REPORT

SEPTEMBER 2025

Supplemental Remedial Investigation 2024

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

Prepared for:

U.S. Army Corps of Engineers - Kansas City District

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

Contract No.: W912DQ-21-D-3004
Delivery Order No.: W912DQ22F3063

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Acronyms and Abbreviations

µg/L	micrograms per liter
amsl	above mean sea level
bgs	below ground surface
CDM Smith	CDM Federal Programs Corporation
EPA	U.S. Environmental Protection Agency
ft	feet
IDW	investigation-derived waste
J	estimated
MCL	maximum contaminant limit
NMR	nuclear magnetic resonance
OU	operable unit
PCE	tetrachloroethene
PID	photoionization detector
PVC	polyvinyl chloride
RI	remedial investigation
ROW	right-of-way
SOP	standard operating procedure
SLC-18	Salt Lake City Department of Public Utilities Drinking Water Well No. 18
TCE	trichloroethene
USACE	U.S. Army Corps of Engineers
VAMC	Veterans Affairs Medical Center
VHA	Veterans Health Administration
VOC	volatile organic compound

1.0 Introduction

Under the U.S. Army Corps of Engineers (USACE), Kansas City District, Contract No. W912DQ-21-D-3004, Task Order No. W912DQ22F3063, CDM Federal Programs Corporation (CDM Smith) was directed to perform a supplemental remedial investigation (RI) for Operable Unit (OU) 1 of the 700 South 1600 East Tetrachloroethene (PCE) Plume Superfund Site in Salt Lake City, Utah. CDM Smith prepared this supplemental RI to present the results of the 2024 drilling investigation supplement site characterization information presented in the final RI report (CDM Smith 2022).

1.1 Background

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

In 2018, as part of the former OU2 RI, 18 shallow monitoring wells (seven monitoring well pairs and four individual wells) were constructed at the site. Additionally, two deep monitoring wells were installed: MW-03R on the VAMC campus, as a multilevel completion with four screened intervals and MW-08 on 700 South near 1300 East, as a multilevel completion with three screened intervals (Jacobs 2019)

Soil vapor investigations and surface and groundwater sampling were also conducted as part of the RI effort. The soil vapor investigation identified elevated PCE concentrations around Buildings 6 and 7 on the VAMC campus. Soil vapor was also investigated along the main sanitary sewer line that runs from Building 7 through Sunnyside Park to the main sewer line that runs along Sunnyside Drive. Elevated PCE concentrations were identified in soil vapor near a manhole in Sunnyside Park (Jacobs 2018).

In spring and summer 2020, 11 monitoring wells were installed to laterally and vertically delineate the plume (MW-30, MW-31, MW-32, MW-34) and to evaluate conditions in and immediately downgradient of source areas (MW-23 through MW-29) (CDM Smith 2021a). In November and December 2020, four additional wells (MW-13L, MW-36, MW-37, and MW-38) and a replacement well (MW-30R) were installed (CDM Smith 2021b).

1.2 Purpose and Scope

The purpose of this supplemental RI is to discuss the fieldwork conducted and data collected during the 2024 well installation event. The investigation and data collection were conducted in accordance with the Supplemental Remedial Investigation Work Plan (CDM Smith 2023a). Groundwater monitoring wells were installed at seven locations. In preparation for treatability studies, an extraction well and an injection well were also installed in the source area near MW-03R. Three monitoring well locations

(MW-40, MW-41, and MW-42) were selected to evaluate aquifer performance testing at varying lateral distances from the extraction well and multiple vertical intervals to understand the influence of pumping (CDM Smith 2023a). Two additional boring locations were advanced to bound the northern (MW-43) and southern (MW-44) extent of the volatile organic compound (VOC) contamination in the source area. The MW-45 boring location was selected to vertically delineate VOC concentrations downgradient of the source area. The MW-39 location was selected to evaluate the fate and transport of groundwater contamination between the source area and the Salt Lake City Department of Public Utilities Drinking Water Well No. 18 (SLC-18) (CDM Smith 2023b).

The objectives of the Supplemental RI were to install wells and collect data to support the following evaluations:

- Evaluate areas of influence for groundwater extraction
- Evaluate ability to distribute amendments via injection wells
- Evaluate effectiveness of bioremediation to reduce PCE concentrations in the source area
- Better understand where PCE mass flux is occurring (permeable pathways and elevated PCE concentrations)
- Evaluate aquifer characteristics for potential full-scale design

The soil boring investigation information will further define the hydrogeology and hydrostratigraphy characteristics of the plume. Soil profiling included field screening soil cores using a photoionization detector (PID). During this investigation, push-ahead groundwater samples were collected and screened using AQR Colortec (CDM Smith 2019a) and submitted for laboratory VOC analysis to evaluate the vertical distribution of VOCs in the aquifer. Nuclear magnetic resonance (NMR) logging of select wells will identify zones of elevated hydraulic conductivity and water content.

This report summarizes the fieldwork conducted and presents the analytical and field data collected during the event. **Appendix A** includes the Daily Quality Control Reports submitted to USACE and VHA during the event. **Appendix B** includes copies of field logbook notes for the fieldwork.

2.0 Monitoring Well Installation

The following sections outline the field activities completed during the 2024 drilling event.

2.1 Utility Clearance and Permitting

Before drilling, all locations were surveyed for utilities using geophysical survey methods. Location clearance requests were submitted to Blue Stakes of Utah, and the utility location notifications were updated as required during the drilling event. GPR Services conducted the geophysical surveys for the boring locations on the VAMC campus, along Guardsman Way, and 900 South. GPRS conducted geophysical surveys at the MW-39 location in the University of Utah parking lot. **Appendix C** includes utility locate reports. Electromagnetic survey and ground penetrating radar were used to locate utilities or anomalies in the areas around each borehole.

2.1.1 Preclearing Excavation

Before drilling, all boring locations were precleared by hydrovac excavation or hand augering. Excavation to 15 ft below ground surface (bgs) was attempted at each boring location on the VAMC campus, or to depth of clearance refusal and VHA approval prior to drilling. The 900 South and University of Utah parking lot boring locations were excavated to at least 5 ft bgs by hand augering. Hydrovac cuttings were managed as soil and water investigation-derived waste (IDW).

Table 1 summarizes the well locations, dates, depths, and issues/comments encountered during the hydrovac excavation.

2.1.2 Permitting

The Salt Lake City Corporation Engineering Division issued a right-of-way (ROW) permit for MW-45 located on 900 South. A performance bond and certificate of liability insurance accompanied the ROW permit application. Utah Barricade created a Traffic Control Plan, included in **Appendix D**, which was submitted to the Salt Lake City Division of Transportation for a traffic control permit along 900 South. **Appendix E** contains copies of the ROW permit, traffic control permit, and associated documents.

Before drilling, non-production well start card applications were submitted by the VHA to the State of Utah, Department of Natural Resources, Division of Water Rights. Yellow Jacket Drilling submitted the well completion forms with well construction information after installation.

2.2 Drilling

Drilling occurred between May 22, 2024, and July 31, 2024. Five source area delineation borings were completed as dual-screen monitoring wells (CDM Smith 2023a) for treatability study performance monitoring and plume delineation. An injection well and an extraction well were installed near MW-03R within the source area in support of the treatability studies. MW-39 was installed in the University of Utah parking lot along Guardsman Way as an intended sentinel well between the PCE plume and SLC-18. MW-45 was installed along 900 South near the MW-13 well cluster to vertically delineate the plume in the area.

Yellow Jacket Drilling used a Terra Sonic 150 track-mounted mini-rotosonic drill rig and a full-size Terra Sonic 150 truck-mounted drill rig to advance the borings. The rotosonic core barrel was advanced in five to ten feet runs and each soil core was bagged in two to three feet intervals. Continuous soil cores were collected and field screened using a PID at one to three foot intervals. The lithology was logged, and photos were taken of the core intervals. **Appendix F** includes borehole logs, and **Appendix G** includes photos of the soil cores. **Section 2.4** discusses well construction details. Soil cuttings were managed as IDW. Flush-mount well vaults were installed at all boring locations. Grab groundwater water samples were collected using a push-ahead sampler during drilling. The groundwater samples are discussed in **Section 2.3**.

2.2.1 Sentinel Well (MW-39)

MW-39 was installed at the University of Utah parking lot on the southeast corner of the intersection of Guardsman Way and East 500 South (**Figure 1**). The MW-39 location was selected to evaluate the potential plume migration toward SLC-18. MW-39 also supports understanding hydrogeologic features and plume characterization as part of the RI data quality objectives (CDM Smith 2023b). The boring was advanced to 384 ft bgs. Groundwater was encountered at 204 ft bgs. Two 2-inch wells were installed in the boring. The MW-39S screen was installed from 269 to 289 ft bgs. The MW-39D screen was installed from 328 to 358 ft bgs. Both well screens were completed in the deep aquifer zone.

2.2.2 Treatability Study Wells

In the treatability study area the shallow aquifer zone is saturated between approximately 190 ft bgs and 240 ft bgs. The deep aquifer zone begins at approximately 250 ft bgs. The depths of the aquifer zones vary due to surface elevation and lateral variability in thickness of the water-bearing units.

A groundwater extraction well (EW-01) was installed approximately 100 ft south of MW-03R (**Figure 1**). EW-01 was installed to assess the potential for implementing hydraulic containment as part of a potential remedy and to provide additional lithologic information and PCE concentrations near MW-03R. The target interval for the EW-01 screen is the upper part of the deep aquifer (CDM Smith 2023a). The total depth of the EW-01 boring was 315 ft bgs, and the 6-inch diameter well was screened from 260 to 300 ft bgs. Groundwater was encountered at approximately 193 ft bgs.

An injection well (IW-01) was installed approximately 125 ft southeast of MW-03R (**Figure 1**). IW-01 was originally proposed for the area near MW-02, but access issues prevented installation in that location. IW-01 was originally targeting the lower part of the shallow aquifer (CDM Smith 2023a). Because of the location change, IW-01 was installed in the upper part of the deep aquifer to target the depth interval where elevated PCE concentrations have been observed. The IW-01 boring was advanced to 276 ft bgs. A 4-inch well was installed with a screen from 250 to 270 ft bgs. Groundwater was encountered at approximately 190 ft bgs.

Monitoring wells MW-40 S/D were installed approximately 125 ft east of EW-01 (**Figure 1**). This location was selected to monitor aquifer drawdown near EW-01 during the aquifer performance test and delineate PCE concentrations near MW-30R (CDM Smith 2023a). The MW-40 boring was advanced to 315 ft bgs. Groundwater was encountered at approximately 188 ft bgs. Two 2-inch wells were installed with MW-40S screened from 230 to 240 ft bgs and MW-40D screened from 295 to 305 ft bgs. MW-40S was screened in the shallow aquifer, and MW-40D was screened in the deep aquifer.

Monitoring wells MW-41 S/D were installed approximately 280 ft south of EW-01 (**Figure 1**). This location was selected to monitor drawdown during the aquifer performance test and to better define the PCE concentrations between MW-02 and MW-03R (CDM Smith 2023a). The MW-41 boring was drilled to 305 ft bgs. Groundwater was encountered at approximately 199 ft bgs. Two 2-inch wells were installed. MW-41S was screened from 216 to 226 ft bgs in the shallow aquifer. MW-41D was screened from 272 to 282 ft bgs in the deep aquifer.

Monitoring wells MW-42 S/D were installed approximately 50 ft southeast of EW-01 and 15 ft west of IW-01 (**Figure 1**). This location was selected as a downgradient location within the IW-01 anticipated injection radius (CDM Smith 2023a). The MW-42 boring was advanced to 276 ft bgs. Groundwater was encountered at approximately 196 ft bgs. Two 2-inch wells were installed. MW-42S was screened from 246 to 256 ft bgs (shallow aquifer), and MW-42D was screened from 266 to 276 ft bgs (deep aquifer).

2.2.3 Plume Delineation Wells

Monitoring wells MW-43 S/D were installed approximately 150 ft north of MW-03R (**Figure 1**). The MW-43 location was selected to delineate the northern edge of the source area between MW-03R and MW-30 locations (CDM Smith 2023b). The MW-43 boring was advanced to 318 ft bgs. Groundwater was encountered at approximately 200 ft bgs. Two 2-inch wells were installed. MW-43S was screened in the shallow aquifer from 225 to 235 ft bgs. MW-43D screen was installed from 274 to 284 ft bgs in the deep aquifer.

Monitoring wells MW-44 S/D were installed approximately 360 ft south of MW-02 (**Figure 1**). The MW-44 location was selected to delineate PCE concentrations between MW-02 and MW-04 (CDM Smith 2023a). The MW-44 boring was advanced to 310 ft bgs. Groundwater was encountered at approximately 190 ft bgs. Two 2-inch wells were installed. MW-44S was screened from 195 to 205 ft bgs in the shallow aquifer. MW-44D was screened from 280 to 290 ft bgs in the deep aquifer.

Monitoring well MW-45 was installed approximately 60 ft west of the MW-13 well cluster along 900 South (**Figure 1**). The MW-45 location was selected to vertically delineate PCE concentrations in the near MW-13 well cluster (CDM Smith 2023a). The MW-45 boring was advanced to 210 ft bgs. Groundwater was encountered at approximately 21 ft bgs. A single 2-inch well was installed with a screen from 200 to 210 ft bgs.

2.3 Groundwater Sampling

2.3.1 Push-Ahead Groundwater Sampling

Push-ahead groundwater samples were collected in the water-bearing zones of the boreholes at approximately 20 ft intervals (CDM Smith 2023a). Groundwater samples were not collected at MW-39 or IW-01. One sample was collected from the bottom of the borehole at MW-45. If a sample could not be collected because of lithology or moisture content, a sample was attempted in the next 10 ft interval. Push-ahead groundwater samples were collected for field screening by AQR Colortec and laboratory VOC analysis. AQR Colortec is a colorimetric screening-level indicator of total chlorinated compounds with a detection limit of approximately 10 micrograms per liter (µg/L) of total chlorinated compounds (CDM Smith 2021a). Field screening of groundwater samples was performed at borings EW-01, MW-41, MW-42, MW-44, and MW-45. Field screening with AQR Colortec indicated chlorinated VOC detections in

samples EW01-GW061324-265 and MW42-GW072024-266. The AQR Colortec field screening, although informative, is not always accurate at low level concentrations. The locations with the greatest chlorinated compound concentrations did indicate the presence of chlorinated compounds. Several laboratory samples that had PCE greater than 10 µg/L did not show a detectible color change with AQR Colortec.

Groundwater grab samples collected for laboratory analysis were submitted to EMAX Laboratories on an expedited turnaround. PCE was detected in all 24 samples, with concentrations ranging from 0.41 J µg/L to 210 µg/L. Trichloroethene (TCE) was detected in 12 out of 24 samples, with concentrations ranging from 0.13 J µg/L to 1.9 µg/L. **Table 2** presents the PCE and TCE results from push-ahead groundwater samples. **Table 3** presents detected results. **Appendix H** includes complete laboratory packages for these data. For this sampling event, validation of groundwater grab samples collected during drilling was not required, and this data is considered screening-level only.

2.4 Well Construction

Final well construction designs were determined via teleconference with the CDM Smith field team leader, project technical leader, and project manager; USACE; and VHA following review of lithology and the push-ahead AQR Colortec results. **Table 4** presents a summary of the well construction information for the wells installed during this event. Polyvinyl chloride (PVC) well casings were installed within the rotosonic drill casing. Wells were installed according to the construction methods described in the Supplemental RI Work Plan (CDM Smith 2023a). Screens consisted of a Schedule 80 0.02-inch factory-slotted PVC screen. The filter pack was constructed using 12/20 silica sand and extended 2 to 3 ft above the top of the screened intervals. At locations where multilevel wells were installed, 3/8-inch uncoated bentonite pellets were installed to seal the borehole between screen and filter pack intervals. Bentonite grout was installed above the shallowest hydrated bentonite interval to approximately 3 ft bgs, except IW-01. IW-01 used a neat cement grout for the annular seal to withstand pressure during future injection activities. Flush-mount well vaults were installed at all boring locations.

Each monitoring well location was completed at the surface with a flush-mounted manhole vault. MW-45 is in the ROW of 900 South. The Salt Lake City Engineering Department requested Portland cement be added to the concrete mix. Well completion diagrams, including screen, sand, and bentonite intervals, are included on the boring logs in **Appendix F**. After completion, the well top of casing and adjacent ground surface locations and elevations were surveyed by a land surveyor licensed in the State of Utah. **Appendix I** presents survey data for the well locations.

2.5 Well Development

The monitoring, injection, and extraction wells were developed by Yellow Jacket Drilling. For wells MW-45, IW-01, and EW-01, Yellow Jacket Drilling used a bailer and swab to remove sediment from the screened interval, then pumped wells following the methods described in the Supplemental RI Work Plan (CDM Smith 2023a). A minimum volume (five casing volumes plus any potable water added while drilling) was calculated before development, and the wells were purged until the minimum volume had been removed from the well, parameter stabilization occurred and turbidity visibly improved.

The 2-inch monitoring wells (MW-39 S/D, MW40 S/D, MW-41 S/D, MW-42 S/D, MW-43 S/D, and MW-44 S/D) were developed by bailing. Because of the well depths and depths to water, pumping was not viable. Depths to water were greater than 150 ft bgs, with most wells having depth to water approximately 200 ft bgs. While commercially-available submersible pumps can pump from this depth in 2-inch wells, the pump rate is not sufficient to remove sediment from the filter pack and there is the potential to damage the pump. For these reasons, bailing was used to develop the monitoring wells. A minimum volume was calculated and purged from each well. Stabilization parameters and turbidity were monitored during development. **Appendix J** includes well development field forms. The development water was handled as IDW.

2.6 Nuclear Magnetic Resonance

Colog, under subcontract to CDM Smith, completed NMR logging at a resolution of approximately 0.5 ft (+/- 0.1 ft). NMR logging was completed on the following:

- **EW-01**: 6-inch diameter extraction well
- **IW-01**: 4-inch diameter extraction well
- **MW-04**: 4-inch diameter monitoring well
- **MW-20D**: 2-inch diameter monitoring well
- **MW-13L**: 2-inch diameter monitoring well

EW-01 was logged with NMR Javelin probe model JPY350; IW-01 and MW-04 with NMR Javelin probe model JPY238; MW-13L, MW-20D, and MW-45 with NMR Javelin micro probe model JPZ175E. Data were initially reviewed in the field to evaluate whether they were adequate to meet the project objectives. Data were then exported using Javelin Pro Plus Version 4.13.6 to generate logs including water content (total fluid volume), hydraulic conductivity (ft/day), transverse distribution (ft^3/ft^3), and noise percentage by depth. Water content was interpreted on the logs as either clay-bound fluid, capillary-bound fluid, or mobile fluid. **Appendix K** includes the NMR logs.

EW-01 and IW-01 were selected for NMR logging to identify variability in hydraulic conductivity in the source area where treatability studies are being performed. MW-04 was selected to identify variations in hydraulic conductivity in other portions of the source area where remedial alternatives are being developed for the feasibility study. MW-20D was selected to improve the understanding of hydraulic conductivity in the mid-plume area to support evaluation of alternatives for the feasibility study. MW-13L was selected for NMR logging to refine the hydraulic conductivity information at the end-of-plume area.

2.7 Decontamination and Investigation-Derived Waste

All decontamination waste produced during the drilling effort was collected and managed in accordance with Standard Operating Procedure (SOP) 4-5, Field Equipment Decontamination at Nonradioactive Sites (CDM Smith 2019a). Waste was produced from decontaminating all downhole drilling equipment before drilling activities, between boreholes, and after the drilling investigation, and the decontamination of the push-ahead groundwater sampler after each use. Additional equipment decontaminated after each

use includes the drilling tag line, water level meters, development pump, swab, and nondedicated bailer.

All IDW was handled per SOP 2-2, Guide to Handling Investigation-Derived Waste (CDM Smith 2019a). All decontamination water, hydrovac water, and purge/development water was transferred to the frac tanks. The excavated soils were placed in lined roll-off bins. Before disposal, groundwater and soil were characterized and determined to be nonhazardous. Approximately 7,000 gallons of decontamination and IDW water and approximately 112 tons of soil, contained in eight soil roll-off bins, were disposed of off-site at Wasatch Regional Landfill.

Appendix L includes waste profiles and nonhazardous manifests.

2.8 Deviations from the Quality Assurance Project Plan

The location of MW-39 was moved from its proposed location along Guardsman Way to the University of Utah parking lot, located on the southeast corner of the intersection of Guardsman Way and 500 South. The location was moved because of underground utilities in the Guardsman Way ROW. The University of Utah parking lot location is approximately the same distance from SLC-18 as the original planned location and is in a suitable location to meet project objectives.

IW-01 and MW-42 locations were moved from the Salt Lake City Sports Complex to the VHA campus near EW-01 because of access issues. The proposed location was near MW-02 to target PCE in the upper aquifer. The new location was selected to target PCE in the upper part of the deep aquifer.

For the vertical profiling sampling, the push-ahead groundwater samples were collected in the water-bearing zones at approximately 20 ft intervals (CDM Smith 2019a). If a sample could not be collected because of lithology or moisture content, a sample was attempted in the next 10 ft interval. There were intervals in which the samples were not collected because lithology was too dense to deploy the sampler properly, there were no indications of water-bearing zones, or the sampler did not function because of silt and clay clogging the screen. Grab groundwater samples were not collected in the following intervals:

- MW-40 at 255 ft bgs and 275 ft bgs
- MW-41 at 205 ft bgs, 240 ft bgs, 250, ft bgs, 260 ft bgs, and 295 ft bgs
- MW-42 at 230 ft bgs, 240 ft bgs, and 250 ft bgs
- MW-43 at 230 ft bgs and 240 ft bgs
- MW-44 at 220 ft bgs, 230 ft bgs, 240 ft bgs, and 250 ft bgs
- EW-01 at 210 ft bgs and 305 ft bgs

The following deviations occurred during the NMR investigation. Because of time and scheduling restraints, NMR logging scope was adjusted to focus on anticipated zones of saturation. Intervals logged for each well include the following:

- **EW-01**: 110 to 305 ft bgs

- **IW-01**: 120 to 270 ft bgs
- **MW-04**: 40 to 173 ft bgs
- **MW-20D**: 40 to 127 ft bgs
- **MW-13L**: 0 to 160 ft bgs

MW-14D is an artesian flowing well with a permanently affixed well cap. To log this well, the cap would have to be removed, and a standpipe affixed to the well head to prevent groundwater flowing into the street. Because of logistical issues and potential IDW generation, MW-20D was chosen to be logged instead. MW-20D was chosen as replacement as it is also located in the down-plume area and should reflect similar subsurface conditions as MW-14D.

MW-45 was attempted to be logged on November 13, 2024. The NMR tooling was stopped because of a slight bend in the 2-inch PVC casing at approximately 40 ft bgs. MW-13L is approximately 40 ft to the east of MW-45 and was logged instead of MW-45.

MW-20D was logged on November 14, 2024. The NMR tooling was stopped because of a slight bend in the 2-inch PVC casing at approximately 127 ft bgs. NMR logging was completed from 127 ft bgs to 40 ft bgs.

MW-02 was attempted to be logged on November 18, 2024. A permanent fitting at the top of the 2-inch PVC casing blocked access for the NMR tooling to fit down the PVC. Attempt to log this well was abandoned, and Colog demobilized from the site.

3.0 Summary

This report presents the results from the Supplemental RI and Sentinel Well Installation. MW-39 S/D was installed to monitor the plume near SLC-18.

Treatability study wells were installed near MW-03R to monitor effects of groundwater extraction and bioremediation in an area of elevated PCE, approximately 200 μg/L. EW-01 is a 6 inch well with 40 ft of screen to perform groundwater extraction. IW-01 is a 4 inch well with 20 ft of screen for bioremediation injection. Monitoring wells MW-40 S/D, MW-41 S/D, and MW-42 S/D were installed to measure the influence of the extraction and injection treatability studies.

Three plume delineation wells were installed to identify PCE concentrations. MW-43 S/D was installed to delineate the northern edge of the source area on the VHA campus. MW-44 S/D was installed to delineate elevated PCE concentrations between MW-04 and MW-02. MW-45 was installed in the end-of-plume area to vertically delineate PCE concentrations near the MW-13 S/D/L well cluster.

3.1 General Lithology

The treatability study wells near MW-03R generally had similar lithology to MW-03R. EW-01 had more silt from 256 to 280 ft bgs than MW-03R. MW-03RB is screened from 267 to 272 ft bgs and has elevated concentrations of PCE.

The MW-43 boring encountered groundwater shallower than MW-30. At MW-43 groundwater was encountered at 202 ft bgs, and at MW-30 groundwater was encountered at 237 ft bgs. MW-30 had more clay between MW-30RA (240 to 250 ft bgs) and MW-30RB (282 to 292 ft bgs), than the MW-43 boring from 242 to 269 ft bgs. This zone in the MW-43 boring had more silt separating the shallow and deep aquifers.

MW-45 had lithology like MW-13L. MW-45 had more clay shallower than 100 ft bgs, but the higher conductivity zones from 145 to 165 ft bgs in MW-45 correlated with the screened zone in MW-13L from 150 to 160 ft bgs. Below 165 ft bgs, MW-45 had clay to 199 ft bgs, before encountering wet gravel from 199 to 210 ft bgs.

An updated cross section is included as **Figure 2**. This section trends north-south from MW-31 in Sunnyside Park to MW-30R on the north side of the VHA campus, along the western boundary.

3.2 MW-39 (SLC-18 Sentinel Well)

The MW-39 screens were installed to correlate with transmissive zones in SLC-18. Transmissive zones were identified in SLC-18 at elevations between 4,408 and 4,378 ft above mean sea level (amsl), and 4355 to 4311 ft amsl (CDM Smith 2023b). MW-39S was screened from 269 to 289 ft bgs in the gravel dominated unit. The MW-39S screen is 4,429 to 4,409 ft amsl, and it generally correlated with the upper transmissive zone in SLC-18 because of sediment being deposited in an alluvial fan environment. MW-39D was screened from 328 to 358 ft bgs, which is 4,370 to 4,340 ft amsl. The screened zone for MW-39D was predominantly silt with sandy zones. The MW-39D screen overlapped with the lower transmissive zone in SLC-18. Both screens at MW-39 were in the deep aquifer.

3.3 Nuclear Magnetic Resonance

NMR was conducted to identify permeable zones in five wells at the site. The NMR logging at EW-01 indicated the highest hydraulic conductivity from 255 to 260 ft bgs, with another area of high hydraulic conductivity from 280 to 290 ft bgs. EW-01 was screened from 260 to 300 ft bgs, but the filter pack extended up to 257 ft bgs. The highest hydraulic conductivity at IW-01 was located at 253 ft bgs and the well is screened from 250 to 270 ft bgs. MW-04 had generally higher hydraulic conductivity between 135 and 170 ft bgs and was screened from 143 to 173 ft bgs.

Borehole correlations are shown in **Figure 3** with NMR data, lithology, and PCE concentrations from grab samples for EW-01, IW-01, and MW-42. PCE concentrations greater than 50 μg/L were present in EW-01 below 240 ft bgs. The 246 ft bgs sample (120 μg/L) correlates to the bottom of the semi-confining layer in areas of low mobile- and clay-bound fluid, but higher capillary-bound fluid. The highest PCE concentrations in EW-01 straddle the highly transmissive zone at approximately 255 ft bgs. No grab groundwater samples were collected from IW-01, but two samples were collected from MW-42 nearby. MW-42 had an elevated PCE concentration (99 μg/L), at 260 ft bgs below the semi-confining unit. IW-01 has more clay-bound fluid zones than EW-01 from approximately 235 ft bgs to 248 ft bgs. There is the potential for these elevated PCE concentrations present in lower-permeability units with more clay-bound and capillary-bound fluid to diffuse from fine grained sediments adjacent to the high conductivity zones in this area. The saturated zone at MW-04 has predominantly mobile fluid, indicating this zone is fairly transmissive and likely has less potential for PCE to be present in lower-conductivity zones in clay-bound and capillary-bound water. At the end-of-plume area, the highest hydraulic conductivity at MW-20D was located at 120 ft bgs and the well was screened from 119 to 129 ft bgs. MW-13L has its highest hydraulic conductivity at 157 ft bgs and the well was screened from 150 to 160 ft bgs. The NMR log data are presented in **Appendix K**.

The NMR data shown in **Figure 4,** borehole correlation of MW-13L and MW-45, PCE concentrations from MW-13S and MW-13D are included in the diagram. The interval with the highest amount of clay bound water in MW-13L was between 115 and 125 ft bgs. This zone is between the screens of MW-13D and MW-13L, which both have PCE concentrations greater than 50 μg/L, indicating there is a potential for PCE to be present within lower-permeability units at this location.

3.4 Grab Groundwater Samples

Grab groundwater samples were collected during drilling from MW-40, MW-41, MW-42, MW-43, MW-44, MW-45, and EW-01. Only one sample was collected from MW-45 since nearby MW-13 S/D/L were screened in the shallower water-bearing intervals in this area.

Five samples were collected at MW-40. One sample from 235 ft bgs exceeded the PCE maximum contaminant limit (MCL) of 5 μg/L with a concentration of 7.5 μg/L. The two samples below 235 ft bgs did not exceed the PCE MCL. No samples from MW-40 had detectable TCE.

Four samples were collected from MW-41. The three shallower samples exceeded the PCE MCL of 5 μg/L, with the highest concentration of 64 μg/L in the sample from 220 ft bgs. The sample from 305 ft bgs had a PCE concentration of 2.2 μg/L. TCE was also detected in the three shallower samples but at concentrations less than the TCE MCL of 5 μg/L.

Two samples were collected from MW-42. The sample from 210 ft bgs had a PCE concentration of 4.8 μg/L. The sample from 266 ft bgs had a PCE concentration of 99 μg/L and a TCE concentration of 0.56 J μg/L.

Five samples were collected while drilling MW-43. All five samples had detectable PCE with three results exceeding the PCE MCL. The shallowest sample (209 ft bgs) and the deepest sample (318 ft bgs) had PCE concentrations less than 5 μg/L. The highest PCE concentration (55 μg/L) was in the sample collected from 298 ft bgs. All TCE results in MW-43 were less than the TCE MCL. TCE was detected in the upper four samples, but the concentration in the deepest sample was non-detect.

Three samples were collected while drilling MW-44. The sample from 167 ft bgs had a PCE concentration of 130 μg/L, and the sample from 198 ft bgs had a PCE concentration of 48 μg/L. The sample from 260 ft bgs had a PCE concentration of 2 μg/L. TCE was detected in the samples collected from 167 and 198 ft bgs but concentrations were less than the TCE MCL.

Six samples were collected while drilling EW-01. All six samples had detectable PCE. The highest PCE concentrations were from the 265 ft bgs sample (210 μg/L) and from the 246 ft bgs sample (120 μg/L). The 285 ft bgs sample had a PCE concentration of 11 μg/L, and the 315 ft bgs sample has a PCE concentration of 0.45 J μg/L. TCE was detected in the 246 and 265 ft bgs samples. Both samples had TCE concentrations less than the MCL.

The sample from MW-45 was collected at 210 ft bgs. This sample had a PCE concentration of 8.8 μg/L and a TCE concentration of 0.13 J μg/L.

The wells near MW-03R (MW-40, MW-42, MW-43, and EW-01) had the highest PCE concentrations in grab samples collected from the upper portion of the deep aquifer unit. PCE concentrations decreased toward the bottom of each borehole except for MW-42, which was not advanced as deep as the other boreholes in the area.

In the area south of EW-01 and IW-01, MW-41 had the highest PCE concentrations in the shallow aquifer in samples collected from 175 and 220 ft bgs, though the sample collected from the deep aquifer unit at 276 ft bgs still exceeded the PCE MCL. MW-44, between MW-04 and MW-02, had the highest concentration in the sample at 167 ft bgs in the shallow aquifer. The sample collected in the deep aquifer unit at 260 ft bgs was below the MCL for PCE. Both MW-02 and MW-04 were screened in the shallow aquifer.

The cross section (**Figure 2**) shows grab groundwater sample PCE concentrations greater than 50 μg/L in the shallow aquifer south of MW-44 to north of MW-41. In the treatability study area, near MW-03R, the PCE groundwater concentrations greater than 50 μg/L are below the semi-confining layer in EW-01, MW-42, and MW-43. This refines the understanding of the lateral and vertical extent of elevated PCE concentrations in the deep aquifer near MW-03R.

3.5 Conclusions

The data collected during this investigation further refines understanding of the lateral and vertical extent of PCE in groundwater in the source area and provides additional details about site lithology and

aquifer hydraulic conductivity. This information will be used to support development of remedial alternatives for the site to be evaluated in the Feasibility Study. The grab groundwater sample PCE concentrations further delineated the areas of elevated PCE (greater than 50 μg/L) in the shallow aquifer near MW-02 (**Figure 2**). North of MW-03R, the grab groundwater sample PCE concentrations from MW-43 further delineated the extent of elevated PCE in the deep aquifer zone (**Figure 2**). The NMR data and grab groundwater sample PCE concentrations from EW-01, IW-01, MW-42, and the groundwater level measurements at MW-40S/D, which show a downward vertical gradient, indicate the semi-confining unit is approximately 240 ft bgs near EW-01 and IW-01. These observations are consistent with historical observations at MW-03R.

In the end-of-plume area, the grab groundwater sample collected at MW-45 at 210 ft bgs contained PCE at 8.8 μg/L, which is less than concentrations previously observed at MW-13S/D/L (**Figure 4**). There is a slight downward gradient between MW-13S/D and MW-13L with groundwater elevation at MW-13L approximately 3 feet lower than MW-13S/D (CDM Smith 2022). The groundwater elevation at MW-45 is approximately 2 feet lower than MW-13L. The NMR data (**Figure 4**) from MW-13L shows zones of capillary-bound and clay-bound fluid between the screen zone of MW-13L and MW-13D.

The NMR data identified zones with higher hydraulic conductivity in the treatability study area which coincide with elevated PCE concentrations, indicating these locations are suitable for treatability studies to evaluate the applicability of groundwater extraction and in situ remediation technologies. The NMR data also identified intervals with higher hydraulic conductivity and greater proportion of mobile fluid, indicating preferential groundwater flow paths, as well as intervals with more clay-bound and capillary-bound fluid that may contain PCE which can diffuse over time.

The data collected during this investigation are consistent with those collected and summarized in the RI (CDM Smith 2022). The understanding of overall site geology and hydrogeology, contaminant fate and transport, and risks remain unchanged from the Final RI.

4.0 References

CDM Smith Federal Programs Corporation (CDM Smith). 2023a. *Supplemental Remedial Investigation Work Plan Operable Unit 1 700 South 1600 East PCE Plume, Salt Lake City, Utah*. Prepared for the U.S. Army Corps of Engineers.

CDM Smith. 2023b. *MW-39 Installation Work Plan Operable Unit 1 700 South 1600 East PCE Plume, Salt Lake City, Utah*. Prepared for the U.S. Army Corps of Engineers.

CDM Smith. 2022. *Final Remedial Investigation Report Operable Unit 1 700 South 1600 East PCE Plume, Salt Lake City, Utah*. Prepared for the U.S. Army Corps of Engineers.

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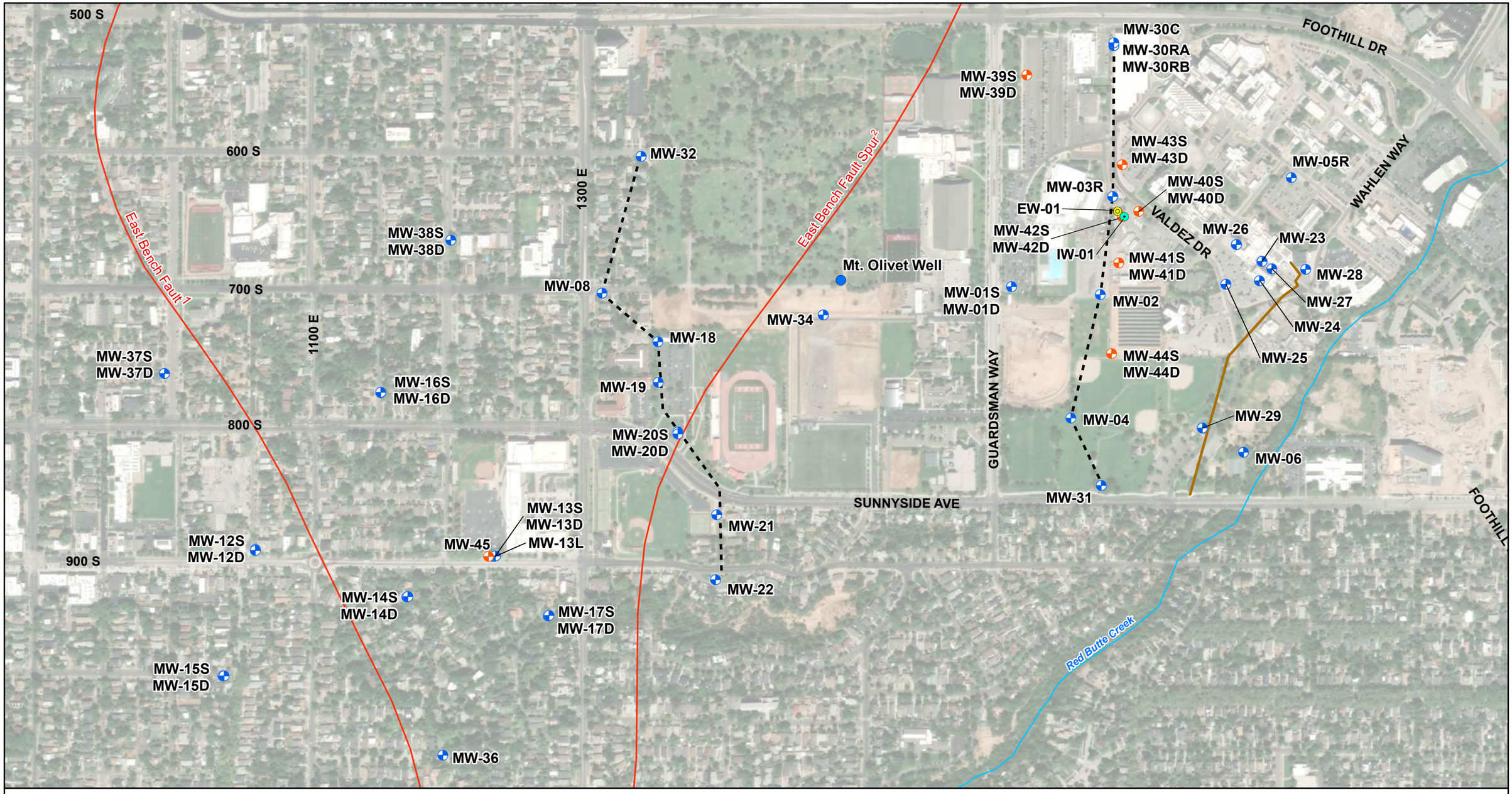
CDM Smith. 2021b. *Data Summary Report Phase 2 2020 Drilling Investigation, 700 South 1600 East PCE Plume, Salt Lake City, Utah*. Prepared for the U.S. Army Corps of Engineers.

CDM Smith. 2019a. *Quality Assurance Project Plan, Operable Unit 2 Remedial Investigation, 700 South 1600 East PCE Plume, Salt Lake City, Utah*. Prepared for the U.S. Army Corps of Engineers.

Jacobs. 2019. 2018 *OU-2 Data Summary Report, Operable Unit 2 Remedial Investigation 700 South 1600 East PCE Plume, Salt Lake City, Utah*. Prepared for the U.S. Army Corps of Engineers.

Jacobs. 2018. *Modification #1 to OU-2 Remedial Investigation Work Plan (Soil Gas Sampling Proposed in Section 5 of RIWP), 700 South 1600 East PCE Plume, Salt Lake City, Utah*. November.

Figures



Legend

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

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
Site Location Map

Supplemental Remedial Investigation 2024
700 South 1600 East PCE Plume
Salt Lake City, Utah

File Path: J:\238824_VA_Medical_Salt_Lake\MXD\Sampling_2024\RI_2024\Fig1_Site_Location_Map.mxd WAGNERA 5/1/2025

South
A

North
A’

Elevation (feet above mean sea level)

Distance Along Baseline (ft)

MW-31 Offset: 69
MW-04 Offset: 243
MW-44 Offset: 7
MW-02 Offset: 69
MW-41 Offset: -39
IW-01 Offset: -73
EW-01 Offset: -34
MW-03R Offset: -6
MW-43 Offset: -61
MW-30 Offset: -17

0.57 J
1 U
1 U
65
58
0.32 J
210
72
33
60
67
32
0.52 J
170
130
6.2
1 U
1 U
0.16 J
NS

50
50
5

Stratigraphy

- Fill (made ground)
- USCS Silty Gravel
- USCS Low Plasticity Clay
- USCS Well-graded Gravel
- USCS Silt
- USCS High Plasticity Clay
- USCS Well-graded Sand
- USCS Silty Sand
- USCS Poorly-graded Sand
- USCS Poorly-graded Gravel
- USCS Clayey Sand
- USCS Clayey Gravel

Well Construction Schematic

- Casing
- Screened Interval

Semi-Confining Unit

Groundwater Elevation (9/4/24)

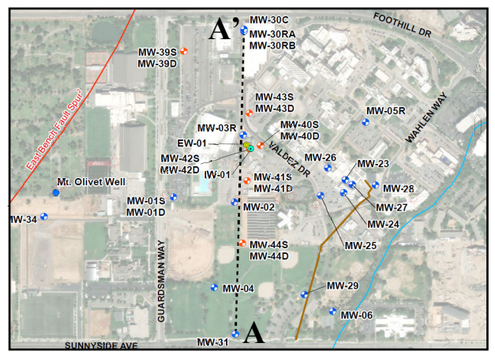
Notes:
-Red PCE concentrations from well sampling in 2024 (CDM Smith 2025).

-All concentrations are posted in micrograms per liter (µg/L)
-MW-30 represents a combination of MW-30RA, MW-30RB, and MW-30C
-J = estimated value
-U = non-detect
-NS = not sampled

Tetrachloroethene Isoconcentration Contour (µg/L) >5µg/L

Tetrachloroethene Isoconcentration Contour (µg/L) >50µg/L

Cross Section Location



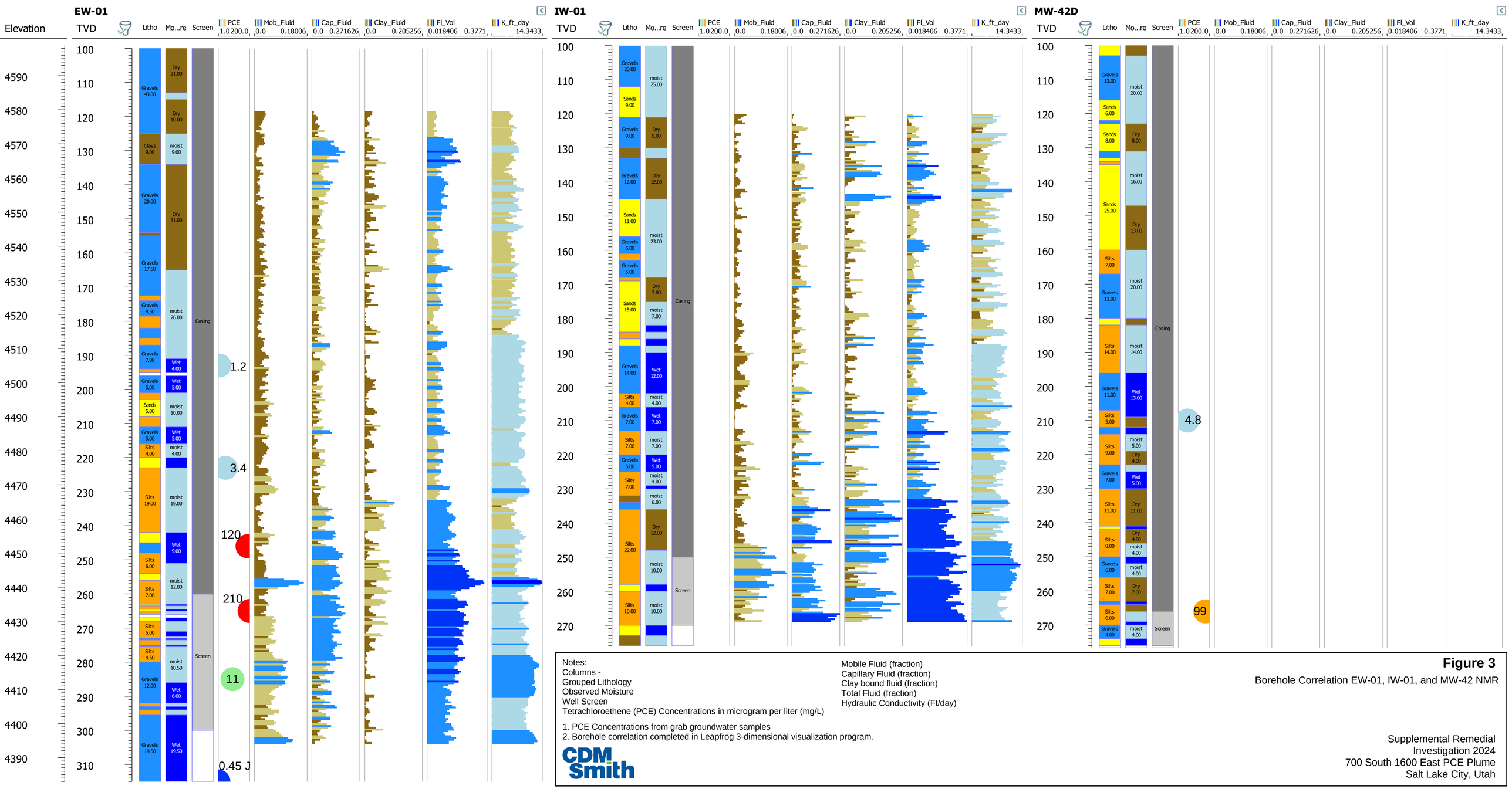
0 215
Horizontal Scale (feet)

Vertical Scale (feet) 0 84

Figure 2
Cross Section A-A’
OU1 Supplemental Remedial Investigation Report
700 South 1600 East PCE Plume
Salt Lake City, UT

CDM Smith

CAYUGA CROSS SECTION 1-1 SLC VA PLUME SCTN_081225.GPJ SLC VA PLUME DRAFT_031121.GPJ 8/13/25 REV.



Notes:
Columns -
Grouped Lithology
Observed Moisture
Well Screen
Tetrachloroethene (PCE) Concentrations in microgram per liter (mg/L)
Mobile Fluid (fraction)
Capillary Fluid (fraction)
Clay bound fluid (fraction)
Total Fluid (fraction)
Hydraulic Conductivity (Ft/day)

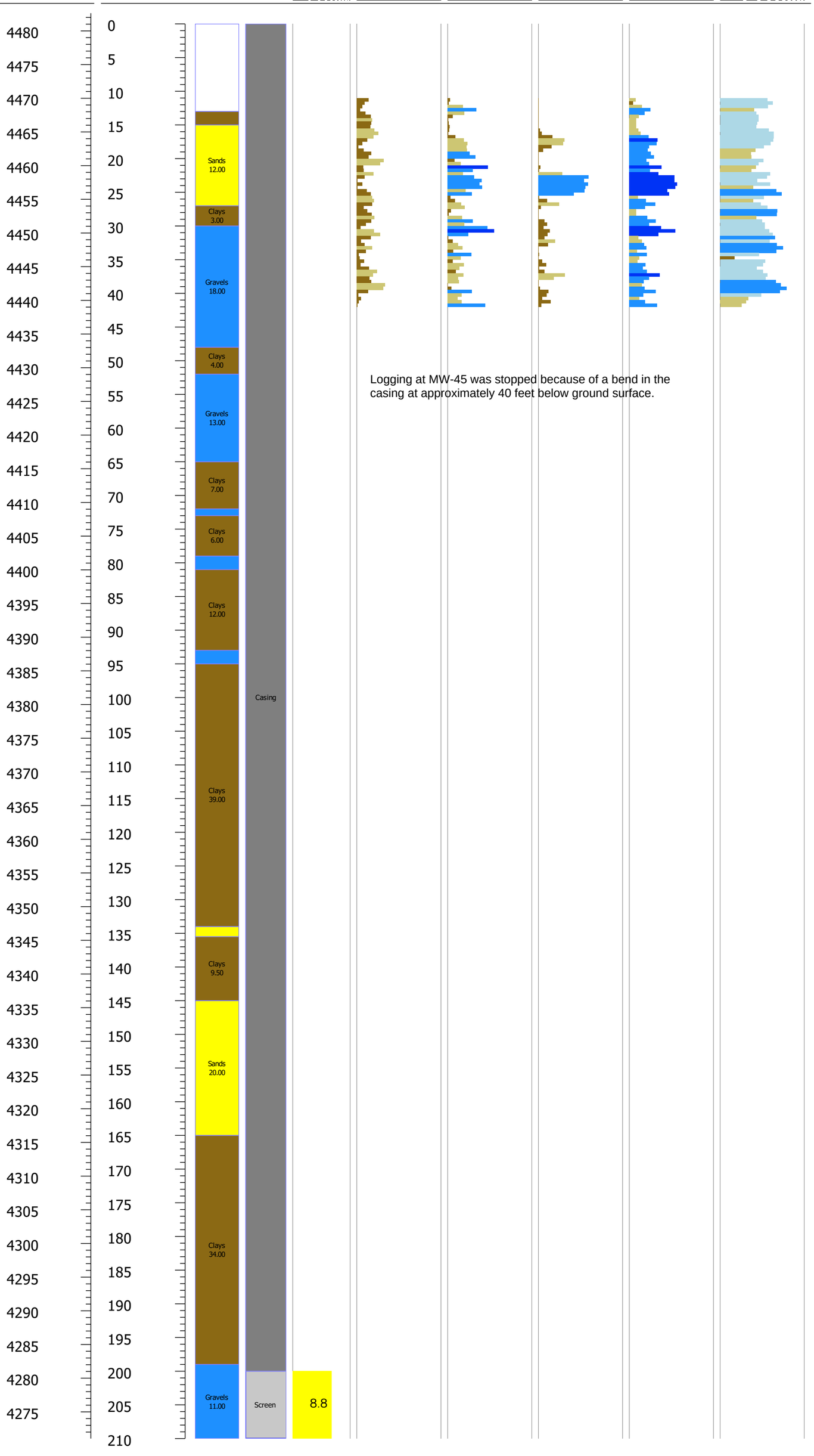
1. PCE Concentrations from grab groundwater samples
2. Borehole correlation completed in Leapfrog 3-dimensional visualization program.

CDM Smith

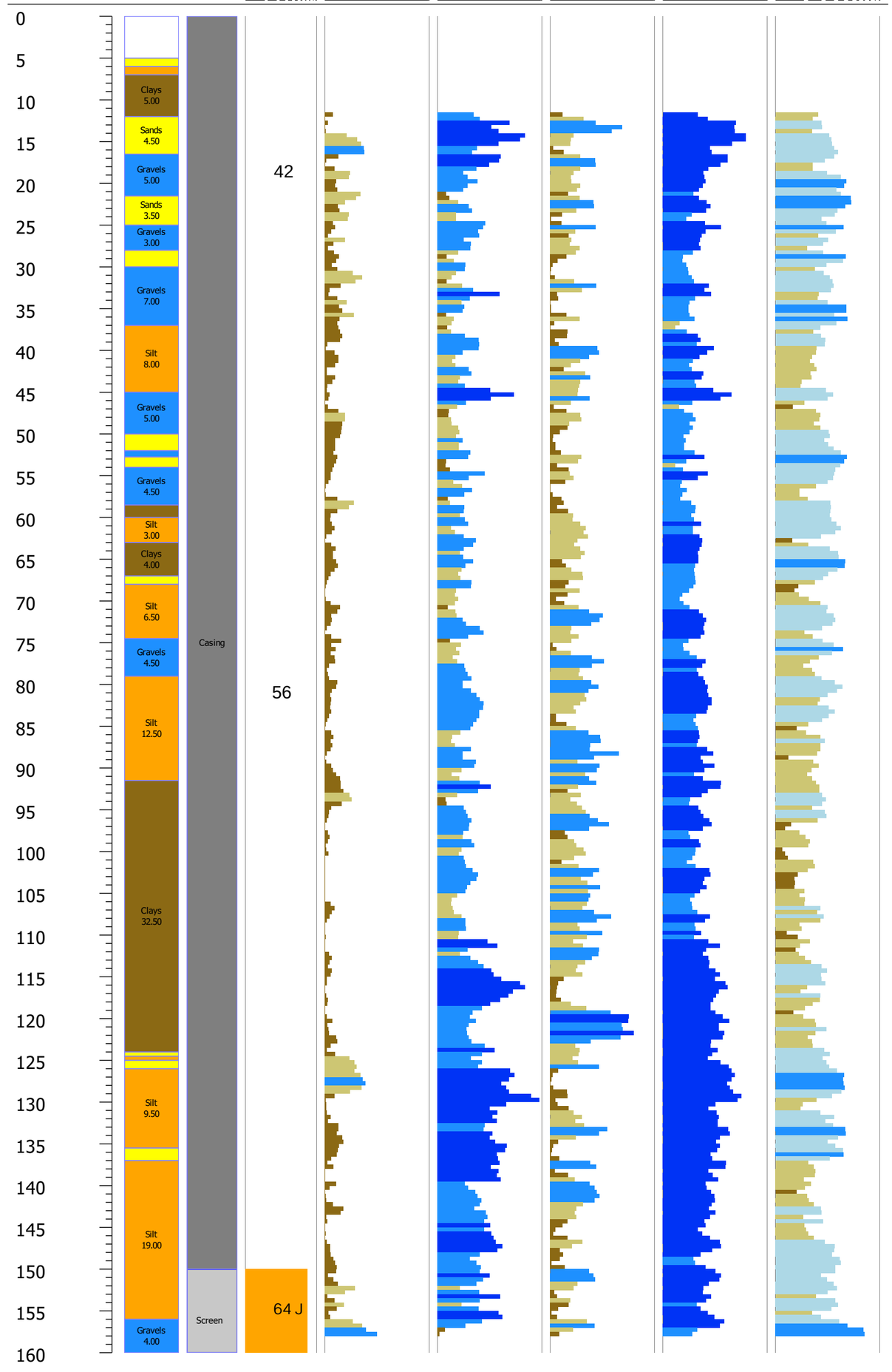
Figure 3
Borehole Correlation EW-01, IW-01, and MW-42 NMR

Supplemental Remedial Investigation 2024
700 South 1600 East PCE Plume
Salt Lake City, Utah

MW-45: Boreholes



MW-13L: Boreholes



Notes:
Columns -
Grouped Lithology
Well Screen
Tetrachloroethene (PCE) Concentrations in microgram per liter (µg/L)
Mobile Fluid (fraction)
Capillary Fluid (fraction)
Clay bound fluid (fraction)
Total Fluid (fraction)
Hydraulic Conductivity (Ft/day)

1. PCE Concentrations from grab groundwater samples or 2022 sampling event. MW-13S and MW-13D sample concentrations shown on MW-13L column.
2. Borehole correlation completed in Leapfrog 3-dimensional visualization program.

Figure 4

Borehole Correlation MW-45 and MW-13L NMR

Supplemental Remedial Investigation 2024
700 South 1600 East PCE Plume
Salt Lake City, Utah

CDM Smith

Tables

Table 1

Preclearing Summary

Well ID	Date	Depth (feet bgs)	Issues/Comments
MW-39	7/1/2024	5	The proposed MW-39 location was not accessible due to identified utilities along Guardsman way. The location in the University of Utah parking lot was hand augered to 5 feet bgs.
MW-40	5/16/2024	7	Unable to advance to 15 feet bgs. Approved by VHA.
MW-41	6/5/2024	7	The proposed MW-41 location had a network of underground utilities. The location was shifted closer to the buildings Unable to advance to 15 feet bgs. Approved by VHA.
MW-42	7/12/2024	11	Access was not granted to the proposed MW-42 location, so the boing was installed southeast of EW-01. Subsurface utilities were identified during preclearing and the boring location was offset. Unable to advance to 15 feet bgs. Approved by VHA.
MW-43	5/16/2024	12	Unable to advance to 15 feet bgs. Approved by VHA.
MW-44	6/19/2024	10	Unable to advance to 15 feet bgs. Approved by VHA.
MW-45	6/25/2024	5	Off campus well location along 900 S near MW-13 well cluster. Boring location hand augered to 5 feet bgs,
EW-01	5/21/2024	10	Unable to advance to 15 feet bgs. Approved by VHA.
IW-01	7/12/2024	7.5	Unable to advance to 15 feet bgs. Approved by VHA. Access was not granted to the proposed IW-01 location, so the boing was installed southeast of EW-01.

Acronyms:

bgs = below ground surface

VHA= Veterans Health Administration

Table 2

PCE and TCE Grab Groundwater Sample Concentrations

Boring	Depth (ft bgs)	Sample	Analyte	Result (µg/L)	Qualifier
MW-40	193	MW40-GW052924-193	PCE	0.69	J
			TCE	ND	
MW-40	215	MW40-GW052924-215	PCE	1.7	
			TCE	ND	
MW-40	235	MW40-GW052924-235	PCE	**7.5**	
			TCE	ND	
MW-40	295	MW40-GW053124-295	PCE	2.2	
			TCE	ND	
MW-40	315	MW40-GW053124-315	PCE	2.9	
			TCE	ND	
MW-41	175	MW41-GW061524-175	PCE	**45**	
			TCE	0.18	J
MW-41	220	MW41-GW061624-220	PCE	**64**	
			TCE	0.24	J
MW-41	276	MW41-GW061724-276	PCE	**20**	
			TCE	0.13	J
MW-41	305	MW41-GW061724-305	PCE	2.2	
			TCE	ND	
MW-42	210	MW42-GW071924-210	PCE	4.8	
			TCE	ND	
MW-42	266	MW42-GW072024-266	PCE	**99**	
			TCE	0.56	J
MW-43	209	MW43-GW060224-209	PCE	0.41	J
			TCE	0.14	J
MW-43	258	MW43-GW060424-258	PCE	**6.2**	
			TCE	0.18	J
MW-43	278	MW43-GW060524-278	PCE	**39**	
			TCE	0.42	J
MW-43	285	MW43-GW060524-285	PCE	**29**	
			TCE	0.21	J
MW-43	298	MW43-GW060624-298	PCE	**55**	
			TCE	0.55	J
MW-43	318	MW43-GW060624-318	PCE	1.5	
			TCE	ND	
MW-44	167	MW44-GW062724-167	PCE	**130**	
			TCE	0.33	J
MW-44	198	MW44-GW062724-198	PCE	**48**	
			TCE	0.29	J
MW-44	260	MW44-GW062924-260	PCE	2	
			TCE	ND	

Table 2

PCE and TCE Grab Groundwater Sample Concentrations

Boring	Depth (ft bgs)	Sample	Analyte	Result (µg/L)	Qualifier
MW-45	210	MW45-GW062824	PCE	**8.8**	
			TCE	0.13	J
EW-01	193	EW01-GW061124-193	PCE	1.2	
			TCE	ND	
EW-01	223	EW01-GW061224-223	PCE	3.4	
			TCE	ND	
EW-01	246	EW01-GW061224-246	PCE	**120**	
			TCE	0.99	J
EW-01	265	EW01-GW061324-265	PCE	**210**	
			TCE	1.9	
EW-01	285	EW01-GW061324-285	PCE	**11**	
			TCE	ND	
EW-01	315	EW01-GW061424-315	PCE	0.45	J
			TCE	ND	

Notes:

Results are from push-ahead groundwater samples for screening purposes only

Highlight indicates values greater than EPA MCL

Acronyms:

PCE = tetrachloroethene

TCE = trichloroethene

µg/L = microgram per liter

ft bgs = feet below ground surface

J = Result is estimated

ND = not detected

Table 3
Detected VOC Concentrations in Groundwater Samples

		Location	EW-01		EW-01		EW-01		EW-01		EW-01		EW-01		MW-40		MW-40	
		Sample Name	EW01-GW061124-193		EW01-GW061224-223		EW01-GW061224-246		EW01-GW061324-265		EW01-GW061324-285		EW01-GW061424-315		MW40-GW052924-193		MW40-GW052924-215	
		Parent Sample																
		Sample Date	6/11/2024		6/12/2024		6/12/2024		6/13/2024		6/13/2024		6/14/2024		5/29/2024		5/29/2024	
		Sample Type	N		N		N		N		N		N		N		N	
Chemical Name	**Screening Level**	**Unit**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**
1,1,1-TRICHLOROETHANE	200[a]	µg/L	1	U	1	U	1	U	**0.1**	**J**	1	U	1	U	1	U	1	U
1,1-DICHLOROETHENE	7[a]	µg/L	1	U	1	U	1	U	**0.15**	**J**	1	U	1	U	1	U	1	U
1,2,3-TRICHLOROBENZENE	7[b]	µg/L	1	U	1	U	**0.17**	**J**	1	U	1	U	1	U	1	U	1	U
1,2,4-TRIMETHYLBENZENE	70[a]	µg/L	**0.31**	**J**	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,3,5-Trimethylbenzene	60[b]	µg/L	**0.14**	**J**	1	U	1	U	1	U	1	U	1	U	1	U	1	U
2-Butanone (MEK)	5600[b]	µg/L	20	U	**5.8**	**J**	20	U	20	U	20	U	20	U	20	U	20	U
ACETONE	18,000[b]	µg/L	**12**	**J**	20	U	20	U	20	U	20	U	20	U	**11**	**J**	**6.7**	**J**
BENZENE	5[a]	µg/L	**0.78**	**J**	**0.48**	**J**	1	U	1	U	**0.25**	**J**	**0.16**	**J**	**0.1**	**J**	**0.1**	**J**
BROMODICHLOROMETHANE	80[a]	µg/L	1	U	1	U	**0.45**	**J**	**0.32**	**J**	1	U	1	U	**0.1**	**J**	1	U
CHLOROFORM	80[a]	µg/L	**2.5**		**2.3**		**4**		**2.7**		**1.8**		**0.55**	**J**	**2.3**		**3.3**	
CHLOROMETHANE	190[b]	µg/L	1	U	**0.9**	**J**	1	U	1	U	1	U	1	U	1	U	1	U
CIS-1,2-DICHLOROETHENE	70[a]	µg/L	1	U	1	U	**0.48**	**J**	**1.6**		**0.11**	**J**	1	U	1	U	1	U
ETHYLBENZENE	700[a]	µg/L	**0.25**	**J**	1	U	1	U	1	U	1	U	1	U	1	U	1	U
m+p-Xylenes	190[b]	µg/L	**0.82**	**J**	**0.3**	**J**	2	U	2	U	**0.26**	**J**	2	U	2	U	2	U
O-XYLENE	190[b]	µg/L	**0.24**	**J**	**0.12**	**J**	1	U	1	U	1	U	1	U	1	U	1	U
TETRACHLOROETHENE (PCE)	5[a]	µg/L	**1.2**		**3.4**		**120**		**210**		**11**		**0.45**	**J**	**0.69**	**J**	**1.7**	
TOLUENE	1000[a]	µg/L	**1.4**		**0.74**	**J**	1	U	**0.12**	**J**	**0.49**	**J**	**0.27**	**J**	**0.17**	**J**	**0.14**	**J**
TRICHLOROETHENE (TCE)	5[a]	µg/L	1	U	1	U	**0.99**	**J**	**1.9**		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)
Highlight indicates values greater than screening level
Bold indicates detected values
Results are from push-ahead groundwater samples and used for screening purposes only

Acronyms:
µg/L = microgram per liter
FD = field duplicate
J = Result is estimated
N = parent sample
U =analyte not detected at the associated value, which is the reporting limit
Q = outside of quality limits

Table 3
Detected VOC Concentrations in Groundwater Samples

			Location	MW-40		MW-40		MW-40		MW-40		MW-41		MW-41		MW-41		MW-41		MW-41	
			Sample Name	MW40-GW052924-235		FD01-GW052924		MW40-GW053124-295		MW40-GW053124-315		MW41-GW061524-175		MW41-GW061624-220		FD03-GW061624		MW41-GW061724-276		MW41-GW061724-305	
			Parent Sample			MW40-GW052924-235										MW41-GW061624-220					
			Sample Date	5/29/2024		5/29/2024		5/31/2024		5/31/2024		6/15/2024		6/16/2024		6/16/2024		6/17/2024		6/17/2024	
			Sample Type	N		FD		N		N		N		N		FD		N		N	
Chemical Name	**Screening Level**	**Unit**		**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**
1,1,1-TRICHLOROETHANE	200[a]	µg/L		1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1-DICHLOROETHENE	7[a]	µg/L		1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2,3-TRICHLOROBENZENE	7[b]	µg/L		1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2,4-TRIMETHYLBENZENE	70[a]	µg/L		1	U	1	U	1	U	1	U	**0.13**	**J**	1	U	1	U	1	U	1	U
1,3,5-Trimethylbenzene	60[b]	µg/L		1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
2-Butanone (MEK)	5600[b]	µg/L		20	U	20	U	**6**	**J**	**5.9**	**J**	20	U	20	U	20	U	20	U	20	U
ACETONE	18,000[b]	µg/L		**14**	**J**	**14**	**J**	**25**		**33**		**5.3**	**J**	**8.6**	**J**	20	U	**20**	**J**	20	U
BENZENE	5[a]	µg/L		**0.17**	**J**	**0.14**	**J**	**0.8**	**J**	**0.65**	**J**	**0.26**	**J**	**0.17**	**J**	**0.17**	**J**	**0.37**	**J**	**0.13**	**J**
BROMODICHLOROMETHANE	80[a]	µg/L		1	U	1	U	1	U	1	U	1	U	**0.24**	**J**	**0.26**	**J**	1	U	**0.13**	**J**
CHLOROFORM	80[a]	µg/L		**4.2**		**4.1**		**3.2**		**3**		**3**		**5.6**		**5.3**		**1.1**		**1.8**	
CHLOROMETHANE	190[b]	µg/L		1	U	1	U	1	U	1	U	**1.1**		1	U	1	U	1	U	1	U
CIS-1,2-DICHLOROETHENE	70[a]	µg/L		1	U	1	U	1	U	1	U	1	U	**0.11**	**J**	**0.1**	**J**	**0.11**	**J**	1	U
ETHYLBENZENE	700[a]	µg/L		1	U	1	U	1	U	1	U	**0.11**	**J**	1	U	1	U	1	U	1	U
m+p-Xylenes	190[b]	µg/L		2	U	2	U	2	U	2	U	**0.28**	**J**	2	U	2	U	2	U	2	U
O-XYLENE	190[b]	µg/L		1	U	1	U	1	U	1	U	**0.13**	**J**	1	U	1	U	1	U	1	U
TETRACHLOROETHENE (PCE)	5[a]	µg/L		**7.5**		**7.2**		**2.2**		**2.9**		**45**		**64**		**58**		**20**		**2.2**	
TOLUENE	1000[a]	µg/L		**0.11**	**J**	1	U	**0.34**	**J**	**0.45**	**J**	**0.47**	**J**	**0.3**	**J**	**0.26**	**J**	**0.55**	**J**	**0.21**	**J**
TRICHLOROETHENE (TCE)	5[a]	µg/L		1	U	1	U	1	U	1	U	**0.18**	**J**	**0.24**	**J**	**0.23**	**J**	**0.13**	**J**	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)
Highlight indicates values greater than screening level
Bold indicates detected values
Results are from push-ahead groundwater samples and used for screening purposes only

Acronyms:
µg/L = microgram per liter
FD = field duplicate
J = Result is estimated
N = parent sample
U =analyte not detected at the associated value, which is the reporting li
Q = outside of quality limits

Table 3
Detected VOC Concentrations in Groundwater Samples

		Location	MW-42		MW-42		MW-43		MW-43		MW-43		MW-43		MW-43		MW-43	
		Sample Name	MW42-GW071924-210		MW42-GW072024-266		MW43-GW060224-209		FD02-GW060224		MW43-GW060424-258		MW43-GW060524-278		MW43-GW060524-285		MW43-GW060624-298	
		Parent Sample							MW43-GW060224-209									
		Sample Date	7/19/2024		7/20/2024		6/2/2024		6/2/2024		6/4/2024		6/5/2024		6/5/2024		6/6/2024	
		Sample Type	N		N		N		FD		N		N		N		N	
Chemical Name	**Screening Level**	**Unit**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**
1,1,1-TRICHLOROETHANE	200[a]	µg/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1-DICHLOROETHENE	7[a]	µg/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2,3-TRICHLOROBENZENE	7[b]	µg/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2,4-TRIMETHYLBENZENE	70[a]	µg/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,3,5-Trimethylbenzene	60[b]	µg/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
2-Butanone (MEK)	5600[b]	µg/L	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U
ACETONE	18,000[b]	µg/L	20	U	20	U	**6.8**	**J**	**7.3**	**J**	**17**	**J**	**16**	**J**	20	U	**26**	
BENZENE	5[a]	µg/L	1	U	**0.76**	**J**	1	U	**0.1**	**J**	**0.29**	**J**	**0.32**	**J**	1	U	**0.31**	**J**
BROMODICHLOROMETHANE	80[a]	µg/L	1	U	1	U	1	U	1	U	1	U	1	U	**0.17**	**J**	1	U
CHLOROFORM	80[a]	µg/L	**3.7**		**2.5**		**4.8**		**4.9**		**4.6**		**3.9**		**1.5**		**2.8**	
CHLOROMETHANE	190[b]	µg/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
CIS-1,2-DICHLOROETHENE	70[a]	µg/L	1	U	**0.57**	**J**	1	U	1	U	1	U	**0.19**	**J**	**0.23**	**J**	**0.33**	**J**
ETHYLBENZENE	700[a]	µg/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
m+p-Xylenes	190[b]	µg/L	2	U	2	U	**0.22**	**J**	2	U	2	U	2	U	2	U	2	U
O-XYLENE	190[b]	µg/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
TETRACHLOROETHENE (PCE)	5[a]	µg/L	**4.8**		**99**		**0.41**	**J**	**0.42**	**J**	**6.2**		**39**		**29**		**55**	
TOLUENE	1000[a]	µg/L	**0.14**	**J**	**0.46**	**J**	**0.12**	**J**	**0.14**	**J**	**0.38**	**J**	**0.54**	**J**	1	U	**0.45**	**J**
TRICHLOROETHENE (TCE)	5[a]	µg/L	1	U	**0.56**	**J**	**0.14**	**J**	**0.14**	**J**	**0.18**	**J**	**0.42**	**J**	**0.21**	**J**	**0.55**	**J**

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)
Highlight indicates values greater than screening level
Bold indicates detected values
Results are from push-ahead groundwater samples and used for screening purposes only

Acronyms:
µg/L = microgram per liter
FD = field duplicate
J = Result is estimated
N = parent sample
U =analyte not detected at the associated value, which is the reporting li
Q = outside of quality limits

Table 3
Detected VOC Concentrations in Groundwater Samples

			Location		MW-43		MW-44		MW-44		MW-44		MW-44		MW-45	
			Sample Name		MW43-GW060624-318		MW44-GW062724-167		FD04-GW062724		MW44-GW062724-198		MW44-GW062924-260		MW45-GW062824	
			Parent Sample						MW44-GW062724-167							
			Sample Date		6/6/2024		6/27/2024		6/27/2024		6/27/2024		6/29/2024		6/28/2024	
			Sample Type		N		N		FD		N		N		N	
Chemical Name	**Screening Level**	**Unit**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**
1,1,1-TRICHLOROETHANE	200[a]	µg/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1-DICHLOROETHENE	7[a]	µg/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2,3-TRICHLOROBENZENE	7[b]	µg/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2,4-TRIMETHYLBENZENE	70[a]	µg/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,3,5-Trimethylbenzene	60[b]	µg/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U
2-Butanone (MEK)	5600[b]	µg/L	20	U	20	U	20	U	20	U	20	U	20	U	20	U
ACETONE	18,000[b]	µg/L	20	U	20	U	20	U	20	U	20	U	20	U	20	U
BENZENE	5[a]	µg/L	**0.23**	**J**	**0.15**	**J**	**0.15**	**J**	1	U	1	U	1	U	1	U
BROMODICHLOROMETHANE	80[a]	µg/L	1	U	1	U	1	U	**0.34**	**J**	**0.35**	**J**	1	U		
CHLOROFORM	80[a]	µg/L	**1**		**1.9**		**1.8**		**4.7**		**2.7**		**1.1**			
CHLOROMETHANE	190[b]	µg/L	1	U	1	U	1	U	1	U	1	U	**0.35**	**J**		
CIS-1,2-DICHLOROETHENE	70[a]	µg/L	1	U	**0.17**	**J**	**0.18**	**J**	**0.12**	**J**	**0.1**	**J**	**0.13**	**J**		
ETHYLBENZENE	700[a]	µg/L	1	U	1	U	1	U	1	U	1	U	1	U		
m+p-Xylenes	190[b]	µg/L	2	U	2	U	2	U	2	U	2	U	2	U		
O-XYLENE	190[b]	µg/L	1	U	1	U	1	U	1	U	1	U	1	U		
TETRACHLOROETHENE (PCE)	5[a]	µg/L	**1.5**		**130**		**130**		**48**		**2**		**8.8**			
TOLUENE	1000[a]	µg/L	**1.9**		**0.25**	**J**	**0.26**	**J**	1	U	1	U	**0.14**	**J**		
TRICHLOROETHENE (TCE)	5[a]	µg/L	1	U	**0.33**	**J**	**0.34**	**J**	**0.29**	**J**	1	U	**0.13**	**J**		

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)
Highlight indicates values greater than screening level
Bold indicates detected values
Results are from push-ahead groundwater samples and used for screening purposes only

Acronyms:
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U =analyte not detected at the associated value, which is the reporting li
Q = outside of quality limits

Table 4
Well Construction

Location	Location Description	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]	Borehole Diameter (Inches)	Boring Depth (ft bgs)	Casing Diameter (Inches)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)
MW-39S	SLC-18 Sentinel Well	7444885.96	1544921.12	4698.78	4698.34	8	384	2	269	289
MW-39D	SLC-18 Sentinel Well	7444885.82	1544921.3		4698.35	8	384	2	328	358
MW-40S	APT Performance Well	7444096.78	1545568.83	4702.21	4701.87	8	315	2	230	240
MW-40D	APT Performance Well	7444097.12	1545568.43		4701.86	8	315	2	295	305
MW-41S	APT Performance Well	7443799.86	1545453.35	4690.5	4689.83	8	305	2	216	226
MW-41D	APT Performance Well	7443800.17	1545453.34		4689.84	8	305	2	272	282
MW-42S	Injection Monitoring Well	7444066.68	1545474.59	4697.59	4697.12	8	276	2	246	256
MW-42D	Injection Monitoring Well	7444066.49	1545474.39		4697.16	8	276	2	266	276
MW-43S	Plume Delineation Well (North)	7444367.04	1545472.72	4707.81	4707.17	8	318	2	225	235
MW-43D	Plume Delineation Well (North)	7444367.36	1545472.54		4707.21	8	318	2	274	284
MW-44S	Plume Delineation Well (South)	7443277.73	1545410.29	4674.13	4673.43	8	310	2	195	205
MW-44D	Plume Delineation Well (South)	7443277.99	1545410.38		4673.44	8	310	2	280	290
MW-45	Plume Delineation Well (EOP Area)	7442104.4	1541810.52	4481.37	4480.77	8	210	2	200	210
EW-01	APT Extraction Well	7444098.4	1545446.41	4697.3	4696.9	10	315	6	260	300
IW-01	Bioremediation Injection Test Well	7444068.9	1545485.7	4698.16	4697.74	8	276	4	250	270

Notes:

[1] X/Y Coordinates measured using NAD 83 State Plane Coordinate System

[2] Elevations measured using NAVD 88 vertical datum

Acronyms:

amsl = above mean sea level
bgs = below ground surface
ft = feet
APT = aquifer performance test
EOP = end of plume

Appendix A Daily Quality Control Reports

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 4/29/2024	**Prepared by:** John Rezac

Personnel Onsite, including Contractors:	Wasatch Environmental – John Rezac GPR Services – Kevin Wiederhold
Visitors/Others:	None

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	To 32 º F
Wind	**Still**	Moderate	High		
Humidity	**Dry**	Moderate	Humid		

Equipment in Use (field instruments, subcontractor equip, etc.)	None

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

John R. took Kevin W. to each well location and marked the locations with white paint.

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

Kevin W. did not have any utility locating equipment with him. John R. and Kevin W. plan to meet Wednesday, 5/1, at 10:00am to begin utility locating.

MW-41 area was not accessible due to a locked gate.

Projected Work – Near Term:

5/1/2024: Kevin W. will begin utility locating.

Other Activities/Remarks:

None.

Photos:

None.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 5/1/2024	**Prepared by:** John Rezac

Personnel Onsite, including Contractors:	Wasatch Environmental – John Rezac
Visitors/Others:	VA – Wynn John

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	To 32 º F
Wind	**Still**	Moderate	High		
Humidity	**Dry**	Moderate	Humid		

Equipment in Use (field instruments, subcontractor equip, etc.)	None

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

John R. was supposed to meet Kevin W. from GPR services at the site at 10:00am. John R. received a call around 9:00am that Kevin W. was already on site working. John R. drove immediately to the site and started calling him, but got no answer and could not locate him. At 10:00am John R. was able to contact Kevin W., but he was already offsite. Kevin W. plans to meet John R. on site at 9:00 am tomorrow (5/2).

John R. met Wynn J. on site and marked the MW-41 location with white paint and looked at the other drilling locations.

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

GPR Services did not show up at the scheduled meeting time to begin utility locating.

Projected Work – Near Term:

5/2/2024-5/3/2024: Utility locating

Other Activities/Remarks:

Virtual Teams meeting with John R. and Hans, Joe, and Neil of CDM Smith in the afternoon.

Photos:



Date: 5/1/2024

Location: MW-40

Description: Marked location of MW-40

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 5/2/2024	**Prepared by:** John Rezac

Personnel Onsite, including Contractors:	Wasatch Environmental – John Rezac GPR Services – Kevin Wiederhold
Visitors/Others:	VA – Wynn John

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**	To 32 º F
Wind	**Still**	Moderate	High		
Humidity	**Dry**	Moderate	Humid		

Equipment in Use (field instruments, subcontractor equip, etc.)	• Subsite 2550GR GPR • Vivax Metrotech vLoc Pro Utility Locator • Schonstedt metal detector

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

John R. met Kevin W. from GPR services and Wynn J. at the site at 9:30 am. MW-41 gate was unlocked, so utility locate was completed at MW-41 except for the sanitary sewer line.

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

None.

Projected Work – Near Term:

5/3/2024: Utility locating

Other Activities/Remarks:

None.

Photos:



Date: 5/2/2024

Location: MW-41

Description: Field sketch of utilities near MW-41.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

	**Date:** 5/2/2024 **Location:** MW-41 **Description:** Marked MW-41 location.
	**Date:** 5/2/2024 **Location:** MW-41 **Description:** GPR unit.
	**Date:** 5/2/2024 **Location:** MW-41 **Description:** Marked utilities near MW-41

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah



Date: 5/2/2024

Location: MW-41

Description: Marked utilities near MW-41.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 5/3/2024	**Prepared by:** John Rezac

Personnel Onsite, including Contractors:	Wasatch Environmental – John Rezac GPR Services – Kevin Wiederhold
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**	To 32 º F
Wind	Still	**Moderate**	High		
Humidity	Dry	Moderate	**Humid**		

Equipment in Use (field instruments, subcontractor equip, etc.)	• Subsite 2550GR GPR • Vivax Metrotech vLoc3 Pro utility locator • Schonstedt Maggie magnetic locator

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

John R. met Kevin W. from GPR Services at 8:30 am and began locating sanitary sewer lines near MW-41 after Zane K. opened the gate.

John R. showed a utility locator from Blue Stakes of Utah the monitoring well locations.

John R. and Kevin W. located utilities in the EW-01 area.

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

None.

Projected Work – Near Term:

5/6/2024: Utility locating at MW-43

Other Activities/Remarks:

None.

Photos:

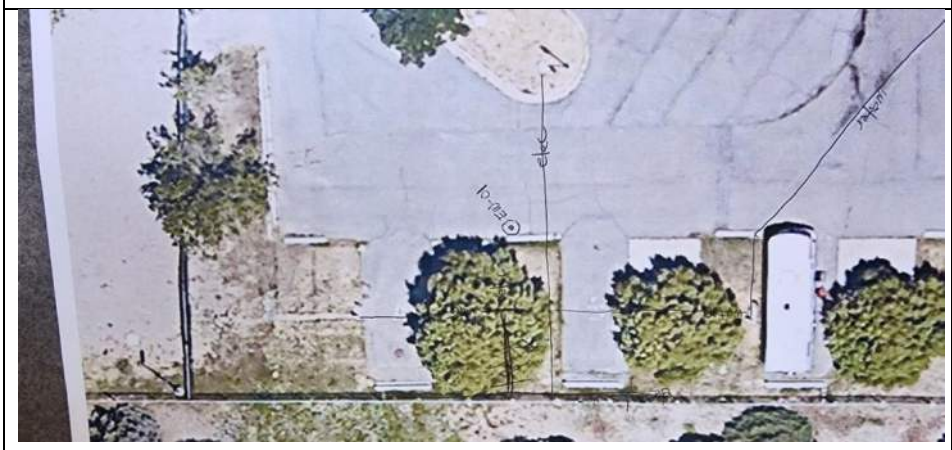


Date: 5/3/2024

Location: MW-41

Description: Marked utilities near MW-41.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

	**Date:** 5/3/2024 **Location:** MW-41 **Description:** Marked sanitary sewer near MW-41.
	**Date:** 5/3/2024 **Location:** EW-01 **Description:** Marked location of EW-01.
	**Date:** 5/3/2024 **Location:** EW-01 **Description:** Field sketch of utilities located near EW-01

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

	**Date:** 5/3/2024 **Location:** EW-01 **Description:** Flagged utilities near EW-01.
	**Date:** 5/3/2024 **Location:** EW-01 **Description:** Marked utilities near EW-01.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 5/6/2024	**Prepared by:** John Rezac

Personnel Onsite, including Contractors:	Wasatch Environmental – John Rezac GPR Services – Kevin Wiederhold
Visitors/Others:	None

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**	To 32 º F
Wind	Still	**Moderate**	High		
Humidity	Dry	Moderate	**Humid**		

Equipment in Use (field instruments, subcontractor equip, etc.)	• Subsite 2550GR GPR • Vivax Metrotech vLoc3 Pro utility locator • Schonstedt Maggie magnetic locator

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

John R. met Kevin W. from GPRS at 12pm and began locating in parking lot around MW-43. Two unknown traces were identified north of the boring location.

MW-40 area was scanned, utilities were identified in the area of the boring and the boring location will be moved approximately 5 feet to avoid the utilities.

The MW-44 area was scanned, an electrical line was identified running to the light pole near the boring location.

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

None.

Projected Work – Near Term:

5/7/2024: John R. to meet with SLC water department to view locations

Other Activities/Remarks:

None.

Photos:

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

	**Date:** 5/6/2024 **Location:** MW-43 **Description:** GPRS scanning area of MW-43. View to the southwest.
	**Date:** 5/6/2024 **Location:** MW-43 **Description:** Identified trends near MW-43. View to west.
	**Date:** 5/6/2024 **Location:** MW-40 **Description:** Utilities at MW-40 location.

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700 South 1600 East PCE Plume
Salt Lake City, Utah

	**Date:** 5/6/2024 **Location:** MW-40 **Description:** Utilities marked at MW-40 location. Boring will be moved to avoid identified utilities. View to the north.
	**Date:** 5/6/2024 **Location:** MW-44 **Description:** GPRS marking utilities near MW-44. View to the west.
	**Date:** 5/6/2024 **Location:** MW-44 **Description:** Marked utilities near MW-44. View to the west.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 5/15/2024	**Prepared by:** Kimberly Myers

Personnel Onsite, including Contractors:	Wasatch Environmental – Rachel Kubina CDM Smith – Kimberly Myers Wynn John - VA
Visitors/Others:	None

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	To 32 º F
Wind	Still	**Moderate**	High		
Humidity	Dry	**Moderate**	Humid		

Equipment in Use (field instruments, subcontractor equip, etc.)	• None

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

Rachel Kubina (Wasatch) on site with hay bales, visqueen plastic sheeting, and sandbags for construction of soil containment area. Pallet of pea gravel is delivered. Kubina and Wyn (VA) discuss where we are allowed to set up equipment.

Kimberly Myers (CDM Smith) met Wasatch on site at 14:00 in the gravel lay-down area and discussed supplies for soil cutting containment. Wynn was in a meeting and could not respond.

Began construction of vacuum cutting containment area and noticed uneven ground surfaces cause plywood to not be flush. Moved location to the flattest space that would not block semi-trucks from turning around. Wasatch will need to pick up two more pieces of plywood and will try to source some thicker plastic sheeting.

Wynn John met CDM Smith and Wasatch in the gravel parking area. Wynn approves soil containment location. CDM Smith and Wynn check for storm drains in the area. VA has concerns about water containment with the soil cuttings due to a recent Notice of Violation (NOV).

CDM Smith and Wynn walk to MW-44 location near solar panels to check on the vegetation clearing that was performed. Steep slope but should be accessible with tracked rig. Vacuum truck may have problems accessing the location. We hope their hoses will reach from above.

CDM Smith and Wasatch build most of the soil containment area. Will be completed tomorrow with more plywood and plastic sheeting. CDM Smith and Wasatch off site at 17:20.

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

None.

Projected Work – Near Term:

5/16/2024: CDM Smith to meet with Yellow Jacket (Chris Hill) and Badger hydrovac truck crew at 8am and begin clearing MW-41. Wasatch to meet with Acore Asphalt cutters in the morning to cut at MW-40, MW-43, and EW-01.

5/17/2024: Borehole clearance with Badger and Yellow Jacket to continue.

Other Activities/Remarks:

None.

Photos:

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Salt Lake City, Utah

	**Date:** 5/15/2024 **Location:** Soil Containment Area **Description:** Selected soil containment site prior to beginning construction of pad.
	**Date:** 5/15/2024 **Location:** Soil Containment Area **Description:** Selected soil containment site with plastic and haybales.
	**Date:** 5/15/2024 **Location:** Soil Containment Area **Description:** Partially constructed soil containment pad.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 5/16/2024	**Prepared by:** Kimberly Myers

Personnel Onsite, including Contractors:	Wasatch Environmental – Rachel Kubina CDM Smith – Kimberly Myers Badger – Wes, Matt, Mike Yellow Jacket – Chris Hill VA - Wynn John, Shannon Smith, Zane Kozarec
Visitors/Others:	None

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	To 32 º F
Wind	**Still**	Moderate	High		
Humidity	Dry	**Moderate**	Humid		

Equipment in Use (field instruments, subcontractor equip, etc.)	• Asphalt cutter • Hydrovac truck

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

Kimberly Myers (CDM Smith) meets Yellow Jacket and Badger on site just after 8am at MW-43. Badger had brought an asphalt cutter.

Wasatch on site at 8:50 with plywood. Badger begins cutting while Wasatch, Yellow Jacket, and CDM Smith check accessibility of marked borehole locations.

At 10:00, Wasatch and CDM Smith complete the soil containment pad.

Badger hits refusal at MW-43 at approximately 12 feet. CDM Smith calls Wyn to approve borehole with clearance under 15 feet. Wynn arrives at MW-43 with Shannon Smith and Zane. They approve and Badger backfills with pea gravel.

Shannon and Wynn call VA utility crew to check locations to suggest changes, if needed. Utility crew (Monty and Piercy) arrive around 11:45 and ask to move MW-41 away from fence by 17 or more feet to avoid known sewer and storm drains that were not marked (parallel with electrical line). Badger moves to hydrovac at MW-40.

At 12:25 hydrovac at MW-40 continues while VA, Yellow Jacket, Wasatch, and CDM Smith check MW-44 location. There is yellow paint with “buried gas pipe” flag marking an area that is too close to drill in the area. Kimberly Myers calls Joe Miller and John Rezac to get 811 ticket number and learn more. Some paint was lost in snow, and a re-marking may be required. John confirms that the yellow flag was to mark the borehole location and no gas line was found by the private utility locator. Yellow Jacket would like a utility locator to come back out and confirm.

There is a large boulder blocking half the hole at MW-40 approximately 7 feet bgs. Hydrovac crew will try to get farther on the south side of the hole. The vac truck has a nearly empty water tank (1,200 gallons of water for clearing 1.5 boreholes). Mike (Badger) goes to empty truck into soil containment pad.

At 14:00, Badger begins slowly opening hatch to release water in a controlled manner. Water is contained until 14:03 when the east side of straw bale wall breaks open and water breaches the containment. CDM Smith instructs Badger to try vacuuming up what spilled water they can and calls Neil Smith.

At 14:08, Neil has been informed and will inform the VA and USACE during the biweekly status call of the breach (call is about to start). The vac truck back hatch cannot be fully closed, so water is pouring out as Badger tries to contain the spill. CDM Smith and Wasatch re-build the hay bale wall with Visqueen layers and add pea gravel bags behind hay bales for support.

At 14:25, Badger releases water and soil into reinforced containment pad which holds. Wait for further instruction.

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Wynn calls Kimberly at 14:50 to check which keys will open gates into the IDW area. Wyn and Zane meet Kimberly to check; two keys (out of 3 in the set) will open fences from both directions. Wyn and Zane view the soil cutting spill and have no further requirements for cleanup.

Badger returns to MW-40 at 15:20 to backfill the hole with pea gravel as no further hydrovac activity will occur today.

Badger and Wasatch leave site at 15:40.

Yellow Jacket and CDM Smith leave site just after 16:00.

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

Breach of soil containment pad. Walls repaired and remaining soil and water deposited inside containment. Badger vacuumed breached water with little success (vacuum too strong to just get water).

MW-40 location shifted further into parking space to avoid underground utilities.

MW-41 shifted east off fence to avoid underground utilities.

EW-01 shifted 3-4 feet off curb to allow room for a full-size drill rig.

Projected Work – Near Term:

5/17/2024: CDM Smith to meet with Wasatch to construct new soil containment.

5/20/2024: Badger will return to site to continue utility clearance hydrovac.

Other Activities/Remarks:

None.

Photos:



Date: 5/16/2024

Location: Soil Containment Area

Description: Completed soil containment pad.

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Salt Lake City, Utah

	**Date:** 5/16/2024 **Location:** MW-40 **Description:** Yellow Jacket and CDM Smith select new location for MW-40 to avoid the gas utility line in yellow and electrical line in red.
	**Date:** 5/16/2024 **Location:** MW-40 **Description:** Badger uses hydrovac to clear MW-40 borehole.
	**Date:** 5/16/2024 **Location:** MW-40 **Description:** Badger uses hydrovac to clear MW-40 to approximately 7 feet below ground surface. Large boulder on north side of borehole (bottom from this downhole view) is difficult to clear.

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Salt Lake City, Utah

	**Date:** 5/16/2024 **Location:** MW-43 **Description:** Badger uses hydrovac to clear MW-43 to 12 feet below ground surface.
	**Date:** 5/16/2024 **Location:** MW-43 **Description:** Total depth cleared at MW-43 was approximately 12 feet below ground surface.
	**Date:** 5/16/2024 **Location:** MW-43 **Description:** Backfilled and sealed borehole at MW-43.

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Salt Lake City, Utah

	**Date:** 5/16/2024 13:58 **Location:** Soil containment area **Description:** Badger empties vacuum truck slowly into containment pad.
	**Date:** 5/16/2024 14:00 **Location:** Soil containment area **Description:** Badger continues to release water from the hydro truck (prior to breach).
	**Date:** 5/16/2024 14:01 **Location:** Soil containment area **Description:** Badger has released most of the water from the hydro truck (prior to breach).

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	**Date:** 5/16/2024 14:03 **Location:** Soil containment area **Description:** Soil containment breach.
	**Date:** 5/16/2024 14:38 **Location:** Soil containment area **Description:** Soil containment after reinforcing the pad and completing evacuation of vac truck.
	**Date:** 5/16/2024 **Location:** Soil containment area **Description:** Soil containment pad with reinforced pea gravel bags at the end of the day.

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Date: 5/16/2024

Location: MW-44

Description: The markings on the photo indicate (approximately) the only location Yellow Jacket can set up on a borehole with their rig to fit the tooling.

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Salt Lake City, Utah

DATE: 5/17/2024	**Prepared by:** Kimberly Myers

Personnel Onsite, including Contractors:	Wasatch Environmental – John Rezac CDM Smith – Kimberly Myers Shannon Smith, Zane Kozarec - VA
Visitors/Others:	None

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	To 32 º F
Wind	**Still**	Moderate	High		
Humidity	**Dry**	Moderate	Humid		

Equipment in Use (field instruments, subcontractor equip, etc.)	• Wasatch trailer on site with water barricades (all off site at end of day).

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

Per email from Neil Smith on 5/16, plan to construct new containment for hydrovac cuttings using water-filled barriers for walls to reduce potential for shifting and breaching.

John Rezac picks up water barricades and arrives on site at 11:00.

CDM Smith goes to Home Depot for Visqueen at 11:25. John is at the site and reports that water remains in the barriers and will need to be drained to attempt to move.

Kimberly arrives at site at 13:15. Shannon Smith and Zane Kozarec are at the soil containment area with John. Kimberly, Zane, and John try to lift the top barricade (stack of two) which has been emptied. It is still too heavy to move and will not be able to be lifted down in a controlled manner. Call to Neil about safety and re-planning. No forklift available. Decide to not use barriers due to inability to safely move.

Badger will be re-scheduled for Tuesday 5/21 and Wasatch and CDM Smith will build a second soil containment with reinforced bales (two bales wide, possibly with lumber for support) on Monday. John will return the water barricades. Badger will begin on Tuesday at MW-41, and Neil will discuss clearance requirements at MW-40 considering the boulder encountered on 5/16.

Wasatch and CDM Smith add reflective candlesticks to front of current soil containment for visibility. Wasatch leaves site at 14:45. Neil asks Kimberly to check former secondary containment for anything useful. Brackets don't have holes for screws, plywood is disintegrating, haybales are aged and will fall apart if moved. Unlikely to be useful for rebuilding a new containment.

CDM Smith off site at 17:15.

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

Barricades are too heavy to move by hand. Will re-build soil containment with lumber, brackets, plywood base, haybales, and Visqueen on Monday.

Projected Work – Near Term:

5/20/2024: CDM Smith to meet with Wasatch on site and build new soil containment pad. Soil bin delivery expected from MP at 9am. Fencing and restroom delivery expected.

5/21/2024: Borehole clearance with Badger will continue. First Yellow Jacket drill rig to arrive.

Other Activities/Remarks:

None.

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Salt Lake City, Utah

Photos:

	**Date:** 5/17/2024 **Location:** Soil Containment Area **Description:** Stacked water barriers have water in footings that does not drain. Barricades are too heavy to safely lift and move.
	**Date:** 5/17/2024 **Location:** IDW Area **Description:** Former Soil containment pad has sun damage and will not be a good source for building materials.

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	**Date:** 5/17/2024 **Location:** Soil Containment Area **Description:** Soil containment from 5/16/2024 is holding. CDM Smith added more pea gravel bags for reinforcement.
	**Date:** 5/17/2024 **Location:** Soil Containment Area **Description:** soil containment pad with reinforced pea gravel and reflective candlesticks.

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DATE: 5/20/2024	**Prepared by:** Kimberly Myers

Personnel Onsite, including Contractors:	Wasatch Environmental – John Rezac, Ryan Panasy CDM Smith – Kimberly Myers, Jason Wagenmaker MP – Soil bin truck driver Anytime Services – Portable toilet truck driver
Visitors/Others:	None

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**	To 32 º F
Wind	**Still**	Moderate	High		
Humidity	Dry	Moderate	**Humid**		

Equipment in Use (field instruments, subcontractor equip, etc.)	• Wasatch trailer • Power tools • 2 Soil Bins (empty)

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

Kimberly Myers (CDM Smith) on site just before 8am to meet vendors (soil bins, portable toilet, and fencing deliveries expected).

MP driver on site at 8:30 to drop two soil bins. Portable toilet delivered at 9:15.

Wasatch arrives on site at 9:35 to unload straw bales and leaves to pick up a second load of bales and plywood.

Jason Wagenmaker (CDM Smith) arrives on site at 11:40 and gets tour of IDW area and borehole locations.

Call with VA at noon to discuss borehole clearance at MW-40. All agree to continue to advance borehole to the south of the large boulder. VA would like to clear at least 10 feet below ground surface if possible.

Wasatch returns to site at 12:20 to drop off plywood and call ranch supply stores to find more straw bales. Wasatch leaves again at 13:00 to get bales, sheet metal screws (flatter heads for tie plates), and 10 mil visqueen (from White Cap).

Wasatch returns to site at 15:40 to complete the soil containment (all supplies purchased). John and Ryan build plywood base with 2x4 railing to hold straw bales in place. End day at 16:40 when wood screws run out. Short sides of railing remain to be built in the morning. Bales and plastic will be placed in the morning after railing is completed.

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

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MP truck could not drop a soil bin near MW-40 because of access issues with the long length of truck. Soil bins dropped in laydown gravel parking lot.

No fencing arrived on site. CDM Smith followed up with Bryce Lugo (Yellow Jacket) to check status of delivery.

Projected Work – Near Term:

5/21/2024: CDM Smith to meet with Yellow Jacket and Badger to continue borehole clearance and begin drilling mobilization. Wasatch to complete soil containment pad #2.

Other Activities/Remarks:

None.

Photos:

	**Date:** 5/20/2024 **Location:** Laydown Area **Description:** Soil bin delivery at laydown area.

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	**Date:** 5/20/2024 **Location:** Laydown Area **Description:** Portable toilet delivered with first containment pad and soil bin adjacent.
	**Date:** 5/20/2024 **Location:** Laydown Area **Description:** Second soil bin location in laydown area. Bin is located for easy pickup for re-location on site.

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Date: 5/20/2024

Location: Laydown Area

Description: Wasatch constructs the second soil containment pad.

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Salt Lake City, Utah

DATE: 5/21/2024	**Prepared by:** Kimberly Myers

Personnel Onsite, including Contractors:	CDM Smith – Neil Smith, Kimberly Myers, Jason Wagenmaker Wasatch Environmental – Ryan Panasy Yellow Jacket – Bryce Lugo, Zachary Olmsted, Charles Winland, Ernesto, Diego Diaz, Timothy Adams, Spring Peterson, Richard Hoyt Badger – Matt Mego, DeAndre Munford, Deran Weaver, Mike Schubert, Clancy Ankola VA – Shannon Smith, Wynn John, Zane Kozarec, Monty
Visitors/Others:	None

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	To 32 º F
Wind	**Still**	**Moderate**	High		
Humidity	Dry	**Moderate**	Humid		

Equipment in Use (field instruments, subcontractor equip, etc.)	• Two hydrovac trucks • PID • Forklift/skid steer • Bobcat • Full-size drill rig (unloaded only) • Limited access drill rig (unloaded only)

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

Kimberly Myers (CDM Smith) arrives on site at 7:50. Yellow Jacket's transportation truck with limited access rig and its crew (Charles and Zachary) already on site. Neil, Jason (CDM Smith), Bryce (YJ), and Ryan (Wasatch) arrive soon after and have a safety meeting. Yellow Jacket begins to unload the transport truck.

At 9:30, the first Yellow Jacket transport truck unloading is completed, and the truck leaves site as the second transport truck and full-size rig arrive with second crew. Wynn and Zane check in on mobilization.

Yellow Jacket works with CDM Smith to find a place to temporarily put the full-size rig while they unload. They move the soil bin by the containment area to western end of the parking lot by the other soil bin. Health and Safety tailgate with second Yellow Jacket crew at 10:45. The second soil containment is completed by Wasatch.

At 11:30, Yellow Jacket begins setting up the decontamination pad and Badger is caught up by another project. Not on site yet.

At 13:30, Badger arrives on site and removes pea gravel at MW-40. The crew clears the borehole to 8 feet and hits more boulders. Bryce and VA inspect the borehole and it is approved for drilling by VA. Bryce says Yellow Jacket will just need to cut away a little more asphalt (a 24-inch square) around the 18-inch hole to get tooling around the large boulder.

At 14:20, a second Badger hydrovac truck arrives on site and the VA opens access to MW-41. The first crew begins excavating EW-01.

At 15:15, the Badger crew clearing MW-41 finds a PVC utility line at 64 inches bgs, and the VA (Shannon Smith, Wyn John, Zane, and Monty) inspect it. They conclude it is a sewer cleanout line from the RV parking spaces. The MW-41 Badger crew steps out 4 feet and begins again while the EW-01 Badger crew hits refusal at 8 feet bgs. The VA approve the variance at EW-01, and Badger backfills and seals the borehole location.

At 16:15, the Badger crew at MW-41 finds a black utility cable with a yellow tracer tape at 4 feet bgs. The VA inspects and determines it is an electrical line. They would like it backfilled with smaller, rounded backfill to not damage the utility. Pea gravel or sand is preferred around the utility itself.

At 17:00, both Badger crews empty their vac trucks into the new soil containment pad and leave while Yellow Jacket brings pallets for the MW-41 excavations and reflective candlesticks for blocking off parking spaces we will need to access tomorrow.

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All personnel off site at 17:45.

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

Badger discovered utilities (Sewer cleanout and electrical) in both attempts to clear a borehole at MW-41. Will step out a new location for MW-41 tomorrow and carefully backfill utility excavations.

Yellow Jacket's transport truck with 9-inch casing broke down and will arrive late tonight. Yellow Jacket to arrive on site early tomorrow (7am) to unload and decontaminate.

Both Yellow Jacket and Badger will have access issues at MW-44. Yellow Jacket requests further grading of the slope to smooth out the lip at top of hill

Projected Work – Near Term:

5/22/2024: Yellow Jacket will complete casing decontamination and set up at MW-40 (full-size rig) and MW-41 (limited access rig; if possible). Badger will clear the borehole at MW-41.

Other Activities/Remarks:

None.

Photos:



Date: 5/21/2024

Location: Laydown Area

Description: Completed soil containment pad for remaining hydrovac cuttings.

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	**Date:** 5/21/2024 **Location:** Laydown Area **Description:** Selected soil containment site with plastic and haybales.
	**Date:** 5/21/2024 **Location:** MW-40 **Description:** Downhole view of boulder obstruction.
	**Date:** 5/21/2024 **Location:** MW-40 **Description:** Full-size rig is ready to set up at MW-40 with a pallet covering the open borehole.

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	**Date:** 5/21/2024 **Location:** MW-41 **Description:** Downhole view of PVC utility, suspected to connect with the sewer line.
	**Date:** 5/21/2024 **Location:** MW-41 **Description:** Downhole view of black utility (cable) with warning tape, suspected to be an electrical line.
	**Date:** 5/21/2024 **Location:** MW-41 **Description:** First two attempts to clear borehole at MW-41. Will backfill and try again tomorrow.

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	**Date:** 5/21/2024 **Location:** EW-01 **Description:** Badger clears EW-01 of utilities down to 8 feet bgs.
	**Date:** 5/21/2024 **Location:** EW-01 **Description:** Badger backfills borehole at EW-01.

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Salt Lake City, Utah

DATE: 5/22/2024	**Prepared by:** Kimberly Myers

Personnel Onsite, including Contractors:	CDM Smith – Neil Smith, Kimberly Myers, Jason Wagenmaker Yellow Jacket – Bryce Lugo, Zachary Olmsted, Charles Winland, Ernesto Godinez, Diego Diaz, Timothy Adams, Spring Peterson, Richard Hoyt Badger – Deran Weaver, Bradley Child VA – Shannon Smith, Wynn John, Zane Kozarec Army Corps of Engineers – David Suchy
Visitors/Others:	MP driver, casing transport driver, honey bucket driver, Anytime Services driver

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	To 32 º F
Wind	**Still**	**Moderate**	High		
Humidity	Dry	**Moderate**	Humid		

Equipment in Use (field instruments, subcontractor equip, etc.)	• One Hydrovac truck and flat bed with gravel (Badger) • PID • 2 Forklifts • Skid steer • Full-size drill rig (at MW-40) • Limited access drill rig (staged at MW-43 only)

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

CDM Smith and Yellow Jacket on site at 7am. Health and safety meeting. Richard will be performing internal safety audit on YJ crew. Yellow Jacket to decon the casing on site while awaiting delivery of the 9-inch casing.

At 7:30, MP arrives on site to move one of the soil bins to the MW-40 parking lot. Badger also arrives on site to clear borehole at MW-41. Zane Kozarec opens the gate for access. Yellow Jacket moves the pallets covering the open holes, and Badger backfills utility holes at MW-41 with pea gravel. CDM Smith adds bags of sand around the electrical utility per VA instructions.

CDM Smith measures distance from utilities to the new proposed MW-41 location, but there is only 4 feet from each utility. Yellow Jacket requires 5 feet from utilities due to boulders in the subsurface and vibration of the drill rig that could impact surrounding soil. Charles (driller with the limited access drill rig) inspects the location with CDM Smith, Badger, and VA. The only location far enough from known and marked utilities is too close to one of the FEMA trailers. Zane says it can be arranged to be moved. Yellow Jacket request that the utility locator returns to trace out the electrical line, since it seems to curve, and location is uncertain.

At 10:00, the 9-inch casing arrives and Yellow Jacket decontaminates it with steam cleaner. Once enough is deconned for one crew, the full-size rig sets up at MW-40.

At 13:40, CDM Smith and the full-size rig crew go through safety checklist.

At 14:50, the full-size rig starts drilling at MW-40 and reaches 55 feet bgs by end of day. Meanwhile the second crew completes the decontamination of the casing, sets the limited access rig up at MW-43.

Portable toilets are delivered from Services Anytime and Honey Bucket. Fencing is expected tomorrow.

All personnel off site at 18:20.

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

Geophysical utility locator will be back to site to trace electrical line at MW-41 and clear utilities at off-site locations pending finalization of IW-01 and MW-42 locations.

No other issues or problems.

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Projected Work – Near Term:

5/23/2024: Yellow Jacket will continue drilling at MW-40 with the full-size rig and set up to drill at MW-43 with the limited access rig.

Other Activities/Remarks:

None.

Photos:

	**Date:** 5/22/2024 **Location:** Laydown Area **Description:** Soil containment pad with hydrovac cuttings from 5/21/24.
	**Date:** 5/22/2024 **Location:** MW-41 **Description:** Sand covers the electrical utility before backfilling the remaining hole with rounded gravel.

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	**Date:** 5/22/2024 **Location:** Laydown Area **Description:** The final casing transport arrives on site.
	**Date:** 5/22/2024 **Location:** Laydown Area **Description:** Yellow Jacket decontaminates casing prior to drilling.
	**Date:** 5/22/2024 **Location:** MW-40 **Description:** Full-size rig with soil cores at MW-40.

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Salt Lake City, Utah

DATE: 5/23/2024	**Prepared by:** Kimberly Myers

Personnel Onsite, including Contractors:	CDM Smith – Neil Smith, Kimberly Myers, Jason Wagenmaker Yellow Jacket – Zachary Olmsted, Charles Winland, Ernesto Godinez, Diego Diaz, Timothy Adams, Spring Peterson VA – Shannon Smith, Wynn John, Zane Kozarec USACE – David Suchy
Visitors/Others:	None

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**	To 32 º F
Wind	**Still**	**Moderate**	High		
Humidity	Dry	**Moderate**	**Humid**		

Equipment in Use (field instruments, subcontractor equip, etc.)	• 3 PIDs • 2 Forklifts • Skid steer • Full-size drill rig (at MW-40) • Limited access drill rig (at MW-43) • 2 soil bins

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

CDM Smith and Yellow Jacket on site at 7am. Health and safety meeting.

At 8am, VA moves their trailer in order to open space around MW-41 while Yellow Jacket prepares to drill at MW-40 and decons the remaining casing. Dill rig inspection on full-size rig. CDM Smith sprays white paint at MW-41 proposed borehole location.

At 9am, Charles and Kimberly perform drill rig inspection on limited access rig. Full size rig warms up and is prepared to drill at MW-40 by 10am.

VA staff visit drilling at MW-40 at 11:50 to observe soil core and progress. CDM Smith logs soil cores. Yellow Jacket takes lunch at 12:40.

Following lunch, Yellow Jacket breaks seal on MW-43 and places a tub around the borehole to capture overspray while drilling. At 14:00, Charles, VA, and CDM Smith meet at MW-44 with the VA bobcat operator to check accessibility south of the solar panels. Wynn asks the VA bobcat operator to smooth out the access road a bit more.

At 14:25, drilling begins at MW-43 with the limited access drill rig. Drilling at MW-40 continues. CDM Smith checks for perched water at 135 feet bgs at MW-40 (soil core was wet), but there is not enough to collect a sample.

Drillers at both boreholes continue to drill until almost 18:00. They pack up and leave for the day at 18:00. CDM Smith and USACE remain on site; CDM Smith completes soil core logging.

Soil core logging is competed at 18:20 and David and Jason leave site. Kimberly stays to re-arrange supplies in connex boxes. Off site at 19:00.

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

Soil cores need to be removed at the end of each day of drilling. This will be implemented in the future.

Projected Work – Near Term:

5/24/2024: Drilling to continue at MW-40 and MW-43. Drilling will end early to close up equipment over the holiday weekend.

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Salt Lake City, Utah

5/28/2024: Yellow Jacket and CDM Smith will mobilize to the site to begin the next shift. Drilling will resume at MW-40 and MW-43.

Other Activities/Remarks:

None.

Photos:

	**Date:** 5/23/2024 **Location:** MW-43 **Description:** Yellow Jacket breaks seal on previously cleared borehole. Pea gravel settled and had a small void space under sealed asphalt.
	**Date:** 5/23/2024 **Location:** MW-43 **Description:** Soil cores from left to right are 12 to 18 feet (along curb), 18 to 28 feet (row two), 28 to 36 feet (row three), 38 to 40 feet (row four), and 40 to 46 feet (bottom row) .

Daily Quality Control Report
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Salt Lake City, Utah

	**Date:** 5/23/2024 **Location:** MW-43 **Description:** Drilling with limited access tracked drill rig at MW-43.
	**Date:** 5/23/2024 MW-43 Area **Description:** Large sandstone boulder at 35-36 feet bgs filled drill shoe and bottom of core barrel.
	**Date:** 5/23/2024 **Location:** MW-40 **Description:** Full-size rig continues drilling at MW-40.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 5/24/2024	**Prepared by:** Kimberly Myers

Personnel Onsite, including Contractors:	CDM Smith – Kimberly Myers, Jason Wagenmaker Yellow Jacket –Charles Winland, Zachary Olmsted, Ernesto Godinez, Diego Diaz, Timothy Adams, Spring Peterson Wasatch – Ryan Panasy VA – Zane Kozarec
Visitors/Others:	None

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**	To 32 º F
Wind	**Still**	Moderate	High		
Humidity	Dry	**Moderate**	Humid		

Equipment in Use (field instruments, subcontractor equip, etc.)	• 3 PIDs • 2 Forklifts • Skid steer • Full-size drill rig (at MW-40) • Limited access drill rig (at MW-43) • 2 soil bins

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

CDM Smith and Yellow Jacket on site at 7am. Health and safety meeting.

At 7:30am, Yellow Jacket warms up their rigs while CDM Smith opens gates to the IDW yard. Yellow Jacket will move their rig hauler trailer into the back lot of IDW yard for storage. Drillers dump soil cores into soil bins. No bucket will be available today for IDW management in soil containment, but Wasatch will be on site to pump water into poly tank on site.

Wasatch arrives on site at 9:10am to transfer water from vac-truck soil cuttings to the poly tank in the IDW yard.

At 10:30, moisture in MW-40 core is not enough water to sample. CDM Smith will monitor for potential water samples.

At 11:50, MW-43 crew takes lunch while CDM Smith continues logging soil. Borehole is advanced to 88 feet bgs. No more drilling expected this week at MW-43 as the drill crew will be moving the trailer, disposing of trash, and doing house keeping ahead of the holiday weekend.

Yellow Jacket leaves site at 14:00. Wasatch stays to continue transferring water. CDM Smith moves supplies and field forms into connex boxes and leaves keys with Wasatch for the next shift.

CDM Smith leaves site at 15:00. Wasatch stays later to continue pumping water out of containment.

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

One of the three PIDs is not reading correctly (checked values against another PID). Will need to exchange non-functioning PID for a new one from Field Environmental.

Projected Work – Near Term:

5/28/2024: Yellow Jacket and CDM Smith will mobilize to the site to begin the next shift. Drilling will resume at MW-40 and MW-43.

Other Activities/Remarks:

None.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

Photos:

	**Date:** 5/24/2024 **Location:** MW-43 **Description:** Drilling continues at MW-43.
	**Date:** 5/24/2024 **Location:** IDW Yard **Description:** Rig-hauling trailer is stored on back lot of IDW Yard behind back gate.

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Salt Lake City, Utah

	**Date:** 5/24/2024 **Location:** IDW Yard **Description:** Wasatch pumps water from soil containment into holding tank to transfer into IDW poly tank.
	**Date:** 5/24/2024 **Location:** Laydown Area **Description:** First soil containment has had water pumped off and is drying in the sun before Yellow Jacket scoops vacuum truck cuttings into a soil bin.
	**Date:** 5/24/2024 **Location:** Laydown Area **Description:** Second soil containment still has water, which is being pumped and transferred to poly tank in the IDW yard.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 5/29/2024	**Prepared by:** Shawn McGuire

Personnel Onsite, including Contractors:	CDM Smith – Shawn McGuire, Katarina Savatic, Jessica Yaich, Joseph Miller Yellow Jacket –Chris Hill, Zachary Olmsted, Ernesto Godinez, Luis Villai, Timothy Adams, Shane McNilty Wasatch – Rachel Kubina VA – Wynn John GPR Services – Kevin Wiederhold
Visitors/Others:	None

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	To 32 º F
Wind	Still	**Moderate**	High		
Humidity	Dry	**Moderate**	Humid		

Equipment in Use (field instruments, subcontractor equip, etc.)	• 3 PIDs • 2 Forklifts • Skid steer • Full-size drill rig (at MW-40) • Limited access drill rig (at MW-43) • 2 soil bins • GRP Sled and EM locator

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

CDM Smith were on site by 6:30am to gather supplies and logging kits. Yellow Jacket was on site at 7am. Health and safety meeting.

At 8:00am, Yellow Jacket fuels up their rigs while CDM Smith fills out daily rig inspection and excavation checklists.

MW-40: Advanced boring from 193 to 255 ft bgs. Prior to drilling depth to water was measured at 185 ft bgs. Three grab groundwater samples were collected today.

MW-43: Advanced boring from 88 to 132 ft bgs. No water was encountered.

Samples collected:
MW40-GW052924-193
MW40-GW052924-215
MW40-GW052924-235 + Duplicate FD01-GW052924

Utility Locating: GPR Services was onsite to locate utilities near MW-41 location and IW-01/MW-42. Two sets of locations were cleared for IW-01 and MW-42, one set in the pavement near MW-01S/D and one set in the grass southeast of MW-01S/D. One utility was identified near the pavement MW-42 location, but that location can be offset by a few feet and be clear of identified utilities.

Drilling stops by 4:55 and all personnel clean/pack up site.

CDM Smith leaves site at 5:55pm.

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

MW-40 is supposed to attempt a groundwater grab sample at 255 ft bgs. The lithology is currently a clay without signs of water, so the team will advance 10 feet and attempt to collect a sample at 265 ft bgs.

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700 South 1600 East PCE Plume
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Projected Work – Near Term:

5/30/2024: Drilling will continue at MW-40 and MW-41. GPR Services will locate two areas around proposed MW-41 (southern most location preferred, with northern location as the alternate).

Other Activities/Remarks:

None.

Photos:

	**Date:** 5/29/2024 **Location:** MW-40 **Description:** Drilling continues at MW-40.
	**Date:** 5/29/2024 **Location:** MW-43 **Description:** Screening cores with PID from 107-110 ft bgs.

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Salt Lake City, Utah

	**Date:** 5/29/2024 **Location:** IW-01/MW-42 **Description:** Alternate locations in grass near MW-01S/D. View to north.
	**Date:** 5/29/2024 **Location:** IW-01/MW-42 **Description:** IW-01 and MW-42 near MW-01S/D. View to the northwest.

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Date: 5/29/2024

Location: MW-42

Description: Utilities marked near MW-42 proposed location. Location should be shifted east three feet. View to the north.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 5/30/2024	**Prepared by:** Shawn McGuire

Personnel Onsite, including Contractors:	CDM Smith – Shawn McGuire, Katarina Savatic, Jessica Yaich, Joseph Miller Yellow Jacket –Chris Hill, Zachary Olmsted, Ernesto Godinez, Luis Villai, Timothy Adams, Shane McNilty Wasatch – Ryan Panasy VA – Wynn John GPR Services – Kevin Wiederhold
Visitors/Others:	MP Environmental

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	To 32 º F
Wind	Still	**Moderate**	High		
Humidity	Dry	**Moderate**	Humid		

Equipment in Use (field instruments, subcontractor equipment, etc.)	• 3 PIDs • 2 Forklifts • Skid steer • Full-size drill rig (at MW-40) • Limited access drill rig (at MW-43) • 2 soil bins • GPR Sled and EM locator

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

CDM Smith were on site by 6:30am to gather supplies and logging kits. Yellow Jacket was on site at 7am. Health and safety meeting.

At 8:00am, Yellow Jacket fuels up their rigs while CDM Smith fills out daily rig inspection and excavation checklists.

MW-40: Advanced boring from 255 to 295 ft bgs. Prior to drilling, depth to water was measured and the boring was dry. No grab groundwater samples were collected today due to lack of water-bearing units encountered.

MW-43: Advanced boring from 132 to 168 ft bgs. No water was encountered.

Both drill rigs switched from 9-inch casing to 8-inch casing

Samples collected:
EB01-GW053024 (Equipment Blank)

Utility Locating: GPR Services was onsite to locate two areas around proposed MW-41 (southernmost location preferred, with northern location as the alternate). Both areas had utility conflicts. A third location was identified and appears to have a clear area to drill MW-41.

Drilling stops by 3:55 and all personnel clean/pack up site.

CDM Smith leaves site at 5:45pm.

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

MW-40 is supposed to attempt a groundwater grab sample since 255 ft bgs. The lithology has consistently been a thick clay to roughly 285 ft bgs. The formation was a little wet, so we left it over night to recharge.

Projected Work – Near Term:

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Salt Lake City, Utah

5/31/2024: Drilling will continue at MW-40 and MW-43.

Other Activities/Remarks:

MP Environmental delivered a new roll-off (6039) dropped off at the drilling location and the full roll-off (6049) was taken to the Laydown Yard.

Photos:

	**Date: 5/30/2024** **Location:** MW-41 **Description:** Utilities around the proposed boring location. View to the west.
	**Date: 5/30/2024** **Location:** MW-41 **Description:** Boring location with surrounding utilities. View to northeast.

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700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 5/31/2024	**Prepared by:** Shawn McGuire

Personnel Onsite, including Contractors:	CDM Smith – Shawn McGuire, Katarina Savatic, Jessica Yaich, Joseph Miller Yellow Jacket –Chris Hill, Zachary Olmsted, Ernesto Godinez, Luis Villai, Timothy Adams, Shane McNilty Wasatch – Rachel Kubina VA – Wynn John
Visitors/Others:	None

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	To 32 º F
Wind	Still	**Moderate**	High		
Humidity	Dry	**Moderate**	Humid		

Equipment in Use (field instruments, subcontractor equipment, etc.)	• 3 PIDs • 2 Forklifts • Skid steer • Full-size drill rig (at MW-40) • Limited access drill rig (at MW-43) • 2 soil bins • GPR Sled and EM locator

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

CDM Smith were on site by 7:00am to gather supplies and logging kits. Yellow Jacket was on site at 7am. Health and safety meeting.

At 8:00am, Yellow Jacket fuels up their rigs while CDM Smith Calibrates PIDs, fills out daily rig inspection and excavation checklists.

MW-40: Advanced boring from 295 to 315 ft bgs. Prior to drilling, depth to water was measured at 204 ft bgs. The PID detection for the 305 ft bgs to 307 ft bgs soil read 380 ppm. A call to discuss the screen depths with VA and USACE decided on a shallow screen interval from 230-240 ft bgs and the deep screen from 297-307 ft bgs. Yellow Jacket prepared the well-construction materials and staged them at MW-40.

MW-43: Advanced boring from 168 to 188 ft bgs. No water was encountered.

Samples collected:
MW40-GW053124-295
MW40-GW053124-315 plus MS/MSD
EB02-GW053124

MW-40 Drilling stops by 12:30pm after reaching total depth and all personnel clean, pack up and are off-site by 4:30pm.

CDM Smith leaves site at 5:00pm.

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

MW-40 The 295 ft bgs to 305 ft bgs dropped out when recovering the sample. Recovered sample by over drilling to 315 ft bgs.

MW-43 At 11:50 am, the driller stopped due to misalignment of the core barrel and found that a pin had popped out from the rig head. After inspection, it was found that the tread of the pin is completely worn down. A replacement part was ordered from Ohio and should be delivered tomorrow. The rig shut down and Yellow Jacket crew cleaned/locked up the site by 1:45pm.

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Salt Lake City, Utah

Projected Work – Near Term:

6/1/2024: Well construction will begin at MW-40 and rig repairs will be performed for the rig on MW-43

Other Activities/Remarks:

Transfer hydrovac soil cuttings to roll-off.

Photos:



Date: 5/31/2024

Location: MW-40

Description: 305 ft bgs to 307 ft bgs soil recovery with high PID reading and high water conductivity.

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Date: 5/31/2024

Location: MW-43

Description: Drilling crew inspecting the track mounted drill rig.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 6/1/2024	**Prepared by:** Shawn McGuire

Personnel Onsite, including Contractors:	CDM Smith – Shawn McGuire, Katarina Savatic, Jessica Yaich Yellow Jacket –Chris Hill, Zachary Olmsted, Ernesto Godinez, Luis Villai, Timothy Adams, Shane McNilty
Visitors/Others:	None

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	To 32 º F
Wind	Still	**Moderate**	High		
Humidity	Dry	**Moderate**	Humid		

Equipment in Use (field instruments, subcontractor equipment, etc.)	• 3 PIDs • 2 Forklifts • Skid steer • Full-size drill rig (at MW-40) • Limited access drill rig (at MW-43) • 3 soil bins

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

CDM Smith were on site by 7:00am to gather supplies and logging kits. Yellow Jacket was on site at 7am. Health and safety meeting.

At 8:00am, Yellow Jacket fuels up their rigs while CDM Smith Calibrates PIDs, fills out daily rig inspection and excavation checklists.

MW-40: Began monitoring well construction. Total boring depth was measured at 311 ft bgs. The boring was backfilled with bentonite to 307 ft bgs. The deep well screen is 297 ft bgs to 307 ft bgs. The sand filter pack was installed from 295 to 307 ft bgs (13 bags of sand). A bentonite seal was installed from 243 to 295 ft bgs. The shallow well screen was installed from 230 ft bgs to 240 ft bgs. 11 bags of filter pack was installed from 228 ft bgs to 243 ft bgs. The bentonite seal was installed above the shallow screen interval prior to the lightning delay.

MW-43: Replacement part arrived on-stie at 12:45pm. No bracket was included, so crew had to use old one and had to hammer it straight. Rig was running and began tripping out by 4:15pm.

Samples collected:
None

MW-40 well construction stops by 4:30pm they stopped due to weather. All personnel clean, pack up and are off-site by 4:30pm.

CDM Smith leaves site at 5:00pm.

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

MW-40 The rigs had to stop due to lightning within 10 miles for 30-45 minutes. Lightning stops occurred at 2:50pm and 4:30pm.

MW-43 No work was done on the rig until 12:45pm, when the part arrived. The rig repairs were made, but no logging occurred due to weather delays.

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Salt Lake City, Utah

Projected Work – Near Term:

6/2/2024: Well construction will resume on MW-40 and will grout the wells to the surface. MW-43 will resume drilling and is expected to encounter water.

Other Activities/Remarks:

Soil containment cleanup and IDW yard organization

Photos:



Date: 6/1/2024

Location: MW-40

Description: removing 8 inch casing after installing both the deep and shallow wells.

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Date: 6/1/2024

Location: Containment Yard

Description: YJD cleanning up the first pad which will NOT be reused.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 6/2/2024	**Prepared by:** Shawn McGuire

Personnel Onsite, including Contractors:	CDM Smith – Shawn McGuire, Katarina Savatic, Jessica Yaich Yellow Jacket –Chris Hill, Zachary Olmsted, Ernesto Godinez, Luis Villai, Timothy Adams, Shane McNilty
Visitors/Others:	None

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	To 32 º F
Wind	Still	**Moderate**	High		
Humidity	Dry	**Moderate**	Humid		

Equipment in Use (field instruments, subcontractor equipment, etc.)	• 3 PIDs • 2 Forklifts • Skid steer • Full-size drill rig (at MW-40) • Limited access drill rig (at MW-43) • 3 soil bins

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

CDM Smith were on site by 7:00am to gather supplies and logging kits. Yellow Jacket was on site at 7am. Health and safety meeting.

At 7:40am, Yellow Jacket fuels up their rigs while CDM Smith Calibrates PIDs, fills out daily rig inspection and excavation checklists.

MW-40: Continued to construct MW-40 deep and shallow monitoring well. Yellow Jacket finished sealing the whole with bentonite up to 50 ft bgs. Then they began pouring grout (3% mix) to the surface. The boring accepted more grout than anticipated, using 28x50 gallon batches to raise the grout to 10 ft bgs.

MW-43: The boring was advanced from 188’ to 228’. Depth to water was measured at 199.50’ during the second run. One groundwater sample, and field duplicate, were collected at 209’, as well as an equipment blank. The soil was wet from 198-212'. Twenty feet after the first sample, the soil was dry to moist and we encountered approximately 4 foot clayey silt. It was decided to trip the sampler in, let it fill overnight, and collect another water sample first thing in the morning.

Samples collected:

MW43-GW060224-209 + field duplicate
EB03-GW060224

CDM Smith leaves site at 5:00pm.

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

MW-43 Drilling continues to be difficult and slow; talked with Chris Hill and he thinks that the casing from the previous shift isn’t fully straight, so they continue to adjust. May adjust placement of the rig in the morning before drilling.

Projected Work – Near Term:

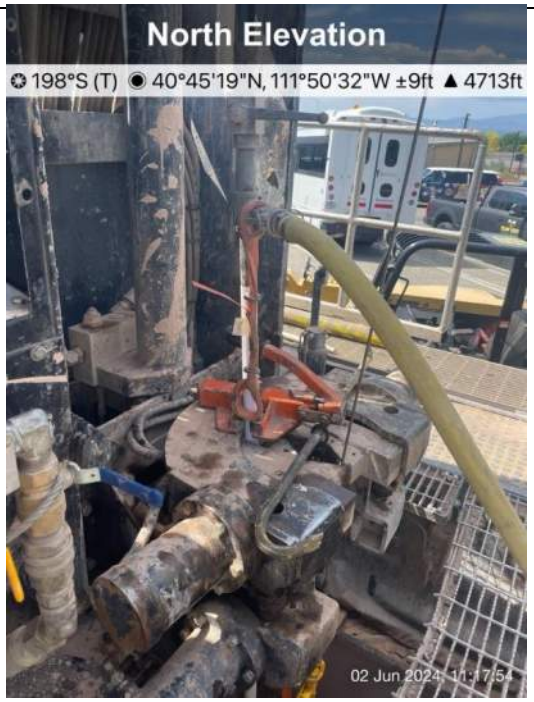
6/3/2024: Well construction will resume on MW-40 and will grout the wells to the surface.

MW-43 – Will continue to drill and take samples every 20 feet

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

Other Activities/Remarks:

Photos:

	**Date: 6/2/2024** **Location:** MW-40 **Description:** Tremie pipe for pumping grout as required in SOW.
	**Date: 6/2/2024** **Location:** MW-40 **Description:** Mixing Grout for MW-40 installation

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 6/4/2024	**Prepared by:** Shawn McGuire

Personnel Onsite, including Contractors:	CDM Smith – Shawn McGuire, Katarina Savatic, Jessica Yaich Yellow Jacket –Chris Hill, Zachary Olmsted, Ernesto Godinez, Luis Villai, Timothy Adams, Shane McNilty VA – Wynn John
Visitors/Others:	MP Environmental

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	To 32 º F
Wind	Still	**Moderate**	High		
Humidity	Dry	**Moderate**	Humid		

Equipment in Use (field instruments, subcontractor equipment, etc.)	• 3 PIDs • 2 Forklifts • Skid steer • Full-size drill rig (at MW-40) • Limited access drill rig (at MW-43) • 4 soil bins

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

CDM Smith were on site by 6:45am to gather supplies and logging kits. Yellow Jacket was on site at 7am to begin the Health and Safety meeting.

At 7:40am, Yellow Jacket fuels up their rigs while CDM Smith Calibrates PIDs, fills out daily rig inspection and excavation checklists.

MW-40: Well construction complete. The VA requested we make some changes to avoid snowplows from catching on the lip of the well pad and reducing potential trip hazard.

EW-01: Advanced boring from surface to 85 ft bgs. The full-size rig had a maintenance issue but was resolved by 11:00am.

MW-43: The boring was advanced from 258 to 278 ft bgs. The groundwater sampler was silted up at 258 ft sample, the sampler was tripped out cleaned and sampling was successfully reattempted. 8-inch sonic casing was deconned and installed in the boring. The sampler was deployed at 278 ft bgs to allow water to infiltrate overnight.

Samples collected:

MW43-GW060424-258

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

EW-01 Maintenance issue, rig was serviced and began drilling at 11am.

MW-40 Drillers will grind down lip of surface completion to make it flush with surrounding surface.

MW-43 The sampler was clogged up for the 258 ft water sample attempt. The sampler was removed, deconned, and a sample was collected.

Projected Work – Near Term:

6/5/2024: **EW-01** Continue drilling

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MW-43: Collect water sample first thing in the morning and continue drilling/logging.

Hydrovac preclearing at MW-41 and MW-44 locations.

Other Activities/Remarks:

MP Environmental moved the filled roll-off (#6139) to the laydown yard and drop off a new roll-off (#6145)

Photos:

	**Date: 6/4/2024** **Location:** EW-01 **Description:** The drilling rig from MW-40 over the new location EW-01 and ready to begin drilling
	**Date: 6/4/2024** **Location:** EW-01 **Description:** Gravel fill from pre-clearing to 10 ft bgs.

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Date: 6/4/2024

Location: MW-43

Description: The sampler after an unsuccessful water sample collection; clogged up with silt.



Date: 6/4/2024

Location: MW-43

Description: The dominate lithology observed from 258 to 278 feet was SANDY SILT (not gravel) which is found above (to the left) of the glove. Around 269' is where you start to get lenses of SILTY SAND with GRAVEL that were wet.

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700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 6/3/2024	**Prepared by:** Shawn McGuire

Personnel Onsite, including Contractors:	CDM Smith – Shawn McGuire, Katarina Savatic, Jessica Yaich Yellow Jacket –Chris Hill, Zachary Olmsted, Ernesto Godinez, Luis Villai, Timothy Adams, Shane McNilty VA – Wynn John
Visitors/Others:	None

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	To 32 º F
Wind	Still	**Moderate**	High		
Humidity	Dry	**Moderate**	Humid		

Equipment in Use (field instruments, subcontractor equipment, etc.)	• 3 PIDs • 2 Forklifts • Skid steer • Full-size drill rig (at MW-40) • Limited access drill rig (at MW-43) • 3 soil bins

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

CDM Smith were on site by 7:00am to gather supplies and logging kits. Yellow Jacket was on site at 7am. Health and safety meeting.

At 7:40am, Yellow Jacket fuels up their rigs while CDM Smith Calibrates PIDs, fills out daily rig inspection and excavation checklists.

MW-40: Continued to construct MW-40 deep and shallow monitoring well. Yellow Jacket finished sealing to the surface and constructed the well pad. YJD mobilized to the location of EW-01 ready to begin drilling.

MW-43: The boring was advanced from 228 to 258 ft bgs. A water sample was attempted at 228 ft bgs, but no water was present in the sampler. Another attempt was made at 235 ft bgs, that didn't produce water. After the 248 ft run, the soil was dry. Last run of the day was from 248 to 258 ft. The top of the run was still in the clayey unit and then returned to SILTY SAND with GRAVEL that was wet, the sampler was deployed to allow water to infiltrate overnight.

Samples collected:

No groundwater samples were collected at MW-43, due to low producing zones. Soil roll-off #6139 was sampled IDW01-SB060324

CDM Smith leaves site at 5:30pm.

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

MW-43: Drill rods were fished out after tripping in sampler, when rods slid from clamps. A rod broke when vibing to open the sampler, and were recovered with the taper bit. No groundwater samples were collected from 228 to 248 ft bgs intervals because of low producing zones. A sample will be attempted at 258 ft bgs.

Projected Work – Near Term:

6/3/2024: Start drilling and logging EW-01.

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MW-43: Collect groundwater sample first thing in the morning and then continue drilling, logging, and aiming to sample for groundwater every 20 feet.

Other Activities/Remarks:

MP environmental was contacted to relocate soil roll-off from camper parking space

Photos:

	**Date: 6/3/2024** **Location:** MW-40 **Description:** Cutting the well pad site as specified.
	**Date: 6/3/2024** **Location:** MW-40 **Description:** Final well pad drying

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah



Date: 6/3/2024

Location: MW-43

Description: Taper attachment used to retrieve broken rod.



Date: 6/3/2024

Location: MW-43

Description: Final 4 feet of the last run of the day (248'-258) where we were back into a SILTY SAND with GRAVEL that was wet.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 6/5/2024	**Prepared by:** Shawn McGuire

Personnel Onsite, including Contractors:	CDM Smith – Shawn McGuire, Katarina Savatic, Jessica Yaich Yellow Jacket –Chris Hill, Zachary Olmsted, Ernesto Godinez, Luis Villai, Timothy Adams, Shane McNilty Wasatch – Ryan Panasy VA – Wynn John, Shannon Smith, Zane Kozarec
Visitors/Others:	Badger Preclearing

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	To 32 º F
Wind	Still	**Moderate**	High		
Humidity	Dry	**Moderate**	Humid		

Equipment in Use (field instruments, subcontractor equipment, etc.)	• 3 PIDs • 2 Forklifts • Skid steer • Full-size drill rig (at EW-01) • Limited access drill rig (at MW-43) • 4 soil bins

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

CDM Smith were on site by 6:45am to gather supplies and logging kits. Yellow Jacket was on site at 7am to begin the Health and Safety meeting.

At 7:40am, Yellow Jacket fuels up their rigs while CDM Smith Calibrates PIDs, fills out daily rig inspection and excavation checklists.

EW-01: Advanced boring from 85 ft bgs to 145 ft bgs. Water has not been encountered yet. The soil core at 90 ft bgs had an elevated PID reading of 436ppm.

MW-43: Advanced boring from 278’ to 298’. Collected two groundwater samples: one at 278’ and one at 285’ with the sampler. Collected one equipment blank. The last run a wet GRAVEL was encountered and the sampler was deployed. Color-tec analysis of 285 ft bgs sample was non-detect.

Samples collected:

MW43-GW060524-278
MW43-GW060524-285
EB04-GW060524

Hydrovac Pre-clearing: MW-41 was cleared to 7 ft bgs. Badger encountered refusal due to large cobbles/boulders with minimal matrix. MW-44 was cleared to 9.5 ft bgs

CDM Smith leaves site at 5:30pm.

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

MW-41 and MW-44 preclearing had refusal less than 15 ft bgs due to soil conditions. No utilities were encountered and the soil appeared to be native.

Daily Quality Control Report
700 South 1600 East PCE Plume
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Projected Work – Near Term:

6/6/2024: EW-01 resume drilling and logging. Possibly collect a water sample if groundwater is encountered

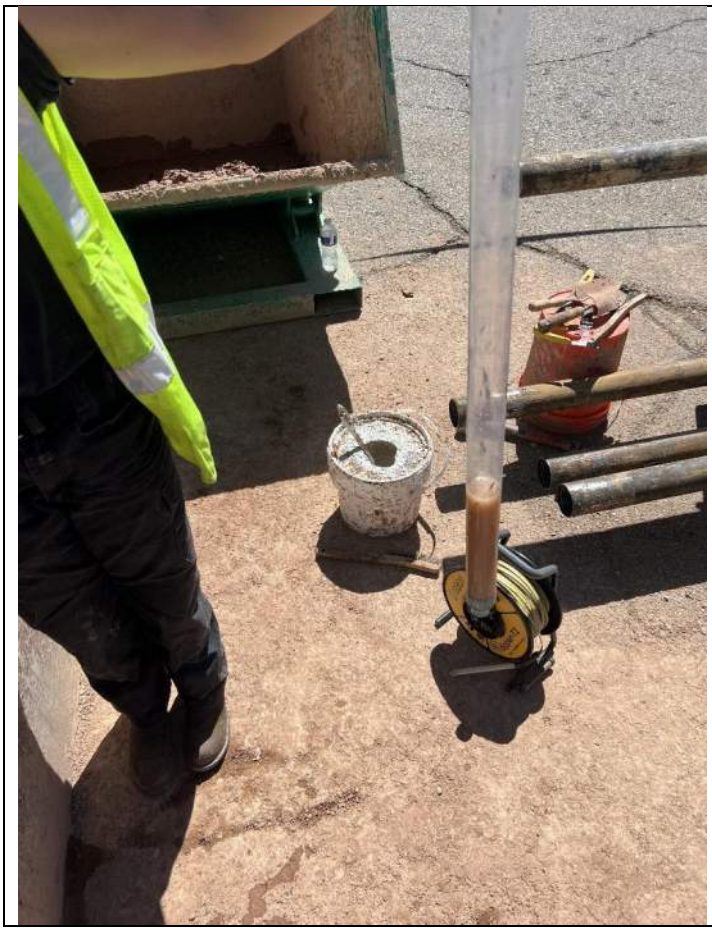
MW-43 Continue drilling, logging, and sampling. Total depth may be encountered tomorrow.

Other Activities/Remarks:

Photos:

	**Date: 6/5/2024** **Location:** MW-41 **Description:** Badger removing asphalt to pre-check utilities.
	**Date: 6/5/2024** **Location:** MW-41 **Description:** Badger stopping at 7 ft bgs due to the presence of large boulders that could not be removed.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

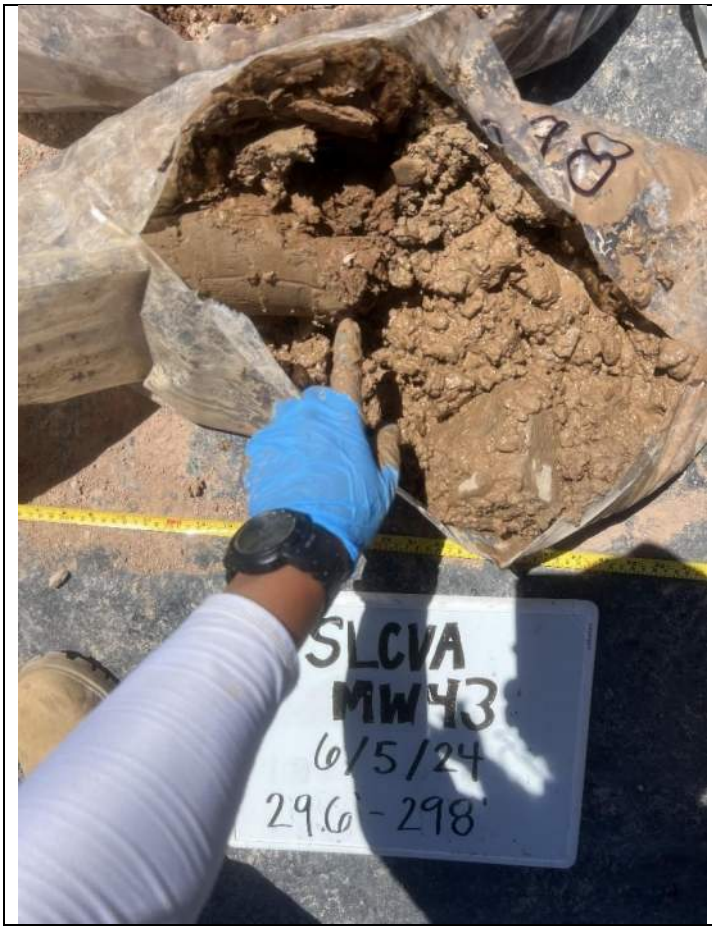


Date: 6/5/2024

Location: MW-43

Description: Successful groundwater sample after deploying the sampler and then a bailer at 285 ft.

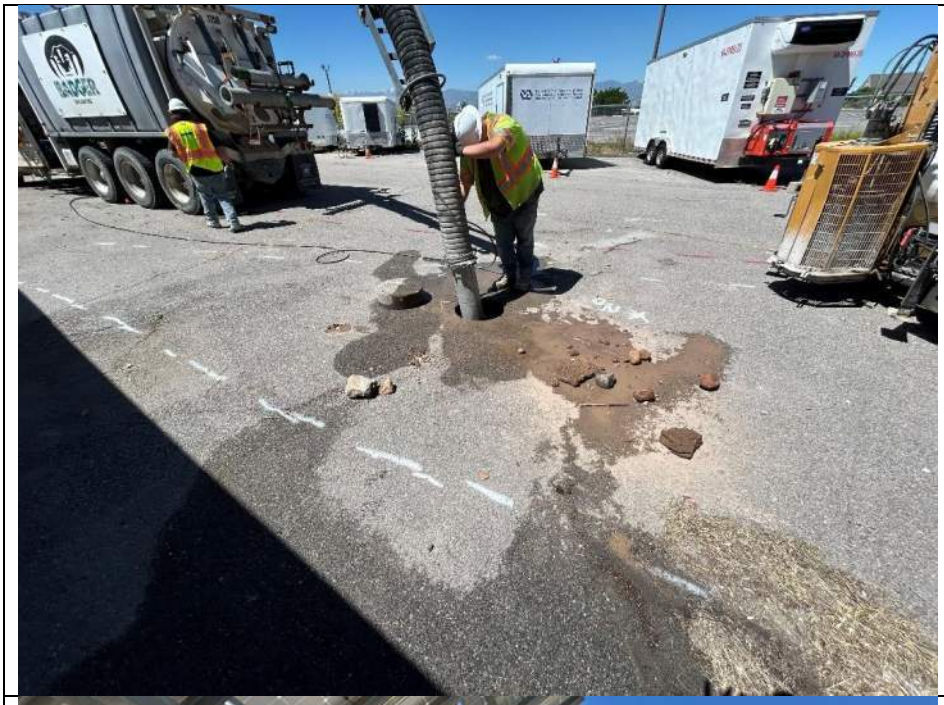
Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

		**Date: 6/5/2024** **Location:** MW-43 **Description:** Last run of the day where a WET GRAVEL was encountered.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 6/5/2024	**Prepared by:** Joe Miller

Additional Photos:

	**Date: 6/5/2024** **Location:** MW-41 **Description:** Hydrovac preclearing with large cobbles/clasts removed from boring. View to the southwest
	**Date: 6/5/2024** **Location:** MW-44 **Description:** Badger pre-clearing backed into solar berm area view to the west.

Daily Quality Control Report
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	**Date: 6/5/2024** **Location:** MW-44 **Description:** Badger running hose extension from solar farm to MW-44 location. View to the north.
	**Date: 6/5/2024** **Location:** MW-44 **Description:** Boring precleared to approximately 9.5 ft bgs.

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	**Location:** MW-44 **Description:** View from top of berm to southwest. Precleared location.
	**Location:** Staging area **Description:** Badger dumping soil and water from hydrovac clearing in temporary containment.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 6/12/2024	**Prepared by:** Alexander Pedjase

Personnel Onsite, including Contractors:	CDM Smith – Joe Miller, Alex Pedjase, Nathan Norris, Isaac Nance Yellow Jacket –Chris Hill, Diego Diaz, Ernesto Godinez, Timothy Adams, Shane McNulty, Raymond Dagle, Weston Waldrop
Visitors/Others:	ELM Public locator

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	To 32 º F
Wind	Still	**Moderate**	High		
Humidity	**Dry**	Moderate	Humid		

Equipment in Use (field instruments, subcontractor equipment, etc.)	• 3 PIDs • 2 Forklifts • Skid steer • Full-size drill rig (at EW-01) • Limited access drill rig (at MW-43) • 4 soil bins

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

CDM Smith was on site by 6:45am to gather supplies and logging kits. Yellow Jacket was on site at 7am to begin the Health and Safety meeting.

At 7:30am, Yellow Jacket loads 10" casing and grouting supplies and mobilizes to their rigs while CDM Smith Calibrates PIDs, fills out daily rig inspection and excavation checklists.

EW-01: Collected groundwater sample EW01-GW061224-223**.** Advanced boring from 223 to 246 ft bgs. 8" core barrel locked inside 10" casing, Yellow Jacket freed casing, but 4.5 rig hours and core from 225-235 ft was mixed up in the retrieval. Installed groundwater sampling tool at 246 ft bgs, and collected EW01-GW061224-246. Yellow Jacket removed the sample tool and drill string before packing up and leaving the site. Color-tec was run on the samples, 223 ft sample was non-detect and 246 ft sample indicated a concentration of 35 ug/L total CVOCs.

MW-43: Placed and hydrated upper annular seal with ¼" uncoated bentonite pellets from 222 to 219 ft bgs. Yellow Jacket installed 1" tremie pipe and pressure grouted with 14 batches (50 gal batches) of AMC Grout 20™ followed 12 batches of a 5% bentonite portland cement to five feet below surface. Casing and drill rods transported to decontamination pad and decontaminated all casing and drill string, and extra equipment packed up to prepare for mobilization to MW-41.

Samples collected:

EW01-GW061224-223
EW01-GW061224-246

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

EW-01 – 8" core barrel became lodged in 10" casing and drill string broke. Yellow Jacket initially tried to fish the core barrel out with a fishing tool but was unsuccessful. Yellow Jacket was able to free the locked up 8" core barrel and drill string by over drilling with 9" casing and washing out around the barrel with water. Total of 4.5 hours lost rig time.

MW-43 – Significant grout loss to formation during grout placement. Estimated approx. 700 gallons required, total used exceeded 1,300 gallons.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

Projected Work – Near Term:

6/13/2024: **EW-01** Continue drilling and sampling.

MW-43: Top-up lost grout, complete surface pad and vault and decontaminate drill tooling.

MW-41: Mobilize limited access rig to MW-41 and begin drilling and sampling.

Other Activities/Remarks:

Dig ticket reopened and utility locator onsite to remark locations.

Photos:

	**Date: 6/12/2024** **Location:** MW-43 **Description:** Yellow Jacket mixing bentonite grout for MW-43 grouting.
	**Date: 6/12/2024** **Location:** MW-43 **Description:** Pressure grouting MW-43 through tremie pipe.

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Salt Lake City, Utah

	**Date: 6/12/2024** **Location:** EW-01 **Description:** Yellow Jacket working to free core barrel from formation.
	**Date: 6/12/2024** **Location:** EW-01 **Description:** Colortec sample at EW-01 246 ft bgs. Indicator reads 0.5 which correlates to 35 ug/L.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 6/13/2024	**Prepared by:** Alexander Pedjase

Personnel Onsite, including Contractors:	CDM Smith – Joe Miller, Alex Pedjase, Isaac Nance Yellow Jacket –Chris Hill, Diego Diaz, Ernesto Godinez, Timothy Adams, Shane McNulty, Raymond Dagle, Weston Waldrop Wasatch Environmental – Ryan Panasy
Visitors/Others:	MP Enviromental

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	To 32 º F
Wind	Still	**Moderate**	High		
Humidity	**Dry**	Moderate	Humid		

Equipment in Use (field instruments, subcontractor equipment, etc.)	• 3 PIDs • 2 Forklifts • Skid steer • Full-size drill rig (at EW-01) • Limited access drill rig (at MW-41) • 5 soil bins

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

CDM Smith was on site by 6:45am to gather supplies and logging kits. Yellow Jacket was on site at 7am to begin the Health and Safety meeting.

At 7:30am, Yellow Jacket mobilizes to their rigs while CDM Smith Calibrates PIDs, fills out daily rig inspection and excavation checklists.

EW-01: Advanced boring from 246 to 305 ft bgs. Installed groundwater sampling tool at 265 and 285 ft bgs, and collected EW01-GW061324-265 and EW01-GW061324-285. Both samples were screened using color-tec, the sample at 265 ft had indicated a total VOC concentration of 450 ug/L.

MW-43: Yellow Jacket topped up grout, which had fallen from 5 feet to 8 ft bgs, and set flush well vault and pad. Mobilized to MW-41.

MW-41: Yellow Jacket began boring at MW-41 with the limited access rig. Yellow Jacket advanced the boring from 0 to 70 ft bgs and installed 9-inch casing from 0 to 60 ft bgs. CDM Smith logged and screened soil cores.

Samples collected:

EW01-GW061324-265
EW01-GW061324-285

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

None

Projected Work – Near Term:

6/14/2024: **EW-01** Continue drilling and sampling. Begin setting EW-01 extraction well.

MW-41: Continue drilling and begin groundwater sampling.

Other Activities/Remarks:

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

MW-41 – VA staff need to mobilize incident control equipment tomorrow, Yellow Jacket has cleared a large path for egress for VA staff.

New roll-off bin delivered to site by MW for soil cuttings.

Vac cutting containment water was pumped off and transferred to IDW water container.

Photos:

	**Date: 6/13/2024** **Location:** MW-43 **Description:** MW-43 completed well vault and pad.
	**Date: 6/13/2024** **Location:** MW-41 **Description:** Limited access rig set-up at MW-41.

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	**Date: 6/13/2024** **Location:** EW-01 **Description:** Soil core from 303 to 305 ft bgs. Silty gravel, moist to wet.

Daily Quality Control Report

700 South 1600 East PCE Plume

Salt Lake City, Utah

DATE: 6/6/2024	**Prepared by:** Shawn McGuire

Personnel Onsite, including Contractors:	CDM Smith – Shawn McGuire, Katarina Savatic, Jessica Yaich Yellow Jacket –Chris Hill, Zachary Olmsted, Ernesto Godinez, Luis Villa, Timothy Adams, Shane McNulty Wasatch – John Rezac
Visitors/Others:	Badger Preclearing

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	To 32 º F
Wind	Still	**Moderate**	High		
Humidity	Dry	**Moderate**	Humid		

Equipment in Use (field instruments, subcontractor equipment, etc.)	• 3 PIDs • 2 Forklifts • Skid steer • Full-size drill rig (at MW-40) • Limited access drill rig (at MW-43) • 4 soil bins

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

Katarina Savatic and Jessie Yaich on-site at 06:00 to conduct ColorTec test on sample MW43-GW060524-285. CDM Smith were on site by 6:45am to gather supplies and logging kits. Yellow Jacket was on site at 7am to begin the Health and safety meeting.

At 7:40am, Yellow Jacket fuels up their rigs while CDM Smith Calibrates PIDs, fills out daily rig inspection and excavation checklists.

EW-01: Advanced boring from 145 ft bgs to 165 ft bgs. Water has not been encountered yet. The soil core at 90 ft bgs had an elevated PID reading of 436ppm. However, the elevated readings seem to be connected to very hot samples and not volitiles.

MW-43: Advanced boring from 298’ to 318’ and reached total depth. Collected two groundwater samples: one at 298’ (no sampler) and one at 318’ with the sampler. Collected one equipment blank. Most of the lithology was a GRAVEL and still was relatively wet. Discussion about where to screen this took place. Casing is around 300’ and well was capped at the end of the day. Well completion will take place next week

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Samples collected:
MW43-GW060624-298
MW43-GW060624-318
EB05-GW060624
IDW02-SB060624

Pre-clear holes were backfilled with gravel/sand.

CDM Smith leaves site at 3:15pm.

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

EW-01: Driller dropped coring rods in boring due to broken rod and needed to "fish" the equipment out.

MW-43: Shane McNulty had issues deploying the sampler for the last sample at 318'. Chris Hill had to assist.

Projected Work – Near Term:

6/11/2024: Resume drilling and logging with new teams.

MW-43: The two intervals proposed for screen intervals are as follows:

Target screen interval of 226 – 236 feet bgs for the shallow zone well. A permeable sand/gravel unit was encountered between 228 and 235 feet bgs, which is roughly equivalent in elevation to MW-03RA interval which is screened at approximately 220 feet bgs.

Target screen interval of 274-284 feet bgs for the deep zone well. Water-bearing intervals were encountered between approximately 274 to 283 feet bgs, which is roughly equivalent in elevation to MW-03RB which is screened at approximately 270 feet bgs.

Backfill will need to occur to approximately 290'

Other Activities/Remarks:

-Used Color-tec equipment on 2 samples. No detections

-Packed up, locked equipment and organized equipment containers for next crew.

Photos:

Daily Quality Control Report

700 South 1600 East PCE Plume

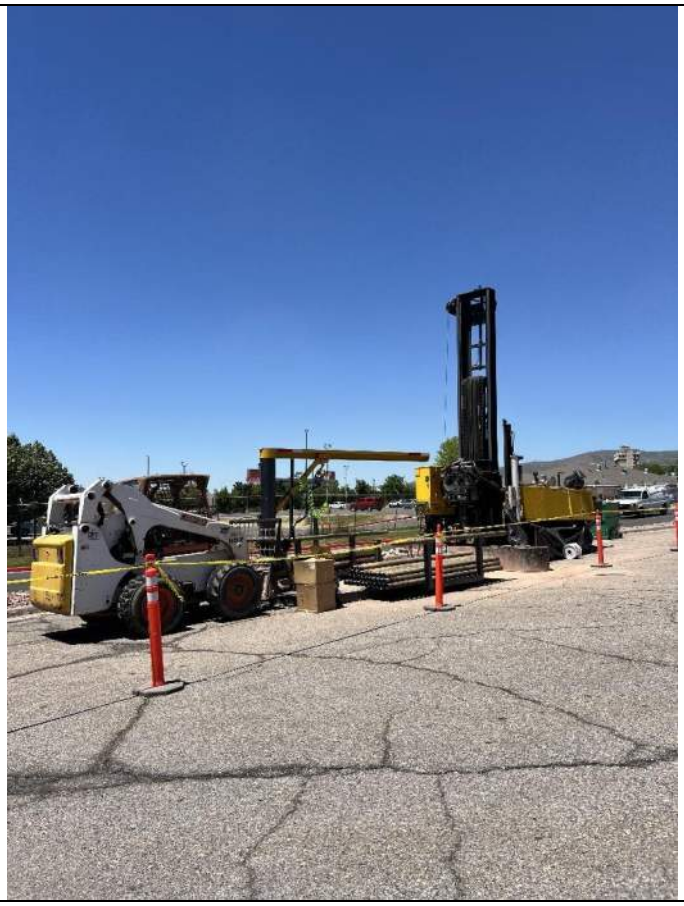
Salt Lake City, Utah

	**Date: 6/6/2024** **Location:** MW-41 **Description:** Gravel/sand used to fill in holes from Badger pre-clear.
	**Date: 6/6/2024** **Location:** Connex Boxes **Description:** Attempt to test for presence of chlorinated solvents using Color-Tec method. Observed no color change after two trials (four vials total).

Daily Quality Control Report

700 South 1600 East PCE Plume

Salt Lake City, Utah



Date: 6/6/2024

Location: MW-43

Description: Picture of the mini-rig after YJ team had clean-up and left for the day.

Daily Quality Control Report

700 South 1600 East PCE Plume

Salt Lake City, Utah

DATE: 6/11/2024	**Prepared by:** Joe Miller

Personnel Onsite, including Contractors:	CDM Smith – Alex Pedjase, Nathan Norris, Isaac Nance, Joe Miller Yellow Jacket –Chris Hill, Zachary Olmsted, Ernesto Godinez, Luis Villa, Timothy Adams, Shane McNulty, Diego Diaz Wasatch – John Rezac GPR Services - Kevin Wiederhold VA – Shannon Smith, Wynn John, Zane Kozarec
Visitors/Others:	None

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	To 32 º F
Wind	Still	**Moderate**	High		
Humidity	Dry	**Moderate**	Humid		

Equipment in Use (field instruments, subcontractor equipment, etc.)	• 3 PIDs • 2 Forklifts • Skid steer • Full-size drill rig (at EW-01) • Limited access drill rig (at MW-43) • 4 soil bins

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

CDM Smith were on site by 6:45am to gather supplies and logging kits. Yellow Jacket was on site at 7am to begin the Health and safety meeting.

At 7:40am, Yellow Jacket fuels up their rigs while CDM Smith Calibrates PIDs, fills out daily rig inspection and excavation checklists.

EW-01: Advanced boring from 165 ft bgs to 223 ft bgs. Water was encountered about 190 ft bgs. A groundwater sample was collected at 193 ft for both laboratory and Color-tec analyses. The Color-tec analyses was non-detect. Another sample was attempted at 215 ft bgs, but did not yield water. The sampler was deployed at 223 ft and allowed for infiltration overnight.

MW-43: Boring was backfilled to 289 ft with bentonite. The deep well was screened from 274-284 ft. Sand filter pack was installed from 271 to 289 ft bgs. Bentonite seal was installed from 241 to 271 ft bgs. Shallow well screen 225 to 235 ft bgs with sand from 221 to 241 ft bgs.

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Samples collected:
EW01-GW061124-193

Geophysical locating:
MW-39 – Public locates identified a gas line and a 12-in waterline in the bike lane and parking lane. A potential location on the sidewalk was identified for the boring location.

MW-45 – Area located.

CDM Smith leaves site at 5:45pm.

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

MW-39 location had utilities in the preferred location. A secondary location has been identified in the sidewalk, but the GPR signal identified some lines about 4 ft apart. YJD and the VA visited the site, if clearance is granted from the City of Salt Lake to work in the sidewalk, then that area will be hydrovac precleared. The west side of the street was looked at for a potential option, but had sewer, communication (2x), and high voltage markings from a previous markout.

EW-01: A water sample was attempted at 215 ft bgs, but did not produce water. Another sample will be attempted at 223 ft bgs.

Projected Work – Near Term:

6/12/2024: Continue advancing EW-01 and well installation at MW-43.

Other Activities/Remarks:

Site orientation for new CDM Smith team

Photos:



Date: 6/11/2024

Location: EW-01

Description: Gravel and sand with silt from 211-213 ft bgs.

Daily Quality Control Report

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Salt Lake City, Utah

	**Date: 6/11/2024** **Location:** MW-39 **Description:** Gas line in bike lane, and water line in parking lane along east side of Guardsman Way. View to the north
	**Date: 6/11/2024** **Location:** MW-45 **Description:** Parallel trends (white paint) in area of MW-45, but well location is in line with MW-13S/D/L. View to the west.

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Salt Lake City, Utah



Date: 6/11/2024

Location: MW-43

Description: Installing well casing at MW-43.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 6/14/2024	**Prepared by:** Alexander Pedjase

Personnel Onsite, including Contractors:	Team 1 (Full Size Rig): Joe Miller (CDM), Nathan Norris (CDM), Isaac Nance (CDM), Diego Diaz (YJ), Ernesto Godinez (YJ), Timothy Adams (YJ) Team 2 (Limited Access Rig): Alex Pedjase (CDM), Chris Hill (YJ), Shane McNulty (YJ), Raymond Dagle (YJ), Weston Waldrop (YJ) YJ=Yellow Jacket CDM= CDM Smith
Visitors/Others:	N/A

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	To 32 º F
Wind	Still	**Moderate**	High		
Humidity	**Dry**	Moderate	Humid		

Equipment in Use (field instruments, subcontractor equipment, etc.)	• 3 PIDs • 2 Forklifts • Skid steer • Full-size drill rig (at EW-01) • Limited access drill rig (at MW-41) • 5 soil bins

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

CDM Smith was on site by 6:45am to gather supplies and logging kits. Yellow Jacket was on site at 7am to begin the Health and Safety meeting, discussed traffic, site size restrictions, heat stress, and

At 7:30am, Yellow Jacket mobilizes to their rigs while CDM Smith Calibrates PIDs, fills out daily rig inspection and excavation checklists and starts logbooks.

EW-01: Advanced boring from 305 to 315 ft bgs. Installed groundwater sampling tool at 315 ft bgs, and collected EW01-GW061424-315. Yellow Jacket pulled 300 ft of 9" casing and installed 276 ft of 10" casing. Groundwater sample was non-detect using the color-tec screening.

MW-41: Advanced boring from 70 to 150 ft bgs. Yellow Jacket cased borehole with 9" casing to 140 ft bgs.

Samples collected:

EW01-GW061424-315
1 Waste Characterization Sample

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

MW-41: No issues noted.

MW-39: CDM Smith marked potential new locations for USA surveying and called in 811 dig ticket to clear areas by Thursday (06/20/24).

Projected Work – Near Term:

6/14/2024
EW-01 Install extraction well EW-01.

Daily Quality Control Report
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Salt Lake City, Utah

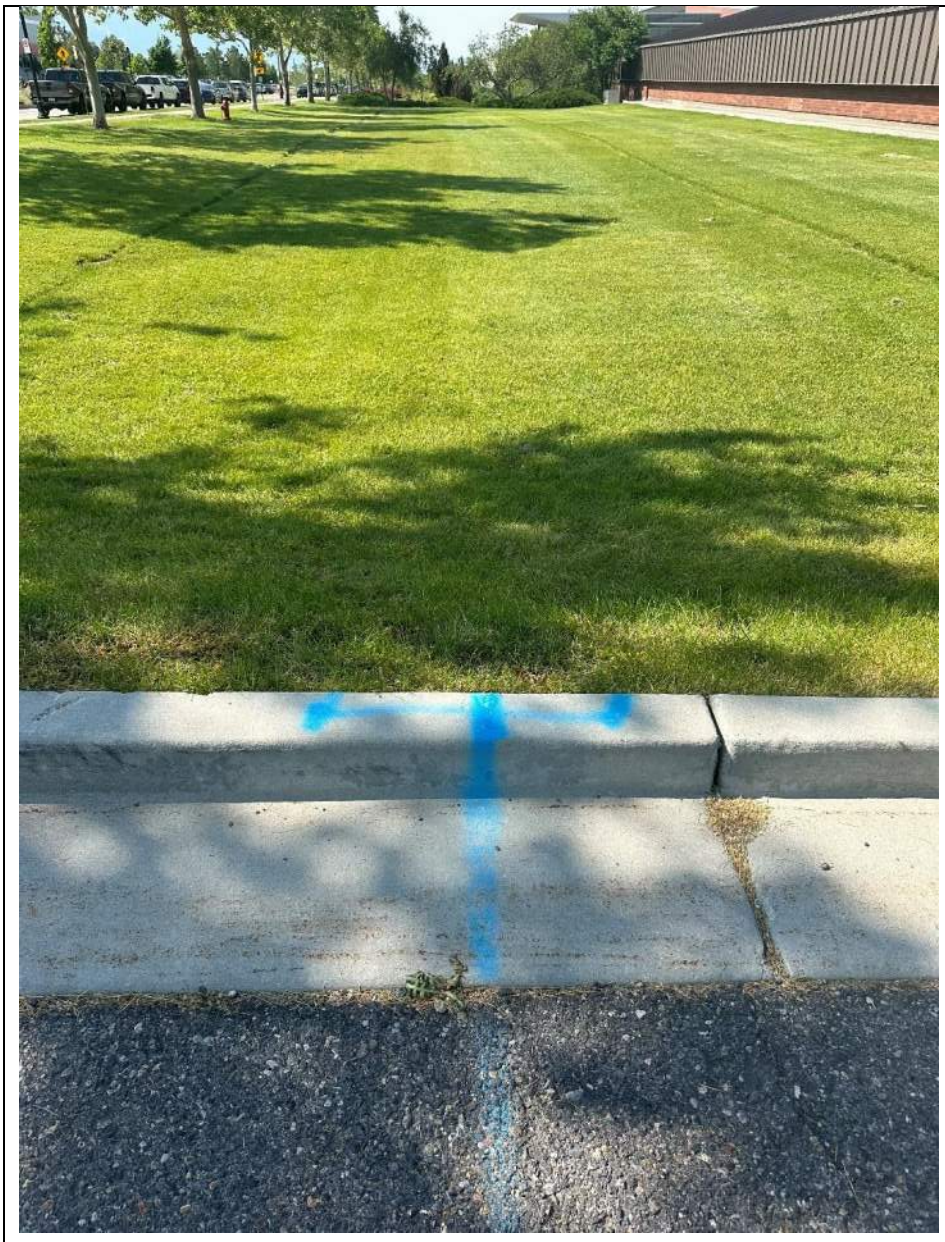
MW-41: Continue drilling and collecting GW samples.
Other Activities/Remarks:

New potential MW-39 locations marked for 811 dig tickets and utility surveys.

Photos:

	**Date: 6/14/2024** **Location:** MW-39 **Description:** Proposed location for MW-39. View to the south with storm drain in the background.

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700 South 1600 East PCE Plume
Salt Lake City, Utah



Date: 6/14/2024

Location: MW-39

Description: Alternate location for MW-39 west of Guardsman Way. View to the south showing water line, storm drain and irrigation lines in grass.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 6/15/2024	**Prepared by:** Alexander Pedjase

Personnel Onsite, including Contractors:	**Team 1 (Full Size Rig):** Nathan Norris (CDM), Isaac Nance (CDM), Diego Diaz (YJ), Ernesto Godinez (YJ), Timothy Adams (YJ) **Team 2 (Limited Access Rig):** Alex Pedjase (CDM), Chris Hill (YJ), Shane McNulty (YJ), Raymond Dagle (YJ), Weston Waldrop (YJ) YJ=Yellow Jacket CDM=CDM Smith
Visitors/Others:	N/A

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	To 32 º F
Wind	Still	**Moderate**	High		
Humidity	**Dry**	Moderate	Humid		

Equipment in Use (field instruments, subcontractor equipment, etc.)	• 3 PIDs • 2 Forklifts • Skid steer • Full-size drill rig (at EW-01) • Limited access drill rig (at MW-41) • 5 soil bins

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

CDM Smith was on site by 6:45am to gather supplies and logging kits. Yellow Jacket was on site at 7am to begin the Health and Safety meeting, which discussed traffic, site size restrictions, heat stress, and lightning precautions.

At 7:30am, Yellow Jacket loaded 9" casing for the limited access rig and mobilizes to their rigs while CDM Smith calibrates PIDs, fills out daily rig inspection and excavation checklists and starts logbooks.

EW-01: Advanced 10" casing from 276 to 305 ft bgs, casing was binding up, Yellow Jacket pulled all 286 ft of 10" casing and re-cased to 305 ft bgs. Yellow Jacket began well construction of EW-01, including back-plugging from 310 to 305 ft bgs with ¼" uncoated bentonite pellets, setting 6" Sch 40 PVC extraction well, screened from 260 to 300 ft bgs, with a 5-foot sump to 305 ft bgs. A 13/24 whole grain filter pack was placed from 305 to 304 ft bgs and will be completed tomorrow.

MW-41: Yellow Jacket advanced boring from 150 to 220 ft bgs and cased borehole with 9" casing from 140 to 210 ft bgs. Water table was encountered at 175 ft bgs. Groundwater sample MW41-GW061524-175 was collected from the open hole at the first indication of ground water. MW41-GW061524-195 was collected through the sample tool at 195 ft bgs. Collection of a groundwater sample was attempted at 200 and 210 ft bgs, but no groundwater was produced. The hydro punch was advanced to 220 ft bgs and left overnight to collect a groundwater sample. One trip blank TB11-GW061524 was prepared. All samples will be shipped on the following Monday (06/17/24).

Samples collected:

MW41-GW061524-175 (11:25)
TB11-GW061524 (11:50)

FedEx Tracking No.: Saturday, no samples shipped today. Samples will be held on ice until Monday (06/17/24).

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

EW-01: 10" casing bound up near 300 ft bgs, Yellow Jacket pulled entire 10" casing column, and re-cased 10" to 305 ft bgs.

MW-41: Sample MW41-GW061524-175 collected from the open hole, no groundwater produced at 200 or 210 ft bgs, reattempting at 220 ft bgs

Projected Work – Near Term:

6/16/2024
EW-01: Well Construction and Grouting
MW-41: Continue drilling and collecting GW samples.

Other Activities/Remarks:

EW01 should be complete on Monday (06/17/24) and will not have another location available for drilling until Thursday (06/20/24), when all parties demobilize from the site.

Photos:

	**Date: 6/15/2024** **Location:** MW-41 **Description:** Yellow Jacket advancing MW-41 through dry overburden material.
	**Date: 6/15/2024** **Location:** MW-41 **Description:** Soil cores from MW-41 between 170 and180 ft bgs, the uppermost groundwater bearing zone.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah



Date: 6/15/2024

Location: EW-01

Description: Yellow Jacket advancing 6” extraction well screen and casing at EW-01.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 6/16/2024	**Prepared by:** Alexander Pedjase

Personnel Onsite, including Contractors:	**Team 1 (Full Size Rig):** Nathan Norris (CDM), Isaac Nance (CDM), Diego Diaz (YJ), Ernesto Godinez (YJ), Timothy Adams (YJ) **Team 2 (Limited Access Rig):** Alex Pedjase (CDM), Chris Hill (YJ), Shane McNulty (YJ), Raymond Dagle (YJ), Weston Waldrop (YJ) YJ=Yellow Jacket CDM=CDM Smith
Visitors/Others:	N/A

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	To 32 º F
Wind	Still	**Moderate**	High		
Humidity	**Dry**	Moderate	Humid		

Equipment in Use (field instruments, subcontractor equipment, etc.)	• 3 PIDs • 2 Forklifts • Skid steer • Full-size drill rig (at EW-01) • Limited access drill rig (at MW-41) • 5 soil bins

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

CDM Smith was on site by 6:45am to gather supplies and logging kits. Yellow Jacket was on site at 7am to begin the Health and Safety meeting, which discussed traffic, site size restrictions, heat stress, and lightning precautions.

At 7:30am, Yellow Jacket loaded 8"" casing for the limited access rig and well materials for EW-01 then mobilized to their rigs while CDM Smith calibrates PIDs, fills out daily rig inspection and excavation checklists and starts logbooks.

EW-01: Yellow Jacket continued well construction of EW-01, including placement of a 13/24 whole grain filter pack from 304 to 257 ft bgs, and an annular seal of ¼" uncoated bentonite pellets from 257 to 252 ft bgs. EW-01 was pressure grouted through a tremie pipe from 252 to 190 ft bgs and will be completed tomorrow. Yellow Jacket also ground down the edges of the MW-40 well pad.

MW-41: Yellow Jacket advanced boring from 220 to 276 ft bgs and cased borehole with 9" casing from 210 to 220 ft bgs and 8" casing from 0 to 260 ft bgs. MW41-GW061624-220 and FD03-GW061624 were collected through the sample tool at 220 ft bgs. Collection of a groundwater sample was considered at 240, and 250 but the formation was a dry tight silt. A sample was attempted at 265 ft bgs, but no groundwater was produced. The hydro punch was advanced to 276 ft bgs and left overnight to collect a groundwater sample. One equipment blank EB09-GW061624 was prepared. All samples will be shipped on the following Monday (06/17/24).

Samples collected:

MW41-GW061624-220 (07:25)
FD03_GW01624 (BLIND)
EB09-GW061624 (09:15)

FedEx Tracking No.: Sunday, no samples shipped today. Samples will be held on ice until Monday (06/17/24).

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

MW-41: No groundwater samples attempted at 240 ft bgs and 250 ft bgs, formation was a dry tight silt. Sample attempted at 265 ft bgs, but no groundwater produced. Sampler installed at 276 ft bgs and left overnight.

Projected Work – Near Term:

6/17/2024
EW-01: Well grouting and surface completion
MW-41: Continue drilling and collecting GW samples.

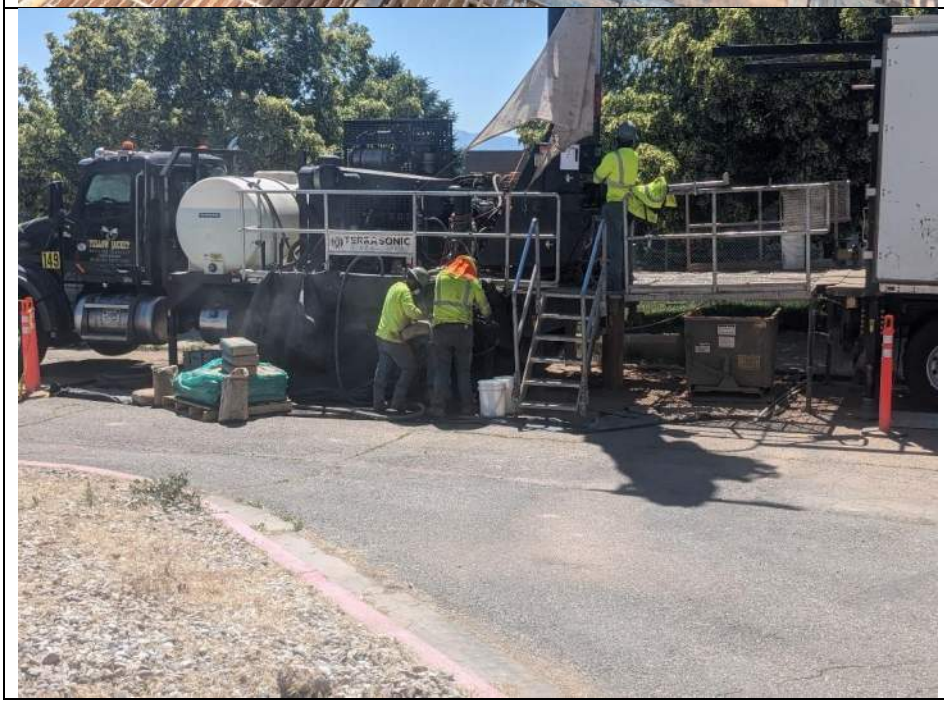
Other Activities/Remarks:

EW01 should be complete on Monday (06/17/24) and will not have another location available for drilling until Thursday (06/20/24), when all parties demobilize from the site.

Photos:

	**Date: 6/16/2024** **Location:** MW-41 **Description:** Yellow Jacket loading 8" casing for telescoping MW-41 borehole.
	**Date: 6/16/2024** **Location:** MW-41 **Description:** Soil cores from MW-41 between at 246 ft bgs, a 6" wide, wet, very fine sand lens was encountered here.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

	**Date: 6/16/2024** **Location:** EW-01 **Description:** Yellow Jacket measuring the depth to placed sand pack at EW-01.
	**Date: 6/16/2024** **Location:** EW-01 **Description:** Yellow Jacket mixing and pumping 5% bentonite portland cement grout at EW-01

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 6/17/2024	**Prepared by:** Alexander Pedjase

Personnel Onsite, including Contractors:	**Team 1 (Full Size Rig):** Nathan Norris (CDM), Isaac Nance (CDM), Diego Diaz (YJ), Ernesto Godinez (YJ), Timothy Adams (YJ) **Team 2 (Limited Access Rig):** Alex Pedjase (CDM), Chris Hill (YJ), Shane McNulty (YJ), Raymond Dagle (YJ), Weston Waldrop (YJ) YJ=Yellow Jacket CDM=CDM Smith
Visitors/Others:	N/A

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	To 32 º F
Wind	Still	**Moderate**	**High**		
Humidity	**Dry**	Moderate	Humid		

Equipment in Use (field instruments, subcontractor equipment, etc.)	• 3 PIDs • 2 Forklifts • Skid steer • Full-size drill rig (at EW-01) • Limited access drill rig (at MW-41) • 5 soil bins

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

CDM Smith was on site by 6:45am to gather supplies and logging kits. Yellow Jacket was on site at 7am to begin the Health and Safety meeting, which discussed traffic, site size restrictions, heat stress, and lightning precautions.

At 7:30am, Yellow Jacket loaded well materials for MW41 then mobilized to their rigs while CDM Smith calibrates PIDs, fills out daily rig inspection and excavation checklists and starts logbooks.

EW-01: Yellow Jacket continued well construction of EW-01, pressure grouting through a tremie pipe from 190 to 8 ft bgs. Yellow Jacket removed 10" and 9" pipe from their drill rig to prepare for the next borings.

MW-41: Yellow Jacket advanced boring from 276 to 305 ft bgs and cased borehole with 8" casing from 220 to 290 ft bgs. MW41-GW061724-276 and MW41-GW061724-305 were collected through the sample tool at 276 and 305 ft bgs. Collection of a groundwater sample was considered at 290, but the formation was a dry tight gravelly silt. A sample was attempted at 300 ft bgs, but no groundwater was produced. The hydro punch was removed before leaving for the day. One equipment blank EB10-GW061724 was prepared. All samples, except for EB10-GW061724, were shipped with FedEx Priority overnight.

Samples collected:

MW41-GW061624-276 (07:30)
MW41-GW061724-305 (16:00)
EB10-GW061724 (17:15)

FedEx Tracking No.: 276026937024

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

MW-41: No groundwater samples attempted at 290 bgs, formation was a dry tight silt. Sample attempted at 300 ft bgs, but no groundwater produced. Sampler installed at 305 ft bgs when driller noted the formation softened and was likely to produce water.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

Projected Work – Near Term:

6/18/2024
EW-01: Well grouting and surface completion
MW-41: Well installation.

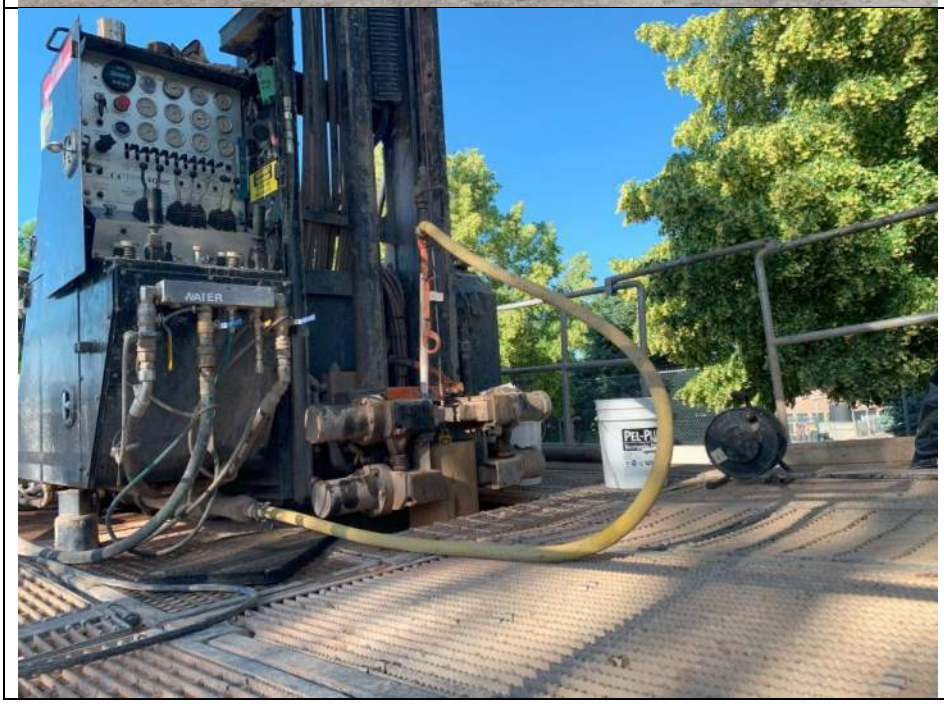
Other Activities/Remarks:

EW01 should be complete on Tuesday (06/18/24) and will not have another location available for drilling until Thursday (06/20/24), when all parties demobilize from the site at approximately 12:00 pm.

Photos:

	**Date: 6/17/2024** **Location:** MW-41 **Description:** Soil cores showing transition from silt lithologies into silty fine sands at 304 ft bgs in MW-41.
	**Date: 6/17/2024** **Location:** MW-41 **Description:** Soil cores from MW-41 between at 286 and 290 ft bgs, dry gravelly silts present with minimal groundwater present.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

	**Date: 6/17/2024** **Location:** Laydown **Description:** Yellow Jacket decontaminating drill casing from EW-01.
	**Date: 6/17/2024** **Location:** EW-01 **Description:** Yellow Jacket pressure grouting and tremie pipe set-up at EW-01.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 6/18/2024	**Prepared by:** Alexander Pedjase

Personnel Onsite, including Contractors:	**Team 1 (Full Size Rig):** Nathan Norris (CDM), Isaac Nance (CDM), Diego Diaz (YJ), Ernesto Godinez (YJ), Timothy Adams (YJ), Canyon Frank (YJ) **Team 2 (Limited Access Rig):** Alex Pedjase (CDM), Chris Hill (YJ), Shane McNulty (YJ), Raymond Dagle (YJ), Weston Waldrop (YJ) YJ=Yellow Jacket CDM=CDM Smith
Visitors/Others:	N/A

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	To 32 º F
Wind	Still	**Moderate**	**High**		
Humidity	**Dry**	Moderate	Humid		

Equipment in Use (field instruments, subcontractor equipment, etc.)	• 3 PIDs • 2 Forklifts • Skid steer • Full-size drill rig (at EW-01) • Limited access drill rig (at MW-41) • 5 soil bins

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

CDM Smith was on site by 6:45am to gather supplies and logging kits. Yellow Jacket was on site at 7am to begin the Health and Safety meeting, which discussed traffic, site size restrictions, heat stress, and lightning precautions.

At 7:30am, Yellow Jacket loaded well materials for MW41 then mobilized to their rigs while CDM Smith calibrates PIDs, fills out daily rig inspection and excavation checklists and starts logbooks. Ernesto Godinez left the site at 11:00 am and was replaced by Canyon Frank at approximately 2:00 pm, and was given site orientation training before starting work. CDM Smith collected a 5 point composite soil waste characterization sample (IDW04-SB061824) from a roll-off bin.

EW-01: Yellow Jacket topped up the grout at EW-01 from 8 to 2 ft bgs then and packed up their drill rig and support truck to move off of the well. Once grout had set, Yellow Jacket constructed a 2 ft flush-mounted well pad with a 12" flush mounted vault at EW-01. Yellow Jacket also moved their drill rig and support truck to the laydown area, and cleaned and reorganized the laydown.

MW-41: Yellow Jacket removed all 220 feet of 9" casing from the borehole and then began backfilling the boring from 305 to 284 ft bgs with ¼" uncoated bentonite pellets. Yellow Jacket installed MW41-D, screened from 282 to 272 ft bgs, with 2"Sch40 PVC, with 0.020" slotted screens. A 13/24 silica sand was gravity placed through drill casing from 284 to 269 ft bgs. An annular seal of ¼" uncoated bentonite pellets was placed from 269 to 229 ft bgs and allowed to hydrate. Yellow Jacket then installed MW41-S, screened from 226 to 216 ft bgs, with 2"Sch40 PVC, with 0.020" slotted screens. A 13/24 silica sand was gravity placed through drill casing from 229 to 213 ft bgs. An annular seal of ¼" uncoated bentonite pellets was placed from 213 to 209 ft bgs and allowed to hydrate overnight.

Samples collected:

IDW04-SB061824 (11:40)

FedEx Tracking No.: 276026937024

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

N/A

Projected Work – Near Term:

6/19/2024
MW-41: Well grouting and surface completion.
Clean laydown yard, decontaminate drill casing, finish retooling full-size drill rig, cleanout containment cell at laydown.

Other Activities/Remarks:

EW01 was completed on Tuesday (06/18/24) and will not have another location available for drilling until Thursday (06/20/24), when all parties demobilize from the site at approximately 12:00 pm.

Photos:

	**Date: 6/18/2024** **Location:** MW-41 **Description:** Yellow Jacket installing MW-41 D well.
	**Date: 6/18/2024** **Location:** MW-41 **Description:** Yellow Jacket installing annular seal at MW-41 with ¼" uncoated bentonite pellets.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

	**Date: 6/18/2024** **Location:** EW-01 **Description:** Completed 6” extraction well EW-01.
	**Date: 6/18/2024** **Location:** EW-01 **Description:** packed up rig and support truck at EW-01.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 6/19/2024	**Prepared by:** Alexander Pedjase

Personnel Onsite, including Contractors:	**Team 1 (Full Size Rig):** Nathan Norris (CDM), Isaac Nance (CDM), Diego Diaz (YJ), Ernesto Godinez (YJ), Timothy Adams (YJ), Canyon Frank (YJ) **Team 2 (Limited Access Rig):** Alex Pedjase (CDM), Chris Hill (YJ), Shane McNulty (YJ), Raymond Dagle (YJ), Weston Waldrop (YJ) Badger Daylighting: Two Hydrovac Operators YJ=Yellow Jacket CDM=CDM Smith
Visitors/Others:	N/A

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	To 32 º F
Wind	Still	**Moderate**	**High**		
Humidity	**Dry**	Moderate	Humid		

Equipment in Use (field instruments, subcontractor equipment, etc.)	• 3 PIDs • 2 Forklifts • Skid steer • Full-size drill rig (at laydown) • Limited access drill rig (at MW-41) • 5 soil bins • Hydrovac and support pick-up

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

CDM Smith was on site by 6:45am to gather supplies and logging kits. Yellow Jacket was on site at 7am to begin the Health and Safety meeting, which discussed traffic, site size restrictions, heat stress, and lightning precautions.

At 7:30am, Yellow Jacket loaded grout and water for MW41 then mobilized to the limited access rig while CDM Smith calibrates PIDs, fills out daily rig inspection and excavation checklists and starts logbooks. The full-size rig did not have an available boring, and was left in the laydown on Standby while the drillers organized and cleaned the Laydown, retooled the drill-rig, and emptied containment cells.

MW-41: Yellow Jacket installed a 1" tremie pipe in MW-43 to 200 ft bgs and pressure grouted MW41 with a 5% bentonite portland cement from 209 to 2 ft bgs.

MW-44: Badger Daylighting cleared MW-44 to a depth of 9 ft bgs with a hydrovac truck. The hole was then backfilled and spoils were deposited in the onsite containment cell.

Samples collected:

No samples collected today.

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

Badger was stuck at the bottom of the hill after clearing MW-44 to 9 ft bgs and could not get out. They had to drop potable water to lighten the load, were still stuck, and had to be aided by Yellow Jacket, who was able to use the forklift to pull them out.

Projected Work – Near Term:

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

6/20/2024
MW-41: Surface completion and demob.
Clean laydown yard, decontaminate drill casing, finish retooling full-size drill rig, cleanout containment cells at laydown.

Other Activities/Remarks:

The full-size rig will start MW-45 and the limited access rig will start MW-44 on Tuesday, June 24th.

Photos:

	**Date: 6/19/2024** **Location:** MW-41 **Description:** Yellow Jacket mixing grout for MW-41.
	**Date: 6/19/2024** **Location:** MW-44 **Description:** Badger clearing MW-44 with a hydrovac truck.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah



Date: 6/19/2024

Location: Laydown

Description: Badger dumping MW-44 spoils in containment cell.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 6/20/2024	**Prepared by:** Alexander Pedjase

Personnel Onsite, including Contractors:	**Team 1 (Full Size Rig):** Isaac Nance (CDM), Diego Diaz (YJ), Ernesto Godinez (YJ), Timothy Adams (YJ), Canyon Frank (YJ) **Team 2 (Limited Access Rig):** Nathan Norris (CDM), Shane McNulty (YJ), Raymond Dagle (YJ), Weston Waldrop (YJ) **Floating:** Alex Pedjase (CDM), Chris Hill (YJ) YJ=Yellow Jacket CDM=CDM Smith
Visitors/Others:	N/A

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	To 32 º F
Wind	**Still**	**Moderate**	High		
Humidity	**Dry**	Moderate	Humid		

Equipment in Use (field instruments, subcontractor equipment, etc.)	• 3 PIDs • 2 Forklifts • Skid steer • Full-size drill rig (at laydown) • Limited access drill rig (at MW-41) • 5 soil bins

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

CDM Smith was on site by 6:45am to gather supplies and logging kits. Yellow Jacket was on site at 7am to begin the Health and Safety meeting, which discussed traffic, site size restrictions, heat stress.

Today was a demobilization and travel day, all personnel were offsite by 14:30, the Emergency Response Area key was delivered to the Zane Kozarec, all other keys were delivered to Wasatch Environmental.

At 7:30am, Yellow Jacket mobilized to the limited access rig while CDM Smith fills out daily rig inspection and excavation checklists and starts logbooks. The full-size rig did not have an available boring, and was left in the laydown on standby while the drillers organized and cleaned the Laydown, retooled the drill-rig, and emptied containment cells. Produced water from the hydrovac was transported from the containment cells to the water tanks at the CDM Connex boxes.

MW-41: Yellow Jacket tagged grout at 2.5 ft bgs, and began filling the well to surface with bag concrete. Yellow Jacket then set a flush, 6-inch thick, 2ft by 2ft well pad with a 12-inch traffic rated steel well vault at MW41. All equipment was removed with the exception of several delineators and the fenced area was locked. All equipment was transported back to the laydown for the weekend, except for the rig which was mobilized to MW44.

MW-44: Yellow Jacket observed the site, cleared vegetation, and flattened the drilling area to prepare for rig mobilization next week.

Samples collected:

No samples collected today.

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

None

Projected Work – Near Term:

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

6/25/2024
MW-44: Mobilize limited access rig and begin boring at MW-44
MW-45: Mobilize full size rig and begin boring MW-45

Other Activities/Remarks:

Staff demobilize from site for shift break. Yellow Jacket and CDM Smith will resume work on Tuesday 6/25.

Photos:

	**Date: 6/20/2024** **Location:** MW-44 **Description:** Yellow Jacket setting up track rig at MW-44

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah



Date: 6/20/2024

Location: MW-41

Description: Flush mount monument.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 6/25/2024	**Prepared by:** Shawn McGuire

Personnel Onsite, including Contractors:	**Team 1 (Full Size Rig):** Shawn McGuire (CDM), Diego Diaz (YJ), Mike Martinelli **Team 2 (Limited Access Rig):** Melanie Blanton (CDM), Shane McNulty (YJ), Raymond Dagle (YJ), Weston Waldrop (YJ) **Floating:** Laura Mulroney (CDM) YJ=Yellow Jacket CDM=CDM Smith
Visitors/Others:	MP Environmental – Roll off delivery Wasatch Environmental – Traffic control delivery

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	To 32 º F
Wind	**Still**	Moderate	High		
Humidity	**Dry**	Moderate	Humid		

Equipment in Use (field instruments, subcontractor equipment, etc.)	• 3 PIDs • 2 Forklifts • Skid steer • Full-size drill rig (at laydown) • Limited access drill rig (at MW-41) • 5 soil bins

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

CDM Smith was on site by 7:00am to gather supplies and logging kits. Yellow Jacket (YJ) was on site at 7am to begin the Health and Safety meeting, which discussed traffic, site size restrictions, heat stress.

MW-44: Yellow Jacket began boring at MW-44 with the limited access rig. Yellow Jacket advanced the boring from 0 to 90 ft bgs and installed 9-inch casing from 0 to 80 ft bgs. CDM Smith logged and screened soil cores.

MW-45: After YJ returned from emissions testing with full size rig, YJ and CDM Smith traveled to the location of MW-45 and deployed the traffic control. YJ mobilized equipment and setup at MW-45 location. Due to the proximity to a gas line (north) and overhead powerlines (south) YJ adjusted the location slightly for equal clearance between both utilities.

Samples collected:

No samples collected today.

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

MW-44 experienced a fuel leak at 10:55 am on the limited access rig and troubleshooted the issue until the leak was resolved at 11:55 am. No soil was impacted.

Projected Work – Near Term:

MW-44: Continue logging boring.
MW-45: Begin drilling and logging boring.

Other Activities/Remarks:

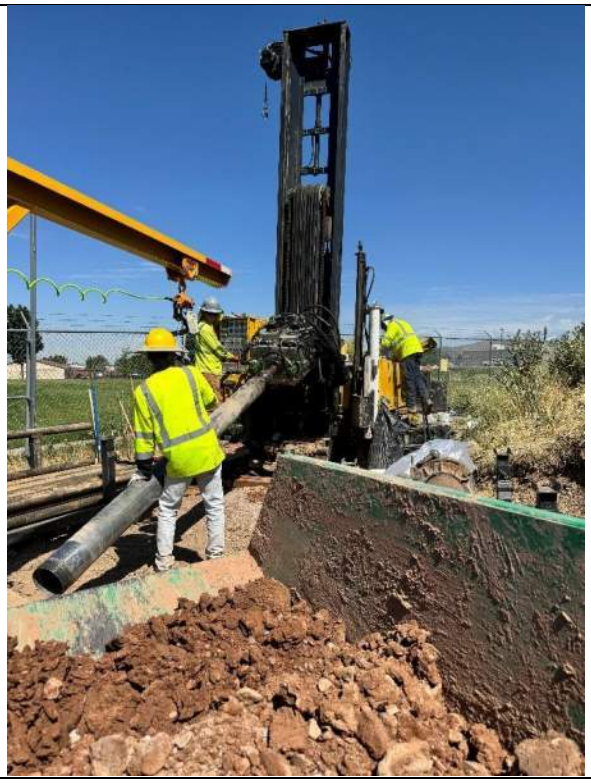
Traffic control was setup at MW-45.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

Photos:

	**Date: 6/25/2024** **Location:** MW-45 **Description:** Yellow Jacket setting up and aligning rig on location.
	**Date: 6/25/2024** **Location:** MW-45 **Description:** Yellow Jacket hand augured 3 holes to 5 feet bgs for utility clearance.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah



Date: 6/25/2024

Location: MW-44

Description: Limited access rig staged at MW-44 advancing 9-inch casing.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 6/26/2024	**Prepared by:** Shawn McGuire

Personnel Onsite, including Contractors:	**Team 1 (Full Size Rig):** Shawn McGuire (CDM), Diego Diaz (YJ), Mike Martinelli, Timothy Adams **Team 2 (Limited Access Rig):** Melanie Blanton (CDM), Shane McNulty (YJ), Raymond Dagle (YJ), Weston Waldrop (YJ) **Floating:** Laura Mulroney (CDM) YJ=Yellow Jacket CDM=CDM Smith
Visitors/Others:	N/A

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	To 32 º F
Wind	**Still**	Moderate	High		
Humidity	**Dry**	Moderate	Humid		

Equipment in Use (field instruments, subcontractor equipment, etc.)	• 3 PIDs • 2 Forklifts • Skid steer • Full-size drill rig (at laydown) • Limited access drill rig (at MW-41) • 6 soil bins

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

CDM Smith was on site by 7:00am to gather supplies and logging kits. Yellow Jacket (YJ) was on site at 7am to begin the Health and Safety meeting, which discussed traffic, site size restrictions, heat stress.

Today

MW-44: Team 2 resumed drilling at MW-44 starting at 90 ft bgs and advanced to 167 ft bgs by end of day. The water table was encountered at 153 ft bgs. The first groundwater sample will be collected at 167 ft bgs tomorrow morning.

MW-45: Began drilling at 9:30am and advanced boring from ground level to 145ft bgs. We encountered a confining layer from 105 ft bgs to 135 ft bgs.

Samples collected:

No samples collected today.

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

None

Projected Work – Near Term:

6/27/2024
MW-44: Take first groundwater sample at MW-44 and continue boring/groundwater sampling.
MW-45: Finish MW-45 and begin well construction.

Other Activities/Remarks:

None

Photos:

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

	**Date: 6/26/2024** **Location:** MW-45 **Description:** Core retrievals from 0 to 135 ft bgs.
	**Date: 6/26/2024** **Location:** MW-45 **Description:** Yellow Jacket Removing hopper to dispose in a roll-off at the laydown area.
	**Date: 6/26/2024** **Location:** MW-44 **Description:** Yellow Jacket adding more 9” casing for advancing boring at MW-44.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 6/27/2024	**Prepared by:** Shawn McGuire

Personnel Onsite, including Contractors:	**Team 1 (Full Size Rig):** Shawn McGuire (CDM), Diego Diaz (YJ), Mike Martinelli, Timothy Adams **Team 2 (Limited Access Rig):** Melanie Blanton (CDM), Shane McNulty (YJ), Raymond Dagle (YJ), Weston Waldrop (YJ) **Floating:** Laura Mulroney (CDM) YJ=Yellow Jacket CDM=CDM Smith
Visitors/Others:	N/A

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	To 32 º F
Wind	**Still**	Moderate	High	Some Lightning	
Humidity	**Dry**	Moderate	Humid		

Equipment in Use (field instruments, subcontractor equipment, etc.)	• 3 PIDs • 2 Forklifts • Skid steer • Full-size drill rig (at laydown) • Limited access drill rig (at MW-41) • 6 soil bins

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

CDM Smith was on site by 7:00am to gather supplies and logging kits. Yellow Jacket (YJ) was on site at 7am to begin the Health and Safety meeting, which discussed traffic, site size restrictions, heat stress.

At 7:30am, Yellow Jacket fuels/prepares the rigs rig while CDM Smith calibrates, fills out daily rig inspection, excavation checklists and starts logbooks.

MW-44: Team 1 collected the first groundwater sample (MW44-GW062724-167) and duplicate (open borehole) at 167 ft bgs. DTW was measured at 153 ft bgs. The boring was advanced from 167 ft to 210 ft bgs. At 190 ft bgs no groundwater was available, a dense clay unit of moderate-high plasticity was identified from 182 ft to 190 ft. CDM collected sample MW44-062724-198, DTW was measured at 167.5 ft bgs. Lightning was observed at 1415 within 1 mile of the drill site and CDM/YJ sheltered in trucks until 1541.

MW-45: CDM Smith measured groundwater at 7:55am at 17.62 ft bgs. Began drilling at 9:00am and advanced boring from 145 ft bgs to 210ft bgs. The 190-200 ft bgs core was mostly clay, with a foot of sandy gravel on the very bottom. The boring was advanced to 210 ft bgs.

Samples collected:

MW44-GW062724-167 + Duplicate
MW44-GW062724-198

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

We had to stop work around 2:30pm due to the proximity of lightning. We stayed sheltered till 3:45pm when it was safe to return.

Projected Work – Near Term:

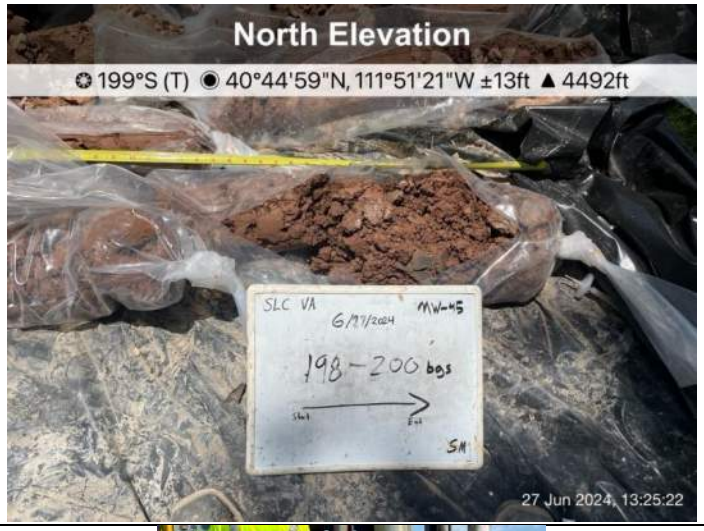
MW-44: Continue to advance boring and collect groundwater samples ~20 ft (based on available groundwater) at MW-44.
MW-45: Grab groundwater samples from MW-45 and begin well construction.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

Other Activities/Remarks:

None

Photos:

	**Date: 6/27/2024** **Location:** MW-45 **Description:** The last sediment core from 198 ft bgs to 200 ft bgs, showing the transition from a clay to a sandy gravel, which lead to the decision to drill 10 additional ft.
	**Date: 6/26/2024** **Location:** MW-44 **Description:** Core from 198 ft bgs.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 6/28/2024	**Prepared by:** Shawn McGuire

Personnel Onsite, including Contractors:	**Team 1 (Full Size Rig):** Shawn McGuire (CDM), Diego Diaz (YJ), Mike Martinelli, Timothy Adams **Team 2 (Limited Access Rig):** Melanie Blanton (CDM), Shane McNulty (YJ), Raymond Dagle (YJ), Weston Waldrop (YJ) **Floating:** Laura Mulroney (CDM) YJ=Yellow Jacket CDM=CDM Smith
Visitors/Others:	GPRS – MW-39 GPR survey Honey Bucket – Fence Delivery

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	To 32 º F
Wind	**Still**	Moderate	High	Some Lightning	
Humidity	Dry	**Moderate**	Humid		

Equipment in Use (field instruments, subcontractor equipment, etc.)	• 3 PIDs • 2 Forklifts • Skid steer • Full-size drill rig (at laydown) • Limited access drill rig (at MW-41) • 6 soil bins

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

CDM Smith was on site by 7:00am to gather supplies and logging kits. Yellow Jacket (YJ) was on site at 7am to begin the Health and Safety meeting, which observation, slips, trips, falls, lifting.

MW-44: Yellow Jacket continued to advance the boring beginning at 200 ft bgs every 10 ft to determine if groundwater was available for sample collection. It was determined that no groundwater was available from 200 – 250 ft bgs due to the continuing dense unit of moderate-high plasticity.

MW-45: CDM Smith measured groundwater at 7:55am at 28.95 ft bgs and collected a groundwater sample. Performed a Color-tec analysis, which indicated no detections. CDM Smith determined to install the screen from 200 ft bgs to 210 ft bgs. YJ began constructing MW-25 at 12:00 pm. YJ placed sand from the bottom to 197 ft bgs and bentonite seal up to 193 ft bgs. YJ then set up all equipment to begin grouting.

Samples collected:

MW45-GW062824-210

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

No samples were collected at MW-44 from 200 to 250 ft bgs, due to lack of water in the formation.

Projected Work – Near Term:

MW-44: Continue to advance boring and collect groundwater samples and determine screening depths for shallow and deep wells.
MW-45: Continue well construction, demob from MW-45

Other Activities/Remarks:

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

At 11:00am GPRS arrived on site at the proposed location of MW-39. GPRS did not identify any utilities near the proposed location.

Photos:

<table>
<tr>
<td> 
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<td>Date: 6/28/2024

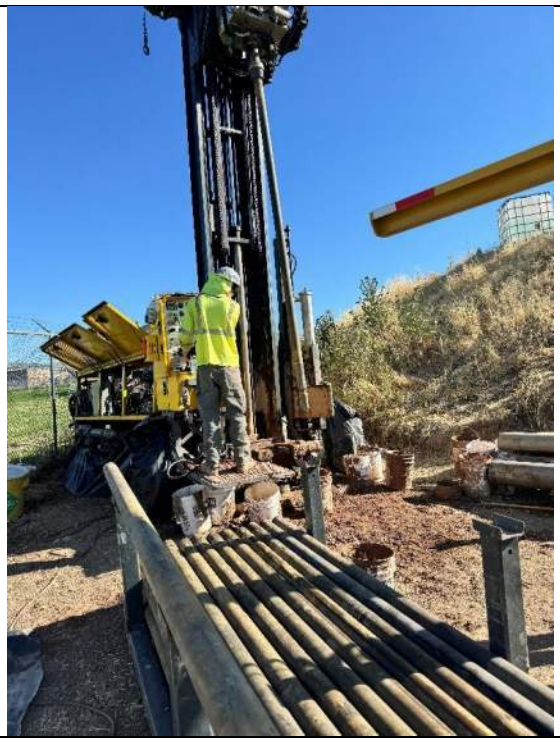
Location: MW-45

Description: PVC stickup during well installation.</td>
</tr>
<tr>
<td> 
</td>
<td>Date: 6/28/2024

Location: MW-39 (Proposed)

Description: Location cleared by GPR at MW-39.</td>
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</table>

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

		**Date: 6/28/2024** **Location:** MW-44 **Description:** Yellow Jacket deploying Hydropunch sampler.

		**Date: 6/28/2024** **Location:** MW-44 **Description:** Moderate-high plasticity clay unit from 230-240 ft bgs.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 6/29/2024	**Prepared by:** Shawn McGuire

Personnel Onsite, including Contractors:	**Team 1 (Full Size Rig):** Shawn McGuire (CDM), Diego Diaz (YJ), Mike Martinelli, Timothy Adams **Team 2 (Limited Access Rig):** Melanie Blanton (CDM), Shane McNulty (YJ), Raymond Dagle (YJ), Weston Waldrop (YJ) **Floating:** Laura Mulroney (CDM) YJ=Yellow Jacket CDM=CDM Smith
Visitors/Others:	N/A

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	To 32 º F
Wind	**Still**	Moderate	High		
Humidity	**Dry**	Moderate	Humid		

Equipment in Use (field instruments, subcontractor equipment, etc.)	• 3 PIDs • 2 Forklifts • Skid steer • Full-size drill rig (at laydown) • Limited access drill rig (at MW-41) • 6 soil bins

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

CDM Smith was on site by 7:00am to gather supplies and logging kits. Yellow Jacket (YJ) was on site at 7am to begin the Health and Safety meeting, which heat, slips+trips+falls, dehydration and people traffic in the area.

MW-44: Upon advancing the boring to 260 ft bgs this morning, a hydraulic fluid leak occurred on the mainline of the limited access rig and a certified welder was called to site to repair the leak. Yellow Jacket resumed advancing the boring to 260 ft bgs once the leak was repaired. Initially there was no recovery within the 250-260 ft bgs core, and the Hydropunch was advanced to attempt a groundwater sample. Depth to water was measured at 257 ft bgs and a groundwater sample was collected.

MW-45: At 0820 YJ began mixing grout (2 bags per 50 gal water per batch) and used tremie pipe to pump the grout. They grouted up to 80 ft bgs using 8 batches of grout. YJ then mixed concrete (7bgs of Portland+ 1 lb of Bentonite gel + 30 gal of water per batch) and installed concrete up to 5 ft bgs. YJ then let the concrete settle while decontaminating the used pipe and casing.

Samples collected:

MW44-GW062924-260
EB13-GW062924
TB14-GW062924

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

The limited access rig set up on MW-44 experienced a hydraulic fluid leak and was down from 1000 to 1345 until repaired.

Projected Work – Near Term:

6/30/2024
MW-44: Reach total depth at 300 ft bgs and determine deep well screening interval. Shallow well screen will be set 195-205 ft bgs.
MW-45: Complete well construction and well pad.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

Other Activities/Remarks:

Performed the Color-Tec analysis on the 260 ft bgs groundwater sample from MW-44. The results were non-detect.

Photos:



Date: 6/29/2024

Location: MW-45

Description: Yellow Jacket safely stopping traffic to maneuver forklift with concrete.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah



Date: 6/28/2024

Location: MW-44

Description: Yellow Jacket advancing core barrels to 260 ft bgs.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 6/30/2024	**Prepared by:** Shawn McGuire

Personnel Onsite, including Contractors:	**Team 1 (Full Size Rig):** Shawn McGuire (CDM), Diego Diaz (YJ), Mike Martinelli, Timothy Adams **Team 2 (Limited Access Rig):** Melanie Blanton (CDM), Shane McNulty (YJ), Raymond Dagle (YJ), Weston Waldrop (YJ) **Floating:** Laura Mulroney (CDM) YJ=Yellow Jacket CDM=CDM Smith
Visitors/Others:	N/A

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	To 32 º F
Wind	**Still**	Moderate	High	Some Lightning	
Humidity	**Dry**	Moderate	Humid		

Equipment in Use (field instruments, subcontractor equipment, etc.)	• 3 PIDs • 2 Forklifts • Skid steer • Full-size drill rig (at laydown) • Limited access drill rig (at MW-41) • 6 soil bins

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

CDM Smith was on site by 7:00am to gather supplies and logging kits. Yellow Jacket (YJ) was on site at 7am to begin the Health and Safety meeting, in which Eye protection, PPE and fire extinguishers were discussed.

MW-44: Team 2 continued advancing the boring to 278 ft bgs, no groundwater was available and YJ advanced to 290 ft bgs. There was no recovery in the core barrel from 279 to 284 ft bgs, very wet silty gravel with sand was observed from 284 to 290 ft bgs. Depth to water was measured at 289.1 ft bgs, a sampling attempt was made with the bailer however groundwater did not rise past the sampler and the bailer could not reach the groundwater level. The sampler was pulled up to 285 ft bgs (more wet zone) and groundwater was measured at 289.2 ft bgs and did not rise after 30 minutes. The Hyrdropunch was very sediment clogged upon inspection and the screens most likely clogged. YJ advanced the boring to 300 ft bgs and then experienced a hydraulic fluid leak at 1339. After troubleshooting it was determined a hose replacement will be required. YJ will retrieve the new hose tomorrow morning.

MW-45: YJ resumed construction of monitoring well and well pad at 8:00 am. The concrete had dropped in the boring to 8 ft bgs overnight. YJ mixed a batch of cement with a small amount of portland to complete the well pad and surface fill. The well pad was finished by noon. YJ and CDM Smith then began demobilizing from site and decontaminating equipment. At 3:00pm, YJD brought equipment to MW-39 location, removed asphalt layer and setup equipment. At 4:45pm YJ and CDM Smith set up traffic cones and caution tape around location in the parking lot. Fencing will placed once the rig is set up on the boring.

Samples collected:

None

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

The limited access rig at MW-44 experienced a hydraulic leak from a hose line. A replacement will be picked up tomorrow morning.

Projected Work – Near Term:

7/1/2024

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

MW-44: Advance boring to 300-320 ft bgs (depending on groundwater availability) and will determine the screening depth for the deep well.
MW-45: Begin drilling and logging at MW-39 location.

Other Activities/Remarks:

Photos:



Date: 6/30/2024

Location: MW-45

Description: Finished well pad

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

	**Date: 6/30/2024** **Location:** MW-39 **Description:** Removing asphalt over boring location.
	**Date: 6/30/2024** **Location:** MW-44 **Description:** Cores from 270-290 ft bgs.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 7/1/2024	**Prepared by:** Shawn McGuire

Personnel Onsite, including Contractors:	**Team 1 (Full Size Rig):** Shawn McGuire (CDM), Diego Diaz (YJ), Mike Martinelli, Timothy Adams **Team 2 (Limited Access Rig):** Melanie Blanton (CDM), Shane McNulty (YJ), Raymond Dagle (YJ), Weston Waldrop (YJ) **Floating:** Laura Mulroney (CDM) YJ=Yellow Jacket CDM=CDM Smith
Visitors/Others:	MP Environmental

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	To 32 º F
Wind	**Still**	Moderate	High	Some Lightning	
Humidity	*Dry*	**Moderate**	Humid		

Equipment in Use (field instruments, subcontractor equipment, etc.)	• 3 PIDs • 2 Forklifts • Skid steer • Full-size drill rig (at MW-39) • Limited access drill rig (at MW-44) • 6 soil bins

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

CDM Smith was on site by 7:00am to gather supplies and logging kits. Yellow Jacket (YJ) was on site at 7am to begin the Health and Safety meeting, in which working at heights, power tools, and exhaustion were discussed.

Today

At 7:30am, Yellow Jacket fuels/prepares the rigs rig while CDM Smith calibrates, fills out daily rig inspection, excavation checklists and starts logbooks.

MW-44: YJ Team 2 arrived on site with the hydraulic hose replacement for the limited access rig at 0800 and successfully completed the reinstallation. YJ continued to advance the boring to 310 ft bgs. Dense and dry silty clay with gravel was observed from 290 – 310 ft bgs. CDM consulted with the VA and USACE and it was determined to not push past 310 ft bgs and install the deep well screen 280 – 290 ft bgs, the shallow well screen will be set at 195 – 205 ft bgs. YJ backfilled the boring to 300 ft bgs with uncoated ¼" bentonite chips and began pulling up the 9" casing.

MW-39: At 7:15am YJ began hand clearing MW-39 with a hand auger. YJ thought intercepted a utility, therefore they moved the location slightly and progressed 3 additional 5ft hand auger borings, which were clear. YJ then laid down the plastic secondary containment, fencing, and blocked off the nearby storm drain. By 12:20pm YJ began drilling and progressed the boring from ground surface to 120ft bgs.

Samples collected:

None

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

Weston Waldrop (YJ Team 2) had a family emergency and left site at 1600 to return home.

Projected Work – Near Term:

MW-44: Proceed with the shallow and deep well construction.
MW-39: Continue drilling and logging.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

Other Activities/Remarks:

MP Environmental delivered a roll off to MW-39

Photos:

	**Date: 7/1/2024** **Location:** MW-39 **Description:** Completed 5ft hand auger to clear location.
	**Date: 7/1/2024** **Location:** MW-39 **Description:** Soil collected from drill with clearly visible clay lenses.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah



Date: 7/1/2024

Location: MW-44

Description: Core from 290 – 310 ft bgs. Dry to slightly moist, dense, silty clay with gravel.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 7/2/2024	**Prepared by:** Shawn McGuire

Personnel Onsite, including Contractors:	**Team 1 (Full Size Rig):** Shawn McGuire (CDM), Diego Diaz (YJ), Mike Martinelli, Timothy Adams **Team 2 (Limited Access Rig):** Melanie Blanton (CDM), Shane McNulty (YJ), Raymond Dagle (YJ) **Floating:** Laura Mulroney (CDM) YJ=Yellow Jacket CDM=CDM Smith
Visitors/Others:	N/A

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	To 32 º F
Wind	**Still**	Moderate	High	Some Lightning	
Humidity	***Dry***	Moderate	Humid		

Equipment in Use (field instruments, subcontractor equipment, etc.)	• 3 PIDs • 2 Forklifts • Skid steer • Full-size drill rig • Limited access drill rig • 7 soil bins

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

CDM Smith was on site by 7:00am to gather supplies and logging kits. Yellow Jacket (YJ) was on site at 7am to begin the Health and Safety meeting, in which we addressed the topic of not rushing on the last day of work and staying vigilant.

MW-44: Yellow Jacket continued the installation of MW-44 S/D. The shallow and deep wells were both constructed today (shallow 195'-205', deep 280'-290') and were sealed with 13/24 sand and uncoated ¼" bentonite up to 189 ft bls.

MW-39: At 7:30pm YJ began drilling and progressed the boring from 120 ft bgs to 202 ft bgs. At 4:30pm YJ stopped drilling.

Samples collected:

None

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

None

Projected Work – Near Term:

Shift break until 7/8.
MW-44: Resume well construction with bentonite portland cement to surface and vault/well pad construction.
MW-45: resume drilling and logging at MW-39 location.

Other Activities/Remarks:

None

Photos:

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

<table>
<tr>
<td> 
</td>
<td>Date: 7/2/2024

Location: MW-39

Description: Roll-off 6077 beside the rig on site.</td>
</tr>
<tr>
<td>  </td>
<td>Date: 7/2/2024

Location: MW-44

Description: Construction of MW-44D</td>
</tr>
</table>

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 7/8/2024	**Prepared by:** Joe Miller

Personnel Onsite, including Contractors:	**Team 1 (Full Size Rig):** Joe Miller (CDM), Diego Diaz (YJ), Zach Olmstead (YJ), Craig Grant (YJ) **Team 2 (Limited Access Rig):** Kaća Savatic (CDM), Shane McNulty (YJ), Raymond Dagle (YJ), Weston Waldrup (YJ) YJ=Yellow Jacket CDM=CDM Smith
Visitors/Others:	N/A

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	To 32 º F
Wind	**Still**	Moderate	High	Some Lightning	
Humidity	***Dry***	Moderate	Humid		

Equipment in Use (field instruments, subcontractor equipment, etc.)	• 3 PIDs • 2 Forklifts • Skid steer • Full-size drill rig • Limited access drill rig • 7 soil bins

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

CDM Smith was on site by 7:00am to gather supplies and logging kits. Yellow Jacket (YJ) was on site at 7am to begin the Health and Safety meeting.

MW-44: The boring was grouted from 30 to 187 ft bgs. Neat cement (Portland) was installed from 30 ft to ground surface.

MW-39: The boring was advanced from 202 ft to 246 ft bgs. Groundwater was encountered at approximately 205 ft bgs.

Samples collected:

None

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

The IW-01/MW-42 locations are inaccessible due to ball field work and access issues. Alternate locations will be discussed tomorrow.

Projected Work – Near Term:

MW-44: Top off grout and vault/well pad construction.
MW-39: Continue drilling and logging at MW-39 location.

Other Activities/Remarks:

None

Photos:

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah



Date: 7/8/2024

Location: MW-39

Description: Soil core with saturated gravel from 218-220 ft bgs.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah



Date: 7/8/2024

Location: MW-44

Description: YJD installing grout through tremie pipe.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 7/9/2024	**Prepared by:** Joe Miller

Personnel Onsite, including Contractors:	**Team 1 (Full Size Rig):** Kaća Savatic (CDM), Diego Diaz (YJ), Zach Olmstead (YJ), Craig Grant (YJ) **Team 2 (Limited Access Rig):** Joe Miller (CDM), Shane McNulty (YJ), Raymond Dagle (YJ), Weston Waldrup (YJ) YJ=Yellow Jacket CDM=CDM Smith
Visitors/Others:	N/A

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	To 32 º F
Wind	**Still**	Moderate	High		
Humidity	***Dry***	Moderate	Humid		

Equipment in Use (field instruments, subcontractor equipment, etc.)	• 3 PIDs • 2 Forklifts • Skid steer • Full-size drill rig • Limited access drill rig • 7 soil bins

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

CDM Smith was on site by 7:00am to gather supplies and logging kits. Yellow Jacket (YJ) was on site at 7am to begin the Health and Safety meeting.

MW-44: The grout/portland settled to 28 ft bgs. Neat cement was added and the surface completion was installed. The track rig was moved to the laydown area and deconned.

MW-39: The boring was advanced from 246 ft to 296 ft bgs. Groundwater was measured at 216 ft bgs prior to drilling. 9-inch casing has been advanced to 290 ft bgs, and the drilling will advance with 8-inch casing.

Samples collected:

None

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

Yellow Jacket helper (Craig Grant) wasn't feeling well and a replaced at the full size rig by Ray Dagle.

Projected Work – Near Term:

Track rig demob from site

MW-39: Continue drilling and logging at MW-39 location.

Other Activities/Remarks:

Markout locations for IW-01 and MW-42. Submit dig ticket with Blue Stakes

Photos:

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah



Date: 7/9/2024

Location: MW-39

Description: Soil core with saturated sand and gravel from 279-281 ft bgs.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah



Date: 7/9/2024

Location: MW-44

Description: Flush mount well vault installed at MW-44

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah



Date: 7/9/2024

Location: IW-01/MW-42

Description: View to the north. Electrical line running from light pole to west. This is the only marked utility in the area.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 7/10/2024	**Prepared by:** Joe Miller

Personnel Onsite, including Contractors:	**Team 1 (Full Size Rig):** Kaća Savatic (CDM), Diego Diaz (YJ), Zach Olmstead (YJ), Raymond Dagle (YJ) **Team 2 (Limited Access Rig):** Joe Miller (CDM), Shane McNulty (YJ), Weston Waldrup (YJ) YJ=Yellow Jacket CDM=CDM Smith
Visitors/Others:	ATC Transport – Flatbed for rig transport Bryce Lugo – YJ Supervisor

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	To 32 º F
Wind	**Still**	Moderate	High		
Humidity	***Dry***	Moderate	Humid		

Equipment in Use (field instruments, subcontractor equipment, etc.)	• 3 PIDs • 2 Forklifts • Full-size drill rig • 7 soil bins

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

CDM Smith was on site by 7:00am to gather supplies and logging kits. Yellow Jacket (YJ) was on site at 7am to begin the Health and Safety meeting.

MW-39: The boring was advanced from 296 ft to 312 ft bgs. Groundwater was measured at 210 ft bgs prior to drilling. At 1400, the rig had issues with the pipe clamps that disconnect the drill rods.

Samples collected: None

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

MW-39: Drill rig valve control unit that runs the pipe clamp jaws failed. YJ ordered a new part which will be shipped Thursday for overnight delivery on Friday.

Projected Work – Near Term:

MW-39: Rig maintenance, site organization

Other Activities/Remarks:

The track rig has demobilized from site along with the bobcat. YJ has loaded extra casing and drill rods ready to demobilize tomorrow.

Photos:

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah



Date: 7/10/2024

Location: MW-39

Description: Drill rig at MW-39. Driller talking to mechanic about pipe clamp issue.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

	**Date: 7/10/2024** **Location:** Laydown Area **Description:** Track rig and bobcat loaded on trailer for demobilization.
	**Date: 7/10/2024** **Location:** Laydown Area **Description:** Extra casing loaded onto YJ trailer, ready to haul from site tomorrow.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 7/11/2024	**Prepared by:** Joe Miller

Personnel Onsite, including Contractors:	**Team 1 (Full Size Rig):** Kaća Savatic (CDM), Diego Diaz (YJ), Zach Olmstead (YJ), Raymond Dagle (YJ) **Team 2 (Limited Access Rig):** Joe Miller (CDM), Shane McNulty (YJ), Weston Waldrup (YJ) YJ=Yellow Jacket CDM=CDM Smith
Visitors/Others:	None

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	To 32 º F
Wind	**Still**	Moderate	High		
Humidity	***Dry***	Moderate	Humid		

Equipment in Use (field instruments, subcontractor equipment, etc.)	• 2 PIDs • 2 Forklifts • Full-size drill rig • 7 soil bins

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

CDM Smith was on site by 7:00am Yellow Jacket (YJ) was on site at 7am to begin the Health and Safety meeting.

MW-39: No drilling activities. YJ performed an oil change on the rig and hauled pallets from well supplies to the landfill.

Samples collected: None

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

None

Projected Work – Near Term:

MW-39: Rig maintenance, site organization
MW-42 and IW-01 Badger preclearing scheduled for Saturday

Other Activities/Remarks:

Track rig crew left site with extra casing and drill rods 9:30am.

CDM Smith organized Connex in IDW area.

Water levels were collected at new wells except MW-41 (gated) and MW-40 (car parked on well)

Photos:

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

	**Date: 7/11/2024** **Location:** Laydown Area **Description:** YJ checking load and connections.
	**Date: 7/11/2024** **Location:** Laydown Area **Description:** Extra casing loaded onto YJ trailer preparing to head from site.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 7/13/2024	**Prepared by:** Joe Miller

Personnel Onsite, including Contractors:	**Team 1 (Full Size Rig):** Kaća Savatic (CDM), Joe Miller (CDM), Diego Diaz (YJ), Zach Olmstead (YJ), Raymond Dagle (YJ) YJ=Yellow Jacket CDM=CDM Smith
Visitors/Others:	None

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	To 32 º F
Wind	**Still**	Moderate	High		
Humidity	***Dry***	Moderate	Humid		

Equipment in Use (field instruments, subcontractor equipment, etc.)	• 2 PIDs • 2 Forklifts • Full-size drill rig • 7 soil bins

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

CDM Smith was on site by 7:00am, Yellow Jacket (YJ) was on site at 7am to begin the Health and Safety meeting.

MW-39: The boring was advanced from 355 to 384 ft bgs. A hydraulic line on the drill head had a leak. It was immediately identified, the line was removed and repaired at an offsite mechanic shop. The leaked fluid was cleaned up using sorbent pads. The rig was down for about 2 hrs for the repair.

The proposed screen intervals are 269-289 ft bgs and 328-358 ft bgs.

Samples collected: None

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

Hydraulic line on the drill head had a leak and was repaired.

Projected Work – Near Term:

MW-39: Begin well install.

Other Activities/Remarks:

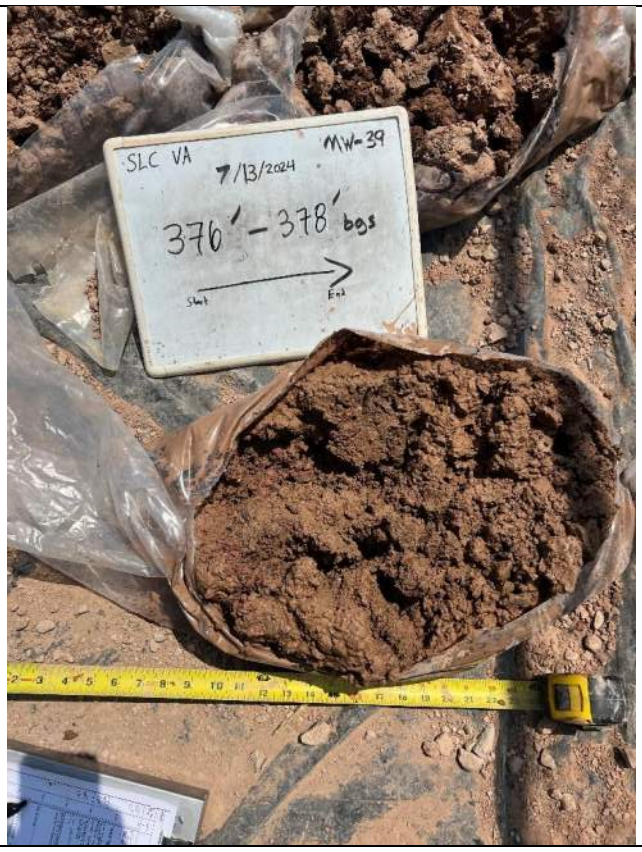
Seal hydrovac holes from yesterday with concrete.

Photos:

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

	**Date: 7/13/2024** **Location:** IW-01 Area **Description:** Surface patches from hydrovac holes. View to the southwest
	**Date: 7/13/2024** **Location:** MW-39 **Description:** Small crack in hydraulic line fitting at the upper nut.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah



Date: 7/12/2024

Location: MW-39

Description: Soil core from 376-378. Saturated coarse sand with silt and gravel.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 7/12/2024	**Prepared by:** Joe Miller

Personnel Onsite, including Contractors:	**Team 1 (Full Size Rig):** Kaća Savatic (CDM), Diego Diaz (YJ), Zach Olmstead (YJ), Raymond Dagle (YJ), Daniel Anemics (YJ) **Badger Preclearing:** Felix Sandoval, Daniel Llanes, Matt Mego, Joe Miller (CDM) Zane Kozerac - VA YJ=Yellow Jacket CDM=CDM Smith
Visitors/Others:	None

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	To 32 º F
Wind	**Still**	Moderate	High		
Humidity	***Dry***	Moderate	Humid		

Equipment in Use (field instruments, subcontractor equipment, etc.)	• 2 PIDs • 2 Forklifts • Full-size drill rig • 7 soil bins • Badger Vac truck

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

CDM Smith was on site by 8:00am, Yellow Jacket (YJ) was on site at 8am to begin the Health and Safety meeting.

MW-39: Rig repairs were completed and drilling resumed at 12pm. The boring was advanced from 312 to 355 ft bgs.

IW-01/MW-42 Preclearing: The initial sites encountered sewer/water. IW-01 encountered sewer at 3 ft bgs. MW-42 encountered sewer at 5 ft bgs. The borings were offset to allow 5 ft between the identified utilities. MW-42 was precleared to 10 ft bgs. IW-01 was precleared to 7.5 ft bgs. Vac cuttings were placed in onsite containment.

Samples collected: None

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

Boring locations on the VA campus are supposed to be precleared to 15 ft bgs. MW-42 encountered refusal at 10 ft bgs. IW-01 encountered refusal at 7.5 ft bgs. The VA approved of both locations not reaching 15 ft bgs.

Projected Work – Near Term:

MW-39: Reach total depth on MW-39 and begin well install.

Other Activities/Remarks:

None

Photos:

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

	**Date: 7/12/2024** **Location:** IW-01 **Description:** Utility encountered at 3 feet bgs when vac clearing initial IW-01 boring. Hole was backfilled and the boring was relocated.
	**Date: 7/12/2024** **Location:** MW-42 **Description:** Utility encountered at 5 feet bgs when vac clearing initial MW-42 boring. Hole was backfilled and the boring was relocated.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah



Date: 7/12/2024

Location: MW-42

Description: Vac clearing MW-42 to 10 ft bgs. Encountered Refusal due to boulders/cobbles.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 7/14/2024	**Prepared by:** Joe Miller

Personnel Onsite, including Contractors:	**Team 1 (Full Size Rig):** Kaća Savatic (CDM), Joe Miller (CDM), Diego Diaz (YJ), Zach Olmstead (YJ), Raymond Dagle (YJ) YJ=Yellow Jacket CDM=CDM Smith
Visitors/Others:	None

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	To 32 º F
Wind	**Still**	Moderate	High		
Humidity	***Dry***	Moderate	Humid		

Equipment in Use (field instruments, subcontractor equipment, etc.)	• 2 PIDs • 2 Forklifts • Full-size drill rig • 7 soil bins

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

CDM Smith was on site by 7:00am, Yellow Jacket (YJ) was on site at 7am to begin the Health and Safety meeting.

MW-39: Well construction began with backfill from 384 to 362 ft bgs with bentonite pellets. The deep well was placed with 30 feet of screen from 328 to 358 ft bgs.

Samples collected: None

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

None

Projected Work – Near Term:

MW-39: Continue well installation

Other Activities/Remarks:

Decon 9-inch casing from MW-39.

Photos:

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah



Date: 7/14/2024

Location: MW-39

Description: Yellow Jacket installing MW-39D PVC

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah



Date: 7/14/2024

Location: MW-39

Description: Yellow Jacket installing bentonite pellets for backfill.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 7/15/2024	**Prepared by:** Joe Miller

Personnel Onsite, including Contractors:	**Team 1 (Full Size Rig):** Kaća Savatic (CDM), Joe Miller (CDM), Diego Diaz (YJ), Zach Olmstead (YJ), Raymond Dagle (YJ) YJ=Yellow Jacket CDM=CDM Smith
Visitors/Others:	MP Environmental

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	To 32 º F
Wind	**Still**	Moderate	High		
Humidity	***Dry***	Moderate	Humid		

Equipment in Use (field instruments, subcontractor equipment, etc.)	• 2 PIDs • 2 Forklifts • Full-size drill rig • 8 soil bins

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

CDM Smith was on site by 7:00am, Yellow Jacket (YJ) was on site at 7am to begin the Health and Safety meeting.

MW-39: Well construction continued. The deep well is installed from 328 to 358 ft bgs. The filter pack was installed from 324 to 360 ft bgs. Bentonite was added from 290 to 324 ft bgs. The shallow well was installed with screen from 269 to 289 ft bgs. The shallow filter pack was installed from 266 to 290 ft bgs. The upper bentonite seal was installed from 262 to 266 ft bgs.

Samples collected:

IDW05-SB071524
IDW06-SB071524

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

None

Projected Work – Near Term:

MW-39: Grout MW-39

Other Activities/Remarks:

MP delivered another roll off for MW-42/IW-01 cuttings, and moved the MW-39 roll off to the laydown area.

Photos:

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

	**Date: 7/15/2024** **Location:** MW-39 **Description:** Yellow Jacket installing MW-39S PVC
	**Date: 7/15/2024** **Location:** MW-42/IW-01 **Description:** MP moving roll off from other wells.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 7/16/2024	**Prepared by:** Joe Miller

Personnel Onsite, including Contractors:	**Team 1 (Full Size Rig):** Kaća Savatic (CDM), Joe Miller (CDM), Diego Diaz (YJ), Zach Olmstead (YJ), Raymond Dagle (YJ) YJ=Yellow Jacket CDM=CDM Smith
Visitors/Others:	None

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	To 32 º F
Wind	**Still**	Moderate	High		
Humidity	***Dry***	Moderate	Humid		

Equipment in Use (field instruments, subcontractor equipment, etc.)	• 2 PIDs • 2 Forklifts • Full-size drill rig • 8 soil bins

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

CDM Smith was on site by 7:00am, Yellow Jacket (YJ) was on site at 7am to begin the Health and Safety meeting.

MW-39: Bentonite grout was installed from 80 ft to 262 ft bgs.

Samples collected: None

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

None

Projected Work – Near Term:

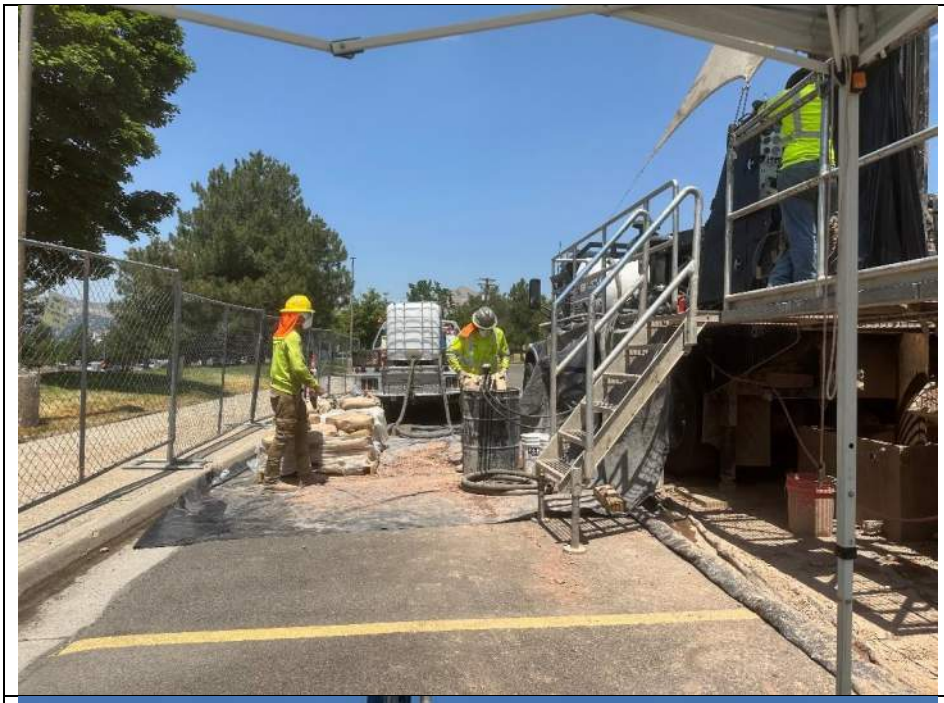
MW-39: Install surface seal, mob rig from MW-39

Other Activities/Remarks:

Decon drill casing from MW-39

Photos:

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

	**Date: 7/16/2024** **Location:** MW-39 **Description:** Yellow Jacket mixing grout.
	**Date: 7/16/2024** **Location:** W-39 **Description:** Yellow Jacket tripping out tremie pipe.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 7/17/2024	**Prepared by:** Joe Miller

Personnel Onsite, including Contractors:	**Team 1 (Full Size Rig):** Kaća Savatic (CDM), Joe Miller (CDM), Diego Diaz (YJ), Zach Olmstead (YJ), Raymond Dagle (YJ) YJ=Yellow Jacket CDM=CDM Smith
Visitors/Others:	None

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	To 32 º F
Wind	**Still**	Moderate	High		
Humidity	***Dry***	Moderate	Humid		

Equipment in Use (field instruments, subcontractor equipment, etc.)	• 2 PIDs • 2 Forklifts • Full-size drill rig • 8 soil bins

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

CDM Smith was on site by 7:00am, Yellow Jacket (YJ) was on site at 7am to begin the Health and Safety meeting.

MW-39: The bentonite settled to 126 ft bgs overnight. Neat cement (Portland) was added from 126 ft to 2 ft bgs.

Samples collected: None

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

None

Projected Work – Near Term:

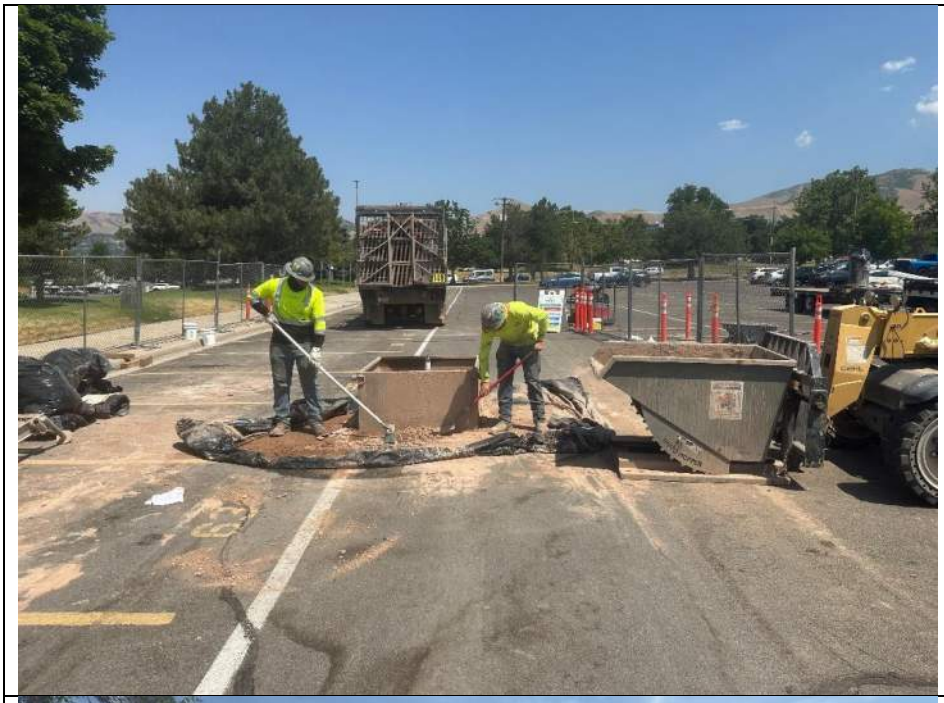
MW-39: Clean up MW-39 area and surface completion.

Other Activities/Remarks:

Decon drill casing from MW-39. Mob equipment from MW-39. Fencing still remains.

Photos:

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

	**Date: 7/17/2024** **Location:** MW-39 **Description:** Yellow Jacket cleaning the area around MW-39.
	**Date: 7/17/2024** **Location:** MW-42 **Description:** Yellow Jacket setting up drill rig at MW-42.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 7/18/2024	**Prepared by:** Joe Miller

Personnel Onsite, including Contractors:	**Team 1 (Full Size Rig):** Joe Miller (CDM), Diego Diaz (YJ), Zach Olmstead (YJ), Raymond Dagle (YJ) YJ=Yellow Jacket CDM=CDM Smith
Visitors/Others:	None

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	To 32 º F
Wind	**Still**	Moderate	High		
Humidity	***Dry***	Moderate	Humid		

Equipment in Use (field instruments, subcontractor equipment, etc.)	• 2 PIDs • 2 Forklifts • Full-size drill rig • 8 soil bins

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

CDM Smith was on site by 7:00am, Yellow Jacket (YJ) was on site at 7am to begin the Health and Safety meeting.

MW-39: The flush mount was completed and the remaining equipment was moved from site.

MW-42: The boring was advanced from surface to 142 ft bgs. 10-inch casing was installed to 17 ft bgs to prevent hydrovac backfill material from entering the boring. 9-inch casing is currently installed to 116 ft bgs.

Samples collected: None

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

None

Projected Work – Near Term:

MW-42: Continue drilling and groundwater sampling

Other Activities/Remarks:

Clean surface around MW-39

Photos:

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

	**Date: 7/18/2024** **Location:** MW-39 **Description:** Surface completion at MW-39.
	**Date: 7/18/2024** **Location:** MW-42 **Description:** Yellow Jacket tripping in drill steel.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah



Date: 7/18/2024

Location: MW-42

Description: Soil core from 74 to 76 ft bgs. Moist to wet silty gravel.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 7/19/2024	**Prepared by:** Joe Miller

Personnel Onsite, including Contractors:	**Team 1 (Full Size Rig):** Joe Miller (CDM), Diego Diaz (YJ), Zach Olmstead (YJ), Raymond Dagle (YJ) YJ=Yellow Jacket CDM=CDM Smith
Visitors/Others:	None

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	To 32 º F
Wind	**Still**	Moderate	High		
Humidity	***Dry***	Moderate	Humid		

Equipment in Use (field instruments, subcontractor equipment, etc.)	• 2 PIDs • 2 Forklifts • Full-size drill rig • 8 soil bins

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

CDM Smith was on site by 7:00am, Yellow Jacket (YJ) was on site at 7am to begin the Health and Safety meeting.

MW-42: The boring was advanced from 142 to 219 ft bgs. 9-inch casing is currently installed to 206 ft bgs. Saturated gravel was encountered at 202-204 ft bgs. A groundwater sample was collected after the 210 ft run.

Samples collected:

MW42-GW071924-210

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

None

Projected Work – Near Term:

MW-42: Continue drilling and groundwater sampling
Sunday 7/21 will be a rest day.

Other Activities/Remarks:

None

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

Photos:

	**Date: 7/19/2024** **Location:** MW-42 **Description:** Grab groundwater sample in bailer. MW42-GW071924-210
	**Date: 7/19/2024** **Location:** MW-42 **Description:** Soil core from 202-204 ft bgs. Soil is saturated gravel and sand.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 7/20/2024	**Prepared by:** Joe Miller

Personnel Onsite, including Contractors:	**Team 1 (Full Size Rig):** Joe Miller (CDM), Diego Diaz (YJ), Zach Olmstead (YJ), Raymond Dagle (YJ) YJ=Yellow Jacket CDM=CDM Smith
Visitors/Others:	None

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	To 32 º F
Wind	Still	**Moderate**	High		
Humidity	***Dry***	Moderate	Humid		

Equipment in Use (field instruments, subcontractor equipment, etc.)	• 2 PIDs • 2 Forklifts • Full-size drill rig • 8 soil bins

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

CDM Smith was on site by 6:40am, Yellow Jacket (YJ) was on site at 7am to begin the Health and Safety meeting.

MW-42: The boring was advanced from 219 to 266 ft bgs. Prior to drilling depth to water was measured at 184 ft bgs. 9-inch casing is currently installed to 256 ft bgs. A groundwater sample was attempted at 246 ft, no groundwater was produced. A groundwater sample was collected after the 266 ft run. Color-tec screening indicates a CVOC concentration of approximately 50ppm.

Samples collected:

MW42-GW072024-266

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

None

Projected Work – Near Term:

Sunday 7/21 will be a rest day.

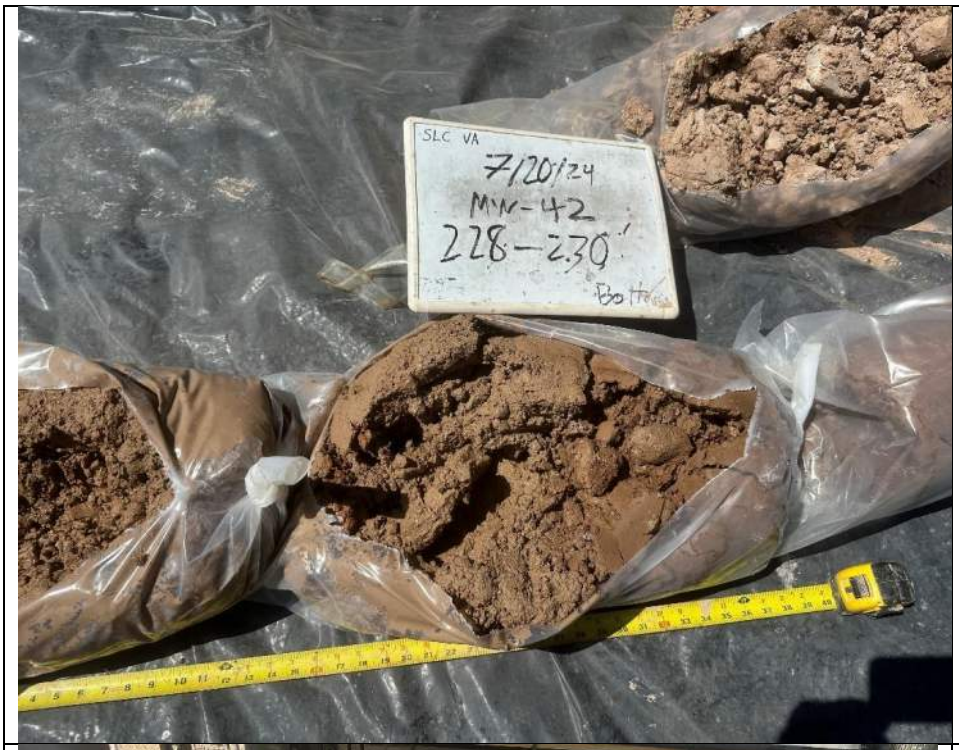
MW-42: Continue drilling, groundwater sampling, and begin well installation

Other Activities/Remarks:

None

Photos:

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

	**Date: 7/20/2024** **Location:** MW-42 **Description:** Soil core from 228-230 ft bgs. Soil type transitions from saturated sand and gravel (225-229) to less permeable silt and gravel.
	**Date: 7/20/2024** **Location:** MW-42 **Description:** Soil cores from 246 to 266 ft bgs. Cores from 246-256 have gravel in a silt matrix, and cores from 256-266 were cohesive silt with a few lenses of sand and gravel.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 7/22/2024	**Prepared by:** Joe Miller

Personnel Onsite, including Contractors:	**Team 1 (Full Size Rig):** Joe Miller (CDM), Diego Diaz (YJ), Zach Olmstead (YJ), Raymond Dagle (YJ) YJ=Yellow Jacket CDM=CDM Smith
Visitors/Others:	Ryan Panasy - Wasatch

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	To 32 º F
Wind	Still	**Moderate**	High		
Humidity	***Dry***	Moderate	Humid		

Equipment in Use (field instruments, subcontractor equipment, etc.)	• 2 PIDs • 2 Forklifts • Full-size drill rig • 8 soil bins

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

CDM Smith was on site by 6:40am, Yellow Jacket (YJ) was on site at 7am to begin the Health and Safety meeting.

MW-42: The boring was advanced from 266 to 276 ft bgs. Prior to drilling depth to water was measured at 192 ft bgs. A groundwater sample was attempted at 276 ft bgs. During the initial attempt the sampler opened but no water infiltrated. During the second attempt, the sampler clogged. No water sample was collected.
The MW-42D well was installed with screen from 266 to 276 ft bgs. The sand filter pack was installed to 265 ft bgs.

Samples collected:

None

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

None

Projected Work – Near Term:

MW-42: Continue well installation.

Other Activities/Remarks:

Wasatch delivered GW samples to Fedex for shipment to EMAX.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

Photos:

	**Date: 7/22/2024** **Location:** MW-42 **Description:** Soil core from 228-230 ft bgs. Soil type transitions from saturated sand and gravel (225-229) to less permeable silt and gravel.
	**Date: 7/22/2024** **Location:** MW-42 **Description:** Soil core from 274 to 276 ft bgs. Sand and gravel.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 7/23/2024	**Prepared by:** Joe Miller

Personnel Onsite, including Contractors:	**Team 1 (Full Size Rig):** Joe Miller (CDM), Diego Diaz (YJ), Zach Olmstead (YJ), Raymond Dagle (YJ) VA – Wynn John YJ=Yellow Jacket CDM=CDM Smith
Visitors/Others:	None

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	To 32 º F
Wind	Still	**Moderate**	High		
Humidity	***Dry***	Moderate	Humid		

Equipment in Use (field instruments, subcontractor equipment, etc.)	• 2 PIDs • 2 Forklifts • Full-size drill rig • 8 soil bins

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

CDM Smith was on site by 6:40am, Yellow Jacket (YJ) was on site at 7am to begin the Health and Safety meeting.

MW-42: Well construction continued at MW-42. MW-42D sand filter pack as installed to 263 ft bgs (263-276). The deep bentonite seal was installed from 258-263 ft bgs. The screen for MW-42S was installed from 246-256 ft bgs, with the sand filter pack from 243-258 ft bgs. The upper bentonite seal was installed from 238-243 ft bgs, and the boring was grouted from 17-238 ft bgs.

Samples collected:

None

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

None

Projected Work – Near Term:

MW-42: Top off grout
IW-01: Setup

Other Activities/Remarks:

Wynn informed the field team about Pioneer Day parade and marathon, including traffic and route impacts.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

Photos:

	**Date: 7/23/2024** **Location:** MW-42 **Description:** YJ moving casing after tripping out of boring.
	**Date: 7/23/2024** **Location:** MW-42 **Description:** Mixing grout for boring.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 7/24/2024	**Prepared by:** Joe Miller

Personnel Onsite, including Contractors:	**Team 1 (Full Size Rig):** Joe Miller (CDM), Diego Diaz (YJ), Zach Olmstead (YJ), Raymond Dagle YJ=Yellow Jacket CDM=CDM Smith
Visitors/Others:	None

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	To 32 º F
Wind	**Still**	Moderate	High		
Humidity	***Dry***	Moderate	Humid		

Equipment in Use (field instruments, subcontractor equipment, etc.)	• 2 PIDs • 2 Forklifts • Full-size drill rig • 8 soil bins

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

CDM Smith was on site by 6:40am, Yellow Jacket (YJ) was on site at 7am to begin the Health and Safety meeting.

MW-42: The grout settled to 38 ft overnight. The boring was topped off with neat cement to the surface.

IW-01: The boring was advanced from 7.5 to 102 ft bgs.

Samples collected:

None

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

None

Projected Work – Near Term:

MW-42: Surface completion
IW-01: Continue drilling

Other Activities/Remarks:

None

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

Photos:

	**Date: 7/24/2024** **Location:** IW-01 **Description:** Soil core from 60 to 62 ft. The soil transitioned from silt to sandy gravel at 61 ft.
	**Date: 7/24/2024** **Location:** IW-01 **Description:** Yellow Jacket setting up drill rig at IW-01.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 7/25/2024	**Prepared by:** Joe Miller

Personnel Onsite, including Contractors:	**Full Size Rig:** Joe Miller (CDM), Diego Diaz (YJ), Zach Olmstead (YJ), Raymond Dagle VA/EPA – Site visit YJ=Yellow Jacket CDM=CDM Smith
Visitors/Others:	None

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	To 32 º F
Wind	**Still**	Moderate	High		
Humidity	*Dry*	**Moderate**	Humid		

Equipment in Use (field instruments, subcontractor equipment, etc.)	• 2 PIDs • Forklift • Full-size drill rig • 8 soil bins

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

CDM Smith was on site by 6:40am, Yellow Jacket (YJ) was on site at 7am to begin the Health and Safety meeting.

IW-01: The boring was advanced from 102 ft to 197 bgs. The 9-inch casing was installed to 176 ft bgs. Groundwater was encountered at approximately 182 ft bgs.

Samples collected:

None

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

None

Projected Work – Near Term:

IW-01: Continue drilling

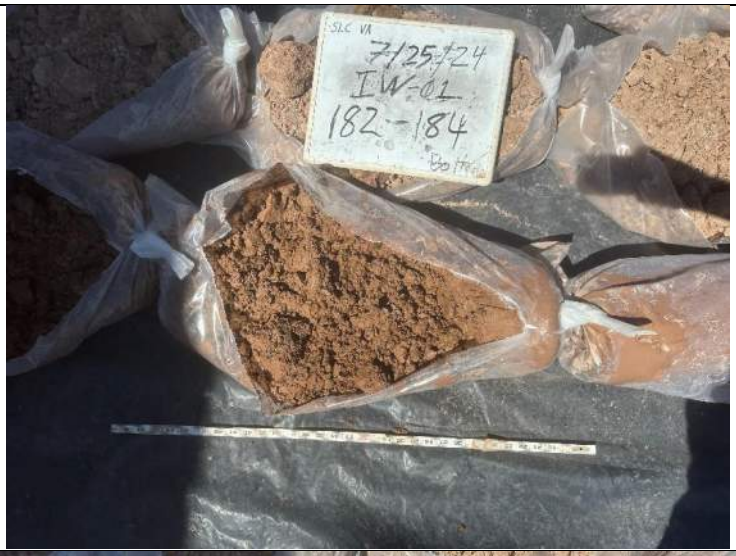
Other Activities/Remarks:

YJ loaded extra casing and forklift on flat bed transport, and it was hauled offsite.

Depth to water was measured at MW-41S/D. MW-41S had DTW of 175.18 ft bgs and MW-41D had DTW of 196.7 ft bgs.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

Photos:

	**Date: 7/25/2024** **Location:** IW-01 **Description:** Soil core from 182 to 184 ft. Wet sand and gravel with silt.
	**Date: 7/25/2024** **Location:** IW-01 **Description:** Soil core from 191 to 194 ft. Saturated gravel with sand.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 7/26/2024	**Prepared by:** Joe Miller

Personnel Onsite, including Contractors:	**Full Size Rig:** Joe Miller (CDM), Diego Diaz (YJ), Zach Olmstead (YJ), Raymond Dagle YJ=Yellow Jacket CDM=CDM Smith
Visitors/Others:	None

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	To 32 º F
Wind	**Still**	Moderate	High		
Humidity	**Dry**	Moderate	Humid		

Equipment in Use (field instruments, subcontractor equipment, etc.)	• 2 PIDs • Forklift • Full-size drill rig • 8 soil bins

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

CDM Smith was on site by 6:40am, Yellow Jacket (YJ) was on site at 7am to begin the Health and Safety meeting.

IW-01: The boring was advanced from 197 to 276 ft bgs. The 8-inch casing was installed to 276 ft bgs. Groundwater was encountered at approximately 184.3 ft bgs.

Samples collected:

None

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

None

Projected Work – Near Term:

IW-01: Well installation

Other Activities/Remarks:

Installed flush mount surface completion at MW-42

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

Photos:



Date: 7/26/2024

Location: IW-01

Description: Soil core from 258 to 260 ft. Wet sand with silt.



Date: 7/26/2024

Location: IMW-42

Description: Preparing to concrete in surface completion.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 7/27/2024	**Prepared by:** Joe Miller

Personnel Onsite, including Contractors:	**Full Size Rig:** Joe Miller (CDM), Diego Diaz (YJ), Zach Olmstead (YJ), Raymond Dagle YJ=Yellow Jacket CDM=CDM Smith
Visitors/Others:	None

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	To 32 º F
Wind	**Still**	**Moderate**	High		
Humidity	Dry	**Moderate**	Humid		

Equipment in Use (field instruments, subcontractor equipment, etc.)	• 2 PIDs • Forklift • Full-size drill rig • 8 soil bins

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

CDM Smith was on site by 6:40am, Yellow Jacket (YJ) was on site at 7am to begin the Health and Safety meeting.

IW-01: The boring was backfilled from 272 to 276 ft bgs with bentonite. A 4-inch well was installed with screen from 250 to 270 ft bgs. The sand filter pack was installed from 245 to 272 ft bgs. The well seal was installed from 240 to 245 ft bgs.

Samples collected:

None

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

30-minute lightning delay at 1200, YJ break for lunch. Lightning delay at 1510, while waiting for bentonite seal to hydrate.

Projected Work – Near Term:

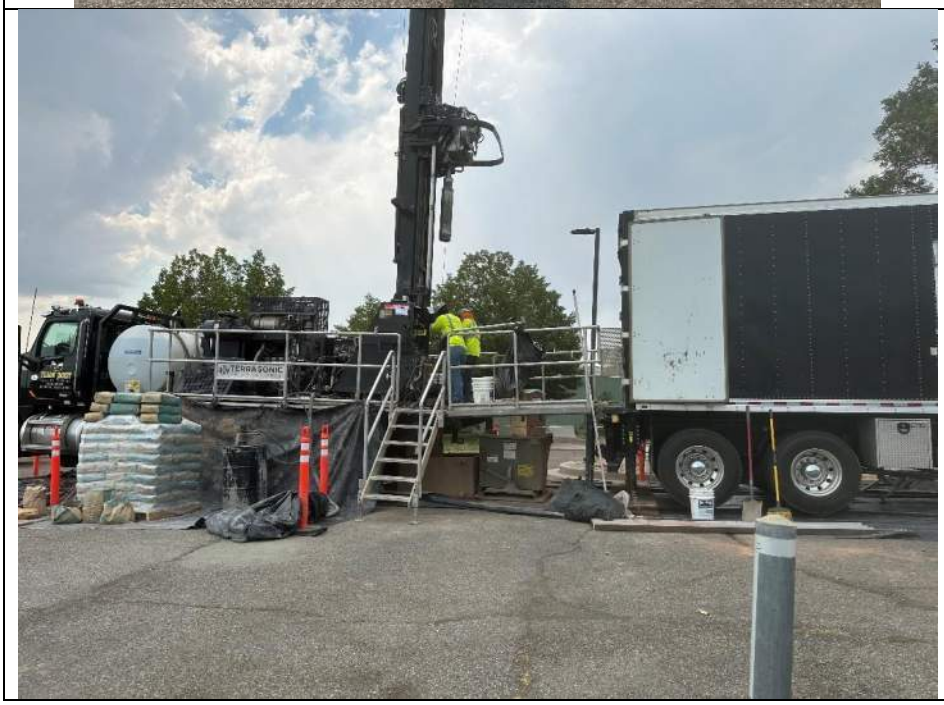
IW-01: Well installation – Grout boring

Other Activities/Remarks:

None

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

Photos:

	**Date: 7/27/2024** **Location:** IW-01 **Description:** Staging PVC well casing for install.
	**Date: 7/27/2024** **Location:** IW-01 **Description:** Measuring depth of the bentonite seal.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 7/28/2024	**Prepared by:** Joe Miller

Personnel Onsite, including Contractors:	**Full Size Rig:** Joe Miller (CDM), Diego Diaz (YJ), Zach Olmstead (YJ), Raymond Dagle YJ=Yellow Jacket CDM=CDM Smith
Visitors/Others:	None

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	To 32 º F
Wind	**Still**	Moderate	High		
Humidity	Dry	**Moderate**	Humid		

Equipment in Use (field instruments, subcontractor equipment, etc.)	• 2 PIDs • Forklift • Full-size drill rig • 8 soil bins

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

CDM Smith was on site by 6:40am, Yellow Jacket (YJ) was on site at 7am to begin the Health and Safety meeting.

IW-01: Neat cement (Portland) grout was installed from 6 to 240 ft.

Samples collected:

None

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

None

Projected Work – Near Term:

IW-01: Top off grout, install surface completion.
Prepare for rig demob.

Other Activities/Remarks:

Decon drill rig.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

Photos:

	**Date: 7/28/2024** **Location:** IW-01 **Description:** Mixing neat cement grout for injection well boring.
	**Date: 7/28/2024** **Location:** IW-01 **Description:** Towering down drill rig.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah



Date: 7/28/2024

Location: Decon Pad

Description: Deconning drill rig.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 7/29/2024	**Prepared by:** Joe Miller

Personnel Onsite, including Contractors:	**Full Size Rig:** Joe Miller (CDM), Diego Diaz (YJ), Zach Olmstead (YJ), Raymond Dagle YJ=Yellow Jacket CDM=CDM Smith
Visitors/Others:	MP Environmental

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	To 32 º F
Wind	**Still**	Moderate	High		
Humidity	Dry	**Moderate**	Humid		

Equipment in Use (field instruments, subcontractor equipment, etc.)	• 2 PIDs • Forklift • Full-size drill rig • 8 soil bins

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

CDM Smith was on site by 6:40am, Yellow Jacket (YJ) was on site at 7am to begin the Health and Safety meeting.

IW-01: Neat cement (Portland) grout was installed from 2 to 12 ft bgs, and the surface completion was installed.

Yellow Jacket deconned sonic casing and drill rods. Vac truck soil containment was cleaned out and broken down.

Samples collected:

IDW07-SB072924 from roll-off 6266

IDW08-SB0872924 from roll-off 6489

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

None

Projected Work – Near Term:

YJ will take a rest day 7/30 to reset for CDL. Drill crew will demob from site on 7/31.

Other Activities/Remarks:

MP move soil roll-off from IW-01 area to laydown.
Drill rig left site

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

Photos:

	**Date: 7/29/2024** **Location:** IW-01 **Description:** MP moving soil roll-off from IW-01 and MW-42.
	**Date: 7/29/2024** **Location:** IW-01 and MW-42 **Description:** Surface completion

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 7/30/2024	**Prepared by:** Joe Miller

Personnel Onsite, including Contractors:	CDM Smith – Joe Miller Wasatch Environmental – Ryan Panasy
Visitors/Others:	United Rentals

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	To 32 º F
Wind	**Still**	Moderate	High		
Humidity	Dry	**Moderate**	Humid		

Equipment in Use (field instruments, subcontractor equipment, etc.)	• PID • Forklift • 8 soil bins

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

CDM Smith was on site by 7am. Yellow Jacket took a rest day to reset their CDL hours.

United rentals delivered one frac tank for development water and pump test.

Samples collected: None

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

None

Projected Work – Near Term:

Drill crew will demob from site on 7/31. Development crew will be onsite 8/1.

Other Activities/Remarks:

Organize connex boxes in the IDW area.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

Photos:



Date: 7/30/2024

Location: IW-01

Description: United Rentals mobilizing a frac tank for well development water.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 7/31/2024	**Prepared by:** Joe Miller

Personnel Onsite, including Contractors:	CDM Smith – Joe Miller Yellow Jacket – Diego Diaz, Ray Dagle, Zach Olmstead
Visitors/Others:	Palmer Transport

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	To 32 º F
Wind	**Still**	Moderate	High		
Humidity	**Dry**	Moderate	Humid		

Equipment in Use (field instruments, subcontractor equipment, etc.)	• PID • Forklift • 8 soil bins

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

CDM Smith was on site by 6:30am.

Yellow Jacket loaded equipment and demobilized the box truck and trailers from site.

Samples collected: None

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

During demobilization a Yellow Jacket vehicle struck the south gate to the VA. CDM Smith is in contact with Yellow Jacket to get the gate repaired.

Projected Work – Near Term:

Yellow Jacket development crew will be onsite 8/1.

Other Activities/Remarks:

None

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

Photos:

	**Date: 7/31/2024** **Location:** Laydown Area **Description:** Yellow Jacket loading equipment on flat bed for transport.
	**Date: 7/31/2024** **Location:** Laydown area **Description:** Yellow Jacket loading equipment on trailer and preparing to leave site.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 8/1/2024	**Prepared by:** Ryan Panasy

Personnel Onsite, including Contractors:	**Well Development:** Ryan Panasy (WEI), John Rezac (WEI), Neil Davis (YJ), Spring Peterson (YJ) YJ=Yellow Jacket WEI = Wasatch Environmental
Visitors/Others:	

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	To 32 º F
Wind	**Still**	Moderate	High		
Humidity	**Dry**	Moderate	Humid		

Equipment in Use (field instruments, subcontractor equipment, etc.)	• PID, YSI PRO PLUS, Hach 2100Q • Support truck from WEI • Well Development Rig from YJ • Frac tank

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

WEI and YJ were onsite at 1100. EW-01 was chosen as the first development well. YJ started a first round of bailing (150gal). WEI calibrated instruments. YJ found depth to bottom, and began swabbing. An additional round of bailing was completed (130gal).

EW-01: Bail-Swab-Bail
Initial depth to bottom was 305.95 ft with a soft bottom. After bailing significant sediment was removed and the bottom of the well was a hard bottom.
Initial depth to water was 202.05, after bailing depth to water was 205.71 ft.

Samples collected:

None

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

None

Projected Work – Near Term:

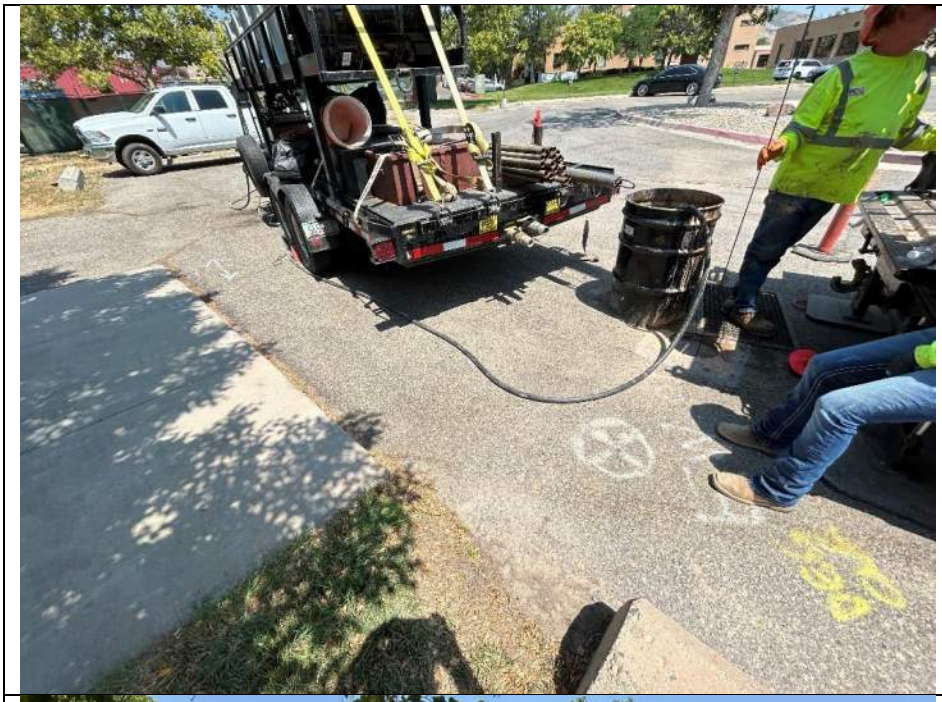
8/2: Bail EW-01 again, then begin pumping

Other Activities/Remarks:

Confirmed that primary approach for development of deep 2" monitoring wells is swabbing and bailing to remove volume (target 5x casing volume or more). Pumps capable of extracting from 2" wells at this depth not readily available.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

Photos:

	**Date: 08/01/2024** **Location:** EW-01 **Description:** Development rig set up.
	**Date: 08/01/2024** **Location:** EW-01 **Description:** Development rig bailing

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 8/2/2024	**Prepared by:** Ryan Panasy

Personnel Onsite, including Contractors:	**Well Development:** Ryan Panasy (WEI), John Rezac (WEI), Neil Davis (YJ), Spring Peterson (YJ) YJ=Yellow Jacket WEI = Wasatch Environmental
Visitors/Others:	None

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	To 32 º F
Wind	**Still**	Moderate	High		
Humidity	**Dry**	Moderate	Humid		

Equipment in Use (field instruments, subcontractor equipment, etc.)	• PID, YSI PRO PLUS, HATCH2100Q • Support truck from WEI • Well Dev Rig from YJ • Frac tank

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

WEI and YJ were onsite at 0700.

Extraction Well Development:
EW-01 was bailed for 50 gal. After bailing, EW-01 was pumped at a depth of 231' at 10 GPM, for 750 gal. Pump was lowered to 258' at 10 GPM and pumped for 560 gal. Pump was lowered again to 294' and pumped at 13 GPM for 1600 gal. Pump was lowered to 305' and pumped at 13 GPM for 500 gal. Pump was raised to 238'and pumped at 13 GPM for 1200gal. Total depth was measured at 305.95 ft.
Total water removed from well = ~4900gal

Samples collected:

None

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

None

Projected Work – Near Term:

Finish development of EW-01
Move to MW-40 S/D

Other Activities/Remarks:

None

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

Photos:

 	**Date: 8/2/2024** **Location:** EW-01 **Description:** Well water 0930 and well water 1455
	**Date: 8/2/2024** **Location:** EW-01 **Description:** Pumping set up

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 8/3/2024	**Prepared by:** Ryan Panasy

Personnel Onsite, including Contractors:	**Well Development:** Ryan Panasy (WEI), Neil Davis (YJ), Spring Peterson (YJ) YJ=Yellow Jacket WEI = Wasatch Environmental
Visitors/Others:	None

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	To 32 º F
Wind	**Still**	Moderate	High		
Humidity	**Dry**	Moderate	Humid		

Equipment in Use (field instruments, subcontractor equipment, etc.)	• PID, YSI PRO PLUS, HATCH2100Q • Support truck from WEI • Well Dev Rig from YJ • Frac tank

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

WEI and YJ were onsite at 0655.

EW-01 was bailed and parameters were collected. All parameters were stable, except for turbidity. Water had visibly cleared, and would settle if allowed to sit. BOW measured at 305.95 ft. Total water removed from well 5500gal.

MW-43S/D:
MW-43S was bailed, swabbed, and parameters were collected. All parameters were stable, except for turbidity. Water had visibly cleared, and would settle if allowed to sit. Total water removed 40 gal. Initial depth to bottom 231.51 ft, after bailing depth to water 235.34 ft.

MW-43D was bailed, swabbed, and parameters were collected. All parameters were stable, except for turbidity. Water had visibly cleared, and would settle if allowed to sit. Total water removed 65 gal. Initial depth to bottom 283.75 ft, after bailing depth to water 284.18 ft.

MW-40S/D:
MW-40S was bailed. Development will continue tomorrow.

Samples collected:

None

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

None

Projected Work – Near Term:

Finish development of MW-40 S/D, Move to MW-41/MW-42.

Other Activities/Remarks:

None

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

Photos:

	**Date: 8/3/2024** **Location:** MW-43 **Description:** Well head of MW-43S/D
	**Date: 8/3/2024** **Location:** MW-43 **Description:** Parameter monitoring.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 8/4/2024	**Prepared by:** Ryan Panasy

Personnel Onsite, including Contractors:	**Well Development:** Ryan Panasy (WEI), Neil Davis (YJ), Spring Peterson (YJ) YJ=Yellow Jacket WEI = Wasatch Environmental
Visitors/Others:	None

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	To 32 º F
Wind	**Still**	Moderate	High		
Humidity	**Dry**	Moderate	Humid		

Equipment in Use (field instruments, subcontractor equipment, etc.)	• PID, YSI PRO PLUS, HATCH2100Q • Support truck from WEI • Well Dev Rig from YJ • Frac tank

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

WEI and YJ were onsite at 0700.

MW-40S/D:
MW-40S was bailed, swabbed, and parameters were collected. All parameters were stable, except for turbidity. Water had visibly cleared, and would settle if allowed to sit. Total water removed 60 gallons. Initial depth to bottom 241.53 ft, after bailing depth to water 243.46 ft bgs.

MW-40D was bailed, swabbed, and parameters were collected. All parameters were stable, except for turbidity. Water had visibly cleared, and would settle if allowed to sit. Total water removed 70 gallons. Initial depth to bottom 293.88 ft, after bailing depth to water 296.98 ft bgs.

IW-01:
IW-01 was bailed [200gal]

Samples collected:

None

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

None

Projected Work – Near Term:

Finish development of IW-01, move to MW-42 S/D

Other Activities/Remarks:

None

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

Photos:

	**Date: 8/4/2024** **Location:** MW-40 **Description:** Well head of MW-40 and the 2-inch bailer.
	**Date: 8/4/2024** **Location:** MW-40 **Description:** Development rig setup.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 8/5/2024	**Prepared by:** Ryan Panasy

Personnel Onsite, including Contractors:	**Well Development:** Ryan Panasy (WEI), Neil Davis (YJ), Spring Peterson (YJ) YJ=Yellow Jacket WEI = Wasatch Environmental
Visitors/Others:	John Rezac - WEI

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	To 32 º F
Wind	**Still**	Moderate	High		
Humidity	**Dry**	Moderate	Humid		

Equipment in Use (field instruments, subcontractor equipment, etc.)	• PID, YSI PRO PLUS, HATCH2100Q • Support truck from WEI • Well Dev Rig from YJ • Frac tank

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

WEI and YJ were onsite at 0700.

IW-01:
IW-01 was pumped, and parameters were collected. All parameters were stable, except for turbidity. Water had visibly cleared, and would settle if allowed to sit. Initial DTW was 193.24 ft, after development DTW 215.31 ft. The initial depth to bottom 264.04, no final depth to bottom was recorded due to lightning in the area. The well was pumped at 13GPM and 750 gallons were removed.

MW-42S/D:
MW-42S was bailed, swabbed, and parameters were collected. All parameters were stable, except for turbidity. Water had visibly cleared, and would settle if allowed to sit. 60 gallons were bailed.

MW-42D was bailed, swabbed, and parameters were collected. All parameters were stable, except for turbidity. Water had visibly cleared, and would settle if allowed to sit. 70 gallons were bailed.

Samples collected:

None

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

Starting around 1400 a thunderstorm heading towards site. At 1600 the storm went from threatening-nearby, to overhead-scary. The mast was towered down and packed up before the squall line hit. We will go back tomorrow 8/6 to get TD on the developed wells.

Projected Work – Near Term:

Start work on MW45 and MW41

Other Activities/Remarks:

None

Photos:

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah



Date: 8/5/2024

Location: IW-01

Description: Pump setup.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 8/6/2024	**Prepared by:** Ryan Panasy

Personnel Onsite, including Contractors:	**Well Development:** Ryan Panasy (WEI), Neil Davis (YJ), Spring Peterson (YJ) YJ=Yellow Jacket WEI = Wasatch Environmental
Visitors/Others:	None

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	To 32 º F
Wind	**Still**	Moderate	High		
Humidity	**Dry**	Moderate	Humid		

Equipment in Use (field instruments, subcontractor equipment, etc.)	• PID, YSI PRO PLUS, HATCH2100Q • Support truck from WEI • Well Dev Rig from YJ • Frac tank from United

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

WEI and YJ were onsite at 0700. We took measurements for wells we had to wrap up quickly yesterday. The trailer and trucks were loaded and secured for travelling on city streets. Drove to and set on MW-45.

MW-45:
MW-45 was bailed, swabbed, bailed and, pumped. Parameters were collected. All parameters were allowed to stabilize. Initial depth to bottom was 200.04 ft and final depth to bottom was 209.7 ft. 180-gallons were removed.

MW-41:
MW-41S was bailed, swabbed, and parameters were collected. All parameters were stable, except for turbidity. Water had visibly cleared, and would settle if allowed to sit. Initial depth to bottom was 220.09 ft and final depth to bottom was 225.91 ft. 60-gallons were removed.

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

None

Projected Work – Near Term:

Develop MW-41D. Move onto MW-39. Thursday, MW-39/MW-44. Friday, finish up MW-44.

Other Activities/Remarks:

None

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

Photos:

	**Date: 8/6/2024** **Location:** MW-45 **Description:** Wellhead full of water, up to TOC.
	**Date: 8/6/2024** **Location:** MW-45 **Description:** Hurricane pump for 2in wells.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 8/7/2024	**Prepared by:** Ryan Panasy

Personnel Onsite, including Contractors:	**Well Development:** Ryan Panasy (WEI), Wener Conejo (YJ), Spring Peterson (YJ), Richard Hoyt (YJ), John Rezac (WEI) YJ=Yellow Jacket WEI = Wasatch Environmental
Visitors/Others:	None

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	To 32 º F
Wind	**Still**	Moderate	High		
Humidity	**Dry**	Moderate	Humid		

Equipment in Use (field instruments, subcontractor equipment, etc.)	• PID, YSI PRO PLUS, HATCH2100Q • Support truck from WEI • Well Dev Rig from YJ • Frac tank from United

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

WEI and YJ were onsite at 0655. We had tailgate safety waiting for the gate to MW-41 to be opened.

MW-41:
MW-41D was bailed, swabbed, bailed. Parameters were collected. All parameters were stable, including turbidity which remained high but was stable. Water has visibly cleared from the start of development, and will clear when allowed to settle. Initial total depth was 277.6 ft and final total depth was 282.38 ft. A total of 75 gallons was purged.

MW-39:
MW-39S was bailed, swabbed, and parameters were collected. All parameters were allowed to stable, except for turbidity which remained high but was stable. Water has visibly cleared from the start of development, and would clear when allowed to settle. A total of 85 gallons was purged. Total depth before development was 286.41 ft and final depth was 288.57.

MW-39D was bailed, swabbed, and bailed. 50-gallons have been purged and initial total depth is 349.92 ft. Development will continue.

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

None

Projected Work – Near Term:

Thursday - finish development on MW-39D. Move onto MW-44. Friday, finish up MW-44.

Other Activities/Remarks:

None

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

Photos:

		**Date: 8/7/2024** **Location:** MW-41 **Description:** Bailing well in gated area.
		**Date: 8/7/2024** **Location:** MW-39 **Description:** Developing in the university lot.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 8/14/2024	**Prepared by:** Ryan Panasy

Personnel Onsite, including Contractors:	**Well Development:** Ryan Panasy (WEI), Chris Sullivan (MP Environmental), Zane Kozarec (VA) WEI = Wasatch Environmental
Visitors/Others:	None

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	To 32 º F
Wind	**Still**	Moderate	High		
Humidity	**Dry**	Moderate	Humid		

Equipment in Use (field instruments, subcontractor equipment, etc.)	• Support truck from WEI • MP Environmental Truck

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

Upon arrival Zane was contacted to sign manifests. Soil roll-off bins 6145, 5830, 6139, and 6049 were hauled to Wasatch Regional Landfill by MP Environmental.
Zane was given generator copies of the manifests after bins were loaded.

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

None

Projected Work – Near Term:

Site clean up of material from hydrovac washout/IDW yard containment.

Other Activities/Remarks:

None

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

Photos:

	**Date: 8/14/2024** **Location:** Laydown area **Description:** Loading roll-off.
	**Date: 8/14/2024** **Location:** Laydown area **Description:** Four remaining soil roll-off bins.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 8/15/2024	**Prepared by:** Ryan Panasy

Personnel Onsite, including Contractors:	**Well Development:** Ryan Panasy (WEI) WEI = Wasatch Environmental
Visitors/Others:	

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	To 32 º F
Wind	**Still**	Moderate	High		
Humidity	**Dry**	Moderate	Humid		

Equipment in Use (field instruments, subcontractor equipment, etc.)	• Support truck from WEI • Flatbed trailer (large) from WEI • Frac tank from United

Description of Field Activities – including borings completed/started (include footages), samples/data collected, etc.:

Clean-up of IDW yard and laydown area. Old secondary containment for tank, remnants from hydrovac cuttings containment including hay bales, sheeting and plywood and other miscellaneous trash removed.

A total of 5060 pounds of material was hauled to Wasatch Regional Landfill.

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

None

Projected Work – Near Term:

Pump installation and preparation for GW sampling event
Remaining soil bin hauling - TBD

Other Activities/Remarks:

IDW yard has been mowed by VA grounds.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

Photos:

	**Date: 8/15/2024** **Location:** IDW area **Description:** After clean-up photos
	**Date: 8/15/2024** **Location:** IDW area **Description:** Before cleanup

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 11/12/2024	**Prepared by:** Nathan Norris

Personnel on site, including Contractors:	CDM Smith –Nathan Norris, Neil Smith Colog – Kent Lewis VA – Zane Kozarec, Wynn John
Visitors/Others:	None

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 meter • RKI PID • NMR Tooling

Description of Field Activities – including samples/data collected, etc:

- A H&S tailgate was conducted at EW-01.
- Nuclear Magnetic Resonance (NMR) logging was completed on EW-01 from 110 to 305 ft bgs.
- Downloaded data and removed transducers from IW-01, MW-43S.

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

- Due to time and scheduling restraints, the NMR logging scope was adjusted to focus on anticipated zones of saturation. EW-01 and IW-01 logging will start at approximately 110 ft bgs.

Projected Work – Near Term:

- Continue NMR logging of wells
- Amendment Injection Test

Other Activities/Remarks:

- None

Photos:

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

	**Date:** 11/12/2024 **Location:** EW-01 **Description:** NMR logging of EW-01.
	**Date:** 11/12/2024 **Location:** EW-01 **Description:** Decontamination of the NMR tooling.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 11/13/2024	**Prepared by:** Nathan Norris

Personnel on site, including Contractors:	CDM Smith –Nathan Norris Colog – Kent Lewis Wasatch Environmental– Ryan Panasy
Visitors/Others:	None

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 meter • RKI PID • NMR Tooling

Description of Field Activities – including samples/data collected, etc:

- A H&S tailgate was conducted at IW-01.
- Nuclear Magnetic Resonance (NMR) logging was completed on IW-01 from 120 to 270 ft bgs.
- NMR logging was attempted on MW-45, but only made it to 40 ft bgs before refusal caused by slight bend in the casing.
- NMR logging was completed at MW-13L from ground surface to 160 ft bgs.

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

- Due to time and scheduling restraints, the NMR logging scope was adjusted to focus on anticipated zones of saturation. EW-01, and IW-01 logging will start at approximately 110 ft bgs.
- NMR tooling was stopped at approximately 40 ft bgs in MW-45 due to a slight bend in the PVC casing. MW-45 logging was abandoned and MW-13L was logged in its place.

Projected Work – Near Term:

- Continue NMR logging of wells
- Amendment Injection Test

Other Activities/Remarks:

- Ryan Panasy was onsite to assist removing transducers from monitoring wells leftover from the aquifer pumping test.

Photos:

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

	**Date:** 11/13/2024 **Location:** IW-01 **Description:** NMR logging of IW-01.
	**Date:** 11/13/2024 **Location:** MW-45 **Description:** Attempted to log MW-45. Tooling became stuck in a slight bend at 40 ft bgs. Photo is condition of MW-45 location following attempt.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah



Date: 11/13/2024

Location: MW-13L

Description: Dedicated pump removed from MW-13L prior to logging.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

DATE: 11/14/2024	**Prepared by:** Nathan Norris

Personnel on site, including Contractors:	CDM Smith –Nathan Norris Colog – Kent Lewis Wasatch – Ryan Panasy
Visitors/Others:	None

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 meter • RKI PID • NMR Tooling

Description of Field Activities – including samples/data collected, etc:

- A H&S tailgate was conducted at MW-20D.
- Nuclear Magnetic Resonance (NMR) logging was completed on MW-20D from 40 to 127 ft bgs.
- NMR logging was completed on MW-04 from 40 to 173 ft bgs.

Issues/Problems Encountered/Deficiencies/Deviations from QAPP (and resolutions):

- NMR tooling was stopped at approximately 127 ft bgs in MW-20D due to a slight bend in the PVC casing. MW-20D logging was from this depth to 40 ft bgs.
- Some rutting and grass damage was observed in the area of MW-20D, likely from landscaping activities. Damage was not incurred during NMR logging.
- The dedicated bladder pump for MW-04 was not replaced in the well after logging due to tangling of the string and tubing. Pump will be redeployed by the GW sampling team.

Projected Work – Near Term:

- Amendment Injection Test
- Groundwater Sampling

Other Activities/Remarks:

- Ship transducers back to supplier

Photos:

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah

	**Date:** 11/14/2024 **Location:** MW-20D **Description:** Rutting observed in the area of MW-20D.
	**Date:** 11/14/2024 **Location:** MW-20D **Description:** Condition of MW-20D after completion of NMR logging.

Daily Quality Control Report
700 South 1600 East PCE Plume
Salt Lake City, Utah



Date: 11/14/2024

Location: MW-04

Description: Condition of MW-04 prior to NMR logging.

Appendix B Field Logbook Notes

SLCVA Terrain Land Nav
Study Dr. Wks



Rite in the Rain®

ALL-WEATHER

FIELD

№ 350F

Logbook #1

CONTENTS

PAGE	REFERENCE	DATE

TACOMA, WA, USA
EST. 1916
Rite in the Rain
DEFYING MOTHER NATURE

ALL-WEATHER
FIELD BOOK

Name Hans Johannes / Neil Smith
CDM Smith
Address 555 17th St Suite 500
Denver, CO 80202

Phone (303) 383-2367 / (303) 383-2447

Project VA hospital
GEMS CERCLA Site
550 Foothill drive
Salt Lake City, UT

VA Police (non-emergency)
(801) 582-1565 ext 4114

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JW 5/23/24

Personnel: Jason Wagenmaker, Neil Smith, Kimberly Myers (CDM Smith); Diego Diaz, Charles Winland, Zachary Olmsted, Spring Peterson, Timothy Adams, Ernesto GODINEZ (Yellow Jacket), David Suchy (Army Corp)

Planned Activities:
Continue to drill at MW-40. Clean up lay down yard, begin drilling at MW-43

Weather: High of 58, partly sunny, W: 5-10

PPE: Level D

1200: Logbook started by J. Wagenmaker. Drillers continue to drill at MW-40
1245: Drillers on lunch
1315: Drilling resumes
1630: Wet soil is encountered. CDM Smith investigates with sounder and attempted to collect with bailer but were unsuccessful.
1730: Drillers pause for the day
1830: CDM Smith offsite

JW 5/23

5/24/24

Personnel: Jason Wagenmaker, Kimberly Myers (CDM Smith); Diego Diaz, Charles Winland, Zachary Olmsted, Spring Peterson, Timothy Adams, Ernesto Godinez (Yellow Jacket), Ryan Panasy (Wesonk)

Planned Activities: Continue drilling at MW-40 and MW-43. Clean up site for weekend

Weather: H: 68 L: 40 Partly Sunny, W: 3-7 MPH

PPE: Level D

0700: CDM Smith and Yellow Jacket Onsite. HASS meeting conducted. PID calibrated
0730: Yella Jacket mobilized to MW-40 and MW-43 and began preparing to resume drilling.
0830: Yellow Jacket resumed drilling of MW-40
0915: A PID Sensor (SN: 592-601366) began malfunctioning, verified with 2nd PID Sensor. It was removed and a back up PID Sensor was used.
1245: Water hit at 188'. Drilling paused for the weekend. Yellow Jacket began cleaning up.

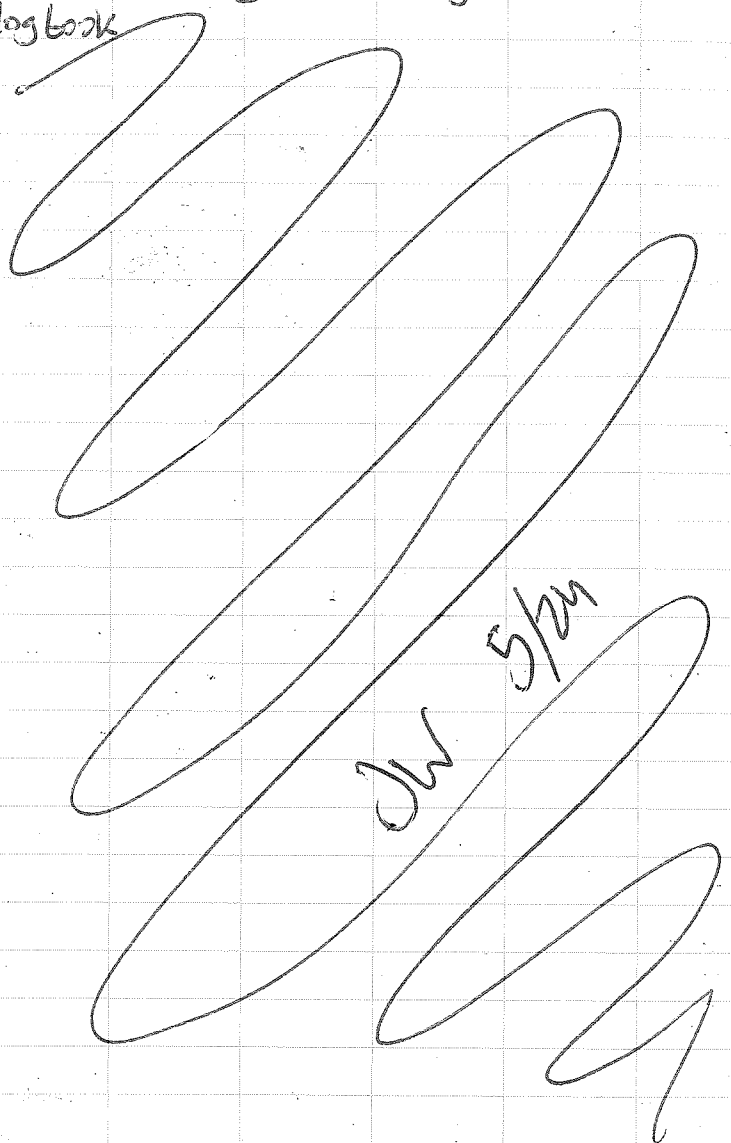
JW 5/24

Rite in the Rain

5/24/24

1415: Yellow Jacket offsite.

1445: CDM Smith and Weatherford offsite. J. Wagenmaker signs out of logbook



5/29/24 SLC VA Shawn McGuire pg 1 of 3

0630 Meet at Supplies site to intro

0635 Move to equipment trailer to pack equipment. + Meet drillers + Perform Safety meeting + documentation

Personnel (Shawn McGuire; Katarina Savtic, Jessica Yates CDM Smith (Chris Hill; Zach Olmstead; Tim Adams; Ernesto Godoy; Luis Villa; Shane McNulty; Yellow Jacket)

Planned Activities: Sample water and continue drilling at MW-40 Proceed to Sample GW every 20' while drilling.

Weather: Hi 76° Lo 58° M. Cloudy

PPE: Level D

0755 on site at Large Rig Filling equipment with Fuel + Setting up Logging equipment

0800 Fill in Daily Rig + Excavation inspection Checklist

0815 run probe to determine DTW
DTW = 184' bgs
TD @ 193' bgs ∴ 9' of water

0825 First bailer = a/b Recovery

0830 Collected Sample: MW40-GW052924-195

0845 Call back PID = Pass while Drillers trip back in MW-40

5/29/24 SLC VA Shawn M. 1 2 of 2

0900 Jessica arrived with string supplies
0931 Confirmed w/ driller water samples frequency of 20'
0945 Logged 195'-205' interval
1010 drillers begin dropping next interval
1040 Took DTW at 194.68' TOC - 6.20' stickup
DTW = 188.49
1045 Sampled MW-40-GW052924-215 and logged 205'-215' run
1056 Drillers resume drilling. Due to boulders in the sample we had to use un-pierced VOA bottles
1126 Drillers drilling through hard substrate at a slow rate.
1140 Drillers pulled 215'-225' run and left for lunch
1150 Finish logging to 225'
1245 Return to drilling + logging
1310 Driller had to help other team w. drilling through hard Gravel
1330 drillers drop 225'-235' run to log and begin tripping out for GW Sampling
1400 GW 194.78. TOC 6.2'
DTW = 187.58' BGS
1415 Collected Sample MW-40-GW052924-235 + Drillers begin Tripping in → SM

5/29/24

1440 Resume drilling
1525 Recieved 235-245' run
1535 Resume drilling
1655 stop drilling
1815 Recieved 245-255' Run to log + Drillers begin packing up
1835 travel to Supplies area to charge/return equipment + Conclusion meal
1945 All personnel off site.

SM

5/30/24 SLC VA Shaun M pg 1 of 3

0645 CDM Smith arrives on site with Yellow Jacket
0700 Begin Safety Briefing and daily review

Personnel: CDM Smith:
~~Yellow Jacket~~: Joe Miller, Katerina Savitz, Jessica Yule
Yellow Jacket:
Tim Adams, Chris Hill, Zack Olmsted, Brandon Graham, Luis Villa, Shane McNutt

Weather H. 70° Lo 44° Sunny
PPE: Level D

0715 CDM to supplies access to load up while YJD begin setting up rigs
0735 Head to rigs to begin setup and Inspection Calibration while YJD begins tripping in.
0800 Start Collecting Equipment Blank of drill Samples. Last Sample was @225' on 5/29/24
0810 Collected ERB01-GWB5302424
0815 Begin drilling
0830 Drillers drop 255'-265' run for logging
0850 Drillers trip out for GW Sample
0906 DTW = 274.4 BTOC Stickup 6.2'
DTW > 265 = Water probe in Mud, Not enough water to sample.
Also GPR Services arrived on site
0910 Drillers unload 8" Casing with Roughrift
0920 Wynn w/ VA arrived on site to discuss access

→ Continue

5/30/24 SLC VA Shaun M pg 2 of 3

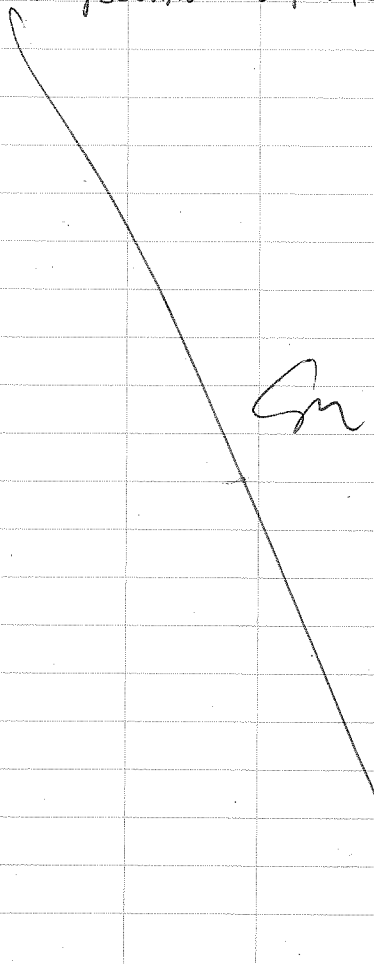
→ Continued to other locations
0930 Ryan W/ Wesche on site
0935 Ben with Pinnacle Environmental bringing new roll-off on-site
~ Drillers stop drilling to rig up 8" Cassing for next Telescopic range
1100 YJD returned with 8" Casing and begin loading it on rig
1130 Break for lunch, Wynn John w/ VA helped identify potential spot for MW-41. Walked with driller and Joe
1210 Moved Structure for another drilling location and YJD off site to resume drilling
1215 Drillers begin to trip in.
1250 Drillers provided 265-275' run and no water was in bearing here
*Noted lenses + precipitated lime in soil.
1345 Caught 275-285' run to log w/ Groundwater Drillers trying to catch it
1450 Drillers drop 285'-295' run. Still pretty dry and let Settle for GW
1530 New roll-off arrived on-site Cleaned packed up site
roll-off 6149 is full relocated to laydown yard
6139 dropped off.
6139

Rite in the Rain

5/30/24 SLC VA

Shawn Nichols
Pg 3 of 3

1550 all personal off drill-site. CDM Smith to Laydown yard
1600 Put up equipment + review schedule
1700 Joe took us to see location of MW-44
1730 Joe drove us around to see other MW site and locations
1750 All personal off site



5/31/24 SLC VA

Shawn Nichols
Pg 1 of 3

0700 Meet in Laydown Yard with YJD to perform Safety/Tailgate meeting and start documentation
0730 CDM travels to gather equipment at EnerX while driller warm-up/refuel rigs
0740 CDM Travels to Drill locations
Personnel: CDM Smith: Joe Miller, Katarina Squitieri, Jessica Yatsu.
YJD: Tim Adair, Chase Hill, Zach Olmsted, Ernesto Gonzalez, Luis Vilkki, Shane McNally
Weather: Hi 77° Lo 49° Partly Cloudy
PPE: Level D
0745: Setup logging equipment + Calibrate PID + Perform Rig/Excavator inspection Checks
0800: Measured depth to Water. 210.2' BTOC Stickup = 6.2' DTW = 204' BGS TD: 295' 91' of GW in boring
0820 Collected Sample MW40-GW053124-295 + Driller start to trip out
0850 Wynn with the VA arrived on site to discuss next location + update
0910 Reached with Wasatch on site to drop off new PID. + driller trip in drilling equipment
0925 Resume drilling
0945 Driller begin to trip out
1000 Join virtual meeting about Screen depth

Rite in the Rain

1005 Soil sample 6- 295-305 fell out of Sampler. Driller plans to recover it with a different bit.

1130 Honeywell onsite with fencing for lay-down yard. Drillers showing them where to put it.
Equipment blank taken @ 1130: EB01-GW053124

1135 Drillers recovered soil from 295-315 ft. YJD overdrilled in order to recover sample from 195-305 ft.

1230 Break for lunch + MW-43 drill is broken need repair

1255 Driller Cleared rig for sampling
DTW; 214.98 BTOC Stickup = 5'
DTW = 209.98 bgs

1330 Sampled MW40-GW053124-315

1400 Drillers begin tripping out and preparing boring for well installation + Seal bore below 305' where the bottom of the well should be.

1430 YJD to yard to gather well supply. Waiting for confirmation that we are setting the deep screen

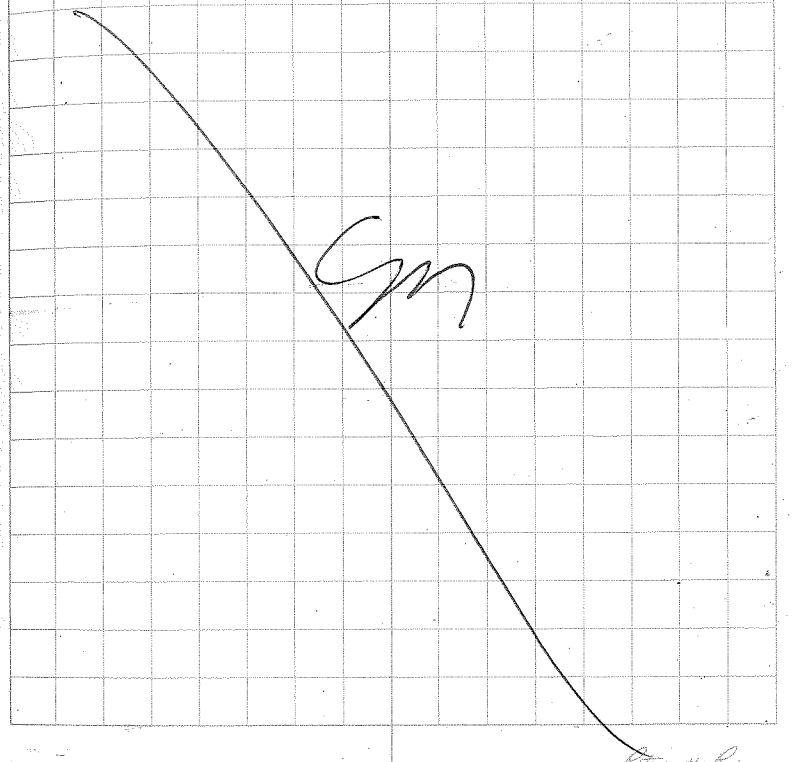
From 297-307 bgs.

1530 recieved Conformation on screen interval.
Deep Screen from 297-307 bgs
Shallow Screen from 230-240 bgs

1600 Drillers arrive with Well construction material and stage equipment

1630 Drillers off site, CDM meets at Supply area.

1700 All personnel off-Site



Rite in the Rain

6/1/24 SLC VA

Shaun McGinn 1 of 3

0700 Arrive on-site w/ YJD for Safety meeting @ MW-40 location

Personnel: CDM Smith: Shaun McGinn, Kacia Savatic, Jessica Yaich

YJD: Tim Adams, Chris Hill, Shane McCarthy, Luis Villa, Zach Olmsted, Ernesto Gonzalez

Weather: Hi 82° Lo 57° Cloudy

PPE: Level D

0730 YJD begins warming (Fueling rig @ MW-40 while CDM performs Excavation/Rig checklist

0800 YJD trips out drill rods

0900 YJD removes rods hole open to 311' with 8" casing.

0905 YJD starts setting bentonite pellets at bottom of well to 307'

0930 1x5gal bucket of bent. pellets used at bottom of well to fill in zone below MW. + Inspect Riser Pipe + Shane to pickup

0945 Driller begin assembling PVS and lowering to bottom YJD + Myself discuss some techniques to adjust for the additional 2' below 205' need to set well @ 207'

1000 Katsha on site to discuss other Crews work Cleaning soil containment pads in yard

6/1/24 SLC VA

Shaun McGinn 2 of 3

Material List

Bent Seal = 1/4" Non-Coated Pellets

Sand = 10/20 grade Whole grain Gilliland

Grout:

Riser pipe = 2" diameter Schedule 80 PVC

Screen = 2" Schedule 80, 0.02" slot PVC

1045 YJD pour in 8th bag of filter pack sand. Well set at TD of 307'

1145 YJD finished pouring filter sand to (12 bags) depth of 295' bags and poured 1 bag of Bent. Pellets on top for seal

1200 Break for lunch.

1240 Resume well construction

1245 Shane (YJD) returns with plant to fix small rig @ MW-43.

YJD pouring bentonite pellet from 295 to a foot under the TD of smaller well..

1450 16 1/2 buckets of bentonite down hole to 248' bgs and installed Shallow well on 3' of filter pack to depth of 240'

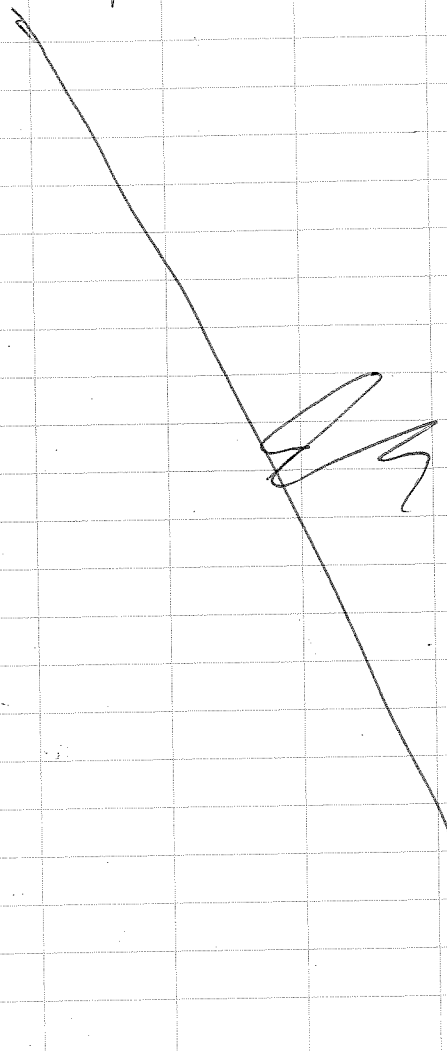
+ Stop work due to lightning proximity

1515 Thunder <10 miles away

1550 Resume well Construction sand pour

16 6/1/24 SLC VA pg 3 of 3

1630 YJD uset 11 bags of Filter pack up to 2' above shallow Screen (228')
Shut down from lightning + Pack up. Clean site and off-site
1700 All personnel off-site



6/2/24 SLC VA Shawn McGuire pg 1 of 2 17

0650 Arrive on site with YJD in laydown yard to perform Safety/tailgate meeting
0715 Travel to MW-40 Location while other team aquires equipment

Personnel: CDM Smith = S. McGuire; K. Savatic, J. Smith
YJD = T. Adams; C. Hill, S. McNulty, C. Villa, Z. Olmsted
E. Gonzalez

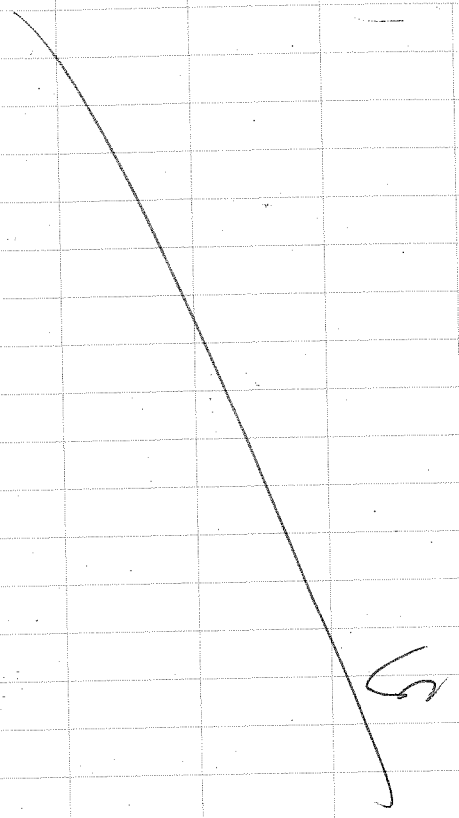
Weather: Hi 81 Lo 60 Cloudy

PPE: Level D

0720 perform Rig/Excavation inspection checklists
0740 Drillers resume well construction pouring bentonite pellets to seal above shallow screen.
0800 Drillers remove Casing and prepare for Grouting
1100 YJD deploy tremie pipe + prep to mix grout
1115 YJD informed me that they are placing bentonite seal up to 50' then Grouting to surface with 3% bentonite Cement Mix.
1150 YJD begin grouting to surface.
1250 So far 14 batches of 50gal mixes used in hole (28 bags) then Break for lunch

6/2/24 SLC VA Shaun McGrath pg 2 of 2

1340 Return to scouting Well
1430 Grout to 25' bgs
1545 Grout up to 10' bgs. 29 x 50 gal batches of grout so far
1610 Pallet stor @ MW-40 to return equipment to yard and decon
1700 All personnel off-site



6/3/24 SLC VA Shaun McGrath pg 1 of 2

0645 Arrive at Laydown yard with 1/2 of YJD & Chris Hill will be a little late gathering supplies.
0700 Begin Safety / tailgate Meeting
Personnel: CDM Smith = S. McGrath; K. Sawtelle; J. Zech
YJD = T. Adams; C. Hill; S. McWatt; G. Villa; Z. Olmstead
E. Gonzalez
Weather: Hi 72° Lo 60° Cloudy chance of rain
PPE: Level D.
0730 YJD begin prepping to inject grout
0800 Resume injecting grout
grout tagged @ 15' bgs in morning
1000 Vanaldi dropped off AQR Color Tec ~~Equipment~~ because they were "in the area"
1030 Completed Grouting + began ~~Archer~~ rig down. Supply Count:
11 more 50 gal batches of grout or 66 bags of cement,
~~40~~ 40 x 50 gal batches total (2000 gal)
1200 Break for lunch + Move RIG off hole
1245 Return to Well construction
1255 Met with Zane from the VA who requested we move our roll-off from RV lot
1300 YJD begins cutting around Well to make Well pad

Rite in the Rain

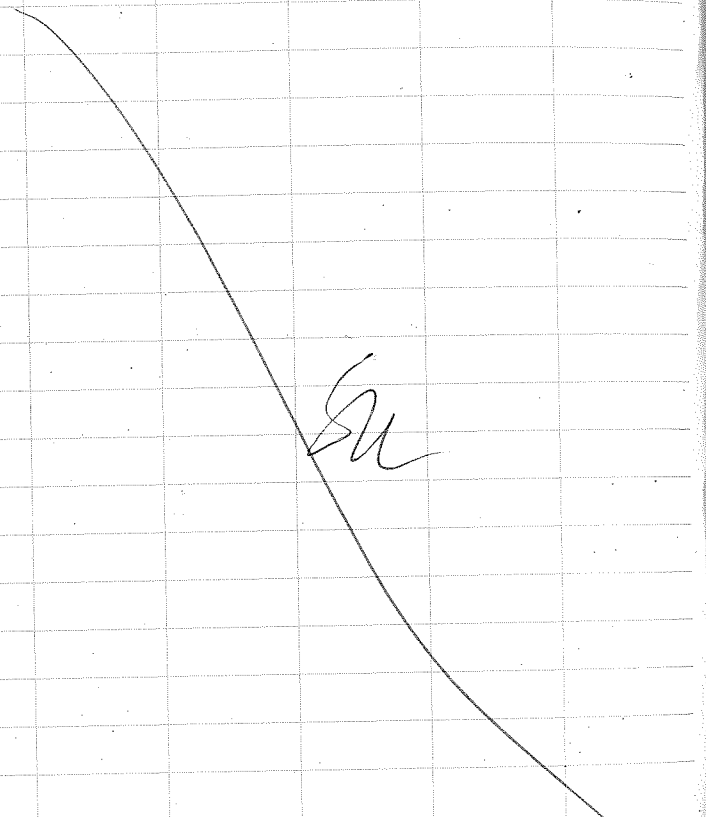
6/3/24 SLC VA Shannon Mclaughlin @2 of 2

1445 YJD finish well pad for MW-40 and begin setting up to drill EW-01

1530 YJD set up traffic cones and caution tape as stated in SOW

1600 YJD finished setup on EW-01

1630 All personnel off site



6/4/2024 SLC VA FS Shannon Mclaughlin pg 1 of 2

0645 Arrive on site with YJD

0700 Perform Safety / Tailgate meeting + Review Scope of the day

Personnel: CDM Smith ES McGuire, K. Savitz, J Leach
YJD: Same as previous day

Weather: Hi 75° Lo 54° Cloudy

PPE: Level D

0730 travel to Supplier area to gather equipment for logging +5/8

0745 YJD begins loading 10" pipe on rig. + PID Calibration

0755 Begin drilling @ EW-01. First 10' is backfill and Grout from Badger pre-dig Clearing

0840 drill rig locked up, will not rotate

1000 drillers think he located issue with rotation gear, might be fixed soon.

1030 YJD off-site to purchase parts for equipment

1100 YJD return to maintenance on drill rig

1125 Had call with Joe regarding the well pad. The VA is worried the lip of the concrete pad will get stuck on snow plows. Plans to modify well pad under max

6/4/2024 SLC VA

S. McGuire pg 2 of 2

1125 took pictures of well pad to show elevated Corners

1150 New parts installed and Rig seems to be working.

1158 Pollce said Badger knock fill from pre clear is the first 10' of Core

1205 Recieved run 5'-15' sediment + began logging

1215 Drillers had to empty hopper due to the amount of fill ground falling into the boring's

1220 YJD advanced casing

1240 Drillers break for lunch

1310 YJD returns to site,

1330 Resume drilling

1330 Capitol Environmental arrived on-site to drop off new calloff (#6145') and remove old calloff to the laydown yard. (#6139)

1510 drilling through very hard rock around 50' bgs

1600 Push Casing

1620 Finish drilling for the Day + begin

1650 Off site to Comm

1700 All personnel off-site

6/5/2024 SLC VA

0650: All personnel on-site

0700: Perform Safety/tailgate meeting + Review Scope of day and Well pad Construction

Personnel: CDM Smith = Same as previous day
YJD: Same as 6/3/24 date entry

Weather: Hi 81 Lo 58°

PPE: Level D

0725 arrive on drill site to Setup and do Rig/Excavation Checklists.

0730 begin drilling + logging 75-85' run

0820 PID indicated multiple high readings between 80'-95' bgs. Where multiple Confining lenses are

0830 YJD picks up more Casing from Laydown yard.

0836 Waste[illegible] on site Called Wyng (No response) to open gate

0845 Badger on-site to pre-clear Auger borings. Received Reply from Zane W/ WA who is on the way to open gate to next Boring. Badger + Waste[illegible] make their way to boring location

0900 Badger informed Me they were not equipped to Core the asphalt and had to get equipment

6/5/24 SLC VA S. McGee pg 2 of

1030 Badger equipment arrived and Cored through proposed location of MW-41 then started Clearing to 15' if possible. + YJD fishing for dropped drill rod.

1230 Badger + Wasatch ran into very large boulders at 7' while Clearing at the proposed MW-41 location. Boulder are larger than the hole and Can't be removed with Va-Trench Method — Contacted Wynn

1250 Wynn + Shanna + Zane on site to determine if pre-Clear is deep enough.

1320 badger to next location. VA has given permission to backfill the hole and move forward.

1330 VA goes to MW-43 location

1335 YJD retrieved equipment and brought up the 105'-125' run.

1410 Break for lunch.

1450 Return to drilling + PID and Camera died. Grabbed PID from other team

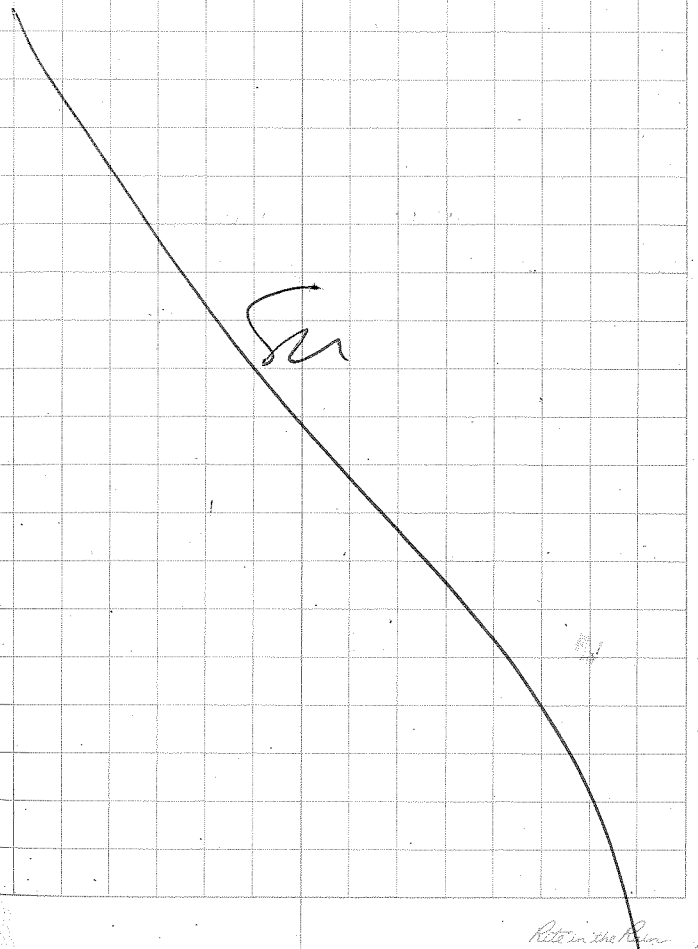
1600 logged 135'-145' run + begin Cleaning + packing site

6/5/24 SLC VA S. McGee pg 3 of

YJD moved Bark Potty as requested by Shanna + Zane from VA

1645 Drillers off-site, CDM attempts to work Color-Tec equipment. Ryan + Badger finish pre-Clearing Location to 8'-10' bgs. Ryan arrive to help

1720 All personnel off site



6/6/24 SLC VA Shawn McGuire pg 1 of

0640 Arrive on site to start on Color-Tec equipment.

0700 Perform Safety/Tailgate meeting w/ YJD at laydown yard + Review Scope of the day

0715 Travel to Rig to Fuel up Mobilize and Calibrate PID

Personnel: Same as Previous day for both YJD + CDM Smith

Weather: Hi 92° Lo 68° Sunny

PPE: Level D

0730 Communicating with VA + YJD and Badger to fill pre-screen hole left at MW-41 location.

0800 Determined that YJD tanks/selves have to fill hole.

0830 YJD begins tripping in to drill

0900 Badger arrives on site to fill MW-41 location

0930 Recieved 145'-155' Run to log YJD Advancer Casing

1030 Recieved 155-165' Run + Stopped to fill Badger hole near Solar Farm + Badger off-site, Chris Hill to other drill rig

1100 Helped YJD with filling hole

→ Near Solar Farm (MW-44)

1140 Locked up equipment @ laydown yard.

MW-44 hole took ~20 bags of pea gravel.

1150 Tag bottom of MW-40 shallow and deep - 301.5 TOC

9/16 DTW deep: 302 BGS 2445

DTW Shallow = 244.5 TOC ~~BGS~~

Well set 0.5' below ground level

Deep DTW: 206.64' bTOC

Shallow DTW: 188.47' bTOC

1230 YJD from EW-01 off site + Travel to Conex for tools to tighten Well Cap labeled + Marked edges of Wells.

1340 CDM to Conex to unpack file documents + and use Color-Tec equipment

1355 Sampled Rotoff ID W02-SBarcode

1406 Return to Conex + pack. Sample

1500 Pass Key to John W/ Wood - off-site

Return to Rain

6/11/2024 JLC VA

Nathan Norris

Personnel - Joe Miller - CDM
Isaac Nance - CDM
Alex Pedjase - CDM
Nathan Norris - CDM
Yellow Jacket Drilling

Weather 90s and sunny
PPE: Level D
Task: Drilling EW-01, start at 168' BGS
0704 perform health and safety briefing with all staff
0713 CDM staff to conex boxes to get PID, logging supplies for the day
0734 Setting up table, supplies at EW-01
0745 drill rig warm up, drill rig check list
0830 begin drilling, adding casing
0859 finish drilling, retrieving core bags
0931 finish next 10', retrieving core bags
GPR services onsite, Joe off to meet them
core bag 173-175 retrieved
1006 Finished next section, retrieving core bags
1009 drillers removing soil hopper from under drilling platform for disposal in soil bin
1015 driller says water encountered, tag at 172.18 from drill platform, 172.18 from ground surface

NN 6/12/24

6/11/2024 JLC VA

1021 call Joe miller, going to collect a water sample here, he is returning to help
1023 return Cal hopper
1051 attempt GW sample with Joe, NO recovery (photo of bailer by Isaac)
return to drilling
1134 borehole to 193 ft, casing 178
letting water infiltrate, drillers take lunch
1146 Joe M tags water level 185' BGS
~~1156 collect GW sample~~ 6/11/24
1200 collect GW sample at 193' BGS
1206 drillers return from lunch, refilling water
1223 Joe Miller leave site for food/drink run
1257 collected 193-195, rock stuck in casing drillers hammering it out
1305 cleared out, return to drilling
1310 drillers remove soil hopper, dispose in bin
1323 Joe M returns
1337 Joe leave site to meet VA at MW39
1420 Joe return
1515 sampler deployed for next GW sample
1519 drillers remove soil hopper for disposal in bin
1530 attempted sample @ 215', empty no water
1705 finish last 5 ft, deploy sampler
1720 screen set, removing soil hopper for disposal in soil bin, drill cuttings

Rite in the Rain

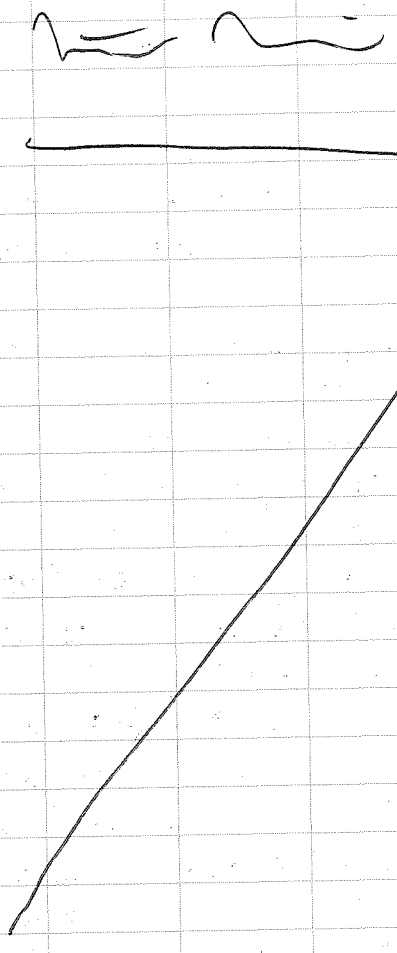
NW 6/11/2024 SLC VA Page 3 of 3

~~1535~~ color test train with Joe

1735 drillers demob

~~1525~~ NW CDM offsite

1745



6/11/2024

Nathan Norris
Page 1 of 3

6/12/2024 SLC VA

Personnel - Joe Miller
Isaac Nance
Alex Pedjase
Nathan Norris
Yellow Jacket Drilling

Weather: 90s and sunny

PPE: Level D

Task: Drilling EW-01, start at 223' BGS

0700 Alex performs health and safety briefing, sign HASP

0718 Retrieve equipment from conex boxes, mob to EW-01

0738 Perform drill rig checklist

0745 Joe miller tag depth 224.35' minus 8.5' stick up,

0800 collect GW sample at 223' BGS

0815 drillers completing rig maintenance

0835 drill rig started back up

0854 Joe M spoke on phone with ELM about MW39 high profile gas line location. ELM stated as long as we working greater than 5 Feet from the line we do not need a stand-by. If we move within 5 Feet, we need to give 24 hrs notice for stand by

Rite in the Rain

0857 drillers begin removing sampler
0920 drillers clean sampler
0930 collect EB06-GW061224 after clean from 223' sample
0933 drillers drilling down for next sample
1005 drillers broke rod in the hole, fishing it out of the hole
1025 spoke with drillers, core barrel still stuck below 10" casing in the soil. They are going to retrieve 9" casing, push down to depth to loosen up core barrel and retrieve, then pull up 9" casing
1113 drillers return with 2 totes of water plus 9" casing
1138 unloaded casing, drillers taking lunch
1210 drillers return from lunch, restart rig
1220 begin deploying 9" casing
1323 9" casing set, attempt to remove rods
1335 rig overheated, spray down with water then resume pull/push 9" casing
1355 attempting to remove core barrel
1403 successfully got rods moving, pulling out now
1439 ELM onsite to remark utilities for EW01, Joe had to refresh ticket
1445 ELM departs work area
1755 after hard drilling, no recovery from core barrel back down

1519 recovered core, driller states got to 241', some bags may be soupy
1616 sampler deploying to 246'
9" casing 226'
1630 10" casing 216'
1646 tag water at 251.2'-8 (stick up)
243.2' - From ground surface
1645 GW sample collected EW01-GW061224-246
1656 leave drill site for Conex boxes
1712 CDM offsite

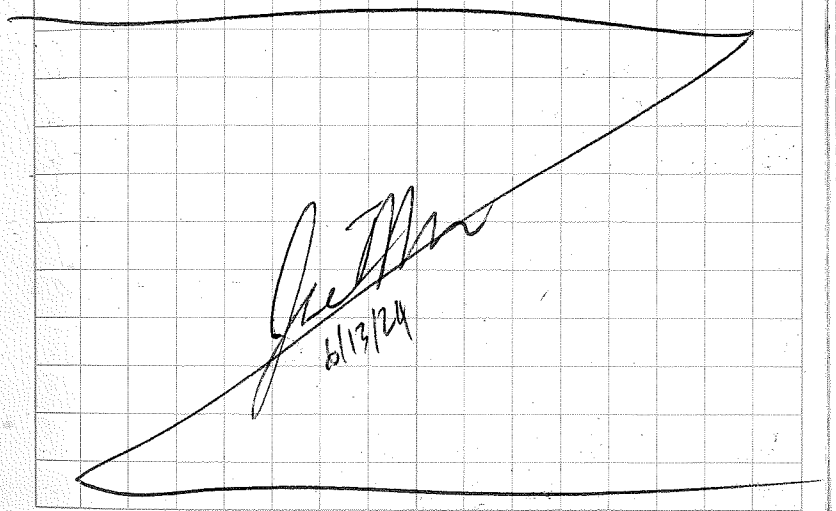
6/12/2024

Rite in the Rain

6/13/2024 SLC VA Weather 70-100°F

0645 CDM Onsite - Joe Miller (Author)
0700 Yellow Jacket/CDM H+S Tailgate
Topics: Heat, communication, Rig Mob,
Correct dumpster usage
0715 load Equipment, Run Colortech
Sample EW01-GW061224-223 ND
Sample EW01-GW061224-246 35 ug/L
0730 Rig Inspection, Checklists prep for drilling
0800 Advance Casing 9"
0820 Resume drilling
0940 Trip in Sampler @ 265
0952 Sampler tripped In allow water to accumulate
1000 Diego - Full size driller and Joe Go to MW-45 look @ location accessibility for Full Size Rig. Diego says it's doable
- Ryan Panasy Wasatch Onsite to purge off vac cuttings.
1020 Ryan offsite Measure dtw @ EW01 : TW 263'
1100 Collect Sample 265' EW01-GW061324-265
1120 Sampler tripped out, Resume drilling
1205 Sample core tripped out
1230 Core to 285' trip in Sampler
1305 Sampler deployed YJP Takes lunch
1340 Check WL 209 - 6' 203' BGS

1400 - Collect GW Sample EW01-GW061324-285
Resume drilling
1410 - MP Onsite to deliver Rolloff
1450 MP Offsite delivered New Rolloff and Rearranged current ones
1535 Collect Blank from Sample @ 285
1610 Isaac to Fedex w/ Samples
1700 Boring to 305'
trip in Sampler
1720 Sampler Deployed
1735 Dump Soil cores, wrap up Rig
1740 YJP To decon 10" casing
1800 Colortech 265 Sample 450 ug/L
285 Sample ND
1815 CDM Offsite



Rite in the Rain

6/14/24 SLC VA Arthur Joe Miller

0645 CDM Smith Onsite
0700 H+S Tailgate w/ YJD
Topics Lifting communication Heat traffic
0715 Prep Equipment/Rig Inspections
Task: Drill EW01, well construction
Weather 75-95°F, Poor Air Quality
0800 Call in dig tickets for MW-34
West - C416601 7a
East - C41660183
0815 Try sample GW @ 305'
No sample Recovered
0840 Trip Out Sampler
0900 GW Sampler Broke @ bottom of hole
Nathan Norris CDM Smith Onsite
0905 Trip in Core Barrell to Retrieve Remaining
Part of Sampler
0920 Joe Miller Relinquishes Field Book Control
to Nathan Norris
6/14/24

Nathan Norris accepts Field book
6/14/24
0948 Drillers lost sample out of core barrel, going
down to retrieve new sample
1020 Received text from Joe Miller, instructed
to stop EW01 at 315', bottom of well
to set at 315'

1028 Retrieve core bags from 305'-315'
1051 Sampler deployed to 315', let hydrate
then collect sample
1101 Joe had call at 10 to determine screening
interval bottom of well at 305', 5'
sump (300-305'), screened interval
260-300' Clear clean borehole to 310'
backfill hole to 305', bentonite chips, 10"
borehole to 305'
1120 Collect ground water sample
EW01-GW061724-315
Drillers tripping out sampler
1146 Drillers breaking for lunch
1226 Drillers start rig back up, to remove 9"
casing and reamm 10" down to ~310'
1245 Collect equipment blank EB08
1302 Finish dripping out 9" casing, loading
on to flatbed to bring to staging area
1310 Joe and Isaac sample collect soil
IDW from rolloff #6145
IDW03-SB061424
1346 Joe Miller CDM Smith offsite
1354 YDS taking 9" casing back to laydown
area to wash to return with 10" casing
1420 Isaac Nance CDM Smith ran colorimetric testing
for EW01 315' sample at 1400, sample was non-detect

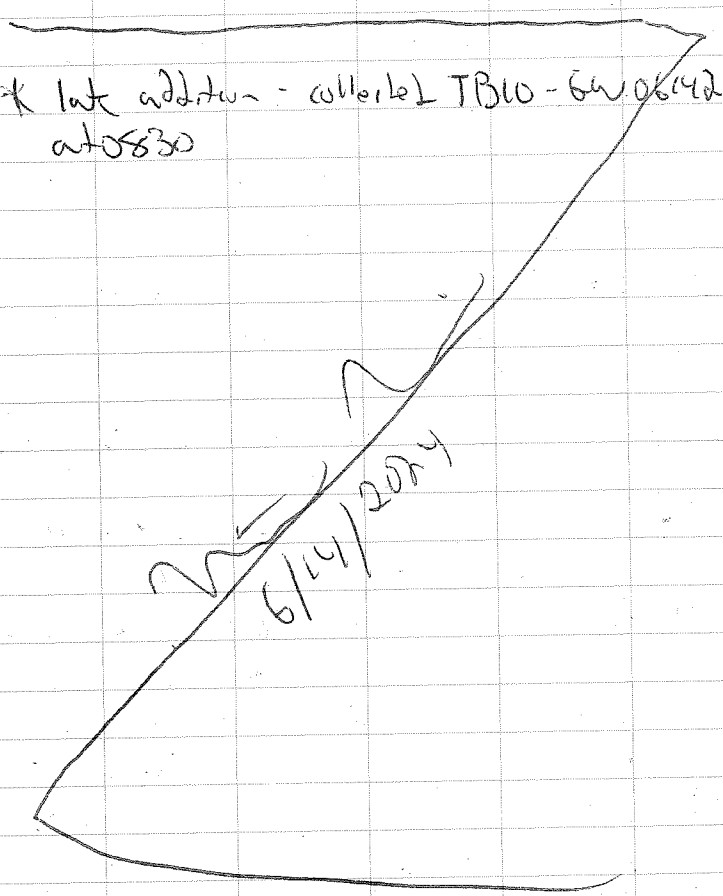
Rite in the Rain

6/14/2024 SLC VA Nathan Norris

1522 YDS returns from decon of 9" with more 10" casing, Nathan Norris CDM Smith completed decontamination checklist

1543 Sending down 10" casing

1751 CDM offsite



Personell - Alex Pedjase CDM Smith
Isaac Nance CDM Smith
Nathan Norris CDM Smith
Yellow Jacket Drilling

Weather: Low 90s P cloudy AM sunny PM

PPE: Level D

Task: EW01 10" borehole to depth, install well

0702 Alex Pedjase CDM Smith completes tailgate health and safety briefing

0711 Nathan Norris returns to hotel to retrieve log book and clipboard, Alex P and Isaac N retrieve supplies from corner

0734 Nathan Norris returns to site, complete Daily Excavation and Driller Checklists

0738 YDS refueling, preparing drill rig

0800 Nathan Norris reviews, signs YDS daily report from 6/14/2024

0833 Begin tripping down the last of the 10" casing to depth

1016 Spoke with YDS, tripped out 12 sections of casing because borehole was getting tight, likely would have gotten stuck. Getting ready to send back down

1129 Casing is back in, tripping in core barrel to clean out

1211 Drillers break for lunch

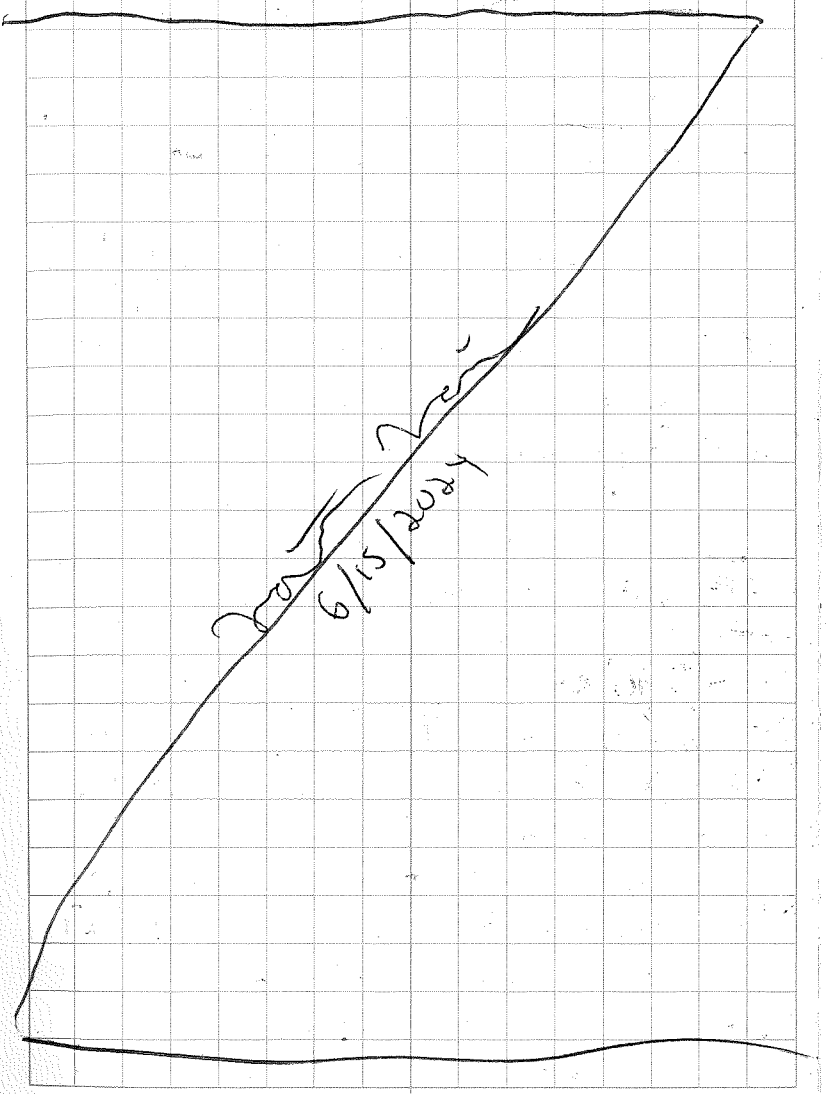
Rite in the Rain

6/15/2024 SLC UA

1241 Drillers return from lunch
tripping in/out sampler to clean borehole
1258 Empty soil hopper into soil bin
Continuing to clean out boring, move casing up and down
13:32 Empty another soil hopper to the bin
1414 Casing has been deployed to depth, one more cleanout
510 Final cleanout complete to 310'
Disposing soil hopper in soil bin
1558 Preparing well construction materials, moving to the boring location from trailer
1628 Begin deploying well casing
Started with screen, reminded them that sump needs to go first. Brought out screen (10ft) for sump
~~1736~~ 1636
Start with 5' sump
~~1644~~ 1641
40' of screen in well, next riser casing
~~1741~~ Riser casing |||| |||| |||| |||| x10
1752 26 10' riser casing and one 5' installed
1757 tag bottom at 305', will add sand to support bottom of well so it is not hanging
1812 Bottom of hole tagged at 311', add 2 50lb bags of sand #FS3
1816 Top of sand tagged 308'
add 2 more 50lb bags
1825 tagged top of sand at 304'

6/15/2024 SLC UA

1825 (cont.) sand to one foot above bottom of PVC, finish for day
1832 CDM Smith offsite



Rite in the Rain

6/16/2024 SLC UA

Nathan Norris

Personnel: Alex Pedjase CDM Smith
Isaac Nance CDM Smith
Nathan Norris CDM Smith
Yellow Jacket Drilling Services

Weather: Upper 70s, P cloudy AM sunny PM

PPE: Level D

Task: construct well EW01

0649 Nathan Norris (author) arrive onsite
0700 Health and safety briefing by Alex P CDM
0712 YDS refueling rig, prepare rig for day
0720 Review and sign daily report
Completing daily checklists
0820 YDS tag top of sand at 300' bgs, settled 4' overnight
0837 Vibrate casing, bring it up by about one foot
0842 Tag top of sand at 301', adding one more 50 lb bag of sand
0849 Tag top of sand at 298',
0853 Pull up casing 5', add 2 50lb bags of sand, remove rest of the 10' section of casing
0905 Tag top of sand 297', adding 2 50lb bags
0917 Top of sand at 293' add 2 more 50 lb bags of sand
0929 top of sand tagged at 290', pull up casing 5' add 2 50lb bags sand
0943 Pulled 10' section of casing out, tag top of sand at 290', add 2x 50 lb bags

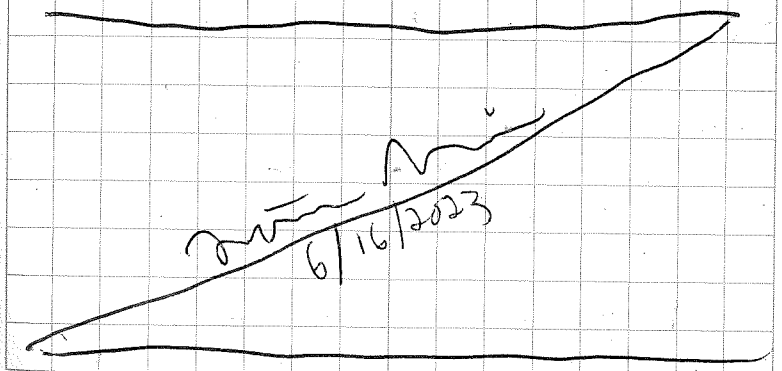
6/16/2024 SLC UA

Nathan Norris

0953 tag top of sand 288', 2x 50 lb bag sand
1012 tag top of sand 286', casing at 285' add 2 bags 50 lb sand
1019 tag top of sand 283', 2x 50 lb sand
1030 tag top of sand 280' pull up casing another 5', add 2 50 lb bags sand remove rest of 10' casing section
1044 tag top of sand at 380' adding 3 50 lb bags of sand
1059 tag top of sand at 278' add another 3 50 lb bags of sand
1112 tag top of sand at 275' add 2 50 lb bags of sand MW40
1118 one YDS staff goes over to FA flashmnt
1120 tag top of sand at 272' another 2x 50 lb sand
1129 tag top of sand at 269', pull up another 2' ~~at add~~ MW and add 2x 50 lb bags sand
1137 Pull rest of 10' section out after last 5' pull up for sand
1141 tag top of sand at 269' 3x 50 lb bags sand
1151 tag top of sand at 266' 3x 50 lb bags of sand. 6 buckets (5 gal) of bentonite non-coated pellets brought over
1201 tag top of sand 261' add one 50 lb bag of sand
1207 tag top of sand at 259', pull up

1207 (cont.) 10' section of casing, add one 50 lb bag of sand
1218 Tag top of sand at 259', add one 50 lb bag sand
1227 Still 259' one more 50 lb bag sand
1234 Top of sand tagged 259', one 50 lb bag sand
1240 Tagged 258' add one 50 lb sand
1244 tagged 258', add one 50 lb bag of Sand
1250 tagged 257', casing at 256'. Begin adding bentonite 2 5gal buckets
1257 Pull casing up 5', tag bentonite at 255', add 2x 5gal buckets bentonite then pull up 10' casing
1307 Tag bentonite at 252', 5' above sand
1311 let bentonite hydrate for about one hour, drillers break for lunch
1401 Drillers bring grout supplies to site, return from lunch
1410 Tag bentonite at 251' add one more 5gal bucket
1424 Tag bentonite at 250', trip out one 10' casing section and trip in tremie pipe
1440 Tremie pipe is in, setting up the grout mixing and pumping sequence
1505 Mixing grout w/ water & bags of Portland Cem. Cement
1511 Add 8.7 more bags Portland Cement
1518 Add 8 more bags Portland Cement
1525 Completed three batches grout, 8

1525 (cont) bags each. Tag grout at appx 206', mushy
1528 Fourth batch of grout, 8 bags Portland Cem
1535 Bringing up tremie pipe
1551 Taking up casing |||| 4 10' sections
1604 Tripping down tremie pipe
* note on 1525, measurement of grout depth was difficult as it was mushy, 206' estimate from tremie
NW ~~1618~~ Mixing fifth batch of grout 8 bags of
1618 Portland Cement
1624 Sixth batch, 8 bags Portland Cement
1631 Seventh batch, 8 bags Portland Cement
1637 Eigth 8th batch, 8 bags Portland Cement
1644 Tag top of grout at ~190'
1648 Tripping out tremie pipe
1659 Removing casing, ||| 3 10' sections, casing at 166' grout at appx. 140-210' end for today
1743 CDM offsite



Rite in the Rain

6/17/2024 SLC UA

Nathan Norris
Page 1 of 3

Personnel: Alex Pedroza COM Smith
Isaac Nanca COM Smith
Nathan Norris COM Smith
Yellow Jacket Drilling

Weather: Upper 60s/low 70s sunny, partly, breezy W 10-15 mph
PPE: Level D
Task: Complete EW01 well installation

0654 Arrive at site
0700 Alex P completes health and safety briefing
0713 YDS brings more bags Portland Cement, refill rig
0809 Tag top of grout at 195'
0815 Tripping in tremie pipe
0831 Mixing 9th batch of grout with 8 bags of Portland Cement
0845 Tenth batch of grout 8 bags cement
0851 Eleventh batch of grout with 8 bags cement
0854 Twelve batches, 8 bags grout cement
0903 Tripping out tremie pipe
0912 Pulling up casing |||| 5 10' sections casing
0927 Tripping in tremie pipe
0934 Tag top of grout at ~~255~~ NW 155'
Thirteenth batch, 8 bags, Portland Cement
0941 Fourteenth batch, 8 bags Portland Cement
0950 fifteenth batch, 8 bags Portland Cement
0956 Sixteenth batch, 4 bags Portland cement
0959 Seventeenth batch 4 bags Portland Cement

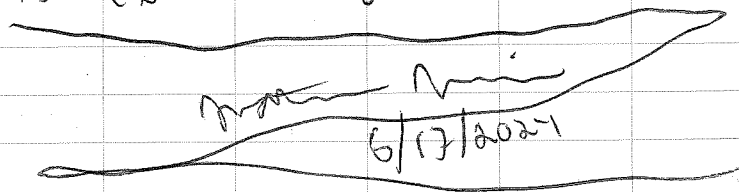
6/17/2024 SLC UA

Nathan Norris
Page 2 of 3

1004 Eighteenth batch, 4 bags Portland Cement
NV ~~1015~~ Tag top of grout ~118' YDS states
1013 each batch is less bags now because the bags are larger, now 92 lbs each
1016 Tripping out tremie pipe
1023 Pulling up casing ||||
Offloading from support truck to trailer
1050 Trippin tremie pipe
1057 Nineteenth batch, 4 bags Portland Cement
1103 20th batch, 4 bags Portland Cement
1107 21st batch, 4 bags Portland Cement
1112 22nd batch, 4 bags Portland Cement
1119 Tripping out tremie pipe
1125 Pulling casing ||||
1410 Tag top of grout at ~75', casing set at 40' Drillers taking lunch then grabbing another pallet of Portland cement
1221 Diego (YDS) off to the store to buy another pallet of Portland cement
1324 Return with new pallet, 4716 bags
1332 Tripping in tremie pipe
1336 23rd batch 4 bags portland cement
1341 24th batch 5 bags Portland Cement, 2 big bags and 3 47-pound bags
1346 25th batch 8 bags Portland Cement
1351 26th batch 8 bags Portland Cement

6/17/2024 SLC VA

1400 Pulling tremie pipe
1404 Pulling Casing || 2 10' sections removed
1408 Trip in tremie pipe
1410 Tag top of grout, 50'
1420 27th batch of grout, 8 bags Portland Cement
1426 28th batch 8 bags Portland Cement
1431 29th batch 8 bags Portland Cement
1436 30th batch 8 bags Portland Cement
1442 Pulling tremie pipe
1444 Grout at about 10', pulling casing then tagging again
1452 Last 3 10' sections of casing removed from borehole
1456 Tagged at 13' grout
1458 Soap in tremie pipe
1501 31st batch grout 8 bags Portland Cement
1507 32nd batch grout 5 bags Portland Cement
1512 Pull tremie pipe
1526 RDJ done grouting, going to let it settle overnight at get new pallet for tomorrow. Decon some of the 10" casing
1600 Observe decon of 10" casing
1713 CDM leave site



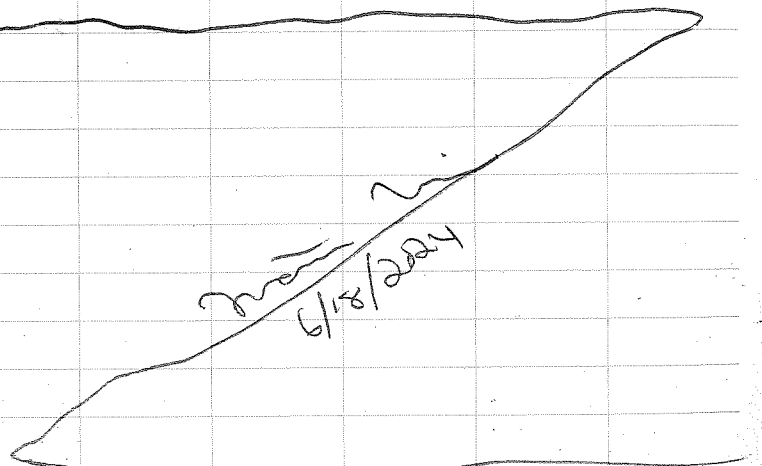
6/18/2024 SLC VA

Personnel: Alex Pedjase CDM Smith
Isaac Nance CDM Smith
Nathan Norris CDM Smith
Yellow Jacket Drilling Services
Weather: Low 40s to upper 60s sunny
PPE: Level D
Task: Finish grouting & surface completion EW01
0652 CDM arrive on site
0700 Alex P does tailgate safety meeting
0726 Fueling up drill rig, preparing
0737 Unloading pallet of Portland Cement- 10947-16, 35 9216 bags
0747 Tag bottom of well at 300', some silt accumulation through screen into the sump
0751 Tag top of grout at 6'
0820 33rd batch grout, 7 bags Portland Cement
0826 34th batch grout, 7 bags Portland Cem.
0831 35th batch grout, 6 bags Portland Cem.
0836 Tag top of grout at 3'
0838 36th batch grout, 4 bags Portland Cem.
0841 Tag top of grout at 2'
0842 37th batch, 4 bags Portland Cement
0845 Tag top of grout at 1'
0850 Finished grouting breaking down set up to clean area for surface completion

Rite in the Rain

6/18/2024 SLC VA

0915 Complete well construction form
1132 Drillers break for lunch, will get supplies for Flushmount
1210 YDS bringing support truck back to laydown area, getting supplies for completion
1240 YDS return with supplies
1305 Vacuuming excess water from borehole
Cutting 2x2 square from concrete around the borehole well casing
1313 Vacuuming water from concrete cutting from the borehole
1332 Mixing concrete, 2 bags
1438 Finishing smoothing out concrete
1516 Replace cap over vault, let concrete finish setting. YDS bringing supplies back to laydown plus organize
1741 CDM Offsite

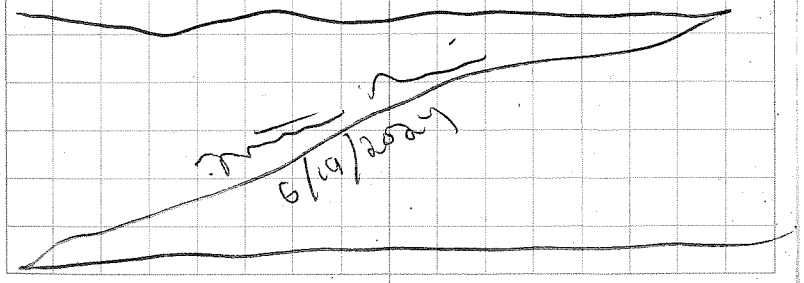


6/19/2024 SLC VA

Personnel: Alex Pedjase CDM Smith
Isaac Nance CDM Smith
Nathan Norris CDM Smith
Yellow Jacket Drilling Services
Weather: Mostly sunny to cloudy, upper 70s
PPE: Level D
Task: Grouting MW411
0649 CDM arrive onsite
0700 Alex P conducts tailgate health and safety
0716 YDS moving grouting supplies to MW411
0738 Sign daily report for Diego, complete driller checklist for truck rig
0803 Tag top of bentonite at 209'
0808 Trip in tremie pipe
0823 1st batch of grout, 4 92-lb bags of Portland Cement
0831 2nd batch, 4 bags Portland Cement
0839 3rd batch, 4 bags Portland Cement
0848 4th batch, 4 bags Portland Cement
0850 Badger onsite to precleat MW44
0906 Pulling out tremie pipe, 200 gal grout in
0920 Pulling casing [redacted] 20 sections of 10' casing, all casing removed from the borehole
1101 Tripping in tremie pipe
1111 5th batch grout, 4 bags Portland Cement

1114 6th batch grout, 4 bags Portland Cement
1122 7th batch grout, 4 bags Portland Cement
1131 8th batch grout, 4 bags Portland Cement
1140 9th batch grout, 4 bags Portland Cement
1152 Tripping out tremie pipe ~3-4 sections
1157 10th batch grout 1 92-pound bag, 6 47-pound bags
1209 11th batch grout, 8 bags Portland Cement
1220 12th batch grout, 7-8 bags Portland Cement
1228 13th batch, 3 4716 bags, 2 9216 bags of Portland Cement
1239 Tripping out tremie pipe, 3 sections
1250 Drillers Break for lunch
1332 Return from lunch
1335 14th batch grout, 4 bags Portland Cement
15th batch grout, 4 bags Portland Cement
1343
1352 16th batch grout, 4 bags Portland Cement
1358 17th batch grout 4 bags Portland Cement
1405 18th batch grout 4 bags Portland Cement
1412 19th batch grout 4 bags Portland Cement
1418 20th batch grout 4 bags Portland Cement
1422 21st batch grout 4 bags Portland Cement
1431 Spoke with Isaac Nance (CDM) about Badger clearing MW49. Cleared down to 8.5 feet. Truck got stuck for several hours on the way out but to extract with

Forklift and other trucks. Badger off site est about 1400
1433 22nd batch grout, Final 2 bags Portland Cem
1445 Top of grout tagged at 52'
1458 New pallet of Portland Cement, 9216 bags. Refueling rig
1509 22nd batch grout 4 bags Portland Cement
1517 23rd batch grout 4 bags Portland Cement
1523 24th batch grout 4 bags Portland Cement
1529 25th batch 4 bags Portland Cement
1537 26th batch 4 bags Portland Cement
1545 Pull tremie pipe
1548 Tag top of grout 12'
1549 27th batch grout 4 bags Portland Cement
1556 Tag top of grout at 3.5'
1602 28th batch grout 2 bags Portland Cement
1607 Tag top of grout at 3'
1618 Grout ~2' below surface, Finished grouting, YDS cleaning up
1723 COM Offsite



Nathan Norris
Page 1 of 1

6/20/2024 SLC VA

Personnel: Alex Pedjase CDM Smith
Isaac Nanca CDM Smith
Nathan Norris CDM Smith
Yellow Jacket Drilling Services

Weather: P cloudy AM Sunny PM, high ~90

PPE: Level D

Task: Surface completion MW-41, demob

0652 CDM arrive onsite
0700 Alex P health and safety briefing
0716 Prepping rig
0721 Top of grout 2.5'
0751 Tag bottom of wells D=283' S=226'
0812 Taking down rig tower, preparing area for surface completion
0832 Escorting truck rig back to laydown area
0855 Truck rig back at the laydown area
0903 Concrete cutting around borehole
0913 Mixing and adding concrete
1028 Finishing smoothing out surface, 11 total bags 60 lbs concrete
1158 Finish at MW-41 surface completion YDS cleaned out area back gate
1245 Close out log book for the day, driller finishing cleaning up laydown area

6/20/2024

S. McGuire
p1 of 2

6/25/2024 SLC VA

Personnel: CDM Smith: Michele Blaton, Lorenzo Rezac, Shaun McGuire
YJD: Shane M, Reece P, Weston V. Diego Diaz, Mitch Martinelli

Weather: Hi 97° Lo 71° Sunny
PPE: Level D

0700 arrive at Laydown Yard + Safety/tailgate meeting
0730 Team 1 ~~left~~ -site for ~~check~~ Emissions test + CDM to Comet supply yard to get the equipment + Calibrate
0800 Team 2 drillers setup equipment at MW-44
0830 CDM + YJD head to MW-44 for H&S Inspection + Excavation checklist + John w/ Wasatch delivered beads at 10730 lake center
0900 Work with MW-44 crew to get them started + logging + Begin Drilling, while Team 1 drillers do emissions testing.
1000 run to Comet to find Printer info for ordering more toner

6/25/2024 SLC VA

Shawn M
p2 of 2

1145 YJD return to laydown yard + Sham travels to MW-45 location to see about traffic control

1200 Break for lunch (Team 2)

1220 Chris (CMPC) dropped off new Rollroll Container #6489 near other Rolloffs

1230 Team 1 Break for lunch

1330 Team 1 return from lunch + Parks to MW-25 location, Discussed with Jon to move boring location slightly farther from Gas line.

1406 YJD brings Grout load to site + deploy traffic control measures

1445 Brought over Supplies truck

1515 brought in rig and setup on boring location

1528 Moved boring location slightly more South Between the Gas Utility and overhead utility for safety

1535 YJD dug 3 5' hand auger holes for Utility Clearance.

1600 YJD Begins laying plastic and aligning rig.

1640 Finished Rig Setup + head to laydown yard.

1750 All personnel off-site

6/26/2024 SLC VA

Shawn M

p1 of 2

Personnel: (CDM Smith) Shawn M. Mckinzie Blaton, Lauren Reed
(YJD) Shane M, Reed D, Weston W, Diego O Mike M, Matthew Blanton

Weather: Hi: 92° Lo: 71° Cloudy - Sunny

PPE: Level D

0645 Arrive on-site to start paperwork

0650 YJD arrives on site

0700 All on-site begin Tailgate/Safety Meeting

0715 Could not find keys to Conex drive to Hotel and storm coming from

0800 Dropped PID off with Team 2 and called Zane to unlock Supplies yard.

0810 Zane opened Supplies + found keys dropped off paperwork for Team 2 while Team 1 sets up equipment

0848 Arrive at MW-45 complete Check links + Calibrate

0930 Begin Drilling @ MW-45

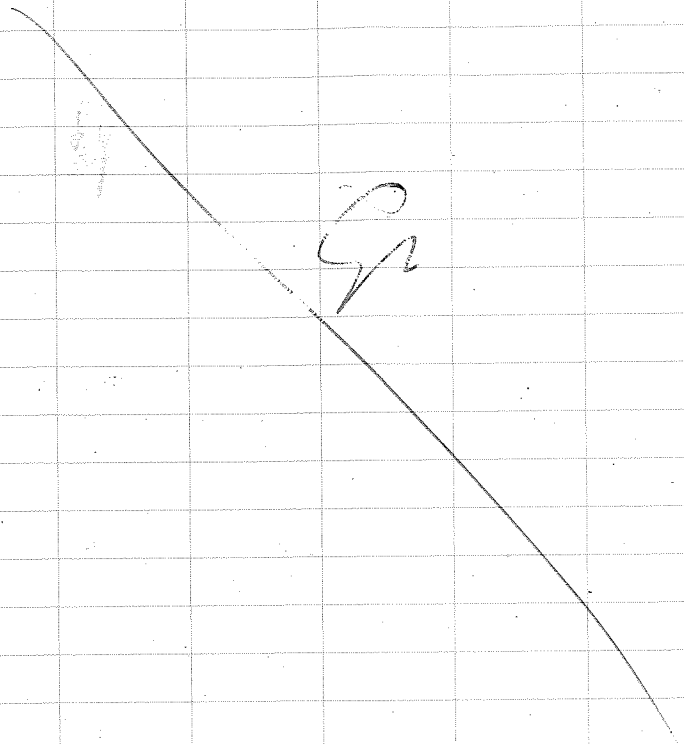
1225 YJD left to return path-pots to Site at MW-45

1245 Break for lunch

1330 Resume drilling

58 6/26/24 SLC VA

1335 YJD takes Hopper to laydown yard to empty into Roll-off
1400 Return to drilling @ 105' bgs
1606 Finished drilling & begin to load hopper with cuttings and Clean Site.
1615 All personnel off MW-45 location
1630 All personnel off site



59 6/27/24 SLC VA

Personnel: CDM Smith: S. McGuire, M. Mingle, L. Rank
YJD: Shane M. Reg D. Weston W. Oregon D. Mike M. Mat B.
Weather Hi 86° Lo 67° Sunny
PPE: Level D

0645 Arrive on-site with YJD
0700 Safety / tailgate Meeting
0715 Drillers fuel rigs CDM To Cover box for equipment + calibrate
0730 Arrived at location of MW-25 Drillers loading + setting up
0755 Measured Stickup @ 4.3'
DTW = 24.92 TOC
- 7.3 SU
17.62' bgs
0800 begin filling hopper W/ core sample
0815 YJD to dump hopper @ Laydown yard
0835 Return with hopper
0850 Advance Casing + trip in
0900 Resume drilling @ 145' bgs
1130 Break for lunch @ 190' bgs
1210 YJD Takes the hopper to empty at laydown yard
1240 Return Hopper

Rite in the Rain

6/27/24 SLC VA

Shaw Media p 2 of 2

1300 Resume drilling @ 190' bgs

1340 @ 190-200 run came out and it was only conductive @ 199' Called Neil, and decided to go another 10' to 210' bgs total

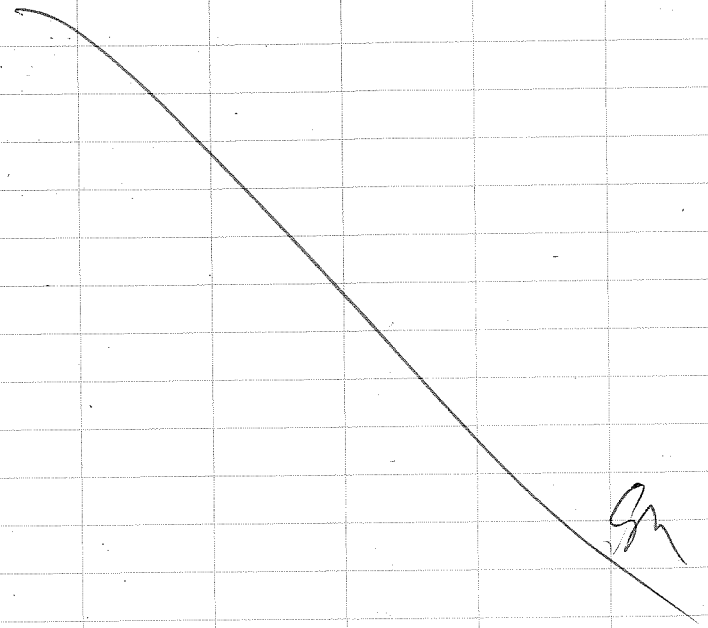
1430 Stop Work for lightning

1545 Return to drilling @ 190' bgs

1600 Begin to clean site & toss soil cuttings.

1620 Remove Soil cutting, Pack equipment and travel to laydown yard

1700 All personnel off site gate locked



6/28/24 SLC VA

Shaw Media p 1 of 2

Personnel: CDM Smith: S. McGuire; M. Ritter
L. Mulroony
Yellow Jacket: S. McNulty; W. Waldrop; R. Doyle; T. Adams; D. Diaz; M. Martinelli

Weather: Hi 89° L: 58° Sunny

PPE: Level D

0545 Arrive on site at laydown yard.

0700 Perform Safety/tailgate meeting

0715 YJD to rigs & setup while CDM to Comp to gather equipment and Calibrate

0725 Arrive on site @ MW-45

0755 DTW = 36.25' BTOC TOC = 7.3'
DTW: 28.95 bgs

0800 Sampled Groundwater MW45-GW062824-210 & Called Joe for Well Specs. Determine that Colortec analysis will be run first then VA will have to agree on proposed Well spec.

0845 YJD prepare to set well while ready to be pulled by the boring

0900 Travel to Laydown yard for Supply drop

0955 performed Color-Tec Analysis on MW-45S and MW-45 Both = Non-Detect

Rite in the Rain

6/28/24 SLC VA

Shaun McCrae
pg 2 of 3

1030 Recieved Call to schedual GPR at Next borings location in parking lot @ 1100 a Sent Boring Log Scans to Nel + Joe. C

1040 Recieve Confirmation for MW-4S constructs Screen from 200'-210' bgs

1045 Arrive at GPR location (MW-39)

1100 GPRS arrived on location to scan and/or mark utilities @ MW-39

GPRS marked out the area of 7 parking spaces and Marked the Corners + labeled MW-39 location

Marks electricity line from street lights in Rd, located in grass west of location (1-2' deep

1150 GPRS off site

1205 Arrive at MW-4S to Construct well

Screen = 200'-210'

Sand = 197'-210

Bend = 194'+ - 192 (or more)

Grout = 194ish - Surface

YJD start helping out pipe and prepping well material

1325 Poured in 2 bag and let settle at bottom for stability up to 205'

1400 Pulled up Casing + Sand dropped to 204'

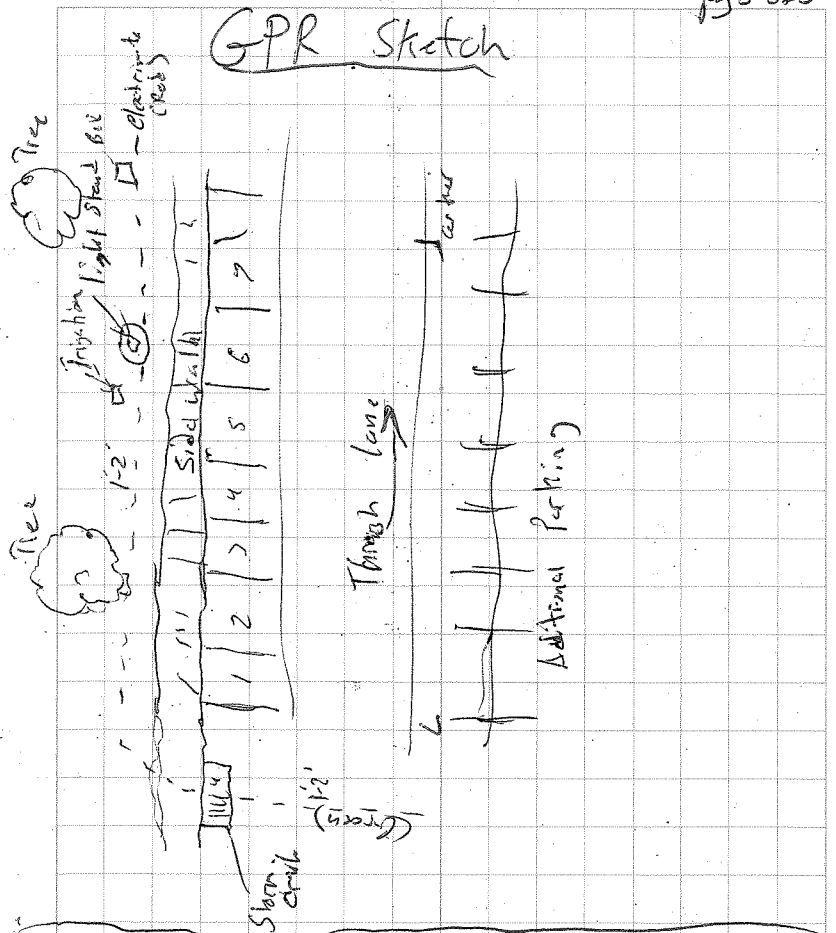
+2 more bags

→ Sam

6/28/24 SLC VA

Shaun McCrae
pg 3 of 3

GPR Sketch



@ 1420 Sand up to 199'. 200' after pulling casing +1 bag to 197' before pulling Casing

1445 pulled casing, Sand @ 199' +1 bag 197' after removing Casing

1500 Bentonite pellets to 195', Removed Casing and bentonite dropped to 194' (2 buckets left) 193' total

6/28/24 SLC VA

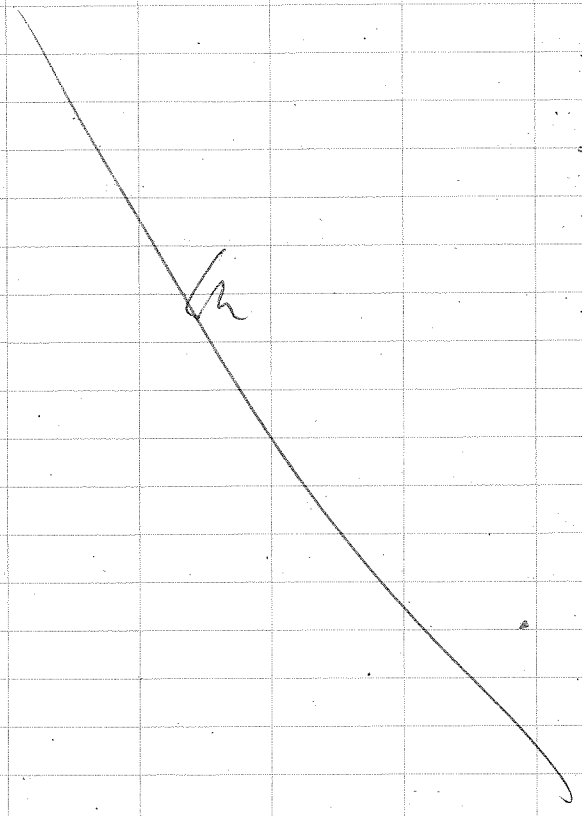
Shea McGraw
pg 3 of 13

1520 YJD begins mobilizing for Grout Injection

1600 Set up Complete, begin packing and Cleaning Site

1605 all personnel at MW-45 location travel to Layton Yard + drop pack sampler

1645 All personnel off site



6/29/24 SLC VA

Shawn McGraw
pl of 2

Personnel: CDM Smith: S. McGraw; M. Blanton; L. Mulrooney

YJD: S. McNutt; W. Wade, R. Dayne; T. Adam; D Diaz; M. Martelle

Weather: Hi 95° Lo 65 M Sunny

PPE: Level D

0645: Arrive on site + begin documentation

0700 Perform Safety / tailgate Meeting w/ YJD

0715 Travel to Conex to unlock + grab equipment while YJD Fuels rigs and prepares for well construction

0720 Arrive at MW-45 location and perform inspection checklists

0800 YJD begin lowering tremie pipe down hole

0820 Begin mixing grout (AMC 20 Grout) 50 lb bags

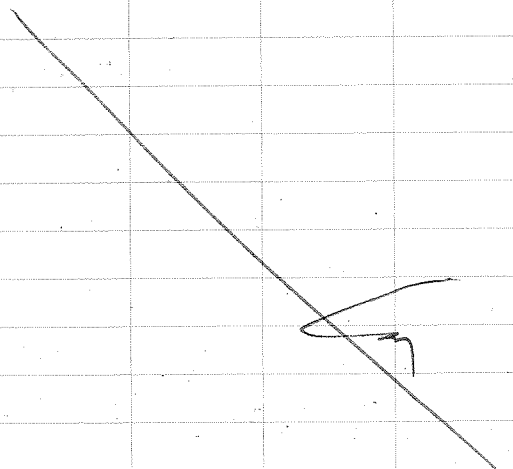
1000 YJD Stops to get more water + Portland. @ 81 bags only 6 batches. Each batch is 2 x 50 lb bags of Grout with 50 gal of water

1100 YJD Back on site with Materials due to issues with other rig they had to leave and weld on smaller rig

6/29/24 SLC VA

Shaun McGuire pg 2 of 2

1145 Break for lunch
1215 Return to Grouting
1220 YJD decides to Cement from ~80' bgs to the surface (Quikcrete concrete) Concrete Mixture = 30 gal water + 7 bags Cement + 1 lb of Quick gell (Bent)
1325 YJD travel to retrieve more water
1300 YJD return to site + resume well Construction
1445 Stopped injecting Concrete @ 5' bgs and let settle. YJD travel to Loydon yard. Tagged bottom of well @ 210' travel to other site to help with MW-44.
1525 YJD begin decon of pin + casing
1600 All personnel off site



6/30/24 SLC VA

Shaun McGuire pg 1 of 2

Personnel: CDM Smith → S. McGuire, M. Blanton, L. Mulrooney
Yellow Jacket S. McNulty, W. Wade, R. Rico, T. Adams, D. Diaz, M. Nichol
Weather: Hi 96° Lo 73° M. Sunny
PPE: Level D

0645 Arrive at site at Leydon Yard + Start Documentation
0700 All personnel on site; begin Safety/Heilgate meeting.
0710 Travel to Equipment Convoy to gather Equipment/Calibrate/Start Documentation
0720 Arrive at MW-25 location + perform inspection.
0725 YJD on site to refill + back up rig + drillers notes indicate 1400 gal of water used so far in well construction + Concrete settled @ 15'
0835 Finished Concrete to surface with 1 batch mix & YJD Cut and Capped Riser
0845 De-mobilize rig and move equipment
1000 Measured well depth while installing well pad Total depth = 210' bgs + Added Grout to cement MP as requested
1200 YJD finishes up well pad + Breaks for lunch

Rite in the Rain

6/30/24 SLC VA

Shawn McGraw pg 2 of 2

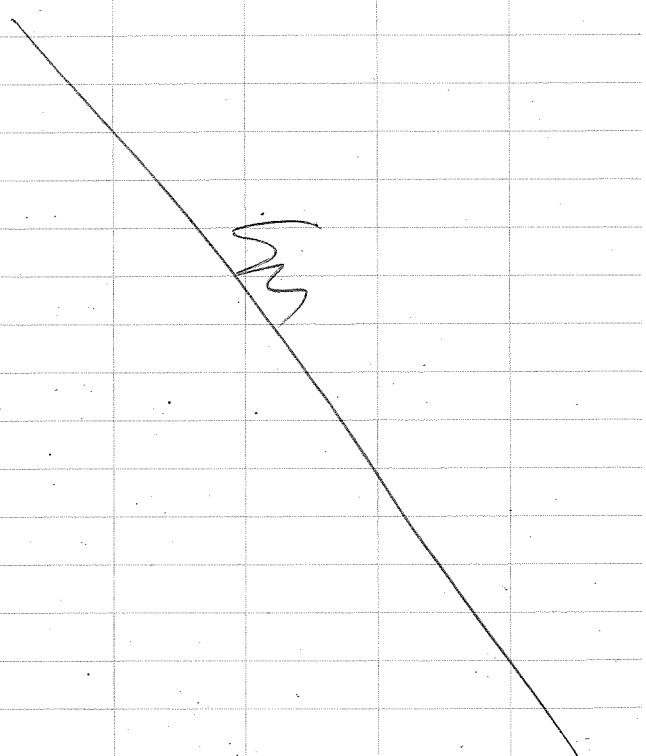
1230 Break for lunch + Cone a/o at MW-39

1305 Yellow Jacket begins removing equipment from MW-45 and decon

1525 YJD + CDM Smith arrive at MW-39 location to setup

1540 YJD begins cutting through asphalt to get to ground surface

1690 Mobilize cone + trucks and off-site



7/1/24 SLC VA MW-39

Shawn McGraw pg 1 of 2

Personnel: (CDM Smith) S. McGraw; M. Blanton; L. McDonnell (Yellow Jacket) D. Diaz; W. Watrous; R. Rule; S. McNutt T. Adams; M. Mashnelli

Weather: H: 82° L: 63° M. Sonnt

PPE: level D

0630 Arrived on site and started paperwork

0700 YJD and others on site + Perform Safety Tailgate meeting + Inspections + Calibrations

0715 Arrive at MW-39 + Complete inspection checks YJD Begins hand augering 3 location for Clearance check.

0745 hit something hard + Sounds Hollow decided to move hole and make Sure it not a unseen Object

0845 Reached 5' with 3 Hand Augers holes to Clear location.

0850 Begin laying Plastic and moving equipment.

0930 YJD Begins erecting fence around site + Cover Storm drain

1030 Start to warm up rig + make Sure we are at the right location

1120 Break for lunch

1205 Resume Setup Activities

1220 Begin drilling

Rite in the Rain

7/1/24 SLC VA MW39 pg 2 of 2

Shaun McGuire

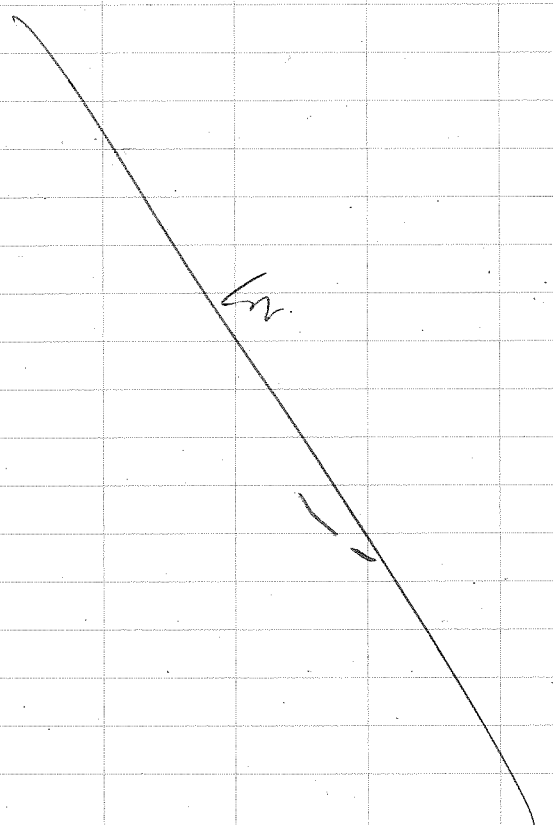
1300 Camera ran out of Memory + Advanced Casing

1400 New Roll off delivered to site of MW-39
9" Casing to 96' bgs

1600 Stop drilling + Pack up site

1615 Personel to Layton yard and load more 9" Casing

1645 All personal off site



9/2/2024 SLC VA MW39 pg 1 of 2

Personnel: (CDM Smith) - S. McGuire; M. Blanks; L. Mattson
(Yellow Jacket) - D. Diaz; W. Wetzel; C. Riley
S. McNutt; M. Mattern

Weather: Hi 81° Lo: 55° Clear Sunny

PPE: Level D

0645 Arrive on-site + Begin documentation

0700 YJD on-site + hold Safety/tailgate meeting. Note that Rolloffs 6145, 6139 + 5962, Rolloff 6489 1/2 Full

0715 Travel to Conex to grab equipment + Calibrate

0730 Arrive at MW-39 + to remove drill cuttings into rolloff + Perform inspections Checklists.

0745 YJD begin fueling + Warming up Rigs

0830 Begin tripping in

0850 Begin drilling + logging @ 120

1155 Break for lunch

1225 Return to drilling/logging @ 168'
YJD pulled out 9" Casing + reamed the boring because it was getting stuck

1330 Drilled tripped in to remove cuttings that fell during Casing adjustment

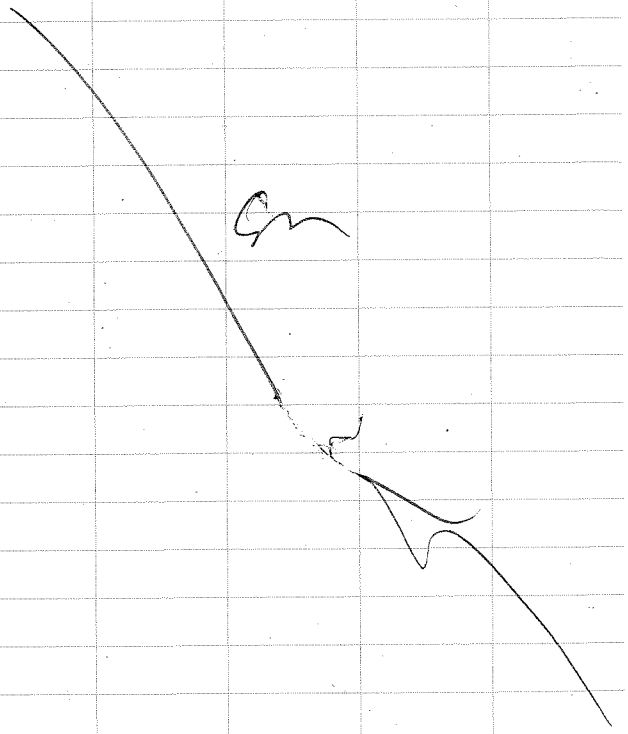
17 Resume normal Drilling

Rite in the Rain

Shaun McGuire

72 7/2/2024 SLC VA MW-39 p2 of 2

1515 empty hopper into Roll-off
1625 Stopped Drilling @ 202' bgs.
1645 loaded hopper with drill cuttings and disposed in roll-off / cleaned site & packed equipment. then off site. travel to Conex to unload equipment
1705 Travel to laydown yard to help @ MW-44
1745 All personnel off site



SLC VA MW-39 7/8/24 73

0650 J. Miller @ Wasatch for keys / Packages
0720 J. Miller @ SLCVA for tailgate
Task MW-39 Drilling
MW-44 Install
~~715~~ JM 7/8/24 Health + Safety Topics
Heat, Communication, Lifting, tight work area, New workers
0740 CDM to Conex for Equipment / YJ to Rigs
0800 Fuel Rigs Inspection
YJ Going over Rig w/ New worker
0840 Warm up
0930 Resume drilling
1155 Drilled to 216 YJD Break for lunch
1230 YJ Returns load up 9" casing
1320 Resume drilling
1500 Call w/ Neil & Hans to discuss Relocation of EW01/MW-42, Propose Either on Campus Next to MW-02 or Near ~~MW-01~~ JM 7/8/24 EW01
1700 End Drilling @ 246'
1715 Wrap up Secure Site
1730 Return to Conex, Head Offsite

JM 7/8/24

Rite in the Rain

PERSONNEL: Team 1 (Big Rig): Kaća Savatic (CDM) RJ: Zach Olmsted (ZO), Diego Diaz (DD), Craig Grant (CG)
Team 2 (Mini-Rig): Joe Miller (JM), RJ: Shane McNulty (SM), Ray Dagle (RD), Weston Westrop (WW)

PLANNED ACTIVITIES: continue well install/completion @ MW-44 and continue drilling @ MW-39

PPE: Level D

WEATHER: sunny ~70°F, will get to ~77°F

0700: H&S meeting
0720: mob to wells, warm-up rig & clean soil borings
0745: KS measures DTW @ 213.18 - 6.5 = 206.68'
0800: complete checklists and check-in with DD; currently @ 246' with 9" casing at 226'
0815: KS and DD head over to laydown area to walk down potential well location on bearm with JM
0835: KS/DD return to MW-39
0845: Resume drilling at MW-39
1100: casing was tight, so tripped it all up and then first run, sample fell out so the bit was switched out

- Katarina Savatic

1141: 246'-252' bagged
1150: drillers take lunch
1285: drillers return from lunch
1245: 9" casing added to 236'
1309: 252'-256' bagged
1310: Talked with DD because Craig Grant has been in car most of day. some injury occurred at Air BnB last night. Bryce was notified and will plan to uber CG to a specialist. Ray came over at 1300 to help and will be here for rest of day; updated JM after
1345: 256' - 268' bagged
1356: 9" casing added to 246'
1437: 268'-275' bagged; some of the core from second bag spilled out; wet
1448: 9" casing added to 256'
1529: 275'-285' bagged; wet
1542: 9" casing added to 266'; JM to site to look at this interval
1630: 285'-296' bagged KS 7/9/24
1500: ~~dirt~~ last run was dropped; clean-up and drillers went to containment yard to prep 8" casing; currently @ 290' w/ 9"; off-site @ ~6:30 pm
1530: CDM offsite

Katarina Savatic 7/9/24

PERSONNEL: Team 1 (Big rig): Kaca Savatic (CDM), YJ: Diego Diaz (DD), Zach Olmstead (ZO), Raymond Dagle (RD); Team 2: Joe Miller (CDM) YJ: Shane McNulty (SM), Weston Waldrup (WW)

PLANNED ACTIVITIES: Team 1 will continue drilling at MW-39, will have to switch out to 8" casing; Team 2 will get limited access rig ready for demobilization

PPE: Level D

Weather: 78°F with high of 100, ~~not~~ moderate AQI and excessive heat warning today

0700: H&S meeting

0720: everyone demobilizes to get ready for day

0740: KS arrives to MW43

0745: drillers arrive on-site to MW-43; yesterday drilled 240'-296' and casing to 290'

0810: KS measured depth from top of casing @ 217.29', top of casing to ground 6.5' so DTW 210.79'

0815: rig powered on

0830: daily checklists completed by KS

0940: trip in of 8" casing

-Katarina Savatic

1023: first trip in of the day commenced

1106: 296'-306' bagged

1155: 306'-312' bagged

1200: drillers take lunch

1230: drillers resume by loading more 8" casing

1310: adding more casing and tripping back in

1350: during trip out, part of the pinch point appeared to not be working; DD looking

1352: rig shut-off

1355: DD let me know something is off and sent video to mechanic, will update me when he knows more

1400: Bryce on-site

1420: talked w/ Bryce - its an internal hydraulic valve that needs to be replaced and ordered from manufacturer in Ohio. They are closed for ~~day~~ and will overnight it first thing in the morning; part arriver 7/~~11~~ 12 and mechanic from New Mexico should arrive by then as well (he'll leave tomorrow morning 7/11); Bryce estimated half a day to repair and there could be some hydraulic

KS 7/10/24

KS 7/10/24

-Katarina Savatic

fluid clean-up as well

1622: Team 1 RJ crew breaks down and KS cleans up site; Bryce heads over to JM

1640: KS leaves MW-39 to drop-off gear @ connex boxes

1700: KS off-site

Katarina Savatic

7/10/24

PERSONNEL: Kaća Savatic, Joe Miller, Shane McNulty, Weston Waldrup

PLANNED ACTIVITIES: since MW-39 is down, RJ will continue to prep mini-rig for demob; COM Team will do house keeping items

PPE: Level D

WEATHER: 78°F, sunny, high over 100°F; heat warning

0700: H&S Meeting

0715: KS and JM head to connex boxes to clean

1215: KS heads to badging office to get update

1250: need "position" filled out by COR

1310: drop off PID at FedEx; lunch

1340: KS returns to finish sampling connex organization

1500: KS off-site

Katarina Savatic

7/11/24

Rite in the Rain

0900: KS on-site
0915: KS to MW-39, mechanic on-site and still waiting on the part
1026: part arrived on-site
1130: looks like everything was fixed; part was replaced; drillers take lunch
1200: drillers get back from lunch
1220: KS completes daily checklists and drillers resume tripping out; confirm w/ JM that no water level is needed today
1230: 312'-322' bagged
1325: 322'-326' bagged
1408: 326'-336' bagged
1438: driller leaves MW-39
1505: JM checks-in @ MW-39
1514: 336'-345' bagged
1618: mechanic back to rig and is looking at motor during trip out
1630: 345'-355' bagged
1704: crew clean-up and talked to Diego; doing some preventative maintenance for a coolant drip while mechanic is on-site; will fill holes for extraction and injection well tomorrow
1715: COM off-site

Katie Jones

7/12/24

PERSONNEL: Kaća Savatic, Joe Miller; YJ: Diego Diaz (DD), Zach Olmstead (ZO), Ray Dagle (RD)
PLANNED ACTIVITIES: Fill in pre-cleared holes where utilities were hit; continue drilling at MW-39 and likely hit total depth
PPE: Level D
WEATHER: 80°F, cloudy with a high of ~100°F

0710: H&S Meeting
0720: KS goes to connex boxes, drillers and JM go to injection well/~~extraction well~~ locations MW-43 KS 7/13/24
0730: KS arrives at IW-01 & ~~EW-01~~ MW-43 KS 7/13/24
0750: 3 holes were filled using 5 bags of High-Strength Concrete Mix
0800: finished filling holes and clean-up; JM to grab PID and drillers to MW-39
0815: DTW = 217.10 - 6.5 = 210.60'
0820: KS completed daily checklists and rig fired up
0835: trip in starts
0935: 355' - 365' bagged
1037: 365' - 366' bagged
1110: drillers look to be tightening

Katie Jones

something on rig head
1112: rig is off; leak of some sort
1120: drillers plan to go get replacement part from NAPA, will install and then take lunch
1315: drillers return and take quick lunch
1330: replace part
1345: rig is back on and Diego continues drilling
1410: 366'-376' bagged
1510: 376'-378' bagged ← sand + gravel wet
1616: 378'-384' bagged
1640: casing to 376' (8") and 290' (9")
JM discusses with Neil and screen will likely be from 259 to 278'
1708: check-in with Diego and drillers clean-up; CDM team to connex boxes
1730: CDM off-site

Katarina Savatic

7/13/24

PERSONNEL: Kaca Savatic, Joe Miller, Diego Diaz, Zach Olmstead, Ray Dagle
PLANNED ACTIVITIES: install well at MW-39, waiting on confirmed screen intervals

PPE: Level D
WEATHER: 78°F w/ high of 97°F, partly cloudy

0700: H&S Meeting
0705: KS on-site and drillers packing trailer with well installation materials
0750: drillers and CDM team leave containment yard and head to MW39
0805: Rig turned on
0810: KS completes daily rig checklist
0825: DTW: 198.24'
0835: cleaning out
0925: call from Neil and bottom screen will be 348'-378' ← yes, 30' screen top screen will be 269'-289'
1015: KS completed well construction log and had JM check
1100: tag depth, 384'; break down rocks, pull out 9" casing, & install well, backfill with pellets

-Katarina Savatic

7/14/24 SLCVA MW-39 KS

1101: drillers take lunch
1135: drillers return from lunch
1228: begin trip up of 9" casing
1235: changing out the jaws
1248: resume tripping out 9" casing
1300: call with Neil - decided to shallow up the screen ~~from~~ KS 7/14/24 to 328' - 358' because that interval better aligns with data (log) from SLC 18
1320: communicate with Diego that lower screen depth is changing - KS redos well completion log; JM checks
1338: completed trip up of 9" casing; loading pellets to backfill
1343: Diego confirms depth of 384' and adding 2 buckets of PEL-PLUG Non-coated Bentonite Pellets
1347: Zach taking 9" casing to containment yard to decon
1359: depth @ 380' after two buckets were added, one more bucket will be added
1404: 378' ← 3 buckets total were added
1409: pulled out 10' of casing
1412: still @ 378' and adding 2 more buckets

- Catarina ~~Arate~~

7/14/24 SLCVA MW-39 LS III KS 85
Bucket count: ~~IIII~~ IIII

1420: 373' adding another bucket
1425: 371'
1430: removed 10' of casing
1433: 371' and loading up well materials on platform
1455: Casing @ 366' - going to hang the well at 358' and backfill until 362' and then sand
1501: 30' screen installed
PVC count: ~~IIII IIII~~ ~~IIII~~ ~~IIII~~ ~~IIII~~ ~~IIII~~ IIII
1535: 34 PVCs installed 365 - 7 feet stick-up = 358'
15:46: backfill at 371' and going to add 2 more buckets
1600: 366' and will pull up casing 2'
1615: 364' is casing and backfill still at 366'
1622: 364 and is going to pull casing up another 2'
1630: 364' and will add another bucket
1638: 362' - 10 total buckets were added
1642: adding 2 bags of sand
Sand bag count: ~~IIII~~ ~~IIII~~
1653: 359' and going to add 2 more bags

- Catarina

1704: 355'
1714: 10' of casing was pulled out; bottom dropped to 360', adding 2 more bags
1722: 358'; adding another 2 bags
1731: 356'; adding another 2 bags; casing is at 356'
1741: 352'; drillers begin clean-up
1750: KS off-site

Katarina Savatic

7/14/24

PERSONNEL: K. Savatic (KS), J. Miller (JM), D. Diaz (DD), R. Dagle (RD), Z. Olmstead (ZO)
PLANNED ACTIVITIES: continue well install at MW-39 and hopefully grout; CDM team needs to sample roll-offs and JM to communicate with Bryce
PPE (KS 7/15/24): ~~Pet~~ Level D
Weather: 77°F, sunny H: 94°F

0700: H&S Meeting
0725: Drillers packing trailer with more well install supplies - mentioned some PVC pipes were cracked, KS to connex to gather supplies
0745: KS to MW-39
0750: drillers on-site
0805: IDW05-SB071524 collected
roll-off # C077
0807: rig fired on
0835: KS completes daily rig checklist
08:44 352'; adding 2 bags of sand
Sand bag count: ~~IIII~~ ~~IIII~~ ~~IIII~~ ~~IIII~~ II
0854: 348'; will pull up casing 5' and add 2 more bags

-Katarina Savatic

0904: 351'
0915: 348' - adding another 2 bags of sand
0924: 344'; DD said he called Bryce because will not have enough sand for this hole
0930: IDW06-SB071524 collected by JM
Bin # 59166
0936: sand at 348' and casing at 346' and will add 4 bags of sand
0951: 343' - adding 2 more bags of sand
10:00: 339' - pulling up casing (just 5')
1008: 342' - adding 2 more bags
1015: 339' - adding 2 more bags
1024: 335'
1035: sand at 338', casing at 336' - adding 4 bags of sand
1057: 332' - adding 2 more bags, which is the last of the available sand; waiting to hear back from Bryce
1100: drillers taking lunch
1130: drillers finish lunch and DD goes to pick-up more sand from store (22 bags used before sand run)
1220: DD arrives with sand
1226: 329' sand at and will pull out casing 5'
12:32: 333' sand at - adding 3 bags
sand count: ~~IIII~~ II
1241: sand at 328' - adding 2 more bags
- Katarina Sara

1249: sand at 324'; going to pull more casing up and recheck since we want top of sand at 324'
1258: sand at 328', casing at 326'; adding 2 more bags of sand
1305: plan is to get casing to 296 and then start on shallow well.
1308: sand at 323'; pull up casing 5' and recheck; 7 more sand
1313: hit 324' - switching to pellets
total of 29 bags of sand - 2 buckets of pellets
Bucket count: ~~IIII~~ ~~IIII~~ II 12 buckets
1320: 320', pulling up some casing
1328: 320' sand at and casing at 316' - adding 2 buckets
1337: pellets @ 318' - adding 2 more buckets
1346: 314' pellets and pulling up casing 5'
1352: 313' pellets - adding 2 buckets
1359: 308' pellets at
1407: 308' pellets at - add 2 buckets
1415: 305'; pulling up 5'
1420: 304' - adding 2 more buckets
1430: 296' casing after pull stick up and ~~pellets~~ tagged at 301'
KS 7/15/24
-Katarina Sara

LATE ENTRY: JM heads to containment yard to met MP with roll-off @ 14:10

1437: Tagged at 301'; getting started on the next well

1440: screen: 11
PVC: 𝍸 𝍸 𝍸 𝍸 𝍸 11 27[10'], but might have missed one b/c had to run to move car + 1 5'

1506: PVC of upper well installed

1510: MP Environmental off-site after delivering one roll-off and moving 2. The driver punctured the side of bin 5830; liner is still intact. Driver said he will notify MP and JM to notify CDM and Capitol Environmental

1525: shallow well at 289' and pellets @ 301' - adding 2 buckets
Bucket count: 12 + 𝍸 111 18 buckets

1537: 298' - adding 2 buckets

1538: cooler packed and JM to drop off at FedEX

1547: 296'; pulling up casing 5'

1553: 293' - adding 2 buckets and casing at 290'

1603: 290' pellets - adding 4 bags of sand
sand count: 𝍸 𝍸 𝍸 𝍸 1111

- Katarina Lavatti

1615: 284', taking stick out

1627: 290' - adding 4 bags of sand

1637: 285' - adding 2 bags of sand

1644: 280'; pulling up 5' casing

1650: 283' - adding 4 bags of sand

1701: 276'; pulling rest of stick out

1718: 276' - adding 4 bags of sand

1727: 271'; pulling casing up 5'

1733: 272' - adding 4 bags of sand

1742: 265'; pulling some casing out

1752: 268' - adding 2 bags of sand

1800: 265' - pulling up casing

1805: 266' - adding 2 buckets of pellets
Pellet count:
53 bags of sand for today
20 buckets of pellets for today

1812: 262' - taking out casing and will retag in the morning

1819: rig off and YJ cleaning up

1821: CDM leaves site

Katarina Lavatti

7/15/24

Rite in the Rain

PERSONNEL: CDM- K. Savatic (KS), J. Miller (JM)
YJ- D. Diaz (DD), Z. Olmstead (ZO),
R. Dagle (RD)

PLANNED ACTIVITIES: Grout MW-39 aka continue with well installation and potentially decon 8" casing and prep for next well

PPE: Level D

WEATHER: 72°F, sunny, H: 95°F

0700: H&S Meeting; casing at 2505 KS 7/10/24 and will re-tag
0725: CDM team arrives to MW-39
0740: YJ arrives to MW-39
0754: Rig turned on.
0800: KS completes daily rig check first
0803: tagged at 262'
0908: installing tremie pipe
~~IIII IIII IIII IIII~~ - confirmed with DD 23
0938: grabbing face masks and then will start grouting
1023: face masks arrive on-site; batches will be 2 bags AMC Grout 20 / 50 gallons and interval will be 30-262' for AMC Grout 20 and then at 30', switch to Portland Cement

-Katarina Savatic

Time	Batch #	Bag count
1025	1	11
1027	2	11
1032	3	11
1035	4	11
1040	5	11
1047:	~~IIII IIII IIII~~ 11	17 pipes ~~1047~~ KS 7/10/24 of tremie pipe removed
1100:	IIII 40' of casing removed	
1115: some of tremie pipe tripped back in		
1123:	6	11
1128	~~7~~	11
1132	8	11
1136	9	11
1140	10	11
1143	11	11

1149: tripping up tremie pipe!
1215: tripped out casing; grout @ 190' and casing @ 176'; grabbing more water
1240: drillers take lunch
1313: drillers resume
1317: tripping in tremie pipe

1331	12	11
1336	13	11
1340	14	11

-Katarina Savatic

Time	Batch#	Bag Ct.
1343	15	11
1347	16	11
1351	17	11
1354	18	11
1358	19	11

1403: tripping out tremie to remove some casing

1507	20	11
1511	21	11
1515	22	11
1518	23	11
1522	24	11
1526	25	11

1533: tripping out tremie to remove more casing

1601	26	11
1605	27	11
1609	28	11

1625: removing more casing
1633: casing at 45' and grout at ~80'; out of grout, so drillers plan to take casing over to containment yard to decon and DD is going to grab more cement; plan to just use portland cement to 0'; drillers breaking down
1645: COM off-site
Katarina Savatic

PERSONNEL: COM - K. Savatic (KS), J. Miller (JM)
YJ - D. Diaz (DD), Z. Olmstead (ZO), R. Dagle (RD)
PLANNED ACTIVITIES: continue grouting at MW-39 and finish well install; mobilize to next site
PPE: Level D
weather: 77°F, sunny

0700: H&S Meeting
0715: KS to MW-39
0738: drillers to MW-39
0808: grout at 129' and casing at 46'
0823: installing tremie pipe
0828: for cement, we got 2 pallets: 1 with 50-lb bags and other with 92-lbs
7-8 for 50-lb/batch & 3-4 for 92-lb/batch

Time	Batch	Bag Count	
0831	1	𝍸 III	8
0840	2	𝍸 III	8
0848	3	𝍸 III	8
0856	4	𝍸 III	8 finished 50-lb bags
0906	5	IIII	4
0915	6	IIII	4
0922	7	IIII	4

32

0931: tripping out tremie pipe to remove casing
- Katarina Savatic

7/17/24 SLCVA MW-39 KS

0951: all of casing is removed

0955	8	IIII	4	34.5
1002	9	IIII	4	
1008	10	IIII	4	
1015	11	IIII	4	
1022	12	IIII	4	
1028	13	II.5	2.5	

1037: grout has reached surface level and starting to clean up

1100: KS relinquishes logbook to JM
-Katarina Sund

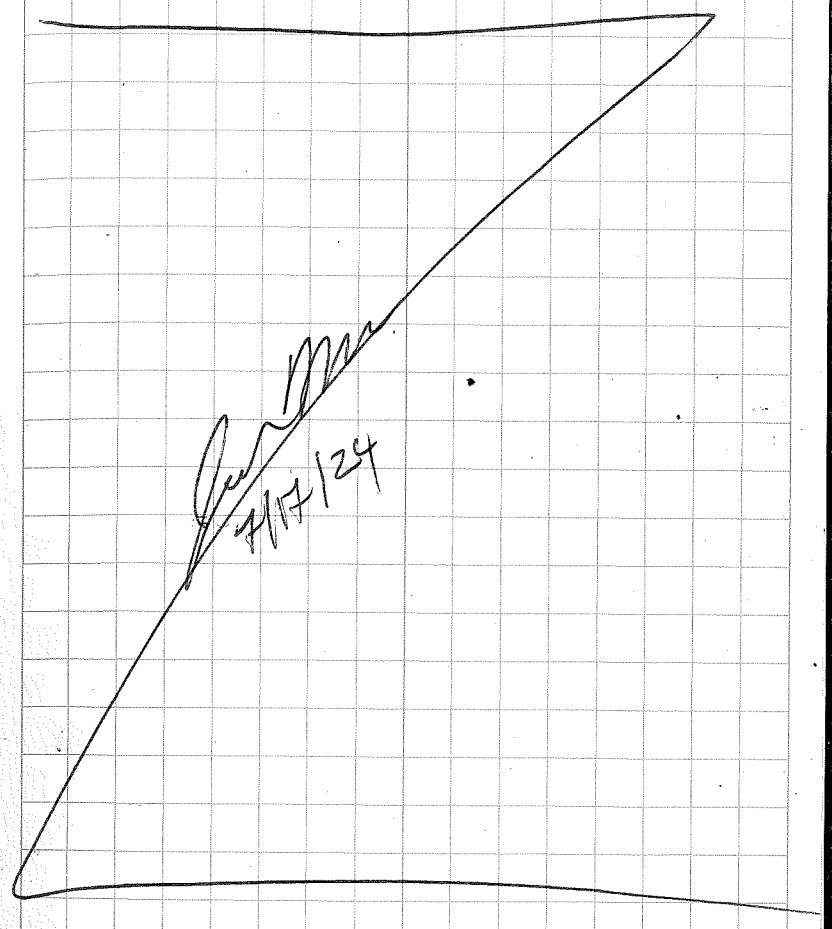
Joe Miller accepts control ~~of~~ JM 7/17 of Logbook
Joe Miller

1125 Mob rig off hole prepare to clean up rig location
1140 VJD Break for lunch
1215 Resume cleaning MW-39 area
1248 Mob Box truck back to VA Campus
1250 Mob to Laydown area w/ Forklift and Truck Trailer
1255 Offload casing Equipment
1320 Load 9" casing into Box truck
1400 Decon 8" casing
1430 Mob ~~Rig~~ JM to MW-42 Box truck
1440 Mob Rig from MW-39 to MW-42
1448 Cut Surface @ MW-42

JM 7/17

JM SLC VA 7/17/24

1515 Move Parking Block
1530 Tower up, Box truck in Place
1545 Setup work Zone Prep Rig for drilling
1700 VJ Secure drill site Mob to MW-39 to clean up.
1830 Offsite



Rite in the Rain

7/18/24 SLCVA JM

0620: Joe Miller Onsite Prep sampling Equipment
Task: Begin drilling MW-42
Finish Surface Completion MW-39
weather: Sunny 80-96°F

0640 Calibrate PID load Equipment

0700 H+S Tailgate
Attendees: YJD - Diego ~~Joe M~~ Diaz
Zack Olmstead
Raymond Dagle
CDMSmith - Joe Miller
Topics: Heat, Lifting, Fatigue, Foams

0715 Mob to site MW-42 begin warmup
Raymond to MW-39 to finish Surface Completion

0745 Rig Inspection

0808 Push 9" casing to 10'

0815 Clear out Backfill Pea gravel

0825 Begin drilling

1215 Boring to 86' YJD Break for lunch

1250 Resume drilling

1400 Dump 102'/of cores (2 hoppers) in Rolloff

1430 Depth to 142 10" casing 17'
9" 116'

1450 YJ To Move fence from MW-39 To laydown

1830 Offsite

JM 7/18/24

JM SLCVA 7/19/24

0630 Joe Miller CDMSmith Onsite
Calibrate PID, gather Equipment
Task: Resume drilling MW-42
weather: 72 → 96°F

0700 H+S tailgate Attendees: Joe Miller
Topics: Heat — Diego Diaz
Fatigue — Raymond Dagle
Lifting — Zach Olmstead

0715 YJ Does Inventory on Supplies
Fixes Fence

0730 Warm up Rig complete inspections

0815 Resume drilling Add Casing

0825 Trip in Core Barrel

1200 Boring to 186' BGS

1230 YJ Break for lunch Casing to 176' boring 185

1315 Check No water Go for another Run

1330 Add More casing

1435 Boring to 210 Saturated Grab GW sample

1445 Collect MW42-GW07192424-210

1455 Resume drilling ~~Add~~ Casing

1640 End drilling @ 219

1645 Bring Hopper for Soil cores

1700 YJD To laydown to Decon 8"

1715 Screen Sample w/ Colortech ND

7/20/24 SLC VA JM

0640 Joe Milke COM Smith Onsite
Task: Drill MW-42 + Grab GW Sample
Weather: 76-99°F

0700 YJD Onsite Diego, Raymond, Zach
H&S Tailgate topics
Fatigue, Heat, Complacency Focus

0715 Head to Rig warm up Inspection
Calibrate PID

0815 DTW 184' BGS (191 - 7' ~~stickup~~ Stickup)
Trip in Core barrel

0900 Core to 225' Bottom Dry to moist
but not enough water for Sample
Keep advancing

0915 Pull 9" casing to help Free it up

0945 Tag hole to 203, Trip in 9" to bottom
Casing should be Free-er

1015 Trip in Core Barrel

1110 Clean out w/ Flapper Bit, switch back to
Regular Bit, add casing

1200 Boring to 236' Bottom dry keep advancing
for Water Sample.
YJD Break for lunch

1240 Add Casing

1340 Trip in Sampler at ~~DTW~~ for GW

1405 Sampler in Place let water in Saturate

1420 No Water in Sampler Trip out Sampler

JM SLC VA 7/20/24

1433 Sampler out Partially clogged

1435 Trip in Core barrel

1600 Boring to 266' trip in Sampler

1620 Sampler to depth

1640 ~~Collect~~ Collect sample MW42-GW07202-266

1700 Sampler tripped out decon

1710 Collect Blank EB14-GW072024
from sample @ 266

1715 YJ Load 8" Casing

1800 Offsite

Joe Milke
7/20/24

0620 Joe Miller CDM Smith Onsite
Prep Equipment Calibrate PID
Task: Drill MW-42 Begin Building well
Weather 75°F-100°F windy

0650 YJ Drilling Onsite - Diego Diaz, Zach Olmstead
H&S Tailgate Raymond Dagle
Topics: Heat, Fatigue, Focus, Communication

0700 Mob to well site, warm up Rig Inspections

0800 load up 8" casing

~~0800~~ JM 0820 DTW 198.1-6' stickup 192.1' BGS
casing to 247'

0830 Trip in 8" casing

0900 Call w/ VA & HSACE to discuss screen intervals
Decide on ~~251~~ 246-256 and 266 to 276
depending on Final Run

0920 YJD Trip in Core Barrel

0935 Resume drilling

1020 Deploy Sampler @ 276

1040 V.B. Sampler Open allow water to
come in

1055 No water wait for water to come in

1110 Still No water Trip out sampler

1130 Sample tripped out. Run casing and do a cleanout

1220 Cleanout complete Tag Bottom to 275
YJD Break for lunch

1255 Resume Cleanout

1315 Trip in Sampler

1330 Sampler to depth

1400 No water in sampler Trip sampler out
Slightly clogged
Ryan Panasy Wasatch Onsite

1420 Pack cooler for shipping

1435 Ryan Offsite to Fedex

1500 Tag depth 276' Pull 9" casing

1540 9-inch Casing Pulled

1555 Begin Build MW-42D

1630 MW-42D to Depth Bottom of well 276'
Add 2 Bag Sand

1641 Tag to 272, pull up casing

1648 Tag 274 add 2 Bags

1659 Tag 269 pull up 5'

1705 Tag 270 add 2 bags

1718 Tag 266 pull casing stick

1725 Tag 268 add 2 Bags

1730 Secure Site
YJ head to laydown to decon 9"

1830 Offsite

7/22/24

7/23/24 SLC VA JM

0650 CDM Smith – Joe Miller Onsite
YJ Diego Diaz, Ray Dagle, Zach Olmstead
Task: loadup 9" casing, Install ~~MW-42S~~ JM, Grout weather 76-100°F
0700 H&S tailgate, Topics Heat, Lifting, Dust
0715 Loadup 9" Casing
0800 warm up Rig, Offload Casing
0830 Tag Bottom 265'
Drillers Note: 9" casing to 257 yesterday.
0835 Add 1 Bag Sand
0844 Tag 263' casing to 266 pull ~~up~~ JM upstt
0852 Tag 265 add 1 Bag sand
0901 Tag 263 pull casing
0912 Tag 263, Begin to Hang MW-42S
0915 Wynn John Onsite
Notify us of Pioneer day activities
Marathon/Parade traffic Closures
0940 well Hung Bottom 256 Screen 246-256
0950 ~~JM~~ Tag 263 add 1 Bucket Bentonite
0957 Tag 259 add Half Bucket
1003 Tag 258 begin Adding Sand/ 2 Bags
1011 Tag 253 add 1 bag sand
1017 Tag 251 pull up 5'
1023 Tag 253 add 2 Bags Sand
1030 Tag 249 add 1 Bag sand
1039 Tag 246 pull casing stick

JM SLCVA 7/23/24

1046 Tag 248' Add 2 Bags
1056 Tag ~~248~~ 245 add 1 Bag Sand
1103 Tag 243 casing at 246 pull up
1115 Tag 243 add 2 buckets Bentonite
1123 Tag 239 pull casing
1133 Tag 240 Add 1 Bucket
1143 Tag 238' Pull Casing
1150 Tag 238
1200 Prep for Grouting add tremie Pipe
1230 Begin Mixing Grout 50lb bags

Batch	Bags	Batch	Bags
1	11	9	11
2	1111	10	11
3	111	11	11
4	111	12	11
5	11	13	11
6	11	14	11
7	11	15	11
8	11	16	11

1300 Tripout tremie, prepare to pull up Casing
1315 Pull casing
1330 Reinstall tremie Pipe
1345 Resume Batches
1415 Pull tremie
1435 Pull casing
1452 Load casing on trailer

106 7/23/24 SLCVA JM

1500 Load water tote for Refill
1504 Trip in Tremie Pipe
1518 Resuming Mixing Grout
1608 Trip out Tremie Pipe
1615 Pull casing
1645 8" casing Removed add Tremie Pipe
1715 Top off Grout

Batch	Bags
17	11
18	11
20	11
21	11
19	11
22	11
23	11
24	11
25	11
26	11
27	11
28	11

1300 Gal water
58 total Bags

~~1550~~ 1750 Grout topped off to 17'.
~~1555~~ 1755 Pull 10" casing to 15'
1800 YJ to Pull trailer to laydown CDN offload Equipment
1830 Offsite

JM SLCVA 7/24/24

0630 Joe Miller CDN/Smith Onsite
Task: Top off Grout MW-42
Setup ~~H~~ DW01
weather: 77 → 103°F
0640 Calibrate PID
0650 YJ Onsite: Diego Diaz, Raymond Dagle
Zach Olmstead
H&S Tailgate Topics - Heat, Focus, use Spotters, Moving Equipment
0705 Load Portland
0725 Warm up Rig Inspections
0735 Grout settled to 36'
0800 Install tremie prep for Neat cement
0813 Begin Mixing Portland

Batch	Bags
1	1
2	1
3	1
4	1
5	11
6	11

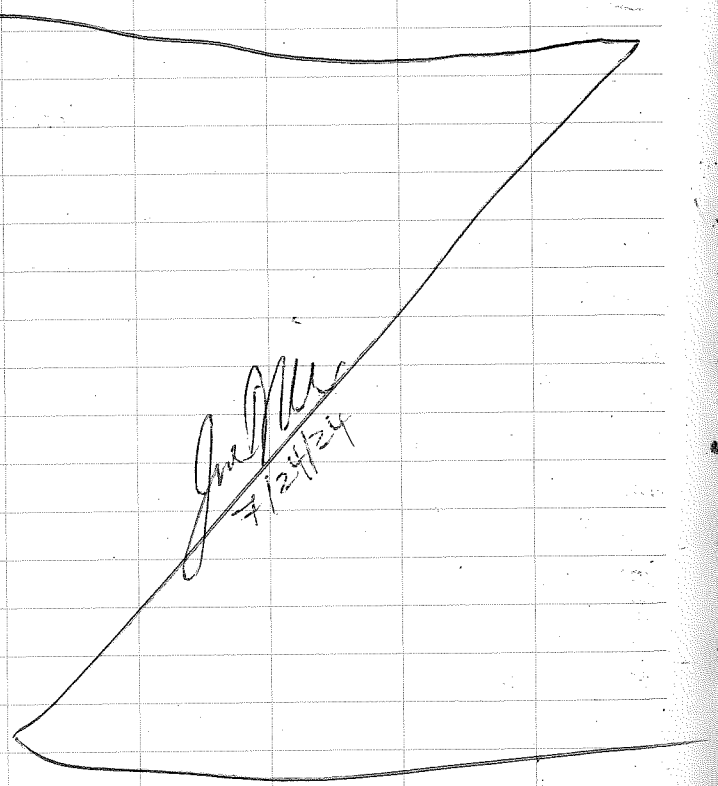
JM ~~40 50 lb Bags~~
96 lb Bags
5016 Bags

0845 - Pull 10" casing
0900 - Pull Remaining 10" casing
0910 - Portland cement to surface
0945 - Tear down Prep for Rig Move and Surface Completion

Rite in the Rain

7/24/24 SLCVA JM

1000 Cut ~~Cut~~ Asphalt around IW01 location
1015 Move Box truck from MW-47
Decon drill Rods
1050 Stage Rig at IW-01
1115 stage Box truck @ IW-01
1152 Add 10' casing
1200 Begin drilling IW01
1700 Drill to 102'
1710 Clean up Soil Cores, VJ worker Rig
1800 CDM Offsite



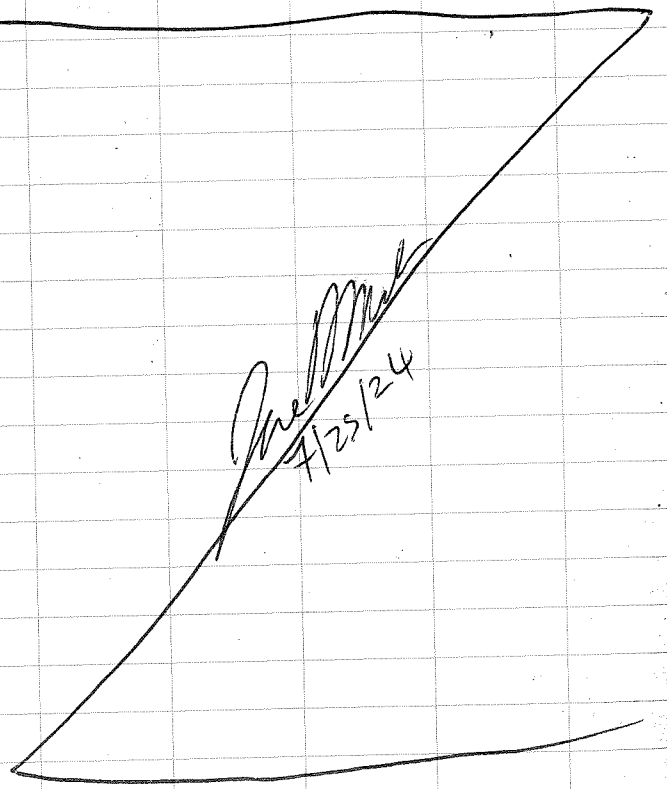
JM SLCVA 7/25/24

0640 CDM Onsite - Joe Miller
Gather loggins Supplies
Task: Load Extra Equipment
Surface completion @ MW-47
Drill IW-01
Weather: 77-94° Overcast
0655 H+S Tailgate VJ Onsite
Attendees: Diego Diaz, Ray Dagle, Zach Olmstead
Topics: Heat, Lifting, Moving Equipment
0710 VJ Prep for truck Drive
0615 Fuel Rig - Begin to Sprinkle
0830 ~~warm up + Inspections~~
0900 Resume adding Casing / Drilling
0930 Ray to Pickup VJD Truck Driver
1015 Wynn Onsite to unlock gate to MW-41
Also discuss Frac tank locations w/
Mike Lackey (ERT)
1030 Ray Back onsite load Semi w/ extra Casing
1300 ~~Truck loaded Ready to Mob~~ JM
VJ Break for lunch
1306 MW 41S DTW 175.18' BTOC
DTB 220.85' BTOC 50 ft Bailer
1313 MW-41D DTW 196.70' BTOC
DTB 275.84' 50 ft Bailer
1315-1335 VA - EPA Onsite

Rite in the Rain

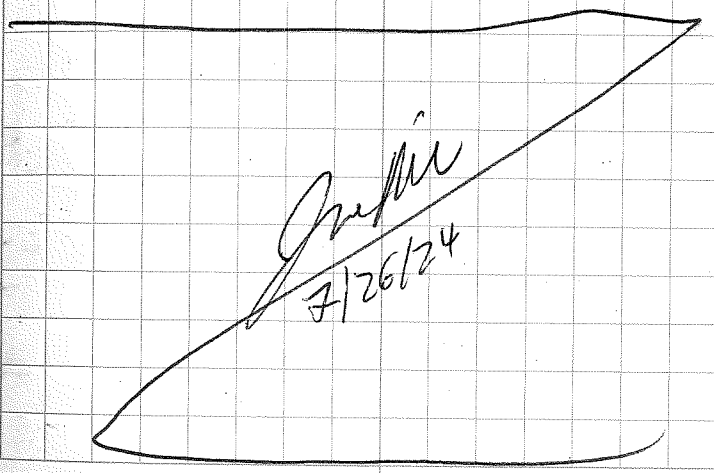
7/25/24 SLC VA JM

1341 YJ Return from lunch Resume drilling
1345 Ray Back to laydown to continue loading
1700 Depth to 197' cores wet
Mob hopper to laydown to dump Soil
Core cuttings
1715 Bring Another Hopper to Laydown Rolloff
Casing to 176'
1730 YJ secure Rig Area
Decon 8"
1800 Offsite



JM SLC VA 7/26/24

0640 Joe Miller CDM Smith Onsite
Calibrate PID / Gather Equipment
0655 YJ Onsite - Diego Diaz, Ray Dagh, Zach Olmsted
0700 HTS Tailgate
Fatigue, Heat, Focus, Complacency
0720 YJ load 8" casing to Rig
Inspections
0855 DTW 184.3' BGS BO Hole 185'
0900 Tripin 8" casing — Begin Surface Completion
0930 Tripin Core Barrel
1205 YJ Break for lunch Core to 226'
1235 YJ Load more 8" casing
1720 TD Boring 276, Casing to 276'
1740 Clean up Soil Cores
1750 Bring Hopper to Laydown Rolloff
1830 Offsite



Rite in the Rain

7/27/24 SLC VA JM

0700 COM/YJ Onsite
Task: Clean out Boring Build DW01
H+S Tailgate: Focus, Heat, crush points
weather 75-95°F
Attendees: Joe Miller
Ray Dagle
Diego Diaz
Zach Olmstead

0725 Warm up Rig Perform inspections
Tag hole 260'

0820 Fill water tote, Begin clean out

0900 Borehole clean to 276'
Break Down drill Rods

0945 Pull 9" Casing

1014 MW395 - DTW 206.80
DTB 284.70

1022 MW-390 DTW 206.82
DTB 381.03

1044 MW425 DTW 191.70
DTB 257.05

MW420 DTW 203.82
DTB 276.70

1100 Begin Hanging well 4" PVC
Screen from 150-270'

1140 well set w/ 20' screen 250' PVC Bottom
270' YJ Break for lunch

JM SLC VA 7/27/24

1200 Lightning Nearby
1240 Lightning out of 10mi Radius
1250 Tag Bottom 276 add 2 buckets
1300 Tag 272 pull casing ~4' add 1 Bucket
1307 Tag 271 add 3 Bags Sand
1318 Tag 260 pull up
1325 Tag 263 pull up add 2 Bags
1340 Tag 257 pull up
1350 Tag ~~255~~ 258 add 2 bags
1357 Tag 253 pull up 5'
1402 Tag 253 add 3 Bags
1415 Tag 248 pull casing out
1421 Tag 244 add 2 Bags
1432 Tag 244 pull up 5'
1437 Tag 248 add 1 Bucket pellets
1446 Tag 243 pull stick add 1 Bucket
1500 Tag 241 add half Bucket
1505 Tag 240 pull casing stick
1508 Lightning 4 Miles
1545 Lightning still in Area
1600 with lightning still in area Secure Site
1610 Offsite

7/27/24

7/28/24 SLC VA JM

0650 CDM Onsite - Joe Miller
0700 YJ Onsite Diego diaz, Ray Dagle, Zach Olmstead
Task: Grout IW-01
weather: 67°F - 90°F
H+S Topics: Focus, Heat, Fatigue
0710 warm up Rig Prep for Grout
0740 Tag pellets 240'
0800 Trip in Tremmie Pipe
810 Begin Mixing Grout (Neat Cement
Joe to Connex to prep for development/sampling
1100 YJ Break for lunch - Completed 8 Batches
1130 YJ Return to work - Resume Grouting
1215 Pull casing, completed 16 Batches
1305 Resume Grouting
1345 22 Batches to 35'
1430 Resume Grouting
1450 Pull casing
1510 Resume Grouting
1530 Grout topped off, prep to Mob Rig to laydown
Load casing into Boxtruck
1600 YJ Clean up around IW-01, Mob Rig to Decon
1730 Decon Rig
1830 Offsite

Joe M 7/28/24

JM SLC VA 7/29/24

0645 CDM Onsite - Joe Miller
0700 YJ Onsite - Raydagle/ Diego Diaz/ Zach Olmstead
H+S Tailgate: Focus, Traffic, Lifting
weather 75-95°F
Task: Top Off Grout, Surface Completion
Site Cleanup
0715 Mob Rig to IW-01
0730 Tag IW-01 DTB 267 ~3'S:1T
Grout to 3.5' Bgs
0815 Collect IDW07-SB072924
from Rolloff #6266
0840 Collect IDW08-SB072924
from Rolloff #6489
0845 YJ Grind down Surface of MW-42
0920 Driver for Yellow Jacket Onsite
0930 Mix grout
1002 Grout topped off
1015 MP Onsite to Move Rolloff
1035 Rolloff 5266 Moved to laydown
1100 Install Surface completion
1330 YJD Break for lunch
1400 Mob box truck to laydown
for decon drill steel
1520 Clean up Soil containment
1530 Joe To Fedex for Sample/Equipment Shipping

Rite in the Rain

7/30/24 SLC VA JM

0700 CDM Onsite - Joe Miller
0730 Call from John Retzac, United Rentals to deliver Frac tank ~0800
0805 Ryan Wasatch Onsite
United Rentals Onsite w/ Baker tank
0820 Setup Containment
0845 IW01 DTW 195.47' BTOC
Lone Entry 0840 United Rentals offsite
0850 IW01 DTB 268.14 Soft Bottom
0900 Show Ryan well locations
1045 Ryan Offsite
1300 Joe Miller Offsite

7/30/24

JM SLC VA 7/31/24

0630 CDM Smith YJ Onsite
0640 H+S tailgate A Henders Joe Miller Ray Dagle, Diego Diaz, Zach Olmstead
Topics worksafe Home Safe Focus
Weather 70-95°F
Task load equipment Demob
0700 Load up Equipment on flatbed
0840 Flatbed w/ casing Mobing From Site
1000 Yellow Jacket loading up
1230 YJ Offsite

7/31/24

Rite in the Rain

Waste labels: 7'3

500 South Soot Hill Dr.

Shannon Smith VA
801-582-1565 ext 2021

11 boxes
66 bags
52
12.5
18-29 bags
14 x 50 gal

20 bags 26 bags x 50 gal

MW4S-GW062824-20

7 bags of Cement + 1/16 of Quikrete
30 gal

Red Iguana

1-100 gal

SLC VA T3
2024

Rite in the Rain®
ALL-WEATHER
FIELD
№ 350F

Book 2

Book #2

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700 SOUTH 1600 EAST
PCE PLUME SITE

TACOMA, WA, USA — EST. 1916 — Rite in the Rain — DEFYING MOTHER NATURE

ALL-WEATHER

FIELD BOOK

VA
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801-582-1565 x 2021

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Patent and Pending App. See:
www.RiteintheRain.com/patents

FIELD PERSONNEL: KIMBERLY MYERS (CDM SMITH), RACHEL KUBINA (WASATCH) WYN JOHN (VA)

PLANNED ACTIVITY: BUILD SOIL CONTAINMENT FOR VAC TRUCK CUTTINGS. WASATCH TO SUPPLY HAYBALES, VISQUEEN, AND PLYWOOD

WEATHER: HIGH OF 72°F, LIGHT WIND, PARTLY CLOUDY WITH RAIN TO THE SOUTHWEST

PPE: STEEL TOES AND HIGH VIS VEST, WORK GLOVES, SAFETY GLASSES

1300: KM FLIGHT LANDS. PICK UP RENTAL CAR AND CALL JOHN REZNEC (WASATCH).

1400: KM ARRIVES AT VA. CALL (VOICEMAIL) TO WYN JOHN (VA). MEET RACHEL KUBINA (WASATCH) AT GRAVEL LAYDOWN AREA ADJACENT TO VALOR HOUSE. H&S. DON PPE.

1430: KM & RK REVIEW SPECS AND LAYDOWN AREA. KM DETERMINES THAT INITIAL SPOT (FARTHER WEST NEAR THE RV) IS GROOVED AND UNEVEN. PLYWOOD SEAMS TO CONTAINMENT DO NOT LAY

1430 CONT'D: FLAT. SEND PHOTOS TO JOE MILLER TO CONFIRM THAT SOUTH SIDE NEXT TO U OF UTAH RV IS ACCEPTABLE (AND FLATTER).

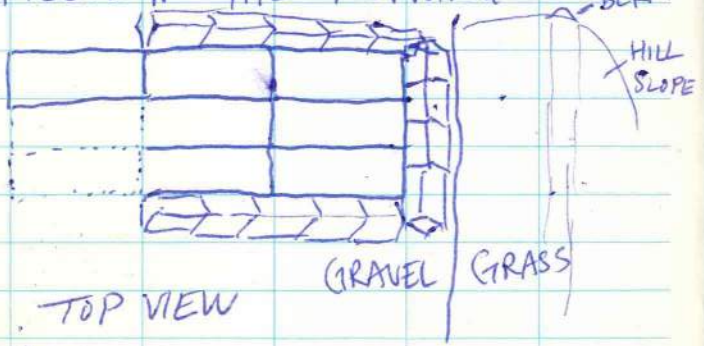
1500: WASATCH SOURCED 7 PIECES OF PLYWOOD (FOR TEN X TWENTY), AND 12X24 REQUIRES 9 PIECES. KM CONFIRMS WITH JOE THAT WE'LL WANT 12' SIDE THE NARROW WAY. CALL WYN

1530: ~~TEXT PHOTO TO WYN TO CALL W~~ KM 5/15/24 KM 5/15/24 WYN COMES TO LAYDOWN AREA TO SEE OUR PLACEMENT. HE SAYS IT IS FINE. HE QUESTIONS IF THE VAC TRUCK USES WATER BECAUSE THE VA IS VERY CONCERNED ABOUT RELEASES. WE CHECK NEAREST STORM KM 5/15/24 ~~DRAID~~ DRAIN NEAR VALOR HOUSE ENTRY. THERE IS A BERM (VERY SLIGHT) ALONG THE TOP OF HILL TO THE SOUTH SIDE OF THE GRAVEL PARKING LOT. KM TELLS WYN

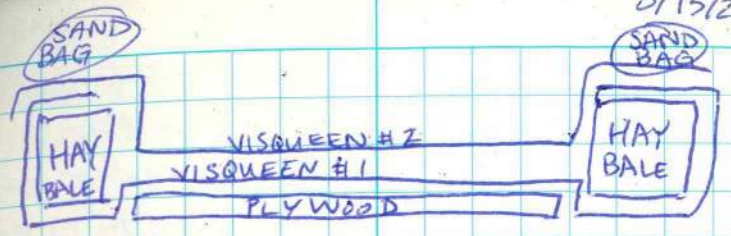
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1530 CONTD: THAT AMOUNT OF VAC TRUCK WATER DEPENDS ON HOW HARD THE FORMATION IS. WYN & KM WALK TO MW-44 (SOUTH OF SOLAR PANELS) TO LOOK AT ACCESSIBILITY FOR DRILL RIG AND VAC TRUCK. BOTH WILL BE A CHALLENGE BUT DRILL RIG TRACKS WILL LIKELY BE ALRIGHT ON THE SLOPE DOWN TO THE LOW ROAD. VAC TRUCK MAY NEED TO KEEP TO THE HIGH ROAD AND USE BOOM & HOSES TO REACH MW-44.

1550 KM & RK LAY OUT HAY BALES AND PLASTIC AROUND AND OVER THE PLYWOOD. WILL NEED TO COMPLETE THE FRONT 3 PLYWOOD PIECES IN THE MORNING



TOP VIEW



SIDE VIEW

1710: KM & RK FINISH AS FAR AS THEY CAN. WILL MEET TOMORROW. KM TO BE ON SITE AT 8 AM. RK TO BUY PLYWOOD AND MEET ACORE CREW FOR ASPHALT CUTTING.

KM 5/15/24
~~1730~~ KM & RK LEAVE SITE.
1720?

5/15/24

Kelly Nilsen

Rite in the Rain

FIELD PERSONNEL: K. MYERS (COM SMITH) RACHEL KUBINA (WASATCH), CHRIS HILL (YELLOW JACKET), MATT ~~(BA~~ (BADGER), WES (BADGER), MIKE (BADGER), WYN JOHN (VA), ZANE (VA), SHANNON SMITH (VA), MONTY (VA UTILITIES), PIERCY (VA UTILITIES), _____ (BADGER), ~~R~~ KM 5/16/24

PLANNED ACTIVITIES: ~~ACORE TO CUT~~ KM 5/16/24 KM 5/16/24 ~~ASPHALT~~, BADGER TO CUT ASPHALT AND VACUUM-CLEAR BOREHOLES TO 15 FEET BGS. YELLOW JACKET ON SITE TO CONFIRM BOREHOLE PLACEMENT WILL WORK FOR DRILL RIGS.

WEATHER: HIGH OF 77°F, SUNNY 0-5 MPH WIND

PPE: LEVEL D PPE WITH HARD HATS, HIGH VIS VEST, STEEL TOE BOOTS, WORK GLOVES, SAFETY GLASSES, HEARING PROTECTION AROUND VAC TRUCK AS NEEDED, SUN PROTECTION.

KM

0810: MEET YJ ON SITE WITH BADGER CREW (WES, MATT) AT MW-43 (PARKING LOT TO THE NORTH). MATT IS THE ASPHALT CUTTER (WE WON'T NEED ACORE TO CUT FOR US). KM INFORMS NEIL & JOE THEN

(0830) CALLS KUBINA TO LET HER KNOW SHE CAN CANCEL WITH ACORE. SHE HAS JUST PICKED UP THE PLYWOOD AND WILL MEET THEM IN SUNNYSIDE PARK TO LET THEM KNOW. MIKE (BADGER ARRIVES)

0845: WALK BORING LOCATIONS WITH CHILL TO CHECK FOR ACCESSIBILITY

0850: KUBINA MEETS / DISMISSES ACORE CREW AND JOINS US ON SITE). MW-40 IS ON A GAS UTILITY AND NEEDS TO MOVE TO AVOID IT AND. NEARBY ELECTRICAL. KM CONFIRMS LOCATION WITH JOE.

0905: MOVE EW-01 OFF CURB 3 OR 4 FEET. CH SAYS THE TREE (ADJACENT) WILL BE CLEAR OF THE EXHAUST ON RIG. JOE APPROVES MOVE.

Rite in the Rain

~~1100~~ KM & CH WALKED TO MW-44. KM 5/16/24
LATE ENTRY
9:45 IT IS VERY CHALLENGING. THERE IS ONLY ONE PLACE THE BOREHOLE CAN GO FOR THE RIG TO FIT. AND HOPPER WILL BE BLOCKED BY THE RACK OF CASING - WILL BE SLOW-GOING AND VERY DIFFICULT. MEANWHILE KUBINA COMPLETES THRID ROW OF PLYWOOD. KM AND RK LAY A THIRD LAYER OF VISQUEEN AS BEST AS CAN (IT'S SHORT OF COVERING THE WHOLE BOTTOM BUT ADDS ANOTHER LAYER FOR THICKNESS) ← PER DISCUSSION WITH JOE YESTERDAY.

1100: MW-43 IS NEAR REFUSAL AT 12.6 FEET BGS. KM GOES TO SEE.

LATE ENTRY
1030: KM & RK GET PAPERWORK / BINDER FROM CONNEX AND ~~EXCHANGE~~ KM 5/16/24 RK HANDS OFF KEYS TO KM

1110: CALL WYN TO APPROVE A SHORT CLEARANCE AT MW-43 (PRIOR REPORT WAS WRONG - MEASURES 11'11" DEEP.

1120: WYN, SHANNON, AND ZANE COME TO SEE BOREHOLE CLEARANCE THEY APPROVE. KM FOLLOWS SHANNON WHO SHOWS HER TO BUILDING 4 FOR FINGERPRINTING.

1130: BADGER CREW BACKFILLS WITH PEA GRAVEL. MOVE TO MW-40.

1145: KM BACK - DID NOT HAVE 2ND FORM OF ID. REFUSED FINGER-PRINTING. VA CREW CALLS MONTY & PIERCY → VA UTILITY FOLKS TO APPROVE BOREHOLE LOCATIONS. (SHANNON HAD REQUESTED THAT ASPHALT CORES GET SEALED UNTIL WE DRILL SO THAT THEY ARE NOT TRIP HAZARDS - BADGER USES SEALANT AT MW-43)

1200: MEASURE FROM FENCE AT MW-41 TO MANHOLE (SEWER) AND STORM DRAIN. FAR EDGE OF STORM DRAIN IS 12 FEET FROM FENCE - UTILITIES POORLY MARKED AND THUS MOVE MW-41 5 TO 10 FEET AWAY FROM SUSPECTED STORM DRAIN.

Rite in the Rain

1225: BADGER IS VACUUMING CLEARANCE AT MW-40. VA CREW & WASATCH & YELLOW JACKET GO TO LOOK AT MW-44. NO KNOWN UTILITES APART FROM ELECTRICAL FOR STREET LIGHTS SAY MONTY AND PIERCY. THE ONE YELLOW MARK WITH "BURRIED GAS LINE" FLAG HAS NO LINEAR DIRECTION. KM CALLS JOE FOR 811 INFO. MAY NEED DOMINION TO REMARK.

1240: JOE SAYS UTILITIES WERE MARKED IN SNOW. SENDS PHOTOS AND 811 TICKET NUMBER.

1250: BADGER IS OFF FOR LUNCH. YELLOW JACKET AND WASATCH TAKE LUNCH. ~~KM~~ KM 5/16/24

1310: KM CALLS JOHN REZAC ABOUT MW-44. THE YELLOW FLAG AND PAINT ARE MARKING THE BOREHOLE LOCATION → NOT ANY UTILITIES.

1317: KM CALL W/ JOE TO GIVE UPDATE.

1350 45: BADGER BACK FROM LUNCH. KM 5/16/24 THEIR TRUCK IS ALMOST OUT OF

1350 45 CONT'D: WATER (1,200 GALLONS) KM 5/16/24 AND THE HAVE A BOULDER (HUGE!) ABOUT 7 FEET BGS AT MW-40. KM PHOTOGRAPHS BOREHOLE. ASKS BADGER TO MARK ON ASPHALT WITH PAINT SO WE'LL KNOW AFTER IT IS BACKFILLED

1358: BADGER DRAINS HYDRO-VAC WATER SLOWLY OUT OF TRUCK INTO CONTAINMENT.

1403: WATER PRESSURE ON HAY BALES BREACHES CONTAINMENT ON ~~ES~~ KM 5/16/24 EAST SIDE WALL - WATER DRAINS INTO GRAVEL AND GRASS BUT STOPS BEFORE THE BERM. KM CALLS NEIL.

1408: NEIL WILL INFORM THE VA ON THE STATUS UPDATE CALL. VAC CREW IS SUCKING UP WHAT THEY CAN

1425: VAC TRUCK HATCH WAS PREVENTED FROM SHUTTING ALL THE WAY, SO VACUUMING UP THE SPILL DOES NOT HELP. KUBINA AND I REBUILD HAYBALE WALL. CH GRABS PEA GRAVEL FROM PALLET TO USE AT OUTSIDE OF BALES FOR REINFORCEMENT BADGER RE-EMPTIES INTO CONTAINMENT.

Rite in the Rain

1440: DONE EMPTYING VAC TRUCK. CONTAINMENT HOLDS. CANNOT EASILY SUCK UP REMAINING SPILLED WATER WITHOUT MAKING HOLES IN GRAVEL AND SUCKING DIRT / VEGETATION. WAIT FOR INSTRUCTION.

1450: WYN CALLS. WANTS TO KNOW IF OUR KEYS WORK ON GATES IN AND OUT OF IDW AREA. KM MEETS WYN AND ZANE AT IDW AREA.

1510: BACK AT VAC TRUCK CONTAINMENT (TWO KEYS CAN OPEN GATES ON BOTH SIDES). WYN CHECKS EXTENT OF SPILL - IT IS CLEAN WATER. HE DOES NOT SEE A PROBLEM BUT SHANNON MAY WANT MORE CLEAN UP. DISCUSS W/ BADGER MORE IDW MANGEMENT OPTIONS.

1520: BADGER GOES TO MW-40 TO FILL THE HOLE WITH PEA GRAVEL. NO MORE HYDROVAC TODAY UNTIL WE FIGURE OUT A CONTAINMENT PLAN.

1540: BADGER LEAVES SITE. KUBINA

LOADED TRAILER AND LEAVES TOO.

1545: ~~CR15~~ KM 5/16/24 CHRIS & KIMBERLY CHAT OPTIONS FOR TOMORROW - CAN WE USE TRASH PUMPS TO REMOVE WATER FROM VAC TRUCK? MIKE (BADGER VAC TRUCK OPERATOR) SAYS NO OTHER OPENING APART FROM HATCH IN BACK. CHRIS THINKS EVEN ONE FULL VAC TRUCK LOAD OF WATER WILL BREACH IT AGAIN. KUBINA SHARED THAT WASATCH HAS ~~A~~ KM 5/16/24 TWO TRASH PUMPS WE COULD RENT (BEFORE SHE LEFT). DO WE NEED BADGER TOMORROW? CANWE DO ANYTHING TONIGHT? NO? CHRIS CALL W/ BOSS.

1600: SHARED WES (BADGER) NUMBER WITH CHRIS (YELLOW JACKET). WE'LL MEET AT 8AM TOMORROW. YELLOW JACKET PREFERS NOT TO HAVE BADGER SIT ALL DAY ON STANDBY. VAC TRUCK HOLDS 1500 TOTAL KM 5/16/24 +500?

1610: YELLOW JACKET LEAVES. KM PHOTOGRAPHS MW-43 & MW-40.

1620: LEAVE SITE.

1630: CALL W/ KM, NEIL & JOE. EMAIL FOLLOWS

KM 5/16/24

Rite in the Rain.

KM

KM 5/17/24

PERSONNEL: K. Myers (COM Smith) ~~AND~~ AND
JOHN REZAC (WASATCH),
SHANNON SMITH (VA) AND ZANE (VA)

PLANNED ACTIVITIES: CONSTRUCT NEW SOIL CUTTING CONTAINMENT USING WATER BARRIERS AND VISQUEEN WITH PEA GRAVEL BAGS TO HOLD PLASTIC.

WEATHER: HIGH OF 80°F, SUNNY, 0-5 MPH WIND, DRY

PPE: HIGH VIS, STEEL TOES, WORK GLOVES
NO DRILLING TODAY.

0928: NEIL HAS RESERVED WATER BARRICADES FROM UTAH BARRICADE. READY FOR PICKUP ANYTIME. JOHN REZAC TO PICK THEM UP WITH THE WASATCH TRAILER (3232 S. REDWOOD RD, WEST VALLEY CITY, UTAH 84119)

1105: JOHN TEXTS ME THAT HE IS ON HIS WAY TO THE SITE WITH THE BARRIERS.

1115: NEIL ASKS ME TO PICK UP VISQUEEN FROM HOME DEPOT ON MY WAY TO THE SITE.

1125: KIMBERLY SETS OFF TO HOME DEPOT FROM HOTEL.

1134: JOHN TEXTS THAT A FORKLIFT WILL BE NEEDED. KM CALLS NEIL TO TELL HIM ABOUT THE MESSAGE. NEIL CALLS JOHN.

1200: NEIL ASKS FOR A BUNG WENCH FROM HOME DEPOT. KM CHECKS WITH STAFF BUT THEY HAVE NO 10 MIL PLASTIC SHEETING AND NO BUNG WRENCH. THERE IS A DRAIN WRENCH THAT LOOKS SIMILAR.

1220: KM CALLS JOHN TO ASK ABOUT WRENCH SIZE - THE DRAIN ONE IS 1-INCH AND PLUGS ON BARRIERS ARE PROBABLY 2-INCH

LATE ENTRY: 1142: NEIL CALLS KM TO UPDATE - THE BARRIERS ARE NOT EMPTY, WHICH IS WHY JOHN CANNOT MOVE THEM. HE WILL HAVE TO DRAIN THEM FIRST.

1225: NEIL & KM TRY SEARCHING LOWES, HOME DEPOT, ACE HARDWARE, GRAINGE FOR VISQUEEN & BUNG WRENCH. AMAZON CAN OVERNIGHT ONE.

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1250: HIGHLAND DRIVE HOME DEPOT (15 ~~MINS~~ KM 5/17/24 MINS SOUTH OF SITE) HAS A BUNG WRENCH. NEIL SAYS TO GO TO SITE. IT MAY NOT BE ~~FEASIBLE~~ FEASIBLE TO MOVE THEM AND HE CAN ORDER THE VISQUEEN. KM 5/17/24

10 KM HEADS TO SITE.

1315: KM ARRIVES ON SITE. JOHN, SHANNON, AND ZANE ARE AT THE BARRIERS TO OBSERVE. KM 5/17/24

1317: KM & JOHN CALL NEIL. ZANE STAYS BUT SHANNON LEAVES. KM, ZANE, & JOHN HAD TRIED MOVING ONE (STACKED TWO TALL). STILL TOO HEAVY WITH 3 PEOPLE LIFTING. THEY WILL FALL ON ZANE. NEIL AGREES IT IS UNSAFE AND WE DISCUSS OPTIONS.

1356: CALL ENDED. ~~ZANE LEAVES~~ KM 5/17/24

WE WILL:

- RETURN BARRICADES (TO FREE UP ROOM IN TRAILER FOR MORE STRAW BALES
- CONSTRUCT NEW CONTAINMENT BIGGER WITH DOUBLE-LAYER

OF STRAW BALES. (ON MONDAY) BADGER WILL BE POSTPONED TO TUESDAY. NEIL WILL BE ON SITE TUESDAY, ALSO.

- NEIL THINKS WE CAN ~~TRY~~ KM 5/17/24 ~~AAS~~ KM 5/17/24 DUMP ANOTHER LOAD IN THE FIRST CONTAINMENT NOW THAT IT IS REINFORCED WITH PEA GRAVEL. KM SUGGESTS A HALF LOAD (DUMP EARLY) TO LIMIT WEIGHT AND HAVE LESS TO MANAGE IF SOMETHING FAILS.

1400: JOHN, KM, & ZANE MOVE THE ONE UNLOADED BARRICADE BACK ONTO TRAILER. ZANE LEAVES.

1405: KM ADDS MORE PEA GRAVEL (TO HOLD PLASTIC WHICH IS BLOWING) AND TO REINFORCE THE CONTAINMENT. JOHN STRAPS BARRICADES DOWN.

1435: TRAILER LOADED. JOHN SUGGESTS ADDING SOME CONES, SO WE GRAB SOME FROM MW-40 (SHANNON GAVE

Rite in the Rain

1435 CONT'D: NS PERMISSION TO MOVE THE VA CANDLESTICKS OR CONES AS NEEDED. VA HAD ALREADY REMOVED THEM FROM MW-43.

1445: JOHN LEAVES SITE. KM ADDS A FEW MORE BAGS OF PEA GRAVEL TO CURRENT CONTAINMENT.

1500: CALL FROM NEIL. UPDATES. HE CAN ORDER VISQUEEN THROUGH WHITE CAP. DISCUSS SOIL BIN PLACEMENT. DISCUSS SCHEDULE FOR MONDAY & TUESDAY. NEIL ASKS KM TO CHECK ON CONDITION OF THE OLD FORMER SECONDARY CONTAINMENT IN THE IDW AREA. IS THE BASE SALVAGEABLE TO HELP BUILD NEW CONTAINMENT?

1522: KM CHECKS IDW AREA. ~~HAY BALES~~ KM 5/17/24 STRAW BALES ARE DONE/DECOMPOSING. MOVING AND USING WOULD MAKE A MESS. INTERIOR TARP-LIKE PLASTIC SHEETS ARE TORN AND

DISINTEGRATING. PLYWOOD UNDERNEATH DISINTEGRATING. THE BOTTOM PLASTIC (FORMED LAYER) MAY BE INTACT BUT MOVING THE ~~LOCATION~~ KM 5/17/24 CONTAINMENT LOCATION (MOVING THE PLASTIC MAY REVEAL HOLES OR BRITTLE / TEARING (LIKE THE TARP-LIKE LAYERS) KM PHOTOGRAPHS. AND THERE WOULD HAVE TO BE SOME SOIL MANAGEMENT PRIOR TO MOVING ~~SING~~ KM 5/17/24 SINCE SOME DIRT AND GRAVEL REMAINS.

1580: KM PAUSES FOR UNRELATED WORK CALL

1624: KM SENDS NEIL PHOTOS

1654: KM & NEIL ~~DISCUSS~~ KM 5/17/24 DISCUSS. NEIL OPTS TO NOT USE OLD CONTAINMENT. BETTER OPTION WOULD BE TO BUILD BRACKETS ONTO PLYWOOD WITH WOOD TO HOLD BALES IN PLACE.

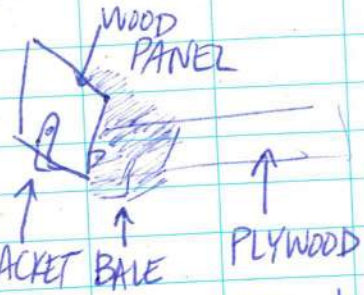


NEVERMIND, NO ARTISTIC SKILL

Rite in the Rain

5/17/24 KM

1700:



1715: NEIL WILL CALL JOHN AND HAVE HIM SOURCE SUPPLIES. WE'LL REGROUP MONDAY. KIMBERLY LEAVES SITE.

LATE ENTRY:
NEIL EMAIL AT 17:24 SUGGESTS TIE PLATES TO SCREW PLYWOOD BOARDS TOGETHER
for 5/17/24

LATE ENTRY:
ABOUT 1325: A VETERAN FROM VALOR HOUSE TALKS TO US. ASKS IF WE NEED ~~HIS~~ KM 5/17/24 HIS RV MOVED (UNIVERSITY "N") TRAILER & RED TRUCK. WE TELL HIM NO, BUT HE SAYS IF WE DO, GO IN AND ASK FRONT DESK FOR "JOHN"
for 5/17/24

5/20/24 21

PERSONNEL: K. Myers (COM Smith), JOHN REZAC (WASATCH), CHRIS (MP) DRIVER (ANYTIME SERVICES), JOHN REZAC, RYAN PANASY (?) WASATCH

PLANNED ACTIVITIES: WASATCH WILL PURCHASE SUPPLIES FOR A NEW SOIL CONTAINMENT PAD. MP (THROUGH CAPITAL ENVIRONMENTAL) WILL BRING TWO SOIL BINS ON SITE AT 9AM, FENCING AND PORTA-POTTY WILL BE DELIVERED. NEIL SAID ON FRIDAY ONE SHOULD BE NEAR MW-40 AND ONE NEAR SOIL CONTAINMENT.

WEATHER: CLOUDY, RAIN, 50°F, HIGH OF 60'F, THUNDERSTORMS PREDICTED

PPE: ~~LEVED~~ KM 5/24/24 LEVEL D PPE

0750: KM ARRIVES ON SITE. CALL JOHN TO CHECK HIS STATUS TODAY. HE HAS AN EARLY MEETING AND WILL GO BUY SUPPLIES FOR SOIL. WILL CALL WHEN EN ROUTE. KM BEGINS NOTES FOR THE DAY.

0819: CALL FROM CHRIS WITH MP OUT OF GRANTSVILLE. HE IS CLOSE TO SITE WITH 2 SOIL BINS.

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0820: QUICK CALL WITH NEIL - HE PREFERS THE GRASSY SPOT BY EW-01 IF WE CAN GET AROUND THE CURB. VOICEMAIL TO ZANE.

0828: CHRIS WITH MP ARRIVES, TRUCK IS DOUBLE-LONG AND MIGHT HAVE TROUBLE DRIVING AROUND MW-40. CHRIS PULLS INTO GRAVEL LAY-DOWN KM & CHRIS AGREE ON FIRST SOIL BIN DROP SPOT (NEXT TO SOIL CONTAIN. BUT NOT TOO CLOSE.) BIN #5966

0840: CHRIS (MP) & KM DRIVE IN CDM CAR TO SEE MW-40 PARKING LOT. CHRIS' LONG TRUCK WILL NOT FIT. HEAD BACK TO GRAVEL LAYDOWN AND DECIDE TO DROP SECOND BIN (6049) NEAR SOLAR PANELS BUT NOT BLOCKING RESIDENT'S PARKING OR ACCESS TO MW-44.

0855: CALL ZANE TO LET HIM KNOW WE WON'T NEED HIS INPUT YET ON PLACEMNT. CHRIS SAYS WE CAN CALL MP AND SCHEDULE A SMALLER TRUCK TO COME MOVE THEM AROUND.

0910: MP IS OFF SITE.

0915: ANYTIME SERVICES ON SITE.

0915 CONT'D: DRIVER HAS A PORTA-POTTY FOR YELLOW JACKET. I DIRECT HIM TO PLACE IT ON SOUTH SIDE OF LAYDOWN AREA BETWEEN SOIL BIN AND SOIL CONTAINMENT PAD. IT IS ON A MINI TRAILER.

0930: ANYTIME LEAVES SITE. CALL NEIL FOR INPUT ON NEW SOIL CONTAINMENT LOCATION. NEXT TO PIONEER RV IS BEST (CAN ASK VETERAN JOHN TO MOVE RED TRAILER AS LAST RESORT IF DRILLERS NEED MORE ROOM.

0935: WASATCH HAS ARRIVED WITH BALES JOHN AND NEW HELPER - RYAN UNLOAD BALES (NEED ONE MORE LOAD AND SUPPLY STORE NEARBY IS OUT. KM & JOHN DISCUSS TIE PLATES FOR PLYWOOD AND L-BRACKETS PER NEIL'S EMAIL ON FRIDAY. JOHN WILL NEED TO GET POWER TOOLS AS WELL.

1005: WASATCH LEAVES SITE FOR MORE BALES AND SUPPLIES.

1020: JASON WAGENMAKER LANDS IN SLC.

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1053: CALL FROM JOHN R. AT LOWES TO CONFIRM PLYWOOD. WE NEED 12 PIECES TO MAKE A 12' x 32' CONTAINMENT.

1100: WEATHER UPDATE: CLOUDY, NO RAIN, NO LIGHTNING NEARBY (435 MILES AWAY)

1124: RAIN BEGINS

1140: JASON WAGENMAKER ARRIVES ON SITE

1150: SHOW JASON THE IDW AREA.

1200: NEIL MADE A CALL WITH THE UA AS AN UPDATE AND TO DISCUSS CLEARANCE AROUND BOULDER IN MW-40 BOREHOLE. SHANNON SMITH WANTS TO CLEAR OF UTILITIES AT LEAST TO 10 FEET BGS. TRY DEEPENING BOREHOLE TO THE SOUTH OF BOULDER. UPDATE ON CONTAINMENT.

1215: CALL ENDED. BACK TO LAYDOWN AREA.

1220: WASATCH ON SITE WITH ~~WOOD~~ LUMBER AND POWER TOOLS. JOHN & RYAN UNLOAD. KM SHOWS JW THE BOREHOLE LOCATIONS. KM 5/20/24

1235: SET UP PLYWOOD BASE WITH WASATCH. NEIL CONFIRMS WE WILL PUT ONE ROW OF ~~BALL~~ BALES ON THE PLYWOOD (INSIDE BRACKETS) AND KM 5/20/24

ONE ROW OUTSIDE FOR ADDED SUPPORT.

1300: SCREWS FOR TIE PLATES ARE WOOD SCREWS AND DO NOT SINK ALL THE WAY INTO THE WOOD WITH THE METAL PLATE IN THE WAY. RYAN SAYS SHEET METAL SCREWS WOULD LAY FLAT. NIEL AGREES WE NEED SCREWS THAT WON'T STICK OUT.

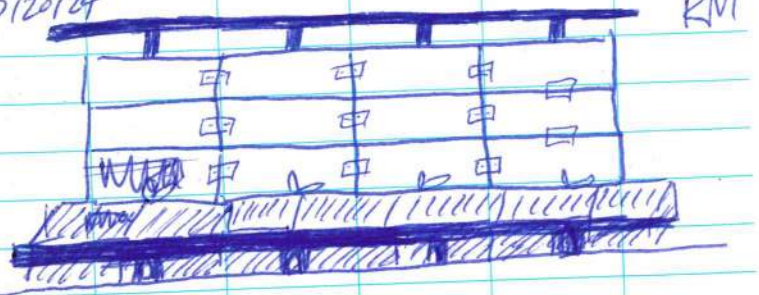
1315: KM CALLS TRACTOR SUPPLY AND CAL RANCH ~~FOR~~ KM 5/20/24 TO SEE IF THEY HAVE BALES IN STOCK. (TRACTOR NO, CAL-YES BUT MINI, ARE THOSE CORRECT? JOHN THINKS SO. WASATCH LEAVES. JASON LEAVES TO GRAB LUNCH. KM 5/20/24

1509: KM CALLS TO CHECK STATUS. CAL RANCH DID NOT HAVE BALES. THEY WENT TO IFA IN DRAPER. THEY HAVE SUPPLIES AND ARE A HALF HOUR AWAY. HEADED BACK TO SITE.

1530: JASON WORKS ON DQCR. KM CATCHES UP FIELD NOTES. RAINING AGAIN.

1540: WASATCH RETURNS TO SITE. UNLOAD BALES AND BEGIN ATTACHING TIE PLATES. CUT 2 2x4S INTO 1-FOOT SECTIONS.

Rite in the Rain



1640: WASATCH RAN OUT OF WOOD SCREENS AND WILL FINISH IN THE MORNING. THE LONG RAILS ARE COMPLETE. ONE ROW OF BALES WILL GO INSIDE AND ONE OUTSIDE. CLEAR TOOLS AND CLOSE UP FOR THE NIGHT. JASON PUT PIDS ON CHARGERS.

1705: COM SMITH & WASATCH LEAVE SITE.

PERSONNEL: K. MYERS, JASON WAGENMAKER NEIL SMITH (COM SMITH), CHARLES WINLAND, BRYCE LUGO, ZACHARY OLMSTEAD (YELLOW JACKET), RYAN PANASY (WASATCH) ERNESTO (GUTINEREZ?), DIEGO DIAZ, TIMOTHY ADAMS, SPRING PETERSON, RICHARD HOYT, MATT MEGO, KM 5/21/24 MIKE SCHUBERT CLANCY DEANDRE DERAN

PLANNED ACTIVITIES: YELLOW JACKET MOBILIZING TO SITE, WASATCH TO COMPLETE SOIL CONTAINMENT, BADGER TO CONTINUE BOREHOLE CLEARANCE

WEATHER 51°F, MOSTLY SUNNY, HIGH OF 62°F, STILL WIND, 47% HUMIDITY, NO RAIN EXPECTED

PPE: LEVEL D - HARD HATS ~~WHITE~~ KM 5/21/24 WHILE TOWERED UP, HEARING PROTECTION IF NEEDED, HIGH VIS, SAFETY TOE BOOTS, WORK GLOVES, SAFETY GLASSES.

0750: KM ARRIVES ON SITE. YELLOW JACKET (CHARLES, ZACH) ALREADY HERE WITH TRANSPORT TRUCK CARRYING THE TRACKED LIMITED ACCESS RIG. ALSO ON SITE IS FORKLIFT, CASING, SUPPORT TRUCK AND BOB CAT FOR IDW MANAGEMENT.

0800: JASON, NEIL, AND BRYCE ARRIVE ON SITE. RYAN ARRIVES SHORTLY AFTER.

0820: H&S MEETING. DISCUSS EVACUATION ROUTE, COCS, PPE, LOGISTICS OF MOB.

Rite in the Rain

0845: YELLOW JACKET BEGINS UNLOADING. JASON CONTINES CONSTRUCTION OF SOIL CONTAINMENT. KM CHECKS NEAR BOREHOLES BUT BADGER IS NOT ON SITE YET. EXPECTED IN 1 HOUR SAYS BRYCE.

0915: JASON LEAVES TO IDW AREA TO CALIBRATE A PID, REVIEW FIELD FORMS.

0928: TRANSPORT TRUCK IS UNLOADED AND LEAVES AS SECOND CREW'S TRANSPORT TRUCK ARRIVES. NEIL LEAVES TO BUY DRINKING WATER FOR THE SITE. CDM HAD A HEAT STRESS INCIDENT ON ANOTHER PROJECT IN LOW 70's °F. BE EXTRA CAUTIOUS. YELLOW JACKET TO UNLOAD AND THEN SET UP DECON PAD AND DECON THE CASING.

0935: CALL FROM JASON AT IDW YARD. NO REGULATORS WITH CAL GAS AND NONE SEEN IN CONNEXES.

0940: KM CALLS NEIL. WE SHOULD HAVE ONE IN CONNEX BOX BUT CHECK W/ WASATCH TO BORROW IF POSSIBLE WHILE WE LOOK.

1005: JOHN REZAC ON SITE WITH REGULATORS. WE FIND ONE THAT FITS THE CAL GAS. SECOND YELLOW JACKET CREW

ARRIVES. WYN AND ZANE STOP BY AND WE ASK ABOUT A DUMPSTER. ASK ABOUT FIRE HYDRANT (BRYCE SAID THEY CAN GET A BACK-FLOW PREVENTER AND WATER METER) YELLOW JACKET PARKS FULL SIZE RIG IN GRAVEL NEAR BACK GATE TO IDW YARD.

1030: SECOND CONTAINMENT FINISHED NEIL BACK ON SITE.

1045: H&S WITH SECOND YJ CREW.

1100: YJ UNLOADS. NO WORD FROM BADGER.

1118: KM CALLS BEN JESTI W/ CAPITAL ENVIRONMENTAL. JASON CALLS SEATTLE FIELD OFFICE TO ORDER A REGULATOR FOR CAL GAS.

1130: DRILLERS BEGIN SETTING UP DECON PAD.

1200: KM TAKES A CALL FOR ANOTHER PROJECT. BADGER IS DONE AND WILL SEND 2 TRUCKS OUT FOR CLEARANCE.

1330: BADGER TRUCK #1 ARRIVES AT MW-40. JASON AND ZANE OBSERVE.

1335: KM DOES BADGER H&S. BADGER HAS HIT ANOTHER BOULDER AND

Rite in the Rain

VA CREW COMES TO OBSERVE.
BOREHOLE IS 7'5" DEEP.
VA OBSERVES BOREHOLE WITH MONTY
1400 QUESTION IF BOULDER IS A ROCK OR A UTILITY, SO BADGER SPRAYS IT CLEAN AND IT'S A ROCK.
BRYCE TAKES A LOOK; SHOULD BE OK FOR DRILLING IF THEY CUT THE 18" CIRCLE OF ASPHALT INTO A 24" SQUARE AND DRILL TO SOUTH OF LARGE BOULDER.
VA "SIGNS OFF" ON MW-40.
1420 SECOND BADGER CREW (MIKE'S) KM 5/21/24 ARRIVES. THEY SET UP ON EW-1 WHILE CREW#1 HEADS TO MW-41.
NEED FEMA GATE OPENED.
1430: WYN RETURNS TO OPEN
CREW #1 BEGINS HYDROVAC.
1430 KM 5/21/24 CREW #2 IS ABOUT 4-5 ~~OR 6~~ KM 5/21/24 FEET DEEP AT EW-1.
1515: CREW#1 FOUND A UTILITY LINE (WHITE PVC 5'4" DEEP) AT MW-41
KM INFORMS NEIL & CALLS WYN WHO BRINGS ZANE AND SHANNON TO SEE.
1530: VA CALLS MONTY TO IDENTIFY

THE TYPE OF UTILITY. THE VA SUGGESTS MOVING 3-4' EAST (TOWARDS GRAVEL ROADWAY).
1545: MONTY TAKES A LOOK - LIKELY A SEWER CLEANOUT LINE FROM THE RV CAMPSPOTS. MEANWHILE, CREW#2 IS HITTING ROCK/REFUSAL AT EW-1. VA GOES TO LOOK.
NEIL RETURNS TO LAYDOWN YARD TO MEET A TOW TRUCK (FOR ~~HIS~~ KM 5/21/24 HIS CAR)
1550 SHANNON LOOKS AT EW-01 AND "SIGNS OFF" ON THE CLEARANCE AT 8 FEET BGS. BADGER BRINGS THE DUMP WITH GRAVEL TO BACKFILL.
JASON CONFIRMS WITH NEIL THAT WE WOULD RATHER BACKFILL THAN START DRILLING HERE.
1615: BADGER CREW #1 AT MW-41 HAS FOUND A SECOND UTILITY. THIS ONE HAS YELLOW TAPE AND IS 4 FEET BGS
KM CALLS WYN. TEXTS PHOTO TO NEIL.
1630: WYN, SHANNON AND MONTY INSPECT THE YELLOW UTILITY. MONTY CONFIRMS IT IS AN ELECTRICAL LINE. MONTY PICKS A SPOT (AMOST LIKE A TRIANGLE

Rite in the Rain

OF UTILITIES) WITH THE MIDDLE OF THE TRIANGLE BEING THE NEW MW-41 LOCATION.

BADGER TRUCKS PREPARE TO DUMP CUTTINGS AT CONTAINMENT LAYDOWN YARD.

MONTY WOULD LIKE US TO USE SMALLER ROUNDED SAND OR PEA GRAVEL WHEN COVERING THE ELECTRICAL LINE. VA RECOMMENDS LEAVING HOLES OPEN (SECURE WITH A PALLET OR SOMETHING HEAVY). UNLIKELY TO HAVE TRAFFIC THROUGH HERE AND THERE IS ROOM TO DRIVE PAST IN AN EMERGENCY. THAT WAY THE DRILLERS WILL HAVE A VISUAL BEFORE THE APPROVE THE NEW SPOT TOMORROW.

1700: Yellow JACKET PLACES PALLETS OVER OPEN MW-41 ~~BOR~~ KM 5/21/24 EXCAVATIONS.

1715: KM & BRYCE DISCUSS SOIL BIN PLACEMT (TO NOT BLOCK DRILL RIG AT EW-01) PUT CONES ON RV SPOT "B" AND ALONG THE MW-40 ROW AS CARS LEAVE. NEIL AND JASON WATCH BADGER CREWS DUMP SOIL.

1745: LOCK UP AND LEAVE.

5/21/24

PERSONNEL: KIMBERLY MYERS, NEIL SMITH, JASON WAGENMAKER (CDM SMITH); DIEGO DIAZ, CHARLES WINLAND, ZACHARY OLMSTED, SPRING PETERSON, TIMOTHY ADAMS, ERNESTO GODINEZ, RICHARD HOYT (YELLOW JACKET) BRYCE LUGO (EXPECTED LATER); BRADLY CHILD, DERAN WEAVER (BADGER); DAVID SUCHY (ARMY CORPS)

PLANNED ACTIVITIES: BADGER TO COMPLETE CLEARING UTILITIES AT MW-41, YJ TO DECON 9-INCH CASING AND SET UP AT MW-40 AND (IF ~~AVAIL~~ KM 5/22/24 AVAILABLE) MW-41. IF NOT, THEN MINI TO START AT MW-43.

WEATHER: 50'S, HIGH OF 73°F, CLOUDY, 0-5 MPH WINDS, 20-30% HUMIDITY

PPE: LEVEL D

0700: CDM SMITH AND YELLOW JACKET ON SITE.

0710: H&S MEETING. THE 9-INCH CASING HAS YET TO ARRIVE

0737: ~~BA~~ KM 5/22/24 MP DRIVER IS LOOKING FOR OUR SITE. HE CALLS KM WHO TEXTS A PIN TO HIM

0742: KM CALLS WYN AND ZANE KOZAREC ABOUT OPENING FEMA GATE TO MW-41.

Rite in the Rain

0745: BADGER VAC TRUCK ARRIVES ON SITE FOLLOWED BY MP DRIVER. YJ IS DECONNING THE CASING THEY HAVE. COM DIRECTS MP TO THE SOIL BIN. KM SHOWS BADGER TO MW-41 WHERE ZANE IS OPENING THE GATE.

0830 HAD TO GET YJ TO MOVE PALLETS AND GRABBED BAGS OF PEA GRAVEL AND SAND FOR BACKFILLING MW-41 BOREHOLE ATTEMPTS. ELECTRICAL UTILITY IS BACKFILLED WITH SAND AROUND IT. ARMY CORPS ON SITE (DAVID).

0900: YJ SAYS THEY NEED 5' FROM UTILITIES, AND PLANNED LOCATION ONLY HAS 4' OF SPACE. MEASURE OUT AND PICK A NEW SPOT CLEAR OF UTILITIES ~~AND~~ 5/22/24 KM BUT NOW IT IS TOO CLOSE TO FEMA TRAILERS.

0920: ZANE SAYS THEY CAN GET THE TRAILER MOVED TOMORROW FOR US. YJ AND COM SMITH AGREE THAT THERE IS TOO MUCH UNCERTANTY ABOUT DIRECTION OF UTILITIES - NEED TO GET A TRACE ON IT, SO WE'LL START ON MW-43 AND CALL

THE LOCATOR BACK OUT.

0930: BADGER LEAVES SITE (DAREN BACKFILLED THE TWO MW-41 ATTEMPTS WHILE WE DEBATED THE NEW LOCATION)

1000: 9-INCH CASING ARRIVES AND YJ SETS UP TO UNLOAD AND DECON IT.

1030: COM SMITH HAD MEETING AMONG SELVES. JASON WILL GO BUY WHITE MARKING PAINT AND EAR PLUGS. NEIL WILL CHECK CONNEXES FOR BORING LOGS OF NEARBY WELLS, WILL CALL WASATCH ABOUT DRAINING / TRANSFERRING SOIL VAC TRUCK CONTAINMENT, AND WILL CONTACT SHANNON ABOUT A SITE WALK TO FINALIZE OFF-SITE LOCATIONS. NEIL HAS ASKED VALOR HOUSE TO CONTACT "VET JOHN" TO MOVE THE RED RV TRAILER.

1115: YJ IS STILL DECONNING 9-INCH CASING. NEIL GIVES UPDATE. YJ COULD TRANSFER WATER INTO HOPPER IF IT'S FASTER. THEY NEED THE SPACE. WASATCH IS AVAILABE ON FRIDAY TO DO UTILITY ~~TH~~ 5/22/24 KM SURVEY ~~(22)~~ YRS KM 5/22/24 KM 5/22/24 BR SITE WALK TO FINALIZE LOCATIONS OFF SITE. WITH VA - MAYBE THURSDAY. KM 5/22/24

1145: JASON BACK ON SITE. HE WILL CHECK ON THE MW-~~43~~ 40 CREW THAT JUST TOOK THE BOX TRUCK UP TO START SETTING UP ON THE WELL. BRYCE CONFIRMED DEPTHS AT MW-43 FOR HOW MUCH CASING THEY NEET TO LOAD. NEIL IS AT THE CONNEX BOX - WILL LOOK FOR SOIL BIN LABELS. YJ LIMITED ACCESS CREW CONTINUES DECONNING THE OTHER HALF OF 9-INCH CASING THAT IS LEFT ON TRANSPORT STILL.
SUN IS STARTING TO COME OUT. 64°F

1220: DRILLERS STOP FOR LUNCH BREAK.

1225: KIMBERLY SIGNS LOG TO JASON.

1330: Drillers on lunch. Will begin drilling on full size rig after lunch. Neil offsite to pickup supplies. 2nd drill crew continues to take casing off truck.

1340: Jason signs log book to Kimberly
YJ CREW MOVES SOIL BIN 6049 FROM RV SPOT "B" TO THE OVERSIZED RV SPOT BY THE FEMA GATE ENTRANCE.

1410: DRILL RIG CHECKLIST IS GOOD ON THE FULL SIZE. DIEGO DEMONSTRATED STOP BUTTONS; SHOWED FEATURES & SAFETY

1430: DIEGO'S CREW FINISHES ADJUSTMENTS AND SETUP IN PREP FOR DRILLING. JOHN THE VET HAS COME TO MOVE HIS RV. CHARLES' DRILL CREW TO PUMP WATER OFF SOIL CONTAINMENT PAD.

1450: DIEGO'S CREW AT MW-40 BEGINS DRILLING KM 5/22/24

1511: FIRST CORE ~~APPEARS~~ IS BAGGED. VA (SHANNON, WYN, ZANE) COME TO OBSERVE WITH DAVID (CORPS), LOGGING

1610: HONEYBUCKET CALLS ABOUT PORTA POTTY. DRIVER WAS TURNED AWAY SO I SEND LISA (THE DISPATCHER) A TEXT WITH A PIN DROP. (801) 707-5622. THE TRUCK IS VERY LONG AND NEIL ASKS FOR IT OVER BY THE LAYDOWN YARD. KM 5/22/24
I DRIVE HONEYBUCKET OVER. TOILET & WASH STATION
MEANWHILE ANYTIME SERVICES ARRIVES WITH THEIR (YJ'S) SECOND PORTABLE TOILET. NEIL DRIVES IT KM 5/22/24 THE DRIVER OVER TO MW-40.
KM & JW LOG & PHOTOGRAPH SOIL CORES (CONTINUE TO)

1745 FULL-SIZE CLOSED UP, CORE WILL BE REMOVED BY YJ IN A.M.

Rite in the Rain

1745 CONT'D: JASON CHARGES PIDS, KM TAKES END-OF-DAY PHOTOS. DIEGOS CREW LOOK FOR A MISSING CORE BARREL IN THE CASING.

1800: JW LEAVES. NEIL & KIMBERLY DECIDE WHERE TO BUY:

- ✓ - BALL-POINT PENS
- ✓ - DRY ERASE BOARD & MARKERS
- ✓ - KNIFE/SAFETY KNIFE
- - RULER IN DECIMAL FEET?
- ✓ - PAINTER'S TOOL (2X)

BRYCES' FATHER ARRIVES - HE DOES THE SECURITY ON SITE AT NIGHT.

1810: YJ LEAVES. KM CATCHES UP NOTES.

1820: KM LEAVES.

LATE ENTRY:

AROUND 1300, VA EMPLOYEE ON A BOBCAT ARRIVES AT SLOPE TO MW-44 TO MOVE THE SOIL AND FLATTEN THE SLOPE

KM 5/23/24

LATE ENTRY: DRILLING AT MW-40 WAS FROM 0 TO 55' BGS ↑ 7-8' BECAUSE CLEARED.

KM 5/23/24

5/22/24

PERSONNEL: NEIL SMITH, KIMBERLY MYERS, JASON WAGENMAKER (COM SMITH); DIEGO DIAZ, ERNESTO GODINEZ, TIMOTHY ADAMS, CHARLES WINLAND, SPRING PETERSON, ZACHARY OLMSTED (YELLOW JACKET); SHANNON SMITH, WYN JOHN, ZANE P (VA), DAVID SUCHY

PLANNED ACTIVITIES: DECON, HOUSE-KEEPING, SOIL CUTTING MANAGEMENT, DRILLING FULL-SIZE RIG AT MW-40, SETTING UP AT MW-43.

WEATHER: CLOUDY, 47°F, STILL, HIGH OF 57°F, 46% HUMIDITY

PPE: LEVEL D - HARD HATS, HIGH VIS VESTS, SAFETY GLASSES, EAR PLUGS, SAFETY TOE BOOTS, WORK GLOVES OR NITRILES.

0700: YELLOW JACKET AND COM SMITH ON SITE. HEALTH & SAFETY TAILGATE.

0745: DIEGO'S CREW GRABS MORE 9-IN. CASING FOR FULL SIZE RIG (TSI-150T #149)

CHARLES CREW DECONS MORE 9-INCH CASING AND MORE SETUP AROUND LAYDOWN AREA.

0810: FEMA PERSONNEL HAVE MOVED THE

Rite in the Rain

0810 CONT'D. MOBILE MORGUE TRAILER TO FRONT SIDE OF THEIR BUILDING. JASON CALIBRATED PIDS AND SPRAYS WHITE PAINT AT MW-41 (OVER THE ORANGE) TO MARK THE INTENDED BOREHOLE LOCATION. YJ FUELS FULL-SIZE RIG.

0845 HOPPER SET UP TO REMOVE SOIL CORE FROM YESTERDAY AT MW-40. TIM SAYS SOIL BIN 6049 IS BACKWARDS - TRUCK HOOKUP IS ON INACCESSIBLE SIDE. THEY (YJ) GET IT TURNED AROUND WITH A SKID STEER. KM SCANNED ALL COMPLETED CHECKLISTS. DAVID SUCHY HAS ALSO RECENTLY ARRIVED ON SITE. I HAVE HIM SIGN THE H&S TAILGATE.

0900: CHECK LIMITED ACCESS RIG AND CHECK IN WITH CHARLES. THE ARE JUST COMPLETING DECON AND WILL PARK THE RIG HAULER AND DO SOME HOUSE KEEPING BEFORE STARTING DRILLING

KM 5/23/24 WATER MANAGER

0915: KM GOES TO BUILDING 4 FOR FINGERPRINTING.

0954: FULL SIZE CREW SETTING UP SAMPLING AREA, WARMING UP DRILL RIG.

1000: DRILLING BEGINS

1045: SAMPLES ARE BAGGED FROM 55' to 65', LIMITED ACCESS RIG WILL LINE UP ON HOLE AND GET CASING READY TO DRILL. SHOULD BE READY FOR INSPECTION IN 30 MINUTES.

1115: KM DOES TSI-150 MINI RIG INSPECTION WITH CHARLES.

1145: MINI-CREW IS STILL LEVELING AND SETTING UP. WILL START DRILLING AFTER LUNCH. KM RETURNS TO MW-40.

1150: SHANNON, WYN, & ZANE COME OVER TO SEE THE WORK. NEIL UPDATES THAT GPR SURVEYOR WILL BE AVAILABLE NEXT WEEK (INSTEAD OF TOMORROW). WYN PUTS ON GLOVES TO LOOK AT SOIL CORE.

1230 VA LEAVES.

1240 DRILLERS TAKE LUNCH WHILE JASON FINISHES LOGGING, THEN

1250 CODMSMITH ALSO TAKES LUNCH.

1315 CALL FROM WYN. WANTS TO MEET CHARLES AT 2PM TO CHECK OUT ROAD TO MW-44. KM CALLS CHARLES, THAT IS FINE. THEY'RE READY TO ~~GO~~ DRILL NEARLY

KM 5/23/24

Rite in the Rain

1330: KM GRABS SAMPLING FORMS & EQUIPMENT AND MEETS CHARLES AT MW-43. CHARLES WILL BREAK SEAL THAT BADGER SET AND THEN USE BENTONITE GEL TO SEAL TUB TO ASPHALT. NEIL IS GETTING A HYDROPHOBIC FILTER FOR MY PID FROM THE CONNEX

1415: MET WITH NEIL, BOBCAT GUY, KM & CHARLES TO SEE MW-44 LOCATION. WYN JOINS US. YJ WANTS UTILITY LOCATOR TO REMARK LINES. RAMP LOOKS GOOD - CAN THE SHAVE JUST A BIT MORE OFF THE INFLECTION POINT? (MY WORDS, NOT THEIRS). WIN TELLS THE VA EARTH MOVER TO SMOOTH THE SLOPE OUT MORE.
KM & CHARLES RETURN TO MW-43

1425: BEGIN DRILLING AT MW-43 WITH MINI RIG. AT 10 FT BGS YJ BEGINS BAGGING SOIL - I REALIZE AFTER-THE-FACT THAT WE HAD CLEARED TO 12' BGS HERE, SO 10' BAG IS JUST BACKFILL. YJ REALIZES THEY HAVE THE WRONG SIZE BAGS FOR SAMPLE CORE. ZACH GET ANOTHER SIZE. MEANWHILE NEIL CHECKS IN & A VA WORKER ASKS AS DRILL RIGS (FORMER DRILLER)

1625: JASON'S CREW AT MW-40 THINKS THEY HIT WATER AT ABOUT 135' BGS. HE GETS KEYS TO CONNEX FROM ME TO GRAB A WATER LEVEL METER.
CHARLES' MINI-RIG CREW GETS 28 TO 36' RUN WITH A BOULDER ON BOTTOM FILLING THE SHOE. SOIL CORE COMES OUT STEAMING

1725: NEIL IS HEADING TO THE AIRPORT, HE WILL LOOK FOR THE FENCE DELIVERY (I WAS SENT A TEAMS MESSAGE)
NEIL WOULD LIKE SOIL CORES DUMPED IN THE HOPPER AFTER TODAY (JUST COVER TODAY). IF WE GET A PERCHED WATER SAMPLE AT MW-40, THEN EITHER OVERNIGHT OR ASK WASATCH TO HOLD OVER HOLIDAY WEEKEND. SATURDAY LAB DELIVERY MAY NOT BE AVAILABLE DUE TO MEMORIAL DAY.

1735: DRILLERS AT MW-43 STILL GOING. MW-40 SEEMS TO BE CLOSING UP. KM 5/23/24 NEIL PACKS UP & OUT

1750: DRILLERS BRING 40-48' CORE. ONE BAG IS WET BUT CHARLES SAID HE ADDED WATER. KM BEGINS PID SCAN & PHOTOGRAPHS.

1800: DRILLERS LEAVE.

1820: FINISH LOGGING. COVER SOIL CORES IN PLASTIC. JW & DS LEAVE

1900: KM RE-ARRANGED CONNEX BOXES & LEAVES

5/23/24 Rite in the Rain

PERSONNEL: K. MYERS, J WAGENMAKER (COM Sm.) CHARLES WINLAND, DIEGO DIAZ, SPRING PETERSON, ZACHARY OLMSTED, ERNESTO GODINEZ, TIM ADAMS (YJ) ~~JASON KM 5/24/24~~ RYAN (WASATCH) EXPECTED

PLANNED ACTIVITIES: DRILLERS TO CONTINUE AT MW-40 & MW-43. RYAN TO TRANSFER WATER OUT OF SOIL CUTTING CONTAINMENT AND ALL WATER TO GO IN BLACK POLY TANK IN IDW YARD (~~PER~~ NEIL). DRILLERS WILL CLOSE UP FOR HOLIDAY WEEKEND AND SHIFT CHANGE. ALL CORES TO GO IN SOIL BINS.

WEATHER: MOSTLY SUNNY, 49°F, HIGH OF 70°F, NO WIND

PPE: LEVEL D - KEEP EYE OUT FOR OTHERS. EVERYONE HAS HARD HAT, HIGH VIS, EAR PLUGS, SAFETY GLASSES, STEEL TOES.

0700: YJ & COM MEET ON SITE. H&S TAILGATE.

0730: DRILLERS WARM UP RIGS. RIG CHECKS (KM 5/24/24) JW & KM OPEN GATES TO IDW YARD (FOR TRAILER STORAGE) AND GET PIDS & CALIBRATE.

0800: CHARLES CREW ADVANCES CASING AND DUMP CORES IN HOPPER.

0820: CALL NEIL TO LET HIM KNOW WE WILL NOT HAVE A BUCKET FOR THE BOBCAT TODAY. NEIL STILL WANTS RYAN TO GO AHEAD AND TRANSFER WATER. HE CAN BUY A SUBMERSIBLE PUMP SINCE THE ONE ON SITE IS BROKEN.

0830: JW CONFIRMS RYAN IS NOT ON SITE YET. KM CALLS JOHN TO ASK FOR A SUBMESIBLE PUMP. JOHN SAYS THEY HAVE ONE AND DO NOT HAVE TO BUY ONE. HE CATCHES RYAN WHO WAS JUST HEADING OUT.

0845: KM ORGANIZES SCANNED DOCS INTO ACCORDIAN FOLDER & SCANS FORMS FROM YESTERDAY. DRILLERS WAIT ON HOPPER BEING EMPTIED, FUEL MINI RIG.

0910: MINI RIG DRILLING CONTINUES (AT 50' BGS AT MW-43. KM MEETS RYAN AT LAYDOWN AREA - SHOW HIM THE IDW YARD. HE IS USING A 12V BATTERY TO POWER THE PUMP. WE PUT ONE OF OURS ON TO CHARGE TOO. KM PICKS UP THE THIRD PID FROM CHARGER. JASON'S PID ISN'T READING CORRECTLY. WE'LL CALIBRATE & EXCHANGE.

Rite in the Rain

0730 GRAB FIELD CAMERA TOO. BATTERY STILL WORKS AFTER CHARGING.

0945: 48-58' CORE COMES OUT AT MW-43. (MW-40 IS AROUND 150').

1030: DRILL CREW AT MW-40 MAY HAVE HIT WATER. THEY'RE CHECKING NOW

1045: NEIL SAYS TO SAMPLE IF POSSIBLE OR IF THEY'RE IN SILT/CLAY, GO 10 FT MORE AND TRY FOR A SANDIER UNIT

1130: I CHECK IN WITH JASON AND IT WAS JUST MOISTURE - NO WATER TO SAMPLE.

1150: DRILLERS ON MW-43 TAKE LUNCH. KM FINISHES LOGGING TO 88 FT BGS.

1250: CHARLES GETS A FORKLIFT TO PUSH TRAILER INTO IDW YARD. THEN CLOSE UP RIG, DUMP SOIL CORES. JASON LABELS BINS. ZANE SENT A PIN FOR A GOOD DUMPSTER TO USE.

1340: DUMPED 4 BAGS - FOUND OUT IT WAS THE WRONG DUMPSTER BUT ZANE SAYS IT'S OK - DIDN'T TAKE UP MUCH SPACE. WE HAVE ONE MORE, TOO.

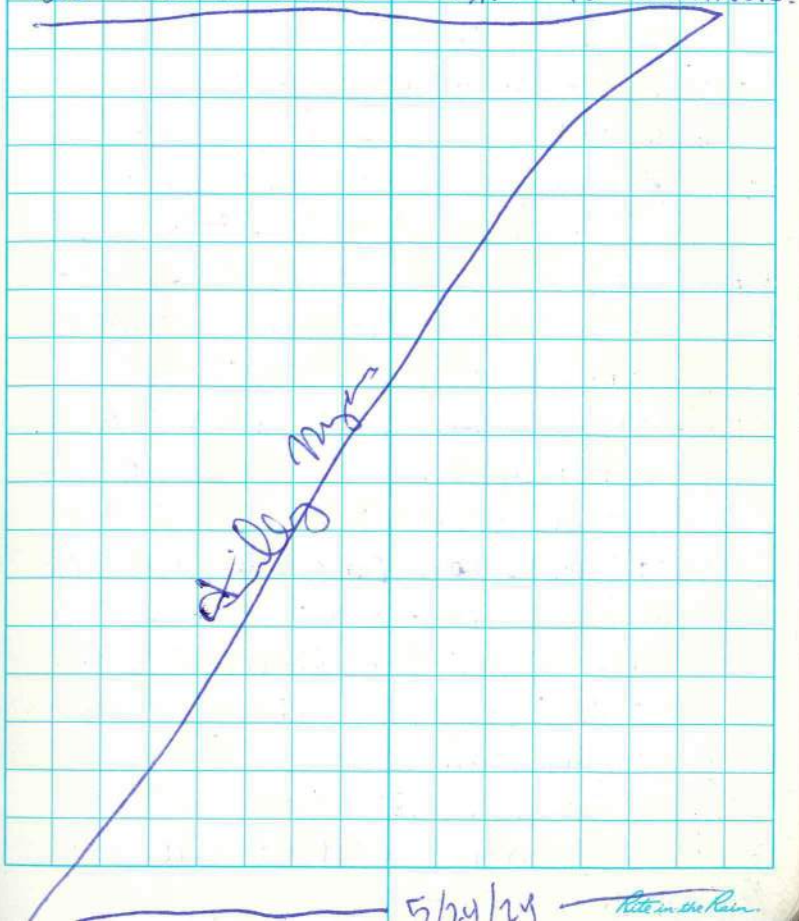
1355: SPRING DUMPS IN CORRECT DUMPSTER BY BUILDING 7.

1405: DRILLERS LEAVE. COM SMITH WILOADS SUPPLIES

1405 CONT'D: INTO CONNEX. ~~JA~~ KM 5/24/24 RYAN WITH WASATCH IS STILL PUMPING WATER OFF 2nd CONTAINMENT.

1440: CATCH UP FIELD NOTES AND FINAL CHECK. CAMERA IN CONNEX HAS MW-43 PHOTOS FROM TODAY.

1500: LEAVE SITE. RYAN TO CONTINUE.



5/24/24

Rite in the Rain

Personnel: Joe Miller (JM), Kaća Savatic (KS), Jessie Yarch (JY), Shawn McGuire (SM); Chris Hill, Zachary Olmsted, Timothy Adams, Ernesto Godinez, Luis Villa, Shane McNulty (yellow jacket)

Planned Activities: MW-40 @ water likely and 193ft, GPRS coming out for MW-41, MW-43 @ 88 ft bgs, soil material should go ~~off~~ into roll-off by rigs and not one (KS staying) currently at solar panels, decon water to go in black tank (poly), badging for JM & SM

PPE: Level D

Weather: sunny, light breeze, 64°F, chance of T-storms later

07:10: Tailgate meeting - lot of logistics b/c new driller but helpers were here last shift

0750: Drillers arrive to both rigs. Entire CDM crew @ MW-40 so KS and JY see bailor sampling

0850: KS arrive to MW43; Rig is running with drillers ready to go

0910: KS completed checklists and gives drillers okay to start

0914: drillers start, KS calibrates PID

0928: resume drilling on MW43

0944: hit something hard at ~98'

1155: Drillers break for lunch, able to get

out 20 feet. Hit another boulder with second run of the day that slowed things down

1220: KS PID was not shutting down; JM went to grab spare

1235: Old PID died, so JM calibrated spare serial# 0103668X; drillers back from lunch

1250: SM (driller) let me know a valve isn't pressurized, so attempting to fix; did not seem to think super major; seems okay

1310: second bucket of water is added and ~117ft bgs - believe it is yet another boulder

1313: CH came from other rig to help, more water was added

1405: JM spoke w/ Pine Environmental and solution is to send another replacement

1440: lot of water, but likely due to how much water was added during previous run; fourth run of day @ MW43 only 8ft (125)

1455: ZO takes forklift to dump out cuttings

1631: casing is in completed 5 runs to 132ft for MW43. KS, LV, ZO cleared soil borings into hopper and disposed

- Laborer Jobs in the Rain

1640: met w/Shane - it is ~~no~~ a hose that appears to not be screwed on correctly, but not a hydraulic one - he noted oil on side and will open up rig head tomorrow

KS 5/29/24

1645: ~~58~~ drillers leave MW43

1055: KS, JM, SM, JR met and unloaded at connex boxes

What do we need for tomorrow: ice, box cutters, camera, daily report (SM), sample tracker (JM), email lab with short hold time (JM), clipboards

Hans reminded to use TS1 for charge code

Sampler post-sampler has to be deconned after sample - just with warm water

LATE ENTRY per JM

0930: Rachel Kubina and Kevin GPRS, mark out GW41

1030: mark out IW1 and MW42

1500: Off-site

1745: COM Team leaves site and KS to Home Depot.

Katarina Savatic

5/29/24

COM Smith:

PERSONNEL: Katarina Savatic (KS), Joe Miller (JM), Shawn McGuire (SM), Jessie Yaich (JR); Yellow Jacket: Chris Hill (CH), Zachary Olmsted (ZO), Luis Villa (LV), Shane McNulty (SMc), Timothy Adams (TA), Ernesto Godinez (EG)

PLANNED ACTIVITIES: GPR guy to walk 41 and alternate, roll-off change will come tomorrow, MW43 at 132' and might hit water, MW40 at 255'

PPE: Level D ~~to~~ to start

WEATHER: sunny, ~ ~~60~~ °F KS 5/30/24 but will warm up, light breeze

0705: H&S Tailgate Meeting

0735: COM team went to connex boxes to pick-up gear

0735: Drillers and KS on-site at MW43; KS and JM set-up; rig inspection

0745: KS an SMc (driller) have discussion about hose and looks good; running low on 8in casing, so KS confirmed w/JM to use 8in until 280' and then go to 6' casing

KS signed off on drillers daily log report; completed daily checks

- Katarina Savatic

Rite in the Rain

0828: resume drilling on MW43

0937: slightly late with this due to KS logging, but Shane (SMc driller) came to look @ first run where recovery was 132-138' - 4 bags where brought out and one of them was scrapings from side; JM agreed; SMc ~~played~~ KS 5/30/24 adjusted tight casing an ZO went to collect a couple of 8" casings and brought to site

1040: corebarrel needs to cool off, sediment is getting stuck maybe?

1044: running water down core barrel; note in hole, on pavement, but placed bucket underneath to catch water

1145: ZO to grab more water for rig; break for SMc

1150: SMc resumes drilling

1245: drillers break for lunch

1315: drillers resume from lunch

LATE ENTRY: 1230: ZO returns with rig water

1509: Discussion with Shane: extra 9" casing from MW40 was brought over to MW43 (completed before lunch), so will continue w/ 9" casing; asked and this extra casing from MW40 was

- Katarina Jones

not used, so no decon

1512: second run post lunch 158'-162' bags ~~compl~~ KS 5/30/24 sample in bag, Shane wants another 6ft before next casing

1525: ZO uses forklift to empty out hopper

1600: third run post-lunch 162'-168' bagged

1602: ZO returns

1620: rig turned off and cleaned up

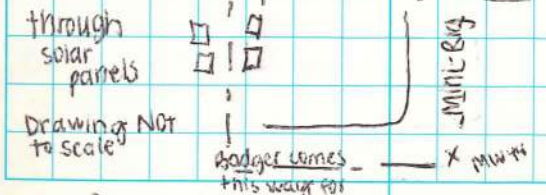
1' soil boring bags

1630: For tomorrow - collect 3 soil jars (4oz) from roll off; JM will provide details

1645: drillers leave MW43

1650: COM @ connex boxes; To DO: return PID to field environmental and do this with sampler, organize completed forms, sample roll-off (or knows where), Wasatch may come Mon/Tues, Wyn is VA contact, big rig to EW01 and mini rig to 41/44

1719: took walk on gravel lot and second hydraulic spot will be reuse MW44 - yellow flag is NOT gas line



- Katarina Jones

Rite in the Rain

1728: drive - MW45 just past High School Musical HS

1745: CDM leaves site and KS to ACE



5/30/24

PERSONNEL: Joe Miller(JM), Shawn McGuire (SM), Jessie Yaich (JY), Katarina Savatic(KS), Chris Hill (CH), Timothy Adams (TA), Ernesto Godinez (EG), Shane McNulty (SMc), Zach Olmsted (ZO), Luis Villa(LV)

PLANNED ACTIVITIES: MW40 - groundwater sample and almost to depth; MW43 - continue drilling and might hit water

PPE: Level D

WEATHER: sunny, 50ish to start and no concerns

0705: H&S Tailgate Meeting

0725: CDM Heads to connex and JY grabbing water and ice

0738: KS and SM arrive to MW43 and MW40, respectively, and JM leaves site

0815: trip in starts; ZO takes one of core barrels to drill a hole into it for minimizing water getting to every other core barrel

0832: drilling resumes

0840: SMc making phone call; his boss called

0848: back to drilling

Katarina Savatic
Water in the Rain

0849: huge hiss and SMc stopped; calling Chris
0851: CH arrives at MW43
0857: CH operating mini-rig; lots of violent shaking and hiss continues
0901: looks like CH got core barrel down
0905: talked with CH, said he was aggressive with rig to get through lithology; CH leaves MW43
0912: Rachel Kubina (Wasatch) arrives on-site with spare PID
0935: Run #1 of day - 168'-178' - bagged
1023: (SLIGHTLY LATE) ZO returned while logging and also got more water for rig with forklift
1033: SMc tightening something on head; ZO finds lone screw near hole, placed bucket over hole to tighten/investigate (drilling stops)
1039: Touched base with SMc, he says he can see where screw needs to go and that it is likely due to being more aggressive with drilling
1045: more tools being brought out and opening up head
1049: CH back to mini-rig
1051: CH leaves and SMc begins to trip out
1109: Run #2 of day - 178-188 - bagged

1125: SM came over to say fencing was here; KS contacted Neil Smith to find where to go
1153: SMc (driller) opened up head again, KS 6/1/24 ~~bolt~~ pin that keeps head straight popped off, placed bucket over core barrel
1157: rig turned off
1220: CH arrives to look and KS to eat lunch and helpers go to lunch; CH and SMc looking at rig
1250: talked with CH, tread on pin is completely worn down and have two options: 1) ship part from OH or 2) get part from different rig from Yellow Jacket Yard in Phoenix; preliminarily gave estimate of running on Tuesday
1255: KS heads to MW40 to sample bailor while MW43 crew breaks down; CH unable to get ahold of mechanic or his supervisor
1338: MW43 crew is done at mini-rig and CH was able to get ahold of mechanic and sent pictures
1354: KS leaves MW43 and heads to MW40; Yellow Jacket crew from

MW43 heads to yard to clean-up

1403: CH said part will be shipped from Ohio and will be here tomorrow

1420: KS an JY arrive at connex boxes to unload and throw away ~~things~~ trash found in connex boxes; packaged samples KS 5/31/24

1600: KS and JY return to MW 43 and get update that part will come some time in morning to mid-afternoon.

1620: Drop-off cooler + PID

1635: Return to connex boxes

1640: CDM departs, KS to unload connex trash and drop table/chair at MW43

LATE ENTRY: At 13:30 KS talked with Neil Smith about rig problems on MW43 and looking for colortech tubes in connex boxes.

Katarina Sarate

5/31/24

-Katarina Sarate

LATE ENTRY: KS dropped off table and chair at MW43 at ~ 16:50 and ran into SMc and ZO who were still cleaning up containment yard. KS stayed until they left until 17:10 and notified Shawn McGuire

0815: KS uploading soil boring pics and fieldbook scans from hotel since part for MW43 arrival time is 10:00

0930: KS arrives to MW40 and touches base with SM. Need to find SOW and KS takes connex keys

0940: KS runs into ZO and LV in containment yard - they are working on emptying the hydrovac clearings from the second location (closer to solar panels). They finished the first yesterday, but left some mud to let it dry - likely let it dry out because no longer using that containment and once dry, can put into the hopper. SMc went to go pick-up part and once he returns on-site, crew will head to MW43.

1010: KS dropped off SOW to SM and gave back keys; returned to connex boxes

10:50: checked in at containment yard, no update from Shane

-Katarina Sarate

6/1/24 KS

1135: did not see ZO/LV at containment yard, messaged SMc at 1015, but still no update

1150: ZO returns to containment yard - was refilling water tank with forklift x2

1230: SMc messages back and is heading to site

1245: drillers arrive on-site to MW43 and LV and SMc begin work on mini-rig

1400: replacement part did not come with bracket so drillers are trying to weld/hammer old bracket straight

1440: CH to MW43

1445: CH leaves

1450: lightening strike, 30-minutes downtime, CH and SMc leave site

1548: back working on the rig at MW43

1615: rig turned on

1625: mini-rig is running smoothly and SMc began to trip out. Due to time, KS said to trip up to where next run is and we'll bag that first thing tomorrow.

1633: shutdown due to another thunder strike, MW40 crew came over to MW43

1640: drillers leave MW43

Katarina Savatic

6/1/24

6/2/24 KS

PERSONNEL: Kaca Savatic (KS), Shawn McGuire (SM), Jessie Raich (JR); Yellow Jacket: Shane McNulty (SMc), Zach Olmsted (ZO), Luis Villa (LV), Chris Hill (CH) Tim Adams (TA), Ernesto Godinez (EG)

PLANNED ACTIVITIES: MW40 grout and continue well installation; MW43 - trip out and @ 188', water will likely be encountered

PPE: Level D

Weather: Overcast, ~60°F

0710: H&S Meeting

0715: JR running to Lowe's b/c MW43 at water soon, so need more string

0730: KS to MW43 and connects with JM about sampling

0735: KS setting up and rig ready to go

0742: continuing to trip out

0753: Run #1 of day 188'-198' bagged; no water, moist in places

0926: core barrels came up with nothing, likely due to sediment being wet; plan is to switch to auger bit (flap one)

0927: Shane leaving MW43 to grab ~~Deco~~ different bit; rig shut down

KS 6/2/24

- Katarina Savatic

0940: Rig back up - correction: NOT an auger bit, flapper

1005: ZO takes one of the water tanks

1027: last 30 feet of corebarrel, lots of water

1034: and to last core barrel is out and extremely muddy; plan to get sample out and let it sit for 10-20 minutes before going in to sample with bailor

10:41: Run #2 of day 198'-209' bagged - looks wet → for sure wet

11:02 let well settle and JY collected DTW

see pg. 79-80 KS 6/6/24 ~~199.50~~ 196.2'

1110: MW43-GW060224-209 collected by JY and field duplicate done as well; told drillers to wait to trip back in to make sure enough sample was collected

1125: begin trip back in

1140: CH ~~feel~~ KS 6/6/24 as driller

1145: JY to get ice for samples

LATE ENTRY: sample bottles we had to use unpreserved bottles because kept fizzing; JY measured DTW

see pg. 79-80 KS 6/6/24 @ ~~199.50~~ 196.2'

1220: talked with CH - he thinks rig should be readjusted before we switch to 8" casing; from previous shift, casing

- Katarina

might not be fully straight - can do at end of day or tomorrow AM

1244: Run #3 209-218' bagged

1256: drillers take lunch

1325: drillers resume

1400: KS to chat with SM about sampling logistics; CH back to MW43

1415: CH takes over drilling - looks like hitting another rough patch

1425: collected field blank with JY EB03-GW-060224

1439: began trip out and CH looking underneath rig head; CH tightens some screws

1443: resume tripping out

1453: CH leaves and SM resumes as driller

1513: Run #4 218'-228' bagged

1525: discussion with SM and CH - going to trip in the sampler and let it refill overnight because this run had a semi-confining layer in it and don't want to wait for next run where might run into large confining unit like MW40

1530: JY starts returning supplies to connex; sampler is deconned

16:00: trip in of sampler

- Katarina

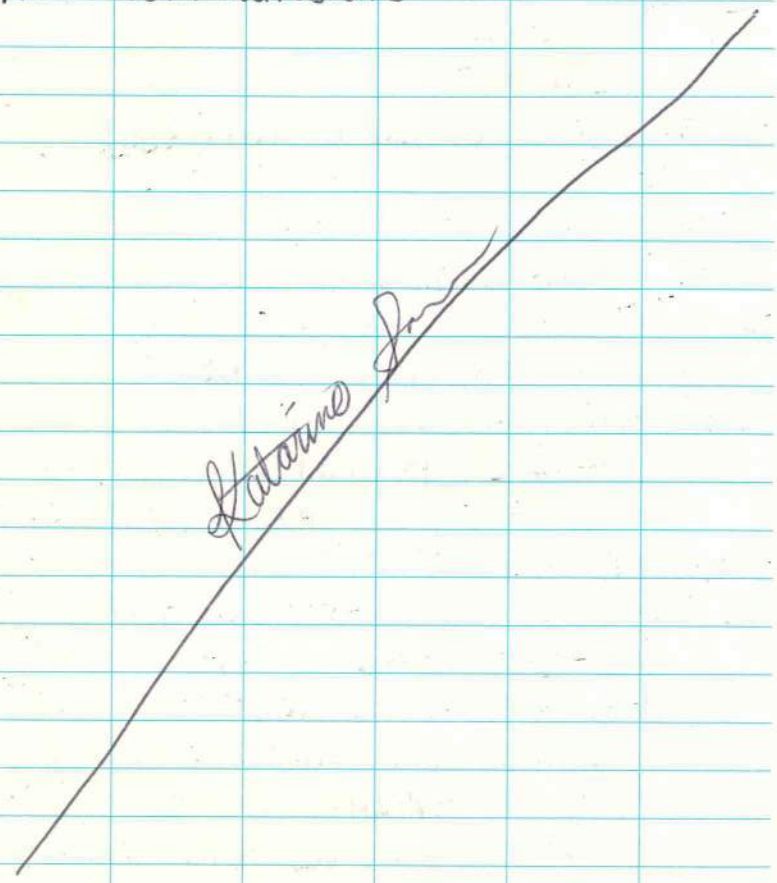
6/2/24 KS

1620: KS, JY, and SM at MW43 and discussing what we'll need for the week - ~20 VOA (HCl preservative), so reached out to JM

1643: JM will order more vials

1645: drillers leave MW43

1700: CDM leaves site



6/2/24

6/3/24 KS

PERSONNEL: Kaća Savatic (KS), Jessie Yaich (JY), Shawn McGuire (SM); Yellow Jacket: Shane McNulty (SMc), Zach Olmsted (ZO), Luis Villa (LV), Tim Adams (TA), Ernesto Godinez (EG), Chris Hill (CH) @ 0731

PLANNED ACTIVITIES: MW40 - continue to grout; MW43 sample first things and continue drilling

PPE: Level D

WEATHER: Overcast, possibility of rain

0700: H&S Meeting

0710: drillers head to wells and CDM to connex boxes

0720: CDM to MW43 to set-up

0729: Rig started up, but SMc needs to wait for CH; KS to fill out checklist, inspections and continue to set-up

0731: CH arrives to MW43

0748: CH informs KS that coring was dropped and they are currently trying to fish it out. SMc, ZO, and LV are all manually moving corebarrel while CH is holding it up with winch.

0752: KS informs SM; should advise drillers to keep open line of communication; from

what I understand, this happened yesterday, but will confirm

0810: CH gives me thumbs up that they fished out; CH is drilling

0820: JY and KS did not hit water, so pulled up water level meter - no sample collected. Drillers plan to continue

0830: KS calibrated PID

0936: one of the ~~core barrels~~ rods KS 6/3/24 (bottom) was damaged (removed - took pic); CH driller, but replaced and continued to trip out

0940: tripping back in? maybe due to core barrel damage

0951: drilling resumes by CH as he tripped all the way back in - slow morning

1001: ZO takes damaged ~~core barrel~~ rod KS 6/3/24 away from MW43

1004: touched base with shane about broken rod - they were drilling when it snapped, so had to trip up and replace that rod with one that had a cap and then trip back in; CH is drilling while Shane gives update

1009: ZO returns to MW43

1020: broken ~~rod~~ guard KS 6/3/24 being tripped out - attached to cap; took picture

1024: talked to CH, part of the rod might be in first bag, so KS plans to wear tear-resistant gloves when dealing with last bag; CH leaves ~~site~~ MW43 KS 6/3/24

1033: Run #1 228'-235' bagged; not looking super wet; SMc as driller 196.5'

1052: measured DTW @ ~~199.80~~ ← this is KS 6/6/24 see pg. 79-80 from top of pinch point, as was yesterday

1058: letting sit for 10 minutes and then we'll send the sampler down

1114: miscommunication on KS part - drillers sending sampler down now; attempting to sample from 235'

1140: last rod is attempting to go in with sampler and we have about 5 feet of stick-up; waiting 5 minutes and then will attempt

1145: drillers take lunch

1158: no water, bailor did not even look wet

1205: called SM and let him know

1210: called JM and got feedback - will look at sampler when it comes back up and potentially redeploy

1215: drillers resume and communicate with Shane to let me look @ sampler when it comes out

1233: rods that are coming out now during sampler trip up look wet

1236: sampler out — 220' casing

1239: KS calls SM to come over — 235' depth

1247: SM and CH come over and all look at sampler - it is wet and looks silty and deciding on whether to deploy sample; decide to not redeploy, there is no casing and sampler cannot go as deep as it just was. Plan is to get sampler out, add more casing and attempt to sample with next 10 foot-run

1249: Zane on-site and has issue with location of soil bin - SM leaves to go address

LATE ENTRY 1230: JY samples soil bin

IDW01-SB060324

Also LV went to decon sampler

1310: LV back with sampler

1329: CH ~~be~~ KS 6/3/24 to MW43

1420: Run #2a 235'-238' bagged

1422: " 2b 238'-248' bagged

1430: hit clay - decided no sample; dry-to moist @ 248'

1538: light drizzle starts

1605: SM comes to MW43

- Kalaunu Lau

1620: CH to MW43

1623: Run #3 248'-258' bagged

1641: tripping in sampler to leave overnight

1712: rig-off and clean-up

1735: CDM leaves site; drillers still in parking lot but done working

Kalaunu Lau

6/3/24

PERSONNEL: COM - Kaca Savatic (KS), Shawn McGuire (SM), Jessie Yaich (JY); Yellow Jacket - Shane McNulty (SMc), Tim Adams (TA), Ernesto Godinez (EG), Zach Olmsted (ZO), Luis Villa (LV)

PLANNED ACTIVITIES: SM team to start at EW01 and KS team to continue @ MW43 with sampling; got to 258' yesterday

PPE: Level D

weather: A bit overcast, high of 75°F

0701: H&S Meeting
0720: COM meets drillers @ MW43
0737: Rig turned on, KS calibrates PID
0732: Shane let us know we are okay to sample; ZO goes to decon 8" casing
0746: KS and JY deployed water level meter to bottom x2 (~162') and there was no water; told Shane to trip up
0747: trip up of sampler
0750: discuss with SM, we will deploy water level meter after sampler comes up - communicated this with shane
0813: sampler comes out and looks wet/ sludgy (took pic)

- Katarina Savatic

0822: Shane stops 1/10 foot every 10 secs
0826: WL ~198, but continually dropping over the 5 minutes we were measuring
0828: decided to let it settle for 10 minutes
0830: JY and KS discuss ~~their~~ KS 6/4/24 logistics over water level meter and make plan to just sample with baller
0838: attempt to take another water level measurement and it is still dropping, ~~plan to t~~ KS 6/4/24; reaching out to SM and Joe Miller to see if we should sample KS 6/4/24 if water level continues to drop
0850: collected water sample by KS
MW43-GW060424-258 in HCL bottles
JY attempted another water level measurement around ~~207~~ 203.7 KS 6/6/24 see pg. 79 & 80, but probe kept getting muddy
0858: called Shane to let him know we are done and he said they were still deconning 8" casing
0904: JY goes to get ice
0930: JY returns
1034: ZO arrives with forklift with new casing
1044: unloading the casing
1100: tripping in casing

- Katarina Savatic

1206: finished trip in and casing is @ 260' drillers getting rid of forklift and trailer and will take lunch afterwards
1210: forklift and trailer leave MW43
1250: drillers return to MW43 and immediately work to trip in
1327: Shane stops to let me know this run will be tight against the casing
1328: ~~Begins to trip out~~ KS 6/4/24 Adjusts the casing and continues to trip in
1336: Starts tripping out
1402: when core barrel w/ sample came out, the contents barely filled a 5-gallon bucket halfway; Shane said he was clearing out the casing; bit was switched out to one to better hold contents in barrel



looking down bit

1404: tripping in
1430: JY heads to connex boxes to begin preparing COCs and cooler
1443: did not look like full 10 ft run; hit a rough spot, so tripped out
1509: looking very wet
1513: Run #1 of day 258'-264' bagged
1518: bottom bag of run is silty, no gravel

-Katarina Sa

really and dry - not sending sampler down

1609: Run #2a 265'-268' KS 6/4/24 bagged
1619: Run #2b 268'-278' bagged
1632: talked with JM, CH and SMc and we hit a wetish SILTY SAND W/GRAVEL @ last foot - going to send down sampler, attempt water and then case
1701: sampler tripped in
1710: ZO to empty hopper, rest of crew cleans up MW43
1715: MW43 crew done with clean-up
1723: went up to Shane to see what deal was because no one was really doing much
1724: drillers leave site

Katarina Sarratic

6/4/24

PERSONNEL: CDM- Kaco Savatic (KS) Jessie Yaich (JY), Shawn McGuire (SM); Yellow Jacket- Chris Hill (CH), Shane McNulty (SMc), Luis Villa (LV), Zach Amsted (ZO), Tim Adams (TA), Ernesto Godinez (EG)

PLANNED ACTIVITIES: continued at MW43, EW01, badger will be on-site to clear MW41, and potentially sand down flush mount @ MW40

PPE: LEVEL D

WEATHER: sunny, 61°F with high of 88°F

0700: H&S Tailgate Meeting
0710: CDM to connex to grab supplies and drillers to wells
0720: CDM to MW43
0723: Rig fired up
0728: KS signs drillers daily report
0738: KS and JY measure DTW @ ~~276.35'~~ ~~279.15~~ KS 6/6/24 see pg. 79-80 290.05' and DTB b/w ~~288.9~~ - ~~285.6'~~ KS 6/6/24 see pg. 79-80.
0740: deploy bailor - hear a clank (like it hit bottom) pulled up and last foot of bailor was slightly wet, but empty so decided to redeploy
0748: deployed a second time and let

bailor sit at depth for 1 minute; pulled up and no water still (took pic)
0755: Tell Shane to trip up to look at sampler
0820: sampler looks wet and sludgy
0828: measured DTW @ ~~217.30~~ KS 6/6/24 214' see pg. 79-80
0830: collected water sample by JY
MW43-GW060524-278
unpreserved bottles
0838: Tell Shane good to start tripping in again; ZO to decon sampler
0848: The second to last core barrel was dropped on ground; SMc did some hammering on the top of the rod and SMc and LV had to manually screw it in
0859: ZO returns with deconned sampler
0921: drilling of next 10 foot run continues
0942: tripping out
1008: the core barrel that was dropped is having some issues getting detached from rig head
1012: got it off
1015: Run #1 278'-285' bagged
1028: want to send sampler in because wet and mostly SILTY SAND w/ GRAVEL

1050: Sampler tripped in; waiting 10-minutes
1105: DTW 264.10' top of Riser (5.5 ft)
1115: collected sample
MW43-GW060524-285
unpreserved
1125: KS to run to connex because we want samples for colortec
1135: successful filling of 4 VOA vials for colortec
1138: drillers resume with tripping up sampler
1202: LV to decon sampler; tripped out
1203: tripping in next run
1218: Ryan (maybe with badger) stopped by and ~~had~~ KS 6/5/24 was running into boulders during pre-clearance. Will call JM
1219: LV returns deconned sampler
1230: KS and JY collect equipment blank
EB04-GW060524
1238: core barrel was dropped; looks like team is fishing
1240: I told Shane to take lunch because it is hot out; he says it should be an easy fish out
1243: John (Wasatch) drops off cooler; JY takes to connex box
1253: tripping out; appears to have gotten the connection
- Later Sun

1317: stopped Shane - core barrel was empty because they were fishing, so starting to trip back in; I advised to take breaks due to heat
1338: Shannan and Zane from VA stopped by MW43 to check on progress. Asked about depth (responded 285') and TAT for groundwater samples (48-hours)
1340: Shannon and Zane leave MW43
1345: SM came to check-in @ MW43
1353: tripping out
1400: Ryan from Wasatch stopped at MW43 to ask about exact location for hydrovac. My notes indicate it is the yellow flag that is NOT a utility flag. Connected him with Shawn to confirm.
1429: Run #2a 285'-288' bagged
1441: Run #2b 288'-298' bagged
1458: bottom of last bag is a WET gravel; decided to send casing down and then sampler to sit overnight
1526: Shane put in casing and said he wouldn't have a problem sending sampler down w/o cleaning
1555: KS, ZO, LV cleaned up soil bags
- Later Sun in the Rain

1556: ZO to empty out hopper with forklift
1601: KS measured depth from ground surface to where we were measuring water level 3.3 ft ← I need to subtract these from my measurements!
1602: Shane needs Chris to look at something on rig
1606: Chris Hill (CH) to MW43
1611: get sampler in
1615: ZO returns with empty hopper
1618: forklift parked; drillers look to be done at MW43; KS to drop off gear at connex
1620: Shane said they were all done
1625: KS returns to connex
1630: COM attempts color tec test; decide to return early
1715: COM leaves site

Katarina Savic

6/5/24

PERSONNEL: COM - Kaca Savatic (KS)
Jessie Kaich (JK), Shawn McGuire (SM)
YJ - Tim Adams (TA), Ernesto Godinez (EG)
Zach Olmstead (ZO), Luis Villa (LV)

PLANNED ACTIVITIES: continue @ MW43 - currently at 298' and nearing total depth; EW01 will likely hit water today; drillers off-site @ 2pm

PPE: Level D

WEATHER: HOT, high of 94°F, Sunny

0600: KS and JK arrive and get through 2 attempts of color tec on sample from 285 → no color changed observed
0705: H&S Meeting
0712: Drillers and COM arrive to MW43
0723: Rig turned on
0735: deployed water level meter twice, no water, DTB was 297.7'
0740: tell Shane to trip up and we will sample with casing
07:55 KS updates DTW/DTB measurements to incorporate casing - see next page!

Sat Sitting in the Rain

KS

	Date	(feet) Original Meas	(feet) Updated Meas	Sample ID
DTW	6/2/24	199.50	196.2	MW43-GW060224-209
DTW	6/3/24	199.80	196.5	NA
DTW	6/4/24	~207.0	203.7	MW43-GW060424-258
DTW	6/5/24	279.65	276.35	NA
DTB	6/5/24	288.90	285.6	NA
DTW	6/5/24	217.30	214	MW43-GW060524-278
DTW	6/5/24	264.10*	264.10*	MW43-GW060524-285
DTB	6/6/24	~~301~~ 297.7 *	297.7*	NA

*correct already in logbook

0809: Sampler out - will wait 10 minutes to let settle

0820: DTW 214.1' ← factored in to top of casing

0825: collected sample by JY
MW43-GW060624-298
HCL bottles

0827: told Shane we are good to go

0831: JY asked about duplicate, but we have only had 5 unknowns since last duplicate

0855: ZO deconned sampler

0940: Run #1 298' - 307' bagged

0944: casing going in

1045: Chris Hill to MW43 - he says if we hit total depth today to just cap the hole; thinks you should case and clean out when we a) have time and b) know exact screen depths

and right now, drillers plan to be done by 2pm

1054: plan to update JM (Joe Miller) when next run comes out

1056: SM says they are done at EW01 for day and heads to lay down yard

1110: Run #2 307'-318' bagged

1112: told Shane to send down sampler per texts with Joe Miller

1152: sampler in and will wait 10 minutes

1205: DTW 260.82

1210: unsucessful bailor attempt - redployed

1220: collected sample by KS/JY
MW43-GW060624-318
unpreserved VOAs

1232: trip up of sampler commences

1234: KS decons both water level meters

1250: KS and LV cleanup soil borings

1301: trip up complete and ZO goes to decon the sampler

1308: KS finishes deconning water level meter; black one has some gross stuff still on it

1318: SMc and LV go to throw out trash

1319: ZO returns with deconned sampler

1325: collected equipment blank
EB05-GW060624

1330: KS done at MW43 and heads to connex to unpack and clean; drillers gone

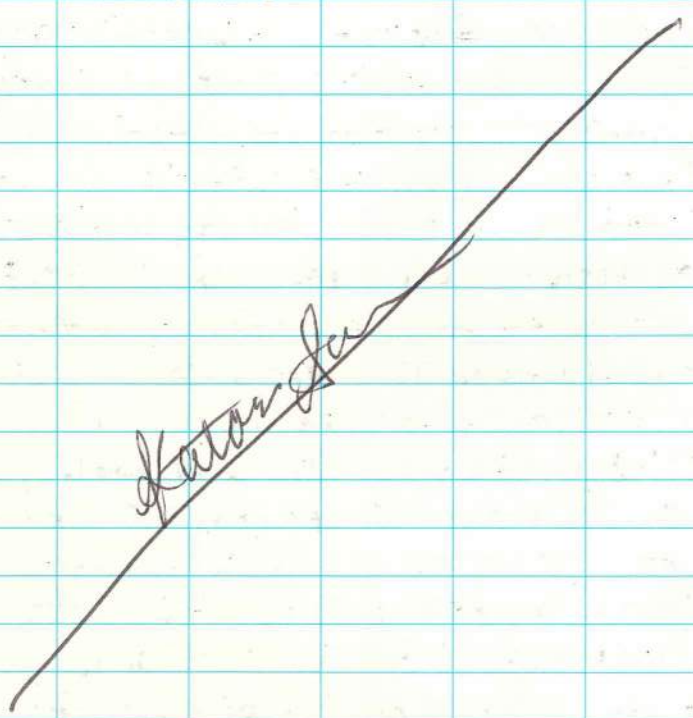
1355: SM and KS sample roll-off

IDW02-SB060624

1400: No color change for sample @ 285 for color-tec

1445: final call with Joe Miller

1500: John from wasatch collected keys CDM off-site



6/6/24

TASK: VA SLC MW-43 INSTALL + IW-01 DRILLING & SAMPLING

WEATHER: 21°/34°, PARTLY CLOUDY, CALM

PERSONNEL: JOE MILLER (CDM), ALEX PEDJASE (CDM), NATHAN NORRIS (CDM) ISSAAC NANCE (CDM), SHANE MCNULTY (YJ) WESTON WALDROP (YJ), RAY DAGLE (YJ DIEGO DIAZ (YJ), TIMOTHY ADAME (YJ) ERNESTO GADINEA (YJ), CHRIS (YJ)

PPE STANDARD LEVEL D.

0645 A. PEDJASE ONSITE AT CONEX BOXES TO PICK-UP PAPER WORK

0700 A. PEDJASE ONSITE @ LAYDOWN WITH J. MILLER, I. NANCE, N. NORRIS + YELLOW JACKET TEAM FOR H+S TAILGATE, DISCUSS OVERHEAD + UNDERGROUND HAZARDS, TRAFFIC PCE/TCE EXPOSURE & WEEKLY TASKS

0720 CDM MOB TO CONEX BOXES TO PICK-UP SAMPLING & LOGGING EQUIP

0735 A. PEDJASE MOB TO MW-43, COMPLETE RIG CHECKLIST AND START MW INSTALL CHECKLIST J. MILLER, N. NORRIS + I. NANCE MOB TO IW-01

Rite in the Rain

6/11/24 VA SLC MW-43 ARD

0750 A. PEDJASE OFFSITE TO ACE HARDWARE FOR SAFETY GLASSES YELLOW JACKET LOADING WELL MAT FOR MW-43.

0820 A. PEDJASE ONSITE @ MW-43 YJ OFFLOADING WELL EQUIP + MAT USING 1/4" NON GAGED PEL PLUG PELLETS & 13/24 SAND (GILLIBRAND WHOLE GRAIN) 2" SCH40 PVC WELL W 0.010" SLOT SCREENS

0835 YJ REMOVING 9" CASING FROM 250 FT BGS

0940 SMALL LEAK @ HYDRAULIC LINE FITTING RIG DOWN, YJ TO REPAIR.

0955 YJ RESUMES REMOVING 9" CASING

1000 YJ REMOVE 250 FT 9" CASING TAG HOLE OPEN TO PAST 300, YJ REMOVING 10' OF 8" TO 290' & BEGIN BACKFILL TO 287' W UNCOATED PELLETS

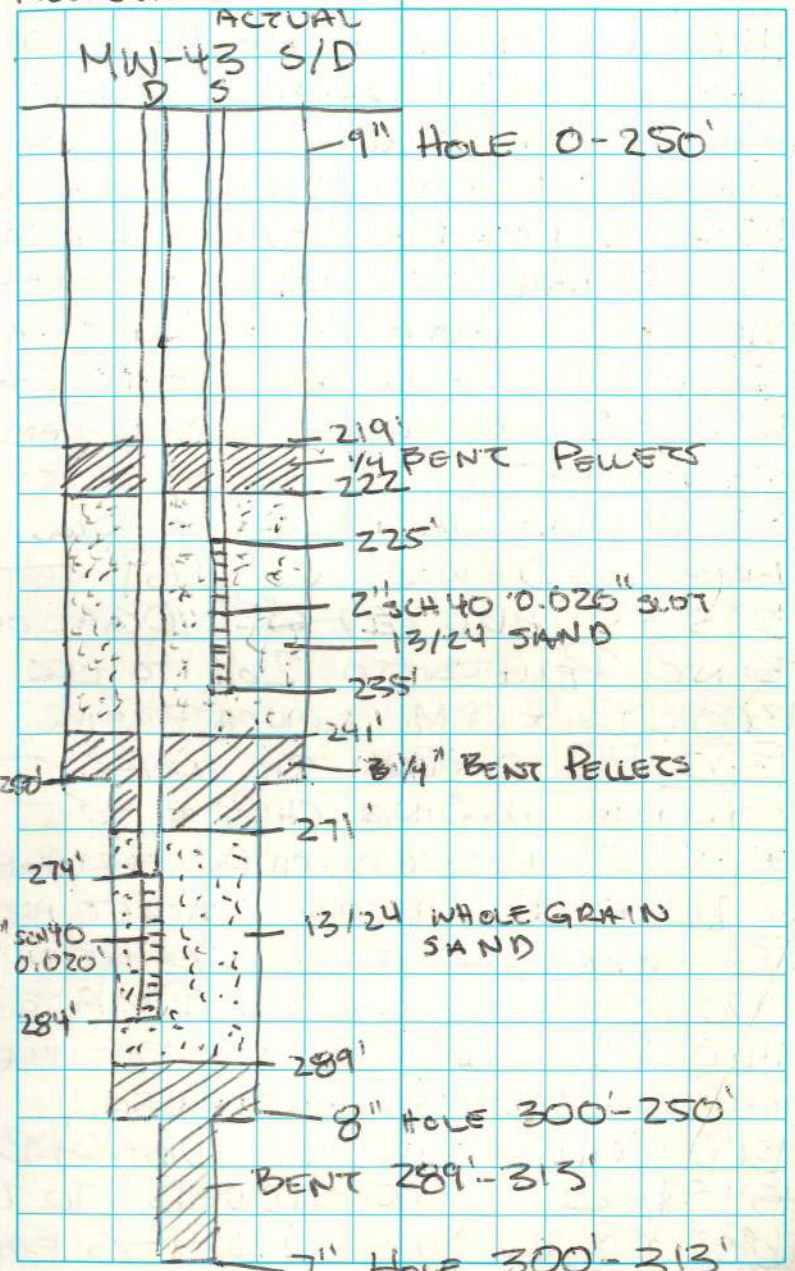
~~ARD~~ ARD 06/11/24 1030 YJ FINISH SETTING BACK PLUG FROM 313'-289' W UNCOATED 1/4" BENT PELLETS, 50 LBS

1110 ADDING 2" SCH40 PVC WELL W 0.020" SLOT SCREEN FROM 284'-274'

THEORETICAL ACTUAL

MW-43 S/D

D S



Rite in the Rain

1140 YJ INSTALLS MW-43D TO 284 FT BGS, SCREENED 284-274
1150 YJ TAGS MW-43D @ 285 FT LENGTH & MW-43D PLUG @ 289 FT
1155 YJ ADDING 13/24 SILICA SAND FROM 289 TO 271 FT
1210 YJ REMOVE 10 FT OF 8" CASING CASING BOTTOM @ 278 FT BGS
1235 YJ CONTINUE TO ADD SAND TO MW-43D FROM 289-271 FT
YJ REMOVE 10 FT OF CASING. NOW CASED TO 8" TO 269'
1255 YJ ADD ~~20 GAL~~ 10 GAL OF BENT PELLETS TO 269 FT BGS
1300 YJ + CDM LUNCH BREAK
1330 YJ RETURN TO WORK — CONTINUE ADDING CHIPS TO —
1400 YJ NOTICED CHIPS BRIDGED @ 720 FT BGS, YELLOW JACKET ATTEMPT TO CLEAR BRIDGE W VIBRATION
1420 YJ GET PLUG TO DROP TO 720
1430 YJ CLEAR BRIDGE, RESUME ADDING BENTONITE; RE BRIDGE
1500 BRIDGE CLEARED, ADDING BENT
~~1545~~ 1525 BENT ADDED TO 241'
1535 YJ BUILDING MW-43S FROM (235' - 225'

1610 YJ FINISH SETTING MW-43S FROM 235'-225', YJ ADDING SAND FROM 241' TO 224'
1645 SAND SET TO 224', BEGIN PACKING UP
1715 YJ SMALL CREW OFFSITE A. PEDTASE HELP J. MILLER FINISH W LARGE RIG.
1720 J. MILLER TRAIN CDM TEAM ON COLOR TECH VOC SCREENING, YJ BEGIN PACKING UP
1745 ALL OFFSITE

06/11/24

Rite in the Rain

TASK: VA SLC - GROUT MW-43
- DRILL + GW SAMPLE EW01

WEATHER: 20°/36°, PARTLY CLOUDY, CALM

TEAM 1: A. PEDJASE / CDM
S. MCNULTY / YJ
R. DAGLE / YJ
W. WALDROP / YJ

TEAM 2: J. MILLER / CDM
N. NORRIS / CDM
I. NANCE / CDM
C. HILL / YJ
E. GARDINGA / YJ
D. DIAZ / YJ
T. ADAVE / YJ

0700 ALL ONSITE FOR HYS TAILGATE. DISCUSS TRAFFIC, SLIPS, TRIPS FALLS, PINCH POINTS. + DAILY TASKS
0720 YJ LOAD AND MOB, TEAM 1 TO MW-43, TEAM 2 TO EW-01
0745 YJ ADD ~~50~~ 2 BAGS OF SAND TO MW-43, TOP OF SAND @ 222
0800 YJ ADD 3 FT OF BENT PELLETS FROM 222' TO 219'
0830 YJ REMOVING ALL 8" CASING FOR GROUT PREP
0845 ALL CASING REMOVED, YJ SET UP GROUT MIXER & PUMP

0908 ~~SET~~ YJ INSTALL TREMMIE ~~CASING~~ TO ~~170~~ 200 FT BGS 170 FT BGS
0925 YJ BEGIN GROUTING FROM ~~220~~ 219' TO SO W BENT GROUT, 50 GAL FRESH WATER & 100 LBS ~~AMC BENTONITE GG~~ AMC GROUT 20™
1000 YJ FINISHES PUMPING LOADS OF AMC GROUT 20, ~~BEGIN~~ REMOVING 30 FT OF TREMMIE PIPE TO ~140 FT, RETURNING W WATER FOR GROUT, ~~BEGIN~~
1005 RESUME GROUTING
1035 FINISH BATCH 8 OF AMC GROUT 20™, BEGIN REMOVING 1" TREMIE PIPE (30 FT TO 110 FT)
1045 TREMIE REMOVED TO 110 FT BEGIN GROOTING BATCH 9
1130 14 BACHES AMC GROUT 20 ~700 GAL, YJ REMOVES 2 STICKS OF TREMIE TO 90 FT BGS SWITCHING TO 5% BENONITE NEAT PORTLAND CEMENT, 8" HOLE W 2x2" PIPES IS 2.979 GAL/FT, 700 GALS IN MW-43 IS ~235 FT, SIGNIFICANT LOSS TO FORMATION

Rite in the Rain

06/12/24 SLC VA A. PEDJASE

1145 YJ BEGIN GROUTING W 5% BENT PORTLAND CEMENT. MIX IS 32 GAL 8 BAGS PORTLAND 5% GEL
1215 YJ FLUSH GROUT LINES
1230 YJ BREAK FOR LUNCH
1300 YJ RETURN TO WORK, BEGIN GROUTING W 5% BENTONITE PORTLAND
1520 GROUT COMPLETE TO 5FT BGS 14 BATCHES AMC GROUT 20%, 12 BATCHES 5% BENT PORTLAND CEMENT. YJ LOAD UP AND PREP TO DEMOB
1615 YJ OFFSITE, A. PEDJASE HELP BIG RIG CREW SAMPLE + LOG

06/12/24

06/13/24 SLC VA A. PEDJASE

TASK: TOP-UP MW-43 GROUT MOB LA RIG TO MW-41 & BEGIN DRILLING, EW-01 CONTINUE DRILLING W FS RIG
PERSONNEL:
TEAM 1: A. PEDJASE / CDM
S. MCNULTY / YJ
R. DAGLE / YJ
W. WALDROP / YJ
TEAM 2: JOE MILLER / CDM
I. NANCE / CDM
C. HILL
D. DIAZ
E. GARDINER
T. ADAMS
WEATHER: 23°/37°C, PARTLY CLOUDY, CALM
0700 ALL ONSITE FOR H+S MEETING DISCUSS TRAFFIC, HEAT COMMUNICATION, STFs, DAILY TASKS
0720 CDM RIOS TO CONEX BOXES FOR COLORIMETRIC SAMPLES, EW-01-061224-246 HAS 35 DTB ROCKS, YJ MOB TO LA RIG TO TOP UP GROUT. PUMP OFF WATER AND ADD GROUT FROM 8FT BGS - 2 FT BGS, 1
0800 BEGIN RIG DOWN FOR MOB

Rite in the Rain

06/13/24 VA SLC A. PEDJASE

0900 GROUT TOPPED UP @ MW-43 RIG PACKED UP, BEGIN MOB TO MW-41.

0945 LA RIG MOBBED TO MW-41 YS SETTING WELL PAD

1030 ASPHALT CUT @ MW-43 VAULT + PAD BEING SET

1130 PAD SET MOB ~~LA RIG~~ SUPPORT + MATERIAL TO MW-41

1200 YS TAKE LUNCH BREAK

1230 YS + CDM RETURN TO WORK YS SET UP FOR DRILLING MW-41

1310 LA RIG BEGINS DRILLING MW-41.

1330 YS COLLECT CORES FROM 10 TO 20 FT BGS, BEGINS TO ADVANCE 9" CASING TO 20 FT BGS

1350 YS COLLECT CORE FROM 20-30 FT BGS, BEGINS ADVANCING 9" CASING TO 30 FT BGS

1430 YS COLLECT CORE FROM 30-40 FT BGS, BEGIN ADVANCING 9" CASING TO 40 FT BGS.

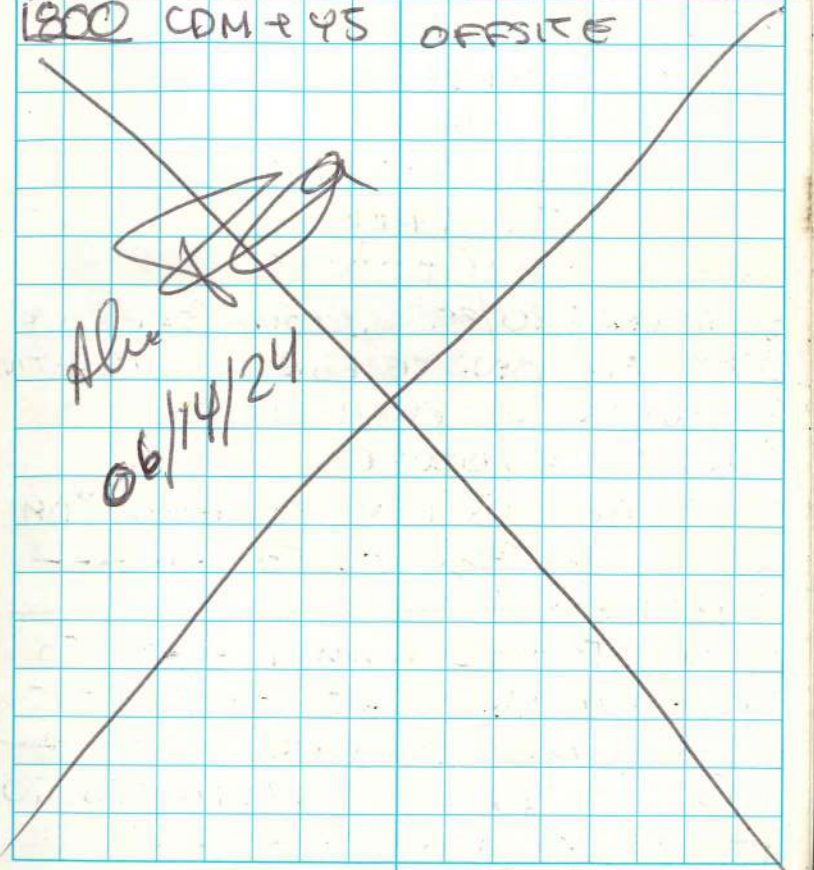
1520 YS COLLECT CORE FROM 40-50 FT BGS, BEGIN ADVANCING 9" CASING TO 40 FT BGS

1615 YS COLLECT CORE FROM 50 -60 FT BGS AND BEGIN RUNNING 9" CASING TO 60 FT BGS

1705 YS COLLECT CORE FROM 60 -70 FT BGS, BEGIN PACKING FOR OFFSITE

1735 YS + CDM OFF OF MW-41

1800 CDM + YS OFFSITE



Alw 06/14/24

Rite in the Rain

TASK: CONTINUE DRILL & SAMPLE EW01 AND MW-41

PERSONNEL:

TEAM 1: A. PEDJASE / CDM
S. MCNULTY / YJ
R. DAGLE / YJ
W. WALDROP / YJ

TEAM 2: S. MILLER
I. NANCE
N. NORRIS
C. HILL
D. DIAZ
T. ADAMS
E. GIRDINOS

WEATHER: 20°/35° C, CLOUDY, BREEZEY

0700 ALL ONSITE FOR HASP MEETING DISCUSS TRAFFIC, HEAT, ODOR + TCE/PCE EXPOSURE

0715 ~~ALL~~ YJ MOB TO RIGS, CDM TO CONEX BOXES TO GATHER SUPPLIES

0730 AP + YJ TEAM 1 MOB TO LA RIG @ MW-41 & BEGIN SET-UP TO RESUME DRILLING

0830 YJ DRIVE 9" CASING TO 70' BEGIN CORING TO 80 FT

0845 YJ COLLECT CORE FROM 70-80 FT, DRIVE 9" CASING TO 80 FT

0925 YJ COLLECT CORE 80-90 FT DRIVE 9" CASING TO 90 FT

1015 YJ COLLECT CORE 90-100 FT DRIVE 9" CASING TO 100 FT

1120 YJ COLLECTS CORE 100-106 FT ~~DRIVE 9" CASING TO 106~~ ARP 6/14/24

1130 YJ BREAK FOR LUNCH

1200 S. MILLER OFFSITE, YJ RETURN FROM LUNCH, BEGIN RUNNING CORE BARREL TO 110 FT

1310 YJ COLLECT CORE 110-120 FT ADVANCE 9" CASING TO 120 FT

1420 YJ COLLECT CORE 120-130 FT ADVANCE CASING TO 130 FT BGS

1430 YJ GAS UP RIG

1445 RESUME BORING

1540 YJ COLLECT CORE 140-150 FT ADVANCE CASING TO 140 FT

1650 YJ COLLECT CORE 140-150 FT ADVANCE CASING TO 150 FT

1655 RUN CORE BARREL TO 150 FT

PACK UP SITE + RIG

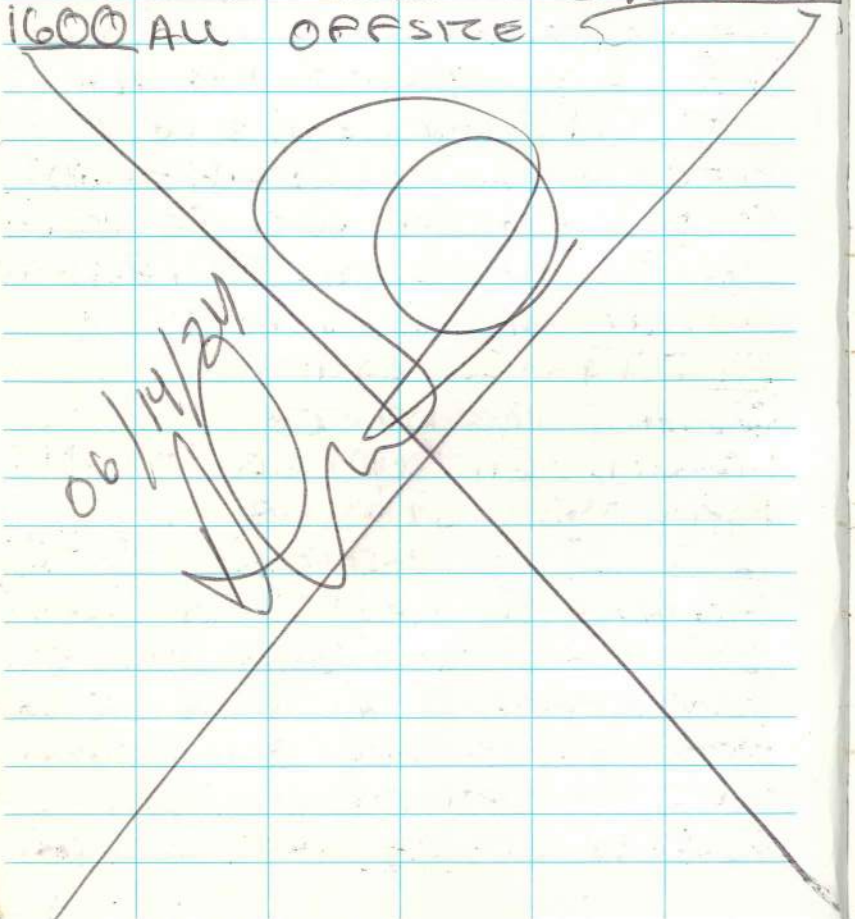
~~1730~~ YJ T1 OFFSITE

1730

Rite in the Rain

06/14/24 VA SLC A. PEDJASE

1735 CDM PACK-UP & CLOSE CONEX BOXES & LOCK GATES
1740 N. NORRIS & I. NANCE OFFSITE
1745 A. PEDJASE OVERSEE FS RIG @ EW01, THEY HAVE PULLED 300 FT OF 9" CASING & INSTALLED 276 FT OF 10" CASING
1600 ALL OFFSITE



06/15/24 VA SLC A. PEDJASE

TASK: BORING & GW SAMPLING @ MW-41, OVER-REAM & WELL CONSTRUCTION @ EW-01
TEAM 1: N. NORRIS, I. NANCE (CDM) D. DIAZ, T. ADAMS, E. GUARDINO (YS)
TEAM 2: A. PEDJASE (CDM) S. MCNULTY, R. DAGLE, P. WALSTROM
WEATHER: 20°/33° C, PARTLY CLOUDY W/ BREEZE
0700 ALL ONSITE FOR HTS MEETING, DISCUSS AIR HAZARDS HEAT STRESS, STE's, PINCH POINTS
0720 YS MOB TO RIGS, TEAM 1 TO FS RIG @ EW01, TEAM 2 TO LA RIG @ MW-41.
0740 TEAM 2 COLLECTS 9" CASING FOR MW-41
0800 BEGIN DRILLING MW-41 FROM 150-160 FT BGS
0830 YS COLLECT CORE 150-160 & ADVANCE 9" CASING TO 160 FT
0845 DARK SKY, TEMP + PRESSURE DROP, DISCUSS LIGHTNING WATCH WITH BOTH RIGS & CDM SMITH
0945 YS RETURN CORE 160-170 & ADVANCE CASING TO 170 FT BGS

Rite in the Rain

1000 9" CASING @ 10 & 9 x 10' FT
6 STICKS IN THE RACK
1055 YJ COLLECT CORE 170-180 FT
WATER ZONE 171-179 FT BGS,
CDM ATTEMPT GW SAMPLE
1125 CDM COLLECT ~~MW41-GW061524~~
2 MW41-GW061524-175
FROM OPEN BOREHOLE
1150 PREPAR TRIP BLANK —
TB11-GW061524
YJ RETURNS TO DRILL TO
190 FT BGS
1300 YJ COLLECTS CORE 180-190 FT
RESUMES BORING TO 200 FT BGS
~~LATE ENTRY~~ 1230 ISAAC NANCE
SCREEN MW41-GW061524-175 W
COLORTECH, RESULTS WERE 0.0 PPM VOC
1410 YJ COLLECTS CORE FROM 190-200 FT
1420 YJ RUNNING A HYDROPUNCH
TO 200 FT BGS
1300 BAILER DRY, YJ SHAKE TOOL
OPEN WAIT FOR GW
1515 NO WATER, ADVANCE 10 FT
REATTEMPT SAMPLE, ~~YJ CASE~~
~~TO 200 FT BGS~~ ARP 06/15/24
1520 YJ REMOVE HYDROPUNCH
CASE TO 200 FT

1540 YJ BEGIN TRIP IN
CORE BARREL TO 210 FT
1635 YJ COLLECT CORE 200-210 FT
WET PG FINE GRAV FROM 204-205
BUT ML, FROM 205-208, IMPERVIOUS
MOIST-DRY, 208-210, MOIST-DRY
WG GRAV. NO GW AVAILABLE
ATTEMPT GW @ 220 FT
1645 YJ ADVANCE CASING TO
220 FT.
1740 YJ COLLECT CORE 210-220 FT
ADVANCES HP TO 220 FT BGS
1805 HP SET TO 220 FT BGS
OVERNIGHT, PACK-UP FOR DAY
1815 ALL OFFSITE

06/15/24

Rite in the Rain

TASK: BORING & SAMPLING MW-41
~~MW INS~~ EW-01 INSTALLATION
PERSONNEL: TEAM 1 (FS RIG) N. NORRIS (COM), ISAAC NANCE (COM), D-DIAZ (YJ) T. ADAMS (YJ), E. GUARDINER (YJ)
TEAM 2 (LA RIG): S. MCNULTY (YJ), R. DAGLE, W. WALDROR (YJ), A. PEDJASE (COM)
WEATHER: 16°/28°C PARTLY CLOUDY BREEZE

0700 ALL ONSITE FOR HTS MEETING, DISCUSS TASKS, DUST MASKS FOR GROUTING, TCE+PCE EXPOSURES

0715 YJ MOBS TO RIG6 COM MOBS TO MW-41 TO COLLECT GW

0725 GW SAMPLE [MW41-GW061624-220] COLLECTED W/ [FD03-GW061624]

0735 YJ T2 REMOVE HP + DRILL TO 230 FT BGS

0810 YJ DECON HYDROPUNCH W/ STEAM CLEANER.

0915 A. PEDJASE COLLECT EQUIP BLANK [EB09-061624] FROM DECON'D HYDRO PUNCH

0935 YJ COLLECT CORE 220-230' ADVANCE 9" CASING TO 220 FT

0945 YJ ~~COLLECTING~~ BORING TO 250 FT BGS W/ 8" CORE BARREL

1100 YJ RETURNS CORE 230'-246' 236-240 IS DRY - MOIST V SILTY SAND NO WATER PRESENT, WILL PUSH 10 FT @ REATTEMPT GW SAMPLE

1110 YJ RUNNING 8" CASING TO 240 FT BGS

1310 YJ RETURN CORE BARREL FROM 240-250 FT BGS, YJ TO REATTEMPT RECOVERY

1430 YJ COLLECT CORE 244-254' ~~NO~~ CLAYEY SILTS FROM 246-254, NO HP, ATTEMPT AGAIN @ 265

~~1500~~

1600 YJ COLLECT CORE ~~254-268~~ 254-268 STILL IN HARD SILT NO SAMPLE

1610 YJ BEGIN BORING TO 276

1715 YJ COLLECT CORE 268-276 FINE SILTY SAND, MOIST TO WET FROM 272-276, YJ SETTING HYDROPUNCH TO 276 FT BGS

1730 YJ CLEANING & PACKING SITE

1745 HP SET @ 276, DIFFICULT TO ADVANCE INTO HARD MATERIAL

06/16/24 VA SLC A. PEDJASE

1750 ALL PACK UP FOR DEMOB

1815 ALL OFFSITE

06/16/24

06/17/24 VA SLC A. PEDJASE

TASK: EW01 GROUT & SURFACE COMPLETION. MW41 BORING AND GW SAMPLING W HP PERSONNEL:

TEAM 1 (FULLSIZE RIG)
N. NORRIS (CDM), I. NANCE (CDM)
D. DIAZ (YJ), T. ADAMS (CDM)
E. GUARDINOZ (YJ)

TEAM 2 (LIMITED ACCESS RIG)
A. PEDJASE (CDM), S. MCNULTY (YJ)
R. DAGLE (YJ), W. WESTROP (YJ)

WEATHER: (17°/23° C, PARTLY CLOUDY WINDY FROM NW

0700 ALL ONSITE FOR HASS MEETINGS, DISCUSS DAILY TASKS TRAFFIC, DEHYDRATION, GROUT DUTIES STPs.

0720 YJ COLLECT GROUT SUPPLIES & MOB 2 RIGS

0725 CDM SAMPLE MW41 AT 276 FT BGS

0730 COLLECT MW41-GW06172 4-276 FOR VOCs

0740 YJ PULLS HP TOOL & CONTINUES ADVANCING BORING

Rite in the Rain.

06/17/24 VASLC A. PEDJASE

0940 YS TEAM 1 COLLECTS CORE FROM MW41 (276-290 FT BGS, CASES TO 280 FT & CONTINUES BORING TO 300 FT BGS

1100 YS COLLECTS CORE 290'-300' YS ADVANCING HP TO 300'

1150 YS SET HP TOOL @ 300'

1200 YS BREAKS FOR LUNCH

1235 NO WATER @ 300', YS WITHDRAWS HP TOOL TO 295' LET WATER ACCUMULATE

1300 NO WATER @ 295' A YS ~~HEADING~~ RESUMES BORING TO 310 FT BGS

1400 YS ENCOUNTER SOFT MATERIAL @ 305', REMOVE CORES AND SET HP TOOL @ 305

1440 YS COLLECT CORE 300'-305' ADVANCE SAMPLING TOOL TO 305'

LATE ENTRY CANYON FRANK ONSITE. A. PEDJASE GIVE CANYON H&S ORIENTATION

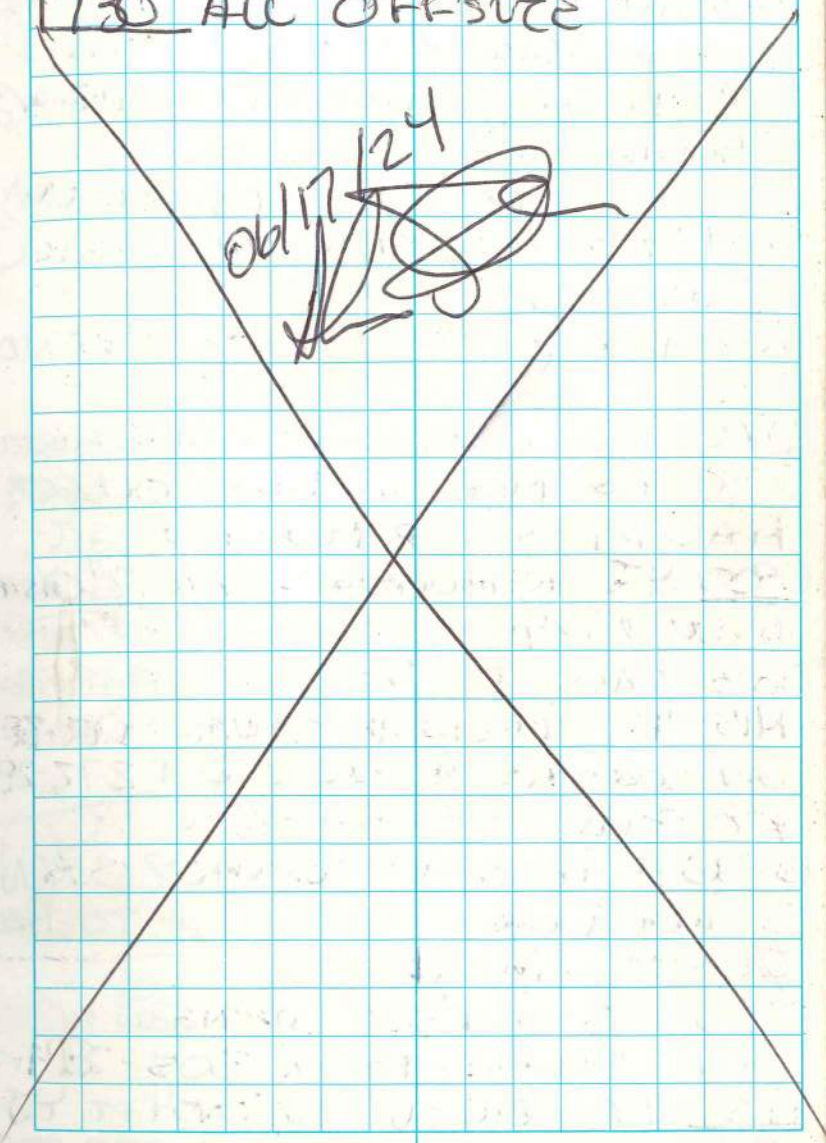
1630 YS SET HP TOOL TO 305 ALLOW TO FILL W WATER

1600 CDM COLLECTS MW41-GW-06172024-305

1620 YS REMOVE HP TOOL & PACK UP

1710 HP TOOL REMOVED ALL PROD FOR OFFSITE

1730 ALL OFFSITE



Rite in the Rain

106 06/18/24 VA SLC A. PEDJASE

TASK: TOP UP & COMPLETE ENOI, DEMOB TO LAYDOWN INSTALL MW-41

PERSONNEL: TEAM 1: N. NORRIS(CDM), I. NANCE(CDM), D. DIAZ(YJ), T. ADAMS(YJ) C. FRANK(YJ)

TEAM 2: A. PEDJASE(CDM) S. MCNULTY(YJ), RAYMOND DAGLE(YJ) W. WESTROP

WEATHER: 18°/75° C, OVERCAST, WINDY

0700 ALL ONSITE FOR H+S MEETING

0720 YJ MOBS TO RIGS, COLLECT MATERIALS FOR MW-41 FIRST,

0800 YJ REMOVING @ ALL 9" CASING FROM MW41

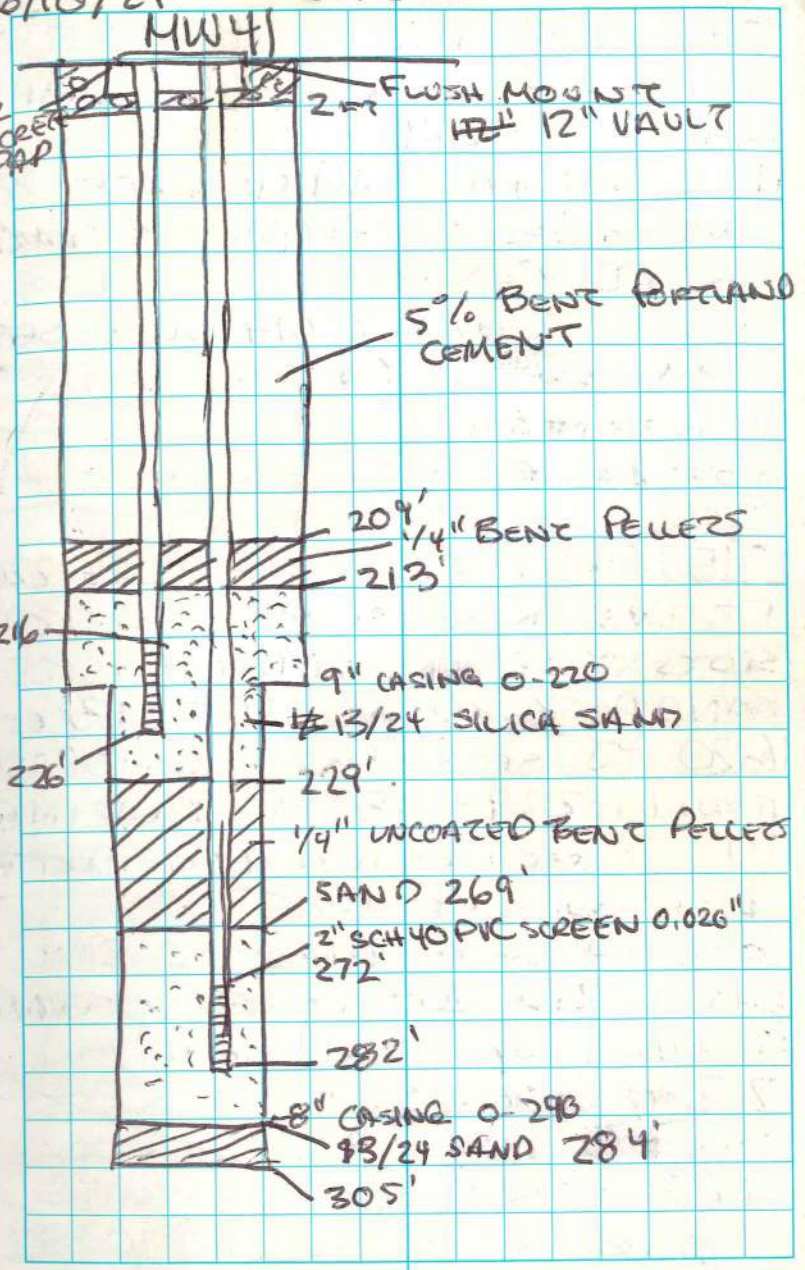
0830 CALL W/ PROJECT TEAM ABOUT MW-41 SCREEN INTERVALS, DECIDE ON SCREENS @ 216-226 & 272-282 FT BGS

0900 A. PEDJASE CONTACT S. MCNULTY W/ WELL DESIGN. YJ BEGIN TO PREP & SET MW-41

0915 YJ BACKFILL BORING W/ 1/4" BENT PELLETS, FROM 305-284 FT BGS

0950 BACKFILLED TO 284 FT. YJ BEGIN SETTING MW41-D 272-282

06/18/24 VA SLC A. PEDJASE



Rite in the Rain

06/18/24 VA SLC A. PEDJAS

1040 MW41-D SET FROM 272-262 FT BGS, YJ ADDING 13/24 SAND FROM 284-269 FT BGS

1130 SANDPACK ADDED FROM 284 -269 FT BGS, YJ BREAK FOR LUNCH

1200 YJ RETURN BEGIN ADDING 1/4" BENT PELLET ANNULAR SEAL FROM 269-229 FT BGS

1430 BENTONITE SEAL SET FROM 269-229 FT BGS, YJ SETS MW41S FROM 216-226 FT BGS

1515 MW41-S SET FROM 216-226 FT BGS W 2" SCH40 PVC, 0.026" SLOTS, YJ BEGINS ADDING 13/24 SANDPACK FROM 229-213 FT BGS

1620 YJ SETS 13/24 SANDPACK FROM 229-213, YJ ADDING 1/4" BENT PELLETS FROM ~~229 FT~~ 213-209 FT BGS

1650 YJ SETS ANNULAR SEAL FROM 213-209 FT BGS, BEGINS PACKING UP FOR DAY

1715 ALL OFFSITE

06/18/24

06/19/24 VASLC A. PEDJAS 109

TASK GROUTING MW41, CLEAN ENV01 SITE, DECON CASING CLEAN CONTAINMENT CELLS DEMOB RIGS TO LAYDOWN

PERSONNEL: TEAM 1: I.NANCE, A. PEDJAS D. DIAZ (YJ), T. ADAMS (YJ), C. FRANK (YJ)

TEAM 2: N. NORRIS (COM) S. McNULTY (YJ), R. DAGLE (YJ) W. WESTROP (YJ)

WEATHER: 18°C/27°C, OVERCAST LIGHT BREEZE

0700 ALL ONSITE, HOLD H+S TAILGATE MEETING

0720 ALL LOAD TRUCKS, COLLECT GROUT FOR MW41, TEAM 2 HEAD TO MW41, BEGIN GROUTING FROM 209 FT BGS TO 2 FT BGS

TEAM 1 STAY AT LAYDOWN DECONNING PIPE, CLEANING CONTAINMENT CELLS, ORGANIZING LAYDOWN

0800 TEAM 1, CLEAN ENV01 LOCATION, A. PEDJASE CLEAN CONNEX OFFICE BOX

0830 BADGER ONSITE TO CLEAR MW44

Rite in the Rain

110 06/19/24 · VA SLC A. PEDJASE

0900 BADGER (2 HYDROVAC OPERATORS + 1 HYDROVAC TRUCK CLEAR DRILLING LOCATION @ MW44 W 12" HOLE TO 15 FT BGS

~~0930~~ B

1100 MW-44 POTHOLED TO 9 FT BY BADGER, LARGE COBBLES CAUSING REFUSAL. COM OKAY'S CLEARANCE. BADGER BEGINS BACKFILLING MW-44

1130 BADGER HYDROVAC CANOT MAKE IT UP HILL @ MW44, DROPPING POTABLE WATER @ GROUND

1300 BADGER STILL STUCK, YJ PULLS THEM OUT W FORKLIFT.

1330 BADGER DUMPS SPOILS IN CONTAINMENT

1400 BADGER OFFSITE, YJ CLEANING CONTAINMENT ORGANIZE LAYDOWN + RETOOLING RIG.

~~150~~

1700 ALL OFFSITE

06/19/24

06/20/24 VA SLC A. PEDJASE

TASK: MW41 SURFACE COMPLETION ORGANIZE LAYDOWN + IDW MANAGEMENT

PERSONNEL: TEAM 1: N. NORRIS (COM) I. NANCE (COM), S. MCNULTY (YJ) R. DAGLE (YJ), (W. WALDROP (YJ) TEAM 2: A. PEDJASE (COM), D. DAGLE (YJ), T. ADAMS (YJ), C. FRANK (YJ) CHRIS HILL (YJ)

WEATHER: 65/89°C, PARTLY CLOUDY, BREEZY

0700 ALL ONSITE FOR HTS MEETING

0720 YJ TEAM 1 MOB TO MW41 TO CHECK GROUT & INSTALL MW41 VAULT

0730 TEAM 2 ORGANIZING LAYDOWN & CLEANING CONTAINMENT

0900 YJ PUMPING, DRILLING + EXCAVATION WATER INTO WATER TANKS @ COM CONNEX BOXES

1100 YJ COMPLETES MW41 WELL VAULT & BEGINS DEMOB FROM MW41.

1200 YJ BREAK FOR LUNCH

1230 YJ RETURN FROM LUNCH

Rite in the Rain

06/20/24 VA SLC A. PEDTKE

1230 YJ RESUMES WORKING @ LAYDOWN, S. MCNULTY USING BOBCAT TO CLEAR & LEVEL MW44 AREA.

1330 YJ MOB LA RIG TO MW44.

1400 WORK FINISHED, ALL LOCK UP & PREP FOR DEMOB

1500 ALL YJ OFFSITE, CDM SCANNING CHECKLISTS, DAILIES AND LOGBOOKS

1530 ALL OFFSITE I. NANCE DELIVER KEYS TO WASATCH ENV.

06/20/24

06/25/24 VA SLC M. Blanton

TASK: Begin drilling MW-44

PERSONNEL: Team 1: Shawn McGuire (SM) (CDM), Diego Diaz (YJ), T. Adams (YJ), C. Frank (YJ)

Team 2: M. Blanton (MB) (CDM), S. McNulty (YJ), Laura Mulvoo-ney (CDM), J. Dagle (YJ), W. Wandrop (YJ), MB (YJ)

WEATHER: 24/38°C, sunny/clear/slight breeze

0700: All onsite for S+HS meeting, complete checklists

0730: drillers go set up at MW-44 drillers take large rig for emission test

CDM awaits keys to trailers, gathers equipment

1000: drilling started at MW-44

~~1030: drill 20'-30' on MW-44~~ MB

1010: YJ collect core 10'-20'; Advance 9" casing to 20'.

1035: YJ collect core 20'-30'; Advance 7" casing to 30';

1050: hydraulic fluid leak discovered. cleanup / troubleshoot.

Rite in the Rain

*MB inadvertently skipped page 114. Notes continued on page 115.

MLB BLB
6/25/24

1138: Discovered to be fuel leak, not hydraulic fluid leak.
1155: Leak repaired
1200: Break for lunch
1230: Return from lunch. YJ collect core 30'-40'. Advance 9" casing to 40'
1320: collect to 50'
1405: collect to 60'. Advance 9" casing to 60'.
1450: YJ collect core 60'-63'. Advance 9" casing to ~~63'~~ MB ~~63'-70'~~ 63'.
1510: YJ collects core from 63-70'. Advance 9" casing to 70'. 70'-
1610: collects to 80'. Advance 9" casing to 80'.
1655: collect core 80'-90'.
1705: Begin packing for offsite.
1720: CDM & YJ offsite.

MLB BLB
6/25/24

Rite in the Rain

6/26/24 SLC VA M. Blanton

Task: continue MW-44 boring

Personnel: Team 1: Shawn McGuire (COM), D. Diaz (YJ), T. Adams (YJ), C. Frank (YJ)
Team 2: M. Blanton (COM), S. McNulty (YJ), L. Mulrooney (COM), R. Dagle (YJ), W. Waldrop (YJ).

Weather: 19/33 °C, partly cloudy, slight breeze

0700: All onsite for H+S meeting. See H+S form.
0715: complete all check lists
0720: S. McGuire offsite to pickup connex box keys for equipment/documents
0800: MB + LM return to MW-44, SM back on site - will speak to VA about lost keys. Dropped off PID.
0811: Begin advancing 9" casing to 90 ft bgs
0817: SM found keys in connex storage shed
0905: YJ collects core 90'-100' ft bgs. Advance 9" casing to 100'

0940: YJ collects core 100'-110'. Advance 9" casing to 110'.
1024: YJ collect 110'-120' ft bgs core. Advance 9" casing to 120'.
1115: YJ collect (20'-130' ft bgs core. Advance 9" casing to 130'.
1140: Break for lunch
1210: return from lunch. Keep advancing to 130'.
1301: YJ collect core 130'-140' ft bgs. Advance 9" casing to 140'
1355: YJ collects core 140'-150'. Advance 9" casing to 150'.
1525: YJ collect core 150'-157'. Advance 9" casing to 157'. Water at 153 ft
1549: YJ collect core 157'-167' ft bgs. Begin packing for offsite + refuel. Will take 1st GW sample tomorrow morning.
1435: All offsite

6/26/24

Rite in the Rain

6/27/24 SLC VA M. Blanton

Task: Continue MW-44 boring & groundwater sampling.

Personnel: Team 1: Shawn McGuire (CDM), D. Diaz (YJ), T. Adams (YJ), C. Frank (YJ).
Team 2: M. Blanton (CDM), L. Mulroney (CDM), S. McNulty (YJ), R. Dagle (YJ), W. Wardrop (YJ)

Weather: 18°/32°C, sunny/slight breeze

0700: All onsite for H+S meeting. See H+S form. Conduct checklists, retrieve equipment.

0730: Team 2 mob to MW-44. location to collect 1st groundwater sample at 167' ft bgs. DTW 153 ft bgs

0750: Issue w/ ball float in bailer, troubleshoot + replace

0805: CDM collect MW44-GW062724-167 from open borehole

0810: collect FD01-GW062724 MS

0830: Advance 9" casing to 167 ft bgs

0910: YJ collect 167'-170' ft bgs. Advance 9" casing to 170'.

0945: YJ collect 170'-180' ft bgs. Advance 9" casing to 180'.

1050: YJ collect 180'-190' ft bgs core. Dry from 182-190'. Fat clay w/ gravel from 182-190'. No GW available. Push to 200' to attempt next GW sample

1100: Flat tire on bobcat, repair leak

1203: Soft at 198' ft bgs, mid pull core + attempt GW sample at 198'.

1233: YJ collect core 190-198' ft bgs. Slightly wet, silty gravel w/ sand. Set HP at 198' to attempt GW sample

1335: water level at 167.5 ft bgs

1345: CDM collect MW44-GW062724-198 from HP.

1355: YJ pull HP + advance boring

1410: Decon HP

1415: Lightning detected within

Rite in the Rain

6/27/24 SLC VA M. Blanton

1 mile - haul + drilling / decon + shelter in trucks for at least 30 minutes.

1445: Another lightning strike - down to at least 15:15

1511: Lightning strike, down to at least 1541.

1541: All clear, resume advancing boring & decon'ing HP.

1557: HP decon'd. collect [EB11-062724]

* YJ continue to advance boring to 210' ft bgs. @ 1541

1630: YJ collect core 2nd 198-210' ft bgs. Begin packing up.

1710: All offsite

* L. Mulraney offsite at 1600 to pack coolers/drop off 5 GW samples.

M. Blanton
6/27/24

6/28/24 SLC VA M. Blanton

Task: continue MW-44 boring & groundwater sampling

Personnel: Team 1: S. McGuire (COM), D. Diaz (YJ), T. Adams (YJ), C. Frank (YJ)

Team 2: M. Blanton (COM), ~~tab~~ NB L. Mulraney (COM), S. McNulty (YJ), R. Dagle (YJ), W. Waldrop (YJ)

Weather: 19°/30° C, Sunny/slight breeze

0700: All on site for H+S meeting. See H+S form. Retrieve equip.

0730: complete all checklists. Unlock YJ fuels up LA rig.

0745: YJ continue to advance boring to 220 ft bgs

0850: YJ collect core from 210-220 ft bgs. wet/loose gravel w/ silt + sand from 218-220 ft bgs. Attempt GW sample

0900: YJ advance HP to 220 ft bgs

0931: ~~No GW~~ ~~NB~~ NO GW available

Rite in the Rain

at 220 ft bgs. Allow to sit for 15 mins.

0945: very little GW available, pull up 1 ft to 219 ft bgs.

0955: Allow to sit for 15 mins at 219 ft bgs

1030: still no available GW, will advance boring to 230 ft bgs and attempt another GW sample. confirm w/ Joe Miller. ~~to~~ MB

1055: pull up HP.

1130: Advance boring to 230 ft bgs. Decon HP.

1147: CDM collect EB12-062824 from HP. TB13-062824 was collected at 0800

1225: YJ collect core from 220 ft bgs to 230 ft bgs. Dense plastic clay w/ gravel - Dry. continue to advance boring to 240' to attempt GW sample.

1250: Break for lunch

1340: Return, continue to advance to 240'

1420: YJ collect 230'-240' ft bgs, fat/highly plastic clay w/ little to no gravel, moist. No GW available, push to 250' to attempt GW sample.

1430: MB update Joe Miller.

1600: YJ collect core 240'-250' ft bgs. dense mod. plastic clay - very solid. No GW available. updated Joe Miller. will advance to 260' tomorrow to attempt GW sample. will most likely set shallow well screen in 190-208 conductive zone.

1615: Begin site ~~cleanup~~ MB cleaner

1630: All offsite, L. Mahoney drop off GW samples at Fedex.

MB 6/28/24

6/29/24 SLC VA M. Blanton

Task: continue MW-44 boring & sampling - will determine well screens.

personnel: Team1: S. McGuire (COM), D. Diaz (YJ), T. Adams (YJ), C. Frank (YJ)
Team 2: M. Blanton (COM), L. Mulroney (COM), S. McNulty (YJ), R. Dagle (YJ), W. Waldrop (YJ)

weather: 23/36°C, Sunny, slight breeze

0700: all on site for H&S meeting. See H&S form.

0715: complete all checklists & calibrate PID. YJ bring in 8" casing, switching out 9"

0815: YJ begin advancing 8" casing to 250 ft bgs

0820: MW-44 at 198' sample was non-detect on the color-tec

0930: YJ advance cores & rods to recover 250'-260' ft bgs.

1000: hydraulic fluid leak (minor), troubleshoot &

6/29/24 SLC VA M. Blanton

cleanup.

1045: welder called to fix leak.

1306: welder on site.

1345: Fixed fluidline, YJ continue boring

1412: No recavery in 250'-260' core, soft spot - will advance HP to attempt GW sample. will attempt 250'-260' recavery on next run.

1505: COM collect MW44-GW062924-260 w/ MS/MSD.

~~1512~~ MB. DTW: 157.2 ft bgs

1512: YJ remove HP

1530: HP removed & taken up to decon. YJ advance boring to

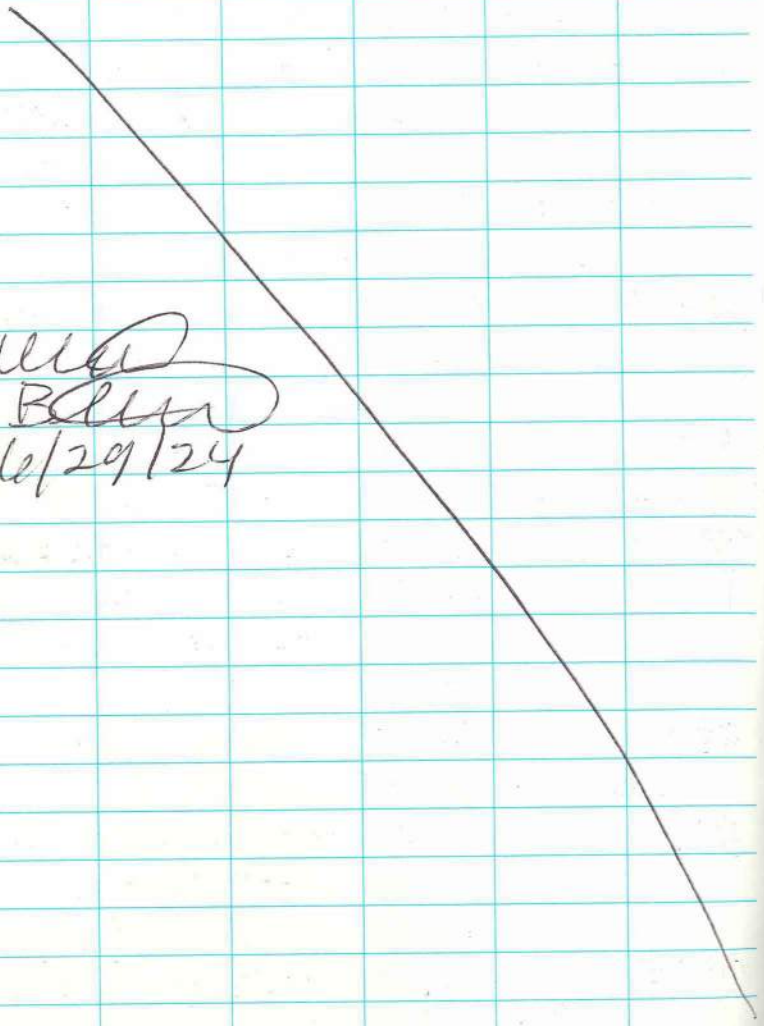
1550: COM collect EB13-062924

~~1600: L. Mulroney offsite to drop off samples at Fedex.~~ MB

1640: YJ collect core 250'-255' & 255-265'. Begin packing up.

6/29/24 SLC VA M. Blanton

1700: All offsite. Will hold samples overnight - lab closed sundays.



M. Blanton
6/29/24

6/30/24 SLC VA M. Blanton

Task: continue MW-44 boring & determine deep well screening interval.

Personnel: Team 1: S. McGuire (COM), D. Diaz (YJ), T. Adams (YJ), C. Frank (YJ)

Team 2: M. Blanton (COM), C. Mulrooney (COM), S. McNulty (YJ), R. Bagle (YJ), W. Waldrop (YJ).

Weather: 36/18°C, Sunny, Slight breeze

0700: All on site for H&S meeting. See H&S form.

0715: Calibrate PID & complete checklists. Team 2 set up at MW-44 to advance boring.

0730: YJ advance boring to 278 ~~268~~ NB ft bgs.

0835: YJ collect core from 265-268 ft bgs. ~~Advance boring~~ NB

0845: YJ collect core from 268-278 ft bgs.

Rite in the Rain

0855: 270-278 ft bgs dry - slightly moist dense silty clay w/ gravel. NO GW available, push to 290'.

1005: VJ collect core from 278'-290' ft bgs. ~~very wet~~ MB NO recovery 278'-284'. Very wet silty gravel w/ sand 284'-290'. Advance HP. ~~290'~~ 289.1

1050: DTW ~~288~~ MB. Deploy bailer.

1125: only ~1 ft of water in HP, bailer can't make it through tool - allow 30 mins to see if GW rises. Take lunch.

1155: Return from lunch. Check DTW: 289.2'. pull up HP by 5 ft at 285'.

1232: still no GW available. Remove HP ~~Advance to 300 ft bgs~~ MB advance casing to 280'. ~~advance boring~~ to 300'.

1310: EB14-GW063024 collected

1339: hydraulic fluid leak, Cleanup / troubleshoot.

~~1410~~ MB determined to be a bad hydraulic hose.

1447: MBlanton make call to Pertek for possible mobile repair service.

1555: VJ remove bad hydraulic hose ~~to~~ troubleshoot. Determined to forego mobile service. Will take hose in to service office for repair or replacement in the morning.

1600: Begin packing up. 8" casing set at 280'. Core barrels set at 290'-300' ft bgs. overnight, inform project team.

1620: All onsite. Samples held over night. For shipment tomorrow.

Helen Boll
6/30/24

Rite in the Rain

7/1/2024 SLC VA M. Blanton

TASK: continue MW-44 boring once replacement hose arrives on site. Determine deep well screen depth.

Personnel: Team1: S. McGuire (COM), D. Diaz (YJ), T. Adams (YJ), + C. Frank (YJ)
Team2: M. Blanton (COM), L. Mulrooney (COM), S. McNulty (YJ), R. Bagle (YJ), W. Waldrop (YJ).

Weather: 30/19 & partly cloudy

0700: All on site for H+S meeting. YJ team2 will arrive once back w/ replacement hose.

0715: conduct checklists / calibrate PID.

0750: YJ team 2 on site w/ hose repair. MB give H+S meeting.

0805: YJ ~~reattach~~ MB install hydraulic hose.

0925: New hose installed. YJ begin pulling up 290' - 300' core.

0945: core fell out, advance

core barrels again to 300 ft bgs.

1030: YJ collect core from 290'-300', silty clay w/ gravel + sand (dense (moist) starts at 291' - 300'. Call Joe Miller. Advance to 310' + possibly 320' to determine if GW available. Will potentially set 280-290 ft bgs if dry to 320'.

1050: YJ advance boring to 310', + 8" casing to 290

1200: YJ collect core from 300'-310', dry-moist silty clay w/ gravel + ~~peat~~ clay lens at 306'-308'. NO GW available.

1210: Take lunch. M. Blanton consult with Joe Miller + Neil Smith. Will recommend to set deep well screen at 280'-290' + shallow 195'-205'.

1240: Return from lunch + waiting on VA/USACE approval.

Rite in the Rain

1255: VJ advance boring to 312' to clear hole. ~~Advance~~ MB

1340: Receive approval from VA + USACE for well depths.

1400: W. waldrop off site - family emergency.

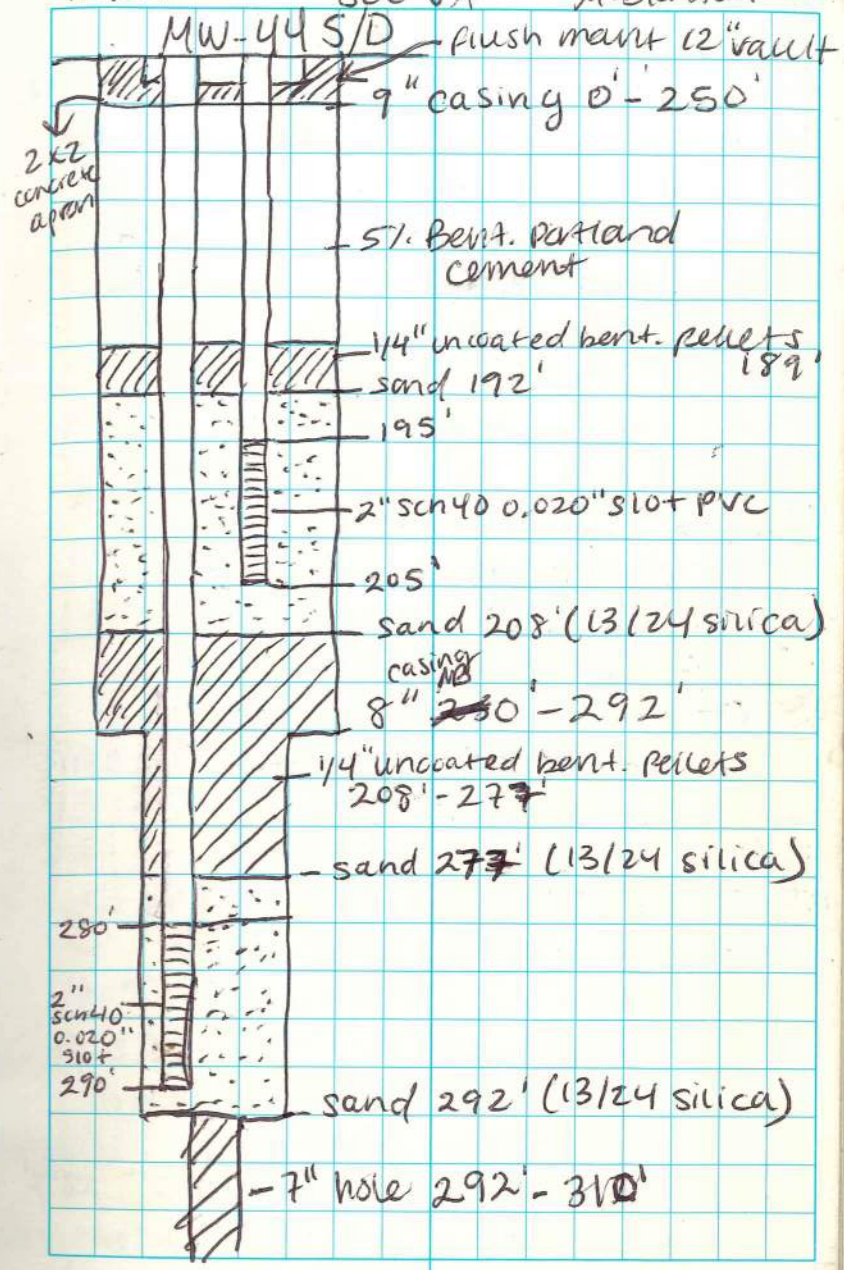
1415: VJ advance 8" to 292', clear out hole to 312'. L. Mulrooney offsite to ship samples from 6/29.

1503: No recovery from 310-312', VJ begin removing 9" casing Backfill to 300' w/ 1/4" bentonite pellets (uncoated).

1430: 70 ft of 9" removed. Begin packing up. see next page for well construction designs.

1445: All offsite.

MB
7/1/24



Rite in the Rain

 7/2/24 SLC VA M. Blanton

Task: continue with MW-44 S/D installs. Prepare for shift change.

Personnel: Team 1: S. McGuire (COM), D. Diaz (YJ), T. Adams (YJ), C. Frank (YJ). Team 2: M. Blanton (COM), L. Mulroney (COM), S. McNulty (YJ), R. Dagle (YJ)

Weather: 15/27°C, sunny, slight breeze

0700: All onsite for H+S meeting. See H+S form.

0715: complete all checklists

0730: YJ continue pulling up 9" casing.

0822: 9" casing removed. ~~Begin pulling up 8" casing~~. Backfill to 292' w/ 1/4" bent pellets (uncoated)

0845: YJ begin setting MW44-D at ~~2980~~ 280-290 Ft bgs.

0946: MW44-D set from 280-290 Ft bgs. YJ adding 13/24 sand from 292-277 Ft bgs.

1105: Sand pack added from 292'-~~277~~'. Begin adding 1/4" bent pellet annular seal from 277'-208'.

7/2/24 SLC VA M. Blanton

1215: hydraulic fluid leak, cleanup/troubleshoot.

1225: COM on lunch

1255: COM return from lunch.

1300: YJ offsite to pick up replacement hoses + to take lunch. COM scan/upload field documents.

1420: YJ back on site w/ hose replacement. Re-install.

1435: YJ decon 9" casing

1455: hose re-install complete. Resume puling up last 9" casing section + adding bent.

1540: Bentonite seal set from 277'-208'; YJ set MW44-S from 205-195 Ft bgs.

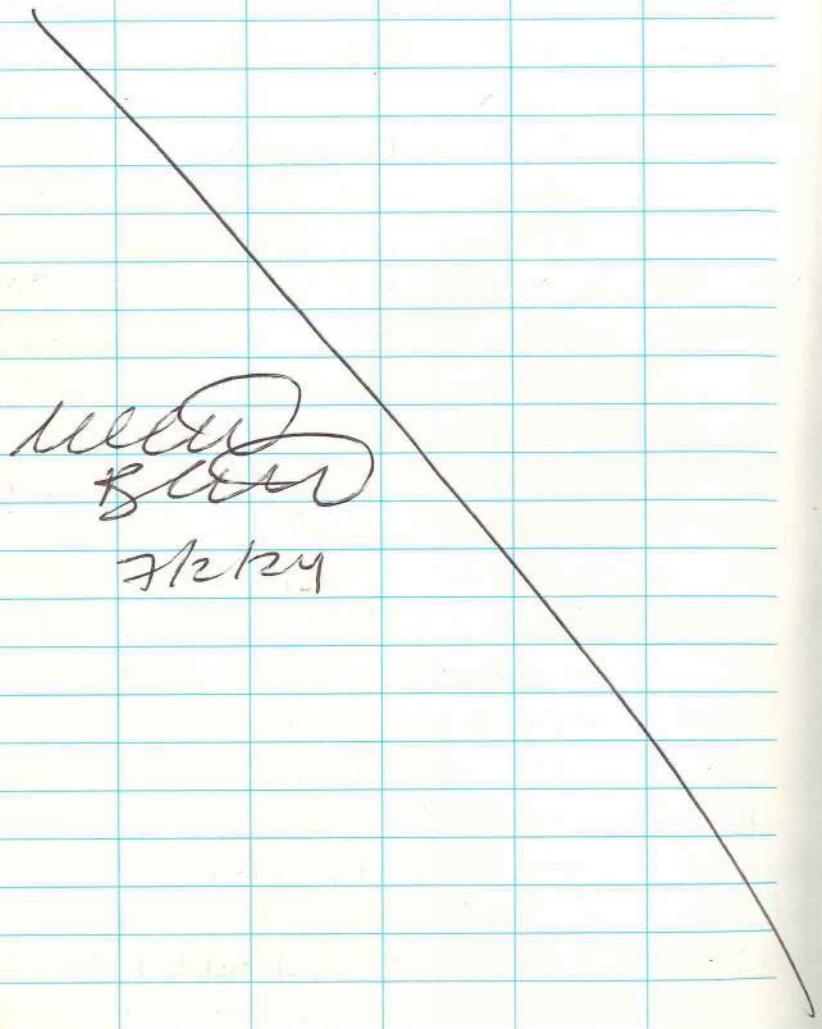
1605: MW44-S set from 195'-205 Ft bgs. YJ add 13/24 sand from 208'-192'.

1713: Sand pack added from 208'-192'. Begin adding 1/4" bent. pellets from 192'-189'.

7/2/24 SLC VA M. Blanton

1525: Bentanite seal set from 192'-189'. Begin packing.

1800: All offsite, connex ready for next shift.



7/2/24

PERSONEL: Kaća Savatic (KS), Joe Miller (JM)
RJ: Shane McNulty (SM), Zach Olmsted (ZO), Diego Diaz (DD), Ray Dagle (RD), Craig Frank (CF)

PLANNED ACTIVITIES: MW-44 (mini-rig) - grout and continue with well development
MW-39 - casing ~150' and hole depth currently @ ~200'; continue drilling and not hit water yet

PPE: Level D

WEATHER: 71°F w/ high in 90s; sunny

07:00: KS onsite with RJ; JM collecting keys from Wasatch
07:30: H&S Tailgate meeting
07:50: mob to wells and drillers remove some 9" casing (on racks) from MW-44
08:30: begin removing 8" casing
1015: all of 8" casing (180') removed and will start with quick grout; discussed seal with SM and he said bentonite seal was set to 187' and not 189'
1020: Tremmie installed to 150' bgs
1025: racks of 8" casing taken to containment yard
1045: SM working to fix grout mixer that

appeared to be leaking hydraulic fluid; hook up to new motor

1110: grout + 55-gallon drum arrive to MW-44 AMC Grout 20™ 50 lbs - started w/ 42 bags; RD to go get water tank

11:40 drillers take lunch

12:10 drillers resume set-up for grout mixing

1235: got mixing going (~~20~~ 3 bags AMC Grout 20 aka ~~150~~ 150 ~~175~~ lbs + ~~50~~ 40 gallons water), but issues with mixer so RD going to grab mixer from other well KS 7/8/24

1247: mixer from other well in mixing drum

1250: Batch 1 of 50 gallons in

1253: New RJ person arrives to site

1259: Batchs 2/3 in (2.5 bags + ~40 gal water each)

1305: Remove 20' of tremie pipe (@ 130' bgs)

1307: JM to MW-44 to have new person (Weston) sign H&S sheet

1310: JM leaves

1337: Batches 4-7 in (2.5 bags + 40 gallons water each) and removed 40' of tremie pipe (@ 90' bgs)

1401: Batches 8-9 in (2.5 bags + ~40 gallons water each); removed 40' of tremie pipe (@ @ 50' bgs)

1419: Batches 10 (2.5 bags) and Batch 11 (3 bags) in and removed 20' of tremine pipe (@ 30' bgs)

Katarina Savate

1500: Removed 10' of tremine pipe (@ 20' bgs, but SM says 10' bgs); switching to 5% Bentonite Portland cement (32 gallons water, 8 bags, 5% gel) @ 30' bgs

1502: consulted with JM about switch

1530: 2 Batches of Portland:
1: (7 bags + gel)
2: (5-6 bags + gel)
going to let these settle and continue to to off because presently like ~~5-7~~ 2-3 bgs

LATE ENTRY: remaing tremie pipe was removed b/w 15:02-15:30

1550: cleaning up grout; we've seen it drop, but SM filled to ~ 1-1.5' bgs

LATE ENTRY 1455: Batch 12 (1.5 bags), 13 ~~(a)~~ - 16 (2.5 bags) were added; Total of 16 Batches of AMC Grout 20™ and ~700 gallons of water

1605: RD to decon tremie pipe and cleaning up

1700: Drillers done at MW-44 & KS to MW-39

1730: COM off-site

7/8/24 Katarina Savate

0700 Onsite Task Finish install @ MW-44
- Weather 65-100°F Sunny
HASTailgate Topics
Heat, Communication, tight work area
Lifting Moving Equipment

0730 Calibrate Meters
Portland @ MW-44 settled to 28' Bgs

0745 Begin Mixing Portland
walk to Area East of MW-02 along
Berm 12 Bags Portland

0815 Diego and Isaac walk Berm to see
about Full Rig Access

0840 MW-44D DTB 290 from TOC
MW-44S DTB 205.25 from TOC

0900 Mob Rig to laydown from MW-44
Decon Casing

0920 Dig out area for Flush mount Monument

1020 Install Flush mount vault w/ circular
Sonotube 6+1/2 Bag Quick crete

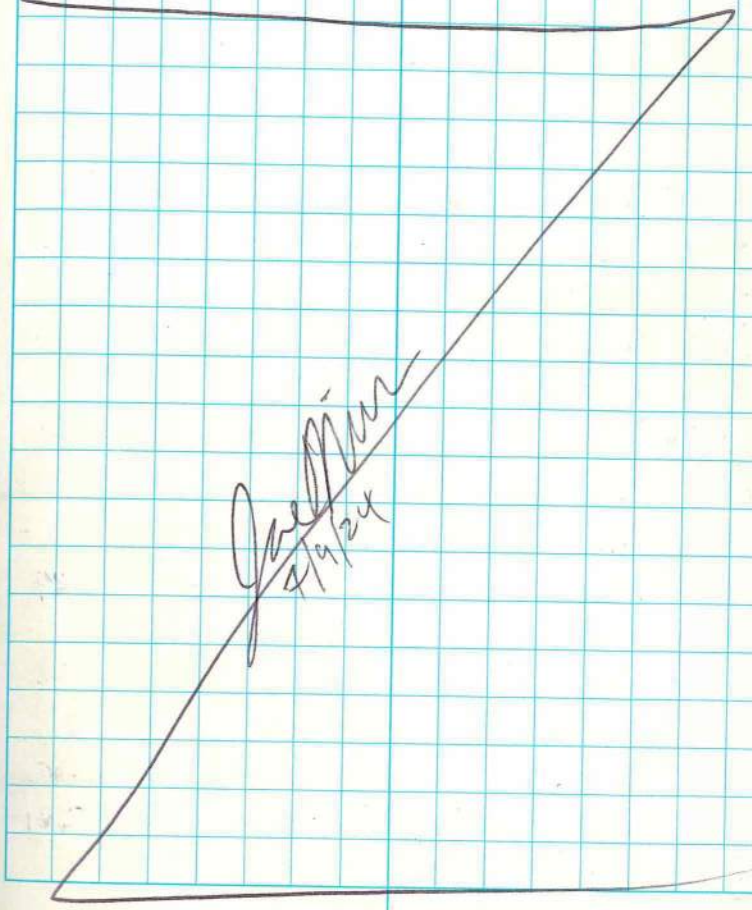
1030 Continue to demob equipment from MW-44
to laydown

1100 Decon / Organize laydown

1130 YSD Break for lunch
Call w/ VA-USACE about IW01 MW-42
Location Decide to locate around EW01

Jm 7/9/24

1200
~~1230~~ - YJ Return from lunch continue decon
1300 - Markout Locations
1345 - Submit 811 Call for location
1410 - Walk over to Rig Hauler and trailer
1420 - Decon truck Rig
1715 - Offsite - YSD
1730 - CDM Smith Offsite



7/10/24 SLC VA

Author: Joe Miller

Weather: 74-103°F

Task: Track Rig Demob/MW-39 Drilling

0645: CDM Smith Onsite

0700: H+S Tailgate - YJD Onsite
Topics: Heat, Lifting, communication, Spotters
Securing loads

0715: YJD does Inventory on Casing figuring out what needs to stay for Fullsize Rig

0745: Decon Bobcat/Lift

0900 Move trailer from FDW Yard
Joe to Connex to Scan Field docs

0950 Wynn delivers Start cards

1100 Call w/Neil to discuss MW-42/EW01 location

1120 Markout EW01 location

1200 YJ Break for lunch

1230 Resume loading Equipment

1300 Semi Onsite to load Rig/Bobcat

1430 Truck loaded Securing load

1440 Bryce Lugo Yellow Jacket Onsit

1600 Full Size Rig update
Valve Cone control for Jaws failed
A Replacement has been ordered from Ohio
will ship tomorrow morning for Friday delivery

1730: CDM/YJ offsite

Joe Miller 7/10/24

0700 CDM Smith/YJ (Track crew) Onsite
H+S Tailgate
Topics Heat, driving, work safe Homesafe

0720 YJ load small trailer

0730 CDM to Connex to Organize

0900 YJ Full Crew onsite:
Diego, ~~Larry~~ on 7/11/24, Ray Zach
H+S tailgate

0915 YJ Track Crew Offsite
YJ Fullsize crew to Service Rig

1015 MW-45 DTW 20.56' BTOC
DTB 204.22 Soft Bottom

1032 MW-44S DTW 155.14 BTOC
DTB 204.63 BTOC Soft Bottom

1038 MW-44D DTW 166.09 BTOC
DTB 291.68 Soft Bottom

1050 MW-40 Blocked By Car

1058 EW01 DTW 175.08 BTOC ?
DTB 304.30 DTB

1121 MW-43S DTW 202.27 BTOC Soft Bottom
DTB 231.94

1127 MW 43D DTW 214.05 DTW
DTB 285.05 BTOC Soft Bottom

1315 Remove EW-01 DTW 200.98'

1330 YJ Finished w/Maintenance Load Pallets for Run to dump - ~~OF~~ JM 7/11/24

Rite in the Rain

7/11/24 SLC VA Joe Miller

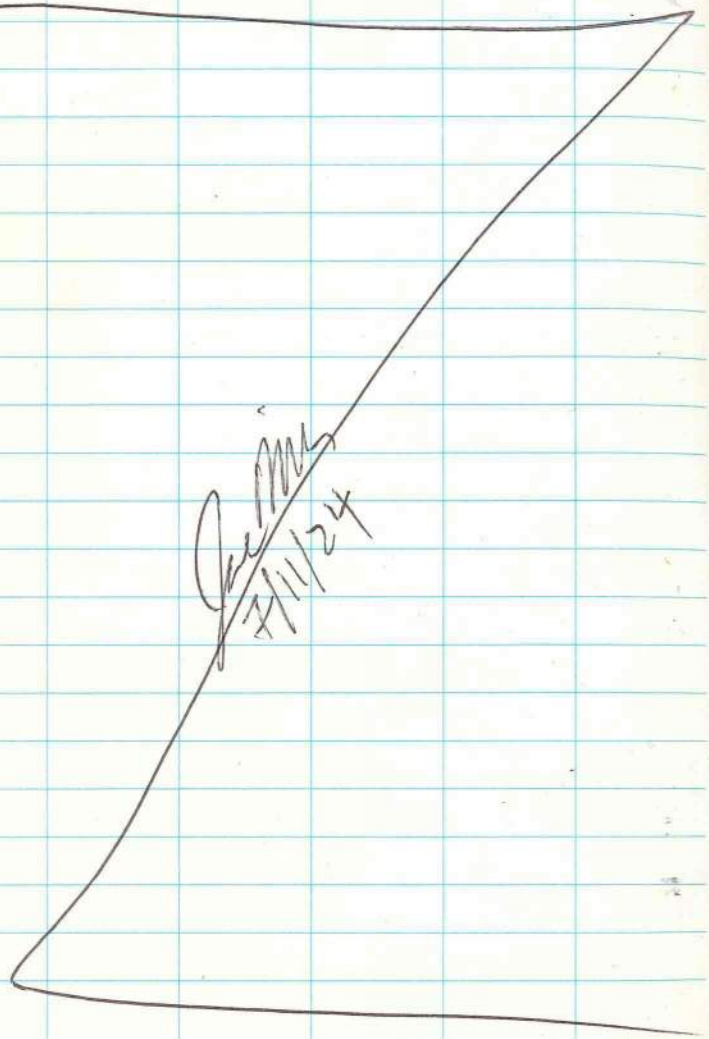
weather 100F

1400 Call w/ VA - USACE

1430 Kacey Sawatzki (CDM) offsite

1500 YJ Return drop trailer offsite

1545 Joe Miller offsite



Author Joe Miller SLC VA 7/12/24

Task: Rig Repair / Badger Preclearing IW01 MW-42

0800 CDM, YJD, Badger Onsite
H+S Tailgate
Communication, Heat, Dust, Pressure

0830 Badger Mob to IW01 Area
Begin Saw Cutting

0850 Saw cut complete both holes

0900 Begin Vac IW01

0915 found sewer offset 5' to NE
Sewer 3' Down

0920 Begin Clearing MW-42 Sawcut
New area for IW01

0935 Sewer Running Ew in MW-42 @ 5'
Notify Neil about second line

0945 Discuss Locations with Neil
Need to offset 5' from known line

1000 Saw cut 3rd Location

1015 Backfill 1st 2 holes begin Clearing
3rd location

1135 3rd location to 10' Call VA - Zane
Comes out to look. Location 42' from
EW also it will be MW-42

1155 Zane Confirms Depth Begin Backfilling

1200 Begin cutting 4th location

1220 Begin Vacing 4th location

Rite in the Rain

7/12/24 SLC VA weather 95°F

1245 IW-01 to 6' BGS

1345 IW-01 to 7.5' BGS Call to Zane to come look at it, Badger keeps on digging until Le gets here

1400 Zane Onsite Boring to 7.5' w/ Large Boulders (Rock on Rock) Okays depth

1420 IW-01 Backfilled

1430 Badger Dump Soil/water in Containment

1450 Badger takes ~1000 gal water to Refill water used

1535 MW-40S DTW 188.75 BTOC

MW-40S DTB 242.32 BTOC Soft Bottom

1543 MW-40D DTW 207.79 BTOC

DTB 295.14 BTOC Soft Bottom

1600 Head to Full Size Rig Site

7/12/24

Rite in the Rain

Appendix C Utility Locate Reports

GPR SERVICES INC.

5/15/2024

On 5/1/2024 I started a GPR Survey at the VA Center in Salt Lake City, UT. under the direction of John S. Rezac with Wasatch Environmental. The survey was done to provide information for hit avoidance and mitigation on underground objects, structure, and buried utilities prior to boring deep into the soils at 5 separate locations.

There is a "Line List" included with this letter stating known and unknown capacities of the utilities encountered during this survey and there were no underground objects discovered.

Best of luck with your project and please let me know about any questions or concerns that you may have.

5-15-24

Kevin D. Wiederhold – Owner, GPR Services Inc.

107 E. Jordan Ridge Blvd. #510 Saratoga Springs, UT 84045
Phone: (385) 253-1776
Email: kevin@gprservicesinc.com

GPR Services Inc.

~~Mobile Home park #1~~

6-1-2024 Operator: Kevin D. Wedderburn

VA SLC

7am - Broken Overcast 47°

8:03 - 2" Grid W/ maggie

- No Hits

John Wilm W/VA - Locations are not right

8:22 - Texted John Rezac

10:05 - Called John - Not going to follow sew.

GR2550 "Subsite GRR"

- 400 mhz + 700 mhz

- 3.9 in. per NS

Water

Storm drain

Comm Pedestal

Fire water

This Site Was Abandon

GPR Services Inc. MW-41

Site ~~#1~~

5-2-2024 VA SLC "Mobile home Park" ~~#1~~

9:30 onsite - John W/ on w/ VA
- Not following SOW

10am - Metrotec V-Loc +
Maggie

11:11-11:55 Lunch
V-Loch, Maggie, GR2550

2:09 - Off-site

- Subsite GPR - GR2550 @ 3.9ia per NS.
*operated by Kevin D. Wiederbold

- Metrotech/Vivax VLoc-3
EM Locator @ 38.5 Hz

- Shonstedt Maggie - Metal detecto

Surved known utilities in
2 opposite directions to
verify calibrated accuracy

GPR Services Inc.
~~Oper~~ Equip Operator - Kevin D. Wiedenbeck

~~Mobile Park #1~~ MW-411

5-3-2024 VA SLC "Fenced yard"

47° Overcast - Cumulonimbus

9:31 - Onsite - Mobil home park

Mala

10:50 - Lunch Break

12:03 - Marking complete

12:10 - Lunch - 12:50

~~12:50~~ Subsite GRZ550 @ 3.9in. per 45

~~12:5~~ Mala EZ-Locater 450 mHz @ 328 ft. per sec

Metrotech/Vivax Vloc-3 EM

Schonstedt Maggia Metal

Served in two opposite directions for QC

Chain link

N

Electrical Pad

Unknown White

Bore Site

Chain link

Sewer - Clean Out - White

Unknown - White

Elec. Pad

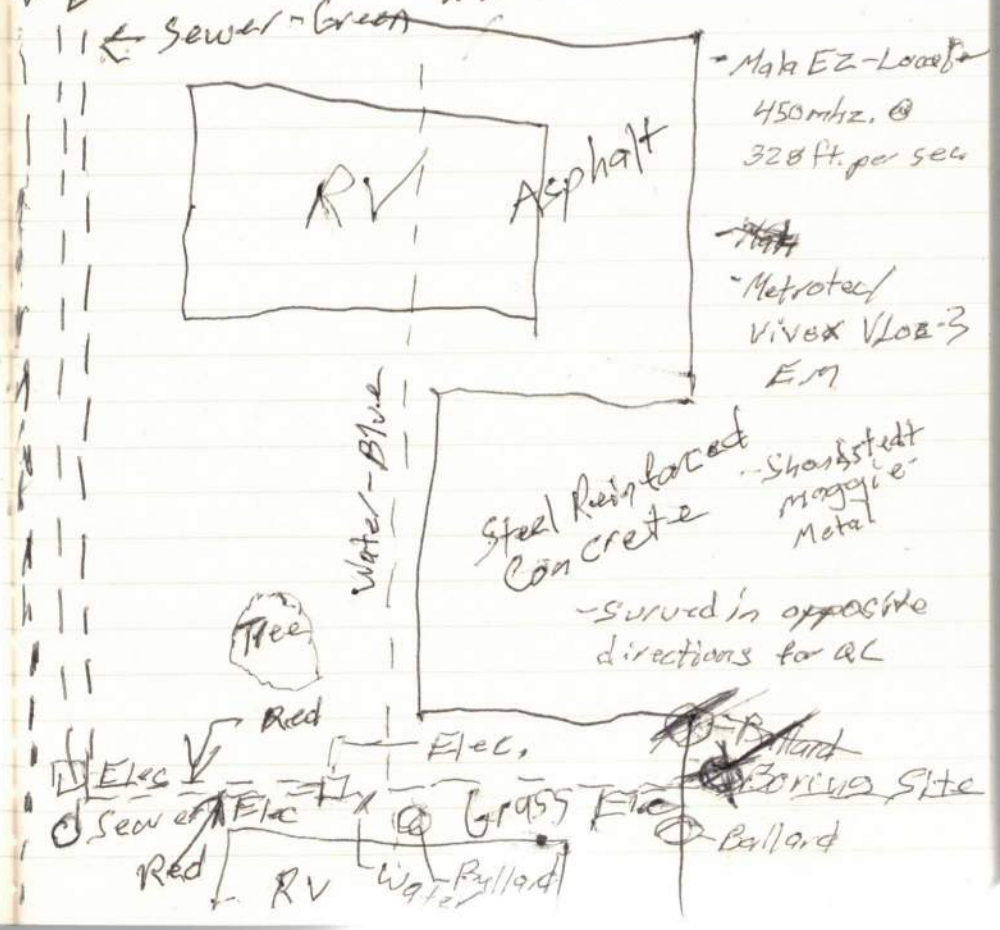
Guy Pad

GPR Services Inc.
Equp. Operated By: Kevin D. Wiederhold EW-01

5-3-2024 Mobile park "RV Pads"

~~12:15~~ Temp. 53°, Scattered Clouds
12:50 - on-site. There are RV's on both sides of the ~~drill~~ bareing location. It is limiting the size AOI.

Red The concrete pad is reinforced with steel
Elec. 4:45 off site Finished
used Mala, VOC3, Maggie
Elec. Red 4:45 off site Finished
Sewer - Green



~~Site #3~~

~~5/6/2024~~

~~11:30am 38° Rain Showers~~

"pages stuck together"

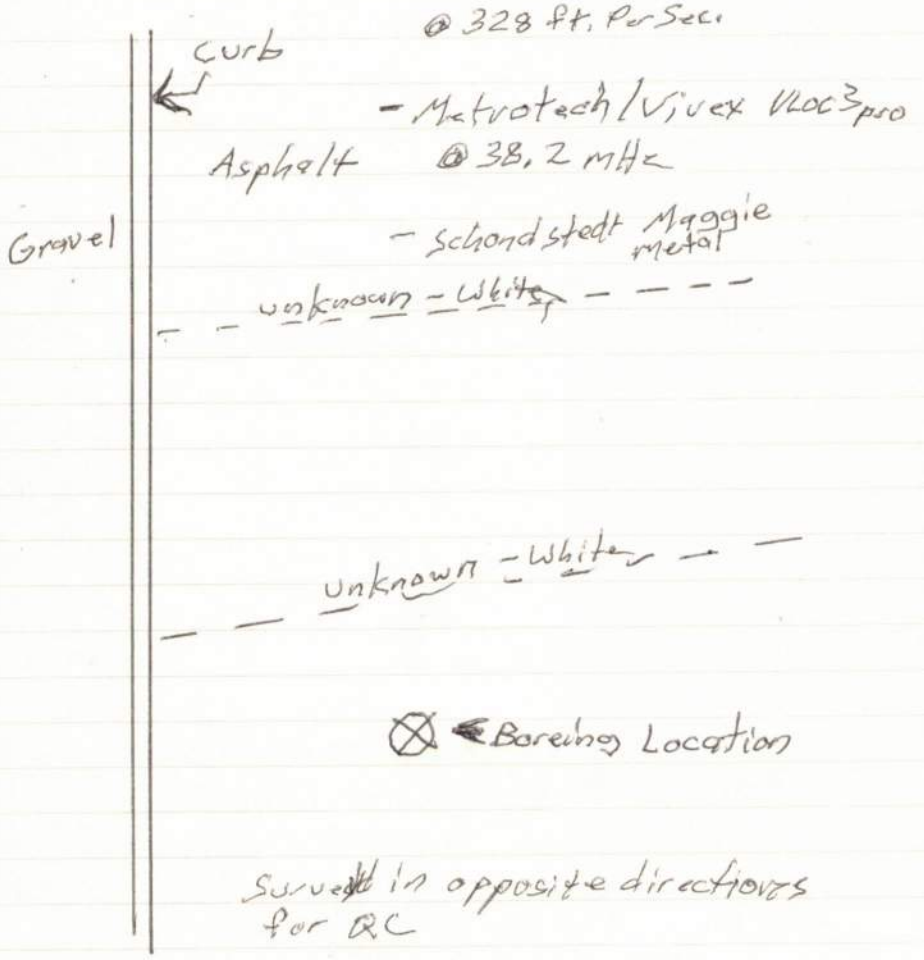
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GPR Service, Inc.
Equip Operated by: Kevin D. Wiederhold

~~Site #3~~ MW-43

5-6-2024 VA, SLC "Entry"
11:30am 38° Rain Showers.
There is a truck and RV blocking some of the access to the site.

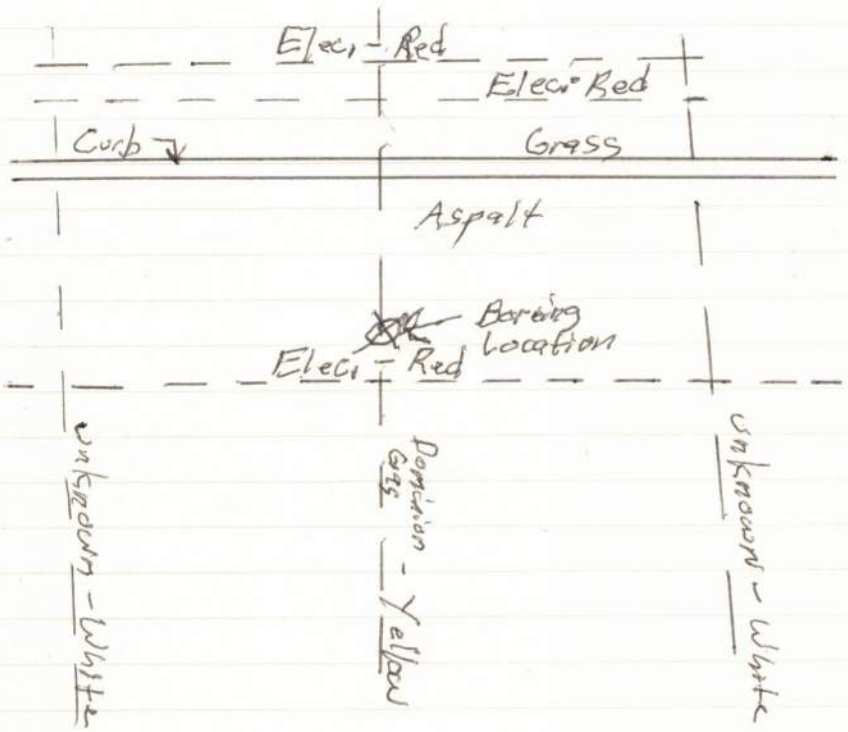
- Mala EZ Locater 450 mHz @ 328 ft. Per Sec.
- Metrotech/Vivax Vloc3pro @ 38.2 mHz
- Schondstedt Maggie metal



GPR Services Inc.
Equip. operated By: Kevin D. Widerhold

~~Site 4~~ MW-40

5-6-2024
12:55 pm Rain and Snow 36°
There is a car blocking part of the AOI



Mala EZ Locator, 450 mH @ 283 kHz
Metrotech / Vivax VLoc3 pro @ 38.5 kHz
Schoendstedt Maggie - Metal detecto

Surveyed in opposite directions for QC

GPR Services Inc.
Equipment Operated by: Kevin R Wiederhold

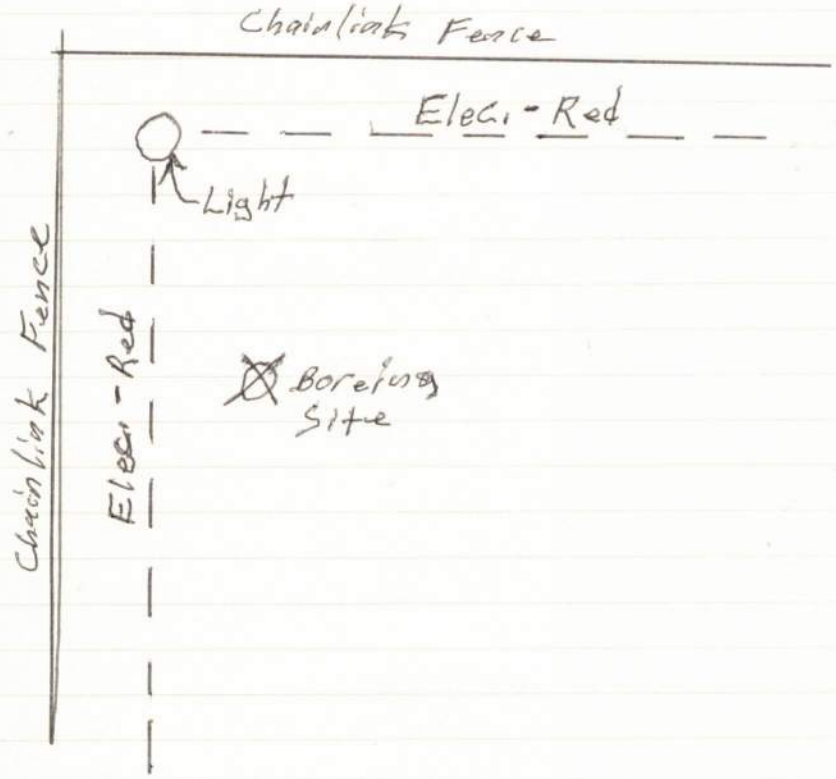
~~Site 5~~ MW-44

VA, SLC "Ballfield"

5-6-2024

41° cloudy, 3" of snow covering the ground.

Offsite at 3:35pm



Malg EZ Locator 450mH @ 328 ft per sec.

surveyed in oppisite directions for QC

GPR SERVICES INC.

6/6/2024

On 5/29/2024 I started a GPR Survey that lasted 2.5 days at the VA Center in Salt Lake City, UT. under the direction of John S. Rezac with Wasatch Environmental.
The survey was done to provide information for hit avoidance and mitigation on underground objects, structure, and the location of buried utilities prior to boring deep into the soils at 8 separate locations.

A "Line List" is included with this report delineating known and unknown utilities and their capacities.

There were no underground tanks or significant structures found, however there are lots of cobles at both sites.

6-6-2024

Kevin D. Wiederhold – Owner, GPR Services Inc.

107 E. Jordan Ridge Blvd. #510 Saratoga Springs, UT 84045
Phone: (385) 253-1776
Email: kevin@gprservicesinc.com


N
Unknown
PWF
ALL
Unknown


Water
Storm Drain
PWR

GPR SERVICES INC.

6/13/2024

On 6/11/2024 I conducted a GPR Survey near the SLC VA Center under the direction of John Rezac with Wasatch Environmental (the contractor).
There were two sites evaluated, the first is on Guardsman Way about mid-property. The second is located on the Southern side of the East high school near 1300 and roughly mid property and close to the two existing wells.

The surveys were done to glean information related to hit avoidance while boring near the two delineated areas of interest for the installation of water monitoring and purifying access points.

A Mala HDR GPR cart probe with a 450 MHz Antenna and a Schonstedt GA-52Cx metal detector were used to conduct the surveys.

The submitted GPR Traces were done from mostly West to East at Guardsman's way, and mostly North to South at East High School.

Results:

Guardsman Way Site: There are 4 utility installations running mostly North and South through the site.
There was some electromagnetic noise detected in the GPR traces while doing the survey that could have diminished the quality of the data.
Please use caution.

East High School: There are 7 utility installations running mostly West to East through the site. There was significant electromagnetic noise and interference detected in the GPR traces that could have diminished the quality of the data throughout the survey.
Please use caution.

Kevin D Wiederhold 6-13-2024

Kevin D. Wiederhold – Owner, GPR Services Inc.

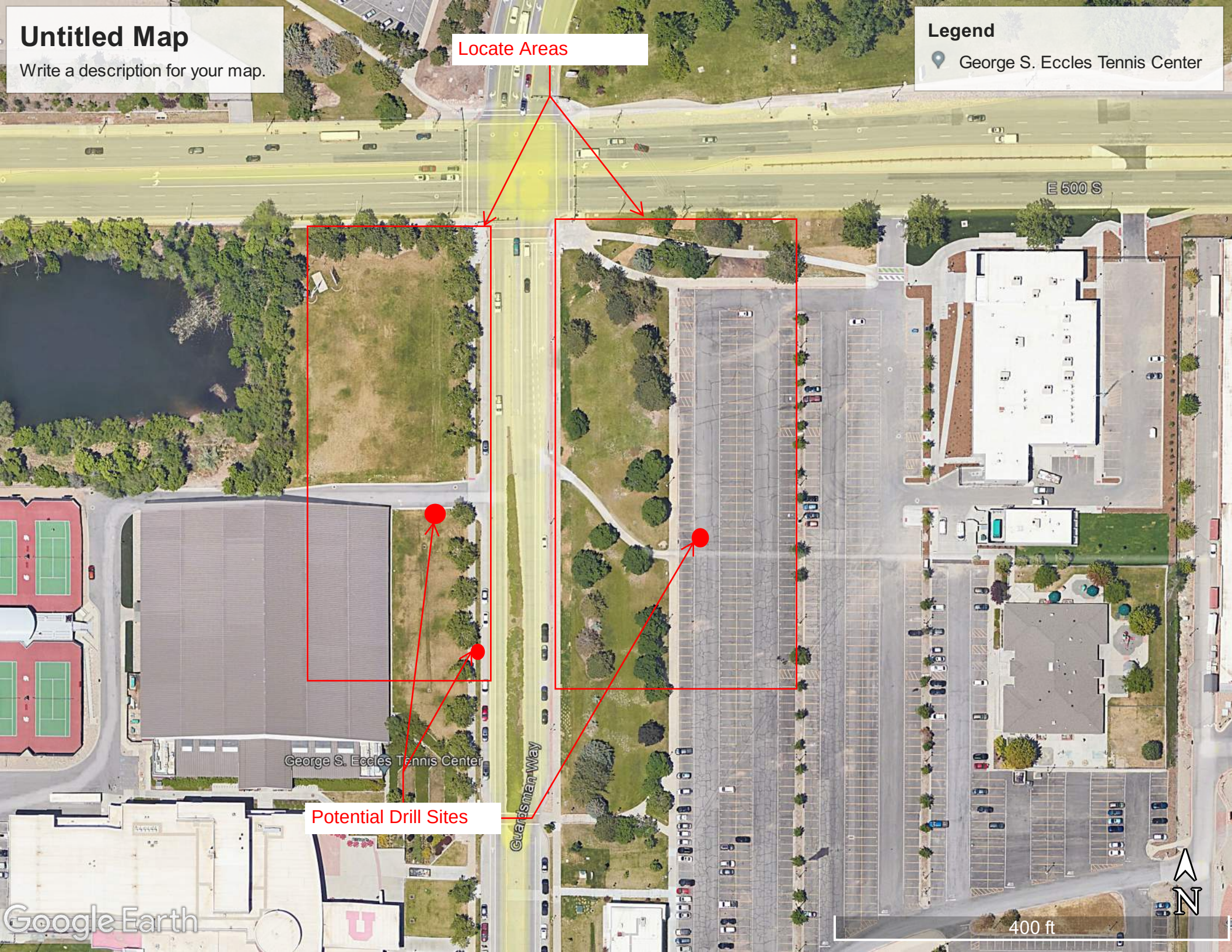
107 E. Jordan Ridge Blvd. #510 Saratoga Springs, UT 84045
Phone: (385) 253-1776
Email: kevin@gprservicesinc.com

Index



MW-39
Water
HOT
PWR
Unknown


MW-45
Unknown
AOI


Untitled Map
Write a description for your map.
Locate Areas
Legend
George S. Eccles Tennis Center
E 500 S
George S. Eccles Tennis Center
Guardsman Way
Potential Drill Sites
Google Earth
400 ft
N

JOB SUMMARY REPORT

Order Number:	Work Order #681053	**Job Date:**	Jun 28, 2024 10:33:00 AM
Customer:	26788 CDM SMITH	**Billing Address:**	CDM SMITH 125 S Wacker Dr Ste #2510 Chicago IL 60644 United States

JOB DETAILS

Jobsite Location	595 Guardsman Way, Salt Lake City, Utah, 84108
Work Order Number	Work Order #681053
Job Number	
PO Number	275859

GPRS Project Manager: Cody Thompson

Thank you for using GPRS on your project. We appreciate the opportunity to work with you. If you have questions regarding the results of this scanning, please contact the lead GPRS project manager on this project.

EQUIPMENT USED

The following equipment was used on this project:

- **Underground GPR Antenna:** This GPR Antenna uses frequencies ranging from 250 MHz to 450 MHz and is mounted in a stroller frame that rolls over the surface. Data is displayed on a screen and marked in the field in real time. The surface needs to be reasonably smooth and unobstructed to obtain readable scans. Obstructions such as curbs, landscaping, and vegetation will limit the efficacy of GPR. The total effective scan depth can be as much as 8’ or more with this antenna but can vary widely depending on the soil conditions and composition. Some soil types, such as clay, may limit maximum depths to 3’ or less. As depth increases, targets must be larger to be detected, and non-metallic targets can be challenging to locate. The depths provided should always be treated as estimates as their accuracy can be affected by multiple factors. For more information, please visit: Link
- **EM Pipe Locator:** Electromagnetic Pipe and Cable Locator. Detects electromagnetic fields. Used to actively trace conductive pipes and tracer wires, or passively detect power and radio signals traveling along conductive pipes and utilities. For more information, please visit: Link
- **GPS:** This handheld unit offers accuracy down to 4 inches; however, the accuracy achieved will depend on the satellite environment at the time of collection and is not considered survey-grade. Features can be collected as points, lines, or areas and then exported as a KML/KMZ or overlaid on a CAD drawing. For more information, please visit: Link

JOB SUMMARY REPORT

WORK PERFORMED

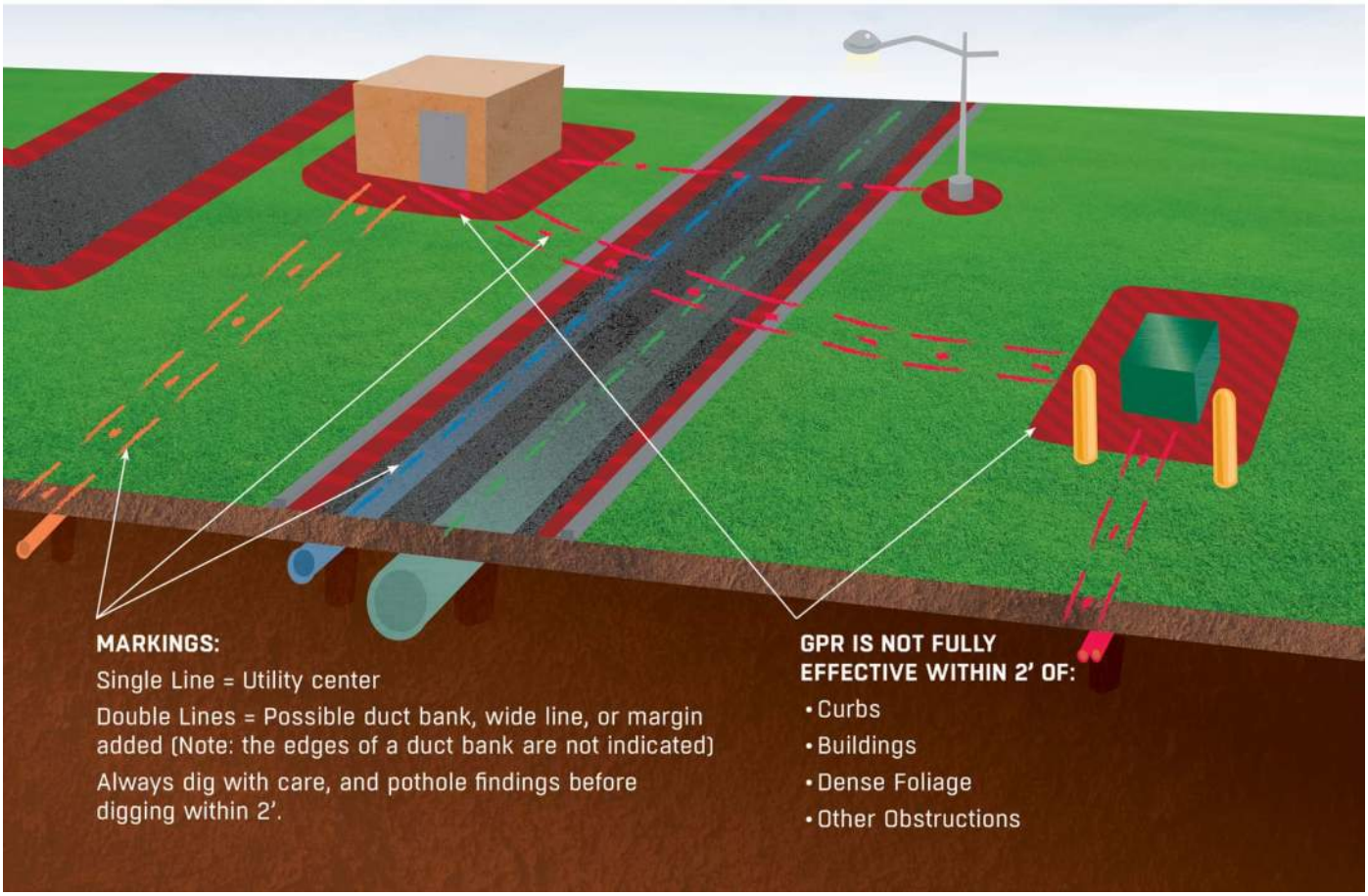
UNDERGROUND UTILITY	
Client Provided Drawings	No
Client completed 811 locate request	No
Scope of Work	Scan area marked on map for underground utilities for 1 soil boring. Mark all findings with spray paint and approximate depths.
Small Area Scan (sq ft)	70
Soil Borings (qty)	1
Approximate GPR Effective Depth (ft)	2
Utilities Located	- Electric - Storm Sewer
Marking Medium	- Spray Paint
Results Notes	Scanned a 70’ area for underground utilities. The area was scanned using GPR and EM locator. There was electrical (site light line) and storm drain near the scan area these were marked with spray paint and approximate depths. Please stay up to 3’ off any marks. If you must dig in these areas please use soft dig methods.

JOB SUMMARY REPORT

SUPPLEMENTAL INFORMATION

COMMON UTILITY LOCATING LIMITATIONS

There are many limitations to locating utilities, due to a variety of factors, with several more common examples illustrated here.



JOB SUMMARY REPORT

JOBSITE IMAGES



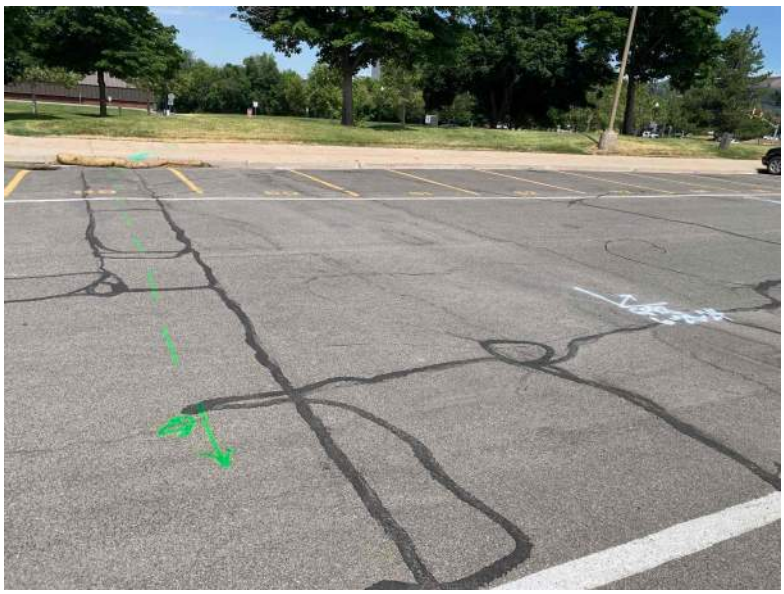
Jobsite Photo #1



Jobsite Photo #2



Jobsite Photo #3



Jobsite Photo #4



Jobsite Photo #5



Jobsite Photo #6

JOB SUMMARY REPORT

CONTACT / SIGNATURE INFORMATION

SIGNATURE



Contact Information

Contact Name	Neil Smith	**Email**	smithnl@cdmsmith.com

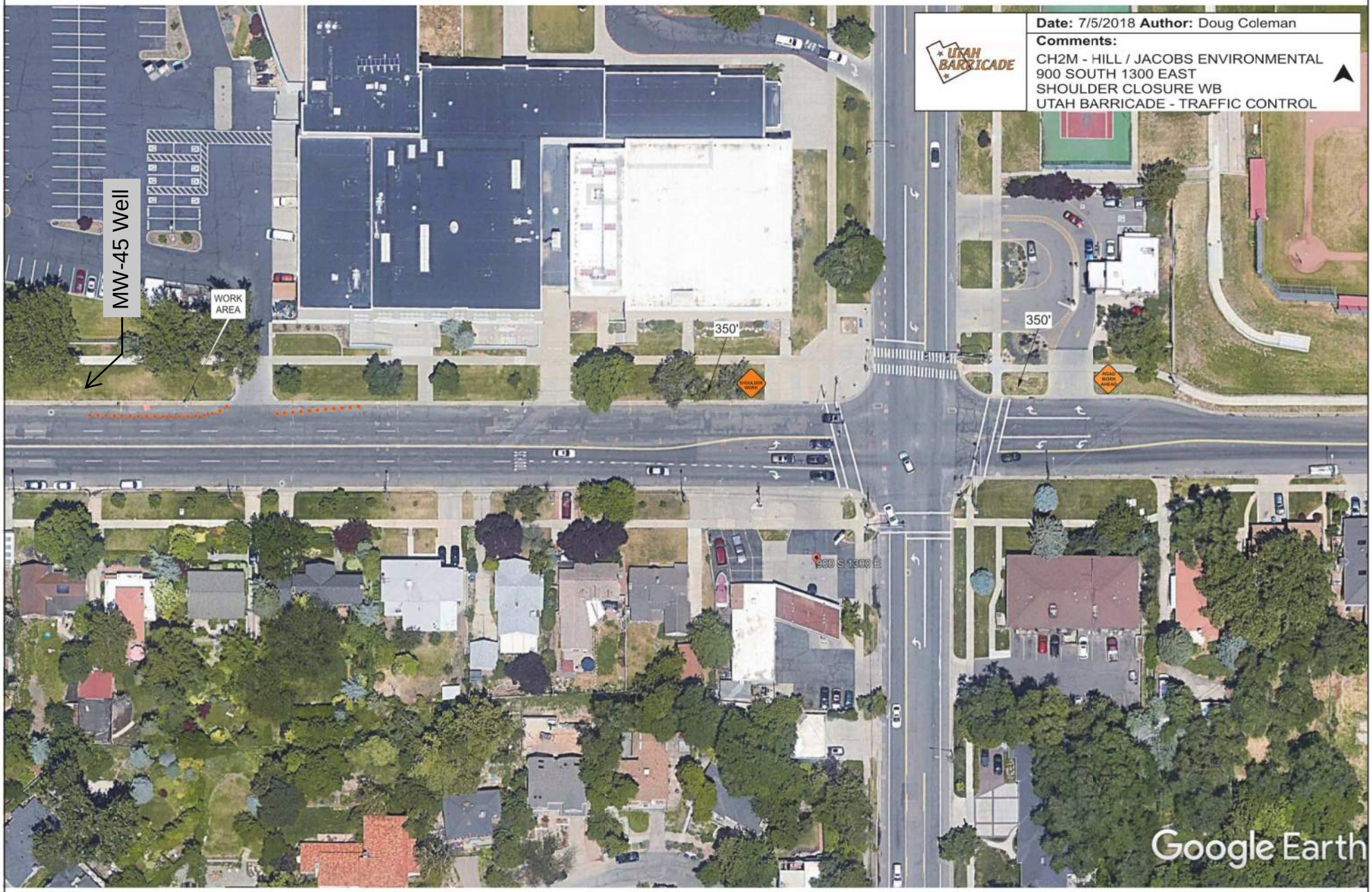
TERMS & CONDITIONS

http://www.gprsinc.com/termsandconditions.html

Appendix D Traffic Control Plan

MW-13S/D Traffic Control Plan

www.invarion.com



Appendix E Salt Lake City Traffic Control, Engineering, and Right-of-Way Permits

SALT LAKE CITY CORPORATION
ENGINEERING DIVISION
349 SOUTH 200 EAST, SUITE 100
SALT LAKE CITY, UTAH 84111
PHONE (801) 535-6396
FAX (801) 535-6093
engpermit@slcgov.com

ENG2024-01139

Assigned Inspector: Jacob Easter
Office Phone: (801) 913-5725
Cell Phone:

Please contact inspector 24 hours before beginning work

PERMIT TO WORK IN THE PUBLIC WAY

Job Address:	**Contractor Phone**
840 S 1300 E	Phone1: Phone2: FAX:

Applicant Name:	Business Name:	Mailing Address:
Neil Smith	CDM Federal Programs Corporation	555 17th Street Suite 500 Denver, CO 80202

Traffic Control Plan		**Starting and Ending Dates**		**Fee**	
Barricade Manual Figure	**TA-6**	Begin Date:	**06/20/2024**	Total Fee:	**$395.00**
Traffic Permit Number:	**TRN2024-01473**	Expiration	**07/19/2024**		

Certificate of Insurance as Per City Ordinance â€“ Chapter 14.32.065	Number:
Bonds As Per City Ordinance â€“ Chapter 14.32.070	Number:
State Contractors License As Per City Ordinance â€“ Chapter 14.32.025	Number:

Work Type: **Test Bore**
Drawing Included: **No**
APWA Standard:

Field Contact: Joseph Miller **Phone:** 513-602-1619

Comments or Additional Requirements:
Single test borehole and monitoring well installed with flush-mounted traffic-rated manhole cover. Work is in park strip south of East High School, north of 900 S, between 1200 E and 1300 E

Notice: CALL 24 HOURS BEFORE COMMENCING WORK (535-6727) for Public Utility inspections or assigned inspector for all other inspections or 48 hours if work is scheduled on holidays and weekends. **Digging within ten feet (10â€™) of any parkstrip street tree requires written authorization from Salt Lake City Urban Forestry.Â Contact Urban Forestry at (801) 972-7818, before any excavation with in ten feet of a street tree, for inspection and authorization.**
BEFORE EXCAVATION CONTACT BLUE STAKES â€“ 811 or 1-800-662-4111

PERMIT APPLICATION: Application is hereby made for a permit to work in the public way as specified above.
Applicant agrees to the terms on the reverse side and to any increase in fees should they be required by Engineering.
Print name of Applicant: Neil Smith

Signature of Applicant: Date: 6/19/2024

Permit Issued By: Kimberly Beard

**** WORK GUARANTEED - 3 YEARS FROM ACCEPTANCE DATE ****

GENERAL CONDITIONS

ACCEPTANCE OF CONDITIONS. It is understood and agreed by the Permittee that performing any work under this permit constitutes acceptance of Title 14 Chapter 32 of the Revised Ordinances of Salt Lake City and the City's Regulations for controlling construction, excavation and obstructions in the Public Right Â¬of Â¬Way, latest revision.
PROXIMATE WORK. Applicant agrees that no other work shall be done under this permit except that specifically set forth herein. It is the applicants responsibility to verify the exact location of city and private facilities prior to commencing excavation operations.
PERMIT AND DRAWINGS AT JOB SITE. The permittee shall have at the work site a copy of the permit, the traffic control plan, and the City approved drawings. NOTIFICATION. Notify the assigned inspector 24 hours before commencing work. Provide the following information: permit number, name and telephone number of permittee, date/time work is to commence, location of work and any other information which may be relevant to the work.
CONFORMANCE TO EXISTING LAWS AND CITY SPECIFICATIONS. Permittee agrees to be fully informed of all federal, state and local laws, ordinances, rules, regulations, and City Construction Specifications which, in any manner, affect the work, and at all times shall observe and comply with such laws, ordinances, rules, regulations and specifications. The City Engineer reserves the right to shut down and/or issue a citation for violation of these provisions.
ENVIRONMENTAL LIABILITY. Permittee agrees to indemnify, defend and hold harmless Salt Lake City, its officers, agents and employees against any claims, losses, damages, or expenses, including, without limitation, any fees or penalties imposed by the United States Environmental Protection Agency, the Utah State Department of Environmental Protection Agency, the Utah State Department of Environmental Quality or any other government or regulatory agency and any attorney's fees or costs sustained on account of, or related to, the presence, release, discovery or creation of hazardous wastes or similar materials as those materials are defined under applicable federal or state statutes or regulations, including, without limitation, the Resource Conservation and Recovery Act of 1976.
STANDARD SPECIFICATIONS AND STANDARD DRAWINGS. Comply with all Salt Lake City Standard Specifications and Standard Drawings for cutting surface, traffic control, backfill, compaction, selection of subgrade materials, asphalt and concrete surfacing requirements. Printed copies of the Regulations and Specifications can be obtained through the City Engineer's Office.
WARRANTY. Permittee shall guarantee the worksite restoration for a period of three years from completion and acceptance of the work, reasonable wear and tear excepted.
PAYMENT DUE within 20 calendar days: If you do not respond to a payment due EMAIL within 10 business days, the
Salt Lake City Collections Department can take further action as it deems appropriate and additional fees may be assessed.
The Salt Lake City Collections Department will aggressively pursue collection of this debt and will use every means necessary
to collect this debt. This process may include court action, garnishment of income tax refund, bank accounts, or wages.
The debt may be referred to third-party collection vendors and submitted to credit reporting agencies.

SPECIAL CONDITIONS

EXCAVATION OPERATIONS BLUE STAKES. Before commencing excavation operations, Permittee shall call "Blue Stakes" at 811
TRAFFIC CONTROL DEVICES. Traffic control devices must be in place before excavation begins.
ENVIRONMENTAL CONTROL DUST AND DEBRIS. Keep dust and debris controlled at the work site at all times. If necessary, wet down dusty areas with water and provide containers for debris.
WHEEL CLEANING ORDINANCE. Conform to Section 18.20.210 of the Revised Ordinances of Salt Lake City, 1987. The ordinance describes the City's requirements for keeping the public way clean.
NOISE. Permittee shall control noise in accordance with the Salt Lake County Health Department Noise Ordinance.
CLEANUP. Remove all equipment, material, barricades and similar items from the right of way. Areas used for storage of excavated material will be smoothed and returned to their original contour. Vacuum sweeping or hand sweeping is required when Engineer determines cleaning equipment is ineffective.
CONFORMANCE TO ENGINEERING REGULATIONS. All provisions of Salt Lake City Engineering Regulation 5Â¬RÂ¬4, "Regulations for Controlling Construction in the City's Public Way", and other pertinent Engineering Regulations, will be adhered to. Engineering Regulations can be obtained in the office of the City Engineer, 349 South 200 East, Suite 100, Salt Lake City, Utah 84111.
TRAFFIC INTERRUPTION. Construction operations will be conducted in a manner to minimize the amount of interference or interruption of roadway traffic. Except during emergency conditions or unless authorized by the Engineer, construction operations such as excavation, backfill and pavement restoration on major/collector and CBD streets are prohibited during peak traffic hours of 7:00 to 9:00 a.m. and 4:00 to 6:00 p.m.
TRAFFIC CONTROL MANUAL. All provisions of the current "Traffic Control Manual" shall be adhered to. This manual provides regulations concerning traffic control construction barricades, road closures, public and private access, traffic control signing, traffic control in Central Business Area and traffic control devices.
EMERGENCY INFORMATION. Permittee shall clearly post on barricades in letters not less than two inches (2 in.) high emergency information consisting of the name and emergency telephone number of the permittee, and the permittee shall cause at least one such barricade per block to be erected at every job site until the work is complete and formally accepted by the City.
STREET EXCAVATION IN WINTER. Excavation of City Streets during the winter months (herein defined as November 15 to April 1) will be allowed only if the work is a new service connection, required maintenance or emergency, or otherwise approved by the Engineer. Permanent patching of City streets excavated in the winter may be delayed until April 1, provided the permittee provides and maintains a temporary asphalt surface until such time as the permanent surfacing is accomplished.
PRECONSTRUCTION PICTURES OF EXISTING PUBLIC WAY IMPROVEMENTS. Prior to commencing the permit work, the permittee is encouraged to secure pictures of the conditions of the existing public way improvements such as curbing, sidewalk, landscaping, asphalt surfaces, etc.
TIME LIMIT. Unless authorized otherwise by the Engineer on the permit, all paving and replacement of street facilities shall be done within seven (7) calendar days from the time the excavation commences, or within three (3) calendar days on major or collector streets from the time excavation commences, except as provided for during excavation in winter or during weather conditions that do not allow paving according to applicable standards and specifications. If work is expected to exceed the above duration, the permittee shall submit a detailed construction schedule for approval. The schedule will address means and methods to minimize traffic disruption and complete the construction as soon as possible.
EXCAVATION WITHIN 10 FEET OF STREET TREES.Â Before commencing excavation activities, Permittee shall contact Salt Lake City Urban Forestry (801) 535-7818 for an inspection.

Traffic Control Permit

Salt Lake City Community and Neighborhoods
Division of Transportation
349 South 200 East #150
Salt Lake City, Utah 84111
Telephone (801) 535-6630
E-Mail TechPermit@slcgov.com

Permit # TRN2024-01473

Organization Name:
Address: 1475 Quaker St Golden, Colorado 80401
Contact Person: Alec Karjala Phone: 4059737450 Cell: 4059737450
Barricade Company: Barricade Phone:

WORK SHALL COMPLY WITH PART 6 OF THE 2009 MUTCD.
PERMITS MUST BE EXTENDED 24 HOURS IN ADVANCE OF EXPIRATION.
IF THE TRAFFIC CONTROL PERMIT IS ALLOWED TO EXPIRE, A NEW PERMIT, AND AN ADDITIONAL FEE WILL BE REQUIRED.
CLOSURES ON A DIFFERENT STREET THAN LISTED WILL REQUIRE AN ADDITIONAL TRAFFIC CONTROL, AND ENGINEERING PERMIT.
THE ORGANIZATION ISSUED THE TRAFFIC CONTROL PERMIT SHALL BE RESPONSIBLE FOR ALL BARRICADE PLACEMENT AND MAINTENENCE.
AN ADDITIONAL PERMIT FROM SLC ENGINEERING MAY ALSO BE REQUIRED.
SHALL MAINTAIN ACCESS TO ALL PROPERTIES.
SHALL INFORM BUSINESSES & RESIDENTS OF PROJECT & DURATION.
SHALL COORDINATE WITH BUSINESSES & RESIDENTS AFFECTED.
SHALL OBTAIN A PERMIT FOR ALL PARKING METERS OR OTHER RESTRICTED PARKING MADE UNAVAILBABLE TO THE PUBLIC.
TRAFFIC CONTROL PERMITS ARE NOT VALID UNTIL PAID IN FULL.
CHANGES TO PERMIT MAY BE REQUIRED AND MADE UPON REVIEW and/or COMPLAINT.

Project Name / Description: Parking lane closure for equipment staging for monitoring well installation in planting strip north of the curb
General Work Type: Specific Work Type:
City Project # Public Way Permit #
Special Event Permit # Block Party Permit #

Closure Type	*On Street Name*	*From Number*	*To Number*	*Side of Street*
Street	**900 S**	**1217 e**	**1235 e**	**N**

Start Date	*End Date*	*Full Road Closure?*	*Barricade Manual Fig #*	*Description*	*Special Requirements*
06/11/2024	07/10/2024	No	TA-6	Parking lane closure for equipment staging for monitoring well installation in planting strip north of the curb	TA-6: SHALL NOT CLOSE ANY TRAFFIC LANES DURING PEAK HOURS (7AM-9AM & 4PM-6PM). WORK HOURS SHALL BE BETWEEN 9AM & 4PM. SHALL USE TA-6 FOR SHOULDER WORK WITH MINOR ENCROACHMENT. PAGE 644-645 2009 MUTCD

Approved By: David Edwards Issue Date: 6/3/2024

Appendix F Borehole Logs with Well Construction Diagrams

CDM Smith
555 17th Street, Suite 500
Denver, CO 80202
(303) 383-2300

BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 275859
PROJECT NAME 700 S 1600 E PCE Plume
LOCATION Salt Lake City, UT
DRILLING METHOD Rotosonic
SAMPLING METHOD Core Barrel
GROUND ELEVATION (FT MSL) 4698.77
TOP OF CASING (FT MSL) S: 4698.34 D: 4698.35
LOGGED BY Joe Miller and Katarina Savatic
REMARKS

BORING/WELL NUMBER MW-39
DATE DRILLED 7/1/2024 - 7/13/2024
CASING TYPE/DIAMETER 2-inch Schedule 80 PVC
SCREEN TYPE/SLOT 2-inch Schedule 80 0.020-slot
GRAVEL PACK TYPE #13/24 sand
GROUT TYPE/QUANTITY Bentonite Grout
DEPTH TO WATER (FT BGS) 206.96
GROUND WATER ELEVATION (FT MSL) 4491.81

PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
			Asphalt	1.0
0.4			Fill material	
0.4				3.0
0.3	5		Well graded GRAVEL with Clay and Sand, low plasticity, loose to slightly tight, moist, very dark gray (5YR 3/1)	
0.4		GC		
0.4			- At 8 ft dark reddish brown (5YR 3/5)	
0.3	10		Well graded GRAVEL with Sand, large clasts >5 inch diameter, permiable, dry, dark reddish brown (5YR 3/4)	10.0
0.5				
0.5	15			
0.5		GW		
0.4				
0.4	20			
0.3			- Dry to moist at 22 ft	
0.3				24.0
	25	SM	Well graded SAND with Silt and Clay and trace Gravel, dense, low plasticity, moist, reddish brown (5YR 4/6)	26.0
1.2			Well graded GRAVEL with Sand, subangular, loose, dry, reddish brown (5YR 4/6)	
6.4				
2.5	30		- Reddish clay lenses from 30 ft - 37 ft	
2.4				
3.2				
	35			

WELL DIAGRAM: Flush-mounted vault (12-inch); 2-inch SCH 80 PVC blank; Bentonite Grout

Continued Next Page

CDM Smith
555 17th Street, Suite 500
Denver, CO 80202
(303) 383-2300

BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 275859 **BORING/WELL NUMBER** MW-39

PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 7/1/2024 - 7/13/2024

Continued from Previous Page

PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
3.8				- Pulverized rock, dry, at 37 ft		
4.7						
1.6	40					
0.3				- Clayey lense 42 ft - 44 ft		
3.2						
2.9	45	GW		- Clayey lense 46 ft - 47 ft		
3.4						
2	50					
1.7				- Clayey lense 51 ft - 52 ft		2-inch SCH 80 PVC blank
1						
2	55					Bentonite Grout
2						
2	60					
2.1						
2.1				- Moist at 64 ft		
	65				65.0	
2.3		CH		Fat CLAY with Sand and Gravel, stiff, wet, reddish brown (5YR 4/4)		
					67.0	
				Well graded GRAVEL with Sand and trace Silt, subangular, moist, light reddish brown (5YR 6/4)		
	70					
10.5						
	75					

Continued Next Page

ALEC'S BORING LOG 2 SLC VA PLUME FINALJCM1.GPJ LAEWNN01.GDT 2/25/25

CDM Smith
555 17th Street, Suite 500
Denver, CO 80202
(303) 383-2300

BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 275859 **BORING/WELL NUMBER** MW-39

PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 7/1/2024 - 7/13/2024

Continued from Previous Page

PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
4				- Clay lense from 76 ft - 77 ft		
1.6						
1	80					
5.8		GW				
11.4						
	85					
6.2				- Fat CLAY lense from 86 ft - 87 ft		
4.3						
0.1	90					
4						
3.9				- Fat CLAY lense from 94 ft - 94.5 ft		
	95					
1.3				- Fat CLAY lense from 96 ft - 96.5 ft	96.5	
4.1				Well graded GRAVEL with Sand and trace Silt, subangular, moist, light reddish brown (5YR 6/4)		
	100					2-inch SCH 80 PVC blank
2.6				- Dry pulverized rock at 100 ft		
3.2						Bentonite Grout
4						
	105					
0.9						
1.4						
4	110					
4.1				- Clay lenses at 112 ft		
4.3						
	115					

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ALEC'S BORING LOG 2 SLC VA PLUME FINALJCM1.GPJ LAEWNN01.GDT 2/25/25

CDM Smith
555 17th Street, Suite 500
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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 275859 **BORING/WELL NUMBER** MW-39

PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 7/1/2024 - 7/13/2024

Continued from Previous Page

PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
5.7				- 0.5 ft clay lense at 116 ft		
6.6						
0.2	120					
0.2						
	125	GW				Bentonite Grout
3.2						
3.7				- Trace clayey gravel lenses at 129 ft		
6	130					
3						2-inch SCH 80 PVC blank.
				- Some dry pulverized rock at 133 ft		
1.8	135					
2.4						
2.5						
2.5	140					
				- Some dry pulverized rock at 141 ft		
2.6						
2.6	145					
13.3						
2.8						
				- Dry at 149 ft		
3.1	150			- Trace clay lenses at 150 ft		
3.2						
4						
	155				155.0	

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ALEC'S BORING LOG 2 SLC VA PLUME FINALJCM1.GPJ LAEWNN01.GDT 2/25/25

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PROJECT NUMBER 275859 **BORING/WELL NUMBER** MW-39

PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 7/1/2024 - 7/13/2024

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PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
4.4				Gravelly Sandy CLAY, well graded, subangular, medium plasticity, wet, reddish brown (5YR 4/4)		
2.4		CH				
2.5	160			- Increased gravel at 161 ft		
4.4					163.0	
2.8		GW		Well graded GRAVEL with Sand and trace Silt, subangular, some pulverized rock, some clasts >5 inch diameter, dry, reddish brown (5YR 4/4)		
1.6	165			- Fat CLAY lense from 166 ft - 167 ft	167.0	
2.2				Well graded GRAVEL with Sand and trace Silt, subangular, some pulverized rock, some clasts >5 inch diameter, dry, reddish brown (5YR 4/4)		
1.5	170	GW				
1.9				- Interbedded 1 ft clay lenses, dry at 173 ft		
2.7					174.0	
	175	CH		Fat CLAY, moist, reddish brown (5YR 4/4)	176.0	2-inch SCH 80 PVC blank
3.1				Well graded GRAVEL with Sand and trace Silt, subangular, some pulverized rock, some clasts >5 inch diameter, dry, reddish brown (5YR 4/4)		
2.6		GW				Bentonite Grout
	180				179.5	
1.2		CH		Gravelly CLAY with some Sand, low plasticity, moist, reddish brown (5YR 4/4)		
1.7					182.0	
1.9				Well graded GRAVEL with Sand, interbedded clay lenses, subangular, some clasts >5 inch diameter, dry, reddish brown (5YR 4/4)		
	185					
1.7						
1.9						
	190			- Some dry pulverized rock at 189 ft		
3.6						
0.3		GW		- Some clay lenses at 191 ft		
0.3						
	195					

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PROJECT NUMBER 275859 **BORING/WELL NUMBER** MW-39

PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 7/1/2024 - 7/13/2024

Continued from Previous Page

PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
0.2				- Some dry pulverized rock at 201 ft		
0.5					202.0	
0.6	200					
0.3		SP		Poorly graded SAND with Gravel, fine to coarse, subangular to subrounded, gravel up to 3 inch diameter, loose, moist, brown (7.5YR 4/4)	204.0	
0.1		GM		Poorly graded GRAVEL with Silt and Sand, subangular to subrounded, fine to coarse gravel, coarse sand, dense, wet, brown (7.5YR 4/4)		
0.2	205				207.0	▼
1.3		GC		Clayey GRAVEL, fine to coarse gravel, dense, cohesive, wet, grayish brown (10YR 5/2)	209.0	
0.4				Sandy GRAVEL with Silt, fine to coarse, subangular to subrounded, cohesive, moist to wet, brown (7.5YR 5/4)		
1.5	210	GP		- Increased silt at 211 ft - Very dense, cohesive at 213 ft		
0.9				- Large clast at 214 ft	215.0	
0.3				Poorly graded GRAVEL with Sand and Silt, fine to coarse, wet, brown (7.5YR 5/4)		
0.5						
0.3	220	GP				2-inch SCH 80 PVC blank
0.5				- Moist to dry, low plasticity, some CaCO3, hard at 223 ft	224.0	Bentonite Grout
0.6		SP		Poorly graded SAND with Gravel, fine gravel, medium to coarse sand, loose, wet, brown (7.5YR 5/4)	225.0	
0.2	225	ML		Gravelly SILT, cohesive, low plasticity, some CaCO3, moist, brown (7.5YR 5/4)	227.0	
0.4		SP SG		Poorly graded SAND with Gravel, brown (7.5YR 5/4)	229.0	
0.4	230			Poorly graded GRAVEL with Silt, wet, brown (7.5YR 5/4)		
0.5						
0.6	235					

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ALEC'S BORING LOG 2 SLC VA PLUME FINALJCM1.GPJ LAEWNN01.GDT 2/25/25

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 275859 **BORING/WELL NUMBER** MW-39

PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 7/1/2024 - 7/13/2024

Continued from Previous Page

PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
0.3		GM	- At 237 ft, dark brown (7.5YR 3/4)	
0.4				
0.6	240		- At 240 ft, reddish brown (5YR 4/4)	
0.8			- Fining downward, increased sand at 242 ft	
0.9			- At 244 ft, strong brown (7.5YR 4/6)	245.0
	245	ML	SILT with trace Gravel, some CaCO3 partings, stiff, cohesive, low plasticity, wet to moist, reddish brown (5YR 4/4)	246.0
0.2		GM	Silty GRAVEL, fine gravel, trace sandy lenses, non cohesive, strong brown (7.5YR 4/6)	
0.3				249.0
0.1	250	SM	Silty SAND and trace Gravel, fine sand, cohesive, wet, strong brown (7.5YR 4/6)	
0.4				252.0
		SP	Gravelly SAND with Silt, fine to medium sand, fine to coarse gravel, cohesive, strong brown (7.5YR 4/6)	
0.3	255			
0.1			- No more gravel, cohesive at 256 ft	
			- Moist at 257 ft	
0.1				
			- Dry at 259 ft	
0.1	260			
			- Moist at 261 ft	
0.1				
0.4			- Dry, CaCO3 streaks at 264 ft	
	265			265.0
0.4		ML	Clayey SILT, low to medium plasticity, cohesive, dry, strong brown (7.5YR 4/6)	
				268.0
0.4		GP	Poorly graded GRAVEL, fine to coarse, subrounded to rounded	
0.3	270		- Clayey at 270 ft	
				271.0
0.3		ML	Gravelly SILT, cohesive, dry to moist, dark reddish brown (5YR 3/4)	
				273.0
0.3			Silty Clayey GRAVEL, dense, wet, dark reddish brown (5YR 3/4)	
	275			

WELL DIAGRAM: Hydrated 1/4" bentonite pellets (262-266 ft bgs).

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 275859 **BORING/WELL NUMBER** MW-39

PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 7/1/2024 - 7/13/2024

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PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
0.1		GM	- 8 inch boulder at 275 ft	
0.5		GM	Sandy GRAVEL with Silt, medium to coarse sand, fine to coarse gravel, subangular to subrounded, loose, wet, dark reddish brown (5YR 3/4)	277.0
0.3	280			
0.1		GM	Sandy GRAVEL, fine to coarse gravel, wet - Increased silt at 283 ft, more cohesive, moist	281.0 284.0
0.4	285	GM	Poorly graded GRAVEL with Silt, fine to coarse gravel, rounded, loose, wet	
0.1				287.0
0.3		GM	Sandy GRAVEL, wet (saturated) - Moisture decreases, angular clasts at 289 ft	
0.1	290			
0.2		ML	Gravelly SILT with Sand, fine to medium subrounded gravel, fine to medium sand, stiff, moist	292.0
0.4	295			
0.2				296.0
0.3		GM	Silty GRAVEL with Sand, fine to medium rounded gravel, loose, wet	
0.2	300		- FeO staining, CaCO3 at 301 ft	
0.7				303.0
33.7		ML	Gravelly SILT and trace Clay, non cohesive, dry, strong brown (7.5YR 4/6)	305.0
37.3	305	SM	Silty SAND with Gravel, loose, dry, strong brown (7.5YR 5/8)	306.0
0.4			Silty GRAVEL, fine subangular to subrounded gravel, medium to coarse sand, loose, wet, strong brown (7.5YR 5/8)	
0.8			- Clayey at 307 ft	
0.3	310		- Increased silt, moist to wet, FeO staining at 311 ft	
0			- At 313 ft, brown (7.5YR 4/4)	
0.2	315			

WELL DIAGRAM:
- 13/24 Silica Sand (266-290 ft bgs)
- 2-inch SCH 80 PVC 0.020 slot screen (269-289 ft bgs)
- Pipe Cap (288.5-289 ft bgs)
- Hydrated 1/4" bentonite pellets (290-324 ft bgs).

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ALEC'S BORING LOG 2 SLC VA PLUME FINALJCM1.GPJ LAEWNN01.GDT 2/25/25

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 275859 **BORING/WELL NUMBER** MW-39

PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 7/1/2024 - 7/13/2024

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PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
0.2		GM				
0.5						
0.7	320			- Dry to moist at 321 ft		
0.6				- At 323 ft FeO staning, yellowish red (5YR 5/8)		
0.6	325				326.0	
0		ML		Gravelly SILT with Clay, gravel subrounded to rounded, stiff, wet		
0.7						
0.4	330			- FeO staining at 330 ft	331.0	
0.6		ML		Gravelly SILT with Sand, loose, moist to wet		
0.7	335					
0.1					337.0	
0.8		ML		Clayey SILT and trace Gravel, cohesive, medium plasticity, dry to moist		
3.4	340				341.0	13/24 Silica Sand (324-362 ft bgs)
3.7		SM		Silty SAND with Gravel, loose, silt clasts		2-inch SCH 80 PVC 0.020 slot screen (328-358 ft bgs)
23		ML		Clayey SILT, cohesive, dry	344.0	
	345				345.0	
0.7		ML		Clayey SILT with Gravel and trace Sand, fine sand, loose, dry		
0					348.0	
4.1	350	ML		Gravelly SILT, coarse gravel, moist to wet		
37.2					351.0	
48.1		SP		Gravelly SAND with Silt, fine to coarse angular gravel, dry, brown (7.5YR 5/4)		
	355					

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ALEC'S BORING LOG 2 SLC VA PLUME FINALJCM1.GPJ LAEWNN01.GDT 2/25/25

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 275859 **BORING/WELL NUMBER** MW-39

PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 7/1/2024 - 7/13/2024

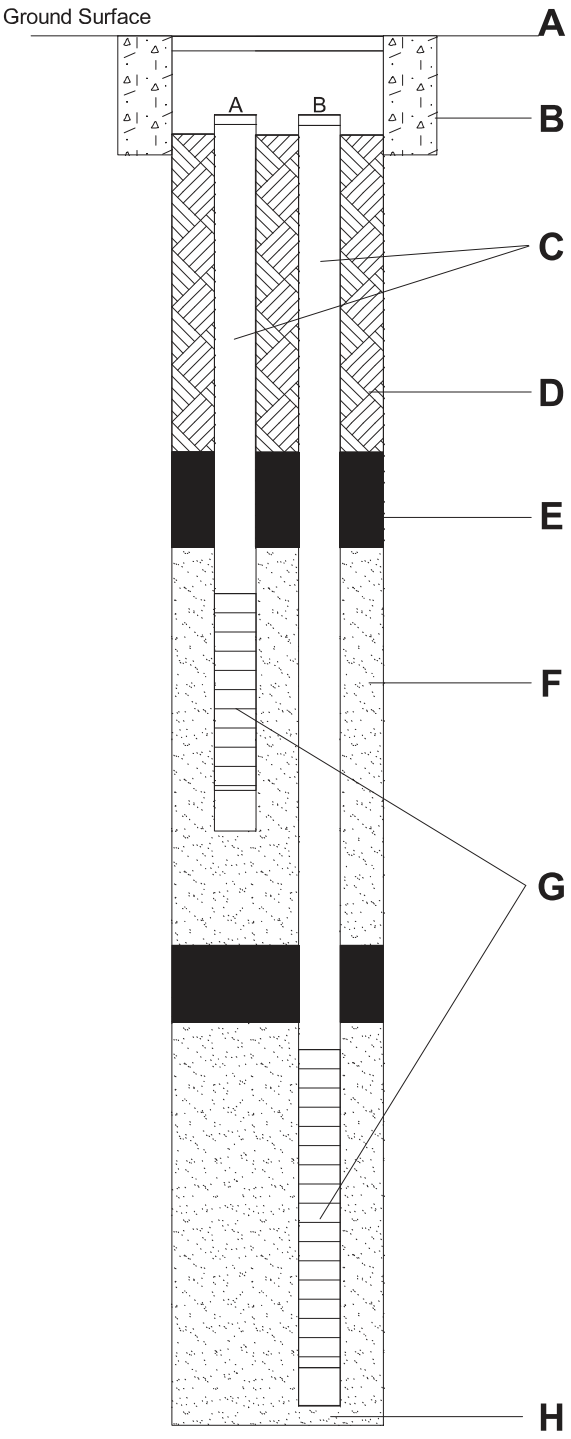
Continued from Previous Page

PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
18.3						
58.2					357.0	
26.5		GP		Sandy GRAVEL with Silt, coarse sand, subrounded gravel, loose, wet, brown (7.5YR 5/4)		Pipe Cap (357.5-358 ft bgs)
15	360	CH		Fat CLAY, wet, brown (7.5YR 5/4)	360.0	
		GP		GRAVEL, rounded, up to 5 inch diameter	361.0	
3.7		CH		Fat CLAY, cohesive, moist	362.0	
		GP		Sandy GRAVEL with Silt, wet	363.0	
1.7	365					
0.4		ML		Gravelly SILT with Clay, moist	366.0	
2						
3.1	370					
2.3					372.0	
		SP		Gravelly SAND with Silt, dry		Hydrated 1/4" bentonite pellets (362-384 ft bgs)
0.4	375				375.0	
		GC		Clayey GRAVEL, wet	376.0	
0.3		GP		Poorly graded GRAVEL, subrounded, wet	378.0	
1.3				Silty Sandy GRAVEL, gravel size increases downhole, wet		
4.3	380	GP				
4.7					382.0	
		ML		Gravelly SILT, loose, dry to moist	384.0	
				End of Boring - Total depth 384 ft bgs		

ALEC'S BORING LOG 2 SLC VA PLUME FINALJCM1.GPJ LAEWNN01.GDT 2/25/25

MONITORING WELL CONSTRUCTION LOG: NESTED WELL

GEOLOGIST: Katarina Savatic	DATE STARTED: July 14, 2024	DATE COMPLETED: July 17, 2024
WELL NO: MW-39	PROJECT: Supplemental RI	SITE: 700 S 1600 E PCE Plume
PROJECT NO: 275859	CONSTRUCTED BY: Yellow Jacket	CITY: Salt Lake City, UT
A. NORTHING: 7444885.96 EASTING: 1544921.12	GROUND SURFACE ELEVATION: 4698.77	A. MEASURING POINT ELEVATION: 4698.34
B. NORTHING: 7444885.82 EASTING: 1544921.30		B. MEASURING POINT ELEVATION: 4698.35



BORING DIAMETER: 8 inch

TOTAL DEPTH: 384 feet

(FEET BELOW GROUND SURFACE)

A. SURFACE COMPLETION

TYPE: Flush Mount

SIZE: 12 inch

B. SURFACE SEAL

MATERIAL: Portland Type I/II Cement

INTERVAL: 0-2 feet

C. RISER PIPE

DIAMETER: A. 2 inch
B. 2 inch

TYPE: A. Schedule 80 PVC
B. Schedule 80 PVC

INTERVAL: A. 0-269 feet
B. 0-328 feet

D. GROUT

COMPOSITION: Bentonite Grout

INTERVAL: 0-262 feet

E. SEAL

TYPE: Bentonite Pellets

INTERVAL: A. 262-266 feet
B. 290-324 feet

F. FILTER PACK

MATERIAL: A. 10/20 Silica Sand
B. 10/20 Silica Sand

INTERVAL: A. 266-290 feet
B. 324-362 feet

G. SCREEN

DIAMETER: A. 2 inch
B. 2 inch

TYPE: A. Schedule 80 PVC
B. Schedule 80 PVC

SLOT SIZE: A. 0.020 inch
B. 0.020 inch

INTERVAL: A. 269-289 feet
B. 328-358 feet

H. BACKFILL

MATERIAL: Bentonite Pellets

INTERVAL: 362-384 feet

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER	275859	**BORING/WELL NUMBER**	MW-40
PROJECT NAME	700 S 1600 E PCE Plume	**DATE DRILLED**	5/22/2024 - 5/31/2024
LOCATION	Salt Lake City, UT	**CASING TYPE/DIAMETER**	2-inch Schedule 80 PVC
DRILLING METHOD	Rotosonic	**SCREEN TYPE/SLOT**	2-inch Schedule 80 0.020-slot
SAMPLING METHOD	Core Barrel	**GRAVEL PACK TYPE**	#10/20 sand
GROUND ELEVATION (FT MSL)	4702.20	**GROUT TYPE/QUANTITY**	Bentonite Grout
TOP OF CASING (FT MSL)	S: 4701.87 D: 4701.86	**DEPTH TO WATER (FT BGS)**	189.90
LOGGED BY	Sean McGuire	**GROUND WATER ELEVATION (FT MSL)**	4512.30
REMARKS			

PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM (Grab Sample PCE Concentration)
	5			Hydrovac preclear to 7 ft, then backfill with artificial fill		Flush-mounted vault (18-inch)
1.4	10	GM		Well graded GRAVEL with Sand and Silt, 0.5 inch - 2 inch subrounded gravel, coarse to fine subangular to subrounded sand, loose, nonplastic, moist, yellowish red (5YR 5/7)	7.0	Bentonite Grout
0.8						
0.8						
1.1	15					
1						
3.3						
6.2	20					
2.1						
1.2						
7.5	25					2-inch SCH 80 PVC blank
7.9						
5.1	30					
3						
12.3	35				34.0	

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ALEC'S BORING LOG 2 SLC VA PLUME FINALJCM1.GPJ LAEWNN01.GDT 2/25/25

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 275859 **BORING/WELL NUMBER** MW-40

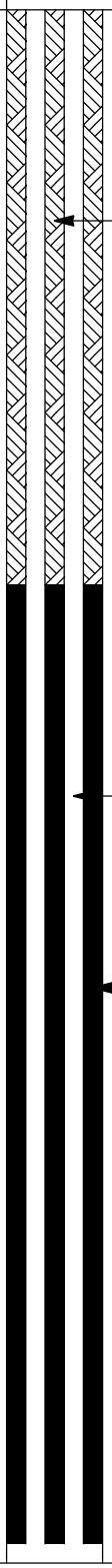
PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 5/22/2024 - 5/31/2024

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PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
3.2, 2.8, 3.2, 3, 1, 0	40, 45	GM	Well graded GRAVEL with Silt and Sand, 0.5 inch - 2 inch diameter subrounded gravel, coarse to fine subangular to subrounded sand, loose, nonplastic, moist, yellowish red (5YR 5/7)	47.0
1.7, 0.5, 0, 0.2	50, 55	SM GP	Well graded SAND with Gravel and Silt, coarse to fine subangular to subrounded sand, 0.5 inch to 3 inch diameter gravel, loose, moist, brown (7.5YR 4/4)	55.0
0, 3.3, 2.3, 1	60, 65	CH	Fat CLAY and trace Sand and Gravel, brown (7.5YR 5/4)	62.0
2.7, 3.8, 6.2, 12.8, 5.1	70, 75	SM	Well graded SAND with Silt and Gravel, subangular to subrounded sand, gravel up to 3 inch diameter, loose, moist, brown (7.5YR 4/4)	74.0
1.6		CH	Fat CLAY lense, brown (7.5YR 5/5)	74.5

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WELL DIAGRAM
Grab Sample
PCE Concentration



ALEC'S BORING LOG 2 SLC VA PLUME FINALJCM1.GPJ LAEWNN01.GDT 2/25/25

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 275859 **BORING/WELL NUMBER** MW-40

PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 5/22/2024 - 5/31/2024

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PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM (Grab Sample, PCE Concentration)
6.5				Sandy SILT with Gravel, well graded, coarse to fine subangular to subrounded sand, 0.5 inch to 3 inch diameter gravel, brown (7.5YR 4/4)		
7.2						
8	80					
3.3		ML				
4.4						
1.1	85					
1.1						
3.2	90				91.0	Hydrated 1/4" bentonite pellets (50-228 ft bgs)
1.7				Sandy GRAVEL with Silt, brown (7.5YR 4/4)		
0.1						
0.1	95					2-inch SCH 80 PVC blank
0.1						
0.1	100	GW				
0.1						
1.2	105					
2						
0.1						
5.7	110					
1.1		CH		Fat CLAY lense, brown (7.5YR 4/4)	112.0	
					112.5	
0.9				Sandy GRAVEL with Silt, brown (7.5YR 4/4)		
	115					

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 275859 **BORING/WELL NUMBER** MW-40

PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 5/22/2024 - 5/31/2024

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PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM (Grab Sample, PCE Concentration)
1.4		GW				
0.5		CH		Fat CLAY lense, brown (7.5YR 4/4)	118.0 118.5	
				Sandy GRAVEL with Silt, brown (7.5YR 4/4)		
0.4	120					
0.5		GW				
0.5						
	125				125.0	
		CH		Fat CLAY lense, brown (7.5YR 4/4)	125.5	
2				Sandy GRAVEL with Silt, brown (7.5YR 4/4)		
0.8						
		GW				
0.7	130					2-inch SCH 80 PVC blank
0.8				No recovery from 132 ft - 136 ft	132.0	
3						
	135				136.0	
0.8		SM		Well graded SAND with Silt and Gravel, subangular to subrounded sand, gravel up to 3 inch diameter, loose, moist, brown (7.5YR 4/4)		
0.3					138.0	
		CH		Fat CLAY lense, brown (7.5YR 4/4)		Hydrated 1/4" bentonite pellets (50-228 ft bgs)
0	140				140.0	
0.3		SM		Well graded SAND with Silt and Gravel, subangular to subrounded sand, gravel up to 3 inch diameter, loose, moist, brown (7.5YR 4/4)		
0.5						
	145				145.0	
0.1				Well graded SAND with Silt and Gravel, subangular to subrounded sand, gravel up to 3 inch diameter, loose, moist, reddish brown (5YR 4/4)		
0.6						
1.5	150					
1.2						
1.8						
	155					

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ALEC'S BORING LOG 2 SLC VA PLUME FINALJCM1.GPJ LAEWNN01.GDT 2/25/25

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 275859 **BORING/WELL NUMBER** MW-40

PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 5/22/2024 - 5/31/2024

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PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
0.4		SM		
1.8				
0.7	160			
1.2				
8.7				
	165	CH	Fat CLAY lense, reddish brown (5YR 4/4)	165.0 165.5
0.3		SM	Well graded SAND with Silt and Gravel, subangular to subrounded sand, gravel up to 3 inch diameter, loose, moist, reddish brown (5YR 4/4)	
0.1				
0.2	170			
		CL	Sandy CLAY and trace Gravel, low plasticity clay, fine subrounded sand, reddish brown (5YR 4/4)	171.0
0.1				
0				
	175	SM	Well graded SAND with Silt and Gravel, subangular to subrounded sand, gravel up to 3 inch diameter, loose, moist, reddish brown (5YR 4/4)	175.0
0.3				
2				
1	180	CL	Sandy CLAY and trace Gravel, low plasticity clay, fine subrounded sand, reddish brown (5YR 4/4)	180.0 182.0
1.1		SM	Well graded SAND with Silt and Gravel, subangular to subrounded sand, gravel up to 3 inch diameter, loose, moist, reddish brown (5YR 4/4)	
0	185			
0				
0.2			- Wet at 188 ft	
0.1	190	CL	Sandy CLAY and trace Gravel, low plasticity clay, fine subrounded sand, wet, reddish brown (5YR 4/4)	190.0
0				193.0
1.2	195		Sandy CLAY with Gravel, low plasticity clay, fine subrounded sand, 0.25 inch to 3 inch diameter gravel, stiff, moist, reddish brown (5YR 5/3)	

WELL DIAGRAM
Grab Sample
PCE Concentration

2-inch SCH 80 PVC blank

Hydrated 1/4" bentonite pellets (50-228 ft bgs)

0.69 J µg/L

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 275859 **BORING/WELL NUMBER** MW-40

PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 5/22/2024 - 5/31/2024

Continued from Previous Page

PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM (Grab Sample PCE Concentration)
8.7				- Wet at 197 ft		
2.7		CL				
5.3	200					
5.7						
2.7				- Dry to moist at 204 ft		
	205				206.0	
3.2		CH		CLAY with some Sand and trace Gravel, medium plasticity clay, poorly graded fine sand, reddish brown (5YR 4/4)	208.0	
1.8				Sandy CLAY with Gravel, stiff, low plasticity clay, fine subrounded sand, 0.25 inch to 3 inch diameter gravel, moist, reddish brown (5YR 5/3)		
3.7	210					Hydrated 1/4" bentonite pellets (50-228 ft bgs)
0.9						
0.5						1.7 µg/L
	215			- Increased coarse gravel at 215 ft		2-inch SCH 80 PVC blank
4.6		CL				
0.9				- Decreased gravel, fine gravel at 218 ft		
1.2	220					
				- Increased clay at 223 ft		
	225				225.0	
5.8				Fat CLAY with trace Sand and Gravel, fine sand, medium plasticity, reddish brown (5YR 4/4)		
0.1		CH				
1.9	230					
					231.0	
8.5				Sandy CLAY with Gravel, fine subrounded sand, 2 inch to 3 inch diameter gravel, stiff, low plasticity clay, reddish brown (5YR 5/3)		
11.1		CL				
11.1						7.5 µg/L
	235				235.0	10/20 Silica Sand (228-243

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PROJECT NUMBER 275859 **BORING/WELL NUMBER** MW-40

PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 5/22/2024 - 5/31/2024

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PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM (Grab Sample, PCE Concentration)
1.7				Fat CLAY with trace Sand and Gravel, >1 inch diameter gravel, high plasticity, moist, yellowish red (5YR 6/6)		ft bgs) 2-inch SCH 80 PVC 0.020 slot screen (230-240 ft bgs)
1.6						
2.6	240					Pipe Cap (239.5-240 ft bgs)
3.1						
6.4	245	CH		- Increased gravel size at 245 ft		
0.9						
0.5						
0.3	250					2-inch SCH 80 PVC blank
3.7						
0.9				- Wet at 254 ft		
	255				255.0	
0.1				Sandy CLAY, fine sand, low plasticity, moist, yellowish red (5YR 4/6)		
0.1		CL				
0.1	260					
0.1					262.5	
0.1				Fat CLAY with trace Sand, high plasticity, trace CaCO3 lenses, dry, yellowish red (5YR 4/6)		
0.1	265					
1.3		CH				
0.6						Hydrated 1/4" bentonite pellets (243-295 ft bgs)
1.7	270					
1					272.0	
0.6				Clayey SILT with trace Gravel, nonplastic, stiff, few large cobbles, trace CaCO3 lenses, dry, reddish brown (5YR 4/4)		
	275					

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ALEC'S BORING LOG 2 SLC VA PLUME FINALJCM1.GPJ LAEWNN01.GDT 2/25/25

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 275859 **BORING/WELL NUMBER** MW-40

PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 5/22/2024 - 5/31/2024

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PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM (Grab Sample PCE Concentration)
4.9		ML CL		- Increased gravel at 275 ft		
10.2						
1.1	280				281.0	
0.5				Well graded SAND with Silt and Gravel, 0.5 inch to 3 inch diameter gravel, nonplastic, dry, yellowish red (5YR 4/6)		
1.1						
285						2-inch SCH 80 PVC blank
10.7						
0.7						
0.5	290	SM GP				
0.2						
12.5						2.2 µg/L
295						
0.2				- Wet at 296 ft		
0.2						
0.2	300					
91.3					302.0	10/20 Silica Sand (295-307 ft bgs)
305				Well graded SAND with Silt and Gravel, angular, wet, reddish brown (5YR 4/4)		2-inch SCH 80 PVC 0.020 slot screen (297-307 ft bgs)
380		SM GP				Pipe Cap (306.5-307 ft bgs)
133.5					309.0	
23.6	310			Clayey Sandy GRAVEL, 0.5 inch to 3 inch diameter gravel, dense, wet, reddish brown (5YR 4/4)		Hydrated 1/4" bentonite pellets (307-315 ft bgs)
15.6		GW				
0.2						
	315				315.0	2.9 µg/L

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ALEC'S BORING LOG 2 SLC VA PLUME FINALJCM1.GPJ LAEWNN01.GDT 2/25/25

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 275859 **BORING/WELL NUMBER** MW-40

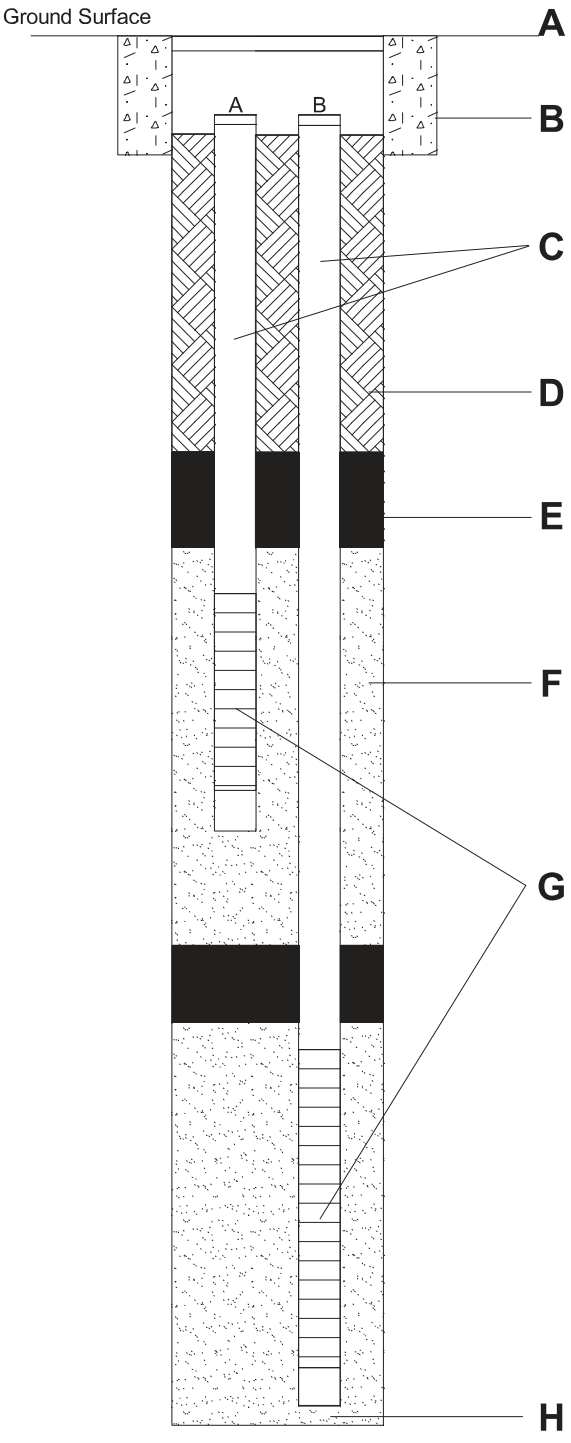
PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 5/22/2024 - 5/31/2024

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PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM Grab Sample PCE Concentration	
				End of Boring - Total depth 315 ft bgs			

MONITORING WELL CONSTRUCTION LOG: NESTED WELL

GEOLOGIST: Shawn McGuire	DATE STARTED: June 1, 2024	DATE COMPLETED: June 3, 2024
WELL NO: MW-40	PROJECT: Supplemental RI	SITE: 700 S 1600 E PCE Plume
PROJECT NO: 275859	CONSTRUCTED BY: Yellow Jacket	CITY: Salt Lake City, UT
A. NORTHING: 7444096.78 EASTING: 1545568.83	GROUND SURFACE ELEVATION: 4702.20	A. MEASURING POINT ELEVATION: 4701.87
B. NORTHING: 7444097.12 EASTING: 1545568.43		B. MEASURING POINT ELEVATION: 4701.87



BORING DIAMETER: 8 inch

TOTAL DEPTH: 315 feet
(FEET BELOW GROUND SURFACE)

A. SURFACE COMPLETION

TYPE: Flush Mount
SIZE: 12 inch

B. SURFACE SEAL

MATERIAL: Concrete
INTERVAL: 0-1.5 feet

C. RISER PIPE

DIAMETER: A. 2 inch
B. 2 inch
TYPE: A. Schedule 80 PVC
B. Schedule 80 PVC
INTERVAL: A. 0-230 feet
B. 0-297 feet

D. GROUT

COMPOSITION: Bentonite Grout
INTERVAL: 1.5-50 feet

E. SEAL

TYPE: Bentonite Pellets
INTERVAL: A. 50-228 feet
B. 243-295 feet

F. FILTER PACK

MATERIAL: A. 10/20 Silica Sand
B. 10/20 Silica Sand
INTERVAL: A. 228-243 feet
B. 295-307 feet

G. SCREEN

DIAMETER: A. 2 inch
B. 2 inch
TYPE: A. Schedule 80 PVC
B. Schedule 80 PVC
SLOT SIZE: A. 0.020 inch
B. 0.020 inch
INTERVAL: A. 297-307 feet
B. 307-315 feet

H. BACKFILL

MATERIAL: Bentonite Pellets
INTERVAL: 307-315 feet

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 275859
PROJECT NAME 700 S 1600 E PCE Plume
LOCATION Salt Lake City, UT
DRILLING METHOD Rotosonic
SAMPLING METHOD Core Barrel
GROUND ELEVATION (FT MSL) 4690.49
TOP OF CASING (FT MSL) S: 4689.83 D: 4689.84
LOGGED BY Shawn McGuire
REMARKS

BORING/WELL NUMBER MW-41
DATE DRILLED 6/13/2024 - 6/17/2024
CASING TYPE/DIAMETER 2-inch Schedule 80 PVC
SCREEN TYPE/SLOT 2-inch Schedule 80 0.020-slot
GRAVEL PACK TYPE #13/24 sand
GROUT TYPE/QUANTITY Bentonite Grout
DEPTH TO WATER (FT BGS) 175.38
GROUND WATER ELEVATION (FT MSL) 4515.11

PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
	5		Hydrovac preclear to 8 ft, then backfill with artificial fill	8.0
0	10	ML	Sandy SILT with Gravel, fine to coarse, subangular to subrounded, low plasticity, slow dilatancy, moist, reddish brown (5YR 4/5)	14.0
0	15	ML	Gravelly SILT with Sand, fine to coarse, angular sand, subrounded gravel, stiff, low plasticity, rapid dilatancy, moist, reddish brown (5YR 4/3)	16.0
0	20	SM	Silty SAND with Gravel, medium dense, fine to coarse, subrounded to subangular sand, low plasticity silt, fine to coarse subangular gravel, moist, reddish brown (5YR 5/4)	20.0
0	25	ML	SILT with Sand and Gravel, fine to coarse, angular to subangular, stiff, low plasticity, rapid dilatancy, moist, reddish brown (5YR 4/4) - 1 ft diameter cobble at 24 ft	26.0
0	30	MH	Elastic SILT with Gravel and Sand, fine to coarse, angular to subangular, stiff, high to medium plasticity, slow dilatancy, moist, reddish brown (2.5YR 4/4)	28.0
0	35	SM	Silty SAND with Gravel, fine to coarse, angular to subangular, medium dense, low plasticity silt, moist, reddish brown (5YR 5/4)	34.0
0			Silty GRAVEL with Sand, fine to coarse, subangular to	

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WELL DIAGRAM
Grab Sample
PCE Concentration

Flush-mounted vault (12-inch).
2-inch SCH 80 PVC blank
Bentonite Grout

ALEC'S BORING LOG 2 SLC VA PLUME FINALJCM1.GPJ LAEWNN01.GDT 2/25/25

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 275859 **BORING/WELL NUMBER** MW-41

PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 6/13/2024 - 6/17/2024

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PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM (Grab Sample PCE Concentration)
0		GM		subrounded, medium dense, low plasticity silt, moist to dry, reddish brown (5YR 5/3)		
0					39.0	
0	40	SM		Silty SAND with Gravel, fine to coarse, angular to subrounded, medium dense, low plasticity silt, reddish brown (2.5YR 4/4)	42.0	
0		SW		Well graded SAND with Silt and Gravel, fine to coarse, angular to subrounded, low plasticity silt, medium dense, moist to dry, light brown (7.5YR 6/4)	44.0	
0	45	GM		Silty GRAVEL with Sand, fine to coarse, angular to subrounded, low plasticity silt, loose, moist, reddish brown (5YR 5/4)		
0					49.0	
0	50	MH		Elastic SILT with Gravel and Sand, fine to coarse, angular to subangular, stiff, high plasticity, rapid dilatancy, moist, reddish brown (2.5YR 4/4)	51.0	
0		GM		Silty GRAVEL with Sand, fine to coarse, angular to subrounded, low plasticity silt, medium dense, moist, reddish brown (5YR 5/4)	53.0	2-inch SCH 80 PVC blank
0	55	SW		Well graded SAND with Silt and Gravel, fine to coarse, angular to subrounded, low plasticity silt, medium dense, moist to dry, light brown (7.5YR 6/4)	56.0	
0		MH		Elastic SILT with Gravel and Sand, fine to coarse, angular to subrounded, high plasticity silt, soft to stiff, moist, reddish brown (2.5YR 4/4)	58.0	Bentonite Grout
0	60	GM		Silty GRAVEL with Sand, fine to coarse, angular to subrounded, low plasticity silt, loose to medium dense, moist, reddish brown (5YR 5/4)		
					63.0	
		MH		Elastic SILT with Gravel and Sand, fine to coarse, angular to subangular, stiff, high plasticity, rapid dilatancy, moist, reddish brown (2.5YR 4/4)		
	65				66.0	
		GM		Silty GRAVEL with Sand, fine to coarse, angular to subrounded, low plasticity silt, medium dense, moist, reddish brown (5YR 4/4)		
					69.0	
	70	SM		Well graded SAND with Silt and Gravel, fine to coarse, angular to subangular, low plasticity silt, loose to medium dense, moist to dry, light brown (7.5YR 6/4)		
					72.0	
0				Silty GRAVEL with Sand, fine to coarse, angular to subangular, low plasticity silt, medium dense, moist, reddish brown (5YR 4/4)		
	75					

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ALEC'S BORING LOG 2 SLC VA PLUME FINALJCM1.GPJ LAEWNN01.GDT 2/25/25

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 275859 **BORING/WELL NUMBER** MW-41

PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 6/13/2024 - 6/17/2024

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PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM (Grab Sample PCE Concentration)
0		GM				
0		ML		Sandy SILT with Gravel, fine to coarse, angular to subangular, stiff, medium plasticity, slow dilatancy, moist, reddish brown (2.5YR 4/4)	78.0 79.0	
0	80	SM		Silty SAND with Gravel, fine to coarse, angular to subangular, low plasticity silt, medium density, dry to moist, light brown (7.5YR 6/4)	84.0	
0	85	GM		Silty GRAVEL with Sand, fine to coarse, angular to subangular, low plasticity silt, loose, dry to moist, light brown (7.5YR 6/4) - 8 inch cobble at 87 ft	88.0	
0	90	SM		Silty SAND with Gravel, fine to coarse, angular to subangular, low plasticity silt, loose, moist to dry, reddish brown (5YR 4/3) - At 91 ft large boulders - crushed rock in core, dry, light brownish gray (10YR 6/2)	93.0	
0	95	MH		Sandy elastic SILT, fine to coarse, angular to subangular, high plasticity, rapid dilatancy, moist, reddish brown (2.5YR 4/4)	95.0	
0	100	GM		Silty GRAVEL with Sand, fine to coarse, angular to subangular, low plasticity silt, medium dense, dry to moist, reddish brown (5YR 5/4)	102.0	2-inch SCH 80 PVC blank
0.3	105	ML		Gravelly SILT with Sand, fine to coarse, angular to subangular, very stiff to hard, medium plasticity silt, low dilatancy, moist, reddish brown (5YR 4/4)		Bentonite Grout 2-inch SCH 80 PVC blank.
0.1	110				112.0	
0	115			Silty GRAVEL with Sand, fine to coarse, angular to subangular, low plasticity silt, medium dense, moist, reddish brown (5YR 5/4)		

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ALEC'S BORING LOG 2 SLC VA PLUME FINALJCM1.GPJ LAEWNN01.GDT 2/25/25

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PROJECT NUMBER 275859 **BORING/WELL NUMBER** MW-41

PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 6/13/2024 - 6/17/2024

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PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
0		GM		
0				
0	120			
0				
0				
0	125			
0				
0		MH	Elastic SILT with Gravel, fine to coarse, angular to subangular, high plasticity, low dilatancy, moist, reddish brown (2.5YR 4/4)	128.0
0	130	SM	Silty SAND with Gravel, fine to coarse, angular to rounded, low plasticity silt, loose to medium dense, high dilatancy, dry to moist, reddish brown (5YR 4/4)	130.0
0		MH	Elastic SILT with Sand and Gravel, fine to coarse, angular to subangular, high plasticity, low dilatancy, moist, reddish brown (2.5YR 4/4)	132.0
0.1	135	GM	Silty GRAVEL with Sand, fine to coarse, angular to subangular, low plasticity silt, loose, high dilatancy, dry, reddish brown (5YR 4/4)	133.0
0				
0.1				
0.2	140			
0.4				
0.1				
0	145			146.0
0		MH	Sandy SILT, fine to coarse, subangular to subrounded, stiff, high plasticity, slow dilatancy, moist, reddish brown (5YR 4/4)	148.0
0		SW	Well graded SAND with Silt and Gravel, fine to coarse, low plasticity silt, loose, reddish brown (5YR 5/4)	
0	150			
0				153.0
0		GM	Silty GRAVEL with Sand, fine to coarse, angular to subangular, low plasticity silt, high dilatancy, loose, dry, light reddish brown (5YR 6/3)	
	155			

WELL DIAGRAM
Grab Sample
PCE Concentration

Bentonite Grout

2-inch SCH 80 PVC blank

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ALEC'S BORING LOG 2 SLC VA PLUME FINALJCM1.GPJ LAEWNN01.GDT 2/25/25

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 275859 **BORING/WELL NUMBER** MW-41

PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 6/13/2024 - 6/17/2024

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PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM (Grab Sample PCE Concentration)
0					156.0	
0		SM		Silty SAND with Gravel, fine to coarse, angular to subangular, low plasticity silt, loose, high dilatancy, moist to dry, reddish brown (5YR 4/4)		
0.1	160				161.0	
0.2		ML		Elastic SILT with Sand and Gravel, fine to coarse, angular to subangular, medium plasticity, slow dilatancy, moist, reddish brown (5YR 4/3)		
0.2	165					
0.4					167.0	
0.1		GM		Silty GRAVEL with Sand, fine to coarse, angular to subangular, low plasticity silt, high dilatancy, loose, dry, reddish brown (5YR 5/3)		
0	170				171.0	
0.1		ML		Elastic SILT with Sand and Gravel, fine to coarse, angular to subangular, medium plasticity, rapid dilatancy, wet, reddish brown (5YR 4/4)		
0.5					175.0	45 µg/L
1.2	175	GW		Well graded GRAVEL with Silt and Sand, fine to coarse, angular to subangular, low plasticity silt, loose, high dilatancy, wet, reddish brown (5YR 4/4)		2-inch SCH 80 PVC blank
0.5					177.0	
0.4		MH		Elastic SILT with Sand and Gravel, fine to coarse, angular to subangular, high plasticity, low dilatancy, wet, reddish brown (5YR 4/4) - Dry at 179 ft		Bentonite Grout
0.1	180				180.0	
0		ML		Sandy elastic SILT, fine to coarse, angular to subangular, medium plasticity, slow dilatancy, moist, reddish brown (2.5YR 4/6)		
0						
0	185				186.0	
0		GW		Well graded GRAVEL with Silt and Sand, fine to coarse, angular to subangular, low plasticity silt, medium dense, high dilatancy, moist, reddish brown (5YR 4/4)		
0					190.0	
0	190			Well graded GRAVEL with Silt and Sand, fine to coarse, angular to subangular, low plasticity silt, medium dense, wet, reddish brown (2.5YR 4/4)		
0						
0	195					

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ALEC'S BORING LOG 2 SLC VA PLUME FINALJCM1.GPJ LAEWNN01.GDT 2/25/25

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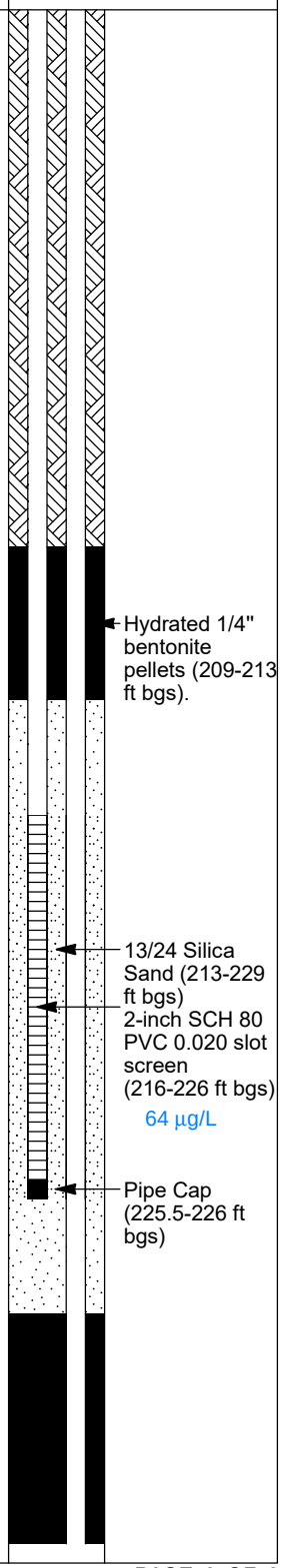
BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 275859 **BORING/WELL NUMBER** MW-41

PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 6/13/2024 - 6/17/2024

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PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
0		GW	- Dry at 195 ft	
0			- At 197 ft 8 inch cobble, dry, brown (7.5YR 5/3)	
0			- Wet at 199 ft	
0	200	ML	Sandy SILT with Gravel, fine to coarse, angular to subangular, medium plasticity, rapid dilatancy, wet, reddish brown (5YR 4/4)	200.0
0		GW	Sandy GRAVEL with Silt, fine to coarse, angular to subangular, low plasticity silt, loose, rapid dilatancy, wet, reddish brown (2.5YR 4/4)	202.0
0		GP	Poorly graded GRAVEL with Silt and Sand, fine gravel, coarse sand, low plasticity silt, loose, wet, dark reddish gray (5YR 4/2)	204.0
0	205	ML	SILT with Sand, fine subrounded sand, hard, low plasticity, low dilatancy, moist, reddish brown (5YR 4/4)	205.0
0		GM	Silty GRAVEL with Sand, fine to coarse, subangular to rounded gravel, fine to coarse sand, low plasticity silt, dense, moist, reddish brown (5YR 4/4)	207.0
0	210		- Dry at 208 ft	
0		GW	Well graded GRAVEL with Sand and Silt, fine to coarse gravel, fine to coarse sand, low plasticity silt, loose, wet, reddish brown (5YR 4/4)	211.0
0.1	215		- Coarse gravel at 216 ft	
0				
0				219.0
0.1	220	ML	SILT with Sand and Gravel, low plasticity, high dilatancy, reddish brown (5YR 4/4)	
2.1		GM	Silty GRAVEL with Sand, medium to coarse gravel, fine to coarse sand, dense, medium plasticity, wet to moist, reddish brown (5YR 4/3)	222.0
0.1	225			
0.1		ML	Sandy SILT with Gravel, fine to coarse, angular to subangular, hard, low plasticity, slow dilatecy, moist, reddish brown (5YR 4/4)	226.0
0.1			- Dry to moist at 229 ft	
0.1	230	GM	Silty GRAVEL with Sand, coarse to medium gravel, fine to coarse sand, low plasticity silt, medium dense, wet, reddish brown (5YR 4/3)	230.0
0.1			- Moist at 233 ft	
0.3	235			



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PROJECT NUMBER 275859 **BORING/WELL NUMBER** MW-41

PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 6/13/2024 - 6/17/2024

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PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM (Grab Sample PCE Concentration)
				- Dry to moist at 235 ft	236.0	
0.7		SM		Silty SAND with Gravel, fine to coarse sand, fine gravel, low plasticity silt, medium density, moist, reddish brown (5YR 4/4)		
0.5				- Dry at 239 ft		
0	240			No recovery from 240 - 244 ft	240.0	
					244.0	
	245	ML		Elastic SILT with Sand, fine, rounded, medium plasticity, slow dilatancy, moist, reddish brown (5YR 4/4)		
0.1				- Sand lense, wet (saturated) at 246 ft		
0.1						Hydrated 1/4" bentonite pellets (229-269 ft bgs).
0.1	250			- Moist to dry at 250 ft		
0						
0	255			- Increased sand at 255 ft		
0.1						
0					258.0	
0	260	ML		SILT with Sand, fine sand, subrounded sand, hard, low plasticity, slow dilatancy, moist to dry, reddish brown (2.5YR 4/4)		
0						
0	265					
0				- Dry at 268 ft		
0	270					
0.1						
0.1					274.0	
0.1	275			Sandy SILT, fine subrounded sand, hard, low plasticity,		

Continued Next Page

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 275859 **BORING/WELL NUMBER** MW-41

PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 6/13/2024 - 6/17/2024

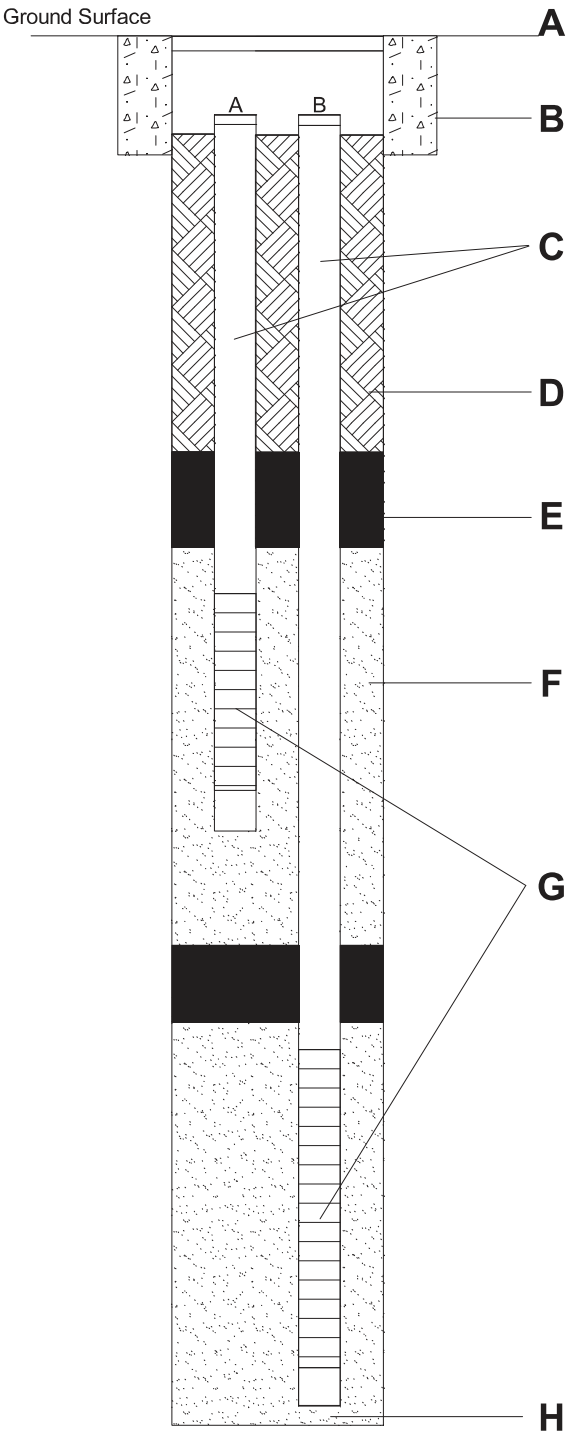
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PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM (Grab Sample PCE Concentration)
0.2		ML		slow dilatancy, moist, reddish brown (5YR 5/3)	276.0	13/24 Silica Sand (269-284 ft bgs)
0				Silty SAND with Gravel, fine to medium sand, medium to coarse gravel, low plasticity silt, dense, moist to wet, reddish brown (5YR 5/3)		2-inch SCH 80 PVC 0.020 slot screen (272-282 ft bgs)
0	280	SM				20 µg/L at 276 ft
0.1				- Dry to moist at 281 ft		Pipe Cap (281.5-282 ft bgs)
0.2					284.0	
0.1	285			Well graded SAND with Silt and Gravel, fine to coarse sand, fine to coarse gravel, low plasticity silt, dense, moist to dry, reddish brown (4YR 4/3)		
0		SW				
0.4	290			- Dry to moist at 289 ft		
				- Wet at 291 ft		
1.5					292.0	
24.1				Silty GRAVEL with Sand, fine to coarse gravel, subangular to rounded, low plasticity silt, fine to coarse sand, dense, moist, reddish brown (5YR 4/4)		Hydrated 1/4" bentonite pellets (284-305 ft bgs).
1.1	295	GM		- Wet at 295 ft		
				- Moist at 297 ft		
0.6					298.0	
0.1	300	GM		Silty GRAVEL with Sand, fine to coarse gravel, subangular to rounded, low plasticity silt, fine to coarse sand, dense, moist, reddish brown (5YR 3/4) - Wet at 300 ft		
					301.0	
0.1		ML		Sandy SILT, fine subrounded sand, stiff to soft, low plasticity, high dilatancy, moist, reddish brown (5YR 4/4)		
0	305				305.0	2.2 µg/L
0				End of Boring - Total depth 305 ft bgs		
	310					
	315					

ALEC'S BORING LOG 2 SLC VA PLUME FINALJCM1.GPJ LAEWNN01.GDT 2/25/25

MONITORING WELL CONSTRUCTION LOG: NESTED WELL

GEOLOGIST: Alex Pedjase	DATE STARTED: June 18, 2024	DATE COMPLETED: June 20, 2024
WELL NO: MW-41	PROJECT: Supplemental RI	SITE: 700 S 1600 E PCE Plume
PROJECT NO: 275859	CONSTRUCTED BY: Yellow Jacket	CITY: Salt Lake City, UT
A. NORTHING: 7443799.86 EASTING: 1545453.35	GROUND SURFACE ELEVATION: 4690.49	A. MEASURING POINT ELEVATION: 4689.83
B. NORTHING: 7443800.17 EASTING: 1545453.34		B. MEASURING POINT ELEVATION: 4689.82



BORING DIAMETER: 8 inch

TOTAL DEPTH: 305 feet

(FEET BELOW GROUND SURFACE)

A. SURFACE COMPLETION

TYPE: Flush Mount

SIZE: 12 inch

B. SURFACE SEAL

MATERIAL: Concrete

INTERVAL: 0-2 feet

C. RISER PIPE

DIAMETER: A. 2 inch
B. 2 inch

TYPE: A. Schedule 80 PVC
B. Schedule 80 PVC

INTERVAL: A. 0-216 feet
B. 0-272 feet

D. GROUT

COMPOSITION: Bentonite Grout

INTERVAL: 0-209 feet

E. SEAL

TYPE: Bentonite Pellets

INTERVAL: A. 209-213 feet
B. 229-269 feet

F. FILTER PACK

MATERIAL: A. 13/24 Silica Sand
B. 13/24 Silica Sand

INTERVAL: A. 213-229 feet
B. 269-284 feet

G. SCREEN

DIAMETER: A. 2-inch
B. 2-inch

TYPE: A. Schedule 80 PVC
B. Schedule 80 PVC

SLOT SIZE: A. 0.020 inch
B. 0.020 inch

INTERVAL: A. 216-226 feet
B. 272-282 feet

H. BACKFILL

MATERIAL: Bentonite Pellets

INTERVAL: 284-305 feet

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER	275859	**BORING/WELL NUMBER**	MW-42
PROJECT NAME	700 S 1600 E PCE Plume	**DATE DRILLED**	7/18/2024 - 7/26/2024
LOCATION	Salt Lake City, UT	**CASING TYPE/DIAMETER**	2-inch Schedule 80 PVC
DRILLING METHOD	Rotosonic	**SCREEN TYPE/SLOT**	2-inch Schedule 80 0.020-slot
SAMPLING METHOD	Core Barrel	**GRAVEL PACK TYPE**	#10/20 sand
GROUND ELEVATION (FT MSL)	4697.59	**GROUT TYPE/QUANTITY**	Bentonite Grout
TOP OF CASING (FT MSL)	S: 4697.12 D: 4697.16	**DEPTH TO WATER (FT BGS)**	192.65
LOGGED BY	Joe Miller	**GROUND WATER ELEVATION (FT MSL)**	4504.94
REMARKS			

PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
	0		Hydrovac to 10 ft, then backfill with artificial fill	
	5			
			- Large cobbles at 8 ft	
2.1	10			
0.1		SP	Poorly graded SAND, fine sand, loose, moist, reddish brown (5YR 5/4)	11.0
0.4		ML	SILT with Gravel and Sand, fine to coarse gravel, fine sand, cohesive, moist, reddish brown (5YR 5/4)	13.0
0.2	15			15.0
0.8		GP	Poorly graded GRAVEL with Sand, fine sand, fine to coarse gravel, large cobbles	
			- Large sandstone clast at 17 ft	18.0
0.2		GM	Poorly graded GRAVEL with Silt, subangular to subrounded, fine to coarse, moist, dark reddish brown (2.5YR 3/4)	
0.3	20		- Sand lense 1 inch at 19.5 ft	20.0
0.8		GP	Sandy GRAVEL and trace Silt, loose, moist, reddish brown (5YR 4/4)	
0.2			- Large cobble at 24 ft	24.5
	25	GM	Silty GRAVEL, cohesive, moist, mottled red and gray	25.5
		GP	Poorly graded GRAVEL with Sand, fine to coarse, moist, yellowish red (5YR 4/6)	26.0
0		ML	Gravelly SILT, cohesive, stiff, moist to wet, reddish brown (2.5YR 4/4)	28.0
1.5			Silty GRAVEL with Sand, fine to coarse gravel, loose, moist, dark reddish brown (5YR 3/3)	
0.2	30	GM		
			- FeO staining, dry, decreased silt at 31 ft	
0.7				33.0
0.4		GP	GRAVEL with Sand, fine to coarse gravel, subangular to subrounded, loose, dry to moist, brown (7.5YR 5/4)	
	35		- Increased sand at 34 ft	

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WELL DIAGRAM
Grab Sample
PCE Concentration

- Flush-mounted vault (12-inch).
- 2-inch SCH 80 PVC blank
- Bentonite Grout

ALEC'S BORING LOG 2 SLC VA PLUME FINALJCM1.GPJ LAEWNN01.GDT 2/25/25

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 275859 **BORING/WELL NUMBER** MW-42

PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 7/18/2024 - 7/26/2024

Continued from Previous Page

PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
				36.0
1.4		SP	Poorly graded SAND with Gravel, fine to coarse, subangular to subrounded, loose, dry, yellowish red (5YR 4/6)	
0.7				
2.3	40		- Large cobble at 39 ft - Large cobble at 40 ft - Broken clast, gray at 41 ft	
4.5		GP	Sandy GRAVEL with trace Silt, fine to coarse, loose, dry to moist, brown (7.5YR 4/4)	42.0
	45		- Large clast at 44.5 ft	45.0
2.5		SP	Poorly graded SAND with Gravel, fine to coarse, loose, dry, pale brown (10YR 6/3)	48.0
0.2		GC	Clayey GRAVEL, fine to coarse gravel, angular to subrounded, cohesive, moist to wet, reddish brown (5YR 4/3)	
0	50	SP	Poorly graded SAND with Gravel, fine to coarse, loose, moist, reddish brown (5YR 4/4)	50.0
0.1		SM	Silty SAND, fine to medium sand, cohesive, dense, moist to wet, brown (7.5YR 4/4)	52.0
0	55		- Fine gravel at 54 ft	55.0
0		ML	Sandy SILT, cohesive, low plasticity, moist to wet, brown (7.5YR 4/4)	
			- Gravel at 57 ft	58.0
0		GM	Gravelly SILT with Sand, fine gravel, some lamination, cohesive, moist, brown (7.5YR 4/4)	
0.2	60		- Moist to wet, increased gravel at 60 ft	62.0
0.2		SP	Poorly graded SAND with Gravel, fine gravel, loose, dry to moist, brown (7.5YR 4/4)	
25.1	65			
1.1			- Moist at 67 ft	
1			- Decreased gravel at 68 ft	69.0
1.1	70	SP	Poorly graded SAND with Gravel, fine to coarse, subangular to rounded, loose, moist, dark brown (7.5YR 3/4)	
0.8				73.5
0.2		ML	Sandy SILT, cohesive, stiff, low plasticity, moist, reddish brown (5YR 4/4)	74.0
	75			

WELL DIAGRAM
Grab Sample
PCE Concentration

2-inch SCH 80 PVC blank

Bentonite Grout

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ALEC'S BORING LOG 2 SLC VA PLUME FINALJCM1.GPJ LAEWNN01.GDT 2/25/25

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 275859 **BORING/WELL NUMBER** MW-42

PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 7/18/2024 - 7/26/2024

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PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM (Grab Sample, PCE Concentration)
0.8		ML		Gravelly SILT, cohesive, medium to stiff, low plasticity, moist to wet, reddish brown (5YR 4/4) - Large clast at 75 ft	76.0	
1.4		SP		Gravelly SAND, fine to coarse, subangular to subrounded, loose, dry to moist, dark reddish brown (2.5YR 4/4)	79.0	
0.4	80	CL		Gravelly CLAY, coarse gravel, coehsive, soft, low plasticity, moist to wet, reddish brown (5YR 4/4) - Fine gravel, increased silt, decreased clay at 81 ft	83.0	
0.8						
34.5	85	SP		Poorly graded SAND with Gravel, fine to coarse, loose, moist, brown (7.5YR 4/4) - Increased silt at 85 ft	86.0	
14.3		GM		Silty GRAVEL with Sand, fine to coarse gravel, cohesive, dense, moist to wet - Large cobble at 87 ft	89.0	
3.4						
0.7	90	ML		Clayey SILT with trace Gravel, stiff, low to medium plasticity, laminated, FeO staining, brown (7.5YR 5/4)	91.5	
2.3		GP		Poorly graded GRAVEL with Sand and Silt, fine to coarse, subangular to subrounded, loose, moist		
0.9	95					
1.9						
14.4		SP		Poorly graded SAND with Gravel, fine to coarse, subangular to subrounded, loose, dry to moist, strong brown (7.5YR 4/6)	98.0	
1	100					2-inch SCH 80 PVC blank
1.8						
4.4		GP		Poorly graded GRAVEL with Sand and trace Silt, fine to coarse gravel, subangular to rounded, loose, moist, yellowish red (5YR 4/6) - Sand lense at 105 ft	103.0	Bentonite Grout
2.5	105					2-inch SCH 80 PVC blank
1.4						
0.2						
1	110					
1.1						
0.9	115					

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 275859 **BORING/WELL NUMBER** MW-42

PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 7/18/2024 - 7/26/2024

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PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
0				116.0
0.6		SP	Poorly graded SAND with Gravel and trace Silt, fine to coarse, loose, moist, strong brown (7.5YR 4/6)	
0	120			
0.6		GM	Silty GRAVEL, fine to coarse gravel, coheisve, moist, yellowish red (5YR 5/6)	122.0
1.2		SP	Poorly graded SAND with Gravel, fine to coarse, loose, moist to dry, yellowish red (5YR 5/6)	123.0
0.2	125			
0.8				
0.3	130			131.0
10.1		GM	Silty GRAVEL, fine to coarse gravel, subangular to subrounded, low plasticity silt, cohesive, moist, yellowish red (5YR 4/6)	133.0
60.1		SP	Poorly graded SAND with Gravel, fine to coarse, loose, moist, strong brown (7.5YR 4/6)	134.0
		ML	Gravelly SILT, cohesive, stiff, low plasticity, moist, yellowish brown (5YR 4/6)	135.0
202	135	SP	Poorly graded SAND with trace Gravel, fine to medium, loose, strong brown (7.5YR 5/6) - Silt lense, cohesive at 136 ft	
51.5			- Large clast at 139 ft	
25.8	140		- Silt lense at 141 ft	142.0
0.6		SP	Poorly graded SAND with Gravel and Silt, fine to coarse, subangular to subrounded, loose, moist, yellowish red (5YR 5/6)	
1.5	145			
3.5				147.0
351		SP	Poorly graded SAND with Gravel, fine to coarse gravel, subangular to subrounded, loose, dry, light brown (7.5YR 6/4) - Increased silt, cohesive in places at 149 ft	150.0
826	150		Poorly graded SAND with Gravel and Silt, fine to coarse, cohesive in places, dense, dry to moist, brown (7.5YR 4/4)	
14.4			- Decreased silt, moist at 153 ft	
0.6	155			

WELL DIAGRAM
Grab Sample
PCE Concentration

Bentonite Grout

2-inch SCH 80 PVC blank

2-inch SCH 80 PVC blank

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ALEC'S BORING LOG 2 SLC VA PLUME FINALJCM1.GPJ LAEWNN01.GDT 2/25/25

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 275859 **BORING/WELL NUMBER** MW-42

PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 7/18/2024 - 7/26/2024

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PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
0.6		SM	- Moist, increased silt at 156 ft	
0.3			- Cohesive in places at 159 ft	160.0
1.7	160		SILT with trace Gravel, soft to stiff, low plasticity, moist to wet, yellowish red (5YR 4/6)	
1		ML		
1	165		- Increased gravel at 165 ft	
2.9				167.0
0.2		GP ML	GRAVEL with Sand and Silt, fine to coarse, subangular to subrounded, loose, moist, yellowish red (5YR 4/6) Gravelly SILT, cohesive, moist	168.5 169.0
1.3	170		Poorly graded GRAVEL with Sand, fine to coarse, angular to rounded gravel, loose, moist, yellowish red (5YR 4/6)	
3.8			- Gravelly SILT from 171.5 ft - 172 ft	
1.3	175	GP		
0.1				
5.3				
14.9	180			180.0
367		SP	Poorly graded SAND with Gravel, fine to coarse, subangular to subrounded, loose, dry to moist, brown (7.5YR 5/4)	182.0
268	185	ML	SILT with Gravel, cohesive, stiff, low plasticity, moist, dark reddish brown (2.5YR 3/3) - Moist to wet, decreased gravel at 184 ft	186.0
7			Gravelly SILT, cohesive, stiff, low plasticity, moist, yellowish red (5YR 5/6)	
96.8				
104.3	190	ML		
10.3				
2	195			

WELL DIAGRAM
Grab Sample
PCE Concentration

2-inch SCH 80 PVC blank

Bentonite Grout

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 275859 **BORING/WELL NUMBER** MW-42

PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 7/18/2024 - 7/26/2024

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PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM (Grab Sample PCE Concentration)
				196.0	
2.9		GP	Sandy GRAVEL with Silt, fine to coarse, cohesive, wet, yellowish red (5YR 4/6)		
1	200		- Wet (saturated) at 200 ft		
			- Clayey at 201.5 ft	202.0	
0.4		GP	Sandy GRAVEL with trace Silt, fine to coarse, subrounded to rounded, loose, wet, strong brown (7.5YR 5/6)		
2.4	205			205.0	
1.2		GM	Silty GRAVEL, fine to coarse, subangular to subrounded, cohesive, wet	207.0	
15.2		ML	Gravelly SILT, fine to coarse subrounded gravel, cohesive, wet	209.0	2-inch SCH 80 PVC blank
11.3	210	ML	SILT with some Gravel, low plasticity, blocky, light brown (7.5YR 6/4)		4.8 µg/L
			- Sandstone clast at 211 ft	212.0	
4.1		GP	Poorly graded GRAVEL with Sand, coarse sand, loose, wet, strong brown (7.5YR 5/6)		Bentonite Grout
5.4				214.0	
11.1	215	ML	Gravelly SILT, fine to coarse gravel, cohesive, stiff, low plasticity, moist, brown (7.5YR 4/4)		
26			- Decreased cohesion, large cobble at 218 ft	219.0	
14.3	220	ML	Gravelly SILT, fine to coarse gravel, cohesive, very stiff, low plasticity, dry, reddish brown (5YR 4/4)		
300.9				223.0	
304		GM	Silty GRAVEL, fine to coarse, cohesive in places, dense, moist, reddish brown (5YR 4/4)	225.0	
1	225		Sandy GRAVEL with trace Silt, fine to coarse gravel and sand, loose, wet, brown (7.5YR 4/4)		
4		GP			
			- Coarse gravel, increased silt and clay at 229 ft	230.0	
0.5	230		CLAY and SILT with Gravel, very stiff, low to medium plasticity, dry to moist, strong brown (7.5YR 4/6)		
2.8		CL ML			
1.8			- Gravel lense at 234 ft		
	235				

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ALEC'S BORING LOG 2 SLC VA PLUME FINALJCM1.GPJ LAEWNN01.GDT 2/25/25

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 275859 **BORING/WELL NUMBER** MW-42

PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 7/18/2024 - 7/26/2024

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PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
15.9			SILT with trace Gravel, hard, low plasticity, dry to moist, reddish brown (5YR 4/4)	236.0
7.9				
1.7	240	ML	- Laminated with some CaCO3 at 240 ft	
6.6			- Sand and gravel lense, wet at 242 ft	
4			- Gravel and silt, dry at 244 ft	
0	245			246.0
		ML	Gravelly SILT, subangular to subrounded fine to coarse gravel, cohesive, stiff, moist to wet	
4.1				249.0
		ML	SILT with Gravel, cohesive, firm, low plasticity, moist	
0.4	250			250.5
		GM	Silty Sandy GRAVEL, subangular to subrounded fine gravel, fine to coarse sand, wet, dark reddish brown (5YR 3/4)	252.0
13.9		GM	Silty GRAVEL, fine to coarse, subrounded to rounded, cohesive, dense, moist, dark reddish brown (5YR 3/4)	
0.8	255			256.0
2.4			SILT, hard, dry to moist, dark reddish brown (5YR 3/4)	
3.7				
2.3	260	ML	- 3 inch wet zone at 259 ft	
1.6				
1.8	265		- 1 inch wet gravel at 263.5 ft	
				266.0
16.9		ML	SILT, stiff, low plasticity, moist, yellowish red (5YR 4/6)	
38			- Coarse sand, wet at 267 ft	
		ML	Gravelly SILT, fine gravel, cohesive, soft to stiff, wet, yellowish red (5YR 5/6)	269.0
408	270			270.0
281		GM	Silty GRAVEL, fine to coarse, moist, core is hot, strong brown (7.5YR 5/6)	
377	275		Gravelly SAND with trace Silt, fine to coarse sand, fine	274.0

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WELL DIAGRAM
Grab Sample
PCE Concentration

- Hydrated 1/4" bentonite pellets (238-243 ft bgs).
- 10/20 Silica Sand (243-258 ft bgs)
- 2-inch SCH 80 PVC 0.020 slot screen (246-256 ft bgs)
- Pipe Cap (255.5-256 ft bgs)
- Hydrated 1/4" bentonite pellets (258-263 ft bgs).
- 99 µg/L
- 10/20 Silica Sand (263-276 ft bgs)
- 2-inch SCH 80 PVC 0.020 slot screen (266-276 ft bgs)

ALEC'S BORING LOG 2 SLC VA PLUME FINALJCM1.GPJ LAEWNN01.GDT 2/25/25

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 275859 **BORING/WELL NUMBER** MW-42

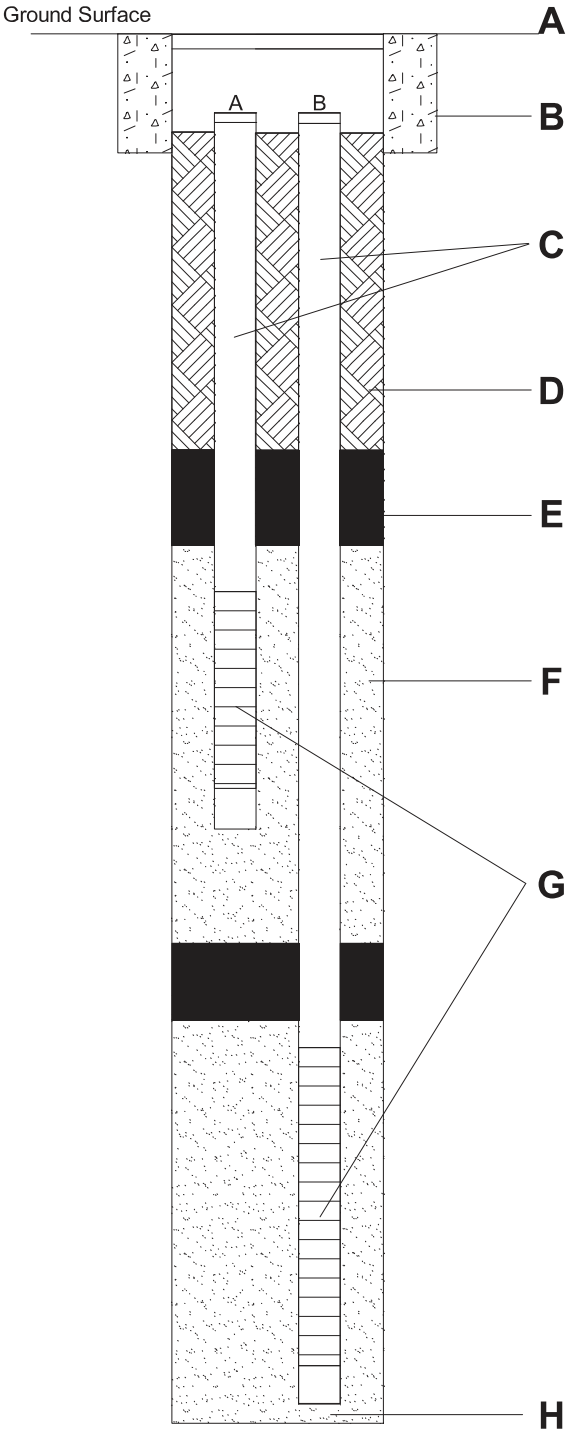
PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 7/18/2024 - 7/26/2024

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PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM (Grab Sample PCE Concentration)
		SP		gravel, loose, wet, brown (7.5YR 4/4)	276.0	Pipe Cap (275.5-276 ft bgs)
				End of Boring - Total depth 276 ft bgs		

MONITORING WELL CONSTRUCTION LOG: NESTED WELL

GEOLOGIST: Joe Miller	DATE STARTED: July 22, 2024	DATE COMPLETED: July 24, 2024
WELL NO: MW-42	PROJECT: Supplemental RI	SITE: 700 S 1600 E PCE Plume
PROJECT NO: 275859	CONSTRUCTED BY: Yellow Jacket	CITY: Salt Lake City, UT
A. NORTHING: 7444066.68 EASTING: 1545474.59	GROUND SURFACE ELEVATION: 4697.59	A. MEASURING POINT ELEVATION: 4697.14
B. NORTHING: 7444066.49 EASTING: 1545474.39		B. MEASURING POINT ELEVATION: 4697.16



BORING DIAMETER: 8-inch

TOTAL DEPTH: 276 feet

(FEET BELOW GROUND SURFACE)

A. SURFACE COMPLETION

TYPE: Flush Mount

SIZE: 12-inch

B. SURFACE SEAL

MATERIAL: Concrete

INTERVAL: 0-2 feet

C. RISER PIPE

DIAMETER: A. 2-inch
B. 2-inch

TYPE: A. Schedule 80 PVC
B. Schedule 80 PVC

INTERVAL: A. 0-246 feet
B. 0-266 feet

D. GROUT

COMPOSITION: Bentonite Grout

INTERVAL: 2-238 feet

E. SEAL

TYPE: Bentonite Pellets

INTERVAL: A. 238-247 feet
B. 258-263 feet

F. FILTER PACK

MATERIAL: A. 10/20 Silica Sand
B. 10/20 Silica Sand

INTERVAL: A. 243-258 feet
B. 263-276 feet

G. SCREEN

DIAMETER: A. 2-inch
B. 2-inch

TYPE: A. Schedule 80 PVC
B. Schedule 80 PVC

SLOT SIZE: A. 0.020 inch
B. 0.020 inch

INTERVAL: A. 246-256 feet
B. 266-276 feet

H. BACKFILL

MATERIAL: None

INTERVAL: N/A

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(303) 383-2300

BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER	275859	**BORING/WELL NUMBER**	MW-43
PROJECT NAME	700 S 1600 E PCE Plume	**DATE DRILLED**	5/23/2024 - 6/6/2025
LOCATION	Salt Lake City, UT	**CASING TYPE/DIAMETER**	2-inch Schedule 80 PVC
DRILLING METHOD	Rotosonic	**SCREEN TYPE/SLOT**	2-inch Schedule 80 0.020-slot
SAMPLING METHOD	Core Barrel	**GRAVEL PACK TYPE**	#10/20 sand
GROUND ELEVATION (FT MSL)	4707.80	**GROUT TYPE/QUANTITY**	Bentonite Grout
TOP OF CASING (FT MSL)	S: 4707.17 D: 4707.21	**DEPTH TO WATER (FT BGS)**	202.68
LOGGED BY	Kimberly Myers	**GROUND WATER ELEVATION (FT MSL)**	4505.12
REMARKS			

PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
			Asphalt	0.3
			Hydrovac to 12 ft, then backfill with artificial fill	
	5			
	10			
5			- At 12 ft, 6 inch diameter cobble caused refusal for hydrovac - crushed cobble on bottom	12.0
2	15	GM	Well graded GRAVEL with Silt and Sand and trace Cobbles, fine to coarse, subangular to subrounded, gravel up to 3 inch diameter, nonplastic silt, trace cobbles up to 5 inch or more, loose, moist, yellowish red (5YR 4/6)	
1.3				
			- Increased large cobbles at 17 ft	18.0
0.5		GM	Well graded GRAVEL with Silt and Sand and trace Cobbles, fine to coarse, subangular to subrounded, gravel up to 3 inch diameter, nonplastic silt, trace cobbles up to 5 inch or more, loose, moist, yellowish red (5YR 4/6)	
24.3	20			21.0
		ML	Gravelly SILT with Sand, well graded, fine to coarse, angular to subrounded, nonplastic, moist, yellowish red (5YR 4/6)	
5.9				22.5
1.3			Well graded SAND with Silt and Gravel and trace Cobbles, subangular to subrounded, fine to medium gravel, trace cobbles up to 5 inch, nonplastic silt, moist, yellowish red (5YR 4/6)	
2.6	25	SM		
2.1				
				28.0
2.9			Sandy CLAY with Gravel and trace Cobbles, well graded, subangular to subrounded, gravel up to 3 inch diameter, trace cobbles up to 8 inch diameter, low plasticity, yellowish red (5YR 4/6)	
7.3				
3.9	30			
19.6		CL		
9.5				
	35			

WELL DIAGRAM
Grab Sample
PCE Concentration

- Flush-mounted vault (12-inch).
- 2-inch SCH 80 PVC blank
- Bentonite Grout

Continued Next Page

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 275859 **BORING/WELL NUMBER** MW-43
PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 5/23/2024 - 6/6/2025

Continued from Previous Page

PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
18.2			- Large sandstone boulder from 35 - 36 ft	36.0
1.2		CL	CLAY with Sand, poorly graded, fine to medium, trace coarse sand, medium plasticity, dark reddish brown (5YR 3/4)	
2.4				39.0
		SC	Clayey SAND with Gravel, dark reddish brown (5YR 3/4)	40.0
1.1	40	CL	Sandy CLAY, dark reddish brown (5YR 3/4)	41.0
8.8		ML	Sandy SILT, dry, brown (7.5YR 4/4)	
16.6				43.0
10.6	45	CH	Sandy CLAY with trace gavel, poorly graded, fine grained sand, trace coarse sand, fine to coarse gravel up to 3 inch diameter, high plasticity, brown (7.5YR 4/4)	45.5
0.2		SC	Clayey SAND, cobbles up to 6 inch diameter, dry	
			- Boulder from 47 - 48 ft - pulverized, dry	48.0
8.4		CH	Sandy CLAY with Gravel and trace Cobbles, well graded, fine to coarse, subangular to subrounded, gravel up to 3 inch diameter, trace cobbles up to 5 inch diameter, medium density, high plasticity, reddish brown (5YR 4/4)	
7.4	50		- No gravel, fine sand, poorly graded, subrounded at 50 ft	51.0
			No Recovery	52.0
1.1		SM	Poorly graded SAND with Silt and trace Gravel, fine to medium, subangular to subrounded, gravel up to 1 inch diameter, nonplastic silt, loose, moist, 1 ft recovery from 52 - 54 ft, brown (7.5YR 4/4)	
2.5	55		- Low plasticity at 54 ft	56.0
1.6			No Recovery	
				58.0
7.3		CL	Sandy CLAY, well graded, fine to coarse, subrounded to subangular, low plasticity, brown (7.5YR 4/4)	
	60			60.0
7.3		ML	Sandy SILT with Gravel, well graded, fine to coarse, subrounded to subangular, gravel up to 2 inch diameter, reddish brown (5YR 4/4)	
4.6				
2.9	65			66.0
11.2		CL	Sandy CLAY with Gravel, 2ft recovery from 66 to 69 ft	
0.8				69.0
3.1	70	ML	Sandy SILT with Gravel, well graded, fine to coarse, subrounded to subangular, gravel up to 2 inch diameter, reddish brown (5YR 4/4)	71.5
1.6		CH	Sandy CLAY with Gravel, poorly graded, fine, subangular to subrounded, medium plasticity, reddish brown (5YR 4/4)	
1.4	75			

WELL DIAGRAM
Grab Sample
PCE Concentration

2-inch SCH 80 PVC blank

Bentonite Grout

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 275859 **BORING/WELL NUMBER** MW-43

PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 5/23/2024 - 6/6/2025

Continued from Previous Page

PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM (Grab Sample PCE Concentration)
				- Sandy Clay, no gravel at 75 ft		
3.7					77.0	
		CH		Sandy CLAY, poorly graded, fine to medium, subangular to subrounded, gravel up to 1 inch diameter, medium plasticity, brown (7.5YR 4/4)	78.0	
2.3		CH		Fat CLAY, soft, moist, high plasticity, brown (7.5YR 4/4)	79.5	
4.8	80	CH		Gravelly CLAY, well graded, fine to coarse, gravel up to 3 inch diameter, trace cobbles, high plasticity, brown (7.5YR 4/4)	82.0	
2.8		SM		Well graded SAND with Silt and Gravel, fine to coarse, subangular to subrounded, gravel up to 1 inch diameter, nonplastic silt, loose, moist	83.5	
3.6	85	CH		Gravelly CLAY, high plasticity, soft, dark reddish brown (2.5YR 3/5)	86.0	
5.8		CH		Sandy CLAY and trace Gravel, dark reddish brown (2.5YR 3/5)	86.5	
6.3		SM		Poorly graded SAND with Silt and Gravel, subrounded to angular, gravel up to 0.5 inch diameter, loose, nonplastic silt, moist, dark reddish brown (2.5YR 3/5)	89.5	
3.1	90	SM		Silty SAND with Gravel, trace large boulders, loose, subangular to subrounded, dry, yellowish red (5YR 4/6) - 8 inch cobble, moist at 90.5 ft	92.0	
11.8		SM		Silty SAND with Gravel, trace large boulders, subangular to subrounded, loose, dry, brown (7.5YR 4/4)	93.5	
		GW		Sandy GRAVEL, brown (7.5YR 4/5)	94.0	
1.6	95	SM		Silty SAND with Gravel, >1 inch angular gravel, brown (7.5YR 4/6)		
0					98.0	
0		CH		Silty CLAY and trace Gravel, trace cobbles, medium to high plasticity, cohesive, dry to moist, brown (7.5YR 4/4)		2-inch SCH 80 PVC blank
0	100			- 7 inch boulder at 100 ft	100.5	
		SM		Silty SAND with Gravel, coarse angular to subrounded gravel, fine sand, dry to moist, dark reddish brown (5YR 3/4)	101.5	
0		SM		Silty SAND with Gravel, coarse angular to subrounded gravel, fine sand, dry, strong brown (7.5YR 4/6) - Gravel increases to 2-4 inch diameter at 102.5 ft - 9 inch boulder at 104.5 ft		Bentonite Grout
0	105					
0						
0.2						
	110			- 7 inch boulder at 109.5 ft	110.0	
0.1				Silty SAND with Gravel, sand fine to medium, gravel subangular to subrounded, up to 4 inch diameter, loose, dry, strong brown (7.5YR 4/6)		
0.1		SM				
0.2	115					

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 275859 **BORING/WELL NUMBER** MW-43

PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 5/23/2024 - 6/6/2025

Continued from Previous Page

PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM (Grab Sample PCE Concentration)
0.1						
0.2		GM		Silty GRAVEL with Sand, gravel up to 3 inch diameter, angular to subrounded, fine sand, moist	117.0	
0.2	120	SM		Silty SAND with Gravel, fine sand, gravel up to 2 inch diameter, trace cobbles up to 6 inch diameter, cohesive, dry to moist, dark reddish brown (5YR 3/4)	119.5	
0.2						
0				- At 124 ft light brown (7.5YR 6/3)	124.5	
	125			Silty SAND with Gravel, fine sand, gravel up to 2 inch diameter, trace cobbles up to 6 inch diameter, cohesive, dry to moist, dark reddish brown (5YR 3/4)		Bentonite Grout
0.2						
0.2						
0.1	130	SM				2-inch SCH 80 PVC blank
0.2						
0.7						
	135				136.0	
0.2		GM		Silty GRAVEL with Sand, subangular to subrounded gravel up to 2 inch diameter, fine to medium sand, dry to moist, dark reddish brown (5YR 3/4)	137.0	
		SM		Silty SAND with Gravel, fine sand, >2 inch diameter gravel, cohesive, moist, dark reddish brown (5YR 3/4)	138.5	
0.4						
0.1	140	GM		Silty GRAVEL, 0.5 inch diameter gravel, trace 3 inch diameter gravel, dry to moist, yellowish red (5YR 4/6)		
0.1				- 12 inch boulder at 142.5 ft	143.0	
0.6				Silty SAND with Gravel, fine to coarse, subangular to subrounded, >2 inch diameter, dry, yellowish red (5YR 4/6)		
	145					
0.3		SM				
0.5						
0.1	150	ML		Gravelly SILT, fine gravel, cohesive, dry, yellowish red (5YR 4/6)	150.0	
					151.0	
0.2		SM		Silty SAND with Gravel, medium to coarse, subangular to subrounded, dry to moist, strong brown (7.5YR 4/6)		
0.2					154.5	
	155					

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 275859 **BORING/WELL NUMBER** MW-43

PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 5/23/2024 - 6/6/2025

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PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM (Grab Sample, PCE Concentration)
0.3		SP		Poorly graded SAND with Gravel, medium to coarse sand, subangular to subrounded, non cohesive, dry, strong brown (7.5YR 4/6)	157.0	
1.4		SM		Silty SAND with Gravel, dry to moist, strong brown (7.5YR 4/6)	159.0	
3.1	160	ML		Sandy SILT, nonplastic, noncohesive, dry, yellowish red (5YR 4/6)	162.0	
0.1		SW		Poorly graded SAND with Gravel, coarse sand, 0.5 inch diameter gravel, yellowish red (5YR 4/6)	163.0	
0.2	165	SM		Silty SAND with Gravel, fine sand, 0.5 inch diameter gravel, loose, cohesive, yellowish red (5YR 4/6)		
0.1					168.0	
0.1	170	ML		Gravelly SILT, fine gravel with trace clasts up to 4 inch diameter, fine sand, cohesive, nonplastic, moist, strong brown (7.5YR 4/6)		
0.3					171.0	
0.2		GM		Silty GRAVEL, fine to coarse gravel, fine sand, noncohesive, dry, strong brown (7.5YR 4/6) - Sandy at 173 ft		2-inch SCH 80 PVC blank
0.3	175					
0.4				- Abundant well rounded gravel at 176 ft	177.0	
0		SP		Poorly graded SAND with Gravel, medium sand, fine gravel, subangular to subrounded, dry to moist, strong brown (7.5YR 5/8)		Bentonite Grout
0.1	180					
0.1		ML		Gravelly SILT, fine to medium gravel, non cohesive, moist, dark yellowish brown (10YR 3/6)	181.0	
0.2	185				185.0	
0.4		SW		Well graded SAND with Gravel, fine to coarse sand, fine gravel, dark yellowish brown (10YR 3/6)	186.5	
0.1		ML		Sandy SILT with trace Gravel, fine gravel, cohesive, medium plasticity, moist, dark yellowish brown (10YR 3/6)	188.0	
0.7	190	GC		Clayey GRAVEL with Silt, well rounded and fine gravel, cohesive, low to medium plasticity, moist, dark yellowish brown (10YR 3/6)	190.0	
4.7				Silty GRAVEL with Sand, medium to coarse sand, fine to coarse gravel, dry to moist, yellowish red (5YR 4/6)		
0	195					

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PROJECT NUMBER 275859 **BORING/WELL NUMBER** MW-43

PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 5/23/2024 - 6/6/2025

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PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
1.4		GM		
0				
0	200			
0			Silty GRAVEL with Sand, wet, yellowish red (5YR 4/6)	202.0
0				
0	205			
0.2		GM		
0.2				
0.2	210			
				211.0
		SP	Gravelly SAND, coarse sand, wet to moist, yellowish red (5YR 4/6)	212.0
0.4			Silty GRAVEL with Sand, wet, yellowish red (5YR 4/6)	
0.1		GM		
0.1	215		- Coarse angular gravel at 216 ft	
				217.0
0.8			Silty GRAVEL with Sand, wet, yellowish red (5YR 4/6)	
1.1	220	GM		
				222.0
0.3			Clayey SILT with Gravel, cohesive, low plasticity, dry to moist	
0.2	225	ML		
				226.0
0.8			Gravelly SILT, subangular to angular gravel, dry to moist	
2.1		ML		
				229.0
1.1	230		Poorly graded SAND with Gravel, coarse sand, fine to coarse angular to subangular gravel - Rounded gravel, wet at 230 ft	
0.8		SP		
0.5	235			235.0

WELL DIAGRAM
Grab Sample
PCE Concentration

0.41 J µg/L

Hydrated 1/4" bentonite pellets (219-222 ft bgs)

13/24 Silica Sand (222-241 ft bgs)

2-inch SCH 80 PVC 0.020 slot screen (225-235 ft bgs)

Pipe Cap

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ALEC'S BORING LOG 2 SLC VA PLUME FINALJCM1.GPJ LAEWNN01.GDT 2/25/25

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 275859 **BORING/WELL NUMBER** MW-43

PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 5/23/2024 - 6/6/2025

Continued from Previous Page

PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
0.3		ML	Clayey SILT with Gravel, medium plasticity, some FeO staining with trace sand, moist	237.0
0.2		SP	Poorly graded SAND with Silt and Gravel, medium sand, rounded to subrounded gravel, wet	
0	240			241.5
0		ML	Sandy SILT and trace Gravel, fine gravel, medium plasticity, dry to moist	244.0
0.3				
0	245	ML	Sandy SILT, medium plasticity, dry to moist	248.0
0.2				
1	250	ML	Clayey SILT with Sand, medium plasticity, moist	
1.4				254.0
0.4				
1.2	255	SM	Silty SAND with Gravel, medium to coarse sand, fine and rounded gravel, wet	
0.1			Conglomerate - lithified rock	258.0
		SM	Silty SAND with Gravel, moist to wet	259.0
0.6	260		Sandy SILT with Clay and trace Gravel, fine gravel, low plasticity, dry to moist	260.0
0.1				
0.1	265	ML		
0.1				
0.1				269.5
0.1	270	SP	Poorly graded SAND, coarse, moist	270.0
		SM	Silty SAND with Gravel, wet	270.5
		SP	Poorly graded SAND, coarse, wet	272.0
0.1			Silty SAND with Gravel, fine rounded gravel, sand coarsens downhole, cohesive, low plasticity, dry to moist	
0.1	275			

WELL DIAGRAM
Grab Sample
PCE Concentration

(234.5-235 ft bgs)

Hydrated 1/4" bentonite pellets (241-271 ft bgs)

6.2 µg/L

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ALEC'S BORING LOG 2 SLC VA PLUME FINALJCM1.GPJ LAEWNN01.GDT 2/25/25

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 275859 **BORING/WELL NUMBER** MW-43

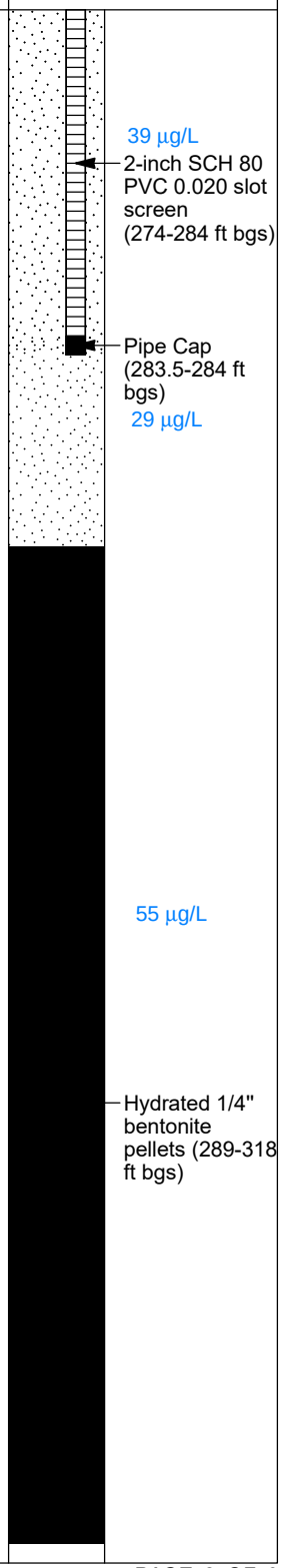
PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 5/23/2024 - 6/6/2025

Continued from Previous Page

PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
0.1	280	SM		
3.1				
0				281.0
		GP	Poorly graded GRAVEL with Sand	282.0
0			Sandy SILT, wet to moist	
		ML		
0.3	285			285.0
		GP	Poorly graded GRAVEL with Sand	285.5
0.2			Silty SAND with Gravel, fine rounded gravel, sand coarsens downhole, cohesive, low plasticity, dry to moist	
0.1				
0.3	290	SM		
0.2				
0.1				
	295			295.5
0.4		ML	Sandy SILT with Gravel, fine rounded gravel, cohesive, dry	297.0
0.2			Silty GRAVEL with Sand, fine to coarse sand, fine to medium subrounded gravel, loose, wet	
0.2	300			
0.2		GM		
0.2				
0.3	305			
0.3				309.0
1.5	310		Silty SAND with Gravel, fine sand, fine to medium subangular gravel, moist to wet	
0.5		SM		
				314.0
0.2	315		Silty GRAVEL with Sand, subangular to subrounded fine	

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WELL DIAGRAM
Grab Sample
PCE Concentration



ALEC'S BORING LOG 2 SLC VA PLUME FINALJCM1.GPJ LAEWNN01.GDT 2/25/25

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 275859 **BORING/WELL NUMBER** MW-43

PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 5/23/2024 - 6/6/2025

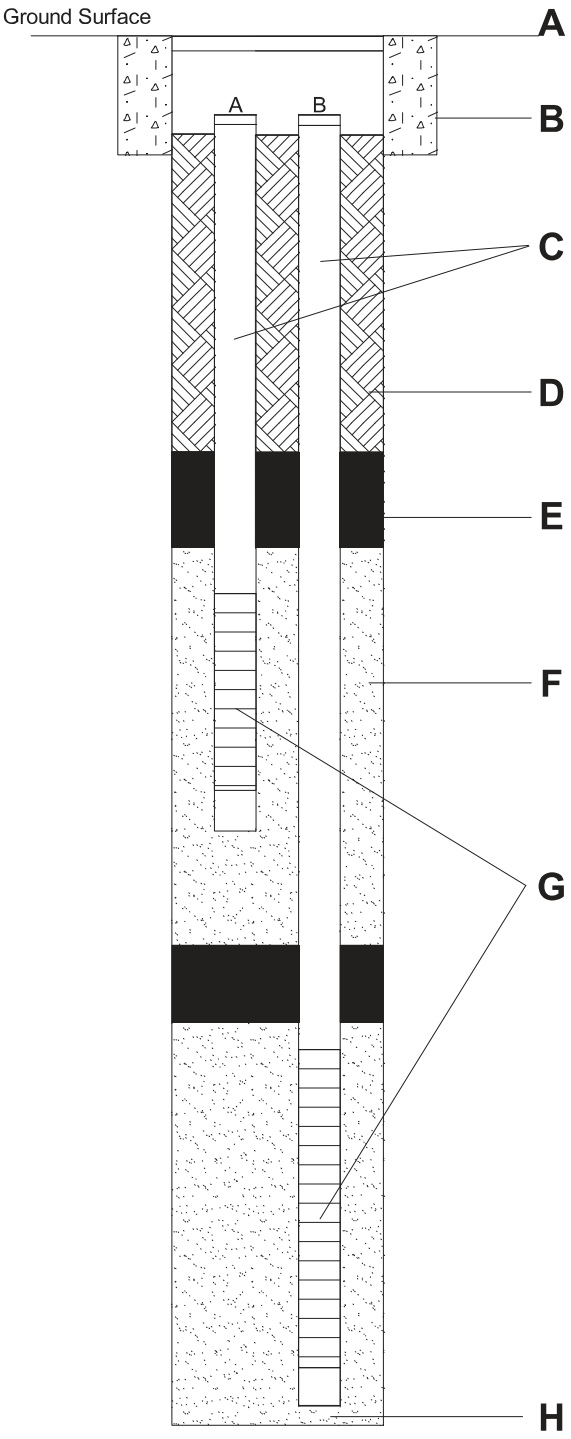
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PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM Grab Sample PCE Concentration
0.2		GM		to medium gravel, fine to coarse sand, wet	318.0	1.5 µg/L
				End of Boring - Total depth 318 ft bgs		

ALEC'S BORING LOG 2 SLC VA PLUME FINALJCM1.GPJ LAEWNN01.GDT 2/25/25

MONITORING WELL CONSTRUCTION LOG: NESTED WELL

GEOLOGIST: Alex Pedjase	DATE STARTED: June 11, 2024	DATE COMPLETED: June 13, 2024
WELL NO: MW-43	PROJECT: Supplemental RI	SITE: 700 S 1600 E PCE Plume
PROJECT NO: 275859	CONSTRUCTED BY: Yellow Jacket	CITY: Salt Lake City, UT
A. NORTHING: 7444367.04 EASTING: 1545472.72	GROUND SURFACE ELEVATION: 4707.80	A. MEASURING POINT ELEVATION: 4707.14
B. NORTHING: 7444367.36 EASTING: 1545472.54		B. MEASURING POINT ELEVATION: 4707.19



BORING DIAMETER: 8 inch

TOTAL DEPTH: 318 feet

(FEET BELOW GROUND SURFACE)

A. SURFACE COMPLETION

TYPE: Flush Mount

SIZE: 12 inch

B. SURFACE SEAL

MATERIAL: Concrete

INTERVAL: 0-2 feet

C. RISER PIPE

DIAMETER: A. 2 inch
B. 2 inch

TYPE: A. Schedule 80 PVC
B. Schedule 80 PVC

INTERVAL: A. 0-225 feet
B. 0-274 feet

D. GROUT

COMPOSITION: Bentonite Grout

INTERVAL: 0-219 feet

E. SEAL

TYPE: Bentonite Pellets

INTERVAL: A. 219-222 feet
B.

F. FILTER PACK

MATERIAL: A. 13/24 Silica Sand
B. 13/24 Silica Sand

INTERVAL: A. 222-241 feet
B. 241-271 feet

G. SCREEN

DIAMETER: A. 2 inch
B. 2 inch

TYPE: A. Schedule 80 PVC
B. Schedule 80 PVC

SLOT SIZE: A. 0.020 inch
B. 0.020 inch

INTERVAL: A. 225-235 feet
B. 274-284 feet

H. BACKFILL

MATERIAL: Bentonite Pellets

INTERVAL: 289-318 feet

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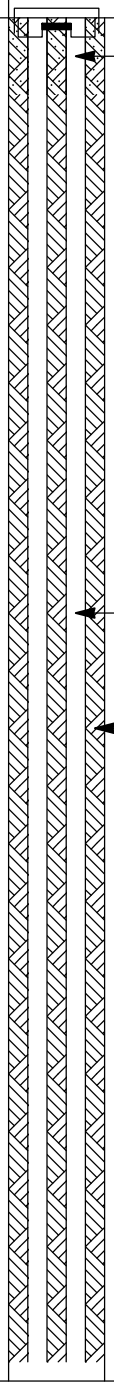
BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER	275859	**BORING/WELL NUMBER**	MW-44
PROJECT NAME	700 S 1600 E PCE Plume	**DATE DRILLED**	06/25/2024 - 7/1/2024
LOCATION	Salt Lake City, UT	**CASING TYPE/DIAMETER**	2-inch Schedule 80 PVC
DRILLING METHOD	Rotosonic	**SCREEN TYPE/SLOT**	2-inch Schedule 80 0.020-slot
SAMPLING METHOD	Core Barrel	**GRAVEL PACK TYPE**	#13/24 sand
GROUND ELEVATION (FT MSL)	4674.13	**GROUT TYPE/QUANTITY**	Bentonite Grout
TOP OF CASING (FT MSL)	S: 4673.43 D: 4673.44	**DEPTH TO WATER (FT BGS)**	153.00
LOGGED BY	Katarina Savatic	**GROUND WATER ELEVATION (FT MSL)**	4521.13
REMARKS			

PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
	5		Hydrovac to 10 ft, then backfill with artificial fill	
0.9	10	ML	Sandy SILT with Gravel, fine to coarse subangular sand, fine to coarse subangular gravel, low plasticity, soft, dry, reddish brown (5YR 4/4)	10.0
0.2			- 5 inch cobble at 13 ft	
0	15	SM	Silty SAND with Gravel, fine to coarse, angular to subangular, low plasticity silt, dense, dry, reddish brown (5YR 4/4)	15.0
0.1				
0			- Cobbles 5 to 7 inch diameter at 19 ft	
0.3	20	ML	SILT with Sand and Gravel, fine to coarse, angular to subangular, stiff, low plasticity, dry to moist, reddish brown (5YR 4/5)	20.0
0.4			- Gravel increases at 22 ft	
0.4	25		- 13 inch cobble at 24 ft	
0.2		ML	SILT with Gravel and Sand, fine to coarse, angular to subangular, soft, low plasticity, dry, reddish brown (2.5YR 4/4)	26.0
0.6			- 10 inch cobble at 29 ft	
0	30	SM	Silty SAND with Gravel, fine to coarse angular to subrounded gravel, dense, low plasticity fines, moist, reddish brown (5YR 5/3)	30.0
0				
0	35			35.0

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WELL DIAGRAM
Grab Sample
PCE Concentration



ALEC'S BORING LOG 2 SLC VA PLUME FINALJCM1.GPJ LAEWNN01.GDT 2/25/25

CDM Smith
555 17th Street, Suite 500
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(303) 383-2300

BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 275859 **BORING/WELL NUMBER** MW-44

PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 06/25/2024 - 7/1/2024

Continued from Previous Page

PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
0		GM	Silty GRAVEL with Sand, fine to coarse angular to subrounded gravel, low plasticity silt, fine to coarse subangular to angular sand, medium dense, dry, reddish brown (5YR 5/3)	
0			- Gravel increases at 38 ft	
0	40		- Loose, dry at 40 ft	
0				
0				
0	45		- At 45 ft light brown (5YR 5/4)	
0				
0				
0	50		- At 50 ft reddish brown (2.5YR 4/4)	
0				
0				
0	55		- Increased gravel at 55 ft	
0				
0				
0	60			
0				
0			- At 63 ft reddish brown (5YR 4/4)	
0	65			
0				67.0
0		CL	CLAY lense, medium plasticity, moist, reddish brown (5YR 4/4)	69.0
0	70		Sandy SILT with Gravel, fine to coarse, angular to subangular, low plasticity, dry, light brown (5YR 5/4)	
0		ML		
0				74.0
0	75		CLAY lense, medium plasticity, moist, reddish brown (5YR	

WELL DIAGRAM
Grab Sample
PCE Concentration

2-inch SCH 80 PVC blank

Bentonite Grout

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ALEC'S BORING LOG 2 SLC VA PLUME FINALJCM1.GPJ LAEWNN01.GDT 2/25/25

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PROJECT NUMBER 275859 **BORING/WELL NUMBER** MW-44

PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 06/25/2024 - 7/1/2024

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PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM (Grab Sample PCE Concentration)
		CL		5/4)	76.0	
0		ML		Sandy SILT with Gravel, fine to coarse, angular to subangular, low plasticity silt, dry, light brown (5YR 5/4)	78.0	
0		GM		Silty GRAVEL with Sand, fine to coarse, angular to subangular, loose, low plasticity, dry	80.0	
7.8	80			Pulverized rock from 80 ft - 84 ft		
3.4					84.0	
1.5	85	GM		Silty GRAVEL with Sand, fine to coarse, angular to subangular, low plasticity silt, loose, dry, reddish brown (2.5YR 5/4)		
1.4						
2.2					90.0	
1.1	90	CL		CLAY lense, medium plasticity, dry to moist, reddish brown (5YR 4/4)	91.0	
				Pulverized rock from 91 ft - 92 ft	92.0	
2.9		GM		Silty GRAVEL with Sand, fine to coarse subangular to subrounded gravel, fine to coarse subangular to angular sand, low plasticity silt, loose, dry, reddish brown (2.5YR 5/4)		2-inch SCH 80 PVC blank
1.1	95					
0.9						
3.7				Pulverized rock from 98 ft - 100 ft, dry	98.0	
1.1	100	GM		Silty GRAVEL with Sand, fine to coarse, subangular to subrounded, loose, low plasticity, dry, reddish brown (2.5YR 4/4)	100.0	2-inch SCH 80 PVC blank
0.8		CL		CLAY lense, medium plasticity, moist, reddish brown (2.5YR 4/4)	102.0	
0.9	105	GM		Silty GRAVEL with Sand, fine to coarse, subangular to subrounded, low plasticity silt, loose, dry, reddish brown (2.5YR 4/4)	104.0	Bentonite Grout
3.6					107.0	
				Pulverized rock from 107 ft - 108 ft	108.0	
1.9		ML		Clayey SILT with Gravel, low plasticity silt, fine to coarse subangular to subrounded gravel, dry to moist, reddish brown (2.5YR 4/4)		
0.2	110			- 6 inch cobbles at 109 ft	110.0	
0.1		GM		Silty GRAVEL with Sand, fine to coarse, subangular to subrounded, low plasticity silt, loose, dry, reddish brown (2.5YR 5/4)		
0.2	115			Pulverized rock at 112 ft - 113 ft	113.0	

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BORING/WELL CONSTRUCTION LOG

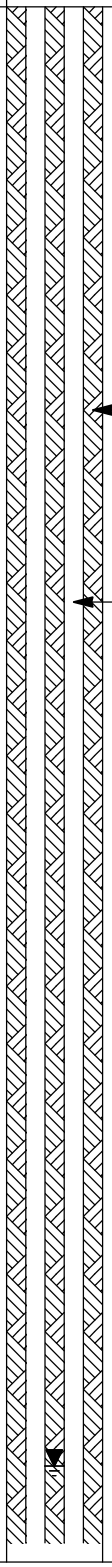
PROJECT NUMBER 275859 **BORING/WELL NUMBER** MW-44

PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 06/25/2024 - 7/1/2024

Continued from Previous Page

PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
0.2		GM	Pulverized rock at 119 ft - 120 ft	
0.1				
0.3	120			120.0
		CH	CLAY, high plasticity, moist, reddish brown (2.5YR 4/4)	
0.1				123.5
3.3			Pulverized rock from 123.5 ft - 130 ft	
	125			
4.7				
5.2				
0	130			130.0
		GM	Silty GRAVEL with Sand, fine to coarse, subangular to subrounded, low plasticity silt, loose, dry, reddish brown (2.5YR 4/4)	132.0
0		ML	SILT with some Clay and Gravel, fine to coarse subangular to subrounded gravel, stiff, low plasticity, dry, reddish brown (2.5YR 4/4)	
0				134.5
	135		Pulverized rock from 134.5 ft - 137.5 ft	
0.3				
				137.5
0.2		GM	Silty GRAVEL with Sand, fine to coarse, subangular to subrounded, loose, low plasticity silt, dry, reddish brown (2.5YR 5/4)	
	140			140.0
0.2		CL	CLAY with trace Gravel, stiff, medium plasticity, moist, reddish brown (5YR 5/4)	
0.1				
0.1				
	145			145.0
0.1		GM	Silty GRAVEL with Sand, fine to coarse, subangular to subrounded, low plasticity silt, loose, dry, reddish brown (5YR 5/4)	
				148.0
0.1		ML	Clayey SILT with Gravel, fine to coarse subangular to subrounded gravel, medium plasticity, reddish brown (5YR 5/4)	
0	150			150.0
			Clayey SILT with Gravel, stiff, medium plasticity, wet, reddish brown (2.5YR 4/4)	
0				
			- Wet (saturated) at 153 ft	
0				
	155			

WELL DIAGRAM
Grab Sample
PCE Concentration



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ALEC'S BORING LOG 2 SLC VA PLUME FINALJCM1.GPJ LAEWNN01.GDT 2/25/25

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 275859 **BORING/WELL NUMBER** MW-44

PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 06/25/2024 - 7/1/2024

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PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM (Grab Sample PCE Concentration)
0.1, 0, 0, 0, 0, 0, 0, 0, 0, 0	160, 165, 170, 175, 180, 185, 190, 195	ML		- Increased gravel at 157 ft		130 µg/L
		ML		Clayey SILT with Gravel and Sand, fine to coarse, subangular to subrounded, medium to stiff, medium plasticity, wet, reddish brown (2.5YR 4/4) - Increased gravel at 169 ft	168.0	
0.3, 0.8		CL		Silty CLAY with Sand and Gravel, fine to coarse, subangular to subrounded, stiff, medium plasticity, moist, reddish brown (5YR 5/4)	171.0	
0.9, 0.7		GM		Silty GRAVEL, pulverized rock, dry, reddish brown (5YR 5/4)	175.0	2-inch SCH 80 PVC blank Bentonite Grout
0.2		GP		Poorly graded GRAVEL with Silt and Sand, fine to coarse, subangular to subrounded, loose, low plasticity silt, reddish brown (2.5YR 4/4)	180.0	
0, 0		CH		CLAY with Gravel, fine to coarse subangular to subrounded gravel, stiff, high plasticity, moist, reddish brown (2.5YR 4/4) - Increased gravel at 185 ft	182.0	
0, 0		CL		CLAY with Gravel, fine to coarse subangular to subrounded gravel, very stiff to hard, medium plasticity, dry, reddish brown (2.5YR 4/4)	186.0	
0.1, 0, 0.1				Silty GRAVEL with Sand, fine to coarse, subangular to subrounded, wet, reddish brown (2.5YR 4/4)	190.0	Hydrated 1/4" bentonite pellets (187-192 ft bgs)

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ALEC'S BORING LOG 2 SLC VA PLUME FINALJCM1.GPJ LAEWNN01.GDT 2/25/25

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 275859 **BORING/WELL NUMBER** MW-44

PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 06/25/2024 - 7/1/2024

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PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM (Grab Sample PCE Concentration)
0		GM		- Clay lense at 200 ft		48 µg/L; 13/24 Silica Sand (192-208 ft bgs); 2-inch SCH 80 PVC 0.020 slot screen (195-205 ft bgs); Pipe Cap (204.5-205 ft bgs)
0	200					
0						
0						
0	205					
0						
0				Silty CLAY with Gravel, fine to coarse subangular to subrounded gravel, very stiff, high plasticity, wet, reddish brown (2.5YR 4/4)	208.0	
0	210					
0		CH				
0.1				- Increased gravel at 215 ft		
0.1	215					
				- Decreased gravel at 217 ft		
0.2		GP		GRAVEL with Silt and Sand, fine to coarse, subangular to subrounded, loose, low plasticity, wet, reddish brown (2.5YR 4/4)	218.0	
0.1	220	GC		Clayey GRAVEL with Sand, fine to coarse, subangular to subrounded, loose, low plasticity, moist, reddish brown (2.5YR 4/4)	220.0	
0					223.0	
0.9		CL		Silty CLAY with Gravel and Sand, fine to coarse, subangular to subrounded, stiff, medium plasticity, dry, reddish brown (2.5YR 4/4)		
	225			- Pulverized rock at 225 ft		Hydrated 1/4" bentonite pellets (208-277 ft bgs)
1.3				- Decreased gravel at 226 ft	227.0	
1		CH		Silty CLAY with Gravel, fine to coarse subangular to subrounded gravel, stiff, high plasticity, dry, reddish brown (2.5YR 4/4)		
0.1	230			- Pulverized rock at 229.5 ft	230.0	
0				CLAY with Silt and Gravel, fine to coarse subangular to subrounded gravel, stiff, high plasticity, moist, reddish brown (2.5YR 4/4)		
0						
	235					

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ALEC'S BORING LOG 2 SLC VA PLUME FINALJCM1.GPJ LAEWNN01.GDT 2/25/25

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PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 06/25/2024 - 7/1/2024

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PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
0		CH	- Decreased gravel at 235 ft	
0			- Dry at 239 ft	240.0
0	240		Silty CLAY, stiff, medium plasticity, dry, reddish brown (2.5YR 4/4)	
0				
0.1	245	CL		
0				
0				
0	250		Clayey SILT with Gravel, stiff, medium plasticity, wet (saturated), reddish brown (5YR 4/4)	250.0
0				
0			- Wet to moist at 253 ft	
0	255			
0		ML		
0				
0	260			
0.8				
0			Pulverized rock from 263 ft - 265 ft	263.0
0	265		Silty CLAY with Gravel, fine to coarse subangular to subrounded gravel, stiff, medium to high plasticity, wet, reddish brown (2.5YR 4/4)	265.0
0		CH		
0				
0.1	270		Silty CLAY with Gravel, very stiff, medium plasticity, dry, reddish brown (2.5YR 4/3)	270.0
0				
0.1		CL		
	275			

WELL DIAGRAM
Grab Sample
PCE Concentration

Hydrated 1/4" bentonite pellets (208-277 ft bgs)

2-inch SCH 80 PVC blank

2 µg/L

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ALEC'S BORING LOG 2 SLC VA PLUME FINALJCM1.GPJ LAEWNN01.GDT 2/25/25

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 275859 **BORING/WELL NUMBER** MW-44

PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 06/25/2024 - 7/1/2024

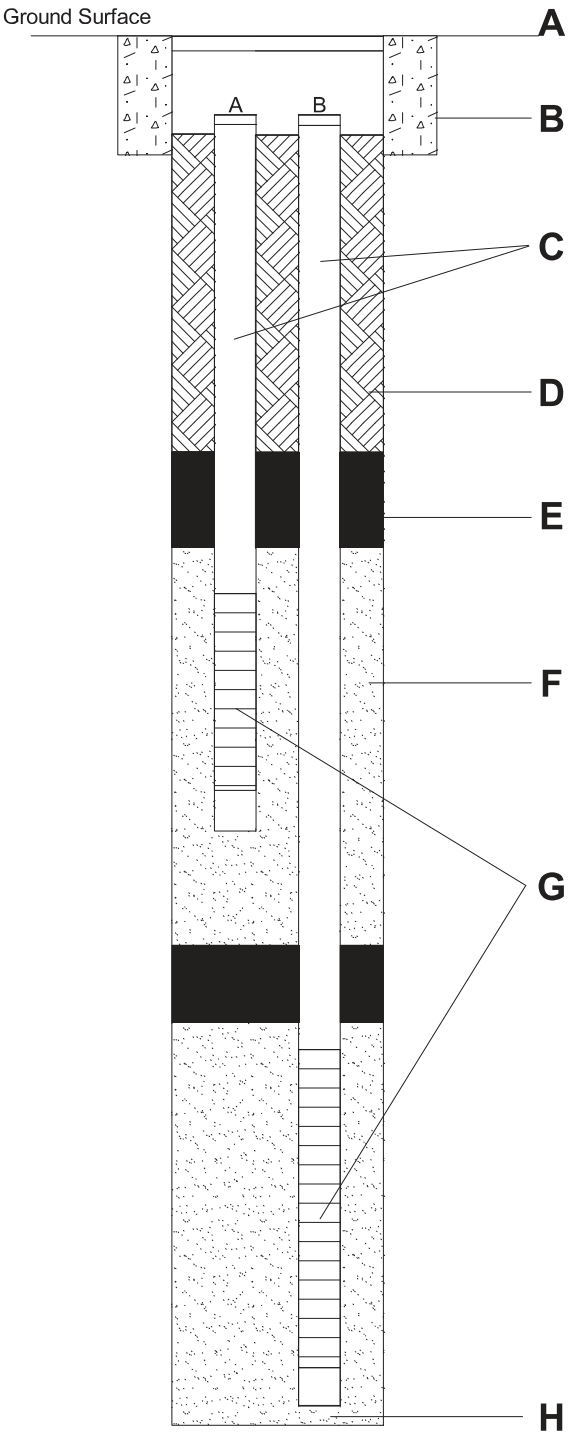
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PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM (Grab Sample PCE Concentration)
0.1						
NA				No Recovery from 278 ft - 284 ft	278.0	
NA	280					
NA						
0				Silty GRAVEL with Sand, fine to coarse, subangular to subrounded, wet (saturated), light brown (5YR 5/4)	284.0	13/24 Silica Sand (277-292 ft bgs)
0	285					2-inch SCH 80 PVC 0.020 slot screen (280-290 ft bgs)
0		GM				
0						
0.1	290					Pipe Cap (289.5-290 ft bgs)
0				Silty CLAY with Gravel and Sand, fine to coarse, subangular to subrounded, stiff, medium to high plasticity, moist, reddish brown (2.5YR 5/4)	291.0	
0						
0	295					
0						
0		CH				
0.1	300					Hydrated 1/4" bentonite pellets (292-310 ft bgs)
0						
0						
0	305					
0.1		CH		CLAY with Silt, high plasticity, very stiff, moist, reddish brown (2.5YR 5/4)	306.0	
0		ML		Clayey SILT with Gravel, fine to coarse subangular to subrounded gravel, stiff, medium plasticity, moist, reddish brown (2.5YR 5/4)	308.0	
	310			End of Boring - Total depth 310 ft bgs	310.0	

ALEC'S BORING LOG 2 SLC VA PLUME FINALJCM1.GPJ LAEWNN01.GDT 2/25/25

MONITORING WELL CONSTRUCTION LOG: NESTED WELL

GEOLOGIST: Melanie Blanton	DATE STARTED: July 1, 2024	DATE COMPLETED: July 9, 2024
WELL NO: MW-44	PROJECT: Supplemental RI	SITE: 700 S 1600 E PCE Plume
PROJECT NO: 275859	CONSTRUCTED BY: Yellow Jacket	CITY: Salt Lake City, UT
A. NORTHING: 7443277.73 EASTING: 1545410.29	GROUND SURFACE ELEVATION: 4665.44	A. MEASURING POINT ELEVATION: 4664.83
B. NORTHING: 7443277.99 EASTING: 1545410.38		B. MEASURING POINT ELEVATION: 4664.79



BORING DIAMETER: 8 inch

TOTAL DEPTH: 310 feet

(FEET BELOW GROUND SURFACE)

A. SURFACE COMPLETION

TYPE: Flush Mount

SIZE: 12 inch

B. SURFACE SEAL

MATERIAL: Concrete

INTERVAL: 0-2 feet

C. RISER PIPE

DIAMETER: A. 2 inch
B. 2 inch

TYPE: A. Schedule 80 PVC
B. Schedule 80 PVC

INTERVAL: A. 0-195 feet
B. 0-280 feet

D. GROUT

COMPOSITION: A. Portland Cement
B. Bentonite Grout

INTERVAL: A. 0-30 feet
B. 30-187 feet

E. SEAL

TYPE: Bentonite Pellets

INTERVAL: A. 187-192 feet
B. 208-277 feet

F. FILTER PACK

MATERIAL: A. 13/24 Silica Sand
B. 13/24 Silica Sand

INTERVAL: A. 192-208 feet
B. 277-292 feet

G. SCREEN

DIAMETER: A. 2 inch
B. 2 inch

TYPE: A. Schedule 80 PVC
B. Schedule 80 PVC

SLOT SIZE: A. 0.020 inch
B. 0.020 inch

INTERVAL: A. 195-205 feet
B. 280-290 feet

H. BACKFILL

MATERIAL: Bentonite Pellets

INTERVAL: 292-310 feet

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER	275859	**BORING/WELL NUMBER**	MW-45
PROJECT NAME	700 S 1600 E PCE Plume	**DATE DRILLED**	6/26/2024 - 6/30/2024
LOCATION	Salt Lake City, UT	**CASING TYPE/DIAMETER**	2-inch Schedule 80 PVC
DRILLING METHOD	Rotosonic	**SCREEN TYPE/SLOT**	2-inch Schedule 80 0.020-slot
SAMPLING METHOD	Core Barrel	**GRAVEL PACK TYPE**	#10/20 sand
GROUND ELEVATION (FT MSL)	4481.36	**GROUT TYPE/QUANTITY**	Bentonite Grout
TOP OF CASING (FT MSL)	4480.77	**DEPTH TO WATER (FT BGS)**	21.00
LOGGED BY	Shawn McGuire	**GROUND WATER ELEVATION (FT MSL)**	4456.36
REMARKS			

PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM (Grab Sample PCE Concentration)
0.5, 0.6, 0.4, 0.4, 0.4, 0	5, 10	OL		Organic Silty SAND with some Gravel and trace Clay, moist, black (5YR 2.5/1) - Hand augered from 0 ft - 5 ft	13.0	Flush-mounted vault
0.1	15	CL		Silty CLAY, medium plasticity, trace organics, reddish gray (5YR 5/2)	15.0	
0.2, 0.3, 0.3, 0.4, 0, 0	20, 25	SC		Clayey SAND with Gravel, wet (saturated), reddish brown (5YR 4/4)		Bentonite Grout
0.5	30	CH		Fat CLAY with some Silt, wet, reddish brown (5YR 4/4)	27.0	
0.7, 0.5, 0.3	35			Silty Sandy GRAVEL, coarse gravel, loose, wet (saturated), reddish brown (5YR 4/4)	30.0	2-inch SCH 80 PVC blank

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ALEC'S BORING LOG 2 SLC VA PLUME FINALJCM1.GPJ LAEWNN01.GDT 2/25/25

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 275859 **BORING/WELL NUMBER** MW-45

PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 6/26/2024 - 6/30/2024

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PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM (Grab Sample PCE Concentration)
0.2						Bentonite Grout
0.2		GM		- Alternating clay and silt matrix at 37 ft		
0.2	40					
0.3				- Increased clay at 41 ft		
0.3						
0.3	45			- Increased silt at 45 ft		
0.8						
1.7				Sandy CLAY with trace Gravel, low to medium plasticity, wet, reddish brown (5YR 4/4)	48.0	
2.3	50	CL				
3.2				Poorly graded GRAVEL with Silt, low plasticity, wet, reddish brown (5YR 4/4)	52.0	2-inch SCH 80 PVC blank
0.1						
1.2	55			- Wet (saturated) at 55 ft - 58 ft		
0.8		GM				
1	60					
1.3				- Wet at 62 ft		
2.5				- Wet to moist at 64 ft		
1	65			Gravelly CLAY, subangular gravel, high to medium plasticity, moist, reddish brown (5YR 4/3)	65.0	
0.8		CH				
0.8	70					
1.3		GW		Sandy GRAVEL, dry	72.0	
0.8	75			Gravelly CLAY, subangular gravel, high to medium plasticity, moist, reddish brown (5YR 4/3)	73.0	

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PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 6/26/2024 - 6/30/2024

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PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM (Grab Sample PCE Concentration)
1		CH		- Increased gravel at 77 ft		
1.3					79.0	
1.3	80	GW		Well graded GRAVEL with Sand, subangular gravel	81.0	
1				Gravelly CLAY, subangular gravel, high to medium plasticity, moist, reddish brown (5YR 4/3)		Bentonite Grout
0.8				- Reduced gravel and sand at 83 ft		
0.7	85	CH		- Trace gravel at 86 ft		
0.8						
0.8	90			- Trace gravel at 91 ft		
					93.0	
1.7		GW		Well graded GRAVEL with Sand, subangular gravel, loose, wet, reddish brown (5YR 4/3)		
	95				95.0	
				Fat CLAY with trace sand, high plasticity, wet, reddish brown (5YR 5/3)		
	100	CH				2-inch SCH 80 PVC blank
	105				105.0	
0.6				Fat CLAY, very stiff, high plasticity, moist to dry, pale brown (10YR 6/3)		
0.8						
1	110					
1.2						
1.2				- Dry at 114 ft		
	115					

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PROJECT NUMBER 275859 **BORING/WELL NUMBER** MW-45

PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 6/26/2024 - 6/30/2024

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PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM (Grab Sample PCE Concentration)
0.7						
0.7	120	CH		- Increased silt and sand at 120 ft		
0.8						Bentonite Grout
1.1				- Decreased silt and sand at 124 ft		
0.2	125					
0.5						
0.5	130					
0.7						
0.1					134.0	
	135	SM		Silty SAND with trace Clay, fine sand, nonplastic, very dense, reddish brown (5YR 4/3)	135.5	
0.5				Silty Sandy CLAY with some Gravel, low to medium plasticity, stiff, moist, reddish brown (5YR 4/3)		2-inch SCH 80 PVC blank
0.2						
0.2	140	CL				
0.7				- Dry at 141 ft		
0.8						
	145				145.0	
0.8				Well graded SAND with Silt and Gravel, subangular gravel, nonplastic, wet, reddish brown (5YR 4/4)		
1.2						
1.5	150	SM				
1.6						
1.6	155					

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 275859 **BORING/WELL NUMBER** MW-45

PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 6/26/2024 - 6/30/2024

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PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM (Grab Sample PCE Concentration)
				- Wet (saturated) at 155 ft		
0				Clayey SAND with Gravel, reddish brown (5YR 4/4)	156.0	
0		SC				
0.1	160			Gravelly SAND, reddish brown (5YR 4/4)	160.0	
0.2		SW				
0.5					165.0	
	165			Fat CLAY with some Sand and trace Gravel, high plasticity, wet, reddish brown (5YR 4/4)		
0.1						
0.2						
0	170					
0						
0.1						
	175					2-inch SCH 80 PVC blank
0.5						
0.7						Bentonite Grout
0.2	180			- At 180 ft, yellowish red (5YR 4/6)		
0.2		CH				
0.1						
	185					
0.1						
0.1						
0.1	190					
0.1						
0.2						
	195					

Continued Next Page

ALEC'S BORING LOG 2 SLC VA PLUME FINALJCM1.GPJ LAEWNN01.GDT 2/25/25

CDM Smith

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 275859 **BORING/WELL NUMBER** MW-45

PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 6/26/2024 - 6/30/2024

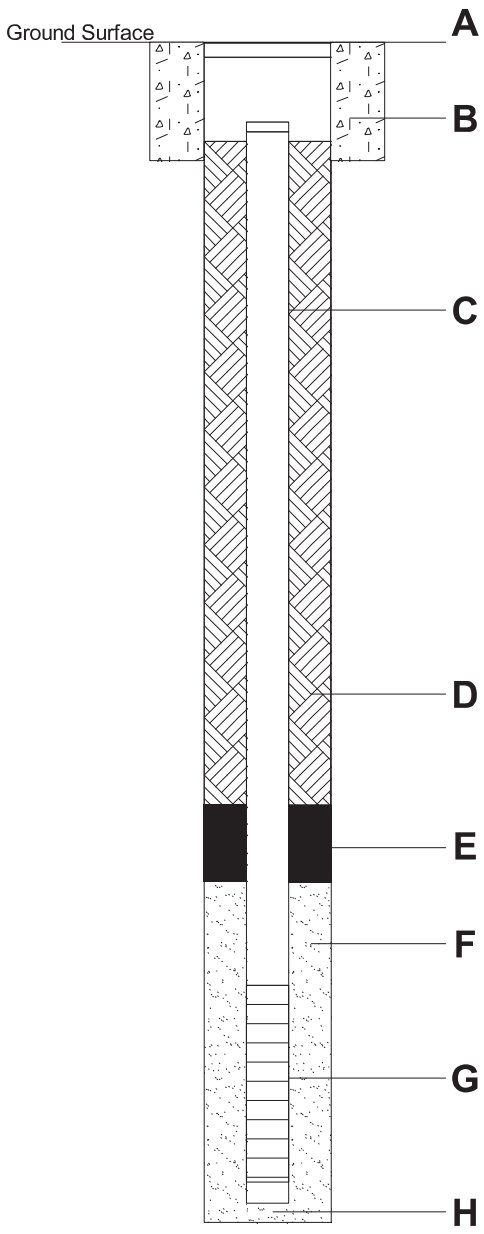
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PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM (Grab Sample PCE Concentration)
0				- Moist, increased gravel at 195 ft		Hydrated bentonite medium chips 193-197 ft bgs)
0.1					199.0	
0.1	200	GW		Well graded GRAVEL with Sand and Silt, subrounded, wet, yellowish red (5YR 4/6)		#10/20 sand (193-210 ft bgs)
0.3						2-inch SCH 80 PVC 0.020 slot screen (200-210 ft bgs)
	205			- Clay lenses, wet (saturated) at 205 ft		8.8 µg/L
	210			End of Boring - Total depth 210 ft bgs	210.0	Pipe Cap (209.5-210 ft bgs)

ALEC'S BORING LOG 2 SLC VA PLUME FINALJCM1.GPJ LAEWNN01.GDT 2/25/25

MONITORING WELL CONSTRUCTION LOG: SINGLE WELL

GEOLOGIST: Shawn McGuire	DATE STARTED: June 28, 2024	DATE COMPLETED: June 30, 2024
WELL NO: MW-45	PROJECT: Supplemental RI	SITE: 700 S 1600 E PCE Plume
PROJECT NO: 275859	CONSTRUCTED BY: Yellow Jacket	CITY: Salt Lake City, UT
NORTHING: 7442104.40 EASTING: 1541810.52	GROUND SURFACE ELEVATION: 4481.36	MEASURING POINT ELEVATION: 4480.78



BORING DIAMETER: 8 inch

TOTAL DEPTH: 210 feet

(FEET BELOW GROUND SURFACE)

A. SURFACE COMPLETION

TYPE: Flush Mount

SIZE: 8 inch

B. SURFACE SEAL

MATERIAL: Concrete

INTERVAL: 0-8 feet

C. RISER PIPE

DIAMETER: 2 inch

TYPE: Schedule 80 PVC

INTERVAL: 0-200 feet

D. GROUT

COMPOSITION: Bentonite Grout

INTERVAL: 80-193 feet

E. SEAL

TYPE: Bentonite Pellets

INTERVAL: 193-197 feet

F. FILTER PACK

MATERIAL: 10/20 Silica Sand

INTERVAL: 197-210 feet

G. SCREEN

DIAMETER: 2 inch

TYPE: Schedule 80 PVC

SLOT SIZE: 0.020 inch

INTERVAL: 200-210 feet

H. BACKFILL

MATERIAL: None

INTERVAL: None

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER	275859	**BORING/WELL NUMBER**	EW-01
PROJECT NAME	700 S 1600 E PCE Plume	**DATE DRILLED**	6/4/2024 - 6/14/2024
LOCATION	Salt Lake City, UT	**CASING TYPE/DIAMETER**	6-inch Schedule 80 PVC
DRILLING METHOD	Rotosonic	**SCREEN TYPE/SLOT**	6-inch Schedule 80 0.020-slot
SAMPLING METHOD	Core Barrel	**GRAVEL PACK TYPE**	#13/24 sand
GROUND ELEVATION (FT MSL)	4697.28	**GROUT TYPE/QUANTITY**	Neat Cement Grout
TOP OF CASING (FT MSL)	4696.89	**DEPTH TO WATER (FT BGS)**	204.31
LOGGED BY	Nathan Norris	**GROUND WATER ELEVATION (FT MSL)**	4492.97
REMARKS			

PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM (Grab Sample PCE Concentration)
				Hydrovac to 10 ft, then backfill with backfill material		Flush-mounted vault
0.4	5					
3.8						
	10			Well graded GRAVEL with Silt and Sand, subangular sand, 0.5 - 3 inch diameter gravel, yellowish red (5YR 6/4)	10.0	
1.7				- Trace large pebbles >6 inch diameter, clay lenses, moist at 12 ft		
0.4						
0.7	15					6-inch SCH 80 PVC blank
2.3						
				- Boulder at 18 ft		Neat cement grout
380.6						
0.6	20	GM		- Dry to moist at 20 ft		
0.2				- Dry at 22 ft		
0.2						
0.1						
	25					
0.3						
0.3				- Increased silt, moist at 28 ft		
	30					
0.3					31.0	
0.1				Sandy Silty CLAY with trace Gravel, low to medium plasticity, moist, reddish brown (5YR 4/4)		
0.3		CL				
	35			*Continued Next Page*		

ALEC'S BORING LOG 2 SLC VA PLUME FINALJCM1.GPJ LAEWNN01.GDT 2/25/25

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 275859 **BORING/WELL NUMBER** EW-01

PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 6/4/2024 - 6/14/2024

Continued from Previous Page

PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM (Grab Sample / PCE Concentration)
					36.5	
11.8		GM		Silty Sandy GRAVEL, <6 inch diameter subangular gravel, moist, yellowish red (5YR 4/6)		
4.6	40			- 0.5 ft clay lense at 40 ft		
1.7						
13.9					43.0	
		GW		Sandy GRAVEL, angular 1-6 inch diameter gravel, dense, dry, pinkish gray (5YR 6/2)	45.0	
4.7	45			Well graded GRAVEL with Sand and Clay, angular to subangular 0.5-4 inch diameter gravel, moist, yellowish red (5YR 4/6)		
0.9						
3.7				- Clay lense at 48.5 ft		
6.4	50					
6				- Dry at 52 ft		6-inch SCH 80 PVC blank
6.2						
23.7	55	GW		- Moist at 56 ft		Neat cement grout
50						
63.9	60					
47				- Dry at 62 ft		
136.5						
	65					
					69.0	
	70	CL		Sandy CLAY with some Gravel, low to medium plasticity, reddish brown (5YR 5/4) - (PID MALFUNCTION FROM 65 ft-75 ft NO READINGS AVAILABLE)	71.0	
		GM		Well graded GRAVEL with Silt and Sand and trace Clay, angular gravel, reddish brown (5YR 4/4)		
	75				75.0	

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ALEC'S BORING LOG 2 SLC VA PLUME FINALJCM1.GPJ LAEWNN01.GDT 2/25/25

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 275859 **BORING/WELL NUMBER** EW-01

PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 6/4/2024 - 6/14/2024

Continued from Previous Page

PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM (Grab Sample PCE Concentration)
317.1				Sandy SILT with some Clay and trace Gravel, low to medium plasticity, wet, yellowish red (5YR 6/4)		
94.1		ML		- Increased plasticity at 78 ft		
4.2	80			- Increased clay, medium to high plasticity, dry at 81 ft	82.0	
11.9				Sandy GRAVEL with trace Silt and Clay, subangular 0.5-4 inch diameter gravel, reddish brown (5YR 4/4)		
9.2						
361	85			- Clay lense at 86 ft		
502				- Dry at 89 ft		
350	90			- Clay lense at 90 - 91 ft, medium to high plasticity		
504						
755						
507.9	95			- Trace large gravel at 97 ft		
47.5						
289	100					6-inch SCH 80 PVC blank
336				- Clay lense at 101 ft		
		GW				Neat cement grout
4.7	105					
2.1						
3.6						
2.6	110			- Silt lense at 110 ft		
0.1				- Pulverized clasts at 112 ft		
2.2				- Moist at 114 ft		
	115					

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ALEC'S BORING LOG 2 SLC VA PLUME FINALJCM1.GPJ LAEWNN01.GDT 2/25/25

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 275859 **BORING/WELL NUMBER** EW-01

PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 6/4/2024 - 6/14/2024

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PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM (Grab Sample PCE Concentration)
492	120			- Silty CLAY lense at 121 ft		Neat cement grout
297						
612				- Dry at 123 ft		
537	125				125.0	
399		CH		Sandy CLAY with some Gravel, medium to high plasticity, wet, dark reddish brown (5YR 3/4)(NEW PID USED)		6-inch SCH 80 PVC blank
0.1						
0.2						
3.5	130			- Moist to wet at 130 ft		
3.5				- Very stiff from 128 - 134 ft, moist at 132 ft		
1.7					134.0	
3.6	135	GW		Well graded GRAVEL with Sand, subangular 0.5-6 inch diameter gravel, dry, reddish brown (5YR 4/6)		
				- Clay lense at 136 ft		
5				- Moist at 138 ft		
4.4	140			- Dry at 140 ft		
3.7				- Silt and clay lenses at 142 ft		
0.6						
	145				145.0	
3.7				Silty GRAVEL, angular to subangular gravel, matrix is dense, dense, dry, yellowish red (5YR 5/6)		
0.1						
2.5	150					
17.8						
11				- Clay lense at 154 ft		
	155					

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ALEC'S BORING LOG 2 SLC VA PLUME FINALJCM1.GPJ LAEWNN01.GDT 2/25/25

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 275859 **BORING/WELL NUMBER** EW-01

PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 6/4/2024 - 6/14/2024

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PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM (Grab Sample PCE Concentration)
6.5		GM				
29.8	160			- Pulverized rock, dry at 160 ft, pink (5Y 7/2)		
	165				165.0	
1.2		GW		GRAVEL with Sand and Silt, moist, reddish brown (5YR 4/4)		
152.1						
18.4	170					
					172.0	
16.2		ML		SILT with Gravel and Clay, cohesive, mottled with lighter laminations, moist, reddish brown (7.5YR 6/6)	174.0	
2.2	175	GW		GRAVEL with Sand and Silt, some large cobbles, moist, grayish brown (2.5YR 6/4)		6-inch SCH 80 PVC blank
4.5					177.0	
		CL		CLAY with Silt and Gravel, cohesive, laminations, brown (7.5YR 4/6)	178.5	Neat cement grout
		ML		SILT with Sand and Gravel, moist, reddish brown (5YR 5/4)	180.0	
154.2	180	GW		GRAVEL with Sand, brown (7.5YR 5/6)	181.5	
		ML		SILT with Clay and some Gravel, reddish brown (5YR 5/4)	182.0	
17		GW		GRAVEL with Sand and Silt, large angular cobbles, moist, reddish brown (5YR 4/6) - (DRILLERS IDENITIFIED WATER AT BOTTOM OF HOLE)		
294.1	185				185.0	
		ML		SILT with Gravel and trace Sand, reddish brown (5YR 5/4)		
3790					187.0	
53.3		GW		GRAVEL with Silt and Sand, large angular cobbles, reddish brown (5YR 5/4)		
20.2						
136.7	190			- Subrounded gravel, weak cohesion at 190 ft		
171.3				- Moist to wet, more cohesion at 192 ft		1.2 µg/L
					194.0	
	195	ML		SILT with Gravel and Sand, some large cobbles, moist,	194.5	

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ALEC'S BORING LOG 2 SLC VA PLUME FINALJCM1.GPJ LAEWNN01.GDT 2/25/25

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 275859 **BORING/WELL NUMBER** EW-01

PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 6/4/2024 - 6/14/2024

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PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM (Grab Sample PCE Concentration)
1.8				reddish brown (5YR 5/4)		
		GM		GRAVEL with Silt, moist to wet, brown (7.5YR 4/4) - Wet (saturated) at 196 ft		
1				- Increased silt at 198 ft		
1.8	200			- Large cobbles at 200 - 201 ft	201.0	
		ML		SILT with Gravel and Clay, moist, reddish brown (5YR 5/3)	202.0	
5.5				SAND with Gravel and Silt, moist, strong brown (7.5YR 5/6)		
4.7	205	SW		- Moist to dry, some large cobbles at 204 ft		
248				- Weak cohesion at 206 ft	208.0	
2.9		ML		SILT with Clay and Gravel, some large cobbles, brown (7.5YR 4/4)		
1.3	210				211.0	
4.9		SW		SAND with Gravel and Silt, wet (saturated), yellowish red (5YR 5/6)	213.0	
		GW		GRAVEL with Sand and Silt	214.0	
0.7	215	SW		SAND with Silt and Gravel, moist, strong brown (7.5YR 5/6)	216.0	
1.3		ML		SILT with Clay and Gravel, moist, brown (7.5YR 5/4)		
5					220.0	6-inch SCH 80 PVC blank
9.6	220	SW		SAND with Gravel, large cobbles, reddish brown (5YR 6/4)		3.4 µg/L
				- Silt and large cobbles at 222 ft	223.0	Neat cement grout
1.6	225	ML		SILT with Sand and Gravel, wet, brown (7.5YR 5/4)		
0.3				- Some clay at 226 ft		
0.7				- Increased gravel at 228 - 229 ft		
1.5	230					
1.7				- SILT with Sand at 233 ft		
0.4	235					

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ALEC'S BORING LOG 2 SLC VA PLUME FINALJCM1.GPJ LAEWNN01.GDT 2/25/25

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 275859 **BORING/WELL NUMBER** EW-01

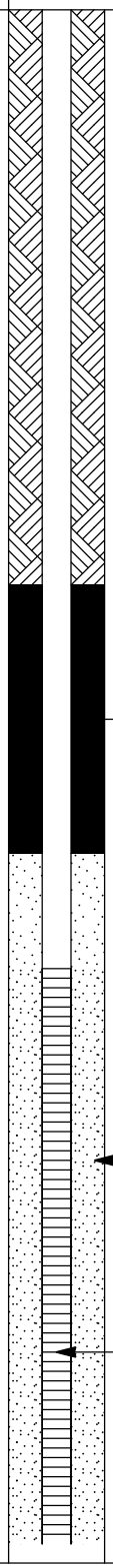
PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 6/4/2024 - 6/14/2024

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PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
0.3			- Large cobbles broken by drilling at 235 ft	
0.9	240			240.0
		SW	SAND with Silt, brown (7.5YR 4/6)	
0			- Some gravel, wet	
0	245			245.0
		GM	Silty GRAVEl with Sand, fine to coarse gravel, fine to medium sand, loose, wet	
0.5				248.0
313			SILT with Gravel, cohesive, stiff, wet, reddish brown (5YR 5/4)	
2.1	250	ML		
			- Sandy SILT at 251 ft	
1.4			- Rounded gravel at 253 ft	
1.7				254.0
	255	SW	Silty SAND with Gravel, loose, moist, reddish brown (5YR 5/4)	
				256.0
1.6			SILT with trace Gravel and Sand, very stiff, moist, yellowish red (5YR 4/6)	
1.9				
1.6	260	ML		
1.3				
			- Sand lense at 263 ft, wet,	264.0
3.9		SM	Silty SAND, fine to medium sand, wet, dark reddish brown (5YR 3/4)	265.0
	265			
0.3			SILT with Sand, very stiff, cohesive, wet, reddish brown (5YR 4/4)	
		ML	- Sand and gravel lense at 267 - 268 ft, wet	
1.2				
			- Medium to stiff, moist to wet at 269 ft	
1.7	270			271.0
		ML	Gravelly SILT, large cobbles, stiff, cohesive, wet, reddish brown (5YR 4/4)	
0.2				273.0
		GM	GRAVEL with Silt, wet	273.5
1.2		ML	SILT with Gravel, cohesive, very stiff, moist	
	275			275.0

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WELL DIAGRAM
Grab Sample
PCE Concentration



120 µg/L

Hydrated bentonite medium chips 250-257 ft bgs)

210 µg/L

13/24 Sand (257-315 ft bgs)

6-inch SCH 80 PVC 0.020 slot screen (260-300 ft bgs)

ALEC'S BORING LOG 2 SLC VA PLUME FINALJCM1.GPJ LAEWNN01.GDT 2/25/25

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 275859 **BORING/WELL NUMBER** EW-01

PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 6/4/2024 - 6/14/2024

Continued from Previous Page

PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM (Grab Sample PCE Concentration)
1.5		GM	GRAVEL with Silt	275.5	
6.1		ML	SILT with Gravel, fine to coarse gravel, stiff, moist, yellowish red (5YR 4/6)		
4.3				280.0	
2	280	GM	Silty GRAVEL, loose, few large cobbles, moist to wet		6-inch SCH 80 PVC 0.020 slot screen (260-300 ft bgs) 13/24 Sand (257-315 ft bgs)
4.3					
4.8	285				11 µg/L
1.3				286.0	
2		GM	GRAVEL with Silt, subangular to subrounded large cobbles, loose, cohesive, wet, brown (7.5YR 5/4)		
4					
2	290		- FeO staining at 289 ft		
0.7				292.0	
		ML	SILT with Gravel, cohesive, stiff, low to medium plasticity	293.0	
		GM	GRAVEL with Silt, fine to coarse gravel, cohesive, loose, wet, brown (7.5YR 4/4)	294.0	
0.3		ML	SILT with Gravel, cohesive, low to medium plasticity, moist, reddish brown (5YR 4/4)		
	295			296.0	
0.5		GM	GRAVEL with Silt, coarse gravel, few cobbles, subangular to subrounded gravel, loose, wet, strong brown (7.5YR 4/6)		
0.5					
1.5	300		- Sand lense from 299 - 300 ft		
1.8					Sediment Sump
7.6					Pipe Cap (304.5-305 ft bgs)
	305		- FeO staining at 304.5 ft		
8.7			- Silty Gravel, large cobbles, wet at 306 ft		
2.7			- Wet, cohesive, FeO staining at 308 ft		
3.2	310				13/24 Sand (257-315 ft bgs)
			- Moist to wet at 311 ft		
1.3			- Wet at 312 ft		
			- Moist at 314 ft		0.45 J µg/L
	315			315.0	

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ALEC'S BORING LOG 2 SLC VA PLUME FINALJCM1.GPJ LAEWNN01.GDT 2/25/25

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 275859 **BORING/WELL NUMBER** EW-01

PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 6/4/2024 - 6/14/2024

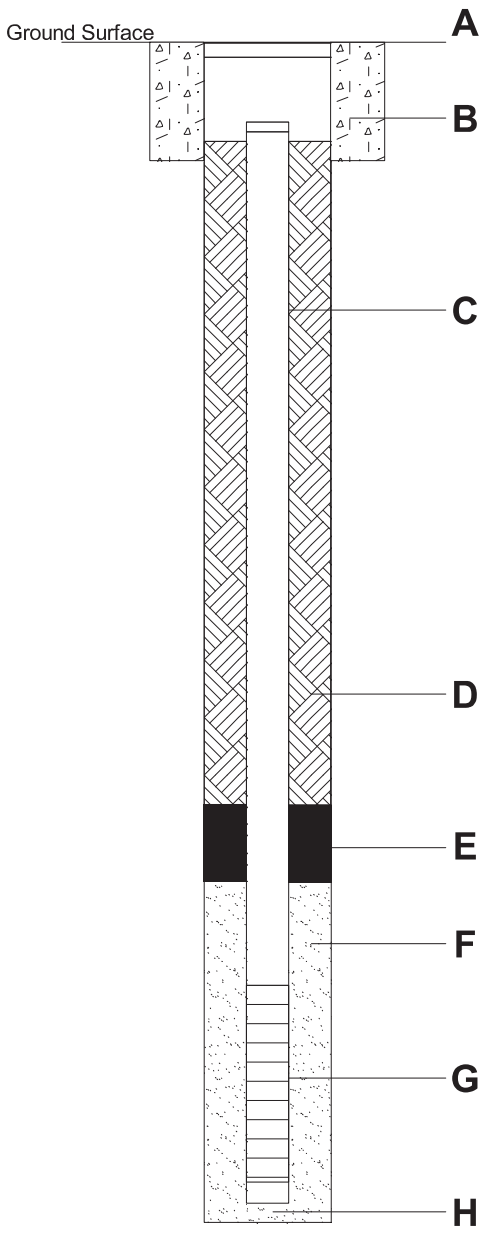
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PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM Grab Sample PCE Concentration	
				End of Boring - Total depth 315 ft bgs			

ALEC'S BORING LOG 2 SLC VA PLUME FINALJCM1.GPJ LAEWNN01.GDT 2/25/25

MONITORING WELL CONSTRUCTION LOG: SINGLE WELL

GEOLOGIST: Nathan Norris	DATE STARTED: June 15, 2024	DATE COMPLETED: June 18, 2024
WELL NO: EW-01	PROJECT: Supplemental RI	SITE: 700 S 1600 E PCE Plume
PROJECT NO: 275859 6545-F3063-tk5.ts1.drill	CONSTRUCTED BY: Yellow Jacket	CITY: Salt Lake City, UT
NORTHING: 7444098.40 EASTING: 1545446.41	GROUND SURFACE ELEVATION: 4697.28	MEASURING POINT ELEVATION: 4696.87



BORING DIAMETER: 10 inch

TOTAL DEPTH: 315 feet

(FEET BELOW GROUND SURFACE)

A. SURFACE COMPLETION

TYPE: Flush Mount

SIZE: 12-inch

B. SURFACE SEAL

MATERIAL: Concrete

INTERVAL: 0-1 feet

C. RISER PIPE

DIAMETER: 6 inch

TYPE: Schedule 80 PVC

INTERVAL: 0-260 feet

D. GROUT

COMPOSITION: Portland Cement Type I/II

INTERVAL: 1-250 feet

E. SEAL

TYPE: Bentonite pellets

INTERVAL: 250-257 feet

F. FILTER PACK

MATERIAL: RFS 3 Sand

INTERVAL: 257-300 feet

G. SCREEN

DIAMETER: 6 inch

TYPE: Schedule 80 PVC

SLOT SIZE: 0.020 inch

INTERVAL: 260-300 feet

H. BACKFILL

MATERIAL: RFS 3 Sand

INTERVAL: 305-315 feet

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 275859
PROJECT NAME 700 S 1600 E PCE Plume
LOCATION Salt Lake City, UT
DRILLING METHOD Rotosonic
SAMPLING METHOD Core Barrel
GROUND ELEVATION (FT MSL) 4698.15
TOP OF CASING (FT MSL) 4697.74
LOGGED BY Joe Miller
REMARKS

BORING/WELL NUMBER IW-01
DATE DRILLED 7/27/2024 - 7/29/2024
CASING TYPE/DIAMETER 4-inch Schedule 80 PVC
SCREEN TYPE/SLOT 4-inch Schedule 80 0.020-slot
GRAVEL PACK TYPE #10/20 sand
GROUT TYPE/QUANTITY Bentonite Grout
DEPTH TO WATER (FT BGS) 193.24
GROUND WATER ELEVATION (FT MSL) 4504.91

PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
			Hydrovac to 7.5 ft, then backfill with pea gravel	
	5			7.5
50.2		SM	Silty SAND with Gravel, fine to medium sand, moist, yellowish red (5YR 5/6)	9.0
78.7		SP	Poorly graded SAND, fine to coarse, loose, moist, dark brown (7.5YR 3/4)	10.0
	10		Pea gravel, backfill slough	
170				12.0
5.6		SP	Poorly graded SAND with Gravel, fine to coarse, loose, moist,	
4.1	15			16.0
269		GM	Silty GRAVEL, fine to coarse, angular to subrounded, dense, cohesive, moist, red (10R 4/4)	19.0
218	20		Sandy GRAVEL, fine to coarse, subangular to subrounded, loose, moist, strong brown (5YR 4/6)	
446		GP	- Large cobble 8 inch at 21 ft	23.0
3.3		SM	Silty SAND with Gravel, fine to coarse, dense, moist, reddish brown (5YR 4/4)	24.0
		ML	Gravelly SILT, cohesive, low plasticity, moist,	25.0
0.9	25	SM	Silty SAND with Gravel, fine to coarse, loose, moist, strong brown (5YR 4/6)	26.0
1.8		ML	Gravelly SILT, fine gravel, cohesive, low plasticity, moist, strong brown (5YR 4/6)	28.0
1.4			Silty GRAVEL, fine to coarse, subangular to subrounded, loose, FeO staining, olive brown (2.5YR 4/3)	
	30	GM		
2.3			- Increased sand at 31 ft	32.0
4.4		GM	Silty GRAVEL with trace Sand, fine to coarse, cohesive, olive brown (2.5YR 4/3)	34.0
	35		Gravelly SAND, fine to coarse, subangular to subrounded,	

Continued Next Page

WELL DIAGRAM: Flush-mounted vault; 4-inch SCH 80 PVC blank; Bentonite Grout

ALEC'S BORING LOG 2 SLC VA PLUME FINALJCM1.GPJ LAEWNN01.GDT 2/25/25

CDM Smith
555 17th Street, Suite 500
Denver, CO 80202
(303) 383-2300

BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 275859 **BORING/WELL NUMBER** IW-01

PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 7/27/2024 - 7/29/2024

Continued from Previous Page

PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
4.4		SW		loose, dry, olive brown (2.5YR 4/4)	37.0	
8.7		GP		Sandy GRAVEL, fine to coarse, subangular to subrounded, loose, brown (7.5YR 4/4)		
12.9						
16	40					
1.7					43.0	
4.3		GM		Silty GRAVEL with Sand, fine to coarse, subangular to subrounded, loose, moist, strong brown (7.5YR 4/6)		
4.2	45			- Increased sand at 46 ft	47.0	
4.8		SP		Poorly graded SAND with Gravel, fine to coarse, subangular to rubrounded, loose, dry to moist, light brown (7.5YR 6/4)		
2.9	50	GM		Silty GRAVEL, fine to coarse, cohesive, dense, moist, strong brown (7.5YR 4/6)	50.0	
0.8		SP		Poorly graded SAND with Gravel, fine to coarse, subangular to subrounded, loose, dry, strong brown (7.5YR 5/6)	52.0	4-inch SCH 80 PVC blank
4.3	55					
3.4		ML		SILT, low plasticity, stiff, moist to wet, reddish brown (5YR 4/4)	56.0	Bentonite Grout
3.2	60			- Gravel lense at 59 ft	61.0	
7.3		SP		Poorly graded SAND with Gravel, fine to coarse gravel, loose, dry, yellowish red (5YR 5/6)		
5.2				- Silt lense at 64 ft		
8.6	65					
1.4				- Increased silt at 68 ft		
4.6	70				70.0	
4.1		SP		Poorly graded SAND with Gravel, fine to coarse gravel, loose, dry, strong brown (7.5YR 4/6)		
4.9				- Increased silt at 74 ft		
	75					

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ALEC'S BORING LOG 2 SLC VA PLUME FINALJCM1.GPJ LAEWNN01.GDT 2/25/25

CDM Smith
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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 275859 **BORING/WELL NUMBER** IW-01

PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 7/27/2024 - 7/29/2024

Continued from Previous Page

PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
3.8					76.0	
9		GP		Poorly graded GRAVEL with Silt and Sand, fine to coarse gravel, subangular to subrounded, cohesive in places, loose, moist, strong brown (5YR 4/6) - Increased sand at 78 ft	79.0	
9.6	80	GM		Silty GRAVEL, fine to coarse gravel, angular to subrounded, cohesive, dense, moist, reddish brown (5YR 4/4) - Cohesive, increased sand at 82 ft	84.0	
12.6						
10.9						
208	85	GP		Poorly graded GRAVEL with Sand, fine to coarse sand, subangular to subrounded, loose, moist	86.0	
1.8		ML		SILT with some Gravel, low plasticity, medium to stiff, moist - Sand lense, trace gravel at 89 ft	92.0	
0.9	90					
14.3						
11.7		GP		Poorly graded GRAVEL with Sand, fine to coarse sand, subangular to subrounded, loose, dry, strong brown (7.5YR 5/6) - Silt lense at 95 ft	96.0	
10.2	95					
11.6		GM		Poorly graded GRAVEL with Silt, fine to coarse gravel, angular to subrounded, loose, moist, yellowish red (5YR 5/6) - Sand lense at 99 ft	102.0	4-inch SCH 80 PVC blank
10.9	100					
59.6						
37.2		GP		Sandy GRAVEL with some Silt, fine to coarse sand and gravel, loose, wet, strong brown (5YR 4/6)		Bentonite Grout
2.5	105			- Moist at 105 ft		
11.7				- Dry to moist at 107 ft		
21.3				- Increased silt at 109 ft	110.0	
37.8	110	GM		Silty GRAVEL with trace Sand, fine to coarse gravel, subangular to subrounded, cohesive, dense, moist, yellowish red (5YR 5/6)	112.0	
5.5				Poorly graded SAND with Gravel, fine to coarse gravel, subangular to subrounded, loose, dry, brown (7.5YR 5/4)		
	115					

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ALEC'S BORING LOG 2 SLC VA PLUME FINALJCM1.GPJ LAEWNN01.GDT 2/25/25

CDM Smith
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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 275859 **BORING/WELL NUMBER** IW-01

PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 7/27/2024 - 7/29/2024

Continued from Previous Page

PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
3.3		SP				
18				- Silt lense, cohesive at 117 ft		
27.5	120			- Silt lense at 119 ft		
					121.0	
78.4		GM		Silty GRAVEL with Sand, fine to coarse, cohesive in places, moist, strong brown (7.5YR 5/6)	122.0	4-inch SCH 80 PVC blank
12.4		GW		Well graded GRAVEL with Sand, fine gravel, well graded sand, loose, dry to moist, strong brown (7.5YR 4/6)		
24.5	125					Bentonite Grout
46.2				- Gravel coarsens at 127 ft		
13.2						
	130				130.0	
9.3		CL		Gravelly CLAY, lean, fine to coarse gravel, low to medium plasticity, stiff, brown (7.5YR 4/4)		
					133.0	
217		GP		Sandy GRAVEL, fine to coarse, subangular to subrounded, loose, dry to moist, strong brown (7.5YR 4/6)		
6.7	135					
12.4				- Silt lense at 136 ft		
12						
27.8						
	140			- Silt lense at 140 ft		
92						
					143.0	
7.7		ML		SILT with Gravel, low plasticity, stiff, dry, yellowish red (5YR 4/6)		
					145.0	
1.7	145	SP		Gravelly SAND, fine to coarse, loose, moist, strong brown (7.5YR 4/6)		
13.5						
6.5						
	150					
1.9						
4.2				- Dry at 153 ft		
	155					

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ALEC'S BORING LOG 2 SLC VA PLUME FINALJCM1.GPJ LAEWNN01.GDT 2/25/25

CDM Smith
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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 275859 **BORING/WELL NUMBER** IW-01

PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 7/27/2024 - 7/29/2024

Continued from Previous Page

PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
0.6				156.0
0.3		GP	Sandy GRAVEL with Silt, fine to coarse, subangular to subrounded, dense, moist, dark brown (7.5YR 3/4)	
0.4	160			161.0
4.3		ML	Gravelly SILT, cohesive, very stiff, low plasticity, moist, dark brown (7.5YR 4/4)	163.0
3.5		GP	Sandy GRAVEL with Silt, fine to coarse, subangular to subrounded, loose, moist, strong brown (7.5YR 4/6)	
10.7	165			166.0
		ML	Gravelly SILT, cohesive, stiff, moist, dark brown (7.5YR 4/4)	167.0
110.4		GP	Sandy GRAVEL with Silt, fine to coarse, subangular to subrounded, loose, dry, reddish brown (5YR 4/4)	168.0
		ML	SILT with trace Gravel, medium to stiff, low plasticity, moist, reddish brown (5YR 4/4)	169.0
1.4	170			
5.2		SP	Gravelly SAND with Silt, fine to coarse, loose, dry, dark brown (7.5YR 3/4)	
4.5				
	175			175.0
42.5			Silty SAND with Gravel, fine to coarse gravel, cohesive in places, loose, dry, dark brown (7.5YR 4/4)	
101.3		SM		
121.2	180		- Decreased silt, moist to wet at 180 ft	
1.9				182.0
3.5		SP	Gravelly SAND and trace Silt, fine to coarse gravel and sand, loose, wet	184.0
1.6	185	ML	SILT with Gravel, fine gravel, cohesive, stiff, low plasticity, moist	186.0
7.1		SP	Gravelly SAND and trace Silt, fine to coarse, loose, wet	188.0
5.8		GM	Silty GRAVEL, fine to coarse gravel, cohesive, dense, moist, dark brown (7.5YR 4/4)	190.0
0.3	190		GRAVEL with Sand, fine to coarse angular gravel, loose, wet, strong brown (7.5YR 4/6)	
0.2		GW		
	195			

WELL DIAGRAM: 4-inch SCH 80 PVC blank; Bentonite Grout

Continued Next Page

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 275859 **BORING/WELL NUMBER** IW-01

PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 7/27/2024 - 7/29/2024

Continued from Previous Page

PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
2.3					197.0	
0.7		GW		Sandy GRAVEL, fine to coarse, loose, wet, reddish brown (5YR 4/4)	198.0	
0.8	200			No recovery from 198 - 202 ft		
0.8					202.0	
2.1		ML		Gravelly SILT, fine to coarse gravel, cohesive, stiff, low plasticity, moist to wet, reddish brown (5YR 4/4)		
6.3	205				206.0	
0		GW		GRAVEL with Sand and Silt, fine to coarse gravel, subangular to subrounded, loose, wet, reddish brown (5YR 4/4)		
2.1	210			- Increased sand at 210 ft		
5.1						
3.6					214.0	
1.1	215	ML		Gravelly SILT, cohesive, stiff, moist, reddish brown (5YR 4/4)		
3.5						
2.4					220.0	
0.2	220	GW		GRAVEL with Sand, fine to coarse, loose, wet, reddish brown (5YR 4/4)		4-inch SCH 80 PVC blank
0.3				- Increased silt at 222 ft		Bentonite Grout
0.4	225				226.0	
2.2		ML		SILT, low plasticity, stiff, some CaCO3 banding, moist, reddish brown (5YR 4/4)	227.0	
104	230	ML		Gravelly SILT, fine to coarse gravel, cohesive, stiff, moist, reddish brown (5YR 4/4) - Wet, less cohesive at 229 ft		
35.4					232.0	
1.2		CL		Silty CLAY with trace Gravel, fine gravel, stiff, low plasticity, moist, reddish brown (5YR 4/4)	234.0	
	235			Silty GRAVEL with Sand, cohesive, dense, dry to moist,		

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ALEC'S BORING LOG 2 SLC VA PLUME FINALJCM1.GPJ LAEWNN01.GDT 2/25/25

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 275859 **BORING/WELL NUMBER** IW-01

PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 7/27/2024 - 7/29/2024

Continued from Previous Page

PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
17.9		GM		reddish brown (5YR 4/4)	236.0	
0.4				SILT with trace Gravel, cohesive, very stiff, low plasticity, dry to moist, reddish brown (5YR 4/4)		
2.5	240	ML				
0.4					243.0	Hydrated bentonite medium chips (240-245 ft bgs)
2.6				Gravelly SILT, reddish brown (5YR 4/4)		
1.2	245					
1						
1.7		ML				
	250			- Moist at 250 ft		
0.7						
0.6						
	255				255.0	
0.5				Gravelly SILT, stiff, low plasticity, moist, reddish brown (5YR 4/4)		
		ML				
0					258.0	10/20 Silica Sand (245-271 ft bgs)
1.7		SM		Silty SAND, fine to coarse, loose, wet, reddish brown (5YR 4/4)	260.0	4-inch SCH 80 PVC 0.020 slot screen (250-270 ft bgs)
	260			SILT, stiff, low plasticity, moist to wet, reddish brown (5YR 4/4)		
3.1						
0.6		ML				
1	265			- Dry to moist at 265 ft	266.0	
0.6				SILT with trace Gravel, hard, low plasticity, moist, reddish brown (5YR 4/4)		
1.1		ML				
	270					Pipe Cap (269.5-270 ft bgs)
2.3				- Increased sand and gravel at 271 ft		
				- Sand lense at 272 ft	273.0	
0.9		CH		CLAY, hard, medium to high plasticity, mottled, dry to moist		Hydrated bentonite medium chips
	275					

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ALEC'S BORING LOG 2 SLC VA PLUME FINALJCM1.GPJ LAEWNN01.GDT 2/25/25

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BORING/WELL CONSTRUCTION LOG

PROJECT NUMBER 275859 **BORING/WELL NUMBER** IW-01

PROJECT NAME 700 S 1600 E PCE Plume **DATE DRILLED** 7/27/2024 - 7/29/2024

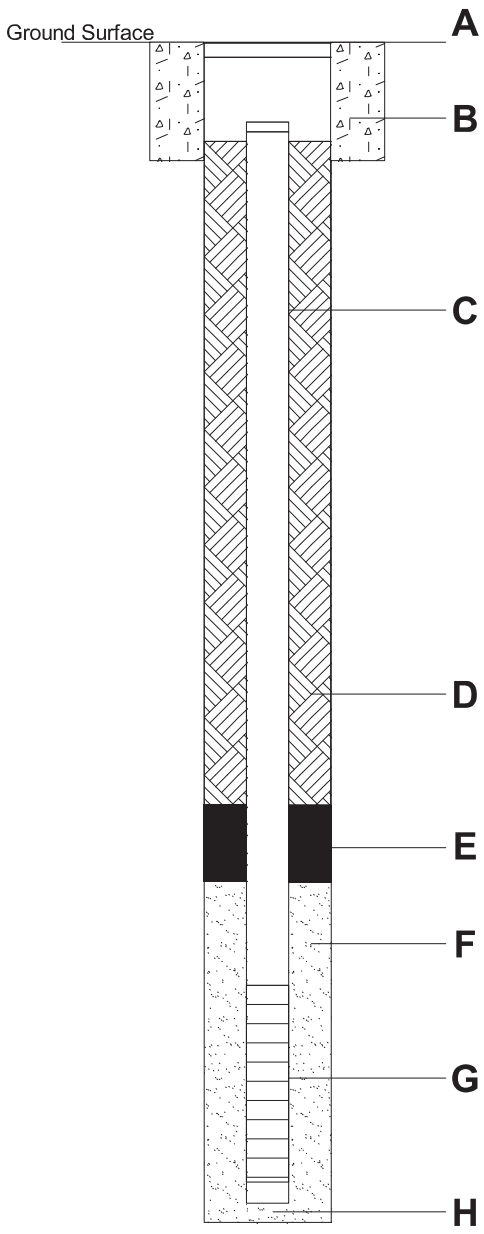
Continued from Previous Page

PID (ppm)	DEPTH (ft. BGL)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
2.8					276.0	(271-276 ft bgs)
				End of Boring - Total depth 276 ft bgs		

ALEC'S BORING LOG 2 SLC VA PLUME FINALJCM1.GPJ LAEWNN01.GDT 2/25/25

MONITORING WELL CONSTRUCTION LOG: SINGLE WELL

GEOLOGIST: Joe Miller	DATE STARTED: July 27, 2024	DATE COMPLETED: July 30, 2024
WELL NO: IW-01	PROJECT: Supplemental RI	SITE: 700 S 1600 E PCE Plume
PROJECT NO: 275859 6545-F3063-tk5.ts1.drill	CONSTRUCTED BY: Yellow Jacket	CITY: Salt Lake City, UT
NORTHING: 7444068.90 EASTING: 1545485.70	GROUND SURFACE ELEVATION: 4698.15	MEASURING POINT ELEVATION: 4697.74



BORING DIAMETER: 9 inch 0-196 feet
8 inch 196-276 feet

TOTAL DEPTH: 276 feet
(FEET BELOW GROUND SURFACE)

A. SURFACE COMPLETION
TYPE: Flush Mount
SIZE: 12-inch

B. SURFACE SEAL
MATERIAL: Concrete
INTERVAL: 0-2 feet

C. RISER PIPE
DIAMETER: 4 inch
TYPE: Schedule 80 PVC
INTERVAL: 0-250 feet

D. GROUT
COMPOSITION: Portland Cement
INTERVAL: 0-240 feet

E. SEAL
TYPE: Bentonite pellets
INTERVAL: 240-245 feet

F. FILTER PACK
MATERIAL: 10/20 Silica Sand
INTERVAL: 245-271 feet

G. SCREEN
DIAMETER: 4 inch
TYPE: Schedule 80 PVC
SLOT SIZE: 0.020 inch
INTERVAL: 250-270 feet

H. BACKFILL
MATERIAL: Bentonite Pellets
INTERVAL: 271-276 feet

Appendix G Soil Core Photo Log

CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **1**	**Date:** 6/4/2024
Location: EW-01	
Description: 5-10’	



Photo No. **2**	**Date:** 6/4/2024
Location: EW-01	
Description: 10-15’	



Photo No. **3**	**Date:** 6/4/2024
Location: EW-01	
Description: 15-20’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. 4	**Date:** 6/4/2024
Location: EW-01	
Description: 20-25’	



Photo No. 5	**Date:** 6/4/2024
Location: EW-01	
Description: 25-27’	



Photo No. 6	**Date:** 6/4/2024
Location: EW-01	
Description: 27-29’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 7	Date: 6/4/2024
Location: EW-01	
Description: 29-31’	



Photo No. 8	Date: 6/4/2024
Location: EW-01	
Description: 31-33’	



Photo No. 9	Date: 6/4/2024
Location: EW-01	
Description: 33-35’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **10**	**Date:** 6/4/2024
Location: EW-01	
Description: 35-37’	



Photo No. **11**	**Date:** 6/4/2024
Location: EW-01	
Description: 37-39’	



Photo No. **12**	**Date:** 6/4/2024
Location: EW-01	
Description: 39-41’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **13**	**Date:** 6/4/2024
Location: EW-01	
Description: 41-43’	



Photo No. **14**	**Date:** 6/4/2024
Location: EW-01	
Description: 43-45’	



Photo No. **15**	**Date:** 6/4/2024
Location: EW-01	
Description: 45-50’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **16**	**Date:** 6/4/2024
Location: EW-01	
Description: 50-55’	



Photo No. **17**	**Date:** 6/4/2024
Location: EW-01	
Description: 55-60’	



Photo No. **18**	**Date:** 6/4/2024
Location: EW-01	
Description: 60-65’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **19**	**Date:** 6/4/2024
Location: EW-01	
Description: 65-69’	



Photo No. **20**	**Date:** 6/4/2024
Location: EW-01	
Description: 69-71’	



Photo No. **21**	**Date:** 6/4/2024
Location: EW-01	
Description: 71-75’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **22**	**Date:** 6/5/2024
Location: EW-01	
Description: 75-80’	



Photo No. **23**	**Date:** 6/5/2024
Location: EW-01	
Description: 80-85’	



Photo No. **24**	**Date:** 11/6/20
Location: EW-01	
Description: 85-89’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 25	Date: 6/5/2024
Location: EW-01	
Description: 89-91’	



Photo No. 26	Date: 6/5/2024
Location: EW-01	
Description: 91-95’	



Photo No. 27	Date: 6/5/24
Location: EW-01	
Description: 95-110’ No Recovery	

CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **28**	**Date:** 6/5/24
Location: EW-01	
Description: 110-115’	



Photo No. **29**	**Date:** 6/5/24
Location: EW-01	
Description: 115-120’	



Photo No. **30**	**Date:** 11/6/20
Location: MW-30R	
Description: **MISSING 120-173’**	

CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 31	Date: 11/6/20
Location: MW-30R	
Description: 72-74’	



Photo No. 32	Date: 11/6/20
Location: MW-30R	
Description: 74-76’	



Photo No. 33	Date: 11/6/20
Location: MW-30R	
Description: 76-78’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 34	Date: 11/6/20
Location: MW-30R	
Description: 78-80’	



Photo No. 35	Date: 11/6/20
Location: MW-30R	
Description: 80-82’	



Photo No. 36	Date: 11/6/20
Location: MW-30R	
Description: 82.5-85’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **37**	**Date:** 11/6/20
Location: MW-30R	
Description: 85-87.5’	



Photo No. **38**	**Date:** 11/6/20
Location: MW-30R	
Description: 87.5-90’	



Photo No. **39**	**Date:** 11/6/20
Location: MW-30R	
Description: 90-92.5’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **40**	**Date:** 11/6/20
Location: MW-30R	
Description: 92.5-95’	



Photo No. **41**	**Date:** 11/6/20
Location: MW-30R	
Description: 95-97.5’	



Photo No. **42**	**Date:** 11/6/20
Location: MW-30R	
Description: 97.5-100’	



CDM Smith **PHOTOGRAPHIC LOG**

Site: 700 South 1600 East PCE Plume

Project No. 238824

Photo No. 43	**Date:** 11/6/20
Location: MW-30R	
Description: 100-102’	



Photo No. 44	**Date:** 11/6/20
Location: MW-30R	
Description: 102-104’	



Photo No. 45	**Date:** 11/6/20
Location: MW-30R	
Description: 104-106’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **46**	**Date:** 11/6/20
Location: MW-30R	
Description: 106-108’	



Photo No. **47**	**Date:** 11/6/20
Location: MW-30R	
Description: 108-110’	



Photo No. **48**	**Date:** 11/6/20
Location: MW-30R	
Description: 110-112’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **49**	**Date:** 11/6/20
Location: MW-30R	
Description: 112-114.5’	



Photo No. **50**	**Date:** 11/6/20
Location: MW-30R	
Description: 114.5-117’	



Photo No. **51**	**Date:** 11/6/20
Location: MW-30R	
Description: 117-119.5’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 52	Date: 11/6/20
Location: MW-30R	
Description: 119.5-121.5’	



Photo No. 53	Date: 11/6/20
Location: MW-30R	
Description: 121.5-123.5’	



Photo No. 54	Date: 11/6/20
Location: MW-30R	
Description: 123.5-125’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **55**	**Date:** 11/6/20
Location: MW-30R	
Description: 125-127’	



Photo No. **56**	**Date:** 11/6/20
Location: MW-30R	
Description: 127-129.5’	



Photo No. **57**	**Date:** 11/6/20
Location: MW-30R	
Description: 129.5-132’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **58**	**Date:** 11/6/20
Location: MW-30R	
Description: 132-133.5’	



Photo No. **59**	**Date:** 11/6/20
Location: MW-30R	
Description: 133.5-135’	



Photo No. **60**	**Date:** 11/6/20
Location: MW-30R	
Description: 135-137’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 61	Date: 11/6/20
Location: MW-30R	
Description: 137-139’	



Photo No. 62	Date: 11/6/20
Location: MW-30R	
Description: 139-142’	



Photo No. 63	Date: 11/6/20
Location: MW-30R	
Description: 142-144’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 64	Date: 11/6/20

MW-30R

Description:
144-146’



Photo No. 65	Date: 11/6/20

Location:

MW-30R

Description:

146-148’



Photo No. 66

Location:

MW-30R

Description:

148-150’



CDM Smith **PHOTOGRAPHIC LOG**

Site: 700 South 1600 East PCE Plume
Project No.
23882 4

Photo No. 67	**Date:** 11/6/20
Location: MW-30R	
Description: 150-152’	



Photo No. 68	**Date:** 11/6/20
Location: MW-30R	
Description: 152-155’	



Photo No. 69	**Date:** 11/6/20
Location: MW-30R	
Description: 155-157’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 70	Date: 11/6/20
Location: MW-30R	
Description: 157-159’	



Photo No. 71	Date: 11/6/20
Location: MW-30R	
Description: 159-162’	



Photo No. 72	Date: 11/6/20
Location: MW-30R	
Description: 162-164’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **73**	**Date:** 11/6/20
Location: MW-30R	
Description: 164-166’	



Photo No. **74**	**Date:** 11/6/20
Location: MW-30R	
Description: 166-168’	



Photo No. **75**	**Date:** 11/6/20
Location: MW-30R	
Description: 168-170’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 76	Date: 11/6/20
Location: MW-30R	
Description: 170-172.5’	



Photo No. 77	Date: 11/6/20
Location: MW-30R	
Description: 172.5-174’	



Photo No. 78	Date: 11/6/20
Location: MW-30R	
Description: 174-176’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **79**	**Date:** 11/6/20
Location: MW-30R	
Description: 176-178’	



Photo No. **80**	**Date:** 11/6/20
Location: MW-30R	
Description: 178-180.5’	



Photo No. **81**	**Date:** 11/6/20
Location: MW-30R	
Description: 180.5-183’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **82**	**Date:** 11/7/20
Location: MW-30R	
Description: 183-185’	



Photo No. **83**	**Date:** 11/7/20
Location: MW-30R	
Description: 185-187.5’	



Photo No. **84**	**Date:** 11/7/20
Location: MW-30R	
Description: 187.5-190’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **85**	**Date:** 11/7/20
Location: MW-30R	
Description: 190-192’	



Photo No. **86**	**Date:** 11/7/20
Location: MW-30R	
Description: 192-194’	



Photo No. **87**	**Date:** 11/7/20
Location: MW-30R	
Description: 194-196’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **88**	**Date:** 11/7/20
Location: MW-30R	
Description: 196-198’	



Photo No. **89**	**Date:** 11/7/20
Location: MW-30R	
Description: 198-200’	



Photo No. **90**	**Date:** 11/7/20
Location: MW-30R	
Description: 200-202’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 91	Date: 11/7/20
Location: MW-30R	
Description: 202-203.5’	



Photo No. 92	Date: 11/7/20
Location: MW-30R	
Description: 203.5-2-5.5’	



Photo No. 93	Date: 11/7/20
Location: MW-30R	
Description: 205.5-207.5’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 94	Date: 11/7/20
Location: MW-30R	
Description: 207.5-210’	



Photo No. 95	Date: 11/7/20
Location: MW-30R	
Description: 210-212’	



Photo No. 96	Date: 11/7/20
Location: MW-30R	
Description: 212-213.5’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **97**	**Date:** 11/7/20
Location: MW-30R	
Description: 213.5-216’	



Photo No. **98**	**Date:** 11/7/20
Location: MW-30R	
Description: 216-218’	



Photo No. **99**	**Date:** 11/7/20
Location: MW-30R	
Description: 218-220’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **100**	**Date:** 11/7/20
Location: MW-30R	
Description: 220-221.5’	



Photo No. **101**	**Date:** 11/7/20
Location: MW-30R	
Description: 221.5-223’	



Photo No. **102**	**Date:** 11/7/20
Location: MW-30R	
Description: 223-225.5’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 103	Date: 11/7/20
Location: MW-30R	
Description: 225.5-228’	



Photo No. 104	Date: 11/7/20
Location: MW-30R	
Description: 228-229.5’	



Photo No. 105	Date: 11/7/20
Location: MW-30R	
Description: 229.5-231.5’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

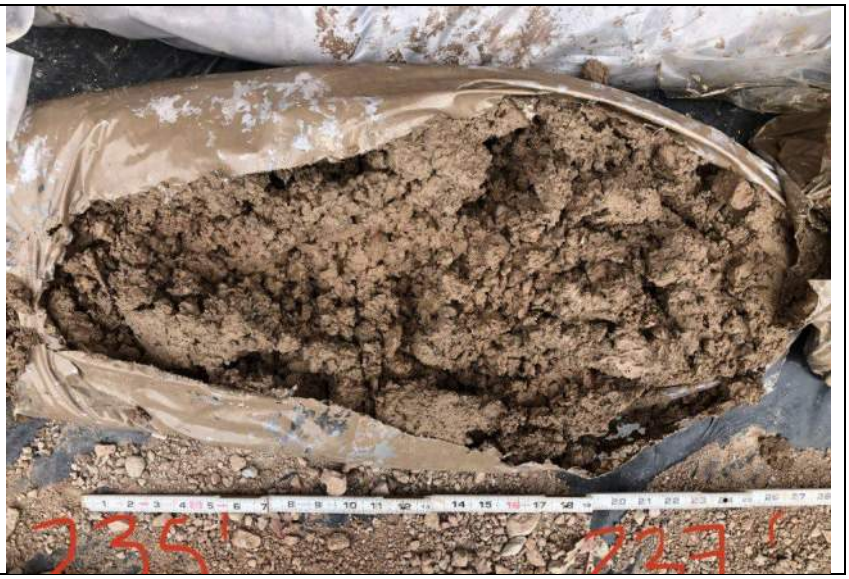
Photo No. 106	Date: 11/7/20
Location: MW-30R	
Description: 231.5-233’	



Photo No. 107	Date: 11/7/20
Location: MW-30R	
Description: 233-235’	



Photo No. 108	Date: 11/7/20
Location: MW-30R	
Description: 235-237’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 109	Date: 11/7/20
Location: MW-30R	
Description: 237-240’	



Photo No. 110	Date: 11/7/2020
Location: MW-30R	
Description: 240-242’	



Photo No. 111	Date: 11/7/20
Location: MW-30R	
Description: 242-243.5’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 112	Date: 11/7/20
Location: MW-30R	
Description: 243.5-246’	



Photo No. 113	Date: 11/7/20
Location: MW-30R	
Description: 246-247.5’	



Photo No. 114	Date: 11/7/20
Location: MW-30R	
Description: 247.5-250’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 115	Date: 11/9/20
Location: MW-30R	
Description: 250-252.5’	



Photo No. 116	Date: 11/9/20
Location: MW-30R	
Description: 252.5-255’	



Photo No. 117	Date: 11/9/20
Location: MW-30R	
Description: 255-257’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **118**	**Date:** 11/9/20
Location: MW-30R	
Description: 257-259’	



Photo No. **119**	**Date:** 11/9/20
Location: MW-30R	
Description: 259-261’	



Photo No. **120**	**Date:** 11/9/20
Location: MW-30R	
Description: 261-263’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

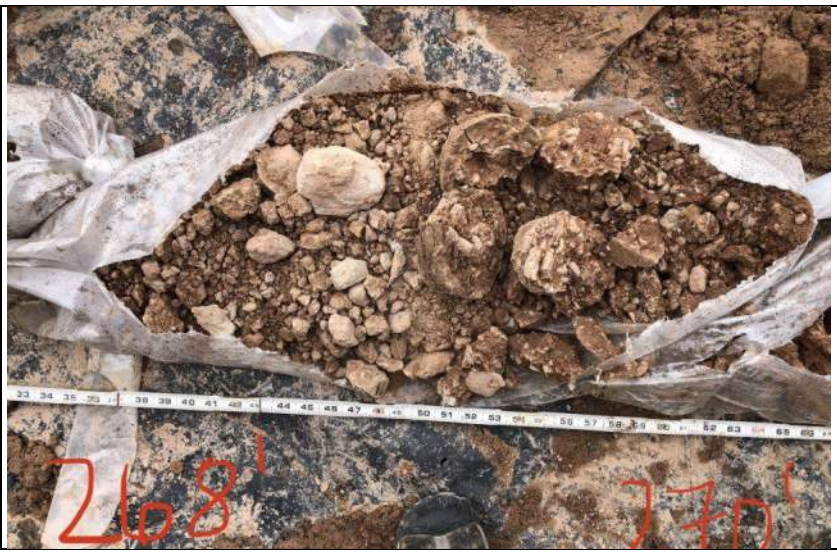
Photo No. 121	Date: 11/9/20
Location: MW-30R	
Description: 263-265’	



Photo No. 122	Date: 11/9/20
Location: MW-30R	
Description: 265-268’	



Photo No. 123	Date: 11/9/20
Location: MW-30R	
Description: 268-270’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **124**	**Date:** 11/9/20
Location: MW-30R	
Description: 270-272’	



Photo No. **125**	**Date:** 11/9/20
Location: MW-30R	
Description: 272-274’	



Photo No. **126**	**Date:** 11/9/20
Location: MW-30R	
Description: 274-276’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **127**	**Date:** 11/9/20
Location: MW-30R	
Description: 276-278’	



Photo No. **128**	**Date:** 11/9/20
Location: MW-30R	
Description: 280-282’	



Photo No. **129**	**Date:** 11/9/20
Location: MW-30R	
Description: 282-284’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **130**	**Date:** 11/9/20
Location: MW-30R	
Description: 284-286’	



Photo No. **131**	**Date:** 11/9/20
Location: MW-30R	
Description: 286-288’	



Photo No. **132**	**Date:** 11/9/20
Location: MW-30R	
Description: 288-290’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **133**	**Date:** 11/9/20
Location: MW-30R	
Description: 290-292.5’	



Photo No. **134**	**Date:** 11/9/20
Location: MW-30R	
Description: 292.5-295’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 1	Date: 7/24/24
Location: IW-01	
Description: 8-10’	



Photo No. 2	Date: 7/24/24
Location: IW-01	
Description: 10-12’	



Photo No. 3	Date: 7/24/24
Location: IW-01	
Description: 12-14’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **4**	**Date:** 7/24/24
Location: IW-01	
Description: 14-16’	



Photo No. **5**	**Date:** 7/24/24
Location: IW-01	
Description: 16-18’	



Photo No. **6**	**Date:** 7/24/24
Location: IW-01	
Description: 18-20’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 7	Date: 7/24/24
Location: IW-01	
Description: 20-22’	



Photo No. 8	Date: 7/24/24
Location: IW-01	
Description: 22-24’	



Photo No. 9	Date: 7/24/24
Location: IW-01	
Description: 24-26’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 10	Date: 7/24/24
Location: IW-01	
Description: 26-28’	



Photo No. 11	Date: 7/24/24
Location: IW-01	
Description: 28-30’	



Photo No. 12	Date: 7/24/24
Location: IW-01	
Description: 30-32’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 13	Date: 7/24/24
Location: IW-01	
Description: 32-34’	



Photo No. 14	Date: 7/24/24
Location: IW-01	
Description: 34-36’	



Photo No. 15	Date: 7/24/24
Location: IW-01	
Description: 36-37’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 16	Date: 7/24/24
Location: IW-01	
Description: 37-39’	



Photo No. 17	Date: 7/24/24
Location: IW-01	
Description: 39-41’	



Photo No. 18	Date: 7/24/24
Location: IW-01	
Description: 41-43’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 19	Date: 7/24/24
Location: IW-01	
Description: 43-45’	

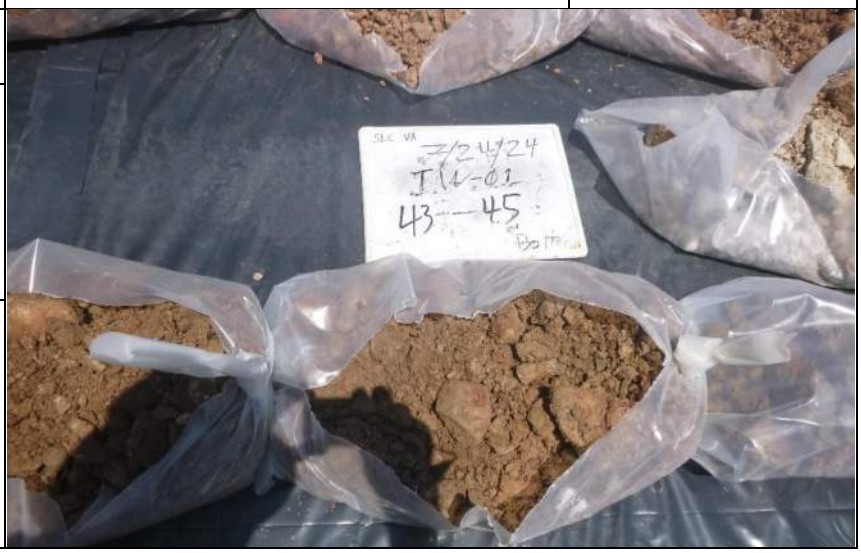


Photo No. 20	Date: 7/24/24
Location: IW-01	
Description: 45-47’	



Photo No. 21	Date: 7/24/24
Location: IW-01	
Description: 47-49’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 22	Date: 7/24/24
Location: IW-01	
Description: 49-51’	



Photo No. 23	Date: 7/24/24
Location: IW-01	
Description: 51-53’	



Photo No. 24	Date: 7/24/24
Location: IW-01	
Description: 52-54’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 25	Date: 7/24/24
Location: IW-01	
Description: 54-56’	



Photo No. 26	Date: 7/24/24
Location: IW-01	
Description: 56-58’	



Photo No. 27	Date: 7/24/24
Location: IW-01	
Description: 58-60’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **28**	**Date:** 7/24/24
Location: IW-01	
Description: 60-62’	



Photo No. **29**	**Date:** 7/24/24
Location: IW-01	
Description: 62-64’	



Photo No. **30**	**Date:** 7/24/24
Location: IW-01	
Description: 64-66’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 31	Date: 7/24/24
Location: IW-01	
Description: 66-68’	



Photo No. 32	Date: 7/24/24
Location: IW-01	
Description: 68-70’	



Photo No. 33	Date: 7/24/24
Location: IW-01	
Description: 70-72’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 34	Date: 7/24/24
Location: IW-01	
Description: 72-74’	



Photo No. 35	Date: 7/24/24
Location: IW-01	
Description: 74-76’	



Photo No. 36	Date: 7/24/24
Location: IW-01	
Description: 76-78’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 37	Date: 7/24/24
Location: IW-01	
Description: 78-80’	



Photo No. 38	Date: 7/24/24
Location: IW-01	
Description: 80-82’	



Photo No. 39	Date: 7/24/24
Location: IW-01	
Description: 82-84’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 40	Date: 7/24/24
Location: IW-01	
Description: 84-86’	

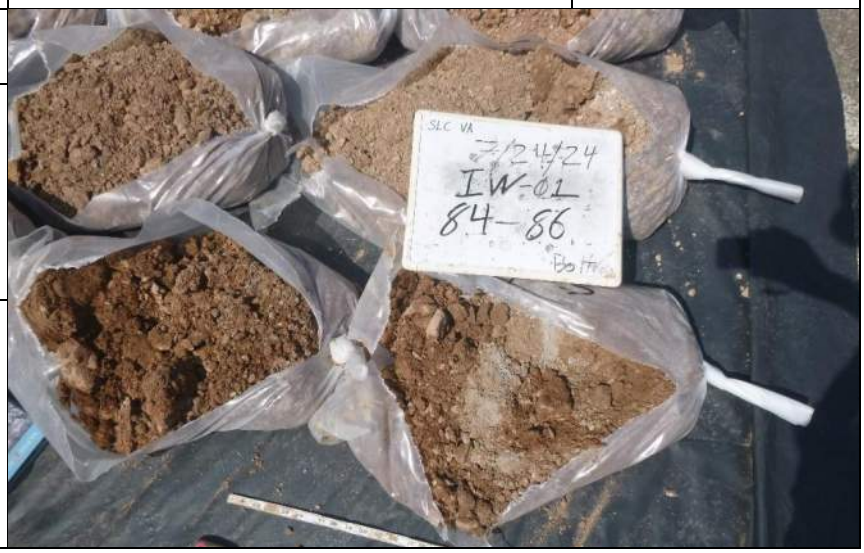


Photo No. 41	Date: 7/24/24
Location: IW-01	
Description: 86-88’	



Photo No. 42	Date: 7/24/24
Location: IW-01	
Description: 88-90’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 43	Date: 7/24/24
Location: IW-01	
Description: 90-92’	



Photo No. 44	Date: 7/24/24
Location: IW-01	
Description: 92-94’	



Photo No. 45	Date: 7/24/24
Location: IW-01	
Description: 94-96’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 46	Date: 7/24/24
Location: IW-01	
Description: 96-98’	



Photo No. 47	Date: 7/24/24
Location: IW-01	
Description: 98-100’	



Photo No. 48	Date: 7/24/24
Location: IW-01	
Description: 100-102’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 49	Date: 7/25/24
Location: IW-01	
Description: 102-104’	



Photo No. 50	Date: 7/25/24
Location: IW-01	
Description: 104-106’	



Photo No. 51	Date: 7/25/24
Location: IW-01	
Description: 106-108’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 52	Date: 7/25/24
Location: IW-01	
Description: 108-110’	

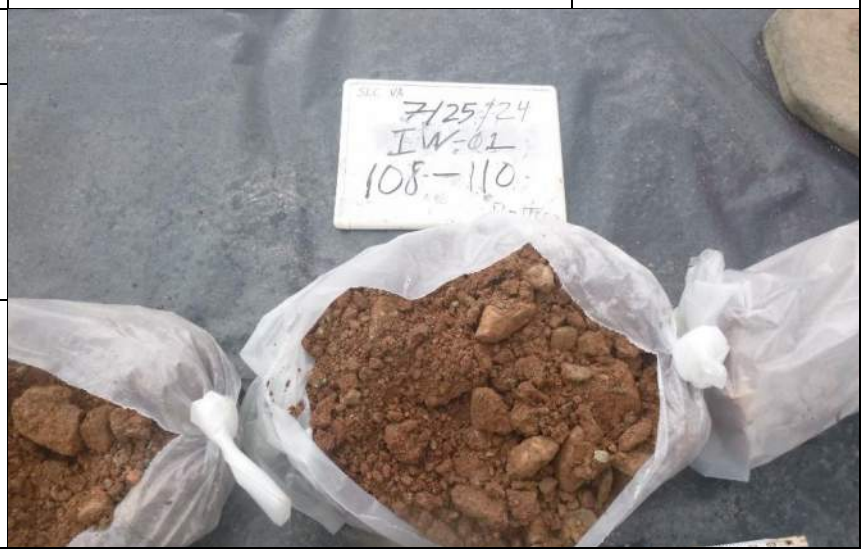


Photo No. 53	Date: 7/25/24
Location: IW-01	
Description: 110-112’	



Photo No. 54	Date: 7/25/24
Location: IW-01	
Description: 112-114’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 55	Date: 7/25/24
Location: IW-01	
Description: 114-116’	



Photo No. 56	Date: 7/25/24
Location: IW-01	
Description: 116-118’	



Photo No. 57	Date: 7/25/24
Location: IW-01	
Description: 118-120’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **58**	**Date:** 7/25/24
Location: IW-01	
Description: 120-122’	



Photo No. **59**	**Date:** 7/25/24
Location: IW-01	
Description: 122-124’	



Photo No. **60**	**Date:** 7/25/24
Location: IW-01	
Description: 124-126’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **61**	**Date:** 7/25/24
Location: IW-01	
Description: 126-128’	



Photo No. **62**	**Date:** 7/25/24
Location: IW-01	
Description: 128-130’	



Photo No. **63**	**Date:** 7/25/24
Location: IW-01	
Description: 130-131’	



CDM Smith **PHOTOGRAPHIC LOG**

Site: 700 South 1600 East PCE Plume

Project No. 238824

Photo No. 64	**Date:** 7/25/24

Location:

IW-01

Description:

131-133'



Photo No. 65	**Date:** 7/25/24

Location:

IW-01

Description:

133-135'



Photo No. 66

Location:

IW-01

Description:

135-137'



CDM Smith **PHOTOGRAPHIC LOG**

Site: 700 South 1600 East PCE Plume
Project No.
23882 4

Photo No. 67	**Date:** 7/25/24
Location: IW-01	
Description: 137-139’	



Photo No. 68	**Date:** 7/25/24
Location: IW-01	
Description: 139-141’	

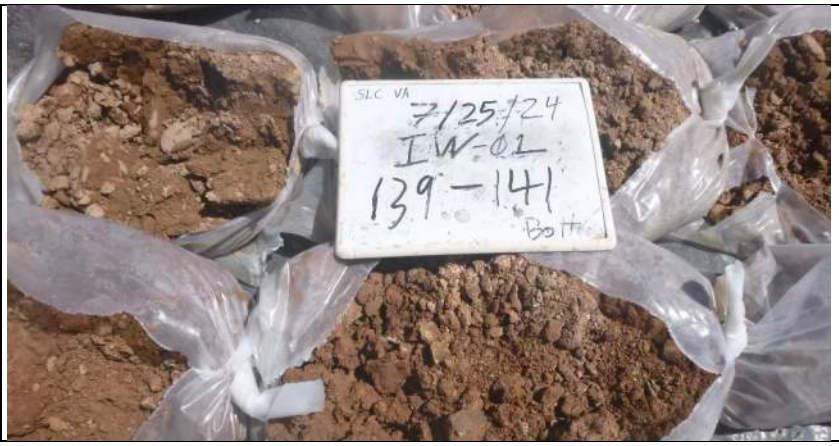


Photo No. 69	**Date:** 7/25/24
Location: IW-01	
Description: 141-143’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 70	Date: 7/25/24
Location: IW-01	
Description: 143-144’	



Photo No. 71	Date: 7/25/24
Location: IW-01	
Description: 144-146’	

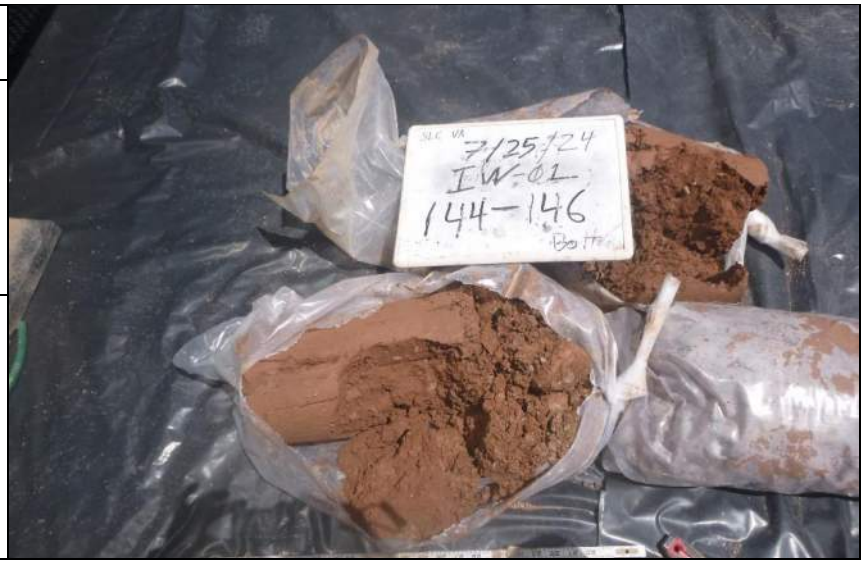


Photo No. 72	Date: 7/25/24
Location: IW-01	
Description: 146-148’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 73	Date: 7/25/24
Location: IW-01	
Description: 148-150’	



Photo No. 74	Date: 7/25/24
Location: IW-01	
Description: 150-152’	



Photo No. 75	Date: 7/25/24
Location: IW-01	
Description: 152-154’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 76	Date: 7/25/24
Location: IW-01	
Description: 154-156’	



Photo No. 77	Date: 7/25/24
Location: IW-01	
Description: 156-158’	



Photo No. 78	Date: 7/25/24
Location: IW-01	
Description: 158-160’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **79**	**Date:** 7/25/24
Location: IW-01	
Description: 160-162’	



Photo No. **80**	**Date:** 7/25/24
Location: IW-01	
Description: 162-164’	



Photo No. **81**	**Date:** 7/25/24
Location: IW-01	
Description: 164-165’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **82**	**Date:** 7/25/24
Location: IW-01	
Description: 165-167’	



Photo No. **83**	**Date:** 7/25/24
Location: IW-01	
Description: 167-169’	



Photo No. **84**	**Date:** 7/25/24
Location: IW-01	
Description: 169-171’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 85	Date: 7/25/24
Location: IW-01	
Description: 171-173’	



Photo No. 86	Date: 7/25/24
Location: IW-01	
Description: 173-175’	



Photo No. 87	Date: 7/25/24
Location: IW-01	
Description: 175-177’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 88	Date: 7/25/24
Location: IW-01	
Description: 177-179’	



Photo No. 89	Date: 7/25/24
Location: IW-01	
Description: 179-181’	



Photo No. 90	Date: 7/25/24
Location: IW-01	
Description: 181-182’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 91	Date: 7/25/24
Location: IW-01	
Description: 182-184’	



Photo No. 92	Date: 7/25/24
Location: IW-01	
Description: 184-186’	



Photo No. 93	Date: 7/25/24
Location: IW-01	
Description: 186-188’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

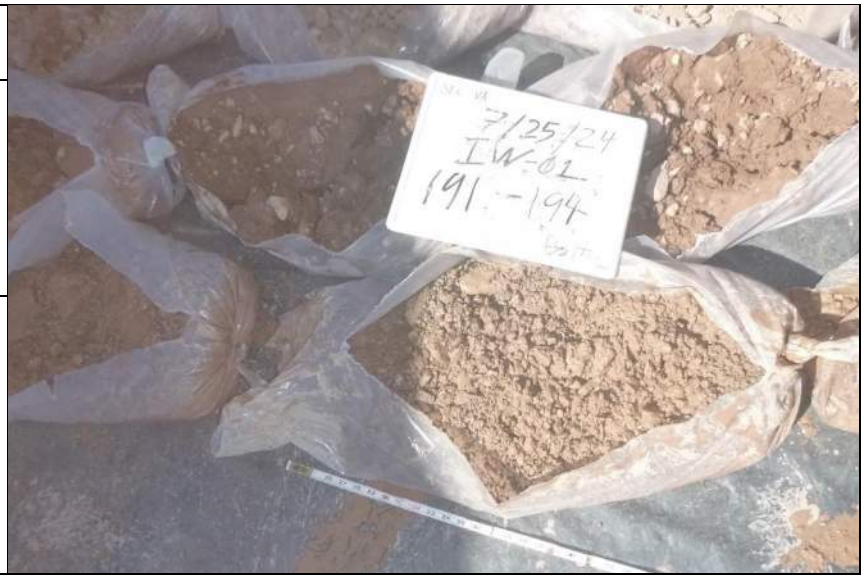
Photo No. 94	Date: 7/25/24
Location: IW-01	
Description: 188-190’	



Photo No. 95	Date: 7/25/24
Location: IW-01	
Description: 190-191’	



Photo No. 96	Date: 7/25/24
Location: IW-01	
Description: 191-194’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 97	Date: 7/25/24
Location: IW-01	
Description: 194-197’	



Photo No. 98	Date: 7/25/24
Location: IW-01	
Description: 197-198’	



Photo No. 99	Date: 7/25/24
Location: IW-01	
Description: 198-200’ No Recovery	

CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 100	Date: 7/26/24
Location: IW-01	
Description: 200-202’	

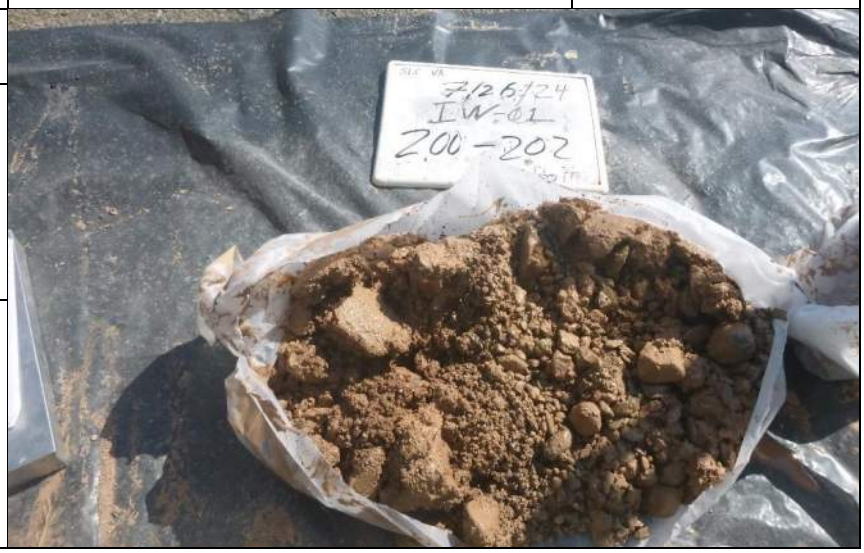


Photo No. 101	Date: 7/26/24
Location: IW-01	
Description: 202-204’	



Photo No. 102	Date: 7/26/24
Location: IW-01	
Description: 204-206’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 103	Date: 7/26/24
Location: IW-01	
Description: 206-207.5’	



Photo No. 104	Date: 7/26/24
Location: IW-01	
Description: 207.5-210	



Photo No. 105	Date: 7/26/24
Location: IW-01	
Description: 210-212’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 106	Date: 7/26/24
Location: IW-01	
Description: 212-214’	



Photo No. 107	Date: 7/26/24
Location: IW-01	
Description: 214-216’	



Photo No. 108	Date: 7/26/24
Location: IW-01	
Description: 216-218’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 109	Date: 7/26/24
Location: IW-01	
Description: 218-220’	



Photo No. 110	Date: 7/26/2420
Location: IW-01	
Description: 220-222’	

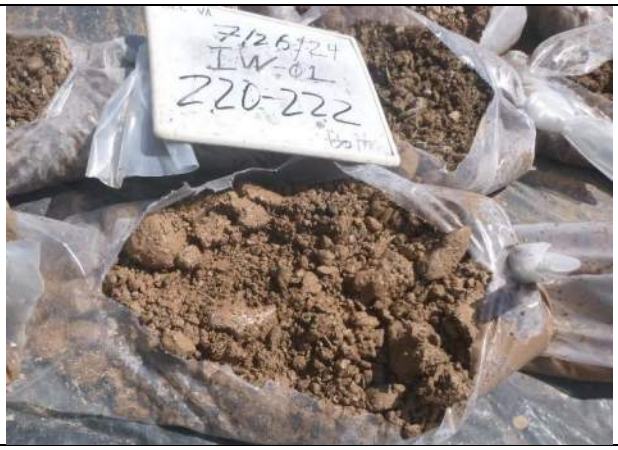


Photo No. 111	Date: 7/26/24
Location: IW-01	
Description: 222-224’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 112	Date: 7/26/24
Location: IW-01	
Description: 224-226’	



Photo No. 113	Date: 7/26/24
Location: IW-01	
Description: 226-228’	



Photo No. 114	Date: 7/26/24
Location: IW-01	
Description: 228-230’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 115	Date: 7/26/24
Location: IW-01	
Description: 230-232’	



Photo No. 116	Date: 7/26/24
Location: IW-01	
Description: 232-234’	



Photo No. 117	Date: 7/26/24
Location: IW-01	
Description: 234-236’	



PHOTOGRAPHIC LOG

Site: 700 South 1600 East PCE Plume

Project No. 238824

Photo No. 118	**Date:** 7/26/24
Location: IW-01	
Description: 236-238’	



Photo No. 119	**Date:** 7/26/24
Location: IW-01	
Description: 238-240’	



Photo No. 120	**Date:** 7/26/24
Location: IW-01	
Description: 240-242’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **121**	**Date:** 7/26/24
Location: IW-01	
Description: 242-244’	



Photo No. **122**	**Date:** 7/26/24
Location: IW-01	
Description: 244-246’	



Photo No. **123**	**Date:** 7/26/24
Location: IW-01	
Description: 246-248’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 124	Date: 7/26/24
Location: IW-01	
Description: 248-250’	



Photo No. 125	Date: 7/26/24
Location: IW-01	
Description: 250-252’	



Photo No. 126	Date: 7/26/24
Location: IW-01	
Description: 252-254’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **127**	**Date:** 7/26/24
Location: IW-01	
Description: 254-256’	



Photo No. **128**	**Date:** 7/26/24
Location: IW-01	
Description: 256-258’	



Photo No. **129**	**Date:** 7/26/24
Location: IW-01	
Description: 258-263’ No Recovery	

CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **130**	**Date:** 7/26/24
Location: IW-01	
Description: 263-266’	



Photo No. **131**	**Date:** 7/26/24
Location: IW-01	
Description: 266-268’	



Photo No. **132**	**Date:** 7/26/24
Location: IW-01	
Description: 268-270’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 133	Date: 7/26/24
Location: IW-01	
Description: 270-272’	



Photo No. 134	Date: 7/26/24
Location: IW-01	
Description: 272-274’	



Photo No. 135	Date: 7/26/24
Location: IW-01	
Description: 274-276’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **1**	**Date:** 7/1/24
Location: MW-39	
Description: 0-5’	



Photo No. **2**	**Date:** 7/1/24
Location: MW-39	
Description: 5-10’	



Photo No. **3**	**Date:** 7/1/24
Location: MW-39	
Description: 10-16’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 4	Date: 7/1/24
Location: MW-39	
Description: 16-18’	



Photo No. 5	Date: 7/1/24
Location: MW-39	
Description: 18-20’	



Photo No. 6	Date: 7/1/24
Location: MW-39	
Description: 20-22’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **7**	**Date:** 7/1/24
Location: MW-39	
Description: 22-26’	



Photo No. **8**	**Date:** 7/1/24
Location: MW-39	
Description: 26-30’	



Photo No. **9**	**Date:** 7/1/24
Location: MW-39	
Description: 30-35’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 10	Date: 7/1/24
Location: MW-39	
Description: 35-40’ No Recovery	

Photo No. 11	Date: 7/1/24
Location: MW-39	
Description: 40-42’	



Photo No. 12	Date: 7/1/24
Location: MW-39	
Description: 42-46’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **13**	**Date:** 7/1/24
Location: MW-39	
Description: 46-51’	



Photo No. **14**	**Date:** 7/1/24
Location: MW-39	
Description: 51-56’	



Photo No. **15**	**Date:** 7/1/24
Location: MW-39	
Description: 56-61’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **16**	**Date:** 7/1/24
Location: MW-39	
Description: 61-66’	



Photo No. **17**	**Date:** 7/1/24
Location: MW-39	
Description: 66-71’	



Photo No. **18**	**Date:** 7/1/24
Location: MW-39	
Description: 71-76’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 19	Date: 7/1/24
Location: MW-39	
Description: 76-81’	



Photo No. 20	Date: 7/1/24
Location: MW-39	
Description: 81-86’	



Photo No. 21	Date: 7/1/24
Location: MW-39	
Description: 86-91’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **22**	**Date:** 7/1/24
Location: MW-39	
Description: 91-96’	



Photo No. **23**	**Date:** 7/1/24
Location: MW-39	
Description: 96-101’	



Photo No. **24**	**Date:** 7/1/24
Location: MW-39	
Description: 101-105’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 25	Date: 7/1/24
Location: MW-39	
Description: 105-110’	



Photo No. 26	Date: 7/1/24
Location: MW-39	
Description: 110-115’	



Photo No. 27	Date: 7/1/24
Location: MW-39	
Description: 115-120’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **28**	**Date:** 7/2/24
Location: MW-39	
Description: 120-126’	



Photo No. **29**	**Date:** 7/2/24
Location: MW-39	
Description: 126-131’	



Photo No. **30**	**Date:** 7/2/24
Location: MW-39	
Description: 131-136’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 31	Date: 7/2/24
Location: MW-39	
Description: 136-141’	



Photo No. 32	Date: 7/2/24
Location: MW-39	
Description: 146-151’	



Photo No. 33	Date: 7/2/24
Location: MW-39	
Description: 151-155’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **34**	**Date:** 7/2/24
Location: MW-39	
Description: 155-161’	



Photo No. **35**	**Date:** 7/2/24
Location: MW-39	
Description: 161-166’	



Photo No. **36**	**Date:** 7/2/24
Location: MW-39	
Description: 166-169’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **37**	**Date:** 7/2/24
Location: MW-39	
Description: 169-171’	



Photo No. **38**	**Date:** 7/2/24
Location: MW-39	
Description: 171-173’	



Photo No. **39**	**Date:** 7/2/24
Location: MW-39	
Description: 173-175’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 40	Date: 7/2/24
Location: MW-39	
Description: 175-180’	



Photo No. 41	Date: 7/2/24
Location: MW-39	
Description: 180-182’	



Photo No. 42	Date: 7/2/24
Location: MW-39	
Description: 182-184’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 43	Date: 7/2/24
Location: MW-39	
Description: 184-186’	



Photo No. 44	Date: 7/2/24
Location: MW-39	
Description: 186-188’	



Photo No. 45	Date: 7/2/24
Location: MW-39	
Description: 188-190’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **46**	**Date:** 7/2/24
Location: MW-39	
Description: 190-192’	



Photo No. **47**	**Date:** 7/2/24
Location: MW-39	
Description: 192-197’	



Photo No. **48**	**Date:** 7/2/24
Location: MW-39	
Description: 197-202’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 49	Date: 7/2/24
Location: MW-39	
Description: 202-204’	



Photo No. 50	Date: 7/8/24
Location: MW-39	
Description: 204-205’	



Photo No. 51	Date: 7/8/24
Location: MW-39	
Description: 205-207.5’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 52	Date: 7/8/24
Location: MW-39	
Description: 207.5-210’	



Photo No. 53	Date: 7/8/24
Location: MW-39	
Description: 210-212’	



Photo No. 54	Date: 7/8/24
Location: MW-39	
Description: 212-214’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 55	Date: 7/8/24
Location: MW-39	
Description: 214-216’	



Photo No. 56	Date: 7/8/24
Location: MW-39	
Description: 216-218’	



Photo No. 57	Date: 7/8/24
Location: MW-39	
Description: 218-220’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **58**	**Date:** 7/8/24
Location: MW-39	
Description: 220-222’	



Photo No. **59**	**Date:** 7/8/24
Location: MW-39	
Description: 222-224’	



Photo No. **60**	**Date:** 7/8/24
Location: MW-39	
Description: 224-226’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **61**	**Date:** 7/8/24
Location: MW-39	
Description: 226-228’	



Photo No. **62**	**Date:** 7/8/24
Location: MW-39	
Description: 228-230’	



Photo No. **63**	**Date:** 7/8/24
Location: MW-39	
Description: 230-232’	



CDM Smith **PHOTOGRAPHIC LOG**

Site: 700 South 1600 East PCE Plume

Project No. 238824

Photo No. 64

Date: 7/8/24



Location:

MW-39

Description:

232-234’

Photo No. 65

Date: 7/8/24



Location:

MW-39

Description:

234-236’

Photo No. 66



Location:

MW-39

Description:

236-238’

CDM Smith **PHOTOGRAPHIC LOG**

Site: 700 South 1600 East PCE Plume
Project No.
23882 4

Photo No. 67	**Date:** 7/8/24
Location: MW-39	
Description: 238-240’	



Photo No. 68	**Date:** 7/8/24
Location: MW-39	
Description: 240-242’	



Photo No. 69	**Date:** 7/8/24
Location: MW-39	
Description: 242-244’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 70	Date: 7/8/24
Location: MW-39	
Description: 244-246’	



Photo No. 71	Date: 7/8/24
Location: MW-39	
Description: 246-248.5’	



Photo No. 72	Date: 7/9/24
Location: MW-39	
Description: 248.5-249.5	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 73	Date: 7/9/24
Location: MW-39	
Description: 249.5-252’	



Photo No. 74	Date: 7/9/24
Location: MW-39	
Description: 252-254’	



Photo No. 75	Date: 7/9/24
Location: MW-39	
Description: 254-256’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 76	Date: 7/9/24
Location: MW-39	
Description: 256-258’	



Photo No. 77	Date: 7/9/24
Location: MW-39	
Description: 258-260’	



Photo No. 78	Date: 7/9/24
Location: MW-39	
Description: 260-262’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **79**	**Date:** 7/9/24
Location: MW-39	
Description: 262-264’	



Photo No. **80**	**Date:** 7/9/24
Location: MW-39	
Description: 264-266’	



Photo No. **81**	**Date:** 7/9/24
Location: MW-39	
Description: 266-268’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 82	Date: 7/9/24
Location: MW-39	
Description: 268-269’	



Photo No. 83	Date: 7/9/24
Location: MW-39	
Description: 269-271’	



Photo No. 84	Date: 7/9/24
Location: MW-39	
Description: 271-273’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **85**	**Date:** 7/9/24
Location: MW-39	
Description: 273-275’	



Photo No. **86**	**Date:** 7/9/24
Location: MW-39	
Description: 275-277’	



Photo No. **87**	**Date:** 7/9/24
Location: MW-39	
Description: 277-279’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **88**	**Date:** 7/9/24
Location: MW-39	
Description: 279-281’	



Photo No. **89**	**Date:** 7/9/24
Location: MW-39	
Description: 281-283’	



Photo No. **90**	**Date:** 7/9/24
Location: MW-39	
Description: 283-285’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 91	Date: 7/9/24
Location: MW-39	
Description: 285-287.5’	



Photo No. 92	Date: 7/9/24
Location: MW-39	
Description: 287.5-289.5’	



Photo No. 93	Date: 7/9/24
Location: MW-39	
Description: 289.5-292’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 94	Date: 7/9/24
Location: MW-39	
Description: 292-294’	



Photo No. 95	Date: 7/9/24
Location: MW-39	
Description: 294-296’	



Photo No. 96	Date: 7/9/24
Location: MW-39	
Description: 296-298’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **97**	**Date:** 7/10/24
Location: MW-39	
Description: 298-300’	



Photo No. **98**	**Date:** 7/10/24
Location: MW-39	
Description: 300-302’	



Photo No. **99**	**Date:** 7/10/24
Location: MW-39	
Description: 302-304’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **100**	**Date:** 7/10/24
Location: MW-39	
Description: 304-306’	



Photo No. **101**	**Date:** 7/10/24
Location: MW-39	
Description: 306-308’	



Photo No. **102**	**Date:** 7/10/24
Location: MW-39	
Description: 308-310’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 103	Date: 7/10/24
Location: MW-39	
Description: 310-312’	



Photo No. 104	Date: 7/10/24
Location: MW-39	
Description: 312-314’	



Photo No. 105	Date: 7/10/24
Location: MW-39	
Description: 314-316’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 106	Date: 7/10/24
Location: MW-39	
Description: 316-318’	



Photo No. 107	Date: 7/10/24
Location: MW-39	
Description: 318-320’	



Photo No. 108	Date: 7/10/24
Location: MW-39	
Description: 320-322’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 109	Date: 7/12/24
Location: MW-39	
Description: 322-324’	



Photo No. 110	Date: 7/12/24
Location: MW-39	
Description: 324-326’	



Photo No. 111	Date: 7/12/24
Location: MW-39	
Description: 326-328’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 112	Date: 7/12/24
Location: MW-39	
Description: 328-330’	



Photo No. 113	Date: 7/12/24
Location: MW-39	
Description: 330-332’	



Photo No. 114	Date: 7/12/24
Location: MW-39	
Description: 332-334’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 115	Date: 7/12/24
Location: MW-39	
Description: 334-336’	



Photo No. 116	Date: 7/12/24
Location: MW-39	
Description: 336-338’	



Photo No. 117	Date: 7/12/24
Location: MW-39	
Description: 388-340’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **118**	**Date:** 7/12/24
Location: MW-39	
Description: 340-342''	



Photo No. **119**	**Date:** 7/12/24
Location: MW-39	
Description: 342-343.5'	



Photo No. **120**	**Date:** 7/12/24
Location: MW-39	
Description: 343.5-345'	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **121**	**Date:** 7/12/24
Location: MW-39	
Description: 345-347’	



Photo No. **122**	**Date:** 7/12/24
Location: MW-39	
Description: 347-349’	



Photo No. **123**	**Date:** 7/12/24
Location: MW-39	
Description: 349-351’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **124**	**Date:** 7/12/24
Location: MW-39	
Description: 351-353’	



Photo No. **125**	**Date:** 7/12/24
Location: MW-39	
Description: 353-355’	



Photo No. **126**	**Date:** 7/12/24
Location: MW-39	
Description: 355-356’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **127**	**Date:** 7/12/24
Location: MW-39	
Description: 356-358’	



Photo No. **128**	**Date:** 7/13/24
Location: MW-39	
Description: 358-360’	



Photo No. **129**	**Date:** 7/13/24
Location: MW-39	
Description: 360-362.5’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **130**	**Date:** 7/13/24
Location: MW-39	
Description: 362.5-365’	



Photo No. **131**	**Date:** 7/13/24
Location: MW-39	
Description: 365-366’	



Photo No. **132**	**Date:** 7/13/24
Location: MW-39	
Description: 366-368’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **133**	**Date:** 7/13/24
Location: MW-39	
Description: 368-370’	



Photo No. **134**	**Date:** 7/13/24
Location: MW-39	
Description: 370-372’	



Photo No. **135**	**Date:** 7/13/24
Location: MW-39	
Description: 372-374’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **136**	**Date:** 7/13/24
Location: MW-39	
Description: 374-376’	



Photo No. **137**	**Date:** 7/13/24
Location: MW-39	
Description: 376-378’	



Photo No. **138**	**Date:** 7/13/24
Location: MW-39	
Description: 378-380’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **139**	**Date:** 7/13/24
Location: MW-39	
Description: 380-382’	



Photo No. **140**	**Date:** 7/13/24
Location: MW-39	
Description: 382-384’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **1**	**Date:** 5/22/24
Location: MW-40	
Description: 7-8’	



Photo No. **2**	**Date:** 5/22/24
Location: MW-40	
Description: 8-10’	



Photo No. **3**	**Date:** 5/22/24
Location: MW-40	
Description: 10-12’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

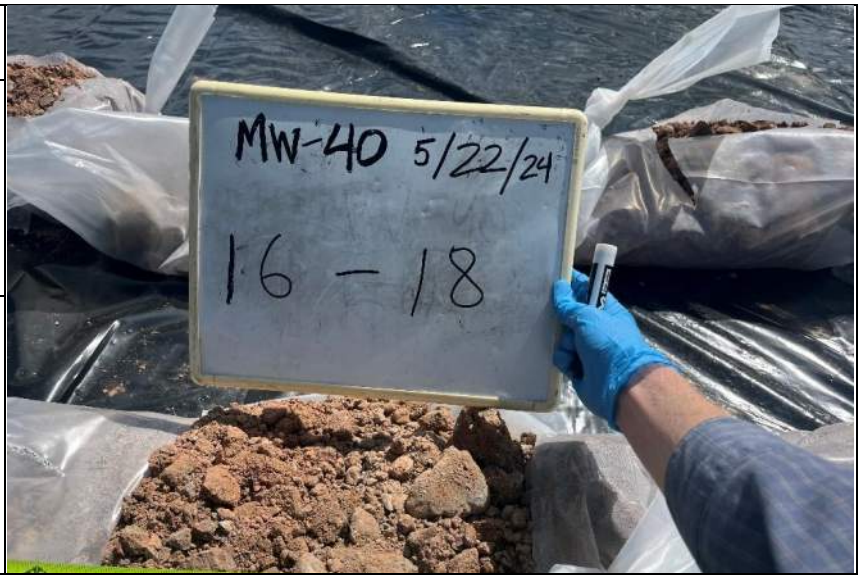
Photo No. 4	Date: 5/22/24
Location: MW-40	
Description: 12-14’	



Photo No. 5	Date: 5/22/24
Location: MW-40	
Description: 14-16’	



Photo No. 6	Date: 5/22/24
Location: MW-40	
Description: 16-18’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **7**	**Date:** 5/22/24
Location: MW-40	
Description: 18-20’	



Photo No. **8**	**Date:** 5/22/24
Location: MW-40	
Description: 20-22’	



Photo No. **9**	**Date:** 5/22/24
Location: MW-40	
Description: 22-24’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **10**	**Date:** 5/22/24
Location: MW-40	
Description: 24-26’	



Photo No. **11**	**Date:** 5/22/24
Location: MW-40	
Description: 26-28’	



Photo No. **12**	**Date:** 5/22/24
Location: MW-40	
Description: 28-30’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 13	Date: 5/22/24
Location: MW-40	
Description: 30-32’	



Photo No. 14	Date: 5/22/24
Location: MW-40	
Description: 32-34’	



Photo No. 15	Date: 5/22/24
Location: MW-40	
Description: 34-36’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 16	Date: 5/22/24
Location: MW-40	
Description: 36-38’	



Photo No. 17	Date: 5/22/24
Location: MW-40	
Description: 38-40’	



Photo No. 18	Date: 5/22/24
Location: MW-40	
Description: 40-42’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 19	Date: 5/22/24
Location: MW-40	
Description: 42-44’	

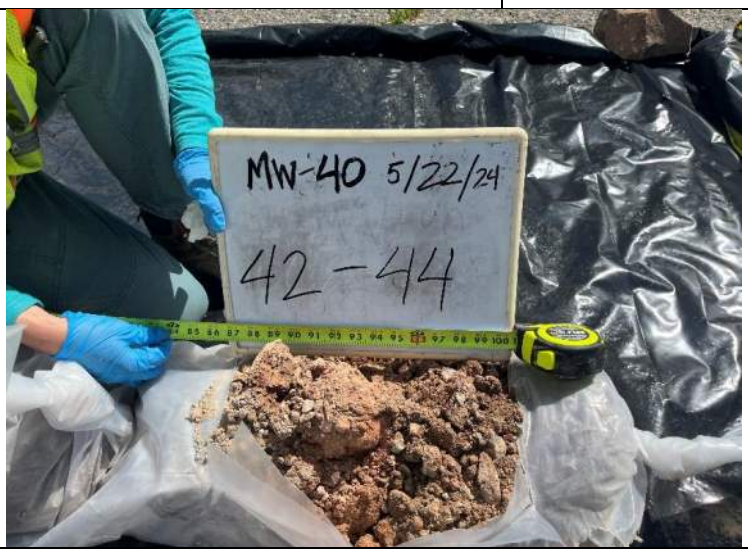
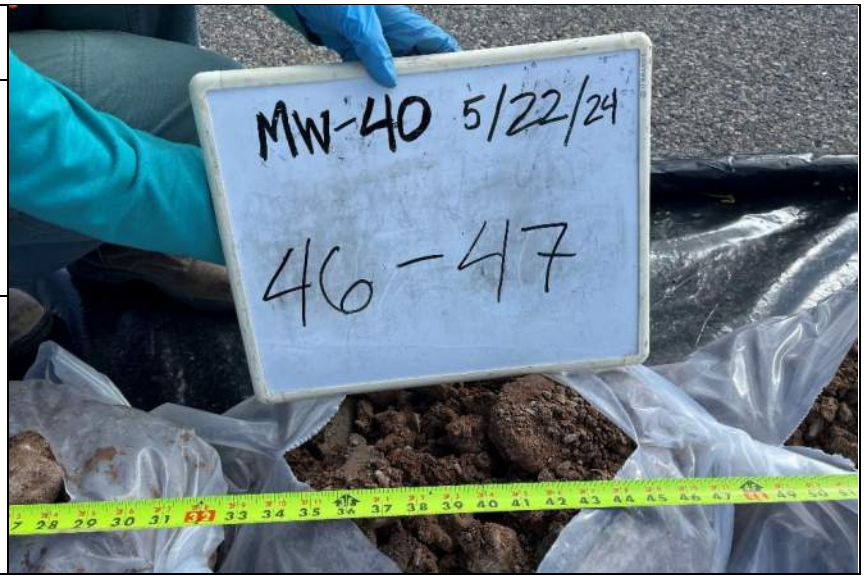


Photo No. 20	Date: 5/22/24
Location: MW-40	
Description: 44-46’	



Photo No. 21	Date: 5/22/24
Location: MW-40	
Description: 46-47’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **22**	**Date:** 5/22/24
Location: MW-40	
Description: 47-49’	

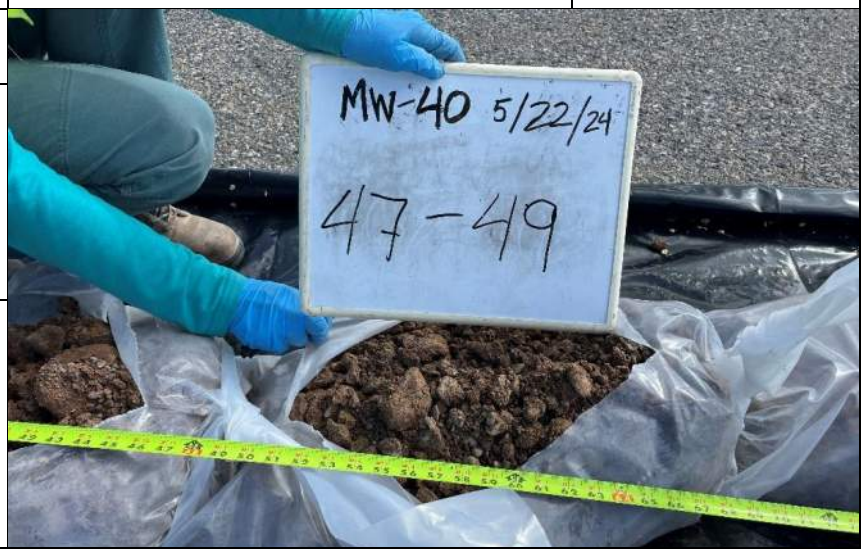


Photo No. **23**	**Date:** 5/22/24
Location: MW-40	
Description: 49-51’	



Photo No. **24**	**Date:** 5/22/24
Location: MW-40	
Description: 51-53’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **25**	**Date:** 5/22/24
Location: MW-40	
Description: 53-55’	



Photo No. **26**	**Date:** 5/23/24
Location: MW-40	
Description: 55-57’	

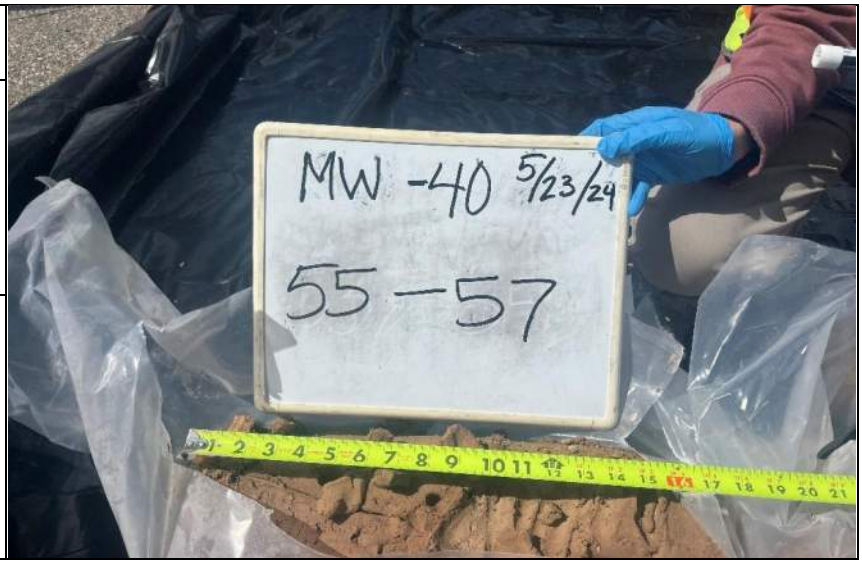


Photo No. **27**	**Date:** 5/23/24
Location: MW-40	
Description: 57-59’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 28	Date: 5/23/24
Location: MW-40	
Description: 59-61’	



Photo No. 29	Date: 5/23/24
Location: MW-40	
Description: 61-63’	



Photo No. 30	Date: 5/23/24
Location: MW-40	
Description: 63-65’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **31**	**Date:** 5/23/24
Location: MW-40	
Description: 65-66’	



Photo No. **32**	**Date:** 5/23/24
Location: MW-40	
Description: 66-68’	



Photo No. **33**	**Date:** 5/23/24
Location: MW-40	
Description: 68-70’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **34**	**Date:** 5/23/24
Location: MW-40	
Description: 70-72’	



Photo No. **35**	**Date:** 5/23/24
Location: MW-40	
Description: 72-74’	



Photo No. **36**	**Date:** 5/23/24
Location: MW-40	
Description: 74-77’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 37	Date: 5/23/24
Location: MW-40	
Description: 77-79’	



Photo No. 38	Date: 5/23/24
Location: MW-40	
Description: 79-81’	



Photo No. 39	Date: 5/23/24
Location: MW-40	
Description: 81-83’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 40	Date: 5/23/24
Location: MW-40	
Description: 83-85’	



Photo No. 41	Date: 5/23/24
Location: MW-40	
Description: 85-87’	



Photo No. 42	Date: 5/23/24
Location: MW-40	
Description: 87-89’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 43	Date: 5/23/24
Location: MW-40	
Description: 89-91’	



Photo No. 44	Date: 5/23/24
Location: MW-40	
Description: 91-93’	



Photo No. 45	Date: 5/23/24
Location: MW-40	
Description: 93-95’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 46	Date: 5/23/24
Location: MW-40	
Description: 95-97’ No Recovery	

Photo No. 47	Date: 5/23/24
Location: MW-40	
Description: 97-99’	



Photo No. 48	Date: 5/23/24
Location: MW-40	
Description: 99-101’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 49	Date: 5/23/24
Location: MW-40	
Description: 101-103’	



Photo No. 50	Date: 5/23/24
Location: MW-40	
Description: 103-105’ No Recovery	

Photo No. 51	Date: 5/23/24
Location: MW-40	
Description: 105-107’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 52	Date: 5/23/24
Location: MW-40	
Description: 107-109’	



Photo No. 53	Date: 5/23/24
Location: MW-40	
Description: 109-111’	



Photo No. 54	Date: 5/23/24
Location: MW-40	
Description: 111-112’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 55	Date: 5/23/24
Location: MW-40	
Description: 112-114’	



Photo No. 56	Date: 5/23/24
Location: MW-40	
Description: 114-116’	



Photo No. 57	Date: 5/23/24
Location: MW-40	
Description: 116-117’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 58	Date: 5/23/24
Location: MW-40	
Description: 117-119’	



Photo No. 59	Date: 5/23/24
Location: MW-40	
Description: 119-121’	



Photo No. 60	Date: 5/23/24
Location: MW-40	
Description: 121-123’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 61	Date: 5/23/24
Location: MW-40	
Description: 123-125’	



Photo No. 62	Date: 5/23/24
Location: MW-40	
Description: 125-127’	



Photo No. 63	Date: 5/23/24
Location: MW-40	
Description: 127-129’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No.	Date:
64	5/23/24

Location:

MW-40

Description:

129-131’



Photo No.	Date:
65	5/23/24

Location:

MW-40

Description:

131-133’



Photo No.
66

Location:

MW-40

Description:

133-135’



CDM Smith **PHOTOGRAPHIC LOG**

Site: 700 South 1600 East PCE Plume
Project No.
23882 4

Photo No. 67	**Date:** 5/23/24
Location: MW-40	
Description: 135-137’	



Photo No. 68	**Date:** 5/23/24
Location: MW-40	
Description: 137-139’	



Photo No. 69	**Date:** 5/23/24
Location: MW-40	
Description: 139-141’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 70	Date: 5/23/24
Location: MW-40	
Description: 141-143’	



Photo No. 71	Date: 5/23/24
Location: MW-40	
Description: 143-145’	



Photo No. 72	Date: 5/24/24
Location: MW-40	
Description: 145-147’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 73	Date: 5/24/24
Location: MW-40	
Description: 147-149’	



Photo No. 74	Date: 5/24/24
Location: MW-40	
Description: 149-151’	



Photo No. 75	Date: 5/24/24
Location: MW-40	
Description: 151-153’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 76	Date: 5/24/24
Location: MW-40	
Description: 153-155’	



Photo No. 77	Date: 5/24/24
Location: MW-40	
Description: 155-157’	



Photo No. 78	Date: 5/24/24
Location: MW-40	
Description: 157-159’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **79**	**Date:** 5/24/24
Location: MW-40	
Description: 159-161’	



Photo No. **80**	**Date:** 5/24/24
Location: MW-40	
Description: 161-163’	



Photo No. **81**	**Date:** 5/24/24
Location: MW-40	
Description: 163-165’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 82	Date: 5/24/24
Location: MW-40	
Description: 165-167’	



Photo No. 83	Date: 5/24/24
Location: MW-40	
Description: 167-169’	



Photo No. 84	Date: 5/24/24
Location: MW-40	
Description: 169-171’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 85	Date: 5/24/24
Location: MW-40	
Description: 171-173’	



Photo No. 86	Date: 5/24/24
Location: MW-40	
Description: 173-175’	



Photo No. 87	Date: 5/24/24
Location: MW-40	
Description: 175-176’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **88**	**Date:** 5/24/24
Location: MW-40	
Description: 176-178''	



Photo No. **89**	**Date:** 5/24/24
Location: MW-40	
Description: 178-180'	



Photo No. **90**	**Date:** 5/24/24
Location: MW-40	
Description: 180-182'	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 91	Date: 5/24/24
Location: MW-40	
Description: 182-184’	



Photo No. 92	Date: 5/24/24
Location: MW-40	
Description: 184-186’	



Photo No. 93	Date: 5/24/24
Location: MW-40	
Description: 186-190’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **94**	**Date:** 5/24/24
Location: MW-40	
Description: 190-193’	



Photo No. **95**	**Date:** 5/24/24
Location: MW-40	
Description: 193-195’	



Photo No. **96**	**Date:** 5/24/24
Location: MW-40	
Description: 195-197.5’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

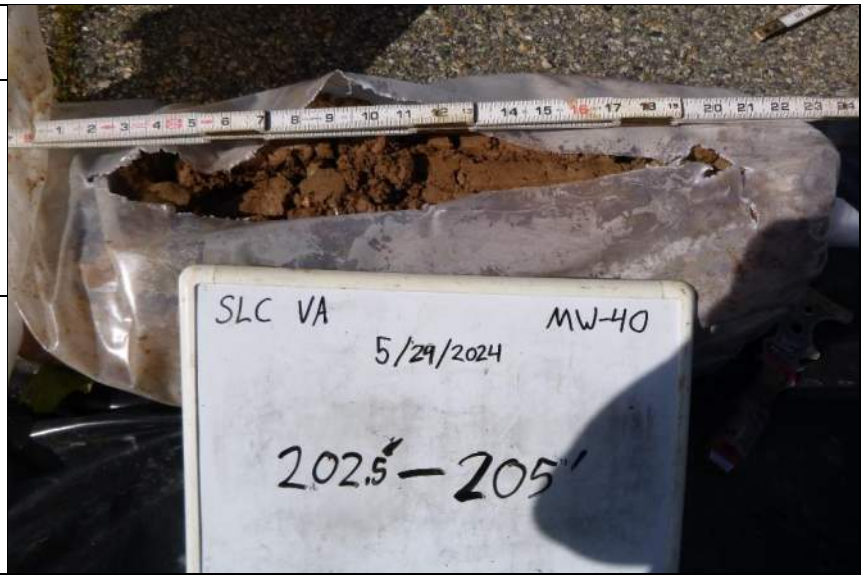
Photo No. **97**	**Date:** 5/29/24
Location: MW-40	
Description: 197.5-200’	



Photo No. **98**	**Date:** 5/29/24
Location: MW-40	
Description: 200-202.5’	



Photo No. **99**	**Date:** 5/29/24
Location: MW-40	
Description: 202.5-205’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **100**	**Date:** 5/29/24
Location: MW-40	
Description: 205-207.5’	



Photo No. **101**	**Date:** 5/29/24
Location: MW-40	
Description: 207.5-210’	



Photo No. **102**	**Date:** 5/29/24
Location: MW-40	
Description: 210-212.5’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 103	Date: 5/29/24
Location: MW-40	
Description: 212.5-215’	

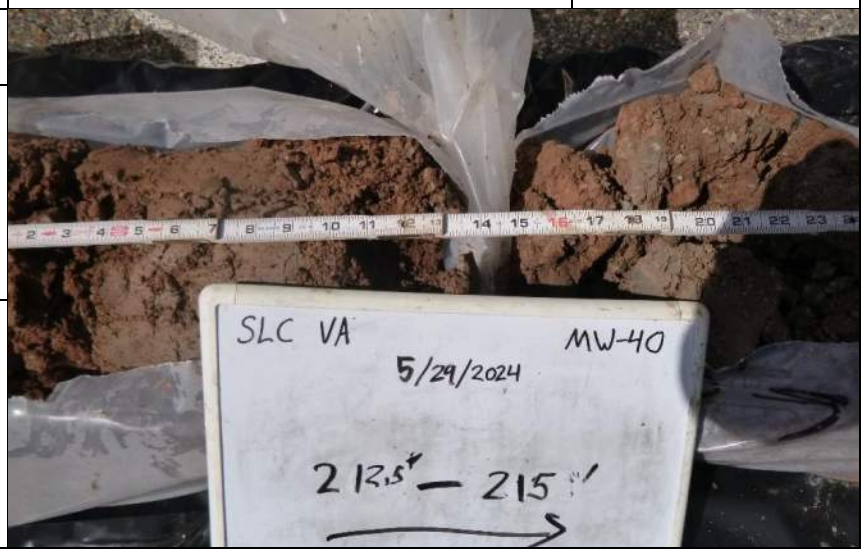


Photo No. 104	Date: 5/29/24
Location: MW-40	
Description: 215-217’	



Photo No. 105	Date: 5/29/24
Location: MW-40	
Description: 217-218’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 106	Date: 5/29/24
Location: MW-40	
Description: 218-219’	



Photo No. 107	Date: 5/29/24
Location: MW-40	
Description: 219-220’	



Photo No. 108	Date: 5/29/24
Location: MW-40	
Description: 220-221’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **109**	**Date:** 5/29/24
Location: MW-40	
Description: 221-223’	



Photo No. **110**	**Date:** 5/29/2420
Location: MW-40	
Description: 225-225’	



Photo No. **111**	**Date:** 5/29/24
Location: MW-40	
Description: 225-227’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. 112	Date: 5/29/24
Location: MW-40	
Description: 227-229’	



Photo No. 113	Date: 5/29/24
Location: MW-40	
Description: 229-231’	



Photo No. 114	Date: 5/29/24
Location: MW-40	
Description: 231-233’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 115	Date: 5/29/24
Location: MW-40	
Description: 233-235’	



Photo No. 116	Date: 5/29/24
Location: MW-40	
Description: 235-240’	



Photo No. 117	Date: 5/29/24
Location: MW-40	
Description: 240-245’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **118**	**Date:** 5/29/24
Location: MW-40	
Description: 245-247’	



Photo No. **119**	**Date:** 5/29/24
Location: MW-40	
Description: 247-248’	



Photo No. **120**	**Date:** 5/29/24
Location: MW-40	
Description: 248-250’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **121**	**Date:** 5/29/24
Location: MW-40	
Description: 250-252’	



Photo No. **122**	**Date:** 5/29/24
Location: MW-40	
Description: 252-254’	



Photo No. **123**	**Date:** 5/29/24
Location: MW-40	
Description: 254-255’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 124	Date: 5/30/24
Location: MW-40	
Description: 255-257’	



Photo No. 125	Date: 5/30/24
Location: MW-40	
Description: 257-259’	



Photo No. 126	Date: 5/30/24
Location: MW-40	
Description: 259-261’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **127**	**Date:** 5/30/24
Location: MW-40	
Description: 261-263’	



Photo No. **128**	**Date:** 5/30/24
Location: MW-40	
Description: 263-265’	



Photo No. **129**	**Date:** 5/30/24
Location: MW-40	
Description: 265-270’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **130**	**Date:** 5/30/24
Location: MW-40	
Description: 270-275’	



Photo No. **131**	**Date:** 5/30/24
Location: MW-40	
Description: 275-277’	



Photo No. **132**	**Date:** 5/30/24
Location: MW-40	
Description: 277-279’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **1**	**Date:** 6/15/24
Location: MW-41	
Description: 160-170’	



Photo No. **2**	**Date:** 6/15/24
Location: MW-41	
Description: 170-180’	



Photo No. **3**	**Date:** 6/15/24
Location: MW-41	
Description: 180-190’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **4**	**Date:** 6/15/24
Location: MW-41	
Description: 190-200’	



Photo No. **5**	**Date:** 6/15/24
Location: MW-41	
Description: 200-210’	



Photo No. **6**	**Date:** 6/15/24
Location: MW-41	
Description: 210-220’	



CDM Smith **PHOTOGRAPHIC LOG**

Site: 700 South 1600 East PCE Plume

Project No. 238824

Photo No.	**Date:**
7	6/16/24

Location:

MW-41

Description:

220-230’



Photo No.	**Date:**
8	6/16/24

Location:

MW-41

Description:

244-254’



Photo No.	**Date:**
9	6/16/24

Location:

MW-41

Description:

262-264’



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **10**	**Date:** 6/16/24
Location: MW-41	
Description: 264-266’	



Photo No. **11**	**Date:** 6/16/24
Location: MW-41	
Description: 266-268’	



Photo No. **12**	**Date:** 6/17/24
Location: MW-41	
Description: 276-280’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 13	Date: 6/17/24
Location: MW-41	
Description: 280-286’	



Photo No. 14	Date: 6/17/24
Location: MW-41	
Description: 286-290’	



Photo No. 15	Date: 6/17/24
Location: MW-41	
Description: 290-294’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 16	Date: 6/17/24
Location: MW-41	
Description: 294-300’	



Photo No. 17	Date: 6/17/24
Location: MW-41	
Description: 300-305’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **1**	**Date:** 7/18/24
Location: MW-42	
Description: 9-11’	



Photo No. **2**	**Date:** 7/18/24
Location: MW-42	
Description: 11-13’	



Photo No. **3**	**Date:** 7/18/24
Location: MW-42	
Description: 13-15’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **4**	**Date:** 7/18/24
Location: MW-42	
Description: 15-16’	



Photo No. **5**	**Date:** 7/18/24
Location: MW-42	
Description: 16-18’	



Photo No. **6**	**Date:** 7/18/24
Location: MW-42	
Description: 18-20’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 7	Date: 7/18/24
Location: MW-42	
Description: 20-22’	



Photo No. 8	Date: 7/18/24
Location: MW-42	
Description: 22-24’	



Photo No. 9	Date: 7/18/24
Location: MW-42	
Description: 24-26’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **10**	**Date:** 7/18/24
Location: MW-42	
Description: 26-28’	



Photo No. **11**	**Date:** 7/18/24
Location: MW-42	
Description: 28-30’	



Photo No. **12**	**Date:** 7/18/24
Location: MW-42	
Description: 30-32’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **13**	**Date:** 7/18/24
Location: MW-42	
Description: 30-32’	



Photo No. **14**	**Date:** 7/18/24
Location: MW-42	
Description: 32-34’	



Photo No. **15**	**Date:** 7/18/24
Location: MW-42	
Description: 34-36’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 16	Date: 7/18/24
Location: MW-42	
Description: 36-38’	



Photo No. 17	Date: 7/18/24
Location: MW-42	
Description: 38-40.5’	



Photo No. 18	Date: 7/18/24
Location: MW-42	
Description: 40.5-42’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 19	Date: 7/18/24
Location: MW-42	
Description: 42-45’	



Photo No. 20	Date: 7/18/24
Location: MW-42	
Description: 45-48’	



Photo No. 21	Date: 7/18/24
Location: MW-42	
Description: 48-50’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 22	Date: 7/18/24
Location: MW-42	
Description: 50-52’	



Photo No. 23	Date: 7/18/24
Location: MW-42	
Description: 52-54’	



Photo No. 24	Date: 7/18/24
Location: MW-42	
Description: 54-56’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **25**	**Date:** 7/18/24
Location: MW-42	
Description: 56-58’	



Photo No. **26**	**Date:** 7/18/24
Location: MW-42	
Description: 58-60’	



Photo No. **27**	**Date:** 7/18/24
Location: MW-42	
Description: 60-62’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 28	Date: 7/18/24
Location: MW-42	
Description: 64-66’	



Photo No. 29	Date: 7/18/24
Location: MW-42	
Description: 66-68’	



Photo No. 30	Date: 7/18/24
Location: MW-42	
Description: 68-70’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 31	Date: 7/18/24
Location: MW-42	
Description: 70-72’	



Photo No. 32	Date: 7/18/24
Location: MW-42	
Description: 72-74’	



Photo No. 33	Date: 7/18/24
Location: MW-42	
Description: 74-76’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **34**	**Date:** 7/18/24
Location: MW-42	
Description: 76-78’	



Photo No. **35**	**Date:** 7/18/24
Location: MW-42	
Description: 78-80’	



Photo No. **36**	**Date:** 7/18/24
Location: MW-42	
Description: 80-82’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 37	Date: 7/18/24
Location: MW-42	
Description: 82-84’	



Photo No. 38	Date: 7/18/24
Location: MW-42	
Description: 84-86’	



Photo No. 39	Date: 7/18/24
Location: MW-42	
Description: 86-88’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 40	Date: 7/18/24
Location: MW-42	
Description: 88-90’	



Photo No. 41	Date: 7/18/24
Location: MW-42	
Description: 90-92’	



Photo No. 42	Date: 7/18/24
Location: MW-42	
Description: 92-94’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 43	Date: 7/18/24
Location: MW-42	
Description: 94-96’	



Photo No. 44	Date: 7/18/24
Location: MW-42	
Description: 96-98’	



Photo No. 45	Date: 7/18/24
Location: MW-42	
Description: 98-100’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 46	Date: 7/18/24
Location: MW-42	
Description: 100-102’	



Photo No. 47	Date: 7/18/24
Location: MW-42	
Description: 102-103’	



Photo No. 48	Date: 7/18/24
Location: MW-42	
Description: 103-105’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 49	Date: 7/18/24
Location: MW-42	
Description: 105-107’	



Photo No. 50	Date: 7/18/24
Location: MW-42	
Description: 107-109’	



Photo No. 51	Date: 7/18/24
Location: MW-42	
Description: 109-110’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 52	Date: 7/18/24
Location: MW-42	
Description: 110-112’	



Photo No. 53	Date: 7/18/24
Location: MW-42	
Description: 112-114’	



Photo No. 54	Date: 7/18/24
Location: MW-42	
Description: 114-116’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 55	Date: 7/18/24
Location: MW-42	
Description: 116-118’	



Photo No. 56	Date: 7/18/24
Location: MW-42	
Description: 118-120’	



Photo No. 57	Date: 7/18/24
Location: MW-42	
Description: 120-122’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 58	Date: 7/18/24
Location: MW-42	
Description: 122-124’	



Photo No. 59	Date: 7/18/24
Location: MW-42	
Description: 124-126’	



Photo No. 60	Date: 7/18/24
Location: MW-42	
Description: 126-128’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 61	Date: 7/18/24
Location: MW-42	
Description: 128-130’	



Photo No. 62	Date: 7/18/24
Location: MW-42	
Description: 130-132’	



Photo No. 63	Date: 7/18/24
Location: MW-42	
Description: 132-134’	



CDM Smith **PHOTOGRAPHIC LOG**

Site: 700 South 1600 East PCE Plume

Project No. 238824

Photo No. 64

Date: 7/18/24



Location:

MW-42

Description:

134-136’

Photo No. 65

Date: 7/18/24



Location:

MW-42

Description:

136-138’

Photo No. 66



Location:

MW-42

Description:

138-140’

CDM Smith **PHOTOGRAPHIC LOG**

Site: 700 South 1600 East PCE Plume
Project No.
23882 4

Photo No.	**Date:**
67	7/18/24

Location:

MW-42

Description:

140-142' No Recovery

Photo No.	**Date:**
68	7/19/24

Location:

MW-42

Description:

142-144'



Photo No.	**Date:**
69	7/19/24

Location:

MW-42

Description:

144-146'



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 70	Date: 7/19/24
Location: MW-42	
Description: 146-148’	

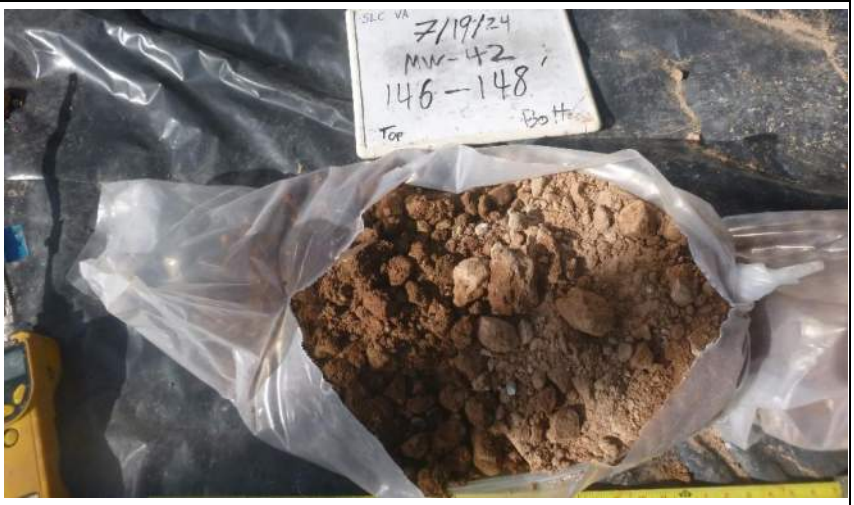


Photo No. 71	Date: 7/19/24
Location: MW-42	
Description: 148-150’	

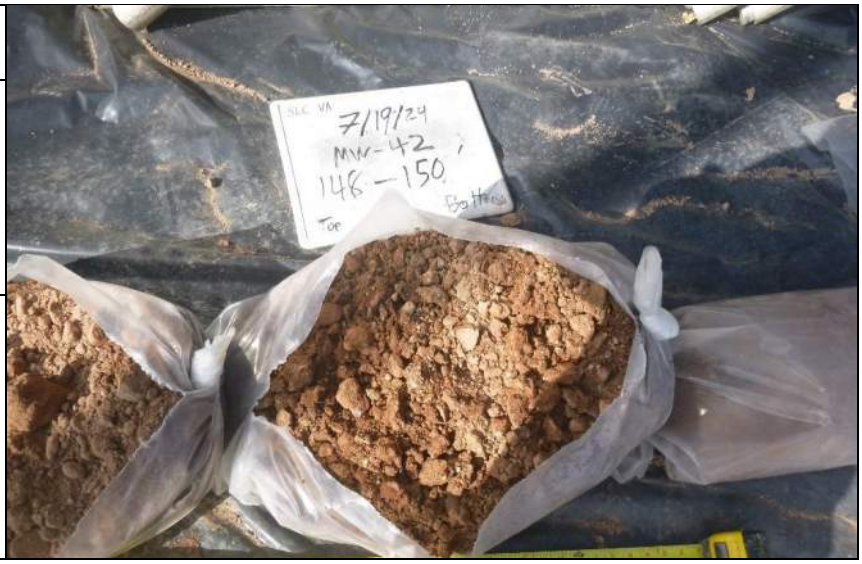


Photo No. 72	Date: 7/19/24
Location: MW-42	
Description: 150-152’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 73	Date: 7/19/24
Location: MW-42	
Description: 152-154’	



Photo No. 74	Date: 7/19/24
Location: MW-42	
Description: 154-156’	



Photo No. 75	Date: 7/19/24
Location: MW-42	
Description: 156-158’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **76**	**Date:** 7/19/24
Location: MW-42	
Description: 158-160’	



Photo No. **77**	**Date:** 7/19/24
Location: MW-42	
Description: 160-162’	



Photo No. **78**	**Date:** 7/19/24
Location: MW-42	
Description: 162-164’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

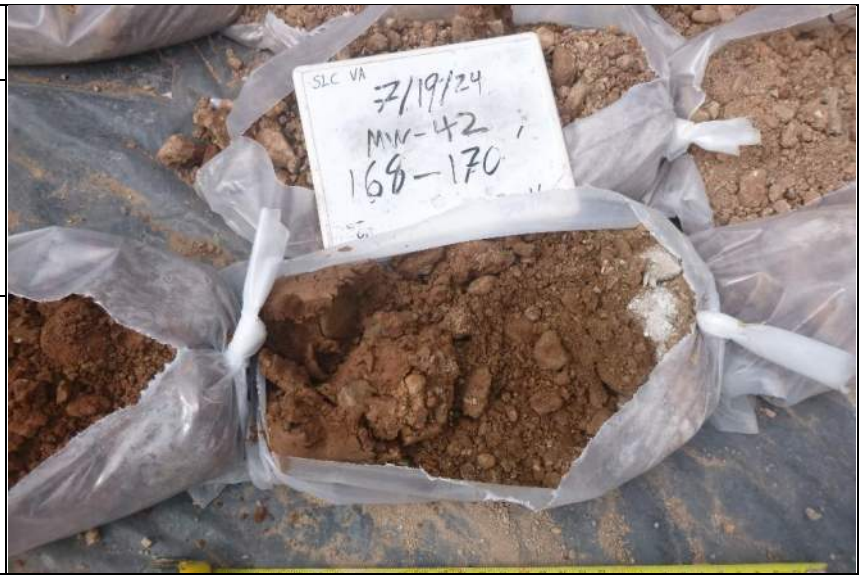
Photo No. 79	Date: 7/19/24
Location: MW-42	
Description: 164-166''	



Photo No. 80	Date: 7/19/24
Location: MW-42	
Description: 166-168'	



Photo No. 81	Date: 7/19/24
Location: MW-42	
Description: 168-170'	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 82	Date: 7/19/24
Location: MW-42	
Description: 170-172’	



Photo No. 83	Date: 7/19/24
Location: MW-42	
Description: 172-174’	



Photo No. 84	Date: 7/19/24
Location: MW-42	
Description: 174-176’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **85**	**Date:** 7/19/24
Location: MW-42	
Description: 176-178’	



Photo No. **86**	**Date:** 7/19/24
Location: MW-42	
Description: 178-180’	



Photo No. **87**	**Date:** 7/19/24
Location: MW-42	
Description: 180-182’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 88	Date: 7/19/24
Location: MW-42	
Description: 182-184’	



Photo No. 89	Date: 7/19/24
Location: MW-42	
Description: 184-185’	



Photo No. 90	Date: 7/19/24
Location: MW-42	
Description: 186-188’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **91**	**Date:** 7/19/24
Location: MW-42	
Description: 188-190’	



Photo No. **92**	**Date:** 7/19/24
Location: MW-42	
Description: 190-192’	



Photo No. **93**	**Date:** 7/19/24
Location: MW-42	
Description: 192-195’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 94	Date: 7/19/24
Location: MW-42	
Description: 195-197’	



Photo No. 95	Date: 7/19/24
Location: MW-42	
Description: 197-200’	



Photo No. 96	Date: 7/19/24
Location: MW-42	
Description: 200-202’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **97**	**Date:** 7/19/24
Location: MW-42	
Description: 202-204’	



Photo No. **98**	**Date:** 7/19/24
Location: MW-42	
Description: 204-206’	



Photo No. **99**	**Date:** 7/19/24
Location: MW-42	
Description: 206-208’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **100**	**Date:** 7/19/24
Location: MW-42	
Description: 208-210’	



Photo No. **101**	**Date:** 7/19/24
Location: MW-42	
Description: 210-212’	



Photo No. **102**	**Date:** 7/19/24
Location: MW-42	
Description: 212-214’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 103	Date: 7/19/24
Location: MW-42	
Description: 214-216’	



Photo No. 104	Date: 7/19/24
Location: MW-42	
Description: 216-217.5’	



Photo No. 105	Date: 7/19/24
Location: MW-42	
Description: 217.5-219’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 106	Date: 7/20/24
Location: MW-42	
Description: 219-221’	



Photo No. 107	Date: 7/20/24
Location: MW-42	
Description: 221-223’	



Photo No. 108	Date: 7/20/24
Location: MW-42	
Description: 223-225’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 109	Date: 7/20/24
Location: MW-42	
Description: 225-228’	



Photo No. 110	Date: 7/20/24
Location: MW-42	
Description: 228-230’	



Photo No. 111	Date: 7/20/24
Location: MW-42	
Description: 230-232’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 112	Date: 7/20/24
Location: MW-42	
Description: 232-234’	



Photo No. 113	Date: 7/20/24
Location: MW-42	
Description: 234-236’	



Photo No. 114	Date: 7/20/24
Location: MW-42	
Description: 236-238’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 115	Date: 7/20/24
Location: MW-42	
Description: 238-240’	



Photo No. 116	Date: 7/20/24
Location: MW-42	
Description: 240-242’	



Photo No. 117	Date: 7/20/24
Location: MW-42	
Description: 242-244’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 118	Date: 7/20/24
Location: MW-42	
Description: 244-246’	



Photo No. 119	Date: 7/20/24
Location: MW-42	
Description: 246-248’	



Photo No. 120	Date: 7/20/24
Location: MW-42	
Description: 248-250’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **121**	**Date:** 7/20/24
Location: MW-42	
Description: 250-252’	



Photo No. **122**	**Date:** 7/20/24
Location: MW-42	
Description: 252-254’	



Photo No. **123**	**Date:** 7/20/24
Location: MW-42	
Description: 254-256’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **124**	**Date:** 7/20/24
Location: MW-42	
Description: 256-258’	



Photo No. **125**	**Date:** 7/20/24
Location: MW-42	
Description: 258-260’	



Photo No. **126**	**Date:** 7/20/24
Location: MW-42	
Description: 260-262’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **127**	**Date:** 7/20/24
Location: MW-42	
Description: 262-264’	



Photo No. **128**	**Date:** 7/20/24
Location: MW-42	
Description: 264-266’	



Photo No. **129**	**Date:** 7/22/24
Location: MW-42	
Description: 266-268’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 130	Date: 7/22/24
Location: MW-42	
Description: 268-270’	



Photo No. 131	Date: 7/22/24
Location: MW-42	
Description: 270-272’	



Photo No. 132	Date: 7/22/24
Location: MW-42	
Description: 272-274’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **133**	**Date:** 7/22/24
Location: MW-42	
Description: 274-276’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **1**	**Date:** 5/23/24
Location: MW-43	
Description: 9-11’	



Photo No. **2**	**Date:** 5/23/24
Location: MW-43	
Description: 12-14’	



Photo No. **3**	**Date:** 5/23/24
Location: MW-43	
Description: 14-16’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **4**	**Date:** 5/23/24
Location: MW-43	
Description: 16-18’	



Photo No. **5**	**Date:** 5/23/24
Location: MW-43	
Description: 18-21’	



Photo No. **6**	**Date:** 5/23/24
Location: MW-43	
Description: 21-25’	



PHOTOGRAPHIC LOG

Site:	Project No.
700 South 1600 East PCE Plume	238824

Photo No.	Date:
7	5/23/24

Location:

MW-43

Description:

25-28’



Photo No.	Date:
8	5/23/24

Location:

MW-43

Description:

28-30’



Photo No.	Date:
9	5/23/24

Location:

MW-43

Description:

30-32.5’



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **10**	**Date:** 5/23/24
Location: MW-43	
Description: 32.5-36’	



Photo No. **11**	**Date:** 5/23/24
Location: MW-43	
Description: 36-38’	



Photo No. **12**	**Date:** 5/23/24
Location: MW-43	
Description: 38-40’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **13**	**Date:** 5/23/24
Location: MW-43	
Description: 40-43’	



Photo No. **14**	**Date:** 5/23/24
Location: MW-43	
Description: 43-44’	



Photo No. **15**	**Date:** 5/23/24
Location: MW-43	
Description: 44-48’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 16	Date: 5/24/24
Location: MW-43	
Description: 48-50’	



Photo No. 17	Date: 5/24/24
Location: MW-43	
Description: 50-52’	



Photo No. 18	Date: 5/24/24
Location: MW-43	
Description: 52-54’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **19**	**Date:** 5/24/24
Location: MW-43	
Description: 54-56’	



Photo No. **20**	**Date:** 5/24/24
Location: MW-43	
Description: 58-60’ (56-58’ no recovery)	

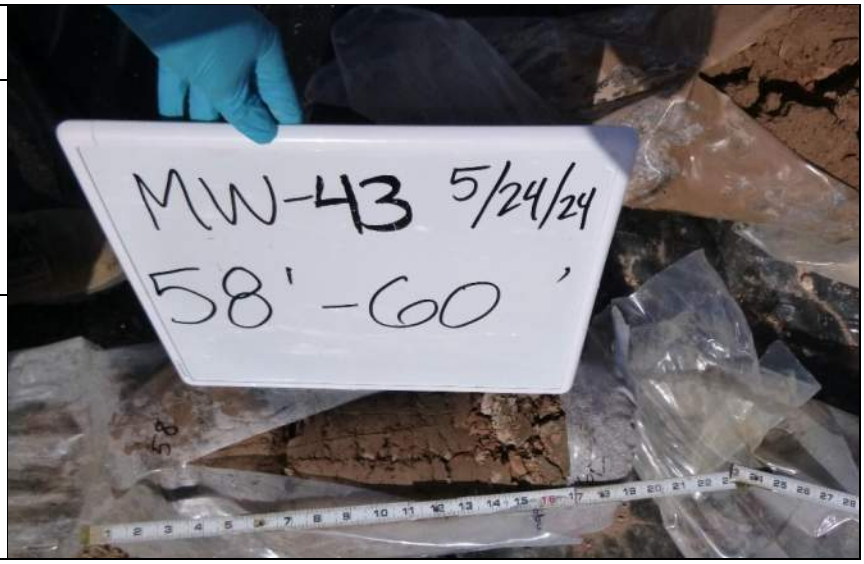


Photo No. **21**	**Date:** 5/24/24
Location: MW-43	
Description: 60-62’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 22	Date: 5/24/24
Location: MW-43	
Description: 62-64’	



Photo No. 23	Date: 5/24/24
Location: MW-43	
Description: 64-66’	



Photo No. 24	Date: 5/24/24
Location: MW-43	
Description: 66-68’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 25	Date: 5/24/24
Location: MW-43	
Description: 68-70’	



Photo No. 26	Date: 5/24/24
Location: MW-43	
Description: 70-73’	



Photo No. 27	Date: 5/24/24
Location: MW-43	
Description: 73-75’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

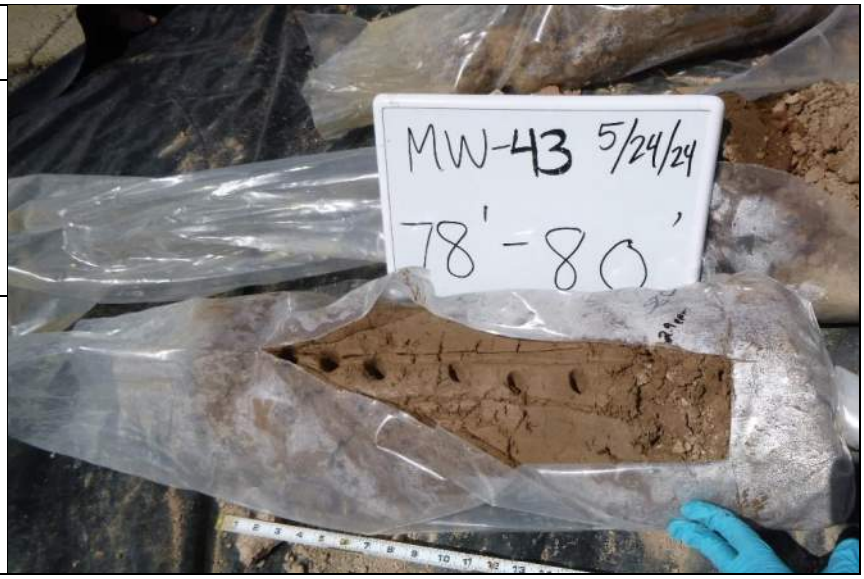
Photo No. **28**	**Date:** 5/24/24
Location: MW-43	
Description: 75-76’	



Photo No. **29**	**Date:** 5/24/24
Location: MW-43	
Description: 76-78’	



Photo No. **30**	**Date:** 5/24/24
Location: MW-43	
Description: 78-80’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

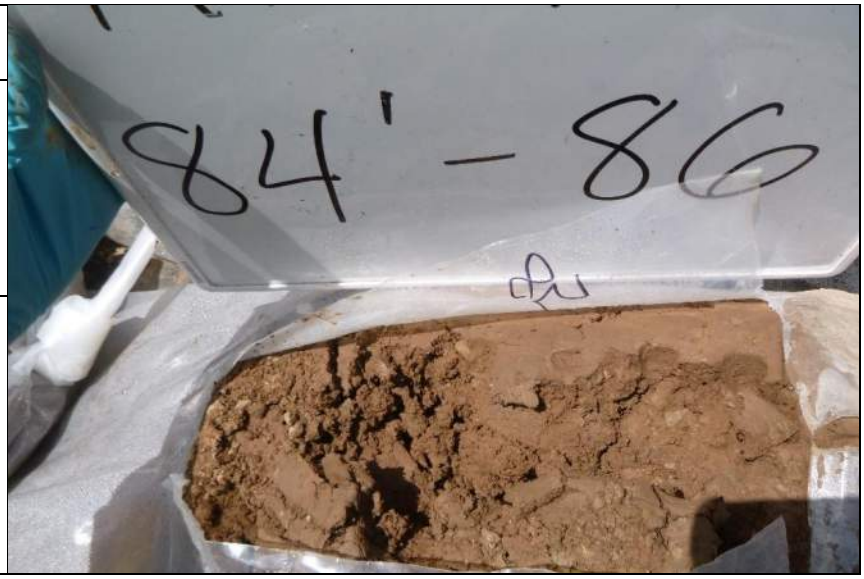
Photo No. **31**	**Date:** 5/24/24
Location: MW-43	
Description: 80-82’	



Photo No. **32**	**Date:** 5/24/24
Location: MW-43	
Description: 82-84’	



Photo No. **33**	**Date:** 5/24/24
Location: MW-43	
Description: 84-86’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **34**	**Date:** 5/24/24
Location: MW-43	
Description: 86-88’	



Photo No. **35**	**Date:** 5/29/24
Location: MW-43	
Description: 88-90.5’	



Photo No. **36**	**Date:** 5/29/24
Location: MW-43	
Description: 90.5-93’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **37**	**Date:** 5/29/24
Location: MW-43	
Description: 93-95.5’	



Photo No. **38**	**Date:** 5/29/24
Location: MW-43	
Description: 95.5-98’	



Photo No. **39**	**Date:** 5/29/24
Location: MW-43	
Description: 98-100.5’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **40**	**Date:** 5/29/24
Location: MW-43	
Description: 100.5-102.5’	



Photo No. **41**	**Date:** 5/29/24
Location: MW-43	
Description: 102.5-104.5’	



Photo No. **42**	**Date:** 5/29/24
Location: MW-43	
Description: 104.5-105.5’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 43	Date: 5/29/24
Location: MW-43	
Description: 105.5-108’ No Recovery	

Photo No. 44	Date: 5/29/24
Location: MW-43	
Description: 108-110’	



Photo No. 45	Date: 5/29/24
Location: MW-43	
Description: 110-112.5’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 46	Date: 5/29/24
Location: MW-43	
Description: 112.5-115’	



Photo No. 47	Date: 5/29/24
Location: MW-43	
Description: 115-117’ No Recovery	

Photo No. 48	Date: 5/29/24
Location: MW-43	
Description: 117-119.5’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 49	Date: 5/29/24
Location: MW-43	
Description: 119.5-122’	



Photo No. 50	Date: 5/29/24
Location: MW-43	
Description: 122-125’ No Recovery	

Photo No. 51	Date: 5/29/24
Location: MW-43	
Description: 125-126.5	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 52	Date: 5/29/24
Location: MW-43	
Description: 126.5-128’	



Photo No. 53	Date: 5/29/24
Location: MW-43	
Description: 128-130’	



Photo No. 54	Date: 5/29/24
Location: MW-43	
Description: 130-132’ No Recovery	

CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 55	Date: 5/29/24
Location: MW-43	
Description: 132-134’	



Photo No. 56	Date: 5/29/24
Location: MW-43	
Description: 134-136’	



Photo No. 57	Date: 5/31/24
Location: MW-43	
Description: 136-138’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **58**	**Date:** 5/31/24
Location: MW-43	
Description: 138-139’	



Photo No. **59**	**Date:** 5/31/24
Location: MW-43	
Description: 139-141’	



Photo No. **60**	**Date:** 5/31/24
Location: MW-43	
Description: 141-143’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **61**	**Date:** 5/31/24
Location: MW-43	
Description: 143-145’	



Photo No. **62**	**Date:** 5/31/24
Location: MW-43	
Description: 145-147’	



Photo No. **63**	**Date:** 5/31/24
Location: MW-43	
Description: 147-149’	



CDM Smith **PHOTOGRAPHIC LOG**

Site: 700 South 1600 East PCE Plume

Project No. 238824

Photo No.	Date:
64	5/31/24

Location:

MW-43

Description:

149-151’



Photo No.	Date:
65	5/31/24

Location:

MW-43

Description:

151-153’



Photo No.
66

Location:

MW-43

Description:

153-155.5’



CDM Smith **PHOTOGRAPHIC LOG**

Site: 700 South 1600 East PCE Plume
Project No.
23882 4

Photo No. 67	**Date:** 5/31/24
Location: MW-43	
Description: 155.5-158’	



Photo No. 68	**Date:** 5/31/24
Location: MW-43	
Description: 158-160’	



Photo No. 69	**Date:** 5/31/24
Location: MW-43	
Description: 160-162’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 70	Date: 5/31/24
Location: MW-43	
Description: 162-164’	



Photo No. 71	Date: 5/31/24
Location: MW-43	
Description: 164-166’	



Photo No. 72	Date: 5/31/24
Location: MW-43	
Description: 166-168’ No Recovery	

CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **73**	**Date:** 5/31/24
Location: MW-43	
Description: 168-170’	



Photo No. **74**	**Date:** 5/31/24
Location: MW-43	
Description: 170-172’	



Photo No. **75**	**Date:** 5/31/24
Location: MW-43	
Description: 172-174’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **76**	**Date:** 5/31/24
Location: MW-43	
Description: 174-176’	



Photo No. **77**	**Date:** 5/31/24
Location: MW-43	
Description: 176-178’	



Photo No. **78**	**Date:** 5/31/24
Location: MW-43	
Description: 178-180.5’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 79	Date: 5/31/24
Location: MW-43	
Description: 180.5-183’	



Photo No. 80	Date: 5/31/24
Location: MW-43	
Description: 183-185.5’	



Photo No. 81	Date: 5/31/24
Location: MW-43	
Description: 185.5-188’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 82	Date: 5/31/24
Location: MW-43	
Description: 188-198’ No Recovery	

Photo No. 83	Date: 6/2/24
Location: MW-43	
Description: 198-200.5’	



Photo No. 84	Date: 6/2/24
Location: MW-43	
Description: 200.5-203’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 85	Date: 6/2/24
Location: MW-43	
Description: 203-205.5’	



Photo No. 86	Date: 6/2/24
Location: MW-43	
Description: 205.5-208’	



Photo No. 87	Date: 6/2/24
Location: MW-43	
Description: 208-209’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 88	Date: 6/2/24
Location: MW-43	
Description: 209-211’	



Photo No. 89	Date: 6/2/24
Location: MW-43	
Description: 211-213.5’	



Photo No. 90	Date: 6/2/24
Location: MW-43	
Description: 213.5-216’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 91	Date: 6/2/24
Location: MW-43	
Description: 216-218’	



Photo No. 92	Date: 6/2/24
Location: MW-43	
Description: 218-219’	



Photo No. 93	Date: 6/2/24
Location: MW-43	
Description: 219-220’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 94	Date: 6/2/24
Location: MW-43	
Description: 220-222’	



Photo No. 95	Date: 6/2/24
Location: MW-43	
Description: 222-224’	



Photo No. 96	Date: 6/2/24
Location: MW-43	
Description: 224-226’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 97	Date: 6/2/24
Location: MW-43	
Description: 226-228’	



Photo No. 98	Date: 6/2/24
Location: MW-43	
Description: 228-229’	



Photo No. 99	Date: 6/2/24
Location: MW-43	
Description: 229-230’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **100**	**Date:** 6/3/24
Location: MW-43	
Description: 230-232.5’	



Photo No. **101**	**Date:** 6/3/24
Location: MW-43	
Description: 232.5-235’	



Photo No. **102**	**Date:** 6/3/24
Location: MW-43	
Description: 235-237’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 103	Date: 6/3/24
Location: MW-43	
Description: 237-238’	



Photo No. 104	Date: 6/3/24
Location: MW-43	
Description: 238-240’	



Photo No. 105	Date: 6/3/24
Location: MW-43	
Description: 240-242’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 106	Date: 6/3/24
Location: MW-43	
Description: 242-244’ No Recovery	

Photo No. 107	Date: 6/3/24
Location: MW-43	
Description: 244-246’	



Photo No. 108	Date: 6/3/24
Location: MW-43	
Description: 246-248’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 109	Date: 6/3/24
Location: MW-43	
Description: 248-250’	



Photo No. 110	Date: 6/4/24
Location: MW-43	
Description: 250-252’	



Photo No. 111	Date: 6/4/24
Location: MW-43	
Description: 252-254’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 112	Date: 6/4/24
Location: MW-43	
Description: 254-256’	



Photo No. 113	Date: 6/4/24
Location: MW-43	
Description: 256-258’	



Photo No. 114	Date: 6/4/24
Location: MW-43	
Description: 258-260.5’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 115	Date: 6/4/24
Location: MW-43	
Description: 260.5-261.5’	



Photo No. 116	Date: 6/4/24
Location: MW-43	
Description: 264-266.5’	



Photo No. 117	Date: 6/4/24
Location: MW-43	
Description: 266.5-268’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 118	Date: 6/4/24
Location: MW-43	
Description: 268-270.5’	



Photo No. 119	Date: 6/4/24
Location: MW-43	
Description: 270.5-273’ No Recovery	

Photo No. 120	Date: 6/4/24
Location: MW-43	
Description: 273-275.5’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **121**	**Date:** 6/4/24
Location: MW-43	
Description: 275.5-278’	



Photo No. **122**	**Date:** 6/5/24
Location: MW-43	
Description: 278-280.5’	



Photo No. **123**	**Date:** 6/5/24
Location: MW-43	
Description: 280.5-283’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 124	Date: 6/5/24
Location: MW-43	
Description: 283-285’	



Photo No. 125	Date: 6/5/24
Location: MW-43	
Description: 285-287’	



Photo No. 126	Date: 6/5/24
Location: MW-43	
Description: 287-288’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **127**	**Date:** 6/5/24
Location: MW-43	
Description: 288-290’	



Photo No. **128**	**Date:** 6/5/24
Location: MW-43	
Description: 290-292’	



Photo No. **129**	**Date:** 6/5/24
Location: MW-43	
Description: 292-294’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **130**	**Date:** 6/5/24
Location: MW-43	
Description: 294-296’	



Photo No. **131**	**Date:** 6/5/24
Location: MW-43	
Description: 296-298’	



Photo No. **132**	**Date:** 6/5/24
Location: MW-43	
Description: 298-300.5’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **133**	**Date:** 6/6/24
Location: MW-43	
Description: 300.5-302’	



Photo No. **134**	**Date:** 6/6/24
Location: MW-43	
Description: 302-304.5’	



Photo No. **135**	**Date:** 6/6/24
Location: MW-43	
Description: 304.5-307’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **136**	**Date:** 6/6/24
Location: MW-43	
Description: 307-308’	



Photo No. **137**	**Date:** 6/6/24
Location: MW-43	
Description: 308-310’	



Photo No. **138**	**Date:** 6/6/24
Location: MW-43	
Description: 310-312’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **139**	**Date:** 6/6/24
Location: MW-43	
Description: 312-314’	



Photo No. **131**	**Date:** 6/6/24
Location: MW-43	
Description: 314-316’	



Photo No. **132**	**Date:** 6/6/24
Location: MW-43	
Description: 316-318’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **130**	**Date:** 6/5/24
Location: MW-43	
Description: 294-296’	



Photo No. **131**	**Date:** 6/5/24
Location: MW-43	
Description: 296-298’	



Photo No. **132**	**Date:** 6/5/24
Location: MW-43	
Description: 298-300.5’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **130**	**Date:** 6/5/24
Location: MW-43	
Description: 294-296’	



Photo No. **131**	**Date:** 6/5/24
Location: MW-43	
Description: 296-298’	



Photo No. **132**	**Date:** 6/5/24
Location: MW-43	
Description: 298-300.5’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **130**	**Date:** 6/5/24
Location: MW-43	
Description: 294-296’	



Photo No. **131**	**Date:** 6/5/24
Location: MW-43	
Description: 296-298’	



Photo No. **132**	**Date:** 6/5/24
Location: MW-43	
Description: 298-300.5’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **130**	**Date:** 6/5/24
Location: MW-43	
Description: 294-296’	



Photo No. **131**	**Date:** 6/5/24
Location: MW-43	
Description: 296-298’	



Photo No. **132**	**Date:** 6/5/24
Location: MW-43	
Description: 298-300.5’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **130**	**Date:** 6/5/24
Location: MW-43	
Description: 294-296’	



Photo No. **131**	**Date:** 6/5/24
Location: MW-43	
Description: 296-298’	



Photo No. **132**	**Date:** 6/5/24
Location: MW-43	
Description: 298-300.5’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **130**	**Date:** 6/5/24
Location: MW-43	
Description: 294-296’	



Photo No. **131**	**Date:** 6/5/24
Location: MW-43	
Description: 296-298’	



Photo No. **132**	**Date:** 6/5/24
Location: MW-43	
Description: 298-300.5’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **130**	**Date:** 6/5/24
Location: MW-43	
Description: 294-296’	



Photo No. **131**	**Date:** 6/5/24
Location: MW-43	
Description: 296-298’	



Photo No. **132**	**Date:** 6/5/24
Location: MW-43	
Description: 298-300.5’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **130**	**Date:** 6/5/24
Location: MW-43	
Description: 294-296’	



Photo No. **131**	**Date:** 6/5/24
Location: MW-43	
Description: 296-298’	



Photo No. **132**	**Date:** 6/5/24
Location: MW-43	
Description: 298-300.5’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **1**	**Date:** 6/25/24
Location: MW-44	
Description: 30-35’	



Photo No. **2**	**Date:** 6/25/24
Location: MW-44	
Description: 35-40’	



Photo No. **3**	**Date:** 6/25/24
Location: MW-44	
Description: 40-45’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **4**	**Date:** 6/25/24
Location: MW-44	
Description: 45-50’	

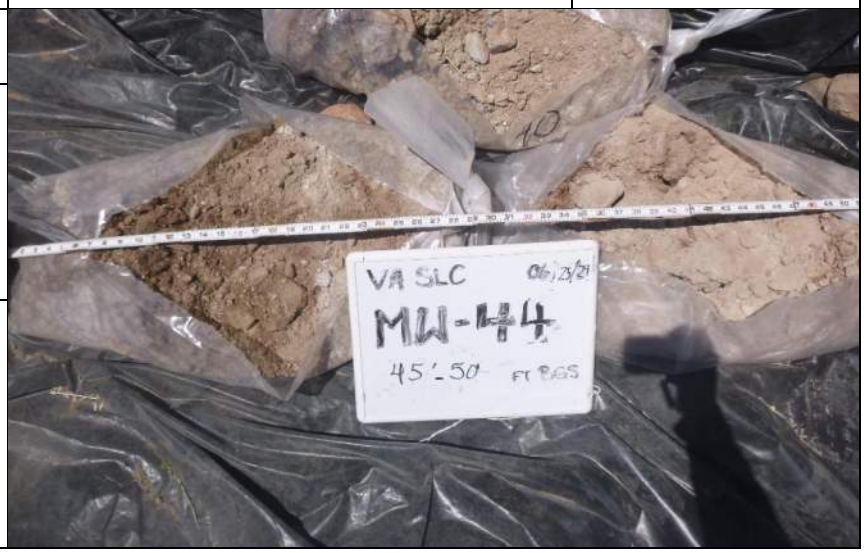


Photo No. **5**	**Date:** 6/25/24
Location: MW-44	
Description: 50-55’	



Photo No. **6**	**Date:** 6/25/24
Location: MW-44	
Description: 55-60’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **7**	**Date:** 6/25/24
Location: MW-44	
Description: 60-63’	



-

Photo No. **8**	**Date:** 6/25/24
Location: MW-44	
Description: 63-65’	



Photo No. **9**	**Date:** 6/25/24
Location: MW-44	
Description: 65-70’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **10**	**Date:** 6/25/24
Location: MW-44	
Description: 70-75’	



Photo No. **11**	**Date:** 6/25/24
Location: MW-44	
Description: 75-80’	



Photo No. **12**	**Date:** 6/25/24
Location: MW-44	
Description: 80-85’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

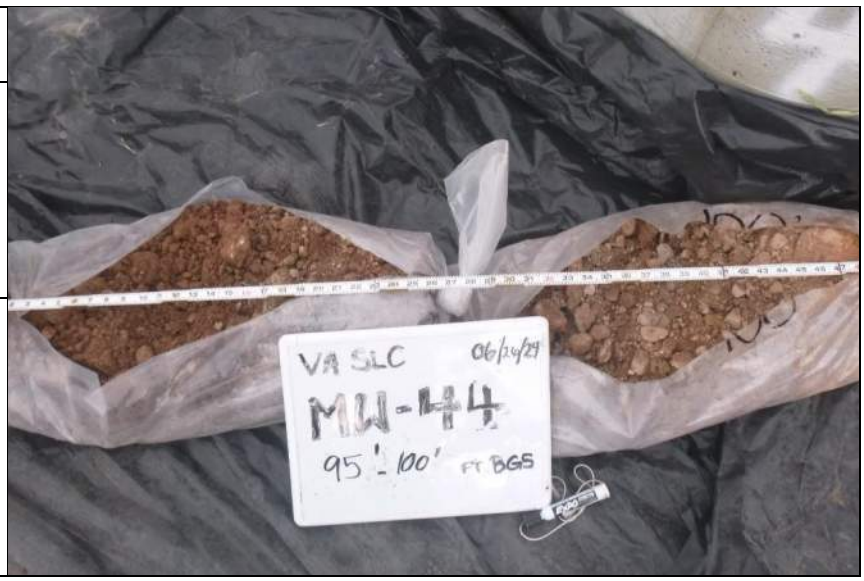
Photo No. 13	Date: 6/25/24
Location: MW-44	
Description: 85-90’	



Photo No. 14	Date: 6/26/24
Location: MW-44	
Description: 90-95’	



Photo No. 15	Date: 6/26/24
Location: MW-44	
Description: 95-100’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **16**	**Date:** 6/26/24
Location: MW-44	
Description: 100-105’	



Photo No. **17**	**Date:** 6/26/24
Location: MW-44	
Description: 105-110’	



Photo No. **18**	**Date:** 6/26/24
Location: MW-44	
Description: 110-115’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **19**	**Date:** 6/26/24
Location: MW-44	
Description: 115-120’	



Photo No. **20**	**Date:** 6/26/24
Location: MW-44	
Description: 120-125’	

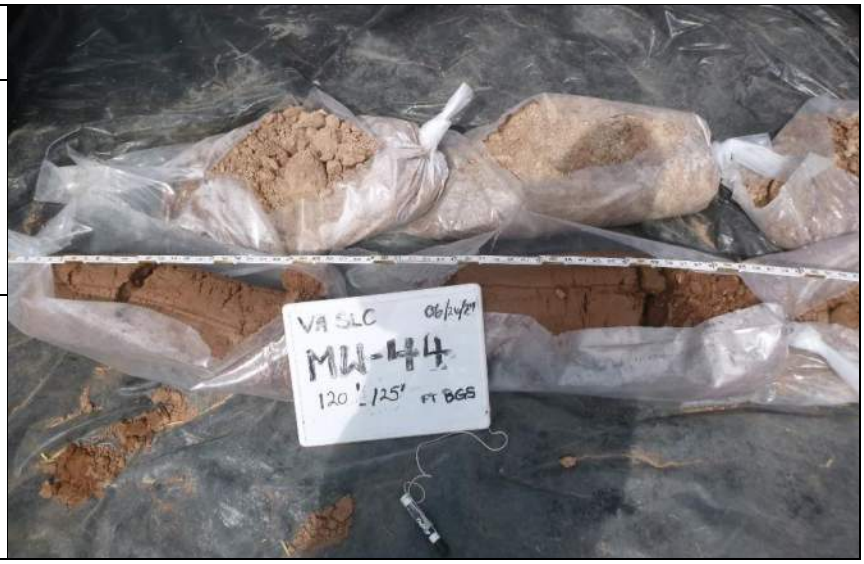


Photo No. **21**	**Date:** 6/26/24
Location: MW-44	
Description: 125-130’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 22	Date: 6/26/24
Location: MW-44	
Description: 130-135’	



Photo No. 23	Date: 6/26/24
Location: MW-44	
Description: 135-140’	



Photo No. 24	Date: 6/26/24
Location: MW-44	
Description: 140-145’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **25**	**Date:** 6/26/24
Location: MW-44	
Description: 145-150’	



Photo No. **26**	**Date:** 6/26/24
Location: MW-44	
Description: 150-153.5’	



Photo No. **27**	**Date:** 6/26/24
Location: MW-44	
Description: 153.5-157’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 28	Date: 6/26/24
Location: MW-44	
Description: 157-162’	



Photo No. 29	Date: 6/26/24
Location: MW-44	
Description: 162-167’	



Photo No. 30	Date: 6/26/24
Location: MW-44	
Description: 167-170’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **31**	**Date:** 6/27/24
Location: MW-44	
Description: 170-175’	



Photo No. **32**	**Date:** 6/27/24
Location: MW-44	
Description: 175-180’	



Photo No. **33**	**Date:** 6/27/24
Location: MW-44	
Description: 180-185’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 34	Date: 6/27/24
Location: MW-44	
Description: 185-190’	



Photo No. 35	Date: 6/27/24
Location: MW-44	
Description: 190-194’	



Photo No. 36	Date: 6/27/24
Location: MW-44	
Description: 194-198’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **37**	**Date:** 6/27/24
Location: MW-44	
Description: 198-204’	



Photo No. **38**	**Date:** 6/27/24
Location: MW-44	
Description: 204-210’	



Photo No. **39**	**Date:** 6/27/24
Location: MW-44	
Description: 210-215’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 40	Date: 6/27/24
Location: MW-44	
Description: 215-220’	



Photo No. 41	Date: 6/27/24
Location: MW-44	
Description: 220-225’	



Photo No. 42	Date: 6/27/24
Location: MW-44	
Description: 225-230’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **43**	**Date:** 6/27/24
Location: MW-44	
Description: 230-235’	



Photo No. **44**	**Date:** 6/27/24
Location: MW-44	
Description: 235-240’	



Photo No. **45**	**Date:** 6/27/24
Location: MW-44	
Description: 240-245’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **46**	**Date:** 6/27/24
Location: MW-44	
Description: 245-250’	



Photo No. **47**	**Date:** 6/29/24
Location: MW-44	
Description: 250-255’	



Photo No. **48**	**Date:** 6/29/24
Location: MW-44	
Description: 255-260’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **49**	**Date:** 6/29/24
Location: MW-44	
Description: 260-265’	



Photo No. **50**	**Date:** 6/30/24
Location: MW-44	
Description: 265-268’	



Photo No. **51**	**Date:** 6/30/24
Location: MW-44	
Description: 268-273’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 52	Date: 6/30/24
Location: MW-44	
Description: 273-278’	



Photo No. 53	Date: 6/30/24
Location: MW-44	
Description: 278-284’ No Recovery	

Photo No. 54	Date: 6/30/24
Location: MW-44	
Description: 284-290’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **55**	**Date:** 6/30/24
Location: MW-44	
Description: 290-295’	



Photo No. **56**	**Date:** 7/1/24
Location: MW-44	
Description: 295-300’	



Photo No. **57**	**Date:** 7/1/24
Location: MW-44	
Description: 300-305’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **58**	**Date:** 7/1/24
Location: MW-44	
Description: 305-310’	



Photo No. **59**	**Date:**
Location: MW-44	
Description:	

Photo No. **60**	**Date:**
Location: MW-44	
Description:	

CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **1**	**Date:** 6/26/24
Location: MW-45	
Description: 0-50’	



Photo No. **2**	**Date:** 6/26/24
Location: MW-45	
Description: 25-30’	



Photo No. **3**	**Date:** 6/25/24
Location: MW-45	
Description: 160-165’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **4**	**Date:** 6/25/24
Location: MW-45	
Description: 165-175	



Photo No. **5**	**Date:** 6/27/24
Location: MW-45	
Description: 170-175’	



Photo No. **6**	**Date:** 6/27/24
Location: MW-45	
Description: 175-178’	



CDM Smith **PHOTOGRAPHIC LOG**	**Site:** 700 South 1600 East PCE Plume	**Project No.** 238824

Photo No. **7**	**Date:** 6/27/24
Location: MW-45	
Description: 178-182’	



-

Photo No. **8**	**Date:** 6/27/24
Location: MW-45	
Description: 182-186’	



Photo No. **9**	**Date:** 6/27/24
Location: MW-45	
Description: 182-186’	



CDM Smith PHOTOGRAPHIC LOG	Site: 700 South 1600 East PCE Plume	Project No. 238824

Photo No. 10	Date: 6/27/24
Location: MW-45	
Description: 186-190’	



Photo No. 11	Date: 6/27/24
Location: MW-45	
Description: 198-200’	



Appendix H Laboratory Data

EMAX LABORATORIES, INC.
3051 Fujita Street
Torrance, CA 90505
Tel: (310)-618-8889

Date: 06-04-2024
EMAX Batch No.: 24E188

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 05/30/24.
The data reported relate only to samples listed below :

Sample ID	Control #	Col Date	Matrix	Analysis
MW40-GW052924-193	E188-01	05/29/24	WATER	VOCS BY 8260C
MW40-GW052924-215	E188-02	05/29/24	WATER	VOCS BY 8260C
MW40-GW052924-235	E188-03	05/29/24	WATER	VOCS BY 8260C
FD01-GW052924	E188-04	05/29/24	WATER	VOCS BY 8260C
TB01-GW052924	E188-05	05/29/24	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. 24E188

PROJECT CODE: 275854 TS1.Drill

CLIENT CDM Smith
PROJECT 700 S 1600 E PCE Plume
COORDINATOR Cherie Zakowski
TEL 720-264-1109 FAX EMAIL ZakowskiC@cdmsmith.com
SEND REPORT TO Hans Johannes
COMPANY CDM Smith
ADDRESS 555 17th St. Denver CO 80202
Ste 500
EMAX PM: Linh Pham

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: VOC 8260, VOC 8260

TAT:
- [x] 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 HC	IC	COMMENTS
1	MW40-GW052924-193		5/29/24	0830	3	VOA		GW		X		
2	MW40-GW052924-215		5/29/24	1045	3	VOA		GW			X	
3	MW40-GW052924-235		5/29/24	1415	3	VOA		GW		X		Used unpreserved
4	FD01-GW052924		5/29/24	0800	3	VOA		GW		X		
5	TB01-GW052924		5/29/24	0815	3	VOA		GW		X		
6												
7												
8												
9												

Instructions
CC millerjc@cdmsmith.com, SmithNL@cdmsmith.com w/sample receipt

Cooler #	Temp. (°C)	Sample #s
	5.5	

SAMPLER Shawn McGuire

COURIER/AIRBILL Fed EX

RELINQUISHED BY	Date	Time	RECEIVED BY
Joe Miller	5/29/24	1625	
	5/30/24	930	

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 24E188
☑ Fedex ☐ UPS ☐ GSO ☐ Others	2752728839114	Recipient Nandeen Nacana
☐ EMAX Courier ☐ Client Delivery		Date 05/30/24 Time 930

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 5.5 °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* 210606272	*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
2,3	4-6, 9	D10		R1
3	8	D14		R4
2	5,6	D6		R1
1	3	D3	MW-40-GW052924-193 on label	R1
2,3	4,8	D22		R8

5/30/24

☐ 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 2-4 have a layer of sediment/ samples are cloudy

SAMPLE MATRIX IS DRINKING WATER? ☐ YES ☑ NO Vials for sample 2 were unpreserved.

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 label
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	>20% sediment
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	Use other vials provided.
R9	
R10	
R11	
R12	

REVIEWS:

Sample Labeling Nandeen Nacana — Date 05/30/24 — 5/30/24

SRF — Date 5/30/24

PM LP for Aspar — Date 5/30/24


ORIGIN ID:NPHA (111) 111-1111
CDM SMITH, INC
555 17TH ST STE 500
DENVER, CO 80202
UNITED STATES US
SHIP DATE: 29MAY24
ACTWGT: 17.80 LB
CAD: 6997117/SSFO2500
DIMS: 15x13x12 IN
BILL THIRD PARTY
TO 275851TS1.DRILL
EMAX LABS
3051 FUJITA ST
TORRANCE CA 90505
(310) 618-8889
REF:
INV:
PO:
DEPT:
930 (B)
sealed
5.5
Part # 156297-
FedEx
Express
THU - 30 MAY 10:30A
PRIORITY OVERNIGHT
TRK# 0201 2752 7283 9114
AHS
90505
CA-US LAX
WZ 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 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#: 24E188

CASE NARRATIVE

Client : CDM SMITH

Project: VA SALT LAKE CITY

SDG : 24E188

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

A total of five(5) water samples were received on 05/30/24 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, 2-Butanone and 2-Hexanon. 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, one(1) method blank was analyzed. VO01E26B - 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. VO01E26L/VO01E26C were within LCS limits. Refer to LCS summary form 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.

LAB CHRONICLE
VOLATILE ORGANICS BY GC/MS

Client : CDM SMITH
Project : VA SALT LAKE CITY

SDG NO. : 24E188
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	V001E26L	1	NA	05/30/2411:57	05/30/2411:57	REV558	REV201	V001E26	Lab Control Sample (LCS)
LCD1W	V001E26C	1	NA	05/30/2412:27	05/30/2412:27	REV559	REV201	V001E26	LCS Duplicate
MBLK1W	V001E26B	1	NA	05/30/2413:26	05/30/2413:26	REV561	REV201	V001E26	Method Blank
TB01-GW052924	24E188-05	1	NA	05/30/2414:26	05/30/2414:26	REV563	REV201	V001E26	Field Sample
MW40-GW052924-193	24E188-01	1	NA	05/30/2414:56	05/30/2414:56	REV564	REV201	V001E26	Field Sample
MW40-GW052924-215	24E188-02	1	NA	05/30/2415:26	05/30/2415:26	REV565	REV201	V001E26	Field Sample
MW40-GW052924-235	24E188-03	1	NA	05/30/2415:56	05/30/2415:56	REV566	REV201	V001E26	Field Sample
FD01-GW052924	24E188-04	1	NA	05/30/2416:26	05/30/2416:26	REV567	REV201	V001E26	Field Sample

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	05/29/24 08:30
Project	: VA SALT LAKE CITY	Date Received:	05/30/24
Batch No.	: 24E188	Date Extracted:	05/30/24 14:56
Sample ID	: MW40-GW052924-193	Date Analyzed:	05/30/24 14:56
Lab Samp ID:	24E188-01	Dilution Factor:	1
Lab File ID:	REV564	Matrix:	WATER
Ext Btch ID:	VO01E26	% Moisture:	NA
Calib. Ref.:	REV201	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	11J	20	2.5
Benzene	0.10J	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.10J	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	0.69J	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	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	9.86	10.0	99	70-130
Toluene-d8	9.77	10.0	98	70-130
Dibromofluoromethane	10.3	10.0	103	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : LPriet Analyzed by : LPriet
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E30\REV564.D Vial: 9
Acq On : 30 May 2024 2:56 pm Operator: LPriet
Sample : 24E188-01 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 30 16:04 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

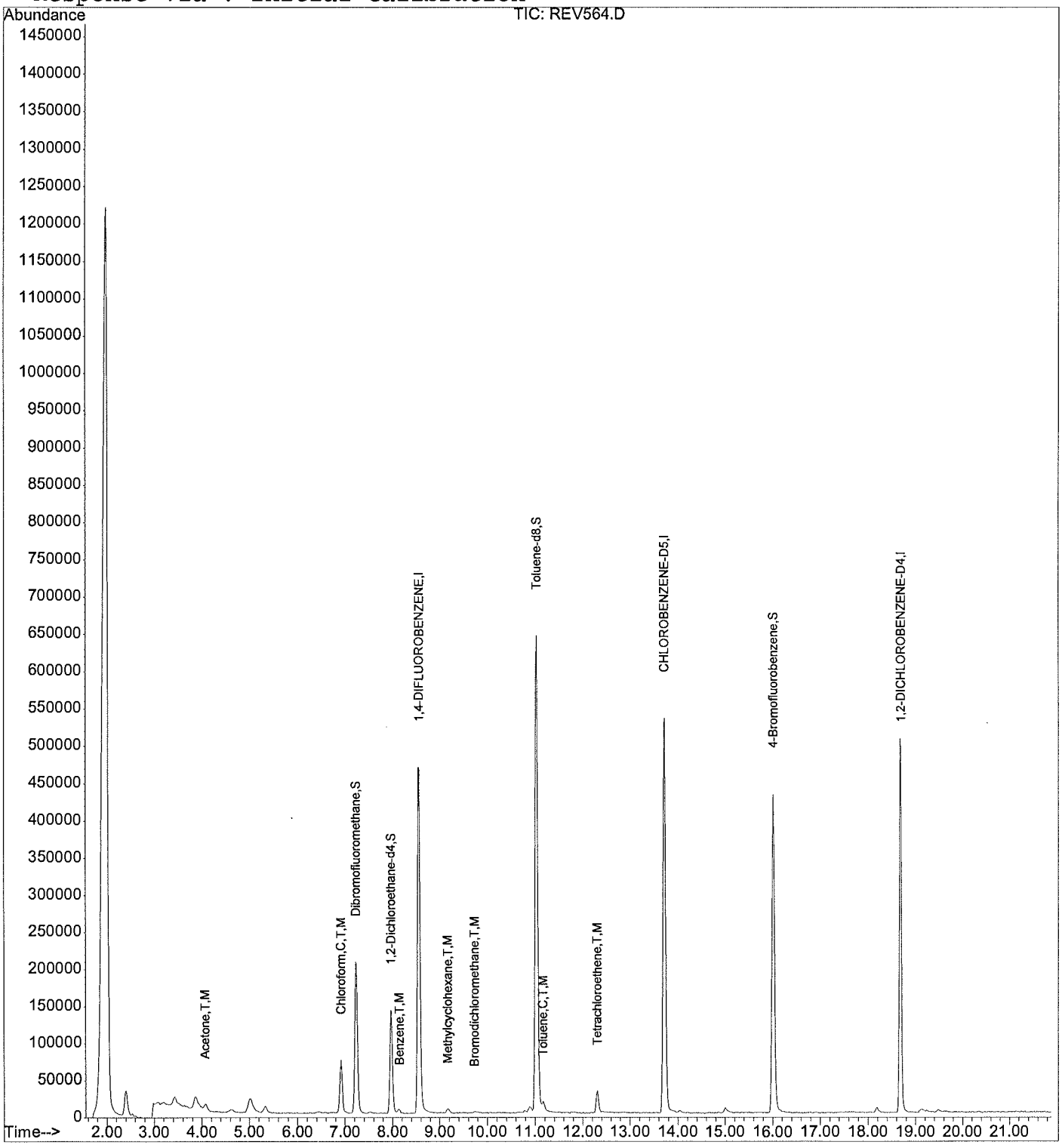
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	763911	10.00	ug/l	0.02
53) CHLOROBENZENE-D5	13.71	117	622137	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	259232	10.00	ug/l	0.01
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	242746	10.27	ug/l	0.00
Spiked Amount 10.000			Recovery =	102.70%		
41) 1,2-Dichloroethane-d4	7.97	65	170237	10.56	ug/l	0.00
Spiked Amount 10.000			Recovery =	105.60%		
54) Toluene-d8	11.03	98	910832	9.77	ug/l	0.00
Spiked Amount 10.000			Recovery =	97.70%		
76) 4-Bromofluorobenzene	16.01	95	348255	9.86	ug/l	0.00
Spiked Amount 10.000			Recovery =	98.60%		
Target Compounds						Qvalue
13) Acetone	4.07	43	31926	11.45	ug/l	100
31) Chloroform	6.92	83	109560	2.34	ug/l	98
42) Benzene	8.15	78	10320	0.10	ug/l	92
45) Methylcyclohexane	9.17	83	4793	0.11	ug/l	93
47) Bromodichloromethane	9.73	83	3264	0.10	ug/l	97
55) Toluene	11.17	91	18389	0.17	ug/l	94
61) Tetrachloroethene	12.31	164	15830	0.69	ug/l	97

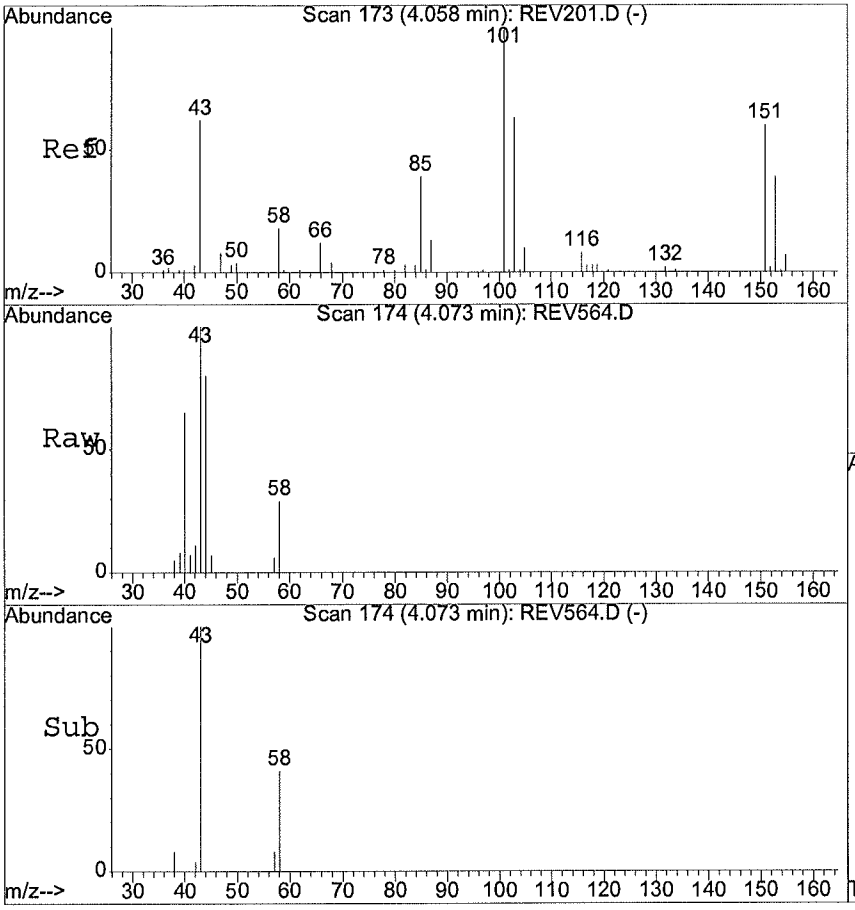
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E30\REV564.D Vial: 9
Acq On : 30 May 2024 2:56 pm Operator: LPriet
Sample : 24E188-01 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 30 16:04 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration

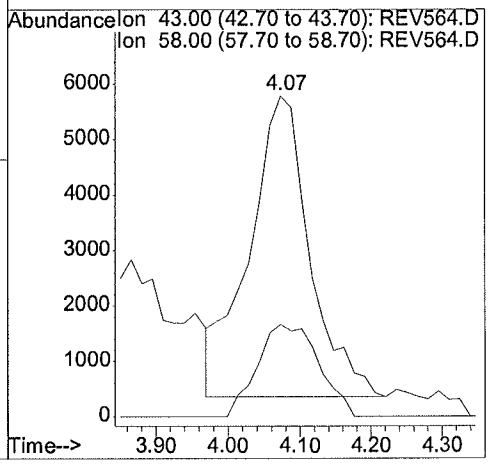


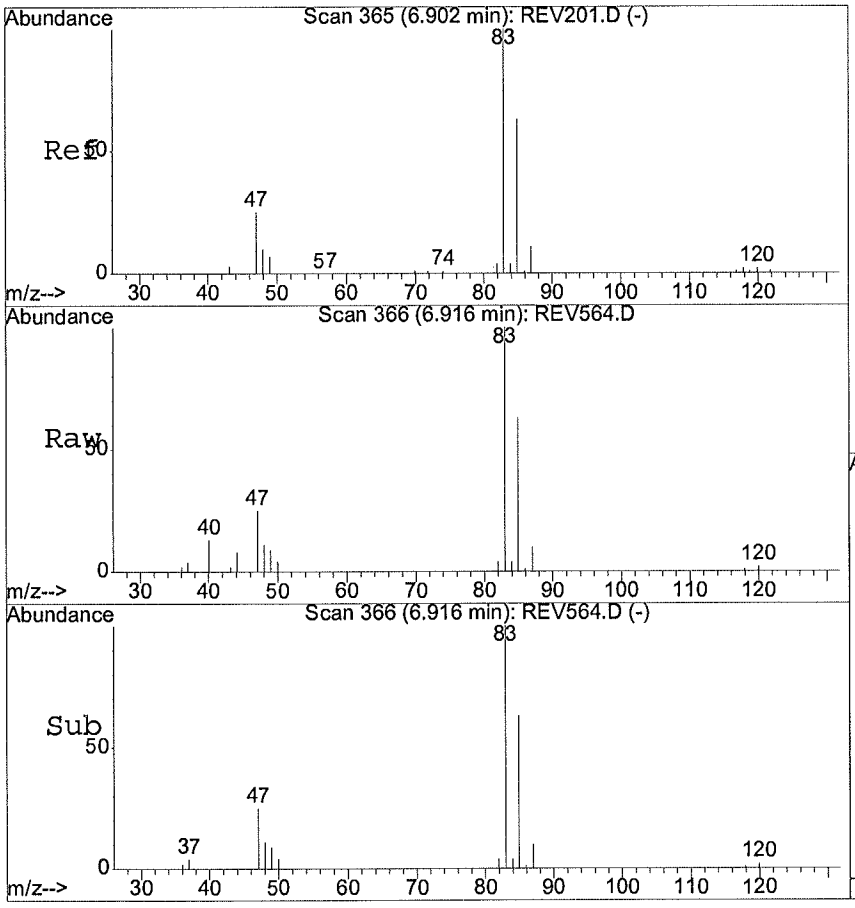


#13
Acetone
Concen: 11.45 ug/l
RT: 4.07 min Scan# 174
Delta R.T. 0.02 min
Lab File: REV564.D
Acq: 30 May 2024 2:56 pm

Tgt Ion: 43 Resp: 31926

Ion	Ratio	Lower	Upper
43	100		
58	31.0	0.9	60.9

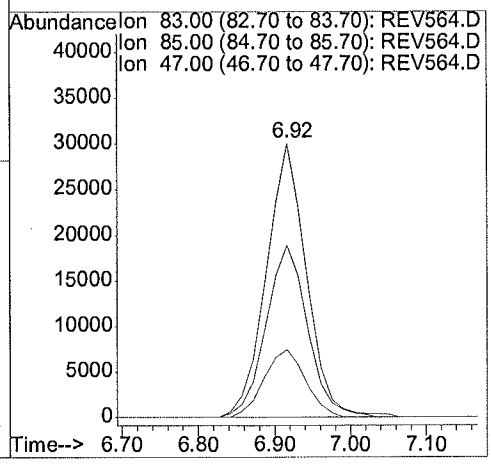


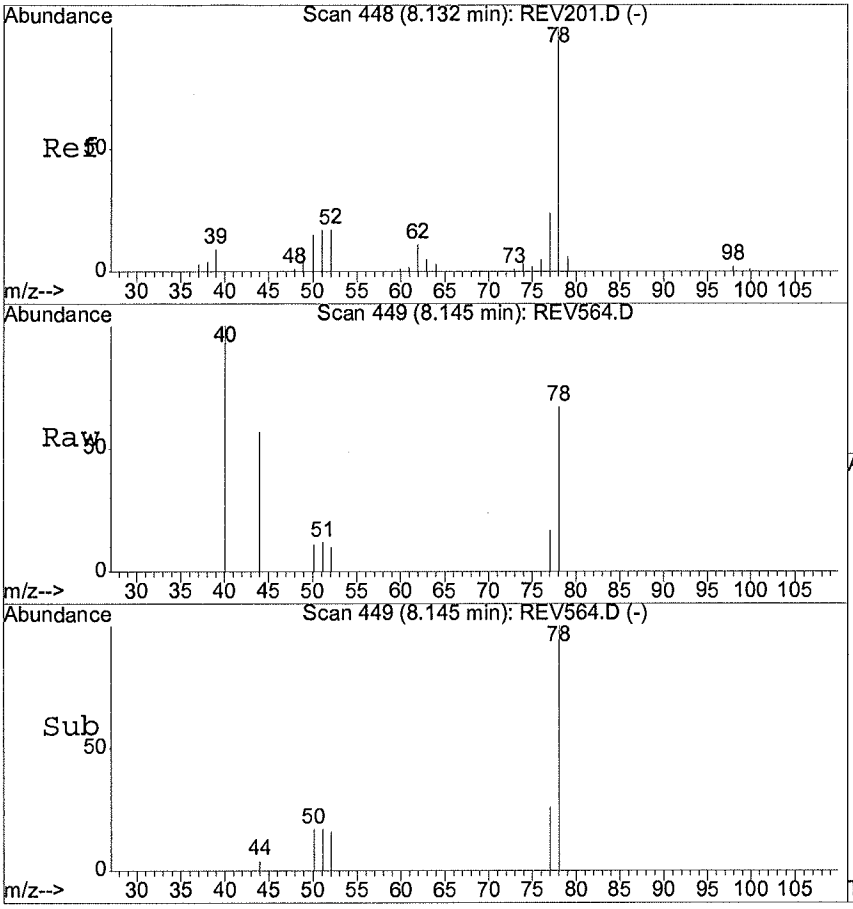


#31
Chloroform
Concen: 2.34 ug/l
RT: 6.92 min Scan# 366
Delta R.T. 0.01 min
Lab File: REV564.D
Acq: 30 May 2024 2:56 pm

Tgt Ion: 83 Resp: 109560

Ion	Ratio	Lower	Upper
83	100		
85	66.4	38.2	98.2
47	25.8	0.0	54.7

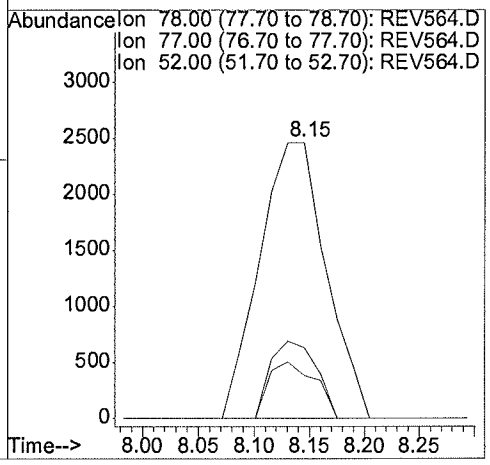


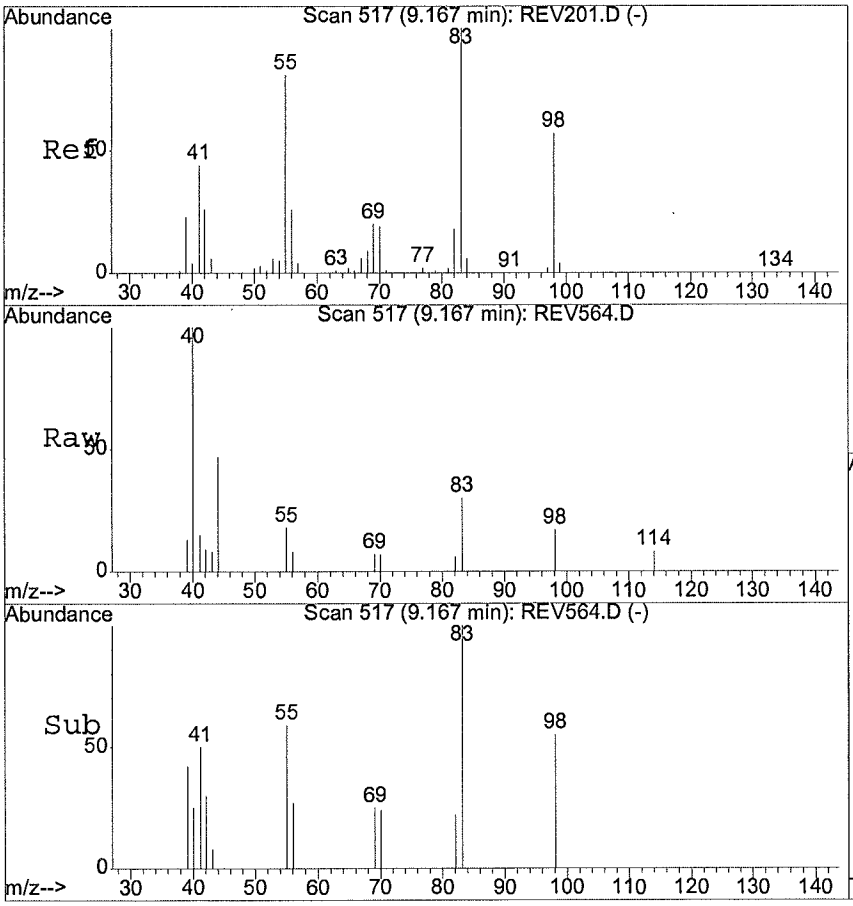


#42
Benzene
Concen: 0.10 ug/l
RT: 8.15 min Scan# 449
Delta R.T. 0.01 min
Lab File: REV564.D
Acq: 30 May 2024 2:56 pm

Tgt Ion: 78 Resp: 10320

Ion	Ratio	Lower	Upper
78	100		
77	19.4	0.0	54.0
52	14.2	0.0	46.8

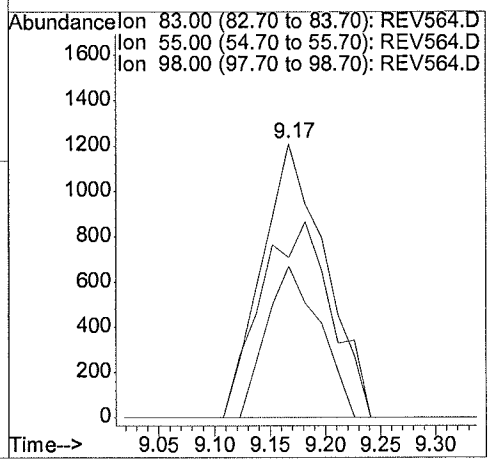


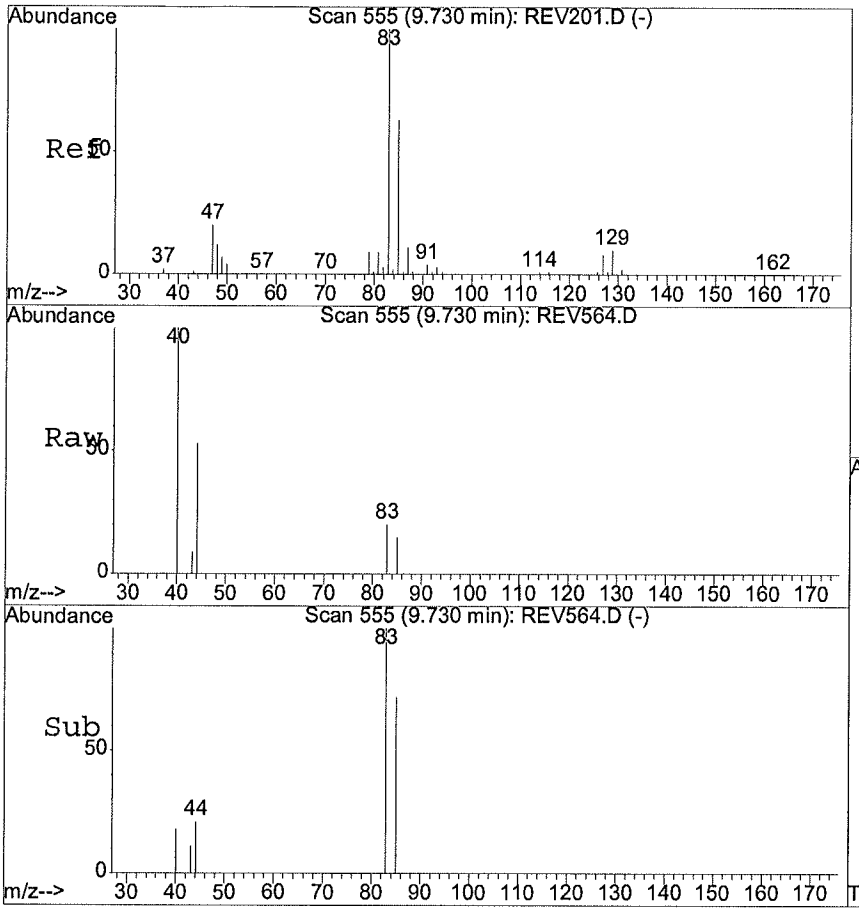


#45
Methylcyclohexane
Concen: 0.11 ug/l
RT: 9.17 min Scan# 517
Delta R.T. 0.00 min
Lab File: REV564.D
Acq: 30 May 2024 2:56 pm

Tgt Ion: 83 Resp: 4793

Ion	Ratio	Lower	Upper
83	100		
55	81.5	52.6	112.6
98	47.2	28.2	88.2

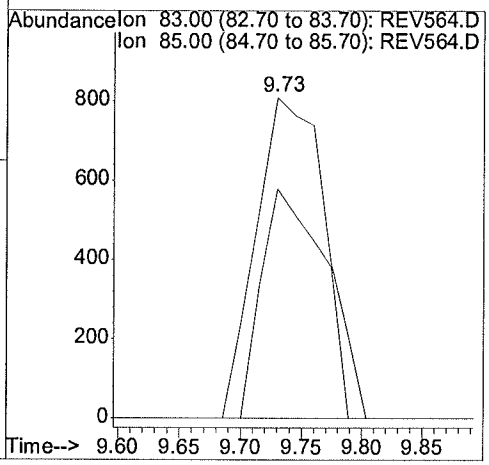


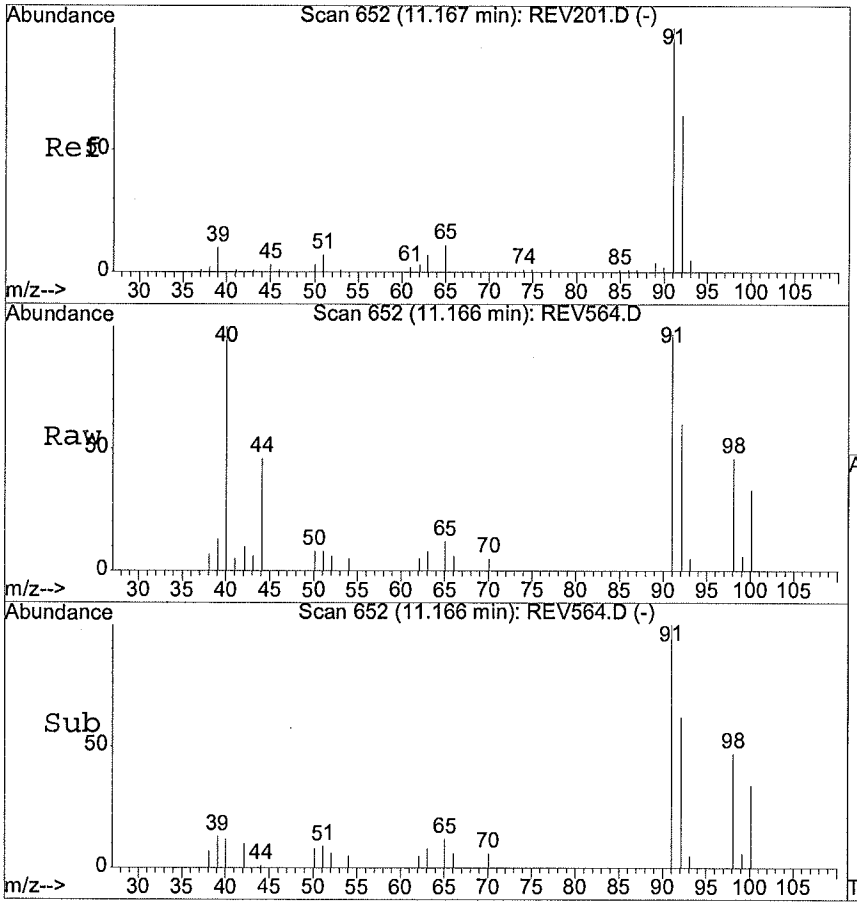


#47
Bromodichloromethane
Concen: 0.10 ug/l
RT: 9.73 min Scan# 555
Delta R.T. 0.00 min
Lab File: REV564.D
Acq: 30 May 2024 2:56 pm

Tgt Ion: 83 Resp: 3264

Ion	Ratio	Lower	Upper
83	100		
85	61.5	34.1	94.1

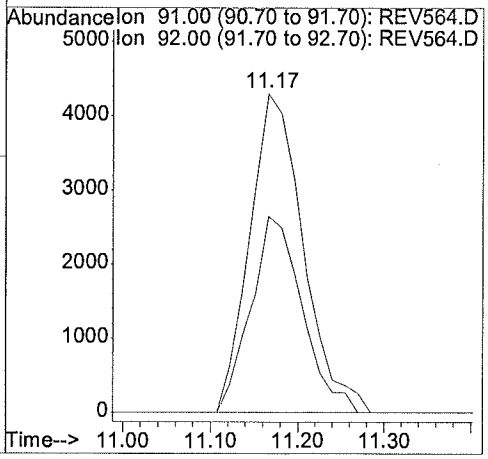


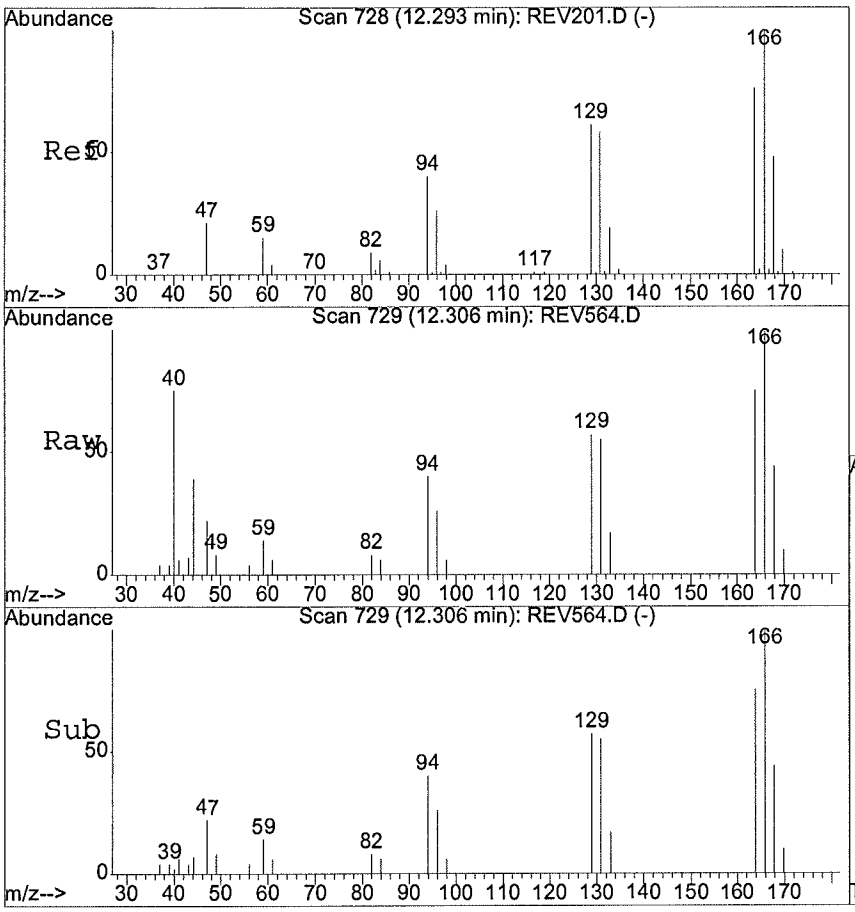


#55
Toluene
Concen: 0.17 ug/l
RT: 11.17 min Scan# 652
Delta R.T. -0.00 min
Lab File: REV564.D
Acq: 30 May 2024 2:56 pm

Tgt Ion: 91 Resp: 18389

Ion	Ratio	Lower	Upper
91	100		
92	59.3	34.0	94.0

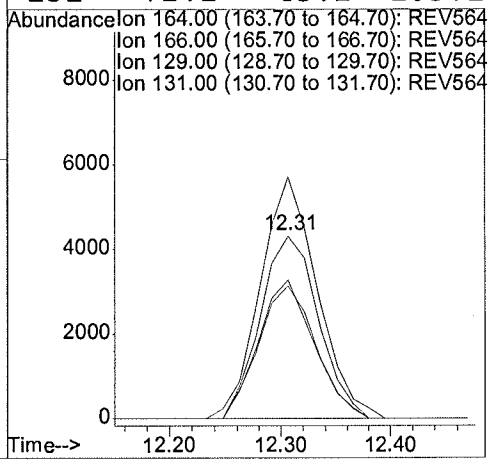




#61
Tetrachloroethene
Concen: 0.69 ug/l
RT: 12.31 min Scan# 729
Delta R.T. 0.01 min
Lab File: REV564.D
Acq: 30 May 2024 2:56 pm

Tgt Ion:164 Resp: 15830

Ion	Ratio	Lower	Upper
164	100		
166	129.7	101.0	161.0
129	72.9	49.2	109.2
131	72.2	45.1	105.1



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	05/29/24 10:45
Project	: VA SALT LAKE CITY	Date Received:	05/30/24
Batch No.	: 24E188	Date Extracted:	05/30/24 15:26
Sample ID	: MW40-GW052924-215	Date Analyzed:	05/30/24 15:26
Lab Samp ID:	24E188-02	Dilution Factor:	1
Lab File ID:	REV565	Matrix:	WATER
Ext Btch ID:	VOO1E26	% Moisture:	NA
Calib. Ref.:	REV201	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	6.7J	20	2.5
Benzene	0.10J	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	1.7	1.0	0.15
Toluene	0.14J	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	9.80	10.0	98	70-130
Toluene-d8	9.50	10.0	95	70-130
Dibromofluoromethane	10.2	10.0	102	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : LPriet Analyzed by : LPriet
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E30\REV565.D Vial: 10
Acq On : 30 May 2024 3:26 pm Operator: LPriet
Sample : 24E188-02 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 30 16:06 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

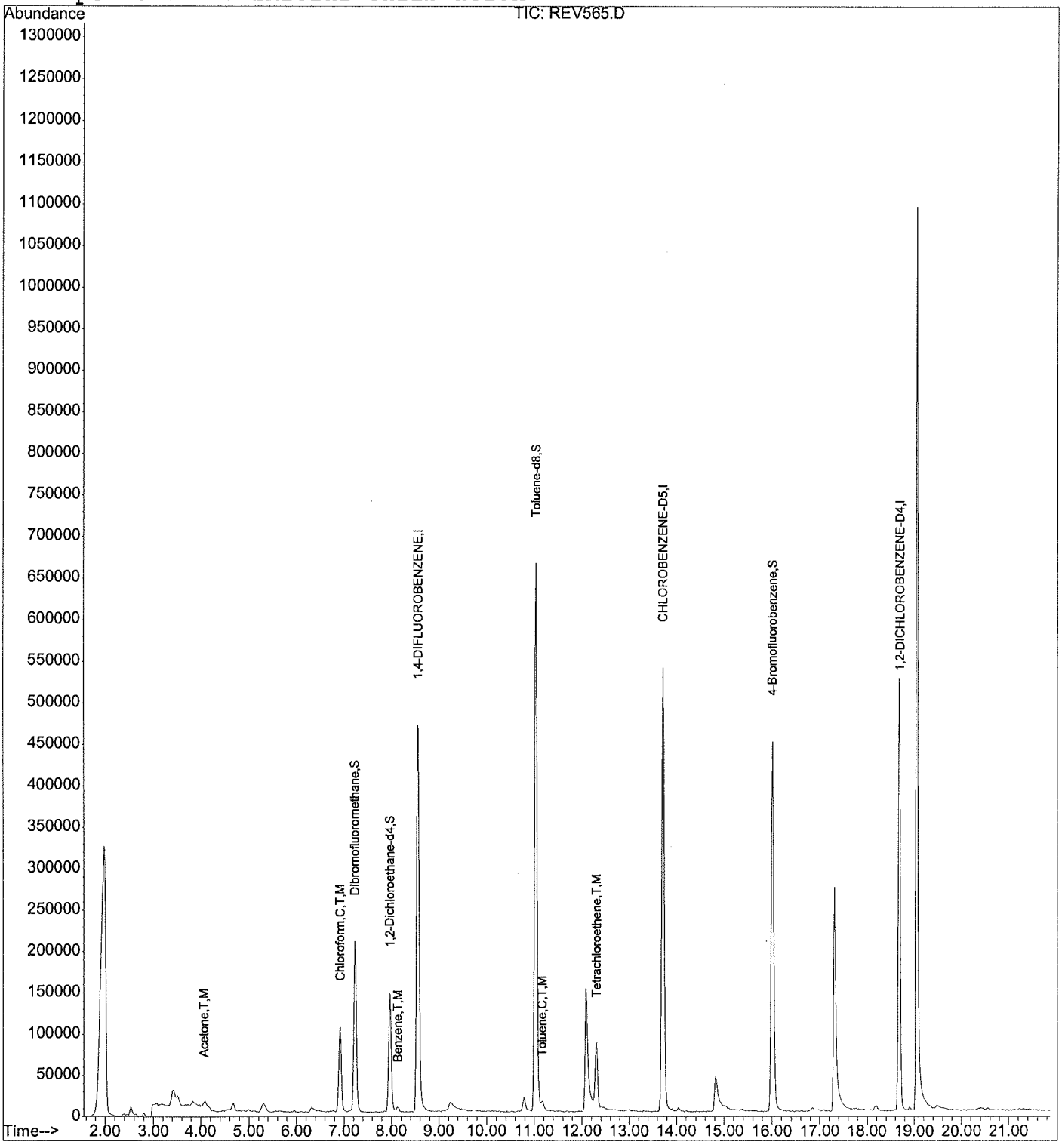
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	773333	10.00	ug/l	0.02
53) CHLOROBENZENE-D5	13.71	117	634416	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	265138	10.00	ug/l	0.01
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	243172	10.16	ug/l	0.00
Spiked Amount 10.000			Recovery =	101.60%		
41) 1,2-Dichloroethane-d4	7.97	65	176429	10.81	ug/l	0.00
Spiked Amount 10.000			Recovery =	108.10%		
54) Toluene-d8	11.03	98	903432	9.50	ug/l	0.00
Spiked Amount 10.000			Recovery =	95.00%		
76) 4-Bromofluorobenzene	16.01	95	354014	9.80	ug/l	0.00
Spiked Amount 10.000			Recovery =	98.00%		
Target Compounds						Qvalue
13) Acetone	4.07	43	18870	6.69	ug/l	# 1
31) Chloroform	6.92	83	156303	3.30	ug/l	97
42) Benzene	8.13	78	10349	0.10	ug/l	97
55) Toluene	11.17	91	15246	0.14	ug/l	97
61) Tetrachloroethene	12.31	164	40513	1.73	ug/l	99

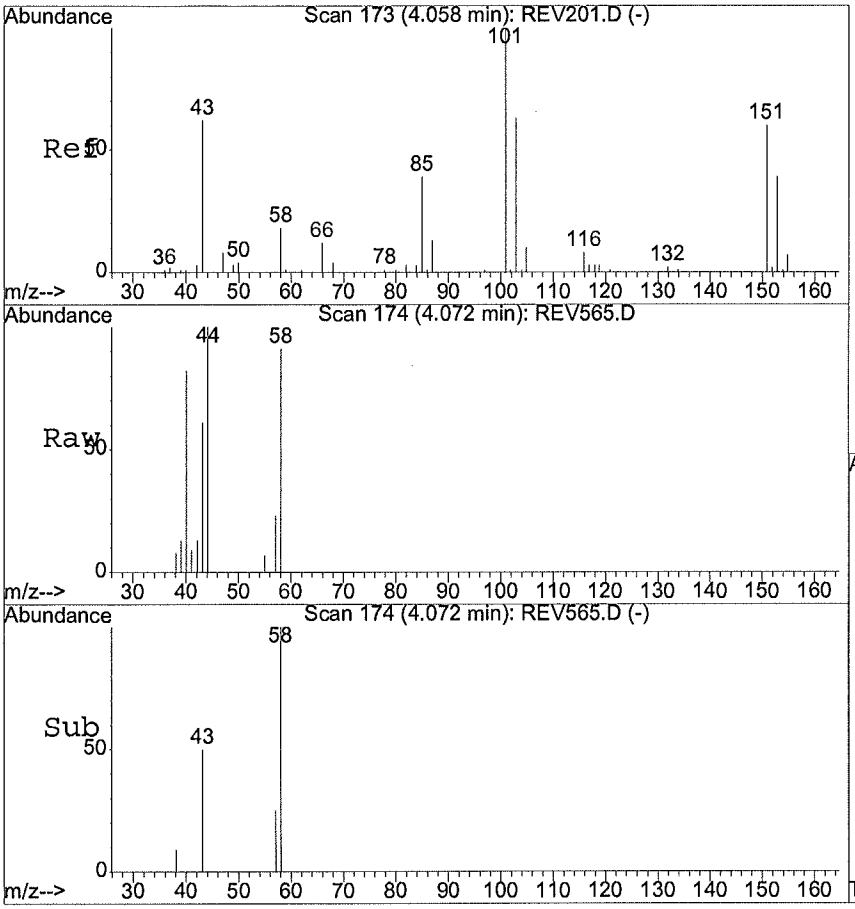
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E30\REV565.D Vial: 10
Acq On : 30 May 2024 3:26 pm Operator: LPriet
Sample : 24E188-02 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 30 16:06 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration

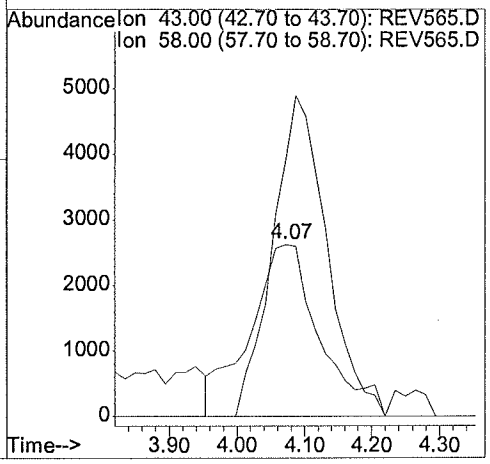


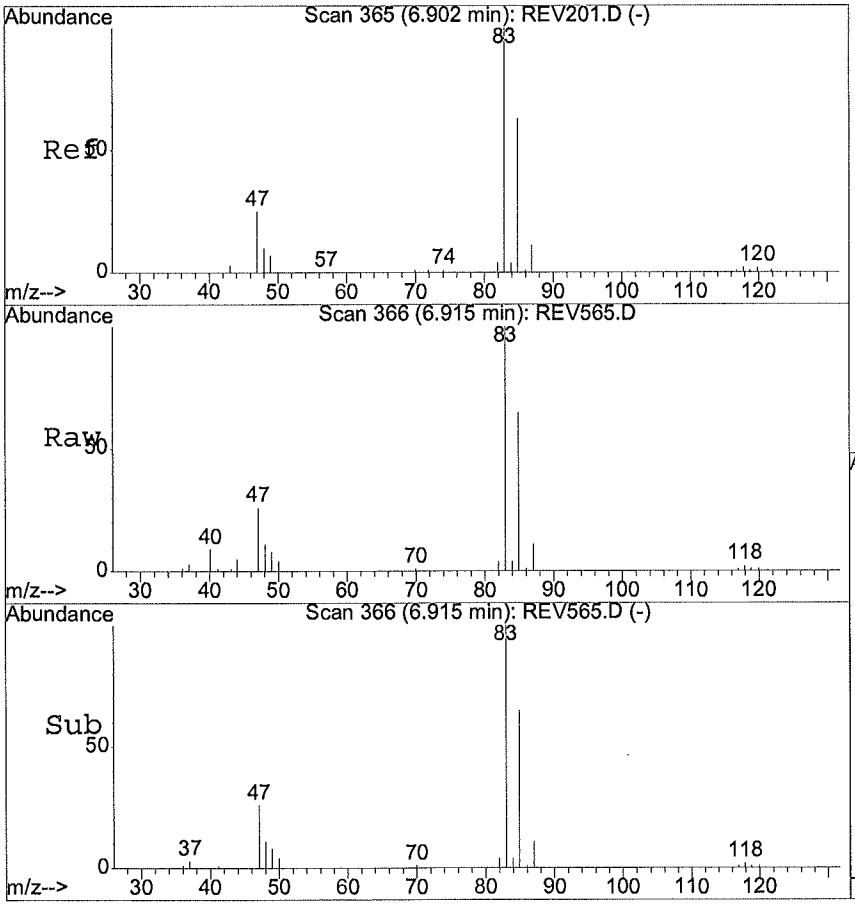


#13
Acetone
Concen: 6.69 ug/l
RT: 4.07 min Scan# 174
Delta R.T. 0.01 min
Lab File: REV565.D
Acq: 30 May 2024 3:26 pm

Tgt Ion: 43 Resp: 18870

Ion	Ratio	Lower	Upper
43	100		
58	144.0	0.9	60.9#

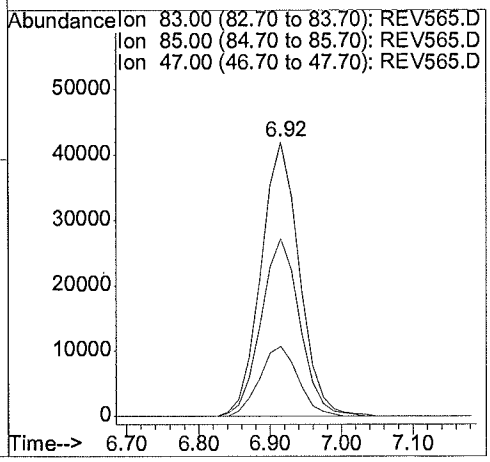


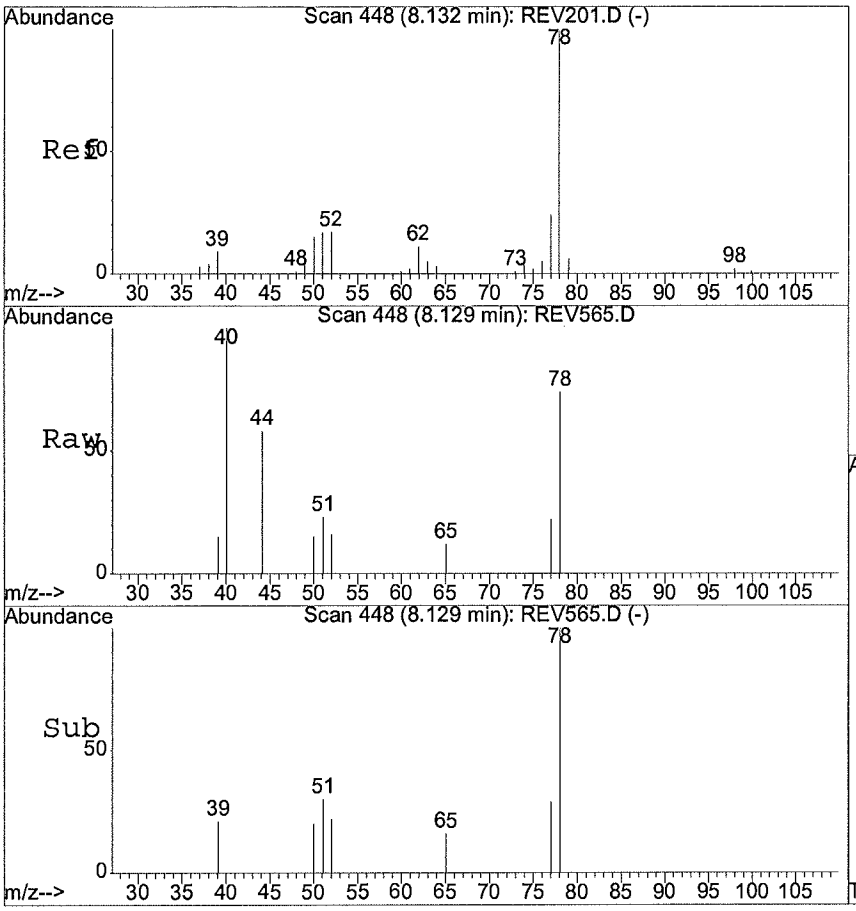


#31
Chloroform
Concen: 3.30 ug/l
RT: 6.92 min Scan# 366
Delta R.T. 0.01 min
Lab File: REV565.D
Acq: 30 May 2024 3:26 pm

Tgt Ion: 83 Resp: 156303

Ion	Ratio	Lower	Upper
83	100		
85	65.6	38.2	98.2
47	25.7	0.0	54.7

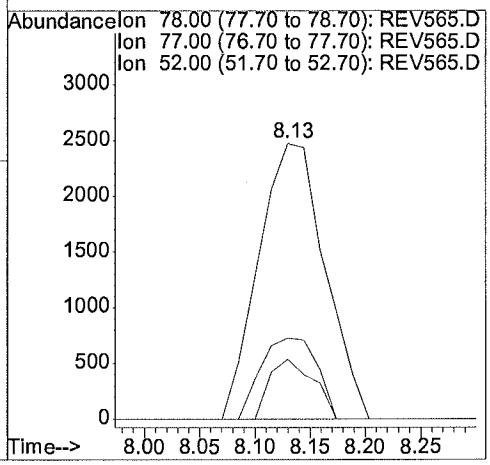


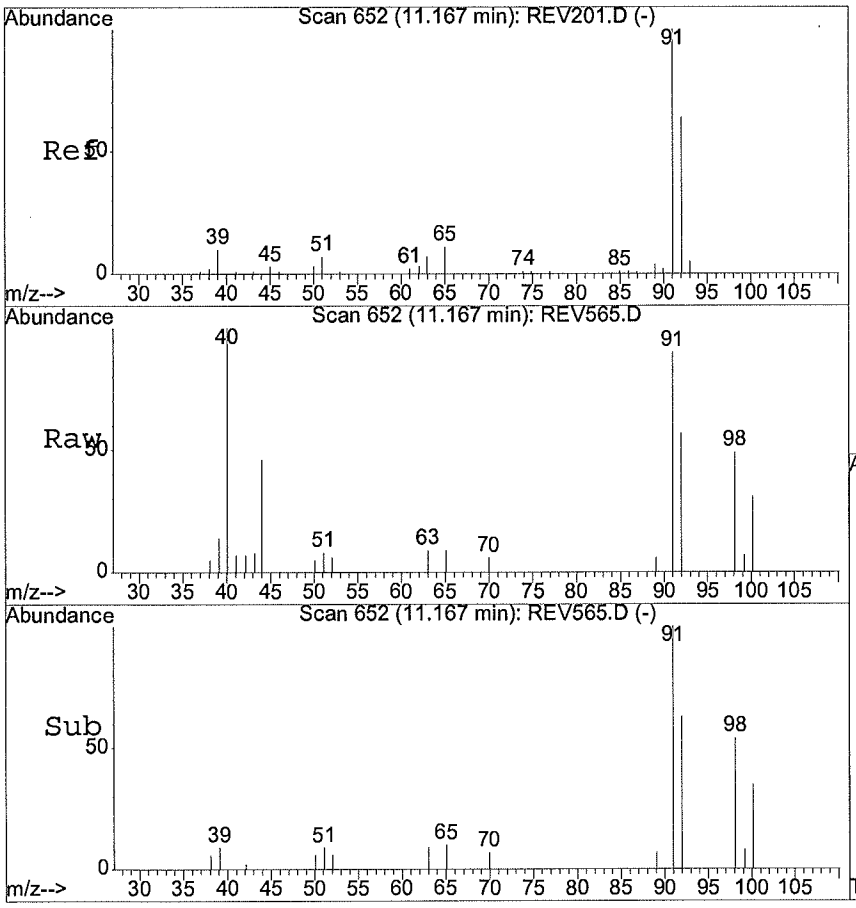


#42
Benzene
Concen: 0.10 ug/l
RT: 8.13 min Scan# 448
Delta R.T. -0.00 min
Lab File: REV565.D
Acq: 30 May 2024 3:26 pm

Tgt Ion: 78 Resp: 10349

Ion	Ratio	Lower	Upper
78	100		
77	25.0	0.0	54.0
52	14.5	0.0	46.8

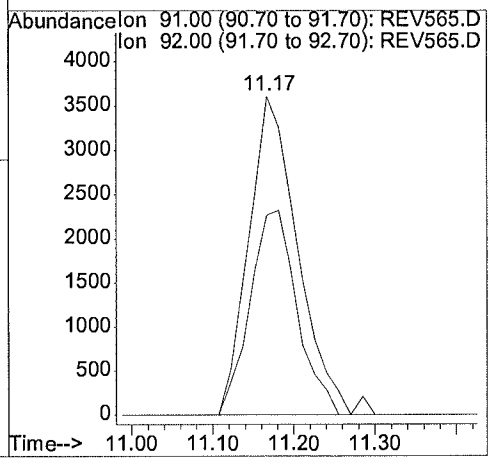


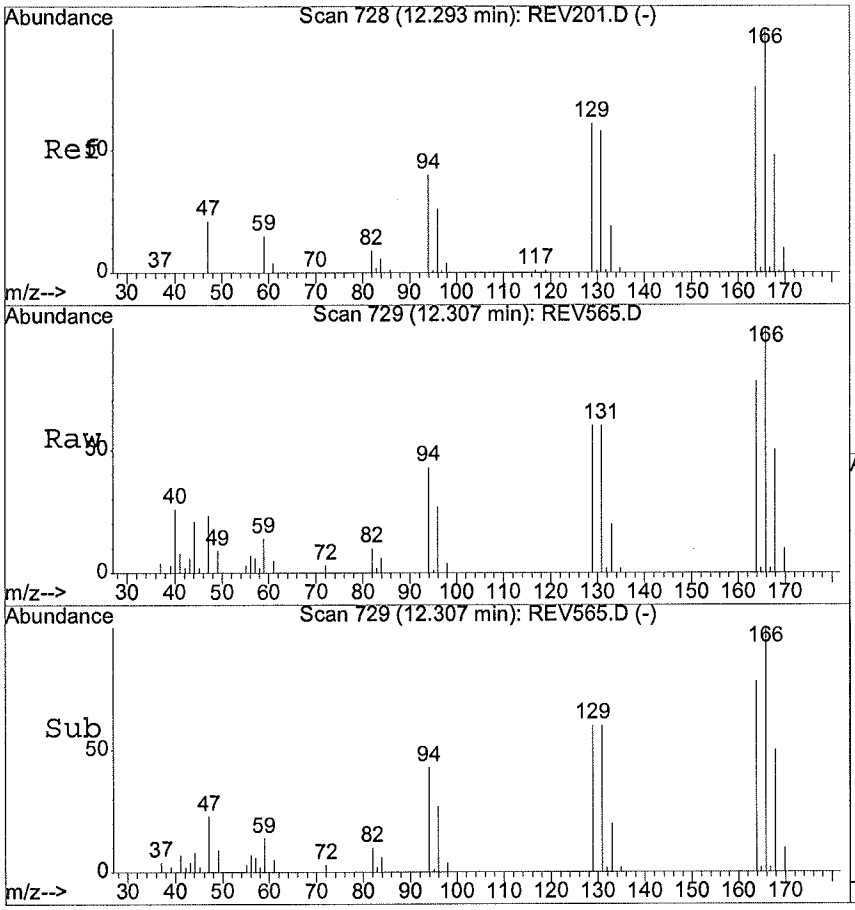


#55
Toluene
Concen: 0.14 ug/l
RT: 11.17 min Scan# 652
Delta R.T. 0.00 min
Lab File: REV565.D
Acq: 30 May 2024 3:26 pm

Tgt Ion: 91 Resp: 15246

Ion	Ratio	Lower	Upper
91	100		
92	61.6	34.0	94.0

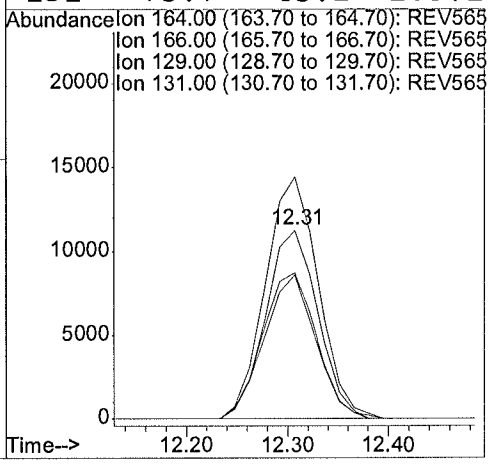




#61
Tetrachloroethene
Concen: 1.73 ug/l
RT: 12.31 min Scan# 729
Delta R.T. 0.01 min
Lab File: REV565.D
Acq: 30 May 2024 3:26 pm

Tgt Ion:164 Resp: 40513

Ion	Ratio	Lower	Upper
164	100		
166	129.9	101.0	161.0
129	79.8	49.2	109.2
131	75.7	45.1	105.1



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	05/29/24 14:15
Project	: VA SALT LAKE CITY	Date Received:	05/30/24
Batch No.	: 24E188	Date Extracted:	05/30/24 15:56
Sample ID	: MW40-GW052924-235	Date Analyzed:	05/30/24 15:56
Lab Samp ID:	24E188-03	Dilution Factor:	1
Lab File ID:	REV566	Matrix:	WATER
Ext Btch ID:	VO01E26	% Moisture:	NA
Calib. Ref.:	REV201	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	14J	20	2.5
Benzene	0.17J	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	4.2	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	7.5	1.0	0.15
Toluene	0.11J	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	9.83	10.0	98	70-130
Toluene-d8	9.50	10.0	95	70-130
Dibromofluoromethane	10.2	10.0	102	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : LPriet Analyzed by : LPriet
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E30\REV566.D Vial: 11
Acq On : 30 May 2024 3:56 pm Operator: LPriet
Sample : 24E188-03 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 30 16:44 2024 Quant Results File: VO01E11.RES

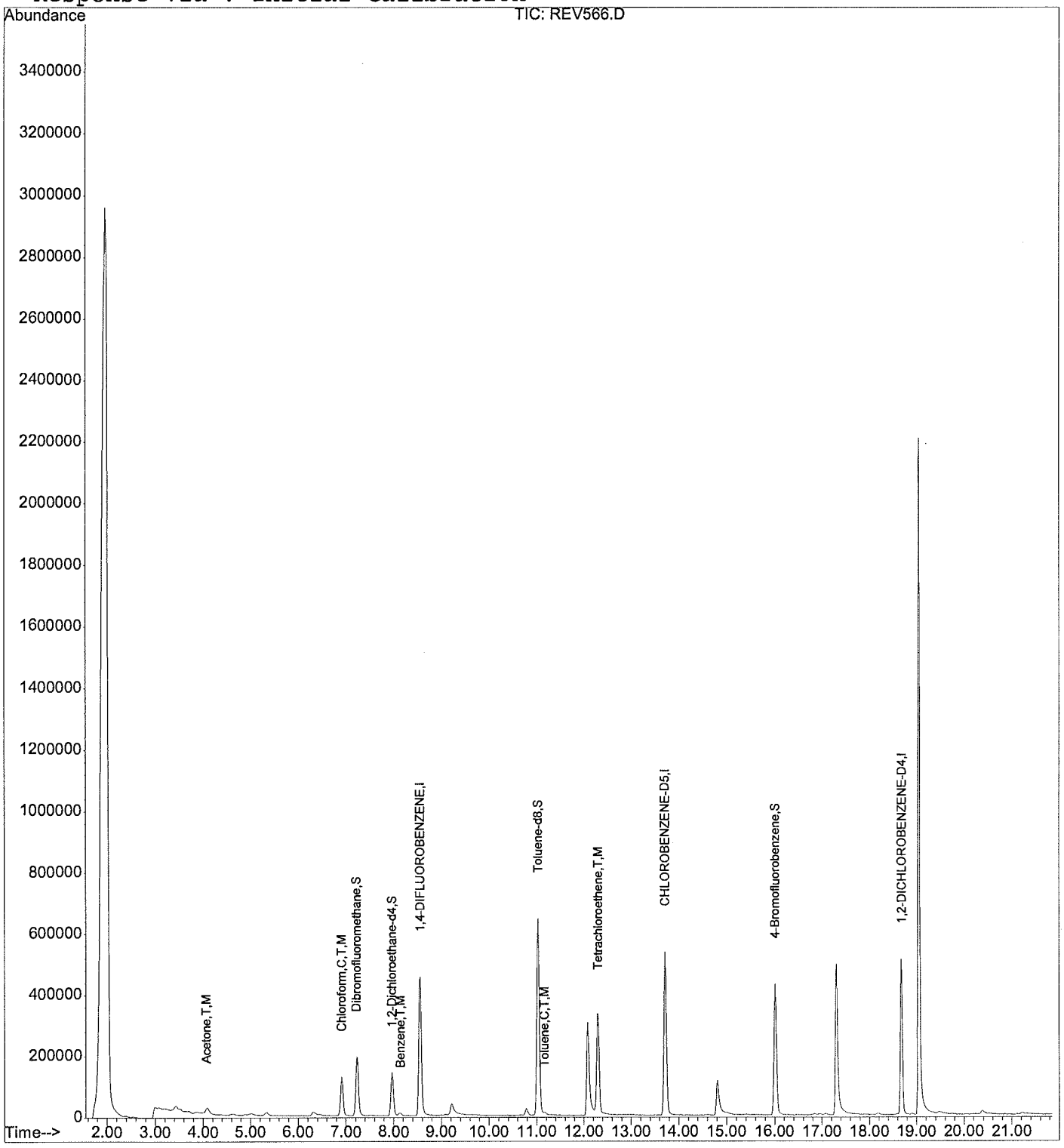
Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

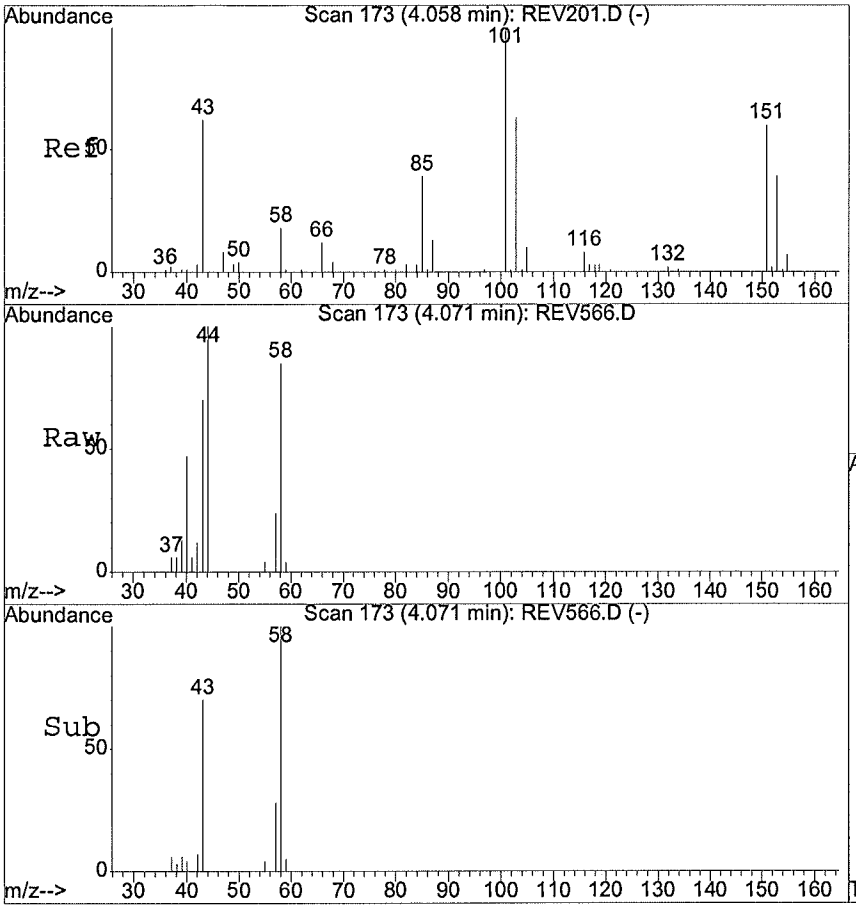
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	750397	10.00	ug/l	0.02
53) CHLOROBENZENE-D5	13.71	117	620702	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	257784	10.00	ug/l	0.01
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	236373	10.18	ug/l	0.00
Spiked Amount 10.000			Recovery =	101.80%		
41) 1,2-Dichloroethane-d4	7.97	65	169581	10.71	ug/l	0.00
Spiked Amount 10.000			Recovery =	107.10%		
54) Toluene-d8	11.03	98	883278	9.50	ug/l	0.00
Spiked Amount 10.000			Recovery =	95.00%		
76) 4-Bromofluorobenzene	16.01	95	345010	9.83	ug/l	0.00
Spiked Amount 10.000			Recovery =	98.30%		
Target Compounds						Qvalue
13) Acetone	4.07	43	37776	13.79	ug/l	# 1
31) Chloroform	6.91	83	193232	4.20	ug/l	97
42) Benzene	8.14	78	16802	0.17	ug/l	98
55) Toluene	11.17	91	11741	0.11	ug/l	96
61) Tetrachloroethene	12.31	164	171850	7.50	ug/l	99

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24E30\REV566.D Vial: 11
Acq On : 30 May 2024 3:56 pm Operator: LPriet
Sample : 24E188-03 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 30 16:44 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration

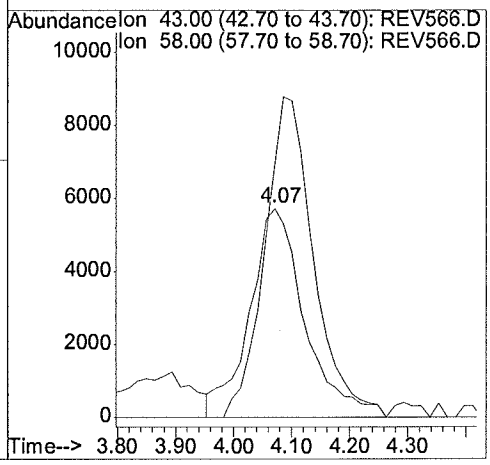


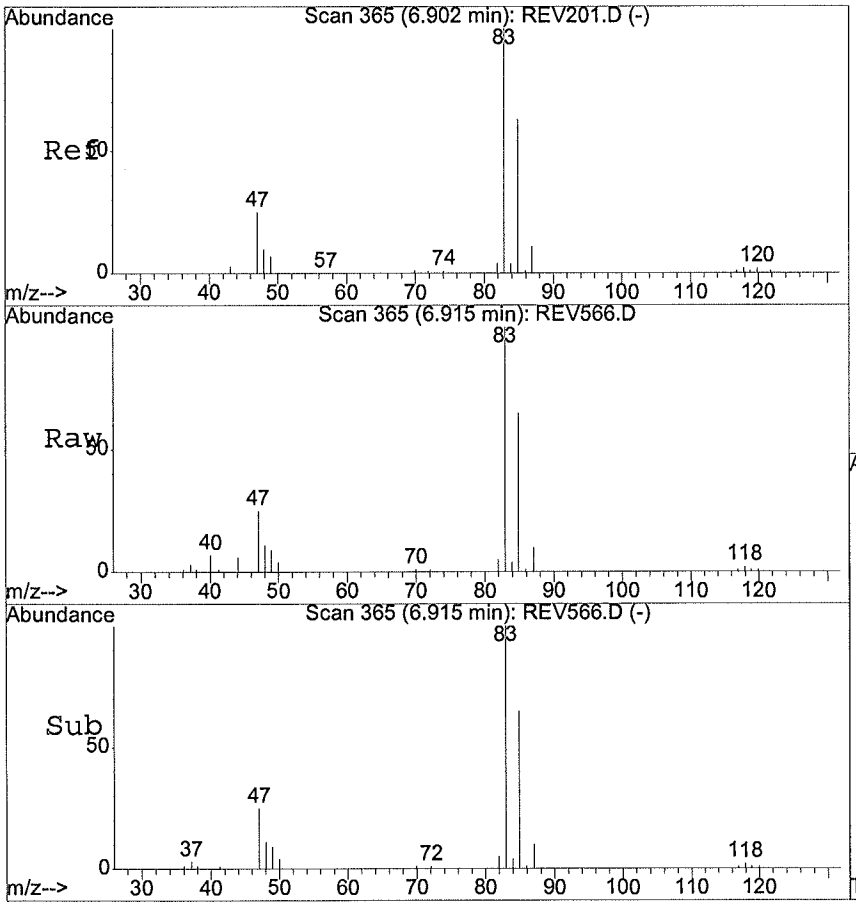


#13
Acetone
Concen: 13.79 ug/l
RT: 4.07 min Scan# 173
Delta R.T. 0.01 min
Lab File: REV566.D
Acq: 30 May 2024 3:56 pm

Tgt Ion: 43 Resp: 37776

Ion	Ratio	Lower	Upper
43	100		
58	135.8	0.9	60.9#

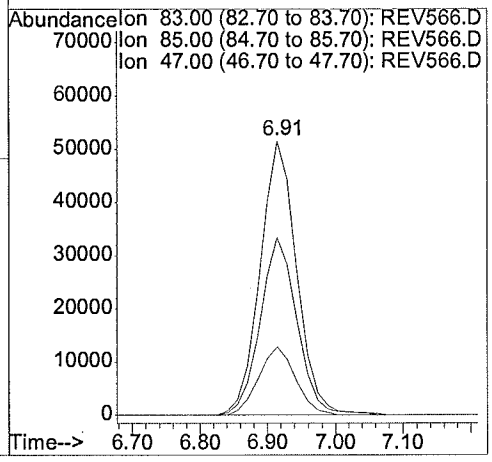


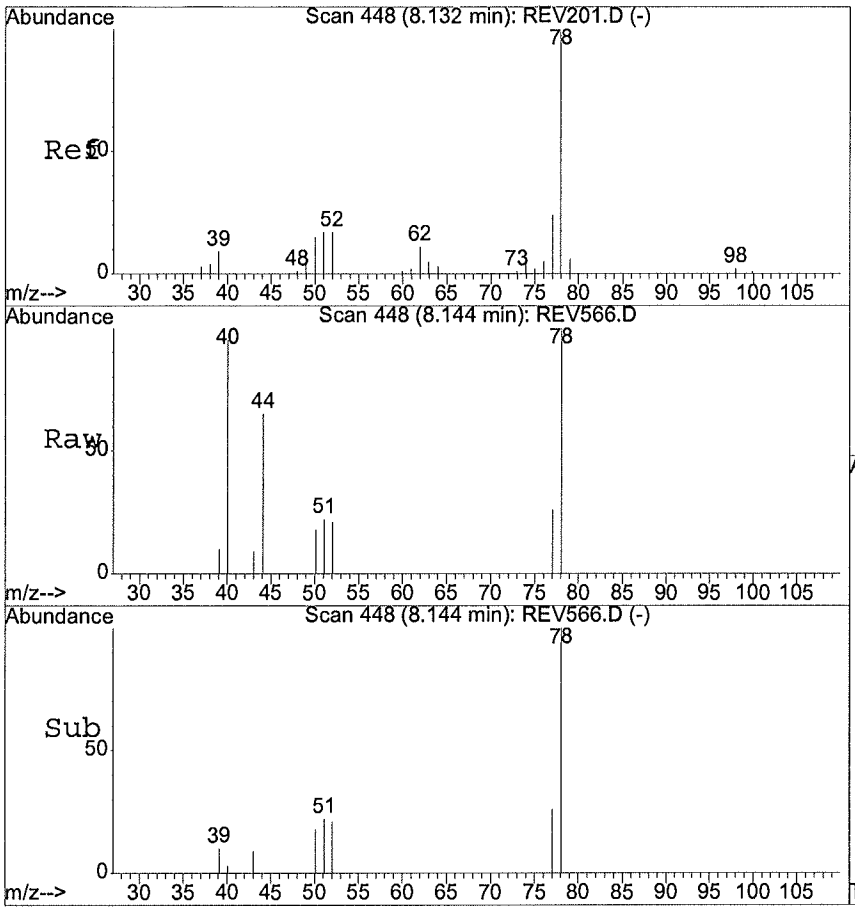


#31
Chloroform
Concen: 4.20 ug/l
RT: 6.91 min Scan# 365
Delta R.T. 0.01 min
Lab File: REV566.D
Acq: 30 May 2024 3:56 pm

Tgt Ion: 83 Resp: 193232

Ion	Ratio	Lower	Upper
83	100		
85	65.6	38.2	98.2
47	25.1	0.0	54.7

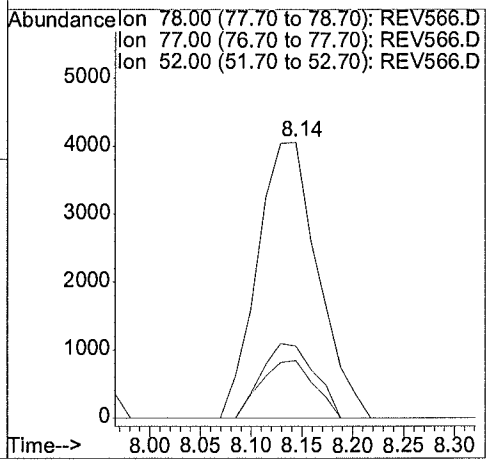


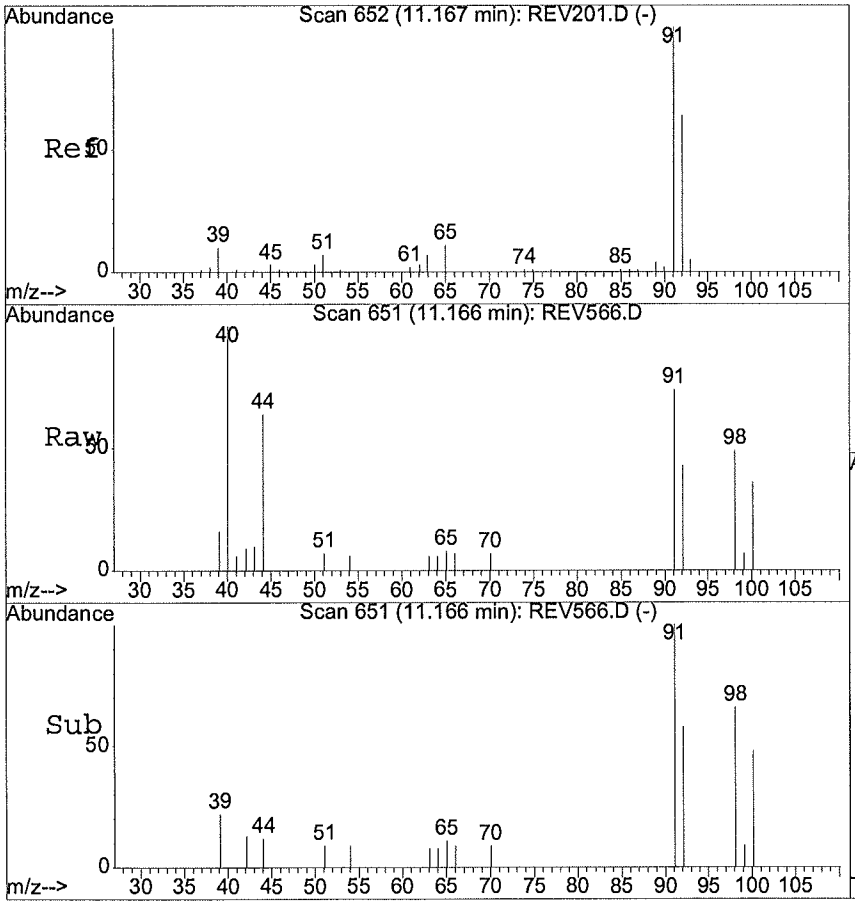


#42
Benzene
Concen: 0.17 ug/l
RT: 8.14 min Scan# 448
Delta R.T. 0.01 min
Lab File: REV566.D
Acq: 30 May 2024 3:56 pm

Tgt Ion: 78 Resp: 16802

Ion	Ratio	Lower	Upper
78	100		
77	23.8	0.0	54.0
52	18.3	0.0	46.8

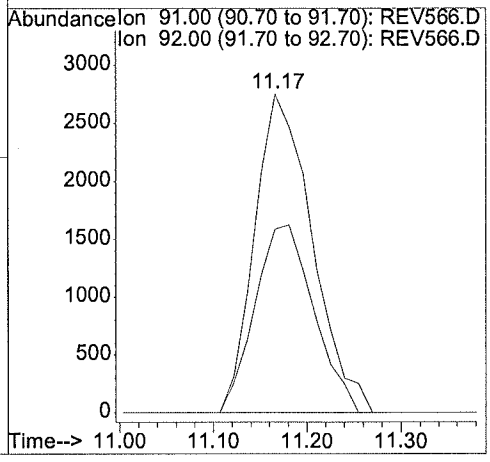


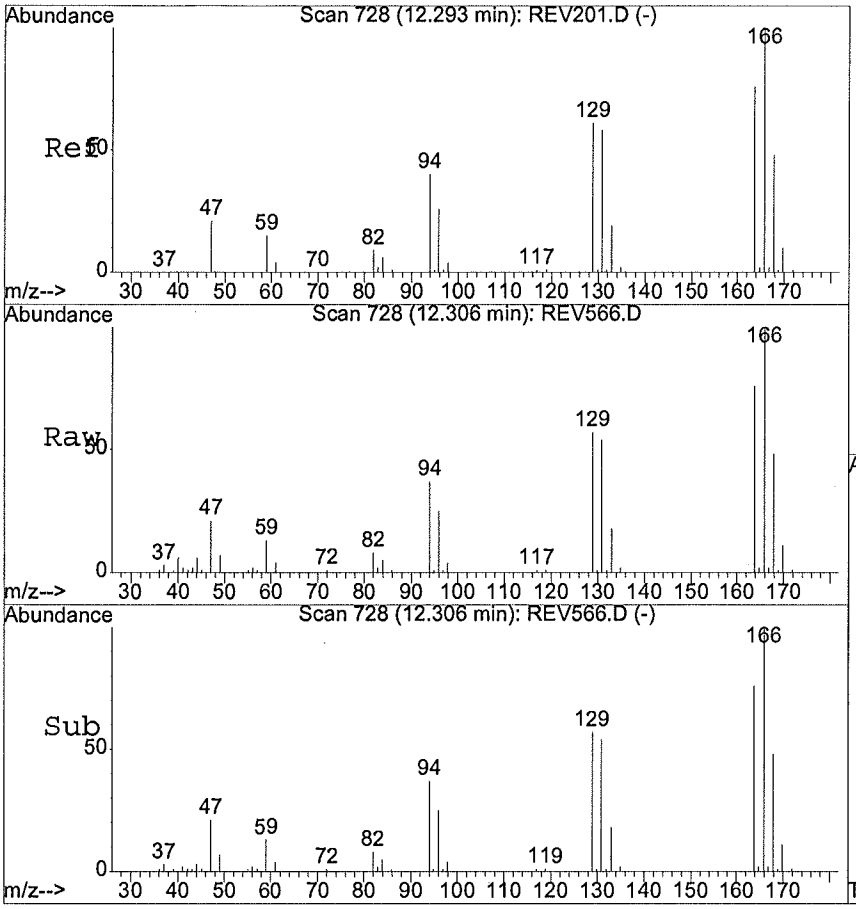


#55
Toluene
Concen: 0.11 ug/l
RT: 11.17 min Scan# 651
Delta R.T. -0.00 min
Lab File: REV566.D
Acq: 30 May 2024 3:56 pm

Tgt Ion: 91 Resp: 11741

Ion	Ratio	Lower	Upper
91	100		
92	60.5	34.0	94.0

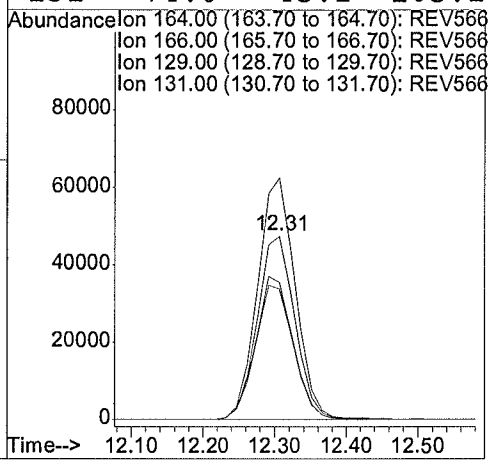




#61
Tetrachloroethene
Concen: 7.50 ug/l
RT: 12.31 min Scan# 728
Delta R.T. 0.01 min
Lab File: REV566.D
Acq: 30 May 2024 3:56 pm

Tgt Ion:164 Resp: 171850

Ion	Ratio	Lower	Upper
164	100		
166	131.9	101.0	161.0
129	77.8	49.2	109.2
131	74.0	45.1	105.1



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	05/29/24 08:00
Project	: VA SALT LAKE CITY	Date Received:	05/30/24
Batch No.	: 24E188	Date Extracted:	05/30/24 16:26
Sample ID	: FD01-GW052924	Date Analyzed:	05/30/24 16:26
Lab Samp ID:	24E188-04	Dilution Factor:	1
Lab File ID:	REV567	Matrix:	WATER
Ext Btch ID:	V001E26	% Moisture:	NA
Calib. Ref.:	REV201	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	14J	20	2.5
Benzene	0.14J	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	4.1	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	7.2	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	10.6	10.0	106	70-130
Bromofluorobenzene	9.72	10.0	97	70-130
Toluene-d8	9.52	10.0	95	70-130
Dibromofluoromethane	10.2	10.0	102	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : LPriet Analyzed by : LPriet
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E30\REV567.D Vial: 12
Acq On : 30 May 2024 4:26 pm Operator: LPriet
Sample : 24E188-04 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 30 17:12 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

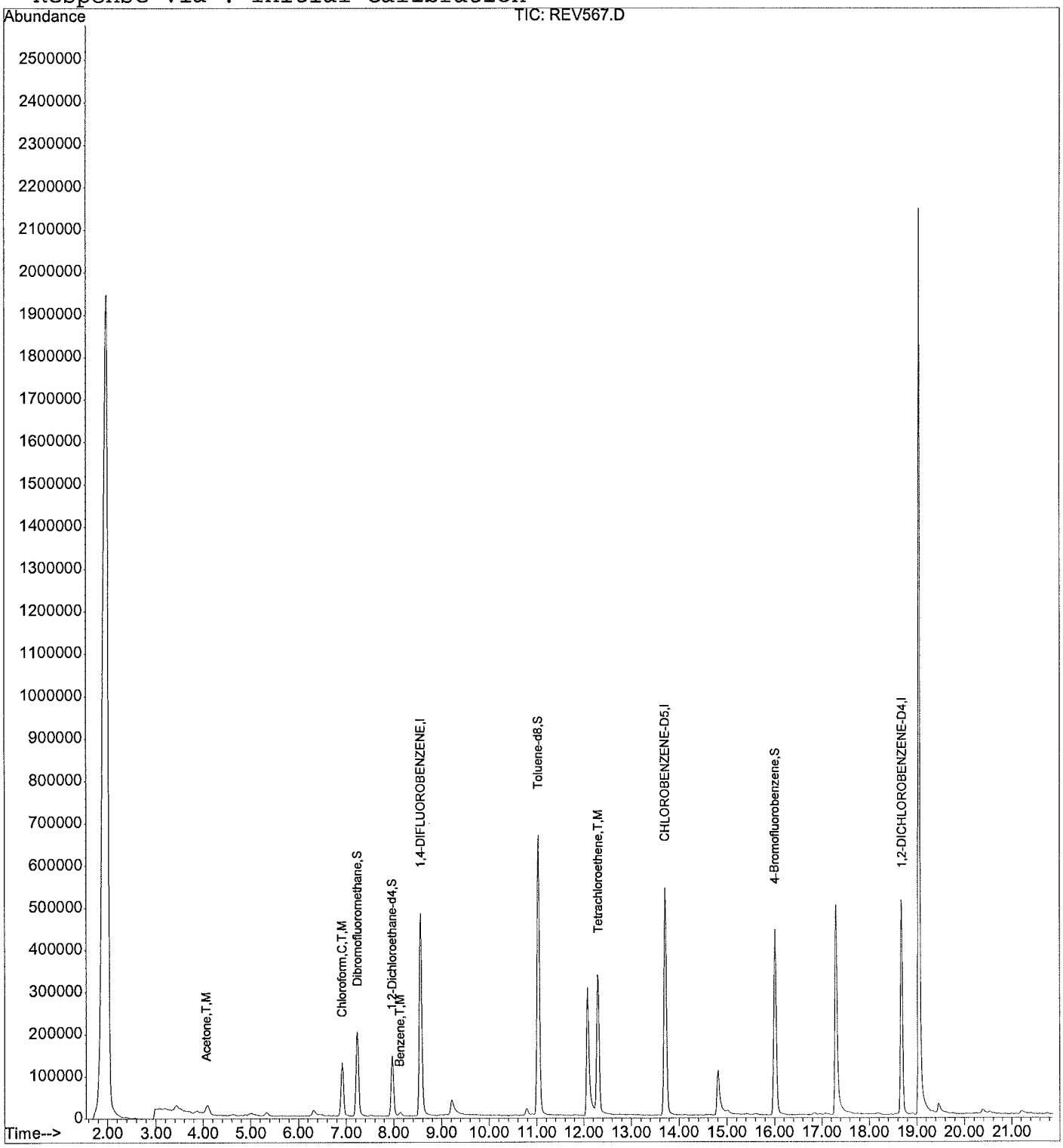
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	774647	10.00	ug/l	0.02
53) CHLOROBENZENE-D5	13.71	117	635381	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	262353	10.00	ug/l	0.01
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	244643	10.20	ug/l	0.01
Spiked Amount 10.000			Recovery =	102.00%		
41) 1,2-Dichloroethane-d4	7.97	65	174155	10.65	ug/l	0.00
Spiked Amount 10.000			Recovery =	106.50%		
54) Toluene-d8	11.03	98	906155	9.52	ug/l	0.00
Spiked Amount 10.000			Recovery =	95.20%		
76) 4-Bromofluorobenzene	16.01	95	347443	9.72	ug/l	0.00
Spiked Amount 10.000			Recovery =	97.20%		
Target Compounds						Qvalue
13) Acetone	4.07	43	40166	14.21	ug/l	# 1
31) Chloroform	6.91	83	196339	4.14	ug/l	97
42) Benzene	8.13	78	14911	0.14	ug/l	98
61) Tetrachloroethene	12.31	164	169990	7.25	ug/l	99

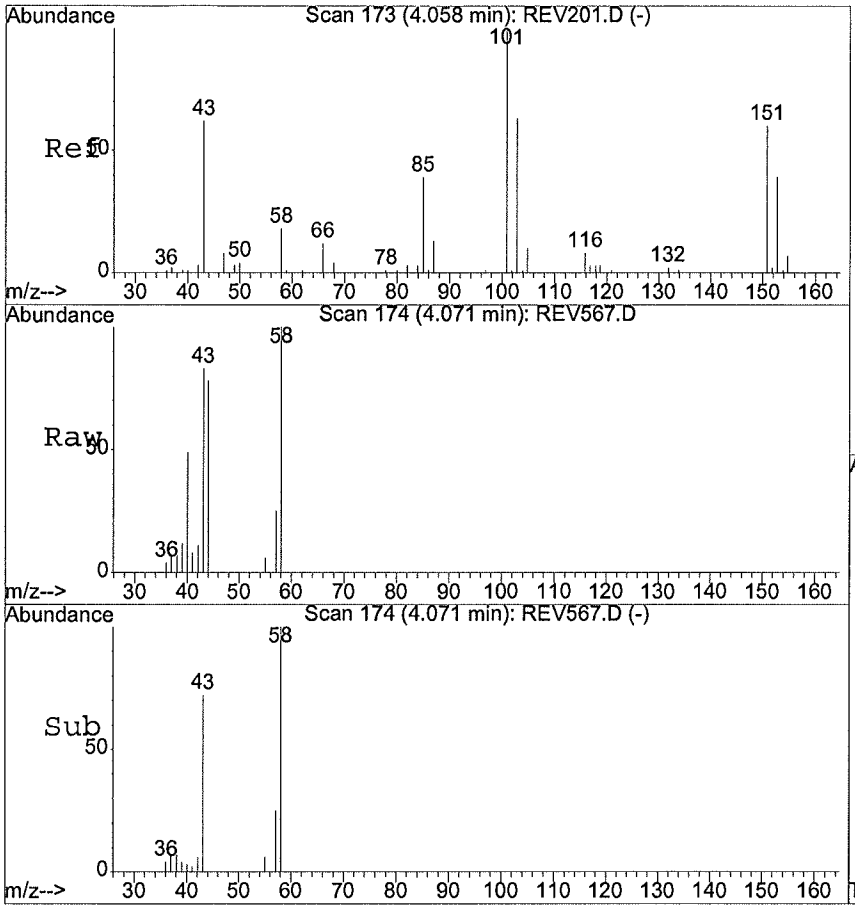
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E30\REV567.D Vial: 12
Acq On : 30 May 2024 4:26 pm Operator: LPriet
Sample : 24E188-04 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 30 17:12 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration

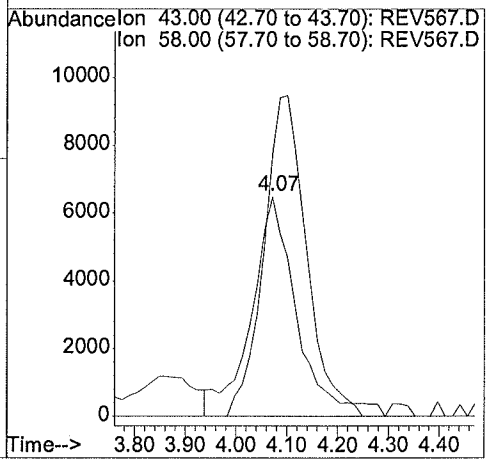


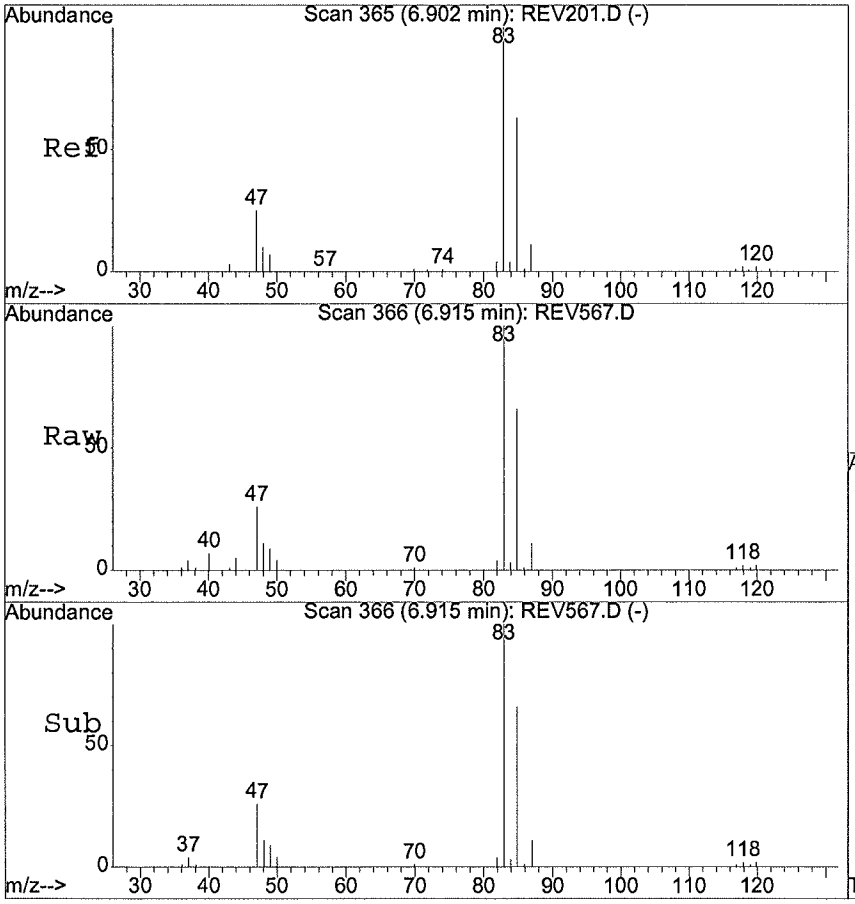


#13
Acetone
Concen: 14.21 ug/l
RT: 4.07 min Scan# 174
Delta R.T. 0.01 min
Lab File: REV567.D
Acq: 30 May 2024 4:26 pm

Tgt Ion: 43 Resp: 40166

Ion	Ratio	Lower	Upper
43	100		
58	137.4	0.9	60.9#

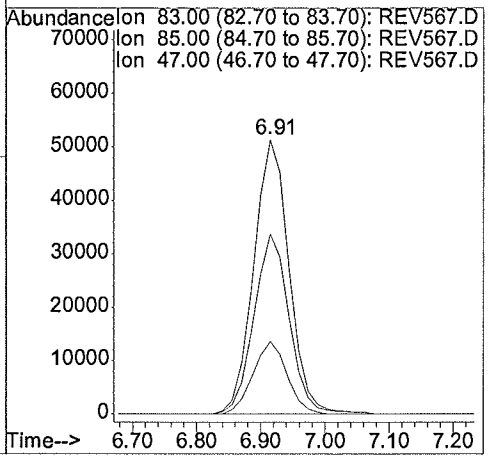


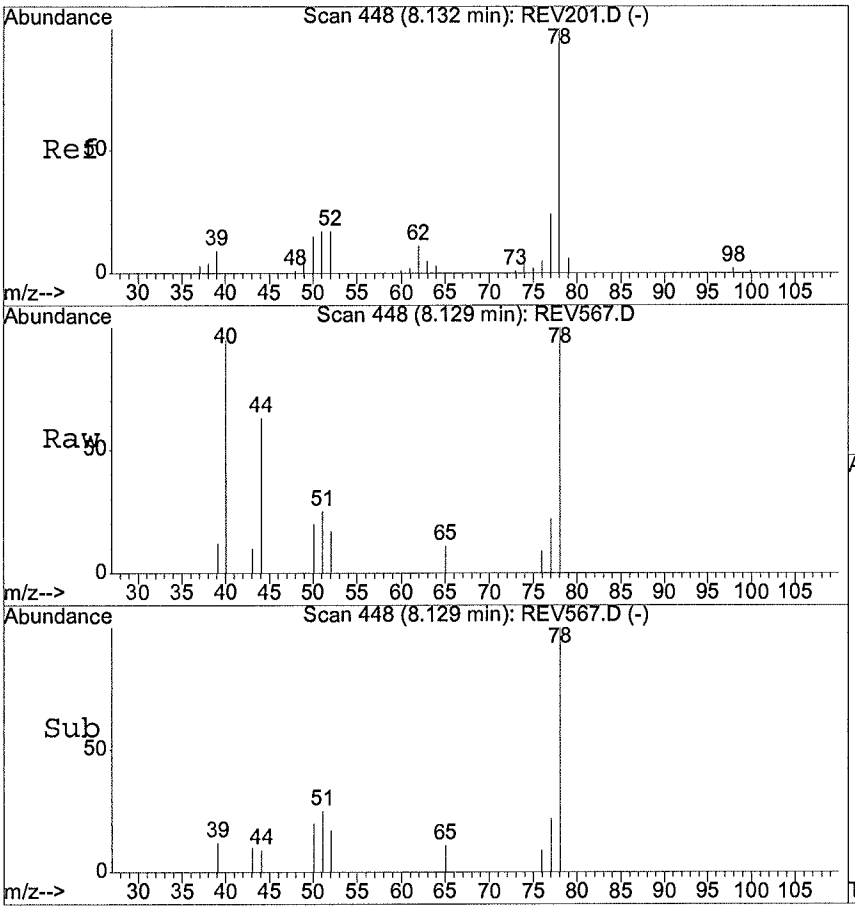


#31
Chloroform
Concen: 4.14 ug/l
RT: 6.91 min Scan# 366
Delta R.T. 0.01 min
Lab File: REV567.D
Acq: 30 May 2024 4:26 pm

Tgt Ion: 83 Resp: 196339

Ion	Ratio	Lower	Upper
83	100		
85	65.8	38.2	98.2
47	25.4	0.0	54.7

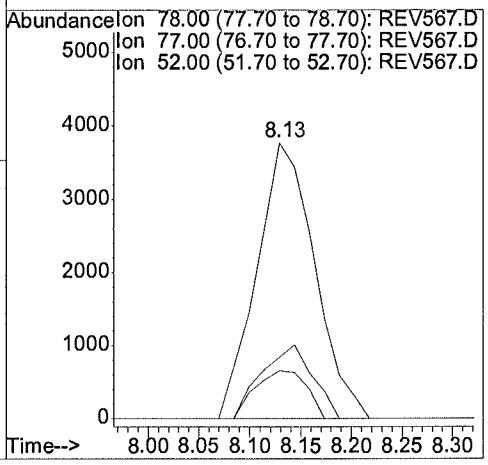


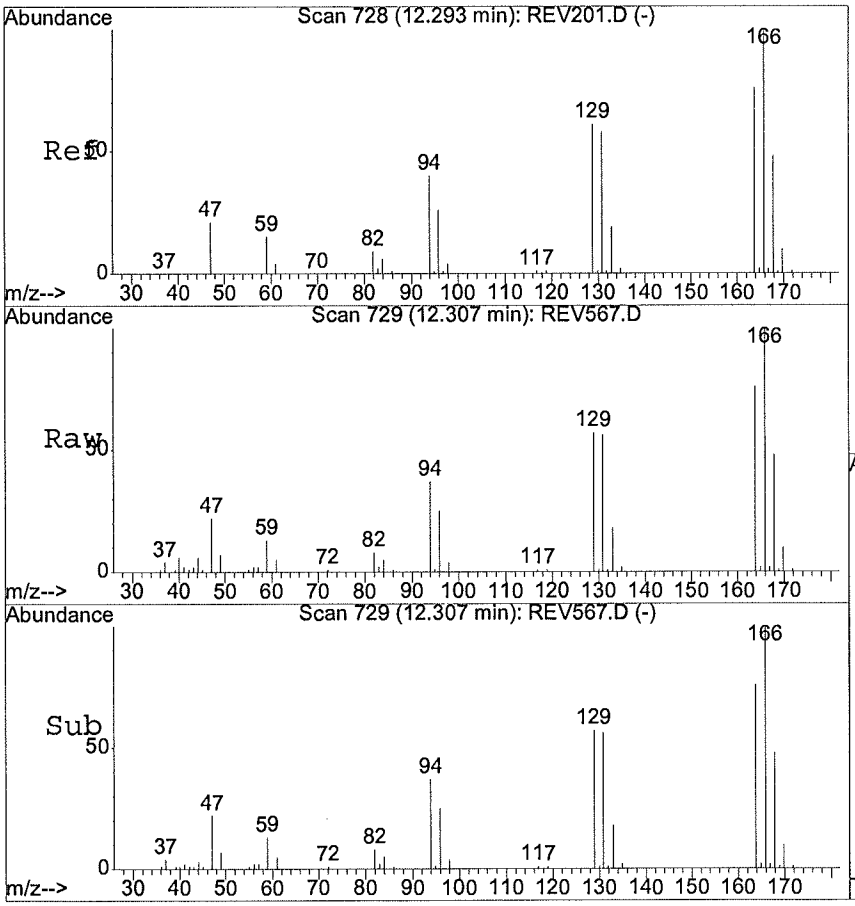


#42
Benzene
Concen: 0.14 ug/l
RT: 8.13 min Scan# 448
Delta R.T. -0.00 min
Lab File: REV567.D
Acq: 30 May 2024 4:26 pm

Tgt Ion: 78 Resp: 14911

Ion	Ratio	Lower	Upper
78	100		
77	23.6	0.0	54.0
52	15.3	0.0	46.8

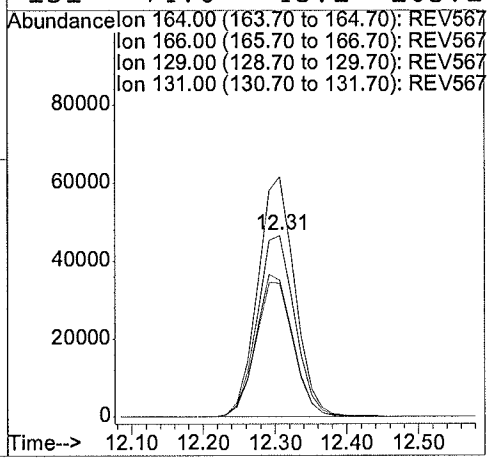




#61
Tetrachloroethene
Concen: 7.25 ug/l
RT: 12.31 min Scan# 729
Delta R.T. 0.01 min
Lab File: REV567.D
Acq: 30 May 2024 4:26 pm

Tgt Ion:164 Resp: 169990

Ion	Ratio	Lower	Upper
164	100		
166	130.2	101.0	161.0
129	77.5	49.2	109.2
131	74.0	45.1	105.1



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	05/29/24 08:15
Project	: VA SALT LAKE CITY	Date Received:	05/30/24
Batch No.	: 24E188	Date Extracted:	05/30/24 14:26
Sample ID	: TB01-GW052924	Date Analyzed:	05/30/24 14:26
Lab Samp ID:	24E188-05	Dilution Factor:	1
Lab File ID:	REV563	Matrix:	WATER
Ext Btch ID:	VO01E26	% Moisture:	NA
Calib. Ref.:	REV201	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	10.5	10.0	105	70-130
Bromofluorobenzene	9.75	10.0	97	70-130
Toluene-d8	9.66	10.0	97	70-130
Dibromofluoromethane	10.1	10.0	101	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : LPriet Analyzed by : LPriet
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E30\REV563.D Vial: 8
Acq On : 30 May 2024 2:26 pm Operator: LPriet
Sample : 24E188-05 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 30 16:02 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	802602	10.00	ug/l	0.01
53) CHLOROBENZENE-D5	13.71	117	649242	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	267318	10.00	ug/l	0.01
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	251840	10.14	ug/l	0.00
Spiked Amount 10.000			Recovery =	101.40%		
41) 1,2-Dichloroethane-d4	7.97	65	177075	10.45	ug/l	0.00
Spiked Amount 10.000			Recovery =	104.50%		
54) Toluene-d8	11.03	98	939624	9.66	ug/l	0.00
Spiked Amount 10.000			Recovery =	96.60%		
76) 4-Bromofluorobenzene	16.01	95	354966	9.75	ug/l	0.00
Spiked Amount 10.000			Recovery =	97.50%		

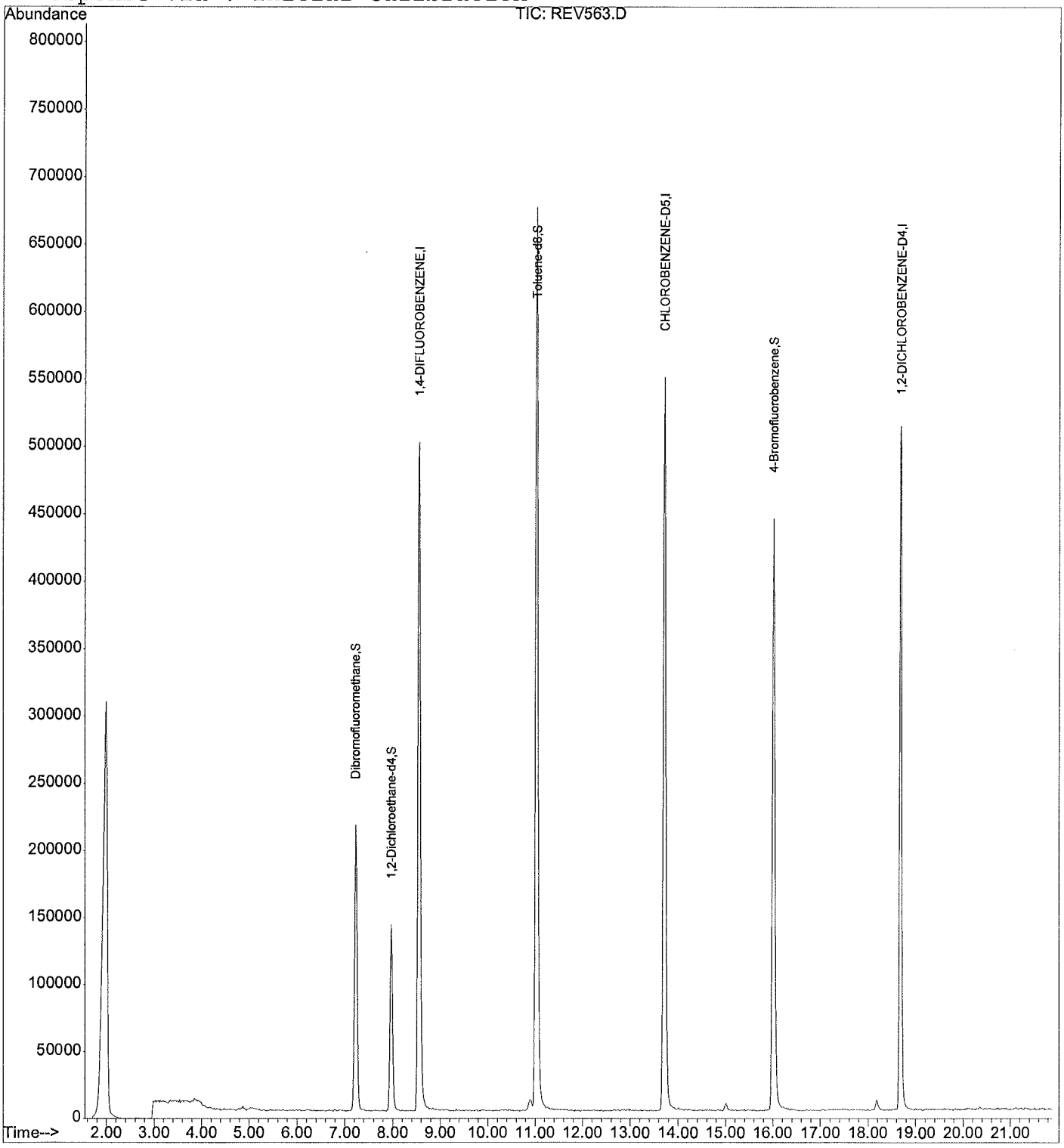
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E30\REV563.D Vial: 8
Acq On : 30 May 2024 2:26 pm Operator: LPriet
Sample : 24E188-05 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 30 16:02 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



QC SUMMARIES

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	05/30/24 13:26
Project	: VA SALT LAKE CITY	Date Received:	05/30/24
Batch No.	: 24E188	Date Extracted:	05/30/24 13:26
Sample ID	: MBLK1W	Date Analyzed:	05/30/24 13:26
Lab Samp ID:	VO01E26B	Dilution Factor:	1
Lab File ID:	REV561	Matrix:	WATER
Ext Btch ID:	VO01E26	% Moisture:	NA
Calib. Ref.:	REV201	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	9.56	10.0	96	70-130
Toluene-d8	9.71	10.0	97	70-130
Dibromofluoromethane	10.2	10.0	102	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : LPriet Analyzed by : LPriet
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. : 24E188
METHOD : SW5030B/8260C

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR:	1	1	1
SAMPLE ID	: MBLK1W	LCS1W	LCD1W
LAB SAMPLE ID	: VO01E26B	VO01E26L	VO01E26C
LAB FILE ID	: REV561	REV558	REV559
DATE PREPARED	: 05/30/24 13:26	05/30/24 11:57	05/30/24 12:27
DATE ANALYZED	: 05/30/24 13:26	05/30/24 11:57	05/30/24 12:27
PREP BATCH	: VO01E26	VO01E26	VO01E26
CALIBRATION REF:	REV201	REV201	REV201

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	10.5	105	10.0	10.6	106	1	74-131	20
1,1,2,2-Tetrachloroethane	ND	10.0	8.44	84	10.0	8.51	85	1	71-121	20
1,1,2-Trichloroethane	ND	10.0	9.31	93	10.0	9.50	95	2	80-119	20
1,1-Dichloroethane	ND	10.0	9.84	98	10.0	9.88	99	0	77-125	20
1,1-Dichloroethene	ND	10.0	9.09	91	10.0	9.27	93	2	71-131	20
1,2,3-Trichlorobenzene	ND	10.0	9.15	92	10.0	9.36	94	2	69-129	20
1,2,4-Trichlorobenzene	ND	10.0	9.39	94	10.0	9.37	94	0	69-130	20
1,2,4-Trimethylbenzene	ND	10.0	9.10	91	10.0	8.86	89	3	76-124	20
1,2-Dibromo-3-chloropropane	ND	10.0	8.10	81	10.0	8.22	82	1	62-138	20
1,2-Dichlorobenzene	ND	10.0	9.46	95	10.0	9.44	94	0	80-119	20
1,2-Dichloroethane	ND	10.0	10.3	103	10.0	10.4	104	1	73-128	20
1,2-Dichloropropane	ND	10.0	9.11	91	10.0	9.36	94	3	78-122	20
1,3,5-Trimethylbenzene	ND	10.0	8.94	89	10.0	8.99	90	1	75-124	20
1,3-Dichlorobenzene	ND	10.0	9.48	95	10.0	9.47	95	0	80-119	20
1,4-Dichlorobenzene	ND	10.0	9.41	94	10.0	9.50	95	1	79-118	20
2-Butanone	ND	50.0	45.2	90	50.0	42.5	85	6	56-143	20
2-Hexanone	ND	50.0	41.7	83	50.0	39.7	79	5	57-139	20
Acetone	ND	50.0	46.5	93	50.0	45.0	90	3	39-160	20
Benzene	ND	10.0	9.37	94	10.0	9.48	95	1	79-120	20
Bromochloromethane	ND	10.0	9.29	93	10.0	9.32	93	0	78-120	20
Bromodichloromethane	ND	10.0	9.84	98	10.0	9.85	99	0	79-125	20
Bromoform	ND	10.0	9.54	95	10.0	9.73	97	2	66-130	20
Bromomethane	ND	10.0	8.99	90	10.0	8.62	86	4	53-141	20
Carbon Disulfide	ND	10.0	10.2	102	10.0	10.3	103	1	64-133	20
Carbon Tetrachloride	ND	10.0	10.8	108	10.0	10.7	107	1	72-136	20
Chlorobenzene	ND	10.0	9.56	96	10.0	9.61	96	1	82-118	20
Chloroethane	ND	10.0	8.69	87	10.0	8.23	82	5	60-138	20
Chloroform	ND	10.0	10.1	101	10.0	10.1	101	0	79-124	20
Chloromethane	ND	10.0	8.10	81	10.0	7.73	77	5	50-139	20
cis-1,2-Dichloroethylene	ND	10.0	9.35	94	10.0	9.34	93	0	78-123	20
Dibromochloromethane	ND	10.0	9.47	95	10.0	9.69	97	2	74-126	20
Dichlorodifluoromethane	ND	10.0	9.16	92	10.0	9.00	90	2	32-152	20
Ethylbenzene	ND	10.0	9.72	97	10.0	10.2	102	5	79-121	20
Isopropylbenzene	ND	10.0	9.33	93	10.0	9.38	94	1	72-131	20
m,p-Xylene	ND	20.0	20.4	102	20.0	20.2	101	1	80-121	20
4-Methyl-2-Pentanone	ND	50.0	43.7	87	50.0	42.7	85	2	67-130	20
Methylene Chloride	ND	10.0	9.43	94	10.0	9.52	95	1	74-124	20
tert-Butyl Methyl Ether	ND	10.0	8.75	88	10.0	8.82	88	1	71-124	20
o-Xylene	ND	10.0	9.82	98	10.0	9.67	97	2	78-122	20
Styrene	ND	10.0	9.58	96	10.0	9.71	97	1	78-123	20
Tetrachloroethene	ND	10.0	10.4	104	10.0	10.6	106	2	74-129	20
Toluene	ND	10.0	9.54	95	10.0	9.66	97	1	80-121	20
Trans-1,2-DCE	ND	10.0	9.42	94	10.0	9.37	94	1	75-124	20
cis-1,3-Dichloropropene	ND	10.0	9.26	93	10.0	9.40	94	2	75-124	20
Trans-1,3-Dichloropropene	ND	10.0	9.31	93	10.0	9.41	94	1	73-127	20
TCE	ND	10.0	10.2	102	10.0	10.1	101	1	79-123	20
Trichlorofluoromethane	ND	10.0	10.1	101	10.0	9.85	99	3	65-141	20
Vinyl Chloride	ND	10.0	8.99	90	10.0	8.56	86	5	58-137	20
1,2-Dibromoethane	ND	10.0	9.07	91	10.0	9.15	92	1	77-121	20
Vinyl Acetate	ND	10.0	8.58	86	10.0	8.32	83	3	54-146	20
Trichlorotrifluoroethane	ND	10.0	10.7	107	10.0	10.9	109	2	70-136	20
Methyl Acetate	ND	10.0	11.6	116	10.0	11.8	118	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	10.0	100	10.0	9.79	98	70-130
Bromofluorobenzene	10.0	9.70	97	10.0	9.89	99	70-130
Toluene-d8	10.0	9.62	96	10.0	9.63	96	70-130
Dibromofluoromethane	10.0	9.85	99	10.0	9.81	98	70-130

MB: Method Blank sample LCS: Lab Control Sample LCD: Lab Control Sample Duplicate

QC DATA

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E30\REV561.D Vial: 6
Acq On : 30 May 2024 1:26 pm Operator: LPriet
Sample : VO01E26B Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 31 11:39 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.54	114	720882	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	584984	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	248064	10.00	ug/l	0.01
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	227550	10.20	ug/l	0.00
Spiked Amount 10.000			Recovery = 102.00%			
41) 1,2-Dichloroethane-d4	7.97	65	165552	10.88	ug/l	0.00
Spiked Amount 10.000			Recovery = 108.80%			
54) Toluene-d8	11.03	98	851553	9.71	ug/l	0.00
Spiked Amount 10.000			Recovery = 97.10%			
76) 4-Bromofluorobenzene	16.01	95	322852	9.56	ug/l	0.00
Spiked Amount 10.000			Recovery = 95.60%			

Target Compounds Qvalue

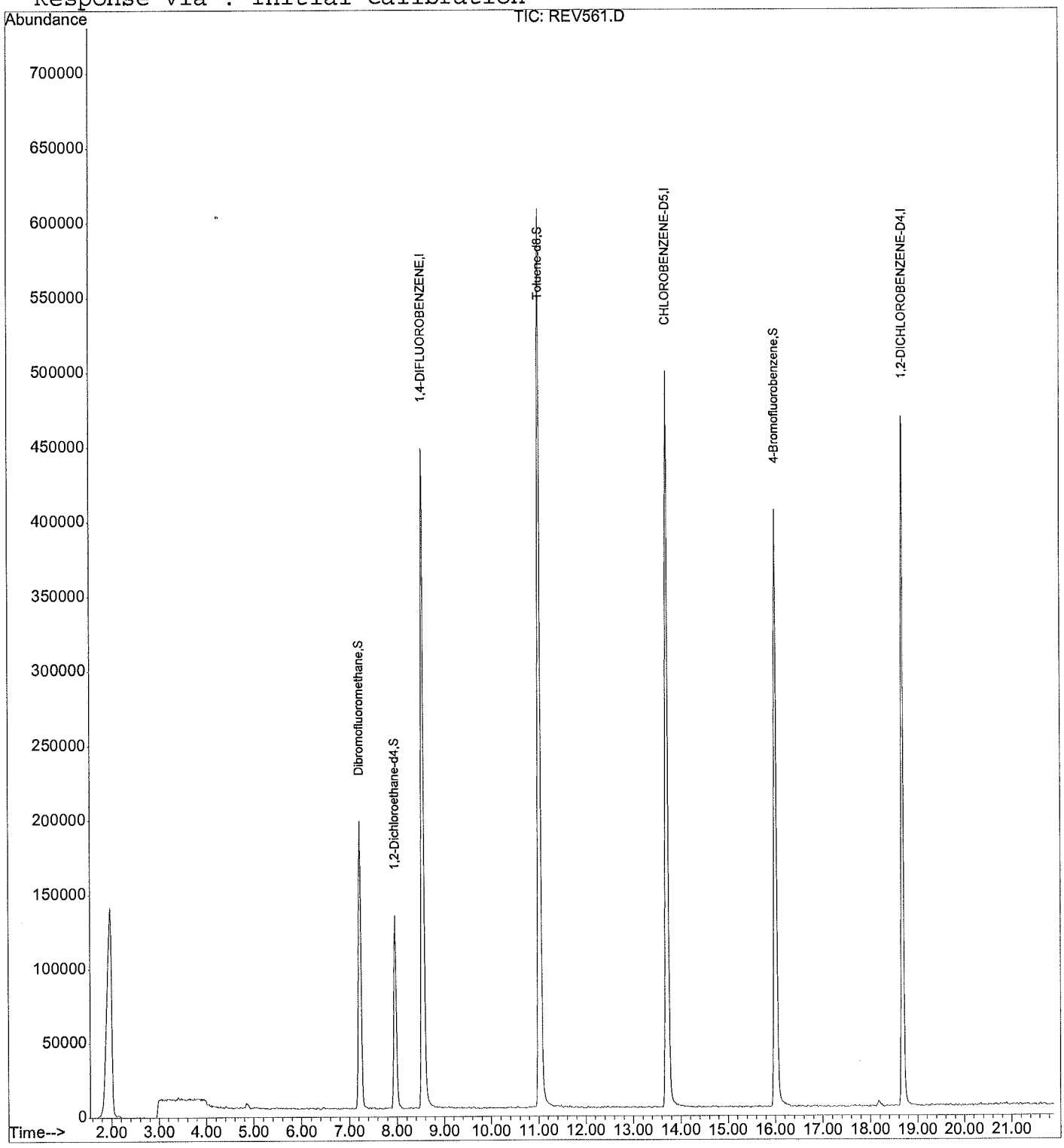
(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24E30\REV561.D
Acq On : 30 May 2024 1:26 pm
Sample : VO01E26B
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: May 31 11:39 2024

Vial: 6
Operator: LPriet
Inst : 01
Multiplr: 1.00

Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E30\REV558.D Vial: 3
Acq On : 30 May 2024 11:57 am Operator: LPriet
Sample : VO01E26L Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 30 12:19 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.54	114	774565	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	627385	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.67	152	253051	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	236214	9.85	ug/l	0.00
Spiked Amount 10.000			Recovery = 98.50%			
41) 1,2-Dichloroethane-d4	7.95	65	164057	10.03	ug/l	-0.02
Spiked Amount 10.000			Recovery = 100.30%			
54) Toluene-d8	11.02	98	904880	9.62	ug/l	-0.01
Spiked Amount 10.000			Recovery = 96.20%			
76) 4-Bromofluorobenzene	15.99	95	334316	9.70	ug/l	-0.02
Spiked Amount 10.000			Recovery = 97.00%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.18	85	189761	9.16	ug/l	100
5) Chloromethane	2.48	50	235047	8.10	ug/l	99
6) Vinyl chloride	2.61	62	217390	8.99	ug/l	100
7) Bromomethane	3.15	94	258245	8.99	ug/l	100
8) Chloroethane	3.20	64	152396	8.69	ug/l	90
9) Dichlorofluoromethane	3.29	67	528825	10.62	ug/l	99
10) Trichlorofluoromethane	3.55	101	331457	10.14	ug/l	97
11) Acrolein	3.98	56	67249	38.65	ug/l	96
12) 1,1,2-Trichloro-1,2,2-trif	4.09	151	174489	10.68	ug/l	100
13) Acetone	4.06	43	131489	46.51	ug/l	94
14) 1,1-Dichloroethene	4.24	61	375554	9.09	ug/l	99
15) tert-Butyl alcohol	4.34	59	170886	198.19	ug/l	82
16) Iodomethane	4.64	142	472981	10.68	ug/l	97
17) Methyl acetate	4.65	43	89157	11.57	ug/l	98
18) Methylene chloride	4.86	49	312634	9.43	ug/l	98
19) Carbon disulfide	4.89	76	899146	10.18	ug/l	99
20) Acrylonitrile	5.02	53	154994	43.21	ug/l	99
21) tert-Butyl methyl ether (M	5.05	73	355413	8.75	ug/l	98
22) trans-1,2-Dichloroethene	5.24	61	374734	9.42	ug/l	100
23) Isopropyl ether (DIPE)	5.67	45	807865	9.50	ug/l	99
24) Vinyl acetate	5.82	43	250426	8.58	ug/l	99
25) 1,1-Dichloroethane	5.82	63	457884	9.84	ug/l	99
27) tert-Butyl ethyl ether (ET	6.23	59	525421	8.62	ug/l	97
28) 2-Butanone	6.41	43	196126	45.21	ug/l	100
29) 2,2-Dichloropropane	6.63	77	375264	9.59	ug/l	99
30) cis-1,2-Dichloroethene	6.68	96	299427	9.35	ug/l	99
31) Chloroform	6.90	83	477936	10.08	ug/l	99

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24E30\REV558.D Vial: 3
Acq On : 30 May 2024 11:57 am Operator: LPriet
Sample : VO01E26L Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 30 12:19 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.14	49	173114	9.29	ug/l	98
33)	Tetrahydrofuran	7.20	42	22136	8.07	ug/l	93
35)	1,1,1-Trichloroethane	7.49	97	416466	10.49	ug/l	99
36)	Cyclohexane	7.52	84	408768	10.58	ug/l	98
38)	1,1-Dichloropropene	7.72	110	128834	9.55	ug/l	100
39)	Carbon tetrachloride	7.88	119	317985	10.76	ug/l	99
40)	tert-Amyl methyl ether (TA	7.88	73	406926	8.58	ug/l	100
42)	Benzene	8.13	78	969324	9.37	ug/l	100
43)	1,2-Dichloroethane	8.10	62	214100	10.26	ug/l	99
44)	Trichloroethene	9.06	130	271768	10.15	ug/l	98
45)	Methylcyclohexane	9.15	83	471524	11.09	ug/l	99
46)	1,2-Dichloropropane	9.34	63	210868	9.11	ug/l	93
47)	Bromodichloromethane	9.71	83	316329	9.84	ug/l	99
48)	1,4-Dioxane	9.79	88	15392	162.39	ug/l	93
49)	Dibromomethane	9.82	93	108936	9.98	ug/l	96
50)	2-Chloroethyl vinyl ether	10.22	63	72521	12.34	ug/l	98
51)	4-Methyl-2-pentanone	10.26	43	496608	43.74	ug/l	97
52)	cis-1,3-Dichloropropene	10.62	75	333581	9.26	ug/l	99
55)	Toluene	11.15	91	1063328	9.54	ug/l	99
56)	Ethyl methacrylate	11.46	69	151282	9.05	ug/l	94
57)	trans-1,3-Dichloropropene	11.48	75	241052	9.31	ug/l	97
58)	1,1,2-Trichloroethane	11.74	97	135753	9.31	ug/l	99
59)	2-Hexanone	11.76	43	271803	41.74	ug/l	97
60)	1,3-Dichloropropane	12.19	76	236490	9.55	ug/l	100
61)	Tetrachloroethene	12.29	164	240873	10.40	ug/l	99
62)	Dibromochloromethane	12.66	129	168703	9.47	ug/l	99
63)	1,2-Dibromoethane	13.03	107	130928	9.07	ug/l	100
64)	1-Chlorohexane	13.30	91	472241	9.82	ug/l	99
65)	Chlorobenzene	13.77	112	634879	9.56	ug/l	100
66)	1,1,1,2-Tetrachloroethane	13.86	131	199739	9.76	ug/l	100
67)	Ethylbenzene	13.88	91	1236240	9.72	ug/l	97
68)	m-Xylene & p-Xylene	14.01	91	1900343	20.41	ug/l	97
69)	o-Xylene	14.82	91	940995	9.82	ug/l	97
70)	Styrene	14.90	104	711292	9.58	ug/l	98
71)	Isopropylbenzene	15.52	105	1177448	9.33	ug/l	99
73)	Bromoform	15.55	173	95281	9.54	ug/l	99
74)	trans-1,4-Dichloro-2-buten	15.62	53	35653	8.17	ug/l	99
75)	1,1,2,2-Tetrachloroethane	15.86	83	142166	8.44	ug/l	99
77)	1,2,3-Trichloropropane	16.14	110	37372	8.67	ug/l	97
78)	n-Propylbenzene	16.29	91	1525766	9.27	ug/l	99
79)	Bromobenzene	16.38	156	249468	9.58	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E30\REV558.D Vial: 3
Acq On : 30 May 2024 11:57 am Operator: LPriet
Sample : VO01E26L Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 30 12:19 2024 Quant Results File: VO01E11.RES

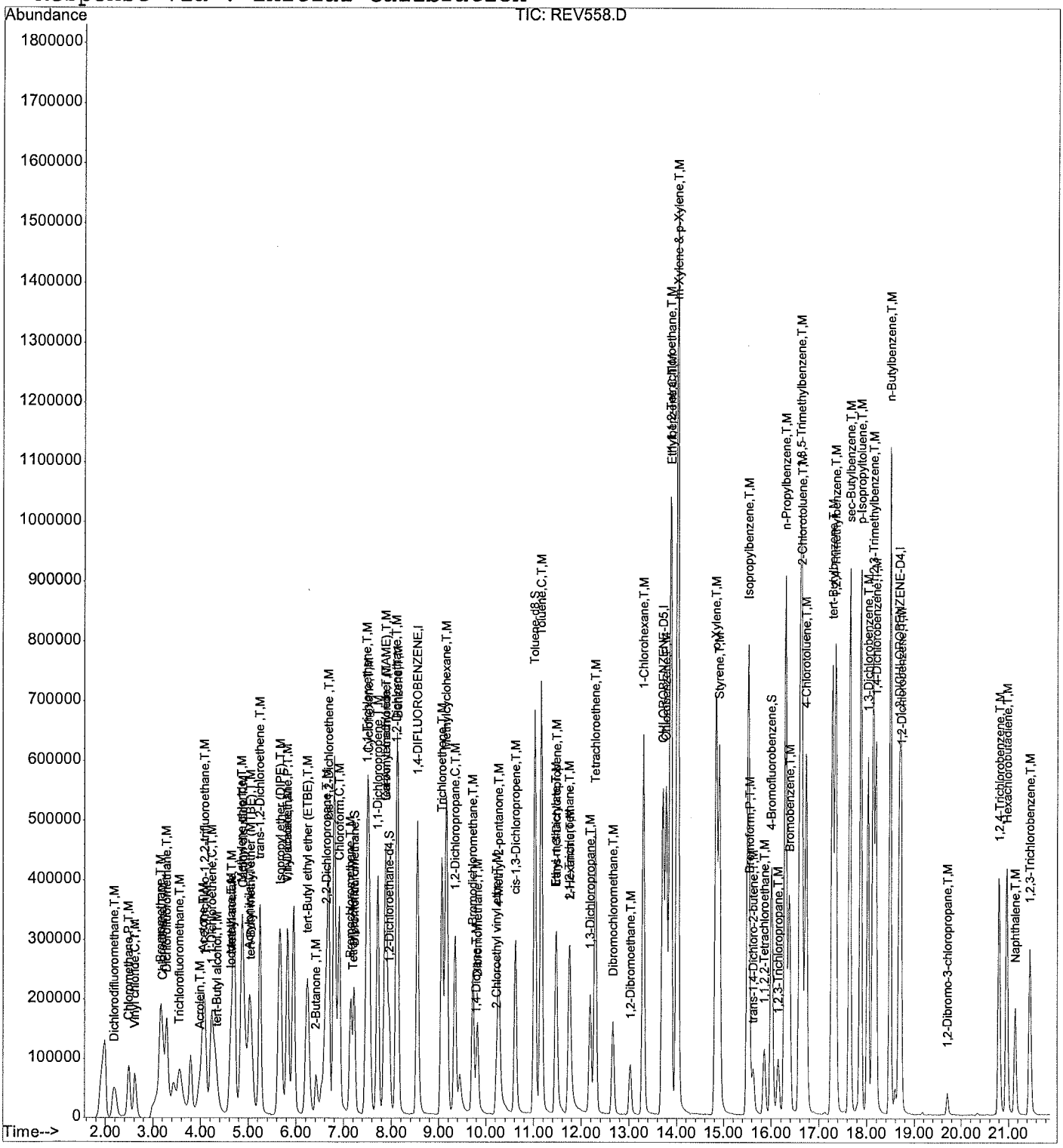
Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	940223	8.94	ug/l	100
81)	2-Chlorotoluene	16.63	91	917311	9.26	ug/l	99
82)	4-Chlorotoluene	16.72	91	810629	9.24	ug/l	100
83)	tert-Butylbenzene	17.28	134	205620	9.32	ug/l	100
84)	1,2,4-Trimethylbenzene	17.34	105	936069	9.10	ug/l	100
85)	sec-Butylbenzene	17.65	105	1330727	9.21	ug/l	100
86)	p-Isopropyltoluene	17.87	119	1013659	9.10	ug/l	99
87)	1,3-Dichlorobenzene	18.02	146	468707	9.48	ug/l	99
88)	1,2,3-Trimethylbenzene	18.13	105	851171	8.86	ug/l	99
89)	1,4-Dichlorobenzene	18.19	146	456544	9.41	ug/l	99
90)	n-Butylbenzene	18.48	91	1070347	9.28	ug/l	99
91)	1,2-Dichlorobenzene	18.72	146	383337	9.46	ug/l	100
92)	1,2-Dibromo-3-chloropropan	19.71	157	20719	8.10	ug/l	98
93)	1,2,4-Trichlorobenzene	20.81	180	277875	9.39	ug/l	99
94)	Hexachlorobutadiene	20.97	225	163611	9.28	ug/l	96
95)	Naphthalene	21.15	128	289868	8.39	ug/l	100
96)	1,2,3-Trichlorobenzene	21.46	180	204046	9.15	ug/l	100

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24E30\REV558.D Vial: 3
Acq On : 30 May 2024 11:57 am Operator: LPriet
Sample : VO01E26L Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 30 12:19 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E30\REV559.D Vial: 4
Acq On : 30 May 2024 12:27 pm Operator: LPriet
Sample : VO01E26C Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 30 12:48 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.54	114	813717	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	658054	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.67	152	263830	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	247029	9.81	ug/l	0.00
Spiked Amount 10.000			Recovery = 98.10%			
41) 1,2-Dichloroethane-d4	7.97	65	168186	9.79	ug/l	0.00
Spiked Amount 10.000			Recovery = 97.90%			
54) Toluene-d8	11.02	98	949695	9.63	ug/l	-0.02
Spiked Amount 10.000			Recovery = 96.30%			
76) 4-Bromofluorobenzene	16.01	95	355356	9.89	ug/l	0.00
Spiked Amount 10.000			Recovery = 98.90%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.18	85	196000	9.00	ug/l	100
5) Chloromethane	2.50	50	235677	7.73	ug/l	99
6) Vinyl chloride	2.62	62	217220	8.56	ug/l	100
7) Bromomethane	3.17	94	260147	8.62	ug/l	99
8) Chloroethane	3.20	64	151534	8.23	ug/l	89
9) Dichlorofluoromethane	3.29	67	556096	10.63	ug/l	99
10) Trichlorofluoromethane	3.57	101	338518	9.85	ug/l	99
11) Acrolein	4.00	56	64336	35.20	ug/l	98
12) 1,1,2-Trichloro-1,2,2-trif	4.07	151	187769	10.94	ug/l	100
13) Acetone	4.06	43	133661	45.00	ug/l	92
14) 1,1-Dichloroethene	4.24	61	402106	9.27	ug/l	99
15) tert-Butyl alcohol	4.34	59	185140	204.39	ug/l	83
16) Iodomethane	4.65	142	503926	10.83	ug/l	98
17) Methyl acetate	4.65	43	95277	11.76	ug/l	98
18) Methylene chloride	4.86	49	331399	9.52	ug/l	98
19) Carbon disulfide	4.89	76	959578	10.34	ug/l	99
20) Acrylonitrile	5.04	53	153364	40.70	ug/l	98
21) tert-Butyl methyl ether (M	5.06	73	376540	8.82	ug/l	98
22) trans-1,2-Dichloroethene	5.26	61	391743	9.37	ug/l	100
23) Isopropyl ether (DIPE)	5.67	45	866259	9.70	ug/l	100
24) Vinyl acetate	5.83	43	255311	8.32	ug/l	99
25) 1,1-Dichloroethane	5.83	63	482905	9.88	ug/l	99
27) tert-Butyl ethyl ether (ET	6.23	59	564792	8.82	ug/l	96
28) 2-Butanone	6.43	43	193683	42.50	ug/l	100
29) 2,2-Dichloropropane	6.62	77	397240	9.66	ug/l	98
30) cis-1,2-Dichloroethene	6.68	96	314206	9.34	ug/l	99
31) Chloroform	6.90	83	503740	10.11	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E30\REV559.D Vial: 4
Acq On : 30 May 2024 12:27 pm Operator: LPriet
Sample : VO01E26C Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 30 12:48 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.15	49	182409	9.32	ug/l	98
33)	Tetrahydrofuran	7.20	42	24862	8.62	ug/l	90
35)	1,1,1-Trichloroethane	7.51	97	440864	10.57	ug/l	99
36)	Cyclohexane	7.52	84	427858	10.54	ug/l	97
38)	1,1-Dichloropropene	7.72	110	134937	9.52	ug/l	99
39)	Carbon tetrachloride	7.88	119	333407	10.74	ug/l	98
40)	tert-Amyl methyl ether (TA	7.89	73	419791	8.43	ug/l	99
42)	Benzene	8.13	78	1030607	9.48	ug/l	100
43)	1,2-Dichloroethane	8.10	62	227055	10.36	ug/l	99
44)	Trichloroethene	9.06	130	284297	10.11	ug/l	97
45)	Methylcyclohexane	9.17	83	505179	11.31	ug/l	97
46)	1,2-Dichloropropane	9.34	63	227777	9.36	ug/l	93
47)	Bromodichloromethane	9.73	83	332680	9.85	ug/l	100
48)	1,4-Dioxane	9.79	88	15869	159.36	ug/l	98
49)	Dibromomethane	9.82	93	111299	9.70	ug/l	99
50)	2-Chloroethyl vinyl ether	10.22	63	76788	12.44	ug/l	99
51)	4-Methyl-2-pentanone	10.26	43	508563	42.70	ug/l	96
52)	cis-1,3-Dichloropropene	10.62	75	355665	9.40	ug/l	99
55)	Toluene	11.15	91	1128683	9.66	ug/l	99
56)	Ethyl methacrylate	11.46	69	159093	9.07	ug/l	94
57)	trans-1,3-Dichloropropene	11.48	75	255609	9.41	ug/l	97
58)	1,1,2-Trichloroethane	11.74	97	145393	9.50	ug/l	100
59)	2-Hexanone	11.77	43	269004	39.66	ug/l	97
60)	1,3-Dichloropropane	12.19	76	252179	9.71	ug/l	100
61)	Tetrachloroethene	12.29	164	256298	10.55	ug/l	99
62)	Dibromochloromethane	12.66	129	180981	9.69	ug/l	99
63)	1,2-Dibromoethane	13.03	107	138470	9.15	ug/l	99
64)	1-Chlorohexane	13.30	91	505741	10.02	ug/l	99
65)	Chlorobenzene	13.79	112	669676	9.61	ug/l	99
66)	1,1,1,2-Tetrachloroethane	13.86	131	213890	9.97	ug/l	99
67)	Ethylbenzene	13.87	91	1354119	10.15	ug/l	98
68)	m-Xylene & p-Xylene	14.01	91	1972003	20.20	ug/l	97
69)	o-Xylene	14.84	91	972085	9.67	ug/l	98
70)	Styrene	14.90	104	756587	9.71	ug/l	99
71)	Isopropylbenzene	15.52	105	1242425	9.38	ug/l	99
73)	Bromoform	15.55	173	101327	9.73	ug/l	98
74)	trans-1,4-Dichloro-2-buten	15.62	53	37153	8.16	ug/l	98
75)	1,1,2,2-Tetrachloroethane	15.86	83	149406	8.51	ug/l	99
77)	1,2,3-Trichloropropane	16.14	110	39319	8.75	ug/l	98
78)	n-Propylbenzene	16.29	91	1605380	9.36	ug/l	99
79)	Bromobenzene	16.38	156	259185	9.55	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E30\REV559.D Vial: 4
Acq On : 30 May 2024 12:27 pm Operator: LPriet
Sample : VO01E26C Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 30 12:48 2024 Quant Results File: VO01E11.RES

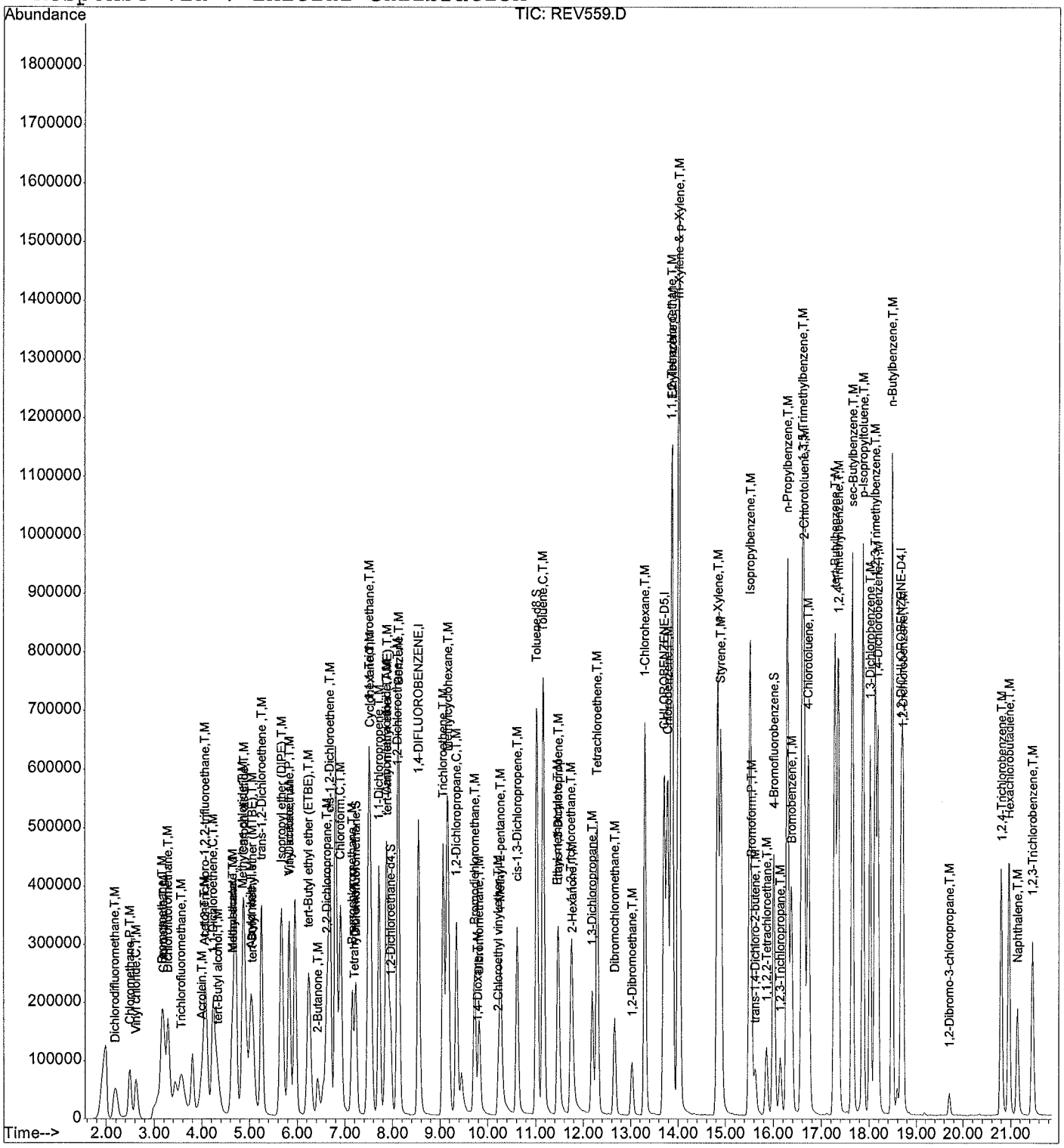
Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	985159	8.99	ug/l	100
81)	2-Chlorotoluene	16.63	91	956613	9.26	ug/l	99
82)	4-Chlorotoluene	16.72	91	864698	9.46	ug/l	99
83)	tert-Butylbenzene	17.28	134	213280	9.28	ug/l	99
84)	1,2,4-Trimethylbenzene	17.36	105	950675	8.86	ug/l	100
85)	sec-Butylbenzene	17.65	105	1409105	9.35	ug/l	100
86)	p-Isopropyltoluene	17.87	119	1063760	9.16	ug/l	99
87)	1,3-Dichlorobenzene	18.02	146	488263	9.47	ug/l	99
88)	1,2,3-Trimethylbenzene	18.13	105	887632	8.87	ug/l	99
89)	1,4-Dichlorobenzene	18.18	146	480144	9.50	ug/l	99
90)	n-Butylbenzene	18.48	91	1123545	9.34	ug/l	99
91)	1,2-Dichlorobenzene	18.72	146	398712	9.44	ug/l	100
92)	1,2-Dibromo-3-chloropropan	19.71	157	21935	8.22	ug/l	99
93)	1,2,4-Trichlorobenzene	20.81	180	289235	9.37	ug/l	100
94)	Hexachlorobutadiene	20.97	225	172883	9.41	ug/l	97
95)	Naphthalene	21.15	128	303680	8.43	ug/l	100
96)	1,2,3-Trichlorobenzene	21.46	180	217635	9.36	ug/l	99

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24E30\REV559.D Vial: 4
Acq On : 30 May 2024 12:27 pm Operator: LPriet
Sample : VO01E26C Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 30 12:48 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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: REV195 BFB Injection Date: 05/11/24

Instrument ID: 01 BFB Injection Time: 10:20

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	18.517
75	30 - 60% of mass 95	42.491
95	Base Peak, 100% relative abundance	100.000
96	5 - 9% of mass 95	7.286
173	Less than 2% of mass 174	0.000(0)1
174	Greater than 50% of mass 95	75.428
175	5 - 9% of mass 174	5.582(7.4)1
176	95 - 101% % of mass 174	72.070(95.55)1
177	5 - 9% % of mass 176	5.085(7.06)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	VO01E111	REV196	05/11/24	10:58
2	VSTD0.5	VO01E112	REV197	05/11/24	11:27
3	VSTD1	VO01E113	REV198	05/11/24	11:56
4	VSTD2	VO01E114	REV199	05/11/24	12:30
5	VSTD5	VO01E115	REV200	05/11/24	12:59
6	VSTD10	VO01E116	REV201	05/11/24	13:28
7	VSTD20	VO01E117	REV202	05/11/24	13:58
8	VSTD30	VO01E118	REV203	05/11/24	14:27
9	VSTD50	VO01E119	REV204	05/11/24	14:56
10	VSTD100	VO01DE1110	REV205	05/11/24	15:26

SC 5/15/24

INITIAL_CALIBRATION - RELATIVE_RESPONSE_FACTOR(%REC)

Instrument ID :01
Beginning DateTime :05/11/24 10:58
Spike Units :PPB
IC File :REV201

Column Spec :RXI-624SILMS ID :0.25MM
Ending DateTime :05/11/24 15:26
HPChem Method :VO01E11

M	IDX	Parameters	.3 10:58 REV196	.5 11:27 REV197	1 11:56 REV198	2 12:30 REV199	5 12:59 REV200	10 13:28 REV201	20 13:58 REV202	30 14:27 REV203	50 14:56 REV204	100 15:26 REV205	AvDRec	%_RSD	Av_Rt_M
	1	1,4-DIFLUOROBENZENE	1	1	1	1	1	1	1	1	1	1	1	0	8.5509
	2	Chlorotrifluoroethylene	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	3	Dichlorodifluoromethane	103	108	92	102	99	95	101	99	102	99	3.4	4.44	2.1690
	4	2-Chloro-1,1,1-trifluoroethane	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	5	Chloromethane	114	108	97	105	101	93	101	94	97	90	5.9	7.39	2.4709
	6	Vinyl chloride	98	102	91	108	108	99	106	98	100	90	4.8	6.31	2.6048
	7	Bromomethane	------	114	99	101	95	88	103	97	103	100	12.3	17.96	3.1458
	8	Chloroethane	104	101	95	96	100	93	104	100	106	103	3.4	4.21	3.1896
	9	Dichlorofluoromethane	117	110	98	100	94	90	102	95	100	93	5.9	8.21	3.2755
	10	Trichlorofluoromethane	104	110	96	105	101	94	99	96	100	95	4.1	5.20	3.5526
5	11	Acrolein	------	------	------	100	100	91	109	100	109	105	4.5	5.86	3.9857
	12	1,1,2-Trichloro-1,2,2-trifluoroethane	82	103	93	109	100	100	106	103	108	95	5.9	8.11	4.0696
5	13	Acetone Δ	------	------	132	100	97	84	95	92	100	92	9.1	14.45	4.0577
	14	1,1-Dichloroethene	97	103	91	103	98	96	107	101	106	99	3.7	4.74	4.2296
25	15	tert-Butyl alcohol	91	91	91	100	100	91	109	109	118	109	8.2	9.12	4.3422
	16	Iodomethane	97	99	92	100	98	95	108	102	107	102	3.6	4.85	4.6385
	17	Methyl acetate	------	------	------	114	101	84	102	97	------	------	7.2	10.84	4.6531
	18	Methylene chloride	105	103	98	102	98	93	104	96	103	97	3.4	3.90	4.8577
	19	Carbon disulfide	110	95	94	99	101	94	108	99	------	------	4.7	6.08	4.8800
5	20	Acrylonitrile	107	100	96	96	100	93	104	100	107	102	3.5	4.77	5.0252
	21	tert-Butyl methyl ether (MTBE)	102	105	95	101	98	90	105	100	104	99	3.4	4.67	5.0607
	22	trans-1,2-Dichloroethene	98	101	96	102	98	93	107	101	106	98	3.3	4.44	5.2489
	23	Isopropyl ether (DIPE)	100	102	94	99	98	94	108	100	104	100	3	4.21	5.6696
	24	Vinyl acetate	------	90	84	95	105	91	110	106	110	108	8.7	9.82	5.8322
	25	1,1-Dichloroethane	97	102	94	102	98	94	108	101	105	99	3.6	4.54	5.8296
25	26	2-Butanol	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	27	tert-Butyl ethyl ether (ETBE)	98	98	96	105	99	92	108	101	103	98	3.5	4.52	6.2400
5	28	2-Butanone	------	89	88	89	96	95	109	109	116	107	9.3	10.70	6.4281
	29	2,2-Dichloropropane	104	105	95	101	97	94	105	100	103	96	3.6	4.21	6.6281
	30	cis-1,2-Dichloroethene	98	102	95	99	98	95	107	101	105	99	3.2	4.03	6.6859
	31	Chloroform	117	109	97	97	96	90	103	95	100	97	5.9	8.00	6.9082
	32	Bromochloromethane	98	102	93	100	99	93	107	103	107	100	3.5	4.73	7.1481
	33	Tetrahydrofuran	------	------	------	109	97	86	106	100	111	103	6.5	8.25	7.2006
	34	Dibromofluoromethane	92	106	93	106	103	91	108	101	------	------	6	7.01	7.2281
	35	1,1,1-Trichloroethane	100	105	95	100	97	94	106	99	104	99	3.2	4.19	7.4993
	36	Cyclohexane	101	109	95	105	102	91	103	94	------	------	5	6.15	7.5244
	37	2,2,4-Trimethylpentane	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	38	1,1-Dichloropropene	97	104	97	102	97	94	106	101	105	99	3.4	4.16	7.7230
	39	Carbon tetrachloride	102	103	92	101	96	96	105	100	105	98	3.6	4.43	7.8785
	40	tert-Amyl methyl ether (TAME)	108	102	97	102	96	88	104	99	105	97	4.3	5.64	7.8889
	41	1,2-Dichloroethane-d4	99	102	91	109	103	88	107	102	------	------	5.6	7.18	7.9652
	42	Benzene	104	105	95	101	99	94	105	98	102	98	3.4	4.04	8.1304
	43	1,2-Dichloroethane	99	100	94	102	99	93	107	101	105	100	3.1	4.45	8.1037
	44	Trichloroethene	97	98	92	99	97	97	108	101	108	102	3.9	4.96	9.0723
	45	Methylcyclohexane	103	110	98	106	100	90	101	93	------	------	4.8	6.46	9.1653
	46	1,2-Dichloropropane	102	105	91	98	96	93	107	100	106	100	4.2	5.38	9.3509
	47	Bromodichloromethane	114	107	95	99	97	90	104	96	103	97	5.5	6.99	9.7316
20	48	1,4-Dioxane	------	------	------	76	93	89	110	106	117	109	0	14.49	9.7831
	49	Dibromomethane	96	103	96	101	99	89	106	101	109	101	4	5.30	9.8235
	50	2-Chloroethyl vinyl ether	------	------	88	96	95	91	108	107	109	104	7.2	8.06	10.2338
5	51	4-Methyl-2-pentanone	------	------	115	93	93	87	101	99	106	98	15.4	18.90	10.2764
	52	cis-1,3-Dichloropropene	99	97	93	98	98	93	108	103	108	102	4.2	5.31	10.6250
	53	CHLOROBENZENE-D5	1	1	1	1	1	1	1	1	1	1	1	0	13.7168
	54	Toluene-d8	99	102	92	108	102	93	105	98	------	------	4.3	5.48	11.0301
	55	Toluene	102	108	93	101	97	96	103	97	104	98	3.8	4.50	11.1687
	56	Ethyl methacrylate	------	------	87	98	94	93	109	103	112	105	7.1	8.54	11.4708
	57	trans-1,3-Dichloropropene	97	98	91	100	98	94	108	102	109	103	4.4	5.62	11.4842
	58	1,1,2-Trichloroethane	106	98	94	102	97	93	104	100	105	99	3.6	4.45	11.7509
5	59	2-Hexanone	------	------	123	93	93	87	101	99	106	99	28.5	36.80	11.7912
	60	1,3-Dichloropropane	96	98	95	103	96	93	107	101	107	103	4.2	5.08	12.1953
	61	Tetrachloroethene	98	106	95	103	96	97	104	99	104	99	3.4	3.83	12.2990
	62	Dibromochloromethane	107	104	93	98	95	92	105	99	107	101	4.6	5.55	12.6665
	63	1,2-Dibromoethane	93	96	93	102	99	93	109	103	110	103	5.2	6.28	13.0383
	64	1-Chlorohexane	103	107	93	103	95	97	103	99	103	96	4.1	4.69	13.3080
	65	Chlorobenzene	99	103	95	101	97	97	106	99	105	99	3	3.64	13.7909
	66	1,1,1,2-Tetrachloroethane	100	101	96	101	96	96	106	99	105	99	2.7	3.59	13.8650
	67	Ethylbenzene	102	106	94	101	97	98	105	99	102	95	3.4	4.07	13.8813
2	68	m-Xylene & p-Xylene	103	107	96	102	98	96	105	98	100	94	3.5	4.23	14.0205
	69	o-Xylene	107	106	96	102	96	95	103	98	102	94	4.1	4.66	14.8428
	70	Styrene	103	102	96	101	97	96	106	100	104	96	3.2	3.78	14.9094
	71	Isopropylbenzene	101	106	94	102	97	97	106	99	102	96	3.3	3.97	15.5243
	72	1,2-DICHLOROBENZENE-D4	1	1	1	1	1	1	1	1	1	1	1	0	18.6798
	73	Bromoform	------	116	98	104	96	86	101	97	100	102	15.5	20.61	15.5589
	74	trans-1,4-Dichloro-2-butene	------	------	84	97	94	90	109	104	110	109	8.2	9.77	15.6338
	75	1,1,2,2-Tetrachloroethane	111	100	93	98	96	89	104	100	105	103	4.7	6.36	15.8650
	76	4-Bromofluorobenzene	107	106	93	101	98	90	106	98	------	------	4.9	6.06	16.0153
	77	1,2,3-Trichloropropane	------	83	90	102	99	94	110	104	112	109	7.8	9.82	16.1515
	78	n-Propylbenzene	103	108	91	97	96	97	106	99	102	101	4	5.03	16.2976
	79	Bromobenzene	97	102	91	97	98	96	108	101	106	105	4.3	5.26	16.3835
	80	1,3,5-Trimethylbenzene	105	108	90	97	96	97	106	99	102	100	4.2	5.49	16.6058
	81	2-Chlorotoluene	103	109	95	95	96	95	104	98	100	103	4	4.84	16.6354
	82	4-Chlorotoluene	100	106	89	101	100	98	107	100	104	94	3.9	5.46	16.7332
	83	tert-Butylbenzene	104	102	91	97	96	97	107	99	104	103	3.9	4.70	17.2872
	84	1,2,4-Trimethylbenzene	103	106	92	98	97	97	106	100	102	100	3.4	4.41	17.3598
	85	sec-Butylbenzene	105	108	90	99	96	97	106	98	102	98	4.2	5.27	17.6576
	86	p-Isopropyltoluene	102	109	91	101	97	96	106	98	101	98	4	5.17	17.8798
	87	1,3-Dichlorobenzene	100	107	92	98	96	96	107	100	103	101	3.7	4.87	18.0280
	88	1,2,3-Trimethylbenzene	105	108	94	99	97	95	105	99	101	98	3.9	4.70	18.1317
	89	1,4-Dichlorobenzene	108	107	94	98	97	95	105	98	101	98	4	4.92	18.1909
	90	n-Butylbenzene	106	109	92	99	96	97	106	99	101	95	4.4	5.46	18.4887
	91	1,2-Dichlorobenzene	101	104	95	100	98	93	106	99	104	100	3.1	4.06	18.7243
	92	1,2-Dibromo-3-chloropropane	------	------	114	106	96	83	100	96	104	101	12.6	16.02	19.7172
	93	1,2,4-Trichlorobenzene	93	98	89	98	97	95	110	106	111	105	6.3	7.49	20.8013
	94	Hexachlorobutadiene	95	99	88	96	96	100	111	105	109	100	5.1	6.95	20.9673
	95	Naphthalene	93	95	88	97	96	93	111	107	113	106	7.4	8.50	21.1480
	96	1,2,3-Trichlorobenzene	95	97	90	99	97	95	110	104	109	104	5.5	6.66	21.4665

Δ - 8260C only report LOQ ≥ 2

For 8260C
SM
5/15/24

Compound List Report 01

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	2.17	0.253	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	2.46	0.288	A	1	A	B
6	T	Vinyl chloride	62	2.61	0.305	A	1	A	B
7	T	Bromomethane	94	3.14	0.367	L	1	A	B
8	T	Chloroethane	64	3.18	0.373	A	1	A	B
9	T	Dichlorofluoromethane	67	3.27	0.383	A	1	A	B
10	T	Trichlorofluoromethane	101	3.55	0.416	A	1	A	B
11	T	Acrolein	56	3.98	0.466	A	1	A	B
12	T	1,1,2-Trichloro-1,2,2-trifluor	151	4.06	0.475	A	1	A	B
13	T	Acetone	43	4.06	0.475	A	1	A	B
14	T	1,1-Dichloroethene	61	4.22	0.494	A	2	A	B
15	T	tert-Butyl alcohol	59	4.34	0.508	A	1	A	B
16	T	Iodomethane	142	4.64	0.543	A	1	A	B
17	T	Methyl acetate	43	4.65	0.544	A	1	A	B
18	T	Methylene chloride	49	4.86	0.569	A	2	A	B
19	T	Carbon disulfide	76	4.87	0.570	A	1	A	B
20	T	Acrylonitrile	53	5.02	0.588	A	2	A	B
21	T	tert-Butyl methyl ether (MTBE)	73	5.07	0.593	A	1	A	B
22	T	trans-1,2-Dichloroethene	61	5.24	0.614	A	2	A	B
23	T	Isopropyl ether (DIPE)	45	5.67	0.664	A	1	A	B
24	T	Vinyl acetate	43	5.82	0.681	A	1	A	B
25	T	1,1-Dichloroethane	63	5.82	0.681	A	2	A	B
26	T	2-Butanol	45	6.16	0.721	A	1	A	B
27	T	tert-Butyl ethyl ether (ETBE)	59	6.24	0.730	A	1	A	B
28	T	2-Butanone	43	6.41	0.751	A	1	A	B
29	T	2,2-Dichloropropane	77	6.62	0.775	A	2	A	B
30	T	cis-1,2-Dichloroethene	96	6.68	0.782	A	2	A	B
31	T	Chloroform	83	6.90	0.808	A	2	A	B
32	T	Bromochloromethane	49	7.14	0.836	A	2	A	B
33	T	Tetrahydrofuran	42	7.20	0.842	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	0.881	A	1	A	B
37	T	2,2,4-Trimethylpentane	57	7.52	0.881	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	7.88	0.922	A	1	A	B
41	S	1,2-Dichloroethane-d4	65	7.97	0.933	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	9.17	1.073	A	2	A	B
46	T	1,2-Dichloropropane	63	9.34	1.094	A	1	A	B
47	T	Bromodichloromethane	83	9.73	1.139	A	1	A	B
48	T	1,4-Dioxane	88	9.79	1.146	A	1	A	B
49	T	Dibromomethane	93	9.82	1.149	A	2	A	B
50	T	2-Chloroethyl vinyl ether	63	10.23	1.198	A	2	A	B
51	T	4-Methyl-2-pentanone	43	10.26	1.201	L	3	A	B
52	T	cis-1,3-Dichloropropene	75	10.62	1.243	A	1	A	B

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53	I	CHLOROBENZENE-D5	117	13.71	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	0.814	A	1	A	B
56	T	Ethyl methacrylate	69	11.46	0.836	A	1	A	B
57	T	trans-1,3-Dichloropropene	75	11.48	0.837	A	1	A	B
58	T	1,1,2-Trichloroethane	97	11.74	0.856	A	2	A	B
59	T	2-Hexanone	43	11.76	0.857	L	1	A	B
60	T	1,3-Dichloropropane	76	12.19	0.889	A	1	A	B
61	T	Tetrachloroethene	164	12.29	0.896	A	3	A	B
62	T	Dibromochloromethane	129	12.66	0.923	A	1	A	B
63	T	1,2-Dibromoethane	107	13.03	0.950	A	1	A	B
64	T	1-Chlorohexane	91	13.30	0.970	A	1	A	B
65	P,M	Chlorobenzene	112	13.79	1.005	A	1	A	B
66	T	1,1,1,2-Tetrachloroethane	131	13.86	1.011	A	1	A	B
67	T	Ethylbenzene	91	13.88	1.012	A	1	A	B
68	T	m-Xylene & p-Xylene	91	14.01	1.022	A	1	A	B
69	T	o-Xylene	91	14.84	1.082	A	1	A	B
70	T	Styrene	104	14.90	1.086	A	2	A	B
71	T	Isopropylbenzene	105	15.52	1.132	A	3	A	B
72	I	1,2-DICHLOROBENZENE-D4	152	18.68	1.000	A	1	A	B
73	T	Bromoform	173	15.55	0.833	L	1	A	B
74	T	trans-1,4-Dichloro-2-butene	53	15.63	0.837	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	16.14	0.864	A	1	A	B
78	T	n-Propylbenzene	91	16.29	0.872	A	2	A	B
79	T	Bromobenzene	156	16.38	0.877	A	1	A	B
80	T	1,3,5-Trimethylbenzene	105	16.60	0.889	A	2	A	B
81	T	2-Chlorotoluene	91	16.63	0.891	A	1	A	B
82	T	4-Chlorotoluene	91	16.72	0.895	A	1	A	B
83	T	tert-Butylbenzene	134	17.29	0.925	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	0.957	A	2	A	B
87	T	1,3-Dichlorobenzene	146	18.03	0.965	A	2	A	B
88	T	1,2,3-Trimethylbenzene	105	18.13	0.971	A	2	A	B
89	T	1,4-Dichlorobenzene	146	18.19	0.974	A	2	A	B
90	T	n-Butylbenzene	91	18.49	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	19.71	1.055	L	1	A	B
93	T	1,2,4-Trichlorobenzene	180	20.80	1.113	A	2	A	B
94	T	Hexachlorobutadiene	225	20.96	1.122	A	1	A	B
95	T	Naphthalene	128	21.14	1.132	A	1	A	B
96	T	1,2,3-Trichlorobenzene	180	21.46	1.149	A	2	A	B

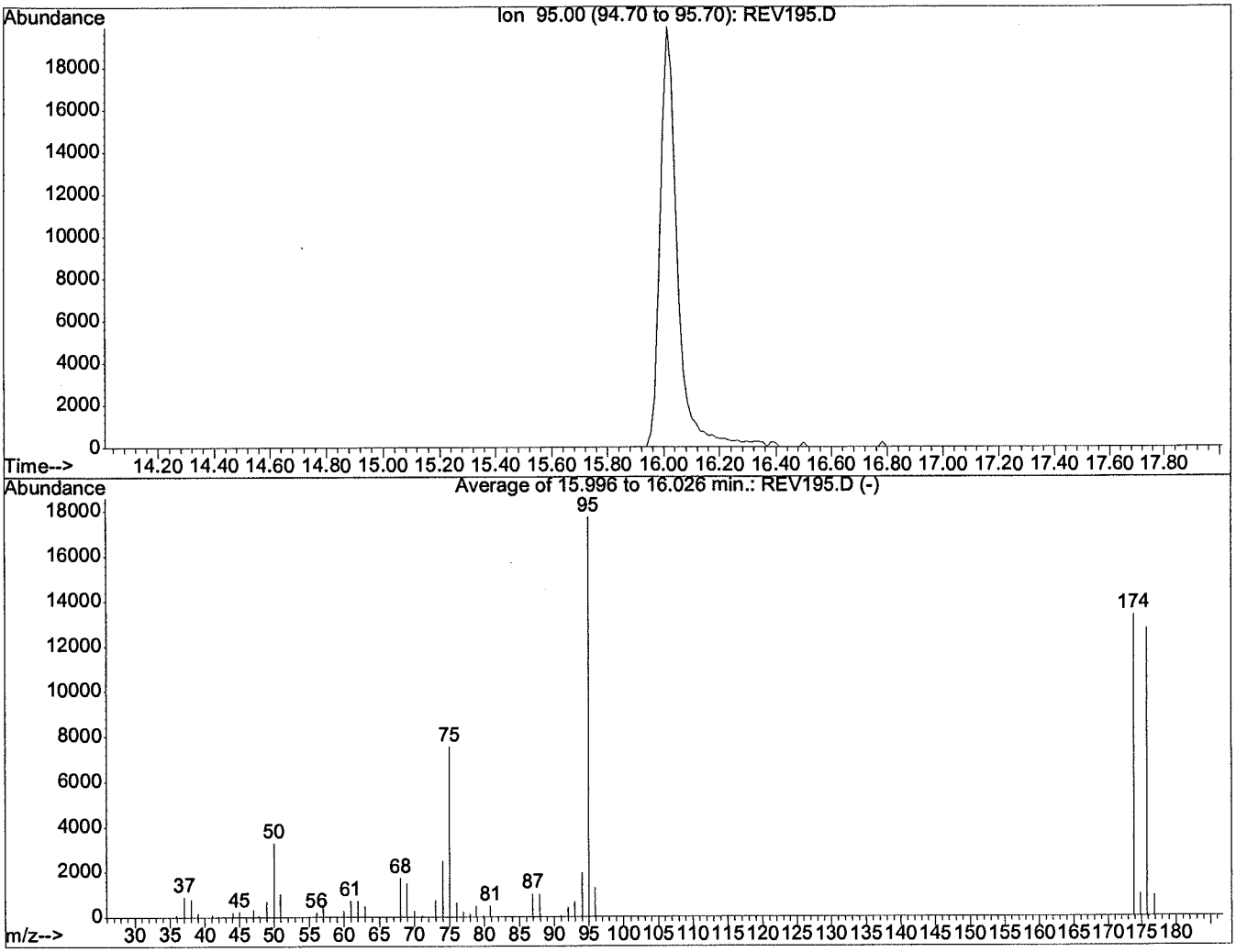
Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
#Qual = number of qualifiers
A/H = Area or Height
ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

VO01E11.M Mon May 13 14:36:08 2024

5/15/24

Data File : D:\HPCHEM\1\DATA\24E11\REV195.D
Acq On : 11 May 2024 10:20 am
Sample : BFB01E11
Misc : T/CHK
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls

Vial: 1
Operator: LPriet
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	18.5	3281	PASS
75	95	30	60	42.5	7529	PASS
95	95	100	100	100.0	17719	PASS
96	95	5	9	7.3	1291	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	75.4	13365	PASS
175	174	5	9	7.4	989	PASS
176	174	95	101	95.5	12770	PASS
177	176	5	9	7.1	901	PASS

REV195.D VO01E11.M Mon May 13 14:35:03 2024 SV 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV196.D Vial: 2
Acq On : 11 May 2024 10:58 am Operator: LPriet
Sample : VO01E111 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: May 13 14:29 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.55	114	981871	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.72	117	797187	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	299571	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	8387	0.28	ug/l	0.00
Spiked Amount 10.000			Recovery =	2.80%		
41) 1,2-Dichloroethane-d4	7.95	65	6117	0.30	ug/l	-0.01
Spiked Amount 10.000			Recovery =	3.00%		
54) Toluene-d8	11.03	98	35624	0.30	ug/l	0.00
Spiked Amount 10.000			Recovery =	3.00%		
76) 4-Bromofluorobenzene	16.03	95	13047	0.32	ug/l	0.02
Spiked Amount 10.000			Recovery =	3.20%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.16	85	8140	0.31	ug/l	65
5) Chloromethane	2.46	50	12543	0.34	ug/l	86
6) Vinyl chloride	2.59	62	8988	0.29	ug/l	89
8) Chloroethane	3.18	64	6888	0.31	ug/l	80
9) Dichlorofluoromethane	3.26	67	22206	0.35	ug/l	73
10) Trichlorofluoromethane	3.52	101	12948	0.31	ug/l	100
12) 1,1,2-Trichloro-1,2,2-trif	4.06	151	5097	0.25	ug/l	94
14) 1,1-Dichloroethene	4.22	61	15229	0.29	ug/l	94
15) tert-Butyl alcohol	4.34	59	7470	6.83	ug/l	79
16) Iodomethane	4.62	142	16364	0.29	ug/l	99
18) Methylene chloride	4.84	49	13215	0.31	ug/l	98
19) Carbon disulfide	4.87	76	36989	0.33	ug/l	99
20) Acrylonitrile	5.02	53	7271	1.60	ug/l	91
21) tert-Butyl methyl ether (M	5.05	73	15688	0.30	ug/l	81
22) trans-1,2-Dichloroethene	5.24	61	14865	0.29	ug/l	99
23) Isopropyl ether (DIPE)	5.66	45	32481	0.30	ug/l	98
25) 1,1-Dichloroethane	5.82	63	17229	0.29	ug/l	98
27) tert-Butyl ethyl ether (ET	6.24	59	22788	0.30	ug/l	100
29) 2,2-Dichloropropane	6.62	77	15398	0.31	ug/l	97
30) cis-1,2-Dichloroethene	6.68	96	11947	0.29	ug/l	98
31) Chloroform	6.90	83	21166	0.35	ug/l	98
32) Bromochloromethane	7.14	49	6943	0.29	ug/l	91
35) 1,1,1-Trichloroethane	7.49	97	15125	0.30	ug/l	97
36) Cyclohexane	7.52	84	14801	0.30	ug/l	88
38) 1,1-Dichloropropene	7.72	110	4945	0.29	ug/l	94
39) Carbon tetrachloride	7.87	119	11491	0.31	ug/l	97
40) tert-Amyl methyl ether (TA	7.89	73	19458	0.32	ug/l	91

(#) = qualifier out of range (m) = manual integration

SW 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV196.D Vial: 2
Acq On : 11 May 2024 10:58 am Operator: LPriet
Sample : VO01E111 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: May 13 14:29 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
42)	Benzene	8.12	78	40894	0.31	ug/l	98
43)	1,2-Dichloroethane	8.10	62	7854	0.30	ug/l	93
44)	Trichloroethene	9.08	130	9853	0.29	ug/l	97
45)	Methylcyclohexane	9.17	83	16634	0.31	ug/l	98
46)	1,2-Dichloropropane	9.36	63	9009	0.31	ug/l	91
47)	Bromodichloromethane	9.73	83	13928	0.34	ug/l	78
49)	Dibromomethane	9.82	93	3964	0.29	ug/l	85
52)	cis-1,3-Dichloropropene	10.63	75	13583	0.30	ug/l	94
55)	Toluene	11.17	91	43467	0.31	ug/l	97
57)	trans-1,3-Dichloropropene	11.49	75	9569	0.29	ug/l	95
58)	1,1,2-Trichloroethane	11.76	97	5879	0.32	ug/l	95
60)	1,3-Dichloropropane	12.21	76	9101	0.29	ug/l	94
61)	Tetrachloroethene	12.29	164	8630	0.29	ug/l	98
62)	Dibromochloromethane	12.68	129	7252	0.32	ug/l	99
63)	1,2-Dibromoethane	13.05	107	5114	0.28	ug/l	93
64)	1-Chlorohexane	13.32	91	18908	0.31	ug/l	95
65)	Chlorobenzene	13.79	112	25024	0.30	ug/l	99
66)	1,1,1,2-Tetrachloroethane	13.86	131	7766	0.30	ug/l	97
67)	Ethylbenzene	13.89	91	49666	0.31	ug/l	99
68)	m-Xylene & p-Xylene	14.03	91	73348	0.62	ug/l	99
69)	o-Xylene	14.84	91	39020	0.32	ug/l	95
70)	Styrene	14.93	104	29115	0.31	ug/l	95
71)	Isopropylbenzene	15.52	105	48372	0.30	ug/l	99
75)	1,1,2,2-Tetrachloroethane	15.86	83	6639	0.33	ug/l	100
78)	n-Propylbenzene	16.31	91	60366	0.31	ug/l	99
79)	Bromobenzene	16.38	156	8946	0.29	ug/l	100
80)	1,3,5-Trimethylbenzene	16.61	105	39112	0.31	ug/l	100
81)	2-Chlorotoluene	16.63	91	36258	0.31	ug/l	99
82)	4-Chlorotoluene	16.74	91	31256	0.30	ug/l	99
83)	tert-Butylbenzene	17.29	134	8128	0.31	ug/l	96
84)	1,2,4-Trimethylbenzene	17.36	105	37452	0.31	ug/l	99
85)	sec-Butylbenzene	17.66	105	53765	0.31	ug/l	98
86)	p-Isopropyltoluene	17.88	119	40416	0.31	ug/l	94
87)	1,3-Dichlorobenzene	18.03	146	17654	0.30	ug/l	99
88)	1,2,3-Trimethylbenzene	18.13	105	35674	0.31	ug/l	97
89)	1,4-Dichlorobenzene	18.19	146	18537	0.32	ug/l	97
90)	n-Butylbenzene	18.50	91	43628	0.32	ug/l	95
91)	1,2-Dichlorobenzene	18.72	146	14596	0.30	ug/l	96
93)	1,2,4-Trichlorobenzene	20.81	180	9721	0.28	ug/l	99
94)	Hexachlorobutadiene	20.96	225	5978	0.29	ug/l	94
95)	Naphthalene	21.15	128	11441	0.28	ug/l	94

(#) = qualifier out of range (m) = manual integration

SM 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV196.D Vial: 2
Acq On : 11 May 2024 10:58 am Operator: LPriet
Sample : VO01E111 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: May 13 14:29 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
96) 1,2,3-Trichlorobenzene	21.46	180	7501	0.28	ug/l	96

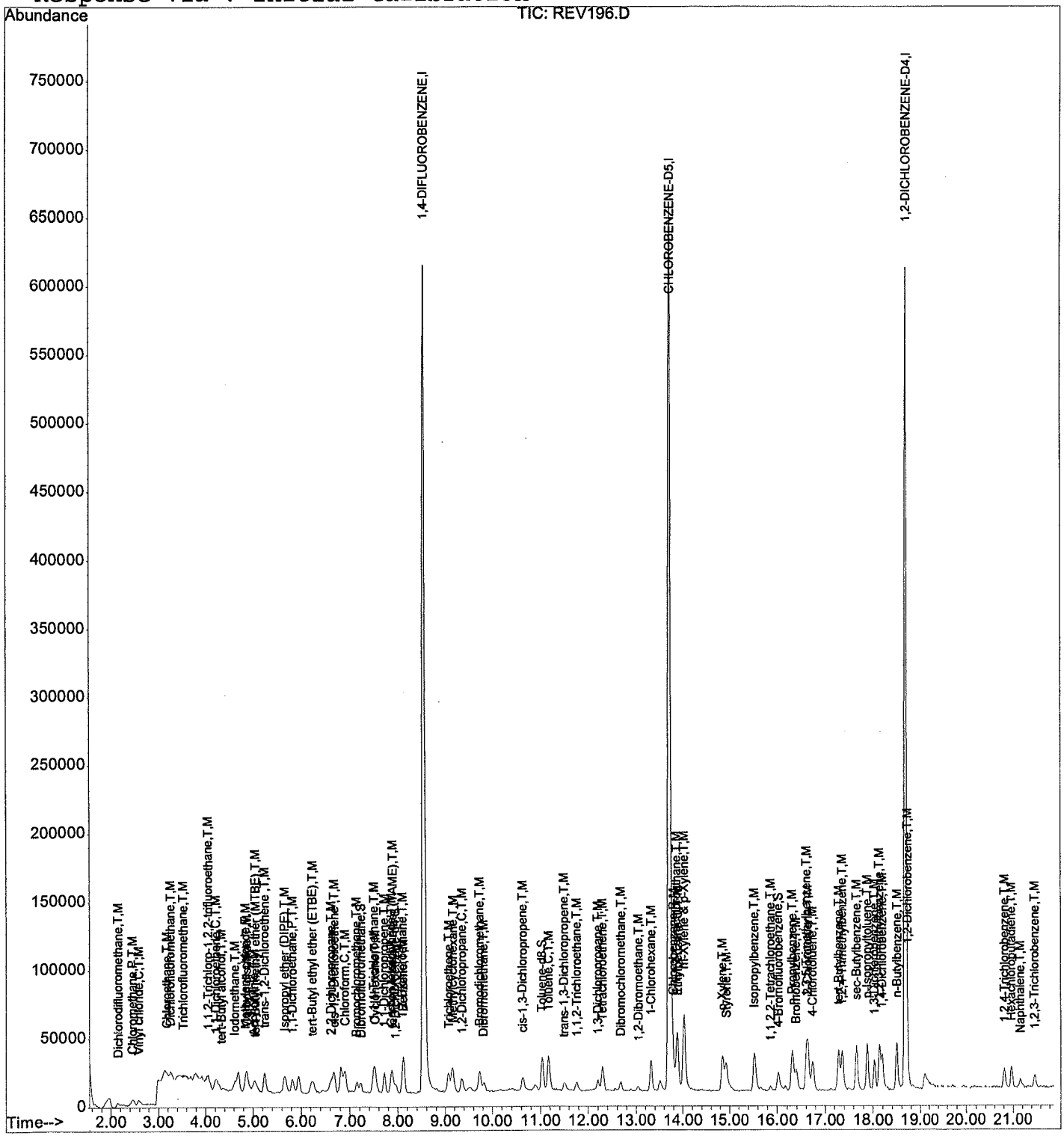
SM 5/15/24

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E11\REV196.D Vial: 2
Acq On : 11 May 2024 10:58 am Operator: LPriet
Sample : VO01E111 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: May 13 14:29 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV197.D Vial: 3
Acq On : 11 May 2024 11:27 am Operator: LPriet
Sample : VO01E112 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: May 13 14:30 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.54	114	958207	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	782724	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	292911	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	15713	0.53	ug/l	0.00
Spiked Amount 10.000			Recovery =	5.30%		
41) 1,2-Dichloroethane-d4	7.97	65	10333	0.51	ug/l	0.00
Spiked Amount 10.000			Recovery =	5.10%		
54) Toluene-d8	11.03	98	59771	0.51	ug/l	0.00
Spiked Amount 10.000			Recovery =	5.10%		
76) 4-Bromofluorobenzene	16.01	95	21050	0.53	ug/l	0.00
Spiked Amount 10.000			Recovery =	5.30%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.17	85	13823	0.54	ug/l	95
5) Chloromethane	2.47	50	19466	0.54	ug/l	94
6) Vinyl chloride	2.60	62	15272	0.51	ug/l	97
7) Bromomethane	3.14	94	27166	0.57	ug/l	73
8) Chloroethane	3.18	64	10907	0.50	ug/l	88
9) Dichlorofluoromethane	3.27	67	33964	0.55	ug/l	88
10) Trichlorofluoromethane	3.55	101	22334	0.55	ug/l	96
12) 1,1,2-Trichloro-1,2,2-trif	4.06	151	10414	0.52	ug/l	99
14) 1,1-Dichloroethene	4.22	61	26419	0.52	ug/l	97
15) tert-Butyl alcohol	4.35	59	11518	10.80	ug/l	75
16) Iodomethane	4.64	142	27278	0.50	ug/l	99
18) Methylene chloride	4.86	49	21078	0.51	ug/l	99
19) Carbon disulfide	4.87	76	52077	0.48	ug/l	98
20) Acrylonitrile	5.04	53	11053	2.49	ug/l	93
21) tert-Butyl methyl ether (M	5.05	73	26332	0.52	ug/l	92
22) trans-1,2-Dichloroethene	5.24	61	24833	0.50	ug/l	98
23) Isopropyl ether (DIPE)	5.67	45	53730	0.51	ug/l	97
24) Vinyl acetate	5.85	43	16307	0.45	ug/l	86
25) 1,1-Dichloroethane	5.82	63	29442	0.51	ug/l	97
27) tert-Butyl ethyl ether (ET	6.24	59	37115	0.49	ug/l	96
28) 2-Butanone	6.46	43	11997	2.24	ug/l	72
29) 2,2-Dichloropropane	6.62	77	25455	0.53	ug/l	98
30) cis-1,2-Dichloroethene	6.68	96	20337	0.51	ug/l	99
31) Chloroform	6.90	83	32100	0.55	ug/l	99
32) Bromochloromethane	7.14	49	11696	0.51	ug/l	95
35) 1,1,1-Trichloroethane	7.50	97	25812	0.53	ug/l	98
36) Cyclohexane	7.52	84	26045	0.54	ug/l	94

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV197.D Vial: 3
Acq On : 11 May 2024 11:27 am Operator: LPriet
Sample : VO01E112 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: May 13 14:30 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
38)	1,1-Dichloropropene	7.72	110	8678	0.52 ug/l	98
39)	Carbon tetrachloride	7.88	119	18823	0.51 ug/l	98
40)	tert-Amyl methyl ether (TA	7.88	73	30034	0.51 ug/l	99
42)	Benzene	8.13	78	67162	0.52 ug/l	99
43)	1,2-Dichloroethane	8.10	62	12935	0.50 ug/l	96
44)	Trichloroethene	9.08	130	16301	0.49 ug/l	93
45)	Methylcyclohexane	9.17	83	28860	0.55 ug/l	98
46)	1,2-Dichloropropane	9.36	63	15082	0.53 ug/l	92
47)	Bromodichloromethane	9.73	83	21158	0.53 ug/l	92
49)	Dibromomethane	9.83	93	6952	0.51 ug/l	88
52)	cis-1,3-Dichloropropene	10.63	75	21629	0.49 ug/l	99
55)	Toluene	11.17	91	74965	0.54 ug/l	95
57)	trans-1,3-Dichloropropene	11.49	75	15855	0.49 ug/l	96
58)	1,1,2-Trichloroethane	11.76	97	8909	0.49 ug/l	95
60)	1,3-Dichloropropane	12.20	76	15204	0.49 ug/l	97
61)	Tetrachloroethene	12.31	164	15270	0.53 ug/l	99
62)	Dibromochloromethane	12.66	129	11514	0.52 ug/l	99
63)	1,2-Dibromoethane	13.05	107	8602	0.48 ug/l	99
64)	1-Chlorohexane	13.31	91	32200	0.54 ug/l	99
65)	Chlorobenzene	13.79	112	42586	0.51 ug/l	99
66)	1,1,1,2-Tetrachloroethane	13.86	131	12904	0.51 ug/l	99
67)	Ethylbenzene	13.88	91	84216	0.53 ug/l	99
68)	m-Xylene & p-Xylene	14.03	91	123954	1.07 ug/l	99
69)	o-Xylene	14.84	91	63511	0.53 ug/l	99
70)	Styrene	14.91	104	47295	0.51 ug/l	98
71)	Isopropylbenzene	15.52	105	83169	0.53 ug/l	98
73)	Bromoform	15.57	173	2997	0.58 ug/l	70
75)	1,1,2,2-Tetrachloroethane	15.86	83	9761	0.50 ug/l	94
77)	1,2,3-Trichloropropane	16.17	110	2065	0.41 ug/l	98
78)	n-Propylbenzene	16.31	91	102429	0.54 ug/l	99
79)	Bromobenzene	16.38	156	15359	0.51 ug/l	98
80)	1,3,5-Trimethylbenzene	16.60	105	65890	0.54 ug/l	99
81)	2-Chlorotoluene	16.63	91	62476	0.54 ug/l	99
82)	4-Chlorotoluene	16.74	91	53625	0.53 ug/l	100
83)	tert-Butylbenzene	17.29	134	13038	0.51 ug/l	98
84)	1,2,4-Trimethylbenzene	17.36	105	62834	0.53 ug/l	94
85)	sec-Butylbenzene	17.66	105	90100	0.54 ug/l	99
86)	p-Isopropyltoluene	17.88	119	70430	0.55 ug/l	95
87)	1,3-Dichlorobenzene	18.03	146	30579	0.53 ug/l	97
88)	1,2,3-Trimethylbenzene	18.13	105	60108	0.54 ug/l	97
89)	1,4-Dichlorobenzene	18.19	146	30059	0.54 ug/l	97

(#) = qualifier out of range (m) = manual integration SA 5/15/24

Data File : D:\HPCHEM\1\DATA\24E11\REV197.D Vial: 3
Acq On : 11 May 2024 11:27 am Operator: LPriet
Sample : VO01E112 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: May 13 14:30 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
90)	n-Butylbenzene	18.49	91	72685	0.54	ug/l	98
91)	1,2-Dichlorobenzene	18.72	146	24372	0.52	ug/l	97
93)	1,2,4-Trichlorobenzene	20.81	180	16768	0.49	ug/l	98
94)	Hexachlorobutadiene	20.96	225	10138	0.50	ug/l	96
95)	Naphthalene	21.15	128	19046	0.48	ug/l	100
96)	1,2,3-Trichlorobenzene	21.48	180	12506	0.48	ug/l	96

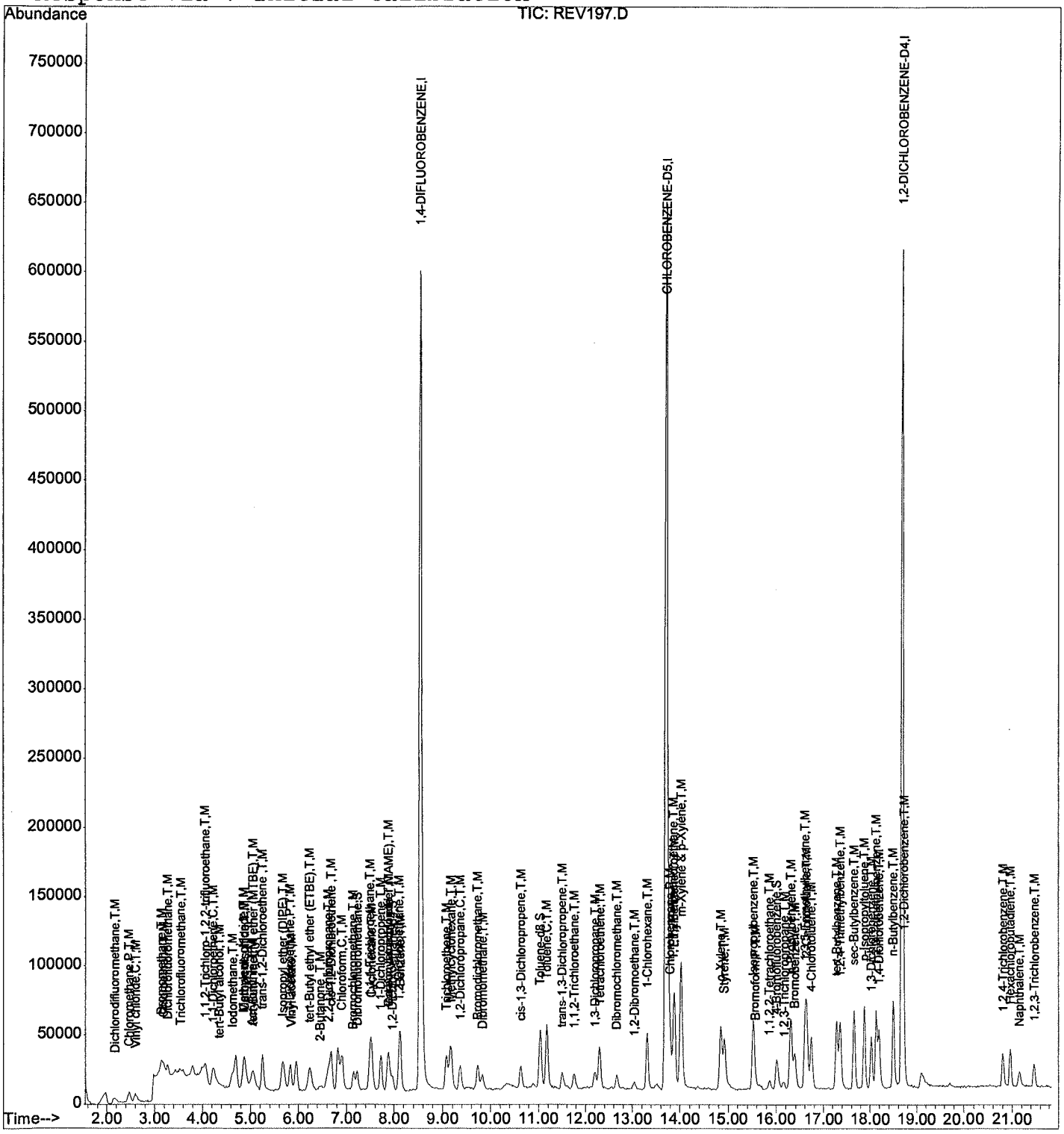
Sm 5/15/24

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E11\REV197.D Vial: 3
Acq On : 11 May 2024 11:27 am Operator: LPriet
Sample : VO01E112 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: May 13 14:30 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV198.D Vial: 4
Acq On : 11 May 2024 11:56 am Operator: LPriet
Sample : VO01E113 0.1/0.5 Inst : 01
Misc : 1ppb 8260/5ppb KET-AA/25ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:30 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.54	114	938282	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	769560	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	301168	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	27033	0.93	ug/l	0.00
Spiked Amount 10.000			Recovery = 9.30%			
41) 1,2-Dichloroethane-d4	7.97	65	18064	0.91	ug/l	0.00
Spiked Amount 10.000			Recovery = 9.10%			
54) Toluene-d8	11.03	98	106585	0.92	ug/l	0.00
Spiked Amount 10.000			Recovery = 9.20%			
76) 4-Bromofluorobenzene	16.01	95	38225	0.93	ug/l	0.00
Spiked Amount 10.000			Recovery = 9.30%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.16	85	23088	0.92	ug/l	94
5) Chloromethane	2.46	50	33932	0.97	ug/l	95
6) Vinyl chloride	2.60	62	26741	0.91	ug/l	96
7) Bromomethane	3.14	94	40909	0.99	ug/l	78
8) Chloroethane	3.18	64	20092	0.95	ug/l	95
9) Dichlorofluoromethane	3.27	67	59133	0.98	ug/l	89
10) Trichlorofluoromethane	3.54	101	38039	0.96	ug/l	99
12) 1,1,2-Trichloro-1,2,2-trif	4.07	151	18470	0.93	ug/l	97
13) Acetone	4.06	43	22798	6.66	ug/l	97
14) 1,1-Dichloroethene	4.24	61	45534	0.91	ug/l	98
15) tert-Butyl alcohol	4.35	59	24124	23.10	ug/l	96
16) Iodomethane	4.64	142	49230	0.92	ug/l	99
18) Methylene chloride	4.86	49	39235	0.98	ug/l	97
19) Carbon disulfide	4.89	76	100956	0.94	ug/l	98
20) Acrylonitrile	5.04	53	20752	4.78	ug/l	96
21) tert-Butyl methyl ether (M	5.07	73	46754	0.95	ug/l	93
22) trans-1,2-Dichloroethene	5.24	61	46060	0.96	ug/l	98
23) Isopropyl ether (DIPE)	5.67	45	97086	0.94	ug/l	99
24) Vinyl acetate	5.85	43	29673	0.84	ug/l	95
25) 1,1-Dichloroethane	5.84	63	53046	0.94	ug/l	99
27) tert-Butyl ethyl ether (ET	6.24	59	70971	0.96	ug/l	99
28) 2-Butanone	6.46	43	22810	4.34	ug/l	98
29) 2,2-Dichloropropane	6.64	77	44935	0.95	ug/l	99
30) cis-1,2-Dichloroethene	6.70	96	36770	0.95	ug/l	100
31) Chloroform	6.90	83	55743	0.97	ug/l	99
32) Bromochloromethane	7.15	49	20957	0.93	ug/l	97
35) 1,1,1-Trichloroethane	7.50	97	45525	0.95	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV198.D Vial: 4
Acq On : 11 May 2024 11:56 am Operator: LPriet
Sample : VO01E113 0.1/0.5 Inst : 01
Misc : 1ppb 8260/5ppb KET-AA/25ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:30 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
36) Cyclohexane	7.52	84	44404	0.95 ug/l	94
38) 1,1-Dichloropropene	7.72	110	15802	0.97 ug/l	96
39) Carbon tetrachloride	7.88	119	33069	0.92 ug/l	99
40) tert-Amyl methyl ether (TA	7.90	73	55848	0.97 ug/l	96
42) Benzene	8.13	78	118978	0.95 ug/l	100
43) 1,2-Dichloroethane	8.10	62	23808	0.94 ug/l	98
44) Trichloroethene	9.08	130	29954	0.92 ug/l	98
45) Methylcyclohexane	9.17	83	50363	0.98 ug/l	98
46) 1,2-Dichloropropane	9.36	63	25645	0.91 ug/l	99
47) Bromodichloromethane	9.73	83	36838	0.95 ug/l	93
49) Dibromomethane	9.83	93	12791	0.97 ug/l	94
50) 2-Chloroethyl vinyl ether	10.26	63	6310	0.89 ug/l	89
51) 4-Methyl-2-pentanone	10.31	43	44214	5.73 ug/l	98
52) cis-1,3-Dichloropropene	10.63	75	40679	0.93 ug/l	98
55) Toluene	11.17	91	127757	0.93 ug/l	99
56) Ethyl methacrylate	11.54	69	17884	0.87 ug/l	84
57) trans-1,3-Dichloropropene	11.49	75	28905	0.91 ug/l	100
58) 1,1,2-Trichloroethane	11.76	97	16916	0.95 ug/l	99
59) 2-Hexanone	11.92	43	11666	6.13 ug/l	79
60) 1,3-Dichloropropane	12.20	76	28770	0.95 ug/l	100
61) Tetrachloroethene	12.31	164	26996	0.95 ug/l	97
62) Dibromochloromethane	12.66	129	20338	0.93 ug/l	98
63) 1,2-Dibromoethane	13.03	107	16471	0.93 ug/l	99
64) 1-Chlorohexane	13.31	91	54872	0.93 ug/l	99
65) Chlorobenzene	13.79	112	77497	0.95 ug/l	98
66) 1,1,1,2-Tetrachloroethane	13.86	131	24060	0.96 ug/l	96
67) Ethylbenzene	13.88	91	146785	0.94 ug/l	99
68) m-Xylene & p-Xylene	14.03	91	218771	1.92 ug/l	98
69) o-Xylene	14.84	91	113075	0.96 ug/l	98
70) Styrene	14.91	104	87190	0.96 ug/l	100
71) Isopropylbenzene	15.52	105	145909	0.94 ug/l	100
73) Bromoform	15.57	173	7931	0.98 ug/l	88
74) trans-1,4-Dichloro-2-buten	15.66	53	4400	0.85 ug/l	88
75) 1,1,2,2-Tetrachloroethane	15.86	83	18640	0.93 ug/l	99
77) 1,2,3-Trichloropropane	16.14	110	4598	0.90 ug/l	94
78) n-Propylbenzene	16.29	91	177771	0.91 ug/l	99
79) Bromobenzene	16.38	156	28202	0.91 ug/l	99
80) 1,3,5-Trimethylbenzene	16.60	105	112460	0.90 ug/l	97
81) 2-Chlorotoluene	16.63	91	111646	0.95 ug/l	100
82) 4-Chlorotoluene	16.74	91	93055	0.89 ug/l	99
83) tert-Butylbenzene	17.29	134	23977	0.91 ug/l	99

(#) = qualifier out of range (m) = manual integration

SA 5/15/24

Data File : D:\HPCHEM\1\DATA\24E11\REV198.D Vial: 4
Acq On : 11 May 2024 11:56 am Operator: LPriet
Sample : VO01E113 0.1/0.5 Inst : 01
Misc : 1ppb 8260/5ppb KET-AA/25ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:30 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
84)	1,2,4-Trimethylbenzene	17.36	105	112239	0.92	ug/l	98
85)	sec-Butylbenzene	17.66	105	155515	0.90	ug/l	100
86)	p-Isopropyltoluene	17.88	119	121109	0.91	ug/l	97
87)	1,3-Dichlorobenzene	18.03	146	54062	0.92	ug/l	100
88)	1,2,3-Trimethylbenzene	18.13	105	107510	0.94	ug/l	99
89)	1,4-Dichlorobenzene	18.19	146	54049	0.94	ug/l	99
90)	n-Butylbenzene	18.49	91	126285	0.92	ug/l	99
91)	1,2-Dichlorobenzene	18.72	146	45597	0.95	ug/l	100
92)	1,2-Dibromo-3-chloropropan	19.71	157	2008	1.14	ug/l	82
93)	1,2,4-Trichlorobenzene	20.80	180	31265	0.89	ug/l	96
94)	Hexachlorobutadiene	20.97	225	18414	0.88	ug/l	96
95)	Naphthalene	21.15	128	36313	0.88	ug/l	99
96)	1,2,3-Trichlorobenzene	21.46	180	23830	0.90	ug/l	98

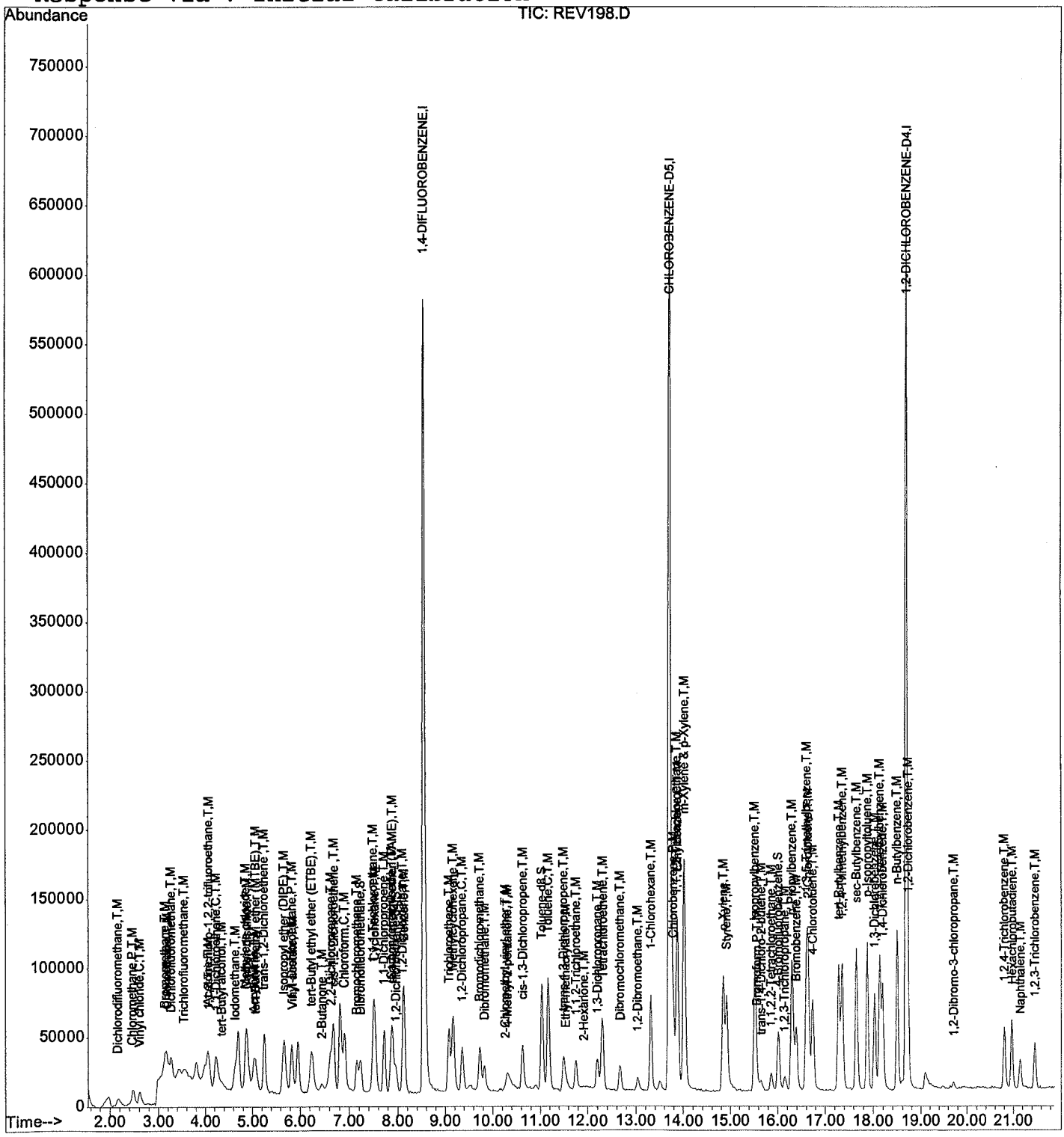
Sa 5/15/24

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E11\REV198.D Vial: 4
Acq On : 11 May 2024 11:56 am Operator: LPriet
Sample : VO01E113 0.1/0.5 Inst : 01
Misc : 1ppb 8260/5ppb KET-AA/25ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:30 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV199.D Vial: 5
Acq On : 11 May 2024 12:30 pm Operator: LPriet
Sample : VO01E114 0.2/1.0 Inst : 01
Misc : 2ppb 8260/10ppb KET-AA/50ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:54 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.55	114	923954	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.72	117	742613	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	293562	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.21	111	60611	2.12	ug/l	-0.02
Spiked Amount 10.000			Recovery = 21.20%			
41) 1,2-Dichloroethane-d4	7.95	65	42296	2.17	ug/l	-0.01
Spiked Amount 10.000			Recovery = 21.70%			
54) Toluene-d8	11.02	98	240432	2.16	ug/l	-0.01
Spiked Amount 10.000			Recovery = 21.60%			
76) 4-Bromofluorobenzene	16.01	95	81025	2.03	ug/l	0.00
Spiked Amount 10.000			Recovery = 20.30%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.15	85	50374	2.04	ug/l	98
5) Chloromethane	2.47	50	72647	2.10	ug/l	93
6) Vinyl chloride	2.60	62	62031	2.15	ug/l	97
7) Bromomethane	3.14	94	74605	2.01	ug/l	87
8) Chloroethane	3.18	64	40122	1.92	ug/l	98
9) Dichlorofluoromethane	3.27	67	119218	2.01	ug/l	96
10) Trichlorofluoromethane	3.54	101	81560	2.09	ug/l	99
11) Acrolein	3.98	56	20592	9.92	ug/l	89
12) 1,1,2-Trichloro-1,2,2-trif	4.07	151	42426	2.18	ug/l	100
13) Acetone	4.04	43	34198	10.14	ug/l	99
14) 1,1-Dichloroethene	4.22	61	101014	2.05	ug/l	98
15) tert-Butyl alcohol	4.34	59	52952	51.48	ug/l	92
16) Iodomethane	4.64	142	105323	1.99	ug/l	100
17) Methyl acetate	4.65	43	21059	2.29	ug/l	89
18) Methylene chloride	4.84	49	80640	2.04	ug/l	98
19) Carbon disulfide	4.87	76	207998	1.97	ug/l	99
20) Acrylonitrile	5.02	53	40810	9.54	ug/l	94
21) tert-Butyl methyl ether (M	5.05	73	98170	2.03	ug/l	99
22) trans-1,2-Dichloroethene	5.24	61	96611	2.03	ug/l	99
23) Isopropyl ether (DIPE)	5.66	45	200708	1.98	ug/l	100
24) Vinyl acetate	5.84	43	66565	1.91	ug/l	97
25) 1,1-Dichloroethane	5.82	63	112928	2.03	ug/l	99
27) tert-Butyl ethyl ether (ET	6.24	59	152096	2.09	ug/l	99
28) 2-Butanone	6.43	43	46317	8.95	ug/l	99
29) 2,2-Dichloropropane	6.62	77	94455	2.02	ug/l	99
30) cis-1,2-Dichloroethene	6.68	96	75331	1.97	ug/l	99
31) Chloroform	6.90	83	109165	1.93	ug/l	99

(#) = qualifier out of range (m) = manual integration

REV199.D VO01E11.M Mon May 13 14:31:07 2024 Page 1

SM 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV199.D Vial: 5
Acq On : 11 May 2024 12:30 pm Operator: LPriet
Sample : VO01E114 0.2/1.0 Inst : 01
Misc : 2ppb 8260/10ppb KET-AA/50ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:54 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32)	Bromochloromethane	7.14	49	44566	2.01 ug/l	100
33)	Tetrahydrofuran	7.20	42	6950	2.12 ug/l	84
35)	1,1,1-Trichloroethane	7.49	97	94535	2.00 ug/l	99
36)	Cyclohexane	7.51	84	97188	2.11 ug/l	97
38)	1,1-Dichloropropene	7.72	110	32679	2.03 ug/l	100
39)	Carbon tetrachloride	7.86	119	71508	2.03 ug/l	98
40)	tert-Amyl methyl ether (TA	7.88	73	115389	2.04 ug/l	97
42)	Benzene	8.12	78	248582	2.01 ug/l	100
43)	1,2-Dichloroethane	8.10	62	50716	2.04 ug/l	99
44)	Trichloroethene	9.06	130	63296	1.98 ug/l	98
45)	Methylcyclohexane	9.15	83	107421	2.12 ug/l	99
46)	1,2-Dichloropropane	9.35	63	54414	1.97 ug/l	98
47)	Bromodichloromethane	9.73	83	75727	1.98 ug/l	99
48)	1,4-Dioxane	9.82	88	3445	30.47 ug/l	71
49)	Dibromomethane	9.82	93	26199	2.01 ug/l	97
50)	2-Chloroethyl vinyl ether	10.25	63	13477	1.92 ug/l	95
51)	4-Methyl-2-pentanone	10.29	43	96326	9.38 ug/l	98
52)	cis-1,3-Dichloropropene	10.62	75	84540	1.97 ug/l	99
55)	Toluene	11.17	91	267463	2.03 ug/l	100
56)	Ethyl methacrylate	11.49	69	38804	1.96 ug/l	97
57)	trans-1,3-Dichloropropene	11.48	75	61587	2.01 ug/l	97
58)	1,1,2-Trichloroethane	11.75	97	35305	2.04 ug/l	99
59)	2-Hexanone	11.83	43	38468	9.25 ug/l	97
60)	1,3-Dichloropropane	12.19	76	60220	2.05 ug/l	100
61)	Tetrachloroethene	12.29	164	56394	2.06 ug/l	100
62)	Dibromochloromethane	12.66	129	41132	1.95 ug/l	98
63)	1,2-Dibromoethane	13.03	107	34770	2.04 ug/l	98
64)	1-Chlorohexane	13.32	91	117841	2.07 ug/l	99
65)	Chlorobenzene	13.79	112	158702	2.02 ug/l	99
66)	1,1,1,2-Tetrachloroethane	13.86	131	48976	2.02 ug/l	99
67)	Ethylbenzene	13.88	91	304664	2.02 ug/l	99
68)	m-Xylene & p-Xylene	14.01	91	450609	4.09 ug/l	99
69)	o-Xylene	14.84	91	231237	2.04 ug/l	99
70)	Styrene	14.92	104	177724	2.02 ug/l	99
71)	Isopropylbenzene	15.52	105	305906	2.05 ug/l	99
73)	Bromoform	15.57	173	21027	2.08 ug/l	97
74)	trans-1,4-Dichloro-2-buten	15.64	53	9849	1.94 ug/l	85
75)	1,1,2,2-Tetrachloroethane	15.86	83	38426	1.97 ug/l	99
77)	1,2,3-Trichloropropane	16.16	110	10163	2.03 ug/l	95
78)	n-Propylbenzene	16.29	91	370739	1.94 ug/l	100
79)	Bromobenzene	16.38	156	58783	1.95 ug/l	100

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24E11\REV199.D Vial: 5
Acq On : 11 May 2024 12:30 pm Operator: LPriet
Sample : VO01E114 0.2/1.0 Inst : 01
Misc : 2ppb 8260/10ppb KET-AA/50ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:54 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

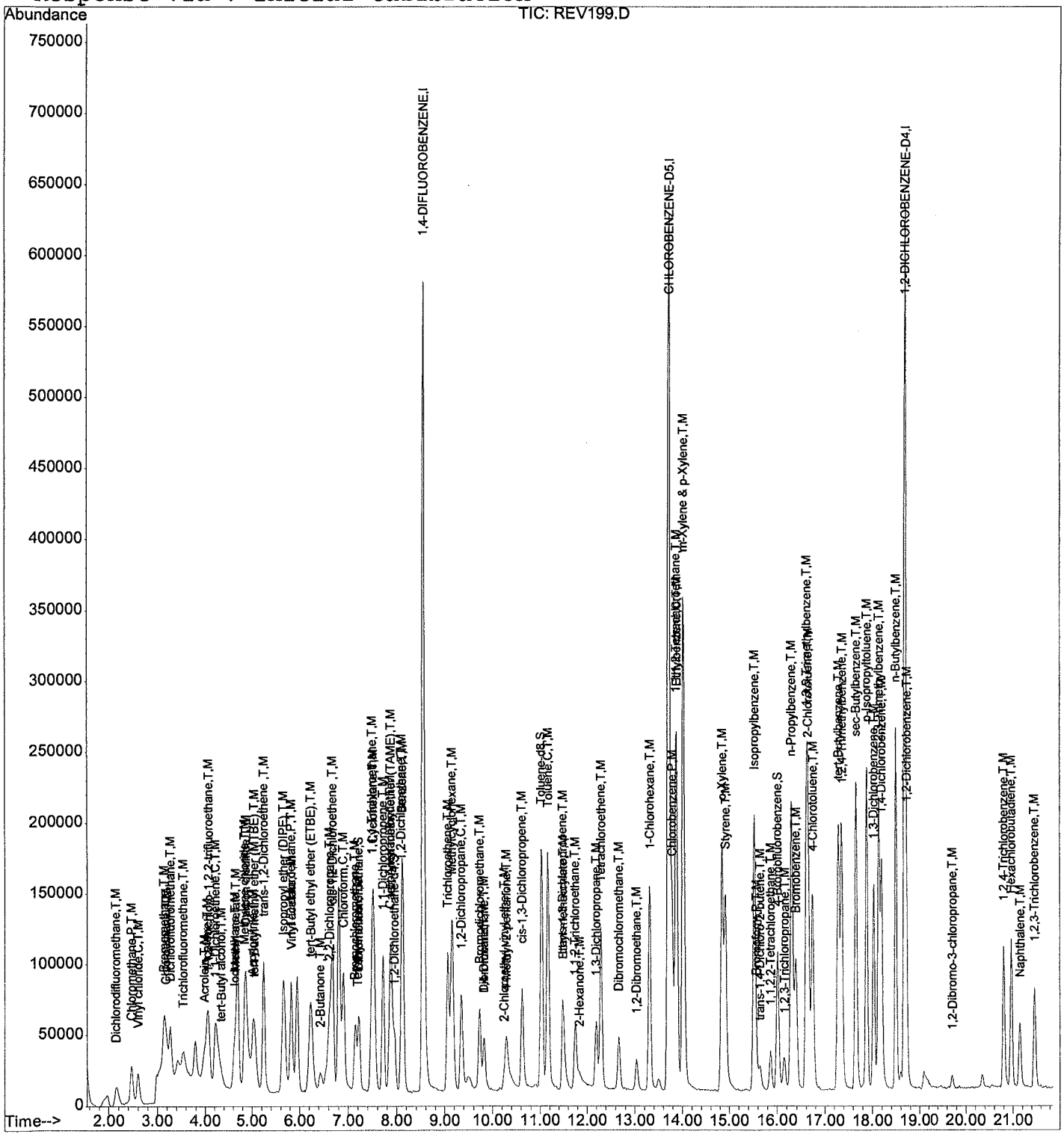
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	237589	1.95	ug/l	98
81)	2-Chlorotoluene	16.63	91	219062	1.91	ug/l	95
82)	4-Chlorotoluene	16.74	91	206396	2.03	ug/l	97
83)	tert-Butylbenzene	17.29	134	49658	1.94	ug/l	98
84)	1,2,4-Trimethylbenzene	17.36	105	233094	1.95	ug/l	98
85)	sec-Butylbenzene	17.66	105	332693	1.98	ug/l	99
86)	p-Isopropyltoluene	17.88	119	260761	2.02	ug/l	99
87)	1,3-Dichlorobenzene	18.03	146	112316	1.96	ug/l	99
88)	1,2,3-Trimethylbenzene	18.13	105	219653	1.97	ug/l	99
89)	1,4-Dichlorobenzene	18.19	146	110373	1.96	ug/l	100
90)	n-Butylbenzene	18.49	91	265074	1.98	ug/l	99
91)	1,2-Dichlorobenzene	18.72	146	94251	2.00	ug/l	99
92)	1,2-Dibromo-3-chloropropan	19.72	157	5091	2.12	ug/l	97
93)	1,2,4-Trichlorobenzene	20.80	180	67009	1.95	ug/l	98
94)	Hexachlorobutadiene	20.96	225	39320	1.92	ug/l	97
95)	Naphthalene	21.15	128	77920	1.94	ug/l	99
96)	1,2,3-Trichlorobenzene	21.46	180	51155	1.98	ug/l	100

SM 5/15/24

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24E11\REV199.D Vial: 5
Acq On : 11 May 2024 12:30 pm Operator: LPriet
Sample : VO01E114 0.2/1.0 Inst : 01
Misc : 2ppb 8260/10ppb KET-AA/50ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:54 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV200.D Vial: 6
Acq On : 11 May 2024 12:59 pm Operator: LPriet
Sample : VO01E115 0.5/2.5 Inst : 01
Misc : 5ppb 8260/25ppb KET-AA/125ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:56 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.54	114	900656	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	744900	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	284539	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	143298	5.14	ug/l	0.00
Spiked Amount 10.000			Recovery =	51.40%		
41) 1,2-Dichloroethane-d4	7.97	65	97715	5.14	ug/l	0.00
Spiked Amount 10.000			Recovery =	51.40%		
54) Toluene-d8	11.03	98	569302	5.10	ug/l	0.00
Spiked Amount 10.000			Recovery =	51.00%		
76) 4-Bromofluorobenzene	16.01	95	190707	4.92	ug/l	0.00
Spiked Amount 10.000			Recovery =	49.20%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.18	85	119456	4.96	ug/l	98
5) Chloromethane	2.48	50	170900	5.06	ug/l	99
6) Vinyl chloride	2.60	62	151684	5.40	ug/l	98
7) Bromomethane	3.14	94	161543	4.74	ug/l	99
8) Chloroethane	3.18	64	101909	5.00	ug/l	100
9) Dichlorofluoromethane	3.27	67	272435	4.71	ug/l	98
10) Trichlorofluoromethane	3.55	101	192432	5.06	ug/l	98
11) Acrolein	3.98	56	50318	24.87	ug/l	98
12) 1,1,2-Trichloro-1,2,2-trif	4.07	151	95572	5.03	ug/l	99
13) Acetone	4.06	43	80312	24.43	ug/l	100
14) 1,1-Dichloroethene	4.24	61	236110	4.92	ug/l	100
15) tert-Butyl alcohol	4.34	59	126289	125.96	ug/l	98
16) Iodomethane	4.64	142	253734	4.93	ug/l	100
17) Methyl acetate	4.65	43	45270	5.05	ug/l	100
18) Methylene chloride	4.86	49	189706	4.92	ug/l	98
19) Carbon disulfide	4.89	76	519242	5.06	ug/l	99
20) Acrylonitrile	5.02	53	104491	25.05	ug/l	99
21) tert-Butyl methyl ether (M	5.07	73	232923	4.93	ug/l	98
22) trans-1,2-Dichloroethene	5.24	61	227623	4.92	ug/l	99
23) Isopropyl ether (DIPE)	5.67	45	486332	4.92	ug/l	99
24) Vinyl acetate	5.84	43	178828	5.27	ug/l	98
25) 1,1-Dichloroethane	5.84	63	265434	4.90	ug/l	100
27) tert-Butyl ethyl ether (ET	6.24	59	350636	4.95	ug/l	99
28) 2-Butanone	6.43	43	122252	24.23	ug/l	98
29) 2,2-Dichloropropane	6.62	77	221475	4.87	ug/l	100
30) cis-1,2-Dichloroethene	6.68	96	182793	4.91	ug/l	99
31) Chloroform	6.90	83	263399	4.78	ug/l	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV200.D Vial: 6
Acq On : 11 May 2024 12:59 pm Operator: LPriet
Sample : VO01E115 0.5/2.5 Inst : 01
Misc : 5ppb 8260/25ppb KET-AA/125ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:56 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) Bromochloromethane	7.15	49	107126	4.95 ug/l	100
33) Tetrahydrofuran	7.20	42	15395	4.82 ug/l	99
35) 1,1,1-Trichloroethane	7.50	97	223490	4.84 ug/l	100
36) Cyclohexane	7.53	84	229091	5.10 ug/l	100
38) 1,1-Dichloropropene	7.72	110	75641	4.82 ug/l	99
39) Carbon tetrachloride	7.88	119	164649	4.79 ug/l	99
40) tert-Amyl methyl ether (TA	7.88	73	265148	4.81 ug/l	100
42) Benzene	8.13	78	593170	4.93 ug/l	100
43) 1,2-Dichloroethane	8.10	62	119634	4.93 ug/l	100
44) Trichloroethene	9.08	130	151454	4.87 ug/l	99
45) Methylcyclohexane	9.17	83	246613	4.99 ug/l	98
46) 1,2-Dichloropropane	9.34	63	129424	4.81 ug/l	99
47) Bromodichloromethane	9.73	83	180624	4.83 ug/l	99
48) 1,4-Dioxane	9.80	88	10209	92.63 ug/l	95
49) Dibromomethane	9.82	93	62590	4.93 ug/l	96
50) 2-Chloroethyl vinyl ether	10.23	63	32624	4.78 ug/l	99
51) 4-Methyl-2-pentanone	10.28	43	302538	24.21 ug/l	100
52) cis-1,3-Dichloropropene	10.62	75	205197	4.90 ug/l	100
55) Toluene	11.17	91	638964	4.83 ug/l	99
56) Ethyl methacrylate	11.46	69	93055	4.69 ug/l	97
57) trans-1,3-Dichloropropene	11.48	75	150076	4.88 ug/l	99
58) 1,1,2-Trichloroethane	11.74	97	84096	4.86 ug/l	100
59) 2-Hexanone	11.79	43	161653	23.32 ug/l	98
60) 1,3-Dichloropropane	12.19	76	141872	4.83 ug/l	99
61) Tetrachloroethene	12.29	164	131949	4.80 ug/l	99
62) Dibromochloromethane	12.66	129	100908	4.77 ug/l	99
63) 1,2-Dibromoethane	13.03	107	84804	4.95 ug/l	98
64) 1-Chlorohexane	13.30	91	270570	4.74 ug/l	100
65) Chlorobenzene	13.79	112	382775	4.85 ug/l	100
66) 1,1,1,2-Tetrachloroethane	13.86	131	116917	4.81 ug/l	99
67) Ethylbenzene	13.88	91	730874	4.84 ug/l	100
68) m-Xylene & p-Xylene	14.01	91	1083475	9.80 ug/l	99
69) o-Xylene	14.84	91	543905	4.78 ug/l	100
70) Styrene	14.90	104	426095	4.83 ug/l	99
71) Isopropylbenzene	15.52	105	729567	4.87 ug/l	100
73) Bromoform	15.55	173	52073	4.81 ug/l	98
74) trans-1,4-Dichloro-2-buten	15.63	53	23167	4.72 ug/l	99
75) 1,1,2,2-Tetrachloroethane	15.86	83	90996	4.80 ug/l	100
77) 1,2,3-Trichloropropane	16.14	110	24020	4.96 ug/l	100
78) n-Propylbenzene	16.29	91	891243	4.82 ug/l	100
79) Bromobenzene	16.38	156	142872	4.88 ug/l	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV200.D Vial: 6
Acq On : 11 May 2024 12:59 pm Operator: LPriet
Sample : VO01E115 0.5/2.5 Inst : 01
Misc : 5ppb 8260/25ppb KET-AA/125ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:56 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

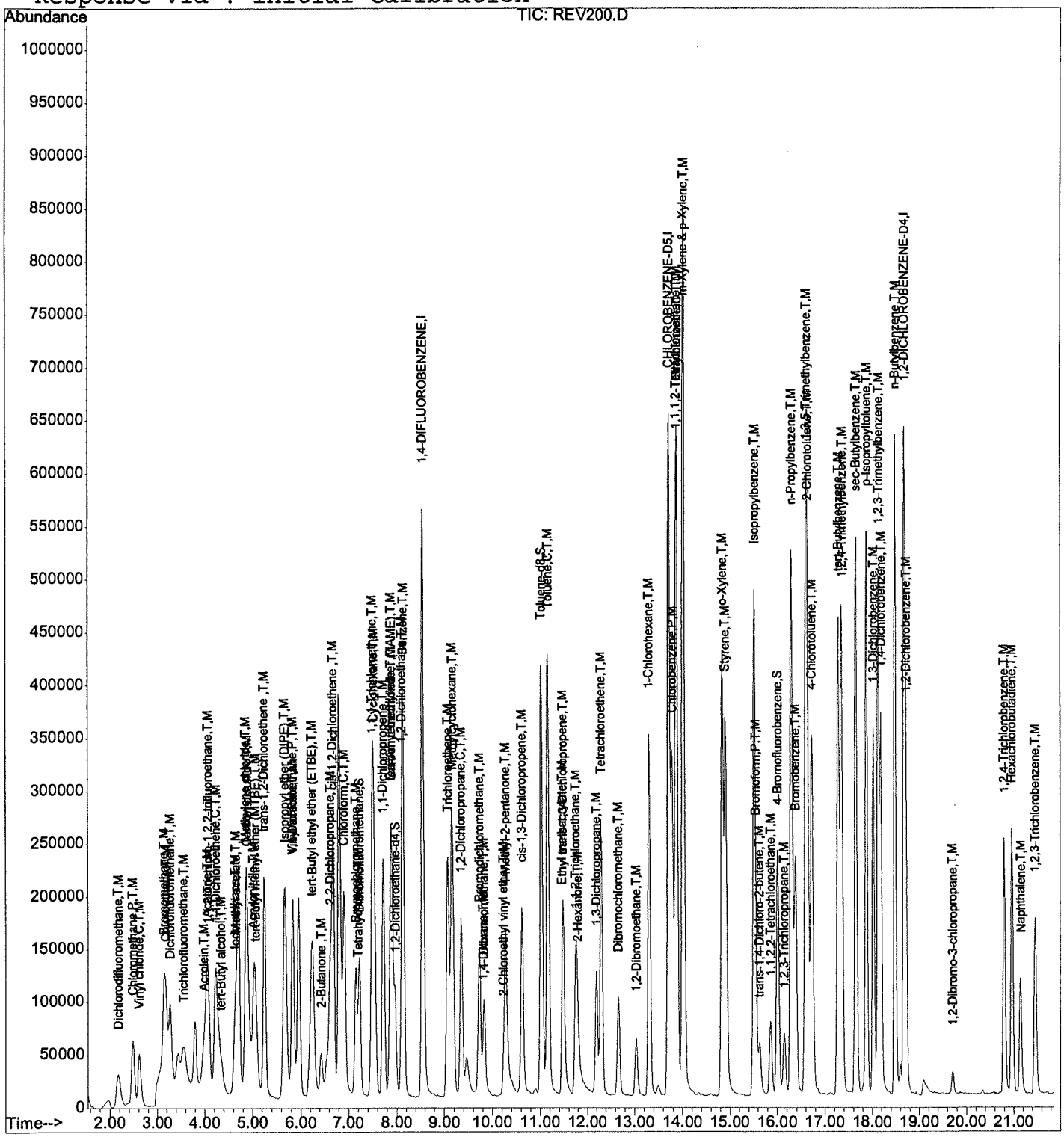
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	568375	4.81	ug/l	100
81)	2-Chlorotoluene	16.63	91	534726	4.80	ug/l	100
82)	4-Chlorotoluene	16.72	91	491373	4.98	ug/l	99
83)	tert-Butylbenzene	17.29	134	119387	4.81	ug/l	100
84)	1,2,4-Trimethylbenzene	17.36	105	562027	4.86	ug/l	99
85)	sec-Butylbenzene	17.66	105	782171	4.81	ug/l	99
86)	p-Isopropyltoluene	17.88	119	604455	4.83	ug/l	100
87)	1,3-Dichlorobenzene	18.03	146	266427	4.79	ug/l	99
88)	1,2,3-Trimethylbenzene	18.13	105	523914	4.85	ug/l	99
89)	1,4-Dichlorobenzene	18.19	146	264166	4.84	ug/l	99
90)	n-Butylbenzene	18.49	91	624902	4.82	ug/l	100
91)	1,2-Dichlorobenzene	18.72	146	222834	4.89	ug/l	99
92)	1,2-Dibromo-3-chloropropan	19.71	157	13172	4.81	ug/l	96
93)	1,2,4-Trichlorobenzene	20.80	180	161262	4.85	ug/l	99
94)	Hexachlorobutadiene	20.96	225	94994	4.79	ug/l	99
95)	Naphthalene	21.15	128	187349	4.82	ug/l	99
96)	1,2,3-Trichlorobenzene	21.46	180	121965	4.87	ug/l	100

SU 5/15/24

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24E11\REV200.D Vial: 6
Acq On : 11 May 2024 12:59 pm Operator: LPriet
Sample : VO01E115 0.5/2.5 Inst : 01
Misc : 5ppb 8260/25ppb KET-AA/125ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:56 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV201.D Vial: 7
Acq On : 11 May 2024 1:28 pm Operator: LPriet
Sample : VO01E116 1.0/5.0 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:58 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.54	114	920983	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	742213	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	284055	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	258776	9.08	ug/l	0.00
Spiked Amount 10.000			Recovery =	90.80%		
41) 1,2-Dichloroethane-d4	7.97	65	170981	8.79	ug/l	0.00
Spiked Amount 10.000			Recovery =	87.90%		
54) Toluene-d8	11.03	98	1034495	9.30	ug/l	0.00
Spiked Amount 10.000			Recovery =	93.00%		
76) 4-Bromofluorobenzene	16.01	95	349924	9.04	ug/l	0.00
Spiked Amount 10.000			Recovery =	90.40%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.17	85	233807	9.49	ug/l	100
5) Chloromethane	2.46	50	319578	9.26	ug/l	100
6) Vinyl chloride	2.61	62	285699	9.94	ug/l	100
7) Bromomethane	3.14	94	303178	8.88	ug/l	100
8) Chloroethane	3.18	64	194643	9.34	ug/l	100
9) Dichlorofluoromethane	3.27	67	535368	9.04	ug/l	100
10) Trichlorofluoromethane	3.55	101	365519	9.40	ug/l	100
11) Acrolein	3.98	56	91543	44.25	ug/l	100
12) 1,1,2-Trichloro-1,2,2-trif	4.06	151	193689	9.97	ug/l	100
13) Acetone	4.06	43	141862	42.20	ug/l	100
14) 1,1-Dichloroethene	4.22	61	473083	9.63	ug/l	100
15) tert-Butyl alcohol	4.34	59	232900	227.17	ug/l	100
16) Iodomethane	4.64	142	502181	9.54	ug/l	100
17) Methyl acetate	4.65	43	77293	8.43	ug/l	100
18) Methylene chloride	4.86	49	367504	9.33	ug/l	100
19) Carbon disulfide	4.87	76	984042	9.37	ug/l	100
20) Acrylonitrile	5.02	53	196137	45.99	ug/l	100
21) tert-Butyl methyl ether (M	5.07	73	435419	9.01	ug/l	100
22) trans-1,2-Dichloroethene	5.24	61	438850	9.27	ug/l	100
23) Isopropyl ether (DIPE)	5.67	45	945894	9.35	ug/l	100
24) Vinyl acetate	5.82	43	316675	9.12	ug/l	100
25) 1,1-Dichloroethane	5.82	63	520416	9.40	ug/l	100
27) tert-Butyl ethyl ether (ET	6.24	59	667502	9.21	ug/l	100
28) 2-Butanone	6.41	43	244678	47.43	ug/l	100
29) 2,2-Dichloropropane	6.62	77	438788	9.43	ug/l	100
30) cis-1,2-Dichloroethene	6.68	96	363843	9.55	ug/l	100
31) Chloroform	6.90	83	508562	9.02	ug/l	100

(#) = qualifier out of range (m) = manual integration

SU 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV201.D Vial: 7
Acq On : 11 May 2024 1:28 pm Operator: LPriet
Sample : VO01E116 1.0/5.0 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:58 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.14	49	205550	9.28	ug/l	100
33)	Tetrahydrofuran	7.20	42	27463	8.42	ug/l	100
35)	1,1,1-Trichloroethane	7.49	97	444990	9.43	ug/l	100
36)	Cyclohexane	7.52	84	417453	9.08	ug/l	100
38)	1,1-Dichloropropene	7.72	110	150631	9.39	ug/l	100
39)	Carbon tetrachloride	7.88	119	336330	9.57	ug/l	100
40)	tert-Amyl methyl ether (TA	7.88	73	497165	8.82	ug/l	100
42)	Benzene	8.13	78	1153601	9.38	ug/l	100
43)	1,2-Dichloroethane	8.10	62	229577	9.25	ug/l	100
44)	Trichloroethene	9.06	130	307851	9.67	ug/l	100
45)	Methylcyclohexane	9.17	83	454050	8.98	ug/l	100
46)	1,2-Dichloropropane	9.34	63	256137	9.30	ug/l	100
47)	Bromodichloromethane	9.73	83	342146	8.95	ug/l	100
48)	1,4-Dioxane	9.79	88	20047	177.87	ug/l	100
49)	Dibromomethane	9.82	93	116361	8.96	ug/l	100
50)	2-Chloroethyl vinyl ether	10.23	63	63930	9.15	ug/l	100
51)	4-Methyl-2-pentanone	10.26	43	589994	43.70	ug/l	100
52)	cis-1,3-Dichloropropene	10.62	75	398855	9.31	ug/l	100
55)	Toluene	11.17	91	1262539	9.58	ug/l	100
56)	Ethyl methacrylate	11.46	69	182985	9.25	ug/l	100
57)	trans-1,3-Dichloropropene	11.48	75	289239	9.44	ug/l	100
58)	1,1,2-Trichloroethane	11.74	97	160672	9.31	ug/l	100
59)	2-Hexanone	11.76	43	335905	43.39	ug/l	100
60)	1,3-Dichloropropane	12.19	76	271863	9.28	ug/l	100
61)	Tetrachloroethene	12.29	164	266498	9.73	ug/l	100
62)	Dibromochloromethane	12.66	129	193517	9.19	ug/l	100
63)	1,2-Dibromoethane	13.03	107	159304	9.33	ug/l	100
64)	1-Chlorohexane	13.30	91	551589	9.69	ug/l	100
65)	Chlorobenzene	13.79	112	759554	9.67	ug/l	100
66)	1,1,1,2-Tetrachloroethane	13.86	131	232054	9.59	ug/l	100
67)	Ethylbenzene	13.88	91	1473355	9.79	ug/l	100
68)	m-Xylene & p-Xylene	14.01	91	2121368	19.26	ug/l	100
69)	o-Xylene	14.84	91	1078385	9.51	ug/l	100
70)	Styrene	14.90	104	842539	9.59	ug/l	100
71)	Isopropylbenzene	15.52	105	1453974	9.74	ug/l	100
73)	Bromoform	15.55	173	95720	8.57	ug/l	100
74)	trans-1,4-Dichloro-2-buten	15.63	53	44316	9.04	ug/l	100
75)	1,1,2,2-Tetrachloroethane	15.86	83	168234	8.90	ug/l	100
77)	1,2,3-Trichloropropane	16.14	110	45054	9.31	ug/l	99
78)	n-Propylbenzene	16.29	91	1790558	9.70	ug/l	100
79)	Bromobenzene	16.38	156	279576	9.57	ug/l	100

(#) = qualifier out of range (m) = manual integration

5/15/24

Data File : D:\HPCHEM\1\DATA\24E11\REV201.D Vial: 7
Acq On : 11 May 2024 1:28 pm Operator: LPriet
Sample : VO01E116 1.0/5.0 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:58 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	1139657	9.66	ug/l	100
81)	2-Chlorotoluene	16.63	91	1060747	9.54	ug/l	100
82)	4-Chlorotoluene	16.72	91	963048	9.78	ug/l	100
83)	tert-Butylbenzene	17.29	134	239466	9.67	ug/l	100
84)	1,2,4-Trimethylbenzene	17.36	105	1122345	9.72	ug/l	100
85)	sec-Butylbenzene	17.66	105	1569792	9.68	ug/l	100
86)	p-Isopropyltoluene	17.88	119	1201659	9.61	ug/l	100
87)	1,3-Dichlorobenzene	18.03	146	533251	9.60	ug/l	100
88)	1,2,3-Trimethylbenzene	18.13	105	1019164	9.45	ug/l	100
89)	1,4-Dichlorobenzene	18.19	146	518636	9.53	ug/l	100
90)	n-Butylbenzene	18.49	91	1250551	9.65	ug/l	100
91)	1,2-Dichlorobenzene	18.72	146	424621	9.33	ug/l	100
92)	1,2-Dibromo-3-chloropropan	19.71	157	23773	8.27	ug/l	100
93)	1,2,4-Trichlorobenzene	20.80	180	314594	9.47	ug/l	100
94)	Hexachlorobutadiene	20.96	225	197705	9.99	ug/l	100
95)	Naphthalene	21.14	128	358996	9.26	ug/l	100
96)	1,2,3-Trichlorobenzene	21.46	180	236728	9.46	ug/l	100

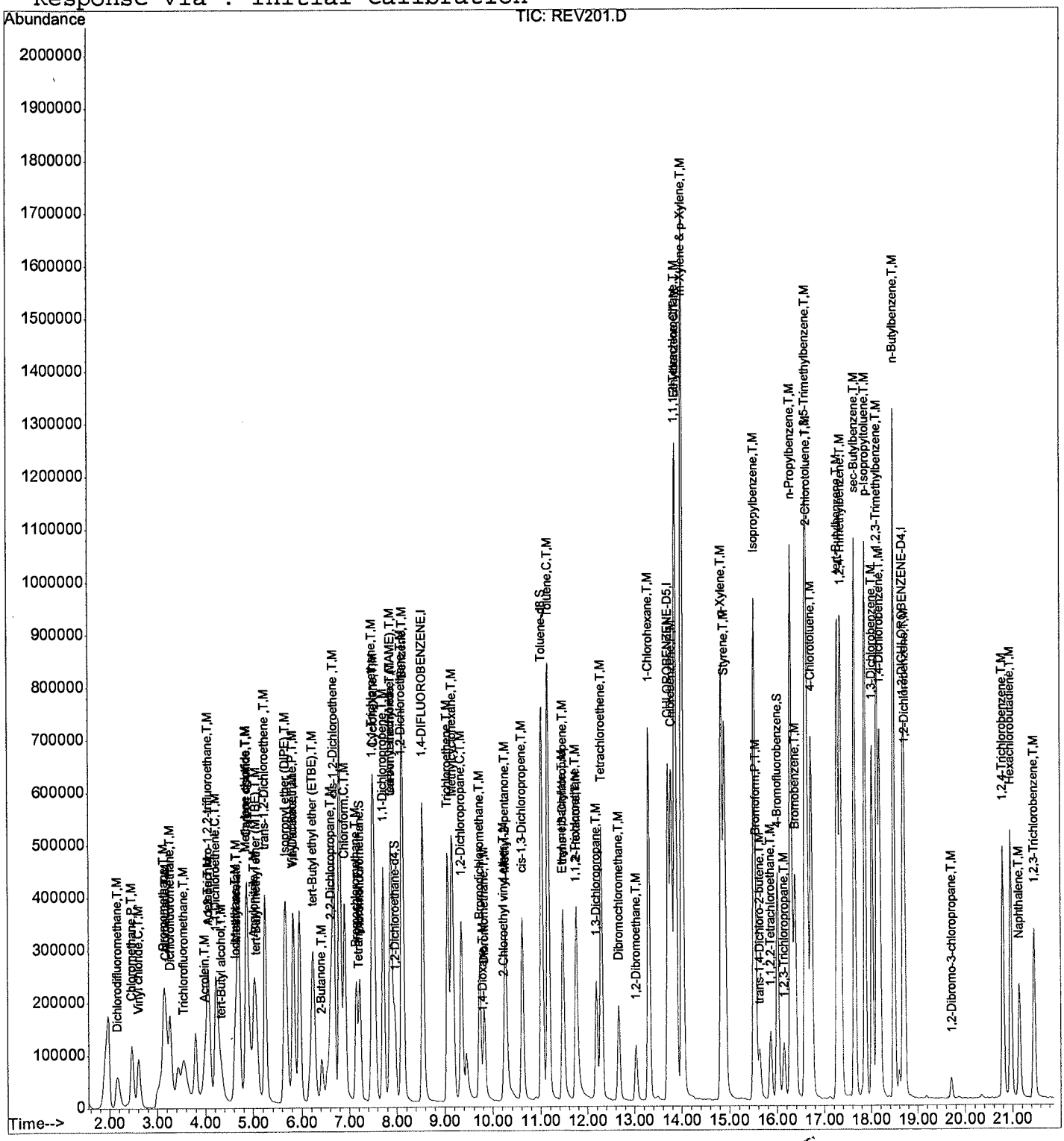
SA 5/15/24

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E11\REV201.D Vial: 7
Acq On : 11 May 2024 1:28 pm Operator: LPriet
Sample : VO01E116 1.0/5.0 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:58 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV202.D Vial: 8
Acq On : 11 May 2024 1:58 pm Operator: LPriet
Sample : VO01E117 2.0/10 Inst : 01
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:00 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	816915	10.00 ug/l	0.02
53) CHLOROBENZENE-D5	13.73	117	679573	10.00 ug/l	0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	256277	10.00 ug/l	0.02
System Monitoring Compounds					
34) Dibromofluoromethane	7.24	111	546945	21.63 ug/l	0.01
Spiked Amount 10.000			Recovery =	216.30%	
41) 1,2-Dichloroethane-d4	7.97	65	368310	21.36 ug/l	0.00
Spiked Amount 10.000			Recovery =	213.60%	
54) Toluene-d8	11.03	98	2143971	21.05 ug/l	0.00
Spiked Amount 10.000			Recovery =	210.50%	
76) 4-Bromofluorobenzene	16.03	95	741429	21.24 ug/l	0.02
Spiked Amount 10.000			Recovery =	212.40%	
Target Compounds					Qvalue
3) Dichlorodifluoromethane	2.17	85	443172	20.27 ug/l	99
5) Chloromethane	2.47	50	619334	20.24 ug/l	100
6) Vinyl chloride	2.61	62	541540	21.25 ug/l	100
7) Bromomethane	3.15	94	618346	20.69 ug/l	97
8) Chloroethane	3.20	64	385600	20.85 ug/l	99
9) Dichlorofluoromethane	3.29	67	1066762	20.31 ug/l	99
10) Trichlorofluoromethane	3.55	101	683028	19.81 ug/l	99
11) Acrolein	3.98	56	192986	105.17 ug/l	96
12) 1,1,2-Trichloro-1,2,2-trif	4.07	151	365492	21.21 ug/l	99
13) Acetone	4.06	43	284979	95.57 ug/l	99
14) 1,1-Dichloroethene	4.24	61	930390	21.35 ug/l	100
15) tert-Butyl alcohol	4.34	59	495292	544.64 ug/l	99
16) Iodomethane	4.65	142	1006828	21.55 ug/l	100
17) Methyl acetate	4.66	43	166847	20.52 ug/l	99
18) Methylene chloride	4.87	49	730623	20.90 ug/l	100
19) Carbon disulfide	4.89	76	2006384	21.54 ug/l	100
20) Acrylonitrile	5.04	53	392428	103.74 ug/l	100
21) tert-Butyl methyl ether (M	5.06	73	899904	21.00 ug/l	99
22) trans-1,2-Dichloroethene	5.26	61	902607	21.50 ug/l	99
23) Isopropyl ether (DIPE)	5.67	45	1935724	21.58 ug/l	99
24) Vinyl acetate	5.84	43	675084	21.93 ug/l	100
25) 1,1-Dichloroethane	5.84	63	1063100	21.66 ug/l	100
27) tert-Butyl ethyl ether (ET	6.25	59	1387307	21.59 ug/l	99
28) 2-Butanone	6.43	43	502145	109.75 ug/l	100
29) 2,2-Dichloropropane	6.64	77	865612	20.97 ug/l	100
30) cis-1,2-Dichloroethene	6.69	96	725941	21.48 ug/l	100
31) Chloroform	6.92	83	1028651	20.56 ug/l	100

(#) = qualifier out of range (m) = manual integration

5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV202.D Vial: 8
Acq On : 11 May 2024 1:58 pm Operator: LPriet
Sample : VO01E117 2.0/10 Inst : 01
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:00 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.15	49	418099	21.28	ug/l	99
33)	Tetrahydrofuran	7.21	42	59689	20.62	ug/l	99
35)	1,1,1-Trichloroethane	7.51	97	890497	21.28	ug/l	100
36)	Cyclohexane	7.54	84	839410	20.59	ug/l	100
38)	1,1-Dichloropropene	7.73	110	301701	21.21	ug/l	99
39)	Carbon tetrachloride	7.89	119	658847	21.13	ug/l	99
40)	tert-Amyl methyl ether (TA	7.89	73	1043076	20.86	ug/l	100
42)	Benzene	8.15	78	2297893	21.05	ug/l	100
43)	1,2-Dichloroethane	8.12	62	472900	21.49	ug/l	99
44)	Trichloroethene	9.08	130	611530	21.66	ug/l	99
45)	Methylcyclohexane	9.17	83	904979	20.18	ug/l	100
46)	1,2-Dichloropropane	9.36	63	521244	21.35	ug/l	100
47)	Bromodichloromethane	9.74	83	704865	20.80	ug/l	100
48)	1,4-Dioxane	9.79	88	43990	440.03	ug/l	99
49)	Dibromomethane	9.83	93	243286	21.12	ug/l	99
50)	2-Chloroethyl vinyl ether	10.23	63	134190	21.65	ug/l	98
51)	4-Methyl-2-pentanone	10.28	43	1288906	103.66	ug/l	100
52)	cis-1,3-Dichloropropene	10.63	75	818576	21.54	ug/l	100
55)	Toluene	11.18	91	2491900	20.65	ug/l	100
56)	Ethyl methacrylate	11.46	69	395514	21.84	ug/l	98
57)	trans-1,3-Dichloropropene	11.49	75	603742	21.52	ug/l	100
58)	1,1,2-Trichloroethane	11.76	97	330926	20.94	ug/l	99
59)	2-Hexanone	11.77	43	767459	101.03	ug/l	100
60)	1,3-Dichloropropane	12.20	76	575688	21.46	ug/l	99
61)	Tetrachloroethene	12.31	164	522743	20.84	ug/l	99
62)	Dibromochloromethane	12.68	129	406460	21.07	ug/l	99
63)	1,2-Dibromoethane	13.05	107	339123	21.70	ug/l	99
64)	1-Chlorohexane	13.32	91	1076692	20.66	ug/l	100
65)	Chlorobenzene	13.80	112	1529085	21.25	ug/l	100
66)	1,1,1,2-Tetrachloroethane	13.88	131	470126	21.22	ug/l	99
67)	Ethylbenzene	13.89	91	2901232	21.06	ug/l	99
68)	m-Xylene & p-Xylene	14.03	91	4237521	42.03	ug/l	100
69)	o-Xylene	14.86	91	2143592	20.66	ug/l	99
70)	Styrene	14.92	104	1701411	21.15	ug/l	100
71)	Isopropylbenzene	15.54	105	2885751	21.11	ug/l	100
73)	Bromoform	15.57	173	208560	20.24	ug/l	99
74)	trans-1,4-Dichloro-2-buten	15.64	53	96395	21.80	ug/l	97
75)	1,1,2,2-Tetrachloroethane	15.88	83	354915	20.80	ug/l	99
77)	1,2,3-Trichloropropane	16.16	110	95768	21.94	ug/l	98
78)	n-Propylbenzene	16.31	91	3533479	21.21	ug/l	100
79)	Bromobenzene	16.40	156	569509	21.60	ug/l	99

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24E11\REV202.D Vial: 8
Acq On : 11 May 2024 1:58 pm Operator: LPriet
Sample : VO01E117 2.0/10 Inst : 01
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:00 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.62	105	2263948	21.26	ug/l	99
81)	2-Chlorotoluene	16.65	91	2094475	20.88	ug/l	100
82)	4-Chlorotoluene	16.74	91	1908157	21.48	ug/l	100
83)	tert-Butylbenzene	17.30	134	478610	21.43	ug/l	99
84)	1,2,4-Trimethylbenzene	17.37	105	2219029	21.30	ug/l	100
85)	sec-Butylbenzene	17.67	105	3115101	21.28	ug/l	100
86)	p-Isopropyltoluene	17.89	119	2394992	21.23	ug/l	100
87)	1,3-Dichlorobenzene	18.04	146	1072675	21.41	ug/l	100
88)	1,2,3-Trimethylbenzene	18.14	105	2044493	21.02	ug/l	100
89)	1,4-Dichlorobenzene	18.20	146	1030532	20.98	ug/l	100
90)	n-Butylbenzene	18.50	91	2472290	21.16	ug/l	100
91)	1,2-Dichlorobenzene	18.74	146	871915	21.24	ug/l	100
92)	1,2-Dibromo-3-chloropropan	19.73	157	54040	20.05	ug/l	99
93)	1,2,4-Trichlorobenzene	20.81	180	660275	22.03	ug/l	100
94)	Hexachlorobutadiene	20.99	225	397807	22.28	ug/l	100
95)	Naphthalene	21.15	128	776440	22.20	ug/l	99
96)	1,2,3-Trichlorobenzene	21.48	180	496067	21.97	ug/l	100

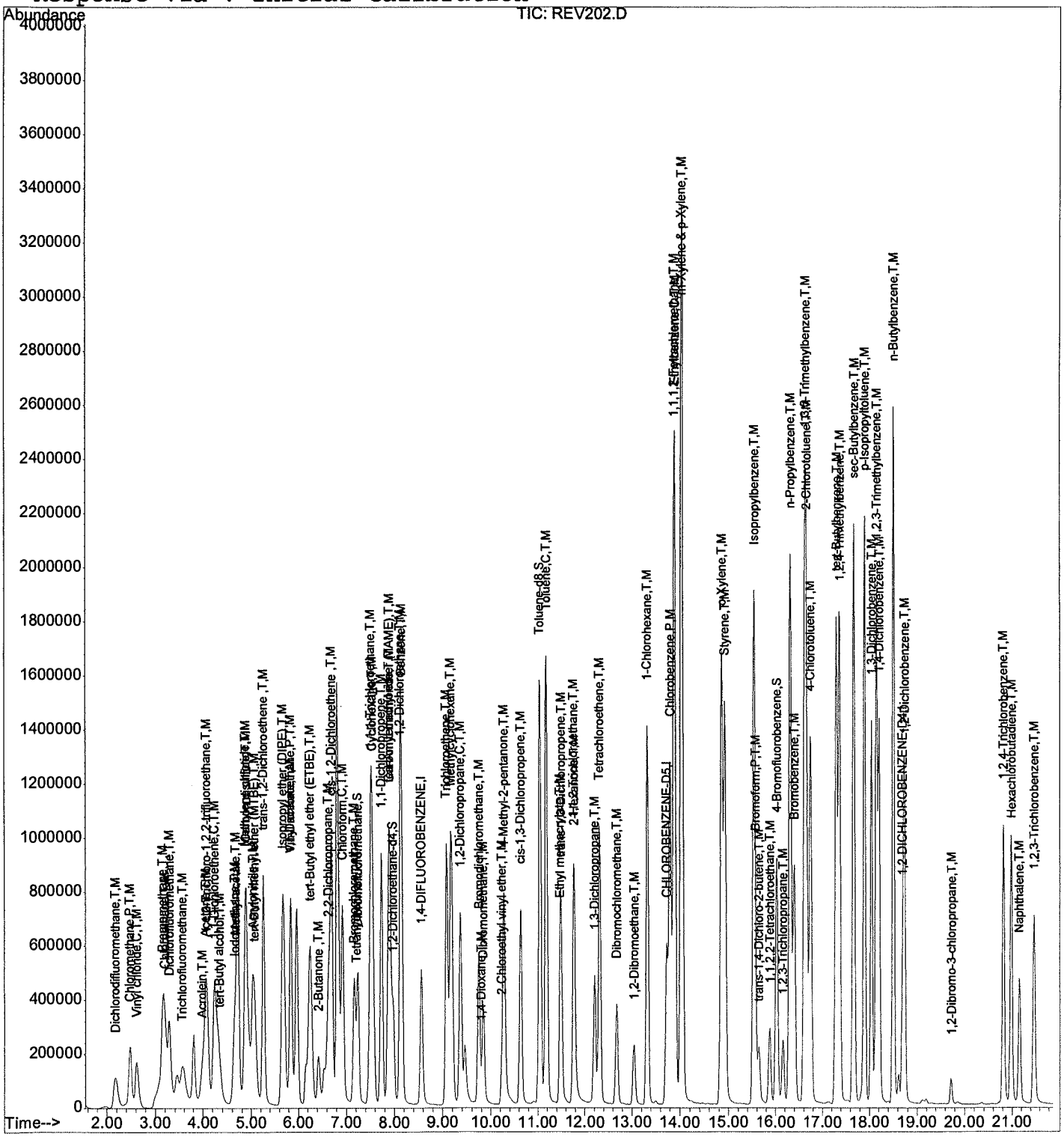
SM 5/15/24

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E11\REV202.D Vial: 8
Acq On : 11 May 2024 1:58 pm Operator: LPriet
Sample : VO01E117 2.0/10 Inst : 01
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:00 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



SY 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV203.D Vial: 9
Acq On : 11 May 2024 2:27 pm Operator: LPriet
Sample : VO01E118 3.0/15 Inst : 01
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:02 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	849708	10.00	ug/l	0.02
53) CHLOROBENZENE-D5	13.72	117	707238	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	267331	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	799087	30.38	ug/l	0.00
Spiked Amount 10.000			Recovery =	303.80%		
41) 1,2-Dichloroethane-d4	7.97	65	550662	30.70	ug/l	0.00
Spiked Amount 10.000			Recovery =	307.00%		
54) Toluene-d8	11.02	98	3115280	29.39	ug/l	-0.01
Spiked Amount 10.000			Recovery =	293.90%		
76) 4-Bromofluorobenzene	16.01	95	1073630	29.49	ug/l	0.00
Spiked Amount 10.000			Recovery =	294.90%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.18	85	673565	29.62	ug/l	98
5) Chloromethane	2.48	50	894520	28.10	ug/l	100
6) Vinyl chloride	2.61	62	776773	29.30	ug/l	100
7) Bromomethane	3.15	94	899449	29.03	ug/l	97
8) Chloroethane	3.20	64	574606	29.88	ug/l	100
9) Dichlorofluoromethane	3.27	67	1551702	28.41	ug/l	99
10) Trichlorofluoromethane	3.57	101	1032985	28.80	ug/l	99
11) Acrolein	3.98	56	286661	150.20	ug/l	97
12) 1,1,2-Trichloro-1,2,2-trif	4.07	151	554202	30.92	ug/l	100
13) Acetone	4.06	43	435360	140.37	ug/l	97
14) 1,1-Dichloroethene	4.23	61	1367312	30.17	ug/l	100
15) tert-Butyl alcohol	4.34	59	759636	803.08	ug/l	99
16) Iodomethane	4.65	142	1484308	30.55	ug/l	100
17) Methyl acetate	4.65	43	247532	29.27	ug/l	100
18) Methylene chloride	4.86	49	1052102	28.94	ug/l	100
19) Carbon disulfide	4.89	76	2879778	29.72	ug/l	100
20) Acrylonitrile	5.02	53	590477	150.07	ug/l	99
21) tert-Butyl methyl ether (M	5.06	73	1337887	30.02	ug/l	98
22) trans-1,2-Dichloroethene	5.26	61	1319053	30.21	ug/l	100
23) Isopropyl ether (DIPE)	5.67	45	2808667	30.11	ug/l	100
24) Vinyl acetate	5.82	43	1017586	31.77	ug/l	100
25) 1,1-Dichloroethane	5.83	63	1541259	30.19	ug/l	100
27) tert-Butyl ethyl ether (ET	6.23	59	2031979	30.40	ug/l	100
28) 2-Butanone	6.41	43	780834	164.07	ug/l	100
29) 2,2-Dichloropropane	6.63	77	1283925	29.91	ug/l	100
30) cis-1,2-Dichloroethene	6.69	96	1065003	30.30	ug/l	100
31) Chloroform	6.92	83	1477710	28.40	ug/l	100

(#) = qualifier out of range (m) = manual integration
REV203.D VO01E11.M Mon May 13 14:32:40 2024 Page 1

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Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV203.D Vial: 9
Acq On : 11 May 2024 2:27 pm Operator: LPriet
Sample : VO01E118 3.0/15 Inst : 01
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:02 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32)	Bromochloromethane	7.15	49	628929	30.78 ug/l	100
33)	Tetrahydrofuran	7.20	42	89460	29.72 ug/l	98
35)	1,1,1-Trichloroethane	7.49	97	1293540	29.71 ug/l	100
36)	Cyclohexane	7.52	84	1200311	28.31 ug/l	100
38)	1,1-Dichloropropene	7.73	110	446401	30.17 ug/l	99
39)	Carbon tetrachloride	7.88	119	976969	30.13 ug/l	100
40)	tert-Amyl methyl ether (TA	7.89	73	1549323	29.79 ug/l	99
42)	Benzene	8.13	78	3348702	29.50 ug/l	100
43)	1,2-Dichloroethane	8.10	62	692754	30.26 ug/l	99
44)	Trichloroethene	9.06	130	891995	30.38 ug/l	99
45)	Methylcyclohexane	9.17	83	1305359	27.98 ug/l	100
46)	1,2-Dichloropropane	9.35	63	761086	29.96 ug/l	100
47)	Bromodichloromethane	9.73	83	1014655	28.78 ug/l	100
48)	1,4-Dioxane	9.76	88	66102	635.70 ug/l	99
49)	Dibromomethane	9.82	93	364896	30.46 ug/l	97
50)	2-Chloroethyl vinyl ether	10.22	63	205504	31.88 ug/l	98
51)	4-Methyl-2-pentanone	10.26	43	1958633	150.19 ug/l	100
52)	cis-1,3-Dichloropropene	10.62	75	1217843	30.81 ug/l	100
55)	Toluene	11.17	91	3665193	29.18 ug/l	100
56)	Ethyl methacrylate	11.45	69	584066	30.99 ug/l	97
57)	trans-1,3-Dichloropropene	11.48	75	891028	30.52 ug/l	100
58)	1,1,2-Trichloroethane	11.75	97	494541	30.07 ug/l	99
59)	2-Hexanone	11.76	43	1192685	148.48 ug/l	99
60)	1,3-Dichloropropane	12.19	76	844763	30.26 ug/l	99
61)	Tetrachloroethene	12.29	164	772439	29.59 ug/l	99
62)	Dibromochloromethane	12.66	129	594252	29.60 ug/l	99
63)	1,2-Dibromoethane	13.03	107	501525	30.83 ug/l	99
64)	1-Chlorohexane	13.30	91	1608154	29.65 ug/l	100
65)	Chlorobenzene	13.79	112	2219576	29.64 ug/l	100
66)	1,1,1,2-Tetrachloroethane	13.86	131	687136	29.80 ug/l	99
67)	Ethylbenzene	13.88	91	4240845	29.59 ug/l	100
68)	m-Xylene & p-Xylene	14.01	91	6175129	58.85 ug/l	100
69)	o-Xylene	14.84	91	3177799	29.42 ug/l	100
70)	Styrene	14.90	104	2503360	29.90 ug/l	100
71)	Isopropylbenzene	15.52	105	4219160	29.65 ug/l	100
73)	Bromoform	15.55	173	312940	28.97 ug/l	99
74)	trans-1,4-Dichloro-2-buten	15.63	53	144056	31.24 ug/l	96
75)	1,1,2,2-Tetrachloroethane	15.86	83	534853	30.05 ug/l	99
77)	1,2,3-Trichloropropane	16.15	110	141561	31.09 ug/l	97
78)	n-Propylbenzene	16.29	91	5144010	29.59 ug/l	100
79)	Bromobenzene	16.38	156	831254	30.23 ug/l	100

(#) = qualifier out of range (m) = manual integration

5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV203.D Vial: 9
Acq On : 11 May 2024 2:27 pm Operator: LPriet
Sample : VO01E118 3.0/15 Inst : 01
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:02 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

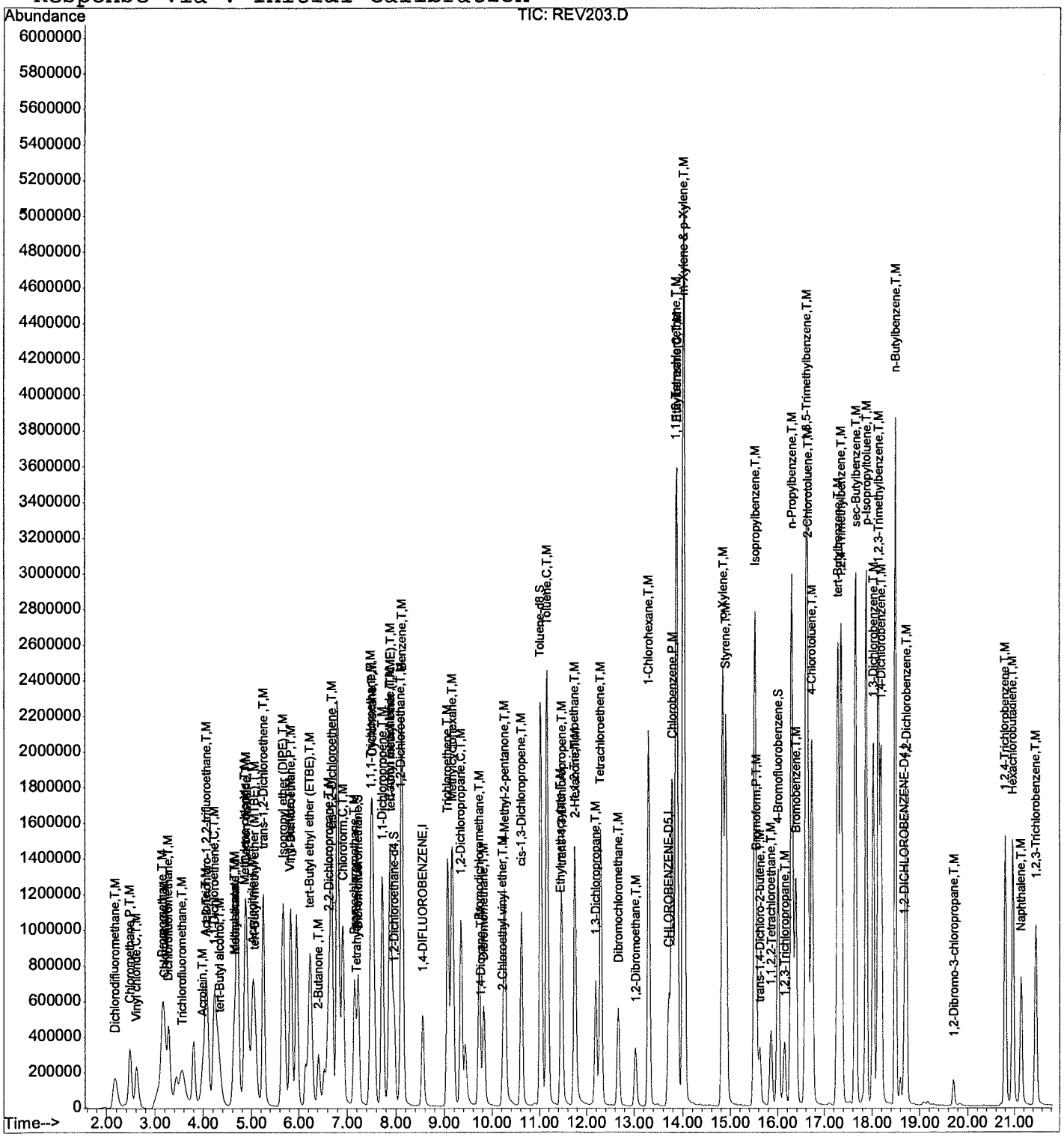
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	3300850	29.72	ug/l	99
81)	2-Chlorotoluene	16.63	91	3091027	29.54	ug/l	100
82)	4-Chlorotoluene	16.72	91	2792432	30.14	ug/l	99
83)	tert-Butylbenzene	17.29	134	693102	29.75	ug/l	99
84)	1,2,4-Trimethylbenzene	17.35	105	3247834	29.89	ug/l	99
85)	sec-Butylbenzene	17.66	105	4497766	29.46	ug/l	100
86)	p-Isopropyltoluene	17.88	119	3456736	29.37	ug/l	100
87)	1,3-Dichlorobenzene	18.03	146	1566009	29.97	ug/l	100
88)	1,2,3-Trimethylbenzene	18.13	105	3006443	29.63	ug/l	100
89)	1,4-Dichlorobenzene	18.19	146	1511456	29.50	ug/l	100
90)	n-Butylbenzene	18.49	91	3615477	29.66	ug/l	100
91)	1,2-Dichlorobenzene	18.72	146	1277031	29.82	ug/l	100
92)	1,2-Dibromo-3-chloropropan	19.72	157	81915	28.90	ug/l	100
93)	1,2,4-Trichlorobenzene	20.80	180	991777	31.73	ug/l	100
94)	Hexachlorobutadiene	20.96	225	585385	31.43	ug/l	99
95)	Naphthalene	21.14	128	1169103	32.04	ug/l	100
96)	1,2,3-Trichlorobenzene	21.46	180	737458	31.32	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E11\REV203.D Vial: 9
Acq On : 11 May 2024 2:27 pm Operator: LPriet
Sample : VO01E118 3.0/15 Inst : 01
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:02 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV204.D Vial: 10
Acq On : 11 May 2024 2:56 pm Operator: LPriet
Sample : VO01E119 5.0/25 Inst : 01
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:33 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	790188	10.00	ug/l	0.01
53) CHLOROBENZENE-D5	13.71	117	650561	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	247844	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	0.00	98	0d	0.00	ug/l	
Spiked Amount 10.000			Recovery =	0.00%		
76) 4-Bromofluorobenzene	0.00	95	0d	0.00	ug/l	
Spiked Amount 10.000			Recovery =	0.00%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.17	85	1081177	51.13	ug/l	98
5) Chloromethane	2.47	50	1438807	48.60	ug/l	100
6) Vinyl chloride	2.62	62	1235915	50.13	ug/l	100
7) Bromomethane	3.15	94	1484374	51.68	ug/l	98
8) Chloroethane	3.20	64	946787	52.94	ug/l	99
9) Dichlorofluoromethane	3.29	67	2533049	49.87	ug/l	98
10) Trichlorofluoromethane	3.57	101	1663384	49.87	ug/l	99
11) Acrolein	3.98	56	473669	266.87	ug/l	99
12) 1,1,2-Trichloro-1,2,2-trif	4.07	151	901773	54.10	ug/l	100
13) Acetone	4.06	43	730855	253.40	ug/l	100
14) 1,1-Dichloroethene	4.24	61	2222510	52.74	ug/l	100
15) tert-Butyl alcohol	4.34	59	1234938	1403.91	ug/l	99
16) Iodomethane	4.64	142	2410819	53.35	ug/l	100
18) Methylene chloride	4.86	49	1737751	51.40	ug/l	100
20) Acrylonitrile	5.02	53	973695	266.10	ug/l	99
21) tert-Butyl methyl ether (M	5.07	73	2163847	52.20	ug/l	99
22) trans-1,2-Dichloroethene	5.26	61	2150916	52.97	ug/l	99
23) Isopropyl ether (DIPE)	5.67	45	4495028	51.81	ug/l	99
24) Vinyl acetate	5.82	43	1638323	55.01	ug/l	100
25) 1,1-Dichloroethane	5.84	63	2492540	52.49	ug/l	100
27) tert-Butyl ethyl ether (ET	6.25	59	3217505	51.76	ug/l	98
28) 2-Butanone	6.41	43	1277785	288.71	ug/l	100
29) 2,2-Dichloropropane	6.64	77	2063550	51.69	ug/l	100
30) cis-1,2-Dichloroethene	6.68	96	1715982	52.50	ug/l	99
31) Chloroform	6.92	83	2420327	50.02	ug/l	100
32) Bromochloromethane	7.15	49	1013155	53.31	ug/l	98
33) Tetrahydrofuran	7.20	42	153627	54.88	ug/l	97

(#) = qualifier out of range (m) = manual integration
REV204.D VO01E11.M Mon May 13 14:33:16 2024 Page 1

SA 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV204.D Vial: 10
Acq On : 11 May 2024 2:56 pm Operator: LPriet
Sample : VO01E119 5.0/25 Inst : 01
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:33 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
35)	1,1,1-Trichloroethane	7.51	97	2111400	52.15	ug/l	100
38)	1,1-Dichloropropene	7.73	110	723523	52.58	ug/l	99
39)	Carbon tetrachloride	7.88	119	1591100	52.76	ug/l	99
40)	tert-Amyl methyl ether (TA	7.90	73	2542219	52.56	ug/l	99
42)	Benzene	8.13	78	5383213	50.99	ug/l	100
43)	1,2-Dichloroethane	8.10	62	1118925	52.56	ug/l	100
44)	Trichloroethene	9.08	130	1468714	53.79	ug/l	99
46)	1,2-Dichloropropane	9.34	63	1258335	53.27	ug/l	100
47)	Bromodichloromethane	9.73	83	1690988	51.58	ug/l	100
48)	1,4-Dioxane	9.76	88	113358	1172.28	ug/l	97
49)	Dibromomethane	9.82	93	602961	54.12	ug/l	98
50)	2-Chloroethyl vinyl ether	10.22	63	329105	54.91	ug/l	98
51)	4-Methyl-2-pentanone	10.26	43	3235283	264.67	ug/l	99
52)	cis-1,3-Dichloropropene	10.62	75	1992729	54.21	ug/l	99
55)	Toluene	11.17	91	6025151	52.15	ug/l	100
56)	Ethyl methacrylate	11.45	69	966319	55.74	ug/l	98
57)	trans-1,3-Dichloropropene	11.48	75	1465798	54.58	ug/l	99
58)	1,1,2-Trichloroethane	11.74	97	796053	52.63	ug/l	100
59)	2-Hexanone	11.74	43	1992542	265.71	ug/l	99
60)	1,3-Dichloropropane	12.19	76	1380516	53.77	ug/l	99
61)	Tetrachloroethene	12.29	164	1249230	52.02	ug/l	100
62)	Dibromochloromethane	12.66	129	985487	53.37	ug/l	99
63)	1,2-Dibromoethane	13.03	107	822866	54.99	ug/l	99
64)	1-Chlorohexane	13.30	91	2572709	51.57	ug/l	100
65)	Chlorobenzene	13.79	112	3610696	52.42	ug/l	99
66)	1,1,1,2-Tetrachloroethane	13.86	131	1116459	52.63	ug/l	99
67)	Ethylbenzene	13.88	91	6718588	50.95	ug/l	99
68)	m-Xylene & p-Xylene	14.03	91	9682404	100.31	ug/l	99
69)	o-Xylene	14.84	91	5069451	51.03	ug/l	99
70)	Styrene	14.90	104	4017810	52.17	ug/l	99
71)	Isopropylbenzene	15.52	105	6705142	51.23	ug/l	100
73)	Bromoform	15.55	173	504524	50.13	ug/l	99
74)	trans-1,4-Dichloro-2-buten	15.63	53	237301	55.50	ug/l	96
75)	1,1,2,2-Tetrachloroethane	15.86	83	869256	52.68	ug/l	99
77)	1,2,3-Trichloropropane	16.14	110	235480	55.79	ug/l	92
78)	n-Propylbenzene	16.29	91	8220515	51.01	ug/l	100
79)	Bromobenzene	16.38	156	1345207	52.77	ug/l	100
80)	1,3,5-Trimethylbenzene	16.60	105	5240717	50.90	ug/l	99
81)	2-Chlorotoluene	16.63	91	4859918	50.09	ug/l	95
82)	4-Chlorotoluene	16.74	91	4476659	52.12	ug/l	97
83)	tert-Butylbenzene	17.29	134	1119401	51.83	ug/l	98

(#) = qualifier out of range (m) = manual integration

SU 5/15/24

Data File : D:\HPCHEM\1\DATA\24E11\REV204.D Vial: 10
Acq On : 11 May 2024 2:56 pm Operator: LPriet
Sample : VO01E119 5.0/25 Inst : 01
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:33 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
84)	1,2,4-Trimethylbenzene	17.36	105	5150477	51.12	ug/l	99
85)	sec-Butylbenzene	17.66	105	7213677	50.97	ug/l	100
86)	p-Isopropyltoluene	17.88	119	5536086	50.73	ug/l	100
87)	1,3-Dichlorobenzene	18.03	146	2506660	51.74	ug/l	100
88)	1,2,3-Trimethylbenzene	18.13	105	4772026	50.74	ug/l	99
89)	1,4-Dichlorobenzene	18.19	146	2389062	50.30	ug/l	99
90)	n-Butylbenzene	18.49	91	5704101	50.47	ug/l	100
91)	1,2-Dichlorobenzene	18.72	146	2055877	51.79	ug/l	100
92)	1,2-Dibromo-3-chloropropan	19.71	157	138333	52.22	ug/l	99
93)	1,2,4-Trichlorobenzene	20.80	180	1603778	55.34	ug/l	100
94)	Hexachlorobutadiene	20.97	225	940175	54.45	ug/l	100
95)	Naphthalene	21.15	128	1911993	56.52	ug/l	100
96)	1,2,3-Trichlorobenzene	21.46	180	1194867	54.73	ug/l	100

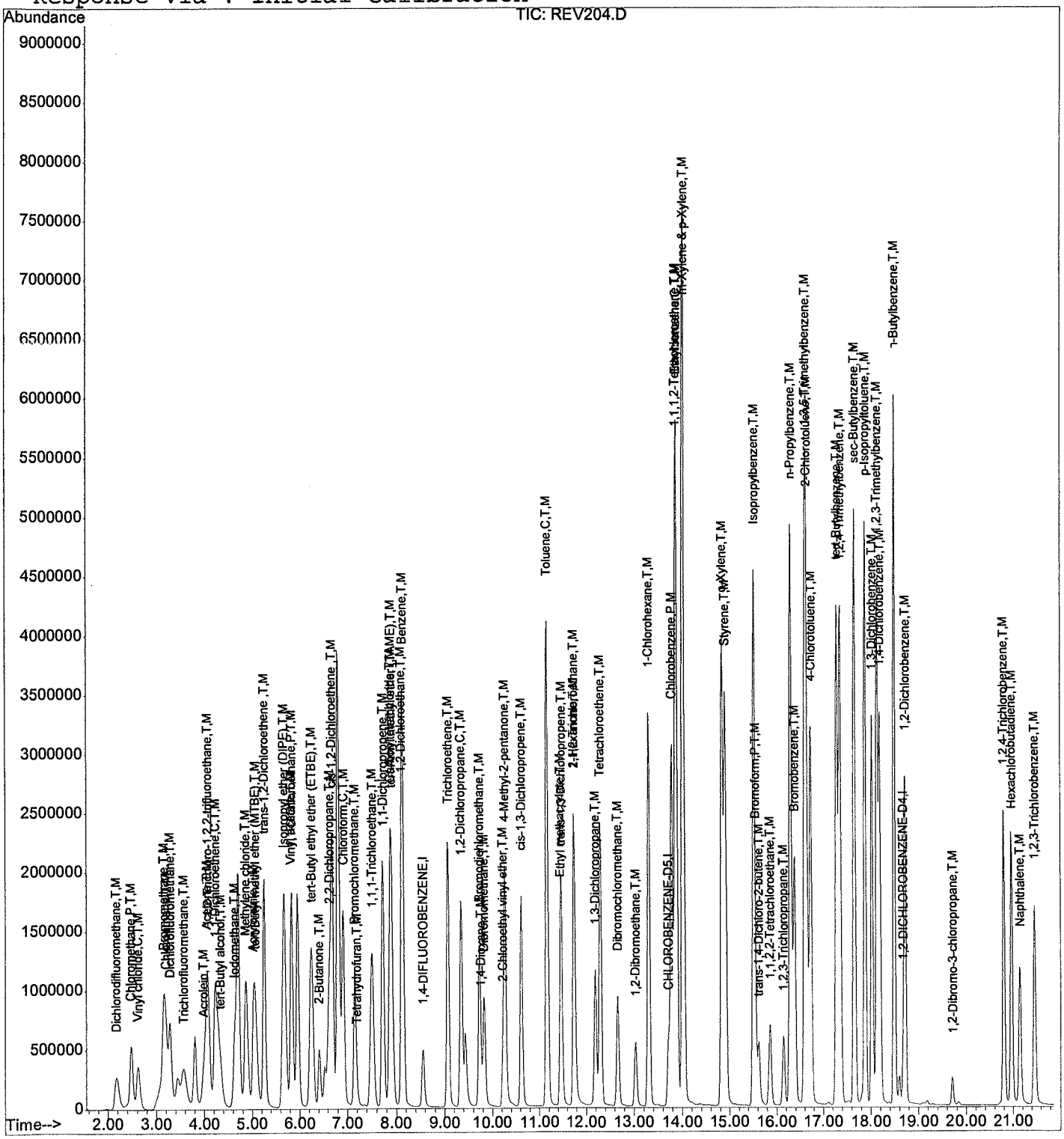
SM 5/15/24

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E11\REV204.D Vial: 10
Acq On : 11 May 2024 2:56 pm Operator: LPriet
Sample : VO01E119 5.0/25 Inst : 01
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:33 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV205.D Vial: 11
Acq On : 11 May 2024 3:26 pm Operator: LPriet
Sample : VO01DE1110 10/50 Inst : 01
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:34 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	813917	10.00	ug/l	0.02
53) CHLOROBENZENE-D5	13.72	117	663851	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	236992	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	0.00	98	0d	0.00	ug/l	
Spiked Amount 10.000			Recovery =	0.00%		
76) 4-Bromofluorobenzene	0.00	95	0d	0.00	ug/l	
Spiked Amount 10.000			Recovery =	0.00%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.18	85	2149061	98.68	ug/l	98
5) Chloromethane	2.48	50	2757462	90.43	ug/l	99
6) Vinyl chloride	2.61	62	2275750	89.61	ug/l	100
7) Bromomethane	3.15	94	2950163	99.92	ug/l	97
8) Chloroethane	3.20	64	1887602	102.46	ug/l	99
9) Dichlorofluoromethane	3.29	67	4893407	93.53	ug/l	98
10) Trichlorofluoromethane	3.57	101	3259184	94.86	ug/l	100
11) Acrolein	4.00	56	920713	503.62	ug/l	97
12) 1,1,2-Trichloro-1,2,2-trif	4.09	151	1635111	95.23	ug/l	100
13) Acetone	4.07	43	1378975	464.17	ug/l	96
14) 1,1-Dichloroethene	4.24	61	4287129	98.76	ug/l	100
15) tert-Butyl alcohol	4.34	59	2428061	2679.81	ug/l	99
16) Iodomethane	4.65	142	4731046	101.65	ug/l	100
18) Methylene chloride	4.87	49	3383840	97.16	ug/l	99
20) Acrylonitrile	5.02	53	1892610	502.15	ug/l	99
21) tert-Butyl methyl ether (M	5.07	73	4236425	99.23	ug/l	99
22) trans-1,2-Dichloroethene	5.26	61	4113790	98.36	ug/l	100
23) Isopropyl ether (DIPE)	5.67	45	8979646	100.48	ug/l	100
24) Vinyl acetate	5.82	43	3315001	108.06	ug/l	99
25) 1,1-Dichloroethane	5.84	63	4821432	98.58	ug/l	100
27) tert-Butyl ethyl ether (ET	6.25	59	6309833	98.54	ug/l	98
28) 2-Butanone	6.41	43	2458656	539.33	ug/l	99
29) 2,2-Dichloropropane	6.64	77	3940507	95.83	ug/l	100
30) cis-1,2-Dichloroethene	6.69	96	3330208	98.92	ug/l	99
31) Chloroform	6.92	83	4814377	96.59	ug/l	100
32) Bromochloromethane	7.15	49	1957186	99.99	ug/l	98
33) Tetrahydrofuran	7.20	42	291915	101.24	ug/l	96

(#) = qualifier out of range (m) = manual integration

SU 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV205.D Vial: 11
Acq On : 11 May 2024 3:26 pm Operator: LPriet
Sample : VO01DE1110 10/50 Inst : 01
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:34 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
35)	1,1,1-Trichloroethane	7.51	97	4134538	99.15	ug/l	100
38)	1,1-Dichloropropene	7.73	110	1407010	99.26	ug/l	98
39)	Carbon tetrachloride	7.88	119	3044744	98.02	ug/l	99
40)	tert-Amyl methyl ether (TA	7.89	73	4847551	97.30	ug/l	99
42)	Benzene	8.13	78	10614708	97.62	ug/l	100
43)	1,2-Dichloroethane	8.10	62	2198375	100.25	ug/l	100
44)	Trichloroethene	9.06	130	2868237	101.98	ug/l	99
46)	1,2-Dichloropropane	9.35	63	2435072	100.09	ug/l	100
47)	Bromodichloromethane	9.73	83	3272651	96.91	ug/l	100
48)	1,4-Dioxane	9.76	88	217292	2181.59	ug/l	95
49)	Dibromomethane	9.82	93	1156972	100.82	ug/l	98
50)	2-Chloroethyl vinyl ether	10.22	63	641035	103.83	ug/l	97
51)	4-Methyl-2-pentanone	10.26	43	6179211	488.45	ug/l	100
52)	cis-1,3-Dichloropropene	10.62	75	3875584	102.36	ug/l	99
55)	Toluene	11.17	91	11521987	97.73	ug/l	99
56)	Ethyl methacrylate	11.45	69	1848777	104.51	ug/l	97
57)	trans-1,3-Dichloropropene	11.48	75	2820520	102.93	ug/l	99
58)	1,1,2-Trichloroethane	11.75	97	1530353	99.15	ug/l	99
59)	2-Hexanone	11.75	43	3802288	492.69	ug/l	100
60)	1,3-Dichloropropane	12.19	76	2688647	102.62	ug/l	99
61)	Tetrachloroethene	12.31	164	2415182	98.56	ug/l	100
62)	Dibromochloromethane	12.66	129	1898169	100.74	ug/l	99
63)	1,2-Dibromoethane	13.03	107	1574680	103.12	ug/l	99
64)	1-Chlorohexane	13.30	91	4899203	96.24	ug/l	100
65)	Chlorobenzene	13.79	112	6936484	98.69	ug/l	99
66)	1,1,1,2-Tetrachloroethane	13.86	131	2153843	99.50	ug/l	99
67)	Ethylbenzene	13.88	91	12839879	95.43	ug/l	98
68)	m-Xylene & p-Xylene	14.03	91	18532298	188.15	ug/l	98
69)	o-Xylene	14.84	91	9582592	94.53	ug/l	98
70)	Styrene	14.90	104	7538023	95.93	ug/l	99
71)	Isopropylbenzene	15.52	105	12772431	95.63	ug/l	99
73)	Bromoform	15.55	173	986318	102.14	ug/l	99
74)	trans-1,4-Dichloro-2-buten	15.63	53	446145	109.12	ug/l	93
75)	1,1,2,2-Tetrachloroethane	15.86	83	1626217	103.07	ug/l	99
77)	1,2,3-Trichloropropane	16.15	110	438929	108.75	ug/l	92
78)	n-Propylbenzene	16.29	91	15596079	101.22	ug/l	99
79)	Bromobenzene	16.38	156	2566592	105.28	ug/l	100
80)	1,3,5-Trimethylbenzene	16.61	105	9823432	99.77	ug/l	98
81)	2-Chlorotoluene	16.63	91	9603952	103.52	ug/l	98
82)	4-Chlorotoluene	16.74	91	7702833	93.79	ug/l	98
83)	tert-Butylbenzene	17.29	134	2120781	102.68	ug/l	96

(#) = qualifier out of range (m) = manual integration SA 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV205.D Vial: 11
Acq On : 11 May 2024 3:26 pm Operator: LPriet
Sample : VO01DE1110 10/50 Inst : 01
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:34 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
84)	1,2,4-Trimethylbenzene	17.36	105	9615877	99.82	ug/l	97
85)	sec-Butylbenzene	17.66	105	13298763	98.26	ug/l	99
86)	p-Isopropyltoluene	17.88	119	10259365	98.33	ug/l	99
87)	1,3-Dichlorobenzene	18.03	146	4662217	100.65	ug/l	100
88)	1,2,3-Trimethylbenzene	18.13	105	8781878	97.65	ug/l	99
89)	1,4-Dichlorobenzene	18.19	146	4430571	97.55	ug/l	100
90)	n-Butylbenzene	18.49	91	10299843	95.31	ug/l	99
91)	1,2-Dichlorobenzene	18.72	146	3781801	99.63	ug/l	100
92)	1,2-Dibromo-3-chloropropan	19.72	157	255821	100.50	ug/l	100
93)	1,2,4-Trichlorobenzene	20.80	180	2909800	105.00	ug/l	100
94)	Hexachlorobutadiene	20.98	225	1658054	100.43	ug/l	100
95)	Naphthalene	21.14	128	3426614	105.94	ug/l	100
96)	1,2,3-Trichlorobenzene	21.46	180	2169257	103.91	ug/l	100

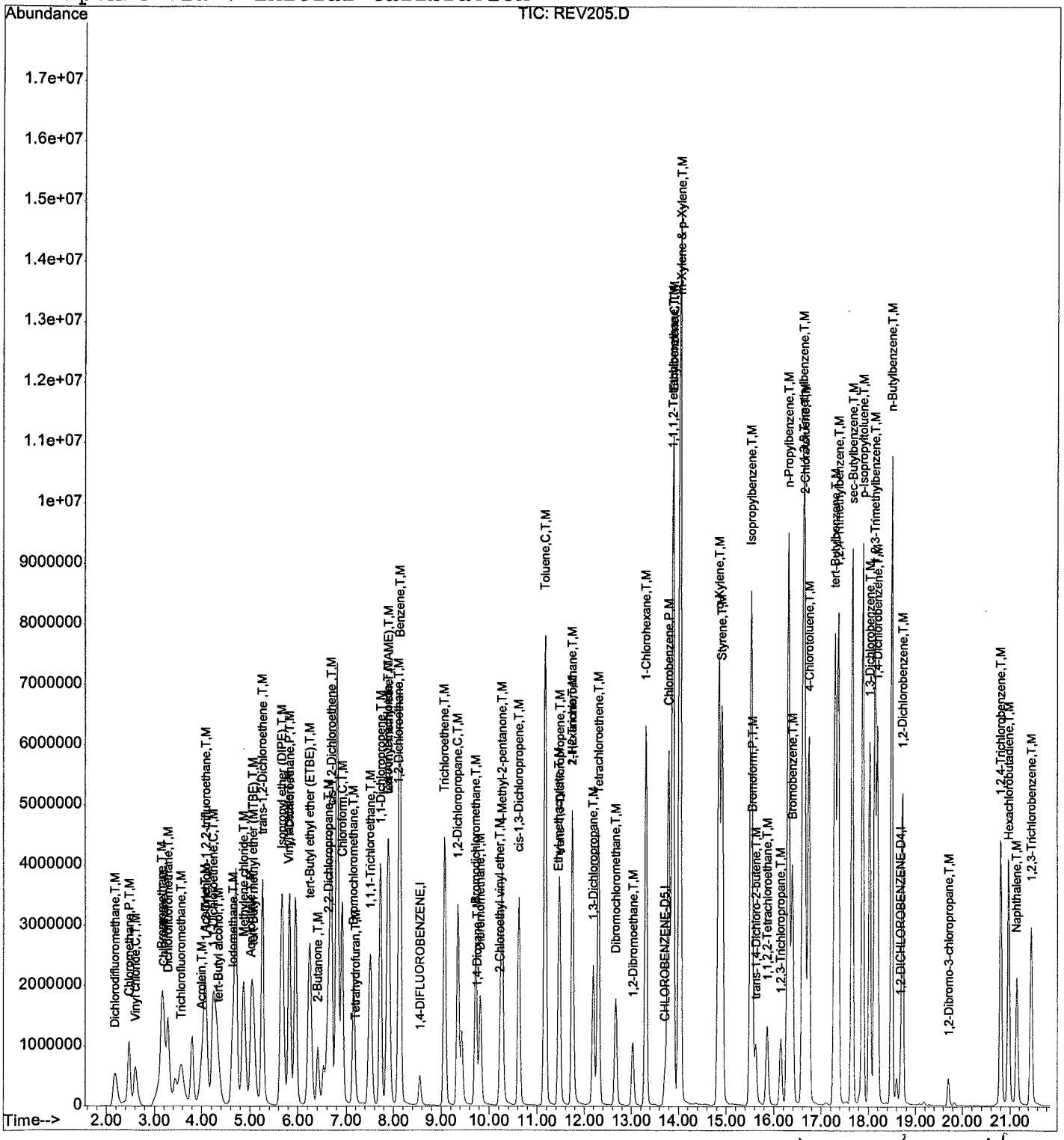
Su 5/15/24

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E11\REV205.D Vial: 11
Acq On : 11 May 2024 3:26 pm Operator: LPriet
Sample : VO01DE1110 10/50 Inst : 01
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:34 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



Su 5/15/24

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: REV209 BFB Injection Date: 05/13/24

Instrument ID: 01 BFB Injection Time: 11:31

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	17.676
75	30 - 60% of mass 95	40.505
95	Base Peak, 100% relative abundance	100.000
96	5 - 9% of mass 95	6.366
173	Less than 2% of mass 174	0.000(0)1
174	Greater than 50% of mass 95	77.234
175	5 - 9% of mass 174	5.650(7.32)1
176	95 - 101% % of mass 174	75.082(97.21)1
177	5 - 9% % of mass 176	4.812(6.41)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	VSTD10	IVO01E1102	REV210	05/13/24	12:06

SU 5/15/24

CONTINUE_CALIBRATION - CALIBRATION VERIFICATION

Instrument ID :01
IC_Beginning DateTime :05/11/24 10:58
Spike Amount :10 PPB
CC/CV File :REV210
IC File :REV201

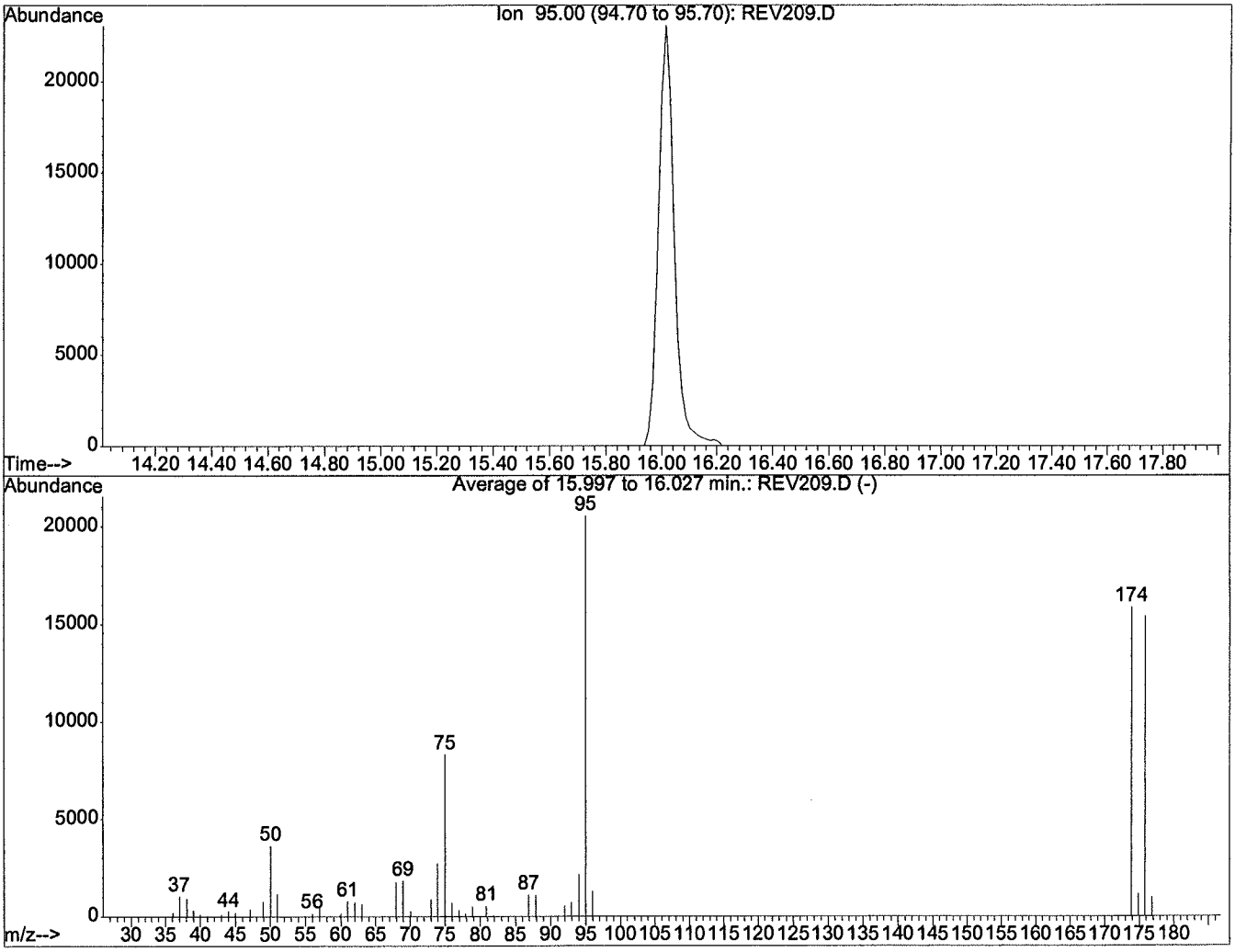
Column Spec :RXI-624SILMS ID :0.25MM
IC_Ending DateTime :05/11/24 15:26
HPChem Method :VO01E11
Date_Time :05/13/24 12:06

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	907856	1	1	8.546	8.551	0				
	2	Chlorotrifluoroethylene												
	3	Dichlorodifluoromethane	10.744	7.4	261017	0.288	0.268	2.174	2.169	4.44				
	4	2-Chloro-1,1,1-trifluoroethane												
	5	Chloromethane	10.222	2.2	347692	0.383	0.375	2.487	2.471	7.39				
	6	Vinyl chloride	11.091	10.9	314201	0.346	0.312	2.615	2.605	6.31				
	7	Bromomethane	9.886	-1.1	332015	0.366	0.396	3.154	3.146	17.96	0.0078	0.3620		0.9993
	8	Chloroethane	9.929	-0.7	204024	0.225	0.226	3.198	3.190	4.21				
	9	Dichlorofluoromethane	9.809	-1.9	572473	0.631	0.643	3.287	3.276	8.21				
	10	Trichlorofluoromethane	10.405	4.0	398783	0.439	0.422	3.554	3.553	5.20				
5	11	Acrolein	46.638	-6.7	95103	0.021	0.022	3.984	3.986	5.86				
	12	1,1,2-Trichloro-1,2,2-trifluoroethane	10.699	7.0	204924	0.226	0.211	4.073	4.070	8.11				
5	13	Acetone	46.249	-7.5	153258	0.034	0.037	4.058	4.058	14.45				
	14	1,1-Dichloroethene	10.534	5.3	510086	0.562	0.533	4.235	4.230	4.74				
25	15	tert-Butyl alcohol	272.706	9.1	275606	0.012	0.011	4.339	4.342	9.12				
	16	Iodomethane	10.129	1.3	525854	0.579	0.572	4.635	4.639	4.85				
	17	Methyl acetate	9.648	-3.5	87177	0.096	0.100	4.650	4.653	10.84				
	18	Methylene chloride	10.396	4.0	403861	0.445	0.428	4.858	4.858	3.90				
	19	Carbon disulfide	9.410	-5.9	974363	1.073	1.140	4.887	4.880	6.08				
5	20	Acrylonitrile	49.767	-0.5	209223	0.046	0.046	5.021	5.025	4.77				
	21	tert-Butyl methyl ether (MTBE)	10.216	2.2	486511	0.536	0.525	5.065	5.061	4.67				
	22	trans-1,2-Dichloroethene	10.334	3.3	482107	0.531	0.514	5.243	5.249	4.44				
	23	Isopropyl ether (DIPE)	10.406	4.1	1037346	1.143	1.098	5.658	5.670	4.21				
	24	Vinyl acetate	10.436	4.4	357100	0.393	0.377	5.821	5.832	9.82				
	25	1,1-Dichloroethane	10.385	3.9	566566	0.624	0.601	5.821	5.830	4.54				
25	26	2-Butanol												
	27	tert-Butyl ethyl ether (ETBE)	10.658	6.6	761232	0.838	0.787	6.235	6.240	4.52				
5	28	2-Butanone	52.383	4.8	266366	0.059	0.056	6.413	6.428	10.70				
	29	2,2-Dichloropropane	10.370	3.7	475647	0.524	0.505	6.621	6.628	4.21				
	30	cis-1,2-Dichloroethene	10.325	3.2	387725	0.427	0.414	6.680	6.686	4.03				
	31	Chloroform	9.820	-1.8	545984	0.601	0.612	6.902	6.908	8.00				
	32	Bromochloromethane	10.539	5.4	230106	0.253	0.240	7.139	7.148	4.73				
	33	Tetrahydrofuran	10.289	2.9	33093	0.036	0.035	7.198	7.201	8.25				
	34	Dibromofluoromethane	9.898	-1.0	278148	0.306	0.310	7.228	7.228	7.01				
	35	1,1,1-Trichloroethane	10.373	3.7	482510	0.531	0.512	7.495	7.499	4.19				
	36	Cyclohexane	10.548	5.5	477860	0.526	0.499	7.524	7.524	6.15				
	37	2,2,4-Trimethylpentane												
	38	1,1-Dichloropropene	10.276	2.8	162485	0.179	0.174	7.717	7.723	4.16				
	39	Carbon tetrachloride	10.352	3.5	358693	0.395	0.382	7.880	7.878	4.43				
	40	tert-Amyl methyl ether (TAME)	10.127	1.3	562793	0.620	0.612	7.880	7.889	5.64				
	41	1,2-Dichloroethane-d4	9.949	-0.5	190681	0.210	0.211	7.954	7.965	7.18				
	42	Benzene	10.090	0.9	1223803	1.348	1.336	8.132	8.130	4.04				
	43	1,2-Dichloroethane	10.336	3.4	252838	0.279	0.269	8.102	8.104	4.45				
	44	Trichloroethene	10.150	1.5	318416	0.351	0.346	9.064	9.072	4.96				
	45	Methylcyclohexane	10.259	2.6	511326	0.563	0.549	9.153	9.165	6.46				
	46	1,2-Dichloropropane	10.115	1.1	274499	0.302	0.299	9.346	9.351	5.38				
	47	Bromodichloromethane	9.862	-1.4	371496	0.409	0.415	9.716	9.732	6.99				
20	48	1,4-Dioxane	205.358	2.7	22815	0.001	0.001	9.775	9.783	14.49				
	49	Dibromomethane	10.344	3.4	132415	0.146	0.141	9.820	9.823	5.30				
	50	2-Chloroethyl vinyl ether	10.212	2.1	70329	0.077	0.076	10.220	10.234	8.06				
5	51	4-Methyl-2-pentanone	49.033	-1.9	657246	0.145	0.136	10.264	10.276	18.90	-0.0424	0.1563		0.9988
	52	cis-1,3-Dichloropropene	10.274	2.7	433879	0.478	0.465	10.620	10.625	5.31				
	53	CHLOROBENZENE-D5	10.000	0	757489	1	1	13.716	13.717	0				
	54	Toluene-d8	9.566	-4.3	1085971	1.434	1.499	11.020	11.030	5.48				
	55	Toluene	9.906	-0.9	1332719	1.759	1.776	11.153	11.169	4.50				
	56	Ethyl methacrylate	10.213	2.1	206172	0.272	0.266	11.449	11.471	8.54				
	57	trans-1,3-Dichloropropene	10.298	3.0	322019	0.425	0.413	11.479	11.484	5.62				
	58	1,1,2-Trichloroethane	10.145	1.5	178678	0.236	0.233	11.746	11.751	4.45				
5	59	2-Hexanone	47.364	-5.3	378200	0.100	0.090	11.761	11.791	36.80	-0.0568	0.1174		0.9987
	60	1,3-Dichloropropane	10.169	1.7	304011	0.401	0.395	12.190	12.195	5.08				
	61	Tetrachloroethene	9.999	-0.0	279605	0.369	0.369	12.294	12.299	3.83				
	62	Dibromochloromethane	10.064	0.6	216381	0.286	0.284	12.664	12.667	5.55				
	63	1,2-Dibromoethane	10.349	3.5	180319	0.238	0.230	13.035	13.038	6.28				
	64	1-Chlorohexane	10.259	2.6	595972	0.787	0.767	13.301	13.308	4.69				
	65	Chlorobenzene	10.061	0.6	806907	1.065	1.059	13.775	13.791	3.64				
	66	1,1,1,2-Tetrachloroethane	10.136	1.4	250367	0.331	0.326	13.864	13.865	3.59				
	67	Ethylbenzene	9.991	-0.1	1533890	2.025	2.027	13.879	13.881	4.07				
2	68	m-Xylene & p-Xylene	20.234	1.2	2274121	1.501	1.484	14.012	14.021	4.23				
	69	o-Xylene	9.950	-0.5	1150973	1.519	1.527	14.827	14.843	4.66				
	70	Styrene	9.968	-0.3	893787	1.180	1.184	14.901	14.909	3.78				
	71	Isopropylbenzene	10.036	0.4	1529556	2.019	2.012	15.509	15.524	3.97				
	72	1,2-DICHLOROBENZENE-D4	10.000	0	290545	1	1	18.679	18.680	0				
	73	Bromoform	9.781	-2.2	112241	0.386	0.350	15.553	15.559	20.61	-0.0135	0.4088		0.9992
	74	trans-1,4-Dichloro-2-butene	10.276	2.8	51511	0.177	0.173	15.627	15.634	9.77				
	75	1,1,2,2-Tetrachloroethane	9.917	-0.8	191835	0.660	0.666	15.849	15.865	6.36				
	76	4-Bromofluorobenzene	9.429	-5.7	373151	1.284	1.362	15.998	16.015	6.06				
	77	1,2,3-Trichloropropane	10.138	1.4	50167	0.173	0.170	16.146	16.152	9.82				
	78	n-Propylbenzene	9.836	-1.6	1858212	6.396	6.502	16.294	16.298	5.03				
	79	Bromobenzene	9.996	-0.0	298744	1.028	1.029	16.383	16.383	5.26				
	80	1,3,5-Trimethylbenzene	9.883	-1.2	1193060	4.106	4.155	16.605	16.606	5.49				
	81	2-Chlorotoluene	10.005	0.1	1138017	3.917	3.915	16.635	16.635	4.84				
	82	4-Chlorotoluene	10.002	0.0	1007192	3.467	3.466	16.723	16.733	5.46				
	83	tert-Butylbenzene	9.950	-0.5	251948	0.867	0.871	17.287	17.287	4.70				
	84	1,2,4-Trimethylbenzene	9.900	-1.0	1169308	4.025	4.065	17.346	17.360	4.41				
	85	sec-Butylbenzene	9.967	-0.3	1653826	5.692	5.711	17.657	17.658	5.27				
	86	p-Isopropyltoluene	9.795	-2.0	1252965	4.312	4.403	17.879	17.880	5.17				
	87	1,3-Dichlorobenzene	10.012	0.1	568580	1.957	1.955	18.027	18.028	4.87				
	88	1,2,3-Trimethylbenzene	9.931	-0.7	1095079	3.769	3.795	18.131	18.132	4.70				
	89	1,4-Dichlorobenzene	9.894	-1.1	550958	1.896	1.916	18.190	18.191	4.92				
	90	n-Butylbenzene	9.925	-0.7	1315009	4.526	4.560	18.486	18.489	5.46				
	91	1,2-Dichlorobenzene	9.987	-0.1	464758	1.600	1.602	18.709	18.724	4.06				
	92	1,2-Dibromo-3-chloropropane	9.352	-6.5	27714	0.095	0.095	19.716	19.717	16.02	-0.0056	0.1080		0.9987
	93	1,2,4-Trichlorobenzene	10.080	0.8	342507	1.179	1.169	20.798	20.801	7.49				
	94	Hexachlorobutadiene	9.944	-0.6	201295	0.693	0.697	20.961	20.967	6.95				
	95	Naphthalene	10.201	2.0	404546	1.392	1.365	21.138	21.148	8.50				
	96	1,2,3-Trichlorobenzene	10.141	1.4	259547	0.893	0.881	21.464	21.466	6.66				

Spike Amount = Nominal Amount * M

SU
5/15/24

Data File : D:\HPCHEM\1\DATA\24E13\REV209.D Vial: 1
Acq On : 13 May 2024 11:31 am Operator: LPriet
Sample : BFB01E12 Inst : 01
Misc : T/CHK Multiplr: 1.00
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls



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	17.7	3629	PASS
75	95	30	60	40.5	8316	PASS
95	95	100	100	100.0	20531	PASS
96	95	5	9	6.4	1307	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	77.2	15857	PASS
175	174	5	9	7.3	1160	PASS
176	174	95	101	97.2	15415	PASS
177	176	5	9	6.4	988	PASS

REV209.D VO01E11.M Mon May 13 14:37:52 2024 SY 5/15/24

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D Vial: 2
Acq On : 13 May 2024 12:06 pm Operator: LPriet
Sample : IVO01E1102 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\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	99	0.00
2	T,M	Chlorotrifluoroethylene	-1.000	0.000	0.0	0	-2.08#
3	T,M	Dichlorodifluoromethane	10.000	10.745	-7.4	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	10.223	-2.2	109	0.02
6	C,T,M	Vinyl chloride	10.000	11.092	-10.9	110	0.00
7	T,M	Bromomethane	10.000	9.887	1.1	110	0.01
8	T,M	Chloroethane	10.000	9.929	0.7	105	0.01
9	T,M	Dichlorofluoromethane	10.000	9.809	1.9	107	0.01
10	T,M	Trichlorofluoromethane	10.000	10.405	-4.0	109	0.00
11	T,M	Acrolein	50.000	46.638	6.7	104	0.00
12	T,M	1,1,2-Trichloro-1,2,2-trifl	10.000	10.700	-7.0	106	0.01
13	T,M	Acetone	50.000	46.249	7.5	108	0.00
14	C,T,M	1,1-Dichloroethene	10.000	10.535	-5.4	108	0.01
15	T,M	tert-Butyl alcohol	250.000	272.707	-9.1	118	0.00
16	T,M	Iodomethane	10.000	10.129	-1.3	105	0.00
17	T,M	Methyl acetate	10.000	9.648	3.5	113	0.00
18	T,M	Methylene chloride	10.000	10.396	-4.0	110	0.00
19	T,M	Carbon disulfide	10.000	9.411	5.9	99	0.02
20	T,M	Acrylonitrile	50.000	49.767	0.5	107	0.00
21	T,M	tert-Butyl methyl ether (MT	10.000	10.216	-2.2	112	0.00
22	T,M	trans-1,2-Dichloroethene	10.000	10.335	-3.4	110	0.00
23	T,M	Isopropyl ether (DIPE)	10.000	10.407	-4.1	110	-0.01
24	T,M	Vinyl acetate	10.000	10.436	-4.4	113	0.00
25	P,T,M	1,1-Dichloroethane	10.000	10.386	-3.9	109	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	10.658	-6.6	114	0.00
28	T,M	2-Butanone	50.000	52.384	-4.8	109	0.00
29	T,M	2,2-Dichloropropane	10.000	10.370	-3.7	108	0.00
30	T,M	cis-1,2-Dichloroethene	10.000	10.325	-3.2	107	0.00
31	C,T,M	Chloroform	10.000	9.821	1.8	107	0.00
32	T,M	Bromochloromethane	10.000	10.539	-5.4	112	0.00
33	T,M	Tetrahydrofuran	10.000	10.289	-2.9	121	0.00
34	S	Dibromofluoromethane	10.000	9.898	1.0	107	0.00
35	T,M	1,1,1-Trichloroethane	10.000	10.374	-3.7	108	0.00
36	T,M	Cyclohexane	10.000	10.549	-5.5	114	0.00
37	T,M	2,2,4-Trimethylpentane	10.000	0.000	100.0#	0	0.00
38	T,M	1,1-Dichloropropene	10.000	10.277	-2.8	108	0.00
39	T,M	Carbon tetrachloride	10.000	10.352	-3.5	107	0.00
40	T,M	tert-Amyl methyl ether (TAM	10.000	10.128	-1.3	113	0.00
41	S	1,2-Dichloroethane-d4	10.000	9.949	0.5	112	-0.01

(#) = Out of Range

5/15/24

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D Vial: 2
Acq On : 13 May 2024 12:06 pm Operator: LPriet
Sample : IVO01E1102 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\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	10.090	-0.9	106	0.00
43	T,M	1,2-Dichloroethane	10.000	10.337	-3.4	110	0.00
44	T,M	Trichloroethene	10.000	10.150	-1.5	103	0.00
45	T,M	Methylcyclohexane	10.000	10.260	-2.6	113	-0.01
46	C,T,M	1,2 Dichloropropane	10.000	10.115	-1.2	107	0.00
47	T,M	Bromodichloromethane	10.000	9.863	1.4	109	-0.01
48	T,M	1,4-Dioxane	200.000	205.359	-2.7	114	-0.01
49	T,M	Dibromomethane	10.000	10.345	-3.5	114	0.00
50	T,M	2-Chloroethyl vinyl ether	10.000	10.212	-2.1	110	-0.01
51	T,M	4-Methyl-2-pentanone	50.000	49.033	1.9	111	0.00
52	T,M	cis-1,3-Dichloropropene	10.000	10.274	-2.7	109	0.00
53	I	CHLOROBENZENE-D5	10.000	10.000	0.0	102	0.00
54	S	Toluene-d8	10.000	9.567	4.3	105	-0.01
55	C,T,M	Toluene	10.000	9.907	0.9	106	-0.01
56	T,M	Ethyl methacrylate	10.000	10.214	-2.1	113	-0.01
57	T,M	trans-1,3-Dichloropropene	10.000	10.299	-3.0	111	0.00
58	T,M	1,1,2-Trichloroethane	10.000	10.145	-1.4	111	0.00
59	T,M	2-Hexanone	50.000	47.365	5.3	113	0.00
60	T,M	1,3-Dichloropropane	10.000	10.169	-1.7	112	0.00
61	T,M	Tetrachloroethene	10.000	9.999	0.0	105	0.00
62	T,M	Dibromochloromethane	10.000	10.064	-0.6	112	0.00
63	T,M	1,2-Dibromoethane	10.000	10.349	-3.5	113	0.00
64	T,M	1-Chlorohexane	10.000	10.260	-2.6	108	0.00
65	P,M	Chlorobenzene	10.000	10.062	-0.6	106	-0.01
66	T,M	1,1,1,2-Tetrachloroethane	10.000	10.136	-1.4	108	0.00
67	C,T,M	Ethylbenzene	10.000	9.991	0.1	104	0.00
68	T,M	m-Xylene & p-Xylene	20.000	20.234	-1.2	107	0.00
69	T,M	o-Xylene	10.000	9.950	0.5	107	-0.01
70	T,M	Styrene	10.000	9.968	0.3	106	0.00
71	T,M	Isopropylbenzene	10.000	10.037	-0.4	105	-0.01
72	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	102	0.00
73	P,T,M	Bromoform	10.000	9.781	2.2	117	0.00
74	T,M	trans-1,4-Dichloro-2-butene	10.000	10.277	-2.8	116	0.00
75	T,M	1,1,2,2-Tetrachloroethane	10.000	9.918	0.8	114	-0.01
76	S	4-Bromofluorobenzene	10.000	9.430	5.7	107	-0.01
77	T,M	1,2,3-Trichloropropane	10.000	10.138	-1.4	111	0.00
78	T,M	n-Propylbenzene	10.000	9.837	1.6	104	0.00
79	T,M	Bromobenzene	10.000	9.996	0.0	107	0.00
80	T,M	1,3,5-Trimethylbenzene	10.000	9.884	1.2	105	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D Vial: 2
Acq On : 13 May 2024 12:06 pm Operator: LPriet
Sample : IVO01E1102 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\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	10.006	-0.1	107	0.00
82	T,M	4-Chlorotoluene	10.000	10.003	-0.0	105	0.00
83	T,M	tert-Butylbenzene	10.000	9.950	0.5	105	0.00
84	T,M	1,2,4-Trimethylbenzene	10.000	9.901	1.0	104	-0.01
85	T,M	sec-Butylbenzene	10.000	9.967	0.3	105	0.00
86	T,M	p-Isopropyltoluene	10.000	9.795	2.1	104	0.00
87	T,M	1,3-Dichlorobenzene	10.000	10.012	-0.1	107	0.00
88	T,M	1,2,3-Trimethylbenzene	10.000	9.932	0.7	107	0.00
89	T,M	1,4-Dichlorobenzene	10.000	9.895	1.1	106	0.00
90	T,M	n-Butylbenzene	10.000	9.925	0.7	105	0.00
91	T,M	1,2-Dichlorobenzene	10.000	9.987	0.1	109	-0.01
92	T,M	1,2-Dibromo-3-chloropropane	10.000	9.353	6.5	117	0.00
93	T,M	1,2,4-Trichlorobenzene	10.000	10.081	-0.8	109	0.00
94	T,M	Hexachlorobutadiene	10.000	9.945	0.5	102	0.00
95	T,M	Naphthalene	10.000	10.202	-2.0	113	0.00
96	T,M	1,2,3-Trichlorobenzene	10.000	10.141	-1.4	110	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

SA 5/15/24

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D Vial: 2
Acq On : 13 May 2024 12:06 pm Operator: LPriet
Sample : IVO01E1102 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\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	99	0.00
2	T,M	Chlorotrifluoroethylene	0.000	0.000	0.0	0#	-2.08#
3	T,M	Dichlorodifluoromethane	0.268	0.288	-7.5	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	0.375	0.383	-2.1	109	0.02
6	C,T,M	Vinyl chloride	0.312	0.346	-10.9	110	0.00
7	T,M	Bromomethane	0.396	0.366	7.6	110	0.01
8	T,M	Chloroethane	0.226	0.225	0.4	105	0.01
9	T,M	Dichlorofluoromethane	0.643	0.631	1.9	107	0.01
10	T,M	Trichlorofluoromethane	0.422	0.439	-4.0	109	0.00
11	T,M	Acrolein	0.022	0.021	4.5	104	0.00
12	T,M	1,1,2-Trichloro-1,2,2-trifl	0.211	0.226	-7.1	106	0.01
13	T,M	Acetone	0.037	0.034	8.1	108	0.00
14	C,T,M	1,1-Dichloroethene	0.533	0.562	-5.4	108	0.01
15	T,M	tert-Butyl alcohol	0.011	0.012	-9.1	118	0.00
16	T,M	Iodomethane	0.572	0.579	-1.2	105	0.00
17	T,M	Methyl acetate	0.100	0.096	4.0	113	0.00
18	T,M	Methylene chloride	0.428	0.445	-4.0	110	0.00
19	T,M	Carbon disulfide	1.140	1.073	5.9	99	0.02
20	T,M	Acrylonitrile	0.046	0.046	0.0	107	0.00
21	T,M	tert-Butyl methyl ether (MT	0.525	0.536	-2.1	112	0.00
22	T,M	trans-1,2-Dichloroethene	0.514	0.531	-3.3	110	0.00
23	T,M	Isopropyl ether (DIPE)	1.098	1.143	-4.1	110	-0.01
24	T,M	Vinyl acetate	0.377	0.393	-4.2	113	0.00
25	P,T,M	1,1-Dichloroethane	0.601	0.624	-3.8	109	0.00
26	T,M	2-Butanol	0.000	0.010	0.0	0#	0.00
27	T,M	tert-Butyl ethyl ether (ETB	0.787	0.838	-6.5	114	0.00
28	T,M	2-Butanone	0.056	0.059	-5.4	109	0.00
29	T,M	2,2-Dichloropropane	0.505	0.524	-3.8	108	0.00
30	T,M	cis-1,2-Dichloroethene	0.414	0.427	-3.1	107	0.00
31	C,T,M	Chloroform	0.612	0.601	1.8	107	0.00
32	T,M	Bromochloromethane	0.240	0.253	-5.4	112	0.00
33	T,M	Tetrahydrofuran	0.035	0.036	-2.9	121	0.00
34	S	Dibromofluoromethane	0.310	0.306	1.3	107	0.00
35	T,M	1,1,1-Trichloroethane	0.512	0.531	-3.7	108	0.00
36	T,M	Cyclohexane	0.499	0.526	-5.4	114	0.00
37	T,M	2,2,4-Trimethylpentane	0.000	0.032	0.0	0#	0.00
38	T,M	1,1-Dichloropropene	0.174	0.179	-2.9	108	0.00
39	T,M	Carbon tetrachloride	0.382	0.395	-3.4	107	0.00
40	T,M	tert-Amyl methyl ether (TAM	0.612	0.620	-1.3	113	0.00
41	S	1,2-Dichloroethane-d4	0.211	0.210	0.5	112	-0.01

(#) = Out of Range

SG 5/15/24

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D Vial: 2
Acq On : 13 May 2024 12:06 pm Operator: LPriet
Sample : IVO01E1102 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\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	1.336	1.348	-0.9	106	0.00
43	T,M	1,2-Dichloroethane	0.269	0.279	-3.7	110	0.00
44	T,M	Trichloroethene	0.346	0.351	-1.4	103	0.00
45	T,M	Methylcyclohexane	0.549	0.563	-2.6	113	-0.01
46	C,T,M	1,2-Dichloropropane	0.299	0.302	-1.0	107	0.00
47	T,M	Bromodichloromethane	0.415	0.409	1.4	109	-0.01
48	T,M	1,4-Dioxane	0.001	0.001	0.0	114	-0.01
49	T,M	Dibromomethane	0.141	0.146	-3.5	114	0.00
50	T,M	2-Chloroethyl vinyl ether	0.076	0.077	-1.3	110	-0.01
51	T,M	4-Methyl-2-pentanone	0.136	0.145	-6.6	111	0.00
52	T,M	cis-1,3-Dichloropropene	0.465	0.478	-2.8	109	0.00
53	I	CHLOROBENZENE-D5	1.000	1.000	0.0	102	0.00
54	S	Toluene-d8	1.499	1.434	4.3	105	-0.01
55	C,T,M	Toluene	1.776	1.759	1.0	106	-0.01
56	T,M	Ethyl methacrylate	0.266	0.272	-2.3	113	-0.01
57	T,M	trans-1,3-Dichloropropene	0.413	0.425	-2.9	111	0.00
58	T,M	1,1,2-Trichloroethane	0.233	0.236	-1.3	111	0.00
59	T,M	2-Hexanone	0.090	0.100	-11.1	113	0.00
60	T,M	1,3-Dichloropropane	0.395	0.401	-1.5	112	0.00
61	T,M	Tetrachloroethene	0.369	0.369	0.0	105	0.00
62	T,M	Dibromochloromethane	0.284	0.286	-0.7	112	0.00
63	T,M	1,2-Dibromoethane	0.230	0.238	-3.5	113	0.00
64	T,M	1-Chlorohexane	0.767	0.787	-2.6	108	0.00
65	P,M	Chlorobenzene	1.059	1.065	-0.6	106	-0.01
66	T,M	1,1,1,2-Tetrachloroethane	0.326	0.331	-1.5	108	0.00
67	C,T,M	Ethylbenzene	2.027	2.025	0.1	104	0.00
68	T,M	m-Xylene & p-Xylene	1.484	1.501	-1.1	107	0.00
69	T,M	o-Xylene	1.527	1.519	0.5	107	-0.01
70	T,M	Styrene	1.184	1.180	0.3	106	0.00
71	T,M	Isopropylbenzene	2.012	2.019	-0.3	105	-0.01
72	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	102	0.00
73	P,T,M	Bromoform	0.350	0.386	-10.3	117	0.00
74	T,M	trans-1,4-Dichloro-2-butene	0.173	0.177	-2.3	116	0.00
75	T,M	1,1,2,2-Tetrachloroethane	0.666	0.660	0.9	114	-0.01
76	S	4-Bromofluorobenzene	1.362	1.284	5.7	107	-0.01
77	T,M	1,2,3-Trichloropropane	0.170	0.173	-1.8	111	0.00
78	T,M	n-Propylbenzene	6.502	6.396	1.6	104	0.00
79	T,M	Bromobenzene	1.029	1.028	0.1	107	0.00
80	T,M	1,3,5-Trimethylbenzene	4.155	4.106	1.2	105	0.00

(#) = Out of Range

SU 5/15/24

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D Vial: 2
Acq On : 13 May 2024 12:06 pm Operator: LPriet
Sample : IVO01E1102 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\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	3.915	3.917	-0.1	107	0.00
82	T,M	4-Chlorotoluene	3.466	3.467	-0.0	105	0.00
83	T,M	tert-Butylbenzene	0.871	0.867	0.5	105	0.00
84	T,M	1,2,4-Trimethylbenzene	4.065	4.025	1.0	104	-0.01
85	T,M	sec-Butylbenzene	5.711	5.692	0.3	105	0.00
86	T,M	p-Isopropyltoluene	4.403	4.312	2.1	104	0.00
87	T,M	1,3-Dichlorobenzene	1.955	1.957	-0.1	107	0.00
88	T,M	1,2,3-Trimethylbenzene	3.795	3.769	0.7	107	0.00
89	T,M	1,4-Dichlorobenzene	1.916	1.896	1.0	106	0.00
90	T,M	n-Butylbenzene	4.560	4.526	0.7	105	0.00
91	T,M	1,2-Dichlorobenzene	1.602	1.600	0.1	109	-0.01
92	T,M	1,2-Dibromo-3-chloropropane	0.095	0.095	0.0	117	0.00
93	T,M	1,2,4-Trichlorobenzene	1.169	1.179	-0.9	109	0.00
94	T,M	Hexachlorobutadiene	0.697	0.693	0.6	102	0.00
95	T,M	Naphthalene	1.365	1.392	-2.0	113	0.00
96	T,M	1,2,3-Trichlorobenzene	0.881	0.893	-1.4	110	0.00

SK 5/15/24

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D Vial: 2
Acq On : 13 May 2024 12:06 pm Operator: LPriet
Sample : IVO01E1102 1.0/5.0 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:24 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.55	114	907856	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.72	117	757489	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	290545	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	278148	9.90	ug/l	0.00
Spiked Amount 10.000			Recovery = 99.00%			
41) 1,2-Dichloroethane-d4	7.95	65	190681	9.95	ug/l	-0.01
Spiked Amount 10.000			Recovery = 99.50%			
54) Toluene-d8	11.02	98	1085971	9.57	ug/l	-0.01
Spiked Amount 10.000			Recovery = 95.70%			
76) 4-Bromofluorobenzene	16.00	95	373151	9.43	ug/l	-0.01
Spiked Amount 10.000			Recovery = 94.30%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.17	85	261017	10.74	ug/l	99
5) Chloromethane	2.49	50	347692	10.22	ug/l	99
6) Vinyl chloride	2.62	62	314201	11.09	ug/l	99
7) Bromomethane	3.15	94	332015	9.89	ug/l	99
8) Chloroethane	3.20	64	204024	9.93	ug/l	98
9) Dichlorofluoromethane	3.29	67	572473	9.81	ug/l	97
10) Trichlorofluoromethane	3.55	101	398783	10.41	ug/l	99
11) Acrolein	3.98	56	95103	46.64	ug/l	99
12) 1,1,2-Trichloro-1,2,2-trif	4.07	151	204924	10.70	ug/l	100
13) Acetone	4.06	43	153258	46.25	ug/l	100
14) 1,1-Dichloroethene	4.24	61	510086	10.53	ug/l	99
15) tert-Butyl alcohol	4.34	59	275606	272.71	ug/l	99
16) Iodomethane	4.64	142	525854	10.13	ug/l	100
17) Methyl acetate	4.65	43	87177	9.65	ug/l	97
18) Methylene chloride	4.86	49	403861	10.40	ug/l	98
19) Carbon disulfide	4.89	76	974363	9.41	ug/l	99
20) Acrylonitrile	5.02	53	209223	49.77	ug/l	100
21) tert-Butyl methyl ether (M	5.07	73	486511	10.22	ug/l	100
22) trans-1,2-Dichloroethene	5.24	61	482107	10.33	ug/l	98
23) Isopropyl ether (DIPE)	5.66	45	1037346	10.41	ug/l	98
24) Vinyl acetate	5.82	43	357100	10.44	ug/l	99
25) 1,1-Dichloroethane	5.82	63	566566	10.39	ug/l	100
27) tert-Butyl ethyl ether (ET	6.24	59	761232	10.66	ug/l	100
28) 2-Butanone	6.41	43	266366	52.38	ug/l	100
29) 2,2-Dichloropropane	6.62	77	475647	10.37	ug/l	100
30) cis-1,2-Dichloroethene	6.68	96	387725	10.33	ug/l	99
31) Chloroform	6.90	83	545984	9.82	ug/l	99

(#) = qualifier out of range (m) = manual integration

5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D Vial: 2
Acq On : 13 May 2024 12:06 pm Operator: LPriet
Sample : IVO01E1102 1.0/5.0 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:24 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32)	Bromochloromethane	7.14	49	230106	10.54 ug/l	98
33)	Tetrahydrofuran	7.20	42	33093	10.29 ug/l	97
35)	1,1,1-Trichloroethane	7.49	97	482510	10.37 ug/l	100
36)	Cyclohexane	7.52	84	477860	10.55 ug/l	100
38)	1,1-Dichloropropene	7.72	110	162485	10.28 ug/l	99
39)	Carbon tetrachloride	7.88	119	358693	10.35 ug/l	99
40)	tert-Amyl methyl ether (TA	7.88	73	562793	10.13 ug/l	100
42)	Benzene	8.13	78	1223803	10.09 ug/l	100
43)	1,2-Dichloroethane	8.10	62	252838	10.34 ug/l	99
44)	Trichloroethene	9.06	130	318416	10.15 ug/l	98
45)	Methylcyclohexane	9.15	83	511326	10.26 ug/l	99
46)	1,2-Dichloropropane	9.35	63	274499	10.12 ug/l	99
47)	Bromodichloromethane	9.72	83	371496	9.86 ug/l	99
48)	1,4-Dioxane	9.78	88	22815	205.36 ug/l	99
49)	Dibromomethane	9.82	93	132415	10.34 ug/l	98
50)	2-Chloroethyl vinyl ether	10.22	63	70329	10.21 ug/l	99
51)	4-Methyl-2-pentanone	10.26	43	657246	49.03 ug/l	100
52)	cis-1,3-Dichloropropene	10.62	75	433879	10.27 ug/l	100
55)	Toluene	11.15	91	1332719	9.91 ug/l	100
56)	Ethyl methacrylate	11.45	69	206172	10.21 ug/l	98
57)	trans-1,3-Dichloropropene	11.48	75	322019	10.30 ug/l	99
58)	1,1,2-Trichloroethane	11.75	97	178678	10.15 ug/l	99
59)	2-Hexanone	11.76	43	378200	47.36 ug/l	100
60)	1,3-Dichloropropane	12.19	76	304011	10.17 ug/l	100
61)	Tetrachloroethene	12.29	164	279605	10.00 ug/l	99
62)	Dibromochloromethane	12.66	129	216381	10.06 ug/l	100
63)	1,2-Dibromoethane	13.03	107	180319	10.35 ug/l	99
64)	1-Chlorohexane	13.30	91	595972	10.26 ug/l	100
65)	Chlorobenzene	13.78	112	806907	10.06 ug/l	100
66)	1,1,1,2-Tetrachloroethane	13.86	131	250367	10.14 ug/l	98
67)	Ethylbenzene	13.88	91	1533890	9.99 ug/l	100
68)	m-Xylene & p-Xylene	14.01	91	2274121	20.23 ug/l	100
69)	o-Xylene	14.83	91	1150973	9.95 ug/l	100
70)	Styrene	14.90	104	893787	9.97 ug/l	100
71)	Isopropylbenzene	15.51	105	1529556	10.04 ug/l	100
73)	Bromoform	15.55	173	112241	9.78 ug/l	97
74)	trans-1,4-Dichloro-2-buten	15.63	53	51511	10.28 ug/l	100
75)	1,1,2,2-Tetrachloroethane	15.85	83	191835	9.92 ug/l	98
77)	1,2,3-Trichloropropane	16.15	110	50167	10.14 ug/l	97
78)	n-Propylbenzene	16.29	91	1858212	9.84 ug/l	100
79)	Bromobenzene	16.38	156	298744	10.00 ug/l	99

(#) = qualifier out of range (m) = manual integration

SA 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D
Acq On : 13 May 2024 12:06 pm
Sample : IVO01E1102 1.0/5.0
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 13:24 2024

Vial: 2
Operator: LPriet
Inst : 01
Multiplr: 1.00

Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
80) 1,3,5-Trimethylbenzene	16.61	105	1193060	9.88 ug/l	99
81) 2-Chlorotoluene	16.63	91	1138017	10.01 ug/l	100
82) 4-Chlorotoluene	16.72	91	1007192	10.00 ug/l	100
83) tert-Butylbenzene	17.29	134	251948	9.95 ug/l	98
84) 1,2,4-Trimethylbenzene	17.35	105	1169308	9.90 ug/l	99
85) sec-Butylbenzene	17.66	105	1653826	9.97 ug/l	100
86) p-Isopropyltoluene	17.88	119	1252965	9.80 ug/l	100
87) 1,3-Dichlorobenzene	18.03	146	568580	10.01 ug/l	100
88) 1,2,3-Trimethylbenzene	18.13	105	1095079	9.93 ug/l	99
89) 1,4-Dichlorobenzene	18.19	146	550958	9.89 ug/l	100
90) n-Butylbenzene	18.49	91	1315009	9.93 ug/l	100
91) 1,2-Dichlorobenzene	18.71	146	464758	9.99 ug/l	99
92) 1,2-Dibromo-3-chloropropan	19.72	157	27714	9.35 ug/l	99
93) 1,2,4-Trichlorobenzene	20.80	180	342507	10.08 ug/l	99
94) Hexachlorobutadiene	20.96	225	201295	9.94 ug/l	98
95) Naphthalene	21.14	128	404546	10.20 ug/l	100
96) 1,2,3-Trichlorobenzene	21.46	180	259547	10.14 ug/l	99

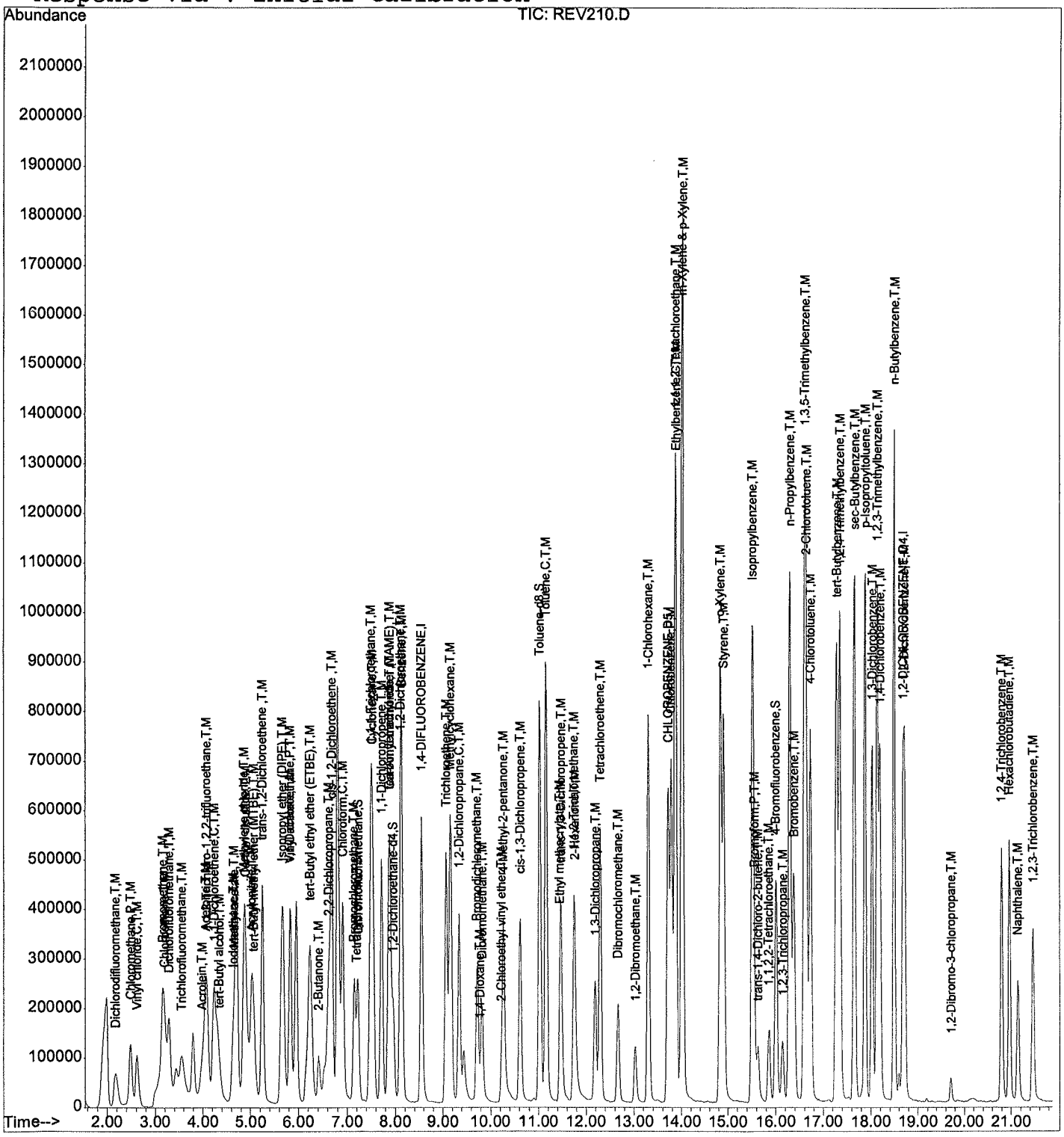
SA 5/15/24

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D Vial: 2
Acq On : 13 May 2024 12:06 pm Operator: LPriet
Sample : IVO01E1102 1.0/5.0 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:24 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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 : 24E188
Lab File ID: REV556 BFB Injection Date: 05/30/24
Instrument ID: 01 BFB Injection Time: 10:49

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	18.620
75	30 - 60% of mass 95	43.050
95	Base Peak, 100% relative abundance	100.000
96	5 - 9% of mass 95	6.430
173	Less than 2% of mass 174	0.196(.23)1
174	Greater than 50% of mass 95	83.461
175	5 - 9% of mass 174	5.914(7.09)1
176	95 - 101% % of mass 174	79.460(95.21)1
177	5 - 9% % of mass 176	5.073(6.38)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	CV001E1114	REV557	05/30/24	11:21
2	LCS1W	V001E26L	REV558	05/30/24	11:57
3	LCD1W	V001E26C	REV559	05/30/24	12:27
4	MBLK1W	V001E26B	REV561	05/30/24	13:26
5	TB01-GW052924	24E188-05	REV563	05/30/24	14:26
6	MW40-GW052924-193	24E188-01	REV564	05/30/24	14:56
7	MW40-GW052924-215	24E188-02	REV565	05/30/24	15:26
8	MW40-GW052924-235	24E188-03	REV566	05/30/24	15:56
9	FD01-GW052924	24E188-04	REV567	05/30/24	16:26

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: EMAX Laboratories, Inc.
Lab Code: EMAX
Lab File ID: REV201
Instrument ID: 01

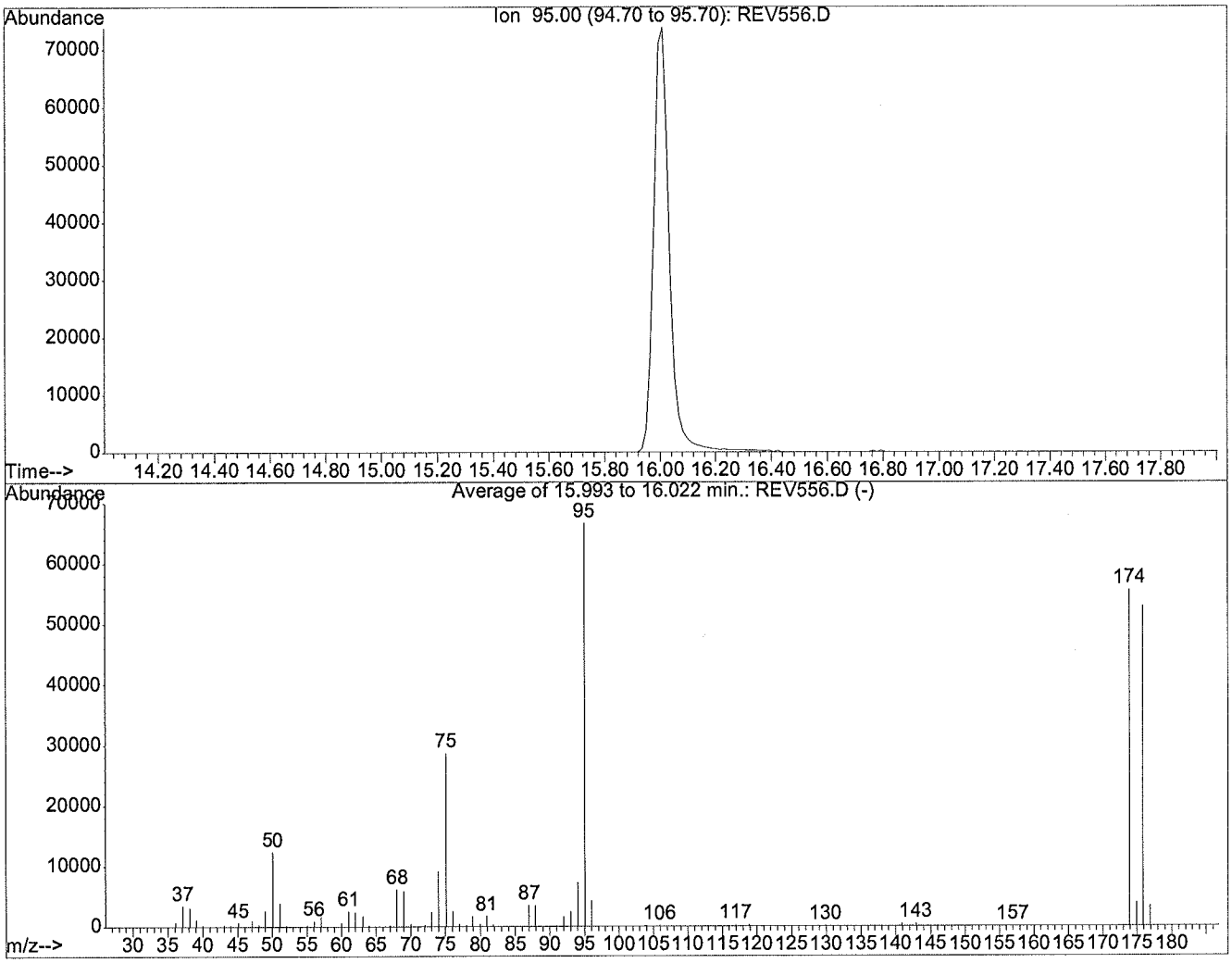
Project: VA SALT LAKE CITY
SDG No: 24E188
Date Analyzed: 05/11/24
Time Analyzed: 13:28

	INTERNAL STANDARD (IS)	1,4-DIFLUOROBENZENE		CHLOROBENZENE-D5		1,2-DICHLOROBENZENE-D4	
		Area #	RT #	Area #	RT #	Area #	RT #
	12 HOUR STD	920983	8.54	742213	13.71	284055	18.68
	UPPER LIMIT	1841966	8.71	1484426	13.88	568110	18.85
	LOWER LIMIT	460492	8.37	371107	13.54	142028	18.51
		Area #	RT #	Area #	RT #	Area #	RT #
1	VSTD10	753805	8.54	631495	13.71	268771	18.67
2	LCS1W	774565	8.54	627385	13.71	253051	18.67
3	LCD1W	813717	8.54	658054	13.71	263830	18.67
4	MBLK1W	720882	8.54	584984	13.71	248064	18.69
5	TB01-GW052924	802602	8.56	649242	13.71	267318	18.69
6	MW40-GW052924-193	763911	8.56	622137	13.71	259232	18.69
7	MW40-GW052924-215	773333	8.56	634416	13.71	265138	18.69
8	MW40-GW052924-235	750397	8.56	620702	13.71	257784	18.69
9	FD01-GW052924	774647	8.56	635381	13.71	262353	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\24E30\REV556.D
Acq On : 30 May 2024 10:49 am
Sample : BFB01E26
Misc : T/CHK
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls

Vial: 1
Operator: LPriet
Inst : 01
Multiplr: 1.00



AutoFind: Scans 978, 979, 980; Background Corrected with Scan 971

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.6	12423	PASS
75	95	30	60	43.1	28723	PASS
95	95	100	100	100.0	66720	PASS
96	95	5	9	6.4	4290	PASS
173	174	0.00	2	0.2	131	PASS
174	95	50	100	83.5	55685	PASS
175	174	5	9	7.1	3946	PASS
176	174	95	101	95.2	53016	PASS
177	176	5	9	6.4	3385	PASS

REV556.D VO01E11.M Fri May 31 11:37:38 2024

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24E30\REV557.D Vial: 2
Acq On : 30 May 2024 11:21 am Operator: LPriet
Sample : CVO01E1114 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	82	0.00
2	T,M	Chlorotrifluoroethylene	-1.000	0.000	0.0	0	-2.08#
3	T,M	Dichlorodifluoromethane	10.000	8.796	12.0	76	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	8.016	19.8	71	0.01
6	C,T,M	Vinyl chloride	10.000	8.673	13.3	71	0.01
7	T,M	Bromomethane	10.000	8.462	15.4	78	0.02
8	T,M	Chloroethane	10.000	8.191	18.1	72	0.02
9	T,M	Dichlorofluoromethane	10.000	9.529	4.7	86	0.02
10	T,M	Trichlorofluoromethane	10.000	9.728	2.7	85	0.00
11	T,M	Acrolein	50.000	43.130	13.7	80	0.00
12	T,M	1,1,2-Trichloro-1,2,2-trifl	10.000	10.391	-3.9	85	0.01
13	T,M	Acetone	50.000	44.772	10.5	87	0.00
14	C,T,M	1,1-Dichloroethene	10.000	9.769	2.3	83	0.00
15	T,M	tert-Butyl alcohol	250.000	218.584	12.6	79	0.00
16	T,M	Iodomethane	10.000	10.298	-3.0	88	0.00
17	T,M	Methyl acetate	10.000	9.031	9.7	88	0.00
18	T,M	Methylene chloride	10.000	9.984	0.2	88	0.00
19	T,M	Carbon disulfide	10.000	8.560	14.4	75	0.00
20	T,M	Acrylonitrile	50.000	44.595	10.8	79	0.00
21	T,M	tert-Butyl methyl ether (MT	10.000	9.320	6.8	85	-0.02
22	T,M	trans-1,2-Dichloroethene	10.000	10.064	-0.6	89	0.00
23	T,M	Isopropyl ether (DIPE)	10.000	9.584	4.2	84	-0.02
24	T,M	Vinyl acetate	10.000	8.782	12.2	79	0.00
25	P,T,M	1,1-Dichloroethane	10.000	9.932	0.7	86	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	9.389	6.1	83	0.00
28	T,M	2-Butanone	50.000	49.356	1.3	85	0.00
29	T,M	2,2-Dichloropropane	10.000	10.266	-2.7	89	0.00
30	T,M	cis-1,2-Dichloroethene	10.000	10.018	-0.2	86	0.00
31	C,T,M	Chloroform	10.000	10.509	-5.1	95	0.00
32	T,M	Bromochloromethane	10.000	10.094	-0.9	89	0.00
33	T,M	Tetrahydrofuran	10.000	11.510	-15.1	112	-0.02
34	S	Dibromofluoromethane	10.000	10.146	-1.5	91	-0.02
35	T,M	1,1,1-Trichloroethane	10.000	10.723	-7.2	93	0.00
36	T,M	Cyclohexane	10.000	9.009	9.9	81	0.00
37	T,M	2,2,4-Trimethylpentane	10.000	0.000	100.0#	0	0.00
38	T,M	1,1-Dichloropropene	10.000	9.574	4.3	83	0.00
39	T,M	Carbon tetrachloride	10.000	10.882	-8.8	93	0.00
40	T,M	tert-Amyl methyl ether (TAM	10.000	9.053	9.5	84	0.00
41	S	1,2-Dichloroethane-d4	10.000	10.862	-8.6	101	-0.02

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24E30\REV557.D Vial: 2
Acq On : 30 May 2024 11:21 am Operator: LPriet
Sample : CVO01E1114 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	9.968	0.3	87	-0.02
43	T,M	1,2-Dichloroethane	10.000	11.114	-11.1	98	0.00
44	T,M	Trichloroethene	10.000	10.084	-0.8	85	0.00
45	T,M	Methylcyclohexane	10.000	8.974	10.3	82	-0.01
46	C,T,M	1,2-Dichloropropane	10.000	9.600	4.0	84	0.00
47	T,M	Bromodichloromethane	10.000	10.352	-3.5	95	-0.02
48	T,M	1,4-Dioxane	200.000	173.882	13.1	80	-0.01
49	T,M	Dibromomethane	10.000	10.462	-4.6	96	-0.02
50	T,M	2-Chloroethyl vinyl ether	10.000	11.863	-18.6	106	-0.02
51	T,M	4-Methyl-2-pentanone	50.000	46.486	7.0	87	0.00
52	T,M	cis-1,3-Dichloropropene	10.000	9.925	0.7	87	0.00
53	I	CHLOROBENZENE-D5	10.000	10.000	0.0	85	0.00
54	S	Toluene-d8	10.000	9.408	5.9	86	-0.02
55	C,T,M	Toluene	10.000	9.857	1.4	88	-0.02
56	T,M	Ethyl methacrylate	10.000	9.422	5.8	87	0.00
57	T,M	trans-1,3-Dichloropropene	10.000	9.978	0.2	90	0.00
58	T,M	1,1,2-Trichloroethane	10.000	9.844	1.6	90	0.00
59	T,M	2-Hexanone	50.000	42.835	14.3	84	0.00
60	T,M	1,3-Dichloropropane	10.000	10.099	-1.0	93	0.00
61	T,M	Tetrachloroethene	10.000	10.426	-4.3	91	0.00
62	T,M	Dibromochloromethane	10.000	10.162	-1.6	94	0.00
63	T,M	1,2-Dibromoethane	10.000	9.896	1.0	90	-0.02
64	T,M	1-Chlorohexane	10.000	9.625	3.8	84	0.00
65	P,M	Chlorobenzene	10.000	9.808	1.9	86	-0.02
66	T,M	1,1,1,2-Tetrachloroethane	10.000	10.472	-4.7	93	0.00
67	C,T,M	Ethylbenzene	10.000	10.262	-2.6	89	0.00
68	T,M	m-Xylene & p-Xylene	20.000	20.696	-3.5	91	0.00
69	T,M	o-Xylene	10.000	10.428	-4.3	93	-0.02
70	T,M	Styrene	10.000	10.087	-0.9	89	0.00
71	T,M	Isopropylbenzene	10.000	10.127	-1.3	88	-0.02
72	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	95	0.00
73	P,T,M	Bromoform	10.000	9.319	6.8	103	0.00
74	T,M	trans-1,4-Dichloro-2-butene	10.000	8.681	13.2	91	0.00
75	T,M	1,1,2,2-Tetrachloroethane	10.000	8.812	11.9	94	0.00
76	S	4-Bromofluorobenzene	10.000	9.678	3.2	101	-0.02
77	T,M	1,2,3-Trichloropropane	10.000	9.099	9.0	92	0.00
78	T,M	n-Propylbenzene	10.000	9.070	9.3	89	0.00
79	T,M	Bromobenzene	10.000	9.738	2.6	96	0.00
80	T,M	1,3,5-Trimethylbenzene	10.000	8.962	10.4	88	-0.02

(#) = Out of Range

Data File : D:\HPCHEM\1\DATA\24E30\REV557.D Vial: 2
Acq On : 30 May 2024 11:21 am Operator: LPriet
Sample : CVO01E1114 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	9.429	5.7	94	0.00
82	T,M	4-Chlorotoluene	10.000	9.341	6.6	90	0.00
83	T,M	tert-Butylbenzene	10.000	9.068	9.3	89	0.00
84	T,M	1,2,4-Trimethylbenzene	10.000	9.065	9.4	88	-0.02
85	T,M	sec-Butylbenzene	10.000	8.937	10.6	87	0.00
86	T,M	p-Isopropyltoluene	10.000	8.989	10.1	89	0.00
87	T,M	1,3-Dichlorobenzene	10.000	9.614	3.9	95	0.00
88	T,M	1,2,3-Trimethylbenzene	10.000	9.263	7.4	93	0.00
89	T,M	1,4-Dichlorobenzene	10.000	9.535	4.6	95	0.00
90	T,M	n-Butylbenzene	10.000	9.052	9.5	89	0.00
91	T,M	1,2-Dichlorobenzene	10.000	9.428	5.7	96	0.00
92	T,M	1,2-Dibromo-3-chloropropane	10.000	8.262	17.4	95	0.00
93	T,M	1,2,4-Trichlorobenzene	10.000	9.235	7.7	92	0.00
94	T,M	Hexachlorobutadiene	10.000	8.977	10.2	85	0.00
95	T,M	Naphthalene	10.000	8.651	13.5	88	0.00
96	T,M	1,2,3-Trichlorobenzene	10.000	9.328	6.7	93	0.00

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24E30\REV557.D Vial: 2
Acq On : 30 May 2024 11:21 am Operator: LPriet
Sample : CVO01E1114 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	82	0.00
2	T,M	Chlorotrifluoroethylene	0.000	0.000	0.0	0#	-2.08#
3	T,M	Dichlorodifluoromethane	0.268	0.235	12.3	76	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	0.375	0.300	20.0#	71	0.01
6	C,T,M	Vinyl chloride	0.312	0.271	13.1	71	0.01
7	T,M	Bromomethane	0.396	0.314	20.7#	78	0.02
8	T,M	Chloroethane	0.226	0.185	18.1	72	0.02
9	T,M	Dichlorofluoromethane	0.643	0.613	4.7	86	0.02
10	T,M	Trichlorofluoromethane	0.422	0.411	2.6	85	0.00
11	T,M	Acrolein	0.022	0.019	13.6	80	0.00
12	T,M	1,1,2-Trichloro-1,2,2-trifl	0.211	0.219	-3.8	85	0.01
13	T,M	Acetone	0.037	0.033	10.8	87	0.00
14	C,T,M	1,1-Dichloroethene	0.533	0.521	2.3	83	0.00
15	T,M	tert-Butyl alcohol	0.011	0.010	9.1	79	0.00
16	T,M	Iodomethane	0.572	0.589	-3.0	88	0.00
17	T,M	Methyl acetate	0.100	0.090	10.0	88	0.00
18	T,M	Methylene chloride	0.428	0.427	0.2	88	0.00
19	T,M	Carbon disulfide	1.140	0.976	14.4	75	0.00
20	T,M	Acrylonitrile	0.046	0.041	10.9	79	0.00
21	T,M	tert-Butyl methyl ether (MT	0.525	0.489	6.9	85	-0.02
22	T,M	trans-1,2-Dichloroethene	0.514	0.517	-0.6	89	0.00
23	T,M	Isopropyl ether (DIPE)	1.098	1.052	4.2	84	-0.02
24	T,M	Vinyl acetate	0.377	0.331	12.2	79	0.00
25	P,T,M	1,1-Dichloroethane	0.601	0.597	0.7	86	0.00
26	T,M	2-Butanol	0.000	0.007	0.0	0#	-0.02
27	T,M	tert-Butyl ethyl ether (ETB	0.787	0.739	6.1	83	0.00
28	T,M	2-Butanone	0.056	0.055	1.8	85	0.00
29	T,M	2,2-Dichloropropane	0.505	0.519	-2.8	89	0.00
30	T,M	cis-1,2-Dichloroethene	0.414	0.414	0.0	86	0.00
31	C,T,M	Chloroform	0.612	0.644	-5.2	95	0.00
32	T,M	Bromochloromethane	0.240	0.243	-1.3	89	0.00
33	T,M	Tetrahydrofuran	0.035	0.041	-17.1	112	-0.02
34	S	Dibromofluoromethane	0.310	0.314	-1.3	91	-0.02
35	T,M	1,1,1-Trichloroethane	0.512	0.549	-7.2	93	0.00
36	T,M	Cyclohexane	0.499	0.450	9.8	81	0.00
37	T,M	2,2,4-Trimethylpentane	0.000	0.021	0.0	0#	0.00
38	T,M	1,1-Dichloropropene	0.174	0.167	4.0	83	0.00
39	T,M	Carbon tetrachloride	0.382	0.415	-8.6	93	0.00
40	T,M	tert-Amyl methyl ether (TAM	0.612	0.554	9.5	84	0.00
41	S	1,2-Dichloroethane-d4	0.211	0.229	-8.5	101	-0.02

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24E30\REV557.D Vial: 2
Acq On : 30 May 2024 11:21 am Operator: LPriet
Sample : CVO01E1114 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	1.336	1.332	0.3	87	-0.02
43	T,M	1,2-Dichloroethane	0.269	0.299	-11.2	98	0.00
44	T,M	Trichloroethene	0.346	0.348	-0.6	85	0.00
45	T,M	Methylcyclohexane	0.549	0.493	10.2	82	-0.01
46	C,T,M	1,2-Dichloropropane	0.299	0.287	4.0	84	0.00
47	T,M	Bromodichloromethane	0.415	0.430	-3.6	95	-0.02
48	T,M	1,4-Dioxane	0.001	0.001	0.0	80	-0.01
49	T,M	Dibromomethane	0.141	0.148	-5.0	96	-0.02
50	T,M	2-Chloroethyl vinyl ether	0.076	0.090	-18.4	106	-0.02
51	T,M	4-Methyl-2-pentanone	0.136	0.137	-0.7	87	0.00
52	T,M	cis-1,3-Dichloropropene	0.465	0.462	0.6	87	0.00
53	I	CHLOROBENZENE-D5	1.000	1.000	0.0	85	0.00
54	S	Toluene-d8	1.499	1.410	5.9	86	-0.02
55	C,T,M	Toluene	1.776	1.751	1.4	88	-0.02
56	T,M	Ethyl methacrylate	0.266	0.251	5.6	87	0.00
57	T,M	trans-1,3-Dichloropropene	0.413	0.412	0.2	90	0.00
58	T,M	1,1,2-Trichloroethane	0.233	0.229	1.7	90	0.00
59	T,M	2-Hexanone	0.090	0.089	1.1	84	0.00
60	T,M	1,3-Dichloropropane	0.395	0.399	-1.0	93	0.00
61	T,M	Tetrachloroethene	0.369	0.385	-4.3	91	0.00
62	T,M	Dibromochloromethane	0.284	0.288	-1.4	94	0.00
63	T,M	1,2-Dibromoethane	0.230	0.228	0.9	90	-0.02
64	T,M	1-Chlorohexane	0.767	0.738	3.8	84	0.00
65	P,M	Chlorobenzene	1.059	1.038	2.0	86	-0.02
66	T,M	1,1,1,2-Tetrachloroethane	0.326	0.341	-4.6	93	0.00
67	C,T,M	Ethylbenzene	2.027	2.080	-2.6	89	0.00
68	T,M	m-Xylene & p-Xylene	1.484	1.535	-3.4	91	0.00
69	T,M	o-Xylene	1.527	1.593	-4.3	93	-0.02
70	T,M	Styrene	1.184	1.194	-0.8	89	0.00
71	T,M	Isopropylbenzene	2.012	2.037	-1.2	88	-0.02
72	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	95	0.00
73	P,T,M	Bromoform	0.350	0.367	-4.9	103	0.00
74	T,M	trans-1,4-Dichloro-2-butene	0.173	0.150	13.3	91	0.00
75	T,M	1,1,2,2-Tetrachloroethane	0.666	0.587	11.9	94	0.00
76	S	4-Bromofluorobenzene	1.362	1.318	3.2	101	-0.02
77	T,M	1,2,3-Trichloropropane	0.170	0.155	8.8	92	0.00
78	T,M	n-Propylbenzene	6.502	5.897	9.3	89	0.00
79	T,M	Bromobenzene	1.029	1.002	2.6	96	0.00
80	T,M	1,3,5-Trimethylbenzene	4.155	3.723	10.4	88	-0.02

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24E30\REV557.D Vial: 2
Acq On : 30 May 2024 11:21 am Operator: LPriet
Sample : CVO01E1114 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	3.915	3.691	5.7	94	0.00
82	T,M	4-Chlorotoluene	3.466	3.237	6.6	90	0.00
83	T,M	tert-Butylbenzene	0.871	0.790	9.3	89	0.00
84	T,M	1,2,4-Trimethylbenzene	4.065	3.685	9.3	88	-0.02
85	T,M	sec-Butylbenzene	5.711	5.104	10.6	87	0.00
86	T,M	p-Isopropyltoluene	4.403	3.958	10.1	89	0.00
87	T,M	1,3-Dichlorobenzene	1.955	1.879	3.9	95	0.00
88	T,M	1,2,3-Trimethylbenzene	3.795	3.515	7.4	93	0.00
89	T,M	1,4-Dichlorobenzene	1.916	1.827	4.6	95	0.00
90	T,M	n-Butylbenzene	4.560	4.128	9.5	89	0.00
91	T,M	1,2-Dichlorobenzene	1.602	1.510	5.7	96	0.00
92	T,M	1,2-Dibromo-3-chloropropane	0.095	0.084	11.6	95	0.00
93	T,M	1,2,4-Trichlorobenzene	1.169	1.080	7.6	92	0.00
94	T,M	Hexachlorobutadiene	0.697	0.625	10.3	85	0.00
95	T,M	Naphthalene	1.365	1.181	13.5	88	0.00
96	T,M	1,2,3-Trichlorobenzene	0.881	0.822	6.7	93	0.00

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E30\REV557.D Vial: 2
Acq On : 30 May 2024 11:21 am Operator: LPriet
Sample : CVO01E1114 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 30 11:50 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.54	114	753805	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	631495	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.67	152	268771	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.21	111	236733	10.15	ug/l	-0.02
Spiked Amount 10.000			Recovery = 101.50%			
41) 1,2-Dichloroethane-d4	7.95	65	172853	10.86	ug/l	-0.02
Spiked Amount 10.000			Recovery = 108.60%			
54) Toluene-d8	11.02	98	890340	9.41	ug/l	-0.02
Spiked Amount 10.000			Recovery = 94.10%			
76) 4-Bromofluorobenzene	15.99	95	354278	9.68	ug/l	-0.02
Spiked Amount 10.000			Recovery = 96.80%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.18	85	177426	8.80	ug/l	99
5) Chloromethane	2.48	50	226374	8.02	ug/l	99
6) Vinyl chloride	2.62	62	204002	8.67	ug/l	99
7) Bromomethane	3.15	94	236799	8.46	ug/l	99
8) Chloroethane	3.20	64	139742	8.19	ug/l	91
9) Dichlorofluoromethane	3.29	67	461764	9.53	ug/l	99
10) Trichlorofluoromethane	3.55	101	309555	9.73	ug/l	98
11) Acrolein	3.98	56	73026	43.13	ug/l	93
12) 1,1,2-Trichloro-1,2,2-trif	4.07	151	165248	10.39	ug/l	100
13) Acetone	4.06	43	123187	44.77	ug/l	92
14) 1,1-Dichloroethene	4.22	61	392738	9.77	ug/l	98
15) tert-Butyl alcohol	4.34	59	183423	218.58	ug/l	81
16) Iodomethane	4.64	142	443893	10.30	ug/l	96
17) Methyl acetate	4.65	43	67751	9.03	ug/l	98
18) Methylene chloride	4.86	49	322035	9.98	ug/l	100
19) Carbon disulfide	4.87	76	735896	8.56	ug/l	99
20) Acrylonitrile	5.02	53	155667	44.60	ug/l	98
21) tert-Butyl methyl ether (M	5.05	73	368518	9.32	ug/l	94
22) trans-1,2-Dichloroethene	5.24	61	389814	10.06	ug/l	97
23) Isopropyl ether (DIPE)	5.66	45	793217	9.58	ug/l	98
24) Vinyl acetate	5.82	43	249516	8.78	ug/l	99
25) 1,1-Dichloroethane	5.82	63	449860	9.93	ug/l	99
27) tert-Butyl ethyl ether (ET	6.23	59	556769	9.39	ug/l	99
28) 2-Butanone	6.41	43	208384	49.36	ug/l	99
29) 2,2-Dichloropropane	6.62	77	390983	10.27	ug/l	99
30) cis-1,2-Dichloroethene	6.68	96	312338	10.02	ug/l	98
31) Chloroform	6.90	83	485123	10.51	ug/l	100

(#) = qualifier out of range (m) = manual integration
REV557.D VO01E11.M Fri May 31 11:38:20 2024 Page 1

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E30\REV557.D Vial: 2
Acq On : 30 May 2024 11:21 am Operator: LPriet
Sample : CVO01E1114 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 30 11:50 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.14	49	182984	10.09	ug/l	99
33)	Tetrahydrofuran	7.18	42	30737	11.51	ug/l	79
35)	1,1,1-Trichloroethane	7.49	97	414115	10.72	ug/l	98
36)	Cyclohexane	7.52	84	338855	9.01	ug/l	98
38)	1,1-Dichloropropene	7.72	110	125693	9.57	ug/l	99
39)	Carbon tetrachloride	7.88	119	313078	10.88	ug/l	100
40)	tert-Amyl methyl ether (TA	7.88	73	417721	9.05	ug/l	99
42)	Benzene	8.12	78	1003824	9.97	ug/l	100
43)	1,2-Dichloroethane	8.10	62	225728	11.11	ug/l	100
44)	Trichloroethene	9.06	130	262665	10.08	ug/l	98
45)	Methylcyclohexane	9.15	83	371365	8.97	ug/l	98
46)	1,2-Dichloropropane	9.34	63	216316	9.60	ug/l	93
47)	Bromodichloromethane	9.71	83	323767	10.35	ug/l	100
48)	1,4-Dioxane	9.77	88	16040	173.88	ug/l	100
49)	Dibromomethane	9.80	93	111193	10.46	ug/l	97
50)	2-Chloroethyl vinyl ether	10.22	63	67832	11.86	ug/l	99
51)	4-Methyl-2-pentanone	10.26	43	515707	46.49	ug/l	97
52)	cis-1,3-Dichloropropene	10.62	75	348025	9.93	ug/l	98
55)	Toluene	11.15	91	1105475	9.86	ug/l	99
56)	Ethyl methacrylate	11.46	69	158553	9.42	ug/l	91
57)	trans-1,3-Dichloropropene	11.48	75	260097	9.98	ug/l	97
58)	1,1,2-Trichloroethane	11.74	97	144536	9.84	ug/l	99
59)	2-Hexanone	11.76	43	281710	42.84	ug/l	96
60)	1,3-Dichloropropane	12.19	76	251706	10.10	ug/l	100
61)	Tetrachloroethene	12.29	164	243031	10.43	ug/l	99
62)	Dibromochloromethane	12.66	129	182139	10.16	ug/l	99
63)	1,2-Dibromoethane	13.02	107	143737	9.90	ug/l	100
64)	1-Chlorohexane	13.30	91	466085	9.62	ug/l	100
65)	Chlorobenzene	13.77	112	655766	9.81	ug/l	99
66)	1,1,1,2-Tetrachloroethane	13.86	131	215645	10.47	ug/l	100
67)	Ethylbenzene	13.88	91	1313393	10.26	ug/l	98
68)	m-Xylene & p-Xylene	14.01	91	1939134	20.70	ug/l	96
69)	o-Xylene	14.82	91	1005664	10.43	ug/l	98
70)	Styrene	14.90	104	754011	10.09	ug/l	98
71)	Isopropylbenzene	15.50	105	1286626	10.13	ug/l	100
73)	Bromoform	15.55	173	98754	9.32	ug/l	98
74)	trans-1,4-Dichloro-2-buten	15.62	53	40252	8.68	ug/l	95
75)	1,1,2,2-Tetrachloroethane	15.86	83	157668	8.81	ug/l	99
77)	1,2,3-Trichloropropane	16.14	110	41651	9.10	ug/l	99
78)	n-Propylbenzene	16.29	91	1584958	9.07	ug/l	99
79)	Bromobenzene	16.38	156	269212	9.74	ug/l	99

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24E30\REV557.D Vial: 2
Acq On : 30 May 2024 11:21 am Operator: LPriet
Sample : CVO01E1114 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 30 11:50 2024 Quant Results File: VO01E11.RES

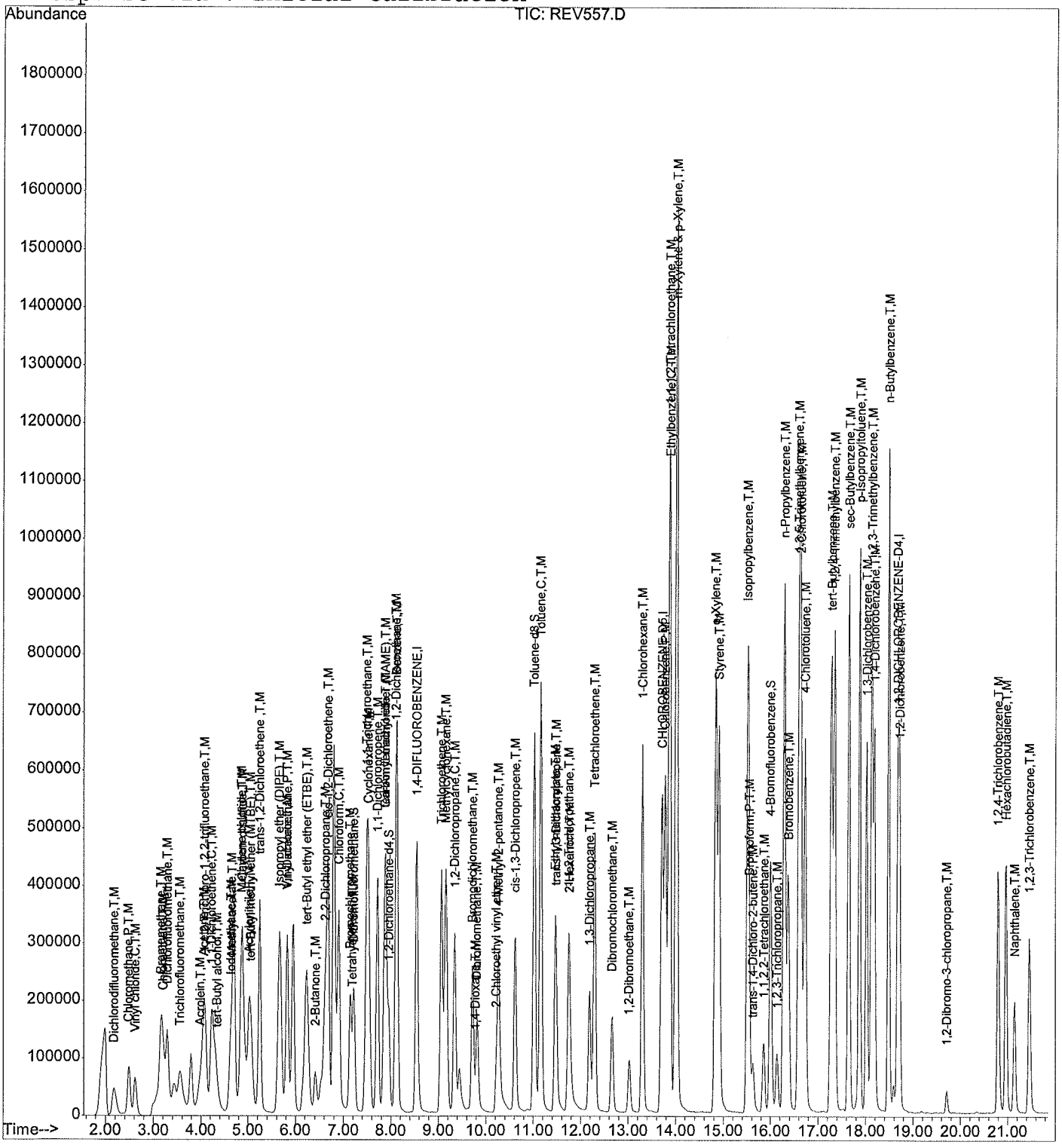
Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.59	105	1000726	8.96	ug/l	100
81)	2-Chlorotoluene	16.63	91	992097	9.43	ug/l	99
82)	4-Chlorotoluene	16.72	91	870032	9.34	ug/l	99
83)	tert-Butylbenzene	17.28	134	212396	9.07	ug/l	99
84)	1,2,4-Trimethylbenzene	17.34	105	990356	9.06	ug/l	99
85)	sec-Butylbenzene	17.65	105	1371783	8.94	ug/l	99
86)	p-Isopropyltoluene	17.87	119	1063689	8.99	ug/l	99
87)	1,3-Dichlorobenzene	18.02	146	505069	9.61	ug/l	99
88)	1,2,3-Trimethylbenzene	18.13	105	944811	9.26	ug/l	99
89)	1,4-Dichlorobenzene	18.18	146	491154	9.54	ug/l	99
90)	n-Butylbenzene	18.48	91	1109450	9.05	ug/l	99
91)	1,2-Dichlorobenzene	18.72	146	405857	9.43	ug/l	99
92)	1,2-Dibromo-3-chloropropan	19.71	157	22473	8.26	ug/l	99
93)	1,2,4-Trichlorobenzene	20.79	180	290255	9.24	ug/l	99
94)	Hexachlorobutadiene	20.97	225	168096	8.98	ug/l	95
95)	Naphthalene	21.15	128	317355	8.65	ug/l	99
96)	1,2,3-Trichlorobenzene	21.46	180	220834	9.33	ug/l	99

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24E30\REV557.D Vial: 2
Acq On : 30 May 2024 11:21 am Operator: LPriet
Sample : CVO01E1114 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 30 11:50 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



ANALYTICAL LOGS

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

Book #:	A01-076
Instrument No.:	01
Analytical Sequence:	24E11
Method File:	V001E11
Analytical Batch:	V001E116

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	5/11/24
ICAL ID	VO01 E11

STANDARDS

NAME	ID	Amount (µl)	Conc. (mg/L)
DCC CS2 GAS	SVI-43-90-03	*	250
	-90-02		250
DCC 4ADD	-95-02		250
DCC 8260	-86-01		50
DCC KET	-93-03		250
BFB	-38-02	1	50
IS/SURR. IS	-94-03	1	250
SS	-87-01	*	250
ICV/LCS CS2 GAS	-79-02	1	250
	-94-01	1	250
ICV/LCS 3ADD	-69-03	5	50
ICV/LCS 8260	-78-03	5	50
ICV/LCS KET	-94-02	5	250
Data File Folder	24E11		

	LOT #	Syringe Lot #
pH strip	N/A	HSV-03-04-12-4
Chlorine strip	↓	-04-12-6
Methanol		-03-23
$NaHSO_4$		-02-24
Reagent Water	RW4-23-001	
Sand		

ELECTRONIC DATA ARCHIVAL	
Location	Date
HPCHEM_VOA/TO01	

Analyzed By: LAP
Date: 5/11/24
Disposed By: LAP
Date Disposed: 5/13/24

Injection Log

Directory: D:\HPCHEM\1\DATA\24E11

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	REV195.D	1.	BFB01E11	T/CHK	11 May 2024 10:20
2	2	REV196.D	1.	VO01E111 0.03/0.15	0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA	11 May 2024 10:58
3	3	REV197.D	1.	VO01E112 0.05/0.25	0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA	11 May 2024 11:27
4	4	REV198.D	1.	VO01E113 0.1/0.5	1ppb 8260/5ppb KET-AA/25ppb TBA	11 May 2024 11:56
5	5	REV199.D	1.	VO01E114 0.2/1.0	2ppb 8260/10ppb KET-AA/50ppb TBA	11 May 2024 12:30
6	6	REV200.D	1.	VO01E115 0.5/2.5	5ppb 8260/25ppb KET-AA/125ppb TBA	11 May 2024 12:59
7	7	REV201.D	1.	VO01E116 1.0/5.0	10ppb 8260/50ppb KET-AA/250ppb TBA	11 May 2024 13:28
8	8	REV202.D	1.	VO01E117 2.0/10	20ppb 8260/100ppb KET-AA/500ppb TBA	11 May 2024 13:58
9	9	REV203.D	1.	VO01E118 3.0/15	30ppb 8260/150ppb KET-AA/750ppb TBA	11 May 2024 14:27
10	10	REV204.D	1.	VO01E119 5.0/25	50ppb 8260/250ppb KET-AA/1250ppb TBA	11 May 2024 14:56
11	11	REV205.D	1.	VO01DE1110 10/50	100ppb 8260/500ppb KET-AA/2500ppb TBA	11 May 2024 15:26
12	12	REV206.D	1.	RINSE		11 May 2024 15:55
13	13	REV207.D	1.	RINSE		11 May 2024 16:24
14	14	REV208.D	1.	IVO01E1101 1.0/5.0 Bromoform 7.R+	10ppb 8260/50ppb KET-AA/250ppb TBA	11 May 2024 16:53

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

Book #:	A01-076
Instrument No.:	01
Analytical Sequence:	24E13
Method File:	V001E11
Analytical Batch:	IV001E1102

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	5/11/24		
ICAL ID	VO01 E11		
STANDARDS			
NAME	ID	Amount (µl)	Conc. (mg/L)
DCC			
DCC			
DCC			
DCC			
BFB	SV1-43-50-02	1	50
IS/SURR. IS	-94-03	1	250
IS/SURR. SS	-87-01	1	250
ICV/LCS CS2	-79-02	1	250
ICV/LCS GAS	-94-01	1	250
ICV/LCS 8ADD	-69-03	5	50
ICV/LCS 8260	-70-03	5	50
ICV/LCS KET	-94-02	5	250
Data File Folder	24E13		
	LOT #	Syringe Lot #	
pH strip	N/A	MSV-03-04-12-6	
Chlorine strip	↓	↓ -12-4	
Methanol			
$NaHSO_4$			
Reagent Water	RW4-23-001		
Sand			

ELECTRONIC DATA ARCHIVAL	
Location	Date
HPCHEM_VOA/TO01	

Analyzed By: LAP
Date: 6/13/24
Disposed By: LAP
Date Disposed: 5/14/24

Injection Log

Directory: D:\HPCHEM\1\DATA\24E13

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	REV209.D	1.	BFB01E12	T/CHK	13 May 2024 11:31
2	2	REV210.D	1.	IVO01E1102 1.0/5.0	10ppb 8260/50ppb KET-AA/250ppb TBA	13 May 2024 12:06
3	1	REV211.D	1.	BFB01E13	T/CHK	13 May 2024 12:45
4	2	REV212.D	1.	CVO01E1101	10ppb 8260/50ppb KET-AA/250ppb TBA	13 May 2024 13:17
5	3	REV213.D	1.	VO01E13L	10ppb 8260/50ppb KET-AA/250ppb TBA	13 May 2024 13:48
6	4	REV214.D	1.	VO01E13C	10ppb 8260/50ppb KET-AA/250ppb TBA	13 May 2024 14:17
7	5	REV215.D	1.	RINSE		13 May 2024 14:47
8	6	REV216.D	1.	VO01E13B	25mL	13 May 2024 15:17
9	7	REV217.D	1.	24E021-01	25mL	13 May 2024 15:46
10	8	REV218.D	1.	24E021-11	25mL	13 May 2024 16:16
11	9	REV219.D	1.	24E072-05	25mL	13 May 2024 16:45
12	10	REV220.D	1.	24E021-04	25mL	13 May 2024 17:15
13	11	REV221.D	1.	24E021-05	25mL	13 May 2024 17:45
14	12	REV222.D	1.	24E021-06	25mL	13 May 2024 18:14
15	13	REV223.D	1.	24E021-07	25mL	13 May 2024 18:43
16	14	REV224.D	1.	24E021-08	25mL	13 May 2024 19:12
17	15	REV225.D	1.	24E021-09	25mL	13 May 2024 19:41
18	16	REV226.D	1.	24E021-10	25mL	13 May 2024 20:10
19	17	REV227.D	1.	24E021-12	25mL	13 May 2024 20:40
20	18	REV228.D	1.	24E021-14	25mL	13 May 2024 21:09
21	19	REV229.D	1.	24E021-15	25mL	13 May 2024 21:38
22	20	REV230.D	1.	24E021-16	25mL	13 May 2024 22:07
23	21	REV231.D	1.	24E072-01	25mL	13 May 2024 22:36
24	22	REV232.D	1.	24E072-02	25mL	13 May 2024 23:05
25	23	REV233.D	1.	24E072-03	25mL	13 May 2024 23:34
26	24	REV234.D	1.	24E072-04	25mL	14 May 2024 00:02
27	25	REV235.D	1.	24E021-02	25mL	14 May 2024 00:31
28	26	REV236.D	1.	EVO01E1101	10ppb 8260/50ppb KET-AA/250ppb TBA	14 May 2024 01:00
29	27	REV237.D	1.	EVO01E1101	10ppb 8260/50ppb KET-AA/250ppb TBA	14 May 2024 01:29
30	28	REV238.D	1.	EVO01E1101	10ppb 8260/50ppb KET-AA/250ppb TBA	14 May 2024 01:58
31	29	REV239.D	1.	RINSE	10ppb 8260/50ppb KET-AA/250ppb TBA	14 May 2024 02:26
32	30	REV240.D	1.	RINSE	10ppb 8260/50ppb KET-AA/250ppb TBA	14 May 2024 02:55

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

Book #:	A01-076
Instrument No.:	01
Analytical Sequence:	24E30
Method File:	V001E11
Analytical Batch:	CV001E1114

INITIAL CALIBRATION REFERENCE			
DATE	5/11/24		
ICAL ID	VO01_E11		
STANDARDS			
NAME	ID	Amount (µl)	Conc. (mg/L)
DCC CS2 GAS	SVI-43-90-03 -90-03	1 1	
DCC 4ADD	-95-02	1	
DCC 8260	-38-01	5	
DCC KET	-89-02	5	
BFB	-38-02	1	
IS/SURR.	-96-01	5	50/250
ICV/LCS CS2 GAS	-79-02 -94-01	1 1	
ICV/LCS 3ADD	-69-03	5	
ICV/LCS 8260	-78-03	5	
ICV/LCS KET	-94-02	5	
Data File Folder	24E30		
	LOT #	Syringe Lot #	
pH strip	HC439975	MSV-03-04-12-4	
Chlorine strip	324303C	↓ -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: LAP
Date: 5/30/24
Disposed By: LAP
Date Disposed: 5/31/24

Injection Log

Directory: D:\HPCHEM\1\DATA\24E30

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	REV556.D	1.	BFB01E26	T/CHK	30 May 2024 10:49
2	2	REV557.D	1.	CVO01E1114	10ppb 8260/50ppb KET-AA/250ppb TBA	30 May 2024 11:21
3	3	REV558.D	1.	VO01E26L	10ppb 8260/50ppb KET-AA/250ppb TBA	30 May 2024 11:57
4	4	REV559.D	1.	VO01E26C	10ppb 8260/50ppb KET-AA/250ppb TBA	30 May 2024 12:27
5	5	REV560.D	1.	RINSE		30 May 2024 12:56
6	6	REV561.D	1.	VO01E26B	25mL	30 May 2024 13:26
7	7	REV562.D	1.	TB	25mL	30 May 2024 13:56
8	8	REV563.D	1.	24E188-05 TB-006-06-04	25mL	30 May 2024 14:26
9	9	REV564.D	1.	24E188-01	25mL	30 May 2024 14:56
10	10	REV565.D	1.	24E188-02 PH6	25mL	30 May 2024 15:26
11	11	REV566.D	1.	24E188-03 PH5	25mL	30 May 2024 15:56
12	12	REV567.D	1.	24E188-04	25mL	30 May 2024 16:26
13	13	REV568.D	1.	RINSE		30 May 2024 16:56
14	14	REV569.D	1.	24E190-01 TB-006-06-03	25mL	30 May 2024 17:25
15	15	REV570.D	1.	24E190-02 ↓	25mL	30 May 2024 17:55
16	16	REV571.D	1.	24E187-04I 500X	50uL	30 May 2024 18:25
17	17	REV572.D	1.	24E187-05I 500X	50uL	30 May 2024 18:54
18	18	REV573.D	1.	24E187-04J 50X	0.5mL	30 May 2024 19:24
19	19	REV574.D	1.	24E187-05J 50X	0.5mL	30 May 2024 19:53
20	20	REV575.D	1.	24E187-02I 10X	2.5mL	30 May 2024 20:23
21	21	REV576.D	1.	24E187-01N	25mL	30 May 2024 20:52
22	22	REV577.D	1.	24E172-04N	25mL	30 May 2024 21:22
23	23	REV578.D	1.	24E172-05N	25mL	30 May 2024 21:51
24	24	REV579.D	1.	EVO01E1114	10ppb 8260/50ppb KET-AA/250ppb TBA	30 May 2024 22:20
25	25	REV580.D	1.	EVO01E11141	10ppb 8260/50ppb KET-AA/250ppb TBA	30 May 2024 22:49
26	26	REV581.D	1.	EVO01E11142	10ppb 8260/50ppb KET-AA/250ppb TBA	30 May 2024 23:18
27	27	REV582.D	1.	RINSE		30 May 2024 23:47
28	28	REV583.D	1.	RINSE		31 May 2024 00:17

EMAX LABORATORIES, INC.

SDG Login Review Sheet

Date: 6/3/2024

Client Code: CDM1910_
Client: CDM Smith
Project: VA Salt Lake City

EMAX PM: Raman Singh

Send Report To: Attn: Cherie Zakowski
Company: CDM Smith
Address: 555 17th Street, Suite 500
Denver, CO 80202

Task Order #: NA

SDG: 24F002 **DATE/ TIME RECEIVED:** 6/1/2024 10:25 **DUE DATE:** 6/24/2024

Lwks ID	Control #	Sample ID	Matrix	Coll Date	Time	Lwks Method	Analysis
EV26004	F002-01	MW40-GW053124-315	WATER	5/31/2024	13:30	8260CW	VOCs by 8260C
EV26009	F002-01M	MW40-GW053124-315MS	WATER	5/31/2024	13:30	8260CW	VOCs by 8260C
EV26010	F002-01S	MW40-GW053124-315MSD	WATER	5/31/2024	13:30	8260CW	VOCs by 8260C
EV26005	F002-02	TB02-GW053124	WATER	5/31/2024	8:00	8260CW	VOCs by 8260C
EV26006	F002-03	EB02-GW053124	WATER	5/31/2024	11:30	8260CW	VOCs by 8260C
EV26007	F002-04	MW40-GW053124-295	WATER	5/31/2024	8:20	8260CW	VOCs by 8260C
EV26008	F002-05	EB01-GW053024	WATER	5/30/2024	8:10	8260CW	VOCs by 8260C

Report Format: REVIEW

ID 6/3/24

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. 24F002

PROJECT CODE:

CLIENT CDM Smith

PROJECT 700 S. 1600 E. PCE Plume

COORDINATOR Chene 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: Linh Pham

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 8260

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	COMMENTS
1	MW4D-GW053124-315		5/31/24	1330	3			GW		X	
2	MW4D-GW053124-315		5/31/24	1330	6			GW		X	MS/MSD
3	TB02-GW053124		5/31/24	800	3			GW		X	
4	EB02-GW053124		5/31/24	1130	3			GW		X	
5	MW4D-GW053124-295		5/31/24	820	3			GW		X	
6	EB01-GW053024		5/30/24	810	3			GW		X	
7											
8											
9											
10											

Instructions

Cooler #	Temp. (°C)	Sample #s
	3.0	

SAMPLER

COURIER/AIRBILL

RELINQUISHED BY	Date	Time	RECEIVED BY
Jessica Yoder CDM	5/31/24	15:50	
	06/01/24	1025	

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 24F002
☑ Fedex ☐ UPS ☐ GSO ☐ Others	2793 6862 1183	Recipient Nandeen Nacana
☐ EMAX Courier ☐ Client Delivery		Date 06/01/24 Time 1025

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: Corrections not initialed/dated

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 3.4 °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* 216706272	*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
1,2,3	1,10-12,13-15	D10		R1
1	1,2,8	D22	>20% sediment	R8

☐ 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 1 has a layer of sediment.

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	sediment
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	use other vials provided
R9	
R10	
R11	
R12	

REVIEWS:

Sample Labeling Nandeen Nacana Date 06/03/24

SRF _____ Date 6/1/24

PM LP for Cayla Date 06/03/24

EMAX LABORATORIES, INC.

REFERENCE: EMAX-SM02 Rev. 12

SAMPLE RECEIPT FORM 2

SAMPLES RECEIVED FOR ECN: 24F002

LAB SAMPLE ID (*)	LAB SAMPLE CONTAINER ID	COOLER#	CONTAINER TYPE								pH paper Lot #: N/A CHEMICAL PRESERVATIVE												Filtered	
			Jar	Amber	HDPE	Encore	Vial	Tube	Bag	Other	NONE	HCl (pH<2)	HNO_3 (pH<2)	H_2SO_4 (pH<2)	ZnAc +NaOH (pH>9)	ZnAc +NaOH (pH>12)	NaOH (pH>10)	NaOH (pH≥12)	$Na_2S_2O_3$	Methanol	NaHSO4	Other	Yes	No
1	* 1	1					/					/												
	* 2	|					/					/												
	* 3	|					/					/												
	* 4	|					/					/												
	* 5	|					/					/												
	* 6	|					/					/												
	* 7	|					/					/												
	* 8	|					/					/												
	* 9	|					/					/												
2	* 10	|					/					/												
	* 1	|					/					/												
	* 2	|					/					/												
3	* 3	|					/					/												
	* 4	|					/					/												
	* 5	|					/					/												
4	* 6	|					/					/												
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5	* 9	|					/					/												
	* 20	V					/					/												
	* 1	1					/					/												
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	* 5																							
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	* 7																							
	* 8																							
	* 9																							
	* 0																							

Nandeen Nacana
06/03/24

Fw: SLC VA samples coming Saturday 06/01/2024.

Linh Pham <LPham@emaxlabs.com>
Fri 5/31/2024 3:55 PM
To:Cecilia Chavez <CChavez@emaxlabs.com>
Cc:Diem T Nguyen <DNguyen@emaxlabs.com>

Hi Cecilia,
Please see email below. Samples coming Saturday 06/01/2024.

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:

Memorial Day
5/27/2024 (Monday)

From: Miller, Joseph C. <millerjc@cdmsmith.com>
Sent: Friday, May 31, 2024 3:42 PM
To: Linh Pham <LPham@emaxlabs.com>; Zakowski, Cherie <ZakowskiCA@cdmsmith.com>; Smith, Neil L. <SmithNL@cdmsmith.com>; Johannes, Hans A. <johannesha@cdmsmith.com>
Subject: SLC VA samples

Hi Linh,
We shipped 6 gw samples for Saturday delivery. Fedex tracking number 275368621183.

Thank you,
Joe

Get Outlook for iOS

ORIGIN ID:NPHA (310) 618-8889

CDM SMITH, INC
555 17TH ST STE 500

DENVER, CO 80202
UNITED STATES US

SHIP DATE: 31MAY24
ACTWGT: 29.95 LB
CAD: 6997117/SSF02500
DIMS: 24x15x15 IN

BILL THIRD PARTY

Part # 156297-635 REV 03/25

TO **EMAX LABORATORIES**

1925 (D)
sealed

3051 FUJITA ST

TORRANCE CA 90505

(000) 000-0000 REF:
INV:
PO: DEPT:

FedEx Express

TRK# 0201 **2753 6862 1183**

SATURDAY 12:00P
PRIORITY OVERNIGHT

WO HHRA

AHS
90505
CA-US **LAX**

EMAX LABORATORIES, INC.

SDG Login Review Sheet

Date: 6/4/2024

Client Code: CDM1910_
Client: CDM Smith
Project: VA Salt Lake City

EMAX PM: Raman Singh

Send Report To: Attn: Cherie Zakowski
Company: CDM Smith
Address: 555 17th Street, Suite 500
Denver, CO 80202

Task Order #: NA

SDG: 24F008 **DATE/ TIME RECEIVED:** 6/4/2024 / 10:30 **DUE DATE:** 6/6/2024

Lwks ID	Control #	Sample ID	Matrix	Coll Date	Time	Lwks Method	Analysis
EV26121	F008-01	MW43-GW060224-209	WATER	6/2/2024	11:10	8260CW	VOCs by 8260C
EV26122	F008-02	FD02-GW060224	WATER	6/2/2024	8:00	8260CW	VOCs by 8260C
EV26123	F008-03	EB03-GW060224	WATER	6/2/2024	14:25	8260CW	VOCs by 8260C
EV26124	F008-05	TB03-GW060324	WATER	6/3/2024	15:00	8260CW	VOCs by 8260C

Report Format: REVIEW

ID 6/4/24

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. 24F008

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: CDM Smith
COMPANY: CDM Smith
ADDRESS: 555 17th St. Ste 500, Denver, CO 80201
EMAX PM: Linh Pham

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: TCLP Metals and Mercury; TCLP VOCs; TCLP SVOCs; pH; Flashpoint/Ignitability; Reactive Cyanide; Reactive Sulfide; VOCs 8260D; VOCs 8260D

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	COMMENTS
1	MW43-GW060224-209		6/2/24	1110	3			GW		IC	unpreserved
2	FD02-GW060224		6/2/24	800	3			GW		IC	unpreserved
3	EB03-GW060224		6/2/24	1425	3			GW		HC	
4	IDW01-SB060324		6/3/24	1230	3			SS		IC	14-day TAT
5	TB03-GW060324		6/3/24	1500	3			GW		HC	
6											
7											
8											
9											
10											

Instructions
CC Joe Miller: millerjc@cdmsmith.com and SmithNL@cdmsmith.com

Cooler #	Temp. (°C)	Sample #s
	5.1	

SAMPLER

COURIER/AIRBILL

RELINQUISHED BY	Date	Time	RECEIVED BY
Jessica Yahn	6/3/24	1545	
	6/4/24	1030	

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.

REFERENCE: EMAX-SM02 Rev. 12

SAMPLE RECEIPT FORM 1

Type of Delivery	Airbill / Tracking Number	ECN 24F008 / 24F008A
☑ Fedex ☐ UPS ☐ GSO ☐ Others	2754 6023 7849	Recipient Nandeen Nacana
☐ EMAX Courier ☐ Client Delivery		Date 06/04/24 Time 1030

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* 216706272	*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. DF 6/4/24

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 _____	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 Nandeen Nacana — Date 06/04/24 | 6/4/24

SRF _____ — Date 6/4/24

PM DF — Date 6/4/24

EMAX LABORATORIES, INC.

REFERENCE: EMAX-SM02 Rev. 12

SAMPLE RECEIPT FORM 2

SAMPLES RECEIVED FOR ECN: 24F008 / 24F008A

pH paper Lot #: N/A

LAB SAMPLE ID (*)	LAB SAMPLE CONTAINER ID	COOLER#	CONTAINER TYPE								CHEMICAL PRESERVATIVE												Filtered	
			Jar	Amber	HDPE	Encore	Vial	Tube	Bag	Other	NONE	HCl (pH<2)	HNO_3 (pH<2)	H_2SO_4 (pH<2)	ZnAc +NaOH (pH>9)	ZnAc +NaOH (pH>12)	NaOH (pH>10)	NaOH (pH≥12)	$Na_2S_2O_3$	Methanol	NaHSO4	Other	Yes	No
1	* 1	1					/				/													
	* 2	|					/				/													
	* 3	|					/				/													
2	* 4	|					/				/													
	* 5	|					/				/													
	* 6	|					/				/													
3	* 7	|					/					/												
	* 8	|					/					/												
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4	* 10	|	/								/													
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	* 2	|	/								/													
5	* 3	|					/					/												
	* 4	↓					/					/												
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24F008A

Nandeen Nacana
06/04/24

ORIGIN ID:MDRA (478) 297-9853
KUMASI ALLEN
JACOBS
BLDG 4646 RANGER ST.
JACOBS ROOM 201
MARSHALL SPACE FLIGH, AL 35812
UNITED STATES US

SHIP DATE: 30APR24
ACTWGT: 50.00 LB
CAD: 110526965/INET4535

BILL SENDER

TO **EMAX**
EMAX
3051 FUJITA STREET

10:00

TORRANCE CA 90505
(310) 618-8889
INV:
REF:
PO: D3581100.B.CS.GEN.41-FW
DEPT:

3.8

583J3/C137/9AE3

FedEx Express

TRK# 0201 **7761 7878 5675**

WED - 01 MAY 10:30A
PRIORITY OVERNIGHT

XW HHRA

90505
CA-US LAX

RT 467
ST 21
5
10:30
A

EMAX
LABORATORIES, INC.
3051 Fujita Street
Torrance, CA 90505
Tel: (310)-618-8889

Date: 06-12-2024
EMAX Batch No.: 24F013

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 06/05/24.
The data reported relate only to samples listed below :

Sample ID	Control #	Col Date	Matrix	Analysis
TB04-GW060424	F013-01	06/04/24	WATER	VOCS BY 8260C
MW43-GW060424-258	F013-02	06/04/24	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,

For CP

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.

1835 W. 205th Street, Torrance, CA 90501
Tel # : 310-618-8889 FAX#: 310-618-0818
Email: info@emaxlabs.com

PO NUMBER:

SAMPLE STORAGE

EMAX CONTROL NO. 24F013

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 Linh Pham

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 8260

TAT
- ☐ Rush __24__hrs.
- ☒ Rush __48_hrs
- ☐ Rush_72_hrs
- ☐ 7 days
- ☐ 14 days
- ☐ 21 days

LAB	SAMPLE ID CLIENT	SAMPLING LOCATION	SAMPLING DATE	SAMPLING TIME	CONTAINER NO.	CONTAINER SIZE	CONTAINER TYPE	MATRIX CODE	QC	PRESERVATIVE CODE HCl	COMMENTS
1	TB04-GW060424		6/4/24		3					X	
2	MW43-GW060424-258		6/4/24		3					X	
3											
4											
5											
6											
7											
8											
9											
10											

Instructions
CC Joe Miller: millerjc@cdmsmith.com and SmithNL@cdmsmith.com

Cooler #	Temp. (°C)	Sample #s
1	5.4	

SAMPLER

COURIER/AIRBILL FEDEX

RELINQUISHED BY	Date	Time	RECEIVED BY
Jessica Yaich	6/4/24	1600	
	6/5/24	1030	

NOTICE: Turn-around-time (TAT) for samples shall not begin untill all discrepancies have been resolved. For samples received and discrepacies resolved after 1500 hrs, TAT shall start at 0800 hrs the next business day. The client is responsible for all cost associted 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 24F013
☑ Fedex ☐ UPS ☐ GSO ☐ Others	2755 1323 1171	Recipient Nandeen Nacana
☐ EMAX Courier ☐ Client Delivery		Date 06/05/24 Time 1030

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: HN 6/5

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 5.4 °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* 210760272	*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
1	1-3	D6	time: "1440" on label	R8 | R1
2	4-6	D6	time: "0849" on label	R8 | R1

☐ 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 COC
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	Inform client
R9	
R10	
R11	
R12	

REVIEWS:

Sample Labeling Nandeen Nacana — Date 06/05/24 6:57pm

SRF — Date 6/5/24

PM — Date 6/5/24

Do not lift using this tag.



ORIGIN ID:NPHA (111) 111-1111

CDM SMITH, INC
555 17TH ST STE 500

DENVER, CO 80202
UNITED STATES US

SHIP DATE: 04JUN24
ACTWGT: 18.00 LB
CAD: 6997117/SSF02521
DIMS: 20x14x11 IN

BILL THIRD PARTY

TO REFERANCE # 275859TS1.DRILL
EMAX LABORATORIES
3051 FUJITA ST

B Sealed

TORRANCE CA 90505

(111) 111-1111 REF: # 275859TS1.DRILL
INV:
PO: DEPT:

FedEx Express

TRK# 0201 2755 1323 1171

WED - 05 JUN 10:30A
PRIORITY OVERNIGHT

WZ HHRA

AHS
90505
CA-US LAX

Part # 156297-438

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#: 24F013

CASE NARRATIVE

Client : CDM SMITH

Project: VA SALT LAKE CITY

SDG : 24F013

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

A total of two(2) water samples were received on 06/05/24 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. 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. VO01F03B - 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. VO01F03L/VO01F03C were within LCS limits. Refer to LCS summary form 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. : 24F013
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	VO01F03L	1	NA	06/05/2411:48	06/05/2411:48	RFV058	REV201	VO01F03	Lab Control Sample (LCS)
LCD1W	VO01F03C	1	NA	06/05/2412:18	06/05/2412:18	RFV059	REV201	VO01F03	LCS Duplicate
MBLK1W	VO01F03B	1	NA	06/05/2413:17	06/05/2413:17	RFV061	REV201	VO01F03	Method Blank
TB04-GW060424	24F013-01	1	NA	06/05/2413:47	06/05/2413:47	RFV062	REV201	VO01F03	Field Sample
MW43-GW060424-258	24F013-02	1	NA	06/05/2415:46	06/05/2415:46	RFV066	REV201	VO01F03	Field Sample

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

METHOD SW50308/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	06/04/24 14:40
Project	: VA SALT LAKE CITY	Date Received:	06/05/24
8atch No.	: 24F013	Date Extracted:	06/05/24 13:47
Sample ID	: TB04-GW060424	Date Analyzed:	06/05/24 13:47
Lab Samp ID:	24F013-01	Dilution Factor:	1
Lab File ID:	RFV062	Matrix:	WATER
Ext 8tch ID:	VO01F03	% Moisture:	NA
Calib. Ref.:	REV201	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
8romochloromethane	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	9.94	10.0	99	70-130
Bromofluorobenzene	9.82	10.0	98	70-130
Toluene-d8	9.89	10.0	99	70-130
Dibromofluoromethane	9.80	10.0	98	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : LPriet Analyzed by : LPriet
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F05\RFV062.D Vial: 7
Acq On : 5 Jun 2024 1:47 pm Operator: LPriet
Sample : 24F013-01 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 6 11:18 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	754447	10.00	ug/l	0.01
53) CHLOROBENZENE-D5	13.73	117	596000	10.00	ug/l	0.01
72) 1,2-DICHLOROBENZENE-D4	18.69	152	235365	10.00	ug/l	0.01
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	228913	9.80	ug/l	0.01
Spiked Amount 10.000			Recovery = 98.00%			
41) 1,2-Dichloroethane-d4	7.97	65	158280	9.94	ug/l	0.00
Spiked Amount 10.000			Recovery = 99.40%			
54) Toluene-d8	11.03	98	883314	9.89	ug/l	0.00
Spiked Amount 10.000			Recovery = 98.90%			
76) 4-Bromofluorobenzene	16.01	95	314932	9.82	ug/l	0.00
Spiked Amount 10.000			Recovery = 98.20%			

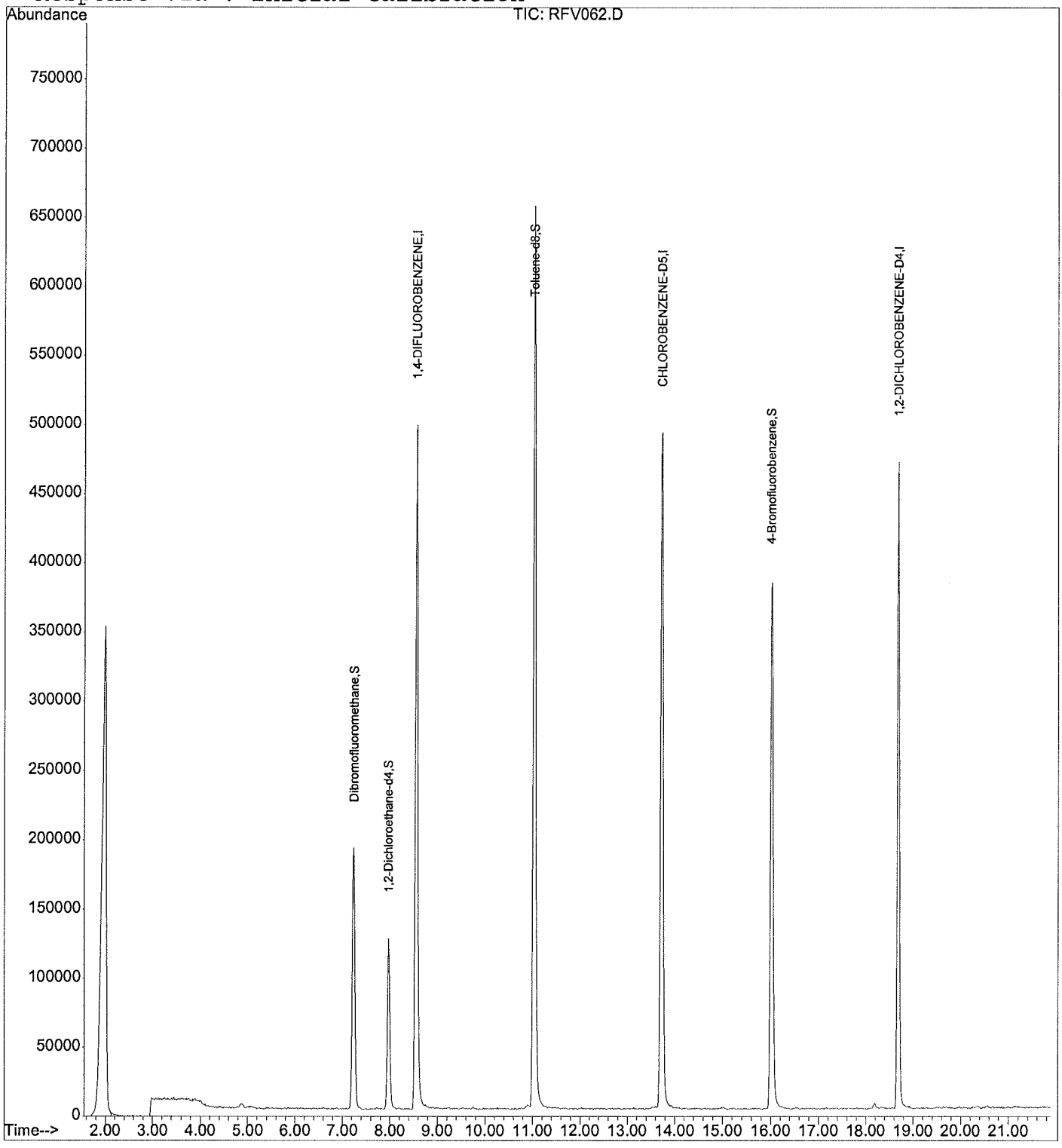
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
RFV062.D VO01E11.M Thu Jun 06 11:18:53 2024 Page 1

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F05\RFV062.D Vial: 7
Acq On : 5 Jun 2024 1:47 pm Operator: LPriet
Sample : 24F013-01 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 6 11:18 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	06/04/24 08:45
Project	: VA SALT LAKE CITY	Date Received:	06/05/24
Batch No.	: 24F013	Date Extracted:	06/05/24 15:46
Sample ID	: MW43-GW060424-258	Date Analyzed:	06/05/24 15:46
Lab Samp ID:	24F013-02	Dilution Factor:	1
Lab File ID:	RFV066	Matrix:	WATER
Ext Btch ID:	VD01F03	% Moisture:	NA
Calib. Ref.:	REV201	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	17J	20	2.5
Benzene	0.29J	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	4.6	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	6.2	1.0	0.15
Toluene	0.38J	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	0.18J	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	9.73	10.0	97	70-130
Toluene-d8	9.87	10.0	99	70-130
Dibromofluoromethane	9.85	10.0	98	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : LPriet Analyzed by : LPriet
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F05\RFV066.D Vial: 11
Acq On : 5 Jun 2024 3:46 pm Operator: LPriet
Sample : 24F013-02 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 6 11:20 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

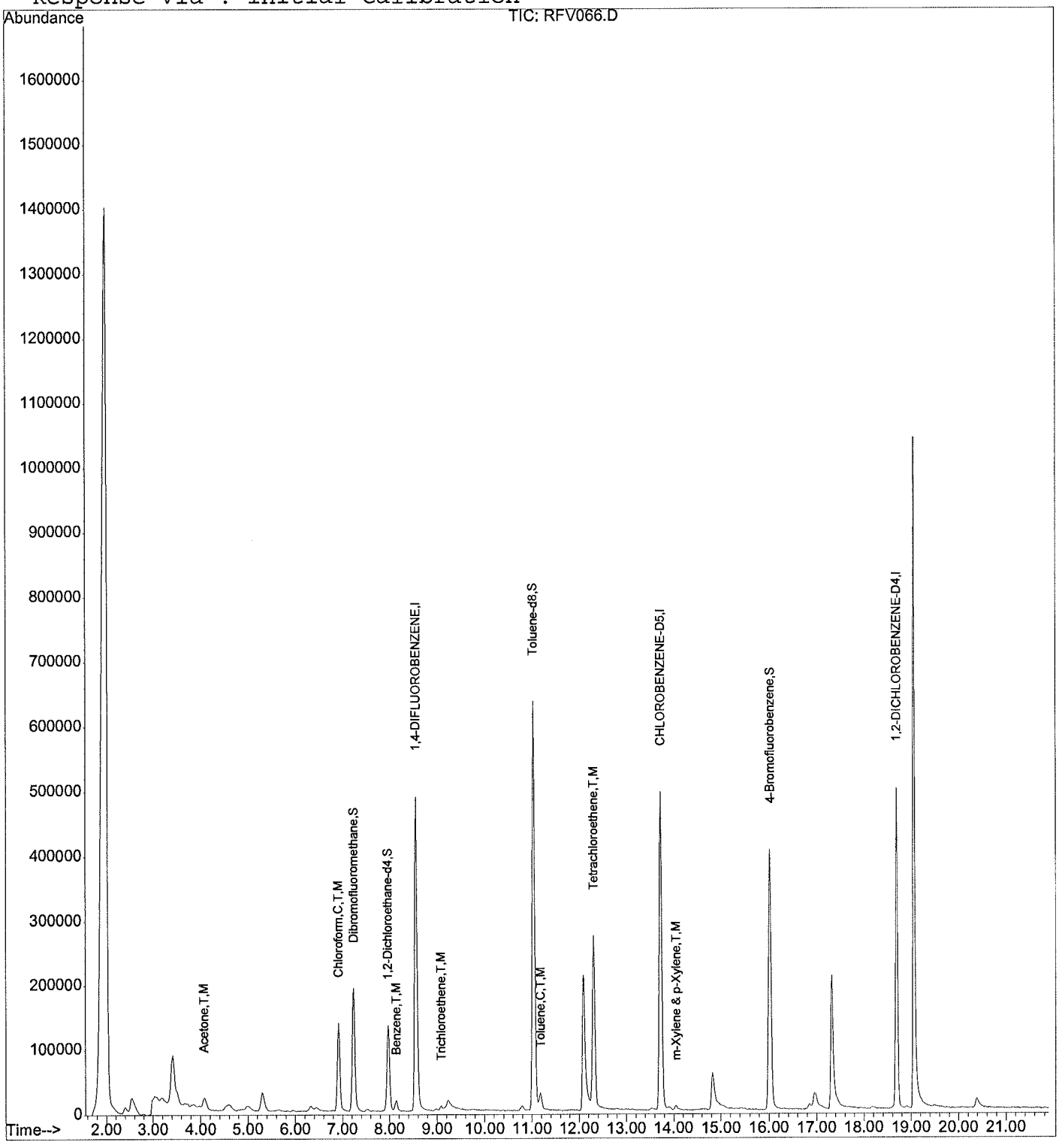
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	748141	10.00	ug/l	0.01
53) CHLOROBENZENE-D5	13.73	117	584378	10.00	ug/l	0.01
72) 1,2-DICHLOROBENZENE-D4	18.69	152	242238	10.00	ug/l	0.01
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	228047	9.85	ug/l	0.01
Spiked Amount 10.000			Recovery =	98.50%		
41) 1,2-Dichloroethane-d4	7.97	65	167833	10.63	ug/l	0.00
Spiked Amount 10.000			Recovery =	106.30%		
54) Toluene-d8	11.03	98	864171	9.87	ug/l	0.00
Spiked Amount 10.000			Recovery =	98.70%		
76) 4-Bromofluorobenzene	16.02	95	320925	9.73	ug/l	0.01
Spiked Amount 10.000			Recovery =	97.30%		
Target Compounds						Qvalue
13) Acetone	4.07	43	45293	16.59	ug/l #	10
31) Chloroform	6.92	83	208468	4.55	ug/l	97
42) Benzene	8.15	78	29333	0.29	ug/l	96
44) Trichloroethene	9.09	130	4593	0.18	ug/l	93
55) Toluene	11.18	91	39315	0.38	ug/l	97
61) Tetrachloroethene	12.31	164	133462	6.19	ug/l	99
68) m-Xylene & p-Xylene	14.05	91	10537	0.12	ug/l	87

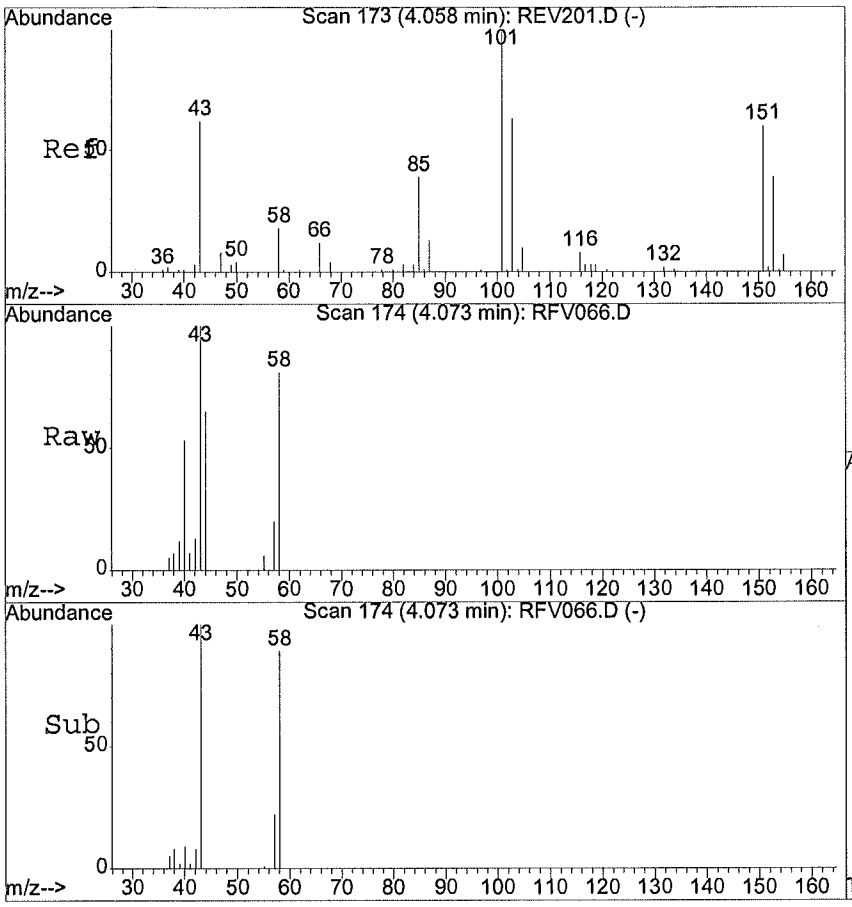
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F05\RFV066.D Vial: 11
Acq On : 5 Jun 2024 3:46 pm Operator: LPriet
Sample : 24F013-02 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 6 11:20 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration

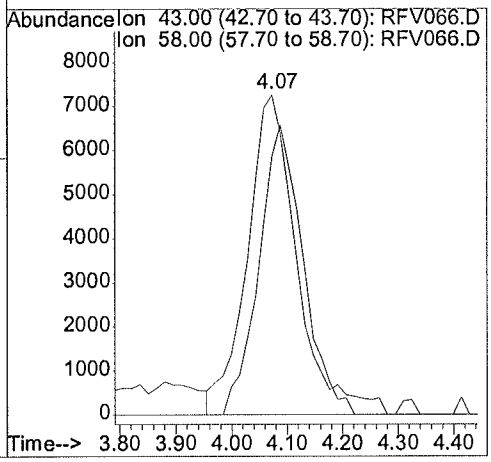


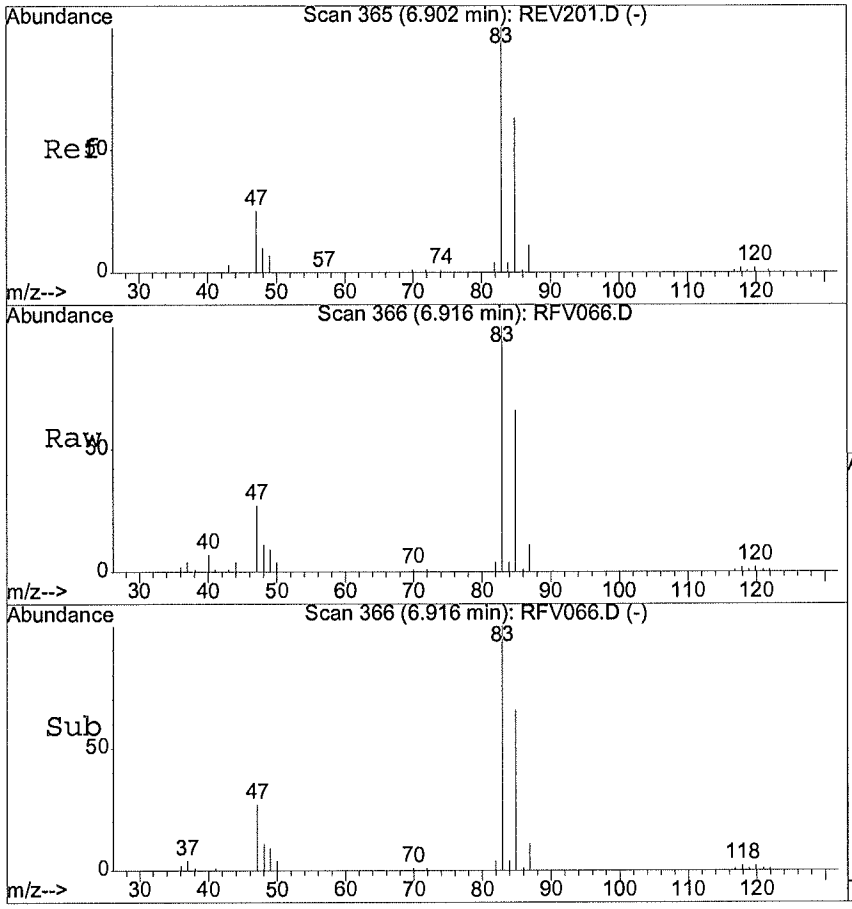


#13
Acetone
Concen: 16.59 ug/l
RT: 4.07 min Scan# 174
Delta R.T. 0.02 min
Lab File: RFV066.D
Acq: 5 Jun 2024 3:46 pm

Tgt Ion: 43 Resp: 45293

Ion	Ratio	Lower	Upper
43	100		
58	80.4	0.9	60.9#

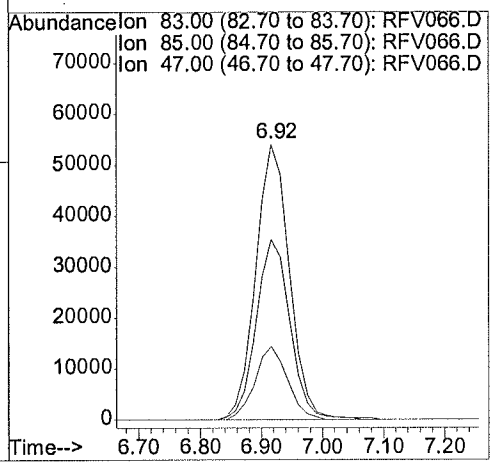


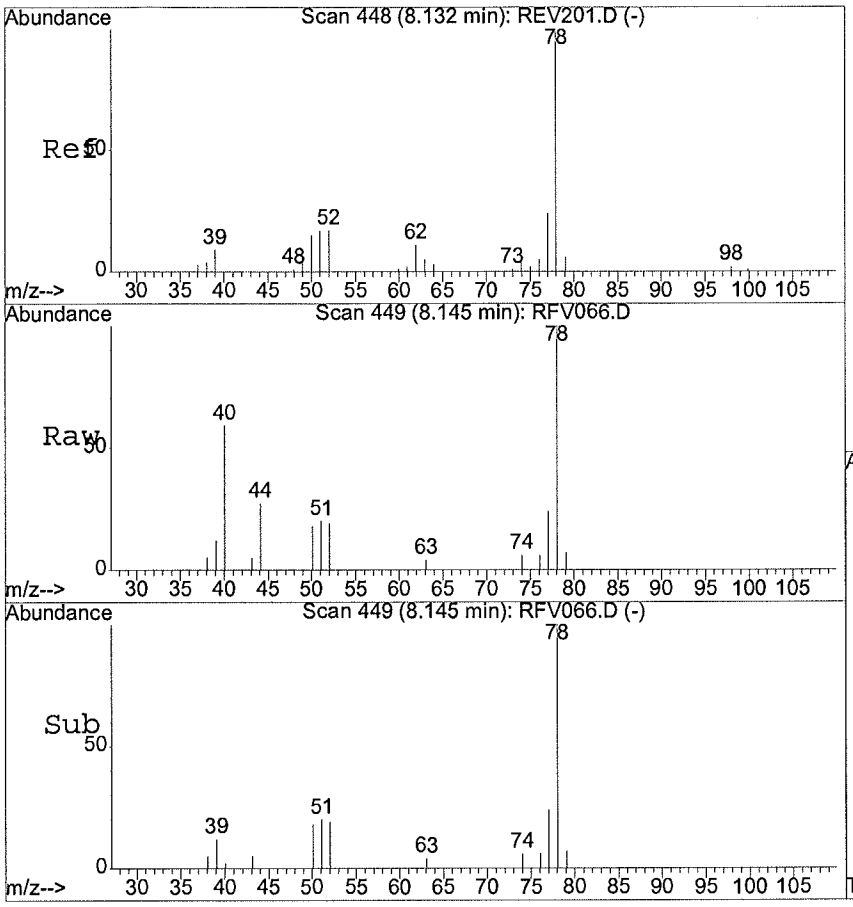


#31
Chloroform
Concen: 4.55 ug/l
RT: 6.92 min Scan# 366
Delta R.T. 0.01 min
Lab File: RFV066.D
Acq: 5 Jun 2024 3:46 pm

Tgt Ion: 83 Resp: 208468

Ion	Ratio	Lower	Upper
83	100		
85	65.7	38.2	98.2
47	25.7	0.0	54.7

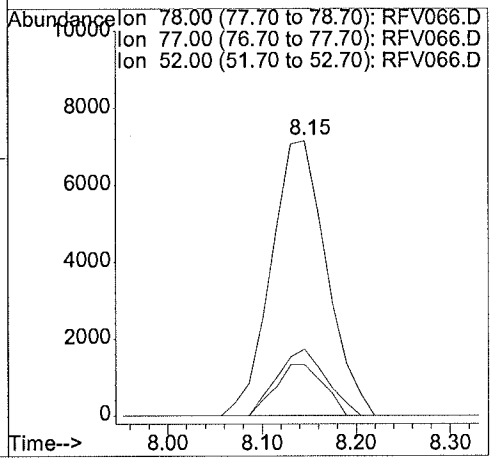


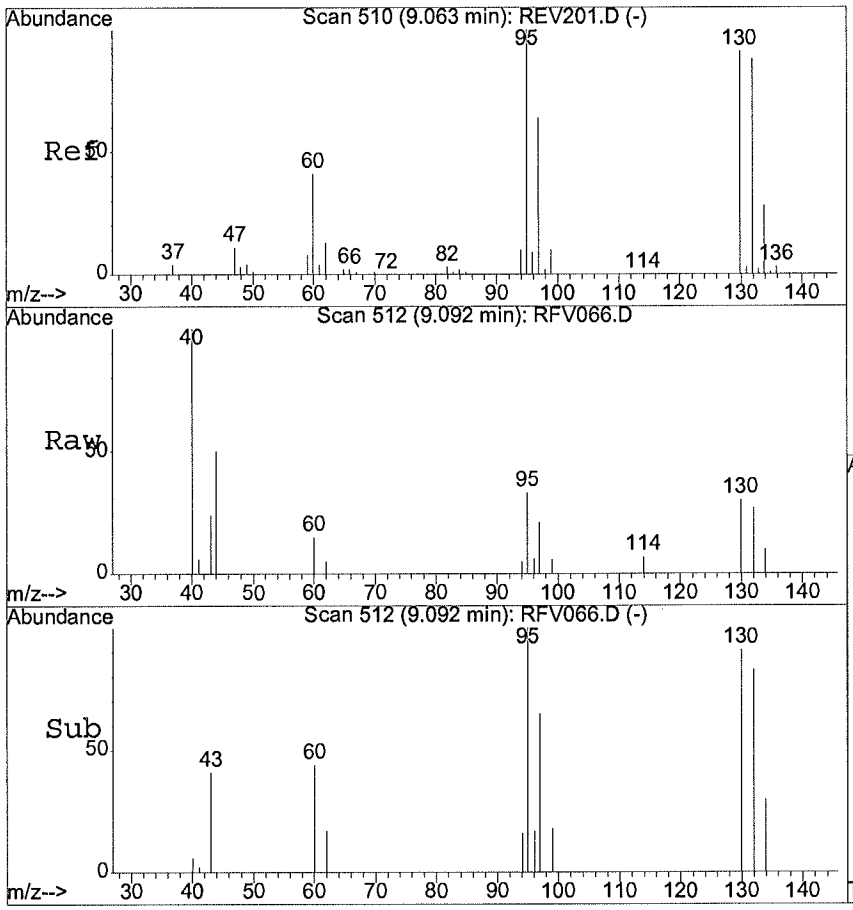


#42
Benzene
Concen: 0.29 ug/l
RT: 8.15 min Scan# 449
Delta R.T. 0.01 min
Lab File: RFV066.D
Acq: 5 Jun 2024 3:46 pm

Tgt Ion: 78 Resp: 29333

Ion	Ratio	Lower	Upper
78	100		
77	21.5	0.0	54.0
52	16.2	0.0	46.8

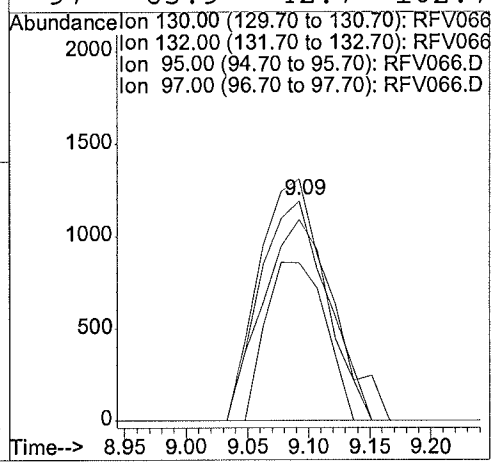


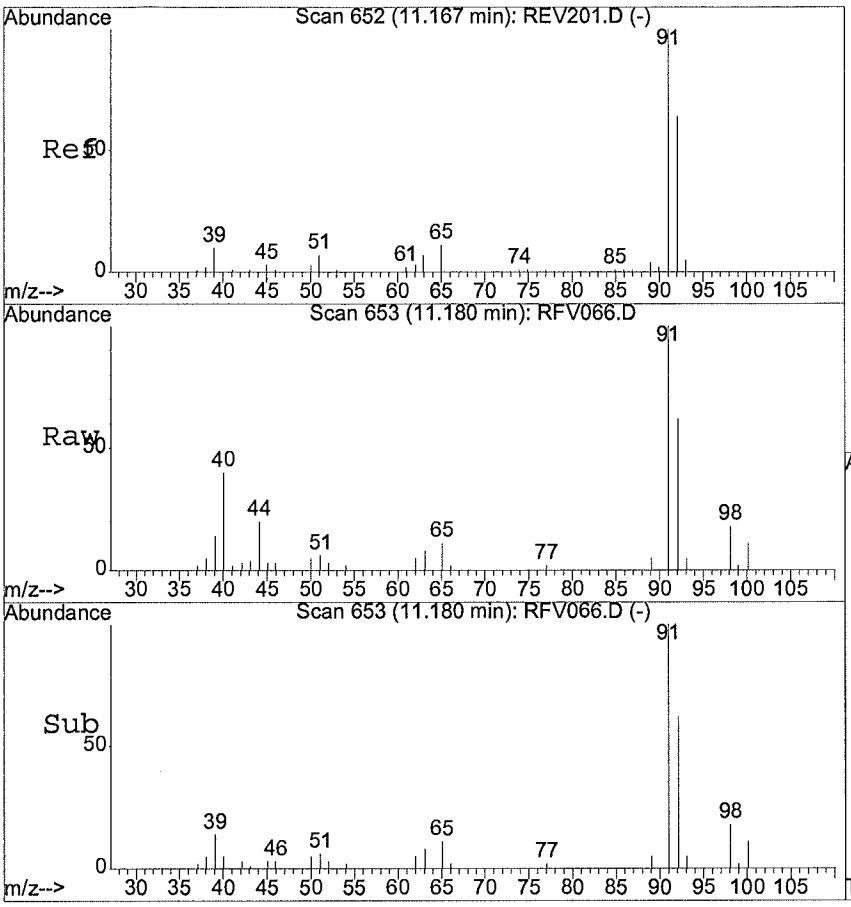


#44
Trichloroethene
Concen: 0.18 ug/l
RT: 9.09 min Scan# 512
Delta R.T. 0.03 min
Lab File: RFV066.D
Acq: 5 Jun 2024 3:46 pm

Tgt Ion:130 Resp: 4593

Ion	Ratio	Lower	Upper
130	100		
132	89.7	66.3	126.3
95	114.7	78.9	138.9
97	63.9	42.7	102.7

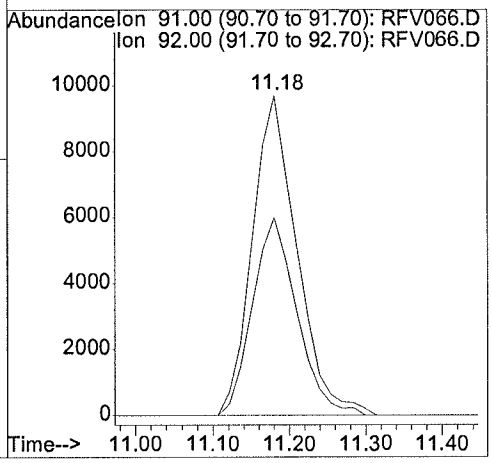


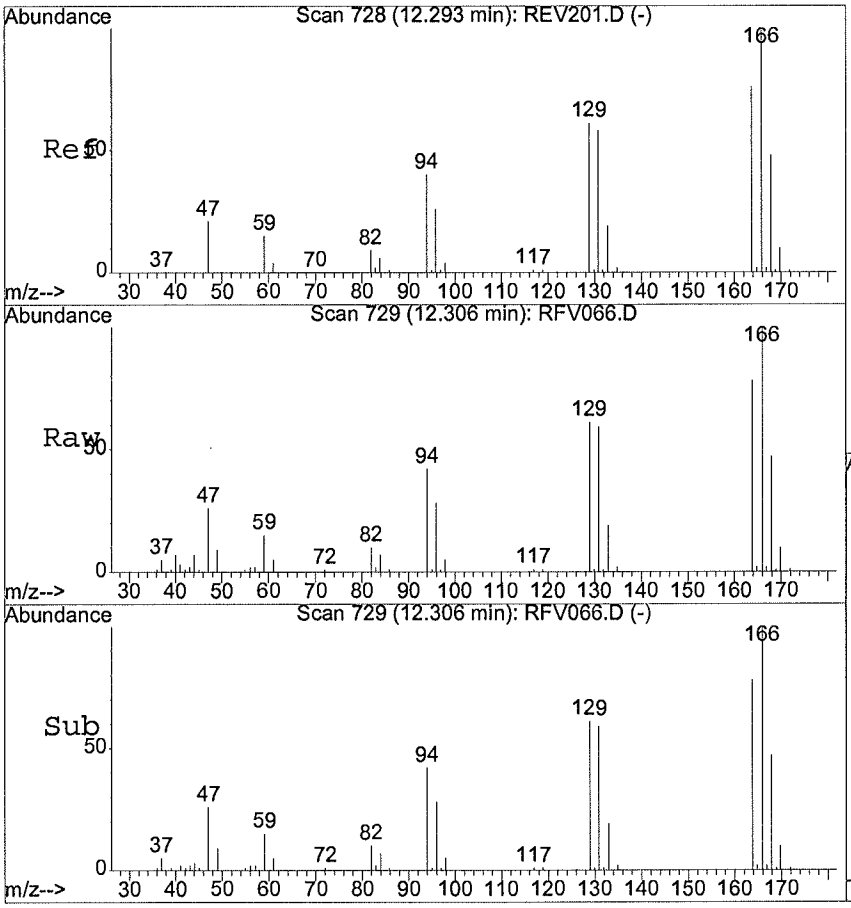


#55
Toluene
Concen: 0.38 ug/l
RT: 11.18 min Scan# 653
Delta R.T. 0.01 min
Lab File: RFV066.D
Acq: 5 Jun 2024 3:46 pm

Tgt Ion: 91 Resp: 39315

Ion	Ratio	Lower	Upper
91	100		
92	61.6	34.0	94.0

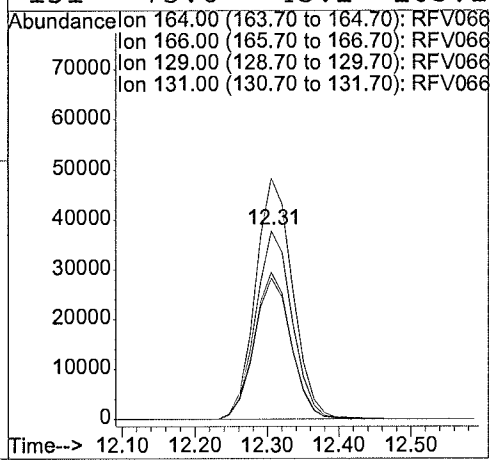


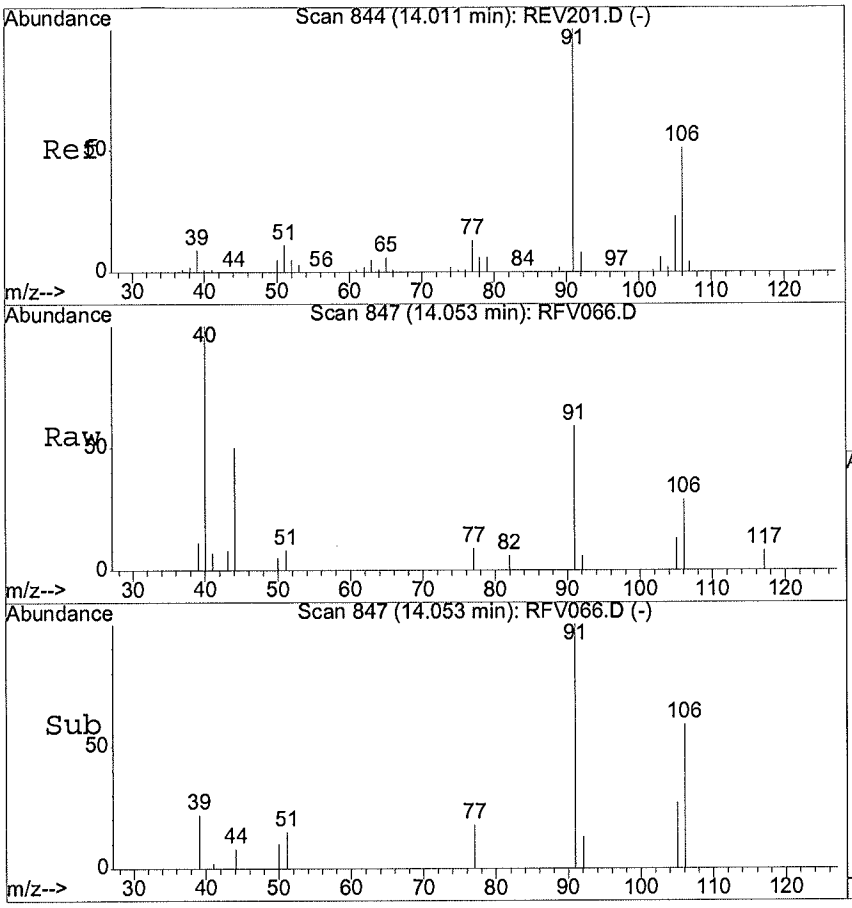


#61
Tetrachloroethene
Concen: 6.19 ug/l
RT: 12.31 min Scan# 729
Delta R.T. 0.01 min
Lab File: RFV066.D
Acq: 5 Jun 2024 3:46 pm

Tgt Ion:164 Resp: 133462

Ion	Ratio	Lower	Upper
164	100		
166	130.5	101.0	161.0
129	78.4	49.2	109.2
131	75.6	45.1	105.1

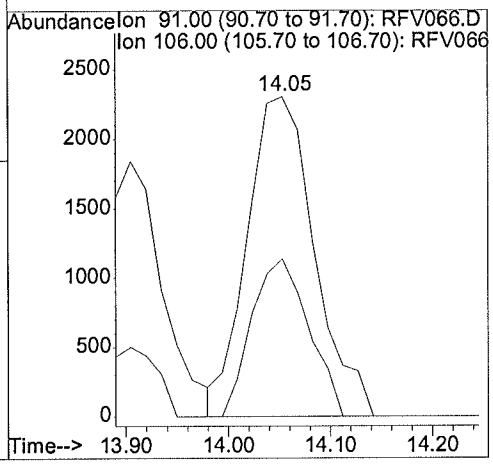




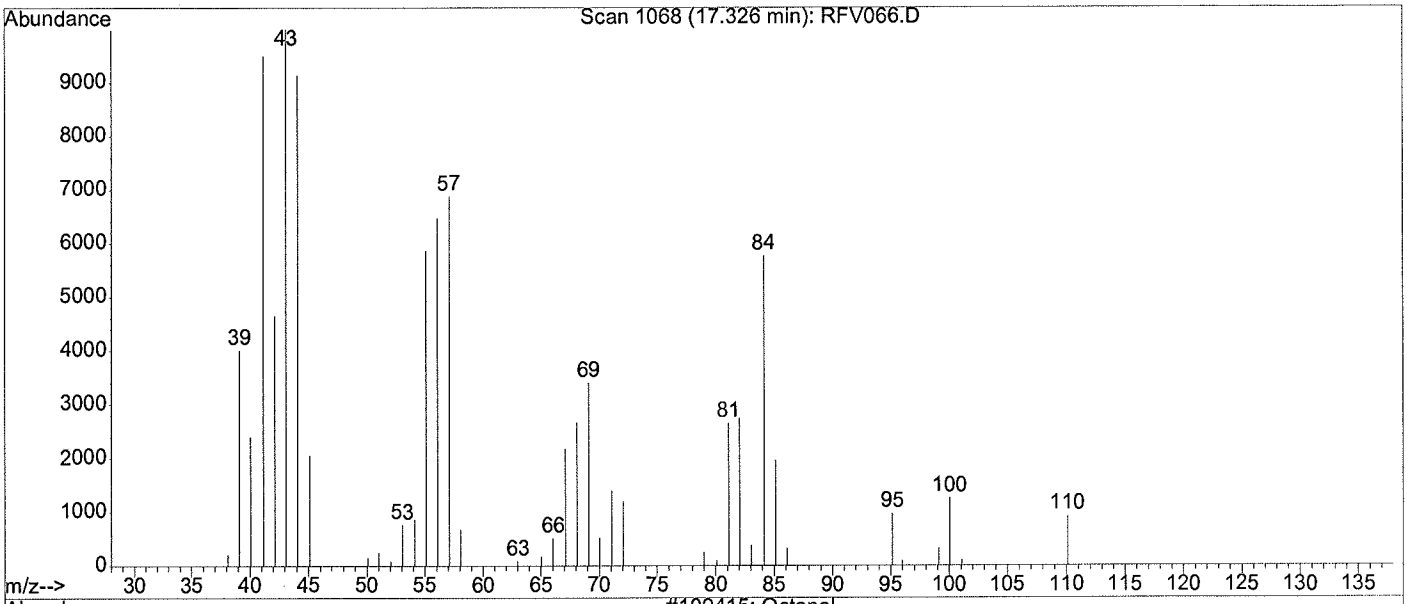
#68
m-Xylene & p-Xylene
Concen: 0.12 ug/l
RT: 14.05 min Scan# 847
Delta R.T. 0.04 min
Lab File: RFV066.D
Acq: 5 Jun 2024 3:46 pm

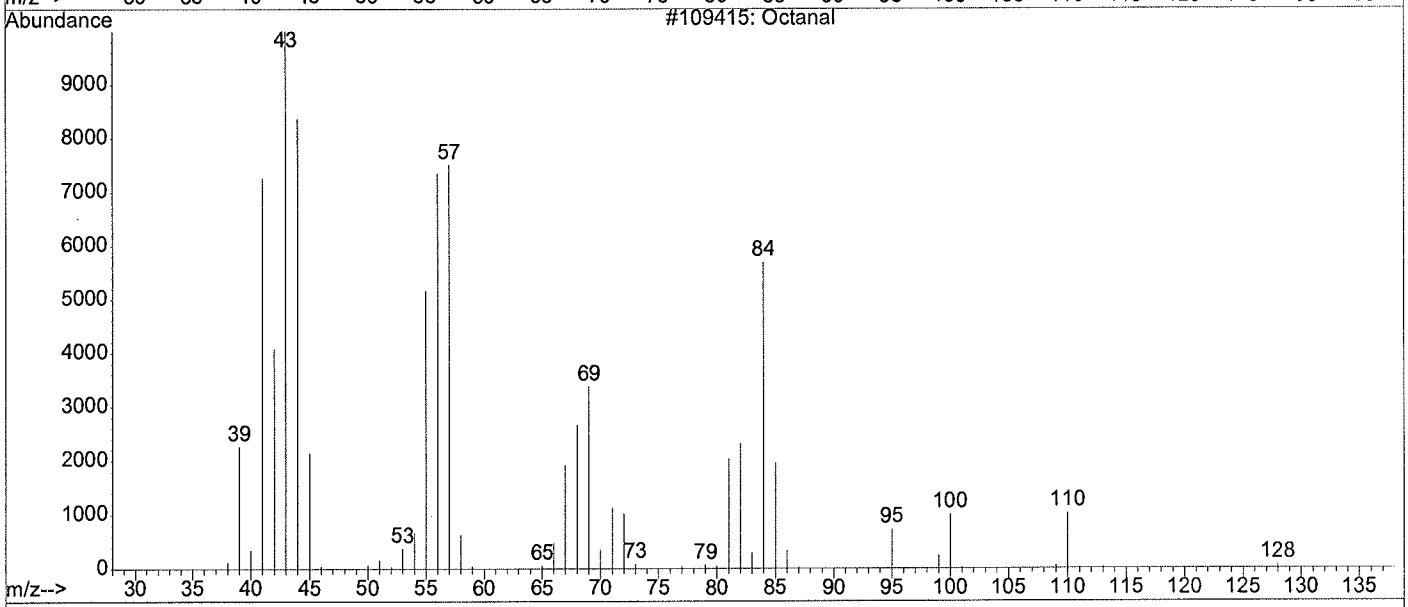
Tgt Ion: 91 Resp: 10537

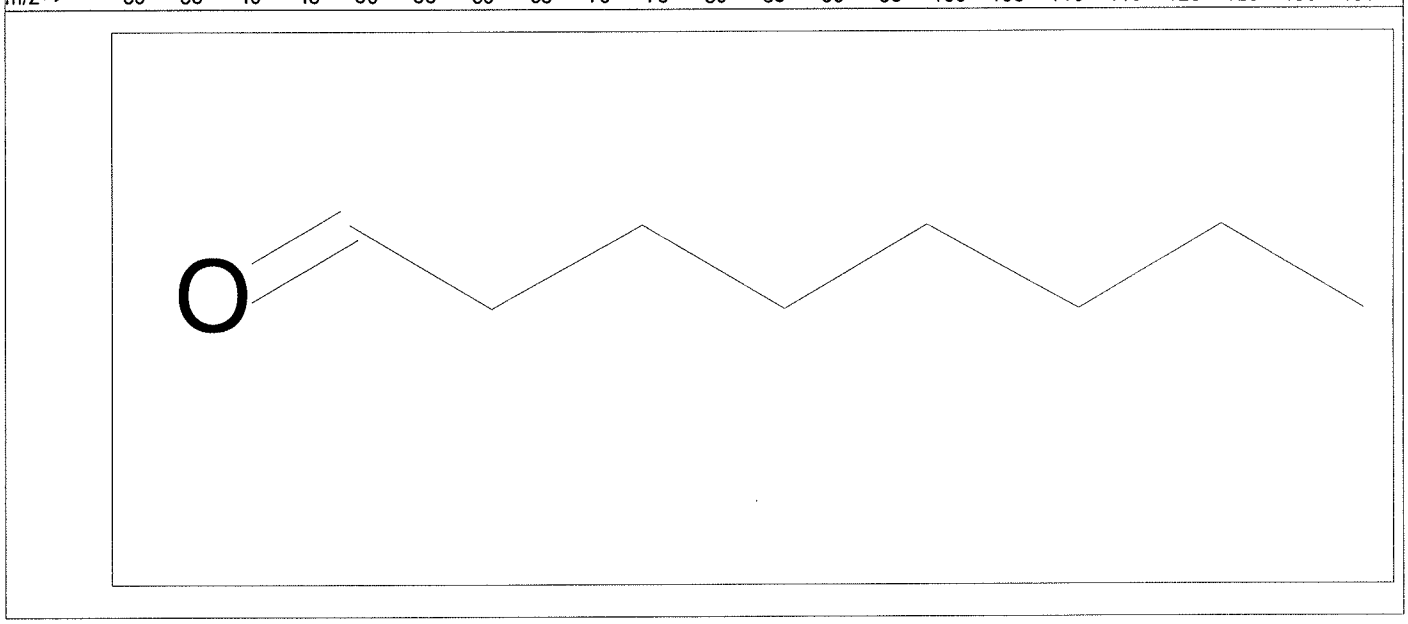
Ion	Ratio	Lower	Upper
91	100		
106	41.9	20.9	80.9



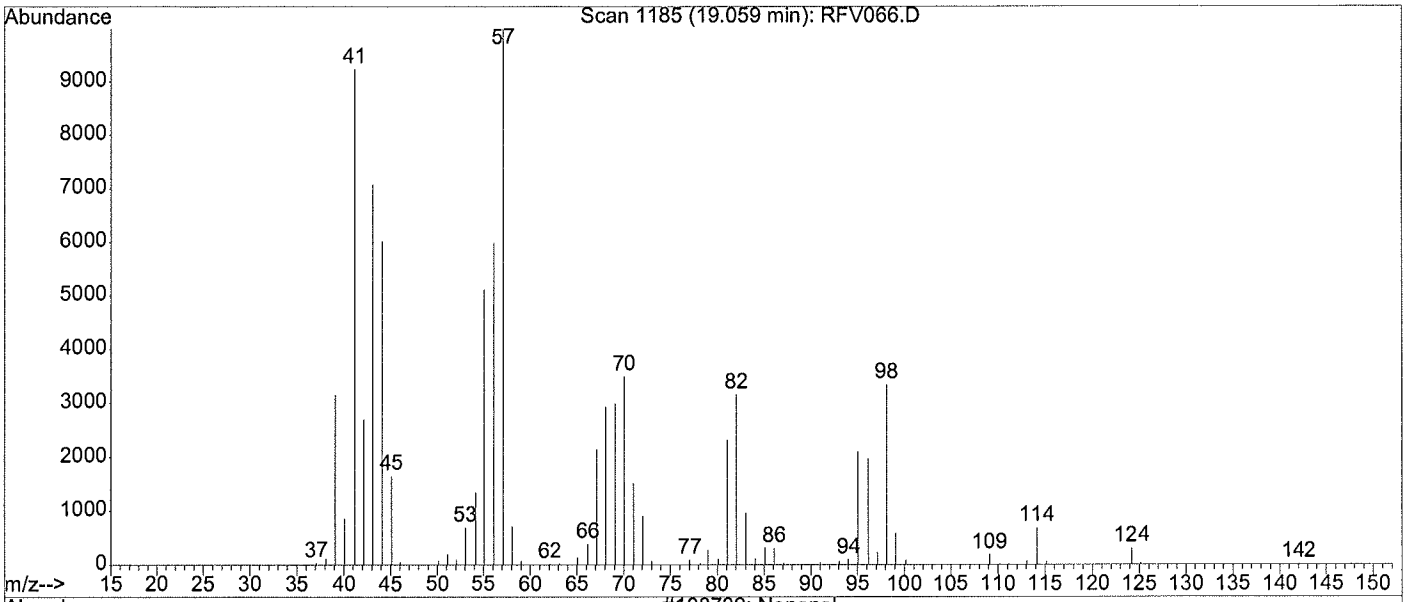
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Quality : 91
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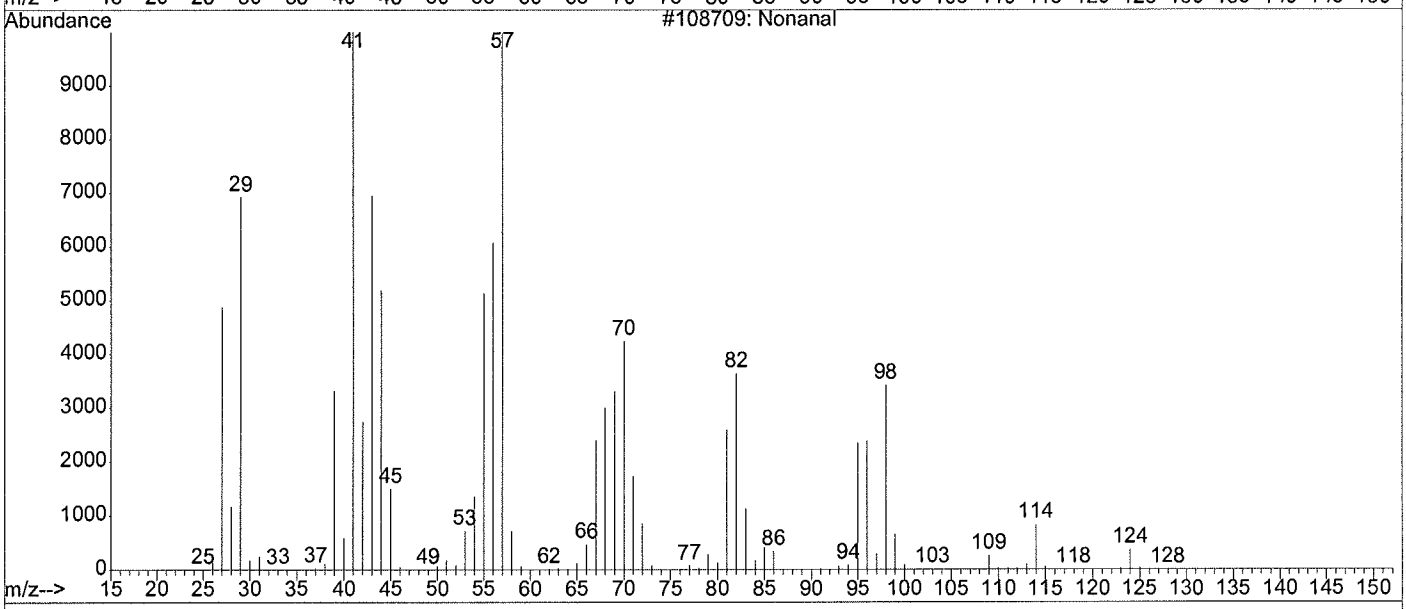


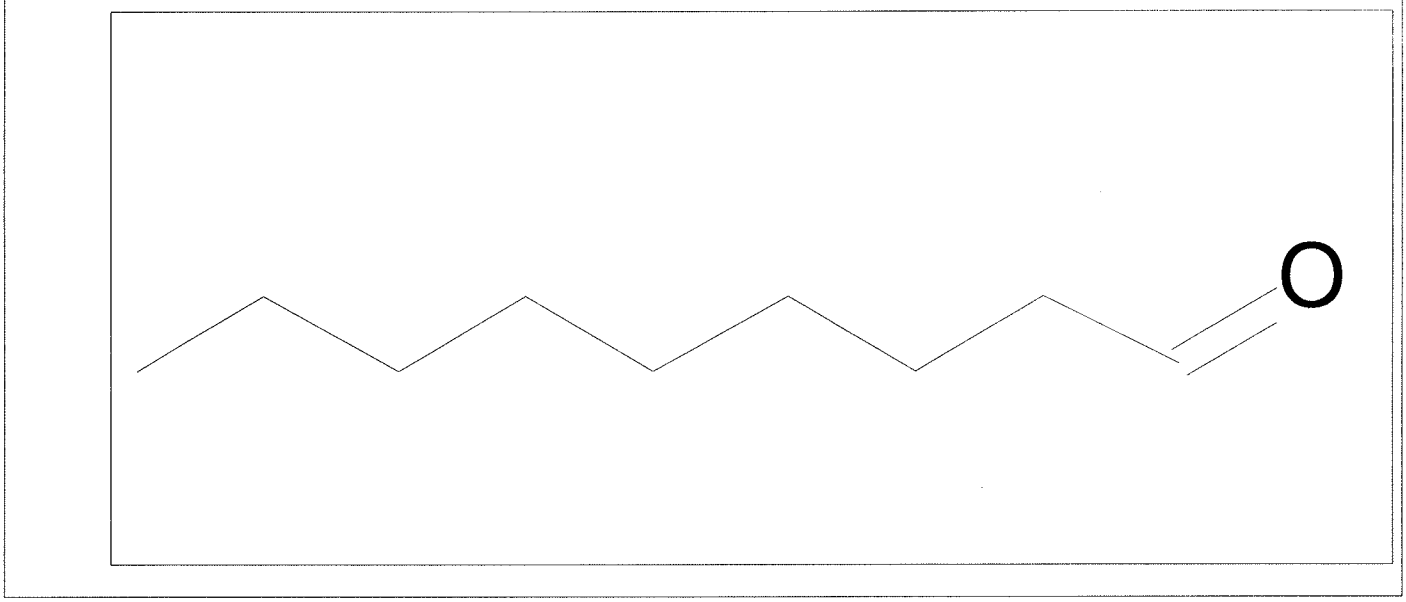




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Quality : 91
ID : Nonanal







QC SUMMARIES

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	06/05/24 13:17
Project	: VA SALT LAKE CITY	Date Received:	06/05/24
Batch No.	: 24F013	Date Extracted:	06/05/24 13:17
Sample ID	: MBLK1W	Date Analyzed:	06/05/24 13:17
Lab Samp ID:	VO01F03B	Dilution Factor:	1
Lab File ID:	RFV061	Matrix:	WATER
Ext Btch ID:	VO01F03	% Moisture:	NA
Calib. Ref.:	REV201	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	11.2	10.0	112	70-130
Bromofluorobenzene	9.41	10.0	94	70-130
Toluene-d8	9.44	10.0	94	70-130
Dibromofluoromethane	10.3	10.0	103	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : LPriet Analyzed by : LPriet
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. : 24F013
METHDD : SW5030B/8260C

MATRIX : WATER
DILUTION FACTOR: 1 1 1
SAMPLE ID : M8LK1W LCS1W LCD1W
LAB SAMPLE ID : VO01F038 VO01F03L VO01F03C
LAB FILE ID : RFV061 RFV058 RFV059
DATE PREPARED : 06/05/24 13:17 06/05/24 11:48 06/05/24 12:18
DATE ANALYZED : 06/05/24 13:17 06/05/24 11:48 06/05/24 12:18
PREP BATCH : VO01F03 VO01F03 VD01F03
CALI8RATION REF: REV201 REV201 REV201
% MOISTURE:NA

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	10.4	104	1	74-131	20
1,1,2,2-Tetrachloroethane	ND	10.0	8.40	84	10.0	8.11	81	4	71-121	20
1,1,2-Trichloroethane	ND	10.0	9.15	92	10.0	9.24	92	1	80-119	20
1,1-Dichloroethane	ND	10.0	9.52	95	10.0	9.60	96	1	77-125	20
1,1-Dichloroethene	ND	10.0	8.72	87	10.0	8.86	89	2	71-131	20
1,2,3-Trichlorobenzene	ND	10.0	8.71	87	10.0	8.83	88	1	69-129	20
1,2,4-Trichlorobenzene	ND	10.0	8.67	87	10.0	8.77	88	1	69-130	20
1,2,4-Trimethylbenzene	ND	10.0	8.51	85	10.0	8.42	84	1	76-124	20
1,2-Dibromo-3-chloropropane	ND	10.0	8.02	80	10.0	7.92	79	1	62-138	20
1,2-Dichlorobenzene	ND	10.0	8.94	89	10.0	8.94	89	0	80-119	20
1,2-Dichloroethane	ND	10.0	10.3	103	10.0	10.1	101	2	73-128	20
1,2-Dichloropropane	ND	10.0	8.98	90	10.0	9.21	92	3	78-122	20
1,3,5-Trimethylbenzene	ND	10.0	8.28	83	10.0	8.27	83	0	75-124	20
1,3-Dichlorobenzene	ND	10.0	9.14	91	10.0	9.04	90	1	80-119	20
1,4-Dichlorobenzene	ND	10.0	9.05	91	10.0	8.89	89	2	79-118	20
2-Butanone	ND	50.0	47.0	94	50.0	45.4	91	3	56-143	20
2-Hexanone	ND	50.0	43.4	87	50.0	42.1	84	3	57-139	20
Acetone	ND	50.0	48.3	97	50.0	46.5	93	4	39-160	20
Benzene	ND	10.0	9.16	92	10.0	9.28	93	1	79-120	20
Bromochloromethane	ND	10.0	9.10	91	10.0	9.19	92	1	78-120	20
Bromodichloromethane	ND	10.0	9.77	98	10.0	9.72	97	1	79-125	20
Bromoform	ND	10.0	9.38	94	10.0	9.27	93	1	66-130	20
Bromomethane	ND	10.0	9.84	98	10.0	10.1	101	3	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	10.3	103	10.0	10.3	103	0	72-136	20
Chlorobenzene	ND	10.0	9.34	93	10.0	9.32	93	0	82-118	20
Chloroethane	ND	10.0	9.52	95	10.0	9.84	98	3	60-138	20
Chloroform	ND	10.0	9.99	100	10.0	9.93	99	1	79-124	20
Chloromethane	ND	10.0	8.99	90	10.0	9.23	92	3	50-139	20
cis-1,2-Dichloroethylene	ND	10.0	9.14	91	10.0	9.23	92	1	78-123	20
Dibromochloromethane	ND	10.0	9.49	95	10.0	9.44	94	1	74-126	20
Dichlorodifluoromethane	ND	10.0	9.71	97	10.0	10.2	102	5	32-152	20
Ethylbenzene	ND	10.0	9.70	97	10.0	9.57	96	1	79-121	20
Isopropylbenzene	ND	10.0	8.85	89	10.0	8.78	88	1	72-131	20
m,p-Xylene	ND	20.0	19.4	97	20.0	19.6	98	1	80-121	20
4-Methyl-2-Pentanone	ND	50.0	45.6	91	50.0	44.7	89	2	67-130	20
Methylene Chloride	ND	10.0	9.39	94	10.0	9.22	92	2	74-124	20
tert-Butyl Methyl Ether	ND	10.0	8.85	89	10.0	8.85	89	0	71-124	20
o-Xylene	ND	10.0	9.43	94	10.0	9.53	95	1	78-122	20
Styrene	ND	10.0	9.19	92	10.0	9.21	92	0	78-123	20
Tetrachloroethene	ND	10.0	9.80	98	10.0	9.93	99	1	74-129	20
Toluene	ND	10.0	9.22	92	10.0	9.13	91	1	80-121	20
Trans-1,2-DCE	ND	10.0	9.03	90	10.0	9.01	90	0	75-124	20
cis-1,3-Dichloropropene	ND	10.0	9.35	94	10.0	9.29	93	1	75-124	20
Trans-1,3-Dichloropropene	ND	10.0	9.13	91	10.0	9.12	91	0	73-127	20
TCE	ND	10.0	9.74	97	10.0	9.72	97	0	79-123	20
Trichlorofluoromethane	ND	10.0	11.2	112	10.0	11.5	115	3	65-141	20
Vinyl Chloride	ND	10.0	9.41	94	10.0	10.5	105	11	58-137	20
1,2-Dibromoethane	ND	10.0	8.92	89	10.0	9.05	91	1	77-121	20
Vinyl Acetate	ND	10.0	9.70	97	10.0	10.0	100	3	54-146	20
Trichlorotrifluoroethane	ND	10.0	10.0	100	10.0	10.2	102	2	70-136	20
Methyl Acetate	ND	10.0	11.8	118	10.0	12.2	122	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	10.3	103	10.0	10.3	103	70-130
Bromofluorobenzene	10.0	9.83	98	10.0	9.57	96	70-130
Toluene-d8	10.0	9.75	98	10.0	9.73	97	70-130
Dibromofluoromethane	10.0	10.2	102	10.0	10.2	102	70-130

MB: Method Blank sample LCS: Lab Control Sample LCD: Lab Control Sample Duplicate

QC DATA

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F05\RFV061.D Vial: 6
Acq On : 5 Jun 2024 1:17 pm Operator: LPriet
Sample : VO01F03B Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 6 12:14 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	812588	10.00	ug/l	0.02
53) CHLOROBENZENE-D5	13.73	117	676078	10.00	ug/l	0.01
72) 1,2-DICHLOROBENZENE-D4	18.69	152	285240	10.00	ug/l	0.01
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	259738	10.33	ug/l	0.01
Spiked Amount 10.000			Recovery =	103.30%		
41) 1,2-Dichloroethane-d4	7.97	65	191317	11.15	ug/l	0.00
Spiked Amount 10.000			Recovery =	111.50%		
54) Toluene-d8	11.03	98	956872	9.44	ug/l	0.00
Spiked Amount 10.000			Recovery =	94.40%		
76) 4-Bromofluorobenzene	16.01	95	365507	9.41	ug/l	0.00
Spiked Amount 10.000			Recovery =	94.10%		

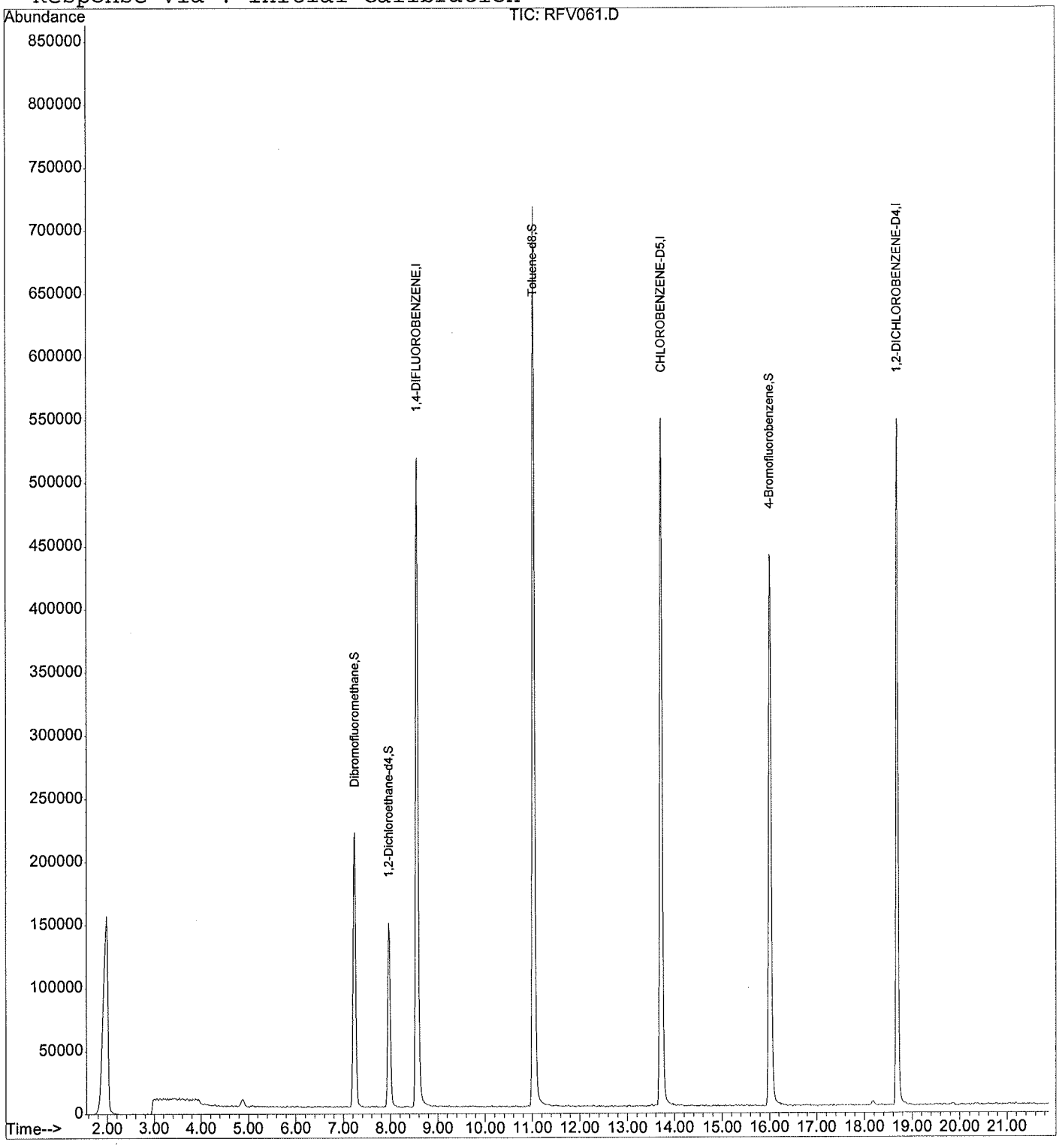
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
RFV061.D VO01E11.M Thu Jun 06 12:14:44 2024 Page 1

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F05\RFV061.D Vial: 6
Acq On : 5 Jun 2024 1:17 pm Operator: LPriet
Sample : VO01F03B Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 6 12:14 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F05\RFV058.D Vial: 3
Acq On : 5 Jun 2024 11:48 am Operator: LPriet
Sample : VO01F03L Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 5 12:10 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.54	114	818488	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	666670	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	270588	10.00	ug/l	0.01
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	257610	10.17	ug/l	0.00
Spiked Amount 10.000			Recovery =	101.70%		
41) 1,2-Dichloroethane-d4	7.97	65	178321	10.32	ug/l	0.00
Spiked Amount 10.000			Recovery =	103.20%		
54) Toluene-d8	11.03	98	974240	9.75	ug/l	0.00
Spiked Amount 10.000			Recovery =	97.50%		
76) 4-Bromofluorobenzene	16.01	95	362222	9.83	ug/l	0.00
Spiked Amount 10.000			Recovery =	98.30%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.17	85	212568	9.71	ug/l	99
5) Chloromethane	2.48	50	275681	8.99	ug/l	99
6) Vinyl chloride	2.61	62	240362	9.41	ug/l	98
7) Bromomethane	3.15	94	297959	9.84	ug/l	99
8) Chloroethane	3.20	64	176452	9.52	ug/l	93
9) Dichlorofluoromethane	3.27	67	543088	10.32	ug/l	98
10) Trichlorofluoromethane	3.55	101	387627	11.22	ug/l	98
11) Acrolein	3.98	56	70893	38.56	ug/l	98
12) 1,1,2-Trichloro-1,2,2-trif	4.07	151	173194	10.03	ug/l	100
13) Acetone	4.04	43	144390	48.33	ug/l	93
14) 1,1-Dichloroethene	4.22	61	380606	8.72	ug/l	99
15) tert-Butyl alcohol	4.34	59	178361	195.75	ug/l	82
16) Iodomethane	4.64	142	481952	10.30	ug/l	98
17) Methyl acetate	4.65	43	96271	11.82	ug/l	99
18) Methylene chloride	4.86	49	328875	9.39	ug/l	99
19) Carbon disulfide	4.87	76	1129753	12.10	ug/l	100
20) Acrylonitrile	5.02	53	165418	43.64	ug/l	98
21) tert-Butyl methyl ether (M	5.05	73	379897	8.85	ug/l	94
22) trans-1,2-Dichloroethene	5.24	61	379816	9.03	ug/l	99
23) Isopropyl ether (DIPE)	5.66	45	867823	9.66	ug/l	99
24) Vinyl acetate	5.82	43	299279	9.70	ug/l	100
25) 1,1-Dichloroethane	5.82	63	468167	9.52	ug/l	99
27) tert-Butyl ethyl ether (ET	6.24	59	567134	8.81	ug/l	98
28) 2-Butanone	6.41	43	215281	46.96	ug/l	100
29) 2,2-Dichloropropane	6.63	77	387413	9.37	ug/l	99
30) cis-1,2-Dichloroethene	6.68	96	309259	9.14	ug/l	99
31) Chloroform	6.90	83	500859	9.99	ug/l	99

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24F05\RFV058.D Vial: 3
Acq On : 5 Jun 2024 11:48 am Operator: LPriet
Sample : VO01F03L Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 5 12:10 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.15	49	179056	9.10	ug/l	97
33)	Tetrahydrofuran	7.20	42	22070	7.61	ug/l	97
35)	1,1,1-Trichloroethane	7.49	97	431992	10.30	ug/l	98
36)	Cyclohexane	7.52	84	417918	10.23	ug/l	98
38)	1,1-Dichloropropene	7.72	110	128012	8.98	ug/l	99
39)	Carbon tetrachloride	7.88	119	321226	10.28	ug/l	100
40)	tert-Amyl methyl ether (TA	7.89	73	418479	8.35	ug/l	99
42)	Benzene	8.13	78	1001561	9.16	ug/l	100
43)	1,2-Dichloroethane	8.10	62	226674	10.28	ug/l	100
44)	Trichloroethene	9.06	130	275481	9.74	ug/l	98
45)	Methylcyclohexane	9.17	83	478882	10.66	ug/l	98
46)	1,2-Dichloropropane	9.34	63	219668	8.98	ug/l	93
47)	Bromodichloromethane	9.73	83	331740	9.77	ug/l	100
48)	1,4-Dioxane	9.79	88	14932	149.08	ug/l	94
49)	Dibromomethane	9.82	93	107439	9.31	ug/l	99
50)	2-Chloroethyl vinyl ether	10.23	63	76173	12.27	ug/l	98
51)	4-Methyl-2-pentanone	10.28	43	548525	45.59	ug/l	97
52)	cis-1,3-Dichloropropene	10.62	75	355960	9.35	ug/l	98
55)	Toluene	11.17	91	1091543	9.22	ug/l	99
56)	Ethyl methacrylate	11.46	69	158934	8.95	ug/l	94
57)	trans-1,3-Dichloropropene	11.48	75	251198	9.13	ug/l	96
58)	1,1,2-Trichloroethane	11.76	97	141805	9.15	ug/l	99
59)	2-Hexanone	11.77	43	301720	43.39	ug/l	96
60)	1,3-Dichloropropane	12.20	76	249971	9.50	ug/l	99
61)	Tetrachloroethene	12.31	164	241184	9.80	ug/l	99
62)	Dibromochloromethane	12.68	129	179610	9.49	ug/l	98
63)	1,2-Dibromoethane	13.03	107	136801	8.92	ug/l	99
64)	1-Chlorohexane	13.31	91	476158	9.31	ug/l	99
65)	Chlorobenzene	13.79	112	658947	9.34	ug/l	100
66)	1,1,1,2-Tetrachloroethane	13.86	131	211893	9.75	ug/l	99
67)	Ethylbenzene	13.88	91	1310706	9.70	ug/l	97
68)	m-Xylene & p-Xylene	14.02	91	1919193	19.40	ug/l	96
69)	o-Xylene	14.84	91	959571	9.43	ug/l	97
70)	Styrene	14.91	104	725490	9.19	ug/l	98
71)	Isopropylbenzene	15.52	105	1187595	8.85	ug/l	99
73)	Bromoform	15.56	173	100058	9.38	ug/l	98
74)	trans-1,4-Dichloro-2-buten	15.64	53	37366	8.00	ug/l	99
75)	1,1,2,2-Tetrachloroethane	15.86	83	151399	8.40	ug/l	99
77)	1,2,3-Trichloropropane	16.16	110	38837	8.43	ug/l	97
78)	n-Propylbenzene	16.30	91	1539950	8.75	ug/l	99
79)	Bromobenzene	16.38	156	254110	9.13	ug/l	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F05\RFV058.D Vial: 3
Acq On : 5 Jun 2024 11:48 am Operator: LPriet
Sample : VO01F03L Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 5 12:10 2024 Quant Results File: VO01E11.RES

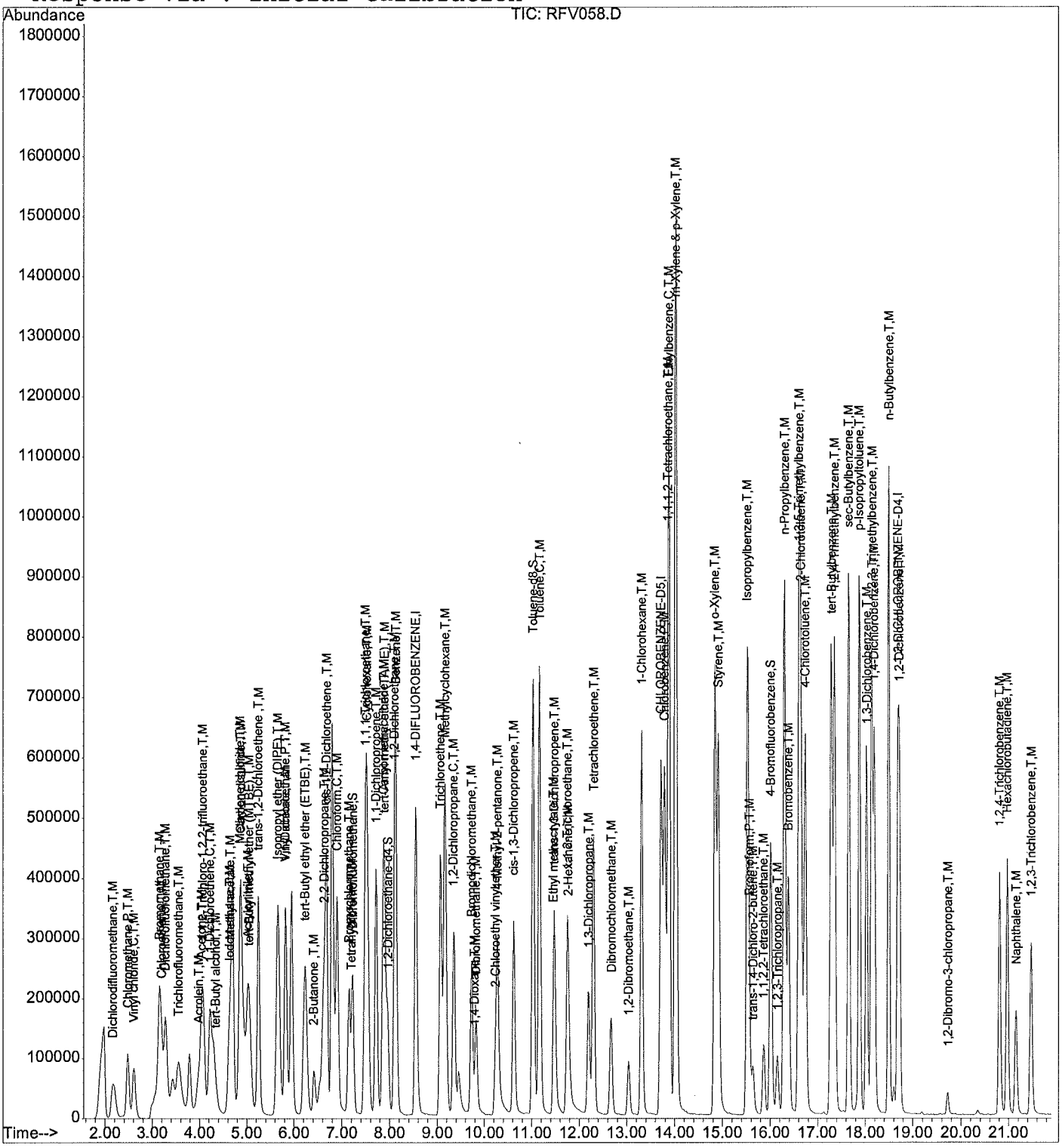
Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	930624	8.28	ug/l	100
81)	2-Chlorotoluene	16.65	91	943565	8.91	ug/l	98
82)	4-Chlorotoluene	16.73	91	837899	8.94	ug/l	99
83)	tert-Butylbenzene	17.30	134	208640	8.85	ug/l	96
84)	1,2,4-Trimethylbenzene	17.36	105	936290	8.51	ug/l	99
85)	sec-Butylbenzene	17.65	105	1323096	8.56	ug/l	99
86)	p-Isopropyltoluene	17.87	119	1029830	8.64	ug/l	99
87)	1,3-Dichlorobenzene	18.04	146	483339	9.14	ug/l	98
88)	1,2,3-Trimethylbenzene	18.14	105	865290	8.43	ug/l	99
89)	1,4-Dichlorobenzene	18.19	146	469092	9.05	ug/l	99
90)	n-Butylbenzene	18.50	91	1071560	8.68	ug/l	99
91)	1,2-Dichlorobenzene	18.72	146	387257	8.94	ug/l	100
92)	1,2-Dibromo-3-chloropropan	19.73	157	21916	8.02	ug/l	98
93)	1,2,4-Trichlorobenzene	20.81	180	274446	8.67	ug/l	99
94)	Hexachlorobutadiene	20.97	225	162129	8.60	ug/l	98
95)	Naphthalene	21.16	128	293605	7.95	ug/l	100
96)	1,2,3-Trichlorobenzene	21.47	180	207515	8.71	ug/l	99

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24F05\RFV058.D Vial: 3
Acq On : 5 Jun 2024 11:48 am Operator: LPriet
Sample : VO01F03L Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 5 12:10 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F05\RFV059.D Vial: 4
Acq On : 5 Jun 2024 12:18 pm Operator: LPriet
Sample : VO01F03C Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 5 12:40 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	800002	10.00	ug/l	0.02
53) CHLOROBENZENE-D5	13.71	117	655706	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	271258	10.00	ug/l	0.01
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	253577	10.24	ug/l	0.00
Spiked Amount 10.000			Recovery = 102.40%			
41) 1,2-Dichloroethane-d4	7.97	65	174400	10.33	ug/l	0.00
Spiked Amount 10.000			Recovery = 103.30%			
54) Toluene-d8	11.03	98	956567	9.73	ug/l	0.00
Spiked Amount 10.000			Recovery = 97.30%			
76) 4-Bromofluorobenzene	16.01	95	353657	9.57	ug/l	0.00
Spiked Amount 10.000			Recovery = 95.70%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.18	85	219242	10.24	ug/l	98
5) Chloromethane	2.49	50	276532	9.23	ug/l	99
6) Vinyl chloride	2.62	62	262827	10.53	ug/l	99
7) Bromomethane	3.15	94	297730	10.06	ug/l	98
8) Chloroethane	3.20	64	178203	9.84	ug/l	93
9) Dichlorofluoromethane	3.29	67	529919	10.30	ug/l	98
10) Trichlorofluoromethane	3.57	101	387313	11.47	ug/l	100
11) Acrolein	3.98	56	67601	37.62	ug/l	96
12) 1,1,2-Trichloro-1,2,2-trif	4.09	151	172066	10.20	ug/l	99
13) Acetone	4.06	43	135729	46.48	ug/l	95
14) 1,1-Dichloroethene	4.24	61	377946	8.86	ug/l	99
15) tert-Butyl alcohol	4.35	59	178125	200.01	ug/l	82
16) Iodomethane	4.65	142	473707	10.36	ug/l	97
17) Methyl acetate	4.65	43	97375	12.23	ug/l	99
18) Methylene chloride	4.86	49	315739	9.22	ug/l	98
19) Carbon disulfide	4.89	76	1079266	11.83	ug/l	100
20) Acrylonitrile	5.04	53	160986	43.46	ug/l	98
21) tert-Butyl methyl ether (M	5.06	73	371370	8.85	ug/l	95
22) trans-1,2-Dichloroethene	5.26	61	370546	9.01	ug/l	100
23) Isopropyl ether (DIPE)	5.67	45	844091	9.61	ug/l	99
24) Vinyl acetate	5.83	43	301616	10.00	ug/l	99
25) 1,1-Dichloroethane	5.83	63	461602	9.60	ug/l	99
27) tert-Butyl ethyl ether (ET	6.23	59	543873	8.64	ug/l	97
28) 2-Butanone	6.43	43	203383	45.39	ug/l	100
29) 2,2-Dichloropropane	6.63	77	376660	9.32	ug/l	99
30) cis-1,2-Dichloroethene	6.69	96	305452	9.23	ug/l	99
31) Chloroform	6.92	83	486511	9.93	ug/l	99

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24F05\RFV059.D Vial: 4
Acq On : 5 Jun 2024 12:18 pm Operator: LPriet
Sample : VO01F03C Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 5 12:40 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.15	49	176858	9.19	ug/l	99
33)	Tetrahydrofuran	7.20	42	23324	8.23	ug/l	90
35)	1,1,1-Trichloroethane	7.51	97	424371	10.35	ug/l	99
36)	Cyclohexane	7.52	84	425303	10.65	ug/l	97
38)	1,1-Dichloropropene	7.73	110	129126	9.27	ug/l	99
39)	Carbon tetrachloride	7.88	119	313789	10.28	ug/l	99
40)	tert-Amyl methyl ether (TA	7.89	73	408604	8.34	ug/l	99
42)	Benzene	8.13	78	992088	9.28	ug/l	99
43)	1,2-Dichloroethane	8.10	62	218300	10.13	ug/l	100
44)	Trichloroethene	9.08	130	268603	9.72	ug/l	97
45)	Methylcyclohexane	9.17	83	490565	11.17	ug/l	99
46)	1,2-Dichloropropane	9.36	63	220274	9.21	ug/l	94
47)	Bromodichloromethane	9.73	83	322734	9.72	ug/l	99
48)	1,4-Dioxane	9.79	88	14576	148.89	ug/l	96
49)	Dibromomethane	9.82	93	111813	9.91	ug/l	96
50)	2-Chloroethyl vinyl ether	10.23	63	73784	12.16	ug/l	99
51)	4-Methyl-2-pentanone	10.28	43	525014	44.70	ug/l	97
52)	cis-1,3-Dichloropropene	10.62	75	345697	9.29	ug/l	98
55)	Toluene	11.17	91	1063598	9.13	ug/l	99
56)	Ethyl methacrylate	11.46	69	157344	9.00	ug/l	90
57)	trans-1,3-Dichloropropene	11.48	75	246797	9.12	ug/l	97
58)	1,1,2-Trichloroethane	11.74	97	140940	9.24	ug/l	99
59)	2-Hexanone	11.77	43	286521	42.06	ug/l	98
60)	1,3-Dichloropropane	12.20	76	247546	9.57	ug/l	98
61)	Tetrachloroethene	12.31	164	240401	9.93	ug/l	99
62)	Dibromochloromethane	12.68	129	175635	9.44	ug/l	100
63)	1,2-Dibromoethane	13.03	107	136535	9.05	ug/l	98
64)	1-Chlorohexane	13.31	91	462925	9.21	ug/l	99
65)	Chlorobenzene	13.79	112	646795	9.32	ug/l	100
66)	1,1,1,2-Tetrachloroethane	13.86	131	207781	9.72	ug/l	100
67)	Ethylbenzene	13.88	91	1271408	9.57	ug/l	98
68)	m-Xylene & p-Xylene	14.02	91	1904066	19.57	ug/l	96
69)	o-Xylene	14.84	91	954310	9.53	ug/l	97
70)	Styrene	14.91	104	714464	9.21	ug/l	98
71)	Isopropylbenzene	15.52	105	1158040	8.78	ug/l	99
73)	Bromoform	15.56	173	99115	9.27	ug/l	98
74)	trans-1,4-Dichloro-2-buten	15.64	53	37505	8.01	ug/l	97
75)	1,1,2,2-Tetrachloroethane	15.86	83	146415	8.11	ug/l	99
77)	1,2,3-Trichloropropane	16.16	110	37974	8.22	ug/l	96
78)	n-Propylbenzene	16.29	91	1514858	8.59	ug/l	99
79)	Bromobenzene	16.38	156	248485	8.91	ug/l	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F05\RFV059.D Vial: 4
Acq On : 5 Jun 2024 12:18 pm Operator: LPriet
Sample : VO01F03C Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 5 12:40 2024 Quant Results File: VO01E11.RES

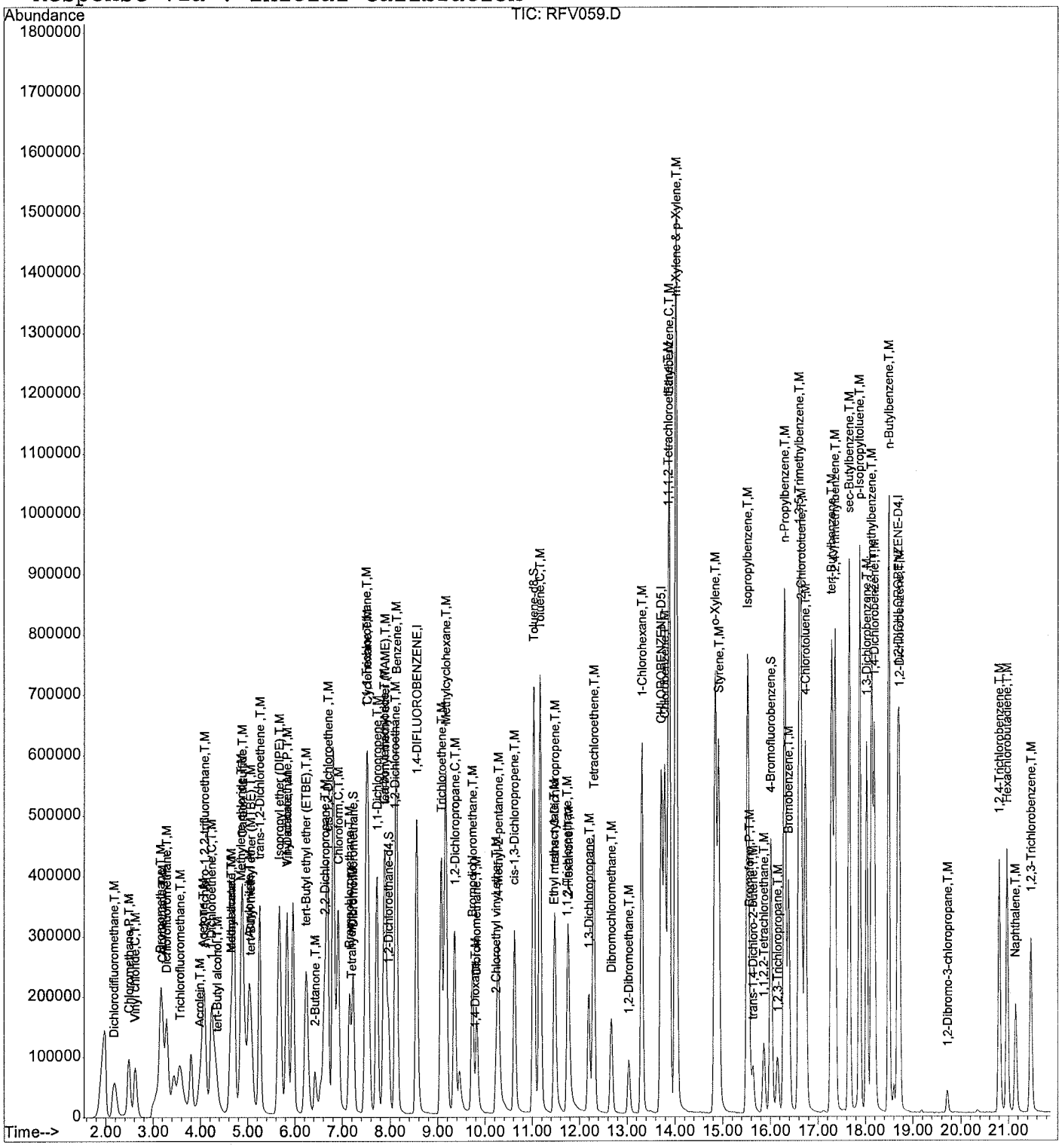
Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	931911	8.27	ug/l	100
81)	2-Chlorotoluene	16.65	91	949204	8.94	ug/l	99
82)	4-Chlorotoluene	16.73	91	806907	8.58	ug/l	99
83)	tert-Butylbenzene	17.28	134	203772	8.62	ug/l	94
84)	1,2,4-Trimethylbenzene	17.36	105	928521	8.42	ug/l	99
85)	sec-Butylbenzene	17.65	105	1318638	8.51	ug/l	99
86)	p-Isopropyltoluene	17.87	119	1020356	8.54	ug/l	98
87)	1,3-Dichlorobenzene	18.02	146	479369	9.04	ug/l	98
88)	1,2,3-Trimethylbenzene	18.13	105	858986	8.34	ug/l	99
89)	1,4-Dichlorobenzene	18.19	146	462102	8.89	ug/l	99
90)	n-Butylbenzene	18.50	91	1065087	8.61	ug/l	99
91)	1,2-Dichlorobenzene	18.72	146	388431	8.94	ug/l	99
92)	1,2-Dibromo-3-chloropropan	19.73	157	21676	7.92	ug/l	95
93)	1,2,4-Trichlorobenzene	20.81	180	278292	8.77	ug/l	99
94)	Hexachlorobutadiene	20.97	225	162434	8.60	ug/l	97
95)	Naphthalene	21.15	128	300607	8.12	ug/l	99
96)	1,2,3-Trichlorobenzene	21.47	180	210956	8.83	ug/l	99

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24F05\RFV059.D Vial: 4
Acq On : 5 Jun 2024 12:18 pm Operator: LPriet
Sample : VO01F03C Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 5 12:40 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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: REV195 BFB Injection Date: 05/11/24

Instrument ID: 01 BFB Injection Time: 10:20

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	18.517
75	30 - 60% of mass 95	42.491
95	Base Peak, 100% relative abundance	100.000
96	5 - 9% of mass 95	7.286
173	Less than 2% of mass 174	0.000(0)1
174	Greater than 50% of mass 95	75.428
175	5 - 9% of mass 174	5.582(7.4)1
176	95 - 101% % of mass 174	72.070(95.55)1
177	5 - 9% % of mass 176	5.085(7.06)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	VO01E111	REV196	05/11/24	10:58
2	VSTD0.5	VO01E112	REV197	05/11/24	11:27
3	VSTD1	VO01E113	REV198	05/11/24	11:56
4	VSTD2	VO01E114	REV199	05/11/24	12:30
5	VSTD5	VO01E115	REV200	05/11/24	12:59
6	VSTD10	VO01E116	REV201	05/11/24	13:28
7	VSTD20	VO01E117	REV202	05/11/24	13:58
8	VSTD30	VO01E118	REV203	05/11/24	14:27
9	VSTD50	VO01E119	REV204	05/11/24	14:56
10	VSTD100	VO01DE1110	REV205	05/11/24	15:26

SC 5/15/24

INITIAL_CALIBRATIDN - RELATIVE_RESPDNSE_FACTDR

Instrument_ID :01
Beginning DateTime :05/11/24 10:5B
Spike_Units :PPB
IC File :REV201

Column Spec :RXI-624SILMS ID :0.25MM
Ending DateTime :05/11/24 15:26
HPChem Method :VOO1E11

M	IDX	Parameters	3 10:58 REV196	5 11:27 REV197	1 11:56 REV198	2 12:30 REV199	5 12:59 REV200	10 13:28 REV201	20 13:58 REV202	30 14:27 REV203	50 14:56 REV204	100 15:26 REV205	Av_RRF	% RSD	Av_Rt_M
	1	1,4-DIFLUOROBENZENE	1	1	1	1	1	1	1	1	1	1	1	0	8.5509
	2	Chlorotrifluoroethylene											0.000	0.00	0.0000
	3	Dichlorodifluoromethane	0.276	0.289	0.246	0.273	0.265	0.254	0.271	0.264	0.274	0.264	0.268	4.44	2.1690
	4	2-Chloro-1,1,1-trifluoroethane											0.000	0.00	0.0000
	5	Chloromethane	0.426	0.406	0.362	0.393	0.380	0.347	0.379	0.351	0.364	0.339	0.375	7.39	2.4709
	6	Vinyl chloride	0.305	0.319	0.285	0.336	0.337	0.310	0.331	0.305	0.313	0.280	0.312	6.31	2.6048
	7	Bromomethane		0.398	0.312	0.404	0.369	0.329	0.378	0.353	0.376	0.362	0.396	17.96	3.1458
	8	Chloroethane	0.234	0.268	0.212	0.217	0.226	0.211	0.236	0.225	0.240	0.232	0.226	4.21	3.1896
	9	Dichlorofluoromethane	0.754	0.702	0.630	0.645	0.605	0.581	0.653	0.609	0.641	0.601	0.643	8.21	3.2755
	10	Trichlorofluoromethane	0.440	0.466	0.405	0.441	0.427	0.387	0.418	0.405	0.421	0.400	0.422	5.20	3.5526
5	11	Acrolein				0.022	0.022	0.020	0.022	0.022	0.024	0.023	0.022	5.86	3.9857
	12	1,1,2-Trichloro-1,2,2-trifluoroethane	0.173	0.217	0.197	0.230	0.212	0.210	0.224	0.217	0.228	0.201	0.211	8.11	4.0696
5	13	Acetone			0.049	0.037	0.036	0.031	0.035	0.034	0.037	0.034	0.037	14.45	4.0577
	14	1,1-Dichloroethene	0.517	0.551	0.485	0.547	0.524	0.514	0.569	0.536	0.563	0.532	0.533	4.73	4.2296
25	15	tert-Butyl alcohol	0.010	0.010	0.010	0.011	0.011	0.010	0.012	0.012	0.013	0.012	0.011	7.43	4.3229
	16	Iodomethane	0.556	0.569	0.525	0.570	0.563	0.545	0.616	0.582	0.610	0.581	0.572	4.85	4.3365
	17	Methyl acetate				0.114	0.101	0.084	0.102	0.097			0.100	10.84	4.6531
	18	Methylene chloride	0.449	0.440	0.418	0.436	0.421	0.399	0.447	0.413	0.440	0.416	0.428	3.90	4.8577
	19	Carbon disulfide	1.256	1.087	1.076	1.126	1.153	1.068	1.228	1.130			1.140	6.08	4.8800
5	20	Acrylonitrile	0.049	0.046	0.044	0.044	0.046	0.043	0.048	0.046	0.049	0.047	0.046	4.77	5.0252
	21	tert-Butyl methyl ether (MTBE)	0.533	0.550	0.498	0.531	0.517	0.473	0.551	0.525	0.548	0.520	0.525	4.67	5.0607
	22	trans-1,2-Dichloroethene	0.505	0.518	0.491	0.523	0.505	0.477	0.552	0.517	0.544	0.505	0.514	4.44	5.2489
	23	Isopropyl ether (DIPE)	1.103	1.129	1.035	1.082	1.080	1.027	1.185	1.102	1.138	1.103	1.098	4.21	5.6696
	24	Vinyl acetate		0.340	0.318	0.360	0.387	0.344	0.413	0.399	0.415	0.407	0.377	9.82	5.8322
	25	1,1-Dichloroethane	0.585	0.615	0.565	0.611	0.589	0.565	0.651	0.605	0.631	0.592	0.601	4.54	5.8296
25	26	2-Butanol											0.000	0.00	0.0000
	27	tert-Butyl ethyl ether (ETBE)	0.774	0.775	0.756	0.823	0.779	0.725	0.849	0.797	0.814	0.775	0.787	4.52	6.2400
5	28	2-Butanone		0.050	0.049	0.050	0.054	0.053	0.061	0.061	0.065	0.060	0.056	10.70	6.4281
	29	2,2-Dichloropropane	0.523	0.531	0.479	0.511	0.492	0.476	0.530	0.504	0.524	0.484	0.512	4.01	6.6691
	30	cis-1,2-Dichlorbethene	0.406	0.424	0.392	0.408	0.406	0.395	0.444	0.418	0.434	0.409	0.413	4.03	6.8859
	31	Chloroform	0.719	0.670	0.594	0.591	0.585	0.552	0.630	0.580	0.613	0.592	0.612	8.00	6.9082
	32	Bromochloromethane	0.236	0.244	0.223	0.241	0.238	0.223	0.256	0.247	0.256	0.240	0.240	4.73	7.1481
	33	Tetrahydrofuran				0.038	0.034	0.030	0.037	0.035	0.039	0.036	0.035	8.25	7.2006
	34	Dibromofluoromethane	0.285	0.328	0.288	0.328	0.318	0.281	0.335	0.313			0.310	7.01	7.2281
	35	1,1,1-Trichloroethane	0.513	0.539	0.485	0.512	0.496	0.483	0.545	0.507	0.534	0.508	0.512	4.19	7.4993
	36	Cyclohexane	0.502	0.544	0.473	0.526	0.509	0.453	0.514	0.471			0.499	6.15	7.5244
	37	2,2,4-Trimethylpentane											0.000	0.00	0.0000
	38	1,1-Dichloropropene	0.168	0.181	0.168	0.177	0.168	0.164	0.185	0.175	0.183	0.173	0.174	4.16	7.7230
	39	Carbon tetrachloride	0.390	0.383	0.352	0.387	0.388	0.365	0.403	0.383	0.403	0.374	0.382	4.43	7.8785
	40	tert-Amyl methyl ether (TAME)	0.661	0.627	0.593	0.624	0.592	0.540	0.636	0.608	0.643	0.596	0.612	5.64	7.8989
	41	1,2-Dichloroethane-d4	0.208	0.216	0.193	0.222	0.217	0.196	0.462	0.414			0.241	7.18	7.9652
	42	Benzene	1.388	1.402	1.268	1.345	1.317	1.233	1.406	1.317	1.363	1.304	1.336	4.04	8.1304
	43	1,2-Dichloroethane	0.267	0.270	0.254	0.274	0.266	0.249	0.299	0.272	0.293	0.279	0.268	4.45	8.1037
	44	Trichloroethene	0.334	0.340	0.319	0.343	0.336	0.334	0.374	0.350	0.372	0.352	0.348	4.62	8.0723
	45	Methylcyclohexane	0.565	0.602	0.537	0.581	0.548	0.493	0.554	0.512			0.549	6.48	8.1853
	46	1,2-Dichloropropane	0.306	0.315	0.273	0.294	0.287	0.278	0.319	0.299	0.318	0.299	0.299	5.38	8.3509
	47	Bromodichloromethane	0.473	0.442	0.393	0.410	0.401	0.372	0.431	0.398	0.428	0.402	0.415	6.99	8.7316
20	48	1,4-Dioxane				0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	14.49	9.7831
	49	Dibromomethane	0.135	0.145	0.136	0.142	0.139	0.126	0.149	0.143	0.153	0.142	0.141	5.30	9.8235
	50	2-Chloroethyl vinyl ether			0.067	0.073	0.072	0.069	0.082	0.081	0.083	0.079	0.076	8.06	10.2338
5	51	4-Methyl-2-pentanone			0.084	0.104	0.134	0.128	0.156	0.154	0.164	0.152	0.136	18.90	10.2764
	52	cis-1,3-Dichloropropene	0.461	0.451	0.434	0.457	0.456	0.433	0.501	0.478	0.504	0.476	0.465	5.31	10.6250
	53	CHLOROBENZENE-D5	1	1	1	1	1	1	1	1	1	1	1	0	13.7168
	54	Toluene-d8	1.490	1.527	1.385	1.619	1.525	1.394	1.577	1.468			1.499	5.48	11.0301
	55	Toluene	1.818	1.915	1.660	1.801	1.716	1.701	1.883	1.727	1.852	1.736	1.776	4.50	11.1687
	56	Ethyl methacrylate			0.232	0.261	0.250	0.247	0.291	0.275	0.287	0.278	0.268	8.54	11.4708
	57	trans-1,3-Dichloropropene	0.400	0.405	0.376	0.415	0.403	0.390	0.444	0.420	0.457	0.425	0.414	4.62	11.4845
	58	1,1,2-Trichloroethane	0.246	0.228	0.220	0.238	0.226	0.216	0.243	0.233	0.245	0.231	0.233	3.95	11.7306
5	59	2-Hexanone			0.030	0.052	0.087	0.091	0.113	0.112	0.123	0.115	0.090	36.80	11.7312
	60	1,3-Dichloropropane	0.381	0.388	0.374	0.405	0.381	0.366	0.424	0.398	0.424	0.405	0.393	3.08	11.7553
	61	Tetrachloroethene	0.361	0.390	0.351	0.380	0.354	0.359	0.385	0.364	0.384	0.364	0.369	3.83	12.2990
	62	Dibromochloromethane	0.303	0.294	0.264	0.277	0.271	0.261	0.299	0.280	0.303	0.286	0.284	5.55	12.6665
	63	1,2-Dibromoethane	0.214	0.220	0.214	0.234	0.228	0.215	0.250	0.236	0.253	0.237	0.230	6.28	13.0383
	64	1-Chlorohexane	0.767	0.823	0.713	0.793	0.726	0.743	0.792	0.758	0.791	0.738	0.767	4.69	13.3080
	65	Chlorobenzene	1.046	1.088	1.007	1.069	1.028	1.023	1.125	1.046	1.110	1.045	1.059	3.64	13.7909
	66	1,1,1,2-Tetrachloroethane	0.322	0.330	0.313	0.330	0.314	0.313	0.346	0.324	0.343	0.324	0.326	3.59	13.8650
	67	Ethylbenzene	2.077	2.152	1.907	2.051	1.962	1.895	2.136	1.999	2.065	1.934	2.027	4.07	13.8813
2	68	m-Xylene & p-Xylene	1.533	1.584	1.421	1.517	1.455	1.428	1.558	1.455	1.488	1.396	1.484	4.23	14.0205
	69	o-Xylene	1.632	1.623	1.469	1.557	1.460	1.453	1.577	1.488	1.508	1.443	1.527	4.66	14.4428
	70	Styrene	1.217	1.208	1.133	1.197	1.144	1.136	1.225	1.180	1.225	1.135	1.184	3.98	14.9064
	71	Isopropylbenzene	2.023	2.125	1.896	2.060	1.959	1.959	2.123	1.989	2.061	1.924	2.012	3.97	15.5243
	72	1,2-DICHLOROBENZENE-D4	1	1	1	1	1	1	1	1	1	1	1	0	15.7588
	73	Bromoform		0.205	0.263	0.358	0.366	0.337	0.407	0.390	0.407	0.416	0.350	20.64	15.8569
	74	trans-1,4-Dichloro-2-butene			0.146	0.168	0.163	0.156	0.188	0.180	0.191	0.188	0.173	9.77	15.6338
	75	1,1,2,2-Tetrachloroethane	0.739	0.666	0.619	0.654	0.640	0.592	0.692	0.667	0.701	0.686	0.666	6.36	15.8620
	76	4-Bromofluorobenzene	1.452	1.437	1.269	1.380	1.340	1.232	1.447	1.339			1.362	6.06	16.0153
	77	1,2,3-Trichloropropane		0.141	0.153	0.173	0.169	0.159	0.187	0.177	0.190	0.185	0.170	9.82	16.1515
	78	n-Propylbenzene	6.717	6.904	5.903	6.314	6.264	6.304	6.894	6.414	6.634	6.581	6.502	5.03	16.2976
	79	Bromobenzene	3.995	4.049	3.936	4.001	3.984	3.984	4.111	4.036	4.086	4.083	4.029	5.26	16.3835
	80	1,3,5-Trimethylbenzene	4.332	4.422	3.707	4.047	3.995	4.012	4.417	4.116	4.229	4.145	4.155	5.49	16.6058
	81	2-Chlorotoluene	4.034	4.286	3.707	3.931	3.757	3.734	4.086	3.852	3.922	4.052	3.915	4.84	16.6354
	82	4-Chlorotoluene	3.476	3.662	3.090	3.315	3.333	3.290	3.693	3.482	3.612	3.750	3.466	5.46	16.7332
	83	tert-Butylbenzene	0.904	0.890	0.796	0.846	0.829	0.843	0.952	0.884	0.903	0.885	0.871	4.70	17.2872
	84	1,2,4-Trimethylbenzene	4.167	4.290	3.727	3.970	3.950	3.951	4.338	4.050	4.159	4.057	4.065	4.41	17.3598
	85	sec-Butylbenzene	5.982	6.152	5.164	5.666	5.498	5.526	6.078	5.608	5.827	5.611	5.711	5.27	17.8576
	86	p-Isopropyltoluene	4.497	4.809	4.021	4.441	4.249	4.230	4.673	4.319	4.467	4.329	4.403	5.47	17.8708
	87	1,3-Dichlorobenzene	1.964	2.088	1.795	1.913	1.873	1.877	2.093	1.953	2.023	1.967	1.955	4.87	18.0280
	88	1,2,3-Trimethylbenzene	3.969	4.104	3.570	3.741	3.683	3.588	3.989	3.749	3.851	3.706	3.795	4.70	18.1317
	89	1,4-Dichlorobenzene	2.063	2.052	1.795	1.880	1.857	1.826	2.011	1.885	1.928	1.870	1.916	4.92	18.1909
	90	n-Butylbenzene	4.854	4.963	4.183	4.515	4.392	4.402	4.823	4.508	4.603	4.346	4.560	5.46	18.4887
	91	1,2-Dichlorobenzene	1.624	1.664	1.514	1.605	1.566	1.495	1.701	1.592	1.659	1.596	1.602	4.06	18.7243
	92	1,2-Dibromo-3-chloropropane			0.067	0.087	0.093	0.084	0.105	0.102	0.112	0.108	0.095	16.02	19.7172
	93	1,2,4-Trichlorobenzene	1.082	1.145	0.939	1.141	1.133	1.108	1.288	1.237	1.294	1.228	1.169	7.49	20.6013
	94	Hexachlorobutadiene	0.665	0.692	0.611	0.670	0.668	0.696	0.776	0.730	0.759	0.700	0.697	6.95	20.9673
	95	Naphthalene	2.273	2.300	2.206	2.367	2.317	2.284	2.528	2.458	2.543	2.446	2.365	8.50	21.1480
	96	1,2,3-Trichlorobenzene	0.835	0.854	0.791	0.871	0.857	0.833	0.968	0.920	0.964	0.915	0.881	6.66	21.4665

Spike Amount = Nominal Amount * M
Ave_%RSD : 6.8 Max_%RSD : 36.8

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
7	Bromomethane	0.00783	0.36169	0.9993
51	4-Methyl-2-pentanone	-0.04242	0.15630	0.9988
59	2-Hexanone	-0.05681	0.11740	0.9987
73	Bromoform	-0.01353	0.40678	0.9992
92	1,2-Dibromo-3-chloropropane	-0.00559	0.10796	0.9987

SC 5/15/24

INITIAL_CALIBRATION - RELATIVE_RESPONSE_FACTOR(%REC)

Instrument ID :01
Beginning DateTime :05/11/24 10:58
Spike Units :PPB
IC File :REV201

Column Spec :RXI-624SILMS ID :0.25MM
Ending DateTime :05/11/24 15:26
HPChem Method :VO01E11

M	IDX	Parameters	.3 10:58 REV196	.5 11:27 REV197	1 11:56 REV198	2 12:30 REV199	5 12:59 REV200	10 13:28 REV201	20 13:58 REV202	30 14:27 REV203	50 14:56 REV204	100 15:26 REV205	AvDRec	%_RSD	Av_Rt_M
	1	1,4-DIFLUOROBENZENE	1	1	1	1	1	1	1	1	1	1	1	0	8.5509
	2	Chlorotrifluoroethylene											0.000	0.00	0.0000
	3	Dichlorodifluoromethane	103	108	92	102	99	95	101	99	102	99	3.4	4.44	2.1690
	4	2-Chloro-1,1,1-trifluoroethane											0.000	0.00	0.0000
	5	Chloromethane	114	108	97	105	101	93	101	94	97	90	5.9	7.39	2.4709
	6	Vinyl chloride	98	102	91	108	108	99	106	98	100	90	4.8	6.31	2.6048
	7	Bromomethane		114	99	101	95	88	103	97	103	100	12.3	17.96	3.1458
	8	Chloroethane	104	101	95	96	100	93	104	100	106	103	3.4	4.21	3.1896
	9	Dichlorofluoromethane	117	110	98	100	94	90	102	95	100	93	5.9	8.21	3.2755
	10	Trichlorofluoromethane	104	110	96	105	101	94	99	96	100	95	4.1	5.20	3.5526
5	11	Acrolein				100	100	91	109	100	109	105	4.5	5.86	3.9857
	12	1,1,2-Trichloro-1,2,2-trifluoroethane	82	103	93	109	100	100	106	103	108	95	5.9	8.11	4.0696
5	13	Acetone			132	100	97	84	95	92	100	92	9.1	14.45	4.0577
	14	1,1-Dichloroethene	97	103	91	103	98	96	107	101	106	99	3.7	4.74	4.2296
25	15	tert-Butyl alcohol	91	91	91	100	100	91	109	109	118	109	8.2	9.12	4.3422
	16	Iodomethane	97	99	92	100	98	95	108	102	107	102	3.6	4.85	4.6385
	17	Methyl acetate				114	101	84	102	97			7.2	10.84	4.6531
	18	Methylene chloride	105	103	98	102	98	93	104	96	103	97	3.4	3.90	4.8577
	19	Carbon disulfide	110	95	94	99	101	94	108	99			4.7	6.08	4.8800
5	20	Acrylonitrile	107	100	96	96	100	93	104	100	107	102	3.5	4.77	5.0252
	21	tert-Butyl methyl ether (MTBE)	102	105	95	101	98	90	105	100	104	99	3.4	4.67	5.0607
	22	trans-1,2-Dichloroethene	98	101	96	102	98	93	107	101	106	98	3.3	4.44	5.2489
	23	Isopropyl ether (DIPE)	100	102	94	99	98	94	108	100	104	100	3	4.21	5.6696
	24	Vinyl acetate		90	84	95	105	91	110	106	110	108	8.7	9.82	5.8322
	25	1,1-Dichloroethane	97	102	94	102	98	94	108	101	105	99	3.6	4.54	5.8296
	26	2-Butanol											0.000	0.00	0.0000
25	27	tert-Butyl ethyl ether (ETBE)	98	98	96	105	99	92	108	101	103	98	3.5	4.52	6.2400
5	28	2-Butanone		00	00	89	96	95	109	109	116	107	9.3	10.70	6.4281
	29	2,2-Dichloropropane	104	105	95	101	97	94	105	100	103	96	3.6	4.21	6.6281
	30	cis-1,2-Dichloroethene	98	102	95	99	98	95	107	101	105	99	3.2	4.03	6.6859
	31	Chloroform	117	109	97	97	96	90	103	95	100	97	5.9	8.00	6.9082
	32	Bromochloromethane	98	102	93	100	99	93	107	103	107	100	3.5	4.73	7.1481
	33	Tetrahydrofuran				109	97	86	106	100	111	103	6.5	8.25	7.2006
	34	Dibromofluoromethane	92	106	93	106	103	91	108	101			6	7.01	7.2281
	35	1,1,1-Trichloroethane	100	105	95	100	97	94	106	99	104	99	3.2	4.19	7.4993
	36	Cyclohexane	101	109	95	105	102	91	103	94			5	6.15	7.5244
	37	2,2,4-Trimethylpentane											0.000	0.00	0.0000
	38	1,1-Dichloropropene	97	104	97	102	97	94	106	101	105	99	3.4	4.16	7.7230
	39	Carbon tetrachloride	102	103	92	101	96	96	105	100	105	98	3.6	4.43	7.8785
	40	tert-Amyl methyl ether (TAME)	108	102	97	102	96	88	104	99	105	97	4.3	5.64	7.8889
	41	1,2-Dichloroethane-d4	99	102	91	109	103	88	107	102			5.6	7.18	7.9652
	42	Benzene	104	105	95	101	99	94	105	98	102	98	3.4	4.04	8.1304
	43	1,2-Dichloroethane	99	100	94	102	99	93	107	101	105	100	3.1	4.45	8.1037
	44	Trichloroethene	97	98	92	99	97	97	108	101	108	102	3.9	4.96	9.0723
	45	Methylcyclohexane	103	110	98	106	100	90	101	93			4.8	6.46	9.1653
	46	1,2-Dichloropropane	102	105	91	98	96	93	107	100	106	100	4.2	5.38	9.3509
	47	Bromodichloromethane	114	107	95	99	97	90	104	96	103	97	5.5	6.99	9.7316
20	48	1,4-Dioxane				76	93	89	110	106	117	109	0	14.49	9.7831
	49	Dibromomethane	96	103	96	101	99	89	106	101	109	101	4	5.30	9.8235
	50	2-Chloroethyl vinyl ether			88	96	95	91	108	107	109	104	7.2	8.06	10.2338
5	51	4-Methyl-2-pentanone			115	93	93	87	101	99	106	98	15.4	18.90	10.2764
	52	cis-1,3-Dichloropropene	99	97	93	98	98	93	108	103	108	102	4.2	5.31	10.6250
	53	CHLOROBENZENE-D5	1	1	1	1	1	1	1	1	1	1	1	0	13.7168
	54	Toluene-d8	99	102	92	108	102	93	105	98			4.3	5.48	11.0301
	55	Toluene	102	108	93	101	97	96	103	97	104	98	3.8	4.50	11.1687
	56	Ethyl methacrylate			87	98	94	93	109	103	112	105	7.1	8.54	11.4708
	57	trans-1,3-Dichloropropene	97	98	91	100	98	94	108	102	109	103	4.4	5.62	11.4842
	58	1,1,2-Trichloroethane	106	98	94	102	97	93	104	100	105	99	3.6	4.45	11.7509
5	59	2-Hexanone			123	93	93	87	101	99	106	99	28.5	36.80	11.7912
	60	1,3-Dichloropropane	96	98	95	103	96	93	107	101	107	103	4.2	5.08	12.1953
	61	Tetrachloroethene	98	106	95	103	96	97	104	99	104	99	3.4	3.83	12.2990
	62	Dibromochloromethane	107	104	93	98	95	92	105	99	107	101	4.6	5.55	12.6665
	63	1,2-Dibromoethane	93	96	93	102	99	93	109	103	110	103	5.2	6.28	13.0383
	64	1-Chlorohexane	103	107	93	103	95	97	103	99	103	96	4.1	4.69	13.3080
	65	Chlorobenzene	99	103	95	101	97	97	106	99	105	99	3	3.64	13.7909
	66	1,1,1,2-Tetrachloroethane	100	101	96	101	96	96	106	99	105	99	2.7	3.59	13.8650
	67	Ethylbenzene	102	106	94	101	97	98	105	99	102	95	3.4	4.07	13.8813
2	68	m-Xylene & p-Xylene	103	107	96	102	98	96	105	98	100	94	3.5	4.23	14.0205
	69	o-Xylene	107	106	96	102	96	95	103	98	102	94	4.1	4.66	14.8428
	70	Styrene	103	102	96	101	97	96	106	100	104	96	3.2	3.78	14.9094
	71	Isopropylbenzene	101	106	94	102	97	97	106	99	102	96	3.3	3.97	15.5243
	72	1,2-DICHLOROBENZENE-D4	1	1	1	1	1	1	1	1	1	1	1	0	18.6798
	73	Bromoform		116	98	104	96	86	101	97	100	102	15.5	20.61	15.5589
	74	trans-1,4-Dichloro-2-butene			84	97	94	90	109	104	110	109	8.2	9.77	15.6338
	75	1,1,2,2-Tetrachloroethane	111	100	93	98	96	89	104	100	105	103	4.7	6.36	15.8650
	76	4-Bromofluorobenzene	107	106	93	101	98	90	106	98			4.9	6.06	16.0153
	77	1,2,3-Trichloropropane		83	90	102	99	94	110	104	112	109	7.8	9.82	16.1515
	78	n-Propylbenzene	103	108	91	97	96	97	106	99	102	101	4	5.03	16.2976
	79	Bromobenzene	97	102	91	97	98	96	108	101	106	105	4.3	5.26	16.3835
	80	1,3,5-Trimethylbenzene	105	108	90	97	96	97	106	99	102	100	4.2	5.49	16.6058
	81	2-Chlorotoluene	103	109	95	95	96	95	104	98	100	103	4	4.84	16.6354
	82	4-Chlorotoluene	100	106	89	101	100	98	107	100	104	94	3.9	5.46	16.7332
	83	tert-Butylbenzene	104	102	91	97	96	97	107	99	104	103	3.9	4.70	17.2872
	84	1,2,4-Trimethylbenzene	103	106	92	98	97	97	106	100	102	100	3.4	4.41	17.3598
	85	sec-Butylbenzene	105	108	90	99	96	97	106	98	102	98	4.2	5.27	17.6576
	86	p-Isopropyltoluene	102	109	91	101	97	96	106	98	101	98	4	5.17	17.8798
	87	1,3-Dichlorobenzene	100	107	92	98	96	96	107	100	103	101	3.7	4.87	18.0280
	88	1,2,3-Trimethylbenzene	105	108	94	99	97	95	105	99	101	98	3.9	4.70	18.1317
	89	1,4-Dichlorobenzene	108	107	94	98	97	95	105	98	101	98	4	4.92	18.1909
	90	n-Butylbenzene	106	109	92	99	96	97	106	99	101	95	4.4	5.46	18.4887
	91	1,2-Dichlorobenzene	101	104	95	100	98	93	106	99	104	100	3.1	4.06	18.7243
	92	1,2-Dibromo-3-chloropropane			114	106	96	83	100	96	104	101	12.6	16.02	19.7172
	93	1,2,4-Trichlorobenzene	93	98	89	98	97	95	110	106	111	105	6.3	7.49	20.8013
	94	Hexachlorobutadiene	95	99	88	96	96	100	111	105	109	100	5.1	6.95	20.9673
	95	Naphthalene	93	95	88	97	96	93	111	107	113	106	7.4	8.50	21.1480
	96	1,2,3-Trichlorobenzene	95	97	90	99	97	95	110	104	109	104	5.5	6.66	21.4665

For 8260 C
SM
5/15/24

Compound List Report 01

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	2.17	0.253	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	2.46	0.288	A	1	A	B
6	T	Vinyl chloride	62	2.61	0.305	A	1	A	B
7	T	Bromomethane	94	3.14	0.367	L	1	A	B
8	T	Chloroethane	64	3.18	0.373	A	1	A	B
9	T	Dichlorofluoromethane	67	3.27	0.383	A	1	A	B
10	T	Trichlorofluoromethane	101	3.55	0.416	A	1	A	B
11	T	Acrolein	56	3.98	0.466	A	1	A	B
12	T	1,1,2-Trichloro-1,2,2-trifluor	151	4.06	0.475	A	1	A	B
13	T	Acetone	43	4.06	0.475	A	1	A	B
14	T	1,1-Dichloroethene	61	4.22	0.494	A	2	A	B
15	T	tert-Butyl alcohol	59	4.34	0.508	A	1	A	B
16	T	Iodomethane	142	4.64	0.543	A	1	A	B
17	T	Methyl acetate	43	4.65	0.544	A	1	A	B
18	T	Methylene chloride	49	4.86	0.569	A	2	A	B
19	T	Carbon disulfide	76	4.87	0.570	A	1	A	B
20	T	Acrylonitrile	53	5.02	0.588	A	2	A	B
21	T	tert-Butyl methyl ether (MTBE)	73	5.07	0.593	A	1	A	B
22	T	trans-1,2-Dichloroethene	61	5.24	0.614	A	2	A	B
23	T	Isopropyl ether (DIPE)	45	5.67	0.664	A	1	A	B
24	T	Vinyl acetate	43	5.82	0.681	A	1	A	B
25	T	1,1-Dichloroethane	63	5.82	0.681	A	2	A	B
26	T	2-Butanol	45	6.16	0.721	A	1	A	B
27	T	tert-Butyl ethyl ether (ETBE)	59	6.24	0.730	A	1	A	B
28	T	2-Butanone	43	6.41	0.751	A	1	A	B
29	T	2,2-Dichloropropane	77	6.62	0.775	A	2	A	B
30	T	cis-1,2-Dichloroethene	96	6.68	0.782	A	2	A	B
31	T	Chloroform	83	6.90	0.808	A	2	A	B
32	T	Bromochloromethane	49	7.14	0.836	A	2	A	B
33	T	Tetrahydrofuran	42	7.20	0.842	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	0.881	A	1	A	B
37	T	2,2,4-Trimethylpentane	57	7.52	0.881	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	7.88	0.922	A	1	A	B
41	S	1,2-Dichloroethane-d4	65	7.97	0.933	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	9.17	1.073	A	2	A	B
46	T	1,2-Dichloropropane	63	9.34	1.094	A	1	A	B
47	T	Bromodichloromethane	83	9.73	1.139	A	1	A	B
48	T	1,4-Dioxane	88	9.79	1.146	A	1	A	B
49	T	Dibromomethane	93	9.82	1.149	A	2	A	B
50	T	2-Chloroethyl vinyl ether	63	10.23	1.198	A	2	A	B
51	T	4-Methyl-2-pentanone	43	10.26	1.201	L	3	A	B
52	T	cis-1,3-Dichloropropene	75	10.62	1.243	A	1	A	B

5V 5/15/24

53	I		CHLOROBENZENE-D5	117	13.71	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	0.814	A	1	A	B
56		T	Ethyl methacrylate	69	11.46	0.836	A	1	A	B
57		T	trans-1,3-Dichloropropene	75	11.48	0.837	A	1	A	B
58		T	1,1,2-Trichloroethane	97	11.74	0.856	A	2	A	B
59		T	2-Hexanone	43	11.76	0.857	L	1	A	B
60		T	1,3-Dichloropropane	76	12.19	0.889	A	1	A	B
61		T	Tetrachloroethene	164	12.29	0.896	A	3	A	B
62		T	Dibromochloromethane	129	12.66	0.923	A	1	A	B
63		T	1,2-Dibromoethane	107	13.03	0.950	A	1	A	B
64		T	1-Chlorohexane	91	13.30	0.970	A	1	A	B
65	P,M		Chlorobenzene	112	13.79	1.005	A	1	A	B
66		T	1,1,1,2-Tetrachloroethane	131	13.86	1.011	A	1	A	B
67		T	Ethylbenzene	91	13.88	1.012	A	1	A	B
68		T	m-Xylene & p-Xylene	91	14.01	1.022	A	1	A	B
69		T	o-Xylene	91	14.84	1.082	A	1	A	B
70		T	Styrene	104	14.90	1.086	A	2	A	B
71		T	Isopropylbenzene	105	15.52	1.132	A	3	A	B
72	I		1,2-DICHLOROBENZENE-D4	152	18.68	1.000	A	1	A	B
73		T	Bromoform	173	15.55	0.833	L	1	A	B
74		T	trans-1,4-Dichloro-2-butene	53	15.63	0.837	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	16.14	0.864	A	1	A	B
78		T	n-Propylbenzene	91	16.29	0.872	A	2	A	B
79		T	Bromobenzene	156	16.38	0.877	A	1	A	B
80		T	1,3,5-Trimethylbenzene	105	16.60	0.889	A	2	A	B
81		T	2-Chlorotoluene	91	16.63	0.891	A	1	A	B
82		T	4-Chlorotoluene	91	16.72	0.895	A	1	A	B
83		T	tert-Butylbenzene	134	17.29	0.925	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	0.957	A	2	A	B
87		T	1,3-Dichlorobenzene	146	18.03	0.965	A	2	A	B
88		T	1,2,3-Trimethylbenzene	105	18.13	0.971	A	2	A	B
89		T	1,4-Dichlorobenzene	146	18.19	0.974	A	2	A	B
90		T	n-Butylbenzene	91	18.49	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	19.71	1.055	L	1	A	B
93		T	1,2,4-Trichlorobenzene	180	20.80	1.113	A	2	A	B
94		T	Hexachlorobutadiene	225	20.96	1.122	A	1	A	B
95		T	Naphthalene	128	21.14	1.132	A	1	A	B
96		T	1,2,3-Trichlorobenzene	180	21.46	1.149	A	2	A	B

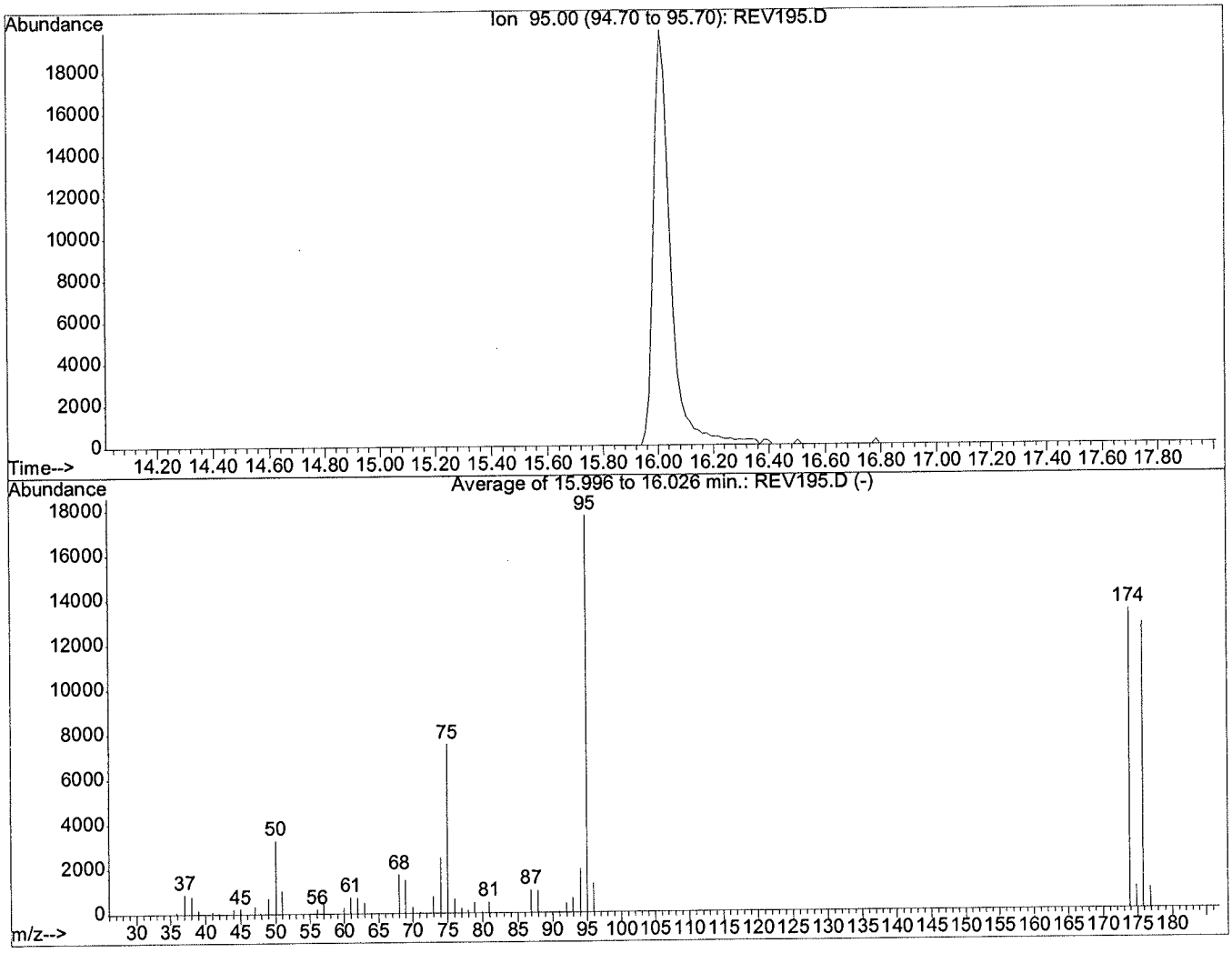
Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
#Qual = number of qualifiers
A/H = Area or Height
ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

VO01E11.M Mon May 13 14:36:08 2024

5/15/24

Data File : D:\HPCHEM\1\DATA\24E11\REV195.D
Acq On : 11 May 2024 10:20 am
Sample : BFB01E11
Misc : T/CHK
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls

Vial: 1
Operator: LPriet
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	18.5	3281	PASS
75	95	30	60	42.5	7529	PASS
95	95	100	100	100.0	17719	PASS
96	95	5	9	7.3	1291	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	75.4	13365	PASS
175	174	5	9	7.4	989	PASS
176	174	95	101	95.5	12770	PASS
177	176	5	9	7.1	901	PASS

REV195.D VO01E11.M Mon May 13 14:35:03 2024 SW 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV196.D Vial: 2
Acq On : 11 May 2024 10:58 am Operator: LPriet
Sample : VO01E111 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: May 13 14:29 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.55	114	981871	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.72	117	797187	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	299571	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	8387	0.28	ug/l	0.00
Spiked Amount 10.000			Recovery =	2.80%		
41) 1,2-Dichloroethane-d4	7.95	65	6117	0.30	ug/l	-0.01
Spiked Amount 10.000			Recovery =	3.00%		
54) Toluene-d8	11.03	98	35624	0.30	ug/l	0.00
Spiked Amount 10.000			Recovery =	3.00%		
76) 4-Bromofluorobenzene	16.03	95	13047	0.32	ug/l	0.02
Spiked Amount 10.000			Recovery =	3.20%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.16	85	8140	0.31	ug/l	65
5) Chloromethane	2.46	50	12543	0.34	ug/l	86
6) Vinyl chloride	2.59	62	8988	0.29	ug/l	89
8) Chloroethane	3.18	64	6888	0.31	ug/l	80
9) Dichlorofluoromethane	3.26	67	22206	0.35	ug/l	73
10) Trichlorofluoromethane	3.52	101	12948	0.31	ug/l	100
12) 1,1,2-Trichloro-1,2,2-trif	4.06	151	5097	0.25	ug/l	94
14) 1,1-Dichloroethene	4.22	61	15229	0.29	ug/l	94
15) tert-Butyl alcohol	4.34	59	7470	6.83	ug/l	79
16) Iodomethane	4.62	142	16364	0.29	ug/l	99
18) Methylene chloride	4.84	49	13215	0.31	ug/l	98
19) Carbon disulfide	4.87	76	36989	0.33	ug/l	99
20) Acrylonitrile	5.02	53	7271	1.60	ug/l	91
21) tert-Butyl methyl ether (M	5.05	73	15688	0.30	ug/l	81
22) trans-1,2-Dichloroethene	5.24	61	14865	0.29	ug/l	99
23) Isopropyl ether (DIPE)	5.66	45	32481	0.30	ug/l	98
25) 1,1-Dichloroethane	5.82	63	17229	0.29	ug/l	98
27) tert-Butyl ethyl ether (ET	6.24	59	22788	0.30	ug/l	100
29) 2,2-Dichloropropane	6.62	77	15398	0.31	ug/l	97
30) cis-1,2-Dichloroethene	6.68	96	11947	0.29	ug/l	98
31) Chloroform	6.90	83	21166	0.35	ug/l	98
32) Bromochloromethane	7.14	49	6943	0.29	ug/l	91
35) 1,1,1-Trichloroethane	7.49	97	15125	0.30	ug/l	97
36) Cyclohexane	7.52	84	14801	0.30	ug/l	88
38) 1,1-Dichloropropene	7.72	110	4945	0.29	ug/l	94
39) Carbon tetrachloride	7.87	119	11491	0.31	ug/l	97
40) tert-Amyl methyl ether (TA	7.89	73	19458	0.32	ug/l	91

(#) = qualifier out of range (m) = manual integration

Sw 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV196.D
Acq On : 11 May 2024 10:58 am
Sample : VO01E111 0.03/0.15
Misc : 0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 14:29 2024

Vial: 2
Operator: LPriet
Inst : 01
Multiplr: 1.00

Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
42) Benzene	8.12	78	40894	0.31	ug/l	98
43) 1,2-Dichloroethane	8.10	62	7854	0.30	ug/l	93
44) Trichloroethene	9.08	130	9853	0.29	ug/l	97
45) Methylcyclohexane	9.17	83	16634	0.31	ug/l	98
46) 1,2-Dichloropropane	9.36	63	9009	0.31	ug/l	91
47) Bromodichloromethane	9.73	83	13928	0.34	ug/l	78
49) Dibromomethane	9.82	93	3964	0.29	ug/l	85
52) cis-1,3-Dichloropropene	10.63	75	13583	0.30	ug/l	94
55) Toluene	11.17	91	43467	0.31	ug/l	97
57) trans-1,3-Dichloropropene	11.49	75	9569	0.29	ug/l	95
58) 1,1,2-Trichloroethane	11.76	97	5879	0.32	ug/l	95
60) 1,3-Dichloropropane	12.21	76	9101	0.29	ug/l	94
61) Tetrachloroethene	12.29	164	8630	0.29	ug/l	98
62) Dibromochloromethane	12.68	129	7252	0.32	ug/l	99
63) 1,2-Dibromoethane	13.05	107	5114	0.28	ug/l	93
64) 1-Chlorohexane	13.32	91	18908	0.31	ug/l	95
65) Chlorobenzene	13.79	112	25024	0.30	ug/l	99
66) 1,1,1,2-Tetrachloroethane	13.86	131	7766	0.30	ug/l	97
67) Ethylbenzene	13.89	91	49666	0.31	ug/l	99
68) m-Xylene & p-Xylene	14.03	91	73348	0.62	ug/l	99
69) o-Xylene	14.84	91	39020	0.32	ug/l	95
70) Styrene	14.93	104	29115	0.31	ug/l	95
71) Isopropylbenzene	15.52	105	48372	0.30	ug/l	99
75) 1,1,2,2-Tetrachloroethane	15.86	83	6639	0.33	ug/l	100
78) n-Propylbenzene	16.31	91	60366	0.31	ug/l	99
79) Bromobenzene	16.38	156	8946	0.29	ug/l	100
80) 1,3,5-Trimethylbenzene	16.61	105	39112	0.31	ug/l	100
81) 2-Chlorotoluene	16.63	91	36258	0.31	ug/l	99
82) 4-Chlorotoluene	16.74	91	31256	0.30	ug/l	99
83) tert-Butylbenzene	17.29	134	8128	0.31	ug/l	96
84) 1,2,4-Trimethylbenzene	17.36	105	37452	0.31	ug/l	99
85) sec-Butylbenzene	17.66	105	53765	0.31	ug/l	98
86) p-Isopropyltoluene	17.88	119	40416	0.31	ug/l	94
87) 1,3-Dichlorobenzene	18.03	146	17654	0.30	ug/l	99
88) 1,2,3-Trimethylbenzene	18.13	105	35674	0.31	ug/l	97
89) 1,4-Dichlorobenzene	18.19	146	18537	0.32	ug/l	97
90) n-Butylbenzene	18.50	91	43628	0.32	ug/l	95
91) 1,2-Dichlorobenzene	18.72	146	14596	0.30	ug/l	96
93) 1,2,4-Trichlorobenzene	20.81	180	9721	0.28	ug/l	99
94) Hexachlorobutadiene	20.96	225	5978	0.29	ug/l	94
95) Naphthalene	21.15	128	11441	0.28	ug/l	94

(#) = qualifier out of range (m) = manual integration

SW 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV196.D Vial: 2
Acq On : 11 May 2024 10:58 am Operator: LPriet
Sample : VO01E111 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: May 13 14:29 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
96) 1,2,3-Trichlorobenzene	21.46	180	7501	0.28	ug/l	96

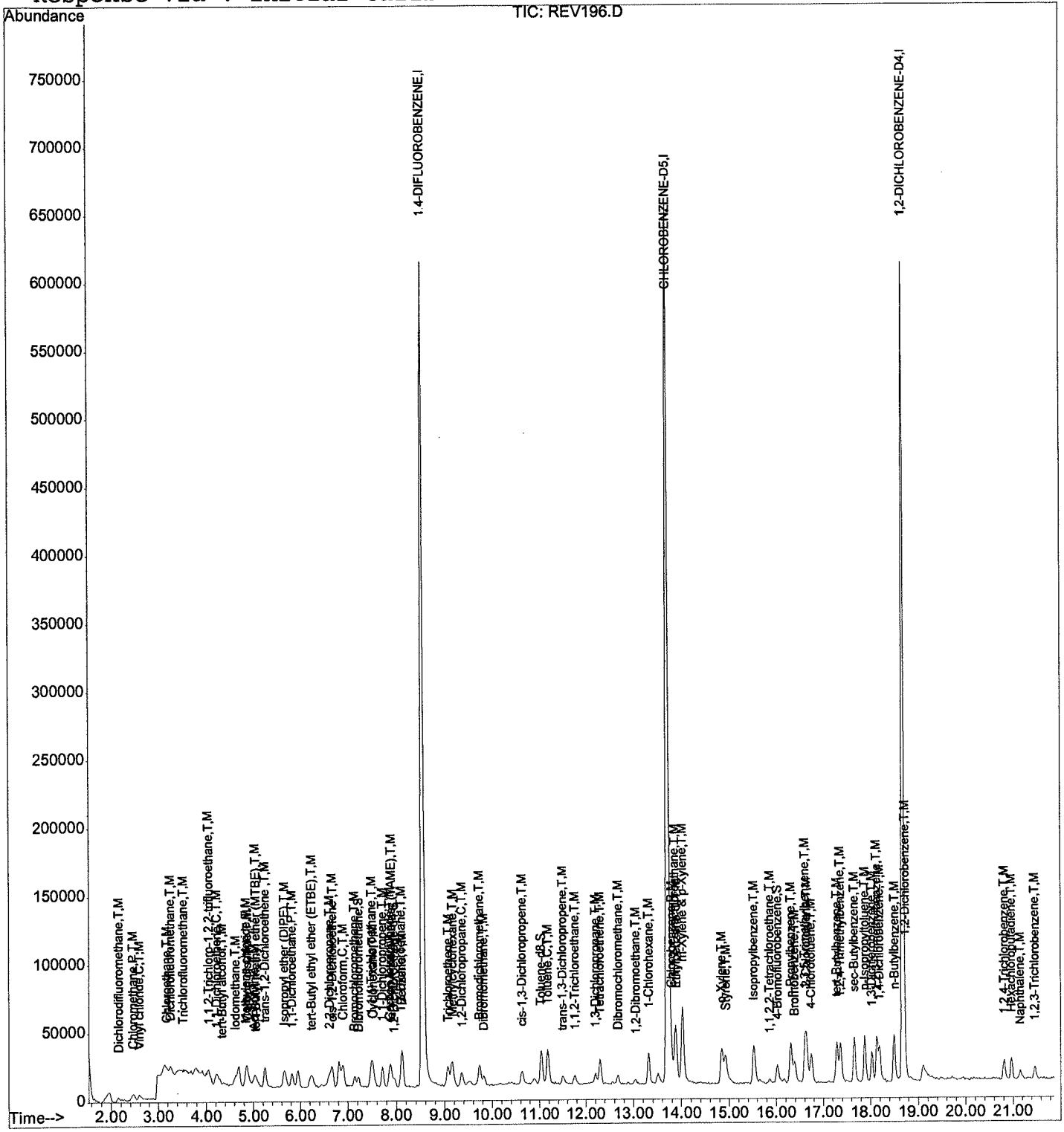
SM 5/15/24

(#) = qualifier out of range (m) = manual integration
REV196.D VO01E11.M Mon May 13 14:29:12 2024 Page 3

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E11\REV196.D Vial: 2
Acq On : 11 May 2024 10:58 am Operator: LPriet
Sample : VO01E111 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: May 13 14:29 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV197.D
Acq On : 11 May 2024 11:27 am
Sample : VO01E112 0.05/0.25
Misc : 0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 14:30 2024

Vial: 3
Operator: LPriet
Inst : 01
Multiplr: 1.00

Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.54	114	958207	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	782724	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	292911	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	15713	0.53	ug/l	0.00
Spiked Amount 10.000			Recovery =	5.30%		
41) 1,2-Dichloroethane-d4	7.97	65	10333	0.51	ug/l	0.00
Spiked Amount 10.000			Recovery =	5.10%		
54) Toluene-d8	11.03	98	59771	0.51	ug/l	0.00
Spiked Amount 10.000			Recovery =	5.10%		
76) 4-Bromofluorobenzene	16.01	95	21050	0.53	ug/l	0.00
Spiked Amount 10.000			Recovery =	5.30%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.17	85	13823	0.54	ug/l	95
5) Chloromethane	2.47	50	19466	0.54	ug/l	94
6) Vinyl chloride	2.60	62	15272	0.51	ug/l	97
7) Bromomethane	3.14	94	27166	0.57	ug/l	73
8) Chloroethane	3.18	64	10907	0.50	ug/l	88
9) Dichlorofluoromethane	3.27	67	33964	0.55	ug/l	88
10) Trichlorofluoromethane	3.55	101	22334	0.55	ug/l	96
12) 1,1,2-Trichloro-1,2,2-trif	4.06	151	10414	0.52	ug/l	99
14) 1,1-Dichloroethene	4.22	61	26419	0.52	ug/l	97
15) tert-Butyl alcohol	4.35	59	11518	10.80	ug/l	75
16) Iodomethane	4.64	142	27278	0.50	ug/l	99
18) Methylene chloride	4.86	49	21078	0.51	ug/l	99
19) Carbon disulfide	4.87	76	52077	0.48	ug/l	98
20) Acrylonitrile	5.04	53	11053	2.49	ug/l	93
21) tert-Butyl methyl ether (M	5.05	73	26332	0.52	ug/l	92
22) trans-1,2-Dichloroethene	5.24	61	24833	0.50	ug/l	98
23) Isopropyl ether (DIPE)	5.67	45	53730	0.51	ug/l	97
24) Vinyl acetate	5.85	43	16307	0.45	ug/l	86
25) 1,1-Dichloroethane	5.82	63	29442	0.51	ug/l	97
27) tert-Butyl ethyl ether (ET	6.24	59	37115	0.49	ug/l	96
28) 2-Butanone	6.46	43	11997	2.24	ug/l	72
29) 2,2-Dichloropropane	6.62	77	25455	0.53	ug/l	98
30) cis-1,2-Dichloroethene	6.68	96	20337	0.51	ug/l	99
31) Chloroform	6.90	83	32100	0.55	ug/l	99
32) Bromochloromethane	7.14	49	11696	0.51	ug/l	95
35) 1,1,1-Trichloroethane	7.50	97	25812	0.53	ug/l	98
36) Cyclohexane	7.52	84	26045	0.54	ug/l	94

(#) = qualifier out of range (m) = manual integration

SU 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV197.D Vial: 3
Acq On : 11 May 2024 11:27 am Operator: LPriet
Sample : VO01E112 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: May 13 14:30 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38)	1,1-Dichloropropene	7.72	110	8678	0.52	ug/l	98
39)	Carbon tetrachloride	7.88	119	18823	0.51	ug/l	98
40)	tert-Amyl methyl ether (TA	7.88	73	30034	0.51	ug/l	99
42)	Benzene	8.13	78	67162	0.52	ug/l	99
43)	1,2-Dichloroethane	8.10	62	12935	0.50	ug/l	96
44)	Trichloroethene	9.08	130	16301	0.49	ug/l	93
45)	Methylcyclohexane	9.17	83	28860	0.55	ug/l	98
46)	1,2-Dichloropropane	9.36	63	15082	0.53	ug/l	92
47)	Bromodichloromethane	9.73	83	21158	0.53	ug/l	92
49)	Dibromomethane	9.83	93	6952	0.51	ug/l	88
52)	cis-1,3-Dichloropropene	10.63	75	21629	0.49	ug/l	99
55)	Toluene	11.17	91	74965	0.54	ug/l	95
57)	trans-1,3-Dichloropropene	11.49	75	15855	0.49	ug/l	96
58)	1,1,2-Trichloroethane	11.76	97	8909	0.49	ug/l	95
60)	1,3-Dichloropropane	12.20	76	15204	0.49	ug/l	97
61)	Tetrachloroethene	12.31	164	15270	0.53	ug/l	99
62)	Dibromochloromethane	12.66	129	11514	0.52	ug/l	99
63)	1,2-Dibromoethane	13.05	107	8602	0.48	ug/l	99
64)	1-Chlorohexane	13.31	91	32200	0.54	ug/l	99
65)	Chlorobenzene	13.79	112	42586	0.51	ug/l	99
66)	1,1,1,2-Tetrachloroethane	13.86	131	12904	0.51	ug/l	99
67)	Ethylbenzene	13.88	91	84216	0.53	ug/l	99
68)	m-Xylene & p-Xylene	14.03	91	123954	1.07	ug/l	99
69)	o-Xylene	14.84	91	63511	0.53	ug/l	99
70)	Styrene	14.91	104	47295	0.51	ug/l	98
71)	Isopropylbenzene	15.52	105	83169	0.53	ug/l	98
73)	Bromoform	15.57	173	2997	0.58	ug/l	70
75)	1,1,2,2-Tetrachloroethane	15.86	83	9761	0.50	ug/l	94
77)	1,2,3-Trichloropropane	16.17	110	2065	0.41	ug/l	98
78)	n-Propylbenzene	16.31	91	102429	0.54	ug/l	99
79)	Bromobenzene	16.38	156	15359	0.51	ug/l	98
80)	1,3,5-Trimethylbenzene	16.60	105	65890	0.54	ug/l	99
81)	2-Chlorotoluene	16.63	91	62476	0.54	ug/l	99
82)	4-Chlorotoluene	16.74	91	53625	0.53	ug/l	100
83)	tert-Butylbenzene	17.29	134	13038	0.51	ug/l	98
84)	1,2,4-Trimethylbenzene	17.36	105	62834	0.53	ug/l	94
85)	sec-Butylbenzene	17.66	105	90100	0.54	ug/l	99
86)	p-Isopropyltoluene	17.88	119	70430	0.55	ug/l	95
87)	1,3-Dichlorobenzene	18.03	146	30579	0.53	ug/l	97
88)	1,2,3-Trimethylbenzene	18.13	105	60108	0.54	ug/l	97
89)	1,4-Dichlorobenzene	18.19	146	30059	0.54	ug/l	97

(#) = qualifier out of range (m) = manual integration SA 5/15/24
REV197.D VO01E11.M Mon May 13 14:30:16 2024 Page 2

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV197.D
Acq On : 11 May 2024 11:27 am
Sample : VO01E112 0.05/0.25
Misc : 0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA
Vial: 3
Operator: LPriet
Inst : 01
Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:30 2024
Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
90) n-Butylbenzene	18.49	91	72685	0.54	ug/l	98
91) 1,2-Dichlorobenzene	18.72	146	24372	0.52	ug/l	97
93) 1,2,4-Trichlorobenzene	20.81	180	16768	0.49	ug/l	98
94) Hexachlorobutadiene	20.96	225	10138	0.50	ug/l	96
95) Naphthalene	21.15	128	19046	0.48	ug/l	100
96) 1,2,3-Trichlorobenzene	21.48	180	12506	0.48	ug/l	96

Sm 5/15/24

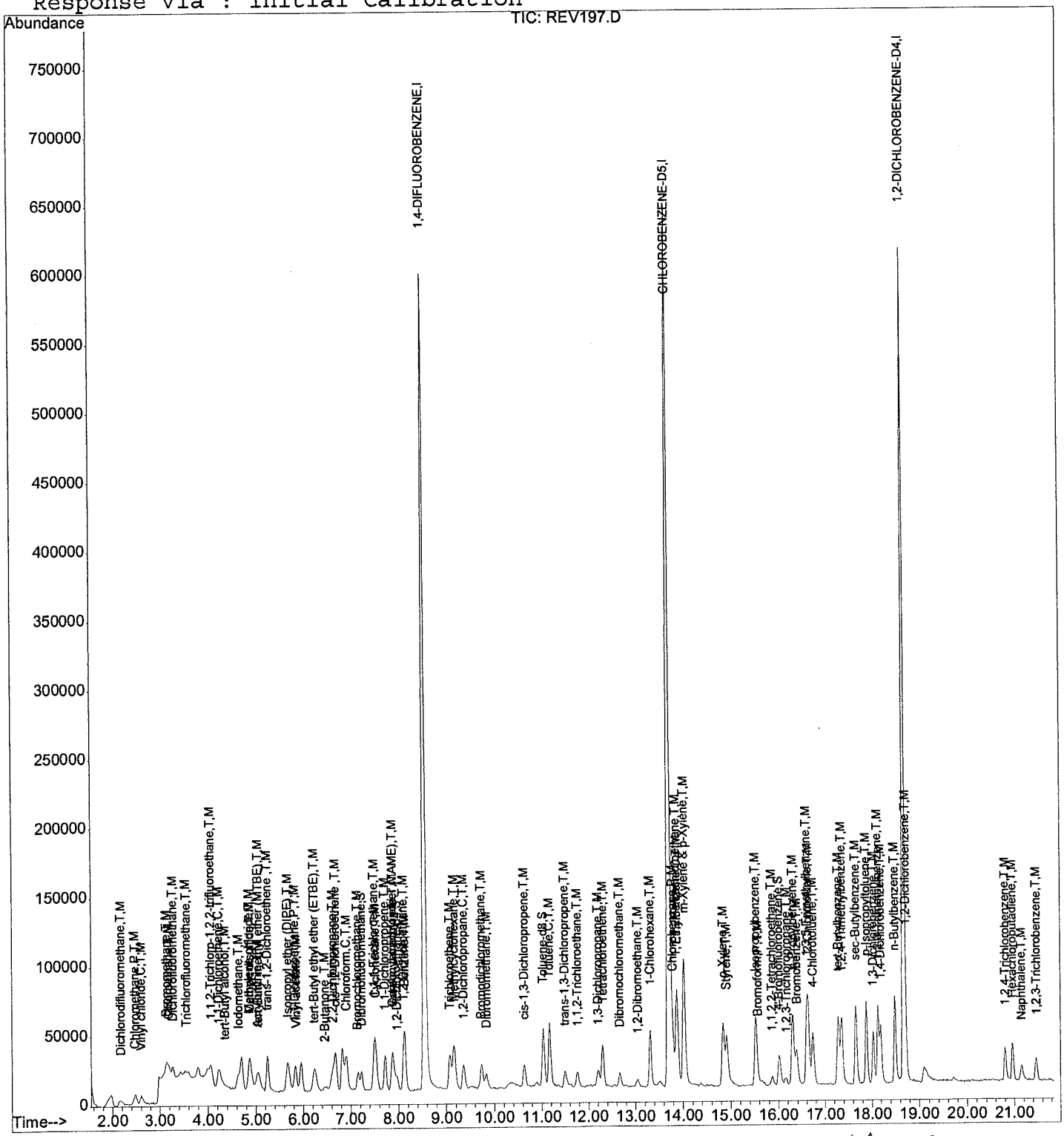
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E11\REV197.D
Acq On : 11 May 2024 11:27 am
Sample : VO01E112 0.05/0.25
Misc : 0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 14:30 2024

Vial: 3
Operator: LPriet
Inst : 01
Multiplr: 1.00
Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV198.D
Acq On : 11 May 2024 11:56 am
Sample : VO01E113 0.1/0.5
Misc : 1ppb 8260/5ppb KET-AA/25ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 14:30 2024

Vial: 4
Operator: LPriet
Inst : 01
Multiplr: 1.00

Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.54	114	938282	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	769560	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	301168	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	27033	0.93	ug/l	0.00
Spiked Amount 10.000			Recovery =	9.30%		
41) 1,2-Dichloroethane-d4	7.97	65	18064	0.91	ug/l	0.00
Spiked Amount 10.000			Recovery =	9.10%		
54) Toluene-d8	11.03	98	106585	0.92	ug/l	0.00
Spiked Amount 10.000			Recovery =	9.20%		
76) 4-Bromofluorobenzene	16.01	95	38225	0.93	ug/l	0.00
Spiked Amount 10.000			Recovery =	9.30%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.16	85	23088	0.92	ug/l	94
5) Chloromethane	2.46	50	33932	0.97	ug/l	95
6) Vinyl chloride	2.60	62	26741	0.91	ug/l	96
7) Bromomethane	3.14	94	40909	0.99	ug/l	78
8) Chloroethane	3.18	64	20092	0.95	ug/l	95
9) Dichlorofluoromethane	3.27	67	59133	0.98	ug/l	89
10) Trichlorofluoromethane	3.54	101	38039	0.96	ug/l	99
12) 1,1,2-Trichloro-1,2,2-trif	4.07	151	18470	0.93	ug/l	97
13) Acetone	4.06	43	22798	6.66	ug/l	97
14) 1,1-Dichloroethene	4.24	61	45534	0.91	ug/l	98
15) tert-Butyl alcohol	4.35	59	24124	23.10	ug/l	96
16) Iodomethane	4.64	142	49230	0.92	ug/l	99
18) Methylene chloride	4.86	49	39235	0.98	ug/l	97
19) Carbon disulfide	4.89	76	100956	0.94	ug/l	98
20) Acrylonitrile	5.04	53	20752	4.78	ug/l	96
21) tert-Butyl methyl ether (M	5.07	73	46754	0.95	ug/l	93
22) trans-1,2-Dichloroethene	5.24	61	46060	0.96	ug/l	98
23) Isopropyl ether (DIPE)	5.67	45	97086	0.94	ug/l	99
24) Vinyl acetate	5.85	43	29673	0.84	ug/l	95
25) 1,1-Dichloroethane	5.84	63	53046	0.94	ug/l	99
27) tert-Butyl ethyl ether (ET	6.24	59	70971	0.96	ug/l	99
28) 2-Butanone	6.46	43	22810	4.34	ug/l	98
29) 2,2-Dichloropropane	6.64	77	44935	0.95	ug/l	99
30) cis-1,2-Dichloroethene	6.70	96	36770	0.95	ug/l	100
31) Chloroform	6.90	83	55743	0.97	ug/l	99
32) Bromochloromethane	7.15	49	20957	0.93	ug/l	97
35) 1,1,1-Trichloroethane	7.50	97	45525	0.95	ug/l	98

(#) = qualifier out of range (m) = manual integration

SA 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV198.D
Acq On : 11 May 2024 11:56 am
Sample : VO01E113 0.1/0.5
Misc : 1ppb 8260/5ppb KET-AA/25ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 14:30 2024

Vial: 4
Operator: LPriet
Inst : 01
Multiplr: 1.00
Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
36)	Cyclohexane	7.52	84	44404	0.95	ug/l	94
38)	1,1-Dichloropropene	7.72	110	15802	0.97	ug/l	96
39)	Carbon tetrachloride	7.88	119	33069	0.92	ug/l	99
40)	tert-Amyl methyl ether (TA	7.90	73	55848	0.97	ug/l	96
42)	Benzene	8.13	78	118978	0.95	ug/l	100
43)	1,2-Dichloroethane	8.10	62	23808	0.94	ug/l	98
44)	Trichloroethene	9.08	130	29954	0.92	ug/l	98
45)	Methylcyclohexane	9.17	83	50363	0.98	ug/l	98
46)	1,2-Dichloropropane	9.36	63	25645	0.91	ug/l	99
47)	Bromodichloromethane	9.73	83	36838	0.95	ug/l	93
49)	Dibromomethane	9.83	93	12791	0.97	ug/l	94
50)	2-Chloroethyl vinyl ether	10.26	63	6310	0.89	ug/l	89
51)	4-Methyl-2-pentanone	10.31	43	44214	5.73	ug/l	98
52)	cis-1,3-Dichloropropene	10.63	75	40679	0.93	ug/l	98
55)	Toluene	11.17	91	127757	0.93	ug/l	99
56)	Ethyl methacrylate	11.54	69	17884	0.87	ug/l	84
57)	trans-1,3-Dichloropropene	11.49	75	28905	0.91	ug/l	100
58)	1,1,2-Trichloroethane	11.76	97	16916	0.95	ug/l	99
59)	2-Hexanone	11.92	43	11666	6.13	ug/l	79
60)	1,3-Dichloropropane	12.20	76	28770	0.95	ug/l	100
61)	Tetrachloroethene	12.31	164	26996	0.95	ug/l	97
62)	Dibromochloromethane	12.66	129	20338	0.93	ug/l	98
63)	1,2-Dibromoethane	13.03	107	16471	0.93	ug/l	99
64)	1-Chlorohexane	13.31	91	54872	0.93	ug/l	99
65)	Chlorobenzene	13.79	112	77497	0.95	ug/l	98
66)	1,1,1,2-Tetrachloroethane	13.86	131	24060	0.96	ug/l	96
67)	Ethylbenzene	13.88	91	146785	0.94	ug/l	99
68)	m-Xylene & p-Xylene	14.03	91	218771	1.92	ug/l	98
69)	o-Xylene	14.84	91	113075	0.96	ug/l	98
70)	Styrene	14.91	104	87190	0.96	ug/l	100
71)	Isopropylbenzene	15.52	105	145909	0.94	ug/l	100
73)	Bromoform	15.57	173	7931	0.98	ug/l	88
74)	trans-1,4-Dichloro-2-buten	15.66	53	4400	0.85	ug/l	88
75)	1,1,2,2-Tetrachloroethane	15.86	83	18640	0.93	ug/l	99
77)	1,2,3-Trichloropropane	16.14	110	4598	0.90	ug/l	94
78)	n-Propylbenzene	16.29	91	177771	0.91	ug/l	99
79)	Bromobenzene	16.38	156	28202	0.91	ug/l	99
80)	1,3,5-Trimethylbenzene	16.60	105	112460	0.90	ug/l	97
81)	2-Chlorotoluene	16.63	91	111646	0.95	ug/l	100
82)	4-Chlorotoluene	16.74	91	93055	0.89	ug/l	99
83)	tert-Butylbenzene	17.29	134	23977	0.91	ug/l	99

(#) = qualifier out of range (m) = manual integration

SM 5/15/24

Data File : D:\HPCHEM\1\DATA\24E11\REV198.D
Acq On : 11 May 2024 11:56 am
Sample : VO01E113 0.1/0.5
Misc : 1ppb 8260/5ppb KET-AA/25ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 14:30 2024

Vial: 4
Operator: LPriet
Inst : 01
Multiplr: 1.00
Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
84)	1,2,4-Trimethylbenzene	17.36	105	112239	0.92	ug/l	98
85)	sec-Butylbenzene	17.66	105	155515	0.90	ug/l	100
86)	p-Isopropyltoluene	17.88	119	121109	0.91	ug/l	97
87)	1,3-Dichlorobenzene	18.03	146	54062	0.92	ug/l	100
88)	1,2,3-Trimethylbenzene	18.13	105	107510	0.94	ug/l	99
89)	1,4-Dichlorobenzene	18.19	146	54049	0.94	ug/l	99
90)	n-Butylbenzene	18.49	91	126285	0.92	ug/l	99
91)	1,2-Dichlorobenzene	18.72	146	45597	0.95	ug/l	100
92)	1,2-Dibromo-3-chloropropan	19.71	157	2008	1.14	ug/l	82
93)	1,2,4-Trichlorobenzene	20.80	180	31265	0.89	ug/l	96
94)	Hexachlorobutadiene	20.97	225	18414	0.88	ug/l	96
95)	Naphthalene	21.15	128	36313	0.88	ug/l	99
96)	1,2,3-Trichlorobenzene	21.46	180	23830	0.90	ug/l	98

Sa 5/15/24

(#) = qualifier out of range (m) = manual integration

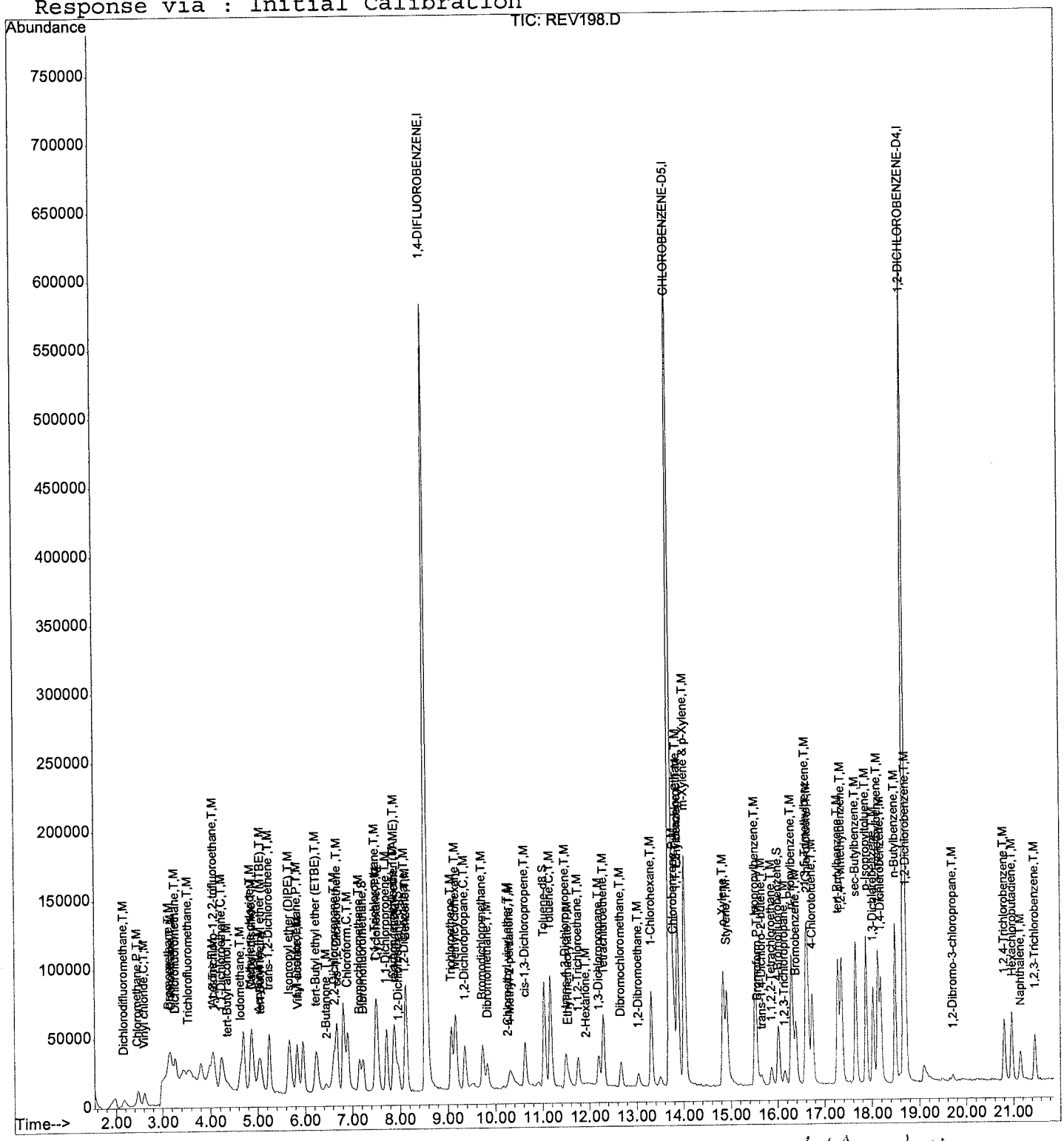
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E11\REV198.D
Acq On : 11 May 2024 11:56 am
Sample : VO01E113 0.1/0.5
Misc : 1ppb 8260/5ppb KET-AA/25ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 14:30 2024

Vial: 4
Operator: LPriet
Inst : 01
Multiplr: 1.00

Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



SY 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV199.D
Acq On : 11 May 2024 12:30 pm
Sample : VO01E114 0.2/1.0
Misc : 2ppb 8260/10ppb KET-AA/50ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 13:54 2024

Vial: 5
Operator: LPriet
Inst : 01
Multiplr: 1.00

Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.55	114	923954	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.72	117	742613	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	293562	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.21	111	60611	2.12	ug/l	-0.02
Spiked Amount 10.000			Recovery =	21.20%		
41) 1,2-Dichloroethane-d4	7.95	65	42296	2.17	ug/l	-0.01
Spiked Amount 10.000			Recovery =	21.70%		
54) Toluene-d8	11.02	98	240432	2.16	ug/l	-0.01
Spiked Amount 10.000			Recovery =	21.60%		
76) 4-Bromofluorobenzene	16.01	95	81025	2.03	ug/l	0.00
Spiked Amount 10.000			Recovery =	20.30%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.15	85	50374	2.04	ug/l	98
5) Chloromethane	2.47	50	72647	2.10	ug/l	93
6) Vinyl chloride	2.60	62	62031	2.15	ug/l	97
7) Bromomethane	3.14	94	74605	2.01	ug/l	87
8) Chloroethane	3.18	64	40122	1.92	ug/l	98
9) Dichlorofluoromethane	3.27	67	119218	2.01	ug/l	96
10) Trichlorofluoromethane	3.54	101	81560	2.09	ug/l	99
11) Acrolein	3.98	56	20592	9.92	ug/l	89
12) 1,1,2-Trichloro-1,2,2-trif	4.07	151	42426	2.18	ug/l	100
13) Acetone	4.04	43	34198	10.14	ug/l	99
14) 1,1-Dichloroethene	4.22	61	101014	2.05	ug/l	98
15) tert-Butyl alcohol	4.34	59	52952	51.48	ug/l	92
16) Iodomethane	4.64	142	105323	1.99	ug/l	100
17) Methyl acetate	4.65	43	21059	2.29	ug/l	89
18) Methylene chloride	4.84	49	80640	2.04	ug/l	98
19) Carbon disulfide	4.87	76	207998	1.97	ug/l	99
20) Acrylonitrile	5.02	53	40810	9.54	ug/l	94
21) tert-Butyl methyl ether (M	5.05	73	98170	2.03	ug/l	99
22) trans-1,2-Dichloroethene	5.24	61	96611	2.03	ug/l	99
23) Isopropyl ether (DIPE)	5.66	45	200708	1.98	ug/l	100
24) Vinyl acetate	5.84	43	66565	1.91	ug/l	97
25) 1,1-Dichloroethane	5.82	63	112928	2.03	ug/l	99
27) tert-Butyl ethyl ether (ET	6.24	59	152096	2.09	ug/l	99
28) 2-Butanone	6.43	43	46317	8.95	ug/l	99
29) 2,2-Dichloropropane	6.62	77	94455	2.02	ug/l	99
30) cis-1,2-Dichloroethene	6.68	96	75331	1.97	ug/l	99
31) Chloroform	6.90	83	109165	1.93	ug/l	99

(#) = qualifier out of range (m) = manual integration

REV199.D VO01E11.M Mon May 13 14:31:07 2024

SA 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV199.D
Acq On : 11 May 2024 12:30 pm
Sample : VO01E114 0.2/1.0
Misc : 2ppb 8260/10ppb KET-AA/50ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 13:54 2024

Vial: 5
Operator: LPriet
Inst : 01
Multiplr: 1.00

Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.14	49	44566	2.01	ug/l	100
33)	Tetrahydrofuran	7.20	42	6950	2.12	ug/l	84
35)	1,1,1-Trichloroethane	7.49	97	94535	2.00	ug/l	99
36)	Cyclohexane	7.51	84	97188	2.11	ug/l	97
38)	1,1-Dichloropropene	7.72	110	32679	2.03	ug/l	100
39)	Carbon tetrachloride	7.86	119	71508	2.03	ug/l	98
40)	tert-Amyl methyl ether (TA	7.88	73	115389	2.04	ug/l	97
42)	Benzene	8.12	78	248582	2.01	ug/l	100
43)	1,2-Dichloroethane	8.10	62	50716	2.04	ug/l	99
44)	Trichloroethene	9.06	130	63296	1.98	ug/l	98
45)	Methylcyclohexane	9.15	83	107421	2.12	ug/l	99
46)	1,2-Dichloropropane	9.35	63	54414	1.97	ug/l	98
47)	Bromodichloromethane	9.73	83	75727	1.98	ug/l	99
48)	1,4-Dioxane	9.82	88	3445	30.47	ug/l	71
49)	Dibromomethane	9.82	93	26199	2.01	ug/l	97
50)	2-Chloroethyl vinyl ether	10.25	63	13477	1.92	ug/l	95
51)	4-Methyl-2-pentanone	10.29	43	96326	9.38	ug/l	98
52)	cis-1,3-Dichloropropene	10.62	75	84540	1.97	ug/l	99
55)	Toluene	11.17	91	267463	2.03	ug/l	100
56)	Ethyl methacrylate	11.49	69	38804	1.96	ug/l	97
57)	trans-1,3-Dichloropropene	11.48	75	61587	2.01	ug/l	97
58)	1,1,2-Trichloroethane	11.75	97	35305	2.04	ug/l	99
59)	2-Hexanone	11.83	43	38468	9.25	ug/l	97
60)	1,3-Dichloropropane	12.19	76	60220	2.05	ug/l	100
61)	Tetrachloroethene	12.29	164	56394	2.06	ug/l	100
62)	Dibromochloromethane	12.66	129	41132	1.95	ug/l	98
63)	1,2-Dibromoethane	13.03	107	34770	2.04	ug/l	98
64)	1-Chlorohexane	13.32	91	117841	2.07	ug/l	99
65)	Chlorobenzene	13.79	112	158702	2.02	ug/l	99
66)	1,1,1,2-Tetrachloroethane	13.86	131	48976	2.02	ug/l	99
67)	Ethylbenzene	13.88	91	304664	2.02	ug/l	99
68)	m-Xylene & p-Xylene	14.01	91	450609	4.09	ug/l	99
69)	o-Xylene	14.84	91	231237	2.04	ug/l	99
70)	Styrene	14.92	104	177724	2.02	ug/l	99
71)	Isopropylbenzene	15.52	105	305906	2.05	ug/l	99
73)	Bromoform	15.57	173	21027	2.08	ug/l	97
74)	trans-1,4-Dichloro-2-buten	15.64	53	9849	1.94	ug/l	85
75)	1,1,2,2-Tetrachloroethane	15.86	83	38426	1.97	ug/l	99
77)	1,2,3-Trichloropropane	16.16	110	10163	2.03	ug/l	95
78)	n-Propylbenzene	16.29	91	370739	1.94	ug/l	100
79)	Bromobenzene	16.38	156	58783	1.95	ug/l	100

(#) = qualifier out of range (m) = manual integration

5/15/24

Data File : D:\HPCHEM\1\DATA\24E11\REV199.D
Acq On : 11 May 2024 12:30 pm
Sample : VO01E114 0.2/1.0
Misc : 2ppb 8260/10ppb KET-AA/50ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 13:54 2024

Vial: 5
Operator: LPriet
Inst : 01
Multiplr: 1.00
Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	237589	1.95 ug/l	98
81)	2-Chlorotoluene	16.63	91	219062	1.91 ug/l	95
82)	4-Chlorotoluene	16.74	91	206396	2.03 ug/l	97
83)	tert-Butylbenzene	17.29	134	49658	1.94 ug/l	98
84)	1,2,4-Trimethylbenzene	17.36	105	233094	1.95 ug/l	98
85)	sec-Butylbenzene	17.66	105	332693	1.98 ug/l	99
86)	p-Isopropyltoluene	17.88	119	260761	2.02 ug/l	99
87)	1,3-Dichlorobenzene	18.03	146	112316	1.96 ug/l	99
88)	1,2,3-Trimethylbenzene	18.13	105	219653	1.97 ug/l	99
89)	1,4-Dichlorobenzene	18.19	146	110373	1.96 ug/l	100
90)	n-Butylbenzene	18.49	91	265074	1.98 ug/l	99
91)	1,2-Dichlorobenzene	18.72	146	94251	2.00 ug/l	99
92)	1,2-Dibromo-3-chloropropan	19.72	157	5091	2.12 ug/l	97
93)	1,2,4-Trichlorobenzene	20.80	180	67009	1.95 ug/l	98
94)	Hexachlorobutadiene	20.96	225	39320	1.92 ug/l	97
95)	Naphthalene	21.15	128	77920	1.94 ug/l	99
96)	1,2,3-Trichlorobenzene	21.46	180	51155	1.98 ug/l	100

SM 5/15/24

(#) = qualifier out of range (m) = manual integration

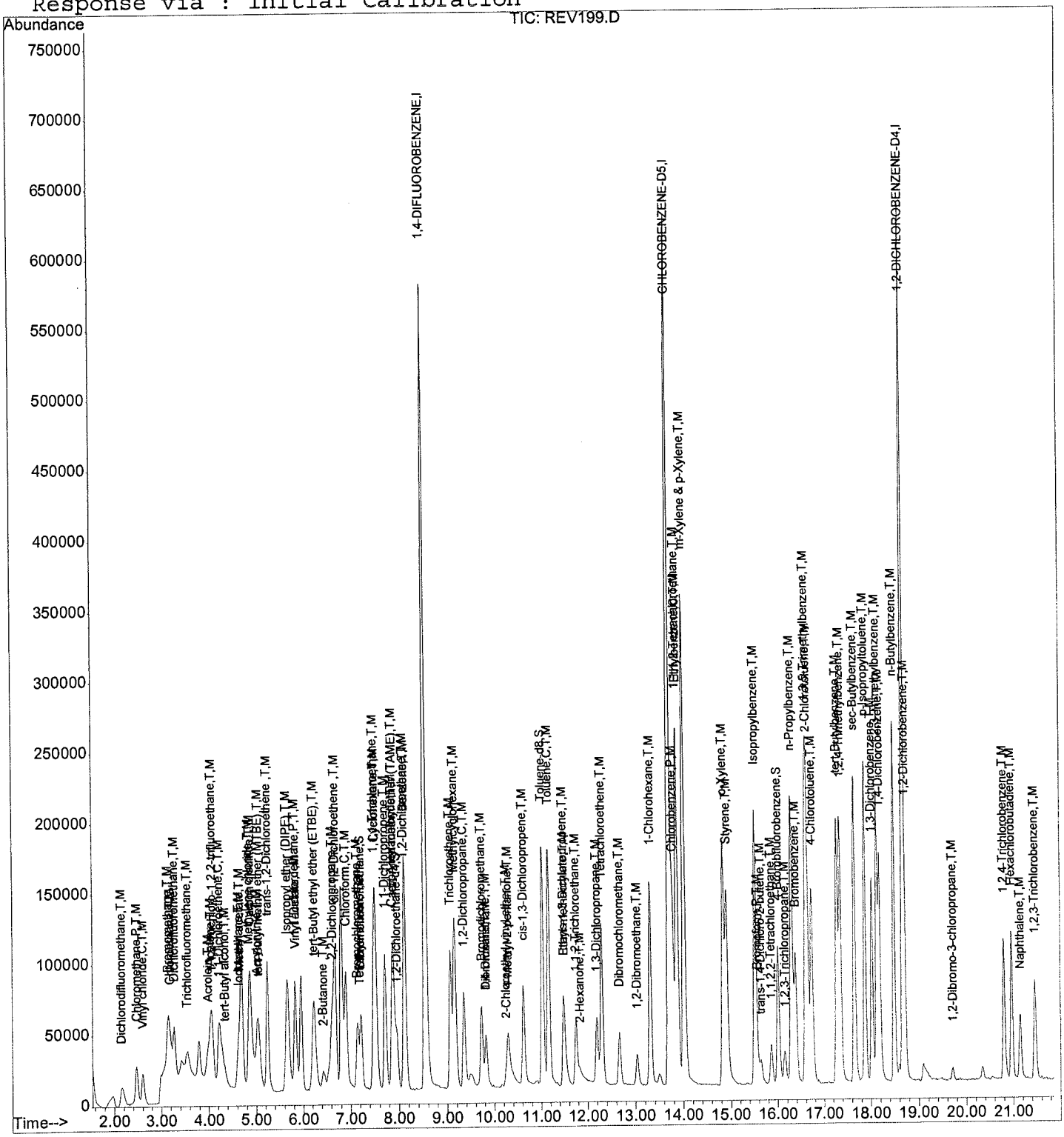
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E11\REV199.D
Acq On : 11 May 2024 12:30 pm
Sample : VO01E114 0.2/1.0
Misc : 2ppb 8260/10ppb KET-AA/50ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 13:54 2024

Vial: 5
Operator: LPriet
Inst : 01
Multiplr: 1.00

Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV200.D
Acq On : 11 May 2024 12:59 pm
Sample : VO01E115 0.5/2.5
Misc : 5ppb 8260/25ppb KET-AA/125ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 13:56 2024

Vial: 6
Operator: LPriet
Inst : 01
Multiplr: 1.00
Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.54	114	900656	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	744900	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	284539	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	143298	5.14	ug/l	0.00
Spiked Amount 10.000			Recovery = 51.40%			
41) 1,2-Dichloroethane-d4	7.97	65	97715	5.14	ug/l	0.00
Spiked Amount 10.000			Recovery = 51.40%			
54) Toluene-d8	11.03	98	569302	5.10	ug/l	0.00
Spiked Amount 10.000			Recovery = 51.00%			
76) 4-Bromofluorobenzene	16.01	95	190707	4.92	ug/l	0.00
Spiked Amount 10.000			Recovery = 49.20%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.18	85	119456	4.96	ug/l	98
5) Chloromethane	2.48	50	170900	5.06	ug/l	99
6) Vinyl chloride	2.60	62	151684	5.40	ug/l	98
7) Bromomethane	3.14	94	161543	4.74	ug/l	99
8) Chloroethane	3.18	64	101909	5.00	ug/l	100
9) Dichlorofluoromethane	3.27	67	272435	4.71	ug/l	98
10) Trichlorofluoromethane	3.55	101	192432	5.06	ug/l	98
11) Acrolein	3.98	56	50318	24.87	ug/l	98
12) 1,1,2-Trichloro-1,2,2-trif	4.07	151	95572	5.03	ug/l	99
13) Acetone	4.06	43	80312	24.43	ug/l	100
14) 1,1-Dichloroethene	4.24	61	236110	4.92	ug/l	100
15) tert-Butyl alcohol	4.34	59	126289	125.96	ug/l	98
16) Iodomethane	4.64	142	253734	4.93	ug/l	100
17) Methyl acetate	4.65	43	45270	5.05	ug/l	100
18) Methylene chloride	4.86	49	189706	4.92	ug/l	98
19) Carbon disulfide	4.89	76	519242	5.06	ug/l	99
20) Acrylonitrile	5.02	53	104491	25.05	ug/l	99
21) tert-Butyl methyl ether (M	5.07	73	232923	4.93	ug/l	98
22) trans-1,2-Dichloroethene	5.24	61	227623	4.92	ug/l	99
23) Isopropyl ether (DIPE)	5.67	45	486332	4.92	ug/l	99
24) Vinyl acetate	5.84	43	178828	5.27	ug/l	98
25) 1,1-Dichloroethane	5.84	63	265434	4.90	ug/l	100
27) tert-Butyl ethyl ether (ET	6.24	59	350636	4.95	ug/l	99
28) 2-Butanone	6.43	43	122252	24.23	ug/l	98
29) 2,2-Dichloropropane	6.62	77	221475	4.87	ug/l	100
30) cis-1,2-Dichloroethene	6.68	96	182793	4.91	ug/l	99
31) Chloroform	6.90	83	263399	4.78	ug/l	100

(#) = qualifier out of range (m) = manual integration

SM 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV200.D
Acq On : 11 May 2024 12:59 pm
Sample : VO01E115 0.5/2.5
Misc : 5ppb 8260/25ppb KET-AA/125ppb TBA
Vial: 6
Operator: LPriet
Inst : 01
Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:56 2024
Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32)	Bromochloromethane	7.15	49	107126	4.95 ug/l	100
33)	Tetrahydrofuran	7.20	42	15395	4.82 ug/l	99
35)	1,1,1-Trichloroethane	7.50	97	223490	4.84 ug/l	100
36)	Cyclohexane	7.53	84	229091	5.10 ug/l	100
38)	1,1-Dichloropropene	7.72	110	75641	4.82 ug/l	99
39)	Carbon tetrachloride	7.88	119	164649	4.79 ug/l	99
40)	tert-Amyl methyl ether (TA	7.88	73	265148	4.81 ug/l	100
42)	Benzene	8.13	78	593170	4.93 ug/l	100
43)	1,2-Dichloroethane	8.10	62	119634	4.93 ug/l	100
44)	Trichloroethene	9.08	130	151454	4.87 ug/l	99
45)	Methylcyclohexane	9.17	83	246613	4.99 ug/l	98
46)	1,2-Dichloropropane	9.34	63	129424	4.81 ug/l	99
47)	Bromodichloromethane	9.73	83	180624	4.83 ug/l	99
48)	1,4-Dioxane	9.80	88	10209	92.63 ug/l	95
49)	Dibromomethane	9.82	93	62590	4.93 ug/l	96
50)	2-Chloroethyl vinyl ether	10.23	63	32624	4.78 ug/l	99
51)	4-Methyl-2-pentanone	10.28	43	302538	24.21 ug/l	100
52)	cis-1,3-Dichloropropene	10.62	75	205197	4.90 ug/l	100
55)	Toluene	11.17	91	638964	4.83 ug/l	99
56)	Ethyl methacrylate	11.46	69	93055	4.69 ug/l	97
57)	trans-1,3-Dichloropropene	11.48	75	150076	4.88 ug/l	99
58)	1,1,2-Trichloroethane	11.74	97	84096	4.86 ug/l	100
59)	2-Hexanone	11.79	43	161653	23.32 ug/l	98
60)	1,3-Dichloropropane	12.19	76	141872	4.83 ug/l	99
61)	Tetrachloroethene	12.29	164	131949	4.80 ug/l	99
62)	Dibromochloromethane	12.66	129	100908	4.77 ug/l	99
63)	1,2-Dibromoethane	13.03	107	84804	4.95 ug/l	98
64)	1-Chlorohexane	13.30	91	270570	4.74 ug/l	100
65)	Chlorobenzene	13.79	112	382775	4.85 ug/l	100
66)	1,1,1,2-Tetrachloroethane	13.86	131	116917	4.81 ug/l	99
67)	Ethylbenzene	13.88	91	730874	4.84 ug/l	100
68)	m-Xylene & p-Xylene	14.01	91	1083475	9.80 ug/l	99
69)	o-Xylene	14.84	91	543905	4.78 ug/l	100
70)	Styrene	14.90	104	426095	4.83 ug/l	99
71)	Isopropylbenzene	15.52	105	729567	4.87 ug/l	100
73)	Bromoform	15.55	173	52073	4.81 ug/l	98
74)	trans-1,4-Dichloro-2-buten	15.63	53	23167	4.72 ug/l	99
75)	1,1,2,2-Tetrachloroethane	15.86	83	90996	4.80 ug/l	100
77)	1,2,3-Trichloropropane	16.14	110	24020	4.96 ug/l	100
78)	n-Propylbenzene	16.29	91	891243	4.82 ug/l	100
79)	Bromobenzene	16.38	156	142872	4.88 ug/l	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV200.D
Acq On : 11 May 2024 12:59 pm
Sample : VO01E115 0.5/2.5
Misc : 5ppb 8260/25ppb KET-AA/125ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 13:56 2024

Vial: 6
Operator: LPriet
Inst : 01
Multiplr: 1.00

Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80) 1,3,5-Trimethylbenzene	16.60	105	568375	4.81	ug/l	100
81) 2-Chlorotoluene	16.63	91	534726	4.80	ug/l	100
82) 4-Chlorotoluene	16.72	91	491373	4.98	ug/l	99
83) tert-Butylbenzene	17.29	134	119387	4.81	ug/l	100
84) 1,2,4-Trimethylbenzene	17.36	105	562027	4.86	ug/l	99
85) sec-Butylbenzene	17.66	105	782171	4.81	ug/l	99
86) p-Isopropyltoluene	17.88	119	604455	4.83	ug/l	100
87) 1,3-Dichlorobenzene	18.03	146	266427	4.79	ug/l	99
88) 1,2,3-Trimethylbenzene	18.13	105	523914	4.85	ug/l	99
89) 1,4-Dichlorobenzene	18.19	146	264166	4.84	ug/l	99
90) n-Butylbenzene	18.49	91	624902	4.82	ug/l	100
91) 1,2-Dichlorobenzene	18.72	146	222834	4.89	ug/l	99
92) 1,2-Dibromo-3-chloropropan	19.71	157	13172	4.81	ug/l	96
93) 1,2,4-Trichlorobenzene	20.80	180	161262	4.85	ug/l	99
94) Hexachlorobutadiene	20.96	225	94994	4.79	ug/l	99
95) Naphthalene	21.15	128	187349	4.82	ug/l	99
96) 1,2,3-Trichlorobenzene	21.46	180	121965	4.87	ug/l	100

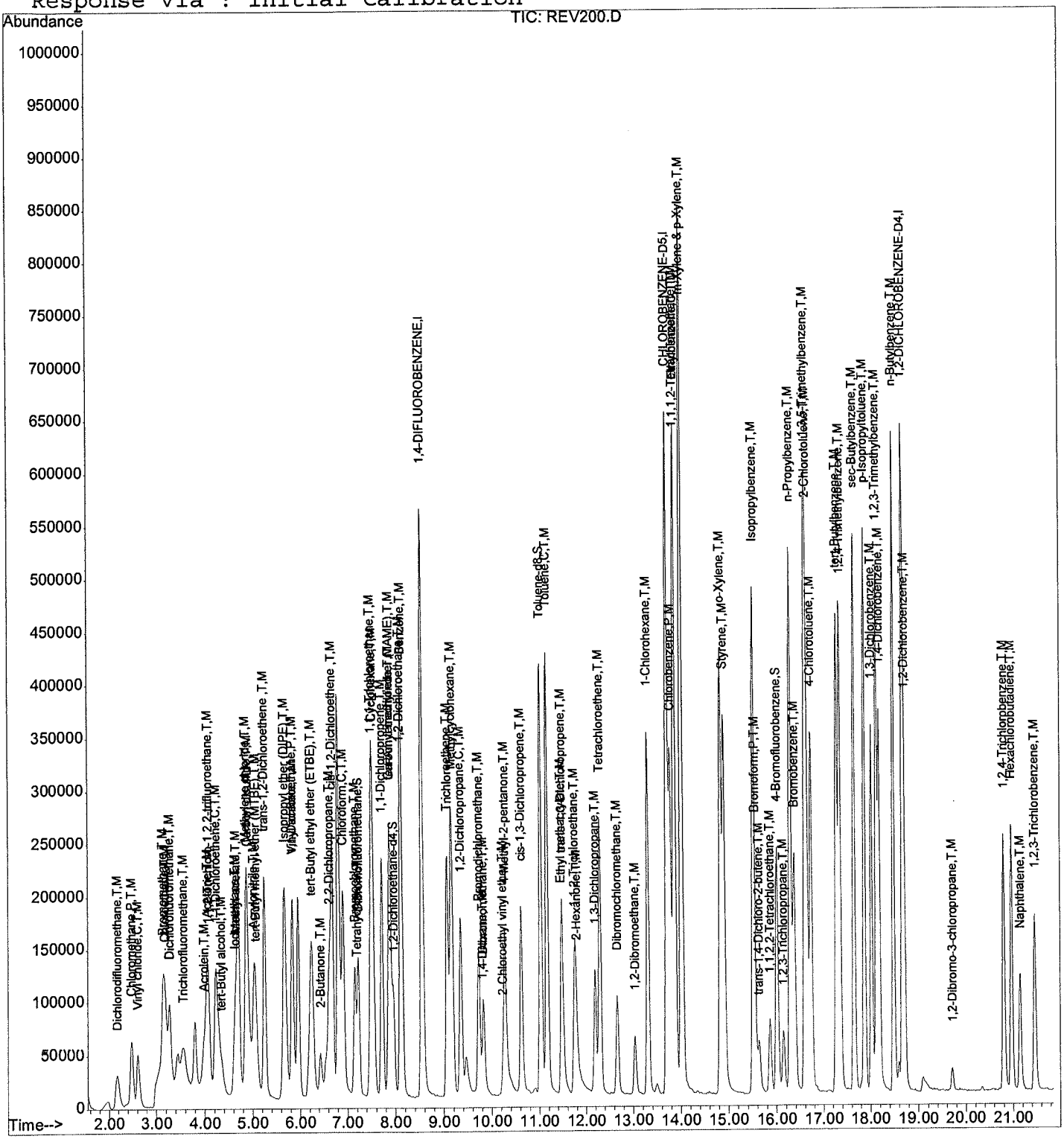
SM 5/15/24

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24E11\REV200.D
Acq On : 11 May 2024 12:59 pm
Sample : VO01E115 0.5/2.5
Misc : 5ppb 8260/25ppb KET-AA/125ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 13:56 2024

Vial: 6
Operator: LPriet
Inst : 01
Multiplr: 1.00
Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



SV 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV201.D Vial: 7
Acq On : 11 May 2024 1:28 pm Operator: LPriet
Sample : VO01E116 1.0/5.0 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:58 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.54	114	920983	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	742213	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	284055	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	258776	9.08	ug/l	0.00
Spiked Amount 10.000			Recovery =	90.80%		
41) 1,2-Dichloroethane-d4	7.97	65	170981	8.79	ug/l	0.00
Spiked Amount 10.000			Recovery =	87.90%		
54) Toluene-d8	11.03	98	1034495	9.30	ug/l	0.00
Spiked Amount 10.000			Recovery =	93.00%		
76) 4-Bromofluorobenzene	16.01	95	349924	9.04	ug/l	0.00
Spiked Amount 10.000			Recovery =	90.40%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.17	85	233807	9.49	ug/l	100
5) Chloromethane	2.46	50	319578	9.26	ug/l	100
6) Vinyl chloride	2.61	62	285699	9.94	ug/l	100
7) Bromomethane	3.14	94	303178	8.88	ug/l	100
8) Chloroethane	3.18	64	194643	9.34	ug/l	100
9) Dichlorofluoromethane	3.27	67	535368	9.04	ug/l	100
10) Trichlorofluoromethane	3.55	101	365519	9.40	ug/l	100
11) Acrolein	3.98	56	91543	44.25	ug/l	100
12) 1,1,2-Trichloro-1,2,2-trif	4.06	151	193689	9.97	ug/l	100
13) Acetone	4.06	43	141862	42.20	ug/l	100
14) 1,1-Dichloroethene	4.22	61	473083	9.63	ug/l	100
15) tert-Butyl alcohol	4.34	59	232900	227.17	ug/l	100
16) Iodomethane	4.64	142	502181	9.54	ug/l	100
17) Methyl acetate	4.65	43	77293	8.43	ug/l	100
18) Methylene chloride	4.86	49	367504	9.33	ug/l	100
19) Carbon disulfide	4.87	76	984042	9.37	ug/l	100
20) Acrylonitrile	5.02	53	196137	45.99	ug/l	100
21) tert-Butyl methyl ether (M	5.07	73	435419	9.01	ug/l	100
22) trans-1,2-Dichloroethene	5.24	61	438850	9.27	ug/l	100
23) Isopropyl ether (DIPE)	5.67	45	945894	9.35	ug/l	100
24) Vinyl acetate	5.82	43	316675	9.12	ug/l	100
25) 1,1-Dichloroethane	5.82	63	520416	9.40	ug/l	100
27) tert-Butyl ethyl ether (ET	6.24	59	667502	9.21	ug/l	100
28) 2-Butanone	6.41	43	244678	47.43	ug/l	100
29) 2,2-Dichloropropane	6.62	77	438788	9.43	ug/l	100
30) cis-1,2-Dichloroethene	6.68	96	363843	9.55	ug/l	100
31) Chloroform	6.90	83	508562	9.02	ug/l	100

(#) = qualifier out of range (m) = manual integration

5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV201.D Vial: 7
Acq On : 11 May 2024 1:28 pm Operator: LPriet
Sample : VO01E116 1.0/5.0 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:58 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.14	49	205550	9.28	ug/l	100
33)	Tetrahydrofuran	7.20	42	27463	8.42	ug/l	100
35)	1,1,1-Trichloroethane	7.49	97	444990	9.43	ug/l	100
36)	Cyclohexane	7.52	84	417453	9.08	ug/l	100
38)	1,1-Dichloropropene	7.72	110	150631	9.39	ug/l	100
39)	Carbon tetrachloride	7.88	119	336330	9.57	ug/l	100
40)	tert-Amyl methyl ether (TA	7.88	73	497165	8.82	ug/l	100
42)	Benzene	8.13	78	1153601	9.38	ug/l	100
43)	1,2-Dichloroethane	8.10	62	229577	9.25	ug/l	100
44)	Trichloroethene	9.06	130	307851	9.67	ug/l	100
45)	Methylcyclohexane	9.17	83	454050	8.98	ug/l	100
46)	1,2-Dichloropropane	9.34	63	256137	9.30	ug/l	100
47)	Bromodichloromethane	9.73	83	342146	8.95	ug/l	100
48)	1,4-Dioxane	9.79	88	20047	177.87	ug/l	100
49)	Dibromomethane	9.82	93	116361	8.96	ug/l	100
50)	2-Chloroethyl vinyl ether	10.23	63	63930	9.15	ug/l	100
51)	4-Methyl-2-pentanone	10.26	43	589994	43.70	ug/l	100
52)	cis-1,3-Dichloropropene	10.62	75	398855	9.31	ug/l	100
55)	Toluene	11.17	91	1262539	9.58	ug/l	100
56)	Ethyl methacrylate	11.46	69	182985	9.25	ug/l	100
57)	trans-1,3-Dichloropropene	11.48	75	289239	9.44	ug/l	100
58)	1,1,2-Trichloroethane	11.74	97	160672	9.31	ug/l	100
59)	2-Hexanone	11.76	43	335905	43.39	ug/l	100
60)	1,3-Dichloropropane	12.19	76	271863	9.28	ug/l	100
61)	Tetrachloroethene	12.29	164	266498	9.73	ug/l	100
62)	Dibromochloromethane	12.66	129	193517	9.19	ug/l	100
63)	1,2-Dibromoethane	13.03	107	159304	9.33	ug/l	100
64)	1-Chlorohexane	13.30	91	551589	9.69	ug/l	100
65)	Chlorobenzene	13.79	112	759554	9.67	ug/l	100
66)	1,1,1,2-Tetrachloroethane	13.86	131	232054	9.59	ug/l	100
67)	Ethylbenzene	13.88	91	1473355	9.79	ug/l	100
68)	m-Xylene & p-Xylene	14.01	91	2121368	19.26	ug/l	100
69)	o-Xylene	14.84	91	1078385	9.51	ug/l	100
70)	Styrene	14.90	104	842539	9.59	ug/l	100
71)	Isopropylbenzene	15.52	105	1453974	9.74	ug/l	100
73)	Bromoform	15.55	173	95720	8.57	ug/l	100
74)	trans-1,4-Dichloro-2-buten	15.63	53	44316	9.04	ug/l	100
75)	1,1,2,2-Tetrachloroethane	15.86	83	168234	8.90	ug/l	100
77)	1,2,3-Trichloropropane	16.14	110	45054	9.31	ug/l	99
78)	n-Propylbenzene	16.29	91	1790558	9.70	ug/l	100
79)	Bromobenzene	16.38	156	279576	9.57	ug/l	100

(#) = qualifier out of range (m) = manual integration

SM 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV201.D Vial: 7
Acq On : 11 May 2024 1:28 pm Operator: LPriet
Sample : VO01E116 1.0/5.0 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:58 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	1139657	9.66	ug/l	100
81)	2-Chlorotoluene	16.63	91	1060747	9.54	ug/l	100
82)	4-Chlorotoluene	16.72	91	963048	9.78	ug/l	100
83)	tert-Butylbenzene	17.29	134	239466	9.67	ug/l	100
84)	1,2,4-Trimethylbenzene	17.36	105	1122345	9.72	ug/l	100
85)	sec-Butylbenzene	17.66	105	1569792	9.68	ug/l	100
86)	p-Isopropyltoluene	17.88	119	1201659	9.61	ug/l	100
87)	1,3-Dichlorobenzene	18.03	146	533251	9.60	ug/l	100
88)	1,2,3-Trimethylbenzene	18.13	105	1019164	9.45	ug/l	100
89)	1,4-Dichlorobenzene	18.19	146	518636	9.53	ug/l	100
90)	n-Butylbenzene	18.49	91	1250551	9.65	ug/l	100
91)	1,2-Dichlorobenzene	18.72	146	424621	9.33	ug/l	100
92)	1,2-Dibromo-3-chloropropan	19.71	157	23773	8.27	ug/l	100
93)	1,2,4-Trichlorobenzene	20.80	180	314594	9.47	ug/l	100
94)	Hexachlorobutadiene	20.96	225	197705	9.99	ug/l	100
95)	Naphthalene	21.14	128	358996	9.26	ug/l	100
96)	1,2,3-Trichlorobenzene	21.46	180	236728	9.46	ug/l	100

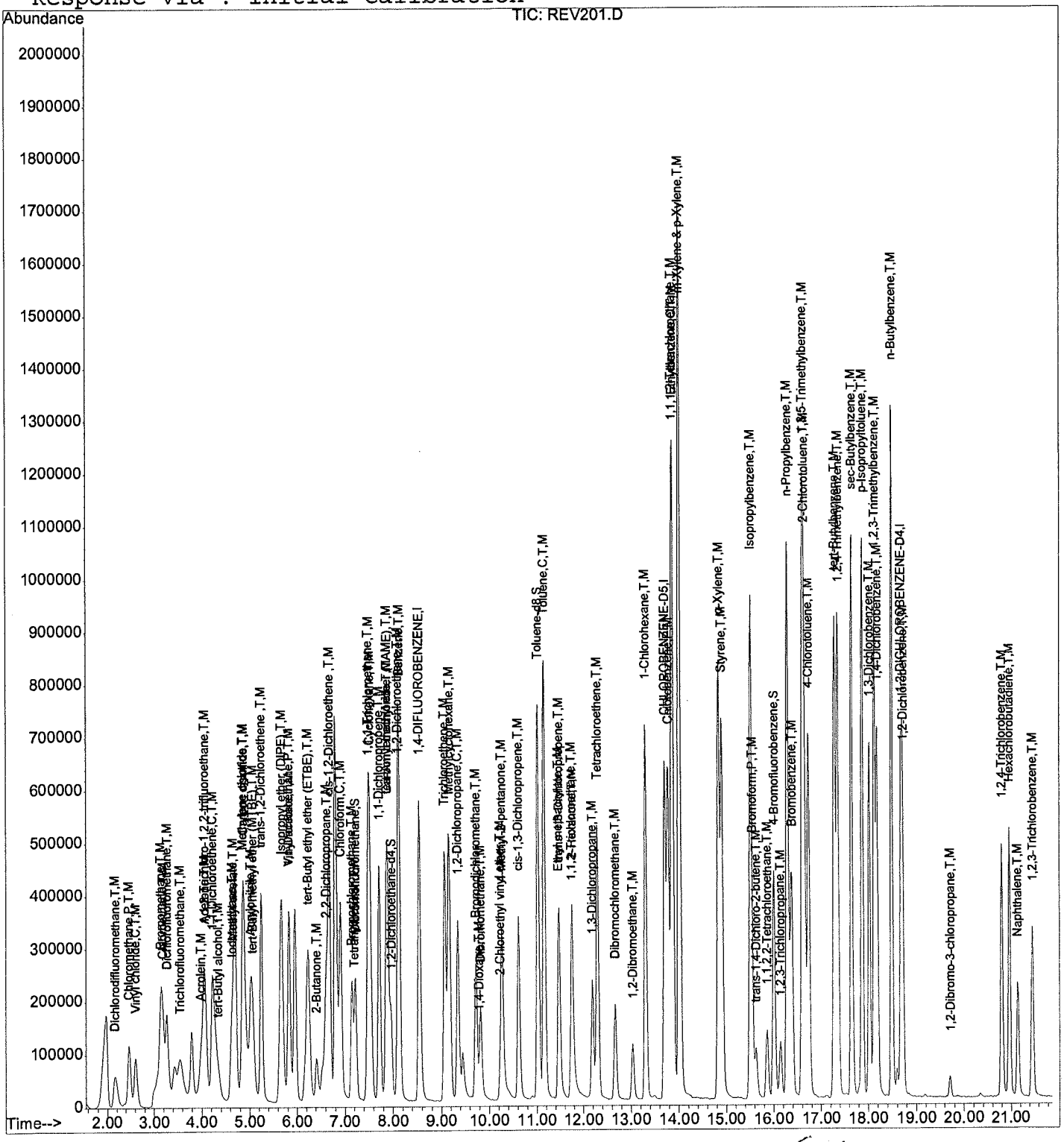
SA 5/15/24

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E11\REV201.D Vial: 7
Acq On : 11 May 2024 1:28 pm Operator: LPriet
Sample : VO01E116 1.0/5.0 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:58 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV202.D Vial: 8
Acq On : 11 May 2024 1:58 pm Operator: LPriet
Sample : VO01E117 2.0/10 Inst : 01
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:00 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	816915	10.00	ug/l	0.02
53) CHLOROBENZENE-D5	13.73	117	679573	10.00	ug/l	0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	256277	10.00	ug/l	0.02
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	546945	21.63	ug/l	0.01
Spiked Amount 10.000			Recovery =	216.30%		
41) 1,2-Dichloroethane-d4	7.97	65	368310	21.36	ug/l	0.00
Spiked Amount 10.000			Recovery =	213.60%		
54) Toluene-d8	11.03	98	2143971	21.05	ug/l	0.00
Spiked Amount 10.000			Recovery =	210.50%		
76) 4-Bromofluorobenzene	16.03	95	741429	21.24	ug/l	0.02
Spiked Amount 10.000			Recovery =	212.40%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.17	85	443172	20.27	ug/l	99
5) Chloromethane	2.47	50	619334	20.24	ug/l	100
6) Vinyl chloride	2.61	62	541540	21.25	ug/l	100
7) Bromomethane	3.15	94	618346	20.69	ug/l	97
8) Chloroethane	3.20	64	385600	20.85	ug/l	99
9) Dichlorofluoromethane	3.29	67	1066762	20.31	ug/l	99
10) Trichlorofluoromethane	3.55	101	683028	19.81	ug/l	99
11) Acrolein	3.98	56	192986	105.17	ug/l	96
12) 1,1,2-Trichloro-1,2,2-trif	4.07	151	365492	21.21	ug/l	99
13) Acetone	4.06	43	284979	95.57	ug/l	99
14) 1,1-Dichloroethene	4.24	61	930390	21.35	ug/l	100
15) tert-Butyl alcohol	4.34	59	495292	544.64	ug/l	99
16) Iodomethane	4.65	142	1006828	21.55	ug/l	100
17) Methyl acetate	4.66	43	166847	20.52	ug/l	99
18) Methylene chloride	4.87	49	730623	20.90	ug/l	100
19) Carbon disulfide	4.89	76	2006384	21.54	ug/l	100
20) Acrylonitrile	5.04	53	392428	103.74	ug/l	100
21) tert-Butyl methyl ether (M	5.06	73	899904	21.00	ug/l	99
22) trans-1,2-Dichloroethene	5.26	61	902607	21.50	ug/l	99
23) Isopropyl ether (DIPE)	5.67	45	1935724	21.58	ug/l	99
24) Vinyl acetate	5.84	43	675084	21.93	ug/l	100
25) 1,1-Dichloroethane	5.84	63	1063100	21.66	ug/l	100
27) tert-Butyl ethyl ether (ET	6.25	59	1387307	21.59	ug/l	99
28) 2-Butanone	6.43	43	502145	109.75	ug/l	100
29) 2,2-Dichloropropane	6.64	77	865612	20.97	ug/l	100
30) cis-1,2-Dichloroethene	6.69	96	725941	21.48	ug/l	100
31) Chloroform	6.92	83	1028651	20.56	ug/l	100

(#) = qualifier out of range (m) = manual integration

5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV202.D
Acq On : 11 May 2024 1:58 pm
Sample : VO01E117 2.0/10
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 14:00 2024

Vial: 8
Operator: LPriet
Inst : 01
Multiplr: 1.00

Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.15	49	418099	21.28	ug/l	99
33)	Tetrahydrofuran	7.21	42	59689	20.62	ug/l	99
35)	1,1,1-Trichloroethane	7.51	97	890497	21.28	ug/l	100
36)	Cyclohexane	7.54	84	839410	20.59	ug/l	100
38)	1,1-Dichloropropene	7.73	110	301701	21.21	ug/l	99
39)	Carbon tetrachloride	7.89	119	658847	21.13	ug/l	99
40)	tert-Amyl methyl ether (TA	7.89	73	1043076	20.86	ug/l	100
42)	Benzene	8.15	78	2297893	21.05	ug/l	100
43)	1,2-Dichloroethane	8.12	62	472900	21.49	ug/l	99
44)	Trichloroethene	9.08	130	611530	21.66	ug/l	99
45)	Methylcyclohexane	9.17	83	904979	20.18	ug/l	100
46)	1,2-Dichloropropane	9.36	63	521244	21.35	ug/l	100
47)	Bromodichloromethane	9.74	83	704865	20.80	ug/l	100
48)	1,4-Dioxane	9.79	88	43990	440.03	ug/l	99
49)	Dibromomethane	9.83	93	243286	21.12	ug/l	99
50)	2-Chloroethyl vinyl ether	10.23	63	134190	21.65	ug/l	98
51)	4-Methyl-2-pentanone	10.28	43	1288906	103.66	ug/l	100
52)	cis-1,3-Dichloropropene	10.63	75	818576	21.54	ug/l	100
55)	Toluene	11.18	91	2491900	20.65	ug/l	100
56)	Ethyl methacrylate	11.46	69	395514	21.84	ug/l	98
57)	trans-1,3-Dichloropropene	11.49	75	603742	21.52	ug/l	100
58)	1,1,2-Trichloroethane	11.76	97	330926	20.94	ug/l	99
59)	2-Hexanone	11.77	43	767459	101.03	ug/l	100
60)	1,3-Dichloropropane	12.20	76	575688	21.46	ug/l	99
61)	Tetrachloroethene	12.31	164	522743	20.84	ug/l	99
62)	Dibromochloromethane	12.68	129	406460	21.07	ug/l	99
63)	1,2-Dibromoethane	13.05	107	339123	21.70	ug/l	99
64)	1-Chlorohexane	13.32	91	1076692	20.66	ug/l	100
65)	Chlorobenzene	13.80	112	1529085	21.25	ug/l	100
66)	1,1,1,2-Tetrachloroethane	13.88	131	470126	21.22	ug/l	99
67)	Ethylbenzene	13.89	91	2901232	21.06	ug/l	99
68)	m-Xylene & p-Xylene	14.03	91	4237521	42.03	ug/l	100
69)	o-Xylene	14.86	91	2143592	20.66	ug/l	99
70)	Styrene	14.92	104	1701411	21.15	ug/l	100
71)	Isopropylbenzene	15.54	105	2885751	21.11	ug/l	100
73)	Bromoform	15.57	173	208560	20.24	ug/l	99
74)	trans-1,4-Dichloro-2-buten	15.64	53	96395	21.80	ug/l	97
75)	1,1,2,2-Tetrachloroethane	15.88	83	354915	20.80	ug/l	99
77)	1,2,3-Trichloropropane	16.16	110	95768	21.94	ug/l	98
78)	n-Propylbenzene	16.31	91	3533479	21.21	ug/l	100
79)	Bromobenzene	16.40	156	569509	21.60	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV202.D
Acq On : 11 May 2024 1:58 pm
Sample : VO01E117 2.0/10
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA
Vial: 8
Operator: LPriet
Inst : 01
Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:00 2024
Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80) 1,3,5-Trimethylbenzene	16.62	105	2263948	21.26	ug/l	99
81) 2-Chlorotoluene	16.65	91	2094475	20.88	ug/l	100
82) 4-Chlorotoluene	16.74	91	1908157	21.48	ug/l	100
83) tert-Butylbenzene	17.30	134	478610	21.43	ug/l	99
84) 1,2,4-Trimethylbenzene	17.37	105	2219029	21.30	ug/l	100
85) sec-Butylbenzene	17.67	105	3115101	21.28	ug/l	100
86) p-Isopropyltoluene	17.89	119	2394992	21.23	ug/l	100
87) 1,3-Dichlorobenzene	18.04	146	1072675	21.41	ug/l	100
88) 1,2,3-Trimethylbenzene	18.14	105	2044493	21.02	ug/l	100
89) 1,4-Dichlorobenzene	18.20	146	1030532	20.98	ug/l	100
90) n-Butylbenzene	18.50	91	2472290	21.16	ug/l	100
91) 1,2-Dichlorobenzene	18.74	146	871915	21.24	ug/l	100
92) 1,2-Dibromo-3-chloropropan	19.73	157	54040	20.05	ug/l	99
93) 1,2,4-Trichlorobenzene	20.81	180	660275	22.03	ug/l	100
94) Hexachlorobutadiene	20.99	225	397807	22.28	ug/l	100
95) Naphthalene	21.15	128	776440	22.20	ug/l	99
96) 1,2,3-Trichlorobenzene	21.48	180	496067	21.97	ug/l	100

SM 5/15/24

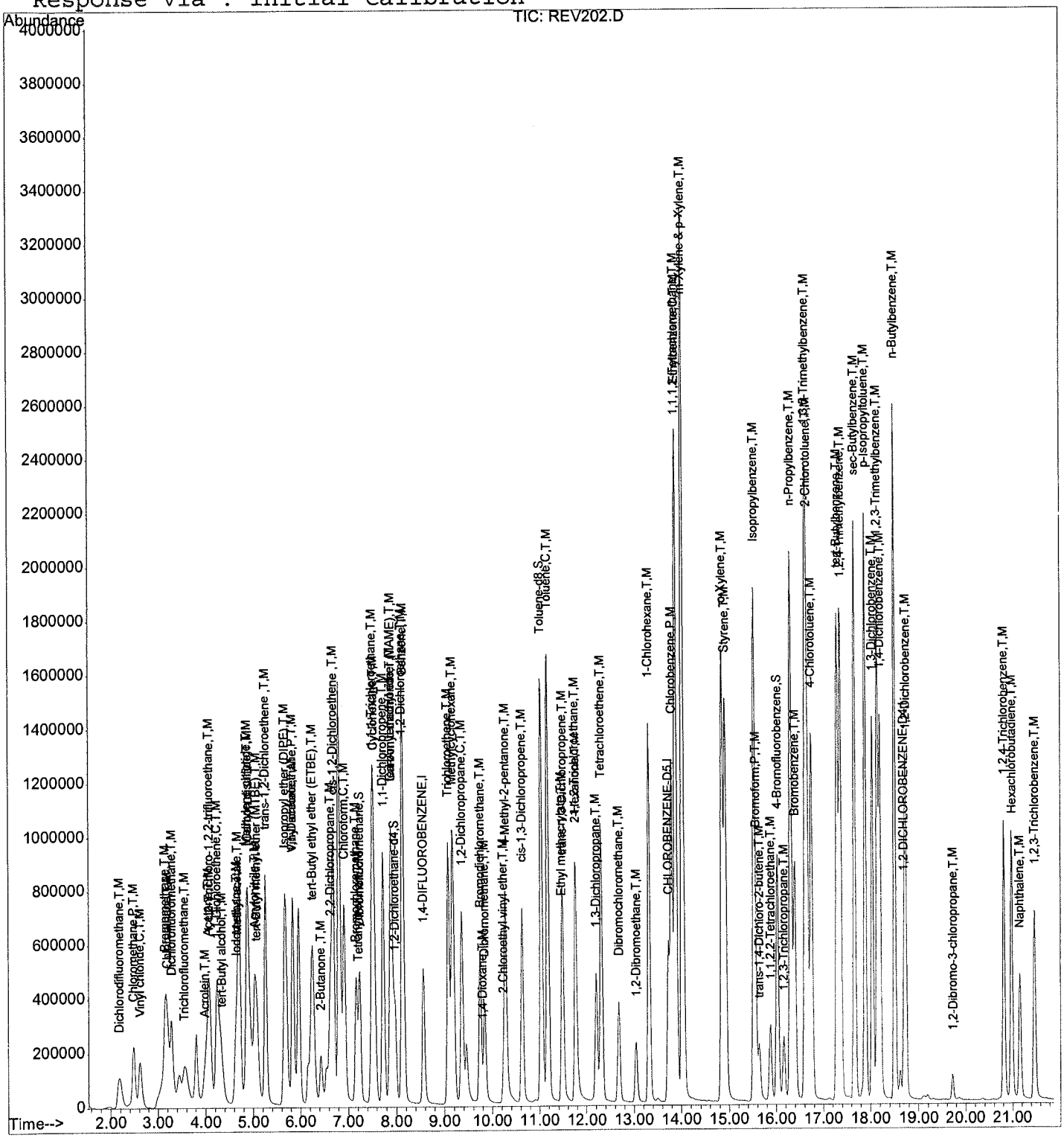
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E11\REV202.D
Acq On : 11 May 2024 1:58 pm
Sample : VO01E117 2.0/10
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 14:00 2024

Vial: 8
Operator: LPriet
Inst : 01
Multiplr: 1.00
Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV203.D
Acq On : 11 May 2024 2:27 pm
Sample : VO01E118 3.0/15
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 14:02 2024

Vial: 9
Operator: LPriet
Inst : 01
Multiplr: 1.00
Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	849708	10.00	ug/l	0.02
53) CHLOROBENZENE-D5	13.72	117	707238	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	267331	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	799087	30.38	ug/l	0.00
Spiked Amount 10.000			Recovery =	303.80%		
41) 1,2-Dichloroethane-d4	7.97	65	550662	30.70	ug/l	0.00
Spiked Amount 10.000			Recovery =	307.00%		
54) Toluene-d8	11.02	98	3115280	29.39	ug/l	-0.01
Spiked Amount 10.000			Recovery =	293.90%		
76) 4-Bromofluorobenzene	16.01	95	1073630	29.49	ug/l	0.00
Spiked Amount 10.000			Recovery =	294.90%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.18	85	673565	29.62	ug/l	98
5) Chloromethane	2.48	50	894520	28.10	ug/l	100
6) Vinyl chloride	2.61	62	776773	29.30	ug/l	100
7) Bromomethane	3.15	94	899449	29.03	ug/l	97
8) Chloroethane	3.20	64	574606	29.88	ug/l	100
9) Dichlorofluoromethane	3.27	67	1551702	28.41	ug/l	99
10) Trichlorofluoromethane	3.57	101	1032985	28.80	ug/l	99
11) Acrolein	3.98	56	286661	150.20	ug/l	97
12) 1,1,2-Trichloro-1,2,2-trif	4.07	151	554202	30.92	ug/l	100
13) Acetone	4.06	43	435360	140.37	ug/l	97
14) 1,1-Dichloroethene	4.23	61	1367312	30.17	ug/l	100
15) tert-Butyl alcohol	4.34	59	759636	803.08	ug/l	99
16) Iodomethane	4.65	142	1484308	30.55	ug/l	100
17) Methyl acetate	4.65	43	247532	29.27	ug/l	100
18) Methylene chloride	4.86	49	1052102	28.94	ug/l	100
19) Carbon disulfide	4.89	76	2879778	29.72	ug/l	100
20) Acrylonitrile	5.02	53	590477	150.07	ug/l	99
21) tert-Butyl methyl ether (M	5.06	73	1337887	30.02	ug/l	98
22) trans-1,2-Dichloroethene	5.26	61	1319053	30.21	ug/l	100
23) Isopropyl ether (DIPE)	5.67	45	2808667	30.11	ug/l	100
24) Vinyl acetate	5.82	43	1017586	31.77	ug/l	100
25) 1,1-Dichloroethane	5.83	63	1541259	30.19	ug/l	100
27) tert-Butyl ethyl ether (ET	6.23	59	2031979	30.40	ug/l	100
28) 2-Butanone	6.41	43	780834	164.07	ug/l	100
29) 2,2-Dichloropropane	6.63	77	1283925	29.91	ug/l	100
30) cis-1,2-Dichloroethene	6.69	96	1065003	30.30	ug/l	100
31) Chloroform	6.92	83	1477710	28.40	ug/l	100

(#) = qualifier out of range (m) = manual integration
REV203.D VO01E11.M Mon May 13 14:32:40 2024

5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV203.D
Acq On : 11 May 2024 2:27 pm
Sample : VO01E118 3.0/15
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 14:02 2024

Vial: 9
Operator: LPriet
Inst : 01
Multiplr: 1.00
Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32) Bromochloromethane	7.15	49	628929	30.78	ug/l	100
33) Tetrahydrofuran	7.20	42	89460	29.72	ug/l	98
35) 1,1,1-Trichloroethane	7.49	97	1293540	29.71	ug/l	100
36) Cyclohexane	7.52	84	1200311	28.31	ug/l	100
38) 1,1-Dichloropropene	7.73	110	446401	30.17	ug/l	99
39) Carbon tetrachloride	7.88	119	976969	30.13	ug/l	100
40) tert-Amyl methyl ether (TA	7.89	73	1549323	29.79	ug/l	99
42) Benzene	8.13	78	3348702	29.50	ug/l	100
43) 1,2-Dichloroethane	8.10	62	692754	30.26	ug/l	99
44) Trichloroethene	9.06	130	891995	30.38	ug/l	99
45) Methylcyclohexane	9.17	83	1305359	27.98	ug/l	100
46) 1,2-Dichloropropane	9.35	63	761086	29.96	ug/l	100
47) Bromodichloromethane	9.73	83	1014655	28.78	ug/l	100
48) 1,4-Dioxane	9.76	88	66102	635.70	ug/l	99
49) Dibromomethane	9.82	93	364896	30.46	ug/l	97
50) 2-Chloroethyl vinyl ether	10.22	63	205504	31.88	ug/l	98
51) 4-Methyl-2-pentanone	10.26	43	1958633	150.19	ug/l	100
52) cis-1,3-Dichloropropene	10.62	75	1217843	30.81	ug/l	100
55) Toluene	11.17	91	3665193	29.18	ug/l	100
56) Ethyl methacrylate	11.45	69	584066	30.99	ug/l	97
57) trans-1,3-Dichloropropene	11.48	75	891028	30.52	ug/l	100
58) 1,1,2-Trichloroethane	11.75	97	494541	30.07	ug/l	99
59) 2-Hexanone	11.76	43	1192685	148.48	ug/l	99
60) 1,3-Dichloropropane	12.19	76	844763	30.26	ug/l	99
61) Tetrachloroethene	12.29	164	772439	29.59	ug/l	99
62) Dibromochloromethane	12.66	129	594252	29.60	ug/l	99
63) 1,2-Dibromoethane	13.03	107	501525	30.83	ug/l	99
64) 1-Chlorohexane	13.30	91	1608154	29.65	ug/l	100
65) Chlorobenzene	13.79	112	2219576	29.64	ug/l	100
66) 1,1,1,2-Tetrachloroethane	13.86	131	687136	29.80	ug/l	99
67) Ethylbenzene	13.88	91	4240845	29.59	ug/l	100
68) m-Xylene & p-Xylene	14.01	91	6175129	58.85	ug/l	100
69) o-Xylene	14.84	91	3177799	29.42	ug/l	100
70) Styrene	14.90	104	2503360	29.90	ug/l	100
71) Isopropylbenzene	15.52	105	4219160	29.65	ug/l	100
73) Bromoform	15.55	173	312940	28.97	ug/l	99
74) trans-1,4-Dichloro-2-buten	15.63	53	144056	31.24	ug/l	96
75) 1,1,2,2-Tetrachloroethane	15.86	83	534853	30.05	ug/l	99
77) 1,2,3-Trichloropropane	16.15	110	141561	31.09	ug/l	97
78) n-Propylbenzene	16.29	91	5144010	29.59	ug/l	100
79) Bromobenzene	16.38	156	831254	30.23	ug/l	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV203.D Vial: 9
Acq On : 11 May 2024 2:27 pm Operator: LPriet
Sample : VO01E118 3.0/15 Inst : 01
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:02 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	3300850	29.72	ug/l	99
81)	2-Chlorotoluene	16.63	91	3091027	29.54	ug/l	100
82)	4-Chlorotoluene	16.72	91	2792432	30.14	ug/l	99
83)	tert-Butylbenzene	17.29	134	693102	29.75	ug/l	99
84)	1,2,4-Trimethylbenzene	17.35	105	3247834	29.89	ug/l	99
85)	sec-Butylbenzene	17.66	105	4497766	29.46	ug/l	100
86)	p-Isopropyltoluene	17.88	119	3456736	29.37	ug/l	100
87)	1,3-Dichlorobenzene	18.03	146	1566009	29.97	ug/l	100
88)	1,2,3-Trimethylbenzene	18.13	105	3006443	29.63	ug/l	100
89)	1,4-Dichlorobenzene	18.19	146	1511456	29.50	ug/l	100
90)	n-Butylbenzene	18.49	91	3615477	29.66	ug/l	100
91)	1,2-Dichlorobenzene	18.72	146	1277031	29.82	ug/l	100
92)	1,2-Dibromo-3-chloropropan	19.72	157	81915	28.90	ug/l	100
93)	1,2,4-Trichlorobenzene	20.80	180	991777	31.73	ug/l	100
94)	Hexachlorobutadiene	20.96	225	585385	31.43	ug/l	99
95)	Naphthalene	21.14	128	1169103	32.04	ug/l	100
96)	1,2,3-Trichlorobenzene	21.46	180	737458	31.32	ug/l	99

(#) = qualifier out of range (m) = manual integration

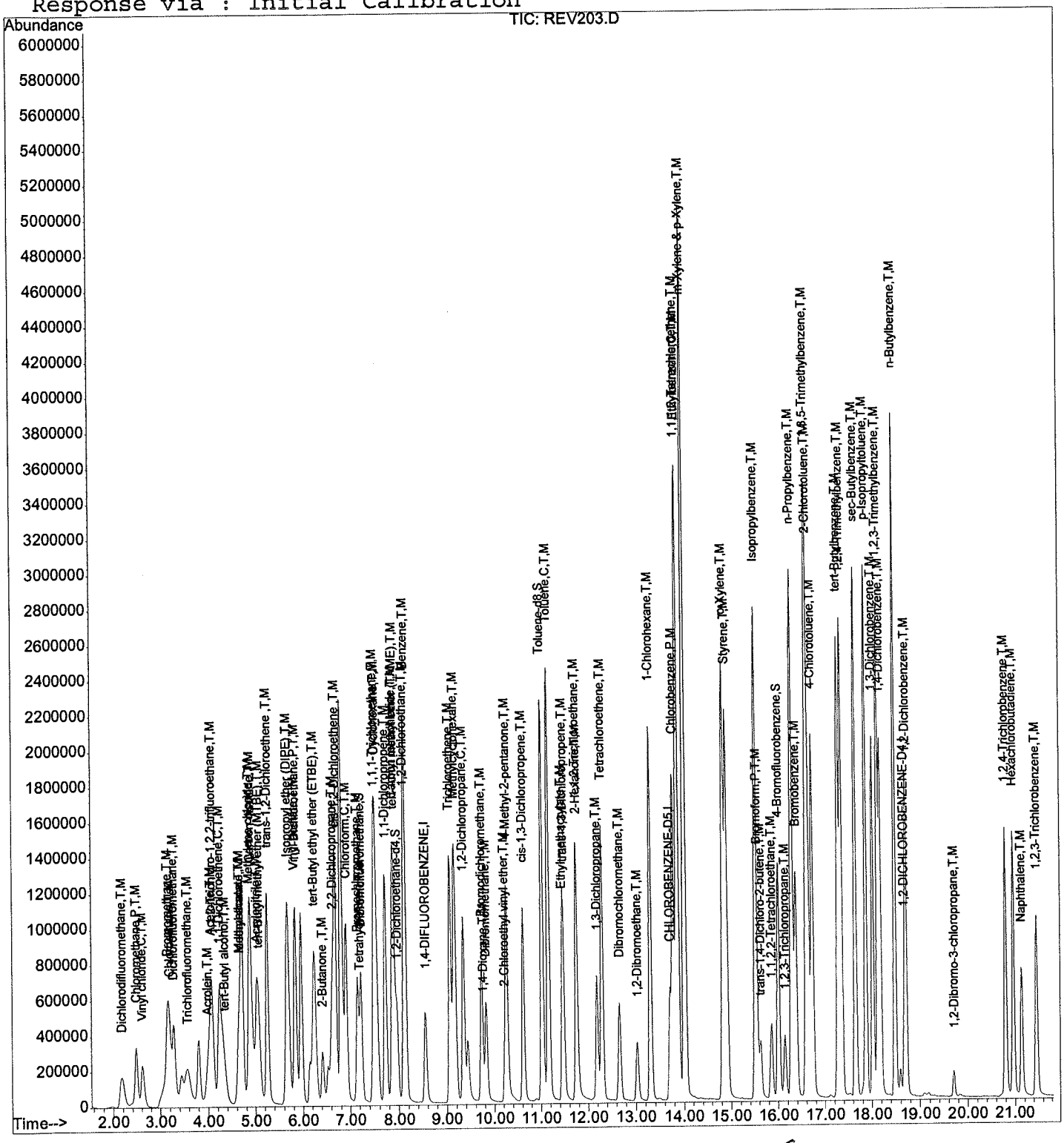
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E11\REV203.D
Acq On : 11 May 2024 2:27 pm
Sample : VO01E118 3.0/15
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 14:02 2024

Vial: 9
Operator: LPriet
Inst : 01
Multiplr: 1.00

Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



Su 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV204.D Vial: 10
Acq On : 11 May 2024 2:56 pm Operator: LPriet
Sample : VO01E119 5.0/25 Inst : 01
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:33 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	790188	10.00	ug/l	0.01
53) CHLOROBENZENE-D5	13.71	117	650561	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	247844	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	0.00	98	0d	0.00	ug/l	
Spiked Amount 10.000			Recovery =	0.00%		
76) 4-Bromofluorobenzene	0.00	95	0d	0.00	ug/l	
Spiked Amount 10.000			Recovery =	0.00%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.17	85	1081177	51.13	ug/l	98
5) Chloromethane	2.47	50	1438807	48.60	ug/l	100
6) Vinyl chloride	2.62	62	1235915	50.13	ug/l	100
7) Bromomethane	3.15	94	1484374	51.68	ug/l	98
8) Chloroethane	3.20	64	946787	52.94	ug/l	99
9) Dichlorofluoromethane	3.29	67	2533049	49.87	ug/l	98
10) Trichlorofluoromethane	3.57	101	1663384	49.87	ug/l	99
11) Acrolein	3.98	56	473669	266.87	ug/l	99
12) 1,1,2-Trichloro-1,2,2-trif	4.07	151	901773	54.10	ug/l	100
13) Acetone	4.06	43	730855	253.40	ug/l	100
14) 1,1-Dichloroethene	4.24	61	2222510	52.74	ug/l	100
15) tert-Butyl alcohol	4.34	59	1234938	1403.91	ug/l	99
16) Iodomethane	4.64	142	2410819	53.35	ug/l	100
18) Methylene chloride	4.86	49	1737751	51.40	ug/l	100
20) Acrylonitrile	5.02	53	973695	266.10	ug/l	99
21) tert-Butyl methyl ether (M	5.07	73	2163847	52.20	ug/l	99
22) trans-1,2-Dichloroethene	5.26	61	2150916	52.97	ug/l	99
23) Isopropyl ether (DIPE)	5.67	45	4495028	51.81	ug/l	99
24) Vinyl acetate	5.82	43	1638323	55.01	ug/l	100
25) 1,1-Dichloroethane	5.84	63	2492540	52.49	ug/l	100
27) tert-Butyl ethyl ether (ET	6.25	59	3217505	51.76	ug/l	98
28) 2-Butanone	6.41	43	1277785	288.71	ug/l	100
29) 2,2-Dichloropropane	6.64	77	2063550	51.69	ug/l	100
30) cis-1,2-Dichloroethene	6.68	96	1715982	52.50	ug/l	99
31) Chloroform	6.92	83	2420327	50.02	ug/l	100
32) Bromochloromethane	7.15	49	1013155	53.31	ug/l	98
33) Tetrahydrofuran	7.20	42	153627	54.88	ug/l	97

(#) = qualifier out of range (m) = manual integration
REV204.D VO01E11.M Mon May 13 14:33:16 2024 Page 1

SA 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV204.D
Acq On : 11 May 2024 2:56 pm
Sample : VO01E119 5.0/25
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA
Vial: 10
Operator: LPriet
Inst : 01
Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:33 2024
Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
35)	1,1,1-Trichloroethane	7.51	97	2111400	52.15	ug/l	100
38)	1,1-Dichloropropene	7.73	110	723523	52.58	ug/l	99
39)	Carbon tetrachloride	7.88	119	1591100	52.76	ug/l	99
40)	tert-Amyl methyl ether (TA	7.90	73	2542219	52.56	ug/l	99
42)	Benzene	8.13	78	5383213	50.99	ug/l	100
43)	1,2-Dichloroethane	8.10	62	1118925	52.56	ug/l	100
44)	Trichloroethene	9.08	130	1468714	53.79	ug/l	99
46)	1,2-Dichloropropane	9.34	63	1258335	53.27	ug/l	100
47)	Bromodichloromethane	9.73	83	1690988	51.58	ug/l	100
48)	1,4-Dioxane	9.76	88	113358	1172.28	ug/l	97
49)	Dibromomethane	9.82	93	602961	54.12	ug/l	98
50)	2-Chloroethyl vinyl ether	10.22	63	329105	54.91	ug/l	98
51)	4-Methyl-2-pentanone	10.26	43	3235283	264.67	ug/l	99
52)	cis-1,3-Dichloropropene	10.62	75	1992729	54.21	ug/l	99
55)	Toluene	11.17	91	6025151	52.15	ug/l	100
56)	Ethyl methacrylate	11.45	69	966319	55.74	ug/l	98
57)	trans-1,3-Dichloropropene	11.48	75	1465798	54.58	ug/l	99
58)	1,1,2-Trichloroethane	11.74	97	796053	52.63	ug/l	100
59)	2-Hexanone	11.74	43	1992542	265.71	ug/l	99
60)	1,3-Dichloropropane	12.19	76	1380516	53.77	ug/l	99
61)	Tetrachloroethene	12.29	164	1249230	52.02	ug/l	100
62)	Dibromochloromethane	12.66	129	985487	53.37	ug/l	99
63)	1,2-Dibromoethane	13.03	107	822866	54.99	ug/l	99
64)	1-Chlorohexane	13.30	91	2572709	51.57	ug/l	100
65)	Chlorobenzene	13.79	112	3610696	52.42	ug/l	99
66)	1,1,1,2-Tetrachloroethane	13.86	131	1116459	52.63	ug/l	99
67)	Ethylbenzene	13.88	91	6718588	50.95	ug/l	99
68)	m-Xylene & p-Xylene	14.03	91	9682404	100.31	ug/l	99
69)	o-Xylene	14.84	91	5069451	51.03	ug/l	99
70)	Styrene	14.90	104	4017810	52.17	ug/l	99
71)	Isopropylbenzene	15.52	105	6705142	51.23	ug/l	100
73)	Bromoform	15.55	173	504524	50.13	ug/l	99
74)	trans-1,4-Dichloro-2-buten	15.63	53	237301	55.50	ug/l	96
75)	1,1,2,2-Tetrachloroethane	15.86	83	869256	52.68	ug/l	99
77)	1,2,3-Trichloropropane	16.14	110	235480	55.79	ug/l	92
78)	n-Propylbenzene	16.29	91	8220515	51.01	ug/l	100
79)	Bromobenzene	16.38	156	1345207	52.77	ug/l	100
80)	1,3,5-Trimethylbenzene	16.60	105	5240717	50.90	ug/l	99
81)	2-Chlorotoluene	16.63	91	4859918	50.09	ug/l	95
82)	4-Chlorotoluene	16.74	91	4476659	52.12	ug/l	97
83)	tert-Butylbenzene	17.29	134	1119401	51.83	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV204.D Vial: 10
Acq On : 11 May 2024 2:56 pm Operator: LPriet
Sample : VO01E119 5.0/25 Inst : 01
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:33 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
84)	1,2,4-Trimethylbenzene	17.36	105	5150477	51.12	ug/l	99
85)	sec-Butylbenzene	17.66	105	7213677	50.97	ug/l	100
86)	p-Isopropyltoluene	17.88	119	5536086	50.73	ug/l	100
87)	1,3-Dichlorobenzene	18.03	146	2506660	51.74	ug/l	100
88)	1,2,3-Trimethylbenzene	18.13	105	4772026	50.74	ug/l	99
89)	1,4-Dichlorobenzene	18.19	146	2389062	50.30	ug/l	99
90)	n-Butylbenzene	18.49	91	5704101	50.47	ug/l	100
91)	1,2-Dichlorobenzene	18.72	146	2055877	51.79	ug/l	100
92)	1,2-Dibromo-3-chloropropan	19.71	157	138333	52.22	ug/l	99
93)	1,2,4-Trichlorobenzene	20.80	180	1603778	55.34	ug/l	100
94)	Hexachlorobutadiene	20.97	225	940175	54.45	ug/l	100
95)	Naphthalene	21.15	128	1911993	56.52	ug/l	100
96)	1,2,3-Trichlorobenzene	21.46	180	1194867	54.73	ug/l	100

SM 5/15/24

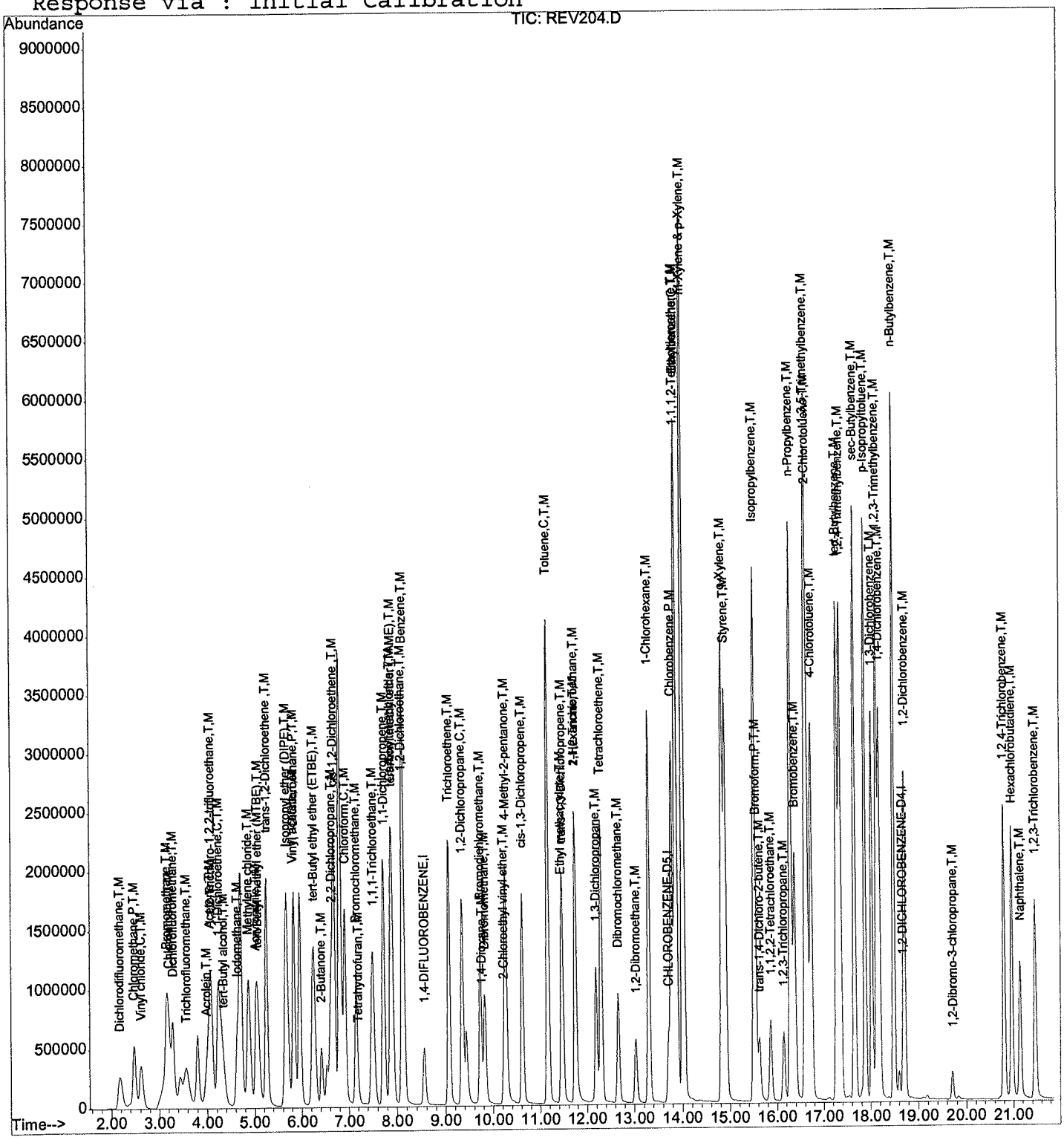
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E11\REV204.D
Acq On : 11 May 2024 2:56 pm
Sample : VO01E119 5.0/25
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 14:33 2024

Vial: 10
Operator: LPriet
Inst : 01
Multiplr: 1.00
Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV205.D Vial: 11
Acq On : 11 May 2024 3:26 pm Operator: LPriet
Sample : VO01DE1110 10/50 Inst : 01
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:34 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	813917	10.00	ug/l	0.02
53) CHLOROBENZENE-D5	13.72	117	663851	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	236992	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	0.00	98	0d	0.00	ug/l	
Spiked Amount 10.000			Recovery =	0.00%		
76) 4-Bromofluorobenzene	0.00	95	0d	0.00	ug/l	
Spiked Amount 10.000			Recovery =	0.00%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.18	85	2149061	98.68	ug/l	98
5) Chloromethane	2.48	50	2757462	90.43	ug/l	99
6) Vinyl chloride	2.61	62	2275750	89.61	ug/l	100
7) Bromomethane	3.15	94	2950163	99.92	ug/l	97
8) Chloroethane	3.20	64	1887602	102.46	ug/l	99
9) Dichlorofluoromethane	3.29	67	4893407	93.53	ug/l	98
10) Trichlorofluoromethane	3.57	101	3259184	94.86	ug/l	100
11) Acrolein	4.00	56	920713	503.62	ug/l	97
12) 1,1,2-Trichloro-1,2,2-trif	4.09	151	1635111	95.23	ug/l	100
13) Acetone	4.07	43	1378975	464.17	ug/l	96
14) 1,1-Dichloroethene	4.24	61	4287129	98.76	ug/l	100
15) tert-Butyl alcohol	4.34	59	2428061	2679.81	ug/l	99
16) Iodomethane	4.65	142	4731046	101.65	ug/l	100
18) Methylene chloride	4.87	49	3383840	97.16	ug/l	99
20) Acrylonitrile	5.02	53	1892610	502.15	ug/l	99
21) tert-Butyl methyl ether (M	5.07	73	4236425	99.23	ug/l	99
22) trans-1,2-Dichloroethene	5.26	61	4113790	98.36	ug/l	100
23) Isopropyl ether (DIPE)	5.67	45	8979646	100.48	ug/l	100
24) Vinyl acetate	5.82	43	3315001	108.06	ug/l	99
25) 1,1-Dichloroethane	5.84	63	4821432	98.58	ug/l	100
27) tert-Butyl ethyl ether (ET	6.25	59	6309833	98.54	ug/l	98
28) 2-Butanone	6.41	43	2458656	539.33	ug/l	99
29) 2,2-Dichloropropane	6.64	77	3940507	95.83	ug/l	100
30) cis-1,2-Dichloroethene	6.69	96	3330208	98.92	ug/l	99
31) Chloroform	6.92	83	4814377	96.59	ug/l	100
32) Bromochloromethane	7.15	49	1957186	99.99	ug/l	98
33) Tetrahydrofuran	7.20	42	291915	101.24	ug/l	96

(#) = qualifier out of range (m) = manual integration

SU 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV205.D Vial: 11
Acq On : 11 May 2024 3:26 pm Operator: LPriet
Sample : VO01DE1110 10/50 Inst : 01
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:34 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
35)	1,1,1-Trichloroethane	7.51	97	4134538	99.15	ug/l	100
38)	1,1-Dichloropropene	7.73	110	1407010	99.26	ug/l	98
39)	Carbon tetrachloride	7.88	119	3044744	98.02	ug/l	99
40)	tert-Amyl methyl ether (TA	7.89	73	4847551	97.30	ug/l	99
42)	Benzene	8.13	78	10614708	97.62	ug/l	100
43)	1,2-Dichloroethane	8.10	62	2198375	100.25	ug/l	100
44)	Trichloroethene	9.06	130	2868237	101.98	ug/l	99
46)	1,2-Dichloropropane	9.35	63	2435072	100.09	ug/l	100
47)	Bromodichloromethane	9.73	83	3272651	96.91	ug/l	100
48)	1,4-Dioxane	9.76	88	217292	2181.59	ug/l	95
49)	Dibromomethane	9.82	93	1156972	100.82	ug/l	98
50)	2-Chloroethyl vinyl ether	10.22	63	641035	103.83	ug/l	97
51)	4-Methyl-2-pentanone	10.26	43	6179211	488.45	ug/l	100
52)	cis-1,3-Dichloropropene	10.62	75	3875584	102.36	ug/l	99
55)	Toluene	11.17	91	11521987	97.73	ug/l	99
56)	Ethyl methacrylate	11.45	69	1848777	104.51	ug/l	97
57)	trans-1,3-Dichloropropene	11.48	75	2820520	102.93	ug/l	99
58)	1,1,2-Trichloroethane	11.75	97	1530353	99.15	ug/l	99
59)	2-Hexanone	11.75	43	3802288	492.69	ug/l	100
60)	1,3-Dichloropropane	12.19	76	2688647	102.62	ug/l	99
61)	Tetrachloroethene	12.31	164	2415182	98.56	ug/l	100
62)	Dibromochloromethane	12.66	129	1898169	100.74	ug/l	99
63)	1,2-Dibromoethane	13.03	107	1574680	103.12	ug/l	99
64)	1-Chlorohexane	13.30	91	4899203	96.24	ug/l	100
65)	Chlorobenzene	13.79	112	6936484	98.69	ug/l	99
66)	1,1,1,2-Tetrachloroethane	13.86	131	2153843	99.50	ug/l	99
67)	Ethylbenzene	13.88	91	12839879	95.43	ug/l	98
68)	m-Xylene & p-Xylene	14.03	91	18532298	188.15	ug/l	98
69)	o-Xylene	14.84	91	9582592	94.53	ug/l	98
70)	Styrene	14.90	104	7538023	95.93	ug/l	99
71)	Isopropylbenzene	15.52	105	12772431	95.63	ug/l	99
73)	Bromoform	15.55	173	986318	102.14	ug/l	99
74)	trans-1,4-Dichloro-2-buten	15.63	53	446145	109.12	ug/l	93
75)	1,1,2,2-Tetrachloroethane	15.86	83	1626217	103.07	ug/l	99
77)	1,2,3-Trichloropropane	16.15	110	438929	108.75	ug/l	92
78)	n-Propylbenzene	16.29	91	15596079	101.22	ug/l	99
79)	Bromobenzene	16.38	156	2566592	105.28	ug/l	100
80)	1,3,5-Trimethylbenzene	16.61	105	9823432	99.77	ug/l	98
81)	2-Chlorotoluene	16.63	91	9603952	103.52	ug/l	98
82)	4-Chlorotoluene	16.74	91	7702833	93.79	ug/l	98
83)	tert-Butylbenzene	17.29	134	2120781	102.68	ug/l	96

(#) = qualifier out of range (m) = manual integration SU 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV205.D Vial: 11
Acq On : 11 May 2024 3:26 pm Operator: LPriet
Sample : VO01DE1110 10/50 Inst : 01
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:34 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
84)	1,2,4-Trimethylbenzene	17.36	105	9615877	99.82	ug/l	97
85)	sec-Butylbenzene	17.66	105	13298763	98.26	ug/l	99
86)	p-Isopropyltoluene	17.88	119	10259365	98.33	ug/l	99
87)	1,3-Dichlorobenzene	18.03	146	4662217	100.65	ug/l	100
88)	1,2,3-Trimethylbenzene	18.13	105	8781878	97.65	ug/l	99
89)	1,4-Dichlorobenzene	18.19	146	4430571	97.55	ug/l	100
90)	n-Butylbenzene	18.49	91	10299843	95.31	ug/l	99
91)	1,2-Dichlorobenzene	18.72	146	3781801	99.63	ug/l	100
92)	1,2-Dibromo-3-chloropropan	19.72	157	255821	100.50	ug/l	100
93)	1,2,4-Trichlorobenzene	20.80	180	2909800	105.00	ug/l	100
94)	Hexachlorobutadiene	20.98	225	1658054	100.43	ug/l	100
95)	Naphthalene	21.14	128	3426614	105.94	ug/l	100
96)	1,2,3-Trichlorobenzene	21.46	180	2169257	103.91	ug/l	100

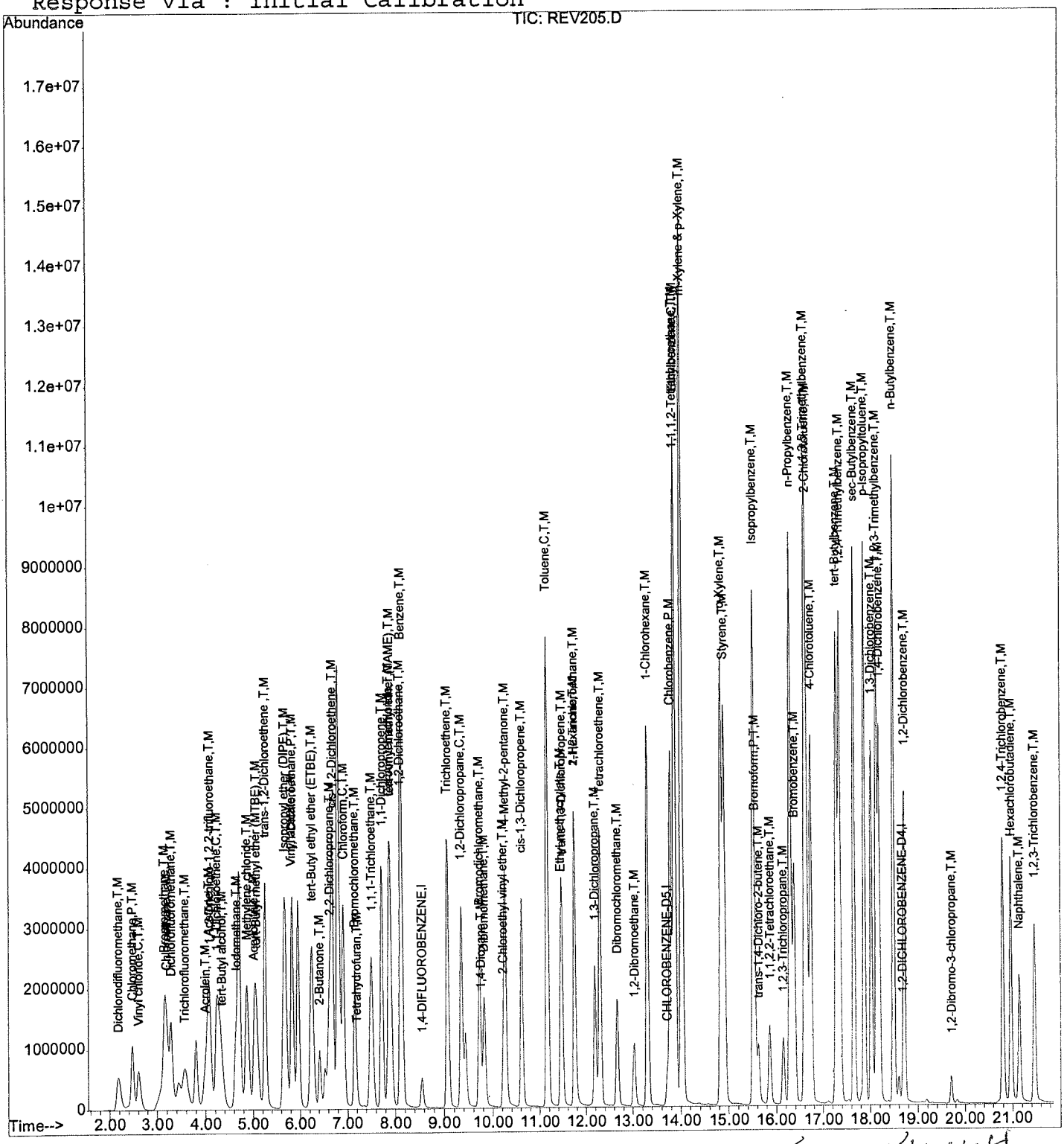
Su 5/15/24

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E11\REV205.D Vial: 11
Acq On : 11 May 2024 3:26 pm Operator: LPriet
Sample : VO01DE1110 10/50 Inst : 01
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:34 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



Su 5/15/24

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: REV209 BFB Injection Date: 05/13/24

Instrument ID: 01 BFB Injection Time: 11:31

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	17.676
75	30 - 60% of mass 95	40.505
95	Base Peak, 100% relative abundance	100.000
96	5 - 9% of mass 95	6.366
173	Less than 2% of mass 174	0.000(0)1
174	Greater than 50% of mass 95	77.234
175	5 - 9% of mass 174	5.650(7.32)1
176	95 - 101% % of mass 174	75.082(97.21)1
177	5 - 9% % of mass 176	4.812(6.41)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	VSTD10	IVO01E1102	REV210	05/13/24	12:06

SW 5/15/24

CONTINUE_CALIBRATION - CALIBRATION VERIFICATION

Instrument ID :01
IC_Beginning DateTime :05/11/24 10:58
Spike Amount :10 PPB
CC/CV File :REV210
IC File :REV201

Column Spec :RXI-624SILMS ID :0.25MM
IC_Ending DateTime :05/11/24 15:26
HPChem Method :VO01E11
Date_Time :05/13/24 12:06

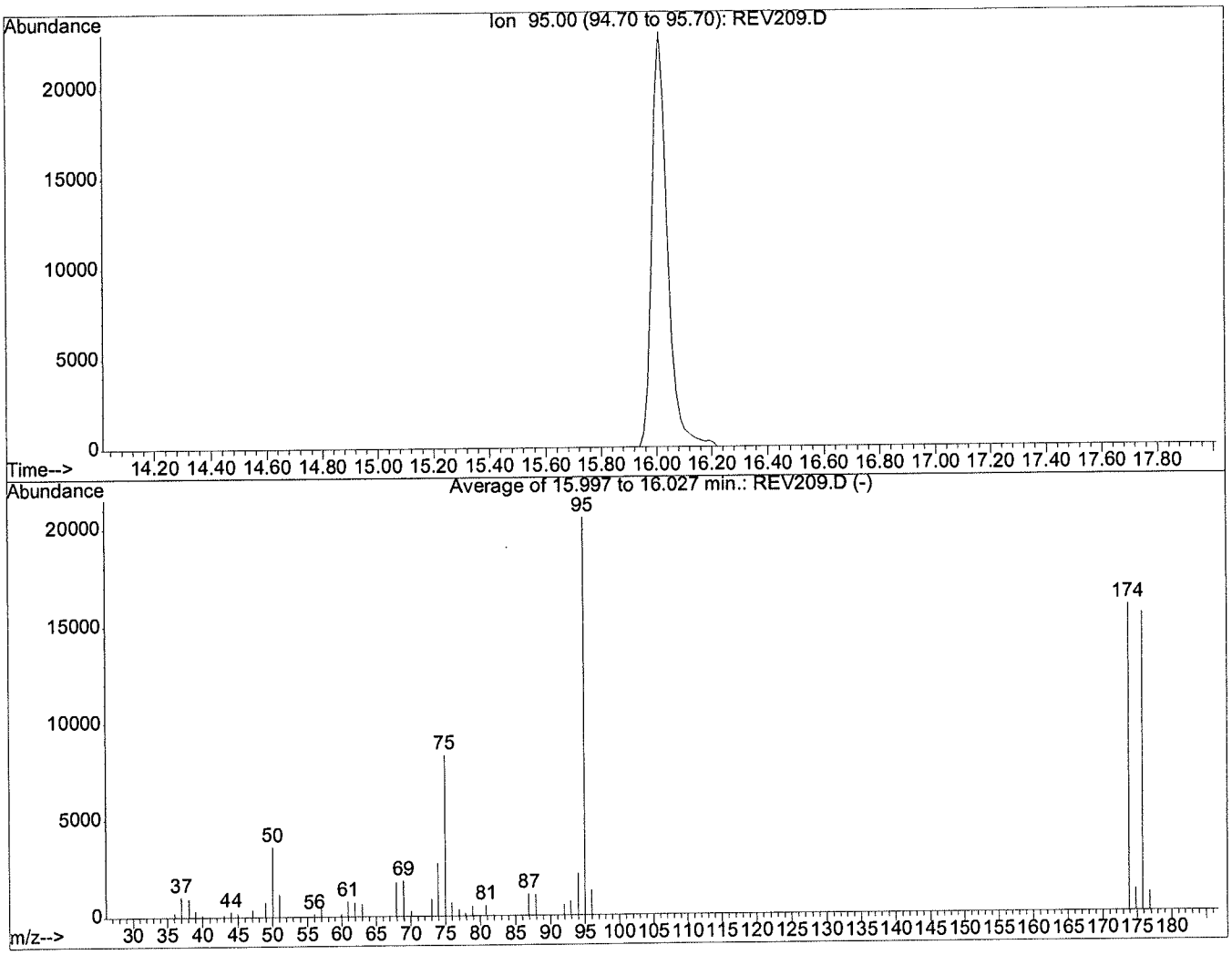
M	IDX	Parameters	CC_Con	CC%_D	CC_Resp	CCRRF	AvRRF	CC_Rtm	AvRtm	%_RSD	Co_X0	Co_X1	Co_X2	Co_Cor
	1	1,4-DIFLUOROBENZENE	10.000	0	907856	1	1	8.546	8.551	0				
	2	Chlorotrifluoroethylene												
	3	Dichlorodifluoromethane	10.744	7.4	261017	0.288	0.268	2.174	2.169	4.44				
	4	2-Chloro-1,1,1-trifluoroethane												
	5	Chloromethane	10.222	2.2	347692	0.383	0.375	2.487	2.471	7.39				
	6	Vinyl chloride	11.091	10.9	314201	0.346	0.312	2.615	2.605	6.31				
	7	Bromomethane	9.886	-1.1	332015	0.366	0.396	3.154	3.146	17.96	0.0078	0.3620		0.9993
	8	Chloroethane	9.929	-0.7	204024	0.225	0.226	3.198	3.190	4.21				
	9	Dichlorofluoromethane	9.809	-1.9	572473	0.631	0.643	3.287	3.276	8.21				
	10	Trichlorofluoromethane	10.405	4.0	398783	0.439	0.422	3.554	3.553	5.20				
5	11	Acrolein	46.638	-6.7	95103	0.021	0.022	3.984	3.986	5.86				
	12	1,1,2-Trichloro-1,2,2-trifluoroethane	10.699	7.0	204924	0.226	0.211	4.073	4.070	8.11				
5	13	Acetone	46.249	-7.5	153258	0.034	0.037	4.058	4.058	14.45				
	14	1,1-Dichloroethene	10.534	5.3	510086	0.562	0.533	4.235	4.230	4.74				
25	15	tert-Butyl alcohol	272.706	9.1	275606	0.012	0.011	4.339	4.342	9.12				
	16	Iodomethane	10.129	1.3	525854	0.579	0.572	4.635	4.639	4.85				
	17	Methyl acetate	9.648	-3.5	87177	0.096	0.100	4.650	4.653	10.84				
	18	Methylene chloride	10.396	4.0	403861	0.445	0.428	4.858	4.858	3.90				
	19	Carbon disulfide	9.410	-5.9	974363	1.073	1.140	4.887	4.880	6.08				
5	20	Acrylonitrile	49.767	-0.5	209223	0.046	0.046	5.021	5.025	4.77				
	21	tert-Butyl methyl ether (MTBE)	10.216	2.2	486511	0.536	0.525	5.065	5.061	4.67				
	22	trans-1,2-Dichloroethene	10.334	3.3	482107	0.531	0.514	5.243	5.249	4.44				
	23	Isopropyl ether (DIPE)	10.406	4.1	1037346	1.143	1.098	5.658	5.670	4.21				
	24	Vinyl acetate	10.436	4.4	357100	0.393	0.377	5.821	5.832	9.82				
	25	1,1-Dichloroethane	10.385	3.9	566566	0.624	0.601	5.821	5.830	4.54				
25	26	2-Butanol												
	27	tert-Butyl ethyl ether (ETBE)	10.658	6.6	761232	0.838	0.787	6.235	6.240	4.52				
5	28	2-Butanone	52.383	4.8	266366	0.059	0.056	6.413	6.428	10.70				
	29	2,2-Dichloropropane	10.370	3.7	475647	0.524	0.505	6.621	6.628	4.21				
	30	cis-1,2-Dichloroethene	10.325	3.2	387725	0.427	0.414	6.680	6.686	4.03				
	31	Chloroform	9.820	-1.8	545984	0.601	0.612	6.902	6.908	8.00				
	32	Bromochloromethane	10.539	5.4	230106	0.253	0.240	7.139	7.148	4.73				
	33	Tetrahydrofuran	10.289	2.9	33093	0.036	0.035	7.198	7.201	8.25				
	34	Dibromofluoromethane	9.898	-1.0	278148	0.306	0.310	7.228	7.228	7.01				
	35	1,1,1-Trichloroethane	10.373	3.7	482510	0.531	0.512	7.495	7.499	4.19				
	36	Cyclohexane	10.548	5.5	477860	0.526	0.499	7.524	7.524	6.15				
	37	2,2,4-Trimethylpentane												
	38	1,1-Dichloropropene	10.276	2.8	162485	0.179	0.174	7.717	7.723	4.16				
	39	Carbon tetrachloride	10.352	3.5	358693	0.395	0.382	7.880	7.878	4.43				
	40	tert-Amyl methyl ether (TAME)	10.127	1.3	562793	0.620	0.612	7.880	7.889	5.64				
	41	1,2-Dichloroethane-d4	9.949	-0.5	190681	0.210	0.211	7.954	7.965	7.18				
	42	Benzene	10.090	0.9	1223803	1.348	1.336	8.132	8.130	4.04				
	43	1,2-Dichloroethane	10.336	3.4	252838	0.279	0.269	8.102	8.104	4.45				
	44	Trichloroethene	10.150	1.5	318416	0.351	0.346	9.064	9.072	4.96				
	45	Methylcyclohexane	10.259	2.6	511326	0.563	0.549	9.153	9.165	6.46				
	46	1,2-Dichloropropane	10.115	1.1	274499	0.302	0.299	9.346	9.351	5.38				
	47	Bromodichloromethane	9.862	-1.4	371496	0.409	0.415	9.716	9.732	6.99				
20	48	1,4-Dioxane	205.358	2.7	22815	0.001	0.001	9.775	9.783	14.49				
	49	Dibromomethane	10.344	3.4	132415	0.146	0.141	9.820	9.823	5.30				
	50	2-Chloroethyl vinyl ether	10.212	2.1	70329	0.077	0.076	10.220	10.234	8.06				
5	51	4-Methyl-2-pentanone	49.033	-1.9	657246	0.145	0.136	10.264	10.276	18.90	-0.0424	0.1563		0.9988
	52	cis-1,3-Dichloropropene	10.274	2.7	433879	0.478	0.465	10.620	10.625	5.31				
	53	CHLOROBENZENE-D5	10.000	0	757489	1	1	13.716	13.717	0				
	54	Toluene-d8	9.566	-4.3	1085971	1.434	1.499	11.020	11.030	5.48				
	55	Toluene	9.906	-0.9	1332719	1.759	1.776	11.153	11.169	4.50				
	56	Ethyl methacrylate	10.213	2.1	206172	0.272	0.266	11.449	11.471	8.54				
	57	trans-1,3-Dichloropropene	10.298	3.0	322019	0.425	0.413	11.479	11.484	5.62				
	58	1,1,2-Trichloroethane	10.145	1.5	178678	0.236	0.233	11.746	11.751	4.45				
5	59	2-Hexanone	47.364	-5.3	378200	0.100	0.090	11.761	11.791	36.80	-0.0568	0.1174		0.9987
	60	1,3-Dichloropropane	10.169	1.7	304011	0.401	0.395	12.190	12.195	5.08				
	61	Tetrachloroethene	9.999	-0.0	279605	0.369	0.369	12.294	12.299	3.83				
	62	Dibromochloromethane	10.064	0.6	216381	0.286	0.284	12.664	12.667	5.55				
	63	1,2-Dibromoethane	10.349	3.5	180319	0.238	0.230	13.035	13.038	6.28				
	64	1-Chlorohexane	10.259	2.6	595972	0.787	0.767	13.301	13.308	4.69				
	65	Chlorobenzene	10.061	0.6	806907	1.065	1.059	13.775	13.791	3.64				
	66	1,1,1,2-Tetrachloroethane	10.136	1.4	250367	0.331	0.326	13.864	13.865	3.59				
	67	Ethylbenzene	9.991	-0.1	1533890	2.025	2.027	13.879	13.881	4.07				
2	68	m-Xylene & p-Xylene	20.234	1.2	2274121	1.501	1.484	14.012	14.021	4.23				
	69	o-Xylene	9.950	-0.5	1150973	1.519	1.527	14.827	14.843	4.66				
	70	Styrene	9.968	-0.3	893787	1.180	1.184	14.901	14.909	3.78				
	71	Isopropylbenzene	10.036	0.4	1529556	2.019	2.012	15.509	15.524	3.97				
	72	1,2-DICHLOROBENZENE-D4	10.000	0	290545	1	1	18.679	18.680	0				
	73	Bromoform	9.781	-2.2	112241	0.386	0.350	15.553	15.559	20.61	-0.0135	0.4088		0.9992
	74	trans-1,4-Dichloro-2-butene	10.276	2.8	51511	0.177	0.173	15.627	15.634	9.77				
	75	1,1,2,2-Tetrachloroethane	9.917	-0.8	191835	0.660	0.666	15.849	15.865	6.36				
	76	4-Bromofluorobenzene	9.429	-5.7	373151	1.284	1.362	15.998	16.015	6.06				
	77	1,2,3-Trichloropropane	10.138	1.4	50167	0.173	0.170	16.146	16.152	9.82				
	78	n-Propylbenzene	9.836	-1.6	1858212	6.396	6.502	16.294	16.298	5.03				
	79	Bromobenzene	9.996	-0.0	298744	1.028	1.029	16.383	16.383	5.26				
	80	1,3,5-Trimethylbenzene	9.883	-1.2	1193060	4.106	4.155	16.605	16.606	5.49				
	81	2-Chlorotoluene	10.005	0.1	1138017	3.917	3.915	16.635	16.635	4.84				
	82	4-Chlorotoluene	10.002	0.0	1007192	3.467	3.466	16.723	16.733	5.46				
	83	tert-Butylbenzene	9.950	-0.5	251948	0.867	0.871	17.287	17.287	4.70				
	84	1,2,4-Trimethylbenzene	9.900	-1.0	1169308	4.025	4.065	17.346	17.360	4.41				
	85	sec-Butylbenzene	9.967	-0.3	1653826	5.692	5.711	17.657	17.658	5.27				
	86	p-Isopropyltoluene	9.795	-2.0	1252965	4.312	4.403	17.879	17.880	5.17				
	87	1,3-Dichlorobenzene	10.012	0.1	568580	1.957	1.955	18.027	18.028	4.87				
	88	1,2,3-Trimethylbenzene	9.931	-0.7	1095079	3.769	3.795	18.131	18.132	4.70				
	89	1,4-Dichlorobenzene	9.894	-1.1	550958	1.896	1.916	18.190	18.191	4.92				
	90	n-Butylbenzene	9.925	-0.7	1315009	4.526	4.560	18.486	18.489	5.46				
	91	1,2-Dichlorobenzene	9.987	-0.1	464758	1.600	1.602	18.709	18.724	4.06				
	92	1,2-Dibromo-3-chloropropane	9.352	-6.5	27714	0.095	0.095	19.716	19.717	16.02	-0.0056	0.1080		0.9987
	93	1,2,4-Trichlorobenzene	10.080	0.8	342507	1.179	1.169	20.798	20.801	7.49				
	94	Hexachlorobutadiene	9.944	-0.6	201295	0.693	0.697	20.961	20.967	6.95				
	95	Naphthalene	10.201	2.0	404546	1.392	1.365	21.138	21.148	8.50				
	96	1,2,3-Trichlorobenzene	10.141	1.4	259547	0.893	0.881	21.464	21.466	6.66				

Spike Amount = Nominal Amount * M

SU
5/15/24

Data File : D:\HPCHEM\1\DATA\24E13\REV209.D
Acq On : 13 May 2024 11:31 am
Sample : BFB01E12
Misc : T/CHK
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls

Vial: 1
Operator: LPriet
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	17.7	3629	PASS
75	95	30	60	40.5	8316	PASS
95	95	100	100	100.0	20531	PASS
96	95	5	9	6.4	1307	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	77.2	15857	PASS
175	174	5	9	7.3	1160	PASS
176	174	95	101	97.2	15415	PASS
177	176	5	9	6.4	988	PASS

REV209.D VO01E11.M Mon May 13 14:37:52 2024 SU 5/15/24

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D Vial: 2
Acq On : 13 May 2024 12:06 pm Operator: LPriet
Sample : IVO01E1102 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\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	99	0.00
2	T,M	Chlorotrifluoroethylene	-1.000	0.000	0.0	0	-2.08#
3	T,M	Dichlorodifluoromethane	10.000	10.745	-7.4	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	10.223	-2.2	109	0.02
6	C,T,M	Vinyl chloride	10.000	11.092	-10.9	110	0.00
7	T,M	Bromomethane	10.000	9.887	1.1	110	0.01
8	T,M	Chloroethane	10.000	9.929	0.7	105	0.01
9	T,M	Dichlorofluoromethane	10.000	9.809	1.9	107	0.01
10	T,M	Trichlorofluoromethane	10.000	10.405	-4.0	109	0.00
11	T,M	Acrolein	50.000	46.638	6.7	104	0.00
12	T,M	1,1,2-Trichloro-1,2,2-trifl	10.000	10.700	-7.0	106	0.01
13	T,M	Acetone	50.000	46.249	7.5	108	0.00
14	C,T,M	1,1-Dichloroethene	10.000	10.535	-5.4	108	0.01
15	T,M	tert-Butyl alcohol	250.000	272.707	-9.1	118	0.00
16	T,M	Iodomethane	10.000	10.129	-1.3	105	0.00
17	T,M	Methyl acetate	10.000	9.648	3.5	113	0.00
18	T,M	Methylene chloride	10.000	10.396	-4.0	110	0.00
19	T,M	Carbon disulfide	10.000	9.411	5.9	99	0.02
20	T,M	Acrylonitrile	50.000	49.767	0.5	107	0.00
21	T,M	tert-Butyl methyl ether (MT	10.000	10.216	-2.2	112	0.00
22	T,M	trans-1,2-Dichloroethene	10.000	10.335	-3.4	110	0.00
23	T,M	Isopropyl ether (DIPE)	10.000	10.407	-4.1	110	-0.01
24	T,M	Vinyl acetate	10.000	10.436	-4.4	113	0.00
25	P,T,M	1,1-Dichloroethane	10.000	10.386	-3.9	109	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	10.658	-6.6	114	0.00
28	T,M	2-Butanone	50.000	52.384	-4.8	109	0.00
29	T,M	2,2-Dichloropropane	10.000	10.370	-3.7	108	0.00
30	T,M	cis-1,2-Dichloroethene	10.000	10.325	-3.2	107	0.00
31	C,T,M	Chloroform	10.000	9.821	1.8	107	0.00
32	T,M	Bromochloromethane	10.000	10.539	-5.4	112	0.00
33	T,M	Tetrahydrofuran	10.000	10.289	-2.9	121	0.00
34	S	Dibromofluoromethane	10.000	9.898	1.0	107	0.00
35	T,M	1,1,1-Trichloroethane	10.000	10.374	-3.7	108	0.00
36	T,M	Cyclohexane	10.000	10.549	-5.5	114	0.00
37	T,M	2,2,4-Trimethylpentane	10.000	0.000	100.0#	0	0.00
38	T,M	1,1-Dichloropropene	10.000	10.277	-2.8	108	0.00
39	T,M	Carbon tetrachloride	10.000	10.352	-3.5	107	0.00
40	T,M	tert-Amyl methyl ether (TAM	10.000	10.128	-1.3	113	0.00
41	S	1,2-Dichloroethane-d4	10.000	9.949	0.5	112	-0.01

(#) = Out of Range

5/15/24

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D Vial: 2
Acq On : 13 May 2024 12:06 pm Operator: LPriet
Sample : IVO01E1102 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\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	10.090	-0.9	106	0.00
43	T,M 1,2-Dichloroethane	10.000	10.337	-3.4	110	0.00
44	T,M Trichloroethene	10.000	10.150	-1.5	103	0.00
45	T,M Methylcyclohexane	10.000	10.260	-2.6	113	-0.01
46	C,T,M 1,2-Dichloropropane	10.000	10.115	-1.2	107	0.00
47	T,M Bromodichloromethane	10.000	9.863	1.4	109	-0.01
48	T,M 1,4-Dioxane	200.000	205.359	-2.7	114	-0.01
49	T,M Dibromomethane	10.000	10.345	-3.5	114	0.00
50	T,M 2-Chloroethyl vinyl ether	10.000	10.212	-2.1	110	-0.01
51	T,M 4-Methyl-2-pentanone	50.000	49.033	1.9	111	0.00
52	T,M cis-1,3-Dichloropropene	10.000	10.274	-2.7	109	0.00
53	I CHLOROBENZENE-D5	10.000	10.000	0.0	102	0.00
54	S Toluene-d8	10.000	9.567	4.3	105	-0.01
55	C,T,M Toluene	10.000	9.907	0.9	106	-0.01
56	T,M Ethyl methacrylate	10.000	10.214	-2.1	113	-0.01
57	T,M trans-1,3-Dichloropropene	10.000	10.299	-3.0	111	0.00
58	T,M 1,1,2-Trichloroethane	10.000	10.145	-1.4	111	0.00
59	T,M 2-Hexanone	50.000	47.365	5.3	113	0.00
60	T,M 1,3-Dichloropropane	10.000	10.169	-1.7	112	0.00
61	T,M Tetrachloroethene	10.000	9.999	0.0	105	0.00
62	T,M Dibromochloromethane	10.000	10.064	-0.6	112	0.00
63	T,M 1,2-Dibromoethane	10.000	10.349	-3.5	113	0.00
64	T,M 1-Chlorohexane	10.000	10.260	-2.6	108	0.00
65	P,M Chlorobenzene	10.000	10.062	-0.6	106	-0.01
66	T,M 1,1,1,2-Tetrachloroethane	10.000	10.136	-1.4	108	0.00
67	C,T,M Ethylbenzene	10.000	9.991	0.1	104	0.00
68	T,M m-Xylene & p-Xylene	20.000	20.234	-1.2	107	0.00
69	T,M o-Xylene	10.000	9.950	0.5	107	-0.01
70	T,M Styrene	10.000	9.968	0.3	106	0.00
71	T,M Isopropylbenzene	10.000	10.037	-0.4	105	-0.01
72	I 1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	102	0.00
73	P,T,M Bromoform	10.000	9.781	2.2	117	0.00
74	T,M trans-1,4-Dichloro-2-butene	10.000	10.277	-2.8	116	0.00
75	T,M 1,1,2,2-Tetrachloroethane	10.000	9.918	0.8	114	-0.01
76	S 4-Bromofluorobenzene	10.000	9.430	5.7	107	-0.01
77	T,M 1,2,3-Trichloropropane	10.000	10.138	-1.4	111	0.00
78	T,M n-Propylbenzene	10.000	9.837	1.6	104	0.00
79	T,M Bromobenzene	10.000	9.996	0.0	107	0.00
80	T,M 1,3,5-Trimethylbenzene	10.000	9.884	1.2	105	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D Vial: 2
Acq On : 13 May 2024 12:06 pm Operator: LPriet
Sample : IVO01E1102 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\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	10.006	-0.1	107	0.00
82	T,M	4-Chlorotoluene	10.000	10.003	-0.0	105	0.00
83	T,M	tert-Butylbenzene	10.000	9.950	0.5	105	0.00
84	T,M	1,2,4-Trimethylbenzene	10.000	9.901	1.0	104	-0.01
85	T,M	sec-Butylbenzene	10.000	9.967	0.3	105	0.00
86	T,M	p-Isopropyltoluene	10.000	9.795	2.1	104	0.00
87	T,M	1,3-Dichlorobenzene	10.000	10.012	-0.1	107	0.00
88	T,M	1,2,3-Trimethylbenzene	10.000	9.932	0.7	107	0.00
89	T,M	1,4-Dichlorobenzene	10.000	9.895	1.1	106	0.00
90	T,M	n-Butylbenzene	10.000	9.925	0.7	105	0.00
91	T,M	1,2-Dichlorobenzene	10.000	9.987	0.1	109	-0.01
92	T,M	1,2-Dibromo-3-chloropropane	10.000	9.353	6.5	117	0.00
93	T,M	1,2,4-Trichlorobenzene	10.000	10.081	-0.8	109	0.00
94	T,M	Hexachlorobutadiene	10.000	9.945	0.5	102	0.00
95	T,M	Naphthalene	10.000	10.202	-2.0	113	0.00
96	T,M	1,2,3-Trichlorobenzene	10.000	10.141	-1.4	110	0.00

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D
Acq On : 13 May 2024 12:06 pm
Sample : IVO01E1102 1.0/5.0
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P

Vial: 2
Operator: LPriet
Inst : 01
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	99	0.00
2	T,M	Chlorotrifluoroethylene	0.000	0.000	0.0	0#	-2.08#
3	T,M	Dichlorodifluoromethane	0.268	0.288	-7.5	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	0.375	0.383	-2.1	109	0.02
6	C,T,M	Vinyl chloride	0.312	0.346	-10.9	110	0.00
7	T,M	Bromomethane	0.396	0.366	7.6	110	0.01
8	T,M	Chloroethane	0.226	0.225	0.4	105	0.01
9	T,M	Dichlorofluoromethane	0.643	0.631	1.9	107	0.01
10	T,M	Trichlorofluoromethane	0.422	0.439	-4.0	109	0.00
11	T,M	Acrolein	0.022	0.021	4.5	104	0.00
12	T,M	1,1,2-Trichloro-1,2,2-trifl	0.211	0.226	-7.1	106	0.01
13	T,M	Acetone	0.037	0.034	8.1	108	0.00
14	C,T,M	1,1-Dichloroethene	0.533	0.562	-5.4	108	0.01
15	T,M	tert-Butyl alcohol	0.011	0.012	-9.1	118	0.00
16	T,M	Iodomethane	0.572	0.579	-1.2	105	0.00
17	T,M	Methyl acetate	0.100	0.096	4.0	113	0.00
18	T,M	Methylene chloride	0.428	0.445	-4.0	110	0.00
19	T,M	Carbon disulfide	1.140	1.073	5.9	99	0.02
20	T,M	Acrylonitrile	0.046	0.046	0.0	107	0.00
21	T,M	tert-Butyl methyl ether (MT	0.525	0.536	-2.1	112	0.00
22	T,M	trans-1,2-Dichloroethene	0.514	0.531	-3.3	110	0.00
23	T,M	Isopropyl ether (DIPE)	1.098	1.143	-4.1	110	-0.01
24	T,M	Vinyl acetate	0.377	0.393	-4.2	113	0.00
25	P,T,M	1,1-Dichloroethane	0.601	0.624	-3.8	109	0.00
26	T,M	2-Butanol	0.000	0.010	0.0	0#	0.00
27	T,M	tert-Butyl ethyl ether (ETB	0.787	0.838	-6.5	114	0.00
28	T,M	2-Butanone	0.056	0.059	-5.4	109	0.00
29	T,M	2,2-Dichloropropane	0.505	0.524	-3.8	108	0.00
30	T,M	cis-1,2-Dichloroethene	0.414	0.427	-3.1	107	0.00
31	C,T,M	Chloroform	0.612	0.601	1.8	107	0.00
32	T,M	Bromochloromethane	0.240	0.253	-5.4	112	0.00
33	T,M	Tetrahydrofuran	0.035	0.036	-2.9	121	0.00
34	S	Dibromofluoromethane	0.310	0.306	1.3	107	0.00
35	T,M	1,1,1-Trichloroethane	0.512	0.531	-3.7	108	0.00
36	T,M	Cyclohexane	0.499	0.526	-5.4	114	0.00
37	T,M	2,2,4-Trimethylpentane	0.000	0.032	0.0	0#	0.00
38	T,M	1,1-Dichloropropene	0.174	0.179	-2.9	108	0.00
39	T,M	Carbon tetrachloride	0.382	0.395	-3.4	107	0.00
40	T,M	tert-Amyl methyl ether (TAM	0.612	0.620	-1.3	113	0.00
41	S	1,2-Dichloroethane-d4	0.211	0.210	0.5	112	-0.01

(#) = Out of Range

SA 5/15/24

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D Vial: 2
Acq On : 13 May 2024 12:06 pm Operator: LPriet
Sample : IVO01E1102 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\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	1.336	1.348	-0.9	106	0.00
43	T,M	1,2-Dichloroethane	0.269	0.279	-3.7	110	0.00
44	T,M	Trichloroethene	0.346	0.351	-1.4	103	0.00
45	T,M	Methylcyclohexane	0.549	0.563	-2.6	113	-0.01
46	C,T,M	1,2-Dichloropropane	0.299	0.302	-1.0	107	0.00
47	T,M	Bromodichloromethane	0.415	0.409	1.4	109	-0.01
48	T,M	1,4-Dioxane	0.001	0.001	0.0	114	-0.01
49	T,M	Dibromomethane	0.141	0.146	-3.5	114	0.00
50	T,M	2-Chloroethyl vinyl ether	0.076	0.077	-1.3	110	-0.01
51	T,M	4-Methyl-2-pentanone	0.136	0.145	-6.6	111	0.00
52	T,M	cis-1,3-Dichloropropene	0.465	0.478	-2.8	109	0.00
53	I	CHLOROBENZENE-D5	1.000	1.000	0.0	102	0.00
54	S	Toluene-d8	1.499	1.434	4.3	105	-0.01
55	C,T,M	Toluene	1.776	1.759	1.0	106	-0.01
56	T,M	Ethyl methacrylate	0.266	0.272	-2.3	113	-0.01
57	T,M	trans-1,3-Dichloropropene	0.413	0.425	-2.9	111	0.00
58	T,M	1,1,2-Trichloroethane	0.233	0.236	-1.3	111	0.00
59	T,M	2-Hexanone	0.090	0.100	-11.1	113	0.00
60	T,M	1,3-Dichloropropane	0.395	0.401	-1.5	112	0.00
61	T,M	Tetrachloroethene	0.369	0.369	0.0	105	0.00
62	T,M	Dibromochloromethane	0.284	0.286	-0.7	112	0.00
63	T,M	1,2-Dibromoethane	0.230	0.238	-3.5	113	0.00
64	T,M	1-Chlorohexane	0.767	0.787	-2.6	108	0.00
65	P,M	Chlorobenzene	1.059	1.065	-0.6	106	-0.01
66	T,M	1,1,1,2-Tetrachloroethane	0.326	0.331	-1.5	108	0.00
67	C,T,M	Ethylbenzene	2.027	2.025	0.1	104	0.00
68	T,M	m-Xylene & p-Xylene	1.484	1.501	-1.1	107	0.00
69	T,M	o-Xylene	1.527	1.519	0.5	107	-0.01
70	T,M	Styrene	1.184	1.180	0.3	106	0.00
71	T,M	Isopropylbenzene	2.012	2.019	-0.3	105	-0.01
72	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	102	0.00
73	P,T,M	Bromoform	0.350	0.386	-10.3	117	0.00
74	T,M	trans-1,4-Dichloro-2-butene	0.173	0.177	-2.3	116	0.00
75	T,M	1,1,2,2-Tetrachloroethane	0.666	0.660	0.9	114	-0.01
76	S	4-Bromofluorobenzene	1.362	1.284	5.7	107	-0.01
77	T,M	1,2,3-Trichloropropane	0.170	0.173	-1.8	111	0.00
78	T,M	n-Propylbenzene	6.502	6.396	1.6	104	0.00
79	T,M	Bromobenzene	1.029	1.028	0.1	107	0.00
80	T,M	1,3,5-Trimethylbenzene	4.155	4.106	1.2	105	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D
Acq On : 13 May 2024 12:06 pm
Sample : IVO01E1102 1.0/5.0
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P

Vial: 2
Operator: LPriet
Inst : 01
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	3.915	3.917	-0.1	107	0.00
82	T,M	4-Chlorotoluene	3.466	3.467	-0.0	105	0.00
83	T,M	tert-Butylbenzene	0.871	0.867	0.5	105	0.00
84	T,M	1,2,4-Trimethylbenzene	4.065	4.025	1.0	104	-0.01
85	T,M	sec-Butylbenzene	5.711	5.692	0.3	105	0.00
86	T,M	p-Isopropyltoluene	4.403	4.312	2.1	104	0.00
87	T,M	1,3-Dichlorobenzene	1.955	1.957	-0.1	107	0.00
88	T,M	1,2,3-Trimethylbenzene	3.795	3.769	0.7	107	0.00
89	T,M	1,4-Dichlorobenzene	1.916	1.896	1.0	106	0.00
90	T,M	n-Butylbenzene	4.560	4.526	0.7	105	0.00
91	T,M	1,2-Dichlorobenzene	1.602	1.600	0.1	109	-0.01
92	T,M	1,2-Dibromo-3-chloropropane	0.095	0.095	0.0	117	0.00
93	T,M	1,2,4-Trichlorobenzene	1.169	1.179	-0.9	109	0.00
94	T,M	Hexachlorobutadiene	0.697	0.693	0.6	102	0.00
95	T,M	Naphthalene	1.365	1.392	-2.0	113	0.00
96	T,M	1,2,3-Trichlorobenzene	0.881	0.893	-1.4	110	0.00

SK 5/15/24

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D Vial: 2
Acq On : 13 May 2024 12:06 pm Operator: LPriet
Sample : IVO01E1102 1.0/5.0 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:24 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.55	114	907856	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.72	117	757489	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	290545	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	278148	9.90	ug/l	0.00
Spiked Amount 10.000			Recovery = 99.00%			
41) 1,2-Dichloroethane-d4	7.95	65	190681	9.95	ug/l	-0.01
Spiked Amount 10.000			Recovery = 99.50%			
54) Toluene-d8	11.02	98	1085971	9.57	ug/l	-0.01
Spiked Amount 10.000			Recovery = 95.70%			
76) 4-Bromofluorobenzene	16.00	95	373151	9.43	ug/l	-0.01
Spiked Amount 10.000			Recovery = 94.30%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.17	85	261017	10.74	ug/l	99
5) Chloromethane	2.49	50	347692	10.22	ug/l	99
6) Vinyl chloride	2.62	62	314201	11.09	ug/l	99
7) Bromomethane	3.15	94	332015	9.89	ug/l	99
8) Chloroethane	3.20	64	204024	9.93	ug/l	98
9) Dichlorofluoromethane	3.29	67	572473	9.81	ug/l	97
10) Trichlorofluoromethane	3.55	101	398783	10.41	ug/l	99
11) Acrolein	3.98	56	95103	46.64	ug/l	99
12) 1,1,2-Trichloro-1,2,2-trif	4.07	151	204924	10.70	ug/l	100
13) Acetone	4.06	43	153258	46.25	ug/l	100
14) 1,1-Dichloroethene	4.24	61	510086	10.53	ug/l	99
15) tert-Butyl alcohol	4.34	59	275606	272.71	ug/l	99
16) Iodomethane	4.64	142	525854	10.13	ug/l	100
17) Methyl acetate	4.65	43	87177	9.65	ug/l	97
18) Methylene chloride	4.86	49	403861	10.40	ug/l	98
19) Carbon disulfide	4.89	76	974363	9.41	ug/l	99
20) Acrylonitrile	5.02	53	209223	49.77	ug/l	100
21) tert-Butyl methyl ether (M	5.07	73	486511	10.22	ug/l	100
22) trans-1,2-Dichloroethene	5.24	61	482107	10.33	ug/l	98
23) Isopropyl ether (DIPE)	5.66	45	1037346	10.41	ug/l	98
24) Vinyl acetate	5.82	43	357100	10.44	ug/l	99
25) 1,1-Dichloroethane	5.82	63	566566	10.39	ug/l	100
27) tert-Butyl ethyl ether (ET	6.24	59	761232	10.66	ug/l	100
28) 2-Butanone	6.41	43	266366	52.38	ug/l	100
29) 2,2-Dichloropropane	6.62	77	475647	10.37	ug/l	100
30) cis-1,2-Dichloroethene	6.68	96	387725	10.33	ug/l	99
31) Chloroform	6.90	83	545984	9.82	ug/l	99

(#) = qualifier out of range (m) = manual integration
REV210.D VO01E11.M Mon May 13 14:38:25 2024 5/15/24 Page 1

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D Vial: 2
Acq On : 13 May 2024 12:06 pm Operator: LPriet
Sample : IVO01E1102 1.0/5.0 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:24 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.14	49	230106	10.54	ug/l	98
33)	Tetrahydrofuran	7.20	42	33093	10.29	ug/l	97
35)	1,1,1-Trichloroethane	7.49	97	482510	10.37	ug/l	100
36)	Cyclohexane	7.52	84	477860	10.55	ug/l	100
38)	1,1-Dichloropropene	7.72	110	162485	10.28	ug/l	99
39)	Carbon tetrachloride	7.88	119	358693	10.35	ug/l	99
40)	tert-Amyl methyl ether (TA	7.88	73	562793	10.13	ug/l	100
42)	Benzene	8.13	78	1223803	10.09	ug/l	100
43)	1,2-Dichloroethane	8.10	62	252838	10.34	ug/l	99
44)	Trichloroethene	9.06	130	318416	10.15	ug/l	98
45)	Methylcyclohexane	9.15	83	511326	10.26	ug/l	99
46)	1,2-Dichloropropane	9.35	63	274499	10.12	ug/l	99
47)	Bromodichloromethane	9.72	83	371496	9.86	ug/l	99
48)	1,4-Dioxane	9.78	88	22815	205.36	ug/l	99
49)	Dibromomethane	9.82	93	132415	10.34	ug/l	98
50)	2-Chloroethyl vinyl ether	10.22	63	70329	10.21	ug/l	99
51)	4-Methyl-2-pentanone	10.26	43	657246	49.03	ug/l	100
52)	cis-1,3-Dichloropropene	10.62	75	433879	10.27	ug/l	100
55)	Toluene	11.15	91	1332719	9.91	ug/l	100
56)	Ethyl methacrylate	11.45	69	206172	10.21	ug/l	98
57)	trans-1,3-Dichloropropene	11.48	75	322019	10.30	ug/l	99
58)	1,1,2-Trichloroethane	11.75	97	178678	10.15	ug/l	99
59)	2-Hexanone	11.76	43	378200	47.36	ug/l	100
60)	1,3-Dichloropropane	12.19	76	304011	10.17	ug/l	100
61)	Tetrachloroethene	12.29	164	279605	10.00	ug/l	99
62)	Dibromochloromethane	12.66	129	216381	10.06	ug/l	100
63)	1,2-Dibromoethane	13.03	107	180319	10.35	ug/l	99
64)	1-Chlorohexane	13.30	91	595972	10.26	ug/l	100
65)	Chlorobenzene	13.78	112	806907	10.06	ug/l	100
66)	1,1,1,2-Tetrachloroethane	13.86	131	250367	10.14	ug/l	98
67)	Ethylbenzene	13.88	91	1533890	9.99	ug/l	100
68)	m-Xylene & p-Xylene	14.01	91	2274121	20.23	ug/l	100
69)	o-Xylene	14.83	91	1150973	9.95	ug/l	100
70)	Styrene	14.90	104	893787	9.97	ug/l	100
71)	Isopropylbenzene	15.51	105	1529556	10.04	ug/l	100
73)	Bromoform	15.55	173	112241	9.78	ug/l	97
74)	trans-1,4-Dichloro-2-buten	15.63	53	51511	10.28	ug/l	100
75)	1,1,2,2-Tetrachloroethane	15.85	83	191835	9.92	ug/l	98
77)	1,2,3-Trichloropropane	16.15	110	50167	10.14	ug/l	97
78)	n-Propylbenzene	16.29	91	1858212	9.84	ug/l	100
79)	Bromobenzene	16.38	156	298744	10.00	ug/l	99

(#) = qualifier out of range (m) = manual integration

SA 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D Vial: 2
Acq On : 13 May 2024 12:06 pm Operator: LPriet
Sample : IVO01E1102 1.0/5.0 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:24 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.61	105	1193060	9.88	ug/l	99
81)	2-Chlorotoluene	16.63	91	1138017	10.01	ug/l	100
82)	4-Chlorotoluene	16.72	91	1007192	10.00	ug/l	100
83)	tert-Butylbenzene	17.29	134	251948	9.95	ug/l	98
84)	1,2,4-Trimethylbenzene	17.35	105	1169308	9.90	ug/l	99
85)	sec-Butylbenzene	17.66	105	1653826	9.97	ug/l	100
86)	p-Isopropyltoluene	17.88	119	1252965	9.80	ug/l	100
87)	1,3-Dichlorobenzene	18.03	146	568580	10.01	ug/l	100
88)	1,2,3-Trimethylbenzene	18.13	105	1095079	9.93	ug/l	99
89)	1,4-Dichlorobenzene	18.19	146	550958	9.89	ug/l	100
90)	n-Butylbenzene	18.49	91	1315009	9.93	ug/l	100
91)	1,2-Dichlorobenzene	18.71	146	464758	9.99	ug/l	99
92)	1,2-Dibromo-3-chloropropan	19.72	157	27714	9.35	ug/l	99
93)	1,2,4-Trichlorobenzene	20.80	180	342507	10.08	ug/l	99
94)	Hexachlorobutadiene	20.96	225	201295	9.94	ug/l	98
95)	Naphthalene	21.14	128	404546	10.20	ug/l	100
96)	1,2,3-Trichlorobenzene	21.46	180	259547	10.14	ug/l	99

SA 5/15/24

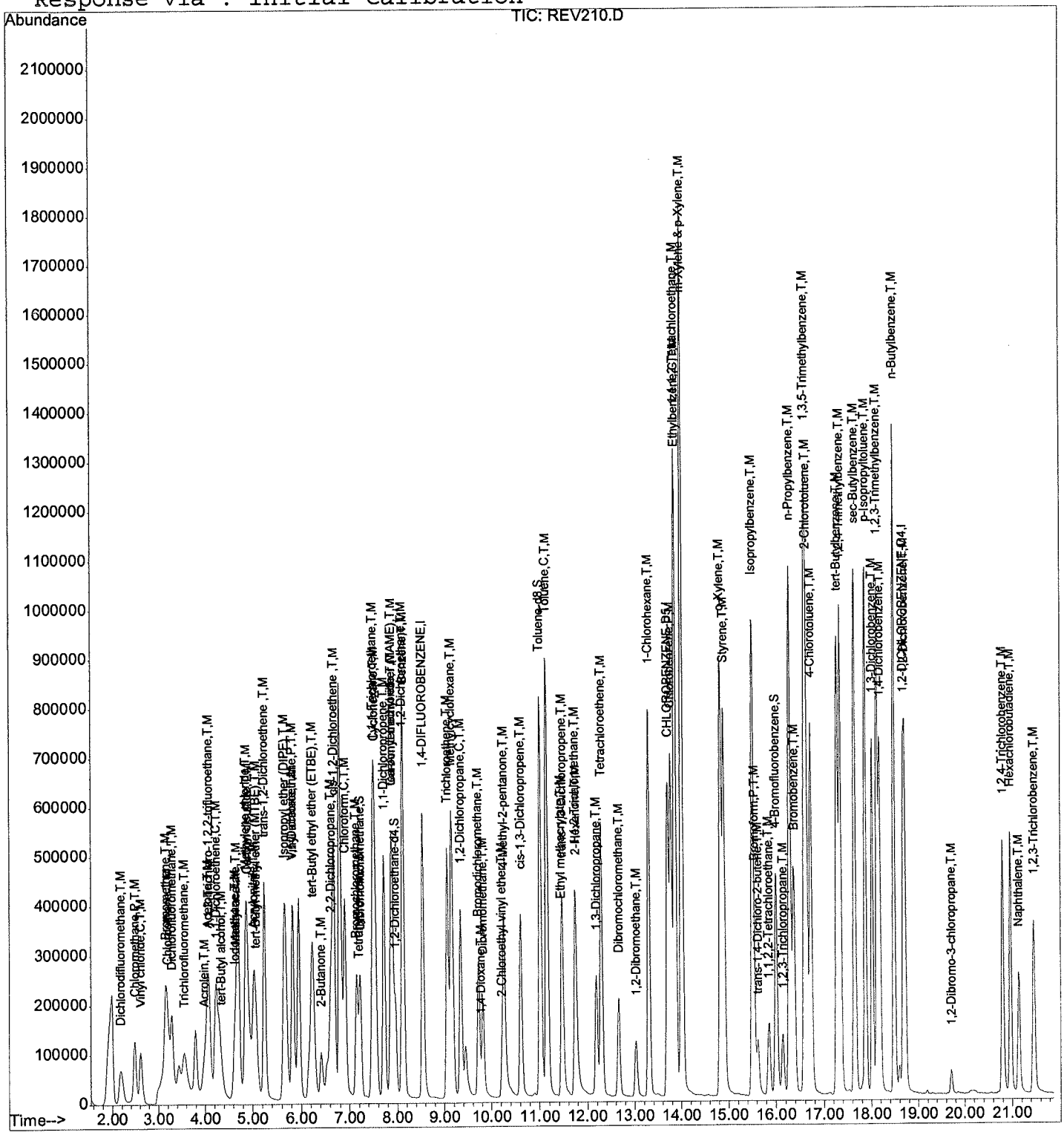
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D
Acq On : 13 May 2024 12:06 pm
Sample : IVO01E1102 1.0/5.0
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 13:24 2024

Vial: 2
Operator: LPriet
Inst : 01
Multiplr: 1.00
Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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 : 24F013
Lab File ID: RFV056 BFB Injection Date: 06/05/24
Instrument ID: 01 BFB Injection Time: 10:23

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	18.527
75	30 - 60% of mass 95	43.109
95	Base Peak, 100% relative abundance	100.000
96	5 - 9% of mass 95	6.329
173	Less than 2% of mass 174	0.000(0)1
174	Greater than 50% of mass 95	79.271
175	5 - 9% of mass 174	5.409(6.82)1
176	95 - 101% % of mass 174	75.866(95.7)1
177	5 - 9% % of mass 176	5.097(6.72)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	CV001E111B	RFV057	06/05/24	11:02
2	LCS1W	V001F03L	RFV058	06/05/24	11:48
3	LCD1W	V001F03C	RFV059	06/05/24	12:18
4	MBLK1W	V001F03B	RFV061	06/05/24	13:17
5	TB04-GW060424	24F013-01	RFV062	06/05/24	13:47
6	MW43-GW060424-25B	24F013-02	RFV066	06/05/24	15:46

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: EMAX Laboratories, Inc.
Lab Code: EMAX
Lab File ID: REV201
Instrument ID: 01

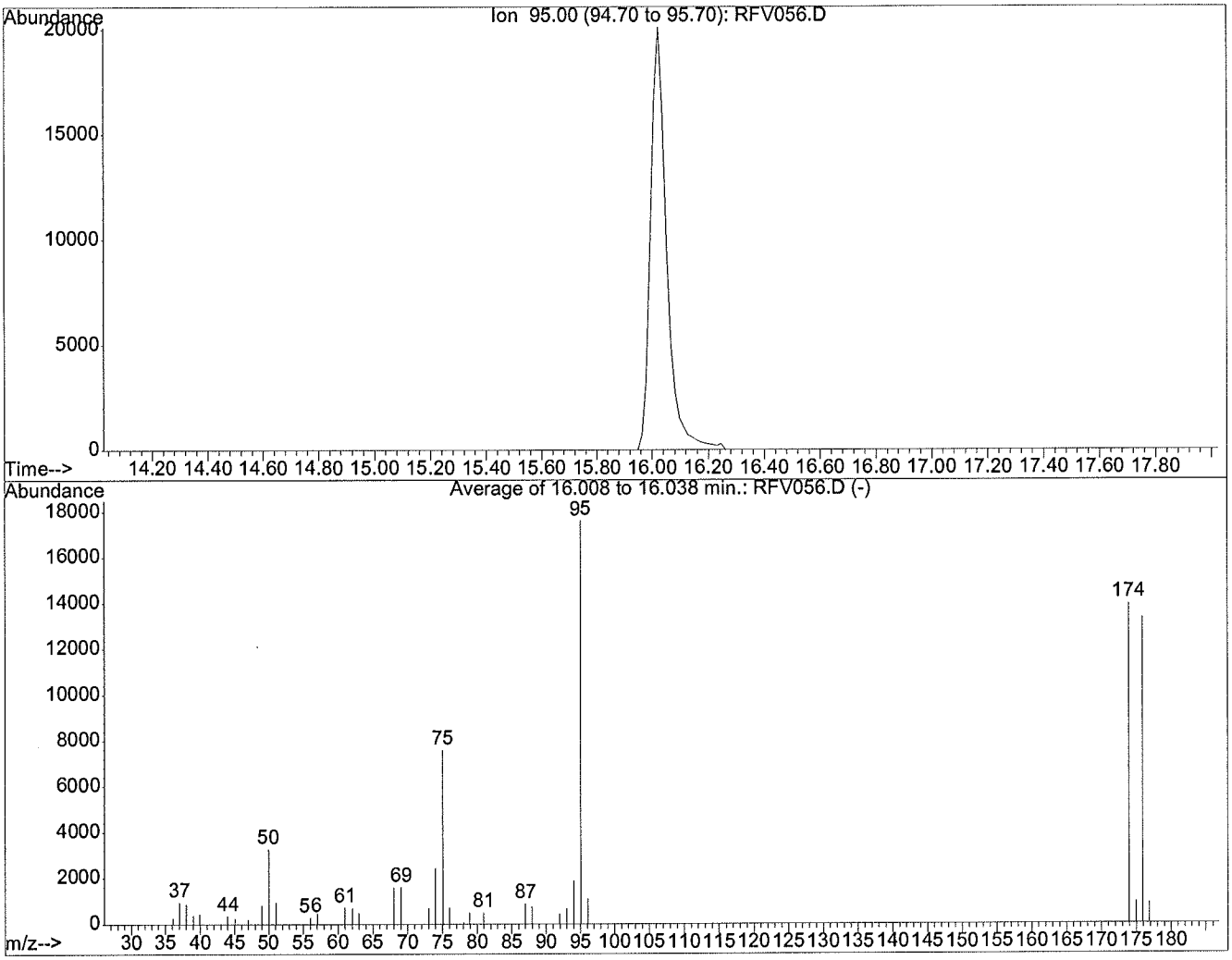
Project: VA SALT LAKE CITY
SDG No: 24F013
Date Analyzed: 05/11/24
Time Analyzed: 13:28

INTERNAL STANDARD (IS)	1,4-DIFLUOROBENZENE		CHLOROBENZENE-D5		1,2-DICHLOROBENZENE-D4	
	Area #	RT #	Area #	RT #	Area #	RT #
12 HOUR STD	920983	8.54	742213	13.71	284055	18.68
UPPER LIMIT	1841966	8.71	1484426	13.88	568110	18.85
LOWER LIMIT	460492	8.37	371107	13.54	142028	18.51
	Area #	RT #	Area #	RT #	Area #	RT #
1 VSTD10	790689	8.56	667993	13.71	281916	18.69
2 LCS1W	818488	8.54	666670	13.71	270588	18.69
3 LCD1W	800002	8.56	655706	13.71	271258	18.69
4 MBLK1W	812588	8.56	676078	13.73	285240	18.69
5 TB04-GW060424	754447	8.56	596000	13.73	235365	18.69
6 MW43-GW060424-258	748141	8.56	584378	13.73	242238	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\24F05\RFV056.D
Acq On : 5 Jun 2024 10:23 am
Sample : BFB01F03
Misc : T/CHK
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls

Vial: 1
Operator: LPriet
Inst : 01
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	18.5	3264	PASS
75	95	30	60	43.1	7595	PASS
95	95	100	100	100.0	17618	PASS
96	95	5	9	6.3	1115	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	79.3	13966	PASS
175	174	5	9	6.8	953	PASS
176	174	95	101	95.7	13366	PASS
177	176	5	9	6.7	898	PASS

RFV056.D VO01E11.M Thu Jun 06 12:11:52 2024

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F05\RFV057.D Vial: 2
Acq On : 5 Jun 2024 11:02 am Operator: LPriet
Sample : CVO01E1118 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	86	0.01
2	T,M	Chlorotrifluoroethylene	-1.000	0.000	0.0	0	-2.08#
3	T,M	Dichlorodifluoromethane	10.000	11.877	-18.8	107	0.02
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	8.545	14.6	79	0.02
6	C,T,M	Vinyl chloride	10.000	10.079	-0.8	87	0.02
7	T,M	Bromomethane	10.000	8.944	10.6	86	0.02
8	T,M	Chloroethane	10.000	10.654	-6.5	98	0.03
9	T,M	Dichlorofluoromethane	10.000	9.866	1.3	94	0.02
10	T,M	Trichlorofluoromethane	10.000	11.500	-15.0	105	0.02
11	T,M	Acrolein	50.000	47.671	4.7	92	0.02
12	T,M	1,1,2-Trichloro-1,2,2-trifl	10.000	11.210	-12.1	97	0.03
13	T,M	Acetone	50.000	51.379	-2.8	105	0.00
14	C,T,M	1,1-Dichloroethene	10.000	10.269	-2.7	92	0.02
15	T,M	tert-Butyl alcohol	250.000	259.673	-3.9	98	0.00
16	T,M	Iodomethane	10.000	10.423	-4.2	94	0.02
17	T,M	Methyl acetate	10.000	12.707	-27.1#	129	0.00
18	T,M	Methylene chloride	10.000	10.374	-3.7	96	0.00
19	T,M	Carbon disulfide	10.000	10.035	-0.4	92	0.02
20	T,M	Acrylonitrile	50.000	50.171	-0.3	94	0.00
21	T,M	tert-Butyl methyl ether (MT	10.000	10.137	-1.4	97	0.00
22	T,M	trans-1,2-Dichloroethene	10.000	10.235	-2.3	95	0.01
23	T,M	Isopropyl ether (DIPE)	10.000	10.170	-1.7	93	0.00
24	T,M	Vinyl acetate	10.000	10.633	-6.3	100	0.02
25	P,T,M	1,1-Dichloroethane	10.000	10.375	-3.8	95	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	10.180	-1.8	95	0.00
28	T,M	2-Butanone	50.000	54.010	-8.0	98	0.00
29	T,M	2,2-Dichloropropane	10.000	10.632	-6.3	97	0.01
30	T,M	cis-1,2-Dichloroethene	10.000	10.278	-2.8	92	0.01
31	C,T,M	Chloroform	10.000	10.724	-7.2	102	0.01
32	T,M	Bromochloromethane	10.000	10.696	-7.0	99	0.01
33	T,M	Tetrahydrofuran	10.000	9.534	4.7	97	0.00
34	S	Dibromofluoromethane	10.000	10.259	-2.6	97	0.00
35	T,M	1,1,1-Trichloroethane	10.000	11.142	-11.4	101	0.01
36	T,M	Cyclohexane	10.000	11.494	-14.9	109	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	9.772	2.3	89	0.01
39	T,M	Carbon tetrachloride	10.000	11.156	-11.6	100	0.00
40	T,M	tert-Amyl methyl ether (TAM	10.000	9.696	3.0	94	0.01
41	S	1,2-Dichloroethane-d4	10.000	11.201	-12.0	109	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F05\RFV057.D Vial: 2
Acq On : 5 Jun 2024 11:02 am Operator: LPriet
Sample : CVO01E1118 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	10.125	-1.3	93	0.00
43	T,M	1,2-Dichloroethane	10.000	11.671	-16.7	108	0.00
44	T,M	Trichloroethene	10.000	10.184	-1.8	90	0.01
45	T,M	Methylcyclohexane	10.000	11.303	-13.0	108	0.00
46	C,T,M	1,2-Dichloropropane	10.000	9.776	2.2	90	0.00
47	T,M	Bromodichloromethane	10.000	10.914	-9.1	105	0.00
48	T,M	1,4-Dioxane	200.000	201.344	-0.7	97	0.00
49	T,M	Dibromomethane	10.000	11.389	-13.9	109	0.00
50	T,M	2-Chloroethyl vinyl ether	10.000	13.228	-32.3#	124	0.00
51	T,M	4-Methyl-2-pentanone	50.000	52.995	-6.0	105	0.02
52	T,M	cis-1,3-Dichloropropene	10.000	10.499	-5.0	97	0.00
53	I	CHLOROBENZENE-D5	10.000	10.000	0.0	90	0.00
54	S	Toluene-d8	10.000	9.291	7.1	90	0.00
55	C,T,M	Toluene	10.000	9.975	0.3	94	0.00
56	T,M	Ethyl methacrylate	10.000	10.126	-1.3	99	0.00
57	T,M	trans-1,3-Dichloropropene	10.000	10.352	-3.5	99	0.00
58	T,M	1,1,2-Trichloroethane	10.000	10.383	-3.8	100	0.01
59	T,M	2-Hexanone	50.000	48.978	2.0	103	0.01
60	T,M	1,3-Dichloropropane	10.000	10.585	-5.9	103	0.01
61	T,M	Tetrachloroethene	10.000	10.358	-3.6	96	0.01
62	T,M	Dibromochloromethane	10.000	10.534	-5.3	103	0.01
63	T,M	1,2-Dibromoethane	10.000	10.387	-3.9	100	0.00
64	T,M	1-Chlorohexane	10.000	9.836	1.6	91	0.01
65	P,M	Chlorobenzene	10.000	9.953	0.5	93	0.00
66	T,M	1,1,1,2-Tetrachloroethane	10.000	10.582	-5.8	99	0.01
67	C,T,M	Ethylbenzene	10.000	10.171	-1.7	93	0.01
68	T,M	m-Xylene & p-Xylene	20.000	20.547	-2.7	96	0.01
69	T,M	o-Xylene	10.000	10.242	-2.4	97	0.00
70	T,M	Styrene	10.000	10.062	-0.6	94	0.01
71	T,M	Isopropylbenzene	10.000	9.967	0.3	92	0.00
72	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	99	0.01
73	P,T,M	Bromoform	10.000	9.806	1.9	114	0.01
74	T,M	trans-1,4-Dichloro-2-butene	10.000	9.267	7.3	102	0.01
75	T,M	1,1,2,2-Tetrachloroethane	10.000	9.505	4.9	106	0.00
76	S	4-Bromofluorobenzene	10.000	9.541	4.6	105	0.00
77	T,M	1,2,3-Trichloropropane	10.000	9.847	1.5	105	0.01
78	T,M	n-Propylbenzene	10.000	9.054	9.5	93	0.01
79	T,M	Bromobenzene	10.000	9.896	1.0	103	0.01
80	T,M	1,3,5-Trimethylbenzene	10.000	8.881	11.2	91	0.00

(#) = Out of Range

Data File : D:\HPCHEM\1\DATA\24F05\RFV057.D Vial: 2
Acq On : 5 Jun 2024 11:02 am Operator: LPriet
Sample : CVO01E1118 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	9.490	5.1	99	0.01
82	T,M	4-Chlorotoluene	10.000	9.417	5.8	96	0.01
83	T,M	tert-Butylbenzene	10.000	9.030	9.7	93	0.01
84	T,M	1,2,4-Trimethylbenzene	10.000	8.922	10.8	91	0.00
85	T,M	sec-Butylbenzene	10.000	8.954	10.5	92	0.00
86	T,M	p-Isopropyltoluene	10.000	9.047	9.5	93	0.00
87	T,M	1,3-Dichlorobenzene	10.000	9.796	2.0	101	0.01
88	T,M	1,2,3-Trimethylbenzene	10.000	9.200	8.0	97	0.01
89	T,M	1,4-Dichlorobenzene	10.000	9.790	2.1	102	0.01
90	T,M	n-Butylbenzene	10.000	9.242	7.6	95	0.01
91	T,M	1,2-Dichlorobenzene	10.000	9.789	2.1	104	0.00
92	T,M	1,2-Dibromo-3-chloropropane	10.000	9.101	9.0	110	0.01
93	T,M	1,2,4-Trichlorobenzene	10.000	9.566	4.3	100	0.00
94	T,M	Hexachlorobutadiene	10.000	8.880	11.2	88	0.02
95	T,M	Naphthalene	10.000	9.301	7.0	100	0.02
96	T,M	1,2,3-Trichlorobenzene	10.000	9.598	4.0	101	0.00

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F05\RFV057.D Vial: 2
Acq On : 5 Jun 2024 11:02 am Operator: LPriet
Sample : CVO01E1118 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	86	0.01
2	T,M	Chlorotrifluoroethylene	0.000	0.000	0.0	0#	-2.08#
3	T,M	Dichlorodifluoromethane	0.268	0.318	-18.7	107	0.02
4	T,M	2-Chloro-1,1,1-trifluoroeth	0.000	0.000	0.0	0#	-2.53#
5	P,T,M	Chloromethane	0.375	0.320	14.7	79	0.02
6	C,T,M	Vinyl chloride	0.312	0.314	-0.6	87	0.02
7	T,M	Bromomethane	0.396	0.332	16.2	86	0.02
8	T,M	Chloroethane	0.226	0.241	-6.6	98	0.03
9	T,M	Dichlorofluoromethane	0.643	0.634	1.4	94	0.02
10	T,M	Trichlorofluoromethane	0.422	0.485	-14.9	105	0.02
11	T,M	Acrolein	0.022	0.021	4.5	92	0.02
12	T,M	1,1,2-Trichloro-1,2,2-trifl	0.211	0.236	-11.8	97	0.03
13	T,M	Acetone	0.037	0.038	-2.7	105	0.00
14	C,T,M	1,1-Dichloroethene	0.533	0.548	-2.8	92	0.02
15	T,M	tert-Butyl alcohol	0.011	0.012	-9.1	98	0.00
16	T,M	Iodomethane	0.572	0.596	-4.2	94	0.02
17	T,M	Methyl acetate	0.100	0.126	-26.0#	129	0.00
18	T,M	Methylene chloride	0.428	0.444	-3.7	96	0.00
19	T,M	Carbon disulfide	1.140	1.144	-0.4	92	0.02
20	T,M	Acrylonitrile	0.046	0.046	0.0	94	0.00
21	T,M	tert-Butyl methyl ether (MT	0.525	0.532	-1.3	97	0.00
22	T,M	trans-1,2-Dichloroethene	0.514	0.526	-2.3	95	0.01
23	T,M	Isopropyl ether (DIPE)	1.098	1.117	-1.7	93	0.00
24	T,M	Vinyl acetate	0.377	0.401	-6.4	100	0.02
25	P,T,M	1,1-Dichloroethane	0.601	0.623	-3.7	95	0.01
26	T,M	2-Butanol	0.000	0.011	0.0	0#	-0.01
27	T,M	tert-Butyl ethyl ether (ETB	0.787	0.801	-1.8	95	0.00
28	T,M	2-Butanone	0.056	0.061	-8.9	98	0.00
29	T,M	2,2-Dichloropropane	0.505	0.537	-6.3	97	0.01
30	T,M	cis-1,2-Dichloroethene	0.414	0.425	-2.7	92	0.01
31	C,T,M	Chloroform	0.612	0.657	-7.4	102	0.01
32	T,M	Bromochloromethane	0.240	0.257	-7.1	99	0.01
33	T,M	Tetrahydrofuran	0.035	0.034	2.9	97	0.00
34	S	Dibromofluoromethane	0.310	0.318	-2.6	97	0.00
35	T,M	1,1,1-Trichloroethane	0.512	0.571	-11.5	101	0.01
36	T,M	Cyclohexane	0.499	0.574	-15.0	109	0.00
37	T,M	2,2,4-Trimethylpentane	0.000	0.028	0.0	0#	0.01
38	T,M	1,1-Dichloropropene	0.174	0.170	2.3	89	0.01
39	T,M	Carbon tetrachloride	0.382	0.426	-11.5	100	0.00
40	T,M	tert-Amyl methyl ether (TAM	0.612	0.594	2.9	94	0.01
41	S	1,2-Dichloroethane-d4	0.211	0.236	-11.8	109	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F05\RFV057.D Vial: 2
Acq On : 5 Jun 2024 11:02 am Operator: LPriet
Sample : CVO01E1118 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	1.336	1.353	-1.3	93	0.00
43	T,M	1,2-Dichloroethane	0.269	0.314	-16.7	108	0.00
44	T,M	Trichloroethene	0.346	0.352	-1.7	90	0.01
45	T,M	Methylcyclohexane	0.549	0.620	-12.9	108	0.00
46	C,T,M	1,2-Dichloropropane	0.299	0.292	2.3	90	0.00
47	T,M	Bromodichloromethane	0.415	0.453	-9.2	105	0.00
48	T,M	1,4-Dioxane	0.001	0.001	0.0	97	0.00
49	T,M	Dibromomethane	0.141	0.161	-14.2	109	0.00
50	T,M	2-Chloroethyl vinyl ether	0.076	0.100	-31.6#	124	0.00
51	T,M	4-Methyl-2-pentanone	0.136	0.157	-15.4	105	0.02
52	T,M	cis-1,3-Dichloropropene	0.465	0.488	-4.9	97	0.00
53	I	CHLOROBENZENE-D5	1.000	1.000	0.0	90	0.00
54	S	Toluene-d8	1.499	1.392	7.1	90	0.00
55	C,T,M	Toluene	1.776	1.771	0.3	94	0.00
56	T,M	Ethyl methacrylate	0.266	0.270	-1.5	99	0.00
57	T,M	trans-1,3-Dichloropropene	0.413	0.427	-3.4	99	0.00
58	T,M	1,1,2-Trichloroethane	0.233	0.241	-3.4	100	0.01
59	T,M	2-Hexanone	0.090	0.104	-15.6	103	0.01
60	T,M	1,3-Dichloropropane	0.395	0.418	-5.8	103	0.01
61	T,M	Tetrachloroethene	0.369	0.382	-3.5	96	0.01
62	T,M	Dibromochloromethane	0.284	0.299	-5.3	103	0.01
63	T,M	1,2-Dibromoethane	0.230	0.239	-3.9	100	0.00
64	T,M	1-Chlorohexane	0.767	0.754	1.7	91	0.01
65	P,M	Chlorobenzene	1.059	1.054	0.5	93	0.00
66	T,M	1,1,1,2-Tetrachloroethane	0.326	0.345	-5.8	99	0.01
67	C,T,M	Ethylbenzene	2.027	2.061	-1.7	93	0.01
68	T,M	m-Xylene & p-Xylene	1.484	1.524	-2.7	96	0.01
69	T,M	o-Xylene	1.527	1.564	-2.4	97	0.00
70	T,M	Styrene	1.184	1.191	-0.6	94	0.01
71	T,M	Isopropylbenzene	2.012	2.005	0.3	92	0.00
72	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	99	0.01
73	P,T,M	Bromoform	0.350	0.387	-10.6	114	0.01
74	T,M	trans-1,4-Dichloro-2-butene	0.173	0.160	7.5	102	0.01
75	T,M	1,1,2,2-Tetrachloroethane	0.666	0.633	5.0	106	0.00
76	S	4-Bromofluorobenzene	1.362	1.299	4.6	105	0.00
77	T,M	1,2,3-Trichloropropane	0.170	0.168	1.2	105	0.01
78	T,M	n-Propylbenzene	6.502	5.887	9.5	93	0.01
79	T,M	Bromobenzene	1.029	1.018	1.1	103	0.01
80	T,M	1,3,5-Trimethylbenzene	4.155	3.690	11.2	91	0.00

(#) = Out of Range

Data File : D:\HPCHEM\1\DATA\24F05\RFV057.D Vial: 2
Acq On : 5 Jun 2024 11:02 am Operator: LPriet
Sample : CVO01E1118 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	3.915	3.715	5.1	99	0.01
82	T,M	4-Chlorotoluene	3.466	3.264	5.8	96	0.01
83	T,M	tert-Butylbenzene	0.871	0.787	9.6	93	0.01
84	T,M	1,2,4-Trimethylbenzene	4.065	3.627	10.8	91	0.00
85	T,M	sec-Butylbenzene	5.711	5.114	10.5	92	0.00
86	T,M	p-Isopropyltoluene	4.403	3.983	9.5	93	0.00
87	T,M	1,3-Dichlorobenzene	1.955	1.915	2.0	101	0.01
88	T,M	1,2,3-Trimethylbenzene	3.795	3.491	8.0	97	0.01
89	T,M	1,4-Dichlorobenzene	1.916	1.876	2.1	102	0.01
90	T,M	n-Butylbenzene	4.560	4.214	7.6	95	0.01
91	T,M	1,2-Dichlorobenzene	1.602	1.568	2.1	104	0.00
92	T,M	1,2-Dibromo-3-chloropropane	0.095	0.093	2.1	110	0.01
93	T,M	1,2,4-Trichlorobenzene	1.169	1.119	4.3	100	0.00
94	T,M	Hexachlorobutadiene	0.697	0.619	11.2	88	0.02
95	T,M	Naphthalene	1.365	1.269	7.0	100	0.02
96	T,M	1,2,3-Trichlorobenzene	0.881	0.845	4.1	101	0.00

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F05\RFV057.D Vial: 2
Acq On : 5 Jun 2024 11:02 am Operator: LPriet
Sample : CVO01E1118 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 5 11:24 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	790689	10.00	ug/l	0.01
53) CHLOROBENZENE-D5	13.71	117	667993	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	281916	10.00	ug/l	0.01
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	251069	10.26	ug/l	0.00
Spiked Amount 10.000			Recovery = 102.60%			
41) 1,2-Dichloroethane-d4	7.97	65	186968	11.20	ug/l	0.00
Spiked Amount 10.000			Recovery = 112.00%			
54) Toluene-d8	11.03	98	930069	9.29	ug/l	0.00
Spiked Amount 10.000			Recovery = 92.90%			
76) 4-Bromofluorobenzene	16.01	95	366342	9.54	ug/l	0.00
Spiked Amount 10.000			Recovery = 95.40%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.18	85	251288	11.88	ug/l	99
5) Chloromethane	2.48	50	253113	8.54	ug/l	99
6) Vinyl chloride	2.62	62	248668	10.08	ug/l	97
7) Bromomethane	3.15	94	262169	8.94	ug/l	99
8) Chloroethane	3.21	64	190663	10.65	ug/l	96
9) Dichlorofluoromethane	3.29	67	501489	9.87	ug/l	98
10) Trichlorofluoromethane	3.57	101	383867	11.50	ug/l	99
11) Acrolein	4.00	56	84663	47.67	ug/l	95
12) 1,1,2-Trichloro-1,2,2-trif	4.09	151	186995	11.21	ug/l	100
13) Acetone	4.06	43	148285	51.38	ug/l	92
14) 1,1-Dichloroethene	4.24	61	433041	10.27	ug/l	97
15) tert-Butyl alcohol	4.34	59	228564	259.67	ug/l	79
16) Iodomethane	4.65	142	471261	10.42	ug/l	96
17) Methyl acetate	4.65	43	100001	12.71	ug/l	99
18) Methylene chloride	4.86	49	350987	10.37	ug/l	100
19) Carbon disulfide	4.89	76	904883	10.03	ug/l	99
20) Acrylonitrile	5.02	53	183698	50.17	ug/l	98
21) tert-Butyl methyl ether (M	5.07	73	420455	10.14	ug/l	93
22) trans-1,2-Dichloroethene	5.26	61	415843	10.24	ug/l	97
23) Isopropyl ether (DIPE)	5.67	45	882940	10.17	ug/l	98
24) Vinyl acetate	5.84	43	316872	10.63	ug/l	99
25) 1,1-Dichloroethane	5.84	63	492935	10.37	ug/l	99
27) tert-Butyl ethyl ether (ET	6.24	59	633233	10.18	ug/l	99
28) 2-Butanone	6.41	43	239189	54.01	ug/l	99
29) 2,2-Dichloropropane	6.63	77	424720	10.63	ug/l	98
30) cis-1,2-Dichloroethene	6.69	96	336128	10.28	ug/l	98
31) Chloroform	6.92	83	519246	10.72	ug/l	99

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24F05\RFV057.D Vial: 2
Acq On : 5 Jun 2024 11:02 am Operator: LPriet
Sample : CVO01E1118 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 5 11:24 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.15	49	203385	10.70	ug/l	99
33)	Tetrahydrofuran	7.20	42	26708	9.53	ug/l	96
35)	1,1,1-Trichloroethane	7.51	97	451371	11.14	ug/l	98
36)	Cyclohexane	7.52	84	453506	11.49	ug/l	98
38)	1,1-Dichloropropene	7.73	110	134558	9.77	ug/l	98
39)	Carbon tetrachloride	7.88	119	336656	11.16	ug/l	100
40)	tert-Amyl methyl ether (TA	7.89	73	469283	9.70	ug/l	99
42)	Benzene	8.13	78	1069531	10.12	ug/l	100
43)	1,2-Dichloroethane	8.10	62	248633	11.67	ug/l	99
44)	Trichloroethene	9.08	130	278238	10.18	ug/l	97
45)	Methylcyclohexane	9.17	83	490608	11.30	ug/l	98
46)	1,2-Dichloropropane	9.34	63	231070	9.78	ug/l	92
47)	Bromodichloromethane	9.73	83	358044	10.91	ug/l	99
48)	1,4-Dioxane	9.79	88	19482	201.34	ug/l	90
49)	Dibromomethane	9.82	93	126968	11.39	ug/l	94
50)	2-Chloroethyl vinyl ether	10.23	63	79337	13.23	ug/l	98
51)	4-Methyl-2-pentanone	10.28	43	621384	53.00	ug/l	97
52)	cis-1,3-Dichloropropene	10.62	75	386163	10.50	ug/l	97
55)	Toluene	11.17	91	1183328	9.97	ug/l	99
56)	Ethyl methacrylate	11.46	69	180251	10.13	ug/l	92
57)	trans-1,3-Dichloropropene	11.48	75	285429	10.35	ug/l	96
58)	1,1,2-Trichloroethane	11.76	97	161262	10.38	ug/l	99
59)	2-Hexanone	11.77	43	346164	48.98	ug/l	96
60)	1,3-Dichloropropane	12.20	76	279053	10.58	ug/l	100
61)	Tetrachloroethene	12.31	164	255401	10.36	ug/l	99
62)	Dibromochloromethane	12.68	129	199727	10.53	ug/l	99
63)	1,2-Dibromoethane	13.03	107	159595	10.39	ug/l	99
64)	1-Chlorohexane	13.31	91	503831	9.84	ug/l	99
65)	Chlorobenzene	13.79	112	703863	9.95	ug/l	100
66)	1,1,1,2-Tetrachloroethane	13.88	131	230498	10.58	ug/l	100
67)	Ethylbenzene	13.89	91	1377052	10.17	ug/l	97
68)	m-Xylene & p-Xylene	14.02	91	2036465	20.55	ug/l	96
69)	o-Xylene	14.84	91	1044797	10.24	ug/l	97
70)	Styrene	14.91	104	795642	10.06	ug/l	98
71)	Isopropylbenzene	15.52	105	1339391	9.97	ug/l	99
73)	Bromoform	15.56	173	109195	9.81	ug/l	97
74)	trans-1,4-Dichloro-2-buten	15.64	53	45070	9.27	ug/l	100
75)	1,1,2,2-Tetrachloroethane	15.86	83	178395	9.51	ug/l	100
77)	1,2,3-Trichloropropane	16.16	110	47279	9.85	ug/l	100
78)	n-Propylbenzene	16.30	91	1659578	9.05	ug/l	99
79)	Bromobenzene	16.39	156	286977	9.90	ug/l	99

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24F05\RFV057.D Vial: 2
Acq On : 5 Jun 2024 11:02 am Operator: LPriet
Sample : CVO01E1118 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 5 11:24 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

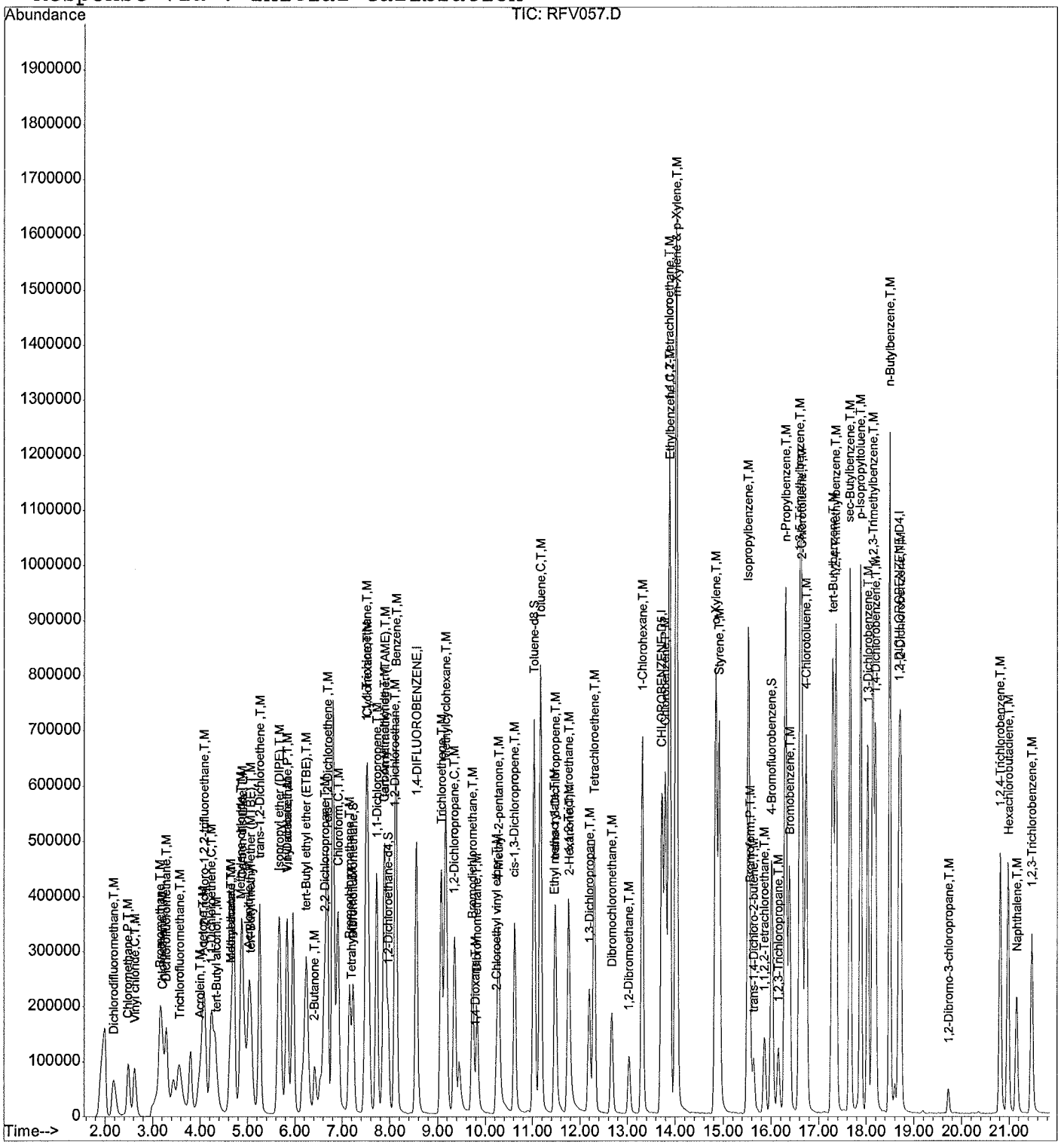
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	1040194	8.88	ug/l	99
81)	2-Chlorotoluene	16.64	91	1047357	9.49	ug/l	99
82)	4-Chlorotoluene	16.73	91	920100	9.42	ug/l	98
83)	tert-Butylbenzene	17.30	134	221860	9.03	ug/l	96
84)	1,2,4-Trimethylbenzene	17.36	105	1022416	8.92	ug/l	99
85)	sec-Butylbenzene	17.65	105	1441592	8.95	ug/l	99
86)	p-Isopropyltoluene	17.87	119	1122853	9.05	ug/l	99
87)	1,3-Dichlorobenzene	18.04	146	539760	9.80	ug/l	99
88)	1,2,3-Trimethylbenzene	18.14	105	984288	9.20	ug/l	99
89)	1,4-Dichlorobenzene	18.20	146	528950	9.79	ug/l	99
90)	n-Butylbenzene	18.50	91	1188077	9.24	ug/l	98
91)	1,2-Dichlorobenzene	18.72	146	442002	9.79	ug/l	100
92)	1,2-Dibromo-3-chloropropan	19.72	157	26125	9.10	ug/l	99
93)	1,2,4-Trichlorobenzene	20.81	180	315346	9.57	ug/l	98
94)	Hexachlorobutadiene	20.98	225	174400	8.88	ug/l	96
95)	Naphthalene	21.16	128	357870	9.30	ug/l	100
96)	1,2,3-Trichlorobenzene	21.47	180	238345	9.60	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F05\RFV057.D Vial: 2
Acq On : 5 Jun 2024 11:02 am Operator: LPriet
Sample : CVO01E1118 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 5 11:24 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



ANALYTICAL LOG(S)

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

Book #:	A01-076
Instrument No.:	01
Analytical Sequence:	24E11
Method File:	V001E11
Analytical Batch:	V001E116

SOP #
☑ EMAX-8260 Rev. No. 10
☐ EMAX-8260C Rev. No. 1
☐ EMAX-8260SIM Rev. No. 1
☐ EMAX-M8260SIM 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	5/11/24		
ICAL ID	VO01 E11		
STANDARDS			
NAME	ID	Amount (µl)	Conc. (mg/L)
DCC CS2 GAS	SVI-43-90-03 -90-02	*	250 250
DCC 4ADD	-95-02		250
DCC 8260	-86-01		50
DCC KET	-93-03	↓	250
BFB	-38-02	1	50
IS/SURR. IS SS	-94-03 -87-01	1 *	250 250
ICV/LCS CS2 GAS	-79-02 -94-01	1 1	250 250
ICV/LCS 4ADD	-64-03	5	50
ICV/LCS 8260	-78-03	5	50
ICV/LCS KET	↓ -94-02	5	250
Data File Folder	24E11		
	LOT #	Syringe Lot #	
pH strip	N/A	MSV-03-04-12-4	
Chlorine strip	↓	-04-12-6	
Methanol		-03-23	
$NaHSO_4$		↓ -02-24	
Reagent Water	RW4-23-001		
Sand			

ELECTRONIC DATA ARCHIVAL	
Location	Date
HPCHEM_VOA/TO01	

Analyzed By: LAP
Date: 5/11/24
Disposed By: LAP
Date Disposed: 5/13/24

Injection Log

Directory: D:\HPCHEM\1\DATA\24E11

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	REV195.D	1.	BFB01E11	T/CHK	11 May 2024 10:20
2	2	REV196.D	1.	VO01E111 0.03/0.15	0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA	11 May 2024 10:58
3	3	REV197.D	1.	VO01E112 0.05/0.25	0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA	11 May 2024 11:27
4	4	REV198.D	1.	VO01E113 0.1/0.5	1ppb 8260/5ppb KET-AA/25ppb TBA	11 May 2024 11:56
5	5	REV199.D	1.	VO01E114 0.2/1.0	2ppb 8260/10ppb KET-AA/50ppb TBA	11 May 2024 12:30
6	6	REV200.D	1.	VO01E115 0.5/2.5	5ppb 8260/25ppb KET-AA/125ppb TBA	11 May 2024 12:59
7	7	REV201.D	1.	VO01E116 1.0/5.0	10ppb 8260/50ppb KET-AA/250ppb TBA	11 May 2024 13:28
8	8	REV202.D	1.	VO01E117 2.0/10	20ppb 8260/100ppb KET-AA/500ppb TBA	11 May 2024 13:58
9	9	REV203.D	1.	VO01E118 3.0/15	30ppb 8260/150ppb KET-AA/750ppb TBA	11 May 2024 14:27
10	10	REV204.D	1.	VO01E119 5.0/25	50ppb 8260/250ppb KET-AA/1250ppb TBA	11 May 2024 14:56
11	11	REV205.D	1.	VO01DE1110 10/50	100ppb 8260/500ppb KET-AA/2500ppb TBA	11 May 2024 15:26
12	12	REV206.D	1.	RINSE		11 May 2024 15:55
13	13	REV207.D	1.	RINSE		11 May 2024 16:24
14	14	REV208.D	1.	IVO01E1101 1.0/5.0 Bromoform ICV	10ppb 8260/50ppb KET-AA/250ppb TBA	11 May 2024 16:53

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

Book #:	A01-076
Instrument No.:	01
Analytical Sequence:	24E13
Method File:	V001E11
Analytical Batch:	V001E1102

SOP #
☑ EMAX-8260 Rev. No. 10
☐ EMAX-8260C Rev. No. 1
☐ EMAX-8260SIM Rev. No. 1
☐ EMAX-M8260SIM 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 <Sppm. Outliers indicated on analytical sequence.
☑ pH <2 and Cl2 are not applicable.

INITIAL CALIBRATION REFERENCE			
DATE	5/11/24		
ICAL ID	V001 E11		
STANDARDS			
NAME	ID	Amount (µl)	Conc. (mg/L)
DCC			
DCC			
DCC			
DCC			
BFB	SV1-43-98-02	1	50
IS/SURR. IS	-94-03	1	250
IS/SURR. SS	-97-01	1	250
ICV/LCS CS2	-79-02	1	250
ICV/LCS CAS	-94-01	1	250
ICV/LCS 8ADD	-69-03	5	50
ICV/LCS 8260	-70-03	5	50
ICV/LCS KET	-94-02	5	250
Data File Folder	24E13		
	LOT #	Syringe Lot #	
pH strip	N/A	MSV-03-04-12-6	
Chlorine strip	↓	↓ -12-4	
Methanol			
$NaHSO_4$			
Reagent Water	RW4-23-001		
Sand			

ELECTRONIC DATA ARCHIVAL	
Location	Date
HPCHEM_VOA/TO01	

Analyzed By: LAP
Date: 6/13/24
Disposed By: LAP
Date Disposed: 5/14/24

Injection Log

Directory: D:\HPCHEM\1\DATA\24E13

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	REV209.D	1.	BFB01E12	T/CHK	13 May 2024 11:31
2	2	REV210.D	1.	IVO01E1102 1.0/5.0	10ppb 8260/50ppb KET-AA/250ppb TBA	13 May 2024 12:06
3	1	REV211.D	1.	BFB01E13	T/CHK	13 May 2024 12:45
4	2	REV212.D	1.	CVO01E1101	10ppb 8260/50ppb KET-AA/250ppb TBA	13 May 2024 13:17
5	3	REV213.D	1.	VO01E13L	10ppb 8260/50ppb KET-AA/250ppb TBA	13 May 2024 13:48
6	4	REV214.D	1.	VO01E13C	10ppb 8260/50ppb KET-AA/250ppb TBA	13 May 2024 14:17
7	5	REV215.D	1.	RINSE		13 May 2024 14:47
8	6	REV216.D	1.	VO01E13B	25mL	13 May 2024 15:17
9	7	REV217.D	1.	24E021-01	25mL	13 May 2024 15:46
10	8	REV218.D	1.	24E021-11	25mL	13 May 2024 16:16
11	9	REV219.D	1.	24E072-05	25mL	13 May 2024 16:45
12	10	REV220.D	1.	24E021-04	25mL	13 May 2024 17:15
13	11	REV221.D	1.	24E021-05	25mL	13 May 2024 17:45
14	12	REV222.D	1.	24E021-06	25mL	13 May 2024 18:14
15	13	REV223.D	1.	24E021-07	25mL	13 May 2024 18:43
16	14	REV224.D	1.	24E021-08	25mL	13 May 2024 19:12
17	15	REV225.D	1.	24E021-09	25mL	13 May 2024 19:41
18	16	REV226.D	1.	24E021-10	25mL	13 May 2024 20:10
19	17	REV227.D	1.	24E021-12	25mL	13 May 2024 20:40
20	18	REV228.D	1.	24E021-14	25mL	13 May 2024 21:09
21	19	REV229.D	1.	24E021-15	25mL	13 May 2024 21:38
22	20	REV230.D	1.	24E021-16	25mL	13 May 2024 22:07
23	21	REV231.D	1.	24E072-01	25mL	13 May 2024 22:36
24	22	REV232.D	1.	24E072-02	25mL	13 May 2024 23:05
25	23	REV233.D	1.	24E072-03	25mL	13 May 2024 23:34
26	24	REV234.D	1.	24E072-04	25mL	14 May 2024 00:02
27	25	REV235.D	1.	24E021-02	25mL	14 May 2024 00:31
28	26	REV236.D	1.	EVO01E1101	10ppb 8260/50ppb KET-AA/250ppb TBA	14 May 2024 01:00
29	27	REV237.D	1.	EVO01E1101	10ppb 8260/50ppb KET-AA/250ppb TBA	14 May 2024 01:29
30	28	REV238.D	1.	EVO01E1101	10ppb 8260/50ppb KET-AA/250ppb TBA	14 May 2024 01:58
31	29	REV239.D	1.	RINSE	10ppb 8260/50ppb KET-AA/250ppb TBA	14 May 2024 02:26
32	30	REV240.D	1.	RINSE	10ppb 8260/50ppb KET-AA/250ppb TBA	14 May 2024 02:55

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

Book #:	A01-076
Instrument No.:	01
Analytical Sequence:	24F05
Method File:	V001E11
Analytical Batch:	CV001E1110

INITIAL CALIBRATION REFERENCE			
DATE	5/11/24		
ICAL ID	V001E11		
STANDARDS			
NAME	ID	Amount (µl)	Conc. (mg/L)
DCC CS2 GAS	SV1-43-90-03 / -90-08	1 / 1	
DCC 4ADD	-95-02	1	
DCC 8260	-38-01	5	
DCC KET	-09-02	5	
BFB	-38-02	1	
IS/SURR.	-96-01	5	50/250
ICV/LCS CS2 GAS	-79-02 / -94-01	1 / 1	
ICV/LCS 3ADD	-69-03	5	
ICV/LCS 8260	-78-03	5	
ICV/LCS KET	-94-02	5	
Data File Folder	24F05		
	LOT #	Syringe Lot #	
pH strip	HC409975	MSV-03-04-12-3	
Chlorine strip	301002	↓ -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: LAP
Date: 6/5/24
Disposed By: LAP
Date Disposed: 6/6/24

Injection Log

Directory: D:\HPCHEM\1\DATA\24F05

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	RFV056.D	1.	BFB01F03	T/CHK	5 Jun 2024 10:23
2	2	RFV057.D	1.	CVO01E1118	10ppb 8260/50ppb KET-AA/250ppb TBA	5 Jun 2024 11:02
3	3	RFV058.D	1.	VO01F03L	10ppb 8260/50ppb KET-AA/250ppb TBA	5 Jun 2024 11:48
4	4	RFV059.D	1.	VO01F03C	10ppb 8260/50ppb KET-AA/250ppb TBA	5 Jun 2024 12:18
5	5	RFV060.D	1.	RINSE		5 Jun 2024 12:48
6	6	RFV061.D	1.	VO01F03B	25mL	5 Jun 2024 13:17
7	7	RFV062.D	1.	24F013-01 TB-006-06-04	25mL	5 Jun 2024 13:47
8	8	RFV063.D	1.	24E197-06 ↓ -05	25mL	5 Jun 2024 14:17
9	9	RFV064.D	1.	24E197-18	25mL	5 Jun 2024 14:47
10	10	RFV065.D	1.	24E197-17	25mL	5 Jun 2024 15:16
11	11	RFV066.D	1.	24F013-02	25mL	5 Jun 2024 15:46
12	12	RFV067.D	1.	24E189-04N	25mL	5 Jun 2024 16:16
13	13	RFV068.D	1.	24E189-07N	25mL	5 Jun 2024 16:47
14	14	RFV069.D	1.	24E197-01	25mL	5 Jun 2024 17:16
15	15	RFV070.D	1.	24E197-02	25mL	5 Jun 2024 17:46
16	16	RFV071.D	1.	24E197-03	25mL	5 Jun 2024 18:16
17	17	RFV072.D	1.	24E197-04	25mL	5 Jun 2024 18:46
18	18	RFV073.D	1.	24E197-05	25mL	5 Jun 2024 19:15
19	19	RFV074.D	1.	24E197-08	25mL	5 Jun 2024 19:44
20	20	RFV075.D	1.	24E197-09 TCE CIO? RR	25mL	5 Jun 2024 20:14
21	21	RFV076.D	1.	24E197-10	25mL	5 Jun 2024 20:44
22	22	RFV077.D	1.	24E197-11	25mL	5 Jun 2024 21:13
23	23	RFV078.D	1.	24E189-04M	25mL	5 Jun 2024 21:42
24	24	RFV079.D	1.	24E189-04MS	25mL	5 Jun 2024 22:11
25	25	RFV080.D	1.	EVO01E1118	10ppb 8260/50ppb KET-AA/250ppb TBA	5 Jun 2024 22:40
26	26	RFV081.D	1.	EVO01E11181	10ppb 8260/50ppb KET-AA/250ppb TBA	5 Jun 2024 23:09
27	27	RFV082.D	1.	EVO01E11182	10ppb 8260/50ppb KET-AA/250ppb TBA	5 Jun 2024 23:39
28	28	RFV083.D	1.	RINSE		6 Jun 2024 00:08
29	29	RFV084.D	1.	RINSE		6 Jun 2024 00:37

EMAX
LABORATORIES, INC.
3051 Fujita Street
Torrance, CA 90505
Tel: (310)-618-8889

Date: 06-14-2024
EMAX Batch No.: 24F025

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 06/06/24.
The data reported relate only to samples listed below :

Sample ID	Control #	Col Date	Matrix	Analysis
MW43-GW060524-285	F025-01	06/05/24	WATER	VOCS BY 8260C
EB04-GW060524	F025-02	06/05/24	WATER	VOCS BY 8260C
MW43-GW060524-278	F025-03	06/05/24	WATER	VOCS BY 8260C
TB05-GW060524	F025-04	06/05/24	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.
1835 W. 205th Street, Torrance, CA 90501
Tel # : 310-618-8889 FAX#: 310-618-0818
Email: info@emaxlabs.com

PO NUMBER:

SAMPLE STORAGE

EMAX CONTROL NO. 24F025

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 Linh Pham

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 8260 | VOCs 8260

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	COMMENTS
1	MW43-GW0160524-285		6/5/24	1115	3						X	unpreserved
2	EB04-GW0160524		6/5/24	1230	3					X		
3	MW43-GW0160524-278		6/5/24	830	3						X	unpreserved
4	TB05-GW0160524		6/5/24	1510	3					X		
5												
6												
7												
8												
9												
10												

Instructions
CC Joe Miller: millerjc@cdmsmith.com
and SmithNL@cdmsmith.com

Cooler #	Temp. (°C)	Sample #s
	3.1	

SAMPLER

COURIER/AIRBILL Fedex

RELINQUISHED BY	Date	Time	RECEIVED BY
Jessica Yuen	6/5/24	1600	
	06/06/24	935	

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.

SAMPLE RECEIPT FORM 1

Type of Delivery	Airbill / Tracking Number	ECN 24F025
☑ Fedex ☐ UPS ☐ GSO ☐ Others	2799 6409 0290	Recipient Nandeen Nacana
☐ EMAX Courier ☐ Client Delivery		Date 06/06/24 Time ~~1031~~ 935

NN 06/06

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 3.1 °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* 210760272	*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
1	3	D10		R1

☐ 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 3 has a layer of sediment.

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 Nandeen Nacana Date 06/06/24

SRF _____ Date 6/6/24

PM _____ Date 6/6/24


ORIGIN ID:NPHA (111) 111-1111

CDM SMITH, INC
555 17TH ST STE 500

DENVER, CO 80202
UNITED STATES US

SHIP DATE: 05JUN24
ACTWGT: 23.00 LB
CAD: 6997117/SSF02521
DIMS: 25x14x14 IN

BILL THIRD PARTY

TO ATTN: 275859TS1.DRILL
EMAX LABS
3051 FUJITA ST

935 (D)
sealed

TORRANCE CA 90505
(111) 111-1111

INV:
PO:
REF:
DEPT:

FedEx
Express

TRK# 0201 2755 6409 0290

THU - 06 JUN 10:30A
PRIORITY OVERNIGHT

WZ HHRA

AHS
90505
CA-US LAX

Part # 156297-[illegible] 03/25

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#: 24F025

CASE NARRATIVE

Client : CDM SMITH

Project: VA SALT LAKE CITY

SDG : 24F025

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

A total of four(4) water samples were received on 06/06/24 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, 2-Butanone and 2-Hexanone. 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, one(1) method blank was analyzed. VO01F05B - 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. VO01F05L/VO01F05C were within LCS limits. Refer to LCS summary form 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.

LAB CHRONICLE
VOLATILE ORGANICS BY GC/MS

Client : CDM SMITH
Project : VA SALT LAKE CITY

SDG NO. : 24F025
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	VO01F05L	1	NA	06/07/2415:31	06/07/2415:31	RFV113	REV201	VO01F05	Lab Control Sample (LCS)
LCD1W	VO01F05C	1	NA	06/07/2416:01	06/07/2416:01	RFV114	REV201	VO01F05	LCS Duplicate
MBLK1W	VO01F05B	1	NA	06/07/2417:01	06/07/2417:01	RFV116	REV201	VO01F05	Method Blank
TB05-GW060524	24F025-04	1	NA	06/07/2417:31	06/07/2417:31	RFV117	REV201	VO01F05	Field Sample
MW43-GW060524-278	24F025-03	1	NA	06/07/2419:05	06/07/2419:05	RFV120	REV201	VO01F05	Field Sample
MW43-GW060524-285	24F025-01	1	NA	06/07/2420:33	06/07/2420:33	RFV123	REV201	VO01F05	Field Sample
EB04-GW060524	24F025-02	1	NA	06/07/2422:59	06/07/2422:59	RFV128	REV201	VO01F05	Field Sample

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

METHOD SW5030B/B260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	06/05/24 11:15
Project	: VA SALT LAKE CITY	Date Received:	06/06/24
Batch No.	: 24F025	Date Extracted:	06/07/24 20:33
Sample ID	: MW43-GW060524-285	Date Analyzed:	06/07/24 20:33
Lab Samp ID:	24F025-01	Dilution Factor:	1
Lab File ID:	RFV123	Matrix:	WATER
Ext Btch ID:	V001F05	% Moisture:	NA
Calib. Ref.:	REV201	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	0.17J	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	1.5	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	0.23J	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	29	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	10.5	10.0	105	70-130
Bromofluorobenzene	9.01	10.0	90	70-130
Toluene-d8	9.45	10.0	94	70-130
Dibromofluoromethane	9.81	10.0	98	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : LPriet Analyzed by : LPriet
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F07\RFV123.D Vial: 13
Acq On : 7 Jun 2024 8:33 pm Operator: LPriet
Sample : 24F025-01 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 13 9:47 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	723814	10.00	ug/l	0.02
53) CHLOROBENZENE-D5	13.73	117	585600	10.00	ug/l	0.01
72) 1,2-DICHLOROBENZENE-D4	18.69	152	259174	10.00	ug/l	0.01
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	219802	9.81	ug/l	0.00
Spiked Amount 10.000			Recovery =	98.10%		
41) 1,2-Dichloroethane-d4	7.97	65	160352	10.49	ug/l	0.00
Spiked Amount 10.000			Recovery =	104.90%		
54) Toluene-d8	11.03	98	828904	9.45	ug/l	0.00
Spiked Amount 10.000			Recovery =	94.50%		
76) 4-Bromofluorobenzene	16.01	95	318143	9.01	ug/l	0.00
Spiked Amount 10.000			Recovery =	90.10%		
Target Compounds						Qvalue
30) cis-1,2-Dichloroethene	6.68	96	6809	0.23	ug/l	87
31) Chloroform	6.92	83	66189	1.49	ug/l	95
44) Trichloroethene	9.08	130	5171	0.21	ug/l	91
47) Bromodichloromethane	9.73	83	5101	0.17	ug/l	92
61) Tetrachloroethene	12.31	164	637153	29.47	ug/l	99

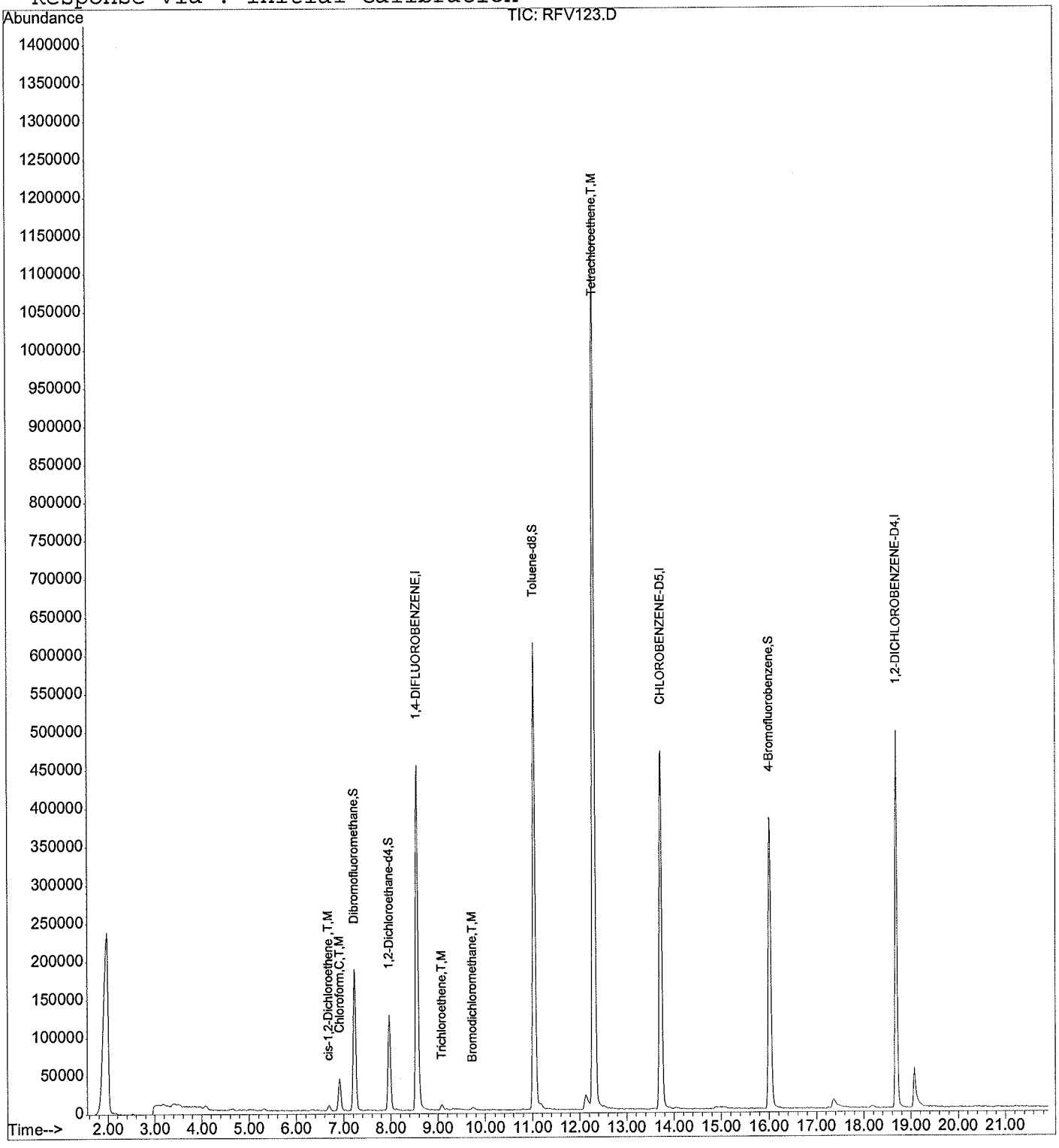
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RFV123.D VO01E11.M Thu Jun 13 09:48:16 2024 Page 1

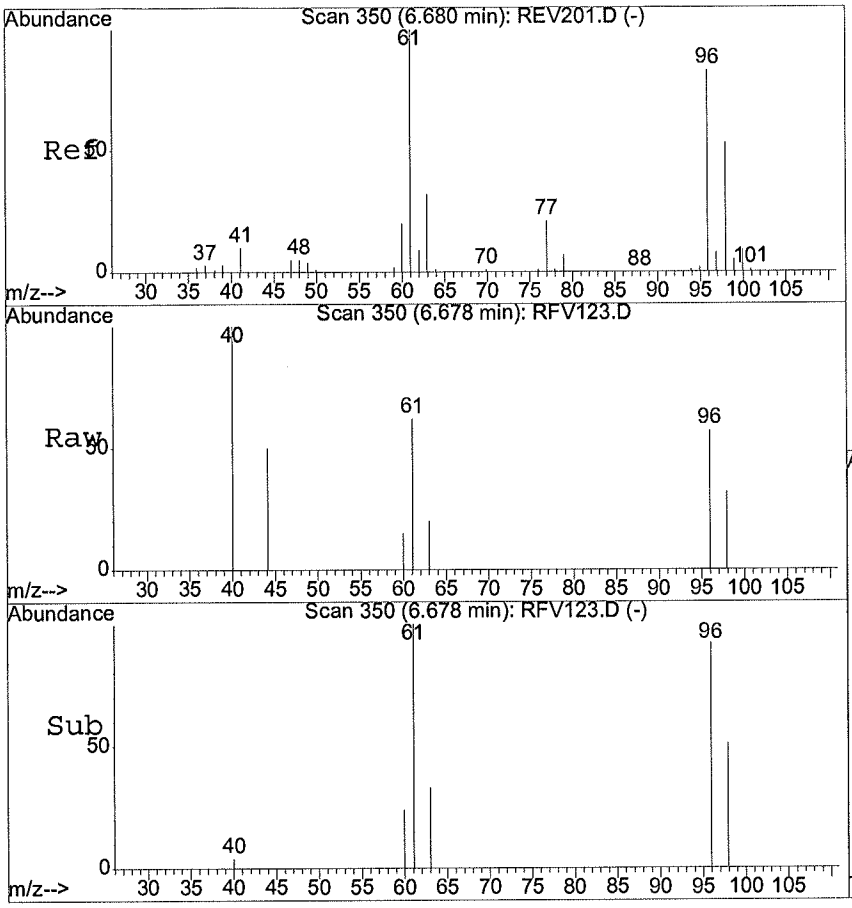
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F07\RFV123.D
Acq On : 7 Jun 2024 8:33 pm
Sample : 24F025-01
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Jun 13 9:47 2024

Vial: 13
Operator: LPriet
Inst : 01
Multiplr: 1.00
Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration

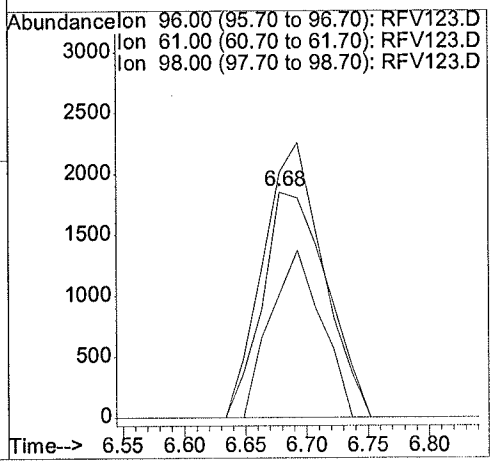


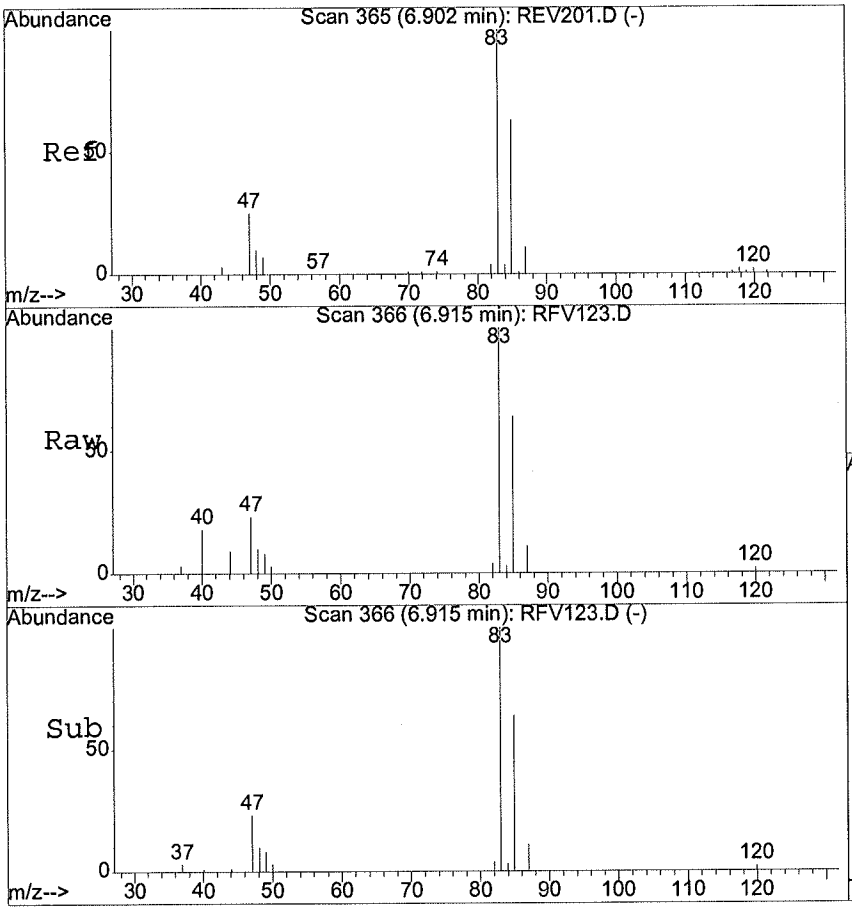


#30
cis-1,2-Dichloroethene
Concen: 0.23 ug/l
RT: 6.68 min Scan# 350
Delta R.T. -0.00 min
Lab File: RFV123.D
Acq: 7 Jun 2024 8:33 pm

Tgt Ion: 96 Resp: 6809

Ion	Ratio	Lower	Upper
96	100		
61	113.3	101.8	161.8
98	58.8	33.6	93.6

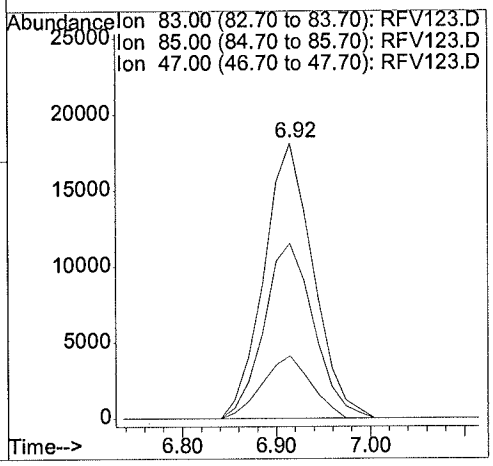


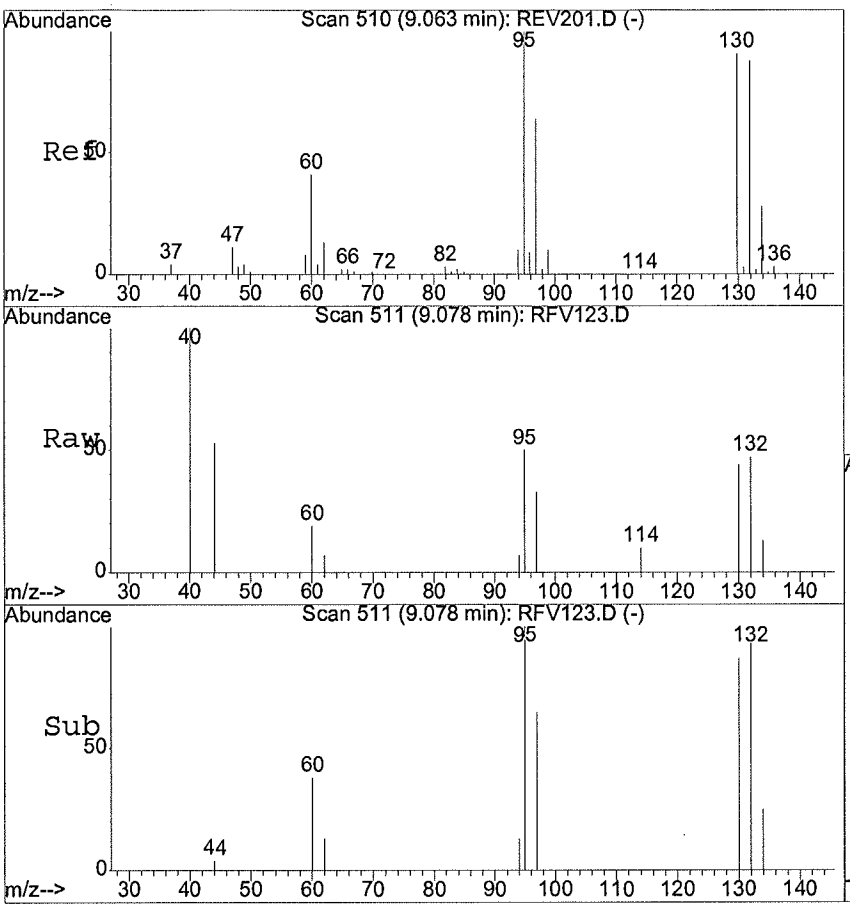


#31
Chloroform
Concen: 1.49 ug/l
RT: 6.92 min Scan# 366
Delta R.T. 0.01 min
Lab File: RFV123.D
Acq: 7 Jun 2024 8:33 pm

Tgt Ion: 83 Resp: 66189

Ion	Ratio	Lower	Upper
83	100		
85	64.4	38.2	98.2
47	22.5	0.0	54.7

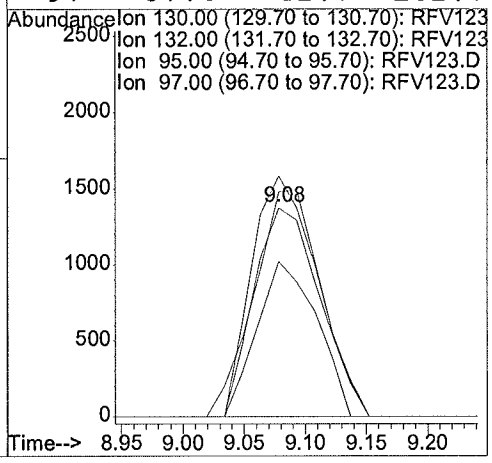


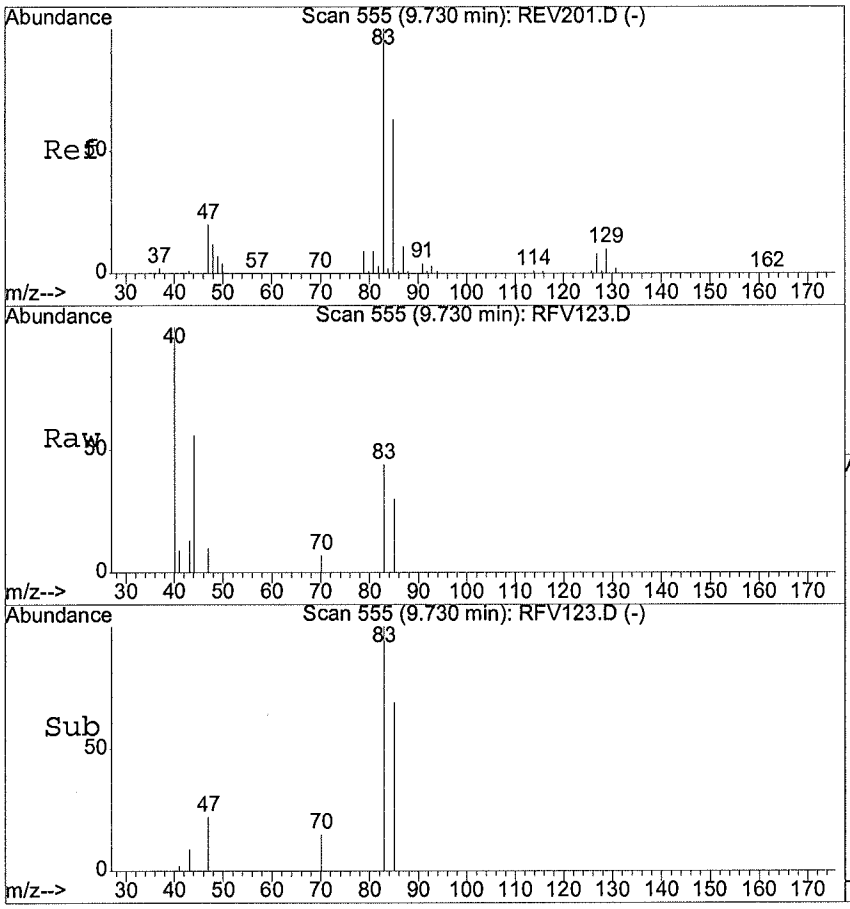


#44
Trichloroethene
Concen: 0.21 ug/l
RT: 9.08 min Scan# 511
Delta R.T. 0.02 min
Lab File: RFV123.D
Acq: 7 Jun 2024 8:33 pm

Tgt Ion:130 Resp: 5171

Ion	Ratio	Lower	Upper
130	100		
132	110.8	66.3	126.3
95	115.1	78.9	138.9
97	67.5	42.7	102.7

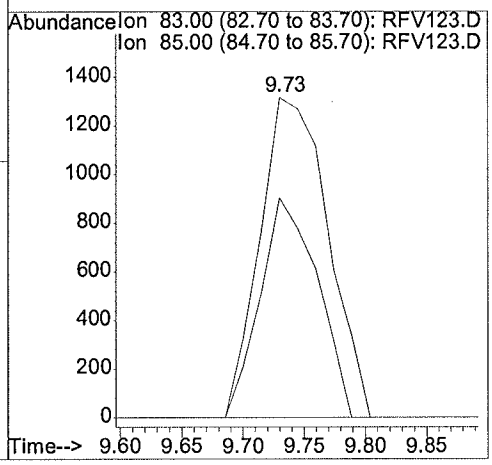


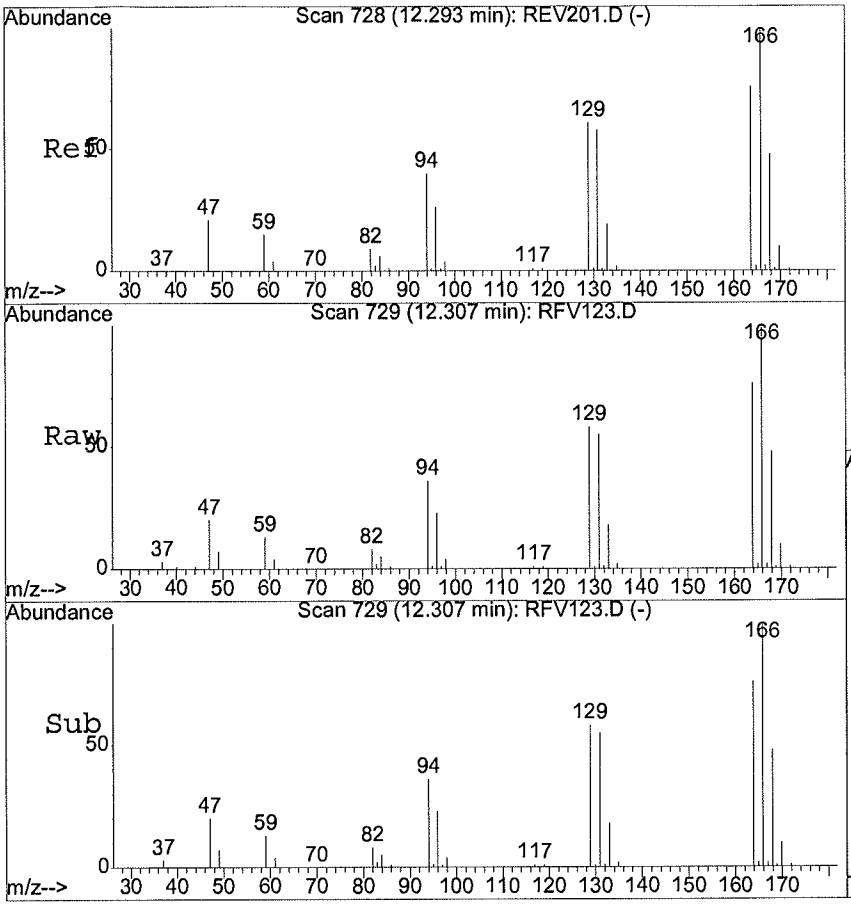


#47
Bromodichloromethane
Concen: 0.17 ug/l
RT: 9.73 min Scan# 555
Delta R.T. 0.00 min
Lab File: RFV123.D
Acq: 7 Jun 2024 8:33 pm

Tgt Ion: 83 Resp: 5101

Ion	Ratio	Lower	Upper
83	100		
85	58.1	34.1	94.1

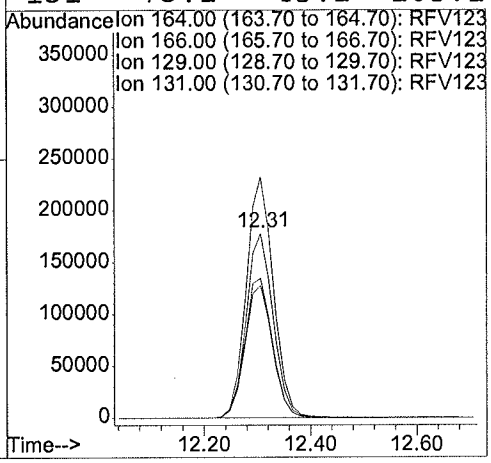




#61
Tetrachloroethene
Concen: 29.47 ug/l
RT: 12.31 min Scan# 729
Delta R.T. 0.01 min
Lab File: RFV123.D
Acq: 7 Jun 2024 8:33 pm

Tgt Ion:164 Resp: 637153

Ion	Ratio	Lower	Upper
164	100		
166	130.9	101.0	161.0
129	77.9	49.2	109.2
131	73.1	45.1	105.1



METHOD SW5030B/B260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	06/05/24 12:30
Project	: VA SALT LAKE CITY	Date Received:	06/06/24
Batch No.	: 24F025	Date Extracted:	06/07/24 22:59
Sample ID	: EB04-GW060524	Date Analyzed:	06/07/24 22:59
Lab Samp ID:	24F025-02	Dilution Factor:	1
Lab File ID:	RFV12B	Matrix:	WATER
Ext Btch ID:	VQ01F05	% Moisture:	NA
Calib. Ref.:	REV201	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.B	10.0	10B	70-130
Bromofluorobenzene	8.B3	10.0	BB	70-130
Toluene-d8	9.43	10.0	94	70-130
Dibromofluoromethane	10.0	10.0	100	70-130

Notes:
Sample Amount : 25ml
Final Volume : 25ml
Prepared by : LPriet
Analyzed by : LPriet
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F07\RFV128.D Vial: 18
Acq On : 7 Jun 2024 10:59 pm Operator: LPriet
Sample : 24F025-02 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 13 9:42 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	683075	10.00	ug/l	0.02
53) CHLOROBENZENE-D5	13.71	117	580278	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	254902	10.00	ug/l	0.01
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	211968	10.03	ug/l	0.00
Spiked Amount 10.000			Recovery = 100.30%			
41) 1,2-Dichloroethane-d4	7.97	65	156007	10.82	ug/l	0.00
Spiked Amount 10.000			Recovery = 108.20%			
54) Toluene-d8	11.03	98	820103	9.43	ug/l	0.00
Spiked Amount 10.000			Recovery = 94.30%			
76) 4-Bromofluorobenzene	16.01	95	306656	8.83	ug/l	0.00
Spiked Amount 10.000			Recovery = 88.30%			
Target Compounds						Qvalue

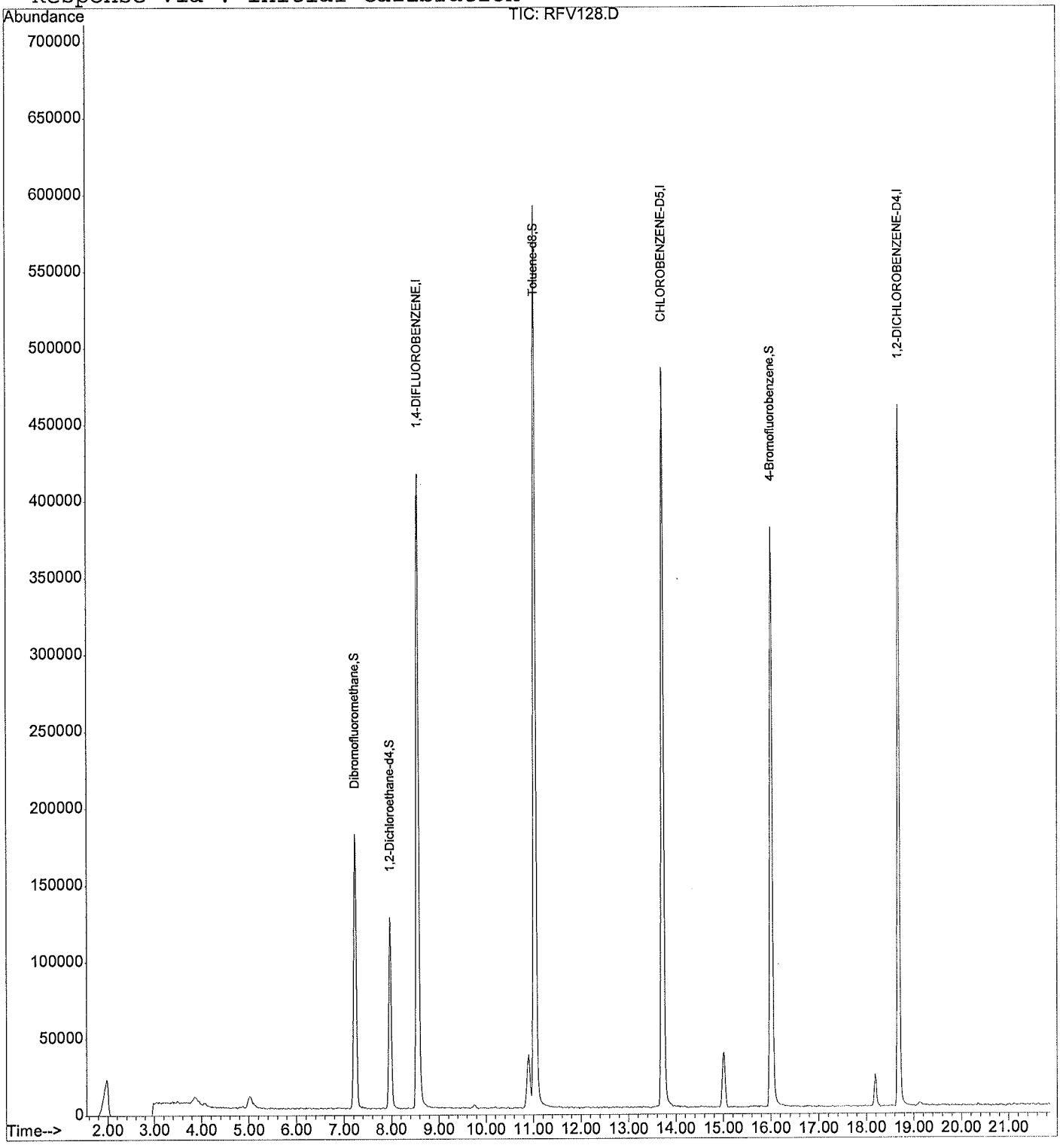
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RFV128.D VO01E11.M Thu Jun 13 09:44:07 2024 Page 1

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F07\RFV128.D
Acq On : 7 Jun 2024 10:59 pm
Sample : 24F025-02
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Jun 13 9:42 2024

Vial: 18
Operator: LPriet
Inst : 01
Multiplr: 1.00
Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	06/05/24 08:30
Project	: VA SALT LAKE CITY	Date Received:	06/06/24
Batch No.	: 24F025	Date Extracted:	06/07/24 19:05
Sample ID	: MW43-GW060524-278	Date Analyzed:	06/07/24 19:05
Lab Samp ID:	24F025-03	Dilution Factor:	1
Lab File ID:	RFV120	Matrix:	WATER
Ext Btch ID:	VQ01F05	% Moisture:	NA
Calib. Ref.:	REV201	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	16J	20	2.5
Benzene	0.32J	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	3.9	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	0.19J	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	39	1.0	0.15
Toluene	0.54J	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	0.42J	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	10.2	10.0	102	70-130
Toluene-d8	10.0	10.0	100	70-130
Dibromofluoromethane	9.98	10.0	100	70-130

Notes:
Sample Amount : 25ml
Final Volume : 25ml
Prepared by : LPriet
Analyzed by : LPriet
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F07\RFV120.D
Acq On : 7 Jun 2024 7:05 pm
Sample : 24F025-03
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Jun 13 9:45 2024

Vial: 10
Operator: LPriet
Inst : 01
Multiplr: 1.00
Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	691609	10.00	ug/l	0.02
53) CHLOROBENZENE-D5	13.73	117	552269	10.00	ug/l	0.01
72) 1,2-DICHLOROBENZENE-D4	18.69	152	224172	10.00	ug/l	0.01
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	213589	9.98	ug/l	0.00
Spiked Amount 10.000			Recovery =	99.80%		
41) 1,2-Dichloroethane-d4	7.97	65	168570	11.55	ug/l	0.00
Spiked Amount 10.000			Recovery =	115.50%		
54) Toluene-d8	11.03	98	828969	10.02	ug/l	0.00
Spiked Amount 10.000			Recovery =	100.20%		
76) 4-Bromofluorobenzene	16.02	95	311131	10.19	ug/l	0.01
Spiked Amount 10.000			Recovery =	101.90%		
Target Compounds						Qvalue
13) Acetone	4.06	43	39799	15.77	ug/l #	19
30) cis-1,2-Dichloroethene	6.69	96	5337	0.19	ug/l	94
31) Chloroform	6.91	83	163116	3.85	ug/l	96
42) Benzene	8.13	78	29815	0.32	ug/l	96
44) Trichloroethene	9.08	130	10040	0.42	ug/l	96
55) Toluene	11.18	91	52820	0.54	ug/l	95
61) Tetrachloroethene	12.31	164	784898	38.50	ug/l	99
68) m-Xylene & p-Xylene	14.04	91	13199	0.16	ug/l	86

(#) = qualifier out of range (m) = manual integration

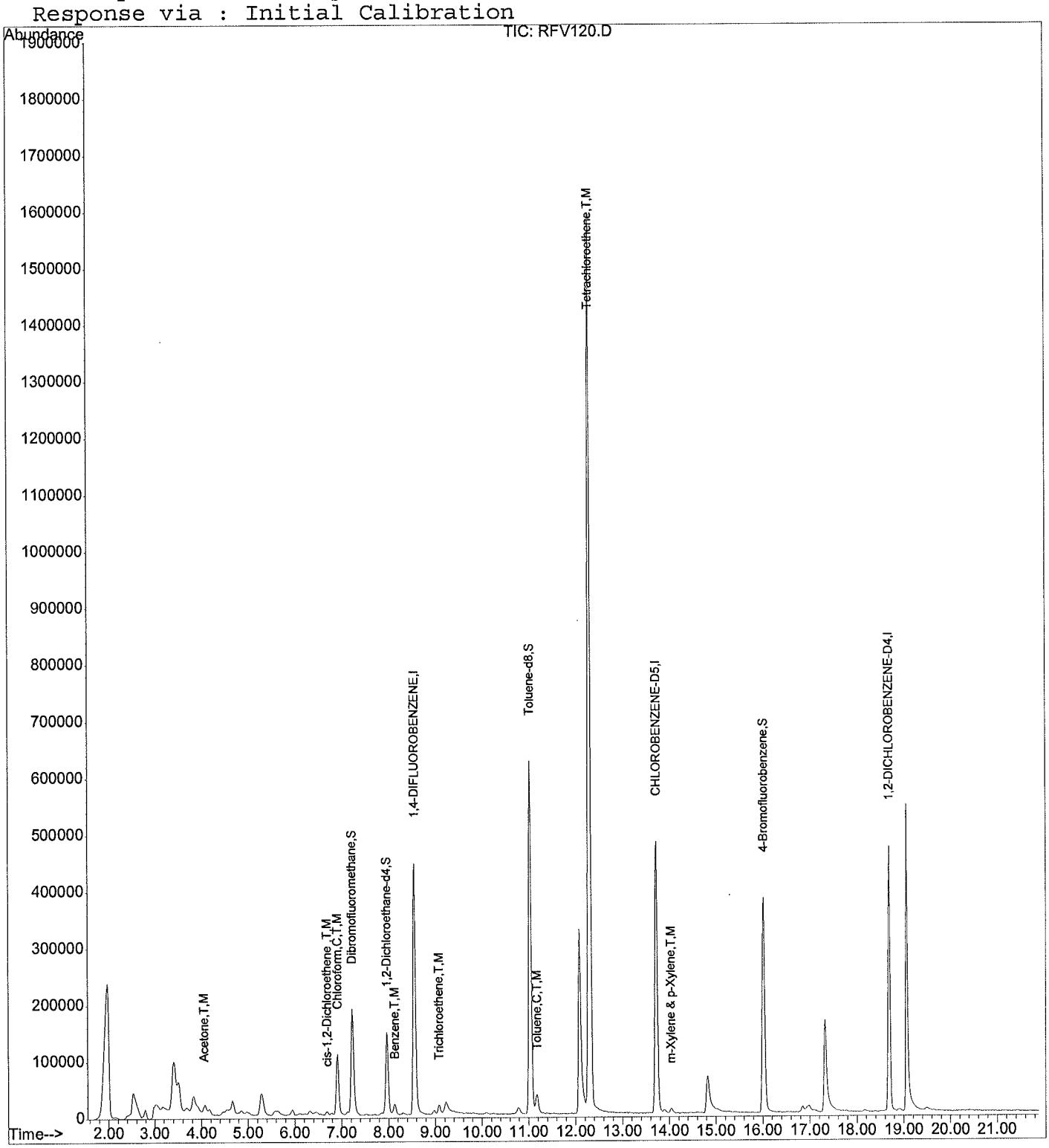
Quantitation Report

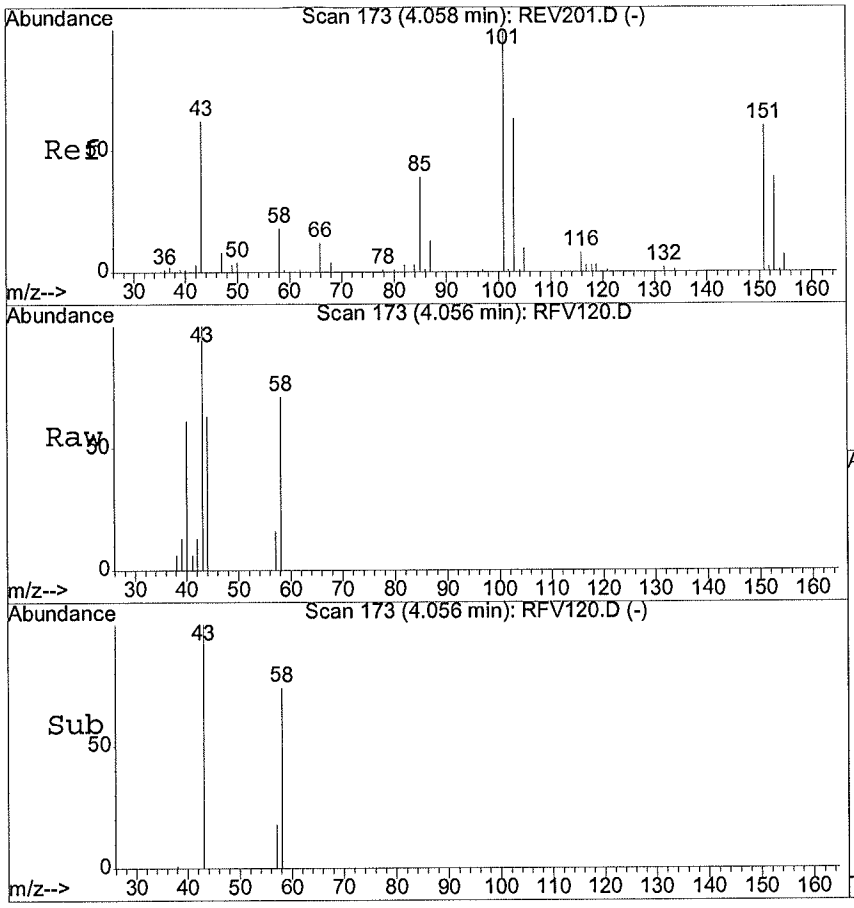
Data File : D:\HPCHEM\1\DATA\24F07\RFV120.D
Acq On : 7 Jun 2024 7:05 pm
Sample : 24F025-03
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Jun 13 9:45 2024

Vial: 10
Operator: LPriet
Inst : 01
Multiplr: 1.00

Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration

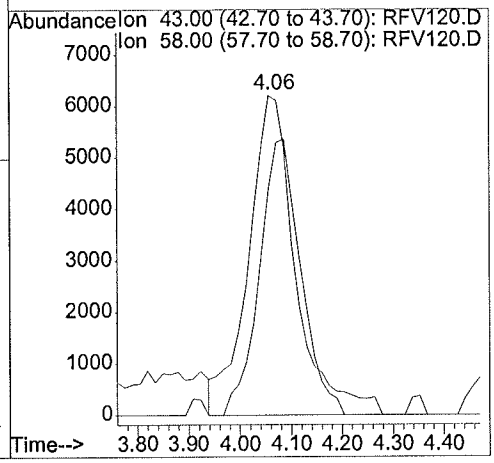


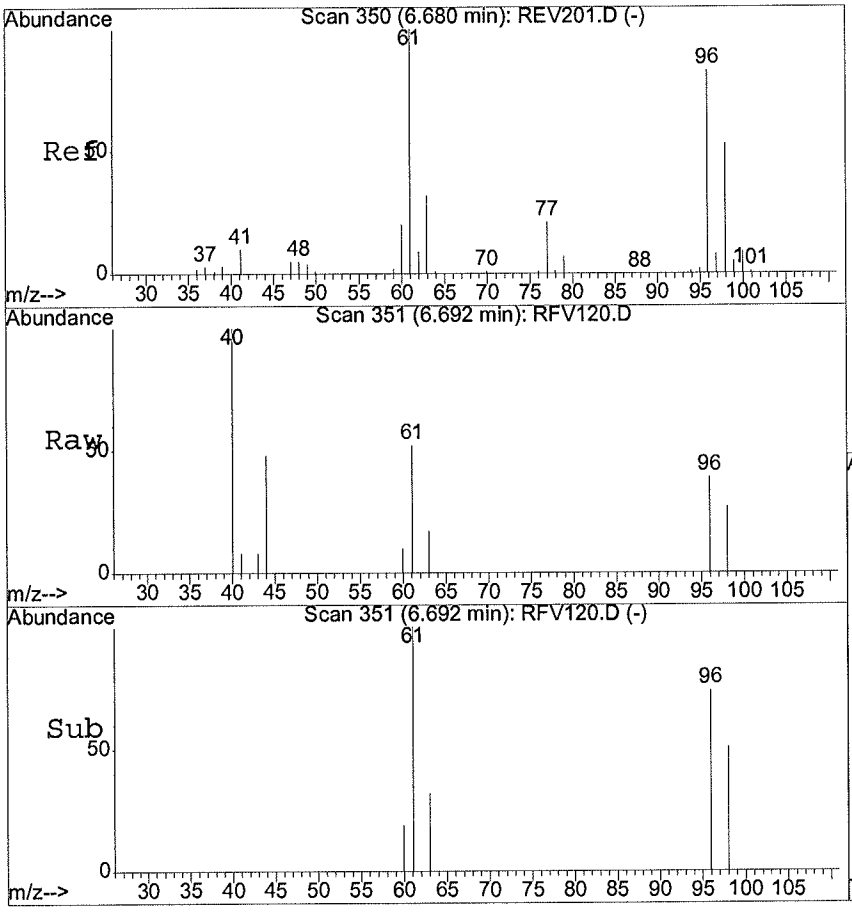


#13
Acetone
Concen: 15.77 ug/l
RT: 4.06 min Scan# 173
Delta R.T. -0.00 min
Lab File: RFV120.D
Acq: 7 Jun 2024 7:05 pm

Tgt Ion: 43 Resp: 39799

Ion	Ratio	Lower	Upper
43	100		
58	75.5	0.9	60.9#

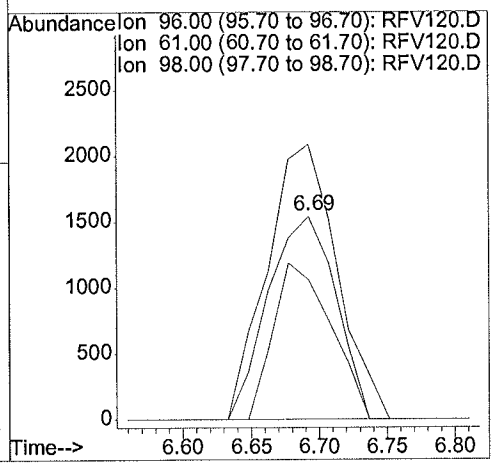


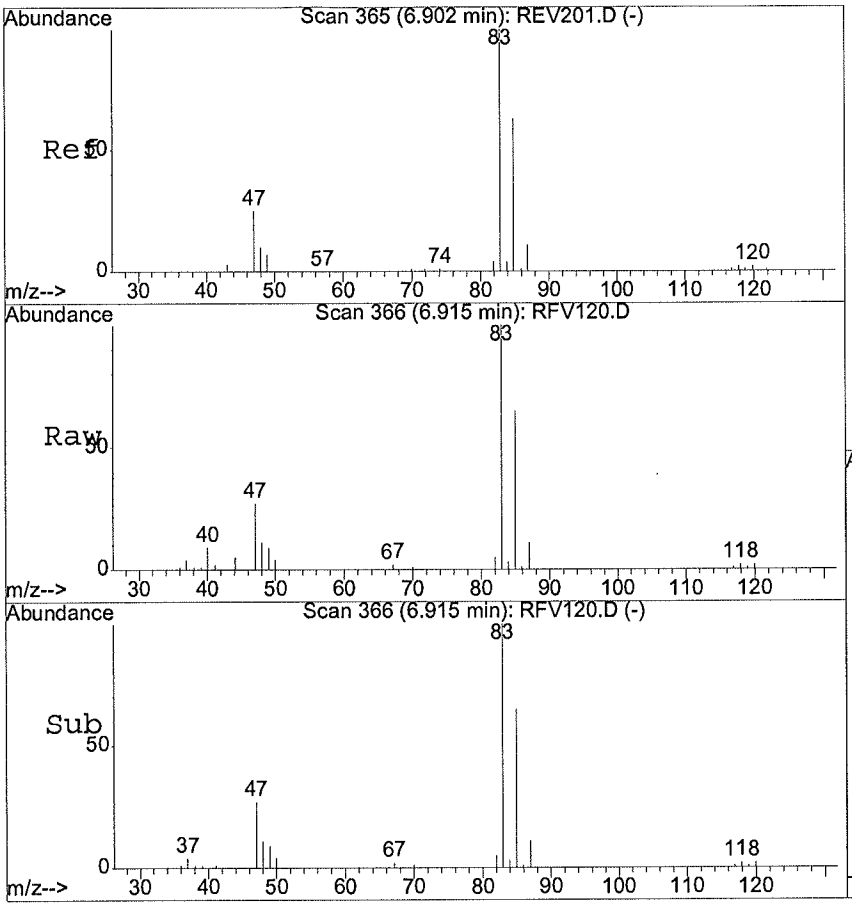


#30
cis-1,2-Dichloroethene
Concen: 0.19 ug/l
RT: 6.69 min Scan# 351
Delta R.T. 0.01 min
Lab File: RFV120.D
Acq: 7 Jun 2024 7:05 pm

Tgt Ion: 96 Resp: 5337

Ion	Ratio	Lower	Upper
96	100		
61	139.8	101.8	161.8
98	66.0	33.6	93.6

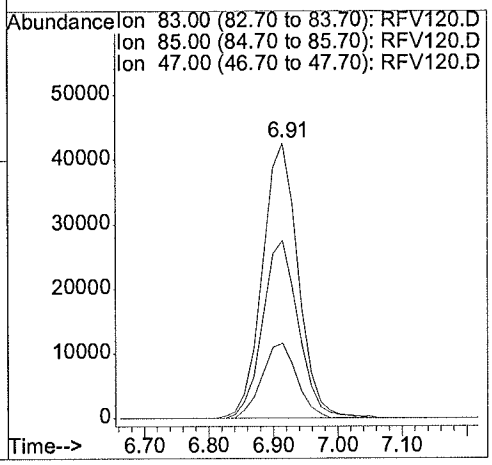


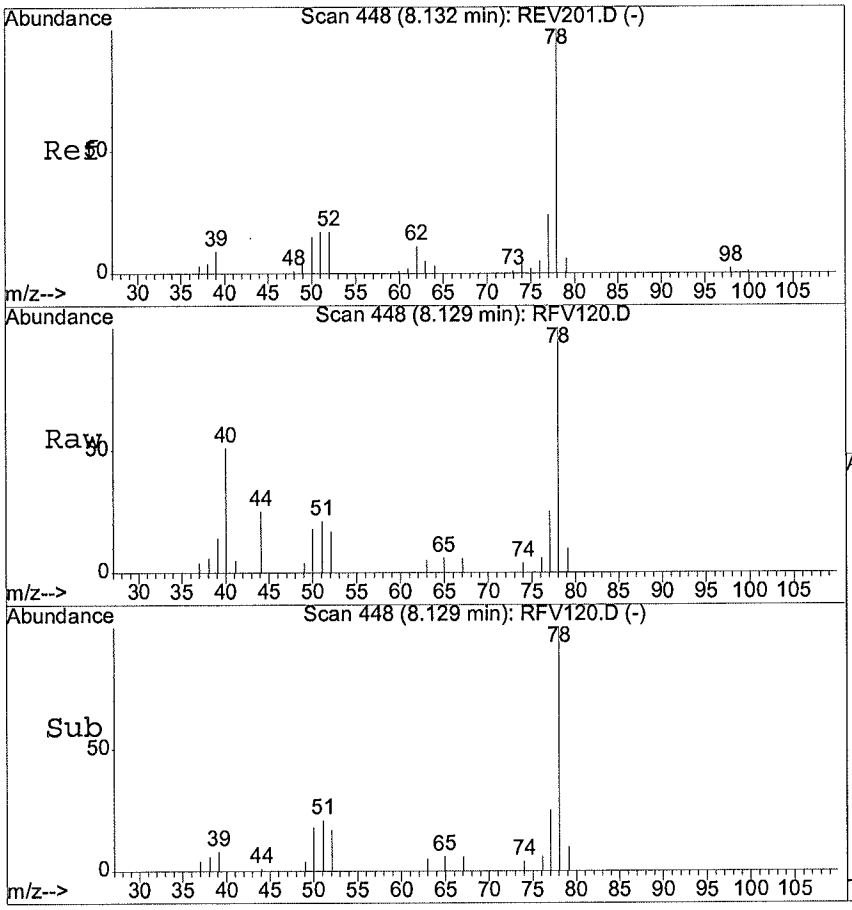


#31
Chloroform
Concen: 3.85 ug/l
RT: 6.91 min Scan# 366
Delta R.T. 0.01 min
Lab File: RFV120.D
Acq: 7 Jun 2024 7:05 pm

Tgt Ion: 83 Resp: 163116

Ion	Ratio	Lower	Upper
83	100		
85	64.8	38.2	98.2
47	26.6	0.0	54.7

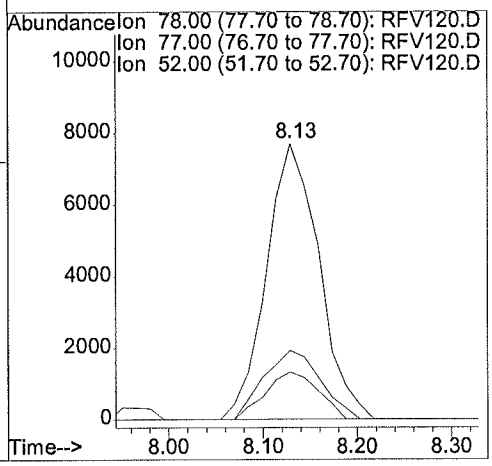


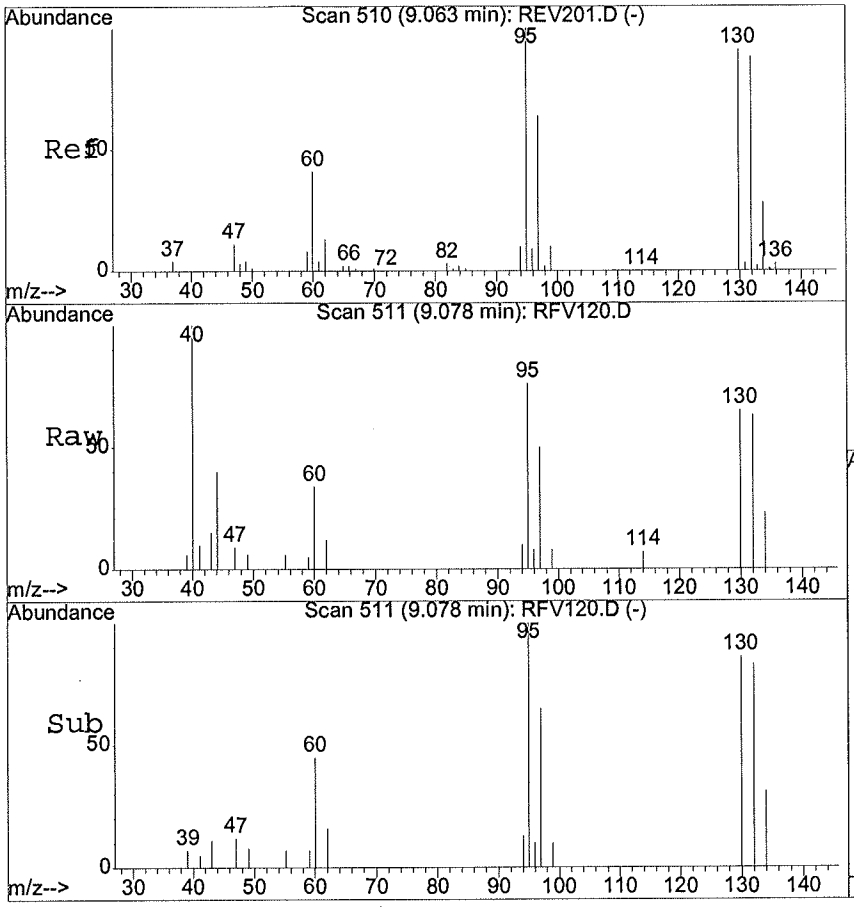


#42
Benzene
Concen: 0.32 ug/l
RT: 8.13 min Scan# 448
Delta R.T. -0.00 min
Lab File: RFV120.D
Acq: 7 Jun 2024 7:05 pm

Tgt Ion: 78 Resp: 29815

Ion	Ratio	Lower	Upper
78	100		
77	27.0	0.0	54.0
52	17.3	0.0	46.8

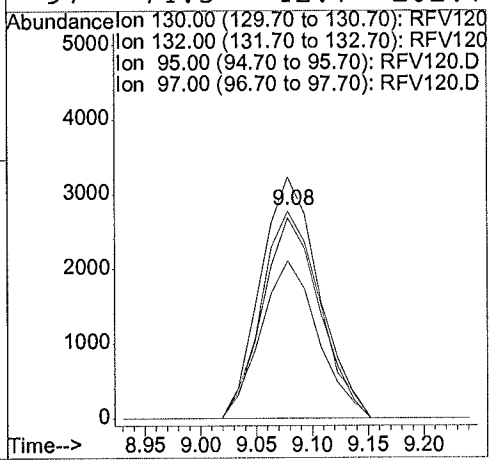


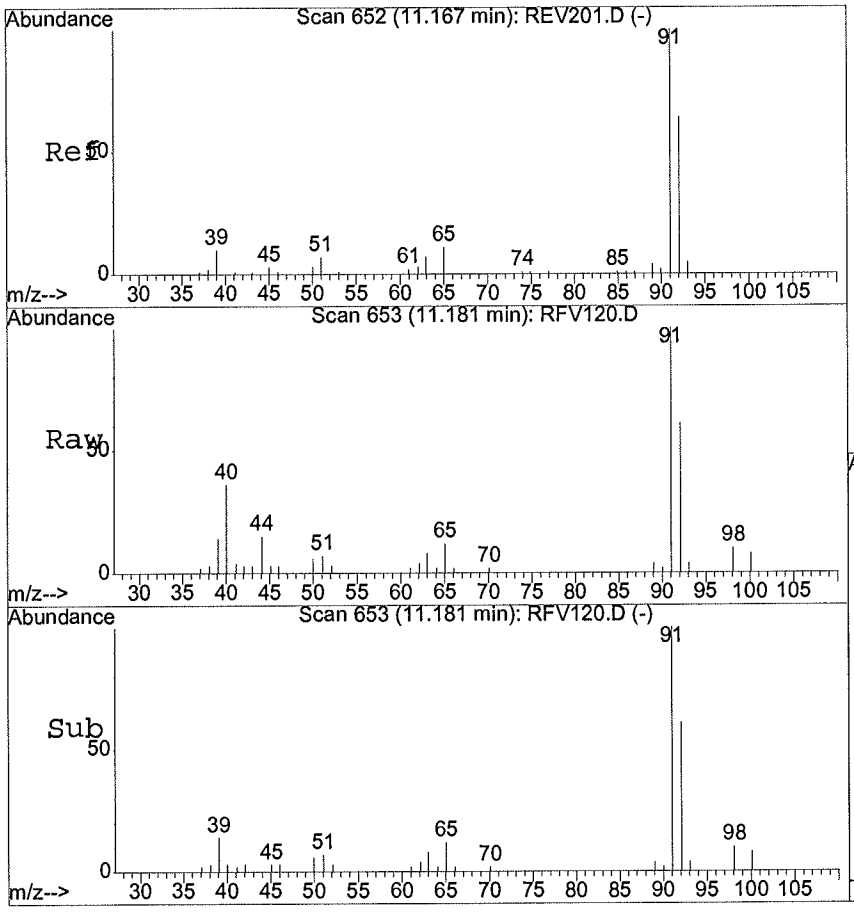


#44
Trichloroethene
Concen: 0.42 ug/l
RT: 9.08 min Scan# 511
Delta R.T. 0.02 min
Lab File: RFV120.D
Acq: 7 Jun 2024 7:05 pm

Tgt Ion:130 Resp: 10040

Ion	Ratio	Lower	Upper
130	100		
132	94.5	66.3	126.3
95	116.3	78.9	138.9
97	74.3	42.7	102.7

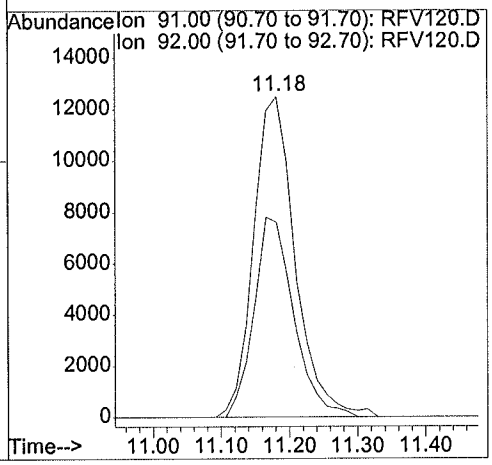


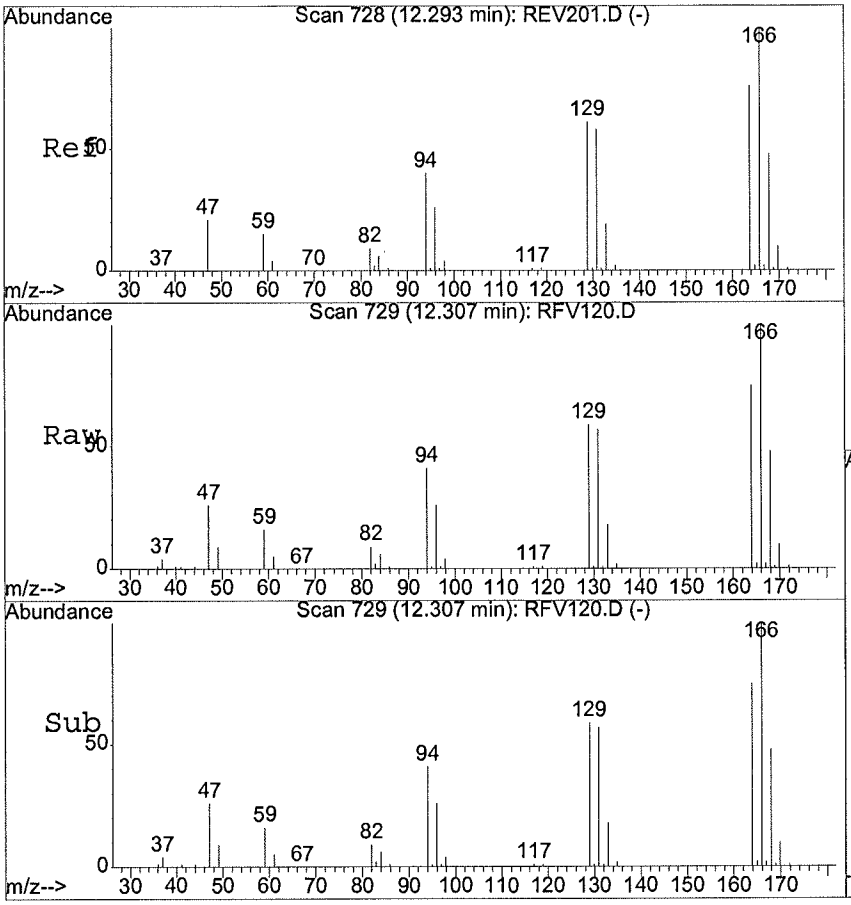


#55
Toluene
Concen: 0.54 ug/l
RT: 11.18 min Scan# 653
Delta R.T. 0.01 min
Lab File: RFV120.D
Acq: 7 Jun 2024 7:05 pm

Tgt Ion: 91 Resp: 52820

Ion	Ratio	Lower	Upper
91	100		
92	59.8	34.0	94.0

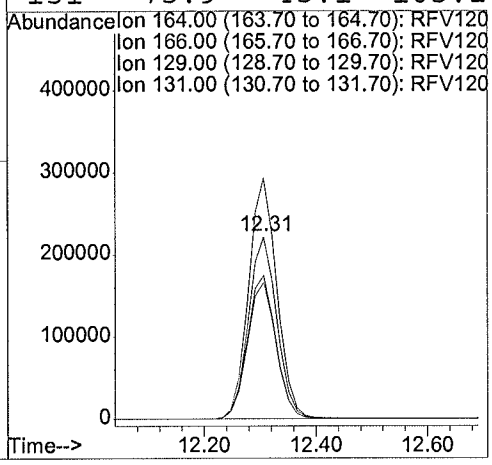


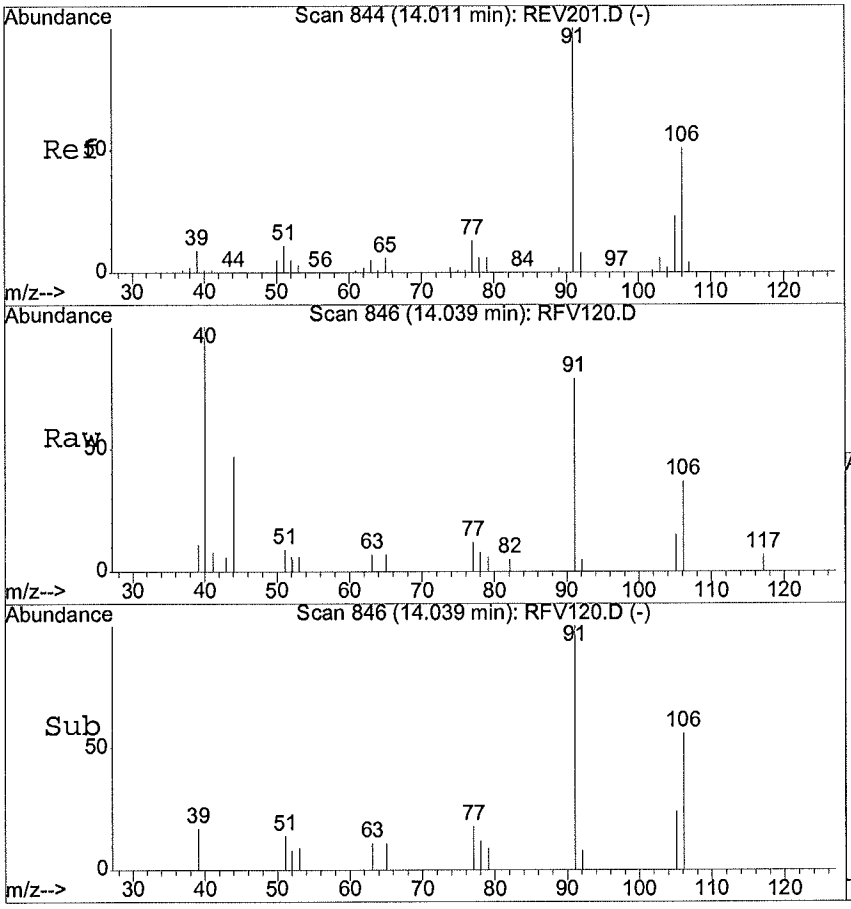


#61
Tetrachloroethene
Concen: 38.50 ug/l
RT: 12.31 min Scan# 729
Delta R.T. 0.01 min
Lab File: RFV120.D
Acq: 7 Jun 2024 7:05 pm

Tgt Ion:164 Resp: 784898

Ion	Ratio	Lower	Upper
164	100		
166	131.6	101.0	161.0
129	79.6	49.2	109.2
131	75.9	45.1	105.1

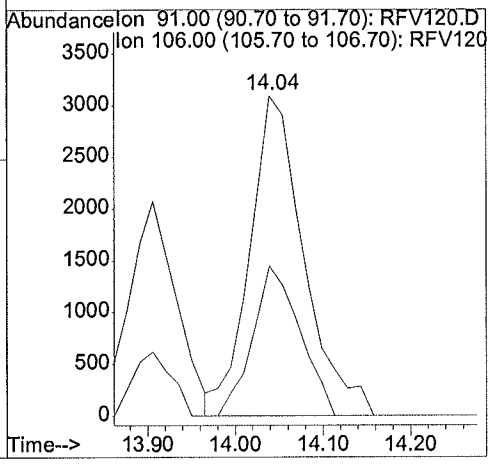




#68
m-Xylene & p-Xylene
Concen: 0.16 ug/l
RT: 14.04 min Scan# 846
Delta R.T. 0.03 min
Lab File: RFV120.D
Acq: 7 Jun 2024 7:05 pm

Tgt Ion: 91 Resp: 13199

Ion	Ratio	Lower	Upper
91	100		
106	41.0	20.9	80.9



METHOD SW5030B/B260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	06/05/24 15:10
Project	: VA SALT LAKE CITY	Date Received:	06/06/24
Batch No.	: 24F025	Date Extracted:	06/07/24 17:31
Sample ID	: TB05-GW060524	Date Analyzed:	06/07/24 17:31
Lab Samp ID:	24F025-04	Dilution Factor:	1
Lab File ID:	RFV117	Matrix:	WATER
Ext Btch ID:	V001F05	% Moisture:	NA
Calib. Ref.:	REV201	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	11.4	10.0	114	70-130
Bromofluorobenzene	10.0	10.0	100	70-130
Toluene-d8	9.86	10.0	99	70-130
Dibromofluoromethane	10.1	10.0	101	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : LPriet Analyzed by : LPriet
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F07\RFV117.D Vial: 7
Acq On : 7 Jun 2024 5:31 pm Operator: LPriet
Sample : 24F025-04 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 13 9:36 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	746880	10.00	ug/l	0.01
53) CHLOROBENZENE-D5	13.73	117	602516	10.00	ug/l	0.01
72) 1,2-DICHLOROBENZENE-D4	18.69	152	250020	10.00	ug/l	0.01
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	232816	10.07	ug/l	0.01
Spiked Amount 10.000			Recovery =	100.70%		
41) 1,2-Dichloroethane-d4	7.97	65	178998	11.35	ug/l	0.00
Spiked Amount 10.000			Recovery =	113.50%		
54) Toluene-d8	11.03	98	890019	9.86	ug/l	0.00
Spiked Amount 10.000			Recovery =	98.60%		
76) 4-Bromofluorobenzene	16.02	95	341666	10.03	ug/l	0.01
Spiked Amount 10.000			Recovery =	100.30%		
Target Compounds						Qvalue
18) Methylene chloride	4.87	49	5272	0.16	ug/l	80

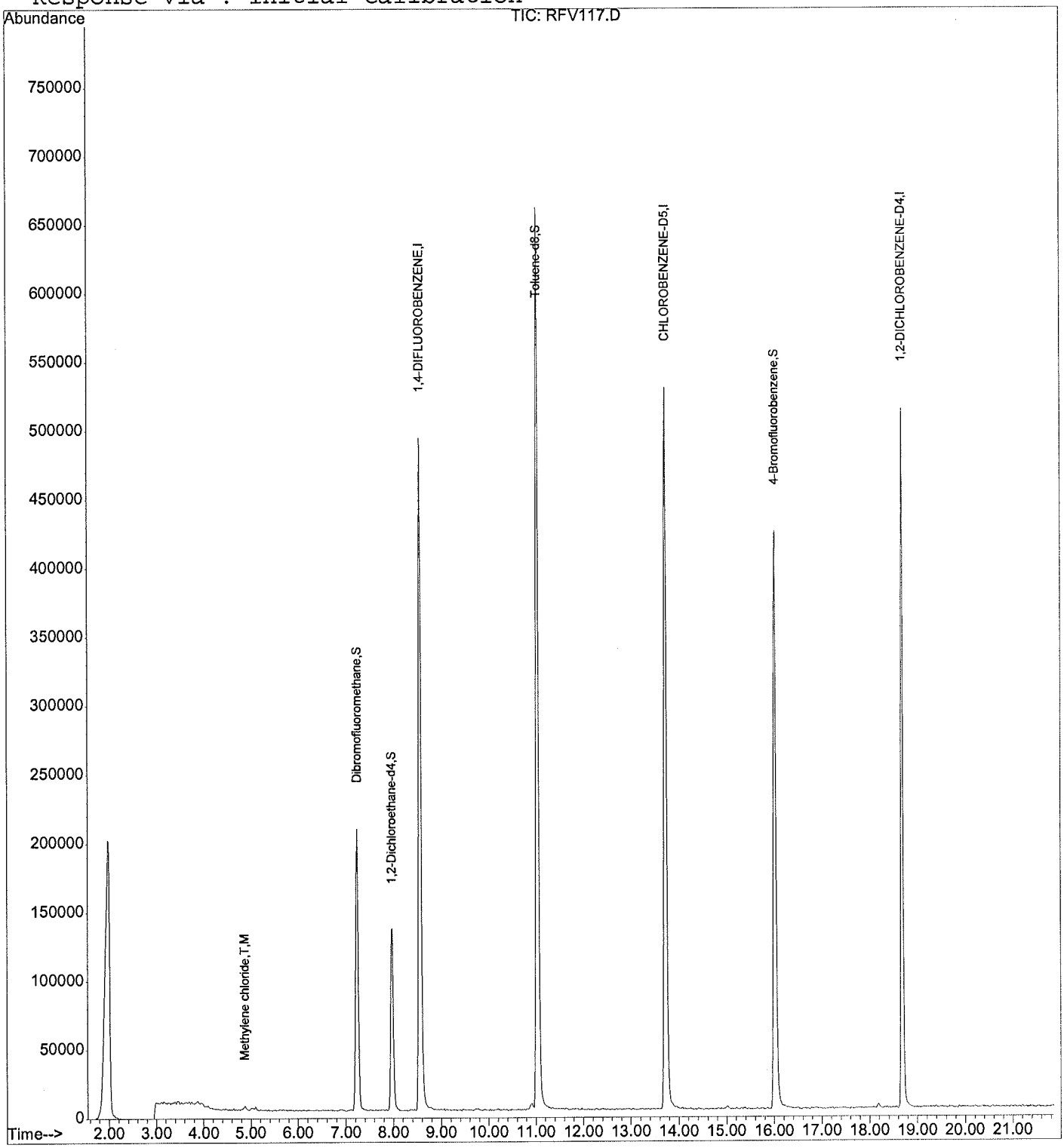
(#) = qualifier out of range (m) = manual integration

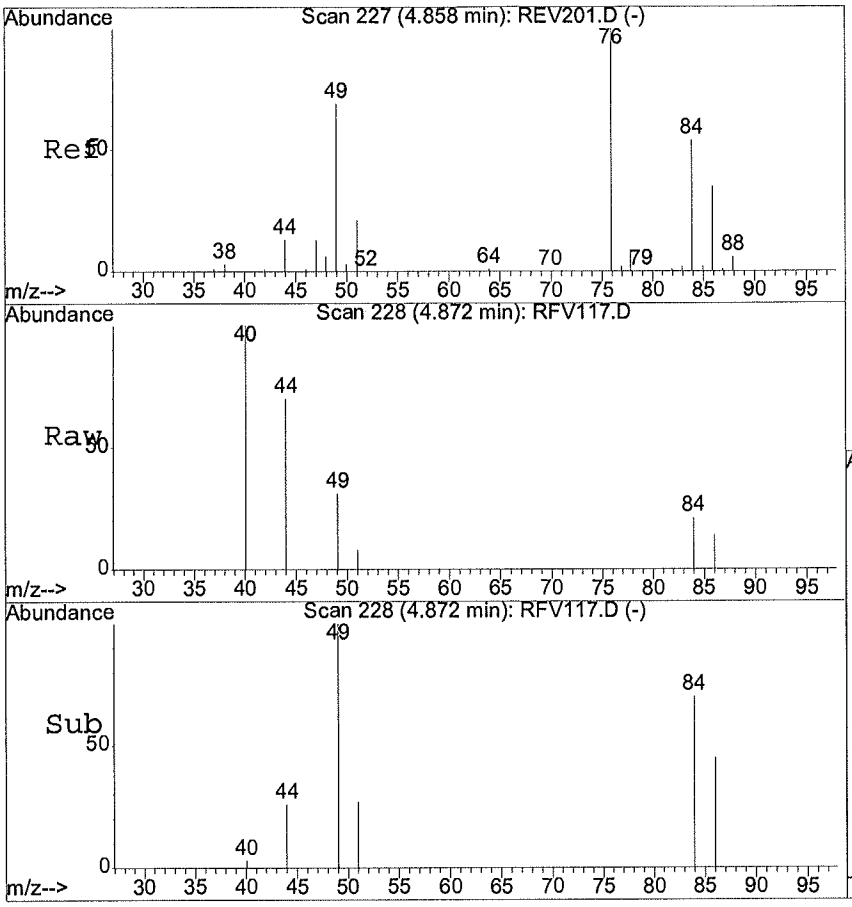
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F07\RFV117.D
Acq On : 7 Jun 2024 5:31 pm
Sample : 24F025-04
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Jun 13 9:36 2024

Vial: 7
Operator: LPriet
Inst : 01
Multiplr: 1.00
Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration

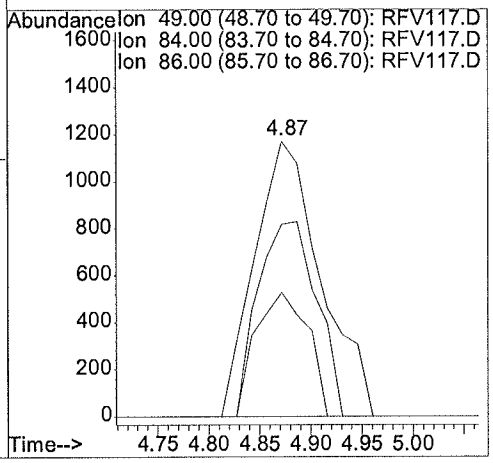




#18
Methylene chloride
Concen: 0.16 ug/l
RT: 4.87 min Scan# 228
Delta R.T. 0.01 min
Lab File: RFV117.D
Acq: 7 Jun 2024 5:31 pm

Tgt Ion: 49 Resp: 5272

Ion	Ratio	Lower	Upper
49	100		
84	62.6	49.1	109.1
86	35.5	20.8	80.8



QC SUMMARIES

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	06/07/24 17:01
Project	: VA SALT LAKE CITY	Date Received:	06/07/24
Batch No.	: 24F025	Date Extracted:	06/07/24 17:01
Sample ID	: MBLK1W	Date Analyzed:	06/07/24 17:01
Lab Samp ID:	V001F05B	Dilution Factor:	1
Lab File ID:	RFV116	Matrix:	WATER
Ext Btch ID:	V001F05	% Moisture:	NA
Calib. Ref.:	REV201	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	11.2	10.0	112	70-130
Bromofluorobenzene	9.88	10.0	99	70-130
Toluene-d8	9.90	10.0	99	70-130
Dibromofluoromethane	10.1	10.0	101	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : LPriet Analyzed by : LPriet
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. : 24F025
METHOD : SW50308/8260C

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: M8LK1W	LCS1W	LCD1W
LAB SAMPLE ID	: VO01F058	VO01F05L	VO01F05C
LAB FILE ID	: RFV116	RFV113	RFV114
DATE PREPARED	: 06/07/24 17:01	06/07/24 15:31	06/07/24 16:01
DATE ANALYZED	: 06/07/24 17:01	06/07/24 15:31	06/07/24 16:01
PREP 8ATCH	: VO01F05	VO01F05	VO01F05
CALI8RATION REF	: REV201	REV201	REV201

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	10.1	101	10.0	10.4	104	3	74-131	20
1,1,2,2-Tetrachloroethane	ND	10.0	8.62	86	10.0	9.23	92	7	71-121	20
1,1,2-Trichloroethane	ND	10.0	9.43	94	10.0	10.4	104	10	80-119	20
1,1-Dichloroethane	ND	10.0	10.2	102	10.0	10.6	106	4	77-125	20
1,1-Dichloroethene	ND	10.0	9.81	98	10.0	10.4	104	6	71-131	20
1,2,3-Trichlorobenzene	ND	10.0	8.55	86	10.0	9.57	96	11	69-129	20
1,2,4-Trichlorobenzene	ND	10.0	8.67	87	10.0	9.35	94	8	69-130	20
1,2,4-Trimethylbenzene	ND	10.0	8.62	86	10.0	9.02	90	5	76-124	20
1,2-Dibromo-3-chloropropane	ND	10.0	7.74	77	10.0	8.59	86	10	62-138	20
1,2-Dichlorobenzene	ND	10.0	9.16	92	10.0	9.46	95	3	80-119	20
1,2-Dichloroethane	ND	10.0	10.8	108	10.0	11.6	116	7	73-128	20
1,2-Dichloropropane	ND	10.0	9.67	97	10.0	10.3	103	6	78-122	20
1,3,5-Trimethylbenzene	ND	10.0	8.69	87	10.0	8.95	90	3	75-124	20
1,3-Dichlorobenzene	ND	10.0	9.10	91	10.0	9.45	95	4	80-119	20
1,4-Dichlorobenzene	ND	10.0	9.12	91	10.0	9.56	96	5	79-118	20
2-8utanone	ND	50.0	52.4	105	50.0	57.4	115	9	56-143	20
2-Hexanone	ND	50.0	44.8	90	50.0	51.7	103	14	57-139	20
Acetone	ND	50.0	47.1	94	50.0	51.7	103	9	39-160	20
8enzene	ND	10.0	9.76	98	10.0	10.3	103	5	79-120	20
8romochloromethane	ND	10.0	10.2	102	10.0	10.9	109	7	78-120	20
Bromodichloromethane	ND	10.0	9.98	100	10.0	10.6	106	6	79-125	20
8romoform	ND	10.0	8.57	86	10.0	8.99	90	5	66-130	20
8romomethane	ND	10.0	9.71	97	10.0	9.45	95	3	53-141	20
Carbon Disulfide	ND	10.0	9.88	99	10.0	10.1	101	2	64-133	20
Carbon Tetrachloride	ND	10.0	10.0	100	10.0	10.4	104	4	72-136	20
Chlorobenzene	ND	10.0	9.27	93	10.0	9.84	98	6	82-118	20
Chloroethane	ND	10.0	10.8	108	10.0	11.0	110	2	60-138	20
Chloroform	ND	10.0	10.2	102	10.0	10.8	108	6	79-124	20
Chloromethane	ND	10.0	9.00	90	10.0	9.20	92	2	50-139	20
cis-1,2-Dichloroethylene	ND	10.0	9.59	96	10.0	10.2	102	6	78-123	20
Dibromochloromethane	ND	10.0	9.40	94	10.0	10.5	105	11	74-126	20
Dichlorodifluoromethane	ND	10.0	9.88	99	10.0	10.1	101	2	32-152	20
Ethylbenzene	ND	10.0	9.88	99	10.0	10.5	105	6	79-121	20
Isopropylbenzene	ND	10.0	9.29	93	10.0	10.1	101	8	72-131	20
m,p-Xylene	ND	20.0	20.0	100	20.0	21.3	107	6	80-121	20
4-Methyl-2-Pentanone	ND	50.0	47.0	94	50.0	53.8	108	13	67-130	20
Methylene Chloride	ND	10.0	10.1	101	10.0	10.7	107	6	74-124	20
tert-8utyl Methyl Ether	ND	10.0	8.95	90	10.0	10.0	100	11	71-124	20
o-Xylene	ND	10.0	9.62	96	10.0	10.4	104	8	78-122	20
Styrene	ND	10.0	9.16	92	10.0	10.1	101	10	78-123	20
Tetrachloroethene	ND	10.0	9.53	95	10.0	10.2	102	7	74-129	20
Toluene	ND	10.0	9.49	95	10.0	10.3	103	8	80-121	20
Trans-1,2-DCE	ND	10.0	9.94	99	10.0	10.5	105	5	75-124	20
cis-1,3-Dichloropropene	ND	10.0	9.39	94	10.0	10.2	102	8	75-124	20
Trans-1,3-Dichloropropene	ND	10.0	9.42	94	10.0	10.4	104	10	73-127	20
TCE	ND	10.0	9.40	94	10.0	9.92	99	5	79-123	20
Trichlorofluoromethane	ND	10.0	10.0	100	10.0	10.2	102	2	65-141	20
Vinyl Chloride	ND	10.0	11.1	111	10.0	10.9	109	2	58-137	20
1,2-Dibromoethane	ND	10.0	9.16	92	10.0	10.2	102	11	77-121	20
Vinyl Acetate	ND	10.0	8.81	88	10.0	9.45	95	7	54-146	20
Trichlorotrifluoroethane	ND	10.0	10.2	102	10.0	10.8	108	6	70-136	20
Methyl Acetate	ND	10.0	10.7	107	10.0	11.8	118	10	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	10.8	108	10.0	11.2	112	70-130
8romofluorobenzene	10.0	9.76	98	10.0	9.63	96	70-130
Toluene-d8	10.0	9.70	97	10.0	9.75	98	70-130
Dibromofluoromethane	10.0	9.99	100	10.0	10.1	101	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\24F07\RFV116.D
Acq On : 7 Jun 2024 5:01 pm
Sample : VO01F05B
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Jun 13 8:39 2024

Vial: 6
Operator: LPriet
Inst : 01
Multiplr: 1.00

Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	753642	10.00	ug/l	0.01
53) CHLOROBENZENE-D5	13.73	117	624758	10.00	ug/l	0.01
72) 1,2-DICHLOROBENZENE-D4	18.69	152	249854	10.00	ug/l	0.01
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	235545	10.10	ug/l	0.01
Spiked Amount 10.000			Recovery =	101.00%		
41) 1,2-Dichloroethane-d4	7.97	65	178280	11.21	ug/l	0.00
Spiked Amount 10.000			Recovery =	112.10%		
54) Toluene-d8	11.03	98	926607	9.90	ug/l	0.00
Spiked Amount 10.000			Recovery =	99.00%		
76) 4-Bromofluorobenzene	16.02	95	336274	9.88	ug/l	0.01
Spiked Amount 10.000			Recovery =	98.80%		
Target Compounds						Qvalue
18) Methylene chloride	4.87	49	5810	0.18	ug/l	92

(#) = qualifier out of range (m) = manual integration

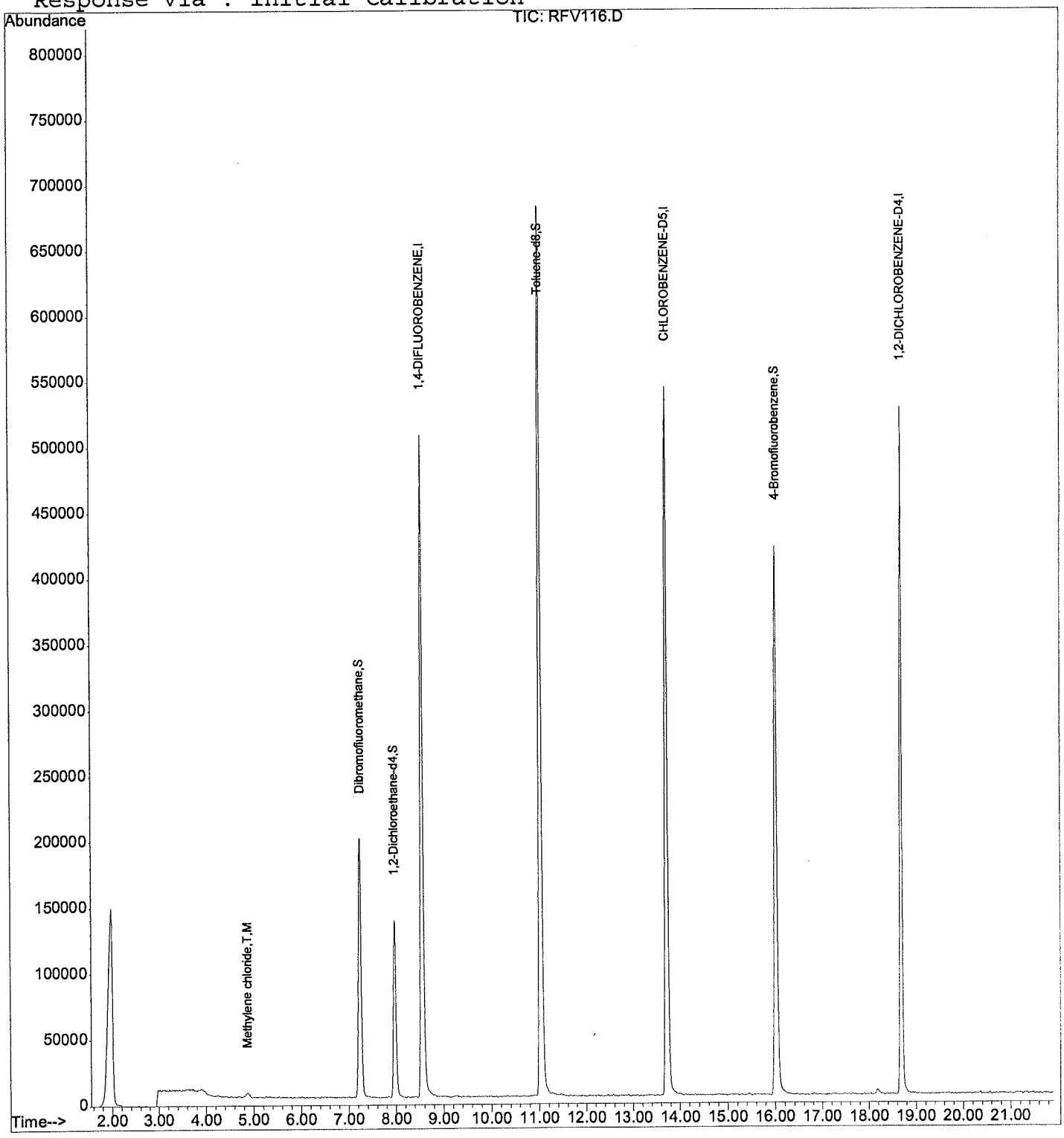
Quantitation Report

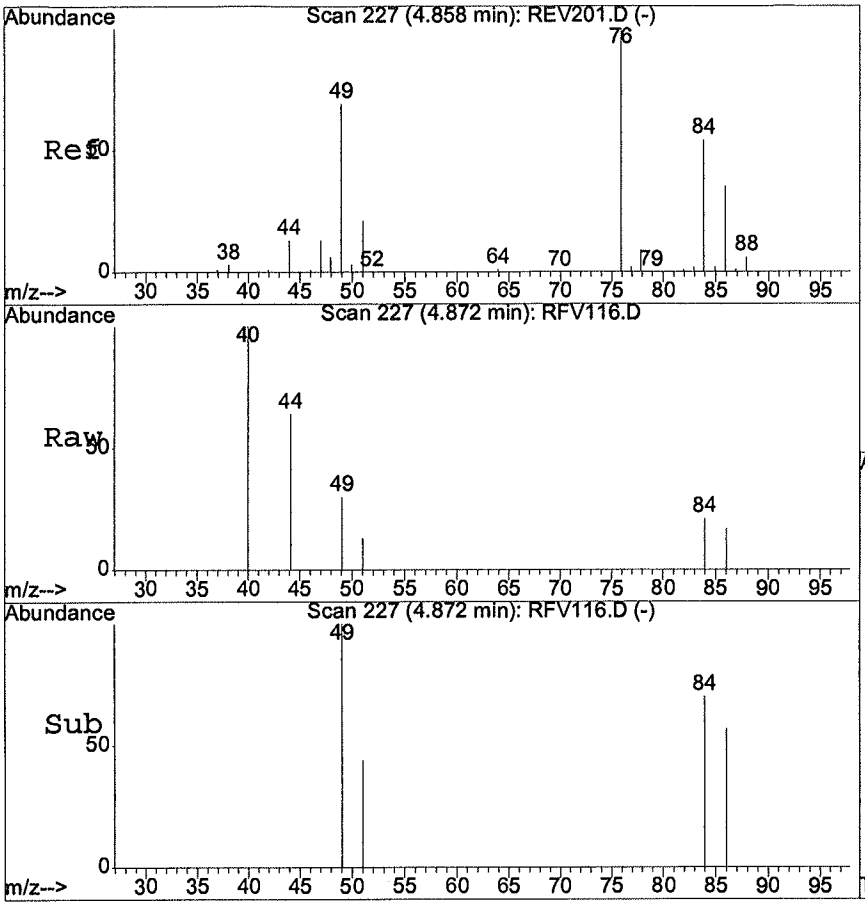
Data File : D:\HPCHEM\1\DATA\24F07\RFV116.D
Acq On : 7 Jun 2024 5:01 pm
Sample : VO01F05B
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Jun 13 8:39 2024

Vial: 6
Operator: LPriet
Inst : 01
Multiplr: 1.00

Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration

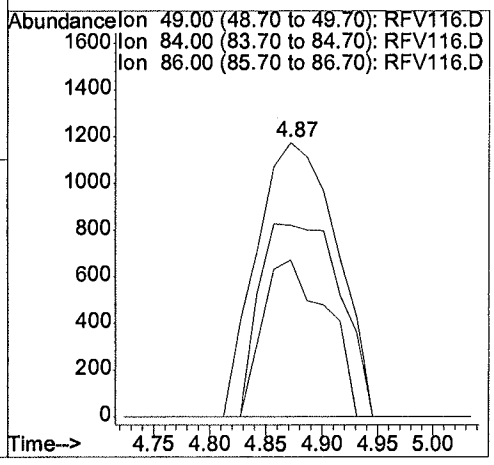




#18
Methylene chloride
Concen: 0.18 ug/l
RT: 4.87 min Scan# 227
Delta R.T. 0.01 min
Lab File: RFV116.D
Acq: 7 Jun 2024 5:01 pm

Tgt Ion: 49 Resp: 5810

Ion	Ratio	Lower	Upper
49	100		
84	71.0	49.1	109.1
86	45.8	20.8	80.8



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F07\RFV113.D Vial: 3
Acq On : 7 Jun 2024 3:31 pm Operator: LPriet
Sample : VO01F05L Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 7 15:53 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	741911	10.00	ug/l	0.02
53) CHLOROBENZENE-D5	13.71	117	607937	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	244510	10.00	ug/l	0.01
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	229405	9.99	ug/l	0.00
Spiked Amount 10.000			Recovery =	99.90%		
41) 1,2-Dichloroethane-d4	7.97	65	169383	10.81	ug/l	0.00
Spiked Amount 10.000			Recovery =	108.10%		
54) Toluene-d8	11.03	98	883650	9.70	ug/l	0.00
Spiked Amount 10.000			Recovery =	97.00%		
76) 4-Bromofluorobenzene	16.01	95	325146	9.76	ug/l	0.00
Spiked Amount 10.000			Recovery =	97.60%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.18	85	196212	9.88	ug/l	100
5) Chloromethane	2.48	50	250224	9.00	ug/l	99
6) Vinyl chloride	2.61	62	256039	11.06	ug/l	99
7) Bromomethane	3.17	94	266455	9.71	ug/l	93
8) Chloroethane	3.21	64	181679	10.82	ug/l	96
9) Dichlorofluoromethane	3.29	67	449920	9.43	ug/l	98
10) Trichlorofluoromethane	3.57	101	313252	10.00	ug/l	98
11) Acrolein	4.00	56	54583	32.75	ug/l	95
12) 1,1,2-Trichloro-1,2,2-trif	4.09	151	158993	10.16	ug/l	100
13) Acetone	4.06	43	127415	47.05	ug/l	93
14) 1,1-Dichloroethene	4.23	61	388073	9.81	ug/l	96
15) tert-Butyl alcohol	4.35	59	165310	200.16	ug/l	71
16) Iodomethane	4.63	142	407175	9.60	ug/l	97
17) Methyl acetate	4.66	43	79279	10.74	ug/l	98
18) Methylene chloride	4.87	49	319862	10.08	ug/l	98
19) Carbon disulfide	4.89	76	835893	9.88	ug/l	99
20) Acrylonitrile	5.03	53	164573	47.90	ug/l	100
21) tert-Butyl methyl ether (M	5.06	73	348494	8.95	ug/l	92
22) trans-1,2-Dichloroethene	5.26	61	379100	9.94	ug/l	94
23) Isopropyl ether (DIPE)	5.67	45	796387	9.78	ug/l	96
24) Vinyl acetate	5.83	43	246291	8.81	ug/l	97
25) 1,1-Dichloroethane	5.83	63	453199	10.17	ug/l	99
27) tert-Butyl ethyl ether (ET	6.25	59	534440	9.16	ug/l	98
28) 2-Butanone	6.43	43	217751	52.40	ug/l	97
29) 2,2-Dichloropropane	6.63	77	366443	9.78	ug/l	98
30) cis-1,2-Dichloroethene	6.69	96	294316	9.59	ug/l	95
31) Chloroform	6.92	83	464700	10.23	ug/l	99

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24F07\RFV113.D Vial: 3
Acq On : 7 Jun 2024 3:31 pm Operator: LPriet
Sample : VO01F05L Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 7 15:53 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.15	49	181507	10.17	ug/l	95
33)	Tetrahydrofuran	7.21	42	22936	8.73	ug/l	91
35)	1,1,1-Trichloroethane	7.51	97	384157	10.11	ug/l	97
36)	Cyclohexane	7.52	84	363787	9.83	ug/l	99
38)	1,1-Dichloropropene	7.73	110	114640	8.87	ug/l	99
39)	Carbon tetrachloride	7.88	119	283479	10.01	ug/l	99
40)	tert-Amyl methyl ether (TA	7.89	73	380008	8.37	ug/l	100
42)	Benzene	8.13	78	967146	9.76	ug/l	100
43)	1,2-Dichloroethane	8.11	62	215733	10.79	ug/l	99
44)	Trichloroethene	9.08	130	240967	9.40	ug/l	96
45)	Methylcyclohexane	9.17	83	396053	9.72	ug/l	98
46)	1,2-Dichloropropane	9.36	63	214489	9.67	ug/l	95
47)	Bromodichloromethane	9.73	83	307304	9.98	ug/l	99
48)	1,4-Dioxane	9.80	88	12851	141.55	ug/l	97
49)	Dibromomethane	9.83	93	104650	10.00	ug/l	95
50)	2-Chloroethyl vinyl ether	10.23	63	54130	9.62	ug/l	98
51)	4-Methyl-2-pentanone	10.28	43	514010	47.04	ug/l	95
52)	cis-1,3-Dichloropropene	10.62	75	324045	9.39	ug/l	96
55)	Toluene	11.17	91	1024875	9.49	ug/l	100
56)	Ethyl methacrylate	11.46	69	146743	9.06	ug/l	90
57)	trans-1,3-Dichloropropene	11.48	75	236382	9.42	ug/l	94
58)	1,1,2-Trichloroethane	11.76	97	133242	9.43	ug/l	98
59)	2-Hexanone	11.77	43	285268	44.81	ug/l	93
60)	1,3-Dichloropropane	12.19	76	233381	9.73	ug/l	99
61)	Tetrachloroethene	12.31	164	213957	9.53	ug/l	99
62)	Dibromochloromethane	12.68	129	162133	9.40	ug/l	100
63)	1,2-Dibromoethane	13.03	107	128050	9.16	ug/l	98
64)	1-Chlorohexane	13.31	91	439052	9.42	ug/l	100
65)	Chlorobenzene	13.79	112	596741	9.27	ug/l	100
66)	1,1,1,2-Tetrachloroethane	13.86	131	193531	9.76	ug/l	100
67)	Ethylbenzene	13.88	91	1217129	9.88	ug/l	97
68)	m-Xylene & p-Xylene	14.02	91	1800165	19.96	ug/l	95
69)	o-Xylene	14.84	91	893151	9.62	ug/l	97
70)	Styrene	14.91	104	658938	9.16	ug/l	97
71)	Isopropylbenzene	15.52	105	1136409	9.29	ug/l	99
73)	Bromoform	15.56	173	82378	8.57	ug/l	97
74)	trans-1,4-Dichloro-2-buten	15.64	53	35249	8.36	ug/l	91
75)	1,1,2,2-Tetrachloroethane	15.86	83	140355	8.62	ug/l	99
77)	1,2,3-Trichloropropane	16.16	110	35583	8.54	ug/l	92
78)	n-Propylbenzene	16.30	91	1438649	9.05	ug/l	98
79)	Bromobenzene	16.38	156	231317	9.20	ug/l	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F07\RFV113.D Vial: 3
Acq On : 7 Jun 2024 3:31 pm Operator: LPriet
Sample : VO01F05L Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 7 15:53 2024 Quant Results File: VO01E11.RES

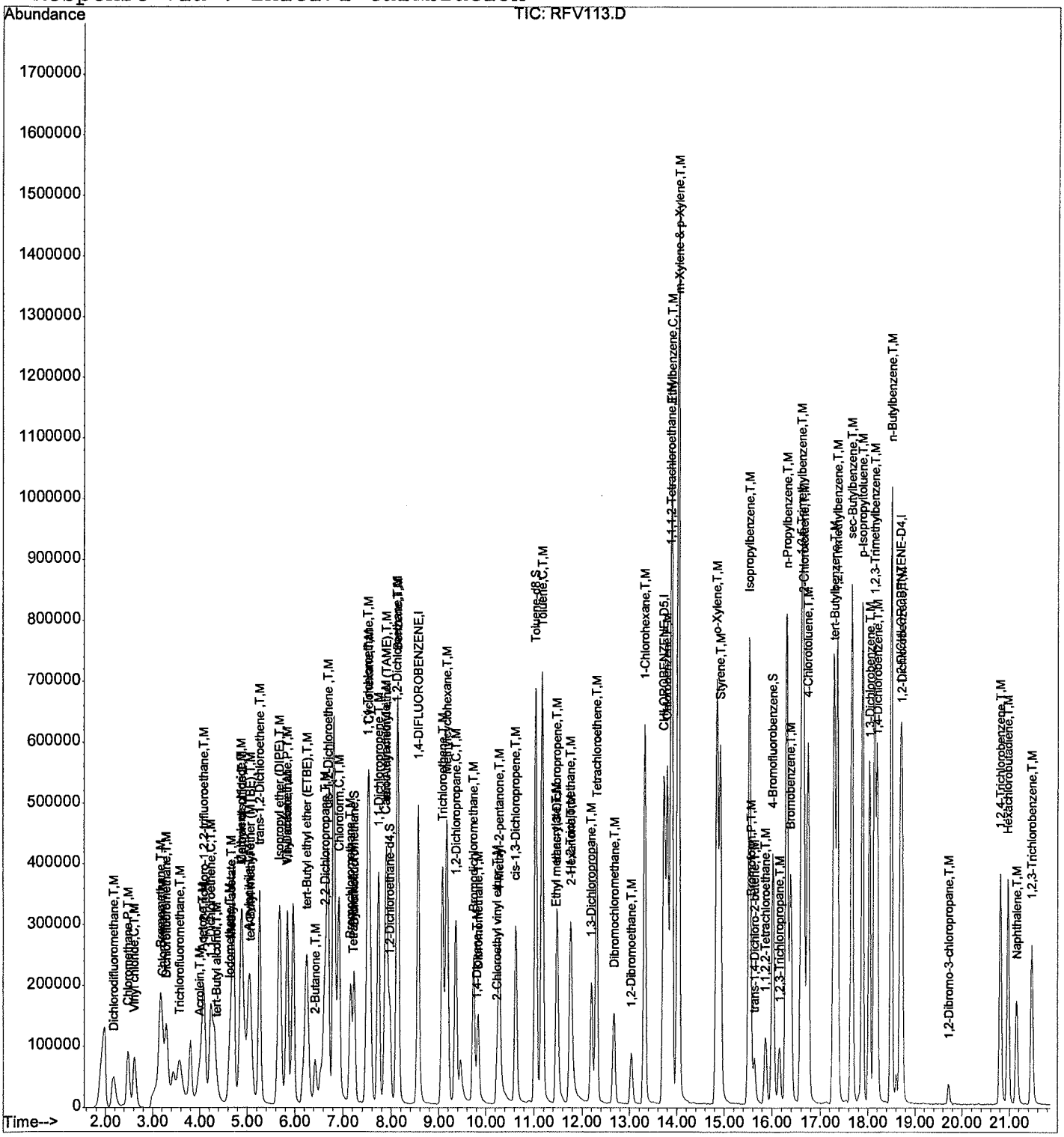
Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	882383	8.69	ug/l	98
81)	2-Chlorotoluene	16.65	91	897586	9.38	ug/l	97
82)	4-Chlorotoluene	16.73	91	792542	9.35	ug/l	97
83)	tert-Butylbenzene	17.30	134	186402	8.75	ug/l	92
84)	1,2,4-Trimethylbenzene	17.36	105	856538	8.62	ug/l	98
85)	sec-Butylbenzene	17.65	105	1217780	8.72	ug/l	99
86)	p-Isopropyltoluene	17.87	119	899467	8.36	ug/l	97
87)	1,3-Dichlorobenzene	18.04	146	435141	9.10	ug/l	98
88)	1,2,3-Trimethylbenzene	18.14	105	826220	8.90	ug/l	99
89)	1,4-Dichlorobenzene	18.20	146	427382	9.12	ug/l	99
90)	n-Butylbenzene	18.50	91	1013348	9.09	ug/l	99
91)	1,2-Dichlorobenzene	18.72	146	358892	9.16	ug/l	98
92)	1,2-Dibromo-3-chloropropan	19.73	157	19060	7.74	ug/l	98
93)	1,2,4-Trichlorobenzene	20.81	180	247963	8.67	ug/l	99
94)	Hexachlorobutadiene	20.97	225	136516	8.01	ug/l	96
95)	Naphthalene	21.16	128	277829	8.33	ug/l	99
96)	1,2,3-Trichlorobenzene	21.47	180	184236	8.55	ug/l	99

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24F07\RFV113.D Vial: 3
Acq On : 7 Jun 2024 3:31 pm Operator: LPriet
Sample : VO01F05L Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 7 15:53 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F07\RFV114.D Vial: 4
Acq On : 7 Jun 2024 4:01 pm Operator: LPriet
Sample : VO01F05C Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 7 16:23 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	741693	10.00	ug/l	0.01
53) CHLOROBENZENE-D5	13.73	117	603217	10.00	ug/l	0.01
72) 1,2-DICHLOROBENZENE-D4	18.69	152	261963	10.00	ug/l	0.01
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	232335	10.12	ug/l	0.00
Spiked Amount 10.000			Recovery = 101.20%			
41) 1,2-Dichloroethane-d4	7.97	65	175648	11.22	ug/l	0.00
Spiked Amount 10.000			Recovery = 112.20%			
54) Toluene-d8	11.03	98	881766	9.75	ug/l	0.00
Spiked Amount 10.000			Recovery = 97.50%			
76) 4-Bromofluorobenzene	16.01	95	343730	9.63	ug/l	0.00
Spiked Amount 10.000			Recovery = 96.30%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.18	85	201239	10.14	ug/l	99
5) Chloromethane	2.48	50	255510	9.20	ug/l	100
6) Vinyl chloride	2.62	62	252834	10.93	ug/l	100
7) Bromomethane	3.15	94	259504	9.45	ug/l	99
8) Chloroethane	3.20	64	184524	10.99	ug/l	95
9) Dichlorofluoromethane	3.29	67	471860	9.90	ug/l	98
10) Trichlorofluoromethane	3.58	101	318844	10.18	ug/l	99
11) Acrolein	4.00	56	58677	35.22	ug/l	95
12) 1,1,2-Trichloro-1,2,2-trif	4.09	151	169562	10.84	ug/l	100
13) Acetone	4.06	43	139954	51.70	ug/l	93
14) 1,1-Dichloroethene	4.24	61	409491	10.35	ug/l	96
15) tert-Butyl alcohol	4.35	59	198658	240.61	ug/l	74
16) Iodomethane	4.65	142	432626	10.20	ug/l	98
17) Methyl acetate	4.66	43	87297	11.83	ug/l	97
18) Methylene chloride	4.87	49	338445	10.66	ug/l	98
19) Carbon disulfide	4.89	76	853168	10.09	ug/l	98
20) Acrylonitrile	5.03	53	177052	51.55	ug/l	97
21) tert-Butyl methyl ether (M	5.06	73	389493	10.01	ug/l	93
22) trans-1,2-Dichloroethene	5.26	61	399343	10.48	ug/l	94
23) Isopropyl ether (DIPE)	5.67	45	880241	10.81	ug/l	97
24) Vinyl acetate	5.83	43	264299	9.45	ug/l	97
25) 1,1-Dichloroethane	5.83	63	473515	10.62	ug/l	100
27) tert-Butyl ethyl ether (ET	6.25	59	592153	10.15	ug/l	99
28) 2-Butanone	6.43	43	238480	57.41	ug/l	97
29) 2,2-Dichloropropane	6.63	77	380783	10.16	ug/l	98
30) cis-1,2-Dichloroethene	6.69	96	313378	10.22	ug/l	95
31) Chloroform	6.92	83	492312	10.84	ug/l	98

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24F07\RFV114.D Vial: 4
Acq On : 7 Jun 2024 4:01 pm Operator: LPriet
Sample : VO01F05C Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 7 16:23 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.15	49	194351	10.90	ug/l	94
33)	Tetrahydrofuran	7.21	42	27504	10.47	ug/l	90
35)	1,1,1-Trichloroethane	7.51	97	395846	10.42	ug/l	97
36)	Cyclohexane	7.52	84	349169	9.43	ug/l	99
38)	1,1-Dichloropropene	7.73	110	121449	9.40	ug/l	100
39)	Carbon tetrachloride	7.88	119	295335	10.43	ug/l	100
40)	tert-Amyl methyl ether (TA	7.89	73	425178	9.37	ug/l	99
42)	Benzene	8.13	78	1020616	10.30	ug/l	99
43)	1,2-Dichloroethane	8.12	62	231951	11.61	ug/l	98
44)	Trichloroethene	9.08	130	254298	9.92	ug/l	95
45)	Methylcyclohexane	9.17	83	374048	9.19	ug/l	97
46)	1,2-Dichloropropane	9.36	63	228509	10.31	ug/l	95
47)	Bromodichloromethane	9.73	83	325588	10.58	ug/l	100
48)	1,4-Dioxane	9.79	88	16913	186.34	ug/l	93
49)	Dibromomethane	9.83	93	116294	11.12	ug/l	92
50)	2-Chloroethyl vinyl ether	10.23	63	62962	11.19	ug/l	98
51)	4-Methyl-2-pentanone	10.28	43	592655	53.84	ug/l	96
52)	cis-1,3-Dichloropropene	10.63	75	352974	10.23	ug/l	96
55)	Toluene	11.17	91	1101980	10.29	ug/l	99
56)	Ethyl methacrylate	11.46	69	167743	10.44	ug/l	89
57)	trans-1,3-Dichloropropene	11.49	75	258048	10.36	ug/l	95
58)	1,1,2-Trichloroethane	11.76	97	145583	10.38	ug/l	98
59)	2-Hexanone	11.77	43	332035	51.72	ug/l	94
60)	1,3-Dichloropropane	12.20	76	261188	10.97	ug/l	99
61)	Tetrachloroethene	12.31	164	227412	10.21	ug/l	99
62)	Dibromochloromethane	12.68	129	179213	10.47	ug/l	100
63)	1,2-Dibromoethane	13.05	107	141709	10.21	ug/l	97
64)	1-Chlorohexane	13.31	91	462566	10.00	ug/l	100
65)	Chlorobenzene	13.79	112	628464	9.84	ug/l	99
66)	1,1,1,2-Tetrachloroethane	13.88	131	207013	10.52	ug/l	99
67)	Ethylbenzene	13.89	91	1289470	10.55	ug/l	96
68)	m-Xylene & p-Xylene	14.02	91	1909605	21.34	ug/l	95
69)	o-Xylene	14.85	91	955224	10.37	ug/l	96
70)	Styrene	14.91	104	717892	10.05	ug/l	97
71)	Isopropylbenzene	15.53	105	1227742	10.12	ug/l	99
73)	Bromoform	15.56	173	92772	8.99	ug/l	97
74)	trans-1,4-Dichloro-2-buten	15.64	53	41252	9.13	ug/l	91
75)	1,1,2,2-Tetrachloroethane	15.87	83	160925	9.23	ug/l	99
77)	1,2,3-Trichloropropane	16.16	110	40315	9.04	ug/l	92
78)	n-Propylbenzene	16.30	91	1574410	9.24	ug/l	97
79)	Bromobenzene	16.39	156	259844	9.64	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F07\RFV114.D Vial: 4
Acq On : 7 Jun 2024 4:01 pm Operator: LPriet
Sample : VO01F05C Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 7 16:23 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

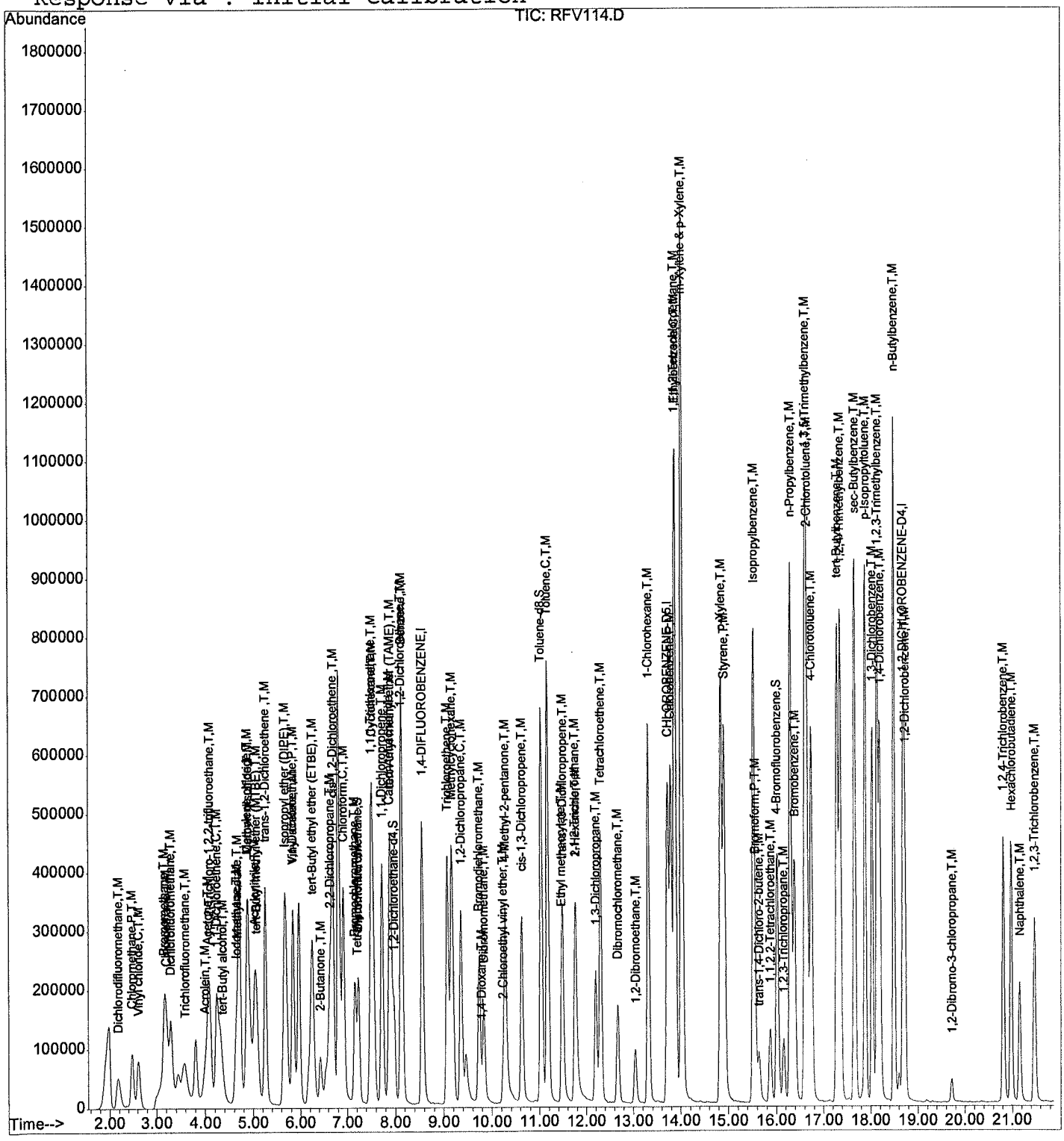
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.62	105	974155	8.95	ug/l	99
81)	2-Chlorotoluene	16.64	91	967396	9.43	ug/l	97
82)	4-Chlorotoluene	16.73	91	870055	9.58	ug/l	98
83)	tert-Butylbenzene	17.30	134	203152	8.90	ug/l	94
84)	1,2,4-Trimethylbenzene	17.36	105	960196	9.02	ug/l	98
85)	sec-Butylbenzene	17.67	105	1341213	8.97	ug/l	100
86)	p-Isopropyltoluene	17.89	119	1001001	8.68	ug/l	97
87)	1,3-Dichlorobenzene	18.04	146	483766	9.45	ug/l	98
88)	1,2,3-Trimethylbenzene	18.14	105	926645	9.32	ug/l	98
89)	1,4-Dichlorobenzene	18.20	146	479762	9.56	ug/l	99
90)	n-Butylbenzene	18.50	91	1124794	9.42	ug/l	99
91)	1,2-Dichlorobenzene	18.73	146	397075	9.46	ug/l	98
92)	1,2-Dibromo-3-chloropropan	19.72	157	22832	8.59	ug/l	100
93)	1,2,4-Trichlorobenzene	20.81	180	286438	9.35	ug/l	99
94)	Hexachlorobutadiene	20.98	225	166202	9.11	ug/l	97
95)	Naphthalene	21.16	128	332972	9.31	ug/l	100
96)	1,2,3-Trichlorobenzene	21.47	180	220906	9.57	ug/l	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F07\RFV114.D Vial: 4
Acq On : 7 Jun 2024 4:01 pm Operator: LPriet
Sample : VO01F05C Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 7 16:23 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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: REV195 BFB Injection Date: 05/11/24

Instrument ID: 01 BFB Injection Time: 10:20

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	18.517
75	30 - 60% of mass 95	42.491
95	Base Peak, 100% relative abundance	100.000
96	5 - 9% of mass 95	7.286
173	Less than 2% of mass 174	0.000(0)1
174	Greater than 50% of mass 95	75.428
175	5 - 9% of mass 174	5.582(7.4)1
176	95 - 101% % of mass 174	72.070(95.55)1
177	5 - 9% % of mass 176	5.085(7.06)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	VO01E111	REV196	05/11/24	10:58
2	VSTD0.5	VO01E112	REV197	05/11/24	11:27
3	VSTD1	VO01E113	REV198	05/11/24	11:56
4	VSTD2	VO01E114	REV199	05/11/24	12:30
5	VSTD5	VO01E115	REV200	05/11/24	12:59
6	VSTD10	VO01E116	REV201	05/11/24	13:28
7	VSTD20	VO01E117	REV202	05/11/24	13:58
8	VSTD30	VO01E118	REV203	05/11/24	14:27
9	VSTD50	VO01E119	REV204	05/11/24	14:56
10	VSTD100	VO01DE1110	REV205	05/11/24	15:26

SC 5/15/24

Instrument ID :01
Beginning Datetime :05/11/24 10:5B
Spike Units :PPB
IC File :REV201

Column Spec :RXI-624SILMS ID :0.25MM
Ending Datetime :05/11/24 15:26
HPChem Method :V001E11

M	IDX	Parameters	3 10:58 REV196	5 11:27 REV197	1 11:56 REV198	2 12:30 REV199	5 12:58 REV200	10 13:28 REV201	20 13:58 REV202	30 14:27 REV203	50 14:56 REV204	100 15:26 REV205	Av RRF	% RSD	Av Rt M
	1	1,4-DIFLUOROBENZENE	1	1	1	1	1	1	1	1	1	1	1	0	8.5509
	2	Chlorotrifluoroethylene	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	3	Dichlorodifluoromethane	0.276	0.289	0.246	0.273	0.265	0.254	0.271	0.264	0.274	0.264	0.268	4.44	2.1820
	4	2-Chloro-1,1,1-trifluoroethane	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	5	Chloromethane	0.426	0.406	0.362	0.393	0.380	0.347	0.379	0.351	0.364	0.339	0.373	7.39	2.4709
	6	Vinyl chloride	0.305	0.319	0.285	0.336	0.337	0.310	0.331	0.305	0.313	0.280	0.312	6.31	2.6048
	7	Bromomethane	------	0.567	0.436	0.404	0.359	0.329	0.378	0.353	0.376	0.362	0.396	17.86	3.1458
	8	Chloroethane	0.234	0.228	0.214	0.217	0.226	0.211	0.236	0.225	0.240	0.232	0.226	4.21	3.1896
	9	Dichlorofluoromethane	0.754	0.709	0.630	0.645	0.605	0.581	0.653	0.609	0.641	0.601	0.643	8.21	3.2755
	10	Trichlorofluoromethane	0.440	0.466	0.405	0.441	0.427	0.397	0.418	0.405	0.421	0.400	0.422	5.20	3.5526
5	11	Acrolein	------	------	------	0.022	0.022	0.020	0.024	0.022	0.024	0.023	0.022	5.86	3.9857
	12	1,1,2-Trichloro-1,2,2-trifluoroethane	0.173	0.217	0.197	0.230	0.212	0.210	0.224	0.217	0.228	0.201	0.211	8.11	4.0696
5	13	Acetone	------	------	0.049	0.037	0.036	0.031	0.035	0.034	0.037	0.034	0.037	14.45	4.0577
	14	1,1-Dichloroethene	0.517	0.551	0.485	0.547	0.524	0.514	0.569	0.536	0.563	0.527	0.533	4.74	4.2296
25	15	tert-Butyl alcohol	0.010	0.010	0.010	0.011	0.011	0.010	0.012	0.012	0.013	0.012	0.011	9.12	4.3422
	16	Iodomethane	0.556	0.569	0.525	0.570	0.563	0.545	0.616	0.582	0.610	0.581	0.572	4.85	4.6385
	17	Methyl acetate	------	------	------	0.114	0.101	0.089	0.107	0.097	------	------	0.102	10.84	4.8537
	18	Methylene chloride	0.449	0.440	0.418	0.436	0.421	0.399	0.447	0.413	0.440	0.416	0.428	3.90	4.8577
	19	Carbon disulfide	1.256	1.087	1.076	1.126	1.153	1.068	1.228	1.130	------	------	1.140	6.08	4.8800
5	20	Acrylonitrile	0.049	0.046	0.044	0.044	0.046	0.043	0.048	0.046	0.049	0.047	0.046	4.77	5.0252
	21	tert-Butyl methyl ether (MTBE)	0.533	0.550	0.498	0.531	0.517	0.473	0.551	0.525	0.548	0.520	0.525	4.67	5.0607
	22	trans-1,2-Dichloroethene	0.505	0.518	0.491	0.523	0.505	0.477	0.552	0.517	0.544	0.505	0.514	4.44	5.2489
	23	Isopropyl ether (DIPE)	1.103	1.121	1.035	1.086	1.080	1.027	1.185	1.102	1.138	1.103	1.098	4.21	5.6696
	24	Vinyl acetate	------	0.340	0.316	0.360	0.397	0.344	0.413	0.399	0.415	0.407	0.377	9.82	5.8322
	25	1,1-Dichloroethane	0.585	0.615	0.565	0.611	0.589	0.565	0.651	0.605	0.631	0.592	0.601	4.54	5.8296
25	26	2-Butanol	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	27	tert-Butyl ethyl ether (ETBE)	0.774	0.775	0.756	0.823	0.779	0.725	0.849	0.797	0.814	0.775	0.787	4.52	6.2400
5	28	2-Butanone	------	0.060	0.049	0.050	0.054	0.053	0.061	0.061	0.065	0.060	0.056	10.70	6.4281
	29	2,2-Dichloropropane	0.523	0.531	0.479	0.511	0.492	0.476	0.530	0.504	0.522	0.484	0.505	4.21	6.6281
	30	cis-1,2-Dichloroethene	0.406	0.424	0.392	0.408	0.406	0.395	0.444	0.418	0.434	0.409	0.414	4.03	6.6859
	31	Chloroform	0.719	0.670	0.624	0.696	0.688	0.655	0.730	0.680	0.693	0.682	0.692	3.00	6.9082
	32	Bromochloromethane	0.236	0.244	0.223	0.241	0.238	0.225	0.250	0.247	0.256	0.240	0.240	4.23	7.1481
	33	Tetrahydrofuran	------	------	------	0.038	0.034	0.030	0.037	0.035	0.039	0.036	0.035	8.25	7.2006
	34	Dibromofluoromethane	0.285	0.328	0.288	0.328	0.318	0.281	0.335	0.313	------	------	0.310	7.01	7.2281
	35	1,1,1-Trichloroethane	0.513	0.539	0.485	0.512	0.496	0.483	0.545	0.507	0.534	0.50B	0.512	4.19	7.4993
	36	Cyclohexane	0.502	0.544	0.473	0.526	0.509	0.453	0.514	0.471	------	------	0.499	6.15	7.5244
	37	2,2,4-Trimethylpentane	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	38	1,1-Dichloropropene	0.168	0.181	0.168	0.177	0.168	0.164	0.185	0.175	0.183	0.173	0.174	4.16	7.7230
	39	Carbon tetrachloride	0.390	0.393	0.352	0.387	0.366	0.365	0.403	0.383	0.403	0.374	0.382	4.43	7.8785
	40	tert-Amyl methyl ether (TAME)	0.661	0.627	0.595	0.624	0.589	0.540	0.638	0.608	0.643	0.596	0.612	5.64	7.8889
	41	1,2-Dichloroethane-d4	0.208	0.216	0.193	0.229	0.217	0.186	0.225	0.216	------	------	0.211	7.18	7.9652
	42	Benzene	1.388	1.402	1.268	1.345	1.317	1.253	1.406	1.314	1.363	1.304	1.336	4.04	8.1304
	43	1,2-Dichloroethane	0.267	0.270	0.254	0.274	0.266	0.249	0.289	0.272	0.283	0.270	0.269	4.45	8.1037
	44	Trichloroethene	0.334	0.340	0.319	0.343	0.338	0.331	0.374	0.350	0.372	0.352	0.346	4.98	8.0723
	45	Methylcyclohexane	0.565	0.602	0.537	0.583	0.548	0.483	0.567	0.579	------	------	0.549	6.48	8.1653
	46	1,2-Dichloropropane	0.306	0.315	0.273	0.307	0.287	0.278	0.331	0.306	0.318	0.299	0.303	5.38	8.3508
	47	Bromodichloromethane	0.473	0.442	0.393	0.410	0.401	0.378	0.431	0.398	0.428	0.402	0.415	5.38	8.7316
20	48	1,4-Dioxane	------	------	------	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	14.49	8.7831
	49	Dibromomethane	0.135	0.145	0.136	0.142	0.139	0.126	0.149	0.143	0.153	0.142	0.141	5.30	8.8235
	50	2-Chloroethyl vinyl ether	------	------	0.067	0.073	0.072	0.069	0.082	0.081	0.083	0.079	0.076	8.06	10.2338
5	51	4-Methyl-2-pentanone	------	------	0.094	0.104	0.134	0.128	0.158	0.154	0.164	0.152	0.136	18.90	10.2764
	52	cis-1,3-Dichloropropene	0.461	0.451	0.434	0.457	0.456	0.433	0.501	0.478	0.504	0.476	0.465	5.31	10.6250
	53	CHLOROBENZENE-D5	1	1	1	1	1	1	1	1	1	1	1	0	13.7168
	54	Toluene-d8	1.490	1.527	1.385	1.619	1.529	1.394	1.577	1.468	------	------	1.499	5.48	11.0301
	55	Toluene	1.818	1.915	1.660	1.801	1.716	1.701	1.833	1.727	1.852	1.736	1.776	4.50	11.1687
	56	Ethyl methacrylate	------	------	0.332	0.361	0.350	0.347	0.391	0.375	0.397	0.378	0.366	8.54	11.4708
	57	trans-1,3-Dichloropropene	0.400	0.405	0.376	0.415	0.403	0.390	0.444	0.420	0.451	0.425	0.413	5.62	11.4842
	58	1,1,2-Trichloroethane	0.246	0.228	0.220	0.238	0.229	0.216	0.243	0.233	0.245	0.231	0.233	4.45	11.7509
5	59	2-Hexanone	------	------	0.090	0.095	0.087	0.092	0.113	0.112	0.123	0.115	0.090	36.80	11.7812
	60	1,3-Dichloropropane	0.381	0.388	0.374	0.405	0.381	0.366	0.424	0.396	0.424	0.405	0.395	5.08	11.8953
	61	Tetrachloroethene	0.361	0.390	0.351	0.380	0.354	0.359	0.385	0.364	0.384	0.364	0.369	3.82	12.2290
	62	Dibromochloromethane	0.303	0.294	0.264	0.277	0.272	0.261	0.299	0.280	0.303	0.286	0.284	5.33	12.6662
	63	1,2-Dibromoethane	0.214	0.220	0.214	0.234	0.228	0.215	0.250	0.236	0.253	0.237	0.230	6.28	13.0383
	64	1-Chlorohexane	0.791	0.823	0.713	0.793	0.726	0.743	0.792	0.758	0.791	0.738	0.767	4.69	13.3080
	65	Chlorobenzene	1.046	1.088	1.007	1.069	1.028	1.023	1.125	1.046	1.110	1.045	1.059	3.64	13.7909
	66	1,1,1,2-Tetrachloroethane	0.325	0.330	0.313	0.330	0.314	0.313	0.346	0.324	0.343	0.324	0.326	3.59	13.8650
	67	Ethylbenzene	2.077	2.152	1.907	2.051	1.962	1.985	2.135	1.999	2.065	1.934	2.027	4.07	13.8813
2	68	m-Xylene & p-Xylene	1.533	1.584	1.421	1.517	1.455	1.429	1.559	1.455	1.488	1.396	1.484	4.23	14.0205
	69	o-Xylene	1.632	1.623	1.469	1.557	1.460	1.453	1.577	1.498	1.558	1.443	1.527	4.66	14.4428
	70	Styrene	1.217	1.208	1.133	1.197	1.144	1.135	1.252	1.180	1.235	1.135	1.184	3.78	14.9064
	71	Isopropylbenzene	2.023	2.125	1.896	2.060	1.959	1.959	2.123	1.989	2.061	1.924	2.012	3.97	15.5243
	72	1,2-DICHLOROBENZENE-D4	1	1	1	1	1	1	1	1	1	1	1	0	18.6708
	73	Bromoform	------	0.205	0.263	0.358	0.366	0.337	0.407	0.390	0.407	0.416	0.350	20.61	15.5588
	74	trans-1,4-Dichloro-2-butene	------	------	0.146	0.168	0.163	0.156	0.186	0.180	0.187	0.188	0.173	9.77	15.8398
	75	1,1,2,2-Tetrachloroethane	0.739	0.666	0.619	0.654	0.640	0.595	0.692	0.667	0.701	0.686	0.666	6.36	15.8520
	76	4-Bromofluorobenzene	1.452	1.437	1.269	1.380	1.340	1.236	1.447	1.339	------	------	1.362	6.06	16.0173
	77	1,2,3-Trichloropropane	------	0.141	0.153	0.173	0.169	0.159	0.187	0.177	0.190	0.185	0.170	9.82	16.1515
	78	n-Propylbenzene	6.717	6.994	5.903	6.314	6.264	6.304	6.894	6.414	6.634	6.581	6.502	5.03	16.2976
	79	Bromobenzene	0.995	1.049	0.936	1.001	1.004	0.984	1.111	1.036	1.086	1.083	1.029	5.26	16.3835
	80	1,3,5-Trimethylbenzene	4.352	4.499	3.734	4.047	3.995	4.012	4.417	4.116	4.229	4.145	4.155	5.49	16.6058
	81	2-Chlorotoluene	4.034	4.266	3.707	3.731	3.759	3.734	4.086	3.854	3.922	4.052	3.915	4.84	16.6354
	82	4-Chlorotoluene	3.478	3.662	3.090	3.515	3.454	3.390	3.723	3.482	3.612	3.250	3.466	5.46	16.7332
	83	tert-Butylbenzene	0.904	0.890	0.796	0.846	0.839	0.843	0.934	0.864	0.903	0.895	0.871	4.70	17.2872
	84	1,2,4-Trimethylbenzene	4.167	4.280	3.727	3.970	3.950	3.951	4.329	4.050	4.156	4.057	4.065	4.41	17.3598
	85	sec-Butylbenzene	5.982	6.152	5.164	5.566	5.498	5.526	6.078	5.608	5.821	5.611	5.711	5.27	17.6576
	86	p-Isopropyltoluene	4.497	4.606	4.021	4.449	4.348	4.330	4.673	4.310	4.467	4.329	4.403	5.17	17.8708
	87	1,3-Dichlorobenzene	2.964	3.088	2.795	2.913	2.873	2.877	3.093	2.982	3.092	2.967	2.955	4.87	18.0280
	88	1,2,3-Trimethylbenzene	3.969	4.104	3.570	3.741	3.683	3.588	3.969	3.748	3.853	3.706	3.782	4.70	18.1597
	89	1,4-Dichlorobenzene	2.063	2.052	1.795	1.880	1.857	1.829	2.011	1.885	1.928	1.870	1.926	4.76	18.1947
	90	n-Butylbenzene	4.854	4.963	4.193	4.515	4.392	4.402	4.823	4.508	4.603	4.346	4.560	5.46	18.4867
	91	1,2-Dichlorobenzene	1.624	1.664	1.514	1.605	1.566	1.495	1.701	1.592	1.659	1.596	1.602	4.06	18.7243
	92	1,2-Dibromo-3-chloropropane	------	------	0.067	0.087	0.093	0.084	0.105	0.102	0.112	0.108	0.095	16.02	19.7172
	93	1,2,4-Trichlorobenzene	1.082	1.145	1.038	1.141	1.133	1.108	1.288	1.237	1.294	1.228	1.169	7.49	20.8013
	94	Hexachlorobutadiene	0.665	0.692	0.611	0.670	0.668	0.696	0.776	0.730	0.759	0.700	0.697	6.95	20.9673
	95	Naphthalene	3.273	3.300	3.206	3.327	3.317	3.264	3.515	3.458	3.543	3.446	3.365	8.50	21.1480
	96	1,2,3-Trichlorobenzene	0.835	0.854	0.791	0.871	0.857	0.833	0.968	0.920	0.964	0.915	0.881	6.66	21.4665

Spike Amount = Nominal Amount * M
Ave_%RSD : 6.8 Max_%RSD : 36.8

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
7	Bromomethane	0.00783	0.36199	0.9993
51	4-Methyl-2-pentanone	-0.04242	0.15630	0.9988
59	2-Hexanone	-0.05681	0.11740	0.9987
73	Bromoform	-0.01353	0.40878	0.9992
92	1,2-Dibromo-3-chloropropane	-0.00559	0.10796	0.9987

SO
5/15/24

INITIAL_CALIBRATION - RELATIVE_RESPONSE_FACTOR(%REC)

Instrument ID :01
Beginning DateTime :05/11/24 10:58
Spike Units :PPB
IC File :REV201

Column Spec :RXI-624SILMS ID :0.25MM
Ending DateTime :05/11/24 15:26
HPChem Method :VO01E11

M	IDX	Parameters	.3 10:58 REV196	.5 11:27 REV197	1 11:56 REV198	2 12:30 REV199	5 12:59 REV200	10 13:28 REV201	20 13:58 REV202	30 14:27 REV203	50 14:56 REV204	100 15:26 REV205	AvDRec	%_RSD	Av_Rt_M
	1	1,4-DIFLUOROBENZENE	1	1	1	1	1	1	1	1	1	1	1	0	8.5509
	2	Chlorotrifluoroethylene	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	3	Dichlorodifluoromethane	103	108	92	102	99	95	101	99	102	99	3.4	4.44	2.1690
	4	2-Chloro-1,1,1-trifluoroethane	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	5	Chloromethane	114	108	97	105	101	93	101	94	97	90	5.9	7.39	2.4709
	6	Vinyl chloride	98	102	91	108	108	99	106	98	100	90	4.8	6.31	2.6048
	7	Bromomethane	------	114	99	101	95	88	103	97	103	100	12.3	17.96	3.1458
	8	Chloroethane	104	101	95	96	100	93	104	100	106	103	3.4	4.21	3.1896
	9	Dichlorofluoromethane	117	110	98	100	94	90	102	95	100	93	5.9	8.21	3.2755
	10	Trichlorofluoromethane	104	110	96	105	101	94	99	96	100	95	4.1	5.20	3.5526
5	11	Acrolein	------	------	------	100	100	91	109	100	109	105	4.5	5.86	3.9857
	12	1,1,2-Trichloro-1,2,2-trifluoroethane	82	103	93	109	100	100	106	103	108	95	5.9	8.11	4.0696
5	13	Acetone	------	------	132	100	97	84	95	92	100	92	9.1	14.45	4.0577
	14	1,1-Dichloroethene	97	103	91	103	98	96	107	101	106	99	3.7	4.74	4.2296
25	15	tert-Butyl alcohol	91	91	91	100	100	91	109	109	118	109	8.2	9.12	4.3422
	16	Iodomethane	97	99	92	100	98	95	108	102	107	102	3.6	4.85	4.6385
	17	Methyl acetate	------	------	------	114	101	84	102	97	------	------	7.2	10.84	4.6531
	18	Methylene chloride	105	103	98	102	98	93	104	96	103	97	3.4	3.90	4.8577
	19	Carbon disulfide	110	95	94	99	101	94	108	99	------	------	4.7	6.08	4.8800
5	20	Acrylonitrile	107	100	96	96	100	93	104	100	107	102	3.5	4.77	5.0252
	21	tert-Butyl methyl ether (MTBE)	102	105	95	101	98	90	105	100	104	99	3.4	4.67	5.0607
	22	trans-1,2-Dichloroethene	98	101	96	102	98	93	107	101	106	98	3.3	4.44	5.2489
	23	Isopropyl ether (DIPE)	100	102	94	99	98	94	108	100	104	100	3	4.21	5.6696
	24	Vinyl acetate	------	90	84	95	105	91	110	106	110	108	8.7	9.82	5.8322
	25	1,1-Dichloroethane	97	102	94	102	98	94	108	101	105	99	3.6	4.54	5.8296
25	26	2-Butanol	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	27	tert-Butyl ethyl ether (ETBE)	98	98	96	105	99	92	108	101	103	98	3.5	4.52	6.2400
5	28	2-Butanone	------	89	88	89	96	95	109	109	116	107	9.3	10.70	6.4281
	29	2,2-Dichloropropane	104	105	95	101	97	94	105	100	103	96	3.6	4.21	6.6281
	30	cis-1,2-Dichloroethene	98	102	95	99	98	95	107	101	105	99	3.2	4.03	6.6859
	31	Chloroform	117	109	97	97	96	90	103	95	100	97	5.9	8.00	6.9082
	32	Bromochloromethane	98	102	93	100	99	93	107	103	107	100	3.5	4.73	7.1481
	33	Tetrahydrofuran	------	------	------	109	97	86	106	100	111	103	6.5	8.25	7.2006
	34	Dibromofluoromethane	92	106	93	106	103	91	108	101	------	------	6	7.01	7.2281
	35	1,1,1-Trichloroethane	100	105	95	100	97	94	106	99	104	99	3.2	4.19	7.4993
	36	Cyclohexane	101	109	95	105	102	91	103	94	------	------	5	6.15	7.5244
	37	2,2,4-Trimethylpentane	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	38	1,1-Dichloropropene	97	104	97	102	97	94	106	101	105	99	3.4	4.16	7.7230
	39	Carbon tetrachloride	102	103	92	101	96	96	105	100	105	98	3.6	4.43	7.8785
	40	tert-Amyl methyl ether (TAME)	108	102	97	102	96	88	104	99	105	97	4.3	5.64	7.8889
	41	1,2-Dichloroethane-d4	99	102	91	109	103	88	107	102	------	------	5.6	7.18	7.9652
	42	Benzene	104	105	95	101	99	94	105	98	102	98	3.4	4.04	8.1304
	43	1,2-Dichloroethane	99	100	94	102	99	93	107	101	105	100	3.1	4.45	8.1037
	44	Trichloroethene	97	98	92	99	97	97	108	101	108	102	3.9	4.96	9.0723
	45	Methylcyclohexane	103	110	98	106	100	90	101	93	------	------	4.8	6.46	9.1653
	46	1,2-Dichloropropane	102	105	91	98	96	93	107	100	106	100	4.2	5.38	9.3509
	47	Bromodichloromethane	114	107	95	99	97	90	104	96	103	97	5.5	6.99	9.7316
20	48	1,4-Dioxane	------	------	------	76	93	89	110	106	117	109	0	14.49	9.7831
	49	Dibromomethane	96	103	96	101	99	89	106	101	109	101	4	5.30	9.8235
	50	2-Chloroethyl vinyl ether	------	------	88	96	95	91	108	107	109	104	7.2	8.06	10.2338
5	51	4-Methyl-2-pentanone	------	------	115	93	93	87	101	99	106	98	15.4	18.90	10.2764
	52	cis-1,3-Dichloropropene	99	97	93	98	98	93	108	103	108	102	4.2	5.31	10.6250
	53	CHLOROBENZENE-D5	1	1	1	1	1	1	1	1	1	1	1	0	13.7168
	54	Toluene-d8	99	102	92	108	102	93	105	98	------	------	4.3	5.48	11.0301
	55	Toluene	102	108	93	101	97	96	103	97	104	98	3.8	4.50	11.1687
	56	Ethyl methacrylate	------	------	87	98	94	93	109	103	112	105	7.1	8.54	11.4708
	57	trans-1,3-Dichloropropene	97	98	91	100	98	94	108	102	109	103	4.4	5.62	11.4842
	58	1,1,2-Trichloroethane	106	98	94	102	97	93	104	100	105	99	3.6	4.45	11.7509
5	59	2-Hexanone	------	------	123	93	93	87	101	99	106	99	28.5	36.80	11.7912
	60	1,3-Dichloropropane	96	98	95	103	96	93	107	101	107	103	4.2	5.08	12.1953
	61	Tetrachloroethene	98	106	95	103	96	97	104	99	104	99	3.4	3.83	12.2990
	62	Dibromochloromethane	107	104	93	98	95	92	105	99	107	101	4.6	5.55	12.6665
	63	1,2-Dibromoethane	93	96	93	102	99	93	109	103	110	103	5.2	6.28	13.0383
	64	1-Chlorohexane	103	107	93	103	95	97	103	99	103	96	4.1	4.69	13.3080
	65	Chlorobenzene	99	103	95	101	97	97	106	99	105	99	3	3.64	13.7909
	66	1,1,1,2-Tetrachloroethane	100	101	96	101	96	96	106	99	105	99	2.7	3.59	13.8650
	67	Ethylbenzene	102	106	94	101	97	98	105	99	102	95	3.4	4.07	13.8813
2	68	m-Xylene & p-Xylene	103	107	96	102	98	96	105	98	100	94	3.5	4.23	14.0205
	69	o-Xylene	107	106	96	102	96	95	103	98	102	94	4.1	4.66	14.8428
	70	Styrene	103	102	96	101	97	96	106	100	104	96	3.2	3.78	14.9094
	71	Isopropylbenzene	101	106	94	102	97	97	106	99	102	96	3.3	3.97	15.5243
	72	1,2-DICHLOROBENZENE-D4	1	1	1	1	1	1	1	1	1	1	1	0	18.6798
	73	Bromoform	------	116	98	104	96	86	101	97	100	102	15.5	20.61	15.5589
	74	trans-1,4-Dichloro-2-butene	------	------	84	97	94	90	109	104	110	109	8.2	9.77	15.6338
	75	1,1,2,2-Tetrachloroethane	111	100	93	98	96	89	104	100	105	103	4.7	6.36	15.8650
	76	4-Bromofluorobenzene	107	106	93	101	98	90	106	98	------	------	4.9	6.06	16.0153
	77	1,2,3-Trichloropropane	------	83	90	102	99	94	110	104	112	109	7.8	9.82	16.1515
	78	n-Propylbenzene	103	108	91	97	96	97	106	99	102	101	4	5.03	16.2976
	79	Bromobenzene	97	102	91	97	98	96	108	101	106	105	4.3	5.26	16.3835
	80	1,3,5-Trimethylbenzene	105	108	90	97	96	97	106	99	102	100	4.2	5.49	16.6058
	81	2-Chlorotoluene	103	109	95	95	96	95	104	98	100	103	4	4.84	16.6354
	82	4-Chlorotoluene	100	106	89	101	100	98	107	100	104	94	3.9	5.46	16.7332
	83	tert-Butylbenzene	104	102	91	97	96	97	107	99	104	103	3.9	4.70	17.2872
	84	1,2,4-Trimethylbenzene	103	106	92	98	97	97	106	100	102	100	3.4	4.41	17.3598
	85	sec-Butylbenzene	105	108	90	99	96	97	106	98	102	98	4.2	5.27	17.6576
	86	p-Isopropyltoluene	102	109	91	101	97	96	106	98	101	98	4	5.17	17.8798
	87	1,3-Dichlorobenzene	100	107	92	98	96	96	107	100	103	101	3.7	4.87	18.0280
	88	1,2,3-Trimethylbenzene	105	108	94	99	97	95	105	99	101	98	3.9	4.70	18.1317
	89	1,4-Dichlorobenzene	108	107	94	98	97	95	105	98	101	98	4	4.92	18.1909
	90	n-Butylbenzene	106	109	92	99	96	97	106	99	101	95	4.4	5.46	18.4887
	91	1,2-Dichlorobenzene	101	104	95	100	98	93	106	99	104	100	3.1	4.06	18.7243
	92	1,2-Dibromo-3-chloropropane	------	------	114	106	96	83	100	96	104	101	12.6	16.02	19.7172
	93	1,2,4-Trichlorobenzene	93	98	89	98	97	95	110	106	111	105	6.3	7.49	20.8013
	94	Hexachlorobutadiene	95	99	88	96	96	100	111	105	109	100	5.1	6.95	20.9673
	95	Naphthalene	93	95	88	97	96	93	111	107	113	106	7.4	8.50	21.1480
	96	1,2,3-Trichlorobenzene	95	97	90	99	97	95	110	104	109	104	5.5	6.66	21.4665

For 8260 C
SM
5/15/24

Compound List Report 01

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	2.17	0.253	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	2.46	0.288	A	1	A	B
6	T	Vinyl chloride	62	2.61	0.305	A	1	A	B
7	T	Bromomethane	94	3.14	0.367	L	1	A	B
8	T	Chloroethane	64	3.18	0.373	A	1	A	B
9	T	Dichlorofluoromethane	67	3.27	0.383	A	1	A	B
10	T	Trichlorofluoromethane	101	3.55	0.416	A	1	A	B
11	T	Acrolein	56	3.98	0.466	A	1	A	B
12	T	1,1,2-Trichloro-1,2,2-trifluor	151	4.06	0.475	A	1	A	B
13	T	Acetone	43	4.06	0.475	A	1	A	B
14	T	1,1-Dichloroethene	61	4.22	0.494	A	2	A	B
15	T	tert-Butyl alcohol	59	4.34	0.508	A	1	A	B
16	T	Iodomethane	142	4.64	0.543	A	1	A	B
17	T	Methyl acetate	43	4.65	0.544	A	1	A	B
18	T	Methylene chloride	49	4.86	0.569	A	2	A	B
19	T	Carbon disulfide	76	4.87	0.570	A	1	A	B
20	T	Acrylonitrile	53	5.02	0.588	A	2	A	B
21	T	tert-Butyl methyl ether (MTBE)	73	5.07	0.593	A	1	A	B
22	T	trans-1,2-Dichloroethene	61	5.24	0.614	A	2	A	B
23	T	Isopropyl ether (DIPE)	45	5.67	0.664	A	1	A	B
24	T	Vinyl acetate	43	5.82	0.681	A	1	A	B
25	T	1,1-Dichloroethane	63	5.82	0.681	A	2	A	B
26	T	2-Butanol	45	6.16	0.721	A	1	A	B
27	T	tert-Butyl ethyl ether (ETBE)	59	6.24	0.730	A	1	A	B
28	T	2-Butanone	43	6.41	0.751	A	1	A	B
29	T	2,2-Dichloropropane	77	6.62	0.775	A	2	A	B
30	T	cis-1,2-Dichloroethene	96	6.68	0.782	A	2	A	B
31	T	Chloroform	83	6.90	0.808	A	2	A	B
32	T	Bromochloromethane	49	7.14	0.836	A	2	A	B
33	T	Tetrahydrofuran	42	7.20	0.842	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	0.881	A	1	A	B
37	T	2,2,4-Trimethylpentane	57	7.52	0.881	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	7.88	0.922	A	1	A	B
41	S	1,2-Dichloroethane-d4	65	7.97	0.933	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	9.17	1.073	A	2	A	B
46	T	1,2-Dichloropropane	63	9.34	1.094	A	1	A	B
47	T	Bromodichloromethane	83	9.73	1.139	A	1	A	B
48	T	1,4-Dioxane	88	9.79	1.146	A	1	A	B
49	T	Dibromomethane	93	9.82	1.149	A	2	A	B
50	T	2-Chloroethyl vinyl ether	63	10.23	1.198	A	2	A	B
51	T	4-Methyl-2-pentanone	43	10.26	1.201	L	3	A	B
52	T	cis-1,3-Dichloropropene	75	10.62	1.243	A	1	A	B

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53	I		CHLOROBENZENE-D5	117	13.71	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	0.814	A	1	A B
56		T	Ethyl methacrylate	69	11.46	0.836	A	1	A B
57		T	trans-1,3-Dichloropropene	75	11.48	0.837	A	1	A B
58		T	1,1,2-Trichloroethane	97	11.74	0.856	A	2	A B
59		T	2-Hexanone	43	11.76	0.857	L	1	A B
60		T	1,3-Dichloropropane	76	12.19	0.889	A	1	A B
61		T	Tetrachloroethene	164	12.29	0.896	A	3	A B
62		T	Dibromochloromethane	129	12.66	0.923	A	1	A B
63		T	1,2-Dibromoethane	107	13.03	0.950	A	1	A B
64		T	1-Chlorohexane	91	13.30	0.970	A	1	A B
65	P,M		Chlorobenzene	112	13.79	1.005	A	1	A B
66		T	1,1,1,2-Tetrachloroethane	131	13.86	1.011	A	1	A B
67		T	Ethylbenzene	91	13.88	1.012	A	1	A B
68		T	m-Xylene & p-Xylene	91	14.01	1.022	A	1	A B
69		T	o-Xylene	91	14.84	1.082	A	1	A B
70		T	Styrene	104	14.90	1.086	A	2	A B
71		T	Isopropylbenzene	105	15.52	1.132	A	3	A B
72	I		1,2-DICHLOROBENZENE-D4	152	18.68	1.000	A	1	A B
73		T	Bromoform	173	15.55	0.833	L	1	A B
74		T	trans-1,4-Dichloro-2-butene	53	15.63	0.837	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	16.14	0.864	A	1	A B
78		T	n-Propylbenzene	91	16.29	0.872	A	2	A B
79		T	Bromobenzene	156	16.38	0.877	A	1	A B
80		T	1,3,5-Trimethylbenzene	105	16.60	0.889	A	2	A B
81		T	2-Chlorotoluene	91	16.63	0.891	A	1	A B
82		T	4-Chlorotoluene	91	16.72	0.895	A	1	A B
83		T	tert-Butylbenzene	134	17.29	0.925	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	0.957	A	2	A B
87		T	1,3-Dichlorobenzene	146	18.03	0.965	A	2	A B
88		T	1,2,3-Trimethylbenzene	105	18.13	0.971	A	2	A B
89		T	1,4-Dichlorobenzene	146	18.19	0.974	A	2	A B
90		T	n-Butylbenzene	91	18.49	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	19.71	1.055	L	1	A B
93		T	1,2,4-Trichlorobenzene	180	20.80	1.113	A	2	A B
94		T	Hexachlorobutadiene	225	20.96	1.122	A	1	A B
95		T	Naphthalene	128	21.14	1.132	A	1	A B
96		T	1,2,3-Trichlorobenzene	180	21.46	1.149	A	2	A B

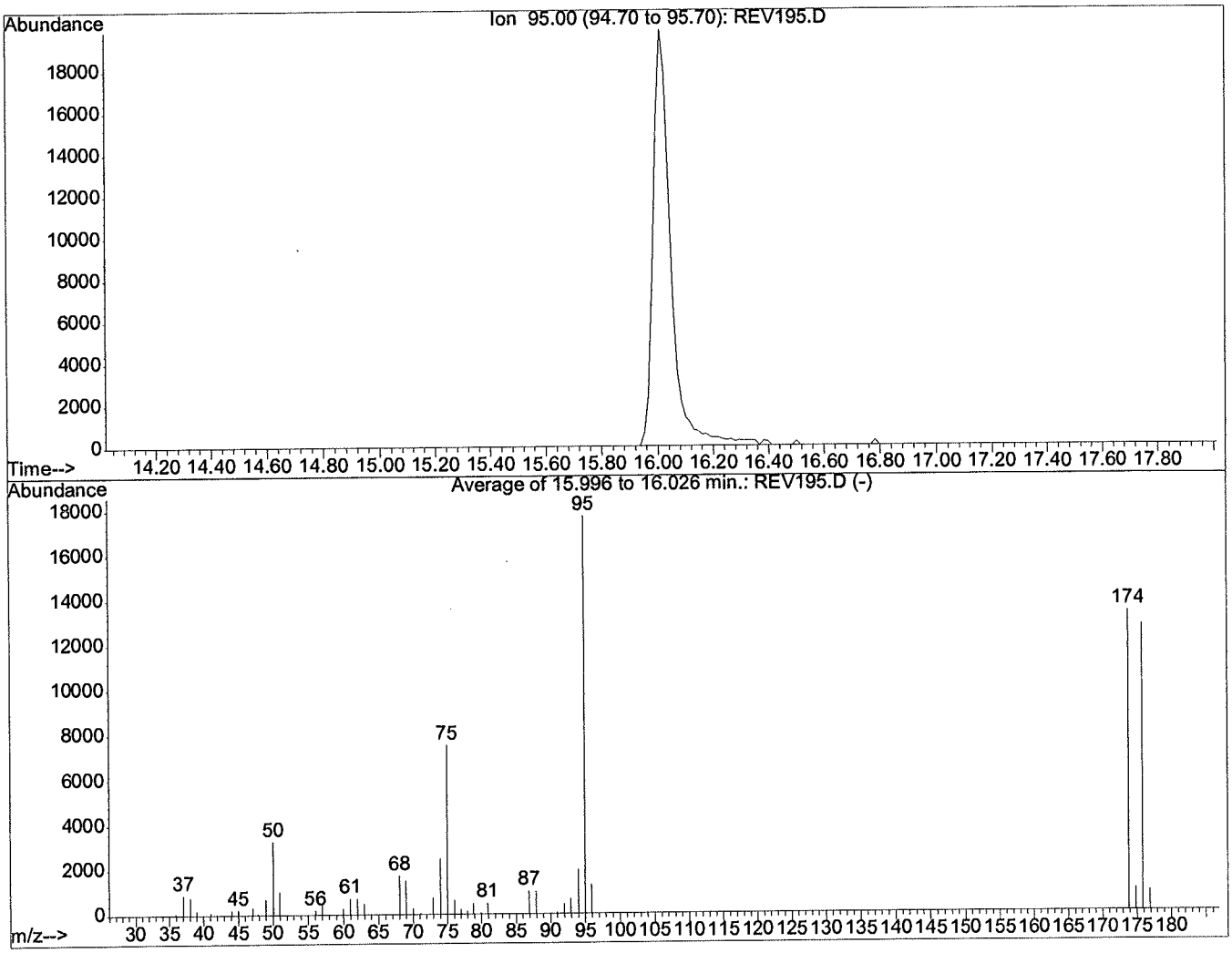
Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
#Qual = number of qualifiers
A/H = Area or Height
ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

VO01E11.M Mon May 13 14:36:08 2024

5/15/24

Data File : D:\HPCHEM\1\DATA\24E11\REV195.D
Acq On : 11 May 2024 10:20 am
Sample : BFB01E11
Misc : T/CHK
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls

Vial: 1
Operator: LPriet
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	18.5	3281	PASS
75	95	30	60	42.5	7529	PASS
95	95	100	100	100.0	17719	PASS
96	95	5	9	7.3	1291	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	75.4	13365	PASS
175	174	5	9	7.4	989	PASS
176	174	95	101	95.5	12770	PASS
177	176	5	9	7.1	901	PASS

REV195.D VO01E11.M Mon May 13 14:35:03 2024 SV 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV196.D Vial: 2
Acq On : 11 May 2024 10:58 am Operator: LPriet
Sample : VO01E111 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: May 13 14:29 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.55	114	981871	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.72	117	797187	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	299571	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	8387	0.28	ug/l	0.00
Spiked Amount 10.000			Recovery =	2.80%		
41) 1,2-Dichloroethane-d4	7.95	65	6117	0.30	ug/l	-0.01
Spiked Amount 10.000			Recovery =	3.00%		
54) Toluene-d8	11.03	98	35624	0.30	ug/l	0.00
Spiked Amount 10.000			Recovery =	3.00%		
76) 4-Bromofluorobenzene	16.03	95	13047	0.32	ug/l	0.02
Spiked Amount 10.000			Recovery =	3.20%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.16	85	8140	0.31	ug/l	65
5) Chloromethane	2.46	50	12543	0.34	ug/l	86
6) Vinyl chloride	2.59	62	8988	0.29	ug/l	89
8) Chloroethane	3.18	64	6888	0.31	ug/l	80
9) Dichlorofluoromethane	3.26	67	22206	0.35	ug/l	73
10) Trichlorofluoromethane	3.52	101	12948	0.31	ug/l	100
12) 1,1,2-Trichloro-1,2,2-trif	4.06	151	5097	0.25	ug/l	94
14) 1,1-Dichloroethene	4.22	61	15229	0.29	ug/l	94
15) tert-Butyl alcohol	4.34	59	7470	6.83	ug/l	79
16) Iodomethane	4.62	142	16364	0.29	ug/l	99
18) Methylene chloride	4.84	49	13215	0.31	ug/l	98
19) Carbon disulfide	4.87	76	36989	0.33	ug/l	99
20) Acrylonitrile	5.02	53	7271	1.60	ug/l	91
21) tert-Butyl methyl ether (M	5.05	73	15688	0.30	ug/l	81
22) trans-1,2-Dichloroethene	5.24	61	14865	0.29	ug/l	99
23) Isopropyl ether (DIPE)	5.66	45	32481	0.30	ug/l	98
25) 1,1-Dichloroethane	5.82	63	17229	0.29	ug/l	98
27) tert-Butyl ethyl ether (ET	6.24	59	22788	0.30	ug/l	100
29) 2,2-Dichloropropane	6.62	77	15398	0.31	ug/l	97
30) cis-1,2-Dichloroethene	6.68	96	11947	0.29	ug/l	98
31) Chloroform	6.90	83	21166	0.35	ug/l	98
32) Bromochloromethane	7.14	49	6943	0.29	ug/l	91
35) 1,1,1-Trichloroethane	7.49	97	15125	0.30	ug/l	97
36) Cyclohexane	7.52	84	14801	0.30	ug/l	88
38) 1,1-Dichloropropene	7.72	110	4945	0.29	ug/l	94
39) Carbon tetrachloride	7.87	119	11491	0.31	ug/l	97
40) tert-Amyl methyl ether (TA	7.89	73	19458	0.32	ug/l	91

(#) = qualifier out of range (m) = manual integration

SM 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV196.D Vial: 2
Acq On : 11 May 2024 10:58 am Operator: LPriet
Sample : VO01E111 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: May 13 14:29 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
42) Benzene	8.12	78	40894	0.31	ug/l	98
43) 1,2-Dichloroethane	8.10	62	7854	0.30	ug/l	93
44) Trichloroethene	9.08	130	9853	0.29	ug/l	97
45) Methylcyclohexane	9.17	83	16634	0.31	ug/l	98
46) 1,2-Dichloropropane	9.36	63	9009	0.31	ug/l	91
47) Bromodichloromethane	9.73	83	13928	0.34	ug/l	78
49) Dibromomethane	9.82	93	3964	0.29	ug/l	85
52) cis-1,3-Dichloropropene	10.63	75	13583	0.30	ug/l	94
55) Toluene	11.17	91	43467	0.31	ug/l	97
57) trans-1,3-Dichloropropene	11.49	75	9569	0.29	ug/l	95
58) 1,1,2-Trichloroethane	11.76	97	5879	0.32	ug/l	95
60) 1,3-Dichloropropane	12.21	76	9101	0.29	ug/l	94
61) Tetrachloroethene	12.29	164	8630	0.29	ug/l	98
62) Dibromochloromethane	12.68	129	7252	0.32	ug/l	99
63) 1,2-Dibromoethane	13.05	107	5114	0.28	ug/l	93
64) 1-Chlorohexane	13.32	91	18908	0.31	ug/l	95
65) Chlorobenzene	13.79	112	25024	0.30	ug/l	99
66) 1,1,1,2-Tetrachloroethane	13.86	131	7766	0.30	ug/l	97
67) Ethylbenzene	13.89	91	49666	0.31	ug/l	99
68) m-Xylene & p-Xylene	14.03	91	73348	0.62	ug/l	99
69) o-Xylene	14.84	91	39020	0.32	ug/l	95
70) Styrene	14.93	104	29115	0.31	ug/l	95
71) Isopropylbenzene	15.52	105	48372	0.30	ug/l	99
75) 1,1,2,2-Tetrachloroethane	15.86	83	6639	0.33	ug/l	100
78) n-Propylbenzene	16.31	91	60366	0.31	ug/l	99
79) Bromobenzene	16.38	156	8946	0.29	ug/l	100
80) 1,3,5-Trimethylbenzene	16.61	105	39112	0.31	ug/l	100
81) 2-Chlorotoluene	16.63	91	36258	0.31	ug/l	99
82) 4-Chlorotoluene	16.74	91	31256	0.30	ug/l	99
83) tert-Butylbenzene	17.29	134	8128	0.31	ug/l	96
84) 1,2,4-Trimethylbenzene	17.36	105	37452	0.31	ug/l	99
85) sec-Butylbenzene	17.66	105	53765	0.31	ug/l	98
86) p-Isopropyltoluene	17.88	119	40416	0.31	ug/l	94
87) 1,3-Dichlorobenzene	18.03	146	17654	0.30	ug/l	99
88) 1,2,3-Trimethylbenzene	18.13	105	35674	0.31	ug/l	97
89) 1,4-Dichlorobenzene	18.19	146	18537	0.32	ug/l	97
90) n-Butylbenzene	18.50	91	43628	0.32	ug/l	95
91) 1,2-Dichlorobenzene	18.72	146	14596	0.30	ug/l	96
93) 1,2,4-Trichlorobenzene	20.81	180	9721	0.28	ug/l	99
94) Hexachlorobutadiene	20.96	225	5978	0.29	ug/l	94
95) Naphthalene	21.15	128	11441	0.28	ug/l	94

(#) = qualifier out of range (m) = manual integration

SW 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV196.D Vial: 2
Acq On : 11 May 2024 10:58 am Operator: LPriet
Sample : VO01E111 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: May 13 14:29 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
96) 1,2,3-Trichlorobenzene	21.46	180	7501	0.28	ug/l	96

SW 5/15/24

(#) = qualifier out of range (m) = manual integration

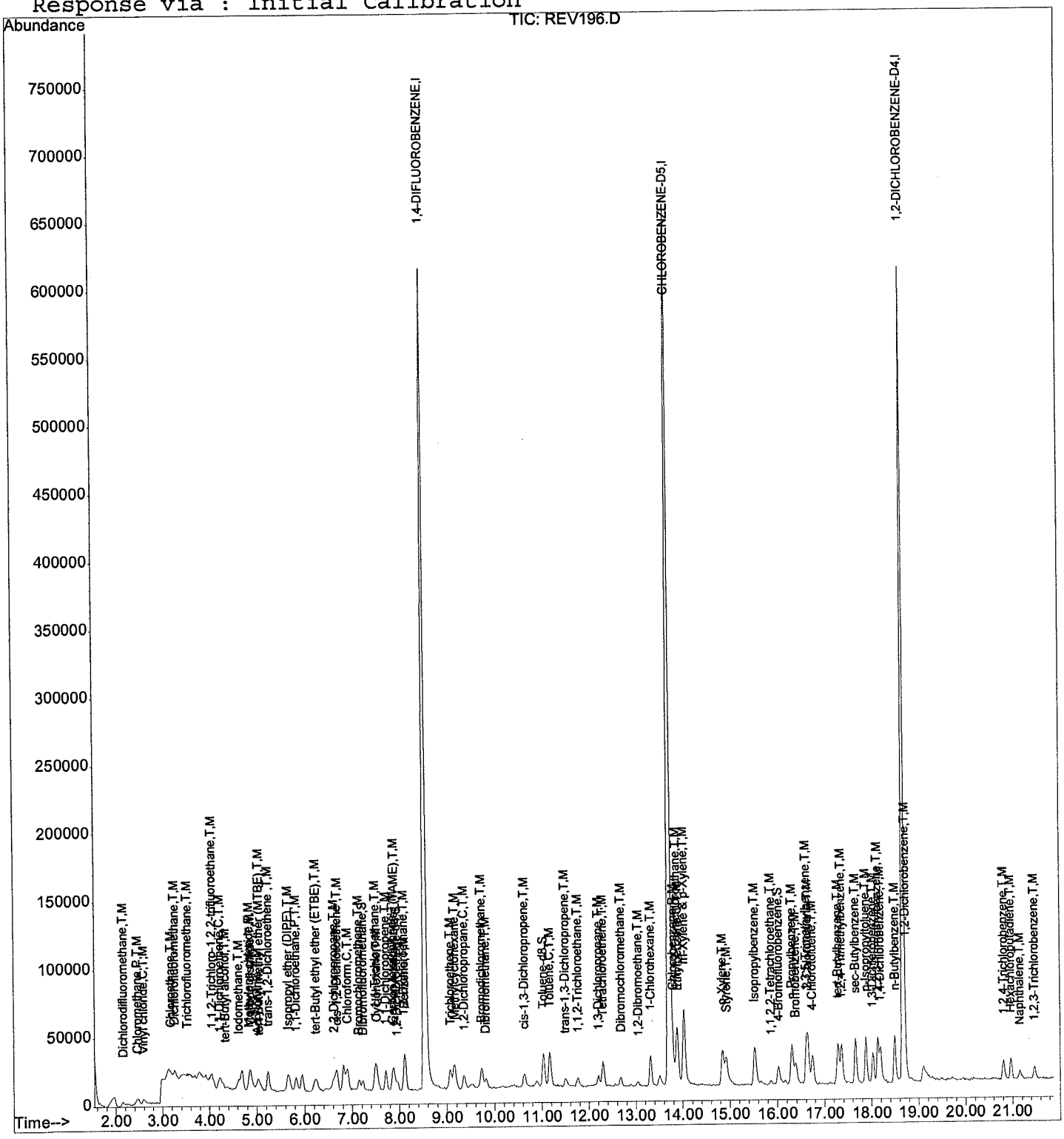
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E11\REV196.D
Acq On : 11 May 2024 10:58 am
Sample : VO01E111 0.03/0.15
Misc : 0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 14:29 2024

Vial: 2
Operator: LPriet
Inst : 01
Multiplr: 1.00

Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



SA 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV197.D Vial: 3
Acq On : 11 May 2024 11:27 am Operator: LPriet
Sample : VO01E112 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: May 13 14:30 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.54	114	958207	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	782724	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	292911	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	15713	0.53	ug/l	0.00
Spiked Amount 10.000			Recovery =	5.30%		
41) 1,2-Dichloroethane-d4	7.97	65	10333	0.51	ug/l	0.00
Spiked Amount 10.000			Recovery =	5.10%		
54) Toluene-d8	11.03	98	59771	0.51	ug/l	0.00
Spiked Amount 10.000			Recovery =	5.10%		
76) 4-Bromofluorobenzene	16.01	95	21050	0.53	ug/l	0.00
Spiked Amount 10.000			Recovery =	5.30%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.17	85	13823	0.54	ug/l	95
5) Chloromethane	2.47	50	19466	0.54	ug/l	94
6) Vinyl chloride	2.60	62	15272	0.51	ug/l	97
7) Bromomethane	3.14	94	27166	0.57	ug/l	73
8) Chloroethane	3.18	64	10907	0.50	ug/l	88
9) Dichlorofluoromethane	3.27	67	33964	0.55	ug/l	88
10) Trichlorofluoromethane	3.55	101	22334	0.55	ug/l	96
12) 1,1,2-Trichloro-1,2,2-trif	4.06	151	10414	0.52	ug/l	99
14) 1,1-Dichloroethene	4.22	61	26419	0.52	ug/l	97
15) tert-Butyl alcohol	4.35	59	11518	10.80	ug/l	75
16) Iodomethane	4.64	142	27278	0.50	ug/l	99
18) Methylene chloride	4.86	49	21078	0.51	ug/l	99
19) Carbon disulfide	4.87	76	52077	0.48	ug/l	98
20) Acrylonitrile	5.04	53	11053	2.49	ug/l	93
21) tert-Butyl methyl ether (M	5.05	73	26332	0.52	ug/l	92
22) trans-1,2-Dichloroethene	5.24	61	24833	0.50	ug/l	98
23) Isopropyl ether (DIPE)	5.67	45	53730	0.51	ug/l	97
24) Vinyl acetate	5.85	43	16307	0.45	ug/l	86
25) 1,1-Dichloroethane	5.82	63	29442	0.51	ug/l	97
27) tert-Butyl ethyl ether (ET	6.24	59	37115	0.49	ug/l	96
28) 2-Butanone	6.46	43	11997	2.24	ug/l	72
29) 2,2-Dichloropropane	6.62	77	25455	0.53	ug/l	98
30) cis-1,2-Dichloroethene	6.68	96	20337	0.51	ug/l	99
31) Chloroform	6.90	83	32100	0.55	ug/l	99
32) Bromochloromethane	7.14	49	11696	0.51	ug/l	95
35) 1,1,1-Trichloroethane	7.50	97	25812	0.53	ug/l	98
36) Cyclohexane	7.52	84	26045	0.54	ug/l	94

(#) = qualifier out of range (m) = manual integration
REV197.D VO01E11.M Mon May 13 14:30:15 2024 SM 5/15/24 Page 1

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV197.D Vial: 3
Acq On : 11 May 2024 11:27 am Operator: LPriet
Sample : VO01E112 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: May 13 14:30 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38)	1,1-Dichloropropene	7.72	110	8678	0.52	ug/l	98
39)	Carbon tetrachloride	7.88	119	18823	0.51	ug/l	98
40)	tert-Amyl methyl ether (TA	7.88	73	30034	0.51	ug/l	99
42)	Benzene	8.13	78	67162	0.52	ug/l	99
43)	1,2-Dichloroethane	8.10	62	12935	0.50	ug/l	96
44)	Trichloroethene	9.08	130	16301	0.49	ug/l	93
45)	Methylcyclohexane	9.17	83	28860	0.55	ug/l	98
46)	1,2-Dichloropropane	9.36	63	15082	0.53	ug/l	92
47)	Bromodichloromethane	9.73	83	21158	0.53	ug/l	92
49)	Dibromomethane	9.83	93	6952	0.51	ug/l	88
52)	cis-1,3-Dichloropropene	10.63	75	21629	0.49	ug/l	99
55)	Toluene	11.17	91	74965	0.54	ug/l	95
57)	trans-1,3-Dichloropropene	11.49	75	15855	0.49	ug/l	96
58)	1,1,2-Trichloroethane	11.76	97	8909	0.49	ug/l	95
60)	1,3-Dichloropropane	12.20	76	15204	0.49	ug/l	97
61)	Tetrachloroethene	12.31	164	15270	0.53	ug/l	99
62)	Dibromochloromethane	12.66	129	11514	0.52	ug/l	99
63)	1,2-Dibromoethane	13.05	107	8602	0.48	ug/l	99
64)	1-Chlorohexane	13.31	91	32200	0.54	ug/l	99
65)	Chlorobenzene	13.79	112	42586	0.51	ug/l	99
66)	1,1,1,2-Tetrachloroethane	13.86	131	12904	0.51	ug/l	99
67)	Ethylbenzene	13.88	91	84216	0.53	ug/l	99
68)	m-Xylene & p-Xylene	14.03	91	123954	1.07	ug/l	99
69)	o-Xylene	14.84	91	63511	0.53	ug/l	99
70)	Styrene	14.91	104	47295	0.51	ug/l	98
71)	Isopropylbenzene	15.52	105	83169	0.53	ug/l	98
73)	Bromoform	15.57	173	2997	0.58	ug/l	70
75)	1,1,2,2-Tetrachloroethane	15.86	83	9761	0.50	ug/l	94
77)	1,2,3-Trichloropropane	16.17	110	2065	0.41	ug/l	98
78)	n-Propylbenzene	16.31	91	102429	0.54	ug/l	99
79)	Bromobenzene	16.38	156	15359	0.51	ug/l	98
80)	1,3,5-Trimethylbenzene	16.60	105	65890	0.54	ug/l	99
81)	2-Chlorotoluene	16.63	91	62476	0.54	ug/l	99
82)	4-Chlorotoluene	16.74	91	53625	0.53	ug/l	100
83)	tert-Butylbenzene	17.29	134	13038	0.51	ug/l	98
84)	1,2,4-Trimethylbenzene	17.36	105	62834	0.53	ug/l	94
85)	sec-Butylbenzene	17.66	105	90100	0.54	ug/l	99
86)	p-Isopropyltoluene	17.88	119	70430	0.55	ug/l	95
87)	1,3-Dichlorobenzene	18.03	146	30579	0.53	ug/l	97
88)	1,2,3-Trimethylbenzene	18.13	105	60108	0.54	ug/l	97
89)	1,4-Dichlorobenzene	18.19	146	30059	0.54	ug/l	97

(#) = qualifier out of range (m) = manual integration SA 5/15/24
REV197.D VO01E11.M Mon May 13 14:30:16 2024 Page 2

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV197.D
Acq On : 11 May 2024 11:27 am
Sample : VO01E112 0.05/0.25
Misc : 0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 14:30 2024

Vial: 3
Operator: LPriet
Inst : 01
Multiplr: 1.00
Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
90) n-Butylbenzene	18.49	91	72685	0.54	ug/l	98
91) 1,2-Dichlorobenzene	18.72	146	24372	0.52	ug/l	97
93) 1,2,4-Trichlorobenzene	20.81	180	16768	0.49	ug/l	98
94) Hexachlorobutadiene	20.96	225	10138	0.50	ug/l	96
95) Naphthalene	21.15	128	19046	0.48	ug/l	100
96) 1,2,3-Trichlorobenzene	21.48	180	12506	0.48	ug/l	96

Sw 5/15/24

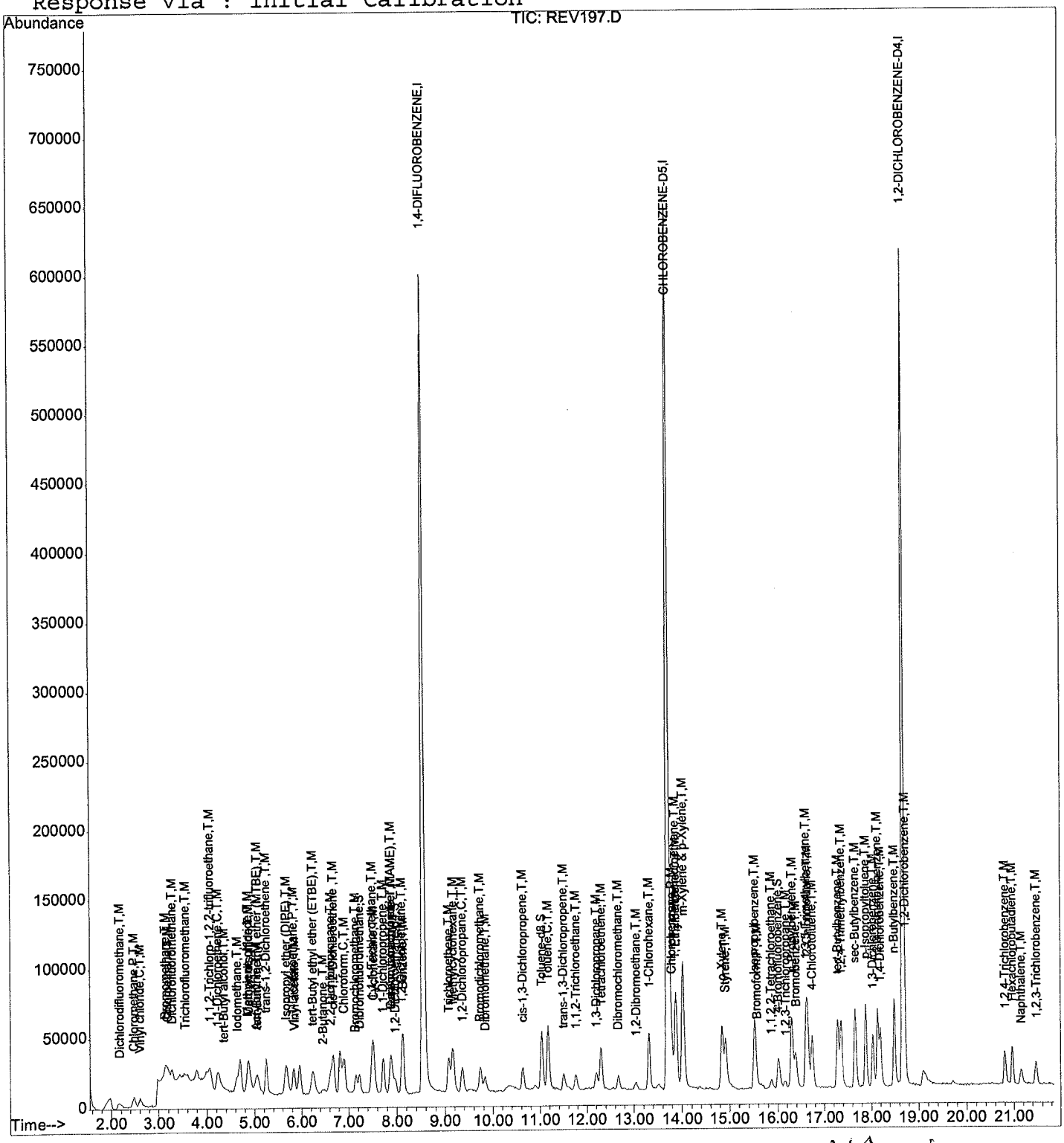
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E11\REV197.D
Acq On : 11 May 2024 11:27 am
Sample : VO01E112 0.05/0.25
Misc : 0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 14:30 2024

Vial: 3
Operator: LPriet
Inst : 01
Multiplr: 1.00
Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV198.D Vial: 4
Acq On : 11 May 2024 11:56 am Operator: LPriet
Sample : VO01E113 0.1/0.5 Inst : 01
Misc : 1ppb 8260/5ppb KET-AA/25ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:30 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.54	114	938282	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	769560	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	301168	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	27033	0.93	ug/l	0.00
Spiked Amount 10.000			Recovery =	9.30%		
41) 1,2-Dichloroethane-d4	7.97	65	18064	0.91	ug/l	0.00
Spiked Amount 10.000			Recovery =	9.10%		
54) Toluene-d8	11.03	98	106585	0.92	ug/l	0.00
Spiked Amount 10.000			Recovery =	9.20%		
76) 4-Bromofluorobenzene	16.01	95	38225	0.93	ug/l	0.00
Spiked Amount 10.000			Recovery =	9.30%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.16	85	23088	0.92	ug/l	94
5) Chloromethane	2.46	50	33932	0.97	ug/l	95
6) Vinyl chloride	2.60	62	26741	0.91	ug/l	96
7) Bromomethane	3.14	94	40909	0.99	ug/l	78
8) Chloroethane	3.18	64	20092	0.95	ug/l	95
9) Dichlorofluoromethane	3.27	67	59133	0.98	ug/l	89
10) Trichlorofluoromethane	3.54	101	38039	0.96	ug/l	99
12) 1,1,2-Trichloro-1,2,2-trif	4.07	151	18470	0.93	ug/l	97
13) Acetone	4.06	43	22798	6.66	ug/l	97
14) 1,1-Dichloroethene	4.24	61	45534	0.91	ug/l	98
15) tert-Butyl alcohol	4.35	59	24124	23.10	ug/l	96
16) Iodomethane	4.64	142	49230	0.92	ug/l	99
18) Methylene chloride	4.86	49	39235	0.98	ug/l	97
19) Carbon disulfide	4.89	76	100956	0.94	ug/l	98
20) Acrylonitrile	5.04	53	20752	4.78	ug/l	96
21) tert-Butyl methyl ether (M	5.07	73	46754	0.95	ug/l	93
22) trans-1,2-Dichloroethene	5.24	61	46060	0.96	ug/l	98
23) Isopropyl ether (DIPE)	5.67	45	97086	0.94	ug/l	99
24) Vinyl acetate	5.85	43	29673	0.84	ug/l	95
25) 1,1-Dichloroethane	5.84	63	53046	0.94	ug/l	99
27) tert-Butyl ethyl ether (ET	6.24	59	70971	0.96	ug/l	99
28) 2-Butanone	6.46	43	22810	4.34	ug/l	98
29) 2,2-Dichloropropane	6.64	77	44935	0.95	ug/l	99
30) cis-1,2-Dichloroethene	6.70	96	36770	0.95	ug/l	100
31) Chloroform	6.90	83	55743	0.97	ug/l	99
32) Bromochloromethane	7.15	49	20957	0.93	ug/l	97
35) 1,1,1-Trichloroethane	7.50	97	45525	0.95	ug/l	98

(#) = qualifier out of range (m) = manual integration

5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV198.D
Acq On : 11 May 2024 11:56 am
Sample : VO01E113 0.1/0.5
Misc : 1ppb 8260/5ppb KET-AA/25ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 14:30 2024

Vial: 4
Operator: LPriet
Inst : 01
Multiplr: 1.00
Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
36)	Cyclohexane	7.52	84	44404	0.95 ug/l	94
38)	1,1-Dichloropropene	7.72	110	15802	0.97 ug/l	96
39)	Carbon tetrachloride	7.88	119	33069	0.92 ug/l	99
40)	tert-Amyl methyl ether (TA	7.90	73	55848	0.97 ug/l	96
42)	Benzene	8.13	78	118978	0.95 ug/l	100
43)	1,2-Dichloroethane	8.10	62	23808	0.94 ug/l	98
44)	Trichloroethene	9.08	130	29954	0.92 ug/l	98
45)	Methylcyclohexane	9.17	83	50363	0.98 ug/l	98
46)	1,2-Dichloropropane	9.36	63	25645	0.91 ug/l	99
47)	Bromodichloromethane	9.73	83	36838	0.95 ug/l	93
49)	Dibromomethane	9.83	93	12791	0.97 ug/l	94
50)	2-Chloroethyl vinyl ether	10.26	63	6310	0.89 ug/l	89
51)	4-Methyl-2-pentanone	10.31	43	44214	5.73 ug/l	98
52)	cis-1,3-Dichloropropene	10.63	75	40679	0.93 ug/l	98
55)	Toluene	11.17	91	127757	0.93 ug/l	99
56)	Ethyl methacrylate	11.54	69	17884	0.87 ug/l	84
57)	trans-1,3-Dichloropropene	11.49	75	28905	0.91 ug/l	100
58)	1,1,2-Trichloroethane	11.76	97	16916	0.95 ug/l	99
59)	2-Hexanone	11.92	43	11666	6.13 ug/l	79
60)	1,3-Dichloropropane	12.20	76	28770	0.95 ug/l	100
61)	Tetrachloroethene	12.31	164	26996	0.95 ug/l	97
62)	Dibromochloromethane	12.66	129	20338	0.93 ug/l	98
63)	1,2-Dibromoethane	13.03	107	16471	0.93 ug/l	99
64)	1-Chlorohexane	13.31	91	54872	0.93 ug/l	99
65)	Chlorobenzene	13.79	112	77497	0.95 ug/l	98
66)	1,1,1,2-Tetrachloroethane	13.86	131	24060	0.96 ug/l	96
67)	Ethylbenzene	13.88	91	146785	0.94 ug/l	99
68)	m-Xylene & p-Xylene	14.03	91	218771	1.92 ug/l	98
69)	o-Xylene	14.84	91	113075	0.96 ug/l	98
70)	Styrene	14.91	104	87190	0.96 ug/l	100
71)	Isopropylbenzene	15.52	105	145909	0.94 ug/l	100
73)	Bromoform	15.57	173	7931	0.98 ug/l	88
74)	trans-1,4-Dichloro-2-buten	15.66	53	4400	0.85 ug/l	88
75)	1,1,2,2-Tetrachloroethane	15.86	83	18640	0.93 ug/l	99
77)	1,2,3-Trichloropropane	16.14	110	4598	0.90 ug/l	94
78)	n-Propylbenzene	16.29	91	177771	0.91 ug/l	99
79)	Bromobenzene	16.38	156	28202	0.91 ug/l	99
80)	1,3,5-Trimethylbenzene	16.60	105	112460	0.90 ug/l	97
81)	2-Chlorotoluene	16.63	91	111646	0.95 ug/l	100
82)	4-Chlorotoluene	16.74	91	93055	0.89 ug/l	99
83)	tert-Butylbenzene	17.29	134	23977	0.91 ug/l	99

(#) = qualifier out of range (m) = manual integration

SU 5/15/24

Data File : D:\HPCHEM\1\DATA\24E11\REV198.D Vial: 4
Acq On : 11 May 2024 11:56 am Operator: LPriet
Sample : VO01E113 0.1/0.5 Inst : 01
Misc : 1ppb 8260/5ppb KET-AA/25ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:30 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
84)	1,2,4-Trimethylbenzene	17.36	105	112239	0.92	ug/l	98
85)	sec-Butylbenzene	17.66	105	155515	0.90	ug/l	100
86)	p-Isopropyltoluene	17.88	119	121109	0.91	ug/l	97
87)	1,3-Dichlorobenzene	18.03	146	54062	0.92	ug/l	100
88)	1,2,3-Trimethylbenzene	18.13	105	107510	0.94	ug/l	99
89)	1,4-Dichlorobenzene	18.19	146	54049	0.94	ug/l	99
90)	n-Butylbenzene	18.49	91	126285	0.92	ug/l	99
91)	1,2-Dichlorobenzene	18.72	146	45597	0.95	ug/l	100
92)	1,2-Dibromo-3-chloropropan	19.71	157	2008	1.14	ug/l	82
93)	1,2,4-Trichlorobenzene	20.80	180	31265	0.89	ug/l	96
94)	Hexachlorobutadiene	20.97	225	18414	0.88	ug/l	96
95)	Naphthalene	21.15	128	36313	0.88	ug/l	99
96)	1,2,3-Trichlorobenzene	21.46	180	23830	0.90	ug/l	98

Sa 5/15/24

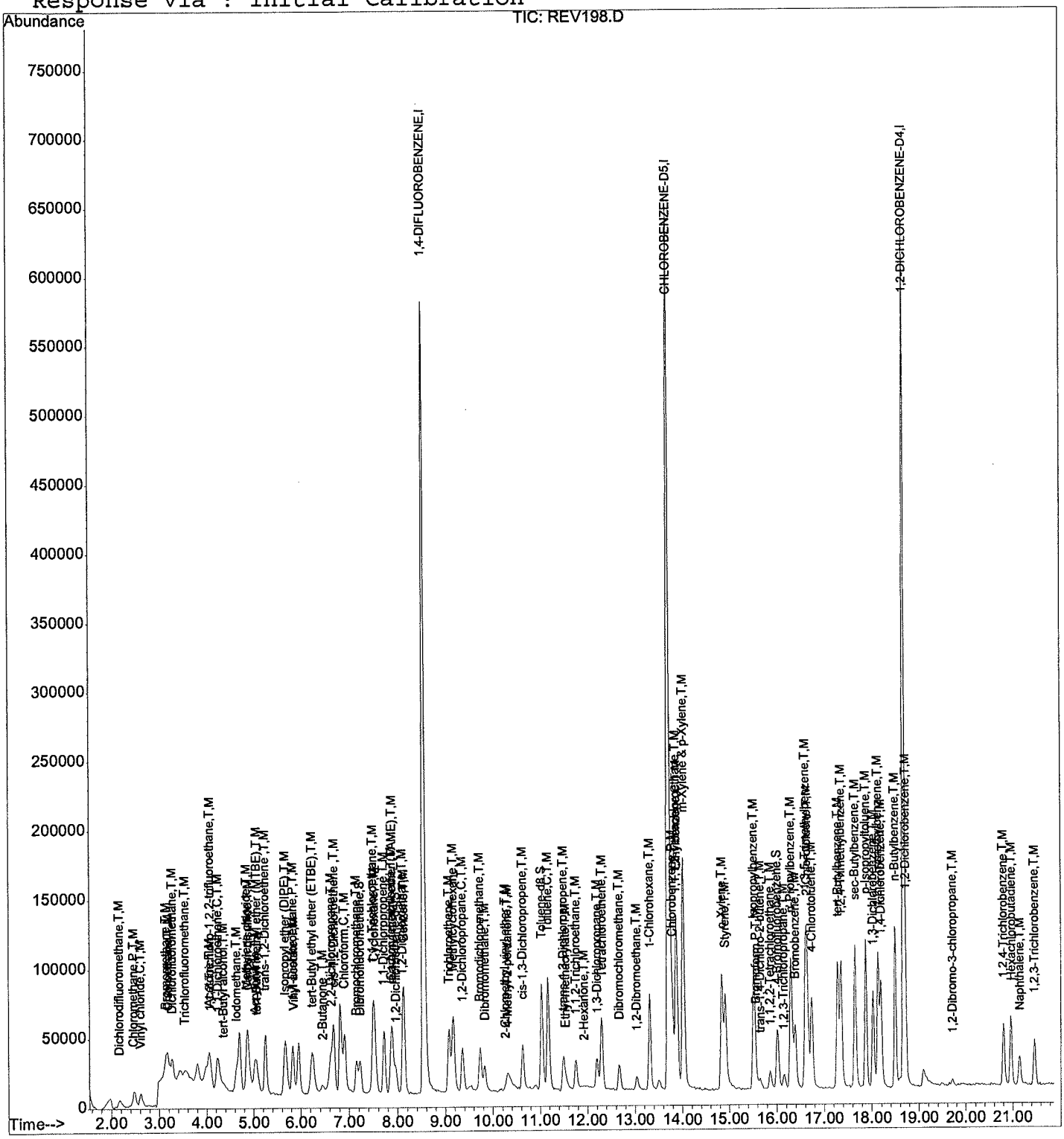
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E11\REV198.D
Acq On : 11 May 2024 11:56 am
Sample : VO01E113 0.1/0.5
Misc : 1ppb 8260/5ppb KET-AA/25ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 14:30 2024

Vial: 4
Operator: LPriet
Inst : 01
Multiplr: 1.00
Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



SU 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV199.D Vial: 5
Acq On : 11 May 2024 12:30 pm Operator: LPriet
Sample : VO01E114 0.2/1.0 Inst : 01
Misc : 2ppb 8260/10ppb KET-AA/50ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:54 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.55	114	923954	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.72	117	742613	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	293562	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.21	111	60611	2.12	ug/l	-0.02
Spiked Amount 10.000			Recovery = 21.20%			
41) 1,2-Dichloroethane-d4	7.95	65	42296	2.17	ug/l	-0.01
Spiked Amount 10.000			Recovery = 21.70%			
54) Toluene-d8	11.02	98	240432	2.16	ug/l	-0.01
Spiked Amount 10.000			Recovery = 21.60%			
76) 4-Bromofluorobenzene	16.01	95	81025	2.03	ug/l	0.00
Spiked Amount 10.000			Recovery = 20.30%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.15	85	50374	2.04	ug/l	98
5) Chloromethane	2.47	50	72647	2.10	ug/l	93
6) Vinyl chloride	2.60	62	62031	2.15	ug/l	97
7) Bromomethane	3.14	94	74605	2.01	ug/l	87
8) Chloroethane	3.18	64	40122	1.92	ug/l	98
9) Dichlorofluoromethane	3.27	67	119218	2.01	ug/l	96
10) Trichlorofluoromethane	3.54	101	81560	2.09	ug/l	99
11) Acrolein	3.98	56	20592	9.92	ug/l	89
12) 1,1,2-Trichloro-1,2,2-trif	4.07	151	42426	2.18	ug/l	100
13) Acetone	4.04	43	34198	10.14	ug/l	99
14) 1,1-Dichloroethene	4.22	61	101014	2.05	ug/l	98
15) tert-Butyl alcohol	4.34	59	52952	51.48	ug/l	92
16) Iodomethane	4.64	142	105323	1.99	ug/l	100
17) Methyl acetate	4.65	43	21059	2.29	ug/l	89
18) Methylene chloride	4.84	49	80640	2.04	ug/l	98
19) Carbon disulfide	4.87	76	207998	1.97	ug/l	99
20) Acrylonitrile	5.02	53	40810	9.54	ug/l	94
21) tert-Butyl methyl ether (M	5.05	73	98170	2.03	ug/l	99
22) trans-1,2-Dichloroethene	5.24	61	96611	2.03	ug/l	99
23) Isopropyl ether (DIPE)	5.66	45	200708	1.98	ug/l	100
24) Vinyl acetate	5.84	43	66565	1.91	ug/l	97
25) 1,1-Dichloroethane	5.82	63	112928	2.03	ug/l	99
27) tert-Butyl ethyl ether (ET	6.24	59	152096	2.09	ug/l	99
28) 2-Butanone	6.43	43	46317	8.95	ug/l	99
29) 2,2-Dichloropropane	6.62	77	94455	2.02	ug/l	99
30) cis-1,2-Dichloroethene	6.68	96	75331	1.97	ug/l	99
31) Chloroform	6.90	83	109165	1.93	ug/l	99

(#) = qualifier out of range (m) = manual integration

SC 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV199.D
Acq On : 11 May 2024 12:30 pm
Sample : VO01E114 0.2/1.0
Misc : 2ppb 8260/10ppb KET-AA/50ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 13:54 2024

Vial: 5
Operator: LPriet
Inst : 01
Multiplr: 1.00
Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32)	Bromochloromethane	7.14	49	44566	2.01 ug/l	100
33)	Tetrahydrofuran	7.20	42	6950	2.12 ug/l	84
35)	1,1,1-Trichloroethane	7.49	97	94535	2.00 ug/l	99
36)	Cyclohexane	7.51	84	97188	2.11 ug/l	97
38)	1,1-Dichloropropene	7.72	110	32679	2.03 ug/l	100
39)	Carbon tetrachloride	7.86	119	71508	2.03 ug/l	98
40)	tert-Amyl methyl ether (TA	7.88	73	115389	2.04 ug/l	97
42)	Benzene	8.12	78	248582	2.01 ug/l	100
43)	1,2-Dichloroethane	8.10	62	50716	2.04 ug/l	99
44)	Trichloroethene	9.06	130	63296	1.98 ug/l	98
45)	Methylcyclohexane	9.15	83	107421	2.12 ug/l	99
46)	1,2-Dichloropropane	9.35	63	54414	1.97 ug/l	98
47)	Bromodichloromethane	9.73	83	75727	1.98 ug/l	99
48)	1,4-Dioxane	9.82	88	3445	30.47 ug/l	71
49)	Dibromomethane	9.82	93	26199	2.01 ug/l	97
50)	2-Chloroethyl vinyl ether	10.25	63	13477	1.92 ug/l	95
51)	4-Methyl-2-pentanone	10.29	43	96326	9.38 ug/l	98
52)	cis-1,3-Dichloropropene	10.62	75	84540	1.97 ug/l	99
55)	Toluene	11.17	91	267463	2.03 ug/l	100
56)	Ethyl methacrylate	11.49	69	38804	1.96 ug/l	97
57)	trans-1,3-Dichloropropene	11.48	75	61587	2.01 ug/l	97
58)	1,1,2-Trichloroethane	11.75	97	35305	2.04 ug/l	99
59)	2-Hexanone	11.83	43	38468	9.25 ug/l	97
60)	1,3-Dichloropropane	12.19	76	60220	2.05 ug/l	100
61)	Tetrachloroethene	12.29	164	56394	2.06 ug/l	100
62)	Dibromochloromethane	12.66	129	41132	1.95 ug/l	98
63)	1,2-Dibromoethane	13.03	107	34770	2.04 ug/l	98
64)	1-Chlorohexane	13.32	91	117841	2.07 ug/l	99
65)	Chlorobenzene	13.79	112	158702	2.02 ug/l	99
66)	1,1,1,2-Tetrachloroethane	13.86	131	48976	2.02 ug/l	99
67)	Ethylbenzene	13.88	91	304664	2.02 ug/l	99
68)	m-Xylene & p-Xylene	14.01	91	450609	4.09 ug/l	99
69)	o-Xylene	14.84	91	231237	2.04 ug/l	99
70)	Styrene	14.92	104	177724	2.02 ug/l	99
71)	Isopropylbenzene	15.52	105	305906	2.05 ug/l	99
73)	Bromoform	15.57	173	21027	2.08 ug/l	97
74)	trans-1,4-Dichloro-2-buten	15.64	53	9849	1.94 ug/l	85
75)	1,1,2,2-Tetrachloroethane	15.86	83	38426	1.97 ug/l	99
77)	1,2,3-Trichloropropane	16.16	110	10163	2.03 ug/l	95
78)	n-Propylbenzene	16.29	91	370739	1.94 ug/l	100
79)	Bromobenzene	16.38	156	58783	1.95 ug/l	100

(#) = qualifier out of range (m) = manual integration

5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV199.D Vial: 5
Acq On : 11 May 2024 12:30 pm Operator: LPriet
Sample : VO01E114 0.2/1.0 Inst : 01
Misc : 2ppb 8260/10ppb KET-AA/50ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:54 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	237589	1.95	ug/l	98
81)	2-Chlorotoluene	16.63	91	219062	1.91	ug/l	95
82)	4-Chlorotoluene	16.74	91	206396	2.03	ug/l	97
83)	tert-Butylbenzene	17.29	134	49658	1.94	ug/l	98
84)	1,2,4-Trimethylbenzene	17.36	105	233094	1.95	ug/l	98
85)	sec-Butylbenzene	17.66	105	332693	1.98	ug/l	99
86)	p-Isopropyltoluene	17.88	119	260761	2.02	ug/l	99
87)	1,3-Dichlorobenzene	18.03	146	112316	1.96	ug/l	99
88)	1,2,3-Trimethylbenzene	18.13	105	219653	1.97	ug/l	99
89)	1,4-Dichlorobenzene	18.19	146	110373	1.96	ug/l	100
90)	n-Butylbenzene	18.49	91	265074	1.98	ug/l	99
91)	1,2-Dichlorobenzene	18.72	146	94251	2.00	ug/l	99
92)	1,2-Dibromo-3-chloropropan	19.72	157	5091	2.12	ug/l	97
93)	1,2,4-Trichlorobenzene	20.80	180	67009	1.95	ug/l	98
94)	Hexachlorobutadiene	20.96	225	39320	1.92	ug/l	97
95)	Naphthalene	21.15	128	77920	1.94	ug/l	99
96)	1,2,3-Trichlorobenzene	21.46	180	51155	1.98	ug/l	100

SM 5/15/24

(#) = qualifier out of range (m) = manual integration

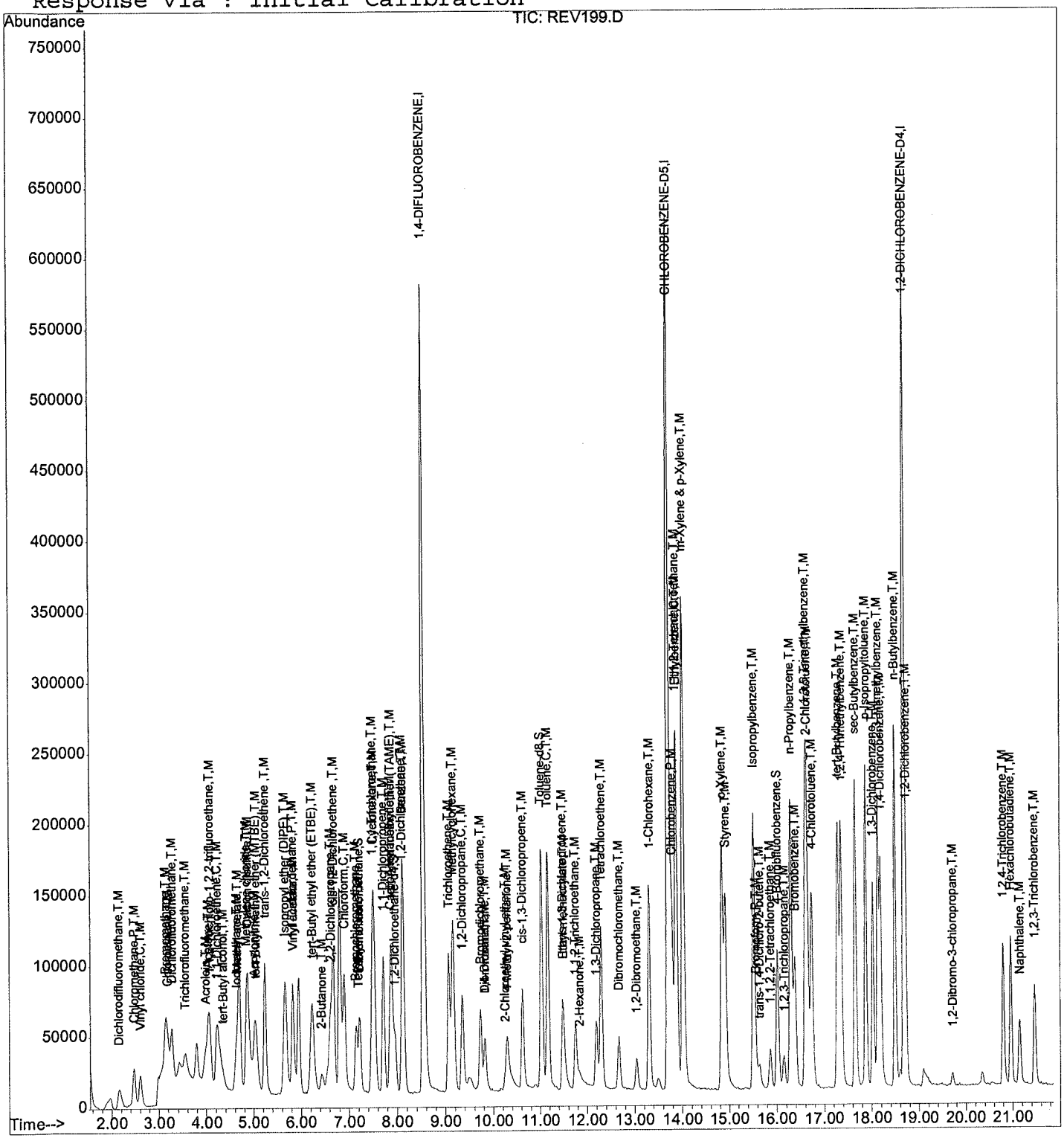
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E11\REV199.D
Acq On : 11 May 2024 12:30 pm
Sample : VO01E114 0.2/1.0
Misc : 2ppb 8260/10ppb KET-AA/50ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 13:54 2024

Vial: 5
Operator: LPriet
Inst : 01
Multiplr: 1.00

Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV200.D Vial: 6
Acq On : 11 May 2024 12:59 pm Operator: LPriet
Sample : VO01E115 0.5/2.5 Inst : 01
Misc : 5ppb 8260/25ppb KET-AA/125ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:56 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.54	114	900656	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	744900	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	284539	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	143298	5.14	ug/l	0.00
Spiked Amount 10.000			Recovery =	51.40%		
41) 1,2-Dichloroethane-d4	7.97	65	97715	5.14	ug/l	0.00
Spiked Amount 10.000			Recovery =	51.40%		
54) Toluene-d8	11.03	98	569302	5.10	ug/l	0.00
Spiked Amount 10.000			Recovery =	51.00%		
76) 4-Bromofluorobenzene	16.01	95	190707	4.92	ug/l	0.00
Spiked Amount 10.000			Recovery =	49.20%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.18	85	119456	4.96	ug/l	98
5) Chloromethane	2.48	50	170900	5.06	ug/l	99
6) Vinyl chloride	2.60	62	151684	5.40	ug/l	98
7) Bromomethane	3.14	94	161543	4.74	ug/l	99
8) Chloroethane	3.18	64	101909	5.00	ug/l	100
9) Dichlorofluoromethane	3.27	67	272435	4.71	ug/l	98
10) Trichlorofluoromethane	3.55	101	192432	5.06	ug/l	98
11) Acrolein	3.98	56	50318	24.87	ug/l	98
12) 1,1,2-Trichloro-1,2,2-trif	4.07	151	95572	5.03	ug/l	99
13) Acetone	4.06	43	80312	24.43	ug/l	100
14) 1,1-Dichloroethene	4.24	61	236110	4.92	ug/l	100
15) tert-Butyl alcohol	4.34	59	126289	125.96	ug/l	98
16) Iodomethane	4.64	142	253734	4.93	ug/l	100
17) Methyl acetate	4.65	43	45270	5.05	ug/l	100
18) Methylene chloride	4.86	49	189706	4.92	ug/l	98
19) Carbon disulfide	4.89	76	519242	5.06	ug/l	99
20) Acrylonitrile	5.02	53	104491	25.05	ug/l	99
21) tert-Butyl methyl ether (M	5.07	73	232923	4.93	ug/l	98
22) trans-1,2-Dichloroethene	5.24	61	227623	4.92	ug/l	99
23) Isopropyl ether (DIPE)	5.67	45	486332	4.92	ug/l	99
24) Vinyl acetate	5.84	43	178828	5.27	ug/l	98
25) 1,1-Dichloroethane	5.84	63	265434	4.90	ug/l	100
27) tert-Butyl ethyl ether (ET	6.24	59	350636	4.95	ug/l	99
28) 2-Butanone	6.43	43	122252	24.23	ug/l	98
29) 2,2-Dichloropropane	6.62	77	221475	4.87	ug/l	100
30) cis-1,2-Dichloroethene	6.68	96	182793	4.91	ug/l	99
31) Chloroform	6.90	83	263399	4.78	ug/l	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV200.D Vial: 6
Acq On : 11 May 2024 12:59 pm Operator: LPriet
Sample : VO01E115 0.5/2.5 Inst : 01
Misc : 5ppb 8260/25ppb KET-AA/125ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:56 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.15	49	107126	4.95	ug/l	100
33)	Tetrahydrofuran	7.20	42	15395	4.82	ug/l	99
35)	1,1,1-Trichloroethane	7.50	97	223490	4.84	ug/l	100
36)	Cyclohexane	7.53	84	229091	5.10	ug/l	100
38)	1,1-Dichloropropene	7.72	110	75641	4.82	ug/l	99
39)	Carbon tetrachloride	7.88	119	164649	4.79	ug/l	99
40)	tert-Amyl methyl ether (TA	7.88	73	265148	4.81	ug/l	100
42)	Benzene	8.13	78	593170	4.93	ug/l	100
43)	1,2-Dichloroethane	8.10	62	119634	4.93	ug/l	100
44)	Trichloroethene	9.08	130	151454	4.87	ug/l	99
45)	Methylcyclohexane	9.17	83	246613	4.99	ug/l	98
46)	1,2-Dichloropropane	9.34	63	129424	4.81	ug/l	99
47)	Bromodichloromethane	9.73	83	180624	4.83	ug/l	99
48)	1,4-Dioxane	9.80	88	10209	92.63	ug/l	95
49)	Dibromomethane	9.82	93	62590	4.93	ug/l	96
50)	2-Chloroethyl vinyl ether	10.23	63	32624	4.78	ug/l	99
51)	4-Methyl-2-pentanone	10.28	43	302538	24.21	ug/l	100
52)	cis-1,3-Dichloropropene	10.62	75	205197	4.90	ug/l	100
55)	Toluene	11.17	91	638964	4.83	ug/l	99
56)	Ethyl methacrylate	11.46	69	93055	4.69	ug/l	97
57)	trans-1,3-Dichloropropene	11.48	75	150076	4.88	ug/l	99
58)	1,1,2-Trichloroethane	11.74	97	84096	4.86	ug/l	100
59)	2-Hexanone	11.79	43	161653	23.32	ug/l	98
60)	1,3-Dichloropropane	12.19	76	141872	4.83	ug/l	99
61)	Tetrachloroethene	12.29	164	131949	4.80	ug/l	99
62)	Dibromochloromethane	12.66	129	100908	4.77	ug/l	99
63)	1,2-Dibromoethane	13.03	107	84804	4.95	ug/l	98
64)	1-Chlorohexane	13.30	91	270570	4.74	ug/l	100
65)	Chlorobenzene	13.79	112	382775	4.85	ug/l	100
66)	1,1,1,2-Tetrachloroethane	13.86	131	116917	4.81	ug/l	99
67)	Ethylbenzene	13.88	91	730874	4.84	ug/l	100
68)	m-Xylene & p-Xylene	14.01	91	1083475	9.80	ug/l	99
69)	o-Xylene	14.84	91	543905	4.78	ug/l	100
70)	Styrene	14.90	104	426095	4.83	ug/l	99
71)	Isopropylbenzene	15.52	105	729567	4.87	ug/l	100
73)	Bromoform	15.55	173	52073	4.81	ug/l	98
74)	trans-1,4-Dichloro-2-buten	15.63	53	23167	4.72	ug/l	99
75)	1,1,2,2-Tetrachloroethane	15.86	83	90996	4.80	ug/l	100
77)	1,2,3-Trichloropropane	16.14	110	24020	4.96	ug/l	100
78)	n-Propylbenzene	16.29	91	891243	4.82	ug/l	100
79)	Bromobenzene	16.38	156	142872	4.88	ug/l	100

(#) = qualifier out of range (m) = manual integration

SH 5/15/24

Data File : D:\HPCHEM\1\DATA\24E11\REV200.D
Acq On : 11 May 2024 12:59 pm
Sample : VO01E115 0.5/2.5
Misc : 5ppb 8260/25ppb KET-AA/125ppb TBA
Vial: 6
Operator: LPriet
Inst : 01
Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:56 2024
Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	568375	4.81	ug/l	100
81)	2-Chlorotoluene	16.63	91	534726	4.80	ug/l	100
82)	4-Chlorotoluene	16.72	91	491373	4.98	ug/l	99
83)	tert-Butylbenzene	17.29	134	119387	4.81	ug/l	100
84)	1,2,4-Trimethylbenzene	17.36	105	562027	4.86	ug/l	99
85)	sec-Butylbenzene	17.66	105	782171	4.81	ug/l	99
86)	p-Isopropyltoluene	17.88	119	604455	4.83	ug/l	100
87)	1,3-Dichlorobenzene	18.03	146	266427	4.79	ug/l	99
88)	1,2,3-Trimethylbenzene	18.13	105	523914	4.85	ug/l	99
89)	1,4-Dichlorobenzene	18.19	146	264166	4.84	ug/l	99
90)	n-Butylbenzene	18.49	91	624902	4.82	ug/l	100
91)	1,2-Dichlorobenzene	18.72	146	222834	4.89	ug/l	99
92)	1,2-Dibromo-3-chloropropan	19.71	157	13172	4.81	ug/l	96
93)	1,2,4-Trichlorobenzene	20.80	180	161262	4.85	ug/l	99
94)	Hexachlorobutadiene	20.96	225	94994	4.79	ug/l	99
95)	Naphthalene	21.15	128	187349	4.82	ug/l	99
96)	1,2,3-Trichlorobenzene	21.46	180	121965	4.87	ug/l	100

SU 5/15/24

(#) = qualifier out of range (m) = manual integration

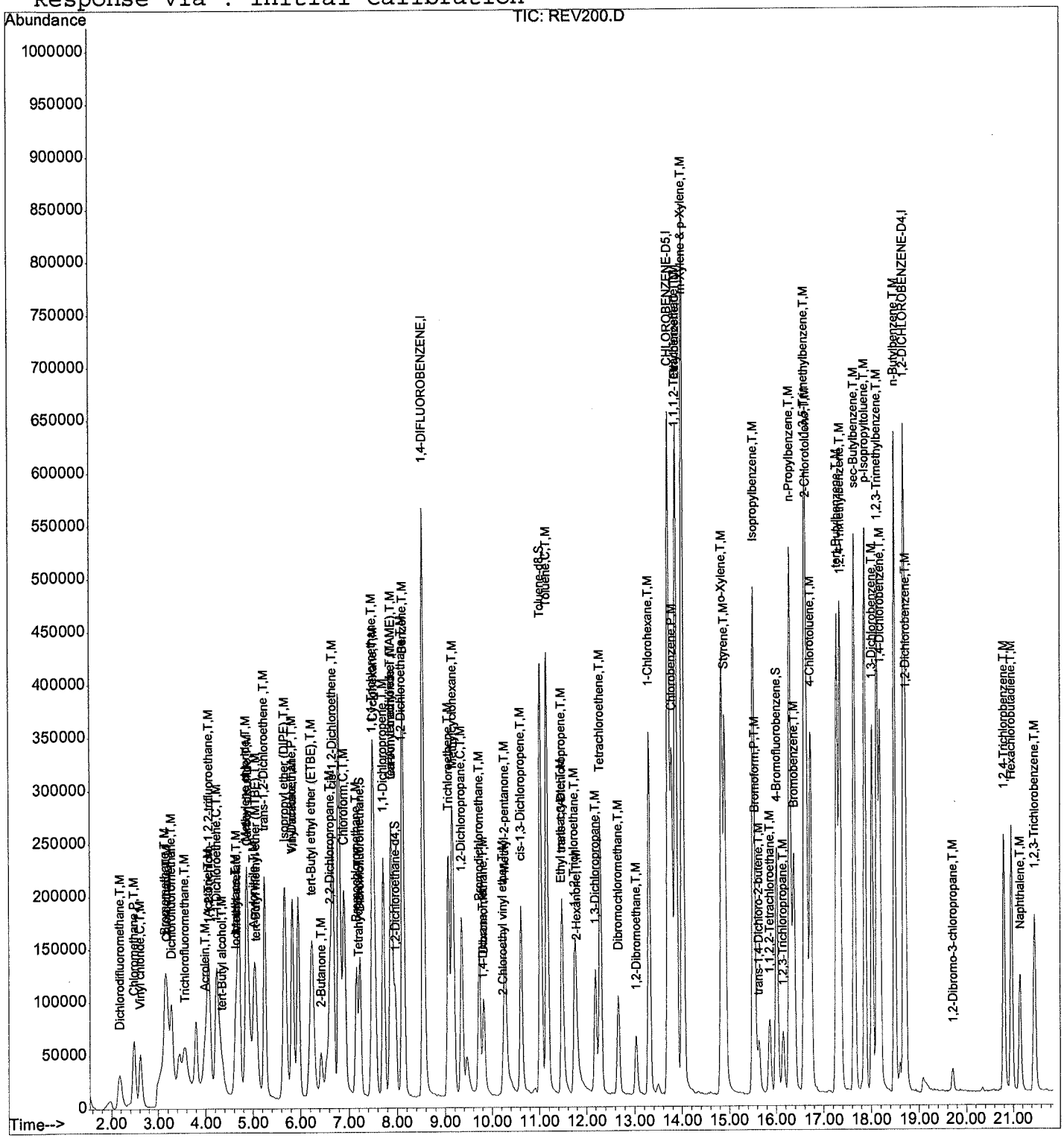
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E11\REV200.D
Acq On : 11 May 2024 12:59 pm
Sample : VO01E115 0.5/2.5
Misc : 5ppb 8260/25ppb KET-AA/125ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 13:56 2024

Vial: 6
Operator: LPriet
Inst : 01
Multiplr: 1.00

Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV201.D Vial: 7
Acq On : 11 May 2024 1:28 pm Operator: LPriet
Sample : VO01E116 1.0/5.0 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:58 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.54	114	920983	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	742213	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	284055	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	258776	9.08	ug/l	0.00
Spiked Amount 10.000			Recovery = 90.80%			
41) 1,2-Dichloroethane-d4	7.97	65	170981	8.79	ug/l	0.00
Spiked Amount 10.000			Recovery = 87.90%			
54) Toluene-d8	11.03	98	1034495	9.30	ug/l	0.00
Spiked Amount 10.000			Recovery = 93.00%			
76) 4-Bromofluorobenzene	16.01	95	349924	9.04	ug/l	0.00
Spiked Amount 10.000			Recovery = 90.40%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.17	85	233807	9.49	ug/l	100
5) Chloromethane	2.46	50	319578	9.26	ug/l	100
6) Vinyl chloride	2.61	62	285699	9.94	ug/l	100
7) Bromomethane	3.14	94	303178	8.88	ug/l	100
8) Chloroethane	3.18	64	194643	9.34	ug/l	100
9) Dichlorofluoromethane	3.27	67	535368	9.04	ug/l	100
10) Trichlorofluoromethane	3.55	101	365519	9.40	ug/l	100
11) Acrolein	3.98	56	91543	44.25	ug/l	100
12) 1,1,2-Trichloro-1,2,2-trif	4.06	151	193689	9.97	ug/l	100
13) Acetone	4.06	43	141862	42.20	ug/l	100
14) 1,1-Dichloroethene	4.22	61	473083	9.63	ug/l	100
15) tert-Butyl alcohol	4.34	59	232900	227.17	ug/l	100
16) Iodomethane	4.64	142	502181	9.54	ug/l	100
17) Methyl acetate	4.65	43	77293	8.43	ug/l	100
18) Methylene chloride	4.86	49	367504	9.33	ug/l	100
19) Carbon disulfide	4.87	76	984042	9.37	ug/l	100
20) Acrylonitrile	5.02	53	196137	45.99	ug/l	100
21) tert-Butyl methyl ether (M	5.07	73	435419	9.01	ug/l	100
22) trans-1,2-Dichloroethene	5.24	61	438850	9.27	ug/l	100
23) Isopropyl ether (DIPE)	5.67	45	945894	9.35	ug/l	100
24) Vinyl acetate	5.82	43	316675	9.12	ug/l	100
25) 1,1-Dichloroethane	5.82	63	520416	9.40	ug/l	100
27) tert-Butyl ethyl ether (ET	6.24	59	667502	9.21	ug/l	100
28) 2-Butanone	6.41	43	244678	47.43	ug/l	100
29) 2,2-Dichloropropane	6.62	77	438788	9.43	ug/l	100
30) cis-1,2-Dichloroethene	6.68	96	363843	9.55	ug/l	100
31) Chloroform	6.90	83	508562	9.02	ug/l	100

(#) = qualifier out of range (m) = manual integration

5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV201.D
Acq On : 11 May 2024 1:28 pm
Sample : VO01E116 1.0/5.0
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 13:58 2024

Vial: 7
Operator: LPriet
Inst : 01
Multiplr: 1.00

Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) Bromochloromethane	7.14	49	205550	9.28 ug/l	100
33) Tetrahydrofuran	7.20	42	27463	8.42 ug/l	100
35) 1,1,1-Trichloroethane	7.49	97	444990	9.43 ug/l	100
36) Cyclohexane	7.52	84	417453	9.08 ug/l	100
38) 1,1-Dichloropropene	7.72	110	150631	9.39 ug/l	100
39) Carbon tetrachloride	7.88	119	336330	9.57 ug/l	100
40) tert-Amyl methyl ether (TA	7.88	73	497165	8.82 ug/l	100
42) Benzene	8.13	78	1153601	9.38 ug/l	100
43) 1,2-Dichloroethane	8.10	62	229577	9.25 ug/l	100
44) Trichloroethene	9.06	130	307851	9.67 ug/l	100
45) Methylcyclohexane	9.17	83	454050	8.98 ug/l	100
46) 1,2-Dichloropropane	9.34	63	256137	9.30 ug/l	100
47) Bromodichloromethane	9.73	83	342146	8.95 ug/l	100
48) 1,4-Dioxane	9.79	88	20047	177.87 ug/l	100
49) Dibromomethane	9.82	93	116361	8.96 ug/l	100
50) 2-Chloroethyl vinyl ether	10.23	63	63930	9.15 ug/l	100
51) 4-Methyl-2-pentanone	10.26	43	589994	43.70 ug/l	100
52) cis-1,3-Dichloropropene	10.62	75	398855	9.31 ug/l	100
55) Toluene	11.17	91	1262539	9.58 ug/l	100
56) Ethyl methacrylate	11.46	69	182985	9.25 ug/l	100
57) trans-1,3-Dichloropropene	11.48	75	289239	9.44 ug/l	100
58) 1,1,2-Trichloroethane	11.74	97	160672	9.31 ug/l	100
59) 2-Hexanone	11.76	43	335905	43.39 ug/l	100
60) 1,3-Dichloropropane	12.19	76	271863	9.28 ug/l	100
61) Tetrachloroethene	12.29	164	266498	9.73 ug/l	100
62) Dibromochloromethane	12.66	129	193517	9.19 ug/l	100
63) 1,2-Dibromoethane	13.03	107	159304	9.33 ug/l	100
64) 1-Chlorohexane	13.30	91	551589	9.69 ug/l	100
65) Chlorobenzene	13.79	112	759554	9.67 ug/l	100
66) 1,1,1,2-Tetrachloroethane	13.86	131	232054	9.59 ug/l	100
67) Ethylbenzene	13.88	91	1473355	9.79 ug/l	100
68) m-Xylene & p-Xylene	14.01	91	2121368	19.26 ug/l	100
69) o-Xylene	14.84	91	1078385	9.51 ug/l	100
70) Styrene	14.90	104	842539	9.59 ug/l	100
71) Isopropylbenzene	15.52	105	1453974	9.74 ug/l	100
73) Bromoform	15.55	173	95720	8.57 ug/l	100
74) trans-1,4-Dichloro-2-buten	15.63	53	44316	9.04 ug/l	100
75) 1,1,2,2-Tetrachloroethane	15.86	83	168234	8.90 ug/l	100
77) 1,2,3-Trichloropropane	16.14	110	45054	9.31 ug/l	99
78) n-Propylbenzene	16.29	91	1790558	9.70 ug/l	100
79) Bromobenzene	16.38	156	279576	9.57 ug/l	100

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24E11\REV201.D Vial: 7
Acq On : 11 May 2024 1:28 pm Operator: LPriet
Sample : VO01E116 1.0/5.0 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:58 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	1139657	9.66	ug/l	100
81)	2-Chlorotoluene	16.63	91	1060747	9.54	ug/l	100
82)	4-Chlorotoluene	16.72	91	963048	9.78	ug/l	100
83)	tert-Butylbenzene	17.29	134	239466	9.67	ug/l	100
84)	1,2,4-Trimethylbenzene	17.36	105	1122345	9.72	ug/l	100
85)	sec-Butylbenzene	17.66	105	1569792	9.68	ug/l	100
86)	p-Isopropyltoluene	17.88	119	1201659	9.61	ug/l	100
87)	1,3-Dichlorobenzene	18.03	146	533251	9.60	ug/l	100
88)	1,2,3-Trimethylbenzene	18.13	105	1019164	9.45	ug/l	100
89)	1,4-Dichlorobenzene	18.19	146	518636	9.53	ug/l	100
90)	n-Butylbenzene	18.49	91	1250551	9.65	ug/l	100
91)	1,2-Dichlorobenzene	18.72	146	424621	9.33	ug/l	100
92)	1,2-Dibromo-3-chloropropan	19.71	157	23773	8.27	ug/l	100
93)	1,2,4-Trichlorobenzene	20.80	180	314594	9.47	ug/l	100
94)	Hexachlorobutadiene	20.96	225	197705	9.99	ug/l	100
95)	Naphthalene	21.14	128	358996	9.26	ug/l	100
96)	1,2,3-Trichlorobenzene	21.46	180	236728	9.46	ug/l	100

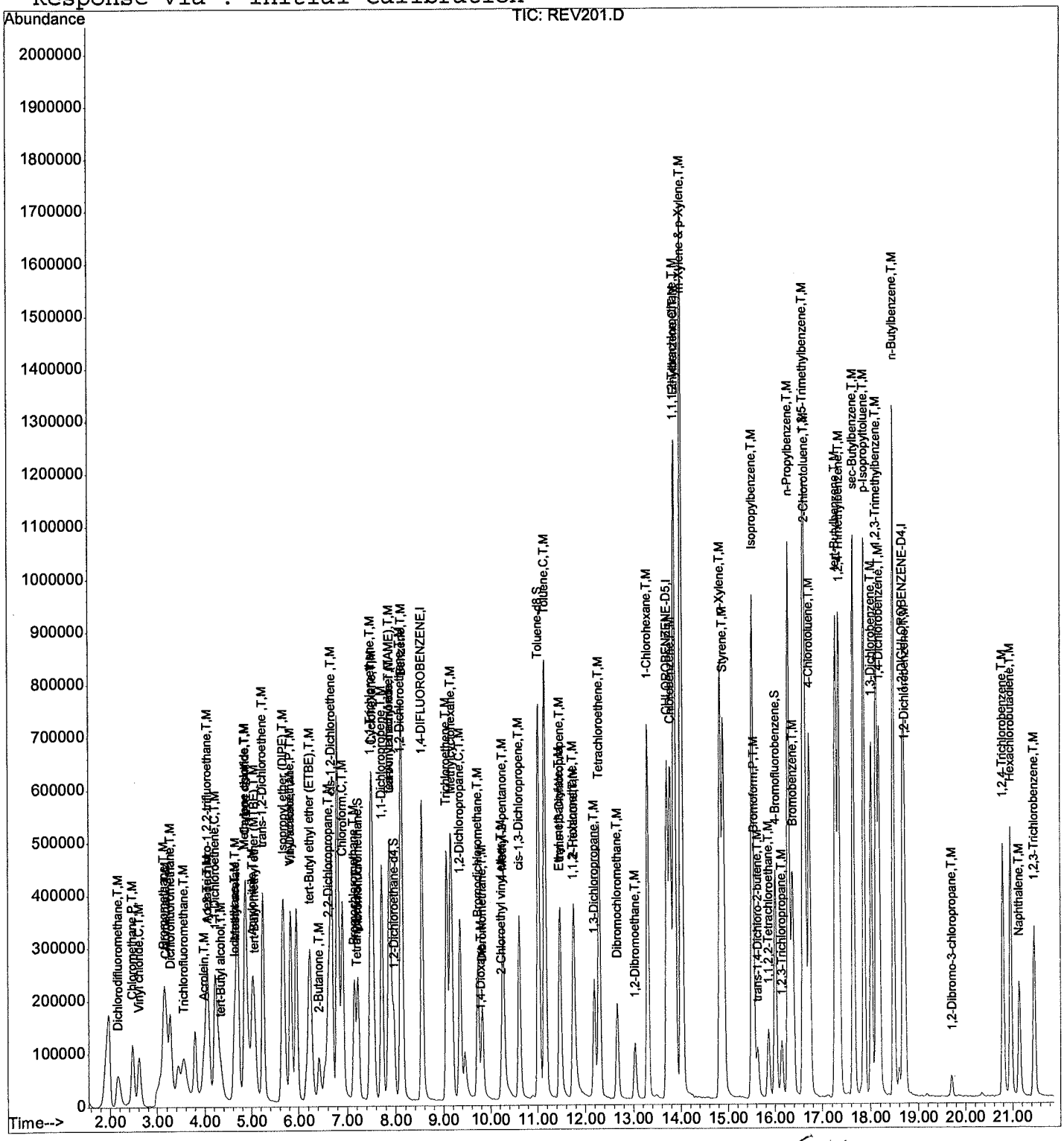
SA 5/15/24

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E11\REV201.D Vial: 7
Acq On : 11 May 2024 1:28 pm Operator: LPriet
Sample : VO01E116 1.0/5.0 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:58 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV202.D Vial: 8
Acq On : 11 May 2024 1:58 pm Operator: LPriet
Sample : VO01E117 2.0/10 Inst : 01
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:00 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	816915	10.00	ug/l	0.02
53) CHLOROBENZENE-D5	13.73	117	679573	10.00	ug/l	0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	256277	10.00	ug/l	0.02
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	546945	21.63	ug/l	0.01
Spiked Amount 10.000			Recovery =	216.30%		
41) 1,2-Dichloroethane-d4	7.97	65	368310	21.36	ug/l	0.00
Spiked Amount 10.000			Recovery =	213.60%		
54) Toluene-d8	11.03	98	2143971	21.05	ug/l	0.00
Spiked Amount 10.000			Recovery =	210.50%		
76) 4-Bromofluorobenzene	16.03	95	741429	21.24	ug/l	0.02
Spiked Amount 10.000			Recovery =	212.40%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.17	85	443172	20.27	ug/l	99
5) Chloromethane	2.47	50	619334	20.24	ug/l	100
6) Vinyl chloride	2.61	62	541540	21.25	ug/l	100
7) Bromomethane	3.15	94	618346	20.69	ug/l	97
8) Chloroethane	3.20	64	385600	20.85	ug/l	99
9) Dichlorofluoromethane	3.29	67	1066762	20.31	ug/l	99
10) Trichlorofluoromethane	3.55	101	683028	19.81	ug/l	99
11) Acrolein	3.98	56	192986	105.17	ug/l	96
12) 1,1,2-Trichloro-1,2,2-trif	4.07	151	365492	21.21	ug/l	99
13) Acetone	4.06	43	284979	95.57	ug/l	99
14) 1,1-Dichloroethene	4.24	61	930390	21.35	ug/l	100
15) tert-Butyl alcohol	4.34	59	495292	544.64	ug/l	99
16) Iodomethane	4.65	142	1006828	21.55	ug/l	100
17) Methyl acetate	4.66	43	166847	20.52	ug/l	99
18) Methylene chloride	4.87	49	730623	20.90	ug/l	100
19) Carbon disulfide	4.89	76	2006384	21.54	ug/l	100
20) Acrylonitrile	5.04	53	392428	103.74	ug/l	100
21) tert-Butyl methyl ether (M	5.06	73	899904	21.00	ug/l	99
22) trans-1,2-Dichloroethene	5.26	61	902607	21.50	ug/l	99
23) Isopropyl ether (DIPE)	5.67	45	1935724	21.58	ug/l	99
24) Vinyl acetate	5.84	43	675084	21.93	ug/l	100
25) 1,1-Dichloroethane	5.84	63	1063100	21.66	ug/l	100
27) tert-Butyl ethyl ether (ET	6.25	59	1387307	21.59	ug/l	99
28) 2-Butanone	6.43	43	502145	109.75	ug/l	100
29) 2,2-Dichloropropane	6.64	77	865612	20.97	ug/l	100
30) cis-1,2-Dichloroethene	6.69	96	725941	21.48	ug/l	100
31) Chloroform	6.92	83	1028651	20.56	ug/l	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV202.D
Acq On : 11 May 2024 1:58 pm
Sample : VO01E117 2.0/10
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 14:00 2024

Vial: 8
Operator: LPriet
Inst : 01
Multiplr: 1.00
Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) Bromochloromethane	7.15	49	418099	21.28 ug/l	99
33) Tetrahydrofuran	7.21	42	59689	20.62 ug/l	99
35) 1,1,1-Trichloroethane	7.51	97	890497	21.28 ug/l	100
36) Cyclohexane	7.54	84	839410	20.59 ug/l	100
38) 1,1-Dichloropropene	7.73	110	301701	21.21 ug/l	99
39) Carbon tetrachloride	7.89	119	658847	21.13 ug/l	99
40) tert-Amyl methyl ether (TA	7.89	73	1043076	20.86 ug/l	100
42) Benzene	8.15	78	2297893	21.05 ug/l	100
43) 1,2-Dichloroethane	8.12	62	472900	21.49 ug/l	99
44) Trichloroethene	9.08	130	611530	21.66 ug/l	99
45) Methylcyclohexane	9.17	83	904979	20.18 ug/l	100
46) 1,2-Dichloropropane	9.36	63	521244	21.35 ug/l	100
47) Bromodichloromethane	9.74	83	704865	20.80 ug/l	100
48) 1,4-Dioxane	9.79	88	43990	440.03 ug/l	99
49) Dibromomethane	9.83	93	243286	21.12 ug/l	99
50) 2-Chloroethyl vinyl ether	10.23	63	134190	21.65 ug/l	98
51) 4-Methyl-2-pentanone	10.28	43	1288906	103.66 ug/l	100
52) cis-1,3-Dichloropropene	10.63	75	818576	21.54 ug/l	100
55) Toluene	11.18	91	2491900	20.65 ug/l	100
56) Ethyl methacrylate	11.46	69	395514	21.84 ug/l	98
57) trans-1,3-Dichloropropene	11.49	75	603742	21.52 ug/l	100
58) 1,1,2-Trichloroethane	11.76	97	330926	20.94 ug/l	99
59) 2-Hexanone	11.77	43	767459	101.03 ug/l	100
60) 1,3-Dichloropropane	12.20	76	575688	21.46 ug/l	99
61) Tetrachloroethene	12.31	164	522743	20.84 ug/l	99
62) Dibromochloromethane	12.68	129	406460	21.07 ug/l	99
63) 1,2-Dibromoethane	13.05	107	339123	21.70 ug/l	99
64) 1-Chlorohexane	13.32	91	1076692	20.66 ug/l	100
65) Chlorobenzene	13.80	112	1529085	21.25 ug/l	100
66) 1,1,1,2-Tetrachloroethane	13.88	131	470126	21.22 ug/l	99
67) Ethylbenzene	13.89	91	2901232	21.06 ug/l	99
68) m-Xylene & p-Xylene	14.03	91	4237521	42.03 ug/l	100
69) o-Xylene	14.86	91	2143592	20.66 ug/l	99
70) Styrene	14.92	104	1701411	21.15 ug/l	100
71) Isopropylbenzene	15.54	105	2885751	21.11 ug/l	100
73) Bromoform	15.57	173	208560	20.24 ug/l	99
74) trans-1,4-Dichloro-2-buten	15.64	53	96395	21.80 ug/l	97
75) 1,1,2,2-Tetrachloroethane	15.88	83	354915	20.80 ug/l	99
77) 1,2,3-Trichloropropane	16.16	110	95768	21.94 ug/l	98
78) n-Propylbenzene	16.31	91	3533479	21.21 ug/l	100
79) Bromobenzene	16.40	156	569509	21.60 ug/l	99

(#) = qualifier out of range (m) = manual integration
REV202.D VO01E11.M Mon May 13 14:32:27 2024

SU 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV202.D Vial: 8
Acq On : 11 May 2024 1:58 pm Operator: LPriet
Sample : VO01E117 2.0/10 Inst : 01
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:00 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.62	105	2263948	21.26	ug/l	99
81)	2-Chlorotoluene	16.65	91	2094475	20.88	ug/l	100
82)	4-Chlorotoluene	16.74	91	1908157	21.48	ug/l	100
83)	tert-Butylbenzene	17.30	134	478610	21.43	ug/l	99
84)	1,2,4-Trimethylbenzene	17.37	105	2219029	21.30	ug/l	100
85)	sec-Butylbenzene	17.67	105	3115101	21.28	ug/l	100
86)	p-Isopropyltoluene	17.89	119	2394992	21.23	ug/l	100
87)	1,3-Dichlorobenzene	18.04	146	1072675	21.41	ug/l	100
88)	1,2,3-Trimethylbenzene	18.14	105	2044493	21.02	ug/l	100
89)	1,4-Dichlorobenzene	18.20	146	1030532	20.98	ug/l	100
90)	n-Butylbenzene	18.50	91	2472290	21.16	ug/l	100
91)	1,2-Dichlorobenzene	18.74	146	871915	21.24	ug/l	100
92)	1,2-Dibromo-3-chloropropan	19.73	157	54040	20.05	ug/l	99
93)	1,2,4-Trichlorobenzene	20.81	180	660275	22.03	ug/l	100
94)	Hexachlorobutadiene	20.99	225	397807	22.28	ug/l	100
95)	Naphthalene	21.15	128	776440	22.20	ug/l	99
96)	1,2,3-Trichlorobenzene	21.48	180	496067	21.97	ug/l	100

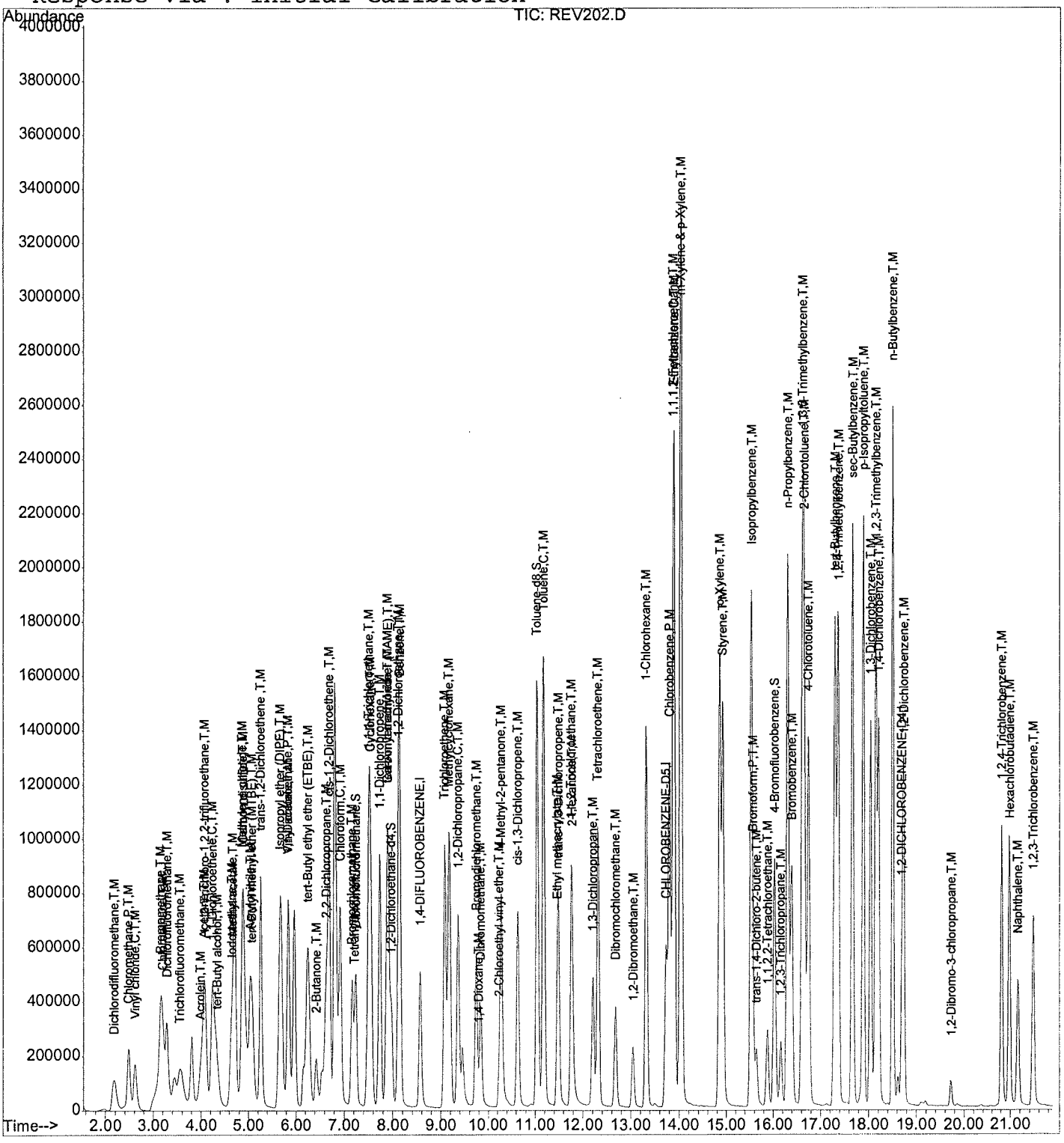
EM 5/15/24

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E11\REV202.D Vial: 8
Acq On : 11 May 2024 1:58 pm Operator: LPriet
Sample : VO01E117 2.0/10 Inst : 01
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:00 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV203.D
Acq On : 11 May 2024 2:27 pm
Sample : VO01E118 3.0/15
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 14:02 2024

Vial: 9
Operator: LPriet
Inst : 01
Multiplr: 1.00
Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	849708	10.00	ug/l	0.02
53) CHLOROBENZENE-D5	13.72	117	707238	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	267331	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	799087	30.38	ug/l	0.00
Spiked Amount 10.000			Recovery =	303.80%		
41) 1,2-Dichloroethane-d4	7.97	65	550662	30.70	ug/l	0.00
Spiked Amount 10.000			Recovery =	307.00%		
54) Toluene-d8	11.02	98	3115280	29.39	ug/l	-0.01
Spiked Amount 10.000			Recovery =	293.90%		
76) 4-Bromofluorobenzene	16.01	95	1073630	29.49	ug/l	0.00
Spiked Amount 10.000			Recovery =	294.90%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.18	85	673565	29.62	ug/l	98
5) Chloromethane	2.48	50	894520	28.10	ug/l	100
6) Vinyl chloride	2.61	62	776773	29.30	ug/l	100
7) Bromomethane	3.15	94	899449	29.03	ug/l	97
8) Chloroethane	3.20	64	574606	29.88	ug/l	100
9) Dichlorofluoromethane	3.27	67	1551702	28.41	ug/l	99
10) Trichlorofluoromethane	3.57	101	1032985	28.80	ug/l	99
11) Acrolein	3.98	56	286661	150.20	ug/l	97
12) 1,1,2-Trichloro-1,2,2-trif	4.07	151	554202	30.92	ug/l	100
13) Acetone	4.06	43	435360	140.37	ug/l	97
14) 1,1-Dichloroethene	4.23	61	1367312	30.17	ug/l	100
15) tert-Butyl alcohol	4.34	59	759636	803.08	ug/l	99
16) Iodomethane	4.65	142	1484308	30.55	ug/l	100
17) Methyl acetate	4.65	43	247532	29.27	ug/l	100
18) Methylene chloride	4.86	49	1052102	28.94	ug/l	100
19) Carbon disulfide	4.89	76	2879778	29.72	ug/l	100
20) Acrylonitrile	5.02	53	590477	150.07	ug/l	99
21) tert-Butyl methyl ether (M	5.06	73	1337887	30.02	ug/l	98
22) trans-1,2-Dichloroethene	5.26	61	1319053	30.21	ug/l	100
23) Isopropyl ether (DIPE)	5.67	45	2808667	30.11	ug/l	100
24) Vinyl acetate	5.82	43	1017586	31.77	ug/l	100
25) 1,1-Dichloroethane	5.83	63	1541259	30.19	ug/l	100
27) tert-Butyl ethyl ether (ET	6.23	59	2031979	30.40	ug/l	100
28) 2-Butanone	6.41	43	780834	164.07	ug/l	100
29) 2,2-Dichloropropane	6.63	77	1283925	29.91	ug/l	100
30) cis-1,2-Dichloroethene	6.69	96	1065003	30.30	ug/l	100
31) Chloroform	6.92	83	1477710	28.40	ug/l	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV203.D Vial: 9
Acq On : 11 May 2024 2:27 pm Operator: LPriet
Sample : VO01E118 3.0/15 Inst : 01
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:02 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.15	49	628929	30.78	ug/l	100
33)	Tetrahydrofuran	7.20	42	89460	29.72	ug/l	98
35)	1,1,1-Trichloroethane	7.49	97	1293540	29.71	ug/l	100
36)	Cyclohexane	7.52	84	1200311	28.31	ug/l	100
38)	1,1-Dichloropropene	7.73	110	446401	30.17	ug/l	99
39)	Carbon tetrachloride	7.88	119	976969	30.13	ug/l	100
40)	tert-Amyl methyl ether (TA	7.89	73	1549323	29.79	ug/l	99
42)	Benzene	8.13	78	3348702	29.50	ug/l	100
43)	1,2-Dichloroethane	8.10	62	692754	30.26	ug/l	99
44)	Trichloroethene	9.06	130	891995	30.38	ug/l	99
45)	Methylcyclohexane	9.17	83	1305359	27.98	ug/l	100
46)	1,2-Dichloropropane	9.35	63	761086	29.96	ug/l	100
47)	Bromodichloromethane	9.73	83	1014655	28.78	ug/l	100
48)	1,4-Dioxane	9.76	88	66102	635.70	ug/l	99
49)	Dibromomethane	9.82	93	364896	30.46	ug/l	97
50)	2-Chloroethyl vinyl ether	10.22	63	205504	31.88	ug/l	98
51)	4-Methyl-2-pentanone	10.26	43	1958633	150.19	ug/l	100
52)	cis-1,3-Dichloropropene	10.62	75	1217843	30.81	ug/l	100
55)	Toluene	11.17	91	3665193	29.18	ug/l	100
56)	Ethyl methacrylate	11.45	69	584066	30.99	ug/l	97
57)	trans-1,3-Dichloropropene	11.48	75	891028	30.52	ug/l	100
58)	1,1,2-Trichloroethane	11.75	97	494541	30.07	ug/l	99
59)	2-Hexanone	11.76	43	1192685	148.48	ug/l	99
60)	1,3-Dichloropropane	12.19	76	844763	30.26	ug/l	99
61)	Tetrachloroethene	12.29	164	772439	29.59	ug/l	99
62)	Dibromochloromethane	12.66	129	594252	29.60	ug/l	99
63)	1,2-Dibromoethane	13.03	107	501525	30.83	ug/l	99
64)	1-Chlorohexane	13.30	91	1608154	29.65	ug/l	100
65)	Chlorobenzene	13.79	112	2219576	29.64	ug/l	100
66)	1,1,1,2-Tetrachloroethane	13.86	131	687136	29.80	ug/l	99
67)	Ethylbenzene	13.88	91	4240845	29.59	ug/l	100
68)	m-Xylene & p-Xylene	14.01	91	6175129	58.85	ug/l	100
69)	o-Xylene	14.84	91	3177799	29.42	ug/l	100
70)	Styrene	14.90	104	2503360	29.90	ug/l	100
71)	Isopropylbenzene	15.52	105	4219160	29.65	ug/l	100
73)	Bromoform	15.55	173	312940	28.97	ug/l	99
74)	trans-1,4-Dichloro-2-buten	15.63	53	144056	31.24	ug/l	96
75)	1,1,2,2-Tetrachloroethane	15.86	83	534853	30.05	ug/l	99
77)	1,2,3-Trichloropropane	16.15	110	141561	31.09	ug/l	97
78)	n-Propylbenzene	16.29	91	5144010	29.59	ug/l	100
79)	Bromobenzene	16.38	156	831254	30.23	ug/l	100

(#) = qualifier out of range (m) = manual integration

5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV203.D
Acq On : 11 May 2024 2:27 pm
Sample : VO01E118 3.0/15
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 14:02 2024

Vial: 9
Operator: LPriet
Inst : 01
Multiplr: 1.00
Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	3300850	29.72	ug/l	99
81)	2-Chlorotoluene	16.63	91	3091027	29.54	ug/l	100
82)	4-Chlorotoluene	16.72	91	2792432	30.14	ug/l	99
83)	tert-Butylbenzene	17.29	134	693102	29.75	ug/l	99
84)	1,2,4-Trimethylbenzene	17.35	105	3247834	29.89	ug/l	99
85)	sec-Butylbenzene	17.66	105	4497766	29.46	ug/l	100
86)	p-Isopropyltoluene	17.88	119	3456736	29.37	ug/l	100
87)	1,3-Dichlorobenzene	18.03	146	1566009	29.97	ug/l	100
88)	1,2,3-Trimethylbenzene	18.13	105	3006443	29.63	ug/l	100
89)	1,4-Dichlorobenzene	18.19	146	1511456	29.50	ug/l	100
90)	n-Butylbenzene	18.49	91	3615477	29.66	ug/l	100
91)	1,2-Dichlorobenzene	18.72	146	1277031	29.82	ug/l	100
92)	1,2-Dibromo-3-chloropropan	19.72	157	81915	28.90	ug/l	100
93)	1,2,4-Trichlorobenzene	20.80	180	991777	31.73	ug/l	100
94)	Hexachlorobutadiene	20.96	225	585385	31.43	ug/l	99
95)	Naphthalene	21.14	128	1169103	32.04	ug/l	100
96)	1,2,3-Trichlorobenzene	21.46	180	737458	31.32	ug/l	99

(#) = qualifier out of range (m) = manual integration

SA 5/15/24

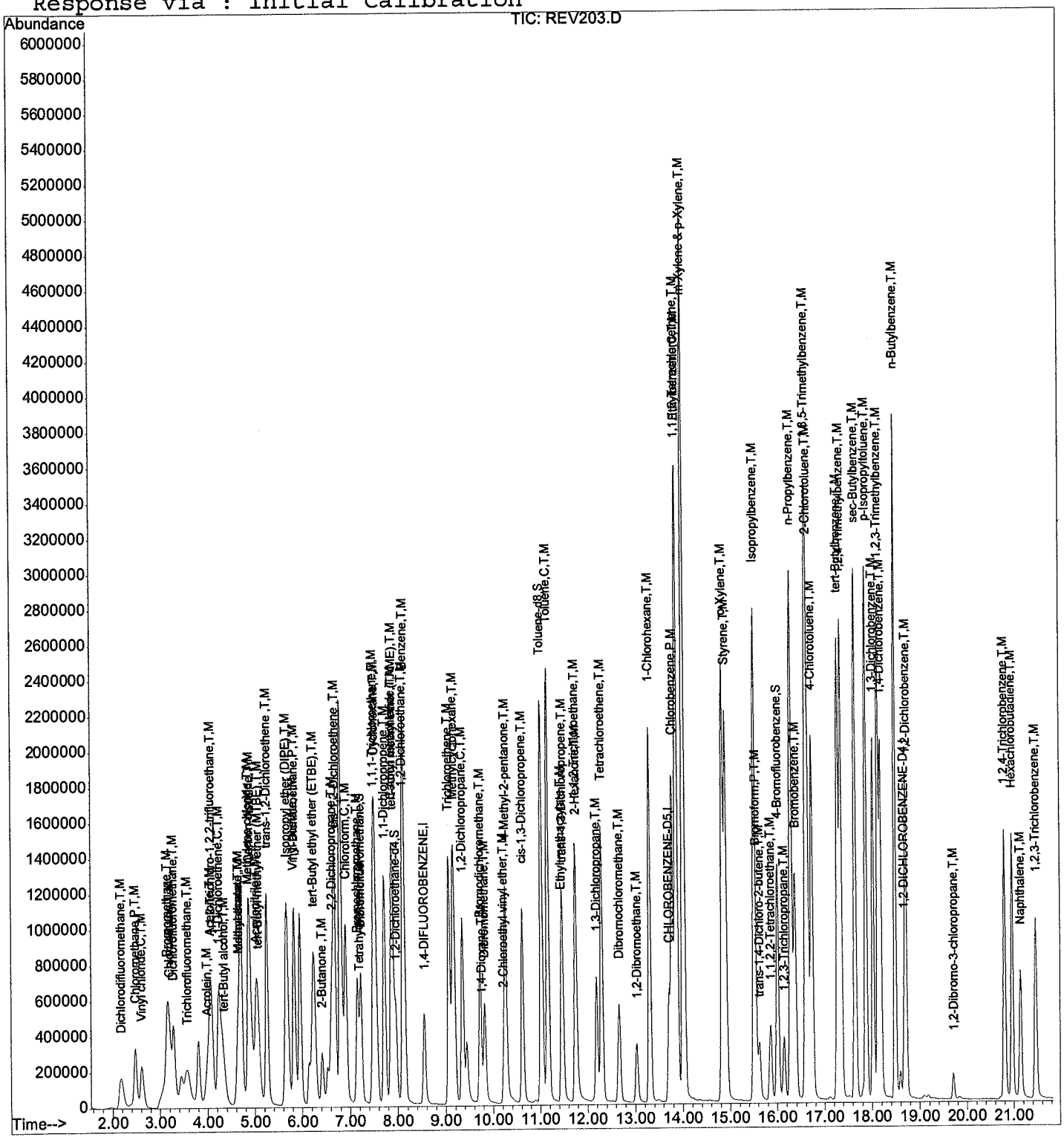
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E11\REV203.D
Acq On : 11 May 2024 2:27 pm
Sample : VO01E118 3.0/15
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 14:02 2024

Vial: 9
Operator: LPriet
Inst : 01
Multiplr: 1.00

Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV204.D Vial: 10
Acq On : 11 May 2024 2:56 pm Operator: LPriet
Sample : VO01E119 5.0/25 Inst : 01
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:33 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	790188	10.00	ug/l	0.01
53) CHLOROBENZENE-D5	13.71	117	650561	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	247844	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	0.00	98	0d	0.00	ug/l	
Spiked Amount 10.000			Recovery =	0.00%		
76) 4-Bromofluorobenzene	0.00	95	0d	0.00	ug/l	
Spiked Amount 10.000			Recovery =	0.00%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.17	85	1081177	51.13	ug/l	98
5) Chloromethane	2.47	50	1438807	48.60	ug/l	100
6) Vinyl chloride	2.62	62	1235915	50.13	ug/l	100
7) Bromomethane	3.15	94	1484374	51.68	ug/l	98
8) Chloroethane	3.20	64	946787	52.94	ug/l	99
9) Dichlorofluoromethane	3.29	67	2533049	49.87	ug/l	98
10) Trichlorofluoromethane	3.57	101	1663384	49.87	ug/l	99
11) Acrolein	3.98	56	473669	266.87	ug/l	99
12) 1,1,2-Trichloro-1,2,2-trif	4.07	151	901773	54.10	ug/l	100
13) Acetone	4.06	43	730855	253.40	ug/l	100
14) 1,1-Dichloroethene	4.24	61	2222510	52.74	ug/l	100
15) tert-Butyl alcohol	4.34	59	1234938	1403.91	ug/l	99
16) Iodomethane	4.64	142	2410819	53.35	ug/l	100
18) Methylene chloride	4.86	49	1737751	51.40	ug/l	100
20) Acrylonitrile	5.02	53	973695	266.10	ug/l	99
21) tert-Butyl methyl ether (M	5.07	73	2163847	52.20	ug/l	99
22) trans-1,2-Dichloroethene	5.26	61	2150916	52.97	ug/l	99
23) Isopropyl ether (DIPE)	5.67	45	4495028	51.81	ug/l	99
24) Vinyl acetate	5.82	43	1638323	55.01	ug/l	100
25) 1,1-Dichloroethane	5.84	63	2492540	52.49	ug/l	100
27) tert-Butyl ethyl ether (ET	6.25	59	3217505	51.76	ug/l	98
28) 2-Butanone	6.41	43	1277785	288.71	ug/l	100
29) 2,2-Dichloropropane	6.64	77	2063550	51.69	ug/l	100
30) cis-1,2-Dichloroethene	6.68	96	1715982	52.50	ug/l	99
31) Chloroform	6.92	83	2420327	50.02	ug/l	100
32) Bromochloromethane	7.15	49	1013155	53.31	ug/l	98
33) Tetrahydrofuran	7.20	42	153627	54.88	ug/l	97

(#) = qualifier out of range (m) = manual integration

SA 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV204.D
Acq On : 11 May 2024 2:56 pm
Sample : VO01E119 5.0/25
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 14:33 2024

Vial: 10
Operator: LPriet
Inst : 01
Multiplr: 1.00
Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
35)	1,1,1-Trichloroethane	7.51	97	2111400	52.15	ug/l	100
38)	1,1-Dichloropropene	7.73	110	723523	52.58	ug/l	99
39)	Carbon tetrachloride	7.88	119	1591100	52.76	ug/l	99
40)	tert-Amyl methyl ether (TA	7.90	73	2542219	52.56	ug/l	99
42)	Benzene	8.13	78	5383213	50.99	ug/l	100
43)	1,2-Dichloroethane	8.10	62	1118925	52.56	ug/l	100
44)	Trichloroethene	9.08	130	1468714	53.79	ug/l	99
46)	1,2-Dichloropropane	9.34	63	1258335	53.27	ug/l	100
47)	Bromodichloromethane	9.73	83	1690988	51.58	ug/l	100
48)	1,4-Dioxane	9.76	88	113358	1172.28	ug/l	97
49)	Dibromomethane	9.82	93	602961	54.12	ug/l	98
50)	2-Chloroethyl vinyl ether	10.22	63	329105	54.91	ug/l	98
51)	4-Methyl-2-pentanone	10.26	43	3235283	264.67	ug/l	99
52)	cis-1,3-Dichloropropene	10.62	75	1992729	54.21	ug/l	99
55)	Toluene	11.17	91	6025151	52.15	ug/l	100
56)	Ethyl methacrylate	11.45	69	966319	55.74	ug/l	98
57)	trans-1,3-Dichloropropene	11.48	75	1465798	54.58	ug/l	99
58)	1,1,2-Trichloroethane	11.74	97	796053	52.63	ug/l	100
59)	2-Hexanone	11.74	43	1992542	265.71	ug/l	99
60)	1,3-Dichloropropane	12.19	76	1380516	53.77	ug/l	99
61)	Tetrachloroethene	12.29	164	1249230	52.02	ug/l	100
62)	Dibromochloromethane	12.66	129	985487	53.37	ug/l	99
63)	1,2-Dibromoethane	13.03	107	822866	54.99	ug/l	99
64)	1-Chlorohexane	13.30	91	2572709	51.57	ug/l	100
65)	Chlorobenzene	13.79	112	3610696	52.42	ug/l	99
66)	1,1,1,2-Tetrachloroethane	13.86	131	1116459	52.63	ug/l	99
67)	Ethylbenzene	13.88	91	6718588	50.95	ug/l	99
68)	m-Xylene & p-Xylene	14.03	91	9682404	100.31	ug/l	99
69)	o-Xylene	14.84	91	5069451	51.03	ug/l	99
70)	Styrene	14.90	104	4017810	52.17	ug/l	99
71)	Isopropylbenzene	15.52	105	6705142	51.23	ug/l	100
73)	Bromoform	15.55	173	504524	50.13	ug/l	99
74)	trans-1,4-Dichloro-2-buten	15.63	53	237301	55.50	ug/l	96
75)	1,1,2,2-Tetrachloroethane	15.86	83	869256	52.68	ug/l	99
77)	1,2,3-Trichloropropane	16.14	110	235480	55.79	ug/l	92
78)	n-Propylbenzene	16.29	91	8220515	51.01	ug/l	100
79)	Bromobenzene	16.38	156	1345207	52.77	ug/l	100
80)	1,3,5-Trimethylbenzene	16.60	105	5240717	50.90	ug/l	99
81)	2-Chlorotoluene	16.63	91	4859918	50.09	ug/l	95
82)	4-Chlorotoluene	16.74	91	4476659	52.12	ug/l	97
83)	tert-Butylbenzene	17.29	134	1119401	51.83	ug/l	98

(#) = qualifier out of range (m) = manual integration

5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV204.D Vial: 10
Acq On : 11 May 2024 2:56 pm Operator: LPriet
Sample : VO01E119 5.0/25 Inst : 01
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:33 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
84)	1,2,4-Trimethylbenzene	17.36	105	5150477	51.12	ug/l	99
85)	sec-Butylbenzene	17.66	105	7213677	50.97	ug/l	100
86)	p-Isopropyltoluene	17.88	119	5536086	50.73	ug/l	100
87)	1,3-Dichlorobenzene	18.03	146	2506660	51.74	ug/l	100
88)	1,2,3-Trimethylbenzene	18.13	105	4772026	50.74	ug/l	99
89)	1,4-Dichlorobenzene	18.19	146	2389062	50.30	ug/l	99
90)	n-Butylbenzene	18.49	91	5704101	50.47	ug/l	100
91)	1,2-Dichlorobenzene	18.72	146	2055877	51.79	ug/l	100
92)	1,2-Dibromo-3-chloropropan	19.71	157	138333	52.22	ug/l	99
93)	1,2,4-Trichlorobenzene	20.80	180	1603778	55.34	ug/l	100
94)	Hexachlorobutadiene	20.97	225	940175	54.45	ug/l	100
95)	Naphthalene	21.15	128	1911993	56.52	ug/l	100
96)	1,2,3-Trichlorobenzene	21.46	180	1194867	54.73	ug/l	100

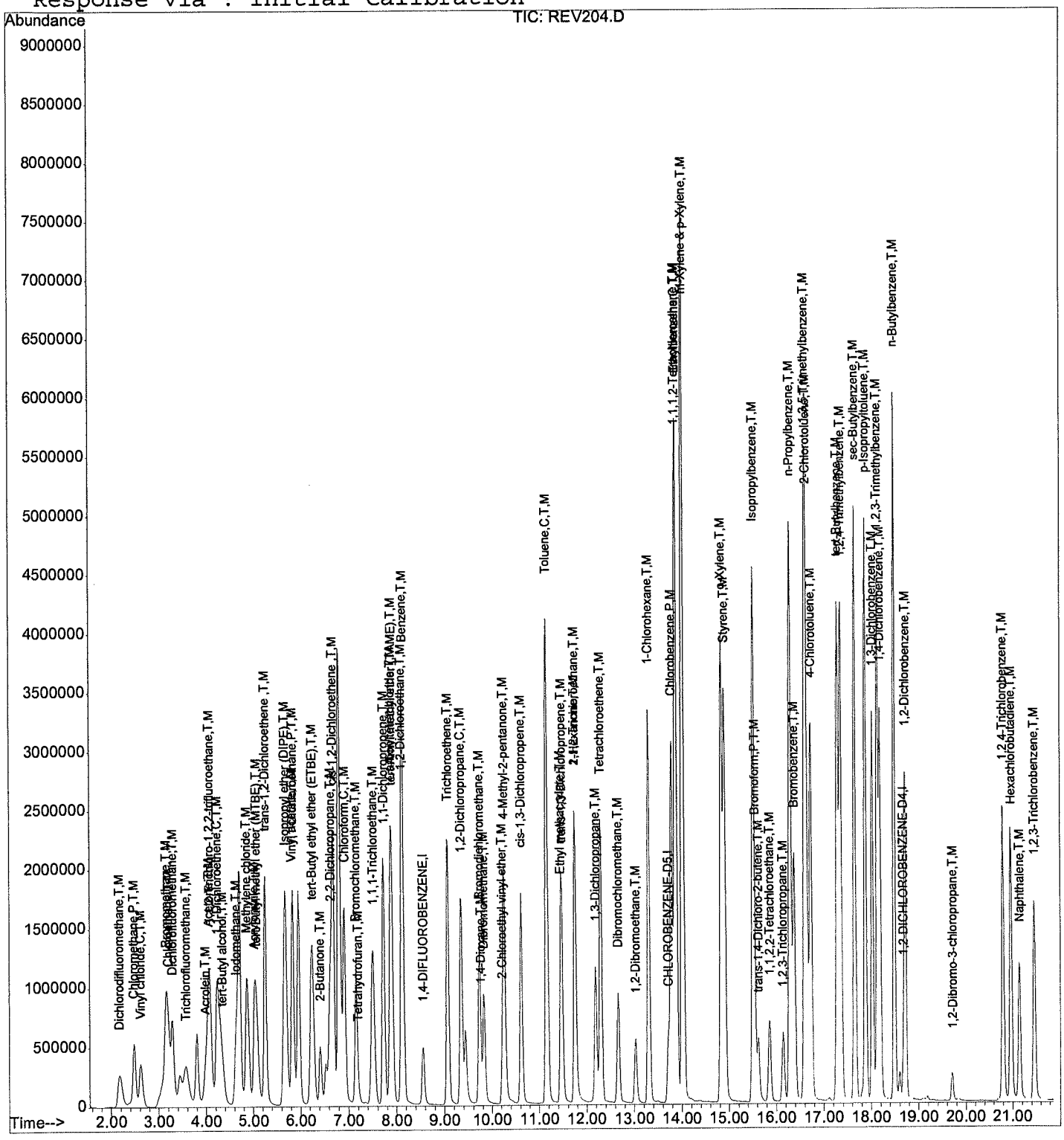
SH 5/15/24

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E11\REV204.D Vial: 10
Acq On : 11 May 2024 2:56 pm Operator: LPriet
Sample : VO01E119 5.0/25 Inst : 01
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:33 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV205.D Vial: 11
Acq On : 11 May 2024 3:26 pm Operator: LPriet
Sample : VO01DE1110 10/50 Inst : 01
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:34 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	813917	10.00	ug/l	0.02
53) CHLOROBENZENE-D5	13.72	117	663851	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	236992	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	0.00	98	0d	0.00	ug/l	
Spiked Amount 10.000			Recovery =	0.00%		
76) 4-Bromofluorobenzene	0.00	95	0d	0.00	ug/l	
Spiked Amount 10.000			Recovery =	0.00%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.18	85	2149061	98.68	ug/l	98
5) Chloromethane	2.48	50	2757462	90.43	ug/l	99
6) Vinyl chloride	2.61	62	2275750	89.61	ug/l	100
7) Bromomethane	3.15	94	2950163	99.92	ug/l	97
8) Chloroethane	3.20	64	1887602	102.46	ug/l	99
9) Dichlorofluoromethane	3.29	67	4893407	93.53	ug/l	98
10) Trichlorofluoromethane	3.57	101	3259184	94.86	ug/l	100
11) Acrolein	4.00	56	920713	503.62	ug/l	97
12) 1,1,2-Trichloro-1,2,2-trif	4.09	151	1635111	95.23	ug/l	100
13) Acetone	4.07	43	1378975	464.17	ug/l	96
14) 1,1-Dichloroethene	4.24	61	4287129	98.76	ug/l	100
15) tert-Butyl alcohol	4.34	59	2428061	2679.81	ug/l	99
16) Iodomethane	4.65	142	4731046	101.65	ug/l	100
18) Methylene chloride	4.87	49	3383840	97.16	ug/l	99
20) Acrylonitrile	5.02	53	1892610	502.15	ug/l	99
21) tert-Butyl methyl ether (M	5.07	73	4236425	99.23	ug/l	99
22) trans-1,2-Dichloroethene	5.26	61	4113790	98.36	ug/l	100
23) Isopropyl ether (DIPE)	5.67	45	8979646	100.48	ug/l	100
24) Vinyl acetate	5.82	43	3315001	108.06	ug/l	99
25) 1,1-Dichloroethane	5.84	63	4821432	98.58	ug/l	100
27) tert-Butyl ethyl ether (ET	6.25	59	6309833	98.54	ug/l	98
28) 2-Butanone	6.41	43	2458656	539.33	ug/l	99
29) 2,2-Dichloropropane	6.64	77	3940507	95.83	ug/l	100
30) cis-1,2-Dichloroethene	6.69	96	3330208	98.92	ug/l	99
31) Chloroform	6.92	83	4814377	96.59	ug/l	100
32) Bromochloromethane	7.15	49	1957186	99.99	ug/l	98
33) Tetrahydrofuran	7.20	42	291915	101.24	ug/l	96

(#) = qualifier out of range (m) = manual integration

SU 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV205.D Vial: 11
Acq On : 11 May 2024 3:26 pm Operator: LPriet
Sample : VO01DE1110 10/50 Inst : 01
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:34 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
35)	1,1,1-Trichloroethane	7.51	97	4134538	99.15	ug/l	100
38)	1,1-Dichloropropene	7.73	110	1407010	99.26	ug/l	98
39)	Carbon tetrachloride	7.88	119	3044744	98.02	ug/l	99
40)	tert-Amyl methyl ether (TA	7.89	73	4847551	97.30	ug/l	99
42)	Benzene	8.13	78	10614708	97.62	ug/l	100
43)	1,2-Dichloroethane	8.10	62	2198375	100.25	ug/l	100
44)	Trichloroethene	9.06	130	2868237	101.98	ug/l	99
46)	1,2-Dichloropropane	9.35	63	2435072	100.09	ug/l	100
47)	Bromodichloromethane	9.73	83	3272651	96.91	ug/l	100
48)	1,4-Dioxane	9.76	88	217292	2181.59	ug/l	95
49)	Dibromomethane	9.82	93	1156972	100.82	ug/l	98
50)	2-Chloroethyl vinyl ether	10.22	63	641035	103.83	ug/l	97
51)	4-Methyl-2-pentanone	10.26	43	6179211	488.45	ug/l	100
52)	cis-1,3-Dichloropropene	10.62	75	3875584	102.36	ug/l	99
55)	Toluene	11.17	91	11521987	97.73	ug/l	99
56)	Ethyl methacrylate	11.45	69	1848777	104.51	ug/l	97
57)	trans-1,3-Dichloropropene	11.48	75	2820520	102.93	ug/l	99
58)	1,1,2-Trichloroethane	11.75	97	1530353	99.15	ug/l	99
59)	2-Hexanone	11.75	43	3802288	492.69	ug/l	100
60)	1,3-Dichloropropane	12.19	76	2688647	102.62	ug/l	99
61)	Tetrachloroethene	12.31	164	2415182	98.56	ug/l	100
62)	Dibromochloromethane	12.66	129	1898169	100.74	ug/l	99
63)	1,2-Dibromoethane	13.03	107	1574680	103.12	ug/l	99
64)	1-Chlorohexane	13.30	91	4899203	96.24	ug/l	100
65)	Chlorobenzene	13.79	112	6936484	98.69	ug/l	99
66)	1,1,1,2-Tetrachloroethane	13.86	131	2153843	99.50	ug/l	99
67)	Ethylbenzene	13.88	91	12839879	95.43	ug/l	98
68)	m-Xylene & p-Xylene	14.03	91	18532298	188.15	ug/l	98
69)	o-Xylene	14.84	91	9582592	94.53	ug/l	98
70)	Styrene	14.90	104	7538023	95.93	ug/l	99
71)	Isopropylbenzene	15.52	105	12772431	95.63	ug/l	99
73)	Bromoform	15.55	173	986318	102.14	ug/l	99
74)	trans-1,4-Dichloro-2-buten	15.63	53	446145	109.12	ug/l	93
75)	1,1,2,2-Tetrachloroethane	15.86	83	1626217	103.07	ug/l	99
77)	1,2,3-Trichloropropane	16.15	110	438929	108.75	ug/l	92
78)	n-Propylbenzene	16.29	91	15596079	101.22	ug/l	99
79)	Bromobenzene	16.38	156	2566592	105.28	ug/l	100
80)	1,3,5-Trimethylbenzene	16.61	105	9823432	99.77	ug/l	98
81)	2-Chlorotoluene	16.63	91	9603952	103.52	ug/l	98
82)	4-Chlorotoluene	16.74	91	7702833	93.79	ug/l	98
83)	tert-Butylbenzene	17.29	134	2120781	102.68	ug/l	96

(#) = qualifier out of range (m) = manual integration SU 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV205.D Vial: 11
Acq On : 11 May 2024 3:26 pm Operator: LPriet
Sample : VO01DE1110 10/50 Inst : 01
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:34 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
84)	1,2,4-Trimethylbenzene	17.36	105	9615877	99.82	ug/l	97
85)	sec-Butylbenzene	17.66	105	13298763	98.26	ug/l	99
86)	p-Isopropyltoluene	17.88	119	10259365	98.33	ug/l	99
87)	1,3-Dichlorobenzene	18.03	146	4662217	100.65	ug/l	100
88)	1,2,3-Trimethylbenzene	18.13	105	8781878	97.65	ug/l	99
89)	1,4-Dichlorobenzene	18.19	146	4430571	97.55	ug/l	100
90)	n-Butylbenzene	18.49	91	10299843	95.31	ug/l	99
91)	1,2-Dichlorobenzene	18.72	146	3781801	99.63	ug/l	100
92)	1,2-Dibromo-3-chloropropan	19.72	157	255821	100.50	ug/l	100
93)	1,2,4-Trichlorobenzene	20.80	180	2909800	105.00	ug/l	100
94)	Hexachlorobutadiene	20.98	225	1658054	100.43	ug/l	100
95)	Naphthalene	21.14	128	3426614	105.94	ug/l	100
96)	1,2,3-Trichlorobenzene	21.46	180	2169257	103.91	ug/l	100

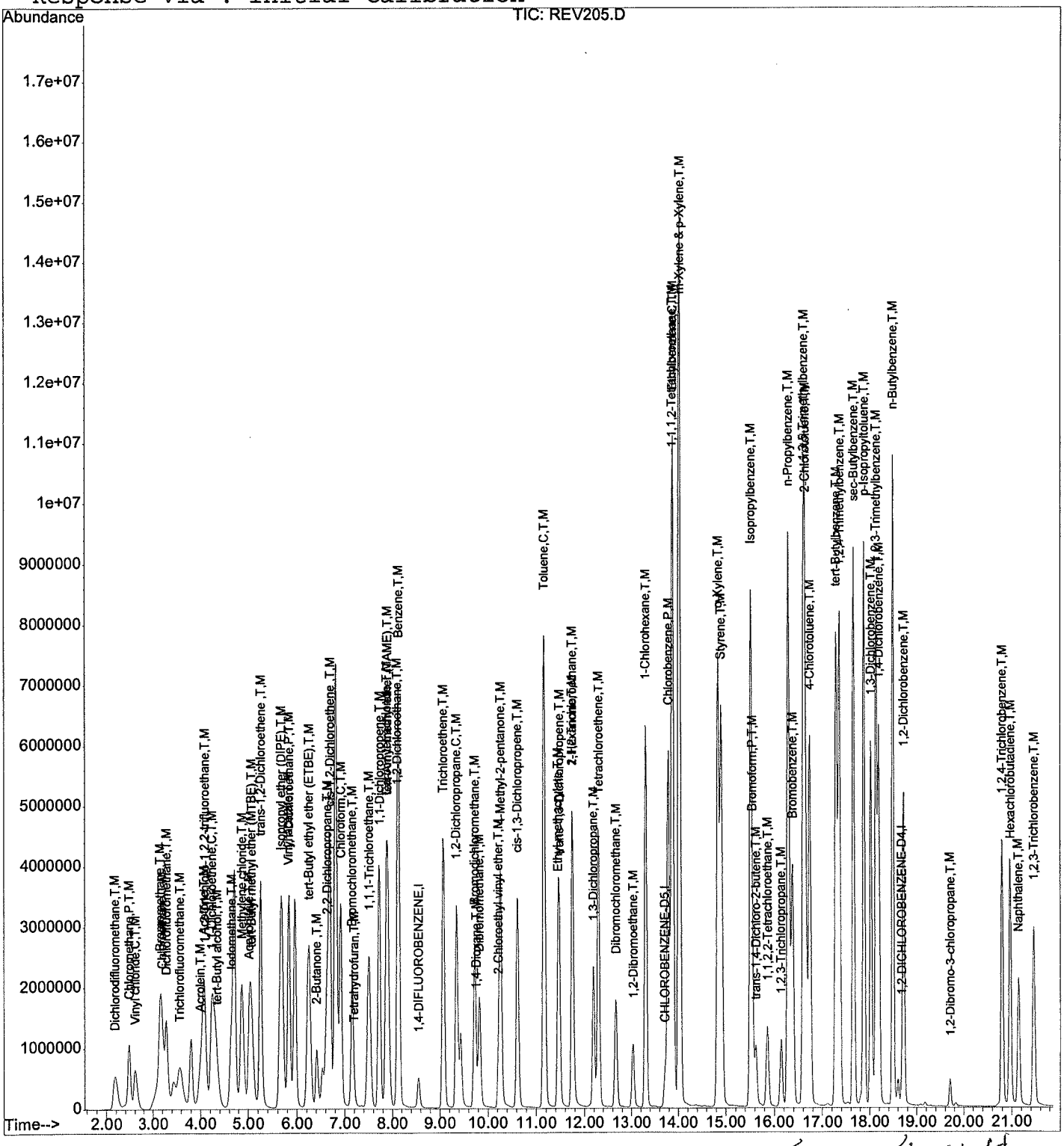
SA 5/15/24

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E11\REV205.D Vial: 11
Acq On : 11 May 2024 3:26 pm Operator: LPriet
Sample : VO01DE1110 10/50 Inst : 01
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:34 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



Su 5/15/24

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: REV209 BFB Injection Date: 05/13/24

Instrument ID: 01 BFB Injection Time: 11:31

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	17.676
75	30 - 60% of mass 95	40.505
95	Base Peak, 100% relative abundance	100.000
96	5 - 9% of mass 95	6.366
173	Less than 2% of mass 174	0.000(0)1
174	Greater than 50% of mass 95	77.234
175	5 - 9% of mass 174	5.650(7.32)1
176	95 - 101% % of mass 174	75.082(97.21)1
177	5 - 9% % of mass 176	4.812(6.41)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	VSTD10	IVO01E1102	REV210	05/13/24	12:06

SU 5/15/24

CONTINUE_CALIBRATION - CALIBRATION VERIFICATION

Instrument ID :01
IC_Beginning DateTime :05/11/24 10:58
Spike Amount :10 PPB
CC/CV File :REV210
IC File :REV201

Column Spec :RXI-624SILMS ID :0.25MM
IC_Ending DateTime :05/11/24 15:26
HPChem Method :V001E11
Date_Time :05/13/24 12:06

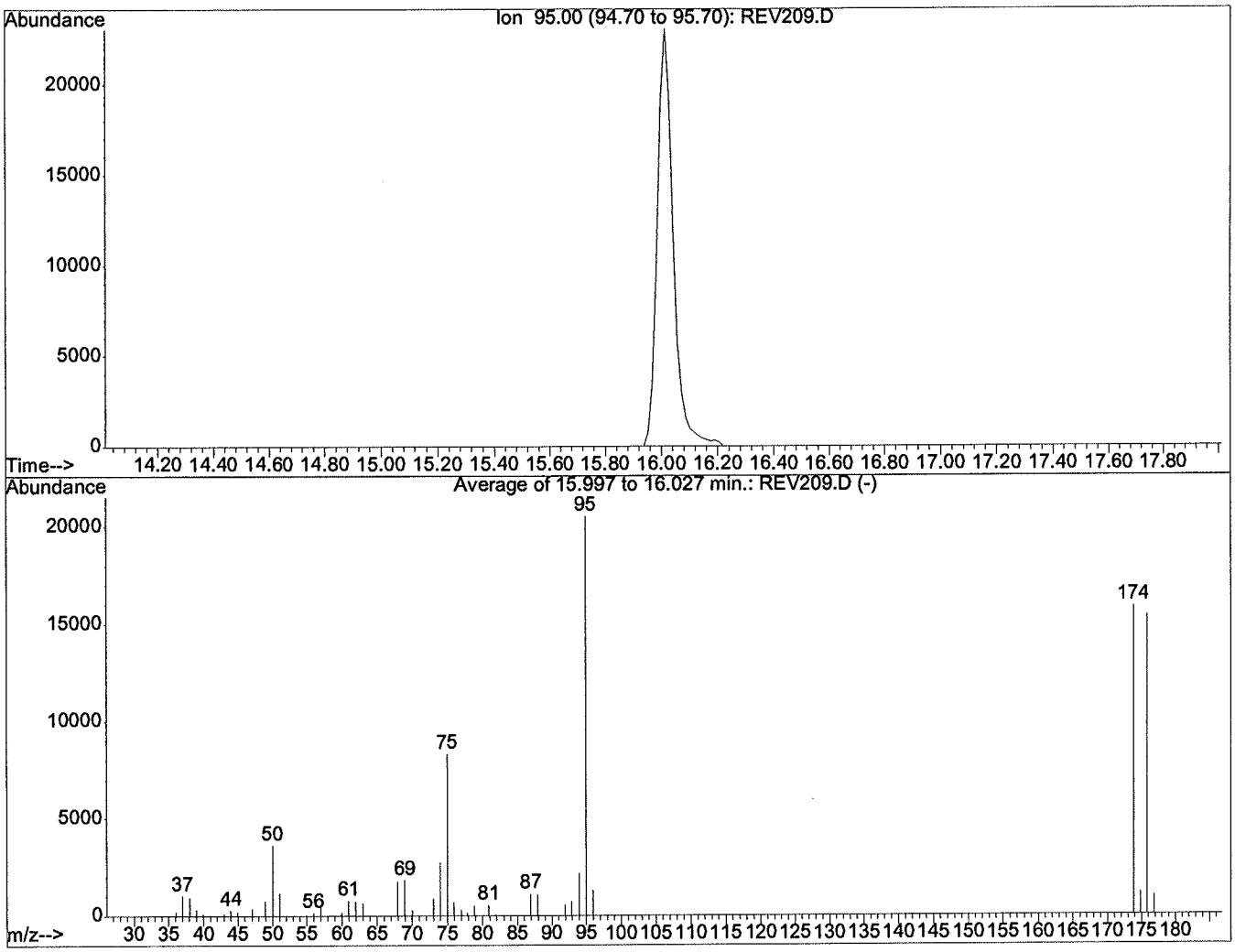
M	IDX	Parameters	CC_Con	CC%_D	CC_Resp	CCRRF	AvRRF	CC_Rtm	AvRtm	%_RSD	Co_X0	Co_X1	Co_X2	Co_Cor
	1	1,4-DIFLUOROBENZENE	10.000	0	907856	1	1	8.546	8.551	0				
	2	Chlorotrifluoroethylene												
	3	Dichlorodifluoromethane	10.744	7.4	261017	0.288	0.268	2.174	2.169	4.44				
	4	2-Chloro-1,1,1-trifluoroethane												
	5	Chloromethane	10.222	2.2	347692	0.383	0.375	2.487	2.471	7.39				
	6	Vinyl chloride	11.091	10.9	314201	0.346	0.312	2.615	2.605	6.31				
	7	Bromomethane	9.886	-1.1	332015	0.366	0.396	3.154	3.146	17.96	0.0078	0.3620		0.9993
	8	Chloroethane	9.929	-0.7	204024	0.225	0.226	3.198	3.190	4.21				
	9	Dichlorofluoromethane	9.809	-1.9	572473	0.631	0.643	3.287	3.276	8.21				
	10	Trichlorofluoromethane	10.405	4.0	398783	0.439	0.422	3.554	3.553	5.20				
5	11	Acrolein	46.638	-6.7	95103	0.021	0.022	3.984	3.986	5.86				
	12	1,1,2-Trichloro-1,2,2-trifluoroethane	10.699	7.0	204924	0.226	0.211	4.073	4.070	8.11				
5	13	Acetone	46.249	-7.5	153258	0.034	0.037	4.058	4.058	14.45				
	14	1,1-Dichloroethene	10.534	5.3	510086	0.562	0.533	4.235	4.230	4.74				
25	15	tert-Butyl alcohol	272.706	9.1	275606	0.012	0.011	4.339	4.342	9.12				
	16	Iodomethane	10.129	1.3	525854	0.579	0.572	4.635	4.639	4.85				
	17	Methyl acetate	9.648	-3.5	87177	0.096	0.100	4.650	4.653	10.84				
	18	Methylene chloride	10.396	4.0	403861	0.445	0.428	4.858	4.858	3.90				
	19	Carbon disulfide	9.410	-5.9	974363	1.073	1.140	4.887	4.880	6.08				
5	20	Acrylonitrile	49.767	-0.5	209223	0.046	0.046	5.021	5.025	4.77				
	21	tert-Butyl methyl ether (MTBE)	10.216	2.2	486511	0.536	0.525	5.065	5.061	4.67				
	22	trans-1,2-Dichloroethene	10.334	3.3	482107	0.531	0.514	5.243	5.249	4.44				
	23	Isopropyl ether (DIPE)	10.406	4.1	1037346	1.143	1.098	5.658	5.670	4.21				
	24	Vinyl acetate	10.436	4.4	357100	0.393	0.377	5.821	5.832	9.82				
	25	1,1-Dichloroethane	10.385	3.9	566566	0.624	0.601	5.821	5.830	4.54				
25	26	2-Butanol												
	27	tert-Butyl ethyl ether (ETBE)	10.658	6.6	761232	0.838	0.787	6.235	6.240	4.52				
5	28	2-Butanone	52.383	4.8	266366	0.059	0.056	6.413	6.428	10.70				
	29	2,2-Dichloropropane	10.370	3.7	475647	0.524	0.505	6.621	6.628	4.21				
	30	cis-1,2-Dichloroethene	10.325	3.2	387725	0.427	0.414	6.680	6.686	4.03				
	31	Chloroform	9.820	-1.8	545984	0.601	0.612	6.902	6.908	8.00				
	32	Bromochloromethane	10.539	5.4	230106	0.253	0.240	7.139	7.148	4.73				
	33	Tetrahydrofuran	10.289	2.9	33093	0.036	0.035	7.198	7.201	8.25				
	34	Dibromofluoromethane	9.898	-1.0	278148	0.306	0.310	7.228	7.228	7.01				
	35	1,1,1-Trichloroethane	10.373	3.7	482510	0.531	0.512	7.495	7.499	4.19				
	36	Cyclohexane	10.548	5.5	477860	0.526	0.499	7.524	7.524	6.15				
	37	2,2,4-Trimethylpentane												
	38	1,1-Dichloropropene	10.276	2.8	162485	0.179	0.174	7.717	7.723	4.16				
	39	Carbon tetrachloride	10.352	3.5	358693	0.395	0.382	7.880	7.878	4.43				
	40	tert-Amyl methyl ether (TAME)	10.127	1.3	562793	0.620	0.612	7.880	7.889	5.64				
	41	1,2-Dichloroethane-d4	9.949	-0.5	190681	0.210	0.211	7.954	7.965	7.18				
	42	Benzene	10.090	0.9	1223803	1.348	1.336	8.132	8.130	4.04				
	43	1,2-Dichloroethane	10.336	3.4	252838	0.279	0.269	8.102	8.104	4.45				
	44	Trichloroethene	10.150	1.5	318416	0.351	0.346	9.064	9.072	4.96				
	45	Methylcyclohexane	10.259	2.6	511326	0.563	0.549	9.153	9.165	6.46				
	46	1,2-Dichloropropane	10.115	1.1	274499	0.302	0.299	9.346	9.351	5.38				
	47	Bromodichloromethane	9.862	-1.4	371496	0.409	0.415	9.716	9.732	6.99				
20	48	1,4-Dioxane	205.358	2.7	22815	0.001	0.001	9.775	9.783	14.49				
	49	Dibromomethane	10.344	3.4	132415	0.146	0.141	9.820	9.823	5.30				
	50	2-Chloroethyl vinyl ether	10.212	2.1	70329	0.077	0.076	10.220	10.234	8.06				
5	51	4-Methyl-2-pentanone	49.033	-1.9	657246	0.145	0.136	10.264	10.276	18.90	-0.0424	0.1563		0.9988
	52	cis-1,3-Dichloropropene	10.274	2.7	433879	0.478	0.465	10.620	10.625	5.31				
	53	CHLOROBENZENE-D5	10.000	0	757489	1	1	13.716	13.717	0				
	54	Toluene-d8	9.566	-4.3	1085971	1.434	1.499	11.020	11.030	5.48				
	55	Toluene	9.906	-0.9	1332719	1.759	1.776	11.153	11.169	4.50				
	56	Ethyl methacrylate	10.213	2.1	206172	0.272	0.266	11.449	11.471	8.54				
	57	trans-1,3-Dichloropropene	10.298	3.0	322019	0.425	0.413	11.479	11.484	5.62				
	58	1,1,2-Trichloroethane	10.145	1.5	178678	0.236	0.233	11.746	11.751	4.45				
5	59	2-Hexanone	47.364	-5.3	378200	0.100	0.090	11.761	11.791	36.80	-0.0568	0.1174		0.9987
	60	1,3-Dichloropropane	10.169	1.7	304011	0.401	0.395	12.190	12.195	5.08				
	61	Tetrachloroethene	9.999	-0.0	279605	0.369	0.369	12.294	12.299	3.83				
	62	Dibromochloromethane	10.064	0.6	216381	0.286	0.284	12.664	12.667	5.55				
	63	1,2-Dibromoethane	10.349	3.5	180319	0.238	0.230	13.035	13.038	6.28				
	64	1-Chlorohexane	10.259	2.6	595972	0.787	0.767	13.301	13.308	4.69				
	65	Chlorobenzene	10.061	0.6	806907	1.065	1.059	13.775	13.791	3.64				
	66	1,1,1,2-Tetrachloroethane	10.136	1.4	250367	0.331	0.326	13.864	13.865	3.59				
	67	Ethylbenzene	9.991	-0.1	1533890	2.025	2.027	13.879	13.881	4.07				
2	68	m-Xylene & p-Xylene	20.234	1.2	2274121	1.501	1.484	14.012	14.021	4.23				
	69	o-Xylene	9.950	-0.5	1150973	1.519	1.527	14.827	14.843	4.66				
	70	Styrene	9.968	-0.3	893787	1.180	1.184	14.901	14.909	3.78				
	71	Isopropylbenzene	10.036	0.4	1529556	2.019	2.012	15.509	15.524	3.97				
	72	1,2-DICHLOROBENZENE-D4	10.000	0	290545	1	1	18.679	18.680	0				
	73	Bromoform	9.781	-2.2	112241	0.386	0.350	15.553	15.559	20.61	-0.0135	0.4088		0.9992
	74	trans-1,4-Dichloro-2-butene	10.276	2.8	51511	0.177	0.173	15.627	15.634	9.77				
	75	1,1,2,2-Tetrachloroethane	9.917	-0.8	191835	0.660	0.666	15.849	15.865	6.36				
	76	4-Bromofluorobenzene	9.429	-5.7	373151	1.284	1.362	15.998	16.015	6.06				
	77	1,2,3-Trichloropropane	10.138	1.4	50167	0.173	0.170	16.146	16.152	9.82				
	78	n-Propylbenzene	9.836	-1.6	1858212	6.396	6.502	16.294	16.298	5.03				
	79	Bromobenzene	9.996	-0.0	298744	1.028	1.029	16.383	16.383	5.26				
	80	1,3,5-Trimethylbenzene	9.883	-1.2	1193060	4.106	4.155	16.605	16.606	5.49				
	81	2-Chlorotoluene	10.005	0.1	1138017	3.917	3.915	16.635	16.635	4.84				
	82	4-Chlorotoluene	10.002	0.0	1007192	3.467	3.466	16.723	16.733	5.46				
	83	tert-Butylbenzene	9.950	-0.5	251948	0.867	0.871	17.287	17.287	4.70				
	84	1,2,4-Trimethylbenzene	9.900	-1.0	1169308	4.025	4.065	17.346	17.360	4.41				
	85	sec-Butylbenzene	9.967	-0.3	1653826	5.692	5.711	17.657	17.658	5.27				
	86	p-Isopropyltoluene	9.795	-2.0	1252965	4.312	4.403	17.879	17.880	5.17				
	87	1,3-Dichlorobenzene	10.012	0.1	568580	1.957	1.955	18.027	18.028	4.87				
	88	1,2,3-Trimethylbenzene	9.931	-0.7	1095079	3.769	3.795	18.131	18.132	4.70				
	89	1,4-Dichlorobenzene	9.894	-1.1	550958	1.896	1.916	18.190	18.191	4.92				
	90	n-Butylbenzene	9.925	-0.7	1315009	4.526	4.560	18.486	18.489	5.46				
	91	1,2-Dichlorobenzene	9.987	-0.1	464758	1.600	1.602	18.709	18.724	4.06				
	92	1,2-Dibromo-3-chloropropane	9.352	-6.5	27714	0.095	0.095	19.716	19.717	16.02	-0.0056	0.1080		0.9987
	93	1,2,4-Trichlorobenzene	10.080	0.8	342507	1.179	1.169	20.798	20.801	7.49				
	94	Hexachlorobutadiene	9.944	-0.6	201295	0.693	0.697	20.961	20.967	6.95				
	95	Naphthalene	10.201	2.0	404546	1.392	1.365	21.138	21.148	8.50				
	96	1,2,3-Trichlorobenzene	10.141	1.4	259547	0.893	0.881	21.464	21.466	6.66				

Spike Amount = Nominal Amount * M

SU
5/15/24

Data File : D:\HPCHEM\1\DATA\24E13\REV209.D
Acq On : 13 May 2024 11:31 am
Sample : BFB01E12
Misc : T/CHK
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls

Vial: 1
Operator: LPriet
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	17.7	3629	PASS
75	95	30	60	40.5	8316	PASS
95	95	100	100	100.0	20531	PASS
96	95	5	9	6.4	1307	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	77.2	15857	PASS
175	174	5	9	7.3	1160	PASS
176	174	95	101	97.2	15415	PASS
177	176	5	9	6.4	988	PASS

REV209.D VO01E11.M Mon May 13 14:37:52 2024 SY 5/15/24

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D Vial: 2
Acq On : 13 May 2024 12:06 pm Operator: LPriet
Sample : IVO01E1102 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\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	99	0.00
2	T,M	Chlorotrifluoroethylene	-1.000	0.000	0.0	0	-2.08#
3	T,M	Dichlorodifluoromethane	10.000	10.745	-7.4	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	10.223	-2.2	109	0.02
6	C,T,M	Vinyl chloride	10.000	11.092	-10.9	110	0.00
7	T,M	Bromomethane	10.000	9.887	1.1	110	0.01
8	T,M	Chloroethane	10.000	9.929	0.7	105	0.01
9	T,M	Dichlorofluoromethane	10.000	9.809	1.9	107	0.01
10	T,M	Trichlorofluoromethane	10.000	10.405	-4.0	109	0.00
11	T,M	Acrolein	50.000	46.638	6.7	104	0.00
12	T,M	1,1,2-Trichloro-1,2,2-trifl	10.000	10.700	-7.0	106	0.01
13	T,M	Acetone	50.000	46.249	7.5	108	0.00
14	C,T,M	1,1-Dichloroethene	10.000	10.535	-5.4	108	0.01
15	T,M	tert-Butyl alcohol	250.000	272.707	-9.1	118	0.00
16	T,M	Iodomethane	10.000	10.129	-1.3	105	0.00
17	T,M	Methyl acetate	10.000	9.648	3.5	113	0.00
18	T,M	Methylene chloride	10.000	10.396	-4.0	110	0.00
19	T,M	Carbon disulfide	10.000	9.411	5.9	99	0.02
20	T,M	Acrylonitrile	50.000	49.767	0.5	107	0.00
21	T,M	tert-Butyl methyl ether (MT	10.000	10.216	-2.2	112	0.00
22	T,M	trans-1,2-Dichloroethene	10.000	10.335	-3.4	110	0.00
23	T,M	Isopropyl ether (DIPE)	10.000	10.407	-4.1	110	-0.01
24	T,M	Vinyl acetate	10.000	10.436	-4.4	113	0.00
25	P,T,M	1,1-Dichloroethane	10.000	10.386	-3.9	109	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	10.658	-6.6	114	0.00
28	T,M	2-Butanone	50.000	52.384	-4.8	109	0.00
29	T,M	2,2-Dichloropropane	10.000	10.370	-3.7	108	0.00
30	T,M	cis-1,2-Dichloroethene	10.000	10.325	-3.2	107	0.00
31	C,T,M	Chloroform	10.000	9.821	1.8	107	0.00
32	T,M	Bromochloromethane	10.000	10.539	-5.4	112	0.00
33	T,M	Tetrahydrofuran	10.000	10.289	-2.9	121	0.00
34	S	Dibromofluoromethane	10.000	9.898	1.0	107	0.00
35	T,M	1,1,1-Trichloroethane	10.000	10.374	-3.7	108	0.00
36	T,M	Cyclohexane	10.000	10.549	-5.5	114	0.00
37	T,M	2,2,4-Trimethylpentane	10.000	0.000	100.0#	0	0.00
38	T,M	1,1-Dichloropropene	10.000	10.277	-2.8	108	0.00
39	T,M	Carbon tetrachloride	10.000	10.352	-3.5	107	0.00
40	T,M	tert-Amyl methyl ether (TAM	10.000	10.128	-1.3	113	0.00
41	S	1,2-Dichloroethane-d4	10.000	9.949	0.5	112	-0.01

(#) = Out of Range

5/15/24

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D Vial: 2
Acq On : 13 May 2024 12:06 pm Operator: LPriet
Sample : IVO01E1102 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\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	10.090	-0.9	106	0.00
43	T,M	1,2-Dichloroethane	10.000	10.337	-3.4	110	0.00
44	T,M	Trichloroethene	10.000	10.150	-1.5	103	0.00
45	T,M	Methylcyclohexane	10.000	10.260	-2.6	113	-0.01
46	C,T,M	1,2-Dichloropropane	10.000	10.115	-1.2	107	0.00
47	T,M	Bromodichloromethane	10.000	9.863	1.4	109	-0.01
48	T,M	1,4-Dioxane	200.000	205.359	-2.7	114	-0.01
49	T,M	Dibromomethane	10.000	10.345	-3.5	114	0.00
50	T,M	2-Chloroethyl vinyl ether	10.000	10.212	-2.1	110	-0.01
51	T,M	4-Methyl-2-pentanone	50.000	49.033	1.9	111	0.00
52	T,M	cis-1,3-Dichloropropene	10.000	10.274	-2.7	109	0.00
53	I	CHLOROBENZENE-D5	10.000	10.000	0.0	102	0.00
54	S	Toluene-d8	10.000	9.567	4.3	105	-0.01
55	C,T,M	Toluene	10.000	9.907	0.9	106	-0.01
56	T,M	Ethyl methacrylate	10.000	10.214	-2.1	113	-0.01
57	T,M	trans-1,3-Dichloropropene	10.000	10.299	-3.0	111	0.00
58	T,M	1,1,2-Trichloroethane	10.000	10.145	-1.4	111	0.00
59	T,M	2-Hexanone	50.000	47.365	5.3	113	0.00
60	T,M	1,3-Dichloropropane	10.000	10.169	-1.7	112	0.00
61	T,M	Tetrachloroethene	10.000	9.999	0.0	105	0.00
62	T,M	Dibromochloromethane	10.000	10.064	-0.6	112	0.00
63	T,M	1,2-Dibromoethane	10.000	10.349	-3.5	113	0.00
64	T,M	1-Chlorohexane	10.000	10.260	-2.6	108	0.00
65	P,M	Chlorobenzene	10.000	10.062	-0.6	106	-0.01
66	T,M	1,1,1,2-Tetrachloroethane	10.000	10.136	-1.4	108	0.00
67	C,T,M	Ethylbenzene	10.000	9.991	0.1	104	0.00
68	T,M	m-Xylene & p-Xylene	20.000	20.234	-1.2	107	0.00
69	T,M	o-Xylene	10.000	9.950	0.5	107	-0.01
70	T,M	Styrene	10.000	9.968	0.3	106	0.00
71	T,M	Isopropylbenzene	10.000	10.037	-0.4	105	-0.01
72	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	102	0.00
73	P,T,M	Bromoform	10.000	9.781	2.2	117	0.00
74	T,M	trans-1,4-Dichloro-2-butene	10.000	10.277	-2.8	116	0.00
75	T,M	1,1,2,2-Tetrachloroethane	10.000	9.918	0.8	114	-0.01
76	S	4-Bromofluorobenzene	10.000	9.430	5.7	107	-0.01
77	T,M	1,2,3-Trichloropropane	10.000	10.138	-1.4	111	0.00
78	T,M	n-Propylbenzene	10.000	9.837	1.6	104	0.00
79	T,M	Bromobenzene	10.000	9.996	0.0	107	0.00
80	T,M	1,3,5-Trimethylbenzene	10.000	9.884	1.2	105	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D
Acq On : 13 May 2024 12:06 pm
Sample : IVO01E1102 1.0/5.0
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P

Vial: 2
Operator: LPriet
Inst : 01
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	10.006	-0.1	107	0.00
82	T,M	4-Chlorotoluene	10.000	10.003	-0.0	105	0.00
83	T,M	tert-Butylbenzene	10.000	9.950	0.5	105	0.00
84	T,M	1,2,4-Trimethylbenzene	10.000	9.901	1.0	104	-0.01
85	T,M	sec-Butylbenzene	10.000	9.967	0.3	105	0.00
86	T,M	p-Isopropyltoluene	10.000	9.795	2.1	104	0.00
87	T,M	1,3-Dichlorobenzene	10.000	10.012	-0.1	107	0.00
88	T,M	1,2,3-Trimethylbenzene	10.000	9.932	0.7	107	0.00
89	T,M	1,4-Dichlorobenzene	10.000	9.895	1.1	106	0.00
90	T,M	n-Butylbenzene	10.000	9.925	0.7	105	0.00
91	T,M	1,2-Dichlorobenzene	10.000	9.987	0.1	109	-0.01
92	T,M	1,2-Dibromo-3-chloropropane	10.000	9.353	6.5	117	0.00
93	T,M	1,2,4-Trichlorobenzene	10.000	10.081	-0.8	109	0.00
94	T,M	Hexachlorobutadiene	10.000	9.945	0.5	102	0.00
95	T,M	Naphthalene	10.000	10.202	-2.0	113	0.00
96	T,M	1,2,3-Trichlorobenzene	10.000	10.141	-1.4	110	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D Vial: 2
Acq On : 13 May 2024 12:06 pm Operator: LPriet
Sample : IVO01E1102 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\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	99	0.00
2	T,M	Chlorotrifluoroethylene	0.000	0.000	0.0	0#	-2.08#
3	T,M	Dichlorodifluoromethane	0.268	0.288	-7.5	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	0.375	0.383	-2.1	109	0.02
6	C,T,M	Vinyl chloride	0.312	0.346	-10.9	110	0.00
7	T,M	Bromomethane	0.396	0.366	7.6	110	0.01
8	T,M	Chloroethane	0.226	0.225	0.4	105	0.01
9	T,M	Dichlorofluoromethane	0.643	0.631	1.9	107	0.01
10	T,M	Trichlorofluoromethane	0.422	0.439	-4.0	109	0.00
11	T,M	Acrolein	0.022	0.021	4.5	104	0.00
12	T,M	1,1,2-Trichloro-1,2,2-trifl	0.211	0.226	-7.1	106	0.01
13	T,M	Acetone	0.037	0.034	8.1	108	0.00
14	C,T,M	1,1-Dichloroethene	0.533	0.562	-5.4	108	0.01
15	T,M	tert-Butyl alcohol	0.011	0.012	-9.1	118	0.00
16	T,M	Iodomethane	0.572	0.579	-1.2	105	0.00
17	T,M	Methyl acetate	0.100	0.096	4.0	113	0.00
18	T,M	Methylene chloride	0.428	0.445	-4.0	110	0.00
19	T,M	Carbon disulfide	1.140	1.073	5.9	99	0.02
20	T,M	Acrylonitrile	0.046	0.046	0.0	107	0.00
21	T,M	tert-Butyl methyl ether (MT	0.525	0.536	-2.1	112	0.00
22	T,M	trans-1,2-Dichloroethene	0.514	0.531	-3.3	110	0.00
23	T,M	Isopropyl ether (DIPE)	1.098	1.143	-4.1	110	-0.01
24	T,M	Vinyl acetate	0.377	0.393	-4.2	113	0.00
25	P,T,M	1,1-Dichloroethane	0.601	0.624	-3.8	109	0.00
26	T,M	2-Butanol	0.000	0.010	0.0	0#	0.00
27	T,M	tert-Butyl ethyl ether (ETB	0.787	0.838	-6.5	114	0.00
28	T,M	2-Butanone	0.056	0.059	-5.4	109	0.00
29	T,M	2,2-Dichloropropane	0.505	0.524	-3.8	108	0.00
30	T,M	cis-1,2-Dichloroethene	0.414	0.427	-3.1	107	0.00
31	C,T,M	Chloroform	0.612	0.601	1.8	107	0.00
32	T,M	Bromochloromethane	0.240	0.253	-5.4	112	0.00
33	T,M	Tetrahydrofuran	0.035	0.036	-2.9	121	0.00
34	S	Dibromofluoromethane	0.310	0.306	1.3	107	0.00
35	T,M	1,1,1-Trichloroethane	0.512	0.531	-3.7	108	0.00
36	T,M	Cyclohexane	0.499	0.526	-5.4	114	0.00
37	T,M	2,2,4-Trimethylpentane	0.000	0.032	0.0	0#	0.00
38	T,M	1,1-Dichloropropene	0.174	0.179	-2.9	108	0.00
39	T,M	Carbon tetrachloride	0.382	0.395	-3.4	107	0.00
40	T,M	tert-Amyl methyl ether (TAM	0.612	0.620	-1.3	113	0.00
41	S	1,2-Dichloroethane-d4	0.211	0.210	0.5	112	-0.01

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D Vial: 2
Acq On : 13 May 2024 12:06 pm Operator: LPriet
Sample : IVO01E1102 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\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	1.336	1.348	-0.9	106	0.00
43	T,M	1,2-Dichloroethane	0.269	0.279	-3.7	110	0.00
44	T,M	Trichloroethene	0.346	0.351	-1.4	103	0.00
45	T,M	Methylcyclohexane	0.549	0.563	-2.6	113	-0.01
46	C,T,M	1,2-Dichloropropane	0.299	0.302	-1.0	107	0.00
47	T,M	Bromodichloromethane	0.415	0.409	1.4	109	-0.01
48	T,M	1,4-Dioxane	0.001	0.001	0.0	114	-0.01
49	T,M	Dibromomethane	0.141	0.146	-3.5	114	0.00
50	T,M	2-Chloroethyl vinyl ether	0.076	0.077	-1.3	110	-0.01
51	T,M	4-Methyl-2-pentanone	0.136	0.145	-6.6	111	0.00
52	T,M	cis-1,3-Dichloropropene	0.465	0.478	-2.8	109	0.00
53	I	CHLOROBENZENE-D5	1.000	1.000	0.0	102	0.00
54	S	Toluene-d8	1.499	1.434	4.3	105	-0.01
55	C,T,M	Toluene	1.776	1.759	1.0	106	-0.01
56	T,M	Ethyl methacrylate	0.266	0.272	-2.3	113	-0.01
57	T,M	trans-1,3-Dichloropropene	0.413	0.425	-2.9	111	0.00
58	T,M	1,1,2-Trichloroethane	0.233	0.236	-1.3	111	0.00
59	T,M	2-Hexanone	0.090	0.100	-11.1	113	0.00
60	T,M	1,3-Dichloropropane	0.395	0.401	-1.5	112	0.00
61	T,M	Tetrachloroethene	0.369	0.369	0.0	105	0.00
62	T,M	Dibromochloromethane	0.284	0.286	-0.7	112	0.00
63	T,M	1,2-Dibromoethane	0.230	0.238	-3.5	113	0.00
64	T,M	1-Chlorohexane	0.767	0.787	-2.6	108	0.00
65	P,M	Chlorobenzene	1.059	1.065	-0.6	106	-0.01
66	T,M	1,1,1,2-Tetrachloroethane	0.326	0.331	-1.5	108	0.00
67	C,T,M	Ethylbenzene	2.027	2.025	0.1	104	0.00
68	T,M	m-Xylene & p-Xylene	1.484	1.501	-1.1	107	0.00
69	T,M	o-Xylene	1.527	1.519	0.5	107	-0.01
70	T,M	Styrene	1.184	1.180	0.3	106	0.00
71	T,M	Isopropylbenzene	2.012	2.019	-0.3	105	-0.01
72	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	102	0.00
73	P,T,M	Bromoform	0.350	0.386	-10.3	117	0.00
74	T,M	trans-1,4-Dichloro-2-butene	0.173	0.177	-2.3	116	0.00
75	T,M	1,1,2,2-Tetrachloroethane	0.666	0.660	0.9	114	-0.01
76	S	4-Bromofluorobenzene	1.362	1.284	5.7	107	-0.01
77	T,M	1,2,3-Trichloropropane	0.170	0.173	-1.8	111	0.00
78	T,M	n-Propylbenzene	6.502	6.396	1.6	104	0.00
79	T,M	Bromobenzene	1.029	1.028	0.1	107	0.00
80	T,M	1,3,5-Trimethylbenzene	4.155	4.106	1.2	105	0.00

(#) = Out of Range

SU 5/15/24

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D Vial: 2
Acq On : 13 May 2024 12:06 pm Operator: LPriet
Sample : IVO01E1102 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\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	3.915	3.917	-0.1	107	0.00
82	T,M	4-Chlorotoluene	3.466	3.467	-0.0	105	0.00
83	T,M	tert-Butylbenzene	0.871	0.867	0.5	105	0.00
84	T,M	1,2,4-Trimethylbenzene	4.065	4.025	1.0	104	-0.01
85	T,M	sec-Butylbenzene	5.711	5.692	0.3	105	0.00
86	T,M	p-Isopropyltoluene	4.403	4.312	2.1	104	0.00
87	T,M	1,3-Dichlorobenzene	1.955	1.957	-0.1	107	0.00
88	T,M	1,2,3-Trimethylbenzene	3.795	3.769	0.7	107	0.00
89	T,M	1,4-Dichlorobenzene	1.916	1.896	1.0	106	0.00
90	T,M	n-Butylbenzene	4.560	4.526	0.7	105	0.00
91	T,M	1,2-Dichlorobenzene	1.602	1.600	0.1	109	-0.01
92	T,M	1,2-Dibromo-3-chloropropane	0.095	0.095	0.0	117	0.00
93	T,M	1,2,4-Trichlorobenzene	1.169	1.179	-0.9	109	0.00
94	T,M	Hexachlorobutadiene	0.697	0.693	0.6	102	0.00
95	T,M	Naphthalene	1.365	1.392	-2.0	113	0.00
96	T,M	1,2,3-Trichlorobenzene	0.881	0.893	-1.4	110	0.00

SK 5/15/24

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D Vial: 2
Acq On : 13 May 2024 12:06 pm Operator: LPriet
Sample : IVO01E1102 1.0/5.0 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:24 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.55	114	907856	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.72	117	757489	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	290545	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	278148	9.90	ug/l	0.00
Spiked Amount 10.000			Recovery = 99.00%			
41) 1,2-Dichloroethane-d4	7.95	65	190681	9.95	ug/l	-0.01
Spiked Amount 10.000			Recovery = 99.50%			
54) Toluene-d8	11.02	98	1085971	9.57	ug/l	-0.01
Spiked Amount 10.000			Recovery = 95.70%			
76) 4-Bromofluorobenzene	16.00	95	373151	9.43	ug/l	-0.01
Spiked Amount 10.000			Recovery = 94.30%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.17	85	261017	10.74	ug/l	99
5) Chloromethane	2.49	50	347692	10.22	ug/l	99
6) Vinyl chloride	2.62	62	314201	11.09	ug/l	99
7) Bromomethane	3.15	94	332015	9.89	ug/l	99
8) Chloroethane	3.20	64	204024	9.93	ug/l	98
9) Dichlorofluoromethane	3.29	67	572473	9.81	ug/l	97
10) Trichlorofluoromethane	3.55	101	398783	10.41	ug/l	99
11) Acrolein	3.98	56	95103	46.64	ug/l	99
12) 1,1,2-Trichloro-1,2,2-trif	4.07	151	204924	10.70	ug/l	100
13) Acetone	4.06	43	153258	46.25	ug/l	100
14) 1,1-Dichloroethene	4.24	61	510086	10.53	ug/l	99
15) tert-Butyl alcohol	4.34	59	275606	272.71	ug/l	99
16) Iodomethane	4.64	142	525854	10.13	ug/l	100
17) Methyl acetate	4.65	43	87177	9.65	ug/l	97
18) Methylene chloride	4.86	49	403861	10.40	ug/l	98
19) Carbon disulfide	4.89	76	974363	9.41	ug/l	99
20) Acrylonitrile	5.02	53	209223	49.77	ug/l	100
21) tert-Butyl methyl ether (M	5.07	73	486511	10.22	ug/l	100
22) trans-1,2-Dichloroethene	5.24	61	482107	10.33	ug/l	98
23) Isopropyl ether (DIPE)	5.66	45	1037346	10.41	ug/l	98
24) Vinyl acetate	5.82	43	357100	10.44	ug/l	99
25) 1,1-Dichloroethane	5.82	63	566566	10.39	ug/l	100
27) tert-Butyl ethyl ether (ET	6.24	59	761232	10.66	ug/l	100
28) 2-Butanone	6.41	43	266366	52.38	ug/l	100
29) 2,2-Dichloropropane	6.62	77	475647	10.37	ug/l	100
30) cis-1,2-Dichloroethene	6.68	96	387725	10.33	ug/l	99
31) Chloroform	6.90	83	545984	9.82	ug/l	99

(#) = qualifier out of range (m) = manual integration
REV210.D VO01E11.M Mon May 13 14:38:25 2024 Page 1

5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D Vial: 2
Acq On : 13 May 2024 12:06 pm Operator: LPriet
Sample : IVO01E1102 1.0/5.0 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:24 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.14	49	230106	10.54	ug/l	98
33)	Tetrahydrofuran	7.20	42	33093	10.29	ug/l	97
35)	1,1,1-Trichloroethane	7.49	97	482510	10.37	ug/l	100
36)	Cyclohexane	7.52	84	477860	10.55	ug/l	100
38)	1,1-Dichloropropene	7.72	110	162485	10.28	ug/l	99
39)	Carbon tetrachloride	7.88	119	358693	10.35	ug/l	99
40)	tert-Amyl methyl ether (TA	7.88	73	562793	10.13	ug/l	100
42)	Benzene	8.13	78	1223803	10.09	ug/l	100
43)	1,2-Dichloroethane	8.10	62	252838	10.34	ug/l	99
44)	Trichloroethene	9.06	130	318416	10.15	ug/l	98
45)	Methylcyclohexane	9.15	83	511326	10.26	ug/l	99
46)	1,2-Dichloropropane	9.35	63	274499	10.12	ug/l	99
47)	Bromodichloromethane	9.72	83	371496	9.86	ug/l	99
48)	1,4-Dioxane	9.78	88	22815	205.36	ug/l	99
49)	Dibromomethane	9.82	93	132415	10.34	ug/l	98
50)	2-Chloroethyl vinyl ether	10.22	63	70329	10.21	ug/l	99
51)	4-Methyl-2-pentanone	10.26	43	657246	49.03	ug/l	100
52)	cis-1,3-Dichloropropene	10.62	75	433879	10.27	ug/l	100
55)	Toluene	11.15	91	1332719	9.91	ug/l	100
56)	Ethyl methacrylate	11.45	69	206172	10.21	ug/l	98
57)	trans-1,3-Dichloropropene	11.48	75	322019	10.30	ug/l	99
58)	1,1,2-Trichloroethane	11.75	97	178678	10.15	ug/l	99
59)	2-Hexanone	11.76	43	378200	47.36	ug/l	100
60)	1,3-Dichloropropane	12.19	76	304011	10.17	ug/l	100
61)	Tetrachloroethene	12.29	164	279605	10.00	ug/l	99
62)	Dibromochloromethane	12.66	129	216381	10.06	ug/l	100
63)	1,2-Dibromoethane	13.03	107	180319	10.35	ug/l	99
64)	1-Chlorohexane	13.30	91	595972	10.26	ug/l	100
65)	Chlorobenzene	13.78	112	806907	10.06	ug/l	100
66)	1,1,1,2-Tetrachloroethane	13.86	131	250367	10.14	ug/l	98
67)	Ethylbenzene	13.88	91	1533890	9.99	ug/l	100
68)	m-Xylene & p-Xylene	14.01	91	2274121	20.23	ug/l	100
69)	o-Xylene	14.83	91	1150973	9.95	ug/l	100
70)	Styrene	14.90	104	893787	9.97	ug/l	100
71)	Isopropylbenzene	15.51	105	1529556	10.04	ug/l	100
73)	Bromoform	15.55	173	112241	9.78	ug/l	97
74)	trans-1,4-Dichloro-2-buten	15.63	53	51511	10.28	ug/l	100
75)	1,1,2,2-Tetrachloroethane	15.85	83	191835	9.92	ug/l	98
77)	1,2,3-Trichloropropane	16.15	110	50167	10.14	ug/l	97
78)	n-Propylbenzene	16.29	91	1858212	9.84	ug/l	100
79)	Bromobenzene	16.38	156	298744	10.00	ug/l	99

(#) = qualifier out of range (m) = manual integration

SA 5/15/24

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D Vial: 2
Acq On : 13 May 2024 12:06 pm Operator: LPriet
Sample : IVO01E1102 1.0/5.0 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:24 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.61	105	1193060	9.88	ug/l	99
81)	2-Chlorotoluene	16.63	91	1138017	10.01	ug/l	100
82)	4-Chlorotoluene	16.72	91	1007192	10.00	ug/l	100
83)	tert-Butylbenzene	17.29	134	251948	9.95	ug/l	98
84)	1,2,4-Trimethylbenzene	17.35	105	1169308	9.90	ug/l	99
85)	sec-Butylbenzene	17.66	105	1653826	9.97	ug/l	100
86)	p-Isopropyltoluene	17.88	119	1252965	9.80	ug/l	100
87)	1,3-Dichlorobenzene	18.03	146	568580	10.01	ug/l	100
88)	1,2,3-Trimethylbenzene	18.13	105	1095079	9.93	ug/l	99
89)	1,4-Dichlorobenzene	18.19	146	550958	9.89	ug/l	100
90)	n-Butylbenzene	18.49	91	1315009	9.93	ug/l	100
91)	1,2-Dichlorobenzene	18.71	146	464758	9.99	ug/l	99
92)	1,2-Dibromo-3-chloropropan	19.72	157	27714	9.35	ug/l	99
93)	1,2,4-Trichlorobenzene	20.80	180	342507	10.08	ug/l	99
94)	Hexachlorobutadiene	20.96	225	201295	9.94	ug/l	98
95)	Naphthalene	21.14	128	404546	10.20	ug/l	100
96)	1,2,3-Trichlorobenzene	21.46	180	259547	10.14	ug/l	99

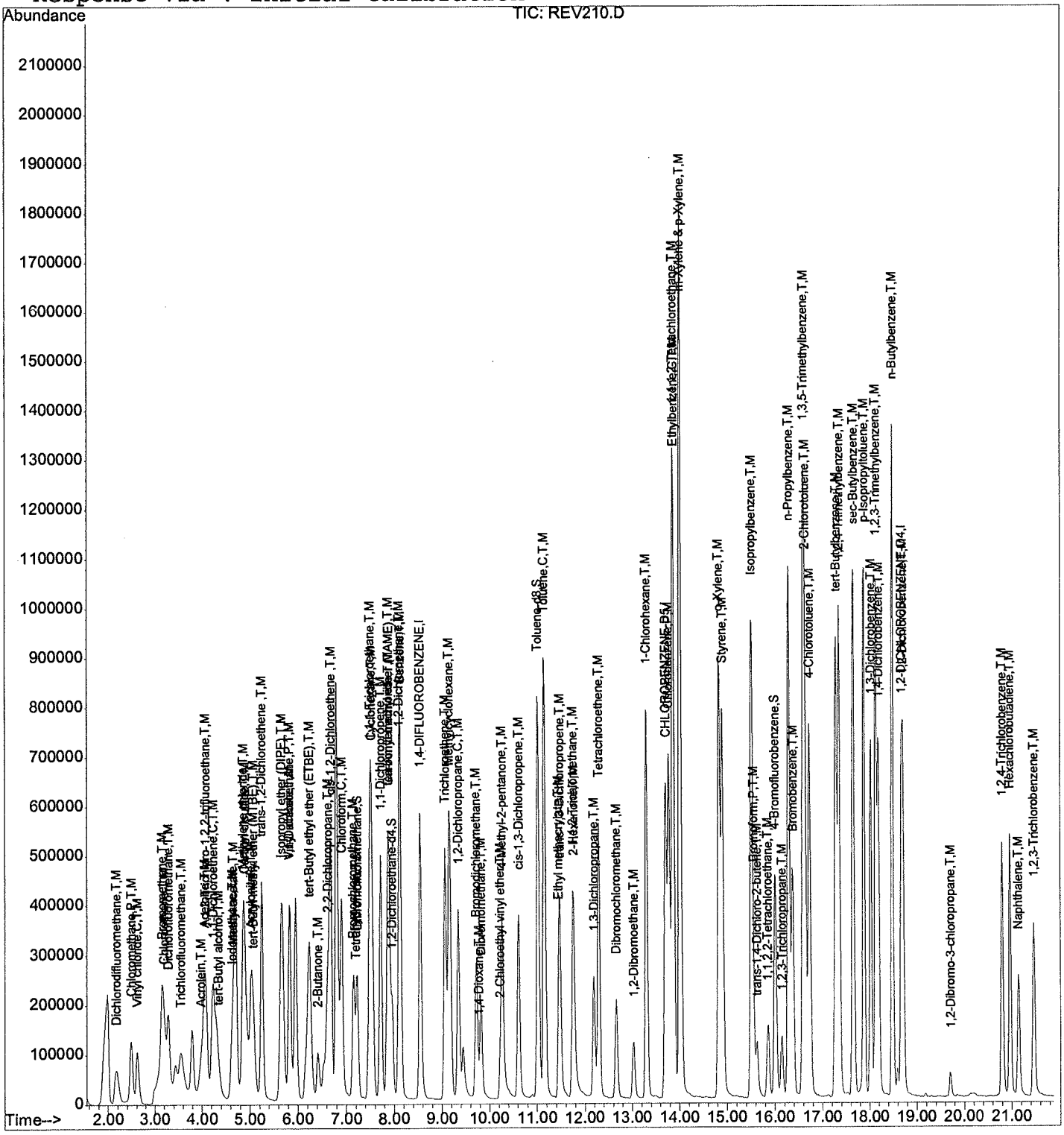
SA 5/15/24

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D Vial: 2
Acq On : 13 May 2024 12:06 pm Operator: LPriet
Sample : IVO01E1102 1.0/5.0 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:24 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



SU 5/15/24

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 : 24F025
Lab File ID: RFV111 BFB Injection Date: 06/07/24
Instrument ID: 01 BFB Injection Time: 14:0B

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	19.788
75	30 - 60% of mass 95	43.750
95	Base Peak, 100% relative abundance	100.000
96	5 - 9% of mass 95	7.054
173	Less than 2% of mass 174	0.000(0)1
174	Greater than 50% of mass 95	76.773
175	5 - 9% of mass 174	5.840(7.61)1
176	95 - 101% % of mass 174	73.769(96.09)1
177	5 - 9% % of mass 176	4.669(6.33)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	CVO01E1120	RFV112	06/07/24	15:02
2	LCS1W	VO01F05L	RFV113	06/07/24	15:31
3	LCD1W	VO01F05C	RFV114	06/07/24	16:01
4	MBLK1W	VO01F05B	RFV116	06/07/24	17:01
5	TB05-GW060524	24F025-04	RFV117	06/07/24	17:31
6	MW43-GW060524-27B	24F025-03	RFV120	06/07/24	19:05
7	MW43-GW060524-2B5	24F025-01	RFV123	06/07/24	20:33
B	EB04-GW060524	24F025-02	RFV12B	06/07/24	22:59

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

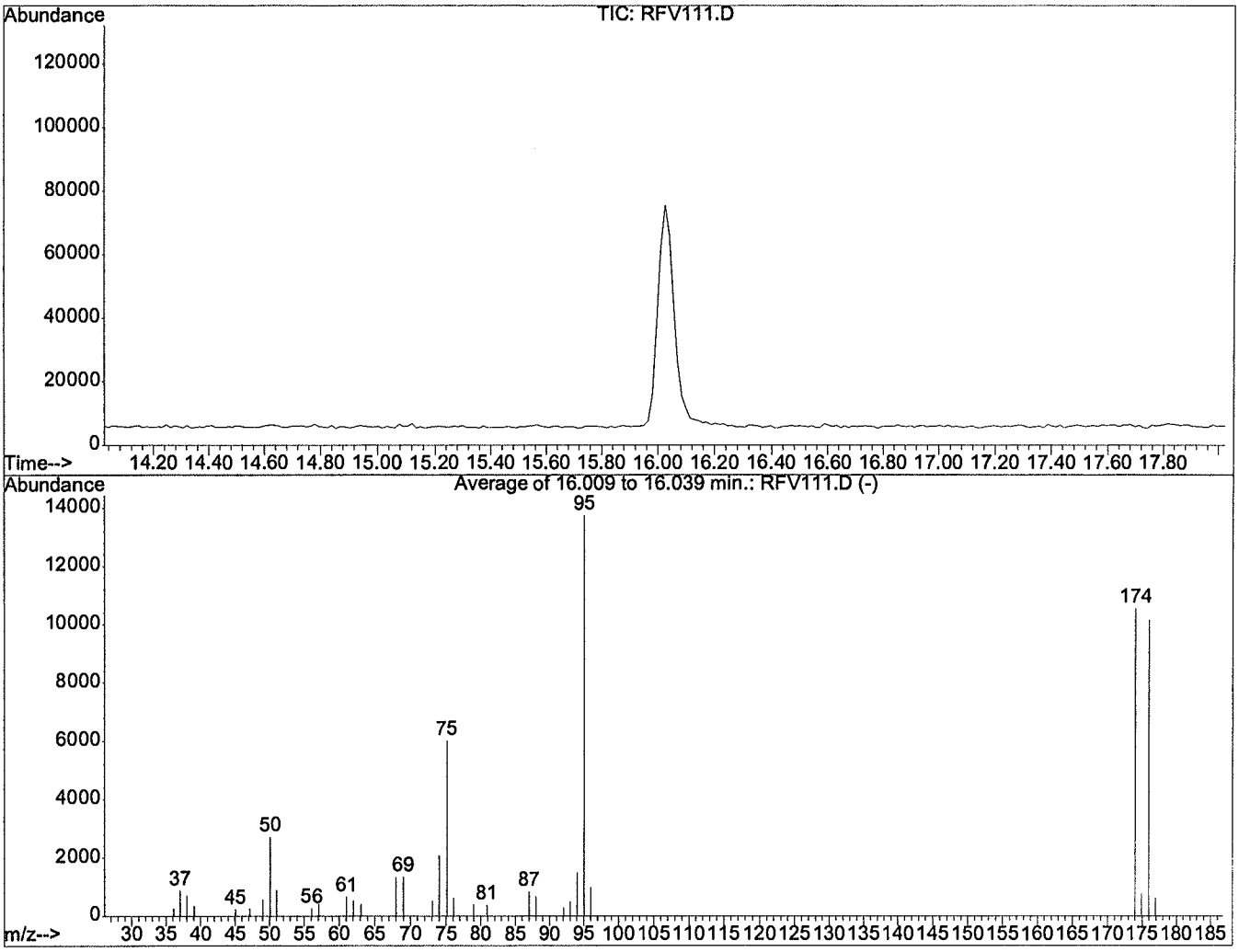
Lab Name: EMAX Laboratories, Inc.
Lab Code: EMAX
Lab File ID: REV201
Instrument ID: 01

Project: VA SALT LAKE CITY
SDG No: 24F025
Date Analyzed: 05/11/24
Time Analyzed: 13:28

	INTERNAL STANDARD (IS)	1,4-DIFLUOROBENZENE		CHLOROBENZENE-D5		1,2-DICHLOROBENZENE-D4	
		Area #	RT #	Area #	RT #	Area #	RT #
	12 HOUR STD	920983	8.54	742213	13.71	284055	18.68
	UPPER LIMIT	1841966	8.71	1484426	13.88	568110	18.85
	LOWER LIMIT	460492	8.37	371107	13.54	142028	18.51
		Area #	RT #	Area #	RT #	Area #	RT #
1	VSTD10	713127	8.56	583969	13.73	242603	18.69
2	LCS1W	741911	8.56	607937	13.71	244510	18.69
3	LCD1W	741693	8.56	603217	13.73	261963	18.69
4	MBLK1W	753642	8.56	624758	13.73	249854	18.69
5	TB05-GW060524	746880	8.56	602516	13.73	250020	18.69
6	MW43-GW060524-278	691609	8.56	552269	13.73	224172	18.69
7	MW43-GW060524-285	723814	8.56	585600	13.73	259174	18.69
8	EB04-GW060524	683075	8.56	580278	13.71	254902	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\24F07\RFV111.D Vial: 1
Acq On : 7 Jun 2024 2:08 pm Operator: LPriet
Sample : BFB01F05 Inst : 01
Misc : T/CHK Multiplr: 1.00
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO01E11.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	19.8	2721	PASS
75	95	30	60	43.7	6016	PASS
95	95	100	100	100.0	13751	PASS
96	95	5	9	7.1	970	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	76.8	10557	PASS
175	174	5	9	7.6	803	PASS
176	174	95	101	96.1	10144	PASS
177	176	5	9	6.3	642	PASS

RFV111.D VO01E11.M Wed Jun 12 18:53:09 2024

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F07\RFV112.D Vial: 2
Acq On : 7 Jun 2024 3:02 pm Operator: LPriet
Sample : CVO01E1120 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	77	0.02
2	T,M	Chlorotrifluoroethylene	-1.000	0.000	0.0	0	-2.08#
3	T,M	Dichlorodifluoromethane	10.000	10.883	-8.8	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	9.325	6.8	78	0.03
6	C,T,M	Vinyl chloride	10.000	11.043	-10.4	86	0.01
7	T,M	Bromomethane	10.000	9.493	5.1	83	0.03
8	T,M	Chloroethane	10.000	11.302	-13.0	94	0.03
9	T,M	Dichlorofluoromethane	10.000	9.985	0.2	85	0.01
10	T,M	Trichlorofluoromethane	10.000	10.970	-9.7	90	0.01
11	T,M	Acrolein	50.000	32.958	34.1#	58	0.01
12	T,M	1,1,2-Trichloro-1,2,2-trifl	10.000	11.276	-12.8	88	0.03
13	T,M	Acetone	50.000	50.636	-1.3	93	0.00
14	C,T,M	1,1-Dichloroethene	10.000	10.498	-5.0	84	0.01
15	T,M	tert-Butyl alcohol	250.000	216.006	13.6	74	0.01
16	T,M	Iodomethane	10.000	10.084	-0.8	82	0.01
17	T,M	Methyl acetate	10.000	11.185	-11.9	103	0.01
18	T,M	Methylene chloride	10.000	10.576	-5.8	88	0.01
19	T,M	Carbon disulfide	10.000	10.511	-5.1	87	0.01
20	T,M	Acrylonitrile	50.000	49.338	1.3	83	0.01
21	T,M	tert-Butyl methyl ether (MT	10.000	9.470	5.3	81	0.00
22	T,M	trans-1,2-Dichloroethene	10.000	10.272	-2.7	86	0.01
23	T,M	Isopropyl ether (DIPE)	10.000	10.340	-3.4	86	0.00
24	T,M	Vinyl acetate	10.000	8.811	11.9	75	0.01
25	P,T,M	1,1-Dichloroethane	10.000	10.397	-4.0	86	0.01
26	T,M	2-Butanol	250.000	0.000	100.0#	0	0.00
27	T,M	tert-Butyl ethyl ether (ETB	10.000	9.682	3.2	81	0.01
28	T,M	2-Butanone	50.000	51.219	-2.4	84	0.01
29	T,M	2,2-Dichloropropane	10.000	10.142	-1.4	83	0.01
30	T,M	cis-1,2-Dichloroethene	10.000	9.906	0.9	80	0.01
31	C,T,M	Chloroform	10.000	10.659	-6.6	92	0.01
32	T,M	Bromochloromethane	10.000	10.550	-5.5	88	0.01
33	T,M	Tetrahydrofuran	10.000	9.296	7.0	86	0.00
34	S	Dibromofluoromethane	10.000	9.895	1.1	84	0.00
35	T,M	1,1,1-Trichloroethane	10.000	10.513	-5.1	86	0.01
36	T,M	Cyclohexane	10.000	10.127	-1.3	86	0.01
37	T,M	2,2,4-Trimethylpentane	10.000	0.000	100.0#	0	0.01
38	T,M	1,1-Dichloropropene	10.000	9.170	8.3	76	0.01
39	T,M	Carbon tetrachloride	10.000	10.621	-6.2	86	0.00
40	T,M	tert-Amyl methyl ether (TAM	10.000	8.776	12.2	77	0.01
41	S	1,2-Dichloroethane-d4	10.000	10.996	-10.0	97	0.00

(#) = Out of Range

Data File : D:\HPCHEM\1\DATA\24F07\RFV112.D Vial: 2
Acq On : 7 Jun 2024 3:02 pm Operator: LPriet
Sample : CVO01E1120 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	10.163	-1.6	84	0.00
43	T,M	1,2-Dichloroethane	10.000	11.233	-12.3	94	0.01
44	T,M	Trichloroethene	10.000	9.670	3.3	77	0.02
45	T,M	Methylcyclohexane	10.000	10.173	-1.7	88	0.00
46	C,T,M	1,2-Dichloropropane	10.000	10.002	-0.0	83	0.02
47	T,M	Bromodichloromethane	10.000	10.480	-4.8	91	0.00
48	T,M	1,4-Dioxane	200.000	176.204	11.9	77	0.00
49	T,M	Dibromomethane	10.000	10.554	-5.5	91	0.00
50	T,M	2-Chloroethyl vinyl ether	10.000	10.411	-4.1	88	0.00
51	T,M	4-Methyl-2-pentanone	50.000	49.346	1.3	88	0.02
52	T,M	cis-1,3-Dichloropropene	10.000	9.823	1.8	82	0.00
53	I	CHLOROBENZENE-D5	10.000	10.000	0.0	79	0.01
54	S	Toluene-d8	10.000	9.948	0.5	84	0.00
55	C,T,M	Toluene	10.000	9.980	0.2	82	0.00
56	T,M	Ethyl methacrylate	10.000	9.590	4.1	82	0.00
57	T,M	trans-1,3-Dichloropropene	10.000	9.791	2.1	82	0.01
58	T,M	1,1,2-Trichloroethane	10.000	9.850	1.5	83	0.01
59	T,M	2-Hexanone	50.000	45.870	8.3	84	0.01
60	T,M	1,3-Dichloropropane	10.000	10.396	-4.0	88	0.01
61	T,M	Tetrachloroethene	10.000	9.925	0.7	80	0.01
62	T,M	Dibromochloromethane	10.000	9.800	2.0	84	0.01
63	T,M	1,2-Dibromoethane	10.000	9.498	5.0	80	0.00
64	T,M	1-Chlorohexane	10.000	9.880	1.2	80	0.01
65	P,M	Chlorobenzene	10.000	9.561	4.4	78	0.00
66	T,M	1,1,1,2-Tetrachloroethane	10.000	10.242	-2.4	84	0.01
67	C,T,M	Ethylbenzene	10.000	10.249	-2.5	82	0.01
68	T,M	m-Xylene & p-Xylene	20.000	20.994	-5.0	86	0.01
69	T,M	o-Xylene	10.000	10.042	-0.4	83	0.00
70	T,M	Styrene	10.000	9.672	3.3	79	0.01
71	T,M	Isopropylbenzene	10.000	9.831	1.7	79	0.01
72	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	85	0.01
73	P,T,M	Bromoform	10.000	8.838	11.6	88	0.01
74	T,M	trans-1,4-Dichloro-2-butene	10.000	8.758	12.4	83	0.01
75	T,M	1,1,2,2-Tetrachloroethane	10.000	8.947	10.5	86	0.00
76	S	4-Bromofluorobenzene	10.000	9.631	3.7	91	0.00
77	T,M	1,2,3-Trichloropropane	10.000	9.035	9.6	83	0.01
78	T,M	n-Propylbenzene	10.000	9.259	7.4	82	0.01
79	T,M	Bromobenzene	10.000	9.444	5.6	84	0.01
80	T,M	1,3,5-Trimethylbenzene	10.000	8.934	10.7	79	0.01

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F07\RFV112.D Vial: 2
Acq On : 7 Jun 2024 3:02 pm Operator: LPriet
Sample : CVO01E1120 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	9.518	4.8	85	0.01
82	T,M	4-Chlorotoluene	10.000	9.576	4.2	84	0.01
83	T,M	tert-Butylbenzene	10.000	9.034	9.7	80	0.01
84	T,M	1,2,4-Trimethylbenzene	10.000	8.923	10.8	78	0.00
85	T,M	sec-Butylbenzene	10.000	9.111	8.9	80	0.01
86	T,M	p-Isopropyltoluene	10.000	9.039	9.6	80	0.00
87	T,M	1,3-Dichlorobenzene	10.000	9.514	4.9	85	0.01
88	T,M	1,2,3-Trimethylbenzene	10.000	9.298	7.0	84	0.01
89	T,M	1,4-Dichlorobenzene	10.000	9.355	6.4	84	0.01
90	T,M	n-Butylbenzene	10.000	9.437	5.6	83	0.01
91	T,M	1,2-Dichlorobenzene	10.000	9.430	5.7	86	0.00
92	T,M	1,2-Dibromo-3-chloropropane	10.000	8.252	17.5	85	0.01
93	T,M	1,2,4-Trichlorobenzene	10.000	9.007	9.9	81	0.01
94	T,M	Hexachlorobutadiene	10.000	9.034	9.7	77	0.03
95	T,M	Naphthalene	10.000	8.594	14.1	79	0.03
96	T,M	1,2,3-Trichlorobenzene	10.000	9.000	10.0	81	0.01

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F07\RFV112.D Vial: 2
Acq On : 7 Jun 2024 3:02 pm Operator: LPriet
Sample : CVO01E1120 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	77	0.02
2	T,M	Chlorotrifluoroethylene	0.000	0.000	0.0	0#	-2.08#
3	T,M	Dichlorodifluoromethane	0.268	0.291	-8.6	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	0.375	0.349	6.9	78	0.03
6	C,T,M	Vinyl chloride	0.312	0.345	-10.6	86	0.01
7	T,M	Bromomethane	0.396	0.351	11.4	83	0.03
8	T,M	Chloroethane	0.226	0.256	-13.3	94	0.03
9	T,M	Dichlorofluoromethane	0.643	0.642	0.2	85	0.01
10	T,M	Trichlorofluoromethane	0.422	0.463	-9.7	90	0.01
11	T,M	Acrolein	0.022	0.015	31.8#	58	0.01
12	T,M	1,1,2-Trichloro-1,2,2-trifl	0.211	0.238	-12.8	88	0.03
13	T,M	Acetone	0.037	0.037	0.0	93	0.00
14	C,T,M	1,1-Dichloroethene	0.533	0.560	-5.1	84	0.01
15	T,M	tert-Butyl alcohol	0.011	0.010	9.1	74	0.01
16	T,M	Iodomethane	0.572	0.577	-0.9	82	0.01
17	T,M	Methyl acetate	0.100	0.111	-11.0	103	0.01
18	T,M	Methylene chloride	0.428	0.453	-5.8	88	0.01
19	T,M	Carbon disulfide	1.140	1.199	-5.2	87	0.01
20	T,M	Acrylonitrile	0.046	0.046	0.0	83	0.01
21	T,M	tert-Butyl methyl ether (MT	0.525	0.497	5.3	81	0.00
22	T,M	trans-1,2-Dichloroethene	0.514	0.528	-2.7	86	0.01
23	T,M	Isopropyl ether (DIPE)	1.098	1.135	-3.4	86	0.00
24	T,M	Vinyl acetate	0.377	0.332	11.9	75	0.01
25	P,T,M	1,1-Dichloroethane	0.601	0.625	-4.0	86	0.01
26	T,M	2-Butanol	0.000	0.009	0.0	0#	0.00
27	T,M	tert-Butyl ethyl ether (ETB	0.787	0.762	3.2	81	0.01
28	T,M	2-Butanone	0.056	0.057	-1.8	84	0.01
29	T,M	2,2-Dichloropropane	0.505	0.512	-1.4	83	0.01
30	T,M	cis-1,2-Dichloroethene	0.414	0.410	1.0	80	0.01
31	C,T,M	Chloroform	0.612	0.653	-6.7	92	0.01
32	T,M	Bromochloromethane	0.240	0.254	-5.8	88	0.01
33	T,M	Tetrahydrofuran	0.035	0.033	5.7	86	0.00
34	S	Dibromofluoromethane	0.310	0.306	1.3	84	0.00
35	T,M	1,1,1-Trichloroethane	0.512	0.539	-5.3	86	0.01
36	T,M	Cyclohexane	0.499	0.505	-1.2	86	0.01
37	T,M	2,2,4-Trimethylpentane	0.000	0.024	0.0	0#	0.01
38	T,M	1,1-Dichloropropene	0.174	0.160	8.0	76	0.01
39	T,M	Carbon tetrachloride	0.382	0.405	-6.0	86	0.00
40	T,M	tert-Amyl methyl ether (TAM	0.612	0.537	12.3	77	0.01
41	S	1,2-Dichloroethane-d4	0.211	0.232	-10.0	97	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F07\RFV112.D Vial: 2
Acq On : 7 Jun 2024 3:02 pm Operator: LPriet
Sample : CVO01E1120 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	1.336	1.358	-1.6	84	0.00
43	T,M	1,2-Dichloroethane	0.269	0.303	-12.6	94	0.01
44	T,M	Trichloroethene	0.346	0.334	3.5	77	0.02
45	T,M	Methylcyclohexane	0.549	0.558	-1.6	88	0.00
46	C,T,M	1,2-Dichloropropane	0.299	0.299	0.0	83	0.02
47	T,M	Bromodichloromethane	0.415	0.435	-4.8	91	0.00
48	T,M	1,4-Dioxane	0.001	0.001	0.0	77	0.00
49	T,M	Dibromomethane	0.141	0.149	-5.7	91	0.00
50	T,M	2-Chloroethyl vinyl ether	0.076	0.079	-3.9	88	0.00
51	T,M	4-Methyl-2-pentanone	0.136	0.146	-7.4	88	0.02
52	T,M	cis-1,3-Dichloropropene	0.465	0.457	1.7	82	0.00
53	I	CHLOROBENZENE-D5	1.000	1.000	0.0	79	0.01
54	S	Toluene-d8	1.499	1.491	0.5	84	0.00
55	C,T,M	Toluene	1.776	1.772	0.2	82	0.00
56	T,M	Ethyl methacrylate	0.266	0.256	3.8	82	0.00
57	T,M	trans-1,3-Dichloropropene	0.413	0.404	2.2	82	0.01
58	T,M	1,1,2-Trichloroethane	0.233	0.229	1.7	83	0.01
59	T,M	2-Hexanone	0.090	0.096	-6.7	84	0.01
60	T,M	1,3-Dichloropropane	0.395	0.410	-3.8	88	0.01
61	T,M	Tetrachloroethene	0.369	0.366	0.8	80	0.01
62	T,M	Dibromochloromethane	0.284	0.278	2.1	84	0.01
63	T,M	1,2-Dibromoethane	0.230	0.218	5.2	80	0.00
64	T,M	1-Chlorohexane	0.767	0.758	1.2	80	0.01
65	P,M	Chlorobenzene	1.059	1.012	4.4	78	0.00
66	T,M	1,1,1,2-Tetrachloroethane	0.326	0.334	-2.5	84	0.01
67	C,T,M	Ethylbenzene	2.027	2.077	-2.5	82	0.01
68	T,M	m-Xylene & p-Xylene	1.484	1.557	-4.9	86	0.01
69	T,M	o-Xylene	1.527	1.533	-0.4	83	0.00
70	T,M	Styrene	1.184	1.145	3.3	79	0.01
71	T,M	Isopropylbenzene	2.012	1.978	1.7	79	0.01
72	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	85	0.01
73	P,T,M	Bromoform	0.350	0.348	0.6	88	0.01
74	T,M	trans-1,4-Dichloro-2-butene	0.173	0.151	12.7	83	0.01
75	T,M	1,1,2,2-Tetrachloroethane	0.666	0.596	10.5	86	0.00
76	S	4-Bromofluorobenzene	1.362	1.312	3.7	91	0.00
77	T,M	1,2,3-Trichloropropane	0.170	0.154	9.4	83	0.01
78	T,M	n-Propylbenzene	6.502	6.020	7.4	82	0.01
79	T,M	Bromobenzene	1.029	0.971	5.6	84	0.01
80	T,M	1,3,5-Trimethylbenzene	4.155	3.712	10.7	79	0.01

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F07\RFV112.D Vial: 2
Acq On : 7 Jun 2024 3:02 pm Operator: LPriet
Sample : CVO01E1120 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	3.915	3.726	4.8	85	0.01
82	T,M	4-Chlorotoluene	3.466	3.319	4.2	84	0.01
83	T,M	tert-Butylbenzene	0.871	0.787	9.6	80	0.01
84	T,M	1,2,4-Trimethylbenzene	4.065	3.627	10.8	78	0.00
85	T,M	sec-Butylbenzene	5.711	5.203	8.9	80	0.01
86	T,M	p-Isopropyltoluene	4.403	3.980	9.6	80	0.00
87	T,M	1,3-Dichlorobenzene	1.955	1.860	4.9	85	0.01
88	T,M	1,2,3-Trimethylbenzene	3.795	3.528	7.0	84	0.01
89	T,M	1,4-Dichlorobenzene	1.916	1.793	6.4	84	0.01
90	T,M	n-Butylbenzene	4.560	4.303	5.6	83	0.01
91	T,M	1,2-Dichlorobenzene	1.602	1.510	5.7	86	0.00
92	T,M	1,2-Dibromo-3-chloropropane	0.095	0.084	11.6	85	0.01
93	T,M	1,2,4-Trichlorobenzene	1.169	1.053	9.9	81	0.01
94	T,M	Hexachlorobutadiene	0.697	0.629	9.8	77	0.03
95	T,M	Naphthalene	1.365	1.173	14.1	79	0.03
96	T,M	1,2,3-Trichlorobenzene	0.881	0.793	10.0	81	0.01

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F07\RFV112.D Vial: 2
Acq On : 7 Jun 2024 3:02 pm Operator: LPriet
Sample : CVO01E1120 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 7 15:24 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	713127	10.00	ug/l	0.02
53) CHLOROBENZENE-D5	13.73	117	583969	10.00	ug/l	0.01
72) 1,2-DICHLOROBENZENE-D4	18.69	152	242603	10.00	ug/l	0.01
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	218422	9.90	ug/l	0.00
Spiked Amount 10.000			Recovery =	99.00%		
41) 1,2-Dichloroethane-d4	7.97	65	165537	11.00	ug/l	0.00
Spiked Amount 10.000			Recovery =	110.00%		
54) Toluene-d8	11.03	98	870617	9.95	ug/l	0.00
Spiked Amount 10.000			Recovery =	99.50%		
76) 4-Bromofluorobenzene	16.01	95	318233	9.63	ug/l	0.00
Spiked Amount 10.000			Recovery =	96.30%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.18	85	207677	10.88	ug/l	100
5) Chloromethane	2.49	50	249124	9.32	ug/l	100
6) Vinyl chloride	2.62	62	245724	11.04	ug/l	98
7) Bromomethane	3.17	94	250633	9.49	ug/l	99
8) Chloroethane	3.21	64	182425	11.30	ug/l	95
9) Dichlorofluoromethane	3.29	67	457720	9.98	ug/l	86
10) Trichlorofluoromethane	3.57	101	330228	10.97	ug/l	99
11) Acrolein	4.00	56	52792	32.96	ug/l	94
12) 1,1,2-Trichloro-1,2,2-trif	4.09	151	169644	11.28	ug/l	99
13) Acetone	4.06	43	131804	50.64	ug/l	91
14) 1,1-Dichloroethene	4.23	61	399275	10.50	ug/l	96
15) tert-Butyl alcohol	4.35	59	171478	216.01	ug/l	71
16) Iodomethane	4.65	142	411208	10.08	ug/l	98
17) Methyl acetate	4.66	43	79388	11.19	ug/l	99
18) Methylene chloride	4.87	49	322724	10.58	ug/l	96
19) Carbon disulfide	4.89	76	854838	10.51	ug/l	100
20) Acrylonitrile	5.03	53	162927	49.34	ug/l	98
21) tert-Butyl methyl ether (M	5.06	73	354235	9.47	ug/l	93
22) trans-1,2-Dichloroethene	5.26	61	376407	10.27	ug/l	95
23) Isopropyl ether (DIPE)	5.67	45	809618	10.34	ug/l	96
24) Vinyl acetate	5.83	43	236827	8.81	ug/l	98
25) 1,1-Dichloroethane	5.83	63	445521	10.40	ug/l	99
27) tert-Butyl ethyl ether (ET	6.25	59	543160	9.68	ug/l	99
28) 2-Butanone	6.43	43	204579	51.22	ug/l	99
29) 2,2-Dichloropropane	6.63	77	365403	10.14	ug/l	98
30) cis-1,2-Dichloroethene	6.69	96	292187	9.91	ug/l	95
31) Chloroform	6.91	83	465507	10.66	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F07\RFV112.D Vial: 2
Acq On : 7 Jun 2024 3:02 pm Operator: LPriet
Sample : CVO01E1120 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 7 15:24 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32)	Bromochloromethane	7.15	49	180937	10.55 ug/l	95
33)	Tetrahydrofuran	7.20	42	23485	9.30 ug/l	89
35)	1,1,1-Trichloroethane	7.51	97	384093	10.51 ug/l	97
36)	Cyclohexane	7.54	84	360369	10.13 ug/l	99
38)	1,1-Dichloropropene	7.73	110	113883	9.17 ug/l	99
39)	Carbon tetrachloride	7.88	119	289066	10.62 ug/l	100
40)	tert-Amyl methyl ether (TA	7.89	73	383084	8.78 ug/l	99
42)	Benzene	8.13	78	968286	10.16 ug/l	99
43)	1,2-Dichloroethane	8.11	62	215816	11.23 ug/l	100
44)	Trichloroethene	9.08	130	238284	9.67 ug/l	95
45)	Methylcyclohexane	9.17	83	398262	10.17 ug/l	98
46)	1,2-Dichloropropane	9.36	63	213206	10.00 ug/l	95
47)	Bromodichloromethane	9.73	83	310086	10.48 ug/l	99
48)	1,4-Dioxane	9.79	88	15377	176.20 ug/l	94
49)	Dibromomethane	9.82	93	106116	10.55 ug/l	93
50)	2-Chloroethyl vinyl ether	10.23	63	56321	10.41 ug/l	97
51)	4-Methyl-2-pentanone	10.28	43	519752	49.35 ug/l	96
52)	cis-1,3-Dichloropropene	10.62	75	325863	9.82 ug/l	96
55)	Toluene	11.17	91	1034992	9.98 ug/l	99
56)	Ethyl methacrylate	11.46	69	149240	9.59 ug/l	90
57)	trans-1,3-Dichloropropene	11.49	75	236022	9.79 ug/l	95
58)	1,1,2-Trichloroethane	11.76	97	133745	9.85 ug/l	98
59)	2-Hexanone	11.77	43	281314	45.87 ug/l	94
60)	1,3-Dichloropropane	12.20	76	239590	10.40 ug/l	100
61)	Tetrachloroethene	12.31	164	213949	9.92 ug/l	99
62)	Dibromochloromethane	12.68	129	162444	9.80 ug/l	99
63)	1,2-Dibromoethane	13.03	107	127573	9.50 ug/l	99
64)	1-Chlorohexane	13.31	91	442432	9.88 ug/l	99
65)	Chlorobenzene	13.79	112	591123	9.56 ug/l	99
66)	1,1,1,2-Tetrachloroethane	13.88	131	195034	10.24 ug/l	99
67)	Ethylbenzene	13.89	91	1213062	10.25 ug/l	96
68)	m-Xylene & p-Xylene	14.02	91	1819000	20.99 ug/l	95
69)	o-Xylene	14.84	91	895483	10.04 ug/l	96
70)	Styrene	14.91	104	668600	9.67 ug/l	97
71)	Isopropylbenzene	15.54	105	1155022	9.83 ug/l	99
73)	Bromoform	15.56	173	84369	8.84 ug/l	97
74)	trans-1,4-Dichloro-2-buten	15.64	53	36655	8.76 ug/l	88
75)	1,1,2,2-Tetrachloroethane	15.86	83	144499	8.95 ug/l	99
77)	1,2,3-Trichloropropane	16.16	110	37329	9.03 ug/l	93
78)	n-Propylbenzene	16.31	91	1460430	9.26 ug/l	97
79)	Bromobenzene	16.39	156	235676	9.44 ug/l	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F07\RFV112.D Vial: 2
Acq On : 7 Jun 2024 3:02 pm Operator: LPriet
Sample : CVO01E1120 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 7 15:24 2024 Quant Results File: VO01E11.RES

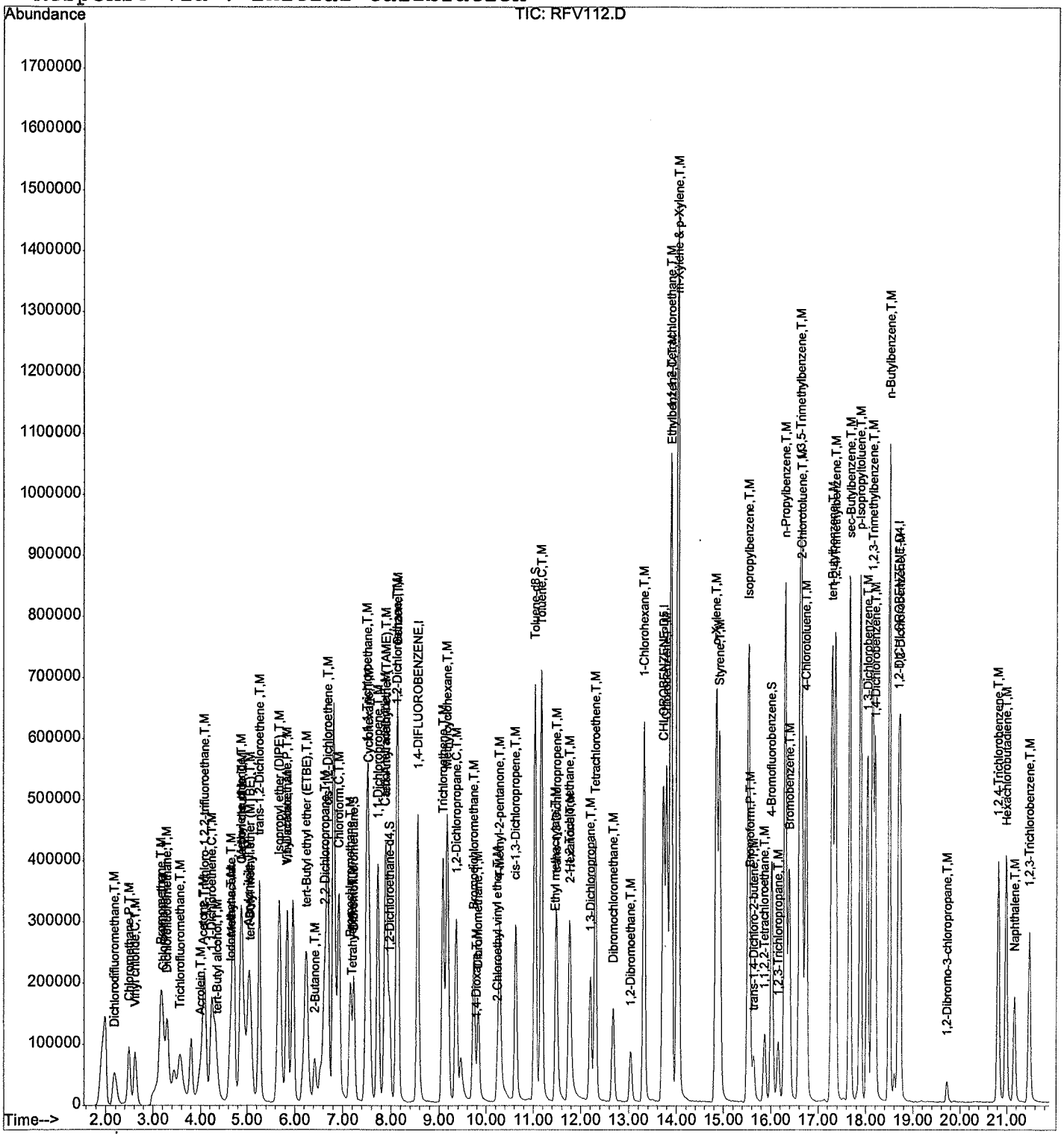
Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.62	105	900445	8.93 ug/l	99
81)	2-Chlorotoluene	16.65	91	903965	9.52 ug/l	97
82)	4-Chlorotoluene	16.73	91	805148	9.58 ug/l	97
83)	tert-Butylbenzene	17.30	134	190999	9.03 ug/l	94
84)	1,2,4-Trimethylbenzene	17.36	105	879989	8.92 ug/l	99
85)	sec-Butylbenzene	17.67	105	1262219	9.11 ug/l	99
86)	p-Isopropyltoluene	17.88	119	965492	9.04 ug/l	97
87)	1,3-Dichlorobenzene	18.04	146	451149	9.51 ug/l	98
88)	1,2,3-Trimethylbenzene	18.14	105	855980	9.30 ug/l	99
89)	1,4-Dichlorobenzene	18.20	146	434976	9.36 ug/l	99
90)	n-Butylbenzene	18.50	91	1043962	9.44 ug/l	98
91)	1,2-Dichlorobenzene	18.72	146	366434	9.43 ug/l	98
92)	1,2-Dibromo-3-chloropropan	19.73	157	20258	8.25 ug/l	97
93)	1,2,4-Trichlorobenzene	20.81	180	255531	9.01 ug/l	99
94)	Hexachlorobutadiene	20.98	225	152679	9.03 ug/l	98
95)	Naphthalene	21.16	128	284556	8.59 ug/l	99
96)	1,2,3-Trichlorobenzene	21.47	180	192341	9.00 ug/l	100

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24F07\RFV112.D Vial: 2
Acq On : 7 Jun 2024 3:02 pm Operator: LPriet
Sample : CVO01E1120 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 7 15:24 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



ANALYTICAL LOG(S)

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

Book #:	A01-076
Instrument No.:	01
Analytical Sequence:	24E11
Method File:	V001E11
Analytical Batch:	V001E116

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
☑ 2S-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.

INITIAL CALIBRATION REFERENCE			
DATE	5/11/24		
ICAL ID	VO01 E11		
STANDARDS			
NAME	ID	Amount (µl)	Conc. (mg/L)
DCC CS2 GAS	SVI-43-90-03 / -90-02	*	250 / 250
DCC 4ADD	-95-02		250
DCC 8260	-86-01		50
DCC KET	-93-03	↓	250
BFB	-38-02	1	50
IS/SURR. IS	-94-03	1	250
IS/SURR. SS	-87-01	*	250
ICV/LCS CS2 GAS	-79-02	1	250
ICV/LCS GAS	-94-01	1	250
ICV/LCS 4ADD	-69-03	5	50
ICV/LCS 8260	-78-03	5	50
ICV/LCS KET	-94-02	5	250
Data File Folder	24E11		
	LOT #	Syringe Lot #	
pH strip	N/A	MSV-03-04-12-4	
Chlorine strip	↓	-04-12-6	
Methanol		-03-23	
$NaHSO_4$		-02-24	
Reagent Water	RW4-23-001		
Sand			

ELECTRONIC DATA ARCHIVAL	
Location	Date
HPCHEM_VOA/TO01	

Analyzed By: LAP
Date: 5/11/24
Disposed By: LAP
Date Disposed: 5/13/24

Injection Log

Directory: D:\HPCHEM\1\DATA\24E11

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	REV195.D	1.	BFB01E11	T/CHK	11 May 2024 10:20
2	2	REV196.D	1.	VO01E111 0.03/0.15	0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA	11 May 2024 10:58
3	3	REV197.D	1.	VO01E112 0.05/0.25	0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA	11 May 2024 11:27
4	4	REV198.D	1.	VO01E113 0.1/0.5	1ppb 8260/5ppb KET-AA/25ppb TBA	11 May 2024 11:56
5	5	REV199.D	1.	VO01E114 0.2/1.0	2ppb 8260/10ppb KET-AA/50ppb TBA	11 May 2024 12:30
6	6	REV200.D	1.	VO01E115 0.5/2.5	5ppb 8260/25ppb KET-AA/125ppb TBA	11 May 2024 12:59
7	7	REV201.D	1.	VO01E116 1.0/5.0	10ppb 8260/50ppb KET-AA/250ppb TBA	11 May 2024 13:28
8	8	REV202.D	1.	VO01E117 2.0/10	20ppb 8260/100ppb KET-AA/500ppb TBA	11 May 2024 13:58
9	9	REV203.D	1.	VO01E118 3.0/15	30ppb 8260/150ppb KET-AA/750ppb TBA	11 May 2024 14:27
10	10	REV204.D	1.	VO01E119 5.0/25	50ppb 8260/250ppb KET-AA/1250ppb TBA	11 May 2024 14:56
11	11	REV205.D	1.	VO01DE1110 10/50	100ppb 8260/500ppb KET-AA/2500ppb TBA	11 May 2024 15:26
12	12	REV206.D	1.	RINSE		11 May 2024 15:55
13	13	REV207.D	1.	RINSE		11 May 2024 16:24
14	14	REV208.D	1.	IVO01E1101 1.0/5.0 Bromoform %R+	10ppb 8260/50ppb KET-AA/250ppb TBA	11 May 2024 16:53

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

Book #:	A01-076
Instrument No.:	01
Analytical Sequence:	24E13
Method File:	V001E11
Analytical Batch:	IV001E1102

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.

INITIAL CALIBRATION REFERENCE

DATE	5/11/24		
ICAL ID	V001 E11		
STANDARDS			
NAME	ID	Amount (µl)	Conc. (mg/L)
DCC			
DCC			
DCC			
DCC			
BFB	SV1-43-50-02	1	50
IS/SURR. IS	-94-03	1	250
IS/SURR. SS	-87-01	1	250
ICV/LCS CS2	-79-02	1	250
ICV/LCS GAS	-94-01	1	250
ICV/LCS 8ADD	-69-03	5	50
ICV/LCS 8260	-76-03	5	50
ICV/LCS KET	-94-02	5	250
Data File Folder	24E13		
	LOT #	Syringe Lot #	
pH strip	N/A	MSV-03-04-12-6	
Chlorine strip	↓	↓ -12-4	
Methanol			
$NaHSO_4$			
Reagent Water	RW4-23-001		
Sand			

ELECTRONIC DATA ARCHIVAL	
Location	Date
HPCHEM_VOA/TO01	

Analyzed By: LAP
Date: 6/13/24
Disposed By: LAP
Date Disposed: 5/14/24

Injection Log

Directory: D:\HPCHEM\1\DATA\24E13

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	REV209.D	1.	BFB01E12	T/CHK	13 May 2024 11:31
2	2	REV210.D	1.	IVO01E1102 1.0/5.0	10ppb 8260/50ppb KET-AA/250ppb TBA	13 May 2024 12:06
3	1	REV211.D	1.	BFB01E13	T/CHK	13 May 2024 12:45
4	2	REV212.D	1.	CVO01E1101	10ppb 8260/50ppb KET-AA/250ppb TBA	13 May 2024 13:17
5	3	REV213.D	1.	VO01E13L	10ppb 8260/50ppb KET-AA/250ppb TBA	13 May 2024 13:48
6	4	REV214.D	1.	VO01E13C	10ppb 8260/50ppb KET-AA/250ppb TBA	13 May 2024 14:17
7	5	REV215.D	1.	RINSE		13 May 2024 14:47
8	6	REV216.D	1.	VO01E13B	25mL	13 May 2024 15:17
9	7	REV217.D	1.	24E021-01	25mL	13 May 2024 15:46
10	8	REV218.D	1.	24E021-11	25mL	13 May 2024 16:16
11	9	REV219.D	1.	24E072-05	25mL	13 May 2024 16:45
12	10	REV220.D	1.	24E021-04	25mL	13 May 2024 17:15
13	11	REV221.D	1.	24E021-05	25mL	13 May 2024 17:45
14	12	REV222.D	1.	24E021-06	25mL	13 May 2024 18:14
15	13	REV223.D	1.	24E021-07	25mL	13 May 2024 18:43
16	14	REV224.D	1.	24E021-08	25mL	13 May 2024 19:12
17	15	REV225.D	1.	24E021-09	25mL	13 May 2024 19:41
18	16	REV226.D	1.	24E021-10	25mL	13 May 2024 20:10
19	17	REV227.D	1.	24E021-12	25mL	13 May 2024 20:40
20	18	REV228.D	1.	24E021-14	25mL	13 May 2024 21:09
21	19	REV229.D	1.	24E021-15	25mL	13 May 2024 21:38
22	20	REV230.D	1.	24E021-16	25mL	13 May 2024 22:07
23	21	REV231.D	1.	24E072-01	25mL	13 May 2024 22:36
24	22	REV232.D	1.	24E072-02	25mL	13 May 2024 23:05
25	23	REV233.D	1.	24E072-03	25mL	13 May 2024 23:34
26	24	REV234.D	1.	24E072-04	25mL	14 May 2024 00:02
27	25	REV235.D	1.	24E021-02	25mL	14 May 2024 00:31
28	26	REV236.D	1.	EVO01E1101	10ppb 8260/50ppb KET-AA/250ppb TBA	14 May 2024 01:00
29	27	REV237.D	1.	EVO01E1101	10ppb 8260/50ppb KET-AA/250ppb TBA	14 May 2024 01:29
30	28	REV238.D	1.	EVO01E1101	10ppb 8260/50ppb KET-AA/250ppb TBA	14 May 2024 01:58
31	29	REV239.D	1.	RINSE	10ppb 8260/50ppb KET-AA/250ppb TBA	14 May 2024 02:26
32	30	REV240.D	1.	RINSE	10ppb 8260/50ppb KET-AA/250ppb TBA	14 May 2024 02:55

LABORATORIES, INC.

for

VOLATILES

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

Book #:	A01-076
Instrument No.:	01
Analytical Sequence:	24F07
Method File:	V001E11
Analytical Batch:	CV001E1120

INITIAL CALIBRATION REFERENCE	
DATE	5/11/24
ICAL ID	V001E11

STANDARDS

NAME	ID	Amount (µl)	Conc. (mg/L)
DCC CS2 GAS	SV1-43-75-03	1	
	-68-01	1	
DCC 4ADD	-95-02	1	
DCC 8260	-37-03	5	
DCC KET	-89-02	5	
BFB	-38-02	1	
IS/SURR.	-96-01	5	50/250
ICV/LCS CS2 GAS	-55-02	1	
	-76-03	1	
ICV/LCS 4ADD	-69-03	5	
ICV/LCS 8260	-77-01	5	
ICV/LCS KET	-94-02	5	
Data File Folder			

	LOT #	Syringe Lot #
pH strip	HC439975	MSV-03-04-12-4
Chlorine strip	301802	↓ -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: LAP

Date: 6/7/24

Disposed By: LAP

Date Disposed: 6/10/24

Injection Log

Directory: D:\HPCHEM\1\DATA\24F07

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	RFV111.D	1.	BFB01F05	T/CHK	7 Jun 2024 14:08
2	2	RFV112.D	1.	CVO01E1120	10ppb 8260/50ppb KET-AA/250ppb TBA	7 Jun 2024 15:02
3	3	RFV113.D	1.	VO01F05L	10ppb 8260/50ppb KET-AA/250ppb TBA	7 Jun 2024 15:31
4	4	RFV114.D	1.	VO01F05C	10ppb 8260/50ppb KET-AA/250ppb TBA	7 Jun 2024 16:01
5	5	RFV115.D	1.	RINSE		7 Jun 2024 16:31
6	6	RFV116.D	1.	VO01F05B	25mL	7 Jun 2024 17:01
7	7	RFV117.D	1.	24F025-04	25mL	7 Jun 2024 17:31
8	8	RFV118.D	1.	24F032-04	25mL	7 Jun 2024 18:01
9	9	RFV119.D	1.	24F016-05	25mL	7 Jun 2024 18:31
10	10	RFV120.D	1.	24F025-03 PH6	25mL	7 Jun 2024 19:05
11	11	RFV121.D	1.	24F032-03 PH6 D4 %R↑ RR ↓	25mL	7 Jun 2024 19:35
12	12	RFV122.D	1.	24F032-02	25mL	7 Jun 2024 20:04
13	13	RFV123.D	1.	24F025-01 PH6	25mL	7 Jun 2024 20:33
14	14	RFV124.D	1.	24F032-03N PH6	25mL	7 Jun 2024 21:02
15	15	RFV125.D	1.	24F032-02N	25mL	7 Jun 2024 21:32
16	16	RFV126.D	1.	RINSE	25mL	7 Jun 2024 22:01
17	17	RFV127.D	1.	24F032-01	25mL	7 Jun 2024 22:30
18	18	RFV128.D	1.	24F025-02	25mL	7 Jun 2024 22:59
19	19	RFV129.D	1.	24F016-01 PH6 ↓	25mL	7 Jun 2024 23:28
20	20	RFV130.D	1.	24F016-02	25mL	7 Jun 2024 23:57
21	21	RFV131.D	1.	24F016-03	25mL	8 Jun 2024 00:26
22	22	RFV132.D	1.	24F016-04	25mL	8 Jun 2024 00:56
23	23	RFV133.D	1.	24F197-15	25mL	8 Jun 2024 01:24
24	24	RFV134.D	1.	24F197-16	25mL	8 Jun 2024 01:54
25	25	RFV135.D	1.	EVO01E1120	10ppb 8260/50ppb KET-AA/250ppb TBA	8 Jun 2024 02:23
26	26	RFV136.D	1.	EVO01E11201	10ppb 8260/50ppb KET-AA/250ppb TBA	8 Jun 2024 02:52
27	27	RFV137.D	1.	EVO01E11202	10ppb 8260/50ppb KET-AA/250ppb TBA	8 Jun 2024 03:21
28	28	RFV138.D	1.	RINSE		8 Jun 2024 03:49
29	29	RFV139.D	1.	RINSE		8 Jun 2024 04:18

EMAX
LABORATORIES, INC.
3051 Fujita Street
Torrance, CA 90505
Tel: (310)-618-8889

Date: 06-14-2024
EMAX Batch No.: 24F032

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 06/07/24.
The data reported relate only to samples listed below :

Sample ID	Control #	Col Date	Matrix	Analysis
EB05-GW060624	F032-01	06/06/24	WATER	VOCS BY 8260C
MW43-GW060624-298	F032-02	06/06/24	WATER	VOCS BY 8260C
MW43-GW060624-318	F032-03	06/06/24	WATER	VOCS BY 8260C
TB06-GW060624	F032-04	06/06/24	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.
1835 W. 205th Street, Torrance, CA 90501
Tel # : 310-618-8889 FAX#: 310-618-0818
Email: info@emaxlabs.com

PO NUMBER:
SAMPLE STORAGE

EMAX CONTROL NO. 24F032 / 24F032A
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: Linh Pham

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: 8260D VOCs; 8260D VOCs; TCLP Metals + Mercury; TCLP VOCs; TCLP SVOCs; pH; Flashpoint/Ignitability; Reactive Cyanide; Reactive Sulfide

TAT:
- ☐ Rush __24__hrs.
- ☒ Rush __48_hrs
- ☐ Rush_72_hrs
- ☐ 7 days
- ☒ 14 days
- ☐ 21 days

LAB	SAMPLE ID (CLIENT)	SAMPLING LOCATION	SAMPLING DATE	SAMPLING TIME	CONTAINER NO.	CONTAINER SIZE	CONTAINER TYPE	MATRIX CODE	QC	PRESERVATIVE CODE	COMMENTS
1	EB05-GW0606024		6/6/24	800	3					HCl	
2	MW43-GW0606024-298		6/6/24	825	3					HCl	
3	MW43-GW0606024-318		6/6/24	820	3					IC	unpreserved
4	TB06-GW0606024		6/6/24	1400	3					HCl	
5	IDW02-SB0606024		6/6/24	1355	3					IC	14 day TAT (24F032A)
6											
7											
8											
9											
10											

Instructions
CC Joe Miller millerjc@cdmsmith.com
and Neil Smith SmithNL@cdmsmith.com

Cooler #	Temp. (°C)	Sample #s
1	5.8	

SAMPLER

COURIER/AIRBILL: Fedex

RELINQUISHED BY	Date	Time	RECEIVED BY
Jessica Vaille	6/6/24	1540	
	06/07/24	1000	

NOTICE: Turn-around-time (TAT) for samples shall not begin until all discrepancies have been resolved. For samples received and discrepacies resolved after 1500 hrs, TAT shall start at 0800 hrs the next business day. The client is responsible for all cost associted 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 24F032
☑ Fedex ☐ UPS ☐ GSO ☐ Others	276010177152	Recipient Jocelyne Solis-Ramos
☐ EMAX Courier ☐ Client Delivery		Date 06/07/24 Time 1000

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 5.0 °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* 210606272	*(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
2,4	4-6,10-12	D16		R1

☐ 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 label
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 Jocelyne Solis-Ramos **Date** 06/07/24 6/7/24

SRF **Date** 6/7/24

PM **Date** 6/7/24


ORIGIN ID:NPHA (513) 602-1619
CDM SMITH, INC
555 17TH ST STE 500
DENVER, CO 80202
UNITED STATES US
SHIP DATE: 06JUN24
ACTWGT: 30.00 LB
CAD: 6997117/SSF02521
DIMS: 26x13x14 IN
BILL THIRD PARTY
TO EMAX LABORATORIES
275859 TS1.DRILL
3051 FUJITA ST
TORRANCE CA 90505
(310) 618-8889
REF:
INV:
PO:
DEPT:
1000
sealed
B
FedEx Express
TRK# 2756 1017 7152
0201
FRI - 07 JUN 10:30A
PRIORITY OVERNIGHT
AHS
90505
CA-US LAX
WZ 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 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#: 24F032

CASE NARRATIVE

Client : CDM SMITH

Project: VA SALT LAKE CITY

SDG : 24F032

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

A total of four(4) water samples were received on 06/07/24 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 calibration requirements were satisfied. Note that" Minimum Response Factor" for all analytes were within method recommended response factors with the exception of Acetone, 2-Butanone and 2-Hexanone. 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, one(1) method blank was analyzed. VO01F05B - 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. VO01F05L/VO01F05C were within LCS limits. Refer to LCS summary form 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.

LAB CHRONICLE
VOLATILE ORGANICS BY GC/MS

Client : CDM SMITH
Project : VA SALT LAKE CITY

SDG NO. : 24F032
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	VO01F05L	1	NA	06/07/2415:31	06/07/2415:31	RFV113	REV201	VO01F05	Lab Control Sample (LCS)
LCD1W	VO01F05C	1	NA	06/07/2416:01	06/07/2416:01	RFV114	REV201	VO01F05	LCS Duplicate
MBLK1W	VO01F05B	1	NA	06/07/2417:01	06/07/2417:01	RFV116	REV201	VO01F05	Method Blank
TB06-GW060624	24F032-04	1	NA	06/07/2418:01	06/07/2418:01	RFV118	REV201	VO01F05	Field Sample
MW43-GW060624-318	24F032-03N	1	NA	06/07/2421:02	06/07/2421:02	RFV124	REV201	VO01F05	Field Sample
MW43-GW060624-298	24F032-02N	1	NA	06/07/2421:32	06/07/2421:32	RFV125	REV201	VO01F05	Field Sample
EB05-GW060624	24F032-01	1	NA	06/07/2422:30	06/07/2422:30	RFV127	REV201	VO01F05	Field Sample

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	06/06/24 08:00
Project	: VA SALT LAKE CITY	Date Received:	06/07/24
Batch No.	: 24F032	Date Extracted:	06/07/24 22:30
Sample ID	: EB05-GW060624	Date Analyzed:	06/07/24 22:30
Lab Samp ID:	24F032-01	Dilution Factor:	1
Lab File ID:	RFV127	Matrix:	WATER
Ext Btch ID:	VO01F05	% Moisture:	NA
Calib. Ref.:	REV201	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	10.8	10.0	108	70-130
Bromofluorobenzene	8.97	10.0	90	70-130
Toluene-d8	9.47	10.0	95	70-130
Dibromofluoromethane	9.75	10.0	98	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : LPriet Analyzed by : LPriet
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F07\RFV127.D Vial: 17
Acq On : 7 Jun 2024 10:30 pm Operator: LPriet
Sample : 24F032-01 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 13 9:18 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

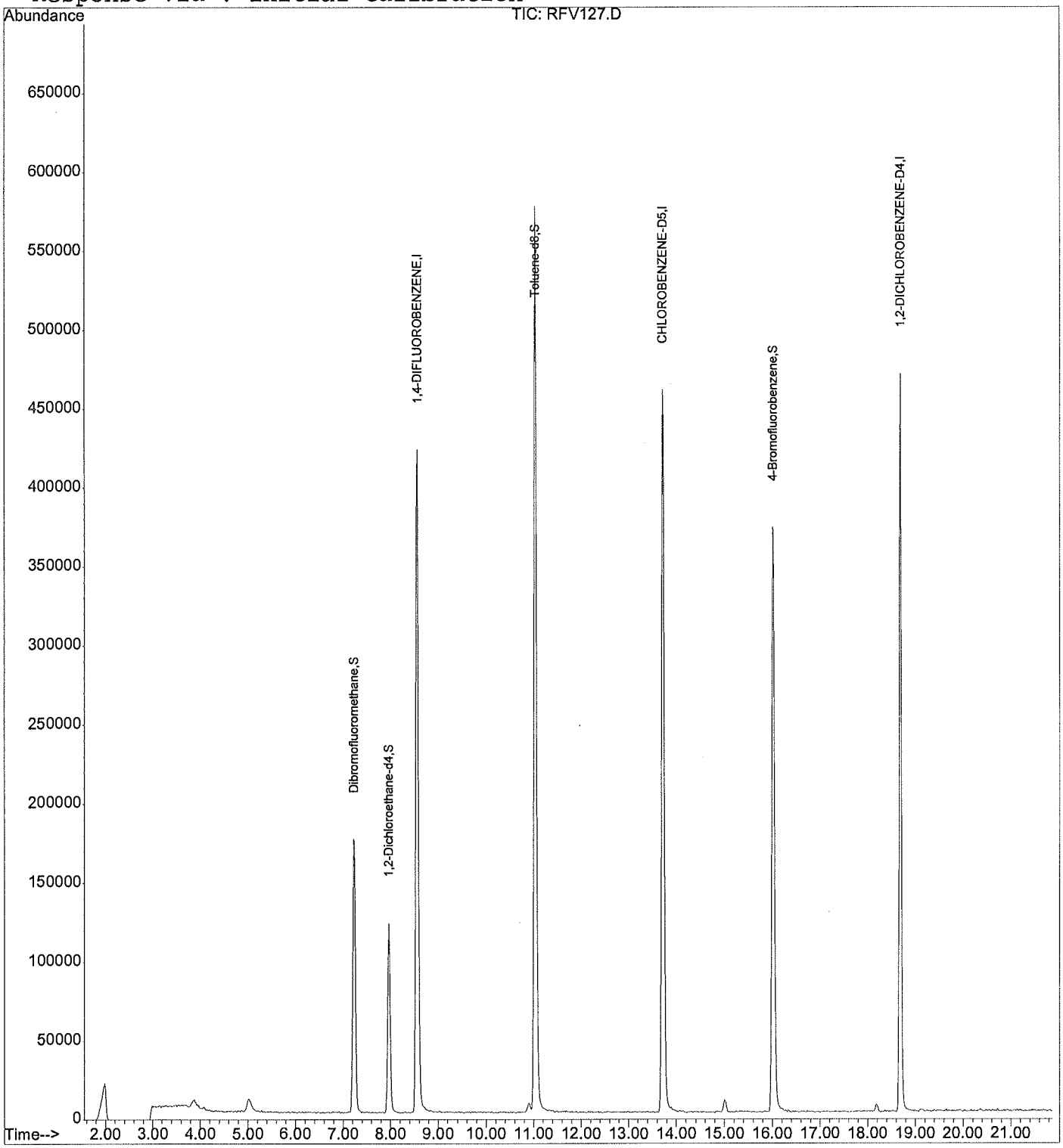
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	682582	10.00	ug/l	0.02
53) CHLOROBENZENE-D5	13.71	117	558366	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	246968	10.00	ug/l	0.01
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	206041	9.75	ug/l	0.00
Spiked Amount 10.000			Recovery =	97.50%		
41) 1,2-Dichloroethane-d4	7.97	65	154996	10.76	ug/l	0.00
Spiked Amount 10.000			Recovery =	107.60%		
54) Toluene-d8	11.03	98	792594	9.47	ug/l	0.00
Spiked Amount 10.000			Recovery =	94.70%		
76) 4-Bromofluorobenzene	16.01	95	301577	8.97	ug/l	0.00
Spiked Amount 10.000			Recovery =	89.70%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration
RFV127.D VO01E11.M Thu Jun 13 09:19:31 2024 Page 1

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F07\RFV127.D Vial: 17
Acq On : 7 Jun 2024 10:30 pm Operator: LPriet
Sample : 24F032-01 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 13 9:18 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



METHOD SW5030B/B260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	06/06/24 08:25
Project	: VA SALT LAKE CITY	Date Received:	06/07/24
Batch No.	: 24F032	Date Extracted:	06/07/24 21:32
Sample ID	: MW43-GW060624-29B	Date Analyzed:	06/07/24 21:32
Lab Samp ID:	24F032-02N	Dilution Factor:	1
Lab File ID:	RFV125	Matrix:	WATER
Ext Btch ID:	VOO1F05	% Moisture:	NA
Calib. Ref.:	REV201	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	26	20	2.5
Benzene	0.31J	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.B	1.0	0.10
Chloromethane	ND	1.0	0.15
cis-1,2-Dichloroethylene	0.33J	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	55	1.0	0.15
Toluene	0.45J	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	11.3	10.0	113	70-130
Bromofluorobenzene	8.58	10.0	86	70-130
Toluene-d8	9.51	10.0	95	70-130
Dibromofluoromethane	9.95	10.0	100	70-130

Notes:
Sample Amount : 25ml
Final Volume : 25ml
Prepared by : LPriet
Analyzed by : LPriet
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F07\RFV125.D
Acq On : 7 Jun 2024 9:32 pm
Sample : 24F032-02N
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Jun 13 9:17 2024

Vial: 15
Operator: LPriet
Inst : 01
Multiplr: 1.00
Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

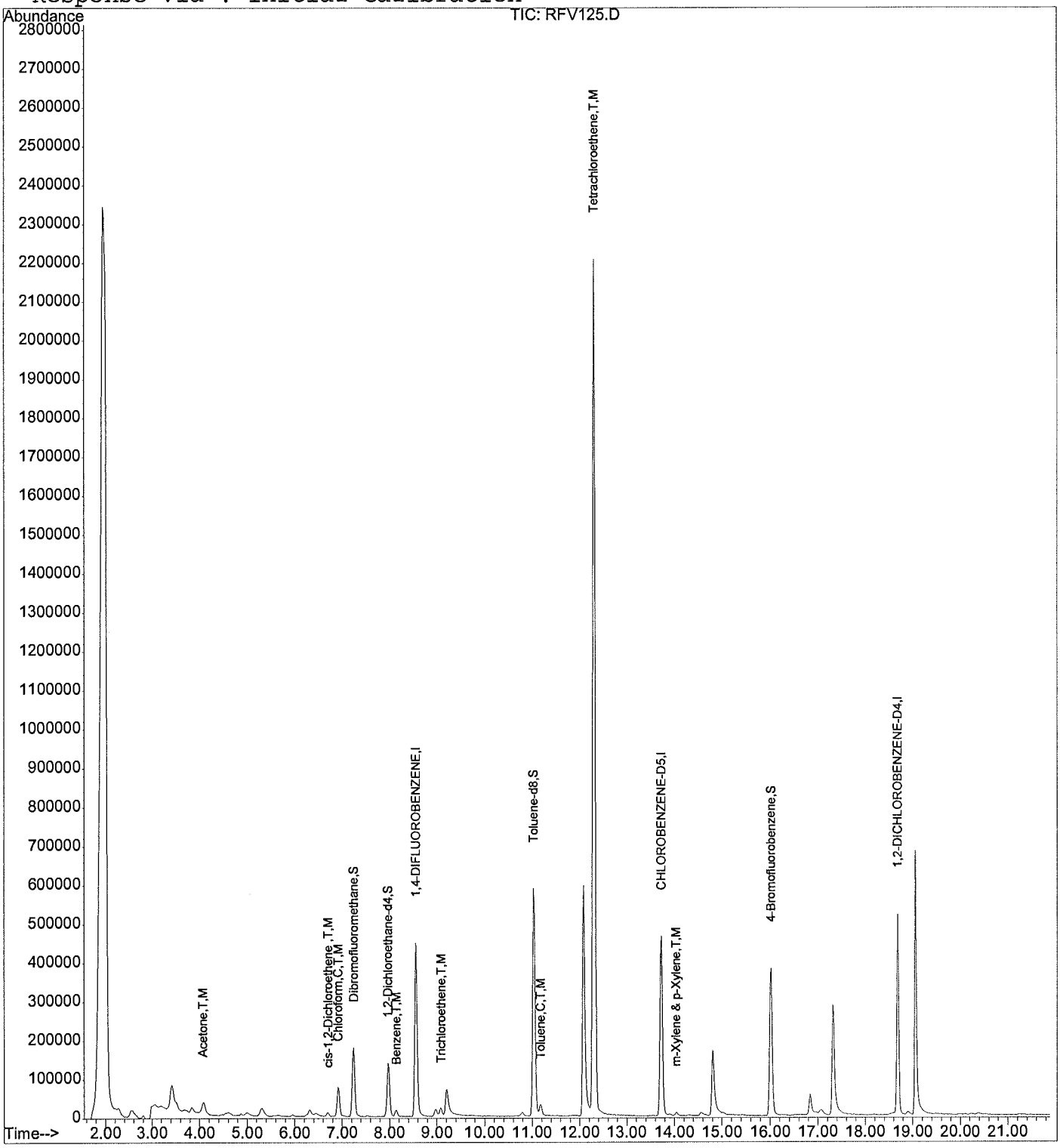
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	684023	10.00	ug/l	0.02
53) CHLOROBENZENE-D5	13.73	117	563537	10.00	ug/l	0.01
72) 1,2-DICHLOROBENZENE-D4	18.69	152	261982	10.00	ug/l	0.01
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	210737	9.95	ug/l	0.01
Spiked Amount 10.000			Recovery =	99.50%		
41) 1,2-Dichloroethane-d4	7.97	65	163800	11.34	ug/l	0.00
Spiked Amount 10.000			Recovery =	113.40%		
54) Toluene-d8	11.03	98	803055	9.51	ug/l	0.00
Spiked Amount 10.000			Recovery =	95.10%		
76) 4-Bromofluorobenzene	16.02	95	306192	8.58	ug/l	0.01
Spiked Amount 10.000			Recovery =	85.80%		
Target Compounds						Qvalue
13) Acetone	4.07	43	65801	26.35	ug/l #	1
30) cis-1,2-Dichloroethene	6.71	96	9428	0.33	ug/l	89
31) Chloroform	6.92	83	119326	2.85	ug/l	97
42) Benzene	8.15	78	28444	0.31	ug/l	97
44) Trichloroethene	9.09	130	13094	0.55	ug/l	96
55) Toluene	11.18	91	45131	0.45	ug/l	98
61) Tetrachloroethene	12.31	164	1150592	55.31	ug/l	98
68) m-Xylene & p-Xylene	14.04	91	13337	0.16	ug/l	91

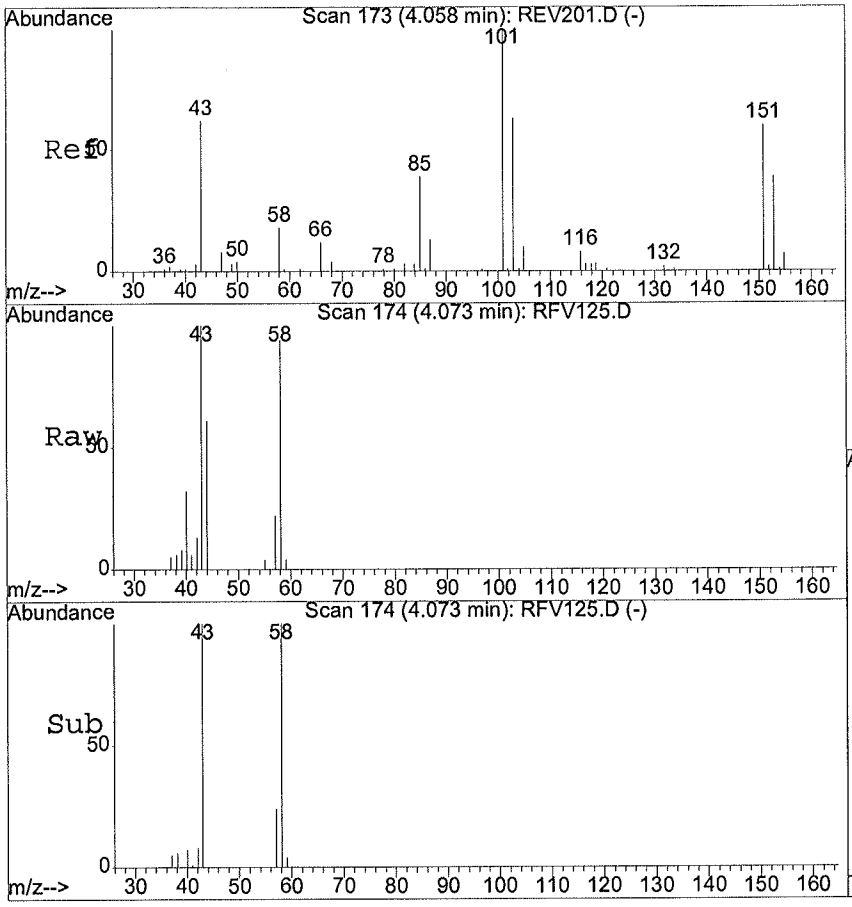
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F07\RFV125.D Vial: 15
Acq On : 7 Jun 2024 9:32 pm Operator: LPriet
Sample : 24F032-02N Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 13 9:17 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration

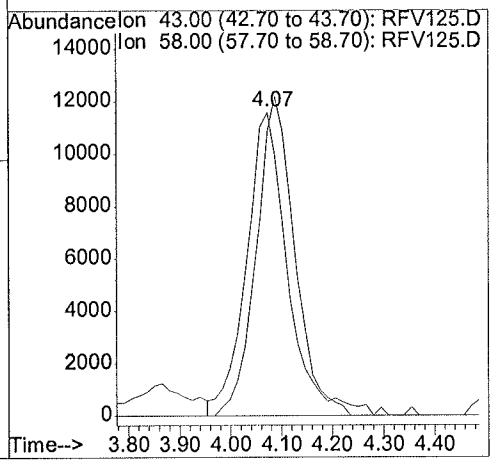


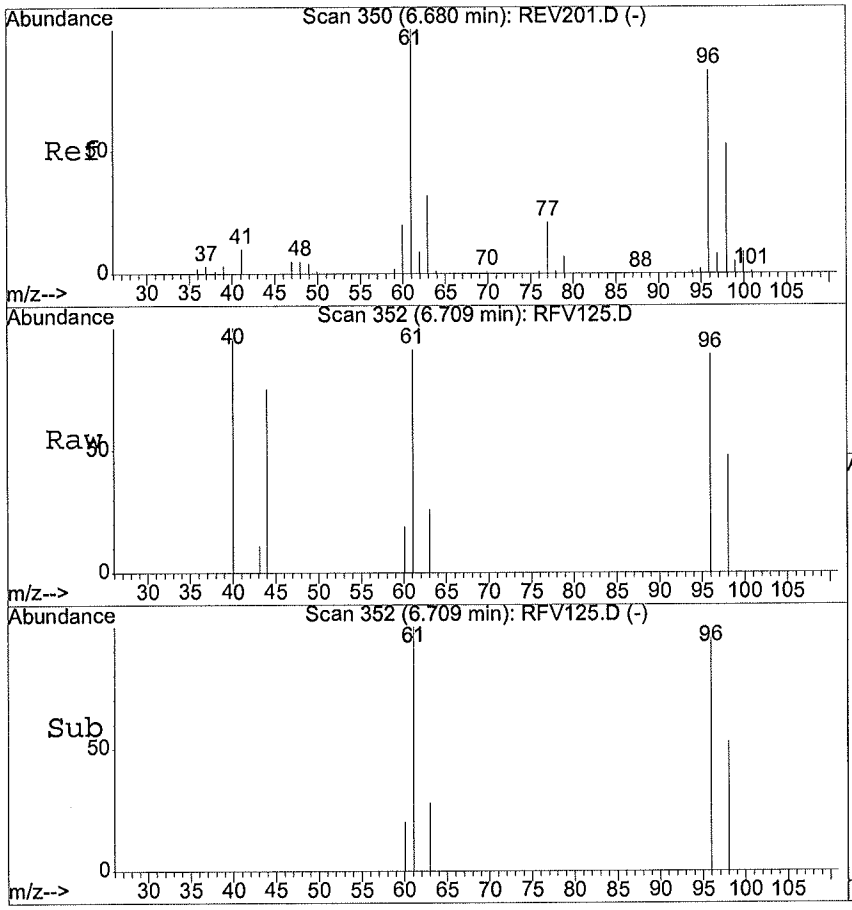


#13
Acetone
Concen: 26.35 ug/l
RT: 4.07 min Scan# 174
Delta R.T. 0.02 min
Lab File: RFV125.D
Acq: 7 Jun 2024 9:32 pm

Tgt Ion: 43 Resp: 65801

Ion	Ratio	Lower	Upper
43	100		
58	97.7	0.9	60.9#

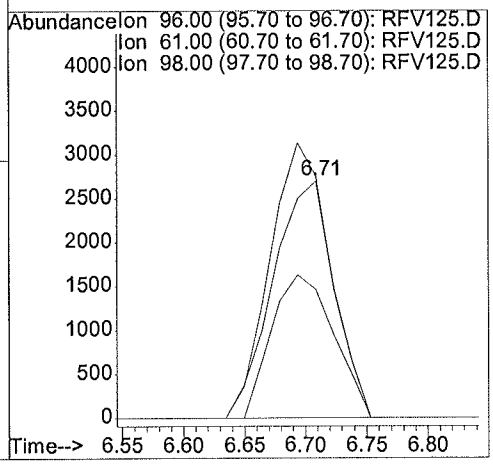


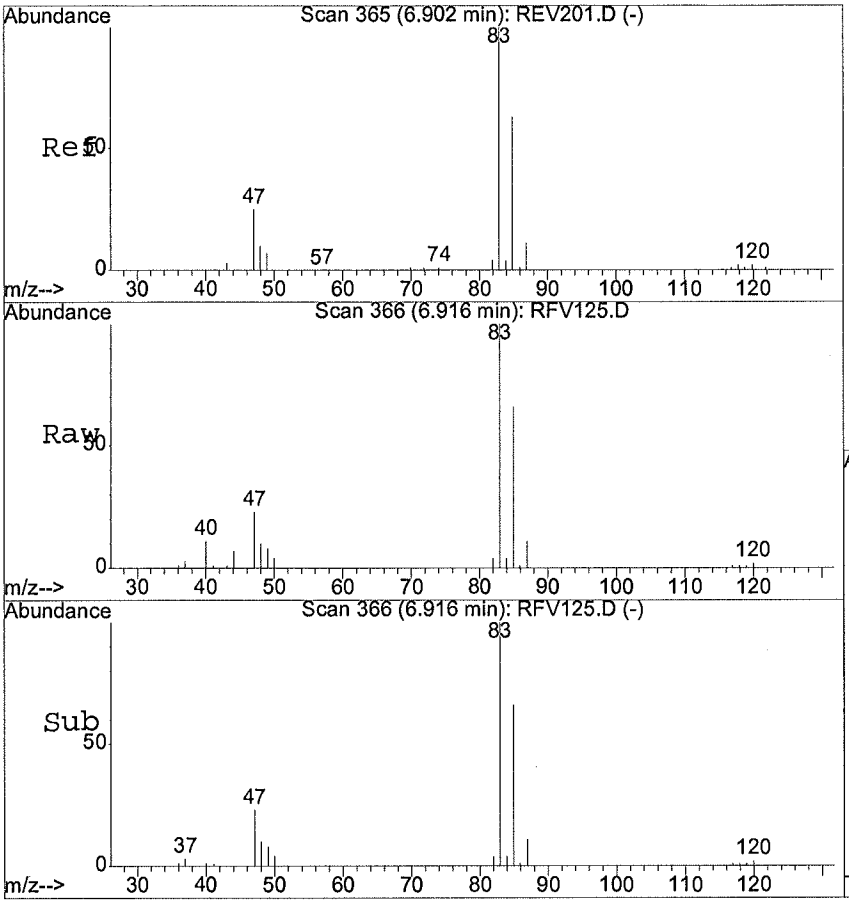


#30
cis-1,2-Dichloroethene
Concen: 0.33 ug/l
RT: 6.71 min Scan# 352
Delta R.T. 0.03 min
Lab File: RFV125.D
Acq: 7 Jun 2024 9:32 pm

Tgt Ion: 96 Resp: 9428

Ion	Ratio	Lower	Upper
96	100		
61	114.1	101.8	161.8
98	61.4	33.6	93.6

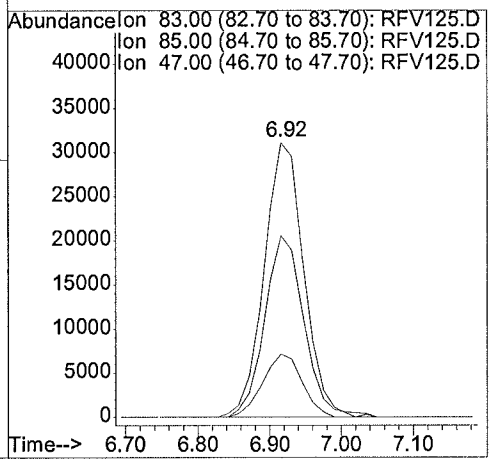


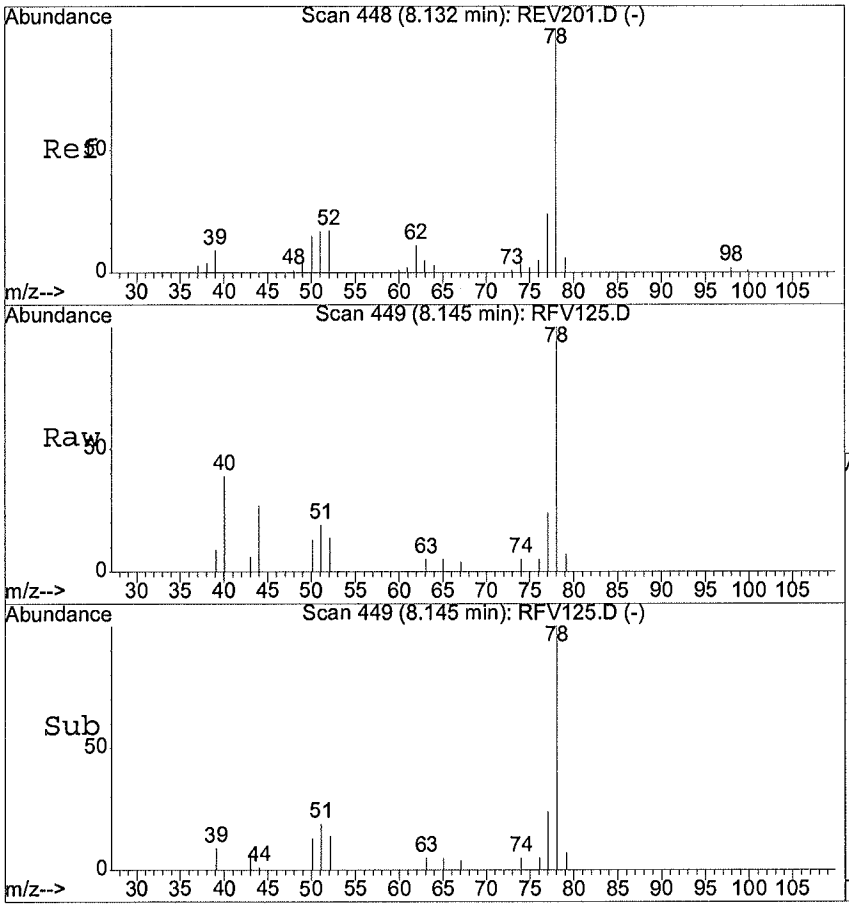


#31
Chloroform
Concen: 2.85 ug/l
RT: 6.92 min Scan# 366
Delta R.T. 0.01 min
Lab File: RFV125.D
Acq: 7 Jun 2024 9:32 pm

Tgt Ion: 83 Resp: 119326

Ion	Ratio	Lower	Upper
83	100		
85	65.6	38.2	98.2
47	22.9	0.0	54.7

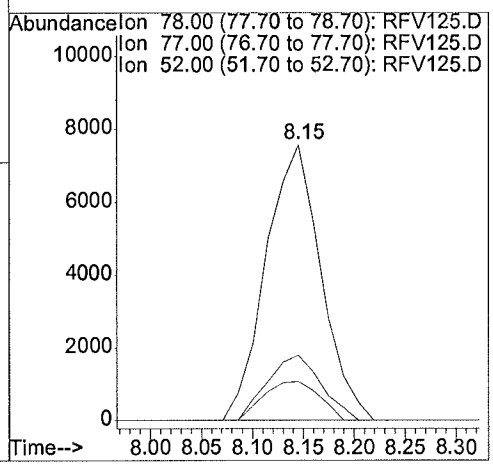


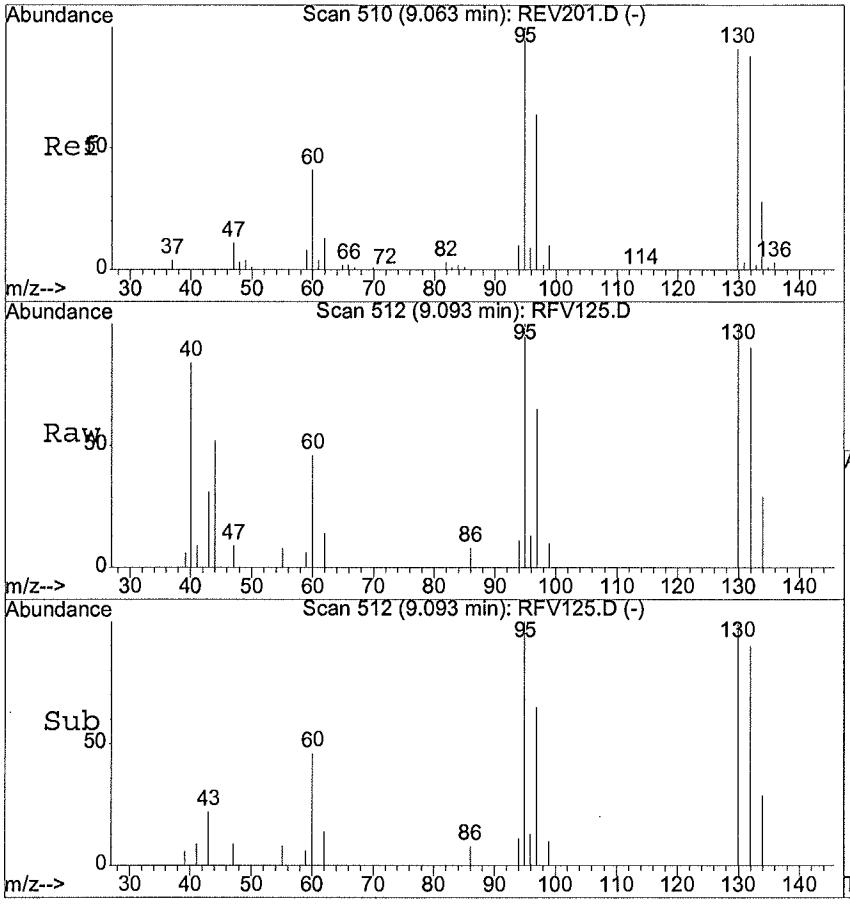


#42
Benzene
Concen: 0.31 ug/l
RT: 8.15 min Scan# 449
Delta R.T. 0.01 min
Lab File: RFV125.D
Acq: 7 Jun 2024 9:32 pm

Tgt Ion: 78 Resp: 28444

Ion	Ratio	Lower	Upper
78	100		
77	23.2	0.0	54.0
52	14.3	0.0	46.8

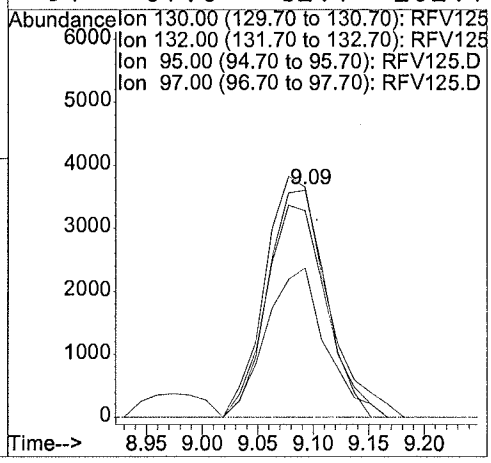


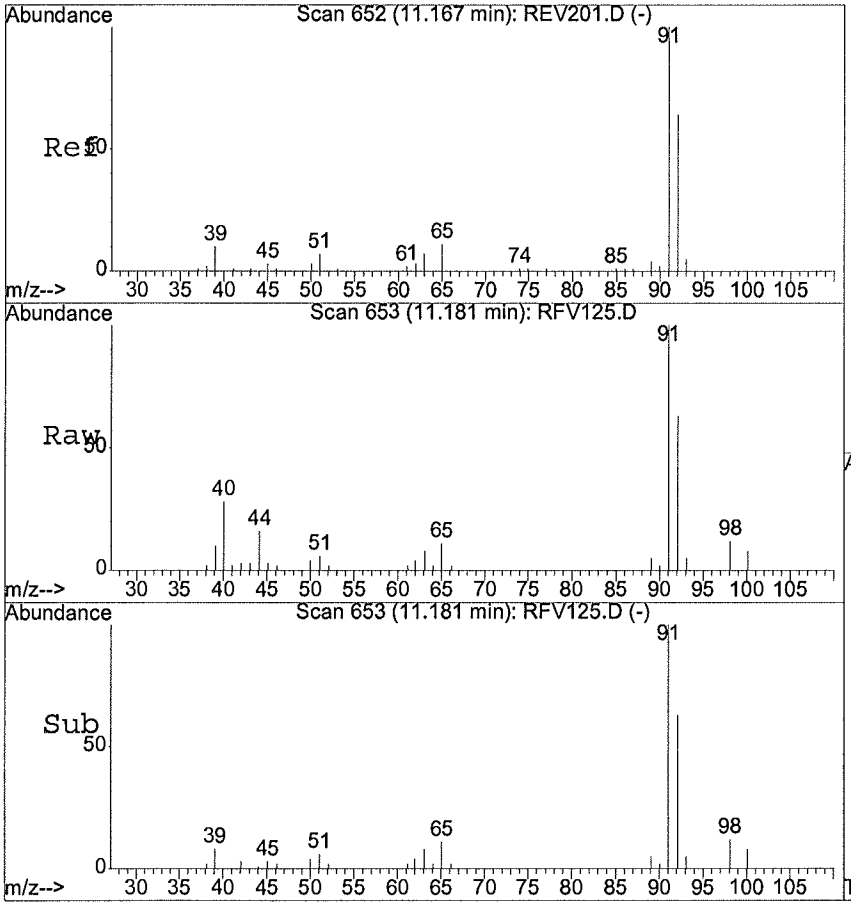


#44
Trichloroethene
Concen: 0.55 ug/l
RT: 9.09 min Scan# 512
Delta R.T. 0.03 min
Lab File: RFV125.D
Acq: 7 Jun 2024 9:32 pm

Tgt Ion:130 Resp: 13094

Ion	Ratio	Lower	Upper
130	100		
132	97.5	66.3	126.3
95	113.9	78.9	138.9
97	67.6	42.7	102.7

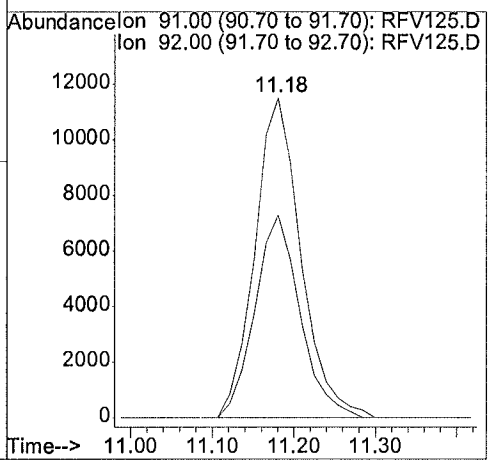


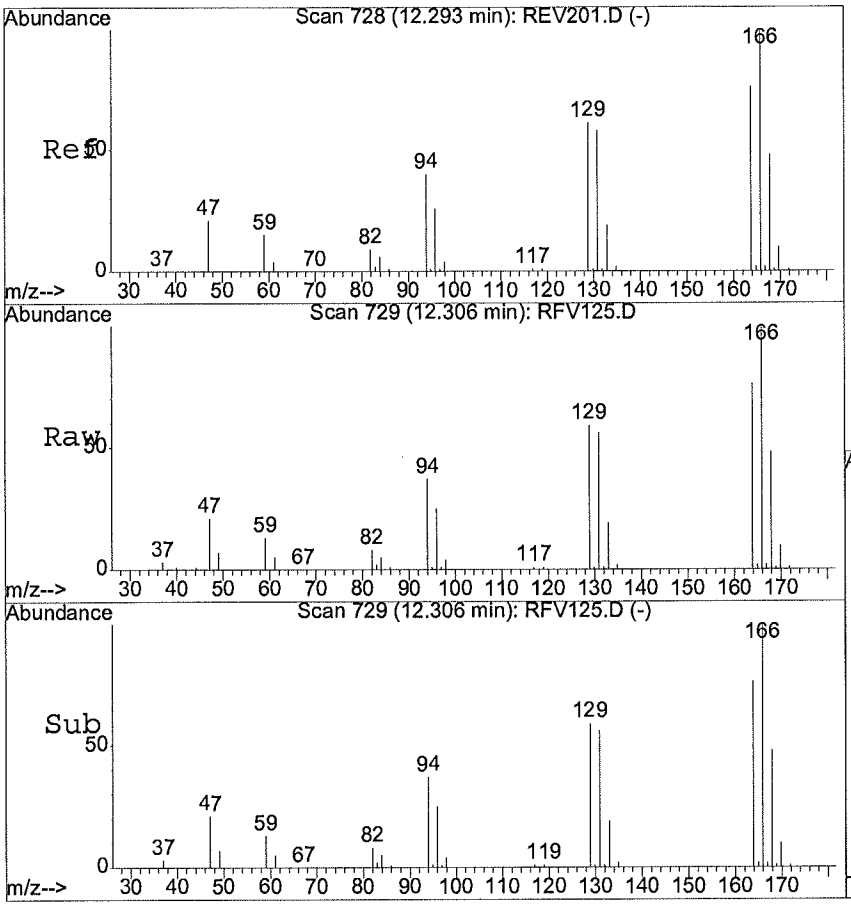


#55
Toluene
Concen: 0.45 ug/l
RT: 11.18 min Scan# 653
Delta R.T. 0.01 min
Lab File: RFV125.D
Acq: 7 Jun 2024 9:32 pm

Tgt Ion: 91 Resp: 45131

Ion	Ratio	Lower	Upper
91	100		
92	62.2	34.0	94.0

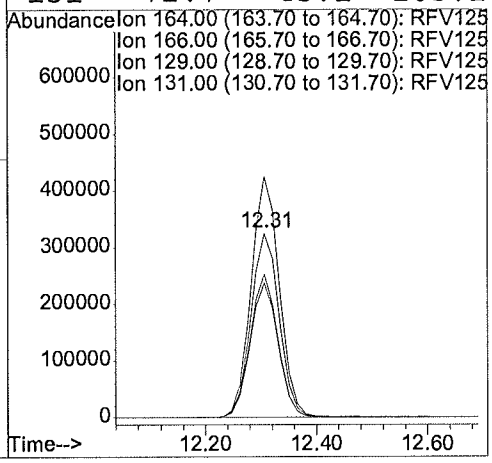


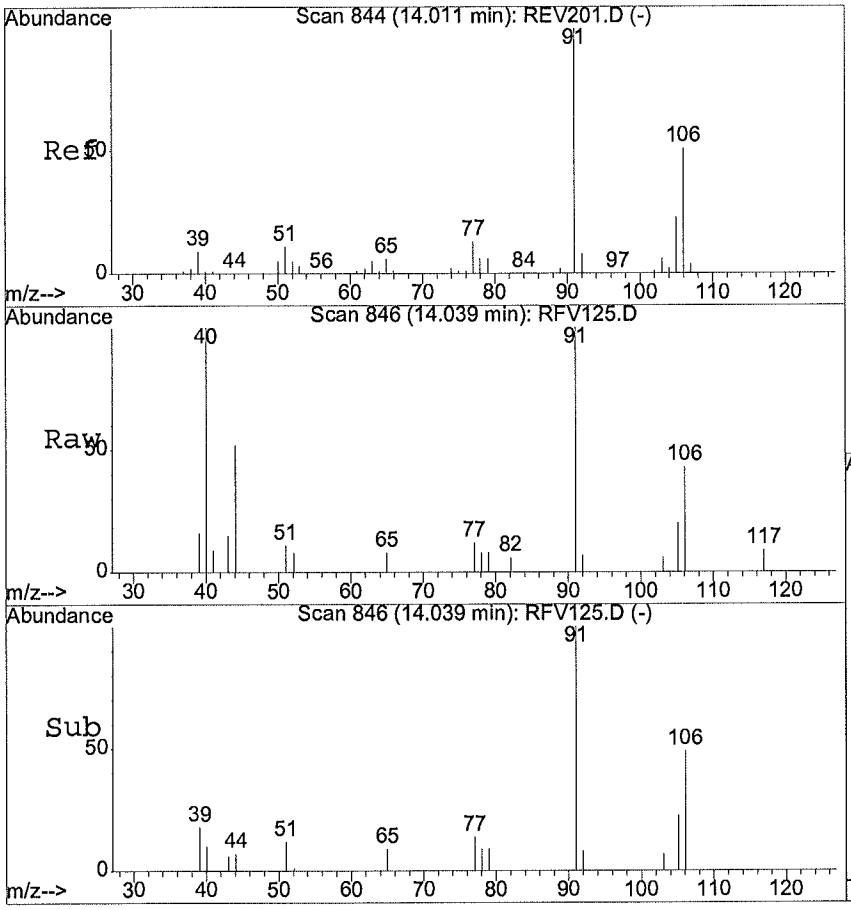


#61
Tetrachloroethene
Concen: 55.31 ug/l
RT: 12.31 min Scan# 729
Delta R.T. 0.01 min
Lab File: RFV125.D
Acq: 7 Jun 2024 9:32 pm

Tgt Ion:164 Resp: 1150592

Ion	Ratio	Lower	Upper
164	100		
166	130.2	101.0	161.0
129	76.7	49.2	109.2
131	72.7	45.1	105.1

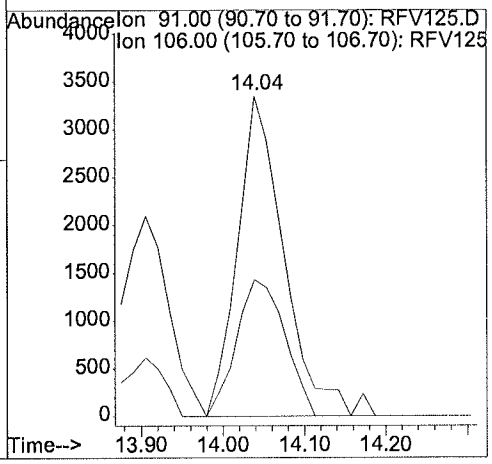




#68
m-Xylene & p-Xylene
Concen: 0.16 ug/l
RT: 14.04 min Scan# 846
Delta R.T. 0.03 min
Lab File: RFV125.D
Acq: 7 Jun 2024 9:32 pm

Tgt Ion: 91 Resp: 13337

Ion	Ratio	Lower	Upper
91	100		
106	44.4	20.9	80.9



METHOD SW5030B/B260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	06/06/24 12:20
Project	: VA SALT LAKE CITY	Date Received:	06/07/24
Batch No.	: 24F032	Date Extracted:	06/07/24 21:02
Sample ID	: MW43-GW060624-31B	Date Analyzed:	06/07/24 21:02
Lab Samp ID:	24F032-03N	Dilution Factor:	1
Lab File ID:	RFV124	Matrix:	WATER
Ext Btch ID:	VOO1F05	% Moisture:	NA
Calib. Ref.:	REV201	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	0.23J	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	1.0	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	1.5	1.0	0.15
Toluene	1.9	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	9.01	10.0	90	70-130
Toluene-d8	9.60	10.0	96	70-130
Dibromofluoromethane	9.92	10.0	99	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : LPriet Analyzed by : LPriet
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F07\RFV124.D Vial: 14
Acq On : 7 Jun 2024 9:02 pm Operator: LPriet
Sample : 24F032-03N Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 13 9:06 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	685929	10.00	ug/l	0.01
53) CHLOROBENZENE-D5	13.73	117	563413	10.00	ug/l	0.01
72) 1,2-DICHLOROBENZENE-D4	18.69	152	244587	10.00	ug/l	0.01
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	210648	9.92	ug/l	0.00
Spiked Amount 10.000			Recovery =	99.20%		
41) 1,2-Dichloroethane-d4	7.97	65	153545	10.60	ug/l	0.00
Spiked Amount 10.000			Recovery =	106.00%		
54) Toluene-d8	11.03	98	810754	9.60	ug/l	0.00
Spiked Amount 10.000			Recovery =	96.00%		
76) 4-Bromofluorobenzene	16.01	95	300133	9.01	ug/l	0.00
Spiked Amount 10.000			Recovery =	90.10%		
Target Compounds						Qvalue
31) Chloroform	6.92	83	43917	1.05	ug/l	95
42) Benzene	8.13	78	20938	0.23	ug/l	98
45) Methylcyclohexane	9.18	83	4357	0.12	ug/l	87
55) Toluene	11.17	91	186875	1.87	ug/l	100
61) Tetrachloroethene	12.31	164	32129	1.54	ug/l	99
68) m-Xylene & p-Xylene	14.04	91	10059	0.12	ug/l	93

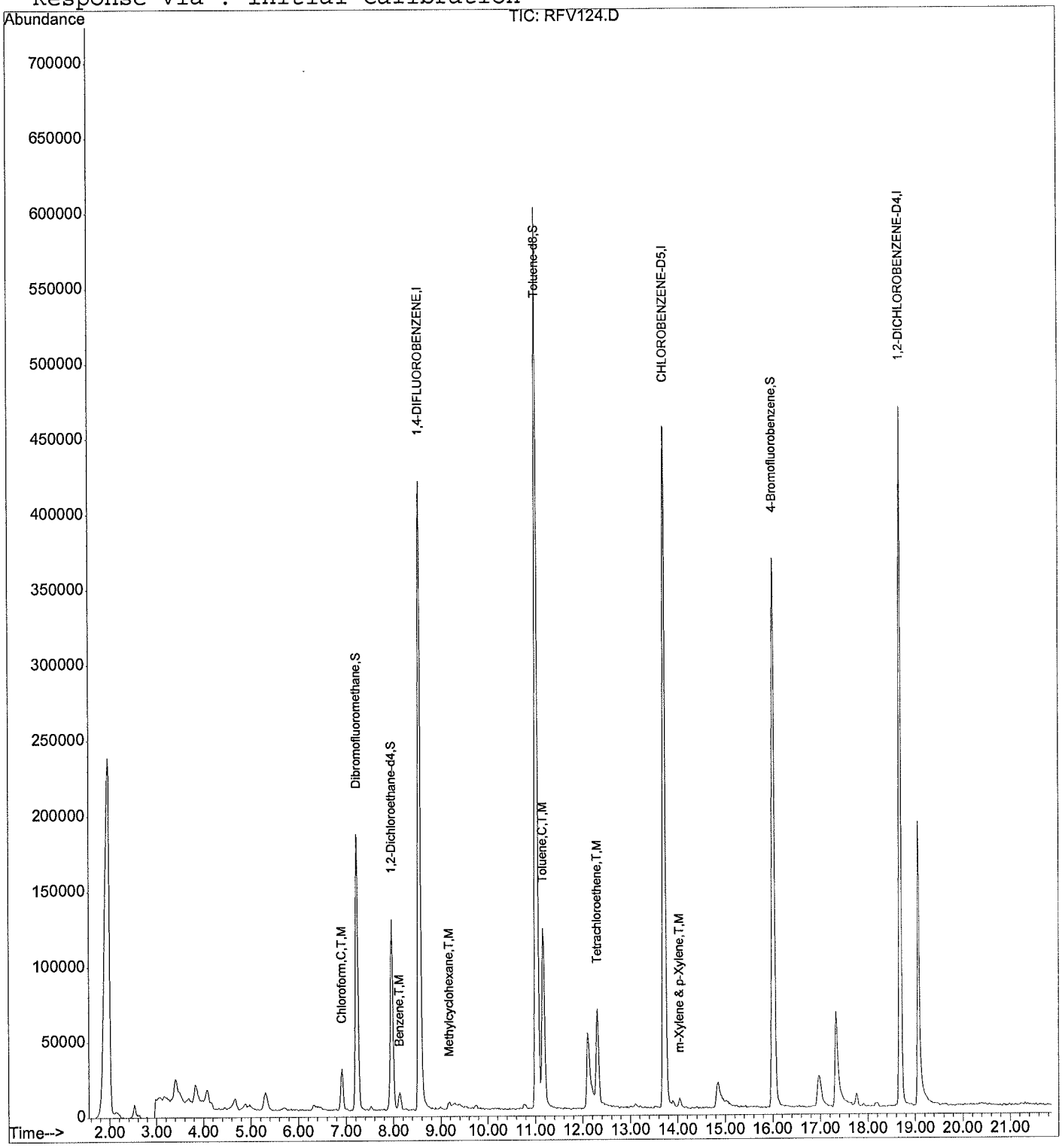
(#) = qualifier out of range (m) = manual integration

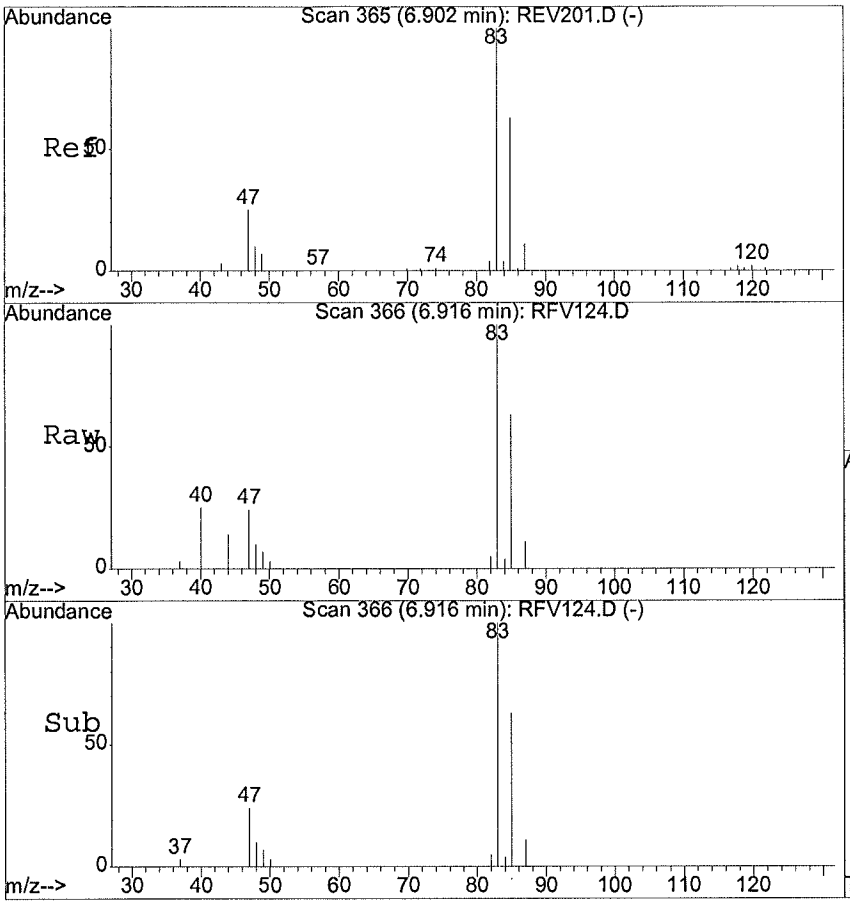
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F07\RFV124.D
Acq On : 7 Jun 2024 9:02 pm
Sample : 24F032-03N
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Jun 13 9:06 2024

Vial: 14
Operator: LPriet
Inst : 01
Multiplr: 1.00
Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration

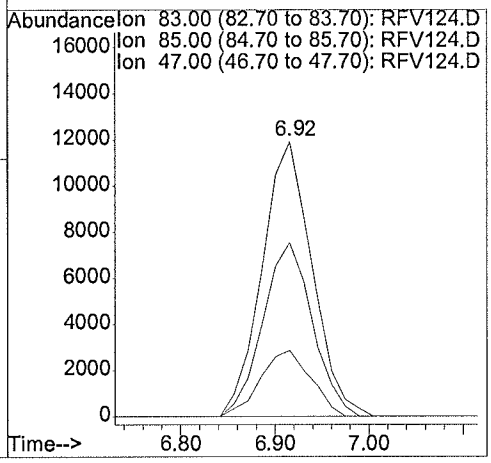


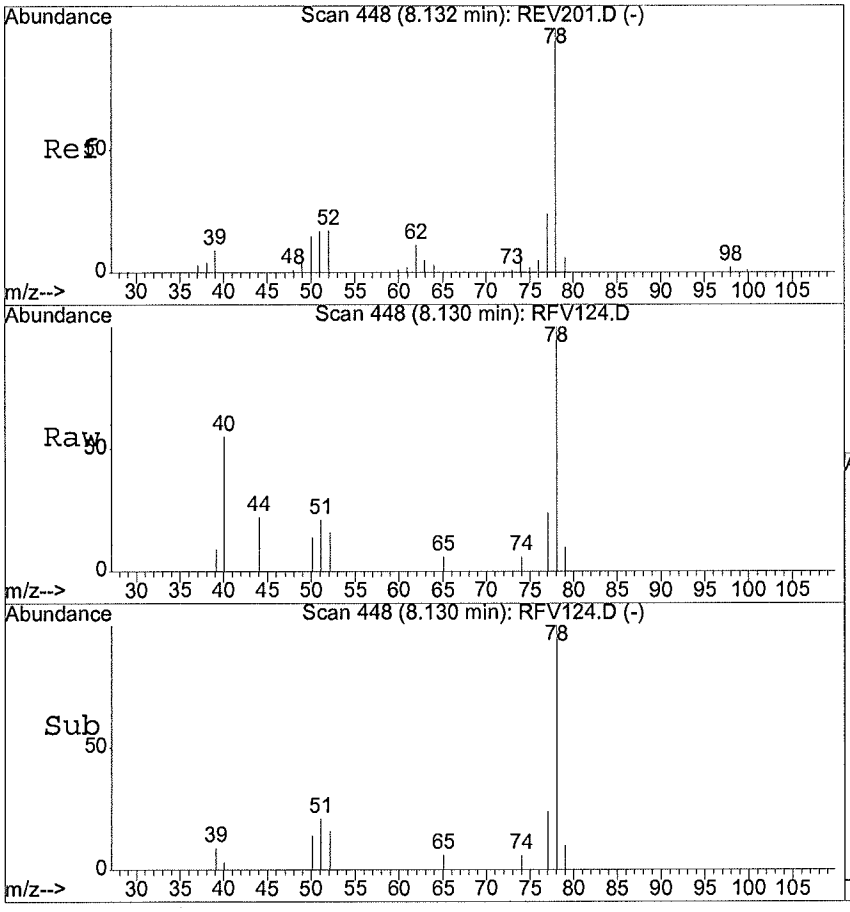


#31
Chloroform
Concen: 1.05 ug/l
RT: 6.92 min Scan# 366
Delta R.T. 0.01 min
Lab File: RFV124.D
Acq: 7 Jun 2024 9:02 pm

Tgt Ion: 83 Resp: 43917

Ion	Ratio	Lower	Upper
83	100		
85	62.7	38.2	98.2
47	24.3	0.0	54.7

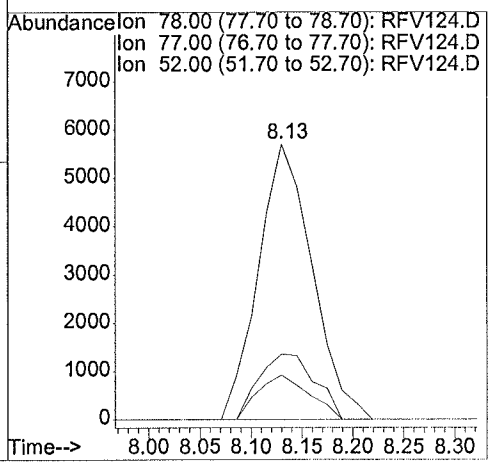


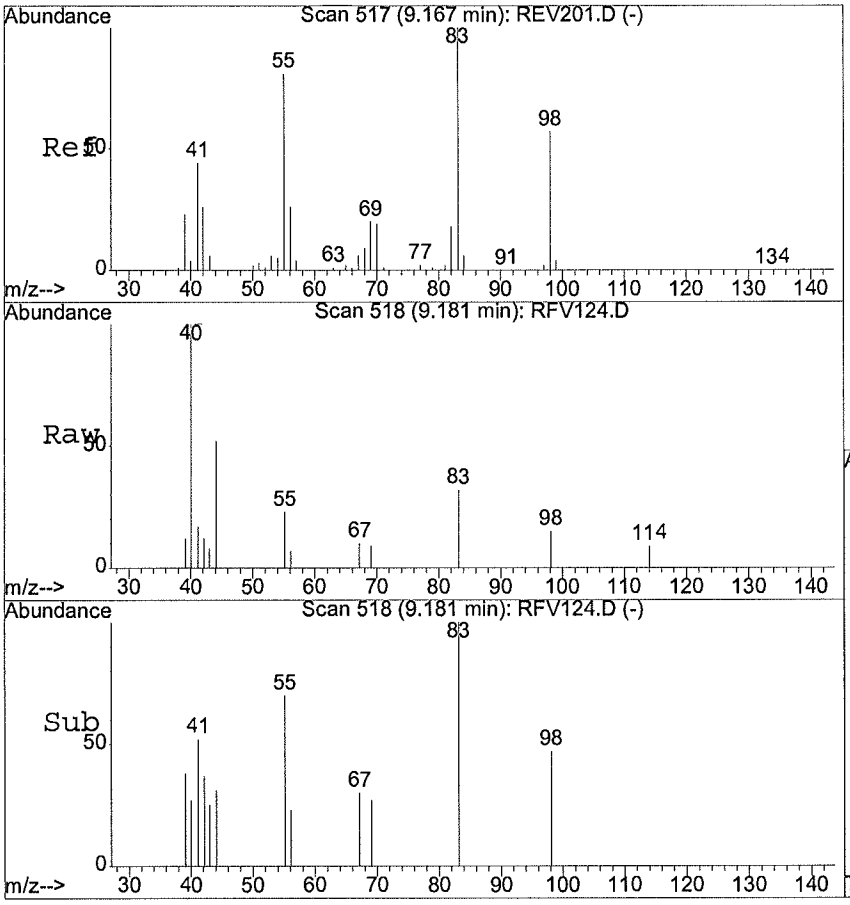


#42
Benzene
Concen: 0.23 ug/l
RT: 8.13 min Scan# 448
Delta R.T. -0.00 min
Lab File: RFV124.D
Acq: 7 Jun 2024 9:02 pm

Tgt Ion: 78 Resp: 20938

Ion	Ratio	Lower	Upper
78	100		
77	24.8	0.0	54.0
52	15.4	0.0	46.8

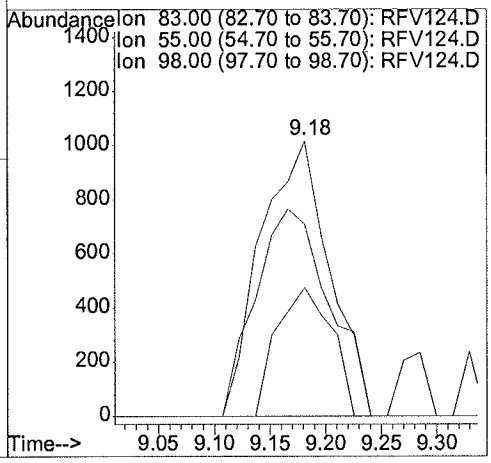


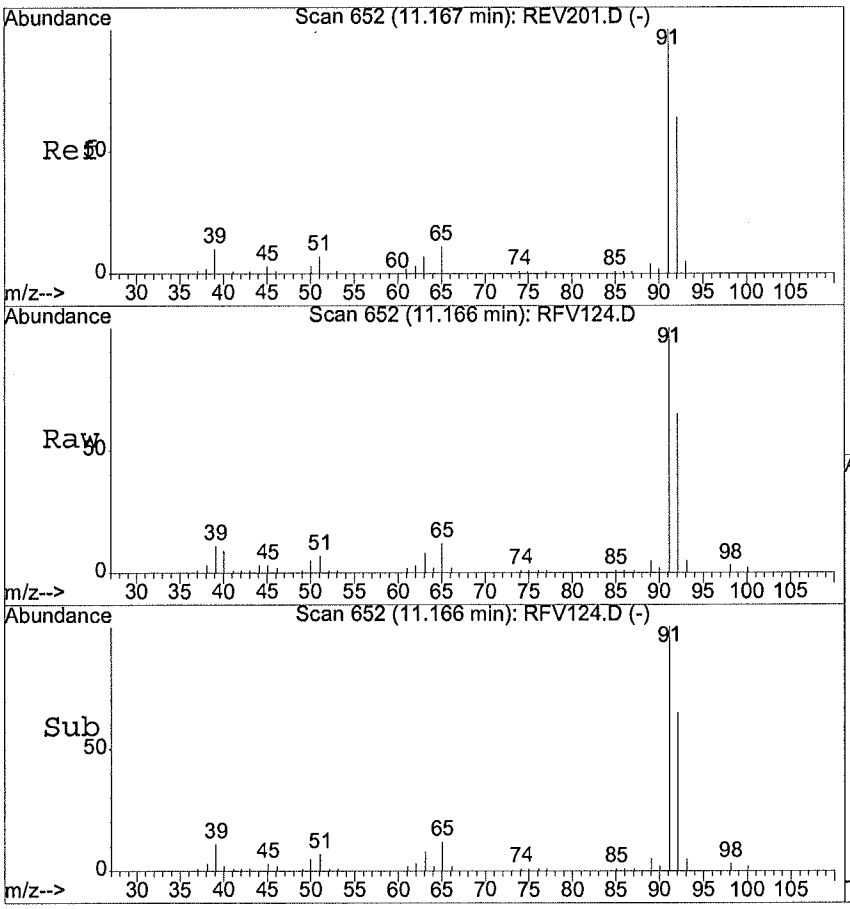


#45
Methylcyclohexane
Concen: 0.12 ug/l
RT: 9.18 min Scan# 518
Delta R.T. 0.02 min
Lab File: RFV124.D
Acq: 7 Jun 2024 9:02 pm

Tgt Ion: 83 Resp: 4357

Ion	Ratio	Lower	Upper
83	100		
55	81.1	52.6	112.6
98	37.4	28.2	88.2

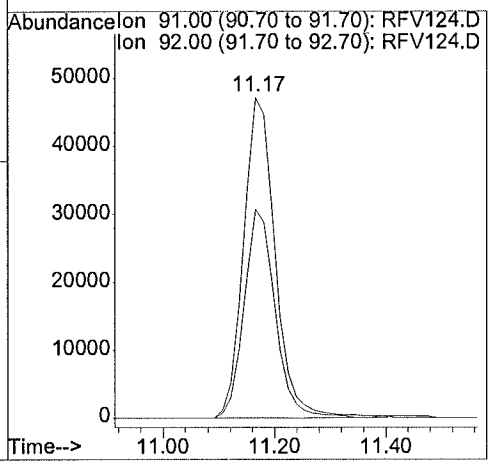


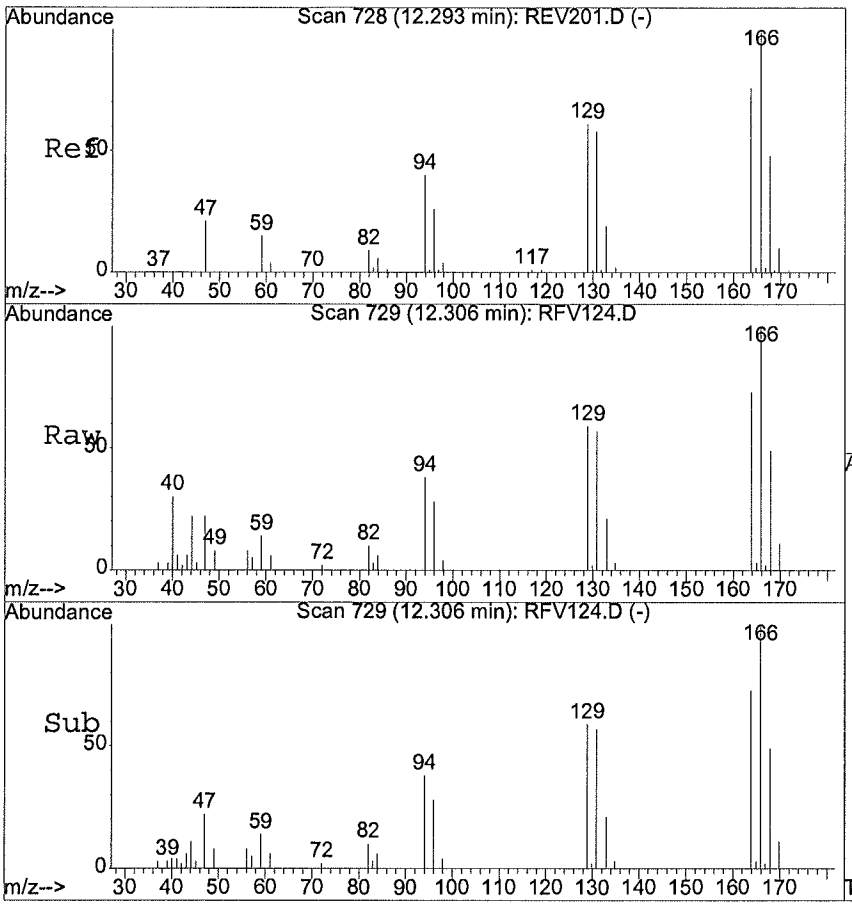


#55
Toluene
Concen: 1.87 ug/l
RT: 11.17 min Scan# 652
Delta R.T. -0.00 min
Lab File: RFV124.D
Acq: 7 Jun 2024 9:02 pm

Tgt Ion: 91 Resp: 186875

Ion	Ratio	Lower	Upper
91	100		
92	63.7	34.0	94.0

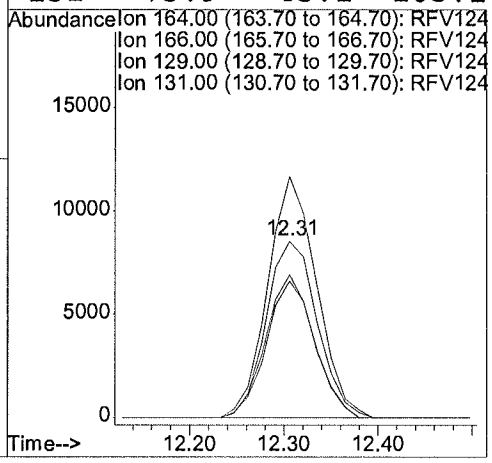


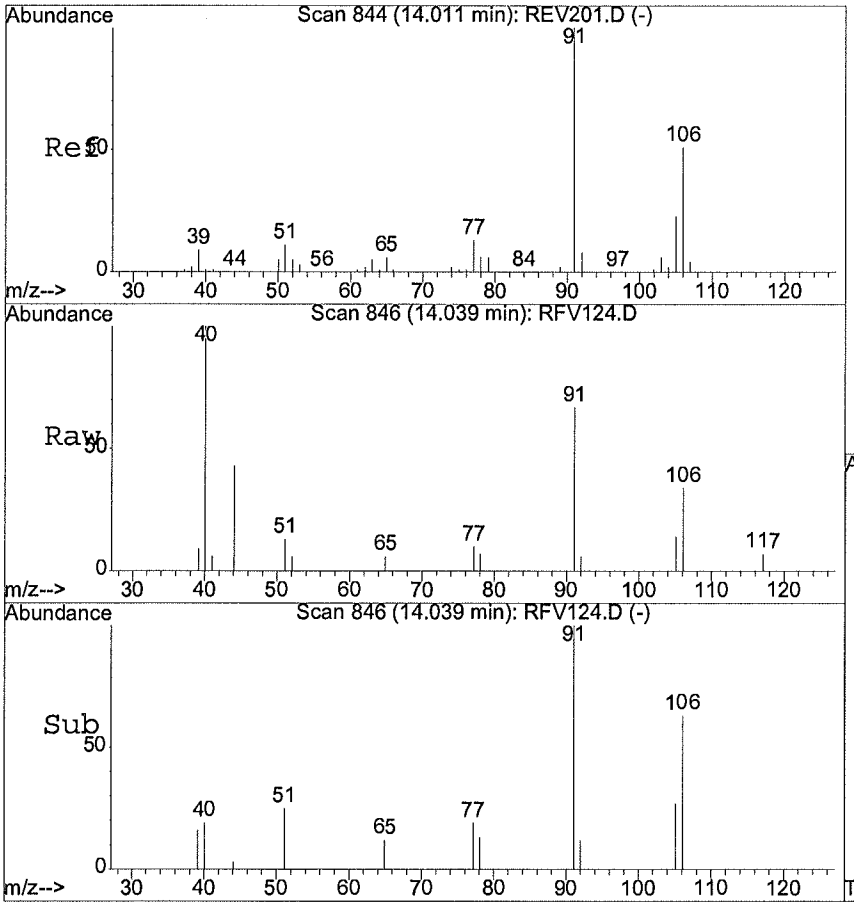


#61
Tetrachloroethene
Concen: 1.54 ug/l
RT: 12.31 min Scan# 729
Delta R.T. 0.01 min
Lab File: RFV124.D
Acq: 7 Jun 2024 9:02 pm

Tgt Ion:164 Resp: 32129

Ion	Ratio	Lower	Upper
164	100		
166	130.7	101.0	161.0
129	76.4	49.2	109.2
131	73.9	45.1	105.1

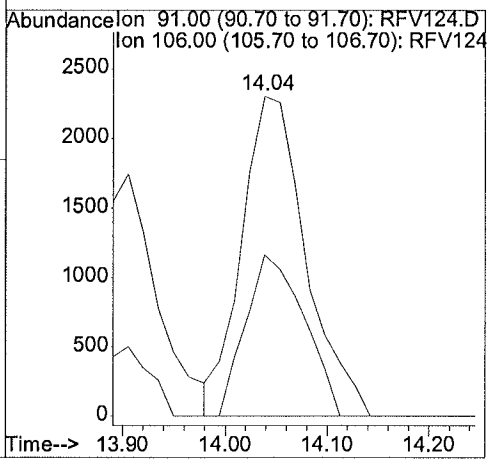




#68
m-Xylene & p-Xylene
Concen: 0.12 ug/l
RT: 14.04 min Scan# 846
Delta R.T. 0.03 min
Lab File: RFV124.D
Acq: 7 Jun 2024 9:02 pm

Tgt Ion: 91 Resp: 10059

Ion	Ratio	Lower	Upper
91	100		
106	46.3	20.9	80.9



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	06/06/24 14:00
Project	: VA SALT LAKE CITY	Date Received:	06/07/24
Batch No.	: 24F032	Date Extracted:	06/07/24 18:01
Sample ID	: TB06-GW060624	Date Analyzed:	06/07/24 18:01
Lab Samp ID:	24F032-04	Dilution Factor:	1
Lab File ID:	RFV118	Matrix:	WATER
Ext Btch ID:	VOO1F05	% Moisture:	NA
Calib. Ref.:	REV201	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	11.9	10.0	119	70-130
Bromofluorobenzene	10.0	10.0	100	70-130
Toluene-d8	9.73	10.0	97	70-130
Dibromofluoromethane	10.4	10.0	104	70-130

Notes:
Sample Amount : 25ml
Final Volume : 25ml
Prepared by : LPriet
Analyzed by : LPriet
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F07\RFV118.D Vial: 8
Acq On : 7 Jun 2024 6:01 pm Operator: LPriet
Sample : 24F032-04 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 13 8:57 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

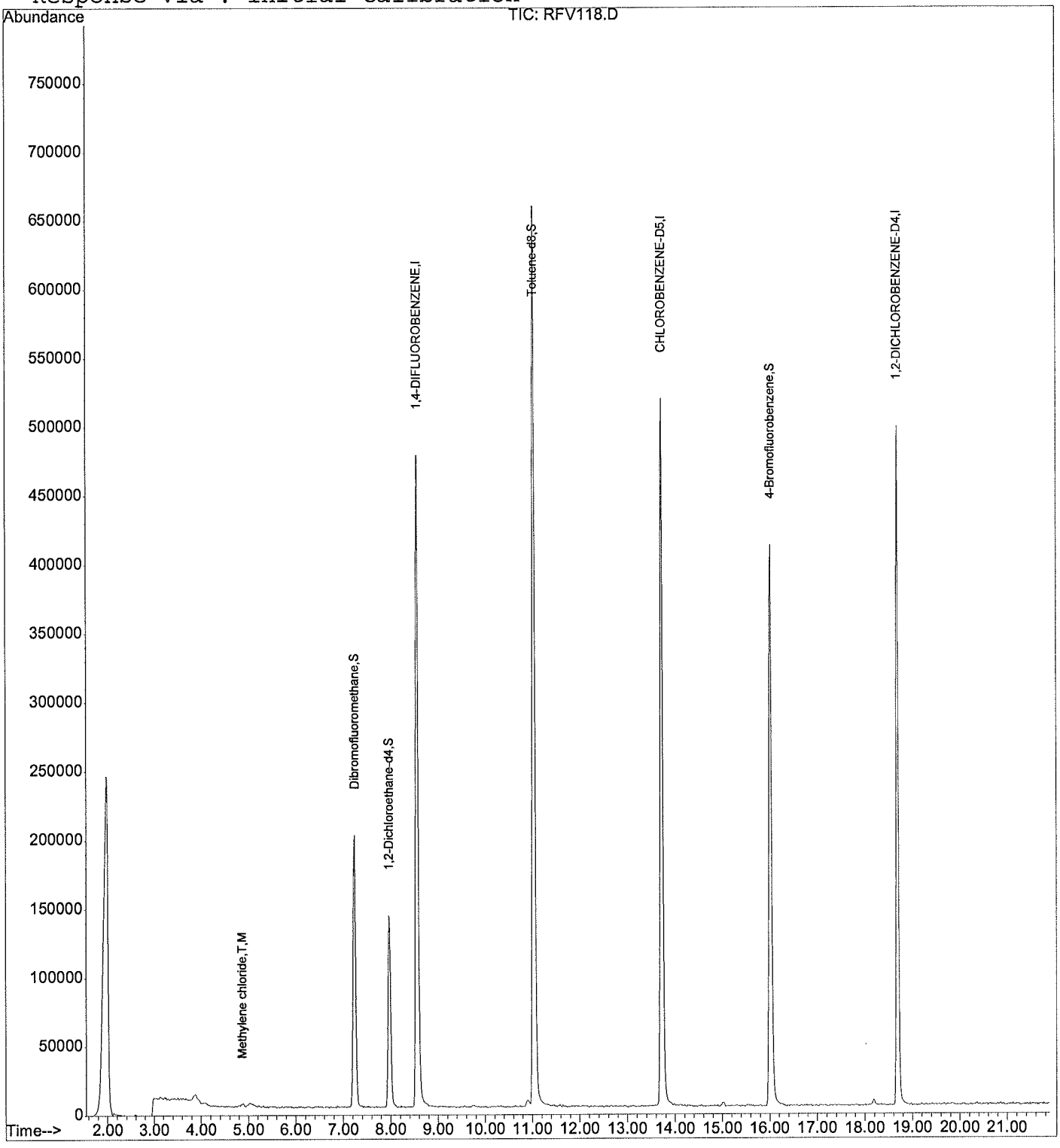
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	727246	10.00	ug/l	0.02
53) CHLOROBENZENE-D5	13.73	117	599026	10.00	ug/l	0.01
72) 1,2-DICHLOROBENZENE-D4	18.69	152	244290	10.00	ug/l	0.01
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	233473	10.37	ug/l	0.01
Spiked Amount 10.000			Recovery = 103.70%			
41) 1,2-Dichloroethane-d4	7.97	65	182807	11.91	ug/l	0.00
Spiked Amount 10.000			Recovery = 119.10%			
54) Toluene-d8	11.03	98	873025	9.73	ug/l	0.00
Spiked Amount 10.000			Recovery = 97.30%			
76) 4-Bromofluorobenzene	16.02	95	332866	10.00	ug/l	0.01
Spiked Amount 10.000			Recovery = 100.00%			
Target Compounds						Qvalue
18) Methylene chloride	4.87	49	4064	0.13	ug/l	81

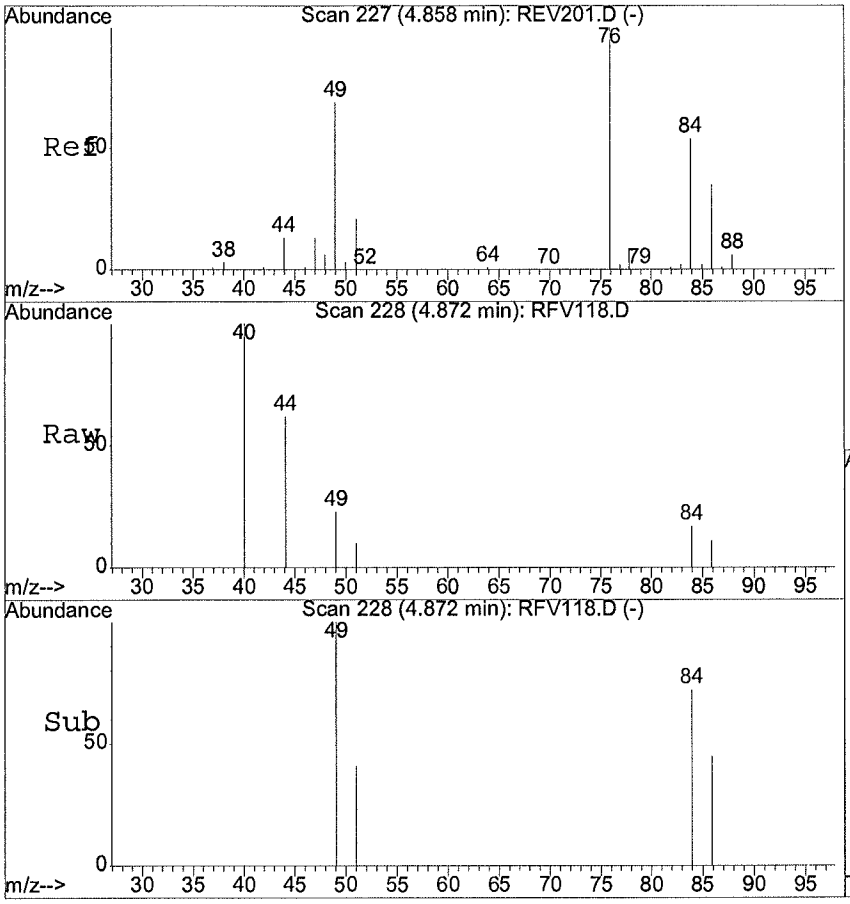
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F07\RFV118.D Vial: 8
Acq On : 7 Jun 2024 6:01 pm Operator: LPriet
Sample : 24F032-04 Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 13 8:57 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration

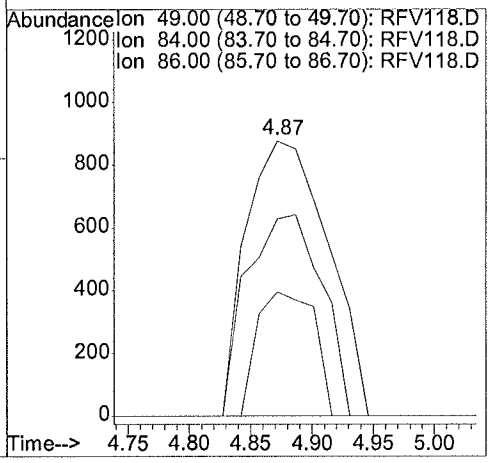




#18
Methylene chloride
Concen: 0.13 ug/l
RT: 4.87 min Scan# 228
Delta R.T. 0.01 min
Lab File: RFV118.D
Acq: 7 Jun 2024 6:01 pm

Tgt Ion: 49 Resp: 4064

Ion	Ratio	Lower	Upper
49	100		
84	66.8	49.1	109.1
86	31.5	20.8	80.8



QC SUMMARIES

METHOD SW5030B/B260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	06/07/24 17:01
Project	: VA SALT LAKE CITY	Date Received:	06/07/24
Batch No.	: 24F032	Date Extracted:	06/07/24 17:01
Sample ID	: MBLK1W	Date Analyzed:	06/07/24 17:01
Lab Samp ID:	VO01F05B	Dilution Factor:	1
Lab File ID:	RFV116	Matrix:	WATER
Ext Btch ID:	VO01F05	% Moisture:	NA
Calib. Ref.:	REV201	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	11.2	10.0	112	70-130
Bromofluorobenzene	9.88	10.0	99	70-130
Toluene-dB	9.90	10.0	99	70-130
Dibromofluoromethane	10.1	10.0	101	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : LPriet Analyzed by : LPriet
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. : 24F032
METHOD : SW50308/8260C

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: M8LK1W	LCS1W	LCD1W
LAB SAMPLE ID	: V001F058	V001F05L	V001F05C
LAB FILE ID	: RFV116	RFV113	RFV114
DATE PREPARED	: 06/07/24 17:01	06/07/24 15:31	06/07/24 16:01
DATE ANALYZED	: 06/07/24 17:01	06/07/24 15:31	06/07/24 16:01
PREP 8ATCH	: V001F05	V001F05	V001F05
CALI8RATION REF	: REV201	REV201	REV201

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	10.1	101	10.0	10.4	104	3	74-131	20
1,1,2,2-Tetrachloroethane	ND	10.0	8.62	86	10.0	9.23	92	7	71-121	20
1,1,2-Trichloroethane	ND	10.0	9.43	94	10.0	10.4	104	10	80-119	20
1,1-Dichloroethane	ND	10.0	10.2	102	10.0	10.6	106	4	77-125	20
1,1-Dichloroethene	ND	10.0	9.81	98	10.0	10.4	104	6	71-131	20
1,2,3-Trichlorobenzene	ND	10.0	8.55	86	10.0	9.57	96	11	69-129	20
1,2,4-Trichlorobenzene	ND	10.0	8.67	87	10.0	9.35	94	8	69-130	20
1,2,4-Trimethylbenzene	ND	10.0	8.62	86	10.0	9.02	90	5	76-124	20
1,2-Oibromo-3-chloropropane	ND	10.0	7.74	77	10.0	8.59	86	10	62-138	20
1,2-Dichlorobenzene	ND	10.0	9.16	92	10.0	9.46	95	3	80-119	20
1,2-Oichloroethane	ND	10.0	10.8	108	10.0	11.6	116	7	73-128	20
1,2-Dichloropropane	ND	10.0	9.67	97	10.0	10.3	103	6	78-122	20
1,3,5-Trimethylbenzene	ND	10.0	8.69	87	10.0	8.95	90	3	75-124	20
1,3-Dichlorobenzene	ND	10.0	9.10	91	10.0	9.45	95	4	80-119	20
1,4-Dichlorobenzene	ND	10.0	9.12	91	10.0	9.56	96	5	79-118	20
2-8utanone	ND	50.0	52.4	105	50.0	57.4	115	9	56-143	20
2-Hexanone	ND	50.0	44.8	90	50.0	51.7	103	14	57-139	20
Acetone	ND	50.0	47.1	94	50.0	51.7	103	9	39-160	20
8enzene	ND	10.0	9.76	98	10.0	10.3	103	5	79-120	20
8romochloromethane	ND	10.0	10.2	102	10.0	10.9	109	7	78-120	20
8romodichloromethane	ND	10.0	9.98	100	10.0	10.6	106	6	79-125	20
8romoform	ND	10.0	8.57	86	10.0	8.99	90	5	66-130	20
8romomethane	ND	10.0	9.71	97	10.0	9.45	95	3	53-141	20
Carbon Disulfide	ND	10.0	9.88	99	10.0	10.1	101	2	64-133	20
Carbon Tetrachloride	ND	10.0	10.0	100	10.0	10.4	104	4	72-136	20
Chlorobenzene	ND	10.0	9.27	93	10.0	9.84	98	6	82-118	20
Chloroethane	ND	10.0	10.8	108	10.0	11.0	110	2	60-138	20
Chloroform	ND	10.0	10.2	102	10.0	10.8	108	6	79-124	20
Chloromethane	ND	10.0	9.00	90	10.0	9.20	92	2	50-139	20
cis-1,2-Oichloroethylene	ND	10.0	9.59	96	10.0	10.2	102	6	78-123	20
Dibromochloromethane	ND	10.0	9.40	94	10.0	10.5	105	11	74-126	20
Dichlorodifluoromethane	ND	10.0	9.88	99	10.0	10.1	101	2	32-152	20
Ethylbenzene	ND	10.0	9.88	99	10.0	10.5	105	6	79-121	20
Isopropylbenzene	ND	10.0	9.29	93	10.0	10.1	101	8	72-131	20
m,p-Xylene	ND	20.0	20.0	100	20.0	21.3	107	6	80-121	20
4-Methyl-2-Pentanone	ND	50.0	47.0	94	50.0	53.8	108	13	67-130	20
Methylene Chloride	ND	10.0	10.1	101	10.0	10.7	107	6	74-124	20
tert-8utyl Methyl Ether	ND	10.0	8.95	90	10.0	10.0	100	11	71-124	20
o-Xylene	ND	10.0	9.62	96	10.0	10.4	104	8	78-122	20
Styrene	ND	10.0	9.16	92	10.0	10.1	101	10	78-123	20
Tetrachloroethene	ND	10.0	9.53	95	10.0	10.2	102	7	74-129	20
Toluene	ND	10.0	9.49	95	10.0	10.3	103	8	80-121	20
Trans-1,2-DCE	ND	10.0	9.94	99	10.0	10.5	105	5	75-124	20
cis-1,3-Dichloropropene	ND	10.0	9.39	94	10.0	10.2	102	8	75-124	20
Trans-1,3-Dichloropropene	ND	10.0	9.42	94	10.0	10.4	104	10	73-127	20
TCE	ND	10.0	9.40	94	10.0	9.92	99	5	79-123	20
Trichlorofluoromethane	ND	10.0	10.0	100	10.0	10.2	102	2	65-141	20
Vinyl Chloride	ND	10.0	11.1	111	10.0	10.9	109	2	58-137	20
1,2-Dibromoethane	ND	10.0	9.16	92	10.0	10.2	102	11	77-121	20
Vinyl Acetate	ND	10.0	8.81	88	10.0	9.45	95	7	54-146	20
Trichlorotrifluoroethane	ND	10.0	10.2	102	10.0	10.8	108	6	70-136	20
Methyl Acetate	ND	10.0	10.7	107	10.0	11.8	118	10	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	10.8	108	10.0	11.2	112	70-130
8romofluorobenzene	10.0	9.76	98	10.0	9.63	96	70-130
Toluene-d8	10.0	9.70	97	10.0	9.75	98	70-130
Dibromofluoromethane	10.0	9.99	100	10.0	10.1	101	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\24F07\RFV116.D Vial: 6
Acq On : 7 Jun 2024 5:01 pm Operator: LPriet
Sample : VO01F05B Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 13 8:39 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

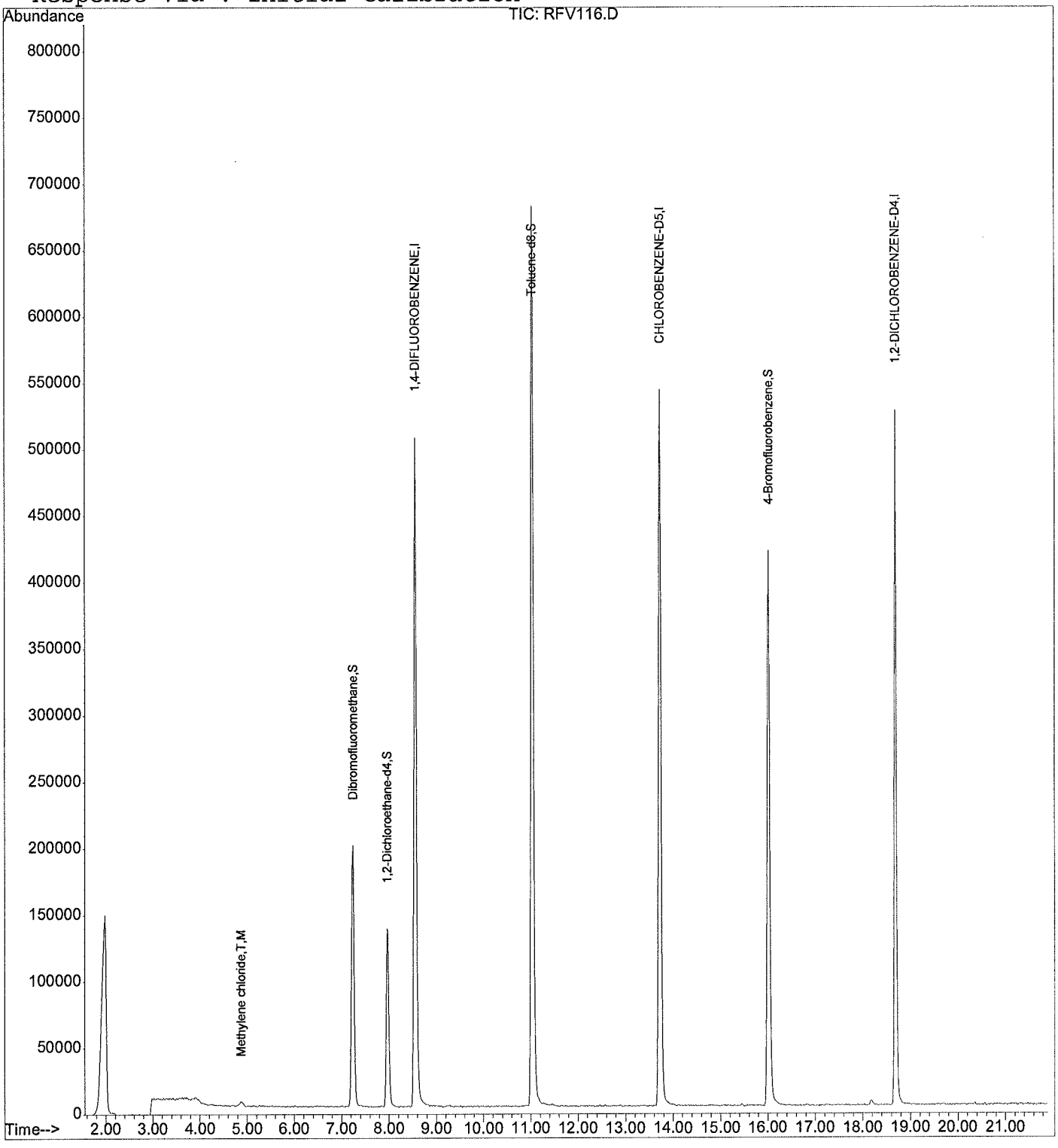
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	753642	10.00	ug/l	0.01
53) CHLOROBENZENE-D5	13.73	117	624758	10.00	ug/l	0.01
72) 1,2-DICHLOROBENZENE-D4	18.69	152	249854	10.00	ug/l	0.01
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	235545	10.10	ug/l	0.01
Spiked Amount 10.000			Recovery =	101.00%		
41) 1,2-Dichloroethane-d4	7.97	65	178280	11.21	ug/l	0.00
Spiked Amount 10.000			Recovery =	112.10%		
54) Toluene-d8	11.03	98	926607	9.90	ug/l	0.00
Spiked Amount 10.000			Recovery =	99.00%		
76) 4-Bromofluorobenzene	16.02	95	336274	9.88	ug/l	0.01
Spiked Amount 10.000			Recovery =	98.80%		
Target Compounds						Qvalue
18) Methylene chloride	4.87	49	5810	0.18	ug/l	92

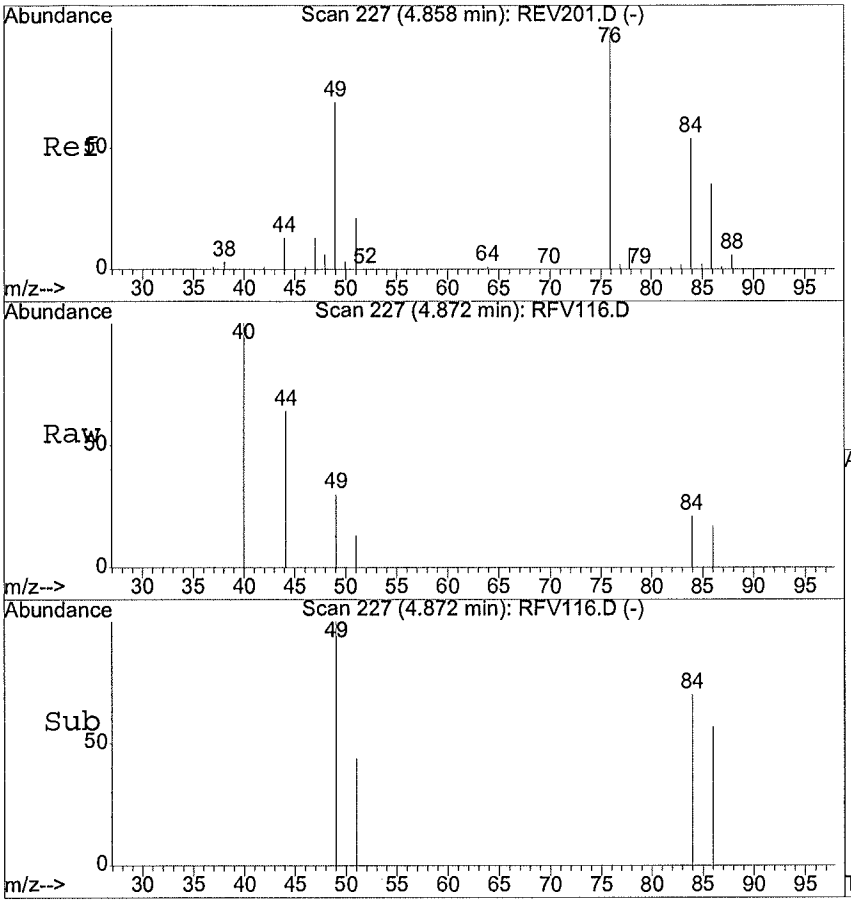
(#) = qualifier out of range (m) = manual integration
RFV116.D VO01E11.M Thu Jun 13 08:40:07 2024 Page 1

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F07\RFV116.D Vial: 6
Acq On : 7 Jun 2024 5:01 pm Operator: LPriet
Sample : VO01F05B Inst : 01
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 13 8:39 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration

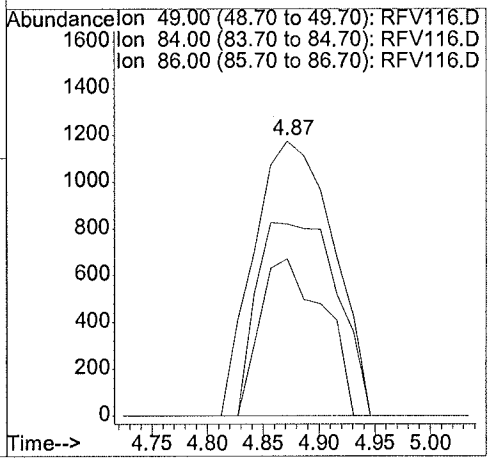




#18
Methylene chloride
Concen: 0.18 ug/l
RT: 4.87 min Scan# 227
Delta R.T. 0.01 min
Lab File: RFV116.D
Acq: 7 Jun 2024 5:01 pm

Tgt Ion: 49 Resp: 5810

Ion	Ratio	Lower	Upper
49	100		
84	71.0	49.1	109.1
86	45.8	20.8	80.8



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F07\RFV113.D Vial: 3
Acq On : 7 Jun 2024 3:31 pm Operator: LPriet
Sample : VO01F05L Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 7 15:53 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	741911	10.00	ug/l	0.02
53) CHLOROBENZENE-D5	13.71	117	607937	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.69	152	244510	10.00	ug/l	0.01
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	229405	9.99	ug/l	0.00
Spiked Amount 10.000			Recovery =	99.90%		
41) 1,2-Dichloroethane-d4	7.97	65	169383	10.81	ug/l	0.00
Spiked Amount 10.000			Recovery =	108.10%		
54) Toluene-d8	11.03	98	883650	9.70	ug/l	0.00
Spiked Amount 10.000			Recovery =	97.00%		
76) 4-Bromofluorobenzene	16.01	95	325146	9.76	ug/l	0.00
Spiked Amount 10.000			Recovery =	97.60%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.18	85	196212	9.88	ug/l	100
5) Chloromethane	2.48	50	250224	9.00	ug/l	99
6) Vinyl chloride	2.61	62	256039	11.06	ug/l	99
7) Bromomethane	3.17	94	266455	9.71	ug/l	93
8) Chloroethane	3.21	64	181679	10.82	ug/l	96
9) Dichlorofluoromethane	3.29	67	449920	9.43	ug/l	98
10) Trichlorofluoromethane	3.57	101	313252	10.00	ug/l	98
11) Acrolein	4.00	56	54583	32.75	ug/l	95
12) 1,1,2-Trichloro-1,2,2-trif	4.09	151	158993	10.16	ug/l	100
13) Acetone	4.06	43	127415	47.05	ug/l	93
14) 1,1-Dichloroethene	4.23	61	388073	9.81	ug/l	96
15) tert-Butyl alcohol	4.35	59	165310	200.16	ug/l	71
16) Iodomethane	4.63	142	407175	9.60	ug/l	97
17) Methyl acetate	4.66	43	79279	10.74	ug/l	98
18) Methylene chloride	4.87	49	319862	10.08	ug/l	98
19) Carbon disulfide	4.89	76	835893	9.88	ug/l	99
20) Acrylonitrile	5.03	53	164573	47.90	ug/l	100
21) tert-Butyl methyl ether (M	5.06	73	348494	8.95	ug/l	92
22) trans-1,2-Dichloroethene	5.26	61	379100	9.94	ug/l	94
23) Isopropyl ether (DIPE)	5.67	45	796387	9.78	ug/l	96
24) Vinyl acetate	5.83	43	246291	8.81	ug/l	97
25) 1,1-Dichloroethane	5.83	63	453199	10.17	ug/l	99
27) tert-Butyl ethyl ether (ET	6.25	59	534440	9.16	ug/l	98
28) 2-Butanone	6.43	43	217751	52.40	ug/l	97
29) 2,2-Dichloropropane	6.63	77	366443	9.78	ug/l	98
30) cis-1,2-Dichloroethene	6.69	96	294316	9.59	ug/l	95
31) Chloroform	6.92	83	464700	10.23	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F07\RFV113.D Vial: 3
Acq On : 7 Jun 2024 3:31 pm Operator: LPriet
Sample : VO01F05L Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 7 15:53 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32)	Bromochloromethane	7.15	49	181507	10.17 ug/l	95
33)	Tetrahydrofuran	7.21	42	22936	8.73 ug/l	91
35)	1,1,1-Trichloroethane	7.51	97	384157	10.11 ug/l	97
36)	Cyclohexane	7.52	84	363787	9.83 ug/l	99
38)	1,1-Dichloropropene	7.73	110	114640	8.87 ug/l	99
39)	Carbon tetrachloride	7.88	119	283479	10.01 ug/l	99
40)	tert-Amyl methyl ether (TA	7.89	73	380008	8.37 ug/l	100
42)	Benzene	8.13	78	967146	9.76 ug/l	100
43)	1,2-Dichloroethane	8.11	62	215733	10.79 ug/l	99
44)	Trichloroethene	9.08	130	240967	9.40 ug/l	96
45)	Methylcyclohexane	9.17	83	396053	9.72 ug/l	98
46)	1,2-Dichloropropane	9.36	63	214489	9.67 ug/l	95
47)	Bromodichloromethane	9.73	83	307304	9.98 ug/l	99
48)	1,4-Dioxane	9.80	88	12851	141.55 ug/l	97
49)	Dibromomethane	9.83	93	104650	10.00 ug/l	95
50)	2-Chloroethyl vinyl ether	10.23	63	54130	9.62 ug/l	98
51)	4-Methyl-2-pentanone	10.28	43	514010	47.04 ug/l	95
52)	cis-1,3-Dichloropropene	10.62	75	324045	9.39 ug/l	96
55)	Toluene	11.17	91	1024875	9.49 ug/l	100
56)	Ethyl methacrylate	11.46	69	146743	9.06 ug/l	90
57)	trans-1,3-Dichloropropene	11.48	75	236382	9.42 ug/l	94
58)	1,1,2-Trichloroethane	11.76	97	133242	9.43 ug/l	98
59)	2-Hexanone	11.77	43	285268	44.81 ug/l	93
60)	1,3-Dichloropropane	12.19	76	233381	9.73 ug/l	99
61)	Tetrachloroethene	12.31	164	213957	9.53 ug/l	99
62)	Dibromochloromethane	12.68	129	162133	9.40 ug/l	100
63)	1,2-Dibromoethane	13.03	107	128050	9.16 ug/l	98
64)	1-Chlorohexane	13.31	91	439052	9.42 ug/l	100
65)	Chlorobenzene	13.79	112	596741	9.27 ug/l	100
66)	1,1,1,2-Tetrachloroethane	13.86	131	193531	9.76 ug/l	100
67)	Ethylbenzene	13.88	91	1217129	9.88 ug/l	97
68)	m-Xylene & p-Xylene	14.02	91	1800165	19.96 ug/l	95
69)	o-Xylene	14.84	91	893151	9.62 ug/l	97
70)	Styrene	14.91	104	658938	9.16 ug/l	97
71)	Isopropylbenzene	15.52	105	1136409	9.29 ug/l	99
73)	Bromoform	15.56	173	82378	8.57 ug/l	97
74)	trans-1,4-Dichloro-2-buten	15.64	53	35249	8.36 ug/l	91
75)	1,1,2,2-Tetrachloroethane	15.86	83	140355	8.62 ug/l	99
77)	1,2,3-Trichloropropane	16.16	110	35583	8.54 ug/l	92
78)	n-Propylbenzene	16.30	91	1438649	9.05 ug/l	98
79)	Bromobenzene	16.38	156	231317	9.20 ug/l	100

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24F07\RFV113.D Vial: 3
Acq On : 7 Jun 2024 3:31 pm Operator: LPriet
Sample : VO01F05L Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 7 15:53 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

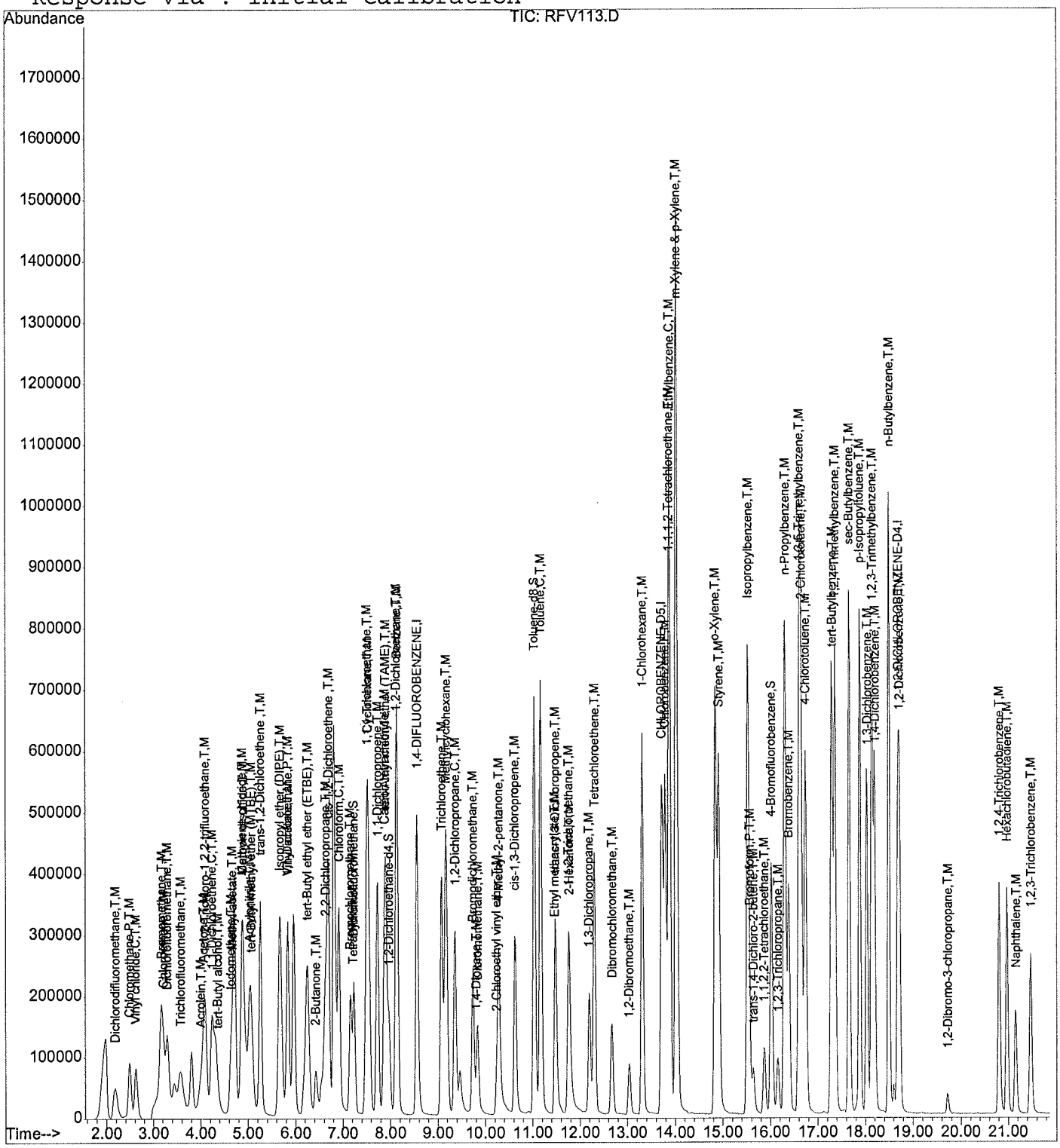
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	882383	8.69	ug/l	98
81)	2-Chlorotoluene	16.65	91	897586	9.38	ug/l	97
82)	4-Chlorotoluene	16.73	91	792542	9.35	ug/l	97
83)	tert-Butylbenzene	17.30	134	186402	8.75	ug/l	92
84)	1,2,4-Trimethylbenzene	17.36	105	856538	8.62	ug/l	98
85)	sec-Butylbenzene	17.65	105	1217780	8.72	ug/l	99
86)	p-Isopropyltoluene	17.87	119	899467	8.36	ug/l	97
87)	1,3-Dichlorobenzene	18.04	146	435141	9.10	ug/l	98
88)	1,2,3-Trimethylbenzene	18.14	105	826220	8.90	ug/l	99
89)	1,4-Dichlorobenzene	18.20	146	427382	9.12	ug/l	99
90)	n-Butylbenzene	18.50	91	1013348	9.09	ug/l	99
91)	1,2-Dichlorobenzene	18.72	146	358892	9.16	ug/l	98
92)	1,2-Dibromo-3-chloropropan	19.73	157	19060	7.74	ug/l	98
93)	1,2,4-Trichlorobenzene	20.81	180	247963	8.67	ug/l	99
94)	Hexachlorobutadiene	20.97	225	136516	8.01	ug/l	96
95)	Naphthalene	21.16	128	277829	8.33	ug/l	99
96)	1,2,3-Trichlorobenzene	21.47	180	184236	8.55	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F07\RFV113.D Vial: 3
Acq On : 7 Jun 2024 3:31 pm Operator: LPriet
Sample : VO01F05L Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 7 15:53 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F07\RFV114.D Vial: 4
Acq On : 7 Jun 2024 4:01 pm Operator: LPriet
Sample : VO01F05C Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 7 16:23 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	741693	10.00	ug/l	0.01
53) CHLOROBENZENE-D5	13.73	117	603217	10.00	ug/l	0.01
72) 1,2-DICHLOROBENZENE-D4	18.69	152	261963	10.00	ug/l	0.01
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	232335	10.12	ug/l	0.00
Spiked Amount 10.000			Recovery =	101.20%		
41) 1,2-Dichloroethane-d4	7.97	65	175648	11.22	ug/l	0.00
Spiked Amount 10.000			Recovery =	112.20%		
54) Toluene-d8	11.03	98	881766	9.75	ug/l	0.00
Spiked Amount 10.000			Recovery =	97.50%		
76) 4-Bromofluorobenzene	16.01	95	343730	9.63	ug/l	0.00
Spiked Amount 10.000			Recovery =	96.30%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.18	85	201239	10.14	ug/l	99
5) Chloromethane	2.48	50	255510	9.20	ug/l	100
6) Vinyl chloride	2.62	62	252834	10.93	ug/l	100
7) Bromomethane	3.15	94	259504	9.45	ug/l	99
8) Chloroethane	3.20	64	184524	10.99	ug/l	95
9) Dichlorofluoromethane	3.29	67	471860	9.90	ug/l	98
10) Trichlorofluoromethane	3.58	101	318844	10.18	ug/l	99
11) Acrolein	4.00	56	58677	35.22	ug/l	95
12) 1,1,2-Trichloro-1,2,2-trif	4.09	151	169562	10.84	ug/l	100
13) Acetone	4.06	43	139954	51.70	ug/l	93
14) 1,1-Dichloroethene	4.24	61	409491	10.35	ug/l	96
15) tert-Butyl alcohol	4.35	59	198658	240.61	ug/l	74
16) Iodomethane	4.65	142	432626	10.20	ug/l	98
17) Methyl acetate	4.66	43	87297	11.83	ug/l	97
18) Methylene chloride	4.87	49	338445	10.66	ug/l	98
19) Carbon disulfide	4.89	76	853168	10.09	ug/l	98
20) Acrylonitrile	5.03	53	177052	51.55	ug/l	97
21) tert-Butyl methyl ether (M	5.06	73	389493	10.01	ug/l	93
22) trans-1,2-Dichloroethene	5.26	61	399343	10.48	ug/l	94
23) Isopropyl ether (DIPE)	5.67	45	880241	10.81	ug/l	97
24) Vinyl acetate	5.83	43	264299	9.45	ug/l	97
25) 1,1-Dichloroethane	5.83	63	473515	10.62	ug/l	100
27) tert-Butyl ethyl ether (ET	6.25	59	592153	10.15	ug/l	99
28) 2-Butanone	6.43	43	238480	57.41	ug/l	97
29) 2,2-Dichloropropane	6.63	77	380783	10.16	ug/l	98
30) cis-1,2-Dichloroethene	6.69	96	313378	10.22	ug/l	95
31) Chloroform	6.92	83	492312	10.84	ug/l	98

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24F07\RFV114.D Vial: 4
Acq On : 7 Jun 2024 4:01 pm Operator: LPriet
Sample : VO01F05C Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 7 16:23 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.15	49	194351	10.90	ug/l	94
33)	Tetrahydrofuran	7.21	42	27504	10.47	ug/l	90
35)	1,1,1-Trichloroethane	7.51	97	395846	10.42	ug/l	97
36)	Cyclohexane	7.52	84	349169	9.43	ug/l	99
38)	1,1-Dichloropropene	7.73	110	121449	9.40	ug/l	100
39)	Carbon tetrachloride	7.88	119	295335	10.43	ug/l	100
40)	tert-Amyl methyl ether (TA	7.89	73	425178	9.37	ug/l	99
42)	Benzene	8.13	78	1020616	10.30	ug/l	99
43)	1,2-Dichloroethane	8.12	62	231951	11.61	ug/l	98
44)	Trichloroethene	9.08	130	254298	9.92	ug/l	95
45)	Methylcyclohexane	9.17	83	374048	9.19	ug/l	97
46)	1,2-Dichloropropane	9.36	63	228509	10.31	ug/l	95
47)	Bromodichloromethane	9.73	83	325588	10.58	ug/l	100
48)	1,4-Dioxane	9.79	88	16913	186.34	ug/l	93
49)	Dibromomethane	9.83	93	116294	11.12	ug/l	92
50)	2-Chloroethyl vinyl ether	10.23	63	62962	11.19	ug/l	98
51)	4-Methyl-2-pentanone	10.28	43	592655	53.84	ug/l	96
52)	cis-1,3-Dichloropropene	10.63	75	352974	10.23	ug/l	96
55)	Toluene	11.17	91	1101980	10.29	ug/l	99
56)	Ethyl methacrylate	11.46	69	167743	10.44	ug/l	89
57)	trans-1,3-Dichloropropene	11.49	75	258048	10.36	ug/l	95
58)	1,1,2-Trichloroethane	11.76	97	145583	10.38	ug/l	98
59)	2-Hexanone	11.77	43	332035	51.72	ug/l	94
60)	1,3-Dichloropropane	12.20	76	261188	10.97	ug/l	99
61)	Tetrachloroethene	12.31	164	227412	10.21	ug/l	99
62)	Dibromochloromethane	12.68	129	179213	10.47	ug/l	100
63)	1,2-Dibromoethane	13.05	107	141709	10.21	ug/l	97
64)	1-Chlorohexane	13.31	91	462566	10.00	ug/l	100
65)	Chlorobenzene	13.79	112	628464	9.84	ug/l	99
66)	1,1,1,2-Tetrachloroethane	13.88	131	207013	10.52	ug/l	99
67)	Ethylbenzene	13.89	91	1289470	10.55	ug/l	96
68)	m-Xylene & p-Xylene	14.02	91	1909605	21.34	ug/l	95
69)	o-Xylene	14.85	91	955224	10.37	ug/l	96
70)	Styrene	14.91	104	717892	10.05	ug/l	97
71)	Isopropylbenzene	15.53	105	1227742	10.12	ug/l	99
73)	Bromoform	15.56	173	92772	8.99	ug/l	97
74)	trans-1,4-Dichloro-2-buten	15.64	53	41252	9.13	ug/l	91
75)	1,1,2,2-Tetrachloroethane	15.87	83	160925	9.23	ug/l	99
77)	1,2,3-Trichloropropane	16.16	110	40315	9.04	ug/l	92
78)	n-Propylbenzene	16.30	91	1574410	9.24	ug/l	97
79)	Bromobenzene	16.39	156	259844	9.64	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F07\RFV114.D Vial: 4
Acq On : 7 Jun 2024 4:01 pm Operator: LPriet
Sample : VO01F05C Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 7 16:23 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

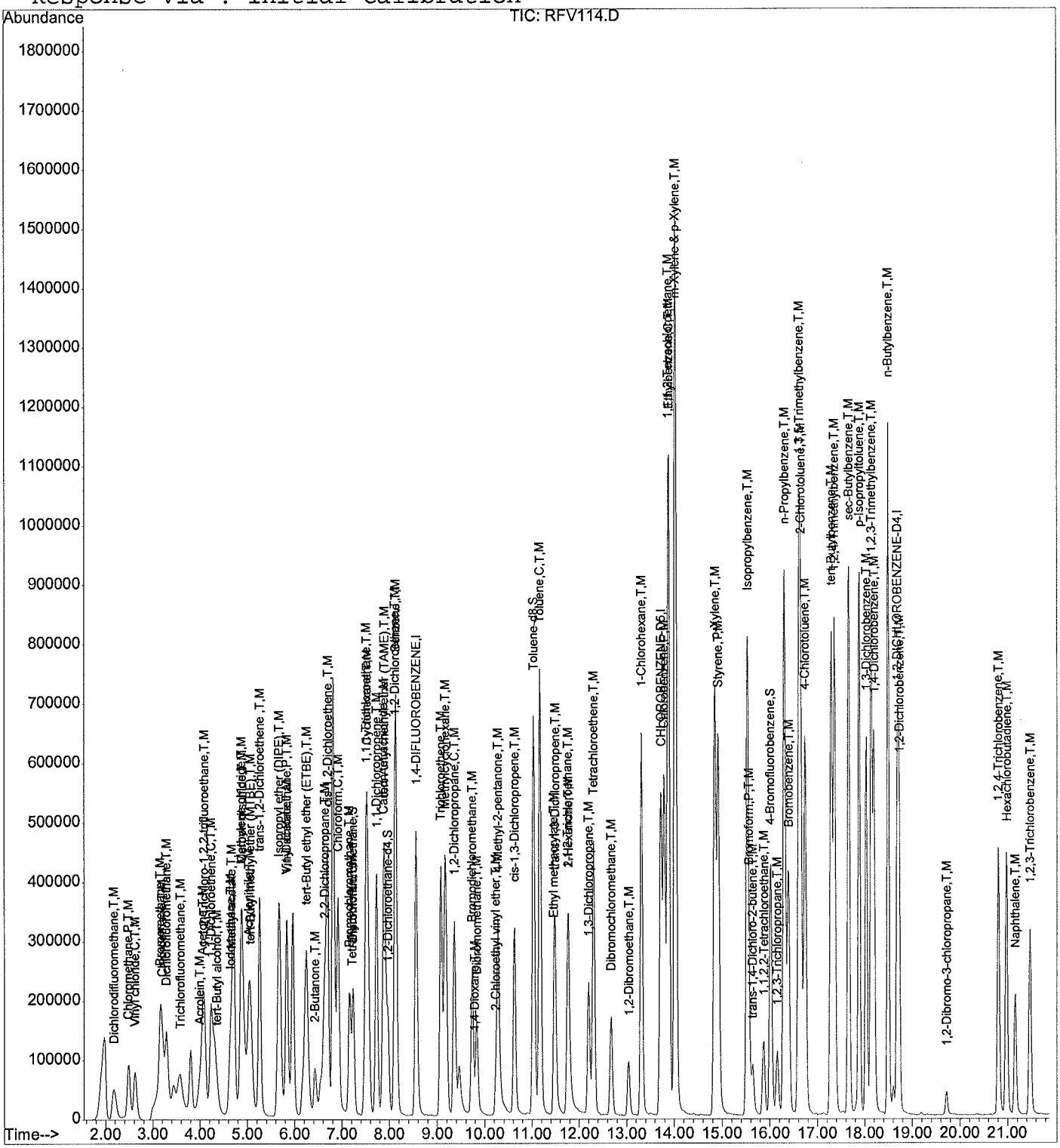
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.62	105	974155	8.95	ug/l	99
81)	2-Chlorotoluene	16.64	91	967396	9.43	ug/l	97
82)	4-Chlorotoluene	16.73	91	870055	9.58	ug/l	98
83)	tert-Butylbenzene	17.30	134	203152	8.90	ug/l	94
84)	1,2,4-Trimethylbenzene	17.36	105	960196	9.02	ug/l	98
85)	sec-Butylbenzene	17.67	105	1341213	8.97	ug/l	100
86)	p-Isopropyltoluene	17.89	119	1001001	8.68	ug/l	97
87)	1,3-Dichlorobenzene	18.04	146	483766	9.45	ug/l	98
88)	1,2,3-Trimethylbenzene	18.14	105	926645	9.32	ug/l	98
89)	1,4-Dichlorobenzene	18.20	146	479762	9.56	ug/l	99
90)	n-Butylbenzene	18.50	91	1124794	9.42	ug/l	99
91)	1,2-Dichlorobenzene	18.73	146	397075	9.46	ug/l	98
92)	1,2-Dibromo-3-chloropropan	19.72	157	22832	8.59	ug/l	100
93)	1,2,4-Trichlorobenzene	20.81	180	286438	9.35	ug/l	99
94)	Hexachlorobutadiene	20.98	225	166202	9.11	ug/l	97
95)	Naphthalene	21.16	128	332972	9.31	ug/l	100
96)	1,2,3-Trichlorobenzene	21.47	180	220906	9.57	ug/l	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F07\RFV114.D Vial: 4
Acq On : 7 Jun 2024 4:01 pm Operator: LPriet
Sample : VO01F05C Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 7 16:23 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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: REV195 BFB Injection Date: 05/11/24

Instrument ID: 01 BFB Injection Time: 10:20

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	18.517
75	30 - 60% of mass 95	42.491
95	Base Peak, 100% relative abundance	100.000
96	5 - 9% of mass 95	7.286
173	Less than 2% of mass 174	0.000(0)1
174	Greater than 50% of mass 95	75.428
175	5 - 9% of mass 174	5.582(7.4)1
176	95 - 101% % of mass 174	72.070(95.55)1
177	5 - 9% % of mass 176	5.085(7.06)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	VO01E111	REV196	05/11/24	10:58
2	VSTD0.5	VO01E112	REV197	05/11/24	11:27
3	VSTD1	VO01E113	REV198	05/11/24	11:56
4	VSTD2	VO01E114	REV199	05/11/24	12:30
5	VSTD5	VO01E115	REV200	05/11/24	12:59
6	VSTD10	VO01E116	REV201	05/11/24	13:28
7	VSTD20	VO01E117	REV202	05/11/24	13:58
8	VSTD30	VO01E118	REV203	05/11/24	14:27
9	VSTD50	VO01E119	REV204	05/11/24	14:56
10	VSTD100	VO01DE1110	REV205	05/11/24	15:26

SC 5/15/24

INITIAL_CALIBRATION - RELATIVE_RESPONSE_FACTOR

Instrument ID :01
Beginning Datetime :05/11/24 10:58
Spike Units :PPB
IC File :REV201

Column Spec :RXI-624SILMS ID :0.25MM
Ending Datetime :05/11/24 15:26
HPChem Method :V001E11

M	IOX	Parameters	3 10:58 REV196	5 11:27 REV197	1 11:56 REV198	2 12:30 REV199	5 12:58 REV200	10 13:28 REV201	20 13:58 REV202	30 14:27 REV203	50 14:56 REV204	100 15:26 REV205	Av RRF	% RSD	Av Rt M
	1	1,4-DIFLUOROBENZENE	1	1	1	1	1	1	1	1	1	1	1	0	8.5509
	2	Chlorotrifluoroethylene	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	3	Dichlorodifluoromethane	0.276	0.289	0.246	0.273	0.265	0.254	0.271	0.264	0.274	0.264	0.268	4.44	2.1690
	4	2-Chloro-1,1,1-trifluoroethane	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	5	Chloromethane	0.426	0.406	0.362	0.393	0.380	0.347	0.379	0.351	0.364	0.339	0.373	7.38	2.4709
	6	Vinyl chloride	0.305	0.319	0.285	0.336	0.337	0.310	0.331	0.305	0.313	0.280	0.312	6.31	2.6048
	7	Bromomethane	------	0.567	0.436	0.404	0.359	0.329	0.378	0.353	0.376	0.362	0.396	17.96	3.1458
	8	Chloroethane	0.234	0.228	0.214	0.217	0.226	0.211	0.236	0.225	0.240	0.232	0.226	4.21	3.1926
	9	Dichlorofluoromethane	0.754	0.709	0.630	0.645	0.605	0.581	0.653	0.609	0.641	0.601	0.643	8.21	3.2755
	10	Trichlorofluoromethane	0.440	0.466	0.405	0.441	0.427	0.397	0.418	0.405	0.421	0.400	0.422	5.20	3.5526
5	11	Acrolein	------	------	------	0.022	0.022	0.020	0.024	0.022	0.024	0.023	0.022	5.86	3.9857
	12	1,1,2-Trichloro-1,2,2-trifluoroethane	0.173	0.217	0.197	0.230	0.212	0.210	0.224	0.217	0.228	0.201	0.211	8.11	4.0696
5	13	Acetone	------	------	0.049	0.037	0.036	0.031	0.035	0.034	0.037	0.034	0.037	14.45	4.0577
	14	1,1-Dichloroethene	0.517	0.551	0.485	0.547	0.524	0.514	0.569	0.536	0.563	0.527	0.533	4.74	4.2296
25	15	tert-Butyl alcohol	0.010	0.010	0.010	0.011	0.011	0.010	0.012	0.012	0.013	0.012	0.011	9.12	4.3422
	16	Iodomethane	0.556	0.569	0.525	0.570	0.563	0.545	0.616	0.582	0.610	0.581	0.572	4.85	4.6385
	17	Methyl acetate	------	------	------	0.112	0.101	0.094	0.102	0.097	------	------	0.100	10.84	4.6531
	18	Methylene chloride	0.449	0.440	0.418	0.436	0.421	0.389	0.447	0.413	0.440	0.416	0.428	3.90	4.8577
	19	Carbon disulfide	1.256	1.087	1.076	1.126	1.153	1.068	1.228	1.130	------	------	1.140	6.08	4.8800
5	20	Acrylonitrile	0.049	0.046	0.044	0.044	0.046	0.043	0.048	0.046	0.049	0.047	0.046	4.77	5.0252
	21	tert-Butyl methyl ether (MTBE)	0.533	0.550	0.498	0.531	0.517	0.473	0.551	0.525	0.548	0.520	0.526	4.67	5.0607
	22	trans-1,2-Dichloroethene	0.505	0.518	0.491	0.523	0.505	0.477	0.552	0.517	0.544	0.503	0.514	4.44	5.2482
	23	Isopropyl ether (DIPE)	1.103	1.121	1.035	1.086	1.080	1.027	1.185	1.102	1.138	1.103	1.098	4.21	5.6996
	24	Vinyl acetate	------	0.340	0.316	0.360	0.397	0.344	0.413	0.399	0.415	0.407	0.377	9.82	5.8352
	25	1,1-Dichloroethane	0.585	0.615	0.565	0.611	0.589	0.565	0.651	0.605	0.631	0.592	0.601	4.54	5.8296
25	26	2-Butanol	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	27	tert-Butyl ethyl ether (ETBE)	0.774	0.775	0.756	0.823	0.779	0.725	0.849	0.797	0.814	0.775	0.787	4.52	6.2400
5	28	2-Butanone	------	0.060	0.049	0.050	0.054	0.053	0.061	0.061	0.065	0.060	0.056	10.70	6.4281
	29	2,2-Dichloropropane	0.523	0.531	0.479	0.511	0.492	0.476	0.530	0.504	0.522	0.484	0.505	4.21	6.6281
	30	cis-1,2-Dichloroethene	0.408	0.424	0.392	0.408	0.406	0.395	0.444	0.418	0.434	0.409	0.414	4.03	6.6859
	31	Chloroform	0.718	0.670	0.594	0.597	0.588	0.552	0.630	0.580	0.613	0.592	0.612	8.00	6.9082
	32	Bromochloromethane	0.236	0.244	0.223	0.241	0.233	0.225	0.256	0.247	0.256	0.240	0.240	4.73	7.1481
	33	Tetrahydrofuran	------	------	------	0.038	0.034	0.030	0.037	0.035	0.039	0.036	0.035	9.25	7.2006
	34	Dibromofluoromethane	0.285	0.328	0.288	0.328	0.319	0.281	0.325	0.313	------	------	0.310	6.07	7.2281
	35	1,1,1-Trichloroethane	0.513	0.539	0.485	0.512	0.496	0.483	0.545	0.507	0.534	0.50B	0.519	4.19	7.4983
	36	Cyclohexane	0.502	0.544	0.473	0.526	0.509	0.453	0.514	0.471	------	------	0.499	6.13	7.5241
	37	2,2,4-Trimethylpentane	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	38	1,1-Dichloropropene	0.168	0.181	0.168	0.177	0.168	0.164	0.185	0.175	0.183	0.173	0.174	4.16	7.7230
	39	Carbon tetrachloride	0.390	0.393	0.352	0.387	0.366	0.365	0.403	0.383	0.403	0.374	0.382	4.43	7.8785
	40	tert-Amyl methyl ether (TAME)	0.661	0.627	0.595	0.624	0.589	0.540	0.638	0.608	0.643	0.596	0.612	5.64	7.8889
	41	1,2-Dichloroethane-d4	0.208	0.216	0.193	0.229	0.217	0.186	0.225	0.216	------	------	0.211	7.18	7.9652
	42	Benzene	1.388	1.402	1.268	1.345	1.317	1.253	1.406	1.314	1.363	1.304	1.336	4.04	8.1304
	43	1,2-Dichloroethane	0.267	0.270	0.254	0.274	0.266	0.248	0.289	0.272	0.283	0.270	0.269	4.45	8.1037
	44	Trichloroethene	0.334	0.340	0.319	0.343	0.336	0.334	0.374	0.350	0.372	0.352	0.346	4.96	9.0723
	45	Methylcyclohexane	0.566	0.602	0.537	0.583	0.548	0.493	0.554	0.512	------	------	0.549	6.46	9.1653
	46	1,2-Dichloropropane	0.305	0.315	0.293	0.314	0.287	0.278	0.319	0.295	0.318	0.299	0.299	5.38	9.3509
	47	Bromodichloromethane	0.473	0.442	0.393	0.410	0.401	0.372	0.437	0.398	0.428	0.402	0.415	6.88	9.7316
20	48	1,4-Dioxane	------	------	------	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	12.49	9.7831
	49	Dibromomethane	0.135	0.145	0.136	0.142	0.139	0.126	0.149	0.143	0.153	0.142	0.141	8.30	9.8235
	50	2-Chloroethyl vinyl ether	------	------	0.067	0.073	0.072	0.069	0.082	0.081	0.083	0.079	0.076	8.06	10.2538
5	51	4-Methyl-2-pentanone	------	------	0.094	0.104	0.134	0.128	0.158	0.154	0.164	0.152	0.136	18.90	10.2764
	52	cis-1,3-Dichloropropene	0.461	0.451	0.434	0.457	0.456	0.433	0.501	0.478	0.504	0.476	0.465	5.31	10.6250
	53	CHLOROBENZENE-D5	1	1	1	1	1	1	1	1	1	1	1	0	13.7168
	54	Toluene-d8	1.490	1.527	1.385	1.619	1.529	1.394	1.577	1.468	------	------	1.499	5.48	11.0301
	55	Toluene	1.818	1.915	1.660	1.801	1.716	1.701	1.833	1.727	1.852	1.736	1.776	4.50	11.1687
	56	Ethyl methacrylate	------	------	0.232	0.261	0.250	0.247	0.291	0.275	0.297	0.278	0.266	8.54	11.4708
	57	trans-1,3-Dichloropropene	0.400	0.405	0.376	0.415	0.403	0.390	0.444	0.420	0.451	0.425	0.413	5.62	11.4842
	58	1,1,2-Trichloroethane	0.246	0.228	0.220	0.238	0.226	0.216	0.243	0.233	0.245	0.231	0.233	4.45	11.7509
5	59	2-Hexanone	------	------	0.050	0.059	0.087	0.091	0.113	0.112	0.133	0.115	0.090	36.80	11.7912
	60	1,3-Dichloropropane	0.381	0.388	0.374	0.405	0.381	0.366	0.422	0.398	0.424	0.405	0.395	5.08	12.1953
	61	Tetrachloroethene	0.361	0.390	0.351	0.380	0.354	0.359	0.385	0.364	0.384	0.364	0.369	3.83	12.2990
	62	Dibromochloromethane	0.303	0.294	0.264	0.277	0.277	0.261	0.299	0.280	0.303	0.286	0.284	5.55	12.6665
	63	1,2-Dibromoethane	0.214	0.220	0.214	0.234	0.228	0.215	0.250	0.236	0.253	0.237	0.230	6.28	12.9383
	64	1-Chlorohexane	0.781	0.823	0.713	0.793	0.726	0.743	0.795	0.758	0.791	0.738	0.767	4.69	13.3080
	65	Chlorobenzene	1.046	1.088	1.007	1.069	1.028	1.023	1.125	1.046	1.110	1.045	1.059	3.64	13.7409
	66	1,1,1,2-Tetrachloroethane	0.325	0.330	0.313	0.330	0.314	0.313	0.346	0.324	0.343	0.324	0.326	3.52	13.8650
	67	Ethylbenzene	2.077	2.152	1.907	2.051	1.962	1.985	2.135	1.999	2.065	1.934	2.027	4.07	13.8813
2	68	m-Xylene & p-Xylene	1.533	1.584	1.421	1.517	1.455	1.429	1.559	1.455	1.488	1.396	1.484	4.23	14.0205
	69	o-Xylene	1.632	1.623	1.469	1.557	1.460	1.453	1.577	1.498	1.558	1.443	1.527	4.66	14.8428
	70	Styrene	1.217	1.208	1.133	1.187	1.144	1.135	1.252	1.180	1.235	1.135	1.184	3.78	14.9094
	71	Isopropylbenzene	2.023	2.125	1.896	2.060	1.959	1.958	2.123	1.989	2.061	1.924	2.012	3.97	15.5243
	72	1,2-DICHLOROBENZENE-D4	1	1	1	1	1	1	1	1	1	1	1	0	18.6798
	73	Bromoform	------	0.205	0.263	0.358	0.366	0.337	0.407	0.390	0.407	0.416	0.350	20.61	15.5589
	74	trans-1,4-Dichloro-2-butene	------	------	0.146	0.168	0.163	0.156	0.188	0.180	0.191	0.168	0.173	9.77	15.6338
	75	1,1,2,2-Tetrachloroethane	0.739	0.666	0.619	0.654	0.640	0.595	0.689	0.667	0.701	0.686	0.666	6.36	15.8650
	76	4-Bromofluorobenzene	1.452	1.437	1.289	1.380	1.340	1.226	1.447	1.399	------	------	1.362	5.89	16.0153
	77	1,2,3-Trichloropropane	------	0.141	0.153	0.173	0.169	0.159	0.187	0.177	0.190	0.185	0.170	8.85	16.1575
	78	n-Propylbenzene	6.717	6.994	5.903	6.314	6.264	6.304	6.894	6.414	6.634	6.584	6.506	5.03	16.2376
	79	Bromobenzene	0.995	1.049	0.936	1.001	1.004	0.984	1.111	1.036	1.086	1.063	1.029	5.28	16.3825
	80	1,3,5-Trimethylbenzene	4.352	4.499	3.734	4.047	3.995	4.012	4.417	4.116	4.229	4.145	4.155	5.49	16.6088
	81	2-Chlorotoluene	4.034	4.266	3.707	3.731	3.759	3.734	4.086	3.854	3.922	4.052	3.915	4.84	16.6354
	82	4-Chlorotoluene	3.478	3.662	3.090	3.515	3.454	3.390	3.723	3.482	3.612	3.250	3.466	5.46	16.7332
	83	tert-Butylbenzene	0.904	0.890	0.796	0.846	0.839	0.843	0.934	0.864	0.903	0.895	0.871	4.70	17.2872
	84	1,2,4-Trimethylbenzene	4.167	4.280	3.727	3.970	3.950	3.951	4.329	4.050	4.156	4.057	4.065	4.41	17.3598
	85	sec-Butylbenzene	5.982	6.152	5.164	5.666	5.498	5.526	6.078	5.608	5.821	5.611	5.711	5.27	17.6576
	86	p-Isopropyltoluene	4.497	4.806	4.021	4.449	4.348	4.230	4.673	4.310	4.467	4.329	4.403	5.17	17.8798
	87	1,3-Dichlorobenzene	2.964	3.088	2.755	2.913	2.873	2.877	3.063	2.953	3.023	2.967	2.955	4.87	18.0280
	88	1,2,3-Trimethylbenzene	3.969	4.104	3.570	3.743	3.683	3.668	3.988	3.748	3.857	3.706	3.785	4.70	18.1317
	89	1,4-Dichlorobenzene	2.063	2.092	1.785	1.890	1.857	1.868	2.001	1.885	1.898	1.863	1.916	4.92	18.1909
	90	n-Butylbenzene	4.854	4.963	4.193	4.515	4.392	4.402	4.823	4.508	4.603	4.346	4.560	5.46	18.4887
	91	1,2-Dichlorobenzene	1.624	1.664	1.514	1.605	1.566	1.495	1.701	1.592	1.655	1.586	1.605	4.08	18.7414
	92	1,2-Dibromo-3-chloropropane	------	------	0.067	0.087	0.093	0.084	0.105	0.102	0.112	0.108	0.095	16.02	19.7112
	93	1,2,4-Trichlorobenzene	1.082	1.145	1.038	1.141	1.133	1.108	1.288	1.237	1.294	1.228	1.169	7.49	20.8013
	94	Hexachlorobutadiene	0.665	0.692	0.611	0.670	0.668	0.696	0.776	0.730	0.759	0.700	0.697	6.95	20.9673
	95	Naphthalene	1.273	1.300	1.206	1.327	1.317	1.264	1.515	1.458	1.543	1.446	1.365	8.50	21.1480
	96	1,2,3-Trichlorobenzene	0.835	0.854	0.791	0.871	0.857	0.833	0.968	0.920	0.964	0.915	0.881	6.66	21.4665

Spike Amount = Nominal Amount * M
Ave_%RSD : 6.8 Max_%RSD : 36.8

Use Least Square Linear Regression with weighting factor of inverse concentration for comps with %_RSD > 15
Resp_Ratio = xo + x1 * Amt_Ratio

IOX	Parameter	x0	x1	CCF
7	Bromomethane	0.00783	0.36199	0.9993
51	4-Methyl-2-pentanone	-0.04242	0.15630	0.9988
59	2-Hexanone	-0.05681	0.11740	0.9987
73	Bromoform	-0.01353	0.40878	0.9992
92	1,2-Dibromo-3-chloropropane	-0.00559	0.10796	0.9987

SC
5/15/24

Instrument ID :01
Beginning DateTime :05/11/24 10:58
Spike Units :PPB
IC File :REV201

Column Spec :RXI-624SILMS ID :0.25MM
Ending DateTime :05/11/24 15:26
HPChem Method :VO01E11

M	IDX	Parameters	.3 10:58 REV196	.5 11:27 REV197	1 11:56 REV198	2 12:30 REV199	5 12:59 REV200	10 13:28 REV201	20 13:58 REV202	30 14:27 REV203	50 14:56 REV204	100 15:26 REV205	AvDRec	%_RSD	Av_Rt_M
	1	1,4-DIFLUOROBENZENE	1	1	1	1	1	1	1	1	1	1	1	0	8.5509
	2	Chlorotrifluoroethylene	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	3	Dichlorodifluoromethane	103	108	92	102	99	95	101	99	102	99	3.4	4.44	2.1690
	4	2-Chloro-1,1,1-trifluoroethane	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	5	Chloromethane	114	108	97	105	101	93	101	94	97	90	5.9	7.39	2.4709
	6	Vinyl chloride	98	102	91	108	108	99	106	98	100	90	4.8	6.31	2.6048
	7	Bromomethane	------	114	99	101	95	88	103	97	103	100	12.3	17.96	3.1458
	8	Chloroethane	104	101	95	96	100	93	104	100	106	103	3.4	4.21	3.1896
	9	Dichlorofluoromethane	117	110	98	100	94	90	102	95	100	93	5.9	8.21	3.2755
	10	Trichlorofluoromethane	104	110	96	105	101	94	99	96	100	95	4.1	5.20	3.5526
5	11	Acrolein	------	------	------	100	100	91	109	100	109	105	4.5	5.86	3.9857
	12	1,1,2-Trichloro-1,2,2-trifluoroethane	82	103	93	109	100	100	106	103	108	95	5.9	8.11	4.0696
5	13	Acetone	------	------	132	100	97	84	95	92	100	92	9.1	14.45	4.0577
	14	1,1-Dichloroethene	97	103	91	103	98	96	107	101	106	99	3.7	4.74	4.2296
25	15	tert-Butyl alcohol	91	91	91	100	100	91	109	109	118	109	8.2	9.12	4.3422
	16	Iodomethane	97	99	92	100	98	95	108	102	107	102	3.6	4.85	4.6385
	17	Methyl acetate	------	------	------	114	101	84	102	97	------	------	7.2	10.84	4.6531
	18	Methylene chloride	105	103	98	102	98	93	104	96	103	97	3.4	3.90	4.8577
	19	Carbon disulfide	110	95	94	99	101	94	108	99	------	------	4.7	6.08	4.8800
5	20	Acrylonitrile	107	100	96	96	100	93	104	100	107	102	3.5	4.77	5.0252
	21	tert-Butyl methyl ether (MTBE)	102	105	95	101	98	90	105	100	104	99	3.4	4.67	5.0607
	22	trans-1,2-Dichloroethene	98	101	96	102	98	93	107	101	106	98	3.3	4.44	5.2489
	23	Isopropyl ether (DIPE)	100	102	94	99	98	94	108	100	104	100	3	4.21	5.6696
	24	Vinyl acetate	------	90	84	95	105	91	110	106	110	108	8.7	9.82	5.8322
	25	1,1-Dichloroethane	97	102	94	102	98	94	108	101	105	99	3.6	4.54	5.8296
25	26	2-Butanol	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	27	tert-Butyl ethyl ether (ETBE)	98	98	96	105	99	92	108	101	103	98	3.5	4.52	6.2400
5	28	2-Butanone	------	89	88	89	96	95	109	109	116	107	9.3	10.70	6.4281
	29	2,2-Dichloropropane	104	105	95	101	97	94	105	100	103	96	3.6	4.21	6.6281
	30	cis-1,2-Dichloroethene	98	102	95	99	98	95	107	101	105	99	3.2	4.03	6.6859
	31	Chloroform	117	109	97	97	96	90	103	95	100	97	5.9	8.00	6.9082
	32	Bromochloromethane	98	102	93	100	99	93	107	103	107	100	3.5	4.73	7.1481
	33	Tetrahydrofuran	------	------	------	109	97	86	106	100	111	103	6.5	8.25	7.2006
	34	Dibromofluoromethane	92	106	93	106	103	91	108	101	------	------	6	7.01	7.2281
	35	1,1,1-Trichloroethane	100	105	95	100	97	94	106	99	104	99	3.2	4.19	7.4993
	36	Cyclohexane	101	109	95	105	102	91	103	94	------	------	5	6.15	7.5244
	37	2,2,4-Trimethylpentane	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	38	1,1-Dichloropropene	97	104	97	102	97	94	106	101	105	99	3.4	4.16	7.7230
	39	Carbon tetrachloride	102	103	92	101	96	96	105	100	105	98	3.6	4.43	7.8785
	40	tert-Amyl methyl ether (TAME)	108	102	97	102	96	88	104	99	105	97	4.3	5.64	7.8889
	41	1,2-Dichloroethane-d4	99	102	91	109	103	88	107	102	------	------	5.6	7.18	7.9652
	42	Benzene	104	105	95	101	99	94	105	98	102	98	3.4	4.04	8.1304
	43	1,2-Dichloroethane	99	100	94	102	99	93	107	101	105	100	3.1	4.45	8.1037
	44	Trichloroethene	97	98	92	99	97	97	108	101	108	102	3.9	4.96	9.0723
	45	Methylcyclohexane	103	110	98	106	100	90	101	93	------	------	4.8	6.46	9.1653
	46	1,2-Dichloropropane	102	105	91	98	96	93	107	100	106	100	4.2	5.38	9.3509
	47	Bromodichloromethane	114	107	95	99	97	90	104	96	103	97	5.5	6.99	9.7316
20	48	1,4-Dioxane	------	------	------	76	93	89	110	106	117	109	0	14.49	9.7831
	49	Dibromomethane	96	103	96	101	99	89	106	101	109	101	4	5.30	9.8235
	50	2-Chloroethyl vinyl ether	------	------	88	96	95	91	108	107	109	104	7.2	8.06	10.2338
5	51	4-Methyl-2-pentanone	------	------	115	93	93	87	101	99	106	98	15.4	18.90	10.2764
	52	cis-1,3-Dichloropropene	99	97	93	98	98	93	108	103	108	102	4.2	5.31	10.6250
	53	CHLOROBENZENE-D5	1	1	1	1	1	1	1	1	1	1	1	0	13.7168
	54	Toluene-d8	99	102	92	108	102	93	105	98	------	------	4.3	5.48	11.0301
	55	Toluene	102	108	93	101	97	96	103	97	104	98	3.8	4.50	11.1687
	56	Ethyl methacrylate	------	------	87	98	94	93	109	103	112	105	7.1	8.54	11.4708
	57	trans-1,3-Dichloropropene	97	98	91	100	98	94	108	102	109	103	4.4	5.62	11.4842
	58	1,1,2-Trichloroethane	106	98	94	102	97	93	104	100	105	99	3.6	4.45	11.7509
5	59	2-Hexanone	------	------	123	93	93	87	101	99	106	99	28.5	36.80	11.7912
	60	1,3-Dichloropropane	96	98	95	103	96	93	107	101	107	103	4.2	5.08	12.1953
	61	Tetrachloroethene	98	106	95	103	96	97	104	99	104	99	3.4	3.83	12.2990
	62	Dibromochloromethane	107	104	93	98	95	92	105	99	107	101	4.6	5.55	12.6665
	63	1,2-Dibromoethane	93	96	93	102	99	93	109	103	110	103	5.2	6.28	13.0383
	64	1-Chlorohexane	103	107	93	103	95	97	103	99	103	96	4.1	4.69	13.3080
	65	Chlorobenzene	99	103	95	101	97	97	106	99	105	99	3	3.64	13.7909
	66	1,1,1,2-Tetrachloroethane	100	101	96	101	96	96	106	99	105	99	2.7	3.59	13.8650
	67	Ethylbenzene	102	106	94	101	97	98	105	99	102	95	3.4	4.07	13.8813
2	68	m-Xylene & p-Xylene	103	107	96	102	98	96	105	98	100	94	3.5	4.23	14.0205
	69	o-Xylene	107	106	96	102	96	95	103	98	102	94	4.1	4.66	14.8428
	70	Styrene	103	102	96	101	97	96	106	100	104	96	3.2	3.78	14.9094
	71	Isopropylbenzene	101	106	94	102	97	97	106	99	102	96	3.3	3.97	15.5243
	72	1,2-DICHLOROBENZENE-D4	1	1	1	1	1	1	1	1	1	1	1	0	18.6798
	73	Bromoform	------	116	98	104	96	86	101	97	100	102	15.5	20.61	15.5589
	74	trans-1,4-Dichloro-2-butene	------	------	84	97	94	90	109	104	110	109	8.2	9.77	15.6338
	75	1,1,2,2-Tetrachloroethane	111	100	93	98	96	89	104	100	105	103	4.7	6.36	15.8650
	76	4-Bromofluorobenzene	107	106	93	101	98	90	106	98	------	------	4.9	6.06	16.0153
	77	1,2,3-Trichloropropane	------	83	90	102	99	94	110	104	112	109	7.8	9.82	16.1515
	78	n-Propylbenzene	103	108	91	97	96	97	106	99	102	101	4	5.03	16.2976
	79	Bromobenzene	97	102	91	97	98	96	108	101	106	105	4.3	5.26	16.3835
	80	1,3,5-Trimethylbenzene	105	108	90	97	96	97	106	99	102	100	4.2	5.49	16.6058
	81	2-Chlorotoluene	103	109	95	95	96	95	104	98	100	103	4	4.84	16.6354
	82	4-Chlorotoluene	100	106	89	101	100	98	107	100	104	94	3.9	5.46	16.7332
	83	tert-Butylbenzene	104	102	91	97	96	97	107	99	104	103	3.9	4.70	17.2872
	84	1,2,4-Trimethylbenzene	103	106	92	98	97	97	106	100	102	100	3.4	4.41	17.3598
	85	sec-Butylbenzene	105	108	90	99	96	97	106	98	102	98	4.2	5.27	17.6576
	86	p-Isopropyltoluene	102	109	91	101	97	96	106	98	101	98	4	5.17	17.8798
	87	1,3-Dichlorobenzene	100	107	92	98	96	96	107	100	103	101	3.7	4.87	18.0280
	88	1,2,3-Trimethylbenzene	105	108	94	99	97	95	105	99	101	98	3.9	4.70	18.1317
	89	1,4-Dichlorobenzene	108	107	94	98	97	95	105	98	101	98	4	4.92	18.1909
	90	n-Butylbenzene	106	109	92	99	96	97	106	99	101	95	4.4	5.46	18.4887
	91	1,2-Dichlorobenzene	101	104	95	100	98	93	106	99	104	100	3.1	4.06	18.7243
	92	1,2-Dibromo-3-chloropropane	------	------	114	106	96	83	100	96	104	101	12.6	16.02	19.7172
	93	1,2,4-Trichlorobenzene	93	98	89	98	97	95	110	106	111	105	6.3	7.49	20.8013
	94	Hexachlorobutadiene	95	99	88	96	96	100	111	105	109	100	5.1	6.95	20.9673
	95	Naphthalene	93	95	88	97	96	93	111	107	113	106	7.4	8.50	21.1480
	96	1,2,3-Trichlorobenzene	95	97	90	99	97	95	110	104	109	104	5.5	6.66	21.4665

For 8260 C
SM
5/15/24

Compound List Report 01

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	2.17	0.253	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	2.46	0.288	A	1	A	B
6	T	Vinyl chloride	62	2.61	0.305	A	1	A	B
7	T	Bromomethane	94	3.14	0.367	L	1	A	B
8	T	Chloroethane	64	3.18	0.373	A	1	A	B
9	T	Dichlorofluoromethane	67	3.27	0.383	A	1	A	B
10	T	Trichlorofluoromethane	101	3.55	0.416	A	1	A	B
11	T	Acrolein	56	3.98	0.466	A	1	A	B
12	T	1,1,2-Trichloro-1,2,2-trifluor	151	4.06	0.475	A	1	A	B
13	T	Acetone	43	4.06	0.475	A	1	A	B
14	T	1,1-Dichloroethene	61	4.22	0.494	A	2	A	B
15	T	tert-Butyl alcohol	59	4.34	0.508	A	1	A	B
16	T	Iodomethane	142	4.64	0.543	A	1	A	B
17	T	Methyl acetate	43	4.65	0.544	A	1	A	B
18	T	Methylene chloride	49	4.86	0.569	A	2	A	B
19	T	Carbon disulfide	76	4.87	0.570	A	1	A	B
20	T	Acrylonitrile	53	5.02	0.588	A	2	A	B
21	T	tert-Butyl methyl ether (MTBE)	73	5.07	0.593	A	1	A	B
22	T	trans-1,2-Dichloroethene	61	5.24	0.614	A	2	A	B
23	T	Isopropyl ether (DIPE)	45	5.67	0.664	A	1	A	B
24	T	Vinyl acetate	43	5.82	0.681	A	1	A	B
25	T	1,1-Dichloroethane	63	5.82	0.681	A	2	A	B
26	T	2-Butanol	45	6.16	0.721	A	1	A	B
27	T	tert-Butyl ethyl ether (ETBE)	59	6.24	0.730	A	1	A	B
28	T	2-Butanone	43	6.41	0.751	A	1	A	B
29	T	2,2-Dichloropropane	77	6.62	0.775	A	2	A	B
30	T	cis-1,2-Dichloroethene	96	6.68	0.782	A	2	A	B
31	T	Chloroform	83	6.90	0.808	A	2	A	B
32	T	Bromochloromethane	49	7.14	0.836	A	2	A	B
33	T	Tetrahydrofuran	42	7.20	0.842	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	0.881	A	1	A	B
37	T	2,2,4-Trimethylpentane	57	7.52	0.881	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	7.88	0.922	A	1	A	B
41	S	1,2-Dichloroethane-d4	65	7.97	0.933	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	9.17	1.073	A	2	A	B
46	T	1,2-Dichloropropane	63	9.34	1.094	A	1	A	B
47	T	Bromodichloromethane	83	9.73	1.139	A	1	A	B
48	T	1,4-Dioxane	88	9.79	1.146	A	1	A	B
49	T	Dibromomethane	93	9.82	1.149	A	2	A	B
50	T	2-Chloroethyl vinyl ether	63	10.23	1.198	A	2	A	B
51	T	4-Methyl-2-pentanone	43	10.26	1.201	L	3	A	B
52	T	cis-1,3-Dichloropropene	75	10.62	1.243	A	1	A	B

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53	I		CHLOROBENZENE-D5	117	13.71	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	0.814	A	1	A B
56		T	Ethyl methacrylate	69	11.46	0.836	A	1	A B
57		T	trans-1,3-Dichloropropene	75	11.48	0.837	A	1	A B
58		T	1,1,2-Trichloroethane	97	11.74	0.856	A	2	A B
59		T	2-Hexanone	43	11.76	0.857	L	1	A B
60		T	1,3-Dichloropropane	76	12.19	0.889	A	1	A B
61		T	Tetrachloroethene	164	12.29	0.896	A	3	A B
62		T	Dibromochloromethane	129	12.66	0.923	A	1	A B
63		T	1,2-Dibromoethane	107	13.03	0.950	A	1	A B
64		T	1-Chlorohexane	91	13.30	0.970	A	1	A B
65	P,M		Chlorobenzene	112	13.79	1.005	A	1	A B
66		T	1,1,1,2-Tetrachloroethane	131	13.86	1.011	A	1	A B
67		T	Ethylbenzene	91	13.88	1.012	A	1	A B
68		T	m-Xylene & p-Xylene	91	14.01	1.022	A	1	A B
69		T	o-Xylene	91	14.84	1.082	A	1	A B
70		T	Styrene	104	14.90	1.086	A	2	A B
71		T	Isopropylbenzene	105	15.52	1.132	A	3	A B
72	I		1,2-DICHLOROBENZENE-D4	152	18.68	1.000	A	1	A B
73		T	Bromoform	173	15.55	0.833	L	1	A B
74		T	trans-1,4-Dichloro-2-butene	53	15.63	0.837	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	16.14	0.864	A	1	A B
78		T	n-Propylbenzene	91	16.29	0.872	A	2	A B
79		T	Bromobenzene	156	16.38	0.877	A	1	A B
80		T	1,3,5-Trimethylbenzene	105	16.60	0.889	A	2	A B
81		T	2-Chlorotoluene	91	16.63	0.891	A	1	A B
82		T	4-Chlorotoluene	91	16.72	0.895	A	1	A B
83		T	tert-Butylbenzene	134	17.29	0.925	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	0.957	A	2	A B
87		T	1,3-Dichlorobenzene	146	18.03	0.965	A	2	A B
88		T	1,2,3-Trimethylbenzene	105	18.13	0.971	A	2	A B
89		T	1,4-Dichlorobenzene	146	18.19	0.974	A	2	A B
90		T	n-Butylbenzene	91	18.49	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	19.71	1.055	L	1	A B
93		T	1,2,4-Trichlorobenzene	180	20.80	1.113	A	2	A B
94		T	Hexachlorobutadiene	225	20.96	1.122	A	1	A B
95		T	Naphthalene	128	21.14	1.132	A	1	A B
96		T	1,2,3-Trichlorobenzene	180	21.46	1.149	A	2	A B

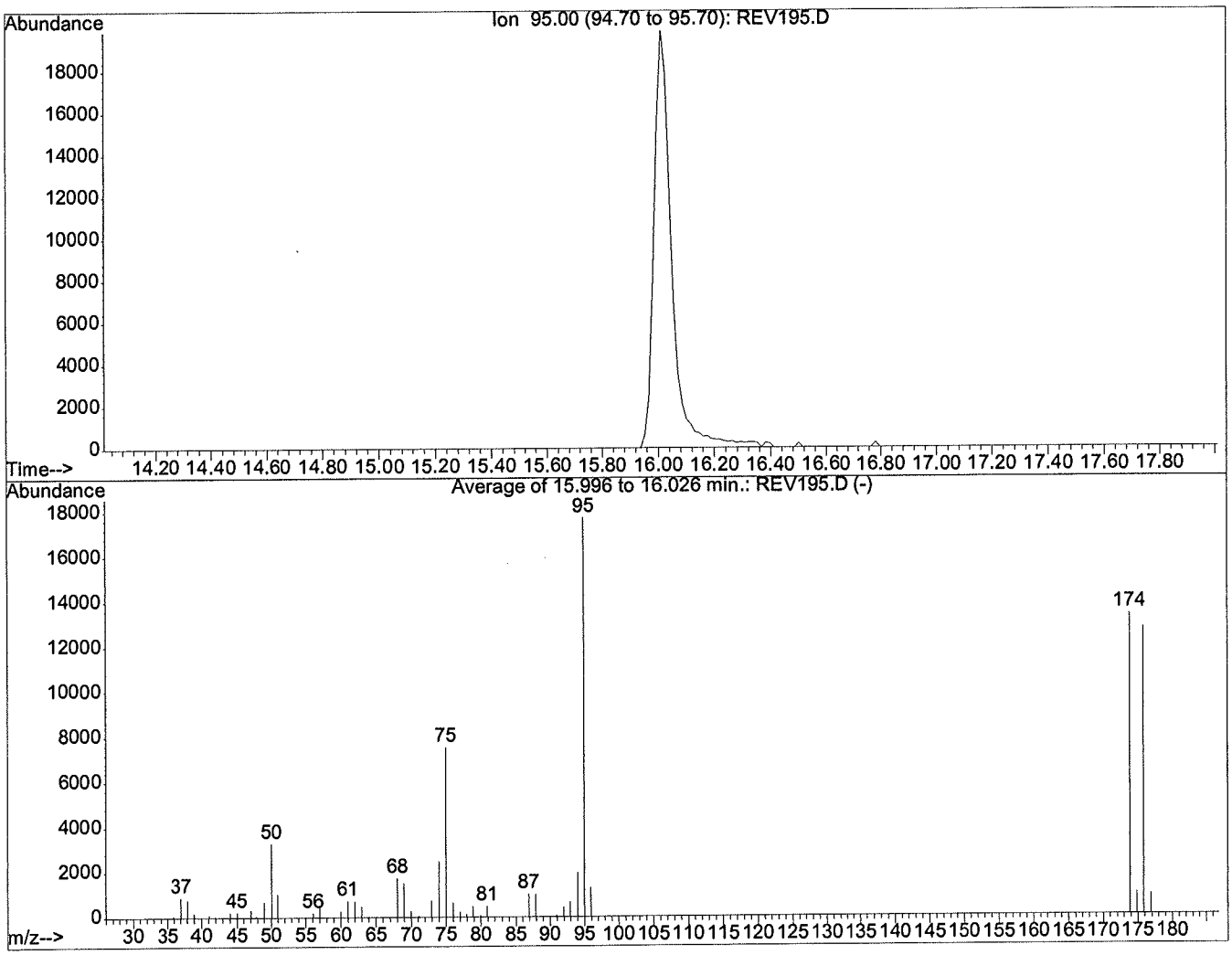
Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
#Qual = number of qualifiers
A/H = Area or Height
ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

VO01E11.M Mon May 13 14:36:08 2024

SA 5/15/24

Data File : D:\HPCHEM\1\DATA\24E11\REV195.D
Acq On : 11 May 2024 10:20 am
Sample : BFB01E11
Misc : T/CHK
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls

Vial: 1
Operator: LPriet
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	18.5	3281	PASS
75	95	30	60	42.5	7529	PASS
95	95	100	100	100.0	17719	PASS
96	95	5	9	7.3	1291	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	75.4	13365	PASS
175	174	5	9	7.4	989	PASS
176	174	95	101	95.5	12770	PASS
177	176	5	9	7.1	901	PASS

REV195.D VO01E11.M Mon May 13 14:35:03 2024 SV 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV196.D Vial: 2
Acq On : 11 May 2024 10:58 am Operator: LPriet
Sample : VO01E111 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: May 13 14:29 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.55	114	981871	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.72	117	797187	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	299571	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	8387	0.28	ug/l	0.00
Spiked Amount 10.000			Recovery =	2.80%		
41) 1,2-Dichloroethane-d4	7.95	65	6117	0.30	ug/l	-0.01
Spiked Amount 10.000			Recovery =	3.00%		
54) Toluene-d8	11.03	98	35624	0.30	ug/l	0.00
Spiked Amount 10.000			Recovery =	3.00%		
76) 4-Bromofluorobenzene	16.03	95	13047	0.32	ug/l	0.02
Spiked Amount 10.000			Recovery =	3.20%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.16	85	8140	0.31	ug/l	65
5) Chloromethane	2.46	50	12543	0.34	ug/l	86
6) Vinyl chloride	2.59	62	8988	0.29	ug/l	89
8) Chloroethane	3.18	64	6888	0.31	ug/l	80
9) Dichlorofluoromethane	3.26	67	22206	0.35	ug/l	73
10) Trichlorofluoromethane	3.52	101	12948	0.31	ug/l	100
12) 1,1,2-Trichloro-1,2,2-trif	4.06	151	5097	0.25	ug/l	94
14) 1,1-Dichloroethene	4.22	61	15229	0.29	ug/l	94
15) tert-Butyl alcohol	4.34	59	7470	6.83	ug/l	79
16) Iodomethane	4.62	142	16364	0.29	ug/l	99
18) Methylene chloride	4.84	49	13215	0.31	ug/l	98
19) Carbon disulfide	4.87	76	36989	0.33	ug/l	99
20) Acrylonitrile	5.02	53	7271	1.60	ug/l	91
21) tert-Butyl methyl ether (M	5.05	73	15688	0.30	ug/l	81
22) trans-1,2-Dichloroethene	5.24	61	14865	0.29	ug/l	99
23) Isopropyl ether (DIPE)	5.66	45	32481	0.30	ug/l	98
25) 1,1-Dichloroethane	5.82	63	17229	0.29	ug/l	98
27) tert-Butyl ethyl ether (ET	6.24	59	22788	0.30	ug/l	100
29) 2,2-Dichloropropane	6.62	77	15398	0.31	ug/l	97
30) cis-1,2-Dichloroethene	6.68	96	11947	0.29	ug/l	98
31) Chloroform	6.90	83	21166	0.35	ug/l	98
32) Bromochloromethane	7.14	49	6943	0.29	ug/l	91
35) 1,1,1-Trichloroethane	7.49	97	15125	0.30	ug/l	97
36) Cyclohexane	7.52	84	14801	0.30	ug/l	88
38) 1,1-Dichloropropene	7.72	110	4945	0.29	ug/l	94
39) Carbon tetrachloride	7.87	119	11491	0.31	ug/l	97
40) tert-Amyl methyl ether (TA	7.89	73	19458	0.32	ug/l	91

(#) = qualifier out of range (m) = manual integration
REV196.D VO01E11.M Mon May 13 14:29:11 2024 Page 1

SW 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV196.D Vial: 2
Acq On : 11 May 2024 10:58 am Operator: LPriet
Sample : VO01E111 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: May 13 14:29 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
42)	Benzene	8.12	78	40894	0.31	ug/l	98
43)	1,2-Dichloroethane	8.10	62	7854	0.30	ug/l	93
44)	Trichloroethene	9.08	130	9853	0.29	ug/l	97
45)	Methylcyclohexane	9.17	83	16634	0.31	ug/l	98
46)	1,2-Dichloropropane	9.36	63	9009	0.31	ug/l	91
47)	Bromodichloromethane	9.73	83	13928	0.34	ug/l	78
49)	Dibromomethane	9.82	93	3964	0.29	ug/l	85
52)	cis-1,3-Dichloropropene	10.63	75	13583	0.30	ug/l	94
55)	Toluene	11.17	91	43467	0.31	ug/l	97
57)	trans-1,3-Dichloropropene	11.49	75	9569	0.29	ug/l	95
58)	1,1,2-Trichloroethane	11.76	97	5879	0.32	ug/l	95
60)	1,3-Dichloropropane	12.21	76	9101	0.29	ug/l	94
61)	Tetrachloroethene	12.29	164	8630	0.29	ug/l	98
62)	Dibromochloromethane	12.68	129	7252	0.32	ug/l	99
63)	1,2-Dibromoethane	13.05	107	5114	0.28	ug/l	93
64)	1-Chlorohexane	13.32	91	18908	0.31	ug/l	95
65)	Chlorobenzene	13.79	112	25024	0.30	ug/l	99
66)	1,1,1,2-Tetrachloroethane	13.86	131	7766	0.30	ug/l	97
67)	Ethylbenzene	13.89	91	49666	0.31	ug/l	99
68)	m-Xylene & p-Xylene	14.03	91	73348	0.62	ug/l	99
69)	o-Xylene	14.84	91	39020	0.32	ug/l	95
70)	Styrene	14.93	104	29115	0.31	ug/l	95
71)	Isopropylbenzene	15.52	105	48372	0.30	ug/l	99
75)	1,1,2,2-Tetrachloroethane	15.86	83	6639	0.33	ug/l	100
78)	n-Propylbenzene	16.31	91	60366	0.31	ug/l	99
79)	Bromobenzene	16.38	156	8946	0.29	ug/l	100
80)	1,3,5-Trimethylbenzene	16.61	105	39112	0.31	ug/l	100
81)	2-Chlorotoluene	16.63	91	36258	0.31	ug/l	99
82)	4-Chlorotoluene	16.74	91	31256	0.30	ug/l	99
83)	tert-Butylbenzene	17.29	134	8128	0.31	ug/l	96
84)	1,2,4-Trimethylbenzene	17.36	105	37452	0.31	ug/l	99
85)	sec-Butylbenzene	17.66	105	53765	0.31	ug/l	98
86)	p-Isopropyltoluene	17.88	119	40416	0.31	ug/l	94
87)	1,3-Dichlorobenzene	18.03	146	17654	0.30	ug/l	99
88)	1,2,3-Trimethylbenzene	18.13	105	35674	0.31	ug/l	97
89)	1,4-Dichlorobenzene	18.19	146	18537	0.32	ug/l	97
90)	n-Butylbenzene	18.50	91	43628	0.32	ug/l	95
91)	1,2-Dichlorobenzene	18.72	146	14596	0.30	ug/l	96
93)	1,2,4-Trichlorobenzene	20.81	180	9721	0.28	ug/l	99
94)	Hexachlorobutadiene	20.96	225	5978	0.29	ug/l	94
95)	Naphthalene	21.15	128	11441	0.28	ug/l	94

(#) = qualifier out of range (m) = manual integration

SW 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV196.D Vial: 2
Acq On : 11 May 2024 10:58 am Operator: LPriet
Sample : VO01E111 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: May 13 14:29 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
96)	1,2,3-Trichlorobenzene	21.46	180	7501	0.28	ug/l	96

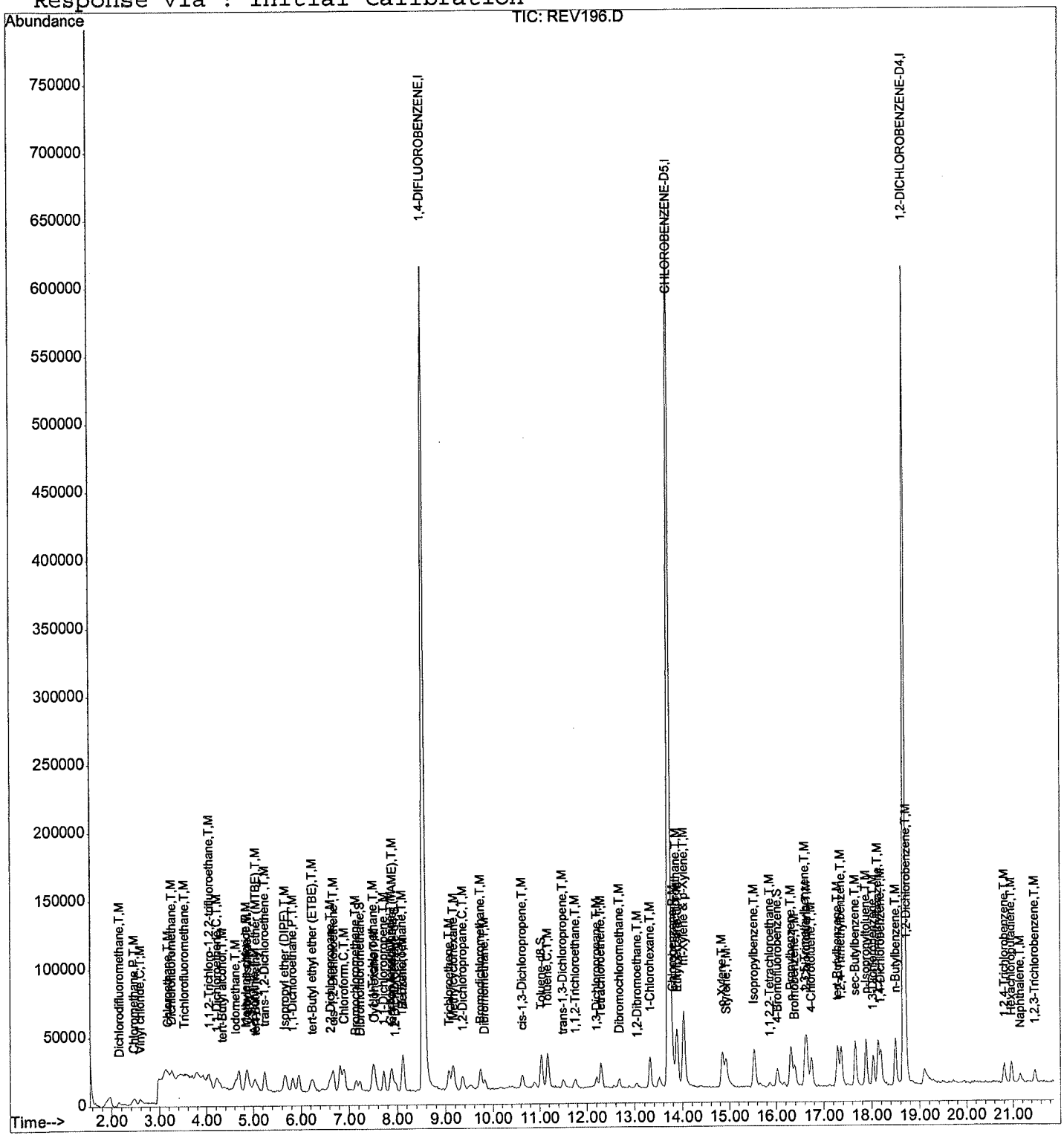
SW 5/15/24

(#) = qualifier out of range (m) = manual integration
REV196.D VO01E11.M Mon May 13 14:29:12 2024 Page 3

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E11\REV196.D Vial: 2
Acq On : 11 May 2024 10:58 am Operator: LPriet
Sample : VO01E111 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: May 13 14:29 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



SU 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV197.D Vial: 3
Acq On : 11 May 2024 11:27 am Operator: LPriet
Sample : VO01E112 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: May 13 14:30 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.54	114	958207	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	782724	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	292911	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	15713	0.53	ug/l	0.00
Spiked Amount 10.000			Recovery =	5.30%		
41) 1,2-Dichloroethane-d4	7.97	65	10333	0.51	ug/l	0.00
Spiked Amount 10.000			Recovery =	5.10%		
54) Toluene-d8	11.03	98	59771	0.51	ug/l	0.00
Spiked Amount 10.000			Recovery =	5.10%		
76) 4-Bromofluorobenzene	16.01	95	21050	0.53	ug/l	0.00
Spiked Amount 10.000			Recovery =	5.30%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.17	85	13823	0.54	ug/l	95
5) Chloromethane	2.47	50	19466	0.54	ug/l	94
6) Vinyl chloride	2.60	62	15272	0.51	ug/l	97
7) Bromomethane	3.14	94	27166	0.57	ug/l	73
8) Chloroethane	3.18	64	10907	0.50	ug/l	88
9) Dichlorofluoromethane	3.27	67	33964	0.55	ug/l	88
10) Trichlorofluoromethane	3.55	101	22334	0.55	ug/l	96
12) 1,1,2-Trichloro-1,2,2-trif	4.06	151	10414	0.52	ug/l	99
14) 1,1-Dichloroethene	4.22	61	26419	0.52	ug/l	97
15) tert-Butyl alcohol	4.35	59	11518	10.80	ug/l	75
16) Iodomethane	4.64	142	27278	0.50	ug/l	99
18) Methylene chloride	4.86	49	21078	0.51	ug/l	99
19) Carbon disulfide	4.87	76	52077	0.48	ug/l	98
20) Acrylonitrile	5.04	53	11053	2.49	ug/l	93
21) tert-Butyl methyl ether (M	5.05	73	26332	0.52	ug/l	92
22) trans-1,2-Dichloroethene	5.24	61	24833	0.50	ug/l	98
23) Isopropyl ether (DIPE)	5.67	45	53730	0.51	ug/l	97
24) Vinyl acetate	5.85	43	16307	0.45	ug/l	86
25) 1,1-Dichloroethane	5.82	63	29442	0.51	ug/l	97
27) tert-Butyl ethyl ether (ET	6.24	59	37115	0.49	ug/l	96
28) 2-Butanone	6.46	43	11997	2.24	ug/l	72
29) 2,2-Dichloropropane	6.62	77	25455	0.53	ug/l	98
30) cis-1,2-Dichloroethene	6.68	96	20337	0.51	ug/l	99
31) Chloroform	6.90	83	32100	0.55	ug/l	99
32) Bromochloromethane	7.14	49	11696	0.51	ug/l	95
35) 1,1,1-Trichloroethane	7.50	97	25812	0.53	ug/l	98
36) Cyclohexane	7.52	84	26045	0.54	ug/l	94

(#) = qualifier out of range (m) = manual integration
REV197.D VO01E11.M Mon May 13 14:30:15 2024 SM 5/15/24 Page 1

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV197.D Vial: 3
Acq On : 11 May 2024 11:27 am Operator: LPriet
Sample : VO01E112 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: May 13 14:30 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38)	1,1-Dichloropropene	7.72	110	8678	0.52	ug/l	98
39)	Carbon tetrachloride	7.88	119	18823	0.51	ug/l	98
40)	tert-Amyl methyl ether (TA	7.88	73	30034	0.51	ug/l	99
42)	Benzene	8.13	78	67162	0.52	ug/l	99
43)	1,2-Dichloroethane	8.10	62	12935	0.50	ug/l	96
44)	Trichloroethene	9.08	130	16301	0.49	ug/l	93
45)	Methylcyclohexane	9.17	83	28860	0.55	ug/l	98
46)	1,2-Dichloropropane	9.36	63	15082	0.53	ug/l	92
47)	Bromodichloromethane	9.73	83	21158	0.53	ug/l	92
49)	Dibromomethane	9.83	93	6952	0.51	ug/l	88
52)	cis-1,3-Dichloropropene	10.63	75	21629	0.49	ug/l	99
55)	Toluene	11.17	91	74965	0.54	ug/l	95
57)	trans-1,3-Dichloropropene	11.49	75	15855	0.49	ug/l	96
58)	1,1,2-Trichloroethane	11.76	97	8909	0.49	ug/l	95
60)	1,3-Dichloropropane	12.20	76	15204	0.49	ug/l	97
61)	Tetrachloroethene	12.31	164	15270	0.53	ug/l	99
62)	Dibromochloromethane	12.66	129	11514	0.52	ug/l	99
63)	1,2-Dibromoethane	13.05	107	8602	0.48	ug/l	99
64)	1-Chlorohexane	13.31	91	32200	0.54	ug/l	99
65)	Chlorobenzene	13.79	112	42586	0.51	ug/l	99
66)	1,1,1,2-Tetrachloroethane	13.86	131	12904	0.51	ug/l	99
67)	Ethylbenzene	13.88	91	84216	0.53	ug/l	99
68)	m-Xylene & p-Xylene	14.03	91	123954	1.07	ug/l	99
69)	o-Xylene	14.84	91	63511	0.53	ug/l	99
70)	Styrene	14.91	104	47295	0.51	ug/l	98
71)	Isopropylbenzene	15.52	105	83169	0.53	ug/l	98
73)	Bromoform	15.57	173	2997	0.58	ug/l	70
75)	1,1,2,2-Tetrachloroethane	15.86	83	9761	0.50	ug/l	94
77)	1,2,3-Trichloropropane	16.17	110	2065	0.41	ug/l	98
78)	n-Propylbenzene	16.31	91	102429	0.54	ug/l	99
79)	Bromobenzene	16.38	156	15359	0.51	ug/l	98
80)	1,3,5-Trimethylbenzene	16.60	105	65890	0.54	ug/l	99
81)	2-Chlorotoluene	16.63	91	62476	0.54	ug/l	99
82)	4-Chlorotoluene	16.74	91	53625	0.53	ug/l	100
83)	tert-Butylbenzene	17.29	134	13038	0.51	ug/l	98
84)	1,2,4-Trimethylbenzene	17.36	105	62834	0.53	ug/l	94
85)	sec-Butylbenzene	17.66	105	90100	0.54	ug/l	99
86)	p-Isopropyltoluene	17.88	119	70430	0.55	ug/l	95
87)	1,3-Dichlorobenzene	18.03	146	30579	0.53	ug/l	97
88)	1,2,3-Trimethylbenzene	18.13	105	60108	0.54	ug/l	97
89)	1,4-Dichlorobenzene	18.19	146	30059	0.54	ug/l	97

(#) = qualifier out of range (m) = manual integration SA 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV197.D Vial: 3
Acq On : 11 May 2024 11:27 am Operator: LPriet
Sample : VO01E112 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: May 13 14:30 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
90)	n-Butylbenzene	18.49	91	72685	0.54	ug/l	98
91)	1,2-Dichlorobenzene	18.72	146	24372	0.52	ug/l	97
93)	1,2,4-Trichlorobenzene	20.81	180	16768	0.49	ug/l	98
94)	Hexachlorobutadiene	20.96	225	10138	0.50	ug/l	96
95)	Naphthalene	21.15	128	19046	0.48	ug/l	100
96)	1,2,3-Trichlorobenzene	21.48	180	12506	0.48	ug/l	96

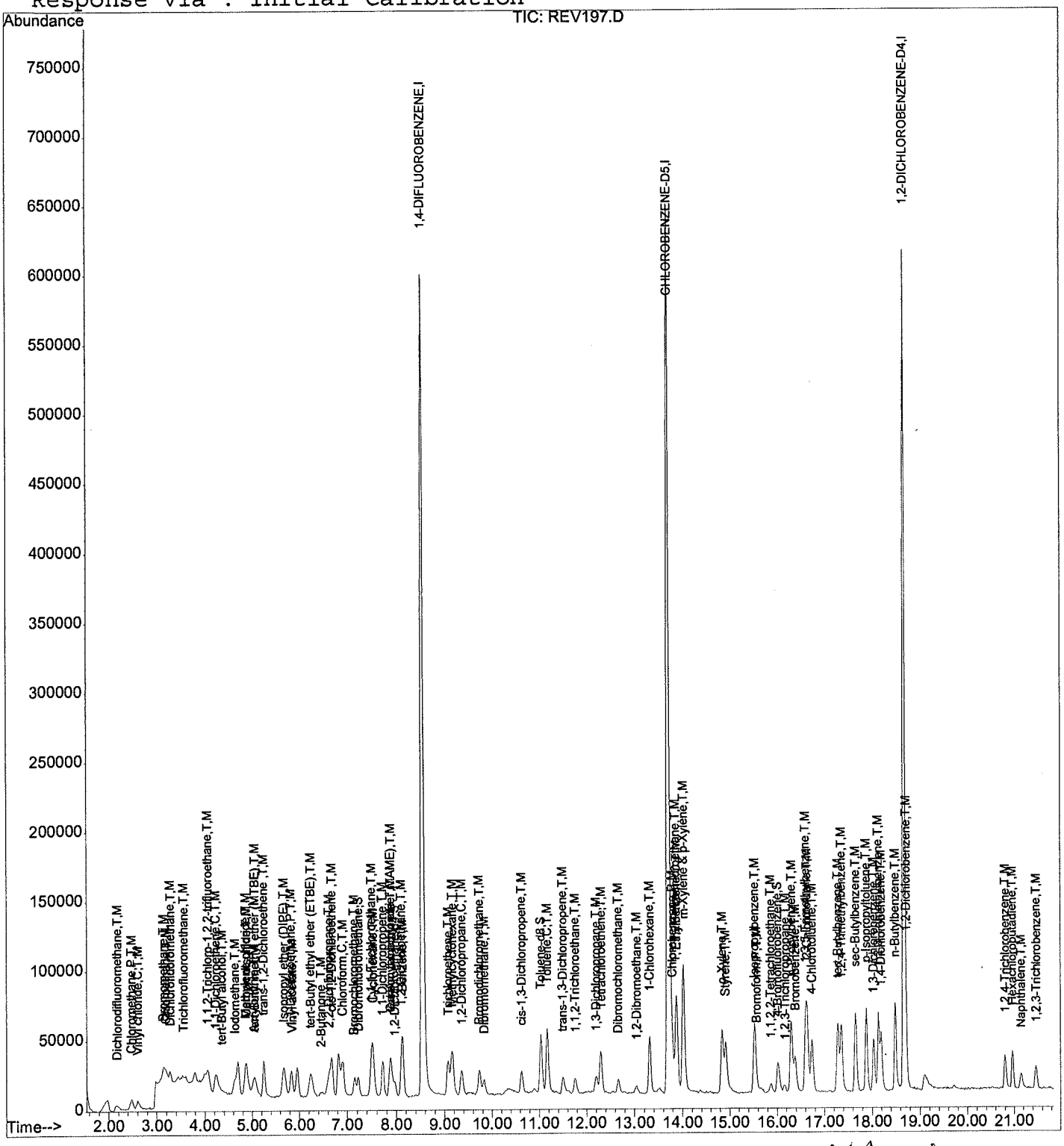
Sm 5/15/24

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E11\REV197.D Vial: 3
Acq On : 11 May 2024 11:27 am Operator: LPriet
Sample : VO01E112 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: May 13 14:30 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV198.D
Acq On : 11 May 2024 11:56 am
Sample : VO01E113 0.1/0.5
Misc : 1ppb 8260/5ppb KET-AA/25ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 14:30 2024

Vial: 4
Operator: LPriet
Inst : 01
Multiplr: 1.00
Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.54	114	938282	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	769560	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	301168	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	27033	0.93	ug/l	0.00
Spiked Amount 10.000			Recovery =	9.30%		
41) 1,2-Dichloroethane-d4	7.97	65	18064	0.91	ug/l	0.00
Spiked Amount 10.000			Recovery =	9.10%		
54) Toluene-d8	11.03	98	106585	0.92	ug/l	0.00
Spiked Amount 10.000			Recovery =	9.20%		
76) 4-Bromofluorobenzene	16.01	95	38225	0.93	ug/l	0.00
Spiked Amount 10.000			Recovery =	9.30%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.16	85	23088	0.92	ug/l	94
5) Chloromethane	2.46	50	33932	0.97	ug/l	95
6) Vinyl chloride	2.60	62	26741	0.91	ug/l	96
7) Bromomethane	3.14	94	40909	0.99	ug/l	78
8) Chloroethane	3.18	64	20092	0.95	ug/l	95
9) Dichlorofluoromethane	3.27	67	59133	0.98	ug/l	89
10) Trichlorofluoromethane	3.54	101	38039	0.96	ug/l	99
12) 1,1,2-Trichloro-1,2,2-trif	4.07	151	18470	0.93	ug/l	97
13) Acetone	4.06	43	22798	6.66	ug/l	97
14) 1,1-Dichloroethene	4.24	61	45534	0.91	ug/l	98
15) tert-Butyl alcohol	4.35	59	24124	23.10	ug/l	96
16) Iodomethane	4.64	142	49230	0.92	ug/l	99
18) Methylene chloride	4.86	49	39235	0.98	ug/l	97
19) Carbon disulfide	4.89	76	100956	0.94	ug/l	98
20) Acrylonitrile	5.04	53	20752	4.78	ug/l	96
21) tert-Butyl methyl ether (M	5.07	73	46754	0.95	ug/l	93
22) trans-1,2-Dichloroethene	5.24	61	46060	0.96	ug/l	98
23) Isopropyl ether (DIPE)	5.67	45	97086	0.94	ug/l	99
24) Vinyl acetate	5.85	43	29673	0.84	ug/l	95
25) 1,1-Dichloroethane	5.84	63	53046	0.94	ug/l	99
27) tert-Butyl ethyl ether (ET	6.24	59	70971	0.96	ug/l	99
28) 2-Butanone	6.46	43	22810	4.34	ug/l	98
29) 2,2-Dichloropropane	6.64	77	44935	0.95	ug/l	99
30) cis-1,2-Dichloroethene	6.70	96	36770	0.95	ug/l	100
31) Chloroform	6.90	83	55743	0.97	ug/l	99
32) Bromochloromethane	7.15	49	20957	0.93	ug/l	97
35) 1,1,1-Trichloroethane	7.50	97	45525	0.95	ug/l	98

(#) = qualifier out of range (m) = manual integration

SA 5/16/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV198.D Vial: 4
Acq On : 11 May 2024 11:56 am Operator: LPriet
Sample : VO01E113 0.1/0.5 Inst : 01
Misc : 1ppb 8260/5ppb KET-AA/25ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:30 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
36)	Cyclohexane	7.52	84	44404	0.95 ug/l	94
38)	1,1-Dichloropropene	7.72	110	15802	0.97 ug/l	96
39)	Carbon tetrachloride	7.88	119	33069	0.92 ug/l	99
40)	tert-Amyl methyl ether (TA	7.90	73	55848	0.97 ug/l	96
42)	Benzene	8.13	78	118978	0.95 ug/l	100
43)	1,2-Dichloroethane	8.10	62	23808	0.94 ug/l	98
44)	Trichloroethene	9.08	130	29954	0.92 ug/l	98
45)	Methylcyclohexane	9.17	83	50363	0.98 ug/l	98
46)	1,2-Dichloropropane	9.36	63	25645	0.91 ug/l	99
47)	Bromodichloromethane	9.73	83	36838	0.95 ug/l	93
49)	Dibromomethane	9.83	93	12791	0.97 ug/l	94
50)	2-Chloroethyl vinyl ether	10.26	63	6310	0.89 ug/l	89
51)	4-Methyl-2-pentanone	10.31	43	44214	5.73 ug/l	98
52)	cis-1,3-Dichloropropene	10.63	75	40679	0.93 ug/l	98
55)	Toluene	11.17	91	127757	0.93 ug/l	99
56)	Ethyl methacrylate	11.54	69	17884	0.87 ug/l	84
57)	trans-1,3-Dichloropropene	11.49	75	28905	0.91 ug/l	100
58)	1,1,2-Trichloroethane	11.76	97	16916	0.95 ug/l	99
59)	2-Hexanone	11.92	43	11666	6.13 ug/l	79
60)	1,3-Dichloropropane	12.20	76	28770	0.95 ug/l	100
61)	Tetrachloroethene	12.31	164	26996	0.95 ug/l	97
62)	Dibromochloromethane	12.66	129	20338	0.93 ug/l	98
63)	1,2-Dibromoethane	13.03	107	16471	0.93 ug/l	99
64)	1-Chlorohexane	13.31	91	54872	0.93 ug/l	99
65)	Chlorobenzene	13.79	112	77497	0.95 ug/l	98
66)	1,1,1,2-Tetrachloroethane	13.86	131	24060	0.96 ug/l	96
67)	Ethylbenzene	13.88	91	146785	0.94 ug/l	99
68)	m-Xylene & p-Xylene	14.03	91	218771	1.92 ug/l	98
69)	o-Xylene	14.84	91	113075	0.96 ug/l	98
70)	Styrene	14.91	104	87190	0.96 ug/l	100
71)	Isopropylbenzene	15.52	105	145909	0.94 ug/l	100
73)	Bromoform	15.57	173	7931	0.98 ug/l	88
74)	trans-1,4-Dichloro-2-buten	15.66	53	4400	0.85 ug/l	88
75)	1,1,2,2-Tetrachloroethane	15.86	83	18640	0.93 ug/l	99
77)	1,2,3-Trichloropropane	16.14	110	4598	0.90 ug/l	94
78)	n-Propylbenzene	16.29	91	177771	0.91 ug/l	99
79)	Bromobenzene	16.38	156	28202	0.91 ug/l	99
80)	1,3,5-Trimethylbenzene	16.60	105	112460	0.90 ug/l	97
81)	2-Chlorotoluene	16.63	91	111646	0.95 ug/l	100
82)	4-Chlorotoluene	16.74	91	93055	0.89 ug/l	99
83)	tert-Butylbenzene	17.29	134	23977	0.91 ug/l	99

(#) = qualifier out of range (m) = manual integration

SM 5/15/24

Data File : D:\HPCHEM\1\DATA\24E11\REV198.D Vial: 4
Acq On : 11 May 2024 11:56 am Operator: LPriet
Sample : VO01E113 0.1/0.5 Inst : 01
Misc : 1ppb 8260/5ppb KET-AA/25ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:30 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
84)	1,2,4-Trimethylbenzene	17.36	105	112239	0.92	ug/l	98
85)	sec-Butylbenzene	17.66	105	155515	0.90	ug/l	100
86)	p-Isopropyltoluene	17.88	119	121109	0.91	ug/l	97
87)	1,3-Dichlorobenzene	18.03	146	54062	0.92	ug/l	100
88)	1,2,3-Trimethylbenzene	18.13	105	107510	0.94	ug/l	99
89)	1,4-Dichlorobenzene	18.19	146	54049	0.94	ug/l	99
90)	n-Butylbenzene	18.49	91	126285	0.92	ug/l	99
91)	1,2-Dichlorobenzene	18.72	146	45597	0.95	ug/l	100
92)	1,2-Dibromo-3-chloropropan	19.71	157	2008	1.14	ug/l	82
93)	1,2,4-Trichlorobenzene	20.80	180	31265	0.89	ug/l	96
94)	Hexachlorobutadiene	20.97	225	18414	0.88	ug/l	96
95)	Naphthalene	21.15	128	36313	0.88	ug/l	99
96)	1,2,3-Trichlorobenzene	21.46	180	23830	0.90	ug/l	98

Sa 5/15/24

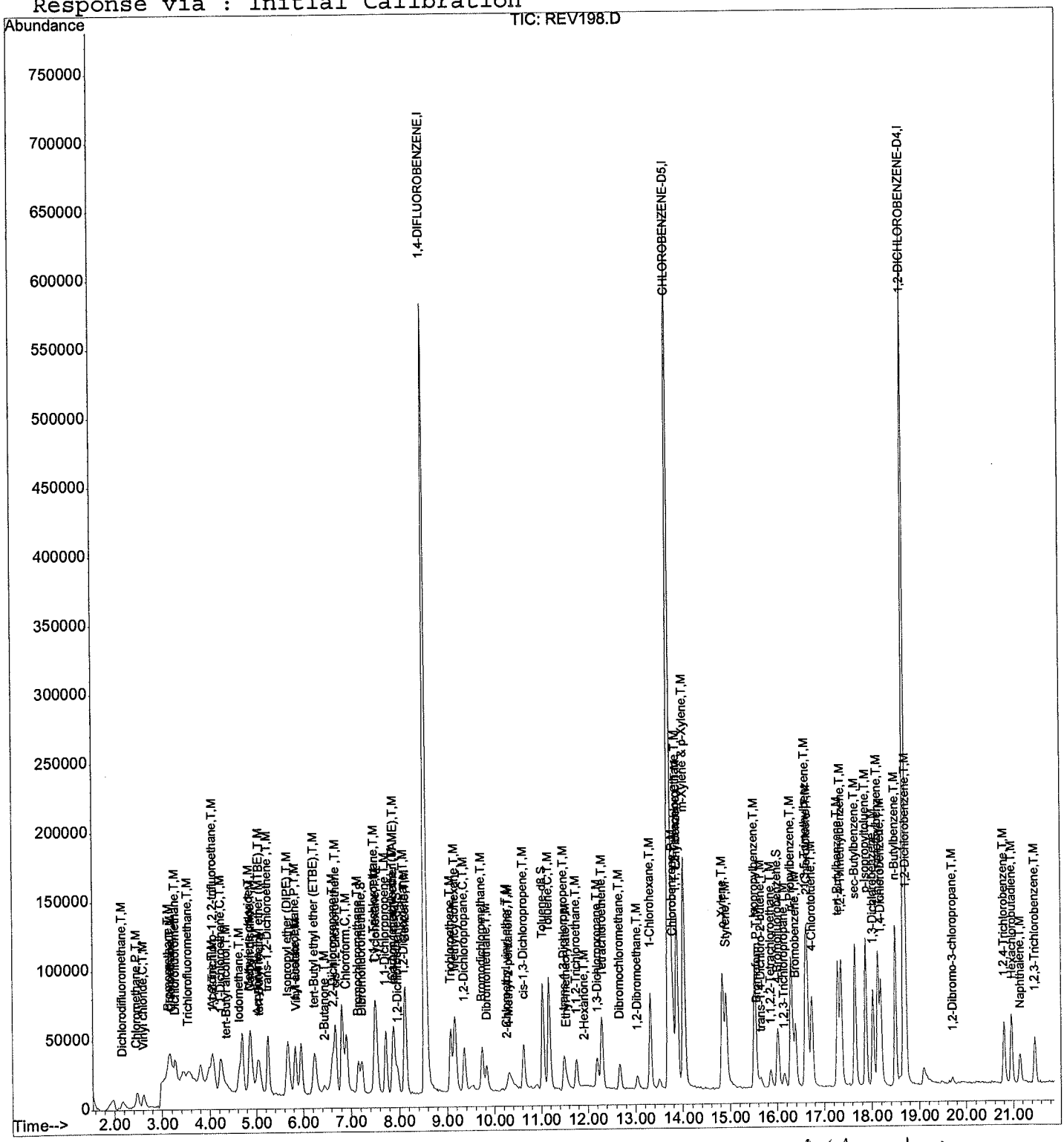
(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24E11\REV198.D
Acq On : 11 May 2024 11:56 am
Sample : VO01E113 0.1/0.5
Misc : 1ppb 8260/5ppb KET-AA/25ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 14:30 2024

Vial: 4
Operator: LPriet
Inst : 01
Multiplr: 1.00

Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



SU 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV199.D Vial: 5
Acq On : 11 May 2024 12:30 pm Operator: LPriet
Sample : VO01E114 0.2/1.0 Inst : 01
Misc : 2ppb 8260/10ppb KET-AA/50ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:54 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.55	114	923954	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.72	117	742613	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	293562	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.21	111	60611	2.12	ug/l	-0.02
Spiked Amount 10.000			Recovery =	21.20%		
41) 1,2-Dichloroethane-d4	7.95	65	42296	2.17	ug/l	-0.01
Spiked Amount 10.000			Recovery =	21.70%		
54) Toluene-d8	11.02	98	240432	2.16	ug/l	-0.01
Spiked Amount 10.000			Recovery =	21.60%		
76) 4-Bromofluorobenzene	16.01	95	81025	2.03	ug/l	0.00
Spiked Amount 10.000			Recovery =	20.30%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.15	85	50374	2.04	ug/l	98
5) Chloromethane	2.47	50	72647	2.10	ug/l	93
6) Vinyl chloride	2.60	62	62031	2.15	ug/l	97
7) Bromomethane	3.14	94	74605	2.01	ug/l	87
8) Chloroethane	3.18	64	40122	1.92	ug/l	98
9) Dichlorofluoromethane	3.27	67	119218	2.01	ug/l	96
10) Trichlorofluoromethane	3.54	101	81560	2.09	ug/l	99
11) Acrolein	3.98	56	20592	9.92	ug/l	89
12) 1,1,2-Trichloro-1,2,2-trif	4.07	151	42426	2.18	ug/l	100
13) Acetone	4.04	43	34198	10.14	ug/l	99
14) 1,1-Dichloroethene	4.22	61	101014	2.05	ug/l	98
15) tert-Butyl alcohol	4.34	59	52952	51.48	ug/l	92
16) Iodomethane	4.64	142	105323	1.99	ug/l	100
17) Methyl acetate	4.65	43	21059	2.29	ug/l	89
18) Methylene chloride	4.84	49	80640	2.04	ug/l	98
19) Carbon disulfide	4.87	76	207998	1.97	ug/l	99
20) Acrylonitrile	5.02	53	40810	9.54	ug/l	94
21) tert-Butyl methyl ether (M	5.05	73	98170	2.03	ug/l	99
22) trans-1,2-Dichloroethene	5.24	61	96611	2.03	ug/l	99
23) Isopropyl ether (DIPE)	5.66	45	200708	1.98	ug/l	100
24) Vinyl acetate	5.84	43	66565	1.91	ug/l	97
25) 1,1-Dichloroethane	5.82	63	112928	2.03	ug/l	99
27) tert-Butyl ethyl ether (ET	6.24	59	152096	2.09	ug/l	99
28) 2-Butanone	6.43	43	46317	8.95	ug/l	99
29) 2,2-Dichloropropane	6.62	77	94455	2.02	ug/l	99
30) cis-1,2-Dichloroethene	6.68	96	75331	1.97	ug/l	99
31) Chloroform	6.90	83	109165	1.93	ug/l	99

(#) = qualifier out of range (m) = manual integration

SC 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV199.D
Acq On : 11 May 2024 12:30 pm
Sample : VO01E114 0.2/1.0
Misc : 2ppb 8260/10ppb KET-AA/50ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 13:54 2024

Vial: 5
Operator: LPriet
Inst : 01
Multiplr: 1.00
Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) Bromochloromethane	7.14	49	44566	2.01 ug/l	100
33) Tetrahydrofuran	7.20	42	6950	2.12 ug/l	84
35) 1,1,1-Trichloroethane	7.49	97	94535	2.00 ug/l	99
36) Cyclohexane	7.51	84	97188	2.11 ug/l	97
38) 1,1-Dichloropropene	7.72	110	32679	2.03 ug/l	100
39) Carbon tetrachloride	7.86	119	71508	2.03 ug/l	98
40) tert-Amyl methyl ether (TA	7.88	73	115389	2.04 ug/l	97
42) Benzene	8.12	78	248582	2.01 ug/l	100
43) 1,2-Dichloroethane	8.10	62	50716	2.04 ug/l	99
44) Trichloroethene	9.06	130	63296	1.98 ug/l	98
45) Methylcyclohexane	9.15	83	107421	2.12 ug/l	99
46) 1,2-Dichloropropane	9.35	63	54414	1.97 ug/l	98
47) Bromodichloromethane	9.73	83	75727	1.98 ug/l	99
48) 1,4-Dioxane	9.82	88	3445	30.47 ug/l	71
49) Dibromomethane	9.82	93	26199	2.01 ug/l	97
50) 2-Chloroethyl vinyl ether	10.25	63	13477	1.92 ug/l	95
51) 4-Methyl-2-pentanone	10.29	43	96326	9.38 ug/l	98
52) cis-1,3-Dichloropropene	10.62	75	84540	1.97 ug/l	99
55) Toluene	11.17	91	267463	2.03 ug/l	100
56) Ethyl methacrylate	11.49	69	38804	1.96 ug/l	97
57) trans-1,3-Dichloropropene	11.48	75	61587	2.01 ug/l	97
58) 1,1,2-Trichloroethane	11.75	97	35305	2.04 ug/l	99
59) 2-Hexanone	11.83	43	38468	9.25 ug/l	97
60) 1,3-Dichloropropane	12.19	76	60220	2.05 ug/l	100
61) Tetrachloroethene	12.29	164	56394	2.06 ug/l	100
62) Dibromochloromethane	12.66	129	41132	1.95 ug/l	98
63) 1,2-Dibromoethane	13.03	107	34770	2.04 ug/l	98
64) 1-Chlorohexane	13.32	91	117841	2.07 ug/l	99
65) Chlorobenzene	13.79	112	158702	2.02 ug/l	99
66) 1,1,1,2-Tetrachloroethane	13.86	131	48976	2.02 ug/l	99
67) Ethylbenzene	13.88	91	304664	2.02 ug/l	99
68) m-Xylene & p-Xylene	14.01	91	450609	4.09 ug/l	99
69) o-Xylene	14.84	91	231237	2.04 ug/l	99
70) Styrene	14.92	104	177724	2.02 ug/l	99
71) Isopropylbenzene	15.52	105	305906	2.05 ug/l	99
73) Bromoform	15.57	173	21027	2.08 ug/l	97
74) trans-1,4-Dichloro-2-buten	15.64	53	9849	1.94 ug/l	85
75) 1,1,2,2-Tetrachloroethane	15.86	83	38426	1.97 ug/l	99
77) 1,2,3-Trichloropropane	16.16	110	10163	2.03 ug/l	95
78) n-Propylbenzene	16.29	91	370739	1.94 ug/l	100
79) Bromobenzene	16.38	156	58783	1.95 ug/l	100

(#) = qualifier out of range (m) = manual integration

5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV199.D Vial: 5
Acq On : 11 May 2024 12:30 pm Operator: LPriet
Sample : VO01E114 0.2/1.0 Inst : 01
Misc : 2ppb 8260/10ppb KET-AA/50ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:54 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	237589	1.95	ug/l	98
81)	2-Chlorotoluene	16.63	91	219062	1.91	ug/l	95
82)	4-Chlorotoluene	16.74	91	206396	2.03	ug/l	97
83)	tert-Butylbenzene	17.29	134	49658	1.94	ug/l	98
84)	1,2,4-Trimethylbenzene	17.36	105	233094	1.95	ug/l	98
85)	sec-Butylbenzene	17.66	105	332693	1.98	ug/l	99
86)	p-Isopropyltoluene	17.88	119	260761	2.02	ug/l	99
87)	1,3-Dichlorobenzene	18.03	146	112316	1.96	ug/l	99
88)	1,2,3-Trimethylbenzene	18.13	105	219653	1.97	ug/l	99
89)	1,4-Dichlorobenzene	18.19	146	110373	1.96	ug/l	100
90)	n-Butylbenzene	18.49	91	265074	1.98	ug/l	99
91)	1,2-Dichlorobenzene	18.72	146	94251	2.00	ug/l	99
92)	1,2-Dibromo-3-chloropropan	19.72	157	5091	2.12	ug/l	97
93)	1,2,4-Trichlorobenzene	20.80	180	67009	1.95	ug/l	98
94)	Hexachlorobutadiene	20.96	225	39320	1.92	ug/l	97
95)	Naphthalene	21.15	128	77920	1.94	ug/l	99
96)	1,2,3-Trichlorobenzene	21.46	180	51155	1.98	ug/l	100

SM 5/15/24

(#) = qualifier out of range (m) = manual integration

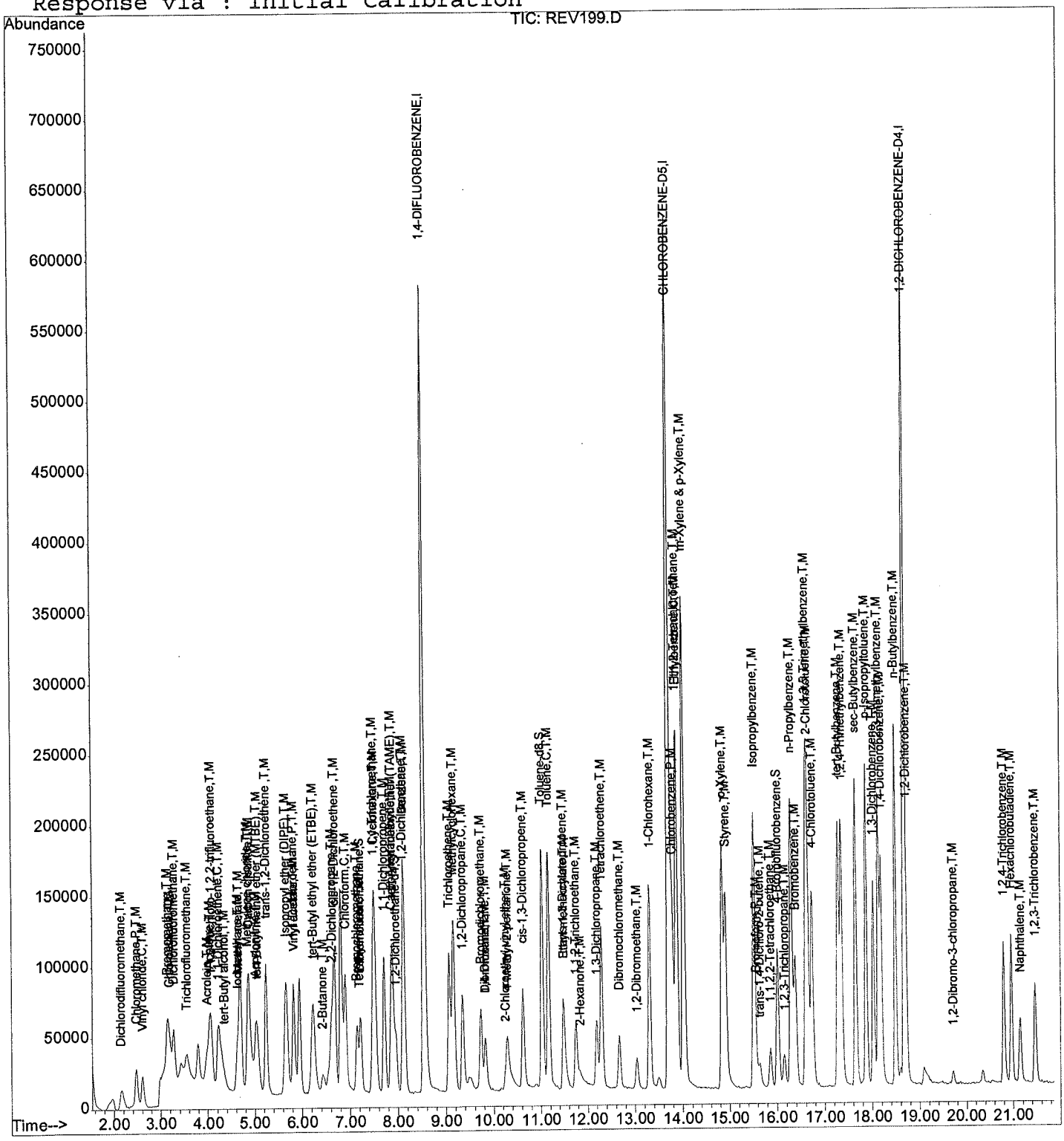
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E11\REV199.D
Acq On : 11 May 2024 12:30 pm
Sample : VO01E114 0.2/1.0
Misc : 2ppb 8260/10ppb KET-AA/50ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 13:54 2024

Vial: 5
Operator: LPriet
Inst : 01
Multiplr: 1.00

Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV200.D Vial: 6
Acq On : 11 May 2024 12:59 pm Operator: LPriet
Sample : VO01E115 0.5/2.5 Inst : 01
Misc : 5ppb 8260/25ppb KET-AA/125ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:56 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.54	114	900656	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	744900	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	284539	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	143298	5.14	ug/l	0.00
Spiked Amount 10.000			Recovery =	51.40%		
41) 1,2-Dichloroethane-d4	7.97	65	97715	5.14	ug/l	0.00
Spiked Amount 10.000			Recovery =	51.40%		
54) Toluene-d8	11.03	98	569302	5.10	ug/l	0.00
Spiked Amount 10.000			Recovery =	51.00%		
76) 4-Bromofluorobenzene	16.01	95	190707	4.92	ug/l	0.00
Spiked Amount 10.000			Recovery =	49.20%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.18	85	119456	4.96	ug/l	98
5) Chloromethane	2.48	50	170900	5.06	ug/l	99
6) Vinyl chloride	2.60	62	151684	5.40	ug/l	98
7) Bromomethane	3.14	94	161543	4.74	ug/l	99
8) Chloroethane	3.18	64	101909	5.00	ug/l	100
9) Dichlorofluoromethane	3.27	67	272435	4.71	ug/l	98
10) Trichlorofluoromethane	3.55	101	192432	5.06	ug/l	98
11) Acrolein	3.98	56	50318	24.87	ug/l	98
12) 1,1,2-Trichloro-1,2,2-trif	4.07	151	95572	5.03	ug/l	99
13) Acetone	4.06	43	80312	24.43	ug/l	100
14) 1,1-Dichloroethene	4.24	61	236110	4.92	ug/l	100
15) tert-Butyl alcohol	4.34	59	126289	125.96	ug/l	98
16) Iodomethane	4.64	142	253734	4.93	ug/l	100
17) Methyl acetate	4.65	43	45270	5.05	ug/l	100
18) Methylene chloride	4.86	49	189706	4.92	ug/l	98
19) Carbon disulfide	4.89	76	519242	5.06	ug/l	99
20) Acrylonitrile	5.02	53	104491	25.05	ug/l	99
21) tert-Butyl methyl ether (M	5.07	73	232923	4.93	ug/l	98
22) trans-1,2-Dichloroethene	5.24	61	227623	4.92	ug/l	99
23) Isopropyl ether (DIPE)	5.67	45	486332	4.92	ug/l	99
24) Vinyl acetate	5.84	43	178828	5.27	ug/l	98
25) 1,1-Dichloroethane	5.84	63	265434	4.90	ug/l	100
27) tert-Butyl ethyl ether (ET	6.24	59	350636	4.95	ug/l	99
28) 2-Butanone	6.43	43	122252	24.23	ug/l	98
29) 2,2-Dichloropropane	6.62	77	221475	4.87	ug/l	100
30) cis-1,2-Dichloroethene	6.68	96	182793	4.91	ug/l	99
31) Chloroform	6.90	83	263399	4.78	ug/l	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV200.D Vial: 6
Acq On : 11 May 2024 12:59 pm Operator: LPriet
Sample : VO01E115 0.5/2.5 Inst : 01
Misc : 5ppb 8260/25ppb KET-AA/125ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:56 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.15	49	107126	4.95	ug/l	100
33)	Tetrahydrofuran	7.20	42	15395	4.82	ug/l	99
35)	1,1,1-Trichloroethane	7.50	97	223490	4.84	ug/l	100
36)	Cyclohexane	7.53	84	229091	5.10	ug/l	100
38)	1,1-Dichloropropene	7.72	110	75641	4.82	ug/l	99
39)	Carbon tetrachloride	7.88	119	164649	4.79	ug/l	99
40)	tert-Amyl methyl ether (TA	7.88	73	265148	4.81	ug/l	100
42)	Benzene	8.13	78	593170	4.93	ug/l	100
43)	1,2-Dichloroethane	8.10	62	119634	4.93	ug/l	100
44)	Trichloroethene	9.08	130	151454	4.87	ug/l	99
45)	Methylcyclohexane	9.17	83	246613	4.99	ug/l	98
46)	1,2-Dichloropropane	9.34	63	129424	4.81	ug/l	99
47)	Bromodichloromethane	9.73	83	180624	4.83	ug/l	99
48)	1,4-Dioxane	9.80	88	10209	92.63	ug/l	95
49)	Dibromomethane	9.82	93	62590	4.93	ug/l	96
50)	2-Chloroethyl vinyl ether	10.23	63	32624	4.78	ug/l	99
51)	4-Methyl-2-pentanone	10.28	43	302538	24.21	ug/l	100
52)	cis-1,3-Dichloropropene	10.62	75	205197	4.90	ug/l	100
55)	Toluene	11.17	91	638964	4.83	ug/l	99
56)	Ethyl methacrylate	11.46	69	93055	4.69	ug/l	97
57)	trans-1,3-Dichloropropene	11.48	75	150076	4.88	ug/l	99
58)	1,1,2-Trichloroethane	11.74	97	84096	4.86	ug/l	100
59)	2-Hexanone	11.79	43	161653	23.32	ug/l	98
60)	1,3-Dichloropropane	12.19	76	141872	4.83	ug/l	99
61)	Tetrachloroethene	12.29	164	131949	4.80	ug/l	99
62)	Dibromochloromethane	12.66	129	100908	4.77	ug/l	99
63)	1,2-Dibromoethane	13.03	107	84804	4.95	ug/l	98
64)	1-Chlorohexane	13.30	91	270570	4.74	ug/l	100
65)	Chlorobenzene	13.79	112	382775	4.85	ug/l	100
66)	1,1,1,2-Tetrachloroethane	13.86	131	116917	4.81	ug/l	99
67)	Ethylbenzene	13.88	91	730874	4.84	ug/l	100
68)	m-Xylene & p-Xylene	14.01	91	1083475	9.80	ug/l	99
69)	o-Xylene	14.84	91	543905	4.78	ug/l	100
70)	Styrene	14.90	104	426095	4.83	ug/l	99
71)	Isopropylbenzene	15.52	105	729567	4.87	ug/l	100
73)	Bromoform	15.55	173	52073	4.81	ug/l	98
74)	trans-1,4-Dichloro-2-buten	15.63	53	23167	4.72	ug/l	99
75)	1,1,2,2-Tetrachloroethane	15.86	83	90996	4.80	ug/l	100
77)	1,2,3-Trichloropropane	16.14	110	24020	4.96	ug/l	100
78)	n-Propylbenzene	16.29	91	891243	4.82	ug/l	100
79)	Bromobenzene	16.38	156	142872	4.88	ug/l	100

(#) = qualifier out of range (m) = manual integration

SH 5/15/24

Data File : D:\HPCHEM\1\DATA\24E11\REV200.D
Acq On : 11 May 2024 12:59 pm
Sample : VO01E115 0.5/2.5
Misc : 5ppb 8260/25ppb KET-AA/125ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 13:56 2024

Vial: 6
Operator: LPriet
Inst : 01
Multiplr: 1.00
Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	568375	4.81	ug/l	100
81)	2-Chlorotoluene	16.63	91	534726	4.80	ug/l	100
82)	4-Chlorotoluene	16.72	91	491373	4.98	ug/l	99
83)	tert-Butylbenzene	17.29	134	119387	4.81	ug/l	100
84)	1,2,4-Trimethylbenzene	17.36	105	562027	4.86	ug/l	99
85)	sec-Butylbenzene	17.66	105	782171	4.81	ug/l	99
86)	p-Isopropyltoluene	17.88	119	604455	4.83	ug/l	100
87)	1,3-Dichlorobenzene	18.03	146	266427	4.79	ug/l	99
88)	1,2,3-Trimethylbenzene	18.13	105	523914	4.85	ug/l	99
89)	1,4-Dichlorobenzene	18.19	146	264166	4.84	ug/l	99
90)	n-Butylbenzene	18.49	91	624902	4.82	ug/l	100
91)	1,2-Dichlorobenzene	18.72	146	222834	4.89	ug/l	99
92)	1,2-Dibromo-3-chloropropan	19.71	157	13172	4.81	ug/l	96
93)	1,2,4-Trichlorobenzene	20.80	180	161262	4.85	ug/l	99
94)	Hexachlorobutadiene	20.96	225	94994	4.79	ug/l	99
95)	Naphthalene	21.15	128	187349	4.82	ug/l	99
96)	1,2,3-Trichlorobenzene	21.46	180	121965	4.87	ug/l	100

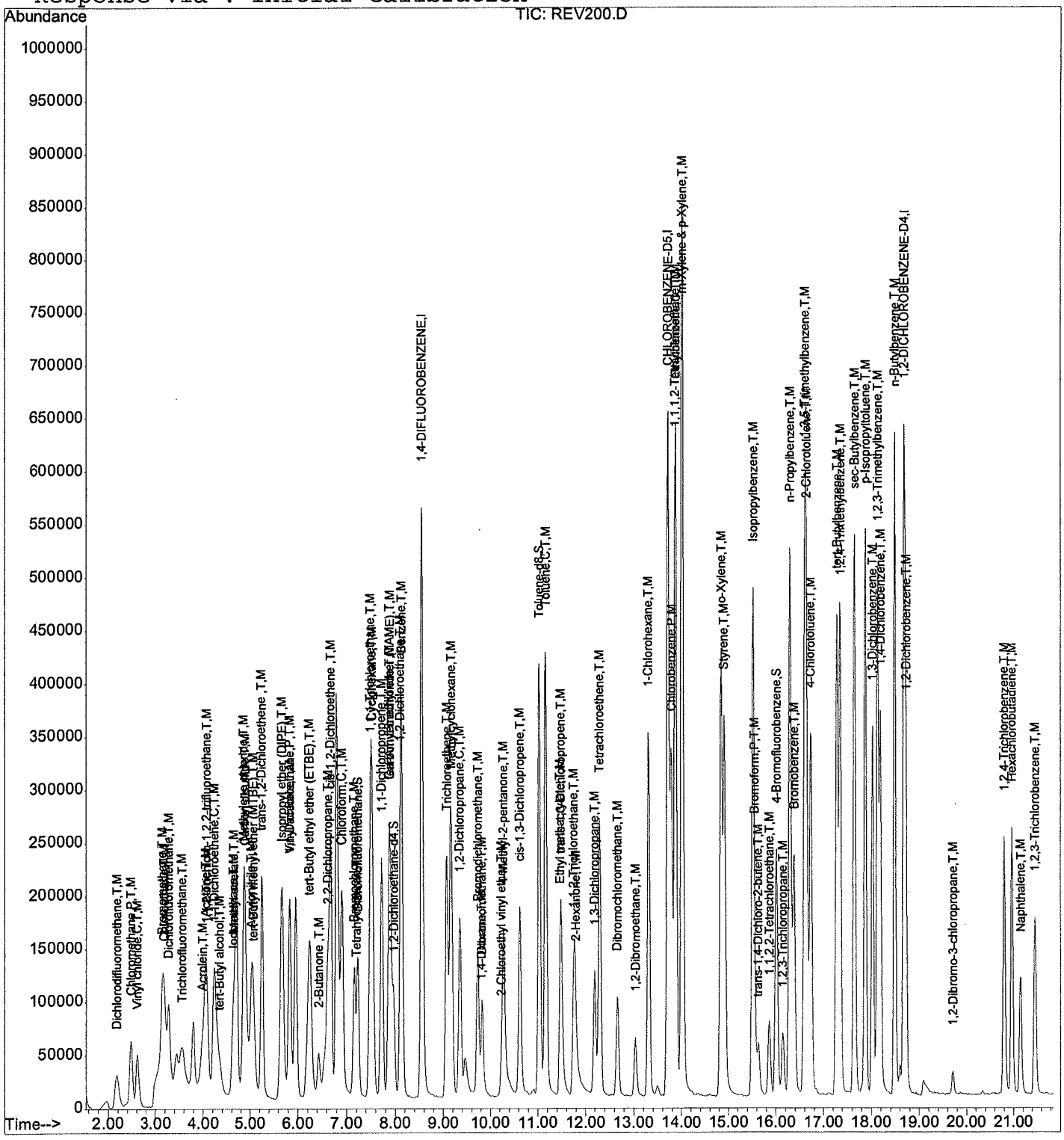
SU 5/15/24

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E11\REV200.D Vial: 6
Acq On : 11 May 2024 12:59 pm Operator: LPriet
Sample : VO01E115 0.5/2.5 Inst : 01
Misc : 5ppb 8260/25ppb KET-AA/125ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:56 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV201.D Vial: 7
Acq On : 11 May 2024 1:28 pm Operator: LPriet
Sample : VO01E116 1.0/5.0 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:58 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.54	114	920983	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	742213	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	284055	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	258776	9.08	ug/l	0.00
Spiked Amount 10.000			Recovery = 90.80%			
41) 1,2-Dichloroethane-d4	7.97	65	170981	8.79	ug/l	0.00
Spiked Amount 10.000			Recovery = 87.90%			
54) Toluene-d8	11.03	98	1034495	9.30	ug/l	0.00
Spiked Amount 10.000			Recovery = 93.00%			
76) 4-Bromofluorobenzene	16.01	95	349924	9.04	ug/l	0.00
Spiked Amount 10.000			Recovery = 90.40%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.17	85	233807	9.49	ug/l	100
5) Chloromethane	2.46	50	319578	9.26	ug/l	100
6) Vinyl chloride	2.61	62	285699	9.94	ug/l	100
7) Bromomethane	3.14	94	303178	8.88	ug/l	100
8) Chloroethane	3.18	64	194643	9.34	ug/l	100
9) Dichlorofluoromethane	3.27	67	535368	9.04	ug/l	100
10) Trichlorofluoromethane	3.55	101	365519	9.40	ug/l	100
11) Acrolein	3.98	56	91543	44.25	ug/l	100
12) 1,1,2-Trichloro-1,2,2-trif	4.06	151	193689	9.97	ug/l	100
13) Acetone	4.06	43	141862	42.20	ug/l	100
14) 1,1-Dichloroethene	4.22	61	473083	9.63	ug/l	100
15) tert-Butyl alcohol	4.34	59	232900	227.17	ug/l	100
16) Iodomethane	4.64	142	502181	9.54	ug/l	100
17) Methyl acetate	4.65	43	77293	8.43	ug/l	100
18) Methylene chloride	4.86	49	367504	9.33	ug/l	100
19) Carbon disulfide	4.87	76	984042	9.37	ug/l	100
20) Acrylonitrile	5.02	53	196137	45.99	ug/l	100
21) tert-Butyl methyl ether (M	5.07	73	435419	9.01	ug/l	100
22) trans-1,2-Dichloroethene	5.24	61	438850	9.27	ug/l	100
23) Isopropyl ether (DIPE)	5.67	45	945894	9.35	ug/l	100
24) Vinyl acetate	5.82	43	316675	9.12	ug/l	100
25) 1,1-Dichloroethane	5.82	63	520416	9.40	ug/l	100
27) tert-Butyl ethyl ether (ET	6.24	59	667502	9.21	ug/l	100
28) 2-Butanone	6.41	43	244678	47.43	ug/l	100
29) 2,2-Dichloropropane	6.62	77	438788	9.43	ug/l	100
30) cis-1,2-Dichloroethene	6.68	96	363843	9.55	ug/l	100
31) Chloroform	6.90	83	508562	9.02	ug/l	100

(#) = qualifier out of range (m) = manual integration

SA 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV201.D
Acq On : 11 May 2024 1:28 pm
Sample : VO01E116 1.0/5.0
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
Vial: 7
Operator: LPriet
Inst : 01
Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:58 2024
Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.14	49	205550	9.28	ug/l	100
33)	Tetrahydrofuran	7.20	42	27463	8.42	ug/l	100
35)	1,1,1-Trichloroethane	7.49	97	444990	9.43	ug/l	100
36)	Cyclohexane	7.52	84	417453	9.08	ug/l	100
38)	1,1-Dichloropropene	7.72	110	150631	9.39	ug/l	100
39)	Carbon tetrachloride	7.88	119	336330	9.57	ug/l	100
40)	tert-Amyl methyl ether (TA	7.88	73	497165	8.82	ug/l	100
42)	Benzene	8.13	78	1153601	9.38	ug/l	100
43)	1,2-Dichloroethane	8.10	62	229577	9.25	ug/l	100
44)	Trichloroethene	9.06	130	307851	9.67	ug/l	100
45)	Methylcyclohexane	9.17	83	454050	8.98	ug/l	100
46)	1,2-Dichloropropane	9.34	63	256137	9.30	ug/l	100
47)	Bromodichloromethane	9.73	83	342146	8.95	ug/l	100
48)	1,4-Dioxane	9.79	88	20047	177.87	ug/l	100
49)	Dibromomethane	9.82	93	116361	8.96	ug/l	100
50)	2-Chloroethyl vinyl ether	10.23	63	63930	9.15	ug/l	100
51)	4-Methyl-2-pentanone	10.26	43	589994	43.70	ug/l	100
52)	cis-1,3-Dichloropropene	10.62	75	398855	9.31	ug/l	100
55)	Toluene	11.17	91	1262539	9.58	ug/l	100
56)	Ethyl methacrylate	11.46	69	182985	9.25	ug/l	100
57)	trans-1,3-Dichloropropene	11.48	75	289239	9.44	ug/l	100
58)	1,1,2-Trichloroethane	11.74	97	160672	9.31	ug/l	100
59)	2-Hexanone	11.76	43	335905	43.39	ug/l	100
60)	1,3-Dichloropropane	12.19	76	271863	9.28	ug/l	100
61)	Tetrachloroethene	12.29	164	266498	9.73	ug/l	100
62)	Dibromochloromethane	12.66	129	193517	9.19	ug/l	100
63)	1,2-Dibromoethane	13.03	107	159304	9.33	ug/l	100
64)	1-Chlorohexane	13.30	91	551589	9.69	ug/l	100
65)	Chlorobenzene	13.79	112	759554	9.67	ug/l	100
66)	1,1,1,2-Tetrachloroethane	13.86	131	232054	9.59	ug/l	100
67)	Ethylbenzene	13.88	91	1473355	9.79	ug/l	100
68)	m-Xylene & p-Xylene	14.01	91	2121368	19.26	ug/l	100
69)	o-Xylene	14.84	91	1078385	9.51	ug/l	100
70)	Styrene	14.90	104	842539	9.59	ug/l	100
71)	Isopropylbenzene	15.52	105	1453974	9.74	ug/l	100
73)	Bromoform	15.55	173	95720	8.57	ug/l	100
74)	trans-1,4-Dichloro-2-buten	15.63	53	44316	9.04	ug/l	100
75)	1,1,2,2-Tetrachloroethane	15.86	83	168234	8.90	ug/l	100
77)	1,2,3-Trichloropropane	16.14	110	45054	9.31	ug/l	99
78)	n-Propylbenzene	16.29	91	1790558	9.70	ug/l	100
79)	Bromobenzene	16.38	156	279576	9.57	ug/l	100

(#) = qualifier out of range (m) = manual integration

5/15/24

Data File : D:\HPCHEM\1\DATA\24E11\REV201.D Vial: 7
Acq On : 11 May 2024 1:28 pm Operator: LPriet
Sample : VO01E116 1.0/5.0 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:58 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	1139657	9.66	ug/l	100
81)	2-Chlorotoluene	16.63	91	1060747	9.54	ug/l	100
82)	4-Chlorotoluene	16.72	91	963048	9.78	ug/l	100
83)	tert-Butylbenzene	17.29	134	239466	9.67	ug/l	100
84)	1,2,4-Trimethylbenzene	17.36	105	1122345	9.72	ug/l	100
85)	sec-Butylbenzene	17.66	105	1569792	9.68	ug/l	100
86)	p-Isopropyltoluene	17.88	119	1201659	9.61	ug/l	100
87)	1,3-Dichlorobenzene	18.03	146	533251	9.60	ug/l	100
88)	1,2,3-Trimethylbenzene	18.13	105	1019164	9.45	ug/l	100
89)	1,4-Dichlorobenzene	18.19	146	518636	9.53	ug/l	100
90)	n-Butylbenzene	18.49	91	1250551	9.65	ug/l	100
91)	1,2-Dichlorobenzene	18.72	146	424621	9.33	ug/l	100
92)	1,2-Dibromo-3-chloropropan	19.71	157	23773	8.27	ug/l	100
93)	1,2,4-Trichlorobenzene	20.80	180	314594	9.47	ug/l	100
94)	Hexachlorobutadiene	20.96	225	197705	9.99	ug/l	100
95)	Naphthalene	21.14	128	358996	9.26	ug/l	100
96)	1,2,3-Trichlorobenzene	21.46	180	236728	9.46	ug/l	100

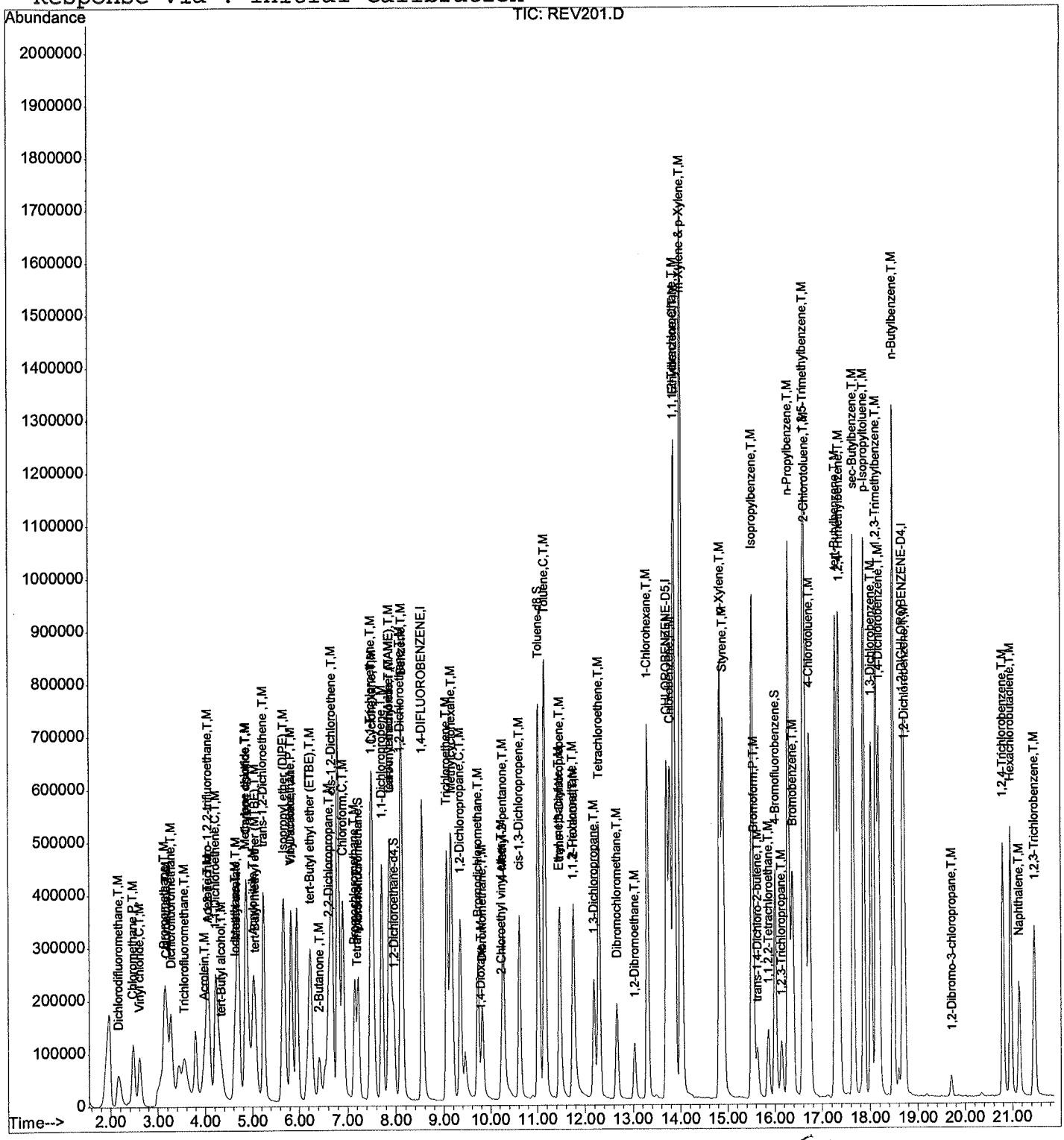
SA 5/15/24

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E11\REV201.D Vial: 7
Acq On : 11 May 2024 1:28 pm Operator: LPriet
Sample : VO01E116 1.0/5.0 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:58 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



SM 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV202.D Vial: 8
Acq On : 11 May 2024 1:58 pm Operator: LPriet
Sample : VO01E117 2.0/10 Inst : 01
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:00 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	816915	10.00	ug/l	0.02
53) CHLOROBENZENE-D5	13.73	117	679573	10.00	ug/l	0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	256277	10.00	ug/l	0.02
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	546945	21.63	ug/l	0.01
Spiked Amount 10.000			Recovery =	216.30%		
41) 1,2-Dichloroethane-d4	7.97	65	368310	21.36	ug/l	0.00
Spiked Amount 10.000			Recovery =	213.60%		
54) Toluene-d8	11.03	98	2143971	21.05	ug/l	0.00
Spiked Amount 10.000			Recovery =	210.50%		
76) 4-Bromofluorobenzene	16.03	95	741429	21.24	ug/l	0.02
Spiked Amount 10.000			Recovery =	212.40%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.17	85	443172	20.27	ug/l	99
5) Chloromethane	2.47	50	619334	20.24	ug/l	100
6) Vinyl chloride	2.61	62	541540	21.25	ug/l	100
7) Bromomethane	3.15	94	618346	20.69	ug/l	97
8) Chloroethane	3.20	64	385600	20.85	ug/l	99
9) Dichlorofluoromethane	3.29	67	1066762	20.31	ug/l	99
10) Trichlorofluoromethane	3.55	101	683028	19.81	ug/l	99
11) Acrolein	3.98	56	192986	105.17	ug/l	96
12) 1,1,2-Trichloro-1,2,2-trif	4.07	151	365492	21.21	ug/l	99
13) Acetone	4.06	43	284979	95.57	ug/l	99
14) 1,1-Dichloroethene	4.24	61	930390	21.35	ug/l	100
15) tert-Butyl alcohol	4.34	59	495292	544.64	ug/l	99
16) Iodomethane	4.65	142	1006828	21.55	ug/l	100
17) Methyl acetate	4.66	43	166847	20.52	ug/l	99
18) Methylene chloride	4.87	49	730623	20.90	ug/l	100
19) Carbon disulfide	4.89	76	2006384	21.54	ug/l	100
20) Acrylonitrile	5.04	53	392428	103.74	ug/l	100
21) tert-Butyl methyl ether (M	5.06	73	899904	21.00	ug/l	99
22) trans-1,2-Dichloroethene	5.26	61	902607	21.50	ug/l	99
23) Isopropyl ether (DIPE)	5.67	45	1935724	21.58	ug/l	99
24) Vinyl acetate	5.84	43	675084	21.93	ug/l	100
25) 1,1-Dichloroethane	5.84	63	1063100	21.66	ug/l	100
27) tert-Butyl ethyl ether (ET	6.25	59	1387307	21.59	ug/l	99
28) 2-Butanone	6.43	43	502145	109.75	ug/l	100
29) 2,2-Dichloropropane	6.64	77	865612	20.97	ug/l	100
30) cis-1,2-Dichloroethene	6.69	96	725941	21.48	ug/l	100
31) Chloroform	6.92	83	1028651	20.56	ug/l	100

(#) = qualifier out of range (m) = manual integration

5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV202.D Vial: 8
Acq On : 11 May 2024 1:58 pm Operator: LPriet
Sample : VO01E117 2.0/10 Inst : 01
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:00 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.15	49	418099	21.28	ug/l	99
33)	Tetrahydrofuran	7.21	42	59689	20.62	ug/l	99
35)	1,1,1-Trichloroethane	7.51	97	890497	21.28	ug/l	100
36)	Cyclohexane	7.54	84	839410	20.59	ug/l	100
38)	1,1-Dichloropropene	7.73	110	301701	21.21	ug/l	99
39)	Carbon tetrachloride	7.89	119	658847	21.13	ug/l	99
40)	tert-Amyl methyl ether (TA	7.89	73	1043076	20.86	ug/l	100
42)	Benzene	8.15	78	2297893	21.05	ug/l	100
43)	1,2-Dichloroethane	8.12	62	472900	21.49	ug/l	99
44)	Trichloroethene	9.08	130	611530	21.66	ug/l	99
45)	Methylcyclohexane	9.17	83	904979	20.18	ug/l	100
46)	1,2-Dichloropropane	9.36	63	521244	21.35	ug/l	100
47)	Bromodichloromethane	9.74	83	704865	20.80	ug/l	100
48)	1,4-Dioxane	9.79	88	43990	440.03	ug/l	99
49)	Dibromomethane	9.83	93	243286	21.12	ug/l	99
50)	2-Chloroethyl vinyl ether	10.23	63	134190	21.65	ug/l	98
51)	4-Methyl-2-pentanone	10.28	43	1288906	103.66	ug/l	100
52)	cis-1,3-Dichloropropene	10.63	75	818576	21.54	ug/l	100
55)	Toluene	11.18	91	2491900	20.65	ug/l	100
56)	Ethyl methacrylate	11.46	69	395514	21.84	ug/l	98
57)	trans-1,3-Dichloropropene	11.49	75	603742	21.52	ug/l	100
58)	1,1,2-Trichloroethane	11.76	97	330926	20.94	ug/l	99
59)	2-Hexanone	11.77	43	767459	101.03	ug/l	100
60)	1,3-Dichloropropane	12.20	76	575688	21.46	ug/l	99
61)	Tetrachloroethene	12.31	164	522743	20.84	ug/l	99
62)	Dibromochloromethane	12.68	129	406460	21.07	ug/l	99
63)	1,2-Dibromoethane	13.05	107	339123	21.70	ug/l	99
64)	1-Chlorohexane	13.32	91	1076692	20.66	ug/l	100
65)	Chlorobenzene	13.80	112	1529085	21.25	ug/l	100
66)	1,1,1,2-Tetrachloroethane	13.88	131	470126	21.22	ug/l	99
67)	Ethylbenzene	13.89	91	2901232	21.06	ug/l	99
68)	m-Xylene & p-Xylene	14.03	91	4237521	42.03	ug/l	100
69)	o-Xylene	14.86	91	2143592	20.66	ug/l	99
70)	Styrene	14.92	104	1701411	21.15	ug/l	100
71)	Isopropylbenzene	15.54	105	2885751	21.11	ug/l	100
73)	Bromoform	15.57	173	208560	20.24	ug/l	99
74)	trans-1,4-Dichloro-2-buten	15.64	53	96395	21.80	ug/l	97
75)	1,1,2,2-Tetrachloroethane	15.88	83	354915	20.80	ug/l	99
77)	1,2,3-Trichloropropane	16.16	110	95768	21.94	ug/l	98
78)	n-Propylbenzene	16.31	91	3533479	21.21	ug/l	100
79)	Bromobenzene	16.40	156	569509	21.60	ug/l	99

(#) = qualifier out of range (m) = manual integration
REV202.D VO01E11.M Mon May 13 14:32:27 2024 Page 2

SU 5/15/24

Data File : D:\HPCHEM\1\DATA\24E11\REV202.D
Acq On : 11 May 2024 1:58 pm
Sample : VO01E117 2.0/10
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 14:00 2024

Vial: 8
Operator: LPriet
Inst : 01
Multiplr: 1.00
Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.62	105	2263948	21.26	ug/l	99
81)	2-Chlorotoluene	16.65	91	2094475	20.88	ug/l	100
82)	4-Chlorotoluene	16.74	91	1908157	21.48	ug/l	100
83)	tert-Butylbenzene	17.30	134	478610	21.43	ug/l	99
84)	1,2,4-Trimethylbenzene	17.37	105	2219029	21.30	ug/l	100
85)	sec-Butylbenzene	17.67	105	3115101	21.28	ug/l	100
86)	p-Isopropyltoluene	17.89	119	2394992	21.23	ug/l	100
87)	1,3-Dichlorobenzene	18.04	146	1072675	21.41	ug/l	100
88)	1,2,3-Trimethylbenzene	18.14	105	2044493	21.02	ug/l	100
89)	1,4-Dichlorobenzene	18.20	146	1030532	20.98	ug/l	100
90)	n-Butylbenzene	18.50	91	2472290	21.16	ug/l	100
91)	1,2-Dichlorobenzene	18.74	146	871915	21.24	ug/l	100
92)	1,2-Dibromo-3-chloropropan	19.73	157	54040	20.05	ug/l	99
93)	1,2,4-Trichlorobenzene	20.81	180	660275	22.03	ug/l	100
94)	Hexachlorobutadiene	20.99	225	397807	22.28	ug/l	100
95)	Naphthalene	21.15	128	776440	22.20	ug/l	99
96)	1,2,3-Trichlorobenzene	21.48	180	496067	21.97	ug/l	100

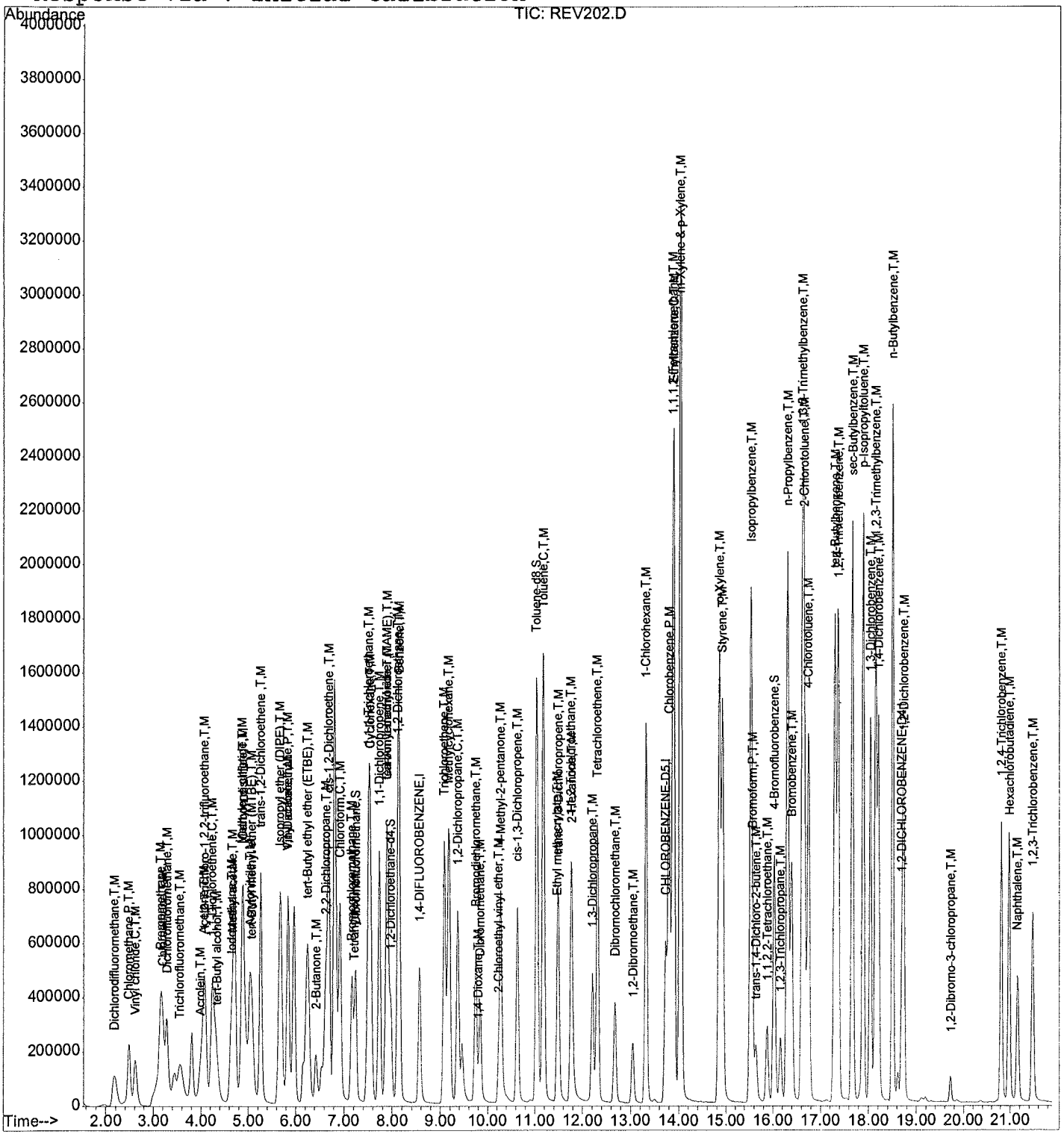
EM 5/15/24

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E11\REV202.D Vial: 8
Acq On : 11 May 2024 1:58 pm Operator: LPriet
Sample : VO01E117 2.0/10 Inst : 01
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:00 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV203.D Vial: 9
Acq On : 11 May 2024 2:27 pm Operator: LPriet
Sample : VO01E118 3.0/15 Inst : 01
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:02 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	849708	10.00	ug/l	0.02
53) CHLOROBENZENE-D5	13.72	117	707238	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	267331	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	799087	30.38	ug/l	0.00
Spiked Amount 10.000			Recovery =	303.80%		
41) 1,2-Dichloroethane-d4	7.97	65	550662	30.70	ug/l	0.00
Spiked Amount 10.000			Recovery =	307.00%		
54) Toluene-d8	11.02	98	3115280	29.39	ug/l	-0.01
Spiked Amount 10.000			Recovery =	293.90%		
76) 4-Bromofluorobenzene	16.01	95	1073630	29.49	ug/l	0.00
Spiked Amount 10.000			Recovery =	294.90%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.18	85	673565	29.62	ug/l	98
5) Chloromethane	2.48	50	894520	28.10	ug/l	100
6) Vinyl chloride	2.61	62	776773	29.30	ug/l	100
7) Bromomethane	3.15	94	899449	29.03	ug/l	97
8) Chloroethane	3.20	64	574606	29.88	ug/l	100
9) Dichlorofluoromethane	3.27	67	1551702	28.41	ug/l	99
10) Trichlorofluoromethane	3.57	101	1032985	28.80	ug/l	99
11) Acrolein	3.98	56	286661	150.20	ug/l	97
12) 1,1,2-Trichloro-1,2,2-trif	4.07	151	554202	30.92	ug/l	100
13) Acetone	4.06	43	435360	140.37	ug/l	97
14) 1,1-Dichloroethene	4.23	61	1367312	30.17	ug/l	100
15) tert-Butyl alcohol	4.34	59	759636	803.08	ug/l	99
16) Iodomethane	4.65	142	1484308	30.55	ug/l	100
17) Methyl acetate	4.65	43	247532	29.27	ug/l	100
18) Methylene chloride	4.86	49	1052102	28.94	ug/l	100
19) Carbon disulfide	4.89	76	2879778	29.72	ug/l	100
20) Acrylonitrile	5.02	53	590477	150.07	ug/l	99
21) tert-Butyl methyl ether (M	5.06	73	1337887	30.02	ug/l	98
22) trans-1,2-Dichloroethene	5.26	61	1319053	30.21	ug/l	100
23) Isopropyl ether (DIPE)	5.67	45	2808667	30.11	ug/l	100
24) Vinyl acetate	5.82	43	1017586	31.77	ug/l	100
25) 1,1-Dichloroethane	5.83	63	1541259	30.19	ug/l	100
27) tert-Butyl ethyl ether (ET	6.23	59	2031979	30.40	ug/l	100
28) 2-Butanone	6.41	43	780834	164.07	ug/l	100
29) 2,2-Dichloropropane	6.63	77	1283925	29.91	ug/l	100
30) cis-1,2-Dichloroethene	6.69	96	1065003	30.30	ug/l	100
31) Chloroform	6.92	83	1477710	28.40	ug/l	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV203.D Vial: 9
Acq On : 11 May 2024 2:27 pm Operator: LPriet
Sample : VO01E118 3.0/15 Inst : 01
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:02 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32)	Bromochloromethane	7.15	49	628929	30.78 ug/l	100
33)	Tetrahydrofuran	7.20	42	89460	29.72 ug/l	98
35)	1,1,1-Trichloroethane	7.49	97	1293540	29.71 ug/l	100
36)	Cyclohexane	7.52	84	1200311	28.31 ug/l	100
38)	1,1-Dichloropropene	7.73	110	446401	30.17 ug/l	99
39)	Carbon tetrachloride	7.88	119	976969	30.13 ug/l	100
40)	tert-Amyl methyl ether (TA	7.89	73	1549323	29.79 ug/l	99
42)	Benzene	8.13	78	3348702	29.50 ug/l	100
43)	1,2-Dichloroethane	8.10	62	692754	30.26 ug/l	99
44)	Trichloroethene	9.06	130	891995	30.38 ug/l	99
45)	Methylcyclohexane	9.17	83	1305359	27.98 ug/l	100
46)	1,2-Dichloropropane	9.35	63	761086	29.96 ug/l	100
47)	Bromodichloromethane	9.73	83	1014655	28.78 ug/l	100
48)	1,4-Dioxane	9.76	88	66102	635.70 ug/l	99
49)	Dibromomethane	9.82	93	364896	30.46 ug/l	97
50)	2-Chloroethyl vinyl ether	10.22	63	205504	31.88 ug/l	98
51)	4-Methyl-2-pentanone	10.26	43	1958633	150.19 ug/l	100
52)	cis-1,3-Dichloropropene	10.62	75	1217843	30.81 ug/l	100
55)	Toluene	11.17	91	3665193	29.18 ug/l	100
56)	Ethyl methacrylate	11.45	69	584066	30.99 ug/l	97
57)	trans-1,3-Dichloropropene	11.48	75	891028	30.52 ug/l	100
58)	1,1,2-Trichloroethane	11.75	97	494541	30.07 ug/l	99
59)	2-Hexanone	11.76	43	1192685	148.48 ug/l	99
60)	1,3-Dichloropropane	12.19	76	844763	30.26 ug/l	99
61)	Tetrachloroethene	12.29	164	772439	29.59 ug/l	99
62)	Dibromochloromethane	12.66	129	594252	29.60 ug/l	99
63)	1,2-Dibromoethane	13.03	107	501525	30.83 ug/l	99
64)	1-Chlorohexane	13.30	91	1608154	29.65 ug/l	100
65)	Chlorobenzene	13.79	112	2219576	29.64 ug/l	100
66)	1,1,1,2-Tetrachloroethane	13.86	131	687136	29.80 ug/l	99
67)	Ethylbenzene	13.88	91	4240845	29.59 ug/l	100
68)	m-Xylene & p-Xylene	14.01	91	6175129	58.85 ug/l	100
69)	o-Xylene	14.84	91	3177799	29.42 ug/l	100
70)	Styrene	14.90	104	2503360	29.90 ug/l	100
71)	Isopropylbenzene	15.52	105	4219160	29.65 ug/l	100
73)	Bromoform	15.55	173	312940	28.97 ug/l	99
74)	trans-1,4-Dichloro-2-buten	15.63	53	144056	31.24 ug/l	96
75)	1,1,2,2-Tetrachloroethane	15.86	83	534853	30.05 ug/l	99
77)	1,2,3-Trichloropropane	16.15	110	141561	31.09 ug/l	97
78)	n-Propylbenzene	16.29	91	5144010	29.59 ug/l	100
79)	Bromobenzene	16.38	156	831254	30.23 ug/l	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV203.D Vial: 9
Acq On : 11 May 2024 2:27 pm Operator: LPriet
Sample : VO01E118 3.0/15 Inst : 01
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:02 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

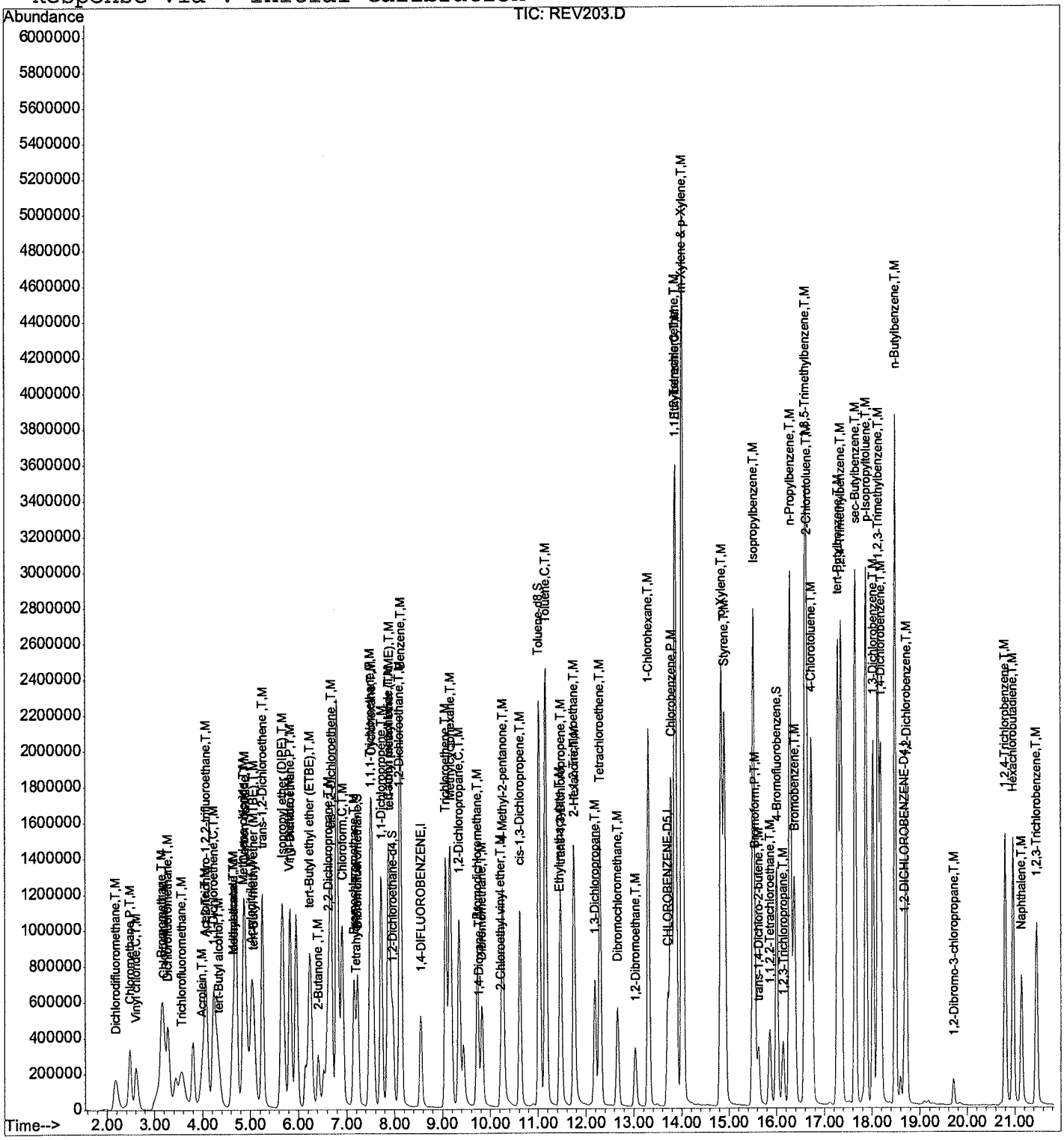
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	3300850	29.72	ug/l	99
81)	2-Chlorotoluene	16.63	91	3091027	29.54	ug/l	100
82)	4-Chlorotoluene	16.72	91	2792432	30.14	ug/l	99
83)	tert-Butylbenzene	17.29	134	693102	29.75	ug/l	99
84)	1,2,4-Trimethylbenzene	17.35	105	3247834	29.89	ug/l	99
85)	sec-Butylbenzene	17.66	105	4497766	29.46	ug/l	100
86)	p-Isopropyltoluene	17.88	119	3456736	29.37	ug/l	100
87)	1,3-Dichlorobenzene	18.03	146	1566009	29.97	ug/l	100
88)	1,2,3-Trimethylbenzene	18.13	105	3006443	29.63	ug/l	100
89)	1,4-Dichlorobenzene	18.19	146	1511456	29.50	ug/l	100
90)	n-Butylbenzene	18.49	91	3615477	29.66	ug/l	100
91)	1,2-Dichlorobenzene	18.72	146	1277031	29.82	ug/l	100
92)	1,2-Dibromo-3-chloropropan	19.72	157	81915	28.90	ug/l	100
93)	1,2,4-Trichlorobenzene	20.80	180	991777	31.73	ug/l	100
94)	Hexachlorobutadiene	20.96	225	585385	31.43	ug/l	99
95)	Naphthalene	21.14	128	1169103	32.04	ug/l	100
96)	1,2,3-Trichlorobenzene	21.46	180	737458	31.32	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E11\REV203.D Vial: 9
Acq On : 11 May 2024 2:27 pm Operator: LPriet
Sample : VO01E118 3.0/15 Inst : 01
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:02 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV204.D Vial: 10
Acq On : 11 May 2024 2:56 pm Operator: LPriet
Sample : VO01E119 5.0/25 Inst : 01
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:33 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	790188	10.00	ug/l	0.01
53) CHLOROBENZENE-D5	13.71	117	650561	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	247844	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	0.00	98	0d	0.00	ug/l	
Spiked Amount 10.000			Recovery =	0.00%		
76) 4-Bromofluorobenzene	0.00	95	0d	0.00	ug/l	
Spiked Amount 10.000			Recovery =	0.00%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.17	85	1081177	51.13	ug/l	98
5) Chloromethane	2.47	50	1438807	48.60	ug/l	100
6) Vinyl chloride	2.62	62	1235915	50.13	ug/l	100
7) Bromomethane	3.15	94	1484374	51.68	ug/l	98
8) Chloroethane	3.20	64	946787	52.94	ug/l	99
9) Dichlorofluoromethane	3.29	67	2533049	49.87	ug/l	98
10) Trichlorofluoromethane	3.57	101	1663384	49.87	ug/l	99
11) Acrolein	3.98	56	473669	266.87	ug/l	99
12) 1,1,2-Trichloro-1,2,2-trif	4.07	151	901773	54.10	ug/l	100
13) Acetone	4.06	43	730855	253.40	ug/l	100
14) 1,1-Dichloroethene	4.24	61	2222510	52.74	ug/l	100
15) tert-Butyl alcohol	4.34	59	1234938	1403.91	ug/l	99
16) Iodomethane	4.64	142	2410819	53.35	ug/l	100
18) Methylene chloride	4.86	49	1737751	51.40	ug/l	100
20) Acrylonitrile	5.02	53	973695	266.10	ug/l	99
21) tert-Butyl methyl ether (M	5.07	73	2163847	52.20	ug/l	99
22) trans-1,2-Dichloroethene	5.26	61	2150916	52.97	ug/l	99
23) Isopropyl ether (DIPE)	5.67	45	4495028	51.81	ug/l	99
24) Vinyl acetate	5.82	43	1638323	55.01	ug/l	100
25) 1,1-Dichloroethane	5.84	63	2492540	52.49	ug/l	100
27) tert-Butyl ethyl ether (ET	6.25	59	3217505	51.76	ug/l	98
28) 2-Butanone	6.41	43	1277785	288.71	ug/l	100
29) 2,2-Dichloropropane	6.64	77	2063550	51.69	ug/l	100
30) cis-1,2-Dichloroethene	6.68	96	1715982	52.50	ug/l	99
31) Chloroform	6.92	83	2420327	50.02	ug/l	100
32) Bromochloromethane	7.15	49	1013155	53.31	ug/l	98
33) Tetrahydrofuran	7.20	42	153627	54.88	ug/l	97

(#) = qualifier out of range (m) = manual integration
REV204.D VO01E11.M Mon May 13 14:33:16 2024 Page 1

SU 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV204.D Vial: 10
Acq On : 11 May 2024 2:56 pm Operator: LPriet
Sample : VO01E119 5.0/25 Inst : 01
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:33 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
35)	1,1,1-Trichloroethane	7.51	97	2111400	52.15	ug/l	100
38)	1,1-Dichloropropene	7.73	110	723523	52.58	ug/l	99
39)	Carbon tetrachloride	7.88	119	1591100	52.76	ug/l	99
40)	tert-Amyl methyl ether (TA	7.90	73	2542219	52.56	ug/l	99
42)	Benzene	8.13	78	5383213	50.99	ug/l	100
43)	1,2-Dichloroethane	8.10	62	1118925	52.56	ug/l	100
44)	Trichloroethene	9.08	130	1468714	53.79	ug/l	99
46)	1,2-Dichloropropane	9.34	63	1258335	53.27	ug/l	100
47)	Bromodichloromethane	9.73	83	1690988	51.58	ug/l	100
48)	1,4-Dioxane	9.76	88	113358	1172.28	ug/l	97
49)	Dibromomethane	9.82	93	602961	54.12	ug/l	98
50)	2-Chloroethyl vinyl ether	10.22	63	329105	54.91	ug/l	98
51)	4-Methyl-2-pentanone	10.26	43	3235283	264.67	ug/l	99
52)	cis-1,3-Dichloropropene	10.62	75	1992729	54.21	ug/l	99
55)	Toluene	11.17	91	6025151	52.15	ug/l	100
56)	Ethyl methacrylate	11.45	69	966319	55.74	ug/l	98
57)	trans-1,3-Dichloropropene	11.48	75	1465798	54.58	ug/l	99
58)	1,1,2-Trichloroethane	11.74	97	796053	52.63	ug/l	100
59)	2-Hexanone	11.74	43	1992542	265.71	ug/l	99
60)	1,3-Dichloropropane	12.19	76	1380516	53.77	ug/l	99
61)	Tetrachloroethene	12.29	164	1249230	52.02	ug/l	100
62)	Dibromochloromethane	12.66	129	985487	53.37	ug/l	99
63)	1,2-Dibromoethane	13.03	107	822866	54.99	ug/l	99
64)	1-Chlorohexane	13.30	91	2572709	51.57	ug/l	100
65)	Chlorobenzene	13.79	112	3610696	52.42	ug/l	99
66)	1,1,1,2-Tetrachloroethane	13.86	131	1116459	52.63	ug/l	99
67)	Ethylbenzene	13.88	91	6718588	50.95	ug/l	99
68)	m-Xylene & p-Xylene	14.03	91	9682404	100.31	ug/l	99
69)	o-Xylene	14.84	91	5069451	51.03	ug/l	99
70)	Styrene	14.90	104	4017810	52.17	ug/l	99
71)	Isopropylbenzene	15.52	105	6705142	51.23	ug/l	100
73)	Bromoform	15.55	173	504524	50.13	ug/l	99
74)	trans-1,4-Dichloro-2-buten	15.63	53	237301	55.50	ug/l	96
75)	1,1,2,2-Tetrachloroethane	15.86	83	869256	52.68	ug/l	99
77)	1,2,3-Trichloropropane	16.14	110	235480	55.79	ug/l	92
78)	n-Propylbenzene	16.29	91	8220515	51.01	ug/l	100
79)	Bromobenzene	16.38	156	1345207	52.77	ug/l	100
80)	1,3,5-Trimethylbenzene	16.60	105	5240717	50.90	ug/l	99
81)	2-Chlorotoluene	16.63	91	4859918	50.09	ug/l	95
82)	4-Chlorotoluene	16.74	91	4476659	52.12	ug/l	97
83)	tert-Butylbenzene	17.29	134	1119401	51.83	ug/l	98

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24E11\REV204.D Vial: 10
Acq On : 11 May 2024 2:56 pm Operator: LPriet
Sample : VO01E119 5.0/25 Inst : 01
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:33 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
84)	1,2,4-Trimethylbenzene	17.36	105	5150477	51.12	ug/l	99
85)	sec-Butylbenzene	17.66	105	7213677	50.97	ug/l	100
86)	p-Isopropyltoluene	17.88	119	5536086	50.73	ug/l	100
87)	1,3-Dichlorobenzene	18.03	146	2506660	51.74	ug/l	100
88)	1,2,3-Trimethylbenzene	18.13	105	4772026	50.74	ug/l	99
89)	1,4-Dichlorobenzene	18.19	146	2389062	50.30	ug/l	99
90)	n-Butylbenzene	18.49	91	5704101	50.47	ug/l	100
91)	1,2-Dichlorobenzene	18.72	146	2055877	51.79	ug/l	100
92)	1,2-Dibromo-3-chloropropan	19.71	157	138333	52.22	ug/l	99
93)	1,2,4-Trichlorobenzene	20.80	180	1603778	55.34	ug/l	100
94)	Hexachlorobutadiene	20.97	225	940175	54.45	ug/l	100
95)	Naphthalene	21.15	128	1911993	56.52	ug/l	100
96)	1,2,3-Trichlorobenzene	21.46	180	1194867	54.73	ug/l	100

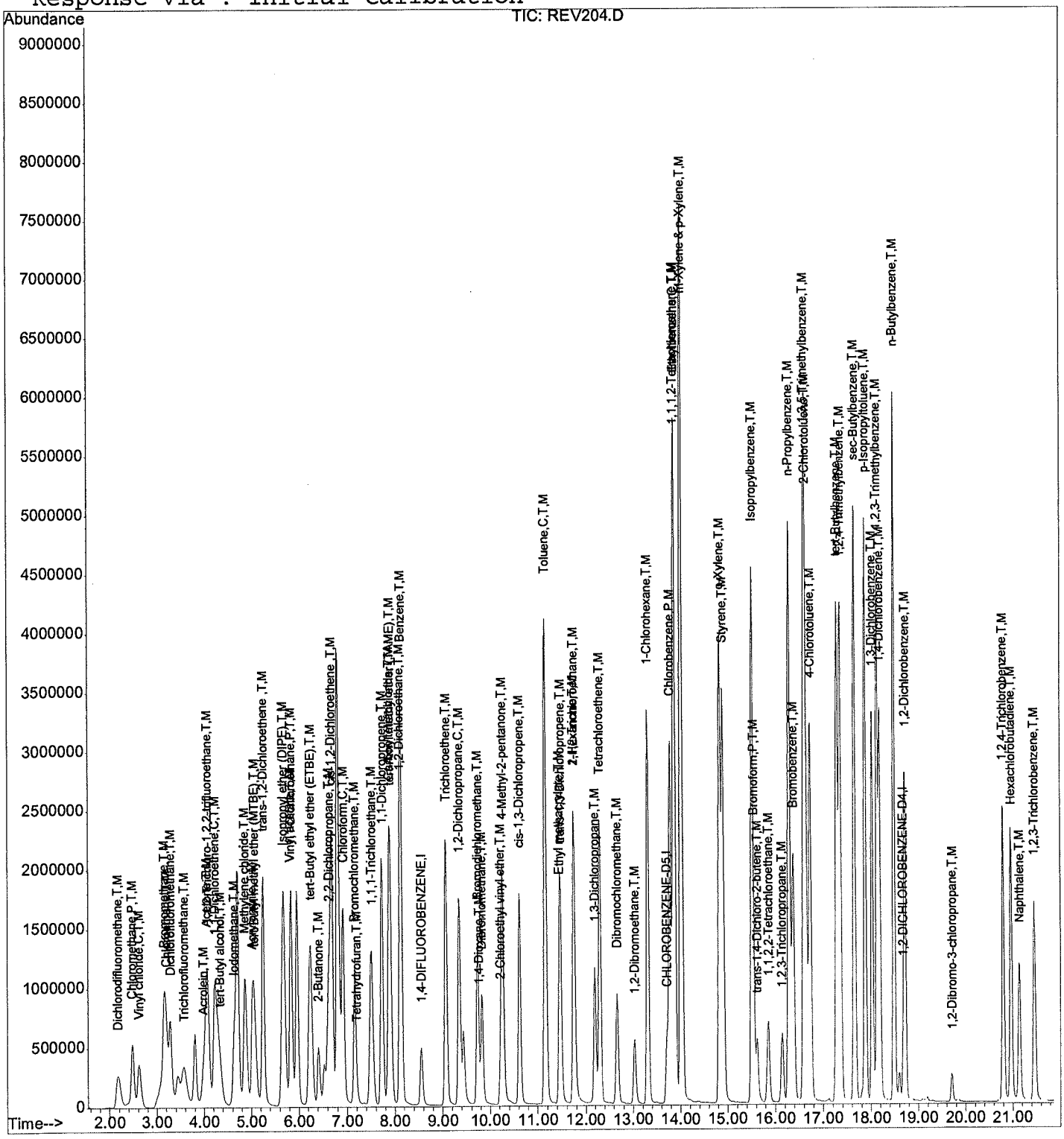
SM 5/15/24

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E11\REV204.D Vial: 10
Acq On : 11 May 2024 2:56 pm Operator: LPriet
Sample : VO01E119 5.0/25 Inst : 01
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:33 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV205.D Vial: 11
Acq On : 11 May 2024 3:26 pm Operator: LPriet
Sample : VO01DE1110 10/50 Inst : 01
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:34 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	813917	10.00	ug/l	0.02
53) CHLOROBENZENE-D5	13.72	117	663851	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	236992	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	0.00	98	0d	0.00	ug/l	
Spiked Amount 10.000			Recovery =	0.00%		
76) 4-Bromofluorobenzene	0.00	95	0d	0.00	ug/l	
Spiked Amount 10.000			Recovery =	0.00%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.18	85	2149061	98.68	ug/l	98
5) Chloromethane	2.48	50	2757462	90.43	ug/l	99
6) Vinyl chloride	2.61	62	2275750	89.61	ug/l	100
7) Bromomethane	3.15	94	2950163	99.92	ug/l	97
8) Chloroethane	3.20	64	1887602	102.46	ug/l	99
9) Dichlorofluoromethane	3.29	67	4893407	93.53	ug/l	98
10) Trichlorofluoromethane	3.57	101	3259184	94.86	ug/l	100
11) Acrolein	4.00	56	920713	503.62	ug/l	97
12) 1,1,2-Trichloro-1,2,2-trif	4.09	151	1635111	95.23	ug/l	100
13) Acetone	4.07	43	1378975	464.17	ug/l	96
14) 1,1-Dichloroethene	4.24	61	4287129	98.76	ug/l	100
15) tert-Butyl alcohol	4.34	59	2428061	2679.81	ug/l	99
16) Iodomethane	4.65	142	4731046	101.65	ug/l	100
18) Methylene chloride	4.87	49	3383840	97.16	ug/l	99
20) Acrylonitrile	5.02	53	1892610	502.15	ug/l	99
21) tert-Butyl methyl ether (M	5.07	73	4236425	99.23	ug/l	99
22) trans-1,2-Dichloroethene	5.26	61	4113790	98.36	ug/l	100
23) Isopropyl ether (DIPE)	5.67	45	8979646	100.48	ug/l	100
24) Vinyl acetate	5.82	43	3315001	108.06	ug/l	99
25) 1,1-Dichloroethane	5.84	63	4821432	98.58	ug/l	100
27) tert-Butyl ethyl ether (ET	6.25	59	6309833	98.54	ug/l	98
28) 2-Butanone	6.41	43	2458656	539.33	ug/l	99
29) 2,2-Dichloropropane	6.64	77	3940507	95.83	ug/l	100
30) cis-1,2-Dichloroethene	6.69	96	3330208	98.92	ug/l	99
31) Chloroform	6.92	83	4814377	96.59	ug/l	100
32) Bromochloromethane	7.15	49	1957186	99.99	ug/l	98
33) Tetrahydrofuran	7.20	42	291915	101.24	ug/l	96

(#) = qualifier out of range (m) = manual integration
REV205.D VO01E11.M Mon May 13 14:34:29 2024 Page 1

SU 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV205.D Vial: 11
Acq On : 11 May 2024 3:26 pm Operator: LPriet
Sample : VO01DE1110 10/50 Inst : 01
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:34 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
35)	1,1,1-Trichloroethane	7.51	97	4134538	99.15	ug/l	100
38)	1,1-Dichloropropene	7.73	110	1407010	99.26	ug/l	98
39)	Carbon tetrachloride	7.88	119	3044744	98.02	ug/l	99
40)	tert-Amyl methyl ether (TA	7.89	73	4847551	97.30	ug/l	99
42)	Benzene	8.13	78	10614708	97.62	ug/l	100
43)	1,2-Dichloroethane	8.10	62	2198375	100.25	ug/l	100
44)	Trichloroethene	9.06	130	2868237	101.98	ug/l	99
46)	1,2-Dichloropropane	9.35	63	2435072	100.09	ug/l	100
47)	Bromodichloromethane	9.73	83	3272651	96.91	ug/l	100
48)	1,4-Dioxane	9.76	88	217292	2181.59	ug/l	95
49)	Dibromomethane	9.82	93	1156972	100.82	ug/l	98
50)	2-Chloroethyl vinyl ether	10.22	63	641035	103.83	ug/l	97
51)	4-Methyl-2-pentanone	10.26	43	6179211	488.45	ug/l	100
52)	cis-1,3-Dichloropropene	10.62	75	3875584	102.36	ug/l	99
55)	Toluene	11.17	91	11521987	97.73	ug/l	99
56)	Ethyl methacrylate	11.45	69	1848777	104.51	ug/l	97
57)	trans-1,3-Dichloropropene	11.48	75	2820520	102.93	ug/l	99
58)	1,1,2-Trichloroethane	11.75	97	1530353	99.15	ug/l	99
59)	2-Hexanone	11.75	43	3802288	492.69	ug/l	100
60)	1,3-Dichloropropane	12.19	76	2688647	102.62	ug/l	99
61)	Tetrachloroethene	12.31	164	2415182	98.56	ug/l	100
62)	Dibromochloromethane	12.66	129	1898169	100.74	ug/l	99
63)	1,2-Dibromoethane	13.03	107	1574680	103.12	ug/l	99
64)	1-Chlorohexane	13.30	91	4899203	96.24	ug/l	100
65)	Chlorobenzene	13.79	112	6936484	98.69	ug/l	99
66)	1,1,1,2-Tetrachloroethane	13.86	131	2153843	99.50	ug/l	99
67)	Ethylbenzene	13.88	91	12839879	95.43	ug/l	98
68)	m-Xylene & p-Xylene	14.03	91	18532298	188.15	ug/l	98
69)	o-Xylene	14.84	91	9582592	94.53	ug/l	98
70)	Styrene	14.90	104	7538023	95.93	ug/l	99
71)	Isopropylbenzene	15.52	105	12772431	95.63	ug/l	99
73)	Bromoform	15.55	173	986318	102.14	ug/l	99
74)	trans-1,4-Dichloro-2-buten	15.63	53	446145	109.12	ug/l	93
75)	1,1,2,2-Tetrachloroethane	15.86	83	1626217	103.07	ug/l	99
77)	1,2,3-Trichloropropane	16.15	110	438929	108.75	ug/l	92
78)	n-Propylbenzene	16.29	91	15596079	101.22	ug/l	99
79)	Bromobenzene	16.38	156	2566592	105.28	ug/l	100
80)	1,3,5-Trimethylbenzene	16.61	105	9823432	99.77	ug/l	98
81)	2-Chlorotoluene	16.63	91	9603952	103.52	ug/l	98
82)	4-Chlorotoluene	16.74	91	7702833	93.79	ug/l	98
83)	tert-Butylbenzene	17.29	134	2120781	102.68	ug/l	96

(#) = qualifier out of range (m) = manual integration SU 5/15/24

Data File : D:\HPCHEM\1\DATA\24E11\REV205.D Vial: 11
Acq On : 11 May 2024 3:26 pm Operator: LPriet
Sample : VO01DE1110 10/50 Inst : 01
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:34 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
84)	1,2,4-Trimethylbenzene	17.36	105	9615877	99.82	ug/l	97
85)	sec-Butylbenzene	17.66	105	13298763	98.26	ug/l	99
86)	p-Isopropyltoluene	17.88	119	10259365	98.33	ug/l	99
87)	1,3-Dichlorobenzene	18.03	146	4662217	100.65	ug/l	100
88)	1,2,3-Trimethylbenzene	18.13	105	8781878	97.65	ug/l	99
89)	1,4-Dichlorobenzene	18.19	146	4430571	97.55	ug/l	100
90)	n-Butylbenzene	18.49	91	10299843	95.31	ug/l	99
91)	1,2-Dichlorobenzene	18.72	146	3781801	99.63	ug/l	100
92)	1,2-Dibromo-3-chloropropan	19.72	157	255821	100.50	ug/l	100
93)	1,2,4-Trichlorobenzene	20.80	180	2909800	105.00	ug/l	100
94)	Hexachlorobutadiene	20.98	225	1658054	100.43	ug/l	100
95)	Naphthalene	21.14	128	3426614	105.94	ug/l	100
96)	1,2,3-Trichlorobenzene	21.46	180	2169257	103.91	ug/l	100

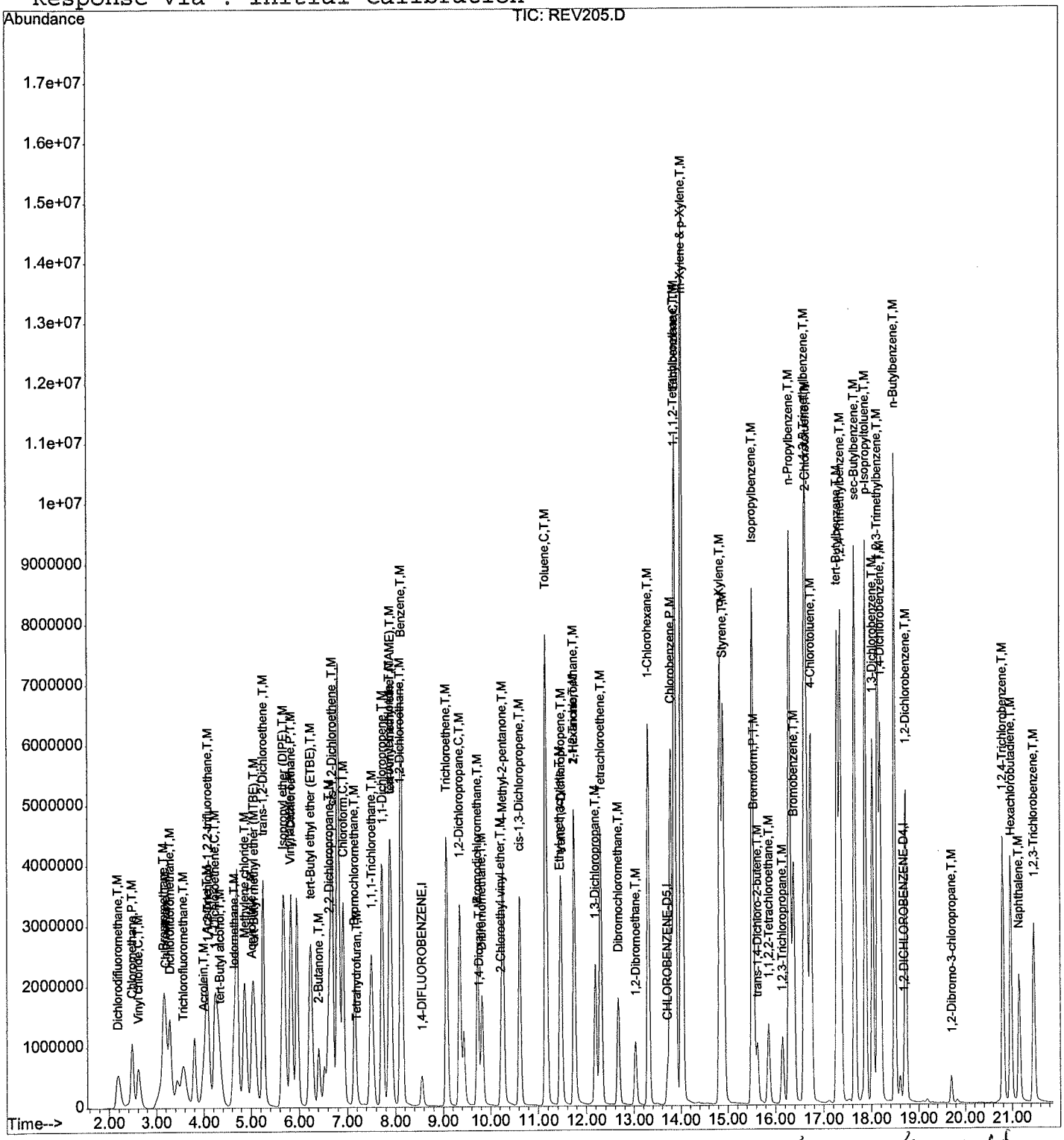
Su 5/15/24

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E11\REV205.D Vial: 11
Acq On : 11 May 2024 3:26 pm Operator: LPriet
Sample : VO01DE1110 10/50 Inst : 01
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:34 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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: REV209 BFB Injection Date: 05/13/24

Instrument ID: 01 BFB Injection Time: 11:31

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	17.676
75	30 - 60% of mass 95	40.505
95	Base Peak, 100% relative abundance	100.000
96	5 - 9% of mass 95	6.366
173	Less than 2% of mass 174	0.000(0)1
174	Greater than 50% of mass 95	77.234
175	5 - 9% of mass 174	5.650(7.32)1
176	95 - 101% % of mass 174	75.082(97.21)1
177	5 - 9% % of mass 176	4.812(6.41)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	VSTD10	IVO01E1102	REV210	05/13/24	12:06

SU 5/15/24

CONTINUE_CALIBRATION - CALIBRATION VERIFICATION

Instrument ID :01
IC_Beginning DateTime :05/11/24 10:58
Spike Amount :10 PPB
CC/CV File :REV210
IC File :REV201

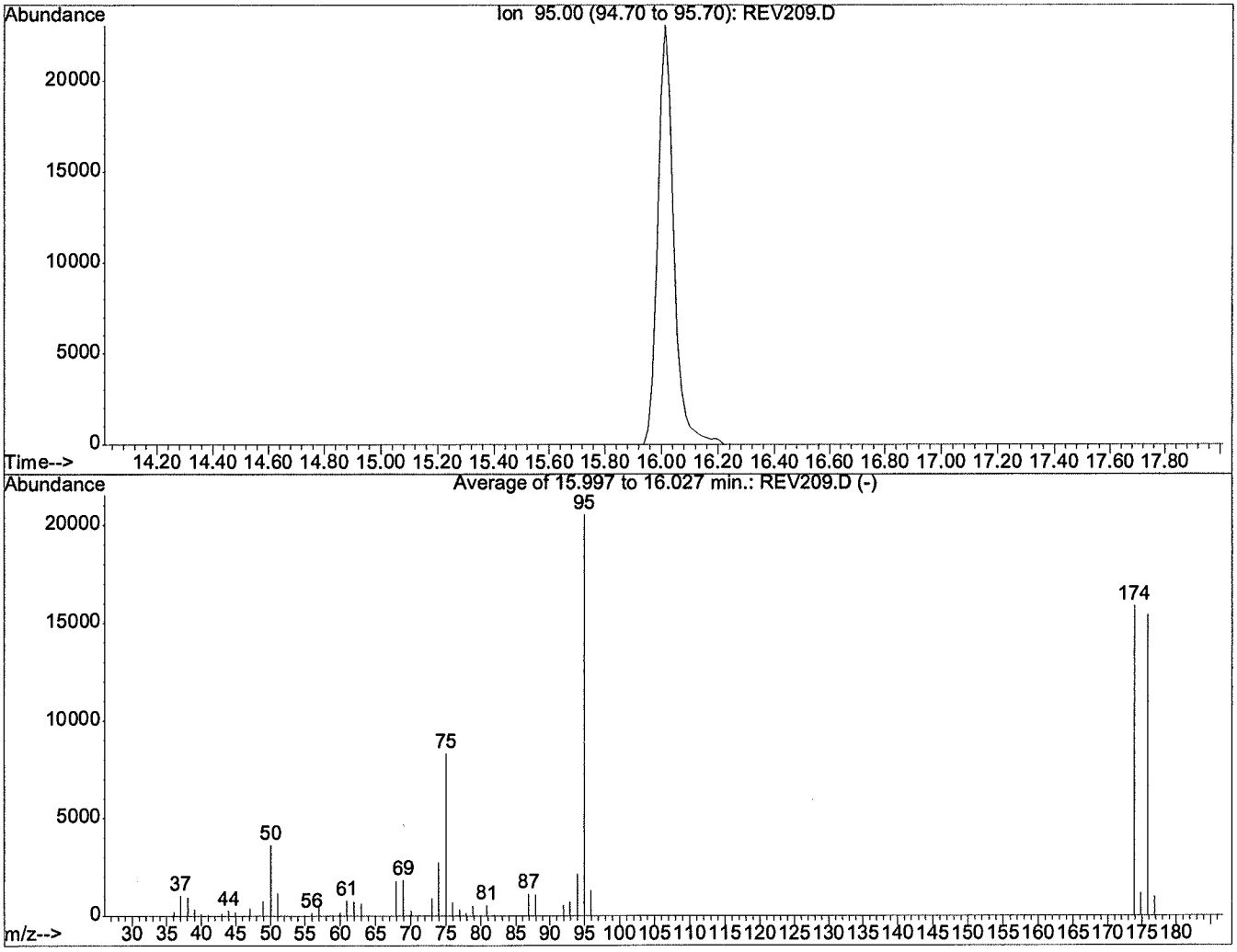
Column Spec :RXI-624SILMS ID :0.25MM
IC_Ending DateTime :05/11/24 15:26
HPChem Method :VO01E11
Date_Time :05/13/24 12:06

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	907856	1	1	8.546	8.551	0				
	2	Chlorotrifluoroethylene												
	3	Dichlorodifluoromethane	10.744	7.4	261017	0.288	0.268	2.174	2.169	4.44				
	4	2-Chloro-1,1,1-trifluoroethane												
	5	Chloromethane	10.222	2.2	347692	0.383	0.375	2.487	2.471	7.39				
	6	Vinyl chloride	11.091	10.9	314201	0.346	0.312	2.615	2.605	6.31				
	7	Bromomethane	9.886	-1.1	332015	0.366	0.396	3.154	3.146	17.96	0.0078	0.3620		0.9993
	8	Chloroethane	9.929	-0.7	204024	0.225	0.226	3.198	3.190	4.21				
	9	Dichlorofluoromethane	9.809	-1.9	572473	0.631	0.643	3.287	3.276	8.21				
	10	Trichlorofluoromethane	10.405	4.0	398783	0.439	0.422	3.554	3.553	5.20				
5	11	Acrolein	46.638	-6.7	95103	0.021	0.022	3.984	3.986	5.86				
	12	1,1,2-Trichloro-1,2,2-trifluoroethane	10.699	7.0	204924	0.226	0.211	4.073	4.070	8.11				
5	13	Acetone	46.249	-7.5	153258	0.034	0.037	4.058	4.058	14.45				
	14	1,1-Dichloroethene	10.534	5.3	510086	0.562	0.533	4.235	4.230	4.74				
25	15	tert-Butyl alcohol	272.706	9.1	275606	0.012	0.011	4.339	4.342	9.12				
	16	Iodomethane	10.129	1.3	525854	0.579	0.572	4.635	4.639	4.85				
	17	Methyl acetate	9.648	-3.5	87177	0.096	0.100	4.650	4.653	10.84				
	18	Methylene chloride	10.396	4.0	403861	0.445	0.428	4.858	4.858	3.90				
	19	Carbon disulfide	9.410	-5.9	974363	1.073	1.140	4.887	4.880	6.08				
5	20	Acrylonitrile	49.767	-0.5	209223	0.046	0.046	5.021	5.025	4.77				
	21	tert-Butyl methyl ether (MTBE)	10.216	2.2	486511	0.536	0.525	5.065	5.061	4.67				
	22	trans-1,2-Dichloroethene	10.334	3.3	482107	0.531	0.514	5.243	5.249	4.44				
	23	Isopropyl ether (DIPE)	10.406	4.1	1037346	1.143	1.098	5.658	5.670	4.21				
	24	Vinyl acetate	10.436	4.4	357100	0.393	0.377	5.821	5.832	9.82				
	25	1,1-Dichloroethane	10.385	3.9	566566	0.624	0.601	5.821	5.830	4.54				
25	26	2-Butanol												
	27	tert-Butyl ethyl ether (ETBE)	10.658	6.6	761232	0.838	0.787	6.235	6.240	4.52				
5	28	2-Butanone	52.383	4.8	266366	0.059	0.056	6.413	6.428	10.70				
	29	2,2-Dichloropropane	10.370	3.7	475647	0.524	0.505	6.621	6.628	4.21				
	30	cis-1,2-Dichloroethene	10.325	3.2	387725	0.427	0.414	6.680	6.686	4.03				
	31	Chloroform	9.820	-1.8	545984	0.601	0.612	6.902	6.908	8.00				
	32	Bromochloromethane	10.539	5.4	230106	0.253	0.240	7.139	7.148	4.73				
	33	Tetrahydrofuran	10.289	2.9	33093	0.036	0.035	7.198	7.201	8.25				
	34	Dibromofluoromethane	9.898	-1.0	278148	0.306	0.310	7.228	7.228	7.01				
	35	1,1,1-Trichloroethane	10.373	3.7	482510	0.531	0.512	7.495	7.499	4.19				
	36	Cyclohexane	10.548	5.5	477860	0.526	0.499	7.524	7.524	6.15				
	37	2,2,4-Trimethylpentane												
	38	1,1-Dichloropropene	10.276	2.8	162485	0.179	0.174	7.717	7.723	4.16				
	39	Carbon tetrachloride	10.352	3.5	358693	0.395	0.382	7.880	7.878	4.43				
	40	tert-Amyl methyl ether (TAME)	10.127	1.3	562793	0.620	0.612	7.880	7.889	5.64				
	41	1,2-Dichloroethane-d4	9.949	-0.5	190681	0.210	0.211	7.954	7.965	7.18				
	42	Benzene	10.090	0.9	1223803	1.348	1.336	8.132	8.130	4.04				
	43	1,2-Dichloroethane	10.336	3.4	252838	0.279	0.269	8.102	8.104	4.45				
	44	Trichloroethene	10.150	1.5	318416	0.351	0.346	9.064	9.072	4.96				
	45	Methylcyclohexane	10.259	2.6	511326	0.563	0.549	9.153	9.165	6.46				
	46	1,2-Dichloropropane	10.115	1.1	274499	0.302	0.299	9.346	9.351	5.38				
	47	Bromodichloromethane	9.862	-1.4	371496	0.409	0.415	9.716	9.732	6.99				
20	48	1,4-Dioxane	205.358	2.7	22815	0.001	0.001	9.775	9.783	14.49				
	49	Dibromomethane	10.344	3.4	132415	0.146	0.141	9.820	9.823	5.30				
	50	2-Chloroethyl vinyl ether	10.212	2.1	70329	0.077	0.076	10.220	10.234	8.06				
5	51	4-Methyl-2-pentanone	49.033	-1.9	657246	0.145	0.136	10.264	10.276	18.90	-0.0424	0.1563		0.9988
	52	cis-1,3-Dichloropropene	10.274	2.7	433879	0.478	0.465	10.620	10.625	5.31				
	53	CHLOROBENZENE-D5	10.000	0	757489	1	1	13.716	13.717	0				
	54	Toluene-d8	9.566	-4.3	1085971	1.434	1.499	11.020	11.030	5.48				
	55	Toluene	9.906	-0.9	1332719	1.759	1.776	11.153	11.169	4.50				
	56	Ethyl methacrylate	10.213	2.1	206172	0.272	0.266	11.449	11.471	8.54				
	57	trans-1,3-Dichloropropene	10.298	3.0	322019	0.425	0.413	11.479	11.484	5.62				
	58	1,1,2-Trichloroethane	10.145	1.5	178678	0.236	0.233	11.746	11.751	4.45				
5	59	2-Hexanone	47.364	-5.3	378200	0.100	0.090	11.761	11.791	36.80	-0.0568	0.1174		0.9987
	60	1,3-Dichloropropane	10.169	1.7	304011	0.401	0.395	12.190	12.195	5.08				
	61	Tetrachloroethene	9.999	-0.0	279605	0.369	0.369	12.294	12.299	3.83				
	62	Dibromochloromethane	10.064	0.6	216381	0.286	0.284	12.664	12.667	5.55				
	63	1,2-Dibromoethane	10.349	3.5	180319	0.238	0.230	13.035	13.038	6.28				
	64	1-Chlorohexane	10.259	2.6	595972	0.787	0.767	13.301	13.308	4.69				
	65	Chlorobenzene	10.061	0.6	806907	1.065	1.059	13.775	13.791	3.64				
	66	1,1,1,2-Tetrachloroethane	10.136	1.4	250367	0.331	0.326	13.864	13.865	3.59				
	67	Ethylbenzene	9.991	-0.1	1533890	2.025	2.027	13.879	13.881	4.07				
2	68	m-Xylene & p-Xylene	20.234	1.2	2274121	1.501	1.484	14.012	14.021	4.23				
	69	o-Xylene	9.950	-0.5	1150973	1.519	1.527	14.827	14.843	4.66				
	70	Styrene	9.968	-0.3	893787	1.180	1.184	14.901	14.909	3.78				
	71	Isopropylbenzene	10.036	0.4	1529556	2.019	2.012	15.509	15.524	3.97				
	72	1,2-DICHLOROBENZENE-D4	10.000	0	290545	1	1	18.679	18.680	0				
	73	Bromoform	9.781	-2.2	112241	0.386	0.350	15.553	15.559	20.61	-0.0135	0.4088		0.9992
	74	trans-1,4-Dichloro-2-butene	10.276	2.8	51511	0.177	0.173	15.627	15.634	9.77				
	75	1,1,2,2-Tetrachloroethane	9.917	-0.8	191835	0.660	0.666	15.849	15.865	6.36				
	76	4-Bromofluorobenzene	9.429	-5.7	373151	1.284	1.362	15.998	16.015	6.06				
	77	1,2,3-Trichloropropane	10.138	1.4	50167	0.173	0.170	16.146	16.152	9.82				
	78	n-Propylbenzene	9.836	-1.6	1858212	6.396	6.502	16.294	16.298	5.03				
	79	Bromobenzene	9.996	-0.0	298744	1.028	1.029	16.383	16.383	5.26				
	80	1,3,5-Trimethylbenzene	9.883	-1.2	1193060	4.106	4.155	16.605	16.606	5.49				
	81	2-Chlorotoluene	10.005	0.1	1138017	3.917	3.915	16.635	16.635	4.84				
	82	4-Chlorotoluene	10.002	0.0	1007192	3.467	3.466	16.723	16.733	5.46				
	83	tert-Butylbenzene	9.950	-0.5	251948	0.867	0.871	17.287	17.287	4.70				
	84	1,2,4-Trimethylbenzene	9.900	-1.0	1169308	4.025	4.065	17.346	17.360	4.41				
	85	sec-Butylbenzene	9.967	-0.3	1653826	5.692	5.711	17.657	17.658	5.27				
	86	p-Isopropyltoluene	9.795	-2.0	1252965	4.312	4.403	17.879	17.880	5.17				
	87	1,3-Dichlorobenzene	10.012	0.1	568580	1.957	1.955	18.027	18.028	4.87				
	88	1,2,3-Trimethylbenzene	9.931	-0.7	1095079	3.769	3.795	18.131	18.132	4.70				
	89	1,4-Dichlorobenzene	9.894	-1.1	550958	1.896	1.916	18.190	18.191	4.92				
	90	n-Butylbenzene	9.925	-0.7	1315009	4.526	4.560	18.486	18.489	5.46				
	91	1,2-Dichlorobenzene	9.987	-0.1	464758	1.600	1.602	18.709	18.724	4.06				
	92	1,2-Dibromo-3-chloropropane	9.352	-6.5	27714	0.095	0.095	19.716	19.717	16.02	-0.0056	0.1080		0.9987
	93	1,2,4-Trichlorobenzene	10.080	0.8	342507	1.179	1.169	20.798	20.801	7.49				
	94	Hexachlorobutadiene	9.944	-0.6	201295	0.693	0.697	20.961	20.967	6.95				
	95	Naphthalene	10.201	2.0	404546	1.392	1.365	21.138	21.148	8.50				
	96	1,2,3-Trichlorobenzene	10.141	1.4	259547	0.893	0.881	21.464	21.466	6.66				

Spike Amount = Nominal Amount * M

SU
5/15/24

Data File : D:\HPCHEM\1\DATA\24E13\REV209.D Vial: 1
Acq On : 13 May 2024 11:31 am Operator: LPriet
Sample : BFB01E12 Inst : 01
Misc : T/CHK Multiplr: 1.00
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls



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	17.7	3629	PASS
75	95	30	60	40.5	8316	PASS
95	95	100	100	100.0	20531	PASS
96	95	5	9	6.4	1307	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	77.2	15857	PASS
175	174	5	9	7.3	1160	PASS
176	174	95	101	97.2	15415	PASS
177	176	5	9	6.4	988	PASS

REV209.D VO01E11.M Mon May 13 14:37:52 2024 SY 5/15/24

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D Vial: 2
Acq On : 13 May 2024 12:06 pm Operator: LPriet
Sample : IVO01E1102 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\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	99	0.00
2	T,M	Chlorotrifluoroethylene	-1.000	0.000	0.0	0	-2.08#
3	T,M	Dichlorodifluoromethane	10.000	10.745	-7.4	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	10.223	-2.2	109	0.02
6	C,T,M	Vinyl chloride	10.000	11.092	-10.9	110	0.00
7	T,M	Bromomethane	10.000	9.887	1.1	110	0.01
8	T,M	Chloroethane	10.000	9.929	0.7	105	0.01
9	T,M	Dichlorofluoromethane	10.000	9.809	1.9	107	0.01
10	T,M	Trichlorofluoromethane	10.000	10.405	-4.0	109	0.00
11	T,M	Acrolein	50.000	46.638	6.7	104	0.00
12	T,M	1,1,2-Trichloro-1,2,2-trifl	10.000	10.700	-7.0	106	0.01
13	T,M	Acetone	50.000	46.249	7.5	108	0.00
14	C,T,M	1,1-Dichloroethene	10.000	10.535	-5.4	108	0.01
15	T,M	tert-Butyl alcohol	250.000	272.707	-9.1	118	0.00
16	T,M	Iodomethane	10.000	10.129	-1.3	105	0.00
17	T,M	Methyl acetate	10.000	9.648	3.5	113	0.00
18	T,M	Methylene chloride	10.000	10.396	-4.0	110	0.00
19	T,M	Carbon disulfide	10.000	9.411	5.9	99	0.02
20	T,M	Acrylonitrile	50.000	49.767	0.5	107	0.00
21	T,M	tert-Butyl methyl ether (MT	10.000	10.216	-2.2	112	0.00
22	T,M	trans-1,2-Dichloroethene	10.000	10.335	-3.4	110	0.00
23	T,M	Isopropyl ether (DIPE)	10.000	10.407	-4.1	110	-0.01
24	T,M	Vinyl acetate	10.000	10.436	-4.4	113	0.00
25	P,T,M	1,1-Dichloroethane	10.000	10.386	-3.9	109	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	10.658	-6.6	114	0.00
28	T,M	2-Butanone	50.000	52.384	-4.8	109	0.00
29	T,M	2,2-Dichloropropane	10.000	10.370	-3.7	108	0.00
30	T,M	cis-1,2-Dichloroethene	10.000	10.325	-3.2	107	0.00
31	C,T,M	Chloroform	10.000	9.821	1.8	107	0.00
32	T,M	Bromochloromethane	10.000	10.539	-5.4	112	0.00
33	T,M	Tetrahydrofuran	10.000	10.289	-2.9	121	0.00
34	S	Dibromofluoromethane	10.000	9.898	1.0	107	0.00
35	T,M	1,1,1-Trichloroethane	10.000	10.374	-3.7	108	0.00
36	T,M	Cyclohexane	10.000	10.549	-5.5	114	0.00
37	T,M	2,2,4-Trimethylpentane	10.000	0.000	100.0#	0	0.00
38	T,M	1,1-Dichloropropene	10.000	10.277	-2.8	108	0.00
39	T,M	Carbon tetrachloride	10.000	10.352	-3.5	107	0.00
40	T,M	tert-Amyl methyl ether (TAM	10.000	10.128	-1.3	113	0.00
41	S	1,2-Dichloroethane-d4	10.000	9.949	0.5	112	-0.01

(#) = Out of Range

5/15/24

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D
Acq On : 13 May 2024 12:06 pm
Sample : IVO01E1102 1.0/5.0
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P

Vial: 2
Operator: LPriet
Inst : 01
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	10.090	-0.9	106	0.00
43	T,M	1,2-Dichloroethane	10.000	10.337	-3.4	110	0.00
44	T,M	Trichloroethene	10.000	10.150	-1.5	103	0.00
45	T,M	Methylcyclohexane	10.000	10.260	-2.6	113	-0.01
46	C,T,M	1,2-Dichloropropane	10.000	10.115	-1.2	107	0.00
47	T,M	Bromodichloromethane	10.000	9.863	1.4	109	-0.01
48	T,M	1,4-Dioxane	200.000	205.359	-2.7	114	-0.01
49	T,M	Dibromomethane	10.000	10.345	-3.5	114	0.00
50	T,M	2-Chloroethyl vinyl ether	10.000	10.212	-2.1	110	-0.01
51	T,M	4-Methyl-2-pentanone	50.000	49.033	1.9	111	0.00
52	T,M	cis-1,3-Dichloropropene	10.000	10.274	-2.7	109	0.00
53	I	CHLOROBENZENE-D5	10.000	10.000	0.0	102	0.00
54	S	Toluene-d8	10.000	9.567	4.3	105	-0.01
55	C,T,M	Toluene	10.000	9.907	0.9	106	-0.01
56	T,M	Ethyl methacrylate	10.000	10.214	-2.1	113	-0.01
57	T,M	trans-1,3-Dichloropropene	10.000	10.299	-3.0	111	0.00
58	T,M	1,1,2-Trichloroethane	10.000	10.145	-1.4	111	0.00
59	T,M	2-Hexanone	50.000	47.365	5.3	113	0.00
60	T,M	1,3-Dichloropropane	10.000	10.169	-1.7	112	0.00
61	T,M	Tetrachloroethene	10.000	9.999	0.0	105	0.00
62	T,M	Dibromochloromethane	10.000	10.064	-0.6	112	0.00
63	T,M	1,2-Dibromoethane	10.000	10.349	-3.5	113	0.00
64	T,M	1-Chlorohexane	10.000	10.260	-2.6	108	0.00
65	P,M	Chlorobenzene	10.000	10.062	-0.6	106	-0.01
66	T,M	1,1,1,2-Tetrachloroethane	10.000	10.136	-1.4	108	0.00
67	C,T,M	Ethylbenzene	10.000	9.991	0.1	104	0.00
68	T,M	m-Xylene & p-Xylene	20.000	20.234	-1.2	107	0.00
69	T,M	o-Xylene	10.000	9.950	0.5	107	-0.01
70	T,M	Styrene	10.000	9.968	0.3	106	0.00
71	T,M	Isopropylbenzene	10.000	10.037	-0.4	105	-0.01
72	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	102	0.00
73	P,T,M	Bromoform	10.000	9.781	2.2	117	0.00
74	T,M	trans-1,4-Dichloro-2-butene	10.000	10.277	-2.8	116	0.00
75	T,M	1,1,2,2-Tetrachloroethane	10.000	9.918	0.8	114	-0.01
76	S	4-Bromofluorobenzene	10.000	9.430	5.7	107	-0.01
77	T,M	1,2,3-Trichloropropane	10.000	10.138	-1.4	111	0.00
78	T,M	n-Propylbenzene	10.000	9.837	1.6	104	0.00
79	T,M	Bromobenzene	10.000	9.996	0.0	107	0.00
80	T,M	1,3,5-Trimethylbenzene	10.000	9.884	1.2	105	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D Vial: 2
Acq On : 13 May 2024 12:06 pm Operator: LPriet
Sample : IVO01E1102 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\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	10.006	-0.1	107	0.00
82	T,M	4-Chlorotoluene	10.000	10.003	-0.0	105	0.00
83	T,M	tert-Butylbenzene	10.000	9.950	0.5	105	0.00
84	T,M	1,2,4-Trimethylbenzene	10.000	9.901	1.0	104	-0.01
85	T,M	sec-Butylbenzene	10.000	9.967	0.3	105	0.00
86	T,M	p-Isopropyltoluene	10.000	9.795	2.1	104	0.00
87	T,M	1,3-Dichlorobenzene	10.000	10.012	-0.1	107	0.00
88	T,M	1,2,3-Trimethylbenzene	10.000	9.932	0.7	107	0.00
89	T,M	1,4-Dichlorobenzene	10.000	9.895	1.1	106	0.00
90	T,M	n-Butylbenzene	10.000	9.925	0.7	105	0.00
91	T,M	1,2-Dichlorobenzene	10.000	9.987	0.1	109	-0.01
92	T,M	1,2-Dibromo-3-chloropropane	10.000	9.353	6.5	117	0.00
93	T,M	1,2,4-Trichlorobenzene	10.000	10.081	-0.8	109	0.00
94	T,M	Hexachlorobutadiene	10.000	9.945	0.5	102	0.00
95	T,M	Naphthalene	10.000	10.202	-2.0	113	0.00
96	T,M	1,2,3-Trichlorobenzene	10.000	10.141	-1.4	110	0.00

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D Vial: 2
Acq On : 13 May 2024 12:06 pm Operator: LPriet
Sample : IVO01E1102 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\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	99	0.00
2	T,M	Chlorotrifluoroethylene	0.000	0.000	0.0	0#	-2.08#
3	T,M	Dichlorodifluoromethane	0.268	0.288	-7.5	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	0.375	0.383	-2.1	109	0.02
6	C,T,M	Vinyl chloride	0.312	0.346	-10.9	110	0.00
7	T,M	Bromomethane	0.396	0.366	7.6	110	0.01
8	T,M	Chloroethane	0.226	0.225	0.4	105	0.01
9	T,M	Dichlorofluoromethane	0.643	0.631	1.9	107	0.01
10	T,M	Trichlorofluoromethane	0.422	0.439	-4.0	109	0.00
11	T,M	Acrolein	0.022	0.021	4.5	104	0.00
12	T,M	1,1,2-Trichloro-1,2,2-trifl	0.211	0.226	-7.1	106	0.01
13	T,M	Acetone	0.037	0.034	8.1	108	0.00
14	C,T,M	1,1-Dichloroethene	0.533	0.562	-5.4	108	0.01
15	T,M	tert-Butyl alcohol	0.011	0.012	-9.1	118	0.00
16	T,M	Iodomethane	0.572	0.579	-1.2	105	0.00
17	T,M	Methyl acetate	0.100	0.096	4.0	113	0.00
18	T,M	Methylene chloride	0.428	0.445	-4.0	110	0.00
19	T,M	Carbon disulfide	1.140	1.073	5.9	99	0.02
20	T,M	Acrylonitrile	0.046	0.046	0.0	107	0.00
21	T,M	tert-Butyl methyl ether (MT	0.525	0.536	-2.1	112	0.00
22	T,M	trans-1,2-Dichloroethene	0.514	0.531	-3.3	110	0.00
23	T,M	Isopropyl ether (DIPE)	1.098	1.143	-4.1	110	-0.01
24	T,M	Vinyl acetate	0.377	0.393	-4.2	113	0.00
25	P,T,M	1,1-Dichloroethane	0.601	0.624	-3.8	109	0.00
26	T,M	2-Butanol	0.000	0.010	0.0	0#	0.00
27	T,M	tert-Butyl ethyl ether (ETB	0.787	0.838	-6.5	114	0.00
28	T,M	2-Butanone	0.056	0.059	-5.4	109	0.00
29	T,M	2,2-Dichloropropane	0.505	0.524	-3.8	108	0.00
30	T,M	cis-1,2-Dichloroethene	0.414	0.427	-3.1	107	0.00
31	C,T,M	Chloroform	0.612	0.601	1.8	107	0.00
32	T,M	Bromochloromethane	0.240	0.253	-5.4	112	0.00
33	T,M	Tetrahydrofuran	0.035	0.036	-2.9	121	0.00
34	S	Dibromofluoromethane	0.310	0.306	1.3	107	0.00
35	T,M	1,1,1-Trichloroethane	0.512	0.531	-3.7	108	0.00
36	T,M	Cyclohexane	0.499	0.526	-5.4	114	0.00
37	T,M	2,2,4-Trimethylpentane	0.000	0.032	0.0	0#	0.00
38	T,M	1,1-Dichloropropene	0.174	0.179	-2.9	108	0.00
39	T,M	Carbon tetrachloride	0.382	0.395	-3.4	107	0.00
40	T,M	tert-Amyl methyl ether (TAM	0.612	0.620	-1.3	113	0.00
41	S	1,2-Dichloroethane-d4	0.211	0.210	0.5	112	-0.01

(#) = Out of Range

SG 5/15/24

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D Vial: 2
Acq On : 13 May 2024 12:06 pm Operator: LPriet
Sample : IVO01E1102 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\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	1.336	1.348	-0.9	106	0.00
43	T,M	1,2-Dichloroethane	0.269	0.279	-3.7	110	0.00
44	T,M	Trichloroethene	0.346	0.351	-1.4	103	0.00
45	T,M	Methylcyclohexane	0.549	0.563	-2.6	113	-0.01
46	C,T,M	1,2-Dichloropropane	0.299	0.302	-1.0	107	0.00
47	T,M	Bromodichloromethane	0.415	0.409	1.4	109	-0.01
48	T,M	1,4-Dioxane	0.001	0.001	0.0	114	-0.01
49	T,M	Dibromomethane	0.141	0.146	-3.5	114	0.00
50	T,M	2-Chloroethyl vinyl ether	0.076	0.077	-1.3	110	-0.01
51	T,M	4-Methyl-2-pentanone	0.136	0.145	-6.6	111	0.00
52	T,M	cis-1,3-Dichloropropene	0.465	0.478	-2.8	109	0.00
53	I	CHLOROBENZENE-D5	1.000	1.000	0.0	102	0.00
54	S	Toluene-d8	1.499	1.434	4.3	105	-0.01
55	C,T,M	Toluene	1.776	1.759	1.0	106	-0.01
56	T,M	Ethyl methacrylate	0.266	0.272	-2.3	113	-0.01
57	T,M	trans-1,3-Dichloropropene	0.413	0.425	-2.9	111	0.00
58	T,M	1,1,2-Trichloroethane	0.233	0.236	-1.3	111	0.00
59	T,M	2-Hexanone	0.090	0.100	-11.1	113	0.00
60	T,M	1,3-Dichloropropane	0.395	0.401	-1.5	112	0.00
61	T,M	Tetrachloroethene	0.369	0.369	0.0	105	0.00
62	T,M	Dibromochloromethane	0.284	0.286	-0.7	112	0.00
63	T,M	1,2-Dibromoethane	0.230	0.238	-3.5	113	0.00
64	T,M	1-Chlorohexane	0.767	0.787	-2.6	108	0.00
65	P,M	Chlorobenzene	1.059	1.065	-0.6	106	-0.01
66	T,M	1,1,1,2-Tetrachloroethane	0.326	0.331	-1.5	108	0.00
67	C,T,M	Ethylbenzene	2.027	2.025	0.1	104	0.00
68	T,M	m-Xylene & p-Xylene	1.484	1.501	-1.1	107	0.00
69	T,M	o-Xylene	1.527	1.519	0.5	107	-0.01
70	T,M	Styrene	1.184	1.180	0.3	106	0.00
71	T,M	Isopropylbenzene	2.012	2.019	-0.3	105	-0.01
72	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	102	0.00
73	P,T,M	Bromoform	0.350	0.386	-10.3	117	0.00
74	T,M	trans-1,4-Dichloro-2-butene	0.173	0.177	-2.3	116	0.00
75	T,M	1,1,2,2-Tetrachloroethane	0.666	0.660	0.9	114	-0.01
76	S	4-Bromofluorobenzene	1.362	1.284	5.7	107	-0.01
77	T,M	1,2,3-Trichloropropane	0.170	0.173	-1.8	111	0.00
78	T,M	n-Propylbenzene	6.502	6.396	1.6	104	0.00
79	T,M	Bromobenzene	1.029	1.028	0.1	107	0.00
80	T,M	1,3,5-Trimethylbenzene	4.155	4.106	1.2	105	0.00

(#) = Out of Range

SU 5/15/24

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D Vial: 2
Acq On : 13 May 2024 12:06 pm Operator: LPriet
Sample : IVO01E1102 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\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	3.915	3.917	-0.1	107	0.00
82	T,M	4-Chlorotoluene	3.466	3.467	-0.0	105	0.00
83	T,M	tert-Butylbenzene	0.871	0.867	0.5	105	0.00
84	T,M	1,2,4-Trimethylbenzene	4.065	4.025	1.0	104	-0.01
85	T,M	sec-Butylbenzene	5.711	5.692	0.3	105	0.00
86	T,M	p-Isopropyltoluene	4.403	4.312	2.1	104	0.00
87	T,M	1,3-Dichlorobenzene	1.955	1.957	-0.1	107	0.00
88	T,M	1,2,3-Trimethylbenzene	3.795	3.769	0.7	107	0.00
89	T,M	1,4-Dichlorobenzene	1.916	1.896	1.0	106	0.00
90	T,M	n-Butylbenzene	4.560	4.526	0.7	105	0.00
91	T,M	1,2-Dichlorobenzene	1.602	1.600	0.1	109	-0.01
92	T,M	1,2-Dibromo-3-chloropropane	0.095	0.095	0.0	117	0.00
93	T,M	1,2,4-Trichlorobenzene	1.169	1.179	-0.9	109	0.00
94	T,M	Hexachlorobutadiene	0.697	0.693	0.6	102	0.00
95	T,M	Naphthalene	1.365	1.392	-2.0	113	0.00
96	T,M	1,2,3-Trichlorobenzene	0.881	0.893	-1.4	110	0.00

SH 5/15/24

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D Vial: 2
Acq On : 13 May 2024 12:06 pm Operator: LPriet
Sample : IVO01E1102 1.0/5.0 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:24 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.55	114	907856	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.72	117	757489	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	290545	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	278148	9.90	ug/l	0.00
Spiked Amount 10.000			Recovery = 99.00%			
41) 1,2-Dichloroethane-d4	7.95	65	190681	9.95	ug/l	-0.01
Spiked Amount 10.000			Recovery = 99.50%			
54) Toluene-d8	11.02	98	1085971	9.57	ug/l	-0.01
Spiked Amount 10.000			Recovery = 95.70%			
76) 4-Bromofluorobenzene	16.00	95	373151	9.43	ug/l	-0.01
Spiked Amount 10.000			Recovery = 94.30%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.17	85	261017	10.74	ug/l	99
5) Chloromethane	2.49	50	347692	10.22	ug/l	99
6) Vinyl chloride	2.62	62	314201	11.09	ug/l	99
7) Bromomethane	3.15	94	332015	9.89	ug/l	99
8) Chloroethane	3.20	64	204024	9.93	ug/l	98
9) Dichlorofluoromethane	3.29	67	572473	9.81	ug/l	97
10) Trichlorofluoromethane	3.55	101	398783	10.41	ug/l	99
11) Acrolein	3.98	56	95103	46.64	ug/l	99
12) 1,1,2-Trichloro-1,2,2-trif	4.07	151	204924	10.70	ug/l	100
13) Acetone	4.06	43	153258	46.25	ug/l	100
14) 1,1-Dichloroethene	4.24	61	510086	10.53	ug/l	99
15) tert-Butyl alcohol	4.34	59	275606	272.71	ug/l	99
16) Iodomethane	4.64	142	525854	10.13	ug/l	100
17) Methyl acetate	4.65	43	87177	9.65	ug/l	97
18) Methylene chloride	4.86	49	403861	10.40	ug/l	98
19) Carbon disulfide	4.89	76	974363	9.41	ug/l	99
20) Acrylonitrile	5.02	53	209223	49.77	ug/l	100
21) tert-Butyl methyl ether (M	5.07	73	486511	10.22	ug/l	100
22) trans-1,2-Dichloroethene	5.24	61	482107	10.33	ug/l	98
23) Isopropyl ether (DIPE)	5.66	45	1037346	10.41	ug/l	98
24) Vinyl acetate	5.82	43	357100	10.44	ug/l	99
25) 1,1-Dichloroethane	5.82	63	566566	10.39	ug/l	100
27) tert-Butyl ethyl ether (ET	6.24	59	761232	10.66	ug/l	100
28) 2-Butanone	6.41	43	266366	52.38	ug/l	100
29) 2,2-Dichloropropane	6.62	77	475647	10.37	ug/l	100
30) cis-1,2-Dichloroethene	6.68	96	387725	10.33	ug/l	99
31) Chloroform	6.90	83	545984	9.82	ug/l	99

(#) = qualifier out of range (m) = manual integration

5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D Vial: 2
Acq On : 13 May 2024 12:06 pm Operator: LPriet
Sample : IVO01E1102 1.0/5.0 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:24 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.14	49	230106	10.54	ug/l	98
33)	Tetrahydrofuran	7.20	42	33093	10.29	ug/l	97
35)	1,1,1-Trichloroethane	7.49	97	482510	10.37	ug/l	100
36)	Cyclohexane	7.52	84	477860	10.55	ug/l	100
38)	1,1-Dichloropropene	7.72	110	162485	10.28	ug/l	99
39)	Carbon tetrachloride	7.88	119	358693	10.35	ug/l	99
40)	tert-Amyl methyl ether (TA	7.88	73	562793	10.13	ug/l	100
42)	Benzene	8.13	78	1223803	10.09	ug/l	100
43)	1,2-Dichloroethane	8.10	62	252838	10.34	ug/l	99
44)	Trichloroethene	9.06	130	318416	10.15	ug/l	98
45)	Methylcyclohexane	9.15	83	511326	10.26	ug/l	99
46)	1,2-Dichloropropane	9.35	63	274499	10.12	ug/l	99
47)	Bromodichloromethane	9.72	83	371496	9.86	ug/l	99
48)	1,4-Dioxane	9.78	88	22815	205.36	ug/l	99
49)	Dibromomethane	9.82	93	132415	10.34	ug/l	98
50)	2-Chloroethyl vinyl ether	10.22	63	70329	10.21	ug/l	99
51)	4-Methyl-2-pentanone	10.26	43	657246	49.03	ug/l	100
52)	cis-1,3-Dichloropropene	10.62	75	433879	10.27	ug/l	100
55)	Toluene	11.15	91	1332719	9.91	ug/l	100
56)	Ethyl methacrylate	11.45	69	206172	10.21	ug/l	98
57)	trans-1,3-Dichloropropene	11.48	75	322019	10.30	ug/l	99
58)	1,1,2-Trichloroethane	11.75	97	178678	10.15	ug/l	99
59)	2-Hexanone	11.76	43	378200	47.36	ug/l	100
60)	1,3-Dichloropropane	12.19	76	304011	10.17	ug/l	100
61)	Tetrachloroethene	12.29	164	279605	10.00	ug/l	99
62)	Dibromochloromethane	12.66	129	216381	10.06	ug/l	100
63)	1,2-Dibromoethane	13.03	107	180319	10.35	ug/l	99
64)	1-Chlorohexane	13.30	91	595972	10.26	ug/l	100
65)	Chlorobenzene	13.78	112	806907	10.06	ug/l	100
66)	1,1,1,2-Tetrachloroethane	13.86	131	250367	10.14	ug/l	98
67)	Ethylbenzene	13.88	91	1533890	9.99	ug/l	100
68)	m-Xylene & p-Xylene	14.01	91	2274121	20.23	ug/l	100
69)	o-Xylene	14.83	91	1150973	9.95	ug/l	100
70)	Styrene	14.90	104	893787	9.97	ug/l	100
71)	Isopropylbenzene	15.51	105	1529556	10.04	ug/l	100
73)	Bromoform	15.55	173	112241	9.78	ug/l	97
74)	trans-1,4-Dichloro-2-buten	15.63	53	51511	10.28	ug/l	100
75)	1,1,2,2-Tetrachloroethane	15.85	83	191835	9.92	ug/l	98
77)	1,2,3-Trichloropropane	16.15	110	50167	10.14	ug/l	97
78)	n-Propylbenzene	16.29	91	1858212	9.84	ug/l	100
79)	Bromobenzene	16.38	156	298744	10.00	ug/l	99

(#) = qualifier out of range (m) = manual integration

SA 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D Vial: 2
Acq On : 13 May 2024 12:06 pm Operator: LPriet
Sample : IVO01E1102 1.0/5.0 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:24 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.61	105	1193060	9.88	ug/l	99
81)	2-Chlorotoluene	16.63	91	1138017	10.01	ug/l	100
82)	4-Chlorotoluene	16.72	91	1007192	10.00	ug/l	100
83)	tert-Butylbenzene	17.29	134	251948	9.95	ug/l	98
84)	1,2,4-Trimethylbenzene	17.35	105	1169308	9.90	ug/l	99
85)	sec-Butylbenzene	17.66	105	1653826	9.97	ug/l	100
86)	p-Isopropyltoluene	17.88	119	1252965	9.80	ug/l	100
87)	1,3-Dichlorobenzene	18.03	146	568580	10.01	ug/l	100
88)	1,2,3-Trimethylbenzene	18.13	105	1095079	9.93	ug/l	99
89)	1,4-Dichlorobenzene	18.19	146	550958	9.89	ug/l	100
90)	n-Butylbenzene	18.49	91	1315009	9.93	ug/l	100
91)	1,2-Dichlorobenzene	18.71	146	464758	9.99	ug/l	99
92)	1,2-Dibromo-3-chloropropan	19.72	157	27714	9.35	ug/l	99
93)	1,2,4-Trichlorobenzene	20.80	180	342507	10.08	ug/l	99
94)	Hexachlorobutadiene	20.96	225	201295	9.94	ug/l	98
95)	Naphthalene	21.14	128	404546	10.20	ug/l	100
96)	1,2,3-Trichlorobenzene	21.46	180	259547	10.14	ug/l	99

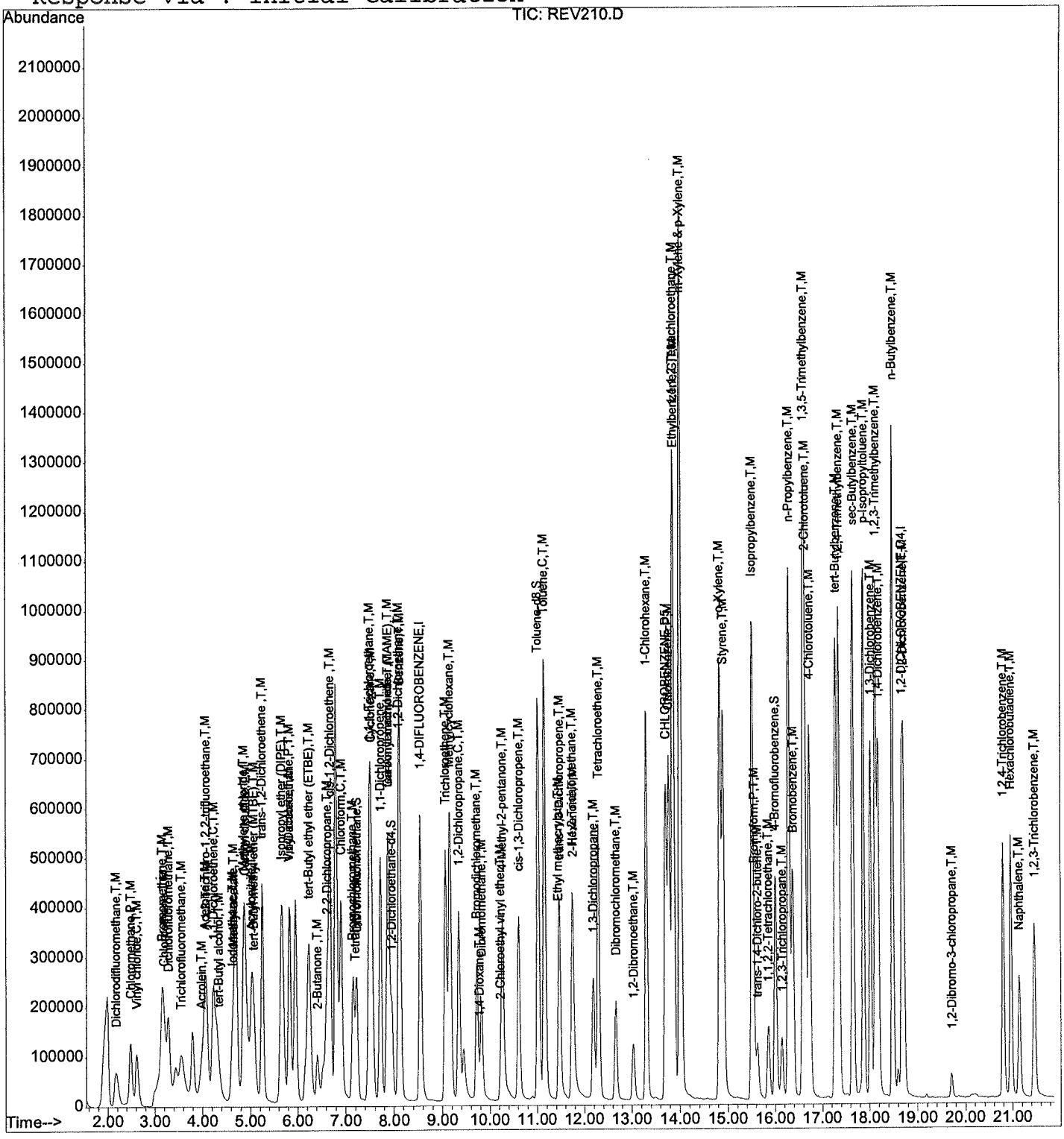
SA 5/15/24

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D Vial: 2
Acq On : 13 May 2024 12:06 pm Operator: LPriet
Sample : IVO01E1102 1.0/5.0 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:24 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



SV 5/15/24

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 : 24F032
Lab File ID: RFV111 BFB Injection Date: 06/07/24
Instrument ID: 01 BFB Injection Time: 14:0B

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	19.788
75	30 - 60% of mass 95	43.750
95	Base Peak, 100% relative abundance	100.000
96	5 - 9% of mass 95	7.054
173	Less than 2% of mass 174	0.000(0)1
174	Greater than 50% of mass 95	76.773
175	5 - 9% of mass 174	5.840(7.61)1
176	95 - 101% % of mass 174	73.769(96.09)1
177	5 - 9% % of mass 176	4.669(6.33)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	CV001E1120	RFV112	06/07/24	15:02
2	LCS1W	V001F05L	RFV113	06/07/24	15:31
3	LCD1W	V001F05C	RFV114	06/07/24	16:01
4	MBLK1W	V001F05B	RFV116	06/07/24	17:01
5	TB06-GW060624	24F032-04	RFV11B	06/07/24	1B:01
6	MW43-GW060624-31B	24F032-03N	RFV124	06/07/24	21:02
7	MW43-GW060624-29B	24F032-02N	RFV125	06/07/24	21:32
8	EB05-GW060624	24F032-01	RFV127	06/07/24	22:30

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: EMAX Laboratories, Inc.
Lab Code: EMAX
Lab File ID: REV201
Instrument ID: 01

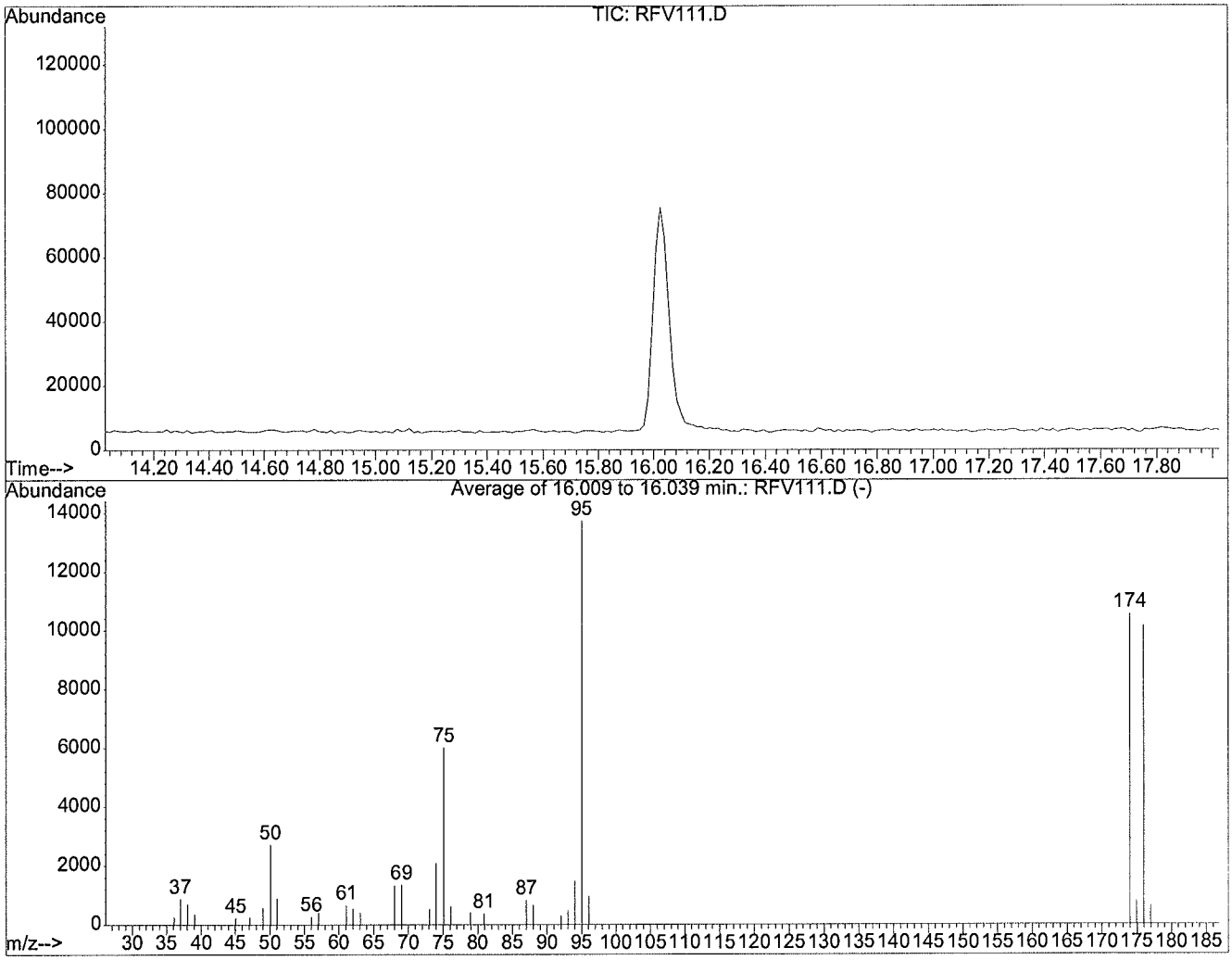
Project: VA SALT LAKE CITY
SDG No: 24F032
Date Analyzed: 05/11/24
Time Analyzed: 13:28

INTERNAL STANDARD (IS)	1,4-DIFLUOROBENZENE		CHLOROBENZENE-D5		1,2-DICHLOROBENZENE-D4	
	Area #	RT #	Area #	RT #	Area #	RT #
12 HOUR STD	920983	8.54	742213	13.71	284055	18.68
UPPER LIMIT	1841966	8.71	1484426	13.88	568110	18.85
LOWER LIMIT	460492	8.37	371107	13.54	142028	18.51
	Area #	RT #	Area #	RT #	Area #	RT #
1 VSTD10	713127	8.56	583969	13.73	242603	18.69
2 LCS1W	741911	8.56	607937	13.71	244510	18.69
3 LCD1W	741693	8.56	603217	13.73	261963	18.69
4 MBLK1W	753642	8.56	624758	13.73	249854	18.69
5 T806-GW060624	727246	8.56	599026	13.73	244290	18.69
6 MW43-GW060624-318	685929	8.56	563413	13.73	244587	18.69
7 MW43-GW060624-298	684023	8.56	563537	13.73	261982	18.69
8 E805-GW060624	682582	8.56	558366	13.71	246968	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\24F07\RFV111.D
Acq On : 7 Jun 2024 2:08 pm
Sample : BFB01F05
Misc : T/CHK
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls

Vial: 1
Operator: LPriet
Inst : 01
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	19.8	2721	PASS
75	95	30	60	43.7	6016	PASS
95	95	100	100	100.0	13751	PASS
96	95	5	9	7.1	970	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	76.8	10557	PASS
175	174	5	9	7.6	803	PASS
176	174	95	101	96.1	10144	PASS
177	176	5	9	6.3	642	PASS

RFV111.D VO01E11.M Wed Jun 12 18:53:09 2024

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F07\RFV112.D Vial: 2
Acq On : 7 Jun 2024 3:02 pm Operator: LPriet
Sample : CVO01E1120 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	77	0.02
2	T,M	Chlorotrifluoroethylene	-1.000	0.000	0.0	0	-2.08#
3	T,M	Dichlorodifluoromethane	10.000	10.883	-8.8	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	9.325	6.8	78	0.03
6	C,T,M	Vinyl chloride	10.000	11.043	-10.4	86	0.01
7	T,M	Bromomethane	10.000	9.493	5.1	83	0.03
8	T,M	Chloroethane	10.000	11.302	-13.0	94	0.03
9	T,M	Dichlorofluoromethane	10.000	9.985	0.2	85	0.01
10	T,M	Trichlorofluoromethane	10.000	10.970	-9.7	90	0.01
11	T,M	Acrolein	50.000	32.958	34.1#	58	0.01
12	T,M	1,1,2-Trichloro-1,2,2-trifl	10.000	11.276	-12.8	88	0.03
13	T,M	Acetone	50.000	50.636	-1.3	93	0.00
14	C,T,M	1,1-Dichloroethene	10.000	10.498	-5.0	84	0.01
15	T,M	tert-Butyl alcohol	250.000	216.006	13.6	74	0.01
16	T,M	Iodomethane	10.000	10.084	-0.8	82	0.01
17	T,M	Methyl acetate	10.000	11.185	-11.9	103	0.01
18	T,M	Methylene chloride	10.000	10.576	-5.8	88	0.01
19	T,M	Carbon disulfide	10.000	10.511	-5.1	87	0.01
20	T,M	Acrylonitrile	50.000	49.338	1.3	83	0.01
21	T,M	tert-Butyl methyl ether (MT	10.000	9.470	5.3	81	0.00
22	T,M	trans-1,2-Dichloroethene	10.000	10.272	-2.7	86	0.01
23	T,M	Isopropyl ether (DIPE)	10.000	10.340	-3.4	86	0.00
24	T,M	Vinyl acetate	10.000	8.811	11.9	75	0.01
25	P,T,M	1,1-Dichloroethane	10.000	10.397	-4.0	86	0.01
26	T,M	2-Butanol	250.000	0.000	100.0#	0	0.00
27	T,M	tert-Butyl ethyl ether (ETB	10.000	9.682	3.2	81	0.01
28	T,M	2-Butanone	50.000	51.219	-2.4	84	0.01
29	T,M	2,2-Dichloropropane	10.000	10.142	-1.4	83	0.01
30	T,M	cis-1,2-Dichloroethene	10.000	9.906	0.9	80	0.01
31	C,T,M	Chloroform	10.000	10.659	-6.6	92	0.01
32	T,M	Bromochloromethane	10.000	10.550	-5.5	88	0.01
33	T,M	Tetrahydrofuran	10.000	9.296	7.0	86	0.00
34	S	Dibromofluoromethane	10.000	9.895	1.1	84	0.00
35	T,M	1,1,1-Trichloroethane	10.000	10.513	-5.1	86	0.01
36	T,M	Cyclohexane	10.000	10.127	-1.3	86	0.01
37	T,M	2,2,4-Trimethylpentane	10.000	0.000	100.0#	0	0.01
38	T,M	1,1-Dichloropropene	10.000	9.170	8.3	76	0.01
39	T,M	Carbon tetrachloride	10.000	10.621	-6.2	86	0.00
40	T,M	tert-Amyl methyl ether (TAM	10.000	8.776	12.2	77	0.01
41	S	1,2-Dichloroethane-d4	10.000	10.996	-10.0	97	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F07\RFV112.D Vial: 2
Acq On : 7 Jun 2024 3:02 pm Operator: LPriet
Sample : CVO01E1120 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	10.163	-1.6	84	0.00
43	T,M	1,2-Dichloroethane	10.000	11.233	-12.3	94	0.01
44	T,M	Trichloroethene	10.000	9.670	3.3	77	0.02
45	T,M	Methylcyclohexane	10.000	10.173	-1.7	88	0.00
46	C,T,M	1,2-Dichloropropane	10.000	10.002	-0.0	83	0.02
47	T,M	Bromodichloromethane	10.000	10.480	-4.8	91	0.00
48	T,M	1,4-Dioxane	200.000	176.204	11.9	77	0.00
49	T,M	Dibromomethane	10.000	10.554	-5.5	91	0.00
50	T,M	2-Chloroethyl vinyl ether	10.000	10.411	-4.1	88	0.00
51	T,M	4-Methyl-2-pentanone	50.000	49.346	1.3	88	0.02
52	T,M	cis-1,3-Dichloropropene	10.000	9.823	1.8	82	0.00
53	I	CHLOROBENZENE-D5	10.000	10.000	0.0	79	0.01
54	S	Toluene-d8	10.000	9.948	0.5	84	0.00
55	C,T,M	Toluene	10.000	9.980	0.2	82	0.00
56	T,M	Ethyl methacrylate	10.000	9.590	4.1	82	0.00
57	T,M	trans-1,3-Dichloropropene	10.000	9.791	2.1	82	0.01
58	T,M	1,1,2-Trichloroethane	10.000	9.850	1.5	83	0.01
59	T,M	2-Hexanone	50.000	45.870	8.3	84	0.01
60	T,M	1,3-Dichloropropane	10.000	10.396	-4.0	88	0.01
61	T,M	Tetrachloroethene	10.000	9.925	0.7	80	0.01
62	T,M	Dibromochloromethane	10.000	9.800	2.0	84	0.01
63	T,M	1,2-Dibromoethane	10.000	9.498	5.0	80	0.00
64	T,M	1-Chlorohexane	10.000	9.880	1.2	80	0.01
65	P,M	Chlorobenzene	10.000	9.561	4.4	78	0.00
66	T,M	1,1,1,2-Tetrachloroethane	10.000	10.242	-2.4	84	0.01
67	C,T,M	Ethylbenzene	10.000	10.249	-2.5	82	0.01
68	T,M	m-Xylene & p-Xylene	20.000	20.994	-5.0	86	0.01
69	T,M	o-Xylene	10.000	10.042	-0.4	83	0.00
70	T,M	Styrene	10.000	9.672	3.3	79	0.01
71	T,M	Isopropylbenzene	10.000	9.831	1.7	79	0.01
72	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	85	0.01
73	P,T,M	Bromoform	10.000	8.838	11.6	88	0.01
74	T,M	trans-1,4-Dichloro-2-butene	10.000	8.758	12.4	83	0.01
75	T,M	1,1,2,2-Tetrachloroethane	10.000	8.947	10.5	86	0.00
76	S	4-Bromofluorobenzene	10.000	9.631	3.7	91	0.00
77	T,M	1,2,3-Trichloropropane	10.000	9.035	9.6	83	0.01
78	T,M	n-Propylbenzene	10.000	9.259	7.4	82	0.01
79	T,M	Bromobenzene	10.000	9.444	5.6	84	0.01
80	T,M	1,3,5-Trimethylbenzene	10.000	8.934	10.7	79	0.01

(#) = Out of Range

Data File : D:\HPCHEM\1\DATA\24F07\RFV112.D Vial: 2
Acq On : 7 Jun 2024 3:02 pm Operator: LPriet
Sample : CVO01E1120 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	9.518	4.8	85	0.01
82	T,M	4-Chlorotoluene	10.000	9.576	4.2	84	0.01
83	T,M	tert-Butylbenzene	10.000	9.034	9.7	80	0.01
84	T,M	1,2,4-Trimethylbenzene	10.000	8.923	10.8	78	0.00
85	T,M	sec-Butylbenzene	10.000	9.111	8.9	80	0.01
86	T,M	p-Isopropyltoluene	10.000	9.039	9.6	80	0.00
87	T,M	1,3-Dichlorobenzene	10.000	9.514	4.9	85	0.01
88	T,M	1,2,3-Trimethylbenzene	10.000	9.298	7.0	84	0.01
89	T,M	1,4-Dichlorobenzene	10.000	9.355	6.4	84	0.01
90	T,M	n-Butylbenzene	10.000	9.437	5.6	83	0.01
91	T,M	1,2-Dichlorobenzene	10.000	9.430	5.7	86	0.00
92	T,M	1,2-Dibromo-3-chloropropane	10.000	8.252	17.5	85	0.01
93	T,M	1,2,4-Trichlorobenzene	10.000	9.007	9.9	81	0.01
94	T,M	Hexachlorobutadiene	10.000	9.034	9.7	77	0.03
95	T,M	Naphthalene	10.000	8.594	14.1	79	0.03
96	T,M	1,2,3-Trichlorobenzene	10.000	9.000	10.0	81	0.01

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F07\RFV112.D Vial: 2
Acq On : 7 Jun 2024 3:02 pm Operator: LPriet
Sample : CVO01E1120 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	77	0.02
2	T,M	Chlorotrifluoroethylene	0.000	0.000	0.0	0#	-2.08#
3	T,M	Dichlorodifluoromethane	0.268	0.291	-8.6	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	0.375	0.349	6.9	78	0.03
6	C,T,M	Vinyl chloride	0.312	0.345	-10.6	86	0.01
7	T,M	Bromomethane	0.396	0.351	11.4	83	0.03
8	T,M	Chloroethane	0.226	0.256	-13.3	94	0.03
9	T,M	Dichlorofluoromethane	0.643	0.642	0.2	85	0.01
10	T,M	Trichlorofluoromethane	0.422	0.463	-9.7	90	0.01
11	T,M	Acrolein	0.022	0.015	31.8#	58	0.01
12	T,M	1,1,2-Trichloro-1,2,2-trifl	0.211	0.238	-12.8	88	0.03
13	T,M	Acetone	0.037	0.037	0.0	93	0.00
14	C,T,M	1,1-Dichloroethene	0.533	0.560	-5.1	84	0.01
15	T,M	tert-Butyl alcohol	0.011	0.010	9.1	74	0.01
16	T,M	Iodomethane	0.572	0.577	-0.9	82	0.01
17	T,M	Methyl acetate	0.100	0.111	-11.0	103	0.01
18	T,M	Methylene chloride	0.428	0.453	-5.8	88	0.01
19	T,M	Carbon disulfide	1.140	1.199	-5.2	87	0.01
20	T,M	Acrylonitrile	0.046	0.046	0.0	83	0.01
21	T,M	tert-Butyl methyl ether (MT	0.525	0.497	5.3	81	0.00
22	T,M	trans-1,2-Dichloroethene	0.514	0.528	-2.7	86	0.01
23	T,M	Isopropyl ether (DIPE)	1.098	1.135	-3.4	86	0.00
24	T,M	Vinyl acetate	0.377	0.332	11.9	75	0.01
25	P,T,M	1,1-Dichloroethane	0.601	0.625	-4.0	86	0.01
26	T,M	2-Butanol	0.000	0.009	0.0	0#	0.00
27	T,M	tert-Butyl ethyl ether (ETB	0.787	0.762	3.2	81	0.01
28	T,M	2-Butanone	0.056	0.057	-1.8	84	0.01
29	T,M	2,2-Dichloropropane	0.505	0.512	-1.4	83	0.01
30	T,M	cis-1,2-Dichloroethene	0.414	0.410	1.0	80	0.01
31	C,T,M	Chloroform	0.612	0.653	-6.7	92	0.01
32	T,M	Bromochloromethane	0.240	0.254	-5.8	88	0.01
33	T,M	Tetrahydrofuran	0.035	0.033	5.7	86	0.00
34	S	Dibromofluoromethane	0.310	0.306	1.3	84	0.00
35	T,M	1,1,1-Trichloroethane	0.512	0.539	-5.3	86	0.01
36	T,M	Cyclohexane	0.499	0.505	-1.2	86	0.01
37	T,M	2,2,4-Trimethylpentane	0.000	0.024	0.0	0#	0.01
38	T,M	1,1-Dichloropropene	0.174	0.160	8.0	76	0.01
39	T,M	Carbon tetrachloride	0.382	0.405	-6.0	86	0.00
40	T,M	tert-Amyl methyl ether (TAM	0.612	0.537	12.3	77	0.01
41	S	1,2-Dichloroethane-d4	0.211	0.232	-10.0	97	0.00

(#) = Out of Range

Data File : D:\HPCHEM\1\DATA\24F07\RFV112.D Vial: 2
Acq On : 7 Jun 2024 3:02 pm Operator: LPriet
Sample : CVO01E1120 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	1.336	1.358	-1.6	84	0.00
43	T,M	1,2-Dichloroethane	0.269	0.303	-12.6	94	0.01
44	T,M	Trichloroethene	0.346	0.334	3.5	77	0.02
45	T,M	Methylcyclohexane	0.549	0.558	-1.6	88	0.00
46	C,T,M	1,2-Dichloropropane	0.299	0.299	0.0	83	0.02
47	T,M	Bromodichloromethane	0.415	0.435	-4.8	91	0.00
48	T,M	1,4-Dioxane	0.001	0.001	0.0	77	0.00
49	T,M	Dibromomethane	0.141	0.149	-5.7	91	0.00
50	T,M	2-Chloroethyl vinyl ether	0.076	0.079	-3.9	88	0.00
51	T,M	4-Methyl-2-pentanone	0.136	0.146	-7.4	88	0.02
52	T,M	cis-1,3-Dichloropropene	0.465	0.457	1.7	82	0.00
53	I	CHLOROBENZENE-D5	1.000	1.000	0.0	79	0.01
54	S	Toluene-d8	1.499	1.491	0.5	84	0.00
55	C,T,M	Toluene	1.776	1.772	0.2	82	0.00
56	T,M	Ethyl methacrylate	0.266	0.256	3.8	82	0.00
57	T,M	trans-1,3-Dichloropropene	0.413	0.404	2.2	82	0.01
58	T,M	1,1,2-Trichloroethane	0.233	0.229	1.7	83	0.01
59	T,M	2-Hexanone	0.090	0.096	-6.7	84	0.01
60	T,M	1,3-Dichloropropane	0.395	0.410	-3.8	88	0.01
61	T,M	Tetrachloroethene	0.369	0.366	0.8	80	0.01
62	T,M	Dibromochloromethane	0.284	0.278	2.1	84	0.01
63	T,M	1,2-Dibromoethane	0.230	0.218	5.2	80	0.00
64	T,M	1-Chlorohexane	0.767	0.758	1.2	80	0.01
65	P,M	Chlorobenzene	1.059	1.012	4.4	78	0.00
66	T,M	1,1,1,2-Tetrachloroethane	0.326	0.334	-2.5	84	0.01
67	C,T,M	Ethylbenzene	2.027	2.077	-2.5	82	0.01
68	T,M	m-Xylene & p-Xylene	1.484	1.557	-4.9	86	0.01
69	T,M	o-Xylene	1.527	1.533	-0.4	83	0.00
70	T,M	Styrene	1.184	1.145	3.3	79	0.01
71	T,M	Isopropylbenzene	2.012	1.978	1.7	79	0.01
72	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	85	0.01
73	P,T,M	Bromoform	0.350	0.348	0.6	88	0.01
74	T,M	trans-1,4-Dichloro-2-butene	0.173	0.151	12.7	83	0.01
75	T,M	1,1,2,2-Tetrachloroethane	0.666	0.596	10.5	86	0.00
76	S	4-Bromofluorobenzene	1.362	1.312	3.7	91	0.00
77	T,M	1,2,3-Trichloropropane	0.170	0.154	9.4	83	0.01
78	T,M	n-Propylbenzene	6.502	6.020	7.4	82	0.01
79	T,M	Bromobenzene	1.029	0.971	5.6	84	0.01
80	T,M	1,3,5-Trimethylbenzene	4.155	3.712	10.7	79	0.01

(#) = Out of Range

Data File : D:\HPCHEM\1\DATA\24F07\RFV112.D Vial: 2
Acq On : 7 Jun 2024 3:02 pm Operator: LPriet
Sample : CVO01E1120 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	3.915	3.726	4.8	85	0.01
82	T,M	4-Chlorotoluene	3.466	3.319	4.2	84	0.01
83	T,M	tert-Butylbenzene	0.871	0.787	9.6	80	0.01
84	T,M	1,2,4-Trimethylbenzene	4.065	3.627	10.8	78	0.00
85	T,M	sec-Butylbenzene	5.711	5.203	8.9	80	0.01
86	T,M	p-Isopropyltoluene	4.403	3.980	9.6	80	0.00
87	T,M	1,3-Dichlorobenzene	1.955	1.860	4.9	85	0.01
88	T,M	1,2,3-Trimethylbenzene	3.795	3.528	7.0	84	0.01
89	T,M	1,4-Dichlorobenzene	1.916	1.793	6.4	84	0.01
90	T,M	n-Butylbenzene	4.560	4.303	5.6	83	0.01
91	T,M	1,2-Dichlorobenzene	1.602	1.510	5.7	86	0.00
92	T,M	1,2-Dibromo-3-chloropropane	0.095	0.084	11.6	85	0.01
93	T,M	1,2,4-Trichlorobenzene	1.169	1.053	9.9	81	0.01
94	T,M	Hexachlorobutadiene	0.697	0.629	9.8	77	0.03
95	T,M	Naphthalene	1.365	1.173	14.1	79	0.03
96	T,M	1,2,3-Trichlorobenzene	0.881	0.793	10.0	81	0.01

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F07\RFV112.D Vial: 2
Acq On : 7 Jun 2024 3:02 pm Operator: LPriet
Sample : CVO01E1120 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 7 15:24 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	713127	10.00	ug/l	0.02
53) CHLOROBENZENE-D5	13.73	117	583969	10.00	ug/l	0.01
72) 1,2-DICHLOROBENZENE-D4	18.69	152	242603	10.00	ug/l	0.01
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	218422	9.90	ug/l	0.00
Spiked Amount 10.000			Recovery =	99.00%		
41) 1,2-Dichloroethane-d4	7.97	65	165537	11.00	ug/l	0.00
Spiked Amount 10.000			Recovery =	110.00%		
54) Toluene-d8	11.03	98	870617	9.95	ug/l	0.00
Spiked Amount 10.000			Recovery =	99.50%		
76) 4-Bromofluorobenzene	16.01	95	318233	9.63	ug/l	0.00
Spiked Amount 10.000			Recovery =	96.30%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.18	85	207677	10.88	ug/l	100
5) Chloromethane	2.49	50	249124	9.32	ug/l	100
6) Vinyl chloride	2.62	62	245724	11.04	ug/l	98
7) Bromomethane	3.17	94	250633	9.49	ug/l	99
8) Chloroethane	3.21	64	182425	11.30	ug/l	95
9) Dichlorofluoromethane	3.29	67	457720	9.98	ug/l	86
10) Trichlorofluoromethane	3.57	101	330228	10.97	ug/l	99
11) Acrolein	4.00	56	52792	32.96	ug/l	94
12) 1,1,2-Trichloro-1,2,2-trif	4.09	151	169644	11.28	ug/l	99
13) Acetone	4.06	43	131804	50.64	ug/l	91
14) 1,1-Dichloroethene	4.23	61	399275	10.50	ug/l	96
15) tert-Butyl alcohol	4.35	59	171478	216.01	ug/l	71
16) Iodomethane	4.65	142	411208	10.08	ug/l	98
17) Methyl acetate	4.66	43	79388	11.19	ug/l	99
18) Methylene chloride	4.87	49	322724	10.58	ug/l	96
19) Carbon disulfide	4.89	76	854838	10.51	ug/l	100
20) Acrylonitrile	5.03	53	162927	49.34	ug/l	98
21) tert-Butyl methyl ether (M	5.06	73	354235	9.47	ug/l	93
22) trans-1,2-Dichloroethene	5.26	61	376407	10.27	ug/l	95
23) Isopropyl ether (DIPE)	5.67	45	809618	10.34	ug/l	96
24) Vinyl acetate	5.83	43	236827	8.81	ug/l	98
25) 1,1-Dichloroethane	5.83	63	445521	10.40	ug/l	99
27) tert-Butyl ethyl ether (ET	6.25	59	543160	9.68	ug/l	99
28) 2-Butanone	6.43	43	204579	51.22	ug/l	99
29) 2,2-Dichloropropane	6.63	77	365403	10.14	ug/l	98
30) cis-1,2-Dichloroethene	6.69	96	292187	9.91	ug/l	95
31) Chloroform	6.91	83	465507	10.66	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F07\RFV112.D Vial: 2
Acq On : 7 Jun 2024 3:02 pm Operator: LPriet
Sample : CVO01E1120 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 7 15:24 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.15	49	180937	10.55	ug/l	95
33)	Tetrahydrofuran	7.20	42	23485	9.30	ug/l	89
35)	1,1,1-Trichloroethane	7.51	97	384093	10.51	ug/l	97
36)	Cyclohexane	7.54	84	360369	10.13	ug/l	99
38)	1,1-Dichloropropene	7.73	110	113883	9.17	ug/l	99
39)	Carbon tetrachloride	7.88	119	289066	10.62	ug/l	100
40)	tert-Amyl methyl ether (TA	7.89	73	383084	8.78	ug/l	99
42)	Benzene	8.13	78	968286	10.16	ug/l	99
43)	1,2-Dichloroethane	8.11	62	215816	11.23	ug/l	100
44)	Trichloroethene	9.08	130	238284	9.67	ug/l	95
45)	Methylcyclohexane	9.17	83	398262	10.17	ug/l	98
46)	1,2-Dichloropropane	9.36	63	213206	10.00	ug/l	95
47)	Bromodichloromethane	9.73	83	310086	10.48	ug/l	99
48)	1,4-Dioxane	9.79	88	15377	176.20	ug/l	94
49)	Dibromomethane	9.82	93	106116	10.55	ug/l	93
50)	2-Chloroethyl vinyl ether	10.23	63	56321	10.41	ug/l	97
51)	4-Methyl-2-pentanone	10.28	43	519752	49.35	ug/l	96
52)	cis-1,3-Dichloropropene	10.62	75	325863	9.82	ug/l	96
55)	Toluene	11.17	91	1034992	9.98	ug/l	99
56)	Ethyl methacrylate	11.46	69	149240	9.59	ug/l	90
57)	trans-1,3-Dichloropropene	11.49	75	236022	9.79	ug/l	95
58)	1,1,2-Trichloroethane	11.76	97	133745	9.85	ug/l	98
59)	2-Hexanone	11.77	43	281314	45.87	ug/l	94
60)	1,3-Dichloropropane	12.20	76	239590	10.40	ug/l	100
61)	Tetrachloroethene	12.31	164	213949	9.92	ug/l	99
62)	Dibromochloromethane	12.68	129	162444	9.80	ug/l	99
63)	1,2-Dibromoethane	13.03	107	127573	9.50	ug/l	99
64)	1-Chlorohexane	13.31	91	442432	9.88	ug/l	99
65)	Chlorobenzene	13.79	112	591123	9.56	ug/l	99
66)	1,1,1,2-Tetrachloroethane	13.88	131	195034	10.24	ug/l	99
67)	Ethylbenzene	13.89	91	1213062	10.25	ug/l	96
68)	m-Xylene & p-Xylene	14.02	91	1819000	20.99	ug/l	95
69)	o-Xylene	14.84	91	895483	10.04	ug/l	96
70)	Styrene	14.91	104	668600	9.67	ug/l	97
71)	Isopropylbenzene	15.54	105	1155022	9.83	ug/l	99
73)	Bromoform	15.56	173	84369	8.84	ug/l	97
74)	trans-1,4-Dichloro-2-buten	15.64	53	36655	8.76	ug/l	88
75)	1,1,2,2-Tetrachloroethane	15.86	83	144499	8.95	ug/l	99
77)	1,2,3-Trichloropropane	16.16	110	37329	9.03	ug/l	93
78)	n-Propylbenzene	16.31	91	1460430	9.26	ug/l	97
79)	Bromobenzene	16.39	156	235676	9.44	ug/l	100

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24F07\RFV112.D Vial: 2
Acq On : 7 Jun 2024 3:02 pm Operator: LPriet
Sample : CVO01E1120 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 7 15:24 2024 Quant Results File: VO01E11.RES

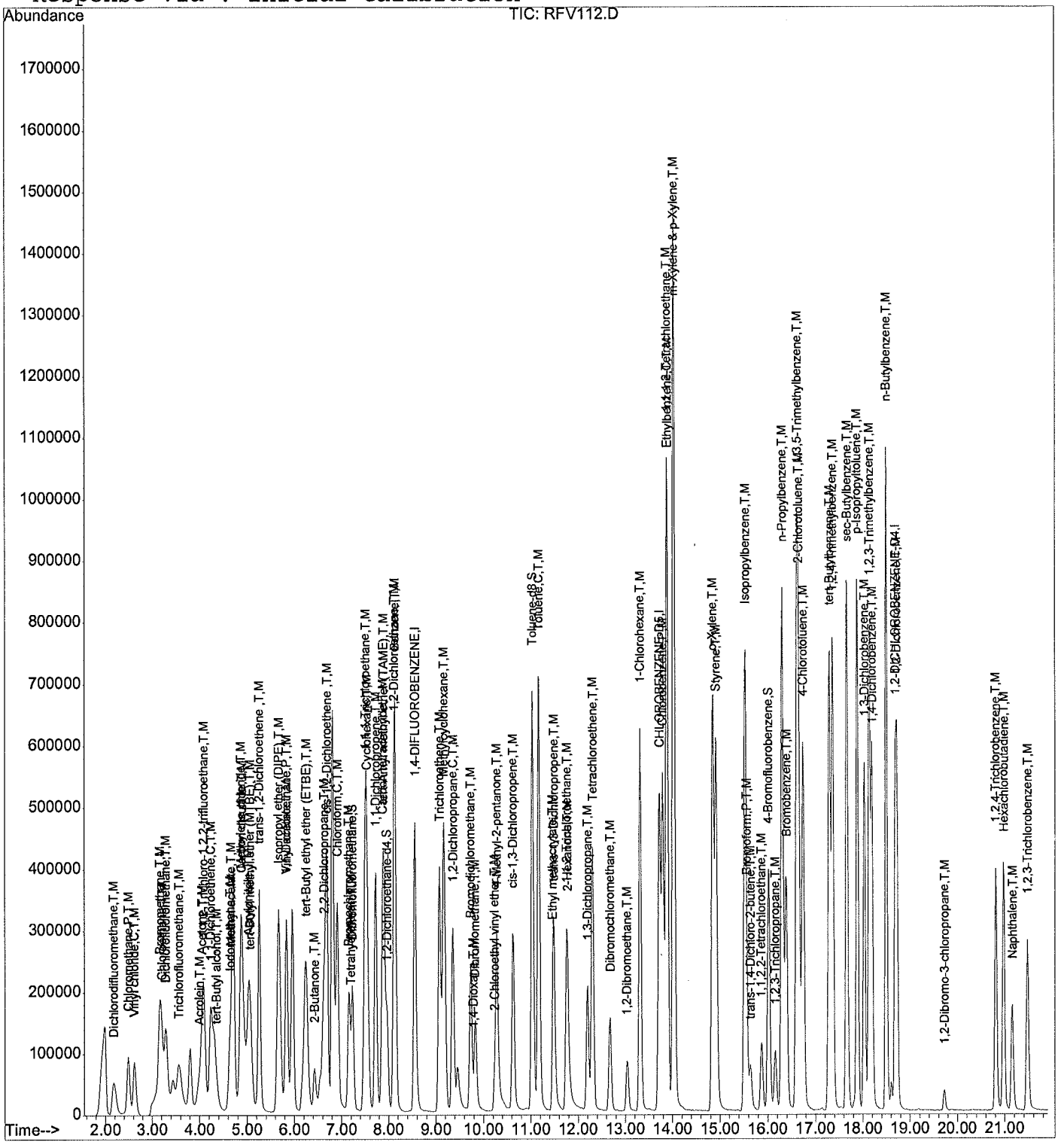
Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.62	105	900445	8.93	ug/l	99
81)	2-Chlorotoluene	16.65	91	903965	9.52	ug/l	97
82)	4-Chlorotoluene	16.73	91	805148	9.58	ug/l	97
83)	tert-Butylbenzene	17.30	134	190999	9.03	ug/l	94
84)	1,2,4-Trimethylbenzene	17.36	105	879989	8.92	ug/l	99
85)	sec-Butylbenzene	17.67	105	1262219	9.11	ug/l	99
86)	p-Isopropyltoluene	17.88	119	965492	9.04	ug/l	97
87)	1,3-Dichlorobenzene	18.04	146	451149	9.51	ug/l	98
88)	1,2,3-Trimethylbenzene	18.14	105	855980	9.30	ug/l	99
89)	1,4-Dichlorobenzene	18.20	146	434976	9.36	ug/l	99
90)	n-Butylbenzene	18.50	91	1043962	9.44	ug/l	98
91)	1,2-Dichlorobenzene	18.72	146	366434	9.43	ug/l	98
92)	1,2-Dibromo-3-chloropropan	19.73	157	20258	8.25	ug/l	97
93)	1,2,4-Trichlorobenzene	20.81	180	255531	9.01	ug/l	99
94)	Hexachlorobutadiene	20.98	225	152679	9.03	ug/l	98
95)	Naphthalene	21.16	128	284556	8.59	ug/l	99
96)	1,2,3-Trichlorobenzene	21.47	180	192341	9.00	ug/l	100

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24F07\RFV112.D Vial: 2
Acq On : 7 Jun 2024 3:02 pm Operator: LPriet
Sample : CVO01E1120 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 7 15:24 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



ANALYTICAL LOG(S)

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

Book #:	A01-076
Instrument No.:	01
Analytical Sequence:	24E11
Method File:	V001E11
Analytical Batch:	V001E116

SOP #
☑ EMAX-8260 Rev. No. 10
☐ EMAX-8260C Rev. No. 1
☐ EMAX-8260SIM Rev. No. 1
☐ EMAX-M8260SIM 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	5/11/24		
ICAL ID	V001 E11		
STANDARDS			
NAME	ID	Amount (µl)	Conc. (mg/L)
DCC CS2 GAS	SVI-43-90-03 -90-02	*	250 250
DCC 4ADD	-95-02		250
DCC 8260	-86-01		50
DCC KET	-93-03		250
BFB	-38-02	1	50
IS/SURR. IS SS	-94-03 -87-01	1 *	250 250
ICV/LCS CS2 GAS	-79-02 -94-01	1 1	250 250
ICV/LCS 4ADD	-64-03	5	50
ICV/LCS 8260	-78-03	5	50
ICV/LCS KET	-94-02	5	250
Data File Folder	24E11		
	LOT #	Syringe Lot #	
pH strip	N/A	MSV-03-04-12-4	
Chlorine strip	↓	-04-12-6	
Methanol		-03-23	
$NaHSO_4$		-02-24	
Reagent Water	RW4-23-001		
Sand			

ELECTRONIC DATA ARCHIVAL	
Location	Date
HPCHEM_VOA/TO01	

Analyzed By: LAP
Date: 5/11/24
Disposed By: LAP
Date Disposed: 5/13/24

Injection Log

Directory: D:\HPCHEM\1\DATA\24E11

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	REV195.D	1.	BFB01E11	T/CHK	11 May 2024 10:20
2	2	REV196.D	1.	VO01E111 0.03/0.15	0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA	11 May 2024 10:58
3	3	REV197.D	1.	VO01E112 0.05/0.25	0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA	11 May 2024 11:27
4	4	REV198.D	1.	VO01E113 0.1/0.5	1ppb 8260/5ppb KET-AA/25ppb TBA	11 May 2024 11:56
5	5	REV199.D	1.	VO01E114 0.2/1.0	2ppb 8260/10ppb KET-AA/50ppb TBA	11 May 2024 12:30
6	6	REV200.D	1.	VO01E115 0.5/2.5	5ppb 8260/25ppb KET-AA/125ppb TBA	11 May 2024 12:59
7	7	REV201.D	1.	VO01E116 1.0/5.0	10ppb 8260/50ppb KET-AA/250ppb TBA	11 May 2024 13:28
8	8	REV202.D	1.	VO01E117 2.0/10	20ppb 8260/100ppb KET-AA/500ppb TBA	11 May 2024 13:58
9	9	REV203.D	1.	VO01E118 3.0/15	30ppb 8260/150ppb KET-AA/750ppb TBA	11 May 2024 14:27
10	10	REV204.D	1.	VO01E119 5.0/25	50ppb 8260/250ppb KET-AA/1250ppb TBA	11 May 2024 14:56
11	11	REV205.D	1.	VO01DE1110 10/50	100ppb 8260/500ppb KET-AA/2500ppb TBA	11 May 2024 15:26
12	12	REV206.D	1.	RINSE		11 May 2024 15:55
13	13	REV207.D	1.	RINSE		11 May 2024 16:24
14	14	REV208.D	1.	IVO01E1101 1.0/5.0 Bromoform %Rv	10ppb 8260/50ppb KET-AA/250ppb TBA	11 May 2024 16:53

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

Book #:	A01-076
Instrument No.:	01
Analytical Sequence:	24E13
Method File:	V001E11
Analytical Batch:	V001E1102

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	5/11/24		
ICAL ID	V001 E11		
STANDARDS			
NAME	ID	Amount (µl)	Conc. (mg/L)
DCC			
DCC			
DCC			
DCC			
BFB	SV1-43-50-02	1	50
IS/SURR. IS	-94-03	1	250
IS/SURR. SS	-07-01	1	250
ICV/LCS CS2	-79-02	1	250
ICV/LCS GAS	-94-01	1	250
ICV/LCS 5ADD	-69-03	5	50
ICV/LCS 8260	-70-03	5	50
ICV/LCS KET	-94-02	5	250
Data File Folder	24E13		
	LOT #	Syringe Lot #	
pH strip	N/A	MSV-03-04-12-6	
Chlorine strip	↓	↓ -12-4	
Methanol			
$NaHSO_4$			
Reagent Water	RW4-23-001		
Sand			

ELECTRONIC DATA ARCHIVAL	
Location	Date
HPCHEM_VOA/TO01	

Analyzed By: LAP
Date: 6/13/24
Disposed By: LAP
Date Disposed: 5/14/24

Injection Log

Directory: D:\HPCHEM\1\DATA\24E13

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	REV209.D	1.	BFB01E12	T/CHK	13 May 2024 11:31
2	2	REV210.D	1.	IVO01E1102 1.0/5.0	10ppb 8260/50ppb KET-AA/250ppb TBA	13 May 2024 12:06
3	1	REV211.D	1.	BFB01E13	T/CHK	13 May 2024 12:45
4	2	REV212.D	1.	CVO01E1101	10ppb 8260/50ppb KET-AA/250ppb TBA	13 May 2024 13:17
5	3	REV213.D	1.	VO01E13L	10ppb 8260/50ppb KET-AA/250ppb TBA	13 May 2024 13:48
6	4	REV214.D	1.	VO01E13C	10ppb 8260/50ppb KET-AA/250ppb TBA	13 May 2024 14:17
7	5	REV215.D	1.	RINSE		13 May 2024 14:47
8	6	REV216.D	1.	VO01E13B	25mL	13 May 2024 15:17
9	7	REV217.D	1.	24E021-01	25mL	13 May 2024 15:46
10	8	REV218.D	1.	24E021-11	25mL	13 May 2024 16:16
11	9	REV219.D	1.	24E072-05	25mL	13 May 2024 16:45
12	10	REV220.D	1.	24E021-04	25mL	13 May 2024 17:15
13	11	REV221.D	1.	24E021-05	25mL	13 May 2024 17:45
14	12	REV222.D	1.	24E021-06	25mL	13 May 2024 18:14
15	13	REV223.D	1.	24E021-07	25mL	13 May 2024 18:43
16	14	REV224.D	1.	24E021-08	25mL	13 May 2024 19:12
17	15	REV225.D	1.	24E021-09	25mL	13 May 2024 19:41
18	16	REV226.D	1.	24E021-10	25mL	13 May 2024 20:10
19	17	REV227.D	1.	24E021-12	25mL	13 May 2024 20:40
20	18	REV228.D	1.	24E021-14	25mL	13 May 2024 21:09
21	19	REV229.D	1.	24E021-15	25mL	13 May 2024 21:38
22	20	REV230.D	1.	24E021-16	25mL	13 May 2024 22:07
23	21	REV231.D	1.	24E072-01	25mL	13 May 2024 22:36
24	22	REV232.D	1.	24E072-02	25mL	13 May 2024 23:05
25	23	REV233.D	1.	24E072-03	25mL	13 May 2024 23:34
26	24	REV234.D	1.	24E072-04	25mL	14 May 2024 00:02
27	25	REV235.D	1.	24E021-02	25mL	14 May 2024 00:31
28	26	REV236.D	1.	EVO01E1101	10ppb 8260/50ppb KET-AA/250ppb TBA	14 May 2024 01:00
29	27	REV237.D	1.	EVO01E1101	10ppb 8260/50ppb KET-AA/250ppb TBA	14 May 2024 01:29
30	28	REV238.D	1.	EVO01E1101	10ppb 8260/50ppb KET-AA/250ppb TBA	14 May 2024 01:58
31	29	REV239.D	1.	RINSE	10ppb 8260/50ppb KET-AA/250ppb TBA	14 May 2024 02:26
32	30	REV240.D	1.	RINSE	10ppb 8260/50ppb KET-AA/250ppb TBA	14 May 2024 02:55

LABORATORIES, INC.

for

VOLATILES

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

Book #: A01-076

Instrument No.: 01

Analytical Sequence: 24F07

Method File: V001E11

Analytical Batch: CV001E1120

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	5/11/24
ICAL ID	V001E11

STANDARDS

NAME	ID	Amount (µl)	Conc. (mg/L)
DCC CS2 GAS	SV1-43-75-03	1	
	-68-01	1	
DCC 4ADD	-95-02	1	
DCC 8260	-37-03	5	
DCC KET	-89-02	5	
BFB	-30-02	1	
IS/SURR.	-96-01	5	50/250
ICV/LCS CS2 GAS	-55-02	1	
	-76-03	1	
ICV/LCS 4ADD	-69-03	5	
ICV/LCS 8260	-77-01	5	
ICV/LCS KET	-94-02	5	
Data File Folder			

	LOT #	Syringe Lot #
pH strip	HC439975	MSV-03-04-12-4
Chlorine strip	301802	↓ -6
Methanol		
$NaHSO_4$		
Reagent Water	RW4-23-001	
Sand		

ELECTRONIC DATA ARCHIVAL	
Location	Date
HPCHEM_VOA/TO01	

Analyzed By: LAP

Date: 6/7/24

Disposed By: LAP

Date Disposed: 6/10/24

Injection Log

Directory: D:\HPCHEM\1\DATA\24F07

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	RFV111.D	1.	BFB01F05	T/CHK	7 Jun 2024 14:08
2	2	RFV112.D	1.	CVO01E1120	10ppb 8260/50ppb KET-AA/250ppb TBA	7 Jun 2024 15:02
3	3	RFV113.D	1.	VO01F05L	10ppb 8260/50ppb KET-AA/250ppb TBA	7 Jun 2024 15:31
4	4	RFV114.D	1.	VO01F05C	10ppb 8260/50ppb KET-AA/250ppb TBA	7 Jun 2024 16:01
5	5	RFV115.D	1.	RINSE		7 Jun 2024 16:31
6	6	RFV116.D	1.	VO01F05B	25mL	7 Jun 2024 17:01
7	7	RFV117.D	1.	24F025-04	25mL	7 Jun 2024 17:31
8	8	RFV118.D	1.	24F032-04	25mL	7 Jun 2024 18:01
9	9	RFV119.D	1.	24F016-05	25mL	7 Jun 2024 18:31
10	10	RFV120.D	1.	24F025-03 PH6	25mL	7 Jun 2024 19:05
11	11	RFV121.D	1.	24F032-03 PH6 D4 %RA RR	25mL	7 Jun 2024 19:35
12	12	RFV122.D	1.	24F032-02	25mL	7 Jun 2024 20:04
13	13	RFV123.D	1.	24F025-01 PH6	25mL	7 Jun 2024 20:33
14	14	RFV124.D	1.	24F032-03N PH6	25mL	7 Jun 2024 21:02
15	15	RFV125.D	1.	24F032-02N	25mL	7 Jun 2024 21:32
16	16	RFV126.D	1.	RINSE	25mL	7 Jun 2024 22:01
17	17	RFV127.D	1.	24F032-01	25mL	7 Jun 2024 22:30
18	18	RFV128.D	1.	24F025-02	25mL	7 Jun 2024 22:59
19	19	RFV129.D	1.	24F016-01 PH6	25mL	7 Jun 2024 23:28
20	20	RFV130.D	1.	24F016-02	25mL	7 Jun 2024 23:57
21	21	RFV131.D	1.	24F016-03	25mL	8 Jun 2024 00:26
22	22	RFV132.D	1.	24F016-04	25mL	8 Jun 2024 00:56
23	23	RFV133.D	1.	24F197-15	25mL	8 Jun 2024 01:24
24	24	RFV134.D	1.	24F197-16	25mL	8 Jun 2024 01:54
25	25	RFV135.D	1.	EVO01E1120	10ppb 8260/50ppb KET-AA/250ppb TBA	8 Jun 2024 02:23
26	26	RFV136.D	1.	EVO01E11201	10ppb 8260/50ppb KET-AA/250ppb TBA	8 Jun 2024 02:52
27	27	RFV137.D	1.	EVO01E11202	10ppb 8260/50ppb KET-AA/250ppb TBA	8 Jun 2024 03:21
28	28	RFV138.D	1.	RINSE		8 Jun 2024 03:49
29	29	RFV139.D	1.	RINSE		8 Jun 2024 04:18

EMAX
LABORATORIES, INC.
3051 Fujita Street
Torrance, CA 90505
Tel: (310)-618-8889

Date: 06-27-2024
EMAX Batch No.: 24F055

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 06/12/24.
The data reported relate only to samples listed below :

Sample ID	Control #	Col Date	Matrix	Analysis
EW01-GW061124-193	F055-01	06/11/24	WATER	VOCS BY 8260C
TB07-GW061124	F055-02	06/11/24	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.
1835 W. 205th Street, Torrance, CA 90501
Tel # : 310-618-8889 FAX#: 310-618-0818
Email: info@emaxlabs.com

PO NUMBER:
SAMPLE STORAGE

EMAX CONTROL NO. 24F055
PROJECT CODE:

CLIENT CDM Smith
PROJECT 7005 1600E 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 Linh Pham

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: VOC 8260; VOC 8260

TAT
- [ ] Rush __24__hrs.
- [x] 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 HC	IC	COMMENTS
1	EW01-GW061124-193	EW01	6/11/24	1200	6	40mL	VOA	GW		X	X	Collected upon reserved
2	TB07-GW061124		6/11/24	1200	3	40mL	VOA	GW		X		
3												
4												
5												
6												
7												
8												
9												
10												

Instructions
CC: SmithVL@CDMSmith.com and millerjc@cdmsmith.com w/sample login

Cooler #	Temp. (°C)	Sample #s
	5.7	

SAMPLER Nathan Morris / Joe Miller
COURIER/AIRBILL Fedex

RELINQUISHED BY	Date	Time	RECEIVED BY
Joe Miller	6/11/24	1600	
	6/12/24	10:05	

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 24F055
☑ Fedex ☐ UPS ☐ GSO ☐ Others	2797 9940 9739	Recipient Nahdeen Nacana
☐ EMAX Courier ☐ Client Delivery		Date 06/12/24 Time 1005

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 5.7 °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* 210606272	*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
1	1-6	D22		R8
1	1-3	D14		R4
1	4-6	D23		R8

☐ 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	more than 50% layer of sediment
D23	headspace
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 06/12/24 6/12/24

SRF _____ Date 6/12/24

PM _____ Date 6/12/24



RT 467 3 10:30 A

ORIGIN ID:NPHA ST 19

CDM SMITH, INC
555 17TH ST STE [illegible]

DENVER, CO 80202
UNITED STATES US

9739 : 11JUN24
06.12 .75 LB
117/SSF02521
[illegible]x10x9 IN

BILL THIRD PARTY

TO SAMPLE RECEIVING
275859 TS1.DRILL
3051 FUJITA ST

1005
0 sealed

TORRANCE CA 90505
(111) 111-1111
INV:
PO:

REF: 27589 TS1.DRILL
DEPT:

FedEx Express

J2420240326011v

TRK# 0201 2757 9940 9739

WED - 12 JUN 10:30A
PRIORITY OVERNIGHT

WZ HHRA

AHS
90505
CA-US LAX

Part # 156297-435-[illegible] EXP 03/25

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#: 24F055

CASE NARRATIVE

Client : CDM SMITH

Project: VA SALT LAKE CITY

SDG : 24F055

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

A total of two(2) water samples were received on 06/12/24 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, one(1) method blank was analyzed. VO06F14B - 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. VO06F14L/VO06F14Y were within LCS limits. Refer to LCS summary form 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.

LAB CHRONICLE
VOLATILE ORGANICS BY GC/MS

Client : CDM SMITH
Project : VA SALT LAKE CITY

SDG NO. : 24F055
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	VO06F14L	1	NA	06/17/2411:45	06/17/2411:45	RFW225	RFW007	VO06F14	Lab Control Sample (LCS)
LCD1W	VO06F14Y	1	NA	06/17/2412:54	06/17/2412:54	RFW227	RFW007	VO06F14	LCS Duplicate
MBLK1W	VO06F14B	1	NA	06/17/2413:54	06/17/2413:54	RFW229	RFW007	VO06F14	Method Blank
TB07-GW061124	24F055-02N	1	NA	06/17/2414:46	06/17/2414:46	RFW231	RFW007	VO06F14	Field Sample
EW01-GW061124-193	24F055-01N	1	NA	06/17/2415:12	06/17/2415:12	RFW232	RFW007	VO06F14	Field Sample

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	06/11/24 12:00
Project	: VA SALT LAKE CITY	Date Received:	06/12/24
Batch No.	: 24F055	Date Extracted:	06/17/24 15:12
Sample ID	: EW01-GW061124-193	Date Analyzed:	06/17/24 15:12
Lab Samp ID:	24F055-01N	Dilution Factor:	1
Lab File ID:	RFW232	Matrix:	WATER
Ext Btch ID:	VOO6F14	% Moisture:	NA
Calib. Ref.:	RFW007	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	0.31J	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	0.14J	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	12J	20	2.5
Benzene	0.78J	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	0.25J	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	0.82J	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	0.24J	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	1.2	1.0	0.15
Toluene	1.4	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	9.96	10.0	100	70-130
Toluene-d8	9.89	10.0	99	70-130
Dibromofluoromethane	10.2	10.0	102	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DHuynh Analyzed by : DHuynh
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F17\RFW232.D Vial: 10
Acq On : 17 Jun 2024 3:12 pm Operator: DHuynh
Sample : 24F055-01N Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 19 15:14 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

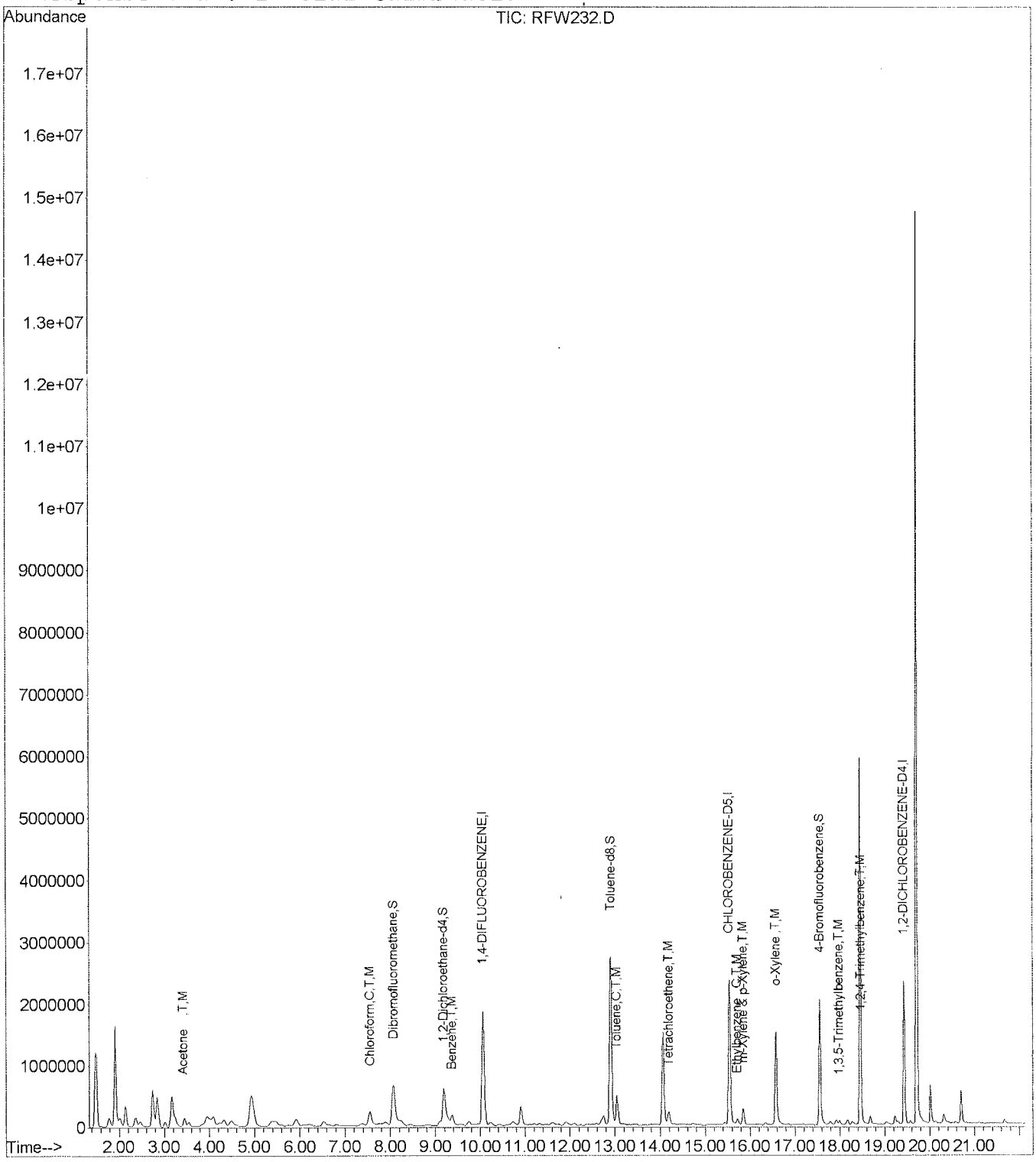
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.07	114	3278684	10.00	ug/l	0.02
54) CHLOROBENZENE-D5	15.55	117	2613021	10.00	ug/l	0.01
74) 1,2-DICHLOROBENZENE-D4	19.43	152	946118	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	8.08	111	999543	10.16	ug/l	0.02
Spiked Amount 10.000			Recovery = 101.60%			
42) 1,2-Dichloroethane-d4	9.19	65	716412	10.12	ug/l	0.00
Spiked Amount 10.000			Recovery = 101.20%			
55) Toluene-d8	12.92	98	3888902	9.89	ug/l	0.02
Spiked Amount 10.000			Recovery = 98.90%			
77) 4-Bromofluorobenzene	17.56	95	1249014	9.96	ug/l	0.01
Spiked Amount 10.000			Recovery = 99.60%			
Target Compounds						Qvalue
11) Acetone	3.43	43	130780	11.65	ug/l	# 1
31) Chloroform	7.55	83	468633	2.50	ug/l	97
44) Benzene	9.38	78	338574	0.78	ug/l	96
56) Toluene	13.05	91	633400	1.39	ug/l	99
62) Tetrachloroethene	14.20	164	103619	1.24	ug/l	93
69) Ethylbenzene	15.72	91	124618	0.25	ug/l	97
70) m-Xylene & p-Xylene	15.86	91	304981	0.82	ug/l	97
71) o-Xylene	16.59	91	92631	0.24	ug/l	97
82) 1,3,5-Trimethylbenzene	17.99	105	54325	0.14	ug/l	97
86) 1,2,4-Trimethylbenzene	18.48	105	120168	0.31	ug/l	88

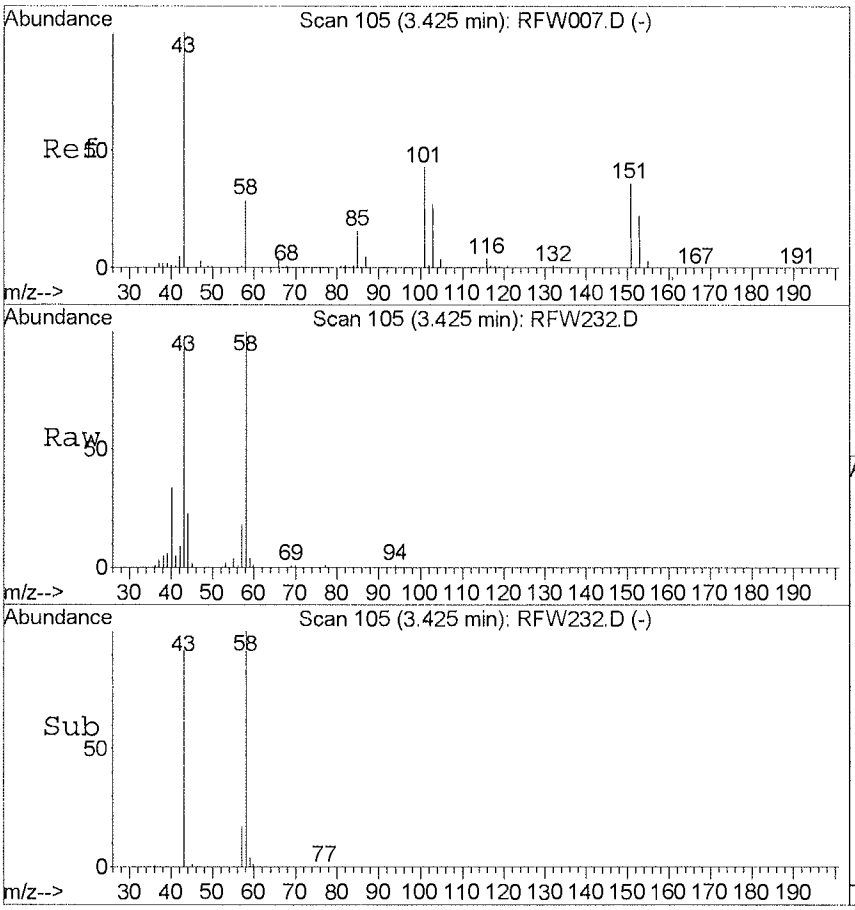
(#) = qualifier out of range (m) = manual integration
RFW232.D VO06F03.M Wed Jun 19 15:16:56 2024 Page 1

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F17\RFW232.D Vial: 10
Acq On : 17 Jun 2024 3:12 pm Operator: DHuynh
Sample : 24F055-01N Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 19 15:14 2024 Quant Results File: VO06F03.RE

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration

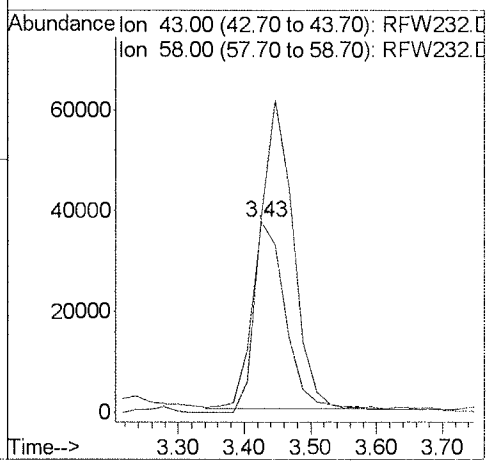


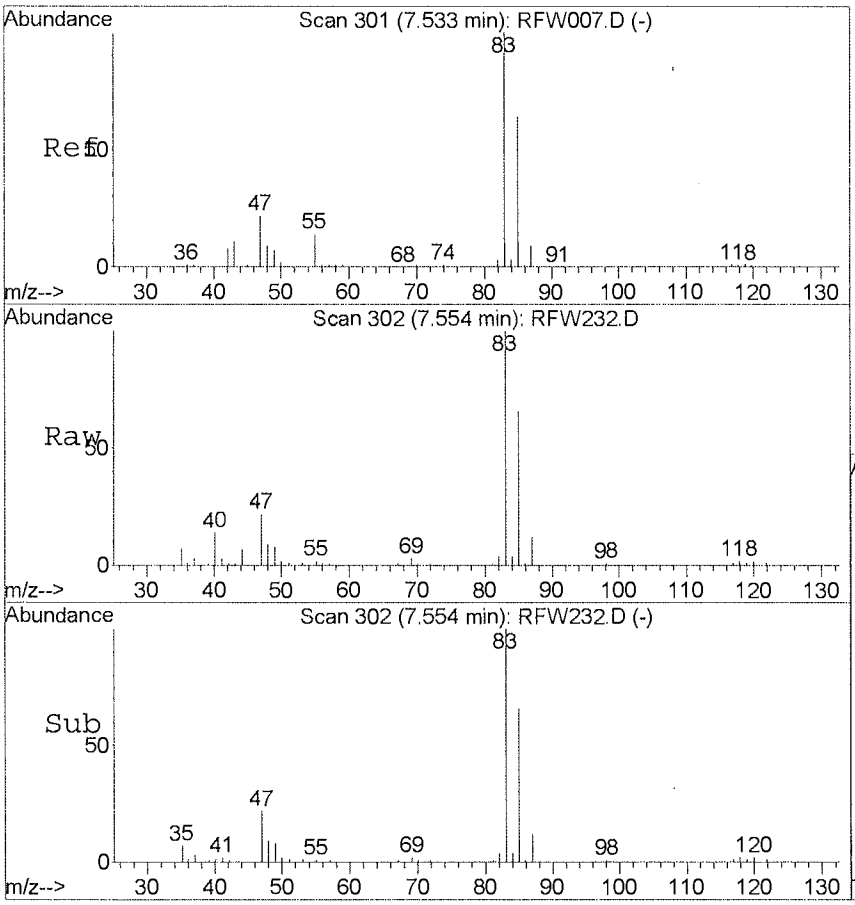


#11
Acetone
Concen: 11.65 ug/l
RT: 3.43 min Scan# 105
Delta R.T. 0.00 min
Lab File: RFW232.D
Acq: 17 Jun 2024 3:12 pm

Tgt Ion: 43 Resp: 130780

Ion	Ratio	Lower	Upper
43	100		
58	168.1	0.8	60.8#

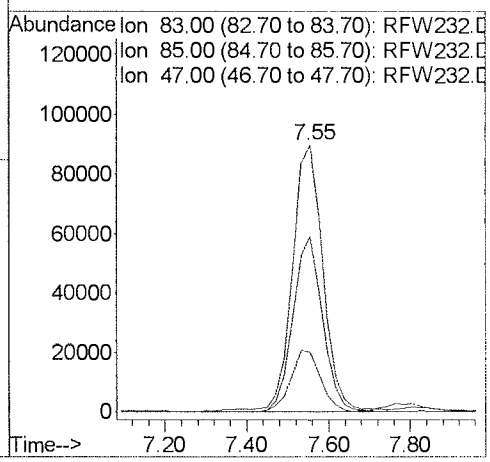


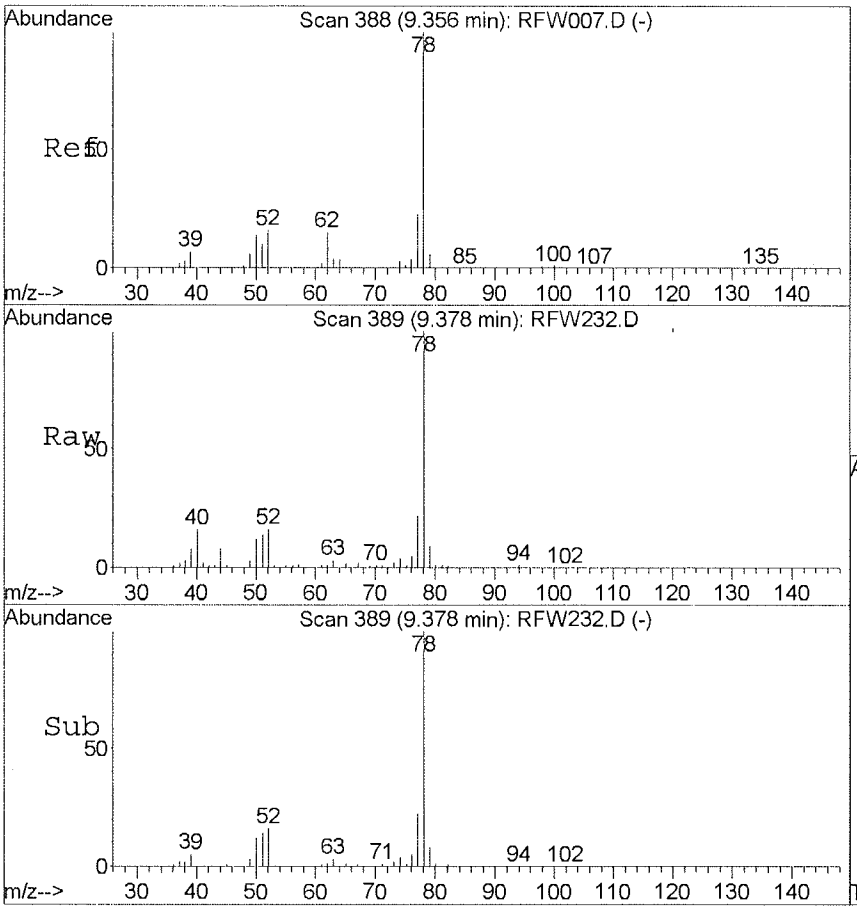


#31
Chloroform
Concen: 2.50 ug/l
RT: 7.55 min Scan# 302
Delta R.T. 0.02 min
Lab File: RFW232.D
Acq: 17 Jun 2024 3:12 pm

Tgt Ion: 83 Resp: 468633

Ion	Ratio	Lower	Upper
83	100		
85	63.0	36.2	96.2
47	22.5	0.0	53.3

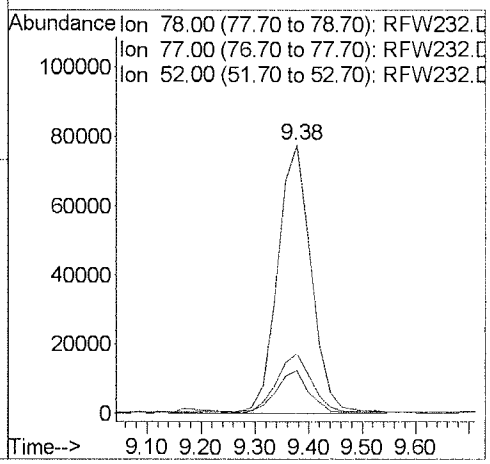


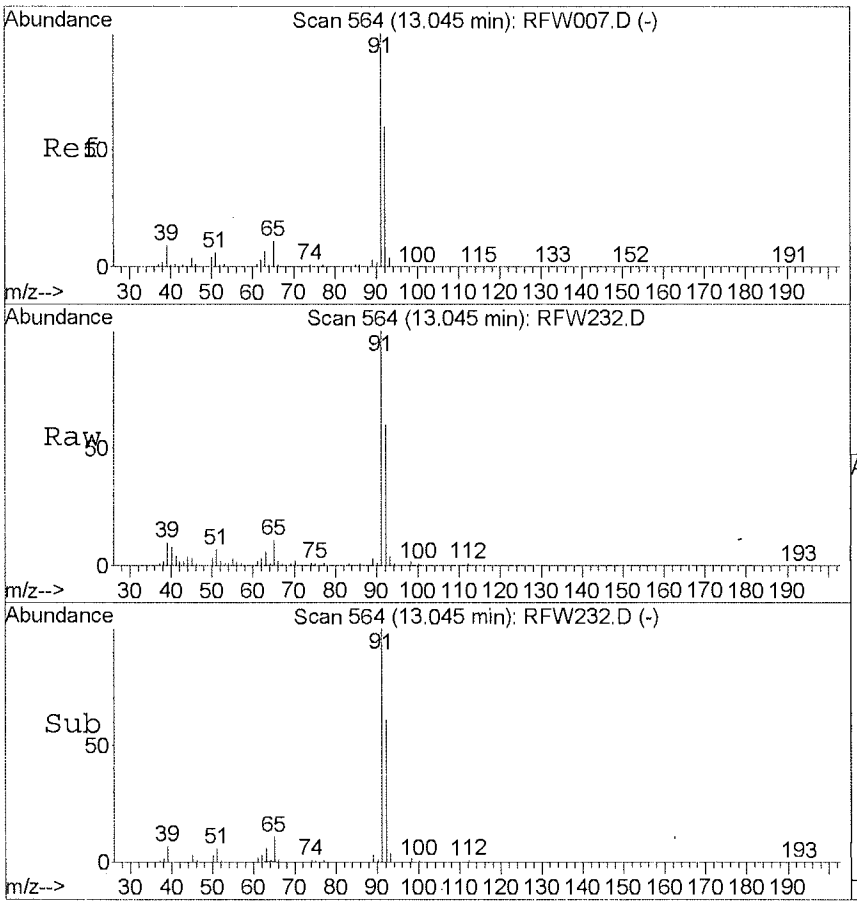


#44
Benzene
Concen: 0.78 ug/l
RT: 9.38 min Scan# 389
Delta R.T. 0.02 min
Lab File: RFW232.D
Acq: 17 Jun 2024 3:12 pm

Tgt Ion: 78 Resp: 338574

Ion	Ratio	Lower	Upper
78	100		
77	24.7	0.0	52.3
52	16.5	0.0	45.9

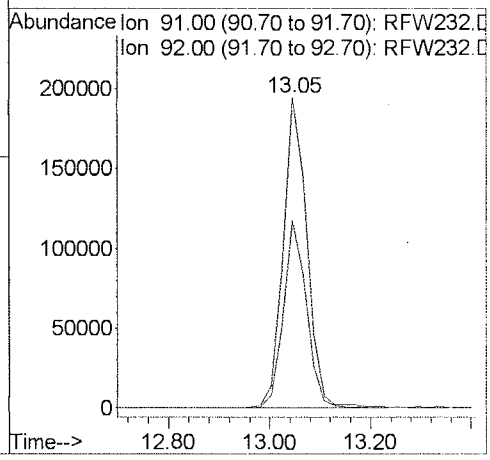


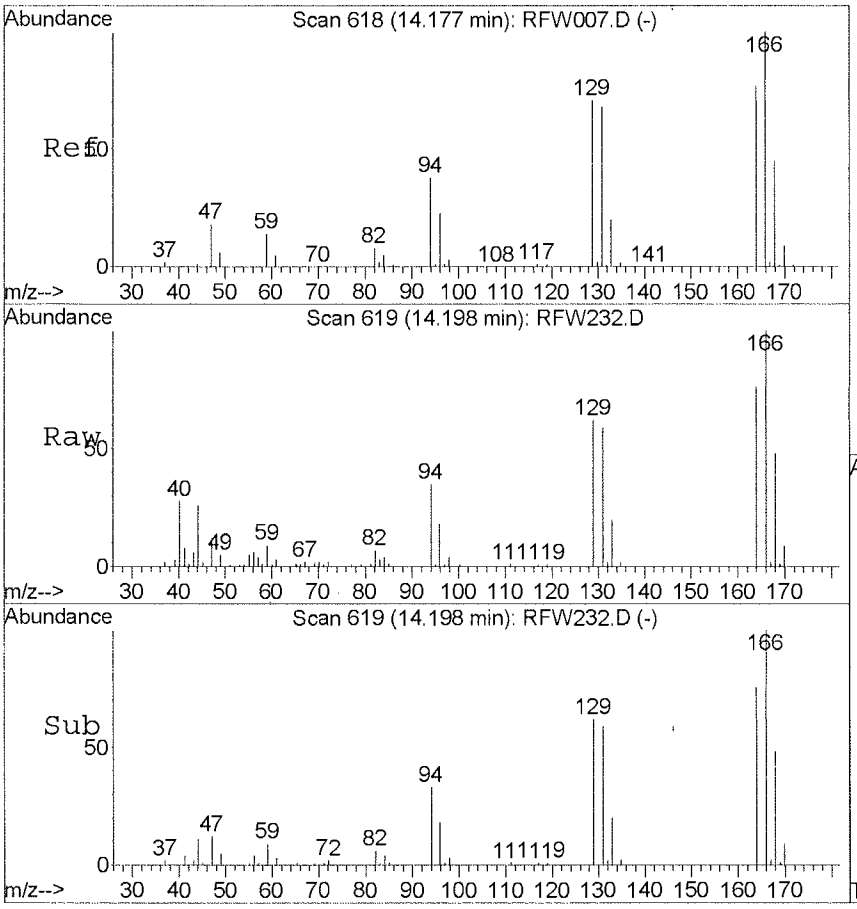


#56
Toluene
Concen: 1.39 ug/l
RT: 13.05 min Scan# 564
Delta R.T. 0.00 min
Lab File: RFW232.D
Acq: 17 Jun 2024 3:12 pm

Tgt Ion: 91 Resp: 633400

Ion	Ratio	Lower	Upper
91	100		
92	58.5	29.6	89.6

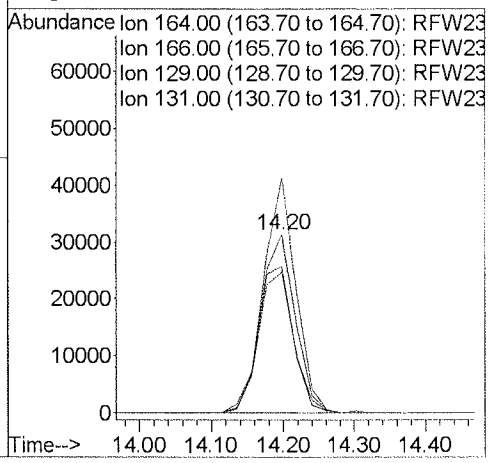


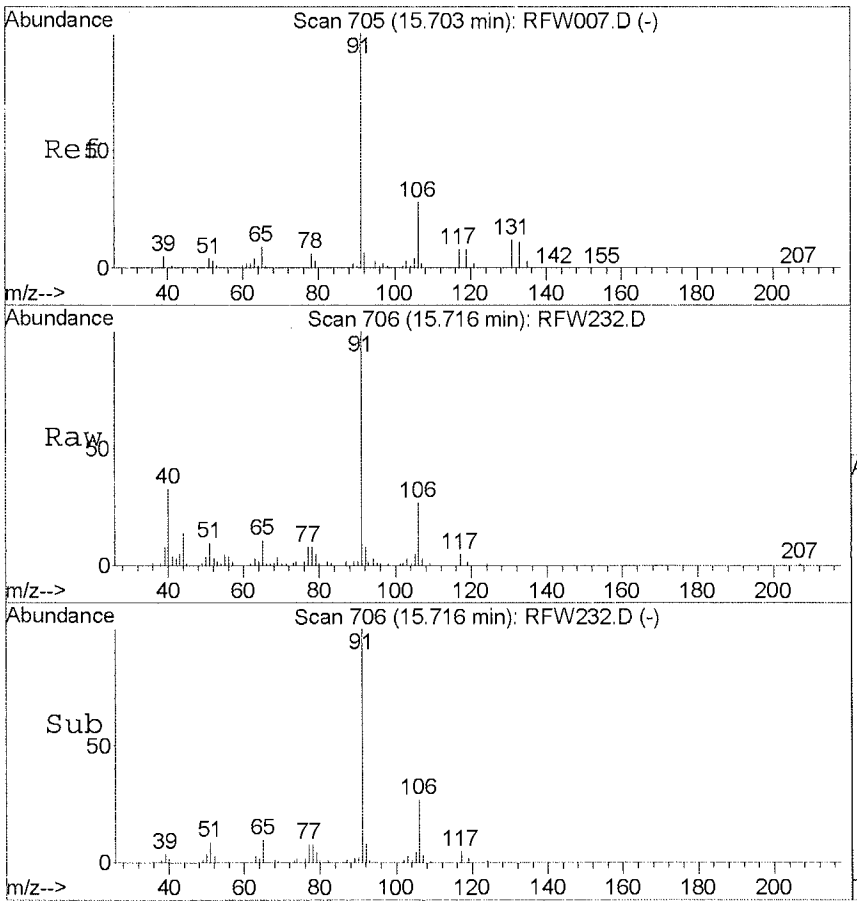


#62
Tetrachloroethene
Concen: 1.24 ug/l
RT: 14.20 min Scan# 619
Delta R.T. 0.02 min
Lab File: RFW232.D
Acq: 17 Jun 2024 3:12 pm

Tgt Ion:164 Resp: 103619

Ion	Ratio	Lower	Upper
164	100		
166	123.9	98.8	158.8
129	84.9	62.9	122.9
131	81.1	58.6	118.6

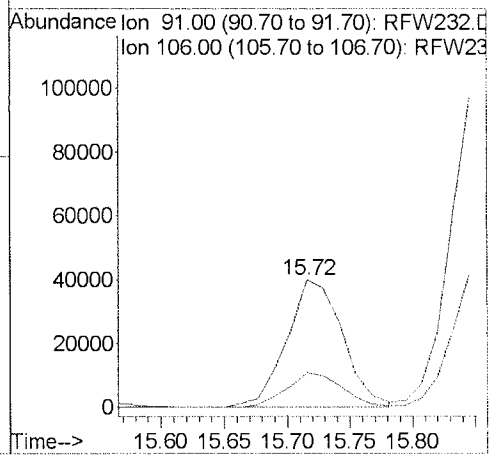


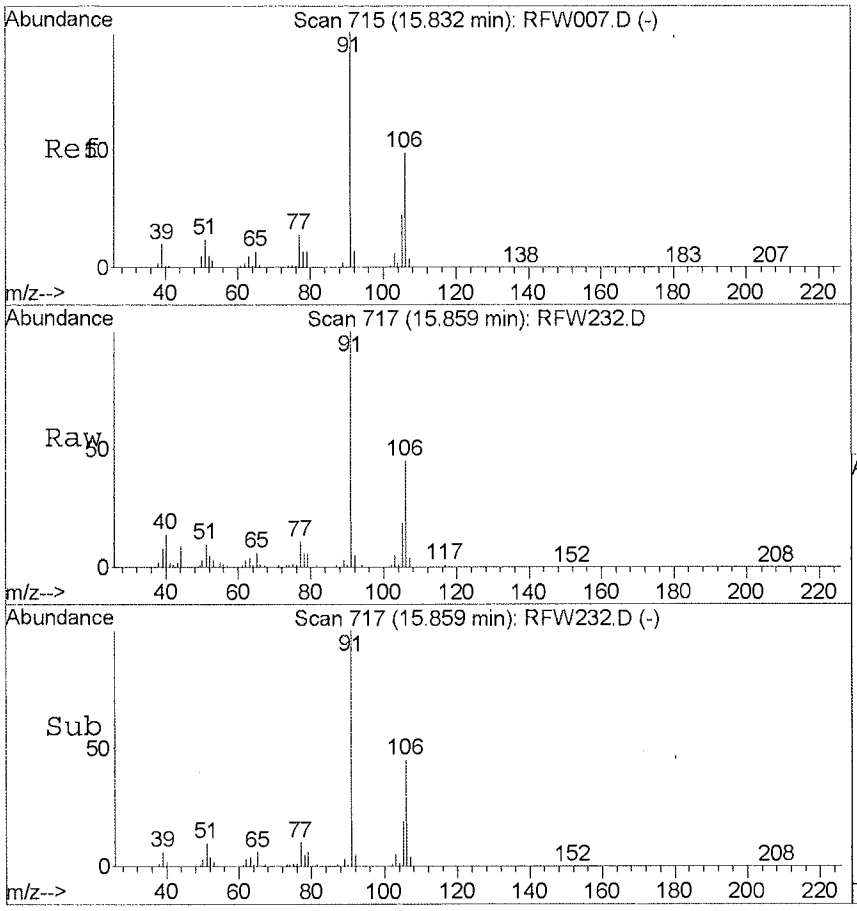


#69
Ethylbenzene
Concen: 0.25 ug/l
RT: 15.72 min Scan# 706
Delta R.T. 0.01 min
Lab File: RFW232.D
Acq: 17 Jun 2024 3:12 pm

Tgt Ion: 91 Resp: 124618

Ion	Ratio	Lower	Upper
91	100		
106	26.6	0.0	58.3

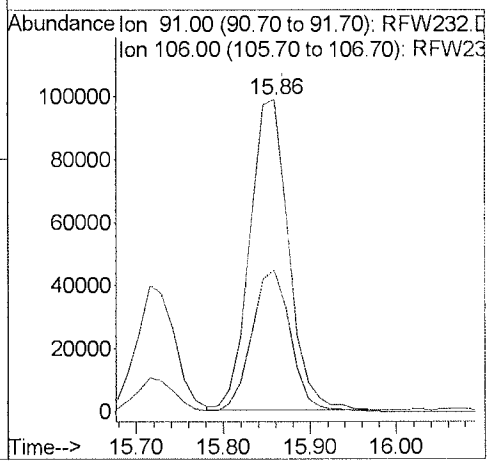


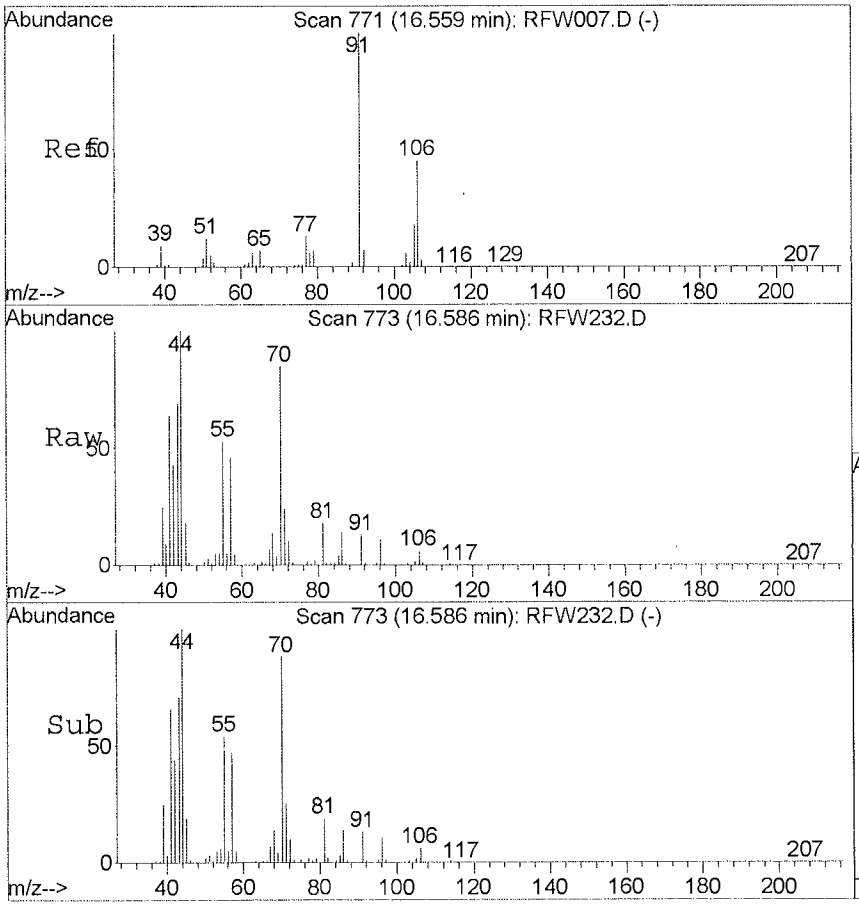


#70
m-Xylene & p-Xylene
Concen: 0.82 ug/l
RT: 15.86 min Scan# 717
Delta R.T. 0.03 min
Lab File: RFW232.D
Acq: 17 Jun 2024 3:12 pm

Tgt Ion: 91 Resp: 304981

Ion	Ratio	Lower	Upper
91	100		
106	46.1	17.8	77.8

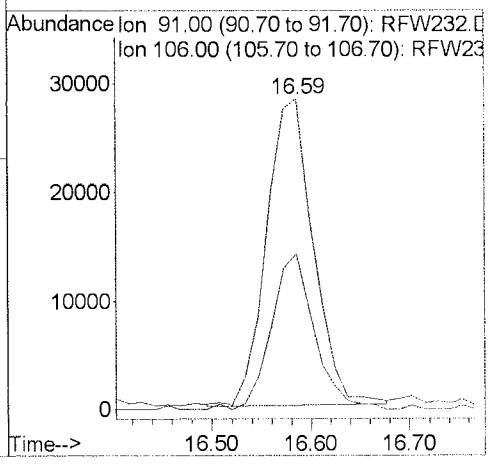


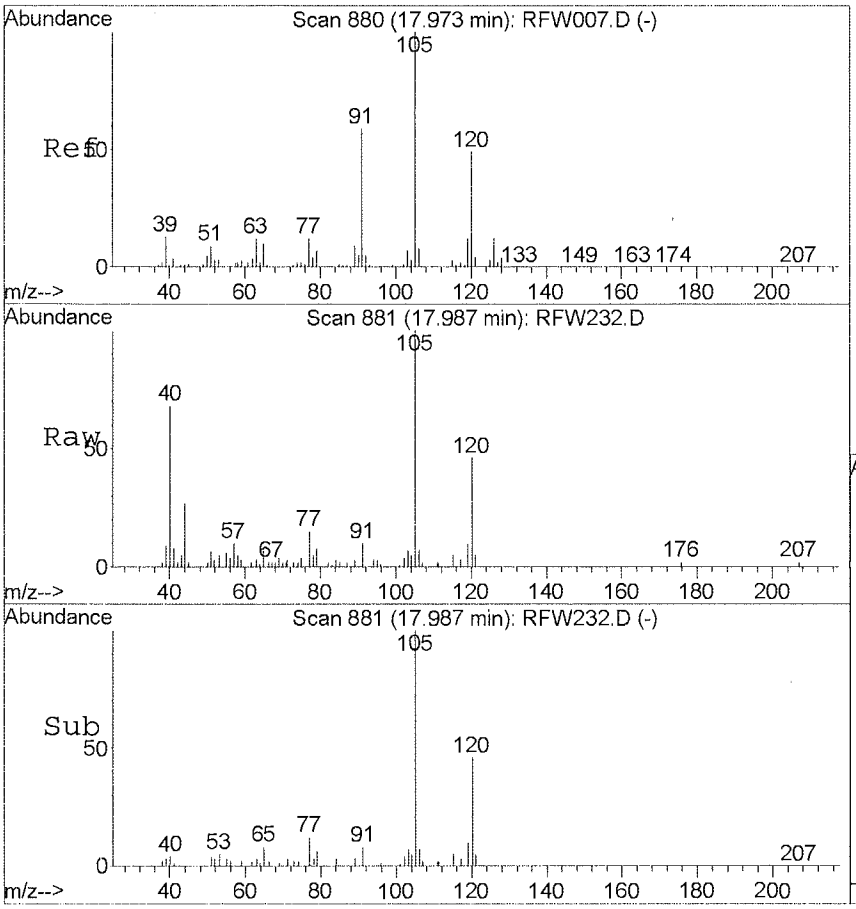


#71
o-Xylene
Concen: 0.24 ug/l
RT: 16.59 min Scan# 773
Delta R.T. 0.03 min
Lab File: RFW232.D
Acq: 17 Jun 2024 3:12 pm

Tgt Ion: 91 Resp: 92631

Ion	Ratio	Lower	Upper
91	100		
106	47.3	15.1	75.1

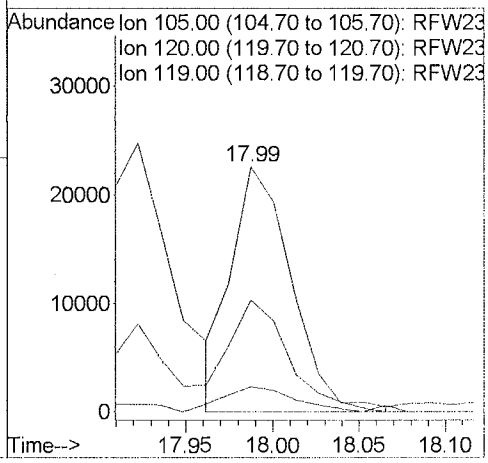


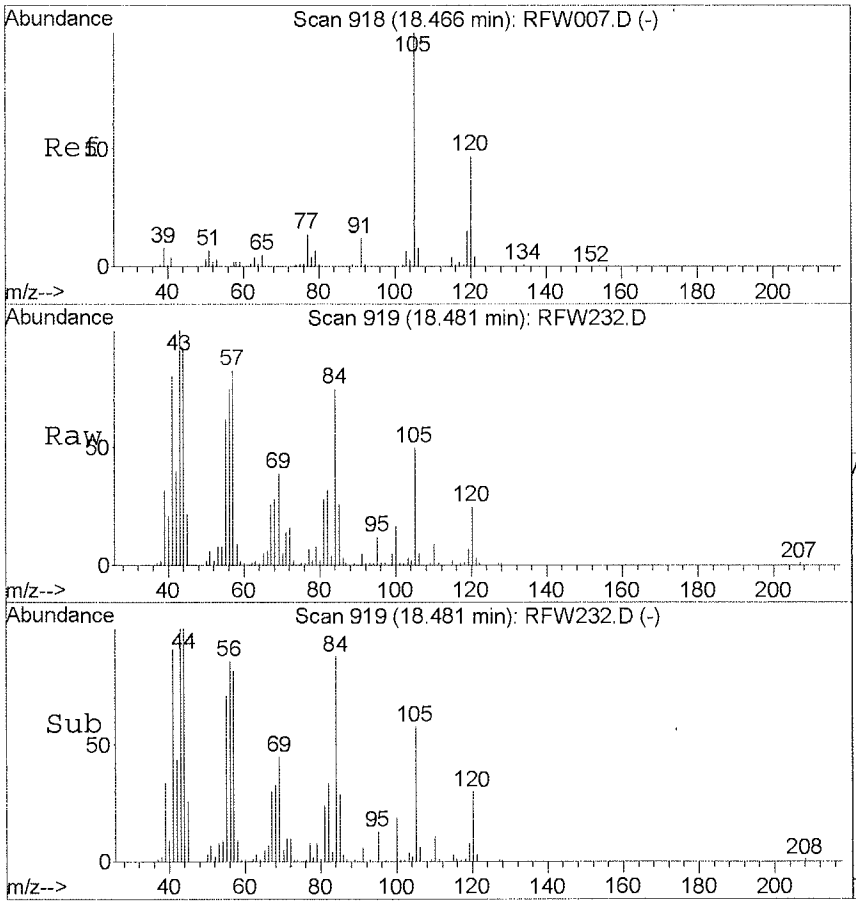


#82
1,3,5-Trimethylbenzene
Concen: 0.14 ug/l
RT: 17.99 min Scan# 881
Delta R.T. 0.01 min
Lab File: RFW232.D
Acq: 17 Jun 2024 3:12 pm

Tgt Ion:105 Resp: 54325

Ion	Ratio	Lower	Upper
105	100		
120	48.3	20.1	80.1
119	12.4	0.0	41.5

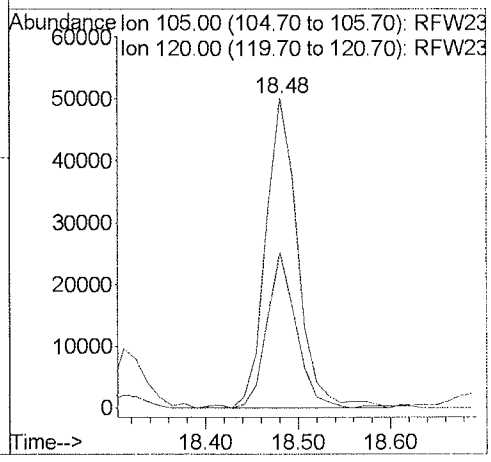




#86
1,2,4-Trimethylbenzene
Concen: 0.31 ug/l
RT: 18.48 min Scan# 919
Delta R.T. 0.01 min
Lab File: RFW232.D
Acq: 17 Jun 2024 3:12 pm

Tgt Ion:105 Resp: 120168

Ion	Ratio	Lower	Upper
105	100		
120	45.8	24.5	84.5



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	06/11/24 12:00
Project	: VA SALT LAKE CITY	Date Received:	06/12/24
Batch No.	: 24F055	Date Extracted:	06/17/24 14:46
Sample ID	: TB07-GW061124	Date Analyzed:	06/17/24 14:46
Lab Samp ID:	24F055-02N	Dilution Factor:	1
Lab File ID:	RFW231	Matrix:	WATER
Ext Btch ID:	VO06F14	% Moisture:	NA
Calib. Ref.:	RFW007	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	0.11J	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	10.2	10.0	102	70-130
Bromofluorobenzene	9.72	10.0	97	70-130
Toluene-d8	10.0	10.0	100	70-130
Dibromofluoromethane	10.5	10.0	105	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DHuynh Analyzed by : DHuynh
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F17\RFW231.D Vial: 9
Acq On : 17 Jun 2024 2:46 pm Operator: DHuynh
Sample : 24F055-02N Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 18 14:26 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

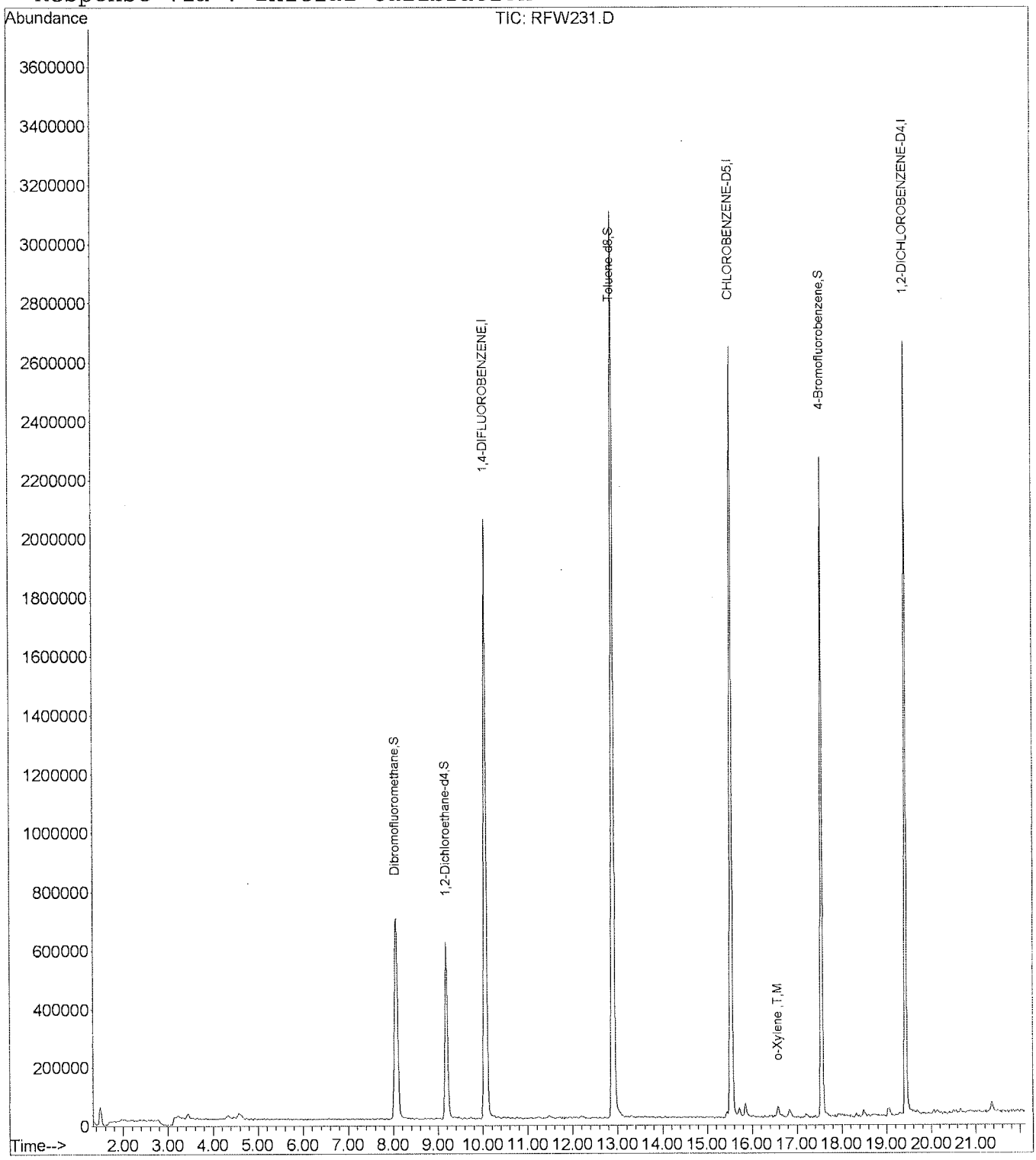
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.07	114	3588393	10.00	ug/l	0.02
54) CHLOROBENZENE-D5	15.55	117	2858580	10.00	ug/l	0.01
74) 1,2-DICHLOROBENZENE-D4	19.43	152	1071340	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	8.06	111	1134492	10.53	ug/l	0.00
Spiked Amount 10.000			Recovery =	105.30%		
42) 1,2-Dichloroethane-d4	9.19	65	792591	10.23	ug/l	0.00
Spiked Amount 10.000			Recovery =	102.30%		
55) Toluene-d8	12.90	98	4322805	10.05	ug/l	0.00
Spiked Amount 10.000			Recovery =	100.50%		
77) 4-Bromofluorobenzene	17.56	95	1380823	9.72	ug/l	0.01
Spiked Amount 10.000			Recovery =	97.20%		
Target Compounds						Qvalue
71) o-Xylene	16.58	91	43910	0.11	ug/l	100

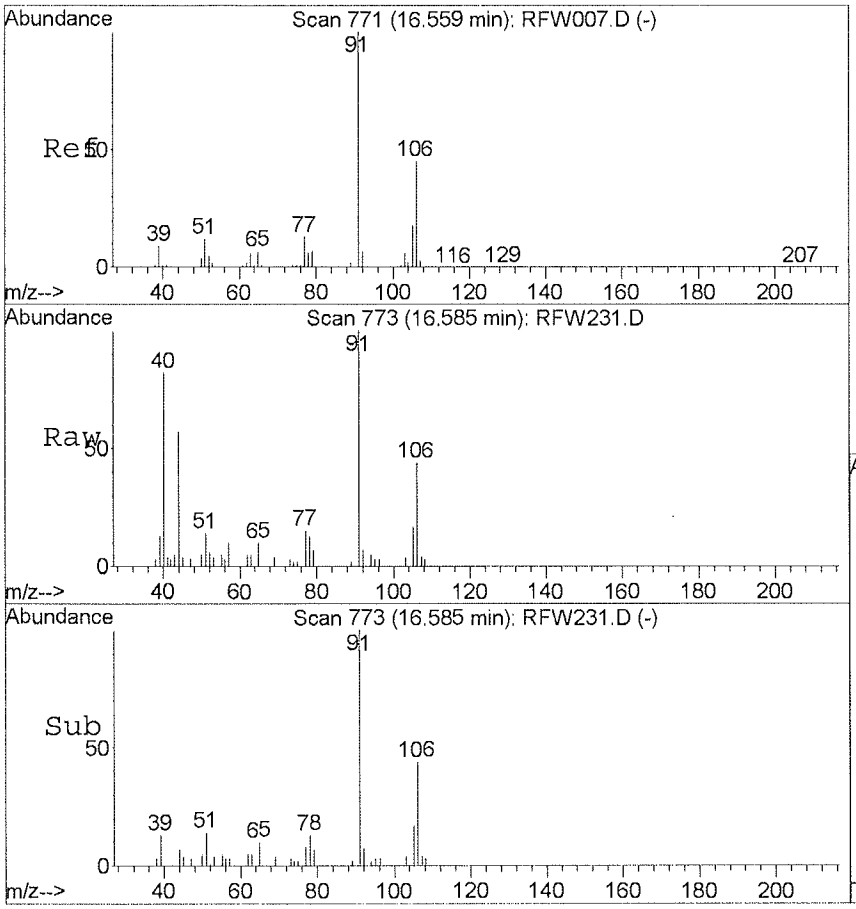
(#) = qualifier out of range (m) = manual integration
RFW231.D VO06F03.M Tue Jun 18 14:26:12 2024 Page 1

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F17\RFW231.D Vial: 9
Acq On : 17 Jun 2024 2:46 pm Operator: DHuynh
Sample : 24F055-02N Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 18 14:26 2024 Quant Results File: VO06F03.RE

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration

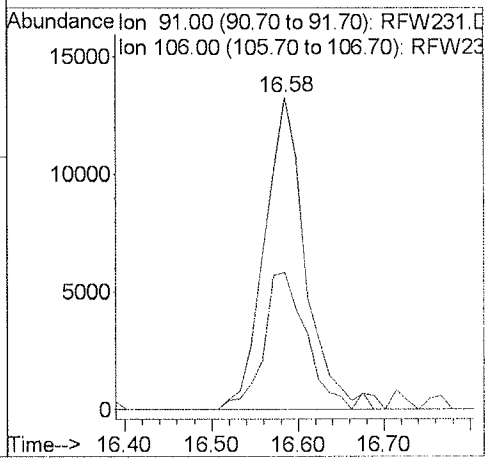




#71
o-Xylene
Concen: 0.11 ug/l
RT: 16.58 min Scan# 773
Delta R.T. 0.03 min
Lab File: RFW231.D
Acq: 17 Jun 2024 2:46 pm

Tgt Ion: 91 Resp: 43910

Ion	Ratio	Lower	Upper
91	100		
106	45.4	15.1	75.1



QC SUMMARIES

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	06/17/24 13:54
Project	: VA SALT LAKE CITY	Date Received:	06/17/24
Batch No.	: 24F055	Date Extracted:	06/17/24 13:54
Sample ID	: MBLK1W	Date Analyzed:	06/17/24 13:54
Lab Samp ID:	VO06F14B	Dilution Factor:	1
Lab File ID:	RFW229	Matrix:	WATER
Ext Btch ID:	VO06F14	% Moisture:	NA
Calib. Ref.:	RFW007	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	9.87	10.0	99	70-130
Toluene-d8	9.82	10.0	98	70-130
Dibromofluoromethane	10.6	10.0	106	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DHuynh Analyzed by : DHuynh
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. : 24F055
METHOD : SW50308/8260C

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: M8LK1W	LCS1W	LCD1W
LAB SAMPLE ID	: VO06F148	VO06F14L	VO06F14Y
LAB FILE ID	: RFW229	RFW225	RFW227
DATE PREPARED	: 06/17/24 13:54	06/17/24 11:45	06/17/24 12:54
DATE ANALYZED	: 06/17/24 13:54	06/17/24 11:45	06/17/24 12:54
PREP 8ATCH	: VO06F14	VO06F14	VO06F14
CALI8RATION REF	: RFW007	RFW007	RFW007

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	11.0	110	10.0	10.9	109	1	74-131	20
1,1,2,2-Tetrachloroethane	ND	10.0	9.62	96	10.0	9.36	94	3	71-121	20
1,1,2-Trichloroethane	ND	10.0	9.41	94	10.0	9.65	97	3	80-119	20
1,1-Dichloroethane	ND	10.0	10.6	106	10.0	10.6	106	0	77-125	20
1,1-Dichloroethene	ND	10.0	10.7	107	10.0	10.3	103	4	71-131	20
1,2,3-Trichlorobenzene	ND	10.0	9.24	92	10.0	9.87	99	7	69-129	20
1,2,4-Trichlorobenzene	ND	10.0	9.71	97	10.0	10.3	103	6	69-130	20
1,2,4-Trimethylbenzene	ND	10.0	9.49	95	10.0	9.45	95	0	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	9.48	95	10.0	9.51	95	0	80-119	20
1,2-Dichloroethane	ND	10.0	9.70	97	10.0	9.86	99	2	73-128	20
1,2-Dichloropropane	ND	10.0	9.12	91	10.0	9.40	94	3	78-122	20
1,3,5-Trimethylbenzene	ND	10.0	9.41	94	10.0	9.14	91	3	75-124	20
1,3-Dichlorobenzene	ND	10.0	9.16	92	10.0	9.29	93	1	80-119	20
1,4-Dichlorobenzene	ND	10.0	9.03	90	10.0	8.93	89	1	79-118	20
2-8utanone	ND	50.0	44.4	89	50.0	44.9	90	1	56-143	20
2-Hexanone	ND	50.0	42.6	85	50.0	42.9	86	1	57-139	20
Acetone	ND	50.0	47.0	94	50.0	46.3	93	2	39-160	20
8enzene	ND	10.0	10.4	104	10.0	10.3	103	1	79-120	20
8romochloromethane	ND	10.0	11.2	112	10.0	11.3	113	1	78-120	20
8romodichloromethane	ND	10.0	9.32	93	10.0	9.51	95	2	79-125	20
8romoform	ND	10.0	11.9	119	10.0	11.3	113	5	66-130	20
8romomethane	ND	10.0	12.4	124	10.0	11.6	116	7	53-141	20
Carbon Disulfide	ND	10.0	8.51	85	10.0	8.11	81	5	64-133	20
Carbon Tetrachloride	ND	10.0	10.8	108	10.0	10.9	109	1	72-136	20
Chlorobenzene	ND	10.0	10.1	101	10.0	10.1	101	0	82-118	20
Chloroethane	ND	10.0	10.3	103	10.0	9.51	95	8	60-138	20
Chloroform	ND	10.0	10.2	102	10.0	10.1	101	1	79-124	20
Chloromethane	ND	10.0	11.1	111	10.0	10.6	106	5	50-139	20
cis-1,2-Dichloroethylene	ND	10.0	11.0	110	10.0	10.8	108	2	78-123	20
Dibromochloromethane	ND	10.0	8.94	89	10.0	9.37	94	5	74-126	20
Dichlorodifluoromethane	ND	10.0	12.1	121	10.0	11.7	117	3	32-152	20
Ethylbenzene	ND	10.0	9.96	100	10.0	9.88	99	1	79-121	20
Isopropylbenzene	ND	10.0	9.75	98	10.0	9.71	97	0	72-131	20
m,p-Xylene	ND	20.0	20.2	101	20.0	19.9	100	1	80-121	20
4-Methyl-2-Pentanone	ND	50.0	49.1	98	50.0	49.1	98	0	67-130	20
Methylene Chloride	ND	10.0	10.7	107	10.0	10.6	106	1	74-124	20
tert-8utyl Methyl Ether	ND	10.0	12.1	121	10.0	11.8	118	3	71-124	20
o-Xylene	ND	10.0	10.3	103	10.0	10.2	102	1	78-122	20
Styrene	ND	10.0	10.4	104	10.0	10.3	103	1	78-123	20
Tetrachloroethene	ND	10.0	10.4	104	10.0	10.3	103	1	74-129	20
Toluene	ND	10.0	9.37	94	10.0	9.26	93	1	80-121	20
Trans-1,2-DCE	ND	10.0	11.6	116	10.0	11.1	111	4	75-124	20
cis-1,3-Dichloropropene	ND	10.0	8.88	89	10.0	9.06	91	2	75-124	20
Trans-1,3-Dichloropropene	ND	10.0	8.71	87	10.0	8.70	87	0	73-127	20
TCE	ND	10.0	10.5	105	10.0	10.6	106	1	79-123	20
Trichlorofluoromethane	ND	10.0	10.7	107	10.0	10.4	104	3	65-141	20
Vinyl Chloride	ND	10.0	11.2	112	10.0	10.9	109	3	58-137	20
1,2-Dibromoethane	ND	10.0	8.64	86	10.0	8.91	89	3	77-121	20
Vinyl Acetate	ND	10.0	10.4	104	10.0	10.4	104	0	54-146	20
Trichlorotrifluoroethane	ND	10.0	11.8	118	10.0	11.6	116	2	70-136	20
Methyl Acetate	ND	10.0	9.41	94	10.0	9.02	90	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	10.2	102	10.0	10.4	104	70-130
8romofluorobenzene	10.0	9.61	96	10.0	9.41	94	70-130
Toluene-d8	10.0	10.2	102	10.0	9.90	99	70-130
Dibromofluoromethane	10.0	11.3	113	10.0	11.3	113	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\24F17\RFW229.D Vial: 7
Acq On : 17 Jun 2024 1:54 pm Operator: DHuynh
Sample : VO06F14B Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 18 12:35 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.07	114	3493822	10.00	ug/l	0.02
54) CHLOROBENZENE-D5	15.55	117	2861950	10.00	ug/l	0.01
74) 1,2-DICHLOROBENZENE-D4	19.43	152	1031279	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	8.06	111	1107743	10.56	ug/l	0.00
Spiked Amount 10.000			Recovery =	105.60%		
42) 1,2-Dichloroethane-d4	9.19	65	775116	10.28	ug/l	0.00
Spiked Amount 10.000			Recovery =	102.80%		
55) Toluene-d8	12.90	98	4230221	9.82	ug/l	0.00
Spiked Amount 10.000			Recovery =	98.20%		
77) 4-Bromofluorobenzene	17.56	95	1349898	9.87	ug/l	0.01
Spiked Amount 10.000			Recovery =	98.70%		

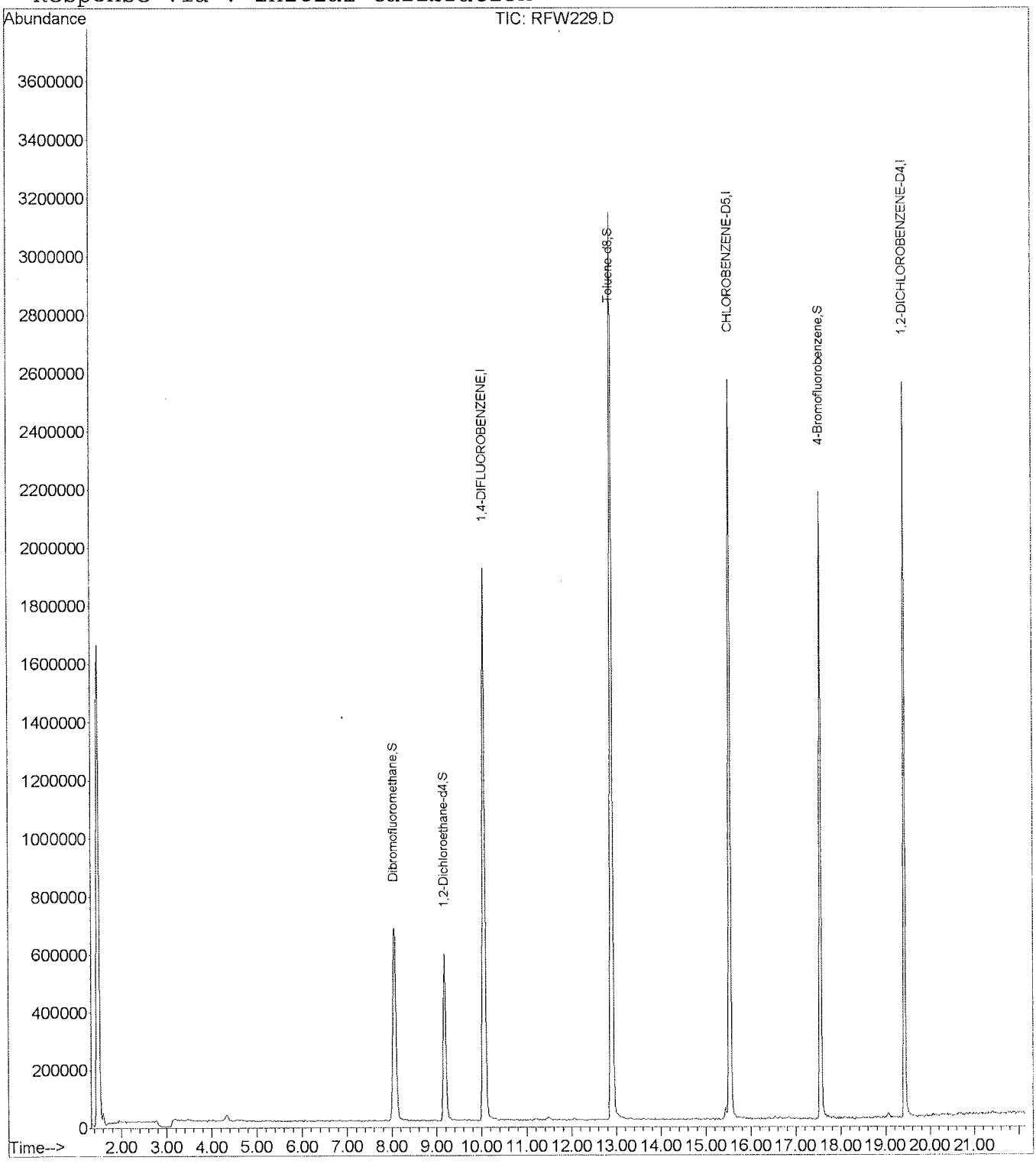
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
RFW229.D VO06F03.M Tue Jun 18 12:35:26 2024 Page 1

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F17\RFW229.D Vial: 7
Acq On : 17 Jun 2024 1:54 pm Operator: DHuynh
Sample : VO06F14B Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 18 12:35 2024 Quant Results File: VO06F03.RE

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F17\RFW225.D Vial: 3
Acq On : 17 Jun 2024 11:45 am Operator: DHuynh
Sample : VO06F14L Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 18 12:35 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.09	114	2983839	10.00	ug/l	0.04
54) CHLOROBENZENE-D5	15.56	117	2340893	10.00	ug/l	0.03
74) 1,2-DICHLOROBENZENE-D4	19.44	152	871400	10.00	ug/l	0.01
System Monitoring Compounds						
35) Dibromofluoromethane	8.08	111	1010415	11.28	ug/l	0.02
Spiked Amount 10.000			Recovery =	112.80%		
42) 1,2-Dichloroethane-d4	9.19	65	654935	10.17	ug/l	0.00
Spiked Amount 10.000			Recovery =	101.70%		
55) Toluene-d8	12.92	98	3585376	10.18	ug/l	0.02
Spiked Amount 10.000			Recovery =	101.80%		
77) 4-Bromofluorobenzene	17.57	95	1110843	9.61	ug/l	0.03
Spiked Amount 10.000			Recovery =	96.10%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.65	85	1072291	12.13	ug/l	100
3) Chloromethane	1.87	50	1492453	11.10	ug/l	99
4) Vinyl chloride	1.98	62	1076649	11.23	ug/l	98
5) Bromomethane	2.44	94	1075686	12.37	ug/l	98
6) Chloroethane	2.52	64	757264	10.28	ug/l	100
7) Dichlorofluoromethane	2.58	67	2303453	12.71	ug/l	98
8) Trichlorofluoromethane	2.81	101	1269112	10.66	ug/l	96
9) Acrolein	3.34	56	311866	51.21	ug/l	98
10) 1,1,2-Trichloro-1,2,2-trif	3.38	151	646905	11.77	ug/l	98
11) Acetone	3.43	43	480477	47.02	ug/l	97
12) 1,1-Dichloroethene	3.59	61	1685260	10.65	ug/l	95
13) tert-Butyl alcohol	3.74	59	816797	262.39	ug/l	100
15) Methyl acetate	4.14	74	65459	9.41	ug/l	96
16) Iodomethane	4.03	142	2090698	13.31	ug/l	95
18) Methylene chloride	4.35	49	1414357	10.67	ug/l	90
19) Carbon disulfide	4.31	76	3509478	8.51	ug/l	99
20) Acrylonitrile	4.58	53	757621	54.58	ug/l	100
21) tert-Butyl methyl ether (M	4.64	73	1843749	12.05	ug/l	97
22) trans-1,2-Dichloroethene	4.85	96	1276438	11.62	ug/l	99
23) Isopropyl ether (DIPE)	5.54	45	3602017	10.43	ug/l	95
24) Vinyl acetate	5.79	43	979234	10.39	ug/l	97
25) 1,1-Dichloroethane	5.71	63	1963255	10.55	ug/l	99
27) tert-Butyl ethyl ether (ET	6.49	59	2691080	10.72	ug/l	96
28) 2-Butanone	6.78	43	726274	44.41	ug/l	96
29) 2,2-Dichloropropane	7.03	77	1344873	12.76	ug/l	99
30) cis-1,2-Dichloroethene	7.16	96	1180251	10.97	ug/l	99
31) Chloroform	7.55	83	1739060	10.20	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F17\RFW225.D Vial: 3
Acq On : 17 Jun 2024 11:45 am Operator: DHuynh
Sample : VO06F14L Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 18 12:35 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) Bromochloromethane	7.93	130	520795	11.20 ug/l	97
33) Tetrahydrofuran	8.04	42	89966	8.98 ug/l	97
34) tert-Amyl alcohol	8.18	59	1730	0.74 ug/l	64
36) 1,1,1-Trichloroethane	8.46	97	1448523	11.03 ug/l	99
37) Cyclohexane	8.46	84	1495701	11.26 ug/l	97
39) 1,1-Dichloropropene	8.83	110	464849	10.41 ug/l	97
40) Carbon tetrachloride	9.00	119	1140554	10.76 ug/l	99
41) tert-Amyl methyl ether (TA	9.17	73	2135708	11.40 ug/l	97
43) 1,2-Dichloroethane	9.40	62	736361	9.70 ug/l	99
44) Benzene	9.38	78	4120641	10.37 ug/l	98
45) Trichloroethene	10.66	130	1063567	10.52 ug/l	98
46) Methylcyclohexane	10.74	83	1886074	12.12 ug/l	95
47) 1,2-Dichloropropane	11.01	63	875705	9.12 ug/l	99
48) 1,4-Dioxane	11.56	88	55708	191.69 ug/l	91
49) Bromodichloromethane	11.45	83	1027385	9.32 ug/l	99
50) Dibromomethane	11.54	93	377338	9.29 ug/l	91
51) 2-Chloroethyl vinyl ether	12.14	63	279137	8.80 ug/l	99
52) 4-Methyl-2-pentanone	12.21	43	2285290	49.13 ug/l	95
53) cis-1,3-Dichloropropene	12.52	75	1244791	8.88 ug/l	95
56) Toluene	13.07	91	3822561	9.37 ug/l	99
57) Ethyl methacrylate	13.49	69	644937	9.28 ug/l	97
58) trans-1,3-Dichloropropene	13.44	75	876040	8.71 ug/l	95
59) 1,1,2-Trichloroethane	13.70	97	450303	9.41 ug/l	95
60) 2-Hexanone	13.78	43	1203028	42.56 ug/l	94
61) 1,3-Dichloropropane	14.14	76	855791	9.48 ug/l	98
62) Tetrachloroethene	14.20	164	777945	10.37 ug/l	97
63) Dibromochloromethane	14.56	129	571216	8.94 ug/l	98
65) 1,2-Dibromoethane	14.89	107	411809	8.63 ug/l	96
66) 1-Chlorohexane	15.25	91	1639369	8.54 ug/l	96
67) Chlorobenzene	15.62	112	2319364	10.08 ug/l	99
68) 1,1,1,2-Tetrachloroethane	15.72	131	801816	10.36 ug/l	96
69) Ethylbenzene	15.73	91	4432435	9.96 ug/l	99
70) m-Xylene & p-Xylene	15.86	91	6740062	20.23 ug/l	100
71) o-Xylene	16.58	91	3515038	10.27 ug/l	99
72) Styrene	16.65	104	2522417	10.42 ug/l	98
73) Isopropylbenzene	17.19	105	4093373	9.75 ug/l	99
75) Bromoform	17.19	173	291698	11.87 ug/l	99
76) 1,1,2,2-Tetrachloroethane	17.48	83	550619	9.62 ug/l	99
78) 1,2,3-Trichloropropane	17.69	110	122932	9.27 ug/l	97
79) trans-1,4-Dichloro-2-buten	17.79	53	121136	8.45 ug/l	94
80) n-Propylbenzene	17.79	91	5356209	9.51 ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F17\RFW225.D Vial: 3
Acq On : 17 Jun 2024 11:45 am Operator: DHuynh
Sample : VO06F14L Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 18 12:35 2024 Quant Results File: VO06F03.RES

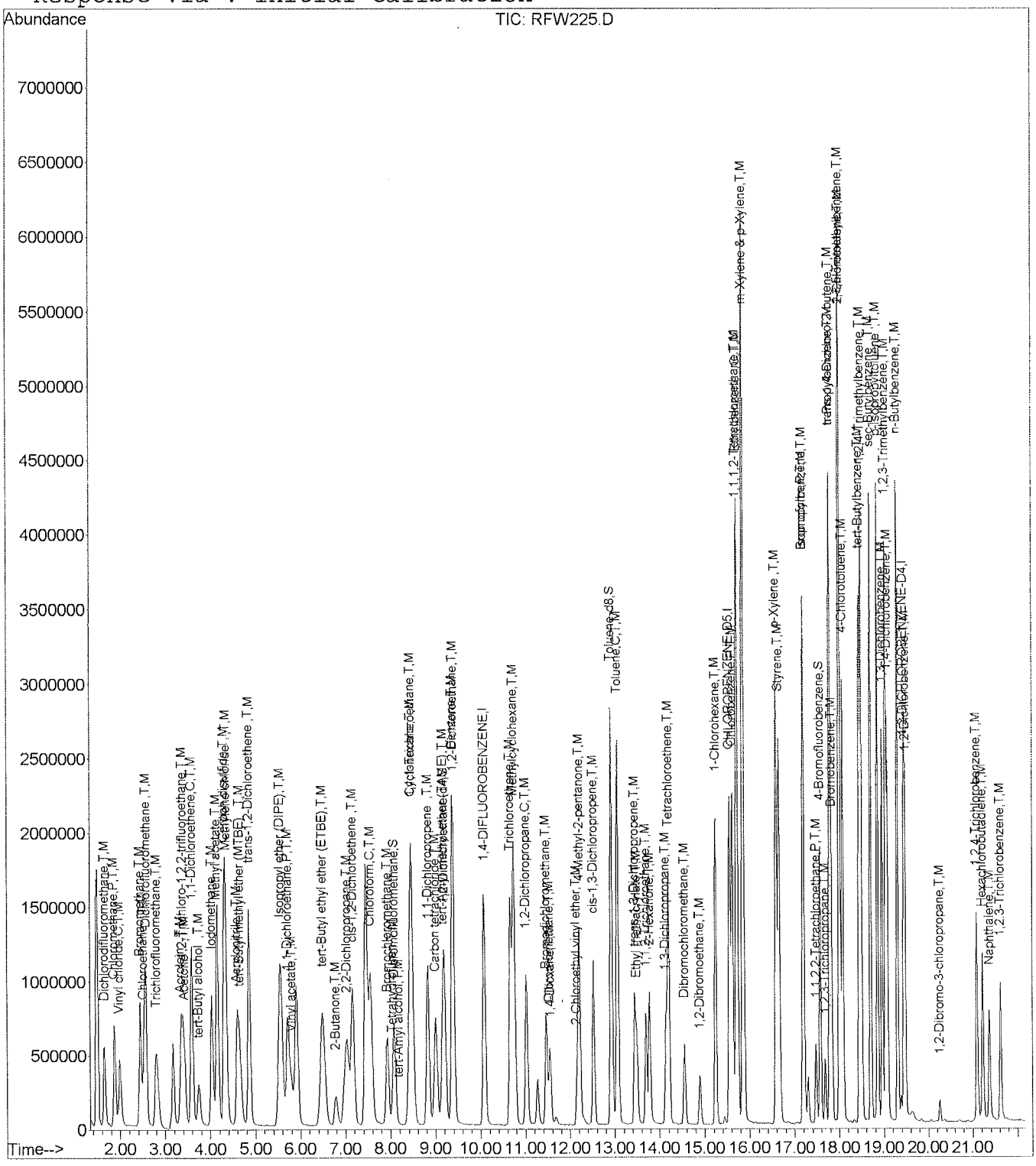
Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
81)	Bromobenzene	17.83	156	797633	9.76	ug/l	99
82)	1,3,5-Trimethylbenzene	18.00	105	3444027	9.41	ug/l	99
83)	2-Chlorotoluene	18.01	91	3488057	9.54	ug/l	99
84)	4-Chlorotoluene	18.08	91	2627226	8.48	ug/l	100
85)	tert-Butylbenzene	18.45	134	723206	9.08	ug/l	99
86)	1,2,4-Trimethylbenzene	18.49	105	3340841	9.49	ug/l	100
87)	sec-Butylbenzene	18.70	105	4502045	9.34	ug/l	98
88)	p-Isopropyltoluene	18.86	119	3605373	9.07	ug/l	98
89)	1,3-Dichlorobenzene	18.96	146	1587239	9.16	ug/l	98
90)	1,2,3-Trimethylbenzene	19.04	105	3188977	9.73	ug/l	98
91)	1,4-Dichlorobenzene	19.08	146	1545796	9.03	ug/l	99
92)	n-Butylbenzene	19.30	91	3549369	8.70	ug/l	98
93)	1,2-Dichlorobenzene	19.48	146	1352568	9.48	ug/l	98
94)	1,2-Dibromo-3-chloropropan	20.26	157	70210	10.02	ug/l	95
95)	1,2,4-Trichlorobenzene	21.09	180	819563	9.71	ug/l	97
96)	Hexachlorobutadiene	21.22	225	442106	8.30	ug/l	98
97)	Naphthalene	21.37	128	1155019	9.65	ug/l	99
98)	1,2,3-Trichlorobenzene	21.62	180	590295	9.24	ug/l	96

(#) = qualifier out of range (m) = manual integration
RFW225.D VO06F03.M Tue Jun 18 12:36:00 2024 Page 3

Data File : D:\HPCHEM\1\DATA\24F17\RFW225.D Vial: 3
Acq On : 17 Jun 2024 11:45 am Operator: DHuynh
Sample : VO06F14L Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 18 12:35 2024 Quant Results File: VO06F03.RE

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F17\RFW227.D Vial: 5
Acq On : 17 Jun 2024 12:54 pm Operator: DHuynh
Sample : VO06F14Y Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 18 12:36 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.07	114	3041029	10.00	ug/l	0.02
54) CHLOROBENZENE-D5	15.55	117	2430400	10.00	ug/l	0.01
74) 1,2-DICHLOROBENZENE-D4	19.43	152	931249	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	8.08	111	1032470	11.31	ug/l	0.02
Spiked Amount 10.000			Recovery = 113.10%			
42) 1,2-Dichloroethane-d4	9.19	65	680221	10.36	ug/l	0.00
Spiked Amount 10.000			Recovery = 103.60%			
55) Toluene-d8	12.92	98	3620288	9.90	ug/l	0.02
Spiked Amount 10.000			Recovery = 99.00%			
77) 4-Bromofluorobenzene	17.56	95	1161968	9.41	ug/l	0.01
Spiked Amount 10.000			Recovery = 94.10%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.63	85	1050863	11.67	ug/l	99
3) Chloromethane	1.87	50	1450090	10.58	ug/l	100
4) Vinyl chloride	1.99	62	1068588	10.93	ug/l	99
5) Bromomethane	2.44	94	1024707	11.56	ug/l	96
6) Chloroethane	2.52	64	714119	9.51	ug/l	99
7) Dichlorofluoromethane	2.56	67	2209391	11.96	ug/l	97
8) Trichlorofluoromethane	2.80	101	1266610	10.44	ug/l	97
9) Acrolein	3.34	56	326958	52.68	ug/l	96
10) 1,1,2-Trichloro-1,2,2-trif	3.38	151	648305	11.57	ug/l	99
11) Acetone	3.43	43	482156	46.29	ug/l	97
12) 1,1-Dichloroethene	3.57	61	1664442	10.32	ug/l	93
13) tert-Butyl alcohol	3.74	59	884114	278.67	ug/l	99
15) Methyl acetate	4.14	74	63996	9.02	ug/l	93
16) Iodomethane	4.03	142	2089877	13.05	ug/l	94
18) Methylene chloride	4.33	49	1436132	10.63	ug/l	92
19) Carbon disulfide	4.31	76	3411033	8.11	ug/l	99
20) Acrylonitrile	4.58	53	745153	52.67	ug/l	100
21) tert-Butyl methyl ether (M	4.62	73	1832510	11.75	ug/l	98
22) trans-1,2-Dichloroethene	4.85	96	1244704	11.11	ug/l	99
23) Isopropyl ether (DIPE)	5.54	45	3622047	10.29	ug/l	96
24) Vinyl acetate	5.79	43	1001213	10.43	ug/l	97
25) 1,1-Dichloroethane	5.71	63	2005372	10.58	ug/l	98
27) tert-Butyl ethyl ether (ET	6.49	59	2696155	10.54	ug/l	97
28) 2-Butanone	6.78	43	748939	44.93	ug/l	95
29) 2,2-Dichloropropane	7.03	77	1334458	12.42	ug/l	99
30) cis-1,2-Dichloroethene	7.16	96	1183083	10.79	ug/l	99
31) Chloroform	7.55	83	1762981	10.15	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F17\RFW227.D Vial: 5
Acq On : 17 Jun 2024 12:54 pm Operator: DHuynh
Sample : VO06F14Y Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 18 12:36 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
32)	Bromochloromethane	7.93	130	536090	11.31	ug/l		100
33)	Tetrahydrofuran	8.04	42	95137	9.32	ug/l		99
34)	tert-Amyl alcohol	8.06	59	2384	1.00	ug/l	#	20
36)	1,1,1-Trichloroethane	8.46	97	1458405	10.90	ug/l		98
37)	Cyclohexane	8.43	84	1511011	11.16	ug/l		99
39)	1,1-Dichloropropene	8.81	110	455560	10.01	ug/l		99
40)	Carbon tetrachloride	9.00	119	1172934	10.85	ug/l		99
41)	tert-Amyl methyl ether (TA	9.17	73	2159690	11.31	ug/l		98
43)	1,2-Dichloroethane	9.40	62	763267	9.86	ug/l		99
44)	Benzene	9.38	78	4172273	10.30	ug/l		98
45)	Trichloroethene	10.66	130	1089928	10.58	ug/l		98
46)	Methylcyclohexane	10.72	83	1919477	12.11	ug/l		95
47)	1,2-Dichloropropane	11.01	63	920149	9.40	ug/l		99
48)	1,4-Dioxane	11.56	88	54198	182.99	ug/l		96
49)	Bromodichloromethane	11.45	83	1068141	9.51	ug/l		100
50)	Dibromomethane	11.52	93	391514	9.45	ug/l		91
51)	2-Chloroethyl vinyl ether	12.14	63	285147	8.82	ug/l		98
52)	4-Methyl-2-pentanone	12.19	43	2328451	49.12	ug/l		95
53)	cis-1,3-Dichloropropene	12.50	75	1294427	9.06	ug/l		96
56)	Toluene	13.05	91	3922581	9.26	ug/l		98
57)	Ethyl methacrylate	13.49	69	672272	9.31	ug/l		97
58)	trans-1,3-Dichloropropene	13.42	75	907759	8.70	ug/l		96
59)	1,1,2-Trichloroethane	13.70	97	479205	9.65	ug/l		95
60)	2-Hexanone	13.76	43	1258059	42.86	ug/l		95
61)	1,3-Dichloropropane	14.14	76	897154	9.57	ug/l		97
62)	Tetrachloroethene	14.20	164	804297	10.32	ug/l		96
63)	Dibromochloromethane	14.53	129	621638	9.37	ug/l		100
65)	1,2-Dibromoethane	14.89	107	441108	8.91	ug/l		98
66)	1-Chlorohexane	15.22	91	1810342	9.08	ug/l		94
67)	Chlorobenzene	15.61	112	2422051	10.14	ug/l		100
68)	1,1,1,2-Tetrachloroethane	15.70	131	837942	10.43	ug/l		99
69)	Ethylbenzene	15.72	91	4567726	9.88	ug/l		99
70)	m-Xylene & p-Xylene	15.85	91	6891939	19.93	ug/l		100
71)	o-Xylene	16.57	91	3610010	10.16	ug/l		99
72)	Styrene	16.64	104	2596980	10.33	ug/l		98
73)	Isopropylbenzene	17.18	105	4232460	9.71	ug/l		99
75)	Bromoform	17.18	173	297817	11.34	ug/l		97
76)	1,1,2,2-Tetrachloroethane	17.46	83	572665	9.36	ug/l		99
78)	1,2,3-Trichloropropane	17.66	110	124871	8.81	ug/l		95
79)	trans-1,4-Dichloro-2-buten	17.78	53	131331	8.57	ug/l		99
80)	n-Propylbenzene	17.77	91	5483935	9.11	ug/l		99

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24F17\RFW227.D Vial: 5
Acq On : 17 Jun 2024 12:54 pm Operator: DHuynh
Sample : VO06F14Y Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 18 12:36 2024 Quant Results File: VO06F03.RES

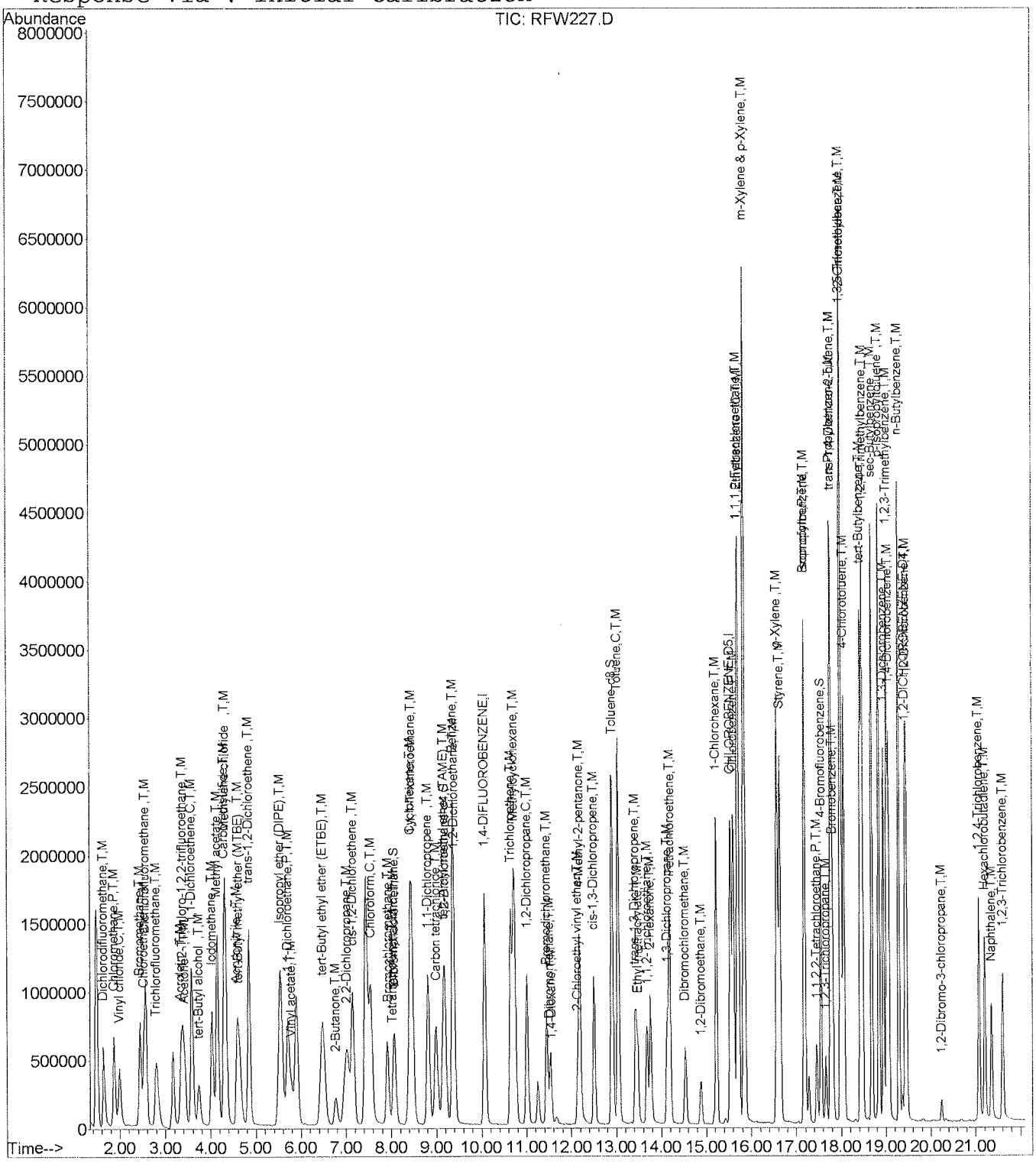
Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
81)	Bromobenzene	17.82	156	834111	9.55	ug/l	96
82)	1,3,5-Trimethylbenzene	17.99	105	3577836	9.14	ug/l	99
83)	2-Chlorotoluene	18.00	91	3359590	8.60	ug/l	94
84)	4-Chlorotoluene	18.07	91	2928476	8.84	ug/l	97
85)	tert-Butylbenzene	18.43	134	766272	9.00	ug/l	99
86)	1,2,4-Trimethylbenzene	18.48	105	3554608	9.45	ug/l	100
87)	sec-Butylbenzene	18.69	105	4808541	9.34	ug/l	99
88)	p-Isopropyltoluene	18.84	119	3902981	9.19	ug/l	99
89)	1,3-Dichlorobenzene	18.95	146	1719436	9.29	ug/l	98
90)	1,2,3-Trimethylbenzene	19.03	105	3393376	9.69	ug/l	100
91)	1,4-Dichlorobenzene	19.06	146	1635024	8.93	ug/l	100
92)	n-Butylbenzene	19.29	91	3770208	8.65	ug/l	99
93)	1,2-Dichlorobenzene	19.45	146	1449574	9.51	ug/l	99
94)	1,2-Dibromo-3-chloropropan	20.25	157	78935	10.54	ug/l	94
95)	1,2,4-Trichlorobenzene	21.08	180	932303	10.33	ug/l	97
96)	Hexachlorobutadiene	21.21	225	529367	9.30	ug/l	97
97)	Naphthalene	21.36	128	1303282	10.19	ug/l	99
98)	1,2,3-Trichlorobenzene	21.61	180	673690	9.87	ug/l	99

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24F17\RFW227.D Vial: 5
Acq On : 17 Jun 2024 12:54 pm Operator: DHuynh
Sample : VO06F14Y Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 18 12:36 2024 Quant Results File: VO06F03.RE

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 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: RFW001 BFB Injection Date: 06/03/24

Instrument ID: 06 BFB Injection Time: 14:25

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	17.714
75	30 - 60% of mass 95	43.812
95	Base Peak, 100% relative abundance	100.000
96	5 - 9% of mass 95	5.660
173	Less than 2% of mass 174	0.000(0)1
174	Greater than 50% of mass 95	66.801
175	5 - 9% of mass 174	4.543(6.8)1
176	95 - 101% % of mass 174	65.298(97.75)1
177	5 - 9% % of mass 176	3.804(5.83)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	VO06F031	RFW002	06/03/24	15:03
2	VSTD0.5	VO06F032	RFW003	06/03/24	15:29
3	VSTD1	VO06F033	RFW004	06/03/24	15:55
4	VSTD2	VO06F034	RFW005	06/03/24	16:21
5	VSTD5	VO06F035	RFW006	06/03/24	16:47
6	VSTD10	VO06F036	RFW007	06/03/24	17:14
7	VSTD20	VO06F037	RFW008	06/03/24	17:40
8	VSTD30	VO06F038	RFW009	06/03/24	18:06
9	VSTD50	VO06F039	RFW010	06/03/24	18:32
10	VSTD100	VO06F0310	RFW011	06/03/24	18:59
11	VSTD10	IVO06F0301	RFW014	06/03/24	20:18

SCC

6/13/24

INITIAL_CALIBRATION - RELATIVE_RESPONSE_FACTOR(%REC)

Instrument ID :06
Beginning DateTime :06/03/24 15:03
Spike Units :PPB
IC File :RFW007

Column Spec :RTX502.2 ID :0.25MM
Ending DateTime :06/03/24 18:59
HPChem Method :VO06F03

M	IDX	Parameters	.3 15:03 RFW002	.5 15:29 RFW003	1 15:55 RFW004	2 16:21 RFW005	5 16:47 RFW006	10 17:14 RFW007	20 17:40 RFW008	30 18:06 RFW009	50 18:32 RFW010	100 18:59 RFW011	AvDRec	%_RSD	Av_Rt_M
	1	1,4-DIFLUOROBENZENE	1	1	1	1	1	1	1	1	1	1	1	0	10.0565
	2	Dichlorodifluoromethane	------	108	88	103	99	100	105	100	99	98	3.7	5.79	1.6306
	3	Chloromethane Δ	136	97	88	95	97	96	98	100	99	94	7.2	13.06	1.8637
	4	Vinyl chloride	------	95	88	99	103	104	109	103	100	------	4.7	6.50	1.9733
	5	Bromomethane	------	85	96	93	101	100	107	109	106	103	5.9	7.51	2.4311
	6	Chloroethane	------	87	98	98	101	98	106	106	105	101	4.3	5.98	2.5188
	7	Dichlorofluoromethane	119	96	87	92	100	100	103	104	102	98	5.6	8.37	2.5585
	8	Trichlorofluoromethane Δ	131	97	85	95	95	97	103	100	98	98	6.9	11.88	2.7954
5	9	Acrolein	------	95	95	80	90	105	105	115	120	115	11.1	12.06	3.3391
	10	1,1,2-Trichloro-1,2,2-trifluoroethane	124	90	93	92	95	97	103	104	100	103	6.7	9.77	3.3791
5	11	Acetone	------	132	94	97	88	91	94	103	103	106	8.8	12.69	3.4253
	12	1,1-Dichloroethene	106	92	89	94	98	103	105	106	103	103	5.2	6.16	3.5719
25	13	tert-Butyl alcohol	120	90	90	90	90	100	100	120	120	120	12	13.37	3.7417
	14	Acetonitrile	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	15	Methyl acetate	------	------	117	96	100	96	96	100	------	------	5.1	8.55	4.1238
	16	Iodomethane	112	87	90	94	101	101	105	105	105	101	5.9	7.71	4.0204
	17	Allyl chloride	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	18	Methylene chloride	116	95	93	91	100	99	102	103	102	100	4.5	6.80	4.3264
	19	Carbon disulfide	------	96	91	98	101	104	105	104	------	------	4.2	5.19	4.2875
5	20	Acrylonitrile	109	87	87	87	94	98	100	109	109	109	8.1	9.66	4.5779
	21	tert Butyl methyl ether (MTBE)	112	91	85	89	96	102	103	111	105	106	7.6	9.16	4.6219
	22	trans-1,2-Dichloroethene	110	95	93	91	98	100	103	104	104	103	4.6	5.68	4.8462
	23	Isopropyl ether (DIPE)	100	86	89	95	103	105	106	109	108	------	6.9	8.51	5.5442
	24	Vinyl acetate	97	80	77	90	99	97	112	119	115	114	11.9	14.60	5.7851
	25	1,1-Dichloroethane	95	90	92	94	100	103	105	108	108	107	6	6.90	5.7013
25	26	2-Butanol	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	27	tert-Butyl ethyl ether (ETBE)	111	91	83	91	97	102	102	108	107	106	7.3	8.89	6.4705
5	28	2-Butanone	91	102	82	85	95	102	102	113	113	113	9.1	11.24	6.7702
	29	2,2-Dichloropropane	------	92	99	96	99	101	108	105	103	------	3.9	5.11	7.0091
	30	cis-1,2-Dichloroethene	106	93	86	93	96	101	105	106	108	107	6.6	7.58	7.1411
	31	Chloroform	103	101	94	92	99	98	102	103	104	104	3.4	4.25	7.5331
	32	Bromochloromethane	108	85	87	91	94	103	104	110	108	110	8.7	9.93	7.9103
	33	Tetrahydrofuran	------	------	115	91	97	94	88	103	94	106	7.4	9.10	8.0283
5	34	tert-Amyl alcohol	------	------	------	100	87	100	87	112	------	------	7.5	11.64	8.0611
	35	Dibromofluoromethane	122	99	82	91	98	100	104	105	------	------	7.9	11.72	8.0570
	36	1,1,1-Trichloroethane	120	89	90	91	98	99	105	104	103	100	6.5	9.11	8.4490
	37	Cyclohexane	------	103	90	101	98	104	105	100	------	------	3.6	5.16	8.4343
	38	2,2,4-Trimethylpentane	120	100	86	99	99	100	101	95	------	------	5.3	9.38	8.6202
	39	1,1-Dichloropropene	103	93	91	91	93	99	105	106	106	110	6.1	6.88	8.8116
	40	Carbon tetrachloride	110	95	86	93	97	100	106	105	105	104	5.9	7.29	8.9813
	41	tert-Amyl methyl ether (TAME)	105	82	86	91	100	104	104	112	108	107	8.2	10.16	9.1511
	42	1,2-Dichloroethane-d4	------	115	85	94	94	100	105	108	------	------	7.9	10.10	9.1798
	43	1,2-Dichloroethane	86	85	91	91	104	105	107	110	111	113	9.7	10.92	9.3795
	44	Benzene	100	95	95	100	105	105	105	106	106	82	5.7	7.65	9.3586
	45	Trichloroethene	99	90	83	95	103	104	105	106	107	108	6.6	8.32	10.6371
	46	Methylcyclohexane	------	96	84	102	98	110	107	103	------	------	6.2	8.40	10.7188
	47	1,2-Dichloropropane	105	85	89	94	101	102	106	107	106	106	6.4	7.90	10.9913
20	48	1,4-Dioxane	------	------	------	87	95	92	98	108	109	111	0	9.47	11.5392
	49	Bromodichloromethane	103	93	91	92	103	100	103	106	106	105	4.9	5.86	11.4314
	50	Dibromomethane	124	99	97	86	93	96	99	101	103	102	6	9.86	11.5152
	51	2-Chloroethyl vinyl ether	------	97	85	84	103	101	103	110	109	110	7.9	10.02	12.1278
5	52	4-Methyl-2-pentanone	87	79	85	92	107	110	107	116	112	104	11.4	13.02	12.1859
	53	cis-1,3-Dichloropropene	99	89	89	93	101	102	106	109	107	105	6	7.30	12.5003
	54	CHLOROBENZENE-D5	1	1	1	1	1	1	1	1	1	1	1	0	15.5334
	55	Toluene-d8	108	104	93	97	101	97	100	99	------	------	3.4	4.62	12.8984
	56	Toluene	92	100	97	100	102	102	104	103	99	------	2.8	3.75	13.0452
	57	Ethyl methacrylate	------	94	87	89	95	102	104	110	106	112	7.7	9.08	13.4715
	58	trans-1,3-Dichloropropene	88	95	90	93	102	103	105	110	107	109	6.9	8.01	13.4246
	59	1,1,2-Trichloroethane	------	105	91	89	99	99	102	109	108	------	5.8	7.35	13.6740
5	60	2-Hexanone	------	------	74	87	100	103	102	112	108	112	9.6	13.14	13.7527
	61	1,3-Dichloropropane	89	95	86	94	100	103	106	109	108	110	7.4	8.77	14.1163
	62	Tetrachloroethene	105	89	86	92	99	101	105	105	106	110	6.7	8.08	14.1770
	63	Dibromochloromethane	115	100	89	88	96	98	100	104	104	106	5.9	8.06	14.5333
	64	2-Ethyl-1-butanol	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	65	1,2-Dibromoethane	129	95	92	92	91	95	95	103	102	104	7.8	11.37	14.8686
	66	1-Chlorohexane	107	97	90	95	104	98	106	101	105	97	4.5	5.44	15.2220
	67	Chlorobenzene	95	96	93	99	104	104	105	107	105	92	5	5.64	15.5983
	68	1,1,1,2-Tetrachloroethane	103	88	87	92	98	103	104	107	107	110	7	8.42	15.6865
	69	Ethylbenzene	97	97	96	100	104	103	105	105	93	------	3.8	4.42	15.7036
2	70	m-Xylene & p-Xylene	102	104	101	104	107	104	106	97	75	------	6.2	9.86	15.8334
	71	o-Xylene	105	98	92	98	103	101	103	102	99	------	3	3.90	16.5614
	72	Styrene	92	92	94	99	102	106	107	108	108	92	6.2	6.99	16.6298
	73	Isopropylbenzene	103	99	99	100	103	102	103	101	91	------	2.6	3.78	17.1697
	74	1,2-DICHLOROBENZENE-D4	1	1	1	1	1	1	1	1	1	1	1	0	19.4258
	75	Bromoform	85	81	94	99	108	115	120	------	------	------	12.1	14.77	17.1682
	76	1,1,2,2-Tetrachloroethane	116	100	84	92	93	98	102	108	104	104	6.7	8.96	17.4536
	77	4-Bromofluorobenzene	------	91	90	101	103	102	106	107	------	------	5.6	7.03	17.5464
	78	1,2,3-Trichloropropane	------	------	89	96	97	97	99	105	107	111	5.5	6.78	17.6612
	79	trans-1,4-Dichloro-2-butene	------	93	102	101	97	100	106	------	------	------	3.2	4.52	17.7673
	80	n-Propylbenzene	90	101	98	108	107	107	108	101	80	------	7.1	9.67	17.7651
	81	Bromobenzene	80	85	89	95	103	104	107	109	112	116	10.1	12.11	17.8040
	82	1,3,5-Trimethylbenzene	91	97	95	102	104	104	106	105	95	------	4.6	5.29	17.9756
	83	2-Chlorotoluene	85	92	93	101	106	105	108	108	102	------	6.7	8.17	17.9871
	84	4-Chlorotoluene	84	98	95	106	103	102	106	105	101	------	5.1	7.10	18.0520
	85	tert-Butylbenzene	------	98	85	94	100	104	105	102	105	107	5.2	6.93	18.4268
	86	1,2,4-Trimethylbenzene	85	99	95	103	105	105	108	106	95	------	5.8	7.30	18.4658
	87	sec-Butylbenzene	93	100	100	108	107	105	105	100	81	------	5.7	8.47	18.6733
	88	p-Isopropyltoluene	94	95	94	108	106	104	106	103	88	------	6.2	7.07	18.8391
	89	1,3-Dichlorobenzene	88	83	91	101	106	106	109	109	110	98	8.1	9.76	18.9379
	90	1,2,3-Trimethylbenzene	93	92	92	101	107	104	107	106	97	------	5.6	6.32	19.0107
	91	1,4-Dichlorobenzene	85	92	88	99	103	105	109	109	110	99	7.2	8.97	19.0625
	92	n-Butylbenzene	98	100	98	104	105	102	106	102	85	------	4.2	6.40	19.2831
	93	1,2-Dichlorobenzene	83	89	95	102	104	105	107	107	106	103	6.6	8.31	19.4517
	94	1,2-Dibromo-3-chloropropane	------	------	------	95	98	96	95	105	105	110	5.2	6.08	20.2321
	95	1,2,4-Trichlorobenzene	99	82	88	93	102	100	107	108	108	113	7.7	9.81	21.0632
	96	Hexachlorobutadiene	107	103	91	101	100	97	104	99	96	103	3.5	4.49	21.1903
	97	Naphthalene	104	87	84	98	98	97	104	109	108	112	7.2	9.16	21.3382
	98	1,2,3-Trichlorobenzene	110	90	86	93	101	92	102	106	108	113	7.8	9.20	21.5912

Δ - 8260C only report LOQ> 0.5

For 8260C
SW 6/13/24

Compound List Report 06

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 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	10.05	1.000	A	1	A	B
2	T	Dichlorodifluoromethane	85	1.63	0.162	A	1	A	B
3	T	Chloromethane	50	1.86	0.186	A	1	A	B
4	T	Vinyl chloride	62	1.98	0.197	A	1	A	B
5	T	Bromomethane	94	2.44	0.243	A	1	A	B
6	T	Chloroethane	64	2.52	0.250	A	1	A	B
7	T	Dichlorofluoromethane	67	2.56	0.254	A	1	A	B
8	T	Trichlorofluoromethane	101	2.79	0.278	A	1	A	B
9	T	Acrolein	56	3.34	0.333	A	1	A	B
10	T	1,1,2-Trichloro-1,2,2-trifluor	151	3.38	0.337	A	1	A	B
11	T	Acetone	43	3.42	0.341	A	1	A	B
12	T	1,1-Dichloroethene	61	3.57	0.355	A	2	A	B
13	T	tert-Butyl alcohol	59	3.74	0.372	A	1	A	B
14	T	Acetonitrile	41	0.00	0.000	A	2	A	B
15	T	Methyl acetate	74	4.14	0.412	A	1	A	B
16	T	Iodomethane	142	4.03	0.401	A	1	A	B
17	T	Allyl chloride	76	4.16	0.414	A	1	A	B
18	T	Methylene chloride	49	4.33	0.431	A	2	A	B
19	T	Carbon disulfide	76	4.28	0.426	A	1	A	B
20	T	Acrylonitrile	53	4.58	0.456	A	2	A	B
21	T	tert-Butyl methyl ether (MTBE)	73	4.62	0.460	A	1	A	B
22	T	trans-1,2-Dichloroethene	96	4.85	0.483	A	1	A	B
23	T	Isopropyl ether (DIPE)	45	5.54	0.552	A	1	A	B
24	T	Vinyl acetate	43	5.77	0.574	A	1	A	B
25	T	1,1-Dichloroethane	63	5.71	0.568	A	2	A	B
26	T	2-Butanol	45	6.28	0.625	A	1	A	B
27	T	tert-Butyl ethyl ether (ETBE)	59	6.46	0.643	A	1	A	B
28	T	2-Butanone	43	6.76	0.673	A	1	A	B
29	T	2,2-Dichloropropane	77	7.01	0.698	A	2	A	B
30	T	cis-1,2-Dichloroethene	96	7.13	0.710	A	1	A	B
31	T	Chloroform	83	7.53	0.750	A	2	A	B
32	T	Bromochloromethane	130	7.91	0.787	A	1	A	B
33	T	Tetrahydrofuran	42	8.04	0.800	A	2	A	B
34	T	tert-Amyl alcohol	59	8.06	0.802	A	1	A	B
35	S	Dibromofluoromethane	111	8.06	0.802	A	1	A	B
36	T	1,1,1-Trichloroethane	97	8.46	0.841	A	2	A	B
37	T	Cyclohexane	84	8.43	0.839	A	1	A	B
38	T	2,2,4-Trimethylpentane	57	8.62	0.858	A	1	A	B
39	T	1,1-Dichloropropene	110	8.81	0.877	A	1	A	B
40	T	Carbon tetrachloride	119	8.98	0.894	A	1	A	B
41	T	tert-Amyl methyl ether (TAME)	73	9.15	0.910	A	2	A	B
42	S	1,2-Dichloroethane-d4	65	9.19	0.914	A	1	A	B
43	T	1,2-Dichloroethane	62	9.38	0.933	A	1	A	B
44	T	Benzene	78	9.36	0.931	A	2	A	B
45	T	Trichloroethene	130	10.63	1.058	A	3	A	B
46	T	Methylcyclohexane	83	10.72	1.067	A	2	A	B
47	T	1,2-Dichloropropane	63	10.99	1.094	A	1	A	B
48	T	1,4-Dioxane	88	11.54	1.148	A	1	A	B
49	T	Bromodichloromethane	83	11.43	1.138	A	1	A	B
50	T	Dibromomethane	93	11.51	1.146	A	2	A	B
51	T	2-Chloroethyl vinyl ether	63	12.12	1.207	A	1	A	B
52	T	4-Methyl-2-pentanone	43	12.19	1.213	A	3	A	B
53	T	cis-1,3-Dichloropropene	75	12.50	1.244	A	3	A	B

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54	I		CHLOROBENZENE-D5	117	15.53	1.000	A	2	A	B
55		S	Toluene-d8	98	12.90	0.830	A	1	A	B
56		T	Toluene	91	13.04	0.840	A	1	A	B
57		T	Ethyl methacrylate	69	13.46	0.867	A	1	A	B
58		T	trans-1,3-Dichloropropene	75	13.42	0.864	A	1	A	B
59		T	1,1,2-Trichloroethane	97	13.67	0.880	A	2	A	B
60		T	2-Hexanone	43	13.76	0.886	A	1	A	B
61		T	1,3-Dichloropropane	76	14.11	0.909	A	1	A	B
62		T	Tetrachloroethene	164	14.18	0.913	A	3	A	B
63		T	Dibromochloromethane	129	14.53	0.936	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	14.87	0.957	A	1	A	B
66		T	1-Chlorohexane	91	15.22	0.980	A	1	A	B
67		T	Chlorobenzene	112	15.60	1.004	A	1	A	B
68		T	1,1,1,2-Tetrachloroethane	131	15.69	1.010	A	1	A	B
69		T	Ethylbenzene	91	15.70	1.011	A	1	A	B
70		T	m-Xylene & p-Xylene	91	15.83	1.019	A	1	A	B
71		T	o-Xylene	91	16.56	1.066	A	1	A	B
72		T	Styrene	104	16.62	1.070	A	2	A	B
73		T	Isopropylbenzene	105	17.17	1.105	A	3	A	B
74	I		1,2-DICHLOROBENZENE-D4	152	19.43	1.000	A	1	A	B
75		T	Bromoform	173	17.17	0.884	A	2	A	B
76		T	1,1,2,2-Tetrachloroethane	83	17.45	0.898	A	1	A	B
77		S	4-Bromofluorobenzene	95	17.54	0.903	A	2	A	B
78		T	1,2,3-Trichloropropane	110	17.66	0.909	A	1	A	B
79		T	trans-1,4-Dichloro-2-butene	53	17.77	0.915	A	1	A	B
80		T	n-Propylbenzene	91	17.77	0.915	A	2	A	B
81		T	Bromobenzene	156	17.80	0.917	A	1	A	B
82		T	1,3,5-Trimethylbenzene	105	17.97	0.925	A	2	A	B
83		T	2-Chlorotoluene	91	17.99	0.926	A	1	A	B
84		T	4-Chlorotoluene	91	18.05	0.929	A	1	A	B
85		T	tert-Butylbenzene	134	18.43	0.949	A	1	A	B
86		T	1,2,4-Trimethylbenzene	105	18.47	0.951	A	1	A	B
87		T	sec-Butylbenzene	105	18.67	0.961	A	1	A	B
88		T	p-Isopropyltoluene	119	18.83	0.969	A	2	A	B
89		T	1,3-Dichlorobenzene	146	18.93	0.975	A	2	A	B
90		T	1,2,3-Trimethylbenzene	105	19.01	0.979	A	2	A	B
91		T	1,4-Dichlorobenzene	146	19.06	0.981	A	2	A	B
92		T	n-Butylbenzene	91	19.28	0.993	A	2	A	B
93		T	1,2-Dichlorobenzene	146	19.45	1.001	A	1	A	B
94		T	1,2-Dibromo-3-chloropropane	157	20.23	1.041	A	1	A	B
95		T	1,2,4-Trichlorobenzene	180	21.06	1.084	A	2	A	B
96		T	Hexachlorobutadiene	225	21.19	1.091	A	2	A	B
97		T	Naphthalene	128	21.33	1.098	A	1	A	B
98		T	1,2,3-Trichlorobenzene	180	21.58	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

VO06F03.M Mon Jun 10 17:42:01 2024

SM 6/13/24

SECOND SOURCE VERIFICATION

CONTINUE_CALIBRATION - CALIBRATION VERIFICATION

Instrument ID :06
IC_Beginning DateTime :06/03/24 15:03
Spike Amount :10 PPB
CC/CV File :RFW014
IC File :RFW007

Column Spec :RTX502.2 ID :0.25MM
IC_Ending DateTime :06/03/24 18:59
HPChem Method :VO06F03
Date_Time :06/03/24 20:18

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	3067327	1	1	10.047	10.057	0				
	2	Dichlorodifluoromethane	9.678	-3.2	879158	0.287	0.296	1.627	1.631	5.79				
	3	Chloromethane	9.688	-3.1	1339526	0.437	0.451	1.864	1.864	13.06				
	4	Vinyl chloride	9.959	-0.4	981772	0.320	0.321	1.982	1.973	6.50				
	5	Bromomethane	10.119	1.2	904417	0.295	0.291	2.436	2.431	7.51				
	6	Chloroethane	9.961	-0.4	754301	0.246	0.247	2.515	2.519	5.98				
	7	Dichlorofluoromethane	9.943	-0.6	1852639	0.604	0.607	2.555	2.559	8.37				
	8	Trichlorofluoromethane	9.296	-7.0	1137996	0.371	0.399	2.792	2.795	11.88				
5	9	Acrolein	49.804	-0.4	311789	0.020	0.020	3.340	3.339	12.06				
	10	1,1,2-Trichloro-1,2,2-trifluoroethane	9.379	-6.2	529874	0.173	0.184	3.382	3.379	9.77				
5	11	Acetone	44.998	-10.0	472714	0.031	0.034	3.424	3.425	12.69				
	12	1,1-Dichloroethene	9.982	-0.2	1623684	0.529	0.530	3.571	3.572	6.16				
25	13	tert-Butyl alcohol	244.740	-2.1	783184	0.010	0.010	3.739	3.742	13.37				
	14	Acetonitrile												
	15	Methyl acetate	8.925	-10.7	63857	0.021	0.023	4.116	4.124	8.55				
	16	Iodomethane	10.198	2.0	1646901	0.537	0.526	4.032	4.020	7.71				
	17	Allyl chloride												
	18	Methylene chloride	9.859	-1.4	1343657	0.438	0.444	4.325	4.326	6.80				
	19	Carbon disulfide	10.237	2.4	4341402	1.415	1.383	4.283	4.287	5.19				
5	20	Acrylonitrile	49.481	-1.0	706101	0.046	0.047	4.577	4.578	9.66				
	21	tert-Butyl methyl ether (MTBE)	10.102	1.0	1588780	0.518	0.513	4.619	4.622	9.16				
	22	trans-1,2-Dichloroethene	10.086	0.9	1139396	0.371	0.368	4.849	4.846	5.68				
	23	Isopropyl ether (DIPE)	10.471	4.7	3718267	1.212	1.158	5.541	5.544	8.51				
	24	Vinyl acetate	9.683	-3.2	937837	0.306	0.316	5.772	5.785	14.60				
	25	1,1-Dichloroethane	10.232	2.3	1956927	0.638	0.623	5.709	5.701	6.90				
25	26	2-Butanol												
	27	tert-Butyl ethyl ether (ETBE)	10.308	3.1	2659759	0.867	0.841	6.463	6.470	8.89				
5	28	2-Butanone	50.421	0.8	847750	0.055	0.055	6.756	6.770	11.24				
	29	2,2-Dichloropropane	9.763	-2.4	1057750	0.345	0.353	7.008	7.009	5.11				
	30	cis-1,2-Dichloroethene	10.001	0.0	1105829	0.361	0.360	7.134	7.141	7.58				
	31	Chloroform	9.891	-1.1	1733464	0.565	0.571	7.532	7.533	4.25				
	32	Bromochloromethane	9.904	-1.0	473424	0.154	0.156	7.909	7.910	9.93				
	33	Tetrahydrofuran	8.620	-13.8	88738	0.029	0.034	8.014	8.028	9.10				
5	34	tert-Amyl alcohol												
	35	Dibromofluoromethane	9.920	-0.8	913355	0.298	0.300	8.056	8.057	11.72				
	36	1,1,1-Trichloroethane	9.930	-0.7	1340703	0.437	0.440	8.454	8.449	9.11				
	37	Cyclohexane	9.605	-4.0	1311974	0.428	0.445	8.433	8.434	5.16				
	38	2,2,4-Trimethylpentane	10.670	6.7	3739017	1.219	1.142	8.622	8.620	9.38				
	39	1,1-Dichloropropene	9.944	-0.6	456656	0.149	0.150	8.811	8.812	6.88				
	40	Carbon tetrachloride	9.921	-0.8	1081570	0.353	0.355	8.978	8.981	7.29				
	41	tert-Amyl methyl ether (TAME)	10.291	2.9	1981882	0.646	0.628	9.146	9.151	10.16				
	42	1,2-Dichloroethane-d4	10.263	2.6	679675	0.222	0.216	9.188	9.180	10.10				
	43	1,2-Dichloroethane	10.217	2.2	797432	0.260	0.254	9.376	9.380	10.92				
	44	Benzene	10.347	3.5	4225842	1.378	1.331	9.355	9.359	7.65				
	45	Trichloroethene	10.297	3.0	1070513	0.349	0.339	10.634	10.637	8.32				
	46	Methylcyclohexane	10.525	5.2	1683252	0.549	0.521	10.718	10.719	8.40				
	47	1,2-Dichloropropane	10.309	3.1	1017751	0.332	0.322	10.990	10.991	7.90				
20	48	1,4-Dioxane	208.701	4.4	62349	0.001	0.001	11.535	11.539	9.47				
	49	Bromodichloromethane	10.053	0.5	1139212	0.371	0.369	11.430	11.431	5.86				
	50	Dibromomethane	9.480	-5.2	396050	0.129	0.136	11.514	11.515	9.86				
	51	2-Chloroethyl vinyl ether	9.481	-5.2	309067	0.101	0.106	12.122	12.128	10.02				
5	52	4-Methyl-2-pentanone	54.066	8.1	2585228	0.169	0.156	12.185	12.186	13.02				
	53	cis-1,3-Dichloropropene	10.266	2.7	1479718	0.482	0.470	12.499	12.500	7.30				
	54	CHLOROBENZENE-D5	10.000	0	2447078	1	1	15.534	15.533	0				
	55	Toluene-d8	9.892	-1.1	3643693	1.489	1.505	12.898	12.898	4.62				
	56	Toluene	10.227	2.3	4363244	1.783	1.743	13.044	13.045	3.75				
	57	Ethyl methacrylate	10.122	1.2	735734	0.301	0.297	13.463	13.472	9.08				
	58	trans-1,3-Dichloropropene	10.025	0.2	1053504	0.431	0.429	13.421	13.425	8.01				
	59	1,1,2-Trichloroethane	10.287	2.9	514511	0.210	0.204	13.673	13.674	7.35				
5	60	2-Hexanone	49.960	-0.1	1476393	0.121	0.121	13.757	13.753	13.14				
	61	1,3-Dichloropropane	10.502	5.0	990803	0.405	0.386	14.113	14.116	8.77				
	62	Tetrachloroethene	10.153	1.5	796511	0.325	0.321	14.176	14.177	8.08				
	63	Dibromochloromethane	9.555	-4.4	638152	0.261	0.273	14.532	14.533	8.06				
	64	2-Ethyl-1-butanol												
	65	1,2-Dibromoethane	9.437	-5.6	470472	0.192	0.204	14.868	14.869	11.37				
	66	1-Chlorohexane	9.968	-0.3	2000900	0.818	0.820	15.222	15.222	5.44				
	67	Chlorobenzene	10.446	4.5	2511716	1.026	0.983	15.599	15.598	5.64				
	68	1,1,1,2-Tetrachloroethane	10.002	0.0	809112	0.331	0.331	15.689	15.686	8.42				
	69	Ethylbenzene	10.286	2.9	4787709	1.957	1.902	15.703	15.704	4.42				
2	70	m-Xylene & p-Xylene	21.077	5.4	7339907	1.500	1.423	15.832	15.833	9.86				
	71	o-Xylene	10.208	2.1	3651913	1.492	1.462	16.559	16.561	3.90				
	72	Styrene	10.531	5.3	2664833	1.089	1.034	16.624	16.630	6.99				
	73	Isopropylbenzene	10.095	1.0	4430704	1.811	1.793	17.169	17.170	3.78				
	74	1,2-DICHLOROBENZENE-D4	10.000	0	825620	1	1	19.426	19.426	0				
	75	Bromoform	11.182	11.8	260456	0.315	0.282	17.169	17.168	14.77				
	76	1,1,2,2-Tetrachloroethane	9.774	-2.3	530261	0.642	0.657	17.454	17.454	8.96				
	77	4-Bromofluorobenzene	10.396	4.0	1138289	1.379	1.326	17.545	17.546	7.03				
	78	1,2,3-Trichloropropane	9.624	-3.8	120911	0.146	0.152	17.662	17.661	6.78				
	79	trans-1,4-Dichloro-2-butene	9.953	-0.5	135264	0.164	0.165	17.765	17.767	4.52				
	80	n-Propylbenzene	10.835	8.4	5780527	7.001	6.462	17.765	17.765	9.67				
	81	Bromobenzene	10.475	4.8	810814	0.982	0.938	17.804	17.804	12.11				
	82	1,3,5-Trimethylbenzene	10.489	4.9	3638846	4.407	4.202	17.973	17.976	5.29				
	83	2-Chlorotoluene	10.783	7.8	3736634	4.526	4.197	17.986	17.987	8.17				
	84	4-Chlorotoluene	10.466	4.7	3073073	3.722	3.556	18.051	18.052	7.10				
	85	tert-Butylbenzene	10.290	2.9	776673	0.941	0.914	18.427	18.427	6.93				
	86	1,2,4-Trimethylbenzene	10.623	6.2	3541709	4.290	4.038	18.466	18.466	7.30				
	87	sec-Butylbenzene	10.494	4.9	4790341	5.802	5.529	18.674	18.673	8.47				
	88	p-Isopropyltoluene	10.600	6.0	3991585	4.835	4.561	18.829	18.839	7.07				
	89	1,3-Dichlorobenzene	10.673	6.7	1752008	2.122	1.988	18.933	18.938	9.76				
	90	1,2,3-Trimethylbenzene	10.570	5.7	3283086	3.977	3.762	19.011	19.011	6.32				
	91	1,4-Dichlorobenzene	10.708	7.1	1737227	2.104	1.965	19.063	19.063	8.97				
	92	n-Butylbenzene	10.472	4.7	4047343	4.902	4.681	19.283	19.283	6.40				
	93	1,2-Dichlorobenzene	10.592	5.9	1431584	1.734	1.637	19.452	19.452	8.31				
	94	1,2-Dibromo-3-chloropropane	9.196	-8.0	61053	0.074	0.080	20.218	20.232	6.08				
	95	1,2,4-Trichlorobenzene	10.310	3.1	824868	0.999	0.969	21.061	21.063	9.81				
	96	Hexachlorobutadiene	10.087	0.9	509117	0.617	0.611	21.191	21.190	4.49				
	97	Naphthalene	10.222	2.2	1159111	1.404	1.373	21.333	21.338	9.16				
	98	1,2,3-Trichlorobenzene	10.042	0.4	607870	0.736	0.733	21.580	21.591	9.20				

Spike Amount = Nominal Amount * M

SH 6/13/24

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F03\RFW014.D Vial: 14
Acq On : 3 Jun 2024 8:18 pm Operator: DHuynh
Sample : IVO06F0301 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 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	97	0.00
2	T,M	Dichlorodifluoromethane	10.000	9.678	3.2	93	0.00
3	P,T,M	Chloromethane	10.000	9.688	3.1	97	0.00
4	C,T,M	Vinyl chloride	10.000	9.959	0.4	93	0.00
5	T,M	Bromomethane	10.000	10.119	-1.2	98	0.00
6	T,M	Chloroethane	10.000	9.962	0.4	98	0.00
7	T,M	Dichlorofluoromethane	10.000	9.943	0.6	96	0.00
8	T,M	Trichlorofluoromethane	10.000	9.296	7.0	93	0.00
9	T,M	Acrolein	50.000	49.804	0.4	95	0.00
10	T,M	1,1,2-Trichloro-1,2,2-trifl	10.000	9.379	6.2	93	0.00
11	T,M	Acetone	50.000	44.998	10.0	96	0.00
12	C,T,M	1,1-Dichloroethene	10.000	9.982	0.2	93	0.00
13	T,M	tert-Butyl alcohol	250.000	244.741	2.1	95	0.00
14	T,M	Acetonitrile	-1.000	0.000	0.0	0	0.00
15	T,M	Methyl acetate	10.000	8.925	10.7	90	-0.02
16	T,M	Iodomethane	10.000	10.199	-2.0	97	0.00
17	T,M	Allyl chloride	10.000	0.000	100.0#	0	0.00
18	T,M	Methylene chloride	10.000	9.860	1.4	96	0.00
19	T,M	Carbon disulfide	10.000	10.237	-2.4	95	0.00
20	T,M	Acrylonitrile	50.000	49.482	1.0	96	0.00
21	T,M	tert-Butyl methyl ether (MT	10.000	10.102	-1.0	96	0.00
22	T,M	trans-1,2-Dichloroethene	10.000	10.086	-0.9	98	0.00
23	T,M	Isopropyl ether (DIPE)	10.000	10.471	-4.7	96	0.00
24	T,M	Vinyl acetate	10.000	9.683	3.2	96	0.00
25	P,T,M	1,1-Dichloroethane	10.000	10.233	-2.3	96	0.00
26	T,M	2-Butanol	250.000	0.000	100.0#	0	-0.17#
27	T,M	tert-Butyl ethyl ether (ETB	10.000	10.308	-3.1	98	0.00
28	T,M	2-Butanone	50.000	50.422	-0.8	95	0.00
29	T,M	2,2-Dichloropropane	10.000	9.763	2.4	94	0.00
30	T,M	cis-1,2-Dichloroethene	10.000	10.001	-0.0	96	0.00
31	C,T,M	Chloroform	10.000	9.892	1.1	97	0.00
32	T,M	Bromochloromethane	10.000	9.904	1.0	93	0.00
33	T,M	Tetrahydrofuran	10.000	8.620	13.8	89	-0.02
34	T,M	tert-Amyl alcohol	50.000	0.000	100.0#	0	-8.06#
35	S	Dibromofluoromethane	10.000	9.920	0.8	96	0.00
36	T,M	1,1,1-Trichloroethane	10.000	9.931	0.7	97	0.00
37	T,M	Cyclohexane	10.000	9.605	3.9	89	0.00
38	T,M	2,2,4-Trimethylpentane	10.000	10.670	-6.7	103	0.00
39	T,M	1,1-Dichloropropene	10.000	9.944	0.6	97	0.00
40	T,M	Carbon tetrachloride	10.000	9.922	0.8	96	0.00
41	T,M	tert-Amyl methyl ether (TAM	10.000	10.291	-2.9	95	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F03\RFW014.D Vial: 14
Acq On : 3 Jun 2024 8:18 pm Operator: DHuynh
Sample : IVO06F0301 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 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	S	1,2-Dichloroethane-d4	10.000	10.264	-2.6	99	0.00
43	T,M	1,2-Dichloroethane	10.000	10.217	-2.2	94	0.00
44	T,M	Benzene	10.000	10.348	-3.5	95	0.00
45	T,M	Trichloroethene	10.000	10.298	-3.0	95	0.00
46	T,M	Methylcyclohexane	10.000	10.525	-5.3	93	0.00
47	C,T,M	1,2-Dichloropropane	10.000	10.309	-3.1	98	0.00
48	T,M	1,4-Dioxane	200.000	208.702	-4.4	109	0.00
49	T,M	Bromodichloromethane	10.000	10.054	-0.5	97	0.00
50	T,M	Dibromomethane	10.000	9.481	5.2	95	0.00
51	T,M	2-Chloroethyl vinyl ether	10.000	9.482	5.2	91	0.00
52	T,M	4-Methyl-2-pentanone	50.000	54.066	-8.1	95	0.00
53	T,M	cis-1,3-Dichloropropene	10.000	10.266	-2.7	97	0.00
54	I	CHLOROBENZENE-D5	10.000	10.000	0.0	97	0.00
55	S	Toluene-d8	10.000	9.892	1.1	98	0.00
56	C,T,M	Toluene	10.000	10.227	-2.3	97	0.00
57	T,M	Ethyl methacrylate	10.000	10.122	-1.2	96	0.00
58	T,M	trans-1,3-Dichloropropene	10.000	10.025	-0.3	95	0.00
59	T,M	1,1,2-Trichloroethane	10.000	10.287	-2.9	101	0.00
60	T,M	2-Hexanone	50.000	49.960	0.1	94	0.00
61	T,M	1,3-Dichloropropane	10.000	10.502	-5.0	99	0.00
62	T,M	Tetrachloroethene	10.000	10.153	-1.5	97	0.00
63	T,M	Dibromochloromethane	10.000	9.555	4.5	95	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	9.437	5.6	96	0.00
66	T,M	1-Chlorohexane	10.000	9.969	0.3	98	0.00
67	P,T,M	Chlorobenzene	10.000	10.446	-4.5	98	0.00
68	T,M	1,1,1,2-Tetrachloroethane	10.000	10.003	-0.0	94	0.00
69	C,T,M	Ethylbenzene	10.000	10.286	-2.9	97	0.00
70	T,M	m-Xylene & p-Xylene	20.000	21.078	-5.4	98	0.00
71	T,M	o-Xylene	10.000	10.209	-2.1	98	0.00
72	T,M	Styrene	10.000	10.532	-5.3	97	0.00
73	T,M	Isopropylbenzene	10.000	10.096	-1.0	96	0.00
74	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	95	0.00
75	P,T,M	Bromoform	10.000	11.182	-11.8	93	0.00
76	P,T,M	1,1,2,2-Tetrachloroethane	10.000	9.774	2.3	95	0.00
77	S	4-Bromofluorobenzene	10.000	10.397	-4.0	97	0.00
78	T,M	1,2,3-Trichloropropane	10.000	9.624	3.8	94	0.00
79	T,M	trans-1,4-Dichloro-2-butene	10.000	9.953	0.5	95	0.00
80	T,M	n-Propylbenzene	10.000	10.835	-8.4	97	0.00

(#) = Out of Range

6/13/24

Data File : D:\HPCHEM\1\DATA\24F03\RFW014.D Vial: 14
Acq On : 3 Jun 2024 8:18 pm Operator: DHuynh
Sample : IVO06F0301 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 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	Bromobenzene	10.000	10.475	-4.7	96	0.00
82	T,M	1,3,5-Trimethylbenzene	10.000	10.489	-4.9	96	0.00
83	T,M	2-Chlorotoluene	10.000	10.784	-7.8	98	0.00
84	T,M	4-Chlorotoluene	10.000	10.466	-4.7	98	0.00
85	T,M	tert-Butylbenzene	10.000	10.290	-2.9	95	0.00
86	T,M	1,2,4-Trimethylbenzene	10.000	10.624	-6.2	97	0.00
87	T,M	sec-Butylbenzene	10.000	10.494	-4.9	96	0.00
88	T,M	p-Isopropyltoluene	10.000	10.601	-6.0	97	0.00
89	T,M	1,3-Dichlorobenzene	10.000	10.674	-6.7	96	0.00
90	T,M	1,2,3-Trimethylbenzene	10.000	10.571	-5.7	97	0.00
91	T,M	1,4-Dichlorobenzene	10.000	10.708	-7.1	97	0.00
92	T,M	n-Butylbenzene	10.000	10.473	-4.7	98	0.00
93	T,M	1,2-Dichlorobenzene	10.000	10.593	-5.9	96	0.00
94	T,M	1,2-Dibromo-3-chloropropane	10.000	9.196	8.0	92	-0.01
95	T,M	1,2,4-Trichlorobenzene	10.000	10.311	-3.1	99	0.00
96	T,M	Hexachlorobutadiene	10.000	10.088	-0.9	99	0.00
97	T,M	Naphthalene	10.000	10.222	-2.2	100	0.00
98	T,M	1,2,3-Trichlorobenzene	10.000	10.042	-0.4	104	0.00

Sa 6/11 3/29

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 : 24F055
Lab File ID: RFW223 BFB Injection Date: 06/17/24
Instrument ID: 06 BFB Injection Time: 10:11

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	15.692
75	30 - 60% of mass 95	41.973
95	Base Peak, 100% relative abundance	100.000
96	5 - 9% of mass 95	5.781
173	Less than 2% of mass 174	0.000(0)1
174	Greater than 50% of mass 95	75.402
175	5 - 9% of mass 174	5.166(6.85)1
176	95 - 101% % of mass 174	73.873(97.97)1
177	5 - 9% % of mass 176	4.434(6)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	CVO06F0308	RFW224	06/17/24	10:53
2	LCS1W	VO06F14L	RFW225	06/17/24	11:45
3	LCD1W	VO06F14Y	RFW227	06/17/24	12:54
4	MBLK1W	VO06F14B	RFW229	06/17/24	13:54
5	TB07-GW061124	24F055-02N	RFW231	06/17/24	14:46
6	EW01-GW061124-193	24F055-01N	RFW232	06/17/24	15:12

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: EMAX Laboratories, Inc.
Lab Code: EMAX
Lab File ID: RFW007
Instrument ID: 06

Project: VA SALT LAKE CITY
SDG No: 24F055
Date Analyzed: 06/03/24
Time Analyzed: 17:14

	INTERNAL STANDARD (IS)	1,4-DIFLUOROBENZENE		CHLOROBENZENE-D5		1,2-DICHLOROBENZENE-D4	
		Area #	RT #	Area #	RT #	Area #	RT #
	12 HOUR STD	3175665	10.05	2524233	15.53	865825	19.43
	UPPER LIMIT	6351330	10.22	5048466	15.70	1731650	19.60
	LOWER LIMIT	1587833	9.883	1262117	15.36	432913	19.26
		Area #	RT #	Area #	RT #	Area #	RT #
1	VSTD10	3148050	10.07	2457554	15.55	874981	19.43
2	LCS1W	2983839	10.09	2340893	15.56	871400	19.44
3	LCD1W	3041029	10.07	2430400	15.55	931249	19.43
4	MBLK1W	3493822	10.07	2861950	15.55	1031279	19.43
5	TB07-GW061124	3588393	10.07	2858580	15.55	1071340	19.43
6	EW01-GW061124-193	3278684	10.07	2613021	15.55	946118	19.43

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

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F17\RFW224.D Vial: 2
Acq On : 17 Jun 2024 10:53 am Operator: DHuynh
Sample : CVO06F0308 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 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	99	0.02
2	T,M	Dichlorodifluoromethane	10.000	10.251	-2.5	101	0.00
3	P,T,M	Chloromethane	10.000	9.186	8.1	94	0.00
4	C,T,M	Vinyl chloride	10.000	11.098	-11.0	106	0.00
5	T,M	Bromomethane	10.000	10.640	-6.4	105	0.00
6	T,M	Chloroethane	10.000	10.505	-5.1	106	0.00
7	T,M	Dichlorofluoromethane	10.000	10.033	-0.3	100	0.00
8	T,M	Trichlorofluoromethane	10.000	10.093	-0.9	103	0.00
9	T,M	Acrolein	50.000	50.794	-1.6	99	0.00
10	T,M	1,1,2-Trichloro-1,2,2-trifl	10.000	11.640	-16.4	119	0.00
11	T,M	Acetone	50.000	41.811	16.4	91	0.02
12	C,T,M	1,1-Dichloroethene	10.000	10.440	-4.4	100	0.02
13	T,M	tert-Butyl alcohol	250.000	242.678	2.9	96	0.00
14	T,M	Acetonitrile	-1.000	0.000	0.0	0	0.00
15	T,M	Methyl acetate	10.000	9.341	6.6	97	0.00
16	T,M	Iodomethane	10.000	11.496	-15.0	113	0.00
17	T,M	Allyl chloride	10.000	0.000	100.0#	0	0.00
18	T,M	Methylene chloride	10.000	9.643	3.6	96	0.02
19	T,M	Carbon disulfide	10.000	10.725	-7.2	102	0.02
20	T,M	Acrylonitrile	50.000	48.777	2.4	97	0.00
21	T,M	tert-Butyl methyl ether (MT	10.000	10.196	-2.0	99	0.02
22	T,M	trans-1,2-Dichloroethene	10.000	10.945	-9.5	109	0.00
23	T,M	Isopropyl ether (DIPE)	10.000	9.407	5.9	89	0.02
24	T,M	Vinyl acetate	10.000	8.304	17.0	85	0.02
25	P,T,M	1,1-Dichloroethane	10.000	9.912	0.9	96	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	9.376	6.2	91	0.02
28	T,M	2-Butanone	50.000	41.110	17.8	80	0.02
29	T,M	2,2-Dichloropropane	10.000	12.540	-25.4#	124	0.02
30	T,M	cis-1,2-Dichloroethene	10.000	10.718	-7.2	105	0.02
31	C,T,M	Chloroform	10.000	9.617	3.8	97	0.02
32	T,M	Bromochloromethane	10.000	10.168	-1.7	97	0.02
33	T,M	Tetrahydrofuran	10.000	7.633	23.7#	81	0.00
34	T,M	tert-Amyl alcohol	50.000	1.016	98.0#	2	0.08
35	S	Dibromofluoromethane	10.000	10.805	-8.0	107	0.02
36	T,M	1,1,1-Trichloroethane	10.000	10.631	-6.3	107	0.00
37	T,M	Cyclohexane	10.000	10.907	-9.1	104	0.00
38	T,M	2,2,4-Trimethylpentane	10.000	0.007	99.9#	0	0.04
39	T,M	1,1-Dichloropropene	10.000	10.478	-4.8	104	0.02
40	T,M	Carbon tetrachloride	10.000	10.657	-6.6	105	0.02
41	T,M	tert-Amyl methyl ether (TAM	10.000	10.097	-1.0	96	0.02

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F17\RFW224.D Vial: 2
Acq On : 17 Jun 2024 10:53 am Operator: DHuynh
Sample : CVO06F0308 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 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	S	1,2-Dichloroethane-d4	10.000	9.719	2.8	97	0.00
43	T,M	1,2-Dichloroethane	10.000	8.848	11.5	83	0.02
44	T,M	Benzene	10.000	9.968	0.3	94	0.02
45	T,M	Trichloroethene	10.000	10.136	-1.4	96	0.02
46	T,M	Methylcyclohexane	10.000	11.232	-12.3	102	0.02
47	C,T,M	1,2-Dichloropropane	10.000	8.817	11.8	86	0.02
48	T,M	1,4-Dioxane	200.000	157.246	21.4#	84	0.02
49	T,M	Bromodichloromethane	10.000	8.878	11.2	88	0.02
50	T,M	Dibromomethane	10.000	8.712	12.9	90	0.00
51	T,M	2-Chloroethyl vinyl ether	10.000	6.260	37.4#	62	0.02
52	T,M	4-Methyl-2-pentanone	50.000	43.311	13.4	78	0.00
53	T,M	cis-1,3-Dichloropropene	10.000	8.638	13.6	84	0.00
54	I	CHLOROBENZENE-D5	10.000	10.000	0.0	97	0.01
55	S	Toluene-d8	10.000	10.242	-2.4	102	0.02
56	C,T,M	Toluene	10.000	9.470	5.3	90	0.00
57	T,M	Ethyl methacrylate	10.000	8.195	18.0	78	0.02
58	T,M	trans-1,3-Dichloropropene	10.000	8.366	16.3	79	0.00
59	T,M	1,1,2-Trichloroethane	10.000	9.165	8.4	90	0.00
60	T,M	2-Hexanone	50.000	40.105	19.8	75	0.00
61	T,M	1,3-Dichloropropane	10.000	8.798	12.0	83	0.02
62	T,M	Tetrachloroethene	10.000	10.443	-4.4	100	0.02
63	T,M	Dibromochloromethane	10.000	8.784	12.2	88	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	8.472	15.3	86	0.00
66	T,M	1-Chlorohexane	10.000	8.830	11.7	87	0.01
67	P,T,M	Chlorobenzene	10.000	10.199	-2.0	96	0.01
68	T,M	1,1,1,2-Tetrachloroethane	10.000	10.250	-2.5	97	0.01
69	C,T,M	Ethylbenzene	10.000	10.136	-1.4	96	0.01
70	T,M	m-Xylene & p-Xylene	20.000	19.914	0.4	93	0.01
71	T,M	o-Xylene	10.000	9.904	1.0	96	0.01
72	T,M	Styrene	10.000	10.028	-0.3	92	0.01
73	T,M	Isopropylbenzene	10.000	10.324	-3.2	99	0.01
74	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	101	0.00
75	P,T,M	Bromoform	10.000	10.293	-2.9	91	0.01
76	P,T,M	1,1,2,2-Tetrachloroethane	10.000	8.930	10.7	92	0.00
77	S	4-Bromofluorobenzene	10.000	10.000	0.0	99	0.01
78	T,M	1,2,3-Trichloropropane	10.000	8.602	14.0	89	0.00
79	T,M	trans-1,4-Dichloro-2-butene	10.000	7.569	24.3#	76	0.01
80	T,M	n-Propylbenzene	10.000	9.963	0.4	94	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F17\RFW224.D Vial: 2
Acq On : 17 Jun 2024 10:53 am Operator: DHuynh
Sample : CVO06F0308 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 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	Bromobenzene	10.000	9.980	0.2	97	0.01
82	T,M	1,3,5-Trimethylbenzene	10.000	9.996	0.0	97	0.01
83	T,M	2-Chlorotoluene	10.000	9.356	6.4	90	0.01
84	T,M	4-Chlorotoluene	10.000	9.680	3.2	96	0.01
85	T,M	tert-Butylbenzene	10.000	9.736	2.6	95	0.01
86	T,M	1,2,4-Trimethylbenzene	10.000	9.880	1.2	95	0.01
87	T,M	sec-Butylbenzene	10.000	9.983	0.2	96	0.01
88	T,M	p-Isopropyltoluene	10.000	9.637	3.6	93	0.01
89	T,M	1,3-Dichlorobenzene	10.000	9.454	5.5	90	0.01
90	T,M	1,2,3-Trimethylbenzene	10.000	9.975	0.3	97	0.01
91	T,M	1,4-Dichlorobenzene	10.000	9.247	7.5	89	0.00
92	T,M	n-Butylbenzene	10.000	9.585	4.1	95	0.00
93	T,M	1,2-Dichlorobenzene	10.000	9.585	4.1	92	0.01
94	T,M	1,2-Dibromo-3-chloropropane	10.000	8.674	13.3	92	0.01
95	T,M	1,2,4-Trichlorobenzene	10.000	9.728	2.7	99	0.03
96	T,M	Hexachlorobutadiene	10.000	9.410	5.9	98	0.03
97	T,M	Naphthalene	10.000	9.117	8.8	95	0.03
98	T,M	1,2,3-Trichlorobenzene	10.000	8.959	10.4	99	0.03

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F17\RFW224.D Vial: 2
Acq On : 17 Jun 2024 10:53 am Operator: DHuynh
Sample : CVO06F0308 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 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	99	0.02
2	T,M	Dichlorodifluoromethane	0.296	0.304	-2.7	101	0.00
3	P,T,M	Chloromethane	0.451	0.414	8.2	94	0.00
4	C,T,M	Vinyl chloride	0.321	0.357	-11.2	106	0.00
5	T,M	Bromomethane	0.291	0.310	-6.5	105	0.00
6	T,M	Chloroethane	0.247	0.259	-4.9	106	0.00
7	T,M	Dichlorofluoromethane	0.607	0.609	-0.3	100	0.00
8	T,M	Trichlorofluoromethane	0.399	0.403	-1.0	103	0.00
9	T,M	Acrolein	0.020	0.021	-5.0	99	0.00
10	T,M	1,1,2-Trichloro-1,2,2-trifl	0.184	0.214	-16.3	119	0.00
11	T,M	Acetone	0.034	0.029	14.7	91	0.02
12	C,T,M	1,1-Dichloroethene	0.530	0.554	-4.5	100	0.02
13	T,M	tert-Butyl alcohol	0.010	0.010	0.0	96	0.00
14	T,M	Acetonitrile	0.000	0.000	0.0	0#	0.00
15	T,M	Methyl acetate	0.023	0.022	4.3	97	0.00
16	T,M	Iodomethane	0.526	0.605	-15.0	113	0.00
17	T,M	Allyl chloride	0.000	0.222	0.0	0#	0.00
18	T,M	Methylene chloride	0.444	0.428	3.6	96	0.02
19	T,M	Carbon disulfide	1.383	1.483	-7.2	102	0.02
20	T,M	Acrylonitrile	0.047	0.045	4.3	97	0.00
21	T,M	tert-Butyl methyl ether (MT	0.513	0.523	-1.9	99	0.02
22	T,M	trans-1,2-Dichloroethene	0.368	0.403	-9.5	109	0.00
23	T,M	Isopropyl ether (DIPE)	1.158	1.089	6.0	89	0.02
24	T,M	Vinyl acetate	0.316	0.262	17.1	85	0.02
25	P,T,M	1,1-Dichloroethane	0.623	0.618	0.8	96	0.00
26	T,M	2-Butanol	0.000	0.008	0.0	0#	0.02
27	T,M	tert-Butyl ethyl ether (ETB	0.841	0.789	6.2	91	0.02
28	T,M	2-Butanone	0.055	0.045	18.2	80	0.02
29	T,M	2,2-Dichloropropane	0.353	0.443	-25.5#	124	0.02
30	T,M	cis-1,2-Dichloroethene	0.360	0.386	-7.2	105	0.02
31	C,T,M	Chloroform	0.571	0.549	3.9	97	0.02
32	T,M	Bromochloromethane	0.156	0.158	-1.3	97	0.02
33	T,M	Tetrahydrofuran	0.034	0.026	23.5#	81	0.00
34	T,M	tert-Amyl alcohol	0.008	0.000	100.0#	2#	0.08
35	S	Dibromofluoromethane	0.300	0.324	-8.0	107	0.02
36	T,M	1,1,1-Trichloroethane	0.440	0.468	-6.4	107	0.00
37	T,M	Cyclohexane	0.445	0.486	-9.2	104	0.00
38	T,M	2,2,4-Trimethylpentane	1.142	0.001	99.9#	0#	0.04
39	T,M	1,1-Dichloropropene	0.150	0.157	-4.7	104	0.02
40	T,M	Carbon tetrachloride	0.355	0.379	-6.8	105	0.02
41	T,M	tert-Amyl methyl ether (TAM	0.628	0.634	-1.0	96	0.02

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F17\RFW224.D Vial: 2
Acq On : 17 Jun 2024 10:53 am Operator: DHuynh
Sample : CVO06F0308 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 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	S	1,2-Dichloroethane-d4	0.216	0.210	2.8	97	0.00
43	T,M	1,2-Dichloroethane	0.254	0.225	11.4	83	0.02
44	T,M	Benzene	1.331	1.327	0.3	94	0.02
45	T,M	Trichloroethene	0.339	0.344	-1.5	96	0.02
46	T,M	Methylcyclohexane	0.521	0.586	-12.5	102	0.02
47	C,T,M	1,2-Dichloropropane	0.322	0.284	11.8	86	0.02
48	T,M	1,4-Dioxane	0.001	0.001	0.0	84	0.02
49	T,M	Bromodichloromethane	0.369	0.328	11.1	88	0.02
50	T,M	Dibromomethane	0.136	0.119	12.5	90	0.00
51	T,M	2-Chloroethyl vinyl ether	0.106	0.067	36.8#	62	0.02
52	T,M	4-Methyl-2-pentanone	0.156	0.135	13.5	78	0.00
53	T,M	cis-1,3-Dichloropropene	0.470	0.406	13.6	84	0.00
54	I	CHLOROBENZENE-D5	1.000	1.000	0.0	97	0.01
55	S	Toluene-d8	1.505	1.542	-2.5	102	0.02
56	C,T,M	Toluene	1.743	1.651	5.3	90	0.00
57	T,M	Ethyl methacrylate	0.297	0.243	18.2	78	0.02
58	T,M	trans-1,3-Dichloropropene	0.429	0.359	16.3	79	0.00
59	T,M	1,1,2-Trichloroethane	0.204	0.187	8.3	90	0.00
60	T,M	2-Hexanone	0.121	0.097	19.8	75	0.00
61	T,M	1,3-Dichloropropane	0.386	0.339	12.2	83	0.02
62	T,M	Tetrachloroethene	0.321	0.335	-4.4	100	0.02
63	T,M	Dibromochloromethane	0.273	0.240	12.1	88	0.00
64	T,M	2-Ethyl-1-butanol	0.000	0.000	0.0	0#	0.00
65	T,M	1,2-Dibromoethane	0.204	0.173	15.2	86	0.00
66	T,M	1-Chlorohexane	0.820	0.724	11.7	87	0.01
67	P,T,M	Chlorobenzene	0.983	1.002	-1.9	96	0.01
68	T,M	1,1,1,2-Tetrachloroethane	0.331	0.339	-2.4	97	0.01
69	C,T,M	Ethylbenzene	1.902	1.928	-1.4	96	0.01
70	T,M	m-Xylene & p-Xylene	1.423	1.417	0.4	93	0.01
71	T,M	o-Xylene	1.462	1.448	1.0	96	0.01
72	T,M	Styrene	1.034	1.037	-0.3	92	0.01
73	T,M	Isopropylbenzene	1.793	1.852	-3.3	99	0.01
74	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	101	0.00
75	P,T,M	Bromoform	0.282	0.290	-2.8	91	0.01
76	P,T,M	1,1,2,2-Tetrachloroethane	0.657	0.587	10.7	92	0.00
77	S	4-Bromofluorobenzene	1.326	1.326	0.0	99	0.01
78	T,M	1,2,3-Trichloropropane	0.152	0.131	13.8	89	0.00
79	T,M	trans-1,4-Dichloro-2-butene	0.165	0.125	24.2#	76	0.01
80	T,M	n-Propylbenzene	6.462	6.438	0.4	94	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F17\RFW224.D Vial: 2
Acq On : 17 Jun 2024 10:53 am Operator: DHuynh
Sample : CVO06F0308 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 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	Bromobenzene	0.938	0.936	0.2	97	0.01
82	T,M	1,3,5-Trimethylbenzene	4.202	4.200	0.0	97	0.01
83	T,M	2-Chlorotoluene	4.197	3.927	6.4	90	0.01
84	T,M	4-Chlorotoluene	3.556	3.442	3.2	96	0.01
85	T,M	tert-Butylbenzene	0.914	0.890	2.6	95	0.01
86	T,M	1,2,4-Trimethylbenzene	4.038	3.989	1.2	95	0.01
87	T,M	sec-Butylbenzene	5.529	5.520	0.2	96	0.01
88	T,M	p-Isopropyltoluene	4.561	4.395	3.6	93	0.01
89	T,M	1,3-Dichlorobenzene	1.988	1.880	5.4	90	0.01
90	T,M	1,2,3-Trimethylbenzene	3.762	3.752	0.3	97	0.01
91	T,M	1,4-Dichlorobenzene	1.965	1.817	7.5	89	0.00
92	T,M	n-Butylbenzene	4.681	4.487	4.1	95	0.00
93	T,M	1,2-Dichlorobenzene	1.637	1.569	4.2	92	0.01
94	T,M	1,2-Dibromo-3-chloropropane	0.080	0.070	12.5	92	0.01
95	T,M	1,2,4-Trichlorobenzene	0.969	0.943	2.7	99	0.03
96	T,M	Hexachlorobutadiene	0.611	0.575	5.9	98	0.03
97	T,M	Naphthalene	1.373	1.252	8.8	95	0.03
98	T,M	1,2,3-Trichlorobenzene	0.733	0.657	10.4	99	0.03

ANALYTICAL LOG(S)

EMAX LABORATORIES, INC.

ANALYSIS RUN LOG
for
VOLATILES

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments: ⊛ varied amount
A: Gas, CS2, 4Add, TAA-224, SS
B: 8260, Ket-AA

Book #: A06-082
Instrument No.: 06
Analytical Sequence: 24F03
Method File: V006F03
Analytical Batch: V006F03D6

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	6/3/24
ICAL ID	V006F03

STANDARDS

NAME	ID	Amount (ul)	Conc. (mg/L)
DCC Gas	SV1-45-53-01	⊛	
DCC CS2	43-98-01		
DCC 4Add	43-95-02		
DCC 8260 Ket	45-01-03 43-82-02		
DCC TAA-224	43-40-03	↓	
BFB	45-01-01	1	
IS/SURR. IS	43-35-02	1	50/250
IS/SURR. SS	43-35-03	1	
ICV/LCS Gas	43-76-03	1	
ICV/LCS CS2	43-55-02	1	
ICV/LCS 3Add	43-81-03	5	
ICV/LCS 8260	43-86-03	5	
ICV/LCS Ket	43-94-02	5	
ICV/LCS TAA	43-69-01	5	
ICV/LCS 224-TMB	43-69-02	5	
Data File Folder	24F03		

	LOT #	Syringe Lot #
pH strip	N/A	MSV-03-02-24
Chlorine strip	↓	03-02-15-5
Methanol		02-01-19
$NaHSO_4$		03-01-11
Reagent Water	RW4-23-001	03-04-17
Sand		

ELECTRONIC DATA ARCHIVAL	
Location	Date
HPCHEM_VOA/TO06	

Analyzed By: DH
Date: 6/3/24
Disposed By: DH
Date Disposed: 6/4/24

Injection Log

Directory: D:\HPCHEM\1\DATA\24F03

Line	Vial	FileName	Multiplier	SampleName		Misc Info	Injected
1	1	RFW001.D	1.	BFB06F01		T/CHK	3 Jun 2024 14:25
2	2	RFW002.D	1.	VO06F031	0.03/0.15uL	0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA	3 Jun 2024 15:03
3	3	RFW003.D	1.	VO06F032	0.05/0.25uL	0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA	3 Jun 2024 15:29
4	4	RFW004.D	1.	VO06F033	0.10/0.50uL	1.0ppb 8260/5.0ppb KET-AA/25ppb TBA	3 Jun 2024 15:55
5	5	RFW005.D	1.	VO06F034	0.20/1.00uL	2.0ppb 8260/10ppb KET-AA/50ppb TBA	3 Jun 2024 16:21
6	6	RFW006.D	1.	VO06F035	0.50/2.50uL	5.0ppb 8260/25ppb KET-AA/125ppb TBA	3 Jun 2024 16:47
7	7	RFW007.D	1.	VO06F036	1.00/5.00uL	10ppb 8260/50ppb KET-AA/250ppb TBA	3 Jun 2024 17:14
8	8	RFW008.D	1.	VO06F037	2.00/10.0uL	20ppb 8260/100ppb KET-AA/500ppb TBA	3 Jun 2024 17:40
9	9	RFW009.D	1.	VO06F038	3.00/15.0uL	30ppb 8260/150ppb KET-AA/750ppb TBA	3 Jun 2024 18:06
10	10	RFW010.D	1.	VO06F039	5.00/25.0uL	50ppb 8260/250ppb KET-AA/1250ppb TBA	3 Jun 2024 18:32
11	11	RFW011.D	1.	VO06F0310	10.0/50.0uL	100ppb 8260/500ppb KET-AA/2500ppb TBA	3 Jun 2024 18:59
12	12	RFW012.D	1.	RINSE			3 Jun 2024 19:25
13	13	RFW013.D	1.	RINSE			3 Jun 2024 19:51
14	14	RFW014.D	1.	IVO06F0301		10ppb 8260/50ppb KET-AA/250ppb TBA	3 Jun 2024 20:18
15	15	RFW015.D	1.	RINSE			3 Jun 2024 20:44

DH 6/10/24

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

Book #:	A06-082
Instrument No.:	06
Analytical Sequence:	24F17
Method File:	V006F03
Analytical Batch:	CV006F0308

INITIAL CALIBRATION REFERENCE			
DATE	6/3/24		
ICAL ID	VO06 F 0 3		
STANDARDS			
NAME	ID	Amount (µl)	Conc. (mg/L)
DCC	SV1- 43-55-01	1	
DCC	43-98-01	1	
DCC	43-95-02	1	
DCC	45-01-03	5	
DCC	43-82-02	5	
BFB	45-01-01	1	
IS/SURR.	43-95-03	6	50/250
ICV/LCS	43-76-03	1	
ICV/LCS	43-55-02	1	
ICV/LCS	43-81-03	5	
ICV/LCS	43-86-03	5	
ICV/LCS	43-94-02	5	
Data File Folder	24F17		
	LOT #	Syringe Lot #	
pH strip	HC210330	MSV-03-02-24	
Chlorine strip	3243036	03-02-16-5	
Methanol			
$NaHSO_4$			
Reagent Water			
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: DH
Date: 6/17/24
Disposed By: DH
Date Disposed: 6/18/24

Injection Log

Directory: D:\HPCHEM\1\DATA\24F17

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	RFW223.D	1.	BFB06F14	T/CHK	17 Jun 2024 10:11
2	2	RFW224.D	1.	CVO06F0308	10ppb 8260/50ppb KET-AA/250ppb TBA	17 Jun 2024 10:53
3	3	RFW225.D	1.	VO06F14L	10ppb 8260/50ppb KET-AA/250ppb TBA	17 Jun 2024 11:45
4	4	RFW226.D	1.	VO06F14C %oRL	10ppb 8260/50ppb KET-AA/250ppb TBA	17 Jun 2024 12:11
5	5	RFW227.D	1.	VO06F14Y	10ppb 8260/50ppb KET-AA/250ppb TBA	17 Jun 2024 12:54
6	6	RFW228.D	1.	RINSE	25mL	17 Jun 2024 13:28
7	7	RFW229.D	1.	VO06F14B	25mL	17 Jun 2024 13:54
8	8	RFW230.D	1.	PV-004-08-04 pH = 7	25mL	17 Jun 2024 14:20
9	9	RFW231.D	1.	24F055-02N	25mL	17 Jun 2024 14:46
10	10	RFW232.D	1.	24F055-01N pH = 7	25mL	17 Jun 2024 15:12
11	11	RFW233.D	1.	24F029-22I 25X	1mL	17 Jun 2024 15:39
12	12	RFW234.D	1.	24F029-16	25mL	17 Jun 2024 16:05
13	13	RFW235.D	1.	24F029-25	25mL	17 Jun 2024 16:31
14	14	RFW236.D	1.	24F031-04	25mL	17 Jun 2024 17:16
15	15	RFW237.D	1.	24F031-04I 10X	2.5mL	17 Jun 2024 18:01
16	16	RFW238.D	1.	24F029-23	25mL	17 Jun 2024 18:30
17	17	RFW239.D	1.	24F029-24	25mL	17 Jun 2024 19:06
18	18	RFW240.D	1.	24E195-09	25mL	17 Jun 2024 19:51
19	19	RFW241.D	1.	24F029-16M	25mL	17 Jun 2024 20:17
20	20	RFW242.D	1.	24F029-16S	25mL	17 Jun 2024 20:44
21	21	RFW243.D	1.	24F029-25M	25mL	17 Jun 2024 21:09
22	22	RFW244.D	1.	24F029-25S	25mL	17 Jun 2024 21:36
23	23	RFW245.D	1.	EVO06F0308	10ppb 8260/50ppb KET-AA/250ppb TBA	17 Jun 2024 22:01
24	24	RFW246.D	1.	EVO06F03081	10ppb 8260/50ppb KET-AA/250ppb TBA	17 Jun 2024 22:27
25	25	RFW247.D	1.	EVO06F03082	10ppb 8260/50ppb KET-AA/250ppb TBA	17 Jun 2024 22:54
26	26	RFW248.D	1.	RINSE		17 Jun 2024 23:20
27	27	RFW249.D	1.	RINSE		17 Jun 2024 23:47
28	28	RFW250.D	1.	RINSE		18 Jun 2024 00:13
29	29	RFW251.D	1.	RINSE		18 Jun 2024 00:39
30	30	RFW252.D	1.	RINSE		18 Jun 2024 01:06
31	31	RFW253.D	1.	RINSE		18 Jun 2024 01:32

DH 6/18/24

EMAX
LABORATORIES, INC.
3051 Fujita Street
Torrance, CA 90505
Tel: (310)-618-8889

Date: 06-25-2024
EMAX Batch No.: 24F063

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 06/13/24.
The data reported relate only to samples listed below :

Sample ID	Control #	Col Date	Matrix	Analysis
EB06-GW061224	F063-01	06/12/24	WATER	VOCS BY 8260C
TB08-GW061224	F063-02	06/12/24	WATER	VOCS BY 8260C
EW01-GW061224-223	F063-03	06/12/24	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.
1835 W. 205th Street, Torrance, CA 90501
Tel # : 310-618-8889 FAX#: 310-618-0818
Email: info@emaxlabs.com

PO NUMBER:
SAMPLE STORAGE

EMAX CONTROL NO. 24F063
PROJECT CODE:

CLIENT CDM Smith
PROJECT 7005 1600E PCE Plume
COORDINATOR Sb Cherie Zalewski
TEL 720-264-1109 FAX EMAIL ZalewskiCA@CDMSmith.com
SEND REPORT TO
COMPANY CDM Smith
ADDRESS 555 17th Street Suite 500
Denver, CO 80201
EMAX PM Linh Pham

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 8260; VOCs 8260

TAT
- [ ] Rush __24__hrs.
- [x] 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 HC	IC	COMMENTS
1	~~EW01-GW061224-223~~		6/12/24	0800	3		GW	GW				
2	EB06-GW061224		6/12/24	0930	3	40mL	VOA	GW		X		
3	TB08-GW061224		6/12/24	0800	2	40mL	VOA	GW		X		
4	EW01-GW061224-223		6/12/24	0800	3	40mL	VOA	GW			X	
5												
6												
7												
8												
9												
10												

Instructions
CC Joe Miller millerjc@CDMSmith.com
mt Neil Smith SmithNL@CDMSmith.com

Cooler #	Temp. (°C)	Sample #s
1	1.9	

SAMPLER Nathan Norris and Isaac Nance
COURIER/AIRBILL FedEx

RELINQUISHED BY	Date	Time	RECEIVED BY
Isaac Nance	6/12/24	1600	
	06/13/24	9:30	

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 24F063
☒ Fedex ☐ UPS ☐ GSO ☐ Others	2758 4769 0270	Recipient Maria Rivera
☐ EMAX Courier ☐ Client Delivery		Date 06/13/24 Time 9:50

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: Corrections not initialed/dated

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 1.9 °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* 210606272	(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 3 vials have slight brown sediment on the bottom.

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	Deseription-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 06/13/24 | 6/13/24

SRF Date 6/13/24

PM Date 6/13/24


ORIGIN ID:NPHA (303) 383-2328
CDM SMITH, INC
555 17TH ST STE 500
DENVER, CO 80202
UNITED STATES US
SHIP DATE: 12JUN24
ACTWGT: 8.85 LB
CAD: 6997117/SSF02521
DIMS: 13x10x10 IN
BILL THIRD PARTY
TO EMAX LABORATORIES
275859TS1DRILL
3051 FUJITA ST
TORRANCE CA 90505
(310) 618-8889
REF:
DEPT:
INV:
PO:
FedEx
Express
REL#
3785346
THU - 13 JUN 10:30A
PRIORITY OVERNIGHT
TRK# 2758 4769 0270
0201
AHS
90505
CA-US LAX
WZ 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 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#: 24F063

CASE NARRATIVE

Client : CDM SMITH

Project: VA SALT LAKE CITY

SDG : 24F063

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

A total of three(3) water samples were received on 06/13/24 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. For this SDG, the following were noted: Vinyl Acetate was detected biased high(%D=25.5) in CCV(Data File ID: RFC213). 2-Butanone was detected biased high(%D=29.0) in CCV(Data File ID: RFC213). However, note that the analytes in question were not detected in any of the associated field samples. 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. VO67F11B - 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. Lab control sample was prepared and analyzed at a frequency required by the project. All analytes were within LCS limits except for: VO67F11L/VO67F11C - RPD for Methyl Acetate(RPD=21*) was not within LCD QC limits. The rest of the analytes were in control. Refer to LCS summary form 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. : 24F063
Instrument ID : 67

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
LCS1W	V067F11L	1	NA	06/15/2412:03	06/15/2412:03	RFC214	RFC007	V067F11	Lab Control Sample (LCS)
LCD1W	V067F11C	1	NA	06/15/2412:31	06/15/2412:31	RFC215	RFC007	V067F11	LCS Duplicate
MBLK1W	V067F11B	1	NA	06/15/2413:45	06/15/2413:45	RFC217	RFC007	V067F11	Method Blank
TB08-GW061224	24F063-02	1	NA	06/15/2414:12	06/15/2414:12	RFC218	RFC007	V067F11	Field Sample
EB06-GW061224	24F063-01	1	NA	06/15/2415:34	06/15/2415:34	RFC221	RFC007	V067F11	Field Sample
EW01-GW061224-223	24F063-03	1	NA	06/15/2416:01	06/15/2416:01	RFC222	RFC007	V067F11	Field Sample

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

METHOD SW5030B/B260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	06/12/24 09:30
Project	: VA SALT LAKE CITY	Date Received:	06/13/24
Batch No.	: 24F063	Date Extracted:	06/15/24 15:34
Sample ID	: EB06-GW061224	Date Analyzed:	06/15/24 15:34
Lab Samp ID:	24F063-01	Dilution Factor:	1
Lab File ID:	RFC221	Matrix:	WATER
Ext Btch ID:	V067F11	% Moisture:	NA
Calib. Ref.:	RFC007	Instrument ID:	67

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	9.01	10.0	90	70-130
Bromofluorobenzene	10.3	10.0	103	70-130
Toluene-dB	9.80	10.0	98	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\24F15\RFC221.D Vial: 10
Acq On : 15 Jun 2024 3:34 pm Operator: DNguye
Sample : 24F063-01 Inst : 67
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 17:13 2024 Quant Results File: VO67F05.RES

Quant Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration
DataAcq Meth : VO67F05

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.83	114	1481656	10.00	ug/l	0.01
55) CHLOROBENZENE-D5	15.34	117	1050456	10.00	ug/l	0.01
74) 1,2-DICHLOROBENZENE-D4	19.30	152	319250	10.00	ug/l	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	7.80	111	399022	9.88	ug/l	0.00
Spiked Amount 10.000			Recovery = 98.80%			
43) 1,2-Dichloroethane-d4	8.95	65	237382	9.02	ug/l	0.01
Spiked Amount 10.000			Recovery = 90.20%			
56) Toluene-d8	12.69	98	1448313	9.80	ug/l	0.01
Spiked Amount 10.000			Recovery = 98.00%			
77) 4-Bromofluorobenzene	17.37	95	414517	10.33	ug/l	0.00
Spiked Amount 10.000			Recovery = 103.30%			

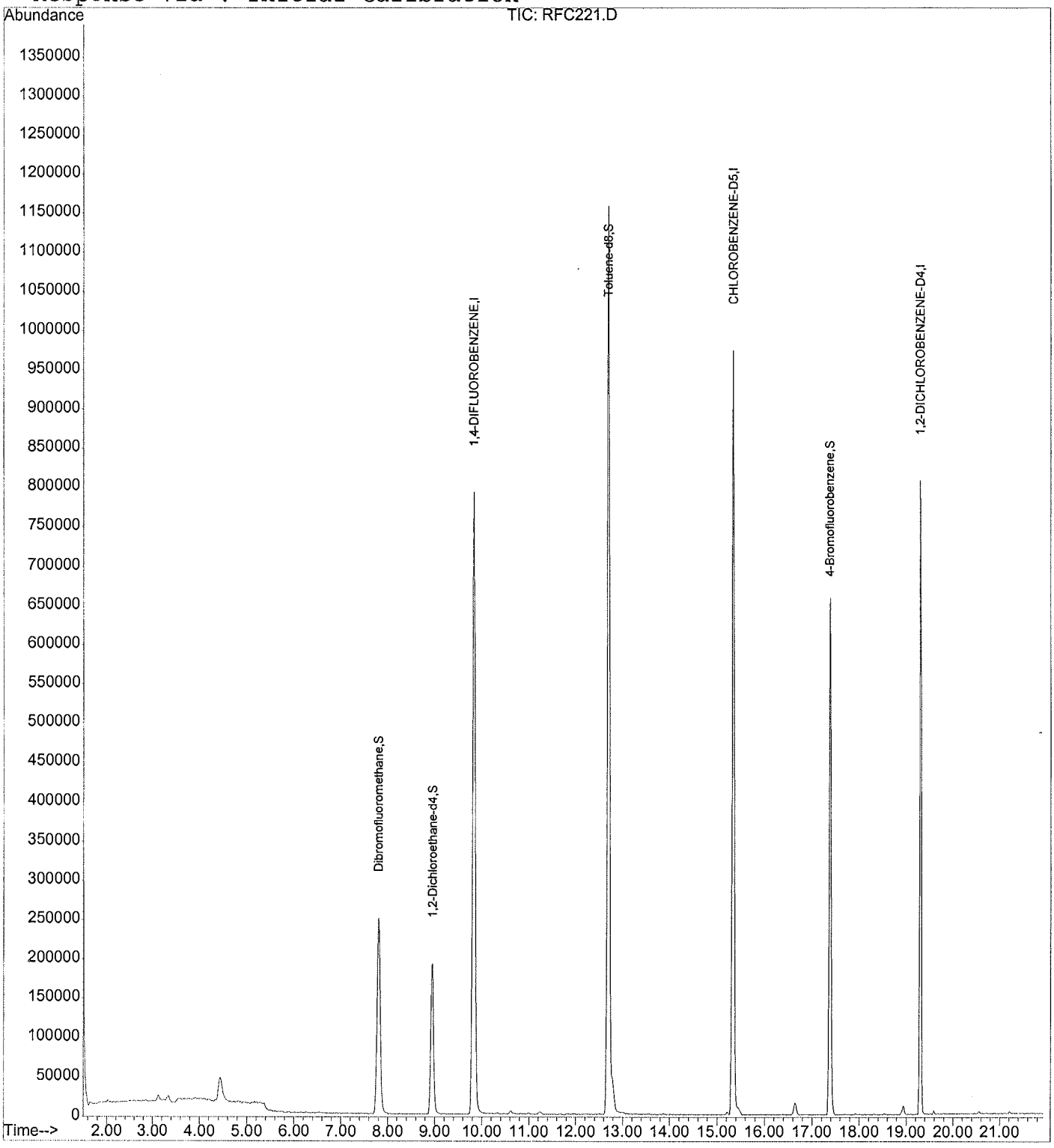
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F15\RFC221.D Vial: 10
Acq On : 15 Jun 2024 3:34 pm Operator: DNguye
Sample : 24F063-01 Inst : 67
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 17:13 2024 Quant Results File: VO67F05.RES

Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	06/12/24 08:00
Project	: VA SALT LAKE CITY	Date Received:	06/13/24
Batch No.	: 24F063	Date Extracted:	06/15/24 14:12
Sample ID	: TB0B-GW061224	Date Analyzed:	06/15/24 14:12
Lab Samp ID:	24F063-02	Dilution Factor:	1
Lab File ID:	RFC218	Matrix:	WATER
Ext Btch ID:	V067F11	% Moisture:	NA
Calib. Ref.:	RFC007	Instrument ID:	67

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	8.63	10.0	86	70-130
Bromofluorobenzene	10.4	10.0	104	70-130
Toluene-d8	9.79	10.0	98	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\24F15\RFC218.D Vial: 7
Acq On : 15 Jun 2024 2:12 pm Operator: DNguye
Sample : 24F063-02 Inst : 67
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 17:10 2024 Quant Results File: VO67F05.RES

Quant Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration
DataAcq Meth : VO67F05

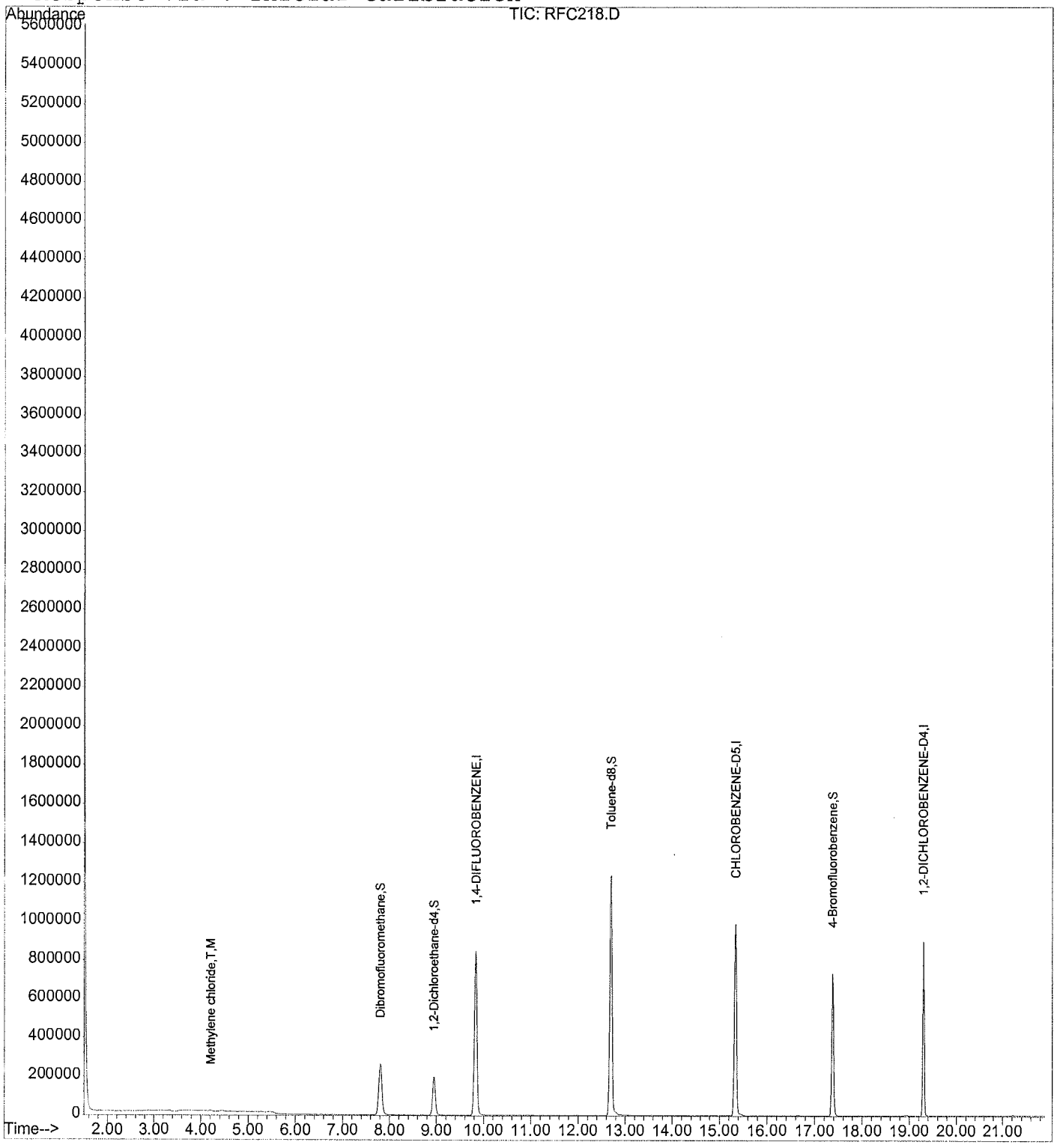
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.83	114	1589306	10.00	ug/l	0.02
55) CHLOROBENZENE-D5	15.34	117	1127403	10.00	ug/l	0.02
74) 1,2-DICHLOROBENZENE-D4	19.30	152	343617	10.00	ug/l	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	7.80	111	422585	9.76	ug/l	0.00
Spiked Amount 10.000			Recovery = 97.60%			
43) 1,2-Dichloroethane-d4	8.94	65	243660	8.63	ug/l	0.00
Spiked Amount 10.000			Recovery = 86.30%			
56) Toluene-d8	12.70	98	1552867	9.79	ug/l	0.02
Spiked Amount 10.000			Recovery = 97.90%			
77) 4-Bromofluorobenzene	17.37	95	448865	10.39	ug/l	0.00
Spiked Amount 10.000			Recovery = 103.90%			
Target Compounds						Qvalue
20) Methylene chloride	4.21	49	6933	0.13	ug/l	88

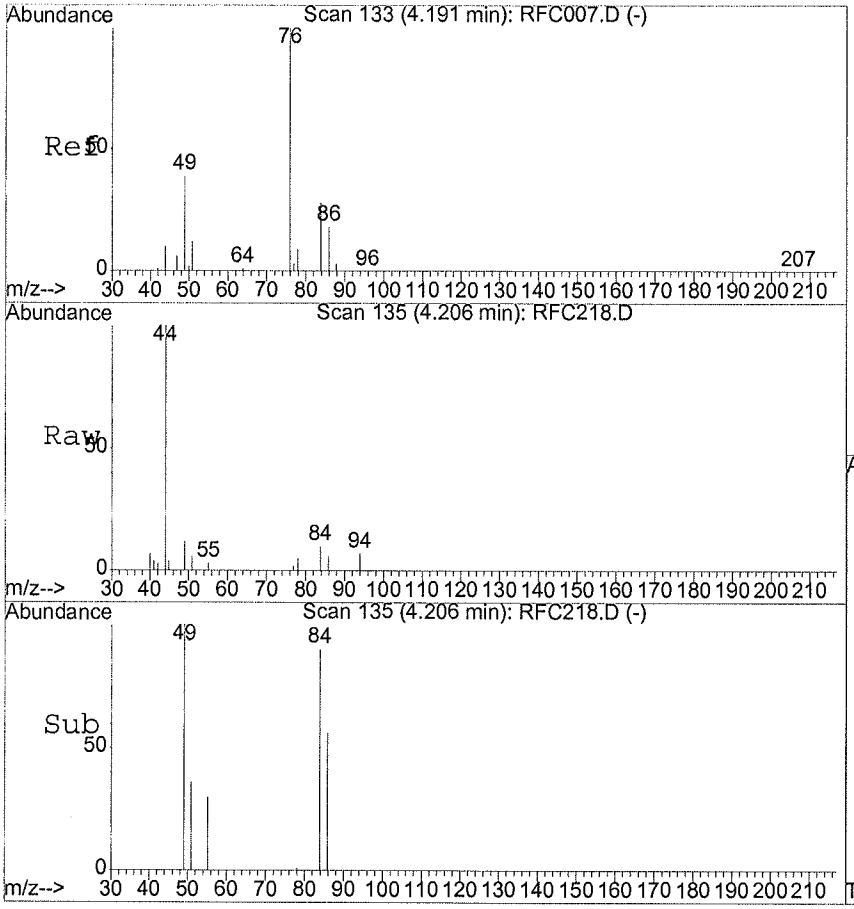
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F15\RFC218.D Vial: 7
Acq On : 15 Jun 2024 2:12 pm Operator: DNguye
Sample : 24F063-02 Inst : 67
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 17:10 2024 Quant Results File: VO67F05.RES

Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration

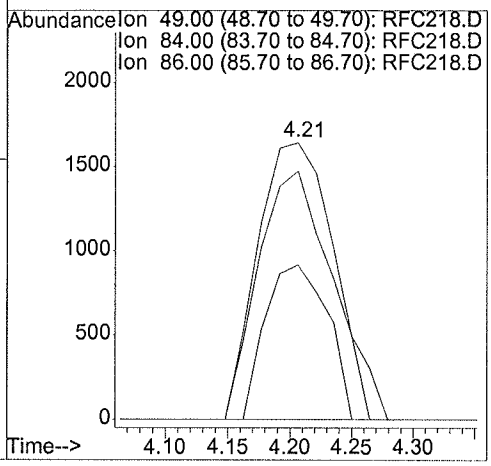




#20
Methylene chloride
Concen: 0.13 ug/l
RT: 4.21 min Scan# 135
Delta R.T. 0.02 min
Lab File: RFC218.D
Acq: 15 Jun 2024 2:12 pm

Tgt Ion: 49 Resp: 6933

Ion	Ratio	Lower	Upper
49	100		
84	89.6	45.0	105.0
86	46.2	19.1	79.1



METHOD SW5030B/B260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	06/12/24 08:00
Project	: VA SALT LAKE CITY	Date Received:	06/13/24
Batch No.	: 24F063	Date Extracted:	06/15/24 16:01
Sample ID	: EW01-GW061224-223	Date Analyzed:	06/15/24 16:01
Lab Samp ID:	24F063-03	Dilution Factor:	1
Lab File ID:	RFC222	Matrix:	WATER
Ext Btch ID:	VO67F11	% Moisture:	NA
Calib. Ref.:	RFC007	Instrument ID:	67

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	5.8J	20	2.5
2-Hexanone	ND	20	2.5
Acetone	ND	20	2.5
Benzene	0.48J	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	2.3	1.0	0.10
Chloromethane	0.90J	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	0.30J	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	0.12J	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	3.4	1.0	0.15
Toluene	0.74J	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	8.57	10.0	86	70-130
Bromofluorobenzene	9.73	10.0	97	70-130
Toluene-d8	9.87	10.0	99	70-130
Dibromofluoromethane	9.42	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.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F15\RFC222.D Vial: 11
Acq On : 15 Jun 2024 4:01 pm Operator: DNguye
Sample : 24F063-03 Inst : 67
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 17:16 2024 Quant Results File: VO67F05.RES

Quant Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Jun 11 11:58:26 2024
Response via : Initial Calibration
DataAcq Meth : VO67F05

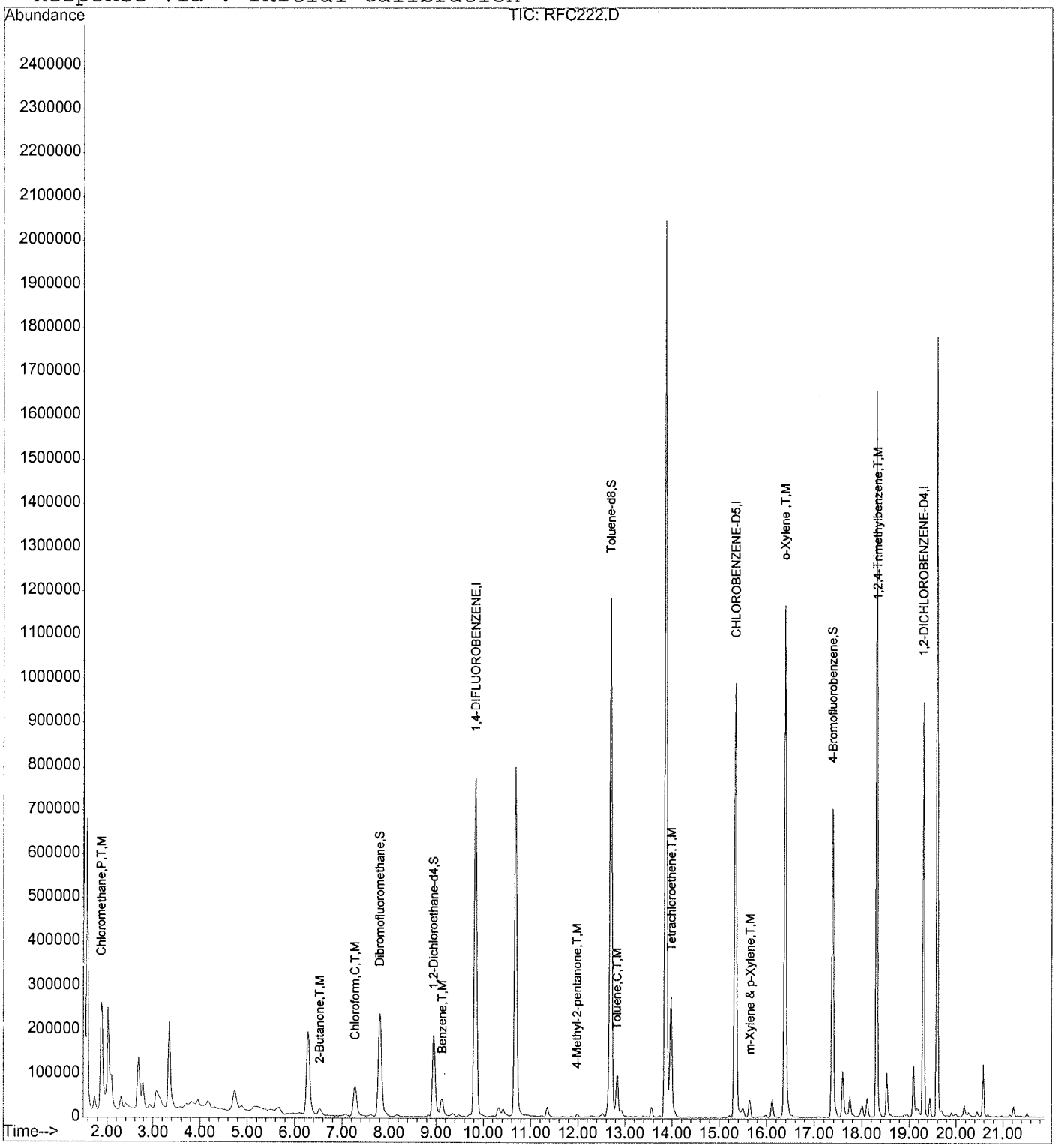
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.83	114	1448187	10.00	ug/l	0.02
55) CHLOROBENZENE-D5	15.34	117	1042518	10.00	ug/l	0.02
74) 1,2-DICHLOROBENZENE-D4	19.30	152	358698	10.00	ug/l	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	7.80	111	371764	9.42	ug/l	0.00
Spiked Amount 10.000			Recovery = 94.20%			
43) 1,2-Dichloroethane-d4	8.94	65	220595	8.57	ug/l	0.00
Spiked Amount 10.000			Recovery = 85.70%			
56) Toluene-d8	12.70	98	1448365	9.87	ug/l	0.02
Spiked Amount 10.000			Recovery = 98.70%			
77) 4-Bromofluorobenzene	17.37	95	438544	9.73	ug/l	0.00
Spiked Amount 10.000			Recovery = 97.30%			
Target Compounds						Qvalue
4) Chloromethane	1.88	50	51732	0.90	ug/l	89
29) 2-Butanone	6.53	72	12265	5.84	ug/l	71
32) Chloroform	7.27	83	155278	2.33	ug/l	94
44) Benzene	9.13	78	89608	0.48	ug/l	96
53) 4-Methyl-2-pentanone	11.98	43	13197	0.50	ug/l	90
57) Toluene	12.83	91	130981	0.74	ug/l	99
63) Tetrachloroethene	13.98	164	124281	3.41	ug/l	99
70) m-Xylene & p-Xylene	15.65	91	42235	0.30	ug/l	98
71) o-Xylene	16.38	91	16216	0.12	ug/l	99
86) 1,2,4-Trimethylbenzene	18.32	105	13881	0.10	ug/l	77

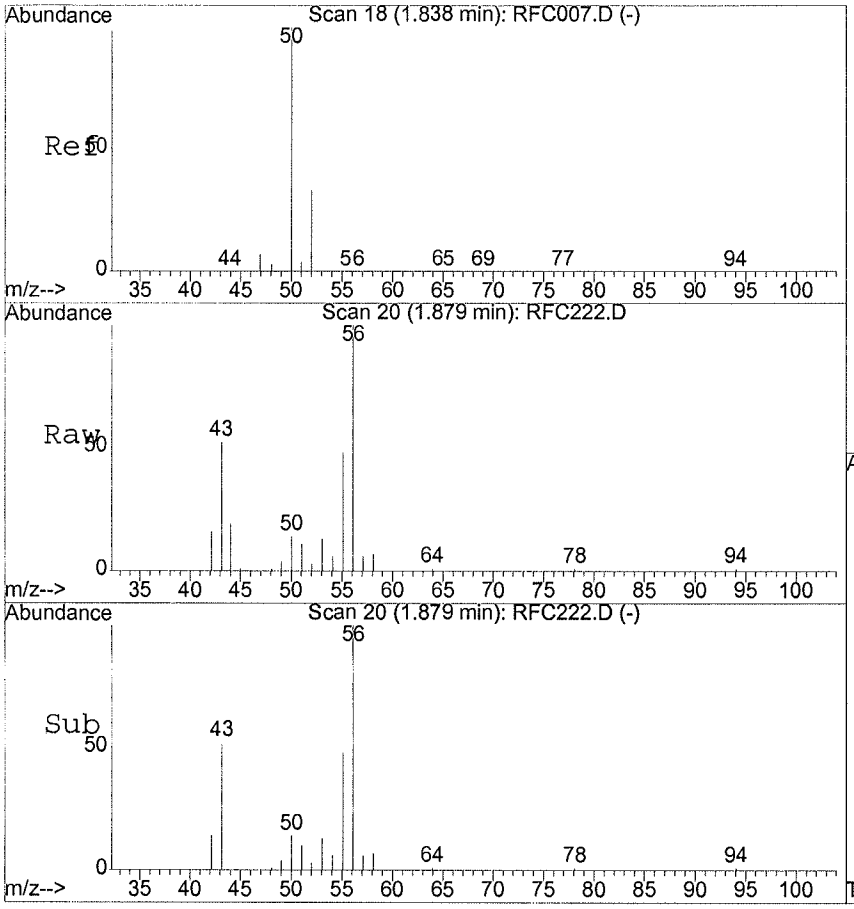
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F15\RFC222.D Vial: 11
Acq On : 15 Jun 2024 4:01 pm Operator: DNguye
Sample : 24F063-03 Inst : 67
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 17:16 2024 Quant Results File: VO67F05.RES

Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration

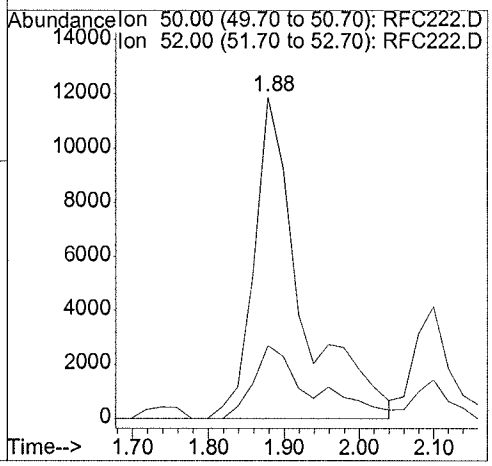


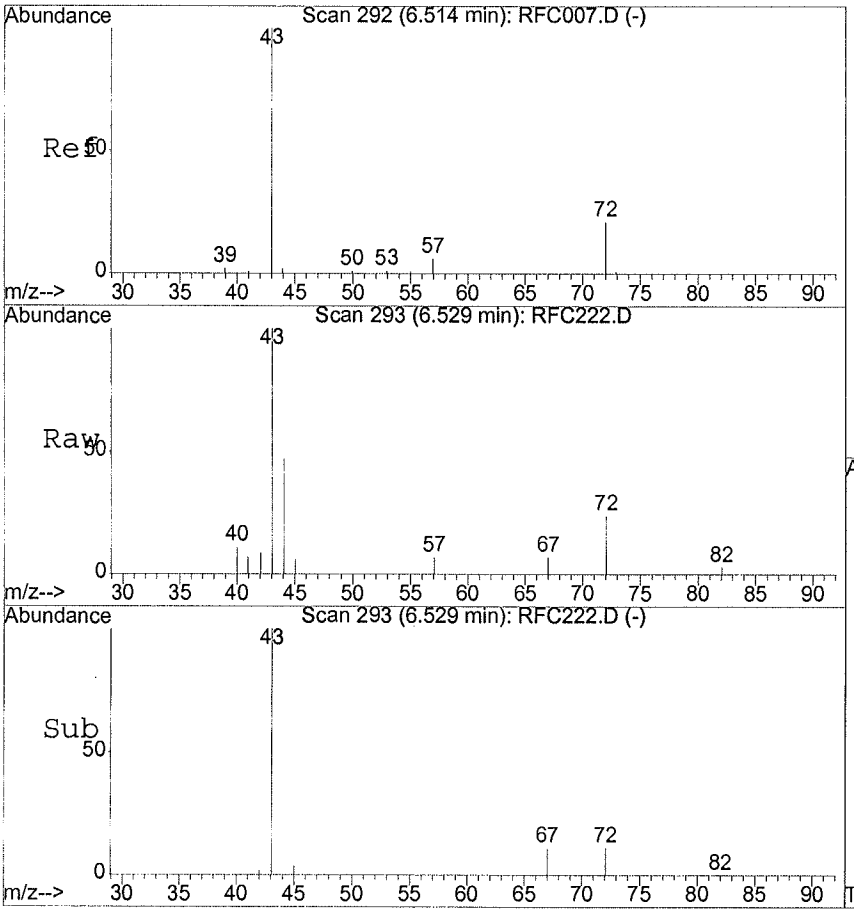


#4
Chloromethane
Concen: 0.90 ug/l
RT: 1.88 min Scan# 20
Delta R.T. 0.04 min
Lab File: RFC222.D
Acq: 15 Jun 2024 4:01 pm

Tgt Ion: 50 Resp: 51732

Ion	Ratio	Lower	Upper
50	100		
52	27.9	4.0	64.0

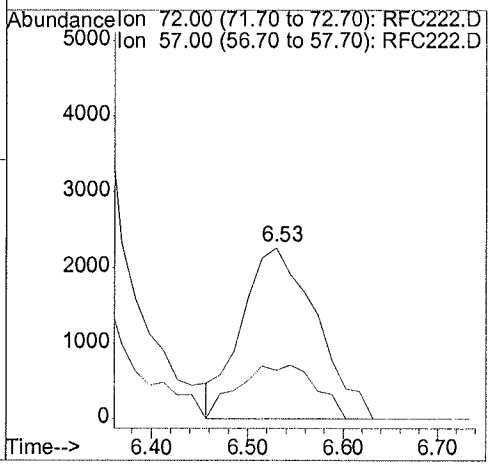


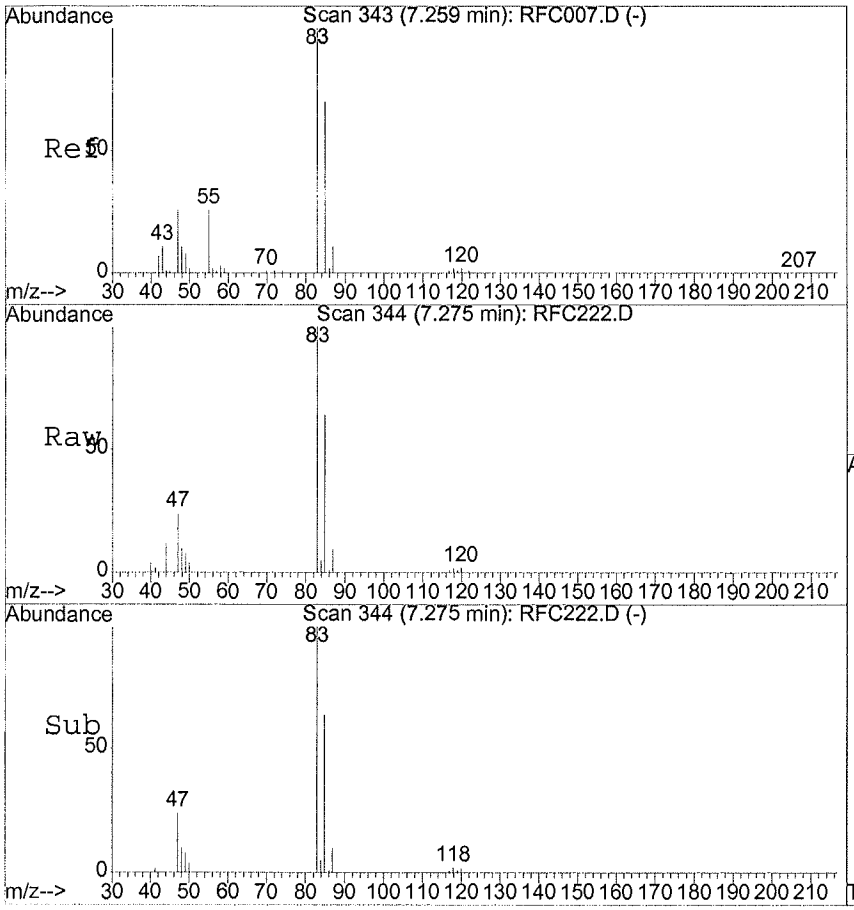


#29
2-Butanone
Concen: 5.84 ug/l
RT: 6.53 min Scan# 293
Delta R.T. 0.02 min
Lab File: RFC222.D
Acq: 15 Jun 2024 4:01 pm

Tgt Ion: 72 Resp: 12265

Ion	Ratio	Lower	Upper
72	100		
57	18.3	5.1	65.1

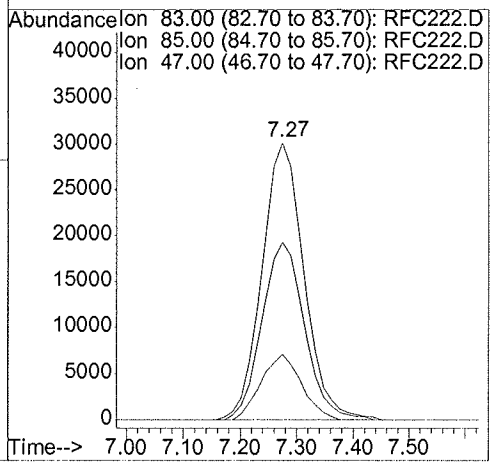


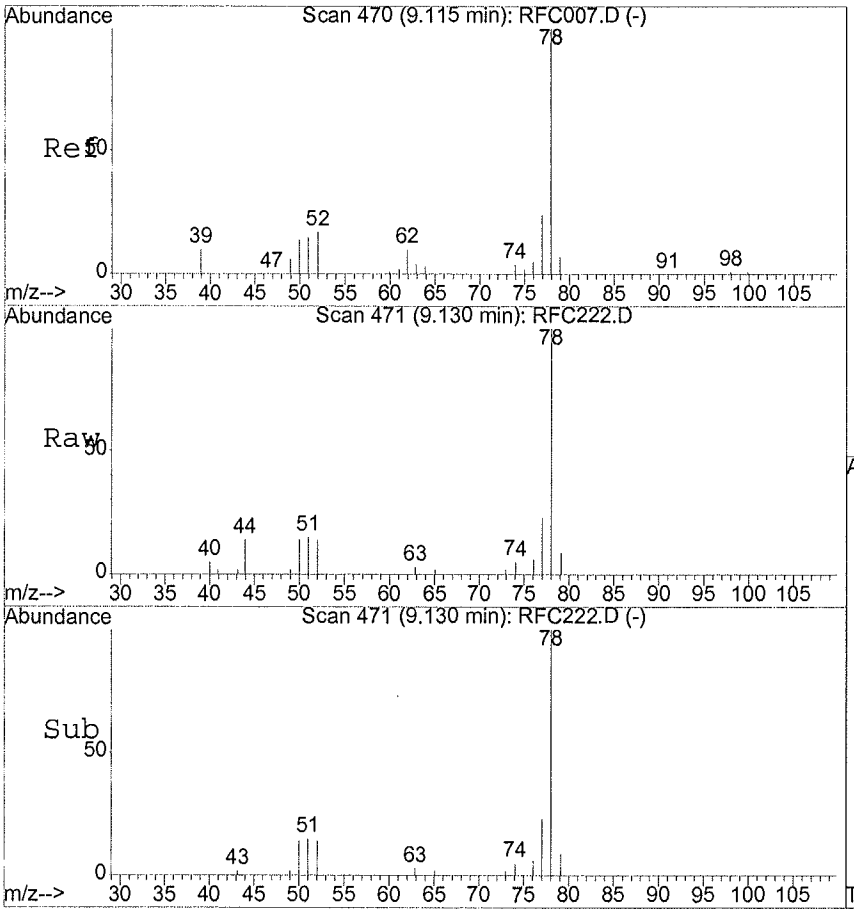


#32
Chloroform
Concen: 2.33 ug/l
RT: 7.27 min Scan# 344
Delta R.T. 0.02 min
Lab File: RFC222.D
Acq: 15 Jun 2024 4:01 pm

Tgt Ion: 83 Resp: 155278

Ion	Ratio	Lower	Upper
83	100		
85	64.8	40.0	100.0
47	22.7	0.0	55.3

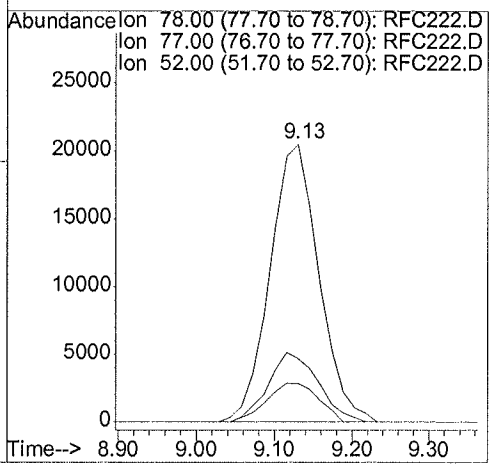


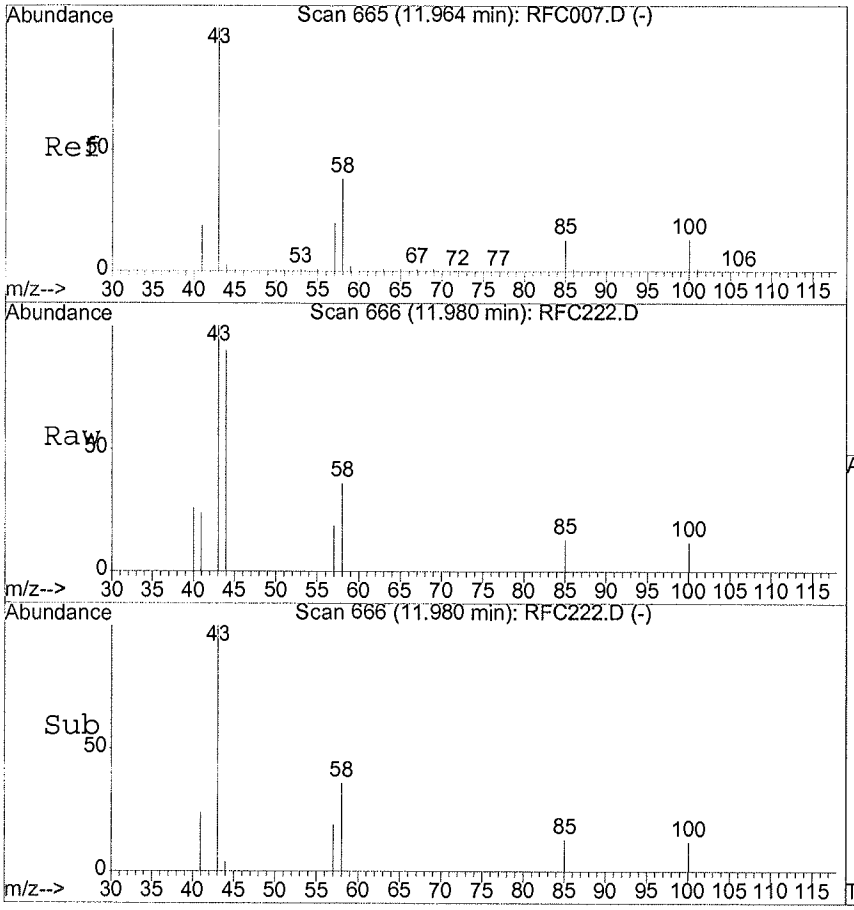


#44
Benzene
Concen: 0.48 ug/l
RT: 9.13 min Scan# 471
Delta R.T. 0.02 min
Lab File: RFC222.D
Acq: 15 Jun 2024 4:01 pm

Tgt Ion: 78 Resp: 89608

Ion	Ratio	Lower	Upper
78	100		
77	25.6	0.0	53.9
52	14.8	0.0	46.6

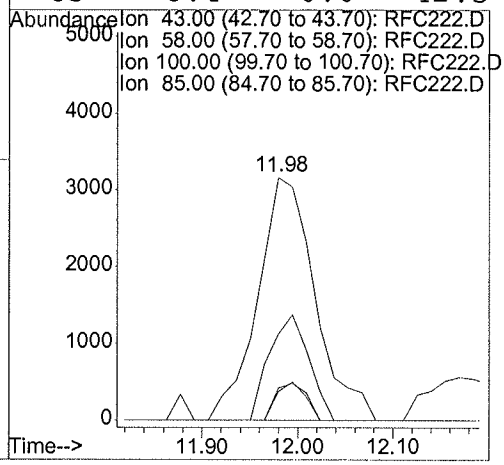


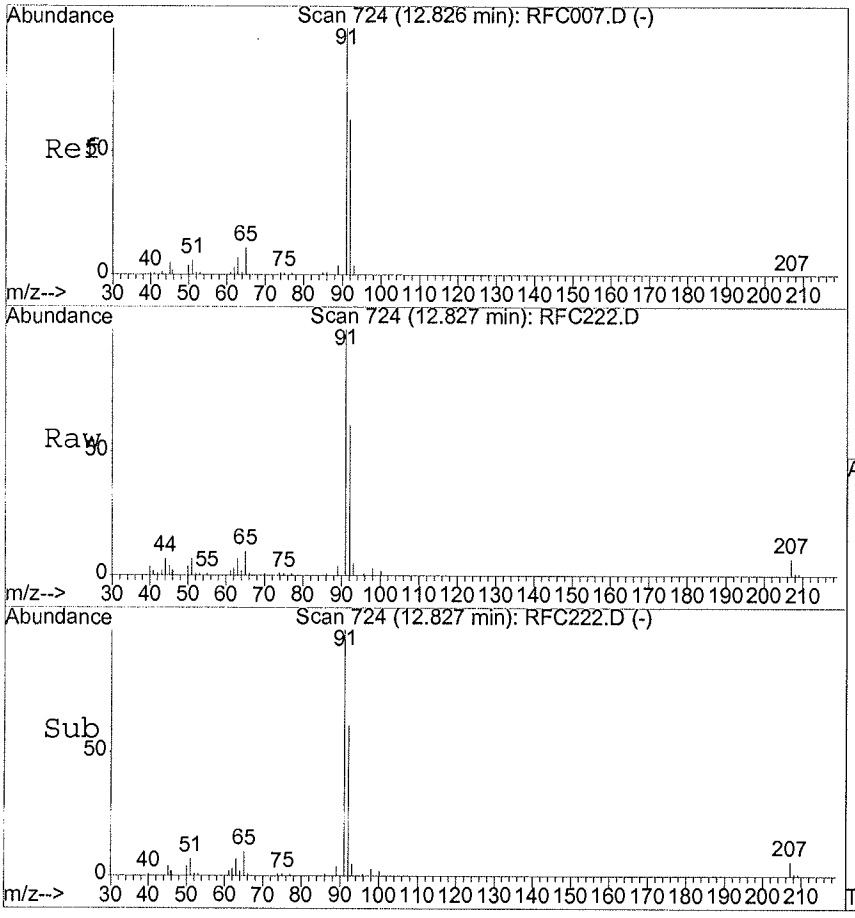


#53
4-Methyl-2-pentanone
Concen: 0.50 ug/l
RT: 11.98 min Scan# 666
Delta R.T. 0.02 min
Lab File: RFC222.D
Acq: 15 Jun 2024 4:01 pm

Tgt Ion: 43 Resp: 13197

Ion	Ratio	Lower	Upper
43	100		
58	29.9	5.4	65.4
100	7.8	0.0	42.6
85	8.4	0.0	42.5

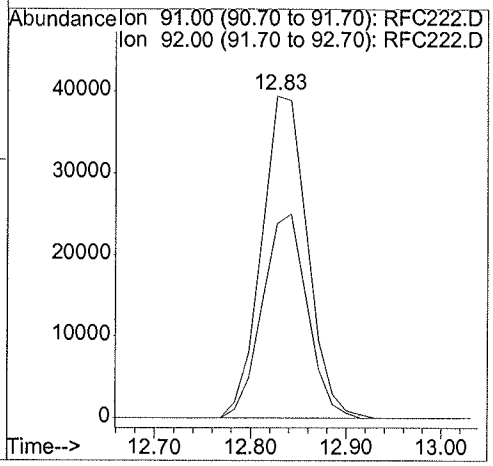


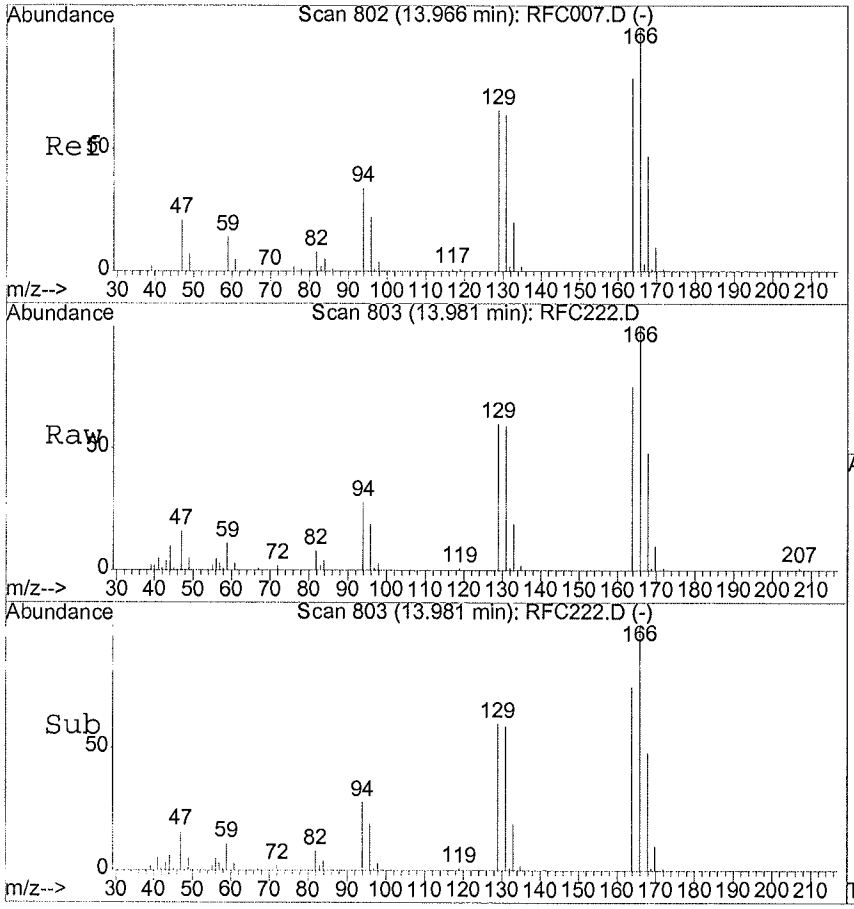


#57
Toluene
Concen: 0.74 ug/l
RT: 12.83 min Scan# 724
Delta R.T. 0.00 min
Lab File: RFC222.D
Acq: 15 Jun 2024 4:01 pm

Tgt Ion: 91 Resp: 130981

Ion	Ratio	Lower	Upper
91	100		
92	62.2	32.9	92.9

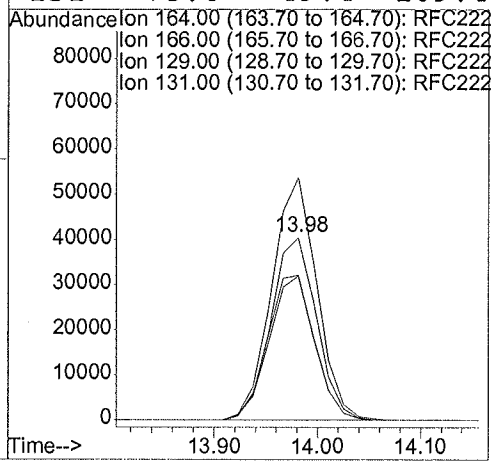


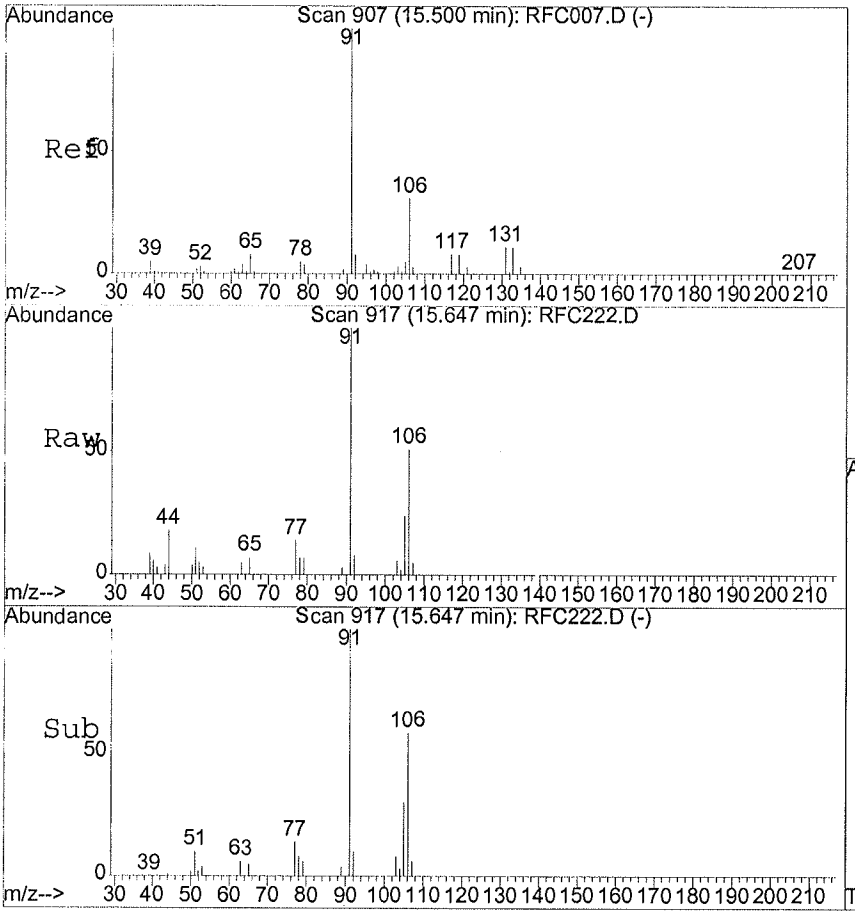


#63
Tetrachloroethene
Concen: 3.41 ug/l
RT: 13.98 min Scan# 803
Delta R.T. 0.02 min
Lab File: RFC222.D
Acq: 15 Jun 2024 4:01 pm

Tgt Ion:164 Resp: 124281

Ion	Ratio	Lower	Upper
164	100		
166	131.0	98.9	158.9
129	82.0	52.0	112.0
131	78.6	49.4	109.4

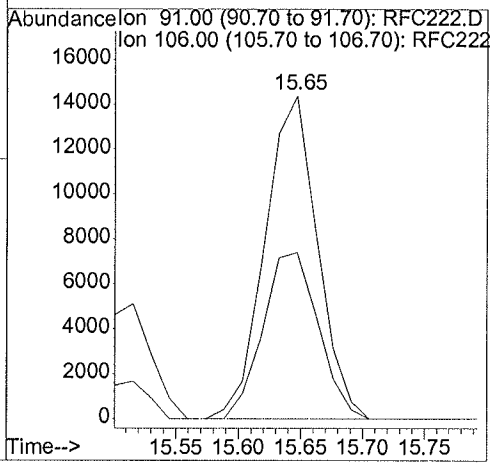


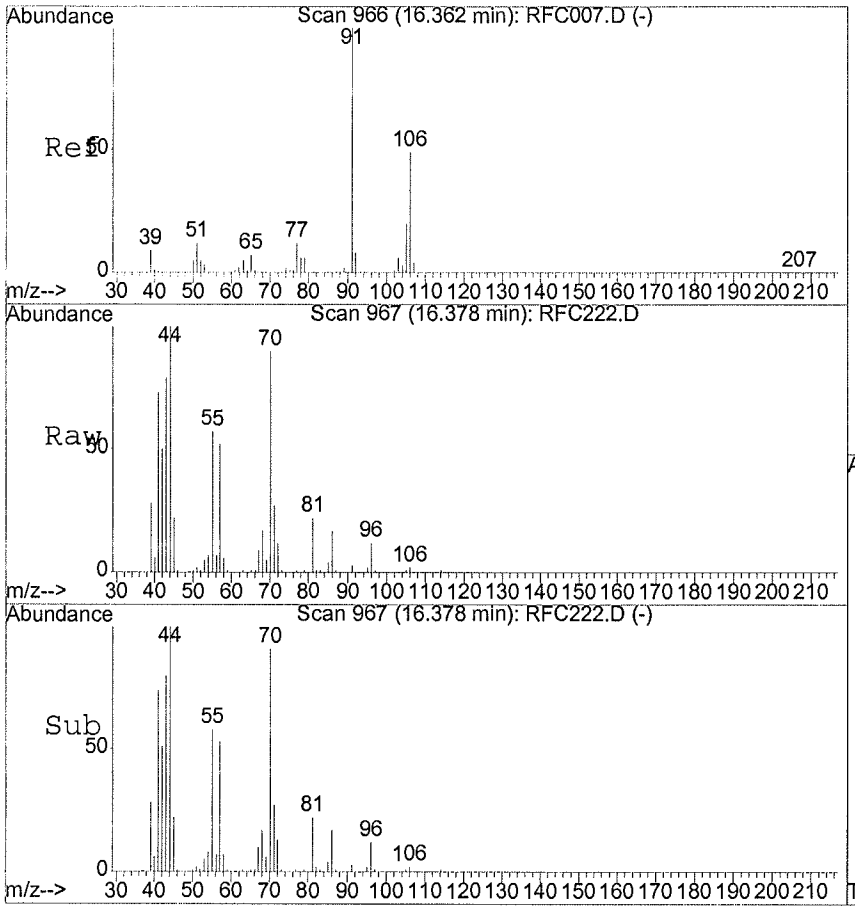


#70
m-Xylene & p-Xylene
Concen: 0.30 ug/l
RT: 15.65 min Scan# 917
Delta R.T. 0.02 min
Lab File: RFC222.D
Acq: 15 Jun 2024 4:01 pm

Tgt Ion: 91 Resp: 42235

Ion	Ratio	Lower	Upper
91	100		
106	54.3	23.0	83.0

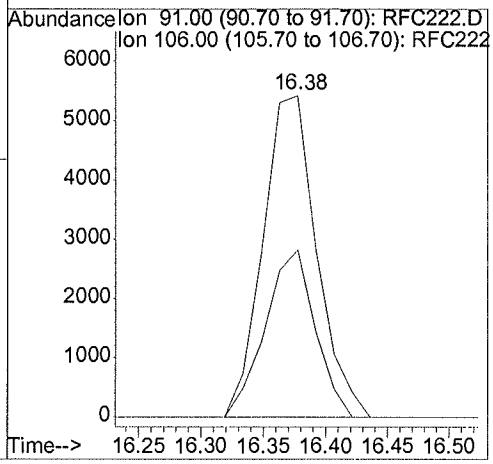


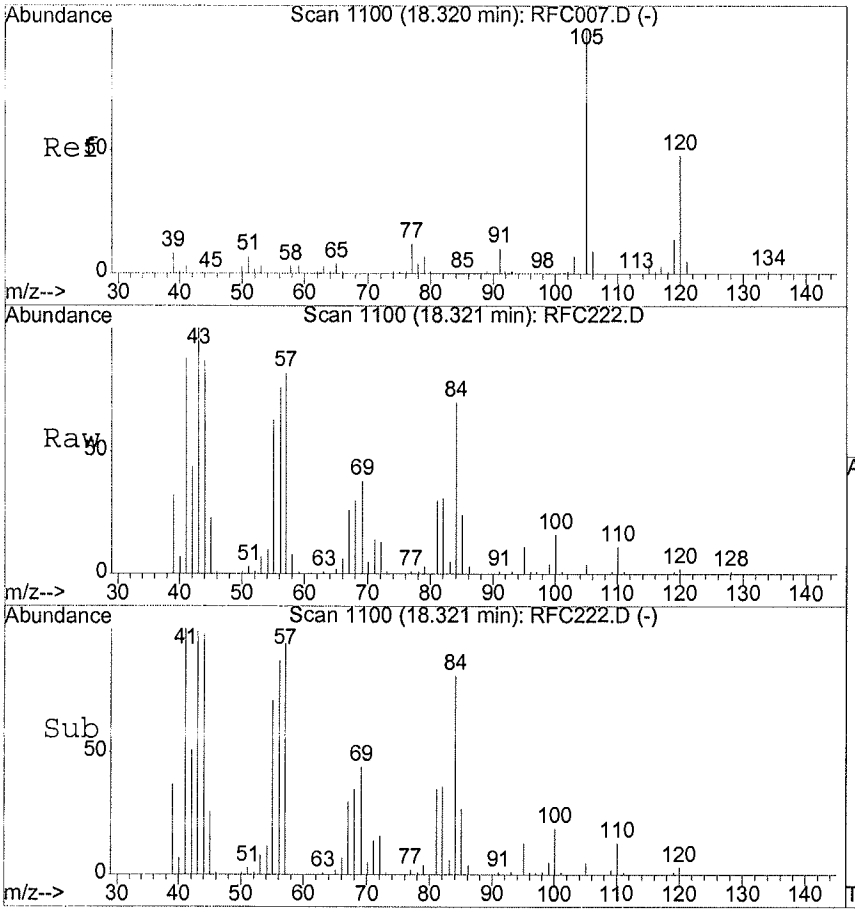


#71
o-Xylene
Concen: 0.12 ug/l
RT: 16.38 min Scan# 967
Delta R.T. 0.02 min
Lab File: RFC222.D
Acq: 15 Jun 2024 4:01 pm

Tgt Ion: 91 Resp: 16216

Ion	Ratio	Lower	Upper
91	100		
106	48.4	19.3	79.3

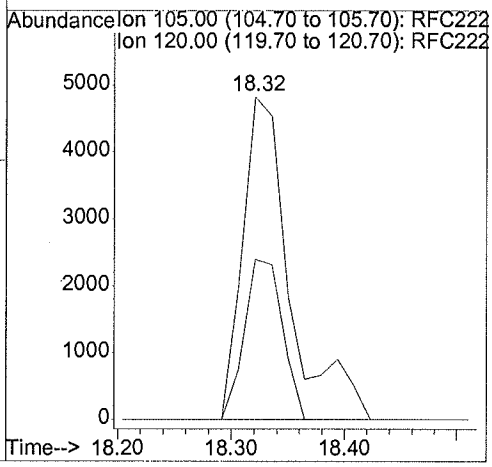




#86
1,2,4-Trimethylbenzene
Concen: 0.10 ug/l
RT: 18.32 min Scan# 1100
Delta R.T. 0.00 min
Lab File: RFC222.D
Acq: 15 Jun 2024 4:01 pm

Tgt Ion:105 Resp: 13881

Ion	Ratio	Lower	Upper
105	100		
120	40.3	26.9	86.9



QC SUMMARIES

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	06/15/24 13:45
Project	: VA SALT LAKE CITY	Date Received:	06/15/24
Batch No.	: 24F063	Date Extracted:	06/15/24 13:45
Sample ID	: MBLK1W	Date Analyzed:	06/15/24 13:45
Lab Samp ID:	VO67F11B	Dilution Factor:	1
Lab File ID:	RFC217	Matrix:	WATER
Ext Btch ID:	VO67F11	% Moisture:	NA
Calib. Ref.:	RFC007	Instrument ID:	67

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	8.87	10.0	89	70-130
Bromofluorobenzene	10.4	10.0	104	70-130
Toluene-d8	9.84	10.0	98	70-130
Dibromofluoromethane	9.72	10.0	97	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. : 24F063
METHOD : SW5030B/B260C

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: MBLK1W	LCS1W	LCD1W
LAB SAMPLE ID	: V067F11B	V067F11L	V067F11C
LAB FILE ID	: RFC217	RFC214	RFC215
DATE PREPARED	: 06/15/24 13:45	06/15/24 12:03	06/15/24 12:31
DATE ANALYZED	: 06/15/24 13:45	06/15/24 12:03	06/15/24 12:31
PREP BATCH	: V067F11	V067F11	V067F11
CALIBRATION REF	: RFC007	RFC007	RFC007

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	10.2	102	10.0	10.3	103	1	74-131	20
1,1,2,2-Tetrachloroethane	ND	10.0	10.5	105	10.0	10.7	107	2	71-121	20
1,1,2-Trichloroethane	ND	10.0	10.B	10B	10.0	10.6	106	2	B0-119	20
1,1-Dichloroethane	ND	10.0	9.39	94	10.0	9.36	94	0	77-125	20
1,1-Dichloroethene	ND	10.0	11.3	113	10.0	10.0	100	12	71-131	20
1,2,3-Trichlorobenzene	ND	10.0	9.62	96	10.0	9.56	96	1	69-129	20
1,2,4-Trichlorobenzene	ND	10.0	9.79	9B	10.0	9.73	97	1	69-130	20
1,2,4-Trimethylbenzene	ND	10.0	10.1	101	10.0	10.3	103	2	76-124	20
1,2-Dibromo-3-chloropropane	ND	10.0	11.1	111	10.0	11.1	111	0	62-13B	20
1,2-Dichlorobenzene	ND	10.0	10.3	103	10.0	10.4	104	1	B0-119	20
1,2-Dichloroethane	ND	10.0	10.2	102	10.0	9.92	99	3	73-12B	20
1,2-Dichloropropane	ND	10.0	9.76	9B	10.0	9.42	94	4	7B-122	20
1,3,5-Trimethylbenzene	ND	10.0	10.1	101	10.0	10.4	104	3	75-124	20
1,3-Dichlorobenzene	ND	10.0	10.2	102	10.0	10.4	104	2	B0-119	20
1,4-Dichlorobenzene	ND	10.0	10.4	104	10.0	10.4	104	0	79-11B	20
2-Butanone	ND	50.0	55.4	111	50.0	52.5	105	5	56-143	20
2-Hexanone	ND	50.0	46.9	94	50.0	44.9	90	4	57-139	20
Acetone	ND	50.0	43.7	B7	50.0	46.9	94	7	39-160	20
Benzene	ND	10.0	9.93	99	10.0	9.7B	9B	2	79-120	20
Bromochloromethane	ND	10.0	10.9	109	10.0	10.6	106	3	7B-120	20
Bromodichloromethane	ND	10.0	10.0	100	10.0	9.90	99	1	79-125	20
Bromoform	ND	10.0	10.6	106	10.0	10.7	107	1	66-130	20
Bromomethane	ND	10.0	10.5	105	10.0	10.4	104	1	53-141	20
Carbon Disulfide	ND	10.0	9.13	91	10.0	B.37	84	9	64-133	20
Carbon Tetrachloride	ND	10.0	10.4	104	10.0	10.6	106	2	72-136	20
Chlorobenzene	ND	10.0	10.4	104	10.0	10.3	103	1	B2-11B	20
Chloroethane	ND	10.0	10.0	100	10.0	10.0	100	0	60-13B	20
Chloroform	ND	10.0	9.B9	99	10.0	9.67	97	2	79-124	20
Chloromethane	ND	10.0	B.B1	BB	10.0	B.77	BB	0	50-139	20
cis-1,2-Dichloroethylene	ND	10.0	10.3	103	10.0	10.1	101	2	7B-123	20
Dibromochloromethane	ND	10.0	10.7	107	10.0	10.4	104	3	74-126	20
Dichlorodifluoromethane	ND	10.0	B.20	B2	10.0	B.B6	B9	B	32-152	20
Ethylbenzene	ND	10.0	10.1	101	10.0	10.2	102	1	79-121	20
Isopropylbenzene	ND	10.0	10.4	104	10.0	10.4	104	0	72-131	20
m,p-Xylene	ND	20.0	20.3	102	20.0	20.0	100	1	B0-121	20
4-Methyl-2-Pentanone	ND	50.0	44.7	B9	50.0	42.3	B5	6	67-130	20
Methylene Chloride	ND	10.0	9.B5	99	10.0	9.64	96	2	74-124	20
tert-Butyl Methyl Ether	ND	10.0	10.7	107	10.0	10.1	101	6	71-124	20
o-Xylene	ND	10.0	10.2	102	10.0	10.1	101	1	7B-122	20
Styrene	ND	10.0	10.4	104	10.0	10.3	103	1	7B-123	20
Tetrachloroethene	ND	10.0	10.1	101	10.0	10.2	102	1	74-129	20
Toluene	ND	10.0	10.0	100	10.0	10.1	101	1	B0-121	20
Trans-1,2-DCE	ND	10.0	10.5	105	10.0	10.4	104	1	75-124	20
cis-1,3-Dichloropropene	ND	10.0	10.4	104	10.0	9.93	99	5	75-124	20
Trans-1,3-Dichloropropene	ND	10.0	10.5	105	10.0	10.1	101	4	73-127	20
TCE	ND	10.0	10.4	104	10.0	10.3	103	1	79-123	20
Trichlorofluoromethane	ND	10.0	9.B0	9B	10.0	10.5	105	7	65-141	20
Vinyl Chloride	ND	10.0	B.55	B6	10.0	B.B7	B9	4	5B-137	20
1,2-Dibromoethane	ND	10.0	11.0	110	10.0	10.7	107	3	77-121	20
Vinyl Acetate	ND	10.0	10.B	10B	10.0	9.99	100	B	54-146	20
Trichlorotrifluoroethane	ND	10.0	11.2	112	10.0	11.3	113	1	70-136	20
Methyl Acetate	ND	10.0	11.5	115	10.0	9.30	93	21*	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	9.05	91	10.0	B.79	BB	70-130
Bromofluorobenzene	10.0	9.53	95	10.0	9.B7	99	70-130
Toluene-d8	10.0	9.74	97	10.0	9.6B	97	70-130
Dibromofluoromethane	10.0	9.76	9B	10.0	9.4B	95	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\24F15\RFC217.D Vial: 6
Acq On : 15 Jun 2024 1:45 pm Operator: DNguye
Sample : VO67F11B Inst : 67
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 21 12:40 2024 Quant Results File: VO67F05.RES

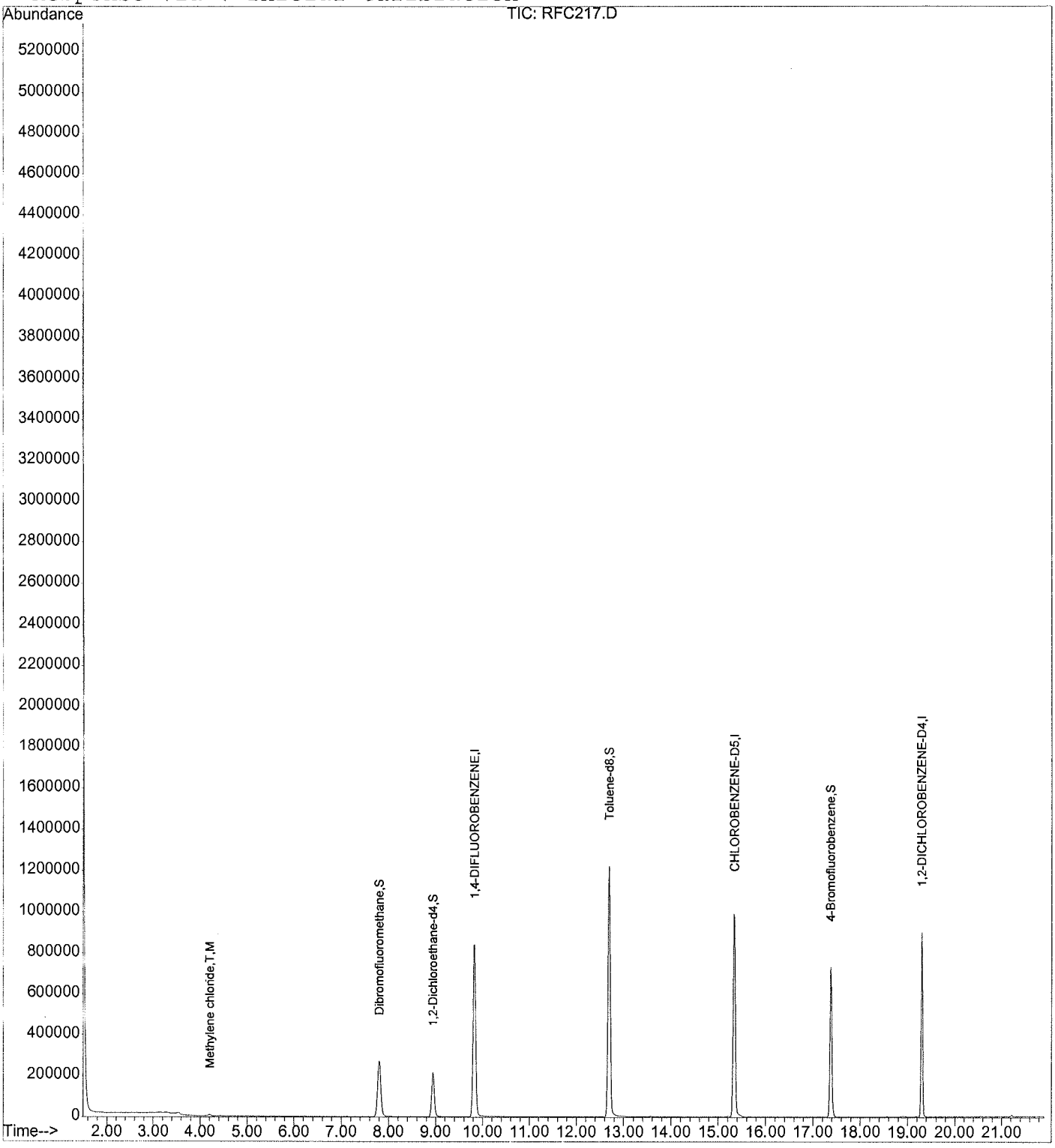
Quant Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration
DataAcq Meth : VO67F05

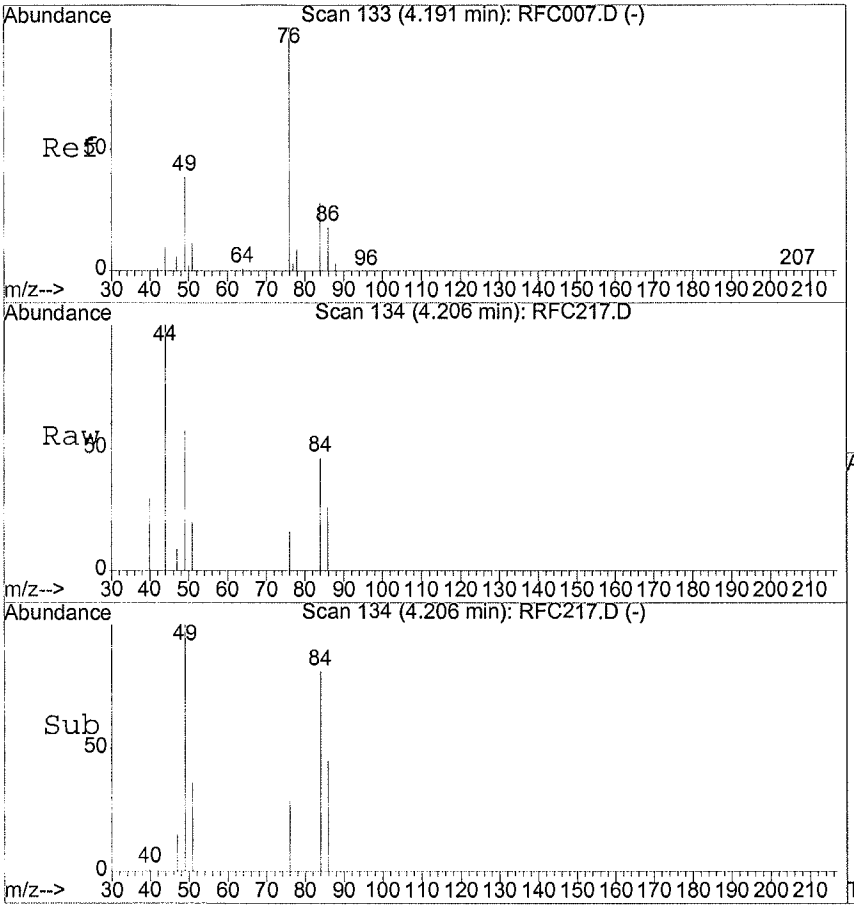
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.83	114	1638996	10.00	ug/l	0.01
55) CHLOROBENZENE-D5	15.34	117	1144864	10.00	ug/l	0.01
74) 1,2-DICHLOROBENZENE-D4	19.30	152	346721	10.00	ug/l	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	7.80	111	434297	9.72	ug/l	0.00
Spiked Amount 10.000			Recovery =	97.20%		
43) 1,2-Dichloroethane-d4	8.94	65	258413	8.87	ug/l	0.00
Spiked Amount 10.000			Recovery =	88.70%		
56) Toluene-d8	12.70	98	1585523	9.84	ug/l	0.01
Spiked Amount 10.000			Recovery =	98.40%		
77) 4-Bromofluorobenzene	17.37	95	454389	10.43	ug/l	0.00
Spiked Amount 10.000			Recovery =	104.30%		
Target Compounds						Qvalue
20) Methylene chloride	4.21	49	8778	0.16	ug/l	96

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24F15\RFC217.D Vial: 6
Acq On : 15 Jun 2024 1:45 pm Operator: DNguye
Sample : VO67F11B Inst : 67
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 21 12:40 2024 Quant Results File: VO67F05.RES

Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration

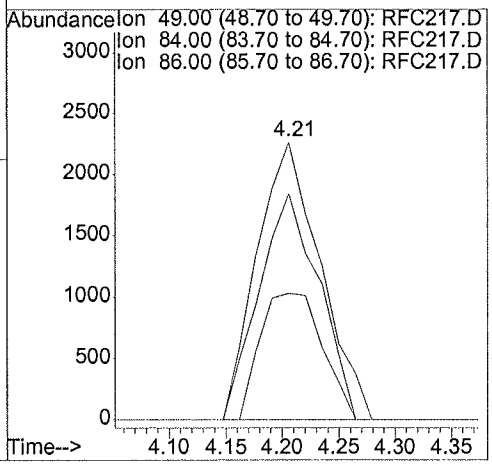




#20
Methylene chloride
Concen: 0.16 ug/l
RT: 4.21 min Scan# 134
Delta R.T. 0.01 min
Lab File: RFC217.D
Acq: 15 Jun 2024 1:45 pm

Tgt Ion: 49 Resp: 8778

Ion	Ratio	Lower	Upper
49	100		
84	77.4	45.0	105.0
86	44.8	19.1	79.1



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F15\RFC214.D Vial: 3
Acq On : 15 Jun 2024 12:03 pm Operator: DNguye
Sample : VO67F11L Inst : 67
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 21 12:41 2024 Quant Results File: VO67F05.RES

Quant Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration
DataAcq Meth : VO67F05

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.82	114	1641145	10.00	ug/l	0.00
55) CHLOROBENZENE-D5	15.33	117	1220417	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.30	152	438841	10.00	ug/l	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	7.80	111	436310	9.76	ug/l	0.00
Spiked Amount 10.000			Recovery = 97.60%			
43) 1,2-Dichloroethane-d4	8.94	65	263895	9.05	ug/l	0.00
Spiked Amount 10.000			Recovery = 90.50%			
56) Toluene-d8	12.70	98	1673608	9.74	ug/l	0.01
Spiked Amount 10.000			Recovery = 97.40%			
77) 4-Bromofluorobenzene	17.37	95	525487	9.53	ug/l	0.00
Spiked Amount 10.000			Recovery = 95.30%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.61	85	412192	8.20	ug/l	100
4) Chloromethane	1.83	50	575589	8.81	ug/l	98
5) Vinyl chloride	1.94	62	468711	8.55	ug/l	99
6) Bromomethane	2.40	94	423016	10.49	ug/l	99
7) Chloroethane	2.46	64	351397	10.05	ug/l	97
8) Dichlorofluoromethane	2.50	67	708730	10.38	ug/l	100
9) Trichlorofluoromethane	2.74	101	424347	9.80	ug/l	100
11) Acrolein	3.24	56	140791	46.89	ug/l	97
12) 1,1,2-Trichloro-1,2,2-trif	3.26	151	338173	11.21	ug/l	99
13) Acetone	3.32	43	259175	43.70	ug/l	91
14) 1,1-Dichloroethene	3.48	61	584473	11.29	ug/l	94
15) tert-Butyl alcohol	3.61	59	520340	333.50	ug/l	99
16) Iodomethane	3.90	142	815309	12.43	ug/l	99
17) Methyl acetate	3.98	43	203500	11.46	ug/l	86
19) Carbon disulfide	4.18	76	1567059	9.13	ug/l	100
20) Methylene chloride	4.19	49	557095	9.85	ug/l	90
21) Acrylonitrile	4.42	53	356589	52.25	ug/l	98
22) tert-Butyl methyl ether (M	4.45	73	765589	10.73	ug/l	98
23) trans-1,2-Dichloroethene	4.67	96	505364	10.51	ug/l	99
24) Isopropyl ether (DIPE)	5.33	45	1470798	8.66	ug/l	93
25) 1,1-Dichloroethane	5.49	63	848501	9.39	ug/l	99
26) Vinyl acetate	5.56	43	651379	10.85	ug/l	97
28) tert-Butyl ethyl ether (ET	6.22	59	1294590	9.47	ug/l	95
29) 2-Butanone	6.51	72	131767	55.38	ug/l	87
30) 2,2-Dichloropropane	6.75	77	465720	10.48	ug/l	97
31) cis-1,2-Dichloroethene	6.87	96	593351	10.25	ug/l	100
32) Chloroform	7.26	83	747168	9.89	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F15\RFC214.D Vial: 3
Acq On : 15 Jun 2024 12:03 pm Operator: DNguye
Sample : VO67F11L Inst : 67
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 21 12:41 2024 Quant Results File: VO67F05.RES

Quant Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration
DataAcq Meth : VO67F05

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
33) Bromochloromethane	7.65	130	277721	10.91 ug/l	98
34) Tetrahydrofuran	7.77	42	78416	10.42 ug/l	95
37) Cyclohexane	8.17	84	840786	10.15 ug/l	95
38) 1,1,1-Trichloroethane	8.19	97	586105	10.18 ug/l	97
40) 1,1-Dichloropropene	8.55	110	261083	10.28 ug/l	99
41) Carbon tetrachloride	8.72	119	470064	10.43 ug/l	99
42) tert-Amyl methyl ether (TA	8.91	87	226518	10.77 ug/l	99
44) Benzene	9.12	78	2100723	9.93 ug/l	99
45) 1,2-Dichloroethane	9.14	62	356546	10.19 ug/l	99
46) Trichloroethene	10.40	130	549922	10.40 ug/l	99
47) Methylcyclohexane	10.47	83	966296	10.11 ug/l	95
48) 1,2-Dichloropropane	10.78	63	487427	9.76 ug/l	98
49) Bromodichloromethane	11.22	83	519737	10.04 ug/l	98
50) 1,4-Dioxane	11.34	88	51670	232.55 ug/l	94
51) Dibromomethane	11.31	93	226859	11.14 ug/l	98
52) 2-Chloroethyl vinyl ether	11.92	63	75849	5.70 ug/l	95
53) 4-Methyl-2-pentanone	11.98	43	1337683	44.68 ug/l	94
54) cis-1,3-Dichloropropene	12.29	75	717714	10.43 ug/l	98
57) Toluene	12.83	91	2091853	10.03 ug/l	100
58) trans-1,3-Dichloropropene	13.22	75	513255	10.47 ug/l	99
59) Ethyl methacrylate	13.26	69	410897	10.72 ug/l	92
60) 1,1,2-Trichloroethane	13.47	97	307806	10.82 ug/l	99
61) 2-Hexanone	13.56	43	868625	46.93 ug/l	95
62) 1,3-Dichloropropane	13.92	76	530958	10.44 ug/l	99
63) Tetrachloroethene	13.97	164	431920	10.14 ug/l	99
64) Dibromochloromethane	14.33	129	341437	10.70 ug/l	99
65) 1,2-Dibromoethane	14.67	107	286630	11.00 ug/l	99
66) 1-Chlorohexane	15.02	91	840703	9.99 ug/l	100
67) Chlorobenzene	15.40	112	1289470	10.42 ug/l	100
68) 1,1,1,2-Tetrachloroethane	15.49	131	402211	10.65 ug/l	98
69) Ethylbenzene	15.50	91	2292058	10.15 ug/l	98
70) m-Xylene & p-Xylene	15.63	91	3368606	20.29 ug/l	99
71) o-Xylene	16.36	91	1674979	10.21 ug/l	98
72) Styrene	16.44	104	1332464	10.42 ug/l	99
73) Isopropylbenzene	16.98	105	2206880	10.39 ug/l	99
75) Bromoform	16.98	173	179566	10.60 ug/l	99
76) 1,1,2,2-Tetrachloroethane	17.27	83	339889	10.53 ug/l	99
78) 1,2,3-Trichloropropane	17.49	110	85779	10.99 ug/l	98
79) trans-1,4-Dichloro-2-buten	17.60	53	74741	9.85 ug/l	92
80) n-Propylbenzene	17.60	91	2610844	9.96 ug/l	99
81) Bromobenzene	17.65	156	457150	10.27 ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F15\RFC214.D Vial: 3
Acq On : 15 Jun 2024 12:03 pm Operator: DNguye
Sample : VO67F11L Inst : 67
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 21 12:41 2024 Quant Results File: VO67F05.RES

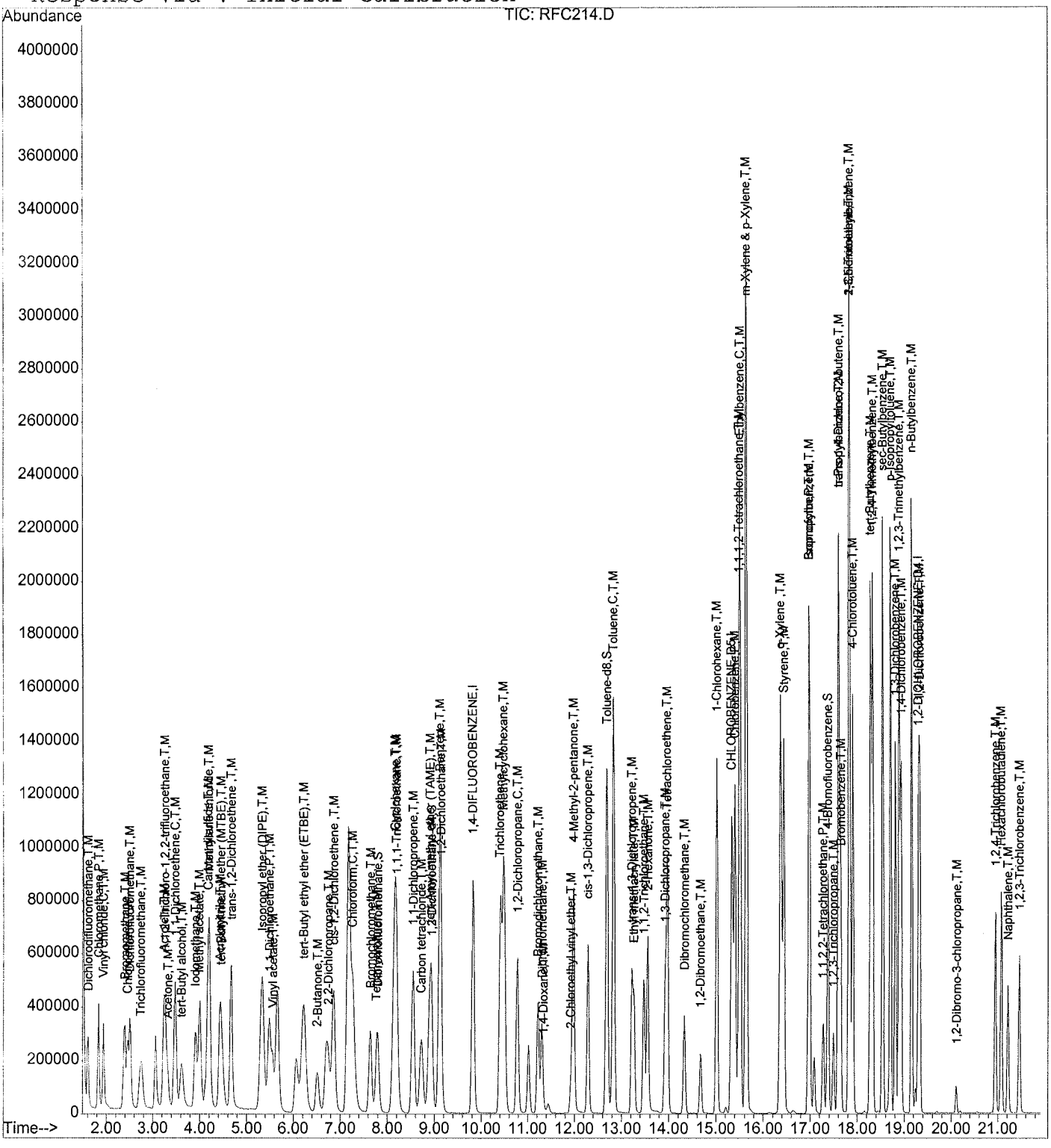
Quant Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration
DataAcq Meth : VO67F05

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
82)	1,3,5-Trimethylbenzene	17.82	105	1746757	10.07	ug/l	100
83)	2-Chlorotoluene	17.82	91	1633174	9.54	ug/l	98
84)	4-Chlorotoluene	17.90	91	1351873	10.09	ug/l	99
85)	tert-Butylbenzene	18.28	134	400826	10.05	ug/l	95
86)	1,2,4-Trimethylbenzene	18.32	105	1655911	10.11	ug/l	100
87)	sec-Butylbenzene	18.54	105	2313888	10.12	ug/l	99
88)	p-Isopropyltoluene	18.70	119	1840784	10.29	ug/l	99
89)	1,3-Dichlorobenzene	18.80	146	856856	10.23	ug/l	99
90)	1,2,3-Trimethylbenzene	18.89	105	1557576	10.03	ug/l	99
91)	1,4-Dichlorobenzene	18.93	146	827314	10.35	ug/l	99
92)	n-Butylbenzene	19.15	91	1656078	10.13	ug/l	99
93)	1,2-Dichlorobenzene	19.33	146	720404	10.30	ug/l	100
94)	1,2-Dibromo-3-chloropropan	20.12	157	45534	11.10	ug/l	100
95)	1,2,4-Trichlorobenzene	20.95	180	401574	9.79	ug/l	99
96)	Hexachlorobutadiene	21.07	225	279398	9.63	ug/l	99
97)	Naphthalene	21.21	128	585793	9.91	ug/l	99
98)	1,2,3-Trichlorobenzene	21.46	180	317617	9.62	ug/l	99

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24F15\RFC214.D Vial: 3
Acq On : 15 Jun 2024 12:03 pm Operator: DNguye
Sample : VO67F11L Inst : 67
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 21 12:41 2024 Quant Results File: VO67F05.RES

Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F15\RFC215.D Vial: 4
Acq On : 15 Jun 2024 12:31 pm Operator: DNguye
Sample : VO67F11C Inst : 67
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 21 12:42 2024 Quant Results File: VO67F05.RES

Quant Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration
DataAcq Meth : VO67F05

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.83	114	1546827	10.00	ug/l	0.01
55) CHLOROBENZENE-D5	15.34	117	1138069	10.00	ug/l	0.01
74) 1,2-DICHLOROBENZENE-D4	19.30	152	392688	10.00	ug/l	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	7.80	111	399567	9.48	ug/l	0.00
Spiked Amount 10.000			Recovery = 94.80%			
43) 1,2-Dichloroethane-d4	8.94	65	241744	8.79	ug/l	0.00
Spiked Amount 10.000			Recovery = 87.90%			
56) Toluene-d8	12.69	98	1550893	9.68	ug/l	0.01
Spiked Amount 10.000			Recovery = 96.80%			
77) 4-Bromofluorobenzene	17.37	95	486855	9.87	ug/l	0.00
Spiked Amount 10.000			Recovery = 98.70%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.60	85	419933	8.86	ug/l	99
4) Chloromethane	1.84	50	540428	8.77	ug/l	99
5) Vinyl chloride	1.94	62	458543	8.87	ug/l	99
6) Bromomethane	2.38	94	393843	10.36	ug/l	99
7) Chloroethane	2.44	64	329689	10.00	ug/l	96
8) Dichlorofluoromethane	2.50	67	664503	10.33	ug/l	99
9) Trichlorofluoromethane	2.74	101	427232	10.46	ug/l	99
11) Acrolein	3.25	56	125044	44.19	ug/l	100
12) 1,1,2-Trichloro-1,2,2-trif	3.27	151	320965	11.29	ug/l	99
13) Acetone	3.33	43	262350	46.93	ug/l	97
14) 1,1-Dichloroethene	3.49	61	489217	10.02	ug/l	97
15) tert-Butyl alcohol	3.61	59	444297	302.13	ug/l	100
16) Iodomethane	3.92	142	746790	12.08	ug/l	98
17) Methyl acetate	3.98	43	157995	9.30	ug/l	79
19) Carbon disulfide	4.18	76	1355019	8.37	ug/l	100
20) Methylene chloride	4.21	49	513540	9.64	ug/l	90
21) Acrylonitrile	4.42	53	323688	50.32	ug/l	98
22) tert-Butyl methyl ether (M	4.47	73	680478	10.12	ug/l	98
23) trans-1,2-Dichloroethene	4.67	96	471339	10.40	ug/l	99
24) Isopropyl ether (DIPE)	5.34	45	1302951	8.14	ug/l	92
25) 1,1-Dichloroethane	5.49	63	797114	9.36	ug/l	99
26) Vinyl acetate	5.56	43	567999	9.99	ug/l	98
28) tert-Butyl ethyl ether (ET	6.22	59	1130809	8.78	ug/l	95
29) 2-Butanone	6.53	72	117764	52.51	ug/l	92
30) 2,2-Dichloropropane	6.75	77	455194	10.87	ug/l	97
31) cis-1,2-Dichloroethene	6.86	96	551095	10.10	ug/l	99
32) Chloroform	7.27	83	688699	9.67	ug/l	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F15\RFC215.D Vial: 4
Acq On : 15 Jun 2024 12:31 pm Operator: DNguye
Sample : VO67F11C Inst : 67
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 21 12:42 2024 Quant Results File: VO67F05.RES

Quant Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration
DataAcq Meth : VO67F05

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
33)	Bromochloromethane	7.65	130	255459	10.64	ug/l	99
34)	Tetrahydrofuran	7.78	42	64729	9.12	ug/l	95
37)	Cyclohexane	8.16	84	781567	10.01	ug/l	95
38)	1,1,1-Trichloroethane	8.19	97	560330	10.33	ug/l	97
40)	1,1-Dichloropropene	8.56	110	248069	10.37	ug/l	98
41)	Carbon tetrachloride	8.73	119	450666	10.61	ug/l	100
42)	tert-Amyl methyl ether (TA	8.91	87	202909	10.24	ug/l	99
44)	Benzene	9.11	78	1948628	9.78	ug/l	99
45)	1,2-Dichloroethane	9.14	62	327018	9.92	ug/l	99
46)	Trichloroethene	10.42	130	514059	10.32	ug/l	99
47)	Methylcyclohexane	10.49	83	896618	9.96	ug/l	95
48)	1,2-Dichloropropane	10.78	63	443372	9.42	ug/l	98
49)	Bromodichloromethane	11.22	83	483031	9.90	ug/l	98
50)	1,4-Dioxane	11.34	88	48291	230.59	ug/l	92
51)	Dibromomethane	11.31	93	212977	11.10	ug/l	98
52)	2-Chloroethyl vinyl ether	11.92	63	66568	5.30	ug/l	92
53)	4-Methyl-2-pentanone	11.98	43	1193174	42.28	ug/l	94
54)	cis-1,3-Dichloropropene	12.30	75	643999	9.93	ug/l	99
57)	Toluene	12.83	91	1961558	10.09	ug/l	100
58)	trans-1,3-Dichloropropene	13.22	75	460558	10.07	ug/l	100
59)	Ethyl methacrylate	13.26	69	362155	10.14	ug/l	92
60)	1,1,2-Trichloroethane	13.48	97	281342	10.61	ug/l	99
61)	2-Hexanone	13.56	43	775721	44.94	ug/l	95
62)	1,3-Dichloropropane	13.92	76	484096	10.21	ug/l	99
63)	Tetrachloroethene	13.98	164	407032	10.24	ug/l	99
64)	Dibromochloromethane	14.33	129	309789	10.42	ug/l	99
65)	1,2-Dibromoethane	14.67	107	259782	10.69	ug/l	97
66)	1-Chlorohexane	15.02	91	791082	10.08	ug/l	100
67)	Chlorobenzene	15.40	112	1187377	10.29	ug/l	100
68)	1,1,1,2-Tetrachloroethane	15.49	131	369095	10.48	ug/l	99
69)	Ethylbenzene	15.50	91	2140799	10.17	ug/l	99
70)	m-Xylene & p-Xylene	15.63	91	3099102	20.01	ug/l	99
71)	o-Xylene	16.36	91	1540727	10.07	ug/l	98
72)	Styrene	16.43	104	1228696	10.31	ug/l	98
73)	Isopropylbenzene	16.98	105	2062166	10.41	ug/l	99
75)	Bromoform	16.98	173	161782	10.68	ug/l	99
76)	1,1,2,2-Tetrachloroethane	17.28	83	308087	10.67	ug/l	99
78)	1,2,3-Trichloropropane	17.50	110	77336	11.07	ug/l	99
79)	trans-1,4-Dichloro-2-buten	17.60	53	66879	9.85	ug/l	96
80)	n-Propylbenzene	17.60	91	2431096	10.36	ug/l	99
81)	Bromobenzene	17.65	156	416552	10.46	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F15\RFC215.D Vial: 4
Acq On : 15 Jun 2024 12:31 pm Operator: DNguye
Sample : VO67F11C Inst : 67
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 21 12:42 2024 Quant Results File: VO67F05.RES

Quant Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration
DataAcq Meth : VO67F05

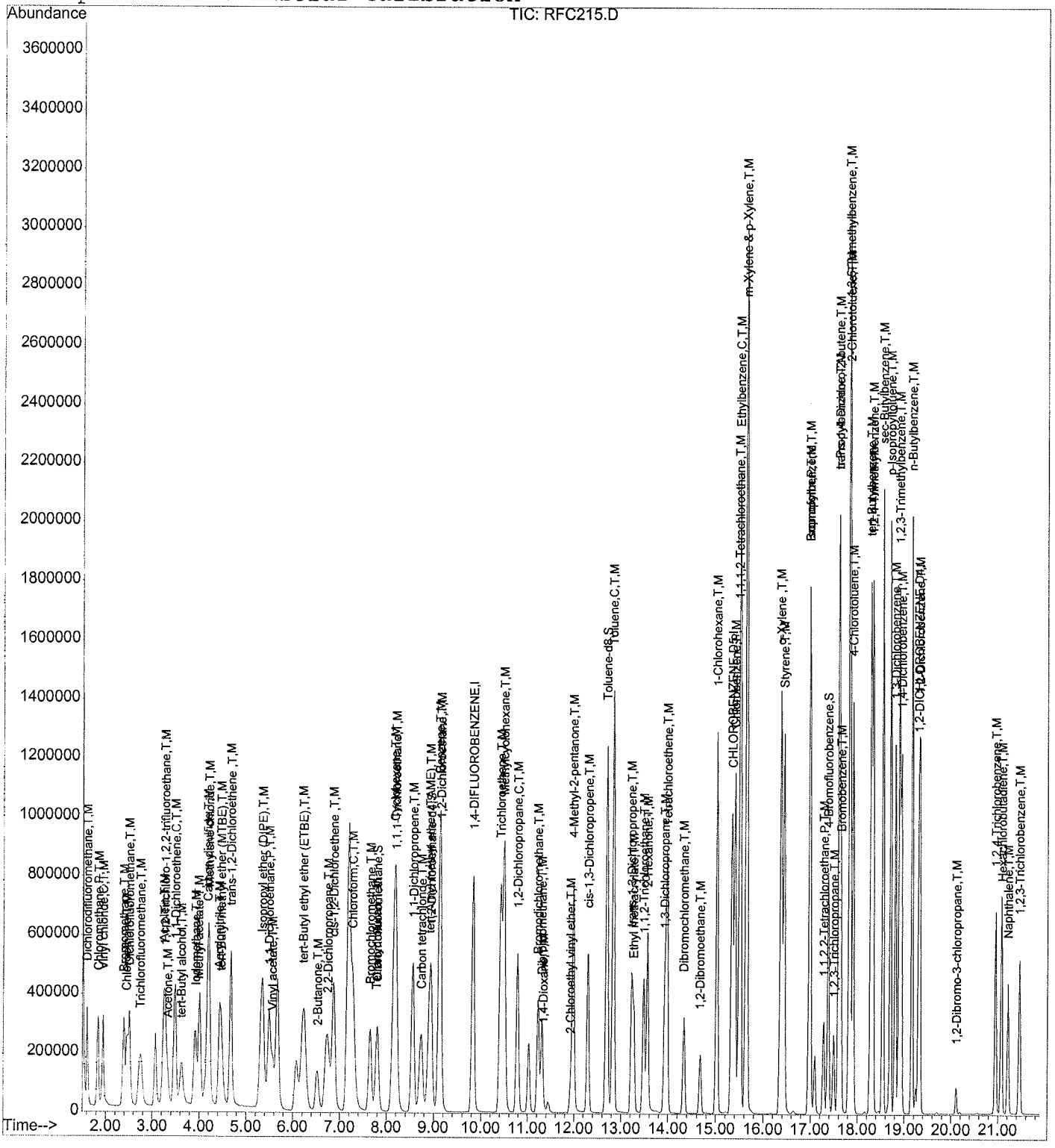
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
82) 1,3,5-Trimethylbenzene	17.82	105	1616682	10.41	ug/l	100
83) 2-Chlorotoluene	17.84	91	1510401	9.86	ug/l	99
84) 4-Chlorotoluene	17.90	91	1247969	10.41	ug/l	100
85) tert-Butylbenzene	18.28	134	366917	10.28	ug/l	96
86) 1,2,4-Trimethylbenzene	18.32	105	1506899	10.29	ug/l	100
87) sec-Butylbenzene	18.54	105	2170974	10.61	ug/l	100
88) p-Isopropyltoluene	18.70	119	1690916	10.57	ug/l	99
89) 1,3-Dichlorobenzene	18.80	146	779124	10.39	ug/l	99
90) 1,2,3-Trimethylbenzene	18.89	105	1389503	10.00	ug/l	100
91) 1,4-Dichlorobenzene	18.93	146	746507	10.44	ug/l	99
92) n-Butylbenzene	19.15	91	1519365	10.38	ug/l	99
93) 1,2-Dichlorobenzene	19.33	146	651482	10.41	ug/l	100
94) 1,2-Dibromo-3-chloropropan	20.12	157	40586	11.05	ug/l	98
95) 1,2,4-Trichlorobenzene	20.95	180	357408	9.73	ug/l	99
96) Hexachlorobutadiene	21.08	225	251391	9.69	ug/l	99
97) Naphthalene	21.21	128	535780	10.13	ug/l	99
98) 1,2,3-Trichlorobenzene	21.46	180	282539	9.56	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F15\RFC215.D Vial: 4
Acq On : 15 Jun 2024 12:31 pm Operator: DNguye
Sample : VO67F11C Inst : 67
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 21 12:42 2024 Quant Results File: VO67F05.RES

Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 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: RFC001 BFB Injection Date: 06/05/24

Instrument ID: 67 BFB Injection Time: 16:07

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	18.780
75	30 - 60% of mass 95	41.402
95	Base Peak, 100% relative abundance	100.000
96	5 - 9% of mass 95	6.989
173	Less than 2% of mass 174	0.000(0)1
174	Greater than 50% of mass 95	76.712
175	5 - 9% of mass 174	6.201(8.08)1
176	95 - 101% % of mass 174	75.277(98.13)1
177	5 - 9% % of mass 176	5.558(7.38)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	VO67F051	RFC002	06/05/24	16:49
2	VSTD0.5	VO67F052	RFC003	06/05/24	17:17
3	VSTD1	VO67F053	RFC004	06/05/24	17:44
4	VSTD2	VO67F054	RFC005	06/05/24	18:12
5	VSTD5	VO67F055	RFC006	06/05/24	18:40
6	VSTD10	VO67F056	RFC007	06/05/24	19:08
7	VSTD20	VO67F057	RFC008	06/05/24	19:36
8	VSTD30	VO67F058	RFC009	06/05/24	20:03
9	VSTD50	VO67F059	RFC010	06/05/24	20:30
10	VSTD100	VO67F0510	RFC011	06/05/24	20:57

INITIAL_CALIBRATION - RELATIVE_RESPONSE_FACTOR

Instrument ID :67
Beginning DateTime :06/05/24 16:49
Spike Units :PPB
IC File :RFC007

Column Spec :RTX502.2 ID :0.25MM
Ending DateTime :06/05/24 20:57
HPChem Method :VO67F05

M	IDX	Parameters	.3 16:49 RFC002	.5 17:17 RFC003	1 17:44 RFC004	2 18:12 RFC005	5 18:40 RFC006	10 19:08 RFC007	20 19:36 RFC008	30 20:03 RFC009	50 20:30 RFC010	100 20:57 RFC011	Av_RRF	%_RSD	Av_Rt_M
	1	1,4-DIFLUOROBENZENE	1	1	1	1	1	1	1	1	1	1	1	0	9.8162
	2	Dichlorodifluoromethane	0.280	0.384	0.321	0.289	0.288	0.314	0.311	0.296	0.302	0.277	0.306	10.15	1.5983
	3	Dichlorotetrafluoroethane	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	4	Chloromethane	0.381	0.463	0.467	0.387	0.366	0.395	0.394	0.385	0.374	0.371	0.398	9.10	1.8333
	5	Vinyl chloride	0.322	0.408	0.356	0.344	0.315	0.342	0.316	0.271	------	------	0.334	11.83	1.9404
	6	Bromomethane	------	0.295	0.254	0.244	0.227	0.248	0.248	0.244	0.230	0.222	0.246	8.71	2.3822
	7	Chloroethane	0.211	0.256	0.230	0.213	0.196	0.213	0.215	0.206	0.200	0.191	0.213	8.82	2.4421
	8	Dichlorofluoromethane	0.485	0.420	0.403	0.412	0.417	0.414	0.412	0.420	0.390	0.385	0.416	6.49	2.5024
	9	Trichlorofluoromethane	0.241	0.311	0.269	0.266	0.261	0.273	0.273	0.261	0.251	0.233	0.264	8.13	2.7435
	10	sec-Propyl alcohol	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
5	11	Acrolein	------	0.021	0.017	0.018	0.020	0.018	0.017	0.019	0.017	0.018	0.018	7.41	3.2350
	12	1,1,2-Trichloro-1,2,2-trifluoroethane	0.203	0.185	0.173	0.173	0.190	0.189	0.185	0.196	0.181	0.163	0.184	6.47	3.2659
5	13	Acetone	------	------	------	0.044	0.035	0.038	0.031	0.033	------	------	0.036	13.52	3.3262
	14	1,1-Dichloroethene	------	0.347	0.307	0.304	0.341	0.317	0.313	0.315	0.296	0.297	0.315	5.67	3.4716
25	15	tert-Butyl alcohol	------	0.011	0.010	0.009	0.010	0.009	0.008	0.010	0.009	0.009	0.010	8.48	3.6224
	16	Iodomethane	------	0.410	0.390	0.402	0.457	0.439	0.391	0.388	0.364	0.356	0.400	8.16	3.9020
	17	Methyl acetate	------	------	0.165	0.140	0.127	0.124	0.103	0.099	------	------	0.126	19.31	3.9816
10	18	Acetonitrile	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	19	Carbon disulfide	------	1.061	1.105	1.034	1.035	1.095	1.037	1.046	1.021	0.983	1.046	3.55	4.1795
	20	Methylene chloride	------	0.398	0.363	0.359	0.342	0.332	0.329	0.340	0.319	0.320	0.345	7.29	4.1909
5	21	Acrylonitrile	------	------	0.039	0.041	0.044	0.043	0.040	0.044	0.040	0.041	0.042	4.20	4.4247
	22	tert-Butyl methyl ether (MTBE)	0.535	0.462	0.430	0.435	0.437	0.415	0.403	0.437	0.397	0.396	0.435	9.44	4.4670
	23	trans-1,2-Dichloroethene	------	0.341	0.299	0.309	0.295	0.288	0.282	0.286	0.271	0.267	0.293	7.59	4.6698
	24	Isopropyl ether (DIPE)	------	1.077	0.960	1.135	1.178	1.126	1.116	0.982	0.862	0.874	1.034	11.40	5.3306
	25	1,1-Dichloroethane	0.640	0.556	0.547	0.560	0.579	0.562	0.555	0.573	0.491	0.442	0.550	9.54	5.4898
	26	Vinyl acetate	------	------	0.505	0.475	0.407	0.377	0.353	0.362	0.344	------	0.403	15.63	5.5644
25	27	2-Butanol	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	28	tert-Butyl ethyl ether (ETBE)	0.944	0.780	0.838	0.809	0.828	0.784	0.775	0.895	0.828	0.847	0.833	6.39	6.2218
5	29	2-Butanone	0.015	0.012	0.012	0.015	0.016	0.015	0.014	0.016	0.014	0.015	0.014	9.28	6.5156
	30	2,2-Dichloropropane	------	0.295	0.282	0.284	0.286	0.272	0.267	0.267	0.252	0.230	0.271	7.37	6.7382
	31	cis-1,2-Dichloroethene	0.403	0.351	0.343	0.353	0.357	0.348	0.342	0.355	0.334	0.340	0.353	5.48	6.8648
	32	Chloroform	0.582	0.474	0.454	0.450	0.461	0.447	0.436	0.450	0.421	0.426	0.460	9.93	7.2637
	33	Bromochloromethane	0.165	0.156	0.145	0.154	0.159	0.154	0.154	0.161	0.150	0.152	0.155	3.67	7.6494
	34	Tetrahydrofuran	------	------	0.047	0.047	0.050	0.045	0.043	0.049	0.042	0.043	0.046	6.68	7.7762
5	35	tert-Amyl alcohol	------	------	0.009	0.011	0.011	0.011	0.011	0.013	0.011	0.011	0.011	8.21	7.8017
	36	Dibromofluoromethane	0.331	0.257	0.262	0.276	0.260	0.277	0.265	0.269	0.263	0.265	0.273	7.94	7.7984
	37	Cyclohexane	0.569	0.504	0.489	0.514	0.480	0.540	0.505	0.501	0.493	0.451	0.505	6.39	8.1637
	38	1,1,1-Trichloroethane	0.380	0.351	0.338	0.351	0.359	0.357	0.351	0.355	0.336	0.330	0.351	4.01	8.1856
	39	2,2,4-Trimethylpentane	1.315	1.301	1.199	1.368	1.210	1.447	1.388	1.364	1.292	1.188	1.307	6.67	8.3580
	40	1,1-Dichloropropene	0.171	0.149	0.144	0.152	0.159	0.160	0.157	0.157	0.150	0.148	0.155	5.00	8.5494
	41	Carbon tetrachloride	0.309	0.274	0.255	0.265	0.280	0.279	0.277	0.282	0.266	0.259	0.275	5.50	8.7233
	42	tert-Amyl methyl ether (TAME)	0.131	0.116	0.117	0.130	0.134	0.130	0.128	0.139	0.127	0.130	0.128	5.31	8.9104
	43	1,2-Dichloroethane-d4	0.217	0.168	0.175	0.185	0.171	0.179	0.173	0.175	0.167	0.166	0.178	8.49	8.9396
	44	Benzene	1.488	1.284	1.239	1.276	1.315	1.285	1.268	1.303	1.221	1.207	1.289	6.08	9.1149
	45	1,2-Dichloroethane	0.220	0.216	0.203	0.215	0.220	0.217	0.212	0.222	0.204	0.203	0.213	3.44	9.1441
	46	Trichloroethene	0.357	0.302	0.304	0.310	0.330	0.327	0.326	0.334	0.315	0.315	0.322	5.10	10.4036
	47	Methylcyclohexane	0.673	0.573	0.557	0.585	0.554	0.629	0.585	0.583	0.567	0.516	0.582	7.36	10.4782
	48	1,2-Dichloropropane	0.349	0.294	0.300	0.301	0.308	0.299	0.298	0.309	0.290	0.294	0.304	5.60	10.7792
	49	Bromodichloromethane	0.393	0.330	0.303	0.305	0.314	0.305	0.299	0.314	0.295	0.297	0.315	9.19	11.2190
20	50	1,4-Dioxane	------	------	------	0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.001	12.37	11.3358
	51	Dibromomethane	0.123	0.106	0.121	0.126	0.132	0.128	0.125	0.132	0.124	0.124	0.124	5.89	11.2949
	52	2-Chloroethyl vinyl ether	------	0.068	0.071	0.076	0.084	0.083	0.083	0.092	0.086	0.087	0.081	9.71	11.9203
5	53	4-Methyl-2-pentanone	0.201	0.192	0.166	0.185	0.196	0.185	0.174	0.193	0.168	0.165	0.182	7.21	11.9729
	54	cis-1,3-Dichloropropene	0.461	0.392	0.392	0.414	0.435	0.419	0.417	0.438	0.410	0.413	0.419	4.99	12.2856
	55	CHLOROBENZENE-D5	1	1	1	1	1	1	1	1	1	1	1	0	15.3262
	56	Toluene-d8	------	1.461	1.383	1.478	1.382	1.488	1.412	1.391	1.352	1.320	1.407	4.10	12.6834
	57	Toluene	1.980	1.718	1.655	1.705	1.768	1.730	1.680	1.710	1.600	1.542	1.709	6.79	12.8262
	58	trans-1,3-Dichloropropene	0.427	0.380	0.370	0.391	0.417	0.408	0.405	0.426	0.398	0.397	0.402	4.67	13.2207
	59	Ethyl methacrylate	0.326	0.281	0.288	0.306	0.334	0.315	0.318	0.346	0.314	0.313	0.314	6.19	13.2645
	60	1,1,2-Trichloroethane	0.267	0.220	0.217	0.237	0.245	0.235	0.228	0.241	0.221	0.221	0.233	6.60	13.4691
5	61	2-Hexanone	------	0.166	0.142	0.154	0.164	0.153	0.146	0.161	0.140	0.139	0.152	6.95	13.5568
	62	1,3-Dichloropropane	0.462	0.409	0.400	0.417	0.433	0.416	0.411	0.428	0.398	0.394	0.417	4.86	13.9221
	63	Tetrachloroethene	0.414	0.350	0.329	0.342	0.358	0.353	0.342	0.345	0.329	0.330	0.349	7.12	13.9659
	64	Dibromochloromethane	0.319	0.260	0.244	0.251	0.264	0.256	0.252	0.268	0.248	0.252	0.261	8.24	14.3312
	65	1,2-Dibromoethane	0.228	0.198	0.201	0.209	0.231	0.218	0.213	0.225	0.206	0.206	0.214	5.40	14.6672
	66	1-Chlorohexane	0.752	0.653	0.621	0.653	0.713	0.719	0.715	0.722	0.683	0.663	0.689	5.95	15.0179
	67	Chlorobenzene	1.163	0.991	0.978	0.993	1.037	1.017	1.000	1.028	0.967	0.962	1.014	5.74	15.3978
	68	1,1,1,2-Tetrachloroethane	0.342	0.300	0.300	0.304	0.315	0.305	0.304	0.319	0.299	0.309	0.310	4.20	15.4855
	69	Ethylbenzene	2.076	1.816	1.753	1.808	1.917	1.903	1.869	1.909	1.778	1.674	1.850	5.99	15.5001
2	70	m-Xylene & p-Xylene	1.557	1.317	1.267	1.317	1.401	1.378	1.362	1.383	1.263	------	1.361	6.53	15.6316
	71	o-Xylene	1.513	1.312	1.288	1.326	1.389	1.367	1.341	1.378	1.283	1.248	1.344	5.52	16.3621
	72	Styrene	1.103	0.978	0.954	1.005	1.086	1.070	1.065	1.117	1.047	1.049	1.048	5.11	16.4352
	73	Isopropylbenzene	1.931	1.672	1.613	1.684	1.815	1.814	1.773	1.816	1.690	1.590	1.740	6.17	16.9758
	74	1,2-DICHLOROBENZENE-D4	1	1	1	1	1	1	1	1	1	1	1	0	19.2990
	75	Bromoform	0.424	0.380	0.372	0.379	0.395	0.384	0.369	0.400	0.377	0.379	0.386	4.26	16.9758
	76	1,1,2,2-Tetrachloroethane	0.880	0.768	0.743	0.761	0.771	0.735	0.676	0.714	0.664	0.644	0.736	9.22	17.2681
	77	4-Bromofluorobenzene	------	1.386	1.314	1.324	1.217	1.293	1.197	1.204	1.197	1.179	1.257	5.86	17.3703
	78	1,2,3-Trichloropropane	0.204	0.176	0.173	0.190	0.189	0.177	0.168	0.178	0.164	0.159	0.178	7.56	17.4887
	79	trans-1,4-Dichloro-2-butene	0.181	0.176	0.161	0.172	0.177	0.177	0.169	0.184	0.169	0.163	0.173	4.44	17.6041
	80	n-Propylbenzene	6.931	5.879	5.838	5.847	6.316	6.305	5.969	6.093	5.732	4.831	5.974	8.94	17.5924
	81	Bromobenzene	1.154	1.006	0.981	0.995	1.034	1.021	0.970	1.016	0.976	0.989	1.014	5.25	17.6348
	82	1,3,5-Trimethylbenzene	4.493	3.905	3.729	3.825	4.148	4.065	3.909	3.994	3.859	3.615	3.954	6.19	17.8218
	83	2-Chlorotoluene	4.622	3.948	3.874	3.896	4.010	4.002	3.766	3.828	3.686	3.393	3.903	7.98	17.8248
	84	4-Chlorotoluene	3.639	3.008	2.919	2.941	3.163	3.045	2.968	3.038	2.928	2.891	3.054	7.22	17.8963
	85	tert-Butylbenzene	0.967	0.913	0.870	0.865	0.936	0.926	0.886	0.912	0.902	0.912	0.909	3.37	18.2762
	86	1,2,4-Trimethylbenzene	4.230	3.696	3.568	3.629	3.864	3.864	3.652	3.798	3.604	3.405	3.731	6.03	18.3201
	87	sec-Butylbenzene	5.924	5.203	4.999	5.126	5.496	5.502	5.286	5.332	5.015	4.237	5.212	8.42	18.5392
	88	p-Isopropyltoluene	4.430	3.855	3.831	3.887	4.241	4.330	4.177	4.241	4.021	3.740	4.075	5.87	18.7000
	89	1,3-Dichlorobenzene	2.222	1.875	1.850	1.819	1.947	1.912	1.847	1.930	1.850	1.839	1.909	6.18	18.8022
	90	1,2,3-Trimethylbenzene	4.150	3.398	3.452	3.442	3.686	3.617	3.463	3.576	3.376	3.232	3.539	7.08	18.8899
	91	1,4-Dichlorobenzene	2.044	1.787	1.723	1.733	1.847	1.841	1.787	1.859	1.791	1.799	1.821	4.95	18.9337
	92	n-Butylbenzene	3.950	3.435	3.415	3.428	3.917	3.970	3.946	3.957	3.814	3.429	3.726	7.01	19.1529
	93	1,2-Dichlorobenzene	1.823	1.629	1.540	1.545	1.614	1.588	1.537	1.611	1.521	1.523	1.593	5.66	19.3283
	94	1,2-Dibromo-3-chloropropane	0.089	0.075	0.088	0.098	0.103	0.099	0.095	0.101	0.094	0.093	0.094	8.72	20.1042
	95	1,2,4-Trichlorobenzene	1.009	0.850	0.836	0.854	0.936	0.934	0.935	1.010	0.981	1.008	0.935	7.32	20.9428
	96	Hexachlorobutadiene	0.718	0.667	0.618	0.622	0.667	0.656	0.652	0.685	0.664	0.661	0.661	4.36	21.0670
	97	Naphthalene	1.617	1.393	1.201	1.214	1.316	1.311	1.286	1.420	1.360	1.353	1.347	8.77	21.2131
	98	1,2,3-Trichlorobenzene	0.812	0.707	0.694	0.707	0.755	0.750	0.750	0.798	0.769	0.785	0.753	5.36	21.4615

Spike Amount = Nominal Amount * M
Ave_%RSD : 7.1 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
17	Methyl acetate	0.00808	0.10113	0.9963
26	Vinyl acetate	0.02075	0.34676	0.9995

6/23/24

INITIAL_CALIBRATION - RELATIVE_RESPONSE_FACTOR(%REC)

Instrument ID :67
Beginning DateTime :06/05/24 16:49
Spike Units :PPB
IC File :RFC007

Column Spec :RTX502.2 ID :0.25MM
Ending DateTime :06/05/24 20:57
HPChem Method :VO67F05

M	IDX	Parameters	.3 16:49 RFC002	.5 17:17 RFC003	1 17:44 RFC004	2 18:12 RFC005	5 18:40 RFC006	10 19:08 RFC007	20 19:36 RFC008	30 20:03 RFC009	50 20:30 RFC010	100 20:57 RFC011	AvDRec	%_RSD	Av_Rt_M
	1	1,4-DIFLUOROBENZENE	1	1	1	1	1	1	1	1	1	1	1	0	9.8162
	2	Dichlorodifluoromethane	92	125	105	94	94	103	102	97	99	91	6.9	10.15	1.5983
	3	Dichlorotetrafluoroethane	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	4	Chloromethane	96	116	117	97	92	99	99	97	94	93	6.7	9.10	1.8333
	5	Vinyl chloride	96	122	107	103	94	102	95	81	------	------	8.5	11.83	1.9404
	6	Bromomethane	------	120	103	99	92	101	101	99	93	90	5.6	8.71	2.3822
	7	Chloroethane	99	120	108	100	92	100	101	97	94	90	5.8	8.82	2.4421
	8	Dichlorofluoromethane	117	101	97	99	100	100	99	101	94	93	3.8	6.49	2.5024
	9	Trichlorofluoromethane	91	118	102	101	99	103	103	99	95	88	5.5	8.13	2.7435
	10	sec-Propyl alcohol	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
5	11	Acrolein	------	117	94	100	111	100	94	106	94	100	5.6	7.41	3.2350
	12	1,1,2-Trichloro-1,2,2-trifluoroethane	110	101	94	94	103	103	101	107	98	89	4.9	6.47	3.2659
5	13	Acetone	------	------	------	122	97	106	86	92	------	------	10.6	13.52	3.3262
	14	1,1-Dichloroethene	------	110	97	97	108	101	99	100	94	94	4.2	5.67	3.4716
25	15	tert-Butyl alcohol	------	110	100	90	100	90	80	100	90	90	7.8	8.48	3.6224
	16	Iodomethane	------	102	98	100	114	110	98	97	91	89	6.1	8.16	3.9020
	17	Methyl acetate	------	------	84	99	109	115	98	95	------	------	14	19.31	3.9816
10	18	Acetonitrile	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	19	Carbon disulfide	------	101	106	99	99	105	99	100	98	94	2.6	3.55	4.1795
	20	Methylene chloride	------	115	105	104	99	96	95	99	92	93	5.6	7.29	4.1909
5	21	Acrylonitrile	------	------	93	98	105	102	95	105	95	98	4.2	4.20	4.4247
	22	tert-Butyl methyl ether (MTBE)	123	106	99	100	100	95	93	100	91	91	6.1	9.44	4.4670
	23	trans-1,2-Dichloroethene	------	116	102	105	101	98	96	98	92	91	5.4	7.59	4.6698
	24	Isopropyl ether (DIPE)	------	104	93	110	114	109	108	95	83	85	9.9	11.40	5.3306
	25	1,1-Dichloroethane	116	101	99	102	105	102	101	104	89	80	6.3	9.54	5.4898
	26	Vinyl acetate	------	------	86	107	105	102	99	102	98	------	12.5	15.63	5.5644
25	27	2-Butanol	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	28	tert-Butyl ethyl ether (ETBE)	113	94	101	97	99	94	93	107	99	102	4.6	6.39	6.2218
5	29	2-Butanone	107	86	86	107	114	107	100	114	100	107	8.6	9.28	6.5156
	30	2,2-Dichloropropane	------	109	104	105	106	100	99	99	93	85	5.4	7.37	6.7382
	31	cis-1,2-Dichloroethene	114	99	97	100	101	99	97	101	95	96	3.3	5.48	6.8648
	32	Chloroform	127	103	99	98	100	97	95	98	92	93	5.9	9.93	7.2637
	33	Bromochloromethane	106	101	94	99	103	99	99	104	97	98	2.7	3.67	7.6494
	34	Tetrahydrofuran	------	------	102	102	109	98	93	107	91	93	5.4	6.68	7.7762
5	35	tert-Amyl alcohol	------	------	82	100	100	100	100	118	100	100	4.5	8.21	7.8017
	36	Dibromofluoromethane	121	94	96	101	95	101	97	99	96	97	4.9	7.94	7.7984
	37	Cyclohexane	113	100	97	102	95	107	100	99	98	89	4.4	6.39	8.1637
	38	1,1,1-Trichloroethane	108	100	96	100	102	102	100	101	96	94	2.7	4.01	8.1856
	39	2,2,4-Trimethylpentane	101	100	92	105	93	111	106	104	99	91	5.3	6.67	8.3580
	40	1,1-Dichloropropene	110	96	93	98	103	103	101	101	97	95	3.9	5.00	8.5494
	41	Carbon tetrachloride	112	100	93	96	102	101	101	103	97	94	3.9	5.50	8.7233
	42	tert-Amyl methyl ether (TAME)	102	91	91	102	105	102	100	109	99	102	3.9	5.31	8.9104
	43	1,2-Dichloroethane-d4	122	94	98	104	96	101	97	98	94	93	5.5	8.49	8.9396
	44	Benzene	115	100	96	99	102	100	98	101	95	94	3.7	6.08	9.1149
	45	1,2-Dichloroethane	103	101	95	101	103	102	100	104	96	95	2.9	3.44	9.1441
	46	Trichloroethene	111	94	94	96	102	102	101	104	98	98	4	5.10	10.4036
	47	Methylcyclohexane	116	98	96	101	95	108	101	100	97	89	4.9	7.36	10.4782
	48	1,2-Dichloropropane	115	97	99	99	101	98	98	102	95	97	3.5	5.60	10.7792
	49	Bromodichloromethane	125	105	96	97	100	97	95	100	94	94	5.7	9.19	11.2190
20	50	1,4-Dioxane	------	------	------	100	100	100	100	200	100	100	14.3	12.37	11.3358
	51	Dibromomethane	99	85	98	102	106	103	101	106	100	100	3.6	5.89	11.2949
	52	2-Chloroethyl vinyl ether	------	84	88	94	104	102	102	114	106	107	7.8	9.71	11.9203
5	53	4-Methyl-2-pentanone	110	105	91	102	108	102	96	106	92	91	6.3	7.21	11.9729
	54	cis-1,3-Dichloropropene	110	94	94	99	104	100	100	105	98	99	3.7	4.99	12.2856
	55	CHLOROBENZENE-D5	1	1	1	1	1	1	1	1	1	1	1	0	15.3262
	56	Toluene-d8	------	104	98	105	98	106	100	99	96	94	3.3	4.10	12.6834
	57	Toluene	116	101	97	100	103	101	98	100	94	90	4.2	6.79	12.8262
	58	trans-1,3-Dichloropropene	106	95	92	97	104	101	101	106	99	99	3.7	4.67	13.2207
	59	Ethyl methacrylate	104	89	92	97	106	100	101	110	100	100	4.4	6.19	13.2645
	60	1,1,2-Trichloroethane	115	94	93	102	105	101	98	103	95	95	5.1	6.60	13.4691
5	61	2-Hexanone	------	109	93	101	108	101	96	106	92	91	5.8	6.95	13.5568
	62	1,3-Dichloropropane	111	98	96	100	104	100	99	103	95	94	3.5	4.86	13.9221
	63	Tetrachloroethene	119	100	94	98	103	101	98	99	94	95	4.5	7.12	13.9659
	64	Dibromochloromethane	122	100	93	96	101	98	97	103	95	97	5.1	8.24	14.3312
	65	1,2-Dibromoethane	107	93	94	98	108	102	100	105	96	96	4.5	5.40	14.6672
	66	1-Chlorohexane	109	95	90	95	103	104	104	105	99	96	5.1	5.95	15.0179
	67	Chlorobenzene	115	98	96	98	102	100	99	101	95	95	3.8	5.74	15.3978
	68	1,1,1,2-Tetrachloroethane	110	97	97	98	102	98	98	103	96	100	3.1	4.20	15.4855
	69	Ethylbenzene	112	98	95	98	104	103	101	103	96	90	4.6	5.99	15.5001
2	70	m-Xylene & p-Xylene	114	97	93	97	103	101	100	102	93	------	4.5	6.53	15.6316
	71	o-Xylene	113	98	96	99	103	102	100	103	95	93	4	5.52	16.3621
	72	Styrene	105	93	91	96	104	102	102	107	100	100	3.9	5.11	16.4352
	73	Isopropylbenzene	111	96	93	97	104	104	102	104	97	91	5.2	6.17	16.9758
	74	1,2-DICHLOROBENZENE-D4	1	1	1	1	1	1	1	1	1	1	1	0	19.2990
	75	Bromoform	110	98	96	98	102	99	96	104	98	98	3.2	4.26	16.9758
	76	1,1,2,2-Tetrachloroethane	120	104	101	103	105	100	92	97	90	88	6.7	9.22	17.2681
	77	4-Bromofluorobenzene	------	110	105	105	97	103	95	96	95	94	5.1	5.86	17.3703
	78	1,2,3-Trichloropropane	115	99	97	107	106	99	94	100	92	89	5.6	7.56	17.4887
	79	trans-1,4-Dichloro-2-butene	105	102	93	99	102	102	98	106	98	94	3.5	4.44	17.6041
	80	n-Propylbenzene	116	98	98	98	106	106	100	102	96	81	5.9	8.94	17.5924
	81	Bromobenzene	114	99	97	98	102	101	96	100	96	98	3.3	5.25	17.6348
	82	1,3,5-Trimethylbenzene	114	99	94	97	105	103	99	101	98	91	4.5	6.19	17.8218
	83	2-Chlorotoluene	118	101	99	100	103	103	96	98	94	87	5	7.98	17.8248
	84	4-Chlorotoluene	119	98	96	96	104	100	97	99	96	95	4.5	7.22	17.8963
	85	tert-Butylbenzene	106	100	96	95	103	102	97	100	99	100	2.5	3.37	18.2762
	86	1,2,4-Trimethylbenzene	113	99	96	97	104	104	98	102	97	91	4.5	6.03	18.3201
	87	sec-Butylbenzene	114	100	96	98	105	106	101	102	96	81	5.7	8.42	18.5392
	88	p-Isopropyltoluene	109	95	94	95	104	106	103	104	99	92	5.1	5.87	18.7000
	89	1,3-Dichlorobenzene	116	98	97	95	102	100	97	101	97	96	3.9	6.18	18.8022
	90	1,2,3-Trimethylbenzene	117	96	98	97	104	102	98	101	95	91	4.9	7.08	18.8899
	91	1,4-Dichlorobenzene	112	98	95	95	101	101	98	102	98	99	3.4	4.95	18.9337
	92	n-Butylbenzene	106	92	92	92	105	107	106	106	102	92	6.4	7.01	19.1529
	93	1,2-Dichlorobenzene	114	102	97	97	101	100	96	101	95	96	3.8	5.66	19.3283
	94	1,2-Dibromo-3-chloropropane	95	80	94	104	110	105	101	107	100	99	6.1	8.72	20.1042
	95	1,2,4-Trichlorobenzene	108	91	89	91	100	100	100	108	105	108	5.7	7.32	20.9428
	96	Hexachlorobutadiene	109	101	93	94	101	99	99	104	100	100	2.9	4.36	21.0670
	97	Naphthalene	120	103	89	90	98	97	95	105	101	100	6.1	8.77	21.2131
	98	1,2,3-Trichlorobenzene	108	94	92	94	100	100	100	106	102	104	4.1	5.36	21.4615

Compound List Report 67

Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 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	9.82	1.000	A	1	A	B
2	T	Dichlorodifluoromethane	85	1.60	0.163	A	1	A	B
3	T	Dichlorotetrafluoroethane	85	2.72	0.277	A	2	A	B
4	T	Chloromethane	50	1.84	0.187	A	1	A	B
5	T	Vinyl chloride	62	1.94	0.197	A	1	A	B
6	T	Bromomethane	94	2.38	0.243	A	1	A	B
7	T	Chloroethane	64	2.44	0.249	A	1	A	B
8	T	Dichlorofluoromethane	67	2.50	0.255	A	1	A	B
9	T	Trichlorofluoromethane	101	2.74	0.279	A	1	A	B
10	T	sec-Propyl alcohol	45	5.33	0.543	A	1	A	B
11	T	Acrolein	56	3.24	0.331	A	1	A	B
12	T	1,1,2-Trichloro-1,2,2-trifluor	151	3.26	0.333	A	1	A	B
13	T	Acetone	43	3.33	0.339	A	1	A	B
14	T	1,1-Dichloroethene	61	3.49	0.355	A	2	A	B
15	T	tert-Butyl alcohol	59	3.61	0.368	A	1	A	B
16	T	Iodomethane	142	3.90	0.397	A	1	A	B
17	T	Methyl acetate	43	3.98	0.406	L	1	A	B
18	T	Acetonitrile	41	4.00	0.408	A	1	A	B
19	T	Carbon disulfide	76	4.18	0.425	A	1	A	B
20	T	Methylene chloride	49	4.19	0.427	A	2	A	B
21	T	Acrylonitrile	53	4.42	0.451	A	2	A	B
22	T	tert-Butyl methyl ether (MTBE)	73	4.47	0.455	A	1	A	B
23	T	trans-1,2-Dichloroethene	96	4.67	0.476	A	1	A	B
24	T	Isopropyl ether (DIPE)	45	5.33	0.543	A	1	A	B
25	T	1,1-Dichloroethane	63	5.49	0.559	A	2	A	B
26	T	Vinyl acetate	43	5.56	0.567	L	1	A	B
27	T	2-Butanol	45	6.06	0.617	A	1	A	B
28	T	tert-Butyl ethyl ether (ETBE)	59	6.22	0.634	A	1	A	B
29	T	2-Butanone	72	6.51	0.664	A	1	A	B
30	T	2,2-Dichloropropane	77	6.75	0.687	A	2	A	B
31	T	cis-1,2-Dichloroethene	96	6.86	0.699	A	1	A	B
32	T	Chloroform	83	7.26	0.740	A	2	A	B
33	T	Bromochloromethane	130	7.65	0.780	A	1	A	B
34	T	Tetrahydrofuran	42	7.77	0.792	A	2	A	B
35	T	tert-Amyl alcohol	59	7.80	0.795	A	1	A	B
36	S	Dibromofluoromethane	111	7.80	0.795	A	1	A	B
37	T	Cyclohexane	84	8.17	0.832	A	1	A	B
38	T	1,1,1-Trichloroethane	97	8.18	0.833	A	2	A	B
39	T	2,2,4-Trimethylpentane	57	8.36	0.851	A	1	A	B
40	T	1,1-Dichloropropene	110	8.56	0.872	A	1	A	B
41	T	Carbon tetrachloride	119	8.72	0.888	A	1	A	B
42	T	tert-Amyl methyl ether (TAME)	87	8.90	0.906	A	1	A	B
43	S	1,2-Dichloroethane-d4	65	8.94	0.911	A	1	A	B
44	T	Benzene	78	9.12	0.929	A	2	A	B
45	T	1,2-Dichloroethane	62	9.14	0.932	A	1	A	B
46	T	Trichloroethene	130	10.40	1.060	A	3	A	B
47	T	Methylcyclohexane	83	10.47	1.067	A	2	A	B
48	T	1,2-Dichloropropane	63	10.78	1.098	A	1	A	B
49	T	Bromodichloromethane	83	11.22	1.143	A	1	A	B
50	T	1,4-Dioxane	88	11.34	1.155	A	1	A	B
51	T	Dibromomethane	93	11.29	1.150	A	2	A	B
52	T	2-Chloroethyl vinyl ether	63	11.92	1.214	A	1	A	B
53	T	4-Methyl-2-pentanone	43	11.96	1.219	A	3	A	B

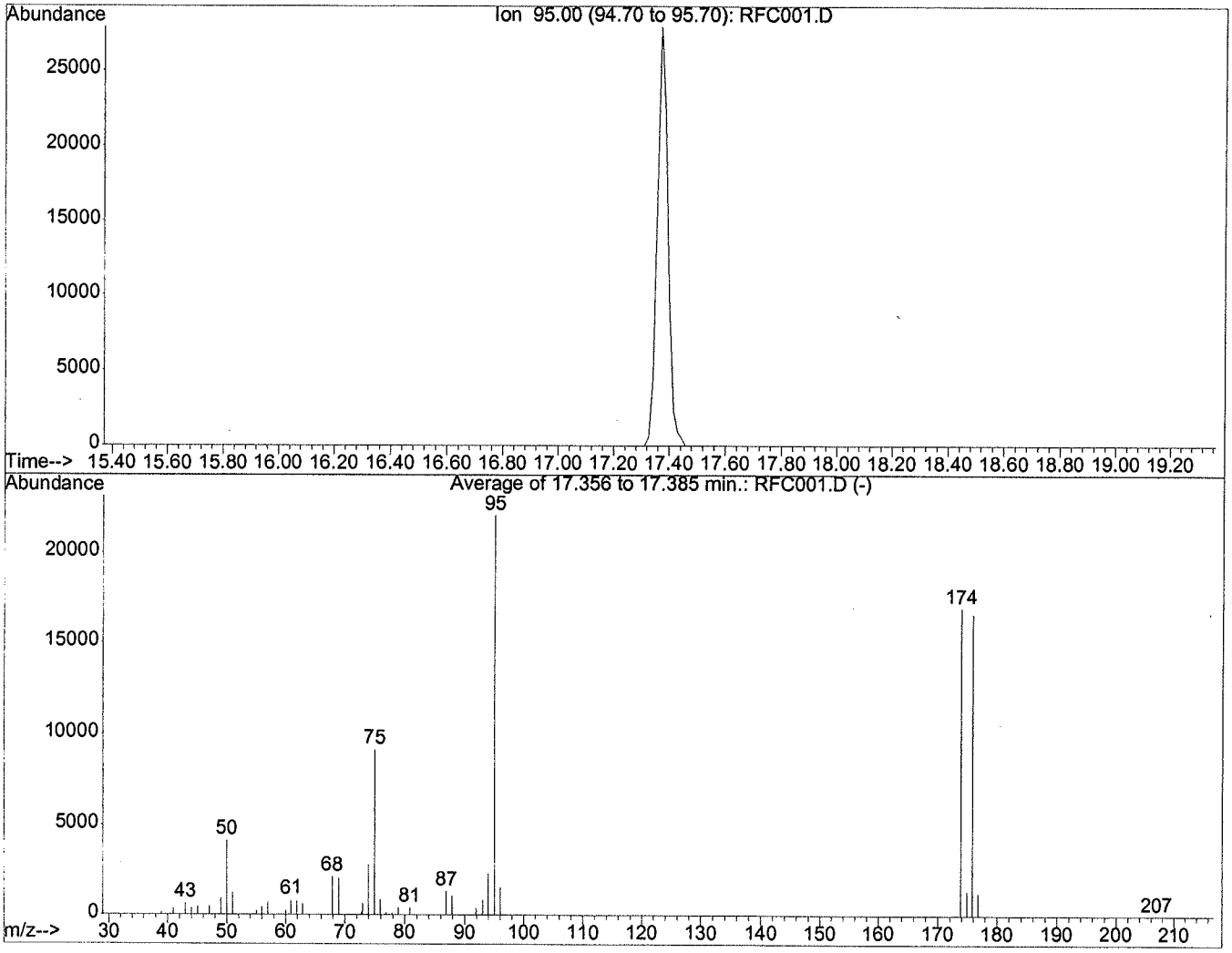
54	T	cis-1,3-Dichloropropene	75	12.29	1.252	A	2	A	B
55	I	CHLOROBENZENE-D5	117	15.32	1.000	A	2	A	B
56	S	Toluene-d8	98	12.68	0.827	A	1	A	B
57	T	Toluene	91	12.83	0.837	A	1	A	B
58	T	trans-1,3-Dichloropropene	75	13.22	0.863	A	1	A	B
59	T	Ethyl methacrylate	69	13.26	0.866	A	1	A	B
60	T	1,1,2-Trichloroethane	97	13.47	0.879	A	2	A	B
61	T	2-Hexanone	43	13.56	0.885	A	1	A	B
62	T	1,3-Dichloropropane	76	13.92	0.908	A	1	A	B
63	T	Tetrachloroethene	164	13.97	0.911	A	3	A	B
64	T	Dibromochloromethane	129	14.33	0.935	A	1	A	B
65	T	1,2-Dibromoethane	107	14.67	0.957	A	1	A	B
66	T	1-Chlorohexane	91	15.02	0.980	A	1	A	B
67	P,M	Chlorobenzene	112	15.40	1.005	A	1	A	B
68	T	1,1,1,2-Tetrachloroethane	131	15.49	1.010	A	1	A	B
69	T	Ethylbenzene	91	15.50	1.011	A	1	A	B
70	T	m-Xylene & p-Xylene	91	15.63	1.020	A	1	A	B
71	T	o-Xylene	91	16.36	1.068	A	1	A	B
72	T	Styrene	104	16.44	1.072	A	2	A	B
73	T	Isopropylbenzene	105	16.98	1.108	A	3	A	B
74	I	1,2-DICHLOROBENZENE-D4	152	19.30	1.000	A	1	A	B
75	T	Bromoform	173	16.98	0.880	A	2	A	B
76	T	1,1,2,2-Tetrachloroethane	83	17.27	0.895	A	1	A	B
77	S	4-Bromofluorobenzene	95	17.37	0.900	A	2	A	B
78	T	1,2,3-Trichloropropane	110	17.49	0.906	A	1	A	B
79	T	trans-1,4-Dichloro-2-butene	53	17.60	0.912	A	1	A	B
80	T	n-Propylbenzene	91	17.59	0.911	A	2	A	B
81	T	Bromobenzene	156	17.63	0.914	A	1	A	B
82	T	1,3,5-Trimethylbenzene	105	17.81	0.923	A	2	A	B
83	T	2-Chlorotoluene	91	17.82	0.924	A	1	A	B
84	T	4-Chlorotoluene	91	17.90	0.927	A	1	A	B
85	T	tert-Butylbenzene	134	18.28	0.947	A	1	A	B
86	T	1,2,4-Trimethylbenzene	105	18.32	0.949	A	1	A	B
87	T	sec-Butylbenzene	105	18.54	0.961	A	1	A	B
88	T	p-Isopropyltoluene	119	18.70	0.969	A	2	A	B
89	T	1,3-Dichlorobenzene	146	18.80	0.974	A	2	A	B
90	T	1,2,3-Trimethylbenzene	105	18.89	0.979	A	2	A	B
91	T	1,4-Dichlorobenzene	146	18.93	0.981	A	2	A	B
92	T	n-Butylbenzene	91	19.15	0.992	A	2	A	B
93	T	1,2-Dichlorobenzene	146	19.33	1.002	A	1	A	B
94	T	1,2-Dibromo-3-chloropropane	157	20.10	1.042	A	1	A	B
95	T	1,2,4-Trichlorobenzene	180	20.94	1.085	A	2	A	B
96	T	Hexachlorobutadiene	225	21.07	1.092	A	2	A	B
97	T	Naphthalene	128	21.21	1.099	A	1	A	B
98	T	1,2,3-Trichlorobenzene	180	21.46	1.112	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

VO67F05.M Thu Jun 20 15:54:52 2024

Data File : D:\HPCHEM\1\DATA\24F05\RFC001.D
Acq On : 5 Jun 2024 4:07 pm
Sample : BFB67F01
Misc : T/CHK
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B

Vial: 1
Operator: ZLin
Inst : 67
Multiplr: 1.00



AutoFind: Scans 1034, 1035, 1036; Background Corrected with Scan 1029

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.8	4149	PASS
75	95	30	60	41.4	9147	PASS
95	95	100	100	100.0	22093	PASS
96	95	5	9	7.0	1544	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	76.7	16948	PASS
175	174	5	9	8.1	1370	PASS
176	174	95	101	98.1	16631	PASS
177	176	5	9	7.4	1228	PASS

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F05\RFC002.D Vial: 2
Acq On : 5 Jun 2024 4:49 pm Operator: ZLin
Sample : VO67F051 0.03/0.15uL Inst : 67
Misc : 0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 15:46 2024 Quant Results File: VO67F05.RES

Quant Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration
DataAcq Meth : VO67F05

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.82	114	1467024	10.00 ug/l	0.00
55) CHLOROBENZENE-D5	15.32	117	1039397	10.00 ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.30	152	334535	10.00 ug/l	0.00
System Monitoring Compounds					
36) Dibromofluoromethane	7.80	111	14578	0.36 ug/l	0.00
Spiked Amount 10.000			Recovery =	3.60%	
43) 1,2-Dichloroethane-d4	8.94	65	9569	0.37 ug/l	0.00
Spiked Amount 10.000			Recovery =	3.70%	
56) Toluene-d8	12.68	98	58343	0.40 ug/l	0.00
Spiked Amount 10.000			Recovery =	4.00%	
77) 4-Bromofluorobenzene	17.37	95	17978	0.43 ug/l	0.00
Spiked Amount 10.000			Recovery =	4.30%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.60	85	12333	0.27 ug/l	100
4) Chloromethane	1.84	50	16757	0.29 ug/l #	46
5) Vinyl chloride	1.94	62	14182	0.29 ug/l	96
6) Bromomethane	2.38	94	8451	0.23 ug/l #	52
7) Chloroethane	2.44	64	9281	0.30 ug/l	97
8) Dichlorofluoromethane	2.50	67	21329	0.35 ug/l	96
9) Trichlorofluoromethane	2.74	101	10588	0.27 ug/l	100
11) Acrolein	3.24	56	5853	2.18 ug/l	83
12) 1,1,2-Trichloro-1,2,2-trif	3.26	151	8953	0.33 ug/l	92
14) 1,1-Dichloroethene	3.46	61	16901	0.37 ug/l	68
15) tert-Butyl alcohol	3.63	59	14554	10.44 ug/l	99
16) Iodomethane	3.90	142	21389	0.36 ug/l	100
19) Carbon disulfide	4.18	76	60072	0.39 ug/l	100
20) Methylene chloride	4.19	49	22727	0.45 ug/l	91
21) Acrylonitrile	4.42	53	8508	1.39 ug/l #	55
22) tert-Butyl methyl ether (M	4.47	73	23546	0.37 ug/l	89
23) trans-1,2-Dichloroethene	4.67	96	17211	0.40 ug/l	93
24) Isopropyl ether (DIPE)	5.33	45	57850	0.38 ug/l	98
25) 1,1-Dichloroethane	5.49	63	28152	0.35 ug/l	94
26) Vinyl acetate	5.56	43	19768	Below Cal	87
28) tert-Butyl ethyl ether (ET	6.22	59	41548	0.34 ug/l	93
29) 2-Butanone	6.50	72	3393	1.60 ug/l #	40
30) 2,2-Dichloropropane	6.73	77	16504	0.42 ug/l	88
31) cis-1,2-Dichloroethene	6.86	96	17755	0.34 ug/l	94
32) Chloroform	7.26	83	25626	0.38 ug/l	96
33) Bromochloromethane	7.65	130	7282	0.32 ug/l	98
34) Tetrahydrofuran	7.79	42	2980	0.44 ug/l #	42

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F05\RFC002.D Vial: 2
Acq On : 5 Jun 2024 4:49 pm Operator: ZLin
Sample : VO67F051 0.03/0.15uL Inst : 67
Misc : 0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 15:46 2024 Quant Results File: VO67F05.RES

Quant Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration
DataAcq Meth : VO67F05

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
35)	tert-Amyl alcohol	7.83	59	315	0.19 ug/l	#	22
37)	Cyclohexane	8.15	84	25044	0.34 ug/l		95
38)	1,1,1-Trichloroethane	8.18	97	16737	0.33 ug/l		97
39)	2,2,4-Trimethylpentane	8.36	57	57867	0.30 ug/l		95
40)	1,1-Dichloropropene	8.54	110	7527	0.33 ug/l		91
41)	Carbon tetrachloride	8.73	119	13586	0.34 ug/l		93
42)	tert-Amyl methyl ether (TA	8.91	87	5761	0.31 ug/l		98
44)	Benzene	9.11	78	65496	0.35 ug/l		97
45)	1,2-Dichloroethane	9.14	62	9675	0.31 ug/l		96
46)	Trichloroethene	10.40	130	15727	0.33 ug/l		99
47)	Methylcyclohexane	10.47	83	29614	0.35 ug/l		91
48)	1,2-Dichloropropane	10.78	63	15373	0.34 ug/l		93
49)	Bromodichloromethane	11.22	83	17282	0.37 ug/l		100
51)	Dibromomethane	11.29	93	5400	0.30 ug/l		93
52)	2-Chloroethyl vinyl ether	11.92	63	2829	0.24 ug/l		100
53)	4-Methyl-2-pentanone	11.98	43	44171	1.65 ug/l		91
54)	cis-1,3-Dichloropropene	12.29	75	20275	0.33 ug/l		93
57)	Toluene	12.83	91	61755	0.35 ug/l		98
58)	trans-1,3-Dichloropropene	13.22	75	13325	0.32 ug/l		88
59)	Ethyl methacrylate	13.26	69	10151	0.31 ug/l	#	64
60)	1,1,2-Trichloroethane	13.47	97	8326	0.34 ug/l		96
61)	2-Hexanone	13.56	43	30290	1.92 ug/l		81
62)	1,3-Dichloropropane	13.92	76	14407	0.33 ug/l		97
63)	Tetrachloroethene	13.97	164	12907	0.36 ug/l		95
64)	Dibromochloromethane	14.33	129	9945	0.37 ug/l		94
65)	1,2-Dibromoethane	14.67	107	7099	0.32 ug/l		97
66)	1-Chlorohexane	15.02	91	23445	0.33 ug/l		95
67)	Chlorobenzene	15.40	112	36279	0.34 ug/l		99
68)	1,1,1,2-Tetrachloroethane	15.49	131	10652	0.33 ug/l		76
69)	Ethylbenzene	15.50	91	64719	0.34 ug/l		97
70)	m-Xylene & p-Xylene	15.63	91	97101	0.69 ug/l		98
71)	o-Xylene	16.36	91	47180	0.34 ug/l		100
72)	Styrene	16.44	104	34409	0.32 ug/l		97
73)	Isopropylbenzene	16.98	105	60222	0.33 ug/l		99
75)	Bromoform	16.98	173	4253	0.33 ug/l		88
76)	1,1,2,2-Tetrachloroethane	17.27	83	8832	0.36 ug/l		94
78)	1,2,3-Trichloropropane	17.50	110	2050	0.34 ug/l		81
79)	trans-1,4-Dichloro-2-buten	17.60	53	1821	0.31 ug/l		64
80)	n-Propylbenzene	17.60	91	69564	0.35 ug/l		98
81)	Bromobenzene	17.65	156	11582	0.34 ug/l		94
82)	1,3,5-Trimethylbenzene	17.82	105	45096	0.34 ug/l		100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F05\RFC002.D Vial: 2
Acq On : 5 Jun 2024 4:49 pm Operator: ZLin
Sample : VO67F051 0.03/0.15uL Inst : 67
Misc : 0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 15:46 2024 Quant Results File: VO67F05.RES

Quant Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration
DataAcq Meth : VO67F05

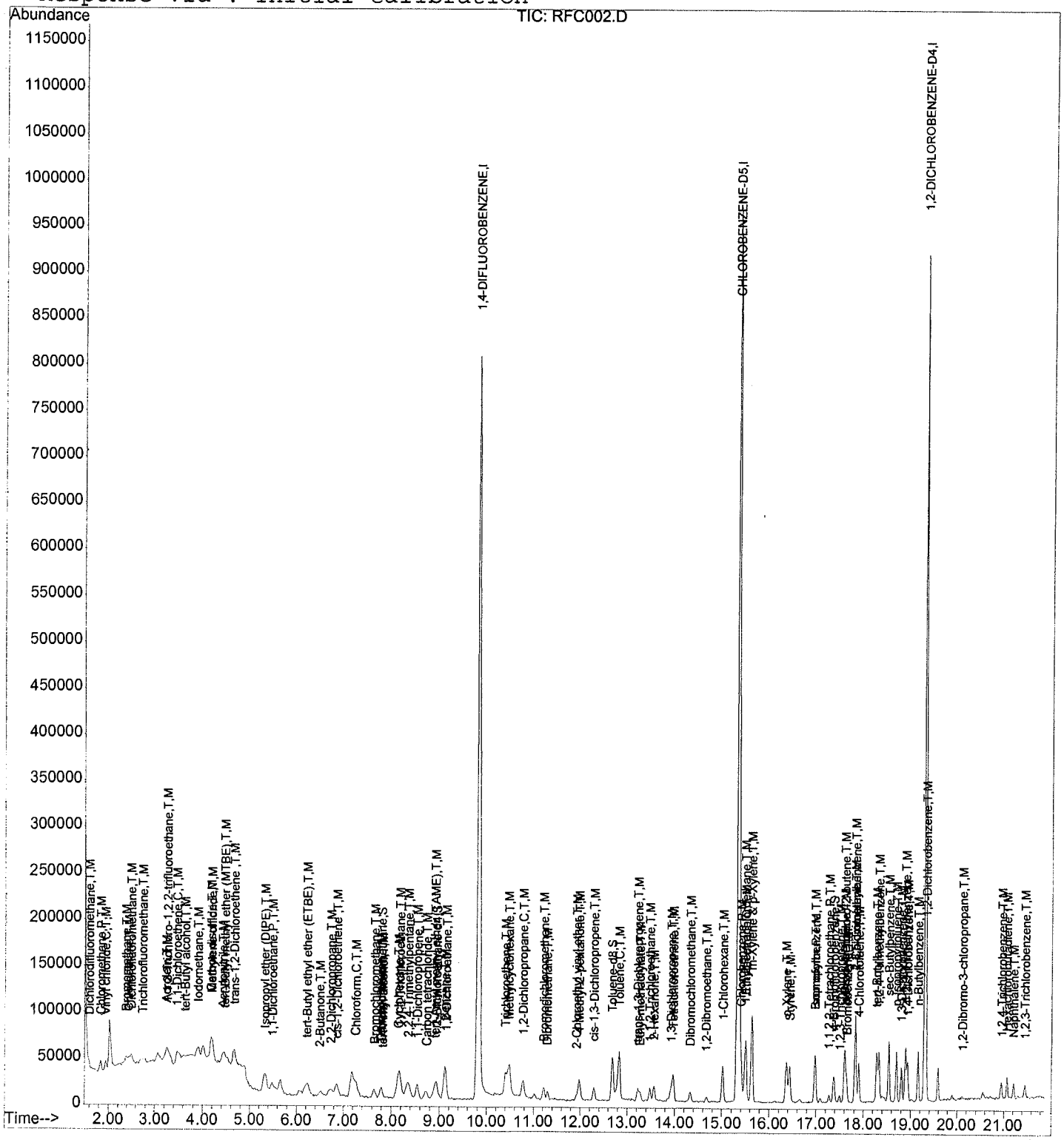
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
83)	2-Chlorotoluene	17.82	91	46382	0.36 ug/l	99
84)	4-Chlorotoluene	17.90	91	36521	0.36 ug/l	99
85)	tert-Butylbenzene	18.28	134	9709	0.32 ug/l	92
86)	1,2,4-Trimethylbenzene	18.32	105	42455	0.34 ug/l	97
87)	sec-Butylbenzene	18.54	105	59456	0.34 ug/l	98
88)	p-Isopropyltoluene	18.70	119	44458	0.33 ug/l	99
89)	1,3-Dichlorobenzene	18.80	146	22305	0.35 ug/l	99
90)	1,2,3-Trimethylbenzene	18.89	105	41647	0.35 ug/l	97
91)	1,4-Dichlorobenzene	18.93	146	20513	0.34 ug/l	99
92)	n-Butylbenzene	19.15	91	39644	0.32 ug/l	98
93)	1,2-Dichlorobenzene	19.33	146	18292	0.34 ug/l	93
94)	1,2-Dibromo-3-chloropropan	20.12	157	892	0.29 ug/l	89
95)	1,2,4-Trichlorobenzene	20.95	180	10126	0.32 ug/l	97
96)	Hexachlorobutadiene	21.07	225	7210	0.33 ug/l	95
97)	Naphthalene	21.21	128	16231	0.36 ug/l	95
98)	1,2,3-Trichlorobenzene	21.46	180	8153	0.32 ug/l	96

(#) = qualifier out of range (m) = manual integration
RFC002.D VO67F05.M Thu Jun 20 15:47:29 2024 Page 3

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F05\RFC002.D Vial: 2
Acq On : 5 Jun 2024 4:49 pm Operator: ZLin
Sample : VO67F051 0.03/0.15uL Inst : 67
Misc : 0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 15:46 2024 Quant Results File: VO67F05.RES

Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F05\RFC003.D Vial: 3
Acq On : 5 Jun 2024 5:17 pm Operator: ZLin
Sample : VO67F052 0.05/0.25uL Inst : 67
Misc : 0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 15:44 2024 Quant Results File: VO67F05.RES

Quant Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration
DataAcq Meth : VO67F05

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.82	114	1461695	10.00	ug/l		0.00
55) CHLOROBENZENE-D5	15.32	117	1046253	10.00	ug/l		0.00
74) 1,2-DICHLOROBENZENE-D4	19.30	152	341282	10.00	ug/l		0.00
System Monitoring Compounds							
36) Dibromofluoromethane	7.80	111	18779	0.47	ug/l		0.00
Spiked Amount 10.000			Recovery =	4.70%			
43) 1,2-Dichloroethane-d4	8.94	65	12310	0.47	ug/l		0.00
Spiked Amount 10.000			Recovery =	4.70%			
56) Toluene-d8	12.68	98	76431	0.52	ug/l		0.00
Spiked Amount 10.000			Recovery =	5.20%			
77) 4-Bromofluorobenzene	17.37	95	23652	0.55	ug/l		0.00
Spiked Amount 10.000			Recovery =	5.50%			
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.60	85	28095	0.63	ug/l		99
4) Chloromethane	1.82	50	33812	0.58	ug/l		83
5) Vinyl chloride	1.94	62	29801	0.61	ug/l		97
6) Bromomethane	2.39	94	21562	0.60	ug/l		87
7) Chloroethane	2.45	64	18719	0.60	ug/l		97
8) Dichlorofluoromethane	2.51	67	30728	0.51	ug/l		92
9) Trichlorofluoromethane	2.75	101	22758	0.59	ug/l		98
11) Acrolein	3.23	56	7618	2.85	ug/l		87
12) 1,1,2-Trichloro-1,2,2-trif	3.27	151	13520	0.50	ug/l		98
14) 1,1-Dichloroethene	3.47	61	25349	0.55	ug/l		80
15) tert-Butyl alcohol	3.63	59	19403	13.96	ug/l		99
16) Iodomethane	3.90	142	29985	0.51	ug/l		98
19) Carbon disulfide	4.18	76	77563	0.51	ug/l		95
20) Methylene chloride	4.19	49	29078	0.58	ug/l		93
21) Acrylonitrile	4.42	53	25353	4.17	ug/l		81
22) tert-Butyl methyl ether (M	4.48	73	33737	0.53	ug/l		98
23) trans-1,2-Dichloroethene	4.67	96	24925	0.58	ug/l		90
24) Isopropyl ether (DIPE)	5.33	45	78729	0.52	ug/l		96
25) 1,1-Dichloroethane	5.49	63	40611	0.50	ug/l		98
26) Vinyl acetate	5.56	43	40087	0.19	ug/l		89
28) tert-Butyl ethyl ether (ET	6.22	59	57040	0.47	ug/l		97
29) 2-Butanone	6.51	72	4425	2.09	ug/l		93
30) 2,2-Dichloropropane	6.73	77	21558	0.54	ug/l		98
31) cis-1,2-Dichloroethene	6.86	96	25659	0.50	ug/l		98
32) Chloroform	7.27	83	34675	0.52	ug/l		99
33) Bromochloromethane	7.65	130	11423	0.50	ug/l		94
34) Tetrahydrofuran	8.00	42	1369	0.20	ug/l	#	51

(#) = qualifier out of range (m) = manual integration
RFC003.D VO67F05.M Thu Jun 20 15:47:42 2024 Page 1

6/27/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F05\RFC003.D Vial: 3
Acq On : 5 Jun 2024 5:17 pm Operator: ZLin
Sample : VO67F052 0.05/0.25uL Inst : 67
Misc : 0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 15:44 2024 Quant Results File: VO67F05.RES

Quant Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration
DataAcq Meth : VO67F05

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
35)	tert-Amyl alcohol	7.83	59	2486	1.54 ug/l	#	57
37)	Cyclohexane	8.17	84	36847	0.50 ug/l		97
38)	1,1,1-Trichloroethane	8.18	97	25659	0.50 ug/l		98
39)	2,2,4-Trimethylpentane	8.37	57	95075	0.50 ug/l		99
40)	1,1-Dichloropropene	8.56	110	10921	0.48 ug/l		97
41)	Carbon tetrachloride	8.72	119	20006	0.50 ug/l		95
42)	tert-Amyl methyl ether (TA	8.91	87	8494	0.45 ug/l		97
44)	Benzene	9.11	78	93851	0.50 ug/l		98
45)	1,2-Dichloroethane	9.14	62	15763	0.51 ug/l		97
46)	Trichloroethene	10.42	130	22104	0.47 ug/l		96
47)	Methylcyclohexane	10.49	83	41912	0.49 ug/l		94
48)	1,2-Dichloropropane	10.78	63	21465	0.48 ug/l		98
49)	Bromodichloromethane	11.22	83	24086	0.52 ug/l		98
50)	1,4-Dioxane	11.32	88	895	4.52 ug/l	#	15
51)	Dibromomethane	11.29	93	7780	0.43 ug/l		88
52)	2-Chloroethyl vinyl ether	11.92	63	4994	0.42 ug/l		90
53)	4-Methyl-2-pentanone	11.98	43	70053	2.63 ug/l		91
54)	cis-1,3-Dichloropropene	12.29	75	28683	0.47 ug/l		94
57)	Toluene	12.83	91	89882	0.50 ug/l		100
58)	trans-1,3-Dichloropropene	13.22	75	19865	0.47 ug/l		91
59)	Ethyl methacrylate	13.26	69	14691	0.45 ug/l	#	56
60)	1,1,2-Trichloroethane	13.47	97	11533	0.47 ug/l		97
61)	2-Hexanone	13.56	43	43475	2.74 ug/l		88
62)	1,3-Dichloropropane	13.92	76	21383	0.49 ug/l		95
63)	Tetrachloroethene	13.97	164	18304	0.50 ug/l		97
64)	Dibromochloromethane	14.33	129	13603	0.50 ug/l		99
65)	1,2-Dibromoethane	14.67	107	10383	0.46 ug/l		96
66)	1-Chlorohexane	15.02	91	34170	0.47 ug/l		99
67)	Chlorobenzene	15.40	112	51858	0.49 ug/l		100
68)	1,1,1,2-Tetrachloroethane	15.49	131	15703	0.48 ug/l		84
69)	Ethylbenzene	15.50	91	94979	0.49 ug/l		98
70)	m-Xylene & p-Xylene	15.63	91	137813	0.97 ug/l		99
71)	o-Xylene	16.36	91	68620	0.49 ug/l		99
72)	Styrene	16.44	104	51141	0.47 ug/l		99
73)	Isopropylbenzene	16.98	105	87483	0.48 ug/l		100
75)	Bromoform	16.98	173	6483	0.49 ug/l		94
76)	1,1,2,2-Tetrachloroethane	17.27	83	13097	0.52 ug/l		98
78)	1,2,3-Trichloropropane	17.49	110	3010	0.50 ug/l		96
79)	trans-1,4-Dichloro-2-buten	17.60	53	2998	0.51 ug/l		72
80)	n-Propylbenzene	17.59	91	100326	0.49 ug/l		98
81)	Bromobenzene	17.63	156	17168	0.50 ug/l		95

(#) = qualifier out of range (m) = manual integration
RFC003.D VO67F05.M Thu Jun 20 15:47:42 2024 Page 2

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F05\RFC003.D Vial: 3
Acq On : 5 Jun 2024 5:17 pm Operator: ZLin
Sample : VO67F052 0.05/0.25uL Inst : 67
Misc : 0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 15:44 2024 Quant Results File: VO67F05.RES

Quant Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration
DataAcq Meth : VO67F05

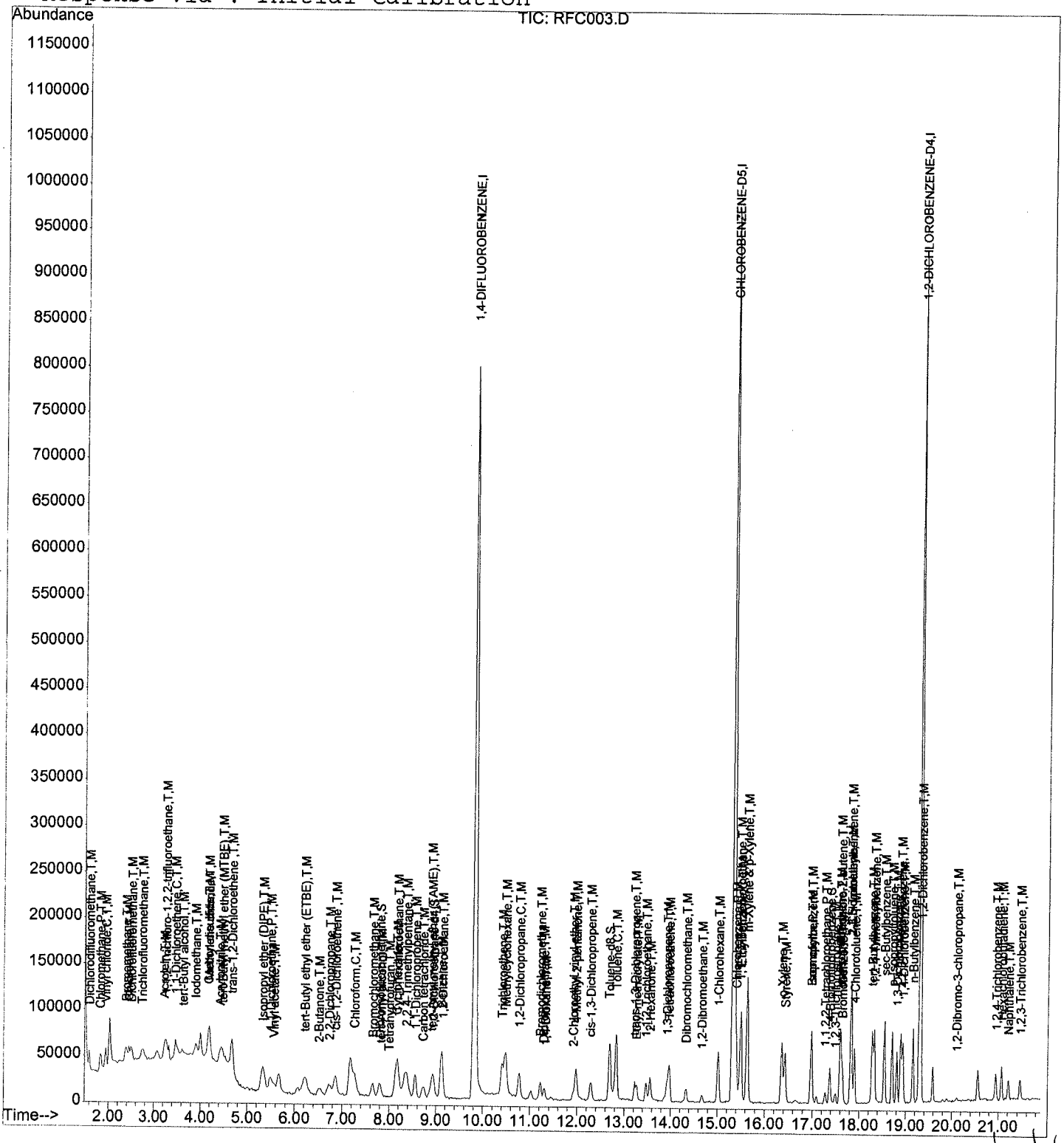
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
82)	1,3,5-Trimethylbenzene	17.82	105	66635	0.49 ug/l	99
83)	2-Chlorotoluene	17.82	91	67377	0.51 ug/l	99
84)	4-Chlorotoluene	17.90	91	51335	0.49 ug/l	100
85)	tert-Butylbenzene	18.28	134	15575	0.50 ug/l	98
86)	1,2,4-Trimethylbenzene	18.32	105	63063	0.50 ug/l	97
87)	sec-Butylbenzene	18.54	105	88792	0.50 ug/l	98
88)	p-Isopropyltoluene	18.70	119	65785	0.47 ug/l	99
89)	1,3-Dichlorobenzene	18.80	146	31999	0.49 ug/l	98
90)	1,2,3-Trimethylbenzene	18.89	105	57990	0.48 ug/l	99
91)	1,4-Dichlorobenzene	18.93	146	30500	0.49 ug/l	99
92)	n-Butylbenzene	19.15	91	58623	0.46 ug/l	98
93)	1,2-Dichlorobenzene	19.33	146	27793	0.51 ug/l	98
94)	1,2-Dibromo-3-chloropropan	20.10	157	1280	0.40 ug/l	93
95)	1,2,4-Trichlorobenzene	20.95	180	14508	0.45 ug/l	95
96)	Hexachlorobutadiene	21.07	225	11389	0.50 ug/l	98
97)	Naphthalene	21.21	128	23778	0.52 ug/l	98
98)	1,2,3-Trichlorobenzene	21.46	180	12060	0.47 ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F05\RFC003.D Vial: 3
Acq On : 5 Jun 2024 5:17 pm Operator: ZLin
Sample : VO67F052 0.05/0.25uL Inst : 67
Misc : 0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 15:44 2024 Quant Results File: VO67F05.RES

Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F05\RFC004.D Vial: 4
Acq On : 5 Jun 2024 5:44 pm Operator: ZLin
Sample : VO67F053 0.10/0.50uL Inst : 67
Misc : 1.0ppb 8260/5.0ppb KET-AA/25ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 15:44 2024 Quant Results File: VO67F05.RES

Quant Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration
DataAcq Meth : VO67F05

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.82	114	1427374	10.00	ug/l	0.00
55) CHLOROBENZENE-D5	15.32	117	1043991	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.30	152	346149	10.00	ug/l	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	7.80	111	37355	0.96	ug/l	0.00
Spiked Amount 10.000			Recovery =	9.60%		
43) 1,2-Dichloroethane-d4	8.94	65	24987	0.99	ug/l	0.00
Spiked Amount 10.000			Recovery =	9.90%		
56) Toluene-d8	12.69	98	144426	0.98	ug/l	0.01
Spiked Amount 10.000			Recovery =	9.80%		
77) 4-Bromofluorobenzene	17.37	95	45480	1.05	ug/l	0.00
Spiked Amount 10.000			Recovery =	10.50%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.60	85	45790	1.05	ug/l	98
4) Chloromethane	1.84	50	66619	1.17	ug/l	89
5) Vinyl chloride	1.94	62	50826	1.07	ug/l	92
6) Bromomethane	2.39	94	36240	1.03	ug/l	91
7) Chloroethane	2.45	64	32826	1.08	ug/l	98
8) Dichlorofluoromethane	2.51	67	57573	0.97	ug/l	97
9) Trichlorofluoromethane	2.75	101	38355	1.02	ug/l	98
11) Acrolein	3.23	56	12402	4.75	ug/l	99
12) 1,1,2-Trichloro-1,2,2-trif	3.27	151	24689	0.94	ug/l	96
13) Acetone	3.33	43	31664	6.14	ug/l	96
14) 1,1-Dichloroethene	3.47	61	43831	0.97	ug/l	94
15) tert-Butyl alcohol	3.63	59	35398	26.09	ug/l	94
16) Iodomethane	3.90	142	55701	0.98	ug/l	98
17) Methyl acetate	3.98	43	23588	0.84	ug/l	87
19) Carbon disulfide	4.19	76	157710	1.06	ug/l	100
20) Methylene chloride	4.19	49	51760	1.05	ug/l	99
21) Acrylonitrile	4.42	53	28188	4.75	ug/l	84
22) tert-Butyl methyl ether (M	4.47	73	61317	0.99	ug/l	98
23) trans-1,2-Dichloroethene	4.67	96	42640	1.02	ug/l	92
24) Isopropyl ether (DIPE)	5.33	45	136962	0.93	ug/l	98
25) 1,1-Dichloroethane	5.49	63	78069	0.99	ug/l	95
26) Vinyl acetate	5.56	43	72032	0.86	ug/l	92
28) tert-Butyl ethyl ether (ET	6.22	59	119636	1.01	ug/l	94
29) 2-Butanone	6.53	72	8829	4.27	ug/l	73
30) 2,2-Dichloropropane	6.75	77	40316	1.04	ug/l	98
31) cis-1,2-Dichloroethene	6.86	96	48950	0.97	ug/l	97
32) Chloroform	7.27	83	64846	0.99	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F05\RFC004.D Vial: 4
Acq On : 5 Jun 2024 5:44 pm Operator: ZLin
Sample : VO67F053 0.10/0.50uL Inst : 67
Misc : 1.0ppb 8260/5.0ppb KET-AA/25ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 15:44 2024 Quant Results File: VO67F05.RES

Quant Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration
DataAcq Meth : VO67F05

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
33)	Bromochloromethane	7.65	130	20761	0.94	ug/l	99
34)	Tetrahydrofuran	7.79	42	6767	1.03	ug/l	76
35)	tert-Amyl alcohol	7.81	59	6612	4.21	ug/l	96
37)	Cyclohexane	8.17	84	69803	0.97	ug/l	98
38)	1,1,1-Trichloroethane	8.18	97	48311	0.96	ug/l	97
39)	2,2,4-Trimethylpentane	8.37	57	171206	0.92	ug/l	99
40)	1,1-Dichloropropene	8.55	110	20598	0.93	ug/l	96
41)	Carbon tetrachloride	8.72	119	36460	0.93	ug/l	98
42)	tert-Amyl methyl ether (TA	8.93	87	16760	0.92	ug/l	99
44)	Benzene	9.12	78	176858	0.96	ug/l	99
45)	1,2-Dichloroethane	9.14	62	28914	0.95	ug/l	99
46)	Trichloroethene	10.40	130	43451	0.95	ug/l	98
47)	Methylcyclohexane	10.49	83	79549	0.96	ug/l	97
48)	1,2-Dichloropropane	10.78	63	42852	0.99	ug/l	99
49)	Bromodichloromethane	11.22	83	43255	0.96	ug/l	99
50)	1,4-Dioxane	11.34	88	2316	11.98	ug/l	82
51)	Dibromomethane	11.29	93	17248	0.97	ug/l	98
52)	2-Chloroethyl vinyl ether	11.92	63	10107	0.87	ug/l	98
53)	4-Methyl-2-pentanone	11.98	43	118666	4.56	ug/l	97
54)	cis-1,3-Dichloropropene	12.29	75	56005	0.94	ug/l	97
57)	Toluene	12.83	91	172832	0.97	ug/l	99
58)	trans-1,3-Dichloropropene	13.22	75	38624	0.92	ug/l	96
59)	Ethyl methacrylate	13.26	69	30041	0.92	ug/l	78
60)	1,1,2-Trichloroethane	13.47	97	22611	0.93	ug/l	93
61)	2-Hexanone	13.56	43	73888	4.67	ug/l	92
62)	1,3-Dichloropropane	13.92	76	41725	0.96	ug/l	97
63)	Tetrachloroethene	13.97	164	34374	0.94	ug/l	99
64)	Dibromochloromethane	14.33	129	25423	0.93	ug/l	95
65)	1,2-Dibromoethane	14.67	107	20935	0.94	ug/l	100
66)	1-Chlorohexane	15.02	91	64811	0.90	ug/l	100
67)	Chlorobenzene	15.40	112	102124	0.97	ug/l	98
68)	1,1,1,2-Tetrachloroethane	15.49	131	31338	0.97	ug/l	94
69)	Ethylbenzene	15.50	91	183033	0.95	ug/l	100
70)	m-Xylene & p-Xylene	15.63	91	264481	1.86	ug/l	100
71)	o-Xylene	16.36	91	134462	0.96	ug/l	99
72)	Styrene	16.44	104	99622	0.91	ug/l	99
73)	Isopropylbenzene	16.98	105	168359	0.93	ug/l	99
75)	Bromoform	16.98	173	12877	0.96	ug/l	92
76)	1,1,2,2-Tetrachloroethane	17.27	83	25736	1.01	ug/l	97
78)	1,2,3-Trichloropropane	17.49	110	5976	0.97	ug/l	99
79)	trans-1,4-Dichloro-2-buten	17.60	53	5566	0.93	ug/l	85

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F05\RFC004.D Vial: 4
Acq On : 5 Jun 2024 5:44 pm Operator: ZLin
Sample : VO67F053 0.10/0.50uL Inst : 67
Misc : 1.0ppb 8260/5.0ppb KET-AA/25ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 15:44 2024 Quant Results File: VO67F05.RES

Quant Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration
DataAcq Meth : VO67F05

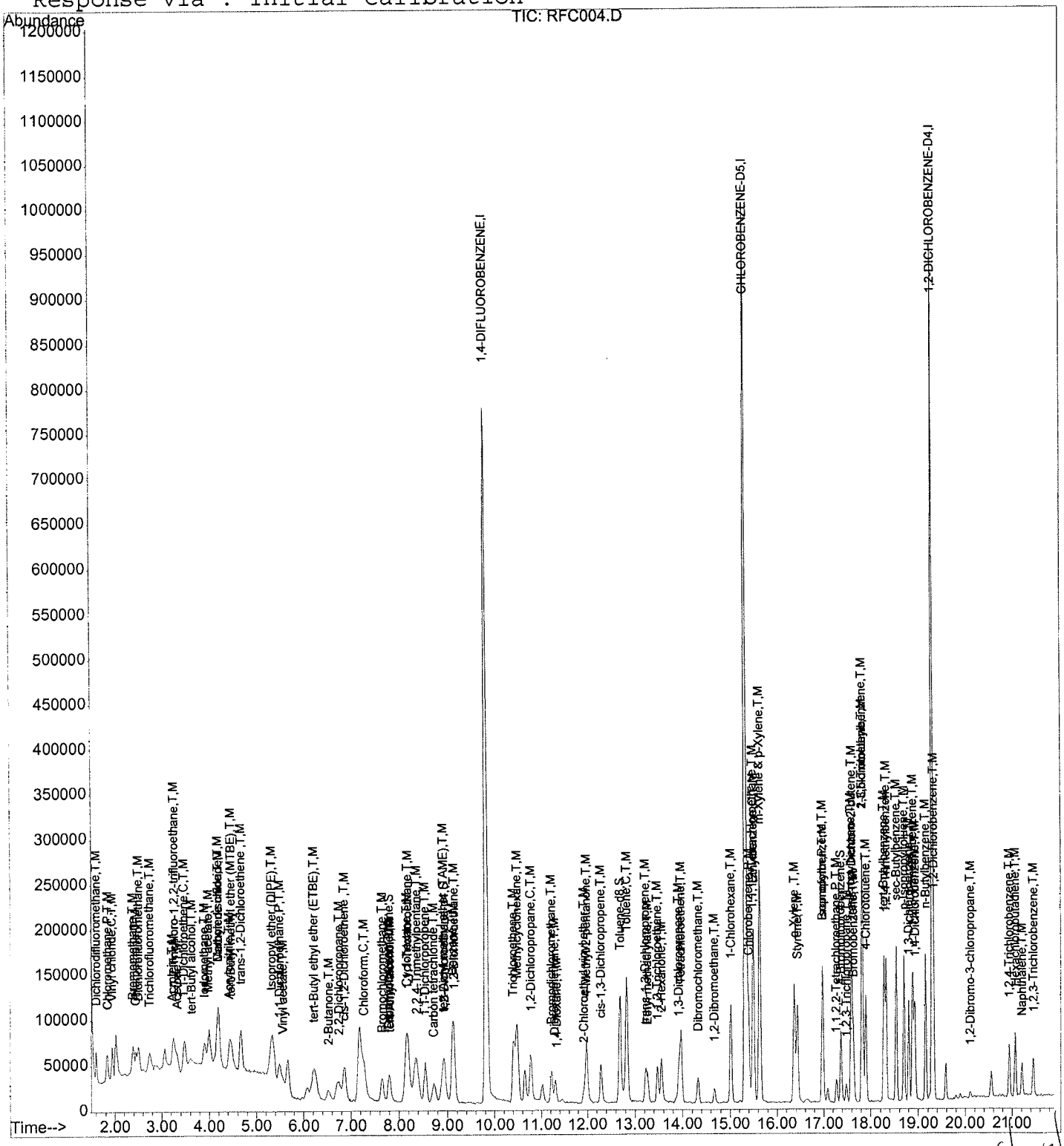
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	n-Propylbenzene	17.59	91	202095	0.98	ug/l	99
81)	Bromobenzene	17.63	156	33963	0.97	ug/l	99
82)	1,3,5-Trimethylbenzene	17.82	105	129087	0.94	ug/l	100
83)	2-Chlorotoluene	17.82	91	134114	0.99	ug/l	100
84)	4-Chlorotoluene	17.90	91	101031	0.96	ug/l	100
85)	tert-Butylbenzene	18.28	134	30129	0.96	ug/l	97
86)	1,2,4-Trimethylbenzene	18.32	105	123496	0.96	ug/l	99
87)	sec-Butylbenzene	18.54	105	173028	0.96	ug/l	100
88)	p-Isopropyltoluene	18.70	119	132616	0.94	ug/l	100
89)	1,3-Dichlorobenzene	18.80	146	64039	0.97	ug/l	98
90)	1,2,3-Trimethylbenzene	18.89	105	119497	0.98	ug/l	98
91)	1,4-Dichlorobenzene	18.93	146	59642	0.95	ug/l	100
92)	n-Butylbenzene	19.15	91	118201	0.92	ug/l	98
93)	1,2-Dichlorobenzene	19.33	146	53317	0.97	ug/l	96
94)	1,2-Dibromo-3-chloropropan	20.10	157	3037	0.94	ug/l	98
95)	1,2,4-Trichlorobenzene	20.94	180	28929	0.89	ug/l	99
96)	Hexachlorobutadiene	21.07	225	21385	0.93	ug/l	98
97)	Naphthalene	21.21	128	41576	0.89	ug/l	98
98)	1,2,3-Trichlorobenzene	21.46	180	24007	0.92	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F05\RFC004.D Vial: 4
Acq On : 5 Jun 2024 5:44 pm Operator: ZLin
Sample : VO67F053 0.10/0.50uL Inst : 67
Misc : 1.0ppb 8260/5.0ppb KET-AA/25ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 15:44 2024 Quant Results File: VO67F05.RES

Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F05\RFC005.D Vial: 5
Acq On : 5 Jun 2024 6:12 pm Operator: ZLin
Sample : VO67F054 0.20/1.00uL Inst : 67
Misc : 2.0ppb 8260/10ppb KET-AA/50ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 15:44 2024 Quant Results File: VO67F05.RES

Quant Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration
DataAcq Meth : VO67F05

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.82	114	1489360	10.00	ug/l	0.00
55) CHLOROBENZENE-D5	15.33	117	1091982	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.30	152	369275	10.00	ug/l	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	7.79	111	82199	2.03	ug/l	-0.01
Spiked Amount 10.000			Recovery = 20.30%			
43) 1,2-Dichloroethane-d4	8.94	65	55136	2.08	ug/l	0.00
Spiked Amount 10.000			Recovery = 20.80%			
56) Toluene-d8	12.68	98	322798	2.10	ug/l	0.00
Spiked Amount 10.000			Recovery = 21.00%			
77) 4-Bromofluorobenzene	17.37	95	97754	2.11	ug/l	0.00
Spiked Amount 10.000			Recovery = 21.10%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.60	85	86139	1.89	ug/l	99
4) Chloromethane	1.84	50	115351	1.94	ug/l	94
5) Vinyl chloride	1.94	62	102369	2.06	ug/l	99
6) Bromomethane	2.38	94	72648	1.99	ug/l	94
7) Chloroethane	2.44	64	63553	2.00	ug/l	98
8) Dichlorofluoromethane	2.50	67	122835	1.98	ug/l	98
9) Trichlorofluoromethane	2.74	101	79331	2.02	ug/l	99
11) Acrolein	3.24	56	27059	9.93	ug/l	94
12) 1,1,2-Trichloro-1,2,2-trif	3.26	151	51638	1.89	ug/l	98
13) Acetone	3.32	43	64974	12.07	ug/l	94
14) 1,1-Dichloroethene	3.48	61	90661	1.93	ug/l	95
15) tert-Butyl alcohol	3.63	59	68418	48.32	ug/l	100
16) Iodomethane	3.92	142	119651	2.01	ug/l	98
17) Methyl acetate	3.98	43	41735	1.97	ug/l	95
19) Carbon disulfide	4.18	76	307903	1.98	ug/l	99
20) Methylene chloride	4.19	49	106802	2.08	ug/l	98
21) Acrylonitrile	4.42	53	61620	9.95	ug/l	91
22) tert-Butyl methyl ether (M	4.47	73	129578	2.00	ug/l	99
23) trans-1,2-Dichloroethene	4.67	96	92062	2.11	ug/l	95
24) Isopropyl ether (DIPE)	5.33	45	338028	2.19	ug/l	99
25) 1,1-Dichloroethane	5.49	63	166936	2.04	ug/l	100
26) Vinyl acetate	5.56	43	141384	2.14	ug/l	94
28) tert-Butyl ethyl ether (ET	6.22	59	241046	1.94	ug/l	100
29) 2-Butanone	6.51	72	21880	10.13	ug/l	86
30) 2,2-Dichloropropane	6.75	77	84650	2.10	ug/l	99
31) cis-1,2-Dichloroethene	6.87	96	105039	2.00	ug/l	97
32) Chloroform	7.26	83	134104	1.96	ug/l	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F05\RFC005.D Vial: 5
Acq On : 5 Jun 2024 6:12 pm Operator: ZLin
Sample : VO67F054 0.20/1.00uL Inst : 67
Misc : 2.0ppb 8260/10ppb KET-AA/50ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 15:44 2024 Quant Results File: VO67F05.RES

Quant Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration
DataAcq Meth : VO67F05

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
33)	Bromochloromethane	7.65	130	45905	1.99 ug/l	99
34)	Tetrahydrofuran	7.79	42	14039	2.06 ug/l	94
35)	tert-Amyl alcohol	7.80	59	15933	9.71 ug/l	97
37)	Cyclohexane	8.17	84	153041	2.04 ug/l	100
38)	1,1,1-Trichloroethane	8.19	97	104524	2.00 ug/l	99
39)	2,2,4-Trimethylpentane	8.36	57	407383	2.09 ug/l	99
40)	1,1-Dichloropropene	8.55	110	45131	1.96 ug/l	99
41)	Carbon tetrachloride	8.74	119	79036	1.93 ug/l	98
42)	tert-Amyl methyl ether (TA	8.91	87	38649	2.03 ug/l	100
44)	Benzene	9.12	78	380162	1.98 ug/l	99
45)	1,2-Dichloroethane	9.14	62	63982	2.02 ug/l	100
46)	Trichloroethene	10.42	130	92347	1.93 ug/l	98
47)	Methylcyclohexane	10.47	83	174137	2.01 ug/l	99
48)	1,2-Dichloropropane	10.78	63	89536	1.98 ug/l	98
49)	Bromodichloromethane	11.22	83	90997	1.94 ug/l	99
50)	1,4-Dioxane	11.34	88	5980	29.66 ug/l	92
51)	Dibromomethane	11.31	93	37482	2.03 ug/l	98
52)	2-Chloroethyl vinyl ether	11.92	63	22544	1.87 ug/l	93
53)	4-Methyl-2-pentanone	11.98	43	275386	10.14 ug/l	98
54)	cis-1,3-Dichloropropene	12.29	75	123303	1.98 ug/l	98
57)	Toluene	12.83	91	372402	2.00 ug/l	99
58)	trans-1,3-Dichloropropene	13.22	75	85440	1.95 ug/l	97
59)	Ethyl methacrylate	13.26	69	66871	1.95 ug/l	95
60)	1,1,2-Trichloroethane	13.47	97	51661	2.03 ug/l	99
61)	2-Hexanone	13.56	43	168022	10.15 ug/l	98
62)	1,3-Dichloropropane	13.92	76	91027	2.00 ug/l	99
63)	Tetrachloroethene	13.97	164	74599	1.96 ug/l	99
64)	Dibromochloromethane	14.33	129	54866	1.92 ug/l	98
65)	1,2-Dibromoethane	14.67	107	45650	1.96 ug/l	98
66)	1-Chlorohexane	15.02	91	142655	1.90 ug/l	100
67)	Chlorobenzene	15.40	112	216952	1.96 ug/l	100
68)	1,1,1,2-Tetrachloroethane	15.49	131	66354	1.96 ug/l	98
69)	Ethylbenzene	15.50	91	394896	1.95 ug/l	100
70)	m-Xylene & p-Xylene	15.63	91	575371	3.87 ug/l	100
71)	o-Xylene	16.36	91	289559	1.97 ug/l	100
72)	Styrene	16.44	104	219421	1.92 ug/l	100
73)	Isopropylbenzene	16.98	105	367804	1.94 ug/l	100
75)	Bromoform	16.98	173	27984	1.96 ug/l	98
76)	1,1,2,2-Tetrachloroethane	17.27	83	56177	2.07 ug/l	100
78)	1,2,3-Trichloropropane	17.49	110	14007	2.13 ug/l	99
79)	trans-1,4-Dichloro-2-buten	17.60	53	12687	1.99 ug/l	94

(#) = qualifier out of range (m) = manual integration
RFC005.D VO67F05.M Thu Jun 20 15:48:52 2024 Page 2

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F05\RFC005.D Vial: 5
Acq On : 5 Jun 2024 6:12 pm Operator: ZLin
Sample : VO67F054 0.20/1.00uL Inst : 67
Misc : 2.0ppb 8260/10ppb KET-AA/50ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 15:44 2024 Quant Results File: VO67F05.RES

Quant Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration
DataAcq Meth : VO67F05

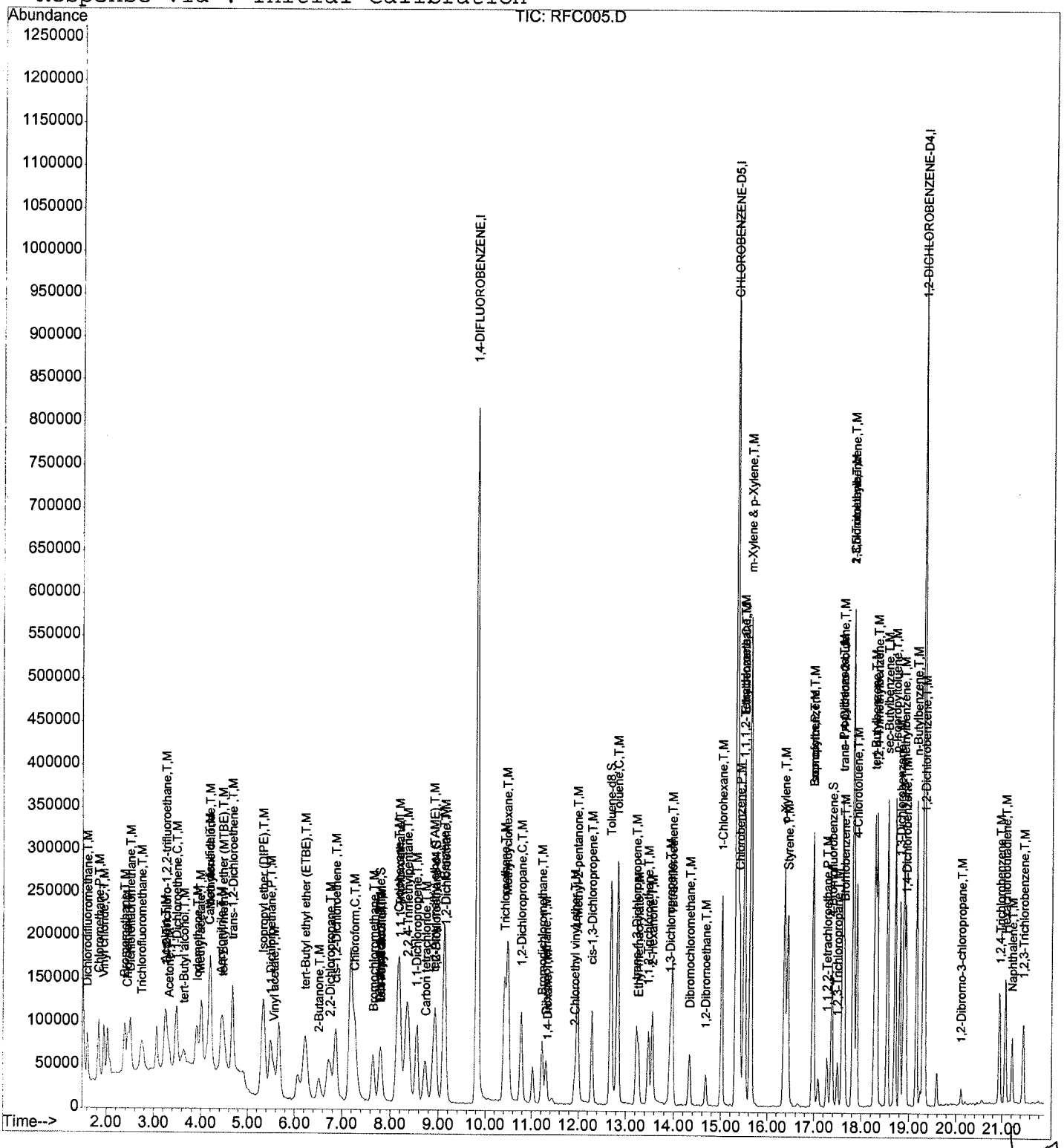
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
80)	n-Propylbenzene	17.59	91	431806	1.96 ug/l	100
81)	Bromobenzene	17.63	156	73481	1.96 ug/l	98
82)	1,3,5-Trimethylbenzene	17.82	105	282475	1.93 ug/l	100
83)	2-Chlorotoluene	17.82	91	287776	2.00 ug/l	100
84)	4-Chlorotoluene	17.90	91	217240	1.93 ug/l	99
85)	tert-Butylbenzene	18.28	134	63897	1.90 ug/l	97
86)	1,2,4-Trimethylbenzene	18.32	105	268007	1.95 ug/l	100
87)	sec-Butylbenzene	18.54	105	378560	1.97 ug/l	99
88)	p-Isopropyltoluene	18.70	119	287100	1.91 ug/l	99
89)	1,3-Dichlorobenzene	18.80	146	134311	1.91 ug/l	99
90)	1,2,3-Trimethylbenzene	18.89	105	254242	1.95 ug/l	99
91)	1,4-Dichlorobenzene	18.93	146	127959	1.90 ug/l	99
92)	n-Butylbenzene	19.15	91	253199	1.84 ug/l	99
93)	1,2-Dichlorobenzene	19.33	146	114082	1.94 ug/l	99
94)	1,2-Dibromo-3-chloropropan	20.10	157	7266	2.10 ug/l	95
95)	1,2,4-Trichlorobenzene	20.95	180	63040	1.83 ug/l	99
96)	Hexachlorobutadiene	21.07	225	45940	1.88 ug/l	100
97)	Naphthalene	21.21	128	89684	1.80 ug/l	97
98)	1,2,3-Trichlorobenzene	21.46	180	52224	1.88 ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F05\RFC005.D Vial: 5
Acq On : 5 Jun 2024 6:12 pm Operator: ZLin
Sample : VO67F054 0.20/1.00uL Inst : 67
Misc : 2.0ppb 8260/10ppb KET-AA/50ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 15:44 2024 Quant Results File: VO67F05.RES

Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F05\RFC006.D Vial: 6
Acq On : 5 Jun 2024 6:40 pm Operator: ZLin
Sample : VO67F055 0.50/2.50uL Inst : 67
Misc : 5.0ppb 8260/25ppb KET-AA/125ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 15:44 2024 Quant Results File: VO67F05.RES

Quant Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration
DataAcq Meth : VO67F05

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.82	114	1497511	10.00	ug/l	0.00
55) CHLOROBENZENE-D5	15.32	117	1100274	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.30	152	378339	10.00	ug/l	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	7.80	111	194373	4.76	ug/l	0.00
Spiked Amount 10.000			Recovery = 47.60%			
43) 1,2-Dichloroethane-d4	8.94	65	128233	4.82	ug/l	0.00
Spiked Amount 10.000			Recovery = 48.20%			
56) Toluene-d8	12.68	98	760083	4.91	ug/l	0.00
Spiked Amount 10.000			Recovery = 49.10%			
77) 4-Bromofluorobenzene	17.37	95	230263	4.84	ug/l	0.00
Spiked Amount 10.000			Recovery = 48.40%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.60	85	215762	4.70	ug/l	100
4) Chloromethane	1.82	50	274335	4.60	ug/l	98
5) Vinyl chloride	1.94	62	235489	4.71	ug/l	99
6) Bromomethane	2.39	94	170175	4.62	ug/l	98
7) Chloroethane	2.45	64	146396	4.59	ug/l	100
8) Dichlorofluoromethane	2.51	67	312436	5.02	ug/l	100
9) Trichlorofluoromethane	2.75	101	195511	4.95	ug/l	99
11) Acrolein	3.23	56	74373	27.15	ug/l	97
12) 1,1,2-Trichloro-1,2,2-trif	3.27	151	142094	5.16	ug/l	99
13) Acetone	3.33	43	131468	24.29	ug/l	97
14) 1,1-Dichloroethene	3.47	61	255625	5.41	ug/l	97
15) tert-Butyl alcohol	3.61	59	195723	137.48	ug/l	96
16) Iodomethane	3.90	142	342344	5.72	ug/l	94
17) Methyl acetate	3.98	43	95128	5.48	ug/l	97
19) Carbon disulfide	4.18	76	774810	4.94	ug/l	100
20) Methylene chloride	4.19	49	256132	4.96	ug/l	98
21) Acrylonitrile	4.42	53	163266	26.22	ug/l	95
22) tert-Butyl methyl ether (M	4.47	73	326971	5.02	ug/l	97
23) trans-1,2-Dichloroethene	4.67	96	220537	5.02	ug/l	98
24) Isopropyl ether (DIPE)	5.33	45	882161	5.69	ug/l	100
25) 1,1-Dichloroethane	5.49	63	433245	5.26	ug/l	100
26) Vinyl acetate	5.56	43	304642	5.27	ug/l	98
28) tert-Butyl ethyl ether (ET	6.22	59	620282	4.97	ug/l	100
29) 2-Butanone	6.51	72	59733	27.51	ug/l	94
30) 2,2-Dichloropropane	6.73	77	214034	5.28	ug/l	98
31) cis-1,2-Dichloroethene	6.86	96	267638	5.07	ug/l	100
32) Chloroform	7.26	83	345384	5.01	ug/l	99

(#) = qualifier out of range (m) = manual integration
RFC006.D VO67F05.M Thu Jun 20 15:49:54 2024 Page 1

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F05\RFC006.D Vial: 6
Acq On : 5 Jun 2024 6:40 pm Operator: ZLin
Sample : VO67F055 0.50/2.50uL Inst : 67
Misc : 5.0ppb 8260/25ppb KET-AA/125ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 15:44 2024 Quant Results File: VO67F05.RES

Quant Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration
DataAcq Meth : VO67F05

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
33)	Bromochloromethane	7.65	130	119425	5.14	ug/l	100
34)	Tetrahydrofuran	7.78	42	37632	5.48	ug/l	94
35)	tert-Amyl alcohol	7.80	59	42265	25.63	ug/l	98
37)	Cyclohexane	8.16	84	359377	4.76	ug/l	98
38)	1,1,1-Trichloroethane	8.19	97	268637	5.11	ug/l	100
39)	2,2,4-Trimethylpentane	8.35	57	906041	4.63	ug/l	100
40)	1,1-Dichloropropene	8.56	110	119025	5.14	ug/l	99
41)	Carbon tetrachloride	8.72	119	209933	5.11	ug/l	98
42)	tert-Amyl methyl ether (TA	8.91	87	100054	5.21	ug/l	99
44)	Benzene	9.11	78	984747	5.10	ug/l	100
45)	1,2-Dichloroethane	9.14	62	164365	5.15	ug/l	99
46)	Trichloroethene	10.40	130	246930	5.12	ug/l	99
47)	Methylcyclohexane	10.47	83	414952	4.76	ug/l	99
48)	1,2-Dichloropropane	10.78	63	230991	5.07	ug/l	99
49)	Bromodichloromethane	11.22	83	234736	4.97	ug/l	100
50)	1,4-Dioxane	11.34	88	21855	107.80	ug/l	97
51)	Dibromomethane	11.29	93	99071	5.33	ug/l	99
52)	2-Chloroethyl vinyl ether	11.92	63	62861	5.17	ug/l	98
53)	4-Methyl-2-pentanone	11.98	43	733344	26.84	ug/l	100
54)	cis-1,3-Dichloropropene	12.29	75	325899	5.19	ug/l	100
57)	Toluene	12.83	91	972460	5.17	ug/l	99
58)	trans-1,3-Dichloropropene	13.22	75	229276	5.19	ug/l	99
59)	Ethyl methacrylate	13.26	69	183804	5.32	ug/l	99
60)	1,1,2-Trichloroethane	13.47	97	134790	5.26	ug/l	98
61)	2-Hexanone	13.56	43	451608	27.06	ug/l	100
62)	1,3-Dichloropropane	13.92	76	238066	5.19	ug/l	100
63)	Tetrachloroethene	13.97	164	196902	5.13	ug/l	99
64)	Dibromochloromethane	14.33	129	145308	5.05	ug/l	100
65)	1,2-Dibromoethane	14.67	107	127270	5.42	ug/l	98
66)	1-Chlorohexane	15.02	91	392291	5.17	ug/l	100
67)	Chlorobenzene	15.40	112	570402	5.11	ug/l	100
68)	1,1,1,2-Tetrachloroethane	15.49	131	173304	5.09	ug/l	99
69)	Ethylbenzene	15.50	91	1054876	5.18	ug/l	99
70)	m-Xylene & p-Xylene	15.63	91	1541543	10.30	ug/l	99
71)	o-Xylene	16.36	91	763918	5.16	ug/l	100
72)	Styrene	16.43	104	597550	5.18	ug/l	99
73)	Isopropylbenzene	16.98	105	998687	5.22	ug/l	100
75)	Bromoform	16.98	173	74763	5.12	ug/l	99
76)	1,1,2,2-Tetrachloroethane	17.27	83	145875	5.24	ug/l	99
78)	1,2,3-Trichloropropane	17.49	110	35786	5.32	ug/l	99
79)	trans-1,4-Dichloro-2-buten	17.60	53	33504	5.12	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F05\RFC006.D Vial: 6
Acq On : 5 Jun 2024 6:40 pm Operator: ZLin
Sample : VO67F055 0.50/2.50uL Inst : 67
Misc : 5.0ppb 8260/25ppb KET-AA/125ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 15:44 2024 Quant Results File: VO67F05.RES

Quant Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration
DataAcq Meth : VO67F05

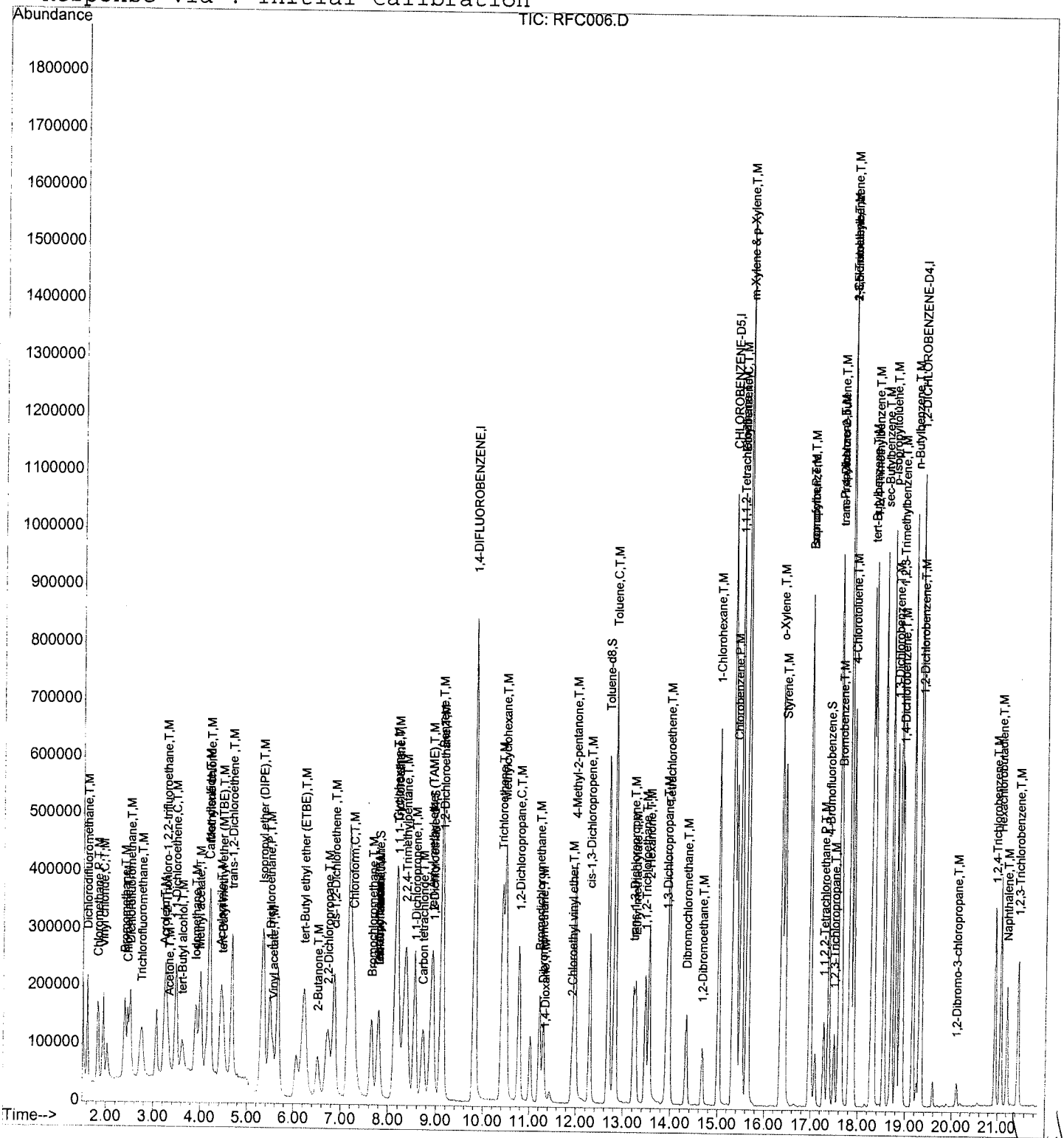
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	n-Propylbenzene	17.59	91	1194824	5.29	ug/l	100
81)	Bromobenzene	17.63	156	195548	5.10	ug/l	98
82)	1,3,5-Trimethylbenzene	17.82	105	784606	5.24	ug/l	99
83)	2-Chlorotoluene	17.82	91	758568	5.14	ug/l	100
84)	4-Chlorotoluene	17.90	91	598381	5.18	ug/l	99
85)	tert-Butylbenzene	18.28	134	177042	5.15	ug/l	100
86)	1,2,4-Trimethylbenzene	18.32	105	730929	5.18	ug/l	100
87)	sec-Butylbenzene	18.54	105	1039600	5.27	ug/l	100
88)	p-Isopropyltoluene	18.70	119	802318	5.20	ug/l	100
89)	1,3-Dichlorobenzene	18.80	146	368349	5.10	ug/l	99
90)	1,2,3-Trimethylbenzene	18.89	105	697247	5.21	ug/l	99
91)	1,4-Dichlorobenzene	18.93	146	349327	5.07	ug/l	100
92)	n-Butylbenzene	19.15	91	740927	5.26	ug/l	99
93)	1,2-Dichlorobenzene	19.33	146	305390	5.07	ug/l	99
94)	1,2-Dibromo-3-chloropropan	20.10	157	19493	5.51	ug/l	95
95)	1,2,4-Trichlorobenzene	20.95	180	176997	5.00	ug/l	99
96)	Hexachlorobutadiene	21.07	225	126167	5.05	ug/l	99
97)	Naphthalene	21.21	128	249034	4.89	ug/l	99
98)	1,2,3-Trichlorobenzene	21.46	180	142897	5.02	ug/l	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F05\RFC006.D Vial: 6
Acq On : 5 Jun 2024 6:40 pm Operator: ZLin
Sample : VO67F055 0.50/2.50uL Inst : 67
Misc : 5.0ppb 8260/25ppb KET-AA/125ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 15:44 2024 Quant Results File: VO67F05.RES

Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration



RFC006.D VO67F05.M Thu Jun 20 15:49:58 2024 Page 4

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F05\RFC007.D Vial: 7
Acq On : 5 Jun 2024 7:08 pm Operator: ZLin
Sample : VO67F056 1.00/5.00uL Inst : 67
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 15:44 2024 Quant Results File: VO67F05.RES

Quant Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration
DataAcq Meth : VO67F05

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.82	114	1433086	10.00	ug/l	0.00
55) CHLOROBENZENE-D5	15.32	117	1053162	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.30	152	364474	10.00	ug/l	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	7.80	111	397318	10.17	ug/l	0.00
Spiked Amount 10.000			Recovery = 101.70%			
43) 1,2-Dichloroethane-d4	8.94	65	256791	10.08	ug/l	0.00
Spiked Amount 10.000			Recovery = 100.80%			
56) Toluene-d8	12.68	98	1566652	10.57	ug/l	0.00
Spiked Amount 10.000			Recovery = 105.70%			
77) 4-Bromofluorobenzene	17.37	95	471409	10.29	ug/l	0.00
Spiked Amount 10.000			Recovery = 102.90%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.60	85	449920	10.25	ug/l	100
4) Chloromethane	1.84	50	566212	9.92	ug/l	100
5) Vinyl chloride	1.94	62	490678	10.24	ug/l	100
6) Bromomethane	2.38	94	354784	10.07	ug/l	100
7) Chloroethane	2.44	64	305649	10.01	ug/l	100
8) Dichlorofluoromethane	2.50	67	592784	9.94	ug/l	100
9) Trichlorofluoromethane	2.74	101	391394	10.35	ug/l	100
11) Acrolein	3.24	56	127214	48.52	ug/l	100
12) 1,1,2-Trichloro-1,2,2-trif	3.26	151	270674	10.28	ug/l	100
13) Acetone	3.33	43	271162	52.36	ug/l	100
14) 1,1-Dichloroethene	3.49	61	454796	10.06	ug/l	100
15) tert-Butyl alcohol	3.61	59	329260	241.67	ug/l	100
16) Iodomethane	3.90	142	629823	11.00	ug/l	100
17) Methyl acetate	3.98	43	177934	11.48	ug/l	100
19) Carbon disulfide	4.18	76	1569706	10.47	ug/l	100
20) Methylene chloride	4.19	49	475825	9.64	ug/l	100
21) Acrylonitrile	4.42	53	306247	51.38	ug/l	100
22) tert-Butyl methyl ether (M	4.47	73	594623	9.55	ug/l	100
23) trans-1,2-Dichloroethene	4.67	96	413400	9.84	ug/l	100
24) Isopropyl ether (DIPE)	5.33	45	1612948	10.88	ug/l	100
25) 1,1-Dichloroethane	5.49	63	805280	10.21	ug/l	100
26) Vinyl acetate	5.56	43	540580	10.28	ug/l	100
28) tert-Butyl ethyl ether (ET	6.22	59	1123406	9.41	ug/l	100
29) 2-Butanone	6.51	72	108905	52.41	ug/l	100
30) 2,2-Dichloropropane	6.75	77	390317	10.06	ug/l	100
31) cis-1,2-Dichloroethene	6.86	96	498734	9.87	ug/l	100
32) Chloroform	7.26	83	639945	9.70	ug/l	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F05\RFC007.D Vial: 7
Acq On : 5 Jun 2024 7:08 pm Operator: ZLin
Sample : VO67F056 1.00/5.00uL Inst : 67
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 15:44 2024 Quant Results File: VO67F05.RES

Quant Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration
DataAcq Meth : VO67F05

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
33)	Bromochloromethane	7.65	130	220795	9.93	ug/l	100
34)	Tetrahydrofuran	7.77	42	64548	9.82	ug/l	100
35)	tert-Amyl alcohol	7.80	59	82232	52.10	ug/l	100
37)	Cyclohexane	8.17	84	774518	10.71	ug/l	100
38)	1,1,1-Trichloroethane	8.18	97	510918	10.16	ug/l	100
39)	2,2,4-Trimethylpentane	8.36	57	2073053	11.07	ug/l	100
40)	1,1-Dichloropropene	8.56	110	228927	10.33	ug/l	100
41)	Carbon tetrachloride	8.72	119	399976	10.16	ug/l	100
42)	tert-Amyl methyl ether (TA	8.90	87	185767	10.12	ug/l	100
44)	Benzene	9.12	78	1841347	9.97	ug/l	100
45)	1,2-Dichloroethane	9.14	62	311290	10.19	ug/l	100
46)	Trichloroethene	10.40	130	468166	10.14	ug/l	100
47)	Methylcyclohexane	10.47	83	901329	10.80	ug/l	100
48)	1,2-Dichloropropane	10.78	63	428001	9.82	ug/l	100
49)	Bromodichloromethane	11.22	83	437635	9.68	ug/l	100
50)	1,4-Dioxane	11.34	88	40724	209.89	ug/l	100
51)	Dibromomethane	11.29	93	183506	10.32	ug/l	100
52)	2-Chloroethyl vinyl ether	11.92	63	118794	10.22	ug/l	100
53)	4-Methyl-2-pentanone	11.96	43	1324612	50.67	ug/l	100
54)	cis-1,3-Dichloropropene	12.29	75	600375	9.99	ug/l	100
57)	Toluene	12.83	91	1821943	10.12	ug/l	100
58)	trans-1,3-Dichloropropene	13.22	75	429297	10.14	ug/l	100
59)	Ethyl methacrylate	13.26	69	331721	10.03	ug/l	100
60)	1,1,2-Trichloroethane	13.47	97	247349	10.08	ug/l	100
61)	2-Hexanone	13.56	43	805337	50.42	ug/l	100
62)	1,3-Dichloropropane	13.92	76	438605	9.99	ug/l	100
63)	Tetrachloroethene	13.97	164	371401	10.10	ug/l	100
64)	Dibromochloromethane	14.33	129	269342	9.79	ug/l	100
65)	1,2-Dibromoethane	14.67	107	229515	10.21	ug/l	100
66)	1-Chlorohexane	15.02	91	756721	10.42	ug/l	100
67)	Chlorobenzene	15.40	112	1070815	10.03	ug/l	100
68)	1,1,1,2-Tetrachloroethane	15.49	131	321022	9.85	ug/l	100
69)	Ethylbenzene	15.50	91	2004485	10.29	ug/l	100
70)	m-Xylene & p-Xylene	15.63	91	2902423	20.26	ug/l	100
71)	o-Xylene	16.36	91	1439385	10.17	ug/l	100
72)	Styrene	16.44	104	1127137	10.22	ug/l	100
73)	Isopropylbenzene	16.98	105	1910735	10.43	ug/l	100
75)	Bromoform	16.98	173	139805	9.94	ug/l	100
76)	1,1,2,2-Tetrachloroethane	17.27	83	267935	9.99	ug/l	100
78)	1,2,3-Trichloropropane	17.49	110	64665	9.97	ug/l	100
79)	trans-1,4-Dichloro-2-buten	17.60	53	64669	10.26	ug/l	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F05\RFC007.D Vial: 7
Acq On : 5 Jun 2024 7:08 pm Operator: ZLin
Sample : VO67F056 1.00/5.00uL Inst : 67
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 15:44 2024 Quant Results File: VO67F05.RES

Quant Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration
DataAcq Meth : VO67F05

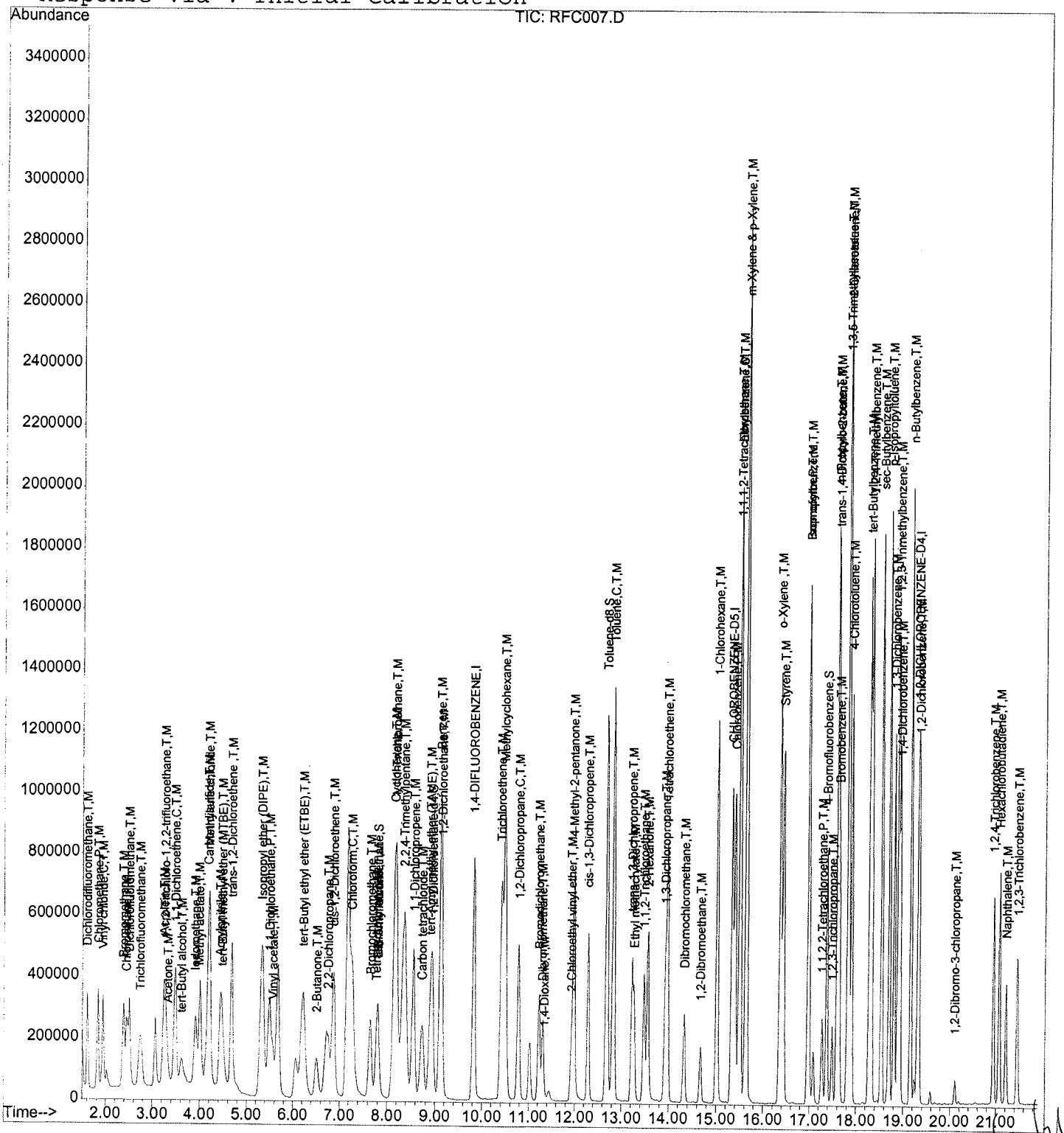
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	n-Propylbenzene	17.59	91	2298134	10.55	ug/l	100
81)	Bromobenzene	17.63	156	372289	10.07	ug/l	100
82)	1,3,5-Trimethylbenzene	17.81	105	1481704	10.28	ug/l	100
83)	2-Chlorotoluene	17.82	91	1458602	10.25	ug/l	100
84)	4-Chlorotoluene	17.90	91	1109936	9.97	ug/l	100
85)	tert-Butylbenzene	18.28	134	337577	10.19	ug/l	100
86)	1,2,4-Trimethylbenzene	18.32	105	1408347	10.36	ug/l	100
87)	sec-Butylbenzene	18.54	105	2005334	10.56	ug/l	100
88)	p-Isopropyltoluene	18.70	119	1578312	10.63	ug/l	100
89)	1,3-Dichlorobenzene	18.80	146	696750	10.01	ug/l	100
90)	1,2,3-Trimethylbenzene	18.89	105	1318258	10.22	ug/l	100
91)	1,4-Dichlorobenzene	18.93	146	670973	10.11	ug/l	100
92)	n-Butylbenzene	19.15	91	1447119	10.66	ug/l	100
93)	1,2-Dichlorobenzene	19.33	146	578913	9.97	ug/l	100
94)	1,2-Dibromo-3-chloropropan	20.10	157	36191	10.62	ug/l	100
95)	1,2,4-Trichlorobenzene	20.94	180	340467	9.99	ug/l	100
96)	Hexachlorobutadiene	21.07	225	239044	9.92	ug/l	100
97)	Naphthalene	21.21	128	477692	9.73	ug/l	100
98)	1,2,3-Trichlorobenzene	21.46	180	273426	9.97	ug/l	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F05\RFC007.D Vial: 7
Acq On : 5 Jun 2024 7:08 pm Operator: ZLin
Sample : VO67F056 1.00/5.00uL Inst : 67
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 15:44 2024 Quant Results File: VO67F05.RES

Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F05\RFC008.D Vial: 8
Acq On : 5 Jun 2024 7:36 pm Operator: ZLin
Sample : VO67F057 2.00/10.0uL Inst : 67
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 15:45 2024 Quant Results File: VO67F05.RES

Quant Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration
DataAcq Meth : VO67F05

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.82	114	1494536	10.00	ug/l	0.00
55) CHLOROBENZENE-D5	15.32	117	1109971	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.30	152	399748	10.00	ug/l	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	7.80	111	790724	19.41	ug/l	0.00
Spiked Amount 10.000			Recovery = 194.10%			
43) 1,2-Dichloroethane-d4	8.94	65	516118	19.43	ug/l	0.00
Spiked Amount 10.000			Recovery = 194.30%			
56) Toluene-d8	12.68	98	3135122	20.07	ug/l	0.00
Spiked Amount 10.000			Recovery = 200.70%			
77) 4-Bromofluorobenzene	17.37	95	957138	19.05	ug/l	0.00
Spiked Amount 10.000			Recovery = 190.50%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.60	85	930492	20.33	ug/l	99
4) Chloromethane	1.84	50	1178794	19.80	ug/l	99
5) Vinyl chloride	1.94	62	945609	18.93	ug/l	100
6) Bromomethane	2.38	94	740014	20.15	ug/l	98
7) Chloroethane	2.44	64	643534	20.21	ug/l	99
8) Dichlorofluoromethane	2.50	67	1232129	19.82	ug/l	100
9) Trichlorofluoromethane	2.74	101	816015	20.69	ug/l	100
11) Acrolein	3.24	56	254051	92.91	ug/l	99
12) 1,1,2-Trichloro-1,2,2-trif	3.26	151	554419	20.19	ug/l	100
13) Acetone	3.32	43	463631	85.84	ug/l	97
14) 1,1-Dichloroethene	3.47	61	937046	19.87	ug/l	99
15) tert-Butyl alcohol	3.61	59	621593	437.48	ug/l	99
16) Iodomethane	3.90	142	1168226	19.56	ug/l	94
17) Methyl acetate	3.98	43	308534	19.61	ug/l	94
19) Carbon disulfide	4.18	76	3100368	19.83	ug/l	100
20) Methylene chloride	4.19	49	981963	19.07	ug/l	99
21) Acrylonitrile	4.42	53	602790	96.98	ug/l	97
22) tert-Butyl methyl ether (M	4.47	73	1204928	18.55	ug/l	98
23) trans-1,2-Dichloroethene	4.67	96	841637	19.21	ug/l	99
24) Isopropyl ether (DIPE)	5.33	45	3336181	21.58	ug/l	99
25) 1,1-Dichloroethane	5.49	63	1658136	20.16	ug/l	100
26) Vinyl acetate	5.56	43	1055346	19.77	ug/l	99
28) tert-Butyl ethyl ether (ET	6.22	59	2316123	18.61	ug/l	100
29) 2-Butanone	6.51	72	215060	99.25	ug/l	90
30) 2,2-Dichloropropane	6.73	77	799277	19.76	ug/l	98
31) cis-1,2-Dichloroethene	6.86	96	1021147	19.38	ug/l	99
32) Chloroform	7.26	83	1303521	18.95	ug/l	99

(#) = qualifier out of range (m) = manual integration
RFC008.D VO67F05.M Thu Jun 20 15:50:26 2024 Page 1

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F05\RFC008.D Vial: 8
Acq On : 5 Jun 2024 7:36 pm Operator: ZLin
Sample : VO67F057 2.00/10.0uL Inst : 67
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 15:45 2024 Quant Results File: VO67F05.RES

Quant Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration
DataAcq Meth : VO67F05

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
33)	Bromochloromethane	7.64	130	460765	19.87 ug/l	99
34)	Tetrahydrofuran	7.77	42	129107	18.83 ug/l	99
35)	tert-Amyl alcohol	7.78	59	164362	99.86 ug/l	97
37)	Cyclohexane	8.16	84	1508848	20.00 ug/l	100
38)	1,1,1-Trichloroethane	8.19	97	1049276	20.02 ug/l	99
39)	2,2,4-Trimethylpentane	8.35	57	4147742	21.23 ug/l	100
40)	1,1-Dichloropropene	8.54	110	469604	20.31 ug/l	100
41)	Carbon tetrachloride	8.72	119	827902	20.17 ug/l	100
42)	tert-Amyl methyl ether (TA	8.91	87	382809	19.99 ug/l	99
44)	Benzene	9.11	78	3789300	19.68 ug/l	100
45)	1,2-Dichloroethane	9.14	62	634920	19.93 ug/l	100
46)	Trichloroethene	10.40	130	974247	20.24 ug/l	100
47)	Methylcyclohexane	10.47	83	1749067	20.10 ug/l	99
48)	1,2-Dichloropropane	10.78	63	889966	19.58 ug/l	99
49)	Bromodichloromethane	11.22	83	894257	18.97 ug/l	99
50)	1,4-Dioxane	11.34	88	83133	410.85 ug/l	98
51)	Dibromomethane	11.29	93	373913	20.17 ug/l	99
52)	2-Chloroethyl vinyl ether	11.92	63	249263	20.56 ug/l	99
53)	4-Methyl-2-pentanone	11.96	43	2602611	95.46 ug/l	100
54)	cis-1,3-Dichloropropene	12.29	75	1246440	19.90 ug/l	100
57)	Toluene	12.83	91	3729124	19.66 ug/l	99
58)	trans-1,3-Dichloropropene	13.22	75	899369	20.16 ug/l	100
59)	Ethyl methacrylate	13.26	69	705108	20.23 ug/l	99
60)	1,1,2-Trichloroethane	13.47	97	506393	19.57 ug/l	99
61)	2-Hexanone	13.56	43	1615837	95.99 ug/l	99
62)	1,3-Dichloropropane	13.92	76	913008	19.74 ug/l	100
63)	Tetrachloroethene	13.97	164	759703	19.60 ug/l	100
64)	Dibromochloromethane	14.33	129	559604	19.29 ug/l	99
65)	1,2-Dibromoethane	14.67	107	473247	19.97 ug/l	99
66)	1-Chlorohexane	15.02	91	1587534	20.75 ug/l	100
67)	Chlorobenzene	15.40	112	2220045	19.73 ug/l	100
68)	1,1,1,2-Tetrachloroethane	15.49	131	673844	19.61 ug/l	99
69)	Ethylbenzene	15.50	91	4149218	20.20 ug/l	99
70)	m-Xylene & p-Xylene	15.63	91	6047244	40.04 ug/l	99
71)	o-Xylene	16.36	91	2976726	19.95 ug/l	99
72)	Styrene	16.43	104	2365053	20.34 ug/l	99
73)	Isopropylbenzene	16.98	105	3935879	20.38 ug/l	100
75)	Bromoform	16.98	173	294906	19.12 ug/l	100
76)	1,1,2,2-Tetrachloroethane	17.27	83	540533	18.38 ug/l	100
78)	1,2,3-Trichloropropane	17.49	110	134032	18.85 ug/l	98
79)	trans-1,4-Dichloro-2-buten	17.60	53	135306	19.57 ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F05\RFC008.D Vial: 8
Acq On : 5 Jun 2024 7:36 pm Operator: ZLin
Sample : VO67F057 2.00/10.0uL Inst : 67
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 15:45 2024 Quant Results File: VO67F05.RES

Quant Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration
DataAcq Meth : VO67F05

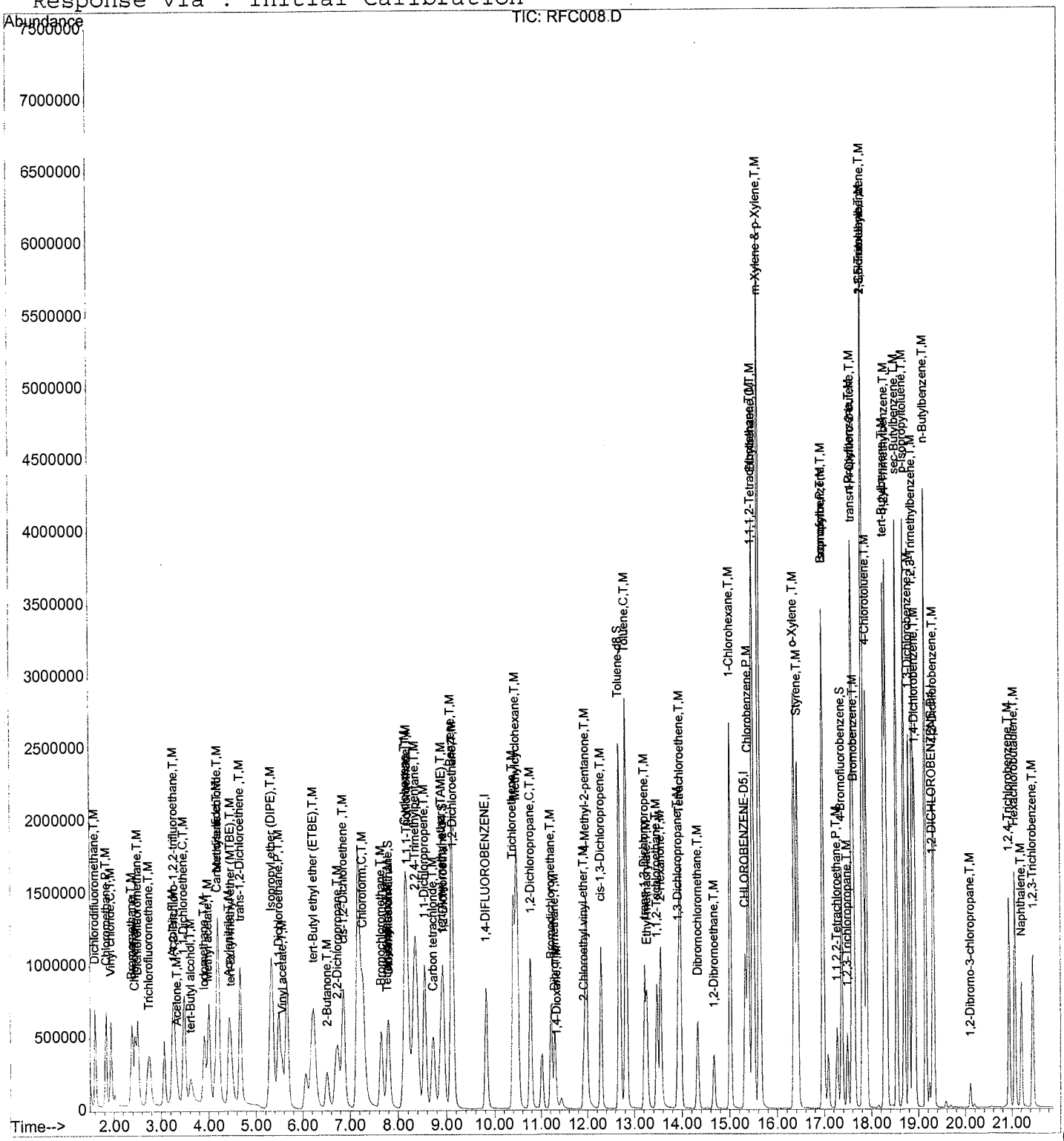
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
80)	n-Propylbenzene	17.59	91	4772501	19.98 ug/l	100
81)	Bromobenzene	17.63	156	775794	19.13 ug/l	99
82)	1,3,5-Trimethylbenzene	17.82	105	3125457	19.77 ug/l	99
83)	2-Chlorotoluene	17.82	91	3010914	19.30 ug/l	99
84)	4-Chlorotoluene	17.90	91	2372528	19.43 ug/l	100
85)	tert-Butylbenzene	18.28	134	708354	19.49 ug/l	99
86)	1,2,4-Trimethylbenzene	18.32	105	2919399	19.57 ug/l	99
87)	sec-Butylbenzene	18.54	105	4226044	20.28 ug/l	99
88)	p-Isopropyltoluene	18.70	119	3339266	20.50 ug/l	100
89)	1,3-Dichlorobenzene	18.80	146	1476624	19.35 ug/l	100
90)	1,2,3-Trimethylbenzene	18.89	105	2768394	19.57 ug/l	100
91)	1,4-Dichlorobenzene	18.93	146	1428742	19.63 ug/l	99
92)	n-Butylbenzene	19.15	91	3154788	21.18 ug/l	100
93)	1,2-Dichlorobenzene	19.33	146	1228883	19.30 ug/l	100
94)	1,2-Dibromo-3-chloropropan	20.10	157	76216	20.39 ug/l	99
95)	1,2,4-Trichlorobenzene	20.94	180	747329	19.99 ug/l	99
96)	Hexachlorobutadiene	21.07	225	521182	19.72 ug/l	99
97)	Naphthalene	21.21	128	1028376	19.10 ug/l	98
98)	1,2,3-Trichlorobenzene	21.46	180	599321	19.92 ug/l	99

(#) = qualifier out of range (m) = manual integration
RFC008.D VO67F05.M Thu Jun 20 15:50:27 2024 Page 13

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F05\RFC008.D Vial: 8
Acq On : 5 Jun 2024 7:36 pm Operator: ZLin
Sample : VO67F057 2.00/10.0uL Inst : 67
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 15:45 2024 Quant Results File: VO67F05.RES

Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F05\RFC009.D Vial: 9
Acq On : 5 Jun 2024 8:03 pm Operator: ZLin
Sample : VO67F058 3.00/15.0uL Inst : 67
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 15:44 2024 Quant Results File: VO67F05.RES

Quant Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration
DataAcq Meth : VO67F05

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.82	114	1518914	10.00	ug/l	0.00
55) CHLOROBENZENE-D5	15.32	117	1129415	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.30	152	409210	10.00	ug/l	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	7.80	111	1227654	29.66	ug/l	0.00
Spiked Amount 10.000			Recovery =	296.60%		
43) 1,2-Dichloroethane-d4	8.94	65	796714	29.51	ug/l	0.00
Spiked Amount 10.000			Recovery =	295.10%		
56) Toluene-d8	12.68	98	4712405	29.65	ug/l	0.00
Spiked Amount 10.000			Recovery =	296.50%		
77) 4-Bromofluorobenzene	17.37	95	1477524	28.73	ug/l	0.00
Spiked Amount 10.000			Recovery =	287.30%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.60	85	1348250	28.98	ug/l	99
4) Chloromethane	1.84	50	1755566	29.02	ug/l	98
5) Vinyl chloride	1.94	62	1233286	24.29	ug/l	100
6) Bromomethane	2.38	94	1113596	29.84	ug/l	99
7) Chloroethane	2.44	64	937726	28.97	ug/l	99
8) Dichlorofluoromethane	2.50	67	1914695	30.31	ug/l	100
9) Trichlorofluoromethane	2.74	101	1190978	29.71	ug/l	100
11) Acrolein	3.23	56	435157	156.59	ug/l	99
12) 1,1,2-Trichloro-1,2,2-trif	3.27	151	891200	31.93	ug/l	95
13) Acetone	3.33	43	753965	137.35	ug/l	98
14) 1,1-Dichloroethene	3.47	61	1437044	29.99	ug/l	98
15) tert-Butyl alcohol	3.61	59	1148543	795.37	ug/l	100
16) Iodomethane	3.90	142	1767279	29.11	ug/l	91
17) Methyl acetate	3.98	43	451858	28.62	ug/l	85
19) Carbon disulfide	4.19	76	4765583	29.98	ug/l	100
20) Methylene chloride	4.19	49	1548375	29.59	ug/l	99
21) Acrylonitrile	4.42	53	1008482	159.65	ug/l	98
22) tert-Butyl methyl ether (M	4.45	73	1992550	30.19	ug/l	99
23) trans-1,2-Dichloroethene	4.67	96	1304360	29.30	ug/l	99
24) Isopropyl ether (DIPE)	5.33	45	4475855	28.49	ug/l	99
25) 1,1-Dichloroethane	5.49	63	2609552	31.22	ug/l	100
26) Vinyl acetate	5.56	43	1651031	30.75	ug/l	99
28) tert-Butyl ethyl ether (ET	6.22	59	4076812	32.23	ug/l	96
29) 2-Butanone	6.51	72	365666	166.04	ug/l	89
30) 2,2-Dichloropropane	6.73	77	1216230	29.58	ug/l	97
31) cis-1,2-Dichloroethene	6.86	96	1619085	30.23	ug/l	100
32) Chloroform	7.26	83	2050800	29.34	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F05\RFC009.D Vial: 9
Acq On : 5 Jun 2024 8:03 pm Operator: ZLin
Sample : VO67F058 3.00/15.0uL Inst : 67
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 15:44 2024 Quant Results File: VO67F05.RES

Quant Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration
DataAcq Meth : VO67F05

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
33)	Bromochloromethane	7.64	130	731989	31.06 ug/l	100
34)	Tetrahydrofuran	7.77	42	223741	32.12 ug/l	99
35)	tert-Amyl alcohol	7.80	59	285154	170.47 ug/l	97
37)	Cyclohexane	8.17	84	2283295	29.79 ug/l	99
38)	1,1,1-Trichloroethane	8.18	97	1615458	30.32 ug/l	100
39)	2,2,4-Trimethylpentane	8.36	57	6216219	31.31 ug/l	100
40)	1,1-Dichloropropene	8.55	110	716572	30.49 ug/l	99
41)	Carbon tetrachloride	8.72	119	1283137	30.77 ug/l	100
42)	tert-Amyl methyl ether (TA	8.91	87	632668	32.51 ug/l	100
44)	Benzene	9.12	78	5938995	30.34 ug/l	100
45)	1,2-Dichloroethane	9.14	62	1011602	31.25 ug/l	100
46)	Trichloroethene	10.40	130	1522762	31.13 ug/l	100
47)	Methylcyclohexane	10.47	83	2657546	30.05 ug/l	99
48)	1,2-Dichloropropane	10.78	63	1410063	30.52 ug/l	100
49)	Bromodichloromethane	11.22	83	1432308	29.89 ug/l	99
50)	1,4-Dioxane	11.34	88	138411	673.06 ug/l	98
51)	Dibromomethane	11.29	93	603168	32.01 ug/l	99
52)	2-Chloroethyl vinyl ether	11.92	63	420373	34.12 ug/l	100
53)	4-Methyl-2-pentanone	11.96	43	4390311	158.44 ug/l	99
54)	cis-1,3-Dichloropropene	12.29	75	1997126	31.37 ug/l	99
57)	Toluene	12.83	91	5793617	30.02 ug/l	99
58)	trans-1,3-Dichloropropene	13.22	75	1443635	31.81 ug/l	100
59)	Ethyl methacrylate	13.26	69	1170943	33.02 ug/l	98
60)	1,1,2-Trichloroethane	13.47	97	815994	31.00 ug/l	99
61)	2-Hexanone	13.56	43	2730167	159.39 ug/l	98
62)	1,3-Dichloropropane	13.92	76	1450303	30.81 ug/l	100
63)	Tetrachloroethene	13.97	164	1168662	29.63 ug/l	99
64)	Dibromochloromethane	14.33	129	908540	30.78 ug/l	99
65)	1,2-Dibromoethane	14.67	107	762448	31.62 ug/l	98
66)	1-Chlorohexane	15.02	91	2446698	31.43 ug/l	100
67)	Chlorobenzene	15.40	112	3481545	30.41 ug/l	100
68)	1,1,1,2-Tetrachloroethane	15.49	131	1079449	30.88 ug/l	99
69)	Ethylbenzene	15.50	91	6468599	30.95 ug/l	98
70)	m-Xylene & p-Xylene	15.63	91	9372777	61.00 ug/l	98
71)	o-Xylene	16.36	91	4669860	30.75 ug/l	99
72)	Styrene	16.44	104	3785569	32.00 ug/l	99
73)	Isopropylbenzene	16.98	105	6152702	31.31 ug/l	100
75)	Bromoform	16.98	173	491370	31.12 ug/l	99
76)	1,1,2,2-Tetrachloroethane	17.27	83	876645	29.12 ug/l	99
78)	1,2,3-Trichloropropane	17.49	110	218574	30.03 ug/l	99
79)	trans-1,4-Dichloro-2-buten	17.60	53	226216	31.96 ug/l	99

(#) = qualifier out of range (m) = manual integration
RFC009.D VO67F05.M Thu Jun 20 15:50:41 2024 Page 2

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F05\RFC009.D Vial: 9
Acq On : 5 Jun 2024 8:03 pm Operator: ZLin
Sample : VO67F058 3.00/15.0uL Inst : 67
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 15:44 2024 Quant Results File: VO67F05.RES

Quant Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration
DataAcq Meth : VO67F05

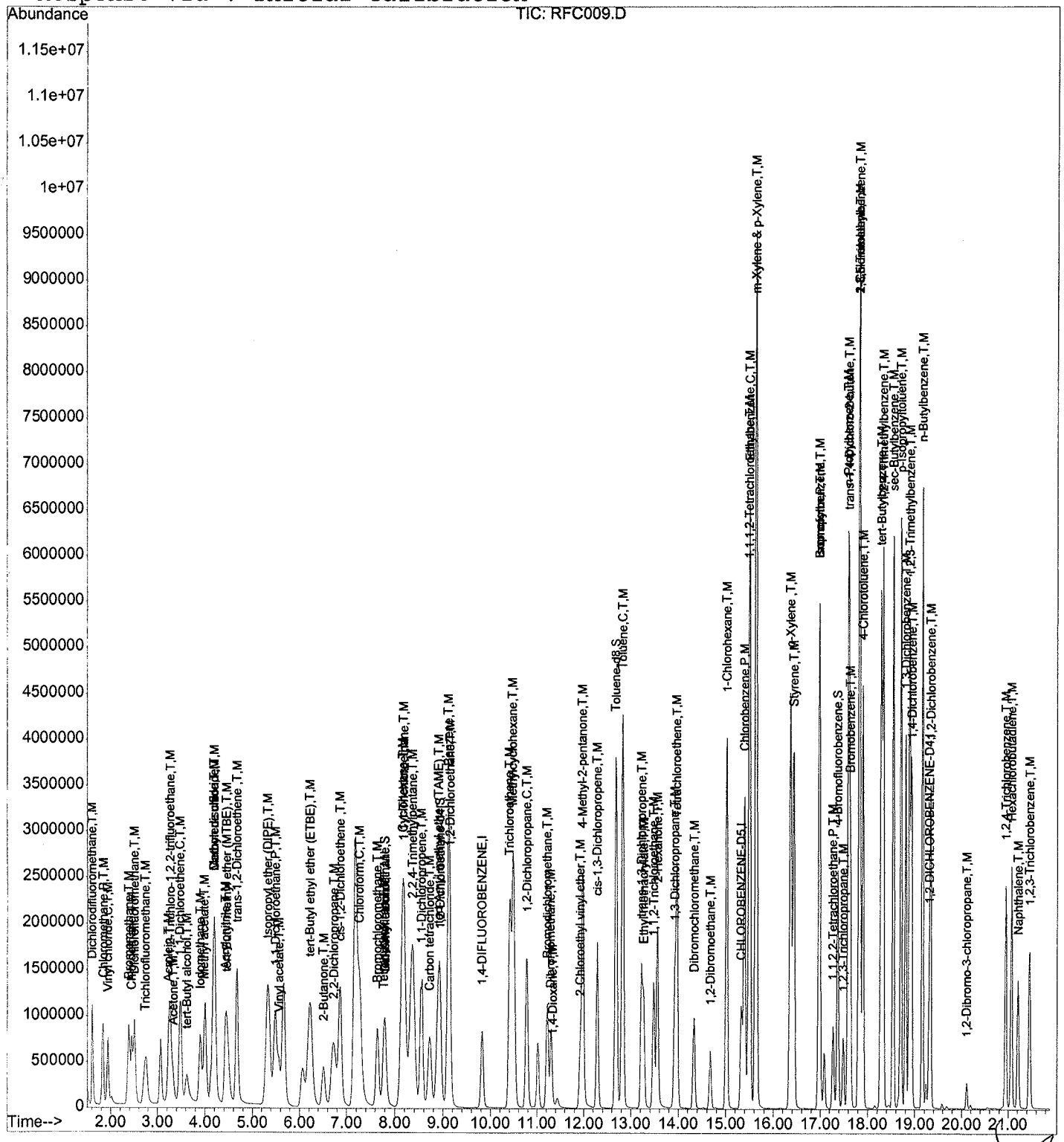
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	n-Propylbenzene	17.59	91	7479964	30.60	ug/l	99
81)	Bromobenzene	17.63	156	1247040	30.04	ug/l	98
82)	1,3,5-Trimethylbenzene	17.82	105	4903539	30.30	ug/l	99
83)	2-Chlorotoluene	17.82	91	4699768	29.43	ug/l	98
84)	4-Chlorotoluene	17.90	91	3729346	29.84	ug/l	100
85)	tert-Butylbenzene	18.28	134	1119009	30.08	ug/l	99
86)	1,2,4-Trimethylbenzene	18.32	105	4662637	30.54	ug/l	99
87)	sec-Butylbenzene	18.54	105	6545360	30.69	ug/l	99
88)	p-Isopropyltoluene	18.70	119	5206819	31.22	ug/l	99
89)	1,3-Dichlorobenzene	18.80	146	2369867	30.33	ug/l	100
90)	1,2,3-Trimethylbenzene	18.89	105	4390475	30.31	ug/l	99
91)	1,4-Dichlorobenzene	18.93	146	2281723	30.62	ug/l	99
92)	n-Butylbenzene	19.15	91	4857300	31.86	ug/l	99
93)	1,2-Dichlorobenzene	19.33	146	1977922	30.34	ug/l	100
94)	1,2-Dibromo-3-chloropropan	20.10	157	123385	32.24	ug/l	99
95)	1,2,4-Trichlorobenzene	20.94	180	1239689	32.40	ug/l	100
96)	Hexachlorobutadiene	21.07	225	841409	31.11	ug/l	99
97)	Naphthalene	21.21	128	1742921	31.61	ug/l	99
98)	1,2,3-Trichlorobenzene	21.46	180	980235	31.83	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F05\RFC009.D Vial: 9
Acq On : 5 Jun 2024 8:03 pm Operator: ZLin
Sample : VO67F058 3.00/15.0uL Inst : 67
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 15:44 2024 Quant Results File: VO67F05.RES

Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F05\RFC010.D Vial: 10
Acq On : 5 Jun 2024 8:30 pm Operator: ZLin
Sample : VO67F059 5.00/25.0uL Inst : 67
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 15:44 2024 Quant Results File: VO67F05.RES

Quant Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration
DataAcq Meth : VO67F05

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.82	114	1559983	10.00	ug/l	0.00
55) CHLOROBENZENE-D5	15.32	117	1157804	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.30	152	409469	10.00	ug/l	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	7.80	111	2054090	48.32	ug/l	0.00
Spiked Amount 10.000			Recovery = 483.20%			
43) 1,2-Dichloroethane-d4	8.94	65	1304003	47.04	ug/l	0.00
Spiked Amount 10.000			Recovery = 470.40%			
56) Toluene-d8	12.68	98	7825428	48.03	ug/l	0.00
Spiked Amount 10.000			Recovery = 480.30%			
77) 4-Bromofluorobenzene	17.37	95	2450626	47.62	ug/l	0.00
Spiked Amount 10.000			Recovery = 476.20%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.60	85	2357750	49.34	ug/l	98
4) Chloromethane	1.84	50	2913943	46.90	ug/l	99
5) Vinyl chloride	1.94	62	1726801	33.12	ug/l	98
6) Bromomethane	2.38	94	1796384	46.86	ug/l	98
7) Chloroethane	2.44	64	1561116	46.96	ug/l	100
8) Dichlorofluoromethane	2.50	67	3045150	46.93	ug/l	100
9) Trichlorofluoromethane	2.74	101	1956904	47.53	ug/l	100
11) Acrolein	3.24	56	662114	231.99	ug/l	99
12) 1,1,2-Trichloro-1,2,2-trif	3.26	151	1408309	49.12	ug/l	95
13) Acetone	3.32	43	1025236	181.85	ug/l	88
14) 1,1-Dichloroethene	3.46	61	2311862	46.97	ug/l	99
15) tert-Butyl alcohol	3.61	59	1674185	1128.86	ug/l	99
16) Iodomethane	3.90	142	2838847	45.53	ug/l	97
17) Methyl acetate	3.98	43	702910	43.76	ug/l	86
19) Carbon disulfide	4.18	76	7964460	48.79	ug/l	100
20) Methylene chloride	4.19	49	2491165	46.35	ug/l	99
21) Acrylonitrile	4.42	53	1566149	241.40	ug/l	98
22) tert-Butyl methyl ether (M	4.45	73	3095397	45.66	ug/l	99
23) trans-1,2-Dichloroethene	4.66	96	2111483	46.18	ug/l	99
24) Isopropyl ether (DIPE)	5.33	45	6722324	41.66	ug/l	98
25) 1,1-Dichloroethane	5.49	63	3832189	44.63	ug/l	100
26) Vinyl acetate	5.56	43	2679923	48.94	ug/l	99
28) tert-Butyl ethyl ether (ET	6.22	59	6461083	49.73	ug/l	97
29) 2-Butanone	6.51	72	552199	244.14	ug/l	91
30) 2,2-Dichloropropane	6.73	77	1968603	46.62	ug/l	97
31) cis-1,2-Dichloroethene	6.86	96	2605469	47.37	ug/l	99
32) Chloroform	7.26	83	3286632	45.78	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F05\RFC010.D Vial: 10
Acq On : 5 Jun 2024 8:30 pm Operator: ZLin
Sample : VO67F059 5.00/25.0uL Inst : 67
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 15:44 2024 Quant Results File: VO67F05.RES

Quant Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration
DataAcq Meth : VO67F05

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
33)	Bromochloromethane	7.64	130	1169057	48.30 ug/l	100
34)	Tetrahydrofuran	7.77	42	329303	46.02 ug/l	100
35)	tert-Amyl alcohol	7.80	59	426202	248.09 ug/l	99
37)	Cyclohexane	8.17	84	3844593	48.83 ug/l	99
38)	1,1,1-Trichloroethane	8.18	97	2619572	47.87 ug/l	100
39)	2,2,4-Trimethylpentane	8.36	57	10076496	49.42 ug/l	100
40)	1,1-Dichloropropene	8.55	110	1171946	48.56 ug/l	99
41)	Carbon tetrachloride	8.72	119	2073572	48.41 ug/l	100
42)	tert-Amyl methyl ether (TA	8.91	87	992002	49.63 ug/l	99
44)	Benzene	9.12	78	9521143	47.36 ug/l	100
45)	1,2-Dichloroethane	9.14	62	1593775	47.93 ug/l	99
46)	Trichloroethene	10.40	130	2453796	48.84 ug/l	100
47)	Methylcyclohexane	10.47	83	4422068	48.69 ug/l	99
48)	1,2-Dichloropropane	10.77	63	2258687	47.60 ug/l	100
49)	Bromodichloromethane	11.22	83	2299171	46.72 ug/l	99
50)	1,4-Dioxane	11.34	88	213336	1010.10 ug/l	96
51)	Dibromomethane	11.29	93	963578	49.79 ug/l	99
52)	2-Chloroethyl vinyl ether	11.92	63	667852	52.77 ug/l	100
53)	4-Methyl-2-pentanone	11.96	43	6552114	230.24 ug/l	99
54)	cis-1,3-Dichloropropene	12.29	75	3194368	48.85 ug/l	100
57)	Toluene	12.83	91	9264157	46.82 ug/l	98
58)	trans-1,3-Dichloropropene	13.22	75	2302689	49.49 ug/l	100
59)	Ethyl methacrylate	13.26	69	1817957	50.01 ug/l	97
60)	1,1,2-Trichloroethane	13.47	97	1276894	47.31 ug/l	99
61)	2-Hexanone	13.56	43	4063406	231.41 ug/l	98
62)	1,3-Dichloropropane	13.92	76	2303691	47.74 ug/l	100
63)	Tetrachloroethene	13.97	164	1906994	47.17 ug/l	100
64)	Dibromochloromethane	14.33	129	1435857	47.45 ug/l	99
65)	1,2-Dibromoethane	14.67	107	1193860	48.29 ug/l	99
66)	1-Chlorohexane	15.02	91	3952668	49.52 ug/l	100
67)	Chlorobenzene	15.40	112	5597546	47.70 ug/l	99
68)	1,1,1,2-Tetrachloroethane	15.49	131	1730716	48.29 ug/l	99
69)	Ethylbenzene	15.50	91	10293409	48.05 ug/l	97
70)	m-Xylene & p-Xylene	15.63	91	14617989	92.80 ug/l	96
71)	o-Xylene	16.36	91	7429868	47.73 ug/l	97
72)	Styrene	16.44	104	6061682	49.98 ug/l	99
73)	Isopropylbenzene	16.98	105	9780869	48.56 ug/l	99
75)	Bromoform	16.98	173	771570	48.83 ug/l	100
76)	1,1,2,2-Tetrachloroethane	17.27	83	1359352	45.13 ug/l	100
78)	1,2,3-Trichloropropane	17.49	110	336414	46.19 ug/l	98
79)	trans-1,4-Dichloro-2-buten	17.60	53	346538	48.93 ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F05\RFC010.D Vial: 10
Acq On : 5 Jun 2024 8:30 pm Operator: ZLin
Sample : VO67F059 5.00/25.0uL Inst : 67
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 15:44 2024 Quant Results File: VO67F05.RES

Quant Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration
DataAcq Meth : VO67F05

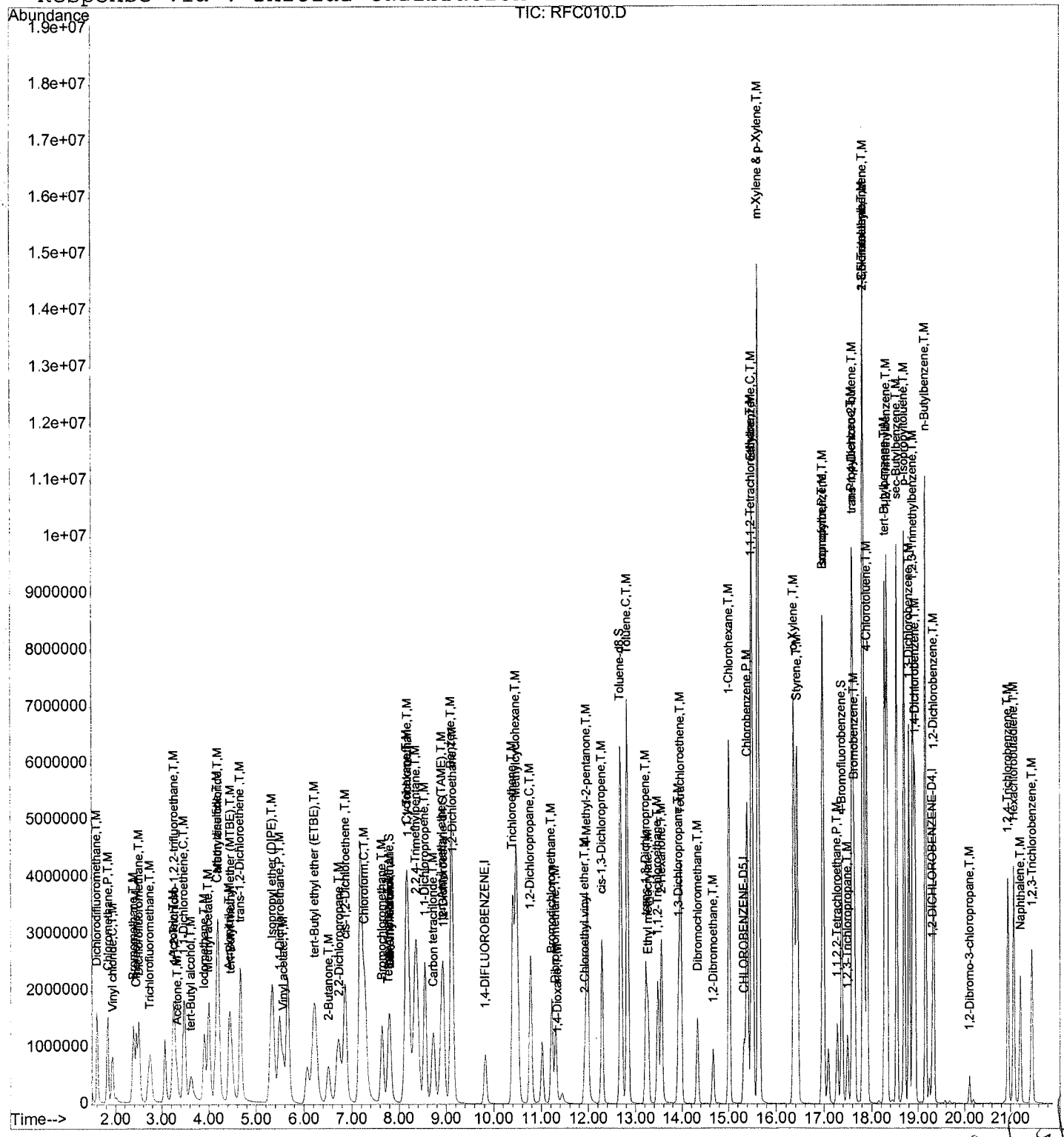
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
80)	n-Propylbenzene	17.59	91	11735445	47.97 ug/l	98
81)	Bromobenzene	17.63	156	1998916	48.13 ug/l	99
82)	1,3,5-Trimethylbenzene	17.82	105	7899860	48.79 ug/l	97
83)	2-Chlorotoluene	17.82	91	7546852	47.23 ug/l	97
84)	4-Chlorotoluene	17.90	91	5995356	47.94 ug/l	99
85)	tert-Butylbenzene	18.28	134	1847505	49.64 ug/l	97
86)	1,2,4-Trimethylbenzene	18.32	105	7377618	48.29 ug/l	97
87)	sec-Butylbenzene	18.54	105	10267496	48.11 ug/l	97
88)	p-Isopropyltoluene	18.70	119	8232228	49.33 ug/l	98
89)	1,3-Dichlorobenzene	18.80	146	3787946	48.46 ug/l	99
90)	1,2,3-Trimethylbenzene	18.89	105	6911138	47.69 ug/l	98
91)	1,4-Dichlorobenzene	18.93	146	3667415	49.18 ug/l	99
92)	n-Butylbenzene	19.15	91	7808120	51.18 ug/l	97
93)	1,2-Dichlorobenzene	19.33	146	3114866	47.75 ug/l	99
94)	1,2-Dibromo-3-chloropropan	20.10	157	192601	50.30 ug/l	99
95)	1,2,4-Trichlorobenzene	20.94	180	2008309	52.45 ug/l	100
96)	Hexachlorobutadiene	21.07	225	1358924	50.21 ug/l	100
97)	Naphthalene	21.21	128	2784944	50.48 ug/l	99
98)	1,2,3-Trichlorobenzene	21.46	180	1573677	51.06 ug/l	98

(#) = qualifier out of range (m) = manual integration
RFC010.D VO67F05.M Thu Jun 20 15:50:55 2024 Page 3

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F05\RFC010.D Vial: 10
Acq On : 5 Jun 2024 8:30 pm , Operator: ZLin
Sample : VO67F059 5.00/25.0uL Inst : 67
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 15:44 2024 Quant Results File: VO67F05.RES

Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F05\RFC011.D Vial: 11
Acq On : 5 Jun 2024 8:57 pm Operator: ZLin
Sample : VO67F0510 10.0/50.0uL Inst : 67
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 15:44 2024 Quant Results File: VO67F05.RES

Quant Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration
DataAcq Meth : VO67F05

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.82	114	1524514	10.00	ug/l	0.00
55) CHLOROBENZENE-D5	15.34	117	1125424	10.00	ug/l	0.01
74) 1,2-DICHLOROBENZENE-D4	19.30	152	402798	10.00	ug/l	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	7.80	111	4045022	97.36	ug/l	0.00
Spiked Amount 10.000			Recovery = 973.60%			
43) 1,2-Dichloroethane-d4	8.94	65	2531161	93.42	ug/l	0.00
Spiked Amount 10.000			Recovery = 934.20%			
56) Toluene-d8	12.69	98	14850660	93.76	ug/l	0.01
Spiked Amount 10.000			Recovery = 937.60%			
77) 4-Bromofluorobenzene	17.37	95	4748395	93.80	ug/l	0.00
Spiked Amount 10.000			Recovery = 938.00%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.60	85	4220308	90.38	ug/l	97
4) Chloromethane	1.82	50	5655136	93.13	ug/l	100
5) Vinyl chloride	1.92	62	2423016	47.56	ug/l	100
6) Bromomethane	2.38	94	3378938	90.20	ug/l	98
7) Chloroethane	2.44	64	2906676	89.47	ug/l	99
8) Dichlorofluoromethane	2.50	67	5869981	92.57	ug/l	100
9) Trichlorofluoromethane	2.74	101	3550748	88.24	ug/l	100
11) Acrolein	3.22	56	1339233	480.16	ug/l	100
12) 1,1,2-Trichloro-1,2,2-trif	3.26	151	2480712	88.54	ug/l	99
13) Acetone	3.32	43	2039464	370.17	ug/l	87
14) 1,1-Dichloroethene	3.47	61	4529740	94.18	ug/l	98
15) tert-Butyl alcohol	3.63	59	3507929	2420.34	ug/l	100
16) Iodomethane	3.90	142	5424485	89.02	ug/l	100
17) Methyl acetate	3.98	43	1350562	86.80	ug/l	86
19) Carbon disulfide	4.18	76	14990147	93.97	ug/l	100
20) Methylene chloride	4.19	49	4878660	92.88	ug/l	98
21) Acrylonitrile	4.42	53	3104839	489.71	ug/l	98
22) tert-Butyl methyl ether (M	4.47	73	6035326	91.09	ug/l	99
23) trans-1,2-Dichloroethene	4.66	96	4075079	91.21	ug/l	99
24) Isopropyl ether (DIPE)	5.33	45	13328870	84.52	ug/l	98
25) 1,1-Dichloroethane	5.48	63	6736884	80.29	ug/l	100
26) Vinyl acetate	5.56	43	4116967	77.28	ug/l	99
28) tert-Butyl ethyl ether (ET	6.22	59	12905529	101.64	ug/l	97
29) 2-Butanone	6.53	72	1116689	505.19	ug/l	92
30) 2,2-Dichloropropane	6.73	77	3500989	84.84	ug/l	97
31) cis-1,2-Dichloroethene	6.86	96	5178216	96.33	ug/l	99
32) Chloroform	7.27	83	6493214	92.54	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F05\RFC011.D Vial: 11
Acq On : 5 Jun 2024 8:57 pm Operator: ZLin
Sample : VO67F0510 10.0/50.0uL Inst : 67
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 15:44 2024 Quant Results File: VO67F05.RES

Quant Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration
DataAcq Meth : VO67F05

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
33)	Bromochloromethane	7.65	130	2318654	98.02	ug/l	99
34)	Tetrahydrofuran	7.77	42	649120	92.83	ug/l	99
35)	tert-Amyl alcohol	7.81	59	833240	496.30	ug/l	99
37)	Cyclohexane	8.16	84	6882173	89.45	ug/l	99
38)	1,1,1-Trichloroethane	8.19	97	5032859	94.12	ug/l	99
39)	2,2,4-Trimethylpentane	8.35	57	18115643	90.91	ug/l	100
40)	1,1-Dichloropropene	8.54	110	2249611	95.38	ug/l	98
41)	Carbon tetrachloride	8.72	119	3943909	94.22	ug/l	99
42)	tert-Amyl methyl ether (TA	8.91	87	1976712	101.20	ug/l	99
44)	Benzene	9.11	78	18394585	93.64	ug/l	99
45)	1,2-Dichloroethane	9.14	62	3094613	95.24	ug/l	100
46)	Trichloroethene	10.40	130	4807861	97.92	ug/l	99
47)	Methylcyclohexane	10.49	83	7863098	88.58	ug/l	98
48)	1,2-Dichloropropane	10.78	63	4479985	96.62	ug/l	99
49)	Bromodichloromethane	11.22	83	4523362	94.05	ug/l	99
50)	1,4-Dioxane	11.34	88	401315	1944.34	ug/l	99
51)	Dibromomethane	11.31	93	1882898	99.55	ug/l	99
52)	2-Chloroethyl vinyl ether	11.92	63	1329192	107.47	ug/l	100
53)	4-Methyl-2-pentanone	11.98	43	12582085	452.41	ug/l	97
54)	cis-1,3-Dichloropropene	12.29	75	6298341	98.56	ug/l	99
57)	Toluene	12.83	91	17352193	90.22	ug/l	96
58)	trans-1,3-Dichloropropene	13.22	75	4465267	98.74	ug/l	99
59)	Ethyl methacrylate	13.26	69	3523080	99.71	ug/l	96
60)	1,1,2-Trichloroethane	13.47	97	2486627	94.79	ug/l	99
61)	2-Hexanone	13.56	43	7827358	458.59	ug/l	96
62)	1,3-Dichloropropane	13.92	76	4433426	94.52	ug/l	100
63)	Tetrachloroethene	13.97	164	3714375	94.52	ug/l	100
64)	Dibromochloromethane	14.33	129	2833264	96.32	ug/l	100
65)	1,2-Dibromoethane	14.67	107	2317300	96.43	ug/l	98
66)	1-Chlorohexane	15.02	91	7459910	96.16	ug/l	99
67)	Chlorobenzene	15.40	112	10822393	94.87	ug/l	97
68)	1,1,1,2-Tetrachloroethane	15.49	131	3472968	99.70	ug/l	99
69)	Ethylbenzene	15.50	91	18843250	90.48	ug/l	92
70)	m-Xylene & p-Xylene	15.65	91	23389577	152.75	ug/l	82
71)	o-Xylene	16.36	91	14045620	92.83	ug/l	95
72)	Styrene	16.43	104	11809920	100.17	ug/l	99
73)	Isopropylbenzene	16.98	105	17892009	91.38	ug/l	96
75)	Bromoform	16.98	173	1527699	98.29	ug/l	100
76)	1,1,2,2-Tetrachloroethane	17.27	83	2593699	87.54	ug/l	99
78)	1,2,3-Trichloropropane	17.49	110	641310	89.51	ug/l	99
79)	trans-1,4-Dichloro-2-buten	17.60	53	654649	93.97	ug/l	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F05\RFC011.D Vial: 11
Acq On : 5 Jun 2024 8:57 pm Operator: ZLin
Sample : VO67F0510 10.0/50.0uL Inst : 67
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 15:44 2024 Quant Results File: VO67F05.RES

Quant Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration
DataAcq Meth : VO67F05

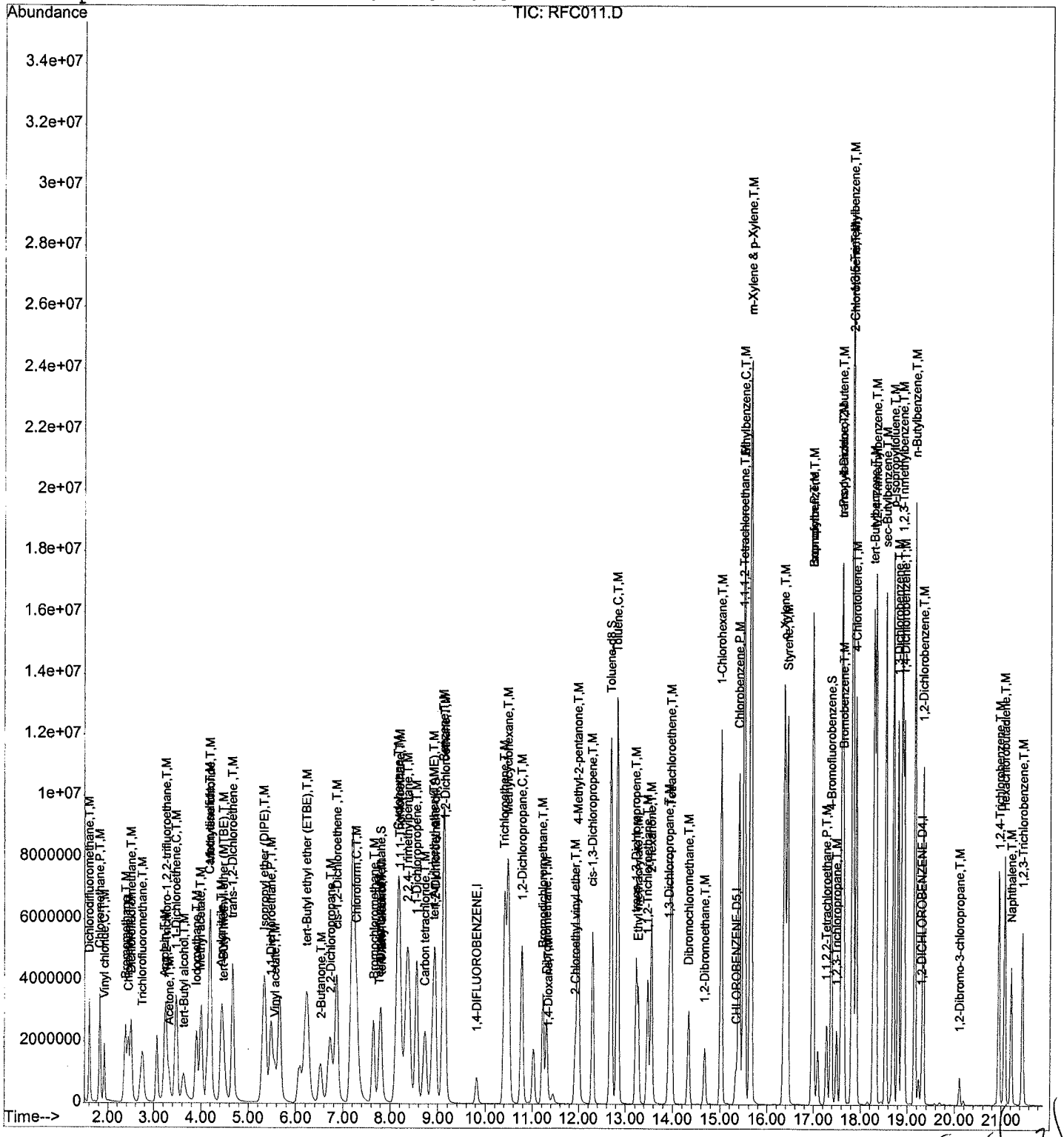
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	n-Propylbenzene	17.60	91	19460984	80.87	ug/l	90
81)	Bromobenzene	17.63	156	3985583	97.55	ug/l	98
82)	1,3,5-Trimethylbenzene	17.82	105	14559963	91.41	ug/l	93
83)	2-Chlorotoluene	17.84	91	13666401	86.94	ug/l	92
84)	4-Chlorotoluene	17.90	91	11644106	94.65	ug/l	96
85)	tert-Butylbenzene	18.28	134	3673149	100.32	ug/l	95
86)	1,2,4-Trimethylbenzene	18.32	105	13715851	91.27	ug/l	92
87)	sec-Butylbenzene	18.54	105	17064887	81.29	ug/l	89
88)	p-Isopropyltoluene	18.70	119	15065402	91.77	ug/l	94
89)	1,3-Dichlorobenzene	18.80	146	7406775	96.32	ug/l	99
90)	1,2,3-Trimethylbenzene	18.89	105	13019474	91.33	ug/l	93
91)	1,4-Dichlorobenzene	18.93	146	7245798	98.78	ug/l	99
92)	n-Butylbenzene	19.15	91	13810607	92.02	ug/l	91
93)	1,2-Dichlorobenzene	19.33	146	6134784	95.60	ug/l	98
94)	1,2-Dibromo-3-chloropropan	20.10	157	374103	99.32	ug/l	99
95)	1,2,4-Trichlorobenzene	20.95	180	4058436	107.75	ug/l	100
96)	Hexachlorobutadiene	21.07	225	2660485	99.92	ug/l	100
97)	Naphthalene	21.21	128	5448777	100.41	ug/l	98
98)	1,2,3-Trichlorobenzene	21.46	180	3160310	104.24	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F05\RFC011.D Vial: 11
Acq On : 5 Jun 2024 8:57 pm Operator: ZLin
Sample : VO67F0510 10.0/50.0uL Inst : 67
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 15:44 2024 Quant Results File: VO67F05.RES

Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 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: RFC015 BFB Injection Date: 06/06/24

Instrument ID: 67 BFB Injection Time: 10:07

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	18.942
75	30 - 60% of mass 95	41.968
95	Base Peak, 100% relative abundance	100.000
96	5 - 9% of mass 95	7.077
173	Less than 2% of mass 174	0.000(0)1
174	Greater than 50% of mass 95	82.213
175	5 - 9% of mass 174	6.456(7.85)1
176	95 - 101% % of mass 174	79.557(96.77)1
177	5 - 9% % of mass 176	5.645(7.1)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	VSTD10	IVO67F0502	RFC016	06/06/24	13:17

6/6/23/24

CONTINUE_CALIBRATION - CALIBRATION VERIFICATION

Instrument ID :67
IC Beginning DateTime :06/05/24 16:49
Spike Amount :10 PPB
CC/CV File :RFC016
IC File :RFC007

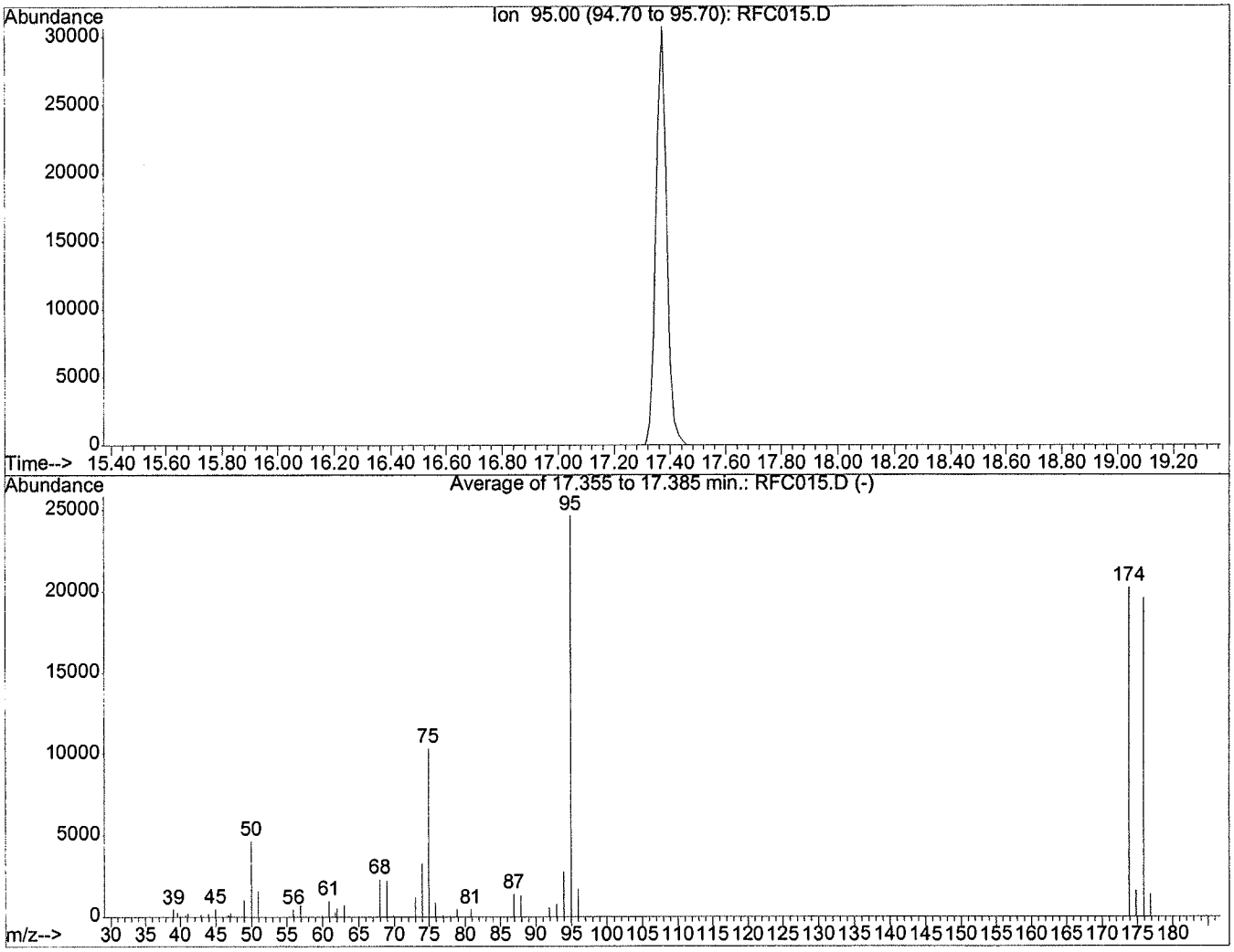
Column Spec :RTX502.2 ID :0.25MM
IC Ending DateTime :06/05/24 20:57
HPChem Method :V06/P05
Date_Time :06/06/24 13:17

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	1700312	1	1	9.817	9.816	0				
	2	Dichlorodifluoromethane	10.399	4.0	541627	0.319	0.306	1.595	1.598	10.15				
	3	Dichlorotetrafluoroethane												
	4	Chloromethane	10.865	8.6	735840	0.433	0.398	1.837	1.833	9.10				
	5	Vinyl chloride	10.970	9.7	623379	0.367	0.334	1.937	1.940	11.83				
	6	Bromomethane	11.295	13.0	471941	0.278	0.246	2.379	2.382	8.71				
	7	Chloroethane	11.505	15.1	416881	0.245	0.213	2.439	2.442	8.82				
	8	Dichlorofluoromethane	10.708	7.1	757351	0.445	0.416	2.500	2.502	6.49				
	9	Trichlorofluoromethane	11.016	10.2	494386	0.291	0.264	2.741	2.743	8.13				
	10	sec-Propyl alcohol												
5	11	Acrolein	47.992	-4.0	149294	0.018	0.018	3.223	3.235	7.41				
	12	1,1,2-Trichloro-1,2,2-trifluoroethane	10.158	1.6	317413	0.187	0.184	3.263	3.266	6.47				
5	13	Acetone	41.074	-17.9	252400	0.030	0.036	3.323	3.326	13.52				
	14	1,1-Dichloroethene	10.791	7.9	578876	0.340	0.315	3.464	3.472	5.67				
25	15	tert-Butyl alcohol	224.911	-10.0	363567	0.009	0.010	3.614	3.622	8.48				
	16	Iodomethane	11.527	15.3	783459	0.461	0.400	3.900	3.902	8.16				
	17	Methyl acetate	9.903	-1.0	184032	0.108	0.126	3.982	3.982	19.31	0.0081	0.1011		0.9963
10	18	Acetonitrile												
	19	Carbon disulfide	10.877	8.8	1935239	1.138	1.046	4.177	4.180	3.55				
	20	Methylene chloride	10.453	4.5	612397	0.360	0.345	4.191	4.191	7.29				
5	21	Acrylonitrile	51.831	3.7	366515	0.043	0.042	4.410	4.425	4.20				
	22	tert-Butyl methyl ether (MTBE)	10.102	1.0	746552	0.439	0.435	4.454	4.467	9.44				
	23	trans-1,2-Dichloroethene	10.781	7.8	537268	0.316	0.293	4.659	4.670	7.59				
	24	Isopropyl ether (DIPE)	11.791	17.9	2073931	1.220	1.034	5.316	5.331	11.40				
	25	1,1-Dichloroethane	10.766	7.7	1007562	0.593	0.550	5.477	5.490	9.54				
	26	Vinyl acetate	11.988	19.9	742110	0.436	0.403	5.550	5.564	15.63	0.0207	0.3468		0.9995
25	27	2-Butanol												
	28	tert-Butyl ethyl ether (ETBE)	9.745	-2.6	1380052	0.812	0.833	6.208	6.222	6.39				
5	29	2-Butanone	49.075	-1.8	120986	0.014	0.014	6.500	6.516	9.28				
	30	2,2-Dichloropropane	10.645	6.5	489958	0.288	0.271	6.719	6.738	7.37				
	31	cis-1,2-Dichloroethene	10.285	2.8	616702	0.363	0.353	6.851	6.865	5.48				
	32	Chloroform	10.026	0.3	784655	0.461	0.460	7.245	7.264	9.93				
	33	Bromochloromethane	10.040	0.4	264907	0.156	0.155	7.640	7.649	3.67				
	34	Tetrahydrofuran	9.085	-9.1	70856	0.042	0.046	7.771	7.776	6.68				
5	35	tert-Amyl alcohol	46.208	-7.6	86524	0.010	0.011	7.786	7.802	8.21				
	36	Dibromofluoromethane	9.733	-2.7	451060	0.265	0.273	7.786	7.798	7.94				
	37	Cyclohexane	9.611	-3.9	824708	0.485	0.505	8.151	8.164	6.39				
	38	1,1,1-Trichloroethane	10.305	3.1	614637	0.361	0.351	8.180	8.186	4.01				
	39	2,2,4-Trimethylpentane	10.730	7.3	2385003	1.403	1.307	8.341	8.358	6.67				
	40	1,1-Dichloropropene	10.197	2.0	268247	0.158	0.155	8.545	8.549	5.00				
	41	Carbon tetrachloride	10.282	2.8	480037	0.282	0.275	8.721	8.723	5.50				
	42	tert-Amyl methyl ether (TAME)	9.947	-0.5	216715	0.127	0.128	8.896	8.910	5.31				
	43	1,2-Dichloroethane-d4	9.448	-5.5	285498	0.168	0.178	8.925	8.940	8.49				
	44	Benzene	10.233	2.3	2242245	1.319	1.289	9.101	9.115	6.08				
	45	1,2-Dichloroethane	10.057	0.6	364487	0.214	0.213	9.130	9.144	3.44				
	46	Trichloroethene	10.131	1.3	554810	0.326	0.322	10.401	10.404	5.10				
	47	Methylcyclohexane	10.224	2.2	1012270	0.595	0.582	10.474	10.478	7.36				
	48	1,2-Dichloropropane	10.042	0.4	519339	0.305	0.304	10.766	10.779	5.60				
	49	Bromodichloromethane	9.688	-3.1	519673	0.306	0.315	11.205	11.219	9.19				
20	50	1,4-Dioxane	192.634	-3.7	44345	0.001	0.001	11.322	11.336	12.37				
	51	Dibromomethane	9.992	-0.1	210788	0.124	0.124	11.292	11.295	5.89				
	52	2-Chloroethyl vinyl ether	9.802	-2.0	135207	0.080	0.081	11.906	11.920	9.71				
5	53	4-Methyl-2-pentanone	47.320	-5.4	1467784	0.173	0.182	11.965	11.973	7.21				
	54	cis-1,3-Dichloropropene	10.145	1.5	723084	0.425	0.419	12.286	12.286	4.99				
	55	CHLOROBENZENE-D5	10.000	0	1242434	1	1	15.325	15.326	0				
	56	Toluene-d8	10.099	1.0	1765924	1.421	1.407	12.681	12.683	4.10				
	57	Toluene	10.334	3.3	2194161	1.766	1.709	12.827	12.826	6.79				
	58	trans-1,3-Dichloropropene	10.123	1.2	505440	0.407	0.402	13.221	13.221	4.67				
	59	Ethyl methacrylate	9.812	-1.9	382776	0.308	0.314	13.265	13.264	6.19				
	60	1,1,2-Trichloroethane	9.688	-3.1	280585	0.226	0.233	13.469	13.469	6.60				
5	61	2-Hexanone	47.295	-5.4	891195	0.143	0.152	13.542	13.557	6.95				
	62	1,3-Dichloropropane	9.754	-2.5	505063	0.407	0.417	13.922	13.922	4.86				
	63	Tetrachloroethene	10.186	1.9	441942	0.356	0.349	13.966	13.966	7.12				
	64	Dibromochloromethane	9.527	-4.7	309375	0.249	0.261	14.332	14.331	8.24				
	65	1,2-Dibromoethane	9.684	-3.2	256919	0.207	0.214	14.668	14.667	5.40				
	66	1-Chlorohexane	10.471	4.7	896830	0.722	0.689	15.004	15.018	5.95				
	67	Chlorobenzene	10.186	1.9	1282838	1.033	1.014	15.384	15.398	5.74				
	68	1,1,1,2-Tetrachloroethane	10.099	1.0	388401	0.313	0.310	15.486	15.486	4.20				
	69	Ethylbenzene	10.439	4.4	2400083	1.932	1.850	15.500	15.500	5.99				
2	70	m-Xylene & p-Xylene	20.830	4.1	3521225	1.417	1.361	15.632	15.632	6.53				
	71	o-Xylene	10.391	3.9	1735711	1.397	1.344	16.362	16.362	5.52				
	72	Styrene	10.465	4.7	1362069	1.096	1.048	16.421	16.435	5.11				
	73	Isopropylbenzene	10.538	5.4	2277986	1.833	1.740	16.976	16.976	6.17				
	74	1,2-DICHLOROBENZENE-D4	10.000	0	422642	1	1	19.299	19.299	0				
	75	Bromoform	9.485	-5.2	154699	0.366	0.386	16.976	16.976	4.26				
	76	1,1,2,2-Tetrachloroethane	9.518	-4.8	295939	0.700	0.736	17.268	17.268	9.22				
	77	4-Bromofluorobenzene	9.876	-1.2	524577	1.241	1.257	17.371	17.370	5.86				
	78	1,2,3-Trichloropropane	9.595	-4.0	72135	0.171	0.178	17.488	17.489	7.56				
	79	trans-1,4-Dichloro-2-butene	10.131	1.3	74059	0.175	0.173	17.604	17.604	4.44				
	80	n-Propylbenzene	10.888	8.9	2749360	6.505	5.974	17.590	17.592	8.94				
	81	Bromobenzene	10.177	1.8	436310	1.032	1.014	17.634	17.635	5.25				
	82	1,3,5-Trimethylbenzene	10.764	7.6	1798926	4.256	3.954	17.809	17.822	6.19				
	83	2-Chlorotoluene	9.986	-0.1	1647212	3.897	3.903	17.824	17.825	7.98				
	84	4-Chlorotoluene	11.251	12.5	1452292	3.436	3.054	17.897	17.896	7.22				
	85	tert-Butylbenzene	10.475	4.8	402437	0.952	0.909	18.277	18.276	3.37				
	86	1,2,4-Trimethylbenzene	10.714	7.1	1689547	3.998	3.731	18.320	18.320	6.03				
	87	sec-Butylbenzene	10.918	9.2	2405092	5.691	5.212	18.540	18.539	8.42				
	88	p-Isopropyltoluene	11.001	10.0	1894914	4.483	4.075	18.700	18.700	5.87				
	89	1,3-Dichlorobenzene	10.352	3.5	835293	1.976	1.909	18.803	18.802	6.18				
	90	1,2,3-Trimethylbenzene	10.570	5.7	1581127	3.741	3.539	18.876	18.890	7.08				
	91	1,4-Dichlorobenzene	10.356	3.6	797071	1.886	1.821	18.920	18.934	4.95				
	92	n-Butylbenzene	11.256	12.6	1772691	4.194	3.726	19.153	19.153	7.01				
	93	1,2-Dichlorobenzene	10.135	1.4	682468	1.615	1.593	19.329	19.328	5.66				
	94	1,2-Dibromo-3-chloropropane	9.744	-2.6	38513	0.091	0.094	20.103	20.104	8.72				
	95	1,2,4-Trichlorobenzene	10.394	3.9	410824	0.972	0.935	20.936	20.943	7.32				
	96	Hexachlorobutadiene	10.765	7.7	300740	0.712	0.661	21.067	21.067	4.36				
	97	Naphthalene	9.522	-4.8	542230	1.283	1.347	21.213	21.213	8.77				
	98	1,2,3-Trichlorobenzene	10.148	1.5	322833	0.764	0.753	21.447	21.462	5.36				

Spike Amount = Nominal Amount * M

Data File : D:\HPCHEM\1\DATA\24F06\RFC015.D
Acq On : 6 Jun 2024 10:07 am
Sample : BFB67F02
Misc : T/CHK
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B

Vial: 1
Operator: ZLin
Inst : 67
Multiplr: 1.00



AutoFind: Scans 1034, 1035, 1036; Background Corrected with Scan 1029

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.9	4671	PASS
75	95	30	60	42.0	10349	PASS
95	95	100	100	100.0	24659	PASS
96	95	5	9	7.1	1745	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	82.2	20273	PASS
175	174	5	9	7.9	1592	PASS
176	174	95	101	96.8	19618	PASS
177	176	5	9	7.1	1392	PASS

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F06\RFC016.D Vial: 2
Acq On : 6 Jun 2024 1:17 pm Operator: ZLin
Sample : IVO67F0502 Inst : 67
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 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	119	0.00
2	T,M	Dichlorodifluoromethane	10.000	10.400	-4.0	120	0.00
3	T,M	Dichlorotetrafluoroethane	-1.000	0.000	0.0	0	-2.72#
4	P,T,M	Chloromethane	10.000	10.865	-8.7	130	0.00
5	C,T,M	Vinyl chloride	10.000	10.970	-9.7	127	0.00
6	T,M	Bromomethane	10.000	11.295	-13.0	133	0.00
7	T,M	Chloroethane	10.000	11.505	-15.1	136	0.00
8	T,M	Dichlorofluoromethane	10.000	10.708	-7.1	128	0.00
9	T,M	Trichlorofluoromethane	10.000	11.016	-10.2	126	0.00
10	T,M	sec-Propyl alcohol	-1.000	0.000	0.0	0	-5.33#
11	T,M	Acrolein	50.000	47.993	4.0	117	-0.02
12	T,M	1,1,2-Trichloro-1,2,2-trifl	10.000	10.158	-1.6	117	0.00
13	T,M	Acetone	50.000	41.075	17.8	93	0.00
14	C,T,M	1,1-Dichloroethene	10.000	10.791	-7.9	127	-0.02
15	T,M	tert-Butyl alcohol	250.000	224.912	10.0	110	0.00
16	T,M	Iodomethane	10.000	11.528	-15.3	124	0.00
17	T,M	Methyl acetate	10.000	9.904	1.0	103	0.00
18	T,M	Acetonitrile	-1.000	0.000	0.0	130	0.00
19	T,M	Carbon disulfide	10.000	10.877	-8.8	123	0.00
20	T,M	Methylene chloride	10.000	10.454	-4.5	129	0.00
21	T,M	Acrylonitrile	50.000	51.831	-3.7	120	-0.01
22	T,M	tert-Butyl methyl ether (MT	10.000	10.103	-1.0	126	-0.01
23	T,M	trans-1,2-Dichloroethene	10.000	10.782	-7.8	130	-0.01
24	T,M	Isopropyl ether (DIPE)	10.000	11.791	-17.9	129	-0.01
25	P,T,M	1,1-Dichloroethane	10.000	10.767	-7.7	125	-0.01
26	T,M	Vinyl acetate	10.000	11.988	-19.9	137	-0.01
27	T,M	2-Butanol	-1.000	0.000	0.0	0	-6.06#
28	T,M	tert-Butyl ethyl ether (ETB	10.000	9.745	2.6	123	-0.01
29	T,M	2-Butanone	50.000	49.075	1.8	111	-0.01
30	T,M	2,2-Dichloropropane	10.000	10.646	-6.5	126	-0.03
31	T,M	cis-1,2-Dichloroethene	10.000	10.286	-2.9	124	-0.01
32	C,T,M	Chloroform	10.000	10.027	-0.3	123	-0.01
33	T,M	Bromochloromethane	10.000	10.041	-0.4	120	-0.01
34	T,M	Tetrahydrofuran	10.000	9.086	9.1	110	0.00
35	T,M	tert-Amyl alcohol	50.000	46.208	7.6	105	-0.01
36	S	Dibromofluoromethane	10.000	9.734	2.7	114	-0.01
37	T,M	Cyclohexane	10.000	9.611	3.9	106	-0.01
38	T,M	1,1,1-Trichloroethane	10.000	10.306	-3.1	120	0.00
39	T,M	2,2,4-Trimethylpentane	10.000	10.731	-7.3	115	-0.01
40	T,M	1,1-Dichloropropene	10.000	10.197	-2.0	117	-0.01
41	T,M	Carbon tetrachloride	10.000	10.282	-2.8	120	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F06\RFC016.D Vial: 2
Acq On : 6 Jun 2024 1:17 pm Operator: ZLin
Sample : IVO67F0502 Inst : 67
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 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	tert-Amyl methyl ether (TAM	10.000	9.947	0.5	117	0.00
43	S	1,2-Dichloroethane-d4	10.000	9.448	5.5	111	-0.01
44	T,M	Benzene	10.000	10.234	-2.3	122	-0.01
45	T,M	1,2-Dichloroethane	10.000	10.058	-0.6	117	-0.01
46	T,M	Trichloroethene	10.000	10.131	-1.3	119	0.00
47	T,M	Methylcyclohexane	10.000	10.225	-2.2	112	0.00
48	C,T,M	1,2-Dichloropropane	10.000	10.042	-0.4	121	-0.01
49	T,M	Bromodichloromethane	10.000	9.688	3.1	119	-0.01
50	T,M	1,4-Dioxane	200.000	192.635	3.7	109	-0.01
51	T,M	Dibromomethane	10.000	9.992	0.1	115	0.00
52	T,M	2-Chloroethyl vinyl ether	10.000	9.802	2.0	114	-0.01
53	T,M	4-Methyl-2-pentanone	50.000	47.320	5.4	111	0.00
54	T,M	cis-1,3-Dichloropropene	10.000	10.146	-1.5	120	0.00
55	I	CHLOROBENZENE-D5	10.000	10.000	0.0	118	0.00
56	S	Toluene-d8	10.000	10.099	-1.0	113	0.00
57	C,T,M	Toluene	10.000	10.334	-3.3	120	0.00
58	T,M	trans-1,3-Dichloropropene	10.000	10.124	-1.2	118	0.00
59	T,M	Ethyl methacrylate	10.000	9.813	1.9	115	0.00
60	T,M	1,1,2-Trichloroethane	10.000	9.689	3.1	113	0.00
61	T,M	2-Hexanone	50.000	47.296	5.4	111	-0.01
62	T,M	1,3-Dichloropropane	10.000	9.754	2.5	115	0.00
63	T,M	Tetrachloroethene	10.000	10.187	-1.9	119	0.00
64	T,M	Dibromochloromethane	10.000	9.527	4.7	115	0.00
65	T,M	1,2-Dibromoethane	10.000	9.684	3.2	112	0.00
66	T,M	1-Chlorohexane	10.000	10.471	-4.7	119	-0.01
67	P,M	Chlorobenzene	10.000	10.187	-1.9	120	-0.01
68	T,M	1,1,1,2-Tetrachloroethane	10.000	10.100	-1.0	121	0.00
69	C,T,M	Ethylbenzene	10.000	10.440	-4.4	120	0.00
70	T,M	m-Xylene & p-Xylene	20.000	20.831	-4.2	121	0.00
71	T,M	o-Xylene	10.000	10.391	-3.9	121	0.00
72	T,M	Styrene	10.000	10.465	-4.6	121	-0.01
73	T,M	Isopropylbenzene	10.000	10.538	-5.4	119	0.00
74	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	116	0.00
75	P,T,M	Bromoform	10.000	9.486	5.1	111	0.00
76	P,T,M	1,1,2,2-Tetrachloroethane	10.000	9.519	4.8	110	0.00
77	S	4-Bromofluorobenzene	10.000	9.876	1.2	111	0.00
78	T,M	1,2,3-Trichloropropane	10.000	9.595	4.0	112	0.00
79	T,M	trans-1,4-Dichloro-2-butene	10.000	10.131	-1.3	115	0.00
80	T,M	n-Propylbenzene	10.000	10.889	-8.9	120	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F06\RFC016.D Vial: 2
Acq On : 6 Jun 2024 1:17 pm Operator: ZLin
Sample : IVO67F0502 Inst : 67
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 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	Bromobenzene	10.000	10.177	-1.8	117	0.00
82	T,M	1,3,5-Trimethylbenzene	10.000	10.764	-7.6	121	0.00
83	T,M	2-Chlorotoluene	10.000	9.987	0.1	113	0.00
84	T,M	4-Chlorotoluene	10.000	11.251	-12.5	131	0.00
85	T,M	tert-Butylbenzene	10.000	10.476	-4.8	119	0.00
86	T,M	1,2,4-Trimethylbenzene	10.000	10.715	-7.1	120	0.00
87	T,M	sec-Butylbenzene	10.000	10.919	-9.2	120	0.00
88	T,M	p-Isopropyltoluene	10.000	11.001	-10.0	120	0.00
89	T,M	1,3-Dichlorobenzene	10.000	10.352	-3.5	120	0.00
90	T,M	1,2,3-Trimethylbenzene	10.000	10.570	-5.7	120	-0.01
91	T,M	1,4-Dichlorobenzene	10.000	10.356	-3.6	119	-0.01
92	T,M	n-Butylbenzene	10.000	11.257	-12.6	122	0.00
93	T,M	1,2-Dichlorobenzene	10.000	10.136	-1.4	118	0.00
94	T,M	1,2-Dibromo-3-chloropropane	10.000	9.744	2.6	106	0.00
95	T,M	1,2,4-Trichlorobenzene	10.000	10.395	-3.9	121	0.00
96	T,M	Hexachlorobutadiene	10.000	10.765	-7.7	126	0.00
97	T,M	Naphthalene	10.000	9.523	4.8	114	0.00
98	T,M	1,2,3-Trichlorobenzene	10.000	10.148	-1.5	118	-0.01

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F06\RFC016.D Vial: 2
Acq On : 6 Jun 2024 1:17 pm Operator: ZLin
Sample : IVO67F0502 Inst : 67
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 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	119	0.00
2	T,M	Dichlorodifluoromethane	0.306	0.319	-4.2	120	0.00
3	T,M	Dichlorotetrafluoroethane	0.000	0.000	0.0	0#	-2.72#
4	P,T,M	Chloromethane	0.398	0.433	-8.8	130	0.00
5	C,T,M	Vinyl chloride	0.334	0.367	-9.9	127	0.00
6	T,M	Bromomethane	0.246	0.278	-13.0	133	0.00
7	T,M	Chloroethane	0.213	0.245	-15.0	136	0.00
8	T,M	Dichlorofluoromethane	0.416	0.445	-7.0	128	0.00
9	T,M	Trichlorofluoromethane	0.264	0.291	-10.2	126	0.00
10	T,M	sec-Propyl alcohol	0.000	0.000	0.0	0#	-5.33#
11	T,M	Acrolein	0.018	0.018	0.0	117	-0.02
12	T,M	1,1,2-Trichloro-1,2,2-trifl	0.184	0.187	-1.6	117	0.00
13	T,M	Acetone	0.036	0.030	16.7	93	0.00
14	C,T,M	1,1-Dichloroethene	0.315	0.340	-7.9	127	-0.02
15	T,M	tert-Butyl alcohol	0.010	0.009	10.0	110	0.00
16	T,M	Iodomethane	0.400	0.461	-15.3	124	0.00
17	T,M	Methyl acetate	0.126	0.108	14.3	103	0.00
18	T,M	Acetonitrile	0.000	0.000	0.0	130	0.00
19	T,M	Carbon disulfide	1.046	1.138	-8.8	123	0.00
20	T,M	Methylene chloride	0.345	0.360	-4.3	129	0.00
21	T,M	Acrylonitrile	0.042	0.043	-2.4	120	-0.01
22	T,M	tert-Butyl methyl ether (MT	0.435	0.439	-0.9	126	-0.01
23	T,M	trans-1,2-Dichloroethene	0.293	0.316	-7.8	130	-0.01
24	T,M	Isopropyl ether (DIPE)	1.034	1.220	-18.0	129	-0.01
25	P,T,M	1,1-Dichloroethane	0.550	0.593	-7.8	125	-0.01
26	T,M	Vinyl acetate	0.403	0.436	-8.2	137	-0.01
27	T,M	2-Butanol	0.000	0.000	0.0	0#	-6.06#
28	T,M	tert-Butyl ethyl ether (ETB	0.833	0.812	2.5	123	-0.01
29	T,M	2-Butanone	0.014	0.014	0.0	111	-0.01
30	T,M	2,2-Dichloropropane	0.271	0.288	-6.3	126	-0.03
31	T,M	cis-1,2-Dichloroethene	0.353	0.363	-2.8	124	-0.01
32	C,T,M	Chloroform	0.460	0.461	-0.2	123	-0.01
33	T,M	Bromochloromethane	0.155	0.156	-0.6	120	-0.01
34	T,M	Tetrahydrofuran	0.046	0.042	8.7	110	0.00
35	T,M	tert-Amyl alcohol	0.011	0.010	9.1	105	-0.01
36	S	Dibromofluoromethane	0.273	0.265	2.9	114	-0.01
37	T,M	Cyclohexane	0.505	0.485	4.0	106	-0.01
38	T,M	1,1,1-Trichloroethane	0.351	0.361	-2.8	120	0.00
39	T,M	2,2,4-Trimethylpentane	1.307	1.403	-7.3	115	-0.01
40	T,M	1,1-Dichloropropene	0.155	0.158	-1.9	117	-0.01
41	T,M	Carbon tetrachloride	0.275	0.282	-2.5	120	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F06\RFC016.D Vial: 2
Acq On : 6 Jun 2024 1:17 pm Operator: ZLin
Sample : IVO67F0502 Inst : 67
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 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	tert-Amyl methyl ether (TAM	0.128	0.127	0.8	117	0.00
43	S	1,2-Dichloroethane-d4	0.178	0.168	5.6	111	-0.01
44	T,M	Benzene	1.289	1.319	-2.3	122	-0.01
45	T,M	1,2-Dichloroethane	0.213	0.214	-0.5	117	-0.01
46	T,M	Trichloroethene	0.322	0.326	-1.2	119	0.00
47	T,M	Methylcyclohexane	0.582	0.595	-2.2	112	0.00
48	C,T,M	1,2-Dichloropropane	0.304	0.305	-0.3	121	-0.01
49	T,M	Bromodichloromethane	0.315	0.306	2.9	119	-0.01
50	T,M	1,4-Dioxane	0.001	0.001	0.0	109	-0.01
51	T,M	Dibromomethane	0.124	0.124	0.0	115	0.00
52	T,M	2-Chloroethyl vinyl ether	0.081	0.080	1.2	114	-0.01
53	T,M	4-Methyl-2-pentanone	0.182	0.173	4.9	111	0.00
54	T,M	cis-1,3-Dichloropropene	0.419	0.425	-1.4	120	0.00
55	I	CHLOROBENZENE-D5	1.000	1.000	0.0	118	0.00
56	S	Toluene-d8	1.407	1.421	-1.0	113	0.00
57	C,T,M	Toluene	1.709	1.766	-3.3	120	0.00
58	T,M	trans-1,3-Dichloropropene	0.402	0.407	-1.2	118	0.00
59	T,M	Ethyl methacrylate	0.314	0.308	1.9	115	0.00
60	T,M	1,1,2-Trichloroethane	0.233	0.226	3.0	113	0.00
61	T,M	2-Hexanone	0.152	0.143	5.9	111	-0.01
62	T,M	1,3-Dichloropropane	0.417	0.407	2.4	115	0.00
63	T,M	Tetrachloroethene	0.349	0.356	-2.0	119	0.00
64	T,M	Dibromochloromethane	0.261	0.249	4.6	115	0.00
65	T,M	1,2-Dibromoethane	0.214	0.207	3.3	112	0.00
66	T,M	1-Chlorohexane	0.689	0.722	-4.8	119	-0.01
67	P,M	Chlorobenzene	1.014	1.033	-1.9	120	-0.01
68	T,M	1,1,1,2-Tetrachloroethane	0.310	0.313	-1.0	121	0.00
69	C,T,M	Ethylbenzene	1.850	1.932	-4.4	120	0.00
70	T,M	m-Xylene & p-Xylene	1.361	1.417	-4.1	121	0.00
71	T,M	o-Xylene	1.344	1.397	-3.9	121	0.00
72	T,M	Styrene	1.048	1.096	-4.6	121	-0.01
73	T,M	Isopropylbenzene	1.740	1.833	-5.3	119	0.00
74	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	116	0.00
75	P,T,M	Bromoform	0.386	0.366	5.2	111	0.00
76	P,T,M	1,1,2,2-Tetrachloroethane	0.736	0.700	4.9	110	0.00
77	S	4-Bromofluorobenzene	1.257	1.241	1.3	111	0.00
78	T,M	1,2,3-Trichloropropane	0.178	0.171	3.9	112	0.00
79	T,M	trans-1,4-Dichloro-2-butene	0.173	0.175	-1.2	115	0.00
80	T,M	n-Propylbenzene	5.974	6.505	-8.9	120	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F06\RFC016.D Vial: 2
Acq On : 6 Jun 2024 1:17 pm Operator: ZLin
Sample : IVO67F0502 Inst : 67
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 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	Bromobenzene	1.014	1.032	-1.8	117	0.00
82	T,M	1,3,5-Trimethylbenzene	3.954	4.256	-7.6	121	0.00
83	T,M	2-Chlorotoluene	3.903	3.897	0.2	113	0.00
84	T,M	4-Chlorotoluene	3.054	3.436	-12.5	131	0.00
85	T,M	tert-Butylbenzene	0.909	0.952	-4.7	119	0.00
86	T,M	1,2,4-Trimethylbenzene	3.731	3.998	-7.2	120	0.00
87	T,M	sec-Butylbenzene	5.212	5.691	-9.2	120	0.00
88	T,M	p-Isopropyltoluene	4.075	4.483	-10.0	120	0.00
89	T,M	1,3-Dichlorobenzene	1.909	1.976	-3.5	120	0.00
90	T,M	1,2,3-Trimethylbenzene	3.539	3.741	-5.7	120	-0.01
91	T,M	1,4-Dichlorobenzene	1.821	1.886	-3.6	119	-0.01
92	T,M	n-Butylbenzene	3.726	4.194	-12.6	122	0.00
93	T,M	1,2-Dichlorobenzene	1.593	1.615	-1.4	118	0.00
94	T,M	1,2-Dibromo-3-chloropropane	0.094	0.091	3.2	106	0.00
95	T,M	1,2,4-Trichlorobenzene	0.935	0.972	-4.0	121	0.00
96	T,M	Hexachlorobutadiene	0.661	0.712	-7.7	126	0.00
97	T,M	Naphthalene	1.347	1.283	4.8	114	0.00
98	T,M	1,2,3-Trichlorobenzene	0.753	0.764	-1.5	118	-0.01

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F06\RFC016.D Vial: 2
Acq On : 6 Jun 2024 1:17 pm Operator: ZLin
Sample : IVO67F0502 Inst : 67
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 15:52 2024 Quant Results File: VO67F05.RES

Quant Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration
DataAcq Meth : VO67F05

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.82	114	1700312	10.00	ug/l	0.00
55) CHLOROBENZENE-D5	15.33	117	1242434	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.30	152	422642	10.00	ug/l	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	7.79	111	451060	9.73	ug/l	-0.01
Spiked Amount 10.000			Recovery = 97.30%			
43) 1,2-Dichloroethane-d4	8.93	65	285498	9.45	ug/l	-0.01
Spiked Amount 10.000			Recovery = 94.50%			
56) Toluene-d8	12.68	98	1765924	10.10	ug/l	0.00
Spiked Amount 10.000			Recovery = 101.00%			
77) 4-Bromofluorobenzene	17.37	95	524577	9.88	ug/l	0.00
Spiked Amount 10.000			Recovery = 98.80%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.60	85	541627	10.40	ug/l	99
4) Chloromethane	1.84	50	735840	10.87	ug/l	98
5) Vinyl chloride	1.94	62	623379	10.97	ug/l	97
6) Bromomethane	2.38	94	471941	11.30	ug/l	99
7) Chloroethane	2.44	64	416881	11.51	ug/l	98
8) Dichlorofluoromethane	2.50	67	757351	10.71	ug/l	99
9) Trichlorofluoromethane	2.74	101	494386	11.02	ug/l	99
11) Acrolein	3.22	56	149294	47.99	ug/l	99
12) 1,1,2-Trichloro-1,2,2-trif	3.26	151	317413	10.16	ug/l	99
13) Acetone	3.32	43	252400	41.07	ug/l	90
14) 1,1-Dichloroethene	3.46	61	578876	10.79	ug/l	99
15) tert-Butyl alcohol	3.61	59	363567	224.91	ug/l	100
16) Iodomethane	3.90	142	783459	11.53	ug/l	100
17) Methyl acetate	3.98	43	184032	9.90	ug/l	99
19) Carbon disulfide	4.18	76	1935239	10.88	ug/l	100
20) Methylene chloride	4.19	49	612397	10.45	ug/l	99
21) Acrylonitrile	4.41	53	366515	51.83	ug/l	98
22) tert-Butyl methyl ether (M	4.45	73	746552	10.10	ug/l	100
23) trans-1,2-Dichloroethene	4.66	96	537268	10.78	ug/l	100
24) Isopropyl ether (DIPE)	5.32	45	2073931	11.79	ug/l	99
25) 1,1-Dichloroethane	5.48	63	1007562	10.77	ug/l	100
26) Vinyl acetate	5.55	43	742110	11.99	ug/l	99
28) tert-Butyl ethyl ether (ET	6.21	59	1380052	9.75	ug/l	99
29) 2-Butanone	6.50	72	120986	49.08	ug/l	87
30) 2,2-Dichloropropane	6.72	77	489958	10.65	ug/l	98
31) cis-1,2-Dichloroethene	6.85	96	616702	10.29	ug/l	100
32) Chloroform	7.25	83	784655	10.03	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F06\RFC016.D Vial: 2
Acq On : 6 Jun 2024 1:17 pm Operator: ZLin
Sample : IVO67F0502 Inst : 67
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 15:52 2024 Quant Results File: VO67F05.RES

Quant Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration
DataAcq Meth : VO67F05

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
33)	Bromochloromethane	7.64	130	264907	10.04 ug/l	100
34)	Tetrahydrofuran	7.77	42	70856	9.09 ug/l	99
35)	tert-Amyl alcohol	7.79	59	86524	46.21 ug/l	98
37)	Cyclohexane	8.15	84	824708	9.61 ug/l	100
38)	1,1,1-Trichloroethane	8.18	97	614637	10.31 ug/l	99
39)	2,2,4-Trimethylpentane	8.34	57	2385003	10.73 ug/l	100
40)	1,1-Dichloropropene	8.55	110	268247	10.20 ug/l	99
41)	Carbon tetrachloride	8.72	119	480037	10.28 ug/l	100
42)	tert-Amyl methyl ether (TA	8.90	87	216715	9.95 ug/l	100
44)	Benzene	9.10	78	2242245	10.23 ug/l	100
45)	1,2-Dichloroethane	9.13	62	364487	10.06 ug/l	100
46)	Trichloroethene	10.40	130	554810	10.13 ug/l	100
47)	Methylcyclohexane	10.47	83	1012270	10.22 ug/l	100
48)	1,2-Dichloropropane	10.77	63	519339	10.04 ug/l	99
49)	Bromodichloromethane	11.20	83	519673	9.69 ug/l	99
50)	1,4-Dioxane	11.32	88	44345	192.63 ug/l	99
51)	Dibromomethane	11.29	93	210788	9.99 ug/l	99
52)	2-Chloroethyl vinyl ether	11.91	63	135207	9.80 ug/l	100
53)	4-Methyl-2-pentanone	11.96	43	1467784	47.32 ug/l	100
54)	cis-1,3-Dichloropropene	12.29	75	723084	10.15 ug/l	99
57)	Toluene	12.83	91	2194161	10.33 ug/l	100
58)	trans-1,3-Dichloropropene	13.22	75	505440	10.12 ug/l	99
59)	Ethyl methacrylate	13.26	69	382776	9.81 ug/l	99
60)	1,1,2-Trichloroethane	13.47	97	280585	9.69 ug/l	99
61)	2-Hexanone	13.54	43	891195	47.30 ug/l	99
62)	1,3-Dichloropropane	13.92	76	505063	9.75 ug/l	100
63)	Tetrachloroethene	13.97	164	441942	10.19 ug/l	100
64)	Dibromochloromethane	14.33	129	309375	9.53 ug/l	100
65)	1,2-Dibromoethane	14.67	107	256919	9.68 ug/l	99
66)	1-Chlorohexane	15.00	91	896830	10.47 ug/l	100
67)	Chlorobenzene	15.38	112	1282838	10.19 ug/l	100
68)	1,1,1,2-Tetrachloroethane	15.49	131	388401	10.10 ug/l	99
69)	Ethylbenzene	15.50	91	2400083	10.44 ug/l	99
70)	m-Xylene & p-Xylene	15.63	91	3521225	20.83 ug/l	99
71)	o-Xylene	16.36	91	1735711	10.39 ug/l	100
72)	Styrene	16.42	104	1362069	10.47 ug/l	100
73)	Isopropylbenzene	16.98	105	2277986	10.54 ug/l	100
75)	Bromoform	16.98	173	154699	9.49 ug/l	99
76)	1,1,2,2-Tetrachloroethane	17.27	83	295939	9.52 ug/l	99
78)	1,2,3-Trichloropropane	17.49	110	72135	9.60 ug/l	100
79)	trans-1,4-Dichloro-2-buten	17.60	53	74059	10.13 ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F06\RFC016.D Vial: 2
Acq On : 6 Jun 2024 1:17 pm Operator: ZLin
Sample : IVO67F0502 Inst : 67
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 15:52 2024 Quant Results File: VO67F05.RES

Quant Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration
DataAcq Meth : VO67F05

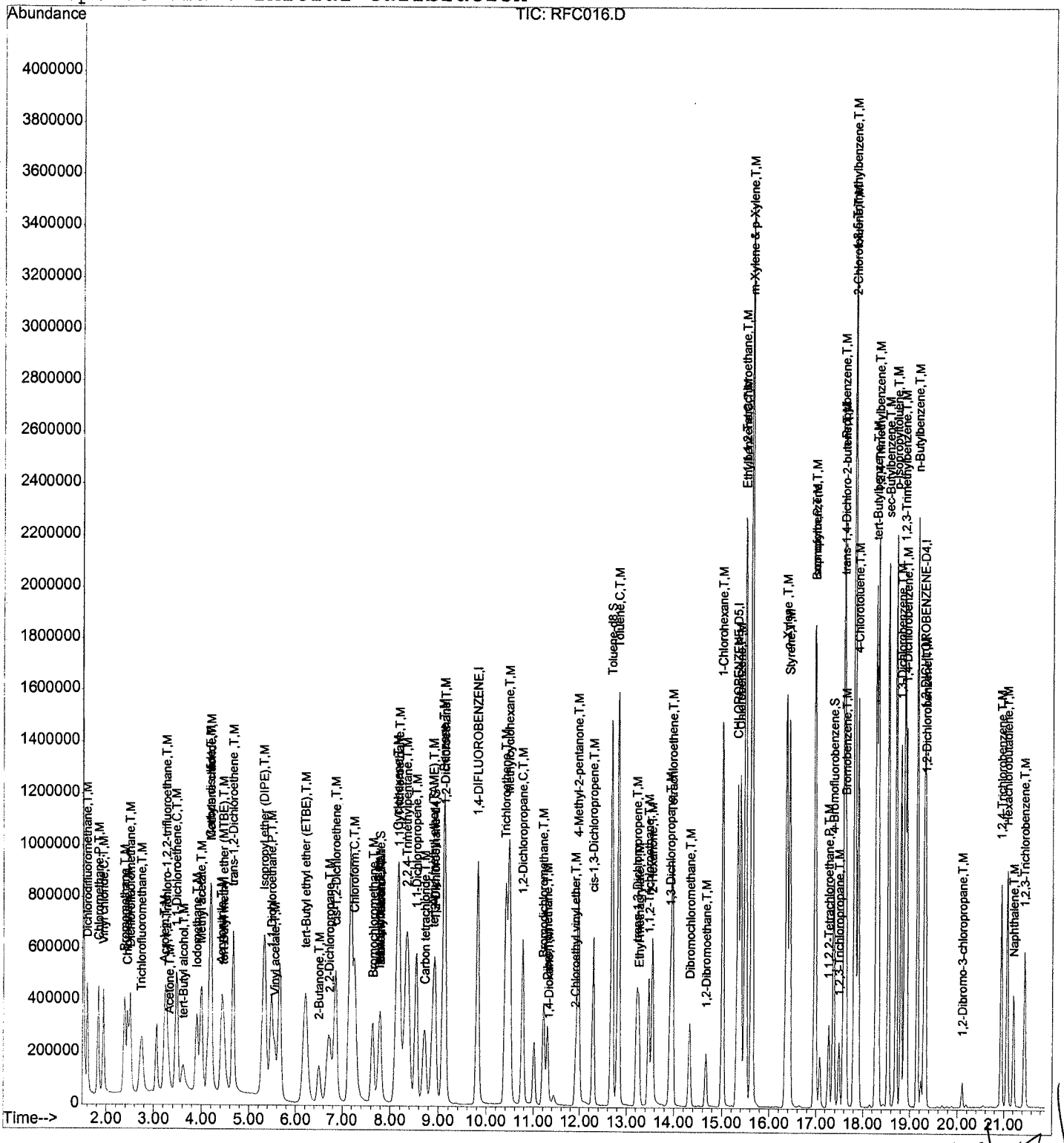
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	n-Propylbenzene	17.59	91	2749360	10.89	ug/l	99
81)	Bromobenzene	17.63	156	436310	10.18	ug/l	99
82)	1,3,5-Trimethylbenzene	17.81	105	1798926	10.76	ug/l	99
83)	2-Chlorotoluene	17.82	91	1647212	9.99	ug/l	95
84)	4-Chlorotoluene	17.90	91	1452292	11.25	ug/l	93
85)	tert-Butylbenzene	18.28	134	402437	10.48	ug/l	100
86)	1,2,4-Trimethylbenzene	18.32	105	1689547	10.71	ug/l	100
87)	sec-Butylbenzene	18.54	105	2405092	10.92	ug/l	99
88)	p-Isopropyltoluene	18.70	119	1894914	11.00	ug/l	100
89)	1,3-Dichlorobenzene	18.80	146	835293	10.35	ug/l	100
90)	1,2,3-Trimethylbenzene	18.88	105	1581127	10.57	ug/l	100
91)	1,4-Dichlorobenzene	18.92	146	797071	10.36	ug/l	100
92)	n-Butylbenzene	19.15	91	1772691	11.26	ug/l	100
93)	1,2-Dichlorobenzene	19.33	146	682468	10.14	ug/l	100
94)	1,2-Dibromo-3-chloropropan	20.10	157	38513	9.74	ug/l	97
95)	1,2,4-Trichlorobenzene	20.94	180	410824	10.39	ug/l	99
96)	Hexachlorobutadiene	21.07	225	300740	10.77	ug/l	100
97)	Naphthalene	21.21	128	542230	9.52	ug/l	100
98)	1,2,3-Trichlorobenzene	21.45	180	322833	10.15	ug/l	100

(#) = qualifier out of range (m) = manual integration
RFC016.D VO67F05.M Thu Jun 20 15:52:33 2024 Page 3

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F06\RFC016.D Vial: 2
Acq On : 6 Jun 2024 1:17 pm Operator: ZLin
Sample : IVO67F0502 Inst : 67
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 15:52 2024 Quant Results File: VO67F05.RES

Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 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 : 24F063
Lab File ID: RFC212 BFB Injection Date: 06/15/24
Instrument ID: 67 BFB Injection Time: 10:59

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	17.409
75	30 - 60% of mass 95	40.089
95	Base Peak, 100% relative abundance	100.000
96	5 - 9% of mass 95	7.023
173	Less than 2% of mass 174	0.000(0)1
174	Greater than 50% of mass 95	76.507
175	5 - 9% of mass 174	5.975(7.81)1
176	95 - 101% % of mass 174	74.419(97.27)1
177	5 - 9% % of mass 176	3.932(5.28)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	CV067F0506	RFC213	06/15/24	11:27
2	LCS1W	V067F11L	RFC214	06/15/24	12:03
3	LCD1W	V067F11C	RFC215	06/15/24	12:31
4	MBLK1W	V067F11B	RFC217	06/15/24	13:45
5	TB08-GW061224	24F063-02	RFC218	06/15/24	14:12
6	EB06-GW061224	24F063-01	RFC221	06/15/24	15:34
7	EW01-GW061224-223	24F063-03	RFC222	06/15/24	16:01

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

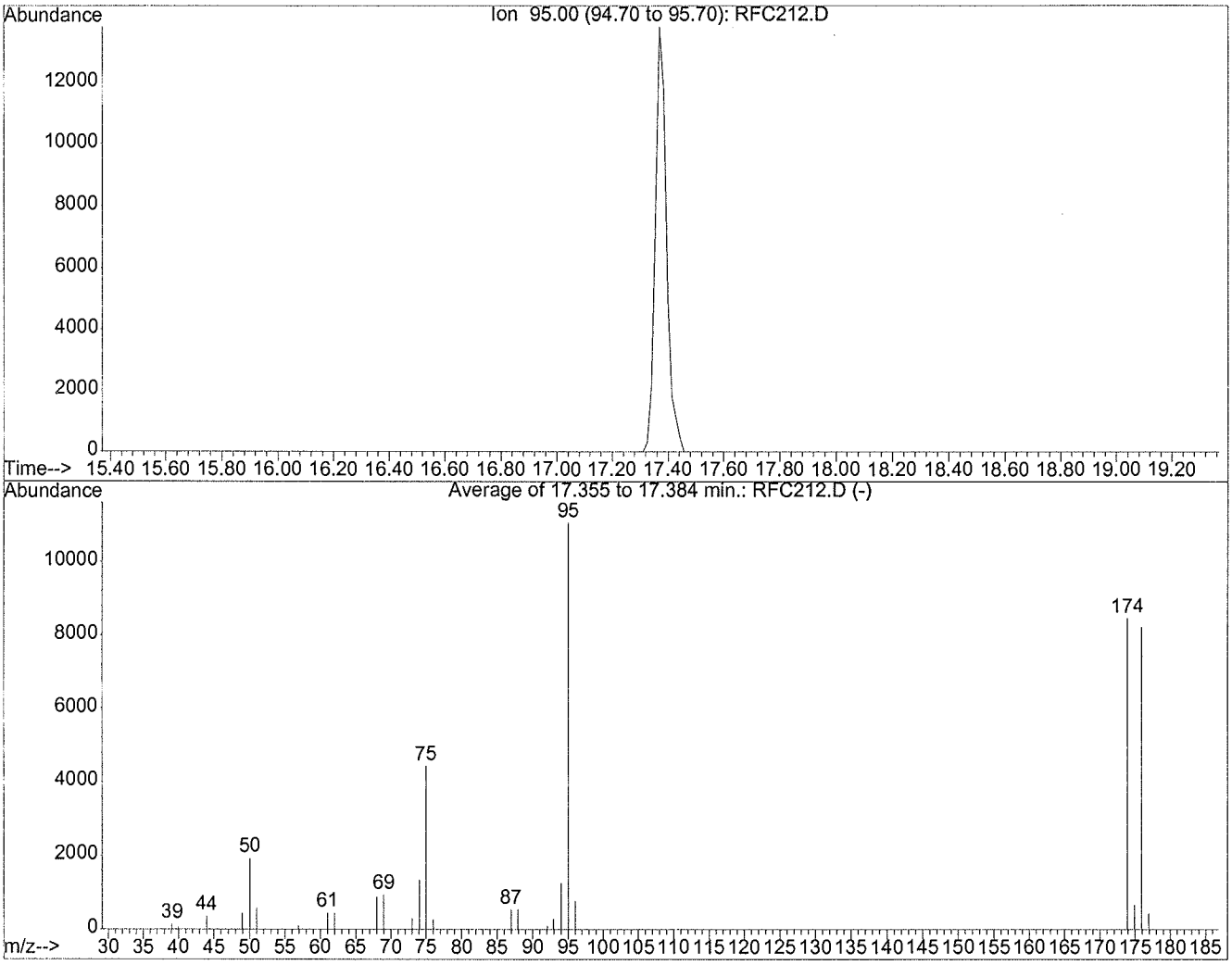
Lab Name: EMAX Laboratories, Inc.
Lab Code: EMAX
Lab File ID: RFC007
Instrument ID: 67

Project: VA SALT LAKE CITY
SDG No: 24F063
Date Analyzed: 06/05/24
Time Analyzed: 19:08

INTERNAL STANDARD (IS)	1,4-DIFLUOROBENZENE		CHLOROBENZENE-D5		1,2-DICHLOROBENZENE-D4	
	Area #	RT #	Area #	RT #	Area #	RT #
12 HOUR STD	1433086	9.82	1053162	15.32	364474	19.30
UPPER LIMIT	2866172	9.99	2106324	15.49	728948	19.47
LOWER LIMIT	716543	9.65	526581	15.15	182237	19.13
	Area #	RT #	Area #	RT #	Area #	RT #
1 VSTD10	1565685	9.83	1178082	15.34	432546	19.30
2 LCS1W	1641145	9.82	1220417	15.33	438841	19.30
3 LCD1W	1546827	9.83	1138069	15.34	392688	19.30
4 MBLK1W	1638996	9.83	1144864	15.34	346721	19.30
5 TB08-GW061224	1589306	9.83	1127403	15.34	343617	19.30
6 EB06-GW061224	1481656	9.83	1050456	15.34	319250	19.30
7 EW01-GW061224-223	1448187	9.83	1042518	15.34	358698	19.30

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\24F15\RFC212.D Vial: 1
Acq On : 15 Jun 2024 10:59 am Operator: DNguye
Sample : BFB67F11 Inst : 67
Misc : T/CHK Multiplr: 1.00
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B



AutoFind: Scans 1034, 1035, 1036; Background Corrected with Scan 1029

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.4	1926	PASS
75	95	30	60	40.1	4435	PASS
95	95	100	100	100.0	11063	PASS
96	95	5	9	7.0	777	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	76.5	8464	PASS
175	174	5	9	7.8	661	PASS
176	174	95	101	97.3	8233	PASS
177	176	5	9	5.3	435	PASS

RFC212.D VO67F05.M Fri Jun 21 12:38:10 2024

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F15\RFC213.D Vial: 2
Acq On : 15 Jun 2024 11:27 am Operator: DNguye
Sample : CVO67F0506 Inst : 67
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 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	109	0.01
2	T,M	Dichlorodifluoromethane	10.000	10.562	-5.6	113	0.02
3	T,M	Dichlorotetrafluoroethane	-1.000	0.000	0.0	0	-2.72#
4	P,T,M	Chloromethane	10.000	9.964	0.4	110	0.00
5	C,T,M	Vinyl chloride	10.000	9.658	3.4	103	0.00
6	T,M	Bromomethane	10.000	11.834	-18.3	128	0.02
7	T,M	Chloroethane	10.000	11.338	-13.4	124	0.02
8	T,M	Dichlorofluoromethane	10.000	10.315	-3.1	113	0.00
9	T,M	Trichlorofluoromethane	10.000	11.923	-19.2	126	0.00
10	T,M	sec-Propyl alcohol	-1.000	0.000	0.0	0	-5.33#
11	T,M	Acrolein	50.000	53.731	-7.5	121	0.00
12	T,M	1,1,2-Trichloro-1,2,2-trifl	10.000	11.104	-11.0	118	0.00
13	T,M	Acetone	50.000	46.979	6.0	98	0.00
14	C,T,M	1,1-Dichloroethene	10.000	10.820	-8.2	118	0.00
15	T,M	tert-Butyl alcohol	250.000	362.107	-44.8#	164	0.00
16	T,M	Iodomethane	10.000	11.669	-16.7	116	0.02
17	T,M	Methyl acetate	10.000	11.669	-16.7	111	0.00
18	T,M	Acetonitrile	-1.000	0.000	0.0	99	0.00
19	T,M	Carbon disulfide	10.000	9.820	1.8	102	0.00
20	T,M	Methylene chloride	10.000	9.822	1.8	111	0.01
21	T,M	Acrylonitrile	50.000	59.566	-19.1	127	0.00
22	T,M	tert-Butyl methyl ether (MT	10.000	10.817	-8.2	124	0.00
23	T,M	trans-1,2-Dichloroethene	10.000	10.134	-1.3	112	0.00
24	T,M	Isopropyl ether (DIPE)	10.000	8.496	15.0	85	0.00
25	P,T,M	1,1-Dichloroethane	10.000	9.874	1.3	106	0.00
26	T,M	Vinyl acetate	10.000	12.550	-25.5#	132	0.00
27	T,M	2-Butanol	-1.000	0.000	0.0	142	0.01
28	T,M	tert-Butyl ethyl ether (ETB	10.000	9.287	7.1	108	0.00
29	T,M	2-Butanone	50.000	64.524	-29.0#	134	0.00
30	T,M	2,2-Dichloropropane	10.000	10.568	-5.7	115	0.00
31	T,M	cis-1,2-Dichloroethene	10.000	10.079	-0.8	112	0.00
32	C,T,M	Chloroform	10.000	9.708	2.9	109	0.01
33	T,M	Bromochloromethane	10.000	11.020	-10.2	121	0.00
34	T,M	Tetrahydrofuran	10.000	10.130	-1.3	113	0.01
35	T,M	tert-Amyl alcohol	50.000	0.000	100.0#	0	-7.80#
36	S	Dibromofluoromethane	10.000	9.679	3.2	104	0.00
37	T,M	Cyclohexane	10.000	9.568	4.3	98	0.00
38	T,M	1,1,1-Trichloroethane	10.000	10.047	-0.5	108	0.01
39	T,M	2,2,4-Trimethylpentane	10.000	0.000	100.0#	0	-8.36#
40	T,M	1,1-Dichloropropene	10.000	10.214	-2.1	108	0.00
41	T,M	Carbon tetrachloride	10.000	10.292	-2.9	111	0.01

(#) = Out of Range

Data File : D:\HPCHEM\1\DATA\24F15\RFC213.D Vial: 2
Acq On : 15 Jun 2024 11:27 am Operator: DNguye
Sample : CVO67F0506 Inst : 67
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 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	tert-Amyl methyl ether (TAM	10.000	11.010	-10.1	119	0.01
43	S	1,2-Dichloroethane-d4	10.000	9.378	6.2	102	0.00
44	T,M	Benzene	10.000	10.047	-0.5	110	0.00
45	T,M	1,2-Dichloroethane	10.000	10.609	-6.1	114	0.00
46	T,M	Trichloroethene	10.000	10.578	-5.8	114	0.01
47	T,M	Methylcyclohexane	10.000	10.045	-0.4	102	0.01
48	C,T,M	1,2-Dichloropropane	10.000	9.701	3.0	108	0.00
49	T,M	Bromodichloromethane	10.000	9.888	1.1	112	0.00
50	T,M	1,4-Dioxane	200.000	255.204	-27.6#	133	0.00
51	T,M	Dibromomethane	10.000	11.442	-14.4	121	0.01
52	T,M	2-Chloroethyl vinyl ether	10.000	6.005	40.0#	64	0.00
53	T,M	4-Methyl-2-pentanone	50.000	50.996	-2.0	110	0.01
54	T,M	cis-1,3-Dichloropropene	10.000	10.203	-2.0	112	0.01
55	I	CHLOROBENZENE-D5	10.000	10.000	0.0	112	0.01
56	S	Toluene-d8	10.000	9.511	4.9	101	0.01
57	C,T,M	Toluene	10.000	9.741	2.6	108	0.00
58	T,M	trans-1,3-Dichloropropene	10.000	10.405	-4.0	115	0.00
59	T,M	Ethyl methacrylate	10.000	10.988	-9.9	123	0.00
60	T,M	1,1,2-Trichloroethane	10.000	10.993	-9.9	122	0.01
61	T,M	2-Hexanone	50.000	53.158	-6.3	118	0.00
62	T,M	1,3-Dichloropropane	10.000	10.523	-5.2	118	0.00
63	T,M	Tetrachloroethene	10.000	9.896	1.0	110	0.01
64	T,M	Dibromochloromethane	10.000	10.768	-7.7	123	0.00
65	T,M	1,2-Dibromoethane	10.000	11.204	-12.0	123	0.00
66	T,M	1-Chlorohexane	10.000	9.691	3.1	104	0.00
67	P,M	Chlorobenzene	10.000	10.103	-1.0	113	0.00
68	T,M	1,1,1,2-Tetrachloroethane	10.000	10.377	-3.8	118	0.00
69	C,T,M	Ethylbenzene	10.000	9.871	1.3	107	0.00
70	T,M	m-Xylene & p-Xylene	20.000	19.587	2.1	108	0.00
71	T,M	o-Xylene	10.000	9.863	1.4	109	0.00
72	T,M	Styrene	10.000	10.210	-2.1	112	0.00
73	T,M	Isopropylbenzene	10.000	10.176	-1.8	109	0.00
74	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	119	0.00
75	P,T,M	Bromoform	10.000	10.700	-7.0	128	0.00
76	P,T,M	1,1,2,2-Tetrachloroethane	10.000	10.890	-8.9	129	0.00
77	S	4-Bromofluorobenzene	10.000	9.438	5.6	109	0.00
78	T,M	1,2,3-Trichloropropane	10.000	11.129	-11.3	132	0.00
79	T,M	trans-1,4-Dichloro-2-butene	10.000	10.220	-2.2	118	0.00
80	T,M	n-Propylbenzene	10.000	9.457	5.4	106	0.00

(#) = Out of Range

Data File : D:\HPCHEM\1\DATA\24F15\RFC213.D Vial: 2
Acq On : 15 Jun 2024 11:27 am Operator: DNguye
Sample : CVO67F0506 Inst : 67
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 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	Bromobenzene	10.000	9.902	1.0	117	0.01
82	T,M	1,3,5-Trimethylbenzene	10.000	9.606	3.9	111	0.01
83	T,M	2-Chlorotoluene	10.000	9.080	9.2	105	0.00
84	T,M	4-Chlorotoluene	10.000	9.525	4.7	113	0.00
85	T,M	tert-Butylbenzene	10.000	9.508	4.9	111	0.00
86	T,M	1,2,4-Trimethylbenzene	10.000	9.611	3.9	110	0.00
87	T,M	sec-Butylbenzene	10.000	9.798	2.0	110	0.00
88	T,M	p-Isopropyltoluene	10.000	9.795	2.1	109	0.00
89	T,M	1,3-Dichlorobenzene	10.000	9.767	2.3	116	0.00
90	T,M	1,2,3-Trimethylbenzene	10.000	9.628	3.7	112	0.00
91	T,M	1,4-Dichlorobenzene	10.000	9.923	0.8	116	0.00
92	T,M	n-Butylbenzene	10.000	9.655	3.5	108	0.00
93	T,M	1,2-Dichlorobenzene	10.000	10.120	-1.2	120	0.00
94	T,M	1,2-Dibromo-3-chloropropane	10.000	11.818	-18.2	132	0.00
95	T,M	1,2,4-Trichlorobenzene	10.000	9.645	3.6	115	0.01
96	T,M	Hexachlorobutadiene	10.000	9.306	6.9	111	0.00
97	T,M	Naphthalene	10.000	10.035	-0.4	122	0.00
98	T,M	1,2,3-Trichlorobenzene	10.000	9.662	3.4	115	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F15\RFC213.D Vial: 2
Acq On : 15 Jun 2024 11:27 am Operator: DNguye
Sample : CVO67F0506 Inst : 67
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 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	109	0.01
2	T,M	Dichlorodifluoromethane	0.306	0.324	-5.9	113	0.02
3	T,M	Dichlorotetrafluoroethane	0.000	0.000	0.0	0#	-2.72#
4	P,T,M	Chloromethane	0.398	0.397	0.3	110	0.00
5	C,T,M	Vinyl chloride	0.334	0.323	3.3	103	0.00
6	T,M	Bromomethane	0.246	0.291	-18.3	128	0.02
7	T,M	Chloroethane	0.213	0.242	-13.6	124	0.02
8	T,M	Dichlorofluoromethane	0.416	0.429	-3.1	113	0.00
9	T,M	Trichlorofluoromethane	0.264	0.315	-19.3	126	0.00
10	T,M	sec-Propyl alcohol	0.000	0.000	0.0	0#	-5.33#
11	T,M	Acrolein	0.018	0.020	-11.1	121	0.00
12	T,M	1,1,2-Trichloro-1,2,2-trifl	0.184	0.204	-10.9	118	0.00
13	T,M	Acetone	0.036	0.034	5.6	98	0.00
14	C,T,M	1,1-Dichloroethene	0.315	0.341	-8.3	118	0.00
15	T,M	tert-Butyl alcohol	0.010	0.014	-40.0#	164	0.00
16	T,M	Iodomethane	0.400	0.466	-16.5	116	0.02
17	T,M	Methyl acetate	0.126	0.126	0.0	111	0.00
18	T,M	Acetonitrile	0.000	0.000	0.0	99	0.00
19	T,M	Carbon disulfide	1.046	1.028	1.7	102	0.00
20	T,M	Methylene chloride	0.345	0.338	2.0	111	0.01
21	T,M	Acrylonitrile	0.042	0.050	-19.0	127	0.00
22	T,M	tert-Butyl methyl ether (MT	0.435	0.470	-8.0	124	0.00
23	T,M	trans-1,2-Dichloroethene	0.293	0.297	-1.4	112	0.00
24	T,M	Isopropyl ether (DIPE)	1.034	0.879	15.0	85	0.00
25	P,T,M	1,1-Dichloroethane	0.550	0.543	1.3	106	0.00
26	T,M	Vinyl acetate	0.403	0.456	-13.2	132	0.00
27	T,M	2-Butanol	0.000	0.000	0.0	142	0.01
28	T,M	tert-Butyl ethyl ether (ETB	0.833	0.774	7.1	108	0.00
29	T,M	2-Butanone	0.014	0.019	-35.7#	134	0.00
30	T,M	2,2-Dichloropropane	0.271	0.286	-5.5	115	0.00
31	T,M	cis-1,2-Dichloroethene	0.353	0.355	-0.6	112	0.00
32	C,T,M	Chloroform	0.460	0.447	2.8	109	0.01
33	T,M	Bromochloromethane	0.155	0.171	-10.3	121	0.00
34	T,M	Tetrahydrofuran	0.046	0.046	0.0	113	0.01
35	T,M	tert-Amyl alcohol	0.011	0.000	100.0#	0#	-7.80#
36	S	Dibromofluoromethane	0.273	0.264	3.3	104	0.00
37	T,M	Cyclohexane	0.505	0.483	4.4	98	0.00
38	T,M	1,1,1-Trichloroethane	0.351	0.352	-0.3	108	0.01
39	T,M	2,2,4-Trimethylpentane	1.307	0.000	100.0#	0#	-8.36#
40	T,M	1,1-Dichloropropene	0.155	0.158	-1.9	108	0.00
41	T,M	Carbon tetrachloride	0.275	0.283	-2.9	111	0.01

(#) = Out of Range

Data File : D:\HPCHEM\1\DATA\24F15\RFC213.D Vial: 2
Acq On : 15 Jun 2024 11:27 am Operator: DNguye
Sample : CVO67F0506 Inst : 67
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 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	tert-Amyl methyl ether (TAM	0.128	0.141	-10.2	119	0.01
43	S	1,2-Dichloroethane-d4	0.178	0.167	6.2	102	0.00
44	T,M	Benzene	1.289	1.295	-0.5	110	0.00
45	T,M	1,2-Dichloroethane	0.213	0.226	-6.1	114	0.00
46	T,M	Trichloroethene	0.322	0.341	-5.9	114	0.01
47	T,M	Methylcyclohexane	0.582	0.585	-0.5	102	0.01
48	C,T,M	1,2-Dichloropropane	0.304	0.295	3.0	108	0.00
49	T,M	Bromodichloromethane	0.315	0.312	1.0	112	0.00
50	T,M	1,4-Dioxane	0.001	0.002	-100.0#	133	0.00
51	T,M	Dibromomethane	0.124	0.142	-14.5	121	0.01
52	T,M	2-Chloroethyl vinyl ether	0.081	0.049	39.5#	64	0.00
53	T,M	4-Methyl-2-pentanone	0.182	0.186	-2.2	110	0.01
54	T,M	cis-1,3-Dichloropropene	0.419	0.428	-2.1	112	0.01
55	I	CHLOROBENZENE-D5	1.000	1.000	0.0	112	0.01
56	S	Toluene-d8	1.407	1.338	4.9	101	0.01
57	C,T,M	Toluene	1.709	1.665	2.6	108	0.00
58	T,M	trans-1,3-Dichloropropene	0.402	0.418	-4.0	115	0.00
59	T,M	Ethyl methacrylate	0.314	0.345	-9.9	123	0.00
60	T,M	1,1,2-Trichloroethane	0.233	0.256	-9.9	122	0.01
61	T,M	2-Hexanone	0.152	0.161	-5.9	118	0.00
62	T,M	1,3-Dichloropropane	0.417	0.439	-5.3	118	0.00
63	T,M	Tetrachloroethene	0.349	0.346	0.9	110	0.01
64	T,M	Dibromochloromethane	0.261	0.281	-7.7	123	0.00
65	T,M	1,2-Dibromoethane	0.214	0.239	-11.7	123	0.00
66	T,M	1-Chlorohexane	0.689	0.668	3.0	104	0.00
67	P,M	Chlorobenzene	1.014	1.024	-1.0	113	0.00
68	T,M	1,1,1,2-Tetrachloroethane	0.310	0.321	-3.5	118	0.00
69	C,T,M	Ethylbenzene	1.850	1.826	1.3	107	0.00
70	T,M	m-Xylene & p-Xylene	1.361	1.332	2.1	108	0.00
71	T,M	o-Xylene	1.344	1.326	1.3	109	0.00
72	T,M	Styrene	1.048	1.070	-2.1	112	0.00
73	T,M	Isopropylbenzene	1.740	1.770	-1.7	109	0.00
74	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	119	0.00
75	P,T,M	Bromoform	0.386	0.413	-7.0	128	0.00
76	P,T,M	1,1,2,2-Tetrachloroethane	0.736	0.801	-8.8	129	0.00
77	S	4-Bromofluorobenzene	1.257	1.186	5.6	109	0.00
78	T,M	1,2,3-Trichloropropane	0.178	0.198	-11.2	132	0.00
79	T,M	trans-1,4-Dichloro-2-butene	0.173	0.177	-2.3	118	0.00
80	T,M	n-Propylbenzene	5.974	5.650	5.4	106	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F15\RFC213.D Vial: 2
Acq On : 15 Jun 2024 11:27 am Operator: DNguye
Sample : CVO67F0506 Inst : 67
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 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	Bromobenzene	1.014	1.004	1.0	117	0.01
82	T,M	1,3,5-Trimethylbenzene	3.954	3.798	3.9	111	0.01
83	T,M	2-Chlorotoluene	3.903	3.544	9.2	105	0.00
84	T,M	4-Chlorotoluene	3.054	2.909	4.7	113	0.00
85	T,M	tert-Butylbenzene	0.909	0.864	5.0	111	0.00
86	T,M	1,2,4-Trimethylbenzene	3.731	3.586	3.9	110	0.00
87	T,M	sec-Butylbenzene	5.212	5.107	2.0	110	0.00
88	T,M	p-Isopropyltoluene	4.075	3.992	2.0	109	0.00
89	T,M	1,3-Dichlorobenzene	1.909	1.865	2.3	116	0.00
90	T,M	1,2,3-Trimethylbenzene	3.539	3.408	3.7	112	0.00
91	T,M	1,4-Dichlorobenzene	1.821	1.807	0.8	116	0.00
92	T,M	n-Butylbenzene	3.726	3.597	3.5	108	0.00
93	T,M	1,2-Dichlorobenzene	1.593	1.612	-1.2	120	0.00
94	T,M	1,2-Dibromo-3-chloropropane	0.094	0.111	-18.1	132	0.00
95	T,M	1,2,4-Trichlorobenzene	0.935	0.902	3.5	115	0.01
96	T,M	Hexachlorobutadiene	0.661	0.615	7.0	111	0.00
97	T,M	Naphthalene	1.347	1.352	-0.4	122	0.00
98	T,M	1,2,3-Trichlorobenzene	0.753	0.727	3.5	115	0.00

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F15\RFC213.D Vial: 2
Acq On : 15 Jun 2024 11:27 am Operator: DNguye
Sample : CVO67F0506 Inst : 67
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 21 12:38 2024 Quant Results File: VO67F05.RES

Quant Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration
DataAcq Meth : VO67F05

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	9.83	114	1565685	10.00	ug/l	0.01
55) CHLOROBENZENE-D5	15.34	117	1178082	10.00	ug/l	0.01
74) 1,2-DICHLOROBENZENE-D4	19.30	152	432546	10.00	ug/l	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	7.80	111	413009	9.68	ug/l	0.00
Spiked Amount 10.000			Recovery = 96.80%			
43) 1,2-Dichloroethane-d4	8.94	65	260939	9.38	ug/l	0.00
Spiked Amount 10.000			Recovery = 93.80%			
56) Toluene-d8	12.69	98	1576822	9.51	ug/l	0.01
Spiked Amount 10.000			Recovery = 95.10%			
77) 4-Bromofluorobenzene	17.37	95	513052	9.44	ug/l	0.00
Spiked Amount 10.000			Recovery = 94.40%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.61	85	506517	10.56	ug/l	99
4) Chloromethane	1.84	50	621368	9.96	ug/l	100
5) Vinyl chloride	1.94	62	505356	9.66	ug/l	98
6) Bromomethane	2.40	94	455282	11.83	ug/l	99
7) Chloroethane	2.46	64	378299	11.34	ug/l	95
8) Dichlorofluoromethane	2.50	67	671760	10.31	ug/l	100
9) Trichlorofluoromethane	2.74	101	492733	11.92	ug/l	100
11) Acrolein	3.24	56	153909	53.73	ug/l	96
12) 1,1,2-Trichloro-1,2,2-trif	3.26	151	319507	11.10	ug/l	99
13) Acetone	3.32	43	265824	46.98	ug/l	85
14) 1,1-Dichloroethene	3.48	61	534481	10.82	ug/l	94
15) tert-Butyl alcohol	3.61	59	538995	362.11	ug/l	99
16) Iodomethane	3.92	142	730234	11.67	ug/l	99
17) Methyl acetate	3.98	43	197407	11.67	ug/l	85
19) Carbon disulfide	4.18	76	1608800	9.82	ug/l	100
20) Methylene chloride	4.20	49	529853	9.82	ug/l	91
21) Acrylonitrile	4.42	53	387858	59.57	ug/l	96
22) tert-Butyl methyl ether (M	4.47	73	736002	10.82	ug/l	98
23) trans-1,2-Dichloroethene	4.67	96	464995	10.13	ug/l	99
24) Isopropyl ether (DIPE)	5.33	45	1375936	8.50	ug/l	93
25) 1,1-Dichloroethane	5.49	63	850904	9.87	ug/l	99
26) Vinyl acetate	5.56	43	713877	12.55	ug/l	97
28) tert-Butyl ethyl ether (ET	6.22	59	1211091	9.29	ug/l	94
29) 2-Butanone	6.51	72	146477	64.52	ug/l	90
30) 2,2-Dichloropropane	6.75	77	447875	10.57	ug/l	97
31) cis-1,2-Dichloroethene	6.86	96	556442	10.08	ug/l	99
32) Chloroform	7.27	83	699533	9.71	ug/l	98

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24F15\RFC213.D Vial: 2
Acq On : 15 Jun 2024 11:27 am Operator: DNguye
Sample : CVO67F0506 Inst : 67
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 21 12:38 2024 Quant Results File: VO67F05.RES

Quant Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration
DataAcq Meth : VO67F05

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
33) Bromochloromethane	7.65	130	267721	11.02	ug/l	99
34) Tetrahydrofuran	7.78	42	72749	10.13	ug/l	94
37) Cyclohexane	8.16	84	755998	9.57	ug/l	95
38) 1,1,1-Trichloroethane	8.19	97	551736	10.05	ug/l	97
40) 1,1-Dichloropropene	8.56	110	247413	10.21	ug/l	99
41) Carbon tetrachloride	8.73	119	442477	10.29	ug/l	100
42) tert-Amyl methyl ether (TA	8.91	87	220877	11.01	ug/l	96
44) Benzene	9.11	78	2026968	10.05	ug/l	99
45) 1,2-Dichloroethane	9.14	62	354018	10.61	ug/l	99
46) Trichloroethene	10.41	130	533417	10.58	ug/l	99
47) Methylcyclohexane	10.49	83	915711	10.04	ug/l	95
48) 1,2-Dichloropropane	10.78	63	461993	9.70	ug/l	98
49) Bromodichloromethane	11.22	83	488393	9.89	ug/l	98
50) 1,4-Dioxane	11.34	88	54097	255.20	ug/l	92
51) Dibromomethane	11.31	93	222271	11.44	ug/l	98
52) 2-Chloroethyl vinyl ether	11.92	63	76273	6.00	ug/l	97
53) 4-Methyl-2-pentanone	11.98	43	1456566	51.00	ug/l	94
54) cis-1,3-Dichloropropene	12.30	75	669617	10.20	ug/l	99
57) Toluene	12.83	91	1961025	9.74	ug/l	100
58) trans-1,3-Dichloropropene	13.22	75	492567	10.40	ug/l	99
59) Ethyl methacrylate	13.26	69	406437	10.99	ug/l	92
60) 1,1,2-Trichloroethane	13.48	97	301880	10.99	ug/l	99
61) 2-Hexanone	13.56	43	949771	53.16	ug/l	96
62) 1,3-Dichloropropane	13.92	76	516671	10.52	ug/l	100
63) Tetrachloroethene	13.98	164	407069	9.90	ug/l	99
64) Dibromochloromethane	14.33	129	331550	10.77	ug/l	99
65) 1,2-Dibromoethane	14.67	107	281844	11.20	ug/l	99
66) 1-Chlorohexane	15.02	91	787011	9.69	ug/l	100
67) Chlorobenzene	15.40	112	1206430	10.10	ug/l	100
68) 1,1,1,2-Tetrachloroethane	15.48	131	378382	10.38	ug/l	99
69) Ethylbenzene	15.50	91	2151709	9.87	ug/l	98
70) m-Xylene & p-Xylene	15.63	91	3139438	19.59	ug/l	99
71) o-Xylene	16.36	91	1562210	9.86	ug/l	98
72) Styrene	16.43	104	1259982	10.21	ug/l	98
73) Isopropylbenzene	16.98	105	2085762	10.18	ug/l	99
75) Bromoform	16.98	173	178587	10.70	ug/l	100
76) 1,1,2,2-Tetrachloroethane	17.27	83	346496	10.89	ug/l	100
78) 1,2,3-Trichloropropane	17.49	110	85629	11.13	ug/l	98
79) trans-1,4-Dichloro-2-buten	17.60	53	76459	10.22	ug/l	94
80) n-Propylbenzene	17.59	91	2443736	9.46	ug/l	99
81) Bromobenzene	17.65	156	434427	9.90	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F15\RFC213.D Vial: 2
Acq On : 15 Jun 2024 11:27 am Operator: DNguye
Sample : CVO67F0506 Inst : 67
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 21 12:38 2024 Quant Results File: VO67F05.RES

Quant Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration
DataAcq Meth : VO67F05

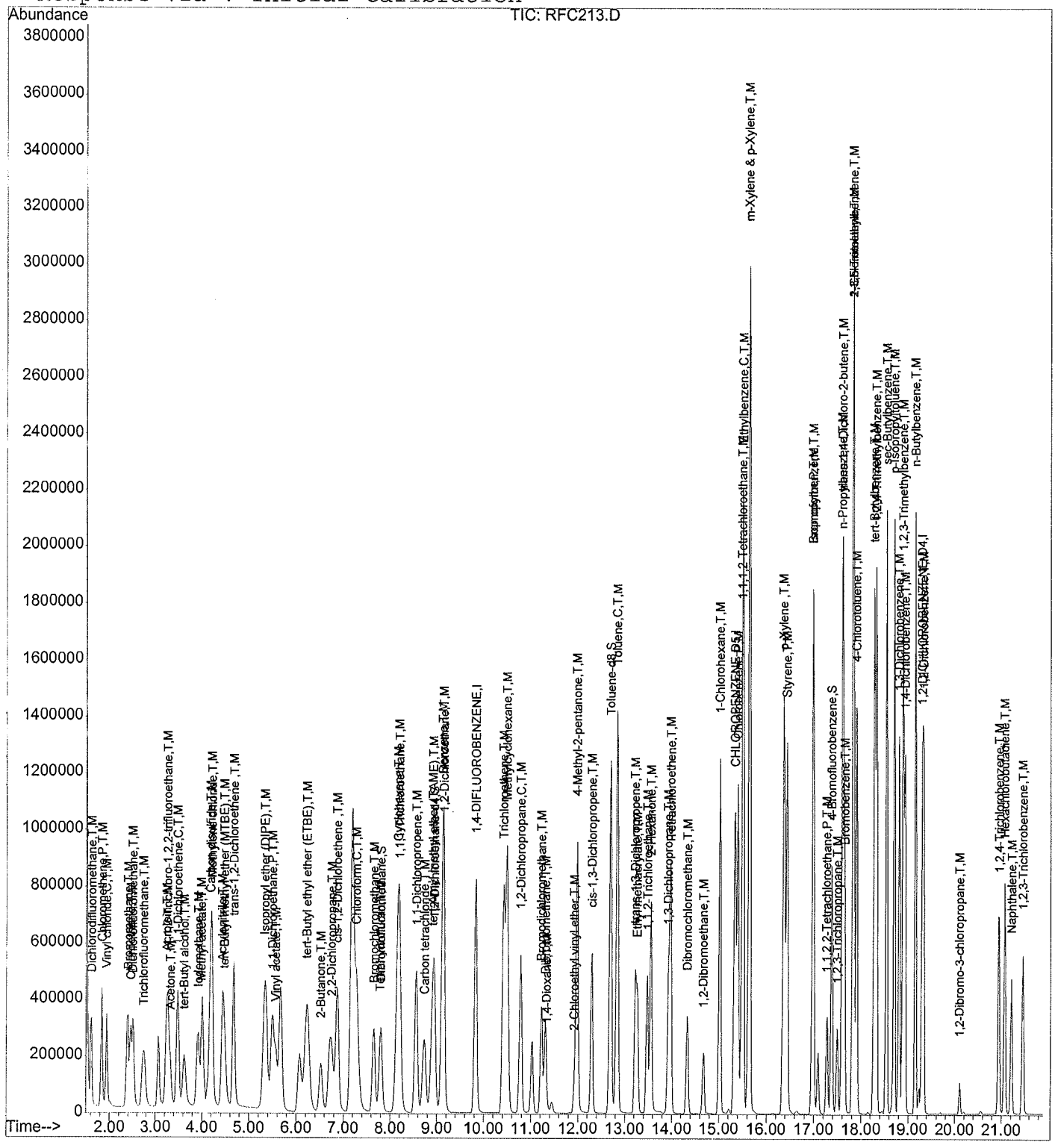
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
82)	1,3,5-Trimethylbenzene	17.82	105	1642993	9.61	ug/l	100
83)	2-Chlorotoluene	17.82	91	1532750	9.08	ug/l	98
84)	4-Chlorotoluene	17.90	91	1258297	9.53	ug/l	99
85)	tert-Butylbenzene	18.28	134	373822	9.51	ug/l	96
86)	1,2,4-Trimethylbenzene	18.32	105	1550921	9.61	ug/l	100
87)	sec-Butylbenzene	18.54	105	2208859	9.80	ug/l	99
88)	p-Isopropyltoluene	18.70	119	1726651	9.79	ug/l	99
89)	1,3-Dichlorobenzene	18.80	146	806596	9.77	ug/l	99
90)	1,2,3-Trimethylbenzene	18.89	105	1473912	9.63	ug/l	100
91)	1,4-Dichlorobenzene	18.93	146	781609	9.92	ug/l	99
92)	n-Butylbenzene	19.15	91	1556045	9.65	ug/l	99
93)	1,2-Dichlorobenzene	19.33	146	697359	10.12	ug/l	100
94)	1,2-Dibromo-3-chloropropan	20.10	157	47804	11.82	ug/l	100
95)	1,2,4-Trichlorobenzene	20.95	180	390148	9.65	ug/l	99
96)	Hexachlorobutadiene	21.07	225	266057	9.31	ug/l	100
97)	Naphthalene	21.21	128	584805	10.04	ug/l	99
98)	1,2,3-Trichlorobenzene	21.46	180	314546	9.66	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F15\RFC213.D Vial: 2
Acq On : 15 Jun 2024 11:27 am Operator: DNguye
Sample : CVO67F0506 Inst : 67
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 21 12:38 2024 Quant Results File: VO67F05.RES

Method : D:\HPCHEM\1\METHODS\VO67F05.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Jun 20 15:42:05 2024
Response via : Initial Calibration



ANALYTICAL LOG(S)

EMAX LABORATORIES, INC.

ANALYSIS LOG FOR VOLATILES

SOP ☑ EMAX-8260 Rev.No. 10 ☐ EMAX-8260C Rev. No. 1 ☐ EMAX-8260SIM Rev.No. 1 ☐ EMAX-M8260SIM Rev.No. 0 ☐ EMAX-TCP5IM Rev.No. 2 ☐ EMAX-624 Rev.No. 6 ☐ EMAX-624.1 Rev.No. 1

Start Date: 06/05/24 ☐ 5-mL Purge ☐ 10-mL Purge ☑ 25-mL Purge Book #: A67-084

BATCH V067F056

	Sample Prep ID	Data File Name	Lab Sample ID	Sample Amount	DF	Matrix W pH < 2	Matrix W Cl_2 < 5ppm	Matrix S	Notes
01									
02									
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Instrument No.	67
INITIAL CALIBRATION REFERENCE	
DATE	~~V067F05 6/6/24~~ 06/05/24
ICAL ID	V067F05

STANDARDS

	NAME	ID	Amount (µl)	Conc. (mg/L)
DCC	8260 KET-AA	SV1-45-01-03 -43-93-03	*	30/1250 250
DCC	4-ADP	-43-95-02	↓	250/6250
DCC	CS_2 GAS	-43-98-02 -43-99-01		450 250
DCC	TAA-224	-45-02-03		350/1250
BFB		-43-96-02	1	50
IS/SURR.	IS SS	-43-44-03 -43-30-01	*	250 250
ICV/LCS	8260 KET-AA	-43-85-02 -43-24-02	5	50/1250 250
ICV/LCS	4-ADP	-43-81-03	5	50
ICV/LCS	CS_2 GAS	-43-~~96~~-02 2L 6/6/24 -43-~~77~~-01	1	250 250
ICV/LCS	TAA 224	-43-00-01 -43-65-03	5	250 50
Data File Folder		24F05		

	LOT #	Syringe Lot #
pH strip		MSV-03-04-15-3
Chlorine strip		-16-6
Methanol		-19
$NaHSO_4$		-23
Reagent Water	RW3-23-001	-01-03-24
Sand		-03-02-25

Electronic Data Archival Location	Date
HPCHEM_VOA/TO67	

Comments: (X) Varied Amount
A: 4-ADP, GAS, CS_2, TAA-224, SS
B: 8260, KET-AA

☐ Refer to sample weight log

Analyzed By: ZL

Date Disposed: 06/06/24 Disposed By: ZL

Injection Log

Directory: D:\HPCHEM\1\DATA\24F05

Line	Vial	FileName	Multiplier	SampleName	*	Misc Info	Injected
1	1	RFC001.D	1.	BFB67F01	A/B	T/CHK	5 Jun 2024 16:07
2	2	RFC002.D	1.	VO67F051	0.03/0.15uL	0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA	5 Jun 2024 16:49
3	3	RFC003.D	1.	VO67F052	0.05/0.25uL	0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA	5 Jun 2024 17:17
4	4	RFC004.D	1.	VO67F053	0.10/0.50uL	1.0ppb 8260/5.0ppb KET-AA/25ppb TBA	5 Jun 2024 17:44
5	5	RFC005.D	1.	VO67F054	0.20/1.00uL	2.0ppb 8260/10ppb KET-AA/50ppb TBA	5 Jun 2024 18:12
6	6	RFC006.D	1.	VO67F055	0.50/2.50uL	5.0ppb 8260/25ppb KET-AA/125ppb TBA	5 Jun 2024 18:40
7	7	RFC007.D	1.	VO67F056	1.00/5.00uL	10ppb 8260/50ppb KET-AA/250ppb TBA	5 Jun 2024 19:08
8	8	RFC008.D	1.	VO67F057	2.00/10.0uL	20ppb 8260/100ppb KET-AA/500ppb TBA	5 Jun 2024 19:36
9	9	RFC009.D	1.	VO67F058	3.00/15.0uL	30ppb 8260/150ppb KET-AA/750ppb TBA	5 Jun 2024 20:03
10	10	RFC010.D	1.	VO67F059	5.00/25.0uL	50ppb 8260/250ppb KET-AA/1250ppb TBA	5 Jun 2024 20:30
11	11	RFC011.D	1.	VO67F0510	10.0/50.0uL	100ppb 8260/500ppb KET-AA/2500ppb TBA	5 Jun 2024 20:57
12	12	RFC012.D	1.	RINSE			5 Jun 2024 21:26
13	13	RFC013.D	1.	RINSE			5 Jun 2024 21:54
14	14	RFC014.D	1.	IVO67F0501	REC>20	10ppb 8260/50ppb KET-AA/250ppb TBA	5 Jun 2024 22:21

6/20/24

6/23/24

EMAX LABORATORIES, INC.

ANALYSIS LOG FOR VOLATILES

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

Start Date: 06/06/24 ☐ 5-mL Purge ☐ 10-mL Purge ☑ 25-mL Purge

Book #: A67-084

BATCH V067F052 / V067F065

Sample Prep ID	Data File Name	Lab Sample ID	Sample Amount	DF	Matrix W pH < 2	Matrix W Cl_2 < 5ppm	Matrix S	Notes
01								
02								
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28								
29								
30								

Instrument No. 67

INITIAL CALIBRATION REFERENCE

DATE 06/05/24

ICAL ID V067F05

STANDARDS

NAME	ID	Amount (µl)	Conc. (mg/L)
DCC			
DCC			
DCC			
DCC			
BFB	SV1-43-76-02	1	50
IS/SURR. IS	CV1-43-94-03	1	250
IS/SURR. SS	-43-87-01	1	250
ICV/LCS 8260 KET-M	-43-85-02	5	50/250
ICV/LCS	-43-94-02	5	250
ICV/LCS 3-ABN	-43-81-03	5	50
ICV/LCS CS_2	-43-89-02	1	250
ICV/LCS GAS	-43-94-01	1	250
ICV/LCS TMA 224	-43-60-01	5	250
ICV/LCS	-43-85-03	5	50
Data File Folder			

	LOT #	Syringe Lot #
pH strip		MSV-03-04-15-3
Chlorine strip		-16-6
Methanol		-19
$NaHSO_4$		-23
Reagent Water	RW3-23-001	-01-03-24
Sand		-03-02-25

Electronic Data Archival Location	Date
HPCHEM_VOA/TO67	

Comments:

☐ Refer to sample weight log

Analyzed By: [signature]

Date Disposed: 06/07/24 Disposed By: [signature]

[signature] 6/7/24

Injection Log

Directory: D:\HPCHEM\1\DATA\24F06

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	RFC015.D	1.	BFB67F02	T/CHK	6 Jun 2024 10:07
2	2	RFC016.D	1.	IVO67F0502	10ppb 8260/50ppb KET-AA/250ppb TBA	6 Jun 2024 13:17
3	1	RFC017.D	1.	BFB67F03	T/CHK	6 Jun 2024 14:18
4	2	RFC018.D	1.	VO67F061 0.05uL	0.5/5.0/10ppb APP IX	6 Jun 2024 15:00
5	3	RFC019.D	1.	VO67F062 0.10uL	1.0/10/20ppb APP IX	6 Jun 2024 15:28
6	4	RFC020.D	1.	VO67F063 0.20uL	2.0/20/40ppb APP IX	6 Jun 2024 15:56
7	5	RFC021.D	1.	VO67F064 0.40uL	4.0/40/80ppb APP IX	6 Jun 2024 16:23
8	6	RFC022.D	1.	VO67F065 1.00uL	10/100/200ppb APP IX	6 Jun 2024 16:51
9	7	RFC023.D	1.	VO67F066 3.00uL	30/300/600ppb APP IX	6 Jun 2024 17:18
10	8	RFC024.D	1.	VO67F067 5.00uL	50/500/1000ppb APP IX	6 Jun 2024 17:44
11	9	RFC025.D	1.	VO67F068 10.0uL	100/1000/2000ppb APP IX	6 Jun 2024 18:11
12	10	RFC026.D	1.	RINSE		6 Jun 2024 18:38
13	11	RFC027.D	1.	IVO67F0601	10/100/200ppb APP IX	6 Jun 2024 19:05
14	12	RFC028.D	1.	LOD 1	0.2 ppb FREON	6 Jun 2024 19:33

6/20/24

6/23/24

EMAX LABORATORIES, INC.

ANALYSIS LOG FOR VOLATILES

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

Start Date: 06/15/24 ☐ 5-mL Purge ☐ 10-mL Purge ☑ 25-mL Purge

Book #: A67-084

BATCH CV067F0506

Sample Prep ID	Data File Name	Lab Sample ID	Sample Amount	DF	Matrix W pH < 2	Matrix W Cl_2 < 5ppm	Matrix S	Notes
01								
02								
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30								

ZL 06/17/24

Instrument No.	67
INITIAL CALIBRATION REFERENCE	
DATE	06/05/24
ICAL ID	V067F05

STANDARDS

NAME	ID	Amount (µl)	Conc (mg/L)
DCC	~~STA-45-01-03~~ -43-93-03	~~5~~ 5	
DCC	-95-02	1	~~50/250~~
DCC	-98-02	1	
DCC	-99-01	1	1250
BFB	-96-02	1	
IS/SURR.	-95-03	5	
ICV/LCS	~~-85-02~~ -94-02	~~5~~ 5	
ICV/LCS	-81-03	5	
ICV/LCS	-79-02	1	
ICV/LCS	-94-01	1	
Data File Folder	24F15		

	LOT #	Syringe Lot #
pH strip	HC434975	MSV-03-04-15-3
Chlorine strip	324303C	-16-6
Methanol		-19
$NaHSO_4$		
Reagent Water	RW3-23-001	
Sand		

Electronic Data Archival Location	Date
HPCHEM_VOA/TO67	

Comments:

☐ Refer to sample weight log

Analyzed By: ZL

Date Disposed: 6/17/24 Disposed By: ZL

Injection Log

Directory: D:\HPCHEM\1\DATA\24F15

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	5	RFC187.D	1.	RINSE		15 Jun 2024 12:58
2	1	RFC212.D	1.	BFB67F11	T/CHK	15 Jun 2024 10:59
3	2	RFC213.D	1.	CVO67F0506	10ppb 8260/50ppb KET-AA/250ppb TBA	15 Jun 2024 11:27
4	3	RFC214.D	1.	VO67F11L	10ppb 8260/50ppb KET-AA/250ppb TBA	15 Jun 2024 12:03
5	4	RFC215.D	1.	VO67F11C	10ppb 8260/50ppb KET-AA/250ppb TBA	15 Jun 2024 12:31
6	6	RFC217.D	1.	VO67F11B	25mL	15 Jun 2024 13:45
7	7	RFC218.D	1.	24F063-02	25mL	15 Jun 2024 14:12
8	8	RFC219.D	1.	24f010-01		15 Jun 2024 14:39
9	9	RFC220.D	1.	24f020-01		15 Jun 2024 15:06
10	10	RFC221.D	1.	24F063-01	25mL	15 Jun 2024 15:34
11	11	RFC222.D	1.	24F063-03	25mL	15 Jun 2024 16:01
12	12	RFC223.D	1.	24F065-01	25mL	15 Jun 2024 16:29
13	13	RFC224.D	1.	24F065-02	25mL	15 Jun 2024 16:56
14	14	RFC225.D	1.	24F065-03	25mL	15 Jun 2024 17:25
15	15	RFC226.D	1.	24f010-06		15 Jun 2024 17:51
16	16	RFC227.D	1.	24f020-02		15 Jun 2024 18:19
17	17	RFC228.D	1.	24f020-03		15 Jun 2024 18:47
18	18	RFC229.D	1.	24f020-04		15 Jun 2024 19:14
19	19	RFC230.D	1.	24f020-05		15 Jun 2024 19:41
20	20	RFC231.D	1.	24f020-06		15 Jun 2024 20:08
21	21	RFC232.D	1.	24f039-03		15 Jun 2024 20:36
22	22	RFC233.D	1.	24f039-04		15 Jun 2024 21:04
23	23	RFC234.D	1.	24f039-05		15 Jun 2024 21:31
24	24	RFC235.D	1.	24f020-03M		15 Jun 2024 21:57
25	25	RFC236.D	1.	24f020-03S		15 Jun 2024 22:25
26	26	RFC237.D	1.	EVO67F0506	10ppb 8260/50ppb KET-AA/250ppb TBA	15 Jun 2024 22:51
27	27	RFC238.D	1.	EVO67F05061	10ppb 8260/50ppb KET-AA/250ppb TBA	15 Jun 2024 23:19
28	28	RFC239.D	1.	EVO67F05062	10ppb 8260/50ppb KET-AA/250ppb TBA	15 Jun 2024 23:46
29	29	RFC240.D	1.	RINSE	25mL	16 Jun 2024 00:15

EMAX LABORATORIES, INC.

SDG Login Review Sheet

Date: 6/14/2024

Client Code: CDM1910_
Client: CDM Smith
Project: VA Salt Lake City

EMAX PM: Caspar/Linh

Send Report To: Attn: Cherie Zakowski
Company: CDM Smith
Address: 555 17th Street, Suite 500
Denver, CO 80202

Task Order #: NA

SDG: 24F066 **DATE/ TIME RECEIVED:** 6/14/2024 9:45 **DUE DATE:** 6/18/2024

Lwks ID	Control #	Sample ID	Matrix	Coll Date	Time	Lwks Method	Analysis
EV27190	F066-01	EW01-GW061224-246	WATER	6/12/2024	16:45	8260CW	VOCs by 8260C
EV27191	F066-02	TB09-GW061324	WATER	6/13/2024	8:30	8260CW	VOCs by 8260C
EV27192	F066-03	EW01-GW061324-265	WATER	6/13/2024	11:00	8260CW	VOCs by 8260C
EV27193	F066-04	EW01-GW061324-285	WATER	6/13/2024	14:00	8260CW	VOCs by 8260C
EV27194	F066-05	EB07-GW061324	WATER	6/13/2024	15:35	8260CW	VOCs by 8260C

DF 6/14/24

Report Format: REVIEW

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. 24F066
		SAMPLE STORAGE	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 80203
EMAX PM: Linh Pham

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=NaOH
SS=Soil/ Sediment	ST=Na2S2O3
WP=Wipes PP=Pure Products	ZA=Zinc Acetate
AR=Air	HS=H2SO4
O=	

ANALYSIS REQUIRED: 8260 VOCs; 8260 VOCs

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 IC	HC	COMMENTS
1	EW01-GW061224-246		6/12/24	1645	3	40mL	VOA	GW		X		
2	TB09-GW061324		6/13/24	0830	2	40mL	VOA	GW			X	
3	EW01-GW061324-265		6/13/24	1100	3	40mL	VOA	GW		X		
4	EW01-GW061324-285		6/13/24	1400	3	40mL	VOA	GW			X	
5	EB07-GW061324		6/13/24	1535	3	40mL	VOA	GW			X	
6												
7												
8												
9												

Instructions: CC: SmithNJL@cdmsmith.com and MillerJC@cdmsmith

Cooler #	Temp. (°C)	Sample #s
1	3.9	

SAMPLER: Isaac Nance, Joe Miller
COURIER/AIRBILL: FEDEX

RELINQUISHED BY	Date	Time	RECEIVED BY
	6/13/24	1630	
	6/14/24	9:45	

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 24F066
☒ Fedex ☐ UPS ☐ GSO ☐ Others	2758 9482 1102	Recipient Maria Rivera
☐ EMAX Courier ☐ Client Delivery		Date 06/14/24 Time 9:45

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 3.9 °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* 210706272	*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
5	12,13	D14		R4

☐ 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 1,3,4 vials have a layer of sediment at the bottom, under 25%.

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	Insuffieient chemical preservative
D19	Insufficient Sample
D20	No filtration info for dissolved analysis
D21	No sample for moisture detennination
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 | Jocelyne Solis-Ramos

Date: 06/14/24 | 06/14/24

SRF _____ Date 6/14/24

PM _____ Date 6/14/24

EMAX LABORATORIES, INC.

REFERENCE: EMAX-SM02 Rev. 12

SAMPLE RECEIPT FORM 2

SAMPLES RECEIVED FOR ECN: 24F066

pH paper Lot #: N/A

LAB SAMPLE ID (*)	LAB SAMPLE CONTAINER ID	COOLER#	CONTAINER TYPE								CHEMICAL PRESERVATIVE												Filtered	
			Jar	Amber	HDPE	Encore	Vial	Tube	Bag	Other	NONE	HCl (pH<2)	HNO_3 (pH<2)	H_2SO_4 (pH<2)	ZnAc +NaOH (pH>9)	ZnAc +NaOH (pH>12)	NaOH (pH>10)	NaOH (pH≥12)	$Na_2S_2O_3$	Methanol	NaHSO4	Other	Yes	No
1	* 1	1					/				/													
	* 2						/				/													
	* 3						/				/													
2	* 4						/					/												
	* 5						/					/												
3	* 6						/				/													
	* 7						/				/													
	* 8						/				/													
4	* 9						/					/												
	* 10						/					/												
	* 1						/					/												
5	* 2						/					/												
	* 3	↓					/					/												
	* 4	1					/					/												
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	* 7																							
	* 8																							
	* 9																							
	* 0																							

Maria Rivera
06/14/24

ORIGIN ID:NPHA (310) 618-8889

CDM SMITH, INC
555 17TH ST STE 500

DENVER, CO 80202
UNITED STATES US

SHIP DATE: 13JUN24
ACTWGT: 10.45 LB
CAD: 6997117/SSF02521
DIMS: 13x9x9 IN

BILL THIRD PARTY

TO **EMAX LABORATORY**
ATTN SAMPLE RECEIVING
3051 FUJITA ST

sealed

TORRANCE CA 90505
(310) 618-8889
INV:
PO:
REF: 275859 TS1.DRILL
DEPT:



FedEx Express

REL# 3785346

TRK# 0201 **2758 9482 1102**

FRI - 14 JUN 5:00P
STANDARD OVERNIGHT

WZ HHRA

90505
CA-US **LAX**



Part # 156207-443 DEC 25

EMAX
LABORATORIES, INC.
3051 Fujita Street
Torrance, CA 90505
Tel: (310)-618-8889

Date: 06-21-2024
EMAX Batch No.: 24F069

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 06/15/24.
The data reported relate only to samples listed below :

Sample ID	Control #	Col Date	Matrix	Analysis
EW01-GW061424-315	F069-01	06/14/24	WATER	VOCS BY 8260C
TB10-GW061424	F069-02	06/14/24	WATER	VOCS BY 8260C
EB08-GW061424	F069-03	06/14/24	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. 24F069
PROJECT CODE:

CLIENT: CDM Smith
PROJECT: 700 S. 1600 E. PCE Plume
COORDINATOR: Cherie Zakowski
TEL: 720-264-1108 FAX: EMAIL: ZakowskiCA@cdmsmith.com
SEND REPORT TO
COMPANY: CDM Smith
ADDRESS: 555 17th St. Ste 500
Denver, CO 80201
EMAX PM: Linh Pham

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: 8260 VOCs; 4260 VOCs; TCLP Metals + Hg; TCLP VOCs; TCLP SVOCs; pH; Flashpoint/Ignitability; Reactive Cyanide; Reactive Sulfide

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: 8260 VOCs	4260 VOCs	TCLP Metals + Hg	TCLP VOCs	TCLP SVOCs	pH	Flashpoint/Ignitability	Reactive Cyanide	Reactive Sulfide		COMMENTS
1	1	EW01-GW061424-315		6/14/24	1120	3	40mL	VOA	GW		X										
2	2	TB10-GW061424		6/14/24	0830	3	40mL	VOA	GW			X									
3	3	EB08-GW061424		6/14/24	1245	3	40mL	VOA	GW			X									
4	4	IDW03-SB061424		6/14/24	1310	2	8oz	Jar	SS				X	X	X	X	X	X	X		14 day TAT 24F069A
	5																				
	6																				
	7																				
	8																				
	9																				
	10																				

Instructions
CC Joe Miller millerJC@cdmsmith.com
and Neil Smith smithNL@cdmsmith.com

Cooler #	Temp. (°C)	Sample #s
1	5.0	

SAMPLER: Isaac Nance, Nathan Norris
COURIER/AIRBILL: FEDEX

RELINQUISHED BY	Date	Time	RECEIVED BY
Isaac Nance	6/14/24	1600	
	6/15/24	10:36	

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 24F069
☒ Fedex ☐ UPS ☐ GSO ☐ Others	2759 3870 7201	Recipient Jhowin Zamora
☐ EMAX Courier ☐ Client Delivery		Date 06/15/24 Time 10:30

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 5.0 °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* 210600272	(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
3	7,8	D14		R4

☐ 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 1 unpreserved vials have a layer of sediment on the bottom, not >20%.

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 06/17/24 6/17/24

SRF — Date 6/17/24

PM — Date 6/17/24

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#: 24F069

CASE NARRATIVE

Client : CDM SMITH

Project: VA SALT LAKE CITY

SDG : 24F069

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

A total of three(3) water samples were received on 06/15/24 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. There was one(1)CCV associated with this SDG. Target analytes in CCV(Data File ID: RFW255) were within calibration acceptance criteria. All calibration requirements were satisfied. 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. VO06F15B - 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. Lab control sample was prepared and analyzed at a frequency required by the project. All analytes were within LCS limits except for: VO06F15L/VO06F15C - Percent recovery for Bromoform in LCD. RPD for Vinyl Acetate(RPD=26*) was not within LCD QC limits. The rest of the analytes were in control. Refer to LCS summary form 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. : 24F069
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	VO06F15L	1	NA	06/18/2410:45	06/18/2410:45	RFW256	RFW007	VO06F15	Lab Control Sample (LCS)
LCD1W	VO06F15C	1	NA	06/18/2411:11	06/18/2411:11	RFW257	RFW007	VO06F15	LCS Duplicate
MBLK1W	VO06F15B	1	NA	06/18/2412:15	06/18/2412:15	RFW259	RFW007	VO06F15	Method Blank
TB10-GW061424	24F069-02	1	NA	06/18/2419:42	06/18/2419:42	RFW275	RFW007	VO06F15	Field Sample
EB08-GW061424	24F069-03	1	NA	06/18/2420:08	06/18/2420:08	RFW276	RFW007	VO06F15	Field Sample
EW01-GW061424-315	24F069-01	1	NA	06/18/2420:35	06/18/2420:35	RFW277	RFW007	VO06F15	Field Sample

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	06/14/24 11:20
Project	: VA SALT LAKE CITY	Date Received:	06/15/24
Batch No.	: 24F069	Date Extracted:	06/18/24 20:35
Sample ID	: EW01-GW061424-315	Date Analyzed:	06/18/24 20:35
Lab Samp ID:	24F069-01	Dilution Factor:	1
Lab File ID:	RFW277	Matrix:	WATER
Ext Btch ID:	VO06F15	% Moisture:	NA
Calib. Ref.:	RFW007	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	0.16J	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	0.55J	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	0.45J	1.0	0.15
Toluene	0.27J	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	9.73	10.0	97	70-130
Toluene-d8	9.81	10.0	98	70-130
Dibromofluoromethane	10.6	10.0	106	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DHuynh Analyzed by : DHuynh
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F18\RFW277.D Vial: 24
Acq On : 18 Jun 2024 8:35 pm Operator: DHuynh
Sample : 24F069-01 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 19 17:56 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

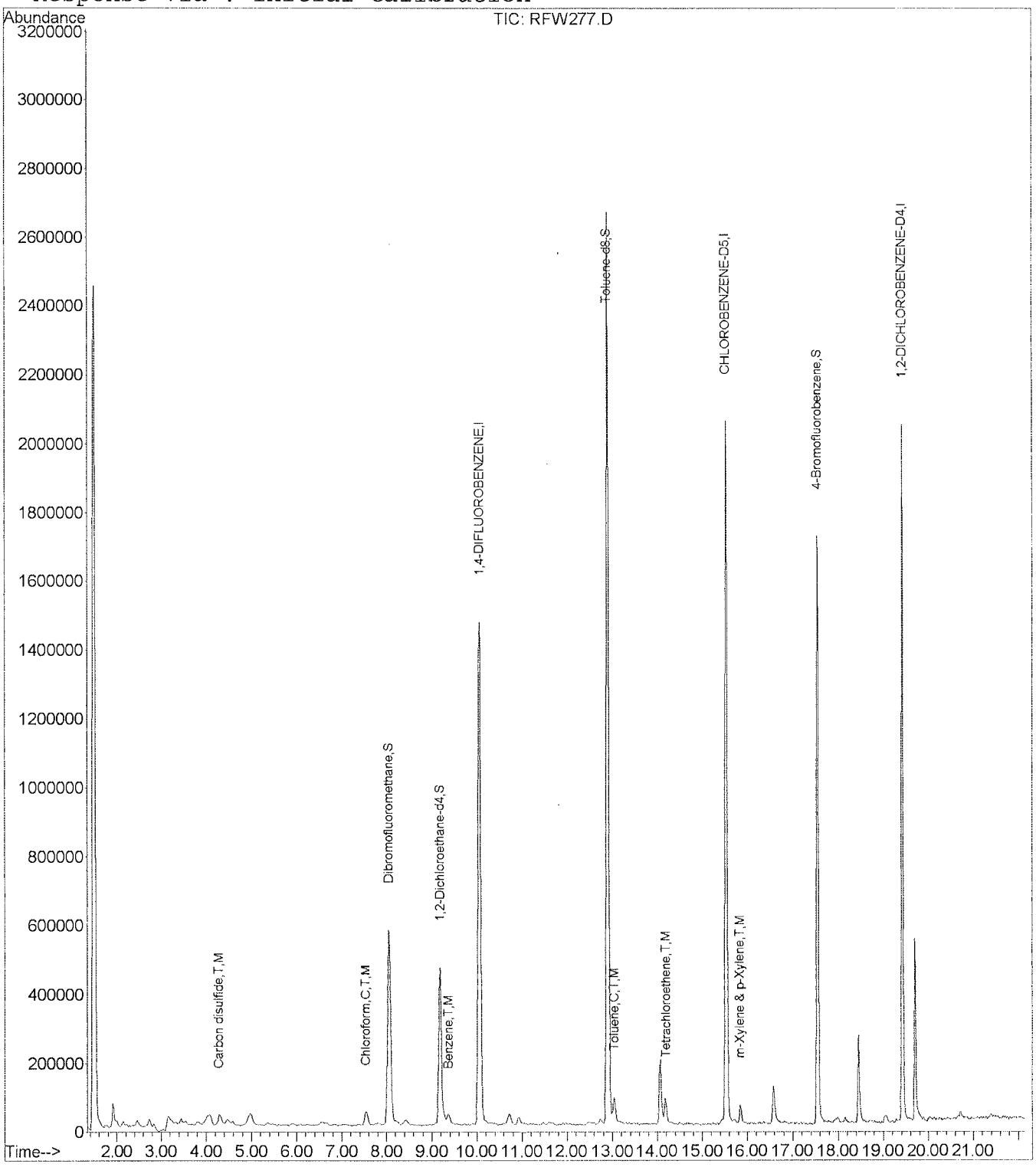
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.07	114	2813046	10.00	ug/l	0.02
54) CHLOROBENZENE-D5	15.53	117	2283975	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.43	152	837059	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	8.06	111	897504	10.63	ug/l	0.00
Spiked Amount 10.000			Recovery = 106.30%			
42) 1,2-Dichloroethane-d4	9.19	65	631538	10.40	ug/l	0.00
Spiked Amount 10.000			Recovery = 104.00%			
55) Toluene-d8	12.90	98	3374201	9.81	ug/l	0.00
Spiked Amount 10.000			Recovery = 98.10%			
77) 4-Bromofluorobenzene	17.54	95	1080305	9.73	ug/l	0.00
Spiked Amount 10.000			Recovery = 97.30%			
Target Compounds						Qvalue
19) Carbon disulfide	4.28	76	68013	0.17	ug/l	91
31) Chloroform	7.53	83	87973	0.55	ug/l	97
44) Benzene	9.38	78	58949	0.16	ug/l	85
56) Toluene	13.05	91	106130	0.27	ug/l	98
62) Tetrachloroethene	14.20	164	33111	0.45	ug/l	96
70) m-Xylene & p-Xylene	15.84	91	59724	0.18	ug/l	93

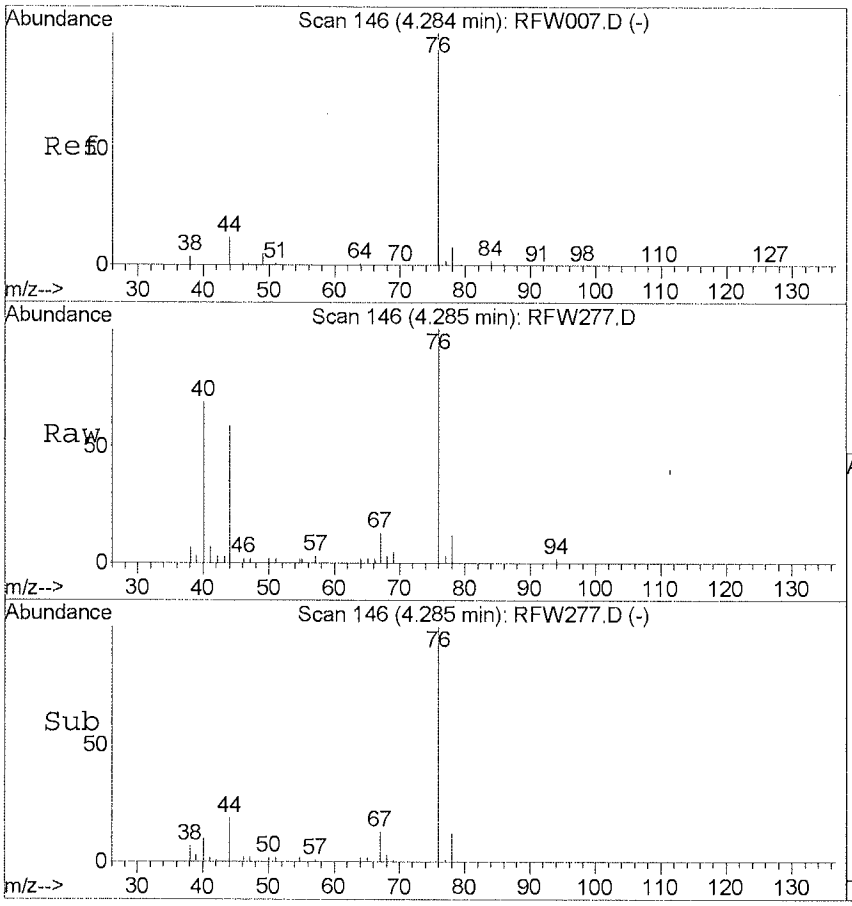
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F18\RFW277.D Vial: 24
Acq On : 18 Jun 2024 8:35 pm Operator: DHuynh
Sample : 24F069-01 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 19 17:56 2024 Quant Results File: VO06F03.RE

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration

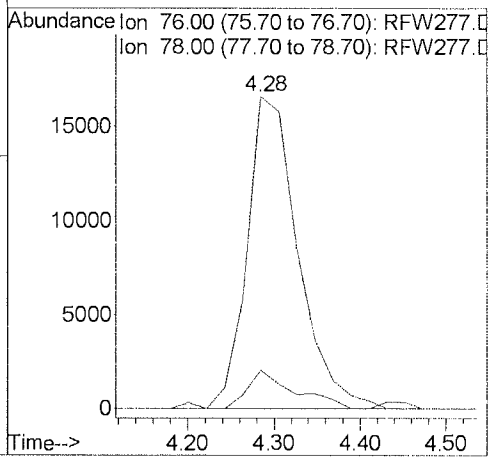


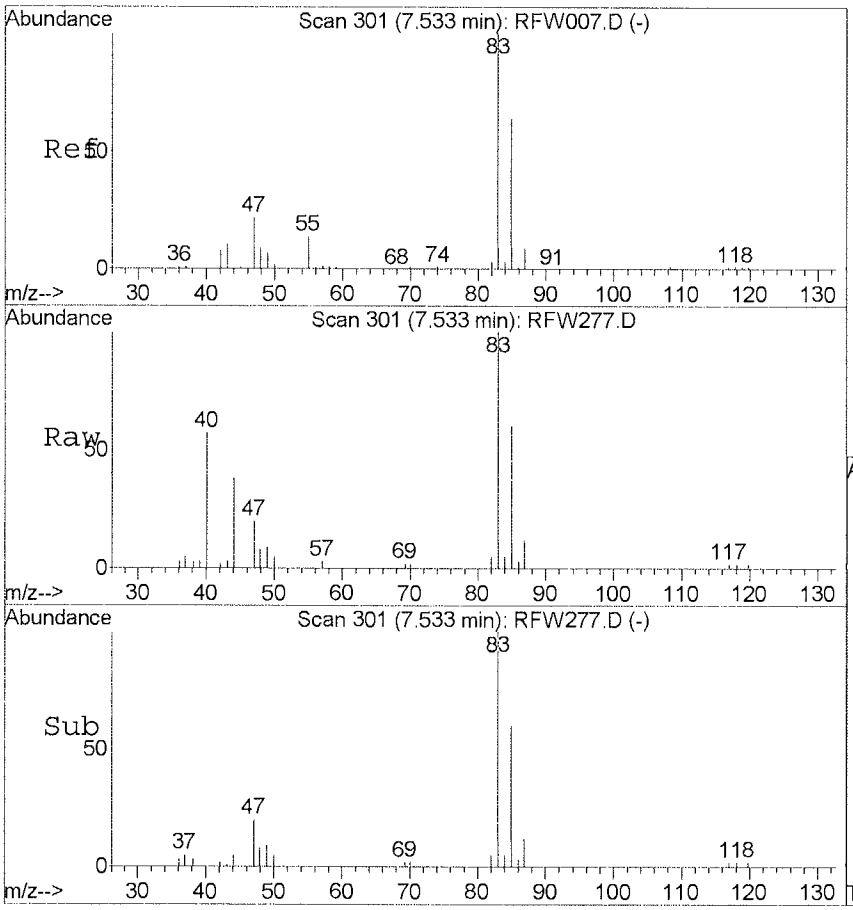


#19
Carbon disulfide
Concen: 0.17 ug/l
RT: 4.28 min Scan# 146
Delta R.T. 0.00 min
Lab File: RFW277.D
Acq: 18 Jun 2024 8:35 pm

Tgt Ion: 76 Resp: 68013

Ion	Ratio	Lower	Upper
76	100		
78	11.3	0.0	38.1

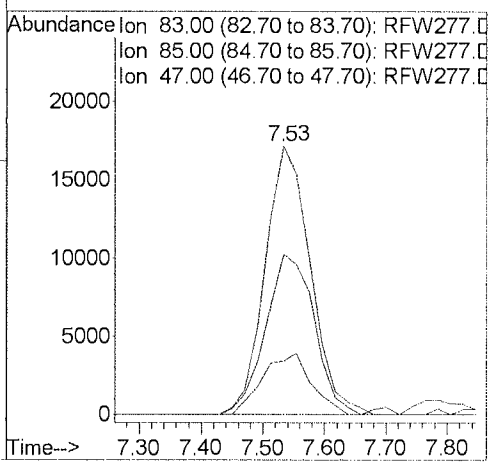


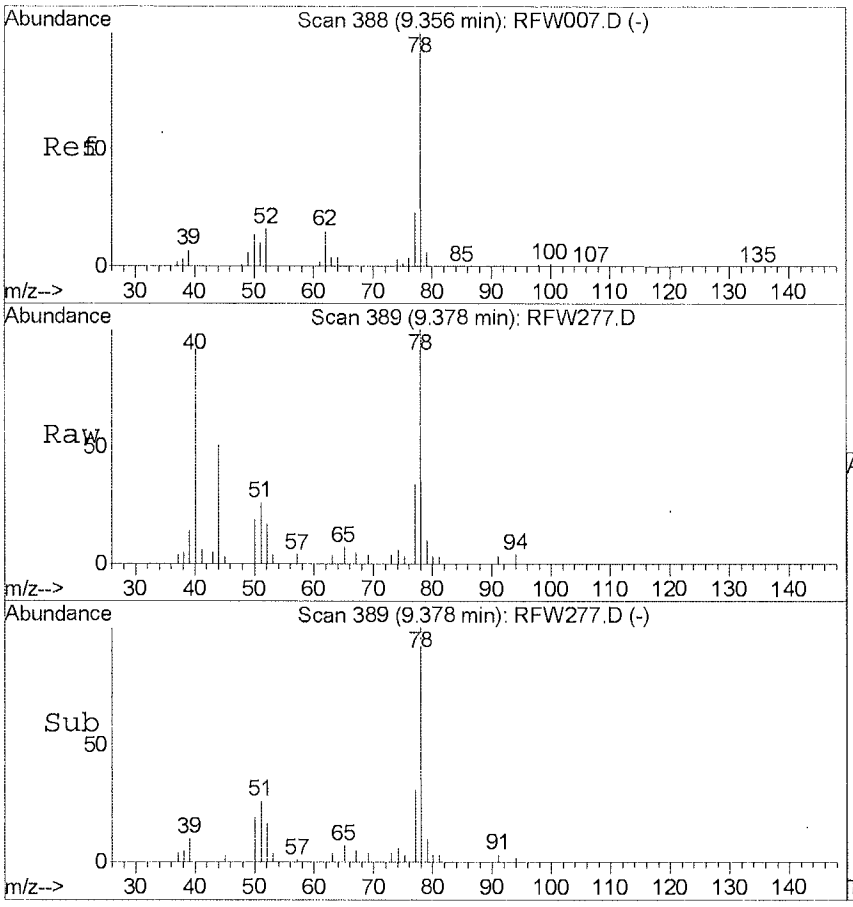


#31
Chloroform
Concen: 0.55 ug/l
RT: 7.53 min Scan# 301
Delta R.T. 0.00 min
Lab File: RFW277.D
Acq: 18 Jun 2024 8:35 pm

Tgt Ion: 83 Resp: 87973

Ion	Ratio	Lower	Upper
83	100		
85	63.9	36.2	96.2
47	24.5	0.0	53.3

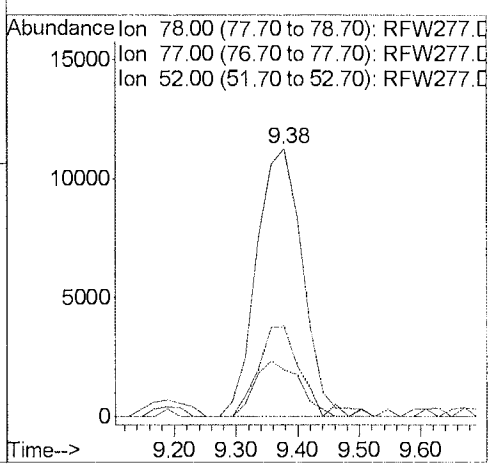


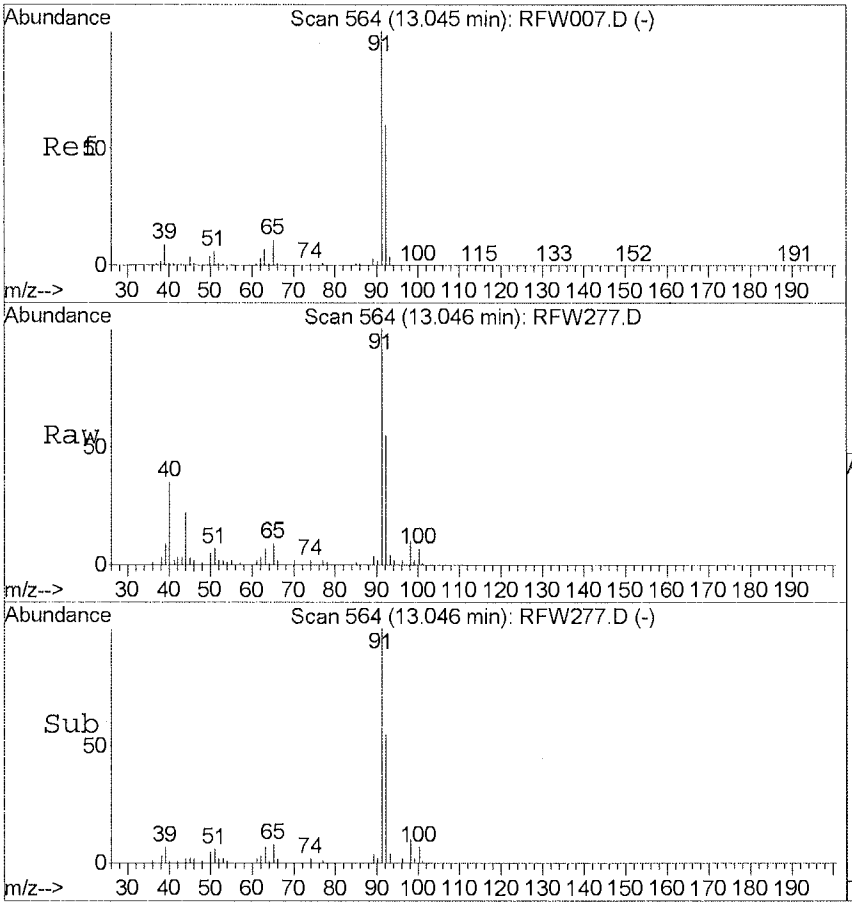


#44
Benzene
Concen: 0.16 ug/l
RT: 9.38 min Scan# 389
Delta R.T. 0.02 min
Lab File: RFW277.D
Acq: 18 Jun 2024 8:35 pm

Tgt Ion: 78 Resp: 58949

Ion	Ratio	Lower	Upper
78	100		
77	31.2	0.0	52.3
52	20.0	0.0	45.9

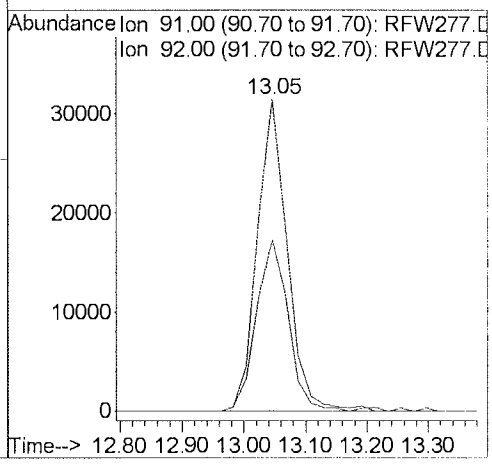


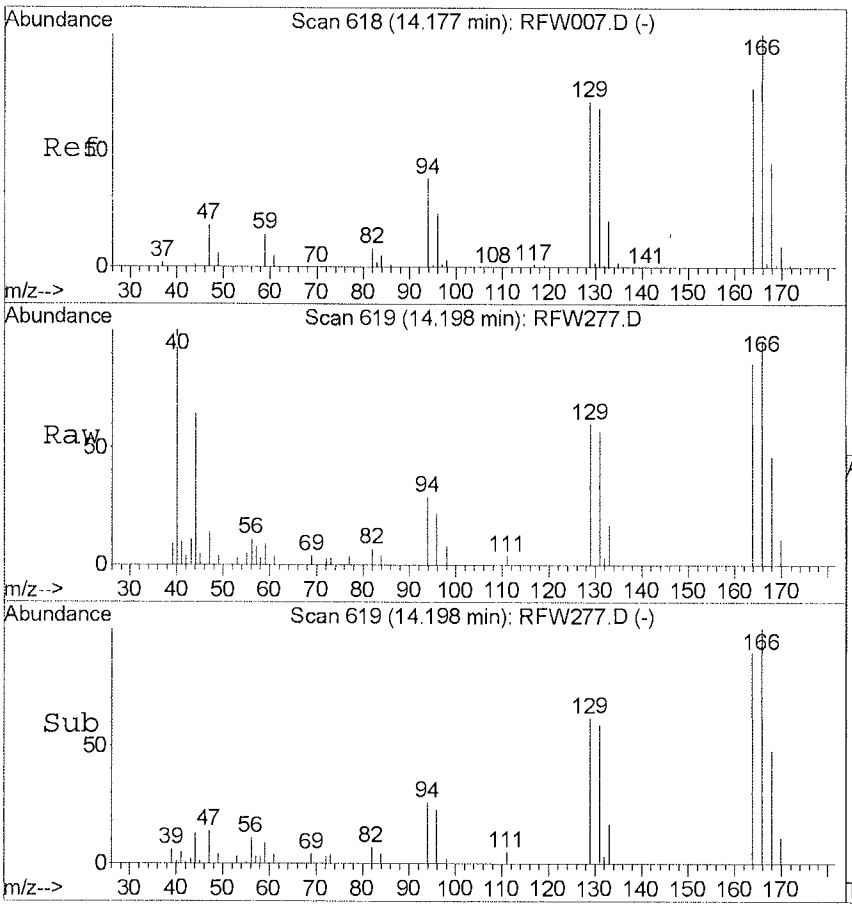


#56
Toluene
Concen: 0.27 ug/l
RT: 13.05 min Scan# 564
Delta R.T. 0.00 min
Lab File: RFW277.D
Acq: 18 Jun 2024 8:35 pm

Tgt Ion: 91 Resp: 106130

Ion	Ratio	Lower	Upper
91	100		
92	58.4	29.6	89.6

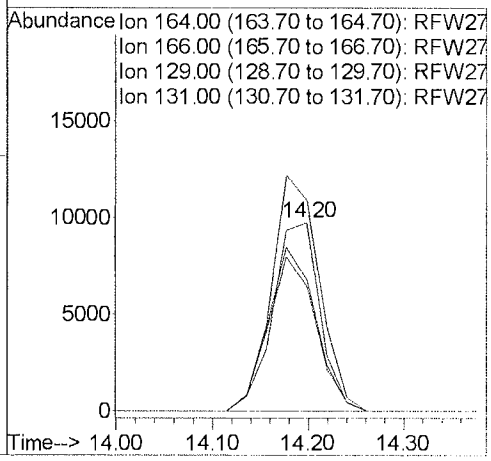


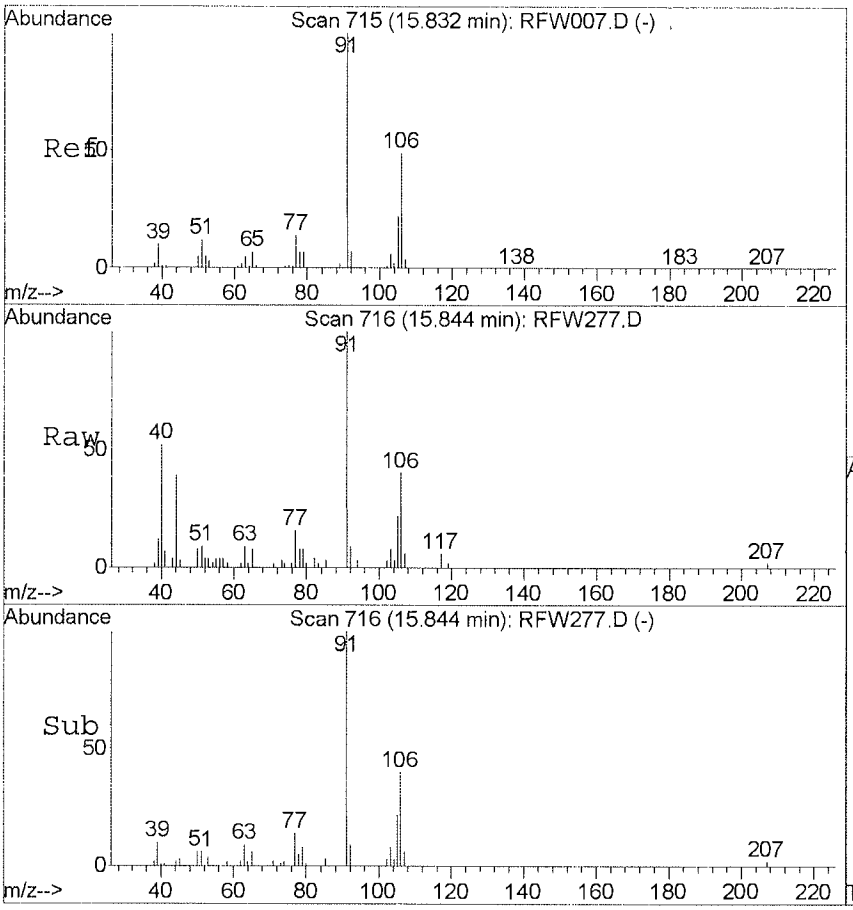


#62
Tetrachloroethene
Concen: 0.45 ug/l
RT: 14.20 min Scan# 619
Delta R.T. 0.02 min
Lab File: RFW277.D
Acq: 18 Jun 2024 8:35 pm

Tgt Ion:164 Resp: 33111

Ion	Ratio	Lower	Upper
164	100		
166	126.8	98.8	158.8
129	88.1	62.9	122.9
131	83.3	58.6	118.6

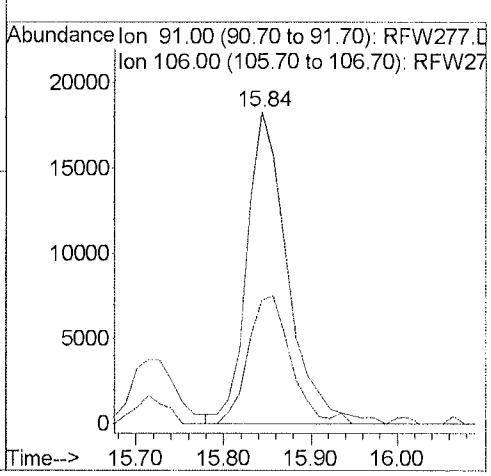




#70
m-Xylene & p-Xylene
Concen: 0.18 ug/l
RT: 15.84 min Scan# 716
Delta R.T. 0.01 min
Lab File: RFW277.D
Acq: 18 Jun 2024 8:35 pm

Tgt Ion: 91 Resp: 59724

Ion	Ratio	Lower	Upper
91	100		
106	43.1	17.8	77.8



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	06/14/24 08:30
Project	: VA SALT LAKE CITY	Date Received:	06/15/24
Batch No.	: 24F069	Date Extracted:	06/18/24 19:42
Sample ID	: TB10-GW061424	Date Analyzed:	06/18/24 19:42
Lab Samp ID:	24F069-02	Dilution Factor:	1
Lab File ID:	RFW275	Matrix:	WATER
Ext Btch ID:	VOO6F15	% Moisture:	NA
Calib. Ref.:	RFW007	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	10.4	10.0	104	70-130
Bromofluorobenzene	9.66	10.0	97	70-130
Toluene-d8	9.88	10.0	99	70-130
Dibromofluoromethane	10.5	10.0	105	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DHuynh Analyzed by : DHuynh
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F18\RFW275.D Vial: 22
Acq On : 18 Jun 2024 7:42 pm Operator: DHuynh
Sample : 24F069-02 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 19 17:57 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

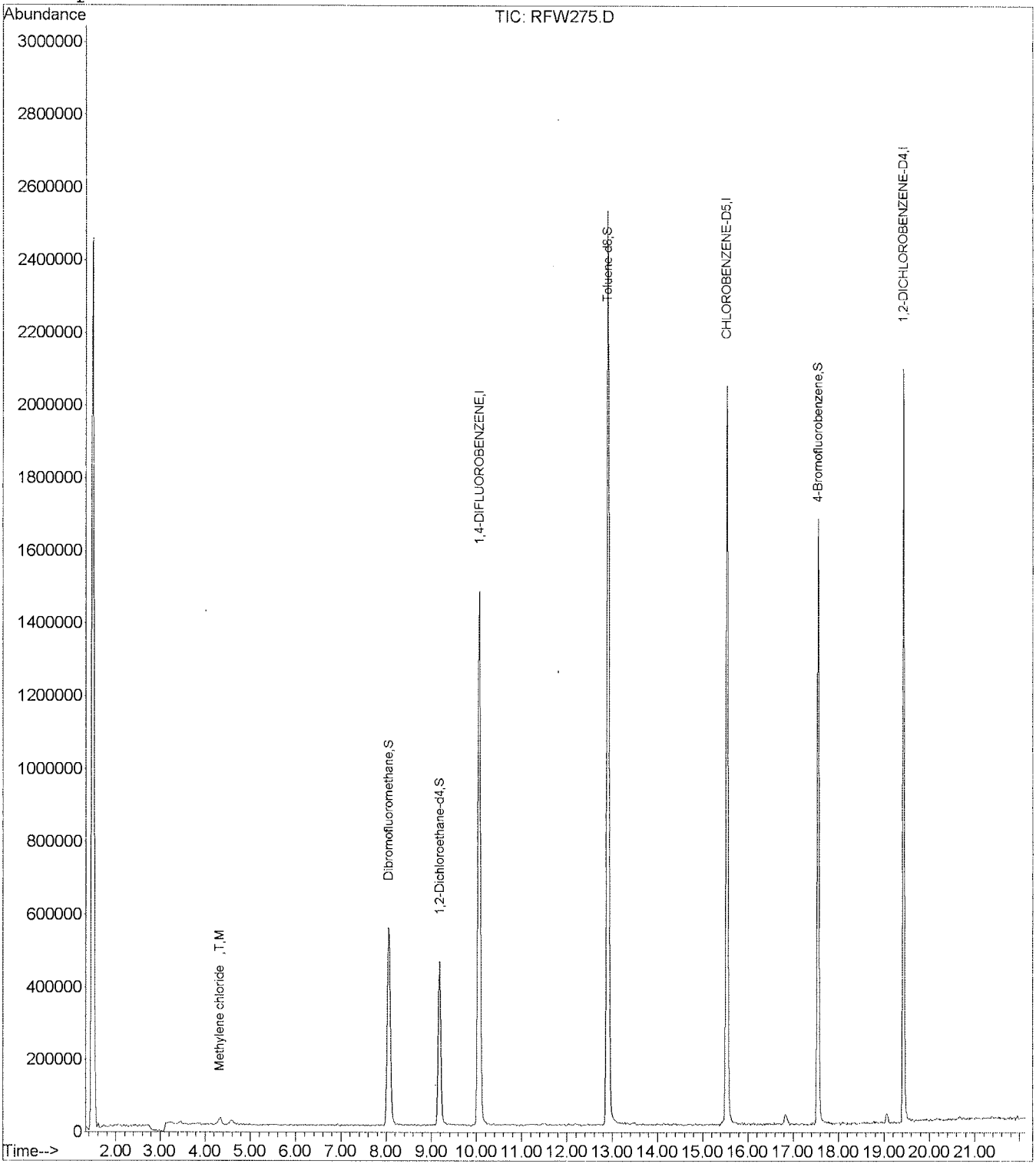
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.07	114	2776335	10.00	ug/l	0.02
54) CHLOROBENZENE-D5	15.53	117	2237074	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.43	152	840455	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	8.06	111	878698	10.54	ug/l	0.00
Spiked Amount 10.000			Recovery = 105.40%			
42) 1,2-Dichloroethane-d4	9.19	65	623706	10.41	ug/l	0.00
Spiked Amount 10.000			Recovery = 104.10%			
55) Toluene-d8	12.90	98	3326906	9.88	ug/l	0.00
Spiked Amount 10.000			Recovery = 98.80%			
77) 4-Bromofluorobenzene	17.54	95	1077017	9.66	ug/l	0.00
Spiked Amount 10.000			Recovery = 96.60%			
Target Compounds						Qvalue
18) Methylene chloride	4.33	49	22193	0.18	ug/l	85

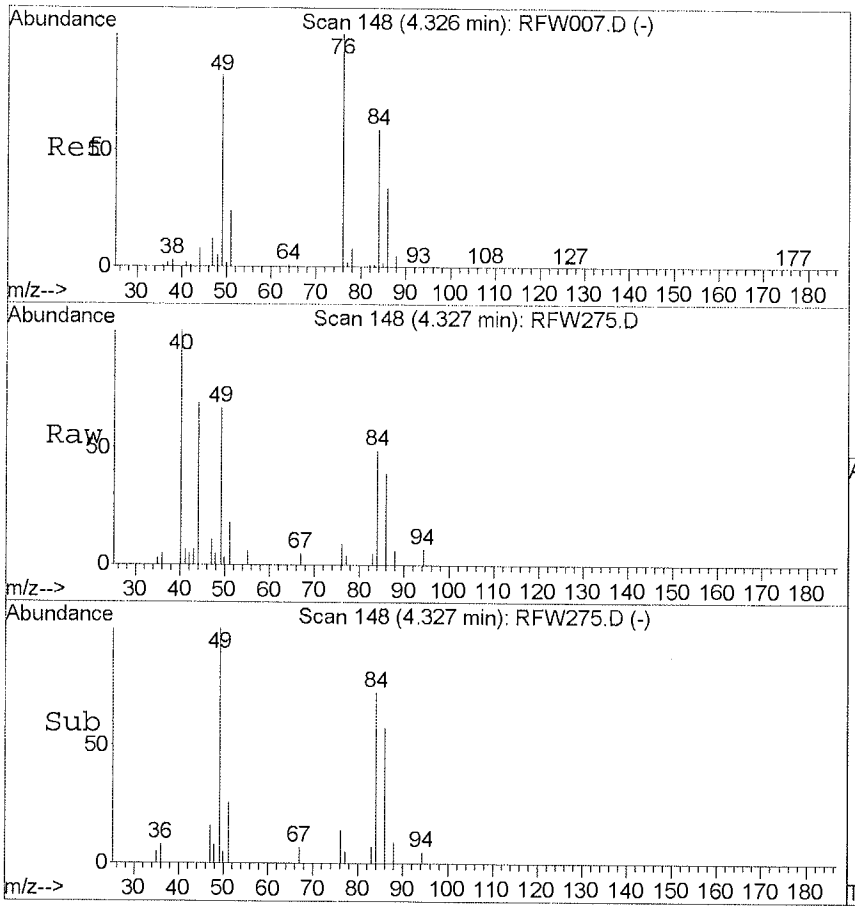
(#) = qualifier out of range (m) = manual integration
RFW275.D VO06F03.M Wed Jun 19 17:57:25 2024 Page 1

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F18\RFW275.D Vial: 22
Acq On : 18 Jun 2024 7:42 pm Operator: DHuynh
Sample : 24F069-02 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 19 17:57 2024 Quant Results File: VO06F03.RE

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration

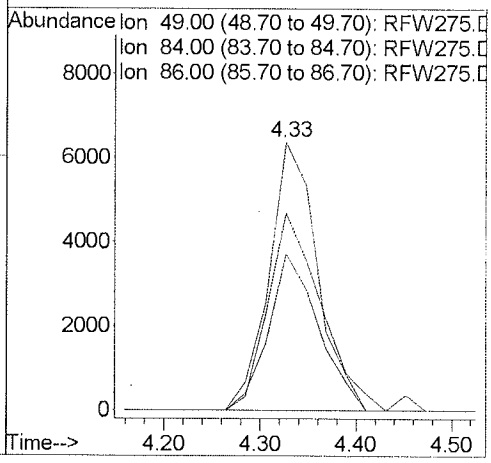




#18
Methylene chloride
Concen: 0.18 ug/l
RT: 4.33 min Scan# 148
Delta R.T. 0.00 min
Lab File: RFW275.D
Acq: 18 Jun 2024 7:42 pm

Tgt Ion: 49 Resp: 22193

Ion	Ratio	Lower	Upper
49	100		
84	83.2	45.0	105.0
86	60.7	14.6	74.6



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	06/14/24 12:45
Project	: VA SALT LAKE CITY	Date Received:	06/15/24
Batch No.	: 24F069	Date Extracted:	06/18/24 20:08
Sample ID	: EB08-GW061424	Date Analyzed:	06/18/24 20:08
Lab Samp ID:	24F069-03	Dilution Factor:	1
Lab File ID:	RFW276	Matrix:	WATER
Ext Btch ID:	VOO6F15	% Moisture:	NA
Calib. Ref.:	RFW007	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	10.1	10.0	101	70-130
Bromofluorobenzene	9.58	10.0	96	70-130
Toluene-d8	10.0	10.0	100	70-130
Dibromofluoromethane	10.7	10.0	107	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DHuynh Analyzed by : DHuynh
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F18\RFW276.D Vial: 23
Acq On : 18 Jun 2024 8:08 pm Operator: DHuynh
Sample : 24F069-03 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 19 17:59 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.07	114	2840906	10.00	ug/l	0.02
54) CHLOROBENZENE-D5	15.53	117	2259057	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.43	152	855460	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	8.06	111	912094	10.70	ug/l	0.00
Spiked Amount 10.000			Recovery =	107.00%		
42) 1,2-Dichloroethane-d4	9.19	65	621126	10.13	ug/l	0.00
Spiked Amount 10.000			Recovery =	101.30%		
55) Toluene-d8	12.90	98	3409044	10.03	ug/l	0.00
Spiked Amount 10.000			Recovery =	100.30%		
77) 4-Bromofluorobenzene	17.55	95	1086473	9.58	ug/l	0.00
Spiked Amount 10.000			Recovery =	95.80%		

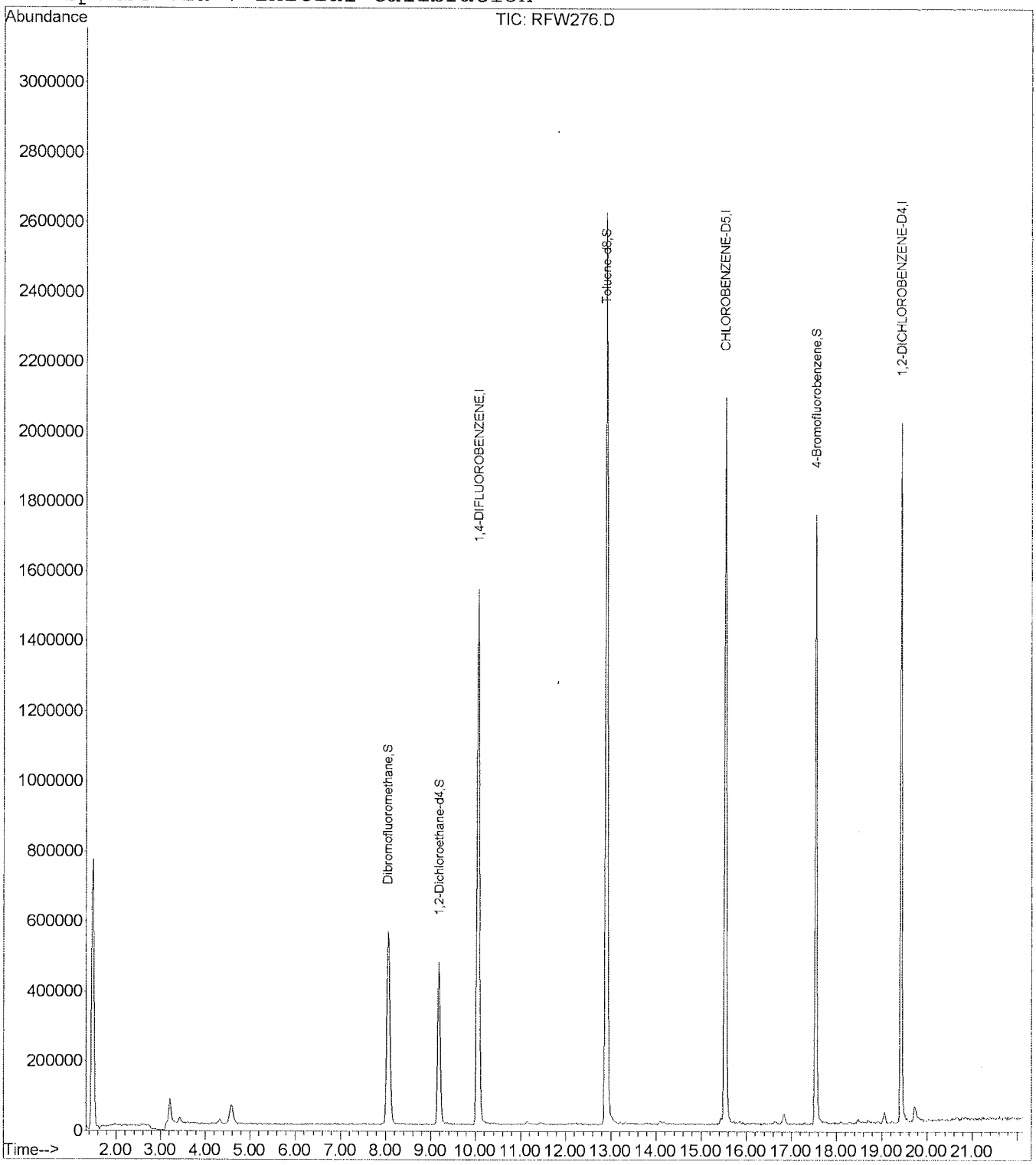
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
RFW276.D VO06F03.M Wed Jun 19 17:59:55 2024 Page 1

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F18\RFW276.D Vial: 23
Acq On : 18 Jun 2024 8:08 pm Operator: DHuynh
Sample : 24F069-03 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 19 17:59 2024 Quant Results File: VO06F03.RE

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration



QC SUMMARIES

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	06/18/24 12:15
Project	: VA SALT LAKE CITY	Date Received:	06/18/24
Batch No.	: 24F069	Date Extracted:	06/18/24 12:15
Sample ID	: MBLK1W	Date Analyzed:	06/18/24 12:15
Lab Samp ID:	VO06F15B	Dilution Factor:	1
Lab File ID:	RFW259	Matrix:	WATER
Ext Btch ID:	VO06F15	% Moisture:	NA
Calib. Ref.:	RFW007	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	9.91	10.0	99	70-130
Bromofluorobenzene	9.94	10.0	99	70-130
Toluene-d8	10.0	10.0	100	70-130
Dibromofluoromethane	10.4	10.0	104	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : DHuynh Analyzed by : DHuynh
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. : 24F069
METHOD : SW50308/8260C

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR:	1	1	1
SAMPLE ID	: M8LK1W	LCS1W	LCD1W
LAB SAMPLE ID	: V006F158	V006F15L	V006F15C
LAB FILE ID	: RFW259	RFW256	RFW257
DATE PREPARED	: 06/18/24 12:15	06/18/24 10:45	06/18/24 11:11
DATE ANALYZED	: 06/18/24 12:15	06/18/24 10:45	06/18/24 11:11
PREP 8ATCH	: V006F15	V006F15	V006F15
CALI8RATION REF:	RFW007	RFW007	RFW007

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	11.2	112	10.0	9.97	100	12	74-131	20
1,1,2,2-Tetrachloroethane	ND	10.0	9.22	92	10.0	10.1	101	9	71-121	20
1,1,2-Trichloroethane	ND	10.0	9.36	94	10.0	10.7	107	13	80-119	20
1,1-Dichloroethane	ND	10.0	10.7	107	10.0	10.0	100	7	77-125	20
1,1-Dichloroethene	ND	10.0	10.4	104	10.0	9.39	94	10	71-131	20
1,2,3-Trichlorobenzene	ND	10.0	9.18	92	10.0	9.78	98	6	69-129	20
1,2,4-Trichlorobenzene	ND	10.0	9.86	99	10.0	10.2	102	3	69-130	20
1,2,4-Trimethylbenzene	ND	10.0	9.48	95	10.0	9.61	96	1	76-124	20
1,2-Dibromo-3-chloropropane	ND	10.0	9.93	99	10.0	11.2	112	12	62-138	20
1,2-Oichlorobenzene	ND	10.0	9.70	97	10.0	10.2	102	5	80-119	20
1,2-Dichloroethane	ND	10.0	9.76	98	10.0	10.3	103	5	73-128	20
1,2-Oichloropropane	ND	10.0	9.42	94	10.0	10.0	100	6	78-122	20
1,3,5-Trimethylbenzene	ND	10.0	9.24	92	10.0	9.54	95	3	75-124	20
1,3-Oichlorobenzene	ND	10.0	9.36	94	10.0	10.3	103	10	80-119	20
1,4-Dichlorobenzene	ND	10.0	9.01	90	10.0	10.2	102	12	79-118	20
2-8utanone	ND	50.0	43.1	86	50.0	50.5	101	16	56-143	20
2-Hexanone	ND	50.0	42.0	84	50.0	51.5	103	20	57-139	20
Acetone	ND	50.0	45.8	92	50.0	46.3	93	1	39-160	20
8enzene	ND	10.0	10.4	104	10.0	10.4	104	0	79-120	20
8romochloromethane	ND	10.0	11.1	111	10.0	11.0	110	1	78-120	20
8romodichloromethane	ND	10.0	9.51	95	10.0	10.1	101	6	79-125	20
8romoform	ND	10.0	11.9	119	10.0	13.4	134*	12	66-130	20
8romomethane	ND	10.0	10.6	106	10.0	10.0	100	6	53-141	20
Carbon Disulfide	ND	10.0	8.17	82	10.0	6.95	70	16	64-133	20
Carbon Tetrachloride	ND	10.0	11.1	111	10.0	10.3	103	7	72-136	20
Chlorobenzene	ND	10.0	10.1	101	10.0	10.5	105	4	82-118	20
Chloroethane	ND	10.0	9.08	91	10.0	8.34	83	8	60-138	20
Chloroform	ND	10.0	10.3	103	10.0	9.79	98	5	79-124	20
Chloromethane	ND	10.0	9.58	96	10.0	9.69	97	1	50-139	20
cis-1,2-Dichloroethylene	ND	10.0	10.8	108	10.0	10.0	100	8	78-123	20
Dibromochloromethane	ND	10.0	9.29	93	10.0	9.90	99	6	74-126	20
Dichlorodifluoromethane	ND	10.0	10.6	106	10.0	10.5	105	1	32-152	20
Ethylbenzene	ND	10.0	9.90	99	10.0	9.90	99	0	79-121	20
Isopropylbenzene	ND	10.0	9.58	96	10.0	9.48	95	1	72-131	20
m,p-Xylene	ND	20.0	20.1	101	20.0	20.4	102	1	80-121	20
4-Methyl-2-Pentanone	ND	50.0	47.5	95	50.0	54.4	109	14	67-130	20
Methylene Chloride	ND	10.0	10.7	107	10.0	9.61	96	11	74-124	20
tert-8utyl Methyl Ether	ND	10.0	11.5	115	10.0	11.1	111	4	71-124	20
o-Xylene	ND	10.0	9.97	100	10.0	9.89	99	1	78-122	20
Styrene	ND	10.0	10.1	101	10.0	10.7	107	6	78-123	20
Tetrachloroethene	ND	10.0	10.4	104	10.0	10.8	108	4	74-129	20
Toluene	ND	10.0	9.32	93	10.0	9.71	97	4	80-121	20
Trans-1,2-DCE	ND	10.0	11.0	110	10.0	10.1	101	9	75-124	20
cis-1,3-Dichloropropene	ND	10.0	9.30	93	10.0	10.4	104	11	75-124	20
Trans-1,3-Dichloropropene	ND	10.0	8.69	87	10.0	9.83	98	12	73-127	20
TCE	ND	10.0	10.6	106	10.0	11.0	110	4	79-123	20
Trichlorofluoromethane	ND	10.0	9.80	98	10.0	9.98	100	2	65-141	20
Vinyl Chloride	ND	10.0	10.0	100	10.0	9.60	96	4	58-137	20
1,2-Dibromoethane	ND	10.0	8.86	89	10.0	9.94	99	11	77-121	20
Vinyl Acetate	ND	10.0	9.09	91	10.0	11.8	118	26*	54-146	20
Trichlorotrifluoroethane	ND	10.0	12.3	123	10.0	10.7	107	14	70-136	20
Methyl Acetate	ND	10.0	8.98	90	10.0	9.26	93	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	10.3	103	70-130
8romofluorobenzene	10.0	9.77	98	10.0	10.4	104	70-130
Toluene-d8	10.0	10.0	100	10.0	9.77	98	70-130
Oibromofluoromethane	10.0	11.5	115	10.0	10.6	106	70-130

M8: Method 8lank 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\24F18\RFW259.D Vial: 6
Acq On : 18 Jun 2024 12:15 pm Operator: DHuynh
Sample : VO06F15B Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 19 17:50 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.07	114	3419081	10.00	ug/l	0.02
54) CHLOROBENZENE-D5	15.53	117	2722454	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.43	152	978225	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	8.06	111	1067527	10.40	ug/l	0.00
Spiked Amount 10.000			Recovery = 104.00%			
42) 1,2-Dichloroethane-d4	9.19	65	731561	9.91	ug/l	0.00
Spiked Amount 10.000			Recovery = 99.10%			
55) Toluene-d8	12.90	98	4111879	10.03	ug/l	0.00
Spiked Amount 10.000			Recovery = 100.30%			
77) 4-Bromofluorobenzene	17.55	95	1288885	9.94	ug/l	0.00
Spiked Amount 10.000			Recovery = 99.40%			

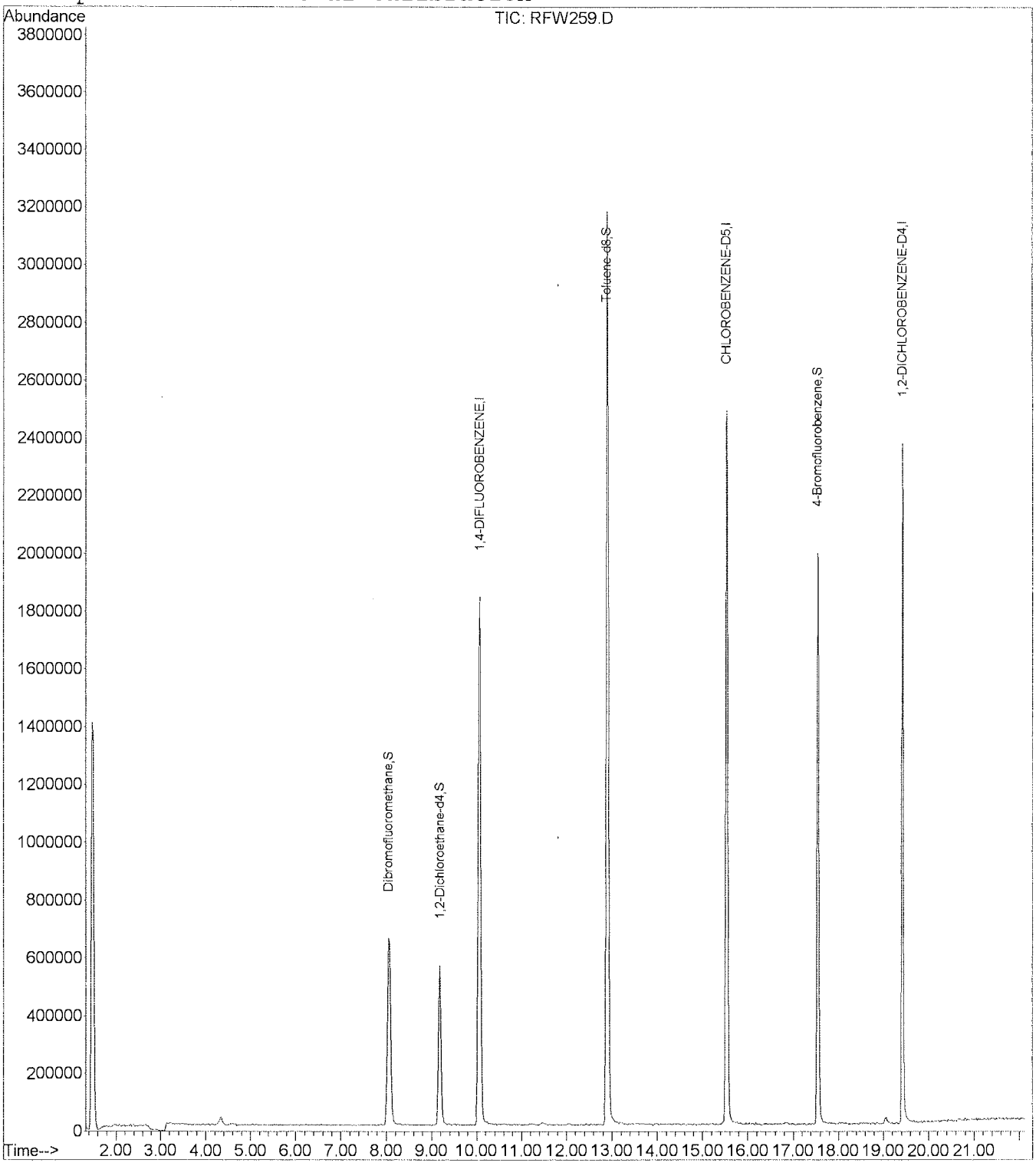
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
RFW259.D VO06F03.M Wed Jun 19 17:50:29 2024 Page 1

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F18\RFW259.D Vial: 6
Acq On : 18 Jun 2024 12:15 pm Operator: DHuynh
Sample : VO06F15B Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 19 17:50 2024 Quant Results File: VO06F03.RE

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F18\RFW256.D Vial: 3
Acq On : 18 Jun 2024 10:45 am Operator: DHuynh
Sample : VO06F15L Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 18 11:07 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.07	114	2949767	10.00	ug/l	0.02
54) CHLOROBENZENE-D5	15.53	117	2398860	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.43	152	882193	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	8.06	111	1020593	11.53	ug/l	0.00
Spiked Amount 10.000			Recovery =	115.30%		
42) 1,2-Dichloroethane-d4	9.19	65	649626	10.20	ug/l	0.00
Spiked Amount 10.000			Recovery =	102.00%		
55) Toluene-d8	12.90	98	3611822	10.00	ug/l	0.00
Spiked Amount 10.000			Recovery =	100.00%		
77) 4-Bromofluorobenzene	17.55	95	1143119	9.77	ug/l	0.00
Spiked Amount 10.000			Recovery =	97.70%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.63	85	925768	10.60	ug/l	100
3) Chloromethane	1.87	50	1273541	9.58	ug/l	98
4) Vinyl chloride	1.99	62	952448	10.05	ug/l	99
5) Bromomethane	2.44	94	909184	10.58	ug/l	96
6) Chloroethane	2.52	64	661419	9.08	ug/l	100
7) Dichlorofluoromethane	2.56	67	2255607	12.59	ug/l	98
8) Trichlorofluoromethane	2.80	101	1153988	9.80	ug/l	98
9) Acrolein	3.34	56	307177	51.02	ug/l	98
10) 1,1,2-Trichloro-1,2,2-trif	3.38	151	669185	12.32	ug/l	99
11) Acetone	3.43	43	462523	45.78	ug/l	99
12) 1,1-Dichloroethene	3.57	61	1630611	10.42	ug/l	94
13) tert-Butyl alcohol	3.74	59	862098	280.14	ug/l	97
15) Methyl acetate	4.14	74	61753	8.98	ug/l	99
16) Iodomethane	4.03	142	2033694	13.10	ug/l	96
18) Methylene chloride	4.33	49	1396225	10.65	ug/l	92
19) Carbon disulfide	4.31	76	3334024	8.17	ug/l	99
20) Acrylonitrile	4.58	53	705532	51.41	ug/l	98
21) tert-Butyl methyl ether (M	4.62	73	1742898	11.52	ug/l	98
22) trans-1,2-Dichloroethene	4.85	96	1200220	11.05	ug/l	99
23) Isopropyl ether (DIPE)	5.54	45	3565614	10.44	ug/l	96
24) Vinyl acetate	5.79	43	846928	9.09	ug/l	97
25) 1,1-Dichloroethane	5.71	63	1958738	10.65	ug/l	99
27) tert-Butyl ethyl ether (ET	6.49	59	2577832	10.39	ug/l	96
28) 2-Butanone	6.76	43	697071	43.11	ug/l	95
29) 2,2-Dichloropropane	7.03	77	1326426	12.73	ug/l	100
30) cis-1,2-Dichloroethene	7.16	96	1153602	10.85	ug/l	98
31) Chloroform	7.53	83	1732020	10.28	ug/l	99

(#) = qualifier out of range (m) = manual integration
RFW256.D VO06F03.M Wed Jun 19 17:50:51 2024 Page 1

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F18\RFW256.D Vial: 3
Acq On : 18 Jun 2024 10:45 am Operator: DHuynh
Sample : VO06F15L Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 18 11:07 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.91	130	510131	11.10	ug/l	97
33)	Tetrahydrofuran	8.04	42	91772	9.27	ug/l	97
34)	tert-Amyl alcohol	7.91	59	834	0.36	ug/l	97
36)	1,1,1-Trichloroethane	8.46	97	1451361	11.18	ug/l	98
37)	Cyclohexane	8.44	84	1467601	11.17	ug/l	99
39)	1,1-Dichloropropene	8.81	110	466558	10.56	ug/l	98
40)	Carbon tetrachloride	9.00	119	1162469	11.09	ug/l	100
41)	tert-Amyl methyl ether (TA	9.17	73	2056399	11.10	ug/l	98
43)	1,2-Dichloroethane	9.38	62	732786	9.76	ug/l	98
44)	Benzene	9.38	78	4103389	10.45	ug/l	99
45)	Trichloroethene	10.66	130	1064330	10.65	ug/l	98
46)	Methylcyclohexane	10.72	83	1842225	11.98	ug/l	96
47)	1,2-Dichloropropane	11.01	63	894071	9.42	ug/l	98
48)	1,4-Dioxane	11.56	88	54989	191.40	ug/l	100
49)	Bromodichloromethane	11.45	83	1035984	9.51	ug/l	99
50)	Dibromomethane	11.52	93	375051	9.34	ug/l	89
51)	2-Chloroethyl vinyl ether	12.14	63	290460	9.27	ug/l	99
52)	4-Methyl-2-pentanone	12.19	43	2182539	47.46	ug/l	95
53)	cis-1,3-Dichloropropene	12.50	75	1288976	9.30	ug/l	96
56)	Toluene	13.05	91	3896440	9.32	ug/l	98
57)	Ethyl methacrylate	13.47	69	667866	9.37	ug/l	95
58)	trans-1,3-Dichloropropene	13.42	75	894777	8.69	ug/l	95
59)	1,1,2-Trichloroethane	13.67	97	458731	9.36	ug/l	96
60)	2-Hexanone	13.76	43	1217534	42.03	ug/l	97
61)	1,3-Dichloropropane	14.14	76	875312	9.46	ug/l	97
62)	Tetrachloroethene	14.18	164	799298	10.39	ug/l	97
63)	Dibromochloromethane	14.53	129	608439	9.29	ug/l	98
65)	1,2-Dibromoethane	14.87	107	433201	8.86	ug/l	99
66)	1-Chlorohexane	15.22	91	1728980	8.79	ug/l	98
67)	Chlorobenzene	15.60	112	2378747	10.09	ug/l	100
68)	1,1,1,2-Tetrachloroethane	15.69	131	822139	10.37	ug/l	98
69)	Ethylbenzene	15.71	91	4518113	9.90	ug/l	100
70)	m-Xylene & p-Xylene	15.84	91	6855708	20.08	ug/l	100
71)	o-Xylene	16.57	91	3496497	9.97	ug/l	100
72)	Styrene	16.64	104	2499953	10.08	ug/l	98
73)	Isopropylbenzene	17.18	105	4121468	9.58	ug/l	99
75)	Bromoform	17.17	173	295107	11.86	ug/l	96
76)	1,1,2,2-Tetrachloroethane	17.45	83	534727	9.22	ug/l	95
78)	1,2,3-Trichloropropane	17.66	110	126607	9.43	ug/l	98
79)	trans-1,4-Dichloro-2-buten	17.77	53	132641	9.13	ug/l	99
80)	n-Propylbenzene	17.77	91	5372515	9.42	ug/l	99

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24F18\RFW256.D Vial: 3
Acq On : 18 Jun 2024 10:45 am Operator: DHuynh
Sample : VO06F15L Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 18 11:07 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

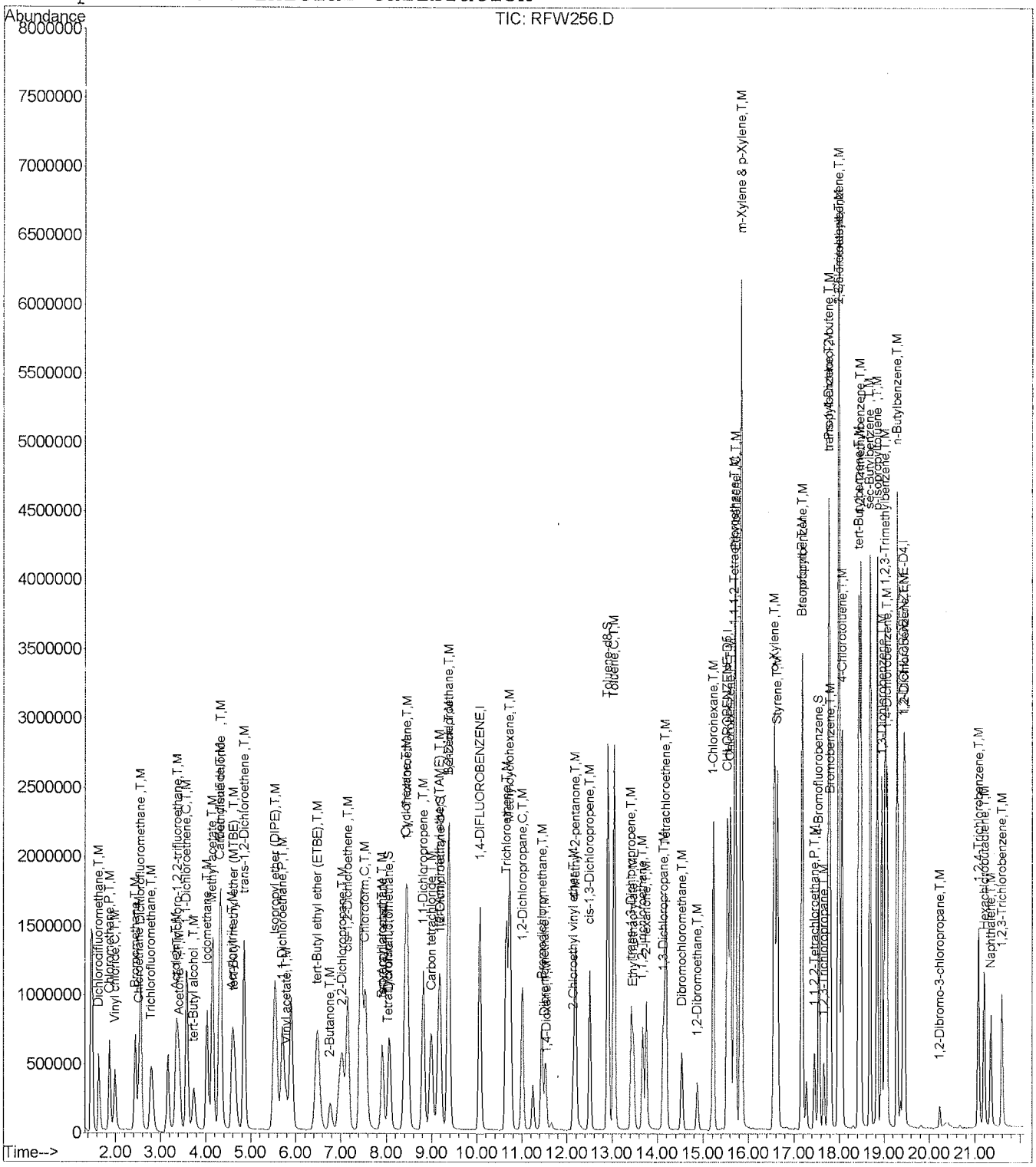
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
81)	Bromobenzene	17.80	156	812375	9.82	ug/l	97
82)	1,3,5-Trimethylbenzene	17.99	105	3424326	9.24	ug/l	98
83)	2-Chlorotoluene	17.99	91	3373177	9.11	ug/l	99
84)	4-Chlorotoluene	18.06	91	2833988	9.03	ug/l	99
85)	tert-Butylbenzene	18.43	134	744599	9.23	ug/l	97
86)	1,2,4-Trimethylbenzene	18.47	105	3377303	9.48	ug/l	100
87)	sec-Butylbenzene	18.67	105	4632408	9.50	ug/l	98
88)	p-Isopropyltoluene	18.84	119	3724621	9.26	ug/l	98
89)	1,3-Dichlorobenzene	18.95	146	1642218	9.36	ug/l	98
90)	1,2,3-Trimethylbenzene	19.01	105	3216086	9.69	ug/l	99
91)	1,4-Dichlorobenzene	19.06	146	1561115	9.01	ug/l	99
92)	n-Butylbenzene	19.28	91	3687402	8.93	ug/l	98
93)	1,2-Dichlorobenzene	19.45	146	1400329	9.70	ug/l	98
94)	1,2-Dibromo-3-chloropropan	20.23	157	70468	9.93	ug/l	94
95)	1,2,4-Trichlorobenzene	21.08	180	842992	9.86	ug/l	98
96)	Hexachlorobutadiene	21.21	225	462739	8.58	ug/l	98
97)	Naphthalene	21.35	128	1174013	9.69	ug/l	100
98)	1,2,3-Trichlorobenzene	21.60	180	593486	9.18	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F18\RFW256.D Vial: 3
Acq On : 18 Jun 2024 10:45 am Operator: DHuynh
Sample : VO06F15L Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 18 11:07 2024 Quant Results File: VO06F03.RE

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F18\RFW257.D Vial: 4
Acq On : 18 Jun 2024 11:11 am Operator: DHuynh
Sample : VO06F15C Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 18 11:33 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.07	114	3408254	10.00	ug/l	0.02
54) CHLOROBENZENE-D5	15.53	117	2774849	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.43	152	984314	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	8.06	111	1084034	10.60	ug/l	0.00
Spiked Amount 10.000			Recovery = 106.00%			
42) 1,2-Dichloroethane-d4	9.19	65	758908	10.31	ug/l	0.00
Spiked Amount 10.000			Recovery = 103.10%			
55) Toluene-d8	12.90	98	4080264	9.77	ug/l	0.00
Spiked Amount 10.000			Recovery = 97.70%			
77) 4-Bromofluorobenzene	17.55	95	1351559	10.35	ug/l	0.00
Spiked Amount 10.000			Recovery = 103.50%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.63	85	1059988	10.50	ug/l	100
3) Chloromethane	1.87	50	1488048	9.69	ug/l	99
4) Vinyl chloride	1.99	62	1051665	9.60	ug/l	99
5) Bromomethane	2.44	94	997784	10.05	ug/l	96
6) Chloroethane	2.52	64	701439	8.34	ug/l	100
7) Dichlorofluoromethane	2.56	67	2269135	10.96	ug/l	98
8) Trichlorofluoromethane	2.80	101	1357874	9.98	ug/l	100
9) Acrolein	3.34	56	348753	50.14	ug/l	92
10) 1,1,2-Trichloro-1,2,2-trif	3.38	151	670468	10.68	ug/l	97
11) Acetone	3.42	43	540961	46.34	ug/l	96
12) 1,1-Dichloroethene	3.57	61	1697922	9.39	ug/l	96
13) tert-Butyl alcohol	3.74	59	978345	275.15	ug/l	99
15) Methyl acetate	4.12	74	73652	9.26	ug/l	94
16) Iodomethane	4.03	142	2049899	11.42	ug/l	95
18) Methylene chloride	4.33	49	1454499	9.61	ug/l	93
19) Carbon disulfide	4.30	76	3273038	6.95	ug/l	100
20) Acrylonitrile	4.58	53	818067	51.59	ug/l	99
21) tert-Butyl methyl ether (M	4.62	73	1931832	11.06	ug/l	97
22) trans-1,2-Dichloroethene	4.85	96	1264248	10.07	ug/l	97
23) Isopropyl ether (DIPE)	5.54	45	3987896	10.11	ug/l	95
24) Vinyl acetate	5.77	43	1264936	11.75	ug/l	98
25) 1,1-Dichloroethane	5.71	63	2126985	10.01	ug/l	98
27) tert-Butyl ethyl ether (ET	6.46	59	2930161	10.22	ug/l	96
28) 2-Butanone	6.76	43	943628	50.51	ug/l	96
29) 2,2-Dichloropropane	7.01	77	1276116	10.60	ug/l	98
30) cis-1,2-Dichloroethene	7.13	96	1234480	10.05	ug/l	98
31) Chloroform	7.53	83	1906628	9.79	ug/l	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F18\RFW257.D Vial: 4
Acq On : 18 Jun 2024 11:11 am Operator: DHuynh
Sample : VO06F15C Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 18 11:33 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.91	130	585346	11.02	ug/l	99
33)	Tetrahydrofuran	8.01	42	105557	9.23	ug/l	95
34)	tert-Amyl alcohol	8.16	59	1409	0.53	ug/l	66
36)	1,1,1-Trichloroethane	8.45	97	1496019	9.97	ug/l	99
37)	Cyclohexane	8.43	84	1497674	9.87	ug/l	99
39)	1,1-Dichloropropene	8.81	110	533136	10.45	ug/l	100
40)	Carbon tetrachloride	8.98	119	1249528	10.32	ug/l	97
41)	tert-Amyl methyl ether (TA	9.15	73	2392833	11.18	ug/l	98
43)	1,2-Dichloroethane	9.38	62	892535	10.29	ug/l	99
44)	Benzene	9.36	78	4713696	10.39	ug/l	98
45)	Trichloroethene	10.63	130	1272109	11.01	ug/l	98
46)	Methylcyclohexane	10.72	83	1977988	11.13	ug/l	95
47)	1,2-Dichloropropane	10.99	63	1097084	10.00	ug/l	99
48)	1,4-Dioxane	11.56	88	67557	203.51	ug/l	99
49)	Bromodichloromethane	11.43	83	1272843	10.11	ug/l	98
50)	Dibromomethane	11.51	93	466417	10.05	ug/l	92
51)	2-Chloroethyl vinyl ether	12.12	63	410602	11.34	ug/l	99
52)	4-Methyl-2-pentanone	12.18	43	2889084	54.38	ug/l	95
53)	cis-1,3-Dichloropropene	12.50	75	1659215	10.36	ug/l	96
56)	Toluene	13.04	91	4696100	9.71	ug/l	98
57)	Ethyl methacrylate	13.46	69	903280	10.96	ug/l	96
58)	trans-1,3-Dichloropropene	13.42	75	1170862	9.83	ug/l	96
59)	1,1,2-Trichloroethane	13.67	97	608792	10.73	ug/l	95
60)	2-Hexanone	13.76	43	1725759	51.50	ug/l	95
61)	1,3-Dichloropropane	14.11	76	1135890	10.62	ug/l	96
62)	Tetrachloroethene	14.18	164	960430	10.80	ug/l	97
63)	Dibromochloromethane	14.53	129	749906	9.90	ug/l	98
65)	1,2-Dibromoethane	14.87	107	562057	9.94	ug/l	98
66)	1-Chlorohexane	15.22	91	2056310	9.03	ug/l	100
67)	Chlorobenzene	15.60	112	2855004	10.47	ug/l	99
68)	1,1,1,2-Tetrachloroethane	15.69	131	920352	10.03	ug/l	97
69)	Ethylbenzene	15.70	91	5224585	9.90	ug/l	99
70)	m-Xylene & p-Xylene	15.83	91	8051289	20.39	ug/l	100
71)	o-Xylene	16.56	91	4010186	9.89	ug/l	99
72)	Styrene	16.64	104	3069310	10.70	ug/l	97
73)	Isopropylbenzene	17.17	105	4718388	9.48	ug/l	99
75)	Bromoform	17.17	173	373413	13.45	ug/l	100
76)	1,1,2,2-Tetrachloroethane	17.45	83	652676	10.09	ug/l	94
78)	1,2,3-Trichloropropane	17.66	110	159086	10.62	ug/l	98
79)	trans-1,4-Dichloro-2-buten	17.77	53	175684	10.84	ug/l	97
80)	n-Propylbenzene	17.77	91	6220205	9.78	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F18\RFW257.D Vial: 4
Acq On : 18 Jun 2024 11:11 am Operator: DHuynh
Sample : VO06F15C Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 18 11:33 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

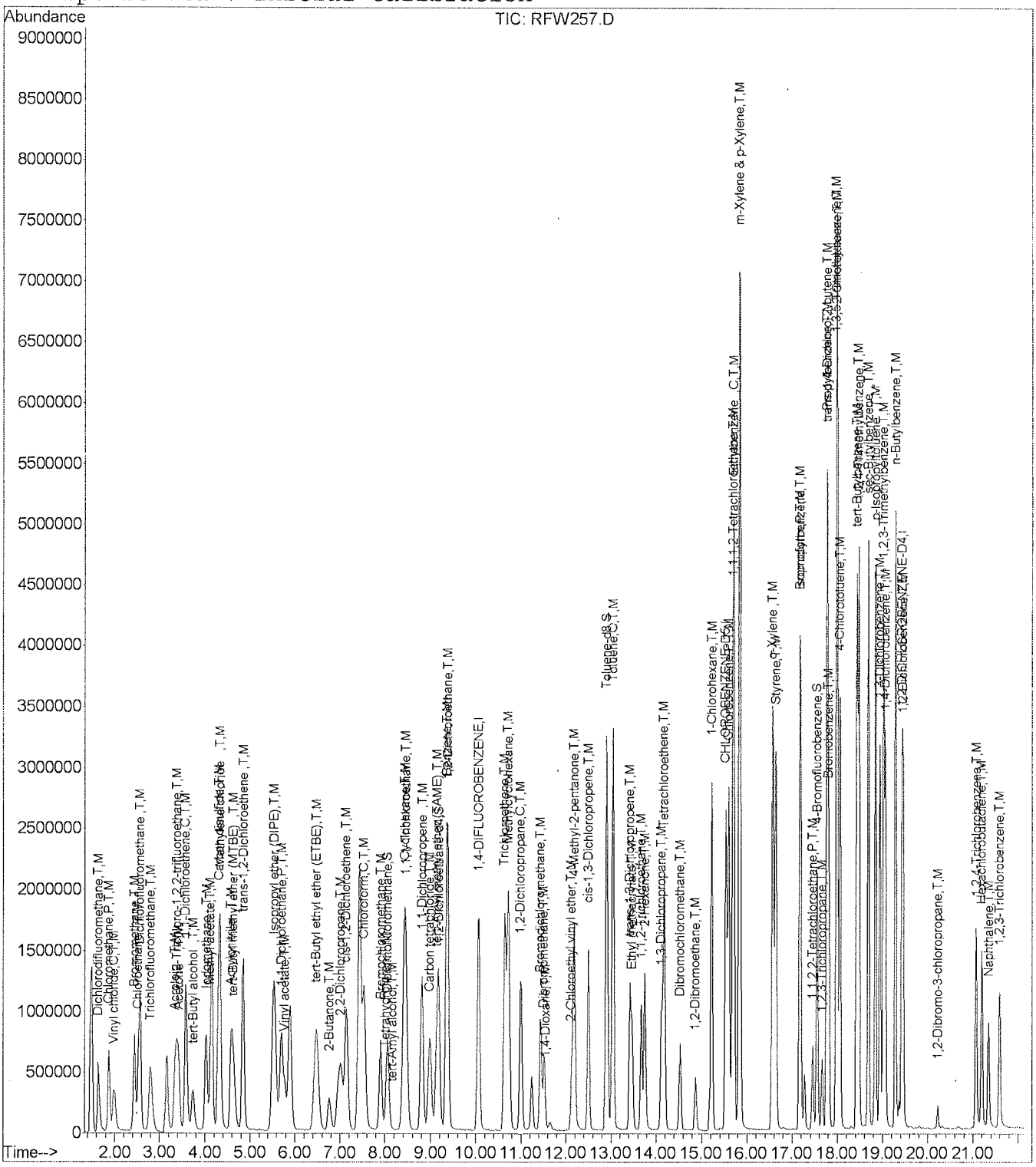
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
81)	Bromobenzene	17.80	156	990219	10.73	ug/l	98
82)	1,3,5-Trimethylbenzene	17.97	105	3945054	9.54	ug/l	99
83)	2-Chlorotoluene	17.99	91	3887674	9.41	ug/l	98
84)	4-Chlorotoluene	18.05	91	3324465	9.50	ug/l	98
85)	tert-Butylbenzene	18.43	134	890870	9.90	ug/l	97
86)	1,2,4-Trimethylbenzene	18.47	105	3820752	9.61	ug/l	98
87)	sec-Butylbenzene	18.67	105	5247905	9.64	ug/l	97
88)	p-Isopropyltoluene	18.84	119	4298095	9.57	ug/l	98
89)	1,3-Dichlorobenzene	18.93	146	2009129	10.27	ug/l	98
90)	1,2,3-Trimethylbenzene	19.01	105	3708445	10.02	ug/l	99
91)	1,4-Dichlorobenzene	19.06	146	1964163	10.15	ug/l	100
92)	n-Butylbenzene	19.28	91	4210892	9.14	ug/l	98
93)	1,2-Dichlorobenzene	19.45	146	1637091	10.16	ug/l	97
94)	1,2-Dibromo-3-chloropropan	20.23	157	88782	11.22	ug/l	97
95)	1,2,4-Trichlorobenzene	21.08	180	971073	10.18	ug/l	98
96)	Hexachlorobutadiene	21.19	225	575554	9.57	ug/l	99
97)	Naphthalene	21.35	128	1326364	9.81	ug/l	99
98)	1,2,3-Trichlorobenzene	21.60	180	705979	9.78	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F18\RFW257.D Vial: 4
Acq On : 18 Jun 2024 11:11 am Operator: DHuynh
Sample : VO06F15C Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 18 11:33 2024 Quant Results File: VO06F03.RE

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 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: RFW001 BFB Injection Date: 06/03/24

Instrument ID: 06 BFB Injection Time: 14:25

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	17.714
75	30 - 60% of mass 95	43.812
95	Base Peak, 100% relative abundance	100.000
96	5 - 9% of mass 95	5.660
173	Less than 2% of mass 174	0.000(0)1
174	Greater than 50% of mass 95	66.801
175	5 - 9% of mass 174	4.543(6.8)1
176	95 - 101% % of mass 174	65.298(97.75)1
177	5 - 9% % of mass 176	3.804(5.83)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	VO06F031	RFW002	06/03/24	15:03
2	VSTD0.5	VO06F032	RFW003	06/03/24	15:29
3	VSTD1	VO06F033	RFW004	06/03/24	15:55
4	VSTD2	VO06F034	RFW005	06/03/24	16:21
5	VSTD5	VO06F035	RFW006	06/03/24	16:47
6	VSTD10	VO06F036	RFW007	06/03/24	17:14
7	VSTD20	VO06F037	RFW008	06/03/24	17:40
8	VSTD30	VO06F038	RFW009	06/03/24	18:06
9	VSTD50	VO06F039	RFW010	06/03/24	18:32
10	VSTD100	VO06F0310	RFW011	06/03/24	18:59
11	VSTD10	IVO06F0301	RFW014	06/03/24	20:18

SCC

6/13/24

Instrument ID :06
Beginning DateTime :06/03/24 15:03
Spike Units :PPB
IC File :RFW007

Column Spec :RTX502.2 ID :0.25MM
Ending DateTime :06/03/24 18:59
HPChem Method :VO06F03

M	IDX	Parameters	.3 15:03 RFW002	.5 15:29 RFW003	1 15:55 RFW004	2 16:21 RFW005	5 16:47 RFW006	10 17:14 RFW007	20 17:40 RFW008	30 18:06 RFW009	50 18:32 RFW010	100 18:59 RFW011	Av_RRF	%_RSD	Av_Rt_M
	1	1,4-DIFLUOROBENZENE	1	1	1	1	1	1	1	1	1	1	1	0	10.0565
	2	Dichlorodifluoromethane	------	0.321	0.260	0.304	0.292	0.297	0.312	0.296	0.293	0.290	0.296	5.79	1.6306
	3	Chloromethane	0.613	0.437	0.396	0.430	0.439	0.434	0.442	0.449	0.445	0.423	0.451	13.06	1.8637
	4	Vinyl chloride	------	0.305	0.282	0.317	0.330	0.333	0.351	0.331	0.322	------	0.321	6.50	1.9733
	5	Bromomethane	------	0.248	0.278	0.272	0.295	0.292	0.312	0.316	0.309	0.301	0.291	7.51	2.4311
	6	Chloroethane	------	0.215	0.241	0.242	0.250	0.243	0.261	0.263	0.260	0.249	0.247	5.98	2.5188
	7	Dichlorofluoromethane	0.720	0.582	0.530	0.557	0.608	0.607	0.627	0.630	0.622	0.593	0.607	8.37	2.5585
	8	Trichlorofluoromethane	0.524	0.387	0.341	0.379	0.381	0.387	0.412	0.399	0.391	0.391	0.399	11.88	2.7954
5	9	Acrolein	------	0.019	0.019	0.016	0.018	0.021	0.021	0.023	0.024	0.023	0.020	12.06	3.3391
	10	1,1,2-Trichloro-1,2,2-trifluoroethane	0.228	0.166	0.172	0.169	0.174	0.179	0.190	0.191	0.184	0.190	0.184	9.77	3.3791
5	11	Acetone	------	0.045	0.032	0.033	0.030	0.031	0.032	0.035	0.035	0.036	0.034	12.69	3.4253
	12	1,1-Dichloroethene	0.560	0.490	0.472	0.499	0.522	0.548	0.559	0.561	0.548	0.544	0.530	6.16	3.5719
25	13	tert-Butyl alcohol	0.012	0.009	0.009	0.009	0.009	0.010	0.010	0.012	0.012	0.012	0.010	13.37	3.7417
	14	Acetonitrile	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	15	Methyl acetate	------	------	0.027	0.022	0.023	0.022	0.022	0.023	------	------	0.023	8.55	4.1238
	16	Iodomethane	0.591	0.457	0.473	0.495	0.530	0.532	0.550	0.553	0.550	0.533	0.526	7.71	4.0204
	17	Allyl chloride	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	18	Methylene chloride	0.513	0.422	0.415	0.402	0.443	0.440	0.451	0.459	0.453	0.444	0.444	6.80	4.3264
	19	Carbon disulfide	------	1.331	1.258	1.356	1.401	1.436	1.452	1.445	------	------	1.383	5.19	4.2875
5	20	Acrylonitrile	0.051	0.041	0.041	0.041	0.044	0.046	0.047	0.051	0.051	0.051	0.047	9.66	4.5779
	21	tert-Butyl methyl ether (MTBE)	0.574	0.467	0.437	0.458	0.495	0.522	0.527	0.567	0.537	0.545	0.513	9.16	4.6219
	22	trans-1,2-Dichloroethene	0.403	0.351	0.343	0.336	0.359	0.367	0.380	0.382	0.383	0.379	0.368	5.68	4.8462
	23	Isopropyl ether (DIPE)	1.155	0.993	1.025	1.096	1.194	1.216	1.229	1.265	1.245	------	1.158	8.51	5.5442
	24	Vinyl acetate	0.306	0.254	0.244	0.284	0.312	0.307	0.354	0.375	0.363	0.359	0.316	14.60	5.7851
	25	1,1-Dichloroethane	0.593	0.560	0.572	0.584	0.623	0.640	0.657	0.670	0.671	0.665	0.623	6.90	5.7013
25	26	2-Butanol	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	27	tert-Butyl ethyl ether (ETBE)	0.935	0.769	0.702	0.769	0.818	0.858	0.860	0.905	0.901	0.895	0.841	8.89	6.4705
5	28	2-Butanone	0.050	0.056	0.045	0.047	0.052	0.056	0.056	0.062	0.062	0.062	0.055	11.24	6.7702
	29	2,2-Dichloropropane	------	0.324	0.349	0.338	0.348	0.355	0.381	0.370	0.362	------	0.353	5.11	7.0091
	30	cis-1,2-Dichloroethene	0.383	0.335	0.311	0.334	0.345	0.364	0.378	0.381	0.388	0.387	0.360	7.58	7.1411
	31	Chloroform	0.588	0.576	0.537	0.525	0.564	0.562	0.581	0.590	0.595	0.596	0.571	4.25	7.5331
	32	Bromochloromethane	0.168	0.132	0.135	0.142	0.147	0.161	0.163	0.171	0.169	0.171	0.156	9.93	7.9103
	33	Tetrahydrofuran	------	------	0.039	0.031	0.033	0.032	0.030	0.035	0.032	0.036	0.034	9.10	8.0283
5	34	tert-Amyl alcohol	------	------	------	0.008	0.007	0.008	0.007	0.009	------	------	0.008	11.64	8.0611
	35	Dibromofluoromethane	0.366	0.296	0.245	0.272	0.293	0.301	0.312	0.316	------	------	0.300	11.72	8.0570
	36	1,1,1-Trichloroethane	0.528	0.392	0.398	0.400	0.432	0.435	0.464	0.456	0.454	0.442	0.440	9.11	8.4490
	37	Cyclohexane	------	0.457	0.399	0.448	0.437	0.463	0.468	0.446	------	------	0.445	5.16	8.4343
	38	2,2,4-Trimethylpentane	1.366	1.137	0.978	1.135	1.134	1.145	1.157	1.087	------	------	1.142	9.38	8.6202
	39	1,1-Dichloropropene	0.154	0.140	0.137	0.137	0.140	0.149	0.157	0.159	0.159	0.165	0.150	6.88	8.8116
	40	Carbon tetrachloride	0.392	0.338	0.306	0.330	0.343	0.356	0.376	0.373	0.371	0.369	0.355	7.29	8.9813
	41	tert-Amyl methyl ether (TAME)	0.661	0.514	0.541	0.571	0.629	0.656	0.652	0.702	0.680	0.672	0.628	10.16	9.1511
	42	1,2-Dichloroethane-d4	------	0.248	0.183	0.204	0.202	0.215	0.226	0.233	------	------	0.216	10.10	9.1798
	43	1,2-Dichloroethane	0.218	0.215	0.232	0.230	0.263	0.267	0.273	0.279	0.282	0.286	0.254	10.92	9.3795
	44	Benzene	1.327	1.258	1.268	1.329	1.404	1.403	1.402	1.417	1.410	1.097	1.331	7.65	9.3586
	45	Trichloroethene	0.337	0.304	0.280	0.322	0.350	0.354	0.355	0.359	0.363	0.365	0.339	8.32	10.6371
	46	Methylcyclohexane	------	0.498	0.440	0.532	0.513	0.571	0.557	0.539	------	------	0.521	8.40	10.7188
	47	1,2-Dichloropropane	0.337	0.275	0.285	0.302	0.324	0.328	0.342	0.343	0.342	0.340	0.322	7.90	10.9913
20	48	1,4-Dioxane	------	------	------	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	9.47	11.5392
	49	Bromodichloromethane	0.380	0.344	0.336	0.339	0.379	0.368	0.380	0.391	0.391	0.386	0.369	5.86	11.4314
	50	Dibromomethane	0.169	0.134	0.132	0.117	0.127	0.131	0.135	0.138	0.140	0.139	0.136	9.86	11.5152
	51	2-Chloroethyl vinyl ether	------	0.103	0.090	0.089	0.109	0.107	0.109	0.117	0.116	0.117	0.106	10.02	12.1278
5	52	4-Methyl-2-pentanone	0.135	0.123	0.133	0.143	0.167	0.172	0.167	0.181	0.175	0.162	0.156	13.02	12.1859
	53	cis-1,3-Dichloropropene	0.465	0.416	0.419	0.439	0.477	0.480	0.497	0.510	0.503	0.493	0.470	7.30	12.5003
	54	CHLOROBENZENE-D5	1	1	1	1	1	1	1	1	1	1	1	0	15.5334
	55	Toluene-d8	1.632	1.561	1.404	1.459	1.527	1.467	1.501	1.490	------	------	1.505	4.62	12.8984
	56	Toluene	1.605	1.751	1.682	1.749	1.785	1.785	1.810	1.797	1.727	------	1.743	3.75	13.0452
	57	Ethyl methacrylate	------	0.279	0.258	0.265	0.283	0.303	0.309	0.328	0.315	0.333	0.297	9.08	13.4715
	58	trans-1,3-Dichloropropene	0.378	0.409	0.385	0.398	0.436	0.441	0.451	0.471	0.457	0.468	0.429	8.01	13.4246
	59	1,1,2-Trichloroethane	------	0.214	0.186	0.181	0.201	0.202	0.209	0.222	0.220	------	0.204	7.35	13.6740
5	60	2-Hexanone	------	------	0.090	0.105	0.121	0.125	0.124	0.136	0.131	0.135	0.121	13.14	13.7527
	61	1,3-Dichloropropane	0.342	0.365	0.333	0.361	0.385	0.398	0.409	0.422	0.415	0.426	0.386	8.77	14.1163
	62	Tetrachloroethene	0.338	0.287	0.276	0.295	0.317	0.325	0.338	0.337	0.340	0.353	0.321	8.08	14.1770
	63	Dibromochloromethane	0.315	0.272	0.243	0.241	0.262	0.267	0.274	0.285	0.283	0.289	0.273	8.06	14.5333
	64	2-Ethyl-1-butanol	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	65	1,2-Dibromoethane	0.263	0.193	0.188	0.188	0.186	0.194	0.193	0.210	0.208	0.213	0.204	11.37	14.8686
	66	1-Chlorohexane	0.878	0.793	0.739	0.783	0.852	0.807	0.870	0.829	0.858	0.793	0.820	5.44	15.2220
	67	Chlorobenzene	0.932	0.939	0.917	0.975	1.019	1.018	1.037	1.050	1.035	0.905	0.983	5.64	15.5983
	68	1,1,1,2-Tetrachloroethane	0.342	0.290	0.287	0.303	0.326	0.341	0.344	0.355	0.355	0.363	0.331	8.42	15.6865
	69	Ethylbenzene	1.846	1.839	1.825	1.905	1.981	1.960	1.991	1.999	1.773	------	1.902	4.42	15.7036
2	70	m-Xylene & p-Xylene	1.447	1.474	1.440	1.487	1.521	1.480	1.512	1.381	1.066	------	1.423	9.86	15.8334
	71	o-Xylene	1.540	1.432	1.345	1.427	1.502	1.472	1.499	1.492	1.446	------	1.462	3.90	16.5614
	72	Styrene	0.955	0.954	0.970	1.023	1.059	1.092	1.104	1.121	1.114	0.948	1.034	6.99	16.6298
	73	Isopropylbenzene	1.846	1.774	1.767	1.790	1.849	1.827	1.846	1.810	1.633	------	1.793	3.78	17.1697
	74	1,2-DICHLOROBENZENE-D4	1	1	1	1	1	1	1	1	1	1	1	0	19.4258
	75	Bromoform	0.239	0.229	0.264	0.278	0.305	0.323	0.338	------	------	------	0.282	14.77	17.1682
	76	1,1,2,2-Tetrachloroethane	0.762	0.660	0.553	0.604	0.608	0.644	0.668	0.708	0.684	0.681	0.657	8.96	17.4536
	77	4-Bromofluorobenzene	------	1.202	1.190	1.342	1.363	1.358	1.406	1.421	------	------	1.326	7.03	17.5464
	78	1,2,3-Trichloropropane	------	------	0.136	0.146	0.147	0.148	0.150	0.160	0.162	0.168	0.152	6.78	17.6612
	79	trans-1,4-Dichloro-2-butene	------	0.153	0.168	0.167	0.160	0.165	0.175	------	------	------	0.165	4.52	17.7673
	80	n-Propylbenzene	5.827	6.531	6.350	6.958	6.946	6.914	6.983	6.506	5.142	------	6.462	9.67	17.7651
	81	Bromobenzene	0.747	0.801	0.833	0.893	0.966	0.979	1.001	1.020	1.050	1.085	0.938	12.11	17.8040
	82	1,3,5-Trimethylbenzene	3.837	4.087	3.996	4.298	4.356	4.367	4.453	4.414	4.008	------	4.202	5.29	17.9756
	83	2-Chlorotoluene	3.578	3.851	3.894	4.231	4.451	4.417	4.531	4.532	4.288	------	4.197	8.17	17.9871
	84	4-Chlorotoluene	2.977	3.499	3.375	3.766	3.675	3.617	3.759	3.743	3.596	------	3.556	7.10	18.0520
	85	tert-Butylbenzene	------	0.893	0.780	0.856	0.918	0.947	0.959	0.933	0.961	0.981	0.914	6.93	18.4268
	86	1,2,4-Trimethylbenzene	3.436	3.993	3.819	4.151	4.250	4.224	4.349	4.275	3.845	------	4.038	7.30	18.4658
	87	sec-Butylbenzene	5.161	5.536	5.537	5.972	5.922	5.793	5.831	5.532	4.477	------	5.529	8.47	18.6733
	88	p-Isopropyltoluene	4.304	4.350	4.304	4.942	4.817	4.764	4.839	4.714	4.012	------	4.561	7.07	18.8391
	89	1,3-Dichlorobenzene	1.748	1.650	1.800	2.004	2.109	2.109	2.165	2.168	2.180	1.947	1.988	9.76	18.9379
	90	1,2,3-Trimethylbenzene	3.509	3.472	3.479	3.810	4.013	3.913	4.025	3.991	3.644	------	3.762	6.32	19.0107
	91	1,4-Dichlorobenzene	1.671	1.817	1.728	1.952	2.018	2.064	2.143	2.147	2.157	1.953	1.965	8.97	19.0625
	92	n-Butylbenzene	4.595	4.696	4.604	4.871	4.909	4.767	4.955	4.774	3.956	------	4.681	6.40	19.2831
	93	1,2-Dichlorobenzene	1.353	1.460	1.559	1.663	1.701	1.723	1.744	1.747	1.738	1.682	1.637	8.31	19.4517
	94	1,2-Dibromo-3-chloropropane	------	------	------	0.076	0.078	0.077	0.076	0.084	0.084	0.088	0.080	6.08	20.2321
	95	1,2,4-Trichlorobenzene	0.960	0.797	0.853	0.898	0.991	0.965	1.037	1.047	1.049	1.093	0.969	9.81	21.0632
	96	Hexachlorobutadiene	0.652	0.628	0.558	0.617	0.613	0.592	0.634	0.604	0.585	0.629	0.611	4.49	21.1903
	97	Naphthalene	1.422	1.196	1.154	1.339	1.345	1.336	1.427	1.493	1.483	1.539	1.373	9.16	21.3382
	98	1,2,3-Trichlorobenzene	0.809	0.662	0.632	0.680	0.741	0.673	0.746	0.775	0.788	0.826	0.733	9.20	21.5912

Spike Amount = Nominal Amount * M
Ave_%RSD : 8.3 Max_%RSD : 14.8

SU 6/13/24

INITIAL_CALIBRATION - RELATIVE_RESPONSE_FACTOR(%REC)

Instrument ID :06
Beginning DateTime :06/03/24 15:03
Spike Units :PPB
IC File :RFW007

Column Spec :RTX502.2 ID :0.25MM
Ending DateTime :06/03/24 18:59
HPChem Method :VO06F03

M	IDX	Parameters	.3 15:03 RFW002	.5 15:29 RFW003	1 15:55 RFW004	2 16:21 RFW005	5 16:47 RFW006	10 17:14 RFW007	20 17:40 RFW008	30 18:06 RFW009	50 18:32 RFW010	100 18:59 RFW011	AvDRec	%_RSD	Av_Rt_M
	1	1,4-DIFLUOROBENZENE	1	1	1	1	1	1	1	1	1	1	1	0	10.0565
	2	Dichlorodifluoromethane	------	108	88	103	99	100	105	100	99	98	3.7	5.79	1.6306
	3	Chloromethane Δ	136	97	88	95	97	96	98	100	99	94	7.2	13.06	1.8637
	4	Vinyl chloride	------	95	88	99	103	104	109	103	100	------	4.7	6.50	1.9733
	5	Bromomethane	------	85	96	93	101	100	107	109	106	103	5.9	7.51	2.4311
	6	Chloroethane	------	87	98	98	101	98	106	106	105	101	4.3	5.98	2.5188
	7	Dichlorofluoromethane	119	96	87	92	100	100	103	104	102	98	5.6	8.37	2.5585
	8	Trichlorofluoromethane Δ	131	97	85	95	95	97	103	100	98	98	6.9	11.88	2.7954
5	9	Acrolein	------	95	95	80	90	105	105	115	120	115	11.1	12.06	3.3391
	10	1,1,2-Trichloro-1,2,2-trifluoroethane	124	90	93	92	95	97	103	104	100	103	6.7	9.77	3.3791
5	11	Acetone	------	132	94	97	88	91	94	103	103	106	8.8	12.69	3.4253
	12	1,1-Dichloroethene	106	92	89	94	98	103	105	106	103	103	5.2	6.16	3.5719
25	13	tert-Butyl alcohol	120	90	90	90	90	100	100	120	120	120	12	13.37	3.7417
	14	Acetonitrile	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	15	Methyl acetate	------	------	117	96	100	96	96	100	------	------	5.1	8.55	4.1238
	16	Iodomethane	112	87	90	94	101	101	105	105	105	101	5.9	7.71	4.0204
	17	Allyl chloride	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	18	Methylene chloride	116	95	93	91	100	99	102	103	102	100	4.5	6.80	4.3264
	19	Carbon disulfide	------	96	91	98	101	104	105	104	------	------	4.2	5.19	4.2875
5	20	Acrylonitrile	109	87	87	87	94	98	100	109	109	109	8.1	9.66	4.5779
	21	tert-Butyl methyl ether (MTBE)	112	91	85	89	96	102	103	111	105	106	7.6	9.16	4.6219
	22	trans-1,2-Dichloroethene	110	95	93	91	98	100	103	104	104	103	4.6	5.68	4.8462
	23	Isopropyl ether (DIPE)	100	86	89	95	103	105	106	109	108	------	6.9	8.51	5.5442
	24	Vinyl acetate	97	80	77	90	99	97	112	119	115	114	11.9	14.60	5.7851
	25	1,1-Dichloroethane	95	90	92	94	100	103	105	108	108	107	6	6.90	5.7013
25	26	2-Butanol	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	27	tert-Butyl ethyl ether (ETBE)	111	91	83	91	97	102	102	108	107	106	7.3	8.89	6.4705
5	28	2-Butanone	91	102	82	85	95	102	102	113	113	113	9.1	11.24	6.7702
	29	2,2-Dichloropropane	------	92	99	96	99	101	108	105	103	------	3.9	5.11	7.0091
	30	cis-1,2-Dichloroethene	106	93	86	93	96	101	105	106	108	107	6.6	7.58	7.1411
	31	Chloroform	103	101	94	92	99	98	102	103	104	104	3.4	4.25	7.5331
	32	Bromochloromethane	108	85	87	91	94	103	104	110	108	110	8.7	9.93	7.9103
	33	Tetrahydrofuran	------	------	115	91	97	94	88	103	94	106	7.4	9.10	8.0283
5	34	tert-Amyl alcohol	------	------	------	100	87	100	87	112	------	------	7.5	11.64	8.0611
	35	Dibromofluoromethane	122	99	82	91	98	100	104	105	------	------	7.9	11.72	8.0570
	36	1,1,1-Trichloroethane	120	89	90	91	98	99	105	104	103	100	6.5	9.11	8.4490
	37	Cyclohexane	------	103	90	101	98	104	105	100	------	------	3.6	5.16	8.4343
	38	2,2,4-Trimethylpentane	120	100	86	99	99	100	101	95	------	------	5.3	9.38	8.6202
	39	1,1-Dichloropropene	103	93	91	91	93	99	105	106	106	110	6.1	6.88	8.8116
	40	Carbon tetrachloride	110	95	86	93	97	100	106	105	105	104	5.9	7.29	8.9813
	41	tert-Amyl methyl ether (TAME)	105	82	86	91	100	104	104	112	108	107	8.2	10.16	9.1511
	42	1,2-Dichloroethane-d4	------	115	85	94	94	100	105	108	------	------	7.9	10.10	9.1798
	43	1,2-Dichloroethane	86	85	91	91	104	105	107	110	111	113	9.7	10.92	9.3795
	44	Benzene	100	95	95	100	105	105	105	106	106	82	5.7	7.65	9.3586
	45	Trichloroethene	99	90	83	95	103	104	105	106	107	108	6.6	8.32	10.6371
	46	Methylcyclohexane	------	96	84	102	98	110	107	103	------	------	6.2	8.40	10.7188
	47	1,2-Dichloropropane	105	85	89	94	101	102	106	107	106	106	6.4	7.90	10.9913
20	48	1,4-Dioxane	------	------	------	87	95	92	98	108	109	111	0	9.47	11.5392
	49	Bromodichloromethane	103	93	91	92	103	100	103	106	106	105	4.9	5.86	11.4314
	50	Dibromomethane	124	99	97	86	93	96	99	101	103	102	6	9.86	11.5152
	51	2-Chloroethyl vinyl ether	------	97	85	84	103	101	103	110	109	110	7.9	10.02	12.1278
5	52	4-Methyl-2-pentanone	87	79	85	92	107	110	107	116	112	104	11.4	13.02	12.1859
	53	cis-1,3-Dichloropropene	99	89	89	93	101	102	106	109	107	105	6	7.30	12.5003
	54	CHLOROBENZENE-D5	1	1	1	1	1	1	1	1	1	1	1	0	15.5334
	55	Toluene-d8	108	104	93	97	101	97	100	99	------	------	3.4	4.62	12.8984
	56	Toluene	92	100	97	100	102	102	104	103	99	------	2.8	3.75	13.0452
	57	Ethyl methacrylate	------	94	87	89	95	102	104	110	106	112	7.7	9.08	13.4715
	58	trans-1,3-Dichloropropene	88	95	90	93	102	103	105	110	107	109	6.9	8.01	13.4246
	59	1,1,2-Trichloroethane	------	105	91	89	99	99	102	109	108	------	5.8	7.35	13.6740
5	60	2-Hexanone	------	------	74	87	100	103	102	112	108	112	9.6	13.14	13.7527
	61	1,3-Dichloropropane	89	95	86	94	100	103	106	109	108	110	7.4	8.77	14.1163
	62	Tetrachloroethene	105	89	86	92	99	101	105	105	106	110	6.7	8.08	14.1770
	63	Dibromochloromethane	115	100	89	88	96	98	100	104	104	106	5.9	8.06	14.5333
	64	2-Ethyl-1-butanol	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	65	1,2-Dibromoethane	129	95	92	92	91	95	95	103	102	104	7.8	11.37	14.8686
	66	1-Chlorohexane	107	97	90	95	104	98	106	101	105	97	4.5	5.44	15.2220
	67	Chlorobenzene	95	96	93	99	104	104	105	107	105	92	5	5.64	15.5983
	68	1,1,1,2-Tetrachloroethane	103	88	87	92	98	103	104	107	107	110	7	8.42	15.6865
	69	Ethylbenzene	97	97	96	100	104	103	105	105	93	------	3.8	4.42	15.7036
2	70	m-Xylene & p-Xylene	102	104	101	104	107	104	106	97	75	------	6.2	9.86	15.8334
	71	o-Xylene	105	98	92	98	103	101	103	102	99	------	3	3.90	16.5614
	72	Styrene	92	92	94	99	102	106	107	108	108	92	6.2	6.99	16.6298
	73	Isopropylbenzene	103	99	99	100	103	102	103	101	91	------	2.6	3.78	17.1697
	74	1,2-DICHLOROBENZENE-D4	1	1	1	1	1	1	1	1	1	1	1	0	19.4258
	75	Bromoform	85	81	94	99	108	115	120	------	------	------	12.1	14.77	17.1682
	76	1,1,2,2-Tetrachloroethane	116	100	84	92	93	98	102	108	104	104	6.7	8.96	17.4536
	77	4-Bromofluorobenzene	------	91	90	101	103	102	106	107	------	------	5.6	7.03	17.5464
	78	1,2,3-Trichloropropane	------	------	89	96	97	97	99	105	107	111	5.5	6.78	17.6612
	79	trans-1,4-Dichloro-2-butene	------	93	102	101	97	100	106	------	------	------	3.2	4.52	17.7673
	80	n-Propylbenzene	90	101	98	108	107	107	108	101	80	------	7.1	9.67	17.7651
	81	Bromobenzene	80	85	89	95	103	104	107	109	112	116	10.1	12.11	17.8040
	82	1,3,5-Trimethylbenzene	91	97	95	102	104	104	106	105	95	------	4.6	5.29	17.9756
	83	2-Chlorotoluene	85	92	93	101	106	105	108	108	102	------	6.7	8.17	17.9871
	84	4-Chlorotoluene	84	98	95	106	103	102	106	105	101	------	5.1	7.10	18.0520
	85	tert-Butylbenzene	------	98	85	94	100	104	105	102	105	107	5.2	6.93	18.4268
	86	1,2,4-Trimethylbenzene	85	99	95	103	105	105	108	106	95	------	5.8	7.30	18.4658
	87	sec-Butylbenzene	93	100	100	108	107	105	105	100	81	------	5.7	8.47	18.6733
	88	p-Isopropyltoluene	94	95	94	108	106	104	106	103	88	------	6.2	7.07	18.8391
	89	1,3-Dichlorobenzene	88	83	91	101	106	106	109	109	110	98	8.1	9.76	18.9379
	90	1,2,3-Trimethylbenzene	93	92	92	101	107	104	107	106	97	------	5.6	6.32	19.0107
	91	1,4-Dichlorobenzene	85	92	88	99	103	105	109	109	110	99	7.2	8.97	19.0625
	92	n-Butylbenzene	98	100	98	104	105	102	106	102	85	------	4.2	6.40	19.2831
	93	1,2-Dichlorobenzene	83	89	95	102	104	105	107	107	106	103	6.6	8.31	19.4517
	94	1,2-Dibromo-3-chloropropane	------	------	------	95	98	96	95	105	105	110	5.2	6.08	20.2321
	95	1,2,4-Trichlorobenzene	99	82	88	93	102	100	107	108	108	113	7.7	9.81	21.0632
	96	Hexachlorobutadiene	107	103	91	101	100	97	104	99	96	103	3.5	4.49	21.1903
	97	Naphthalene	104	87	84	98	98	97	104	109	108	112	7.2	9.16	21.3382
	98	1,2,3-Trichlorobenzene	110	90	86	93	101	92	102	106	108	113	7.8	9.20	21.5912

Δ - 8260C only report LOQ ≥ 0.5

For 8260C
SW 6/13/24

Compound List Report 06

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 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	10.05	1.000	A	1	A	B
2	T	Dichlorodifluoromethane	85	1.63	0.162	A	1	A	B
3	T	Chloromethane	50	1.86	0.186	A	1	A	B
4	T	Vinyl chloride	62	1.98	0.197	A	1	A	B
5	T	Bromomethane	94	2.44	0.243	A	1	A	B
6	T	Chloroethane	64	2.52	0.250	A	1	A	B
7	T	Dichlorofluoromethane	67	2.56	0.254	A	1	A	B
8	T	Trichlorofluoromethane	101	2.79	0.278	A	1	A	B
9	T	Acrolein	56	3.34	0.333	A	1	A	B
10	T	1,1,2-Trichloro-1,2,2-trifluor	151	3.38	0.337	A	1	A	B
11	T	Acetone	43	3.42	0.341	A	1	A	B
12	T	1,1-Dichloroethene	61	3.57	0.355	A	2	A	B
13	T	tert-Butyl alcohol	59	3.74	0.372	A	1	A	B
14	T	Acetonitrile	41	0.00	0.000	A	2	A	B
15	T	Methyl acetate	74	4.14	0.412	A	1	A	B
16	T	Iodomethane	142	4.03	0.401	A	1	A	B
17	T	Allyl chloride	76	4.16	0.414	A	1	A	B
18	T	Methylene chloride	49	4.33	0.431	A	2	A	B
19	T	Carbon disulfide	76	4.28	0.426	A	1	A	B
20	T	Acrylonitrile	53	4.58	0.456	A	2	A	B
21	T	tert-Butyl methyl ether (MTBE)	73	4.62	0.460	A	1	A	B
22	T	trans-1,2-Dichloroethene	96	4.85	0.483	A	1	A	B
23	T	Isopropyl ether (DIPE)	45	5.54	0.552	A	1	A	B
24	T	Vinyl acetate	43	5.77	0.574	A	1	A	B
25	T	1,1-Dichloroethane	63	5.71	0.568	A	2	A	B
26	T	2-Butanol	45	6.28	0.625	A	1	A	B
27	T	tert-Butyl ethyl ether (ETBE)	59	6.46	0.643	A	1	A	B
28	T	2-Butanone	43	6.76	0.673	A	1	A	B
29	T	2,2-Dichloropropane	77	7.01	0.698	A	2	A	B
30	T	cis-1,2-Dichloroethene	96	7.13	0.710	A	1	A	B
31	T	Chloroform	83	7.53	0.750	A	2	A	B
32	T	Bromochloromethane	130	7.91	0.787	A	1	A	B
33	T	Tetrahydrofuran	42	8.04	0.800	A	2	A	B
34	T	tert-Amyl alcohol	59	8.06	0.802	A	1	A	B
35	S	Dibromofluoromethane	111	8.06	0.802	A	1	A	B
36	T	1,1,1-Trichloroethane	97	8.46	0.841	A	2	A	B
37	T	Cyclohexane	84	8.43	0.839	A	1	A	B
38	T	2,2,4-Trimethylpentane	57	8.62	0.858	A	1	A	B
39	T	1,1-Dichloropropene	110	8.81	0.877	A	1	A	B
40	T	Carbon tetrachloride	119	8.98	0.894	A	1	A	B
41	T	tert-Amyl methyl ether (TAME)	73	9.15	0.910	A	2	A	B
42	S	1,2-Dichloroethane-d4	65	9.19	0.914	A	1	A	B
43	T	1,2-Dichloroethane	62	9.38	0.933	A	1	A	B
44	T	Benzene	78	9.36	0.931	A	2	A	B
45	T	Trichloroethene	130	10.63	1.058	A	3	A	B
46	T	Methylcyclohexane	83	10.72	1.067	A	2	A	B
47	T	1,2-Dichloropropane	63	10.99	1.094	A	1	A	B
48	T	1,4-Dioxane	88	11.54	1.148	A	1	A	B
49	T	Bromodichloromethane	83	11.43	1.138	A	1	A	B
50	T	Dibromomethane	93	11.51	1.146	A	2	A	B
51	T	2-Chloroethyl vinyl ether	63	12.12	1.207	A	1	A	B
52	T	4-Methyl-2-pentanone	43	12.19	1.213	A	3	A	B
53	T	cis-1,3-Dichloropropene	75	12.50	1.244	A	3	A	B

54	I	CHLOROBENZENE-D5	117	15.53	1.000	A	2	A	B
55	S	Toluene-d8	98	12.90	0.830	A	1	A	B
56	T	Toluene	91	13.04	0.840	A	1	A	B
57	T	Ethyl methacrylate	69	13.46	0.867	A	1	A	B
58	T	trans-1,3-Dichloropropene	75	13.42	0.864	A	1	A	B
59	T	1,1,2-Trichloroethane	97	13.67	0.880	A	2	A	B
60	T	2-Hexanone	43	13.76	0.886	A	1	A	B
61	T	1,3-Dichloropropane	76	14.11	0.909	A	1	A	B
62	T	Tetrachloroethene	164	14.18	0.913	A	3	A	B
63	T	Dibromochloromethane	129	14.53	0.936	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	14.87	0.957	A	1	A	B
66	T	1-Chlorohexane	91	15.22	0.980	A	1	A	B
67	T	Chlorobenzene	112	15.60	1.004	A	1	A	B
68	T	1,1,1,2-Tetrachloroethane	131	15.69	1.010	A	1	A	B
69	T	Ethylbenzene	91	15.70	1.011	A	1	A	B
70	T	m-Xylene & p-Xylene	91	15.83	1.019	A	1	A	B
71	T	o-Xylene	91	16.56	1.066	A	1	A	B
72	T	Styrene	104	16.62	1.070	A	2	A	B
73	T	Isopropylbenzene	105	17.17	1.105	A	3	A	B
74	I	1,2-DICHLOROBENZENE-D4	152	19.43	1.000	A	1	A	B
75	T	Bromoform	173	17.17	0.884	A	2	A	B
76	T	1,1,2,2-Tetrachloroethane	83	17.45	0.898	A	1	A	B
77	S	4-Bromofluorobenzene	95	17.54	0.903	A	2	A	B
78	T	1,2,3-Trichloropropane	110	17.66	0.909	A	1	A	B
79	T	trans-1,4-Dichloro-2-butene	53	17.77	0.915	A	1	A	B
80	T	n-Propylbenzene	91	17.77	0.915	A	2	A	B
81	T	Bromobenzene	156	17.80	0.917	A	1	A	B
82	T	1,3,5-Trimethylbenzene	105	17.97	0.925	A	2	A	B
83	T	2-Chlorotoluene	91	17.99	0.926	A	1	A	B
84	T	4-Chlorotoluene	91	18.05	0.929	A	1	A	B
85	T	tert-Butylbenzene	134	18.43	0.949	A	1	A	B
86	T	1,2,4-Trimethylbenzene	105	18.47	0.951	A	1	A	B
87	T	sec-Butylbenzene	105	18.67	0.961	A	1	A	B
88	T	p-Isopropyltoluene	119	18.83	0.969	A	2	A	B
89	T	1,3-Dichlorobenzene	146	18.93	0.975	A	2	A	B
90	T	1,2,3-Trimethylbenzene	105	19.01	0.979	A	2	A	B
91	T	1,4-Dichlorobenzene	146	19.06	0.981	A	2	A	B
92	T	n-Butylbenzene	91	19.28	0.993	A	2	A	B
93	T	1,2-Dichlorobenzene	146	19.45	1.001	A	1	A	B
94	T	1,2-Dibromo-3-chloropropane	157	20.23	1.041	A	1	A	B
95	T	1,2,4-Trichlorobenzene	180	21.06	1.084	A	2	A	B
96	T	Hexachlorobutadiene	225	21.19	1.091	A	2	A	B
97	T	Naphthalene	128	21.33	1.098	A	1	A	B
98	T	1,2,3-Trichlorobenzene	180	21.58	1.111	A	2	A	B

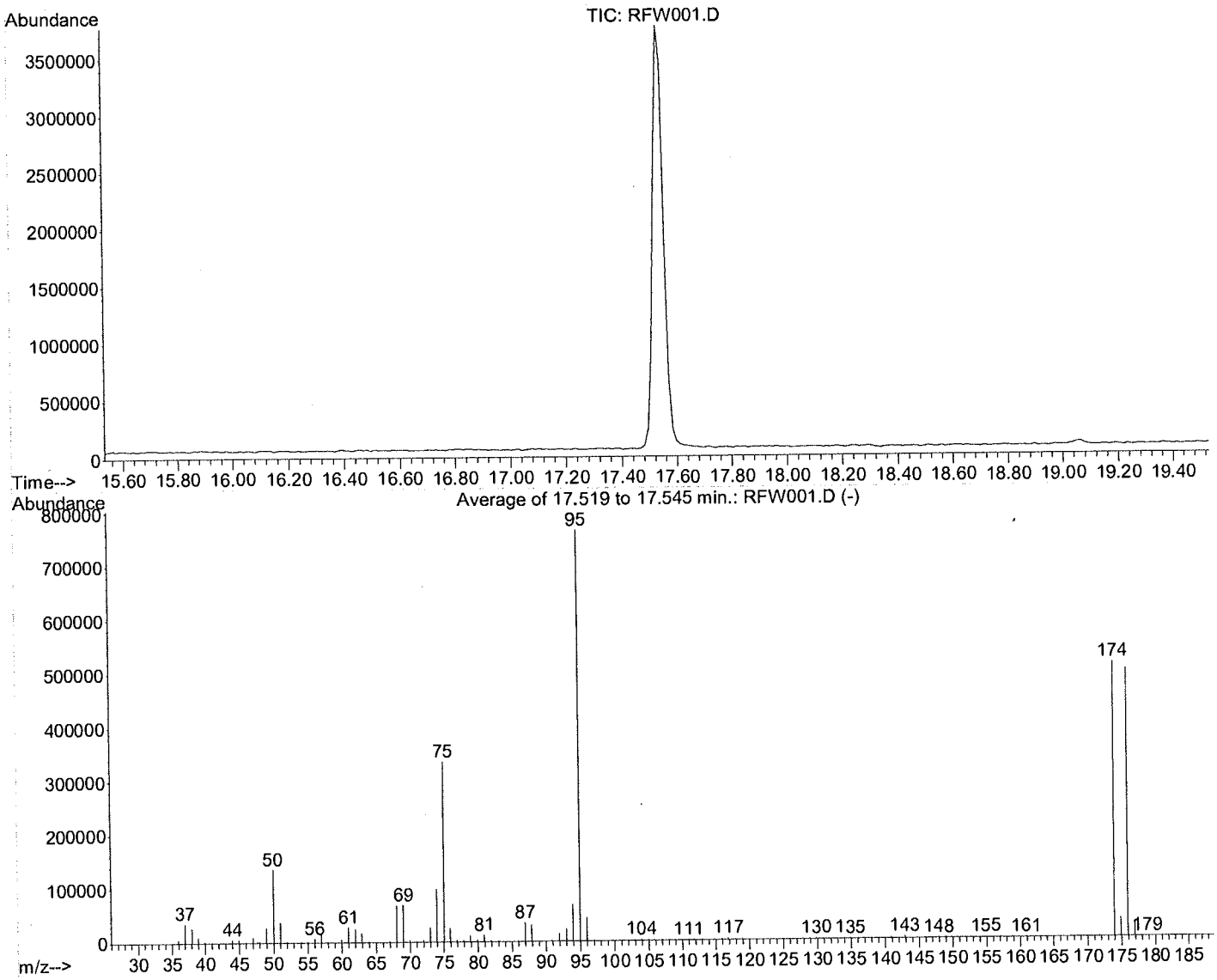
Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
#Qual = number of qualifiers
A/H = Area or Height
ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

VO06F03.M Mon Jun 10 17:42:01 2024

SM 6/13/24

Data File : D:\HPCHEM\1\DATA\24F03\RFW001.D
Acq On : 3 Jun 2024 2:25 pm
Sample : BFB06F01
Misc : T/CHK
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260

Vial: 1
Operator: DHuynh
Inst : 06
Multiplr: 1.00



AutoFind: Scans 845, 846, 847; Background Corrected with Scan 838

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.7	135578	PASS
75	95	30	60	43.8	335326	PASS
95	95	100	100	100.0	765375	PASS
96	95	5	9	5.7	43319	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	66.8	511275	PASS
175	174	5	9	6.8	34773	PASS
176	174	95	101	97.8	499776	PASS
177	176	5	9	5.8	29114	PASS

SC
6/13/24

RFW001.D VO06F03.M Mon Jun 10 16:45:31 2024

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW002.D
Acq On : 3 Jun 2024 3:03 pm
Sample : VO06F031 0.03/0.15uL
Misc : 0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA
MS Integration Params: RTE.P
Quant Time: Jun 10 16:49 2024

Vial: 2
Operator: DHuynh
Inst : 06
Multiplr: 1.00
Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.07	114	2525414	10.00	ug/l	0.02
54) CHLOROBENZENE-D5	15.53	117	1862974	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.43	152	750796	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	8.06	111	27720	0.37	ug/l	0.00
Spiked Amount 10.000			Recovery = 3.70%			
42) 1,2-Dichloroethane-d4	9.19	65	20939	0.38	ug/l	0.00
Spiked Amount 10.000			Recovery = 3.80%			
55) Toluene-d8	12.90	98	91236	0.33	ug/l	0.00
Spiked Amount 10.000			Recovery = 3.30%			
77) 4-Bromofluorobenzene	17.56	95	36089	0.36	ug/l	0.01
Spiked Amount 10.000			Recovery = 3.60%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.63	85	33680	0.45	ug/l	75
3) Chloromethane	1.87	50	46435	0.41	ug/l	90
4) Vinyl chloride	1.99	62	35381	0.44	ug/l	97
5) Bromomethane	2.44	94	34640	0.47	ug/l	98
6) Chloroethane	2.52	64	29572	0.47	ug/l	98
7) Dichlorofluoromethane	2.56	67	54547	0.36	ug/l	93
8) Trichlorofluoromethane	2.80	101	39669	0.39	ug/l	96
9) Acrolein	3.34	56	10589	2.05	ug/l	71
10) 1,1,2-Trichloro-1,2,2-trif	3.36	151	17300	0.37	ug/l	96
11) Acetone	3.45	43	17658	2.04	ug/l	64
12) 1,1-Dichloroethene	3.57	61	42447	0.32	ug/l	87
13) tert-Butyl alcohol	3.76	59	23137	8.78	ug/l	67
16) Iodomethane	4.03	142	44746	0.34	ug/l	97
18) Methylene chloride	4.33	49	38878	0.35	ug/l	93
19) Carbon disulfide	4.30	76	152496	0.44	ug/l	97
20) Acrylonitrile	4.58	53	19445	1.66	ug/l	96
21) tert-Butyl methyl ether (M	4.64	73	43458	0.34	ug/l	77
22) trans-1,2-Dichloroethene	4.85	96	30555	0.33	ug/l	95
23) Isopropyl ether (DIPE)	5.58	45	87492	0.30	ug/l	86
24) Vinyl acetate	5.81	43	23182	0.29	ug/l	97
25) 1,1-Dichloroethane	5.71	63	44933	0.29	ug/l	90
27) tert-Butyl ethyl ether (ET	6.51	59	70816	0.33	ug/l	95
28) 2-Butanone	6.82	43	18852	1.36	ug/l	78
29) 2,2-Dichloropropane	7.01	77	45437	0.51	ug/l	78
30) cis-1,2-Dichloroethene	7.15	96	28998	0.32	ug/l	99
31) Chloroform	7.53	83	44544	0.31	ug/l	78
32) Bromochloromethane	7.91	130	12720	0.32	ug/l	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW002.D Vial: 2
Acq On : 3 Jun 2024 3:03 pm Operator: DHuynh
Sample : VO06F031 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: Jun 10 16:49 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
34)	tert-Amyl alcohol	8.12	59	7687	3.87	ug/l	85
36)	1,1,1-Trichloroethane	8.45	97	40006	0.36	ug/l	92
37)	Cyclohexane	8.43	84	48550	0.43	ug/l	98
38)	2,2,4-Trimethylpentane	8.62	57	103467	0.36	ug/l	98
39)	1,1-Dichloropropene	8.81	110	11632	0.31	ug/l	93
40)	Carbon tetrachloride	8.98	119	29712	0.33	ug/l	95
41)	tert-Amyl methyl ether (TA	9.15	73	50116	0.32	ug/l	71
43)	1,2-Dichloroethane	9.40	62	16490	0.26	ug/l	78
44)	Benzene	9.38	78	100533	0.30	ug/l	99
45)	Trichloroethene	10.65	130	25541	0.30	ug/l	88
46)	Methylcyclohexane	10.72	83	57113	0.43	ug/l	98
47)	1,2-Dichloropropane	10.99	63	25515	0.31	ug/l	98
49)	Bromodichloromethane	11.43	83	28753	0.31	ug/l	98
50)	Dibromomethane	11.51	93	12815	0.37	ug/l	73
52)	4-Methyl-2-pentanone	12.21	43	51163	1.30	ug/l	90
53)	cis-1,3-Dichloropropene	12.50	75	35200	0.30	ug/l	92
56)	Toluene	13.04	91	89701	0.28	ug/l	98
58)	trans-1,3-Dichloropropene	13.44	75	21125	0.26	ug/l	78
60)	2-Hexanone	13.80	43	21584	0.96	ug/l	94
61)	1,3-Dichloropropane	14.13	76	19106	0.27	ug/l	90
62)	Tetrachloroethene	14.18	164	18876	0.32	ug/l	92
63)	Dibromochloromethane	14.53	129	17586	0.35	ug/l	97
65)	1,2-Dibromoethane	14.87	107	14713	0.39	ug/l	85
66)	1-Chlorohexane	15.22	91	49082	0.32	ug/l	96
67)	Chlorobenzene	15.60	112	52061	0.28	ug/l	95
68)	1,1,1,2-Tetrachloroethane	15.69	131	19128	0.31	ug/l	99
69)	Ethylbenzene	15.71	91	103166	0.29	ug/l	94
70)	m-Xylene & p-Xylene	15.84	91	161737	0.61	ug/l	93
71)	o-Xylene	16.57	91	86072	0.32	ug/l	97
72)	Styrene	16.64	104	53371	0.28	ug/l	95
73)	Isopropylbenzene	17.17	105	103149	0.31	ug/l	96
75)	Bromoform	17.15	173	5373	0.25	ug/l	71
76)	1,1,2,2-Tetrachloroethane	17.45	83	17171	0.35	ug/l	75
79)	trans-1,4-Dichloro-2-buten	17.75	53	5262	0.43	ug/l	56
80)	n-Propylbenzene	17.76	91	131246	0.27	ug/l	94
81)	Bromobenzene	17.80	156	16823	0.24	ug/l	91
82)	1,3,5-Trimethylbenzene	17.99	105	86433	0.27	ug/l	94
83)	2-Chlorotoluene	18.00	91	80596	0.26	ug/l	96
84)	4-Chlorotoluene	18.06	91	67061	0.25	ug/l	98
86)	1,2,4-Trimethylbenzene	18.47	105	77390	0.26	ug/l	97
87)	sec-Butylbenzene	18.67	105	116245	0.28	ug/l	97

(#) = qualifier out of range (m) = manual integration

Su 6/13/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW002.D
Acq On : 3 Jun 2024 3:03 pm
Sample : VO06F031 0.03/0.15uL
Misc : 0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA
Vial: 2
Operator: DHuynh
Inst : 06
Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 10 16:49 2024
Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
88) p-Isopropyltoluene	18.84	119	96932	0.28 ug/l	96
89) 1,3-Dichlorobenzene	18.95	146	39379	0.26 ug/l	95
90) 1,2,3-Trimethylbenzene	19.01	105	79035	0.28 ug/l	89
91) 1,4-Dichlorobenzene	19.06	146	37647	0.26 ug/l	93
92) n-Butylbenzene	19.28	91	103497	0.29 ug/l	98
93) 1,2-Dichlorobenzene	19.45	146	30468	0.25 ug/l	77
94) 1,2-Dibromo-3-chloropropan	20.23	157	3259	0.54 ug/l	67
95) 1,2,4-Trichlorobenzene	21.07	180	21615	0.30 ug/l	87
96) Hexachlorobutadiene	21.18	225	14687	0.32 ug/l	90
97) Naphthalene	21.35	128	32040	0.31 ug/l	86
98) 1,2,3-Trichlorobenzene	21.61	180	18211	0.33 ug/l	94

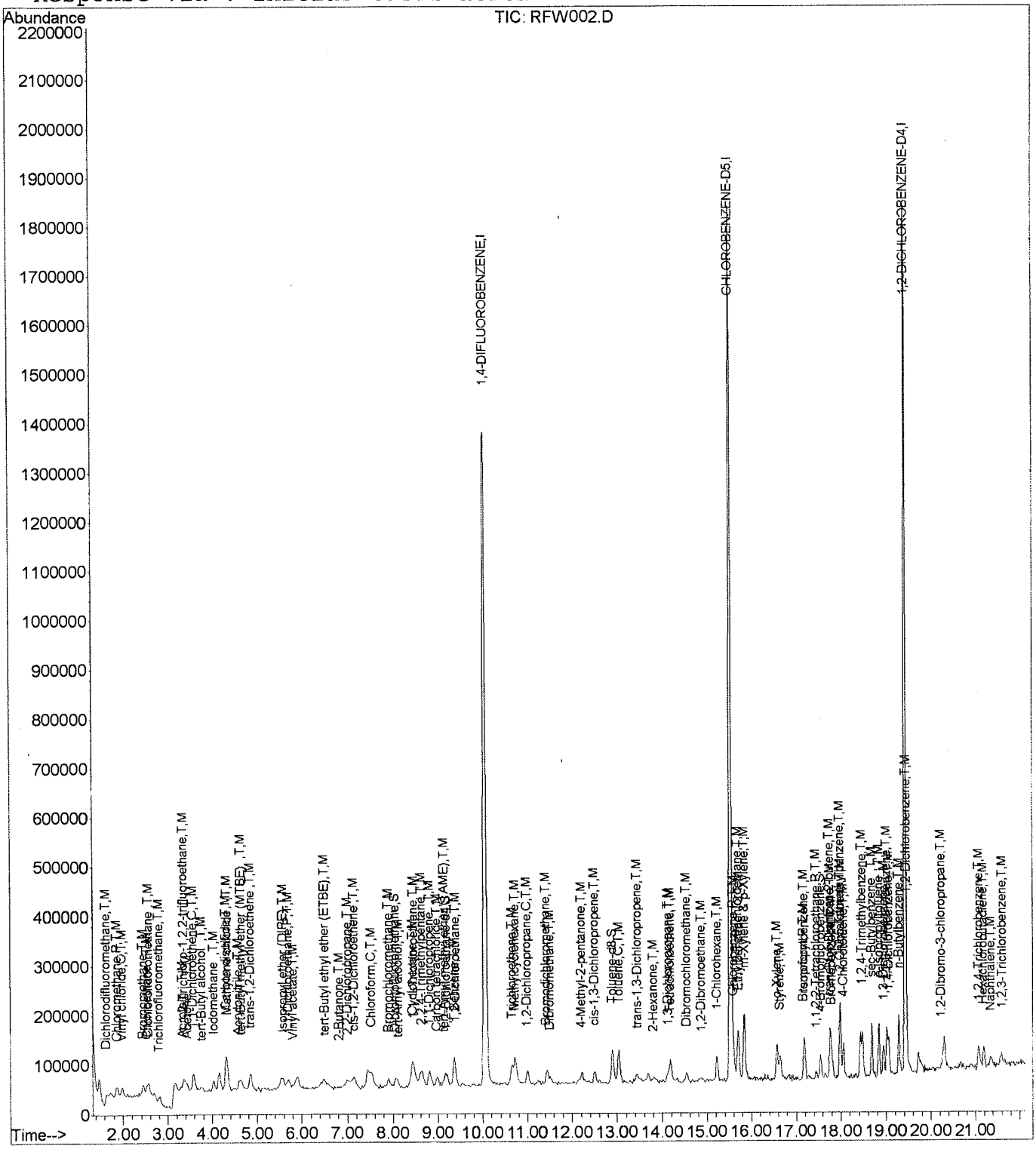
SA 6/13/24

(#) = qualifier out of range (m) = manual integration
RFW002.D VO06F03.M Mon Jun 10 16:49:43 2024 Page 3

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F03\RFW002.D Vial: 2
Acq On : 3 Jun 2024 3:03 pm Operator: DHuynh
Sample : VO06F031 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: Jun 10 16:49 2024 Quant Results File: VO06F03.RE

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW003.D Vial: 3
Acq On : 3 Jun 2024 3:29 pm Operator: DHuynh
Sample : VO06F032 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: Jun 10 16:52 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.05	114	3175879	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.53	117	2430140	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.43	152	874635	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	8.06	111	47042	0.49	ug/l	0.00
Spiked Amount 10.000			Recovery =	4.90%		
42) 1,2-Dichloroethane-d4	9.19	65	39413	0.57	ug/l	0.00
Spiked Amount 10.000			Recovery =	5.70%		
55) Toluene-d8	12.90	98	189709	0.52	ug/l	0.00
Spiked Amount 10.000			Recovery =	5.20%		
77) 4-Bromofluorobenzene	17.55	95	52549	0.45	ug/l	0.00
Spiked Amount 10.000			Recovery =	4.50%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.63	85	51031	0.54	ug/l	89
3) Chloromethane	1.87	50	69330	0.48	ug/l	97
4) Vinyl chloride	1.97	62	48506	0.48	ug/l	85
5) Bromomethane	2.42	94	39447	0.43	ug/l	76
6) Chloroethane	2.52	64	34097	0.43	ug/l	87
7) Dichlorofluoromethane	2.56	67	92381	0.48	ug/l	99
8) Trichlorofluoromethane	2.80	101	61437	0.48	ug/l	100
9) Acrolein	3.34	56	15295	2.36	ug/l	77
10) 1,1,2-Trichloro-1,2,2-trif	3.38	151	26359	0.45	ug/l	99
11) Acetone	3.43	43	35350	3.25	ug/l	89
12) 1,1-Dichloroethene	3.57	61	77787	0.46	ug/l	93
13) tert-Butyl alcohol	3.74	59	34788	10.50	ug/l	89
16) Iodomethane	4.01	142	72521	0.43	ug/l	99
18) Methylene chloride	4.33	49	66954	0.47	ug/l	97
19) Carbon disulfide	4.28	76	211303	0.48	ug/l	96
20) Acrylonitrile	4.58	53	32558	2.20	ug/l	96
21) tert-Butyl methyl ether (M	4.62	73	74128	0.46	ug/l	79
22) trans-1,2-Dichloroethene	4.85	96	55731	0.48	ug/l	94
23) Isopropyl ether (DIPE)	5.54	45	157713	0.43	ug/l	89
24) Vinyl acetate	5.81	43	40289	0.40	ug/l	92
25) 1,1-Dichloroethane	5.69	63	88938	0.45	ug/l	86
27) tert-Butyl ethyl ether (ET	6.46	59	122162	0.46	ug/l	92
28) 2-Butanone	6.78	43	44541	2.56	ug/l	87
29) 2,2-Dichloropropane	7.01	77	51390	0.46	ug/l	72
30) cis-1,2-Dichloroethene	7.14	96	53240	0.47	ug/l	95
31) Chloroform	7.53	83	91402	0.50	ug/l	95
32) Bromochloromethane	7.91	130	20930	0.42	ug/l	94

(#) = qualifier out of range (m) = manual integration
RFW003.D VO06F03.M Mon Jun 10 16:53:04 2024 Page 1

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Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW003.D Vial: 3
Acq On : 3 Jun 2024 3:29 pm Operator: DHuynh
Sample : VO06F032 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: Jun 10 16:52 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
33) Tetrahydrofuran	8.06	42	11787	1.11 ug/l	83
34) tert-Amyl alcohol	8.08	59	6731	2.69 ug/l	67
36) 1,1,1-Trichloroethane	8.43	97	62315	0.45 ug/l	94
37) Cyclohexane	8.43	84	72500	0.51 ug/l	95
38) 2,2,4-Trimethylpentane	8.60	57	180510	0.50 ug/l	99
39) 1,1-Dichloropropene	8.81	110	22222	0.47 ug/l	90
40) Carbon tetrachloride	8.98	119	53625	0.48 ug/l	91
41) tert-Amyl methyl ether (TA	9.17	73	81556	0.41 ug/l	71
43) 1,2-Dichloroethane	9.38	62	34125	0.42 ug/l	80
44) Benzene	9.36	78	199788	0.47 ug/l	96
45) Trichloroethene	10.64	130	48285	0.45 ug/l	91
46) Methylcyclohexane	10.72	83	79010	0.48 ug/l	88
47) 1,2-Dichloropropane	10.99	63	43704	0.43 ug/l	92
49) Bromodichloromethane	11.43	83	54681	0.47 ug/l	94
50) Dibromomethane	11.52	93	21279	0.49 ug/l	86
51) 2-Chloroethyl vinyl ether	12.14	63	16421	0.49 ug/l	86
52) 4-Methyl-2-pentanone	12.21	43	97860	1.98 ug/l	98
53) cis-1,3-Dichloropropene	12.50	75	66100	0.44 ug/l	89
56) Toluene	13.05	91	212717	0.50 ug/l	92
57) Ethyl methacrylate	13.49	69	33950	0.47 ug/l	95
58) trans-1,3-Dichloropropene	13.42	75	49657	0.48 ug/l	98
59) 1,1,2-Trichloroethane	13.67	97	26018	0.52 ug/l	89
60) 2-Hexanone	13.78	43	54224	1.85 ug/l	84
61) 1,3-Dichloropropane	14.11	76	44297	0.47 ug/l	83
62) Tetrachloroethene	14.18	164	34885	0.45 ug/l	98
63) Dibromochloromethane	14.53	129	33103	0.50 ug/l	98
65) 1,2-Dibromoethane	14.87	107	23477	0.47 ug/l	99
66) 1-Chlorohexane	15.22	91	96386	0.48 ug/l	90
67) Chlorobenzene	15.60	112	114123	0.48 ug/l	98
68) 1,1,1,2-Tetrachloroethane	15.68	131	35271	0.44 ug/l	99
69) Ethylbenzene	15.70	91	223475	0.48 ug/l	92
70) m-Xylene & p-Xylene	15.83	91	358161	1.04 ug/l	96
71) o-Xylene	16.56	91	174036	0.49 ug/l	92
72) Styrene	16.64	104	115889	0.46 ug/l	95
73) Isopropylbenzene	17.18	105	215536	0.49 ug/l	98
75) Bromoform	17.17	173	10015	0.41 ug/l	75
76) 1,1,2,2-Tetrachloroethane	17.45	83	28871	0.50 ug/l	89
79) trans-1,4-Dichloro-2-buten	17.78	53	6701	0.47 ug/l	86
80) n-Propylbenzene	17.77	91	285594	0.51 ug/l	95
81) Bromobenzene	17.80	156	35009	0.43 ug/l	96
82) 1,3,5-Trimethylbenzene	17.97	105	178718	0.49 ug/l	95

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW003.D Vial: 3
Acq On : 3 Jun 2024 3:29 pm Operator: DHuynh
Sample : VO06F032 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: Jun 10 16:52 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
83) 2-Chlorotoluene	17.99	91	168405	0.46	ug/l	94
84) 4-Chlorotoluene	18.05	91	153007	0.49	ug/l	93
85) tert-Butylbenzene	18.43	134	39059	0.49	ug/l	92
86) 1,2,4-Trimethylbenzene	18.47	105	174623	0.49	ug/l	90
87) sec-Butylbenzene	18.67	105	242091	0.50	ug/l	97
88) p-Isopropyltoluene	18.84	119	190233	0.48	ug/l	98
89) 1,3-Dichlorobenzene	18.95	146	72170	0.42	ug/l	95
90) 1,2,3-Trimethylbenzene	19.01	105	151840	0.46	ug/l	98
91) 1,4-Dichlorobenzene	19.06	146	79440	0.46	ug/l	97
92) n-Butylbenzene	19.28	91	205360	0.50	ug/l	98
93) 1,2-Dichlorobenzene	19.45	146	63829	0.45	ug/l	91
95) 1,2,4-Trichlorobenzene	21.06	180	34833	0.41	ug/l	94
96) Hexachlorobutadiene	21.19	225	27446	0.51	ug/l	93
97) Naphthalene	21.35	128	52298	0.44	ug/l	97
98) 1,2,3-Trichlorobenzene	21.59	180	28965	0.45	ug/l	92

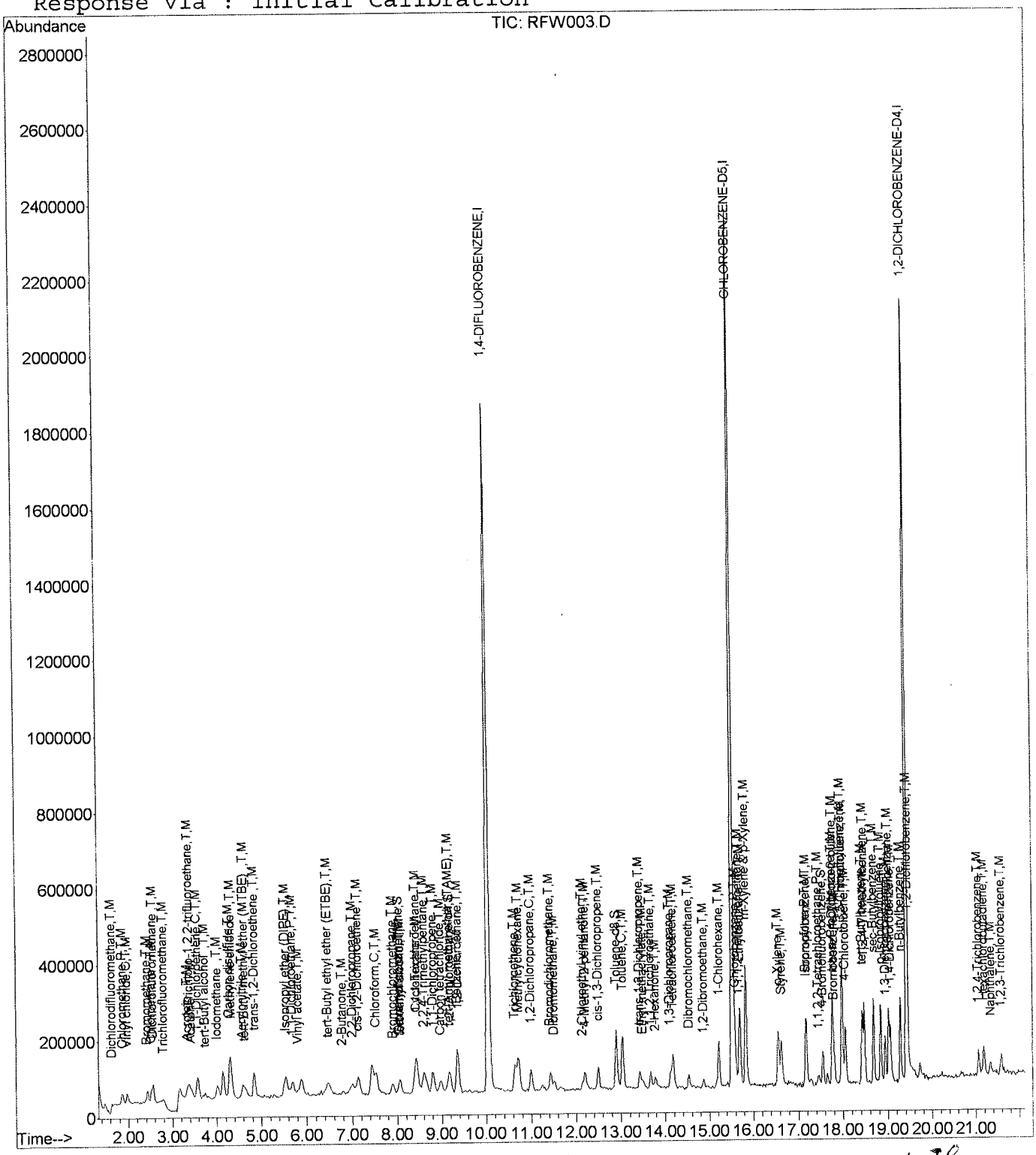
SU 6/13/24

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F03\RFW003.D Vial: 3
Acq On : 3 Jun 2024 3:29 pm Operator: DHuynh
Sample : VO06F032 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: Jun 10 16:52 2024 Quant Results File: VO06F03.RE

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW004.D Vial: 4
Acq On : 3 Jun 2024 3:55 pm Operator: DHuynh
Sample : VO06F033 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: Jun 10 16:52 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.05	114	3052232	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.53	117	2368110	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.43	152	842690	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	8.06	111	74638	0.81	ug/l	0.00
Spiked Amount 10.000			Recovery =	8.10%		
42) 1,2-Dichloroethane-d4	9.17	65	55828	0.85	ug/l	-0.02
Spiked Amount 10.000			Recovery =	8.50%		
55) Toluene-d8	12.90	98	332601	0.93	ug/l	0.00
Spiked Amount 10.000			Recovery =	9.30%		
77) 4-Bromofluorobenzene	17.56	95	100285	0.90	ug/l	0.01
Spiked Amount 10.000			Recovery =	9.00%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.63	85	79266	0.88	ug/l	92
3) Chloromethane	1.86	50	120975	0.88	ug/l	90
4) Vinyl chloride	1.98	62	85944	0.88	ug/l	88
5) Bromomethane	2.44	94	84860	0.95	ug/l	99
6) Chloroethane	2.51	64	73427	0.97	ug/l	99
7) Dichlorofluoromethane	2.55	67	161737	0.87	ug/l	94
8) Trichlorofluoromethane	2.79	101	104020	0.85	ug/l	97
9) Acrolein	3.34	56	29169	4.68	ug/l	95
10) 1,1,2-Trichloro-1,2,2-trif	3.36	151	52502	0.93	ug/l	98
11) Acetone	3.43	43	49520	4.74	ug/l	86
12) 1,1-Dichloroethene	3.57	61	143933	0.89	ug/l	95
13) tert-Butyl alcohol	3.74	59	67768	21.28	ug/l	99
16) Iodomethane	4.01	142	144359	0.90	ug/l	99
18) Methylene chloride	4.33	49	126715	0.93	ug/l	96
19) Carbon disulfide	4.29	76	383840	0.91	ug/l	99
20) Acrylonitrile	4.58	53	62058	4.37	ug/l	97
21) tert-Butyl methyl ether (M	4.62	73	133243	0.85	ug/l	92
22) trans-1,2-Dichloroethene	4.85	96	104737	0.93	ug/l	96
23) Isopropyl ether (DIPE)	5.54	45	312818	0.89	ug/l	98
24) Vinyl acetate	5.79	43	74544	0.77	ug/l	95
25) 1,1-Dichloroethane	5.71	63	174689	0.92	ug/l	93
27) tert-Butyl ethyl ether (ET	6.46	59	214155	0.83	ug/l	95
28) 2-Butanone	6.78	43	68628	4.10	ug/l	83
29) 2,2-Dichloropropane	7.01	77	106431	0.99	ug/l	98
30) cis-1,2-Dichloroethene	7.16	96	94871	0.86	ug/l	92
31) Chloroform	7.53	83	164032	0.94	ug/l	95
32) Bromochloromethane	7.91	130	41131	0.86	ug/l	98

(#) = qualifier out of range (m) = manual integration

SC 6/13/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW004.D Vial: 4
Acq On : 3 Jun 2024 3:55 pm Operator: DHuynh
Sample : VO06F033 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: Jun 10 16:52 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
33)	Tetrahydrofuran	8.06	42	11970	1.17	ug/l	93
36)	1,1,1-Trichloroethane	8.46	97	121437	0.90	ug/l	98
37)	Cyclohexane	8.43	84	121806	0.90	ug/l	99
38)	2,2,4-Trimethylpentane	8.62	57	298451	0.86	ug/l	92
39)	1,1-Dichloropropene	8.81	110	41876	0.92	ug/l	99
40)	Carbon tetrachloride	9.00	119	93426	0.86	ug/l	99
41)	tert-Amyl methyl ether (TA	9.17	73	164987	0.86	ug/l	94
43)	1,2-Dichloroethane	9.38	62	70670	0.91	ug/l	94
44)	Benzene	9.36	78	386927	0.95	ug/l	99
45)	Trichloroethene	10.64	130	85601	0.83	ug/l	93
46)	Methylcyclohexane	10.72	83	134210	0.84	ug/l	90
47)	1,2-Dichloropropane	10.99	63	86920	0.88	ug/l	97
49)	Bromodichloromethane	11.43	83	102604	0.91	ug/l	97
50)	Dibromomethane	11.52	93	40171	0.97	ug/l	89
51)	2-Chloroethyl vinyl ether	12.14	63	27474	0.85	ug/l	94
52)	4-Methyl-2-pentanone	12.19	43	203343	4.27	ug/l	95
53)	cis-1,3-Dichloropropene	12.50	75	127852	0.89	ug/l	97
56)	Toluene	13.05	91	398297	0.96	ug/l	96
57)	Ethyl methacrylate	13.49	69	61030	0.87	ug/l	98
58)	trans-1,3-Dichloropropene	13.42	75	91290	0.90	ug/l	96
59)	1,1,2-Trichloroethane	13.67	97	44124	0.91	ug/l	91
60)	2-Hexanone	13.78	43	106269	3.72	ug/l	92
61)	1,3-Dichloropropane	14.11	76	78806	0.86	ug/l	90
62)	Tetrachloroethene	14.18	164	65462	0.86	ug/l	97
63)	Dibromochloromethane	14.53	129	57465	0.89	ug/l	99
65)	1,2-Dibromoethane	14.87	107	44548	0.92	ug/l	90
66)	1-Chlorohexane	15.22	91	175022	0.90	ug/l	99
67)	Chlorobenzene	15.60	112	217106	0.93	ug/l	96
68)	1,1,1,2-Tetrachloroethane	15.68	131	67883	0.87	ug/l	99
69)	Ethylbenzene	15.70	91	432104	0.96	ug/l	99
70)	m-Xylene & p-Xylene	15.83	91	682033	2.02	ug/l	95
71)	o-Xylene	16.57	91	318617	0.92	ug/l	99
72)	Styrene	16.64	104	229794	0.94	ug/l	96
73)	Isopropylbenzene	17.17	105	418387	0.99	ug/l	96
75)	Bromoform	17.17	173	22214	0.93	ug/l	95
76)	1,1,2,2-Tetrachloroethane	17.45	83	46642	0.84	ug/l	84
78)	1,2,3-Trichloropropane	17.66	110	11473	0.89	ug/l	67
79)	trans-1,4-Dichloro-2-buten	17.76	53	14190	1.02	ug/l	95
80)	n-Propylbenzene	17.76	91	535086	0.98	ug/l	95
81)	Bromobenzene	17.80	156	70158	0.89	ug/l	97
82)	1,3,5-Trimethylbenzene	17.98	105	336728	0.95	ug/l	98

(#) = qualifier out of range (m) = manual integration

6/13/24

Data File : D:\HPCHEM\1\DATA\24F03\RFW004.D Vial: 4
Acq On : 3 Jun 2024 3:55 pm Operator: DHuynh
Sample : VO06F033 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: Jun 10 16:52 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
83)	2-Chlorotoluene	17.98	91	328104	0.93	ug/l	97
84)	4-Chlorotoluene	18.05	91	284435	0.95	ug/l	95
85)	tert-Butylbenzene	18.43	134	65692	0.85	ug/l	83
86)	1,2,4-Trimethylbenzene	18.46	105	321788	0.95	ug/l	99
87)	sec-Butylbenzene	18.67	105	466639	1.00	ug/l	98
88)	p-Isopropyltoluene	18.84	119	362670	0.94	ug/l	98
89)	1,3-Dichlorobenzene	18.95	146	151692	0.91	ug/l	97
90)	1,2,3-Trimethylbenzene	19.01	105	293148	0.92	ug/l	99
91)	1,4-Dichlorobenzene	19.06	146	145591	0.88	ug/l	99
92)	n-Butylbenzene	19.28	91	387975	0.98	ug/l	96
93)	1,2-Dichlorobenzene	19.45	146	131366	0.95	ug/l	98
95)	1,2,4-Trichlorobenzene	21.06	180	71899	0.88	ug/l	99
96)	Hexachlorobutadiene	21.19	225	47003	0.91	ug/l	97
97)	Naphthalene	21.35	128	97222	0.84	ug/l	96
98)	1,2,3-Trichlorobenzene	21.59	180	53227	0.86	ug/l	95

(#) = qualifier out of range (m) = manual integration

SA 6/13/24

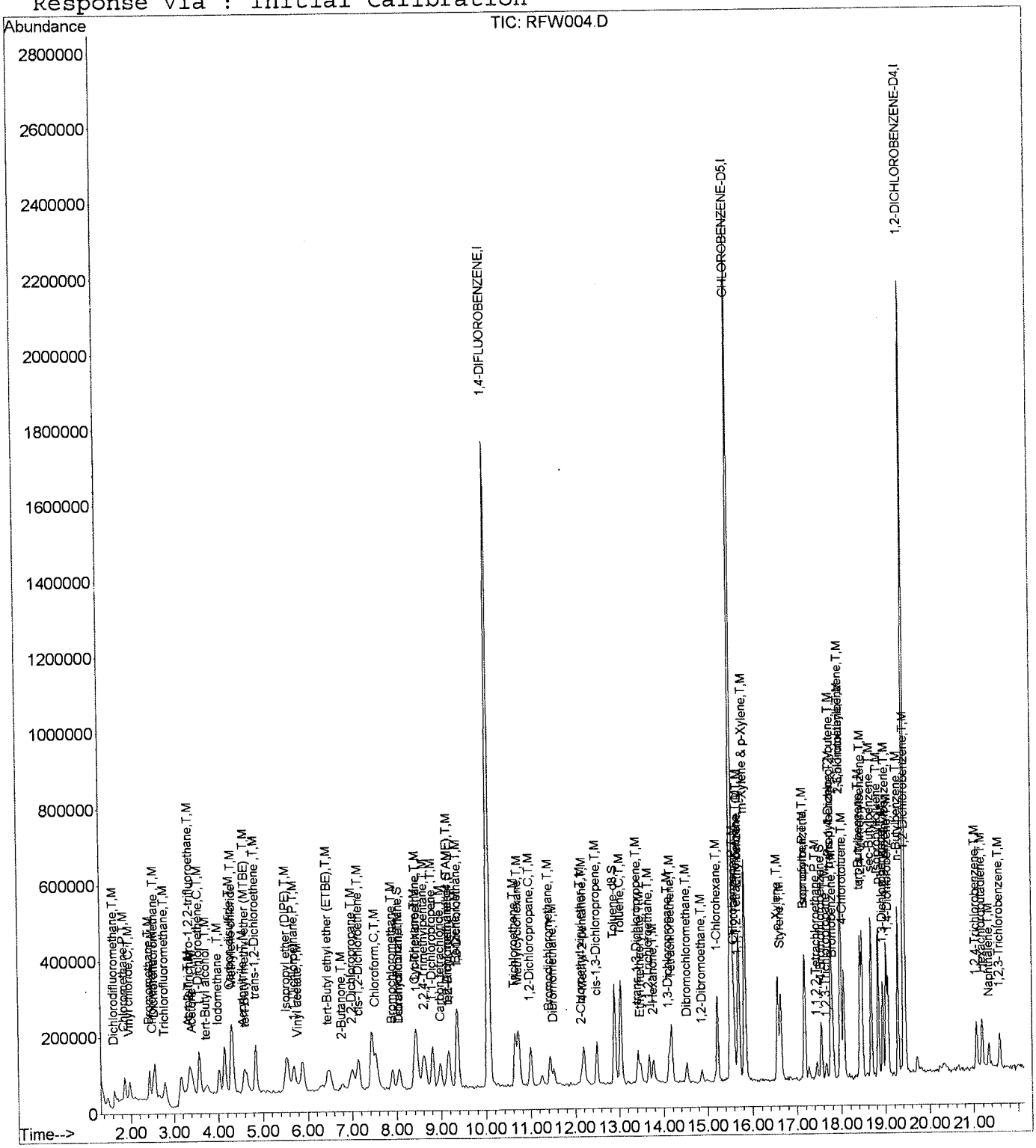
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F03\RFW004.D
Acq On : 3 Jun 2024 3:55 pm
Sample : VO06F033 0.10/0.50uL
Misc : 1.0ppb 8260/5.0ppb KET-AA/25ppb TBA
MS Integration Params: RTE.P
Quant Time: Jun 10 16:52 2024

Vial: 4
Operator: DHuynh
Inst : 06
Multiplr: 1.00

Quant Results File: VO06F03.RE

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration



SU 6/13/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW005.D
Acq On : 3 Jun 2024 4:21 pm
Sample : VO06F034 0.20/1.00uL
Misc : 2.0ppb 8260/10ppb KET-AA/50ppb TBA
MS Integration Params: RTE.P
Quant Time: Jun 10 17:54 2024

Vial: 5
Operator: DHuynh
Inst : 06
Multiplr: 1.00
Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.05	114	3129284	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.53	117	2422056	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.43	152	831427	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	8.06	111	170298	1.81	ug/l	0.00
Spiked Amount 10.000			Recovery =	18.10%		
42) 1,2-Dichloroethane-d4	9.19	65	127587	1.89	ug/l	0.00
Spiked Amount 10.000			Recovery =	18.90%		
55) Toluene-d8	12.90	98	706579	1.94	ug/l	0.00
Spiked Amount 10.000			Recovery =	19.40%		
77) 4-Bromofluorobenzene	17.54	95	223210	2.02	ug/l	0.00
Spiked Amount 10.000			Recovery =	20.20%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.63	85	190067	2.05	ug/l	100
3) Chloromethane	1.86	50	268957	1.91	ug/l	97
4) Vinyl chloride	1.98	62	198229	1.97	ug/l	99
5) Bromomethane	2.44	94	170087	1.87	ug/l	98
6) Chloroethane	2.51	64	151321	1.96	ug/l	94
7) Dichlorofluoromethane	2.55	67	348361	1.83	ug/l	99
8) Trichlorofluoromethane	2.79	101	237215	1.90	ug/l	99
9) Acrolein	3.34	56	51143	8.01	ug/l	95
10) 1,1,2-Trichloro-1,2,2-trif	3.38	151	105580	1.83	ug/l	98
11) Acetone	3.43	43	102528	9.57	ug/l	95
12) 1,1-Dichloroethene	3.57	61	312259	1.88	ug/l	98
13) tert-Butyl alcohol	3.74	59	146153	44.77	ug/l	81
15) Methyl acetate	4.14	74	14058	1.93	ug/l	56
16) Iodomethane	4.03	142	309490	1.88	ug/l	100
18) Methylene chloride	4.33	49	251788	1.81	ug/l	99
19) Carbon disulfide	4.31	76	848787	1.96	ug/l	98
20) Acrylonitrile	4.58	53	129197	8.87	ug/l	96
21) tert-Butyl methyl ether (M	4.62	73	286341	1.78	ug/l	98
22) trans-1,2-Dichloroethene	4.85	96	210154	1.82	ug/l	100
23) Isopropyl ether (DIPE)	5.54	45	685964	1.89	ug/l	100
24) Vinyl acetate	5.79	43	177844	1.80	ug/l	99
25) 1,1-Dichloroethane	5.71	63	365292	1.87	ug/l	97
27) tert-Butyl ethyl ether (ET	6.49	59	481319	1.83	ug/l	99
28) 2-Butanone	6.78	43	147559	8.60	ug/l	96
29) 2,2-Dichloropropane	7.01	77	211425	1.91	ug/l	91
30) cis-1,2-Dichloroethene	7.16	96	208927	1.85	ug/l	99
31) Chloroform	7.53	83	328711	1.84	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW005.D Vial: 5
Acq On : 3 Jun 2024 4:21 pm Operator: DHuynh
Sample : VO06F034 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: Jun 10 17:54 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
32) Bromochloromethane	7.91	130	88904	1.82 ug/l		97
33) Tetrahydrofuran	8.04	42	19694	1.88 ug/l	#	70
34) tert-Amyl alcohol	8.08	59	25264	10.26 ug/l		82
36) 1,1,1-Trichloroethane	8.46	97	250555	1.82 ug/l		99
37) Cyclohexane	8.43	84	280291	2.01 ug/l		97
38) 2,2,4-Trimethylpentane	8.62	57	710614	1.99 ug/l		97
39) 1,1-Dichloropropene	8.81	110	86041	1.84 ug/l		98
40) Carbon tetrachloride	8.98	119	206721	1.86 ug/l		98
41) tert-Amyl methyl ether (TA	9.15	73	357580	1.82 ug/l		96
43) 1,2-Dichloroethane	9.38	62	144235	1.81 ug/l		99
44) Benzene	9.36	78	831623	2.00 ug/l		98
45) Trichloroethene	10.64	130	201748	1.90 ug/l		99
46) Methylcyclohexane	10.72	83	332717	2.04 ug/l		100
47) 1,2-Dichloropropane	10.99	63	189073	1.88 ug/l		95
48) 1,4-Dioxane	11.56	88	10544	34.60 ug/l	#	40
49) Bromodichloromethane	11.43	83	211865	1.83 ug/l		98
50) Dibromomethane	11.52	93	73278	1.72 ug/l		95
51) 2-Chloroethyl vinyl ether	12.12	63	55571	1.67 ug/l		97
52) 4-Methyl-2-pentanone	12.19	43	448700	9.20 ug/l		99
53) cis-1,3-Dichloropropene	12.50	75	274644	1.87 ug/l		97
56) Toluene	13.05	91	847391	2.01 ug/l		99
57) Ethyl methacrylate	13.49	69	128364	1.78 ug/l		92
58) trans-1,3-Dichloropropene	13.42	75	192571	1.85 ug/l		100
59) 1,1,2-Trichloroethane	13.67	97	87493	1.77 ug/l		98
60) 2-Hexanone	13.76	43	254411	8.70 ug/l		94
61) 1,3-Dichloropropane	14.11	76	174929	1.87 ug/l		96
62) Tetrachloroethene	14.18	164	143047	1.84 ug/l		96
63) Dibromochloromethane	14.53	129	116600	1.76 ug/l		98
65) 1,2-Dibromoethane	14.87	107	91182	1.85 ug/l		97
66) 1-Chlorohexane	15.22	91	379187	1.91 ug/l		97
67) Chlorobenzene	15.60	112	472295	1.98 ug/l		95
68) 1,1,1,2-Tetrachloroethane	15.69	131	146765	1.83 ug/l		96
69) Ethylbenzene	15.70	91	922707	2.00 ug/l		99
70) m-Xylene & p-Xylene	15.83	91	1440256	4.18 ug/l		97
71) o-Xylene	16.56	91	691495	1.95 ug/l		95
72) Styrene	16.64	104	495591	1.98 ug/l		92
73) Isopropylbenzene	17.17	105	867026	2.00 ug/l		99
75) Bromoform	17.18	173	46146	1.97 ug/l		89
76) 1,1,2,2-Tetrachloroethane	17.45	83	100473	1.84 ug/l		98
78) 1,2,3-Trichloropropane	17.66	110	24308	1.92 ug/l		89
79) trans-1,4-Dichloro-2-buten	17.76	53	27784	2.03 ug/l		97

(#) = qualifier out of range (m) = manual integration

SV 6/13/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW005.D Vial: 5
Acq On : 3 Jun 2024 4:21 pm Operator: DHuynh
Sample : VO06F034 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: Jun 10 17:54 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80) n-Propylbenzene	17.76	91	1156943	2.15	ug/l	97
81) Bromobenzene	17.80	156	148459	1.90	ug/l	97
82) 1,3,5-Trimethylbenzene	17.97	105	714630	2.05	ug/l	99
83) 2-Chlorotoluene	17.98	91	703553	2.02	ug/l	97
84) 4-Chlorotoluene	18.05	91	626255	2.12	ug/l	96
85) tert-Butylbenzene	18.43	134	142262	1.87	ug/l	90
86) 1,2,4-Trimethylbenzene	18.46	105	690301	2.06	ug/l	100
87) sec-Butylbenzene	18.67	105	993062	2.16	ug/l	97
88) p-Isopropyltoluene	18.84	119	821827	2.17	ug/l	97
89) 1,3-Dichlorobenzene	18.93	146	333222	2.02	ug/l	98
90) 1,2,3-Trimethylbenzene	19.01	105	633564	2.03	ug/l	98
91) 1,4-Dichlorobenzene	19.06	146	324594	1.99	ug/l	95
92) n-Butylbenzene	19.28	91	810054	2.08	ug/l	99
93) 1,2-Dichlorobenzene	19.45	146	276536	2.03	ug/l	98
94) 1,2-Dibromo-3-chloropropan	20.24	157	12650	1.89	ug/l	93
95) 1,2,4-Trichlorobenzene	21.07	180	149379	1.85	ug/l	97
96) Hexachlorobutadiene	21.20	225	102649	2.02	ug/l	94
97) Naphthalene	21.35	128	222587	1.95	ug/l	95
98) 1,2,3-Trichlorobenzene	21.59	180	113102	1.86	ug/l	96

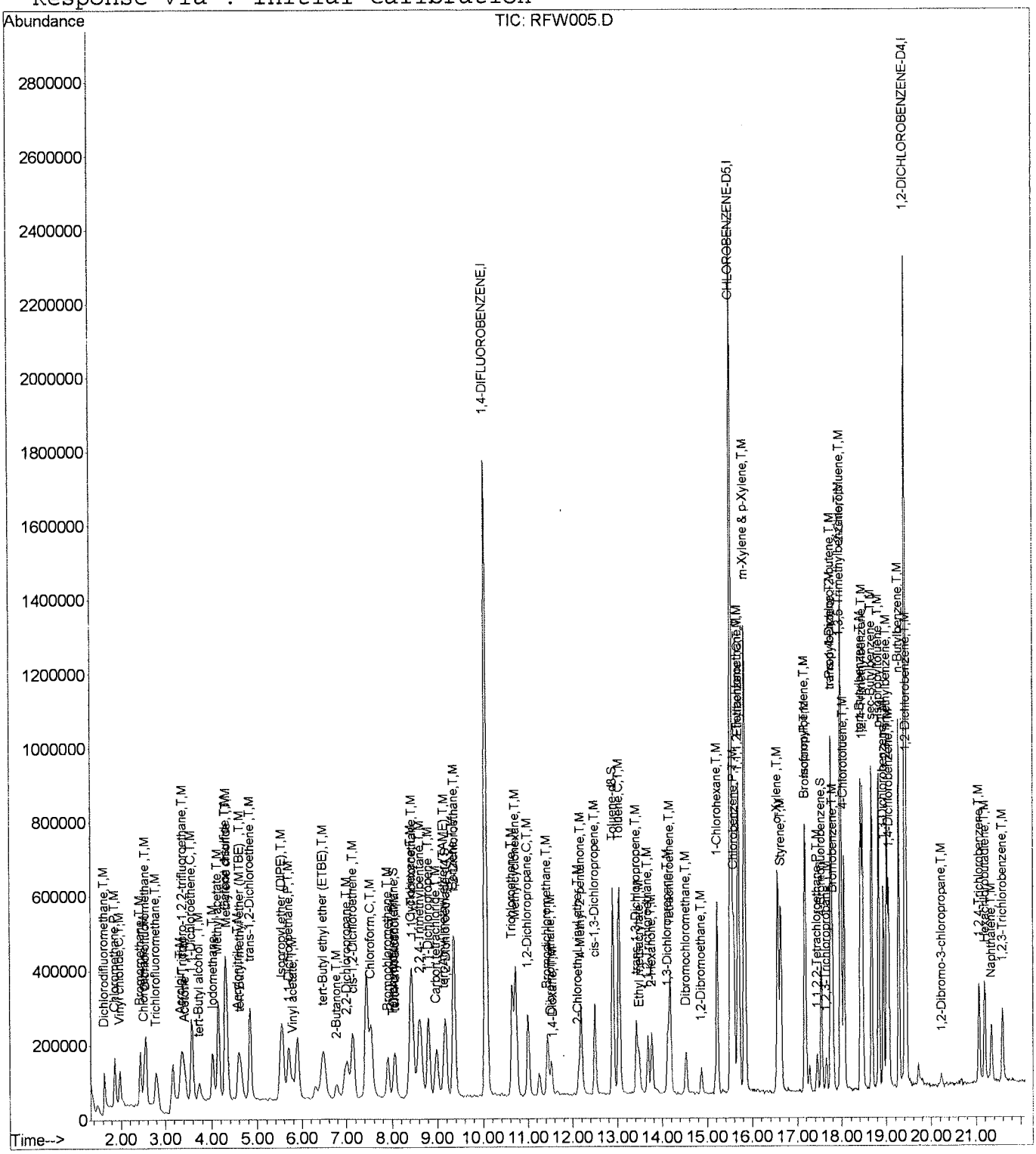
SH 6/13/24

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F03\RFW005.D Vial: 5
Acq On : 3 Jun 2024 4:21 pm Operator: DHuynh
Sample : VO06F034 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: Jun 10 17:54 2024 Quant Results File: VO06F03.RE

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration



SA 6/13/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW006.D
Acq On : 3 Jun 2024 4:47 pm
Sample : VO06F035 0.50/2.50uL
Misc : 5.0ppb 8260/25ppb KET-AA/125ppb TBA
MS Integration Params: RTE.P
Quant Time: Jun 11 13:17 2024

Vial: 6
Operator: DHuynh
Inst : 06
Multiplr: 1.00

Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.07	114	3048752	10.00 ug/l	0.02
54) CHLOROBENZENE-D5	15.53	117	2411903	10.00 ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.43	152	836067	10.00 ug/l	0.00
System Monitoring Compounds					
35) Dibromofluoromethane	8.06	111	446932	4.88 ug/l	0.00
Spiked Amount 10.000			Recovery =	48.80%	
42) 1,2-Dichloroethane-d4	9.17	65	308399	4.69 ug/l	-0.02
Spiked Amount 10.000			Recovery =	46.90%	
55) Toluene-d8	12.90	98	1841858	5.07 ug/l	0.00
Spiked Amount 10.000			Recovery =	50.70%	
77) 4-Bromofluorobenzene	17.55	95	569971	5.14 ug/l	0.00
Spiked Amount 10.000			Recovery =	51.40%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.63	85	445801	4.94 ug/l	99
3) Chloromethane	1.87	50	668998	4.87 ug/l	99
4) Vinyl chloride	1.97	62	503619	5.14 ug/l	100
5) Bromomethane	2.44	94	449862	5.06 ug/l	100
6) Chloroethane	2.52	64	381404	5.07 ug/l	95
7) Dichlorofluoromethane	2.56	67	926295	5.00 ug/l	100
8) Trichlorofluoromethane	2.80	101	580968	4.77 ug/l	99
9) Acrolein	3.34	56	136831	21.99 ug/l	97
10) 1,1,2-Trichloro-1,2,2-trif	3.38	151	264867	4.72 ug/l	93
11) Acetone	3.43	43	226679	21.71 ug/l	99
12) 1,1-Dichloroethene	3.57	61	796306	4.93 ug/l	99
13) tert-Butyl alcohol	3.74	59	343199	107.90 ug/l	97
15) Methyl acetate	4.12	74	34610	4.87 ug/l	96
16) Iodomethane	4.01	142	808491	5.04 ug/l	100
18) Methylene chloride	4.33	49	674793	4.98 ug/l	97
19) Carbon disulfide	4.28	76	2135077	5.07 ug/l	99
20) Acrylonitrile	4.58	53	337425	23.79 ug/l	99
21) tert-Butyl methyl ether (M	4.62	73	754528	4.83 ug/l	99
22) trans-1,2-Dichloroethene	4.85	96	547598	4.88 ug/l	99
23) Isopropyl ether (DIPE)	5.54	45	1820142	5.16 ug/l	99
24) Vinyl acetate	5.77	43	476177	4.95 ug/l	100
25) 1,1-Dichloroethane	5.71	63	949397	4.99 ug/l	97
27) tert-Butyl ethyl ether (ET	6.46	59	1246707	4.86 ug/l	98
28) 2-Butanone	6.76	43	399024	23.88 ug/l	99
29) 2,2-Dichloropropane	7.01	77	530177	4.92 ug/l	96
30) cis-1,2-Dichloroethene	7.13	96	526275	4.79 ug/l	97
31) Chloroform	7.53	83	859016	4.93 ug/l	98

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24F03\RFW006.D Vial: 6
Acq On : 3 Jun 2024 4:47 pm Operator: DHuynh
Sample : VO06F035 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: Jun 11 13:17 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.91	130	223614	4.71	ug/l	97
33)	Tetrahydrofuran	8.04	42	50584	4.94	ug/l	95
34)	tert-Amyl alcohol	8.08	59	50106	20.89	ug/l	77
36)	1,1,1-Trichloroethane	8.46	97	658574	4.91	ug/l	98
37)	Cyclohexane	8.43	84	666195	4.91	ug/l	99
38)	2,2,4-Trimethylpentane	8.62	57	1728147	4.96	ug/l	98
39)	1,1-Dichloropropene	8.81	110	214051	4.69	ug/l	97
40)	Carbon tetrachloride	8.98	119	522679	4.82	ug/l	96
41)	tert-Amyl methyl ether (TA	9.15	73	958314	5.01	ug/l	98
43)	1,2-Dichloroethane	9.38	62	400697	5.17	ug/l	98
44)	Benzene	9.36	78	2139559	5.27	ug/l	98
45)	Trichloroethene	10.63	130	533311	5.16	ug/l	97
46)	Methylcyclohexane	10.72	83	782512	4.92	ug/l	97
47)	1,2-Dichloropropane	10.99	63	493646	5.03	ug/l	99
48)	1,4-Dioxane	11.54	88	28163	94.84	ug/l	66
49)	Bromodichloromethane	11.43	83	577531	5.13	ug/l	94
50)	Dibromomethane	11.52	93	193398	4.66	ug/l	95
51)	2-Chloroethyl vinyl ether	12.12	63	165714	5.11	ug/l	96
52)	4-Methyl-2-pentanone	12.19	43	1271413	26.75	ug/l	99
53)	cis-1,3-Dichloropropene	12.50	75	727269	5.08	ug/l	99
56)	Toluene	13.05	91	2152486	5.12	ug/l	99
57)	Ethyl methacrylate	13.46	69	341379	4.77	ug/l	97
58)	trans-1,3-Dichloropropene	13.42	75	525982	5.08	ug/l	97
59)	1,1,2-Trichloroethane	13.67	97	242497	4.92	ug/l	95
60)	2-Hexanone	13.76	43	727433	24.97	ug/l	97
61)	1,3-Dichloropropane	14.11	76	464349	4.99	ug/l	97
62)	Tetrachloroethene	14.18	164	381698	4.94	ug/l	98
63)	Dibromochloromethane	14.53	129	315432	4.79	ug/l	97
65)	1,2-Dibromoethane	14.87	107	223728	4.55	ug/l	100
66)	1-Chlorohexane	15.22	91	1027080	5.19	ug/l	92
67)	Chlorobenzene	15.60	112	1228748	5.18	ug/l	98
68)	1,1,1,2-Tetrachloroethane	15.69	131	393002	4.93	ug/l	98
69)	Ethylbenzene	15.70	91	2389553	5.21	ug/l	99
70)	m-Xylene & p-Xylene	15.83	91	3669256	10.69	ug/l	98
71)	o-Xylene	16.56	91	1811531	5.14	ug/l	99
72)	Styrene	16.62	104	1276784	5.12	ug/l	99
73)	Isopropylbenzene	17.17	105	2229624	5.15	ug/l	99
75)	Bromoform	17.17	173	127484	5.41	ug/l	97
76)	1,1,2,2-Tetrachloroethane	17.45	83	254016	4.62	ug/l	96
78)	1,2,3-Trichloropropane	17.66	110	61289	4.82	ug/l	95
79)	trans-1,4-Dichloro-2-buten	17.77	53	66694	4.85	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW006.D Vial: 6
Acq On : 3 Jun 2024 4:47 pm Operator: DHuynh
Sample : VO06F035 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: Jun 11 13:17 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80) n-Propylbenzene	17.77	91	2903686	5.37	ug/l	99
81) Bromobenzene	17.80	156	403979	5.15	ug/l	99
82) 1,3,5-Trimethylbenzene	17.97	105	1821129	5.18	ug/l	99
83) 2-Chlorotoluene	17.99	91	1860595	5.30	ug/l	98
84) 4-Chlorotoluene	18.05	91	1536082	5.17	ug/l	99
85) tert-Butylbenzene	18.43	134	383916	5.02	ug/l	99
86) 1,2,4-Trimethylbenzene	18.47	105	1776678	5.26	ug/l	99
87) sec-Butylbenzene	18.67	105	2475584	5.36	ug/l	99
88) p-Isopropyltoluene	18.83	119	2013782	5.28	ug/l	97
89) 1,3-Dichlorobenzene	18.93	146	881465	5.30	ug/l	98
90) 1,2,3-Trimethylbenzene	19.01	105	1677580	5.33	ug/l	98
91) 1,4-Dichlorobenzene	19.06	146	843622	5.13	ug/l	100
92) n-Butylbenzene	19.28	91	2052151	5.24	ug/l	99
93) 1,2-Dichlorobenzene	19.45	146	711188	5.20	ug/l	98
94) 1,2-Dibromo-3-chloropropan	20.23	157	32604	4.85	ug/l	99
95) 1,2,4-Trichlorobenzene	21.06	180	414151	5.11	ug/l	98
96) Hexachlorobutadiene	21.19	225	256385	5.02	ug/l	99
97) Naphthalene	21.33	128	562291	4.90	ug/l	98
98) 1,2,3-Trichlorobenzene	21.59	180	309816	5.05	ug/l	97

(#) = qualifier out of range (m) = manual integration
RFW006.D VO06F03.M Tue Jun 11 13:17:35 2024 SG 6/13/24

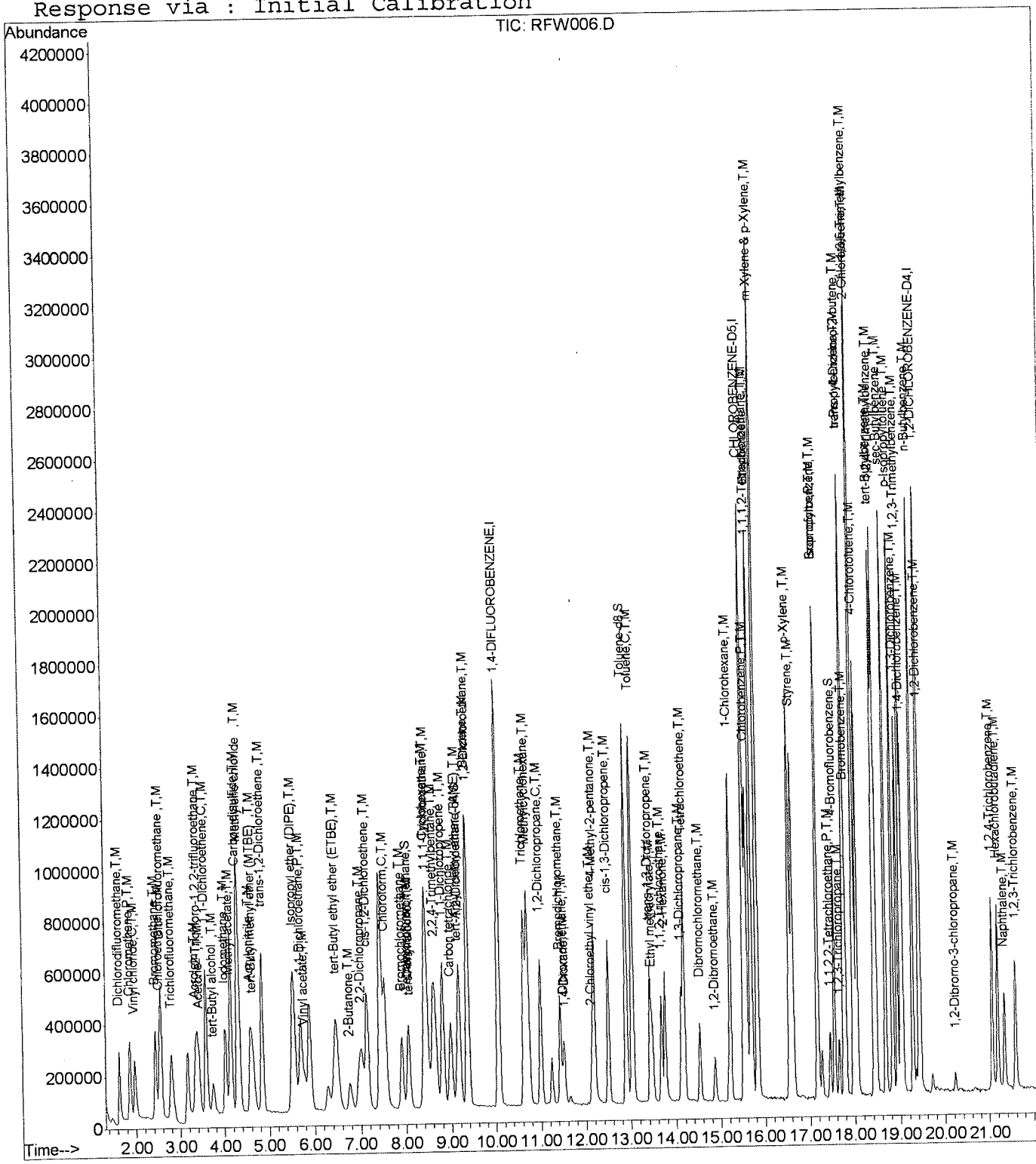
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F03\RFW006.D
Acq On : 3 Jun 2024 4:47 pm
Sample : VO06F035 0.50/2.50uL
Misc : 5.0ppb 8260/25ppb KET-AA/125ppb TBA
MS Integration Params: RTE.P
Quant Time: Jun 11 13:17 2024

Vial: 6
Operator: DHuynh
Inst : 06
Multiplr: 1.00

Quant Results File: VO06F03.RE

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW007.D Vial: 7
Acq On : 3 Jun 2024 5:14 pm Operator: DHuynh
Sample : VO06F036 1.00/5.00uL Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 10 16:47 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.05	114	3175665	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.53	117	2524233	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.43	152	865825	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	8.06	111	955711	10.03	ug/l	0.00
Spiked Amount 10.000			Recovery =	100.30%		
42) 1,2-Dichloroethane-d4	9.19	65	683634	9.97	ug/l	0.00
Spiked Amount 10.000			Recovery =	99.70%		
55) Toluene-d8	12.90	98	3702851	9.75	ug/l	0.00
Spiked Amount 10.000			Recovery =	97.50%		
77) 4-Bromofluorobenzene	17.54	95	1175426	10.24	ug/l	0.00
Spiked Amount 10.000			Recovery =	102.40%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.63	85	944148	10.04	ug/l	100
3) Chloromethane	1.86	50	1379661	9.64	ug/l	100
4) Vinyl chloride	1.98	62	1057816	10.36	ug/l	100
5) Bromomethane	2.44	94	926181	10.01	ug/l	100
6) Chloroethane	2.52	64	770397	9.83	ug/l	100
7) Dichlorofluoromethane	2.56	67	1927624	9.99	ug/l	100
8) Trichlorofluoromethane	2.79	101	1227432	9.68	ug/l	100
9) Acrolein	3.34	56	329881	50.90	ug/l	100
10) 1,1,2-Trichloro-1,2,2-trif	3.38	151	568290	9.72	ug/l	100
11) Acetone	3.42	43	493816	45.40	ug/l	100
12) 1,1-Dichloroethene	3.57	61	1740095	10.33	ug/l	100
13) tert-Butyl alcohol	3.74	59	827866	249.88	ug/l	100
15) Methyl acetate	4.14	74	70878	9.57	ug/l	100
16) Iodomethane	4.03	142	1690731	10.11	ug/l	100
18) Methylene chloride	4.33	49	1398164	9.91	ug/l	100
19) Carbon disulfide	4.28	76	4559062	10.38	ug/l	100
20) Acrylonitrile	4.58	53	738025	49.95	ug/l	100
21) tert-Butyl methyl ether (M	4.62	73	1658863	10.19	ug/l	100
22) trans-1,2-Dichloroethene	4.85	96	1165892	9.97	ug/l	100
23) Isopropyl ether (DIPE)	5.54	45	3862672	10.51	ug/l	100
24) Vinyl acetate	5.77	43	974695	9.72	ug/l	100
25) 1,1-Dichloroethane	5.71	63	2033904	10.27	ug/l	100
27) tert-Butyl ethyl ether (ET	6.46	59	2724914	10.20	ug/l	100
28) 2-Butanone	6.76	43	888916	51.07	ug/l	100
29) 2,2-Dichloropropane	7.01	77	1127535	10.05	ug/l	100
30) cis-1,2-Dichloroethene	7.13	96	1154449	10.08	ug/l	100
31) Chloroform	7.53	83	1784668	9.84	ug/l	100

(#) = qualifier out of range (m) = manual integration
RFW007.D VO06F03.M Mon Jun 10 17:16:55 2024 Page 1

SG 6/13/24

Data File : D:\HPCHEM\1\DATA\24F03\RFW007.D Vial: 7
Acq On : 3 Jun 2024 5:14 pm Operator: DHuynh
Sample : VO06F036 1.00/5.00uL Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 10 16:47 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.91	130	511769	10.34	ug/l	100
33)	Tetrahydrofuran	8.04	42	100150	9.40	ug/l	100
34)	tert-Amyl alcohol	8.06	59	130079	52.05	ug/l	100
36)	1,1,1-Trichloroethane	8.46	97	1382807	9.89	ug/l	100
37)	Cyclohexane	8.43	84	1468844	10.39	ug/l	100
38)	2,2,4-Trimethylpentane	8.62	57	3637165	10.03	ug/l	100
39)	1,1-Dichloropropene	8.81	110	472805	9.94	ug/l	100
40)	Carbon tetrachloride	8.98	119	1130682	10.02	ug/l	100
41)	tert-Amyl methyl ether (TA	9.15	73	2084558	10.46	ug/l	100
43)	1,2-Dichloroethane	9.38	62	849179	10.51	ug/l	100
44)	Benzene	9.36	78	4457037	10.54	ug/l	100
45)	Trichloroethene	10.63	130	1123791	10.44	ug/l	100
46)	Methylcyclohexane	10.72	83	1814653	10.96	ug/l	100
47)	1,2-Dichloropropane	10.99	63	1042417	10.20	ug/l	100
48)	1,4-Dioxane	11.54	88	57099	184.61	ug/l	100
49)	Bromodichloromethane	11.43	83	1169828	9.97	ug/l	100
50)	Dibromomethane	11.51	93	415449	9.61	ug/l	100
51)	2-Chloroethyl vinyl ether	12.12	63	338413	10.03	ug/l	100
52)	4-Methyl-2-pentanone	12.19	43	2733672	55.22	ug/l	100
53)	cis-1,3-Dichloropropene	12.50	75	1525685	10.22	ug/l	100
56)	Toluene	13.04	91	4506298	10.24	ug/l	100
57)	Ethyl methacrylate	13.46	69	765503	10.21	ug/l	100
58)	trans-1,3-Dichloropropene	13.42	75	1113685	10.27	ug/l	100
59)	1,1,2-Trichloroethane	13.67	97	509239	9.87	ug/l	100
60)	2-Hexanone	13.76	43	1577687	51.76	ug/l	100
61)	1,3-Dichloropropane	14.11	76	1003947	10.32	ug/l	100
62)	Tetrachloroethene	14.18	164	819957	10.13	ug/l	100
63)	Dibromochloromethane	14.53	129	672925	9.77	ug/l	100
65)	1,2-Dibromoethane	14.87	107	490706	9.54	ug/l	100
66)	1-Chlorohexane	15.22	91	2038068	9.84	ug/l	100
67)	Chlorobenzene	15.60	112	2568732	10.36	ug/l	100
68)	1,1,1,2-Tetrachloroethane	15.69	131	860214	10.31	ug/l	100
69)	Ethylbenzene	15.70	91	4946602	10.30	ug/l	100
70)	m-Xylene & p-Xylene	15.83	91	7472985	20.80	ug/l	100
71)	o-Xylene	16.56	91	3716621	10.07	ug/l	100
72)	Styrene	16.62	104	2755841	10.56	ug/l	100
73)	Isopropylbenzene	17.17	105	4611756	10.19	ug/l	100
75)	Bromoform	17.17	173	279362	11.44	ug/l	100
76)	1,1,2,2-Tetrachloroethane	17.45	83	557204	9.79	ug/l	100
78)	1,2,3-Trichloropropane	17.66	110	128404	9.75	ug/l	100
79)	trans-1,4-Dichloro-2-buten	17.77	53	142575	10.00	ug/l	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW007.D Vial: 7
Acq On : 3 Jun 2024 5:14 pm Operator: DHuynh
Sample : VO06F036 1.00/5.00uL Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 10 16:47 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80) n-Propylbenzene	17.77	91	5986695	10.70	ug/l	100
81) Bromobenzene	17.80	156	848065	10.45	ug/l	100
82) 1,3,5-Trimethylbenzene	17.97	105	3781174	10.39	ug/l	100
83) 2-Chlorotoluene	17.99	91	3824144	10.52	ug/l	100
84) 4-Chlorotoluene	18.05	91	3132014	10.17	ug/l	100
85) tert-Butylbenzene	18.43	134	819804	10.36	ug/l	100
86) 1,2,4-Trimethylbenzene	18.47	105	3657381	10.46	ug/l	100
87) sec-Butylbenzene	18.67	105	5015585	10.48	ug/l	100
88) p-Isopropyltoluene	18.83	119	4124841	10.45	ug/l	100
89) 1,3-Dichlorobenzene	18.93	146	1826041	10.61	ug/l	100
90) 1,2,3-Trimethylbenzene	19.01	105	3388303	10.40	ug/l	100
91) 1,4-Dichlorobenzene	19.06	146	1787165	10.50	ug/l	100
92) n-Butylbenzene	19.28	91	4127265	10.18	ug/l	100
93) 1,2-Dichlorobenzene	19.45	146	1491869	10.53	ug/l	100
94) 1,2-Dibromo-3-chloropropan	20.23	157	66299	9.52	ug/l	100
95) 1,2,4-Trichlorobenzene	21.06	180	835662	9.96	ug/l	100
96) Hexachlorobutadiene	21.19	225	512877	9.69	ug/l	100
97) Naphthalene	21.33	128	1156511	9.73	ug/l	100
98) 1,2,3-Trichlorobenzene	21.58	180	582836	9.18	ug/l	100

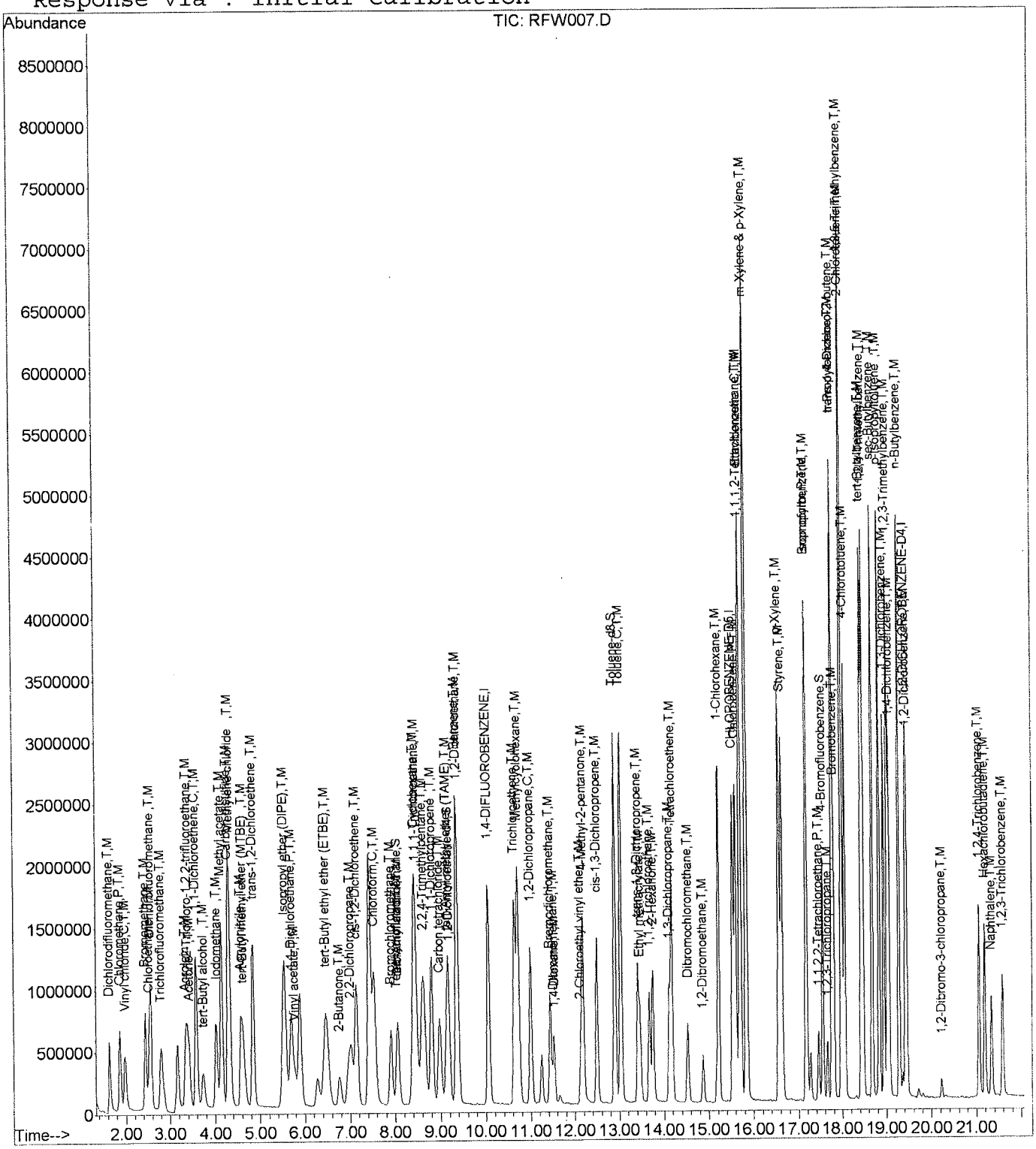
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F03\RFW007.D
Acq On : 3 Jun 2024 5:14 pm
Sample : VO06F036 1.00/5.00uL
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P
Quant Time: Jun 10 16:47 2024

Vial: 7
Operator: DHuynh
Inst : 06
Multiplr: 1.00
Quant Results File: VO06F03.RE

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW008.D Vial: 8
Acq On : 3 Jun 2024 5:40 pm Operator: DHuynh
Sample : VO06F037 2.00/10.0uL Inst : 06
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 10 15:24 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.07	114	3129127	10.00	ug/l	0.02
54) CHLOROBENZENE-D5	15.53	117	2471333	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.43	152	840170	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	8.06	111	1953155	20.80	ug/l	0.00
Spiked Amount 10.000			Recovery =	208.00%		
42) 1,2-Dichloroethane-d4	9.19	65	1412289	20.91	ug/l	0.00
Spiked Amount 10.000			Recovery =	209.10%		
55) Toluene-d8	12.90	98	7418347	19.94	ug/l	0.00
Spiked Amount 10.000			Recovery =	199.40%		
77) 4-Bromofluorobenzene	17.54	95	2362992	21.21	ug/l	0.00
Spiked Amount 10.000			Recovery =	212.10%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.63	85	1954855	21.10	ug/l	100
3) Chloromethane	1.87	50	2763462	19.59	ug/l	98
4) Vinyl chloride	1.97	62	2196831	21.84	ug/l	99
5) Bromomethane	2.42	94	1951629	21.41	ug/l	97
6) Chloroethane	2.52	64	1631266	21.12	ug/l	100
7) Dichlorofluoromethane	2.56	67	3926825	20.66	ug/l	98
8) Trichlorofluoromethane	2.80	101	2580921	20.67	ug/l	99
9) Acrolein	3.34	56	653410	102.31	ug/l	99
10) 1,1,2-Trichloro-1,2,2-trif	3.38	151	1186603	20.59	ug/l	99
11) Acetone	3.42	43	995917	92.93	ug/l	99
12) 1,1-Dichloroethene	3.57	61	3500152	21.09	ug/l	99
13) tert-Butyl alcohol	3.74	59	1597458	489.34	ug/l	99
15) Methyl acetate	4.12	74	136124	18.65	ug/l	94
16) Iodomethane	4.03	142	3443671	20.90	ug/l	98
18) Methylene chloride	4.33	49	2824713	20.32	ug/l	97
19) Carbon disulfide	4.28	76	9088666	21.01	ug/l	98
20) Acrylonitrile	4.58	53	1473774	101.24	ug/l	98
21) tert-Butyl methyl ether (M	4.62	73	3295676	20.54	ug/l	99
22) trans-1,2-Dichloroethene	4.85	96	2376655	20.62	ug/l	98
23) Isopropyl ether (DIPE)	5.54	45	7693292	21.24	ug/l	99
24) Vinyl acetate	5.77	43	2214955	22.42	ug/l	99
25) 1,1-Dichloroethane	5.71	63	4110836	21.07	ug/l	99
27) tert-Butyl ethyl ether (ET	6.46	59	5384784	20.46	ug/l	99
28) 2-Butanone	6.76	43	1759508	102.58	ug/l	100
29) 2,2-Dichloropropane	7.01	77	2381701	21.55	ug/l	99
30) cis-1,2-Dichloroethene	7.13	96	2362597	20.95	ug/l	99
31) Chloroform	7.53	83	3635213	20.33	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW008.D Vial: 8
Acq On : 3 Jun 2024 5:40 pm Operator: DHuynh
Sample : VO06F037 2.00/10.0uL Inst : 06
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 10 15:24 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) Bromochloromethane	7.91	130	1019400	20.91 ug/l	96
33) Tetrahydrofuran	8.01	42	186150	17.73 ug/l	98
34) tert-Amyl alcohol	8.06	59	233623	94.88 ug/l	85
36) 1,1,1-Trichloroethane	8.46	97	2903352	21.08 ug/l	100
37) Cyclohexane	8.43	84	2930303	21.03 ug/l	99
38) 2,2,4-Trimethylpentane	8.62	57	7242682	20.26 ug/l	100
39) 1,1-Dichloropropene	8.81	110	981400	20.95 ug/l	97
40) Carbon tetrachloride	8.98	119	2351636	21.15 ug/l	100
41) tert-Amyl methyl ether (TA	9.15	73	4077449	20.75 ug/l	98
43) 1,2-Dichloroethane	9.38	62	1705928	21.43 ug/l	100
44) Benzene	9.36	78	8774659	21.06 ug/l	99
45) Trichloroethene	10.63	130	2219080	20.92 ug/l	98
46) Methylcyclohexane	10.72	83	3487747	21.38 ug/l	98
47) 1,2-Dichloropropane	10.99	63	2140358	21.25 ug/l	100
48) 1,4-Dioxane	11.54	88	119866	393.30 ug/l	89
49) Bromodichloromethane	11.43	83	2376338	20.56 ug/l	98
50) Dibromomethane	11.52	93	843279	19.79 ug/l	98
51) 2-Chloroethyl vinyl ether	12.12	63	684959	20.60 ug/l	97
52) 4-Methyl-2-pentanone	12.19	43	5236453	107.35 ug/l	98
53) cis-1,3-Dichloropropene	12.50	75	3110855	21.16 ug/l	98
56) Toluene	13.05	91	8946641	20.76 ug/l	99
57) Ethyl methacrylate	13.46	69	1528847	20.83 ug/l	98
58) trans-1,3-Dichloropropene	13.42	75	2229605	21.01 ug/l	99
59) 1,1,2-Trichloroethane	13.67	97	1034105	20.47 ug/l	97
60) 2-Hexanone	13.76	43	3069633	102.85 ug/l	100
61) 1,3-Dichloropropane	14.11	76	2022114	21.22 ug/l	97
62) Tetrachloroethene	14.18	164	1671054	21.09 ug/l	99
63) Dibromochloromethane	14.53	129	1355574	20.10 ug/l	99
65) 1,2-Dibromoethane	14.87	107	952859	18.93 ug/l	97
66) 1-Chlorohexane	15.22	91	4298726	21.21 ug/l	98
67) Chlorobenzene	15.60	112	5125670	21.11 ug/l	99
68) 1,1,1,2-Tetrachloroethane	15.69	131	1702271	20.84 ug/l	98
69) Ethylbenzene	15.70	91	9840310	20.93 ug/l	99
70) m-Xylene & p-Xylene	15.83	91	14946607	42.50 ug/l	100
71) o-Xylene	16.56	91	7407735	20.50 ug/l	99
72) Styrene	16.62	104	5455597	21.35 ug/l	99
73) Isopropylbenzene	17.17	105	9126079	20.59 ug/l	99
75) Bromoform	17.17	173	568741	24.00 ug/l	100
76) 1,1,2,2-Tetrachloroethane	17.45	83	1121726	20.32 ug/l	96
78) 1,2,3-Trichloropropane	17.66	110	252451	19.75 ug/l	96
79) trans-1,4-Dichloro-2-buten	17.77	53	293526	21.23 ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW008.D Vial: 8
Acq On : 3 Jun 2024 5:40 pm Operator: DHuynh
Sample : VO06F037 2.00/10.0uL Inst : 06
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 10 15:24 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

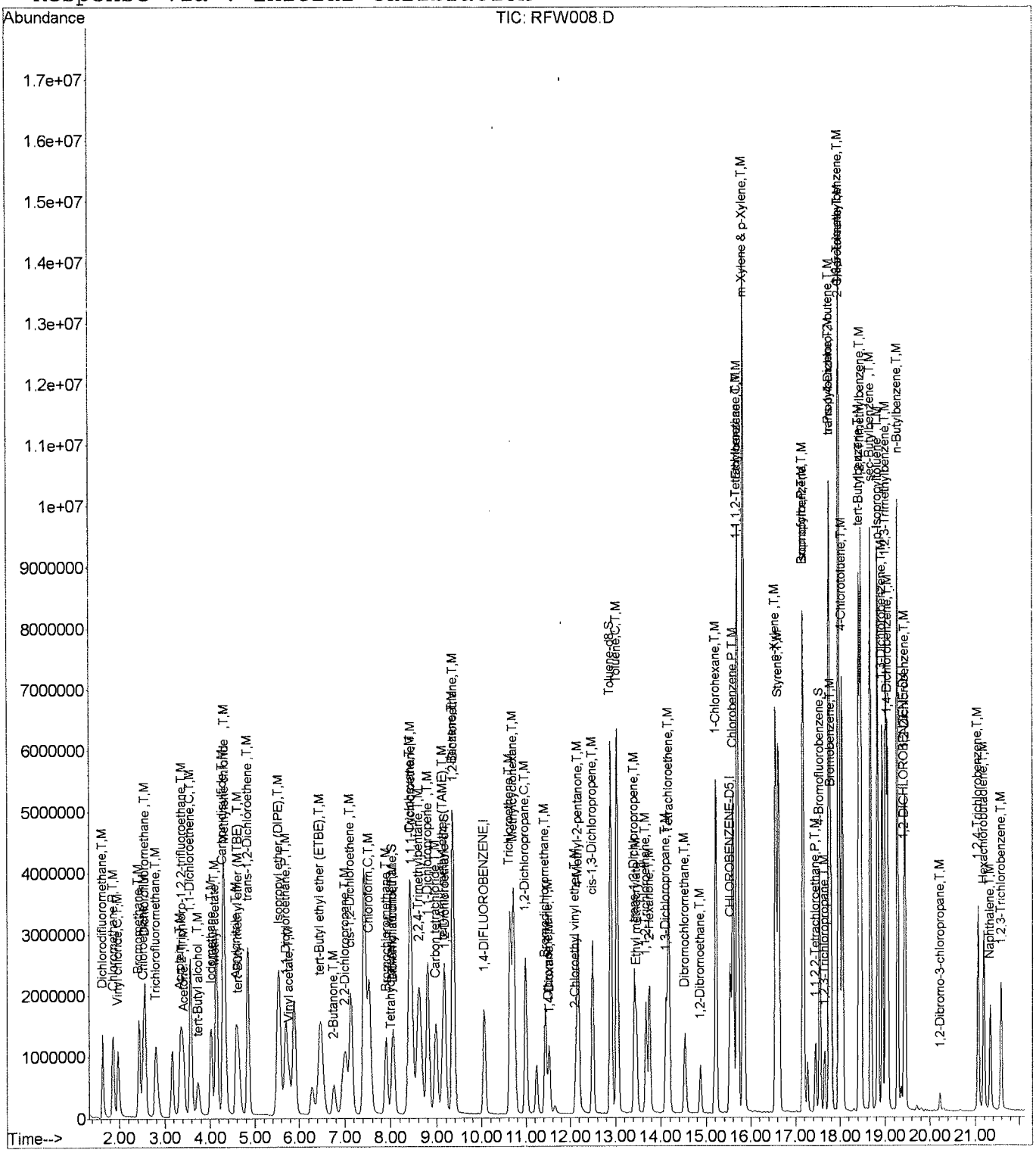
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80) n-Propylbenzene	17.77	91	11733040	21.61	ug/l	99
81) Bromobenzene	17.80	156	1682480	21.36	ug/l	97
82) 1,3,5-Trimethylbenzene	17.97	105	7482685	21.20	ug/l	99
83) 2-Chlorotoluene	17.99	91	7613267	21.59	ug/l	99
84) 4-Chlorotoluene	18.05	91	6316846	21.14	ug/l	99
85) tert-Butylbenzene	18.43	134	1611011	20.98	ug/l	96
86) 1,2,4-Trimethylbenzene	18.47	105	7307578	21.54	ug/l	98
87) sec-Butylbenzene	18.67	105	9798072	21.09	ug/l	99
88) p-Isopropyltoluene	18.84	119	8130968	21.22	ug/l	98
89) 1,3-Dichlorobenzene	18.93	146	3638567	21.78	ug/l	98
90) 1,2,3-Trimethylbenzene	19.01	105	6762541	21.40	ug/l	100
91) 1,4-Dichlorobenzene	19.06	146	3601199	21.81	ug/l	99
92) n-Butylbenzene	19.28	91	8325699	21.17	ug/l	98
93) 1,2-Dichlorobenzene	19.45	146	2930846	21.31	ug/l	98
94) 1,2-Dibromo-3-chloropropan	20.23	157	128108	18.96	ug/l	96
95) 1,2,4-Trichlorobenzene	21.06	180	1743210	21.41	ug/l	100
96) Hexachlorobutadiene	21.19	225	1065548	20.75	ug/l	98
97) Naphthalene	21.33	128	2398284	20.78	ug/l	98
98) 1,2,3-Trichlorobenzene	21.59	180	1253940	20.36	ug/l	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F03\RFW008.D Vial: 8
Acq On : 3 Jun 2024 5:40 pm Operator: DHuynh
Sample : VO06F037 2.00/10.0uL Inst : 06
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 10 15:24 2024 Quant Results File: VO06F03.RE

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW009.D Vial: 9
Acq On : 3 Jun 2024 6:06 pm Operator: DHuynh
Sample : VO06F038 3.00/15.0uL Inst : 06
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 10 15:24 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.07	114	3157508	10.00	ug/l	0.02
54) CHLOROBENZENE-D5	15.53	117	2502488	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.43	152	847553	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	8.06	111	2995949	31.61	ug/l	0.00
Spiked Amount 10.000			Recovery =	316.10%		
42) 1,2-Dichloroethane-d4	9.17	65	2207389	32.38	ug/l	-0.02
Spiked Amount 10.000			Recovery =	323.80%		
55) Toluene-d8	12.90	98	11185485	29.69	ug/l	0.00
Spiked Amount 10.000			Recovery =	296.90%		
77) 4-Bromofluorobenzene	17.54	95	3614143	32.16	ug/l	0.00
Spiked Amount 10.000			Recovery =	321.60%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.63	85	2800651	29.95	ug/l	98
3) Chloromethane	1.86	50	4254165	29.89	ug/l	97
4) Vinyl chloride	1.96	62	3137161	30.91	ug/l	99
5) Bromomethane	2.44	94	2990484	32.50	ug/l	97
6) Chloroethane	2.52	64	2489208	31.93	ug/l	99
7) Dichlorofluoromethane	2.56	67	5966515	31.11	ug/l	97
8) Trichlorofluoromethane	2.79	101	3776250	29.97	ug/l	97
9) Acrolein	3.34	56	1070508	166.12	ug/l	96
10) 1,1,2-Trichloro-1,2,2-trif	3.38	151	1811163	31.14	ug/l	98
11) Acetone	3.42	43	1675156	154.91	ug/l	98
12) 1,1-Dichloroethene	3.57	61	5310316	31.71	ug/l	99
13) tert-Butyl alcohol	3.74	59	2780708	844.14	ug/l	100
15) Methyl acetate	4.12	74	222506	30.21	ug/l	96
16) Iodomethane	4.01	142	5242673	31.54	ug/l	98
18) Methylene chloride	4.33	49	4343883	30.96	ug/l	99
19) Carbon disulfide	4.28	76	13690067	31.36	ug/l	98
20) Acrylonitrile	4.58	53	2435302	165.79	ug/l	99
21) tert-Butyl methyl ether (M	4.62	73	5371709	33.18	ug/l	99
22) trans-1,2-Dichloroethene	4.85	96	3616808	31.10	ug/l	99
23) Isopropyl ether (DIPE)	5.54	45	11981874	32.78	ug/l	98
24) Vinyl acetate	5.77	43	3549160	35.60	ug/l	100
25) 1,1-Dichloroethane	5.69	63	6347802	32.24	ug/l	98
27) tert-Butyl ethyl ether (ET	6.46	59	8568963	32.26	ug/l	98
28) 2-Butanone	6.76	43	2920001	168.71	ug/l	98
29) 2,2-Dichloropropane	7.01	77	3505603	31.43	ug/l	99
30) cis-1,2-Dichloroethene	7.13	96	3609646	31.71	ug/l	97
31) Chloroform	7.53	83	5584053	30.95	ug/l	99

(#) = qualifier out of range (m) = manual integration
RFW009.D VO06F03.M Mon Jun 10 17:17:39 2024 Page 1

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW009.D Vial: 9
Acq On : 3 Jun 2024 6:06 pm Operator: DHuynh
Sample : VO06F038 3.00/15.0uL Inst : 06
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 10 15:24 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) Bromochloromethane	7.91	130	1622195	32.97 ug/l	98
33) Tetrahydrofuran	8.01	42	333513	31.47 ug/l	99
34) tert-Amyl alcohol	8.04	59	428166	172.32 ug/l	95
36) 1,1,1-Trichloroethane	8.45	97	4314838	31.05 ug/l	99
37) Cyclohexane	8.43	84	4222551	30.03 ug/l	98
38) 2,2,4-Trimethylpentane	8.62	57	10301198	28.56 ug/l	100
39) 1,1-Dichloropropene	8.81	110	1507038	31.88 ug/l	97
40) Carbon tetrachloride	8.98	119	3533249	31.49 ug/l	99
41) tert-Amyl methyl ether (TA	9.15	73	6651534	33.55 ug/l	97
43) 1,2-Dichloroethane	9.38	62	2643256	32.90 ug/l	98
44) Benzene	9.36	78	13421260	31.93 ug/l	98
45) Trichloroethene	10.63	130	3402142	31.79 ug/l	99
46) Methylcyclohexane	10.72	83	5103144	31.00 ug/l	99
47) 1,2-Dichloropropane	10.99	63	3253064	32.01 ug/l	99
48) 1,4-Dioxane	11.54	88	199825	649.77 ug/l	97
49) Bromodichloromethane	11.43	83	3707290	31.78 ug/l	99
50) Dibromomethane	11.51	93	1309300	30.45 ug/l	96
51) 2-Chloroethyl vinyl ether	12.12	63	1104169	32.91 ug/l	98
52) 4-Methyl-2-pentanone	12.16	43	8558125	173.87 ug/l	98
53) cis-1,3-Dichloropropene	12.50	75	4826803	32.53 ug/l	97
56) Toluene	13.04	91	13493461	30.93 ug/l	98
57) Ethyl methacrylate	13.46	69	2459154	33.08 ug/l	97
58) trans-1,3-Dichloropropene	13.42	75	3534293	32.89 ug/l	96
59) 1,1,2-Trichloroethane	13.67	97	1668591	32.62 ug/l	98
60) 2-Hexanone	13.74	43	5097874	168.69 ug/l	98
61) 1,3-Dichloropropane	14.11	76	3169248	32.85 ug/l	98
62) Tetrachloroethene	14.18	164	2532429	31.57 ug/l	99
63) Dibromochloromethane	14.53	129	2137573	31.30 ug/l	99
65) 1,2-Dibromoethane	14.87	107	1575709	30.91 ug/l	98
66) 1-Chlorohexane	15.22	91	6224918	30.33 ug/l	99
67) Chlorobenzene	15.60	112	7880377	32.05 ug/l	98
68) 1,1,1,2-Tetrachloroethane	15.69	131	2665278	32.22 ug/l	98
69) Ethylbenzene	15.70	91	15004399	31.52 ug/l	98
70) m-Xylene & p-Xylene	15.83	91	20728474	58.21 ug/l	93
71) o-Xylene	16.56	91	11202924	30.62 ug/l	100
72) Styrene	16.62	104	8419372	32.54 ug/l	98
73) Isopropylbenzene	17.17	105	13587375	30.27 ug/l	98
75) Bromoform	17.17	173	927360	38.79 ug/l	99
76) 1,1,2,2-Tetrachloroethane	17.45	83	1799348	32.31 ug/l	96
78) 1,2,3-Trichloropropane	17.66	110	406032	31.48 ug/l	95
79) trans-1,4-Dichloro-2-buten	17.77	53	470821	33.75 ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW009.D Vial: 9
Acq On : 3 Jun 2024 6:06 pm Operator: DHuynh
Sample : VO06F038 3.00/15.0uL Inst : 06
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 10 15:24 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	n-Propylbenzene	17.77	91	16541405	30.20	ug/l	96
81)	Bromobenzene	17.80	156	2594135	32.65	ug/l	98
82)	1,3,5-Trimethylbenzene	17.97	105	11223942	31.52	ug/l	99
83)	2-Chlorotoluene	17.99	91	11522522	32.39	ug/l	99
84)	4-Chlorotoluene	18.05	91	9516913	31.57	ug/l	99
85)	tert-Butylbenzene	18.43	134	2371986	30.61	ug/l	94
86)	1,2,4-Trimethylbenzene	18.47	105	10870803	31.76	ug/l	99
87)	sec-Butylbenzene	18.67	105	14064799	30.01	ug/l	97
88)	p-Isopropyltoluene	18.84	119	11987182	31.01	ug/l	98
89)	1,3-Dichlorobenzene	18.93	146	5513287	32.72	ug/l	98
90)	1,2,3-Trimethylbenzene	19.01	105	10147741	31.83	ug/l	99
91)	1,4-Dichlorobenzene	19.06	146	5460306	32.79	ug/l	99
92)	n-Butylbenzene	19.28	91	12138274	30.60	ug/l	98
93)	1,2-Dichlorobenzene	19.45	146	4441577	32.01	ug/l	97
94)	1,2-Dibromo-3-chloropropan	20.23	157	213114	31.27	ug/l	94
95)	1,2,4-Trichlorobenzene	21.06	180	2661527	32.41	ug/l	99
96)	Hexachlorobutadiene	21.19	225	1535231	29.63	ug/l	100
97)	Naphthalene	21.33	128	3796941	32.62	ug/l	97
98)	1,2,3-Trichlorobenzene	21.59	180	1971100	31.72	ug/l	99

(#) = qualifier out of range (m) = manual integration

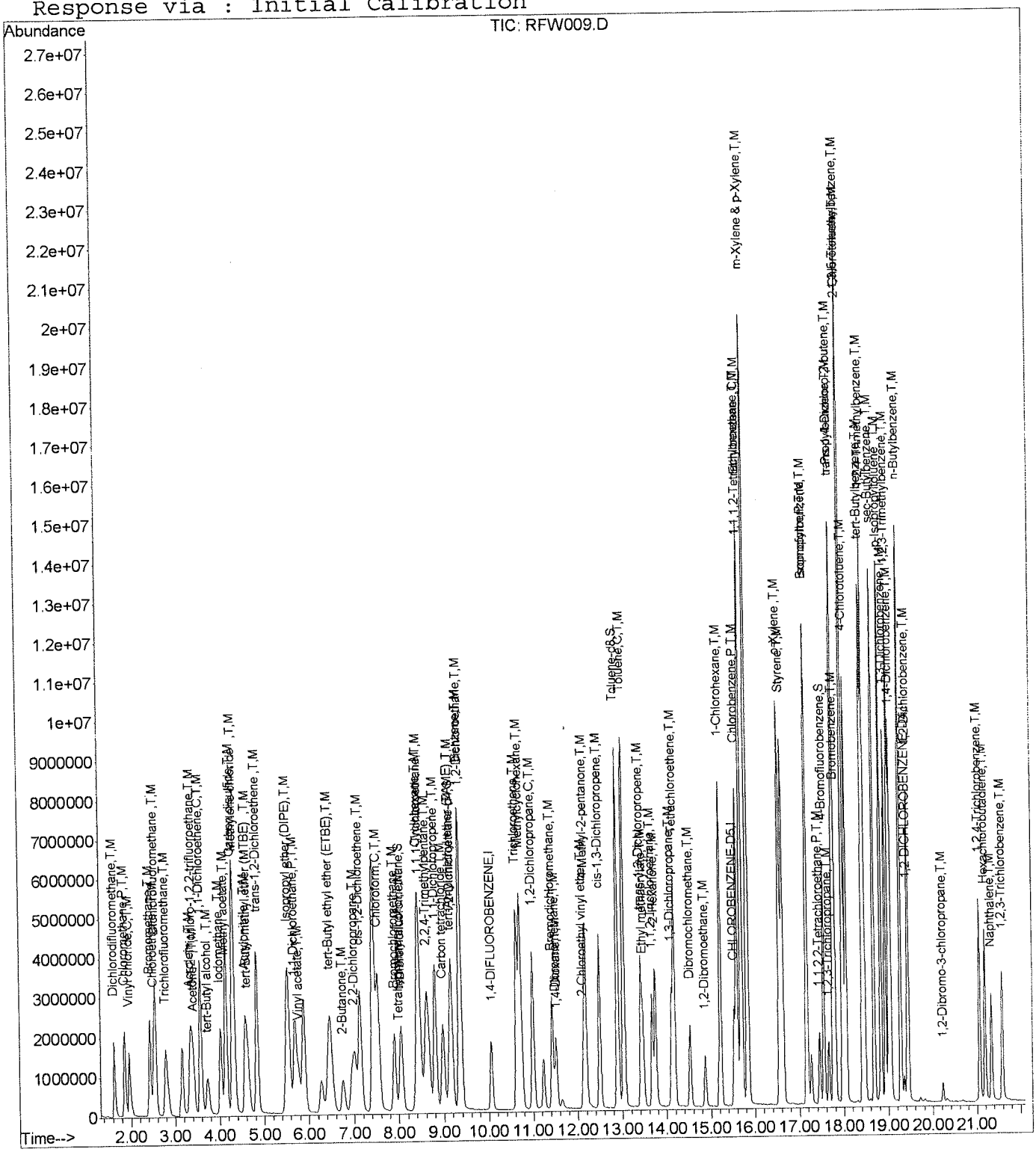
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F03\RFW009.D
Acq On : 3 Jun 2024 6:06 pm
Sample : VO06F038 3.00/15.0uL
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA
MS Integration Params: RTE.P
Quant Time: Jun 10 15:24 2024

Vial: 9
Operator: DHuynh
Inst : 06
Multiplr: 1.00

Quant Results File: VO06F03.RE

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW010.D
Acq On : 3 Jun 2024 6:32 pm
Sample : VO06F039 5.00/25.0uL
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA
MS Integration Params: RTE.P
Quant Time: Jun 13 14:44 2024

Vial: 10
Operator: DHuynh
Inst : 06
Multiplr: 1.00
Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.05	114	3116397	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.53	117	2463139	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.43	152	817022	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	8.06	111	2047	0.02	ug/l	0.00
Spiked Amount 10.000			Recovery =	0.20%		
42) 1,2-Dichloroethane-d4	9.38	65	146280	2.17	ug/l	0.19
Spiked Amount 10.000			Recovery =	21.70%		
55) Toluene-d8	12.90	98	11699	0.03	ug/l	0.00
Spiked Amount 10.000			Recovery =	0.30%		
77) 4-Bromofluorobenzene	17.45	95	334633	3.09	ug/l	-0.09
Spiked Amount 10.000			Recovery =	30.90%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.63	85	4565047	49.46	ug/l	98
3) Chloromethane	1.85	50	6929109	49.33	ug/l	98
4) Vinyl chloride	1.97	62	5011281	50.03	ug/l	98
5) Bromomethane	2.42	94	4814336	53.02	ug/l	97
6) Chloroethane	2.52	64	4047626	52.61	ug/l	99
7) Dichlorofluoromethane	2.56	67	9684492	51.16	ug/l	97
8) Trichlorofluoromethane	2.80	101	6086554	48.94	ug/l	97
9) Acrolein	3.34	56	1841817	289.58	ug/l	97
10) 1,1,2-Trichloro-1,2,2-trif	3.38	151	2860019	49.83	ug/l	100
11) Acetone	3.43	43	2697286	252.72	ug/l	98
12) 1,1-Dichloroethene	3.57	61	8540321	51.68	ug/l	98
13) tert-Butyl alcohol	3.74	59	4639511	1426.99	ug/l	99
16) Iodomethane	4.01	142	8573910	52.26	ug/l	98
18) Methylene chloride	4.33	49	7063550	51.02	ug/l	98
20) Acrylonitrile	4.58	53	3948572	272.35	ug/l	97
21) tert-Butyl methyl ether (M	4.62	73	8363740	52.34	ug/l	99
22) trans-1,2-Dichloroethene	4.83	96	5964803	51.97	ug/l	99
23) Isopropyl ether (DIPE)	5.52	45	19403541	53.78	ug/l	97
24) Vinyl acetate	5.77	43	5655446	57.47	ug/l	100
25) 1,1-Dichloroethane	5.69	63	10451406	53.79	ug/l	97
27) tert-Butyl ethyl ether (ET	6.46	59	14041355	53.56	ug/l	99
28) 2-Butanone	6.76	43	4797015	280.82	ug/l	99
29) 2,2-Dichloropropane	7.01	77	5641443	51.25	ug/l	97
30) cis-1,2-Dichloroethene	7.13	96	6044518	53.81	ug/l	99
31) Chloroform	7.53	83	9277417	52.11	ug/l	98
32) Bromochloromethane	7.91	130	2637941	54.32	ug/l	97
33) Tetrahydrofuran	8.02	42	501965	47.99	ug/l	95

(#) = qualifier out of range (m) = manual integration

Su 6/13/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW010.D Vial: 10
Acq On : 3 Jun 2024 6:32 pm Operator: DHuynh
Sample : VO06F039 5.00/25.0uL Inst : 06
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 13 14:44 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
36) 1,1,1-Trichloroethane	8.43	97	7077776	51.60	ug/l	99
39) 1,1-Dichloropropene	8.81	110	2477374	53.10	ug/l	100
40) Carbon tetrachloride	8.98	119	5780512	52.19	ug/l	100
41) tert-Amyl methyl ether (TA	9.15	73	10601434	54.18	ug/l	97
43) 1,2-Dichloroethane	9.38	62	4390464	55.37	ug/l	98
44) Benzene	9.36	78	21964137	52.94	ug/l	97
45) Trichloroethene	10.63	130	5651998	53.51	ug/l	99
47) 1,2-Dichloropropane	10.99	63	5325088	53.09	ug/l	99
48) 1,4 Dioxane	11.54	88	329428	1085.34	ug/l	98
49) Bromodichloromethane	11.43	83	6095730	52.95	ug/l	99
50) Dibromomethane	11.52	93	2182574	51.42	ug/l	97
51) 2-Chloroethyl vinyl ether	12.12	63	1813000	54.74	ug/l	98
52) 4-Methyl-2-pentanone	12.16	43	13663024	281.24	ug/l	97
53) cis-1,3-Dichloropropene	12.50	75	7839555	53.53	ug/l	98
56) Toluene	13.05	91	21264151	49.52	ug/l	94
57) Ethyl methacrylate	13.46	69	3878172	53.01	ug/l	97
58) trans-1,3-Dichloropropene	13.42	75	5631346	53.24	ug/l	97
59) 1,1,2-Trichloroethane	13.67	97	2705802	53.75	ug/l	96
60) 2-Hexanone	13.74	43	8067704	271.22	ug/l	98
61) 1,3-Dichloropropane	14.11	76	5112268	53.83	ug/l	95
62) Tetrachloroethene	14.18	164	4182240	52.96	ug/l	99
63) Dibromochloromethane	14.53	129	3484995	51.84	ug/l	98
65) 1,2-Dibromoethane	14.87	107	2567529	51.16	ug/l	100
66) 1-Chlorohexane	15.22	91	10567556	52.31	ug/l	97
67) Chlorobenzene	15.60	112	12745643	52.66	ug/l	98
68) 1,1,1,2-Tetrachloroethane	15.69	131	4366242	53.63	ug/l	97
69) Ethylbenzene	15.70	91	21836386	46.61	ug/l	91
70) m-Xylene & p-Xylene	15.83	91	26257770	74.91	ug/l	73
71) o-Xylene	16.56	91	17806915	49.45	ug/l	98
72) Styrene	16.62	104	13719753	53.87	ug/l	98
73) Isopropylbenzene	17.17	105	20112820	45.53	ug/l	94
75) Bromoform	17.17	173	1500807	65.11	ug/l	100
76) 1,1,2,2-Tetrachloroethane	17.45	83	2792590	52.02	ug/l	94
78) 1,2,3-Trichloropropane	17.66	110	663613	53.38	ug/l	97
79) trans-1,4-Dichloro-2-buten	17.77	53	778748	57.91	ug/l	100
80) n-Propylbenzene	17.77	91	21004725	39.79	ug/l	85
81) Bromobenzene	17.80	156	4289938	56.01	ug/l	99
82) 1,3,5-Trimethylbenzene	17.97	105	16371249	47.69	ug/l	91
83) 2-Chlorotoluene	17.99	91	17518844	51.09	ug/l	95
84) 4-Chlorotoluene	18.05	91	14688103	50.55	ug/l	95
85) tert-Butylbenzene	18.43	134	3926370	52.57	ug/l	95

(#) = qualifier out of range (m) = manual integration
RFW010.D VO06F03.M Thu Jun 13 14:44:22 2024 Page 2

SU 6/13/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW010.D
Acq On : 3 Jun 2024 6:32 pm
Sample : VO06F039 5.00/25.0uL
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA
MS Integration Params: RTE.P
Quant Time: Jun 13 14:44 2024

Vial: 10
Operator: DHuynh
Inst : 06
Multiplr: 1.00
Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
86) 1,2,4-Trimethylbenzene	18.47	105	15705453	47.60	ug/l	90
87) sec-Butylbenzene	18.67	105	18287261	40.48	ug/l	87
88) p-Isopropyltoluene	18.84	119	16389807	43.99	ug/l	89
89) 1,3-Dichlorobenzene	18.93	146	8906956	54.83	ug/l	98
90) 1,2,3-Trimethylbenzene	19.01	105	14888062	48.44	ug/l	93
91) 1,4-Dichlorobenzene	19.06	146	8812762	54.89	ug/l	99
92) n-Butylbenzene	19.28	91	16162238	42.26	ug/l	85
93) 1,2-Dichlorobenzene	19.45	146	7098849	53.08	ug/l	98
94) 1,2-Dibromo-3-chloropropan	20.23	157	342277	52.10	ug/l	92
95) 1,2,4-Trichlorobenzene	21.06	180	4284870	54.12	ug/l	98
96) Hexachlorobutadiene	21.19	225	2390381	47.86	ug/l	100
97) Naphthalene	21.33	128	6058211	53.99	ug/l	96
98) 1,2,3-Trichlorobenzene	21.58	180	3217149	53.71	ug/l	97

SY 6/13/24

(#) = qualifier out of range (m) = manual integration

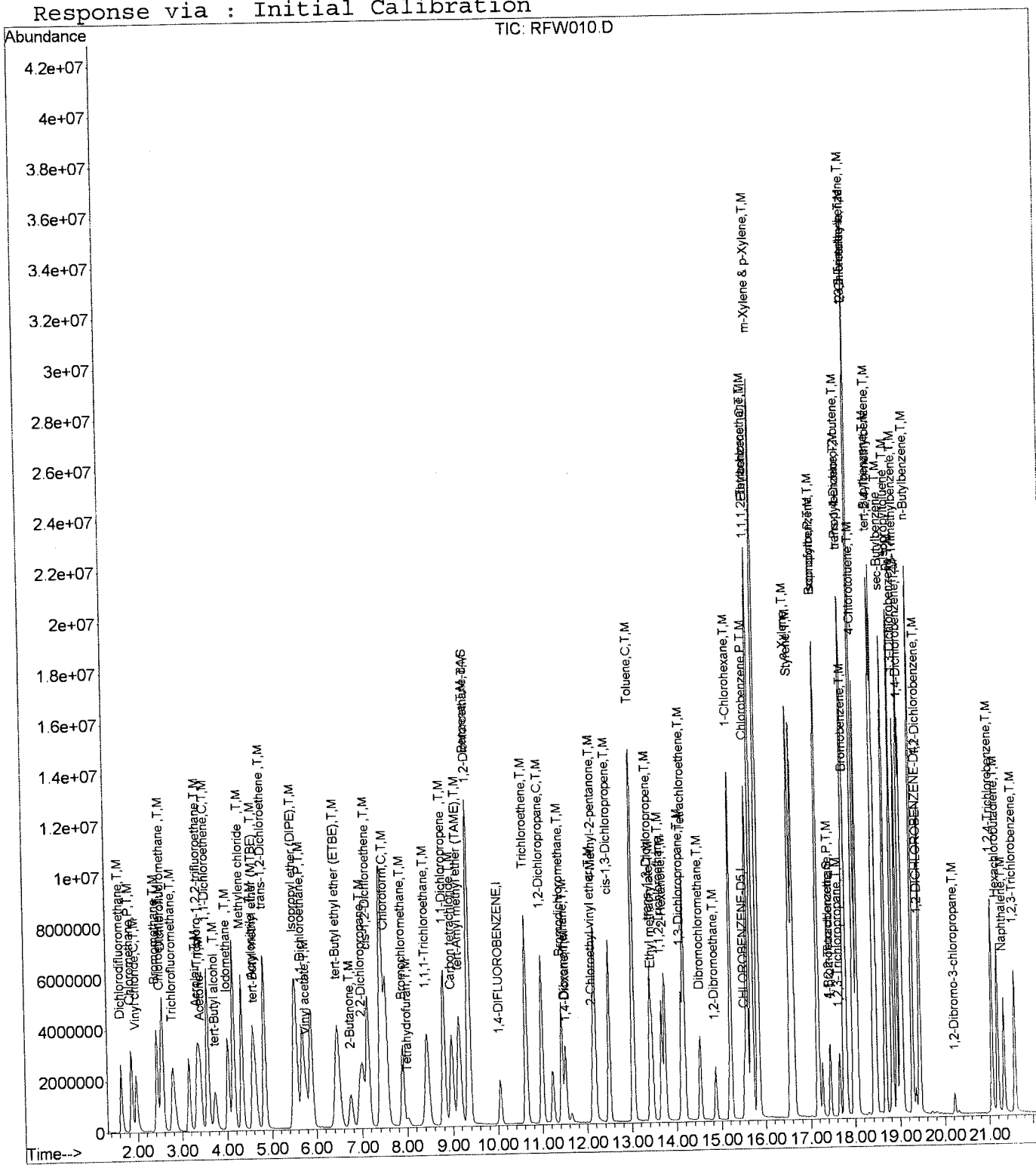
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F03\RFW010.D
Acq On : 3 Jun 2024 6:32 pm
Sample : VO06F039 5.00/25.0uL
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA
MS Integration Params: RTE.P
Quant Time: Jun 13 14:44 2024

Vial: 10
Operator: DHuynh
Inst : 06
Multiplr: 1.00

Quant Results File: VO06F03.RE

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW011.D Vial: 11
Acq On : 3 Jun 2024 6:59 pm Operator: DHuynh
Sample : VO06F0310 10.0/50.0uL Inst : 06
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 13 14:45 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.05	114	3267276	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.53	117	2470521	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.43	152	807954	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	8.06	111	1654	0.02	ug/l	0.00
Spiked Amount 10.000			Recovery =	0.20%		
42) 1,2-Dichloroethane-d4	9.38	65	322551	4.57	ug/l	0.19
Spiked Amount 10.000			Recovery =	45.70%		
55) Toluene-d8	12.90	98	7845	0.02	ug/l	0.00
Spiked Amount 10.000			Recovery =	0.20%		
77) 4-Bromofluorobenzene	17.66	95	9716	0.09	ug/l	0.12
Spiked Amount 10.000			Recovery =	0.90%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.63	85	9468664	97.86	ug/l	97
3) Chloromethane	1.85	50	13830085	93.91	ug/l	97
4) Vinyl chloride	1.95	62	9844460	93.75	ug/l	96
5) Bromomethane	2.42	94	9831475	103.27	ug/l	96
6) Chloroethane	2.52	64	8125496	100.74	ug/l	97
7) Dichlorofluoromethane	2.56	67	19366118	97.58	ug/l	95
8) Trichlorofluoromethane	2.80	101	12785329	98.05	ug/l	98
9) Acrolein	3.32	56	3775794	566.23	ug/l	92
10) 1,1,2-Trichloro-1,2,2-trif	3.38	151	6197712	102.99	ug/l	100
11) Acetone	3.43	43	5855592	523.29	ug/l	98
12) 1,1-Dichloroethene	3.57	61	17775935	102.59	ug/l	96
13) tert-Butyl alcohol	3.74	59	9663719	2835.05	ug/l	100
16) Iodomethane	4.01	142	17413665	101.24	ug/l	97
18) Methylene chloride	4.33	49	14522196	100.04	ug/l	97
20) Acrylonitrile	4.58	53	8329195	547.97	ug/l	96
21) tert-Butyl methyl ether (M	4.62	73	17802450	106.27	ug/l	98
22) trans-1,2-Dichloroethene	4.83	96	12383476	102.91	ug/l	98
23) Isopropyl ether (DIPE)	5.54	45	39445303	104.29	ug/l	96
24) Vinyl acetate	5.77	43	11713328	113.54	ug/l	98
25) 1,1-Dichloroethane	5.69	63	21713208	106.59	ug/l	96
27) tert-Butyl ethyl ether (ET	6.46	59	29245164	106.41	ug/l	98
28) 2-Butanone	6.76	43	10187613	568.85	ug/l	98
29) 2,2-Dichloropropane	7.01	77	10704225	92.75	ug/l	96
30) cis-1,2-Dichloroethene	7.14	96	12640667	107.32	ug/l	98
31) Chloroform	7.53	83	19463376	104.27	ug/l	97
32) Bromochloromethane	7.91	130	5571840	109.43	ug/l	95
33) Tetrahydrofuran	8.02	42	1173408	107.01	ug/l	92

(#) = qualifier out of range (m) = manual integration
RFW011.D VO06F03.M Thu Jun 13 14:45:19 2024 SC 6/13/24 Page 1

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW011.D Vial: 11
Acq On : 3 Jun 2024 6:59 pm Operator: DHuynh
Sample : VO06F0310 10.0/50.0uL Inst : 06
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 13 14:45 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
36) 1,1,1-Trichloroethane	8.44	97	14425577	100.31	ug/l	99
39) 1,1-Dichloropropene	8.81	110	5382858	110.05	ug/l	100
40) Carbon tetrachloride	8.98	119	12054731	103.82	ug/l	100
41) tert-Amyl methyl ether (TA	9.15	73	21967113	107.09	ug/l	96
43) 1,2-Dichloroethane	9.38	62	9352958	112.50	ug/l	97
44) Benzene	9.36	78	35835145	82.38	ug/l	83
45) Trichloroethene	10.64	130	11922526	107.67	ug/l	99
47) 1,2-Dichloropropane	10.99	63	11123729	105.78	ug/l	97
48) 1,4-Dioxane	11.54	88	707776	2224.16	ug/l	94
49) Bromodichloromethane	11.43	83	12613415	104.50	ug/l	100
50) Dibromomethane	11.52	93	4553076	102.32	ug/l	97
51) 2-Chloroethyl vinyl ether	12.12	63	3808698	109.69	ug/l	99
52) 4-Methyl-2-pentanone	12.19	43	26391574	518.16	ug/l	93
53) cis-1,3-Dichloropropene	12.50	75	16116476	104.97	ug/l	97
56) Toluene	13.05	91	30011235	69.68	ug/l	73
57) Ethyl methacrylate	13.47	69	8228972	112.14	ug/l	97
58) trans-1,3-Dichloropropene	13.42	75	11564165	109.00	ug/l	96
59) 1,1,2-Trichloroethane	13.67	97	5624363	111.39	ug/l	97
60) 2-Hexanone	13.74	43	16630636	557.43	ug/l	96
61) 1,3-Dichloropropane	14.11	76	10522894	110.48	ug/l	95
62) Tetrachloroethene	14.18	164	8719325	110.09	ug/l	99
63) Dibromochloromethane	14.53	129	7129209	105.74	ug/l	99
65) 1,2-Dibromoethane	14.87	107	5272512	104.76	ug/l	99
66) 1-Chlorohexane	15.22	91	19587233	96.66	ug/l	98
67) Chlorobenzene	15.60	112	22363149	92.12	ug/l	88
68) 1,1,1,2-Tetrachloroethane	15.69	131	8963057	109.75	ug/l	97
71) o-Xylene	16.56	91	26444346	73.22	ug/l	74
72) Styrene	16.64	104	23427132	91.71	ug/l	83
73) Isopropylbenzene	17.18	105	27248613	61.50	ug/l	71
75) Bromoform	17.17	173	3019818	132.49	ug/l	97
76) 1,1,2,2-Tetrachloroethane	17.45	83	5499706	103.59	ug/l	94
78) 1,2,3-Trichloropropane	17.66	110	1354845	110.20	ug/l	98
79) trans-1,4-Dichloro-2-buten	17.76	53	1611642	121.19	ug/l	98
80) n-Propylbenzene	17.76	91	26824584	51.38	ug/l	53
81) Bromobenzene	17.80	156	8764926	115.71	ug/l	100
82) 1,3,5-Trimethylbenzene	17.98	105	22472794	66.20	ug/l	66
85) tert-Butylbenzene	18.43	134	7928634	107.35	ug/l	93
86) 1,2,4-Trimethylbenzene	18.48	105	21772080	66.73	ug/l	59
87) sec-Butylbenzene	18.67	105	23290361	52.14	ug/l	56
88) p-Isopropyltoluene	18.84	119	21695698	58.88	ug/l	59
89) 1,3-Dichlorobenzene	18.94	146	15731281	97.93	ug/l	89

(#) = qualifier out of range (m) = manual integration

SA 6/13/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW011.D Vial: 11
Acq On : 3 Jun 2024 6:59 pm Operator: DHuynh
Sample : VO06F0310 10.0/50.0uL Inst : 06
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 13 14:45 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
90)	1,2,3-Trimethylbenzene	19.02	105	20399117	67.12	ug/l	66
91)	1,4-Dichlorobenzene	19.06	146	15775580	99.36	ug/l	90
92)	n-Butylbenzene	19.28	91	21174049	55.99	ug/l	64
93)	1,2-Dichlorobenzene	19.45	146	13588099	102.74	ug/l	95
94)	1,2-Dibromo-3-chloropropan	20.23	157	714222	109.93	ug/l	90
95)	1,2,4-Trichlorobenzene	21.06	180	8833037	112.82	ug/l	99
96)	Hexachlorobutadiene	21.19	225	5085714	102.97	ug/l	100
97)	Naphthalene	21.33	128	12437403	112.08	ug/l	95
98)	1,2,3-Trichlorobenzene	21.59	180	6671220	112.62	ug/l	98

SC 6/13/24

(#) = qualifier out of range (m) = manual integration
RFW011.D VO06F03.M Thu Jun 13 14:45:20 2024 Page 3

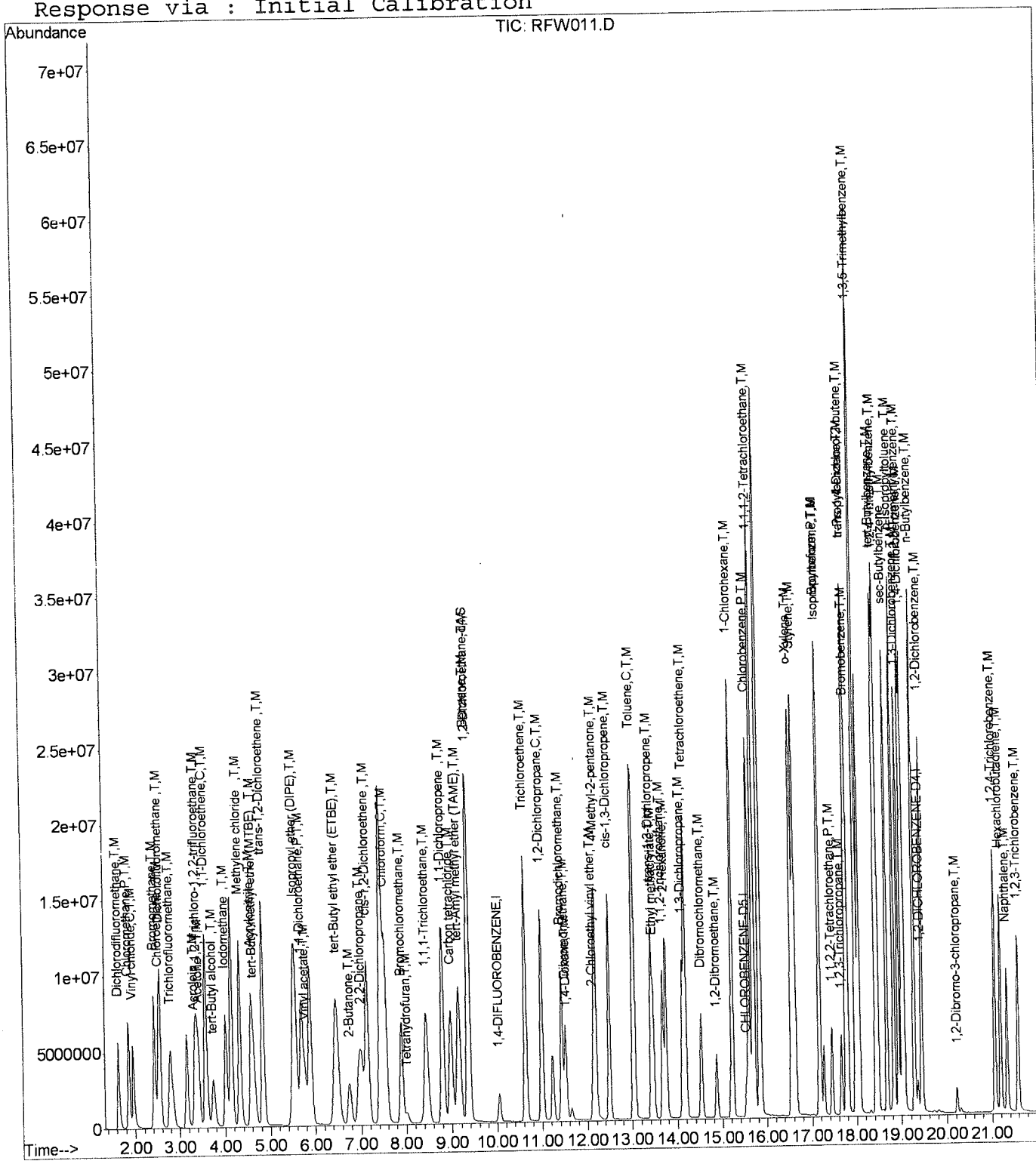
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F03\RFW011.D
Acq On : 3 Jun 2024 6:59 pm
Sample : VO06F0310 10.0/50.0uL
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA
MS Integration Params: RTE.P
Quant Time: Jun 13 14:45 2024

Vial: 11
Operator: DHuynh
Inst : 06
Multiplr: 1.00

Quant Results File: VO06F03.RE

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration



SECOND SOURCE VERIFICATION

CONTINUE_CALIBRATION - CALIBRATION VERIFICATION

Instrument ID :06
IC_Beginning DateTime :06/03/24 15:03
Spike Amount :10 PPB
CC/CV File :RFW014
IC File :RFW007

Column Spec :RTX502.2 ID :0.25MM
IC_Ending DateTime :06/03/24 18:59
HPChem Method :VO06F03
Date_Time :06/03/24 20:18

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	3067327	1	1	10.047	10.057	0				
	2	Dichlorodifluoromethane	9.678	-3.2	879158	0.287	0.296	1.627	1.631	5.79				
	3	Chloromethane	9.688	-3.1	1339526	0.437	0.451	1.864	1.864	13.06				
	4	Vinyl chloride	9.959	-0.4	981772	0.320	0.321	1.982	1.973	6.50				
	5	Bromomethane	10.119	1.2	904417	0.295	0.291	2.436	2.431	7.51				
	6	Chloroethane	9.961	-0.4	754301	0.246	0.247	2.515	2.519	5.98				
	7	Dichlorofluoromethane	9.943	-0.6	1852639	0.604	0.607	2.555	2.559	8.37				
	8	Trichlorofluoromethane	9.296	-7.0	1137996	0.371	0.399	2.792	2.795	11.88				
5	9	Acrolein	49.804	-0.4	311789	0.020	0.020	3.340	3.339	12.06				
	10	1,1,2-Trichloro-1,2,2-trifluoroethane	9.379	-6.2	529874	0.173	0.184	3.382	3.379	9.77				
5	11	Acetone	44.998	-10.0	472714	0.031	0.034	3.424	3.425	12.69				
	12	1,1-Dichloroethene	9.982	-0.2	1623684	0.529	0.530	3.571	3.572	6.16				
25	13	tert-Butyl alcohol	244.740	-2.1	783184	0.010	0.010	3.739	3.742	13.37				
	14	Acetonitrile												
	15	Methyl acetate	8.925	-10.7	63857	0.021	0.023	4.116	4.124	8.55				
	16	Iodomethane	10.198	2.0	1646901	0.537	0.526	4.032	4.020	7.71				
	17	Allyl chloride												
	18	Methylene chloride	9.859	-1.4	1343657	0.438	0.444	4.325	4.326	6.80				
	19	Carbon disulfide	10.237	2.4	4341402	1.415	1.383	4.283	4.287	5.19				
5	20	Acrylonitrile	49.481	-1.0	706101	0.046	0.047	4.577	4.578	9.66				
	21	tert-Butyl methyl ether (MTBE)	10.102	1.0	1588780	0.518	0.513	4.619	4.622	9.16				
	22	trans-1,2-Dichloroethene	10.086	0.9	1139396	0.371	0.368	4.849	4.846	5.68				
	23	Isopropyl ether (DIPE)	10.471	4.7	3718267	1.212	1.158	5.541	5.544	8.51				
	24	Vinyl acetate	9.683	-3.2	937837	0.306	0.316	5.772	5.785	14.60				
	25	1,1-Dichloroethane	10.232	2.3	1956927	0.638	0.623	5.709	5.701	6.90				
25	26	2-Butanol												
	27	tert Butyl ethyl ether (ETBE)	10.308	3.1	2659759	0.867	0.841	6.463	6.470	8.89				
5	28	2-Butanone	50.421	0.8	847750	0.055	0.055	6.756	6.770	11.24				
	29	2,2-Dichloropropane	9.763	-2.4	1057750	0.345	0.353	7.008	7.009	5.11				
	30	cis-1,2-Dichloroethene	10.001	0.0	1105829	0.361	0.360	7.134	7.141	7.58				
	31	Chloroform	9.891	-1.1	1733464	0.565	0.571	7.532	7.533	4.25				
	32	Bromochloromethane	9.904	-1.0	473424	0.154	0.156	7.909	7.910	9.93				
	33	Tetrahydrofuran	8.620	-13.8	88738	0.029	0.034	8.014	8.028	9.10				
5	34	tert-Amyl alcohol												
	35	Dibromofluoromethane	9.920	-0.8	913355	0.298	0.300	8.056	8.057	11.72				
	36	1,1,1-Trichloroethane	9.930	-0.7	1340703	0.437	0.440	8.454	8.449	9.11				
	37	Cyclohexane	9.605	-4.0	1311974	0.428	0.445	8.433	8.434	5.16				
	38	2,2,4-Trimethylpentane	10.670	6.7	3739017	1.219	1.142	8.622	8.620	9.38				
	39	1,1-Dichloropropene	9.944	-0.6	456656	0.149	0.150	8.811	8.812	6.88				
	40	Carbon tetrachloride	9.921	-0.8	1081570	0.353	0.355	8.978	8.981	7.29				
	41	tert-Amyl methyl ether (TAME)	10.291	2.9	1981882	0.646	0.628	9.146	9.151	10.16				
	42	1,2-Dichloroethane-d4	10.263	2.6	679675	0.222	0.216	9.188	9.180	10.10				
	43	1,2-Dichloroethane	10.217	2.2	797432	0.260	0.254	9.376	9.380	10.92				
	44	Benzene	10.347	3.5	4225842	1.378	1.331	9.355	9.359	7.65				
	45	Trichloroethene	10.297	3.0	1070513	0.349	0.339	10.634	10.637	8.32				
	46	Methylcyclohexane	10.525	5.2	1683252	0.549	0.521	10.718	10.719	8.40				
	47	1,2-Dichloropropane	10.309	3.1	1017751	0.332	0.322	10.990	10.991	7.90				
20	48	1,4-Dioxane	208.701	4.4	62349	0.001	0.001	11.535	11.539	9.47				
	49	Bromodichloromethane	10.053	0.5	1139212	0.371	0.369	11.430	11.431	5.86				
	50	Dibromomethane	9.480	-5.2	396050	0.129	0.136	11.514	11.515	9.86				
	51	2-Chloroethyl vinyl ether	9.481	-5.2	309067	0.101	0.106	12.122	12.128	10.02				
5	52	4-Methyl-2-pentanone	54.066	8.1	2585228	0.169	0.156	12.185	12.186	13.02				
	53	cis-1,3-Dichloropropene	10.266	2.7	1479718	0.482	0.470	12.499	12.500	7.30				
	54	CHLOROBENZENE-D5	10.000	0	2447078	1	1	15.534	15.533	0				
	55	Toluene-d8	9.892	-1.1	3643693	1.489	1.505	12.898	12.898	4.62				
	56	Toluene	10.227	2.3	4363244	1.783	1.743	13.044	13.045	3.75				
	57	Ethyl methacrylate	10.122	1.2	735734	0.301	0.297	13.463	13.472	9.08				
	58	trans-1,3-Dichloropropene	10.025	0.2	1053504	0.431	0.429	13.421	13.425	8.01				
	59	1,1,2-Trichloroethane	10.287	2.9	514511	0.210	0.204	13.673	13.674	7.35				
5	60	2-Hexanone	49.960	-0.1	1476393	0.121	0.121	13.757	13.753	13.14				
	61	1,3-Dichloropropane	10.502	5.0	990803	0.405	0.386	14.113	14.116	8.77				
	62	Tetrachloroethene	10.153	1.5	796511	0.325	0.321	14.176	14.177	8.08				
	63	Dibromochloromethane	9.555	-4.4	638152	0.261	0.273	14.532	14.533	8.06				
	64	2-Ethyl-1-butanol												
	65	1,2-Dibromoethane	9.437	-5.6	470472	0.192	0.204	14.868	14.869	11.37				
	66	1-Chlorohexane	9.968	-0.3	2000900	0.818	0.820	15.222	15.222	5.44				
	67	Chlorobenzene	10.446	4.5	2511716	1.026	0.983	15.599	15.598	5.64				
	68	1,1,1,2-Tetrachloroethane	10.002	0.0	809112	0.331	0.331	15.689	15.686	8.42				
	69	Ethylbenzene	10.286	2.9	4787709	1.957	1.902	15.703	15.704	4.42				
2	70	m-Xylene & p-Xylene	21.077	5.4	7339907	1.500	1.423	15.832	15.833	9.86				
	71	o-Xylene	10.208	2.1	3651913	1.492	1.462	16.559	16.561	3.90				
	72	Styrene	10.531	5.3	2664833	1.089	1.034	16.624	16.630	6.99				
	73	Isopropylbenzene	10.095	1.0	4430704	1.811	1.793	17.169	17.170	3.78				
	74	1,2-DICHLOROBENZENE-D4	10.000	0	825620	1	1	19.426	19.426	0				
	75	Bromoform	11.182	11.8	260456	0.315	0.282	17.169	17.168	14.77				
	76	1,1,2,2-Tetrachloroethane	9.774	-2.3	530261	0.642	0.657	17.454	17.454	8.96				
	77	4-Bromofluorobenzene	10.396	4.0	1138289	1.379	1.326	17.545	17.546	7.03				
	78	1,2,3-Trichloropropane	9.624	-3.8	120911	0.146	0.152	17.662	17.661	6.78				
	79	trans-1,4-Dichloro-2-butene	9.953	-0.5	135264	0.164	0.165	17.765	17.767	4.52				
	80	n-Propylbenzene	10.835	8.4	5780527	7.001	6.462	17.765	17.765	9.67				
	81	Bromobenzene	10.475	4.8	810814	0.982	0.938	17.804	17.804	12.11				
	82	1,3,5-Trimethylbenzene	10.489	4.9	3638846	4.407	4.202	17.973	17.976	5.29				
	83	2-Chlorotoluene	10.783	7.8	3736634	4.526	4.197	17.986	17.987	8.17				
	84	4-Chlorotoluene	10.466	4.7	3073073	3.722	3.556	18.051	18.052	7.10				
	85	tert-Butylbenzene	10.290	2.9	776673	0.941	0.914	18.427	18.427	6.93				
	86	1,2,4-Trimethylbenzene	10.623	6.2	3541709	4.290	4.038	18.466	18.466	7.30				
	87	sec-Butylbenzene	10.494	4.9	4790341	5.802	5.529	18.674	18.673	8.47				
	88	p-Isopropyltoluene	10.600	6.0	3991585	4.835	4.561	18.829	18.839	7.07				
	89	1,3-Dichlorobenzene	10.673	6.7	1752008	2.122	1.988	18.933	18.938	9.76				
	90	1,2,3-Trimethylbenzene	10.570	5.7	3283086	3.977	3.762	19.011	19.011	6.32				
	91	1,4-Dichlorobenzene	10.708	7.1	1737227	2.104	1.965	19.063	19.063	8.97				
	92	n-Butylbenzene	10.472	4.7	4047343	4.902	4.681	19.283	19.283	6.40				
	93	1,2-Dichlorobenzene	10.592	5.9	1431584	1.734	1.637	19.452	19.452	8.31				
	94	1,2-Dibromo 3 chloropropane	9.196	-8.0	61053	0.074	0.080	20.218	20.232	6.08				
	95	1,2,4-Trichlorobenzene	10.310	3.1	824868	0.999	0.969	21.061	21.063	9.81				
	96	Hexachlorobutadiene	10.087	0.9	509117	0.617	0.611	21.191	21.190	4.49				
	97	Naphthalene	10.222	2.2	1159111	1.404	1.373	21.333	21.338	9.16				
	98	1,2,3-Trichlorobenzene	10.042	0.4	607870	0.736	0.733	21.580	21.591	9.20				

Spike Amount = Nominal Amount * M

SU 6/13/24

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F03\RFW014.D
Acq On : 3 Jun 2024 8:18 pm
Sample : IVO06F0301
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P

Vial: 14
Operator: DHuynh
Inst : 06
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 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	97	0.00
2	T,M	Dichlorodifluoromethane	10.000	9.678	3.2	93	0.00
3	P,T,M	Chloromethane	10.000	9.688	3.1	97	0.00
4	C,T,M	Vinyl chloride	10.000	9.959	0.4	93	0.00
5	T,M	Bromomethane	10.000	10.119	-1.2	98	0.00
6	T,M	Chloroethane	10.000	9.962	0.4	98	0.00
7	T,M	Dichlorofluoromethane	10.000	9.943	0.6	96	0.00
8	T,M	Trichlorofluoromethane	10.000	9.296	7.0	93	0.00
9	T,M	Acrolein	50.000	49.804	0.4	95	0.00
10	T,M	1,1,2-Trichloro-1,2,2-trifl	10.000	9.379	6.2	93	0.00
11	T,M	Acetone	50.000	44.998	10.0	96	0.00
12	C,T,M	1,1-Dichloroethene	10.000	9.982	0.2	93	0.00
13	T,M	tert-Butyl alcohol	250.000	244.741	2.1	95	0.00
14	T,M	Acetonitrile	-1.000	0.000	0.0	0	0.00
15	T,M	Methyl acetate	10.000	8.925	10.7	90	-0.02
16	T,M	Iodomethane	10.000	10.199	-2.0	97	0.00
17	T,M	Allyl chloride	10.000	0.000	100.0#	0	0.00
18	T,M	Methylene chloride	10.000	9.860	1.4	96	0.00
19	T,M	Carbon disulfide	10.000	10.237	-2.4	95	0.00
20	T,M	Acrylonitrile	50.000	49.482	1.0	96	0.00
21	T,M	tert-Butyl methyl ether (MT	10.000	10.102	-1.0	96	0.00
22	T,M	trans-1,2-Dichloroethene	10.000	10.086	-0.9	98	0.00
23	T,M	Isopropyl ether (DIPE)	10.000	10.471	-4.7	96	0.00
24	T,M	Vinyl acetate	10.000	9.683	3.2	96	0.00
25	P,T,M	1,1-Dichloroethane	10.000	10.233	-2.3	96	0.00
26	T,M	2-Butanol	250.000	0.000	100.0#	0	-0.17#
27	T,M	tert-Butyl ethyl ether (ETB	10.000	10.308	-3.1	98	0.00
28	T,M	2-Butanone	50.000	50.422	-0.8	95	0.00
29	T,M	2,2-Dichloropropane	10.000	9.763	2.4	94	0.00
30	T,M	cis-1,2-Dichloroethene	10.000	10.001	-0.0	96	0.00
31	C,T,M	Chloroform	10.000	9.892	1.1	97	0.00
32	T,M	Bromochloromethane	10.000	9.904	1.0	93	0.00
33	T,M	Tetrahydrofuran	10.000	8.620	13.8	89	-0.02
34	T,M	tert-Amyl alcohol	50.000	0.000	100.0#	0	-8.06#
35	S	Dibromofluoromethane	10.000	9.920	0.8	96	0.00
36	T,M	1,1,1-Trichloroethane	10.000	9.931	0.7	97	0.00
37	T,M	Cyclohexane	10.000	9.605	3.9	89	0.00
38	T,M	2,2,4-Trimethylpentane	10.000	10.670	-6.7	103	0.00
39	T,M	1,1-Dichloropropene	10.000	9.944	0.6	97	0.00
40	T,M	Carbon tetrachloride	10.000	9.922	0.8	96	0.00
41	T,M	tert-Amyl methyl ether (TAM	10.000	10.291	-2.9	95	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F03\RFW014.D
Acq On : 3 Jun 2024 8:18 pm
Sample : IVO06F0301
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P

Vial: 14
Operator: DHuynh
Inst : 06
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 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	S	1,2-Dichloroethane-d4	10.000	10.264	-2.6	99	0.00
43	T,M	1,2-Dichloroethane	10.000	10.217	-2.2	94	0.00
44	T,M	Benzene	10.000	10.348	-3.5	95	0.00
45	T,M	Trichloroethene	10.000	10.298	-3.0	95	0.00
46	T,M	Methylcyclohexane	10.000	10.525	-5.3	93	0.00
47	C,T,M	1,2-Dichloropropane	10.000	10.309	-3.1	98	0.00
48	T,M	1,4-Dioxane	200.000	208.702	-4.4	109	0.00
49	T,M	Bromodichloromethane	10.000	10.054	-0.5	97	0.00
50	T,M	Dibromomethane	10.000	9.481	5.2	95	0.00
51	T,M	2-Chloroethyl vinyl ether	10.000	9.482	5.2	91	0.00
52	T,M	4-Methyl-2-pentanone	50.000	54.066	-8.1	95	0.00
53	T,M	cis-1,3-Dichloropropene	10.000	10.266	-2.7	97	0.00
54	I	CHLOROBENZENE-D5	10.000	10.000	0.0	97	0.00
55	S	Toluene-d8	10.000	9.892	1.1	98	0.00
56	C,T,M	Toluene	10.000	10.227	-2.3	97	0.00
57	T,M	Ethyl methacrylate	10.000	10.122	-1.2	96	0.00
58	T,M	trans-1,3-Dichloropropene	10.000	10.025	-0.3	95	0.00
59	T,M	1,1,2-Trichloroethane	10.000	10.287	-2.9	101	0.00
60	T,M	2-Hexanone	50.000	49.960	0.1	94	0.00
61	T,M	1,3-Dichloropropane	10.000	10.502	-5.0	99	0.00
62	T,M	Tetrachloroethene	10.000	10.153	-1.5	97	0.00
63	T,M	Dibromochloromethane	10.000	9.555	4.5	95	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	9.437	5.6	96	0.00
66	T,M	1-Chlorohexane	10.000	9.969	0.3	98	0.00
67	P,T,M	Chlorobenzene	10.000	10.446	-4.5	98	0.00
68	T,M	1,1,1,2-Tetrachloroethane	10.000	10.003	-0.0	94	0.00
69	C,T,M	Ethylbenzene	10.000	10.286	-2.9	97	0.00
70	T,M	m-Xylene & p-Xylene	20.000	21.078	-5.4	98	0.00
71	T,M	o-Xylene	10.000	10.209	-2.1	98	0.00
72	T,M	Styrene	10.000	10.532	-5.3	97	0.00
73	T,M	Isopropylbenzene	10.000	10.096	-1.0	96	0.00
74	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	95	0.00
75	P,T,M	Bromoform	10.000	11.182	-11.8	93	0.00
76	P,T,M	1,1,2,2-Tetrachloroethane	10.000	9.774	2.3	95	0.00
77	S	4-Bromofluorobenzene	10.000	10.397	-4.0	97	0.00
78	T,M	1,2,3-Trichloropropane	10.000	9.624	3.8	94	0.00
79	T,M	trans-1,4-Dichloro-2-butene	10.000	9.953	0.5	95	0.00
80	T,M	n-Propylbenzene	10.000	10.835	-8.4	97	0.00

(#) = Out of Range

Data File : D:\HPCHEM\1\DATA\24F03\RFW014.D
Acq On : 3 Jun 2024 8:18 pm
Sample : IVO06F0301
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P

Vial: 14
Operator: DHuynh
Inst : 06
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 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	Bromobenzene	10.000	10.475	-4.7	96	0.00
82	T,M	1,3,5-Trimethylbenzene	10.000	10.489	-4.9	96	0.00
83	T,M	2-Chlorotoluene	10.000	10.784	-7.8	98	0.00
84	T,M	4-Chlorotoluene	10.000	10.466	-4.7	98	0.00
85	T,M	tert-Butylbenzene	10.000	10.290	-2.9	95	0.00
86	T,M	1,2,4-Trimethylbenzene	10.000	10.624	-6.2	97	0.00
87	T,M	sec-Butylbenzene	10.000	10.494	-4.9	96	0.00
88	T,M	p-Isopropyltoluene	10.000	10.601	-6.0	97	0.00
89	T,M	1,3-Dichlorobenzene	10.000	10.674	-6.7	96	0.00
90	T,M	1,2,3-Trimethylbenzene	10.000	10.571	-5.7	97	0.00
91	T,M	1,4-Dichlorobenzene	10.000	10.708	-7.1	97	0.00
92	T,M	n-Butylbenzene	10.000	10.473	-4.7	98	0.00
93	T,M	1,2-Dichlorobenzene	10.000	10.593	-5.9	96	0.00
94	T,M	1,2-Dibromo-3-chloropropane	10.000	9.196	8.0	92	-0.01
95	T,M	1,2,4-Trichlorobenzene	10.000	10.311	-3.1	99	0.00
96	T,M	Hexachlorobutadiene	10.000	10.088	-0.9	99	0.00
97	T,M	Naphthalene	10.000	10.222	-2.2	100	0.00
98	T,M	1,2,3-Trichlorobenzene	10.000	10.042	-0.4	104	0.00

Sa 6/13 3/29

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F03\RFW014.D Vial: 14
Acq On : 3 Jun 2024 8:18 pm Operator: DHuynh
Sample : IVO06F0301 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 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	97	0.00
2	T,M	Dichlorodifluoromethane	0.296	0.287	3.0	93	0.00
3	P,T,M	Chloromethane	0.451	0.437	3.1	97	0.00
4	C,T,M	Vinyl chloride	0.321	0.320	0.3	93	0.00
5	T,M	Bromomethane	0.291	0.295	-1.4	98	0.00
6	T,M	Chloroethane	0.247	0.246	0.4	98	0.00
7	T,M	Dichlorofluoromethane	0.607	0.604	0.5	96	0.00
8	T,M	Trichlorofluoromethane	0.399	0.371	7.0	93	0.00
9	T,M	Acrolein	0.020	0.020	0.0	95	0.00
10	T,M	1,1,2-Trichloro-1,2,2-trifl	0.184	0.173	6.0	93	0.00
11	T,M	Acetone	0.034	0.031	8.8	96	0.00
12	C,T,M	1,1-Dichloroethene	0.530	0.529	0.2	93	0.00
13	T,M	tert-Butyl alcohol	0.010	0.010	0.0	95	0.00
14	T,M	Acetonitrile	0.000	0.000	0.0	0#	0.00
15	T,M	Methyl acetate	0.023	0.021	8.7	90	-0.02
16	T,M	Iodomethane	0.526	0.537	-2.1	97	0.00
17	T,M	Allyl chloride	0.000	0.212	0.0	0#	0.00
18	T,M	Methylene chloride	0.444	0.438	1.4	96	0.00
19	T,M	Carbon disulfide	1.383	1.415	-2.3	95	0.00
20	T,M	Acrylonitrile	0.047	0.046	2.1	96	0.00
21	T,M	tert-Butyl methyl ether (MT	0.513	0.518	-1.0	96	0.00
22	T,M	trans-1,2-Dichloroethene	0.368	0.371	-0.8	98	0.00
23	T,M	Isopropyl ether (DIPE)	1.158	1.212	-4.7	96	0.00
24	T,M	Vinyl acetate	0.316	0.306	3.2	96	0.00
25	P,T,M	1,1-Dichloroethane	0.623	0.638	-2.4	96	0.00
26	T,M	2-Butanol	0.000	0.000	0.0	0#	-0.17#
27	T,M	tert-Butyl ethyl ether (ETB	0.841	0.867	-3.1	98	0.00
28	T,M	2-Butanone	0.055	0.055	0.0	95	0.00
29	T,M	2,2-Dichloropropane	0.353	0.345	2.3	94	0.00
30	T,M	cis-1,2-Dichloroethene	0.360	0.361	-0.3	96	0.00
31	C,T,M	Chloroform	0.571	0.565	1.1	97	0.00
32	T,M	Bromochloromethane	0.156	0.154	1.3	93	0.00
33	T,M	Tetrahydrofuran	0.034	0.029	14.7	89	-0.02
34	T,M	tert-Amyl alcohol	0.008	0.000	100.0#	0#	-8.06#
35	S	Dibromofluoromethane	0.300	0.298	0.7	96	0.00
36	T,M	1,1,1-Trichloroethane	0.440	0.437	0.7	97	0.00
37	T,M	Cyclohexane	0.445	0.428	3.8	89	0.00
38	T,M	2,2,4-Trimethylpentane	1.142	1.219	-6.7	103	0.00
39	T,M	1,1-Dichloropropene	0.150	0.149	0.7	97	0.00
40	T,M	Carbon tetrachloride	0.355	0.353	0.6	96	0.00
41	T,M	tert-Amyl methyl ether (TAM	0.628	0.646	-2.9	95	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F03\RFW014.D Vial: 14
Acq On : 3 Jun 2024 8:18 pm Operator: DHuynh
Sample : IVO06F0301 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 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	S	1,2-Dichloroethane-d4	0.216	0.222	-2.8	99	0.00
43	T,M	1,2-Dichloroethane	0.254	0.260	-2.4	94	0.00
44	T,M	Benzene	1.331	1.378	-3.5	95	0.00
45	T,M	Trichloroethene	0.339	0.349	-2.9	95	0.00
46	T,M	Methylcyclohexane	0.521	0.549	-5.4	93	0.00
47	C,T,M	1,2-Dichloropropane	0.322	0.332	-3.1	98	0.00
48	T,M	1,4-Dioxane	0.001	0.001	0.0	109	0.00
49	T,M	Bromodichloromethane	0.369	0.371	-0.5	97	0.00
50	T,M	Dibromomethane	0.136	0.129	5.1	95	0.00
51	T,M	2-Chloroethyl vinyl ether	0.106	0.101	4.7	91	0.00
52	T,M	4-Methyl-2-pentanone	0.156	0.169	-8.3	95	0.00
53	T,M	cis-1,3-Dichloropropene	0.470	0.482	-2.6	97	0.00
54	I	CHLOROBENZENE-D5	1.000	1.000	0.0	97	0.00
55	S	Toluene-d8	1.505	1.489	1.1	98	0.00
56	C,T,M	Toluene	1.743	1.783	-2.3	97	0.00
57	T,M	Ethyl methacrylate	0.297	0.301	-1.3	96	0.00
58	T,M	trans-1,3-Dichloropropene	0.429	0.431	-0.5	95	0.00
59	T,M	1,1,2-Trichloroethane	0.204	0.210	-2.9	101	0.00
60	T,M	2-Hexanone	0.121	0.121	0.0	94	0.00
61	T,M	1,3-Dichloropropane	0.386	0.405	-4.9	99	0.00
62	T,M	Tetrachloroethene	0.321	0.325	-1.2	97	0.00
63	T,M	Dibromochloromethane	0.273	0.261	4.4	95	0.00
64	T,M	2-Ethyl-1-butanol	0.000	0.000	0.0	0#	0.00
65	T,M	1,2-Dibromoethane	0.204	0.192	5.9	96	0.00
66	T,M	1-Chlorohexane	0.820	0.818	0.2	98	0.00
67	P,T,M	Chlorobenzene	0.983	1.026	-4.4	98	0.00
68	T,M	1,1,1,2-Tetrachloroethane	0.331	0.331	0.0	94	0.00
69	C,T,M	Ethylbenzene	1.902	1.957	-2.9	97	0.00
70	T,M	m-Xylene & p-Xylene	1.423	1.500	-5.4	98	0.00
71	T,M	o-Xylene	1.462	1.492	-2.1	98	0.00
72	T,M	Styrene	1.034	1.089	-5.3	97	0.00
73	T,M	Isopropylbenzene	1.793	1.811	-1.0	96	0.00
74	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	95	0.00
75	P,T,M	Bromoform	0.282	0.315	-11.7	93	0.00
76	P,T,M	1,1,2,2-Tetrachloroethane	0.657	0.642	2.3	95	0.00
77	S	4-Bromofluorobenzene	1.326	1.379	-4.0	97	0.00
78	T,M	1,2,3-Trichloropropane	0.152	0.146	3.9	94	0.00
79	T,M	trans-1,4-Dichloro-2-butene	0.165	0.164	0.6	95	0.00
80	T,M	n-Propylbenzene	6.462	7.001	-8.3	97	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F03\RFW014.D
Acq On : 3 Jun 2024 8:18 pm
Sample : IVO06F0301
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P

Vial: 14
Operator: DHuynh
Inst : 06
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 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	Bromobenzene	0.938	0.982	-4.7	96	0.00
82	T,M	1,3,5-Trimethylbenzene	4.202	4.407	-4.9	96	0.00
83	T,M	2-Chlorotoluene	4.197	4.526	-7.8	98	0.00
84	T,M	4-Chlorotoluene	3.556	3.722	-4.7	98	0.00
85	T,M	tert-Butylbenzene	0.914	0.941	-3.0	95	0.00
86	T,M	1,2,4-Trimethylbenzene	4.038	4.290	-6.2	97	0.00
87	T,M	sec-Butylbenzene	5.529	5.802	-4.9	96	0.00
88	T,M	p-Isopropyltoluene	4.561	4.835	-6.0	97	0.00
89	T,M	1,3-Dichlorobenzene	1.988	2.122	-6.7	96	0.00
90	T,M	1,2,3-Trimethylbenzene	3.762	3.977	-5.7	97	0.00
91	T,M	1,4-Dichlorobenzene	1.965	2.104	-7.1	97	0.00
92	T,M	n-Butylbenzene	4.681	4.902	-4.7	98	0.00
93	T,M	1,2-Dichlorobenzene	1.637	1.734	-5.9	96	0.00
94	T,M	1,2-Dibromo-3-chloropropane	0.080	0.074	7.5	92	-0.01
95	T,M	1,2,4-Trichlorobenzene	0.969	0.999	-3.1	99	0.00
96	T,M	Hexachlorobutadiene	0.611	0.617	-1.0	99	0.00
97	T,M	Naphthalene	1.373	1.404	-2.3	100	0.00
98	T,M	1,2,3-Trichlorobenzene	0.733	0.736	-0.4	104	0.00

SV 6/13/24

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW014.D Vial: 14
Acq On : 3 Jun 2024 8:18 pm Operator: DHuynh
Sample : IVO06F0301 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 13 10:30 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.05	114	3067327	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.53	117	2447078	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.43	152	825620	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	8.06	111	913355	9.92	ug/l	0.00
Spiked Amount 10.000			Recovery =	99.20%		
42) 1,2-Dichloroethane-d4	9.19	65	679675	10.26	ug/l	0.00
Spiked Amount 10.000			Recovery =	102.60%		
55) Toluene-d8	12.90	98	3643693	9.89	ug/l	0.00
Spiked Amount 10.000			Recovery =	98.90%		
77) 4-Bromofluorobenzene	17.54	95	1138289	10.40	ug/l	0.00
Spiked Amount 10.000			Recovery =	104.00%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.63	85	879158	9.68	ug/l	98
3) Chloromethane	1.86	50	1339526	9.69	ug/l	99
4) Vinyl chloride	1.98	62	981772	9.96	ug/l	100
5) Bromomethane	2.44	94	904417	10.12	ug/l	98
6) Chloroethane	2.52	64	754301	9.96	ug/l	98
7) Dichlorofluoromethane	2.55	67	1852639	9.94	ug/l	100
8) Trichlorofluoromethane	2.79	101	1137996	9.30	ug/l	98
9) Acrolein	3.34	56	311789	49.80	ug/l	97
10) 1,1,2-Trichloro-1,2,2-trif	3.38	151	529874	9.38	ug/l	99
11) Acetone	3.42	43	472714	45.00	ug/l	98
12) 1,1-Dichloroethene	3.57	61	1623684	9.98	ug/l	99
13) tert-Butyl alcohol	3.74	59	783184	244.74	ug/l	100
15) Methyl acetate	4.12	74	63857	8.93	ug/l	95
16) Iodomethane	4.03	142	1646901	10.20	ug/l	100
18) Methylene chloride	4.33	49	1343657	9.86	ug/l	98
19) Carbon disulfide	4.28	76	4341402	10.24	ug/l	99
20) Acrylonitrile	4.58	53	706101	49.48	ug/l	99
21) tert-Butyl methyl ether (M	4.62	73	1588780	10.10	ug/l	99
22) trans-1,2-Dichloroethene	4.85	96	1139396	10.09	ug/l	99
23) Isopropyl ether (DIPE)	5.54	45	3718267	10.47	ug/l	100
24) Vinyl acetate	5.77	43	937837	9.68	ug/l	100
25) 1,1-Dichloroethane	5.71	63	1956927	10.23	ug/l	99
27) tert-Butyl ethyl ether (ET	6.46	59	2659759	10.31	ug/l	99
28) 2-Butanone	6.76	43	847750	50.42	ug/l	99
29) 2,2-Dichloropropane	7.01	77	1057750	9.76	ug/l	98
30) cis-1,2-Dichloroethene	7.13	96	1105829	10.00	ug/l	99
31) Chloroform	7.53	83	1733464	9.89	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW014.D Vial: 14
Acq On : 3 Jun 2024 8:18 pm Operator: DHuynh
Sample : IVO06F0301 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 13 10:30 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) Bromochloromethane	7.91	130	473424	9.90 ug/l	99
33) Tetrahydrofuran	8.01	42	88738	8.62 ug/l	91
36) 1,1,1-Trichloroethane	8.45	97	1340703	9.93 ug/l	99
37) Cyclohexane	8.43	84	1311974	9.61 ug/l	100
38) 2,2,4-Trimethylpentane	8.62	57	3739017	10.67 ug/l	100
39) 1,1-Dichloropropene	8.81	110	456656	9.94 ug/l	96
40) Carbon tetrachloride	8.98	119	1081570	9.92 ug/l	98
41) tert-Amyl methyl ether (TA	9.15	73	1981882	10.29 ug/l	99
43) 1,2-Dichloroethane	9.38	62	797432	10.22 ug/l	99
44) Benzene	9.36	78	4225842	10.35 ug/l	99
45) Trichloroethene	10.63	130	1070513	10.30 ug/l	98
46) Methylcyclohexane	10.72	83	1683252	10.53 ug/l	97
47) 1,2-Dichloropropane	10.99	63	1017751	10.31 ug/l	98
48) 1,4-Dioxane	11.54	88	62349	208.70 ug/l	100
49) Bromodichloromethane	11.43	83	1139212	10.05 ug/l	98
50) Dibromomethane	11.51	93	396050	9.48 ug/l	98
51) 2-Chloroethyl vinyl ether	12.12	63	309067	9.48 ug/l	96
52) 4-Methyl-2-pentanone	12.18	43	2585228	54.07 ug/l	98
53) cis-1,3-Dichloropropene	12.50	75	1479718	10.27 ug/l	100
56) Toluene	13.04	91	4363244	10.23 ug/l	99
57) Ethyl methacrylate	13.46	69	735734	10.12 ug/l	98
58) trans-1,3-Dichloropropene	13.42	75	1053504	10.03 ug/l	98
59) 1,1,2-Trichloroethane	13.67	97	514511	10.29 ug/l	97
60) 2-Hexanone	13.76	43	1476393	49.96 ug/l	98
61) 1,3-Dichloropropane	14.11	76	990803	10.50 ug/l	99
62) Tetrachloroethene	14.18	164	796511	10.15 ug/l	98
63) Dibromochloromethane	14.53	129	638152	9.56 ug/l	98
65) 1,2-Dibromoethane	14.87	107	470472	9.44 ug/l	99
66) 1-Chlorohexane	15.22	91	2000900	9.97 ug/l	100
67) Chlorobenzene	15.60	112	2511716	10.45 ug/l	100
68) 1,1,1,2-Tetrachloroethane	15.69	131	809112	10.00 ug/l	97
69) Ethylbenzene	15.70	91	4787709	10.29 ug/l	100
70) m-Xylene & p-Xylene	15.83	91	7339907	21.08 ug/l	98
71) o-Xylene	16.56	91	3651913	10.21 ug/l	99
72) Styrene	16.62	104	2664833	10.53 ug/l	99
73) Isopropylbenzene	17.17	105	4430704	10.10 ug/l	100
75) Bromoform	17.17	173	260456	11.18 ug/l	99
76) 1,1,2,2-Tetrachloroethane	17.45	83	530261	9.77 ug/l	95
78) 1,2,3-Trichloropropane	17.66	110	120911	9.62 ug/l	95
79) trans-1,4-Dichloro-2-buten	17.77	53	135264	9.95 ug/l	100
80) n-Propylbenzene	17.77	91	5780527	10.84 ug/l	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW014.D Vial: 14
Acq On : 3 Jun 2024 8:18 pm Operator: DHuynh
Sample : IVO06F0301 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 13 10:30 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

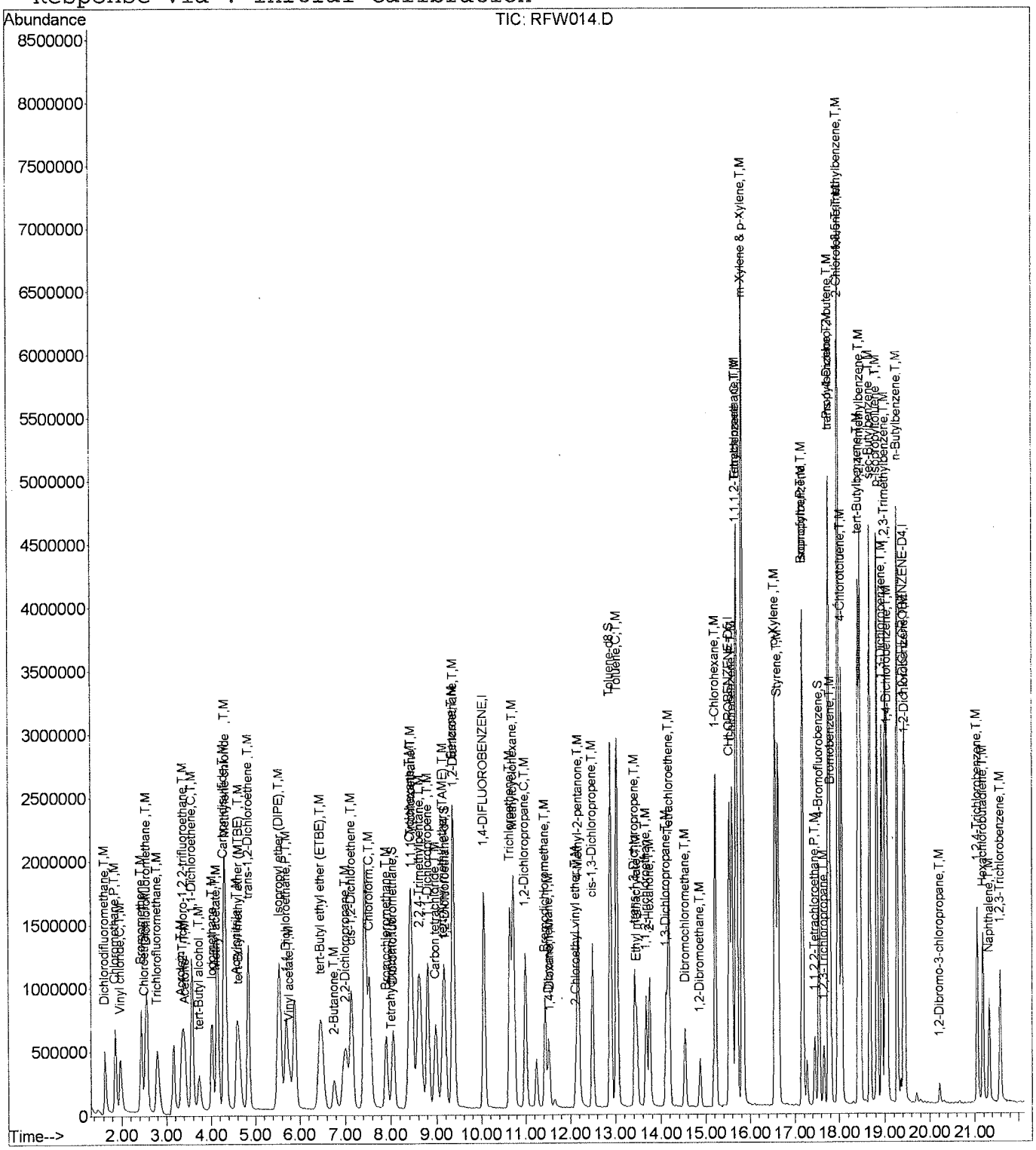
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
81) Bromobenzene	17.80	156	810814	10.48	ug/l	100
82) 1,3,5-Trimethylbenzene	17.97	105	3638846	10.49	ug/l	99
83) 2-Chlorotoluene	17.99	91	3736634	10.78	ug/l	98
84) 4-Chlorotoluene	18.05	91	3073073	10.47	ug/l	99
85) tert-Butylbenzene	18.43	134	776673	10.29	ug/l	99
86) 1,2,4-Trimethylbenzene	18.47	105	3541709	10.62	ug/l	99
87) sec-Butylbenzene	18.67	105	4790341	10.49	ug/l	99
88) p-Isopropyltoluene	18.83	119	3991585	10.60	ug/l	99
89) 1,3-Dichlorobenzene	18.93	146	1752008	10.67	ug/l	98
90) 1,2,3-Trimethylbenzene	19.01	105	3283086	10.57	ug/l	99
91) 1,4-Dichlorobenzene	19.06	146	1737227	10.71	ug/l	98
92) n-Butylbenzene	19.28	91	4047343	10.47	ug/l	100
93) 1,2-Dichlorobenzene	19.45	146	1431584	10.59	ug/l	100
94) 1,2-Dibromo-3-chloropropan	20.22	157	61053	9.20	ug/l	98
95) 1,2,4-Trichlorobenzene	21.06	180	824868	10.31	ug/l	99
96) Hexachlorobutadiene	21.19	225	509117	10.09	ug/l	98
97) Naphthalene	21.33	128	1159111	10.22	ug/l	99
98) 1,2,3-Trichlorobenzene	21.58	180	607870	10.04	ug/l	98

(#) = qualifier out of range (m) = manual integration
RFW014.D VO06F03.M Thu Jun 13 10:31:20 2024 Su 6/13/24 Page 3

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F03\RFW014.D Vial: 14
Acq On : 3 Jun 2024 8:18 pm Operator: DHuynh
Sample : IVO06F0301 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 13 10:30 2024 Quant Results File: VO06F03.RE

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 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 : 24F069
Lab File ID: RFW254 BFB Injection Date: 06/18/24
Instrument ID: 06 BFB Injection Time: 08:53

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	15.054
75	30 - 60% of mass 95	41.147
95	Base Peak, 100% relative abundance	100.000
96	5 - 9% of mass 95	5.896
173	Less than 2% of mass 174	0.000(0)1
174	Greater than 50% of mass 95	78.442
175	5 - 9% of mass 174	5.696(7.26)1
176	95 - 101% % of mass 174	75.889(96.75)1
177	5 - 9% % of mass 176	4.484(5.91)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	CVO06F0309	RFW255	06/18/24	10:10
2	LCS1W	VO06F15L	RFW256	06/18/24	10:45
3	LCD1W	VO06F15C	RFW257	06/18/24	11:11
4	MBLK1W	VO06F15B	RFW259	06/18/24	12:15
5	TB10-GW061424	24F069-02	RFW275	06/18/24	19:42
6	EB08-GW061424	24F069-03	RFW276	06/18/24	20:08
7	EW01-GW061424-315	24F069-01	RFW277	06/18/24	20:35

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: EMAX Laboratories, Inc.
Lab Code: EMAX
Lab File ID: RFW007
Instrument ID: 06

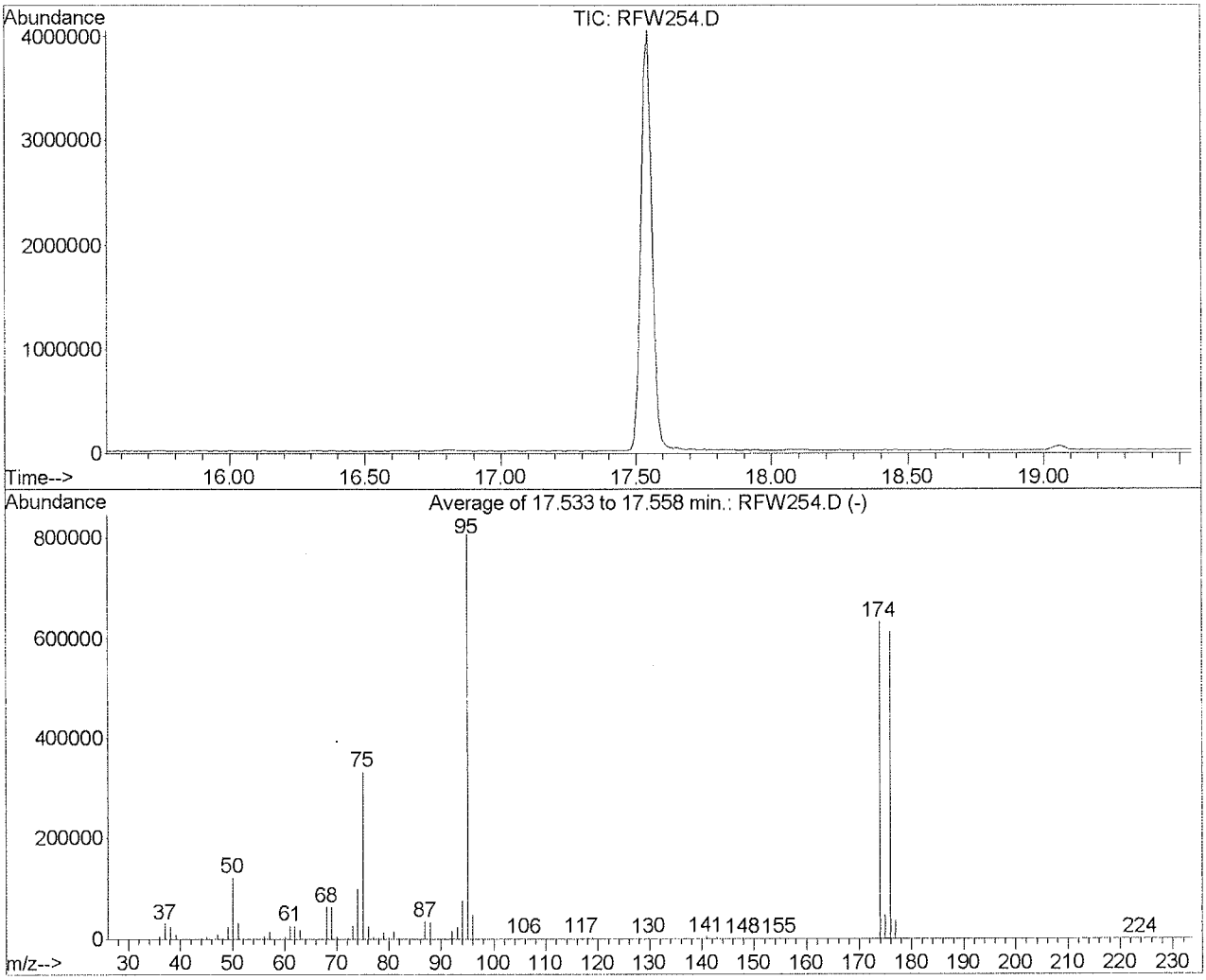
Project: VA SALT LAKE CITY
SDG No: 24F069
Date Analyzed: 06/03/24
Time Analyzed: 17:14

	INTERNAL STANDARD (IS)	1,4-DIFLUOROBENZENE		CHLOROBENZENE-D5		1,2-DICHLOROBENZENE-D4	
		Area #	RT #	Area #	RT #	Area #	RT #
	12 HOUR STD	3175665	10.05	2524233	15.53	865825	19.43
	UPPER LIMIT	6351330	10.22	5048466	15.70	1731650	19.60
	LOWER LIMIT	1587833	9.883	1262117	15.36	432913	19.26
		Area #	RT #	Area #	RT #	Area #	RT #
1	VSTD10	3147660	10.07	2494380	15.53	892282	19.43
2	LCS1W	2949767	10.07	2398860	15.53	882193	19.43
3	LCD1W	3408254	10.07	2774849	15.53	984314	19.43
4	MBLK1W	3419081	10.07	2722454	15.53	978225	19.43
5	TB10-GW061424	2776335	10.07	2237074	15.53	840455	19.43
6	EB08-GW061424	2840906	10.07	2259057	15.53	855460	19.43
7	EW01-GW061424-315	2813046	10.07	2283975	15.53	837059	19.43

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\24F18\RFW254.D
Acq On : 18 Jun 2024 8:53 am
Sample : BFB06F15
Misc : T/CHK
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260

Vial: 1
Operator: DHuynh
Inst : 06
Multiplr: 1.00



AutoFind: Scans 846, 847, 848; Background Corrected with Scan 838

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	15.1	121531	PASS
75	95	30	60	41.1	332181	PASS
95	95	100	100	100.0	807296	PASS
96	95	5	9	5.9	47597	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	78.4	633259	PASS
175	174	5	9	7.3	45981	PASS
176	174	95	101	96.7	612651	PASS
177	176	5	9	5.9	36197	PASS

RFW254.D VO06F03.M Wed Jun 19 17:51:58 2024

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F18\RFW255.D Vial: 2
Acq On : 18 Jun 2024 10:10 am Operator: DHuynh
Sample : CVO06F0309 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 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	99	0.02
2	T,M	Dichlorodifluoromethane	10.000	9.593	4.1	95	0.00
3	P,T,M	Chloromethane	10.000	8.942	10.6	92	0.00
4	C,T,M	Vinyl chloride	10.000	10.449	-4.5	100	0.00
5	T,M	Bromomethane	10.000	10.487	-4.9	104	0.00
6	T,M	Chloroethane	10.000	10.089	-0.9	102	0.00
7	T,M	Dichlorofluoromethane	10.000	10.209	-2.1	101	0.00
8	T,M	Trichlorofluoromethane	10.000	9.608	3.9	98	0.00
9	T,M	Acrolein	50.000	59.484	-19.0	116	0.00
10	T,M	1,1,2-Trichloro-1,2,2-trifl	10.000	11.233	-12.3	115	0.00
11	T,M	Acetone	50.000	48.592	2.8	106	0.00
12	C,T,M	1,1-Dichloroethene	10.000	10.299	-3.0	99	0.00
13	T,M	tert-Butyl alcohol	250.000	274.411	-9.8	109	0.00
14	T,M	Acetonitrile	-1.000	0.000	0.0	0	0.00
15	T,M	Methyl acetate	10.000	9.700	3.0	100	0.00
16	T,M	Iodomethane	10.000	11.635	-16.3	114	0.00
17	T,M	Allyl chloride	10.000	0.000	100.0#	0	0.00
18	T,M	Methylene chloride	10.000	9.976	0.2	100	0.00
19	T,M	Carbon disulfide	10.000	10.469	-4.7	100	0.02
20	T,M	Acrylonitrile	50.000	55.611	-11.2	110	0.00
21	T,M	tert-Butyl methyl ether (MT	10.000	11.126	-11.3	108	0.02
22	T,M	trans-1,2-Dichloroethene	10.000	11.104	-11.0	110	0.00
23	T,M	Isopropyl ether (DIPE)	10.000	10.052	-0.5	95	0.00
24	T,M	Vinyl acetate	10.000	8.671	13.3	88	0.02
25	P,T,M	1,1-Dichloroethane	10.000	10.174	-1.7	98	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	10.097	-1.0	98	0.02
28	T,M	2-Butanone	50.000	47.528	4.9	92	0.00
29	T,M	2,2-Dichloropropane	10.000	12.579	-25.8#	124	0.02
30	T,M	cis-1,2-Dichloroethene	10.000	10.985	-9.8	108	0.02
31	C,T,M	Chloroform	10.000	9.916	0.8	100	0.02
32	T,M	Bromochloromethane	10.000	10.943	-9.4	105	0.00
33	T,M	Tetrahydrofuran	10.000	8.307	16.9	88	0.00
34	T,M	tert-Amyl alcohol	50.000	1.094	97.8#	2	-0.02
35	S	Dibromofluoromethane	10.000	10.933	-9.3	108	0.00
36	T,M	1,1,1-Trichloroethane	10.000	10.498	-5.0	105	0.00
37	T,M	Cyclohexane	10.000	10.830	-8.3	103	0.00
38	T,M	2,2,4-Trimethylpentane	10.000	0.000	100.0#	0	-8.62#
39	T,M	1,1-Dichloropropene	10.000	10.367	-3.7	103	0.00
40	T,M	Carbon tetrachloride	10.000	10.514	-5.1	104	0.02
41	T,M	tert-Amyl methyl ether (TAM	10.000	10.903	-9.0	103	0.02

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F18\RFW255.D Vial: 2
Acq On : 18 Jun 2024 10:10 am Operator: DHuynh
Sample : CVO06F0309 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 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	S	1,2-Dichloroethane-d4	10.000	10.004	-0.0	99	0.00
43	T,M	1,2-Dichloroethane	10.000	9.427	5.7	89	0.00
44	T,M	Benzene	10.000	10.263	-2.6	96	0.02
45	T,M	Trichloroethene	10.000	10.384	-3.8	99	0.02
46	T,M	Methylcyclohexane	10.000	10.849	-8.5	98	0.00
47	C,T,M	1,2-Dichloropropane	10.000	9.271	7.3	90	0.02
48	T,M	1,4-Dioxane	200.000	197.054	1.5	106	0.02
49	T,M	Bromodichloromethane	10.000	9.253	7.5	92	0.02
50	T,M	Dibromomethane	10.000	9.465	5.4	98	0.00
51	T,M	2-Chloroethyl vinyl ether	10.000	6.745	32.6#	67	0.02
52	T,M	4-Methyl-2-pentanone	50.000	49.226	1.5	88	0.00
53	T,M	cis-1,3-Dichloropropene	10.000	8.962	10.4	87	0.00
54	I	CHLOROBENZENE-D5	10.000	10.000	0.0	99	0.00
55	S	Toluene-d8	10.000	9.944	0.6	101	0.00
56	C,T,M	Toluene	10.000	9.585	4.1	92	0.00
57	T,M	Ethyl methacrylate	10.000	8.811	11.9	85	0.00
58	T,M	trans-1,3-Dichloropropene	10.000	8.664	13.4	83	0.00
59	T,M	1,1,2-Trichloroethane	10.000	9.640	3.6	97	0.00
60	T,M	2-Hexanone	50.000	46.033	7.9	88	0.00
61	T,M	1,3-Dichloropropane	10.000	9.475	5.3	91	0.02
62	T,M	Tetrachloroethene	10.000	10.379	-3.8	101	0.00
63	T,M	Dibromochloromethane	10.000	9.076	9.2	92	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	9.140	8.6	95	0.00
66	T,M	1-Chlorohexane	10.000	9.153	8.5	92	0.00
67	P,T,M	Chlorobenzene	10.000	10.070	-0.7	96	0.00
68	T,M	1,1,1,2-Tetrachloroethane	10.000	10.542	-5.4	101	0.00
69	C,T,M	Ethylbenzene	10.000	10.127	-1.3	97	0.01
70	T,M	m-Xylene & p-Xylene	20.000	20.254	-1.3	96	0.01
71	T,M	o-Xylene	10.000	10.089	-0.9	99	0.01
72	T,M	Styrene	10.000	10.339	-3.4	97	0.01
73	T,M	Isopropylbenzene	10.000	10.186	-1.9	99	0.01
74	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	103	0.00
75	P,T,M	Bromoform	10.000	10.933	-9.3	99	0.01
76	P,T,M	1,1,2,2-Tetrachloroethane	10.000	9.804	2.0	103	0.00
77	S	4-Bromofluorobenzene	10.000	10.025	-0.3	101	0.00
78	T,M	1,2,3-Trichloropropane	10.000	9.507	4.9	101	0.00
79	T,M	trans-1,4-Dichloro-2-butene	10.000	8.182	18.2	84	0.00
80	T,M	n-Propylbenzene	10.000	10.032	-0.3	97	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F18\RFW255.D Vial: 2
Acq On : 18 Jun 2024 10:10 am Operator: DHuynh
Sample : CVO06F0309 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 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	Bromobenzene	10.000	10.448	-4.5	103	0.00
82	T,M	1,3,5-Trimethylbenzene	10.000	10.050	-0.5	100	0.01
83	T,M	2-Chlorotoluene	10.000	9.607	3.9	94	0.01
84	T,M	4-Chlorotoluene	10.000	9.674	3.3	98	0.01
85	T,M	tert-Butylbenzene	10.000	9.809	1.9	98	0.00
86	T,M	1,2,4-Trimethylbenzene	10.000	10.151	-1.5	100	0.00
87	T,M	sec-Butylbenzene	10.000	9.937	0.6	98	0.01
88	T,M	p-Isopropyltoluene	10.000	9.857	1.4	97	0.01
89	T,M	1,3-Dichlorobenzene	10.000	9.891	1.1	96	0.01
90	T,M	1,2,3-Trimethylbenzene	10.000	10.224	-2.2	101	0.01
91	T,M	1,4-Dichlorobenzene	10.000	9.516	4.8	93	0.00
92	T,M	n-Butylbenzene	10.000	9.595	4.0	97	0.00
93	T,M	1,2-Dichlorobenzene	10.000	10.126	-1.3	99	0.00
94	T,M	1,2-Dibromo-3-chloropropane	10.000	10.176	-1.8	110	0.00
95	T,M	1,2,4-Trichlorobenzene	10.000	10.549	-5.5	109	0.01
96	T,M	Hexachlorobutadiene	10.000	9.833	1.7	105	0.01
97	T,M	Naphthalene	10.000	10.088	-0.9	107	0.01
98	T,M	1,2,3-Trichlorobenzene	10.000	9.498	5.0	107	0.01

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F18\RFW255.D Vial: 2
Acq On : 18 Jun 2024 10:10 am Operator: DHuynh
Sample : CVO06F0309 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 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	99	0.02
2	T,M	Dichlorodifluoromethane	0.296	0.284	4.1	95	0.00
3	P,T,M	Chloromethane	0.451	0.403	10.6	92	0.00
4	C,T,M	Vinyl chloride	0.321	0.336	-4.7	100	0.00
5	T,M	Bromomethane	0.291	0.306	-5.2	104	0.00
6	T,M	Chloroethane	0.247	0.249	-0.8	102	0.00
7	T,M	Dichlorofluoromethane	0.607	0.620	-2.1	101	0.00
8	T,M	Trichlorofluoromethane	0.399	0.383	4.0	98	0.00
9	T,M	Acrolein	0.020	0.024	-20.0	116	0.00
10	T,M	1,1,2-Trichloro-1,2,2-trifl	0.184	0.207	-12.5	115	0.00
11	T,M	Acetone	0.034	0.033	2.9	106	0.00
12	C,T,M	1,1-Dichloroethene	0.530	0.546	-3.0	99	0.00
13	T,M	tert-Butyl alcohol	0.010	0.011	-10.0	109	0.00
14	T,M	Acetonitrile	0.000	0.000	0.0	0#	0.00
15	T,M	Methyl acetate	0.023	0.023	0.0	100	0.00
16	T,M	Iodomethane	0.526	0.613	-16.5	114	0.00
17	T,M	Allyl chloride	0.000	0.233	0.0	0#	0.00
18	T,M	Methylene chloride	0.444	0.443	0.2	100	0.00
19	T,M	Carbon disulfide	1.383	1.447	-4.6	100	0.02
20	T,M	Acrylonitrile	0.047	0.052	-10.6	110	0.00
21	T,M	tert-Butyl methyl ether (MT	0.513	0.570	-11.1	108	0.02
22	T,M	trans-1,2-Dichloroethene	0.368	0.409	-11.1	110	0.00
23	T,M	Isopropyl ether (DIPE)	1.158	1.164	-0.5	95	0.00
24	T,M	Vinyl acetate	0.316	0.274	13.3	88	0.02
25	P,T,M	1,1-Dichloroethane	0.623	0.634	-1.8	98	0.00
26	T,M	2-Butanol	0.000	0.009	0.0	0#	0.02
27	T,M	tert-Butyl ethyl ether (ETB	0.841	0.849	-1.0	98	0.02
28	T,M	2-Butanone	0.055	0.052	5.5	92	0.00
29	T,M	2,2-Dichloropropane	0.353	0.444	-25.8#	124	0.02
30	T,M	cis-1,2-Dichloroethene	0.360	0.396	-10.0	108	0.02
31	C,T,M	Chloroform	0.571	0.567	0.7	100	0.02
32	T,M	Bromochloromethane	0.156	0.171	-9.6	105	0.00
33	T,M	Tetrahydrofuran	0.034	0.028	17.6	88	0.00
34	T,M	tert-Amyl alcohol	0.008	0.000	100.0#	2#	-0.02
35	S	Dibromofluoromethane	0.300	0.328	-9.3	108	0.00
36	T,M	1,1,1-Trichloroethane	0.440	0.462	-5.0	105	0.00
37	T,M	Cyclohexane	0.445	0.482	-8.3	103	0.00
38	T,M	2,2,4-Trimethylpentane	1.142	0.000	100.0#	0#	-8.62#
39	T,M	1,1-Dichloropropene	0.150	0.155	-3.3	103	0.00
40	T,M	Carbon tetrachloride	0.355	0.374	-5.4	104	0.02
41	T,M	tert-Amyl methyl ether (TAM	0.628	0.685	-9.1	103	0.02

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F18\RFW255.D Vial: 2
Acq On : 18 Jun 2024 10:10 am Operator: DHuynh
Sample : CVO06F0309 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 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	S	1,2-Dichloroethane-d4	0.216	0.216	0.0	99	0.00
43	T,M	1,2-Dichloroethane	0.254	0.240	5.5	89	0.00
44	T,M	Benzene	1.331	1.366	-2.6	96	0.02
45	T,M	Trichloroethene	0.339	0.352	-3.8	99	0.02
46	T,M	Methylcyclohexane	0.521	0.566	-8.6	98	0.00
47	C,T,M	1,2-Dichloropropane	0.322	0.298	7.5	90	0.02
48	T,M	1,4-Dioxane	0.001	0.001	0.0	106	0.02
49	T,M	Bromodichloromethane	0.369	0.342	7.3	92	0.02
50	T,M	Dibromomethane	0.136	0.129	5.1	98	0.00
51	T,M	2-Chloroethyl vinyl ether	0.106	0.072	32.1#	67	0.02
52	T,M	4-Methyl-2-pentanone	0.156	0.153	1.9	88	0.00
53	T,M	cis-1,3-Dichloropropene	0.470	0.421	10.4	87	0.00
54	I	CHLOROBENZENE-D5	1.000	1.000	0.0	99	0.00
55	S	Toluene-d8	1.505	1.497	0.5	101	0.00
56	C,T,M	Toluene	1.743	1.671	4.1	92	0.00
57	T,M	Ethyl methacrylate	0.297	0.262	11.8	85	0.00
58	T,M	trans-1,3-Dichloropropene	0.429	0.372	13.3	83	0.00
59	T,M	1,1,2-Trichloroethane	0.204	0.197	3.4	97	0.00
60	T,M	2-Hexanone	0.121	0.111	8.3	88	0.00
61	T,M	1,3-Dichloropropane	0.386	0.365	5.4	91	0.02
62	T,M	Tetrachloroethene	0.321	0.333	-3.7	101	0.00
63	T,M	Dibromochloromethane	0.273	0.248	9.2	92	0.00
64	T,M	2-Ethyl-1-butanol	0.000	0.000	0.0	0#	0.00
65	T,M	1,2-Dibromoethane	0.204	0.186	8.8	95	0.00
66	T,M	1-Chlorohexane	0.820	0.751	8.4	92	0.00
67	P,T,M	Chlorobenzene	0.983	0.989	-0.6	96	0.00
68	T,M	1,1,1,2-Tetrachloroethane	0.331	0.348	-5.1	101	0.00
69	C,T,M	Ethylbenzene	1.902	1.926	-1.3	97	0.01
70	T,M	m-Xylene & p-Xylene	1.423	1.441	-1.3	96	0.01
71	T,M	o-Xylene	1.462	1.475	-0.9	99	0.01
72	T,M	Styrene	1.034	1.069	-3.4	97	0.01
73	T,M	Isopropylbenzene	1.793	1.827	-1.9	99	0.01
74	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	103	0.00
75	P,T,M	Bromoform	0.282	0.308	-9.2	99	0.01
76	P,T,M	1,1,2,2-Tetrachloroethane	0.657	0.644	2.0	103	0.00
77	S	4-Bromofluorobenzene	1.326	1.329	-0.2	101	0.00
78	T,M	1,2,3-Trichloropropane	0.152	0.145	4.6	101	0.00
79	T,M	trans-1,4-Dichloro-2-butene	0.165	0.135	18.2	84	0.00
80	T,M	n-Propylbenzene	6.462	6.482	-0.3	97	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F18\RFW255.D Vial: 2
Acq On : 18 Jun 2024 10:10 am Operator: DHuynh
Sample : CVO06F0309 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 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	Bromobenzene	0.938	0.980	-4.5	103	0.00
82	T,M	1,3,5-Trimethylbenzene	4.202	4.223	-0.5	100	0.01
83	T,M	2-Chlorotoluene	4.197	4.032	3.9	94	0.01
84	T,M	4-Chlorotoluene	3.556	3.441	3.2	98	0.01
85	T,M	tert-Butylbenzene	0.914	0.897	1.9	98	0.00
86	T,M	1,2,4-Trimethylbenzene	4.038	4.099	-1.5	100	0.00
87	T,M	sec-Butylbenzene	5.529	5.494	0.6	98	0.01
88	T,M	p-Isopropyltoluene	4.561	4.496	1.4	97	0.01
89	T,M	1,3-Dichlorobenzene	1.988	1.966	1.1	96	0.01
90	T,M	1,2,3-Trimethylbenzene	3.762	3.846	-2.2	101	0.01
91	T,M	1,4-Dichlorobenzene	1.965	1.870	4.8	93	0.00
92	T,M	n-Butylbenzene	4.681	4.491	4.1	97	0.00
93	T,M	1,2-Dichlorobenzene	1.637	1.658	-1.3	99	0.00
94	T,M	1,2-Dibromo-3-chloropropane	0.080	0.082	-2.5	110	0.00
95	T,M	1,2,4-Trichlorobenzene	0.969	1.022	-5.5	109	0.01
96	T,M	Hexachlorobutadiene	0.611	0.601	1.6	105	0.01
97	T,M	Naphthalene	1.373	1.385	-0.9	107	0.01
98	T,M	1,2,3-Trichlorobenzene	0.733	0.696	5.0	107	0.01

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F18\RFW255.D Vial: 2
Acq On : 18 Jun 2024 10:10 am Operator: DHuynh
Sample : CVO06F0309 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 18 10:32 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.07	114	3147660	10.00	ug/l	0.02
54) CHLOROBENZENE-D5	15.53	117	2494380	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.43	152	892282	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	8.06	111	1032991	10.93	ug/l	0.00
Spiked Amount 10.000			Recovery =	109.30%		
42) 1,2-Dichloroethane-d4	9.19	65	679842	10.00	ug/l	0.00
Spiked Amount 10.000			Recovery =	100.00%		
55) Toluene-d8	12.90	98	3733615	9.94	ug/l	0.00
Spiked Amount 10.000			Recovery =	99.40%		
77) 4-Bromofluorobenzene	17.54	95	1186250	10.03	ug/l	0.00
Spiked Amount 10.000			Recovery =	100.30%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.63	85	894261	9.59	ug/l	100
3) Chloromethane	1.87	50	1268720	8.94	ug/l	100
4) Vinyl chloride	1.99	62	1056997	10.45	ug/l	99
5) Bromomethane	2.44	94	961820	10.49	ug/l	96
6) Chloroethane	2.52	64	783933	10.09	ug/l	96
7) Dichlorofluoromethane	2.56	67	1951992	10.21	ug/l	99
8) Trichlorofluoromethane	2.80	101	1206976	9.61	ug/l	97
9) Acrolein	3.34	56	382138	59.48	ug/l	97
10) 1,1,2-Trichloro-1,2,2-trif	3.38	151	651222	11.23	ug/l	98
11) Acetone	3.43	43	523830	48.59	ug/l	97
12) 1,1-Dichloroethene	3.57	61	1719192	10.30	ug/l	96
13) tert-Butyl alcohol	3.74	59	901128	274.41	ug/l	99
15) Methyl acetate	4.14	74	71219	9.70	ug/l	94
16) Iodomethane	4.03	142	1928050	11.64	ug/l	96
18) Methylene chloride	4.33	49	1395082	9.98	ug/l	91
19) Carbon disulfide	4.31	76	4556100	10.47	ug/l	99
20) Acrylonitrile	4.58	53	814340	55.61	ug/l	99
21) tert-Butyl methyl ether (M	4.64	73	1795599	11.13	ug/l	97
22) trans-1,2-Dichloroethene	4.85	96	1287298	11.10	ug/l	100
23) Isopropyl ether (DIPE)	5.54	45	3662723	10.05	ug/l	96
24) Vinyl acetate	5.79	43	861755	8.67	ug/l	95
25) 1,1-Dichloroethane	5.71	63	1996618	10.17	ug/l	98
27) tert-Butyl ethyl ether (ET	6.49	59	2673432	10.10	ug/l	95
28) 2-Butanone	6.76	43	820024	47.53	ug/l	96
29) 2,2-Dichloropropane	7.03	77	1398500	12.58	ug/l	98
30) cis-1,2-Dichloroethene	7.16	96	1246392	10.98	ug/l	98
31) Chloroform	7.55	83	1783179	9.92	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F18\RFW255.D Vial: 2
Acq On : 18 Jun 2024 10:10 am Operator: DHuynh
Sample : CVO06F0309 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 18 10:32 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
32)	Bromochloromethane	7.91	130	536754	10.94	ug/l		97
33)	Tetrahydrofuran	8.04	42	87755	8.31	ug/l		92
34)	tert-Amyl alcohol	8.04	59	2710	1.09	ug/l	#	28
36)	1,1,1-Trichloroethane	8.46	97	1454383	10.50	ug/l		99
37)	Cyclohexane	8.43	84	1518008	10.83	ug/l		99
39)	1,1-Dichloropropene	8.81	110	488529	10.37	ug/l		100
40)	Carbon tetrachloride	9.00	119	1176195	10.51	ug/l		100
41)	tert-Amyl methyl ether (TA	9.17	73	2154666	10.90	ug/l		98
43)	1,2-Dichloroethane	9.38	62	755009	9.43	ug/l		99
44)	Benzene	9.38	78	4300796	10.26	ug/l		99
45)	Trichloroethene	10.66	130	1107695	10.38	ug/l		97
46)	Methylcyclohexane	10.72	83	1780541	10.85	ug/l		96
47)	1,2-Dichloropropane	11.01	63	939268	9.27	ug/l		99
48)	1,4-Dioxane	11.56	88	60411	197.05	ug/l		96
49)	Bromodichloromethane	11.45	83	1075914	9.25	ug/l		100
50)	Dibromomethane	11.52	93	405744	9.46	ug/l		92
51)	2-Chloroethyl vinyl ether	12.14	63	225605	6.74	ug/l		98
52)	4-Methyl-2-pentanone	12.19	43	2415432	49.23	ug/l		93
53)	cis-1,3-Dichloropropene	12.50	75	1325571	8.96	ug/l		96
56)	Toluene	13.05	91	4168230	9.58	ug/l		98
57)	Ethyl methacrylate	13.46	69	652811	8.81	ug/l		98
58)	trans-1,3-Dichloropropene	13.42	75	928029	8.66	ug/l		93
59)	1,1,2-Trichloroethane	13.67	97	491475	9.64	ug/l		95
60)	2-Hexanone	13.76	43	1386643	46.03	ug/l		96
61)	1,3-Dichloropropane	14.14	76	911212	9.48	ug/l		97
62)	Tetrachloroethene	14.18	164	829964	10.38	ug/l		97
63)	Dibromochloromethane	14.53	129	617835	9.08	ug/l		99
65)	1,2-Dibromoethane	14.87	107	464498	9.14	ug/l		100
66)	1-Chlorohexane	15.22	91	1872560	9.15	ug/l		99
67)	Chlorobenzene	15.60	112	2468104	10.07	ug/l		99
68)	1,1,1,2-Tetrachloroethane	15.69	131	869186	10.54	ug/l		98
69)	Ethylbenzene	15.71	91	4804506	10.13	ug/l		100
70)	m-Xylene & p-Xylene	15.84	91	7189396	20.25	ug/l		99
71)	o-Xylene	16.57	91	3678920	10.09	ug/l		100
72)	Styrene	16.64	104	2666612	10.34	ug/l		98
73)	Isopropylbenzene	17.18	105	4557011	10.19	ug/l		99
75)	Bromoform	17.18	173	275194	10.93	ug/l		98
76)	1,1,2,2-Tetrachloroethane	17.45	83	574826	9.80	ug/l		97
78)	1,2,3-Trichloropropane	17.66	110	129075	9.51	ug/l		95
79)	trans-1,4-Dichloro-2-buten	17.77	53	120166	8.18	ug/l		97
80)	n-Propylbenzene	17.77	91	5784069	10.03	ug/l		99

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24F18\RFW255.D Vial: 2
Acq On : 18 Jun 2024 10:10 am Operator: DHuynh
Sample : CVO06F0309 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 18 10:32 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

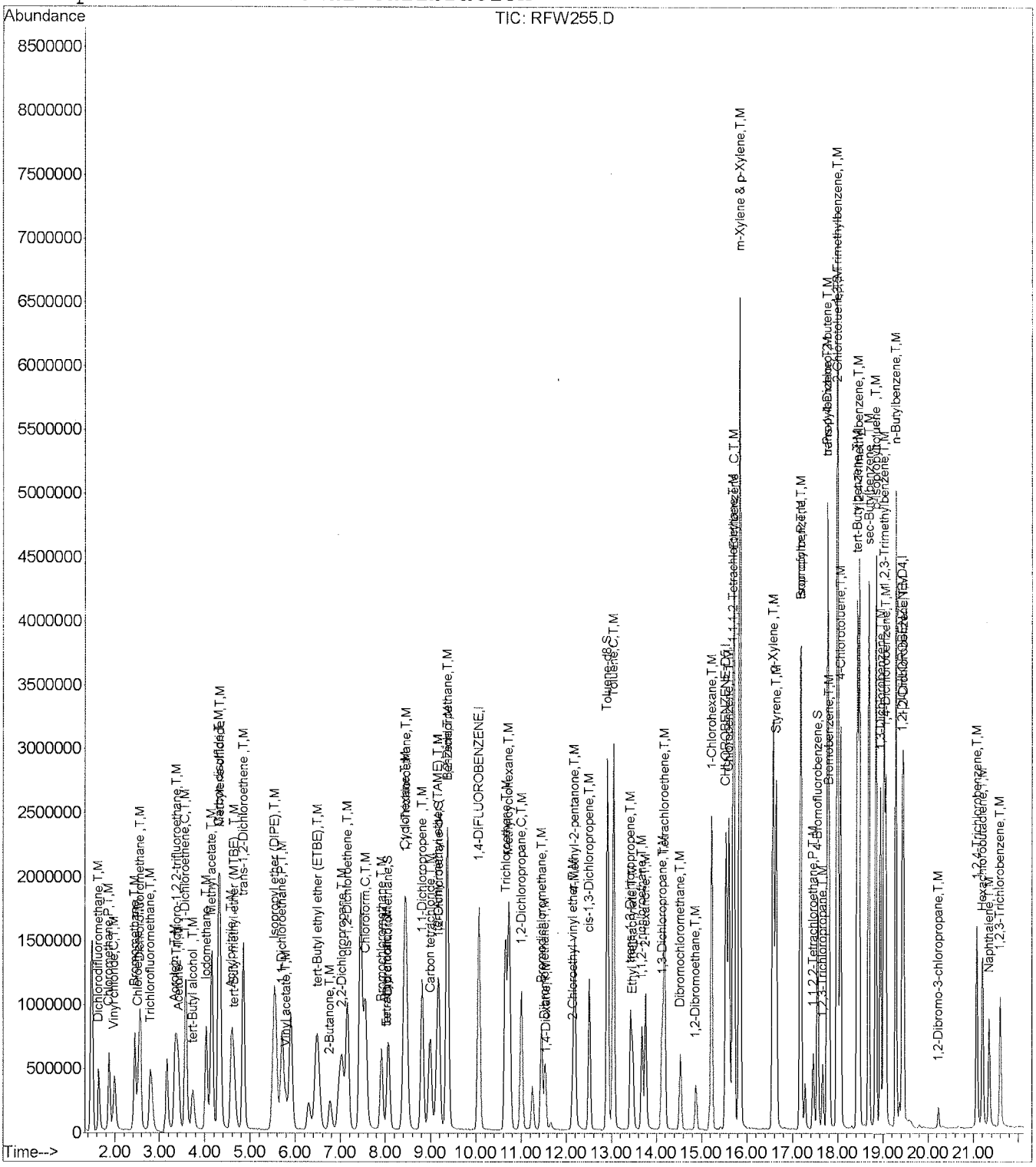
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
81)	Bromobenzene	17.80	156	874000	10.45	ug/l	98
82)	1,3,5-Trimethylbenzene	17.99	105	3768060	10.05	ug/l	99
83)	2-Chlorotoluene	18.00	91	3597609	9.61	ug/l	98
84)	4-Chlorotoluene	18.06	91	3069923	9.67	ug/l	100
85)	tert-Butylbenzene	18.43	134	800146	9.81	ug/l	96
86)	1,2,4-Trimethylbenzene	18.47	105	3657376	10.15	ug/l	100
87)	sec-Butylbenzene	18.69	105	4902397	9.94	ug/l	98
88)	p-Isopropyltoluene	18.84	119	4011350	9.86	ug/l	99
89)	1,3-Dichlorobenzene	18.95	146	1754595	9.89	ug/l	98
90)	1,2,3-Trimethylbenzene	19.02	105	3431764	10.22	ug/l	99
91)	1,4-Dichlorobenzene	19.06	146	1668545	9.52	ug/l	99
92)	n-Butylbenzene	19.28	91	4007295	9.59	ug/l	99
93)	1,2-Dichlorobenzene	19.45	146	1479036	10.13	ug/l	97
94)	1,2-Dibromo-3-chloropropan	20.23	157	73013	10.18	ug/l	99
95)	1,2,4-Trichlorobenzene	21.08	180	912068	10.55	ug/l	99
96)	Hexachlorobutadiene	21.21	225	536354	9.83	ug/l	99
97)	Naphthalene	21.35	128	1236229	10.09	ug/l	98
98)	1,2,3-Trichlorobenzene	21.59	180	621317	9.50	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F18\RFW255.D Vial: 2
Acq On : 18 Jun 2024 10:10 am Operator: DHuynh
Sample : CVO06F0309 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 18 10:32 2024 Quant Results File: VO06F03.RE

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration



ANALYTICAL LOG(S)

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments: (*) varied amount
A: Gas, CS2, 4Add, TAA-224, SS
B: 8260, Ket-AA

Book #: A06-082
Instrument No.: 06
Analytical Sequence: 24F03
Method File: V006F03
Analytical Batch: V006F03D6

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.

INITIAL CALIBRATION REFERENCE

DATE	6/3/24
ICAL ID	V006F03

STANDARDS

NAME	ID	Amount (ul)	Conc. (mg/L)
DCC Gas	SV1-43-59-01	(*)	
DCC CS2	43-91-01	↓	
DCC 4Add	43-95-02		
DCC 8260 Ket	45-01-03 43-92-02		
DCC TAA-224	43-40-03	↓	
BFB	45-01-01	1	
IS/SURR. IS SS	43-35-02 43-35-03	1 1	50/250
ICV/LCS Gas CS2	43-76-03 43-55-02	1 1	
ICV/LCS 3Add	43-81-03	5	
ICV/LCS 8260 Ket	43-86-03 43-94-02	5 5	
ICV/LCS TAA 224-TMS	43-69-01 43-69-02	5 5	
Data File Folder	24F03		

	LOT #	Syringe Lot #
pH strip	N/A	MSV-03-02-24
Chlorine strip	↓	03-02-15-5
Methanol		02-01-19
$NaHSO_4$		03-01-11
Reagent Water	RW4-23-001	↓ 03-04-17
Sand		

ELECTRONIC DATA ARCHIVAL	
Location	Date
HPCHEM_VOA/TO06	

Analyzed By: DH
Date: 6/3/24
Disposed By: DH
Date Disposed: 6/4/24

Injection Log

Directory: D:\HPCHEM\1\DATA\24F03

.ine	Vial	FIleName	Multiplier	SampleName		Misc Info	Injected
	1	RFW001.D	1.	BFB06F01		T/CHK	3 Jun 2024 14:25
	2	RFW002.D	1.	VO06F031	0.03/0.15uL	0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA	3 Jun 2024 15:03
	3	RFW003.D	1.	VO06F032	0.05/0.25uL	0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA	3 Jun 2024 15:29
	4	RFW004.D	1.	VO06F033	0.10/0.50uL	1.0ppb 8260/5.0ppb KET-AA/25ppb TBA	3 Jun 2024 15:55
	5	RFW005.D	1.	VO06F034	0.20/1.00uL	2.0ppb 8260/10ppb KET-AA/50ppb TBA	3 Jun 2024 16:21
	6	RFW006.D	1.	VO06F035	0.50/2.50uL	5.0ppb 8260/25ppb KET-AA/125ppb TBA	3 Jun 2024 16:47
	7	RFW007.D	1.	VO06F036	1.00/5.00uL	10ppb 8260/50ppb KET-AA/250ppb TBA	3 Jun 2024 17:14
	8	RFW008.D	1.	VO06F037	2.00/10.0uL	20ppb 8260/100ppb KET-AA/500ppb TBA	3 Jun 2024 17:40
	9	RFW009.D	1.	VO06F038	3.00/15.0uL	30ppb 8260/150ppb KET-AA/750ppb TBA	3 Jun 2024 18:06
0	10	RFW010.D	1.	VO06F039	5.00/25.0uL	50ppb 8260/250ppb KET-AA/1250ppb TBA	3 Jun 2024 18:32
1	11	RFW011.D	1.	VO06F0310	10.0/50.0uL	100ppb 8260/500ppb KET-AA/2500ppb TBA	3 Jun 2024 18:59
2	12	RFW012.D	1.	RINSE			3 Jun 2024 19:25
3	13	RFW013.D	1.	RINSE			3 Jun 2024 19:51
4	14	RFW014.D	1.	IVO06F0301		10ppb 8260/50ppb KET-AA/250ppb TBA	3 Jun 2024 20:18
5	15	RFW015.D	1.	RINSE			3 Jun 2024 20:44

DH 6/10/24

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

Book #: A06-082
Instrument No.: 06
Analytical Sequence: 24F18
Method File: V006F03
Analytical Batch: CV006F0309

INITIAL CALIBRATION REFERENCE			
DATE	6/3/24		
ICAL ID	V006F03		
STANDARDS			
NAME	ID	Amount (µl)	Conc. (mg/L)
DCC	SV1-43-53-01 43-98-01	1 1	
DCC	43-95-02	1	
DCC	45-01-03	5	
DCC	43-82-02	5	
BFB	45-01-01	1	
IS/SURR.	43-95-03	5	50/250
ICV/LCS	43-76-03 43-55-02	1 1	
ICV/LCS	43-81-03	5	
ICV/LCS	43-86-03	5	
ICV/LCS	43-94-02	5	
Data File Folder	24F18		
	LOT #	Syringe Lot #	
pH strip	HC210330	MSV-03-02-24	
Chlorine strip	324302C	03-02-15-5	
Methanol			
$NaHSO_4$			
Reagent Water			
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: DH
Date: 6/18/24
Disposed By: DH
Date Disposed: 6/18/24

Injection Log

Directory: D:\HPCHEM\1\DATA\24F18

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	RFW254.D	1.	BFB06F15	T/CHK	18 Jun 2024 08:53
2	2	RFW255.D	1.	CVO06F0309	10ppb 8260/50ppb KET-AA/250ppb TBA	18 Jun 2024 10:10
3	3	RFW256.D	1.	VO06F15L	10ppb 8260/50ppb KET-AA/250ppb TBA	18 Jun 2024 10:45
4	4	RFW257.D	1.	VO06F15C	10ppb 8260/50ppb KET-AA/250ppb TBA	18 Jun 2024 11:11
5	5	RFW258.D	1.	RINSE	25mL	18 Jun 2024 11:48
6	6	RFW259.D	1.	VO06F15B	25mL	18 Jun 2024 12:15
7	7	RFW260.D	1.	24F077-01	25mL	18 Jun 2024 12:41
8	8	RFW261.D	1.	24F012-01	25mL	18 Jun 2024 13:07
9	9	RFW262.D	1.	24F031-09	25mL	18 Jun 2024 13:33
10	10	RFW263.D	1.	24F012-02	25mL	18 Jun 2024 13:59
11	11	RFW264.D	1.	24F012-03	25mL	18 Jun 2024 14:27
12	12	RFW265.D	1.	24F031-15	25mL	18 Jun 2024 15:05
13	13	RFW266.D	1.	24F031-16	25mL	18 Jun 2024 15:31
14	14	RFW267.D	1.	24F031-17	25mL	18 Jun 2024 15:58
15	15	RFW268.D	1.	24F031-13 D4↑ (matrix)	25mL	18 Jun 2024 16:28
16	16	RFW269.D	1.	24F031-14	25mL	18 Jun 2024 16:54
17	17	RFW270.D	1.	24F031-14I 10X	2.5mL	18 Jun 2024 17:31
18	18	RFW271.D	1.	24F031-09M	25mL	18 Jun 2024 17:58
19	19	RFW272.D	1.	24F031-09S	25mL	18 Jun 2024 18:24
20	20	RFW273.D	1.	RINSE	25mL	18 Jun 2024 18:50
21	21	RFW274.D	1.	RINSE	25mL	18 Jun 2024 19:16
22	22	RFW275.D	1.	24F069-02	25mL	18 Jun 2024 19:42
23	23	RFW276.D	1.	24F069-03	25mL	18 Jun 2024 20:08
24	24	RFW277.D	1.	24F069-01	25mL	18 Jun 2024 20:35
25	25	RFW278.D	1.	EVO06F0309	10ppb 8260/50ppb KET-AA/250ppb TBA	18 Jun 2024 21:01
26	26	RFW279.D	1.	EVO06F03091	10ppb 8260/50ppb KET-AA/250ppb TBA	18 Jun 2024 21:27
27	27	RFW280.D	1.	EVO06F03092	10ppb 8260/50ppb KET-AA/250ppb TBA	18 Jun 2024 21:53
28	28	RFW281.D	1.	RINSE		18 Jun 2024 22:19
29	29	RFW282.D	1.	RINSE		18 Jun 2024 22:45

DH 6/19/24

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Torrance, CA 90505
Tel: (310)-618-8889

Date: 06-25-2024
EMAX Batch No.: 24F073

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 06/18/24.
The data reported relate only to samples listed below :

Sample ID	Control #	Col Date	Matrix	Analysis
MW41-GW061524-175	F073-01	06/15/24	WATER	VOCS BY 8260C
TB11-GW061524	F073-02	06/15/24	WATER	VOCS BY 8260C
MW41-GW061624-220	F073-03	06/16/24	WATER	VOCS BY 8260C
FD03-GW061624	F073-04	06/16/24	WATER	VOCS BY 8260C
EB09-GW061624	F073-05	06/16/24	WATER	VOCS BY 8260C
MW41-GW061724-276	F073-06	06/17/24	WATER	VOCS BY 8260C
MW41-GW061724-305	F073-07	06/17/24	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:	EMAX CONTROL NO. 24F073
		SAMPLE STORAGE	PROJECT CODE:

CLIENT: CDM SMITH
PROJECT: 700S 1600E PCE PLUME
COORDINATOR: CHERIE ZAKOWSKI
TEL: 720-264-1109 EMAIL: ZAKOWSKICA@CDMSMITH.COM
SEND REPORT TO:
COMPANY: CDM SMITH
ADDRESS: 555 17TH ST STE 500 DENVER, CO 80201
EMAX PM: L. PHAM

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 8260, VOCs 8260

TAT:
- ☐ Rush __24__hrs.
- ☑ Rush __48_hrs
- ☐ Rush_72_hrs
- ☐ 7 days
- ☒ ~~14 days~~ 6/17 MC
- ☐ 21 days

LAB	SAMPLE ID CLIENT	SAMPLING LOCATION	DATE	TIME	CONTAINER NO.	SIZE	TYPE	MATRIX CODE	QC	PRESERVATIVE CODE IC	HC	COMMENTS
1	MW41-GW061524-175	SLC	06/15/24	1125	3	40mL	VOA	GW	MC	X		
2	TB11-GW061524	SLC	06/15/24	1150	3	40	VOA	GW	~~X~~		X	
3	MW41-GW061624-220	SLC	06/16/24	0725	3	40mL	VOA	GW	6/17		X	
4	FD03-GW061624	SLC	06/16/24		3	40mL	VOA	GW			X	
5	EB09-GW061624	SLC	06/16/24	0915	3	40mL	VOA	GW			X	
6	MW41-GW061724-276	SLC	06/17/24	0730	3	40mL	VOA	GW			X	
7	MW41-GW061724-308	SLC	06/17/24	1600	3	40mL	VOA	GW			X	
8												
9												
10												

Instructions
CC JOE MILLER MILLERJC@CDMSMITH.COM
CC NEIL SMITH SMITHNL@CDMSMITH.COM

Cooler #	Temp. (°C)	Sample #s
	2.3	

SAMPLER: ALEX PEDJASE
COURIER/AIRBILL: FED EX

RELINQUISHED BY	Date	Time	RECEIVED BY
	6/17/24	1630	
	6/18/24	950	

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.

SAMPLE RECEIPT FORM 1

Type of Delivery	Airbill / Tracking Number	ECN 24F073
☑ Fedex ☐ UPS ☐ GSO ☐ Others	2760 2693 7024	Recipient Nahdeen Nacana
☐ EMAX Courier ☐ Client Delivery		Date 06/18/24 Time 950

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: no date/initial on corrections.

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 2.3 °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:	*A - S/N* 210606272	*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	5,6	D14		R4
4	10-12	D6		R4, R2

☐ 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 7 has a layer of sediment.

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 COC/label
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/labcl
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	Inform client
R9	
R10	
R11	
R12	

REVIEWS: Nahdeen

Sample Labeling Nacana

Date 06/18/24 6/18/24

SRF

Date 6/18/24

PM

Date 6/18/24

RE: SLC VA Sample shipment 6/17/24 SDG 24F073 collection time missing

Zakowski, Cherie <ZakowskiCA@cdmsmith.com>
Tue 6/18/2024 10:10 PM
To:Linh Pham <LPham@emaxlabs.com>;Miller, Joseph C. <millerjc@cdmsmith.com>;Cecilia Chavez <CChavez@emaxlabs.com>
Cc:Johannes, Hans A. <johannesha@cdmsmith.com>;Smith, Neil L. <SmithNL@cdmsmith.com>;Pedjase, Alexander R. <pedjasear@cdmsmith.com>

Hello: Please put 0730 for the sample collection time. Sorry about that.

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, June 18, 2024 1:00 PM
To: Miller, Joseph C. <millerjc@cdmsmith.com>; Cecilia Chavez <CChavez@emaxlabs.com>
Cc: Zakowski, Cherie <ZakowskiCA@cdmsmith.com>; Johannes, Hans A. <johannesha@cdmsmith.com>; Smith, Neil L. <SmithNL@cdmsmith.com>; Pedjase, Alexander R. <pedjasear@cdmsmith.com>
Subject: SLC VA Sample shipment 6/17/24 SDG 24F073 collection time missing

Hello Cherie,
Attached please find COC and SRFs of SLCA VA SDG 24F073.
Please provide collection time of sample 24F073-04 (FD03-GW06162024)- it was missing on COC and labels.

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:

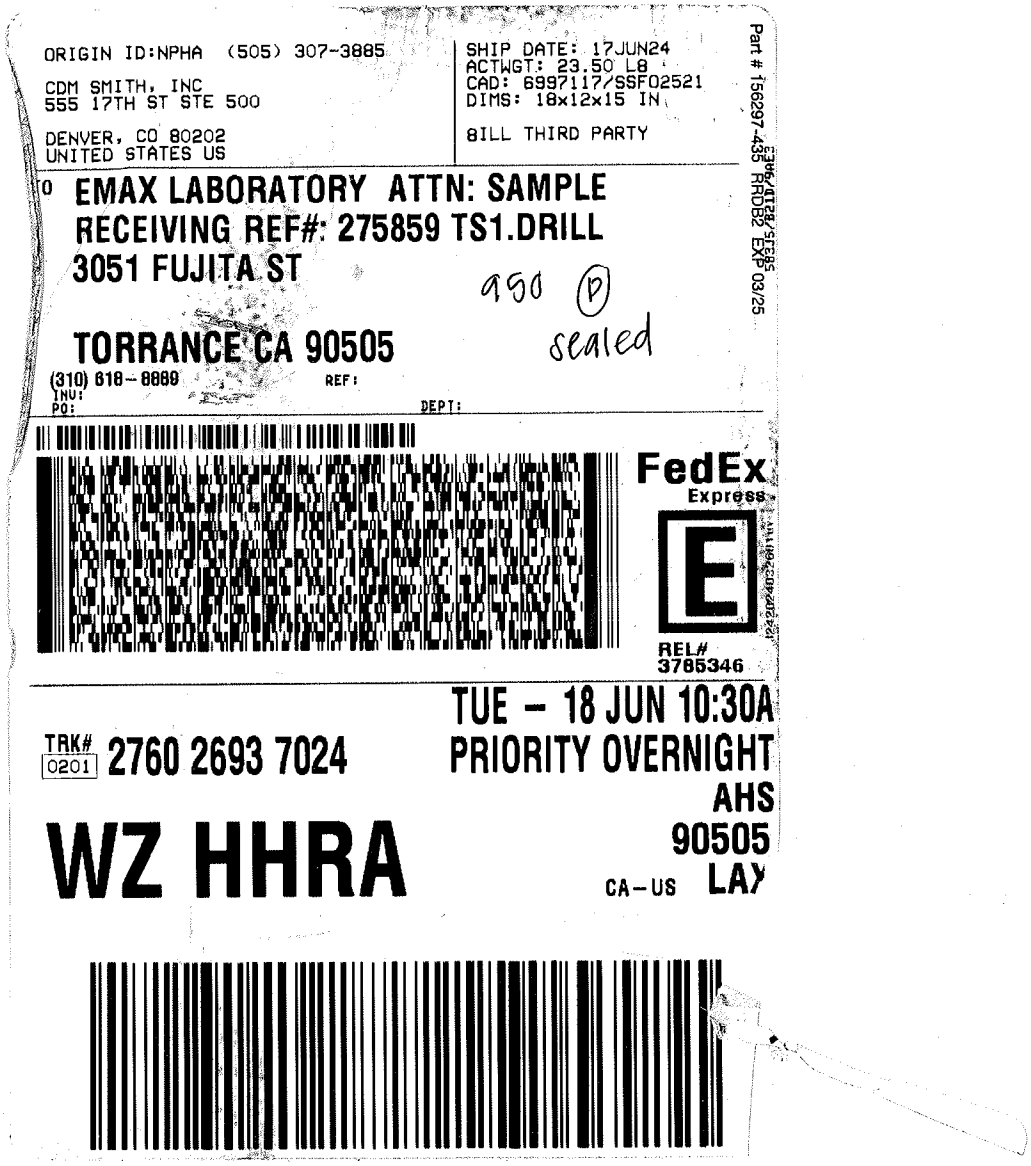
Juneteenth
6/19/2024 (Wednesday)

From: Miller, Joseph C. <millerjc@cdmsmith.com>
Sent: Monday, June 17, 2024 3:52 PM
To: Linh Pham <LPham@emaxlabs.com>; Cecilia Chavez <CChavez@emaxlabs.com>
Cc: Zakowski, Cherie <ZakowskiCA@cdmsmith.com>; Johannes, Hans A. <johannesha@cdmsmith.com>; Smith, Neil L. <SmithNL@cdmsmith.com>; Pedjase, Alexander R. <pedjasear@cdmsmith.com>
Subject: SLC VA Sample shipment 6/17/24

Hi Linh,
We shipped a cooler with 7 groundwater samples. Fedex tracking 276026937024.

Thanks,
Joe Miller, PG
Geologist
CDM Smith
555 17th Street Ste 500
Denver, CO 80202
Direct: 303.383.2328
cdmsmith.com




ORIGIN ID:NPHA (505) 307-3885
CDM SMITH, INC
555 17TH ST STE 500
DENVER, CO 80202
UNITED STATES US
SHIP DATE: 17JUN24
ACTWGT: 23.50 LB
CAD: 6997117/SSFO2521
DIMS: 18x12x15 IN
BILL THIRD PARTY
Part # 156297-435 RRD82 EXP 03/25
TO EMAX LABORATORY ATTN: SAMPLE
RECEIVING REF#: 275859 TS1.DRILL
3051 FUJITA ST
950 (P)
sealed
TORRANCE CA 90505
(310) 618-8889 REF:
INV:
PO: DEPT:
FedEx
Express
REL#
3785346
TUE - 18 JUN 10:30A
TRK# 0201 2760 2693 7024
PRIORITY OVERNIGHT
AHS
90505
WZ HHRA
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#: 24F073

CASE NARRATIVE

Client : CDM SMITH

Project: VA SALT LAKE CITY

SDG : 24F073

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

A total of seven(7) water samples were received on 06/18/24 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. For this SDG, the following were noted: Dichlorodifluoromethane was detected biased high(%D=43.7) in CCV(Data File ID: RFV166). Chloroethane was detected biased high(%D=22.4) in CCV(Data File ID: RFV166). Trichlorofluoromethane was detected biased high(%D=39.7) in CCV(Data File ID: RFV166). 1,1,2-Trichloro-1,2,2-Trifluoroethane was detected biased high(%D=22.3) in CCV(Data File ID: RFV166). Methyl Acetate was detected biased high(%D=38.0) in CCV(Data File ID: RFV166). Vinyl Acetate was detected biased high(%D=22.6) in CCV(data file ID RFV166). However, note that the analytes in question were not detected in any of the associated field samples. Dichlorodifluoromethane was detected biased high(%D=38.2) in CCV(Data File ID: RFV189). Trichlorofluoromethane was detected biased high(%D=35.7) in CCV(Data File ID: RFV189). Methyl Acetate was detected biased high(%D=29.8) in CCV(Data File ID: RFV189). However, note that the analytes in question were not detected in any of the associated field samples. 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. VO01F08B and VO01F09B 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. Lab control sample was prepared and analyzed at a frequency required by the project. All analytes were within LCS limits except for: VO01F08L/VO01F08C - Percent recovery for Methyl Acetate in LCS/LCD was biased high. The rest of the analytes were in control and VO01F09L/VO01F09C - Percent recovery for Methyl Acetate in LCS/LCD was biased high. RPD for Bromomethane(RPD=29*) was not within LCD QC limits. The rest of the analytes were in control. 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. : 24F073
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	V001F08L	1	NA	06/20/2414:58	06/20/2414:58	RFV167	REV201	V001F08	Lab Control Sample (LCS)
LCD1W	V001F08C	1	NA	06/20/2415:29	06/20/2415:29	RFV168	REV201	V001F08	LCS Duplicate
MBLK1W	V001F08B	1	NA	06/20/2416:29	06/20/2416:29	RFV170	REV201	V001F08	Method Blank
MW41-GW061524-175	24F073-01	1	NA	06/20/2420:00	06/20/2420:00	RFV177	REV201	V001F08	Field Sample
TB11-GW061524	24F073-02	1	NA	06/20/2422:27	06/20/2422:27	RFV182	REV201	V001F08	Field Sample
MW41-GW061624-220	24F073-03	1	NA	06/20/2422:57	06/20/2422:57	RFV183	REV201	V001F08	Field Sample
LCS2W	V001F09L	1	NA	06/21/2411:52	06/21/2411:52	RFV190	REV201	V001F09	Lab Control Sample (LCS)
LCD2W	V001F09C	1	NA	06/21/2412:22	06/21/2412:22	RFV191	REV201	V001F09	LCS Duplicate
MBLK2W	V001F09B	1	NA	06/21/2413:22	06/21/2413:22	RFV193	REV201	V001F09	Method Blank
FD03-GW061624	24F073-04	1	NA	06/21/2417:24	06/21/2417:24	RFV201	REV201	V001F09	Field Sample
EB09-GW061624	24F073-05	1	NA	06/21/2417:55	06/21/2417:55	RFV202	REV201	V001F09	Field Sample
MW41-GW061724-276	24F073-06	1	NA	06/21/2418:25	06/21/2418:25	RFV203	REV201	V001F09	Field Sample
MW41-GW061724-305	24F073-07	1	NA	06/21/2418:55	06/21/2418:55	RFV204	REV201	V001F09	Field Sample

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	06/15/24 11:25
Project	: VA SALT LAKE CITY	Date Received:	06/18/24
Batch No.	: 24F073	Date Extracted:	06/20/24 20:00
Sample ID	: MW41-GW061524-175	Date Analyzed:	06/20/24 20:00
Lab Samp ID:	24F073-01	Dilution Factor:	1
Lab File ID:	RFV177	Matrix:	WATER
Ext Btch ID:	VO01F08	% Moisture:	NA
Calib. Ref.:	REV201	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	0.13J	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	5.3J	20	2.5
Benzene	0.26J	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	3.0	1.0	0.10
Chloromethane	1.1	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	0.11J	1.0	0.10
Isopropylbenzene	ND	1.0	0.10
m,p-Xylene	0.28J	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	0.13J	1.0	0.10
Styrene	ND	1.0	0.25
Tetrachloroethene	45	1.0	0.15
Toluene	0.47J	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	0.18J	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	10.2	10.0	102	70-130
Bromofluorobenzene	9.53	10.0	95	70-130
Toluene-d8	10.5	10.0	105	70-130
Dibromofluoromethane	9.55	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\24F20\RFV177.D
Acq On : 20 Jun 2024 8:00 pm
Sample : 24F073-01
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Jun 21 17:23 2024

Vial: 13
Operator: DNguye
Inst : 01New
Multiplr: 1.00
Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

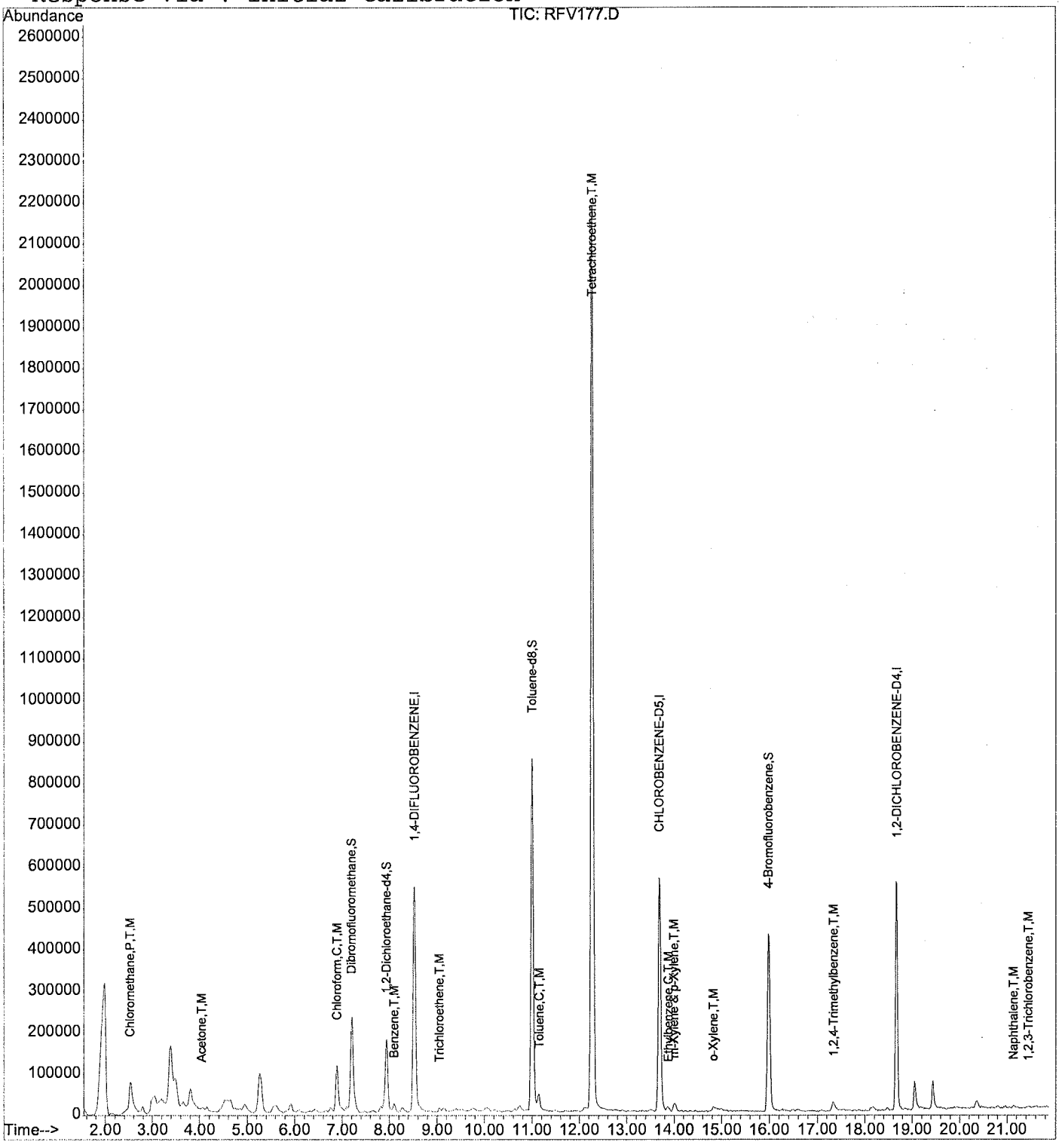
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.53	114	885475	10.00	ug/l	-0.01
53) CHLOROBENZENE-D5	13.68	117	707319	10.00	ug/l	-0.03
72) 1,2-DICHLOROBENZENE-D4	18.67	152	289705	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.20	111	261784	9.55	ug/l	-0.03
Spiked Amount 10.000			Recovery = 95.50%			
41) 1,2-Dichloroethane-d4	7.94	65	191436	10.24	ug/l	-0.03
Spiked Amount 10.000			Recovery = 102.40%			
54) Toluene-d8	11.00	98	1115403	10.52	ug/l	-0.03
Spiked Amount 10.000			Recovery = 105.20%			
76) 4-Bromofluorobenzene	15.98	95	375886	9.53	ug/l	-0.03
Spiked Amount 10.000			Recovery = 95.30%			
Target Compounds						Qvalue
5) Chloromethane	2.52	50	37659	1.14	ug/l	70
13) Acetone	4.04	43	17004	5.26	ug/l #	1
31) Chloroform	6.88	83	163660	3.02	ug/l	98
42) Benzene	8.10	78	31010	0.26	ug/l	94
44) Trichloroethene	9.05	130	5568	0.18	ug/l	96
55) Toluene	11.15	91	58607	0.47	ug/l	99
61) Tetrachloroethene	12.28	164	1167422	44.71	ug/l	99
67) Ethylbenzene	13.88	91	16254	0.11	ug/l	96
68) m-Xylene & p-Xylene	13.99	91	28881	0.28	ug/l	100
69) o-Xylene	14.82	91	14567	0.13	ug/l	74
84) 1,2,4-Trimethylbenzene	17.34	105	15114	0.13	ug/l	88
95) Naphthalene	21.13	128	9866	0.25	ug/l	92
96) 1,2,3-Trichlorobenzene	21.44	180	2841	0.11	ug/l	84

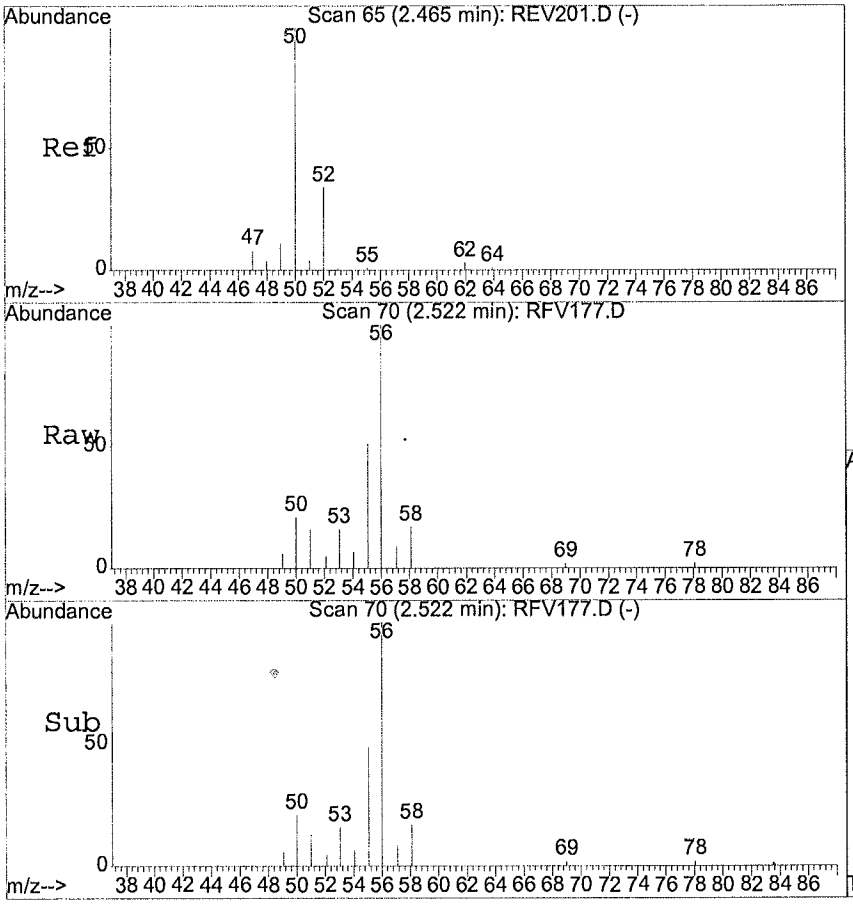
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F20\RFV177.D Vial: 13
Acq On : 20 Jun 2024 8:00 pm Operator: DNguye
Sample : 24F073-01 Inst : 01New
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 21 17:23 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration

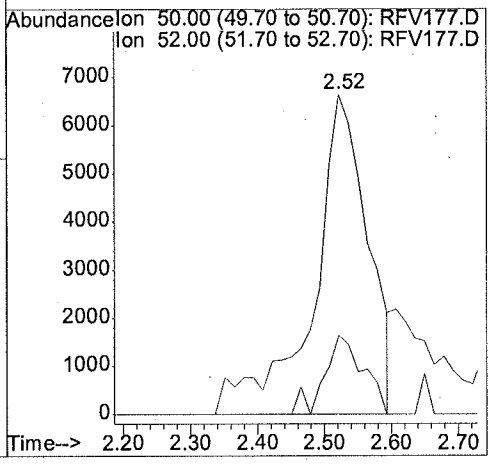


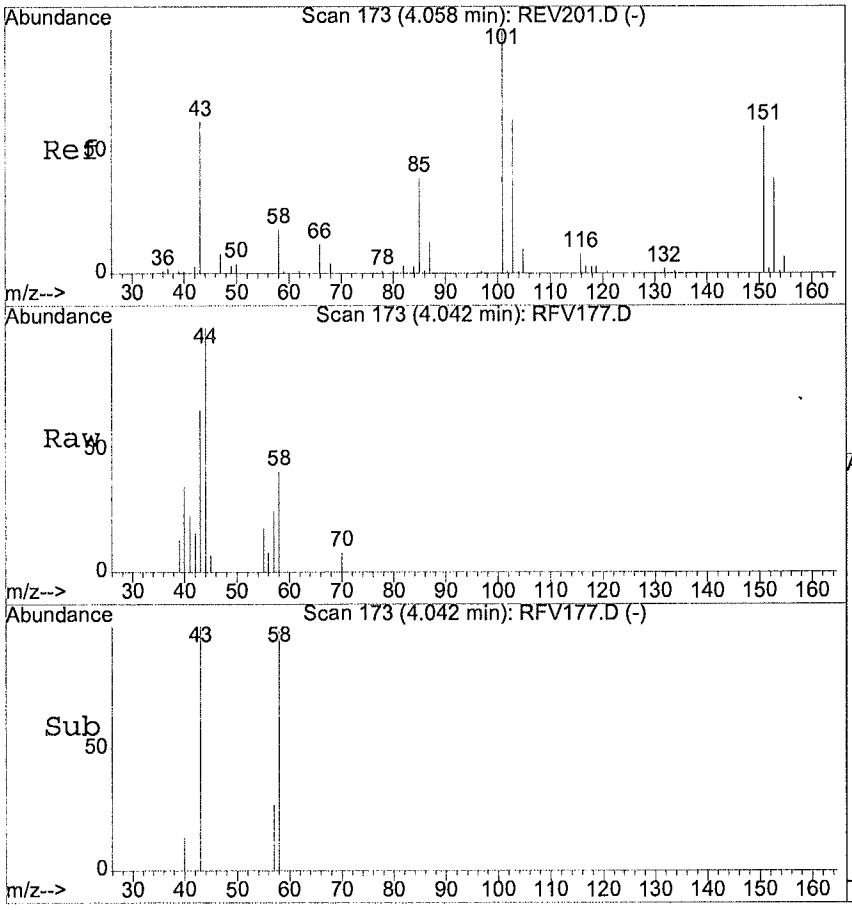


#5
Chloromethane
Concen: 1.14 ug/l
RT: 2.52 min Scan# 70
Delta R.T. 0.06 min
Lab File: RFV177.D
Acq: 20 Jun 2024 8:00 pm

Tgt Ion: 50 Resp: 37659

Ion	Ratio	Lower	Upper
50	100		
52	17.6	5.2	65.2

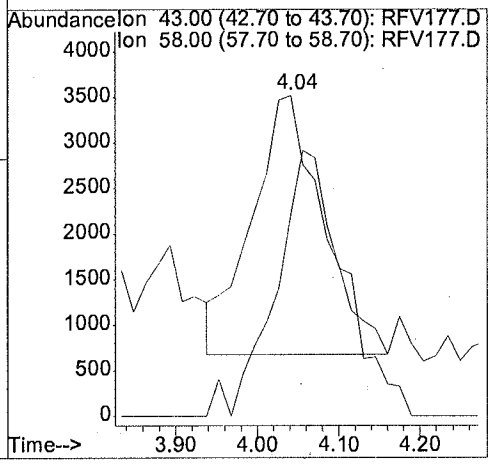


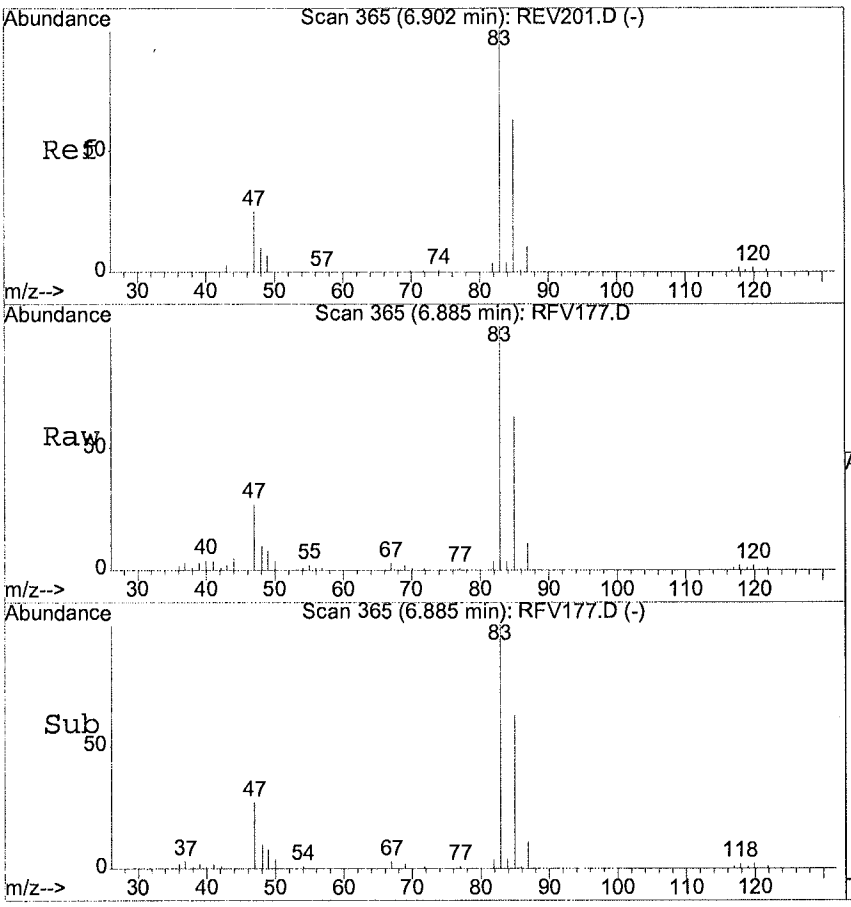


#13
Acetone
Concen: 5.26 ug/l
RT: 4.04 min Scan# 173
Delta R.T. -0.02 min
Lab File: RFV177.D
Acq: 20 Jun 2024 8:00 pm

Tgt Ion: 43 Resp: 17004

Ion	Ratio	Lower	Upper
43	100		
58	100.7	0.9	60.9#

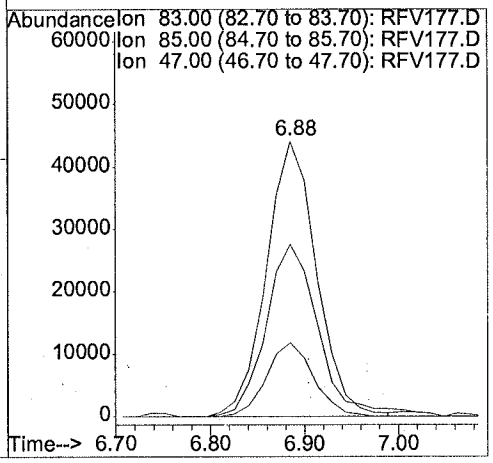


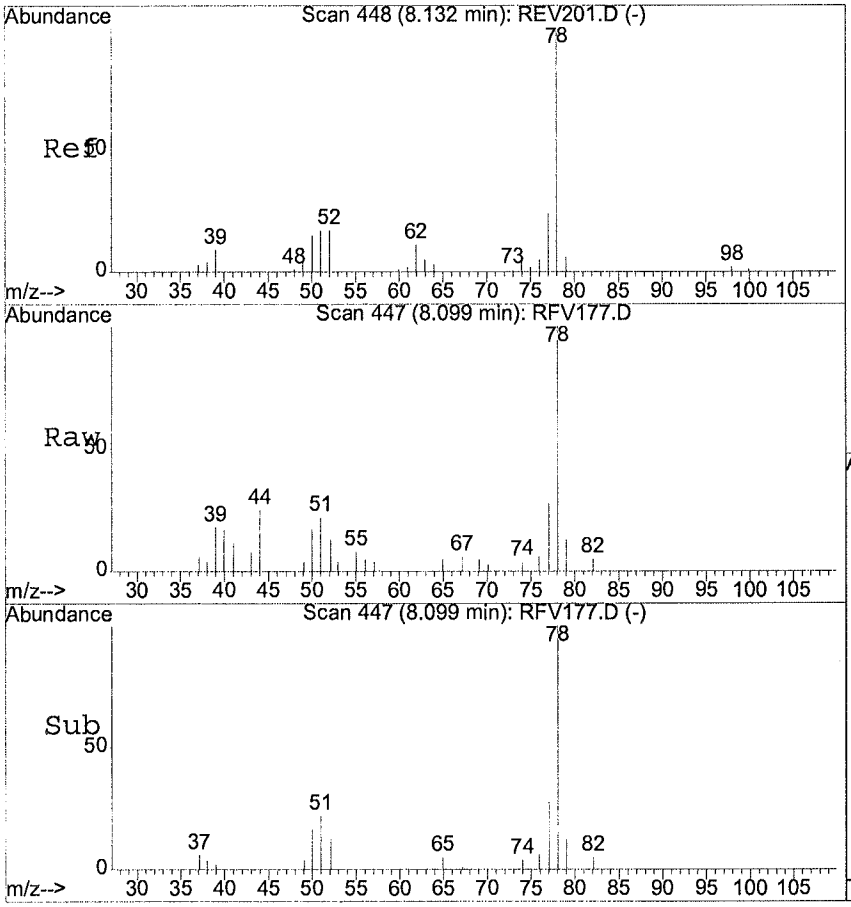


#31
Chloroform
Concen: 3.02 ug/l
RT: 6.88 min Scan# 365
Delta R.T. -0.02 min
Lab File: RFV177.D
Acq: 20 Jun 2024 8:00 pm

Tgt Ion: 83 Resp: 163660

Ion	Ratio	Lower	Upper
83	100		
85	65.9	38.2	98.2
47	25.2	0.0	54.7

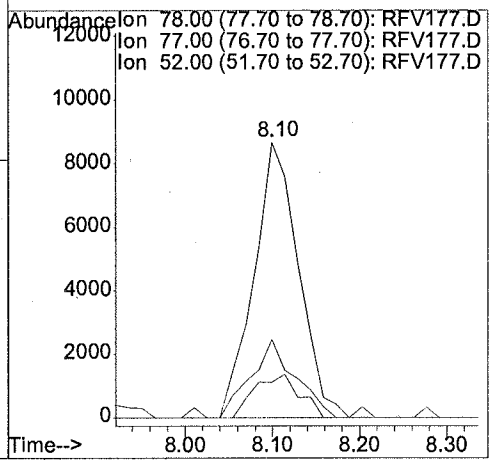


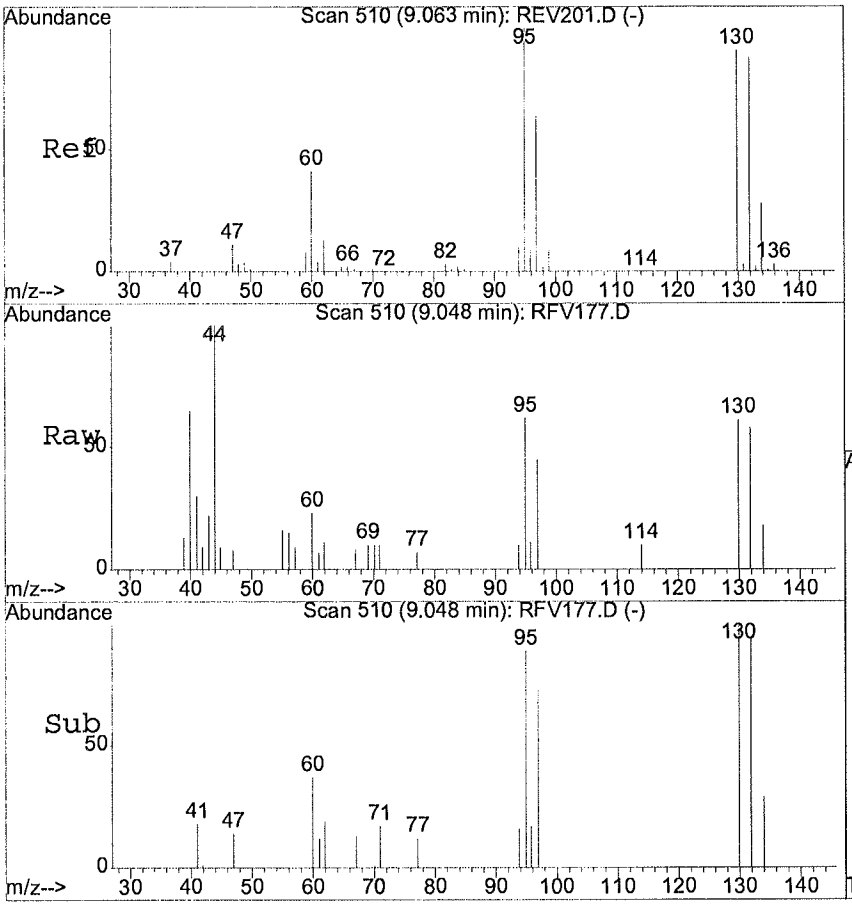


#42
Benzene
Concen: 0.26 ug/l
RT: 8.10 min Scan# 447
Delta R.T. -0.03 min
Lab File: RFV177.D
Acq: 20 Jun 2024 8:00 pm

Tgt Ion: 78 Resp: 31010

Ion	Ratio	Lower	Upper
78	100		
77	28.0	0.0	54.0
52	15.8	0.0	46.8

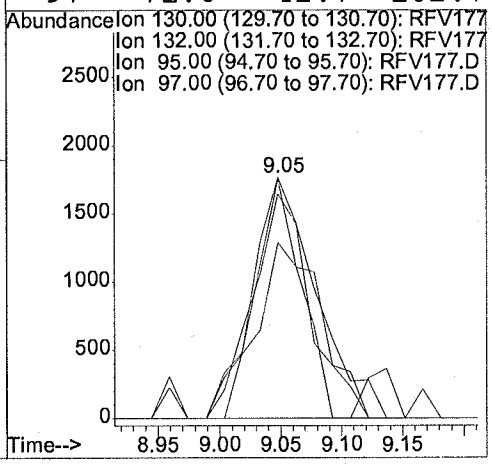


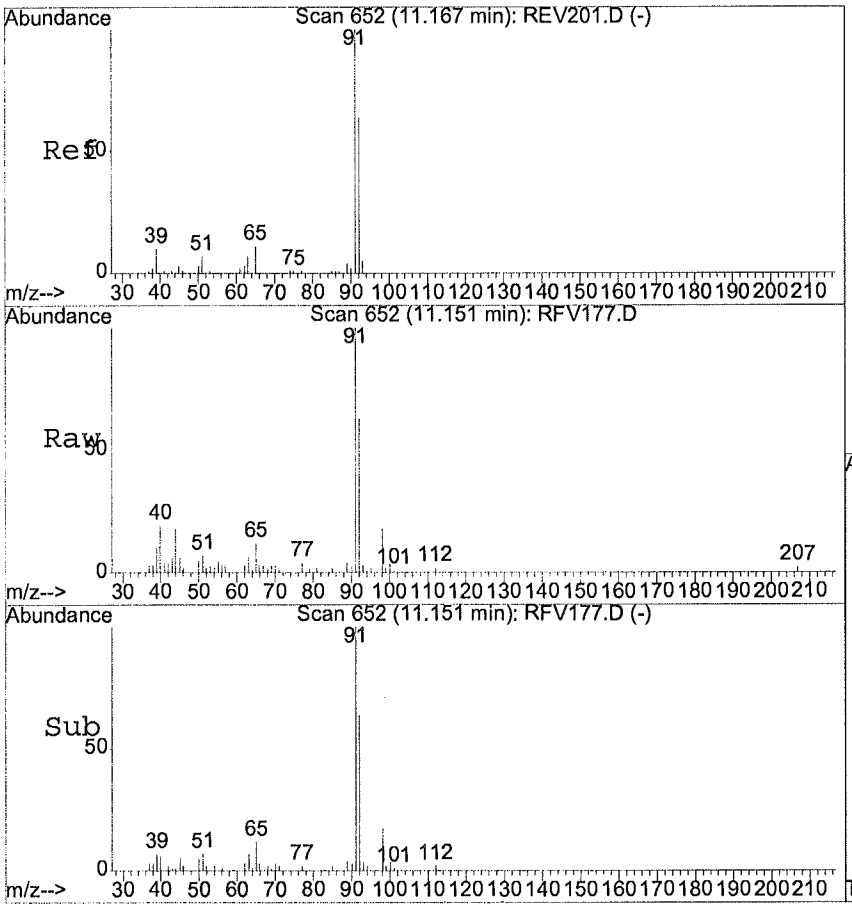


#44
Trichloroethene
Concen: 0.18 ug/l
RT: 9.05 min Scan# 510
Delta R.T. -0.01 min
Lab File: RFV177.D
Acq: 20 Jun 2024 8:00 pm

Tgt Ion:130 Resp: 5568

Ion	Ratio	Lower	Upper
130	100		
132	98.1	66.3	126.3
95	117.9	78.9	138.9
97	71.6	42.7	102.7

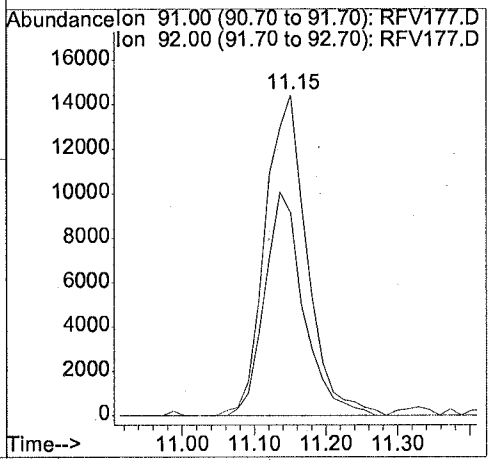


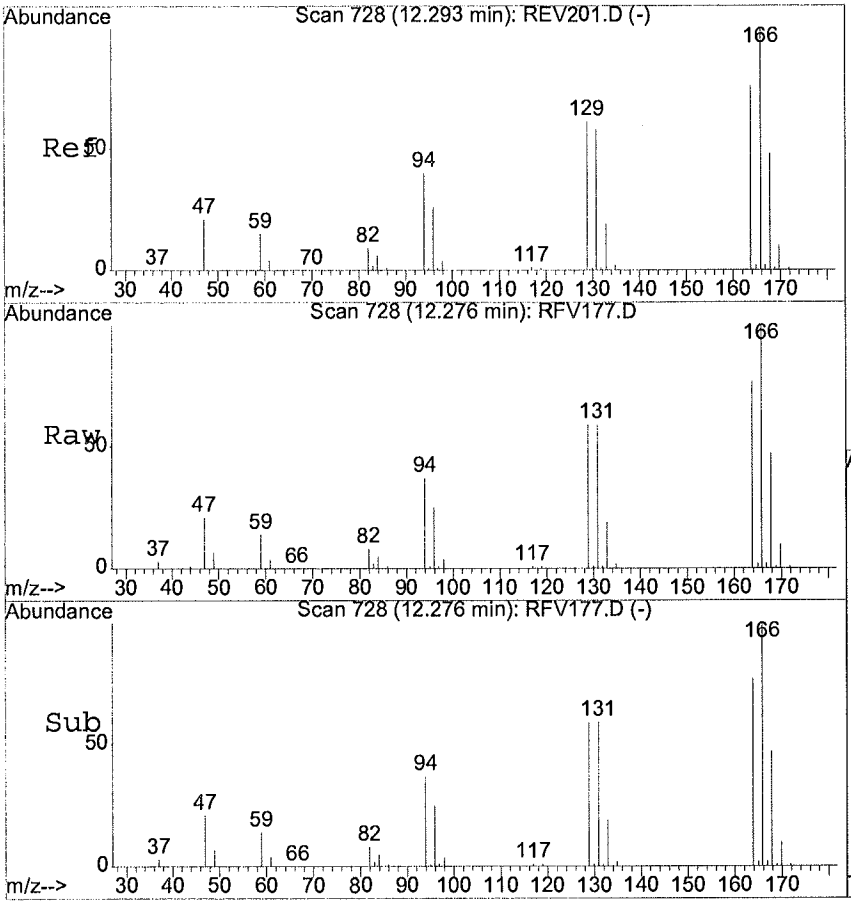


#55
Toluene
Concen: 0.47 ug/l
RT: 11.15 min Scan# 652
Delta R.T. -0.02 min
Lab File: RFV177.D
Acq: 20 Jun 2024 8:00 pm

Tgt Ion: 91 Resp: 58607

Ion	Ratio	Lower	Upper
91	100		
92	65.0	34.0	94.0

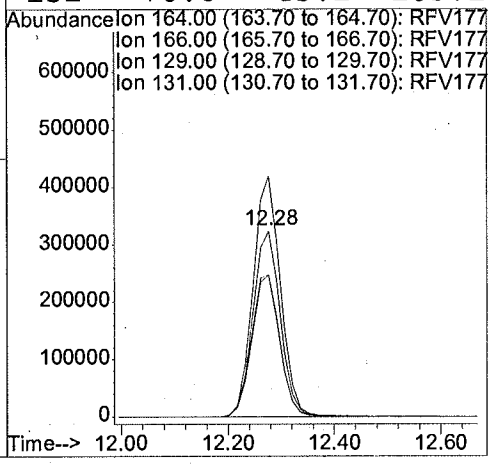


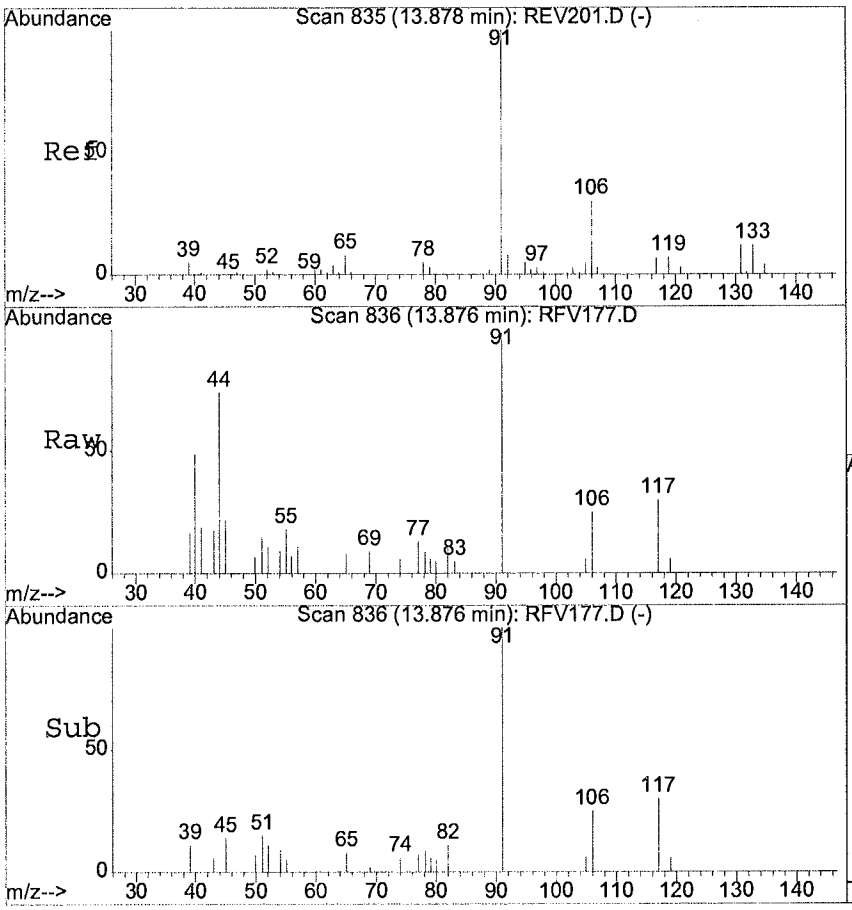


#61
Tetrachloroethene
Concen: 44.71 ug/l
RT: 12.28 min Scan# 728
Delta R.T. -0.02 min
Lab File: RFV177.D
Acq: 20 Jun 2024 8:00 pm

Tgt Ion:164 Resp: 1167422

Ion	Ratio	Lower	Upper
164	100		
166	129.0	101.0	161.0
129	78.9	49.2	109.2
131	76.8	45.1	105.1

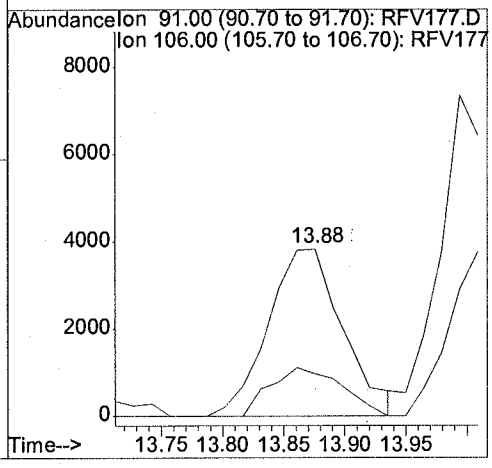


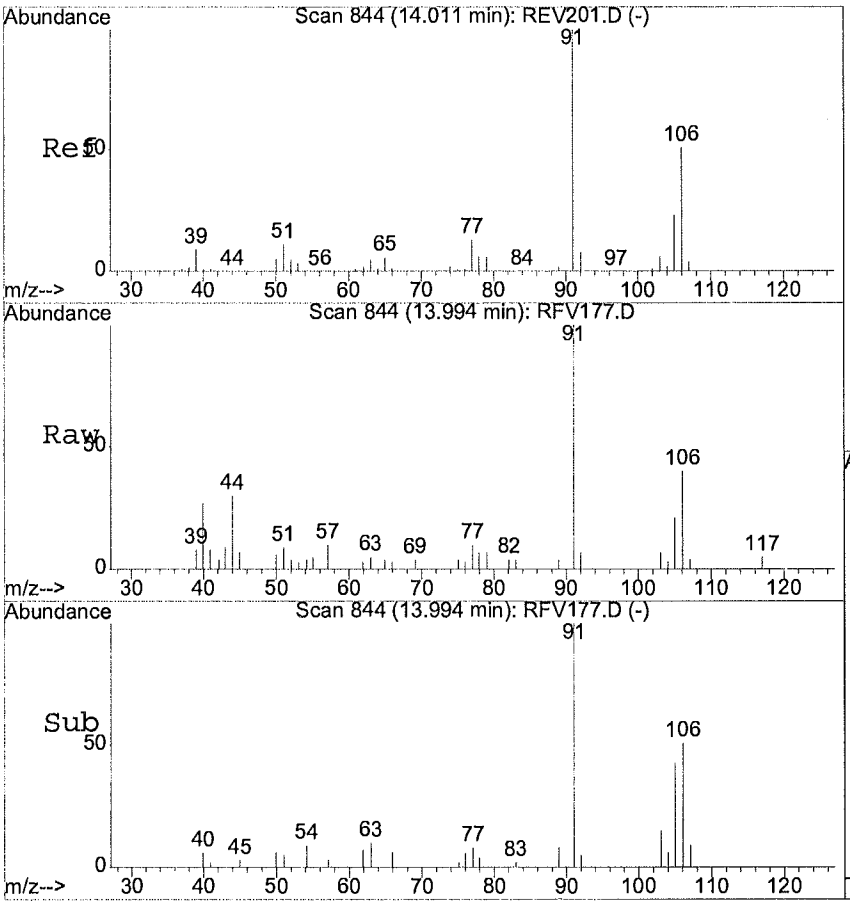


#67
Ethylbenzene
Concen: 0.11 ug/l
RT: 13.88 min Scan# 836
Delta R.T. -0.00 min
Lab File: RFV177.D
Acq: 20 Jun 2024 8:00 pm

Tgt Ion: 91 Resp: 16254

Ion	Ratio	Lower	Upper
91	100		
106	27.8	0.0	60.0

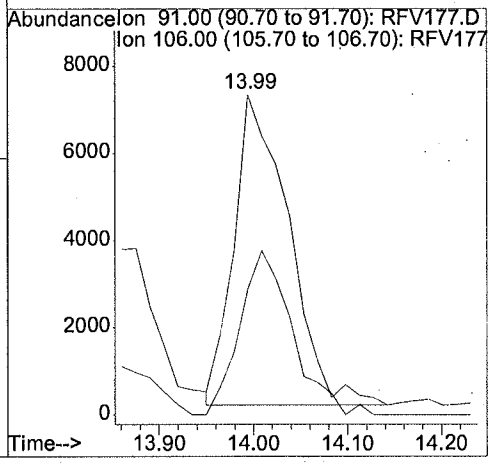


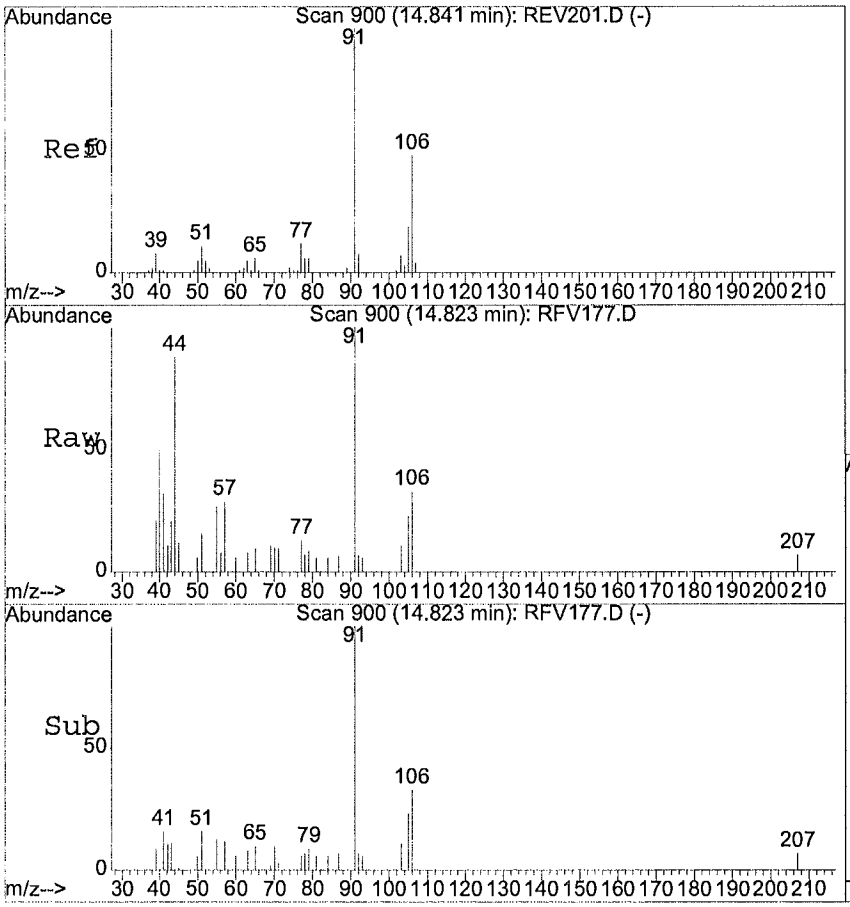


#68
m-Xylene & p-Xylene
Concen: 0.28 ug/l
RT: 13.99 min Scan# 844
Delta R.T. -0.02 min
Lab File: RFV177.D
Acq: 20 Jun 2024 8:00 pm

Tgt Ion: 91 Resp: 28881

Ion	Ratio	Lower	Upper
91	100		
106	50.6	20.9	80.9

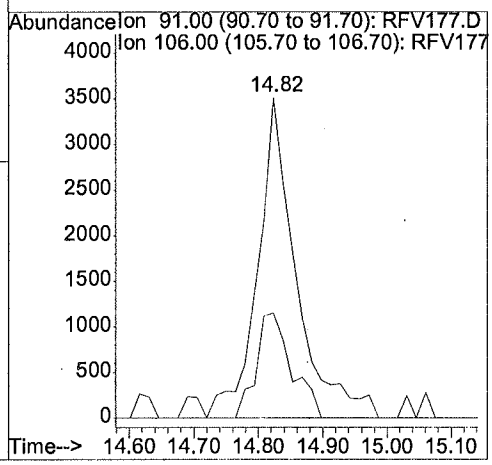


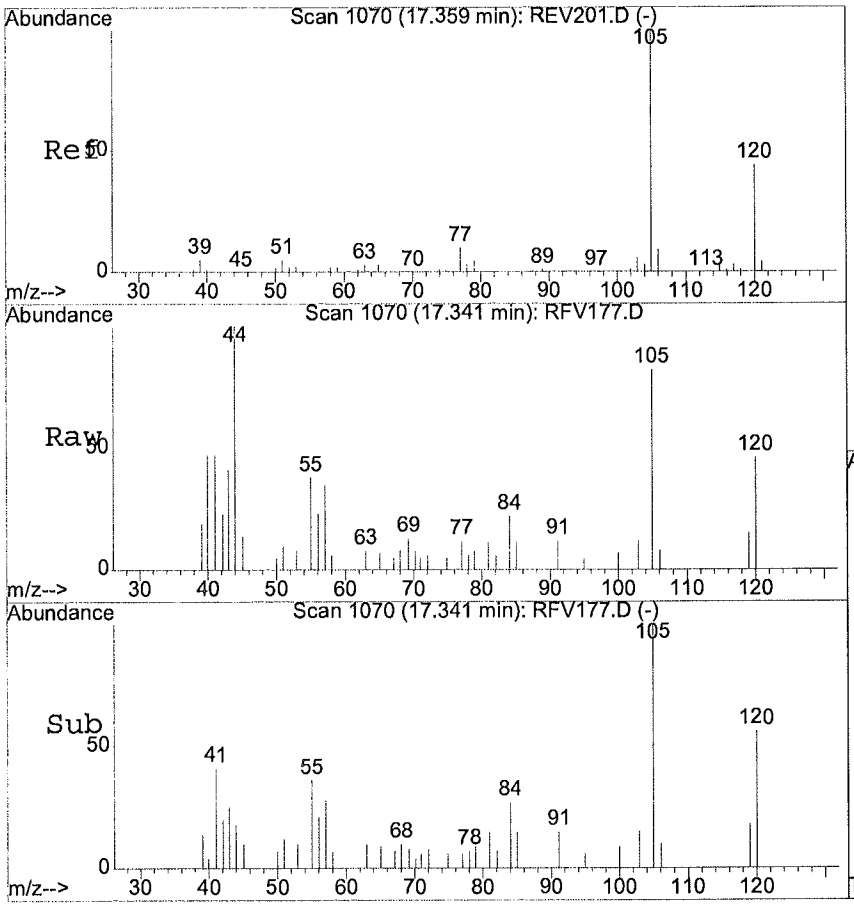


#69
o-Xylene
Concen: 0.13 ug/l
RT: 14.82 min Scan# 900
Delta R.T. -0.02 min
Lab File: RFV177.D
Acq: 20 Jun 2024 8:00 pm

Tgt Ion: 91 Resp: 14567

Ion	Ratio	Lower	Upper
91	100		
106	30.2	17.9	77.9

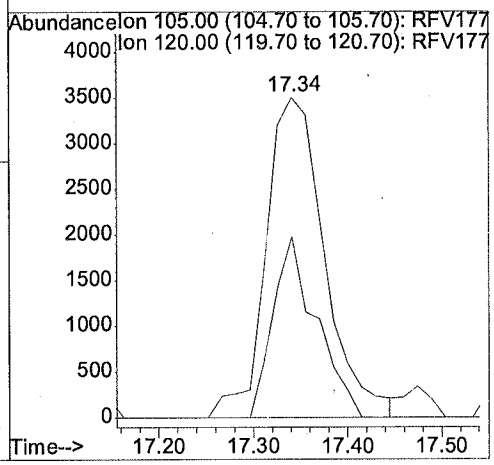


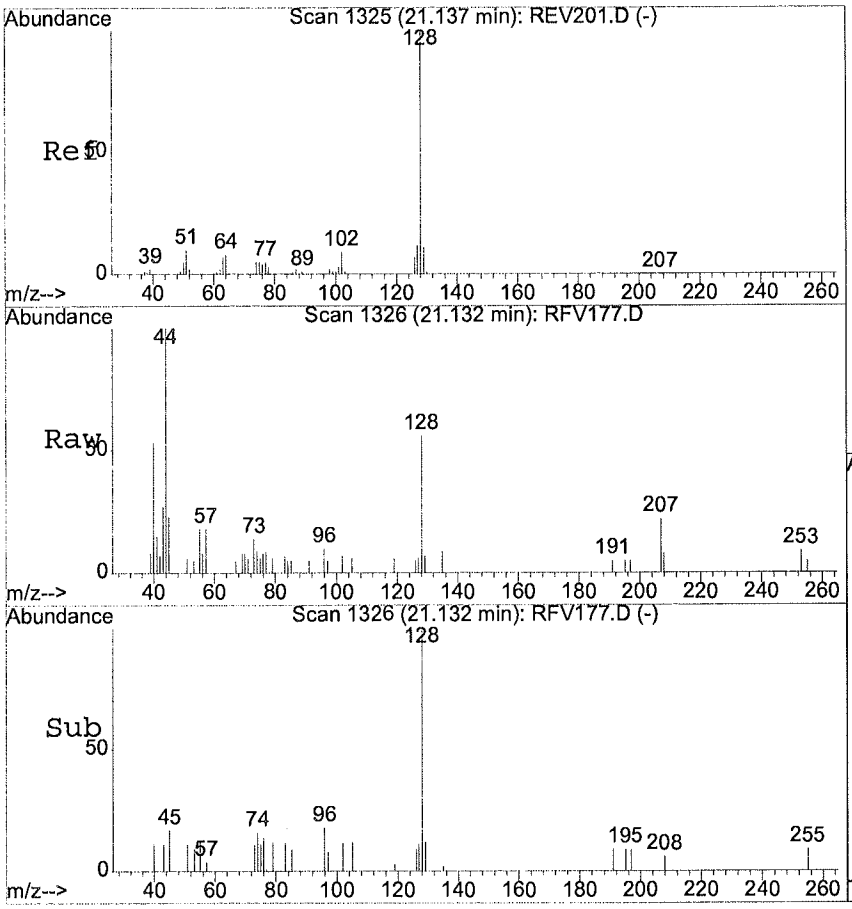


#84
1,2,4-Trimethylbenzene
Concen: 0.13 ug/l
RT: 17.34 min Scan# 1070
Delta R.T. -0.02 min
Lab File: RFV177.D
Acq: 20 Jun 2024 8:00 pm

Tgt Ion:105 Resp: 15114

Ion	Ratio	Lower	Upper
105	100		
120	41.7	19.9	79.9

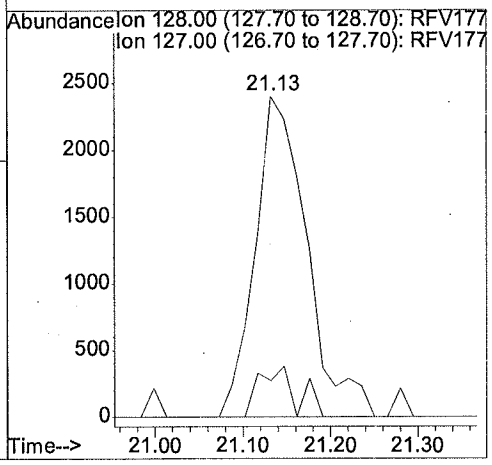


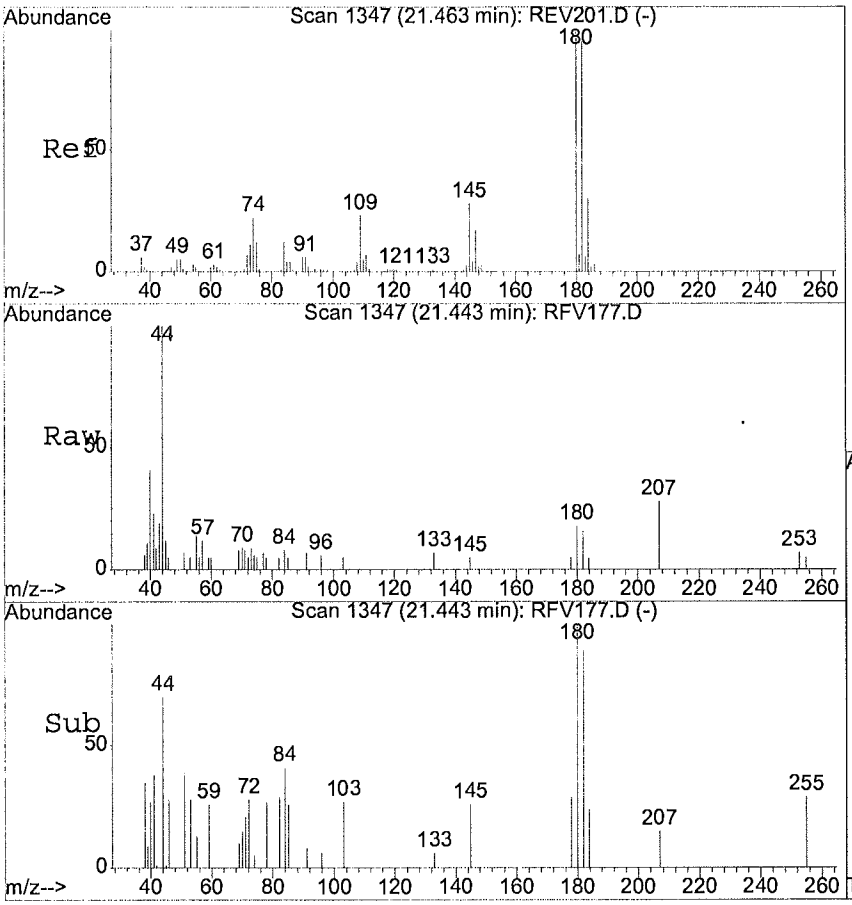


#95
Naphthalene
Concen: 0.25 ug/l
RT: 21.13 min Scan# 1326
Delta R.T. -0.01 min
Lab File: RFV177.D
Acq: 20 Jun 2024 8:00 pm

Tgt Ion:128 Resp: 9866

Ion	Ratio	Lower	Upper
128	100		
127	8.8	0.0	42.1

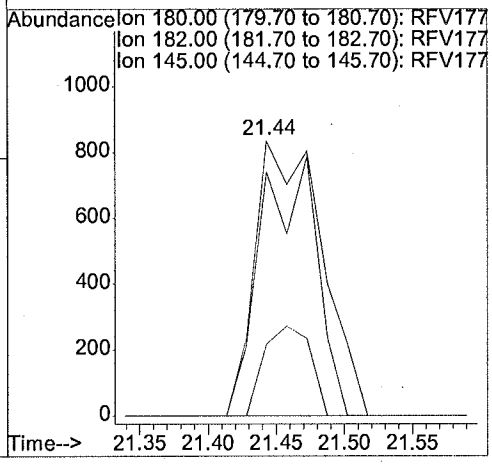




#96
1,2,3-Trichlorobenzene
Concen: 0.11 ug/l
RT: 21.44 min Scan# 1347
Delta R.T. -0.02 min
Lab File: RFV177.D
Acq: 20 Jun 2024 8:00 pm

Tgt Ion:180 Resp: 2841

Ion	Ratio	Lower	Upper
180	100		
182	79.2	65.9	125.9
145	22.6	0.0	58.1



METHOD SW5030B/B260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	06/15/24 11:50
Project	: VA SALT LAKE CITY	Date Received:	06/18/24
Batch No.	: 24F073	Date Extracted:	06/20/24 22:27
Sample ID	: TB11-GW061524	Date Analyzed:	06/20/24 22:27
Lab Samp ID:	24F073-02	Dilution Factor:	1
Lab File ID:	RFV1B2	Matrix:	WATER
Ext Btch ID:	VQ01F0B	% Moisture:	NA
Calib. Ref.:	REV201	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	9.65	10.0	96	70-130
Bromofluorobenzene	10.0	10.0	100	70-130
Toluene-dB	9.99	10.0	100	70-130
Dibromofluoromethane	9.39	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.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F20\RFV182.D Vial: 18
Acq On : 20 Jun 2024 10:27 pm Operator: DNguye
Sample : 24F073-02 Inst : 01New
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 21 17:29 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.53	114	869974	10.00	ug/l	-0.01
53) CHLOROBENZENE-D5	13.68	117	686718	10.00	ug/l	-0.03
72) 1,2-DICHLOROBENZENE-D4	18.66	152	259445	10.00	ug/l	-0.02
System Monitoring Compounds						
34) Dibromofluoromethane	7.20	111	252978	9.39	ug/l	-0.03
Spiked Amount 10.000			Recovery =	93.90%		
41) 1,2-Dichloroethane-d4	7.94	65	177175	9.65	ug/l	-0.03
Spiked Amount 10.000			Recovery =	96.50%		
54) Toluene-d8	11.00	98	1027990	9.99	ug/l	-0.03
Spiked Amount 10.000			Recovery =	99.90%		
76) 4-Bromofluorobenzene	15.98	95	353308	10.00	ug/l	-0.03
Spiked Amount 10.000			Recovery =	100.00%		

Target Compounds Qvalue

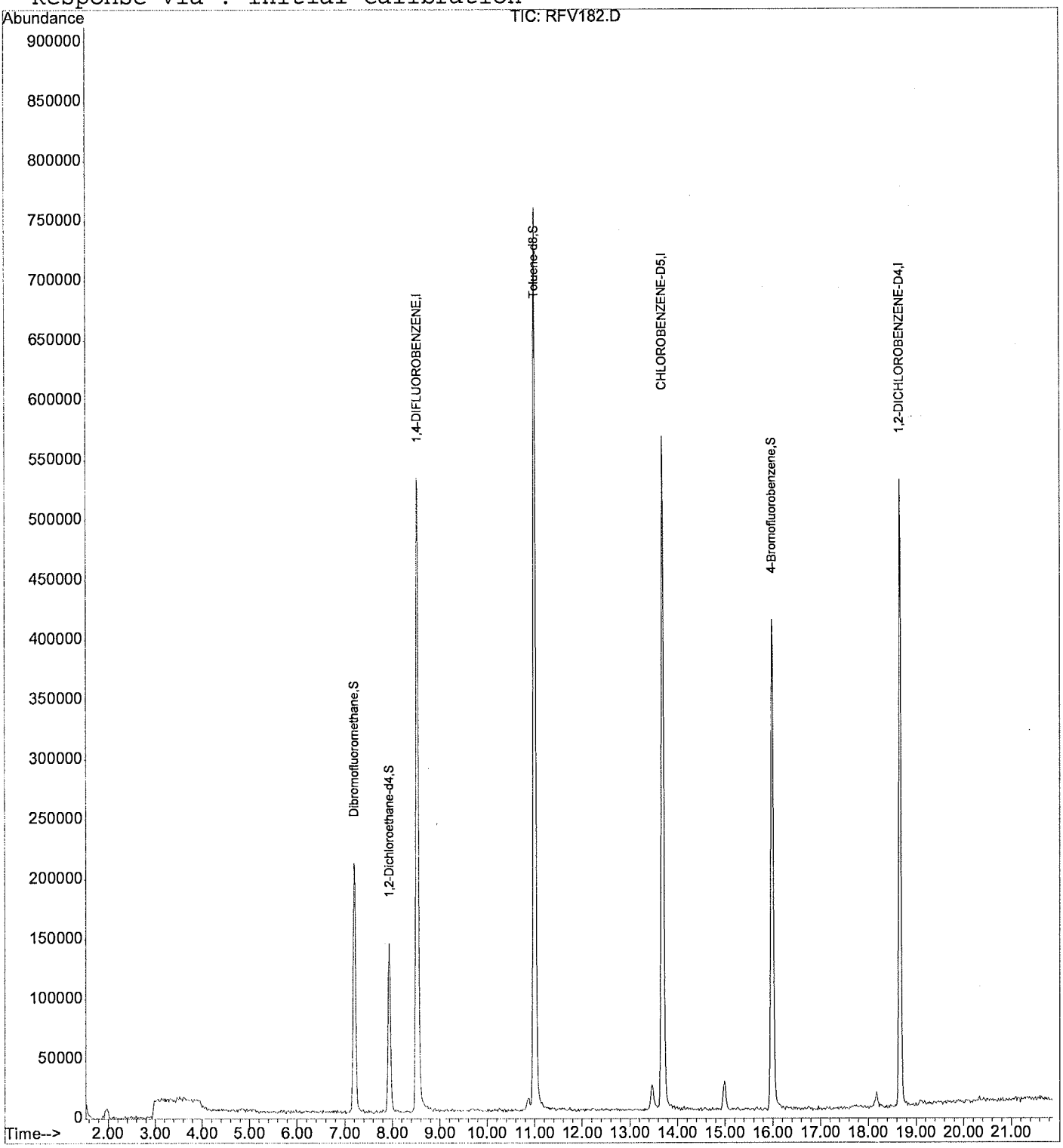
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F20\RFV182.D
Acq On : 20 Jun 2024 10:27 pm
Sample : 24F073-02
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Jun 21 17:29 2024

Vial: 18
Operator: DNguye
Inst : 01New
Multiplr: 1.00
Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



METHOD SW5030B/B260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	06/16/24 07:25
Project	: VA SALT LAKE CITY	Date Received:	06/1B/24
Batch No.	: 24F073	Date Extracted:	06/20/24 22:57
Sample ID	: MW41-GW061624-220	Date Analyzed:	06/20/24 22:57
Lab Samp ID:	24F073-03	Dilution Factor:	1
Lab File ID:	RFV1B3	Matrix:	WATER
Ext Btch ID:	V001F0B	% Moisture:	NA
Calib. Ref.:	REV201	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	B,6J	20	2.5
Benzene	0.17J	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	5.6	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	64	1.0	0.15
Toluene	0.30J	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	0.24J	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	9.79	10.0	9B	70-130
Toluene-dB	10.2	10.0	102	70-130
Dibromofluoromethane	9.4B	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\24F20\RFV183.D
Acq On : 20 Jun 2024 10:57 pm
Sample : 24F073-03
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Jun 21 17:32 2024

Vial: 19
Operator: DNguye
Inst : 01New
Multiplr: 1.00
Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.52	114	786099	10.00	ug/l	-0.03
53) CHLOROBENZENE-D5	13.68	117	620135	10.00	ug/l	-0.03
72) 1,2-DICHLOROBENZENE-D4	18.67	152	236571	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.20	111	230717	9.48	ug/l	-0.03
Spiked Amount 10.000			Recovery = 94.80%			
41) 1,2-Dichloroethane-d4	7.94	65	168425	10.15	ug/l	-0.03
Spiked Amount 10.000			Recovery = 101.50%			
54) Toluene-d8	11.00	98	946133	10.18	ug/l	-0.03
Spiked Amount 10.000			Recovery = 101.80%			
76) 4-Bromofluorobenzene	15.98	95	315411	9.79	ug/l	-0.03
Spiked Amount 10.000			Recovery = 97.90%			
Target Compounds						Qvalue
13) Acetone	4.03	43	24579	8.57	ug/l #	1
30) cis-1,2-Dichloroethene	6.65	96	3683	0.11	ug/l #	72
31) Chloroform	6.89	83	267970	5.57	ug/l	97
36) Cyclohexane	7.49	84	6277	0.16	ug/l	72
42) Benzene	8.10	78	18324	0.17	ug/l	92
44) Trichloroethene	9.03	130	6463	0.24	ug/l	90
45) Methylcyclohexane	9.14	83	11937	0.28	ug/l	97
47) Bromodichloromethane	9.72	83	7682	0.24	ug/l	90
55) Toluene	11.14	91	32611	0.30	ug/l	91
61) Tetrachloroethene	12.26	164	1458610	63.72	ug/l	99
68) m-Xylene & p-Xylene	14.01	91	19182	0.21	ug/l	85

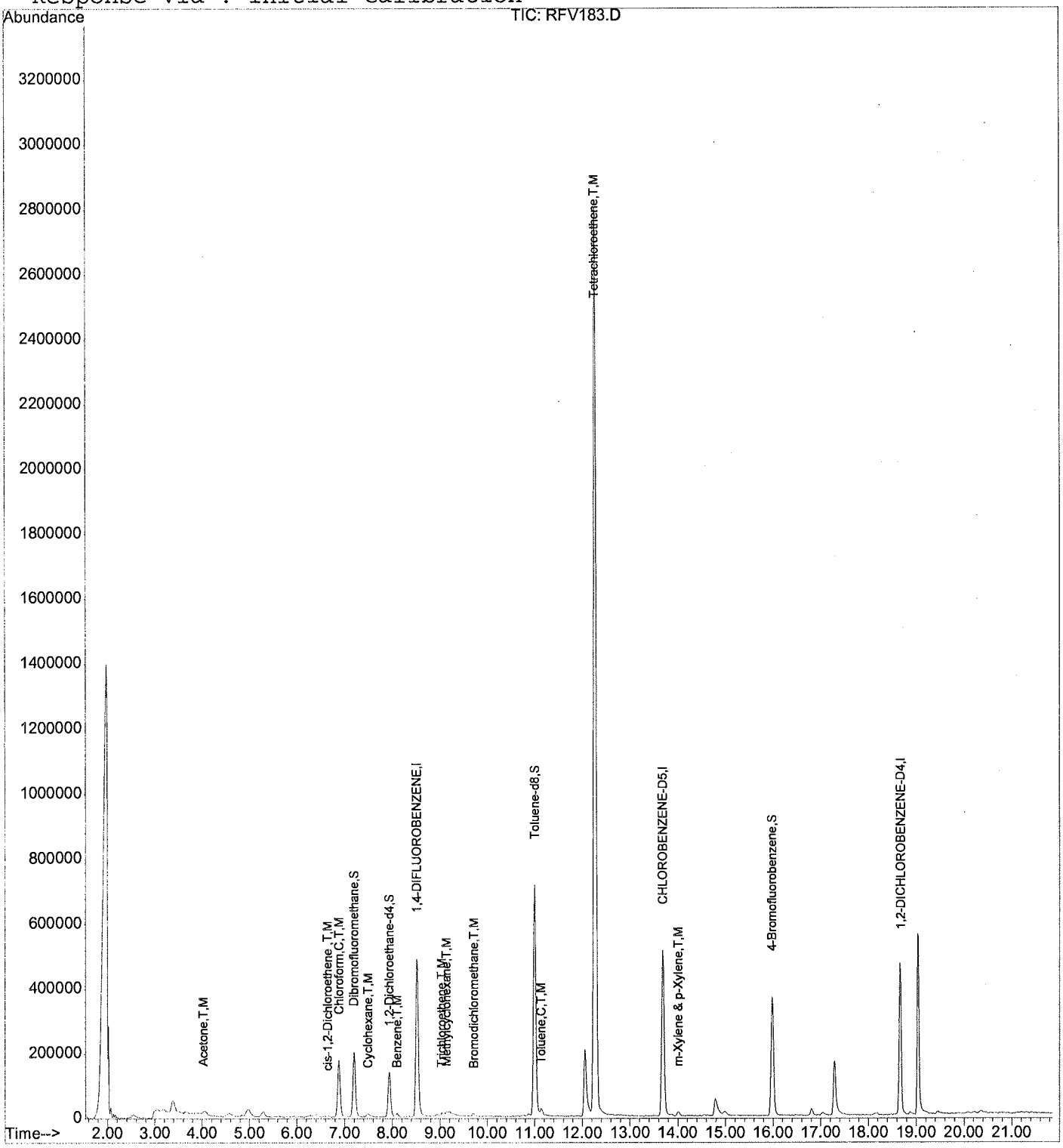
(#) = qualifier out of range (m) = manual integration

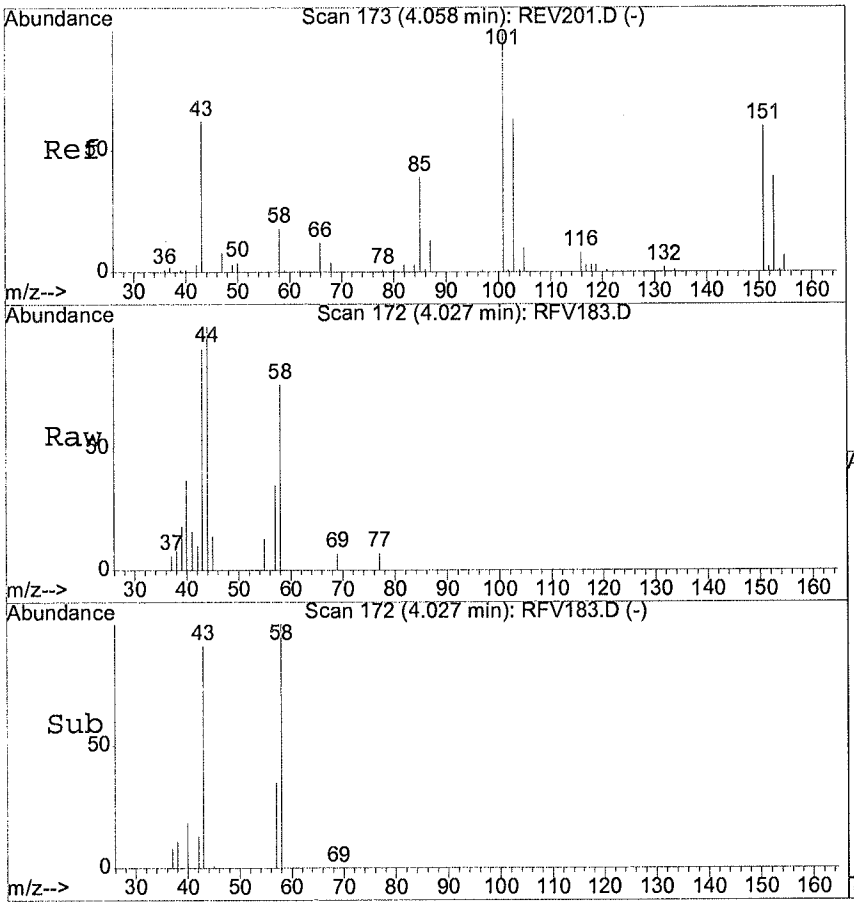
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F20\RFV183.D
Acq On : 20 Jun 2024 10:57 pm
Sample : 24F073-03
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Jun 21 17:32 2024

Vial: 19
Operator: DNguye
Inst : 01New
Multiplr: 1.00
Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration

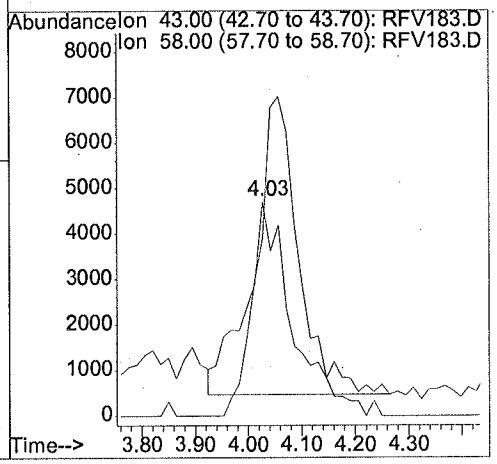


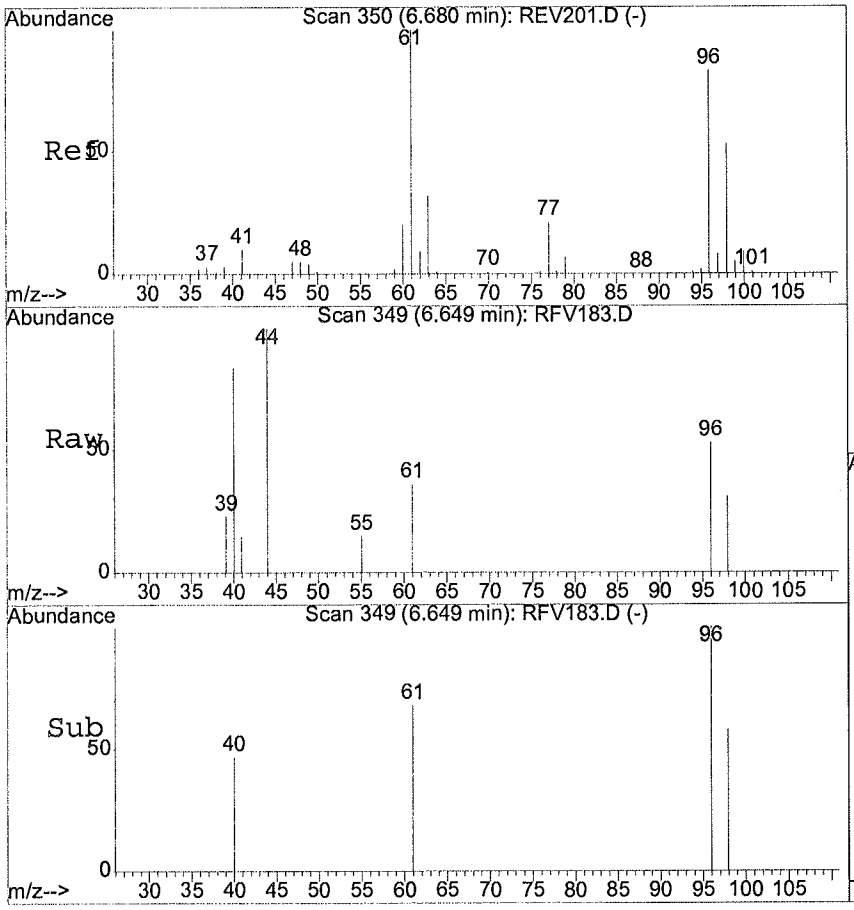


#13
Acetone
Concen: 8.57 ug/l
RT: 4.03 min Scan# 172
Delta R.T. -0.03 min
Lab File: RFV183.D
Acq: 20 Jun 2024 10:57 pm

Tgt Ion: 43 Resp: 24579

Ion	Ratio	Lower	Upper
43	100		
58	155.2	0.9	60.9#

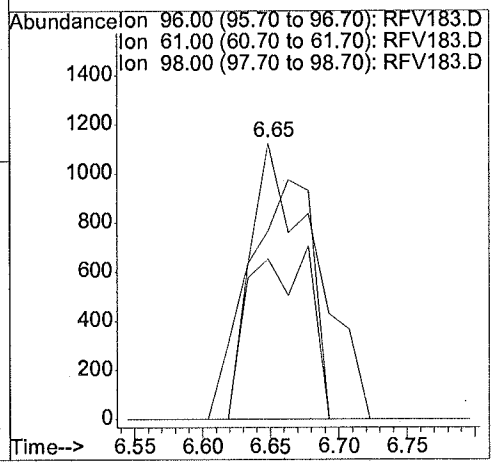


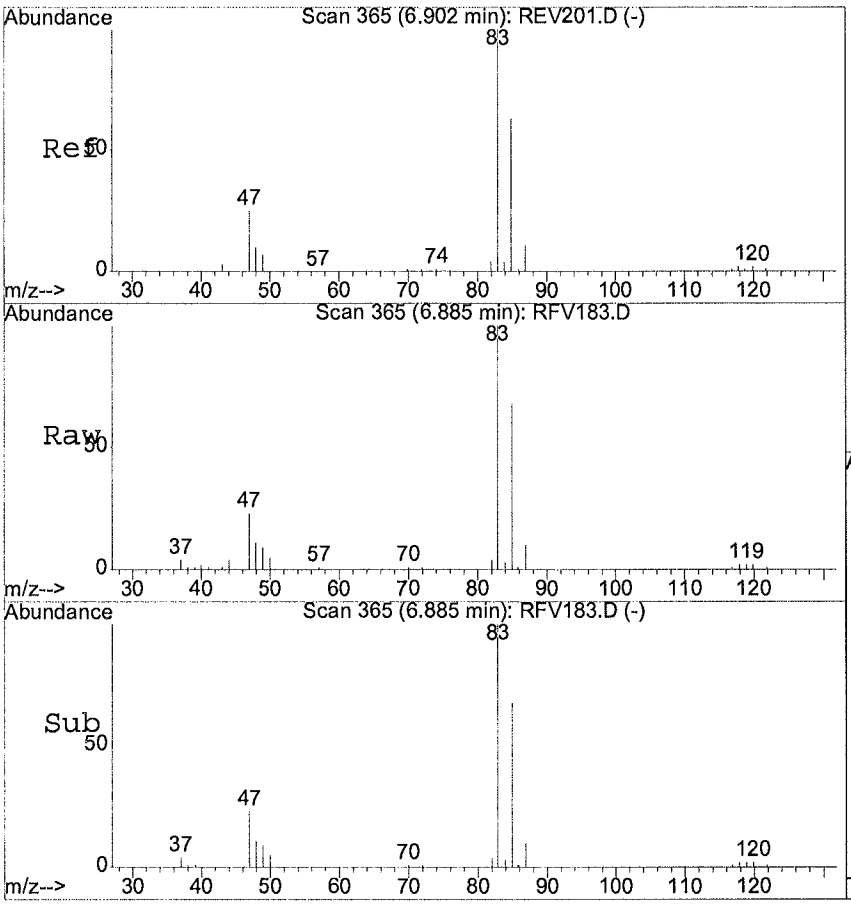


#30
cis-1,2-Dichloroethene
Concen: 0.11 ug/l
RT: 6.65 min Scan# 349
Delta R.T. -0.03 min
Lab File: RFV183.D
Acq: 20 Jun 2024 10:57 pm

Tgt Ion: 96 Resp: 3683

Ion	Ratio	Lower	Upper
96	100		
61	87.1	101.8	161.8#
98	58.8	33.6	93.6

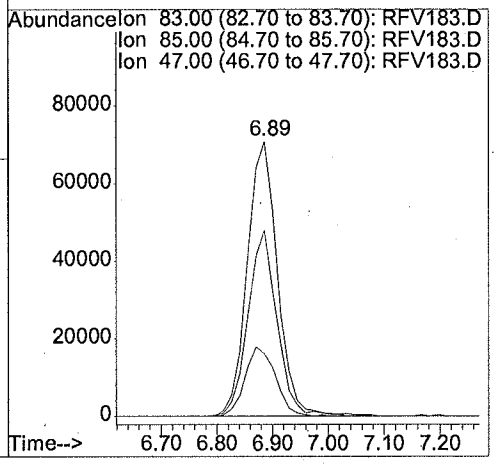


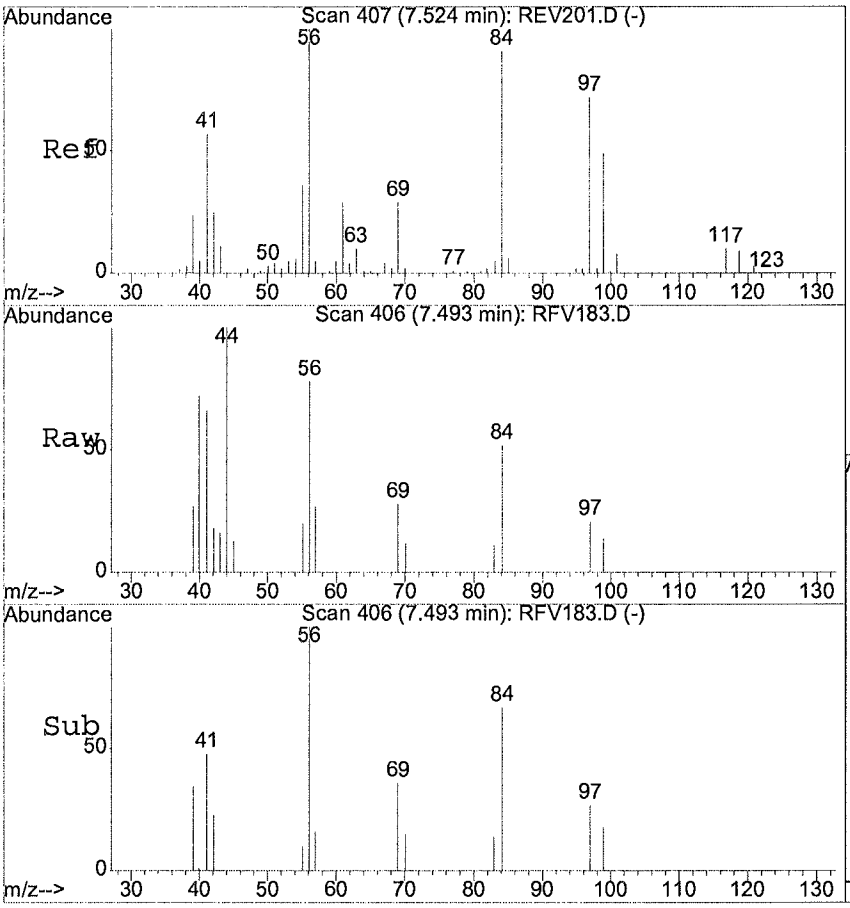


#31
Chloroform
Concen: 5.57 ug/l
RT: 6.89 min Scan# 365
Delta R.T. -0.02 min
Lab File: RFV183.D
Acq: 20 Jun 2024 10:57 pm

Tgt Ion: 83 Resp: 267970

Ion	Ratio	Lower	Upper
83	100		
85	64.9	38.2	98.2
47	25.4	0.0	54.7

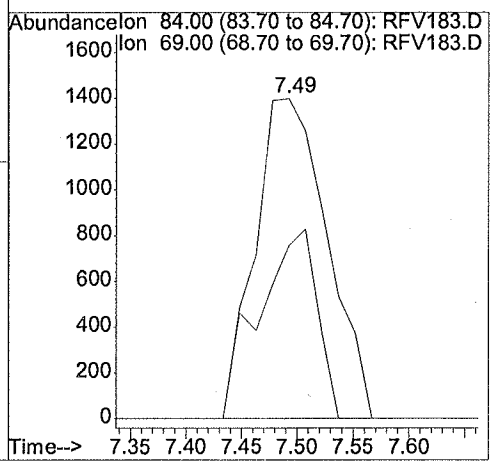


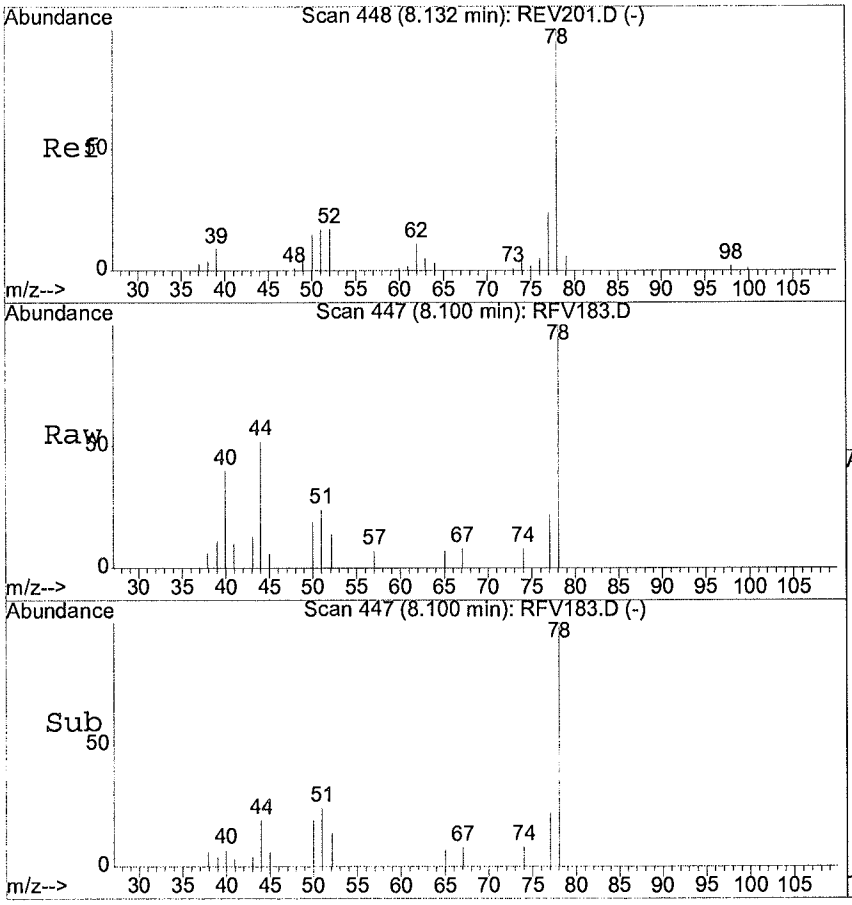


#36
Cyclohexane
Concen: 0.16 ug/l
RT: 7.49 min Scan# 406
Delta R.T. -0.03 min
Lab File: RFV183.D
Acq: 20 Jun 2024 10:57 pm

Tgt Ion: 84 Resp: 6277

Ion	Ratio	Lower	Upper
84	100		
69	48.0	2.4	62.4

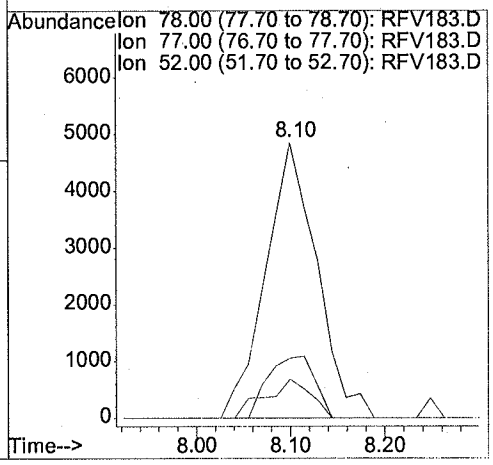


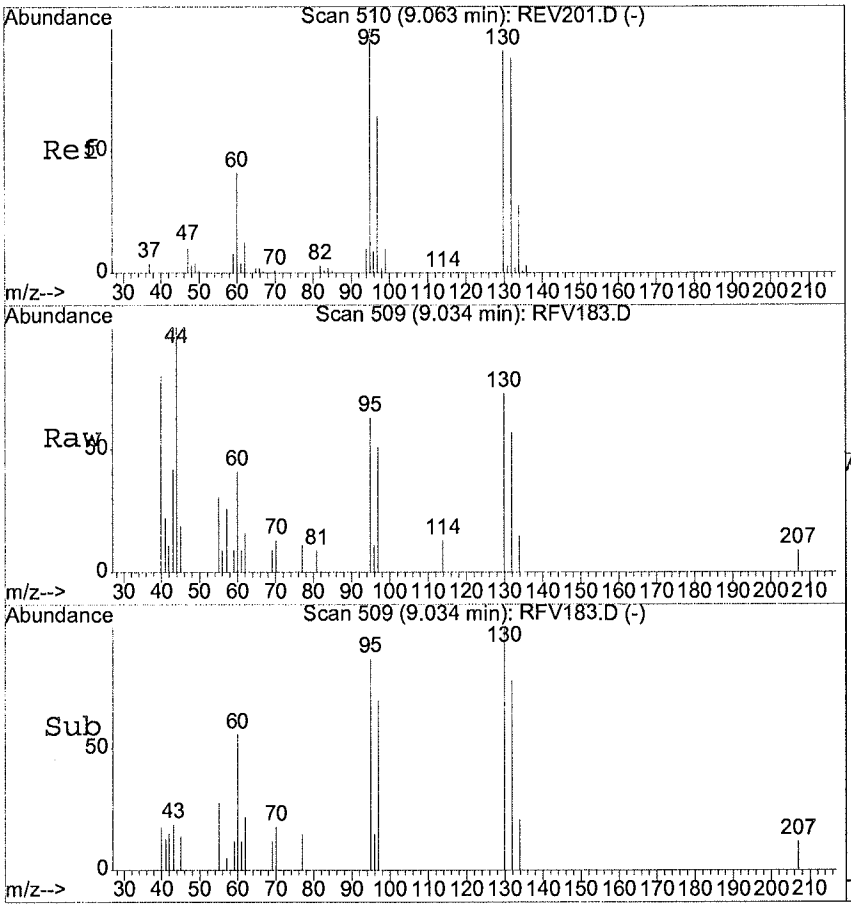


#42
Benzene
Concen: 0.17 ug/l
RT: 8.10 min Scan# 447
Delta R.T. -0.03 min
Lab File: RFV183.D
Acq: 20 Jun 2024 10:57 pm

Tgt Ion: 78 Resp: 18324

Ion	Ratio	Lower	Upper
78	100		
77	20.5	0.0	54.0
52	12.6	0.0	46.8

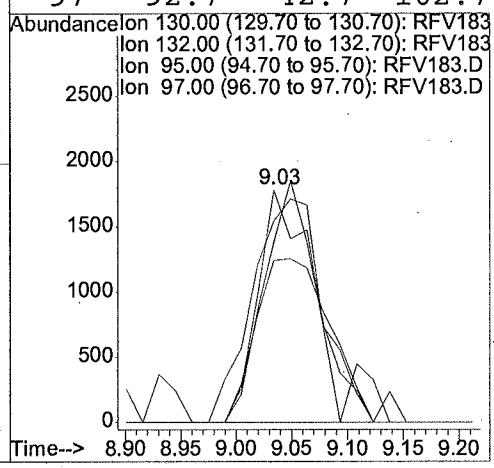


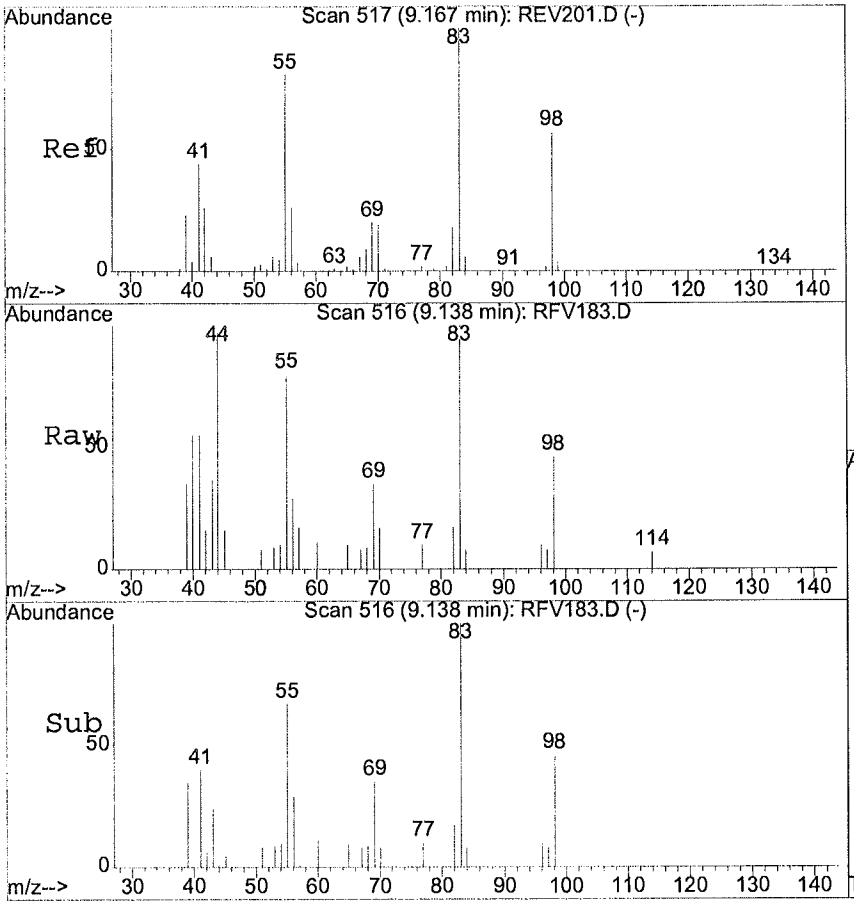


#44
Trichloroethene
Concen: 0.24 ug/l
RT: 9.03 min Scan# 509
Delta R.T. -0.03 min
Lab File: RFV183.D
Acq: 20 Jun 2024 10:57 pm

Tgt Ion:130 Resp: 6463

Ion	Ratio	Lower	Upper
130	100		
132	99.0	66.3	126.3
95	117.2	78.9	138.9
97	92.7	42.7	102.7

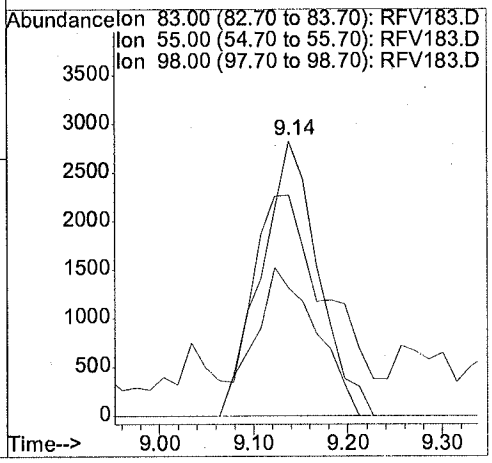


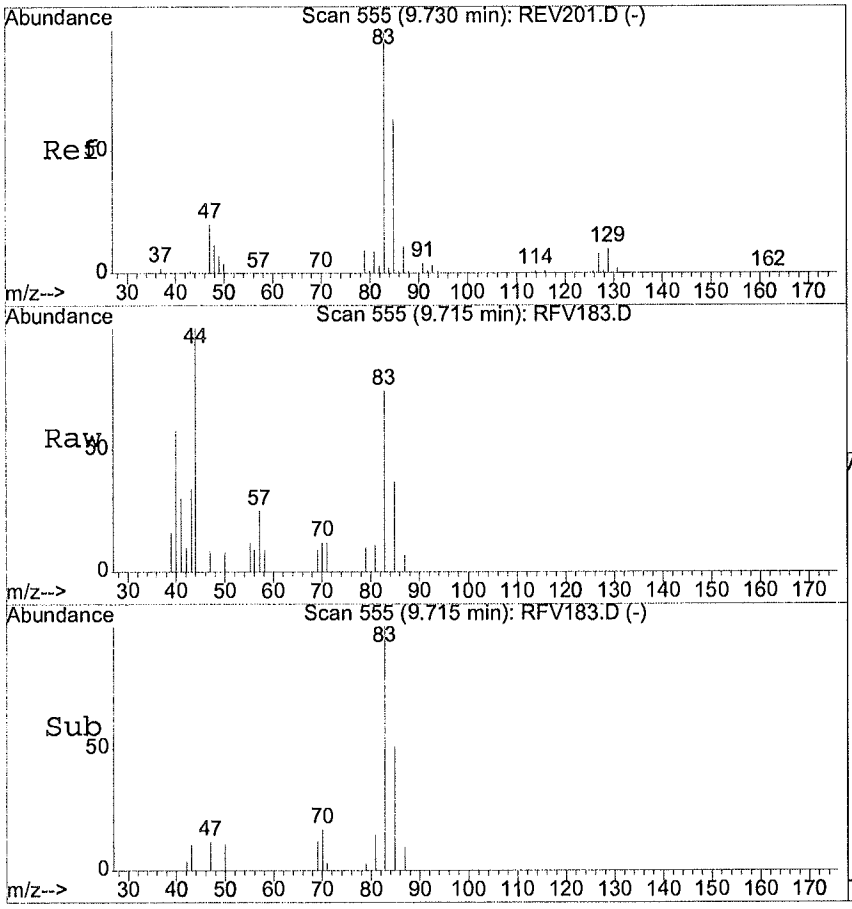


#45
Methylcyclohexane
Concen: 0.28 ug/l
RT: 9.14 min Scan# 516
Delta R.T. -0.03 min
Lab File: RFV183.D
Acq: 20 Jun 2024 10:57 pm

Tgt Ion: 83 Resp: 11937

Ion	Ratio	Lower	Upper
83	100		
55	77.4	52.6	112.6
98	58.2	28.2	88.2

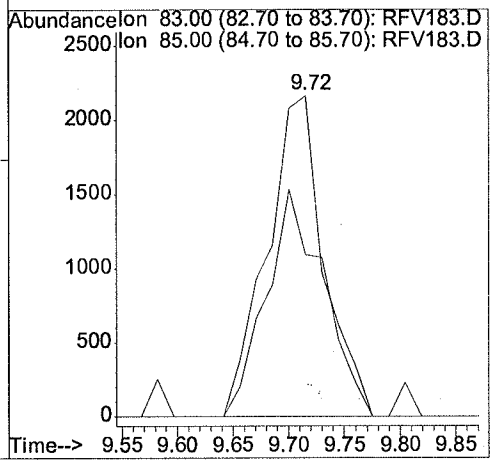


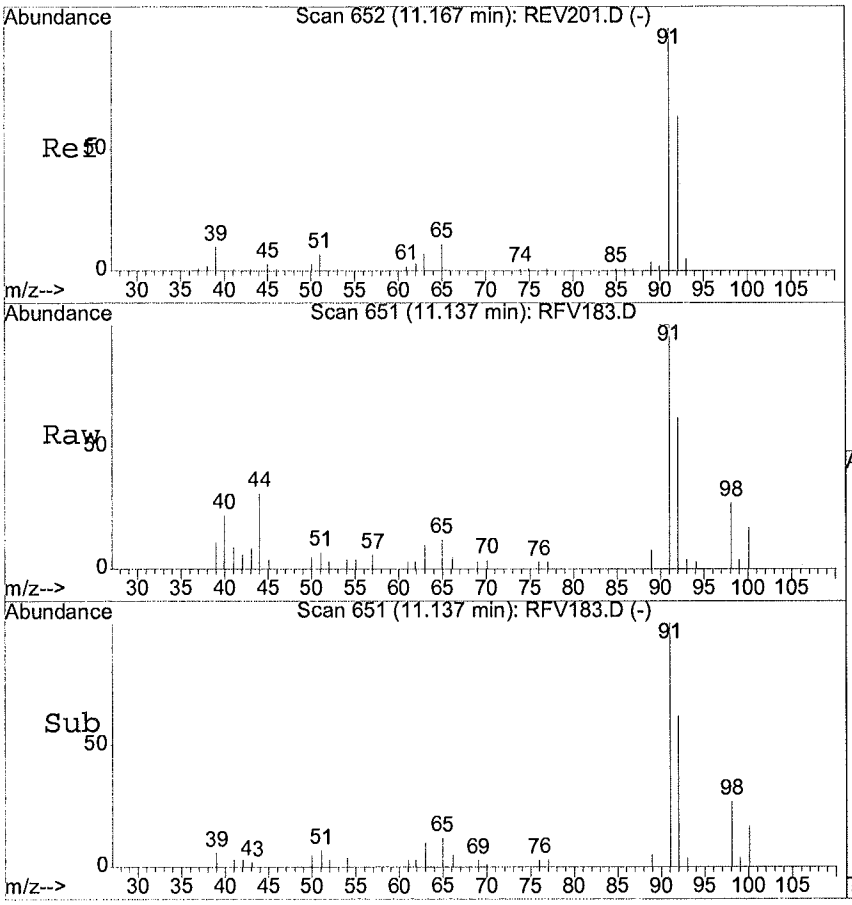


#47
Bromodichloromethane
Concen: 0.24 ug/l
RT: 9.72 min Scan# 555
Delta R.T. -0.01 min
Lab File: RFV183.D
Acq: 20 Jun 2024 10:57 pm

Tgt Ion: 83 Resp: 7682

Ion	Ratio	Lower	Upper
83	100		
85	71.8	34.1	94.1

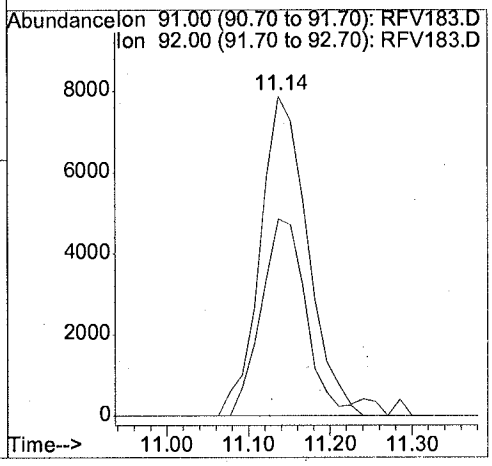


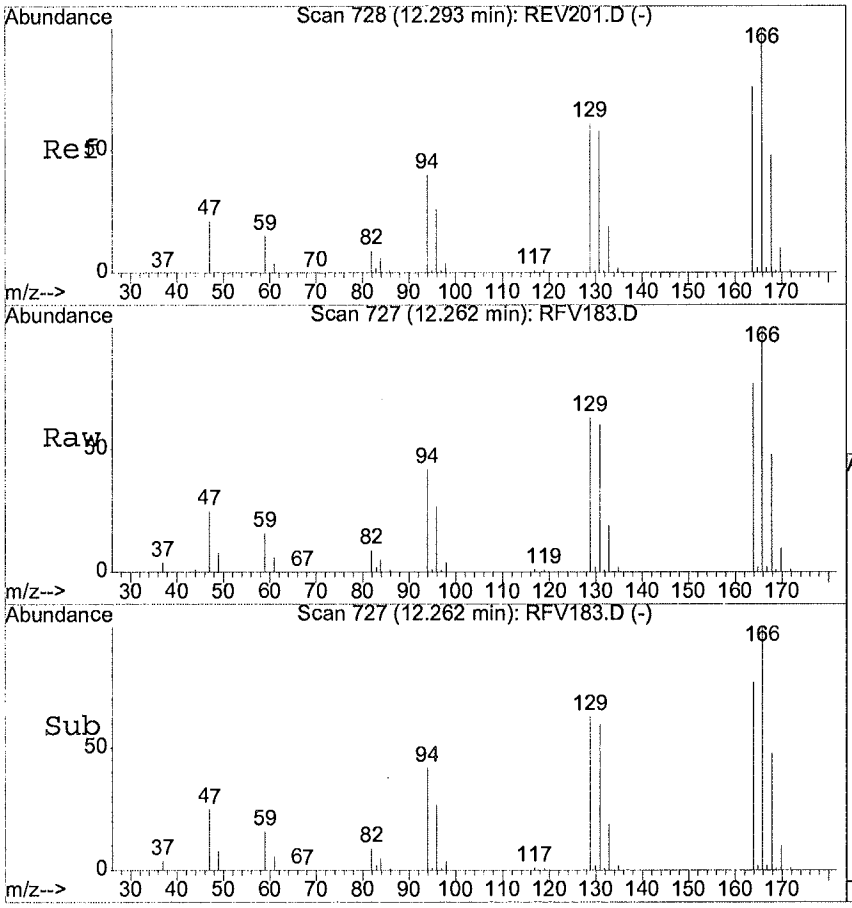


#55
Toluene
Concen: 0.30 ug/l
RT: 11.14 min Scan# 651
Delta R.T. -0.03 min
Lab File: RFV183.D
Acq: 20 Jun 2024 10:57 pm

Tgt Ion: 91 Resp: 32611

Ion	Ratio	Lower	Upper
91	100		
92	57.0	34.0	94.0

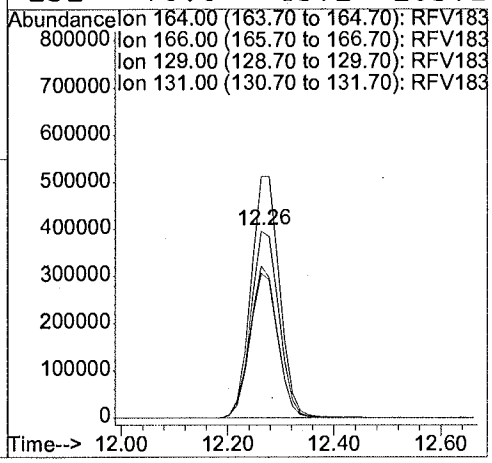


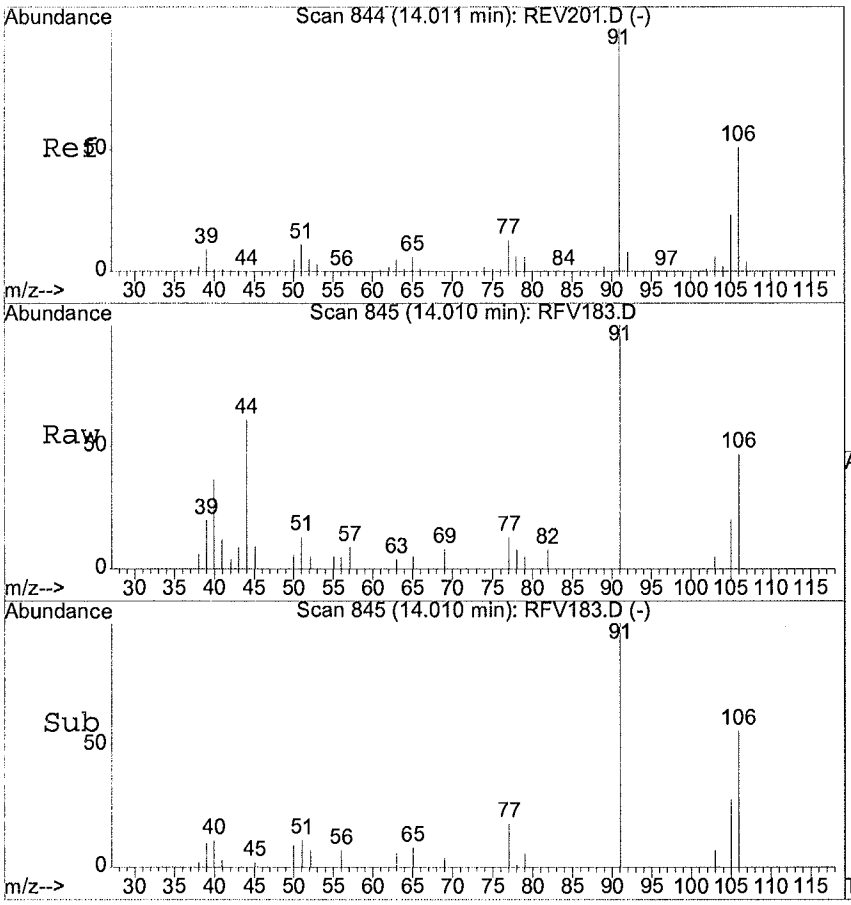


#61
Tetrachloroethene
Concen: 63.72 ug/l
RT: 12.26 min Scan# 727
Delta R.T. -0.03 min
Lab File: RFV183.D
Acq: 20 Jun 2024 10:57 pm

Tgt Ion:164 Resp: 1458610

Ion	Ratio	Lower	Upper
164	100		
166	130.9	101.0	161.0
129	79.3	49.2	109.2
131	76.6	45.1	105.1

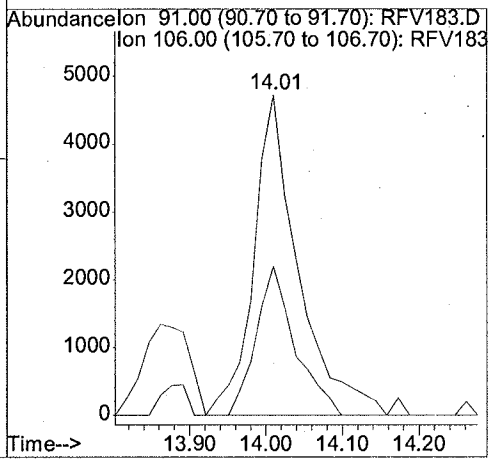




#68
m-Xylene & p-Xylene
Concen: 0.21 ug/l
RT: 14.01 min Scan# 845
Delta R.T. -0.00 min
Lab File: RFV183.D
Acq: 20 Jun 2024 10:57 pm

Tgt Ion: 91 Resp: 19182

Ion	Ratio	Lower	Upper
91	100		
106	40.6	20.9	80.9



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	06/16/24 07:30
Project	: VA SALT LAKE CITY	Date Received:	06/18/24
Batch No.	: 24F073	Date Extracted:	06/21/24 17:24
Sample ID	: FD03-GW061624	Date Analyzed:	06/21/24 17:24
Lab Samp ID:	24F073-04	Dilution Factor:	1
Lab File ID:	RFV201	Matrix:	WATER
Ext Btch ID:	VOO1F09	% Moisture:	NA
Calib. Ref.:	REV201	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	0.17J	1.0	0.10
Bromochloromethane	ND	1.0	0.11
Bromodichloromethane	0.26J	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	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	58	1.0	0.15
Toluene	0.26J	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	0.23J	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	9.50	10.0	95	70-130
Toluene-d8	10.7	10.0	107	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.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F21\RFV201.D Vial: 14
Acq On : 21 Jun 2024 5:24 pm Operator: DNguye
Sample : 24F073-04 Inst : 01New
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 23 13:05 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.53	114	674738	10.00	ug/l	-0.01
53) CHLOROBENZENE-D5	13.70	117	549847	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.67	152	225321	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.21	111	196582	9.41	ug/l	-0.02
Spiked Amount 10.000			Recovery =	94.10%		
41) 1,2-Dichloroethane-d4	7.94	65	157879	11.08	ug/l	-0.03
Spiked Amount 10.000			Recovery =	110.80%		
54) Toluene-d8	11.00	98	878254	10.66	ug/l	-0.03
Spiked Amount 10.000			Recovery =	106.60%		
76) 4-Bromofluorobenzene	15.99	95	291506	9.50	ug/l	-0.02
Spiked Amount 10.000			Recovery =	95.00%		
Target Compounds						Qvalue
30) cis-1,2-Dichloroethene	6.68	96	2895	0.10	ug/l #	64
31) Chloroform	6.89	83	219983	5.32	ug/l	98
42) Benzene	8.10	78	15401	0.17	ug/l	95
44) Trichloroethene	9.06	130	5414	0.23	ug/l #	83
45) Methylcyclohexane	9.17	83	8442	0.23	ug/l #	76
47) Bromodichloromethane	9.70	83	7221	0.26	ug/l	87
55) Toluene	11.15	91	25853	0.26	ug/l	100
61) Tetrachloroethene	12.28	164	1177213	58.00	ug/l	99
68) m-Xylene & p-Xylene	14.02	91	14303	0.18	ug/l	96

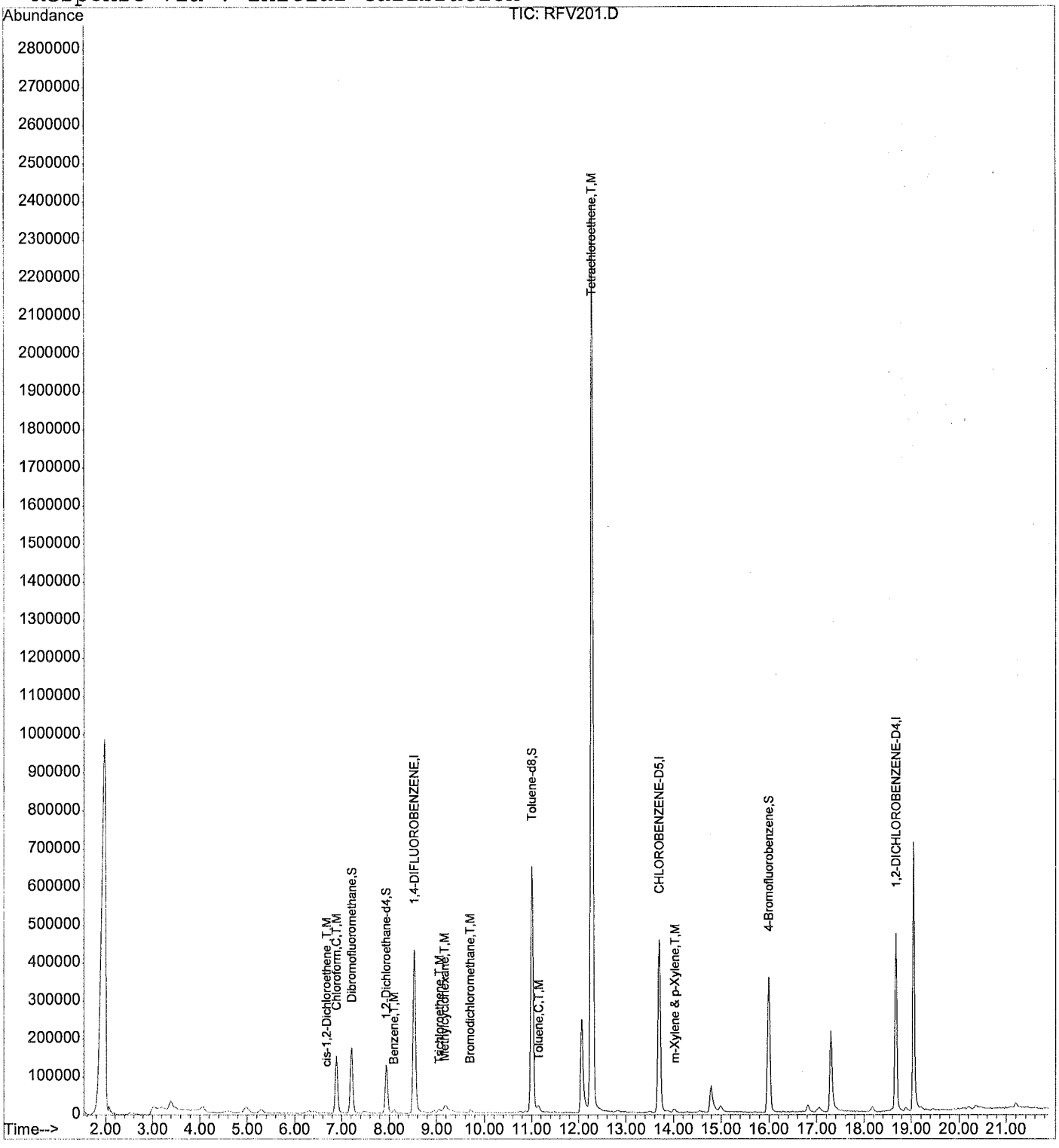
(#) = qualifier out of range (m) = manual integration
RFV201.D VO01E11.M Sun Jun 23 13:06:01 2024 Page 1

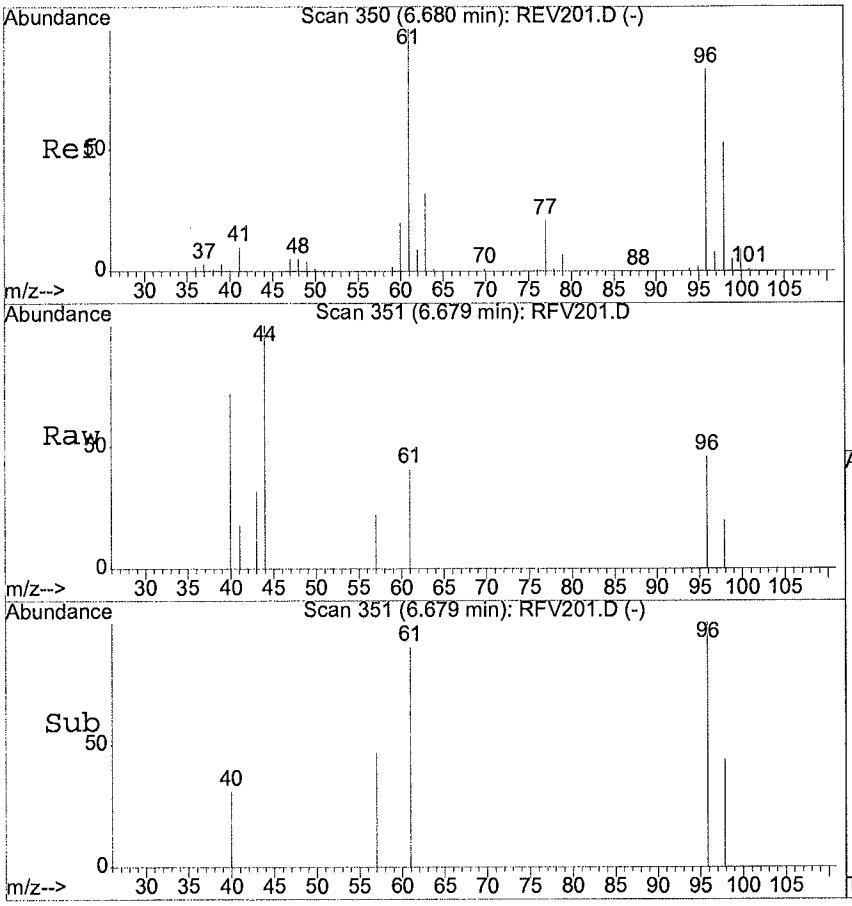
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F21\RFV201.D
Acq On : 21 Jun 2024 5:24 pm
Sample : 24F073-04
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Jun 23 13:05 2024

Vial: 14
Operator: DNguye
Inst : 01New
Multiplr: 1.00
Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration

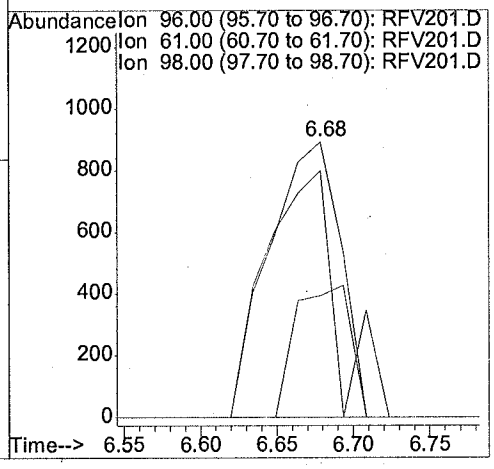


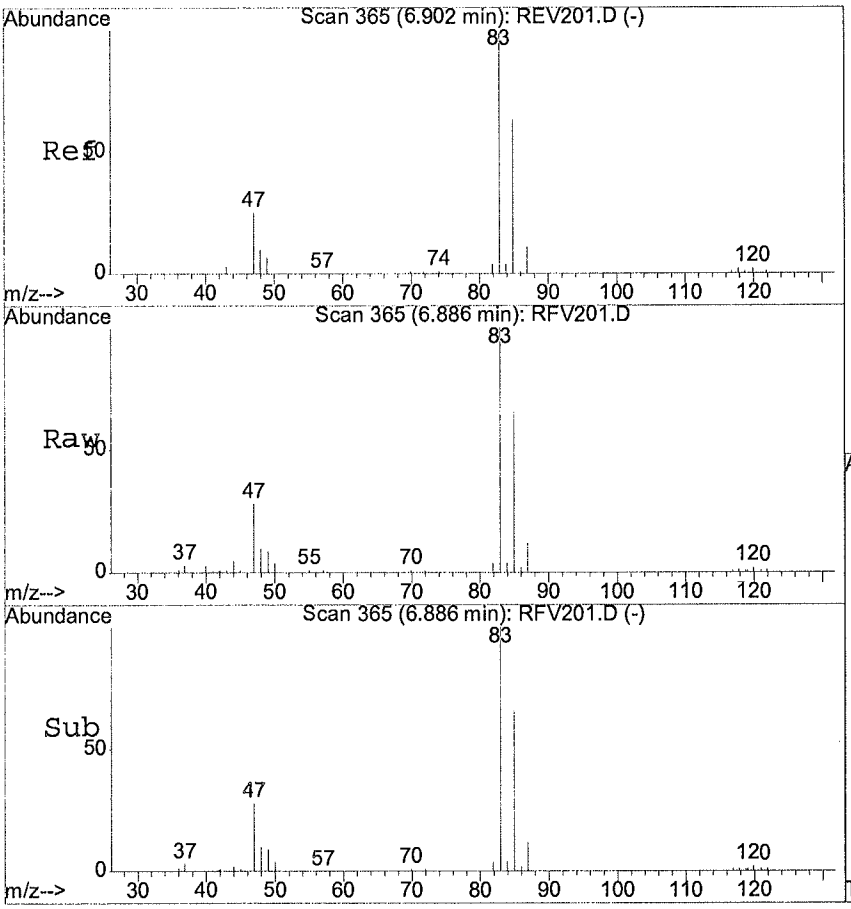


#30
cis-1,2-Dichloroethene
Concen: 0.10 ug/l
RT: 6.68 min Scan# 351
Delta R.T. -0.00 min
Lab File: RFV201.D
Acq: 21 Jun 2024 5:24 pm

Tgt Ion: 96 Resp: 2895

Ion	Ratio	Lower	Upper
96	100		
61	89.2	101.8	161.8#
98	36.8	33.6	93.6

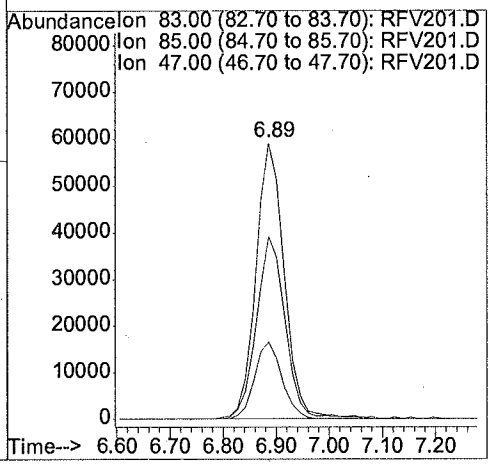


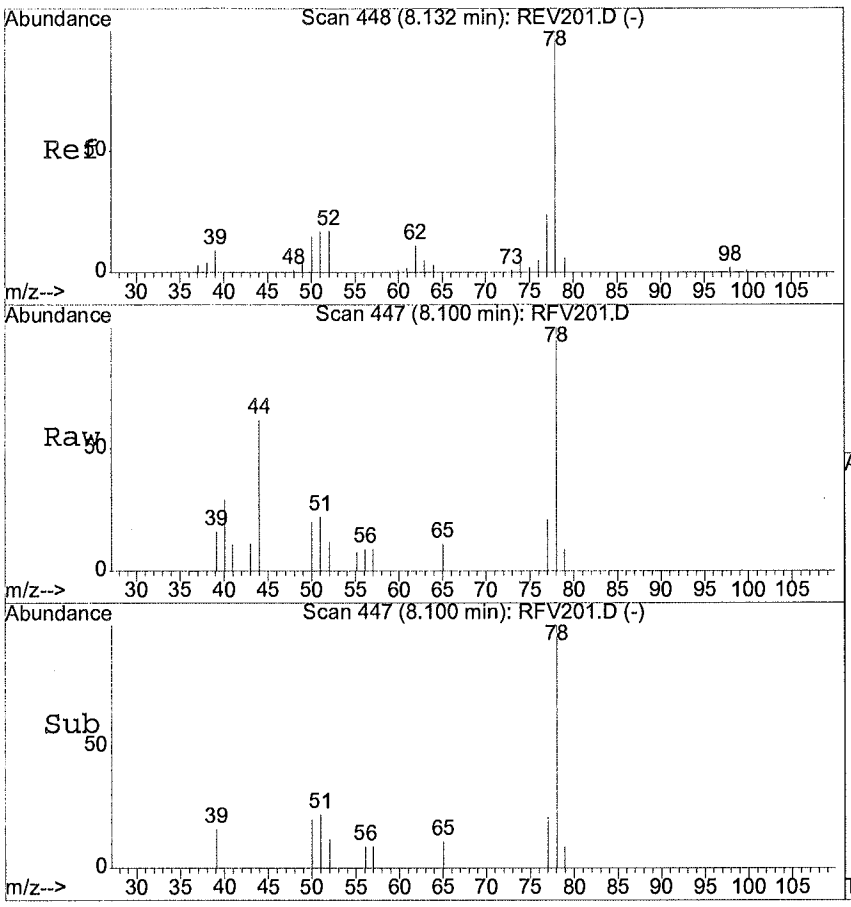


#31
Chloroform
Concen: 5.32 ug/l
RT: 6.89 min Scan# 365
Delta R.T. -0.02 min
Lab File: RFV201.D
Acq: 21 Jun 2024 5:24 pm

Tgt Ion: 83 Resp: 219983

Ion	Ratio	Lower	Upper
83	100		
85	67.3	38.2	98.2
47	26.8	0.0	54.7

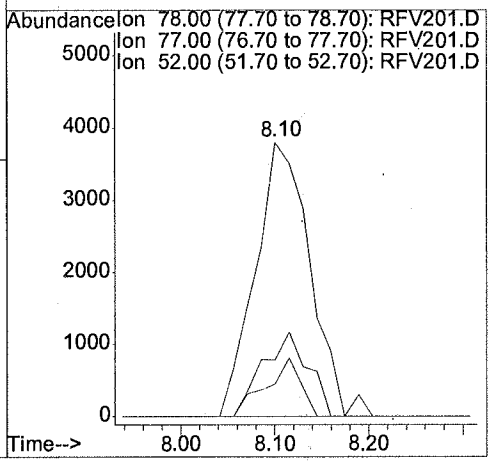


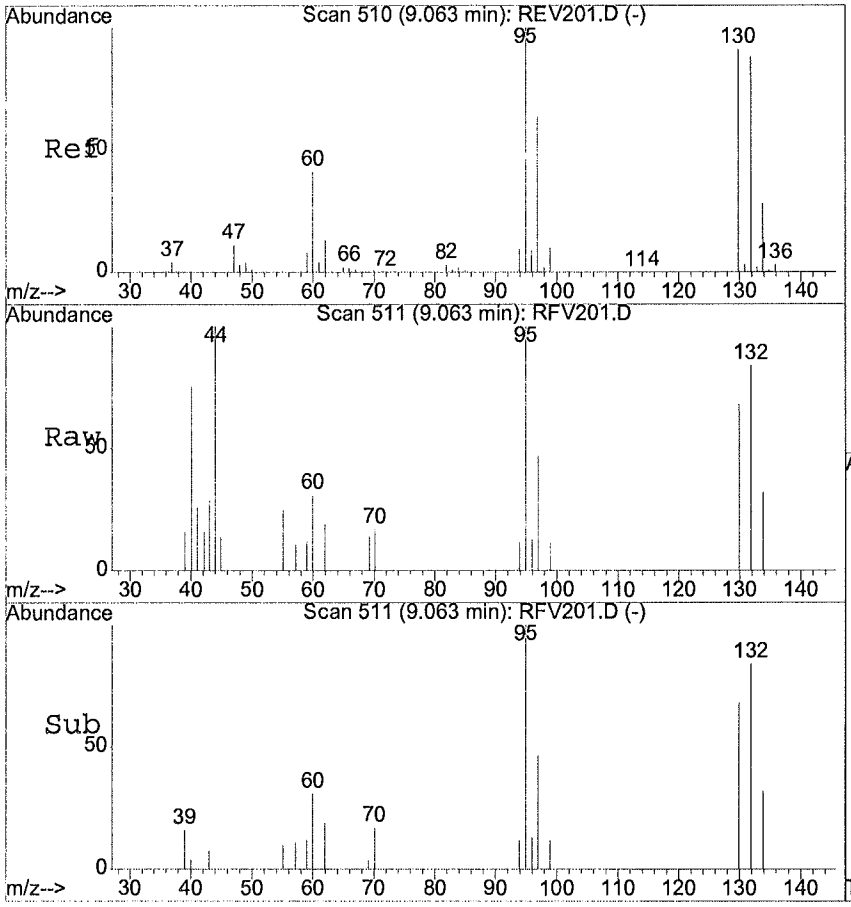


#42
Benzene
Concen: 0.17 ug/l
RT: 8.10 min Scan# 447
Delta R.T. -0.03 min
Lab File: RFV201.D
Acq: 21 Jun 2024 5:24 pm

Tgt Ion: 78 Resp: 15401

Ion	Ratio	Lower	Upper
78	100		
77	25.4	0.0	54.0
52	13.5	0.0	46.8

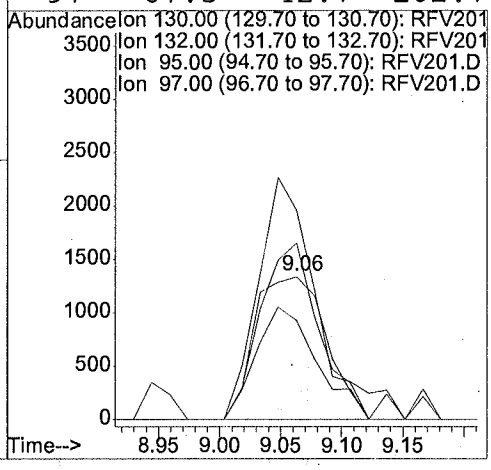


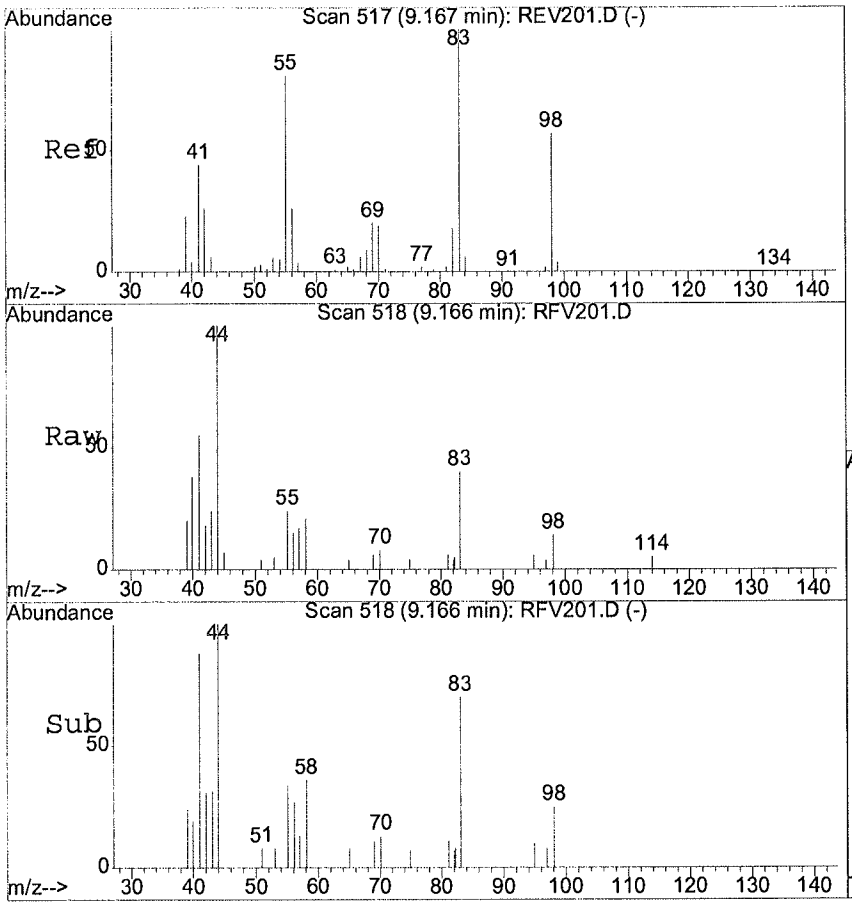


#44
Trichloroethene
Concen: 0.23 ug/l
RT: 9.06 min Scan# 511
Delta R.T. -0.00 min
Lab File: RFV201.D
Acq: 21 Jun 2024 5:24 pm

Tgt Ion:130 Resp: 5414

Ion	Ratio	Lower	Upper
130	100		
132	102.6	66.3	126.3
95	145.4	78.9	138.9#
97	67.5	42.7	102.7

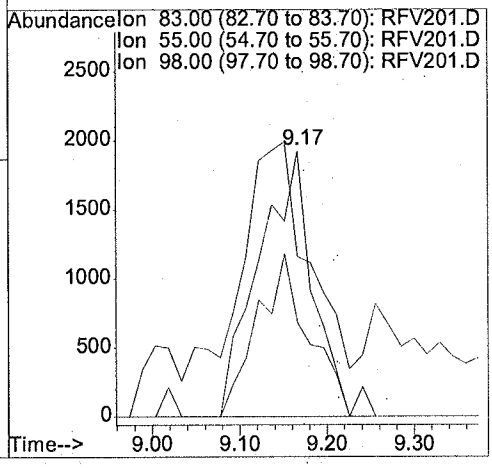


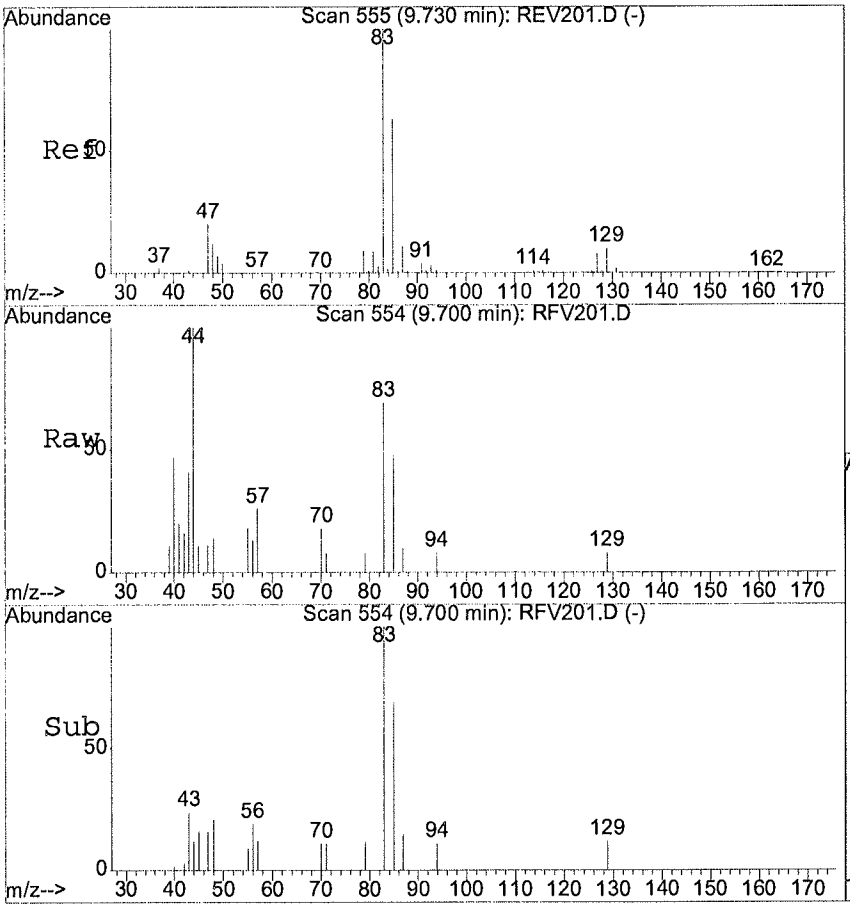


#45
Methylcyclohexane
Concen: 0.23 ug/l
RT: 9.17 min Scan# 518
Delta R.T. 0.00 min
Lab File: RFV201.D
Acq: 21 Jun 2024 5:24 pm

Tgt Ion: 83 Resp: 8442

Ion	Ratio	Lower	Upper
83	100		
55	118.6	52.6	112.6#
98	57.2	28.2	88.2

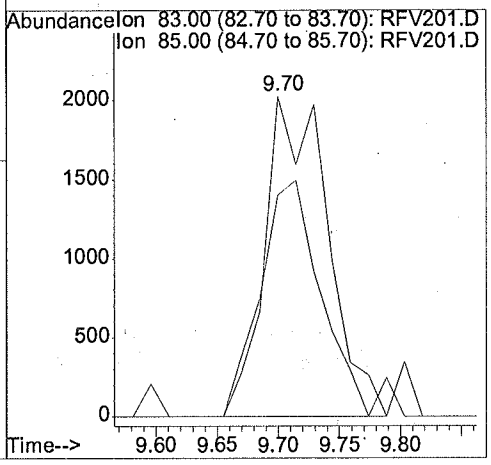


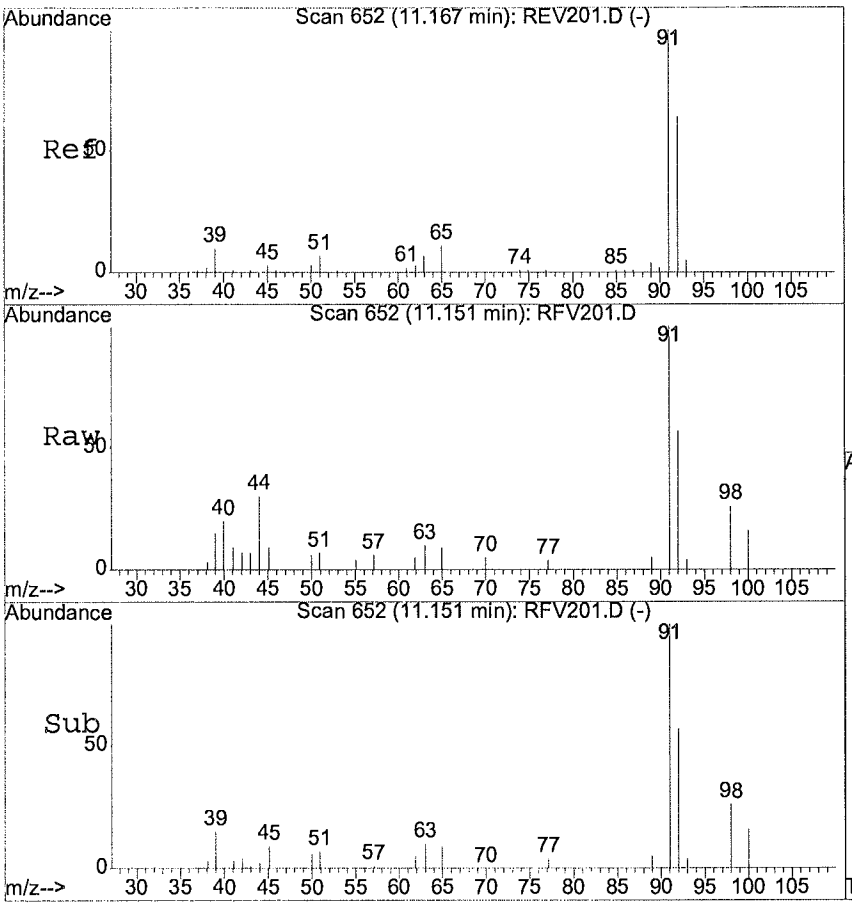


#47
Bromodichloromethane
Concen: 0.26 ug/l
RT: 9.70 min Scan# 554
Delta R.T. -0.03 min
Lab File: RFV201.D
Acq: 21 Jun 2024 5:24 pm

Tgt Ion: 83 Resp: 7221

Ion	Ratio	Lower	Upper
83	100		
85	74.1	34.1	94.1

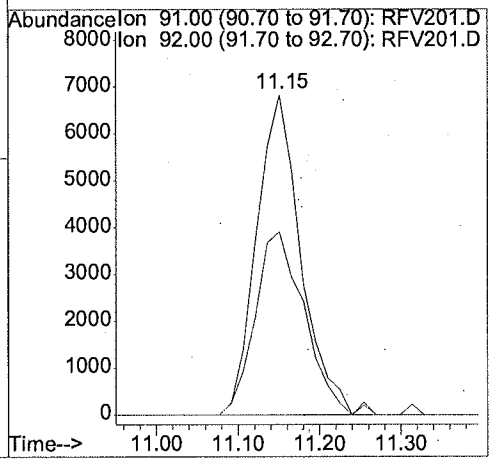


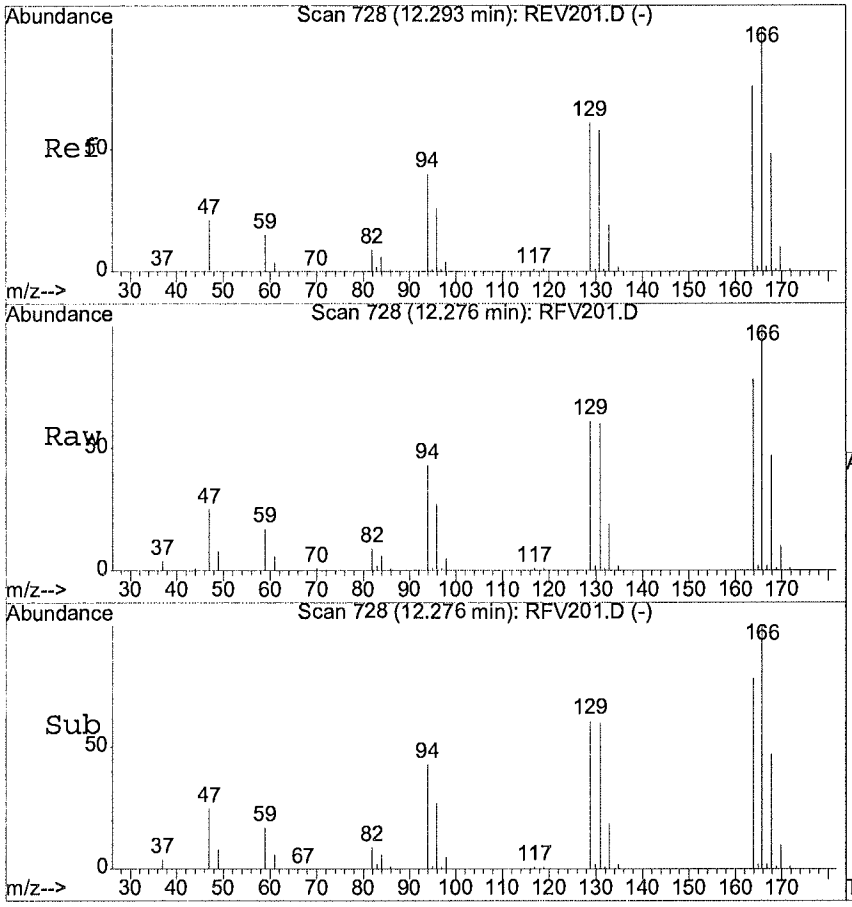


#55
Toluene
Concen: 0.26 ug/l
RT: 11.15 min Scan# 652
Delta R.T. -0.02 min
Lab File: RFV201.D
Acq: 21 Jun 2024 5:24 pm

Tgt Ion: 91 Resp: 25853

Ion	Ratio	Lower	Upper
91	100		
92	63.7	34.0	94.0

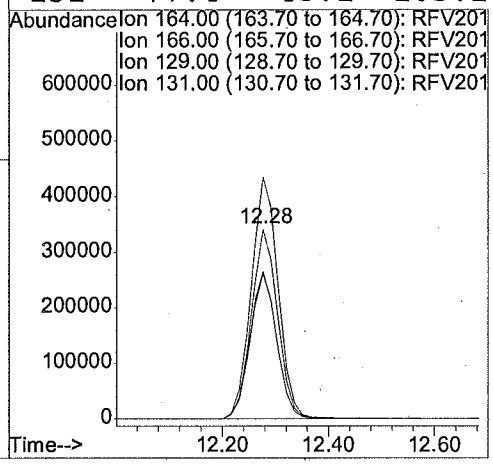


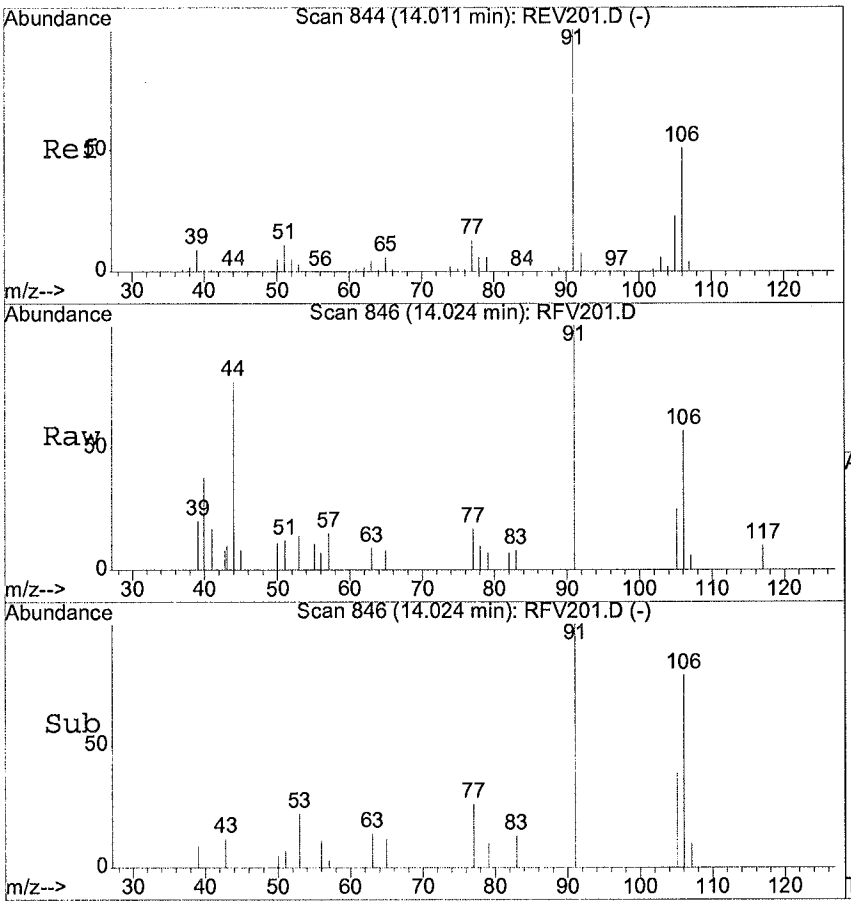


#61
Tetrachloroethene
Concen: 58.00 ug/l
RT: 12.28 min Scan# 728
Delta R.T. -0.02 min
Lab File: RFV201.D
Acq: 21 Jun 2024 5:24 pm

Tgt Ion:164 Resp: 1177213

Ion	Ratio	Lower	Upper
164	100		
166	129.9	101.0	161.0
129	78.9	49.2	109.2
131	77.4	45.1	105.1

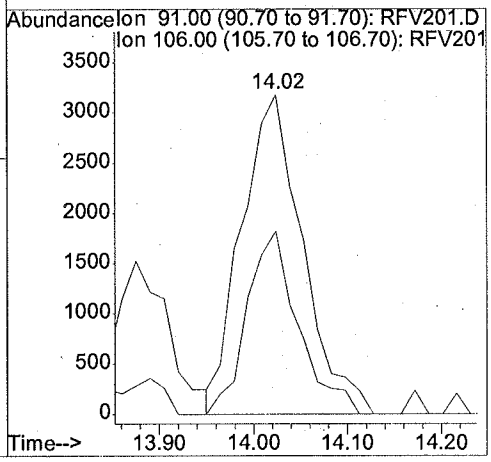




#68
m-Xylene & p-Xylene
Concen: 0.18 ug/l
RT: 14.02 min Scan# 846
Delta R.T. 0.01 min
Lab File: RFV201.D
Acq: 21 Jun 2024 5:24 pm

Tgt Ion: 91 Resp: 14303

Ion	Ratio	Lower	Upper
91	100		
106	48.1	20.9	80.9



METHOD SW5030B/B260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	06/16/24 09:15
Project	: VA SALT LAKE CITY	Date Received:	06/18/24
Batch No.	: 24F073	Date Extracted:	06/21/24 17:55
Sample ID	: EB09-GW061624	Date Analyzed:	06/21/24 17:55
Lab Samp ID:	24F073-05	Dilution Factor:	1
Lab File ID:	RFV202	Matrix:	WATER
Ext Btch ID:	VOO1F09	% Moisture:	NA
Calib. Ref.:	REV201	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
Oibromochloromethane	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-Oibromoethane	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	9.72	10.0	97	70-130
Toluene-dB	9.90	10.0	99	70-130
Dibromofluoromethane	9.87	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\24F21\RFV202.D Vial: 15
Acq On : 21 Jun 2024 5:55 pm Operator: DNguye
Sample : 24F073-05 Inst : 01New
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 23 13:07 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.53	114	704841	10.00	ug/l	-0.01
53) CHLOROBENZENE-D5	13.70	117	576315	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.67	152	231232	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.21	111	215436	9.87	ug/l	-0.02
Spiked Amount 10.000			Recovery =	98.70%		
41) 1,2-Dichloroethane-d4	7.94	65	159199	10.70	ug/l	-0.03
Spiked Amount 10.000			Recovery =	107.00%		
54) Toluene-d8	11.00	98	854963	9.90	ug/l	-0.03
Spiked Amount 10.000			Recovery =	99.00%		
76) 4-Bromofluorobenzene	15.99	95	305969	9.72	ug/l	-0.02
Spiked Amount 10.000			Recovery =	97.20%		
Target Compounds						Qvalue

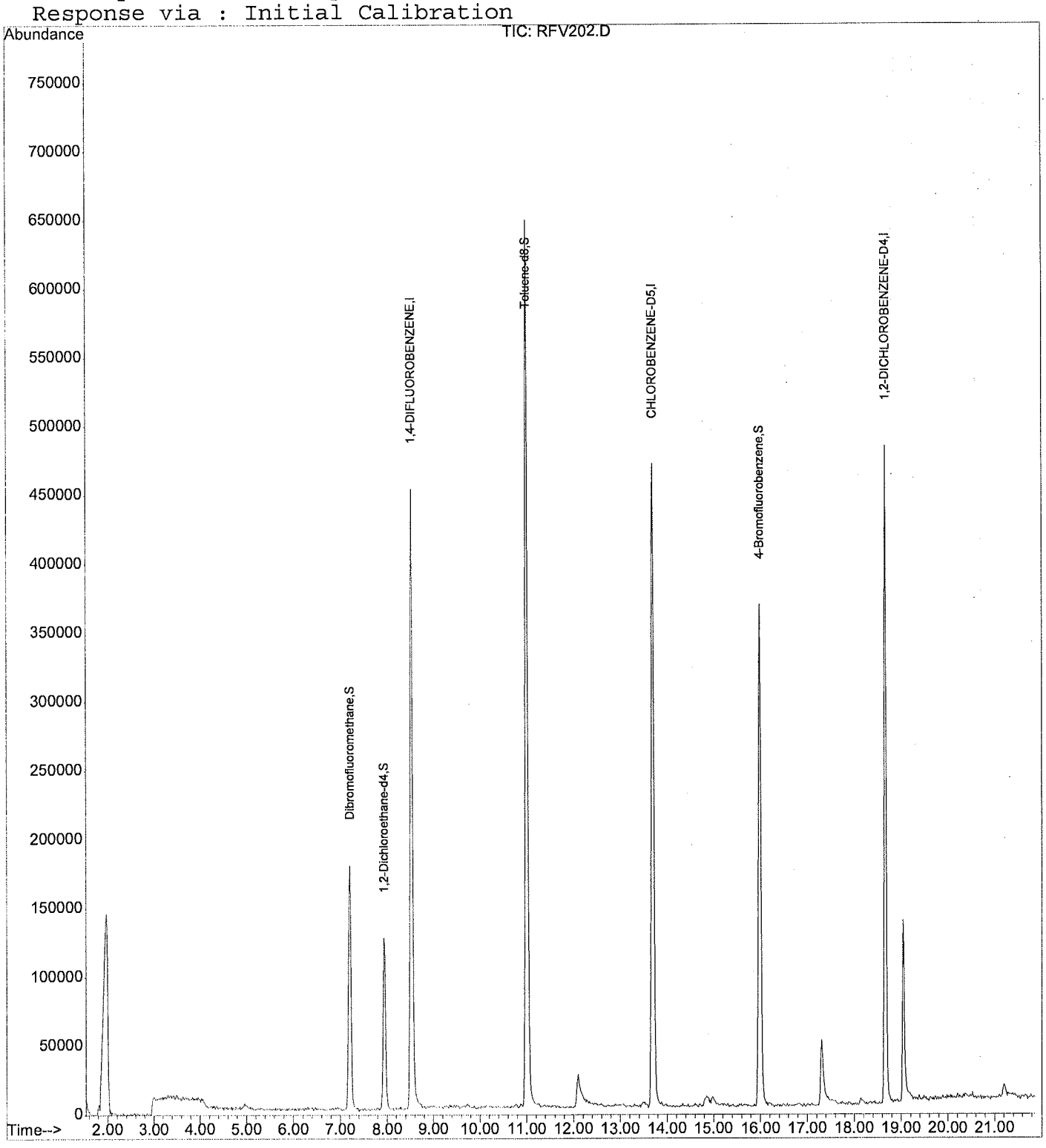
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F21\RFV202.D
Acq On : 21 Jun 2024 5:55 pm
Sample : 24F073-05
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Jun 23 13:07 2024

Vial: 15
Operator: DNguye
Inst : 01New
Multiplr: 1.00
Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



METHOD SW5030B/B260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	06/17/24 07:30
Project	: VA SALT LAKE CITY	Date Received:	06/18/24
Batch No.	: 24F073	Date Extracted:	06/21/24 18:25
Sample ID	: MW41-GW061724-276	Date Analyzed:	06/21/24 18:25
Lab Samp ID:	24F073-06	Dilution Factor:	1
Lab File ID:	RFV203	Matrix:	WATER
Ext Btch ID:	VO01F09	% Moisture:	NA
Calib. Ref.:	REV201	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	20J	20	2.5
Benzene	0.37J	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	1.1	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	20	1.0	0.15
Toluene	0.55J	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	0.13J	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	9.53	10.0	95	70-130
Toluene-dB	9.25	10.0	93	70-130
Dibromofluoromethane	10.1	10.0	101	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\24F21\RFV203.D
Acq On : 21 Jun 2024 6:25 pm
Sample : 24F073-06
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Jun 23 13:10 2024

Vial: 16
Operator: DNguye
Inst : 01New
Multiplr: 1.00
Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.53	114	659904	10.00	ug/l	-0.01
53) CHLOROBENZENE-D5	13.70	117	540766	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.67	152	216262	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.21	111	205898	10.08	ug/l	-0.02
Spiked Amount 10.000			Recovery = 100.80%			
41) 1,2-Dichloroethane-d4	7.94	65	150720	10.82	ug/l	-0.03
Spiked Amount 10.000			Recovery = 108.20%			
54) Toluene-d8	11.00	98	749858	9.25	ug/l	-0.03
Spiked Amount 10.000			Recovery = 92.50%			
76) 4-Bromofluorobenzene	15.99	95	280808	9.53	ug/l	-0.02
Spiked Amount 10.000			Recovery = 95.30%			
Target Compounds						Qvalue
13) Acetone	4.06	43	48046	19.95	ug/l #	1
30) cis-1,2-Dichloroethene	6.68	96	3118	0.11	ug/l #	72
31) Chloroform	6.89	83	46197	1.14	ug/l	96
42) Benzene	8.12	78	32178	0.36	ug/l	95
44) Trichloroethene	9.06	130	2987	0.13	ug/l #	66
55) Toluene	11.15	91	52575	0.55	ug/l	96
61) Tetrachloroethene	12.28	164	394661	19.77	ug/l	98
68) m-Xylene & p-Xylene	14.02	91	15336	0.19	ug/l	90

(#) = qualifier out of range (m) = manual integration

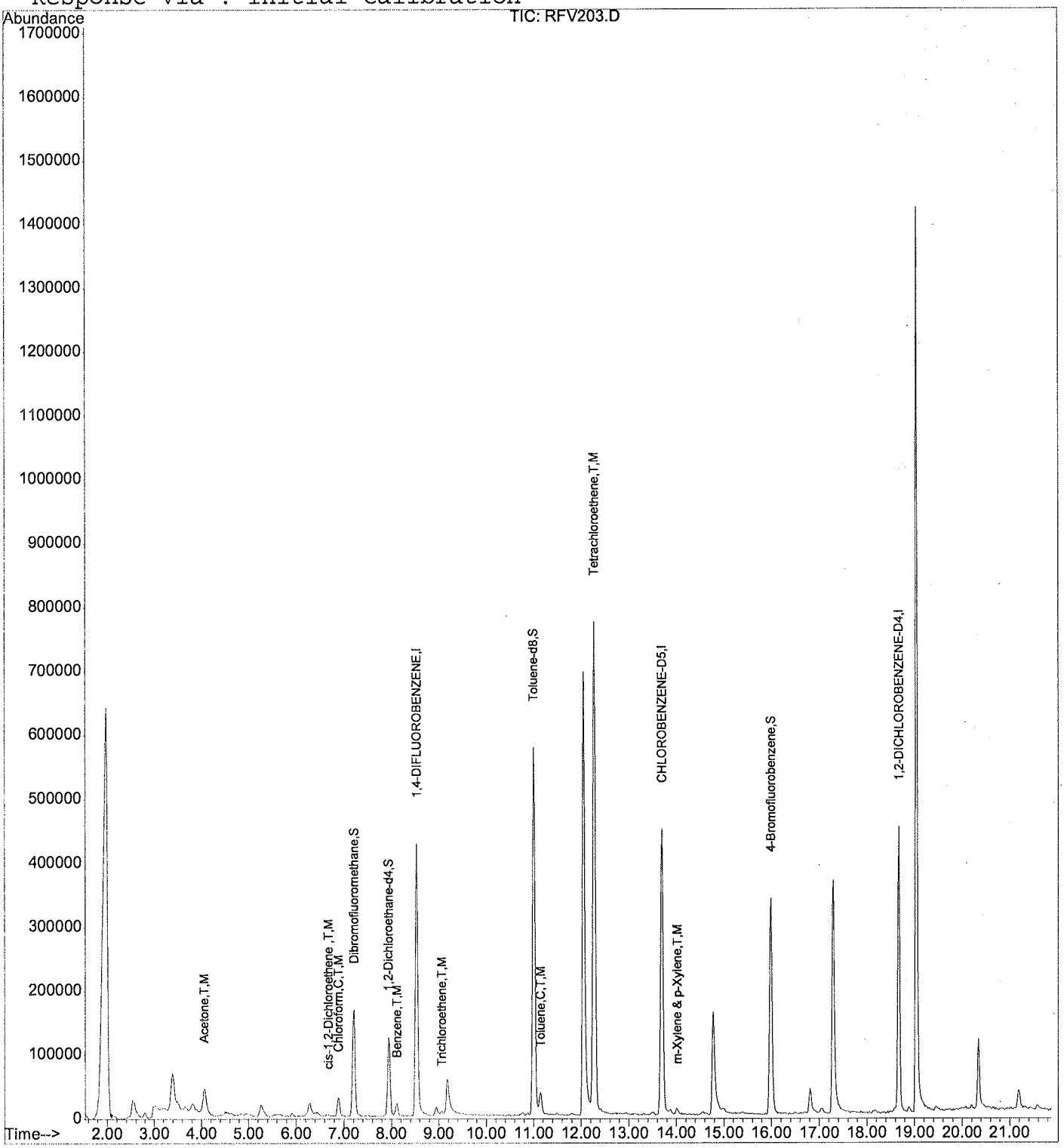
Quantitation Report

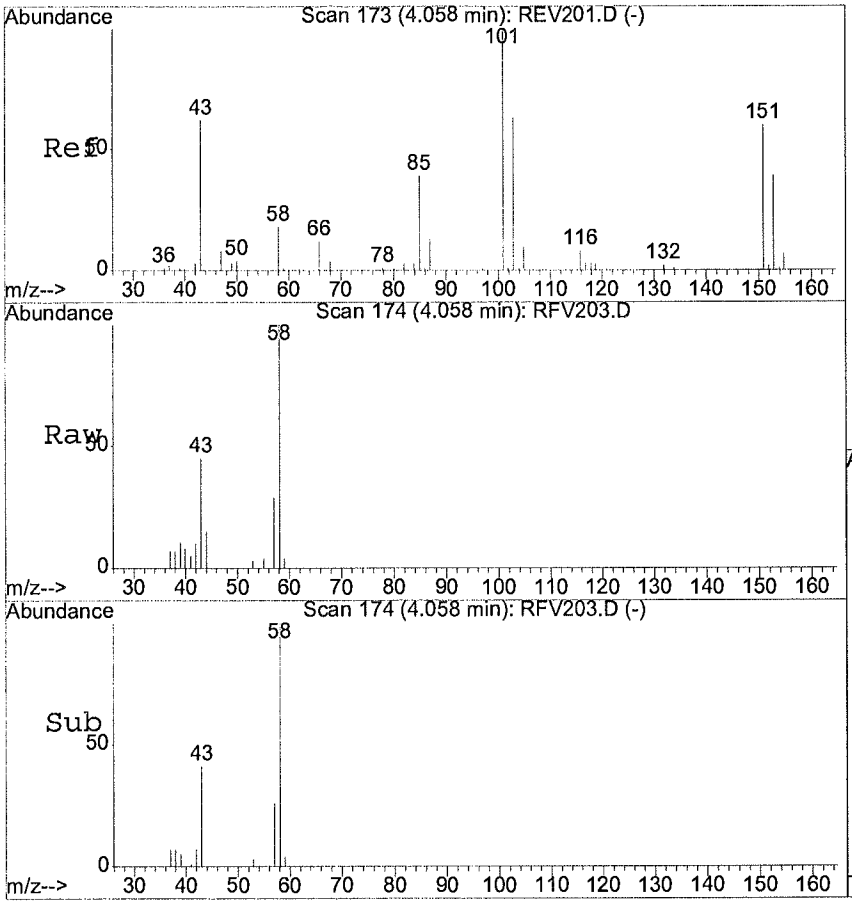
Data File : D:\HPCHEM\1\DATA\24F21\RFV203.D
Acq On : 21 Jun 2024 6:25 pm
Sample : 24F073-06
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Jun 23 13:10 2024

Vial: 16
Operator: DNguye
Inst : 01New
Multiplr: 1.00

Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration

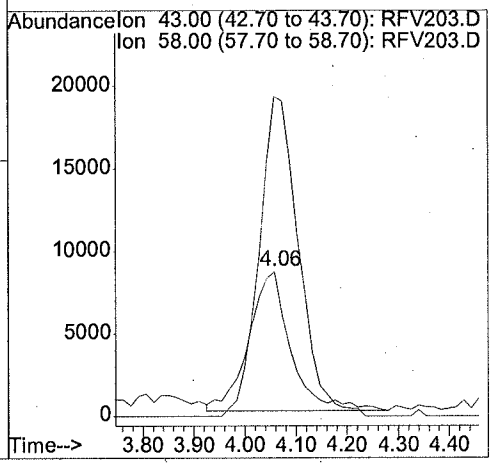


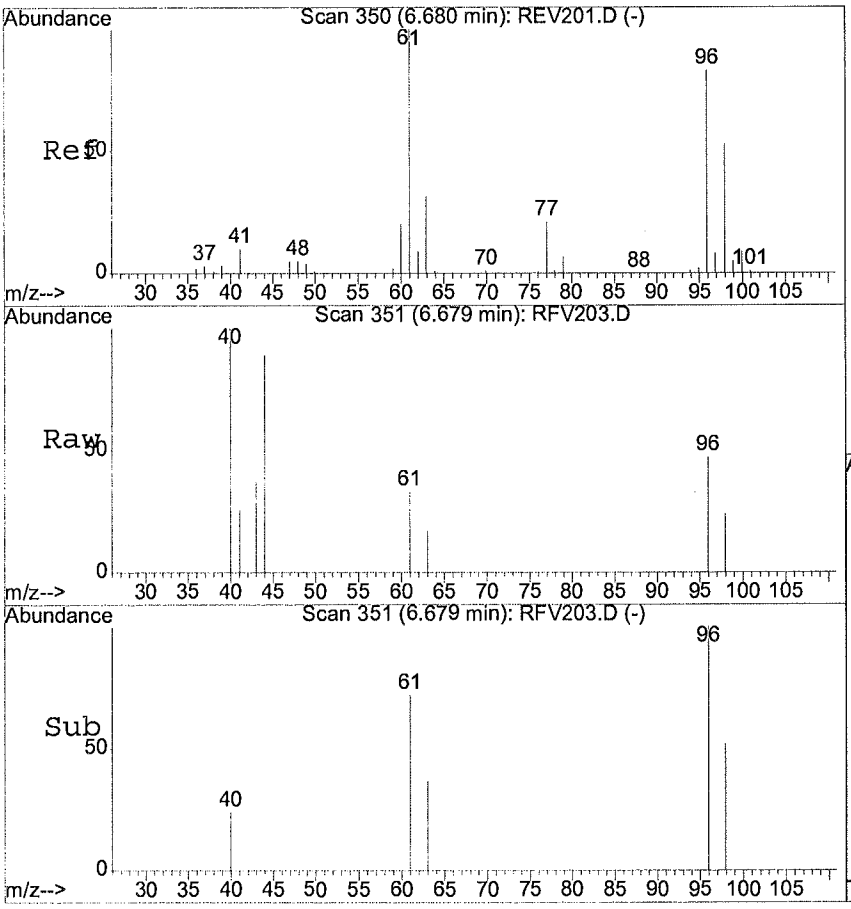


#13
Acetone
Concen: 19.95 ug/l
RT: 4.06 min Scan# 174
Delta R.T. 0.00 min
Lab File: RFV203.D
Acq: 21 Jun 2024 6:25 pm

Tgt Ion: 43 Resp: 48046

Ion	Ratio	Lower	Upper
43	100		
58	216.6	0.9	60.9#

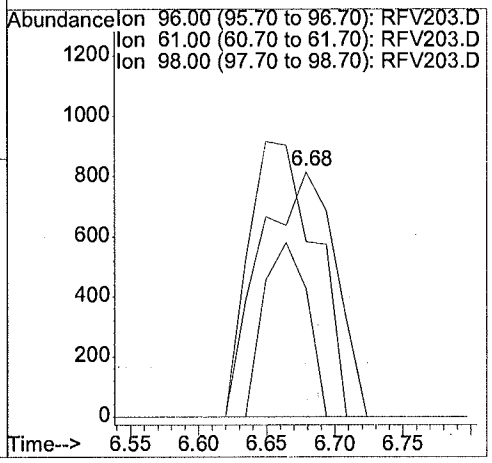


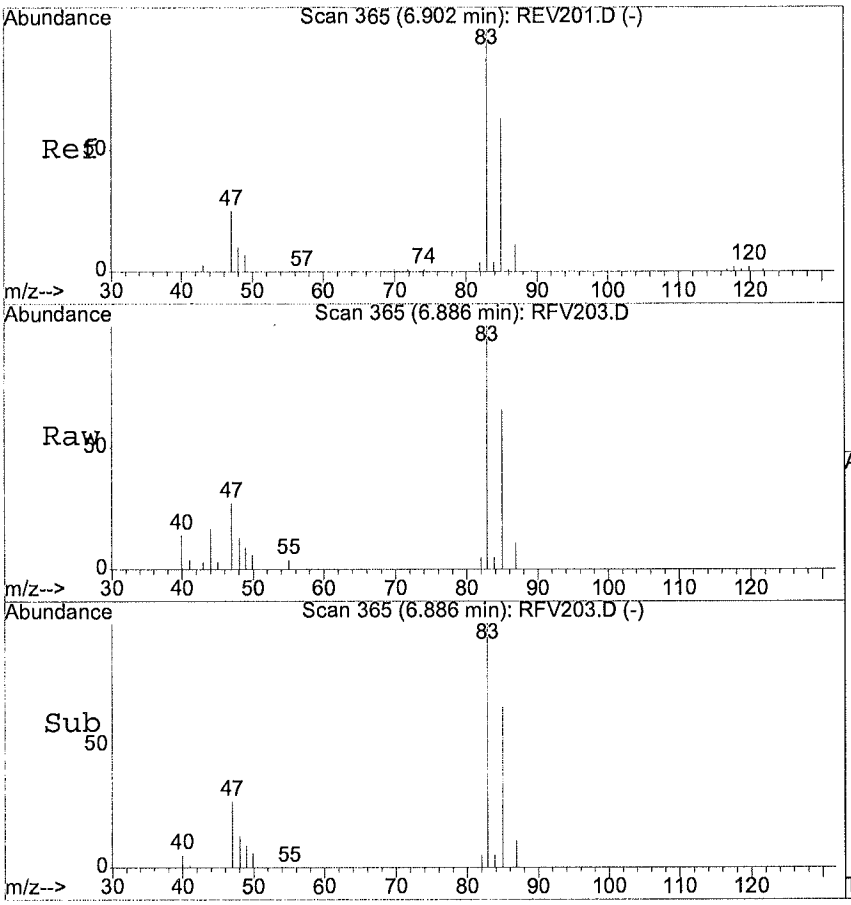


#30
cis-1,2-Dichloroethene
Concen: 0.11 ug/l
RT: 6.68 min Scan# 351
Delta R.T. -0.00 min
Lab File: RFV203.D
Acq: 21 Jun 2024 6:25 pm

Tgt Ion: 96 Resp: 3118

Ion	Ratio	Lower	Upper
96	100		
61	99.6	101.8	161.8#
98	41.7	33.6	93.6

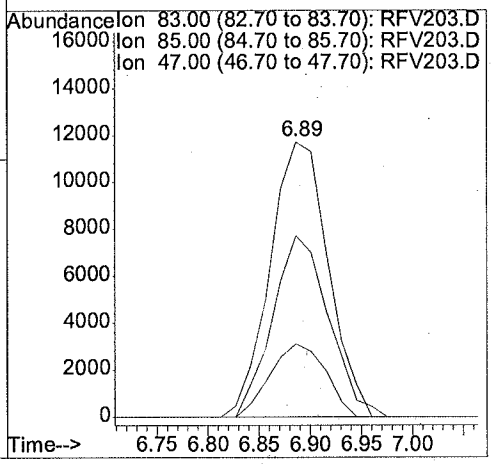


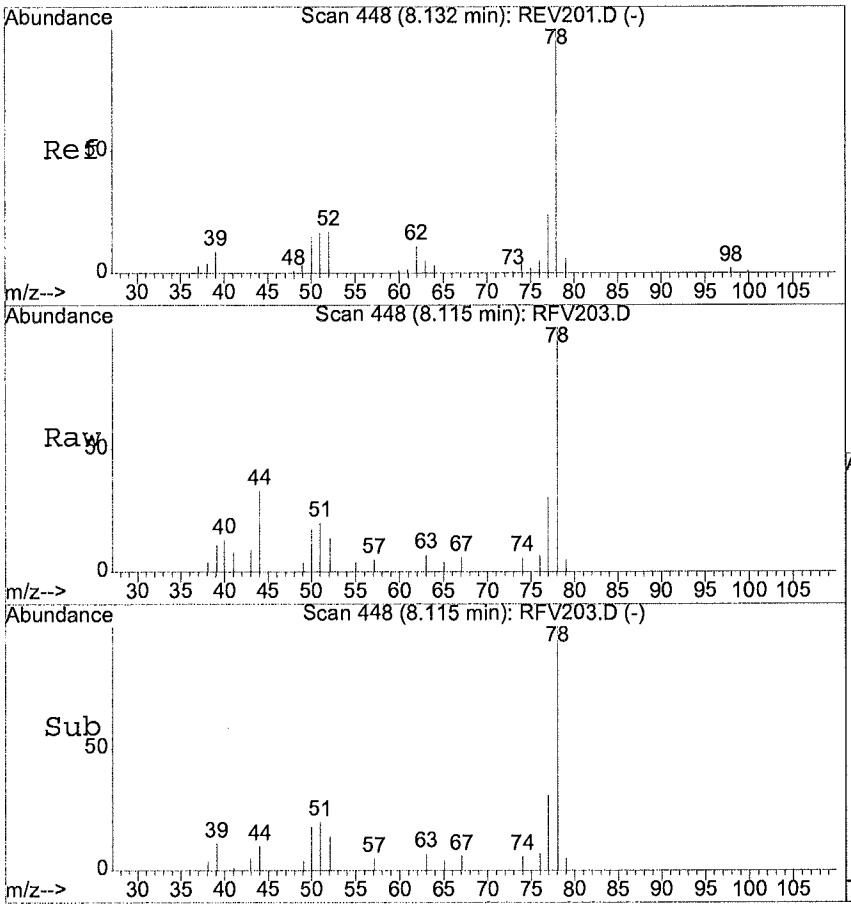


#31
Chloroform
Concen: 1.14 ug/l
RT: 6.89 min Scan# 365
Delta R.T. -0.02 min
Lab File: RFV203.D
Acq: 21 Jun 2024 6:25 pm

Tgt Ion: 83 Resp: 46197

Ion	Ratio	Lower	Upper
83	100		
85	63.6	38.2	98.2
47	25.2	0.0	54.7

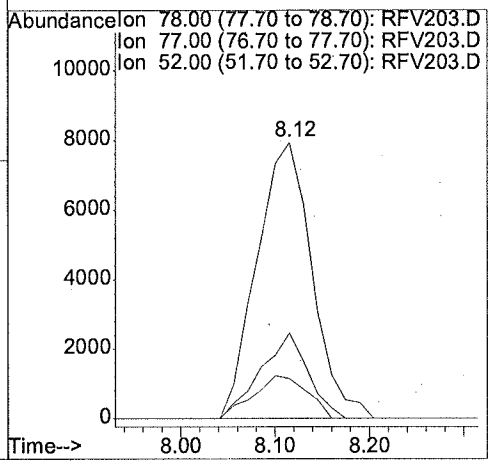


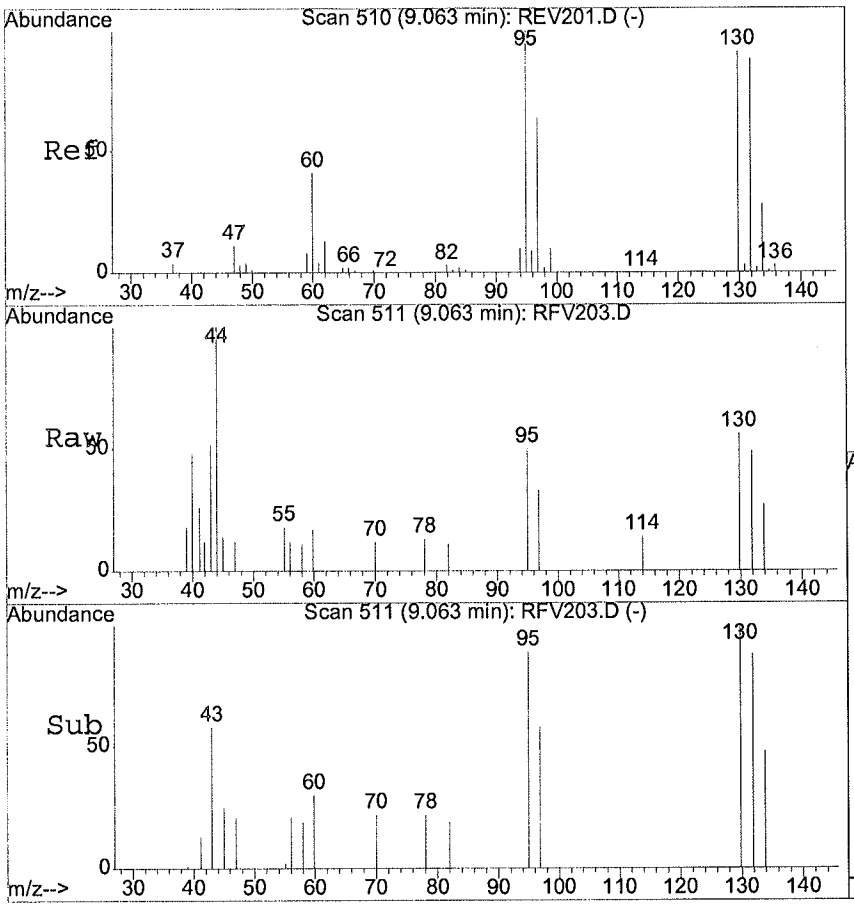


#42
Benzene
Concen: 0.36 ug/l
RT: 8.12 min Scan# 448
Delta R.T. -0.02 min
Lab File: RFV203.D
Acq: 21 Jun 2024 6:25 pm

Tgt Ion: 78 Resp: 32178

Ion	Ratio	Lower	Upper
78	100		
77	26.7	0.0	54.0
52	15.1	0.0	46.8

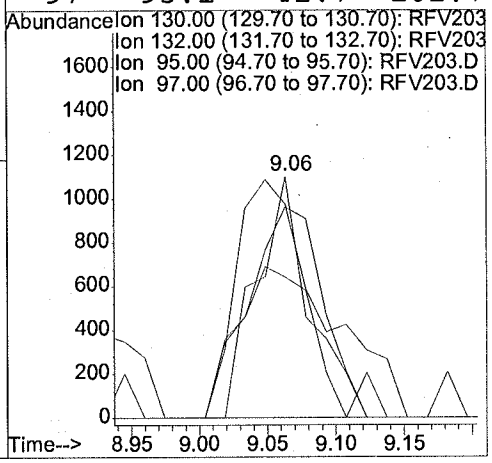


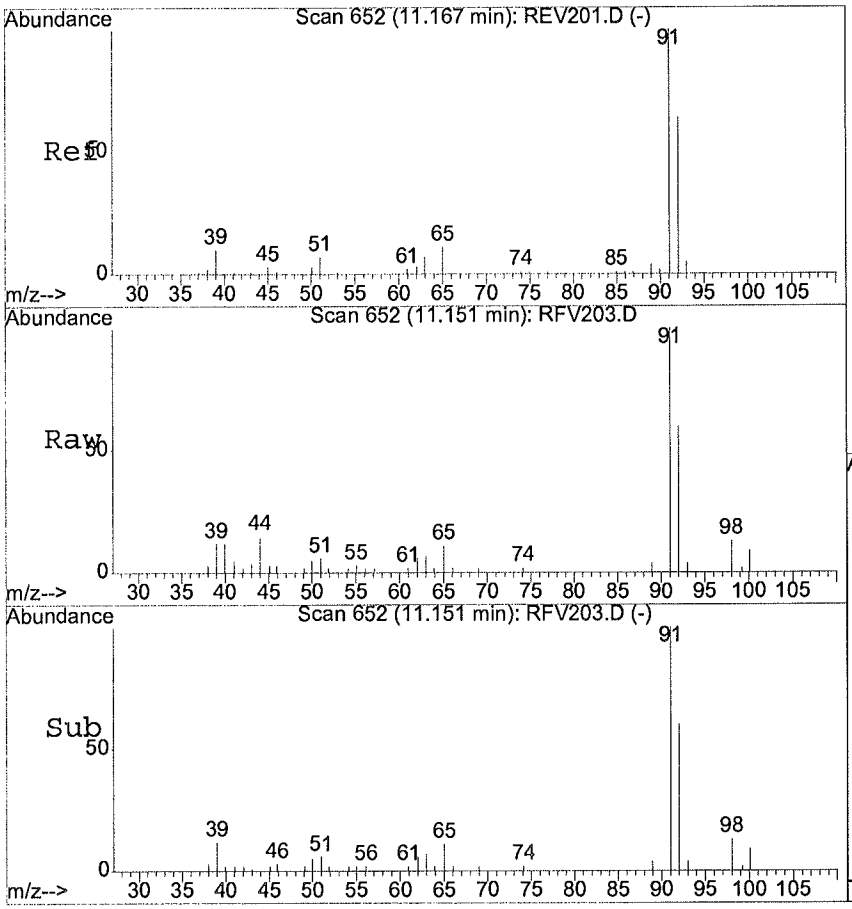


#44
Trichloroethene
Concen: 0.13 ug/l
RT: 9.06 min Scan# 511
Delta R.T. 0.00 min
Lab File: RFV203.D
Acq: 21 Jun 2024 6:25 pm

Tgt Ion:130 Resp: 2987

Ion	Ratio	Lower	Upper
130	100		
132	123.1	66.3	126.3
95	158.0	78.9	138.9#
97	93.1	42.7	102.7

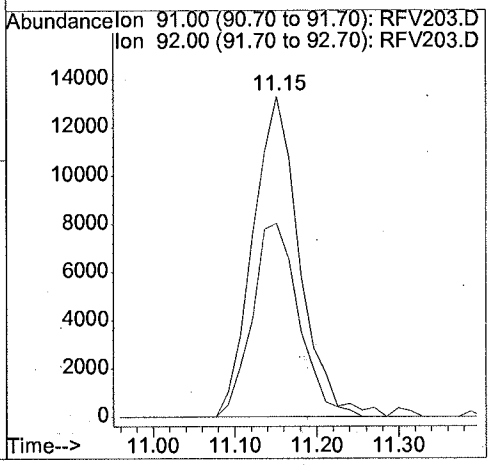


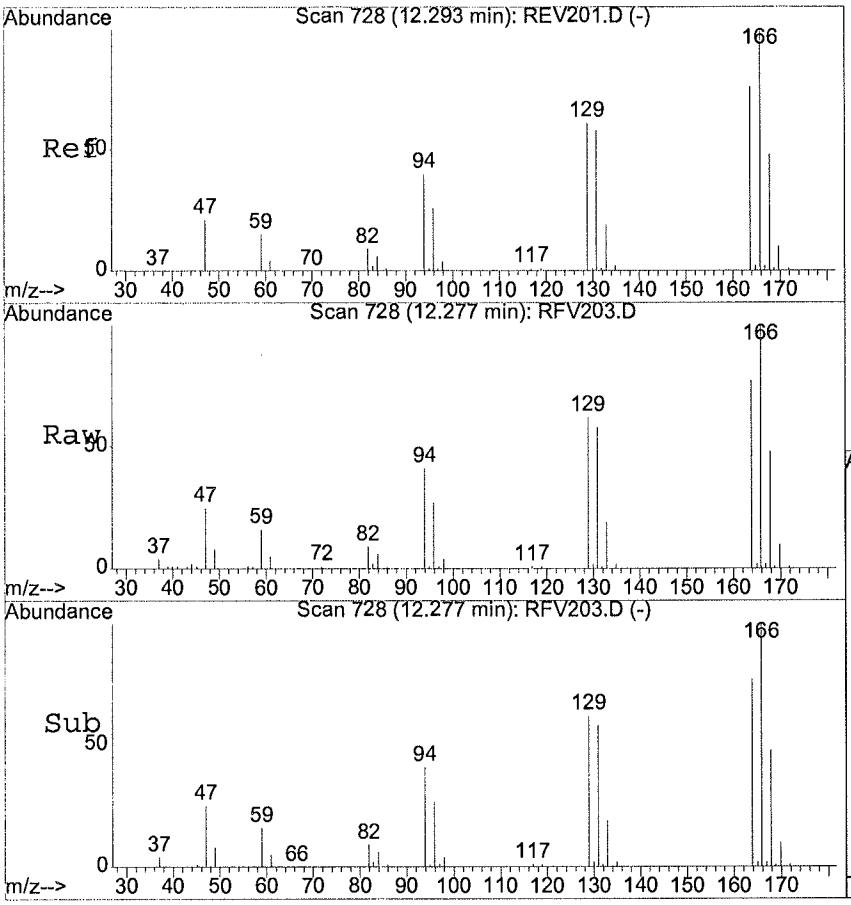


#55
Toluene
Concen: 0.55 ug/l
RT: 11.15 min Scan# 652
Delta R.T. -0.02 min
Lab File: RFV203.D
Acq: 21 Jun 2024 6:25 pm

Tgt Ion: 91 Resp: 52575

Ion	Ratio	Lower	Upper
91	100		
92	60.6	34.0	94.0

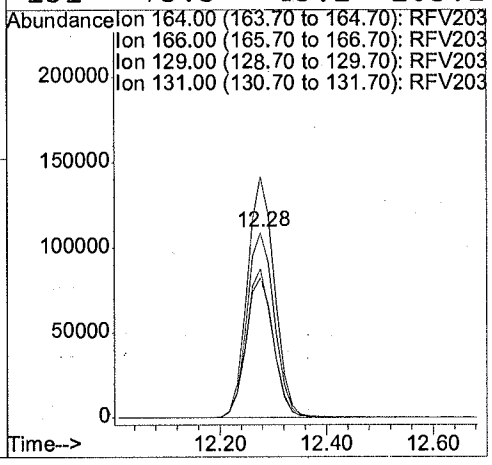


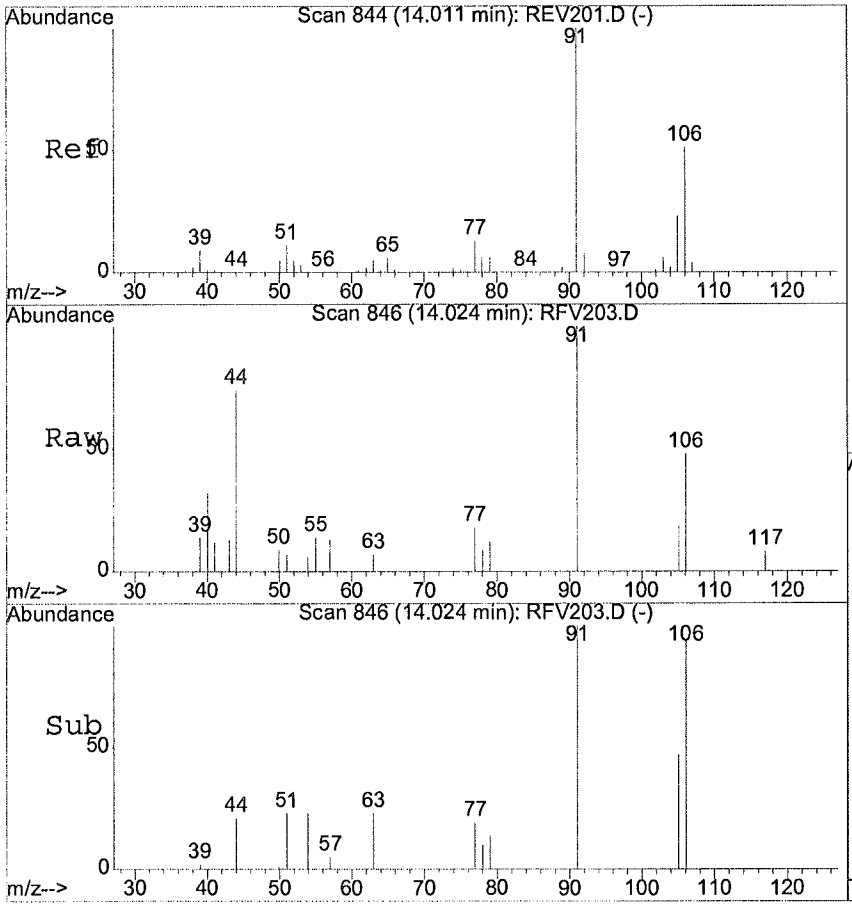


#61
Tetrachloroethene
Concen: 19.77 ug/l
RT: 12.28 min Scan# 728
Delta R.T. -0.02 min
Lab File: RFV203.D
Acq: 21 Jun 2024 6:25 pm

Tgt Ion:164 Resp: 394661

Ion	Ratio	Lower	Upper
164	100		
166	128.4	101.0	161.0
129	77.6	49.2	109.2
131	75.3	45.1	105.1

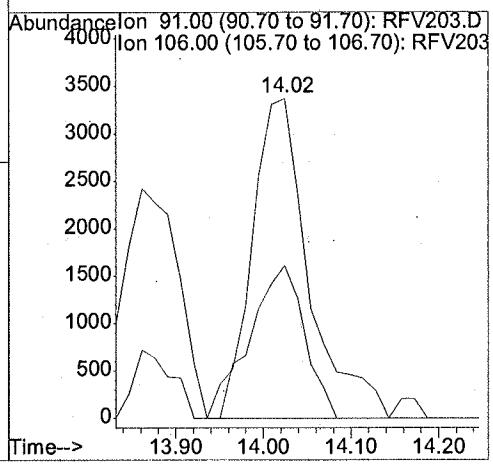




#68
m-Xylene & p-Xylene
Concen: 0.19 ug/l
RT: 14.02 min Scan# 846
Delta R.T. 0.01 min
Lab File: RFV203.D
Acq: 21 Jun 2024 6:25 pm

Tgt Ion: 91 Resp: 15336

Ion	Ratio	Lower	Upper
91	100		
106	43.9	20.9	80.9



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	06/17/24 16:00
Project	: VA SALT LAKE CITY	Date Received:	06/18/24
Batch No.	: 24F073	Date Extracted:	06/21/24 18:55
Sample ID	: MW41-GW061724-305	Date Analyzed:	06/21/24 18:55
Lab Samp ID:	24F073-07	Dilution Factor:	1
Lab File ID:	RFV204	Matrix:	WATER
Ext Btch ID:	VOO1F09	% Moisture:	NA
Calib. Ref.:	REV201	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	0.13J	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	1.8	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	2.2	1.0	0.15
Toluene	0.21J	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	9.42	10.0	94	70-130
Toluene-d8	10.0	10.0	100	70-130
Dibromofluoromethane	9.71	10.0	97	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\24F21\RFV204.D Vial: 17
Acq On : 21 Jun 2024 6:55 pm Operator: DNguye
Sample : 24F073-07 Inst : 01New
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 23 13:12 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.53	114	674928	10.00	ug/l	-0.01
53) CHLOROBENZENE-D5	13.70	117	566076	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.67	152	228275	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.21	111	202816	9.71	ug/l	-0.02
Spiked Amount 10.000			Recovery =	97.10%		
41) 1,2-Dichloroethane-d4	7.94	65	152737	10.72	ug/l	-0.03
Spiked Amount 10.000			Recovery =	107.20%		
54) Toluene-d8	11.00	98	850424	10.02	ug/l	-0.03
Spiked Amount 10.000			Recovery =	100.20%		
76) 4-Bromofluorobenzene	15.99	95	292966	9.42	ug/l	-0.02
Spiked Amount 10.000			Recovery =	94.20%		
Target Compounds						Qvalue
31) Chloroform	6.89	83	75767	1.83	ug/l	96
42) Benzene	8.12	78	11816	0.13	ug/l	89
45) Methylcyclohexane	9.15	83	4165	0.11	ug/l	80
47) Bromodichloromethane	9.73	83	3759	0.13	ug/l	73
55) Toluene	11.15	91	21387	0.21	ug/l	90
61) Tetrachloroethene	12.28	164	46804	2.24	ug/l	97

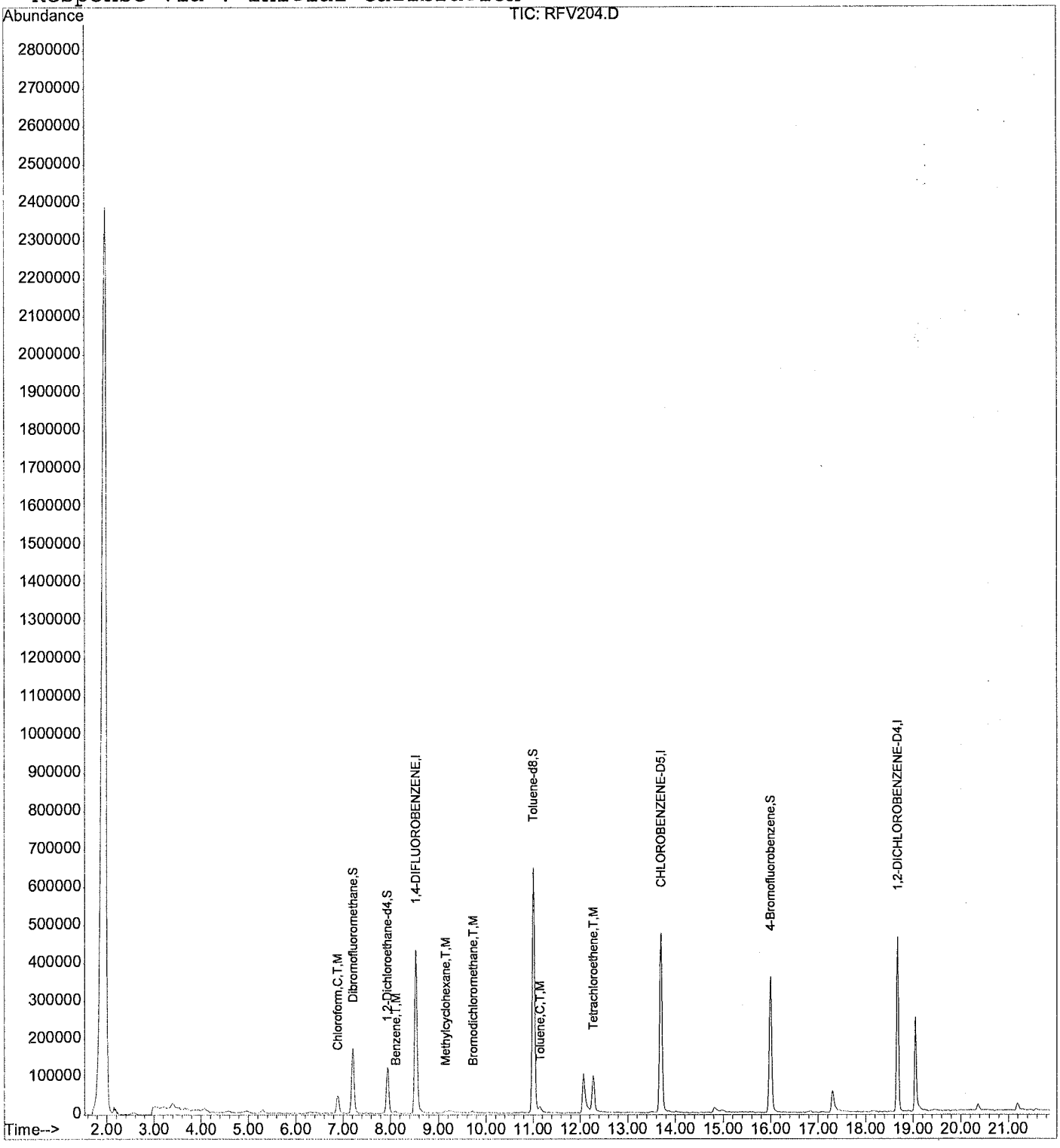
(#) = qualifier out of range (m) = manual integration

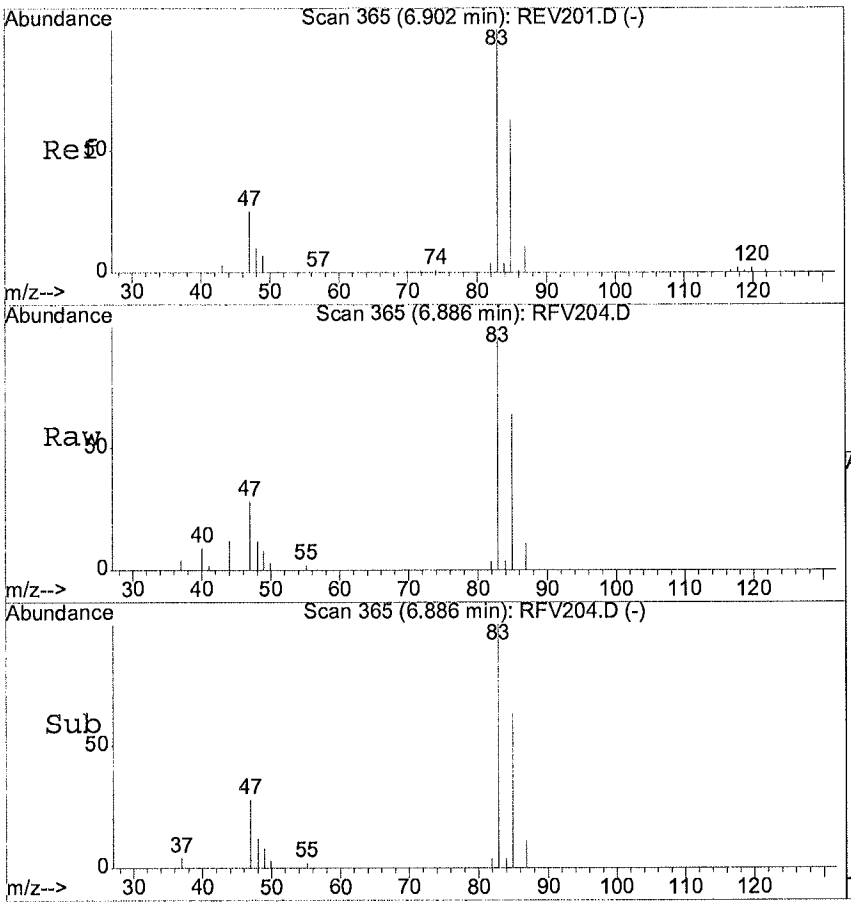
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F21\RFV204.D
Acq On : 21 Jun 2024 6:55 pm
Sample : 24F073-07
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Jun 23 13:12 2024

Vial: 17
Operator: DNguye
Inst : 01New
Multiplr: 1.00
Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration

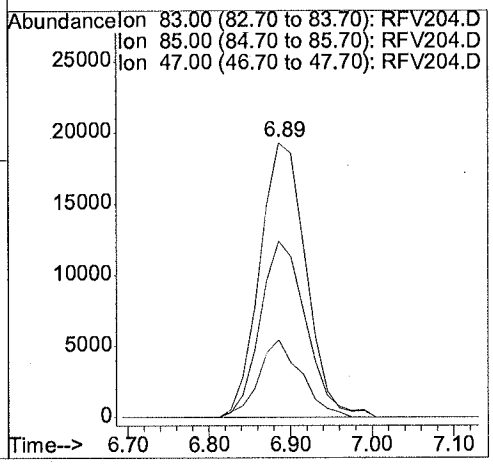


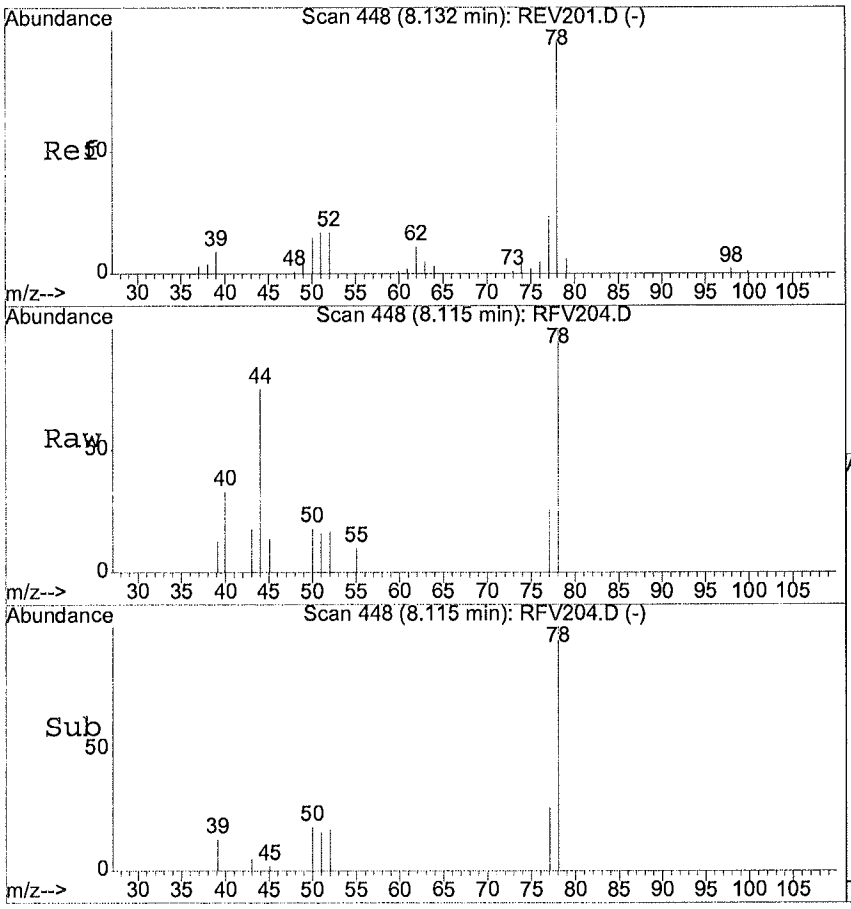


#31
Chloroform
Concen: 1.83 ug/l
RT: 6.89 min Scan# 365
Delta R.T. -0.02 min
Lab File: RFV204.D
Acq: 21 Jun 2024 6:55 pm

Tgt Ion: 83 Resp: 75767

Ion	Ratio	Lower	Upper
83	100		
85	64.3	38.2	98.2
47	26.2	0.0	54.7

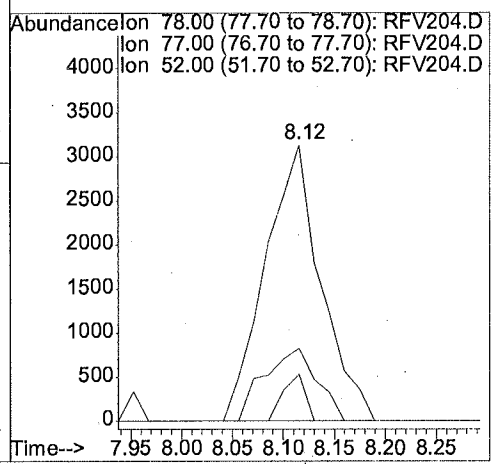


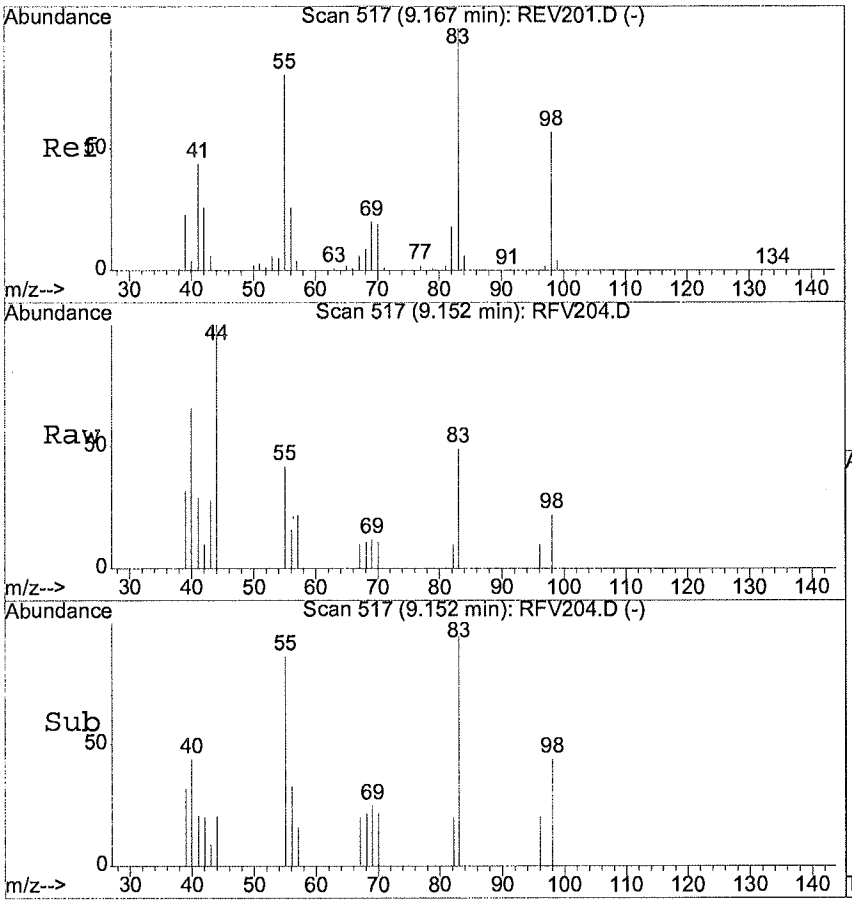


#42
Benzene
Concen: 0.13 ug/l
RT: 8.12 min Scan# 448
Delta R.T. -0.02 min
Lab File: RFV204.D
Acq: 21 Jun 2024 6:55 pm

Tgt Ion: 78 Resp: 11816

Ion	Ratio	Lower	Upper
78	100		
77	25.0	0.0	54.0
52	6.6	0.0	46.8

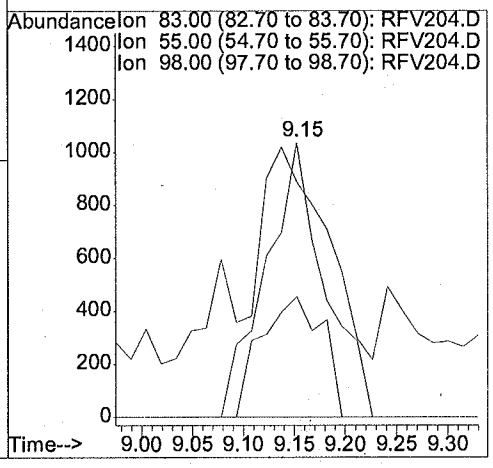


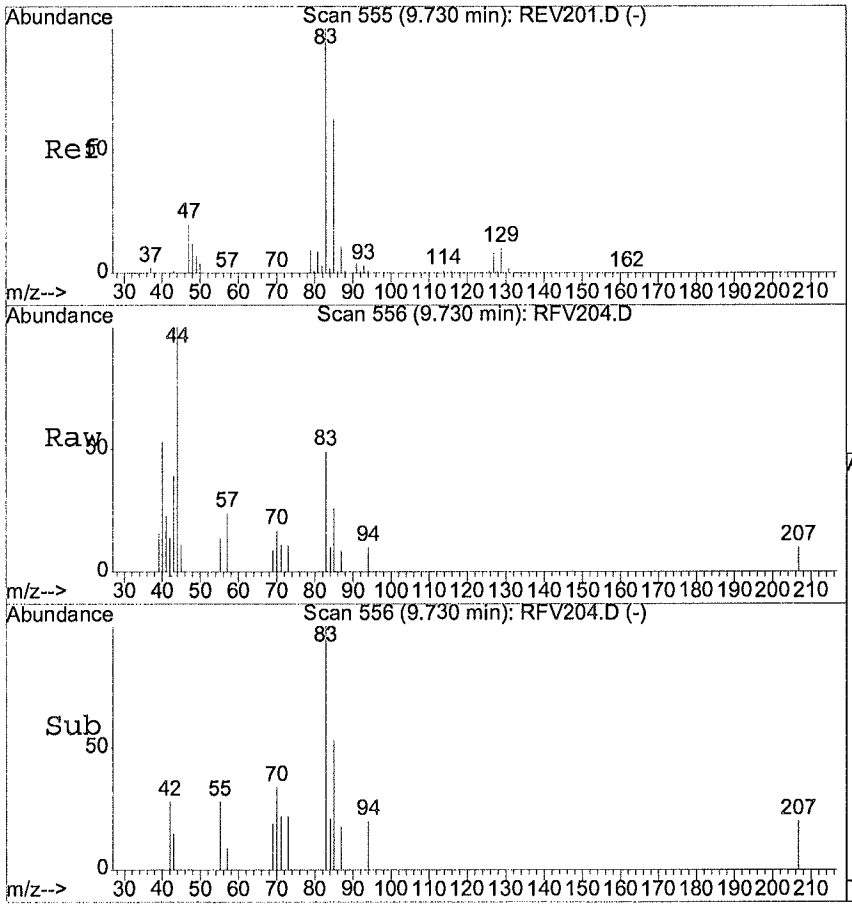


#45
Methylcyclohexane
Concen: 0.11 ug/l
RT: 9.15 min Scan# 517
Delta R.T. -0.01 min
Lab File: RFV204.D
Acq: 21 Jun 2024 6:55 pm

Tgt Ion: 83 Resp: 4165

Ion	Ratio	Lower	Upper
83	100		
55	102.1	52.6	112.6
98	45.9	28.2	88.2

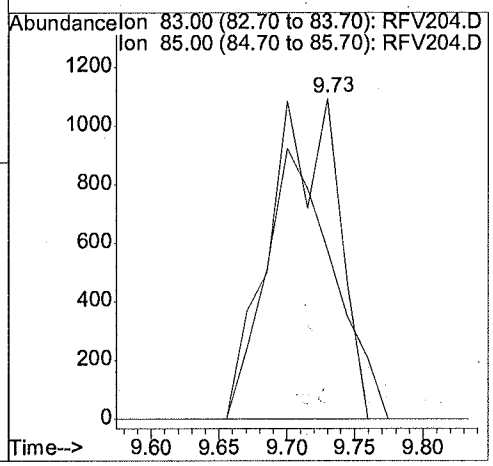


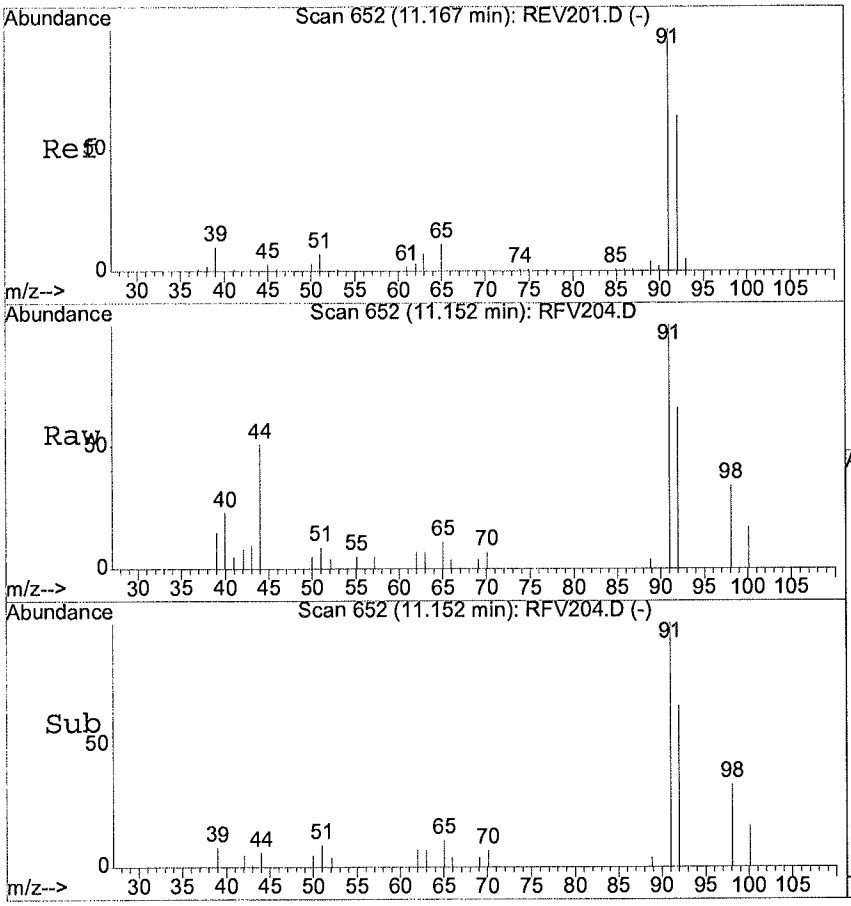


#47
Bromodichloromethane
Concen: 0.13 ug/l
RT: 9.73 min Scan# 556
Delta R.T. 0.00 min
Lab File: RFV204.D
Acq: 21 Jun 2024 6:55 pm

Tgt Ion: 83 Resp: 3759

Ion	Ratio	Lower	Upper
83	100		
85	85.1	34.1	94.1

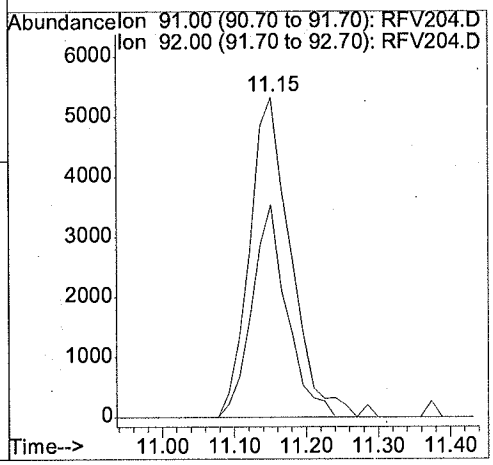


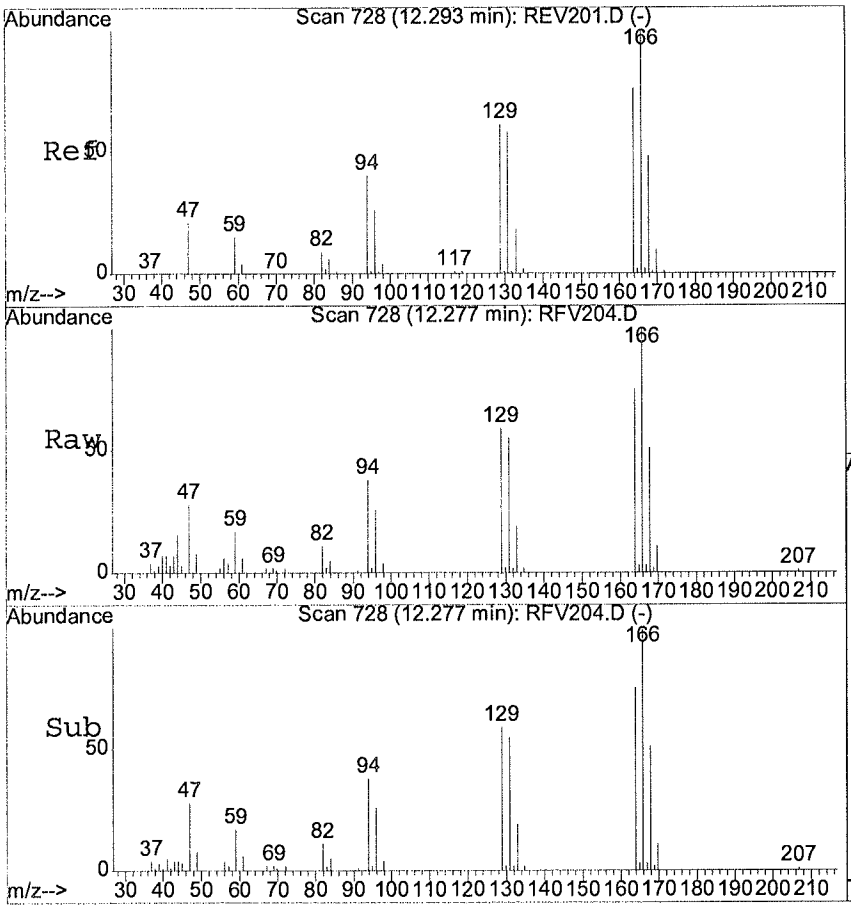


#55
Toluene
Concen: 0.21 ug/l
RT: 11.15 min Scan# 652
Delta R.T. -0.02 min
Lab File: RFV204.D
Acq: 21 Jun 2024 6:55 pm

Tgt Ion: 91 Resp: 21387

Ion	Ratio	Lower	Upper
91	100		
92	56.4	34.0	94.0

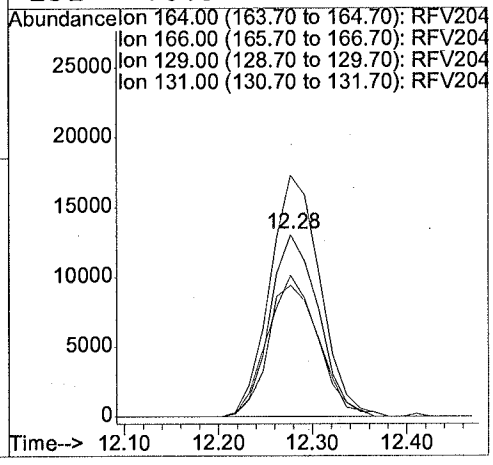




#61
Tetrachloroethene
Concen: 2.24 ug/l
RT: 12.28 min Scan# 728
Delta R.T. -0.02 min
Lab File: RFV204.D
Acq: 21 Jun 2024 6:55 pm

Tgt Ion:164 Resp: 46804

Ion	Ratio	Lower	Upper
164	100		
166	137.0	101.0	161.0
129	81.0	49.2	109.2
131	76.9	45.1	105.1



QC SUMMARIES

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	06/20/24 16:29
Project	: VA SALT LAKE CITY	Date Received:	06/20/24
Batch No.	: 24F073	Date Extracted:	06/20/24 16:29
Sample ID	: MBLK1W	Date Analyzed:	06/20/24 16:29
Lab Samp ID:	VO01F0BB	Dilution Factor:	1
Lab File ID:	RFV170	Matrix:	WATER
Ext Btch ID:	VO01F0B	% Moisture:	NA
Calib. Ref.:	REV201	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	9.83	10.0	98	70-130
Bromofluorobenzene	9.80	10.0	98	70-130
Toluene-d8	9.02	10.0	90	70-130
Dibromofluoromethane	9.67	10.0	97	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. : 24F073
METHOD : SW5030B/8260C

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR:	1	1	1
SAMPLE ID	: M8LK1W	LCS1W	LCD1W
LAB SAMPLE ID	: V001F088	V001F08L	V001F08C
LAB FILE ID	: RFV170	RFV167	RFV168
DATE PREPARED	: 06/20/24 16:29	06/20/24 14:58	06/20/24 15:29
DATE ANALYZED	: 06/20/24 16:29	06/20/24 14:58	06/20/24 15:29
PREP BATCH	: V001F08	V001F08	V001F08
CALIBRATION REF:	REV201	REV201	REV201

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	10.4	104	10.0	10.2	102	2	74-131	20
1,1,2,2-Tetrachloroethane	ND	10.0	8.88	89	10.0	8.88	89	0	71-121	20
1,1,2-Trichloroethane	ND	10.0	10.0	100	10.0	9.99	100	0	80-119	20
1,1-Dichloroethane	ND	10.0	9.18	92	10.0	9.40	94	2	77-125	20
1,1-Dichloroethene	ND	10.0	8.92	89	10.0	8.91	89	0	71-131	20
1,2,3-Trichlorobenzene	ND	10.0	9.97	100	10.0	10.5	105	5	69-129	20
1,2,4-Trichlorobenzene	ND	10.0	9.83	98	10.0	10.1	101	3	69-130	20
1,2,4-Trimethylbenzene	ND	10.0	9.22	92	10.0	9.64	96	4	76-124	20
1,2-Dibromo-3-chloropropane	ND	10.0	9.46	95	10.0	9.58	96	1	62-138	20
1,2-Dichlorobenzene	ND	10.0	9.90	99	10.0	10.1	101	2	80-119	20
1,2-Dichloroethane	ND	10.0	10.2	102	10.0	10.0	100	2	73-128	20
1,2-Dichloropropane	ND	10.0	9.08	91	10.0	9.08	91	0	78-122	20
1,3,5-Trimethylbenzene	ND	10.0	9.28	93	10.0	9.69	97	4	75-124	20
1,3-Dichlorobenzene	ND	10.0	9.72	97	10.0	9.91	99	2	80-119	20
1,4-Dichlorobenzene	ND	10.0	9.87	99	10.0	9.88	99	0	79-118	20
2-Butanone	ND	50.0	50.2	100	50.0	48.1	96	4	56-143	20
2-Hexanone	ND	50.0	49.4	99	50.0	49.2	98	0	57-139	20
Acetone	ND	50.0	50.4	101	50.0	47.5	95	6	39-160	20
Benzene	ND	10.0	9.34	93	10.0	9.35	94	0	79-120	20
Bromochloromethane	ND	10.0	8.96	90	10.0	8.57	86	4	78-120	20
Bromodichloromethane	ND	10.0	9.01	90	10.0	9.12	91	1	79-125	20
Bromoform	ND	10.0	8.94	89	10.0	9.04	90	1	66-130	20
Bromomethane	ND	10.0	8.58	86	10.0	7.75	78	10	53-141	20
Carbon Disulfide	ND	10.0	11.2	112	10.0	11.5	115	3	64-133	20
Carbon Tetrachloride	ND	10.0	10.3	103	10.0	10.3	103	0	72-136	20
Chlorobenzene	ND	10.0	9.89	99	10.0	10.1	101	2	82-118	20
Chloroethane	ND	10.0	10.4	104	10.0	9.85	99	5	60-138	20
Chloroform	ND	10.0	9.15	92	10.0	9.07	91	1	79-124	20
Chloromethane	ND	10.0	7.80	78	10.0	7.25	73	7	50-139	20
cis-1,2-Dichloroethylene	ND	10.0	9.50	95	10.0	9.34	93	2	78-123	20
Dibromochloromethane	ND	10.0	9.32	93	10.0	9.53	95	2	74-126	20
Dichlorodifluoromethane	ND	10.0	11.1	111	10.0	9.99	100	11	32-152	20
Ethylbenzene	ND	10.0	10.2	102	10.0	10.3	103	1	79-121	20
Isopropylbenzene	ND	10.0	9.65	97	10.0	10.1	101	5	72-131	20
m,p-Xylene	ND	20.0	20.7	104	20.0	21.3	107	3	80-121	20
4-Methyl-2-Pentanone	ND	50.0	46.9	94	50.0	45.0	90	4	67-130	20
Methylene Chloride	ND	10.0	8.54	85	10.0	8.33	83	2	74-124	20
tert-Butyl Methyl Ether	ND	10.0	10.3	103	10.0	10.2	102	1	71-124	20
o-Xylene	ND	10.0	10.0	100	10.0	10.2	102	2	78-122	20
Styrene	ND	10.0	9.74	97	10.0	10.1	101	4	78-123	20
Tetrachloroethene	ND	10.0	10.1	101	10.0	10.1	101	0	74-129	20
Toluene	ND	10.0	9.74	97	10.0	9.94	99	2	80-121	20
Trans-1,2-DCE	ND	10.0	8.88	89	10.0	8.74	87	2	75-124	20
cis-1,3-Dichloropropene	ND	10.0	9.48	95	10.0	9.53	95	1	75-124	20
Trans-1,3-Dichloropropene	ND	10.0	10.3	103	10.0	10.3	103	0	73-127	20
TCE	ND	10.0	9.60	96	10.0	9.80	98	2	79-123	20
Trichlorofluoromethane	ND	10.0	11.7	117	10.0	10.3	103	13	65-141	20
Vinyl Chloride	ND	10.0	9.31	93	10.0	8.82	88	5	58-137	20
1,2-Dibromoethane	ND	10.0	8.96	90	10.0	9.18	92	2	77-121	20
Vinyl Acetate	ND	10.0	10.3	103	10.0	9.67	97	6	54-146	20
Trichlorotrifluoroethane	ND	10.0	11.4	114	10.0	11.1	111	3	70-136	20
Methyl Acetate	ND	10.0	15.1	151*	10.0	14.5	145*	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	9.82	98	10.0	9.36	94	70-130
Bromofluorobenzene	10.0	9.35	94	10.0	9.33	93	70-130
Toluene-d8	10.0	10.0	100	10.0	10.4	104	70-130
Dibromofluoromethane	10.0	9.57	96	10.0	9.17	92	70-130

M8: 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:	06/21/24 13:22
Project	: VA SALT LAKE CITY	Date Received:	06/21/24
Batch No.	: 24F073	Date Extracted:	06/21/24 13:22
Sample ID	: MBLK2W	Date Analyzed:	06/21/24 13:22
Lab Samp ID:	VO01F09B	Dilution Factor:	1
Lab File ID:	RFV193	Matrix:	WATER
Ext Btch ID:	VO01F09	% Moisture:	NA
Calib. Ref.:	REV201	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
8romomethane	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	9.52	10.0	95	70-130
Toluene-d8	10.7	10.0	107	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.

EMAX QUALITY CONTROL DATA
LAB CONTROL SAMPLE ANALYSIS

CLIENT : CDM SMITH
PROJECT : VA SALT LAKE CITY
BATCH NO. : 24F073
METHOD : SW5030B/8260C

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: MBLK2W	LCS2W	LCD2W
LAB SAMPLE ID	: V001F09B	V001F09L	V001F09C
LAB FILE ID	: RFV193	RFV190	RFV191
DATE PREPARED	: 06/21/24 13:22	06/21/24 11:52	06/21/24 12:22
DATE ANALYZED	: 06/21/24 13:22	06/21/24 11:52	06/21/24 12:22
PREP BATCH	: V001F09	V001F09	V001F09
CALIBRATION REF	: REV201	REV201	REV201

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	10.5	105	10.0	10.7	107	2	74-131	20
1,1,2,2-Tetrachloroethane	ND	10.0	8.94	89	10.0	8.86	89	1	71-121	20
1,1,2-Trichloroethane	ND	10.0	9.97	100	10.0	9.91	99	1	80-119	20
1,1-Dichloroethane	ND	10.0	9.33	93	10.0	9.80	98	5	77-125	20
1,1-Dichloroethene	ND	10.0	9.07	91	10.0	9.43	94	4	71-131	20
1,2,3-Trichlorobenzene	ND	10.0	10.1	101	10.0	10.2	102	1	69-129	20
1,2,4-Trichlorobenzene	ND	10.0	9.95	100	10.0	10.1	101	1	69-130	20
1,2,4-Trimethylbenzene	ND	10.0	9.43	94	10.0	9.76	98	3	76-124	20
1,2-Dibromo-3-chloropropane	ND	10.0	8.88	89	10.0	9.26	93	4	62-138	20
1,2-Dichlorobenzene	ND	10.0	10.1	101	10.0	10.4	104	3	80-119	20
1,2-Dichloroethane	ND	10.0	10.6	106	10.0	10.2	102	4	73-128	20
1,2-Dichloropropane	ND	10.0	9.20	92	10.0	9.63	96	5	78-122	20
1,3,5-Trimethylbenzene	ND	10.0	9.46	95	10.0	9.97	100	5	75-124	20
1,3-Dichlorobenzene	ND	10.0	9.79	98	10.0	10.3	103	5	80-119	20
1,4-Dichlorobenzene	ND	10.0	9.90	99	10.0	10.0	100	1	79-118	20
2-Butanone	ND	50.0	48.7	97	50.0	46.1	92	5	56-143	20
2-Hexanone	ND	50.0	49.1	98	50.0	46.8	94	5	57-139	20
Acetone	ND	50.0	49.7	99	50.0	48.7	97	2	39-160	20
Benzene	ND	10.0	9.49	95	10.0	9.47	95	0	79-120	20
Bromochloromethane	ND	10.0	8.97	90	10.0	8.91	89	1	78-120	20
Bromodichloromethane	ND	10.0	9.48	95	10.0	9.33	93	2	79-125	20
Bromoform	ND	10.0	9.15	92	10.0	9.05	91	1	66-130	20
Bromomethane	ND	10.0	7.03	70	10.0	9.43	94	29*	53-141	20
Carbon Disulfide	ND	10.0	10.6	106	10.0	12.0	120	12	64-133	20
Carbon Tetrachloride	ND	10.0	10.7	107	10.0	10.8	108	1	72-136	20
Chlorobenzene	ND	10.0	10.1	101	10.0	10.3	103	2	82-118	20
Chloroethane	ND	10.0	10.5	105	10.0	11.7	117	11	60-138	20
Chloroform	ND	10.0	9.41	94	10.0	9.44	94	0	79-124	20
Chloromethane	ND	10.0	8.04	80	10.0	8.55	86	6	50-139	20
cis-1,2-Dichloroethylene	ND	10.0	9.39	94	10.0	9.66	97	3	78-123	20
Dibromochloromethane	ND	10.0	9.73	97	10.0	9.63	96	1	74-126	20
Dichlorodifluoromethane	ND	10.0	12.4	124	10.0	13.8	138	11	32-152	20
Ethylbenzene	ND	10.0	10.3	103	10.0	10.6	106	3	79-121	20
Isopropylbenzene	ND	10.0	10.2	102	10.0	10.2	102	0	72-131	20
m,p-Xylene	ND	20.0	21.3	107	20.0	21.5	108	1	80-121	20
4-Methyl-2-Pentanone	ND	50.0	47.5	95	50.0	46.1	92	3	67-130	20
Methylene Chloride	ND	10.0	8.59	86	10.0	8.72	87	2	74-124	20
tert-Butyl Methyl Ether	ND	10.0	10.6	106	10.0	10.1	101	5	71-124	20
o-Xylene	ND	10.0	10.3	103	10.0	10.2	102	1	78-122	20
Styrene	ND	10.0	9.90	99	10.0	10.1	101	2	78-123	20
Tetrachloroethene	ND	10.0	10.3	103	10.0	10.2	102	1	74-129	20
Toluene	ND	10.0	9.96	100	10.0	10.1	101	1	80-121	20
Trans-1,2-DCE	ND	10.0	8.91	89	10.0	9.11	91	2	75-124	20
cis-1,3-Dichloropropene	ND	10.0	9.85	99	10.0	9.98	100	1	75-124	20
Trans-1,3-Dichloropropene	ND	10.0	10.7	107	10.0	10.5	105	2	73-127	20
TCE	ND	10.0	9.88	99	10.0	10.2	102	3	79-123	20
Trichlorofluoromethane	ND	10.0	12.3	123	10.0	13.7	137	11	65-141	20
Vinyl Chloride	ND	10.0	9.79	98	10.0	10.3	103	5	58-137	20
1,2-Dibromoethane	ND	10.0	9.01	90	10.0	8.92	89	1	77-121	20
Vinyl Acetate	ND	10.0	10.5	105	10.0	10.7	107	2	54-146	20
Trichlorotrifluoroethane	ND	10.0	11.5	115	10.0	11.6	116	1	70-136	20
Methyl Acetate	ND	10.0	14.9	149*	10.0	14.1	141*	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	10.0	100	10.0	9.55	96	70-130
Bromofluorobenzene	10.0	9.55	96	10.0	9.65	97	70-130
Toluene-d8	10.0	9.17	92	10.0	10.6	106	70-130
Dibromofluoromethane	10.0	9.38	94	10.0	9.62	96	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\24F20\RFV170.D Vial: 6
Acq On : 20 Jun 2024 4:29 pm Operator: DNguye
Sample : VO01F08B Inst : 01New
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 21 12:59 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.52	114	829745	10.00	ug/l	-0.03
53) CHLOROBENZENE-D5	13.68	117	672653	10.00	ug/l	-0.03
72) 1,2-DICHLOROBENZENE-D4	18.66	152	259390	10.00	ug/l	-0.02
System Monitoring Compounds						
34) Dibromofluoromethane	7.20	111	248397	9.67	ug/l	-0.03
Spiked Amount 10.000			Recovery = 96.70%			
41) 1,2-Dichloroethane-d4	7.94	65	172106	9.83	ug/l	-0.03
Spiked Amount 10.000			Recovery = 98.30%			
54) Toluene-d8	11.00	98	908948	9.02	ug/l	-0.03
Spiked Amount 10.000			Recovery = 90.20%			
76) 4-Bromofluorobenzene	15.98	95	346316	9.80	ug/l	-0.03
Spiked Amount 10.000			Recovery = 98.00%			

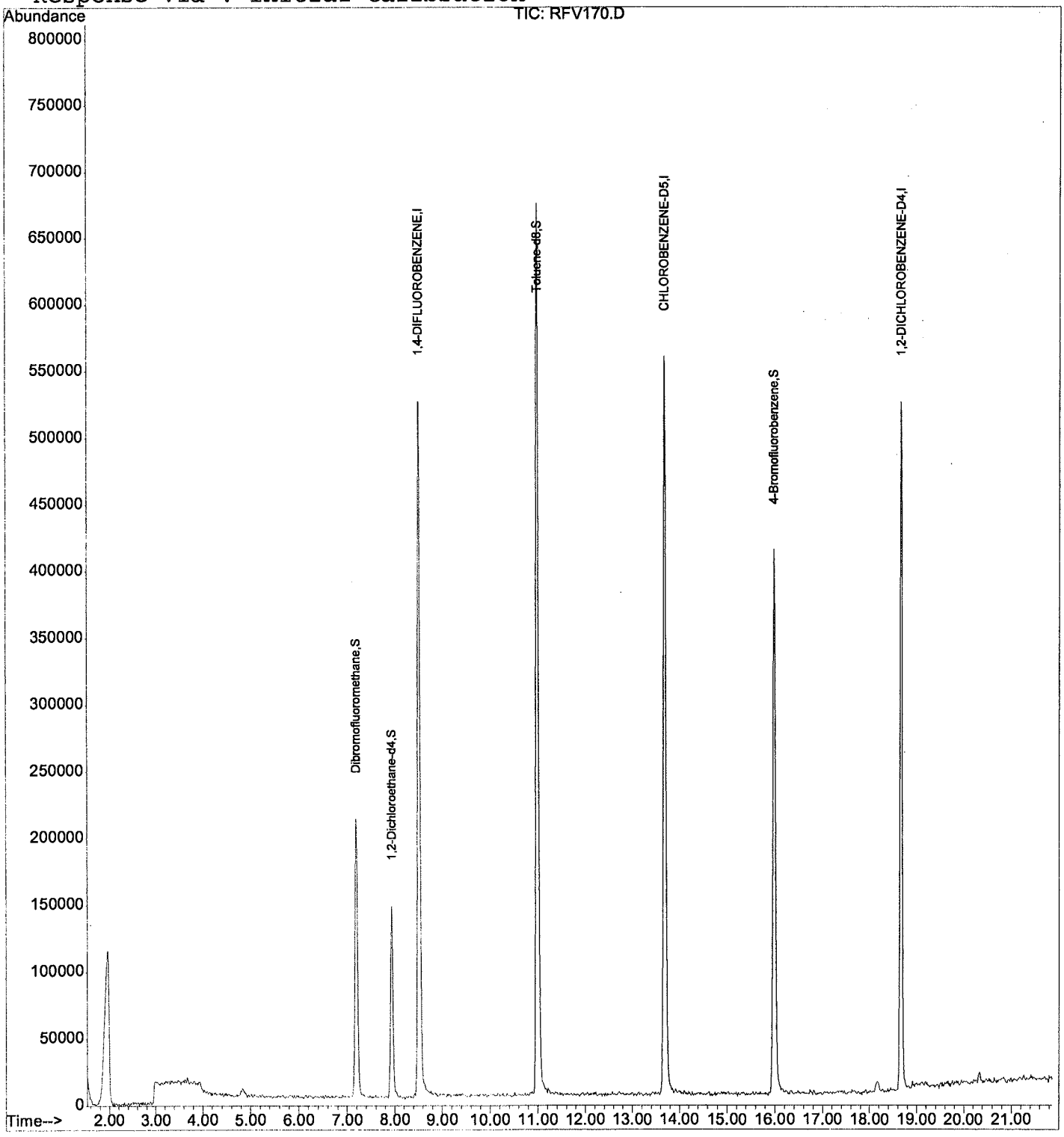
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F20\RFV170.D Vial: 6
Acq On : 20 Jun 2024 4:29 pm Operator: DNguye
Sample : VO01F08B Inst : 01New
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 21 12:59 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F20\RFV167.D Vial: 3
Acq On : 20 Jun 2024 2:58 pm Operator: DNguye
Sample : VO01F08L Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 15:20 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.52	114	875284	10.00	ug/l	-0.03
53) CHLOROBENZENE-D5	13.68	117	704189	10.00	ug/l	-0.03
72) 1,2-DICHLOROBENZENE-D4	18.66	152	279237	10.00	ug/l	-0.02
System Monitoring Compounds						
34) Dibromofluoromethane	7.20	111	259228	9.57	ug/l	-0.03
Spiked Amount 10.000			Recovery =	95.70%		
41) 1,2-Dichloroethane-d4	7.92	65	181519	9.82	ug/l	-0.05
Spiked Amount 10.000			Recovery =	98.20%		
54) Toluene-d8	10.99	98	1056045	10.01	ug/l	-0.04
Spiked Amount 10.000			Recovery =	100.10%		
76) 4-Bromofluorobenzene	15.98	95	355466	9.35	ug/l	-0.03
Spiked Amount 10.000			Recovery =	93.50%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.16	85	260051	11.10	ug/l	99
5) Chloromethane	2.46	50	255875	7.80	ug/l	99
6) Vinyl chloride	2.60	62	254132	9.31	ug/l	98
7) Bromomethane	3.14	94	278722	8.58	ug/l	93
8) Chloroethane	3.17	64	206168	10.41	ug/l	98
9) Dichlorofluoromethane	3.27	67	461937	8.21	ug/l	99
10) Trichlorofluoromethane	3.52	101	434092	11.75	ug/l	96
11) Acrolein	3.95	56	75668	38.49	ug/l	95
12) 1,1,2-Trichloro-1,2,2-trif	4.06	151	209754	11.36	ug/l	97
13) Acetone	4.03	43	161032	50.40	ug/l	94
14) 1,1-Dichloroethene	4.21	61	416297	8.92	ug/l	98
15) tert-Butyl alcohol	4.29	59	272083	279.24	ug/l	98
16) Iodomethane	4.61	142	427216	8.54	ug/l	100
17) Methyl acetate	4.62	43	131917	15.14	ug/l	98
18) Methylene chloride	4.83	49	319914	8.54	ug/l	94
19) Carbon disulfide	4.84	76	1114377	11.16	ug/l	98
20) Acrylonitrile	4.99	53	182645	45.06	ug/l	97
21) tert-Butyl methyl ether (M	5.04	73	474802	10.34	ug/l	95
22) trans-1,2-Dichloroethene	5.21	61	399194	8.88	ug/l	97
23) Isopropyl ether (DIPE)	5.64	45	894604	9.31	ug/l	98
24) Vinyl acetate	5.79	43	338146	10.25	ug/l	98
25) 1,1-Dichloroethane	5.79	63	482640	9.18	ug/l	98
27) tert-Butyl ethyl ether (ET	6.20	59	686229	9.97	ug/l	99
28) 2-Butanone	6.38	43	245885	50.16	ug/l	98
29) 2,2-Dichloropropane	6.59	77	442453	10.01	ug/l	97
30) cis-1,2-Dichloroethene	6.65	96	343766	9.50	ug/l	97
31) Chloroform	6.87	83	490477	9.15	ug/l	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F20\RFV167.D Vial: 3
Acq On : 20 Jun 2024 2:58 pm Operator: DNguye
Sample : VO01F08L Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 15:20 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) Bromochloromethane	7.12	49	188684	8.96 ug/l	97
33) Tetrahydrofuran	7.17	42	27111	8.74 ug/l	96
35) 1,1,1-Trichloroethane	7.46	97	465124	10.37 ug/l	99
36) Cyclohexane	7.48	84	577466	13.22 ug/l	97
38) 1,1-Dichloropropene	7.69	110	145725	9.56 ug/l	100
39) Carbon tetrachloride	7.85	119	344300	10.31 ug/l	98
40) tert-Amyl methyl ether (TA	7.86	73	523628	9.77 ug/l	100
42) Benzene	8.10	78	1092233	9.34 ug/l	98
43) 1,2-Dichloroethane	8.07	62	240709	10.21 ug/l	97
44) Trichloroethene	9.03	130	290460	9.60 ug/l	97
45) Methylcyclohexane	9.14	83	668830	13.92 ug/l	97
46) 1,2-Dichloropropane	9.32	63	237661	9.08 ug/l	94
47) Bromodichloromethane	9.70	83	327342	9.01 ug/l	96
48) 1,4-Dioxane	9.74	88	20573	192.07 ug/l	96
49) Dibromomethane	9.79	93	112302	9.10 ug/l	97
50) 2-Chloroethyl vinyl ether	10.20	63	40919	6.16 ug/l	96
51) 4-Methyl-2-pentanone	10.23	43	604198	46.88 ug/l	99
52) cis-1,3-Dichloropropene	10.59	75	385794	9.48 ug/l	100
55) Toluene	11.14	91	1217931	9.74 ug/l	98
56) Ethyl methacrylate	11.43	69	192367	10.25 ug/l	99
57) trans-1,3-Dichloropropene	11.45	75	300759	10.35 ug/l	99
58) 1,1,2-Trichloroethane	11.71	97	163791	10.00 ug/l	93
59) 2-Hexanone	11.73	43	368133	49.37 ug/l	97
60) 1,3-Dichloropropane	12.16	76	272512	9.81 ug/l	98
61) Tetrachloroethene	12.28	164	261541	10.06 ug/l	99
62) Dibromochloromethane	12.63	129	186228	9.32 ug/l	98
63) 1,2-Dibromoethane	13.00	107	145177	8.96 ug/l	98
64) 1-Chlorohexane	13.28	91	528545	9.79 ug/l	100
65) Chlorobenzene	13.76	112	737261	9.89 ug/l	99
66) 1,1,1,2-Tetrachloroethane	13.83	131	236522	10.30 ug/l	95
67) Ethylbenzene	13.85	91	1450622	10.16 ug/l	99
68) m-Xylene & p-Xylene	13.99	91	2164607	20.72 ug/l	98
69) o-Xylene	14.81	91	1076783	10.01 ug/l	98
70) Styrene	14.88	104	811640	9.74 ug/l	98
71) Isopropylbenzene	15.49	105	1366863	9.65 ug/l	98
73) Bromoform	15.53	173	98299	8.94 ug/l	97
74) trans-1,4-Dichloro-2-buten	15.61	53	47229	9.80 ug/l	96
75) 1,1,2,2-Tetrachloroethane	15.83	83	165121	8.88 ug/l	100
77) 1,2,3-Trichloropropane	16.13	110	45497	9.57 ug/l	98
78) n-Propylbenzene	16.26	91	1757412	9.68 ug/l	100
79) Bromobenzene	16.35	156	262790	9.15 ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F20\RFV167.D Vial: 3
Acq On : 20 Jun 2024 2:58 pm Operator: DNguye
Sample : VO01F08L Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 15:20 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

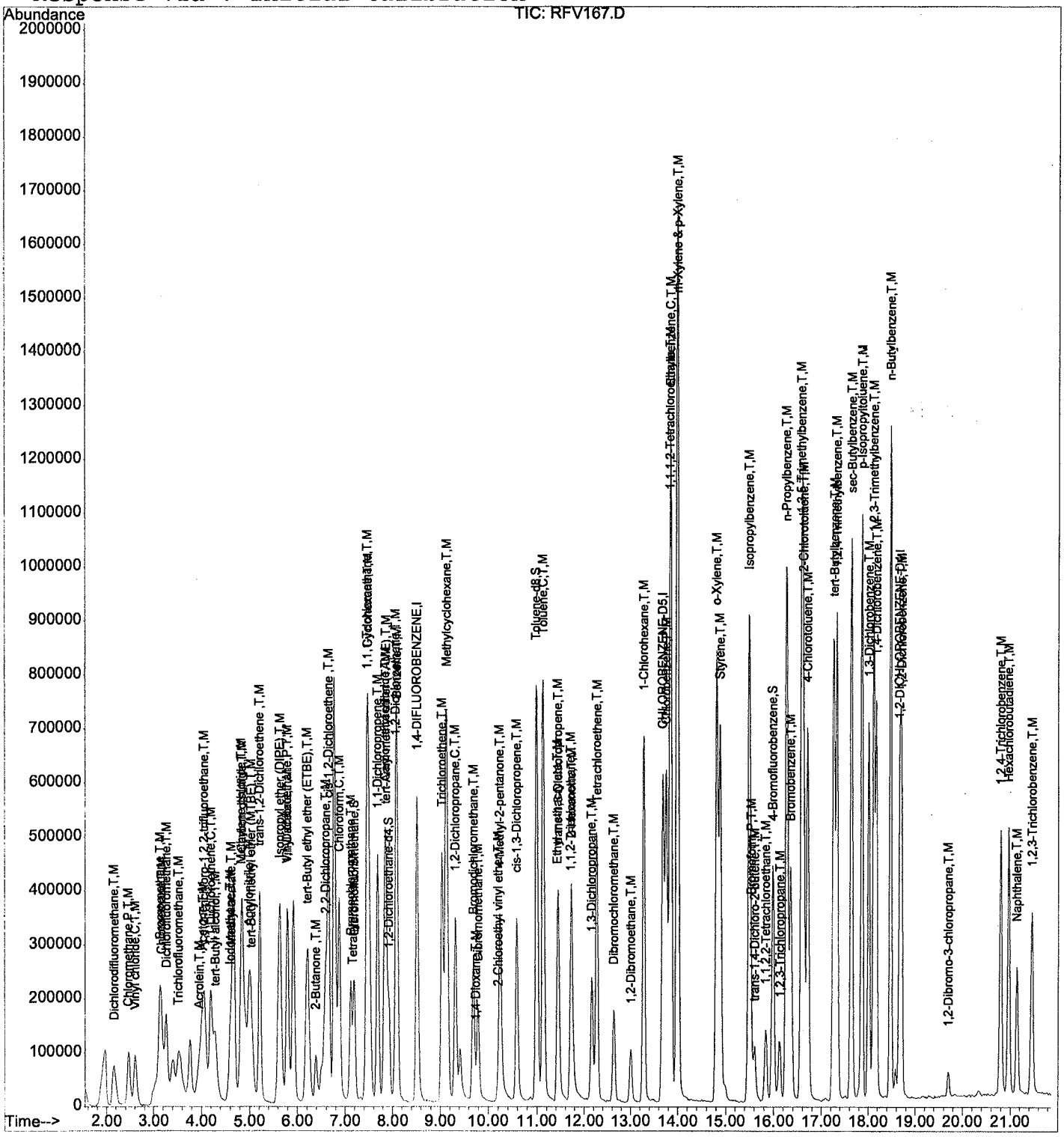
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.57	105	1077073	9.28	ug/l	98
81)	2-Chlorotoluene	16.62	91	1080673	9.89	ug/l	98
82)	4-Chlorotoluene	16.70	91	941361	9.73	ug/l	98
83)	tert-Butylbenzene	17.27	134	232432	9.55	ug/l	99
84)	1,2,4-Trimethylbenzene	17.33	105	1046878	9.22	ug/l	96
85)	sec-Butylbenzene	17.64	105	1528007	9.58	ug/l	100
86)	p-Isopropyltoluene	17.86	119	1226859	9.98	ug/l	98
87)	1,3-Dichlorobenzene	18.01	146	530472	9.72	ug/l	98
88)	1,2,3-Trimethylbenzene	18.11	105	1001412	9.45	ug/l	99
89)	1,4-Dichlorobenzene	18.17	146	528200	9.87	ug/l	98
90)	n-Butylbenzene	18.47	91	1278906	10.04	ug/l	98
91)	1,2-Dichlorobenzene	18.70	146	442616	9.90	ug/l	98
92)	1,2-Dibromo-3-chloropropan	19.70	157	26955	9.46	ug/l	97
93)	1,2,4-Trichlorobenzene	20.79	180	320936	9.83	ug/l	96
94)	Hexachlorobutadiene	20.95	225	176504	9.07	ug/l	93
95)	Naphthalene	21.13	128	388002	10.18	ug/l	98
96)	1,2,3-Trichlorobenzene	21.46	180	245190	9.97	ug/l	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F20\RFV167.D Vial: 3
Acq On : 20 Jun 2024 2:58 pm Operator: DNguye
Sample : VO01F08L Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 15:20 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F20\RFV168.D Vial: 4
Acq On : 20 Jun 2024 3:29 pm Operator: DNguye
Sample : VO01F08C Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 15:51 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.52	114	869305	10.00	ug/l	-0.03
53) CHLOROBENZENE-D5	13.68	117	682917	10.00	ug/l	-0.03
72) 1,2-DICHLOROBENZENE-D4	18.66	152	269865	10.00	ug/l	-0.02
System Monitoring Compounds						
34) Dibromofluoromethane	7.20	111	246649	9.17	ug/l	-0.03
Spiked Amount 10.000			Recovery = 91.70%			
41) 1,2-Dichloroethane-d4	7.94	65	171842	9.36	ug/l	-0.03
Spiked Amount 10.000			Recovery = 93.60%			
54) Toluene-d8	11.00	98	1062803	10.38	ug/l	-0.03
Spiked Amount 10.000			Recovery = 103.80%			
76) 4-Bromofluorobenzene	15.98	95	342908	9.33	ug/l	-0.03
Spiked Amount 10.000			Recovery = 93.30%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.16	85	232286	9.99	ug/l	98
5) Chloromethane	2.47	50	236077	7.25	ug/l	100
6) Vinyl chloride	2.60	62	239197	8.82	ug/l	99
7) Bromomethane	3.15	94	250586	7.75	ug/l	100
8) Chloroethane	3.17	64	193772	9.85	ug/l	97
9) Dichlorofluoromethane	3.27	67	462694	8.28	ug/l	84
10) Trichlorofluoromethane	3.55	101	379427	10.34	ug/l	98
11) Acrolein	3.95	56	72551	37.16	ug/l	95
12) 1,1,2-Trichloro-1,2,2-trif	4.06	151	203289	11.09	ug/l	97
13) Acetone	4.03	43	150682	47.49	ug/l	93
14) 1,1-Dichloroethene	4.20	61	412878	8.91	ug/l	97
15) tert-Butyl alcohol	4.32	59	260062	268.74	ug/l	99
16) Iodomethane	4.62	142	429042	8.63	ug/l	99
17) Methyl acetate	4.62	43	125092	14.46	ug/l	99
18) Methylene chloride	4.83	49	310030	8.33	ug/l	91
19) Carbon disulfide	4.86	76	1138728	11.49	ug/l	99
20) Acrylonitrile	5.00	53	176955	43.96	ug/l	98
21) tert-Butyl methyl ether (M	5.03	73	463224	10.16	ug/l	97
22) trans-1,2-Dichloroethene	5.23	61	390450	8.74	ug/l	96
23) Isopropyl ether (DIPE)	5.64	45	863959	9.05	ug/l	98
24) Vinyl acetate	5.80	43	316743	9.67	ug/l	100
25) 1,1-Dichloroethane	5.80	63	491210	9.40	ug/l	98
27) tert-Butyl ethyl ether (ET	6.20	59	668894	9.78	ug/l	100
28) 2-Butanone	6.40	43	234279	48.12	ug/l	99
29) 2,2-Dichloropropane	6.60	77	436778	9.94	ug/l	98
30) cis-1,2-Dichloroethene	6.66	96	335687	9.34	ug/l	97
31) Chloroform	6.88	83	482676	9.07	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F20\RFV168.D Vial: 4
Acq On : 20 Jun 2024 3:29 pm Operator: DNguye
Sample : VO01F08C Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 15:51 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32)	Bromochloromethane	7.12	49	179200	8.57 ug/l	95
33)	Tetrahydrofuran	7.17	42	28099	9.12 ug/l	94
35)	1,1,1-Trichloroethane	7.48	97	455435	10.23 ug/l	99
36)	Cyclohexane	7.49	84	555700	12.81 ug/l	99
38)	1,1-Dichloropropene	7.70	110	143315	9.47 ug/l	100
39)	Carbon tetrachloride	7.85	119	342929	10.34 ug/l	99
40)	tert-Amyl methyl ether (TA	7.86	73	513878	9.66 ug/l	100
42)	Benzene	8.10	78	1085373	9.35 ug/l	98
43)	1,2-Dichloroethane	8.07	62	235299	10.05 ug/l	100
44)	Trichloroethene	9.05	130	294524	9.80 ug/l	98
45)	Methylcyclohexane	9.14	83	645864	13.53 ug/l	97
46)	1,2-Dichloropropane	9.32	63	236032	9.08 ug/l	94
47)	Bromodichloromethane	9.70	83	329089	9.12 ug/l	99
48)	1,4-Dioxane	9.76	88	19752	185.67 ug/l	90
49)	Dibromomethane	9.79	93	107659	8.78 ug/l	98
50)	2-Chloroethyl vinyl ether	10.20	63	41410	6.28 ug/l	94
51)	4-Methyl-2-pentanone	10.23	43	574858	45.02 ug/l	98
52)	cis-1,3-Dichloropropene	10.59	75	385171	9.53 ug/l	98
55)	Toluene	11.14	91	1205463	9.94 ug/l	98
56)	Ethyl methacrylate	11.43	69	179150	9.84 ug/l	95
57)	trans-1,3-Dichloropropene	11.45	75	291357	10.34 ug/l	100
58)	1,1,2-Trichloroethane	11.71	97	158619	9.99 ug/l	94
59)	2-Hexanone	11.74	43	355364	49.16 ug/l	98
60)	1,3-Dichloropropane	12.16	76	264615	9.82 ug/l	97
61)	Tetrachloroethene	12.26	164	253469	10.05 ug/l	99
62)	Dibromochloromethane	12.63	129	184766	9.53 ug/l	100
63)	1,2-Dibromoethane	13.00	107	144142	9.18 ug/l	98
64)	1-Chlorohexane	13.28	91	525560	10.04 ug/l	99
65)	Chlorobenzene	13.76	112	733203	10.14 ug/l	97
66)	1,1,1,2-Tetrachloroethane	13.83	131	235039	10.55 ug/l	95
67)	Ethylbenzene	13.85	91	1431125	10.34 ug/l	99
68)	m-Xylene & p-Xylene	14.00	91	2161056	21.33 ug/l	96
69)	o-Xylene	14.81	91	1059328	10.16 ug/l	98
70)	Styrene	14.88	104	814734	10.08 ug/l	98
71)	Isopropylbenzene	15.49	105	1383137	10.07 ug/l	99
73)	Bromoform	15.54	173	96115	9.04 ug/l	96
74)	trans-1,4-Dichloro-2-buten	15.61	53	44471	9.55 ug/l	94
75)	1,1,2,2-Tetrachloroethane	15.83	83	159586	8.88 ug/l	97
77)	1,2,3-Trichloropropane	16.13	110	44808	9.75 ug/l	98
78)	n-Propylbenzene	16.26	91	1734572	9.89 ug/l	100
79)	Bromobenzene	16.35	156	258815	9.32 ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F20\RFV168.D Vial: 4
Acq On : 20 Jun 2024 3:29 pm Operator: DNguye
Sample : VO01F08C Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 15:51 2024 Quant Results File: VO01E11.RES

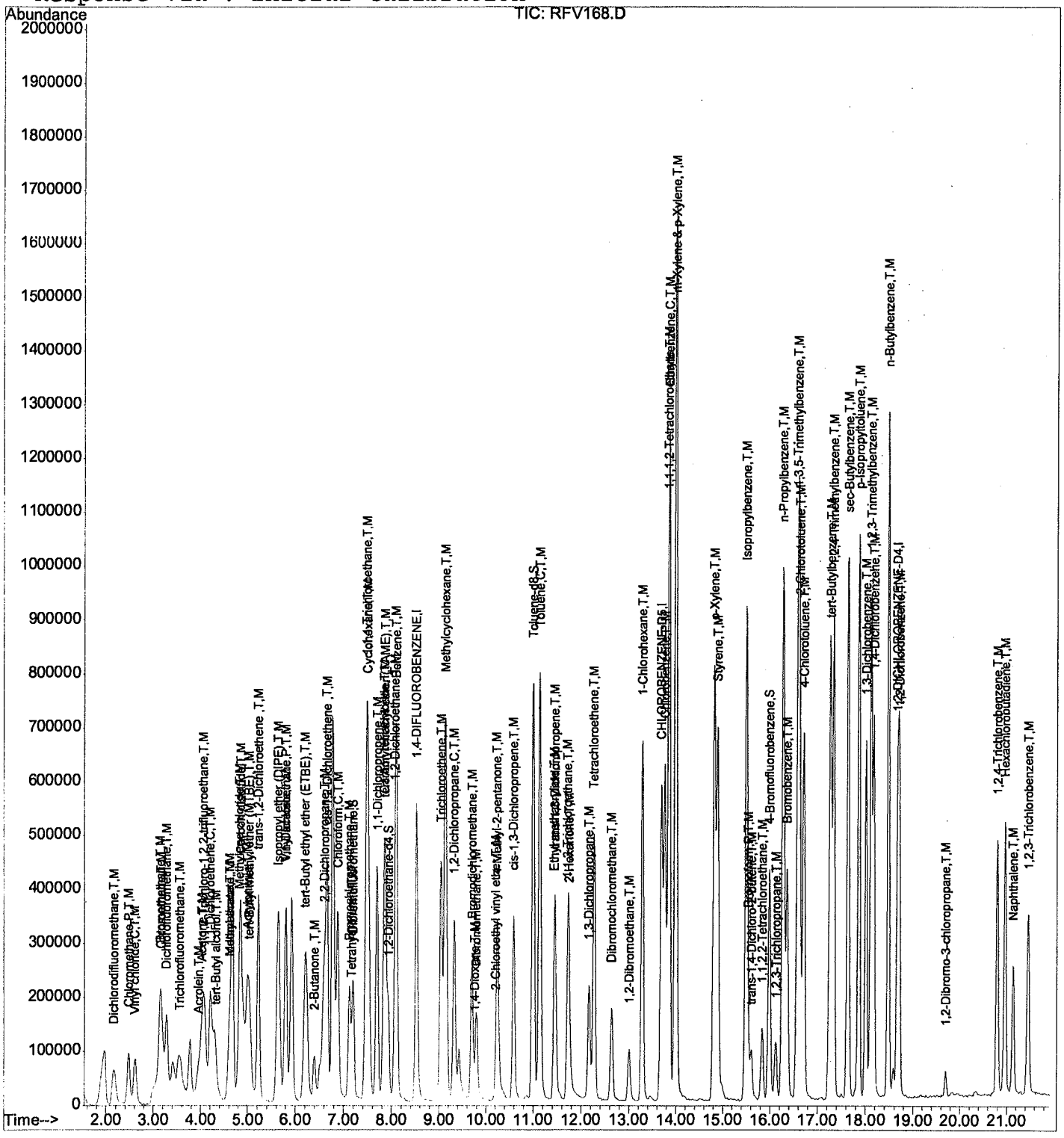
Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.57	105	1085953	9.69	ug/l	98
81)	2-Chlorotoluene	16.62	91	1100143	10.41	ug/l	97
82)	4-Chlorotoluene	16.71	91	894341	9.56	ug/l	98
83)	tert-Butylbenzene	17.27	134	226860	9.65	ug/l	93
84)	1,2,4-Trimethylbenzene	17.33	105	1057758	9.64	ug/l	98
85)	sec-Butylbenzene	17.64	105	1531207	9.94	ug/l	100
86)	p-Isopropyltoluene	17.86	119	1206114	10.15	ug/l	98
87)	1,3-Dichlorobenzene	18.01	146	522785	9.91	ug/l	98
88)	1,2,3-Trimethylbenzene	18.11	105	986255	9.63	ug/l	98
89)	1,4-Dichlorobenzene	18.17	146	511137	9.88	ug/l	99
90)	n-Butylbenzene	18.47	91	1273766	10.35	ug/l	97
91)	1,2-Dichlorobenzene	18.70	146	437649	10.13	ug/l	97
92)	1,2-Dibromo-3-chloropropan	19.70	157	26415	9.58	ug/l	95
93)	1,2,4-Trichlorobenzene	20.79	180	317828	10.07	ug/l	97
94)	Hexachlorobutadiene	20.96	225	179550	9.55	ug/l	96
95)	Naphthalene	21.13	128	386685	10.50	ug/l	99
96)	1,2,3-Trichlorobenzene	21.46	180	248825	10.47	ug/l	97

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24F20\RFV168.D Vial: 4
Acq On : 20 Jun 2024 3:29 pm Operator: DNguye
Sample : VO01F08C Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 15:51 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F21\RFV193.D
Acq On : 21 Jun 2024 1:22 pm
Sample : VO01F09B
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Jun 23 12:50 2024

Vial: 6
Operator: DNguye
Inst : 01New
Multiplr: 1.00
Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.53	114	780613	10.00	ug/l	-0.01
53) CHLOROBENZENE-D5	13.70	117	630338	10.00	ug/l	-0.02
72) 1,2-DICHLOROBENZENE-D4	18.67	152	250447	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.21	111	235842	9.76	ug/l	-0.02
Spiked Amount 10.000			Recovery = 97.60%			
41) 1,2-Dichloroethane-d4	7.94	65	168956	10.25	ug/l	-0.03
Spiked Amount 10.000			Recovery = 102.50%			
54) Toluene-d8	11.00	98	1012706	10.72	ug/l	-0.03
Spiked Amount 10.000			Recovery = 107.20%			
76) 4-Bromofluorobenzene	15.98	95	324683	9.52	ug/l	-0.03
Spiked Amount 10.000			Recovery = 95.20%			
Target Compounds						Qvalue
18) Methylene chloride	4.86	49	5220	0.16	ug/l	81

(#) = qualifier out of range (m) = manual integration

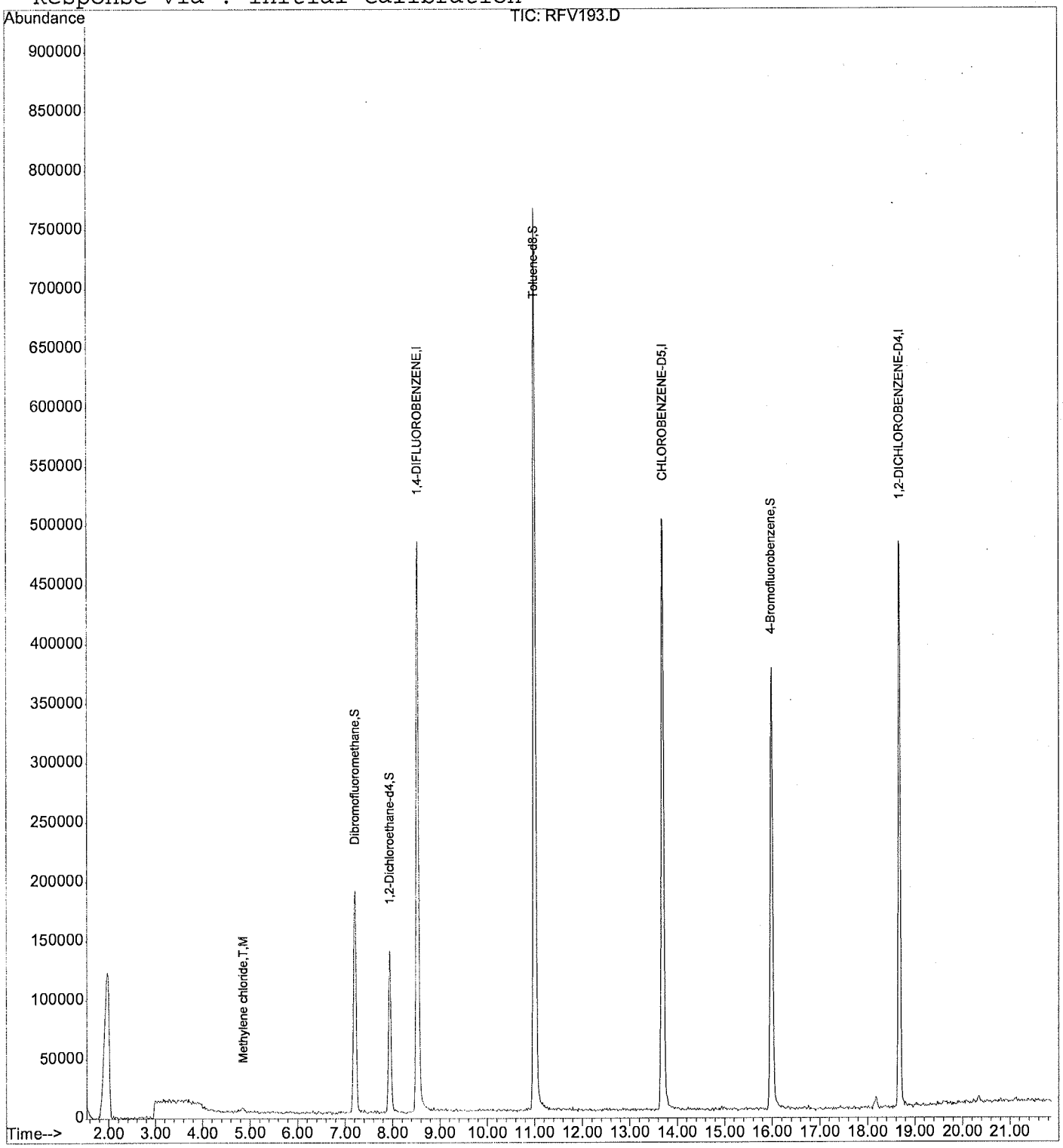
Quantitation Report

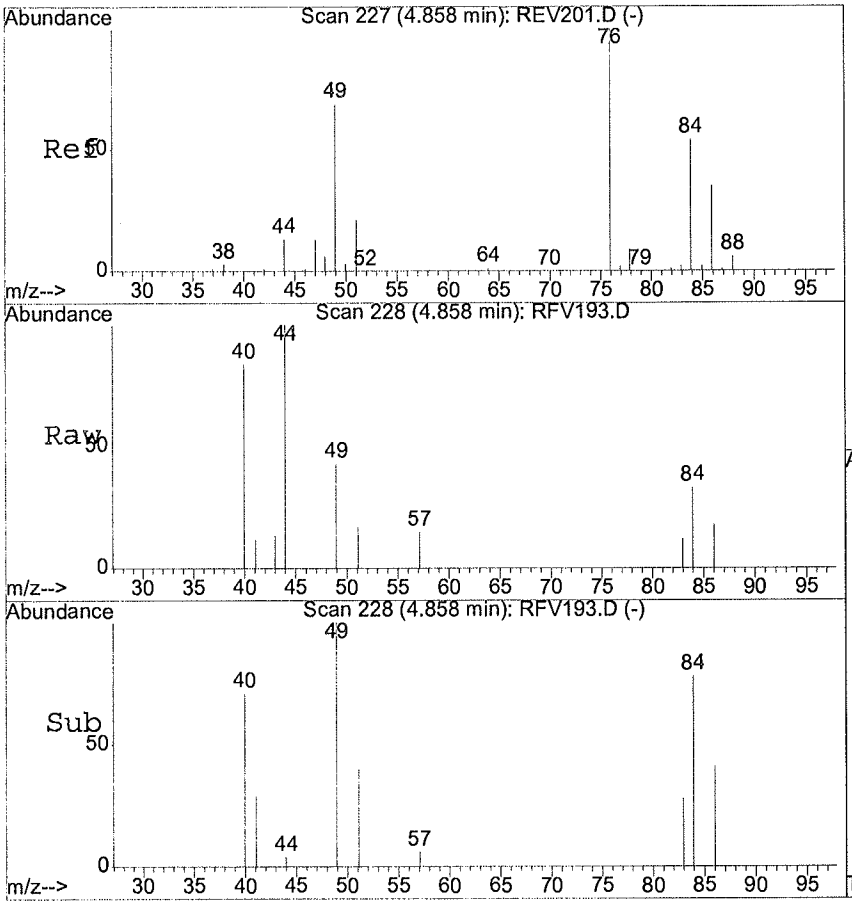
Data File : D:\HPCHEM\1\DATA\24F21\RFV193.D
Acq On : 21 Jun 2024 1:22 pm
Sample : VO01F09B
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Jun 23 12:50 2024

Vial: 6
Operator: DNguye
Inst : 01New
Multiplr: 1.00

Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration

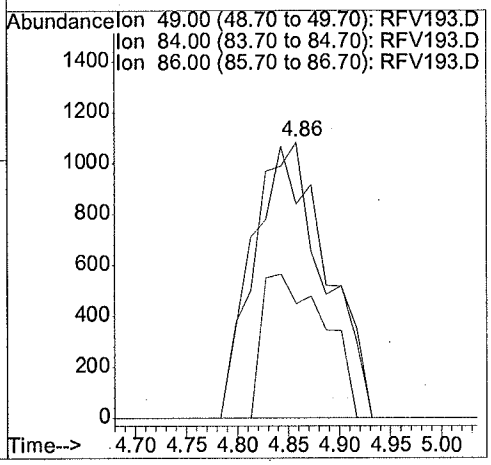




#18
Methylene chloride
Concen: 0.16 ug/l
RT: 4.86 min Scan# 228
Delta R.T. 0.00 min
Lab File: RFV193.D
Acq: 21 Jun 2024 1:22 pm

Tgt Ion: 49 Resp: 5220

Ion	Ratio	Lower	Upper
49	100		
84	103.1	49.1	109.1
86	46.5	20.8	80.8



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F21\RFV190.D Vial: 3
Acq On : 21 Jun 2024 11:52 am Operator: DNguye
Sample : VO01F09L Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 21 12:14 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.53	114	826357	10.00	ug/l	-0.02
53) CHLOROBENZENE-D5	13.68	117	662201	10.00	ug/l	-0.03
72) 1,2-DICHLOROBENZENE-D4	18.67	152	268827	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.20	111	240004	9.38	ug/l	-0.03
Spiked Amount 10.000			Recovery =	93.80%		
41) 1,2-Dichloroethane-d4	7.94	65	174751	10.02	ug/l	-0.03
Spiked Amount 10.000			Recovery =	100.20%		
54) Toluene-d8	11.00	98	909574	9.17	ug/l	-0.03
Spiked Amount 10.000			Recovery =	91.70%		
76) 4-Bromofluorobenzene	15.98	95	349804	9.55	ug/l	-0.03
Spiked Amount 10.000			Recovery =	95.50%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.17	85	273118	12.35	ug/l	98
5) Chloromethane	2.48	50	248905	8.04	ug/l	99
6) Vinyl chloride	2.62	62	252532	9.79	ug/l	99
7) Bromomethane	3.15	94	216634	7.03	ug/l	81
8) Chloroethane	3.20	64	197013	10.53	ug/l	98
9) Dichlorofluoromethane	3.29	67	454187	8.55	ug/l	85
10) Trichlorofluoromethane	3.55	101	427779	12.26	ug/l	99
11) Acrolein	3.97	56	65112	35.08	ug/l	99
12) 1,1,2-Trichloro-1,2,2-trif	4.09	151	200779	11.52	ug/l	98
13) Acetone	4.04	43	149822	49.67	ug/l	91
14) 1,1-Dichloroethene	4.21	61	399551	9.07	ug/l	100
15) tert-Butyl alcohol	4.32	59	249193	270.89	ug/l	99
16) Iodomethane	4.62	142	406971	8.61	ug/l	98
17) Methyl acetate	4.64	43	122932	14.95	ug/l	97
18) Methylene chloride	4.84	49	303906	8.59	ug/l	92
19) Carbon disulfide	4.86	76	996531	10.57	ug/l	99
20) Acrylonitrile	5.01	53	170694	44.61	ug/l	96
21) tert-Butyl methyl ether (M	5.05	73	458821	10.58	ug/l	96
22) trans-1,2-Dichloroethene	5.23	61	378500	8.91	ug/l	97
23) Isopropyl ether (DIPE)	5.64	45	845743	9.32	ug/l	98
24) Vinyl acetate	5.81	43	327506	10.52	ug/l	99
25) 1,1-Dichloroethane	5.81	63	463087	9.33	ug/l	98
27) tert-Butyl ethyl ether (ET	6.22	59	672252	10.34	ug/l	98
28) 2-Butanone	6.40	43	225248	48.67	ug/l	98
29) 2,2-Dichloropropane	6.60	77	435592	10.43	ug/l	97
30) cis-1,2-Dichloroethene	6.66	96	320923	9.39	ug/l	99
31) Chloroform	6.89	83	476085	9.41	ug/l	98

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24F21\RFV190.D Vial: 3
Acq On : 21 Jun 2024 11:52 am Operator: DNguye
Sample : VO01F09L Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 21 12:14 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.12	49	178357	8.97	ug/l	97
33)	Tetrahydrofuran	7.18	42	25990	8.88	ug/l	96
35)	1,1,1-Trichloroethane	7.48	97	443260	10.47	ug/l	100
36)	Cyclohexane	7.49	84	539450	13.08	ug/l	98
38)	1,1-Dichloropropene	7.70	110	138408	9.62	ug/l	98
39)	Carbon tetrachloride	7.85	119	336637	10.67	ug/l	97
40)	tert-Amyl methyl ether (TA	7.86	73	502771	9.94	ug/l	97
42)	Benzene	8.10	78	1048126	9.49	ug/l	98
43)	1,2-Dichloroethane	8.09	62	235011	10.56	ug/l	98
44)	Trichloroethene	9.05	130	282213	9.88	ug/l	98
45)	Methylcyclohexane	9.14	83	655914	14.46	ug/l	95
46)	1,2-Dichloropropane	9.33	63	227229	9.20	ug/l	88
47)	Bromodichloromethane	9.70	83	325120	9.48	ug/l	98
48)	1,4-Dioxane	9.74	88	19251	190.37	ug/l	99
49)	Dibromomethane	9.79	93	113681	9.76	ug/l	94
50)	2-Chloroethyl vinyl ether	10.20	63	38895	6.20	ug/l	99
51)	4-Methyl-2-pentanone	10.25	43	578390	47.50	ug/l	98
52)	cis-1,3-Dichloropropene	10.59	75	378474	9.85	ug/l	99
55)	Toluene	11.14	91	1171031	9.96	ug/l	98
56)	Ethyl methacrylate	11.43	69	180850	10.25	ug/l	95
57)	trans-1,3-Dichloropropene	11.45	75	291568	10.67	ug/l	97
58)	1,1,2-Trichloroethane	11.73	97	153433	9.97	ug/l	97
59)	2-Hexanone	11.74	43	343958	49.08	ug/l	98
60)	1,3-Dichloropropane	12.17	76	262545	10.05	ug/l	98
61)	Tetrachloroethene	12.28	164	251878	10.30	ug/l	98
62)	Dibromochloromethane	12.65	129	182860	9.73	ug/l	97
63)	1,2-Dibromoethane	13.00	107	137206	9.01	ug/l	96
64)	1-Chlorohexane	13.28	91	507564	10.00	ug/l	100
65)	Chlorobenzene	13.76	112	709222	10.12	ug/l	99
66)	1,1,1,2-Tetrachloroethane	13.83	131	226912	10.51	ug/l	97
67)	Ethylbenzene	13.85	91	1376151	10.25	ug/l	98
68)	m-Xylene & p-Xylene	13.99	91	2089181	21.26	ug/l	97
69)	o-Xylene	14.81	91	1037248	10.26	ug/l	98
70)	Styrene	14.88	104	775761	9.90	ug/l	97
71)	Isopropylbenzene	15.49	105	1353229	10.16	ug/l	99
73)	Bromoform	15.53	173	96859	9.15	ug/l	100
74)	trans-1,4-Dichloro-2-buten	15.61	53	45640	9.84	ug/l	94
75)	1,1,2,2-Tetrachloroethane	15.83	83	160007	8.94	ug/l	98
77)	1,2,3-Trichloropropane	16.13	110	47687	10.42	ug/l	95
78)	n-Propylbenzene	16.27	91	1728070	9.89	ug/l	99
79)	Bromobenzene	16.36	156	255811	9.25	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F21\RFV190.D Vial: 3
Acq On : 21 Jun 2024 11:52 am Operator: DNguye
Sample : VO01F09L Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 21 12:14 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

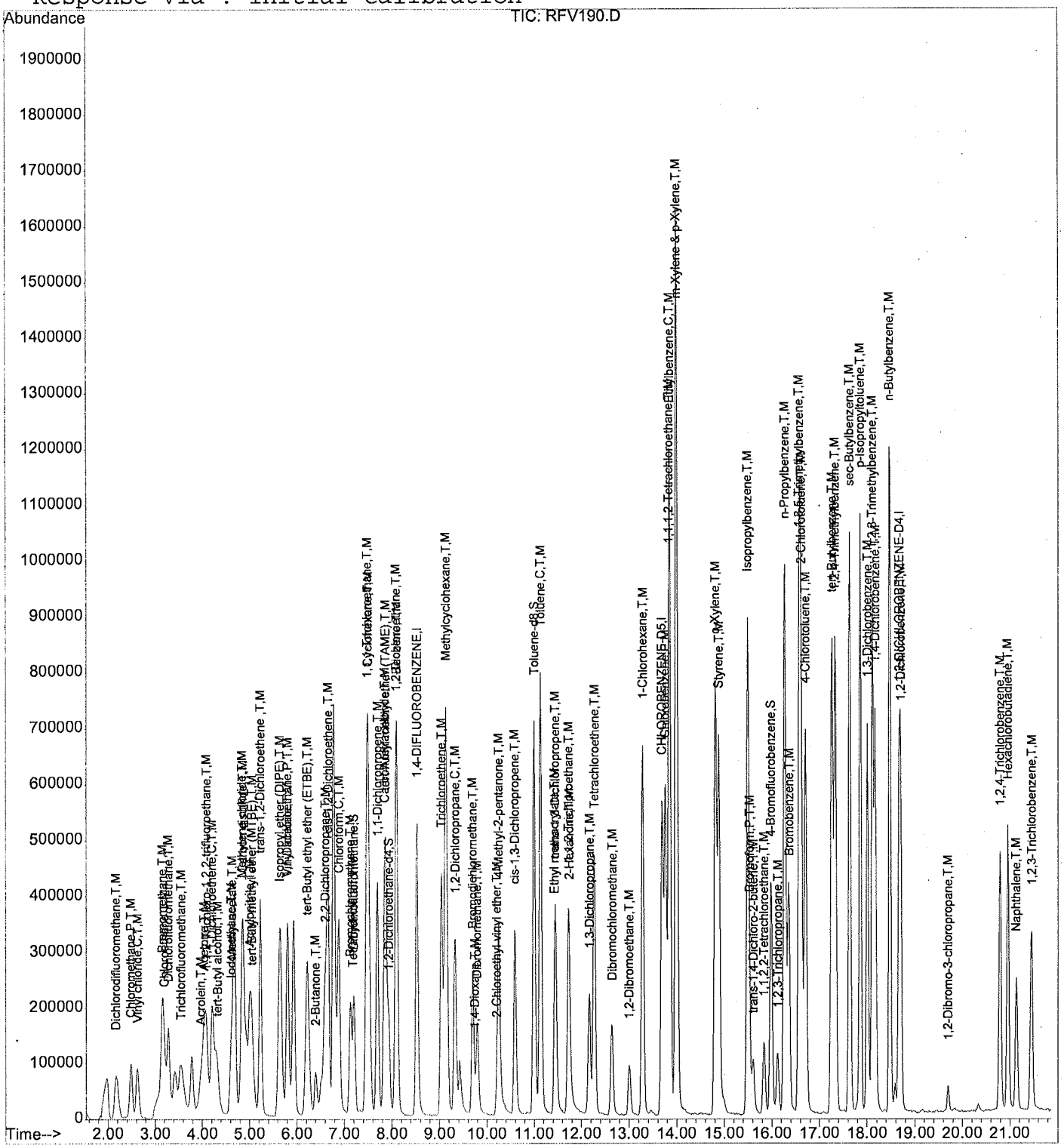
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.57	105	1056389	9.46	ug/l	99
81)	2-Chlorotoluene	16.61	91	1076422	10.23	ug/l	96
82)	4-Chlorotoluene	16.70	91	937670	10.06	ug/l	97
83)	tert-Butylbenzene	17.27	134	227476	9.71	ug/l	100
84)	1,2,4-Trimethylbenzene	17.33	105	1030744	9.43	ug/l	100
85)	sec-Butylbenzene	17.64	105	1524726	9.93	ug/l	100
86)	p-Isopropyltoluene	17.86	119	1175919	9.94	ug/l	98
87)	1,3-Dichlorobenzene	18.01	146	514320	9.79	ug/l	99
88)	1,2,3-Trimethylbenzene	18.11	105	989841	9.70	ug/l	99
89)	1,4-Dichlorobenzene	18.17	146	510216	9.90	ug/l	99
90)	n-Butylbenzene	18.47	91	1257383	10.26	ug/l	97
91)	1,2-Dichlorobenzene	18.70	146	434455	10.09	ug/l	97
92)	1,2-Dibromo-3-chloropropan	19.70	157	24259	8.88	ug/l	98
93)	1,2,4-Trichlorobenzene	20.79	180	312753	9.95	ug/l	97
94)	Hexachlorobutadiene	20.95	225	178714	9.54	ug/l	96
95)	Naphthalene	21.13	128	391577	10.67	ug/l	98
96)	1,2,3-Trichlorobenzene	21.46	180	239977	10.13	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F21\RFV190.D Vial: 3
Acq On : 21 Jun 2024 11:52 am Operator: DNguye
Sample : VO01F09L Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 21 12:14 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F21\RFV191.D Vial: 4
Acq On : 21 Jun 2024 12:22 pm Operator: DNguye
Sample : VO01F09C Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 21 12:44 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.53	114	802338	10.00	ug/l	-0.01
53) CHLOROBENZENE-D5	13.68	117	648941	10.00	ug/l	-0.03
72) 1,2-DICHLOROBENZENE-D4	18.67	152	255577	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.20	111	238977	9.62	ug/l	-0.03
Spiked Amount 10.000			Recovery = 96.20%			
41) 1,2-Dichloroethane-d4	7.94	65	161752	9.55	ug/l	-0.03
Spiked Amount 10.000			Recovery = 95.50%			
54) Toluene-d8	11.00	98	1030209	10.59	ug/l	-0.03
Spiked Amount 10.000			Recovery = 105.90%			
76) 4-Bromofluorobenzene	15.98	95	335918	9.65	ug/l	-0.03
Spiked Amount 10.000			Recovery = 96.50%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.17	85	296449	13.81	ug/l	100
5) Chloromethane	2.49	50	257125	8.55	ug/l	100
6) Vinyl chloride	2.62	62	258056	10.31	ug/l	96
7) Bromomethane	3.15	94	280137	9.43	ug/l	98
8) Chloroethane	3.18	64	211745	11.66	ug/l	95
9) Dichlorofluoromethane	3.29	67	460265	8.92	ug/l	84
10) Trichlorofluoromethane	3.55	101	462735	13.66	ug/l	100
11) Acrolein	3.98	56	65032	36.09	ug/l	94
12) 1,1,2-Trichloro-1,2,2-trif	4.07	151	196153	11.59	ug/l	98
13) Acetone	4.04	43	142760	48.75	ug/l	91
14) 1,1-Dichloroethene	4.21	61	403640	9.43	ug/l	99
15) tert-Butyl alcohol	4.32	59	229182	256.59	ug/l	100
16) Iodomethane	4.62	142	403463	8.79	ug/l	98
17) Methyl acetate	4.63	43	112558	14.10	ug/l	98
18) Methylene chloride	4.84	49	299362	8.72	ug/l	94
19) Carbon disulfide	4.86	76	1099500	12.02	ug/l	99
20) Acrylonitrile	5.00	53	164284	44.22	ug/l	97
21) tert-Butyl methyl ether (M	5.05	73	426970	10.14	ug/l	94
22) trans-1,2-Dichloroethene	5.23	61	375516	9.11	ug/l	97
23) Isopropyl ether (DIPE)	5.64	45	825323	9.37	ug/l	98
24) Vinyl acetate	5.80	43	322759	10.67	ug/l	99
25) 1,1-Dichloroethane	5.80	63	472462	9.80	ug/l	98
27) tert-Butyl ethyl ether (ET	6.22	59	650185	10.30	ug/l	99
28) 2-Butanone	6.40	43	207199	46.11	ug/l	97
29) 2,2-Dichloropropane	6.60	77	425595	10.50	ug/l	98
30) cis-1,2-Dichloroethene	6.66	96	320685	9.66	ug/l	99
31) Chloroform	6.89	83	463601	9.44	ug/l	97

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24F21\RFV191.D Vial: 4
Acq On : 21 Jun 2024 12:22 pm Operator: DNguye
Sample : VO01F09C Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 21 12:44 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.12	49	171920	8.91	ug/l	95
33)	Tetrahydrofuran	7.18	42	24511	8.62	ug/l	98
35)	1,1,1-Trichloroethane	7.48	97	440697	10.72	ug/l	99
36)	Cyclohexane	7.49	84	527167	13.17	ug/l	99
38)	1,1-Dichloropropene	7.70	110	137398	9.83	ug/l	98
39)	Carbon tetrachloride	7.85	119	330056	10.78	ug/l	99
40)	tert-Amyl methyl ether (TA	7.86	73	486623	9.91	ug/l	100
42)	Benzene	8.10	78	1015509	9.47	ug/l	99
43)	1,2-Dichloroethane	8.08	62	220599	10.20	ug/l	99
44)	Trichloroethene	9.05	130	282989	10.21	ug/l	98
45)	Methylcyclohexane	9.14	83	635334	14.42	ug/l	96
46)	1,2-Dichloropropane	9.33	63	230945	9.63	ug/l	95
47)	Bromodichloromethane	9.70	83	310493	9.33	ug/l	97
48)	1,4-Dioxane	9.76	88	17525	178.49	ug/l	88
49)	Dibromomethane	9.79	93	103099	9.11	ug/l	94
50)	2-Chloroethyl vinyl ether	10.20	63	38078	6.26	ug/l	97
51)	4-Methyl-2-pentanone	10.25	43	543447	46.05	ug/l	99
52)	cis-1,3-Dichloropropene	10.59	75	372325	9.98	ug/l	100
55)	Toluene	11.14	91	1169117	10.14	ug/l	97
56)	Ethyl methacrylate	11.43	69	170486	9.86	ug/l	99
57)	trans-1,3-Dichloropropene	11.45	75	280909	10.49	ug/l	99
58)	1,1,2-Trichloroethane	11.73	97	149463	9.91	ug/l	95
59)	2-Hexanone	11.74	43	319832	46.82	ug/l	96
60)	1,3-Dichloropropane	12.17	76	252720	9.87	ug/l	98
61)	Tetrachloroethene	12.28	164	243162	10.15	ug/l	99
62)	Dibromochloromethane	12.63	129	177308	9.63	ug/l	100
63)	1,2-Dibromoethane	13.00	107	133096	8.92	ug/l	99
64)	1-Chlorohexane	13.28	91	509906	10.25	ug/l	99
65)	Chlorobenzene	13.76	112	709892	10.33	ug/l	98
66)	1,1,1,2-Tetrachloroethane	13.85	131	222225	10.50	ug/l	95
67)	Ethylbenzene	13.85	91	1389133	10.56	ug/l	98
68)	m-Xylene & p-Xylene	14.00	91	2068591	21.48	ug/l	96
69)	o-Xylene	14.81	91	1010495	10.20	ug/l	98
70)	Styrene	14.88	104	778851	10.14	ug/l	99
71)	Isopropylbenzene	15.49	105	1336334	10.24	ug/l	99
73)	Bromoform	15.54	173	91074	9.05	ug/l	97
74)	trans-1,4-Dichloro-2-buten	15.61	53	44444	10.08	ug/l	100
75)	1,1,2,2-Tetrachloroethane	15.83	83	150819	8.86	ug/l	99
77)	1,2,3-Trichloropropane	16.13	110	40958	9.41	ug/l	97
78)	n-Propylbenzene	16.28	91	1686938	10.15	ug/l	99
79)	Bromobenzene	16.35	156	253094	9.63	ug/l	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F21\RFV191.D Vial: 4
Acq On : 21 Jun 2024 12:22 pm Operator: DNguye
Sample : VO01F09C Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 21 12:44 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

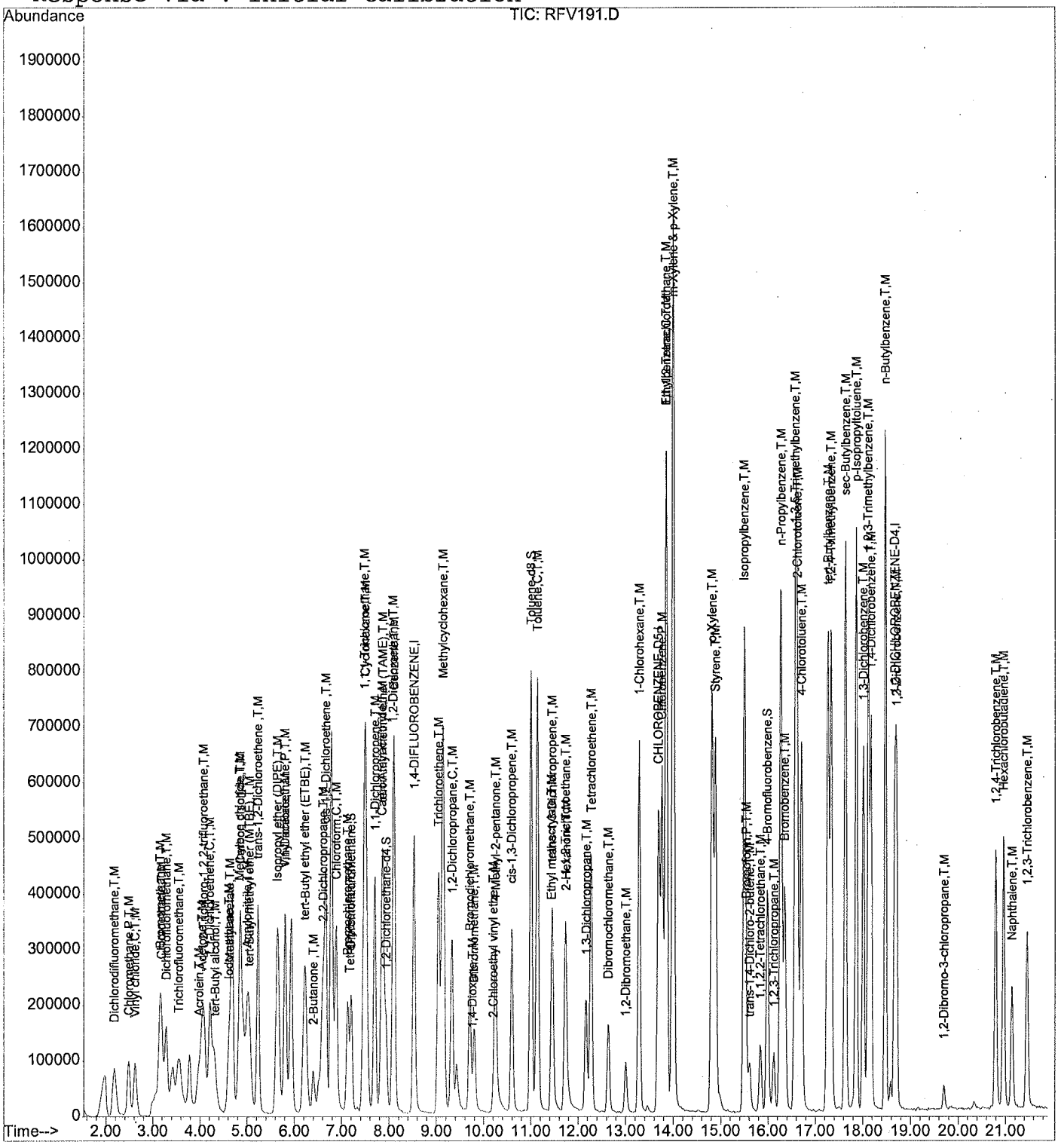
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.57	105	1058911	9.97	ug/l	98
81)	2-Chlorotoluene	16.62	91	1060064	10.60	ug/l	96
82)	4-Chlorotoluene	16.71	91	914952	10.33	ug/l	98
83)	tert-Butylbenzene	17.27	134	228101	10.24	ug/l	96
84)	1,2,4-Trimethylbenzene	17.33	105	1014450	9.76	ug/l	98
85)	sec-Butylbenzene	17.64	105	1483537	10.16	ug/l	100
86)	p-Isopropyltoluene	17.86	119	1160126	10.31	ug/l	98
87)	1,3-Dichlorobenzene	18.01	146	516318	10.34	ug/l	97
88)	1,2,3-Trimethylbenzene	18.11	105	974751	10.05	ug/l	99
89)	1,4-Dichlorobenzene	18.17	146	490631	10.02	ug/l	99
90)	n-Butylbenzene	18.47	91	1264165	10.85	ug/l	97
91)	1,2-Dichlorobenzene	18.70	146	424707	10.38	ug/l	99
92)	1,2-Dibromo-3-chloropropan	19.70	157	24113	9.26	ug/l	100
93)	1,2,4-Trichlorobenzene	20.79	180	301687	10.09	ug/l	99
94)	Hexachlorobutadiene	20.96	225	175705	9.87	ug/l	95
95)	Naphthalene	21.13	128	366152	10.50	ug/l	99
96)	1,2,3-Trichlorobenzene	21.46	180	228865	10.17	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F21\RFV191.D Vial: 4
Acq On : 21 Jun 2024 12:22 pm Operator: DNguye
Sample : VO01F09C Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 21 12:44 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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: REV195 BFB Injection Date: 05/11/24

Instrument ID: 01 BFB Injection Time: 10:20

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	18.517
75	30 - 60% of mass 95	42.491
95	Base Peak, 100% relative abundance	100.000
96	5 - 9% of mass 95	7.286
173	Less than 2% of mass 174	0.000(0)1
174	Greater than 50% of mass 95	75.428
175	5 - 9% of mass 174	5.582(7.4)1
176	95 - 101% % of mass 174	72.070(95.55)1
177	5 - 9% % of mass 176	5.085(7.06)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	VO01E111	REV196	05/11/24	10:58
2	VSTD0.5	VO01E112	REV197	05/11/24	11:27
3	VSTD1	VO01E113	REV198	05/11/24	11:56
4	VSTD2	VO01E114	REV199	05/11/24	12:30
5	VSTD5	VO01E115	REV200	05/11/24	12:59
6	VSTD10	VO01E116	REV201	05/11/24	13:28
7	VSTD20	VO01E117	REV202	05/11/24	13:58
8	VSTD30	VO01E118	REV203	05/11/24	14:27
9	VSTD50	VO01E119	REV204	05/11/24	14:56
10	VSTD100	VO01DE1110	REV205	05/11/24	15:26

SC 5/15/24

INITIAL_CALIBRATION - RELATIVE_RESPONSE_FACTOR

Instrument_ID :01
Beginning_DateTime :05/11/24 10:58
Spike_Units :PPB
IC File :REV201

Column_Spec :RXI-624SILMS ID :0.25MM
Ending_DateTime :05/11/24 15:26
HPChem Method :V001E11

M	IDX	Parameters	3 10:58 REV196	5 11:27 REV197	1 11:56 REV198	2 12:30 REV199	5 12:59 REV200	10 13:28 REV201	20 13:58 REV202	30 14:27 REV203	50 14:56 REV204	100 15:26 REV205	Av_RRF	% RSD	Av_Rt_M
	1	1,4-DIFLUOROBENZENE	1	1	1	1	1	1	1	1	1	1	1	0	8.5509
	2	Chlorotrifluoroethylene	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	3	Dichlorodifluoromethane	0.276	0.289	0.246	0.273	0.265	0.254	0.271	0.264	0.274	0.264	0.268	4.44	2.1690
	4	2-Chloro-1,1,1-trifluoroethane	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	5	Chloromethane	0.426	0.406	0.362	0.393	0.380	0.347	0.379	0.351	0.364	0.339	0.375	7.39	2.4709
	6	Vinyl chloride	0.305	0.318	0.285	0.332	0.327	0.310	0.331	0.305	0.313	0.280	0.315	6.31	2.5048
	7	Bromomethane	------	0.262	0.236	0.270	0.269	0.249	0.278	0.253	0.258	0.232	0.256	6.86	3.1458
	8	Chloroethane	0.224	0.228	0.214	0.246	0.266	0.241	0.256	0.243	0.240	0.231	0.236	4.51	3.1989
	9	Dichlorofluoromethane	0.754	0.709	0.630	0.645	0.695	0.581	0.653	0.609	0.641	0.601	0.653	8.21	3.2255
	10	Trichlorofluoromethane	0.440	0.466	0.405	0.441	0.427	0.397	0.418	0.405	0.421	0.400	0.422	5.20	3.3526
5	11	Acrolein	------	------	------	0.022	0.022	0.020	0.024	0.022	0.024	0.023	0.022	5.96	3.9857
	12	1,1,2-Trichloro-1,2,2-trifluoroethane	0.173	0.217	0.197	0.230	0.212	0.210	0.224	0.217	0.228	0.201	0.211	8.11	4.0626
5	13	Acetone	------	------	0.049	0.037	0.036	0.031	0.035	0.034	0.037	0.034	0.037	14.45	4.0577
	14	1,1-Dichloroethene	0.517	0.551	0.485	0.547	0.524	0.514	0.569	0.536	0.563	0.527	0.533	4.74	4.2296
25	15	tert-Butyl alcohol	0.010	0.010	0.010	0.011	0.011	0.010	0.012	0.012	0.013	0.012	0.011	9.12	4.3422
	16	Iodomethane	0.556	0.569	0.525	0.570	0.563	0.545	0.616	0.582	0.610	0.581	0.572	4.85	4.6385
	17	Methyl acetate	------	------	------	0.114	0.101	0.084	0.102	0.097	------	------	0.100	10.84	4.6531
	18	Methylene chloride	0.449	0.440	0.418	0.436	0.421	0.399	0.447	0.413	0.440	0.416	0.428	3.90	4.8577
	19	Carbon disulfide	1.256	1.087	1.076	1.128	1.153	1.068	1.228	1.130	------	------	1.140	6.08	4.8800
5	20	Acrylonitrile	0.049	0.046	0.044	0.044	0.046	0.043	0.048	0.046	0.049	0.047	0.046	4.77	5.0252
	21	tert-Butyl methyl ether (MT8E)	0.533	0.550	0.498	0.531	0.517	0.473	0.551	0.525	0.548	0.520	0.526	4.67	5.0607
	22	trans-1,2-Dichloroethene	0.503	0.518	0.491	0.532	0.505	0.477	0.555	0.517	0.544	0.505	0.514	4.44	5.2289
	23	Isopropyl ether (DIPE)	1.103	1.121	1.035	1.086	1.080	1.027	1.165	1.102	1.138	1.103	1.098	3.27	5.2482
	24	Vinyl acetate	------	0.340	0.316	0.360	0.397	0.344	0.413	0.399	0.415	0.407	0.377	8.82	5.8362
	25	1,1-Dichloroethane	0.585	0.615	0.565	0.611	0.589	0.565	0.651	0.605	0.631	0.592	0.601	4.54	5.8296
25	26	2-Butanol	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	27	tert-Butyl ethyl ether (ET8E)	0.774	0.775	0.756	0.823	0.779	0.725	0.849	0.797	0.814	0.775	0.787	4.52	6.2400
5	28	2-Butanone	------	0.050	0.049	0.050	0.054	0.053	0.061	0.061	0.065	0.060	0.056	10.70	6.4281
	29	2,2-Dichloropropane	0.523	0.531	0.479	0.511	0.492	0.476	0.530	0.504	0.522	0.484	0.505	4.21	6.6281
	30	cis-1,2-Dichlorbethene	0.406	0.424	0.392	0.408	0.406	0.395	0.444	0.418	0.434	0.409	0.414	4.03	6.6859
	31	Chloroform	0.719	0.670	0.594	0.591	0.585	0.552	0.630	0.580	0.613	0.592	0.612	8.00	6.9082
	32	Bromochloromethane	0.236	0.244	0.223	0.241	0.238	0.223	0.256	0.247	0.256	0.240	0.240	4.73	7.1481
	33	Tetrahydrofuran	------	------	------	0.038	0.034	0.030	0.037	0.035	0.039	0.036	0.035	8.25	7.2006
	34	Dibromofluoromethane	0.285	0.328	0.288	0.328	0.318	0.281	0.335	0.313	------	------	0.310	7.01	7.2281
	35	1,1,1-Trichloroethane	0.573	0.558	0.485	0.512	0.496	0.483	0.545	0.507	0.534	0.508	0.512	4.19	7.4693
	36	Cyclohexane	0.502	0.544	0.473	0.526	0.509	0.453	0.514	0.471	------	------	0.496	6.15	7.5344
	37	2,2,4-Trimethylpentane	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	38	1,1-Dichloropropene	0.168	0.181	0.168	0.177	0.168	0.164	0.185	0.175	0.183	0.173	0.174	4.16	7.7230
	39	Carbon tetrachloride	0.390	0.393	0.352	0.387	0.366	0.365	0.403	0.383	0.403	0.374	0.382	4.43	7.8785
	40	tert-Amyl methyl ether (TAME)	0.661	0.627	0.595	0.624	0.589	0.540	0.638	0.608	0.643	0.596	0.612	5.64	7.8889
	41	1,2-Dichloroethane-d4	0.208	0.216	0.193	0.229	0.217	0.186	0.225	0.216	------	------	0.211	7.18	7.9652
	42	Benzene	1.388	1.402	1.268	1.345	1.317	1.253	1.406	1.314	1.363	1.304	1.336	4.04	8.1304
	43	1,2-Dichloroethane	0.267	0.270	0.254	0.274	0.266	0.249	0.289	0.272	0.283	0.270	0.269	4.45	8.1037
	44	Trichloroethene	0.334	0.340	0.319	0.343	0.336	0.334	0.374	0.350	0.372	0.352	0.346	4.96	9.0723
	45	Methylcyclohexane	0.565	0.602	0.537	0.581	0.548	0.493	0.554	0.512	------	------	0.549	6.46	9.1653
	46	1,2-Dichloropropane	0.306	0.315	0.273	0.294	0.287	0.278	0.319	0.299	0.318	0.299	0.299	5.38	9.3509
	47	Bromodichloromethane	0.473	0.442	0.393	0.410	0.401	0.372	0.431	0.398	0.428	0.402	0.415	6.89	9.7316
20	48	1,4-Dioxane	------	------	------	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	14.49	9.7831
	49	Dibromomethane	0.135	0.145	0.136	0.142	0.139	0.126	0.149	0.143	0.153	0.142	0.141	5.30	9.8235
	50	2-Chloroethyl vinyl ether	------	------	0.067	0.073	0.072	0.068	0.082	0.081	0.083	0.076	0.076	8.06	10.2338
5	51	4-Methyl-2-pentanone	------	------	0.094	0.104	0.104	0.098	0.116	0.114	0.164	0.152	0.126	18.90	10.2764
	52	cis-1,3-Dichloropropene	0.461	0.451	0.434	0.457	0.456	0.433	0.501	0.478	0.504	0.476	0.465	5.31	10.6220
	53	CHLOROBENZENE-D5	1	1	1	1	1	1	1	1	1	1	1	0	13.7169
	54	Toluene-d8	1.490	1.527	1.385	1.619	1.529	1.394	1.577	1.468	------	------	1.499	5.48	11.0301
	55	Toluene	1.818	1.915	1.660	1.801	1.716	1.701	1.833	1.727	1.852	1.736	1.776	4.50	11.1687
	56	Ethyl methacrylate	------	------	0.232	0.261	0.250	0.247	0.291	0.275	0.297	0.278	0.266	8.54	11.4708
	57	trans-1,3-Dichloropropene	0.400	0.405	0.376	0.415	0.403	0.390	0.444	0.420	0.451	0.425	0.413	5.62	11.4842
	58	1,1,2-Trichloroethane	0.246	0.228	0.220	0.238	0.226	0.216	0.243	0.233	0.245	0.231	0.233	4.45	11.7509
5	59	2-Hexanone	------	------	0.030	0.052	0.087	0.091	0.113	0.112	0.123	0.115	0.090	36.80	11.7912
	60	1,3-Dichloropropane	0.381	0.388	0.374	0.405	0.381	0.366	0.424	0.398	0.424	0.405	0.395	5.08	12.1653
	61	Tetrachloroethene	0.361	0.390	0.351	0.380	0.354	0.359	0.385	0.364	0.384	0.364	0.369	3.83	12.2090
	62	Dibromochloromethane	0.303	0.294	0.264	0.277	0.271	0.261	0.289	0.280	0.303	0.286	0.284	5.55	12.6625
	63	1,2-Dibromoethane	0.214	0.220	0.204	0.234	0.228	0.215	0.250	0.236	0.253	0.237	0.230	6.28	12.9383
	64	Chlorohexane	0.791	0.823	0.713	0.783	0.758	0.743	0.782	0.758	0.781	0.738	0.767	3.69	13.3080
	65	Chlorobenzene	1.046	1.088	1.007	1.069	1.028	1.023	1.122	1.046	1.110	1.045	1.052	3.64	13.3909
	66	1,1,1,2-Tetrachloroethane	0.325	0.330	0.313	0.330	0.314	0.312	0.346	0.324	0.343	0.324	0.329	2.89	13.8650
	67	Ethylbenzene	2.077	2.152	1.907	2.051	1.962	1.985	2.135	1.992	2.063	1.934	2.027	4.07	13.8813
2	68	m-Xylene & p-Xylene	1.533	1.584	1.421	1.517	1.455	1.429	1.559	1.455	1.488	1.396	1.484	4.23	14.0205
	69	o-Xylene	1.632	1.623	1.469	1.557	1.460	1.453	1.577	1.498	1.558	1.443	1.527	4.66	14.8428
	70	Styrene	1.217	1.208	1.133	1.197	1.144	1.135	1.252	1.180	1.235	1.135	1.184	3.78	14.9094
	71	Isopropylbenzene	2.023	2.125	1.896	2.060	1.959	1.959	2.123	1.989	2.061	1.924	2.012	3.97	15.5243
	72	1,2-DICHLOROBENZENE-D4	1	1	1	1	1	1	1	1	1	1	1	0	18.6798
	73	Bromoform	------	0.205	0.263	0.358	0.366	0.337	0.407	0.390	0.407	0.416	0.350	20.61	15.5589
	74	trans-1,4-Dichloro-2-butene	------	------	0.146	0.168	0.163	0.156	0.188	0.180	0.191	0.188	0.173	9.77	15.6338
	75	1,1,2,2-Tetrachloroethane	0.739	0.666	0.619	0.654	0.640	0.582	0.692	0.667	0.701	0.686	0.666	6.36	15.8650
	76	4-Bromofluorobenzene	1.452	1.437	1.369	1.380	1.340	1.222	1.447	1.339	------	------	1.362	6.06	16.0153
	77	1,2,3-Trichloropropane	------	0.141	0.133	0.173	0.169	0.159	0.187	0.177	0.190	0.185	0.170	8.82	16.1515
	78	n-Propylbenzene	6.717	6.994	5.903	6.314	6.262	6.304	6.894	6.414	6.634	6.581	6.502	5.03	16.2872
	79	Bromobenzene	0.667	1.049	0.936	1.001	1.004	0.984	1.111	1.036	1.086	1.083	1.026	5.26	16.3835
	80	1,3,5-Trimethylbenzene	4.352	4.492	3.734	4.047	3.995	4.012	4.417	4.176	4.322	4.145	4.155	5.48	16.6059
	81	2-Chlorotoluene	4.034	4.266	3.707	3.731	3.759	3.734	4.086	3.954	4.022	4.052	3.942	4.84	16.9354
	82	4-Chlorotoluene	3.478	3.662	3.090	3.515	3.454	3.390	3.723	3.482	3.612	3.250	3.466	5.46	16.9832
	83	tert-Butylbenzene	0.904	0.890	0.796	0.846	0.839	0.843	0.934	0.864	0.903	0.895	0.871	4.70	17.2872
	84	1,2,4-Trimethylbenzene	4.167	4.290	3.727	3.970	3.950	3.951	4.329	4.050	4.156	4.057	4.065	4.41	17.3598
	85	sec-Butylbenzene	5.982	6.152	5.164	5.666	5.498	5.526	6.078	5.608	5.821	5.611	5.711	5.22	17.6576
	86	p-Isopropyltoluene	4.497	4.809	4.021	4.441	4.249	4.230	4.673	4.310	4.467	4.329	4.403	5.17	17.8798
	87	1,3-Dichlorobenzene	1.964	2.088	1.795	1.913	1.873	1.877	2.093	1.953	2.023	1.967	1.955	4.87	18.0280
	88	1,2,3-Trimethylbenzene	3.969	4.104	3.570	3.741	3.683	3.588	3.989	3.749	3.851	3.706	3.795	4.70	18.1317
	89	1,4-Dichlorobenzene	2.063	2.052	1.795	1.880	1.857	1.826	2.011	1.885	1.928	1.870	1.916	4.92	18.1909
	90	n-Butylbenzene	4.854	4.963	4.183	4.515	4.392	4.402	4.823	4.508	4.603	4.346	4.560	5.46	18.4887
	91	1,2-Dichlorobenzene	1.624	1.664	1.514	1.605	1.566	1.495	1.701	1.592	1.659	1.596	1.602	4.08	18.7243
	92	1,2-Dibromo-3-chloropropane	------	------	0.067	0.087	0.093	0.084	0.105	0.102	0.112	0.108	0.095	16.46	19.4172
	93	1,2,4-Trichlorobenzene	1.082	1.145	1.038	1.141	1.133	1.108	1.288	1.237	1.294	1.268	1.187	7.45	20.8013
	94	Hexachlorobutadiene	0.665	0.692	0.611	0.670	0.668	0.626	0.776	0.730	0.759	0.700	0.697	6.45	20.9623
	95	Naphthalene	1.273	1.300	1.206	1.327	1.317	1.284	1.515	1.458	1.543	1.446	1.365	8.50	21.1480
	96	1,2,3-Trichlorobenzene	0.835	0.854	0.791	0.871	0.857	0.833	0.968	0.920	0.964	0.915	0.881	6.66	21.4665

Spike_Amount = Nominal_Amount * M
Ave_%RSD : 6.8 Max_%RSD : 36.8

Use Least Square Linear Regression with weighting factor of inverse concentration for comps with %_RSD > 15
Resp_Ratio = x0 + x1 * Amt_Ratio

IDX	Parameter	x0	x1	CCF
7	Bromomethane	0.00783	0.36199	0.9993
51	4-Methyl-2-pentanone	-0.04242	0.15630	0.9989
59	2-Hexanone	-0.05681	0.11740	0.9987
73	Bromoform	-0.01353	0.40878	0.9992
92	1,2-Dibromo-3-chloropropane	-0.00559	0.10796	0.9987

SO 5/15/24

INITIAL_CALIBRATION - RELATIVE_RESPONSE_FACTOR(%REC)

Instrument ID :01
Beginning DateTime :05/11/24 10:58
Spike Units :PPB
IC File :REV201

Column Spec :RXI-624SILMS ID :0.25MM
Ending DateTime :05/11/24 15:26
HPChem Method :VO01E11

M	IDX	Parameters	.3 10:58 REV196	.5 11:27 REV197	1 11:56 REV198	2 12:30 REV199	5 12:59 REV200	10 13:28 REV201	20 13:58 REV202	30 14:27 REV203	50 14:56 REV204	100 15:26 REV205	AvDRec	%_RSD	Av_Rt_M
	1	1,4-DIFLUOROBENZENE	1	1	1	1	1	1	1	1	1	1	1	0	8.5509
	2	Chlorotrifluoroethylene	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	3	Dichlorodifluoromethane	103	108	92	102	99	95	101	99	102	99	3.4	4.44	2.1690
	4	2-Chloro-1,1,1-trifluoroethane	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	5	Chloromethane	114	108	97	105	101	93	101	94	97	90	5.9	7.39	2.4709
	6	Vinyl chloride	98	102	91	108	108	99	106	98	100	90	4.8	6.31	2.6048
	7	Bromomethane	------	114	99	101	95	88	103	97	103	100	12.3	17.96	3.1458
	8	Chloroethane	104	101	95	96	100	93	104	100	106	103	3.4	4.21	3.1896
	9	Dichlorofluoromethane	117	110	98	100	94	90	102	95	100	93	5.9	8.21	3.2755
	10	Trichlorofluoromethane	104	110	96	105	101	94	99	96	100	95	4.1	5.20	3.5526
5	11	Acrolein	------	------	------	100	100	91	109	100	109	105	4.5	5.86	3.9857
	12	1,1,2-Trichloro-1,2,2-trifluoroethane	82	103	93	109	100	100	106	103	108	95	5.9	8.11	4.0696
5	13	Acetone	------	------	132	100	97	84	95	92	100	92	9.1	14.45	4.0577
	14	1,1-Dichloroethene	97	103	91	103	98	96	107	101	106	99	3.7	4.74	4.2296
25	15	tert-Butyl alcohol	91	91	91	100	100	91	109	109	118	109	8.2	9.12	4.3422
	16	Iodomethane	97	99	92	100	98	95	108	102	107	102	3.6	4.85	4.6385
	17	Methyl acetate	------	------	------	114	101	84	102	97	------	------	7.2	10.84	4.6531
	18	Methylene chloride	105	103	98	102	98	93	104	96	103	97	3.4	3.90	4.8577
	19	Carbon disulfide	110	95	94	99	101	94	108	99	------	------	4.7	6.08	4.8800
5	20	Acrylonitrile	107	100	96	96	100	93	104	100	107	102	3.5	4.77	5.0252
	21	tert-Butyl methyl ether (MTBE)	102	105	95	101	98	90	105	100	104	99	3.4	4.67	5.0607
	22	trans-1,2-Dichloroethene	98	101	96	102	98	93	107	101	106	98	3.3	4.44	5.2489
	23	Isopropyl ether (DIPE)	100	102	94	99	98	94	108	100	104	100	3	4.21	5.6696
	24	Vinyl acetate	------	90	84	95	105	91	110	106	110	108	8.7	9.82	5.8322
	25	1,1-Dichloroethane	97	102	94	102	98	94	108	101	105	99	3.6	4.54	5.8296
25	26	2-Butanol	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	27	tert-Butyl ethyl ether (ETBE)	98	98	96	105	99	92	108	101	103	98	3.5	4.52	6.2400
5	28	2-Butanone	------	89	88	89	96	95	109	109	116	107	9.3	10.70	6.4281
	29	2,2-Dichloropropane	104	105	95	101	97	94	105	100	103	96	3.6	4.21	6.6281
	30	cis-1,2-Dichloroethene	98	102	95	99	98	95	107	101	105	99	3.2	4.03	6.6859
	31	Chloroform	117	109	97	97	96	90	103	95	100	97	5.9	8.00	6.9082
	32	Bromochloromethane	98	102	93	100	99	93	107	103	107	100	3.5	4.73	7.1481
	33	Tetrahydrofuran	------	------	------	109	97	86	106	100	111	103	6.5	8.25	7.2006
	34	Dibromofluoromethane	92	106	93	106	103	91	108	101	------	------	6	7.01	7.2281
	35	1,1,1-Trichloroethane	100	105	95	100	97	94	106	99	104	99	3.2	4.19	7.4993
	36	Cyclohexane	101	109	95	105	102	91	103	94	------	------	5	6.15	7.5244
	37	2,2,4-Trimethylpentane	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	38	1,1-Dichloropropene	97	104	97	102	97	94	106	101	105	99	3.4	4.16	7.7230
	39	Carbon tetrachloride	102	103	92	101	96	96	105	100	105	98	3.6	4.43	7.8785
	40	tert-Amyl methyl ether (TAME)	108	102	97	102	96	88	104	99	105	97	4.3	5.64	7.8889
	41	1,2-Dichloroethane-d4	99	102	91	109	103	88	107	102	------	------	5.6	7.18	7.9652
	42	Benzene	104	105	95	101	99	94	105	98	102	98	3.4	4.04	8.1304
	43	1,2-Dichloroethane	99	100	94	102	99	93	107	101	105	100	3.1	4.45	8.1037
	44	Trichloroethene	97	98	92	99	97	97	108	101	108	102	3.9	4.96	9.0723
	45	Methylcyclohexane	103	110	98	106	100	90	101	93	------	------	4.8	6.46	9.1653
	46	1,2-Dichloropropane	102	105	91	98	96	93	107	100	106	100	4.2	5.38	9.3509
	47	Bromodichloromethane	114	107	95	99	97	90	104	96	103	97	5.5	6.99	9.7316
20	48	1,4-Dioxane	------	------	------	76	93	89	110	106	117	109	0	14.49	9.7831
	49	Dibromomethane	96	103	96	101	99	89	106	101	109	101	4	5.30	9.8235
	50	2-Chloroethyl vinyl ether	------	------	88	96	95	91	108	107	109	104	7.2	8.06	10.2338
5	51	4-Methyl-2-pentanone	------	------	115	93	93	87	101	99	106	98	15.4	18.90	10.2764
	52	cis-1,3-Dichloropropene	99	97	93	98	98	93	108	103	108	102	4.2	5.31	10.6250
	53	CHLOROBENZENE-D5	1	1	1	1	1	1	1	1	1	1	1	0	13.7168
	54	Toluene-d8	99	102	92	108	102	93	105	98	------	------	4.3	5.48	11.0301
	55	Toluene	102	108	93	101	97	96	103	97	104	98	3.8	4.50	11.1687
	56	Ethyl methacrylate	------	------	87	98	94	93	109	103	112	105	7.1	8.54	11.4708
	57	trans-1,3-Dichloropropene	97	98	91	100	98	94	108	102	109	103	4.4	5.62	11.4842
	58	1,1,2-Trichloroethane	106	98	94	102	97	93	104	100	105	99	3.6	4.45	11.7509
5	59	2-Hexanone	------	------	123	93	93	87	101	99	106	99	28.5	36.80	11.7912
	60	1,3-Dichloropropane	96	98	95	103	96	93	107	101	107	103	4.2	5.08	12.1953
	61	Tetrachloroethene	98	106	95	103	96	97	104	99	104	99	3.4	3.83	12.2990
	62	Dibromochloromethane	107	104	93	98	95	92	105	99	107	101	4.6	5.55	12.6665
	63	1,2-Dibromoethane	93	96	93	102	99	93	109	103	110	103	5.2	6.28	13.0383
	64	1-Chlorohexane	103	107	93	103	95	97	103	99	103	96	4.1	4.69	13.3080
	65	Chlorobenzene	99	103	95	101	97	97	106	99	105	99	3	3.64	13.7909
	66	1,1,1,2-Tetrachloroethane	100	101	96	101	96	96	106	99	105	99	2.7	3.59	13.8650
	67	Ethylbenzene	102	106	94	101	97	98	105	99	102	95	3.4	4.07	13.8813
2	68	m-Xylene & p-Xylene	103	107	96	102	98	96	105	98	100	94	3.5	4.23	14.0205
	69	o-Xylene	107	106	96	102	96	95	103	98	102	94	4.1	4.66	14.8428
	70	Styrene	103	102	96	101	97	96	106	100	104	96	3.2	3.78	14.9094
	71	Isopropylbenzene	101	106	94	102	97	97	106	99	102	96	3.3	3.97	15.5243
	72	1,2-DICHLOROBENZENE-D4	1	1	1	1	1	1	1	1	1	1	1	0	18.6798
	73	Bromoform	------	116	98	104	96	86	101	97	100	102	15.5	20.61	15.5589
	74	trans-1,4-Dichloro-2-butene	------	------	84	97	94	90	109	104	110	109	8.2	9.77	15.6338
	75	1,1,2,2-Tetrachloroethane	111	100	93	98	96	89	104	100	105	103	4.7	6.36	15.8650
	76	4-Bromofluorobenzene	107	106	93	101	98	90	106	98	------	------	4.9	6.06	16.0153
	77	1,2,3-Trichloropropane	------	83	90	102	99	94	110	104	112	109	7.8	9.82	16.1515
	78	n-Propylbenzene	103	108	91	97	96	97	106	99	102	101	4	5.03	16.2976
	79	Bromobenzene	97	102	91	97	98	96	108	101	106	105	4.3	5.26	16.3835
	80	1,3,5-Trimethylbenzene	105	108	90	97	96	97	106	99	102	100	4.2	5.49	16.6058
	81	2-Chlorotoluene	103	109	95	95	96	95	104	98	100	103	4	4.84	16.6354
	82	4-Chlorotoluene	100	106	89	101	100	98	107	100	104	94	3.9	5.46	16.7332
	83	tert-Butylbenzene	104	102	91	97	96	97	107	99	104	103	3.9	4.70	17.2872
	84	1,2,4-Trimethylbenzene	103	106	92	98	97	97	106	100	102	100	3.4	4.41	17.3598
	85	sec-Butylbenzene	105	108	90	99	96	97	106	98	102	98	4.2	5.27	17.6576
	86	p-Isopropyltoluene	102	109	91	101	97	96	106	98	101	98	4	5.17	17.8798
	87	1,3-Dichlorobenzene	100	107	92	98	96	96	107	100	103	101	3.7	4.87	18.0280
	88	1,2,3-Trimethylbenzene	105	108	94	99	97	95	105	99	101	98	3.9	4.70	18.1317
	89	1,4-Dichlorobenzene	108	107	94	98	97	95	105	98	101	98	4	4.92	18.1909
	90	n-Butylbenzene	106	109	92	99	96	97	106	99	101	95	4.4	5.46	18.4887
	91	1,2-Dichlorobenzene	101	104	95	100	98	93	106	99	104	100	3.1	4.06	18.7243
	92	1,2-Dibromo-3-chloropropane	------	------	114	106	96	83	100	96	104	101	12.6	16.02	19.7172
	93	1,2,4-Trichlorobenzene	93	98	89	98	97	95	110	106	111	105	6.3	7.49	20.8013
	94	Hexachlorobutadiene	95	99	88	96	96	100	111	105	109	100	5.1	6.95	20.9673
	95	Naphthalene	93	95	88	97	96	93	111	107	113	106	7.4	8.50	21.1480
	96	1,2,3-Trichlorobenzene	95	97	90	99	97	95	110	104	109	104	5.5	6.66	21.4665

For 8260 C
SM
5/15/24

Compound List Report 01

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	2.17	0.253	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	2.46	0.288	A	1	A	B
6	T	Vinyl chloride	62	2.61	0.305	A	1	A	B
7	T	Bromomethane	94	3.14	0.367	L	1	A	B
8	T	Chloroethane	64	3.18	0.373	A	1	A	B
9	T	Dichlorofluoromethane	67	3.27	0.383	A	1	A	B
10	T	Trichlorofluoromethane	101	3.55	0.416	A	1	A	B
11	T	Acrolein	56	3.98	0.466	A	1	A	B
12	T	1,1,2-Trichloro-1,2,2-trifluor	151	4.06	0.475	A	1	A	B
13	T	Acetone	43	4.06	0.475	A	1	A	B
14	T	1,1-Dichloroethene	61	4.22	0.494	A	2	A	B
15	T	tert-Butyl alcohol	59	4.34	0.508	A	1	A	B
16	T	Iodomethane	142	4.64	0.543	A	1	A	B
17	T	Methyl acetate	43	4.65	0.544	A	1	A	B
18	T	Methylene chloride	49	4.86	0.569	A	2	A	B
19	T	Carbon disulfide	76	4.87	0.570	A	1	A	B
20	T	Acrylonitrile	53	5.02	0.588	A	2	A	B
21	T	tert-Butyl methyl ether (MTBE)	73	5.07	0.593	A	1	A	B
22	T	trans-1,2-Dichloroethene	61	5.24	0.614	A	2	A	B
23	T	Isopropyl ether (DIPE)	45	5.67	0.664	A	1	A	B
24	T	Vinyl acetate	43	5.82	0.681	A	1	A	B
25	T	1,1-Dichloroethane	63	5.82	0.681	A	2	A	B
26	T	2-Butanol	45	6.16	0.721	A	1	A	B
27	T	tert-Butyl ethyl ether (ETBE)	59	6.24	0.730	A	1	A	B
28	T	2-Butanone	43	6.41	0.751	A	1	A	B
29	T	2,2-Dichloropropane	77	6.62	0.775	A	2	A	B
30	T	cis-1,2-Dichloroethene	96	6.68	0.782	A	2	A	B
31	T	Chloroform	83	6.90	0.808	A	2	A	B
32	T	Bromochloromethane	49	7.14	0.836	A	2	A	B
33	T	Tetrahydrofuran	42	7.20	0.842	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	0.881	A	1	A	B
37	T	2,2,4-Trimethylpentane	57	7.52	0.881	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	7.88	0.922	A	1	A	B
41	S	1,2-Dichloroethane-d4	65	7.97	0.933	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	9.17	1.073	A	2	A	B
46	T	1,2-Dichloropropane	63	9.34	1.094	A	1	A	B
47	T	Bromodichloromethane	83	9.73	1.139	A	1	A	B
48	T	1,4-Dioxane	88	9.79	1.146	A	1	A	B
49	T	Dibromomethane	93	9.82	1.149	A	2	A	B
50	T	2-Chloroethyl vinyl ether	63	10.23	1.198	A	2	A	B
51	T	4-Methyl-2-pentanone	43	10.26	1.201	L	3	A	B
52	T	cis-1,3-Dichloropropene	75	10.62	1.243	A	1	A	B

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53	I		CHLOROBENZENE-D5	117	13.71	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	0.814	A	1	A	B
56		T	Ethyl methacrylate	69	11.46	0.836	A	1	A	B
57		T	trans-1,3-Dichloropropene	75	11.48	0.837	A	1	A	B
58		T	1,1,2-Trichloroethane	97	11.74	0.856	A	2	A	B
59		T	2-Hexanone	43	11.76	0.857	L	1	A	B
60		T	1,3-Dichloropropane	76	12.19	0.889	A	1	A	B
61		T	Tetrachloroethene	164	12.29	0.896	A	3	A	B
62		T	Dibromochloromethane	129	12.66	0.923	A	1	A	B
63		T	1,2-Dibromoethane	107	13.03	0.950	A	1	A	B
64		T	1-Chlorohexane	91	13.30	0.970	A	1	A	B
65	P,M		Chlorobenzene	112	13.79	1.005	A	1	A	B
66		T	1,1,1,2-Tetrachloroethane	131	13.86	1.011	A	1	A	B
67		T	Ethylbenzene	91	13.88	1.012	A	1	A	B
68		T	m-Xylene & p-Xylene	91	14.01	1.022	A	1	A	B
69		T	o-Xylene	91	14.84	1.082	A	1	A	B
70		T	Styrene	104	14.90	1.086	A	2	A	B
71		T	Isopropylbenzene	105	15.52	1.132	A	3	A	B
72	I		1,2-DICHLOROBENZENE-D4	152	18.68	1.000	A	1	A	B
73		T	Bromoform	173	15.55	0.833	L	1	A	B
74		T	trans-1,4-Dichloro-2-butene	53	15.63	0.837	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	16.14	0.864	A	1	A	B
78		T	n-Propylbenzene	91	16.29	0.872	A	2	A	B
79		T	Bromobenzene	156	16.38	0.877	A	1	A	B
80		T	1,3,5-Trimethylbenzene	105	16.60	0.889	A	2	A	B
81		T	2-Chlorotoluene	91	16.63	0.891	A	1	A	B
82		T	4-Chlorotoluene	91	16.72	0.895	A	1	A	B
83		T	tert-Butylbenzene	134	17.29	0.925	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	0.957	A	2	A	B
87		T	1,3-Dichlorobenzene	146	18.03	0.965	A	2	A	B
88		T	1,2,3-Trimethylbenzene	105	18.13	0.971	A	2	A	B
89		T	1,4-Dichlorobenzene	146	18.19	0.974	A	2	A	B
90		T	n-Butylbenzene	91	18.49	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	19.71	1.055	L	1	A	B
93		T	1,2,4-Trichlorobenzene	180	20.80	1.113	A	2	A	B
94		T	Hexachlorobutadiene	225	20.96	1.122	A	1	A	B
95		T	Naphthalene	128	21.14	1.132	A	1	A	B
96		T	1,2,3-Trichlorobenzene	180	21.46	1.149	A	2	A	B

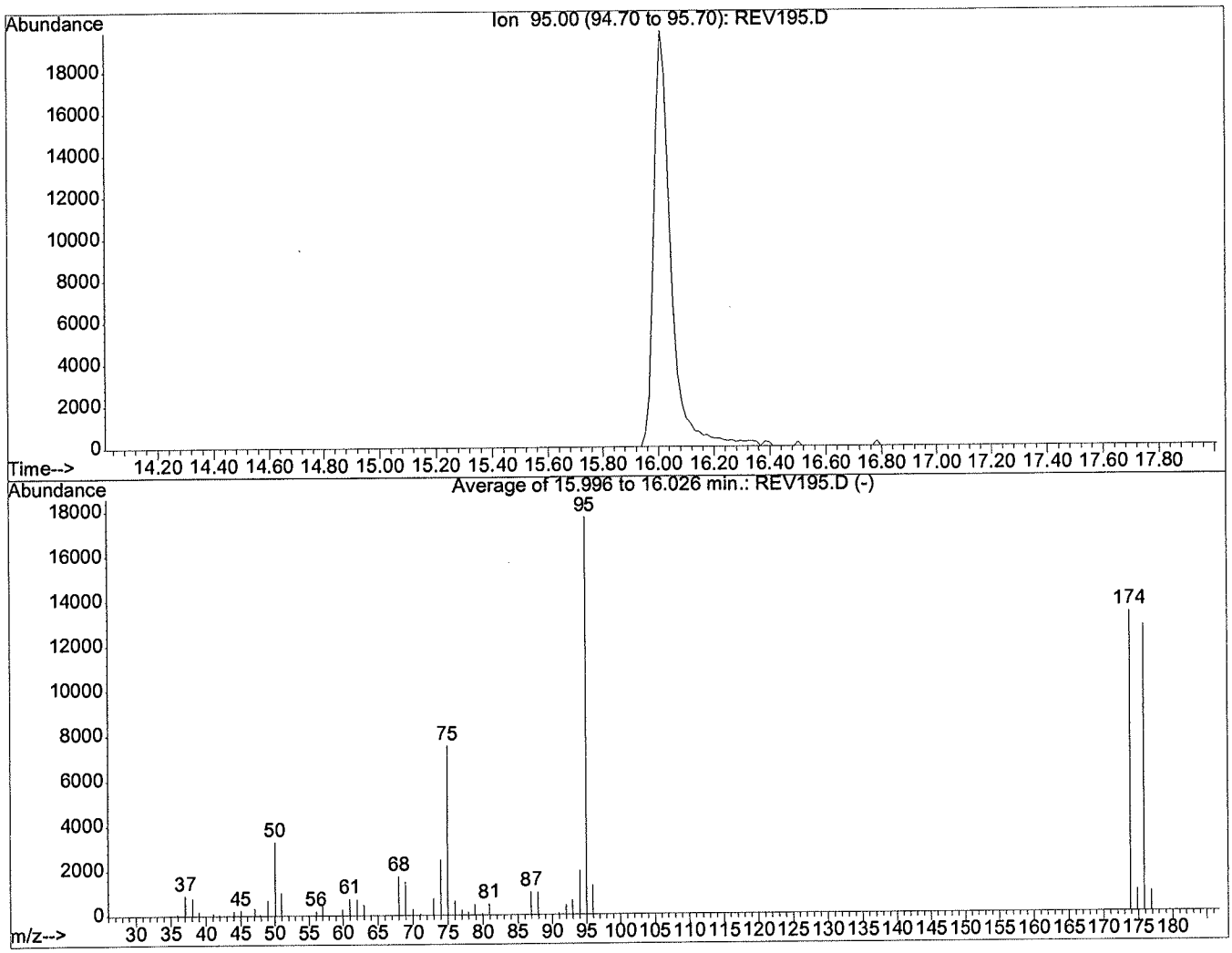
Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
#Qual = number of qualifiers
A/H = Area or Height
ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

VO01E11.M Mon May 13 14:36:08 2024

5/15/24

Data File : D:\HPCHEM\1\DATA\24E11\REV195.D
Acq On : 11 May 2024 10:20 am
Sample : BFB01E11
Misc : T/CHK
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls

Vial: 1
Operator: LPriet
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	18.5	3281	PASS
75	95	30	60	42.5	7529	PASS
95	95	100	100	100.0	17719	PASS
96	95	5	9	7.3	1291	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	75.4	13365	PASS
175	174	5	9	7.4	989	PASS
176	174	95	101	95.5	12770	PASS
177	176	5	9	7.1	901	PASS

REV195.D VO01E11.M Mon May 13 14:35:03 2024 SV 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV196.D Vial: 2
Acq On : 11 May 2024 10:58 am Operator: LPriet
Sample : VO01E111 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: May 13 14:29 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.55	114	981871	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.72	117	797187	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	299571	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	8387	0.28	ug/l	0.00
Spiked Amount 10.000			Recovery =	2.80%		
41) 1,2-Dichloroethane-d4	7.95	65	6117	0.30	ug/l	-0.01
Spiked Amount 10.000			Recovery =	3.00%		
54) Toluene-d8	11.03	98	35624	0.30	ug/l	0.00
Spiked Amount 10.000			Recovery =	3.00%		
76) 4-Bromofluorobenzene	16.03	95	13047	0.32	ug/l	0.02
Spiked Amount 10.000			Recovery =	3.20%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.16	85	8140	0.31	ug/l	65
5) Chloromethane	2.46	50	12543	0.34	ug/l	86
6) Vinyl chloride	2.59	62	8988	0.29	ug/l	89
8) Chloroethane	3.18	64	6888	0.31	ug/l	80
9) Dichlorofluoromethane	3.26	67	22206	0.35	ug/l	73
10) Trichlorofluoromethane	3.52	101	12948	0.31	ug/l	100
12) 1,1,2-Trichloro-1,2,2-trif	4.06	151	5097	0.25	ug/l	94
14) 1,1-Dichloroethene	4.22	61	15229	0.29	ug/l	94
15) tert-Butyl alcohol	4.34	59	7470	6.83	ug/l	79
16) Iodomethane	4.62	142	16364	0.29	ug/l	99
18) Methylene chloride	4.84	49	13215	0.31	ug/l	98
19) Carbon disulfide	4.87	76	36989	0.33	ug/l	99
20) Acrylonitrile	5.02	53	7271	1.60	ug/l	91
21) tert-Butyl methyl ether (M	5.05	73	15688	0.30	ug/l	81
22) trans-1,2-Dichloroethene	5.24	61	14865	0.29	ug/l	99
23) Isopropyl ether (DIPE)	5.66	45	32481	0.30	ug/l	98
25) 1,1-Dichloroethane	5.82	63	17229	0.29	ug/l	98
27) tert-Butyl ethyl ether (ET	6.24	59	22788	0.30	ug/l	100
29) 2,2-Dichloropropane	6.62	77	15398	0.31	ug/l	97
30) cis-1,2-Dichloroethene	6.68	96	11947	0.29	ug/l	98
31) Chloroform	6.90	83	21166	0.35	ug/l	98
32) Bromochloromethane	7.14	49	6943	0.29	ug/l	91
35) 1,1,1-Trichloroethane	7.49	97	15125	0.30	ug/l	97
36) Cyclohexane	7.52	84	14801	0.30	ug/l	88
38) 1,1-Dichloropropene	7.72	110	4945	0.29	ug/l	94
39) Carbon tetrachloride	7.87	119	11491	0.31	ug/l	97
40) tert-Amyl methyl ether (TA	7.89	73	19458	0.32	ug/l	91

(#) = qualifier out of range (m) = manual integration
REV196.D VO01E11.M Mon May 13 14:29:11 2024 Page 1

Sm 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV196.D
Acq On : 11 May 2024 10:58 am
Sample : VO01E111 0.03/0.15
Misc : 0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 14:29 2024

Vial: 2
Operator: LPriet
Inst : 01
Multiplr: 1.00

Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
42) Benzene	8.12	78	40894	0.31 ug/l	98
43) 1,2-Dichloroethane	8.10	62	7854	0.30 ug/l	93
44) Trichloroethene	9.08	130	9853	0.29 ug/l	97
45) Methylcyclohexane	9.17	83	16634	0.31 ug/l	98
46) 1,2-Dichloropropane	9.36	63	9009	0.31 ug/l	91
47) Bromodichloromethane	9.73	83	13928	0.34 ug/l	78
49) Dibromomethane	9.82	93	3964	0.29 ug/l	85
52) cis-1,3-Dichloropropene	10.63	75	13583	0.30 ug/l	94
55) Toluene	11.17	91	43467	0.31 ug/l	97
57) trans-1,3-Dichloropropene	11.49	75	9569	0.29 ug/l	95
58) 1,1,2-Trichloroethane	11.76	97	5879	0.32 ug/l	95
60) 1,3-Dichloropropane	12.21	76	9101	0.29 ug/l	94
61) Tetrachloroethene	12.29	164	8630	0.29 ug/l	98
62) Dibromochloromethane	12.68	129	7252	0.32 ug/l	99
63) 1,2-Dibromoethane	13.05	107	5114	0.28 ug/l	93
64) 1-Chlorohexane	13.32	91	18908	0.31 ug/l	95
65) Chlorobenzene	13.79	112	25024	0.30 ug/l	99
66) 1,1,1,2-Tetrachloroethane	13.86	131	7766	0.30 ug/l	97
67) Ethylbenzene	13.89	91	49666	0.31 ug/l	99
68) m-Xylene & p-Xylene	14.03	91	73348	0.62 ug/l	99
69) o-Xylene	14.84	91	39020	0.32 ug/l	95
70) Styrene	14.93	104	29115	0.31 ug/l	95
71) Isopropylbenzene	15.52	105	48372	0.30 ug/l	99
75) 1,1,2,2-Tetrachloroethane	15.86	83	6639	0.33 ug/l	100
78) n-Propylbenzene	16.31	91	60366	0.31 ug/l	99
79) Bromobenzene	16.38	156	8946	0.29 ug/l	100
80) 1,3,5-Trimethylbenzene	16.61	105	39112	0.31 ug/l	100
81) 2-Chlorotoluene	16.63	91	36258	0.31 ug/l	99
82) 4-Chlorotoluene	16.74	91	31256	0.30 ug/l	99
83) tert-Butylbenzene	17.29	134	8128	0.31 ug/l	96
84) 1,2,4-Trimethylbenzene	17.36	105	37452	0.31 ug/l	99
85) sec-Butylbenzene	17.66	105	53765	0.31 ug/l	98
86) p-Isopropyltoluene	17.88	119	40416	0.31 ug/l	94
87) 1,3-Dichlorobenzene	18.03	146	17654	0.30 ug/l	99
88) 1,2,3-Trimethylbenzene	18.13	105	35674	0.31 ug/l	97
89) 1,4-Dichlorobenzene	18.19	146	18537	0.32 ug/l	97
90) n-Butylbenzene	18.50	91	43628	0.32 ug/l	95
91) 1,2-Dichlorobenzene	18.72	146	14596	0.30 ug/l	96
93) 1,2,4-Trichlorobenzene	20.81	180	9721	0.28 ug/l	99
94) Hexachlorobutadiene	20.96	225	5978	0.29 ug/l	94
95) Naphthalene	21.15	128	11441	0.28 ug/l	94

(#) = qualifier out of range (m) = manual integration

SW 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV196.D
Acq On : 11 May 2024 10:58 am
Sample : VO01E111 0.03/0.15
Misc : 0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA
Vial: 2
Operator: LPriet
Inst : 01
Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:29 2024
Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
96) 1,2,3-Trichlorobenzene	21.46	180	7501	0.28	ug/l	96

SW 5/15/24

(#) = qualifier out of range (m) = manual integration

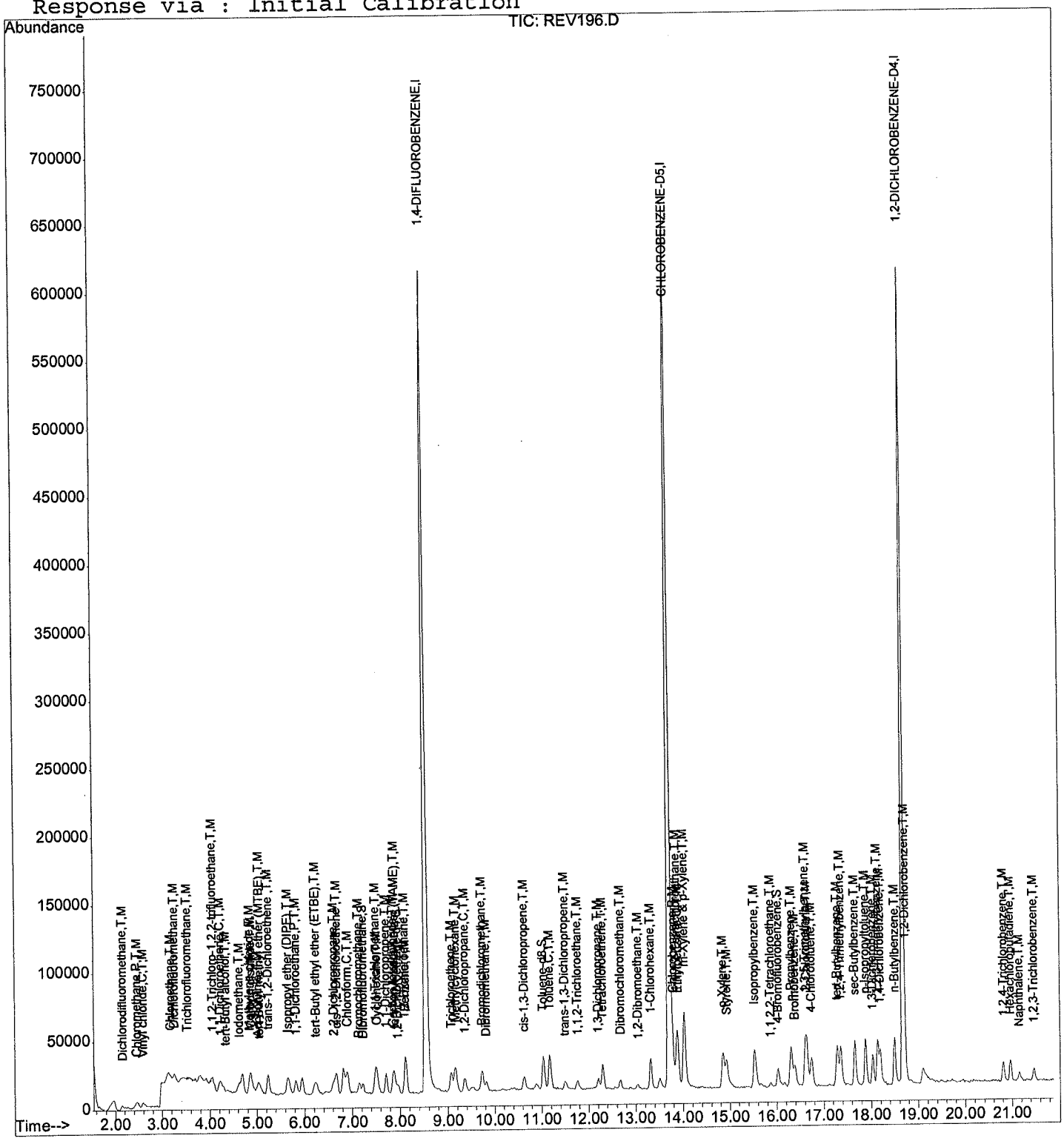
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E11\REV196.D
Acq On : 11 May 2024 10:58 am
Sample : VO01E111 0.03/0.15
Misc : 0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 14:29 2024

Vial: 2
Operator: LPriet
Inst : 01
Multiplr: 1.00

Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



SU 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV197.D Vial: 3
Acq On : 11 May 2024 11:27 am Operator: LPriet
Sample : VO01E112 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: May 13 14:30 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.54	114	958207	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	782724	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	292911	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	15713	0.53	ug/l	0.00
Spiked Amount 10.000			Recovery =	5.30%		
41) 1,2-Dichloroethane-d4	7.97	65	10333	0.51	ug/l	0.00
Spiked Amount 10.000			Recovery =	5.10%		
54) Toluene-d8	11.03	98	59771	0.51	ug/l	0.00
Spiked Amount 10.000			Recovery =	5.10%		
76) 4-Bromofluorobenzene	16.01	95	21050	0.53	ug/l	0.00
Spiked Amount 10.000			Recovery =	5.30%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.17	85	13823	0.54	ug/l	95
5) Chloromethane	2.47	50	19466	0.54	ug/l	94
6) Vinyl chloride	2.60	62	15272	0.51	ug/l	97
7) Bromomethane	3.14	94	27166	0.57	ug/l	73
8) Chloroethane	3.18	64	10907	0.50	ug/l	88
9) Dichlorofluoromethane	3.27	67	33964	0.55	ug/l	88
10) Trichlorofluoromethane	3.55	101	22334	0.55	ug/l	96
12) 1,1,2-Trichloro-1,2,2-trif	4.06	151	10414	0.52	ug/l	99
14) 1,1-Dichloroethene	4.22	61	26419	0.52	ug/l	97
15) tert-Butyl alcohol	4.35	59	11518	10.80	ug/l	75
16) Iodomethane	4.64	142	27278	0.50	ug/l	99
18) Methylene chloride	4.86	49	21078	0.51	ug/l	99
19) Carbon disulfide	4.87	76	52077	0.48	ug/l	98
20) Acrylonitrile	5.04	53	11053	2.49	ug/l	93
21) tert-Butyl methyl ether (M	5.05	73	26332	0.52	ug/l	92
22) trans-1,2-Dichloroethene	5.24	61	24833	0.50	ug/l	98
23) Isopropyl ether (DIPE)	5.67	45	53730	0.51	ug/l	97
24) Vinyl acetate	5.85	43	16307	0.45	ug/l	86
25) 1,1-Dichloroethane	5.82	63	29442	0.51	ug/l	97
27) tert-Butyl ethyl ether (ET	6.24	59	37115	0.49	ug/l	96
28) 2-Butanone	6.46	43	11997	2.24	ug/l	72
29) 2,2-Dichloropropane	6.62	77	25455	0.53	ug/l	98
30) cis-1,2-Dichloroethene	6.68	96	20337	0.51	ug/l	99
31) Chloroform	6.90	83	32100	0.55	ug/l	99
32) Bromochloromethane	7.14	49	11696	0.51	ug/l	95
35) 1,1,1-Trichloroethane	7.50	97	25812	0.53	ug/l	98
36) Cyclohexane	7.52	84	26045	0.54	ug/l	94

(#) = qualifier out of range (m) = manual integration
REV197.D VO01E11.M Mon May 13 14:30:15 2024 Page 1

SM 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV197.D Vial: 3
Acq On : 11 May 2024 11:27 am Operator: LPriet
Sample : VO01E112 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: May 13 14:30 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38)	1,1-Dichloropropene	7.72	110	8678	0.52	ug/l	98
39)	Carbon tetrachloride	7.88	119	18823	0.51	ug/l	98
40)	tert-Amyl methyl ether (TA	7.88	73	30034	0.51	ug/l	99
42)	Benzene	8.13	78	67162	0.52	ug/l	99
43)	1,2-Dichloroethane	8.10	62	12935	0.50	ug/l	96
44)	Trichloroethene	9.08	130	16301	0.49	ug/l	93
45)	Methylcyclohexane	9.17	83	28860	0.55	ug/l	98
46)	1,2-Dichloropropane	9.36	63	15082	0.53	ug/l	92
47)	Bromodichloromethane	9.73	83	21158	0.53	ug/l	92
49)	Dibromomethane	9.83	93	6952	0.51	ug/l	88
52)	cis-1,3-Dichloropropene	10.63	75	21629	0.49	ug/l	99
55)	Toluene	11.17	91	74965	0.54	ug/l	95
57)	trans-1,3-Dichloropropene	11.49	75	15855	0.49	ug/l	96
58)	1,1,2-Trichloroethane	11.76	97	8909	0.49	ug/l	95
60)	1,3-Dichloropropane	12.20	76	15204	0.49	ug/l	97
61)	Tetrachloroethene	12.31	164	15270	0.53	ug/l	99
62)	Dibromochloromethane	12.66	129	11514	0.52	ug/l	99
63)	1,2-Dibromoethane	13.05	107	8602	0.48	ug/l	99
64)	1-Chlorohexane	13.31	91	32200	0.54	ug/l	99
65)	Chlorobenzene	13.79	112	42586	0.51	ug/l	99
66)	1,1,1,2-Tetrachloroethane	13.86	131	12904	0.51	ug/l	99
67)	Ethylbenzene	13.88	91	84216	0.53	ug/l	99
68)	m-Xylene & p-Xylene	14.03	91	123954	1.07	ug/l	99
69)	o-Xylene	14.84	91	63511	0.53	ug/l	99
70)	Styrene	14.91	104	47295	0.51	ug/l	98
71)	Isopropylbenzene	15.52	105	83169	0.53	ug/l	98
73)	Bromoform	15.57	173	2997	0.58	ug/l	70
75)	1,1,2,2-Tetrachloroethane	15.86	83	9761	0.50	ug/l	94
77)	1,2,3-Trichloropropane	16.17	110	2065	0.41	ug/l	98
78)	n-Propylbenzene	16.31	91	102429	0.54	ug/l	99
79)	Bromobenzene	16.38	156	15359	0.51	ug/l	98
80)	1,3,5-Trimethylbenzene	16.60	105	65890	0.54	ug/l	99
81)	2-Chlorotoluene	16.63	91	62476	0.54	ug/l	99
82)	4-Chlorotoluene	16.74	91	53625	0.53	ug/l	100
83)	tert-Butylbenzene	17.29	134	13038	0.51	ug/l	98
84)	1,2,4-Trimethylbenzene	17.36	105	62834	0.53	ug/l	94
85)	sec-Butylbenzene	17.66	105	90100	0.54	ug/l	99
86)	p-Isopropyltoluene	17.88	119	70430	0.55	ug/l	95
87)	1,3-Dichlorobenzene	18.03	146	30579	0.53	ug/l	97
88)	1,2,3-Trimethylbenzene	18.13	105	60108	0.54	ug/l	97
89)	1,4-Dichlorobenzene	18.19	146	30059	0.54	ug/l	97

(#) = qualifier out of range (m) = manual integration SC 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV197.D
Acq On : 11 May 2024 11:27 am
Sample : VO01E112 0.05/0.25
Misc : 0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA
Vial: 3
Operator: LPriet
Inst : 01
Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:30 2024
Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
90) n-Butylbenzene	18.49	91	72685	0.54	ug/l	98
91) 1,2-Dichlorobenzene	18.72	146	24372	0.52	ug/l	97
93) 1,2,4-Trichlorobenzene	20.81	180	16768	0.49	ug/l	98
94) Hexachlorobutadiene	20.96	225	10138	0.50	ug/l	96
95) Naphthalene	21.15	128	19046	0.48	ug/l	100
96) 1,2,3-Trichlorobenzene	21.48	180	12506	0.48	ug/l	96

SM 5/15/24

(#) = qualifier out of range (m) = manual integration

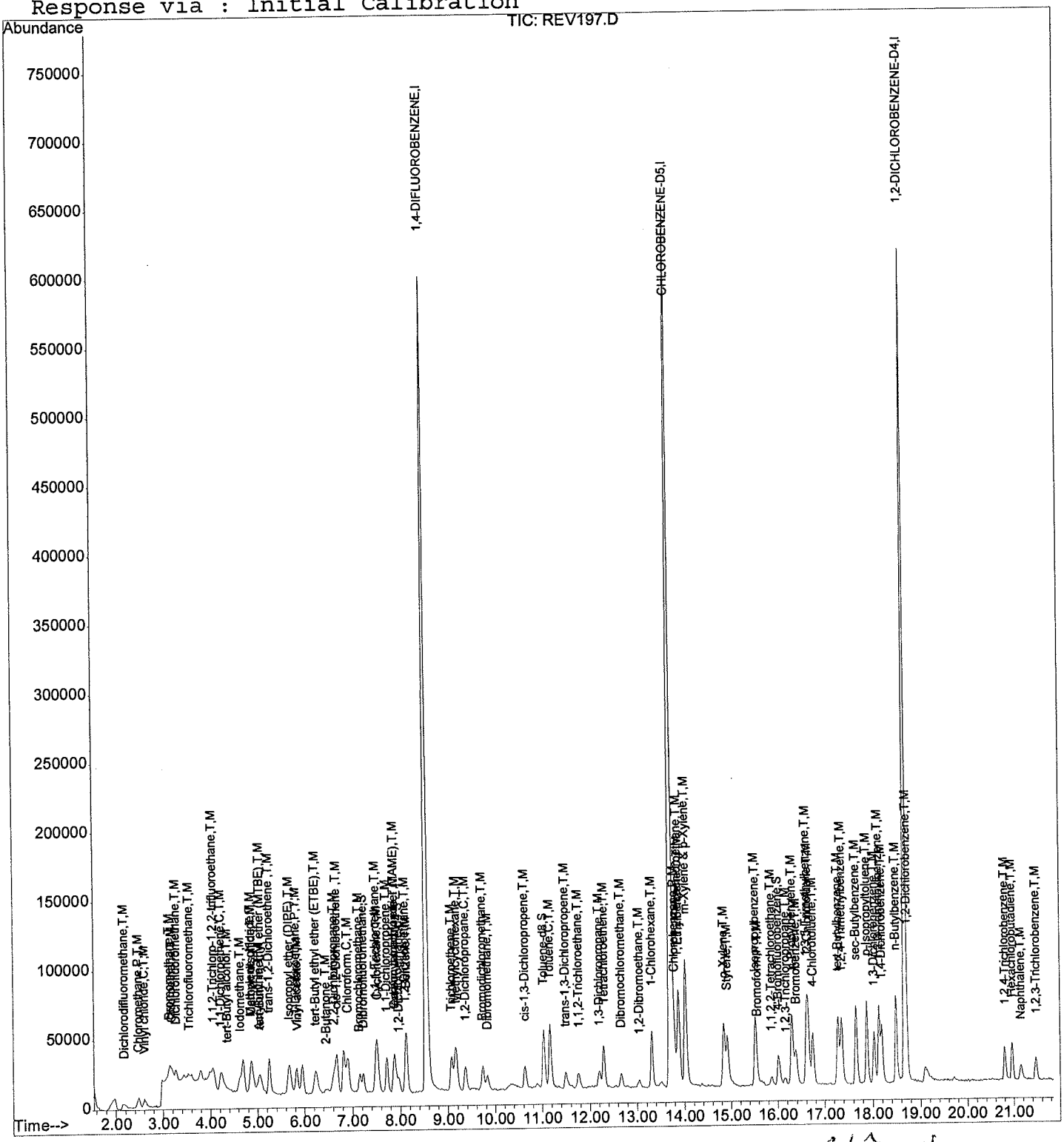
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E11\REV197.D
Acq On : 11 May 2024 11:27 am
Sample : VO01E112 0.05/0.25
Misc : 0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 14:30 2024

Vial: 3
Operator: LPriet
Inst : 01
Multiplr: 1.00

Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV198.D
Acq On : 11 May 2024 11:56 am
Sample : VO01E113 0.1/0.5
Misc : 1ppb 8260/5ppb KET-AA/25ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 14:30 2024

Vial: 4
Operator: LPriet
Inst : 01
Multiplr: 1.00
Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.54	114	938282	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	769560	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	301168	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	27033	0.93	ug/l	0.00
Spiked Amount 10.000			Recovery =	9.30%		
41) 1,2-Dichloroethane-d4	7.97	65	18064	0.91	ug/l	0.00
Spiked Amount 10.000			Recovery =	9.10%		
54) Toluene-d8	11.03	98	106585	0.92	ug/l	0.00
Spiked Amount 10.000			Recovery =	9.20%		
76) 4-Bromofluorobenzene	16.01	95	38225	0.93	ug/l	0.00
Spiked Amount 10.000			Recovery =	9.30%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.16	85	23088	0.92	ug/l	94
5) Chloromethane	2.46	50	33932	0.97	ug/l	95
6) Vinyl chloride	2.60	62	26741	0.91	ug/l	96
7) Bromomethane	3.14	94	40909	0.99	ug/l	78
8) Chloroethane	3.18	64	20092	0.95	ug/l	95
9) Dichlorofluoromethane	3.27	67	59133	0.98	ug/l	89
10) Trichlorofluoromethane	3.54	101	38039	0.96	ug/l	99
12) 1,1,2-Trichloro-1,2,2-trif	4.07	151	18470	0.93	ug/l	97
13) Acetone	4.06	43	22798	6.66	ug/l	97
14) 1,1-Dichloroethene	4.24	61	45534	0.91	ug/l	98
15) tert-Butyl alcohol	4.35	59	24124	23.10	ug/l	96
16) Iodomethane	4.64	142	49230	0.92	ug/l	99
18) Methylene chloride	4.86	49	39235	0.98	ug/l	97
19) Carbon disulfide	4.89	76	100956	0.94	ug/l	98
20) Acrylonitrile	5.04	53	20752	4.78	ug/l	96
21) tert-Butyl methyl ether (M	5.07	73	46754	0.95	ug/l	93
22) trans-1,2-Dichloroethene	5.24	61	46060	0.96	ug/l	98
23) Isopropyl ether (DIPE)	5.67	45	97086	0.94	ug/l	99
24) Vinyl acetate	5.85	43	29673	0.84	ug/l	95
25) 1,1-Dichloroethane	5.84	63	53046	0.94	ug/l	99
27) tert-Butyl ethyl ether (ET	6.24	59	70971	0.96	ug/l	99
28) 2-Butanone	6.46	43	22810	4.34	ug/l	98
29) 2,2-Dichloropropane	6.64	77	44935	0.95	ug/l	99
30) cis-1,2-Dichloroethene	6.70	96	36770	0.95	ug/l	100
31) Chloroform	6.90	83	55743	0.97	ug/l	99
32) Bromochloromethane	7.15	49	20957	0.93	ug/l	97
35) 1,1,1-Trichloroethane	7.50	97	45525	0.95	ug/l	98

(#) = qualifier out of range (m) = manual integration

SM 5/16/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV198.D Vial: 4
Acq On : 11 May 2024 11:56 am Operator: LPriet
Sample : VO01E113 0.1/0.5 Inst : 01
Misc : 1ppb 8260/5ppb KET-AA/25ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:30 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
36)	Cyclohexane	7.52	84	44404	0.95 ug/l	94
38)	1,1-Dichloropropene	7.72	110	15802	0.97 ug/l	96
39)	Carbon tetrachloride	7.88	119	33069	0.92 ug/l	99
40)	tert-Amyl methyl ether (TA	7.90	73	55848	0.97 ug/l	96
42)	Benzene	8.13	78	118978	0.95 ug/l	100
43)	1,2-Dichloroethane	8.10	62	23808	0.94 ug/l	98
44)	Trichloroethene	9.08	130	29954	0.92 ug/l	98
45)	Methylcyclohexane	9.17	83	50363	0.98 ug/l	98
46)	1,2-Dichloropropane	9.36	63	25645	0.91 ug/l	99
47)	Bromodichloromethane	9.73	83	36838	0.95 ug/l	93
49)	Dibromomethane	9.83	93	12791	0.97 ug/l	94
50)	2-Chloroethyl vinyl ether	10.26	63	6310	0.89 ug/l	89
51)	4-Methyl-2-pentanone	10.31	43	44214	5.73 ug/l	98
52)	cis-1,3-Dichloropropene	10.63	75	40679	0.93 ug/l	98
55)	Toluene	11.17	91	127757	0.93 ug/l	99
56)	Ethyl methacrylate	11.54	69	17884	0.87 ug/l	84
57)	trans-1,3-Dichloropropene	11.49	75	28905	0.91 ug/l	100
58)	1,1,2-Trichloroethane	11.76	97	16916	0.95 ug/l	99
59)	2-Hexanone	11.92	43	11666	6.13 ug/l	79
60)	1,3-Dichloropropane	12.20	76	28770	0.95 ug/l	100
61)	Tetrachloroethene	12.31	164	26996	0.95 ug/l	97
62)	Dibromochloromethane	12.66	129	20338	0.93 ug/l	98
63)	1,2-Dibromoethane	13.03	107	16471	0.93 ug/l	99
64)	1-Chlorohexane	13.31	91	54872	0.93 ug/l	99
65)	Chlorobenzene	13.79	112	77497	0.95 ug/l	98
66)	1,1,1,2-Tetrachloroethane	13.86	131	24060	0.96 ug/l	96
67)	Ethylbenzene	13.88	91	146785	0.94 ug/l	99
68)	m-Xylene & p-Xylene	14.03	91	218771	1.92 ug/l	98
69)	o-Xylene	14.84	91	113075	0.96 ug/l	98
70)	Styrene	14.91	104	87190	0.96 ug/l	100
71)	Isopropylbenzene	15.52	105	145909	0.94 ug/l	100
73)	Bromoform	15.57	173	7931	0.98 ug/l	88
74)	trans-1,4-Dichloro-2-buten	15.66	53	4400	0.85 ug/l	88
75)	1,1,2,2-Tetrachloroethane	15.86	83	18640	0.93 ug/l	99
77)	1,2,3-Trichloropropane	16.14	110	4598	0.90 ug/l	94
78)	n-Propylbenzene	16.29	91	177771	0.91 ug/l	99
79)	Bromobenzene	16.38	156	28202	0.91 ug/l	99
80)	1,3,5-Trimethylbenzene	16.60	105	112460	0.90 ug/l	97
81)	2-Chlorotoluene	16.63	91	111646	0.95 ug/l	100
82)	4-Chlorotoluene	16.74	91	93055	0.89 ug/l	99
83)	tert-Butylbenzene	17.29	134	23977	0.91 ug/l	99

(#) = qualifier out of range (m) = manual integration

SA 5/15/24

Data File : D:\HPCHEM\1\DATA\24E11\REV198.D
Acq On : 11 May 2024 11:56 am
Sample : VO01E113 0.1/0.5
Misc : 1ppb 8260/5ppb KET-AA/25ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 14:30 2024

Vial: 4
Operator: LPriet
Inst : 01
Multiplr: 1.00

Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
84)	1,2,4-Trimethylbenzene	17.36	105	112239	0.92	ug/l	98
85)	sec-Butylbenzene	17.66	105	155515	0.90	ug/l	100
86)	p-Isopropyltoluene	17.88	119	121109	0.91	ug/l	97
87)	1,3-Dichlorobenzene	18.03	146	54062	0.92	ug/l	100
88)	1,2,3-Trimethylbenzene	18.13	105	107510	0.94	ug/l	99
89)	1,4-Dichlorobenzene	18.19	146	54049	0.94	ug/l	99
90)	n-Butylbenzene	18.49	91	126285	0.92	ug/l	99
91)	1,2-Dichlorobenzene	18.72	146	45597	0.95	ug/l	100
92)	1,2-Dibromo-3-chloropropan	19.71	157	2008	1.14	ug/l	82
93)	1,2,4-Trichlorobenzene	20.80	180	31265	0.89	ug/l	96
94)	Hexachlorobutadiene	20.97	225	18414	0.88	ug/l	96
95)	Naphthalene	21.15	128	36313	0.88	ug/l	99
96)	1,2,3-Trichlorobenzene	21.46	180	23830	0.90	ug/l	98

Su 5/15/24

(#) = qualifier out of range (m) = manual integration

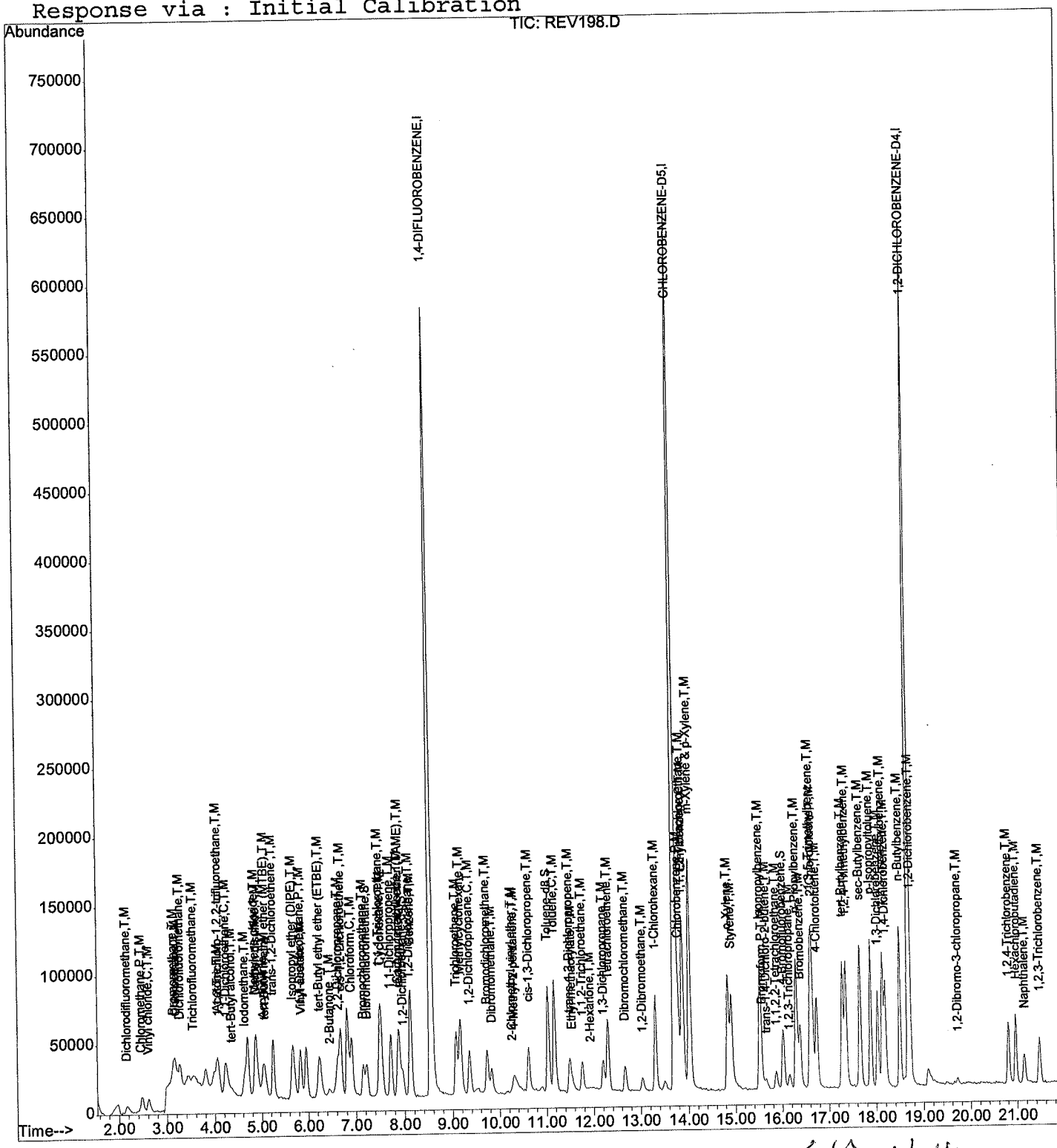
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E11\REV198.D
Acq On : 11 May 2024 11:56 am
Sample : VO01E113 0.1/0.5
Misc : 1ppb 8260/5ppb KET-AA/25ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 14:30 2024

Vial: 4
Operator: LPriet
Inst : 01
Multiplr: 1.00

Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



SU 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV199.D Vial: 5
Acq On : 11 May 2024 12:30 pm Operator: LPriet
Sample : VO01E114 0.2/1.0 Inst : 01
Misc : 2ppb 8260/10ppb KET-AA/50ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:54 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.55	114	923954	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.72	117	742613	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	293562	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.21	111	60611	2.12	ug/l	-0.02
Spiked Amount 10.000			Recovery = 21.20%			
41) 1,2-Dichloroethane-d4	7.95	65	42296	2.17	ug/l	-0.01
Spiked Amount 10.000			Recovery = 21.70%			
54) Toluene-d8	11.02	98	240432	2.16	ug/l	-0.01
Spiked Amount 10.000			Recovery = 21.60%			
76) 4-Bromofluorobenzene	16.01	95	81025	2.03	ug/l	0.00
Spiked Amount 10.000			Recovery = 20.30%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.15	85	50374	2.04	ug/l	98
5) Chloromethane	2.47	50	72647	2.10	ug/l	93
6) Vinyl chloride	2.60	62	62031	2.15	ug/l	97
7) Bromomethane	3.14	94	74605	2.01	ug/l	87
8) Chloroethane	3.18	64	40122	1.92	ug/l	98
9) Dichlorofluoromethane	3.27	67	119218	2.01	ug/l	96
10) Trichlorofluoromethane	3.54	101	81560	2.09	ug/l	99
11) Acrolein	3.98	56	20592	9.92	ug/l	89
12) 1,1,2-Trichloro-1,2,2-trif	4.07	151	42426	2.18	ug/l	100
13) Acetone	4.04	43	34198	10.14	ug/l	99
14) 1,1-Dichloroethene	4.22	61	101014	2.05	ug/l	98
15) tert-Butyl alcohol	4.34	59	52952	51.48	ug/l	92
16) Iodomethane	4.64	142	105323	1.99	ug/l	100
17) Methyl acetate	4.65	43	21059	2.29	ug/l	89
18) Methylene chloride	4.84	49	80640	2.04	ug/l	98
19) Carbon disulfide	4.87	76	207998	1.97	ug/l	99
20) Acrylonitrile	5.02	53	40810	9.54	ug/l	94
21) tert-Butyl methyl ether (M	5.05	73	98170	2.03	ug/l	99
22) trans-1,2-Dichloroethene	5.24	61	96611	2.03	ug/l	99
23) Isopropyl ether (DIPE)	5.66	45	200708	1.98	ug/l	100
24) Vinyl acetate	5.84	43	66565	1.91	ug/l	97
25) 1,1-Dichloroethane	5.82	63	112928	2.03	ug/l	99
27) tert-Butyl ethyl ether (ET	6.24	59	152096	2.09	ug/l	99
28) 2-Butanone	6.43	43	46317	8.95	ug/l	99
29) 2,2-Dichloropropane	6.62	77	94455	2.02	ug/l	99
30) cis-1,2-Dichloroethene	6.68	96	75331	1.97	ug/l	99
31) Chloroform	6.90	83	109165	1.93	ug/l	99

(#) = qualifier out of range (m) = manual integration

SA 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV199.D
Acq On : 11 May 2024 12:30 pm
Sample : VO01E114 0.2/1.0
Misc : 2ppb 8260/10ppb KET-AA/50ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 13:54 2024

Vial: 5
Operator: LPriet
Inst : 01
Multiplr: 1.00
Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.14	49	44566	2.01	ug/l	100
33)	Tetrahydrofuran	7.20	42	6950	2.12	ug/l	84
35)	1,1,1-Trichloroethane	7.49	97	94535	2.00	ug/l	99
36)	Cyclohexane	7.51	84	97188	2.11	ug/l	97
38)	1,1-Dichloropropene	7.72	110	32679	2.03	ug/l	100
39)	Carbon tetrachloride	7.86	119	71508	2.03	ug/l	98
40)	tert-Amyl methyl ether (TA	7.88	73	115389	2.04	ug/l	97
42)	Benzene	8.12	78	248582	2.01	ug/l	100
43)	1,2-Dichloroethane	8.10	62	50716	2.04	ug/l	99
44)	Trichloroethene	9.06	130	63296	1.98	ug/l	98
45)	Methylcyclohexane	9.15	83	107421	2.12	ug/l	99
46)	1,2-Dichloropropane	9.35	63	54414	1.97	ug/l	98
47)	Bromodichloromethane	9.73	83	75727	1.98	ug/l	99
48)	1,4-Dioxane	9.82	88	3445	30.47	ug/l	71
49)	Dibromomethane	9.82	93	26199	2.01	ug/l	97
50)	2-Chloroethyl vinyl ether	10.25	63	13477	1.92	ug/l	95
51)	4-Methyl-2-pentanone	10.29	43	96326	9.38	ug/l	98
52)	cis-1,3-Dichloropropene	10.62	75	84540	1.97	ug/l	99
55)	Toluene	11.17	91	267463	2.03	ug/l	100
56)	Ethyl methacrylate	11.49	69	38804	1.96	ug/l	97
57)	trans-1,3-Dichloropropene	11.48	75	61587	2.01	ug/l	97
58)	1,1,2-Trichloroethane	11.75	97	35305	2.04	ug/l	99
59)	2-Hexanone	11.83	43	38468	9.25	ug/l	97
60)	1,3-Dichloropropane	12.19	76	60220	2.05	ug/l	100
61)	Tetrachloroethene	12.29	164	56394	2.06	ug/l	100
62)	Dibromochloromethane	12.66	129	41132	1.95	ug/l	98
63)	1,2-Dibromoethane	13.03	107	34770	2.04	ug/l	98
64)	1-Chlorohexane	13.32	91	117841	2.07	ug/l	99
65)	Chlorobenzene	13.79	112	158702	2.02	ug/l	99
66)	1,1,1,2-Tetrachloroethane	13.86	131	48976	2.02	ug/l	99
67)	Ethylbenzene	13.88	91	304664	2.02	ug/l	99
68)	m-Xylene & p-Xylene	14.01	91	450609	4.09	ug/l	99
69)	o-Xylene	14.84	91	231237	2.04	ug/l	99
70)	Styrene	14.92	104	177724	2.02	ug/l	99
71)	Isopropylbenzene	15.52	105	305906	2.05	ug/l	99
73)	Bromoform	15.57	173	21027	2.08	ug/l	97
74)	trans-1,4-Dichloro-2-buten	15.64	53	9849	1.94	ug/l	85
75)	1,1,2,2-Tetrachloroethane	15.86	83	38426	1.97	ug/l	99
77)	1,2,3-Trichloropropane	16.16	110	10163	2.03	ug/l	95
78)	n-Propylbenzene	16.29	91	370739	1.94	ug/l	100
79)	Bromobenzene	16.38	156	58783	1.95	ug/l	100

(#) = qualifier out of range (m) = manual integration

5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV199.D Vial: 5
Acq On : 11 May 2024 12:30 pm Operator: LPriet
Sample : VO01E114 0.2/1.0 Inst : 01
Misc : 2ppb 8260/10ppb KET-AA/50ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:54 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	237589	1.95	ug/l	98
81)	2-Chlorotoluene	16.63	91	219062	1.91	ug/l	95
82)	4-Chlorotoluene	16.74	91	206396	2.03	ug/l	97
83)	tert-Butylbenzene	17.29	134	49658	1.94	ug/l	98
84)	1,2,4-Trimethylbenzene	17.36	105	233094	1.95	ug/l	98
85)	sec-Butylbenzene	17.66	105	332693	1.98	ug/l	99
86)	p-Isopropyltoluene	17.88	119	260761	2.02	ug/l	99
87)	1,3-Dichlorobenzene	18.03	146	112316	1.96	ug/l	99
88)	1,2,3-Trimethylbenzene	18.13	105	219653	1.97	ug/l	99
89)	1,4-Dichlorobenzene	18.19	146	110373	1.96	ug/l	100
90)	n-Butylbenzene	18.49	91	265074	1.98	ug/l	99
91)	1,2-Dichlorobenzene	18.72	146	94251	2.00	ug/l	99
92)	1,2-Dibromo-3-chloropropan	19.72	157	5091	2.12	ug/l	97
93)	1,2,4-Trichlorobenzene	20.80	180	67009	1.95	ug/l	98
94)	Hexachlorobutadiene	20.96	225	39320	1.92	ug/l	97
95)	Naphthalene	21.15	128	77920	1.94	ug/l	99
96)	1,2,3-Trichlorobenzene	21.46	180	51155	1.98	ug/l	100

SM 5/15/24

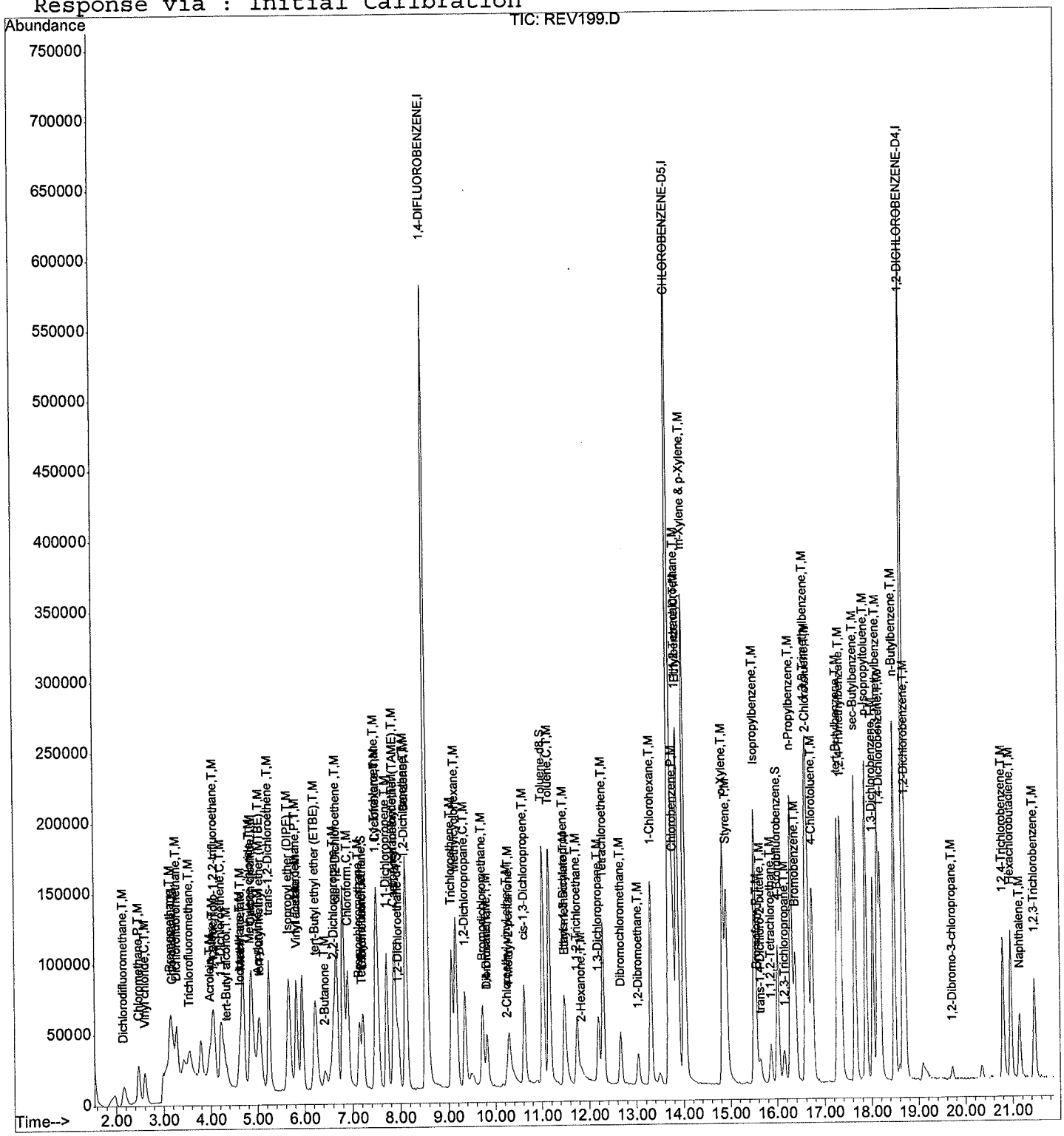
(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24E11\REV199.D
Acq On : 11 May 2024 12:30 pm
Sample : VO01E114 0.2/1.0
Misc : 2ppb 8260/10ppb KET-AA/50ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 13:54 2024

Vial: 5
Operator: LPriet
Inst : 01
Multiplr: 1.00

Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV200.D
Acq On : 11 May 2024 12:59 pm
Sample : VO01E115 0.5/2.5
Misc : 5ppb 8260/25ppb KET-AA/125ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 13:56 2024

Vial: 6
Operator: LPriet
Inst : 01
Multiplr: 1.00
Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.54	114	900656	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	744900	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	284539	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	143298	5.14	ug/l	0.00
Spiked Amount 10.000			Recovery = 51.40%			
41) 1,2-Dichloroethane-d4	7.97	65	97715	5.14	ug/l	0.00
Spiked Amount 10.000			Recovery = 51.40%			
54) Toluene-d8	11.03	98	569302	5.10	ug/l	0.00
Spiked Amount 10.000			Recovery = 51.00%			
76) 4-Bromofluorobenzene	16.01	95	190707	4.92	ug/l	0.00
Spiked Amount 10.000			Recovery = 49.20%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.18	85	119456	4.96	ug/l	98
5) Chloromethane	2.48	50	170900	5.06	ug/l	99
6) Vinyl chloride	2.60	62	151684	5.40	ug/l	98
7) Bromomethane	3.14	94	161543	4.74	ug/l	99
8) Chloroethane	3.18	64	101909	5.00	ug/l	100
9) Dichlorofluoromethane	3.27	67	272435	4.71	ug/l	98
10) Trichlorofluoromethane	3.55	101	192432	5.06	ug/l	98
11) Acrolein	3.98	56	50318	24.87	ug/l	98
12) 1,1,2-Trichloro-1,2,2-trif	4.07	151	95572	5.03	ug/l	99
13) Acetone	4.06	43	80312	24.43	ug/l	100
14) 1,1-Dichloroethene	4.24	61	236110	4.92	ug/l	100
15) tert-Butyl alcohol	4.34	59	126289	125.96	ug/l	98
16) Iodomethane	4.64	142	253734	4.93	ug/l	100
17) Methyl acetate	4.65	43	45270	5.05	ug/l	100
18) Methylene chloride	4.86	49	189706	4.92	ug/l	98
19) Carbon disulfide	4.89	76	519242	5.06	ug/l	99
20) Acrylonitrile	5.02	53	104491	25.05	ug/l	99
21) tert-Butyl methyl ether (M	5.07	73	232923	4.93	ug/l	98
22) trans-1,2-Dichloroethene	5.24	61	227623	4.92	ug/l	99
23) Isopropyl ether (DIPE)	5.67	45	486332	4.92	ug/l	99
24) Vinyl acetate	5.84	43	178828	5.27	ug/l	98
25) 1,1-Dichloroethane	5.84	63	265434	4.90	ug/l	100
27) tert-Butyl ethyl ether (ET	6.24	59	350636	4.95	ug/l	99
28) 2-Butanone	6.43	43	122252	24.23	ug/l	98
29) 2,2-Dichloropropane	6.62	77	221475	4.87	ug/l	100
30) cis-1,2-Dichloroethene	6.68	96	182793	4.91	ug/l	99
31) Chloroform	6.90	83	263399	4.78	ug/l	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV200.D Vial: 6
Acq On : 11 May 2024 12:59 pm Operator: LPriet
Sample : VO01E115 0.5/2.5 Inst : 01
Misc : 5ppb 8260/25ppb KET-AA/125ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:56 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.15	49	107126	4.95	ug/l	100
33)	Tetrahydrofuran	7.20	42	15395	4.82	ug/l	99
35)	1,1,1-Trichloroethane	7.50	97	223490	4.84	ug/l	100
36)	Cyclohexane	7.53	84	229091	5.10	ug/l	100
38)	1,1-Dichloropropene	7.72	110	75641	4.82	ug/l	99
39)	Carbon tetrachloride	7.88	119	164649	4.79	ug/l	99
40)	tert-Amyl methyl ether (TA	7.88	73	265148	4.81	ug/l	100
42)	Benzene	8.13	78	593170	4.93	ug/l	100
43)	1,2-Dichloroethane	8.10	62	119634	4.93	ug/l	100
44)	Trichloroethene	9.08	130	151454	4.87	ug/l	99
45)	Methylcyclohexane	9.17	83	246613	4.99	ug/l	98
46)	1,2-Dichloropropane	9.34	63	129424	4.81	ug/l	99
47)	Bromodichloromethane	9.73	83	180624	4.83	ug/l	99
48)	1,4-Dioxane	9.80	88	10209	92.63	ug/l	95
49)	Dibromomethane	9.82	93	62590	4.93	ug/l	96
50)	2-Chloroethyl vinyl ether	10.23	63	32624	4.78	ug/l	99
51)	4-Methyl-2-pentanone	10.28	43	302538	24.21	ug/l	100
52)	cis-1,3-Dichloropropene	10.62	75	205197	4.90	ug/l	100
55)	Toluene	11.17	91	638964	4.83	ug/l	99
56)	Ethyl methacrylate	11.46	69	93055	4.69	ug/l	97
57)	trans-1,3-Dichloropropene	11.48	75	150076	4.88	ug/l	99
58)	1,1,2-Trichloroethane	11.74	97	84096	4.86	ug/l	100
59)	2-Hexanone	11.79	43	161653	23.32	ug/l	98
60)	1,3-Dichloropropane	12.19	76	141872	4.83	ug/l	99
61)	Tetrachloroethene	12.29	164	131949	4.80	ug/l	99
62)	Dibromochloromethane	12.66	129	100908	4.77	ug/l	99
63)	1,2-Dibromoethane	13.03	107	84804	4.95	ug/l	98
64)	1-Chlorohexane	13.30	91	270570	4.74	ug/l	100
65)	Chlorobenzene	13.79	112	382775	4.85	ug/l	100
66)	1,1,1,2-Tetrachloroethane	13.86	131	116917	4.81	ug/l	99
67)	Ethylbenzene	13.88	91	730874	4.84	ug/l	100
68)	m-Xylene & p-Xylene	14.01	91	1083475	9.80	ug/l	99
69)	o-Xylene	14.84	91	543905	4.78	ug/l	100
70)	Styrene	14.90	104	426095	4.83	ug/l	99
71)	Isopropylbenzene	15.52	105	729567	4.87	ug/l	100
73)	Bromoform	15.55	173	52073	4.81	ug/l	98
74)	trans-1,4-Dichloro-2-buten	15.63	53	23167	4.72	ug/l	99
75)	1,1,2,2-Tetrachloroethane	15.86	83	90996	4.80	ug/l	100
77)	1,2,3-Trichloropropane	16.14	110	24020	4.96	ug/l	100
78)	n-Propylbenzene	16.29	91	891243	4.82	ug/l	100
79)	Bromobenzene	16.38	156	142872	4.88	ug/l	100

(#) = qualifier out of range (m) = manual integration

SU 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV200.D
Acq On : 11 May 2024 12:59 pm
Sample : VO01E115 0.5/2.5
Misc : 5ppb 8260/25ppb KET-AA/125ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 13:56 2024

Vial: 6
Operator: LPriet
Inst : 01
Multiplr: 1.00

Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
80) 1,3,5-Trimethylbenzene	16.60	105	568375	4.81 ug/l	100
81) 2-Chlorotoluene	16.63	91	534726	4.80 ug/l	100
82) 4-Chlorotoluene	16.72	91	491373	4.98 ug/l	99
83) tert-Butylbenzene	17.29	134	119387	4.81 ug/l	100
84) 1,2,4-Trimethylbenzene	17.36	105	562027	4.86 ug/l	99
85) sec-Butylbenzene	17.66	105	782171	4.81 ug/l	99
86) p-Isopropyltoluene	17.88	119	604455	4.83 ug/l	100
87) 1,3-Dichlorobenzene	18.03	146	266427	4.79 ug/l	99
88) 1,2,3-Trimethylbenzene	18.13	105	523914	4.85 ug/l	99
89) 1,4-Dichlorobenzene	18.19	146	264166	4.84 ug/l	99
90) n-Butylbenzene	18.49	91	624902	4.82 ug/l	100
91) 1,2-Dichlorobenzene	18.72	146	222834	4.89 ug/l	99
92) 1,2-Dibromo-3-chloropropan	19.71	157	13172	4.81 ug/l	96
93) 1,2,4-Trichlorobenzene	20.80	180	161262	4.85 ug/l	99
94) Hexachlorobutadiene	20.96	225	94994	4.79 ug/l	99
95) Naphthalene	21.15	128	187349	4.82 ug/l	99
96) 1,2,3-Trichlorobenzene	21.46	180	121965	4.87 ug/l	100

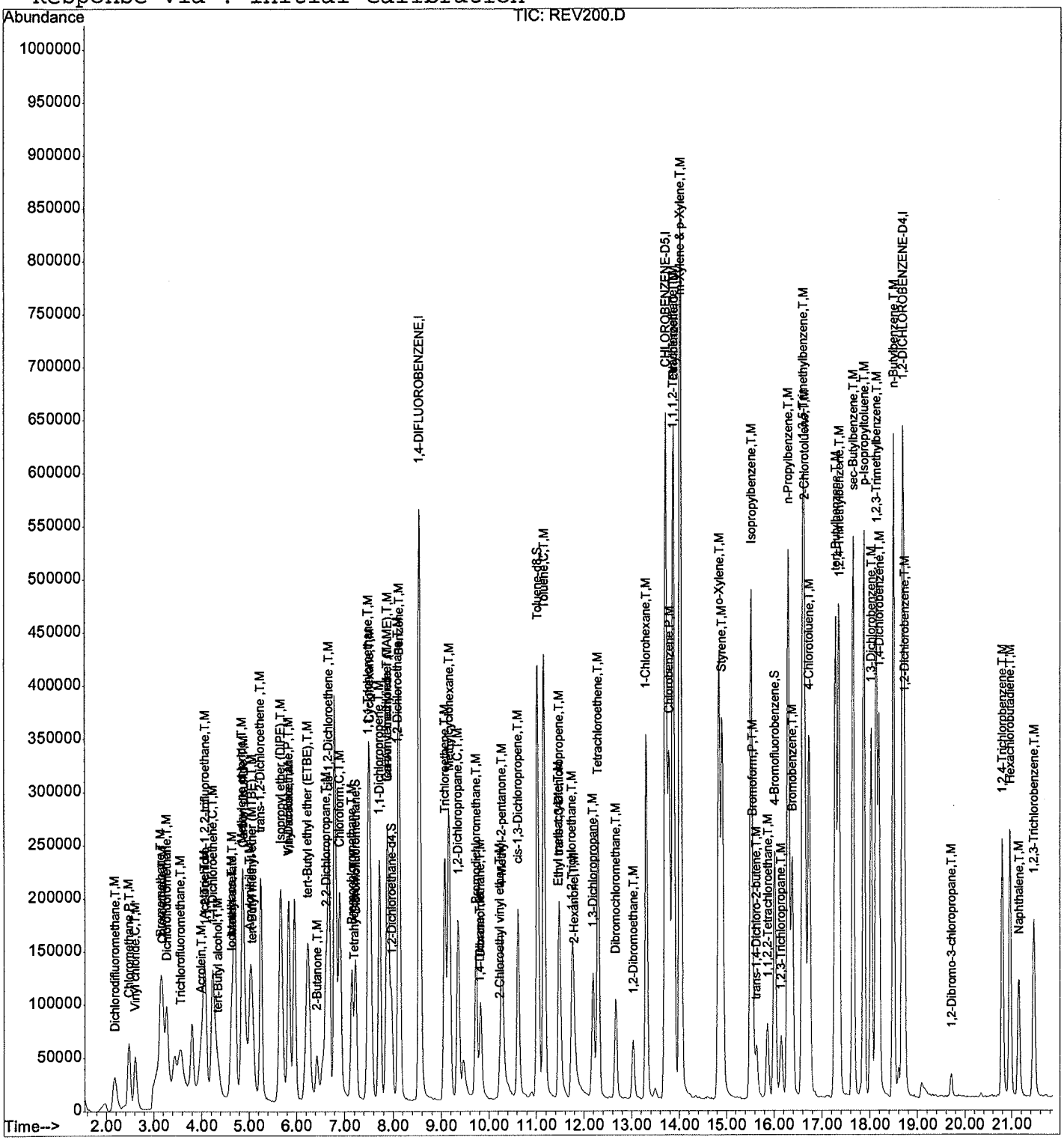
SU 5/15/24

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E11\REV200.D Vial: 6
Acq On : 11 May 2024 12:59 pm Operator: LPriet
Sample : VO01E115 0.5/2.5 Inst : 01
Misc : 5ppb 8260/25ppb KET-AA/125ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:56 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV201.D Vial: 7
Acq On : 11 May 2024 1:28 pm Operator: LPriet
Sample : VO01E116 1.0/5.0 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:58 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.54	114	920983	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	742213	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	284055	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	258776	9.08	ug/l	0.00
Spiked Amount 10.000			Recovery =	90.80%		
41) 1,2-Dichloroethane-d4	7.97	65	170981	8.79	ug/l	0.00
Spiked Amount 10.000			Recovery =	87.90%		
54) Toluene-d8	11.03	98	1034495	9.30	ug/l	0.00
Spiked Amount 10.000			Recovery =	93.00%		
76) 4-Bromofluorobenzene	16.01	95	349924	9.04	ug/l	0.00
Spiked Amount 10.000			Recovery =	90.40%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.17	85	233807	9.49	ug/l	100
5) Chloromethane	2.46	50	319578	9.26	ug/l	100
6) Vinyl chloride	2.61	62	285699	9.94	ug/l	100
7) Bromomethane	3.14	94	303178	8.88	ug/l	100
8) Chloroethane	3.18	64	194643	9.34	ug/l	100
9) Dichlorofluoromethane	3.27	67	535368	9.04	ug/l	100
10) Trichlorofluoromethane	3.55	101	365519	9.40	ug/l	100
11) Acrolein	3.98	56	91543	44.25	ug/l	100
12) 1,1,2-Trichloro-1,2,2-trif	4.06	151	193689	9.97	ug/l	100
13) Acetone	4.06	43	141862	42.20	ug/l	100
14) 1,1-Dichloroethene	4.22	61	473083	9.63	ug/l	100
15) tert-Butyl alcohol	4.34	59	232900	227.17	ug/l	100
16) Iodomethane	4.64	142	502181	9.54	ug/l	100
17) Methyl acetate	4.65	43	77293	8.43	ug/l	100
18) Methylene chloride	4.86	49	367504	9.33	ug/l	100
19) Carbon disulfide	4.87	76	984042	9.37	ug/l	100
20) Acrylonitrile	5.02	53	196137	45.99	ug/l	100
21) tert-Butyl methyl ether (M	5.07	73	435419	9.01	ug/l	100
22) trans-1,2-Dichloroethene	5.24	61	438850	9.27	ug/l	100
23) Isopropyl ether (DIPE)	5.67	45	945894	9.35	ug/l	100
24) Vinyl acetate	5.82	43	316675	9.12	ug/l	100
25) 1,1-Dichloroethane	5.82	63	520416	9.40	ug/l	100
27) tert-Butyl ethyl ether (ET	6.24	59	667502	9.21	ug/l	100
28) 2-Butanone	6.41	43	244678	47.43	ug/l	100
29) 2,2-Dichloropropane	6.62	77	438788	9.43	ug/l	100
30) cis-1,2-Dichloroethene	6.68	96	363843	9.55	ug/l	100
31) Chloroform	6.90	83	508562	9.02	ug/l	100

(#) = qualifier out of range (m) = manual integration

SU 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV201.D
Acq On : 11 May 2024 1:28 pm
Sample : VO01E116 1.0/5.0
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 13:58 2024

Vial: 7
Operator: LPriet
Inst : 01
Multiplr: 1.00
Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.14	49	205550	9.28	ug/l	100
33)	Tetrahydrofuran	7.20	42	27463	8.42	ug/l	100
35)	1,1,1-Trichloroethane	7.49	97	444990	9.43	ug/l	100
36)	Cyclohexane	7.52	84	417453	9.08	ug/l	100
38)	1,1-Dichloropropene	7.72	110	150631	9.39	ug/l	100
39)	Carbon tetrachloride	7.88	119	336330	9.57	ug/l	100
40)	tert-Amyl methyl ether (TA	7.88	73	497165	8.82	ug/l	100
42)	Benzene	8.13	78	1153601	9.38	ug/l	100
43)	1,2-Dichloroethane	8.10	62	229577	9.25	ug/l	100
44)	Trichloroethene	9.06	130	307851	9.67	ug/l	100
45)	Methylcyclohexane	9.17	83	454050	8.98	ug/l	100
46)	1,2-Dichloropropane	9.34	63	256137	9.30	ug/l	100
47)	Bromodichloromethane	9.73	83	342146	8.95	ug/l	100
48)	1,4-Dioxane	9.79	88	20047	177.87	ug/l	100
49)	Dibromomethane	9.82	93	116361	8.96	ug/l	100
50)	2-Chloroethyl vinyl ether	10.23	63	63930	9.15	ug/l	100
51)	4-Methyl-2-pentanone	10.26	43	589994	43.70	ug/l	100
52)	cis-1,3-Dichloropropene	10.62	75	398855	9.31	ug/l	100
55)	Toluene	11.17	91	1262539	9.58	ug/l	100
56)	Ethyl methacrylate	11.46	69	182985	9.25	ug/l	100
57)	trans-1,3-Dichloropropene	11.48	75	289239	9.44	ug/l	100
58)	1,1,2-Trichloroethane	11.74	97	160672	9.31	ug/l	100
59)	2-Hexanone	11.76	43	335905	43.39	ug/l	100
60)	1,3-Dichloropropane	12.19	76	271863	9.28	ug/l	100
61)	Tetrachloroethene	12.29	164	266498	9.73	ug/l	100
62)	Dibromochloromethane	12.66	129	193517	9.19	ug/l	100
63)	1,2-Dibromoethane	13.03	107	159304	9.33	ug/l	100
64)	1-Chlorohexane	13.30	91	551589	9.69	ug/l	100
65)	Chlorobenzene	13.79	112	759554	9.67	ug/l	100
66)	1,1,1,2-Tetrachloroethane	13.86	131	232054	9.59	ug/l	100
67)	Ethylbenzene	13.88	91	1473355	9.79	ug/l	100
68)	m-Xylene & p-Xylene	14.01	91	2121368	19.26	ug/l	100
69)	o-Xylene	14.84	91	1078385	9.51	ug/l	100
70)	Styrene	14.90	104	842539	9.59	ug/l	100
71)	Isopropylbenzene	15.52	105	1453974	9.74	ug/l	100
73)	Bromoform	15.55	173	95720	8.57	ug/l	100
74)	trans-1,4-Dichloro-2-buten	15.63	53	44316	9.04	ug/l	100
75)	1,1,2,2-Tetrachloroethane	15.86	83	168234	8.90	ug/l	100
77)	1,2,3-Trichloropropane	16.14	110	45054	9.31	ug/l	99
78)	n-Propylbenzene	16.29	91	1790558	9.70	ug/l	100
79)	Bromobenzene	16.38	156	279576	9.57	ug/l	100

(#) = qualifier out of range (m) = manual integration

5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV201.D Vial: 7
Acq On : 11 May 2024 1:28 pm Operator: LPriet
Sample : VO01E116 1.0/5.0 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:58 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	1139657	9.66	ug/l	100
81)	2-Chlorotoluene	16.63	91	1060747	9.54	ug/l	100
82)	4-Chlorotoluene	16.72	91	963048	9.78	ug/l	100
83)	tert-Butylbenzene	17.29	134	239466	9.67	ug/l	100
84)	1,2,4-Trimethylbenzene	17.36	105	1122345	9.72	ug/l	100
85)	sec-Butylbenzene	17.66	105	1569792	9.68	ug/l	100
86)	p-Isopropyltoluene	17.88	119	1201659	9.61	ug/l	100
87)	1,3-Dichlorobenzene	18.03	146	533251	9.60	ug/l	100
88)	1,2,3-Trimethylbenzene	18.13	105	1019164	9.45	ug/l	100
89)	1,4-Dichlorobenzene	18.19	146	518636	9.53	ug/l	100
90)	n-Butylbenzene	18.49	91	1250551	9.65	ug/l	100
91)	1,2-Dichlorobenzene	18.72	146	424621	9.33	ug/l	100
92)	1,2-Dibromo-3-chloropropan	19.71	157	23773	8.27	ug/l	100
93)	1,2,4-Trichlorobenzene	20.80	180	314594	9.47	ug/l	100
94)	Hexachlorobutadiene	20.96	225	197705	9.99	ug/l	100
95)	Naphthalene	21.14	128	358996	9.26	ug/l	100
96)	1,2,3-Trichlorobenzene	21.46	180	236728	9.46	ug/l	100

SA 5/15/24

(#) = qualifier out of range (m) = manual integration

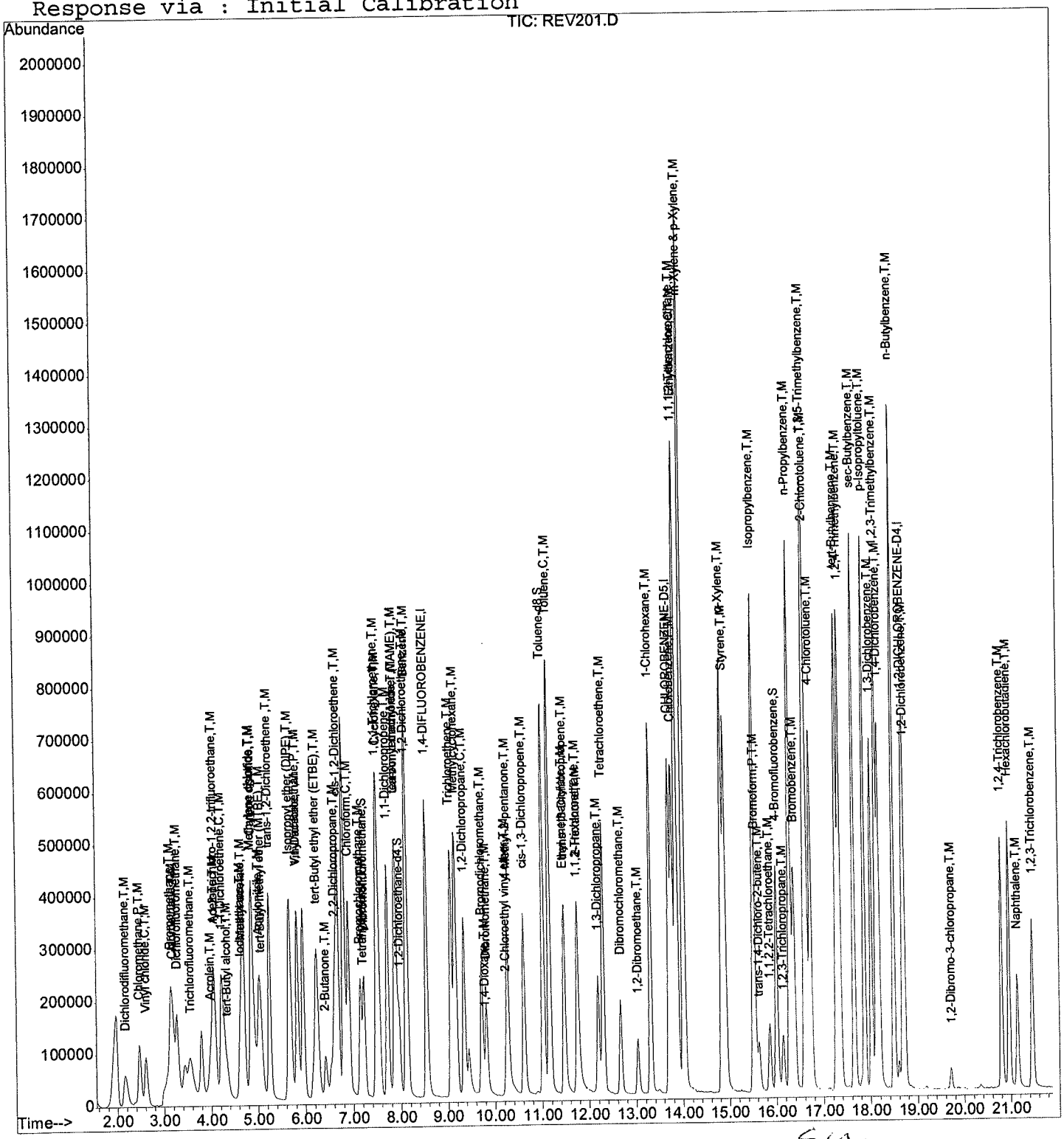
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E11\REV201.D
Acq On : 11 May 2024 1:28 pm
Sample : VO01E116 1.0/5.0
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 13:58 2024

Vial: 7
Operator: LPriet
Inst : 01
Multiplr: 1.00

Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



SA 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV202.D Vial: 8
Acq On : 11 May 2024 1:58 pm Operator: LPriet
Sample : VO01E117 2.0/10 Inst : 01
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:00 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	816915	10.00	ug/l	0.02
53) CHLOROBENZENE-D5	13.73	117	679573	10.00	ug/l	0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	256277	10.00	ug/l	0.02
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	546945	21.63	ug/l	0.01
Spiked Amount 10.000			Recovery = 216.30%			
41) 1,2-Dichloroethane-d4	7.97	65	368310	21.36	ug/l	0.00
Spiked Amount 10.000			Recovery = 213.60%			
54) Toluene-d8	11.03	98	2143971	21.05	ug/l	0.00
Spiked Amount 10.000			Recovery = 210.50%			
76) 4-Bromofluorobenzene	16.03	95	741429	21.24	ug/l	0.02
Spiked Amount 10.000			Recovery = 212.40%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.17	85	443172	20.27	ug/l	99
5) Chloromethane	2.47	50	619334	20.24	ug/l	100
6) Vinyl chloride	2.61	62	541540	21.25	ug/l	100
7) Bromomethane	3.15	94	618346	20.69	ug/l	97
8) Chloroethane	3.20	64	385600	20.85	ug/l	99
9) Dichlorofluoromethane	3.29	67	1066762	20.31	ug/l	99
10) Trichlorofluoromethane	3.55	101	683028	19.81	ug/l	99
11) Acrolein	3.98	56	192986	105.17	ug/l	96
12) 1,1,2-Trichloro-1,2,2-trif	4.07	151	365492	21.21	ug/l	99
13) Acetone	4.06	43	284979	95.57	ug/l	99
14) 1,1-Dichloroethene	4.24	61	930390	21.35	ug/l	100
15) tert-Butyl alcohol	4.34	59	495292	544.64	ug/l	99
16) Iodomethane	4.65	142	1006828	21.55	ug/l	100
17) Methyl acetate	4.66	43	166847	20.52	ug/l	99
18) Methylene chloride	4.87	49	730623	20.90	ug/l	100
19) Carbon disulfide	4.89	76	2006384	21.54	ug/l	100
20) Acrylonitrile	5.04	53	392428	103.74	ug/l	100
21) tert-Butyl methyl ether (M	5.06	73	899904	21.00	ug/l	99
22) trans-1,2-Dichloroethene	5.26	61	902607	21.50	ug/l	99
23) Isopropyl ether (DIPE)	5.67	45	1935724	21.58	ug/l	99
24) Vinyl acetate	5.84	43	675084	21.93	ug/l	100
25) 1,1-Dichloroethane	5.84	63	1063100	21.66	ug/l	100
27) tert-Butyl ethyl ether (ET	6.25	59	1387307	21.59	ug/l	99
28) 2-Butanone	6.43	43	502145	109.75	ug/l	100
29) 2,2-Dichloropropane	6.64	77	865612	20.97	ug/l	100
30) cis-1,2-Dichloroethene	6.69	96	725941	21.48	ug/l	100
31) Chloroform	6.92	83	1028651	20.56	ug/l	100

(#) = qualifier out of range (m) = manual integration

5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV202.D
Acq On : 11 May 2024 1:58 pm
Sample : VO01E117 2.0/10
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA
Vial: 8
Operator: LPriet
Inst : 01
Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:00 2024
Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) Bromochloromethane	7.15	49	418099	21.28 ug/l	99
33) Tetrahydrofuran	7.21	42	59689	20.62 ug/l	99
35) 1,1,1-Trichloroethane	7.51	97	890497	21.28 ug/l	100
36) Cyclohexane	7.54	84	839410	20.59 ug/l	100
38) 1,1-Dichloropropene	7.73	110	301701	21.21 ug/l	99
39) Carbon tetrachloride	7.89	119	658847	21.13 ug/l	99
40) tert-Amyl methyl ether (TA	7.89	73	1043076	20.86 ug/l	100
42) Benzene	8.15	78	2297893	21.05 ug/l	100
43) 1,2-Dichloroethane	8.12	62	472900	21.49 ug/l	99
44) Trichloroethene	9.08	130	611530	21.66 ug/l	99
45) Methylcyclohexane	9.17	83	904979	20.18 ug/l	100
46) 1,2-Dichloropropane	9.36	63	521244	21.35 ug/l	100
47) Bromodichloromethane	9.74	83	704865	20.80 ug/l	100
48) 1,4-Dioxane	9.79	88	43990	440.03 ug/l	99
49) Dibromomethane	9.83	93	243286	21.12 ug/l	99
50) 2-Chloroethyl vinyl ether	10.23	63	134190	21.65 ug/l	98
51) 4-Methyl-2-pentanone	10.28	43	1288906	103.66 ug/l	100
52) cis-1,3-Dichloropropene	10.63	75	818576	21.54 ug/l	100
55) Toluene	11.18	91	2491900	20.65 ug/l	100
56) Ethyl methacrylate	11.46	69	395514	21.84 ug/l	98
57) trans-1,3-Dichloropropene	11.49	75	603742	21.52 ug/l	100
58) 1,1,2-Trichloroethane	11.76	97	330926	20.94 ug/l	99
59) 2-Hexanone	11.77	43	767459	101.03 ug/l	100
60) 1,3-Dichloropropane	12.20	76	575688	21.46 ug/l	99
61) Tetrachloroethene	12.31	164	522743	20.84 ug/l	99
62) Dibromochloromethane	12.68	129	406460	21.07 ug/l	99
63) 1,2-Dibromoethane	13.05	107	339123	21.70 ug/l	99
64) 1-Chlorohexane	13.32	91	1076692	20.66 ug/l	100
65) Chlorobenzene	13.80	112	1529085	21.25 ug/l	100
66) 1,1,1,2-Tetrachloroethane	13.88	131	470126	21.22 ug/l	99
67) Ethylbenzene	13.89	91	2901232	21.06 ug/l	99
68) m-Xylene & p-Xylene	14.03	91	4237521	42.03 ug/l	100
69) o-Xylene	14.86	91	2143592	20.66 ug/l	99
70) Styrene	14.92	104	1701411	21.15 ug/l	100
71) Isopropylbenzene	15.54	105	2885751	21.11 ug/l	100
73) Bromoform	15.57	173	208560	20.24 ug/l	99
74) trans-1,4-Dichloro-2-buten	15.64	53	96395	21.80 ug/l	97
75) 1,1,2,2-Tetrachloroethane	15.88	83	354915	20.80 ug/l	99
77) 1,2,3-Trichloropropane	16.16	110	95768	21.94 ug/l	98
78) n-Propylbenzene	16.31	91	3533479	21.21 ug/l	100
79) Bromobenzene	16.40	156	569509	21.60 ug/l	99

(#) = qualifier out of range (m) = manual integration

SU 5/15/24

Data File : D:\HPCHEM\1\DATA\24E11\REV202.D
Acq On : 11 May 2024 1:58 pm
Sample : VO01E117 2.0/10
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 14:00 2024

Vial: 8
Operator: LPriet
Inst : 01
Multiplr: 1.00
Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
80) 1,3,5-Trimethylbenzene	16.62	105	2263948	21.26 ug/l	99
81) 2-Chlorotoluene	16.65	91	2094475	20.88 ug/l	100
82) 4-Chlorotoluene	16.74	91	1908157	21.48 ug/l	100
83) tert-Butylbenzene	17.30	134	478610	21.43 ug/l	99
84) 1,2,4-Trimethylbenzene	17.37	105	2219029	21.30 ug/l	100
85) sec-Butylbenzene	17.67	105	3115101	21.28 ug/l	100
86) p-Isopropyltoluene	17.89	119	2394992	21.23 ug/l	100
87) 1,3-Dichlorobenzene	18.04	146	1072675	21.41 ug/l	100
88) 1,2,3-Trimethylbenzene	18.14	105	2044493	21.02 ug/l	100
89) 1,4-Dichlorobenzene	18.20	146	1030532	20.98 ug/l	100
90) n-Butylbenzene	18.50	91	2472290	21.16 ug/l	100
91) 1,2-Dichlorobenzene	18.74	146	871915	21.24 ug/l	100
92) 1,2-Dibromo-3-chloropropan	19.73	157	54040	20.05 ug/l	99
93) 1,2,4-Trichlorobenzene	20.81	180	660275	22.03 ug/l	100
94) Hexachlorobutadiene	20.99	225	397807	22.28 ug/l	100
95) Naphthalene	21.15	128	776440	22.20 ug/l	99
96) 1,2,3-Trichlorobenzene	21.48	180	496067	21.97 ug/l	100

SA 5/15/24

(#) = qualifier out of range (m) = manual integration

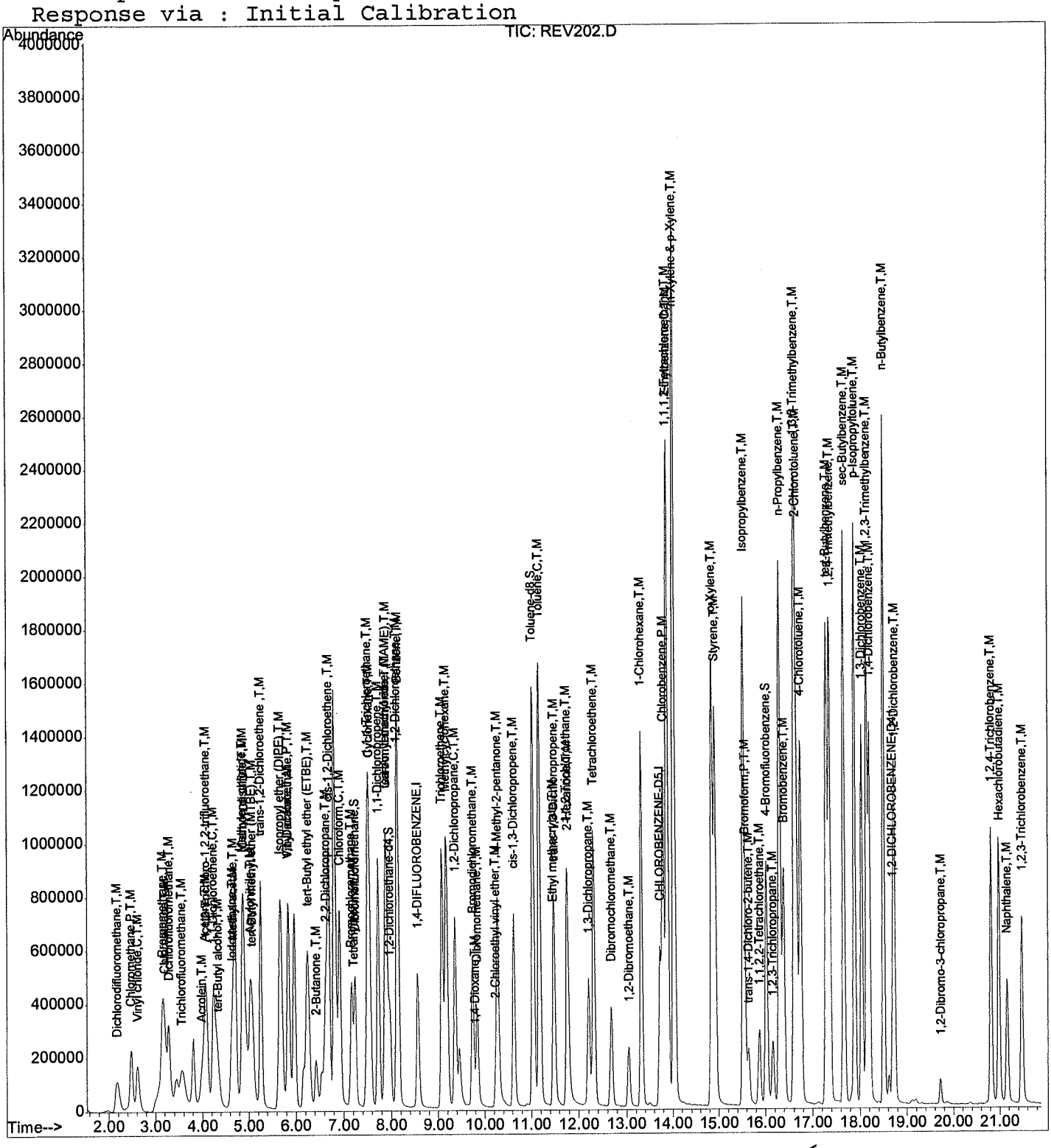
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E11\REV202.D
Acq On : 11 May 2024 1:58 pm
Sample : VO01E117 2.0/10
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 14:00 2024

Vial: 8
Operator: LPriet
Inst : 01
Multiplr: 1.00

Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



SY 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV203.D Vial: 9
Acq On : 11 May 2024 2:27 pm Operator: LPriet
Sample : VO01E118 3.0/15 Inst : 01
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:02 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	849708	10.00	ug/l	0.02
53) CHLOROBENZENE-D5	13.72	117	707238	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	267331	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	799087	30.38	ug/l	0.00
Spiked Amount 10.000			Recovery = 303.80%			
41) 1,2-Dichloroethane-d4	7.97	65	550662	30.70	ug/l	0.00
Spiked Amount 10.000			Recovery = 307.00%			
54) Toluene-d8	11.02	98	3115280	29.39	ug/l	-0.01
Spiked Amount 10.000			Recovery = 293.90%			
76) 4-Bromofluorobenzene	16.01	95	1073630	29.49	ug/l	0.00
Spiked Amount 10.000			Recovery = 294.90%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.18	85	673565	29.62	ug/l	98
5) Chloromethane	2.48	50	894520	28.10	ug/l	100
6) Vinyl chloride	2.61	62	776773	29.30	ug/l	100
7) Bromomethane	3.15	94	899449	29.03	ug/l	97
8) Chloroethane	3.20	64	574606	29.88	ug/l	100
9) Dichlorofluoromethane	3.27	67	1551702	28.41	ug/l	99
10) Trichlorofluoromethane	3.57	101	1032985	28.80	ug/l	99
11) Acrolein	3.98	56	286661	150.20	ug/l	97
12) 1,1,2-Trichloro-1,2,2-trif	4.07	151	554202	30.92	ug/l	100
13) Acetone	4.06	43	435360	140.37	ug/l	97
14) 1,1-Dichloroethene	4.23	61	1367312	30.17	ug/l	100
15) tert-Butyl alcohol	4.34	59	759636	803.08	ug/l	99
16) Iodomethane	4.65	142	1484308	30.55	ug/l	100
17) Methyl acetate	4.65	43	247532	29.27	ug/l	100
18) Methylene chloride	4.86	49	1052102	28.94	ug/l	100
19) Carbon disulfide	4.89	76	2879778	29.72	ug/l	100
20) Acrylonitrile	5.02	53	590477	150.07	ug/l	99
21) tert-Butyl methyl ether (M	5.06	73	1337887	30.02	ug/l	98
22) trans-1,2-Dichloroethene	5.26	61	1319053	30.21	ug/l	100
23) Isopropyl ether (DIPE)	5.67	45	2808667	30.11	ug/l	100
24) Vinyl acetate	5.82	43	1017586	31.77	ug/l	100
25) 1,1-Dichloroethane	5.83	63	1541259	30.19	ug/l	100
27) tert-Butyl ethyl ether (ET	6.23	59	2031979	30.40	ug/l	100
28) 2-Butanone	6.41	43	780834	164.07	ug/l	100
29) 2,2-Dichloropropane	6.63	77	1283925	29.91	ug/l	100
30) cis-1,2-Dichloroethene	6.69	96	1065003	30.30	ug/l	100
31) Chloroform	6.92	83	1477710	28.40	ug/l	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV203.D
Acq On : 11 May 2024 2:27 pm
Sample : VO01E118 3.0/15
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 14:02 2024

Vial: 9
Operator: LPriet
Inst : 01
Multiplr: 1.00
Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.15	49	628929	30.78	ug/l	100
33)	Tetrahydrofuran	7.20	42	89460	29.72	ug/l	98
35)	1,1,1-Trichloroethane	7.49	97	1293540	29.71	ug/l	100
36)	Cyclohexane	7.52	84	1200311	28.31	ug/l	100
38)	1,1-Dichloropropene	7.73	110	446401	30.17	ug/l	99
39)	Carbon tetrachloride	7.88	119	976969	30.13	ug/l	100
40)	tert-Amyl methyl ether (TA	7.89	73	1549323	29.79	ug/l	99
42)	Benzene	8.13	78	3348702	29.50	ug/l	100
43)	1,2-Dichloroethane	8.10	62	692754	30.26	ug/l	99
44)	Trichloroethene	9.06	130	891995	30.38	ug/l	99
45)	Methylcyclohexane	9.17	83	1305359	27.98	ug/l	100
46)	1,2-Dichloropropane	9.35	63	761086	29.96	ug/l	100
47)	Bromodichloromethane	9.73	83	1014655	28.78	ug/l	100
48)	1,4-Dioxane	9.76	88	66102	635.70	ug/l	99
49)	Dibromomethane	9.82	93	364896	30.46	ug/l	97
50)	2-Chloroethyl vinyl ether	10.22	63	205504	31.88	ug/l	98
51)	4-Methyl-2-pentanone	10.26	43	1958633	150.19	ug/l	100
52)	cis-1,3-Dichloropropene	10.62	75	1217843	30.81	ug/l	100
55)	Toluene	11.17	91	3665193	29.18	ug/l	100
56)	Ethyl methacrylate	11.45	69	584066	30.99	ug/l	97
57)	trans-1,3-Dichloropropene	11.48	75	891028	30.52	ug/l	100
58)	1,1,2-Trichloroethane	11.75	97	494541	30.07	ug/l	99
59)	2-Hexanone	11.76	43	1192685	148.48	ug/l	99
60)	1,3-Dichloropropane	12.19	76	844763	30.26	ug/l	99
61)	Tetrachloroethene	12.29	164	772439	29.59	ug/l	99
62)	Dibromochloromethane	12.66	129	594252	29.60	ug/l	99
63)	1,2-Dibromoethane	13.03	107	501525	30.83	ug/l	99
64)	1-Chlorohexane	13.30	91	1608154	29.65	ug/l	100
65)	Chlorobenzene	13.79	112	2219576	29.64	ug/l	100
66)	1,1,1,2-Tetrachloroethane	13.86	131	687136	29.80	ug/l	99
67)	Ethylbenzene	13.88	91	4240845	29.59	ug/l	100
68)	m-Xylene & p-Xylene	14.01	91	6175129	58.85	ug/l	100
69)	o-Xylene	14.84	91	3177799	29.42	ug/l	100
70)	Styrene	14.90	104	2503360	29.90	ug/l	100
71)	Isopropylbenzene	15.52	105	4219160	29.65	ug/l	100
73)	Bromoform	15.55	173	312940	28.97	ug/l	99
74)	trans-1,4-Dichloro-2-buten	15.63	53	144056	31.24	ug/l	96
75)	1,1,2,2-Tetrachloroethane	15.86	83	534853	30.05	ug/l	99
77)	1,2,3-Trichloropropane	16.15	110	141561	31.09	ug/l	97
78)	n-Propylbenzene	16.29	91	5144010	29.59	ug/l	100
79)	Bromobenzene	16.38	156	831254	30.23	ug/l	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV203.D
Acq On : 11 May 2024 2:27 pm
Sample : VO01E118 3.0/15
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 14:02 2024

Vial: 9
Operator: LPriet
Inst : 01
Multiplr: 1.00
Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
80) 1,3,5-Trimethylbenzene	16.60	105	3300850	29.72 ug/l	99
81) 2-Chlorotoluene	16.63	91	3091027	29.54 ug/l	100
82) 4-Chlorotoluene	16.72	91	2792432	30.14 ug/l	99
83) tert-Butylbenzene	17.29	134	693102	29.75 ug/l	99
84) 1,2,4-Trimethylbenzene	17.35	105	3247834	29.89 ug/l	99
85) sec-Butylbenzene	17.66	105	4497766	29.46 ug/l	100
86) p-Isopropyltoluene	17.88	119	3456736	29.37 ug/l	100
87) 1,3-Dichlorobenzene	18.03	146	1566009	29.97 ug/l	100
88) 1,2,3-Trimethylbenzene	18.13	105	3006443	29.63 ug/l	100
89) 1,4-Dichlorobenzene	18.19	146	1511456	29.50 ug/l	100
90) n-Butylbenzene	18.49	91	3615477	29.66 ug/l	100
91) 1,2-Dichlorobenzene	18.72	146	1277031	29.82 ug/l	100
92) 1,2-Dibromo-3-chloropropan	19.72	157	81915	28.90 ug/l	100
93) 1,2,4-Trichlorobenzene	20.80	180	991777	31.73 ug/l	100
94) Hexachlorobutadiene	20.96	225	585385	31.43 ug/l	99
95) Naphthalene	21.14	128	1169103	32.04 ug/l	100
96) 1,2,3-Trichlorobenzene	21.46	180	737458	31.32 ug/l	99

(#) = qualifier out of range (m) = manual integration

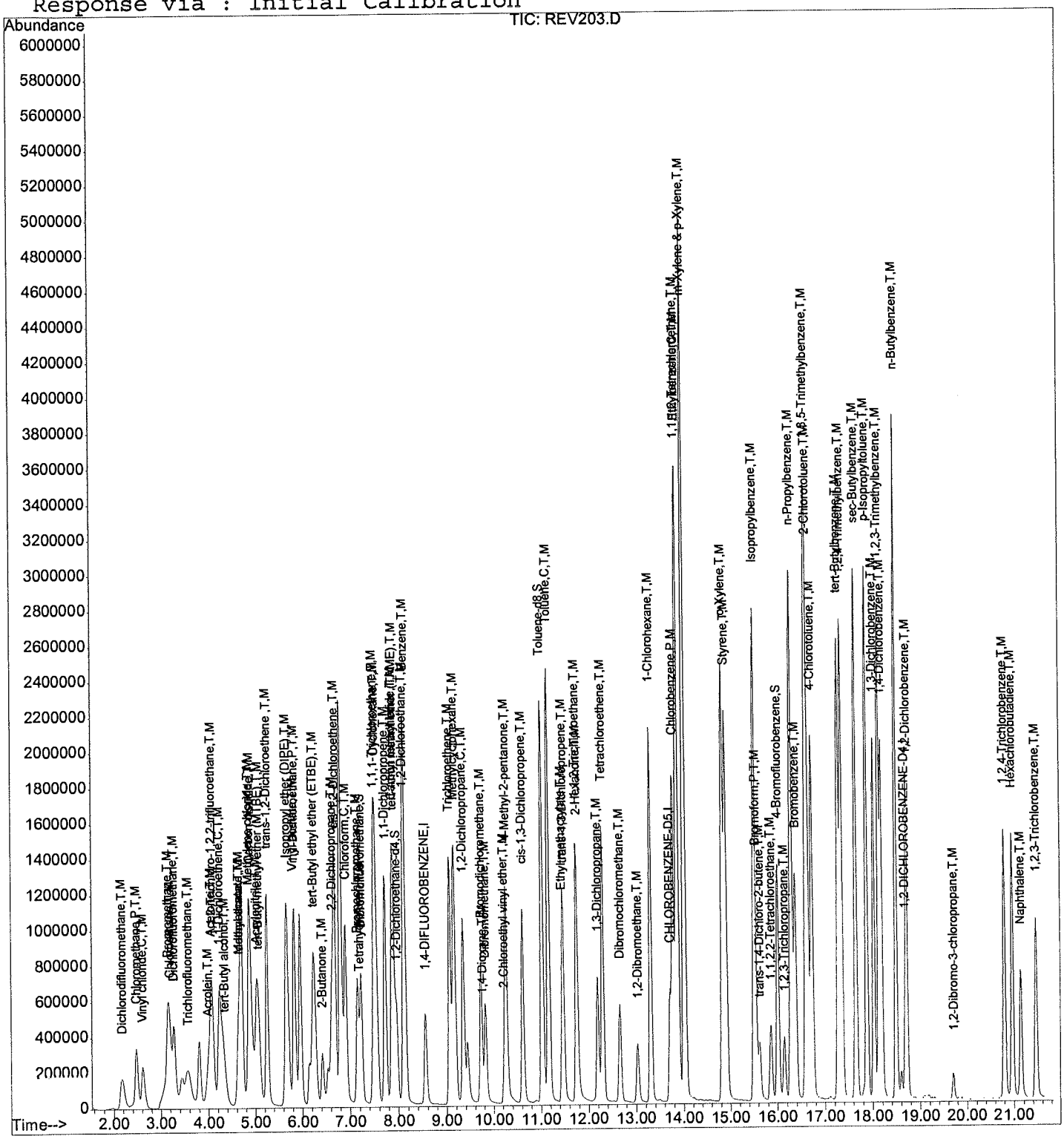
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E11\REV203.D
Acq On : 11 May 2024 2:27 pm
Sample : VO01E118 3.0/15
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 14:02 2024

Vial: 9
Operator: LPriet
Inst : 01
Multiplr: 1.00

Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV204.D Vial: 10
Acq On : 11 May 2024 2:56 pm Operator: LPriet
Sample : VO01E119 5.0/25 Inst : 01
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:33 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	790188	10.00	ug/l	0.01
53) CHLOROBENZENE-D5	13.71	117	650561	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	247844	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	0.00	98	0d	0.00	ug/l	
Spiked Amount 10.000			Recovery =	0.00%		
76) 4-Bromofluorobenzene	0.00	95	0d	0.00	ug/l	
Spiked Amount 10.000			Recovery =	0.00%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.17	85	1081177	51.13	ug/l	98
5) Chloromethane	2.47	50	1438807	48.60	ug/l	100
6) Vinyl chloride	2.62	62	1235915	50.13	ug/l	100
7) Bromomethane	3.15	94	1484374	51.68	ug/l	98
8) Chloroethane	3.20	64	946787	52.94	ug/l	99
9) Dichlorofluoromethane	3.29	67	2533049	49.87	ug/l	98
10) Trichlorofluoromethane	3.57	101	1663384	49.87	ug/l	99
11) Acrolein	3.98	56	473669	266.87	ug/l	99
12) 1,1,2-Trichloro-1,2,2-trif	4.07	151	901773	54.10	ug/l	100
13) Acetone	4.06	43	730855	253.40	ug/l	100
14) 1,1-Dichloroethene	4.24	61	2222510	52.74	ug/l	100
15) tert-Butyl alcohol	4.34	59	1234938	1403.91	ug/l	99
16) Iodomethane	4.64	142	2410819	53.35	ug/l	100
18) Methylene chloride	4.86	49	1737751	51.40	ug/l	100
20) Acrylonitrile	5.02	53	973695	266.10	ug/l	99
21) tert-Butyl methyl ether (M	5.07	73	2163847	52.20	ug/l	99
22) trans-1,2-Dichloroethene	5.26	61	2150916	52.97	ug/l	99
23) Isopropyl ether (DIPE)	5.67	45	4495028	51.81	ug/l	99
24) Vinyl acetate	5.82	43	1638323	55.01	ug/l	100
25) 1,1-Dichloroethane	5.84	63	2492540	52.49	ug/l	100
27) tert-Butyl ethyl ether (ET	6.25	59	3217505	51.76	ug/l	98
28) 2-Butanone	6.41	43	1277785	288.71	ug/l	100
29) 2,2-Dichloropropane	6.64	77	2063550	51.69	ug/l	100
30) cis-1,2-Dichloroethene	6.68	96	1715982	52.50	ug/l	99
31) Chloroform	6.92	83	2420327	50.02	ug/l	100
32) Bromochloromethane	7.15	49	1013155	53.31	ug/l	98
33) Tetrahydrofuran	7.20	42	153627	54.88	ug/l	97

(#) = qualifier out of range (m) = manual integration

SA 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV204.D
Acq On : 11 May 2024 2:56 pm
Sample : VO01E119 5.0/25
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA
Vial: 10
Operator: LPriet
Inst : 01
Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:33 2024
Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
35) 1,1,1-Trichloroethane	7.51	97	2111400	52.15 ug/l	100
38) 1,1-Dichloropropene	7.73	110	723523	52.58 ug/l	99
39) Carbon tetrachloride	7.88	119	1591100	52.76 ug/l	99
40) tert-Amyl methyl ether (TA	7.90	73	2542219	52.56 ug/l	99
42) Benzene	8.13	78	5383213	50.99 ug/l	100
43) 1,2-Dichloroethane	8.10	62	1118925	52.56 ug/l	100
44) Trichloroethene	9.08	130	1468714	53.79 ug/l	99
46) 1,2-Dichloropropane	9.34	63	1258335	53.27 ug/l	100
47) Bromodichloromethane	9.73	83	1690988	51.58 ug/l	100
48) 1,4-Dioxane	9.76	88	113358	1172.28 ug/l	97
49) Dibromomethane	9.82	93	602961	54.12 ug/l	98
50) 2-Chloroethyl vinyl ether	10.22	63	329105	54.91 ug/l	98
51) 4-Methyl-2-pentanone	10.26	43	3235283	264.67 ug/l	99
52) cis-1,3-Dichloropropene	10.62	75	1992729	54.21 ug/l	99
55) Toluene	11.17	91	6025151	52.15 ug/l	100
56) Ethyl methacrylate	11.45	69	966319	55.74 ug/l	98
57) trans-1,3-Dichloropropene	11.48	75	1465798	54.58 ug/l	99
58) 1,1,2-Trichloroethane	11.74	97	796053	52.63 ug/l	100
59) 2-Hexanone	11.74	43	1992542	265.71 ug/l	99
60) 1,3-Dichloropropane	12.19	76	1380516	53.77 ug/l	99
61) Tetrachloroethene	12.29	164	1249230	52.02 ug/l	100
62) Dibromochloromethane	12.66	129	985487	53.37 ug/l	99
63) 1,2-Dibromoethane	13.03	107	822866	54.99 ug/l	99
64) 1-Chlorohexane	13.30	91	2572709	51.57 ug/l	100
65) Chlorobenzene	13.79	112	3610696	52.42 ug/l	99
66) 1,1,1,2-Tetrachloroethane	13.86	131	1116459	52.63 ug/l	99
67) Ethylbenzene	13.88	91	6718588	50.95 ug/l	99
68) m-Xylene & p-Xylene	14.03	91	9682404	100.31 ug/l	99
69) o-Xylene	14.84	91	5069451	51.03 ug/l	99
70) Styrene	14.90	104	4017810	52.17 ug/l	99
71) Isopropylbenzene	15.52	105	6705142	51.23 ug/l	100
73) Bromoform	15.55	173	504524	50.13 ug/l	99
74) trans-1,4-Dichloro-2-buten	15.63	53	237301	55.50 ug/l	96
75) 1,1,2,2-Tetrachloroethane	15.86	83	869256	52.68 ug/l	99
77) 1,2,3-Trichloropropane	16.14	110	235480	55.79 ug/l	92
78) n-Propylbenzene	16.29	91	8220515	51.01 ug/l	100
79) Bromobenzene	16.38	156	1345207	52.77 ug/l	100
80) 1,3,5-Trimethylbenzene	16.60	105	5240717	50.90 ug/l	99
81) 2-Chlorotoluene	16.63	91	4859918	50.09 ug/l	95
82) 4-Chlorotoluene	16.74	91	4476659	52.12 ug/l	97
83) tert-Butylbenzene	17.29	134	1119401	51.83 ug/l	98

(#) = qualifier out of range (m) = manual integration

SU 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV204.D
Acq On : 11 May 2024 2:56 pm
Sample : VO01E119 5.0/25
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 14:33 2024

Vial: 10
Operator: LPriet
Inst : 01
Multiplr: 1.00
Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
84)	1,2,4-Trimethylbenzene	17.36	105	5150477	51.12	ug/l	99
85)	sec-Butylbenzene	17.66	105	7213677	50.97	ug/l	100
86)	p-Isopropyltoluene	17.88	119	5536086	50.73	ug/l	100
87)	1,3-Dichlorobenzene	18.03	146	2506660	51.74	ug/l	100
88)	1,2,3-Trimethylbenzene	18.13	105	4772026	50.74	ug/l	99
89)	1,4-Dichlorobenzene	18.19	146	2389062	50.30	ug/l	99
90)	n-Butylbenzene	18.49	91	5704101	50.47	ug/l	100
91)	1,2-Dichlorobenzene	18.72	146	2055877	51.79	ug/l	100
92)	1,2-Dibromo-3-chloropropan	19.71	157	138333	52.22	ug/l	99
93)	1,2,4-Trichlorobenzene	20.80	180	1603778	55.34	ug/l	100
94)	Hexachlorobutadiene	20.97	225	940175	54.45	ug/l	100
95)	Naphthalene	21.15	128	1911993	56.52	ug/l	100
96)	1,2,3-Trichlorobenzene	21.46	180	1194867	54.73	ug/l	100

SM 5/15/24

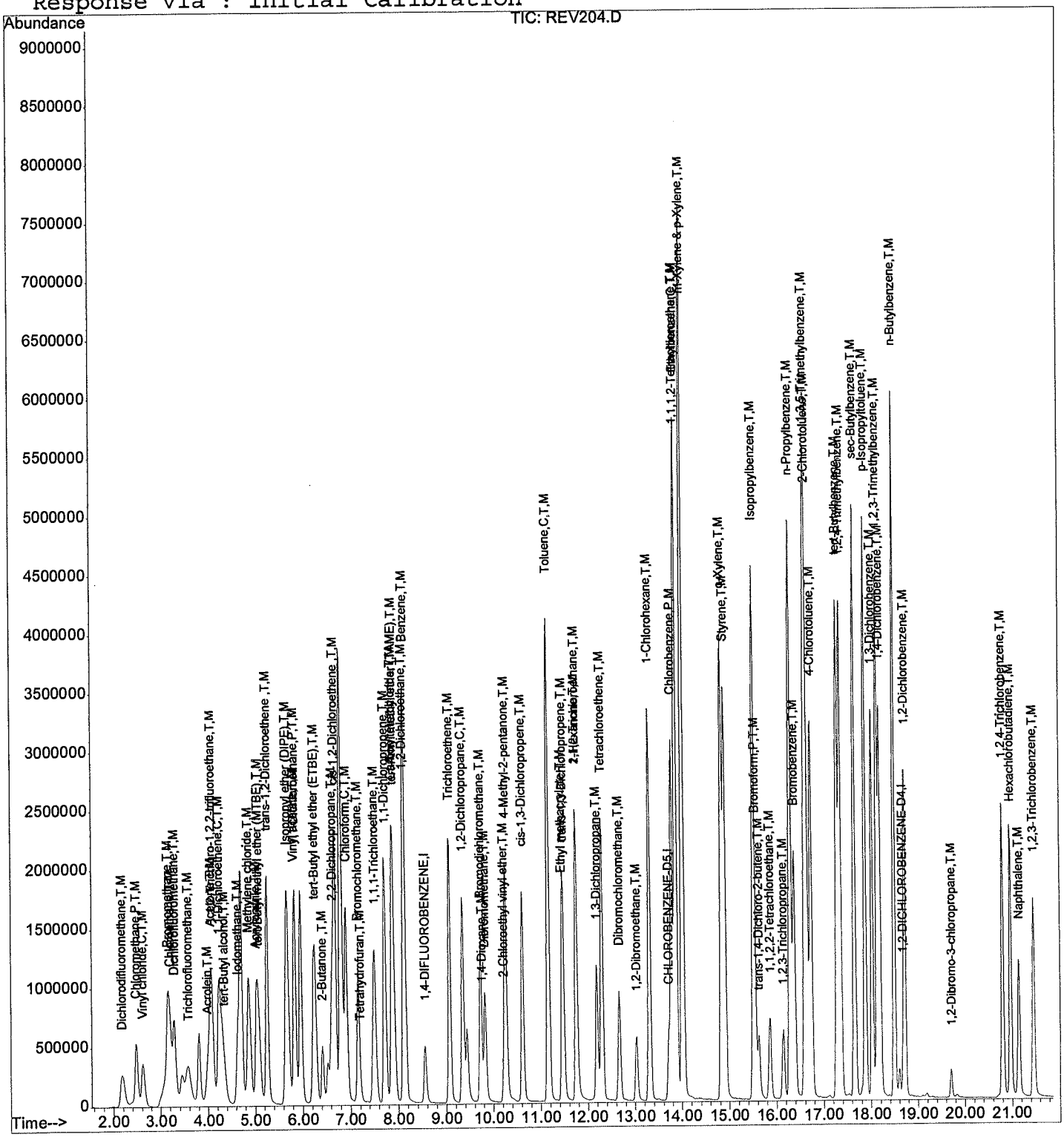
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E11\REV204.D
Acq On : 11 May 2024 2:56 pm
Sample : VO01E119 5.0/25
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 14:33 2024

Vial: 10
Operator: LPriet
Inst : 01
Multiplr: 1.00
Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV205.D Vial: 11
Acq On : 11 May 2024 3:26 pm Operator: LPriet
Sample : VO01DE1110 10/50 Inst : 01
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:34 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	813917	10.00	ug/l	0.02
53) CHLOROBENZENE-D5	13.72	117	663851	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	236992	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	0.00	98	0d	0.00	ug/l	
Spiked Amount 10.000			Recovery =	0.00%		
76) 4-Bromofluorobenzene	0.00	95	0d	0.00	ug/l	
Spiked Amount 10.000			Recovery =	0.00%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.18	85	2149061	98.68	ug/l	98
5) Chloromethane	2.48	50	2757462	90.43	ug/l	99
6) Vinyl chloride	2.61	62	2275750	89.61	ug/l	100
7) Bromomethane	3.15	94	2950163	99.92	ug/l	97
8) Chloroethane	3.20	64	1887602	102.46	ug/l	99
9) Dichlorofluoromethane	3.29	67	4893407	93.53	ug/l	98
10) Trichlorofluoromethane	3.57	101	3259184	94.86	ug/l	100
11) Acrolein	4.00	56	920713	503.62	ug/l	97
12) 1,1,2-Trichloro-1,2,2-trif	4.09	151	1635111	95.23	ug/l	100
13) Acetone	4.07	43	1378975	464.17	ug/l	96
14) 1,1-Dichloroethene	4.24	61	4287129	98.76	ug/l	100
15) tert-Butyl alcohol	4.34	59	2428061	2679.81	ug/l	99
16) Iodomethane	4.65	142	4731046	101.65	ug/l	100
18) Methylene chloride	4.87	49	3383840	97.16	ug/l	99
20) Acrylonitrile	5.02	53	1892610	502.15	ug/l	99
21) tert-Butyl methyl ether (M	5.07	73	4236425	99.23	ug/l	99
22) trans-1,2-Dichloroethene	5.26	61	4113790	98.36	ug/l	100
23) Isopropyl ether (DIPE)	5.67	45	8979646	100.48	ug/l	100
24) Vinyl acetate	5.82	43	3315001	108.06	ug/l	99
25) 1,1-Dichloroethane	5.84	63	4821432	98.58	ug/l	100
27) tert-Butyl ethyl ether (ET	6.25	59	6309833	98.54	ug/l	98
28) 2-Butanone	6.41	43	2458656	539.33	ug/l	99
29) 2,2-Dichloropropane	6.64	77	3940507	95.83	ug/l	100
30) cis-1,2-Dichloroethene	6.69	96	3330208	98.92	ug/l	99
31) Chloroform	6.92	83	4814377	96.59	ug/l	100
32) Bromochloromethane	7.15	49	1957186	99.99	ug/l	98
33) Tetrahydrofuran	7.20	42	291915	101.24	ug/l	96

(#) = qualifier out of range (m) = manual integration

SU 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV205.D Vial: 11
Acq On : 11 May 2024 3:26 pm Operator: LPriet
Sample : VO01DE1110 10/50 Inst : 01
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:34 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
35)	1,1,1-Trichloroethane	7.51	97	4134538	99.15 ug/l	100
38)	1,1-Dichloropropene	7.73	110	1407010	99.26 ug/l	98
39)	Carbon tetrachloride	7.88	119	3044744	98.02 ug/l	99
40)	tert-Amyl methyl ether (TA	7.89	73	4847551	97.30 ug/l	99
42)	Benzene	8.13	78	10614708	97.62 ug/l	100
43)	1,2-Dichloroethane	8.10	62	2198375	100.25 ug/l	100
44)	Trichloroethene	9.06	130	2868237	101.98 ug/l	99
46)	1,2-Dichloropropane	9.35	63	2435072	100.09 ug/l	100
47)	Bromodichloromethane	9.73	83	3272651	96.91 ug/l	100
48)	1,4-Dioxane	9.76	88	217292	2181.59 ug/l	95
49)	Dibromomethane	9.82	93	1156972	100.82 ug/l	98
50)	2-Chloroethyl vinyl ether	10.22	63	641035	103.83 ug/l	97
51)	4-Methyl-2-pentanone	10.26	43	6179211	488.45 ug/l	100
52)	cis-1,3-Dichloropropene	10.62	75	3875584	102.36 ug/l	99
55)	Toluene	11.17	91	11521987	97.73 ug/l	99
56)	Ethyl methacrylate	11.45	69	1848777	104.51 ug/l	97
57)	trans-1,3-Dichloropropene	11.48	75	2820520	102.93 ug/l	99
58)	1,1,2-Trichloroethane	11.75	97	1530353	99.15 ug/l	99
59)	2-Hexanone	11.75	43	3802288	492.69 ug/l	100
60)	1,3-Dichloropropane	12.19	76	2688647	102.62 ug/l	99
61)	Tetrachloroethene	12.31	164	2415182	98.56 ug/l	100
62)	Dibromochloromethane	12.66	129	1898169	100.74 ug/l	99
63)	1,2-Dibromoethane	13.03	107	1574680	103.12 ug/l	99
64)	1-Chlorohexane	13.30	91	4899203	96.24 ug/l	100
65)	Chlorobenzene	13.79	112	6936484	98.69 ug/l	99
66)	1,1,1,2-Tetrachloroethane	13.86	131	2153843	99.50 ug/l	99
67)	Ethylbenzene	13.88	91	12839879	95.43 ug/l	98
68)	m-Xylene & p-Xylene	14.03	91	18532298	188.15 ug/l	98
69)	o-Xylene	14.84	91	9582592	94.53 ug/l	98
70)	Styrene	14.90	104	7538023	95.93 ug/l	99
71)	Isopropylbenzene	15.52	105	12772431	95.63 ug/l	99
73)	Bromoform	15.55	173	986318	102.14 ug/l	99
74)	trans-1,4-Dichloro-2-buten	15.63	53	446145	109.12 ug/l	93
75)	1,1,2,2-Tetrachloroethane	15.86	83	1626217	103.07 ug/l	99
77)	1,2,3-Trichloropropane	16.15	110	438929	108.75 ug/l	92
78)	n-Propylbenzene	16.29	91	15596079	101.22 ug/l	99
79)	Bromobenzene	16.38	156	2566592	105.28 ug/l	100
80)	1,3,5-Trimethylbenzene	16.61	105	9823432	99.77 ug/l	98
81)	2-Chlorotoluene	16.63	91	9603952	103.52 ug/l	98
82)	4-Chlorotoluene	16.74	91	7702833	93.79 ug/l	98
83)	tert-Butylbenzene	17.29	134	2120781	102.68 ug/l	96

(#) = qualifier out of range (m) = manual integration SA 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV205.D Vial: 11
Acq On : 11 May 2024 3:26 pm Operator: LPriet
Sample : VO01DE1110 10/50 Inst : 01
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:34 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
84) 1,2,4-Trimethylbenzene	17.36	105	9615877	99.82	ug/l	97
85) sec-Butylbenzene	17.66	105	13298763	98.26	ug/l	99
86) p-Isopropyltoluene	17.88	119	10259365	98.33	ug/l	99
87) 1,3-Dichlorobenzene	18.03	146	4662217	100.65	ug/l	100
88) 1,2,3-Trimethylbenzene	18.13	105	8781878	97.65	ug/l	99
89) 1,4-Dichlorobenzene	18.19	146	4430571	97.55	ug/l	100
90) n-Butylbenzene	18.49	91	10299843	95.31	ug/l	99
91) 1,2-Dichlorobenzene	18.72	146	3781801	99.63	ug/l	100
92) 1,2-Dibromo-3-chloropropan	19.72	157	255821	100.50	ug/l	100
93) 1,2,4-Trichlorobenzene	20.80	180	2909800	105.00	ug/l	100
94) Hexachlorobutadiene	20.98	225	1658054	100.43	ug/l	100
95) Naphthalene	21.14	128	3426614	105.94	ug/l	100
96) 1,2,3-Trichlorobenzene	21.46	180	2169257	103.91	ug/l	100

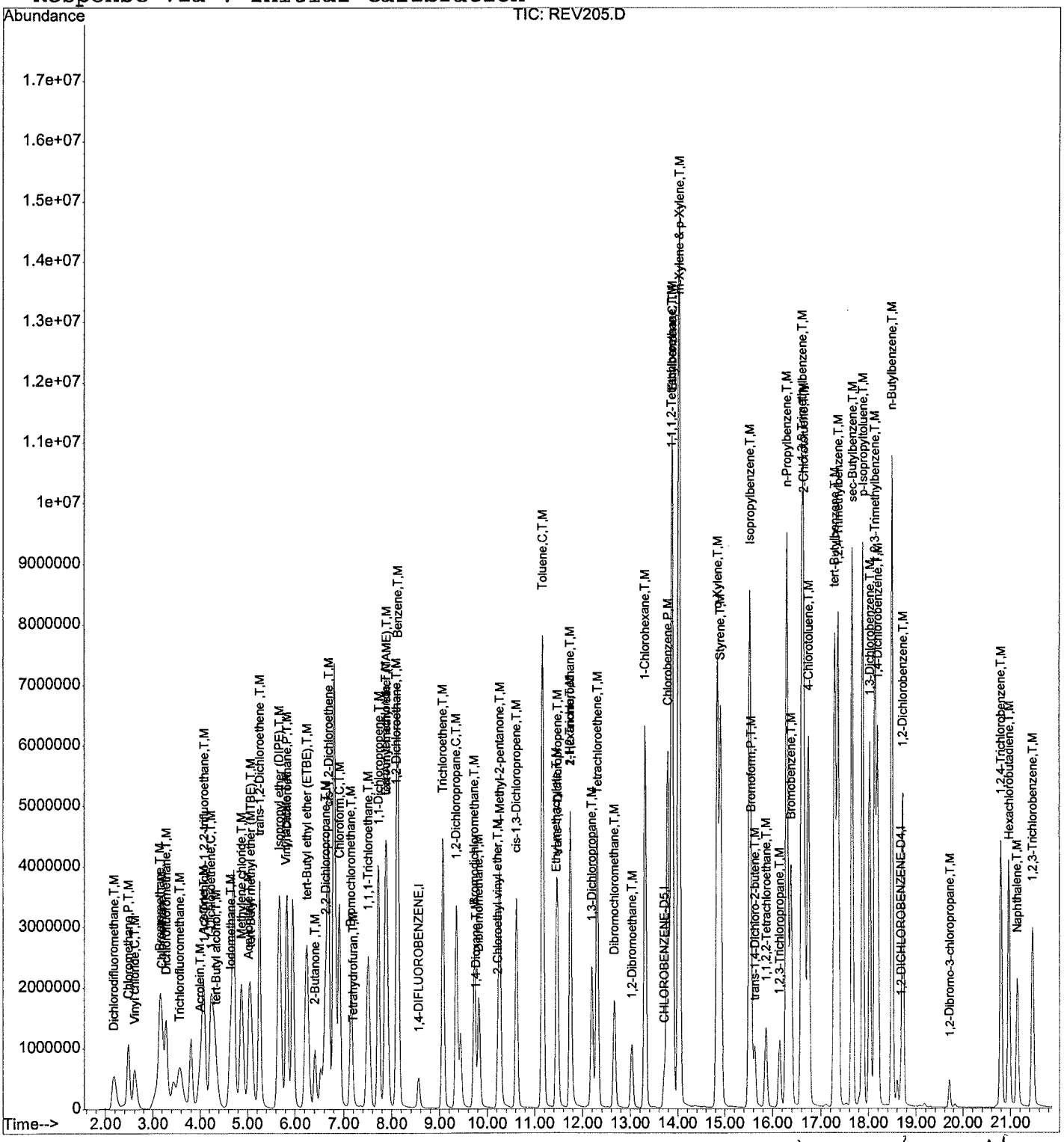
SA 5/15/24

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E11\REV205.D Vial: 11
Acq On : 11 May 2024 3:26 pm Operator: LPriet
Sample : VO01DE1110 10/50 Inst : 01
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:34 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



SA 5/15/24

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: REV209 BFB Injection Date: 05/13/24

Instrument ID: 01 BFB Injection Time: 11:31

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	17.676
75	30 - 60% of mass 95	40.505
95	Base Peak, 100% relative abundance	100.000
96	5 - 9% of mass 95	6.366
173	Less than 2% of mass 174	0.000(0)1
174	Greater than 50% of mass 95	77.234
175	5 - 9% of mass 174	5.650(7.32)1
176	95 - 101% % of mass 174	75.082(97.21)1
177	5 - 9% % of mass 176	4.812(6.41)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	VSTD10	IVO01E1102	REV210	05/13/24	12:06

SC 5/15/24

CONTINUE_CALIBRATION - CALIBRATION VERIFICATION

Instrument ID :01
IC_Beginning DateTime :05/11/24 10:58
Spike Amount :10 PPB
CC/CV File :REV210
IC File :REV201

Column Spec :RXI-624SILMS ID :0.25MM
IC_Ending DateTime :05/11/24 15:26
HPChem Method :VO01E11
Date_Time :05/13/24 12:06

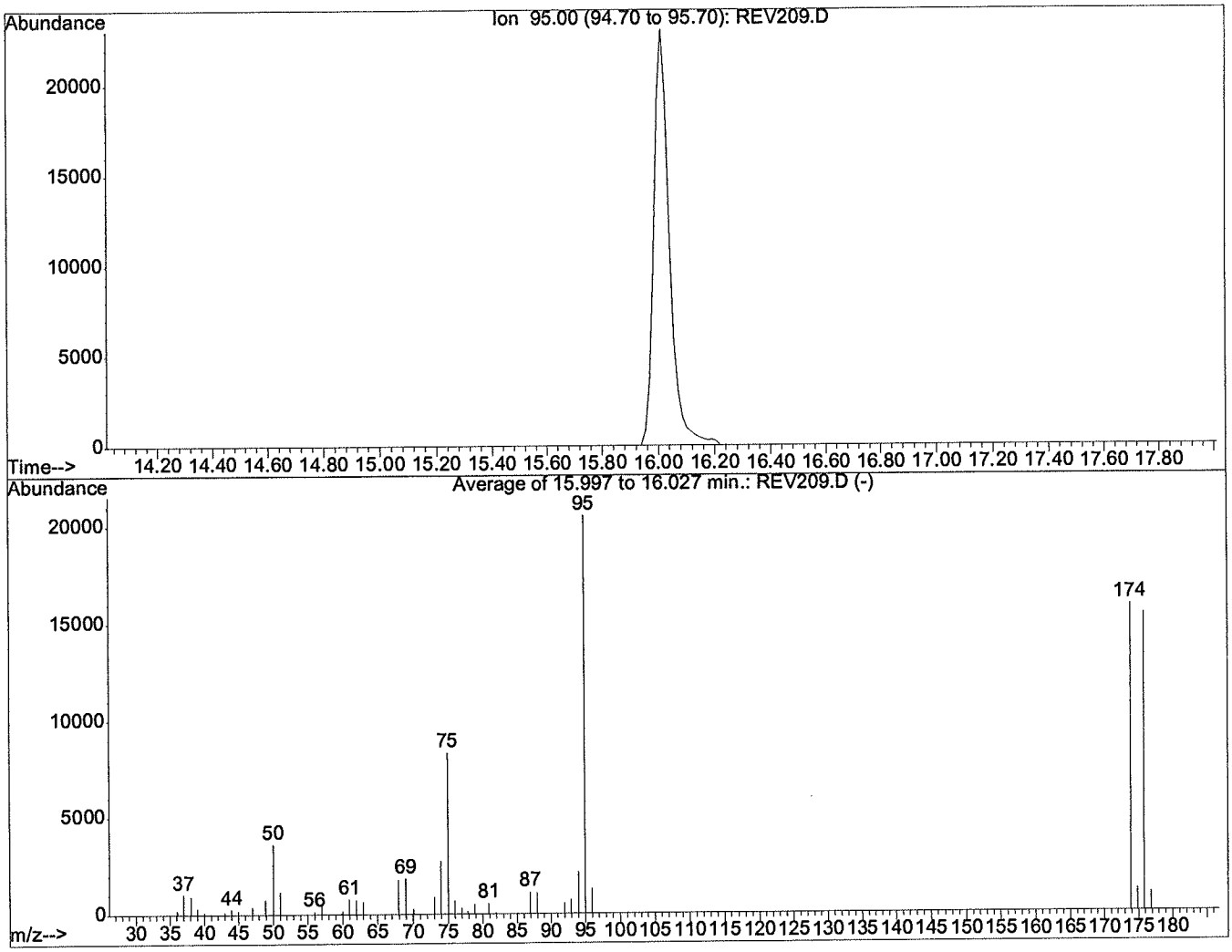
M	IDX	Parameters	CC_Con	CC%_D	CC_Resp	CCRRF	AvRRF	CC_Rtm	AvRtm	%_RSD	Co_X0	Co_X1	Co_X2	Co_Cor
	1	1,4-DIFLUOROBENZENE	10.000	0	907856	1	1	8.546	8.551	0				
	2	Chlorotrifluoroethylene												
	3	Dichlorodifluoromethane	10.744	7.4	261017	0.288	0.268	2.174	2.169	4.44				
	4	2-Chloro-1,1,1-trifluoroethane												
	5	Chloromethane	10.222	2.2	347692	0.383	0.375	2.487	2.471	7.39				
	6	Vinyl chloride	11.091	10.9	314201	0.346	0.312	2.615	2.605	6.31				
	7	Bromomethane	9.886	-1.1	332015	0.366	0.396	3.154	3.146	17.96	0.0078	0.3620		0.9993
	8	Chloroethane	9.929	-0.7	204024	0.225	0.226	3.198	3.190	4.21				
	9	Dichlorofluoromethane	9.809	-1.9	572473	0.631	0.643	3.287	3.276	8.21				
	10	Trichlorofluoromethane	10.405	4.0	398783	0.439	0.422	3.554	3.553	5.20				
5	11	Acrolein	46.638	-6.7	95103	0.021	0.022	3.984	3.986	5.86				
	12	1,1,2-Trichloro-1,2,2-trifluoroethane	10.699	7.0	204924	0.226	0.211	4.073	4.070	8.11				
5	13	Acetone	46.249	-7.5	153258	0.034	0.037	4.058	4.058	14.45				
	14	1,1-Dichloroethene	10.534	5.3	510086	0.562	0.533	4.235	4.230	4.74				
25	15	tert-Butyl alcohol	272.706	9.1	275606	0.012	0.011	4.339	4.342	9.12				
	16	Iodomethane	10.129	1.3	525854	0.579	0.572	4.635	4.639	4.85				
	17	Methyl acetate	9.648	-3.5	87177	0.096	0.100	4.650	4.653	10.84				
	18	Methylene chloride	10.396	4.0	403861	0.445	0.428	4.858	4.858	3.90				
	19	Carbon disulfide	9.410	-5.9	974363	1.073	1.140	4.887	4.880	6.08				
5	20	Acrylonitrile	49.767	-0.5	209223	0.046	0.046	5.021	5.025	4.77				
	21	tert-Butyl methyl ether (MTBE)	10.216	2.2	486511	0.536	0.525	5.065	5.061	4.67				
	22	trans-1,2-Dichloroethene	10.334	3.3	482107	0.531	0.514	5.243	5.249	4.44				
	23	Isopropyl ether (DIPE)	10.406	4.1	1037346	1.143	1.098	5.658	5.670	4.21				
	24	Vinyl acetate	10.436	4.4	357100	0.393	0.377	5.821	5.832	9.82				
	25	1,1-Dichloroethane	10.385	3.9	566566	0.624	0.601	5.821	5.830	4.54				
25	26	2-Butanol												
	27	tert-Butyl ethyl ether (ETBE)	10.658	6.6	761232	0.838	0.787	6.235	6.240	4.52				
5	28	2-Butanone	52.383	4.8	266366	0.059	0.056	6.413	6.428	10.70				
	29	2,2-Dichloropropane	10.370	3.7	475647	0.524	0.505	6.621	6.628	4.21				
	30	cis-1,2-Dichloroethene	10.325	3.2	387725	0.427	0.414	6.680	6.686	4.03				
	31	Chloroform	9.820	-1.8	545984	0.601	0.612	6.902	6.908	8.00				
	32	Bromochloromethane	10.539	5.4	230106	0.253	0.240	7.139	7.148	4.73				
	33	Tetrahydrofuran	10.289	2.9	33093	0.036	0.035	7.198	7.201	8.25				
	34	Dibromofluoromethane	9.898	-1.0	278148	0.306	0.310	7.228	7.228	7.01				
	35	1,1,1-Trichloroethane	10.373	3.7	482510	0.531	0.512	7.495	7.499	4.19				
	36	Cyclohexane	10.548	5.5	477860	0.526	0.499	7.524	7.524	6.15				
	37	2,2,4-Trimethylpentane												
	38	1,1-Dichloropropene	10.276	2.8	162485	0.179	0.174	7.717	7.723	4.16				
	39	Carbon tetrachloride	10.352	3.5	358693	0.395	0.382	7.880	7.878	4.43				
	40	tert-Amyl methyl ether (TAME)	10.127	1.3	562793	0.620	0.612	7.880	7.889	5.64				
	41	1,2-Dichloroethane-d4	9.949	-0.5	190681	0.210	0.211	7.954	7.965	7.18				
	42	Benzene	10.090	0.9	1223803	1.348	1.336	8.132	8.130	4.04				
	43	1,2-Dichloroethane	10.336	3.4	252838	0.279	0.269	8.102	8.104	4.45				
	44	Trichloroethene	10.150	1.5	318416	0.351	0.346	9.064	9.072	4.96				
	45	Methylcyclohexane	10.259	2.6	511326	0.563	0.549	9.153	9.165	6.46				
	46	1,2-Dichloropropane	10.115	1.1	274499	0.302	0.299	9.346	9.351	5.38				
	47	Bromodichloromethane	9.862	-1.4	371496	0.409	0.415	9.716	9.732	6.99				
20	48	1,4-Dioxane	205.358	2.7	22815	0.001	0.001	9.775	9.783	14.49				
	49	Dibromomethane	10.344	3.4	132415	0.146	0.141	9.820	9.823	5.30				
	50	2-Chloroethyl vinyl ether	10.212	2.1	70329	0.077	0.076	10.220	10.234	8.06				
5	51	4-Methyl-2-pentanone	49.033	-1.9	657246	0.145	0.136	10.264	10.276	18.90	-0.0424	0.1563		0.9988
	52	cis-1,3-Dichloropropene	10.274	2.7	433879	0.478	0.465	10.620	10.625	5.31				
	53	CHLOROBENZENE-D5	10.000	0	757489	1	1	13.716	13.717	0				
	54	Toluene-d8	9.566	-4.3	1085971	1.434	1.499	11.020	11.030	5.48				
	55	Toluene	9.906	-0.9	1332719	1.759	1.776	11.153	11.169	4.50				
	56	Ethyl methacrylate	10.213	2.1	206172	0.272	0.266	11.449	11.471	8.54				
	57	trans-1,3-Dichloropropene	10.298	3.0	322019	0.425	0.413	11.479	11.484	5.62				
	58	1,1,2-Trichloroethane	10.145	1.5	178678	0.236	0.233	11.746	11.751	4.45				
5	59	2-Hexanone	47.364	-5.3	378200	0.100	0.090	11.761	11.791	36.80	-0.0568	0.1174		0.9987
	60	1,3-Dichloropropane	10.169	1.7	304011	0.401	0.395	12.190	12.195	5.08				
	61	Tetrachloroethene	9.999	-0.0	279605	0.369	0.369	12.294	12.299	3.83				
	62	Dibromochloromethane	10.064	0.6	216381	0.286	0.284	12.664	12.667	5.55				
	63	1,2-Dibromoethane	10.349	3.5	180319	0.238	0.230	13.035	13.038	6.28				
	64	1-Chlorohexane	10.259	2.6	595972	0.787	0.767	13.301	13.308	4.69				
	65	Chlorobenzene	10.061	0.6	806907	1.065	1.059	13.775	13.791	3.64				
	66	1,1,1,2-Tetrachloroethane	10.136	1.4	250367	0.331	0.326	13.864	13.865	3.59				
	67	Ethylbenzene	9.991	-0.1	1533890	2.025	2.027	13.879	13.881	4.07				
2	68	m-Xylene & p-Xylene	20.234	1.2	2274121	1.501	1.484	14.012	14.021	4.23				
	69	o-Xylene	9.950	-0.5	1150973	1.519	1.527	14.827	14.843	4.66				
	70	Styrene	9.968	-0.3	893787	1.180	1.184	14.901	14.909	3.78				
	71	Isopropylbenzene	10.036	0.4	1529556	2.019	2.012	15.509	15.524	3.97				
	72	1,2-DICHLOROBENZENE-D4	10.000	0	290545	1	1	18.679	18.680	0				
	73	Bromoform	9.781	-2.2	112241	0.386	0.350	15.553	15.559	20.61	-0.0135	0.4088		0.9992
	74	trans-1,4-Dichloro-2-butene	10.276	2.8	51511	0.177	0.173	15.627	15.634	9.77				
	75	1,1,2,2-Tetrachloroethane	9.917	-0.8	191835	0.660	0.666	15.849	15.865	6.36				
	76	4-Bromofluorobenzene	9.429	-5.7	373151	1.284	1.362	15.998	16.015	6.06				
	77	1,2,3-Trichloropropane	10.138	1.4	50167	0.173	0.170	16.146	16.152	9.82				
	78	n-Propylbenzene	9.836	-1.6	1858212	6.396	6.502	16.294	16.298	5.03				
	79	Bromobenzene	9.996	-0.0	298744	1.028	1.029	16.383	16.383	5.26				
	80	1,3,5-Trimethylbenzene	9.883	-1.2	1193060	4.106	4.155	16.605	16.606	5.49				
	81	2-Chlorotoluene	10.005	0.1	1138017	3.917	3.915	16.635	16.635	4.84				
	82	4-Chlorotoluene	10.002	0.0	1007192	3.467	3.466	16.723	16.733	5.46				
	83	tert-Butylbenzene	9.950	-0.5	251948	0.867	0.871	17.287	17.287	4.70				
	84	1,2,4-Trimethylbenzene	9.900	-1.0	1169308	4.025	4.065	17.346	17.360	4.41				
	85	sec-Butylbenzene	9.967	-0.3	1653826	5.692	5.711	17.657	17.658	5.27				
	86	p-Isopropyltoluene	9.795	-2.0	1252965	4.312	4.403	17.879	17.880	5.17				
	87	1,3-Dichlorobenzene	10.012	0.1	568580	1.957	1.955	18.027	18.028	4.87				
	88	1,2,3-Trimethylbenzene	9.931	-0.7	1095079	3.769	3.795	18.131	18.132	4.70				
	89	1,4-Dichlorobenzene	9.894	-1.1	550958	1.896	1.916	18.190	18.191	4.92				
	90	n-Butylbenzene	9.925	-0.7	1315009	4.526	4.560	18.486	18.489	5.46				
	91	1,2-Dichlorobenzene	9.987	-0.1	464758	1.600	1.602	18.709	18.724	4.06				
	92	1,2-Dibromo-3-chloropropane	9.352	-6.5	27714	0.095	0.095	19.716	19.717	16.02	-0.0056	0.1080		0.9987
	93	1,2,4-Trichlorobenzene	10.080	0.8	342507	1.179	1.169	20.798	20.801	7.49				
	94	Hexachlorobutadiene	9.944	-0.6	201295	0.693	0.697	20.961	20.967	6.95				
	95	Naphthalene	10.201	2.0	404546	1.392	1.365	21.138	21.148	8.50				
	96	1,2,3-Trichlorobenzene	10.141	1.4	259547	0.893	0.881	21.464	21.466	6.66				

Spike Amount = Nominal Amount * M

SU
5/15/24

Data File : D:\HPCHEM\1\DATA\24E13\REV209.D
Acq On : 13 May 2024 11:31 am
Sample : BFB01E12
Misc : T/CHK
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls

Vial: 1
Operator: LPriet
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	17.7	3629	PASS
75	95	30	60	40.5	8316	PASS
95	95	100	100	100.0	20531	PASS
96	95	5	9	6.4	1307	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	77.2	15857	PASS
175	174	5	9	7.3	1160	PASS
176	174	95	101	97.2	15415	PASS
177	176	5	9	6.4	988	PASS

REV209.D VO01E11.M Mon May 13 14:37:52 2024 SY 5/15/24

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D
Acq On : 13 May 2024 12:06 pm
Sample : IVO01E1102 1.0/5.0
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P

Vial: 2
Operator: LPriet
Inst : 01
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	99	0.00
2	T,M	Chlorotrifluoroethylene	-1.000	0.000	0.0	0	-2.08#
3	T,M	Dichlorodifluoromethane	10.000	10.745	-7.4	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	10.223	-2.2	109	0.02
6	C,T,M	Vinyl chloride	10.000	11.092	-10.9	110	0.00
7	T,M	Bromomethane	10.000	9.887	1.1	110	0.01
8	T,M	Chloroethane	10.000	9.929	0.7	105	0.01
9	T,M	Dichlorofluoromethane	10.000	9.809	1.9	107	0.01
10	T,M	Trichlorofluoromethane	10.000	10.405	-4.0	109	0.00
11	T,M	Acrolein	50.000	46.638	6.7	104	0.00
12	T,M	1,1,2-Trichloro-1,2,2-trifl	10.000	10.700	-7.0	106	0.01
13	T,M	Acetone	50.000	46.249	7.5	108	0.00
14	C,T,M	1,1-Dichloroethene	10.000	10.535	-5.4	108	0.01
15	T,M	tert-Butyl alcohol	250.000	272.707	-9.1	118	0.00
16	T,M	Iodomethane	10.000	10.129	-1.3	105	0.00
17	T,M	Methyl acetate	10.000	9.648	3.5	113	0.00
18	T,M	Methylene chloride	10.000	10.396	-4.0	110	0.00
19	T,M	Carbon disulfide	10.000	9.411	5.9	99	0.02
20	T,M	Acrylonitrile	50.000	49.767	0.5	107	0.00
21	T,M	tert-Butyl methyl ether (MT	10.000	10.216	-2.2	112	0.00
22	T,M	trans-1,2-Dichloroethene	10.000	10.335	-3.4	110	0.00
23	T,M	Isopropyl ether (DIPE)	10.000	10.407	-4.1	110	-0.01
24	T,M	Vinyl acetate	10.000	10.436	-4.4	113	0.00
25	P,T,M	1,1-Dichloroethane	10.000	10.386	-3.9	109	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	10.658	-6.6	114	0.00
28	T,M	2-Butanone	50.000	52.384	-4.8	109	0.00
29	T,M	2,2-Dichloropropane	10.000	10.370	-3.7	108	0.00
30	T,M	cis-1,2-Dichloroethene	10.000	10.325	-3.2	107	0.00
31	C,T,M	Chloroform	10.000	9.821	1.8	107	0.00
32	T,M	Bromochloromethane	10.000	10.539	-5.4	112	0.00
33	T,M	Tetrahydrofuran	10.000	10.289	-2.9	121	0.00
34	S	Dibromofluoromethane	10.000	9.898	1.0	107	0.00
35	T,M	1,1,1-Trichloroethane	10.000	10.374	-3.7	108	0.00
36	T,M	Cyclohexane	10.000	10.549	-5.5	114	0.00
37	T,M	2,2,4-Trimethylpentane	10.000	0.000	100.0#	0	0.00
38	T,M	1,1-Dichloropropene	10.000	10.277	-2.8	108	0.00
39	T,M	Carbon tetrachloride	10.000	10.352	-3.5	107	0.00
40	T,M	tert-Amyl methyl ether (TAM	10.000	10.128	-1.3	113	0.00
41	S	1,2-Dichloroethane-d4	10.000	9.949	0.5	112	-0.01

(#) = Out of Range

SA 5/15/24

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D
Acq On : 13 May 2024 12:06 pm
Sample : IVO01E1102 1.0/5.0
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P

Vial: 2
Operator: LPriet
Inst : 01
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	10.090	-0.9	106	0.00
43	T,M	1,2-Dichloroethane	10.000	10.337	-3.4	110	0.00
44	T,M	Trichloroethene	10.000	10.150	-1.5	103	0.00
45	T,M	Methylcyclohexane	10.000	10.260	-2.6	113	-0.01
46	C,T,M	1,2-Dichloropropane	10.000	10.115	-1.2	107	0.00
47	T,M	Bromodichloromethane	10.000	9.863	1.4	109	-0.01
48	T,M	1,4-Dioxane	200.000	205.359	-2.7	114	-0.01
49	T,M	Dibromomethane	10.000	10.345	-3.5	114	0.00
50	T,M	2-Chloroethyl vinyl ether	10.000	10.212	-2.1	110	-0.01
51	T,M	4-Methyl-2-pentanone	50.000	49.033	1.9	111	0.00
52	T,M	cis-1,3-Dichloropropene	10.000	10.274	-2.7	109	0.00
53	I	CHLOROBENZENE-D5	10.000	10.000	0.0	102	0.00
54	S	Toluene-d8	10.000	9.567	4.3	105	-0.01
55	C,T,M	Toluene	10.000	9.907	0.9	106	-0.01
56	T,M	Ethyl methacrylate	10.000	10.214	-2.1	113	-0.01
57	T,M	trans-1,3-Dichloropropene	10.000	10.299	-3.0	111	0.00
58	T,M	1,1,2-Trichloroethane	10.000	10.145	-1.4	111	0.00
59	T,M	2-Hexanone	50.000	47.365	5.3	113	0.00
60	T,M	1,3-Dichloropropane	10.000	10.169	-1.7	112	0.00
61	T,M	Tetrachloroethene	10.000	9.999	0.0	105	0.00
62	T,M	Dibromochloromethane	10.000	10.064	-0.6	112	0.00
63	T,M	1,2-Dibromoethane	10.000	10.349	-3.5	113	0.00
64	T,M	1-Chlorohexane	10.000	10.260	-2.6	108	0.00
65	P,M	Chlorobenzene	10.000	10.062	-0.6	106	-0.01
66	T,M	1,1,1,2-Tetrachloroethane	10.000	10.136	-1.4	108	0.00
67	C,T,M	Ethylbenzene	10.000	9.991	0.1	104	0.00
68	T,M	m-Xylene & p-Xylene	20.000	20.234	-1.2	107	0.00
69	T,M	o-Xylene	10.000	9.950	0.5	107	-0.01
70	T,M	Styrene	10.000	9.968	0.3	106	0.00
71	T,M	Isopropylbenzene	10.000	10.037	-0.4	105	-0.01
72	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	102	0.00
73	P,T,M	Bromoform	10.000	9.781	2.2	117	0.00
74	T,M	trans-1,4-Dichloro-2-butene	10.000	10.277	-2.8	116	0.00
75	T,M	1,1,2,2-Tetrachloroethane	10.000	9.918	0.8	114	-0.01
76	S	4-Bromofluorobenzene	10.000	9.430	5.7	107	-0.01
77	T,M	1,2,3-Trichloropropane	10.000	10.138	-1.4	111	0.00
78	T,M	n-Propylbenzene	10.000	9.837	1.6	104	0.00
79	T,M	Bromobenzene	10.000	9.996	0.0	107	0.00
80	T,M	1,3,5-Trimethylbenzene	10.000	9.884	1.2	105	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D Vial: 2
Acq On : 13 May 2024 12:06 pm Operator: LPriet
Sample : IVO01E1102 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\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	10.006	-0.1	107	0.00
82	T,M	4-Chlorotoluene	10.000	10.003	-0.0	105	0.00
83	T,M	tert-Butylbenzene	10.000	9.950	0.5	105	0.00
84	T,M	1,2,4-Trimethylbenzene	10.000	9.901	1.0	104	-0.01
85	T,M	sec-Butylbenzene	10.000	9.967	0.3	105	0.00
86	T,M	p-Isopropyltoluene	10.000	9.795	2.1	104	0.00
87	T,M	1,3-Dichlorobenzene	10.000	10.012	-0.1	107	0.00
88	T,M	1,2,3-Trimethylbenzene	10.000	9.932	0.7	107	0.00
89	T,M	1,4-Dichlorobenzene	10.000	9.895	1.1	106	0.00
90	T,M	n-Butylbenzene	10.000	9.925	0.7	105	0.00
91	T,M	1,2-Dichlorobenzene	10.000	9.987	0.1	109	-0.01
92	T,M	1,2-Dibromo-3-chloropropane	10.000	9.353	6.5	117	0.00
93	T,M	1,2,4-Trichlorobenzene	10.000	10.081	-0.8	109	0.00
94	T,M	Hexachlorobutadiene	10.000	9.945	0.5	102	0.00
95	T,M	Naphthalene	10.000	10.202	-2.0	113	0.00
96	T,M	1,2,3-Trichlorobenzene	10.000	10.141	-1.4	110	0.00

SA 5/15/24

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D
Acq On : 13 May 2024 12:06 pm
Sample : IVO01E1102 1.0/5.0
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P

Vial: 2
Operator: LPriet
Inst : 01
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	99	0.00
2	T,M	Chlorotrifluoroethylene	0.000	0.000	0.0	0#	-2.08#
3	T,M	Dichlorodifluoromethane	0.268	0.288	-7.5	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	0.375	0.383	-2.1	109	0.02
6	C,T,M	Vinyl chloride	0.312	0.346	-10.9	110	0.00
7	T,M	Bromomethane	0.396	0.366	7.6	110	0.01
8	T,M	Chloroethane	0.226	0.225	0.4	105	0.01
9	T,M	Dichlorofluoromethane	0.643	0.631	1.9	107	0.01
10	T,M	Trichlorofluoromethane	0.422	0.439	-4.0	109	0.00
11	T,M	Acrolein	0.022	0.021	4.5	104	0.00
12	T,M	1,1,2-Trichloro-1,2,2-trifl	0.211	0.226	-7.1	106	0.01
13	T,M	Acetone	0.037	0.034	8.1	108	0.00
14	C,T,M	1,1-Dichloroethene	0.533	0.562	-5.4	108	0.01
15	T,M	tert-Butyl alcohol	0.011	0.012	-9.1	118	0.00
16	T,M	Iodomethane	0.572	0.579	-1.2	105	0.00
17	T,M	Methyl acetate	0.100	0.096	4.0	113	0.00
18	T,M	Methylene chloride	0.428	0.445	-4.0	110	0.00
19	T,M	Carbon disulfide	1.140	1.073	5.9	99	0.02
20	T,M	Acrylonitrile	0.046	0.046	0.0	107	0.00
21	T,M	tert-Butyl methyl ether (MT	0.525	0.536	-2.1	112	0.00
22	T,M	trans-1,2-Dichloroethene	0.514	0.531	-3.3	110	0.00
23	T,M	Isopropyl ether (DIPE)	1.098	1.143	-4.1	110	-0.01
24	T,M	Vinyl acetate	0.377	0.393	-4.2	113	0.00
25	P,T,M	1,1-Dichloroethane	0.601	0.624	-3.8	109	0.00
26	T,M	2-Butanol	0.000	0.010	0.0	0#	0.00
27	T,M	tert-Butyl ethyl ether (ETB	0.787	0.838	-6.5	114	0.00
28	T,M	2-Butanone	0.056	0.059	-5.4	109	0.00
29	T,M	2,2-Dichloropropane	0.505	0.524	-3.8	108	0.00
30	T,M	cis-1,2-Dichloroethene	0.414	0.427	-3.1	107	0.00
31	C,T,M	Chloroform	0.612	0.601	1.8	107	0.00
32	T,M	Bromochloromethane	0.240	0.253	-5.4	112	0.00
33	T,M	Tetrahydrofuran	0.035	0.036	-2.9	121	0.00
34	S	Dibromofluoromethane	0.310	0.306	1.3	107	0.00
35	T,M	1,1,1-Trichloroethane	0.512	0.531	-3.7	108	0.00
36	T,M	Cyclohexane	0.499	0.526	-5.4	114	0.00
37	T,M	2,2,4-Trimethylpentane	0.000	0.032	0.0	0#	0.00
38	T,M	1,1-Dichloropropene	0.174	0.179	-2.9	108	0.00
39	T,M	Carbon tetrachloride	0.382	0.395	-3.4	107	0.00
40	T,M	tert-Amyl methyl ether (TAM	0.612	0.620	-1.3	113	0.00
41	S	1,2-Dichloroethane-d4	0.211	0.210	0.5	112	-0.01

(#) = Out of Range

SA 5/15/24

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D Vial: 2
Acq On : 13 May 2024 12:06 pm Operator: LPriet
Sample : IVO01E1102 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\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	1.336	1.348	-0.9	106	0.00
43	T,M	1,2-Dichloroethane	0.269	0.279	-3.7	110	0.00
44	T,M	Trichloroethene	0.346	0.351	-1.4	103	0.00
45	T,M	Methylcyclohexane	0.549	0.563	-2.6	113	-0.01
46	C,T,M	1,2-Dichloropropane	0.299	0.302	-1.0	107	0.00
47	T,M	Bromodichloromethane	0.415	0.409	1.4	109	-0.01
48	T,M	1,4-Dioxane	0.001	0.001	0.0	114	-0.01
49	T,M	Dibromomethane	0.141	0.146	-3.5	114	0.00
50	T,M	2-Chloroethyl vinyl ether	0.076	0.077	-1.3	110	-0.01
51	T,M	4-Methyl-2-pentanone	0.136	0.145	-6.6	111	0.00
52	T,M	cis-1,3-Dichloropropene	0.465	0.478	-2.8	109	0.00
53	I	CHLOROBENZENE-D5	1.000	1.000	0.0	102	0.00
54	S	Toluene-d8	1.499	1.434	4.3	105	-0.01
55	C,T,M	Toluene	1.776	1.759	1.0	106	-0.01
56	T,M	Ethyl methacrylate	0.266	0.272	-2.3	113	-0.01
57	T,M	trans-1,3-Dichloropropene	0.413	0.425	-2.9	111	0.00
58	T,M	1,1,2-Trichloroethane	0.233	0.236	-1.3	111	0.00
59	T,M	2-Hexanone	0.090	0.100	-11.1	113	0.00
60	T,M	1,3-Dichloropropane	0.395	0.401	-1.5	112	0.00
61	T,M	Tetrachloroethene	0.369	0.369	0.0	105	0.00
62	T,M	Dibromochloromethane	0.284	0.286	-0.7	112	0.00
63	T,M	1,2-Dibromoethane	0.230	0.238	-3.5	113	0.00
64	T,M	1-Chlorohexane	0.767	0.787	-2.6	108	0.00
65	P,M	Chlorobenzene	1.059	1.065	-0.6	106	-0.01
66	T,M	1,1,1,2-Tetrachloroethane	0.326	0.331	-1.5	108	0.00
67	C,T,M	Ethylbenzene	2.027	2.025	0.1	104	0.00
68	T,M	m-Xylene & p-Xylene	1.484	1.501	-1.1	107	0.00
69	T,M	o-Xylene	1.527	1.519	0.5	107	-0.01
70	T,M	Styrene	1.184	1.180	0.3	106	0.00
71	T,M	Isopropylbenzene	2.012	2.019	-0.3	105	-0.01
72	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	102	0.00
73	P,T,M	Bromoform	0.350	0.386	-10.3	117	0.00
74	T,M	trans-1,4-Dichloro-2-butene	0.173	0.177	-2.3	116	0.00
75	T,M	1,1,2,2-Tetrachloroethane	0.666	0.660	0.9	114	-0.01
76	S	4-Bromofluorobenzene	1.362	1.284	5.7	107	-0.01
77	T,M	1,2,3-Trichloropropane	0.170	0.173	-1.8	111	0.00
78	T,M	n-Propylbenzene	6.502	6.396	1.6	104	0.00
79	T,M	Bromobenzene	1.029	1.028	0.1	107	0.00
80	T,M	1,3,5-Trimethylbenzene	4.155	4.106	1.2	105	0.00

(#) = Out of Range

SU 5/15/24

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D Vial: 2
Acq On : 13 May 2024 12:06 pm Operator: LPriet
Sample : IVO01E1102 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\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	3.915	3.917	-0.1	107	0.00
82	T,M	4-Chlorotoluene	3.466	3.467	-0.0	105	0.00
83	T,M	tert-Butylbenzene	0.871	0.867	0.5	105	0.00
84	T,M	1,2,4-Trimethylbenzene	4.065	4.025	1.0	104	-0.01
85	T,M	sec-Butylbenzene	5.711	5.692	0.3	105	0.00
86	T,M	p-Isopropyltoluene	4.403	4.312	2.1	104	0.00
87	T,M	1,3-Dichlorobenzene	1.955	1.957	-0.1	107	0.00
88	T,M	1,2,3-Trimethylbenzene	3.795	3.769	0.7	107	0.00
89	T,M	1,4-Dichlorobenzene	1.916	1.896	1.0	106	0.00
90	T,M	n-Butylbenzene	4.560	4.526	0.7	105	0.00
91	T,M	1,2-Dichlorobenzene	1.602	1.600	0.1	109	-0.01
92	T,M	1,2-Dibromo-3-chloropropane	0.095	0.095	0.0	117	0.00
93	T,M	1,2,4-Trichlorobenzene	1.169	1.179	-0.9	109	0.00
94	T,M	Hexachlorobutadiene	0.697	0.693	0.6	102	0.00
95	T,M	Naphthalene	1.365	1.392	-2.0	113	0.00
96	T,M	1,2,3-Trichlorobenzene	0.881	0.893	-1.4	110	0.00

SK 5/15/24

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D Vial: 2
Acq On : 13 May 2024 12:06 pm Operator: LPriet
Sample : IVO01E1102 1.0/5.0 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:24 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.55	114	907856	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.72	117	757489	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	290545	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	278148	9.90	ug/l	0.00
Spiked Amount 10.000			Recovery =	99.00%		
41) 1,2-Dichloroethane-d4	7.95	65	190681	9.95	ug/l	-0.01
Spiked Amount 10.000			Recovery =	99.50%		
54) Toluene-d8	11.02	98	1085971	9.57	ug/l	-0.01
Spiked Amount 10.000			Recovery =	95.70%		
76) 4-Bromofluorobenzene	16.00	95	373151	9.43	ug/l	-0.01
Spiked Amount 10.000			Recovery =	94.30%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.17	85	261017	10.74	ug/l	99
5) Chloromethane	2.49	50	347692	10.22	ug/l	99
6) Vinyl chloride	2.62	62	314201	11.09	ug/l	99
7) Bromomethane	3.15	94	332015	9.89	ug/l	99
8) Chloroethane	3.20	64	204024	9.93	ug/l	98
9) Dichlorofluoromethane	3.29	67	572473	9.81	ug/l	97
10) Trichlorofluoromethane	3.55	101	398783	10.41	ug/l	99
11) Acrolein	3.98	56	95103	46.64	ug/l	99
12) 1,1,2-Trichloro-1,2,2-trif	4.07	151	204924	10.70	ug/l	100
13) Acetone	4.06	43	153258	46.25	ug/l	100
14) 1,1-Dichloroethene	4.24	61	510086	10.53	ug/l	99
15) tert-Butyl alcohol	4.34	59	275606	272.71	ug/l	99
16) Iodomethane	4.64	142	525854	10.13	ug/l	100
17) Methyl acetate	4.65	43	87177	9.65	ug/l	97
18) Methylene chloride	4.86	49	403861	10.40	ug/l	98
19) Carbon disulfide	4.89	76	974363	9.41	ug/l	99
20) Acrylonitrile	5.02	53	209223	49.77	ug/l	100
21) tert-Butyl methyl ether (M	5.07	73	486511	10.22	ug/l	100
22) trans-1,2-Dichloroethene	5.24	61	482107	10.33	ug/l	98
23) Isopropyl ether (DIPE)	5.66	45	1037346	10.41	ug/l	98
24) Vinyl acetate	5.82	43	357100	10.44	ug/l	99
25) 1,1-Dichloroethane	5.82	63	566566	10.39	ug/l	100
27) tert-Butyl ethyl ether (ET	6.24	59	761232	10.66	ug/l	100
28) 2-Butanone	6.41	43	266366	52.38	ug/l	100
29) 2,2-Dichloropropane	6.62	77	475647	10.37	ug/l	100
30) cis-1,2-Dichloroethene	6.68	96	387725	10.33	ug/l	99
31) Chloroform	6.90	83	545984	9.82	ug/l	99

(#) = qualifier out of range (m) = manual integration

5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D Vial: 2
Acq On : 13 May 2024 12:06 pm Operator: LPriet
Sample : IVO01E1102 1.0/5.0 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:24 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.14	49	230106	10.54	ug/l	98
33)	Tetrahydrofuran	7.20	42	33093	10.29	ug/l	97
35)	1,1,1-Trichloroethane	7.49	97	482510	10.37	ug/l	100
36)	Cyclohexane	7.52	84	477860	10.55	ug/l	100
38)	1,1-Dichloropropene	7.72	110	162485	10.28	ug/l	99
39)	Carbon tetrachloride	7.88	119	358693	10.35	ug/l	99
40)	tert-Amyl methyl ether (TA	7.88	73	562793	10.13	ug/l	100
42)	Benzene	8.13	78	1223803	10.09	ug/l	100
43)	1,2-Dichloroethane	8.10	62	252838	10.34	ug/l	99
44)	Trichloroethene	9.06	130	318416	10.15	ug/l	98
45)	Methylcyclohexane	9.15	83	511326	10.26	ug/l	99
46)	1,2-Dichloropropane	9.35	63	274499	10.12	ug/l	99
47)	Bromodichloromethane	9.72	83	371496	9.86	ug/l	99
48)	1,4-Dioxane	9.78	88	22815	205.36	ug/l	99
49)	Dibromomethane	9.82	93	132415	10.34	ug/l	98
50)	2-Chloroethyl vinyl ether	10.22	63	70329	10.21	ug/l	99
51)	4-Methyl-2-pentanone	10.26	43	657246	49.03	ug/l	100
52)	cis-1,3-Dichloropropene	10.62	75	433879	10.27	ug/l	100
55)	Toluene	11.15	91	1332719	9.91	ug/l	100
56)	Ethyl methacrylate	11.45	69	206172	10.21	ug/l	98
57)	trans-1,3-Dichloropropene	11.48	75	322019	10.30	ug/l	99
58)	1,1,2-Trichloroethane	11.75	97	178678	10.15	ug/l	99
59)	2-Hexanone	11.76	43	378200	47.36	ug/l	100
60)	1,3-Dichloropropane	12.19	76	304011	10.17	ug/l	100
61)	Tetrachloroethene	12.29	164	279605	10.00	ug/l	99
62)	Dibromochloromethane	12.66	129	216381	10.06	ug/l	100
63)	1,2-Dibromoethane	13.03	107	180319	10.35	ug/l	99
64)	1-Chlorohexane	13.30	91	595972	10.26	ug/l	100
65)	Chlorobenzene	13.78	112	806907	10.06	ug/l	100
66)	1,1,1,2-Tetrachloroethane	13.86	131	250367	10.14	ug/l	98
67)	Ethylbenzene	13.88	91	1533890	9.99	ug/l	100
68)	m-Xylene & p-Xylene	14.01	91	2274121	20.23	ug/l	100
69)	o-Xylene	14.83	91	1150973	9.95	ug/l	100
70)	Styrene	14.90	104	893787	9.97	ug/l	100
71)	Isopropylbenzene	15.51	105	1529556	10.04	ug/l	100
73)	Bromoform	15.55	173	112241	9.78	ug/l	97
74)	trans-1,4-Dichloro-2-buten	15.63	53	51511	10.28	ug/l	100
75)	1,1,2,2-Tetrachloroethane	15.85	83	191835	9.92	ug/l	98
77)	1,2,3-Trichloropropane	16.15	110	50167	10.14	ug/l	97
78)	n-Propylbenzene	16.29	91	1858212	9.84	ug/l	100
79)	Bromobenzene	16.38	156	298744	10.00	ug/l	99

(#) = qualifier out of range (m) = manual integration

SA 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D Vial: 2
Acq On : 13 May 2024 12:06 pm Operator: LPriet
Sample : IVO01E1102 1.0/5.0 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:24 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.61	105	1193060	9.88	ug/l	99
81)	2-Chlorotoluene	16.63	91	1138017	10.01	ug/l	100
82)	4-Chlorotoluene	16.72	91	1007192	10.00	ug/l	100
83)	tert-Butylbenzene	17.29	134	251948	9.95	ug/l	98
84)	1,2,4-Trimethylbenzene	17.35	105	1169308	9.90	ug/l	99
85)	sec-Butylbenzene	17.66	105	1653826	9.97	ug/l	100
86)	p-Isopropyltoluene	17.88	119	1252965	9.80	ug/l	100
87)	1,3-Dichlorobenzene	18.03	146	568580	10.01	ug/l	100
88)	1,2,3-Trimethylbenzene	18.13	105	1095079	9.93	ug/l	99
89)	1,4-Dichlorobenzene	18.19	146	550958	9.89	ug/l	100
90)	n-Butylbenzene	18.49	91	1315009	9.93	ug/l	100
91)	1,2-Dichlorobenzene	18.71	146	464758	9.99	ug/l	99
92)	1,2-Dibromo-3-chloropropan	19.72	157	27714	9.35	ug/l	99
93)	1,2,4-Trichlorobenzene	20.80	180	342507	10.08	ug/l	99
94)	Hexachlorobutadiene	20.96	225	201295	9.94	ug/l	98
95)	Naphthalene	21.14	128	404546	10.20	ug/l	100
96)	1,2,3-Trichlorobenzene	21.46	180	259547	10.14	ug/l	99

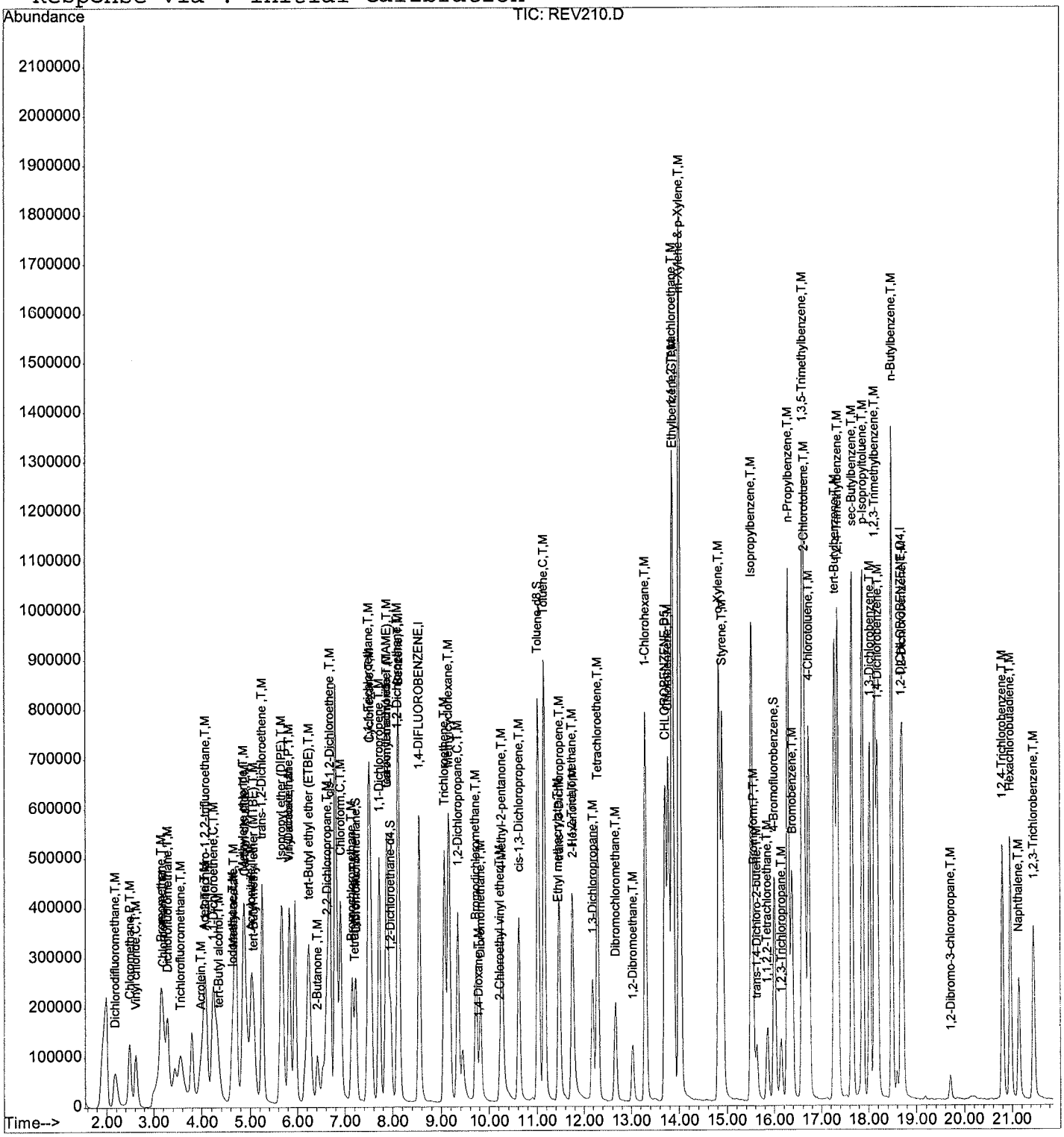
SM 5/15/24

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D Vial: 2
Acq On : 13 May 2024 12:06 pm Operator: LPriet
Sample : IVO01E1102 1.0/5.0 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:24 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



DAILY CALIBRATIONS

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
8ROMOFLUOROBENZENE (BFB)

Lab Name : EMAX Laboratories, Inc. Project : VA SALT LAKE CITY
Lab Code : EMAX SDG No : 24F073
Lab File ID: RFV165 8FB Injection Date: 06/20/24
Instrument ID: 01 BFB Injection Time: 13:32

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	17.420
75	30 - 60% of mass 95	43.212
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	69.853
175	5 - 9% of mass 174	5.241(7.5)1
176	95 - 101% % of mass 174	69.090(98.91)1
177	5 - 9% % of mass 176	4.645(6.72)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	CV001E1123	RFV166	06/20/24	14:22
2	LCS1W	V001F08L	RFV167	06/20/24	14:58
3	LCD1W	V001F08C	RFV168	06/20/24	15:29
4	MBLK1W	V001F08B	RFV170	06/20/24	16:29
5	MW41-GW061524-175	24F073-01	RFV177	06/20/24	20:00
6	TB11-GW061524	24F073-02	RFV182	06/20/24	22:27
7	MW41-GW061624-220	24F073-03	RFV183	06/20/24	22:57

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: EMAX Laboratories, Inc.
Lab Code: EMAX
Lab File ID: REV201
Instrument ID: 01

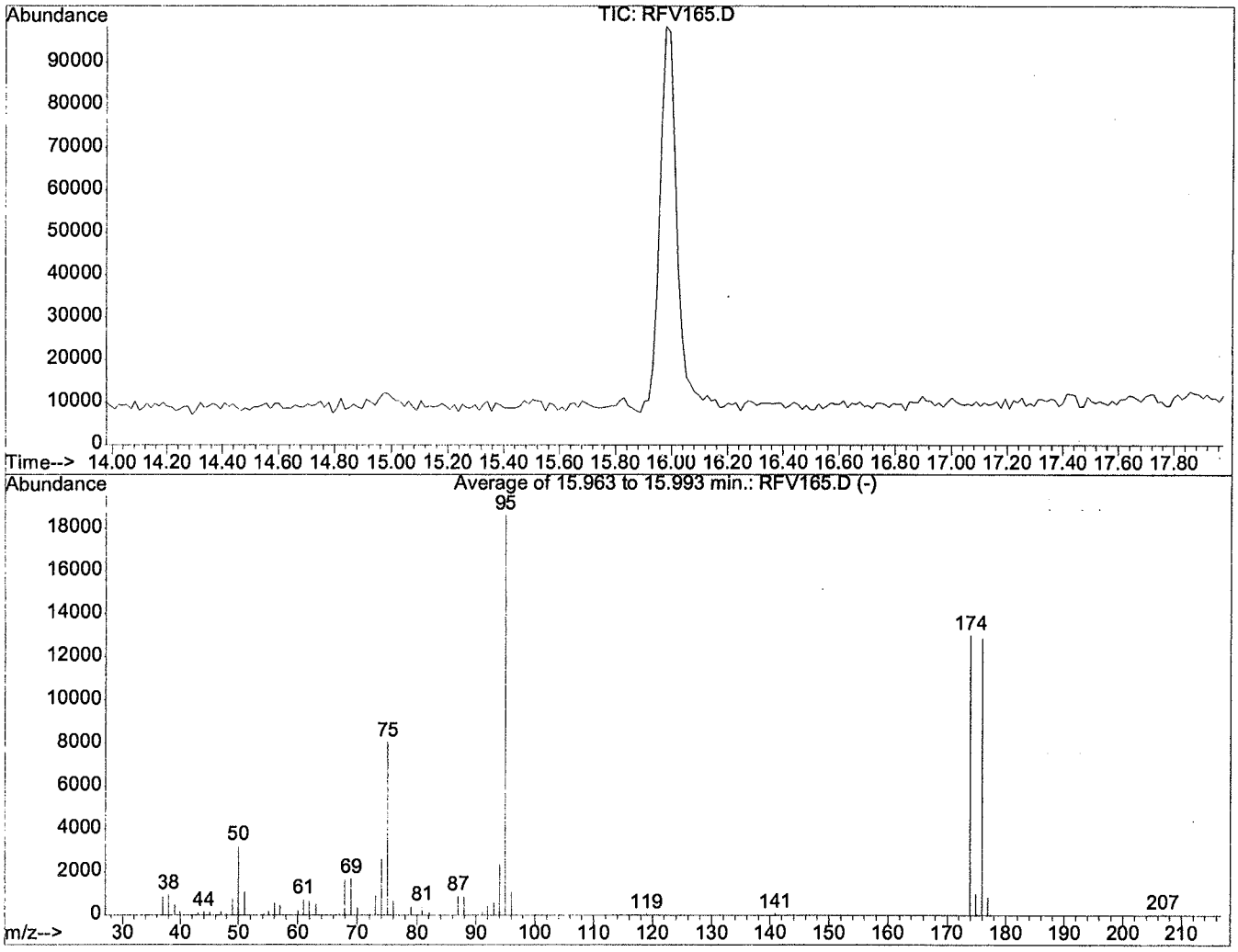
Project: VA SALT LAKE CITY
SDG No: 24F073
Date Analyzed: 05/11/24
Time Analyzed: 13:28

INTERNAL STANDARD (IS)	1,4-DIFLUOROBENZENE		CHLOROBENZENE-D5		1,2-DICHLOROBENZENE-D4	
	Area #	RT #	Area #	RT #	Area #	RT #
12 HOUR STD	920983	8.54	742213	13.71	284055	18.68
UPPER LIMIT	1841966	8.71	1484426	13.88	568110	18.85
LOWER LIMIT	460492	8.37	371107	13.54	142028	18.51
	Area #	RT #	Area #	RT #	Area #	RT #
1 VSTD10	762255	8.53	610436	13.68	238368	18.67
2 LCS1W	875284	8.52	704189	13.68	279237	18.66
3 LCD1W	869305	8.52	682917	13.68	269865	18.66
4 MBLK1W	829745	8.52	672653	13.68	259390	18.66
5 MW41-GW061524-175	885475	8.53	707319	13.68	289705	18.67
6 TB11-GW061524	869974	8.53	686718	13.68	259445	18.66
7 MW41-GW061624-220	786099	8.52	620135	13.68	236571	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

Data File : D:\HPCHEM\1\DATA\24F20\RFV165.D
Acq On : 20 Jun 2024 1:32 pm
Sample : BFB01F08
Misc : T/CHK
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls

Vial: 1
Operator: DNguye
Inst : 01New
Multiplr: 1.00



AutoFind: Scans 977, 978, 979; Background Corrected with Scan 971

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.4	3244	PASS
75	95	30	60	43.2	8047	PASS
95	95	100	100	100.0	18622	PASS
96	95	5	9	6.0	1119	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	69.9	13008	PASS
175	174	5	9	7.5	976	PASS
176	174	95	101	98.9	12866	PASS
177	176	5	9	6.7	865	PASS

RFV165.D VO01E11.M Fri Jun 21 12:51:10 2024

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F20\RFV166.D Vial: 2
Acq On : 20 Jun 2024 2:22 pm Operator: DNguye
Sample : CVO01E1123 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 14:44 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.53	114	762255	10.00	ug/l	-0.02
53) CHLOROBENZENE-D5	13.68	117	610436	10.00	ug/l	-0.03
72) 1,2-DICHLOROBENZENE-D4	18.67	152	238368	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.20	111	229288	9.72	ug/l	-0.03
Spiked Amount 10.000			Recovery = 97.20%			
41) 1,2-Dichloroethane-d4	7.94	65	157332	9.78	ug/l	-0.03
Spiked Amount 10.000			Recovery = 97.80%			
54) Toluene-d8	11.00	98	982572	10.74	ug/l	-0.03
Spiked Amount 10.000			Recovery = 107.40%			
76) 4-Bromofluorobenzene	15.98	95	309416	9.53	ug/l	-0.03
Spiked Amount 10.000			Recovery = 95.30%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.18	85	293197	14.37	ug/l	98
5) Chloromethane	2.47	50	264991	9.28	ug/l	100
6) Vinyl chloride	2.60	62	266886	11.22	ug/l	98
7) Bromomethane	3.15	94	282363	10.02	ug/l	100
8) Chloroethane	3.18	64	211247	12.24	ug/l	96
9) Dichlorofluoromethane	3.27	67	473042	9.65	ug/l	90
10) Trichlorofluoromethane	3.52	101	449431	13.97	ug/l	100
11) Acrolein	3.97	56	68758	40.16	ug/l	98
12) 1,1,2-Trichloro-1,2,2-trif	4.09	151	196685	12.23	ug/l	100
13) Acetone	4.03	43	155877	56.02	ug/l	88
14) 1,1-Dichloroethene	4.21	61	418826	10.30	ug/l	99
15) tert-Butyl alcohol	4.31	59	266586	314.17	ug/l	99
16) Iodomethane	4.61	142	429144	9.85	ug/l	99
17) Methyl acetate	4.64	43	104665	13.80	ug/l	99
18) Methylene chloride	4.83	49	311732	9.56	ug/l	92
19) Carbon disulfide	4.86	76	1045544	12.03	ug/l	98
20) Acrylonitrile	5.01	53	173540	49.16	ug/l	97
21) tert-Butyl methyl ether (M	5.03	73	459351	11.49	ug/l	97
22) trans-1,2-Dichloroethene	5.21	61	396806	10.13	ug/l	97
23) Isopropyl ether (DIPE)	5.64	45	864638	10.33	ug/l	98
24) Vinyl acetate	5.80	43	352198	12.26	ug/l	100
25) 1,1-Dichloroethane	5.80	63	485545	10.60	ug/l	99
27) tert-Butyl ethyl ether (ET	6.22	59	709273	11.83	ug/l	98
28) 2-Butanone	6.38	43	245740	57.56	ug/l	100
29) 2,2-Dichloropropane	6.60	77	434507	11.28	ug/l	99
30) cis-1,2-Dichloroethene	6.65	96	337043	10.69	ug/l	97
31) Chloroform	6.87	83	486276	10.42	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F20\RFV166.D Vial: 2
Acq On : 20 Jun 2024 2:22 pm Operator: DNguye
Sample : CVO01E1123 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 14:44 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.12	49	178297	9.73	ug/l	94
33)	Tetrahydrofuran	7.17	42	26257	9.72	ug/l	96
35)	1,1,1-Trichloroethane	7.46	97	453459	11.61	ug/l	98
36)	Cyclohexane	7.48	84	445593	11.72	ug/l	98
38)	1,1-Dichloropropene	7.70	110	140744	10.60	ug/l	98
39)	Carbon tetrachloride	7.85	119	336935	11.58	ug/l	98
40)	tert-Amyl methyl ether (TA	7.86	73	516388	11.07	ug/l	98
42)	Benzene	8.10	78	1075615	10.56	ug/l	99
43)	1,2-Dichloroethane	8.07	62	231133	11.25	ug/l	98
44)	Trichloroethene	9.05	130	287161	10.90	ug/l	98
45)	Methylcyclohexane	9.14	83	478285	11.43	ug/l	96
46)	1,2-Dichloropropane	9.31	63	234266	10.28	ug/l	93
47)	Bromodichloromethane	9.70	83	322541	10.20	ug/l	97
48)	1,4-Dioxane	9.74	88	20441	219.13	ug/l	85
49)	Dibromomethane	9.79	93	114041	10.61	ug/l	90
50)	2-Chloroethyl vinyl ether	10.20	63	37829	6.54	ug/l	93
51)	4-Methyl-2-pentanone	10.25	43	552438	49.08	ug/l	98
52)	cis-1,3-Dichloropropene	10.59	75	377530	10.65	ug/l	99
55)	Toluene	11.14	91	1186511	10.94	ug/l	98
56)	Ethyl methacrylate	11.43	69	173218	10.65	ug/l	93
57)	trans-1,3-Dichloropropene	11.45	75	293281	11.64	ug/l	97
58)	1,1,2-Trichloroethane	11.71	97	157528	11.10	ug/l	95
59)	2-Hexanone	11.74	43	331426	51.08	ug/l	99
60)	1,3-Dichloropropane	12.17	76	261280	10.85	ug/l	99
61)	Tetrachloroethene	12.28	164	257049	11.41	ug/l	95
62)	Dibromochloromethane	12.65	129	179316	10.35	ug/l	99
63)	1,2-Dibromoethane	13.00	107	140826	10.03	ug/l	99
64)	1-Chlorohexane	13.28	91	512411	10.95	ug/l	99
65)	Chlorobenzene	13.76	112	714224	11.05	ug/l	99
66)	1,1,1,2-Tetrachloroethane	13.85	131	226393	11.37	ug/l	98
67)	Ethylbenzene	13.85	91	1386533	11.21	ug/l	99
68)	m-Xylene & p-Xylene	13.99	91	2091654	23.09	ug/l	97
69)	o-Xylene	14.81	91	1040166	11.16	ug/l	99
70)	Styrene	14.88	104	793145	10.98	ug/l	98
71)	Isopropylbenzene	15.49	105	1354771	11.03	ug/l	99
73)	Bromoform	15.53	173	96220	10.21	ug/l	95
74)	trans-1,4-Dichloro-2-buten	15.61	53	45966	11.18	ug/l	100
75)	1,1,2,2-Tetrachloroethane	15.83	83	158548	9.99	ug/l	99
77)	1,2,3-Trichloropropane	16.13	110	46389	11.43	ug/l	95
78)	n-Propylbenzene	16.27	91	1702247	10.98	ug/l	100
79)	Bromobenzene	16.36	156	250043	10.20	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F20\RFV166.D Vial: 2
Acq On : 20 Jun 2024 2:22 pm Operator: DNguye
Sample : CVO01E1123 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 14:44 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

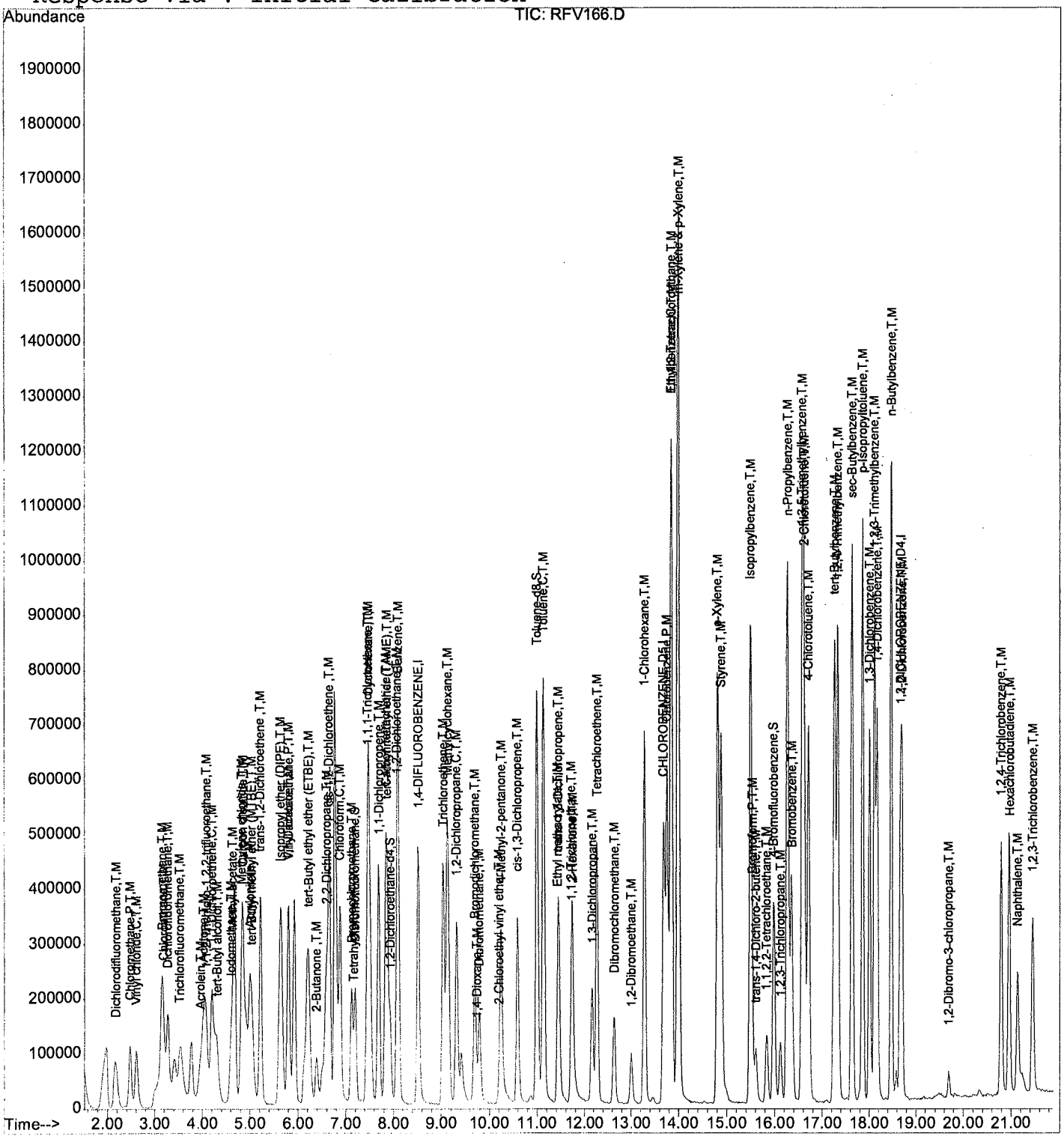
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.57	105	1058748	10.69 ug/l	97
81)	2-Chlorotoluene	16.61	91	1068547	11.45 ug/l	97
82)	4-Chlorotoluene	16.70	91	935738	11.33 ug/l	97
83)	tert-Butylbenzene	17.27	134	223074	10.74 ug/l	96
84)	1,2,4-Trimethylbenzene	17.33	105	1014923	10.47 ug/l	99
85)	sec-Butylbenzene	17.64	105	1465847	10.77 ug/l	100
86)	p-Isopropyltoluene	17.86	119	1175128	11.20 ug/l	99
87)	1,3-Dichlorobenzene	18.01	146	521328	11.19 ug/l	98
88)	1,2,3-Trimethylbenzene	18.11	105	980254	10.84 ug/l	98
89)	1,4-Dichlorobenzene	18.17	146	511065	11.19 ug/l	99
90)	n-Butylbenzene	18.48	91	1247299	11.47 ug/l	97
91)	1,2-Dichlorobenzene	18.70	146	429195	11.24 ug/l	98
92)	1,2-Dibromo-3-chloropropan	19.70	157	26413	10.78 ug/l	97
93)	1,2,4-Trichlorobenzene	20.79	180	302433	10.85 ug/l	97
94)	Hexachlorobutadiene	20.97	225	172374	10.38 ug/l	95
95)	Naphthalene	21.13	128	368601	11.33 ug/l	99
96)	1,2,3-Trichlorobenzene	21.46	180	233374	11.11 ug/l	96

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F20\RFV166.D Vial: 2
Acq On : 20 Jun 2024 2:22 pm Operator: DNguye
Sample : CVO01E1123 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 20 14:44 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F20\RFV166.D Vial: 2
Acq On : 20 Jun 2024 2:22 pm Operator: DNguye
Sample : CVO01E1123 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	83	-0.02
2	T,M	Chlorotrifluoroethylene	-1.000	0.000	0.0	0	-2.08#
3	T,M	Dichlorodifluoromethane	10.000	14.375	-43.8#	125	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	9.280	7.2	83	0.00
6	C,T,M	Vinyl chloride	10.000	11.221	-12.2	93	0.00
7	T,M	Bromomethane	10.000	10.017	-0.2	93	0.02
8	T,M	Chloroethane	10.000	12.244	-22.4#	109	0.00
9	T,M	Dichlorofluoromethane	10.000	9.654	3.5	88	0.00
10	T,M	Trichlorofluoromethane	10.000	13.967	-39.7#	123	-0.03
11	T,M	Acrolein	50.000	40.159	19.7	75	-0.01
12	T,M	1,1,2-Trichloro-1,2,2-trifl	10.000	12.231	-22.3#	102	0.03
13	T,M	Acetone	50.000	56.025	-12.0	110	-0.03
14	C,T,M	1,1-Dichloroethene	10.000	10.302	-3.0	89	-0.01
15	T,M	tert-Butyl alcohol	250.000	314.167	-25.7#	114	-0.03
16	T,M	Iodomethane	10.000	9.846	1.5	85	-0.03
17	T,M	Methyl acetate	10.000	13.796	-38.0#	135	-0.01
18	T,M	Methylene chloride	10.000	9.558	4.4	85	-0.03
19	T,M	Carbon disulfide	10.000	12.027	-20.3#	106	-0.01
20	T,M	Acrylonitrile	50.000	49.164	1.7	88	-0.02
21	T,M	tert-Butyl methyl ether (MT	10.000	11.488	-14.9	105	-0.03
22	T,M	trans-1,2-Dichloroethene	10.000	10.131	-1.3	90	-0.03
23	T,M	Isopropyl ether (DIPE)	10.000	10.331	-3.3	91	-0.03
24	T,M	Vinyl acetate	10.000	12.259	-22.6#	111	-0.02
25	P,T,M	1,1-Dichloroethane	10.000	10.601	-6.0	93	-0.02
26	T,M	2-Butanol	250.000	0.000	100.0#	0	-0.05
27	T,M	tert-Butyl ethyl ether (ETB	10.000	11.828	-18.3	106	-0.02
28	T,M	2-Butanone	50.000	57.559	-15.1	100	-0.03
29	T,M	2,2-Dichloropropane	10.000	11.283	-12.8	99	-0.02
30	T,M	cis-1,2-Dichloroethene	10.000	10.690	-6.9	93	-0.03
31	C,T,M	Chloroform	10.000	10.417	-4.2	96	-0.03
32	T,M	Bromochloromethane	10.000	9.726	2.7	87	-0.02
33	T,M	Tetrahydrofuran	10.000	9.723	2.8	96	-0.03
34	S	Dibromofluoromethane	10.000	9.718	2.8	89	-0.03
35	T,M	1,1,1-Trichloroethane	10.000	11.611	-16.1	102	-0.03
36	T,M	Cyclohexane	10.000	11.715	-17.1	107	-0.05
37	T,M	2,2,4-Trimethylpentane	10.000	0.000	100.0#	0	-0.03
38	T,M	1,1-Dichloropropene	10.000	10.602	-6.0	93	-0.02
39	T,M	Carbon tetrachloride	10.000	11.582	-15.8	100	-0.03
40	T,M	tert-Amyl methyl ether (TAM	10.000	11.068	-10.7	104	-0.02
41	S	1,2-Dichloroethane-d4	10.000	9.777	2.2	92	-0.03

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F20\RFV166.D Vial: 2
Acq On : 20 Jun 2024 2:22 pm Operator: DNguye
Sample : CVO01E1123 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	10.562	-5.6	93	-0.03
43	T,M	1,2-Dichloroethane	10.000	11.254	-12.5	101	-0.03
44	T,M	Trichloroethene	10.000	10.902	-9.0	93	-0.02
45	T,M	Methylcyclohexane	10.000	11.430	-14.3	105	-0.03
46	C,T,M	1,2-Dichloropropane	10.000	10.281	-2.8	91	-0.03
47	T,M	Bromodichloromethane	10.000	10.199	-2.0	94	-0.03
48	T,M	1,4-Dioxane	200.000	219.135	-9.6	102	-0.04
49	T,M	Dibromomethane	10.000	10.611	-6.1	98	-0.03
50	T,M	2-Chloroethyl vinyl ether	10.000	6.542	34.6#	59	-0.03
51	T,M	4-Methyl-2-pentanone	50.000	49.084	1.8	94	-0.01
52	T,M	cis-1,3-Dichloropropene	10.000	10.647	-6.5	95	-0.03
53	I	CHLOROBENZENE-D5	10.000	10.000	0.0	82	-0.03
54	S	Toluene-d8	10.000	10.741	-7.4	95	-0.03
55	C,T,M	Toluene	10.000	10.945	-9.5	94	-0.03
56	T,M	Ethyl methacrylate	10.000	10.648	-6.5	95	-0.03
57	T,M	trans-1,3-Dichloropropene	10.000	11.639	-16.4	101	-0.03
58	T,M	1,1,2-Trichloroethane	10.000	11.099	-11.0	98	-0.03
59	T,M	2-Hexanone	50.000	51.083	-2.2	99	-0.02
60	T,M	1,3-Dichloropropane	10.000	10.845	-8.5	96	-0.02
61	T,M	Tetrachloroethene	10.000	11.407	-14.1	96	-0.02
62	T,M	Dibromochloromethane	10.000	10.349	-3.5	93	-0.02
63	T,M	1,2-Dibromoethane	10.000	10.030	-0.3	88	-0.03
64	T,M	1-Chlorohexane	10.000	10.946	-9.5	93	-0.02
65	P,M	Chlorobenzene	10.000	11.051	-10.5	94	-0.03
66	T,M	1,1,1,2-Tetrachloroethane	10.000	11.373	-13.7	98	-0.02
67	C,T,M	Ethylbenzene	10.000	11.207	-12.1	94	-0.03
68	T,M	m-Xylene & p-Xylene	20.000	23.094	-15.5	99	-0.02
69	T,M	o-Xylene	10.000	11.158	-11.6	96	-0.03
70	T,M	Styrene	10.000	10.977	-9.8	94	-0.02
71	T,M	Isopropylbenzene	10.000	11.031	-10.3	93	-0.03
72	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	84	0.00
73	P,T,M	Bromoform	10.000	10.206	-2.1	101	-0.02
74	T,M	trans-1,4-Dichloro-2-butene	10.000	11.178	-11.8	104	-0.02
75	T,M	1,1,2,2-Tetrachloroethane	10.000	9.991	0.1	94	-0.03
76	S	4-Bromofluorobenzene	10.000	9.531	4.7	88	-0.03
77	T,M	1,2,3-Trichloropropane	10.000	11.427	-14.3	103	-0.02
78	T,M	n-Propylbenzene	10.000	10.983	-9.8	95	-0.02
79	T,M	Bromobenzene	10.000	10.198	-2.0	89	-0.02
80	T,M	1,3,5-Trimethylbenzene	10.000	10.691	-6.9	93	-0.03

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F20\RFV166.D Vial: 2
Acq On : 20 Jun 2024 2:22 pm Operator: DNguye
Sample : CVO01E1123 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	11.451	-14.5	101	-0.02
82	T,M	4-Chlorotoluene	10.000	11.327	-13.3	97	-0.02
83	T,M	tert-Butylbenzene	10.000	10.738	-7.4	93	-0.02
84	T,M	1,2,4-Trimethylbenzene	10.000	10.475	-4.7	90	-0.03
85	T,M	sec-Butylbenzene	10.000	10.768	-7.7	93	-0.02
86	T,M	p-Isopropyltoluene	10.000	11.197	-12.0	98	-0.02
87	T,M	1,3-Dichlorobenzene	10.000	11.189	-11.9	98	-0.02
88	T,M	1,2,3-Trimethylbenzene	10.000	10.837	-8.4	96	-0.02
89	T,M	1,4-Dichlorobenzene	10.000	11.187	-11.9	99	-0.02
90	T,M	n-Butylbenzene	10.000	11.475	-14.7	100	0.00
91	T,M	1,2-Dichlorobenzene	10.000	11.242	-12.4	101	-0.02
92	T,M	1,2-Dibromo-3-chloropropane	10.000	10.781	-7.8	111	-0.02
93	T,M	1,2,4-Trichlorobenzene	10.000	10.850	-8.5	96	0.00
94	T,M	Hexachlorobutadiene	10.000	10.380	-3.8	87	0.00
95	T,M	Naphthalene	10.000	11.330	-13.3	103	0.00
96	T,M	1,2,3-Trichlorobenzene	10.000	11.115	-11.2	99	0.00

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F20\RFV166.D Vial: 2
Acq On : 20 Jun 2024 2:22 pm Operator: DNguye
Sample : CVO01E1123 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	83	-0.02
2	T,M	Chlorotrifluoroethylene	0.000	0.000	0.0	0#	-2.08#
3	T,M	Dichlorodifluoromethane	0.268	0.385	-43.7#	125	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	0.375	0.348	7.2	83	0.00
6	C,T,M	Vinyl chloride	0.312	0.350	-12.2	93	0.00
7	T,M	Bromomethane	0.396	0.370	6.6	93	0.02
8	T,M	Chloroethane	0.226	0.277	-22.6#	109	0.00
9	T,M	Dichlorofluoromethane	0.643	0.621	3.4	88	0.00
10	T,M	Trichlorofluoromethane	0.422	0.590	-39.8#	123	-0.03
11	T,M	Acrolein	0.022	0.018	18.2	75	-0.01
12	T,M	1,1,2-Trichloro-1,2,2-trifl	0.211	0.258	-22.3#	102	0.03
13	T,M	Acetone	0.037	0.041	-10.8	110	-0.03
14	C,T,M	1,1-Dichloroethene	0.533	0.549	-3.0	89	-0.01
15	T,M	tert-Butyl alcohol	0.011	0.014	-27.3#	114	-0.03
16	T,M	Iodomethane	0.572	0.563	1.6	85	-0.03
17	T,M	Methyl acetate	0.100	0.137	-37.0#	135	-0.01
18	T,M	Methylene chloride	0.428	0.409	4.4	85	-0.03
19	T,M	Carbon disulfide	1.140	1.372	-20.4#	106	-0.01
20	T,M	Acrylonitrile	0.046	0.046	0.0	88	-0.02
21	T,M	tert-Butyl methyl ether (MT	0.525	0.603	-14.9	105	-0.03
22	T,M	trans-1,2-Dichloroethene	0.514	0.521	-1.4	90	-0.03
23	T,M	Isopropyl ether (DIPE)	1.098	1.134	-3.3	91	-0.03
24	T,M	Vinyl acetate	0.377	0.462	-22.5#	111	-0.02
25	P,T,M	1,1-Dichloroethane	0.601	0.637	-6.0	93	-0.02
26	T,M	2-Butanol	0.000	0.012	0.0	0#	-0.05
27	T,M	tert-Butyl ethyl ether (ETB	0.787	0.930	-18.2	106	-0.02
28	T,M	2-Butanone	0.056	0.064	-14.3	100	-0.03
29	T,M	2,2-Dichloropropane	0.505	0.570	-12.9	99	-0.02
30	T,M	cis-1,2-Dichloroethene	0.414	0.442	-6.8	93	-0.03
31	C,T,M	Chloroform	0.612	0.638	-4.2	96	-0.03
32	T,M	Bromochloromethane	0.240	0.234	2.5	87	-0.02
33	T,M	Tetrahydrofuran	0.035	0.034	2.9	96	-0.03
34	S	Dibromofluoromethane	0.310	0.301	2.9	89	-0.03
35	T,M	1,1,1-Trichloroethane	0.512	0.595	-16.2	102	-0.03
36	T,M	Cyclohexane	0.499	0.585	-17.2	107	-0.05
37	T,M	2,2,4-Trimethylpentane	0.000	0.036	0.0	0#	-0.03
38	T,M	1,1-Dichloropropene	0.174	0.185	-6.3	93	-0.02
39	T,M	Carbon tetrachloride	0.382	0.442	-15.7	100	-0.03
40	T,M	tert-Amyl methyl ether (TAM	0.612	0.677	-10.6	104	-0.02
41	S	1,2-Dichloroethane-d4	0.211	0.206	2.4	92	-0.03

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F20\RFV166.D Vial: 2
Acq On : 20 Jun 2024 2:22 pm Operator: DNguye
Sample : CVO01E1123 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	1.336	1.411	-5.6	93	-0.03
43	T,M	1,2-Dichloroethane	0.269	0.303	-12.6	101	-0.03
44	T,M	Trichloroethene	0.346	0.377	-9.0	93	-0.02
45	T,M	Methylcyclohexane	0.549	0.627	-14.2	105	-0.03
46	C,T,M	1,2-Dichloropropane	0.299	0.307	-2.7	91	-0.03
47	T,M	Bromodichloromethane	0.415	0.423	-1.9	94	-0.03
48	T,M	1,4-Dioxane	0.001	0.001	0.0	102	-0.04
49	T,M	Dibromomethane	0.141	0.150	-6.4	98	-0.03
50	T,M	2-Chloroethyl vinyl ether	0.076	0.050	34.2#	59	-0.03
51	T,M	4-Methyl-2-pentanone	0.136	0.145	-6.6	94	-0.01
52	T,M	cis-1,3-Dichloropropene	0.465	0.495	-6.5	95	-0.03
53	I	CHLOROBENZENE-D5	1.000	1.000	0.0	82	-0.03
54	S	Toluene-d8	1.499	1.610	-7.4	95	-0.03
55	C,T,M	Toluene	1.776	1.944	-9.5	94	-0.03
56	T,M	Ethyl methacrylate	0.266	0.284	-6.8	95	-0.03
57	T,M	trans-1,3-Dichloropropene	0.413	0.480	-16.2	101	-0.03
58	T,M	1,1,2-Trichloroethane	0.233	0.258	-10.7	98	-0.03
59	T,M	2-Hexanone	0.090	0.109	-21.1#	99	-0.02
60	T,M	1,3-Dichloropropane	0.395	0.428	-8.4	96	-0.02
61	T,M	Tetrachloroethene	0.369	0.421	-14.1	96	-0.02
62	T,M	Dibromochloromethane	0.284	0.294	-3.5	93	-0.02
63	T,M	1,2-Dibromoethane	0.230	0.231	-0.4	88	-0.03
64	T,M	1-Chlorohexane	0.767	0.839	-9.4	93	-0.02
65	P,M	Chlorobenzene	1.059	1.170	-10.5	94	-0.03
66	T,M	1,1,1,2-Tetrachloroethane	0.326	0.371	-13.8	98	-0.02
67	C,T,M	Ethylbenzene	2.027	2.271	-12.0	94	-0.03
68	T,M	m-Xylene & p-Xylene	1.484	1.713	-15.4	99	-0.02
69	T,M	o-Xylene	1.527	1.704	-11.6	96	-0.03
70	T,M	Styrene	1.184	1.299	-9.7	94	-0.02
71	T,M	Isopropylbenzene	2.012	2.219	-10.3	93	-0.03
72	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	84	0.00
73	P,T,M	Bromoform	0.350	0.404	-15.4	101	-0.02
74	T,M	trans-1,4-Dichloro-2-butene	0.173	0.193	-11.6	104	-0.02
75	T,M	1,1,2,2-Tetrachloroethane	0.666	0.665	0.2	94	-0.03
76	S	4-Bromofluorobenzene	1.362	1.298	4.7	88	-0.03
77	T,M	1,2,3-Trichloropropane	0.170	0.195	-14.7	103	-0.02
78	T,M	n-Propylbenzene	6.502	7.141	-9.8	95	-0.02
79	T,M	Bromobenzene	1.029	1.049	-1.9	89	-0.02
80	T,M	1,3,5-Trimethylbenzene	4.155	4.442	-6.9	93	-0.03

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F20\RFV166.D Vial: 2
Acq On : 20 Jun 2024 2:22 pm Operator: DNguye
Sample : CVO01E1123 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	3.915	4.483	-14.5	101	-0.02
82	T,M	4-Chlorotoluene	3.466	3.926	-13.3	97	-0.02
83	T,M	tert-Butylbenzene	0.871	0.936	-7.5	93	-0.02
84	T,M	1,2,4-Trimethylbenzene	4.065	4.258	-4.7	90	-0.03
85	T,M	sec-Butylbenzene	5.711	6.150	-7.7	93	-0.02
86	T,M	p-Isopropyltoluene	4.403	4.930	-12.0	98	-0.02
87	T,M	1,3-Dichlorobenzene	1.955	2.187	-11.9	98	-0.02
88	T,M	1,2,3-Trimethylbenzene	3.795	4.112	-8.4	96	-0.02
89	T,M	1,4-Dichlorobenzene	1.916	2.144	-11.9	99	-0.02
90	T,M	n-Butylbenzene	4.560	5.233	-14.8	100	0.00
91	T,M	1,2-Dichlorobenzene	1.602	1.801	-12.4	101	-0.02
92	T,M	1,2-Dibromo-3-chloropropane	0.095	0.111	-16.8	111	-0.02
93	T,M	1,2,4-Trichlorobenzene	1.169	1.269	-8.6	96	0.00
94	T,M	Hexachlorobutadiene	0.697	0.723	-3.7	87	0.00
95	T,M	Naphthalene	1.365	1.546	-13.3	103	0.00
96	T,M	1,2,3-Trichlorobenzene	0.881	0.979	-11.1	99	0.00

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name : EMAX Laboratories, Inc. Project : VA SALT LAKE CITY
Lab Code : EMAX SOG No : 24F073
Lab File ID: RFV1B8 BFB Injection Date: 06/21/24
Instrument ID: 01 BFB Injection Time: 09:46

m/e	ION ABUNOANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	16.401
75	30 - 60% of mass 95	43.221
95	Base Peak, 100% relative abundance	100.000
96	5 - 9% of mass 95	6.533
173	Less than 2% of mass 174	0.000(0)1
174	Greater than 50% of mass 95	69.299
175	5 - 9% of mass 174	5.032(7.26)1
176	95 - 101% % of mass 174	67.964(98.07)1
177	5 - 9% % of mass 176	4.919(7.24)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 ANALYZEO
1	VSTD10	CV001E1123	RFV189	06/21/24	11:23
2	LCS2W	V001F09L	RFV190	06/21/24	11:52
3	LCD2W	V001F09C	RFV191	06/21/24	12:22
4	MBLK2W	V001F09B	RFV193	06/21/24	13:22
5	FD03-GW061624	24F073-04	RFV201	06/21/24	17:24
6	EB09-GW061624	24F073-05	RFV202	06/21/24	17:55
7	MW41-GW061724-276	24F073-06	RFV203	06/21/24	18:25
8	MW41-GW061724-305	24F073-07	RFV204	06/21/24	18:55

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: EMAX Laboratories, Inc.
Lab Code: EMAX
Lab File ID: REV201
Instrument ID: 01

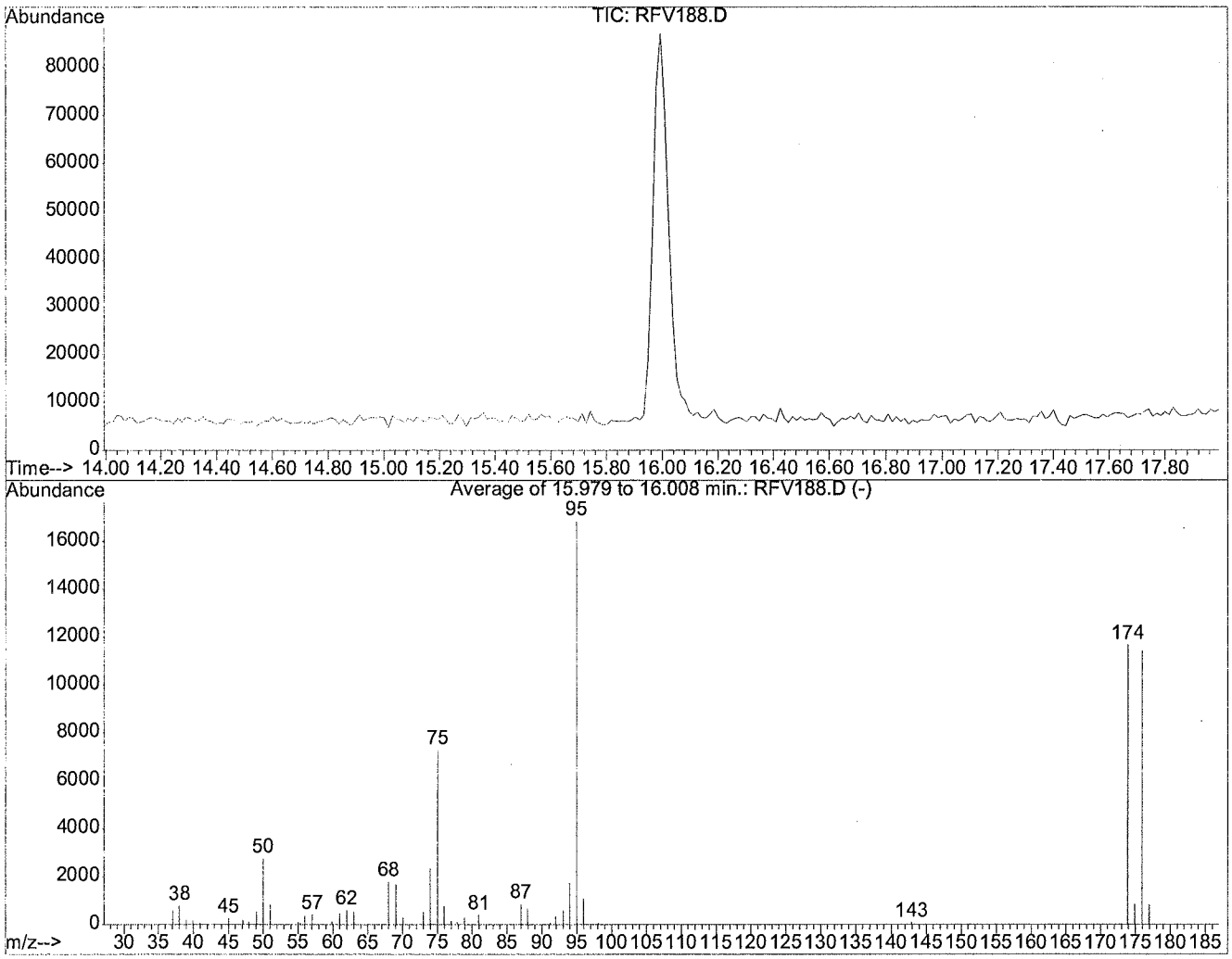
Project: VA SALT LAKE CITY
SDG No: 24F073
Date Analyzed: 05/11/24
Time Analyzed: 13:28

	INTERNAL STANDARD (IS)	1,4-DIFLUOROBENZENE		CHLOROBENZENE-D5		1,2-DICHLOROBENZENE-D4	
		Area #	RT #	Area #	RT #	Area #	RT #
	12 HOUR STD	920983	8.54	742213	13.71	284055	18.68
	UPPER LIMIT	1841966	8.71	1484426	13.88	568110	18.85
	LOWER LIMIT	460492	8.37	371107	13.54	142028	18.51
		Area #	RT #	Area #	RT #	Area #	RT #
1	VSTD10	801945	8.52	634115	13.68	259059	18.67
2	LCS2W	826357	8.53	662201	13.68	268827	18.67
3	LCD2W	802338	8.53	648941	13.68	255577	18.67
4	MBLK2W	780613	8.53	630338	13.70	250447	18.67
5	FD03-GW061624	674738	8.53	549847	13.70	225321	18.67
6	EB09-GW061624	704841	8.53	576315	13.70	231232	18.67
7	MW41-GW061724-276	659904	8.53	540766	13.70	216262	18.67
8	MW41-GW061724-305	674928	8.53	566076	13.70	228275	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

Data File : D:\HPCHEM\1\DATA\24F21\RFV188.D
Acq On : 21 Jun 2024 9:46 am
Sample : BFB01F09
Misc : T/CHK
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls

Vial: 1
Operator: DNguye
Inst : 01New
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	16.4	2764	PASS
75	95	30	60	43.2	7284	PASS
95	95	100	100	100.0	16853	PASS
96	95	5	9	6.5	1101	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	69.3	11679	PASS
175	174	5	9	7.3	848	PASS
176	174	95	101	98.1	11454	PASS
177	176	5	9	7.2	829	PASS

RFV188.D VO01E11.M Sun Jun 23 12:36:15 2024

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F21\RFV189.D Vial: 2
Acq On : 21 Jun 2024 11:23 am Operator: DNguye
Sample : CVO01E1123 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	-0.03
2	T,M	Chlorotrifluoroethylene	-1.000	0.000	0.0	0	-2.08#
3	T,M	Dichlorodifluoromethane	10.000	13.817	-38.2#	127	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	8.421	15.8	79	0.03
6	C,T,M	Vinyl chloride	10.000	10.509	-5.1	92	0.01
7	T,M	Bromomethane	10.000	9.656	3.4	95	0.02
8	T,M	Chloroethane	10.000	10.552	-5.5	98	0.00
9	T,M	Dichlorofluoromethane	10.000	8.892	11.1	86	0.01
10	T,M	Trichlorofluoromethane	10.000	13.569	-35.7#	126	0.00
11	T,M	Acrolein	50.000	36.667	26.7#	72	-0.01
12	T,M	1,1,2-Trichloro-1,2,2-trifl	10.000	11.476	-14.8	100	0.03
13	T,M	Acetone	50.000	51.486	-3.0	106	-0.01
14	C,T,M	1,1-Dichloroethene	10.000	9.263	7.4	84	-0.02
15	T,M	tert-Butyl alcohol	250.000	263.825	-5.5	101	-0.02
16	T,M	Iodomethane	10.000	8.530	14.7	78	-0.02
17	T,M	Methyl acetate	10.000	12.978	-29.8#	134	-0.03
18	T,M	Methylene chloride	10.000	8.775	12.2	82	-0.03
19	T,M	Carbon disulfide	10.000	11.608	-16.1	108	-0.01
20	T,M	Acrylonitrile	50.000	43.738	12.5	83	-0.02
21	T,M	tert-Butyl methyl ether (MT	10.000	10.396	-4.0	100	-0.03
22	T,M	trans-1,2-Dichloroethene	10.000	9.260	7.4	87	-0.02
23	T,M	Isopropyl ether (DIPE)	10.000	9.170	8.3	85	-0.03
24	T,M	Vinyl acetate	10.000	11.223	-12.2	107	-0.02
25	P,T,M	1,1-Dichloroethane	10.000	9.648	3.5	89	-0.02
26	T,M	2-Butanol	250.000	0.000	100.0#	0	-0.03
27	T,M	tert-Butyl ethyl ether (ETB	10.000	10.750	-7.5	102	-0.02
28	T,M	2-Butanone	50.000	50.407	-0.8	93	-0.02
29	T,M	2,2-Dichloropropane	10.000	10.739	-7.4	99	-0.02
30	T,M	cis-1,2-Dichloroethene	10.000	9.561	4.4	87	-0.02
31	C,T,M	Chloroform	10.000	9.509	4.9	92	-0.02
32	T,M	Bromochloromethane	10.000	8.750	12.5	82	-0.02
33	T,M	Tetrahydrofuran	10.000	9.098	9.0	94	-0.03
34	S	Dibromofluoromethane	10.000	9.328	6.7	89	-0.03
35	T,M	1,1,1-Trichloroethane	10.000	10.751	-7.5	99	-0.02
36	T,M	Cyclohexane	10.000	12.724	-27.2#	122	-0.03
37	T,M	2,2,4-Trimethylpentane	10.000	0.000	100.0#	0	-0.03
38	T,M	1,1-Dichloropropene	10.000	9.742	2.6	90	-0.02
39	T,M	Carbon tetrachloride	10.000	11.190	-11.9	102	-0.03
40	T,M	tert-Amyl methyl ether (TAM	10.000	10.012	-0.1	99	-0.02
41	S	1,2-Dichloroethane-d4	10.000	10.075	-0.7	100	-0.03

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F21\RFV189.D Vial: 2
Acq On : 21 Jun 2024 11:23 am Operator: DNguye
Sample : CVO01E1123 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	9.732	2.7	90	-0.03
43	T,M	1,2-Dichloroethane	10.000	10.658	-6.6	100	-0.03
44	T,M	Trichloroethene	10.000	10.012	-0.1	90	-0.01
45	T,M	Methylcyclohexane	10.000	12.810	-28.1#	124	-0.03
46	C,T,M	1,2-Dichloropropane	10.000	9.469	5.3	89	-0.03
47	T,M	Bromodichloromethane	10.000	9.529	4.7	93	-0.03
48	T,M	1,4-Dioxane	200.000	186.789	6.6	91	-0.03
49	T,M	Dibromomethane	10.000	9.597	4.0	93	-0.03
50	T,M	2-Chloroethyl vinyl ether	10.000	6.185	38.2#	59	-0.03
51	T,M	4-Methyl-2-pentanone	50.000	45.969	8.1	92	-0.01
52	T,M	cis-1,3-Dichloropropene	10.000	9.990	0.1	93	-0.03
53	I	CHLOROBENZENE-D5	10.000	10.000	0.0	85	-0.03
54	S	Toluene-d8	10.000	9.317	6.8	86	-0.03
55	C,T,M	Toluene	10.000	10.530	-5.3	94	-0.03
56	T,M	Ethyl methacrylate	10.000	10.341	-3.4	95	-0.03
57	T,M	trans-1,3-Dichloropropene	10.000	11.032	-10.3	100	-0.03
58	T,M	1,1,2-Trichloroethane	10.000	10.444	-4.4	96	-0.01
59	T,M	2-Hexanone	50.000	49.877	0.2	100	-0.01
60	T,M	1,3-Dichloropropane	10.000	10.286	-2.9	95	-0.02
61	T,M	Tetrachloroethene	10.000	10.636	-6.4	93	-0.02
62	T,M	Dibromochloromethane	10.000	9.896	1.0	92	-0.03
63	T,M	1,2-Dibromoethane	10.000	9.518	4.8	87	-0.03
64	T,M	1-Chlorohexane	10.000	10.470	-4.7	92	-0.02
65	P,M	Chlorobenzene	10.000	10.373	-3.7	92	-0.03
66	T,M	1,1,1,2-Tetrachloroethane	10.000	10.850	-8.5	97	-0.02
67	C,T,M	Ethylbenzene	10.000	10.892	-8.9	95	-0.03
68	T,M	m-Xylene & p-Xylene	20.000	21.880	-9.4	97	-0.02
69	T,M	o-Xylene	10.000	10.605	-6.1	95	-0.03
70	T,M	Styrene	10.000	10.289	-2.9	92	-0.02
71	T,M	Isopropylbenzene	10.000	10.585	-5.9	93	-0.03
72	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	91	0.00
73	P,T,M	Bromoform	10.000	9.205	7.9	98	-0.02
74	T,M	trans-1,4-Dichloro-2-butene	10.000	10.030	-0.3	101	-0.02
75	T,M	1,1,2,2-Tetrachloroethane	10.000	8.866	11.3	91	-0.03
76	S	4-Bromofluorobenzene	10.000	9.416	5.8	95	-0.03
77	T,M	1,2,3-Trichloropropane	10.000	9.903	1.0	97	-0.02
78	T,M	n-Propylbenzene	10.000	10.096	-1.0	95	-0.02
79	T,M	Bromobenzene	10.000	9.387	6.1	89	-0.03
80	T,M	1,3,5-Trimethylbenzene	10.000	9.651	3.5	91	-0.03

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F21\RFV189.D Vial: 2
Acq On : 21 Jun 2024 11:23 am Operator: DNguye
Sample : CVO01E1123 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	10.435	-4.4	100	-0.02
82	T,M	4-Chlorotoluene	10.000	10.308	-3.1	96	-0.02
83	T,M	tert-Butylbenzene	10.000	9.961	0.4	94	-0.02
84	T,M	1,2,4-Trimethylbenzene	10.000	9.621	3.8	90	-0.03
85	T,M	sec-Butylbenzene	10.000	10.165	-1.6	96	-0.02
86	T,M	p-Isopropyltoluene	10.000	10.459	-4.6	99	-0.02
87	T,M	1,3-Dichlorobenzene	10.000	10.365	-3.7	98	-0.02
88	T,M	1,2,3-Trimethylbenzene	10.000	9.748	2.5	94	-0.02
89	T,M	1,4-Dichlorobenzene	10.000	10.022	-0.2	96	-0.02
90	T,M	n-Butylbenzene	10.000	10.705	-7.1	101	-0.02
91	T,M	1,2-Dichlorobenzene	10.000	10.158	-1.6	99	-0.02
92	T,M	1,2-Dibromo-3-chloropropane	10.000	8.967	10.3	99	-0.02
93	T,M	1,2,4-Trichlorobenzene	10.000	9.892	1.1	95	0.00
94	T,M	Hexachlorobutadiene	10.000	9.385	6.2	86	0.00
95	T,M	Naphthalene	10.000	10.529	-5.3	104	0.00
96	T,M	1,2,3-Trichlorobenzene	10.000	10.210	-2.1	98	0.00

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F21\RFV189.D Vial: 2
Acq On : 21 Jun 2024 11:23 am Operator: DNguye
Sample : CVO01E1123 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	-0.03
2	T,M	Chlorotrifluoroethylene	0.000	0.000	0.0	0#	-2.08#
3	T,M	Dichlorodifluoromethane	0.268	0.370	-38.1#	127	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	0.375	0.315	16.0	79	0.03
6	C,T,M	Vinyl chloride	0.312	0.328	-5.1	92	0.01
7	T,M	Bromomethane	0.396	0.357	9.8	95	0.02
8	T,M	Chloroethane	0.226	0.239	-5.8	98	0.00
9	T,M	Dichlorofluoromethane	0.643	0.572	11.0	86	0.01
10	T,M	Trichlorofluoromethane	0.422	0.573	-35.8#	126	0.00
11	T,M	Acrolein	0.022	0.016	27.3#	72	-0.01
12	T,M	1,1,2-Trichloro-1,2,2-trifl	0.211	0.242	-14.7	100	0.03
13	T,M	Acetone	0.037	0.038	-2.7	106	-0.01
14	C,T,M	1,1-Dichloroethene	0.533	0.494	7.3	84	-0.02
15	T,M	tert-Butyl alcohol	0.011	0.012	-9.1	101	-0.02
16	T,M	Iodomethane	0.572	0.488	14.7	78	-0.02
17	T,M	Methyl acetate	0.100	0.129	-29.0#	134	-0.03
18	T,M	Methylene chloride	0.428	0.375	12.4	82	-0.03
19	T,M	Carbon disulfide	1.140	1.324	-16.1	108	-0.01
20	T,M	Acrylonitrile	0.046	0.041	10.9	83	-0.02
21	T,M	tert-Butyl methyl ether (MT	0.525	0.545	-3.8	100	-0.03
22	T,M	trans-1,2-Dichloroethene	0.514	0.476	7.4	87	-0.02
23	T,M	Isopropyl ether (DIPE)	1.098	1.007	8.3	85	-0.03
24	T,M	Vinyl acetate	0.377	0.423	-12.2	107	-0.02
25	P,T,M	1,1-Dichloroethane	0.601	0.580	3.5	89	-0.02
26	T,M	2-Butanol	0.000	0.011	0.0	0#	-0.03
27	T,M	tert-Butyl ethyl ether (ETB	0.787	0.846	-7.5	102	-0.02
28	T,M	2-Butanone	0.056	0.056	0.0	93	-0.02
29	T,M	2,2-Dichloropropane	0.505	0.543	-7.5	99	-0.02
30	T,M	cis-1,2-Dichloroethene	0.414	0.395	4.6	87	-0.02
31	C,T,M	Chloroform	0.612	0.582	4.9	92	-0.02
32	T,M	Bromochloromethane	0.240	0.210	12.5	82	-0.02
33	T,M	Tetrahydrofuran	0.035	0.032	8.6	94	-0.03
34	S	Dibromofluoromethane	0.310	0.289	6.8	89	-0.03
35	T,M	1,1,1-Trichloroethane	0.512	0.551	-7.6	99	-0.02
36	T,M	Cyclohexane	0.499	0.635	-27.3#	122	-0.03
37	T,M	2,2,4-Trimethylpentane	0.000	0.036	0.0	0#	-0.03
38	T,M	1,1-Dichloropropene	0.174	0.170	2.3	90	-0.02
39	T,M	Carbon tetrachloride	0.382	0.427	-11.8	102	-0.03
40	T,M	tert-Amyl methyl ether (TAM	0.612	0.613	-0.2	99	-0.02
41	S	1,2-Dichloroethane-d4	0.211	0.213	-0.9	100	-0.03

(#) = Out of Range

Data File : D:\HPCHEM\1\DATA\24F21\RFV189.D Vial: 2
Acq On : 21 Jun 2024 11:23 am Operator: DNguye
Sample : CVO01E1123 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	1.336	1.300	2.7	90	-0.03
43	T,M	1,2-Dichloroethane	0.269	0.287	-6.7	100	-0.03
44	T,M	Trichloroethene	0.346	0.346	0.0	90	-0.01
45	T,M	Methylcyclohexane	0.549	0.703	-28.1#	124	-0.03
46	C,T,M	1,2-Dichloropropane	0.299	0.283	5.4	89	-0.03
47	T,M	Bromodichloromethane	0.415	0.395	4.8	93	-0.03
48	T,M	1,4-Dioxane	0.001	0.001	0.0	91	-0.03
49	T,M	Dibromomethane	0.141	0.135	4.3	93	-0.03
50	T,M	2-Chloroethyl vinyl ether	0.076	0.047	38.2#	59	-0.03
51	T,M	4-Methyl-2-pentanone	0.136	0.135	0.7	92	-0.01
52	T,M	cis-1,3-Dichloropropene	0.465	0.465	0.0	93	-0.03
53	I	CHLOROBENZENE-D5	1.000	1.000	0.0	85	-0.03
54	S	Toluene-d8	1.499	1.396	6.9	86	-0.03
55	C,T,M	Toluene	1.776	1.870	-5.3	94	-0.03
56	T,M	Ethyl methacrylate	0.266	0.276	-3.8	95	-0.03
57	T,M	trans-1,3-Dichloropropene	0.413	0.455	-10.2	100	-0.03
58	T,M	1,1,2-Trichloroethane	0.233	0.243	-4.3	96	-0.01
59	T,M	2-Hexanone	0.090	0.106	-17.8	100	-0.01
60	T,M	1,3-Dichloropropane	0.395	0.406	-2.8	95	-0.02
61	T,M	Tetrachloroethene	0.369	0.393	-6.5	93	-0.02
62	T,M	Dibromochloromethane	0.284	0.281	1.1	92	-0.03
63	T,M	1,2-Dibromoethane	0.230	0.219	4.8	87	-0.03
64	T,M	1-Chlorohexane	0.767	0.803	-4.7	92	-0.02
65	P,M	Chlorobenzene	1.059	1.098	-3.7	92	-0.03
66	T,M	1,1,1,2-Tetrachloroethane	0.326	0.354	-8.6	97	-0.02
67	C,T,M	Ethylbenzene	2.027	2.208	-8.9	95	-0.03
68	T,M	m-Xylene & p-Xylene	1.484	1.623	-9.4	97	-0.02
69	T,M	o-Xylene	1.527	1.619	-6.0	95	-0.03
70	T,M	Styrene	1.184	1.218	-2.9	92	-0.02
71	T,M	Isopropylbenzene	2.012	2.129	-5.8	93	-0.03
72	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	91	0.00
73	P,T,M	Bromoform	0.350	0.363	-3.7	98	-0.02
74	T,M	trans-1,4-Dichloro-2-butene	0.173	0.173	0.0	101	-0.02
75	T,M	1,1,2,2-Tetrachloroethane	0.666	0.590	11.4	91	-0.03
76	S	4-Bromofluorobenzene	1.362	1.282	5.9	95	-0.03
77	T,M	1,2,3-Trichloropropane	0.170	0.169	0.6	97	-0.02
78	T,M	n-Propylbenzene	6.502	6.564	-1.0	95	-0.02
79	T,M	Bromobenzene	1.029	0.966	6.1	89	-0.03
80	T,M	1,3,5-Trimethylbenzene	4.155	4.010	3.5	91	-0.03

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F21\RFV189.D Vial: 2
Acq On : 21 Jun 2024 11:23 am Operator: DNguye
Sample : CVO01E1123 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	3.915	4.085	-4.3	100	-0.02
82	T,M	4-Chlorotoluene	3.466	3.572	-3.1	96	-0.02
83	T,M	tert-Butylbenzene	0.871	0.868	0.3	94	-0.02
84	T,M	1,2,4-Trimethylbenzene	4.065	3.911	3.8	90	-0.03
85	T,M	sec-Butylbenzene	5.711	5.805	-1.6	96	-0.02
86	T,M	p-Isopropyltoluene	4.403	4.605	-4.6	99	-0.02
87	T,M	1,3-Dichlorobenzene	1.955	2.026	-3.6	98	-0.02
88	T,M	1,2,3-Trimethylbenzene	3.795	3.699	2.5	94	-0.02
89	T,M	1,4-Dichlorobenzene	1.916	1.921	-0.3	96	-0.02
90	T,M	n-Butylbenzene	4.560	4.882	-7.1	101	-0.02
91	T,M	1,2-Dichlorobenzene	1.602	1.627	-1.6	99	-0.02
92	T,M	1,2-Dibromo-3-chloropropane	0.095	0.091	4.2	99	-0.02
93	T,M	1,2,4-Trichlorobenzene	1.169	1.157	1.0	95	0.00
94	T,M	Hexachlorobutadiene	0.697	0.654	6.2	86	0.00
95	T,M	Naphthalene	1.365	1.437	-5.3	104	0.00
96	T,M	1,2,3-Trichlorobenzene	0.881	0.899	-2.0	98	0.00

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F21\RFV189.D Vial: 2
Acq On : 21 Jun 2024 11:23 am Operator: DNguye
Sample : CVO01E1123 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 23 12:35 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.52	114	801945	10.00	ug/l	-0.03
53) CHLOROBENZENE-D5	13.68	117	634115	10.00	ug/l	-0.03
72) 1,2-DICHLOROBENZENE-D4	18.67	152	259059	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.20	111	231532	9.33	ug/l	-0.03
Spiked Amount 10.000			Recovery = 93.30%			
41) 1,2-Dichloroethane-d4	7.94	65	170567	10.08	ug/l	-0.03
Spiked Amount 10.000			Recovery = 100.80%			
54) Toluene-d8	11.00	98	885419	9.32	ug/l	-0.03
Spiked Amount 10.000			Recovery = 93.20%			
76) 4-Bromofluorobenzene	15.98	95	332241	9.42	ug/l	-0.03
Spiked Amount 10.000			Recovery = 94.20%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.18	85	296495	13.82	ug/l	98
5) Chloromethane	2.49	50	253007	8.42	ug/l	98
6) Vinyl chloride	2.62	62	262954	10.51	ug/l	97
7) Bromomethane	3.15	94	286584	9.66	ug/l	93
8) Chloroethane	3.18	64	191524	10.55	ug/l	99
9) Dichlorofluoromethane	3.29	67	458410	8.89	ug/l	81
10) Trichlorofluoromethane	3.55	101	459366	13.57	ug/l	98
11) Acrolein	3.97	56	66048	36.67	ug/l	99
12) 1,1,2-Trichloro-1,2,2-trif	4.09	151	194157	11.48	ug/l	100
13) Acetone	4.04	43	150707	51.49	ug/l	89
14) 1,1-Dichloroethene	4.21	61	396199	9.26	ug/l	100
15) tert-Butyl alcohol	4.32	59	235525	263.83	ug/l	97
16) Iodomethane	4.62	142	391154	8.53	ug/l	96
17) Methyl acetate	4.62	43	103584	12.98	ug/l	98
18) Methylene chloride	4.83	49	301111	8.78	ug/l	95
19) Carbon disulfide	4.86	76	1061612	11.61	ug/l	100
20) Acrylonitrile	5.01	53	162423	43.74	ug/l	95
21) tert-Butyl methyl ether (M	5.03	73	437314	10.40	ug/l	96
22) trans-1,2-Dichloroethene	5.23	61	381574	9.26	ug/l	99
23) Isopropyl ether (DIPE)	5.64	45	807386	9.17	ug/l	99
24) Vinyl acetate	5.80	43	339230	11.22	ug/l	100
25) 1,1-Dichloroethane	5.80	63	464905	9.65	ug/l	99
27) tert-Butyl ethyl ether (ET	6.22	59	678211	10.75	ug/l	97
28) 2-Butanone	6.40	43	226411	50.41	ug/l	99
29) 2,2-Dichloropropane	6.60	77	435120	10.74	ug/l	97
30) cis-1,2-Dichloroethene	6.66	96	317132	9.56	ug/l	99
31) Chloroform	6.89	83	466995	9.51	ug/l	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F21\RFV189.D Vial: 2
Acq On : 21 Jun 2024 11:23 am Operator: DNguye
Sample : CVO01E1123 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 23 12:35 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.12	49	168758	8.75	ug/l	94
33)	Tetrahydrofuran	7.17	42	25849	9.10	ug/l	98
35)	1,1,1-Trichloroethane	7.48	97	441733	10.75	ug/l	100
36)	Cyclohexane	7.49	84	509159	12.72	ug/l	97
38)	1,1-Dichloropropene	7.70	110	136058	9.74	ug/l	99
39)	Carbon tetrachloride	7.85	119	342484	11.19	ug/l	97
40)	tert-Amyl methyl ether (TA	7.86	73	491454	10.01	ug/l	99
42)	Benzene	8.10	78	1042699	9.73	ug/l	98
43)	1,2-Dichloroethane	8.07	62	230280	10.66	ug/l	100
44)	Trichloroethene	9.05	130	277452	10.01	ug/l	98
45)	Methylcyclohexane	9.14	83	563933	12.81	ug/l	98
46)	1,2-Dichloropropane	9.32	63	226982	9.47	ug/l	90
47)	Bromodichloromethane	9.70	83	317041	9.53	ug/l	97
48)	1,4-Dioxane	9.76	88	18331	186.79	ug/l	99
49)	Dibromomethane	9.79	93	108509	9.60	ug/l	94
50)	2-Chloroethyl vinyl ether	10.20	63	37623	6.18	ug/l	98
51)	4-Methyl-2-pentanone	10.25	43	542163	45.97	ug/l	98
52)	cis-1,3-Dichloropropene	10.59	75	372650	9.99	ug/l	99
55)	Toluene	11.14	91	1185785	10.53	ug/l	97
56)	Ethyl methacrylate	11.43	69	174739	10.34	ug/l	95
57)	trans-1,3-Dichloropropene	11.45	75	288760	11.03	ug/l	97
58)	1,1,2-Trichloroethane	11.73	97	153985	10.44	ug/l	95
59)	2-Hexanone	11.74	43	335302	49.88	ug/l	96
60)	1,3-Dichloropropane	12.17	76	257416	10.29	ug/l	99
61)	Tetrachloroethene	12.28	164	248973	10.64	ug/l	98
62)	Dibromochloromethane	12.63	129	178111	9.90	ug/l	99
63)	1,2-Dibromoethane	13.00	107	138825	9.52	ug/l	99
64)	1-Chlorohexane	13.28	91	509124	10.47	ug/l	99
65)	Chlorobenzene	13.76	112	696425	10.37	ug/l	98
66)	1,1,1,2-Tetrachloroethane	13.85	131	224355	10.85	ug/l	98
67)	Ethylbenzene	13.85	91	1399860	10.89	ug/l	98
68)	m-Xylene & p-Xylene	14.00	91	2058613	21.88	ug/l	97
69)	o-Xylene	14.81	91	1026921	10.60	ug/l	96
70)	Styrene	14.88	104	772313	10.29	ug/l	97
71)	Isopropylbenzene	15.49	105	1350329	10.58	ug/l	98
73)	Bromoform	15.54	173	93975	9.21	ug/l	96
74)	trans-1,4-Dichloro-2-buten	15.61	53	44826	10.03	ug/l	98
75)	1,1,2,2-Tetrachloroethane	15.83	83	152905	8.87	ug/l	96
77)	1,2,3-Trichloropropane	16.13	110	43693	9.90	ug/l	97
78)	n-Propylbenzene	16.28	91	1700453	10.10	ug/l	100
79)	Bromobenzene	16.35	156	250137	9.39	ug/l	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F21\RFV189.D Vial: 2
Acq On : 21 Jun 2024 11:23 am Operator: DNguye
Sample : CVO01E1123 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 23 12:35 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

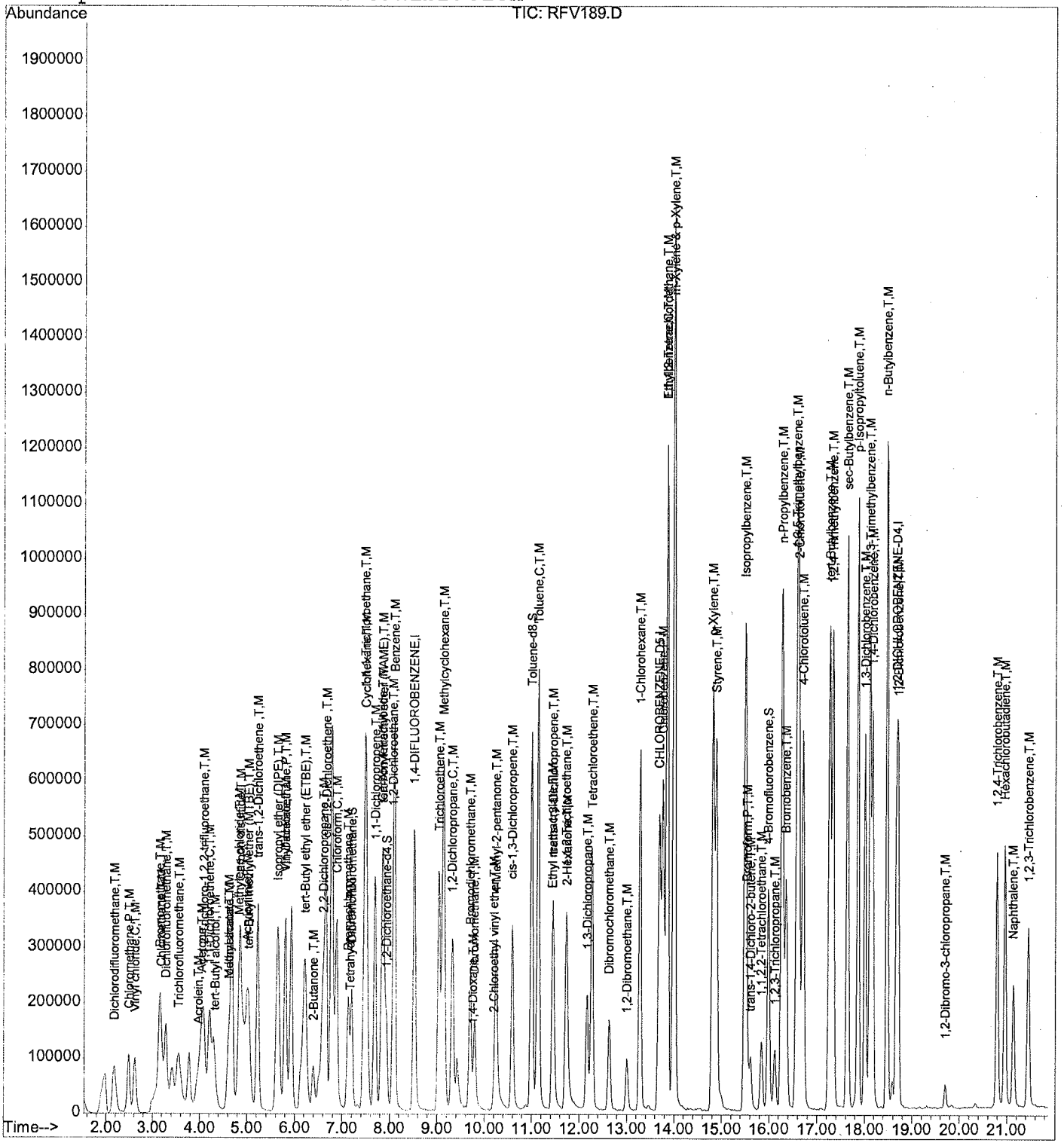
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.57	105	1038721	9.65	ug/l	99
81)	2-Chlorotoluene	16.62	91	1058252	10.44	ug/l	98
82)	4-Chlorotoluene	16.71	91	925418	10.31	ug/l	97
83)	tert-Butylbenzene	17.27	134	224881	9.96	ug/l	97
84)	1,2,4-Trimethylbenzene	17.33	105	1013151	9.62	ug/l	100
85)	sec-Butylbenzene	17.64	105	1503887	10.17	ug/l	99
86)	p-Isopropyltoluene	17.86	119	1192911	10.46	ug/l	97
87)	1,3-Dichlorobenzene	18.01	146	524840	10.37	ug/l	97
88)	1,2,3-Trimethylbenzene	18.11	105	958318	9.75	ug/l	100
89)	1,4-Dichlorobenzene	18.17	146	497581	10.02	ug/l	99
90)	n-Butylbenzene	18.47	91	1264621	10.71	ug/l	97
91)	1,2-Dichlorobenzene	18.70	146	421477	10.16	ug/l	100
92)	1,2-Dibromo-3-chloropropan	19.70	157	23632	8.97	ug/l	98
93)	1,2,4-Trichlorobenzene	20.79	180	299654	9.89	ug/l	99
94)	Hexachlorobutadiene	20.96	225	169381	9.39	ug/l	93
95)	Naphthalene	21.13	128	372294	10.53	ug/l	100
96)	1,2,3-Trichlorobenzene	21.46	180	232987	10.21	ug/l	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F21\RFV189.D Vial: 2
Acq On : 21 Jun 2024 11:23 am Operator: DNguye
Sample : CVO01E1123 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 23 12:35 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



ANALYTICAL LOG(S)

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

Book #:	A01-076
Instrument No.:	01
Analytical Sequence:	24E11
Method File:	V001E11
Analytical Batch:	V001E116

INITIAL CALIBRATION REFERENCE			
DATE	5/11/24		
ICAL ID	V001 E11		
STANDARDS			
NAME	ID	Amount (µl)	Conc. (mg/L)
DCC CS2 GAS	SVI-93-90-03 -90-02	*	250 250
DCC 4ADD	-95-02		250
DCC 8260	-86-01		50
DCC KET	-93-03		250
BFB	-38-02	1	50
IS/SURR. IS SS	-94-03 -87-01	1 *	250 250
ICV/LCS CS2 GAS	-79-02 -94-01	1 1	250 250
ICV/LCS 4ADD	-64-03	5	50
ICV/LCS 8260	-78-03	5	50
ICV/LCS KET	-94-02	5	250
Data File Folder	24E11		
	LOT #	Syringe Lot #	
pH strip	N/A	MSV-03-04-12-4	
Chlorine strip	↓	-04-12-6	
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-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.

ELECTRONIC DATA ARCHIVAL	
Location	Date
HPCHEM_VOA/TO01	

Analyzed By: LAP

Date: 5/11/24

Disposed By: LAP

Date Disposed: 5/13/24

Injection Log

Directory: D:\HPCHEM\1\DATA\24E11

Line	Vial	FileName	Multiplier	SampleName			Misc Info	Injected
1	1	REV195.D	1.	BFB01E11			T/CHK	11 May 2024 10:20
2	2	REV196.D	1.	VO01E111	0.03/0.15		0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA	11 May 2024 10:58
3	3	REV197.D	1.	VO01E112	0.05/0.25		0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA	11 May 2024 11:27
4	4	REV198.D	1.	VO01E113	0.1/0.5		1ppb 8260/5ppb KET-AA/25ppb TBA	11 May 2024 11:56
5	5	REV199.D	1.	VO01E114	0.2/1.0		2ppb 8260/10ppb KET-AA/50ppb TBA	11 May 2024 12:30
6	6	REV200.D	1.	VO01E115	0.5/2.5		5ppb 8260/25ppb KET-AA/125ppb TBA	11 May 2024 12:59
7	7	REV201.D	1.	VO01E116	1.0/5.0		10ppb 8260/50ppb KET-AA/250ppb TBA	11 May 2024 13:28
8	8	REV202.D	1.	VO01E117	2.0/10		20ppb 8260/100ppb KET-AA/500ppb TBA	11 May 2024 13:58
9	9	REV203.D	1.	VO01E118	3.0/15		30ppb 8260/150ppb KET-AA/750ppb TBA	11 May 2024 14:27
10	10	REV204.D	1.	VO01E119	5.0/25		50ppb 8260/250ppb KET-AA/1250ppb TBA	11 May 2024 14:56
11	11	REV205.D	1.	VO01DE1110	10/50		100ppb 8260/500ppb KET-AA/2500ppb TBA	11 May 2024 15:26
12	12	REV206.D	1.	RINSE				11 May 2024 15:55
13	13	REV207.D	1.	RINSE				11 May 2024 16:24
14	14	REV208.D	1.	IVO01E1101	1.0/5.0	Bromoform %R↓	10ppb 8260/50ppb KET-AA/250ppb TBA	11 May 2024 16:53

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

Book #:	A01-076
Instrument No.:	01
Analytical Sequence:	24E13
Method File:	V001E11
Analytical Batch:	IV001E1102

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
☑ 2S-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.

INITIAL CALIBRATION REFERENCE			
DATE	5/11/24		
ICAL ID	VO01 E11		
STANDARDS			
NAME	ID	Amount (µl)	Conc. (mg/L)
DCC			
DCC			
DCC			
DCC			
BFB	SV1-43-50-02	1	50
IS/SURR. IS	-94-03	1	250
IS/SURR. SS	-97-01	1	250
ICV/LCS CS2	-79-02	1	250
ICV/LCS CAS	-94-01	1	250
ICV/LCS 8ADD	-69-03	5	50
ICV/LCS 8260	-70-03	5	50
ICV/LCS KET	-94-02	5	250
Data File Folder	24E13		
	LOT #	Syringe Lot #	
pH strip	N/A	MSV-03-04-12-6	
Chlorine strip	↓	↓ -12-4	
Methanol			
$NaHSO_4$			
Reagent Water	RW4-23-001		
Sand			

ELECTRONIC DATA ARCHIVAL	
Location	Date
HPCHEM_VOA/TO01	

Analyzed By: LAP
Date: 6/13/24
Disposed By: LAP
Date Disposed: 5/14/24

Injection Log

Directory: D:\HPCHEM\1\DATA\24E13

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	REV209.D	1.	BFB01E12	T/CHK	13 May 2024 11:31
2	2	REV210.D	1.	IVO01E1102 1.0/5.0	10ppb 8260/50ppb KET-AA/250ppb TBA	13 May 2024 12:06
3	1	REV211.D	1.	BFB01E13	T/CHK	13 May 2024 12:45
4	2	REV212.D	1.	CVO01E1101	10ppb 8260/50ppb KET-AA/250ppb TBA	13 May 2024 13:17
5	3	REV213.D	1.	VO01E13L	10ppb 8260/50ppb KET-AA/250ppb TBA	13 May 2024 13:48
6	4	REV214.D	1.	VO01E13C	10ppb 8260/50ppb KET-AA/250ppb TBA	13 May 2024 14:17
7	5	REV215.D	1.	RINSE		13 May 2024 14:47
8	6	REV216.D	1.	VO01E13B	25mL	13 May 2024 15:17
9	7	REV217.D	1.	24E021-01	25mL	13 May 2024 15:46
10	8	REV218.D	1.	24E021-11	25mL	13 May 2024 16:16
11	9	REV219.D	1.	24E072-05	25mL	13 May 2024 16:45
12	10	REV220.D	1.	24E021-04	25mL	13 May 2024 17:15
13	11	REV221.D	1.	24E021-05	25mL	13 May 2024 17:45
14	12	REV222.D	1.	24E021-06	25mL	13 May 2024 18:14
15	13	REV223.D	1.	24E021-07	25mL	13 May 2024 18:43
16	14	REV224.D	1.	24E021-08	25mL	13 May 2024 19:12
17	15	REV225.D	1.	24E021-09	25mL	13 May 2024 19:41
18	16	REV226.D	1.	24E021-10	25mL	13 May 2024 20:10
19	17	REV227.D	1.	24E021-12	25mL	13 May 2024 20:40
20	18	REV228.D	1.	24E021-14	25mL	13 May 2024 21:09
21	19	REV229.D	1.	24E021-15	25mL	13 May 2024 21:38
22	20	REV230.D	1.	24E021-16	25mL	13 May 2024 22:07
23	21	REV231.D	1.	24E072-01	25mL	13 May 2024 22:36
24	22	REV232.D	1.	24E072-02	25mL	13 May 2024 23:05
25	23	REV233.D	1.	24E072-03	25mL	13 May 2024 23:34
26	24	REV234.D	1.	24E072-04	25mL	14 May 2024 00:02
27	25	REV235.D	1.	24E021-02	25mL	14 May 2024 00:31
28	26	REV236.D	1.	EVO01E1101	10ppb 8260/50ppb KET-AA/250ppb TBA	14 May 2024 01:00
29	27	REV237.D	1.	EVO01E1101	10ppb 8260/50ppb KET-AA/250ppb TBA	14 May 2024 01:29
30	28	REV238.D	1.	EVO01E1101	10ppb 8260/50ppb KET-AA/250ppb TBA	14 May 2024 01:58
31	29	REV239.D	1.	RINSE	10ppb 8260/50ppb KET-AA/250ppb TBA	14 May 2024 02:26
32	30	REV240.D	1.	RINSE	10ppb 8260/50ppb KET-AA/250ppb TBA	14 May 2024 02:55

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

Book #:	A01-076
Instrument No.:	01
Analytical Sequence:	24F20
Method File:	V001E11
Analytical Batch:	V001E1123

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	5/11/24
ICAL ID	V001E11

STANDARDS

NAME	ID	Amount (µl)	Conc. (mg/L)
DCC	SVI-43-00-02	1	
DCC	-87-03	1	
DCC	-70-02 -83-03	1 5	
DCC	-86-01	5	
BFB	SVI-45-01-01	1	50/250
IS/SURR.	SVI-43-100-01	5	
ICV/LCS	-79-02	1	
ICV/LCS	-82-01	1	
ICV/LCS	-70-01 -74-02	5 5	
ICV/LCS	-77-01	5	
Data File Folder	24F20		

	LOT #	Syringe Lot #
pH strip	HC240330	MSV-03-01-12-5
Chlorine strip	3243030	-12-6
Methanol		
$NaHSO_4$		
Reagent Water	RW4-23-001	
Sand		

ELECTRONIC DATA ARCHIVAL	
Location	Date
HPCHEM_VOA/TO01	

Analyzed By: DM

Date: 6/20/24

Disposed By: DM

Date Disposed: 6/21/24

Injection Log

Directory: D:\HPCHEM\1\DATA\24F20

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	Rfv165.d	1.	BFB01F08	T/CHK	20 Jun 2024 13:32
2	2	RFV166.D	1.	CVO01E1123	10ppb 8260/50ppb KET-AA/250ppb TBA	20 Jun 2024 14:22
3	3	RFV167.D	1.	VO01F08L	10ppb 8260/50ppb KET-AA/250ppb TBA	20 Jun 2024 14:58
4	4	RFV168.D	1.	VO01F08C	10ppb 8260/50ppb KET-AA/250ppb TBA	20 Jun 2024 15:29
5	5	RFV169.D	1.	RINSE		20 Jun 2024 15:59
6	6	RFV170.D	1.	VO01F08B	25mL	20 Jun 2024 16:29
7	7	RFV171.D	1.	24F037-01N	25mL	20 Jun 2024 16:59
8	8	RFV172.D	1.	24F037-07	25mL	20 Jun 2024 17:30
9	9	RFV173.D	1.	24F037-08	25mL	20 Jun 2024 18:00
10	10	RFV174.D	1.	24F076-02	25mL	20 Jun 2024 18:30
11	11	RFV175.D	1.	24F076-01	25mL	20 Jun 2024 19:00
12	12	RFV176.D	1.	RINSE	25mL	20 Jun 2024 19:30
13	13	RFV177.D	1.	24F073-01 $Cl_2 < 5$	25mL	20 Jun 2024 20:00
14	14	RFV178.D	1.	24F037-08I 10X	2.5mL	20 Jun 2024 20:29
15	15	RFV179.D	1.	RINSE	25mL	20 Jun 2024 20:59
16	16	RFV180.D	1.	24F066-01 pH=7 ↓ Cl<5 ↓	25mL	20 Jun 2024 21:29
17	17	RFV181.D	1.	24F066-03	25mL	20 Jun 2024 21:58
18	18	RFV182.D	1.	24F073-02	25mL	20 Jun 2024 22:27
19	19	RFV183.D	1.	24F073-03	25mL	20 Jun 2024 22:57
20	20	RFV184.D	1.	24F074-01	25mL	20 Jun 2024 23:26
21	21	RFV185.D	1.	24F074-02	25mL	20 Jun 2024 23:55
22	22	RFV186.D	1.	CVO01E1123	10ppb 8260/50ppb KET-AA/250ppb TBA	21 Jun 2024 00:25
23	23	RFV187.D	1.	RINSE		21 Jun 2024 00:54

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

Book #:	A01-076
Instrument No.:	01
Analytical Sequence:	V0F21
Method File:	V001E11
Analytical Batch:	V001E11Z4

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	5/11/24		
ICAL ID	V001E11		
STANDARDS			
NAME	ID	Amount (µl)	Conc. (mg/L)
DCC	SVI-43-80-02	1	
DCC	-87-03	1	
DCC	-70-02 -83-03	1 5	50/25
DCC	-86-01	5	
BFB	SM-45-01-01	1	
IS/SURR.	SVI-43-100-01	5	
ICV/LCS	-79-02	1	
ICV/LCS	-82-01	1	
ICV/LCS	-70-01 -74-02	5 5	
ICV/LCS	-77-01	5	
Data File Folder	DM V24F21		
	LOT #	Syringe Lot #	
pH strip	MC2103330	MGV-03-04-12-5	
Chlorine strip	32-43-03C	↓ -12-6	
Methanol			
$NaHSO_4$			
Reagent Water	RWH-23-001		
Sand			

ELECTRONIC DATA ARCHIVAL	
Location	Date
HPCHEM_VOA/TO01	

Analyzed By: DM

Date: 6/24/24

Disposed By: DM

Date Disposed: 6/24/24

Injection Log

Directory: D:\HPCHEM\1\DATA\24F21

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	RFV188.D	1.	BFB01F09	T/CHK	21 Jun 2024 09:46
2	2	RFV189.D	1.	CVO01E1123	10ppb 8260/50ppb KET-AA/250ppb TBA	21 Jun 2024 11:23
3	3	Rfv190.d	1.	VO01F09L	10ppb 8260/50ppb KET-AA/250ppb TBA	21 Jun 2024 11:52
4	4	RFV191.D	1.	VO01F09C	10ppb 8260/50ppb KET-AA/250ppb TBA	21 Jun 2024 12:22
5	5	RFV192.D	1.	RINSE		21 Jun 2024 12:52
6	6	RFV193.D	1.	VO01F09B	25mL	21 Jun 2024 13:22
7	7	RFV194.D	1.	24F066-01I 10X	2.5mL	21 Jun 2024 13:53
8	8	RFV195.D	1.	24F066-03I 10X	2.5mL	21 Jun 2024 14:23
9	9	RFV196.D	1.	24F066-02	25mL	21 Jun 2024 14:53
10	10	RFV197.D	1.	24F066-04	25mL	21 Jun 2024 15:23
11	11	RFV198.D	1.	24F066-05	25mL	21 Jun 2024 15:54
12	12	RFV199.D	1.	24F076-02N	25mL	21 Jun 2024 16:24
13	13	RFV200.D	1.	24F066-04N	25mL	21 Jun 2024 16:54
14	14	RFV201.D	1.	24F073-04	25mL	21 Jun 2024 17:24
15	15	RFV202.D	1.	24F073-05	25mL	21 Jun 2024 17:55
16	16	RFV203.D	1.	24F073-06	25mL	21 Jun 2024 18:25
17	17	RFV204.D	1.	24F073-07	25mL	21 Jun 2024 18:55
18	18	RFV205.D	1.	24F056-01	25mL	21 Jun 2024 19:25
19	19	RFV206.D	1.	24F056-03	25mL	21 Jun 2024 19:55
20	20	RFV207.D	1.	24F097-02	25mL	21 Jun 2024 20:25
21	21	RFV208.D	1.	EVO01E1123	10ppb 8260/50ppb KET-AA/250ppb TBA	21 Jun 2024 20:54
22	22	RFV209.D	1.	RINSE		21 Jun 2024 21:24

EMAX
LABORATORIES, INC.
3051 Fujita Street
Torrance, CA 90505
Tel: (310)-618-8889

Date: 07-01-2024
EMAX Batch No.: 24F079

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 06/19/24.
The data reported relate only to samples listed below :

Sample ID	Control #	Col Date	Matrix	Analysis
EB10-GW061724	F079-02	06/17/24	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. 24F079 / 24F079A
PROJECT CODE:

CLIENT CDM Smith
PROJECT 700 S. 1600 E. PCE Plume
COORDINATOR Cherie Zakowski
TEL 720-264-1189 FAX EMAIL ZakowskiCA@cdmsmith.com
SEND REPORT TO
COMPANY CDM Smith
ADDRESS 555 17th St Ste 500
Denver, CO 80201
EMAX PM: Linh Pham

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: TCLP Metals + Hg; TCLP VOCs; TCLP SVOCs; pH; Flashpoint/Ignitability; Reactive Cyanide; Reactive Sulfide; 8260 VOCs

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
1	IDW04-SB061824	SLCVA	6/18/24	1140	2	8 oz	Jar	SS		IC IC IC IC IC IC IC HC	14 day TAT (24F079A)
2	EB10-GW061724	SLCVA	6/17/24	1715	3	40mL	VOA	GW		IC IC IC IC IC IC IC HC	48 hr TAT
3											
4											
5											
6											
7											
8											
9											
10											

Instructions
CC Joe Miller MillerJC@cdmsmith.com
and Neil Smith SmithNL@cdmsmith.com

Cooler #	Temp. (°C)	Sample #s
1	4.0	

SAMPLER Isaac Nance, Alex Pedjase
COURIER/AIRBILL FEDEX

RELINQUISHED BY	Date	Time	RECEIVED BY
Isaac Nance	6/18/24	1600	
	06/19/24	0950	

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 24F079
☑ Fedex ☐ UPS ☐ GSO ☐ Others	276076784990	Recipient Jocelyne Solis-Ramos
☐ EMAX Courier ☐ Client Delivery		Date 06/19/24 Time 0950

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 4.0 °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* 210606272	(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		D15	for VOCs	RS

☐ 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 _____	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	proceed
D9	Sample received is not listed in COC	D21	No sample for moisture detennination	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 Jocelyne Solis-Ramos Date 06/19/24 — 6/19/24

SRF _____ Date 6/19/24

PM _____ Date 6/20/24

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#: 24F079

CASE NARRATIVE

Client : CDM SMITH

Project: VA SALT LAKE CITY

SDG : 24F079

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

One(1) water sample was received on 06/19/24 to be analyzed for Volatile Organics by GC/MS in accordance with Method SW5030B/8260C and project specific requirements.

Holding Time
The sample was 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. For this SDG, the following were noted: Dichlorodifluoromethane was detected biased high(%D=43.3) in CCV(Data File ID: RFV221). Trichlorofluoromethane was detected biased high(%D=46.5) in CCV(Data File ID: RFV221). However, note that the analytes in question were not detected in any of the associated field samples. 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. VO01F10B - 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. Lab control sample was prepared and analyzed at a frequency required by the project. All analytes were within LCS limits except for: VO01F10L/VO01F10C - Percent recovery for Trichlorofluoromethane in LCD. The rest of the analytes were in control. Refer to LCS summary form 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
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 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. : 24F079
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	V001F10L	1	NA	06/22/2413:11	06/22/2413:11	RFV222	REV201	V001F10	Lab Control Sample (LCS)
LCD1W	V001F10C	1	NA	06/22/2413:40	06/22/2413:40	RFV223	REV201	V001F10	LCS Duplicate
MBLK1W	V001F10B	1	NA	06/22/2414:39	06/22/2414:39	RFV225	REV201	V001F10	Method Blank
EB10-GW061724	24F079-02	1	NA	06/22/2416:09	06/22/2416:09	RFV228	REV201	V001F10	Field Sample

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

METHOD SW5030B/B260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	06/17/24 17:15
Project	: VA SALT LAKE CITY	Date Received:	06/19/24
Batch No.	: 24F079	Date Extracted:	06/22/24 16:09
Sample ID	: EB10-GW061724	Date Analyzed:	06/22/24 16:09
Lab Samp ID:	24F079-02	Dilution Factor:	1
Lab File ID:	RFV22B	Matrix:	WATER
Ext Btch ID:	VO01F10	% Moisture:	NA
Calib. Ref.:	REV201	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	7.9J	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	10.4	10.0	104	70-130
Bromofluorobenzene	9.50	10.0	95	70-130
Toluene-d8	9.85	10.0	98	70-130
Dibromofluoromethane	9.51	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\24F22\RFV228.D Vial: 9
Acq On : 22 Jun 2024 4:09 pm Operator: DNguye
Sample : 24F079-02 Inst : 01New
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 24 19:36 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

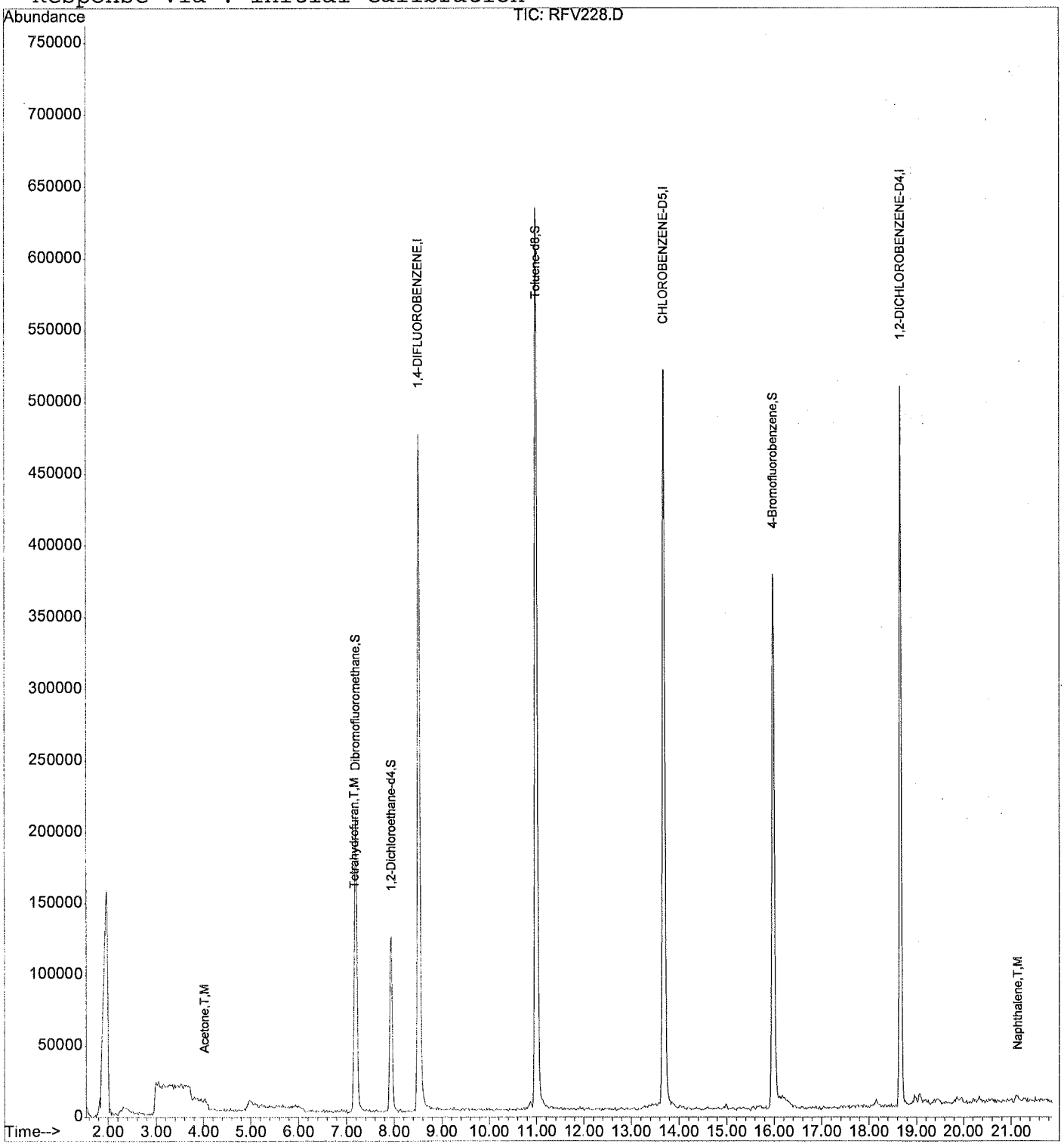
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.51	114	748295	10.00	ug/l	-0.03
53) CHLOROBENZENE-D5	13.68	117	602089	10.00	ug/l	-0.03
72) 1,2-DICHLOROBENZENE-D4	18.66	152	241342	10.00	ug/l	-0.02
System Monitoring Compounds						
34) Dibromofluoromethane	7.20	111	220359	9.51	ug/l	-0.03
Spiked Amount 10.000			Recovery = 95.10%			
41) 1,2-Dichloroethane-d4	7.94	65	164402	10.41	ug/l	-0.03
Spiked Amount 10.000			Recovery = 104.10%			
54) Toluene-d8	11.00	98	888707	9.85	ug/l	-0.03
Spiked Amount 10.000			Recovery = 98.50%			
76) 4-Bromofluorobenzene	15.98	95	312424	9.50	ug/l	-0.03
Spiked Amount 10.000			Recovery = 95.00%			
Target Compounds						Qvalue
13) Acetone	4.03	43	21514	7.88	ug/l	94
33) Tetrahydrofuran	7.17	42	43991	16.59	ug/l	93
95) Naphthalene	21.15	128	7808	0.24	ug/l	86

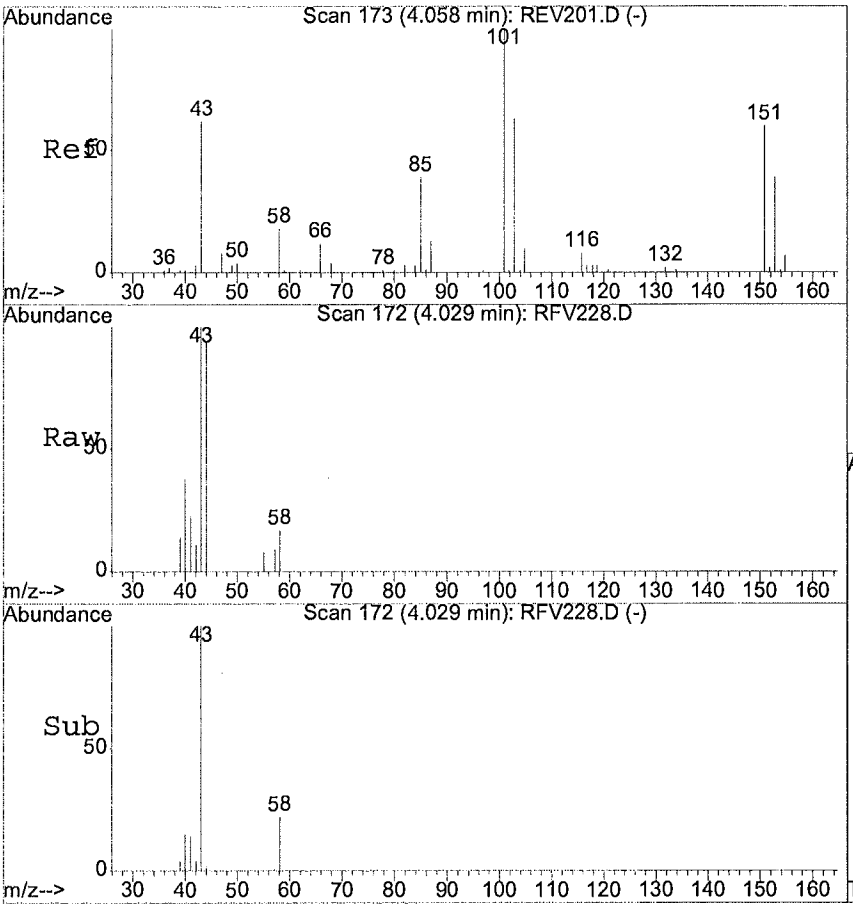
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F22\RFV228.D Vial: 9
Acq On : 22 Jun 2024 4:09 pm Operator: DNguye
Sample : 24F079-02 Inst : 01New
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 24 19:36 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration

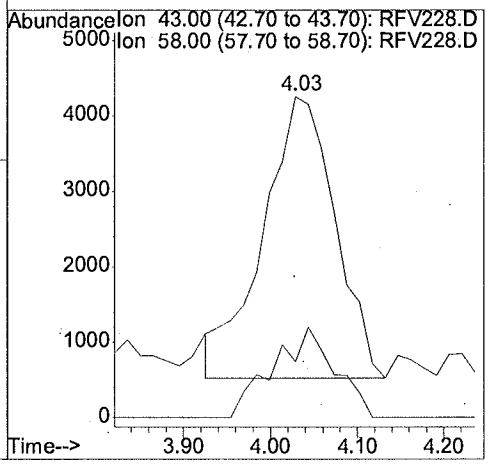


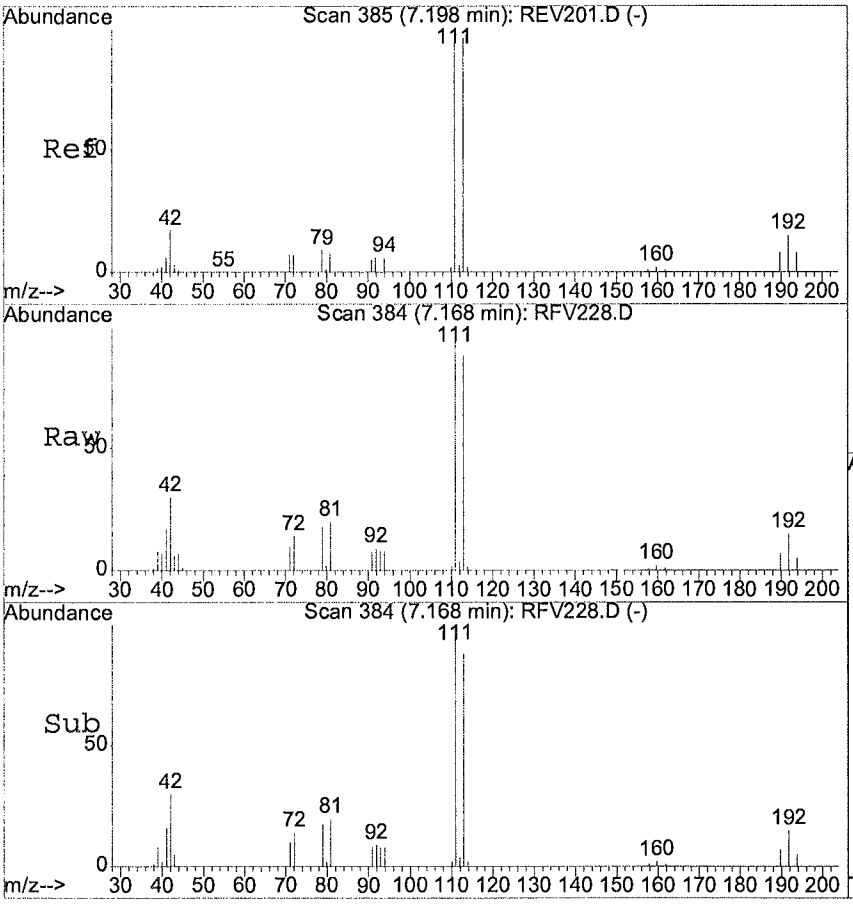


#13
Acetone
Concen: 7.88 ug/l
RT: 4.03 min Scan# 172
Delta R.T. -0.03 min
Lab File: RFV228.D
Acq: 22 Jun 2024 4:09 pm

Tgt Ion: 43 Resp: 21514

Ion	Ratio	Lower	Upper
43	100		
58	27.5	0.9	60.9

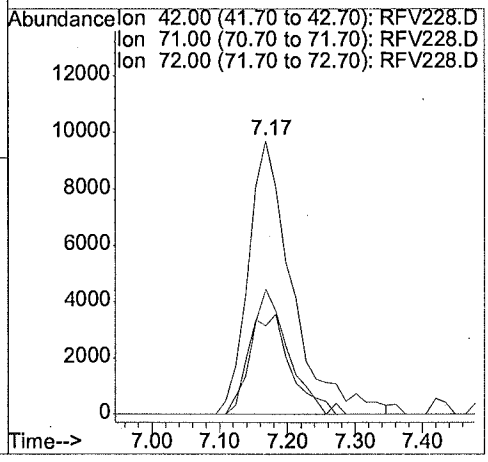


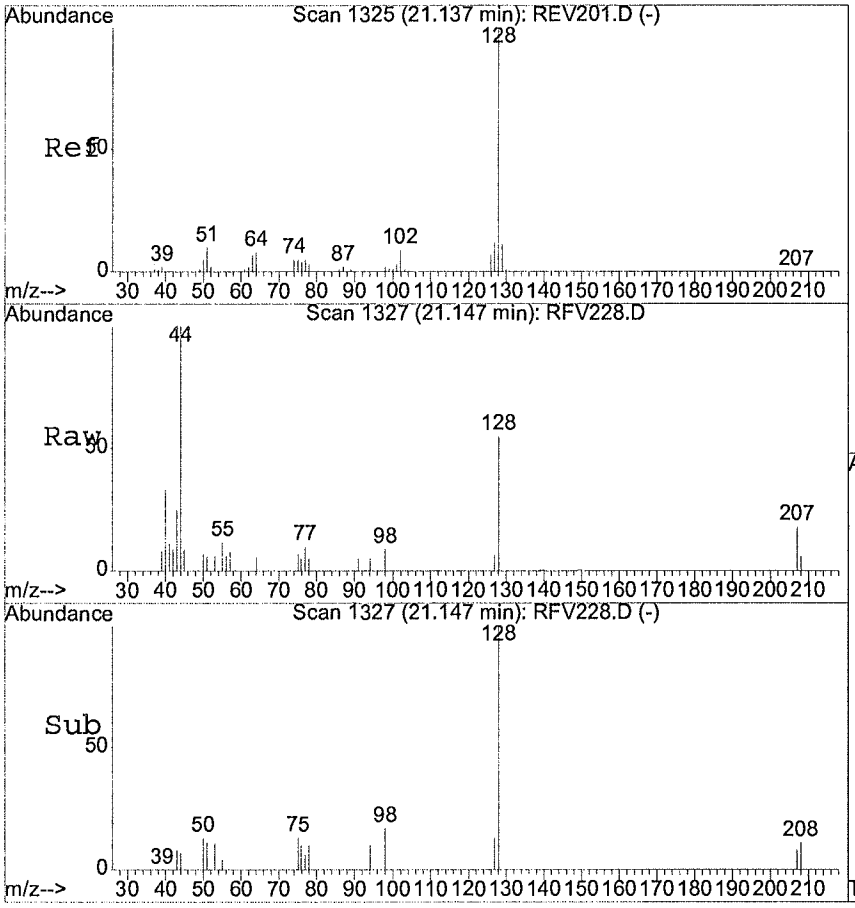


#33
Tetrahydrofuran
Concen: 16.59 ug/l
RT: 7.17 min Scan# 384
Delta R.T. -0.03 min
Lab File: RFV228.D
Acq: 22 Jun 2024 4:09 pm

Tgt Ion: 42 Resp: 43991

Ion	Ratio	Lower	Upper
42	100		
71	34.8	11.4	71.4
72	37.8	10.4	70.4

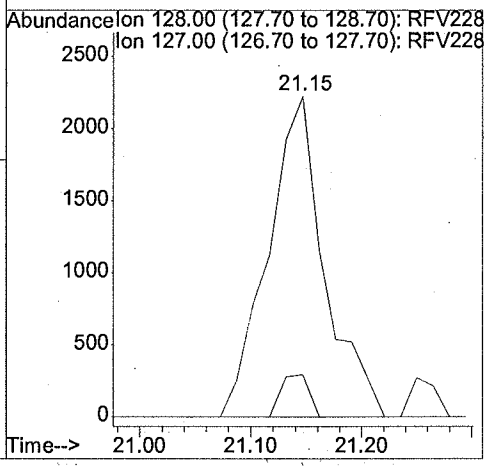




#95
Naphthalene
Concen: 0.24 ug/l
RT: 21.15 min Scan# 1327
Delta R.T. 0.01 min
Lab File: RFV228.D
Acq: 22 Jun 2024 4:09 pm

Tgt Ion:128 Resp: 7808

Ion	Ratio	Lower	Upper
128	100		
127	6.5	0.0	42.1



QC SUMMARIES

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	06/22/24 14:39
Project	: VA SALT LAKE CITY	Date Received:	06/22/24
Batch No.	: 24F079	Date Extracted:	06/22/24 14:39
Sample ID	: MBLK1W	Date Analyzed:	06/22/24 14:39
Lab Samp ID:	VO01F10B	Dilution Factor:	1
Lab File ID:	RFV225	Matrix:	WATER
Ext Btch ID:	VO01F10	% Moisture:	NA
Calib. Ref.:	REV201	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	10.2	10.0	102	70-130
Bromofluorobenzene	9.44	10.0	94	70-130
Toluene-d8	10.3	10.0	103	70-130
Dibromofluoromethane	9.72	10.0	97	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. : 24F079
METHOD : SW5030B/8260C

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: MBLK1W	LCS1W	LCD1W
LAB SAMPLE ID	: V001F10B	V001F10L	V001F10C
LAB FILE ID	: RFV225	RFV222	RFV223
DATE PREPARED	: 06/22/24 14:39	06/22/24 13:11	06/22/24 13:40
DATE ANALYZED	: 06/22/24 14:39	06/22/24 13:11	06/22/24 13:40
PREP BATCH	: V001F10	V001F10	V001F10
CALIBRATION REF	: REV201	REV201	REV201

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	11.0	110	10.0	11.1	111	1	74-131	20
1,1,2,2-Tetrachloroethane	ND	10.0	9.45	95	10.0	9.01	90	5	71-121	20
1,1,2-Trichloroethane	ND	10.0	10.1	101	10.0	10.0	100	1	80-119	20
1,1-Dichloroethane	ND	10.0	9.59	96	10.0	9.72	97	1	77-125	20
1,1-Dichloroethene	ND	10.0	9.06	91	10.0	9.37	94	3	71-131	20
1,2,3-Trichlorobenzene	ND	10.0	10.3	103	10.0	10.2	102	1	69-129	20
1,2,4-Trichlorobenzene	ND	10.0	9.94	99	10.0	10.3	103	4	69-130	20
1,2,4-Trimethylbenzene	ND	10.0	9.69	97	10.0	9.70	97	0	76-124	20
1,2-Dibromo-3-chloropropane	ND	10.0	9.64	96	10.0	8.73	87	10	62-138	20
1,2-Dichlorobenzene	ND	10.0	10.4	104	10.0	10.4	104	0	80-119	20
1,2-Dichloroethane	ND	10.0	11.2	112	10.0	10.9	109	3	73-128	20
1,2-Dichloropropane	ND	10.0	9.35	94	10.0	9.55	96	2	78-122	20
1,3,5-Trimethylbenzene	ND	10.0	9.71	97	10.0	9.70	97	0	75-124	20
1,3-Dichlorobenzene	ND	10.0	10.4	104	10.0	10.5	105	1	80-119	20
1,4-Dichlorobenzene	ND	10.0	10.4	104	10.0	10.1	101	3	79-118	20
2-Butanone	ND	50.0	49.7	99	50.0	47.2	94	5	56-143	20
2-Hexanone	ND	50.0	51.2	102	50.0	48.7	97	5	57-139	20
Acetone	ND	50.0	47.3	95	50.0	46.1	92	3	39-160	20
Benzene	ND	10.0	9.71	97	10.0	9.58	96	1	79-120	20
Bromochloromethane	ND	10.0	8.98	90	10.0	8.96	90	0	78-120	20
Bromodichloromethane	ND	10.0	10.1	101	10.0	9.74	97	4	79-125	20
Bromoform	ND	10.0	9.64	96	10.0	9.01	90	7	66-130	20
Bromomethane	ND	10.0	8.50	85	10.0	10.0	100	16	53-141	20
Carbon Disulfide	ND	10.0	10.4	104	10.0	11.2	112	7	64-133	20
Carbon Tetrachloride	ND	10.0	10.9	109	10.0	11.3	113	4	72-136	20
Chlorobenzene	ND	10.0	10.1	101	10.0	10.2	102	1	82-118	20
Chloroethane	ND	10.0	10.1	101	10.0	11.2	112	10	60-138	20
Chloroform	ND	10.0	9.95	100	10.0	9.79	98	2	79-124	20
Chloromethane	ND	10.0	8.59	86	10.0	9.58	96	11	50-139	20
cis-1,2-Dichloroethylene	ND	10.0	9.56	96	10.0	9.73	97	2	78-123	20
Dibromochloromethane	ND	10.0	9.78	98	10.0	9.74	97	0	74-126	20
Dichlorodifluoromethane	ND	10.0	12.3	123	10.0	14.9	149	19	32-152	20
Ethylbenzene	ND	10.0	10.5	105	10.0	10.7	107	2	79-121	20
Isopropylbenzene	ND	10.0	10.4	104	10.0	10.5	105	1	72-131	20
m,p-Xylene	ND	20.0	21.6	108	20.0	21.4	107	1	80-121	20
4-Methyl-2-Pentanone	ND	50.0	50.3	101	50.0	47.6	95	6	67-130	20
Methylene Chloride	ND	10.0	8.99	90	10.0	9.06	91	1	74-124	20
tert-Butyl Methyl Ether	ND	10.0	10.7	107	10.0	10.4	104	3	71-124	20
o-Xylene	ND	10.0	10.4	104	10.0	10.6	106	2	78-122	20
Styrene	ND	10.0	10.1	101	10.0	10.3	103	2	78-123	20
Tetrachloroethene	ND	10.0	10.1	101	10.0	10.3	103	2	74-129	20
Toluene	ND	10.0	10.1	101	10.0	10.1	101	0	80-121	20
Trans-1,2-DCE	ND	10.0	9.05	91	10.0	8.98	90	1	75-124	20
cis-1,3-Dichloropropene	ND	10.0	10.1	101	10.0	10.1	101	0	75-124	20
Trans-1,3-Dichloropropene	ND	10.0	10.9	109	10.0	10.7	107	2	73-127	20
TCE	ND	10.0	9.68	97	10.0	9.85	99	2	79-123	20
Trichlorofluoromethane	ND	10.0	12.7	127	10.0	14.7	147*	15	65-141	20
Vinyl Chloride	ND	10.0	9.76	98	10.0	10.9	109	11	58-137	20
1,2-Dibromoethane	ND	10.0	9.38	94	10.0	9.22	92	2	77-121	20
Vinyl Acetate	ND	10.0	11.5	115	10.0	11.5	115	0	54-146	20
Trichlorotrifluoroethane	ND	10.0	10.9	109	10.0	11.4	114	4	70-136	20
Methyl Acetate	ND	10.0	12.1	121	10.0	12.0	120	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	10.3	103	10.0	10.4	104	70-130
Bromofluorobenzene	10.0	9.50	95	10.0	9.35	94	70-130
Toluene-d8	10.0	10.3	103	10.0	10.3	103	70-130
Dibromofluoromethane	10.0	9.60	96	10.0	9.33	93	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\24F22\RFV225.D Vial: 6
Acq On : 22 Jun 2024 2:39 pm Operator: DNguye
Sample : VO01F10B Inst : 01New
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 23 14:49 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

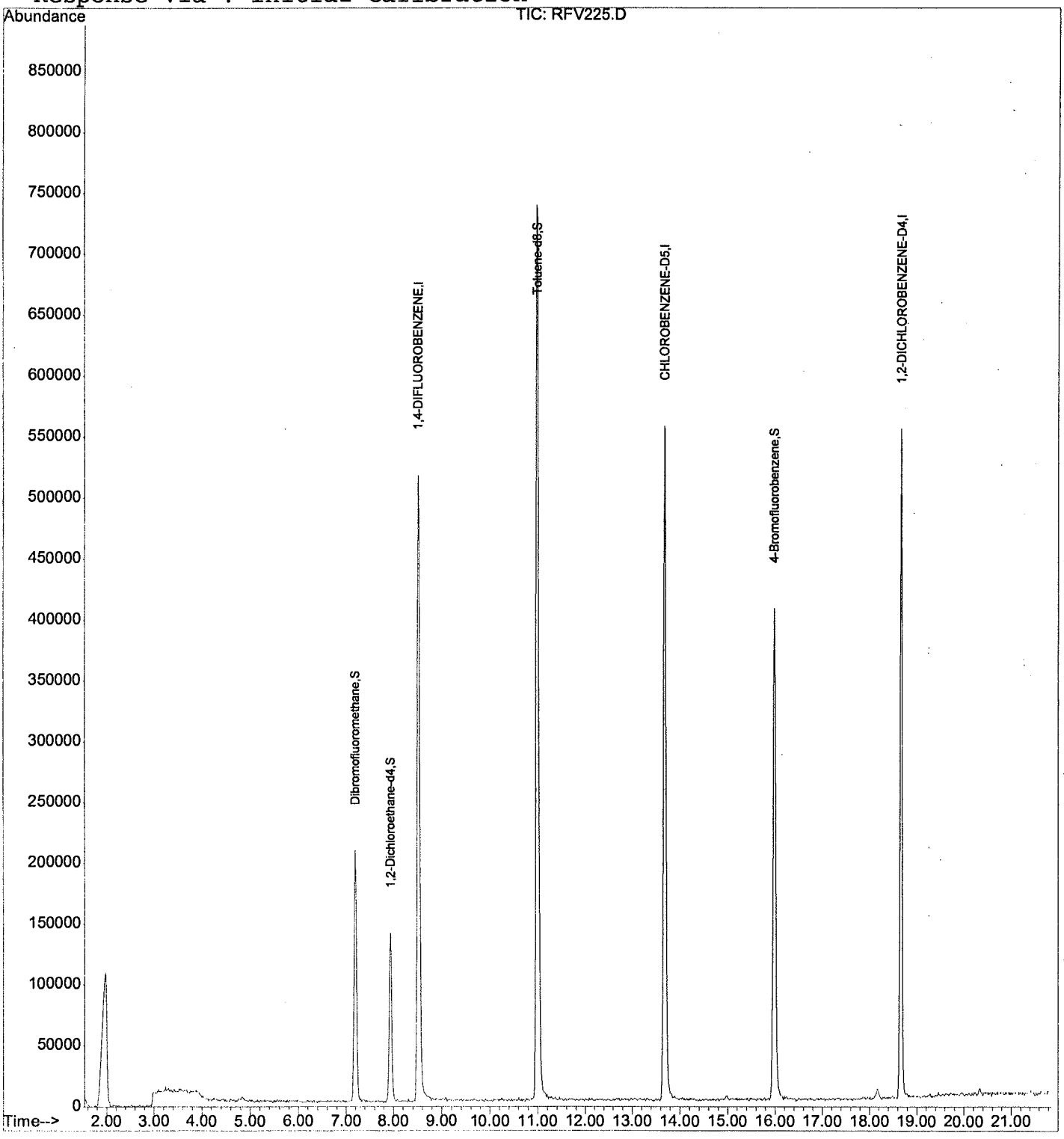
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.52	114	811176	10.00	ug/l	-0.03
53) CHLOROBENZENE-D5	13.68	117	654608	10.00	ug/l	-0.03
72) 1,2-DICHLOROBENZENE-D4	18.66	152	263952	10.00	ug/l	-0.02
System Monitoring Compounds						
34) Dibromofluoromethane	7.20	111	243946	9.72	ug/l	-0.03
Spiked Amount 10.000			Recovery =	97.20%		
41) 1,2-Dichloroethane-d4	7.94	65	175185	10.23	ug/l	-0.03
Spiked Amount 10.000			Recovery =	102.30%		
54) Toluene-d8	11.00	98	1007206	10.27	ug/l	-0.03
Spiked Amount 10.000			Recovery =	102.70%		
76) 4-Bromofluorobenzene	15.98	95	339419	9.44	ug/l	-0.03
Spiked Amount 10.000			Recovery =	94.40%		

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24F22\RFV225.D Vial: 6
Acq On : 22 Jun 2024 2:39 pm Operator: DNguye
Sample : VO01F10B Inst : 01New
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 23 14:49 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F22\RFV222.D Vial: 3
Acq On : 22 Jun 2024 1:11 pm Operator: DNguye
Sample : VO01F10L Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 22 13:33 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.52	114	847395	10.00	ug/l	-0.03
53) CHLOROBENZENE-D5	13.68	117	695654	10.00	ug/l	-0.03
72) 1,2-DICHLOROBENZENE-D4	18.66	152	282690	10.00	ug/l	-0.02
System Monitoring Compounds						
34) Dibromofluoromethane	7.20	111	251788	9.60	ug/l	-0.03
Spiked Amount 10.000			Recovery = 96.00%			
41) 1,2-Dichloroethane-d4	7.94	65	184734	10.33	ug/l	-0.03
Spiked Amount 10.000			Recovery = 103.30%			
54) Toluene-d8	11.00	98	1069217	10.26	ug/l	-0.03
Spiked Amount 10.000			Recovery = 102.60%			
76) 4-Bromofluorobenzene	15.98	95	365815	9.50	ug/l	-0.03
Spiked Amount 10.000			Recovery = 95.00%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.18	85	278870	12.30	ug/l	98
5) Chloromethane	2.47	50	272662	8.59	ug/l	97
6) Vinyl chloride	2.62	62	257956	9.76	ug/l	100
7) Bromomethane	3.15	94	267463	8.50	ug/l	83
8) Chloroethane	3.18	64	192854	10.06	ug/l	99
9) Dichlorofluoromethane	3.27	67	474635	8.71	ug/l	84
10) Trichlorofluoromethane	3.55	101	453997	12.69	ug/l	98
11) Acrolein	3.97	56	67122	35.26	ug/l	99
12) 1,1,2-Trichloro-1,2,2-trif	4.09	151	195020	10.91	ug/l	99
13) Acetone	4.03	43	146451	47.35	ug/l	88
14) 1,1-Dichloroethene	4.21	61	409492	9.06	ug/l	97
15) tert-Butyl alcohol	4.31	59	252364	267.53	ug/l	99
16) Iodomethane	4.62	142	413105	8.53	ug/l	95
17) Methyl acetate	4.62	43	102463	12.15	ug/l	99
18) Methylene chloride	4.83	49	325929	8.99	ug/l	95
19) Carbon disulfide	4.86	76	1007647	10.43	ug/l	100
20) Acrylonitrile	5.00	53	167330	42.64	ug/l	95
21) tert-Butyl methyl ether (M	5.03	73	474033	10.66	ug/l	94
22) trans-1,2-Dichloroethene	5.23	61	393897	9.05	ug/l	98
23) Isopropyl ether (DIPE)	5.64	45	879526	9.45	ug/l	98
24) Vinyl acetate	5.80	43	367640	11.51	ug/l	99
25) 1,1-Dichloroethane	5.80	63	488066	9.59	ug/l	98
27) tert-Butyl ethyl ether (ET	6.22	59	725610	10.88	ug/l	98
28) 2-Butanone	6.40	43	235685	49.66	ug/l	97
29) 2,2-Dichloropropane	6.60	77	456582	10.66	ug/l	98
30) cis-1,2-Dichloroethene	6.65	96	334951	9.56	ug/l	99
31) Chloroform	6.89	83	516366	9.95	ug/l	98

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24F22\RFV222.D Vial: 3
Acq On : 22 Jun 2024 1:11 pm Operator: DNguye
Sample : VO01F10L Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 22 13:33 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.12	49	182973	8.98	ug/l	95
33)	Tetrahydrofuran	7.17	42	25783	8.59	ug/l	96
35)	1,1,1-Trichloroethane	7.46	97	478641	11.02	ug/l	98
36)	Cyclohexane	7.49	84	458356	10.84	ug/l	98
38)	1,1-Dichloropropene	7.69	110	142292	9.64	ug/l	98
39)	Carbon tetrachloride	7.85	119	352264	10.89	ug/l	99
40)	tert-Amyl methyl ether (TA	7.86	73	543618	10.48	ug/l	99
42)	Benzene	8.10	78	1099515	9.71	ug/l	98
43)	1,2-Dichloroethane	8.07	62	254978	11.17	ug/l	99
44)	Trichloroethene	9.03	130	283464	9.68	ug/l	98
45)	Methylcyclohexane	9.14	83	501598	10.78	ug/l	96
46)	1,2-Dichloropropane	9.32	63	236913	9.35	ug/l	87
47)	Bromodichloromethane	9.70	83	353455	10.05	ug/l	98
48)	1,4-Dioxane	9.75	88	19141	184.58	ug/l	89
49)	Dibromomethane	9.79	93	111982	9.37	ug/l	98
50)	2-Chloroethyl vinyl ether	10.20	63	68070	10.59	ug/l	96
51)	4-Methyl-2-pentanone	10.25	43	629932	50.28	ug/l	97
52)	cis-1,3-Dichloropropene	10.59	75	397677	10.09	ug/l	99
55)	Toluene	11.14	91	1244347	10.07	ug/l	98
56)	Ethyl methacrylate	11.43	69	188537	10.17	ug/l	95
57)	trans-1,3-Dichloropropene	11.45	75	314018	10.94	ug/l	96
58)	1,1,2-Trichloroethane	11.73	97	163020	10.08	ug/l	98
59)	2-Hexanone	11.74	43	378340	51.16	ug/l	94
60)	1,3-Dichloropropane	12.16	76	279483	10.18	ug/l	97
61)	Tetrachloroethene	12.28	164	259955	10.12	ug/l	99
62)	Dibromochloromethane	12.63	129	193067	9.78	ug/l	98
63)	1,2-Dibromoethane	13.00	107	150010	9.37	ug/l	97
64)	1-Chlorohexane	13.28	91	521483	9.78	ug/l	99
65)	Chlorobenzene	13.76	112	741212	10.06	ug/l	100
66)	1,1,1,2-Tetrachloroethane	13.83	131	242915	10.71	ug/l	97
67)	Ethylbenzene	13.85	91	1476999	10.48	ug/l	97
68)	m-Xylene & p-Xylene	14.00	91	2234167	21.65	ug/l	95
69)	o-Xylene	14.81	91	1108114	10.43	ug/l	95
70)	Styrene	14.88	104	829645	10.08	ug/l	98
71)	Isopropylbenzene	15.49	105	1451839	10.37	ug/l	98
73)	Bromoform	15.54	173	107563	9.64	ug/l	97
74)	trans-1,4-Dichloro-2-buten	15.61	53	49832	10.22	ug/l	92
75)	1,1,2,2-Tetrachloroethane	15.83	83	177850	9.45	ug/l	98
77)	1,2,3-Trichloropropane	16.13	110	47202	9.80	ug/l	94
78)	n-Propylbenzene	16.28	91	1849902	10.06	ug/l	99
79)	Bromobenzene	16.35	156	277736	9.55	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F22\RFV222.D Vial: 3
Acq On : 22 Jun 2024 1:11 pm Operator: DNguye
Sample : VO01F10L Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 22 13:33 2024 Quant Results File: VO01E11.RES

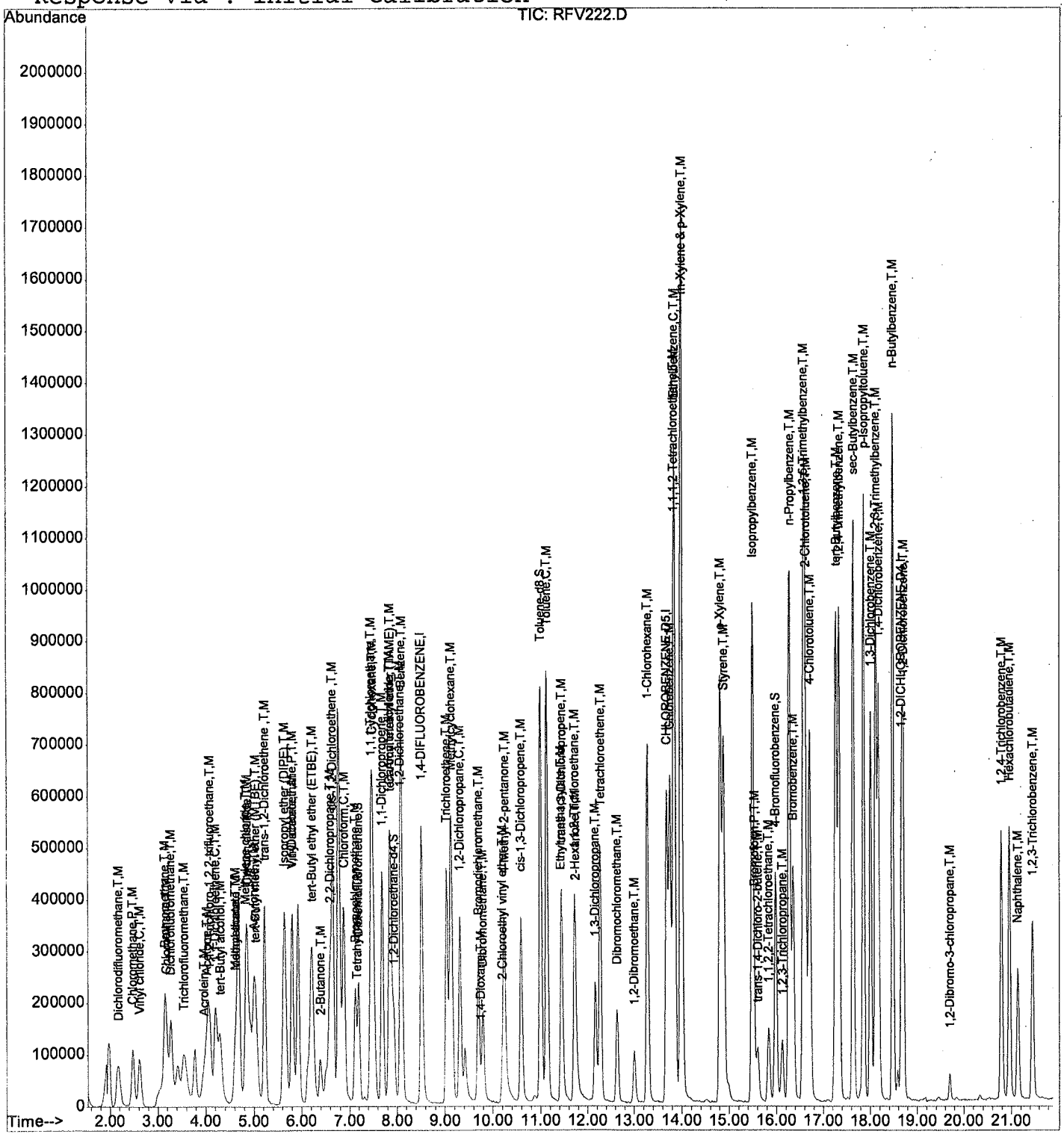
Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.57	105	1140109	9.71	ug/l	99
81)	2-Chlorotoluene	16.62	91	1161799	10.50	ug/l	97
82)	4-Chlorotoluene	16.71	91	988773	10.09	ug/l	97
83)	tert-Butylbenzene	17.27	134	244603	9.93	ug/l	94
84)	1,2,4-Trimethylbenzene	17.33	105	1113371	9.69	ug/l	100
85)	sec-Butylbenzene	17.64	105	1625958	10.07	ug/l	100
86)	p-Isopropyltoluene	17.86	119	1275648	10.25	ug/l	98
87)	1,3-Dichlorobenzene	18.01	146	574829	10.40	ug/l	99
88)	1,2,3-Trimethylbenzene	18.11	105	1061497	9.89	ug/l	99
89)	1,4-Dichlorobenzene	18.17	146	560900	10.35	ug/l	98
90)	n-Butylbenzene	18.47	91	1364129	10.58	ug/l	98
91)	1,2-Dichlorobenzene	18.70	146	472071	10.43	ug/l	99
92)	1,2-Dibromo-3-chloropropan	19.70	157	27854	9.64	ug/l	100
93)	1,2,4-Trichlorobenzene	20.79	180	328722	9.94	ug/l	99
94)	Hexachlorobutadiene	20.96	225	187813	9.54	ug/l	95
95)	Naphthalene	21.13	128	411423	10.66	ug/l	99
96)	1,2,3-Trichlorobenzene	21.46	180	255378	10.26	ug/l	98

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24F22\RFV222.D Vial: 3
Acq On : 22 Jun 2024 1:11 pm Operator: DNguye
Sample : VO01F10L Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 22 13:33 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F22\RFV223.D Vial: 4
Acq On : 22 Jun 2024 1:40 pm Operator: DNguye
Sample : VO01F10C Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 22 14:02 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.52	114	788617	10.00	ug/l	-0.03
53) CHLOROBENZENE-D5	13.68	117	637913	10.00	ug/l	-0.03
72) 1,2-DICHLOROBENZENE-D4	18.66	152	262043	10.00	ug/l	-0.02
System Monitoring Compounds						
34) Dibromofluoromethane	7.20	111	227691	9.33	ug/l	-0.03
Spiked Amount 10.000			Recovery = 93.30%			
41) 1,2-Dichloroethane-d4	7.94	65	172625	10.37	ug/l	-0.03
Spiked Amount 10.000			Recovery = 103.70%			
54) Toluene-d8	11.00	98	987363	10.33	ug/l	-0.03
Spiked Amount 10.000			Recovery = 103.30%			
76) 4-Bromofluorobenzene	15.98	95	333870	9.35	ug/l	-0.03
Spiked Amount 10.000			Recovery = 93.50%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.16	85	313872	14.87	ug/l	99
5) Chloromethane	2.47	50	283044	9.58	ug/l	98
6) Vinyl chloride	2.62	62	268172	10.90	ug/l	95
7) Bromomethane	3.15	94	293005	10.05	ug/l	91
8) Chloroethane	3.18	64	200250	11.22	ug/l	98
9) Dichlorofluoromethane	3.27	67	450987	8.90	ug/l	80
10) Trichlorofluoromethane	3.54	101	489829	14.71	ug/l	98
11) Acrolein	3.97	56	66240	37.40	ug/l	98
12) 1,1,2-Trichloro-1,2,2-trif	4.07	151	189518	11.39	ug/l	100
13) Acetone	4.04	43	132838	46.15	ug/l	90
14) 1,1-Dichloroethene	4.21	61	394117	9.37	ug/l	98
15) tert-Butyl alcohol	4.31	59	224600	255.84	ug/l	99
16) Iodomethane	4.62	142	383052	8.49	ug/l	95
17) Methyl acetate	4.64	43	93950	11.97	ug/l	99
18) Methylene chloride	4.84	49	305673	9.06	ug/l	94
19) Carbon disulfide	4.86	76	1010920	11.24	ug/l	100
20) Acrylonitrile	5.01	53	154985	42.44	ug/l	96
21) tert-Butyl methyl ether (M	5.03	73	430197	10.40	ug/l	97
22) trans-1,2-Dichloroethene	5.23	61	363712	8.98	ug/l	98
23) Isopropyl ether (DIPE)	5.64	45	819396	9.46	ug/l	99
24) Vinyl acetate	5.80	43	342005	11.51	ug/l	98
25) 1,1-Dichloroethane	5.80	63	460702	9.72	ug/l	98
27) tert-Butyl ethyl ether (ET	6.22	59	672225	10.84	ug/l	97
28) 2-Butanone	6.40	43	208565	47.22	ug/l	100
29) 2,2-Dichloropropane	6.60	77	435846	10.94	ug/l	98
30) cis-1,2-Dichloroethene	6.66	96	317398	9.73	ug/l	98
31) Chloroform	6.87	83	472566	9.79	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F22\RFV223.D Vial: 4
Acq On : 22 Jun 2024 1:40 pm Operator: DNguye
Sample : VO01F10C Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 22 14:02 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.12	49	169976	8.96	ug/l	97
33)	Tetrahydrofuran	7.18	42	24647	8.82	ug/l	97
35)	1,1,1-Trichloroethane	7.48	97	447961	11.09	ug/l	98
36)	Cyclohexane	7.49	84	468029	11.89	ug/l	98
38)	1,1-Dichloropropene	7.69	110	134419	9.79	ug/l	99
39)	Carbon tetrachloride	7.85	119	341327	11.34	ug/l	96
40)	tert-Amyl methyl ether (TA	7.86	73	493332	10.22	ug/l	100
42)	Benzene	8.10	78	1009857	9.58	ug/l	99
43)	1,2-Dichloroethane	8.07	62	231306	10.89	ug/l	99
44)	Trichloroethene	9.03	130	268541	9.85	ug/l	98
45)	Methylcyclohexane	9.14	83	533431	12.32	ug/l	97
46)	1,2-Dichloropropane	9.32	63	225119	9.55	ug/l	91
47)	Bromodichloromethane	9.70	83	318576	9.74	ug/l	97
48)	1,4-Dioxane	9.74	88	16885	174.96	ug/l	93
49)	Dibromomethane	9.79	93	103673	9.32	ug/l	98
50)	2-Chloroethyl vinyl ether	10.20	63	61481	10.28	ug/l	95
51)	4-Methyl-2-pentanone	10.23	43	552990	47.58	ug/l	97
52)	cis-1,3-Dichloropropene	10.59	75	371054	10.11	ug/l	99
55)	Toluene	11.14	91	1139234	10.06	ug/l	99
56)	Ethyl methacrylate	11.43	69	173198	10.19	ug/l	94
57)	trans-1,3-Dichloropropene	11.45	75	282854	10.74	ug/l	98
58)	1,1,2-Trichloroethane	11.71	97	148488	10.01	ug/l	97
59)	2-Hexanone	11.74	43	328730	48.73	ug/l	92
60)	1,3-Dichloropropane	12.16	76	256849	10.20	ug/l	98
61)	Tetrachloroethene	12.26	164	242773	10.31	ug/l	99
62)	Dibromochloromethane	12.63	129	176333	9.74	ug/l	100
63)	1,2-Dibromoethane	13.00	107	135303	9.22	ug/l	98
64)	1-Chlorohexane	13.28	91	502433	10.27	ug/l	99
65)	Chlorobenzene	13.76	112	687260	10.18	ug/l	99
66)	1,1,1,2-Tetrachloroethane	13.83	131	222236	10.68	ug/l	98
67)	Ethylbenzene	13.85	91	1381699	10.69	ug/l	97
68)	m-Xylene & p-Xylene	13.99	91	2028352	21.43	ug/l	96
69)	o-Xylene	14.81	91	1036773	10.64	ug/l	96
70)	Styrene	14.88	104	776219	10.28	ug/l	99
71)	Isopropylbenzene	15.49	105	1353461	10.55	ug/l	99
73)	Bromoform	15.54	173	92923	9.01	ug/l	96
74)	trans-1,4-Dichloro-2-buten	15.59	53	44510	9.85	ug/l	93
75)	1,1,2,2-Tetrachloroethane	15.83	83	157186	9.01	ug/l	98
77)	1,2,3-Trichloropropane	16.11	110	44029	9.87	ug/l	100
78)	n-Propylbenzene	16.26	91	1721360	10.10	ug/l	99
79)	Bromobenzene	16.35	156	253501	9.40	ug/l	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F22\RFV223.D Vial: 4
Acq On : 22 Jun 2024 1:40 pm Operator: DNguye
Sample : VO01F10C Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 22 14:02 2024 Quant Results File: VO01E11.RES

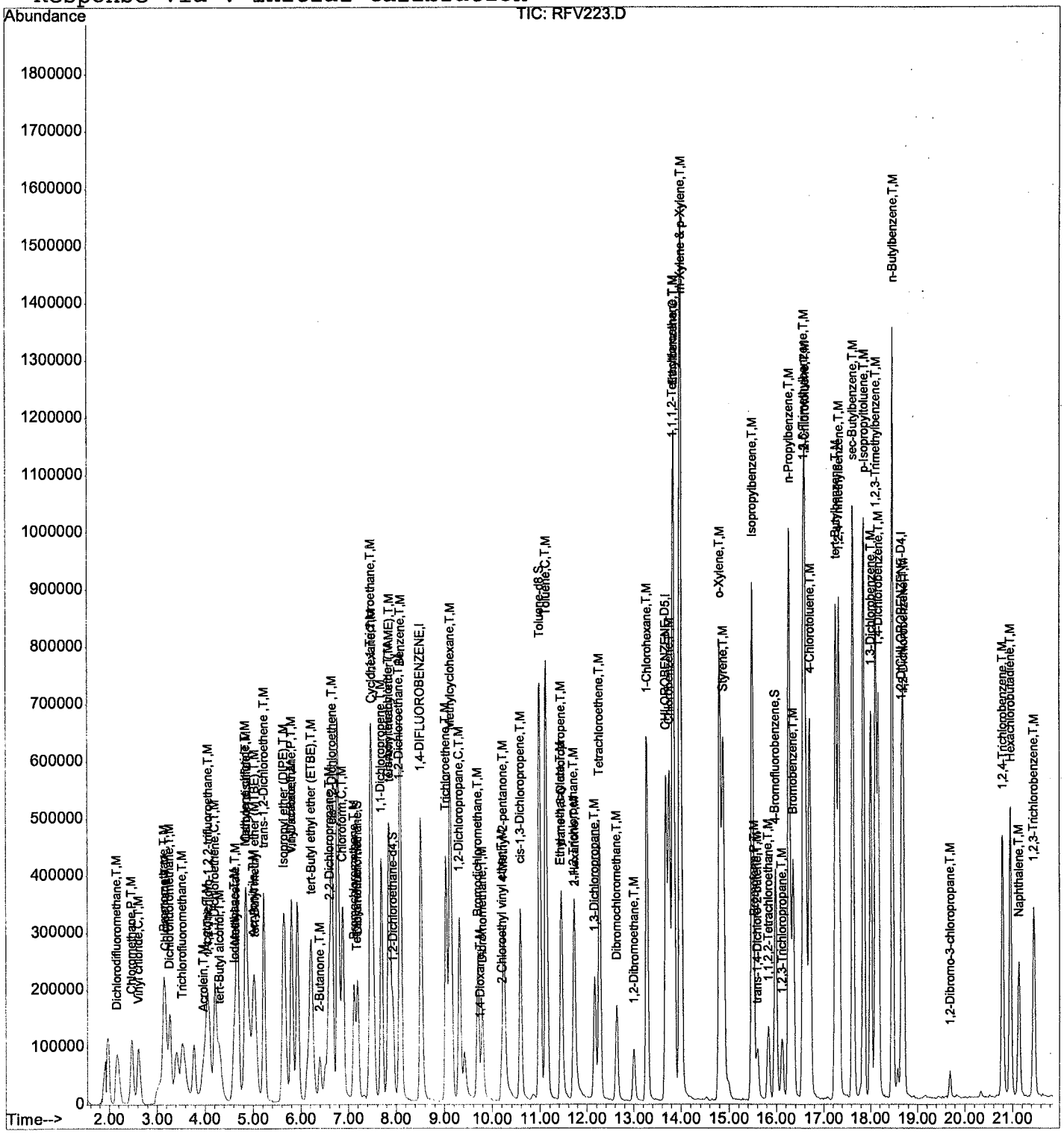
Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.57	105	1055819	9.70	ug/l	99
81)	2-Chlorotoluene	16.60	91	1098369	10.71	ug/l	97
82)	4-Chlorotoluene	16.70	91	904254	9.96	ug/l	96
83)	tert-Butylbenzene	17.25	134	227060	9.94	ug/l	92
84)	1,2,4-Trimethylbenzene	17.33	105	1033524	9.70	ug/l	99
85)	sec-Butylbenzene	17.62	105	1505333	10.06	ug/l	99
86)	p-Isopropyltoluene	17.86	119	1169859	10.14	ug/l	98
87)	1,3-Dichlorobenzene	18.01	146	537783	10.50	ug/l	98
88)	1,2,3-Trimethylbenzene	18.11	105	989352	9.95	ug/l	99
89)	1,4-Dichlorobenzene	18.17	146	505960	10.07	ug/l	100
90)	n-Butylbenzene	18.47	91	1274937	10.67	ug/l	98
91)	1,2-Dichlorobenzene	18.70	146	436585	10.40	ug/l	96
92)	1,2-Dibromo-3-chloropropan	19.70	157	23232	8.73	ug/l	98
93)	1,2,4-Trichlorobenzene	20.79	180	316192	10.32	ug/l	97
94)	Hexachlorobutadiene	20.96	225	181424	9.94	ug/l	97
95)	Naphthalene	21.13	128	377601	10.56	ug/l	100
96)	1,2,3-Trichlorobenzene	21.44	180	236465	10.24	ug/l	97

(#) = qualifier out of range (m) = manual integration

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MS Integration Params: RTE.P
Quant Time: Jun 22 14:02 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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: REV195 BFB Injection Date: 05/11/24

Instrument ID: 01 BFB Injection Time: 10:20

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	18.517
75	30 - 60% of mass 95	42.491
95	Base Peak, 100% relative abundance	100.000
96	5 - 9% of mass 95	7.286
173	Less than 2% of mass 174	0.000(0)1
174	Greater than 50% of mass 95	75.428
175	5 - 9% of mass 174	5.582(7.4)1
176	95 - 101% % of mass 174	72.070(95.55)1
177	5 - 9% % of mass 176	5.085(7.06)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	VO01E111	REV196	05/11/24	10:58
2	VSTD0.5	VO01E112	REV197	05/11/24	11:27
3	VSTD1	VO01E113	REV198	05/11/24	11:56
4	VSTD2	VO01E114	REV199	05/11/24	12:30
5	VSTD5	VO01E115	REV200	05/11/24	12:59
6	VSTD10	VO01E116	REV201	05/11/24	13:28
7	VSTD20	VO01E117	REV202	05/11/24	13:58
8	VSTD30	VO01E118	REV203	05/11/24	14:27
9	VSTD50	VO01E119	REV204	05/11/24	14:56
10	VSTD100	VO01DE1110	REV205	05/11/24	15:26

SC 5/15/24

INITIAL_CALIBRATION - RELATIVE_RESPONSE_FACTOR

Instrument_ID :01
Beginning_Datetime :05/11/24 10:58
Spike_Units :PPB
IC File :REV201

Column Spec :RXI-624SILMS ID :0.25MM
Ending DateTime :05/11/24 15:26
HPChem Method :V001E11

M	IDX	Parameters	3 10:58 REV196	5 11:27 REV197	1 11:56 REV198	2 12:30 REV199	5 12:59 REV200	10 13:28 REV201	20 13:58 REV202	30 14:27 REV203	50 14:56 REV204	100 15:26 REV205	Av_RRF	% RSD	Av_Rt_M
	1	1,4-DIFLUOROBENZENE	1	1	1	1	1	1	1	1	1	1	1	0	8.5509
	2	Chlorotrifluoroethylene	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	3	Dichlorodifluoromethane	0.276	0.289	0.246	0.273	0.265	0.254	0.271	0.264	0.274	0.264	0.268	4.44	2.1690
	4	2-Chloro-1,1,1-trifluoroethane	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	5	Chloromethane	0.426	0.406	0.362	0.393	0.380	0.347	0.379	0.351	0.364	0.339	0.375	7.38	2.4705
	6	Vinyl chloride	0.305	0.319	0.285	0.336	0.337	0.310	0.331	0.305	0.313	0.280	0.312	6.31	2.6048
	7	Bromomethane	------	0.567	0.436	0.404	0.359	0.329	0.378	0.353	0.376	0.362	0.396	17.96	3.1458
	8	Chloroethane	0.234	0.228	0.214	0.217	0.226	0.211	0.236	0.225	0.240	0.232	0.226	4.21	3.1896
	9	Dichlorofluoromethane	0.754	0.709	0.630	0.645	0.605	0.581	0.653	0.609	0.641	0.601	0.643	8.21	3.2755
	10	Trichlorofluoromethane	0.440	0.466	0.405	0.441	0.427	0.397	0.418	0.405	0.421	0.400	0.422	5.20	3.5526
5	11	Acrolein	------	------	------	0.022	0.022	0.020	0.024	0.022	0.024	0.023	0.022	5.86	3.9857
	12	1,1,2-Trichloro-1,2,2-trifluoroethane	0.173	0.217	0.197	0.230	0.212	0.210	0.224	0.217	0.228	0.201	0.211	8.11	4.0696
5	13	Acetone	------	------	0.049	0.037	0.036	0.031	0.035	0.034	0.037	0.034	0.037	14.45	4.0577
	14	1,1-Dichloroethene	0.517	0.551	0.485	0.547	0.524	0.514	0.569	0.536	0.563	0.527	0.533	4.74	4.2296
25	15	tert-Butyl alcohol	0.010	0.010	0.010	0.011	0.011	0.010	0.012	0.013	0.013	0.012	0.011	9.12	4.3422
	16	Iodomethane	0.556	0.569	0.525	0.570	0.563	0.545	0.616	0.582	0.610	0.581	0.572	4.85	4.6385
	17	Methyl acetate	------	------	------	0.472	0.501	0.480	0.502	0.497	------	------	0.490	10.82	4.8531
	18	Methylene chloride	0.449	0.440	0.418	0.436	0.421	0.398	0.425	0.413	0.440	0.416	0.428	2.80	4.8827
	19	Carbon disulfide	1.256	1.087	1.076	1.126	1.153	1.068	1.228	1.130	------	------	1.140	6.08	4.8909
5	20	Acrylonitrile	0.049	0.046	0.044	0.044	0.046	0.043	0.048	0.046	0.049	0.047	0.046	4.77	5.0252
	21	tert-Butyl methyl ether (MTBE)	0.533	0.550	0.498	0.531	0.517	0.473	0.551	0.525	0.548	0.520	0.525	4.67	5.0607
	22	trans-1,2-Dichloroethene	0.505	0.518	0.491	0.523	0.505	0.477	0.552	0.517	0.544	0.505	0.514	4.44	5.2489
	23	Isopropyl ether (DIPE)	1.103	1.121	1.035	1.086	1.080	1.027	1.185	1.102	1.138	1.103	1.098	4.21	5.6696
	24	Vinyl acetate	------	0.340	0.316	0.360	0.397	0.344	0.413	0.399	0.415	0.407	0.377	9.82	5.8322
	25	1,1-Dichloroethane	0.585	0.615	0.565	0.611	0.589	0.565	0.651	0.605	0.631	0.592	0.601	4.54	5.8296
25	26	2-Butanol	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	27	tert-Butyl ethyl ether (ETBE)	0.774	0.775	0.756	0.823	0.779	0.725	0.849	0.797	0.814	0.775	0.787	4.52	6.2400
5	28	2-Butanone	------	0.050	0.049	0.050	0.054	0.053	0.061	0.061	0.065	0.060	0.056	10.70	6.4281
	29	2,2-Dichloropropane	0.523	0.531	0.479	0.511	0.482	0.476	0.530	0.504	0.522	0.484	0.505	4.21	6.6281
	30	cis-1,2-Dichloroethene	0.406	0.424	0.392	0.408	0.406	0.395	0.444	0.418	0.434	0.409	0.414	4.03	6.6859
	31	Chloroform	0.719	0.670	0.594	0.641	0.588	0.555	0.630	0.580	0.613	0.592	0.612	8.00	6.9082
	32	Bromochloromethane	0.236	0.244	0.223	0.241	0.236	0.225	0.259	0.247	0.256	0.240	0.240	4.23	7.1481
	33	Tetrahydrofuran	------	------	------	0.038	0.034	0.030	0.037	0.035	0.039	0.036	0.035	8.25	7.2006
	34	Dibromofluoromethane	0.285	0.328	0.288	0.328	0.318	0.281	0.335	0.313	------	------	0.310	7.01	7.2681
	35	1,1,1-Trichloroethane	0.513	0.539	0.485	0.512	0.496	0.483	0.545	0.507	0.534	0.508	0.512	4.19	7.4993
	36	Cyclohexane	0.502	0.544	0.473	0.526	0.509	0.453	0.514	0.471	------	------	0.499	6.15	7.5244
	37	2,2,4-Trimethylpentane	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	38	1,1-Dichloropropene	0.168	0.181	0.168	0.177	0.168	0.164	0.185	0.175	0.183	0.173	0.174	4.16	7.7230
	39	Carbon tetrachloride	0.390	0.393	0.352	0.387	0.366	0.365	0.403	0.383	0.403	0.374	0.382	4.43	7.8785
	40	tert-Amyl methyl ether (TAME)	0.661	0.627	0.595	0.624	0.589	0.540	0.638	0.608	0.643	0.596	0.612	5.64	7.8889
	41	1,2-Dichloroethane-d4	0.208	0.216	0.193	0.229	0.217	0.186	0.225	0.216	------	------	0.211	7.18	7.9652
	42	Benzene	1.388	1.402	1.268	1.345	1.317	1.253	1.406	1.314	1.363	1.304	1.336	4.04	8.1304
	43	1,2-Dichloroethane	0.267	0.270	0.254	0.274	0.266	0.248	0.288	0.272	0.283	0.270	0.269	4.45	8.1037
	44	Trichloroethene	0.334	0.340	0.317	0.343	0.328	0.334	0.371	0.350	0.372	0.352	0.346	4.96	9.0723
	45	Methylcyclohexane	0.565	0.602	0.537	0.581	0.549	0.493	0.557	0.550	------	------	0.548	6.46	9.1653
	46	1,2-Dichloropropane	0.306	0.315	0.273	0.294	0.287	0.278	0.319	0.298	0.318	0.299	0.299	5.38	9.3508
	47	Bromodichloromethane	0.473	0.442	0.393	0.410	0.401	0.372	0.431	0.398	0.428	0.402	0.415	6.88	9.7316
20	48	1,4-Dioxane	------	------	------	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	14.49	9.7831
	49	Dibromomethane	0.135	0.145	0.136	0.142	0.139	0.126	0.149	0.143	0.153	0.142	0.141	5.30	9.8535
	50	2-Chloroethyl vinyl ether	------	------	0.067	0.073	0.072	0.069	0.082	0.081	0.083	0.079	0.076	8.06	10.2338
5	51	4-Methyl-2-pentanone	------	------	0.094	0.104	0.134	0.128	0.158	0.154	0.164	0.152	0.136	18.90	10.2764
	52	cis-1,3-Dichloropropene	0.461	0.451	0.434	0.457	0.456	0.433	0.501	0.478	0.504	0.476	0.465	5.31	10.6250
	53	CHLOROBENZENE-D5	1	1	1	1	1	1	1	1	1	1	1	0	13.7168
	54	Toluene-d8	1.490	1.527	1.385	1.619	1.529	1.394	1.577	1.468	------	------	1.499	5.48	11.0301
	55	Toluene	1.818	1.915	1.660	1.801	1.716	1.701	1.833	1.727	1.852	1.736	1.776	4.50	11.1687
	56	Ethyl methacrylate	------	------	0.232	0.261	0.250	0.247	0.291	0.275	0.287	0.278	0.266	8.54	11.4708
	57	trans-1,3-Dichloropropene	0.400	0.405	0.376	0.415	0.403	0.390	0.444	0.420	0.451	0.425	0.413	5.62	11.4842
	58	1,1,2-Trichloroethane	0.246	0.228	0.220	0.238	0.226	0.216	0.243	0.233	0.245	0.231	0.233	4.45	11.7505
5	59	2-Hexanone	------	------	0.030	0.052	0.087	0.091	0.113	0.112	0.133	0.115	0.090	36.80	11.7912
	60	1,3-Dichloropropane	0.381	0.388	0.374	0.405	0.381	0.366	0.424	0.398	0.452	0.405	0.395	5.08	11.7953
	61	Tetrachloroethene	0.361	0.390	0.351	0.380	0.354	0.329	0.385	0.364	0.384	0.364	0.363	3.82	11.8290
	62	Dibromochloromethane	0.303	0.294	0.264	0.277	0.271	0.261	0.299	0.280	0.303	0.286	0.284	5.33	12.0665
	63	1,2-Dibromoethane	0.214	0.220	0.214	0.234	0.228	0.215	0.250	0.236	0.253	0.237	0.230	6.28	13.0383
	64	1-Chlorohexane	0.791	0.823	0.713	0.793	0.726	0.743	0.792	0.758	0.791	0.738	0.767	4.69	13.3080
	65	Chlorobenzene	1.046	1.088	1.007	1.069	1.028	1.023	1.125	1.046	1.110	1.045	1.059	3.64	13.7909
	66	1,1,1,2-Tetrachloroethane	0.325	0.330	0.313	0.330	0.314	0.313	0.346	0.324	0.343	0.324	0.326	3.59	13.8650
	67	Ethylbenzene	2.077	2.152	1.907	2.051	1.962	1.985	2.135	1.999	2.065	1.934	2.027	4.07	13.8813
2	68	m-Xylene & p-Xylene	1.533	1.584	1.421	1.517	1.455	1.429	1.559	1.455	1.488	1.396	1.484	4.23	14.0205
	69	o-Xylene	1.232	1.623	1.469	1.557	1.460	1.453	1.577	1.498	1.558	1.443	1.527	4.66	14.8428
	70	Styrene	1.717	1.208	1.133	1.187	1.144	1.135	1.252	1.180	1.235	1.135	1.184	3.78	14.9094
	71	Isopropylbenzene	2.023	2.125	1.896	2.060	1.959	1.959	2.123	1.989	2.061	1.924	2.012	3.97	15.5243
	72	1,2-DICHLOROBENZENE-D4	1	1	1	1	1	1	1	1	1	1	1	0	16.2708
	73	Bromoform	------	0.205	0.263	0.358	0.366	0.337	0.407	0.390	0.407	0.416	0.350	20.61	16.2589
	74	trans-1,4-Dichloro-2-butene	------	------	0.146	0.168	0.163	0.156	0.189	0.180	0.191	0.188	0.173	8.77	15.8336
	75	1,1,2,2-Tetrachloroethane	0.739	0.666	0.619	0.654	0.640	0.592	0.677	0.662	0.701	0.686	0.666	6.36	15.8650
	76	4-Bromofluorobenzene	1.452	1.437	1.269	1.380	1.340	1.232	1.447	1.339	------	------	1.362	6.08	16.0152
	77	1,2,3-Trichloropropane	------	0.141	0.153	0.173	0.169	0.159	0.187	0.177	0.190	0.185	0.170	9.82	16.1515
	78	n-Propylbenzene	6.717	6.994	5.903	6.314	6.264	6.304	6.894	6.414	6.634	6.581	6.502	5.03	16.2976
	79	Bromobenzene	0.995	1.049	0.936	1.001	1.004	0.984	1.111	1.036	1.086	1.083	1.029	5.26	16.3835
	80	1,3,5-Trimethylbenzene	4.352	4.499	3.734	4.047	3.995	4.012	4.417	4.116	4.229	4.145	4.155	5.49	16.6058
	81	2-Chlorotoluene	4.034	4.266	3.707	3.731	3.759	3.734	4.086	3.854	3.922	4.052	3.915	4.84	16.6354
	82	4-Chlorotoluene	3.478	3.662	3.090	3.515	3.454	3.390	3.723	3.482	3.612	3.250	3.466	5.46	16.7332
	83	tert-Butylbenzene	0.904	0.890	0.796	0.846	0.839	0.843	0.934	0.864	0.903	0.895	0.871	4.70	17.2872
	84	1,2,4-Trimethylbenzene	4.167	4.290	3.727	3.970	3.950	3.951	4.329	4.050	4.156	4.057	4.065	4.41	17.3598
	85	sec-Butylbenzene	5.982	6.152	5.164	5.666	5.498	5.526	6.078	5.608	5.821	5.611	5.711	5.27	17.6576
	86	p-Isopropyltoluene	4.487	4.606	4.021	4.441	4.248	4.230	4.673	4.310	4.467	4.329	4.403	5.17	17.8798
	87	1,3-Dichlorobenzene	1.964	2.088	1.755	1.913	1.873	1.877	2.093	1.953	2.093	1.957	1.955	4.87	18.0280
	88	1,2,3-Trimethylbenzene	3.969	4.104	3.570	3.741	3.883	3.888	4.101	3.748	3.857	3.706	3.785	4.20	18.1317
	89	1,4-Dichlorobenzene	2.063	2.052	1.795	1.880	1.857	1.826	2.017	1.888	2.028	1.870	1.916	4.62	18.1909
	90	n-Butylbenzene	4.854	4.963	4.193	4.515	4.392	4.402	4.823	4.508	4.603	4.346	4.560	5.46	18.4887
	91	1,2-Dichlorobenzene	1.624	1.664	1.514	1.605	1.566	1.495	1.701	1.592	1.659	1.596	1.602	4.06	18.7243
	92	1,2-Dibromo-3-chloropropane	------	------	0.067	0.087	0.093	0.084	0.105	0.102	0.112	0.108	0.095	16.02	19.7172
	93	1,2,4-Trichlorobenzene	1.082	1.145	1.038	1.141	1.133	1.108	1.288	1.237	1.294	1.228	1.169	7.49	20.8043
	94	Hexachlorobutadiene	0.665	0.692	0.611	0.670	0.668	0.696	0.776	0.730	0.759	0.700	0.697	6.95	20.9673
	95	Naphthalene	1.273	1.300	1.206	1.327	1.317	1.264	1.515	1.458	1.543	1.446	1.365	8.50	21.1480
	96	1,2,3-Trichlorobenzene	0.835	0.854	0.791	0.871	0.857	0.833	0.968	0.920	0.964	0.915	0.881	6.66	21.4665

Spike_Amount = Nominal_Amount * M
Ave_%RSD : 6.8 Max_%RSD : 36.8

Use Least Square Linear Regression with weighting factor of inverse concentration for comps with %_RSD > 15
Resp_Ratio = x0 + x1 * Amt_Ratio

IDX	Parameter	x0	x1	CCF
7	Bromomethane	0.00783	0.36199	0.9993
51	4-Methyl-2-pentanone	-0.04242	0.15630	0.9988
59	2-Hexanone	-0.05681	0.11740	0.9987
73	Bromoform	-0.01353	0.40878	0.9992
92	1,2-Dibromo-3-chloropropane	-0.00559	0.10796	0.9987

SV
5/15/24

Instrument ID :01
Beginning DateTime :05/11/24 10:58
Spike Units :PPB
IC File :REV201

Column Spec :RXI-624SILMS ID :0.25MM
Ending DateTime :05/11/24 15:26
HPChem Method :VO01E11

M	IDX	Parameters	.3 10:58 REV196	.5 11:27 REV197	1 11:56 REV198	2 12:30 REV199	5 12:59 REV200	10 13:28 REV201	20 13:58 REV202	30 14:27 REV203	50 14:56 REV204	100 15:26 REV205	AvDRec	%_RSD	Av_Rt_M
	1	1,4-DIFLUOROBENZENE	1	1	1	1	1	1	1	1	1	1	1	0	8.5509
	2	Chlorotrifluoroethylene	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	3	Dichlorodifluoromethane	103	108	92	102	99	95	101	99	102	99	3.4	4.44	2.1690
	4	2-Chloro-1,1,1-trifluoroethane	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	5	Chloromethane	114	108	97	105	101	93	101	94	97	90	5.9	7.35	2.4709
	6	Vinyl chloride	98	102	91	108	108	99	106	98	100	90	4.8	6.31	2.6048
	7	Bromomethane	------	114	99	101	95	88	103	97	103	100	12.3	17.96	3.1458
	8	Chloroethane	104	101	95	96	100	93	104	100	106	103	3.4	4.21	3.1896
	9	Dichlorofluoromethane	117	110	98	100	94	90	102	95	100	93	5.9	8.21	3.2755
	10	Trichlorofluoromethane	104	110	96	105	101	94	99	96	100	95	4.1	5.20	3.5526
5	11	Acrolein	------	------	------	100	100	91	109	100	109	105	4.5	5.86	3.9857
	12	1,1,2-Trichloro-1,2,2-trifluoroethane	82	103	93	109	100	100	106	103	108	95	5.9	8.11	4.0696
5	13	Acetone	------	------	132	100	97	84	95	92	100	92	9.1	14.45	4.0577
	14	1,1-Dichloroethene	97	103	91	103	98	96	107	101	106	99	3.7	4.74	4.2296
25	15	tert-Butyl alcohol	91	91	91	100	100	91	109	109	118	109	8.2	9.12	4.3422
	16	Iodomethane	97	99	92	100	98	95	108	102	107	102	3.6	4.85	4.6385
	17	Methyl acetate	------	------	------	114	101	84	102	97	------	------	7.2	10.84	4.6531
	18	Methylene chloride	105	103	98	102	98	93	104	96	103	97	3.4	3.90	4.8577
	19	Carbon disulfide	110	95	94	99	101	94	108	99	------	------	4.7	6.08	4.8800
5	20	Acrylonitrile	107	100	96	96	100	93	104	100	107	102	3.5	4.77	5.0252
	21	tert-Butyl methyl ether (MTBE)	102	105	95	101	98	90	105	100	104	99	3.4	4.67	5.0607
	22	trans-1,2-Dichloroethene	98	101	96	102	98	93	107	101	106	98	3.3	4.44	5.2489
	23	Isopropyl ether (DIPE)	100	102	94	99	98	94	108	100	104	100	3	4.21	5.6696
	24	Vinyl acetate	------	90	84	95	105	91	110	106	110	108	8.7	9.82	5.8322
	25	1,1-Dichloroethane	97	102	94	102	98	94	108	101	105	99	3.6	4.54	5.8296
25	26	2-Butanol	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	27	tert-Butyl ethyl ether (ETBE)	98	98	96	105	99	92	108	101	103	98	3.5	4.52	6.2400
5	28	2-Butanone	------	89	88	89	96	95	109	109	116	107	9.3	10.70	6.4281
	29	2,2-Dichloropropane	104	105	95	101	97	94	105	100	103	96	3.6	4.21	6.6281
	30	cis-1,2-Dichloroethene	98	102	95	99	98	95	107	101	105	99	3.2	4.03	6.6859
	31	Chloroform	117	109	97	97	96	90	103	95	100	97	5.9	8.00	6.9082
	32	Bromochloromethane	98	102	93	100	99	93	107	103	107	100	3.5	4.73	7.1481
	33	Tetrahydrofuran	------	------	------	109	97	86	106	100	111	103	6.5	8.25	7.2006
	34	Dibromofluoromethane	92	106	93	106	103	91	108	101	------	------	6	7.01	7.2281
	35	1,1,1-Trichloroethane	100	105	95	100	97	94	106	99	104	99	3.2	4.19	7.4993
	36	Cyclohexane	101	109	95	105	102	91	103	94	------	------	5	6.15	7.5244
	37	2,2,4-Trimethylpentane	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	38	1,1-Dichloropropene	97	104	97	102	97	94	106	101	105	99	3.4	4.16	7.7230
	39	Carbon tetrachloride	102	103	92	101	96	96	105	100	105	98	3.6	4.43	7.8785
	40	tert-Amyl methyl ether (TAME)	108	102	97	102	96	88	104	99	105	97	4.3	5.64	7.8889
	41	1,2-Dichloroethane-d4	99	102	91	109	103	88	107	102	------	------	5.6	7.18	7.9652
	42	Benzene	104	105	95	101	99	94	105	98	102	98	3.4	4.04	8.1304
	43	1,2-Dichloroethane	99	100	94	102	99	93	107	101	105	100	3.1	4.45	8.1037
	44	Trichloroethene	97	98	92	99	97	97	108	101	108	102	3.9	4.96	9.0723
	45	Methylcyclohexane	103	110	98	106	100	90	101	93	------	------	4.8	6.46	9.1653
	46	1,2-Dichloropropane	102	105	91	98	96	93	107	100	106	100	4.2	5.38	9.3509
	47	Bromodichloromethane	114	107	95	99	97	90	104	96	103	97	5.5	6.99	9.7316
20	48	1,4-Dioxane	------	------	------	76	93	89	110	106	117	109	0	14.49	9.7831
	49	Dibromomethane	96	103	96	101	99	89	106	101	109	101	4	5.30	9.8235
	50	2-Chloroethyl vinyl ether	------	------	88	96	95	91	108	107	109	104	7.2	8.06	10.2338
5	51	4-Methyl-2-pentanone	------	------	115	93	93	87	101	99	106	98	15.4	18.90	10.2764
	52	cis-1,3-Dichloropropene	99	97	93	98	98	93	108	103	108	102	4.2	5.31	10.6250
	53	CHLOROBENZENE-D5	1	1	1	1	1	1	1	1	1	1	1	0	13.7168
	54	Toluene-d8	99	102	92	108	102	93	105	98	------	------	4.3	5.48	11.0301
	55	Toluene	102	108	93	101	97	96	103	97	104	98	3.8	4.50	11.1687
	56	Ethyl methacrylate	------	------	87	98	94	93	109	103	112	105	7.1	8.54	11.4708
	57	trans-1,3-Dichloropropene	97	98	91	100	98	94	108	102	109	103	4.4	5.62	11.4842
	58	1,1,2-Trichloroethane	106	98	94	102	97	93	104	100	105	99	3.6	4.45	11.7509
5	59	2-Hexanone	------	------	123	93	93	87	101	99	106	99	28.5	36.80	11.7912
	60	1,3-Dichloropropane	96	98	95	103	96	93	107	101	107	103	4.2	5.08	12.1953
	61	Tetrachloroethene	98	106	95	103	96	97	104	99	104	99	3.4	3.83	12.2990
	62	Dibromochloromethane	107	104	93	98	95	92	105	99	107	101	4.6	5.55	12.6665
	63	1,2-Dibromoethane	93	96	93	102	99	93	109	103	110	103	5.2	6.28	13.0383
	64	1-Chlorohexane	103	107	93	103	95	97	103	99	103	96	4.1	4.69	13.3080
	65	Chlorobenzene	99	103	95	101	97	97	106	99	105	99	3	3.64	13.7909
	66	1,1,1,2-Tetrachloroethane	100	101	96	101	96	96	106	99	105	99	2.7	3.59	13.8650
	67	Ethylbenzene	102	106	94	101	97	98	105	99	102	95	3.4	4.07	13.8813
2	68	m-Xylene & p-Xylene	103	107	96	102	98	96	105	98	100	94	3.5	4.23	14.0205
	69	o-Xylene	107	106	96	102	96	95	103	98	102	94	4.1	4.66	14.8428
	70	Styrene	103	102	96	101	97	96	106	100	104	96	3.2	3.78	14.9094
	71	Isopropylbenzene	101	106	94	102	97	97	106	99	102	96	3.3	3.97	15.5243
	72	1,2-DICHLOROBENZENE-D4	1	1	1	1	1	1	1	1	1	1	1	0	18.6798
	73	Bromoform	------	116	98	104	96	86	101	97	100	102	15.5	20.61	15.5589
	74	trans-1,4-Dichloro-2-butene	------	------	84	97	94	90	109	104	110	109	8.2	9.77	15.6338
	75	1,1,2,2-Tetrachloroethane	111	100	93	98	96	89	104	100	105	103	4.7	6.36	15.8650
	76	4-Bromofluorobenzene	107	106	93	101	98	90	106	98	------	------	4.9	6.06	16.0153
	77	1,2,3-Trichloropropane	------	83	90	102	99	94	110	104	112	109	7.8	9.82	16.1515
	78	n-Propylbenzene	103	108	91	97	96	97	106	99	102	101	4	5.03	16.2976
	79	Bromobenzene	97	102	91	97	98	96	108	101	106	105	4.3	5.26	16.3835
	80	1,3,5-Trimethylbenzene	105	108	90	97	96	97	106	99	102	100	4.2	5.49	16.6058
	81	2-Chlorotoluene	103	109	95	95	96	95	104	98	100	103	4	4.84	16.6354
	82	4-Chlorotoluene	100	106	89	101	100	98	107	100	104	94	3.9	5.46	16.7332
	83	tert-Butylbenzene	104	102	91	97	96	97	107	99	104	103	3.9	4.70	17.2872
	84	1,2,4-Trimethylbenzene	103	106	92	98	97	97	106	100	102	100	3.4	4.41	17.3598
	85	sec-Butylbenzene	105	108	90	99	96	97	106	98	102	98	4.2	5.27	17.6576
	86	p-Isopropyltoluene	102	109	91	101	97	96	106	98	101	98	4	5.17	17.8798
	87	1,3-Dichlorobenzene	100	107	92	98	96	96	107	100	103	101	3.7	4.87	18.0280
	88	1,2,3-Trimethylbenzene	105	108	94	99	97	95	105	99	101	98	3.9	4.70	18.1317
	89	1,4-Dichlorobenzene	108	107	94	98	97	95	105	98	101	98	4	4.92	18.1909
	90	n-Butylbenzene	106	109	92	99	96	97	106	99	101	95	4.4	5.46	18.4887
	91	1,2-Dichlorobenzene	101	104	95	100	98	93	106	99	104	100	3.1	4.06	18.7243
	92	1,2-Dibromo-3-chloropropane	------	------	114	106	96	83	100	96	104	101	12.6	16.02	19.7172
	93	1,2,4-Trichlorobenzene	93	98	89	98	97	95	110	106	111	105	6.3	7.49	20.8013
	94	Hexachlorobutadiene	95	99	88	96	96	100	111	105	109	100	5.1	6.95	20.9673
	95	Naphthalene	93	95	88	97	96	93	111	107	113	106	7.4	8.50	21.1480
	96	1,2,3-Trichlorobenzene	95	97	90	99	97	95	110	104	109	104	5.5	6.66	21.4665

For 8260 C
SM
5/15/24

Compound List Report 01

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	2.17	0.253	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	2.46	0.288	A	1	A	B
6	T	Vinyl chloride	62	2.61	0.305	A	1	A	B
7	T	Bromomethane	94	3.14	0.367	L	1	A	B
8	T	Chloroethane	64	3.18	0.373	A	1	A	B
9	T	Dichlorofluoromethane	67	3.27	0.383	A	1	A	B
10	T	Trichlorofluoromethane	101	3.55	0.416	A	1	A	B
11	T	Acrolein	56	3.98	0.466	A	1	A	B
12	T	1,1,2-Trichloro-1,2,2-trifluor	151	4.06	0.475	A	1	A	B
13	T	Acetone	43	4.06	0.475	A	1	A	B
14	T	1,1-Dichloroethene	61	4.22	0.494	A	2	A	B
15	T	tert-Butyl alcohol	59	4.34	0.508	A	1	A	B
16	T	Iodomethane	142	4.64	0.543	A	1	A	B
17	T	Methyl acetate	43	4.65	0.544	A	1	A	B
18	T	Methylene chloride	49	4.86	0.569	A	2	A	B
19	T	Carbon disulfide	76	4.87	0.570	A	1	A	B
20	T	Acrylonitrile	53	5.02	0.588	A	2	A	B
21	T	tert-Butyl methyl ether (MTBE)	73	5.07	0.593	A	1	A	B
22	T	trans-1,2-Dichloroethene	61	5.24	0.614	A	2	A	B
23	T	Isopropyl ether (DIPE)	45	5.67	0.664	A	1	A	B
24	T	Vinyl acetate	43	5.82	0.681	A	1	A	B
25	T	1,1-Dichloroethane	63	5.82	0.681	A	2	A	B
26	T	2-Butanol	45	6.16	0.721	A	1	A	B
27	T	tert-Butyl ethyl ether (ETBE)	59	6.24	0.730	A	1	A	B
28	T	2-Butanone	43	6.41	0.751	A	1	A	B
29	T	2,2-Dichloropropane	77	6.62	0.775	A	2	A	B
30	T	cis-1,2-Dichloroethene	96	6.68	0.782	A	2	A	B
31	T	Chloroform	83	6.90	0.808	A	2	A	B
32	T	Bromochloromethane	49	7.14	0.836	A	2	A	B
33	T	Tetrahydrofuran	42	7.20	0.842	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	0.881	A	1	A	B
37	T	2,2,4-Trimethylpentane	57	7.52	0.881	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	7.88	0.922	A	1	A	B
41	S	1,2-Dichloroethane-d4	65	7.97	0.933	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	9.17	1.073	A	2	A	B
46	T	1,2-Dichloropropane	63	9.34	1.094	A	1	A	B
47	T	Bromodichloromethane	83	9.73	1.139	A	1	A	B
48	T	1,4-Dioxane	88	9.79	1.146	A	1	A	B
49	T	Dibromomethane	93	9.82	1.149	A	2	A	B
50	T	2-Chloroethyl vinyl ether	63	10.23	1.198	A	2	A	B
51	T	4-Methyl-2-pentanone	43	10.26	1.201	L	3	A	B
52	T	cis-1,3-Dichloropropene	75	10.62	1.243	A	1	A	B

5/15/24

53	I	CHLOROBENZENE-D5	117	13.71	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	0.814	A	1	A	B
56	T	Ethyl methacrylate	69	11.46	0.836	A	1	A	B
57	T	trans-1,3-Dichloropropene	75	11.48	0.837	A	1	A	B
58	T	1,1,2-Trichloroethane	97	11.74	0.856	A	2	A	B
59	T	2-Hexanone	43	11.76	0.857	L	1	A	B
60	T	1,3-Dichloropropane	76	12.19	0.889	A	1	A	B
61	T	Tetrachloroethene	164	12.29	0.896	A	3	A	B
62	T	Dibromochloromethane	129	12.66	0.923	A	1	A	B
63	T	1,2-Dibromoethane	107	13.03	0.950	A	1	A	B
64	T	1-Chlorohexane	91	13.30	0.970	A	1	A	B
65	P,M	Chlorobenzene	112	13.79	1.005	A	1	A	B
66	T	1,1,1,2-Tetrachloroethane	131	13.86	1.011	A	1	A	B
67	T	Ethylbenzene	91	13.88	1.012	A	1	A	B
68	T	m-Xylene & p-Xylene	91	14.01	1.022	A	1	A	B
69	T	o-Xylene	91	14.84	1.082	A	1	A	B
70	T	Styrene	104	14.90	1.086	A	2	A	B
71	T	Isopropylbenzene	105	15.52	1.132	A	3	A	B
72	I	1,2-DICHLOROBENZENE-D4	152	18.68	1.000	A	1	A	B
73	T	Bromoform	173	15.55	0.833	L	1	A	B
74	T	trans-1,4-Dichloro-2-butene	53	15.63	0.837	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	16.14	0.864	A	1	A	B
78	T	n-Propylbenzene	91	16.29	0.872	A	2	A	B
79	T	Bromobenzene	156	16.38	0.877	A	1	A	B
80	T	1,3,5-Trimethylbenzene	105	16.60	0.889	A	2	A	B
81	T	2-Chlorotoluene	91	16.63	0.891	A	1	A	B
82	T	4-Chlorotoluene	91	16.72	0.895	A	1	A	B
83	T	tert-Butylbenzene	134	17.29	0.925	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	0.957	A	2	A	B
87	T	1,3-Dichlorobenzene	146	18.03	0.965	A	2	A	B
88	T	1,2,3-Trimethylbenzene	105	18.13	0.971	A	2	A	B
89	T	1,4-Dichlorobenzene	146	18.19	0.974	A	2	A	B
90	T	n-Butylbenzene	91	18.49	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	19.71	1.055	L	1	A	B
93	T	1,2,4-Trichlorobenzene	180	20.80	1.113	A	2	A	B
94	T	Hexachlorobutadiene	225	20.96	1.122	A	1	A	B
95	T	Naphthalene	128	21.14	1.132	A	1	A	B
96	T	1,2,3-Trichlorobenzene	180	21.46	1.149	A	2	A	B

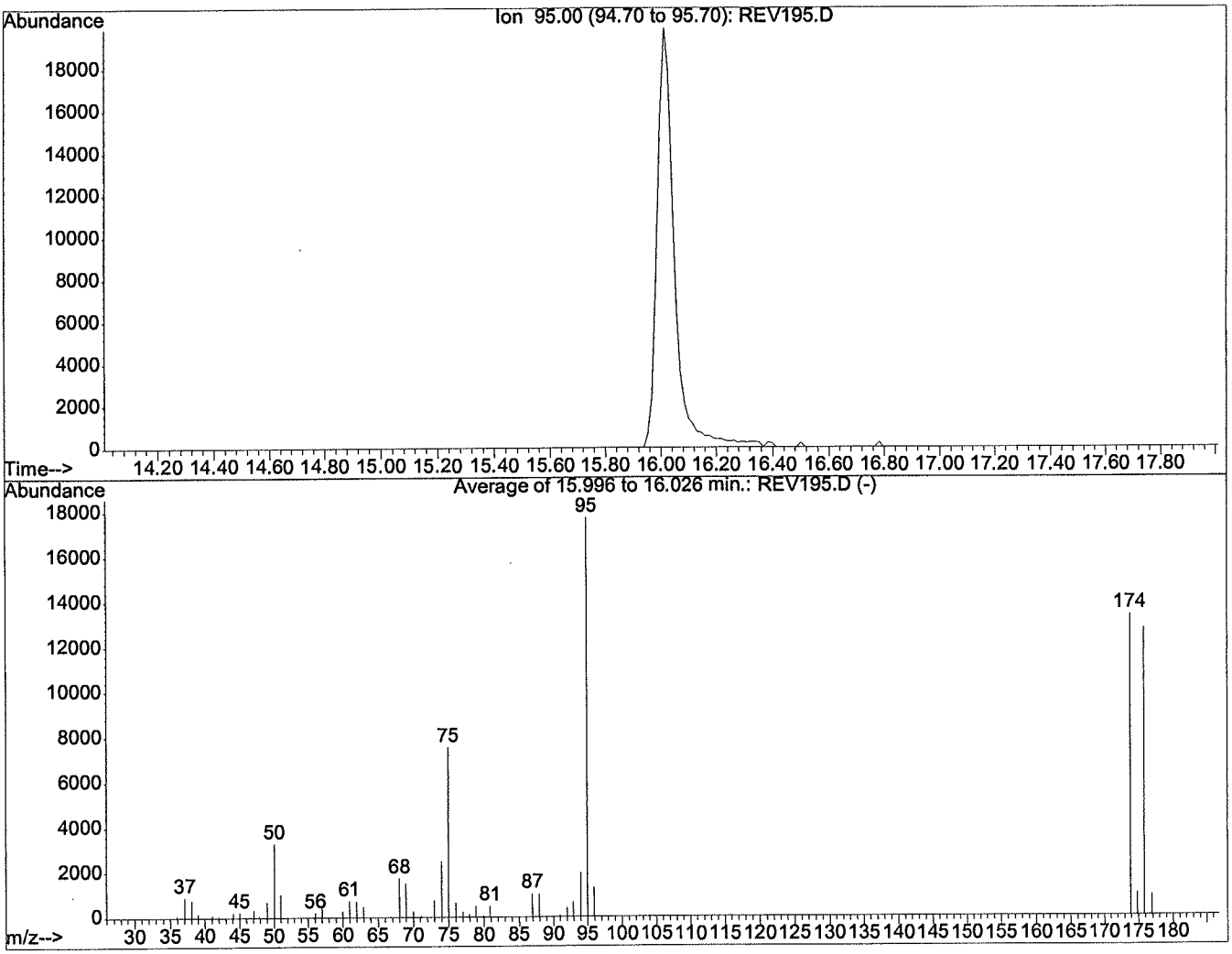
Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
#Qual = number of qualifiers
A/H = Area or Height
ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

VO01E11.M Mon May 13 14:36:08 2024

5/15/24

Data File : D:\HPCHEM\1\DATA\24E11\REV195.D
Acq On : 11 May 2024 10:20 am
Sample : BFB01E11
Misc : T/CHK
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls

Vial: 1
Operator: LPriet
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	18.5	3281	PASS
75	95	30	60	42.5	7529	PASS
95	95	100	100	100.0	17719	PASS
96	95	5	9	7.3	1291	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	75.4	13365	PASS
175	174	5	9	7.4	989	PASS
176	174	95	101	95.5	12770	PASS
177	176	5	9	7.1	901	PASS

REV195.D VO01E11.M Mon May 13 14:35:03 2024 SU 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV196.D Vial: 2
Acq On : 11 May 2024 10:58 am Operator: LPriet
Sample : VO01E111 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: May 13 14:29 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.55	114	981871	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.72	117	797187	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	299571	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	8387	0.28	ug/l	0.00
Spiked Amount 10.000			Recovery =	2.80%		
41) 1,2-Dichloroethane-d4	7.95	65	6117	0.30	ug/l	-0.01
Spiked Amount 10.000			Recovery =	3.00%		
54) Toluene-d8	11.03	98	35624	0.30	ug/l	0.00
Spiked Amount 10.000			Recovery =	3.00%		
76) 4-Bromofluorobenzene	16.03	95	13047	0.32	ug/l	0.02
Spiked Amount 10.000			Recovery =	3.20%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.16	85	8140	0.31	ug/l	65
5) Chloromethane	2.46	50	12543	0.34	ug/l	86
6) Vinyl chloride	2.59	62	8988	0.29	ug/l	89
8) Chloroethane	3.18	64	6888	0.31	ug/l	80
9) Dichlorofluoromethane	3.26	67	22206	0.35	ug/l	73
10) Trichlorofluoromethane	3.52	101	12948	0.31	ug/l	100
12) 1,1,2-Trichloro-1,2,2-trif	4.06	151	5097	0.25	ug/l	94
14) 1,1-Dichloroethene	4.22	61	15229	0.29	ug/l	94
15) tert-Butyl alcohol	4.34	59	7470	6.83	ug/l	79
16) Iodomethane	4.62	142	16364	0.29	ug/l	99
18) Methylene chloride	4.84	49	13215	0.31	ug/l	98
19) Carbon disulfide	4.87	76	36989	0.33	ug/l	99
20) Acrylonitrile	5.02	53	7271	1.60	ug/l	91
21) tert-Butyl methyl ether (M	5.05	73	15688	0.30	ug/l	81
22) trans-1,2-Dichloroethene	5.24	61	14865	0.29	ug/l	99
23) Isopropyl ether (DIPE)	5.66	45	32481	0.30	ug/l	98
25) 1,1-Dichloroethane	5.82	63	17229	0.29	ug/l	98
27) tert-Butyl ethyl ether (ET	6.24	59	22788	0.30	ug/l	100
29) 2,2-Dichloropropane	6.62	77	15398	0.31	ug/l	97
30) cis-1,2-Dichloroethene	6.68	96	11947	0.29	ug/l	98
31) Chloroform	6.90	83	21166	0.35	ug/l	98
32) Bromochloromethane	7.14	49	6943	0.29	ug/l	91
35) 1,1,1-Trichloroethane	7.49	97	15125	0.30	ug/l	97
36) Cyclohexane	7.52	84	14801	0.30	ug/l	88
38) 1,1-Dichloropropene	7.72	110	4945	0.29	ug/l	94
39) Carbon tetrachloride	7.87	119	11491	0.31	ug/l	97
40) tert-Amyl methyl ether (TA	7.89	73	19458	0.32	ug/l	91

(#) = qualifier out of range (m) = manual integration

5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV196.D Vial: 2
Acq On : 11 May 2024 10:58 am Operator: LPriet
Sample : VO01E111 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: May 13 14:29 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
42)	Benzene	8.12	78	40894	0.31	ug/l	98
43)	1,2-Dichloroethane	8.10	62	7854	0.30	ug/l	93
44)	Trichloroethene	9.08	130	9853	0.29	ug/l	97
45)	Methylcyclohexane	9.17	83	16634	0.31	ug/l	98
46)	1,2-Dichloropropane	9.36	63	9009	0.31	ug/l	91
47)	Bromodichloromethane	9.73	83	13928	0.34	ug/l	78
49)	Dibromomethane	9.82	93	3964	0.29	ug/l	85
52)	cis-1,3-Dichloropropene	10.63	75	13583	0.30	ug/l	94
55)	Toluene	11.17	91	43467	0.31	ug/l	97
57)	trans-1,3-Dichloropropene	11.49	75	9569	0.29	ug/l	95
58)	1,1,2-Trichloroethane	11.76	97	5879	0.32	ug/l	95
60)	1,3-Dichloropropane	12.21	76	9101	0.29	ug/l	94
61)	Tetrachloroethene	12.29	164	8630	0.29	ug/l	98
62)	Dibromochloromethane	12.68	129	7252	0.32	ug/l	99
63)	1,2-Dibromoethane	13.05	107	5114	0.28	ug/l	93
64)	1-Chlorohexane	13.32	91	18908	0.31	ug/l	95
65)	Chlorobenzene	13.79	112	25024	0.30	ug/l	99
66)	1,1,1,2-Tetrachloroethane	13.86	131	7766	0.30	ug/l	97
67)	Ethylbenzene	13.89	91	49666	0.31	ug/l	99
68)	m-Xylene & p-Xylene	14.03	91	73348	0.62	ug/l	99
69)	o-Xylene	14.84	91	39020	0.32	ug/l	95
70)	Styrene	14.93	104	29115	0.31	ug/l	95
71)	Isopropylbenzene	15.52	105	48372	0.30	ug/l	99
75)	1,1,2,2-Tetrachloroethane	15.86	83	6639	0.33	ug/l	100
78)	n-Propylbenzene	16.31	91	60366	0.31	ug/l	99
79)	Bromobenzene	16.38	156	8946	0.29	ug/l	100
80)	1,3,5-Trimethylbenzene	16.61	105	39112	0.31	ug/l	100
81)	2-Chlorotoluene	16.63	91	36258	0.31	ug/l	99
82)	4-Chlorotoluene	16.74	91	31256	0.30	ug/l	99
83)	tert-Butylbenzene	17.29	134	8128	0.31	ug/l	96
84)	1,2,4-Trimethylbenzene	17.36	105	37452	0.31	ug/l	99
85)	sec-Butylbenzene	17.66	105	53765	0.31	ug/l	98
86)	p-Isopropyltoluene	17.88	119	40416	0.31	ug/l	94
87)	1,3-Dichlorobenzene	18.03	146	17654	0.30	ug/l	99
88)	1,2,3-Trimethylbenzene	18.13	105	35674	0.31	ug/l	97
89)	1,4-Dichlorobenzene	18.19	146	18537	0.32	ug/l	97
90)	n-Butylbenzene	18.50	91	43628	0.32	ug/l	95
91)	1,2-Dichlorobenzene	18.72	146	14596	0.30	ug/l	96
93)	1,2,4-Trichlorobenzene	20.81	180	9721	0.28	ug/l	99
94)	Hexachlorobutadiene	20.96	225	5978	0.29	ug/l	94
95)	Naphthalene	21.15	128	11441	0.28	ug/l	94

(#) = qualifier out of range (m) = manual integration

SC 5/16/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV196.D Vial: 2
Acq On : 11 May 2024 10:58 am Operator: LPriet
Sample : VO01E111 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: May 13 14:29 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
96) 1,2,3-Trichlorobenzene	21.46	180	7501	0.28	ug/l	96

SW 5/15/24

(#) = qualifier out of range (m) = manual integration

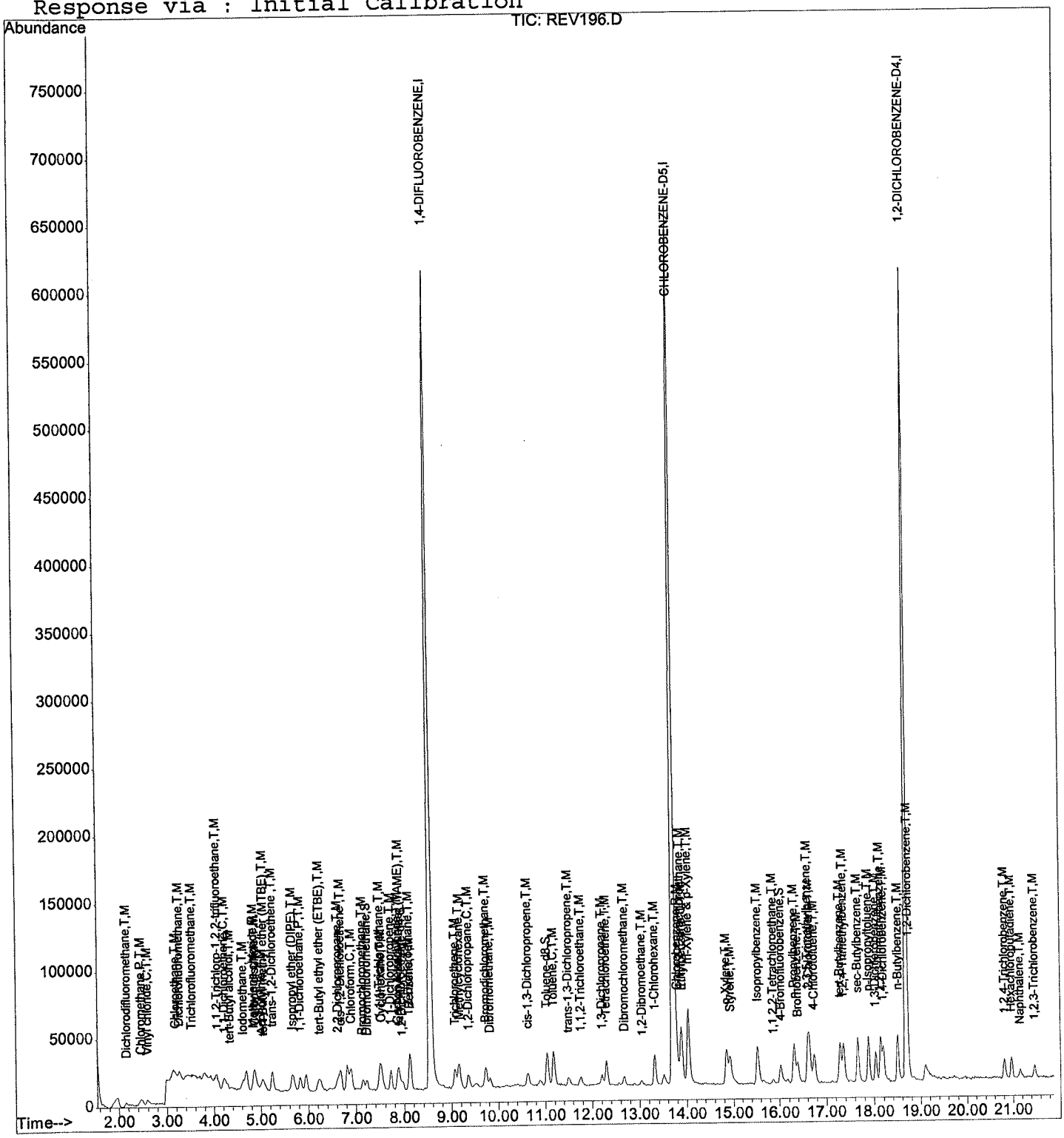
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E11\REV196.D
Acq On : 11 May 2024 10:58 am
Sample : VO01E111 0.03/0.15
Misc : 0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 14:29 2024

Vial: 2
Operator: LPriet
Inst : 01
Multiplr: 1.00

Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



Su 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV197.D Vial: 3
Acq On : 11 May 2024 11:27 am Operator: LPriet
Sample : VO01E112 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: May 13 14:30 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.54	114	958207	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	782724	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	292911	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	15713	0.53	ug/l	0.00
Spiked Amount 10.000			Recovery =	5.30%		
41) 1,2-Dichloroethane-d4	7.97	65	10333	0.51	ug/l	0.00
Spiked Amount 10.000			Recovery =	5.10%		
54) Toluene-d8	11.03	98	59771	0.51	ug/l	0.00
Spiked Amount 10.000			Recovery =	5.10%		
76) 4-Bromofluorobenzene	16.01	95	21050	0.53	ug/l	0.00
Spiked Amount 10.000			Recovery =	5.30%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.17	85	13823	0.54	ug/l	95
5) Chloromethane	2.47	50	19466	0.54	ug/l	94
6) Vinyl chloride	2.60	62	15272	0.51	ug/l	97
7) Bromomethane	3.14	94	27166	0.57	ug/l	73
8) Chloroethane	3.18	64	10907	0.50	ug/l	88
9) Dichlorofluoromethane	3.27	67	33964	0.55	ug/l	88
10) Trichlorofluoromethane	3.55	101	22334	0.55	ug/l	96
12) 1,1,2-Trichloro-1,2,2-trif	4.06	151	10414	0.52	ug/l	99
14) 1,1-Dichloroethene	4.22	61	26419	0.52	ug/l	97
15) tert-Butyl alcohol	4.35	59	11518	10.80	ug/l	75
16) Iodomethane	4.64	142	27278	0.50	ug/l	99
18) Methylene chloride	4.86	49	21078	0.51	ug/l	99
19) Carbon disulfide	4.87	76	52077	0.48	ug/l	98
20) Acrylonitrile	5.04	53	11053	2.49	ug/l	93
21) tert-Butyl methyl ether (M	5.05	73	26332	0.52	ug/l	92
22) trans-1,2-Dichloroethene	5.24	61	24833	0.50	ug/l	98
23) Isopropyl ether (DIPE)	5.67	45	53730	0.51	ug/l	97
24) Vinyl acetate	5.85	43	16307	0.45	ug/l	86
25) 1,1-Dichloroethane	5.82	63	29442	0.51	ug/l	97
27) tert-Butyl ethyl ether (ET	6.24	59	37115	0.49	ug/l	96
28) 2-Butanone	6.46	43	11997	2.24	ug/l	72
29) 2,2-Dichloropropane	6.62	77	25455	0.53	ug/l	98
30) cis-1,2-Dichloroethene	6.68	96	20337	0.51	ug/l	99
31) Chloroform	6.90	83	32100	0.55	ug/l	99
32) Bromochloromethane	7.14	49	11696	0.51	ug/l	95
35) 1,1,1-Trichloroethane	7.50	97	25812	0.53	ug/l	98
36) Cyclohexane	7.52	84	26045	0.54	ug/l	94

(#) = qualifier out of range (m) = manual integration
REV197.D VO01E11.M Mon May 13 14:30:15 2024 Page 1

SM 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV197.D Vial: 3
Acq On : 11 May 2024 11:27 am Operator: LPriet
Sample : VO01E112 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: May 13 14:30 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
38)	1,1-Dichloropropene	7.72	110	8678	0.52 ug/l	98
39)	Carbon tetrachloride	7.88	119	18823	0.51 ug/l	98
40)	tert-Amyl methyl ether (TA	7.88	73	30034	0.51 ug/l	99
42)	Benzene	8.13	78	67162	0.52 ug/l	99
43)	1,2-Dichloroethane	8.10	62	12935	0.50 ug/l	96
44)	Trichloroethene	9.08	130	16301	0.49 ug/l	93
45)	Methylcyclohexane	9.17	83	28860	0.55 ug/l	98
46)	1,2-Dichloropropane	9.36	63	15082	0.53 ug/l	92
47)	Bromodichloromethane	9.73	83	21158	0.53 ug/l	92
49)	Dibromomethane	9.83	93	6952	0.51 ug/l	88
52)	cis-1,3-Dichloropropene	10.63	75	21629	0.49 ug/l	99
55)	Toluene	11.17	91	74965	0.54 ug/l	95
57)	trans-1,3-Dichloropropene	11.49	75	15855	0.49 ug/l	96
58)	1,1,2-Trichloroethane	11.76	97	8909	0.49 ug/l	95
60)	1,3-Dichloropropane	12.20	76	15204	0.49 ug/l	97
61)	Tetrachloroethene	12.31	164	15270	0.53 ug/l	99
62)	Dibromochloromethane	12.66	129	11514	0.52 ug/l	99
63)	1,2-Dibromoethane	13.05	107	8602	0.48 ug/l	99
64)	1-Chlorohexane	13.31	91	32200	0.54 ug/l	99
65)	Chlorobenzene	13.79	112	42586	0.51 ug/l	99
66)	1,1,1,2-Tetrachloroethane	13.86	131	12904	0.51 ug/l	99
67)	Ethylbenzene	13.88	91	84216	0.53 ug/l	99
68)	m-Xylene & p-Xylene	14.03	91	123954	1.07 ug/l	99
69)	o-Xylene	14.84	91	63511	0.53 ug/l	99
70)	Styrene	14.91	104	47295	0.51 ug/l	98
71)	Isopropylbenzene	15.52	105	83169	0.53 ug/l	98
73)	Bromoform	15.57	173	2997	0.58 ug/l	70
75)	1,1,2,2-Tetrachloroethane	15.86	83	9761	0.50 ug/l	94
77)	1,2,3-Trichloropropane	16.17	110	2065	0.41 ug/l	98
78)	n-Propylbenzene	16.31	91	102429	0.54 ug/l	99
79)	Bromobenzene	16.38	156	15359	0.51 ug/l	98
80)	1,3,5-Trimethylbenzene	16.60	105	65890	0.54 ug/l	99
81)	2-Chlorotoluene	16.63	91	62476	0.54 ug/l	99
82)	4-Chlorotoluene	16.74	91	53625	0.53 ug/l	100
83)	tert-Butylbenzene	17.29	134	13038	0.51 ug/l	98
84)	1,2,4-Trimethylbenzene	17.36	105	62834	0.53 ug/l	94
85)	sec-Butylbenzene	17.66	105	90100	0.54 ug/l	99
86)	p-Isopropyltoluene	17.88	119	70430	0.55 ug/l	95
87)	1,3-Dichlorobenzene	18.03	146	30579	0.53 ug/l	97
88)	1,2,3-Trimethylbenzene	18.13	105	60108	0.54 ug/l	97
89)	1,4-Dichlorobenzene	18.19	146	30059	0.54 ug/l	97

(#) = qualifier out of range (m) = manual integration SC 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV197.D Vial: 3
Acq On : 11 May 2024 11:27 am Operator: LPriet
Sample : VO01E112 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: May 13 14:30 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
90) n-Butylbenzene	18.49	91	72685	0.54	ug/l	98
91) 1,2-Dichlorobenzene	18.72	146	24372	0.52	ug/l	97
93) 1,2,4-Trichlorobenzene	20.81	180	16768	0.49	ug/l	98
94) Hexachlorobutadiene	20.96	225	10138	0.50	ug/l	96
95) Naphthalene	21.15	128	19046	0.48	ug/l	100
96) 1,2,3-Trichlorobenzene	21.48	180	12506	0.48	ug/l	96

Sm 5/15/24

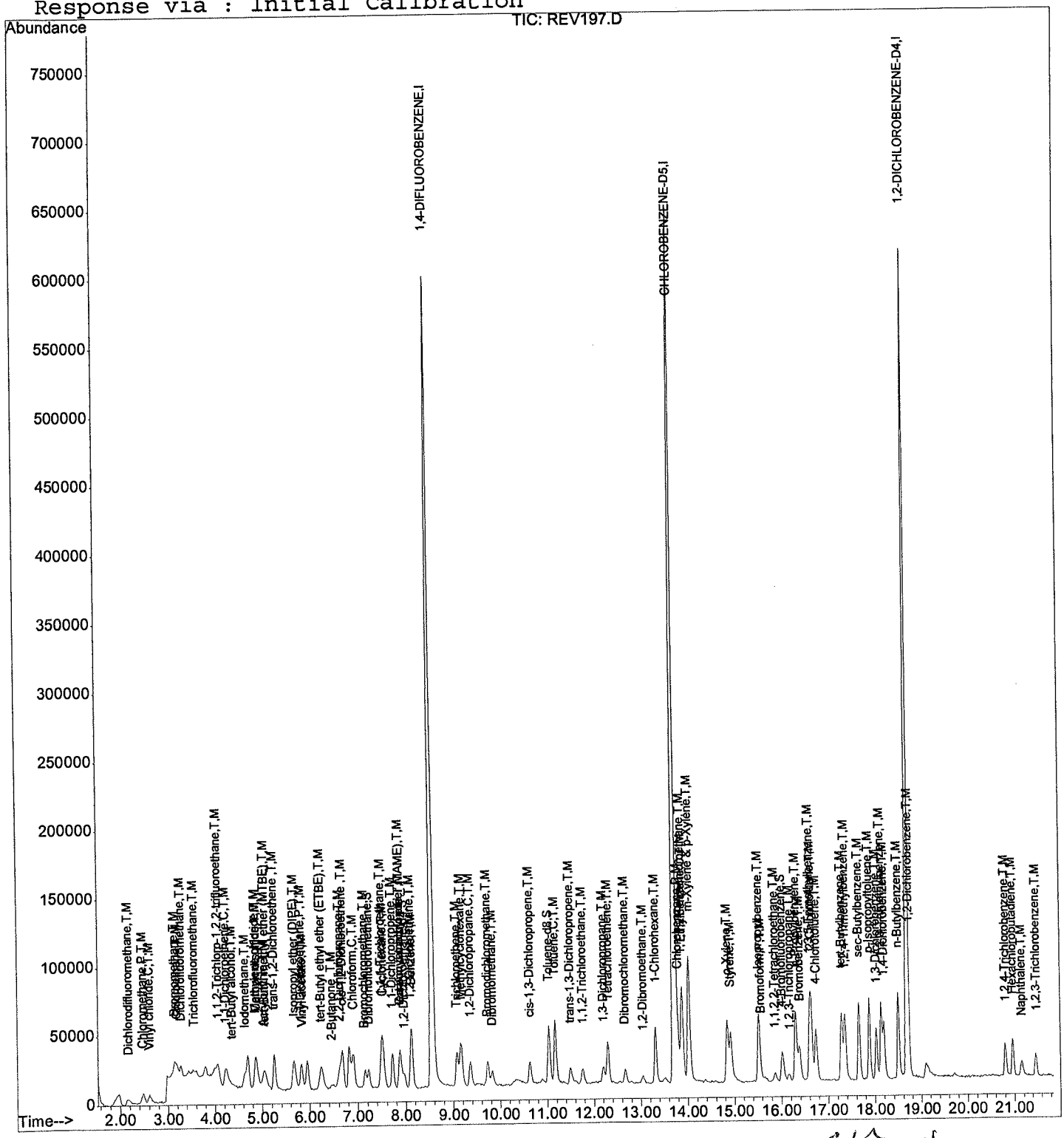
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E11\REV197.D
Acq On : 11 May 2024 11:27 am
Sample : VO01E112 0.05/0.25
Misc : 0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 14:30 2024

Vial: 3
Operator: LPriet
Inst : 01
Multiplr: 1.00
Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV198.D Vial: 4
Acq On : 11 May 2024 11:56 am Operator: LPriet
Sample : VO01E113 0.1/0.5 Inst : 01
Misc : 1ppb 8260/5ppb KET-AA/25ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:30 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.54	114	938282	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	769560	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	301168	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	27033	0.93	ug/l	0.00
Spiked Amount 10.000			Recovery =	9.30%		
41) 1,2-Dichloroethane-d4	7.97	65	18064	0.91	ug/l	0.00
Spiked Amount 10.000			Recovery =	9.10%		
54) Toluene-d8	11.03	98	106585	0.92	ug/l	0.00
Spiked Amount 10.000			Recovery =	9.20%		
76) 4-Bromofluorobenzene	16.01	95	38225	0.93	ug/l	0.00
Spiked Amount 10.000			Recovery =	9.30%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.16	85	23088	0.92	ug/l	94
5) Chloromethane	2.46	50	33932	0.97	ug/l	95
6) Vinyl chloride	2.60	62	26741	0.91	ug/l	96
7) Bromomethane	3.14	94	40909	0.99	ug/l	78
8) Chloroethane	3.18	64	20092	0.95	ug/l	95
9) Dichlorofluoromethane	3.27	67	59133	0.98	ug/l	89
10) Trichlorofluoromethane	3.54	101	38039	0.96	ug/l	99
12) 1,1,2-Trichloro-1,2,2-trif	4.07	151	18470	0.93	ug/l	97
13) Acetone	4.06	43	22798	6.66	ug/l	97
14) 1,1-Dichloroethene	4.24	61	45534	0.91	ug/l	98
15) tert-Butyl alcohol	4.35	59	24124	23.10	ug/l	96
16) Iodomethane	4.64	142	49230	0.92	ug/l	99
18) Methylene chloride	4.86	49	39235	0.98	ug/l	97
19) Carbon disulfide	4.89	76	100956	0.94	ug/l	98
20) Acrylonitrile	5.04	53	20752	4.78	ug/l	96
21) tert-Butyl methyl ether (M	5.07	73	46754	0.95	ug/l	93
22) trans-1,2-Dichloroethene	5.24	61	46060	0.96	ug/l	98
23) Isopropyl ether (DIPE)	5.67	45	97086	0.94	ug/l	99
24) Vinyl acetate	5.85	43	29673	0.84	ug/l	95
25) 1,1-Dichloroethane	5.84	63	53046	0.94	ug/l	99
27) tert-Butyl ethyl ether (ET	6.24	59	70971	0.96	ug/l	99
28) 2-Butanone	6.46	43	22810	4.34	ug/l	98
29) 2,2-Dichloropropane	6.64	77	44935	0.95	ug/l	99
30) cis-1,2-Dichloroethene	6.70	96	36770	0.95	ug/l	100
31) Chloroform	6.90	83	55743	0.97	ug/l	99
32) Bromochloromethane	7.15	49	20957	0.93	ug/l	97
35) 1,1,1-Trichloroethane	7.50	97	45525	0.95	ug/l	98

(#) = qualifier out of range (m) = manual integration

SA 5/16/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV198.D
Acq On : 11 May 2024 11:56 am
Sample : VO01E113 0.1/0.5
Misc : 1ppb 8260/5ppb KET-AA/25ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 14:30 2024

Vial: 4
Operator: LPriet
Inst : 01
Multiplr: 1.00
Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
36) Cyclohexane	7.52	84	44404	0.95 ug/l	94
38) 1,1-Dichloropropene	7.72	110	15802	0.97 ug/l	96
39) Carbon tetrachloride	7.88	119	33069	0.92 ug/l	99
40) tert-Amyl methyl ether (TA	7.90	73	55848	0.97 ug/l	96
42) Benzene	8.13	78	118978	0.95 ug/l	100
43) 1,2-Dichloroethane	8.10	62	23808	0.94 ug/l	98
44) Trichloroethene	9.08	130	29954	0.92 ug/l	98
45) Methylcyclohexane	9.17	83	50363	0.98 ug/l	98
46) 1,2-Dichloropropane	9.36	63	25645	0.91 ug/l	99
47) Bromodichloromethane	9.73	83	36838	0.95 ug/l	93
49) Dibromomethane	9.83	93	12791	0.97 ug/l	94
50) 2-Chloroethyl vinyl ether	10.26	63	6310	0.89 ug/l	89
51) 4-Methyl-2-pentanone	10.31	43	44214	5.73 ug/l	98
52) cis-1,3-Dichloropropene	10.63	75	40679	0.93 ug/l	98
55) Toluene	11.17	91	127757	0.93 ug/l	99
56) Ethyl methacrylate	11.54	69	17884	0.87 ug/l	84
57) trans-1,3-Dichloropropene	11.49	75	28905	0.91 ug/l	100
58) 1,1,2-Trichloroethane	11.76	97	16916	0.95 ug/l	99
59) 2-Hexanone	11.92	43	11666	6.13 ug/l	79
60) 1,3-Dichloropropane	12.20	76	28770	0.95 ug/l	100
61) Tetrachloroethene	12.31	164	26996	0.95 ug/l	97
62) Dibromochloromethane	12.66	129	20338	0.93 ug/l	98
63) 1,2-Dibromoethane	13.03	107	16471	0.93 ug/l	99
64) 1-Chlorohexane	13.31	91	54872	0.93 ug/l	99
65) Chlorobenzene	13.79	112	77497	0.95 ug/l	98
66) 1,1,1,2-Tetrachloroethane	13.86	131	24060	0.96 ug/l	96
67) Ethylbenzene	13.88	91	146785	0.94 ug/l	99
68) m-Xylene & p-Xylene	14.03	91	218771	1.92 ug/l	98
69) o-Xylene	14.84	91	113075	0.96 ug/l	98
70) Styrene	14.91	104	87190	0.96 ug/l	100
71) Isopropylbenzene	15.52	105	145909	0.94 ug/l	100
73) Bromoform	15.57	173	7931	0.98 ug/l	88
74) trans-1,4-Dichloro-2-buten	15.66	53	4400	0.85 ug/l	88
75) 1,1,2,2-Tetrachloroethane	15.86	83	18640	0.93 ug/l	99
77) 1,2,3-Trichloropropane	16.14	110	4598	0.90 ug/l	94
78) n-Propylbenzene	16.29	91	177771	0.91 ug/l	99
79) Bromobenzene	16.38	156	28202	0.91 ug/l	99
80) 1,3,5-Trimethylbenzene	16.60	105	112460	0.90 ug/l	97
81) 2-Chlorotoluene	16.63	91	111646	0.95 ug/l	100
82) 4-Chlorotoluene	16.74	91	93055	0.89 ug/l	99
83) tert-Butylbenzene	17.29	134	23977	0.91 ug/l	99

(#) = qualifier out of range (m) = manual integration

SA 5/15/24

Data File : D:\HPCHEM\1\DATA\24E11\REV198.D Vial: 4
Acq On : 11 May 2024 11:56 am Operator: LPriet
Sample : VO01E113 0.1/0.5 Inst : 01
Misc : 1ppb 8260/5ppb KET-AA/25ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:30 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
84)	1,2,4-Trimethylbenzene	17.36	105	112239	0.92	ug/l	98
85)	sec-Butylbenzene	17.66	105	155515	0.90	ug/l	100
86)	p-Isopropyltoluene	17.88	119	121109	0.91	ug/l	97
87)	1,3-Dichlorobenzene	18.03	146	54062	0.92	ug/l	100
88)	1,2,3-Trimethylbenzene	18.13	105	107510	0.94	ug/l	99
89)	1,4-Dichlorobenzene	18.19	146	54049	0.94	ug/l	99
90)	n-Butylbenzene	18.49	91	126285	0.92	ug/l	99
91)	1,2-Dichlorobenzene	18.72	146	45597	0.95	ug/l	100
92)	1,2-Dibromo-3-chloropropan	19.71	157	2008	1.14	ug/l	82
93)	1,2,4-Trichlorobenzene	20.80	180	31265	0.89	ug/l	96
94)	Hexachlorobutadiene	20.97	225	18414	0.88	ug/l	96
95)	Naphthalene	21.15	128	36313	0.88	ug/l	99
96)	1,2,3-Trichlorobenzene	21.46	180	23830	0.90	ug/l	98

Sa 5/15/24

(#) = qualifier out of range (m) = manual integration

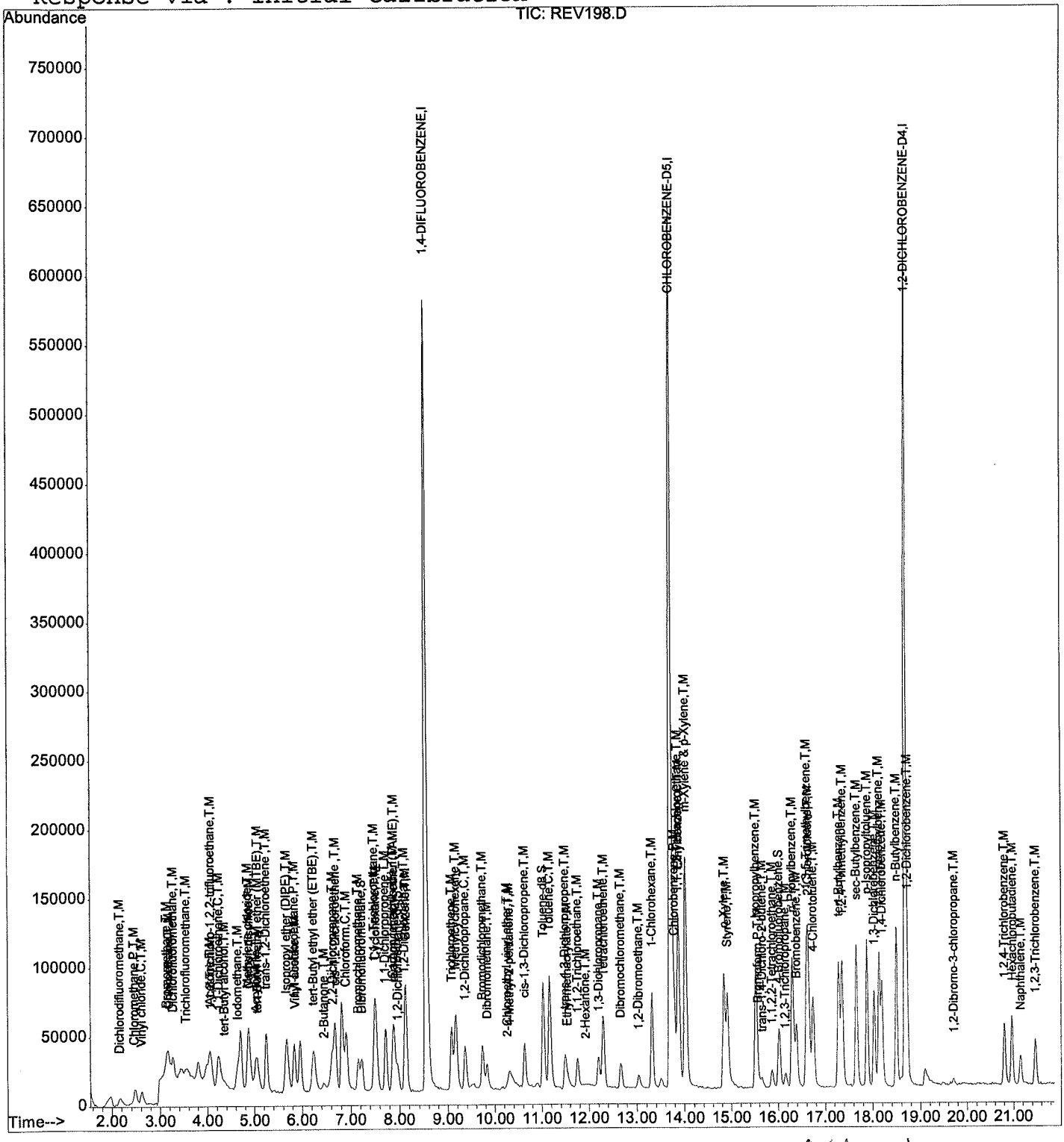
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E11\REV198.D
Acq On : 11 May 2024 11:56 am
Sample : VO01E113 0.1/0.5
Misc : 1ppb 8260/5ppb KET-AA/25ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 14:30 2024

Vial: 4
Operator: LPriet
Inst : 01
Multiplr: 1.00

Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



SH 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV199.D
Acq On : 11 May 2024 12:30 pm
Sample : VO01E114 0.2/1.0
Misc : 2ppb 8260/10ppb KET-AA/50ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 13:54 2024

Vial: 5
Operator: LPriet
Inst : 01
Multiplr: 1.00
Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.55	114	923954	10.00 ug/l	0.00
53) CHLOROBENZENE-D5	13.72	117	742613	10.00 ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	293562	10.00 ug/l	0.00
System Monitoring Compounds					
34) Dibromofluoromethane	7.21	111	60611	2.12 ug/l	-0.02
Spiked Amount 10.000			Recovery =	21.20%	
41) 1,2-Dichloroethane-d4	7.95	65	42296	2.17 ug/l	-0.01
Spiked Amount 10.000			Recovery =	21.70%	
54) Toluene-d8	11.02	98	240432	2.16 ug/l	-0.01
Spiked Amount 10.000			Recovery =	21.60%	
76) 4-Bromofluorobenzene	16.01	95	81025	2.03 ug/l	0.00
Spiked Amount 10.000			Recovery =	20.30%	
Target Compounds					Qvalue
3) Dichlorodifluoromethane	2.15	85	50374	2.04 ug/l	98
5) Chloromethane	2.47	50	72647	2.10 ug/l	93
6) Vinyl chloride	2.60	62	62031	2.15 ug/l	97
7) Bromomethane	3.14	94	74605	2.01 ug/l	87
8) Chloroethane	3.18	64	40122	1.92 ug/l	98
9) Dichlorofluoromethane	3.27	67	119218	2.01 ug/l	96
10) Trichlorofluoromethane	3.54	101	81560	2.09 ug/l	99
11) Acrolein	3.98	56	20592	9.92 ug/l	89
12) 1,1,2-Trichloro-1,2,2-trif	4.07	151	42426	2.18 ug/l	100
13) Acetone	4.04	43	34198	10.14 ug/l	99
14) 1,1-Dichloroethene	4.22	61	101014	2.05 ug/l	98
15) tert-Butyl alcohol	4.34	59	52952	51.48 ug/l	92
16) Iodomethane	4.64	142	105323	1.99 ug/l	100
17) Methyl acetate	4.65	43	21059	2.29 ug/l	89
18) Methylene chloride	4.84	49	80640	2.04 ug/l	98
19) Carbon disulfide	4.87	76	207998	1.97 ug/l	99
20) Acrylonitrile	5.02	53	40810	9.54 ug/l	94
21) tert-Butyl methyl ether (M	5.05	73	98170	2.03 ug/l	99
22) trans-1,2-Dichloroethene	5.24	61	96611	2.03 ug/l	99
23) Isopropyl ether (DIPE)	5.66	45	200708	1.98 ug/l	100
24) Vinyl acetate	5.84	43	66565	1.91 ug/l	97
25) 1,1-Dichloroethane	5.82	63	112928	2.03 ug/l	99
27) tert-Butyl ethyl ether (ET	6.24	59	152096	2.09 ug/l	99
28) 2-Butanone	6.43	43	46317	8.95 ug/l	99
29) 2,2-Dichloropropane	6.62	77	94455	2.02 ug/l	99
30) cis-1,2-Dichloroethene	6.68	96	75331	1.97 ug/l	99
31) Chloroform	6.90	83	109165	1.93 ug/l	99

(#) = qualifier out of range (m) = manual integration

SA 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV199.D
Acq On : 11 May 2024 12:30 pm
Sample : VO01E114 0.2/1.0
Misc : 2ppb 8260/10ppb KET-AA/50ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 13:54 2024

Vial: 5
Operator: LPriet
Inst : 01
Multiplr: 1.00

Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) Bromochloromethane	7.14	49	44566	2.01 ug/l	100
33) Tetrahydrofuran	7.20	42	6950	2.12 ug/l	84
35) 1,1,1-Trichloroethane	7.49	97	94535	2.00 ug/l	99
36) Cyclohexane	7.51	84	97188	2.11 ug/l	97
38) 1,1-Dichloropropene	7.72	110	32679	2.03 ug/l	100
39) Carbon tetrachloride	7.86	119	71508	2.03 ug/l	98
40) tert-Amyl methyl ether (TA	7.88	73	115389	2.04 ug/l	97
42) Benzene	8.12	78	248582	2.01 ug/l	100
43) 1,2-Dichloroethane	8.10	62	50716	2.04 ug/l	99
44) Trichloroethene	9.06	130	63296	1.98 ug/l	98
45) Methylcyclohexane	9.15	83	107421	2.12 ug/l	99
46) 1,2-Dichloropropane	9.35	63	54414	1.97 ug/l	98
47) Bromodichloromethane	9.73	83	75727	1.98 ug/l	99
48) 1,4-Dioxane	9.82	88	3445	30.47 ug/l	71
49) Dibromomethane	9.82	93	26199	2.01 ug/l	97
50) 2-Chloroethyl vinyl ether	10.25	63	13477	1.92 ug/l	95
51) 4-Methyl-2-pentanone	10.29	43	96326	9.38 ug/l	98
52) cis-1,3-Dichloropropene	10.62	75	84540	1.97 ug/l	99
55) Toluene	11.17	91	267463	2.03 ug/l	100
56) Ethyl methacrylate	11.49	69	38804	1.96 ug/l	97
57) trans-1,3-Dichloropropene	11.48	75	61587	2.01 ug/l	97
58) 1,1,2-Trichloroethane	11.75	97	35305	2.04 ug/l	99
59) 2-Hexanone	11.83	43	38468	9.25 ug/l	97
60) 1,3-Dichloropropane	12.19	76	60220	2.05 ug/l	100
61) Tetrachloroethene	12.29	164	56394	2.06 ug/l	100
62) Dibromochloromethane	12.66	129	41132	1.95 ug/l	98
63) 1,2-Dibromoethane	13.03	107	34770	2.04 ug/l	98
64) 1-Chlorohexane	13.32	91	117841	2.07 ug/l	99
65) Chlorobenzene	13.79	112	158702	2.02 ug/l	99
66) 1,1,1,2-Tetrachloroethane	13.86	131	48976	2.02 ug/l	99
67) Ethylbenzene	13.88	91	304664	2.02 ug/l	99
68) m-Xylene & p-Xylene	14.01	91	450609	4.09 ug/l	99
69) o-Xylene	14.84	91	231237	2.04 ug/l	99
70) Styrene	14.92	104	177724	2.02 ug/l	99
71) Isopropylbenzene	15.52	105	305906	2.05 ug/l	99
73) Bromoform	15.57	173	21027	2.08 ug/l	97
74) trans-1,4-Dichloro-2-buten	15.64	53	9849	1.94 ug/l	85
75) 1,1,2,2-Tetrachloroethane	15.86	83	38426	1.97 ug/l	99
77) 1,2,3-Trichloropropane	16.16	110	10163	2.03 ug/l	95
78) n-Propylbenzene	16.29	91	370739	1.94 ug/l	100
79) Bromobenzene	16.38	156	58783	1.95 ug/l	100

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24E11\REV199.D Vial: 5
Acq On : 11 May 2024 12:30 pm Operator: LPriet
Sample : VO01E114 0.2/1.0 Inst : 01
Misc : 2ppb 8260/10ppb KET-AA/50ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:54 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
80) 1,3,5-Trimethylbenzene	16.60	105	237589	1.95 ug/l	98
81) 2-Chlorotoluene	16.63	91	219062	1.91 ug/l	95
82) 4-Chlorotoluene	16.74	91	206396	2.03 ug/l	97
83) tert-Butylbenzene	17.29	134	49658	1.94 ug/l	98
84) 1,2,4-Trimethylbenzene	17.36	105	233094	1.95 ug/l	98
85) sec-Butylbenzene	17.66	105	332693	1.98 ug/l	99
86) p-Isopropyltoluene	17.88	119	260761	2.02 ug/l	99
87) 1,3-Dichlorobenzene	18.03	146	112316	1.96 ug/l	99
88) 1,2,3-Trimethylbenzene	18.13	105	219653	1.97 ug/l	99
89) 1,4-Dichlorobenzene	18.19	146	110373	1.96 ug/l	100
90) n-Butylbenzene	18.49	91	265074	1.98 ug/l	99
91) 1,2-Dichlorobenzene	18.72	146	94251	2.00 ug/l	99
92) 1,2-Dibromo-3-chloropropan	19.72	157	5091	2.12 ug/l	97
93) 1,2,4-Trichlorobenzene	20.80	180	67009	1.95 ug/l	98
94) Hexachlorobutadiene	20.96	225	39320	1.92 ug/l	97
95) Naphthalene	21.15	128	77920	1.94 ug/l	99
96) 1,2,3-Trichlorobenzene	21.46	180	51155	1.98 ug/l	100

SM 5/15/24

(#) = qualifier out of range (m) = manual integration

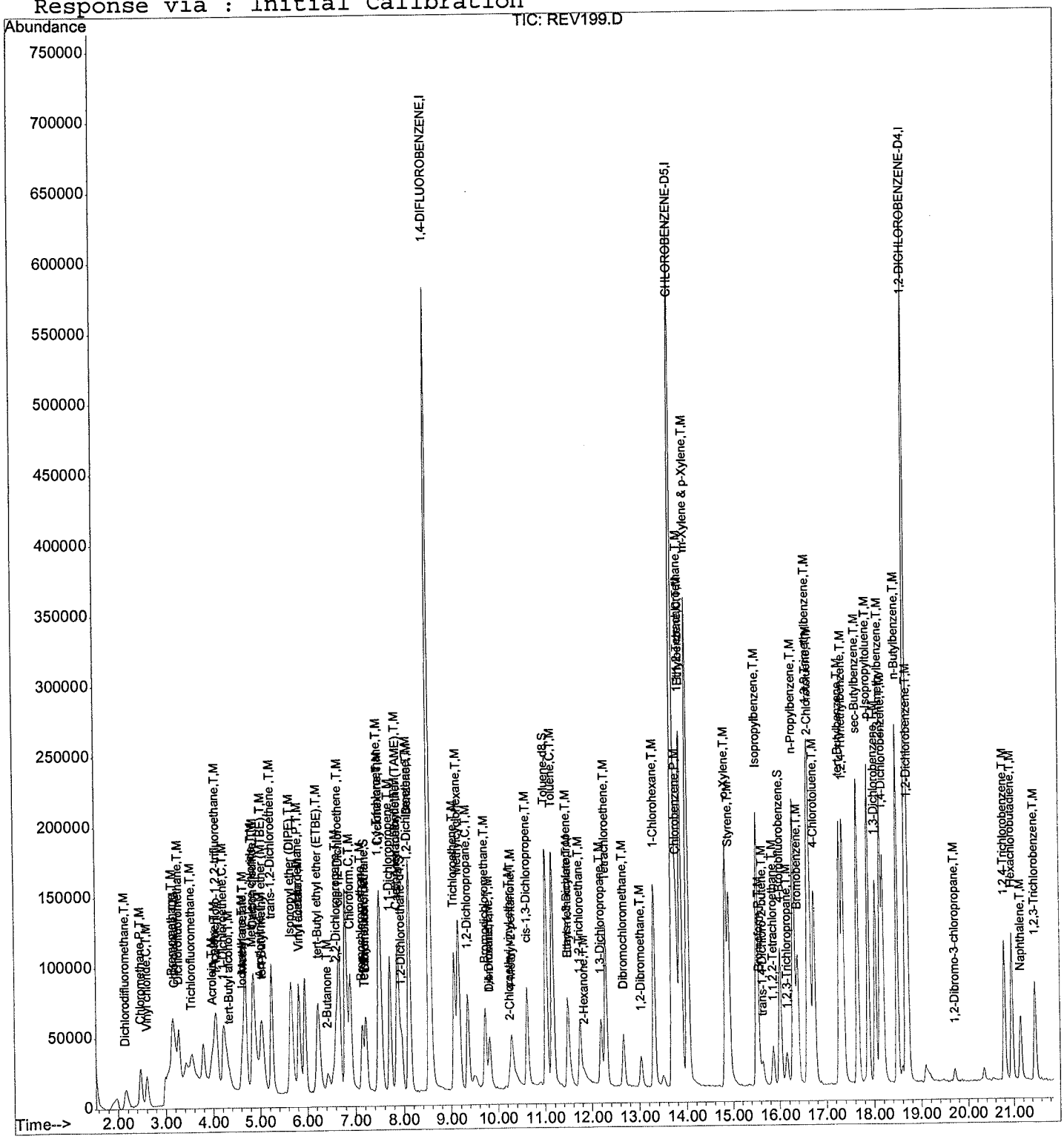
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E11\REV199.D
Acq On : 11 May 2024 12:30 pm
Sample : VO01E114 0.2/1.0
Misc : 2ppb 8260/10ppb KET-AA/50ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 13:54 2024

Vial: 5
Operator: LPriet
Inst : 01
Multiplr: 1.00

Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV200.D Vial: 6
Acq On : 11 May 2024 12:59 pm Operator: LPriet
Sample : VO01E115 0.5/2.5 Inst : 01
Misc : 5ppb 8260/25ppb KET-AA/125ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:56 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.54	114	900656	10.00 ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	744900	10.00 ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	284539	10.00 ug/l	0.00
System Monitoring Compounds					
34) Dibromofluoromethane	7.23	111	143298	5.14 ug/l	0.00
Spiked Amount 10.000			Recovery =	51.40%	
41) 1,2-Dichloroethane-d4	7.97	65	97715	5.14 ug/l	0.00
Spiked Amount 10.000			Recovery =	51.40%	
54) Toluene-d8	11.03	98	569302	5.10 ug/l	0.00
Spiked Amount 10.000			Recovery =	51.00%	
76) 4-Bromofluorobenzene	16.01	95	190707	4.92 ug/l	0.00
Spiked Amount 10.000			Recovery =	49.20%	
Target Compounds					Qvalue
3) Dichlorodifluoromethane	2.18	85	119456	4.96 ug/l	98
5) Chloromethane	2.48	50	170900	5.06 ug/l	99
6) Vinyl chloride	2.60	62	151684	5.40 ug/l	98
7) Bromomethane	3.14	94	161543	4.74 ug/l	99
8) Chloroethane	3.18	64	101909	5.00 ug/l	100
9) Dichlorofluoromethane	3.27	67	272435	4.71 ug/l	98
10) Trichlorofluoromethane	3.55	101	192432	5.06 ug/l	98
11) Acrolein	3.98	56	50318	24.87 ug/l	98
12) 1,1,2-Trichloro-1,2,2-trif	4.07	151	95572	5.03 ug/l	99
13) Acetone	4.06	43	80312	24.43 ug/l	100
14) 1,1-Dichloroethene	4.24	61	236110	4.92 ug/l	100
15) tert-Butyl alcohol	4.34	59	126289	125.96 ug/l	98
16) Iodomethane	4.64	142	253734	4.93 ug/l	100
17) Methyl acetate	4.65	43	45270	5.05 ug/l	100
18) Methylene chloride	4.86	49	189706	4.92 ug/l	98
19) Carbon disulfide	4.89	76	519242	5.06 ug/l	99
20) Acrylonitrile	5.02	53	104491	25.05 ug/l	99
21) tert-Butyl methyl ether (M	5.07	73	232923	4.93 ug/l	98
22) trans-1,2-Dichloroethene	5.24	61	227623	4.92 ug/l	99
23) Isopropyl ether (DIPE)	5.67	45	486332	4.92 ug/l	99
24) Vinyl acetate	5.84	43	178828	5.27 ug/l	98
25) 1,1-Dichloroethane	5.84	63	265434	4.90 ug/l	100
27) tert-Butyl ethyl ether (ET	6.24	59	350636	4.95 ug/l	99
28) 2-Butanone	6.43	43	122252	24.23 ug/l	98
29) 2,2-Dichloropropane	6.62	77	221475	4.87 ug/l	100
30) cis-1,2-Dichloroethene	6.68	96	182793	4.91 ug/l	99
31) Chloroform	6.90	83	263399	4.78 ug/l	100

(#) = qualifier out of range (m) = manual integration

5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV200.D
Acq On : 11 May 2024 12:59 pm
Sample : VO01E115 0.5/2.5
Misc : 5ppb 8260/25ppb KET-AA/125ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 13:56 2024

Vial: 6
Operator: LPriet
Inst : 01
Multiplr: 1.00
Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.15	49	107126	4.95	ug/l	100
33)	Tetrahydrofuran	7.20	42	15395	4.82	ug/l	99
35)	1,1,1-Trichloroethane	7.50	97	223490	4.84	ug/l	100
36)	Cyclohexane	7.53	84	229091	5.10	ug/l	100
38)	1,1-Dichloropropene	7.72	110	75641	4.82	ug/l	99
39)	Carbon tetrachloride	7.88	119	164649	4.79	ug/l	99
40)	tert-Amyl methyl ether (TA	7.88	73	265148	4.81	ug/l	100
42)	Benzene	8.13	78	593170	4.93	ug/l	100
43)	1,2-Dichloroethane	8.10	62	119634	4.93	ug/l	100
44)	Trichloroethene	9.08	130	151454	4.87	ug/l	99
45)	Methylcyclohexane	9.17	83	246613	4.99	ug/l	98
46)	1,2-Dichloropropane	9.34	63	129424	4.81	ug/l	99
47)	Bromodichloromethane	9.73	83	180624	4.83	ug/l	99
48)	1,4-Dioxane	9.80	88	10209	92.63	ug/l	95
49)	Dibromomethane	9.82	93	62590	4.93	ug/l	96
50)	2-Chloroethyl vinyl ether	10.23	63	32624	4.78	ug/l	99
51)	4-Methyl-2-pentanone	10.28	43	302538	24.21	ug/l	100
52)	cis-1,3-Dichloropropene	10.62	75	205197	4.90	ug/l	100
55)	Toluene	11.17	91	638964	4.83	ug/l	99
56)	Ethyl methacrylate	11.46	69	93055	4.69	ug/l	97
57)	trans-1,3-Dichloropropene	11.48	75	150076	4.88	ug/l	99
58)	1,1,2-Trichloroethane	11.74	97	84096	4.86	ug/l	100
59)	2-Hexanone	11.79	43	161653	23.32	ug/l	98
60)	1,3-Dichloropropane	12.19	76	141872	4.83	ug/l	99
61)	Tetrachloroethene	12.29	164	131949	4.80	ug/l	99
62)	Dibromochloromethane	12.66	129	100908	4.77	ug/l	99
63)	1,2-Dibromoethane	13.03	107	84804	4.95	ug/l	98
64)	1-Chlorohexane	13.30	91	270570	4.74	ug/l	100
65)	Chlorobenzene	13.79	112	382775	4.85	ug/l	100
66)	1,1,1,2-Tetrachloroethane	13.86	131	116917	4.81	ug/l	99
67)	Ethylbenzene	13.88	91	730874	4.84	ug/l	100
68)	m-Xylene & p-Xylene	14.01	91	1083475	9.80	ug/l	99
69)	o-Xylene	14.84	91	543905	4.78	ug/l	100
70)	Styrene	14.90	104	426095	4.83	ug/l	99
71)	Isopropylbenzene	15.52	105	729567	4.87	ug/l	100
73)	Bromoform	15.55	173	52073	4.81	ug/l	98
74)	trans-1,4-Dichloro-2-buten	15.63	53	23167	4.72	ug/l	99
75)	1,1,2,2-Tetrachloroethane	15.86	83	90996	4.80	ug/l	100
77)	1,2,3-Trichloropropane	16.14	110	24020	4.96	ug/l	100
78)	n-Propylbenzene	16.29	91	891243	4.82	ug/l	100
79)	Bromobenzene	16.38	156	142872	4.88	ug/l	100

(#) = qualifier out of range (m) = manual integration

SU 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV200.D Vial: 6
Acq On : 11 May 2024 12:59 pm Operator: LPriet
Sample : VO01E115 0.5/2.5 Inst : 01
Misc : 5ppb 8260/25ppb KET-AA/125ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:56 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	568375	4.81	ug/l	100
81)	2-Chlorotoluene	16.63	91	534726	4.80	ug/l	100
82)	4-Chlorotoluene	16.72	91	491373	4.98	ug/l	99
83)	tert-Butylbenzene	17.29	134	119387	4.81	ug/l	100
84)	1,2,4-Trimethylbenzene	17.36	105	562027	4.86	ug/l	99
85)	sec-Butylbenzene	17.66	105	782171	4.81	ug/l	99
86)	p-Isopropyltoluene	17.88	119	604455	4.83	ug/l	100
87)	1,3-Dichlorobenzene	18.03	146	266427	4.79	ug/l	99
88)	1,2,3-Trimethylbenzene	18.13	105	523914	4.85	ug/l	99
89)	1,4-Dichlorobenzene	18.19	146	264166	4.84	ug/l	99
90)	n-Butylbenzene	18.49	91	624902	4.82	ug/l	100
91)	1,2-Dichlorobenzene	18.72	146	222834	4.89	ug/l	99
92)	1,2-Dibromo-3-chloropropan	19.71	157	13172	4.81	ug/l	96
93)	1,2,4-Trichlorobenzene	20.80	180	161262	4.85	ug/l	99
94)	Hexachlorobutadiene	20.96	225	94994	4.79	ug/l	99
95)	Naphthalene	21.15	128	187349	4.82	ug/l	99
96)	1,2,3-Trichlorobenzene	21.46	180	121965	4.87	ug/l	100

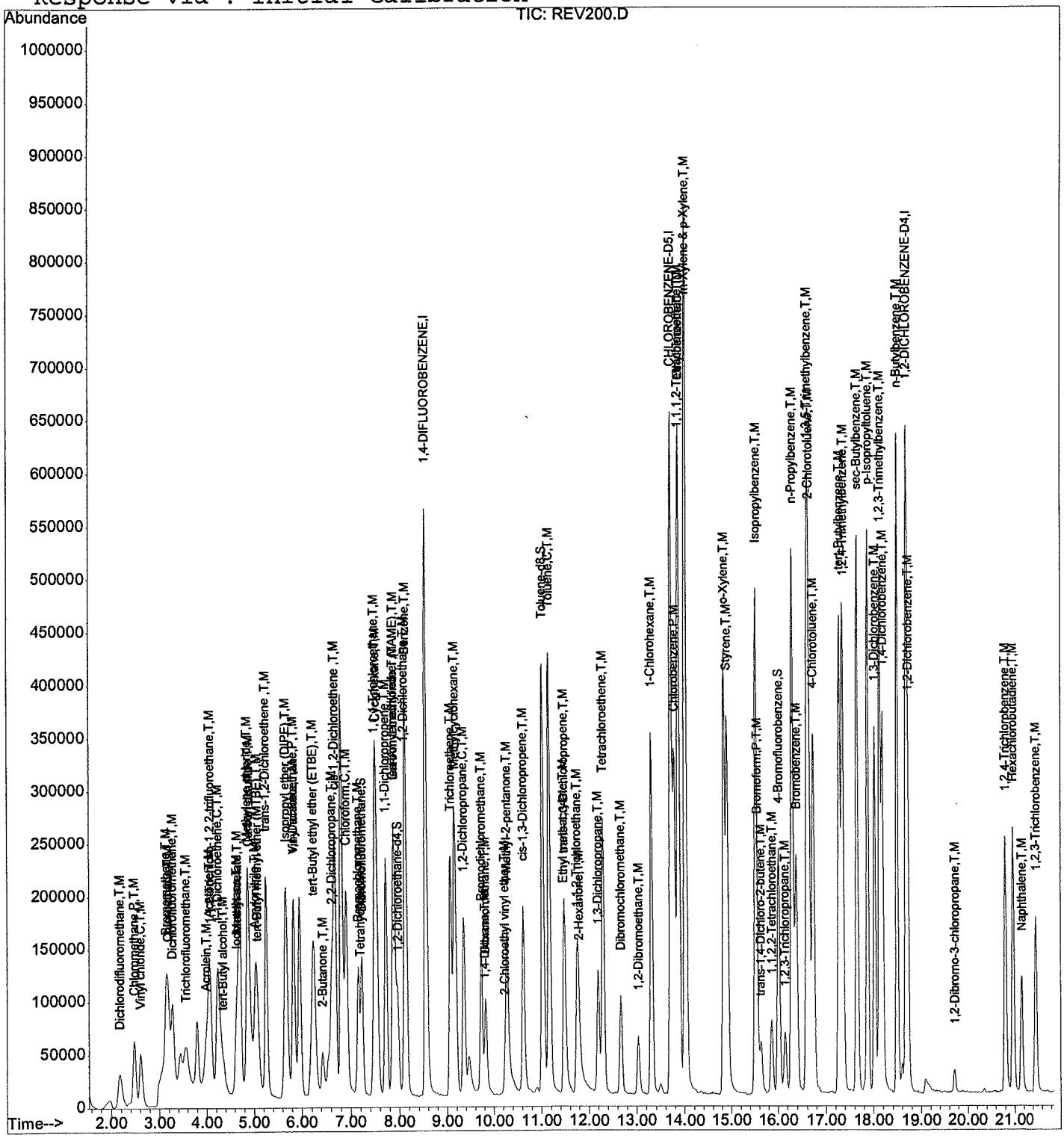
SU 5/15/24

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E11\REV200.D Vial: 6
Acq On : 11 May 2024 12:59 pm Operator: LPriet
Sample : VO01E115 0.5/2.5 Inst : 01
Misc : 5ppb 8260/25ppb KET-AA/125ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:56 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV201.D
Acq On : 11 May 2024 1:28 pm
Sample : VO01E116 1.0/5.0
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 13:58 2024

Vial: 7
Operator: LPriet
Inst : 01
Multiplr: 1.00
Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.54	114	920983	10.00	ug/l	0.00
53) CHLOROBENZENE-D5	13.71	117	742213	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	284055	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	258776	9.08	ug/l	0.00
Spiked Amount 10.000			Recovery =	90.80%		
41) 1,2-Dichloroethane-d4	7.97	65	170981	8.79	ug/l	0.00
Spiked Amount 10.000			Recovery =	87.90%		
54) Toluene-d8	11.03	98	1034495	9.30	ug/l	0.00
Spiked Amount 10.000			Recovery =	93.00%		
76) 4-Bromofluorobenzene	16.01	95	349924	9.04	ug/l	0.00
Spiked Amount 10.000			Recovery =	90.40%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.17	85	233807	9.49	ug/l	100
5) Chloromethane	2.46	50	319578	9.26	ug/l	100
6) Vinyl chloride	2.61	62	285699	9.94	ug/l	100
7) Bromomethane	3.14	94	303178	8.88	ug/l	100
8) Chloroethane	3.18	64	194643	9.34	ug/l	100
9) Dichlorofluoromethane	3.27	67	535368	9.04	ug/l	100
10) Trichlorofluoromethane	3.55	101	365519	9.40	ug/l	100
11) Acrolein	3.98	56	91543	44.25	ug/l	100
12) 1,1,2-Trichloro-1,2,2-trif	4.06	151	193689	9.97	ug/l	100
13) Acetone	4.06	43	141862	42.20	ug/l	100
14) 1,1-Dichloroethene	4.22	61	473083	9.63	ug/l	100
15) tert-Butyl alcohol	4.34	59	232900	227.17	ug/l	100
16) Iodomethane	4.64	142	502181	9.54	ug/l	100
17) Methyl acetate	4.65	43	77293	8.43	ug/l	100
18) Methylene chloride	4.86	49	367504	9.33	ug/l	100
19) Carbon disulfide	4.87	76	984042	9.37	ug/l	100
20) Acrylonitrile	5.02	53	196137	45.99	ug/l	100
21) tert-Butyl methyl ether (M	5.07	73	435419	9.01	ug/l	100
22) trans-1,2-Dichloroethene	5.24	61	438850	9.27	ug/l	100
23) Isopropyl ether (DIPE)	5.67	45	945894	9.35	ug/l	100
24) Vinyl acetate	5.82	43	316675	9.12	ug/l	100
25) 1,1-Dichloroethane	5.82	63	520416	9.40	ug/l	100
27) tert-Butyl ethyl ether (ET	6.24	59	667502	9.21	ug/l	100
28) 2-Butanone	6.41	43	244678	47.43	ug/l	100
29) 2,2-Dichloropropane	6.62	77	438788	9.43	ug/l	100
30) cis-1,2-Dichloroethene	6.68	96	363843	9.55	ug/l	100
31) Chloroform	6.90	83	508562	9.02	ug/l	100

(#) = qualifier out of range (m) = manual integration

5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV201.D Vial: 7
Acq On : 11 May 2024 1:28 pm Operator: LPriet
Sample : VO01E116 1.0/5.0 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:58 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.14	49	205550	9.28	ug/l	100
33)	Tetrahydrofuran	7.20	42	27463	8.42	ug/l	100
35)	1,1,1-Trichloroethane	7.49	97	444990	9.43	ug/l	100
36)	Cyclohexane	7.52	84	417453	9.08	ug/l	100
38)	1,1-Dichloropropene	7.72	110	150631	9.39	ug/l	100
39)	Carbon tetrachloride	7.88	119	336330	9.57	ug/l	100
40)	tert-Amyl methyl ether (TA	7.88	73	497165	8.82	ug/l	100
42)	Benzene	8.13	78	1153601	9.38	ug/l	100
43)	1,2-Dichloroethane	8.10	62	229577	9.25	ug/l	100
44)	Trichloroethene	9.06	130	307851	9.67	ug/l	100
45)	Methylcyclohexane	9.17	83	454050	8.98	ug/l	100
46)	1,2-Dichloropropane	9.34	63	256137	9.30	ug/l	100
47)	Bromodichloromethane	9.73	83	342146	8.95	ug/l	100
48)	1,4-Dioxane	9.79	88	20047	177.87	ug/l	100
49)	Dibromomethane	9.82	93	116361	8.96	ug/l	100
50)	2-Chloroethyl vinyl ether	10.23	63	63930	9.15	ug/l	100
51)	4-Methyl-2-pentanone	10.26	43	589994	43.70	ug/l	100
52)	cis-1,3-Dichloropropene	10.62	75	398855	9.31	ug/l	100
55)	Toluene	11.17	91	1262539	9.58	ug/l	100
56)	Ethyl methacrylate	11.46	69	182985	9.25	ug/l	100
57)	trans-1,3-Dichloropropene	11.48	75	289239	9.44	ug/l	100
58)	1,1,2-Trichloroethane	11.74	97	160672	9.31	ug/l	100
59)	2-Hexanone	11.76	43	335905	43.39	ug/l	100
60)	1,3-Dichloropropane	12.19	76	271863	9.28	ug/l	100
61)	Tetrachloroethene	12.29	164	266498	9.73	ug/l	100
62)	Dibromochloromethane	12.66	129	193517	9.19	ug/l	100
63)	1,2-Dibromoethane	13.03	107	159304	9.33	ug/l	100
64)	1-Chlorohexane	13.30	91	551589	9.69	ug/l	100
65)	Chlorobenzene	13.79	112	759554	9.67	ug/l	100
66)	1,1,1,2-Tetrachloroethane	13.86	131	232054	9.59	ug/l	100
67)	Ethylbenzene	13.88	91	1473355	9.79	ug/l	100
68)	m-Xylene & p-Xylene	14.01	91	2121368	19.26	ug/l	100
69)	o-Xylene	14.84	91	1078385	9.51	ug/l	100
70)	Styrene	14.90	104	842539	9.59	ug/l	100
71)	Isopropylbenzene	15.52	105	1453974	9.74	ug/l	100
73)	Bromoform	15.55	173	95720	8.57	ug/l	100
74)	trans-1,4-Dichloro-2-buten	15.63	53	44316	9.04	ug/l	100
75)	1,1,2,2-Tetrachloroethane	15.86	83	168234	8.90	ug/l	100
77)	1,2,3-Trichloropropane	16.14	110	45054	9.31	ug/l	99
78)	n-Propylbenzene	16.29	91	1790558	9.70	ug/l	100
79)	Bromobenzene	16.38	156	279576	9.57	ug/l	100

(#) = qualifier out of range (m) = manual integration

SM 5/15/24

Data File : D:\HPCHEM\1\DATA\24E11\REV201.D Vial: 7
Acq On : 11 May 2024 1:28 pm Operator: LPriet
Sample : VO01E116 1.0/5.0 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:58 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	1139657	9.66 ug/l	100
81)	2-Chlorotoluene	16.63	91	1060747	9.54 ug/l	100
82)	4-Chlorotoluene	16.72	91	963048	9.78 ug/l	100
83)	tert-Butylbenzene	17.29	134	239466	9.67 ug/l	100
84)	1,2,4-Trimethylbenzene	17.36	105	1122345	9.72 ug/l	100
85)	sec-Butylbenzene	17.66	105	1569792	9.68 ug/l	100
86)	p-Isopropyltoluene	17.88	119	1201659	9.61 ug/l	100
87)	1,3-Dichlorobenzene	18.03	146	533251	9.60 ug/l	100
88)	1,2,3-Trimethylbenzene	18.13	105	1019164	9.45 ug/l	100
89)	1,4-Dichlorobenzene	18.19	146	518636	9.53 ug/l	100
90)	n-Butylbenzene	18.49	91	1250551	9.65 ug/l	100
91)	1,2-Dichlorobenzene	18.72	146	424621	9.33 ug/l	100
92)	1,2-Dibromo-3-chloropropan	19.71	157	23773	8.27 ug/l	100
93)	1,2,4-Trichlorobenzene	20.80	180	314594	9.47 ug/l	100
94)	Hexachlorobutadiene	20.96	225	197705	9.99 ug/l	100
95)	Naphthalene	21.14	128	358996	9.26 ug/l	100
96)	1,2,3-Trichlorobenzene	21.46	180	236728	9.46 ug/l	100

SA 5/15/24

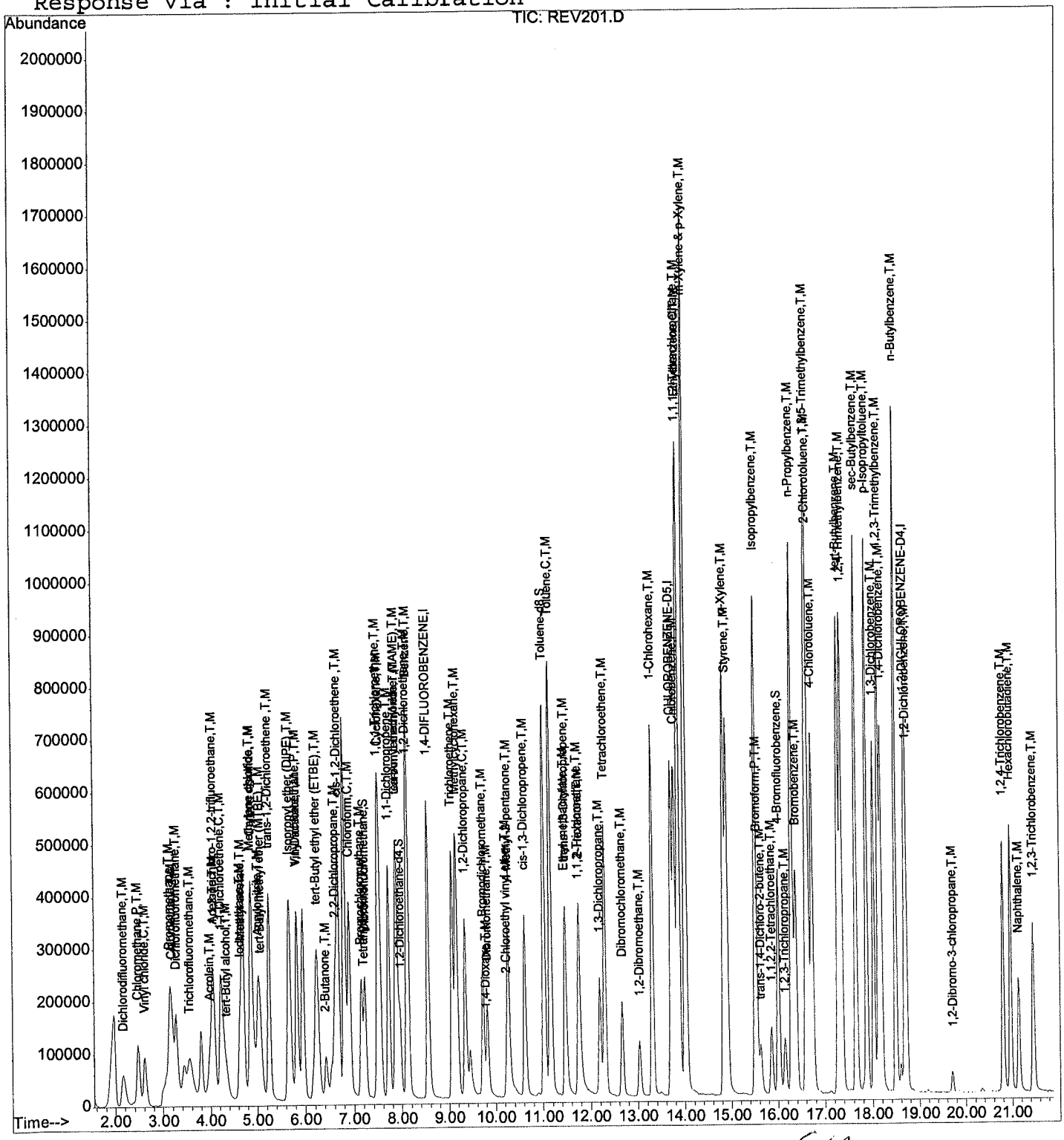
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E11\REV201.D
Acq On : 11 May 2024 1:28 pm
Sample : VO01E116 1.0/5.0
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 13:58 2024

Vial: 7
Operator: LPriet
Inst : 01
Multiplr: 1.00
Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV202.D Vial: 8
Acq On : 11 May 2024 1:58 pm Operator: LPriet
Sample : VO01E117 2.0/10 Inst : 01
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:00 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	816915	10.00	ug/l	0.02
53) CHLOROBENZENE-D5	13.73	117	679573	10.00	ug/l	0.02
72) 1,2-DICHLOROBENZENE-D4	18.69	152	256277	10.00	ug/l	0.02
System Monitoring Compounds						
34) Dibromofluoromethane	7.24	111	546945	21.63	ug/l	0.01
Spiked Amount 10.000			Recovery =	216.30%		
41) 1,2-Dichloroethane-d4	7.97	65	368310	21.36	ug/l	0.00
Spiked Amount 10.000			Recovery =	213.60%		
54) Toluene-d8	11.03	98	2143971	21.05	ug/l	0.00
Spiked Amount 10.000			Recovery =	210.50%		
76) 4-Bromofluorobenzene	16.03	95	741429	21.24	ug/l	0.02
Spiked Amount 10.000			Recovery =	212.40%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.17	85	443172	20.27	ug/l	99
5) Chloromethane	2.47	50	619334	20.24	ug/l	100
6) Vinyl chloride	2.61	62	541540	21.25	ug/l	100
7) Bromomethane	3.15	94	618346	20.69	ug/l	97
8) Chloroethane	3.20	64	385600	20.85	ug/l	99
9) Dichlorofluoromethane	3.29	67	1066762	20.31	ug/l	99
10) Trichlorofluoromethane	3.55	101	683028	19.81	ug/l	99
11) Acrolein	3.98	56	192986	105.17	ug/l	96
12) 1,1,2-Trichloro-1,2,2-trif	4.07	151	365492	21.21	ug/l	99
13) Acetone	4.06	43	284979	95.57	ug/l	99
14) 1,1-Dichloroethene	4.24	61	930390	21.35	ug/l	100
15) tert-Butyl alcohol	4.34	59	495292	544.64	ug/l	99
16) Iodomethane	4.65	142	1006828	21.55	ug/l	100
17) Methyl acetate	4.66	43	166847	20.52	ug/l	99
18) Methylene chloride	4.87	49	730623	20.90	ug/l	100
19) Carbon disulfide	4.89	76	2006384	21.54	ug/l	100
20) Acrylonitrile	5.04	53	392428	103.74	ug/l	100
21) tert-Butyl methyl ether (M	5.06	73	899904	21.00	ug/l	99
22) trans-1,2-Dichloroethene	5.26	61	902607	21.50	ug/l	99
23) Isopropyl ether (DIPE)	5.67	45	1935724	21.58	ug/l	99
24) Vinyl acetate	5.84	43	675084	21.93	ug/l	100
25) 1,1-Dichloroethane	5.84	63	1063100	21.66	ug/l	100
27) tert-Butyl ethyl ether (ET	6.25	59	1387307	21.59	ug/l	99
28) 2-Butanone	6.43	43	502145	109.75	ug/l	100
29) 2,2-Dichloropropane	6.64	77	865612	20.97	ug/l	100
30) cis-1,2-Dichloroethene	6.69	96	725941	21.48	ug/l	100
31) Chloroform	6.92	83	1028651	20.56	ug/l	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV202.D
Acq On : 11 May 2024 1:58 pm
Sample : VO01E117 2.0/10
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 14:00 2024

Vial: 8
Operator: LPriet
Inst : 01
Multiplr: 1.00
Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32) Bromochloromethane	7.15	49	418099	21.28	ug/l	99
33) Tetrahydrofuran	7.21	42	59689	20.62	ug/l	99
35) 1,1,1-Trichloroethane	7.51	97	890497	21.28	ug/l	100
36) Cyclohexane	7.54	84	839410	20.59	ug/l	100
38) 1,1-Dichloropropene	7.73	110	301701	21.21	ug/l	99
39) Carbon tetrachloride	7.89	119	658847	21.13	ug/l	99
40) tert-Amyl methyl ether (TA	7.89	73	1043076	20.86	ug/l	100
42) Benzene	8.15	78	2297893	21.05	ug/l	100
43) 1,2-Dichloroethane	8.12	62	472900	21.49	ug/l	99
44) Trichloroethene	9.08	130	611530	21.66	ug/l	99
45) Methylcyclohexane	9.17	83	904979	20.18	ug/l	100
46) 1,2-Dichloropropane	9.36	63	521244	21.35	ug/l	100
47) Bromodichloromethane	9.74	83	704865	20.80	ug/l	100
48) 1,4-Dioxane	9.79	88	43990	440.03	ug/l	99
49) Dibromomethane	9.83	93	243286	21.12	ug/l	99
50) 2-Chloroethyl vinyl ether	10.23	63	134190	21.65	ug/l	98
51) 4-Methyl-2-pentanone	10.28	43	1288906	103.66	ug/l	100
52) cis-1,3-Dichloropropene	10.63	75	818576	21.54	ug/l	100
55) Toluene	11.18	91	2491900	20.65	ug/l	100
56) Ethyl methacrylate	11.46	69	395514	21.84	ug/l	98
57) trans-1,3-Dichloropropene	11.49	75	603742	21.52	ug/l	100
58) 1,1,2-Trichloroethane	11.76	97	330926	20.94	ug/l	99
59) 2-Hexanone	11.77	43	767459	101.03	ug/l	100
60) 1,3-Dichloropropane	12.20	76	575688	21.46	ug/l	99
61) Tetrachloroethene	12.31	164	522743	20.84	ug/l	99
62) Dibromochloromethane	12.68	129	406460	21.07	ug/l	99
63) 1,2-Dibromoethane	13.05	107	339123	21.70	ug/l	99
64) 1-Chlorohexane	13.32	91	1076692	20.66	ug/l	100
65) Chlorobenzene	13.80	112	1529085	21.25	ug/l	100
66) 1,1,1,2-Tetrachloroethane	13.88	131	470126	21.22	ug/l	99
67) Ethylbenzene	13.89	91	2901232	21.06	ug/l	99
68) m-Xylene & p-Xylene	14.03	91	4237521	42.03	ug/l	100
69) o-Xylene	14.86	91	2143592	20.66	ug/l	99
70) Styrene	14.92	104	1701411	21.15	ug/l	100
71) Isopropylbenzene	15.54	105	2885751	21.11	ug/l	100
73) Bromoform	15.57	173	208560	20.24	ug/l	99
74) trans-1,4-Dichloro-2-buten	15.64	53	96395	21.80	ug/l	97
75) 1,1,2,2-Tetrachloroethane	15.88	83	354915	20.80	ug/l	99
77) 1,2,3-Trichloropropane	16.16	110	95768	21.94	ug/l	98
78) n-Propylbenzene	16.31	91	3533479	21.21	ug/l	100
79) Bromobenzene	16.40	156	569509	21.60	ug/l	99

(#) = qualifier out of range (m) = manual integration

SM 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV202.D Vial: 8
Acq On : 11 May 2024 1:58 pm Operator: LPriet
Sample : VO01E117 2.0/10 Inst : 01
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:00 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
80) 1,3,5-Trimethylbenzene	16.62	105	2263948	21.26 ug/l	99
81) 2-Chlorotoluene	16.65	91	2094475	20.88 ug/l	100
82) 4-Chlorotoluene	16.74	91	1908157	21.48 ug/l	100
83) tert-Butylbenzene	17.30	134	478610	21.43 ug/l	99
84) 1,2,4-Trimethylbenzene	17.37	105	2219029	21.30 ug/l	100
85) sec-Butylbenzene	17.67	105	3115101	21.28 ug/l	100
86) p-Isopropyltoluene	17.89	119	2394992	21.23 ug/l	100
87) 1,3-Dichlorobenzene	18.04	146	1072675	21.41 ug/l	100
88) 1,2,3-Trimethylbenzene	18.14	105	2044493	21.02 ug/l	100
89) 1,4-Dichlorobenzene	18.20	146	1030532	20.98 ug/l	100
90) n-Butylbenzene	18.50	91	2472290	21.16 ug/l	100
91) 1,2-Dichlorobenzene	18.74	146	871915	21.24 ug/l	100
92) 1,2-Dibromo-3-chloropropan	19.73	157	54040	20.05 ug/l	99
93) 1,2,4-Trichlorobenzene	20.81	180	660275	22.03 ug/l	100
94) Hexachlorobutadiene	20.99	225	397807	22.28 ug/l	100
95) Naphthalene	21.15	128	776440	22.20 ug/l	99
96) 1,2,3-Trichlorobenzene	21.48	180	496067	21.97 ug/l	100

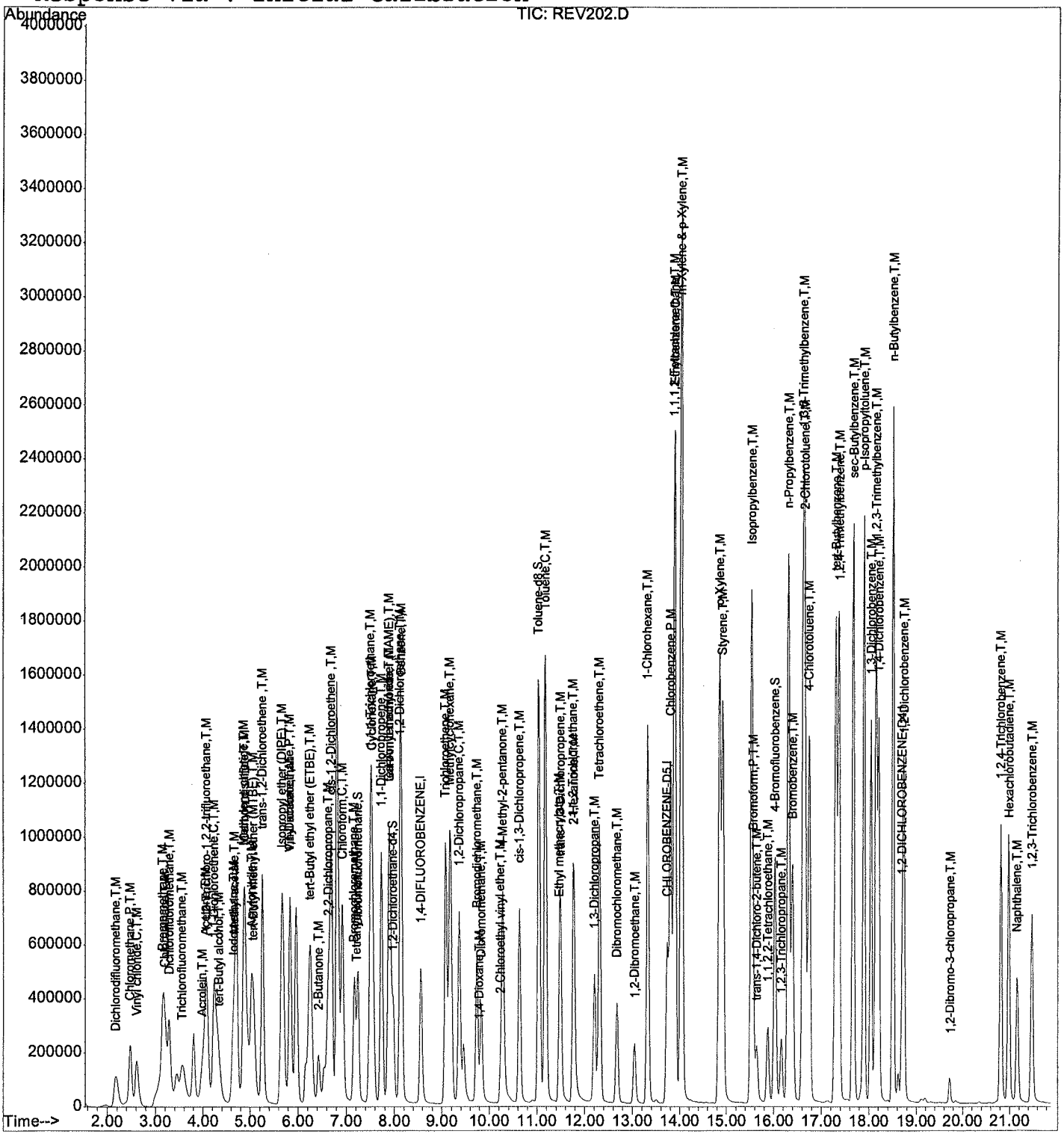
SM 5/15/24

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E11\REV202.D Vial: 8
Acq On : 11 May 2024 1:58 pm Operator: LPriet
Sample : VO01E117 2.0/10 Inst : 01
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:00 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



SY 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV203.D
Acq On : 11 May 2024 2:27 pm
Sample : VO01E118 3.0/15
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 14:02 2024

Vial: 9
Operator: LPriet
Inst : 01
Multiplr: 1.00
Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	849708	10.00	ug/l	0.02
53) CHLOROBENZENE-D5	13.72	117	707238	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	267331	10.00	ug/l	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	7.23	111	799087	30.38	ug/l	0.00
Spiked Amount 10.000			Recovery =	303.80%		
41) 1,2-Dichloroethane-d4	7.97	65	550662	30.70	ug/l	0.00
Spiked Amount 10.000			Recovery =	307.00%		
54) Toluene-d8	11.02	98	3115280	29.39	ug/l	-0.01
Spiked Amount 10.000			Recovery =	293.90%		
76) 4-Bromofluorobenzene	16.01	95	1073630	29.49	ug/l	0.00
Spiked Amount 10.000			Recovery =	294.90%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.18	85	673565	29.62	ug/l	98
5) Chloromethane	2.48	50	894520	28.10	ug/l	100
6) Vinyl chloride	2.61	62	776773	29.30	ug/l	100
7) Bromomethane	3.15	94	899449	29.03	ug/l	97
8) Chloroethane	3.20	64	574606	29.88	ug/l	100
9) Dichlorofluoromethane	3.27	67	1551702	28.41	ug/l	99
10) Trichlorofluoromethane	3.57	101	1032985	28.80	ug/l	99
11) Acrolein	3.98	56	286661	150.20	ug/l	97
12) 1,1,2-Trichloro-1,2,2-trif	4.07	151	554202	30.92	ug/l	100
13) Acetone	4.06	43	435360	140.37	ug/l	97
14) 1,1-Dichloroethene	4.23	61	1367312	30.17	ug/l	100
15) tert-Butyl alcohol	4.34	59	759636	803.08	ug/l	99
16) Iodomethane	4.65	142	1484308	30.55	ug/l	100
17) Methyl acetate	4.65	43	247532	29.27	ug/l	100
18) Methylene chloride	4.86	49	1052102	28.94	ug/l	100
19) Carbon disulfide	4.89	76	2879778	29.72	ug/l	100
20) Acrylonitrile	5.02	53	590477	150.07	ug/l	99
21) tert-Butyl methyl ether (M	5.06	73	1337887	30.02	ug/l	98
22) trans-1,2-Dichloroethene	5.26	61	1319053	30.21	ug/l	100
23) Isopropyl ether (DIPE)	5.67	45	2808667	30.11	ug/l	100
24) Vinyl acetate	5.82	43	1017586	31.77	ug/l	100
25) 1,1-Dichloroethane	5.83	63	1541259	30.19	ug/l	100
27) tert-Butyl ethyl ether (ET	6.23	59	2031979	30.40	ug/l	100
28) 2-Butanone	6.41	43	780834	164.07	ug/l	100
29) 2,2-Dichloropropane	6.63	77	1283925	29.91	ug/l	100
30) cis-1,2-Dichloroethene	6.69	96	1065003	30.30	ug/l	100
31) Chloroform	6.92	83	1477710	28.40	ug/l	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV203.D Vial: 9
Acq On : 11 May 2024 2:27 pm Operator: LPriet
Sample : VO01E118 3.0/15 Inst : 01
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:02 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.15	49	628929	30.78	ug/l	100
33)	Tetrahydrofuran	7.20	42	89460	29.72	ug/l	98
35)	1,1,1-Trichloroethane	7.49	97	1293540	29.71	ug/l	100
36)	Cyclohexane	7.52	84	1200311	28.31	ug/l	100
38)	1,1-Dichloropropene	7.73	110	446401	30.17	ug/l	99
39)	Carbon tetrachloride	7.88	119	976969	30.13	ug/l	100
40)	tert-Amyl methyl ether (TA	7.89	73	1549323	29.79	ug/l	99
42)	Benzene	8.13	78	3348702	29.50	ug/l	100
43)	1,2-Dichloroethane	8.10	62	692754	30.26	ug/l	99
44)	Trichloroethene	9.06	130	891995	30.38	ug/l	99
45)	Methylcyclohexane	9.17	83	1305359	27.98	ug/l	100
46)	1,2-Dichloropropane	9.35	63	761086	29.96	ug/l	100
47)	Bromodichloromethane	9.73	83	1014655	28.78	ug/l	100
48)	1,4-Dioxane	9.76	88	66102	635.70	ug/l	99
49)	Dibromomethane	9.82	93	364896	30.46	ug/l	97
50)	2-Chloroethyl vinyl ether	10.22	63	205504	31.88	ug/l	98
51)	4-Methyl-2-pentanone	10.26	43	1958633	150.19	ug/l	100
52)	cis-1,3-Dichloropropene	10.62	75	1217843	30.81	ug/l	100
55)	Toluene	11.17	91	3665193	29.18	ug/l	100
56)	Ethyl methacrylate	11.45	69	584066	30.99	ug/l	97
57)	trans-1,3-Dichloropropene	11.48	75	891028	30.52	ug/l	100
58)	1,1,2-Trichloroethane	11.75	97	494541	30.07	ug/l	99
59)	2-Hexanone	11.76	43	1192685	148.48	ug/l	99
60)	1,3-Dichloropropane	12.19	76	844763	30.26	ug/l	99
61)	Tetrachloroethene	12.29	164	772439	29.59	ug/l	99
62)	Dibromochloromethane	12.66	129	594252	29.60	ug/l	99
63)	1,2-Dibromoethane	13.03	107	501525	30.83	ug/l	99
64)	1-Chlorohexane	13.30	91	1608154	29.65	ug/l	100
65)	Chlorobenzene	13.79	112	2219576	29.64	ug/l	100
66)	1,1,1,2-Tetrachloroethane	13.86	131	687136	29.80	ug/l	99
67)	Ethylbenzene	13.88	91	4240845	29.59	ug/l	100
68)	m-Xylene & p-Xylene	14.01	91	6175129	58.85	ug/l	100
69)	o-Xylene	14.84	91	3177799	29.42	ug/l	100
70)	Styrene	14.90	104	2503360	29.90	ug/l	100
71)	Isopropylbenzene	15.52	105	4219160	29.65	ug/l	100
73)	Bromoform	15.55	173	312940	28.97	ug/l	99
74)	trans-1,4-Dichloro-2-buten	15.63	53	144056	31.24	ug/l	96
75)	1,1,2,2-Tetrachloroethane	15.86	83	534853	30.05	ug/l	99
77)	1,2,3-Trichloropropane	16.15	110	141561	31.09	ug/l	97
78)	n-Propylbenzene	16.29	91	5144010	29.59	ug/l	100
79)	Bromobenzene	16.38	156	831254	30.23	ug/l	100

(#) = qualifier out of range (m) = manual integration

5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV203.D Vial: 9
Acq On : 11 May 2024 2:27 pm Operator: LPriet
Sample : VO01E118 3.0/15 Inst : 01
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:02 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.60	105	3300850	29.72	ug/l	99
81)	2-Chlorotoluene	16.63	91	3091027	29.54	ug/l	100
82)	4-Chlorotoluene	16.72	91	2792432	30.14	ug/l	99
83)	tert-Butylbenzene	17.29	134	693102	29.75	ug/l	99
84)	1,2,4-Trimethylbenzene	17.35	105	3247834	29.89	ug/l	99
85)	sec-Butylbenzene	17.66	105	4497766	29.46	ug/l	100
86)	p-Isopropyltoluene	17.88	119	3456736	29.37	ug/l	100
87)	1,3-Dichlorobenzene	18.03	146	1566009	29.97	ug/l	100
88)	1,2,3-Trimethylbenzene	18.13	105	3006443	29.63	ug/l	100
89)	1,4-Dichlorobenzene	18.19	146	1511456	29.50	ug/l	100
90)	n-Butylbenzene	18.49	91	3615477	29.66	ug/l	100
91)	1,2-Dichlorobenzene	18.72	146	1277031	29.82	ug/l	100
92)	1,2-Dibromo-3-chloropropan	19.72	157	81915	28.90	ug/l	100
93)	1,2,4-Trichlorobenzene	20.80	180	991777	31.73	ug/l	100
94)	Hexachlorobutadiene	20.96	225	585385	31.43	ug/l	99
95)	Naphthalene	21.14	128	1169103	32.04	ug/l	100
96)	1,2,3-Trichlorobenzene	21.46	180	737458	31.32	ug/l	99

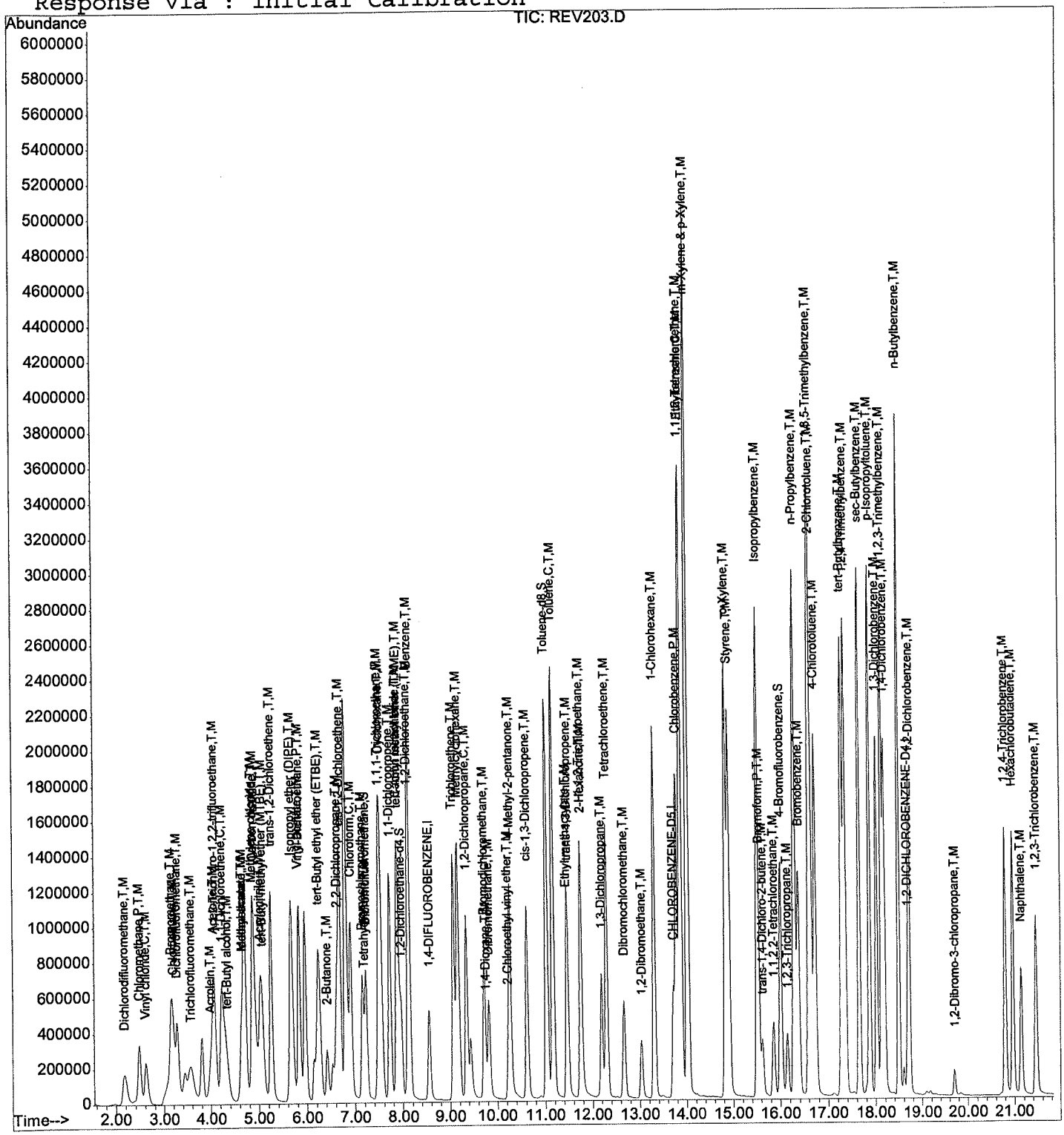
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E11\REV203.D
Acq On : 11 May 2024 2:27 pm
Sample : VO01E118 3.0/15
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 14:02 2024

Vial: 9
Operator: LPriet
Inst : 01
Multiplr: 1.00
Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV204.D Vial: 10
Acq On : 11 May 2024 2:56 pm Operator: LPriet
Sample : VO01E119 5.0/25 Inst : 01
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:33 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	790188	10.00	ug/l	0.01
53) CHLOROBENZENE-D5	13.71	117	650561	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	247844	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	0.00	98	0d	0.00	ug/l	
Spiked Amount 10.000			Recovery =	0.00%		
76) 4-Bromofluorobenzene	0.00	95	0d	0.00	ug/l	
Spiked Amount 10.000			Recovery =	0.00%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.17	85	1081177	51.13	ug/l	98
5) Chloromethane	2.47	50	1438807	48.60	ug/l	100
6) Vinyl chloride	2.62	62	1235915	50.13	ug/l	100
7) Bromomethane	3.15	94	1484374	51.68	ug/l	98
8) Chloroethane	3.20	64	946787	52.94	ug/l	99
9) Dichlorofluoromethane	3.29	67	2533049	49.87	ug/l	98
10) Trichlorofluoromethane	3.57	101	1663384	49.87	ug/l	99
11) Acrolein	3.98	56	473669	266.87	ug/l	99
12) 1,1,2-Trichloro-1,2,2-trif	4.07	151	901773	54.10	ug/l	100
13) Acetone	4.06	43	730855	253.40	ug/l	100
14) 1,1-Dichloroethene	4.24	61	2222510	52.74	ug/l	100
15) tert-Butyl alcohol	4.34	59	1234938	1403.91	ug/l	99
16) Iodomethane	4.64	142	2410819	53.35	ug/l	100
18) Methylene chloride	4.86	49	1737751	51.40	ug/l	100
20) Acrylonitrile	5.02	53	973695	266.10	ug/l	99
21) tert-Butyl methyl ether (M	5.07	73	2163847	52.20	ug/l	99
22) trans-1,2-Dichloroethene	5.26	61	2150916	52.97	ug/l	99
23) Isopropyl ether (DIPE)	5.67	45	4495028	51.81	ug/l	99
24) Vinyl acetate	5.82	43	1638323	55.01	ug/l	100
25) 1,1-Dichloroethane	5.84	63	2492540	52.49	ug/l	100
27) tert-Butyl ethyl ether (ET	6.25	59	3217505	51.76	ug/l	98
28) 2-Butanone	6.41	43	1277785	288.71	ug/l	100
29) 2,2-Dichloropropane	6.64	77	2063550	51.69	ug/l	100
30) cis-1,2-Dichloroethene	6.68	96	1715982	52.50	ug/l	99
31) Chloroform	6.92	83	2420327	50.02	ug/l	100
32) Bromochloromethane	7.15	49	1013155	53.31	ug/l	98
33) Tetrahydrofuran	7.20	42	153627	54.88	ug/l	97

(#) = qualifier out of range (m) = manual integration

SA 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV204.D
Acq On : 11 May 2024 2:56 pm
Sample : VO01E119 5.0/25
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 14:33 2024

Vial: 10
Operator: LPriet
Inst : 01
Multiplr: 1.00
Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
35)	1,1,1-Trichloroethane	7.51	97	2111400	52.15	ug/l	100
38)	1,1-Dichloropropene	7.73	110	723523	52.58	ug/l	99
39)	Carbon tetrachloride	7.88	119	1591100	52.76	ug/l	99
40)	tert-Amyl methyl ether (TA	7.90	73	2542219	52.56	ug/l	99
42)	Benzene	8.13	78	5383213	50.99	ug/l	100
43)	1,2-Dichloroethane	8.10	62	1118925	52.56	ug/l	100
44)	Trichloroethene	9.08	130	1468714	53.79	ug/l	99
46)	1,2-Dichloropropane	9.34	63	1258335	53.27	ug/l	100
47)	Bromodichloromethane	9.73	83	1690988	51.58	ug/l	100
48)	1,4-Dioxane	9.76	88	113358	1172.28	ug/l	97
49)	Dibromomethane	9.82	93	602961	54.12	ug/l	98
50)	2-Chloroethyl vinyl ether	10.22	63	329105	54.91	ug/l	98
51)	4-Methyl-2-pentanone	10.26	43	3235283	264.67	ug/l	99
52)	cis-1,3-Dichloropropene	10.62	75	1992729	54.21	ug/l	99
55)	Toluene	11.17	91	6025151	52.15	ug/l	100
56)	Ethyl methacrylate	11.45	69	966319	55.74	ug/l	98
57)	trans-1,3-Dichloropropene	11.48	75	1465798	54.58	ug/l	99
58)	1,1,2-Trichloroethane	11.74	97	796053	52.63	ug/l	100
59)	2-Hexanone	11.74	43	1992542	265.71	ug/l	99
60)	1,3-Dichloropropane	12.19	76	1380516	53.77	ug/l	99
61)	Tetrachloroethene	12.29	164	1249230	52.02	ug/l	100
62)	Dibromochloromethane	12.66	129	985487	53.37	ug/l	99
63)	1,2-Dibromoethane	13.03	107	822866	54.99	ug/l	99
64)	1-Chlorohexane	13.30	91	2572709	51.57	ug/l	100
65)	Chlorobenzene	13.79	112	3610696	52.42	ug/l	99
66)	1,1,1,2-Tetrachloroethane	13.86	131	1116459	52.63	ug/l	99
67)	Ethylbenzene	13.88	91	6718588	50.95	ug/l	99
68)	m-Xylene & p-Xylene	14.03	91	9682404	100.31	ug/l	99
69)	o-Xylene	14.84	91	5069451	51.03	ug/l	99
70)	Styrene	14.90	104	4017810	52.17	ug/l	99
71)	Isopropylbenzene	15.52	105	6705142	51.23	ug/l	100
73)	Bromoform	15.55	173	504524	50.13	ug/l	99
74)	trans-1,4-Dichloro-2-buten	15.63	53	237301	55.50	ug/l	96
75)	1,1,2,2-Tetrachloroethane	15.86	83	869256	52.68	ug/l	99
77)	1,2,3-Trichloropropane	16.14	110	235480	55.79	ug/l	92
78)	n-Propylbenzene	16.29	91	8220515	51.01	ug/l	100
79)	Bromobenzene	16.38	156	1345207	52.77	ug/l	100
80)	1,3,5-Trimethylbenzene	16.60	105	5240717	50.90	ug/l	99
81)	2-Chlorotoluene	16.63	91	4859918	50.09	ug/l	95
82)	4-Chlorotoluene	16.74	91	4476659	52.12	ug/l	97
83)	tert-Butylbenzene	17.29	134	1119401	51.83	ug/l	98

(#) = qualifier out of range (m) = manual integration

SU 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV204.D Vial: 10
Acq On : 11 May 2024 2:56 pm Operator: LPriet
Sample : VO01E119 5.0/25 Inst : 01
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:33 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
84) 1,2,4-Trimethylbenzene	17.36	105	5150477	51.12	ug/l	99
85) sec-Butylbenzene	17.66	105	7213677	50.97	ug/l	100
86) p-Isopropyltoluene	17.88	119	5536086	50.73	ug/l	100
87) 1,3-Dichlorobenzene	18.03	146	2506660	51.74	ug/l	100
88) 1,2,3-Trimethylbenzene	18.13	105	4772026	50.74	ug/l	99
89) 1,4-Dichlorobenzene	18.19	146	2389062	50.30	ug/l	99
90) n-Butylbenzene	18.49	91	5704101	50.47	ug/l	100
91) 1,2-Dichlorobenzene	18.72	146	2055877	51.79	ug/l	100
92) 1,2-Dibromo-3-chloropropan	19.71	157	138333	52.22	ug/l	99
93) 1,2,4-Trichlorobenzene	20.80	180	1603778	55.34	ug/l	100
94) Hexachlorobutadiene	20.97	225	940175	54.45	ug/l	100
95) Naphthalene	21.15	128	1911993	56.52	ug/l	100
96) 1,2,3-Trichlorobenzene	21.46	180	1194867	54.73	ug/l	100

SM 5/15/24

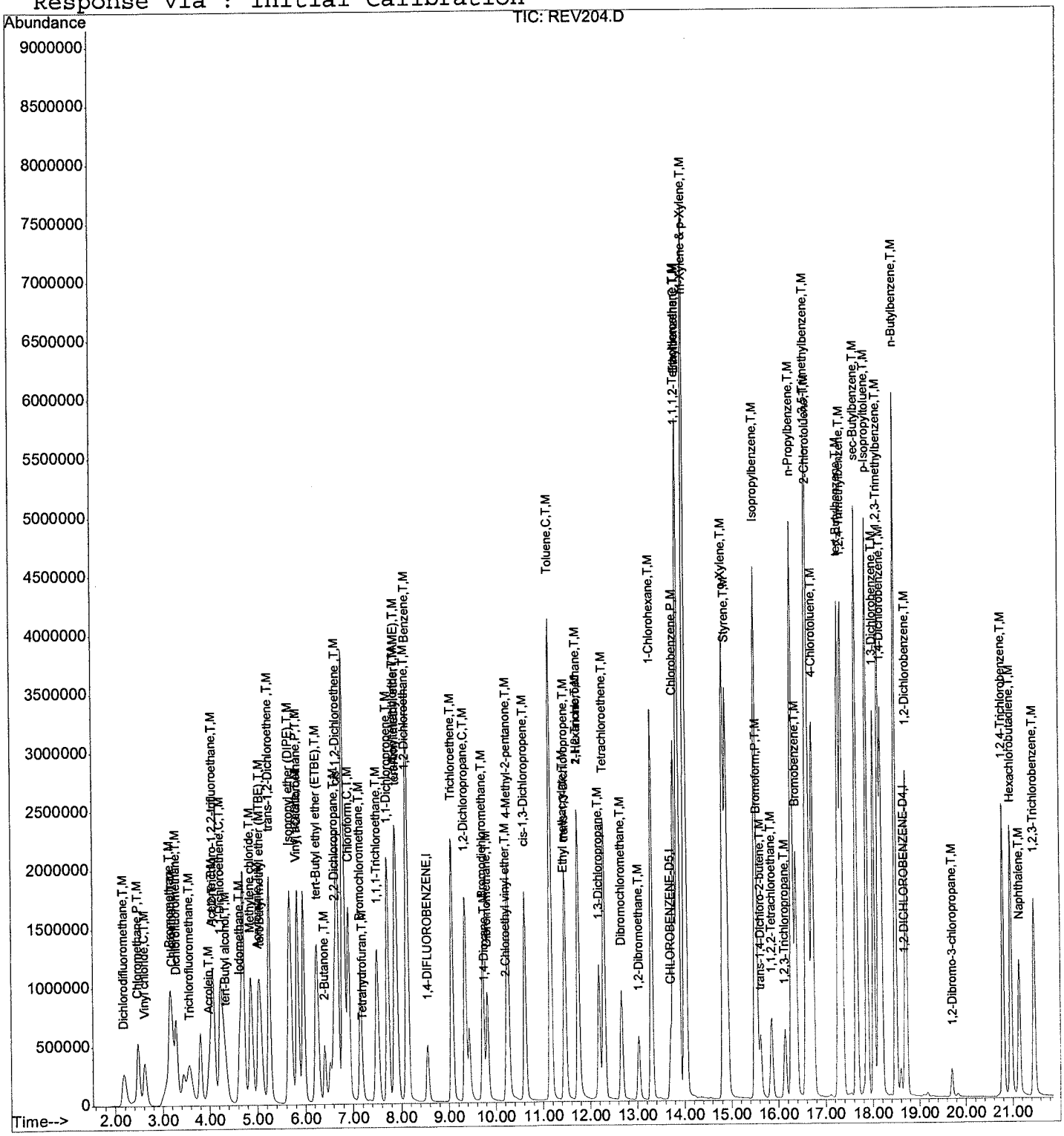
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E11\REV204.D
Acq On : 11 May 2024 2:56 pm
Sample : VO01E119 5.0/25
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA
MS Integration Params: RTE.P
Quant Time: May 13 14:33 2024

Vial: 10
Operator: LPriet
Inst : 01
Multiplr: 1.00
Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV205.D Vial: 11
Acq On : 11 May 2024 3:26 pm Operator: LPriet
Sample : VO01DE1110 10/50 Inst : 01
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:34 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.56	114	813917	10.00	ug/l	0.02
53) CHLOROBENZENE-D5	13.72	117	663851	10.00	ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	236992	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	0.00	98	0d	0.00	ug/l	
Spiked Amount 10.000			Recovery =	0.00%		
76) 4-Bromofluorobenzene	0.00	95	0d	0.00	ug/l	
Spiked Amount 10.000			Recovery =	0.00%		
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.18	85	2149061	98.68	ug/l	98
5) Chloromethane	2.48	50	2757462	90.43	ug/l	99
6) Vinyl chloride	2.61	62	2275750	89.61	ug/l	100
7) Bromomethane	3.15	94	2950163	99.92	ug/l	97
8) Chloroethane	3.20	64	1887602	102.46	ug/l	99
9) Dichlorofluoromethane	3.29	67	4893407	93.53	ug/l	98
10) Trichlorofluoromethane	3.57	101	3259184	94.86	ug/l	100
11) Acrolein	4.00	56	920713	503.62	ug/l	97
12) 1,1,2-Trichloro-1,2,2-trif	4.09	151	1635111	95.23	ug/l	100
13) Acetone	4.07	43	1378975	464.17	ug/l	96
14) 1,1-Dichloroethene	4.24	61	4287129	98.76	ug/l	100
15) tert-Butyl alcohol	4.34	59	2428061	2679.81	ug/l	99
16) Iodomethane	4.65	142	4731046	101.65	ug/l	100
18) Methylene chloride	4.87	49	3383840	97.16	ug/l	99
20) Acrylonitrile	5.02	53	1892610	502.15	ug/l	99
21) tert-Butyl methyl ether (M	5.07	73	4236425	99.23	ug/l	99
22) trans-1,2-Dichloroethene	5.26	61	4113790	98.36	ug/l	100
23) Isopropyl ether (DIPE)	5.67	45	8979646	100.48	ug/l	100
24) Vinyl acetate	5.82	43	3315001	108.06	ug/l	99
25) 1,1-Dichloroethane	5.84	63	4821432	98.58	ug/l	100
27) tert-Butyl ethyl ether (ET	6.25	59	6309833	98.54	ug/l	98
28) 2-Butanone	6.41	43	2458656	539.33	ug/l	99
29) 2,2-Dichloropropane	6.64	77	3940507	95.83	ug/l	100
30) cis-1,2-Dichloroethene	6.69	96	3330208	98.92	ug/l	99
31) Chloroform	6.92	83	4814377	96.59	ug/l	100
32) Bromochloromethane	7.15	49	1957186	99.99	ug/l	98
33) Tetrahydrofuran	7.20	42	291915	101.24	ug/l	96

(#) = qualifier out of range (m) = manual integration

SA 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV205.D Vial: 11
Acq On : 11 May 2024 3:26 pm Operator: LPriet
Sample : VO01DE1110 10/50 Inst : 01
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:34 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
35)	1,1,1-Trichloroethane	7.51	97	4134538	99.15	ug/l	100
38)	1,1-Dichloropropene	7.73	110	1407010	99.26	ug/l	98
39)	Carbon tetrachloride	7.88	119	3044744	98.02	ug/l	99
40)	tert-Amyl methyl ether (TA	7.89	73	4847551	97.30	ug/l	99
42)	Benzene	8.13	78	10614708	97.62	ug/l	100
43)	1,2-Dichloroethane	8.10	62	2198375	100.25	ug/l	100
44)	Trichloroethene	9.06	130	2868237	101.98	ug/l	99
46)	1,2-Dichloropropane	9.35	63	2435072	100.09	ug/l	100
47)	Bromodichloromethane	9.73	83	3272651	96.91	ug/l	100
48)	1,4-Dioxane	9.76	88	217292	2181.59	ug/l	95
49)	Dibromomethane	9.82	93	1156972	100.82	ug/l	98
50)	2-Chloroethyl vinyl ether	10.22	63	641035	103.83	ug/l	97
51)	4-Methyl-2-pentanone	10.26	43	6179211	488.45	ug/l	100
52)	cis-1,3-Dichloropropene	10.62	75	3875584	102.36	ug/l	99
55)	Toluene	11.17	91	11521987	97.73	ug/l	99
56)	Ethyl methacrylate	11.45	69	1848777	104.51	ug/l	97
57)	trans-1,3-Dichloropropene	11.48	75	2820520	102.93	ug/l	99
58)	1,1,2-Trichloroethane	11.75	97	1530353	99.15	ug/l	99
59)	2-Hexanone	11.75	43	3802288	492.69	ug/l	100
60)	1,3-Dichloropropane	12.19	76	2688647	102.62	ug/l	99
61)	Tetrachloroethene	12.31	164	2415182	98.56	ug/l	100
62)	Dibromochloromethane	12.66	129	1898169	100.74	ug/l	99
63)	1,2-Dibromoethane	13.03	107	1574680	103.12	ug/l	99
64)	1-Chlorohexane	13.30	91	4899203	96.24	ug/l	100
65)	Chlorobenzene	13.79	112	6936484	98.69	ug/l	99
66)	1,1,1,2-Tetrachloroethane	13.86	131	2153843	99.50	ug/l	99
67)	Ethylbenzene	13.88	91	12839879	95.43	ug/l	98
68)	m-Xylene & p-Xylene	14.03	91	18532298	188.15	ug/l	98
69)	o-Xylene	14.84	91	9582592	94.53	ug/l	98
70)	Styrene	14.90	104	7538023	95.93	ug/l	99
71)	Isopropylbenzene	15.52	105	12772431	95.63	ug/l	99
73)	Bromoform	15.55	173	986318	102.14	ug/l	99
74)	trans-1,4-Dichloro-2-buten	15.63	53	446145	109.12	ug/l	93
75)	1,1,2,2-Tetrachloroethane	15.86	83	1626217	103.07	ug/l	99
77)	1,2,3-Trichloropropane	16.15	110	438929	108.75	ug/l	92
78)	n-Propylbenzene	16.29	91	15596079	101.22	ug/l	99
79)	Bromobenzene	16.38	156	2566592	105.28	ug/l	100
80)	1,3,5-Trimethylbenzene	16.61	105	9823432	99.77	ug/l	98
81)	2-Chlorotoluene	16.63	91	9603952	103.52	ug/l	98
82)	4-Chlorotoluene	16.74	91	7702833	93.79	ug/l	98
83)	tert-Butylbenzene	17.29	134	2120781	102.68	ug/l	96

(#) = qualifier out of range (m) = manual integration SA 5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E11\REV205.D Vial: 11
Acq On : 11 May 2024 3:26 pm Operator: LPriet
Sample : VO01DE1110 10/50 Inst : 01
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:34 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
84)	1,2,4-Trimethylbenzene	17.36	105	9615877	99.82	ug/l	97
85)	sec-Butylbenzene	17.66	105	13298763	98.26	ug/l	99
86)	p-Isopropyltoluene	17.88	119	10259365	98.33	ug/l	99
87)	1,3-Dichlorobenzene	18.03	146	4662217	100.65	ug/l	100
88)	1,2,3-Trimethylbenzene	18.13	105	8781878	97.65	ug/l	99
89)	1,4-Dichlorobenzene	18.19	146	4430571	97.55	ug/l	100
90)	n-Butylbenzene	18.49	91	10299843	95.31	ug/l	99
91)	1,2-Dichlorobenzene	18.72	146	3781801	99.63	ug/l	100
92)	1,2-Dibromo-3-chloropropan	19.72	157	255821	100.50	ug/l	100
93)	1,2,4-Trichlorobenzene	20.80	180	2909800	105.00	ug/l	100
94)	Hexachlorobutadiene	20.98	225	1658054	100.43	ug/l	100
95)	Naphthalene	21.14	128	3426614	105.94	ug/l	100
96)	1,2,3-Trichlorobenzene	21.46	180	2169257	103.91	ug/l	100

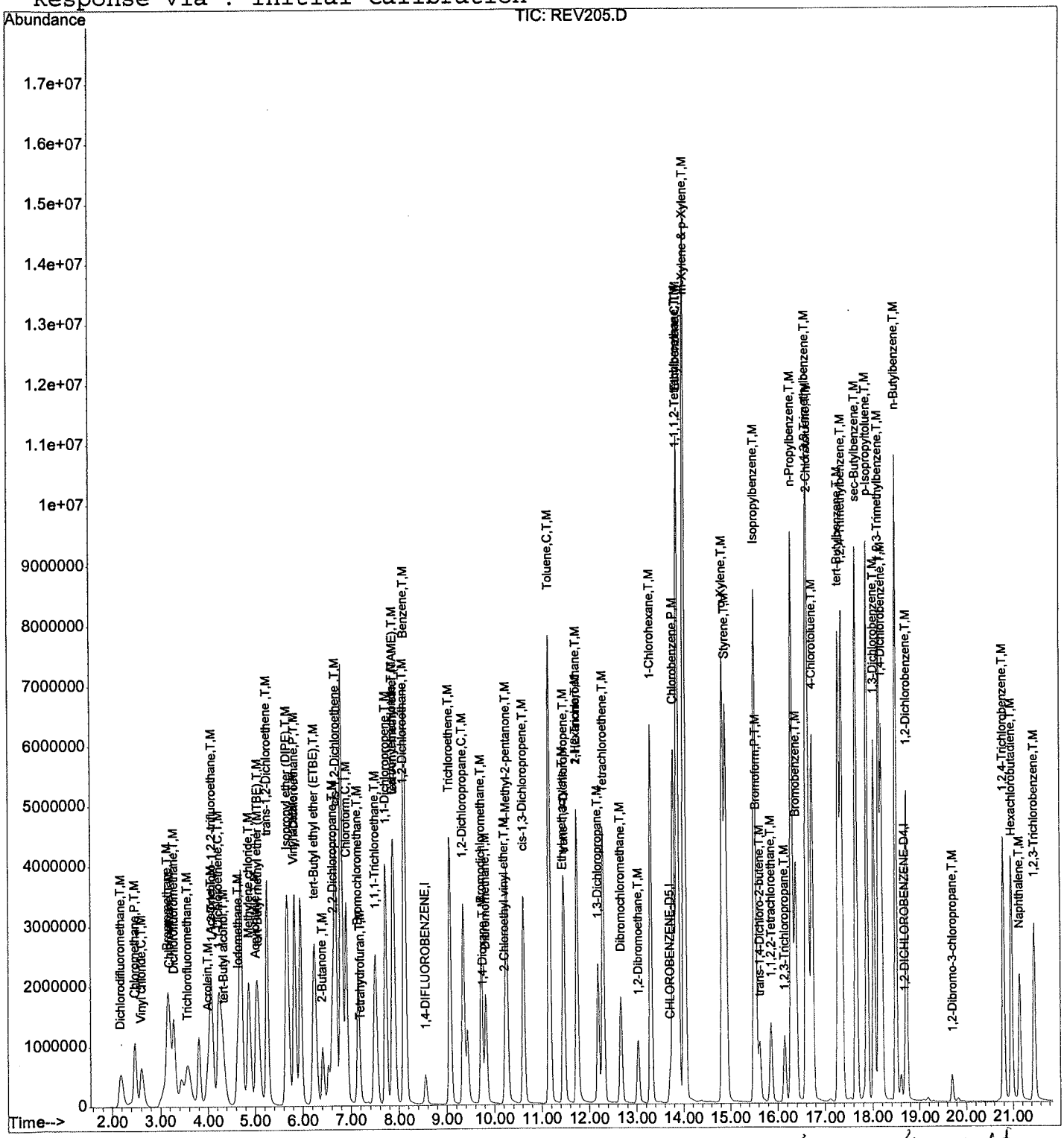
Su 5/15/24

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E11\REV205.D Vial: 11
Acq On : 11 May 2024 3:26 pm Operator: LPriet
Sample : VO01DE1110 10/50 Inst : 01
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 14:34 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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: REV209 BFB Injection Date: 05/13/24

Instrument ID: 01 BFB Injection Time: 11:31

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	17.676
75	30 - 60% of mass 95	40.505
95	Base Peak, 100% relative abundance	100.000
96	5 - 9% of mass 95	6.366
173	Less than 2% of mass 174	0.000(0)1
174	Greater than 50% of mass 95	77.234
175	5 - 9% of mass 174	5.650(7.32)1
176	95 - 101% % of mass 174	75.082(97.21)1
177	5 - 9% % of mass 176	4.812(6.41)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	VSTD10	IVO01E1102	REV210	05/13/24	12:06

SC 5/15/24

CONTINUE_CALIBRATION - CALIBRATION VERIFICATION

Instrument ID :01
IC_Beginning DateTime :05/11/24 10:58
Spike Amount :10 PPB
CC/CV File :REV210
IC File :REV201

Column Spec :RXI-624SILMS ID :0.25MM
IC_Ending DateTime :05/11/24 15:26
HPChem Method :VO01E11
Date_Time :05/13/24 12:06

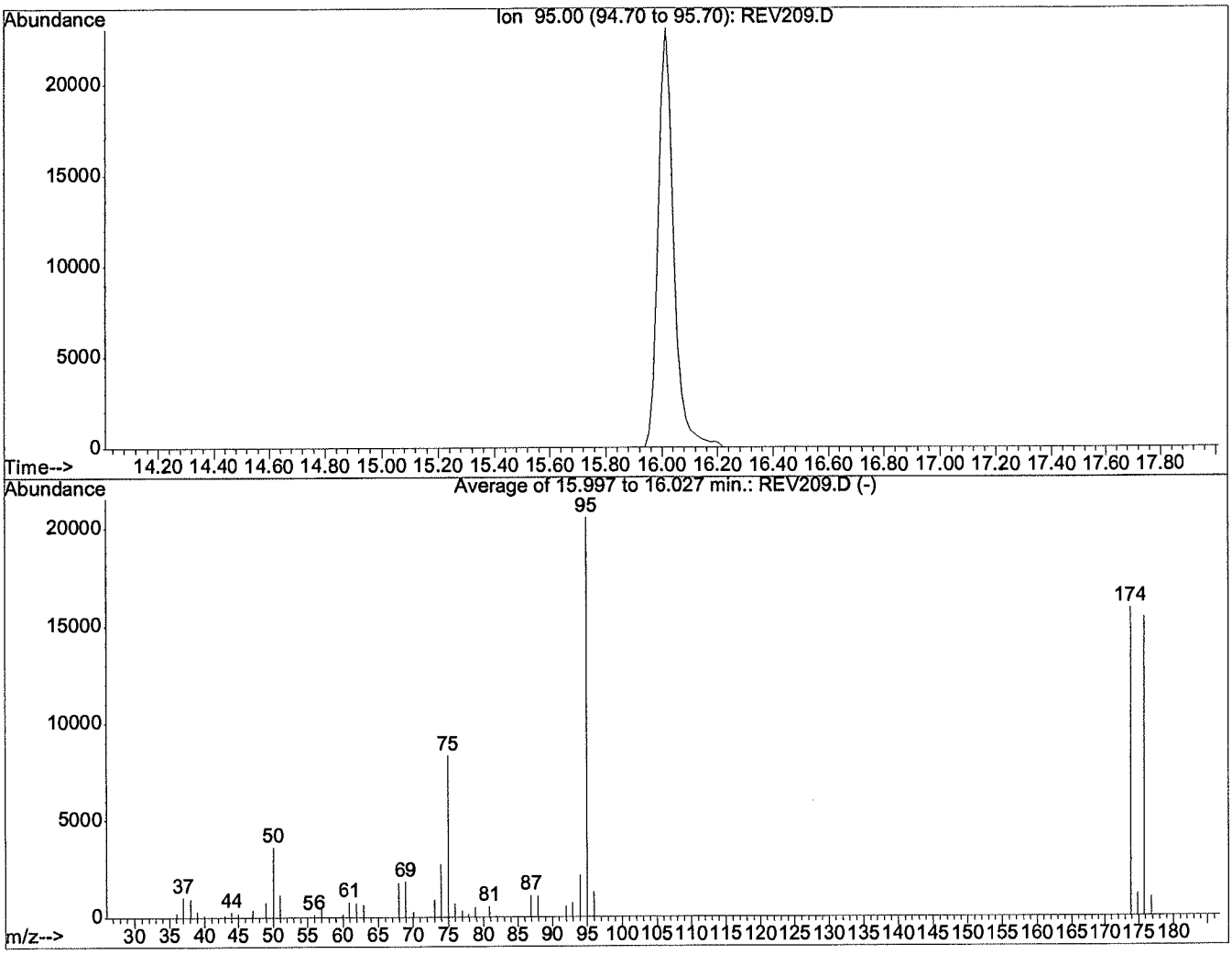
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	1	1,4-DIFLUOROBENZENE	10.000	0	907856	1	1	8.546	8.551	0				
	2	Chlorotrifluoroethylene												
	3	Dichlorodifluoromethane	10.744	7.4	261017	0.288	0.268	2.174	2.169	4.44				
	4	2-Chloro-1,1,1-trifluoroethane												
	5	Chloromethane	10.222	2.2	347692	0.383	0.375	2.487	2.471	7.39				
	6	Vinyl chloride	11.091	10.9	314201	0.346	0.312	2.615	2.605	6.31				
	7	Bromomethane	9.886	-1.1	332015	0.366	0.396	3.154	3.146	17.96	0.0078	0.3620		0.9993
	8	Chloroethane	9.929	-0.7	204024	0.225	0.226	3.198	3.190	4.21				
	9	Dichlorofluoromethane	9.809	-1.9	572473	0.631	0.643	3.287	3.276	8.21				
	10	Trichlorofluoromethane	10.405	4.0	398783	0.439	0.422	3.554	3.553	5.20				
5	11	Acrolein	46.638	-6.7	95103	0.021	0.022	3.984	3.986	5.86				
	12	1,1,2-Trichloro-1,2,2-trifluoroethane	10.699	7.0	204924	0.226	0.211	4.073	4.070	8.11				
5	13	Acetone	46.249	-7.5	153258	0.034	0.037	4.058	4.058	14.45				
	14	1,1-Dichloroethene	10.534	5.3	510086	0.562	0.533	4.235	4.230	4.74				
25	15	tert-Butyl alcohol	272.706	9.1	275606	0.012	0.011	4.339	4.342	9.12				
	16	Iodomethane	10.129	1.3	525854	0.579	0.572	4.635	4.639	4.85				
	17	Methyl acetate	9.648	-3.5	87177	0.096	0.100	4.650	4.653	10.84				
	18	Methylene chloride	10.396	4.0	403861	0.445	0.428	4.858	4.858	3.90				
	19	Carbon disulfide	9.410	-5.9	974363	1.073	1.140	4.887	4.880	6.08				
5	20	Acrylonitrile	49.767	-0.5	209223	0.046	0.046	5.021	5.025	4.77				
	21	tert-Butyl methyl ether (MTBE)	10.216	2.2	486511	0.536	0.525	5.065	5.061	4.67				
	22	trans-1,2-Dichloroethene	10.334	3.3	482107	0.531	0.514	5.243	5.249	4.44				
	23	Isopropyl ether (DIPE)	10.406	4.1	1037346	1.143	1.098	5.658	5.670	4.21				
	24	Vinyl acetate	10.436	4.4	357100	0.393	0.377	5.821	5.832	9.82				
	25	1,1-Dichloroethane	10.385	3.9	566566	0.624	0.601	5.821	5.830	4.54				
25	26	2-Butanol												
	27	tert-Butyl ethyl ether (ETBE)	10.658	6.6	761232	0.838	0.787	6.235	6.240	4.52				
5	28	2-Butanone	52.383	4.8	266366	0.059	0.056	6.413	6.428	10.70				
	29	2,2-Dichloropropane	10.370	3.7	475647	0.524	0.505	6.621	6.628	4.21				
	30	cis-1,2-Dichloroethene	10.325	3.2	387725	0.427	0.414	6.680	6.686	4.03				
	31	Chloroform	9.820	-1.8	545984	0.601	0.612	6.902	6.908	8.00				
	32	Bromochloromethane	10.539	5.4	230106	0.253	0.240	7.139	7.148	4.73				
	33	Tetrahydrofuran	10.289	2.9	33093	0.036	0.035	7.198	7.201	8.25				
	34	Dibromofluoromethane	9.898	-1.0	278148	0.306	0.310	7.228	7.228	7.01				
	35	1,1,1-Trichloroethane	10.373	3.7	482510	0.531	0.512	7.495	7.499	4.19				
	36	Cyclohexane	10.548	5.5	477860	0.526	0.499	7.524	7.524	6.15				
	37	2,2,4-Trimethylpentane												
	38	1,1-Dichloropropene	10.276	2.8	162485	0.179	0.174	7.717	7.723	4.16				
	39	Carbon tetrachloride	10.352	3.5	358693	0.395	0.382	7.880	7.878	4.43				
	40	tert-Amyl methyl ether (TAME)	10.127	1.3	562793	0.620	0.612	7.880	7.889	5.64				
	41	1,2-Dichloroethane-d4	9.949	-0.5	190681	0.210	0.211	7.954	7.965	7.18				
	42	Benzene	10.090	0.9	1223803	1.348	1.336	8.132	8.130	4.04				
	43	1,2-Dichloroethane	10.336	3.4	252838	0.279	0.269	8.102	8.104	4.45				
	44	Trichloroethene	10.150	1.5	318416	0.351	0.346	9.064	9.072	4.96				
	45	Methylcyclohexane	10.259	2.6	511326	0.563	0.549	9.153	9.165	6.46				
	46	1,2-Dichloropropane	10.115	1.1	274499	0.302	0.299	9.346	9.351	5.38				
	47	Bromodichloromethane	9.862	-1.4	371496	0.409	0.415	9.716	9.732	6.99				
20	48	1,4-Dioxane	205.358	2.7	22815	0.001	0.001	9.775	9.783	14.49				
	49	Dibromomethane	10.344	3.4	132415	0.146	0.141	9.820	9.823	5.30				
	50	2-Chloroethyl vinyl ether	10.212	2.1	70329	0.077	0.076	10.220	10.234	8.06				
5	51	4-Methyl-2-pentanone	49.033	-1.9	657246	0.145	0.136	10.264	10.276	18.90	-0.0424	0.1563		0.9988
	52	cis-1,3-Dichloropropene	10.274	2.7	433879	0.478	0.465	10.620	10.625	5.31				
	53	CHLOROBENZENE-D5	10.000	0	757489	1	1	13.716	13.717	0				
	54	Toluene-d8	9.566	-4.3	1085971	1.434	1.499	11.020	11.030	5.48				
	55	Toluene	9.906	-0.9	1332719	1.759	1.776	11.153	11.169	4.50				
	56	Ethyl methacrylate	10.213	2.1	206172	0.272	0.266	11.449	11.471	8.54				
	57	trans-1,3-Dichloropropene	10.298	3.0	322019	0.425	0.413	11.479	11.484	5.62				
	58	1,1,2-Trichloroethane	10.145	1.5	178678	0.236	0.233	11.746	11.751	4.45				
5	59	2-Hexanone	47.364	-5.3	378200	0.100	0.090	11.761	11.791	36.80	-0.0568	0.1174		0.9987
	60	1,3-Dichloropropane	10.169	1.7	304011	0.401	0.395	12.190	12.195	5.08				
	61	Tetrachloroethene	9.999	-0.0	279605	0.369	0.369	12.294	12.299	3.83				
	62	Dibromochloromethane	10.064	0.6	216381	0.286	0.284	12.664	12.667	5.55				
	63	1,2-Dibromoethane	10.349	3.5	180319	0.238	0.230	13.035	13.038	6.28				
	64	1-Chlorohexane	10.259	2.6	595972	0.787	0.767	13.301	13.308	4.69				
	65	Chlorobenzene	10.061	0.6	806907	1.065	1.059	13.775	13.791	3.64				
	66	1,1,1,2-Tetrachloroethane	10.136	1.4	250367	0.331	0.326	13.864	13.865	3.59				
	67	Ethylbenzene	9.991	-0.1	1533890	2.025	2.027	13.879	13.881	4.07				
2	68	m-Xylene & p-Xylene	20.234	1.2	2274121	1.501	1.484	14.012	14.021	4.23				
	69	o-Xylene	9.950	-0.5	1150973	1.519	1.527	14.827	14.843	4.66				
	70	Styrene	9.968	-0.3	893787	1.180	1.184	14.901	14.909	3.78				
	71	Isopropylbenzene	10.036	0.4	1529556	2.019	2.012	15.509	15.524	3.97				
	72	1,2-DICHLOROBENZENE-D4	10.000	0	290545	1	1	18.679	18.680	0				
	73	Bromoform	9.781	-2.2	112241	0.386	0.350	15.553	15.559	20.61	-0.0135	0.4088		0.9992
	74	trans-1,4-Dichloro-2-butene	10.276	2.8	51511	0.177	0.173	15.627	15.634	9.77				
	75	1,1,2,2-Tetrachloroethane	9.917	-0.8	191835	0.660	0.666	15.849	15.865	6.36				
	76	4-Bromofluorobenzene	9.429	-5.7	373151	1.284	1.362	15.998	16.015	6.06				
	77	1,2,3-Trichloropropane	10.138	1.4	50167	0.173	0.170	16.146	16.152	9.82				
	78	n-Propylbenzene	9.836	-1.6	1858212	6.396	6.502	16.294	16.298	5.03				
	79	Bromobenzene	9.996	-0.0	298744	1.028	1.029	16.383	16.383	5.26				
	80	1,3,5-Trimethylbenzene	9.883	-1.2	1193060	4.106	4.155	16.605	16.606	5.49				
	81	2-Chlorotoluene	10.005	0.1	1138017	3.917	3.915	16.635	16.635	4.84				
	82	4-Chlorotoluene	10.002	0.0	1007192	3.467	3.466	16.723	16.733	5.46				
	83	tert-Butylbenzene	9.950	-0.5	251948	0.867	0.871	17.287	17.287	4.70				
	84	1,2,4-Trimethylbenzene	9.900	-1.0	1169308	4.025	4.065	17.346	17.360	4.41				
	85	sec-Butylbenzene	9.967	-0.3	1653826	5.692	5.711	17.657	17.658	5.27				
	86	p-Isopropyltoluene	9.795	-2.0	1252965	4.312	4.403	17.879	17.880	5.17				
	87	1,3-Dichlorobenzene	10.012	0.1	568580	1.957	1.955	18.027	18.028	4.87				
	88	1,2,3-Trimethylbenzene	9.931	-0.7	1095079	3.769	3.795	18.131	18.132	4.70				
	89	1,4-Dichlorobenzene	9.894	-1.1	550958	1.896	1.916	18.190	18.191	4.92				
	90	n-Butylbenzene	9.925	-0.7	1315009	4.526	4.560	18.486	18.489	5.46				
	91	1,2-Dichlorobenzene	9.987	-0.1	464758	1.600	1.602	18.709	18.724	4.06				
	92	1,2-Dibromo-3-chloropropane	9.352	-6.5	27714	0.095	0.095	19.716	19.717	16.02	-0.0056	0.1080		0.9987
	93	1,2,4-Trichlorobenzene	10.080	0.8	342507	1.179	1.169	20.798	20.801	7.49				
	94	Hexachlorobutadiene	9.944	-0.6	201295	0.693	0.697	20.961	20.967	6.95				
	95	Naphthalene	10.201	2.0	404546	1.392	1.365	21.138	21.148	8.50				
	96	1,2,3-Trichlorobenzene	10.141	1.4	259547	0.893	0.881	21.464	21.466	6.66				

Spike Amount = Nominal Amount * M

SU
5/15/24

Data File : D:\HPCHEM\1\DATA\24E13\REV209.D
Acq On : 13 May 2024 11:31 am
Sample : BFB01E12
Misc : T/CHK
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls

Vial: 1
Operator: LPriet
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	17.7	3629	PASS
75	95	30	60	40.5	8316	PASS
95	95	100	100	100.0	20531	PASS
96	95	5	9	6.4	1307	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	77.2	15857	PASS
175	174	5	9	7.3	1160	PASS
176	174	95	101	97.2	15415	PASS
177	176	5	9	6.4	988	PASS

REV209.D VO01E11.M Mon May 13 14:37:52 2024 SY 5/15/24

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D Vial: 2
Acq On : 13 May 2024 12:06 pm Operator: LPriet
Sample : IVO01E1102 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\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	99	0.00
2	T,M	Chlorotrifluoroethylene	-1.000	0.000	0.0	0	-2.08#
3	T,M	Dichlorodifluoromethane	10.000	10.745	-7.4	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	10.223	-2.2	109	0.02
6	C,T,M	Vinyl chloride	10.000	11.092	-10.9	110	0.00
7	T,M	Bromomethane	10.000	9.887	1.1	110	0.01
8	T,M	Chloroethane	10.000	9.929	0.7	105	0.01
9	T,M	Dichlorofluoromethane	10.000	9.809	1.9	107	0.01
10	T,M	Trichlorofluoromethane	10.000	10.405	-4.0	109	0.00
11	T,M	Acrolein	50.000	46.638	6.7	104	0.00
12	T,M	1,1,2-Trichloro-1,2,2-trifl	10.000	10.700	-7.0	106	0.01
13	T,M	Acetone	50.000	46.249	7.5	108	0.00
14	C,T,M	1,1-Dichloroethene	10.000	10.535	-5.4	108	0.01
15	T,M	tert-Butyl alcohol	250.000	272.707	-9.1	118	0.00
16	T,M	Iodomethane	10.000	10.129	-1.3	105	0.00
17	T,M	Methyl acetate	10.000	9.648	3.5	113	0.00
18	T,M	Methylene chloride	10.000	10.396	-4.0	110	0.00
19	T,M	Carbon disulfide	10.000	9.411	5.9	99	0.02
20	T,M	Acrylonitrile	50.000	49.767	0.5	107	0.00
21	T,M	tert-Butyl methyl ether (MT	10.000	10.216	-2.2	112	0.00
22	T,M	trans-1,2-Dichloroethene	10.000	10.335	-3.4	110	0.00
23	T,M	Isopropyl ether (DIPE)	10.000	10.407	-4.1	110	-0.01
24	T,M	Vinyl acetate	10.000	10.436	-4.4	113	0.00
25	P,T,M	1,1-Dichloroethane	10.000	10.386	-3.9	109	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	10.658	-6.6	114	0.00
28	T,M	2-Butanone	50.000	52.384	-4.8	109	0.00
29	T,M	2,2-Dichloropropane	10.000	10.370	-3.7	108	0.00
30	T,M	cis-1,2-Dichloroethene	10.000	10.325	-3.2	107	0.00
31	C,T,M	Chloroform	10.000	9.821	1.8	107	0.00
32	T,M	Bromochloromethane	10.000	10.539	-5.4	112	0.00
33	T,M	Tetrahydrofuran	10.000	10.289	-2.9	121	0.00
34	S	Dibromofluoromethane	10.000	9.898	1.0	107	0.00
35	T,M	1,1,1-Trichloroethane	10.000	10.374	-3.7	108	0.00
36	T,M	Cyclohexane	10.000	10.549	-5.5	114	0.00
37	T,M	2,2,4-Trimethylpentane	10.000	0.000	100.0#	0	0.00
38	T,M	1,1-Dichloropropene	10.000	10.277	-2.8	108	0.00
39	T,M	Carbon tetrachloride	10.000	10.352	-3.5	107	0.00
40	T,M	tert-Amyl methyl ether (TAM	10.000	10.128	-1.3	113	0.00
41	S	1,2-Dichloroethane-d4	10.000	9.949	0.5	112	-0.01

(#) = Out of Range

SA 5/15/24

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D
Acq On : 13 May 2024 12:06 pm
Sample : IVO01E1102 1.0/5.0
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P

Vial: 2
Operator: LPriet
Inst : 01
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	10.090	-0.9	106	0.00
43	T,M 1,2-Dichloroethane	10.000	10.337	-3.4	110	0.00
44	T,M Trichloroethene	10.000	10.150	-1.5	103	0.00
45	T,M Methylcyclohexane	10.000	10.260	-2.6	113	-0.01
46	C,T,M 1,2-Dichloropropane	10.000	10.115	-1.2	107	0.00
47	T,M Bromodichloromethane	10.000	9.863	1.4	109	-0.01
48	T,M 1,4-Dioxane	200.000	205.359	-2.7	114	-0.01
49	T,M Dibromomethane	10.000	10.345	-3.5	114	0.00
50	T,M 2-Chloroethyl vinyl ether	10.000	10.212	-2.1	110	-0.01
51	T,M 4-Methyl-2-pentanone	50.000	49.033	1.9	111	0.00
52	T,M cis-1,3-Dichloropropene	10.000	10.274	-2.7	109	0.00
53	I CHLOROBENZENE-D5	10.000	10.000	0.0	102	0.00
54	S Toluene-d8	10.000	9.567	4.3	105	-0.01
55	C,T,M Toluene	10.000	9.907	0.9	106	-0.01
56	T,M Ethyl methacrylate	10.000	10.214	-2.1	113	-0.01
57	T,M trans-1,3-Dichloropropene	10.000	10.299	-3.0	111	0.00
58	T,M 1,1,2-Trichloroethane	10.000	10.145	-1.4	111	0.00
59	T,M 2-Hexanone	50.000	47.365	5.3	113	0.00
60	T,M 1,3-Dichloropropane	10.000	10.169	-1.7	112	0.00
61	T,M Tetrachloroethene	10.000	9.999	0.0	105	0.00
62	T,M Dibromochloromethane	10.000	10.064	-0.6	112	0.00
63	T,M 1,2-Dibromoethane	10.000	10.349	-3.5	113	0.00
64	T,M 1-Chlorohexane	10.000	10.260	-2.6	108	0.00
65	P,M Chlorobenzene	10.000	10.062	-0.6	106	-0.01
66	T,M 1,1,1,2-Tetrachloroethane	10.000	10.136	-1.4	108	0.00
67	C,T,M Ethylbenzene	10.000	9.991	0.1	104	0.00
68	T,M m-Xylene & p-Xylene	20.000	20.234	-1.2	107	0.00
69	T,M o-Xylene	10.000	9.950	0.5	107	-0.01
70	T,M Styrene	10.000	9.968	0.3	106	0.00
71	T,M Isopropylbenzene	10.000	10.037	-0.4	105	-0.01
72	I 1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	102	0.00
73	P,T,M Bromoform	10.000	9.781	2.2	117	0.00
74	T,M trans-1,4-Dichloro-2-butene	10.000	10.277	-2.8	116	0.00
75	T,M 1,1,2,2-Tetrachloroethane	10.000	9.918	0.8	114	-0.01
76	S 4-Bromofluorobenzene	10.000	9.430	5.7	107	-0.01
77	T,M 1,2,3-Trichloropropane	10.000	10.138	-1.4	111	0.00
78	T,M n-Propylbenzene	10.000	9.837	1.6	104	0.00
79	T,M Bromobenzene	10.000	9.996	0.0	107	0.00
80	T,M 1,3,5-Trimethylbenzene	10.000	9.884	1.2	105	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D
Acq On : 13 May 2024 12:06 pm
Sample : IVO01E1102 1.0/5.0
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA
MS Integration Params: RTE.P

Vial: 2
Operator: LPriet
Inst : 01
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	10.006	-0.1	107	0.00
82	T,M	4-Chlorotoluene	10.000	10.003	-0.0	105	0.00
83	T,M	tert-Butylbenzene	10.000	9.950	0.5	105	0.00
84	T,M	1,2,4-Trimethylbenzene	10.000	9.901	1.0	104	-0.01
85	T,M	sec-Butylbenzene	10.000	9.967	0.3	105	0.00
86	T,M	p-Isopropyltoluene	10.000	9.795	2.1	104	0.00
87	T,M	1,3-Dichlorobenzene	10.000	10.012	-0.1	107	0.00
88	T,M	1,2,3-Trimethylbenzene	10.000	9.932	0.7	107	0.00
89	T,M	1,4-Dichlorobenzene	10.000	9.895	1.1	106	0.00
90	T,M	n-Butylbenzene	10.000	9.925	0.7	105	0.00
91	T,M	1,2-Dichlorobenzene	10.000	9.987	0.1	109	-0.01
92	T,M	1,2-Dibromo-3-chloropropane	10.000	9.353	6.5	117	0.00
93	T,M	1,2,4-Trichlorobenzene	10.000	10.081	-0.8	109	0.00
94	T,M	Hexachlorobutadiene	10.000	9.945	0.5	102	0.00
95	T,M	Naphthalene	10.000	10.202	-2.0	113	0.00
96	T,M	1,2,3-Trichlorobenzene	10.000	10.141	-1.4	110	0.00

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D Vial: 2
Acq On : 13 May 2024 12:06 pm Operator: LPriet
Sample : IVO01E1102 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\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	99	0.00
2	T,M	Chlorotrifluoroethylene	0.000	0.000	0.0	0#	-2.08#
3	T,M	Dichlorodifluoromethane	0.268	0.288	-7.5	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	0.375	0.383	-2.1	109	0.02
6	C,T,M	Vinyl chloride	0.312	0.346	-10.9	110	0.00
7	T,M	Bromomethane	0.396	0.366	7.6	110	0.01
8	T,M	Chloroethane	0.226	0.225	0.4	105	0.01
9	T,M	Dichlorofluoromethane	0.643	0.631	1.9	107	0.01
10	T,M	Trichlorofluoromethane	0.422	0.439	-4.0	109	0.00
11	T,M	Acrolein	0.022	0.021	4.5	104	0.00
12	T,M	1,1,2-Trichloro-1,2,2-trifl	0.211	0.226	-7.1	106	0.01
13	T,M	Acetone	0.037	0.034	8.1	108	0.00
14	C,T,M	1,1-Dichloroethene	0.533	0.562	-5.4	108	0.01
15	T,M	tert-Butyl alcohol	0.011	0.012	-9.1	118	0.00
16	T,M	Iodomethane	0.572	0.579	-1.2	105	0.00
17	T,M	Methyl acetate	0.100	0.096	4.0	113	0.00
18	T,M	Methylene chloride	0.428	0.445	-4.0	110	0.00
19	T,M	Carbon disulfide	1.140	1.073	5.9	99	0.02
20	T,M	Acrylonitrile	0.046	0.046	0.0	107	0.00
21	T,M	tert-Butyl methyl ether (MT	0.525	0.536	-2.1	112	0.00
22	T,M	trans-1,2-Dichloroethene	0.514	0.531	-3.3	110	0.00
23	T,M	Isopropyl ether (DIPE)	1.098	1.143	-4.1	110	-0.01
24	T,M	Vinyl acetate	0.377	0.393	-4.2	113	0.00
25	P,T,M	1,1-Dichloroethane	0.601	0.624	-3.8	109	0.00
26	T,M	2-Butanol	0.000	0.010	0.0	0#	0.00
27	T,M	tert-Butyl ethyl ether (ETB	0.787	0.838	-6.5	114	0.00
28	T,M	2-Butanone	0.056	0.059	-5.4	109	0.00
29	T,M	2,2-Dichloropropane	0.505	0.524	-3.8	108	0.00
30	T,M	cis-1,2-Dichloroethene	0.414	0.427	-3.1	107	0.00
31	C,T,M	Chloroform	0.612	0.601	1.8	107	0.00
32	T,M	Bromochloromethane	0.240	0.253	-5.4	112	0.00
33	T,M	Tetrahydrofuran	0.035	0.036	-2.9	121	0.00
34	S	Dibromofluoromethane	0.310	0.306	1.3	107	0.00
35	T,M	1,1,1-Trichloroethane	0.512	0.531	-3.7	108	0.00
36	T,M	Cyclohexane	0.499	0.526	-5.4	114	0.00
37	T,M	2,2,4-Trimethylpentane	0.000	0.032	0.0	0#	0.00
38	T,M	1,1-Dichloropropene	0.174	0.179	-2.9	108	0.00
39	T,M	Carbon tetrachloride	0.382	0.395	-3.4	107	0.00
40	T,M	tert-Amyl methyl ether (TAM	0.612	0.620	-1.3	113	0.00
41	S	1,2-Dichloroethane-d4	0.211	0.210	0.5	112	-0.01

(#) = Out of Range

SG 5/15/24

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D Vial: 2
Acq On : 13 May 2024 12:06 pm Operator: LPriet
Sample : IVO01E1102 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\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	1.336	1.348	-0.9	106	0.00
43	T,M	1,2-Dichloroethane	0.269	0.279	-3.7	110	0.00
44	T,M	Trichloroethene	0.346	0.351	-1.4	103	0.00
45	T,M	Methylcyclohexane	0.549	0.563	-2.6	113	-0.01
46	C,T,M	1,2-Dichloropropane	0.299	0.302	-1.0	107	0.00
47	T,M	Bromodichloromethane	0.415	0.409	1.4	109	-0.01
48	T,M	1,4-Dioxane	0.001	0.001	0.0	114	-0.01
49	T,M	Dibromomethane	0.141	0.146	-3.5	114	0.00
50	T,M	2-Chloroethyl vinyl ether	0.076	0.077	-1.3	110	-0.01
51	T,M	4-Methyl-2-pentanone	0.136	0.145	-6.6	111	0.00
52	T,M	cis-1,3-Dichloropropene	0.465	0.478	-2.8	109	0.00
53	I	CHLOROBENZENE-D5	1.000	1.000	0.0	102	0.00
54	S	Toluene-d8	1.499	1.434	4.3	105	-0.01
55	C,T,M	Toluene	1.776	1.759	1.0	106	-0.01
56	T,M	Ethyl methacrylate	0.266	0.272	-2.3	113	-0.01
57	T,M	trans-1,3-Dichloropropene	0.413	0.425	-2.9	111	0.00
58	T,M	1,1,2-Trichloroethane	0.233	0.236	-1.3	111	0.00
59	T,M	2-Hexanone	0.090	0.100	-11.1	113	0.00
60	T,M	1,3-Dichloropropane	0.395	0.401	-1.5	112	0.00
61	T,M	Tetrachloroethene	0.369	0.369	0.0	105	0.00
62	T,M	Dibromochloromethane	0.284	0.286	-0.7	112	0.00
63	T,M	1,2-Dibromoethane	0.230	0.238	-3.5	113	0.00
64	T,M	1-Chlorohexane	0.767	0.787	-2.6	108	0.00
65	P,M	Chlorobenzene	1.059	1.065	-0.6	106	-0.01
66	T,M	1,1,1,2-Tetrachloroethane	0.326	0.331	-1.5	108	0.00
67	C,T,M	Ethylbenzene	2.027	2.025	0.1	104	0.00
68	T,M	m-Xylene & p-Xylene	1.484	1.501	-1.1	107	0.00
69	T,M	o-Xylene	1.527	1.519	0.5	107	-0.01
70	T,M	Styrene	1.184	1.180	0.3	106	0.00
71	T,M	Isopropylbenzene	2.012	2.019	-0.3	105	-0.01
72	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	102	0.00
73	P,T,M	Bromoform	0.350	0.386	-10.3	117	0.00
74	T,M	trans-1,4-Dichloro-2-butene	0.173	0.177	-2.3	116	0.00
75	T,M	1,1,2,2-Tetrachloroethane	0.666	0.660	0.9	114	-0.01
76	S	4-Bromofluorobenzene	1.362	1.284	5.7	107	-0.01
77	T,M	1,2,3-Trichloropropane	0.170	0.173	-1.8	111	0.00
78	T,M	n-Propylbenzene	6.502	6.396	1.6	104	0.00
79	T,M	Bromobenzene	1.029	1.028	0.1	107	0.00
80	T,M	1,3,5-Trimethylbenzene	4.155	4.106	1.2	105	0.00

(#) = Out of Range

SU 5/15/24

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D Vial: 2
Acq On : 13 May 2024 12:06 pm Operator: LPriet
Sample : IVO01E1102 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\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	3.915	3.917	-0.1	107	0.00
82	T,M	4-Chlorotoluene	3.466	3.467	-0.0	105	0.00
83	T,M	tert-Butylbenzene	0.871	0.867	0.5	105	0.00
84	T,M	1,2,4-Trimethylbenzene	4.065	4.025	1.0	104	-0.01
85	T,M	sec-Butylbenzene	5.711	5.692	0.3	105	0.00
86	T,M	p-Isopropyltoluene	4.403	4.312	2.1	104	0.00
87	T,M	1,3-Dichlorobenzene	1.955	1.957	-0.1	107	0.00
88	T,M	1,2,3-Trimethylbenzene	3.795	3.769	0.7	107	0.00
89	T,M	1,4-Dichlorobenzene	1.916	1.896	1.0	106	0.00
90	T,M	n-Butylbenzene	4.560	4.526	0.7	105	0.00
91	T,M	1,2-Dichlorobenzene	1.602	1.600	0.1	109	-0.01
92	T,M	1,2-Dibromo-3-chloropropane	0.095	0.095	0.0	117	0.00
93	T,M	1,2,4-Trichlorobenzene	1.169	1.179	-0.9	109	0.00
94	T,M	Hexachlorobutadiene	0.697	0.693	0.6	102	0.00
95	T,M	Naphthalene	1.365	1.392	-2.0	113	0.00
96	T,M	1,2,3-Trichlorobenzene	0.881	0.893	-1.4	110	0.00

SK 5/15/24

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D Vial: 2
Acq On : 13 May 2024 12:06 pm Operator: LPriet
Sample : IVO01E1102 1.0/5.0 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:24 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.55	114	907856	10.00 ug/l	0.00
53) CHLOROBENZENE-D5	13.72	117	757489	10.00 ug/l	0.00
72) 1,2-DICHLOROBENZENE-D4	18.68	152	290545	10.00 ug/l	0.00
System Monitoring Compounds					
34) Dibromofluoromethane	7.23	111	278148	9.90 ug/l	0.00
Spiked Amount 10.000			Recovery =	99.00%	
41) 1,2-Dichloroethane-d4	7.95	65	190681	9.95 ug/l	-0.01
Spiked Amount 10.000			Recovery =	99.50%	
54) Toluene-d8	11.02	98	1085971	9.57 ug/l	-0.01
Spiked Amount 10.000			Recovery =	95.70%	
76) 4-Bromofluorobenzene	16.00	95	373151	9.43 ug/l	-0.01
Spiked Amount 10.000			Recovery =	94.30%	
Target Compounds					Qvalue
3) Dichlorodifluoromethane	2.17	85	261017	10.74 ug/l	99
5) Chloromethane	2.49	50	347692	10.22 ug/l	99
6) Vinyl chloride	2.62	62	314201	11.09 ug/l	99
7) Bromomethane	3.15	94	332015	9.89 ug/l	99
8) Chloroethane	3.20	64	204024	9.93 ug/l	98
9) Dichlorofluoromethane	3.29	67	572473	9.81 ug/l	97
10) Trichlorofluoromethane	3.55	101	398783	10.41 ug/l	99
11) Acrolein	3.98	56	95103	46.64 ug/l	99
12) 1,1,2-Trichloro-1,2,2-trif	4.07	151	204924	10.70 ug/l	100
13) Acetone	4.06	43	153258	46.25 ug/l	100
14) 1,1-Dichloroethene	4.24	61	510086	10.53 ug/l	99
15) tert-Butyl alcohol	4.34	59	275606	272.71 ug/l	99
16) Iodomethane	4.64	142	525854	10.13 ug/l	100
17) Methyl acetate	4.65	43	87177	9.65 ug/l	97
18) Methylene chloride	4.86	49	403861	10.40 ug/l	98
19) Carbon disulfide	4.89	76	974363	9.41 ug/l	99
20) Acrylonitrile	5.02	53	209223	49.77 ug/l	100
21) tert-Butyl methyl ether (M	5.07	73	486511	10.22 ug/l	100
22) trans-1,2-Dichloroethene	5.24	61	482107	10.33 ug/l	98
23) Isopropyl ether (DIPE)	5.66	45	1037346	10.41 ug/l	98
24) Vinyl acetate	5.82	43	357100	10.44 ug/l	99
25) 1,1-Dichloroethane	5.82	63	566566	10.39 ug/l	100
27) tert-Butyl ethyl ether (ET	6.24	59	761232	10.66 ug/l	100
28) 2-Butanone	6.41	43	266366	52.38 ug/l	100
29) 2,2-Dichloropropane	6.62	77	475647	10.37 ug/l	100
30) cis-1,2-Dichloroethene	6.68	96	387725	10.33 ug/l	99
31) Chloroform	6.90	83	545984	9.82 ug/l	99

(#) = qualifier out of range (m) = manual integration

5/15/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D Vial: 2
Acq On : 13 May 2024 12:06 pm Operator: LPriet
Sample : IVO01E1102 1.0/5.0 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:24 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.14	49	230106	10.54	ug/l	98
33)	Tetrahydrofuran	7.20	42	33093	10.29	ug/l	97
35)	1,1,1-Trichloroethane	7.49	97	482510	10.37	ug/l	100
36)	Cyclohexane	7.52	84	477860	10.55	ug/l	100
38)	1,1-Dichloropropene	7.72	110	162485	10.28	ug/l	99
39)	Carbon tetrachloride	7.88	119	358693	10.35	ug/l	99
40)	tert-Amyl methyl ether (TA	7.88	73	562793	10.13	ug/l	100
42)	Benzene	8.13	78	1223803	10.09	ug/l	100
43)	1,2-Dichloroethane	8.10	62	252838	10.34	ug/l	99
44)	Trichloroethene	9.06	130	318416	10.15	ug/l	98
45)	Methylcyclohexane	9.15	83	511326	10.26	ug/l	99
46)	1,2-Dichloropropane	9.35	63	274499	10.12	ug/l	99
47)	Bromodichloromethane	9.72	83	371496	9.86	ug/l	99
48)	1,4-Dioxane	9.78	88	22815	205.36	ug/l	99
49)	Dibromomethane	9.82	93	132415	10.34	ug/l	98
50)	2-Chloroethyl vinyl ether	10.22	63	70329	10.21	ug/l	99
51)	4-Methyl-2-pentanone	10.26	43	657246	49.03	ug/l	100
52)	cis-1,3-Dichloropropene	10.62	75	433879	10.27	ug/l	100
55)	Toluene	11.15	91	1332719	9.91	ug/l	100
56)	Ethyl methacrylate	11.45	69	206172	10.21	ug/l	98
57)	trans-1,3-Dichloropropene	11.48	75	322019	10.30	ug/l	99
58)	1,1,2-Trichloroethane	11.75	97	178678	10.15	ug/l	99
59)	2-Hexanone	11.76	43	378200	47.36	ug/l	100
60)	1,3-Dichloropropane	12.19	76	304011	10.17	ug/l	100
61)	Tetrachloroethene	12.29	164	279605	10.00	ug/l	99
62)	Dibromochloromethane	12.66	129	216381	10.06	ug/l	100
63)	1,2-Dibromoethane	13.03	107	180319	10.35	ug/l	99
64)	1-Chlorohexane	13.30	91	595972	10.26	ug/l	100
65)	Chlorobenzene	13.78	112	806907	10.06	ug/l	100
66)	1,1,1,2-Tetrachloroethane	13.86	131	250367	10.14	ug/l	98
67)	Ethylbenzene	13.88	91	1533890	9.99	ug/l	100
68)	m-Xylene & p-Xylene	14.01	91	2274121	20.23	ug/l	100
69)	o-Xylene	14.83	91	1150973	9.95	ug/l	100
70)	Styrene	14.90	104	893787	9.97	ug/l	100
71)	Isopropylbenzene	15.51	105	1529556	10.04	ug/l	100
73)	Bromoform	15.55	173	112241	9.78	ug/l	97
74)	trans-1,4-Dichloro-2-buten	15.63	53	51511	10.28	ug/l	100
75)	1,1,2,2-Tetrachloroethane	15.85	83	191835	9.92	ug/l	98
77)	1,2,3-Trichloropropane	16.15	110	50167	10.14	ug/l	97
78)	n-Propylbenzene	16.29	91	1858212	9.84	ug/l	100
79)	Bromobenzene	16.38	156	298744	10.00	ug/l	99

(#) = qualifier out of range (m) = manual integration

5/15/24

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D Vial: 2
Acq On : 13 May 2024 12:06 pm Operator: LPriet
Sample : IVO01E1102 1.0/5.0 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:24 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.61	105	1193060	9.88	ug/l	99
81)	2-Chlorotoluene	16.63	91	1138017	10.01	ug/l	100
82)	4-Chlorotoluene	16.72	91	1007192	10.00	ug/l	100
83)	tert-Butylbenzene	17.29	134	251948	9.95	ug/l	98
84)	1,2,4-Trimethylbenzene	17.35	105	1169308	9.90	ug/l	99
85)	sec-Butylbenzene	17.66	105	1653826	9.97	ug/l	100
86)	p-Isopropyltoluene	17.88	119	1252965	9.80	ug/l	100
87)	1,3-Dichlorobenzene	18.03	146	568580	10.01	ug/l	100
88)	1,2,3-Trimethylbenzene	18.13	105	1095079	9.93	ug/l	99
89)	1,4-Dichlorobenzene	18.19	146	550958	9.89	ug/l	100
90)	n-Butylbenzene	18.49	91	1315009	9.93	ug/l	100
91)	1,2-Dichlorobenzene	18.71	146	464758	9.99	ug/l	99
92)	1,2-Dibromo-3-chloropropan	19.72	157	27714	9.35	ug/l	99
93)	1,2,4-Trichlorobenzene	20.80	180	342507	10.08	ug/l	99
94)	Hexachlorobutadiene	20.96	225	201295	9.94	ug/l	98
95)	Naphthalene	21.14	128	404546	10.20	ug/l	100
96)	1,2,3-Trichlorobenzene	21.46	180	259547	10.14	ug/l	99

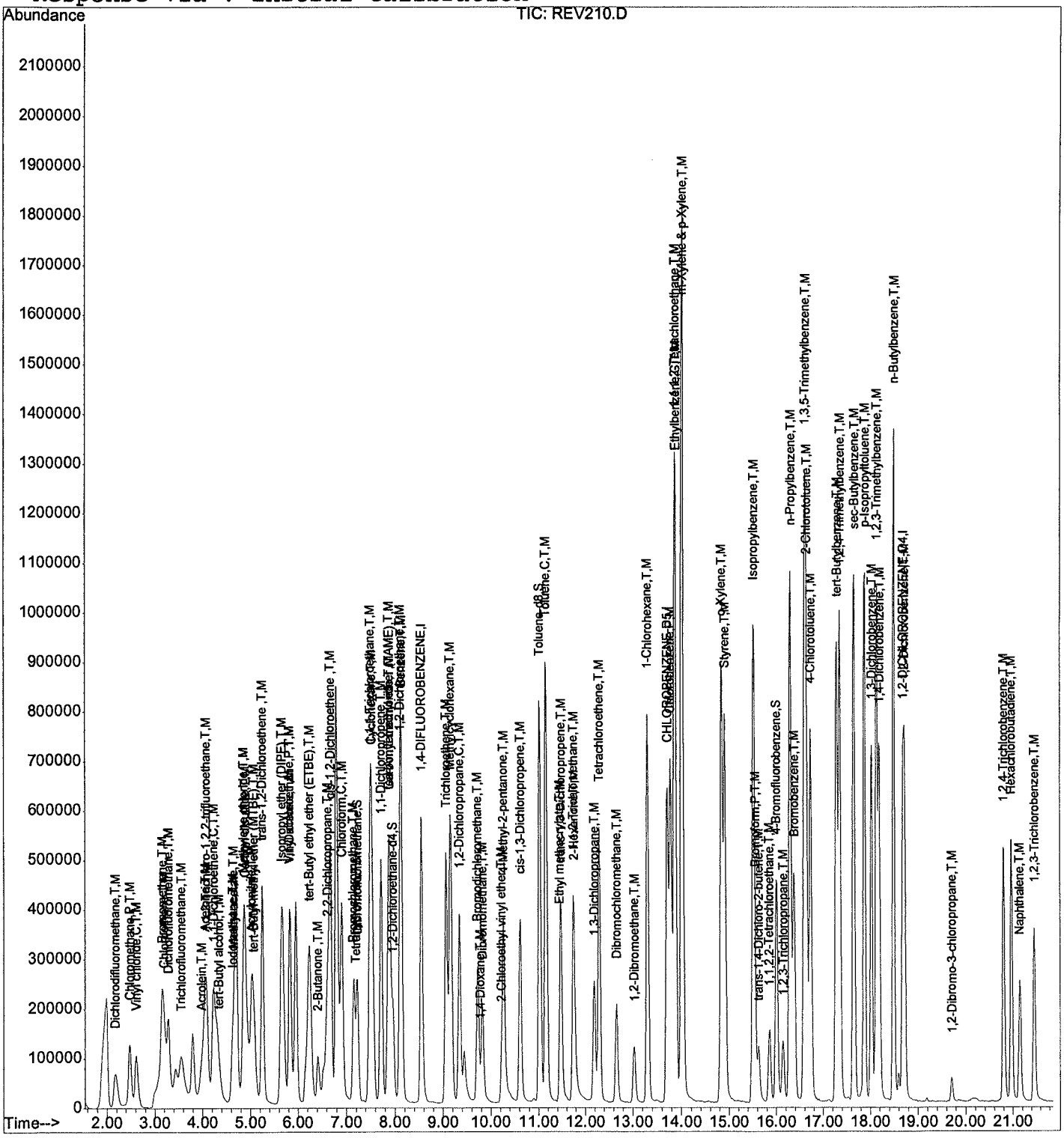
SA 5/15/24

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24E13\REV210.D Vial: 2
Acq On : 13 May 2024 12:06 pm Operator: LPriet
Sample : IVO01E1102 1.0/5.0 Inst : 01
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: May 13 13:24 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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 : 24F079

Lab File ID: RFV220
BFB Injection Date: 06/22/24

Instrument ID: 01
BFB Injection Time: 12:01

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	16.413
75	30 - 60% of mass 95	39.440
95	Base Peak, 100% relative abundance	100.000
96	5 - 9% of mass 95	6.229
173	Less than 2% of mass 174	0.000(0)1
174	Greater than 50% of mass 95	73.355
175	5 - 9% of mass 174	4.926(6.72)1
176	95 - 101% % of mass 174	70.176(95.67)1
177	5 - 9% % of mass 176	4.068(5.8)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	CVO01E1124	RFV221	06/22/24	12:31
2	LCS1W	VO01F10L	RFV222	06/22/24	13:11
3	LCD1W	VO01F10C	RFV223	06/22/24	13:40
4	MBLK1W	VO01F10B	RFV225	06/22/24	14:39
5	EB10-GW061724	24F079-02	RFV228	06/22/24	16:09

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: EMAX Laboratories, Inc.
Lab Code: EMAX
Lab File ID: REV201
Instrument ID: 01

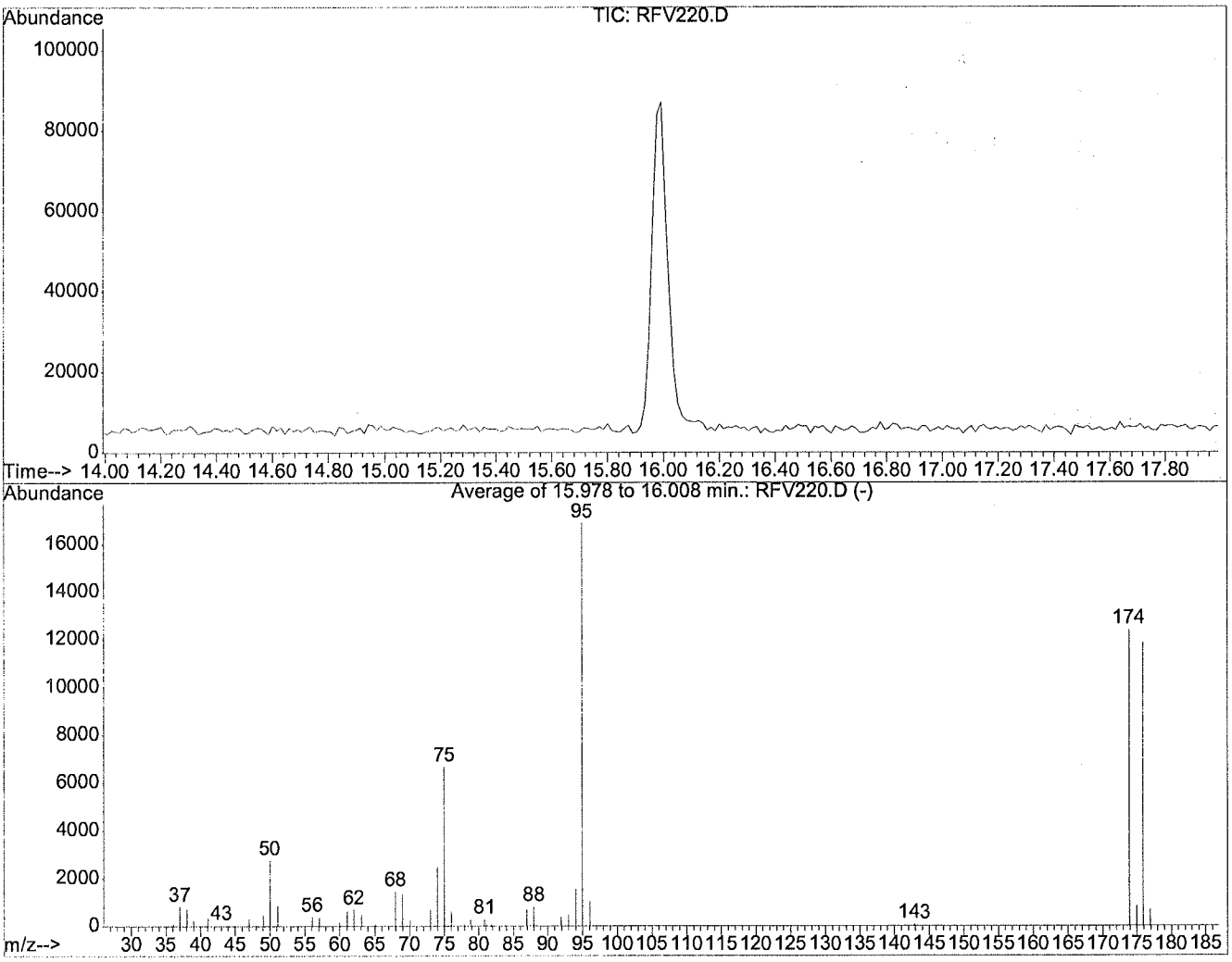
Project: VA SALT LAKE CITY
SDG No: 24F079
Date Analyzed: 05/11/24
Time Analyzed: 13:28

	INTERNAL STANDARD (IS)	1,4-DIFLUOROBENZENE		CHLOROBENZENE-D5		1,2-DICHLOROBENZENE-D4	
		Area #	RT #	Area #	RT #	Area #	RT #
	12 HOUR STD	920983	8.54	742213	13.71	284055	18.68
	UPPER LIMIT	1841966	8.71	1484426	13.88	568110	18.85
	LOWER LIMIT	460492	8.37	371107	13.54	142028	18.51
		Area #	RT #	Area #	RT #	Area #	RT #
1	VSTD10	776173	8.52	627072	13.68	256235	18.66
2	LCS1W	847395	8.52	695654	13.68	282690	18.66
3	LCD1W	788617	8.52	637913	13.68	262043	18.66
4	MBLK1W	811176	8.52	654608	13.68	263952	18.66
5	EB10-GW061724	748295	8.51	602089	13.68	241342	18.66

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\24F22\RFV220.D
Acq On : 22 Jun 2024 12:01 pm
Sample : BFB01F10
Misc : T/CHK
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls

Vial: 1
Operator: DNguye
Inst : 01New
Multiplr: 1.00



AutoFind: Scans 978, 979, 980; Background Corrected with Scan 971

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.4	2772	PASS
75	95	30	60	39.4	6661	PASS
95	95	100	100	100.0	16889	PASS
96	95	5	9	6.2	1052	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	73.4	12389	PASS
175	174	5	9	6.7	832	PASS
176	174	95	101	95.7	11852	PASS
177	176	5	9	5.8	687	PASS

RFV220.D VO01E11.M Sun Jun 23 14:03:51 2024

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F22\RFV221.D Vial: 2
Acq On : 22 Jun 2024 12:31 pm Operator: DNguye
Sample : CVO01E1124 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	-0.03
2	T,M	Chlorotrifluoroethylene	-1.000	0.000	0.0	0	-2.08#
3	T,M	Dichlorodifluoromethane	10.000	14.331	-43.3#	127	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	8.941	10.6	81	0.00
6	C,T,M	Vinyl chloride	10.000	10.553	-5.5	89	0.00
7	T,M	Bromomethane	10.000	9.514	4.9	90	0.00
8	T,M	Chloroethane	10.000	10.877	-8.8	98	-0.02
9	T,M	Dichlorofluoromethane	10.000	8.003	20.0	75	0.00
10	T,M	Trichlorofluoromethane	10.000	14.653	-46.5#	131	-0.02
11	T,M	Acrolein	50.000	32.798	34.4#	62	-0.02
12	T,M	1,1,2-Trichloro-1,2,2-trifl	10.000	9.559	4.4	81	0.01
13	T,M	Acetone	50.000	44.542	10.9	89	-0.02
14	C,T,M	1,1-Dichloroethene	10.000	8.190	18.1	72	0.00
15	T,M	tert-Butyl alcohol	250.000	234.009	6.4	87	-0.02
16	T,M	Iodomethane	10.000	7.991	20.1#	71	-0.02
17	T,M	Methyl acetate	10.000	11.423	-14.2	114	-0.02
18	T,M	Methylene chloride	10.000	8.651	13.5	78	-0.02
19	T,M	Carbon disulfide	10.000	10.485	-4.8	94	-0.02
20	T,M	Acrylonitrile	50.000	41.373	17.3	76	-0.02
21	T,M	tert-Butyl methyl ether (MT	10.000	9.666	3.3	90	-0.03
22	T,M	trans-1,2-Dichloroethene	10.000	8.298	17.0	75	-0.02
23	T,M	Isopropyl ether (DIPE)	10.000	8.641	13.6	78	-0.03
24	T,M	Vinyl acetate	10.000	11.702	-17.0	108	-0.02
25	P,T,M	1,1-Dichloroethane	10.000	8.946	10.5	80	-0.02
26	T,M	2-Butanol	250.000	0.000	100.0#	0	-0.03
27	T,M	tert-Butyl ethyl ether (ETB	10.000	9.823	1.8	90	-0.02
28	T,M	2-Butanone	50.000	49.411	1.2	88	-0.02
29	T,M	2,2-Dichloropropane	10.000	10.339	-3.4	92	-0.02
30	T,M	cis-1,2-Dichloroethene	10.000	8.951	10.5	79	-0.02
31	C,T,M	Chloroform	10.000	9.300	7.0	87	-0.02
32	T,M	Bromochloromethane	10.000	8.146	18.5	74	-0.02
33	T,M	Tetrahydrofuran	10.000	7.643	23.6#	77	-0.02
34	S	Dibromofluoromethane	10.000	9.472	5.3	88	-0.03
35	T,M	1,1,1-Trichloroethane	10.000	10.148	-1.5	91	-0.02
36	T,M	Cyclohexane	10.000	10.628	-6.3	99	-0.03
37	T,M	2,2,4-Trimethylpentane	10.000	0.000	100.0#	0	-0.05
38	T,M	1,1-Dichloropropene	10.000	8.816	11.8	79	-0.03
39	T,M	Carbon tetrachloride	10.000	10.299	-3.0	91	-0.03
40	T,M	tert-Amyl methyl ether (TAM	10.000	9.532	4.7	91	-0.02
41	S	1,2-Dichloroethane-d4	10.000	10.325	-3.2	99	-0.03

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F22\RFV221.D Vial: 2
Acq On : 22 Jun 2024 12:31 pm Operator: DNguye
Sample : CVO01E1124 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	8.963	10.4	81	-0.03
43	T,M	1,2-Dichloroethane	10.000	10.236	-2.4	93	-0.03
44	T,M	Trichloroethene	10.000	9.154	8.5	80	-0.03
45	T,M	Methylcyclohexane	10.000	10.485	-4.8	98	-0.03
46	C,T,M	1,2-Dichloropropane	10.000	9.075	9.3	82	-0.03
47	T,M	Bromodichloromethane	10.000	9.049	9.5	85	-0.03
48	T,M	1,4-Dioxane	200.000	139.266	30.4#	66	-0.03
49	T,M	Dibromomethane	10.000	8.738	12.6	82	-0.03
50	T,M	2-Chloroethyl vinyl ether	10.000	7.279	27.2#	67	-0.03
51	T,M	4-Methyl-2-pentanone	50.000	46.476	7.0	90	-0.03
52	T,M	cis-1,3-Dichloropropene	10.000	9.417	5.8	85	-0.03
53	I	CHLOROBENZENE-D5	10.000	10.000	0.0	84	-0.03
54	S	Toluene-d8	10.000	9.329	6.7	85	-0.04
55	C,T,M	Toluene	10.000	9.458	5.4	83	-0.03
56	T,M	Ethyl methacrylate	10.000	9.371	6.3	86	-0.03
57	T,M	trans-1,3-Dichloropropene	10.000	9.936	0.6	89	-0.03
58	T,M	1,1,2-Trichloroethane	10.000	9.883	1.2	90	-0.03
59	T,M	2-Hexanone	50.000	47.194	5.6	93	-0.02
60	T,M	1,3-Dichloropropane	10.000	9.499	5.0	86	-0.03
61	T,M	Tetrachloroethene	10.000	9.219	7.8	80	-0.03
62	T,M	Dibromochloromethane	10.000	9.291	7.1	85	-0.03
63	T,M	1,2-Dibromoethane	10.000	8.882	11.2	80	-0.03
64	T,M	1-Chlorohexane	10.000	8.612	13.9	75	-0.02
65	P,M	Chlorobenzene	10.000	9.425	5.7	82	-0.03
66	T,M	1,1,1,2-Tetrachloroethane	10.000	10.454	-4.5	92	-0.03
67	C,T,M	Ethylbenzene	10.000	9.916	0.8	86	-0.03
68	T,M	m-Xylene & p-Xylene	20.000	20.091	-0.5	88	-0.02
69	T,M	o-Xylene	10.000	9.835	1.6	87	-0.03
70	T,M	Styrene	10.000	9.681	3.2	85	-0.02
71	T,M	Isopropylbenzene	10.000	9.386	6.1	81	-0.03
72	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	90	-0.02
73	P,T,M	Bromoform	10.000	8.748	12.5	92	-0.03
74	T,M	trans-1,4-Dichloro-2-butene	10.000	9.656	3.4	96	-0.03
75	T,M	1,1,2,2-Tetrachloroethane	10.000	8.486	15.1	86	-0.03
76	S	4-Bromofluorobenzene	10.000	9.503	5.0	95	-0.03
77	T,M	1,2,3-Trichloropropane	10.000	8.931	10.7	87	-0.03
78	T,M	n-Propylbenzene	10.000	8.967	10.3	83	-0.03
79	T,M	Bromobenzene	10.000	8.773	12.3	83	-0.03
80	T,M	1,3,5-Trimethylbenzene	10.000	8.628	13.7	81	-0.03

(#) = Out of Range

Data File : D:\HPCHEM\1\DATA\24F22\RFV221.D Vial: 2
Acq On : 22 Jun 2024 12:31 pm Operator: DNguye
Sample : CVO01E1124 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	9.748	2.5	92	-0.03
82	T,M	4-Chlorotoluene	10.000	9.201	8.0	85	-0.02
83	T,M	tert-Butylbenzene	10.000	8.660	13.4	81	-0.03
84	T,M	1,2,4-Trimethylbenzene	10.000	8.782	12.2	81	-0.03
85	T,M	sec-Butylbenzene	10.000	8.498	15.0	79	-0.03
86	T,M	p-Isopropyltoluene	10.000	8.600	14.0	81	-0.02
87	T,M	1,3-Dichlorobenzene	10.000	9.210	7.9	87	-0.02
88	T,M	1,2,3-Trimethylbenzene	10.000	9.012	9.9	86	-0.02
89	T,M	1,4-Dichlorobenzene	10.000	9.318	6.8	88	-0.02
90	T,M	n-Butylbenzene	10.000	8.667	13.3	81	-0.02
91	T,M	1,2-Dichlorobenzene	10.000	9.488	5.1	92	-0.02
92	T,M	1,2-Dibromo-3-chloropropane	10.000	8.801	12.0	96	-0.02
93	T,M	1,2,4-Trichlorobenzene	10.000	8.546	14.5	81	0.00
94	T,M	Hexachlorobutadiene	10.000	7.367	26.3#	67	0.00
95	T,M	Naphthalene	10.000	9.476	5.2	92	0.00
96	T,M	1,2,3-Trichlorobenzene	10.000	8.692	13.1	83	-0.02

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F22\RFV221.D Vial: 2
Acq On : 22 Jun 2024 12:31 pm Operator: DNguye
Sample : CVO01E1124 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	-0.03
2	T,M	Chlorotrifluoroethylene	0.000	0.000	0.0	0#	-2.08#
3	T,M	Dichlorodifluoromethane	0.268	0.383	-42.9#	127	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	0.375	0.335	10.7	81	0.00
6	C,T,M	Vinyl chloride	0.312	0.329	-5.4	89	0.00
7	T,M	Bromomethane	0.396	0.352	11.1	90	0.00
8	T,M	Chloroethane	0.226	0.246	-8.8	98	-0.02
9	T,M	Dichlorofluoromethane	0.643	0.514	20.1#	75	0.00
10	T,M	Trichlorofluoromethane	0.422	0.619	-46.7#	131	-0.02
11	T,M	Acrolein	0.022	0.015	31.8#	62	-0.02
12	T,M	1,1,2-Trichloro-1,2,2-trifl	0.211	0.202	4.3	81	0.01
13	T,M	Acetone	0.037	0.033	10.8	89	-0.02
14	C,T,M	1,1-Dichloroethene	0.533	0.437	18.0	72	0.00
15	T,M	tert-Butyl alcohol	0.011	0.010	9.1	87	-0.02
16	T,M	Iodomethane	0.572	0.457	20.1#	71	-0.02
17	T,M	Methyl acetate	0.100	0.114	-14.0	114	-0.02
18	T,M	Methylene chloride	0.428	0.370	13.6	78	-0.02
19	T,M	Carbon disulfide	1.140	1.196	-4.9	94	-0.02
20	T,M	Acrylonitrile	0.046	0.038	17.4	76	-0.02
21	T,M	tert-Butyl methyl ether (MT	0.525	0.507	3.4	90	-0.03
22	T,M	trans-1,2-Dichloroethene	0.514	0.426	17.1	75	-0.02
23	T,M	Isopropyl ether (DIPE)	1.098	0.949	13.6	78	-0.03
24	T,M	Vinyl acetate	0.377	0.441	-17.0	108	-0.02
25	P,T,M	1,1-Dichloroethane	0.601	0.538	10.5	80	-0.02
26	T,M	2-Butanol	0.000	0.009	0.0	0#	-0.03
27	T,M	tert-Butyl ethyl ether (ETB	0.787	0.773	1.8	90	-0.02
28	T,M	2-Butanone	0.056	0.055	1.8	88	-0.02
29	T,M	2,2-Dichloropropane	0.505	0.522	-3.4	92	-0.02
30	T,M	cis-1,2-Dichloroethene	0.414	0.370	10.6	79	-0.02
31	C,T,M	Chloroform	0.612	0.570	6.9	87	-0.02
32	T,M	Bromochloromethane	0.240	0.196	18.3	74	-0.02
33	T,M	Tetrahydrofuran	0.035	0.027	22.9#	77	-0.02
34	S	Dibromofluoromethane	0.310	0.293	5.5	88	-0.03
35	T,M	1,1,1-Trichloroethane	0.512	0.520	-1.6	91	-0.02
36	T,M	Cyclohexane	0.499	0.530	-6.2	99	-0.03
37	T,M	2,2,4-Trimethylpentane	0.000	0.026	0.0	0#	-0.05
38	T,M	1,1-Dichloropropene	0.174	0.154	11.5	79	-0.03
39	T,M	Carbon tetrachloride	0.382	0.393	-2.9	91	-0.03
40	T,M	tert-Amyl methyl ether (TAM	0.612	0.583	4.7	91	-0.02
41	S	1,2-Dichloroethane-d4	0.211	0.218	-3.3	99	-0.03

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F22\RFV221.D Vial: 2
Acq On : 22 Jun 2024 12:31 pm Operator: DNguye
Sample : CVO01E1124 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	1.336	1.197	10.4	81	-0.03
43	T,M	1,2-Dichloroethane	0.269	0.276	-2.6	93	-0.03
44	T,M	Trichloroethene	0.346	0.316	8.7	80	-0.03
45	T,M	Methylcyclohexane	0.549	0.576	-4.9	98	-0.03
46	C,T,M	1,2-Dichloropropane	0.299	0.271	9.4	82	-0.03
47	T,M	Bromodichloromethane	0.415	0.375	9.6	85	-0.03
48	T,M	1,4-Dioxane	0.001	0.001	0.0	66	-0.03
49	T,M	Dibromomethane	0.141	0.123	12.8	82	-0.03
50	T,M	2-Chloroethyl vinyl ether	0.076	0.055	27.6#	67	-0.03
51	T,M	4-Methyl-2-pentanone	0.136	0.137	-0.7	90	-0.03
52	T,M	cis-1,3-Dichloropropene	0.465	0.438	5.8	85	-0.03
53	I	CHLOROBENZENE-D5	1.000	1.000	0.0	84	-0.03
54	S	Toluene-d8	1.499	1.398	6.7	85	-0.04
55	C,T,M	Toluene	1.776	1.680	5.4	83	-0.03
56	T,M	Ethyl methacrylate	0.266	0.250	6.0	86	-0.03
57	T,M	trans-1,3-Dichloropropene	0.413	0.410	0.7	89	-0.03
58	T,M	1,1,2-Trichloroethane	0.233	0.230	1.3	90	-0.03
59	T,M	2-Hexanone	0.090	0.099	-10.0	93	-0.02
60	T,M	1,3-Dichloropropane	0.395	0.375	5.1	86	-0.03
61	T,M	Tetrachloroethene	0.369	0.340	7.9	80	-0.03
62	T,M	Dibromochloromethane	0.284	0.264	7.0	85	-0.03
63	T,M	1,2-Dibromoethane	0.230	0.204	11.3	80	-0.03
64	T,M	1-Chlorohexane	0.767	0.660	14.0	75	-0.02
65	P,M	Chlorobenzene	1.059	0.998	5.8	82	-0.03
66	T,M	1,1,1,2-Tetrachloroethane	0.326	0.341	-4.6	92	-0.03
67	C,T,M	Ethylbenzene	2.027	2.010	0.8	86	-0.03
68	T,M	m-Xylene & p-Xylene	1.484	1.490	-0.4	88	-0.02
69	T,M	o-Xylene	1.527	1.502	1.6	87	-0.03
70	T,M	Styrene	1.184	1.146	3.2	85	-0.02
71	T,M	Isopropylbenzene	2.012	1.888	6.2	81	-0.03
72	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	90	-0.02
73	P,T,M	Bromoform	0.350	0.344	1.7	92	-0.03
74	T,M	trans-1,4-Dichloro-2-butene	0.173	0.167	3.5	96	-0.03
75	T,M	1,1,2,2-Tetrachloroethane	0.666	0.565	15.2	86	-0.03
76	S	4-Bromofluorobenzene	1.362	1.294	5.0	95	-0.03
77	T,M	1,2,3-Trichloropropane	0.170	0.152	10.6	87	-0.03
78	T,M	n-Propylbenzene	6.502	5.830	10.3	83	-0.03
79	T,M	Bromobenzene	1.029	0.902	12.3	83	-0.03
80	T,M	1,3,5-Trimethylbenzene	4.155	3.585	13.7	81	-0.03

(#) = Out of Range

Data File : D:\HPCHEM\1\DATA\24F22\RFV221.D Vial: 2
Acq On : 22 Jun 2024 12:31 pm Operator: DNguye
Sample : CVO01E1124 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 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	3.915	3.816	2.5	92	-0.03
82	T,M	4-Chlorotoluene	3.466	3.189	8.0	85	-0.02
83	T,M	tert-Butylbenzene	0.871	0.755	13.3	81	-0.03
84	T,M	1,2,4-Trimethylbenzene	4.065	3.570	12.2	81	-0.03
85	T,M	sec-Butylbenzene	5.711	4.853	15.0	79	-0.03
86	T,M	p-Isopropyltoluene	4.403	3.786	14.0	81	-0.02
87	T,M	1,3-Dichlorobenzene	1.955	1.800	7.9	87	-0.02
88	T,M	1,2,3-Trimethylbenzene	3.795	3.420	9.9	86	-0.02
89	T,M	1,4-Dichlorobenzene	1.916	1.786	6.8	88	-0.02
90	T,M	n-Butylbenzene	4.560	3.952	13.3	81	-0.02
91	T,M	1,2-Dichlorobenzene	1.602	1.520	5.1	92	-0.02
92	T,M	1,2-Dibromo-3-chloropropane	0.095	0.089	6.3	96	-0.02
93	T,M	1,2,4-Trichlorobenzene	1.169	0.999	14.5	81	0.00
94	T,M	Hexachlorobutadiene	0.697	0.513	26.4#	67	0.00
95	T,M	Naphthalene	1.365	1.293	5.3	92	0.00
96	T,M	1,2,3-Trichlorobenzene	0.881	0.766	13.1	83	-0.02

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F22\RFV221.D Vial: 2
Acq On : 22 Jun 2024 12:31 pm Operator: DNguye
Sample : CVO01E1124 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 22 12:52 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	8.52	114	776173	10.00	ug/l	-0.03
53) CHLOROBENZENE-D5	13.68	117	627072	10.00	ug/l	-0.03
72) 1,2-DICHLOROBENZENE-D4	18.66	152	256235	10.00	ug/l	-0.02
System Monitoring Compounds						
34) Dibromofluoromethane	7.20	111	227573	9.47	ug/l	-0.03
Spiked Amount 10.000			Recovery = 94.70%			
41) 1,2-Dichloroethane-d4	7.94	65	169177	10.32	ug/l	-0.03
Spiked Amount 10.000			Recovery = 103.20%			
54) Toluene-d8	10.99	98	876708	9.33	ug/l	-0.04
Spiked Amount 10.000			Recovery = 93.30%			
76) 4-Bromofluorobenzene	15.98	95	331651	9.50	ug/l	-0.03
Spiked Amount 10.000			Recovery = 95.00%			
Target Compounds						Qvalue
3) Dichlorodifluoromethane	2.16	85	297651	14.33	ug/l	98
5) Chloromethane	2.47	50	259978	8.94	ug/l	98
6) Vinyl chloride	2.62	62	255574	10.55	ug/l	99
7) Bromomethane	3.14	94	273395	9.51	ug/l	97
8) Chloroethane	3.17	64	191079	10.88	ug/l	98
9) Dichlorofluoromethane	3.27	67	399318	8.00	ug/l	82
10) Trichlorofluoromethane	3.54	101	480113	14.65	ug/l	98
11) Acrolein	3.97	56	57180	32.80	ug/l	96
12) 1,1,2-Trichloro-1,2,2-trif	4.07	151	156515	9.56	ug/l	98
13) Acetone	4.04	43	126193	44.54	ug/l	90
14) 1,1-Dichloroethene	4.22	61	339025	8.19	ug/l	98
15) tert-Butyl alcohol	4.32	59	202193	234.01	ug/l	99
16) Iodomethane	4.62	142	354687	7.99	ug/l	95
17) Methyl acetate	4.63	43	88242	11.42	ug/l	100
18) Methylene chloride	4.84	49	287317	8.65	ug/l	94
19) Carbon disulfide	4.86	76	928070	10.48	ug/l	100
20) Acrylonitrile	5.00	53	148706	41.37	ug/l	96
21) tert-Butyl methyl ether (M	5.03	73	393541	9.67	ug/l	90
22) trans-1,2-Dichloroethene	5.23	61	330932	8.30	ug/l	98
23) Isopropyl ether (DIPE)	5.64	45	736364	8.64	ug/l	99
24) Vinyl acetate	5.80	43	342336	11.70	ug/l	99
25) 1,1-Dichloroethane	5.80	63	417257	8.95	ug/l	99
27) tert-Butyl ethyl ether (ET	6.22	59	599824	9.82	ug/l	98
28) 2-Butanone	6.40	43	214806	49.41	ug/l	99
29) 2,2-Dichloropropane	6.60	77	405423	10.34	ug/l	97
30) cis-1,2-Dichloroethene	6.66	96	287352	8.95	ug/l	99
31) Chloroform	6.88	83	442043	9.30	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F22\RFV221.D Vial: 2
Acq On : 22 Jun 2024 12:31 pm Operator: DNguye
Sample : CVO01E1124 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 22 12:52 2024 Quant Results File: VO01E11.RES

Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32)	Bromochloromethane	7.12	49	152052	8.15 ug/l	95
33)	Tetrahydrofuran	7.18	42	21016	7.64 ug/l	99
35)	1,1,1-Trichloroethane	7.48	97	403557	10.15 ug/l	98
36)	Cyclohexane	7.49	84	411616	10.63 ug/l	97
38)	1,1-Dichloropropene	7.68	110	119170	8.82 ug/l	97
39)	Carbon tetrachloride	7.85	119	305093	10.30 ug/l	97
40)	tert-Amyl methyl ether (TA	7.86	73	452849	9.53 ug/l	99
42)	Benzene	8.10	78	929424	8.96 ug/l	98
43)	1,2-Dichloroethane	8.07	62	214059	10.24 ug/l	100
44)	Trichloroethene	9.03	130	245505	9.15 ug/l	99
45)	Methylcyclohexane	9.14	83	446771	10.49 ug/l	99
46)	1,2-Dichloropropane	9.32	63	210561	9.08 ug/l	90
47)	Bromodichloromethane	9.70	83	291413	9.05 ug/l	98
48)	1,4-Dioxane	9.76	88	13228	139.27 ug/l	91
49)	Dibromomethane	9.79	93	95619	8.74 ug/l	98
50)	2-Chloroethyl vinyl ether	10.20	63	42858	7.28 ug/l	95
51)	4-Methyl-2-pentanone	10.23	43	530894	46.48 ug/l	98
52)	cis-1,3-Dichloropropene	10.59	75	339998	9.42 ug/l	98
55)	Toluene	11.14	91	1053286	9.46 ug/l	97
56)	Ethyl methacrylate	11.43	69	156597	9.37 ug/l	92
57)	trans-1,3-Dichloropropene	11.45	75	257176	9.94 ug/l	98
58)	1,1,2-Trichloroethane	11.71	97	144088	9.88 ug/l	95
59)	2-Hexanone	11.74	43	311830	47.19 ug/l	94
60)	1,3-Dichloropropane	12.16	76	235075	9.50 ug/l	95
61)	Tetrachloroethene	12.26	164	213406	9.22 ug/l	98
62)	Dibromochloromethane	12.63	129	165374	9.29 ug/l	99
63)	1,2-Dibromoethane	13.00	107	128112	8.88 ug/l	96
64)	1-Chlorohexane	13.28	91	414148	8.61 ug/l	97
65)	Chlorobenzene	13.76	112	625727	9.43 ug/l	98
66)	1,1,1,2-Tetrachloroethane	13.83	131	213756	10.45 ug/l	94
67)	Ethylbenzene	13.85	91	1260218	9.92 ug/l	98
68)	m-Xylene & p-Xylene	13.99	91	1869272	20.09 ug/l	95
69)	o-Xylene	14.81	91	941756	9.83 ug/l	95
70)	Styrene	14.88	104	718591	9.68 ug/l	98
71)	Isopropylbenzene	15.49	105	1184067	9.39 ug/l	99
73)	Bromoform	15.52	173	88167	8.75 ug/l	95
74)	trans-1,4-Dichloro-2-buten	15.59	53	42685	9.66 ug/l	96
75)	1,1,2,2-Tetrachloroethane	15.83	83	144753	8.49 ug/l	98
77)	1,2,3-Trichloropropane	16.11	110	38976	8.93 ug/l	96
78)	n-Propylbenzene	16.26	91	1493926	8.97 ug/l	99
79)	Bromobenzene	16.35	156	231229	8.77 ug/l	99

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24F22\RFV221.D Vial: 2
Acq On : 22 Jun 2024 12:31 pm Operator: DNguye
Sample : CVO01E1124 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 22 12:52 2024 Quant Results File: VO01E11.RES

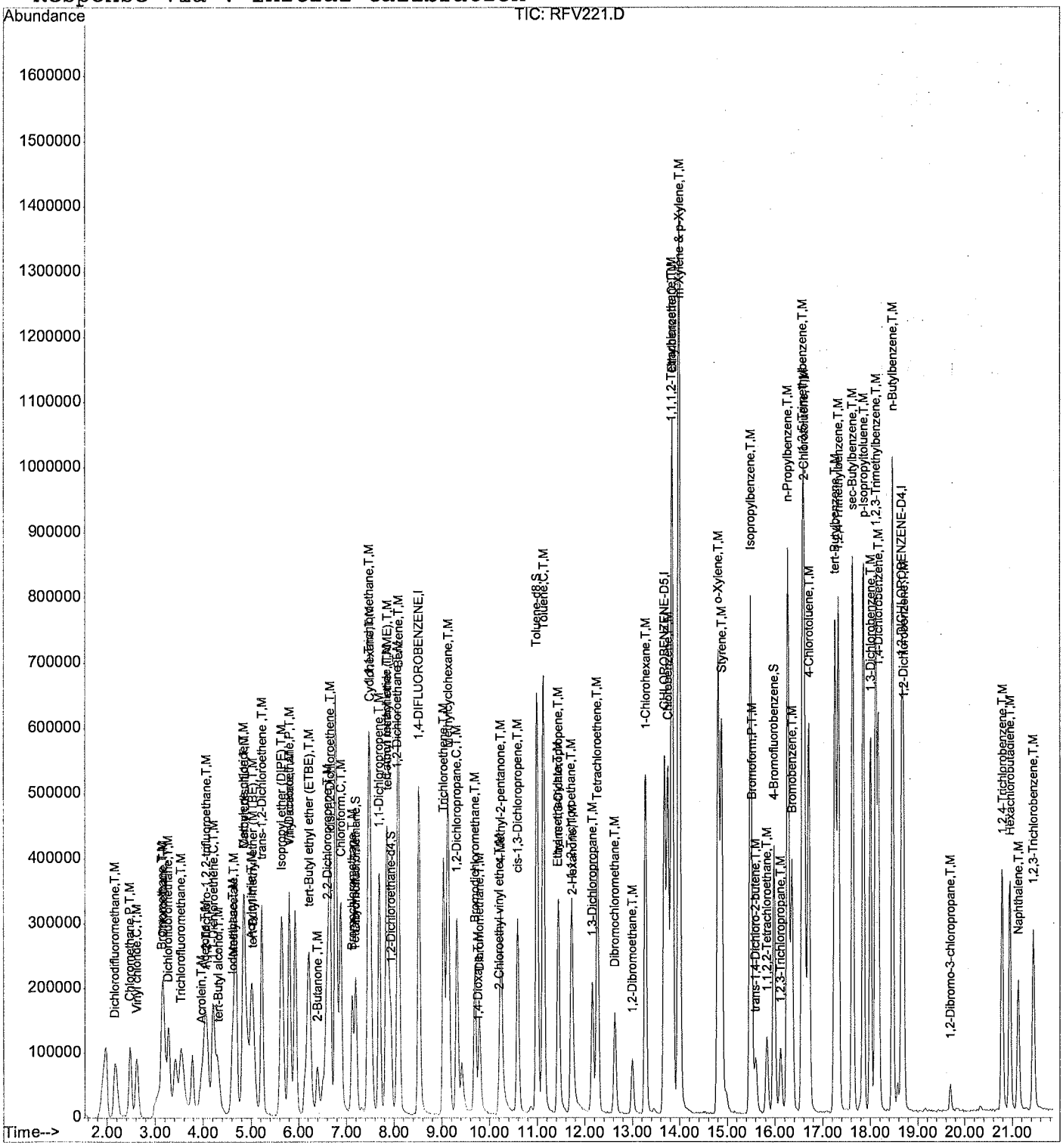
Quant Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration
DataAcq Meth : VO01E11

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	1,3,5-Trimethylbenzene	16.57	105	918527	8.63	ug/l	98
81)	2-Chlorotoluene	16.60	91	977776	9.75	ug/l	97
82)	4-Chlorotoluene	16.70	91	817075	9.20	ug/l	96
83)	tert-Butylbenzene	17.25	134	193386	8.66	ug/l	97
84)	1,2,4-Trimethylbenzene	17.33	105	914703	8.78	ug/l	99
85)	sec-Butylbenzene	17.62	105	1243470	8.50	ug/l	99
86)	p-Isopropyltoluene	17.86	119	970170	8.60	ug/l	98
87)	1,3-Dichlorobenzene	18.01	146	461288	9.21	ug/l	99
88)	1,2,3-Trimethylbenzene	18.11	105	876348	9.01	ug/l	99
89)	1,4-Dichlorobenzene	18.17	146	457591	9.32	ug/l	98
90)	n-Butylbenzene	18.47	91	1012719	8.67	ug/l	98
91)	1,2-Dichlorobenzene	18.70	146	389410	9.49	ug/l	99
92)	1,2-Dibromo-3-chloropropan	19.70	157	22914	8.80	ug/l	92
93)	1,2,4-Trichlorobenzene	20.79	180	256069	8.55	ug/l	96
94)	Hexachlorobutadiene	20.95	225	131504	7.37	ug/l	95
95)	Naphthalene	21.13	128	331412	9.48	ug/l	98
96)	1,2,3-Trichlorobenzene	21.44	180	196195	8.69	ug/l	97

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24F22\RFV221.D Vial: 2
Acq On : 22 Jun 2024 12:31 pm Operator: DNguye
Sample : CVO01E1124 Inst : 01New
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 22 12:52 2024 Quant Results File: VO01E11.RES

Method : D:\HPCHEM\1\METHODS\VO01E11.M (RTE Integrator)
Title : METHOD 8260 25mls
Last Update : Mon May 13 13:20:11 2024
Response via : Initial Calibration



ANALYTICAL LOG(S)

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

Book #:	A01-076
Instrument No.:	01
Analytical Sequence:	24E11
Method File:	V001E11
Analytical Batch:	V001E116

INITIAL CALIBRATION REFERENCE			
DATE	5/11/24		
ICAL ID	VO01 E11		
STANDARDS			
NAME	ID	Amount (µl)	Conc. (mg/L)
DCC CS2 GAS	SVI-43-90-03 -90-02	*	250 250
DCC 4ADD	-95-02		250
DCC 8260	-86-01		50
DCC KET	-93-03		250
BFB	-38-02	1	50
IS/SURR. IS SS	-94-03 -87-01	1 *	250 250
ICV/LCS CS2 GAS	-79-02 -94-01	1 1	250 250
ICV/LCS 4ADD	-64-03	5	50
ICV/LCS 8260	-78-03	5	50
ICV/LCS KET	-94-02	5	250
Data File Folder	24E11		
	LOT #	Syringe Lot #	
pH strip	N/A	MSV-03-04-12-4	
Chlorine strip	↓	-04-12-6	
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: LAP
Date: 5/11/24
Disposed By: LAP
Date Disposed: 5/13/24

Injection Log

Directory: D:\HPCHEM\1\DATA\24E11

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	REV195.D	1.	BFB01E11	T/CHK	11 May 2024 10:20
2	2	REV196.D	1.	VO01E111 0.03/0.15	0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA	11 May 2024 10:58
3	3	REV197.D	1.	VO01E112 0.05/0.25	0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA	11 May 2024 11:27
4	4	REV198.D	1.	VO01E113 0.1/0.5	1ppb 8260/5ppb KET-AA/25ppb TBA	11 May 2024 11:56
5	5	REV199.D	1.	VO01E114 0.2/1.0	2ppb 8260/10ppb KET-AA/50ppb TBA	11 May 2024 12:30
6	6	REV200.D	1.	VO01E115 0.5/2.5	5ppb 8260/25ppb KET-AA/125ppb TBA	11 May 2024 12:59
7	7	REV201.D	1.	VO01E116 1.0/5.0	10ppb 8260/50ppb KET-AA/250ppb TBA	11 May 2024 13:28
8	8	REV202.D	1.	VO01E117 2.0/10	20ppb 8260/100ppb KET-AA/500ppb TBA	11 May 2024 13:58
9	9	REV203.D	1.	VO01E118 3.0/15	30ppb 8260/150ppb KET-AA/750ppb TBA	11 May 2024 14:27
10	10	REV204.D	1.	VO01E119 5.0/25	50ppb 8260/250ppb KET-AA/1250ppb TBA	11 May 2024 14:56
11	11	REV205.D	1.	VO01DE1110 10/50	100ppb 8260/500ppb KET-AA/2500ppb TBA	11 May 2024 15:26
12	12	REV206.D	1.	RINSE		11 May 2024 15:55
13	13	REV207.D	1.	RINSE		11 May 2024 16:24
14	14	REV208.D	1.	IVO01E1101 1.0/5.0 Bromoform ↑.R↓	10ppb 8260/50ppb KET-AA/250ppb TBA	11 May 2024 16:53

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

Book #:	A01-076
Instrument No.:	01
Analytical Sequence:	24E13
Method File:	V001E11
Analytical Batch:	V001E1102

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	5/11/24		
ICAL ID	V001 E11		
STANDARDS			
NAME	ID	Amount (ul)	Conc. (mg/L)
DCC			
DCC			
DCC			
DCC			
BFB	SV1-43-30-02	1	50
IS/SURR. IS	-94-03	1	250
IS/SURR. SS	-07-01	1	250
ICV/LCS CS2	-79-02	1	250
ICV/LCS GAS	-94-01	1	250
ICV/LCS 8ADD	-69-03	5	50
ICV/LCS 8260	-70-03	5	50
ICV/LCS KET	-94-02	5	250
Data File Folder	24E13		
	LOT #	Syringe Lot #	
pH strip	N/A	MSV-03-04-12-6	
Chlorine strip	↓	↓ -12-4	
Methanol			
$NaHSO_4$			
Reagent Water	RW4-23-001		
Sand			

ELECTRONIC DATA ARCHIVAL	
Location	Date
HPCHEM_VOA/TO01	

Analyzed By: LAP
Date: 6/13/24
Disposed By: LAP
Date Disposed: 5/14/24

Injection Log

Directory: D:\HPCHEM\1\DATA\24E13

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	REV209.D	1.	BFB01E12	T/CHK	13 May 2024 11:31
2	2	REV210.D	1.	IVO01E1102 1.0/5.0	10ppb 8260/50ppb KET-AA/250ppb TBA	13 May 2024 12:06
3	1	REV211.D	1.	BFB01E13	T/CHK	13 May 2024 12:45
4	2	REV212.D	1.	CVO01E1101	10ppb 8260/50ppb KET-AA/250ppb TBA	13 May 2024 13:17
5	3	REV213.D	1.	VO01E13L	10ppb 8260/50ppb KET-AA/250ppb TBA	13 May 2024 13:48
6	4	REV214.D	1.	VO01E13C	10ppb 8260/50ppb KET-AA/250ppb TBA	13 May 2024 14:17
7	5	REV215.D	1.	RINSE		13 May 2024 14:47
8	6	REV216.D	1.	VO01E13B	25mL	13 May 2024 15:17
9	7	REV217.D	1.	24E021-01	25mL	13 May 2024 15:46
10	8	REV218.D	1.	24E021-11	25mL	13 May 2024 16:16
11	9	REV219.D	1.	24E072-05	25mL	13 May 2024 16:45
12	10	REV220.D	1.	24E021-04	25mL	13 May 2024 17:15
13	11	REV221.D	1.	24E021-05	25mL	13 May 2024 17:45
14	12	REV222.D	1.	24E021-06	25mL	13 May 2024 18:14
15	13	REV223.D	1.	24E021-07	25mL	13 May 2024 18:43
16	14	REV224.D	1.	24E021-08	25mL	13 May 2024 19:12
17	15	REV225.D	1.	24E021-09	25mL	13 May 2024 19:41
18	16	REV226.D	1.	24E021-10	25mL	13 May 2024 20:10
19	17	REV227.D	1.	24E021-12	25mL	13 May 2024 20:40
20	18	REV228.D	1.	24E021-14	25mL	13 May 2024 21:09
21	19	REV229.D	1.	24E021-15	25mL	13 May 2024 21:38
22	20	REV230.D	1.	24E021-16	25mL	13 May 2024 22:07
23	21	REV231.D	1.	24E072-01	25mL	13 May 2024 22:36
24	22	REV232.D	1.	24E072-02	25mL	13 May 2024 23:05
25	23	REV233.D	1.	24E072-03	25mL	13 May 2024 23:34
26	24	REV234.D	1.	24E072-04	25mL	14 May 2024 00:02
27	25	REV235.D	1.	24E021-02	25mL	14 May 2024 00:31
28	26	REV236.D	1.	EVO01E1101	10ppb 8260/50ppb KET-AA/250ppb TBA	14 May 2024 01:00
29	27	REV237.D	1.	EVO01E1101	10ppb 8260/50ppb KET-AA/250ppb TBA	14 May 2024 01:29
30	28	REV238.D	1.	EVO01E1101	10ppb 8260/50ppb KET-AA/250ppb TBA	14 May 2024 01:58
31	29	REV239.D	1.	RINSE	10ppb 8260/50ppb KET-AA/250ppb TBA	14 May 2024 02:26
32	30	REV240.D	1.	RINSE	10ppb 8260/50ppb KET-AA/250ppb TBA	14 May 2024 02:55

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

Book #:	A01-076
Instrument No.:	01
Analytical Sequence:	VOF22
Method File:	~~VOE1~~ VOO1E11
Analytical Batch:	VOO1E11 24

DM 6/24/24

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	5/11/24		
ICAL ID	VO01E11		
STANDARDS			
NAME	ID	Amount (µl)	Conc. (mg/L)
DCC	SVI-43-00-02	1	
DCC	-87-03	1	
DCC	-70-02 -93-03	1 5	
DCC	-86-01	5	
BFB	SVI-45-01-01	1	
IS/SURR.	43-100-01	5	50/250
ICV/LCS	-79-02	1 X	
ICV/LCS	-82-01	5 1	
ICV/LCS	-70-01 -74-02	5 5	
ICV/LCS	-77-01	5	
Data File Folder	24F22		
	LOT #	Syringe Lot #	
pH strip	HC210330	MSV-03-04-12-5	
Chlorine strip	244 3243030	↓ -6	
Methanol	LAP 6/25/24		
$NaHSO_4$			
Reagent Water	RW4-23-001		
Sand			

LAP 6/25/24

ELECTRONIC DATA ARCHIVAL	
Location	Date
HPCHEM_VOA/TO01	

Analyzed By: DM

Date: 6/22/24

Disposed By: DM

Date Disposed: 6/24/24

Injection Log

Directory: D:\HPCHEM\1\DATA\24F22

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	RFV220.D	1.	BFB01F10	T/CHK	22 Jun 2024 12:01
2	2	RFV221.D	1.	CVO01E1124	10ppb 8260/50ppb KET-AA/250ppb TBA	22 Jun 2024 12:31
3	3	RFV222.D	1.	VO01F10L	10ppb 8260/50ppb KET-AA/250ppb TBA	22 Jun 2024 13:11
4	4	RFV223.D	1.	VO01F10C	10ppb 8260/50ppb KET-AA/250ppb TBA	22 Jun 2024 13:40
5	5	RFV224.D	1.	RINSE	25mL	22 Jun 2024 14:10
6	6	RFV225.D	1.	VO01F10B	25mL	22 Jun 2024 14:39
7	7	RFV226.D	1.	24F081-02	25mL	22 Jun 2024 15:09
8	8	RFV227.D	1.	24F081-01	25mL	22 Jun 2024 15:39
9	9	RFV228.D	1.	24F079-02	25mL	22 Jun 2024 16:09
10	10	RFV229.D	1.	24F048-01	25mL	22 Jun 2024 16:38
11	11	RFV230.D	1.	24F048-02	25mL	22 Jun 2024 17:08
12	12	RFV231.D	1.	24F078-01	25mL	22 Jun 2024 17:38
13	13	RFV232.D	1.	24F078-02	25mL	22 Jun 2024 18:07
14	14	RFV233.D	1.	24F088-01	25mL	22 Jun 2024 18:37
15	15	RFV234.D	1.	24F088-02	25mL	22 Jun 2024 19:07
16	16	RFV235.D	1.	24F070-10	25mL	22 Jun 2024 19:37
17	17	RFV236.D	1.	24F070-01	25mL	22 Jun 2024 20:06
18	18	RFV237.D	1.	24F070-02	25mL	22 Jun 2024 20:36
19	19	RFV238.D	1.	24F070-03	25mL	22 Jun 2024 21:06
20	20	RFV239.D	1.	24F070-04	25mL	22 Jun 2024 21:35
21	21	RFV240.D	1.	24F070-10M	25mL	22 Jun 2024 22:05
22	22	RFV241.D	1.	24F070-10S	25mL	22 Jun 2024 22:34
23	23	RFV242.D	1.	EVO01E1124	10ppb 8260/50ppb KET-AA/250ppb TBA	22 Jun 2024 23:04
24	24	RFV243.D	1.	EVO01E11241	10ppb 8260/50ppb KET-AA/250ppb TBA	22 Jun 2024 23:33
25	25	RFV244.D	1.	EVO01E11242	10ppb 8260/50ppb KET-AA/250ppb TBA	23 Jun 2024 00:02
26	26	RFV245.D	1.	RINSE		23 Jun 2024 00:32

EMAX
LABORATORIES, INC.
3051 Fujita Street
Torrance, CA 90505
Tel: (310)-618-8889

Date: 07-10-2024
EMAX Batch No.: 24F147

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 06/29/24.
The data reported relate only to samples listed below :

Sample ID	Control #	Col Date	Matrix	Analysis
TB13-GW062824	F147-01	06/28/24	WATER	VOCS BY 8260C
MW4S-GW062824	F147-02	06/28/24	WATER	VOCS BY 8260C
EB12-GW062824	F147-03	06/28/24	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. 24F147
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: Linh Pham

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 8260; VOCs 8260

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: HCl	PRESERVATIVE CODE: IC	COMMENTS
1	TB13-GW062824		6/28/24	0800	3	40ml	VOA			X		
2	MW45-GW062824		6/28/24	0800	3	40ml	VOA				X	Unpreserved
3	EB12-GW062824		6/28/24	1147	3	40ml	VOA			X		
4												
5												
6												
7												
8												
9												
10												

Instructions
CC. Joe Miller: millerjC@cdmsmith.com and SmithNL@cdmsmith.com

Cooler #	Temp. (°C)	Sample #s
1	0.9	

SAMPLER Laura Mulrooney
COURIER/AIRBILL FedEX

RELINQUISHED BY	Date	Time	RECEIVED BY
Laura Mulrooney	6/28/24	1645	
	06/29/24	10:45	

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 24F147
☑ Fedex ☐ UPS ☐ GSO ☐ Others	2704 8686 9543	Recipient Maria Rivera
☐ EMAX Courier ☐ Client Delivery		Date 06/29/24 Time 10:45

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 0.9 °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* 210606272	*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 2 has a layer of sediment.

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: Nahdeen

Sample Labeling Nacana — Date ~~07/01/24~~ 7/1/24

07/01/24

SRF _____ Date 7/1/24

PM _____ Date 7/1/24



10:45

B Sealed

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#: 24F147

CASE NARRATIVE

Client : CDM SMITH

Project: VA SALT LAKE CITY

SDG : 24F147

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

A total of three(3) water samples were received on 06/29/24 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. There was one(1)CCV associated with this SDG. Target analytes in CCV(Data File ID: RGW031) were within calibration acceptance criteria. All calibration requirements were satisfied. 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. VO06G02B - 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. VO06G02X/VO06G02C were within LCS limits. Refer to LCS summary form 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.

LAB CHRONICLE
VOLATILE ORGANICS BY GC/MS

Client : CDM SMITH
Project : VA SALT LAKE CITY

SDG NO. : 24F147
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
LCD1W	VO06G02C	1	NA	07/02/2413:02	07/02/2413:02	RGW033	RFW007	VO06G02	LCS Duplicate
MBLK1W	VO06G02B	1	NA	07/02/2413:56	07/02/2413:56	RGW035	RFW007	VO06G02	Method Blank
LCS1W	VO06G02X	1	NA	07/02/2420:05	07/02/2420:05	RGW049	RFW007	VO06G02	Lab Control Sample (LCS)
TB13-GW062824	24F147-01	1	NA	07/02/2420:57	07/02/2420:57	RGW051	RFW007	VO06G02	Field Sample
EB12-GW062824	24F147-03	1	NA	07/02/2421:23	07/02/2421:23	RGW052	RFW007	VO06G02	Field Sample
MW4S-GW062824	24F147-02	1	NA	07/02/2421:49	07/02/2421:49	RGW053	RFW007	VO06G02	Field Sample

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	06/28/24 08:00
Project	: VA SALT LAKE CITY	Date Received:	06/29/24
Batch No.	: 24F147	Date Extracted:	07/02/24 20:57
Sample ID	: TB13-GW062824	Date Analyzed:	07/02/24 20:57
Lab Samp ID:	24F147-01	Dilution Factor:	1
Lab File ID:	RGW051	Matrix:	WATER
Ext Btch ID:	VOO6G02	% Moisture:	NA
Calib. Ref.:	RFW007	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	10.4	10.0	104	70-130
Bromofluorobenzene	10.0	10.0	100	70-130
Toluene-d8	10.0	10.0	100	70-130
Dibromofluoromethane	10.4	10.0	104	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : LPriet Analyzed by : LPriet
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24G02\RGW051.D Vial: 22
Acq On : 2 Jul 2024 8:57 pm Operator: LPriet
Sample : 24F147-01 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jul 3 13:55 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.07	114	2981195	10.00	ug/l	0.02
54) CHLOROBENZENE-D5	15.53	117	2407041	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.43	152	874896	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	8.06	111	927868	10.37	ug/l	0.00
Spiked Amount 10.000			Recovery = 103.70%			
42) 1,2-Dichloroethane-d4	9.19	65	669381	10.40	ug/l	0.00
Spiked Amount 10.000			Recovery = 104.00%			
55) Toluene-d8	12.90	98	3625218	10.01	ug/l	0.00
Spiked Amount 10.000			Recovery = 100.10%			
77) 4-Bromofluorobenzene	17.55	95	1163792	10.03	ug/l	0.00
Spiked Amount 10.000			Recovery = 100.30%			

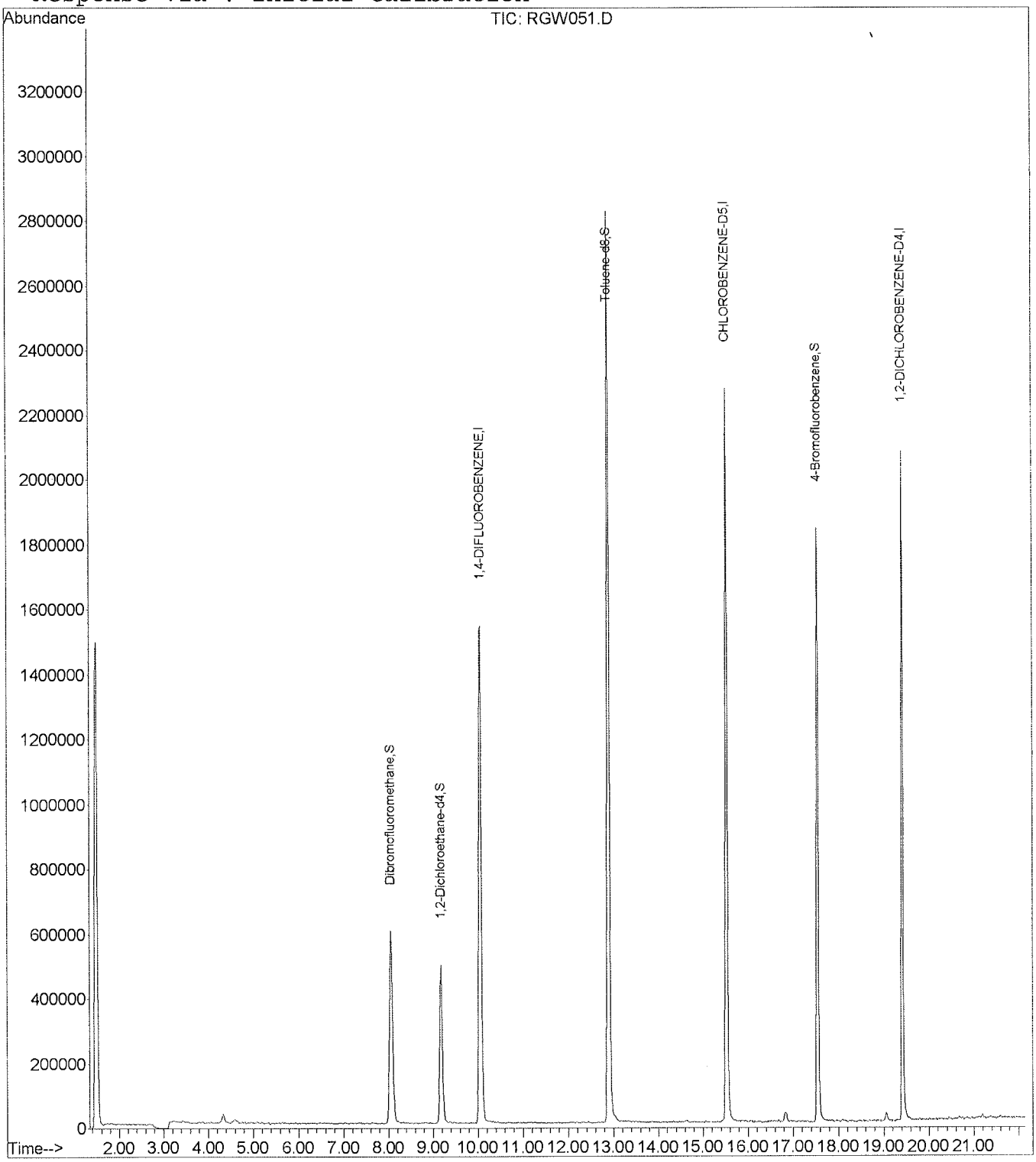
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
RGW051.D VO06F03.M Wed Jul 03 13:58:40 2024 Page 1

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24G02\RGW051.D Vial: 22
Acq On : 2 Jul 2024 8:57 pm Operator: LPriet
Sample : 24F147-01 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jul 3 13:55 2024 Quant Results File: VO06F03.RE

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	06/28/24 08:00
Project	: VA SALT LAKE CITY	Date Received:	06/29/24
Batch No.	: 24F147	Date Extracted:	07/02/24 21:49
Sample ID	: MW4S-GW062824	Date Analyzed:	07/02/24 21:49
Lab Samp ID:	24F147-02	Dilution Factor:	1
Lab File ID:	RGW053	Matrix:	WATER
Ext Btch ID:	VOO6G02	% Moisture:	NA
Calib. Ref.:	RFW007	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	1.1	1.0	0.10
Chloromethane	0.35J	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	8.8	1.0	0.15
Toluene	0.14J	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	0.13J	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	9.79	10.0	98	70-130
Toluene-d8	9.87	10.0	99	70-130
Dibromofluoromethane	10.6	10.0	106	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : LPriet Analyzed by : LPriet
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24G02\RGW053.D Vial: 24
Acq On : 2 Jul 2024 9:49 pm Operator: LPriet
Sample : 24F147-02 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jul 3 14:00 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

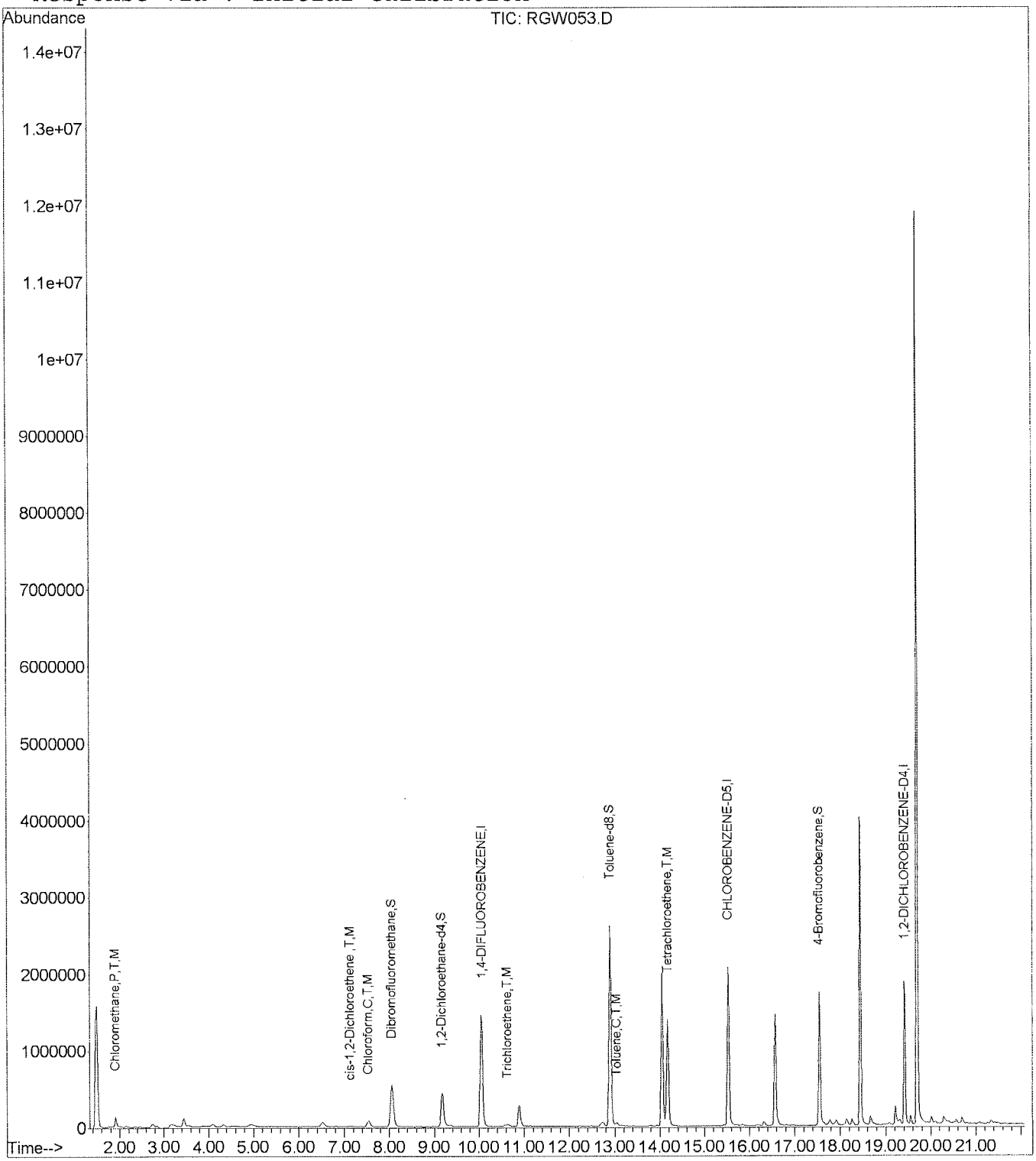
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.07	114	2691873	10.00	ug/l	0.02
54) CHLOROBENZENE-D5	15.53	117	2202288	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.43	152	801784	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	8.06	111	857127	10.61	ug/l	0.00
Spiked Amount 10.000			Recovery = 106.10%			
42) 1,2-Dichloroethane-d4	9.17	65	623808	10.73	ug/l	-0.02
Spiked Amount 10.000			Recovery = 107.30%			
55) Toluene-d8	12.90	98	3272443	9.87	ug/l	0.00
Spiked Amount 10.000			Recovery = 98.70%			
77) 4-Bromofluorobenzene	17.55	95	1040483	9.79	ug/l	0.00
Spiked Amount 10.000			Recovery = 97.90%			
Target Compounds						Qvalue
3) Chloromethane	1.91	50	42067	0.35	ug/l	91
30) cis-1,2-Dichloroethene	7.13	96	12239	0.13	ug/l	97
31) Chloroform	7.53	83	164356	1.07	ug/l	97
45) Trichloroethene	10.64	130	11482	0.13	ug/l	87
56) Toluene	13.05	91	52439	0.14	ug/l	99
62) Tetrachloroethene	14.18	164	623608	8.83	ug/l	98

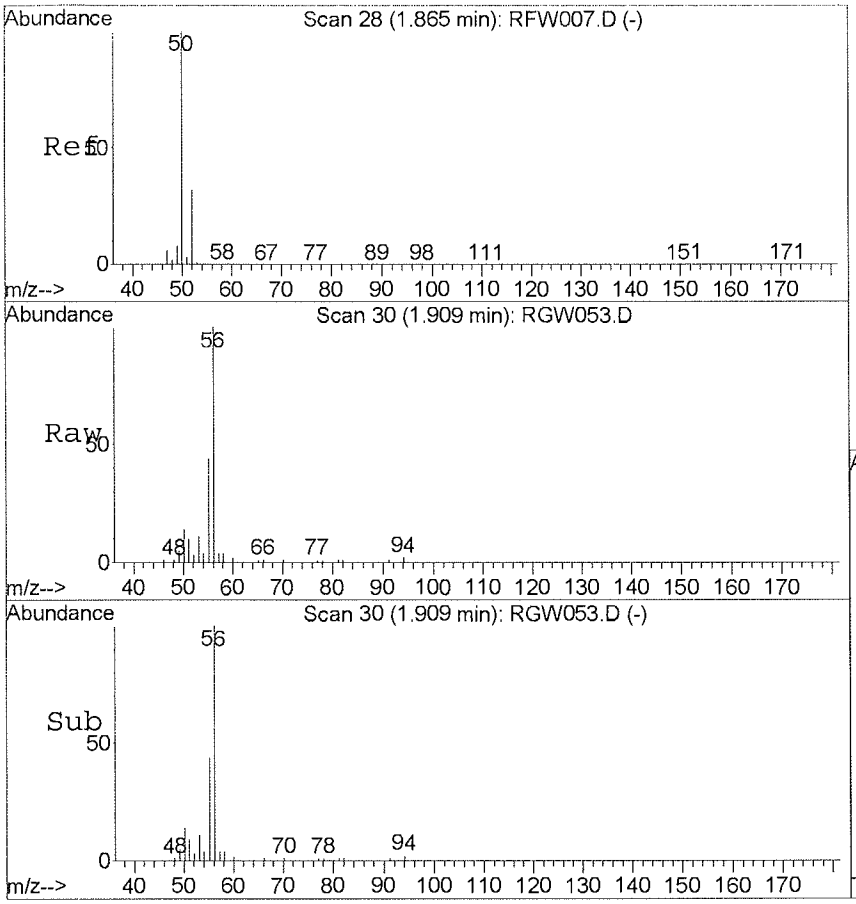
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RGW053.D VO06F03.M Wed Jul 03 14:01:08 2024 Page 1

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24G02\RGW053.D Vial: 24
Acq On : 2 Jul 2024 9:49 pm Operator: LPriet
Sample : 24F147-02 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jul 3 14:00 2024 Quant Results File: VO06F03.RE

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration

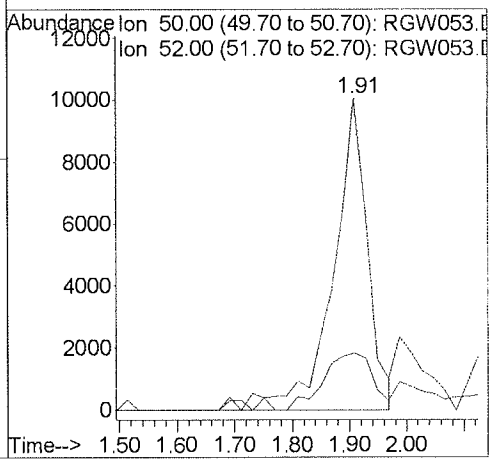


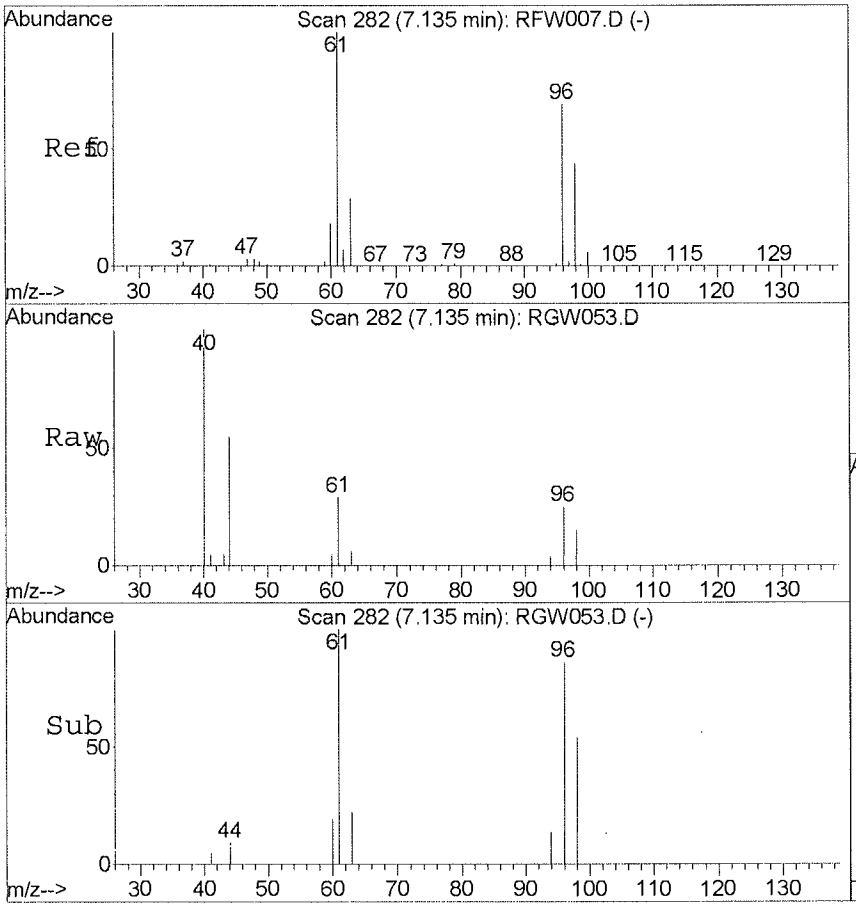


#3
Chloromethane
Concen: 0.35 ug/l
RT: 1.91 min Scan# 30
Delta R.T. 0.04 min
Lab File: RGW053.D
Acq: 2 Jul 2024 9:49 pm

Tgt Ion: 50 Resp: 42067

Ion	Ratio	Lower	Upper
50	100		
52	25.9	0.9	60.9

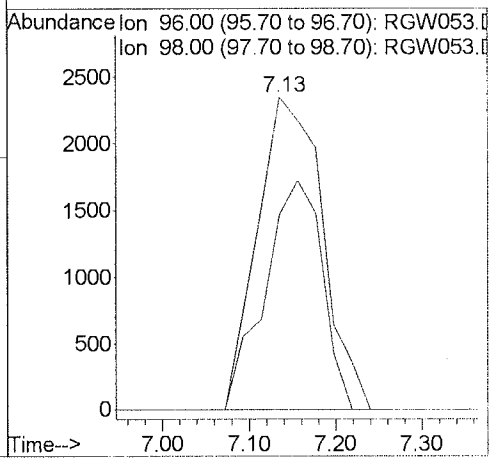


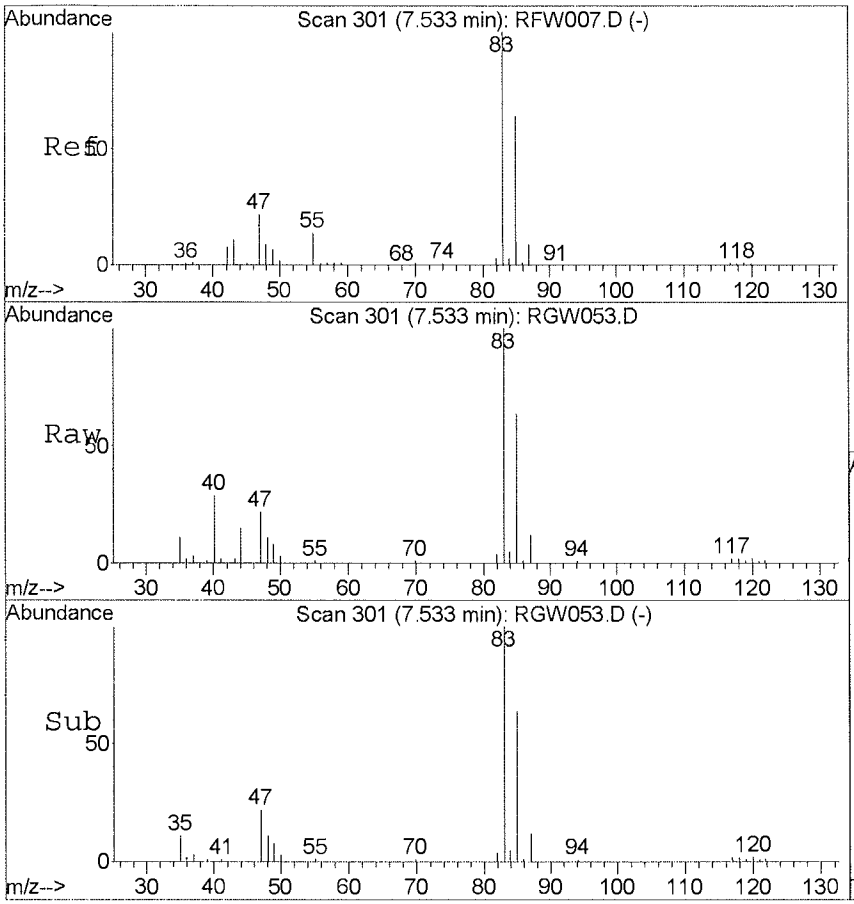


#30
cis-1,2-Dichloroethene
Concen: 0.13 ug/l
RT: 7.13 min Scan# 282
Delta R.T. 0.00 min
Lab File: RGW053.D
Acq: 2 Jul 2024 9:49 pm

Tgt Ion: 96 Resp: 12239

Ion	Ratio	Lower	Upper
96	100		
98	64.9	32.5	92.5

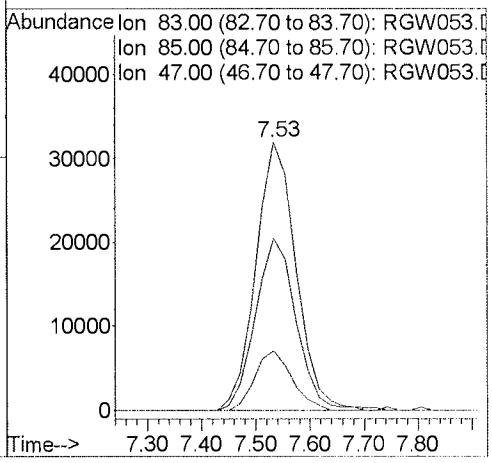


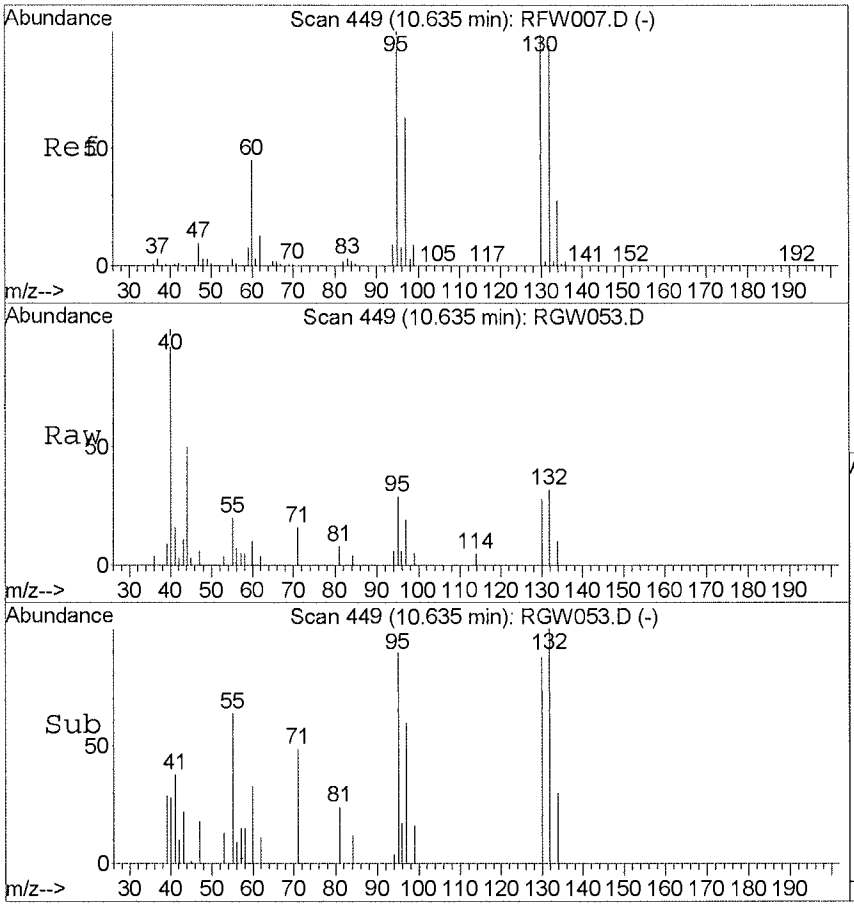


#31
Chloroform
Concen: 1.07 ug/l
RT: 7.53 min Scan# 301
Delta R.T. 0.00 min
Lab File: RGW053.D
Acq: 2 Jul 2024 9:49 pm

Tgt Ion: 83 Resp: 164356

Ion	Ratio	Lower	Upper
83	100		
85	64.3	36.2	96.2
47	20.5	0.0	53.3

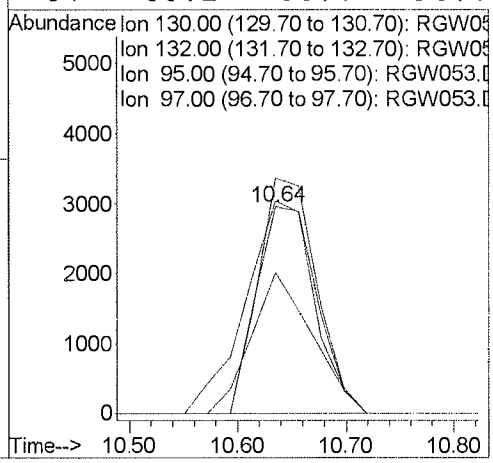


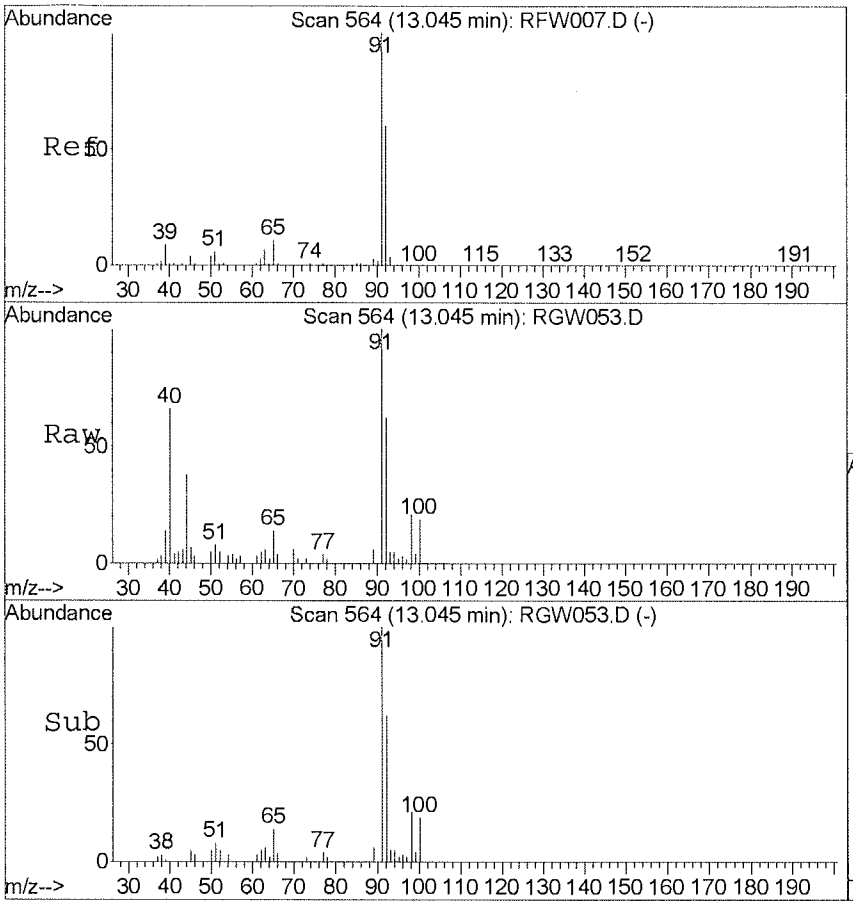


#45
Trichloroethene
Concen: 0.13 ug/l
RT: 10.64 min Scan# 449
Delta R.T. 0.00 min
Lab File: RGW053.D
Acq: 2 Jul 2024 9:49 pm

Tgt Ion:130 Resp: 11482

Ion	Ratio	Lower	Upper
130	100		
132	109.6	64.2	124.2
95	115.7	68.5	128.5
97	68.2	36.0	96.0

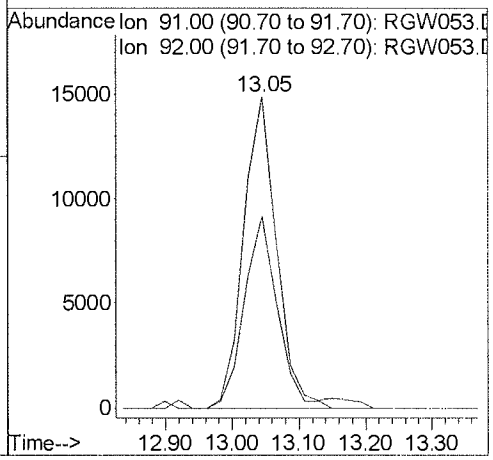


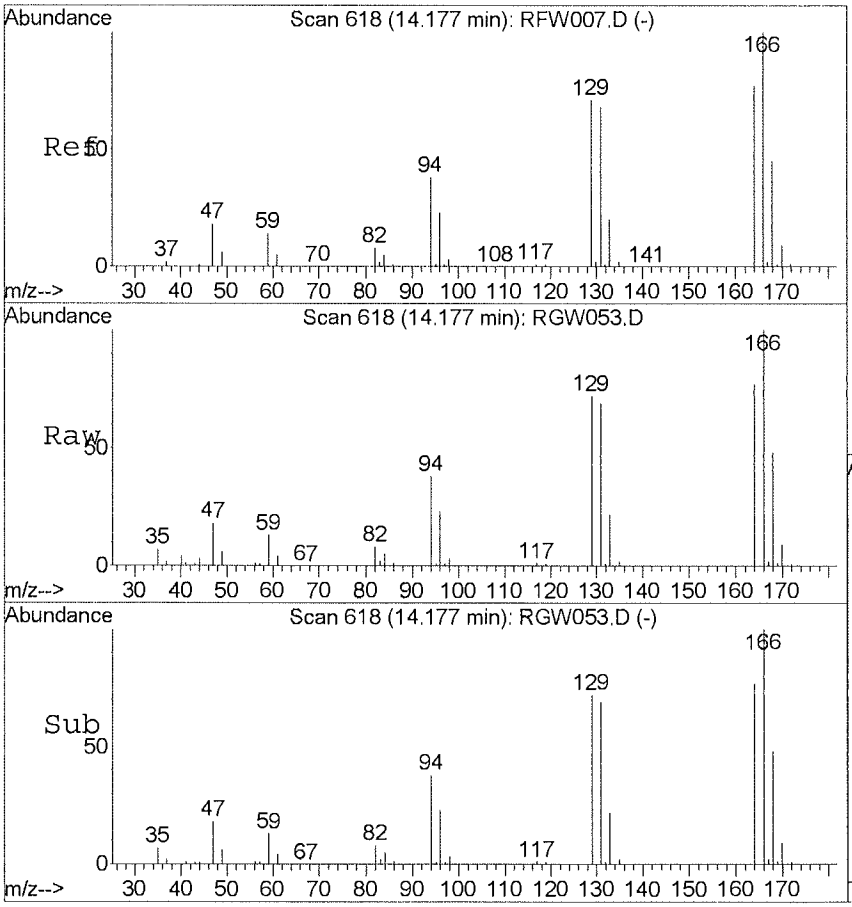


#56
Toluene
Concen: 0.14 ug/l
RT: 13.05 min Scan# 564
Delta R.T. 0.00 min
Lab File: RGW053.D
Acq: 2 Jul 2024 9:49 pm

Tgt Ion: 91 Resp: 52439

Ion	Ratio	Lower	Upper
91	100		
92	60.6	29.6	89.6

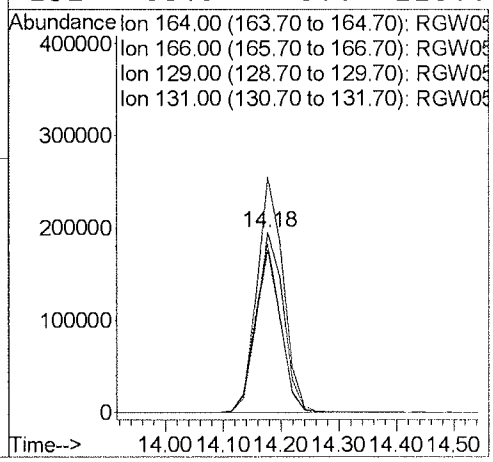




#62
Tetrachloroethene
Concen: 8.83 ug/l
RT: 14.18 min Scan# 618
Delta R.T. 0.00 min
Lab File: RGW053.D
Acq: 2 Jul 2024 9:49 pm

Tgt Ion:164 Resp: 623608

Ion	Ratio	Lower	Upper
164	100		
166	129.8	98.8	158.8
129	89.0	62.9	122.9
131	85.9	58.6	118.6



METHOD SW5030B/8260C
VDLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	06/28/24 11:47
Project	: VA SALT LAKE CITY	Date Received:	06/29/24
Batch No.	: 24F147	Date Extracted:	07/02/24 21:23
Sample ID	: EB12-GW062824	Date Analyzed:	07/02/24 21:23
Lab Samp ID:	24F147-03	Dilution Factor:	1
Lab File ID:	RGW052	Matrix:	WATER
Ext Btch ID:	VD06G02	% Moisture:	NA
Calib. Ref.:	RFW007	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	10.6	10.0	106	70-130
Bromofluorobenzene	9.55	10.0	95	70-130
Toluene-d8	9.88	10.0	99	70-130
Dibromofluoromethane	10.5	10.0	105	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : LPriet Analyzed by : LPriet
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24G02\RGW052.D Vial: 23
Acq On : 2 Jul 2024 9:23 pm Operator: LPriet
Sample : 24F147-03 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jul 3 13:58 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.07	114	2863818	10.00	ug/l	0.02
54) CHLOROBENZENE-D5	15.53	117	2318980	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.43	152	879725	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	8.06	111	905221	10.53	ug/l	0.00
Spiked Amount 10.000			Recovery =	105.30%		
42) 1,2-Dichloroethane-d4	9.19	65	657559	10.64	ug/l	0.00
Spiked Amount 10.000			Recovery =	106.40%		
55) Toluene-d8	12.90	98	3450224	9.88	ug/l	0.00
Spiked Amount 10.000			Recovery =	98.80%		
77) 4-Bromofluorobenzene	17.55	95	1113966	9.55	ug/l	0.00
Spiked Amount 10.000			Recovery =	95.50%		

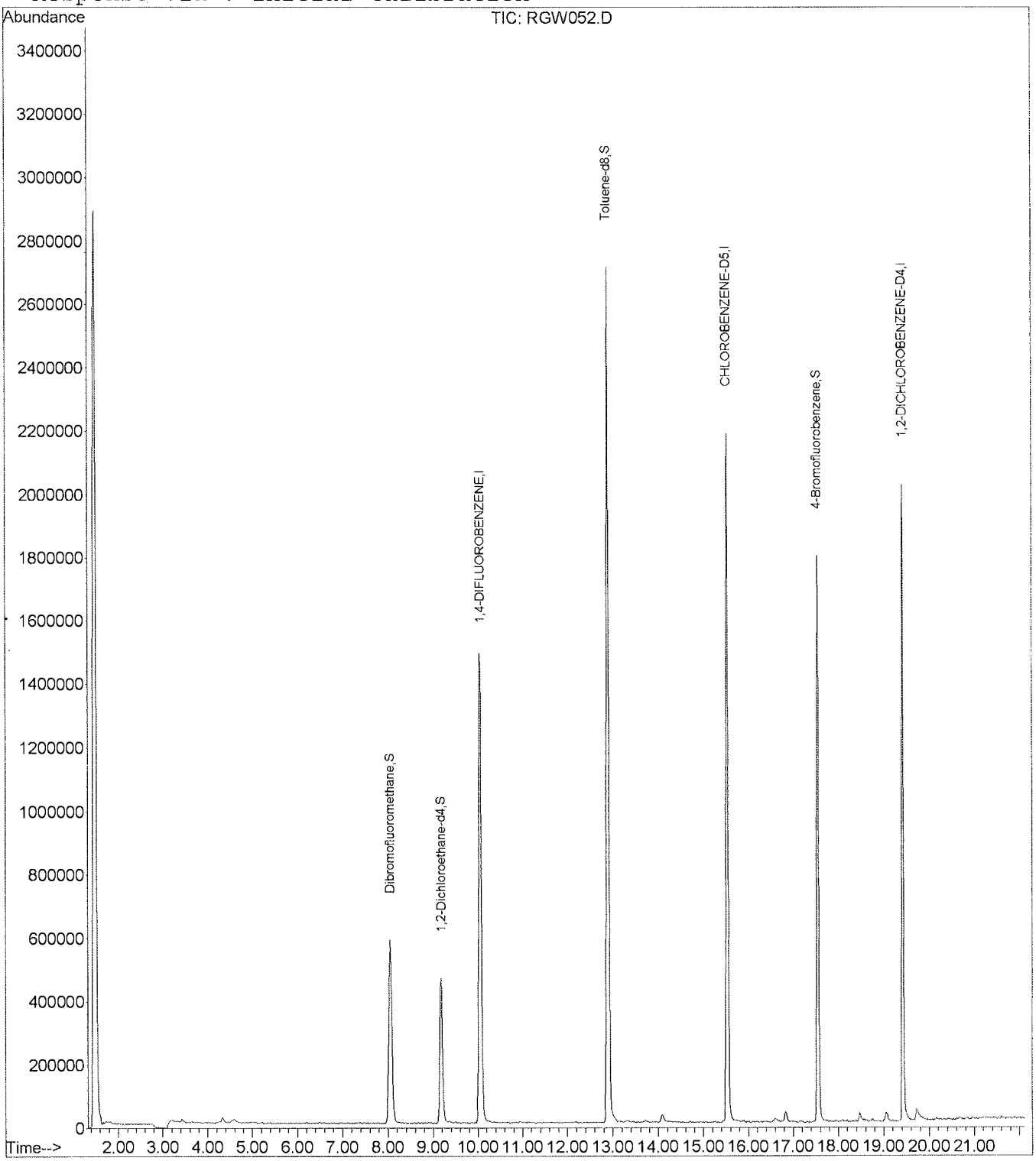
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
RGW052.D VO06F03.M Wed Jul 03 13:58:27 2024 Page 1

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24G02\RGW052.D Vial: 23
Acq On : 2 Jul 2024 9:23 pm Operator: LPriet
Sample : 24F147-03 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jul 3 13:58 2024 Quant Results File: VO06F03.RE

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration



QC SUMMARIES

METHOD SW5030B/B260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	07/02/24 13:56
Project	: VA SALT LAKE CITY	Date Received:	07/02/24
Batch No.	: 24F147	Date Extracted:	07/02/24 13:56
Sample ID	: MBLK1W	Date Analyzed:	07/02/24 13:56
Lab Samp ID:	VOO6G02B	Dilution Factor:	1
Lab File ID:	RGW035	Matrix:	WATER
Ext Btch ID:	VOO6G02	% Moisture:	NA
Calib. Ref.:	RFW007	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	10.2	10.0	102	70-130
Bromofluorobenzene	9.87	10.0	99	70-130
Toluene-dB	9.90	10.0	99	70-130
Dibromofluoromethane	10.3	10.0	103	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : LPriet Analyzed by : LPriet
Detection limits are reported relative to sample result significant figures.

EMAX QUALITY CONTRDL DATA
LAB CONTROL SAMPLE ANALYSIS

CLIENT : CDM SMITH
PRDJECT : VA SALT LAKE CITY
BATCH ND. : 24F147
METHDD : SW5030B/B260C

MATRIX : WATER
DILUTION FACTDR: 1 1 1
SAMPLE ID : MBLK1W LCS1W LCD1W
LAB SAMPLE ID : VD06G02B V006G02X V006G02C
LAB FILE ID : RGW035 RGW049 RGW033
DATE PREPARED : 07/02/24 13:56 07/02/24 20:05 07/02/24 13:02
DATE ANALYZED : 07/02/24 13:56 07/02/24 20:05 07/02/24 13:02
PREP BATCH : V006G02 V006G02 V006G02
CALIBRATION REF: RFW007 RFW007 RFW007
% MDISTURE:NA

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	B.B3	BB	10.0	B.B9	B9	1	74-131	20
1,1,2,2-Tetrachloroethane	ND	10.0	9.B6	99	10.0	9.61	96	3	71-121	20
1,1,2-Trichloroethane	ND	10.0	10.6	106	10.0	10.3	103	3	B0-119	20
1,1-Dichloroethane	ND	10.0	B.95	90	10.0	B.75	BB	2	77-125	20
1,1-Dichloroethene	ND	10.0	B.29	83	10.0	B.13	B1	2	71-131	20
1,2,3-Trichlorobenzene	ND	10.0	B.94	B9	10.0	B.B9	B9	1	69-129	20
1,2,4-Trichlorobenzene	ND	10.0	9.30	93	10.0	9.52	95	2	69-130	20
1,2,4-Trimethylbenzene	ND	10.0	B.5B	B6	10.0	9.05	91	5	76-124	20
1,2-Dibromo-3-chloropropane	ND	10.0	10.B	10B	10.0	9.B7	99	9	62-13B	20
1,2-Dichlorobenzene	ND	10.0	9.54	95	10.0	9.51	95	0	B0-119	20
1,2-Dichloroethane	ND	10.0	9.53	95	10.0	B.B3	88	B	73-12B	20
1,2-Dichloropropane	ND	10.0	9.37	94	10.0	B.92	B9	5	7B-122	20
1,3,5-Trimethylbenzene	ND	10.0	B.46	B5	10.0	9.00	90	6	75-124	20
1,3-Dichlorobenzene	ND	10.0	9.2B	93	10.0	9.54	95	3	B0-119	20
1,4-Dichlorobenzene	ND	10.0	9.22	92	10.0	9.42	94	2	79-11B	20
2-Butanone	ND	50.0	56.B	114	50.0	50.0	100	13	56-143	20
2-Hexanone	ND	50.0	5B.B	11B	50.0	53.5	107	9	57-139	20
Acetone	ND	50.0	50.9	102	50.0	45.7	91	11	39-160	20
Benzene	ND	10.0	9.2B	93	10.0	9.14	91	2	79-120	20
Bromochloromethane	ND	10.0	10.5	105	10.0	9.73	97	B	7B-120	20
Bromodichloromethane	ND	10.0	9.67	97	10.0	9.07	91	6	79-125	20
Bromoform	ND	10.0	11.6	116	10.0	11.6	116	0	66-130	20
Bromomethane	ND	10.0	B.31	B3	10.0	B.07	B1	3	53-141	20
Carbon Disulfide	ND	10.0	7.93	79	10.0	7.54	75	5	64-133	20
Carbon Tetrachloride	ND	10.0	9.03	90	10.0	9.00	90	0	72-136	20
Chlorobenzene	ND	10.0	9.77	9B	10.0	9.6B	97	1	B2-11B	20
Chloroethane	ND	10.0	B.07	B1	10.0	B.07	B1	0	60-13B	20
Chloroform	ND	10.0	9.03	90	10.0	B.77	BB	3	79-124	20
Chloromethane	ND	10.0	7.3B	74	10.0	7.24	72	2	50-139	20
cis-1,2-Dichloroethylene	ND	10.0	9.60	96	10.0	9.27	93	3	7B-123	20
Dibromochloromethane	ND	10.0	9.64	96	10.0	9.39	94	3	74-126	20
Dichlorodifluoromethane	ND	10.0	B.30	B3	10.0	B.11	B1	2	32-152	20
Ethylbenzene	ND	10.0	9.30	93	10.0	9.25	93	1	79-121	20
Isopropylbenzene	ND	10.0	9.13	91	10.0	9.35	94	2	72-131	20
m,p-Xylene	ND	20.0	1B.7	94	20.0	1B.B	94	1	B0-121	20
4-Methyl-2-Pentanone	ND	50.0	5B.4	117	50.0	53.1	106	10	67-130	20
Methylene Chloride	ND	10.0	B.60	B6	10.0	B.29	B3	4	74-124	20
tert-Butyl Methyl Ether	ND	10.0	10.5	105	10.0	9.B3	9B	7	71-124	20
o-Xylene	ND	10.0	9.1B	92	10.0	9.11	91	1	7B-122	20
Styrene	ND	10.0	9.9B	100	10.0	9.93	99	1	7B-123	20
Tetrachloroethene	ND	10.0	9.2B	93	10.0	9.69	97	4	74-129	20
Toluene	ND	10.0	9.12	91	10.0	B.99	90	1	B0-121	20
Trans-1,2-DCE	ND	10.0	B.96	90	10.0	B.B0	88	2	75-124	20
cis-1,3-Dichloropropene	ND	10.0	9.62	96	10.0	9.17	92	5	75-124	20
Trans-1,3-Dichloropropene	ND	10.0	9.40	94	10.0	9.23	92	2	73-127	20
TCE	ND	10.0	9.B2	9B	10.0	9.73	97	1	79-123	20
Trichlorofluoromethane	ND	10.0	B.47	B5	10.0	B.29	B3	2	65-141	20
Vinyl Chloride	ND	10.0	B.10	B1	10.0	7.42	74	9	5B-137	20
1,2-Dibromoethane	ND	10.0	9.71	97	10.0	9.40	94	3	77-121	20
Vinyl Acetate	ND	10.0	9.36	94	10.0	9.43	94	1	54-146	20
Trichlorotrifluoroethane	ND	10.0	10.1	101	10.0	9.43	94	7	70-136	20
Methyl Acetate	ND	10.0	10.0	100	10.0	9.42	94	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	10.4	104	10.0	10.2	102	70-130
Bromofluorobenzene	10.0	9.B3	9B	10.0	9.9B	100	70-130
Toluene-dB	10.0	9.76	9B	10.0	10.0	100	70-130
Dibromofluoromethane	10.0	10.6	106	10.0	10.5	105	70-130

MB: Method Blank sample LCS: Lab Control Sample LCD: Lab Control Sample Duplicate

QC DATA

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24G02\RGW035.D Vial: 6
Acq On : 2 Jul 2024 1:56 pm Operator: LPriet
Sample : VO06G02B Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jul 3 14:06 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.05	114	3002485	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.53	117	2446561	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.43	152	895062	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	8.06	111	926820	10.28	ug/l	0.00
Spiked Amount 10.000			Recovery = 102.80%			
42) 1,2-Dichloroethane-d4	9.17	65	661362	10.20	ug/l	-0.02
Spiked Amount 10.000			Recovery = 102.00%			
55) Toluene-d8	12.90	98	3644723	9.90	ug/l	0.00
Spiked Amount 10.000			Recovery = 99.00%			
77) 4-Bromofluorobenzene	17.55	95	1171543	9.87	ug/l	0.00
Spiked Amount 10.000			Recovery = 98.70%			

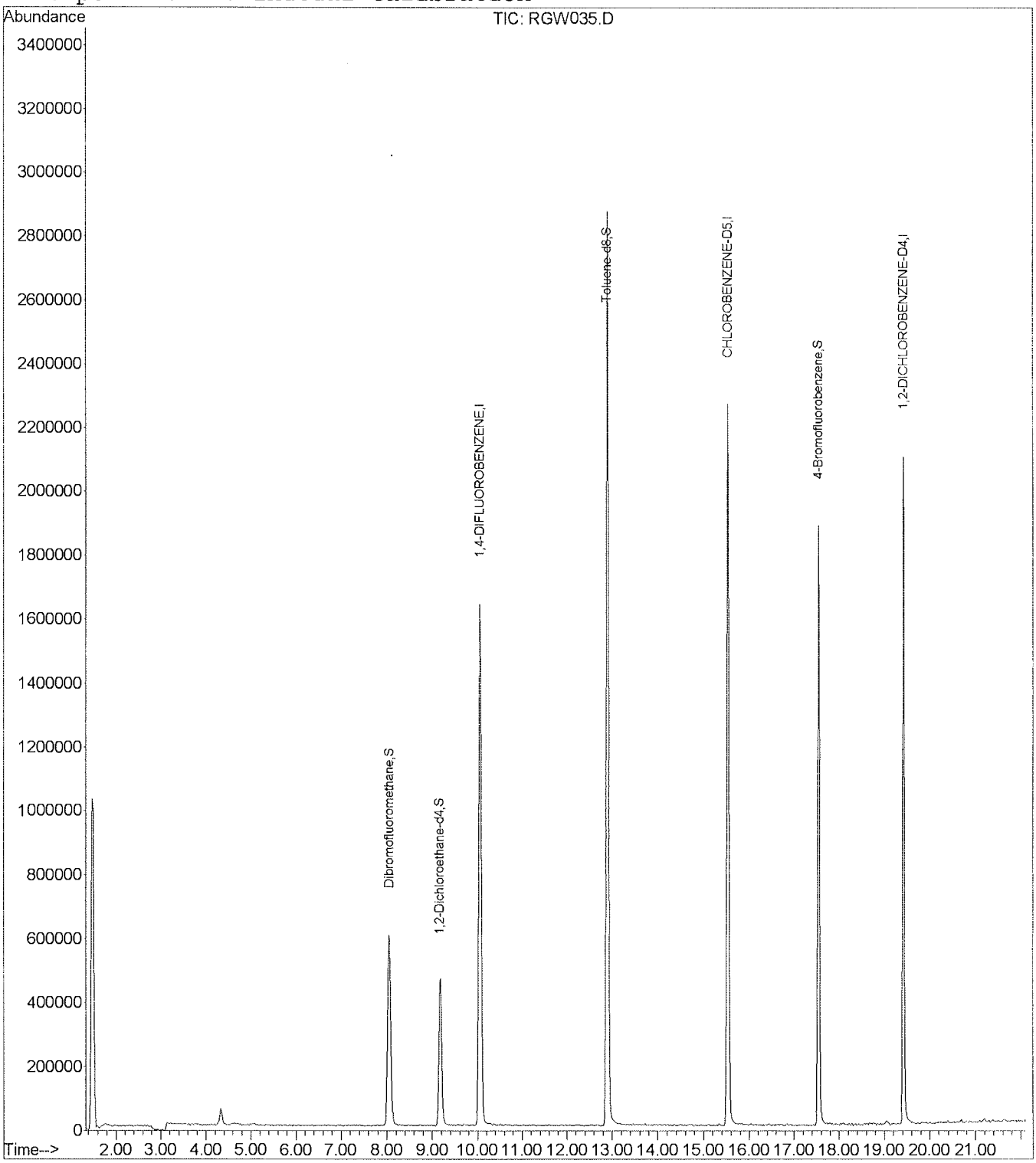
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
RGW035.D VO06F03.M Wed Jul 03 14:06:38 2024 Page 1

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24G02\RGW035.D Vial: 6
Acq On : 2 Jul 2024 1:56 pm Operator: LPriet
Sample : VO06G02B Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jul 3 14:06 2024 Quant Results File: VO06F03.RE

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24G02\RGW049.D Vial: 20
Acq On : 2 Jul 2024 8:05 pm Operator: LPriet
Sample : VO06G02X Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jul 2 20:27 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.07	114	2892169	10.00	ug/l	0.02
54) CHLOROBENZENE-D5	15.53	117	2399864	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.43	152	906072	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	8.06	111	923279	10.64	ug/l	0.00
Spiked Amount 10.000			Recovery =	106.40%		
42) 1,2-Dichloroethane-d4	9.19	65	652469	10.45	ug/l	0.00
Spiked Amount 10.000			Recovery =	104.50%		
55) Toluene-d8	12.90	98	3526974	9.76	ug/l	0.00
Spiked Amount 10.000			Recovery =	97.60%		
77) 4-Bromofluorobenzene	17.55	95	1180881	9.83	ug/l	0.00
Spiked Amount 10.000			Recovery =	98.30%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.63	85	711250	8.30	ug/l	99
3) Chloromethane	1.87	50	962036	7.38	ug/l	97
4) Vinyl chloride	1.99	62	752648	8.10	ug/l	98
5) Bromomethane	2.44	94	700039	8.31	ug/l	94
6) Chloroethane	2.52	64	576267	8.07	ug/l	100
7) Dichlorofluoromethane	2.56	67	1459751	8.31	ug/l	97
8) Trichlorofluoromethane	2.80	101	977641	8.47	ug/l	98
9) Acrolein	3.34	56	240128	40.68	ug/l	93
10) 1,1,2-Trichloro-1,2,2-trif	3.38	151	535885	10.06	ug/l	99
11) Acetone	3.42	43	504572	50.94	ug/l	97
12) 1,1-Dichloroethene	3.57	61	1271740	8.29	ug/l	95
13) tert-Butyl alcohol	3.74	59	808188	267.85	ug/l	99
15) Methyl acetate	4.12	74	67638	10.03	ug/l	91
16) Iodomethane	4.03	142	1388172	9.12	ug/l	95
18) Methylene chloride	4.33	49	1104989	8.60	ug/l	90
19) Carbon disulfide	4.30	76	3169120	7.93	ug/l	99
20) Acrylonitrile	4.58	53	764045	56.79	ug/l	99
21) tert-Butyl methyl ether (M	4.62	73	1563343	10.54	ug/l	99
22) trans-1,2-Dichloroethene	4.85	96	954135	8.96	ug/l	98
23) Isopropyl ether (DIPE)	5.54	45	3076337	9.19	ug/l	95
24) Vinyl acetate	5.77	43	855167	9.36	ug/l	97
25) 1,1-Dichloroethane	5.71	63	1613301	8.95	ug/l	98
27) tert-Butyl ethyl ether (ET	6.46	59	2319388	9.53	ug/l	95
28) 2-Butanone	6.76	43	899844	56.76	ug/l	93
29) 2,2-Dichloropropane	7.01	77	882562	8.64	ug/l	97
30) cis-1,2-Dichloroethene	7.15	96	1001327	9.60	ug/l	99
31) Chloroform	7.53	83	1491488	9.03	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24G02\RGW049.D Vial: 20
Acq On : 2 Jul 2024 8:05 pm Operator: LPriet
Sample : VO06G02X Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jul 2 20:27 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
32)	Bromochloromethane	7.91	130	473748	10.51	ug/l		97
33)	Tetrahydrofuran	8.01	42	94536	9.74	ug/l		97
34)	tert-Amyl alcohol	8.08	59	1622	0.71	ug/l	#	26
36)	1,1,1-Trichloroethane	8.45	97	1124297	8.83	ug/l		99
37)	Cyclohexane	8.43	84	1119792	8.69	ug/l		99
39)	1,1-Dichloropropene	8.81	110	404794	9.35	ug/l		100
40)	Carbon tetrachloride	8.98	119	927656	9.03	ug/l		100
41)	tert-Amyl methyl ether (TA	9.15	73	1945222	10.71	ug/l		97
43)	1,2-Dichloroethane	9.38	62	701337	9.53	ug/l		98
44)	Benzene	9.36	78	3572882	9.28	ug/l		99
45)	Trichloroethene	10.63	130	962353	9.82	ug/l		97
46)	Methylcyclohexane	10.72	83	1368532	9.08	ug/l		93
47)	1,2-Dichloropropane	10.99	63	872179	9.37	ug/l		99
48)	1,4-Dioxane	11.54	88	57652	204.67	ug/l		92
49)	Bromodichloromethane	11.43	83	1032962	9.67	ug/l		98
50)	Dibromomethane	11.51	93	382567	9.71	ug/l		88
51)	2-Chloroethyl vinyl ether	12.12	63	250079	8.14	ug/l		98
52)	4-Methyl-2-pentanone	12.19	43	2632197	58.38	ug/l		92
53)	cis-1,3-Dichloropropene	12.50	75	1307908	9.62	ug/l		94
56)	Toluene	13.04	91	3816797	9.12	ug/l		99
57)	Ethyl methacrylate	13.46	69	786033	11.03	ug/l		95
58)	trans-1,3-Dichloropropene	13.42	75	969065	9.40	ug/l		97
59)	1,1,2-Trichloroethane	13.67	97	519780	10.60	ug/l		94
60)	2-Hexanone	13.76	43	1703867	58.79	ug/l		93
61)	1,3-Dichloropropane	14.11	76	953398	10.30	ug/l		98
62)	Tetrachloroethene	14.18	164	713673	9.28	ug/l		98
63)	Dibromochloromethane	14.53	129	631309	9.64	ug/l		97
65)	1,2-Dibromoethane	14.87	107	474560	9.71	ug/l		96
66)	1-Chlorohexane	15.22	91	1715818	8.72	ug/l		99
67)	Chlorobenzene	15.60	112	2302961	9.77	ug/l		99
68)	1,1,1,2-Tetrachloroethane	15.69	131	788599	9.94	ug/l		98
69)	Ethylbenzene	15.70	91	4243835	9.30	ug/l		99
70)	m-Xylene & p-Xylene	15.85	91	6379071	18.68	ug/l		100
71)	o-Xylene	16.57	91	3220950	9.18	ug/l		100
72)	Styrene	16.64	104	2477330	9.98	ug/l		98
73)	Isopropylbenzene	17.18	105	3927605	9.13	ug/l		99
75)	Bromoform	17.17	173	296097	11.58	ug/l		99
76)	1,1,2,2-Tetrachloroethane	17.45	83	587042	9.86	ug/l		94
78)	1,2,3-Trichloropropane	17.66	110	135999	9.86	ug/l		94
79)	trans-1,4-Dichloro-2-buten	17.77	53	133812	8.97	ug/l		95
80)	n-Propylbenzene	17.77	91	5042446	8.61	ug/l		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24G02\RGW049.D Vial: 20
Acq On : 2 Jul 2024 8:05 pm Operator: LPriet
Sample : VO06G02X Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jul 2 20:27 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

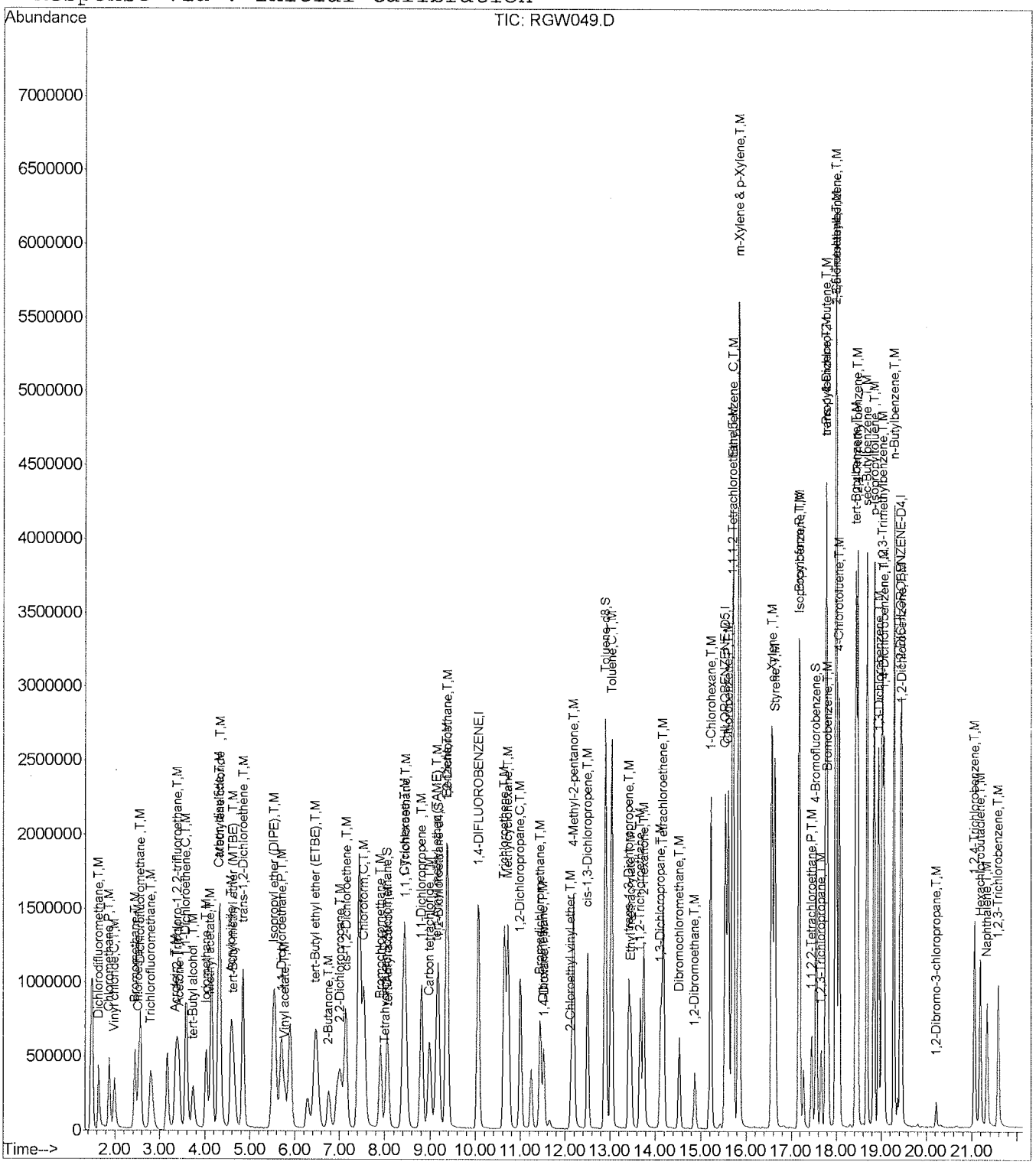
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
81)	Bromobenzene	17.81	156	824571	9.71	ug/l	98
82)	1,3,5-Trimethylbenzene	17.99	105	3221640	8.46	ug/l	99
83)	2-Chlorotoluene	17.99	91	3180818	8.36	ug/l	98
84)	4-Chlorotoluene	18.05	91	2748409	8.53	ug/l	98
85)	tert-Butylbenzene	18.43	134	722323	8.72	ug/l	96
86)	1,2,4-Trimethylbenzene	18.47	105	3140898	8.58	ug/l	98
87)	sec-Butylbenzene	18.67	105	4341508	8.67	ug/l	98
88)	p-Isopropyltoluene	18.84	119	3496625	8.46	ug/l	98
89)	1,3-Dichlorobenzene	18.95	146	1671320	9.28	ug/l	98
90)	1,2,3-Trimethylbenzene	19.03	105	3026335	8.88	ug/l	99
91)	1,4-Dichlorobenzene	19.06	146	1642252	9.22	ug/l	100
92)	n-Butylbenzene	19.28	91	3446103	8.13	ug/l	99
93)	1,2-Dichlorobenzene	19.45	146	1415171	9.54	ug/l	99
94)	1,2-Dibromo-3-chloropropan	20.22	157	78923	10.83	ug/l	94
95)	1,2,4-Trichlorobenzene	21.06	180	816627	9.30	ug/l	99
96)	Hexachlorobutadiene	21.19	225	467856	8.45	ug/l	100
97)	Naphthalene	21.34	128	1216295	9.77	ug/l	97
98)	1,2,3-Trichlorobenzene	21.58	180	594126	8.94	ug/l	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24G02\RGW049.D Vial: 20
Acq On : 2 Jul 2024 8:05 pm Operator: LPriet
Sample : VO06G02X Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jul 2 20:27 2024 Quant Results File: VO06F03.RE

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24G02\RGW033.D Vial: 4
Acq On : 2 Jul 2024 1:02 pm Operator: LPriet
Sample : VO06G02C Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jul 2 13:24 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.05	114	2959127	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.53	117	2392814	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.43	152	866264	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	8.06	111	930719	10.48	ug/l	0.00
Spiked Amount 10.000			Recovery = 104.80%			
42) 1,2-Dichloroethane-d4	9.17	65	652303	10.21	ug/l	-0.02
Spiked Amount 10.000			Recovery = 102.10%			
55) Toluene-d8	12.90	98	3606787	10.01	ug/l	0.00
Spiked Amount 10.000			Recovery = 100.10%			
77) 4-Bromofluorobenzene	17.55	95	1146647	9.98	ug/l	0.00
Spiked Amount 10.000			Recovery = 99.80%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.64	85	710522	8.11	ug/l	100
3) Chloromethane	1.87	50	965655	7.24	ug/l	98
4) Vinyl chloride	1.99	62	705851	7.42	ug/l	96
5) Bromomethane	2.44	94	695694	8.07	ug/l	96
6) Chloroethane	2.52	64	589436	8.07	ug/l	97
7) Dichlorofluoromethane	2.56	67	1420138	7.90	ug/l	98
8) Trichlorofluoromethane	2.80	101	979306	8.29	ug/l	97
9) Acrolein	3.34	56	222628	36.86	ug/l	98
10) 1,1,2-Trichloro-1,2,2-trif	3.38	151	514205	9.43	ug/l	100
11) Acetone	3.42	43	463291	45.71	ug/l	97
12) 1,1-Dichloroethene	3.57	61	1275926	8.13	ug/l	94
13) tert-Butyl alcohol	3.74	59	754221	244.31	ug/l	99
15) Methyl acetate	4.12	74	65013	9.42	ug/l	90
16) Iodomethane	4.01	142	1382860	8.88	ug/l	94
18) Methylene chloride	4.33	49	1089733	8.29	ug/l	92
19) Carbon disulfide	4.28	76	3086327	7.54	ug/l	99
20) Acrylonitrile	4.58	53	718690	52.21	ug/l	99
21) tert-Butyl methyl ether (M	4.62	73	1491067	9.83	ug/l	99
22) trans-1,2-Dichloroethene	4.85	96	959529	8.80	ug/l	98
23) Isopropyl ether (DIPE)	5.54	45	3031403	8.85	ug/l	95
24) Vinyl acetate	5.77	43	881051	9.43	ug/l	97
25) 1,1-Dichloroethane	5.69	63	1614814	8.75	ug/l	98
27) tert-Butyl ethyl ether (ET	6.46	59	2254517	9.06	ug/l	94
28) 2-Butanone	6.76	43	811562	50.03	ug/l	95
29) 2,2-Dichloropropane	7.01	77	975948	9.34	ug/l	97
30) cis-1,2-Dichloroethene	7.13	96	988900	9.27	ug/l	98
31) Chloroform	7.53	83	1482449	8.77	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24G02\RGW033.D Vial: 4
Acq On : 2 Jul 2024 1:02 pm Operator: LPriet
Sample : VO06G02C Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jul 2 13:24 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
32)	Bromochloromethane	7.91	130	448476	9.73	ug/l		97
33)	Tetrahydrofuran	8.04	42	82030	8.26	ug/l		95
34)	tert-Amyl alcohol	8.10	59	386	0.17	ug/l	#	1
36)	1,1,1-Trichloroethane	8.45	97	1158331	8.89	ug/l		97
37)	Cyclohexane	8.43	84	1259238	9.56	ug/l		100
39)	1,1-Dichloropropene	8.81	110	404274	9.13	ug/l		100
40)	Carbon tetrachloride	8.98	119	946574	9.00	ug/l		99
41)	tert-Amyl methyl ether (TA	9.15	73	1829553	9.85	ug/l		97
43)	1,2-Dichloroethane	9.38	62	664852	8.83	ug/l		99
44)	Benzene	9.36	78	3600958	9.14	ug/l		98
45)	Trichloroethene	10.63	130	975837	9.73	ug/l		96
46)	Methylcyclohexane	10.72	83	1660287	10.76	ug/l		95
47)	1,2-Dichloropropane	10.99	63	849486	8.92	ug/l		98
48)	1,4-Dioxane	11.54	88	54958	190.69	ug/l		99
49)	Bromodichloromethane	11.43	83	991867	9.07	ug/l		100
50)	Dibromomethane	11.51	93	362747	9.00	ug/l		88
51)	2-Chloroethyl vinyl ether	12.12	63	239342	7.61	ug/l		98
52)	4-Methyl-2-pentanone	12.19	43	2450578	53.12	ug/l		93
53)	cis-1,3-Dichloropropene	12.50	75	1274800	9.17	ug/l		95
56)	Toluene	13.04	91	3749642	8.99	ug/l		98
57)	Ethyl methacrylate	13.46	69	727660	10.24	ug/l		93
58)	trans-1,3-Dichloropropene	13.42	75	948120	9.23	ug/l		94
59)	1,1,2-Trichloroethane	13.67	97	503069	10.29	ug/l		94
60)	2-Hexanone	13.74	43	1544566	53.45	ug/l		94
61)	1,3-Dichloropropane	14.11	76	892978	9.68	ug/l		96
62)	Tetrachloroethene	14.18	164	743387	9.69	ug/l		96
63)	Dibromochloromethane	14.53	129	612972	9.39	ug/l		99
65)	1,2-Dibromoethane	14.87	107	458133	9.40	ug/l		97
66)	1-Chlorohexane	15.22	91	1785031	9.10	ug/l		97
67)	Chlorobenzene	15.60	112	2276732	9.68	ug/l		100
68)	1,1,1,2-Tetrachloroethane	15.69	131	758247	9.59	ug/l		98
69)	Ethylbenzene	15.70	91	4208862	9.25	ug/l		99
70)	m-Xylene & p-Xylene	15.83	91	6412756	18.83	ug/l		99
71)	o-Xylene	16.56	91	3186000	9.11	ug/l		99
72)	Styrene	16.62	104	2456721	9.93	ug/l		97
73)	Isopropylbenzene	17.17	105	4012006	9.35	ug/l		99
75)	Bromoform	17.17	173	282639	11.57	ug/l		99
76)	1,1,2,2-Tetrachloroethane	17.46	83	546821	9.61	ug/l		96
78)	1,2,3-Trichloropropane	17.66	110	125288	9.50	ug/l		89
79)	trans-1,4-Dichloro-2-buten	17.77	53	121240	8.50	ug/l		94
80)	n-Propylbenzene	17.77	91	5087360	9.09	ug/l		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24G02\RGW033.D Vial: 4
Acq On : 2 Jul 2024 1:02 pm Operator: LPriet
Sample : VO06G02C Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jul 2 13:24 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

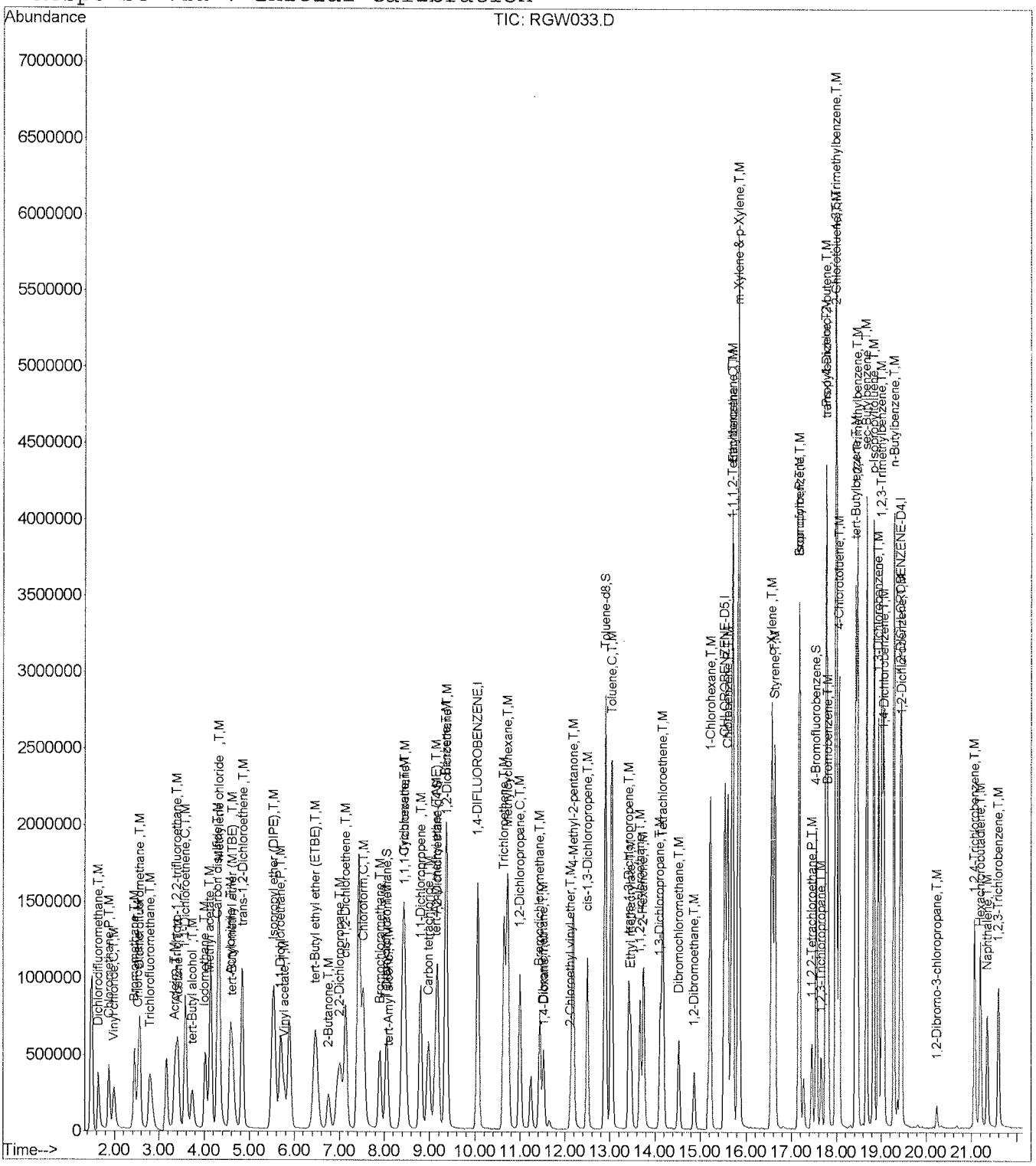
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
81)	Bromobenzene	17.81	156	823982	10.15	ug/l	97
82)	1,3,5-Trimethylbenzene	17.97	105	3275150	9.00	ug/l	100
83)	2-Chlorotoluene	17.99	91	3274343	9.01	ug/l	99
84)	4-Chlorotoluene	18.05	91	2687576	8.72	ug/l	100
85)	tert-Butylbenzene	18.43	134	711644	8.99	ug/l	94
86)	1,2,4-Trimethylbenzene	18.47	105	3166766	9.05	ug/l	99
87)	sec-Butylbenzene	18.68	105	4331119	9.04	ug/l	97
88)	p-Isopropyltoluene	18.83	119	3467865	8.78	ug/l	98
89)	1,3-Dichlorobenzene	18.93	146	1642189	9.54	ug/l	98
90)	1,2,3-Trimethylbenzene	19.01	105	2992648	9.18	ug/l	100
91)	1,4-Dichlorobenzene	19.06	146	1603744	9.42	ug/l	99
92)	n-Butylbenzene	19.29	91	3493464	8.62	ug/l	98
93)	1,2-Dichlorobenzene	19.45	146	1348898	9.51	ug/l	98
94)	1,2-Dibromo-3-chloropropan	20.23	157	68780	9.87	ug/l	96
95)	1,2,4-Trichlorobenzene	21.08	180	799133	9.52	ug/l	99
96)	Hexachlorobutadiene	21.21	225	464653	8.77	ug/l	98
97)	Naphthalene	21.35	128	1113829	9.36	ug/l	99
98)	1,2,3-Trichlorobenzene	21.60	180	564831	8.89	ug/l	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24G02\RGW033.D Vial: 4
Acq On : 2 Jul 2024 1:02 pm Operator: LPriet
Sample : VO06G02C Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jul 2 13:24 2024 Quant Results File: VO06F03.RE

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 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: RFW001 BFB Injection Date: 06/03/24

Instrument ID: 06 BFB Injection Time: 14:25

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	17.714
75	30 - 60% of mass 95	43.812
95	Base Peak, 100% relative abundance	100.000
96	5 - 9% of mass 95	5.660
173	Less than 2% of mass 174	0.000(0)1
174	Greater than 50% of mass 95	66.801
175	5 - 9% of mass 174	4.543(6.8)1
176	95 - 101% % of mass 174	65.298(97.75)1
177	5 - 9% % of mass 176	3.804(5.83)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	VO06F031	RFW002	06/03/24	15:03
2	VSTD0.5	VO06F032	RFW003	06/03/24	15:29
3	VSTD1	VO06F033	RFW004	06/03/24	15:55
4	VSTD2	VO06F034	RFW005	06/03/24	16:21
5	VSTD5	VO06F035	RFW006	06/03/24	16:47
6	VSTD10	VO06F036	RFW007	06/03/24	17:14
7	VSTD20	VO06F037	RFW008	06/03/24	17:40
8	VSTD30	VO06F038	RFW009	06/03/24	18:06
9	VSTD50	VO06F039	RFW010	06/03/24	18:32
10	VSTD100	VO06F0310	RFW011	06/03/24	18:59
11	VSTD10	IVO06F0301	RFW014	06/03/24	20:18

SLC

6/13/24

INITIAL_CALIBRATION - RELATIVE_RESPONSE_FACTOR

Instrument ID :06
Beginning DateTime :06/03/24 15:03
Spike Units :PPB
IC File :RFW007

Column Spec :RTX502.2 ID :0.25MM
Ending DateTime :06/03/24 18:59
HPChem Method :VO06F03

M	IDX	Parameters	.3 15:03 RFW002	.5 15:29 RFW003	1 15:55 RFW004	2 16:21 RFW005	5 16:47 RFW006	10 17:14 RFW007	20 17:40 RFW008	30 18:06 RFW009	50 18:32 RFW010	100 18:59 RFW011	Av_RRF	%_RSD	Av_Rt_M
	1	1,4-DIFLUOROBENZENE	1	1	1	1	1	1	1	1	1	1	1	0	10.0565
	2	Dichlorodifluoromethane	------	0.321	0.260	0.304	0.292	0.297	0.312	0.296	0.293	0.290	0.296	5.79	1.6306
	3	Chloromethane	0.613	0.437	0.396	0.430	0.439	0.434	0.442	0.449	0.445	0.423	0.451	13.06	1.8637
	4	Vinyl chloride	------	0.305	0.282	0.317	0.330	0.333	0.351	0.331	0.322	------	0.321	6.50	1.9733
	5	Bromomethane	------	0.248	0.278	0.272	0.295	0.292	0.312	0.316	0.309	0.301	0.291	7.51	2.4311
	6	Chloroethane	------	0.215	0.241	0.242	0.250	0.243	0.261	0.263	0.260	0.249	0.247	5.98	2.5188
	7	Dichlorofluoromethane	0.720	0.582	0.530	0.557	0.608	0.607	0.627	0.630	0.622	0.593	0.607	8.37	2.5585
	8	Trichlorofluoromethane	0.524	0.387	0.341	0.379	0.381	0.387	0.412	0.399	0.391	0.391	0.399	11.88	2.7954
5	9	Acrolein	------	0.019	0.019	0.016	0.018	0.021	0.021	0.023	0.024	0.023	0.020	12.06	3.3391
	10	1,1,2-Trichloro-1,2,2-trifluoroethane	0.228	0.166	0.172	0.169	0.174	0.179	0.190	0.191	0.184	0.190	0.184	9.77	3.3791
5	11	Acetone	------	0.045	0.032	0.033	0.030	0.031	0.032	0.035	0.035	0.036	0.034	12.69	3.4253
	12	1,1-Dichloroethene	0.560	0.490	0.472	0.499	0.522	0.548	0.559	0.561	0.548	0.544	0.530	6.16	3.5719
25	13	tert-Butyl alcohol	0.012	0.009	0.009	0.009	0.009	0.010	0.010	0.012	0.012	0.012	0.010	13.37	3.7417
	14	Acetonitrile	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	15	Methyl acetate	------	------	0.027	0.022	0.023	0.022	0.022	0.023	------	------	0.023	8.55	4.1238
	16	Iodomethane	0.591	0.457	0.473	0.495	0.530	0.532	0.550	0.553	0.550	0.533	0.526	7.71	4.0204
	17	Allyl chloride	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	18	Methylene chloride	0.513	0.422	0.415	0.402	0.443	0.440	0.451	0.459	0.453	0.444	0.444	6.80	4.3264
	19	Carbon disulfide	------	1.331	1.258	1.356	1.401	1.436	1.452	1.445	------	------	1.383	5.19	4.2875
5	20	Acrylonitrile	0.051	0.041	0.041	0.041	0.044	0.046	0.047	0.051	0.051	0.051	0.047	9.66	4.5779
	21	tert-Butyl methyl ether (MTBE)	0.574	0.467	0.437	0.458	0.495	0.522	0.527	0.567	0.537	0.545	0.513	9.16	4.6219
	22	trans-1,2-Dichloroethene	0.403	0.351	0.343	0.336	0.359	0.367	0.380	0.382	0.383	0.379	0.368	5.68	4.8462
	23	Isopropyl ether (DIPE)	1.155	0.993	1.025	1.096	1.194	1.216	1.229	1.265	1.245	------	1.158	8.51	5.5442
	24	Vinyl acetate	0.306	0.254	0.244	0.284	0.312	0.307	0.354	0.375	0.363	0.359	0.316	14.60	5.7851
	25	1,1-Dichloroethane	0.593	0.560	0.572	0.584	0.623	0.640	0.657	0.670	0.671	0.665	0.623	6.90	5.7013
25	26	2-Butanol	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	27	tert-Butyl ethyl ether (ETBE)	0.935	0.769	0.702	0.769	0.818	0.858	0.860	0.905	0.901	0.895	0.841	8.89	6.4705
5	28	2-Butanone	0.050	0.056	0.045	0.047	0.052	0.056	0.056	0.062	0.062	0.062	0.055	11.24	6.7702
	29	2,2-Dichloropropane	------	0.324	0.349	0.338	0.348	0.355	0.381	0.370	0.362	------	0.353	5.11	7.0091
	30	cis-1,2-Dichloroethene	0.383	0.335	0.311	0.334	0.345	0.364	0.378	0.381	0.388	0.387	0.360	7.58	7.1411
	31	Chloroform	0.588	0.576	0.537	0.525	0.564	0.562	0.581	0.590	0.595	0.596	0.571	4.25	7.5331
	32	Bromochloromethane	0.168	0.132	0.135	0.142	0.147	0.161	0.163	0.171	0.169	0.171	0.156	9.93	7.9103
	33	Tetrahydrofuran	------	------	0.039	0.031	0.033	0.032	0.030	0.035	0.032	0.036	0.034	9.10	8.0283
5	34	tert-Amyl alcohol	------	------	------	0.008	0.007	0.008	0.007	0.009	------	------	0.008	11.64	8.0611
	35	Dibromofluoromethane	0.366	0.296	0.245	0.272	0.293	0.301	0.312	0.316	------	------	0.300	11.72	8.0570
	36	1,1,1-Trichloroethane	0.528	0.392	0.398	0.400	0.432	0.435	0.464	0.456	0.454	0.442	0.440	9.11	8.4490
	37	Cyclohexane	------	0.457	0.399	0.448	0.437	0.463	0.468	0.446	------	------	0.445	5.16	8.4343
	38	2,2,4-Trimethylpentane	1.366	1.137	0.978	1.135	1.134	1.145	1.157	1.087	------	------	1.142	9.38	8.6202
	39	1,1-Dichloropropene	0.154	0.140	0.137	0.137	0.140	0.149	0.157	0.159	0.159	0.165	0.150	6.88	8.8116
	40	Carbon tetrachloride	0.392	0.338	0.306	0.330	0.343	0.356	0.376	0.373	0.371	0.369	0.355	7.29	8.9813
	41	tert-Amyl methyl ether (TAME)	0.661	0.514	0.541	0.571	0.629	0.656	0.652	0.702	0.680	0.672	0.628	10.16	9.1511
	42	1,2-Dichloroethane-d4	------	0.248	0.183	0.204	0.202	0.215	0.226	0.233	------	------	0.216	10.10	9.1798
	43	1,2-Dichloroethane	0.218	0.215	0.232	0.230	0.263	0.267	0.273	0.279	0.282	0.286	0.254	10.92	9.3795
	44	Benzene	1.327	1.258	1.268	1.329	1.404	1.403	1.402	1.417	1.410	1.097	1.331	7.65	9.3586
	45	Trichloroethene	0.337	0.304	0.280	0.322	0.350	0.354	0.355	0.359	0.363	0.365	0.339	8.32	10.6371
	46	Methylcyclohexane	------	0.498	0.440	0.532	0.513	0.571	0.557	0.539	------	------	0.521	8.40	10.7188
	47	1,2-Dichloropropane	0.337	0.275	0.285	0.302	0.324	0.328	0.342	0.343	0.342	0.340	0.322	7.90	10.9913
20	48	1,4-Dioxane	------	------	------	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	9.47	11.5392
	49	Bromodichloromethane	0.380	0.344	0.336	0.339	0.379	0.368	0.380	0.391	0.391	0.386	0.369	5.86	11.4314
	50	Dibromomethane	0.169	0.134	0.132	0.117	0.127	0.131	0.135	0.138	0.140	0.139	0.136	9.86	11.5152
	51	2-Chloroethyl vinyl ether	------	0.103	0.090	0.089	0.109	0.107	0.109	0.117	0.116	0.117	0.106	10.02	12.1278
5	52	4-Methyl-2-pentanone	0.135	0.123	0.133	0.143	0.167	0.172	0.167	0.181	0.175	0.162	0.156	13.02	12.1859
	53	cis-1,3-Dichloropropene	0.465	0.416	0.419	0.439	0.477	0.480	0.497	0.510	0.503	0.493	0.470	7.30	12.5003
	54	CHLOROBENZENE-D5	1	1	1	1	1	1	1	1	1	1	1	0	15.5334
	55	Toluene-d8	1.632	1.561	1.404	1.459	1.527	1.467	1.501	1.490	------	------	1.505	4.62	12.8984
	56	Toluene	1.605	1.751	1.682	1.749	1.785	1.785	1.810	1.797	1.727	------	1.743	3.75	13.0452
	57	Ethyl methacrylate	------	0.279	0.258	0.265	0.283	0.303	0.309	0.328	0.315	0.333	0.297	9.08	13.4715
	58	trans-1,3-Dichloropropene	0.378	0.409	0.385	0.398	0.436	0.441	0.451	0.471	0.457	0.468	0.429	8.01	13.4246
	59	1,1,2-Trichloroethane	------	0.214	0.186	0.181	0.201	0.202	0.209	0.222	0.220	------	0.204	7.35	13.6740
5	60	2-Hexanone	------	------	0.090	0.105	0.121	0.125	0.124	0.136	0.131	0.135	0.121	13.14	13.7527
	61	1,3-Dichloropropane	0.342	0.365	0.333	0.361	0.385	0.398	0.409	0.422	0.415	0.426	0.386	8.77	14.1163
	62	Tetrachloroethene	0.338	0.287	0.276	0.295	0.317	0.325	0.338	0.337	0.340	0.353	0.321	8.08	14.1770
	63	Dibromochloromethane	0.315	0.272	0.243	0.241	0.262	0.267	0.274	0.285	0.283	0.289	0.273	8.06	14.5333
	64	2-Ethyl-1-butanol	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	65	1,2-Dibromoethane	0.263	0.193	0.188	0.188	0.186	0.194	0.193	0.210	0.208	0.213	0.204	11.37	14.8686
	66	1-Chlorohexane	0.878	0.793	0.739	0.783	0.852	0.807	0.870	0.829	0.858	0.793	0.820	5.44	15.2220
	67	Chlorobenzene	0.932	0.939	0.917	0.975	1.019	1.018	1.037	1.050	1.035	0.905	0.983	5.64	15.5983
	68	1,1,1,2-Tetrachloroethane	0.342	0.290	0.287	0.303	0.326	0.341	0.344	0.355	0.355	0.363	0.331	8.42	15.6865
	69	Ethylbenzene	1.846	1.839	1.825	1.905	1.981	1.960	1.991	1.999	1.773	------	1.902	4.42	15.7036
2	70	m-Xylene & p-Xylene	1.447	1.474	1.440	1.487	1.521	1.480	1.512	1.381	1.066	------	1.423	9.86	15.8334
	71	o-Xylene	1.540	1.432	1.345	1.427	1.502	1.472	1.499	1.492	1.446	------	1.462	3.90	16.5614
	72	Styrene	0.955	0.954	0.970	1.023	1.059	1.092	1.104	1.121	1.114	0.948	1.034	6.99	16.6298
	73	Isopropylbenzene	1.846	1.774	1.767	1.790	1.849	1.827	1.846	1.810	1.633	------	1.793	3.78	17.1697
	74	1,2-DICHLOROBENZENE-D4	1	1	1	1	1	1	1	1	1	1	1	0	19.4258
	75	Bromoform	0.239	0.229	0.264	0.278	0.305	0.323	0.338	------	------	------	0.282	14.77	17.1682
	76	1,1,2,2-Tetrachloroethane	0.762	0.660	0.553	0.604	0.608	0.644	0.668	0.708	0.684	0.681	0.657	8.96	17.4536
	77	4-Bromofluorobenzene	------	1.202	1.190	1.342	1.363	1.358	1.406	1.421	------	------	1.326	7.03	17.5464
	78	1,2,3-Trichloropropane	------	------	0.136	0.146	0.147	0.148	0.150	0.160	0.162	0.168	0.152	6.78	17.6612
	79	trans-1,4-Dichloro-2-butene	------	0.153	0.168	0.167	0.160	0.165	0.175	------	------	------	0.165	4.52	17.7673
	80	n-Propylbenzene	5.827	6.531	6.350	6.958	6.946	6.914	6.983	6.506	5.142	------	6.462	9.67	17.7651
	81	Bromobenzene	0.747	0.801	0.833	0.893	0.966	0.979	1.001	1.020	1.050	1.085	0.938	12.11	17.8040
	82	1,3,5-Trimethylbenzene	3.837	4.087	3.996	4.298	4.356	4.367	4.453	4.414	4.008	------	4.202	5.29	17.9756
	83	2-Chlorotoluene	3.578	3.851	3.894	4.231	4.451	4.417	4.531	4.532	4.288	------	4.197	8.17	17.9871
	84	4-Chlorotoluene	2.977	3.499	3.375	3.766	3.675	3.617	3.759	3.743	3.596	------	3.556	7.10	18.0520
	85	tert-Butylbenzene	------	0.893	0.780	0.856	0.918	0.947	0.959	0.933	0.961	0.981	0.914	6.93	18.4268
	86	1,2,4-Trimethylbenzene	3.436	3.993	3.819	4.151	4.250	4.224	4.349	4.275	3.845	------	4.038	7.30	18.4658
	87	sec-Butylbenzene	5.161	5.536	5.537	5.972	5.922	5.793	5.831	5.532	4.477	------	5.529	8.47	18.6733
	88	p-Isopropyltoluene	4.304	4.350	4.304	4.942	4.817	4.764	4.839	4.714	4.012	------	4.561	7.07	18.8391
	89	1,3-Dichlorobenzene	1.748	1.650	1.800	2.004	2.109	2.109	2.165	2.168	2.180	1.947	1.988	9.76	18.9379
	90	1,2,3-Trimethylbenzene	3.509	3.472	3.479	3.810	4.013	3.913	4.025	3.991	3.644	------	3.762	6.32	19.0107
	91	1,4-Dichlorobenzene	1.671	1.817	1.728	1.952	2.018	2.064	2.143	2.147	2.157	1.953	1.965	8.97	19.0625
	92	n-Butylbenzene	4.595	4.696	4.604	4.871	4.909	4.767	4.955	4.774	3.956	------	4.681	6.40	19.2831
	93	1,2-Dichlorobenzene	1.353	1.460	1.559	1.663	1.701	1.723	1.744	1.747	1.738	1.682	1.637	8.31	19.4517
	94	1,2-Dibromo-3-chloropropane	------	------	------	0.076	0.078	0.077	0.076	0.084	0.084	0.088	0.080	6.08	20.2321
	95	1,2,4-Trichlorobenzene	0.960	0.797	0.853	0.898	0.991	0.965	1.037	1.047	1.049	1.093	0.969	9.81	21.0632
	96	Hexachlorobutadiene	0.652	0.628	0.558	0.617	0.613	0.592	0.634	0.604	0.585	0.629	0.611	4.49	21.1903
	97	Naphthalene	1.422	1.196	1.154	1.339	1.345	1.336	1.427	1.493	1.483	1.539	1.373	9.16	21.3382
	98	1,2,3-Trichlorobenzene	0.809	0.662	0.632	0.680	0.741	0.673	0.746	0.775	0.788	0.826	0.733	9.20	21.5912

Spike Amount = Nominal Amount * M
Ave_%RSD : 8.3 Max_%RSD : 14.8

SM 6/13/24

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 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	10.05	1.000	A	1	A	B
2	T	Dichlorodifluoromethane	85	1.63	0.162	A	1	A	B
3	T	Chloromethane	50	1.86	0.186	A	1	A	B
4	T	Vinyl chloride	62	1.98	0.197	A	1	A	B
5	T	Bromomethane	94	2.44	0.243	A	1	A	B
6	T	Chloroethane	64	2.52	0.250	A	1	A	B
7	T	Dichlorofluoromethane	67	2.56	0.254	A	1	A	B
8	T	Trichlorofluoromethane	101	2.79	0.278	A	1	A	B
9	T	Acrolein	56	3.34	0.333	A	1	A	B
10	T	1,1,2-Trichloro-1,2,2-trifluor	151	3.38	0.337	A	1	A	B
11	T	Acetone	43	3.42	0.341	A	1	A	B
12	T	1,1-Dichloroethene	61	3.57	0.355	A	2	A	B
13	T	tert-Butyl alcohol	59	3.74	0.372	A	1	A	B
14	T	Acetonitrile	41	0.00	0.000	A	2	A	B
15	T	Methyl acetate	74	4.14	0.412	A	1	A	B
16	T	Iodomethane	142	4.03	0.401	A	1	A	B
17	T	Allyl chloride	76	4.16	0.414	A	1	A	B
18	T	Methylene chloride	49	4.33	0.431	A	2	A	B
19	T	Carbon disulfide	76	4.28	0.426	A	1	A	B
20	T	Acrylonitrile	53	4.58	0.456	A	2	A	B
21	T	tert-Butyl methyl ether (MTBE)	73	4.62	0.460	A	1	A	B
22	T	trans-1,2-Dichloroethene	96	4.85	0.483	A	1	A	B
23	T	Isopropyl ether (DIPE)	45	5.54	0.552	A	1	A	B
24	T	Vinyl acetate	43	5.77	0.574	A	1	A	B
25	T	1,1-Dichloroethane	63	5.71	0.568	A	2	A	B
26	T	2-Butanol	45	6.28	0.625	A	1	A	B
27	T	tert-Butyl ethyl ether (ETBE)	59	6.46	0.643	A	1	A	B
28	T	2-Butanone	43	6.76	0.673	A	1	A	B
29	T	2,2-Dichloropropane	77	7.01	0.698	A	2	A	B
30	T	cis-1,2-Dichloroethene	96	7.13	0.710	A	1	A	B
31	T	Chloroform	83	7.53	0.750	A	2	A	B
32	T	Bromochloromethane	130	7.91	0.787	A	1	A	B
33	T	Tetrahydrofuran	42	8.04	0.800	A	2	A	B
34	T	tert-Amyl alcohol	59	8.06	0.802	A	1	A	B
35	S	Dibromofluoromethane	111	8.06	0.802	A	1	A	B
36	T	1,1,1-Trichloroethane	97	8.46	0.841	A	2	A	B
37	T	Cyclohexane	84	8.43	0.839	A	1	A	B
38	T	2,2,4-Trimethylpentane	57	8.62	0.858	A	1	A	B
39	T	1,1-Dichloropropene	110	8.81	0.877	A	1	A	B
40	T	Carbon tetrachloride	119	8.98	0.894	A	1	A	B
41	T	tert-Amyl methyl ether (TAME)	73	9.15	0.910	A	2	A	B
42	S	1,2-Dichloroethane-d4	65	9.19	0.914	A	1	A	B
43	T	1,2-Dichloroethane	62	9.38	0.933	A	1	A	B
44	T	Benzene	78	9.36	0.931	A	2	A	B
45	T	Trichloroethene	130	10.63	1.058	A	3	A	B
46	T	Methylcyclohexane	83	10.72	1.067	A	2	A	B
47	T	1,2-Dichloropropane	63	10.99	1.094	A	1	A	B
48	T	1,4-Dioxane	88	11.54	1.148	A	1	A	B
49	T	Bromodichloromethane	83	11.43	1.138	A	1	A	B
50	T	Dibromomethane	93	11.51	1.146	A	2	A	B
51	T	2-Chloroethyl vinyl ether	63	12.12	1.207	A	1	A	B
52	T	4-Methyl-2-pentanone	43	12.19	1.213	A	3	A	B
53	T	cis-1,3-Dichloropropene	75	12.50	1.244	A	3	A	B

6/13/24

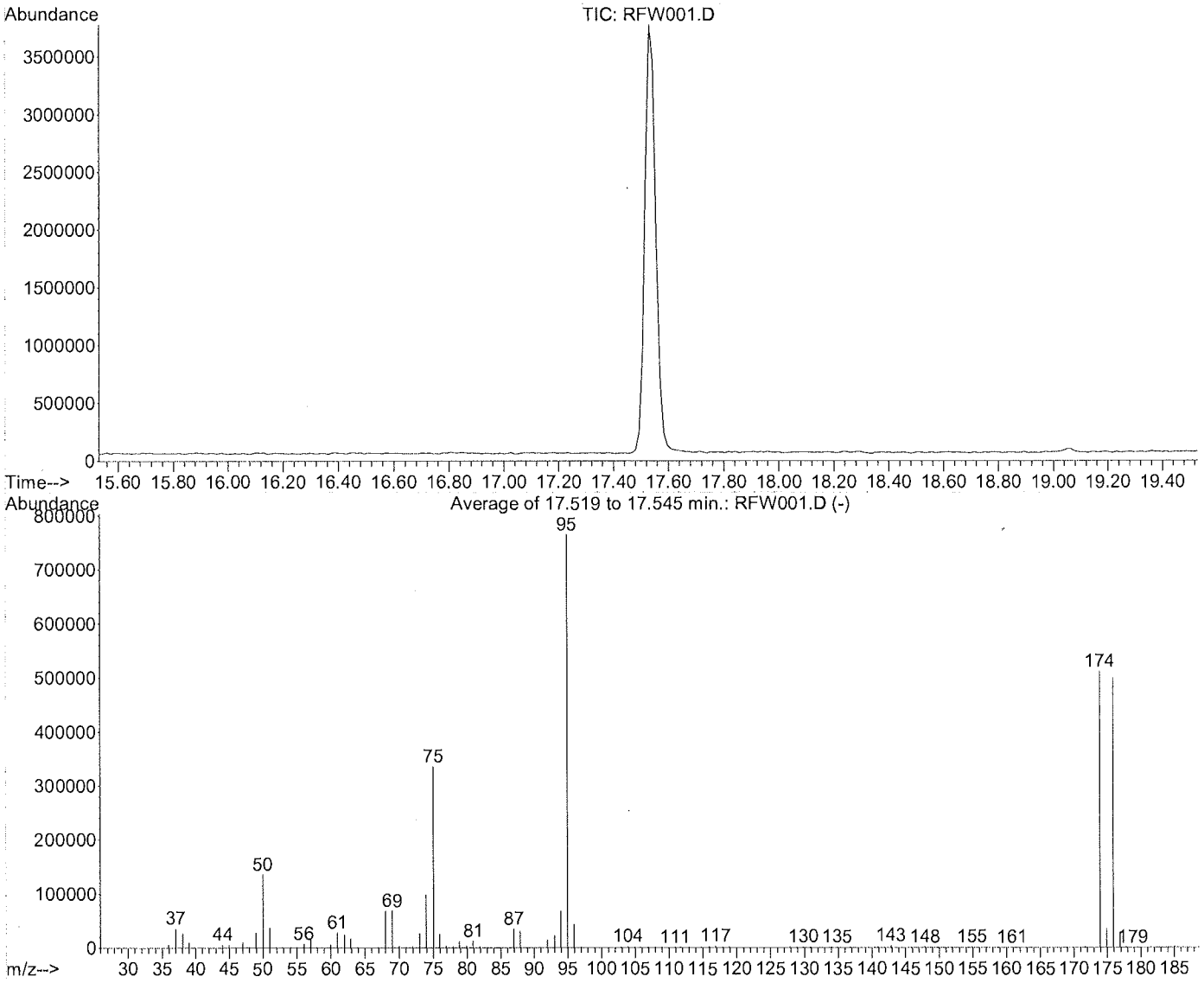
54	I	CHLOROBENZENE-D5	117	15.53	1.000	A	2	A	B
55	S	Toluene-d8	98	12.90	0.830	A	1	A	B
56	T	Toluene	91	13.04	0.840	A	1	A	B
57	T	Ethyl methacrylate	69	13.46	0.867	A	1	A	B
58	T	trans-1,3-Dichloropropene	75	13.42	0.864	A	1	A	B
59	T	1,1,2-Trichloroethane	97	13.67	0.880	A	2	A	B
60	T	2-Hexanone	43	13.76	0.886	A	1	A	B
61	T	1,3-Dichloropropane	76	14.11	0.909	A	1	A	B
62	T	Tetrachloroethene	164	14.18	0.913	A	3	A	B
63	T	Dibromochloromethane	129	14.53	0.936	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	14.87	0.957	A	1	A	B
66	T	1-Chlorohexane	91	15.22	0.980	A	1	A	B
67	T	Chlorobenzene	112	15.60	1.004	A	1	A	B
68	T	1,1,1,2-Tetrachloroethane	131	15.69	1.010	A	1	A	B
69	T	Ethylbenzene	91	15.70	1.011	A	1	A	B
70	T	m-Xylene & p-Xylene	91	15.83	1.019	A	1	A	B
71	T	o-Xylene	91	16.56	1.066	A	1	A	B
72	T	Styrene	104	16.62	1.070	A	2	A	B
73	T	Isopropylbenzene	105	17.17	1.105	A	3	A	B
74	I	1,2-DICHLOROBENZENE-D4	152	19.43	1.000	A	1	A	B
75	T	Bromoform	173	17.17	0.884	A	2	A	B
76	T	1,1,2,2-Tetrachloroethane	83	17.45	0.898	A	1	A	B
77	S	4-Bromofluorobenzene	95	17.54	0.903	A	2	A	B
78	T	1,2,3-Trichloropropane	110	17.66	0.909	A	1	A	B
79	T	trans-1,4-Dichloro-2-butene	53	17.77	0.915	A	1	A	B
80	T	n-Propylbenzene	91	17.77	0.915	A	2	A	B
81	T	Bromobenzene	156	17.80	0.917	A	1	A	B
82	T	1,3,5-Trimethylbenzene	105	17.97	0.925	A	2	A	B
83	T	2-Chlorotoluene	91	17.99	0.926	A	1	A	B
84	T	4-Chlorotoluene	91	18.05	0.929	A	1	A	B
85	T	tert-Butylbenzene	134	18.43	0.949	A	1	A	B
86	T	1,2,4-Trimethylbenzene	105	18.47	0.951	A	1	A	B
87	T	sec-Butylbenzene	105	18.67	0.961	A	1	A	B
88	T	p-Isopropyltoluene	119	18.83	0.969	A	2	A	B
89	T	1,3-Dichlorobenzene	146	18.93	0.975	A	2	A	B
90	T	1,2,3-Trimethylbenzene	105	19.01	0.979	A	2	A	B
91	T	1,4-Dichlorobenzene	146	19.06	0.981	A	2	A	B
92	T	n-Butylbenzene	91	19.28	0.993	A	2	A	B
93	T	1,2-Dichlorobenzene	146	19.45	1.001	A	1	A	B
94	T	1,2-Dibromo-3-chloropropane	157	20.23	1.041	A	1	A	B
95	T	1,2,4-Trichlorobenzene	180	21.06	1.084	A	2	A	B
96	T	Hexachlorobutadiene	225	21.19	1.091	A	2	A	B
97	T	Naphthalene	128	21.33	1.098	A	1	A	B
98	T	1,2,3-Trichlorobenzene	180	21.58	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

VO06F03.M Mon Jun 10 17:42:01 2024

SM 6/13/24

Data File : D:\HPCHEM\1\DATA\24F03\RFW001.D Vial: 1
Acq On : 3 Jun 2024 2:25 pm Operator: DHuynh
Sample : BFB06F01 Inst : 06
Misc : T/CHK Multiplr: 1.00
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260



AutoFind: Scans 845, 846, 847; Background Corrected with Scan 838

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.7	135578	PASS
75	95	30	60	43.8	335326	PASS
95	95	100	100	100.0	765375	PASS
96	95	5	9	5.7	43319	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	66.8	511275	PASS
175	174	5	9	6.8	34773	PASS
176	174	95	101	97.8	499776	PASS
177	176	5	9	5.8	29114	PASS

SC 6/13/24

RFW001.D VO06F03.M Mon Jun 10 16:45:31 2024

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW002.D Vial: 2
Acq On : 3 Jun 2024 3:03 pm Operator: DHuynh
Sample : VO06F031 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: Jun 10 16:49 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.07	114	2525414	10.00	ug/l	0.02
54) CHLOROBENZENE-D5	15.53	117	1862974	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.43	152	750796	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	8.06	111	27720	0.37	ug/l	0.00
Spiked Amount 10.000			Recovery =	3.70%		
42) 1,2-Dichloroethane-d4	9.19	65	20939	0.38	ug/l	0.00
Spiked Amount 10.000			Recovery =	3.80%		
55) Toluene-d8	12.90	98	91236	0.33	ug/l	0.00
Spiked Amount 10.000			Recovery =	3.30%		
77) 4-Bromofluorobenzene	17.56	95	36089	0.36	ug/l	0.01
Spiked Amount 10.000			Recovery =	3.60%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.63	85	33680	0.45	ug/l	75
3) Chloromethane	1.87	50	46435	0.41	ug/l	90
4) Vinyl chloride	1.99	62	35381	0.44	ug/l	97
5) Bromomethane	2.44	94	34640	0.47	ug/l	98
6) Chloroethane	2.52	64	29572	0.47	ug/l	98
7) Dichlorofluoromethane	2.56	67	54547	0.36	ug/l	93
8) Trichlorofluoromethane	2.80	101	39669	0.39	ug/l	96
9) Acrolein	3.34	56	10589	2.05	ug/l	71
10) 1,1,2-Trichloro-1,2,2-trif	3.36	151	17300	0.37	ug/l	96
11) Acetone	3.45	43	17658	2.04	ug/l	64
12) 1,1-Dichloroethene	3.57	61	42447	0.32	ug/l	87
13) tert-Butyl alcohol	3.76	59	23137	8.78	ug/l	67
16) Iodomethane	4.03	142	44746	0.34	ug/l	97
18) Methylene chloride	4.33	49	38878	0.35	ug/l	93
19) Carbon disulfide	4.30	76	152496	0.44	ug/l	97
20) Acrylonitrile	4.58	53	19445	1.66	ug/l	96
21) tert-Butyl methyl ether (M	4.64	73	43458	0.34	ug/l	77
22) trans-1,2-Dichloroethene	4.85	96	30555	0.33	ug/l	95
23) Isopropyl ether (DIPE)	5.58	45	87492	0.30	ug/l	86
24) Vinyl acetate	5.81	43	23182	0.29	ug/l	97
25) 1,1-Dichloroethane	5.71	63	44933	0.29	ug/l	90
27) tert-Butyl ethyl ether (ET	6.51	59	70816	0.33	ug/l	95
28) 2-Butanone	6.82	43	18852	1.36	ug/l	78
29) 2,2-Dichloropropane	7.01	77	45437	0.51	ug/l	78
30) cis-1,2-Dichloroethene	7.15	96	28998	0.32	ug/l	99
31) Chloroform	7.53	83	44544	0.31	ug/l	78
32) Bromochloromethane	7.91	130	12720	0.32	ug/l	100

(#) = qualifier out of range (m) = manual integration
RFW002.D VO06F03.M Mon Jun 10 16:49:42 2024 SU 6/13/24 Page 1

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW002.D Vial: 2
Acq On : 3 Jun 2024 3:03 pm Operator: DHuynh
Sample : VO06F031 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: Jun 10 16:49 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
34)	tert-Amyl alcohol	8.12	59	7687	3.87	ug/l	85
36)	1,1,1-Trichloroethane	8.45	97	40006	0.36	ug/l	92
37)	Cyclohexane	8.43	84	48550	0.43	ug/l	98
38)	2,2,4-Trimethylpentane	8.62	57	103467	0.36	ug/l	98
39)	1,1-Dichloropropene	8.81	110	11632	0.31	ug/l	93
40)	Carbon tetrachloride	8.98	119	29712	0.33	ug/l	95
41)	tert-Amyl methyl ether (TA	9.15	73	50116	0.32	ug/l	71
43)	1,2-Dichloroethane	9.40	62	16490	0.26	ug/l	78
44)	Benzene	9.38	78	100533	0.30	ug/l	99
45)	Trichloroethene	10.65	130	25541	0.30	ug/l	88
46)	Methylcyclohexane	10.72	83	57113	0.43	ug/l	98
47)	1,2-Dichloropropane	10.99	63	25515	0.31	ug/l	98
49)	Bromodichloromethane	11.43	83	28753	0.31	ug/l	98
50)	Dibromomethane	11.51	93	12815	0.37	ug/l	73
52)	4-Methyl-2-pentanone	12.21	43	51163	1.30	ug/l	90
53)	cis-1,3-Dichloropropene	12.50	75	35200	0.30	ug/l	92
56)	Toluene	13.04	91	89701	0.28	ug/l	98
58)	trans-1,3-Dichloropropene	13.44	75	21125	0.26	ug/l	78
60)	2-Hexanone	13.80	43	21584	0.96	ug/l	94
61)	1,3-Dichloropropane	14.13	76	19106	0.27	ug/l	90
62)	Tetrachloroethene	14.18	164	18876	0.32	ug/l	92
63)	Dibromochloromethane	14.53	129	17586	0.35	ug/l	97
65)	1,2-Dibromoethane	14.87	107	14713	0.39	ug/l	85
66)	1-Chlorohexane	15.22	91	49082	0.32	ug/l	96
67)	Chlorobenzene	15.60	112	52061	0.28	ug/l	95
68)	1,1,1,2-Tetrachloroethane	15.69	131	19128	0.31	ug/l	99
69)	Ethylbenzene	15.71	91	103166	0.29	ug/l	94
70)	m-Xylene & p-Xylene	15.84	91	161737	0.61	ug/l	93
71)	o-Xylene	16.57	91	86072	0.32	ug/l	97
72)	Styrene	16.64	104	53371	0.28	ug/l	95
73)	Isopropylbenzene	17.17	105	103149	0.31	ug/l	96
75)	Bromoform	17.15	173	5373	0.25	ug/l	71
76)	1,1,2,2-Tetrachloroethane	17.45	83	17171	0.35	ug/l	75
79)	trans-1,4-Dichloro-2-buten	17.75	53	5262	0.43	ug/l	56
80)	n-Propylbenzene	17.76	91	131246	0.27	ug/l	94
81)	Bromobenzene	17.80	156	16823	0.24	ug/l	91
82)	1,3,5-Trimethylbenzene	17.99	105	86433	0.27	ug/l	94
83)	2-Chlorotoluene	18.00	91	80596	0.26	ug/l	96
84)	4-Chlorotoluene	18.06	91	67061	0.25	ug/l	98
86)	1,2,4-Trimethylbenzene	18.47	105	77390	0.26	ug/l	97
87)	sec-Butylbenzene	18.67	105	116245	0.28	ug/l	97

(#) = qualifier out of range (m) = manual integration SA 6/13/24

Data File : D:\HPCHEM\1\DATA\24F03\RFW002.D Vial: 2
Acq On : 3 Jun 2024 3:03 pm Operator: DHuynh
Sample : VO06F031 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: Jun 10 16:49 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
88) p-Isopropyltoluene	18.84	119	96932	0.28 ug/l	96
89) 1,3-Dichlorobenzene	18.95	146	39379	0.26 ug/l	95
90) 1,2,3-Trimethylbenzene	19.01	105	79035	0.28 ug/l	89
91) 1,4-Dichlorobenzene	19.06	146	37647	0.26 ug/l	93
92) n-Butylbenzene	19.28	91	103497	0.29 ug/l	98
93) 1,2-Dichlorobenzene	19.45	146	30468	0.25 ug/l	77
94) 1,2-Dibromo-3-chloropropan	20.23	157	3259	0.54 ug/l	67
95) 1,2,4-Trichlorobenzene	21.07	180	21615	0.30 ug/l	87
96) Hexachlorobutadiene	21.18	225	14687	0.32 ug/l	90
97) Naphthalene	21.35	128	32040	0.31 ug/l	86
98) 1,2,3-Trichlorobenzene	21.61	180	18211	0.33 ug/l	94

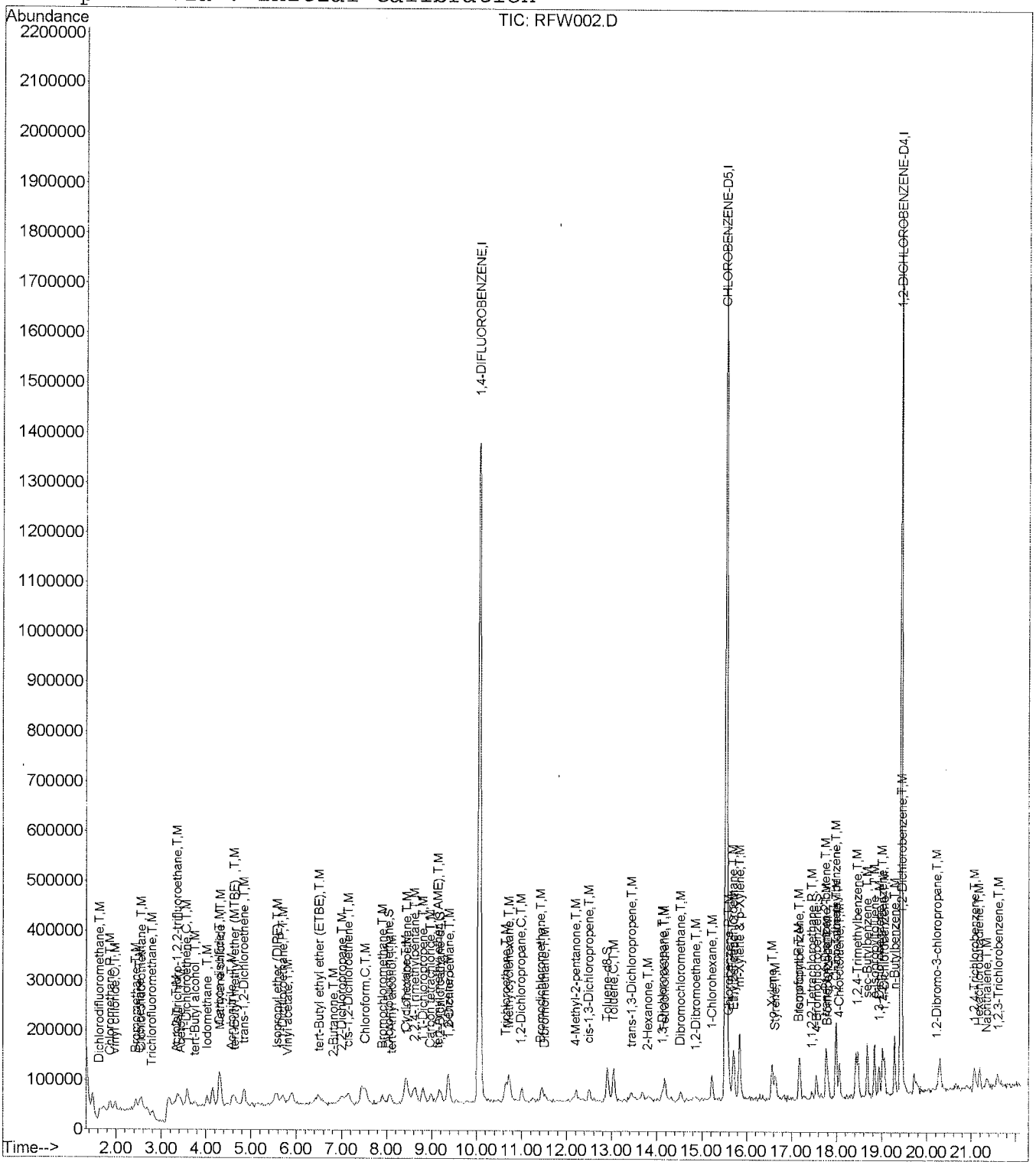
SA 6/13/24

(#) = qualifier out of range (m) = manual integration
RFW002.D VO06F03.M Mon Jun 10 16:49:43 2024 Page 3

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F03\RFW002.D Vial: 2
Acq On : 3 Jun 2024 3:03 pm Operator: DHuynh
Sample : VO06F031 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: Jun 10 16:49 2024 Quant Results File: VO06F03.RE

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration



RFW002.D VO06F03.M Mon Jun 10 16:49:46 2024 Su 6/13/24 Page 4

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW003.D Vial: 3
Acq On : 3 Jun 2024 3:29 pm Operator: DHuynh
Sample : VO06F032 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: Jun 10 16:52 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.05	114	3175879	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.53	117	2430140	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.43	152	874635	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	8.06	111	47042	0.49	ug/l	0.00
Spiked Amount 10.000			Recovery =	4.90%		
42) 1,2-Dichloroethane-d4	9.19	65	39413	0.57	ug/l	0.00
Spiked Amount 10.000			Recovery =	5.70%		
55) Toluene-d8	12.90	98	189709	0.52	ug/l	0.00
Spiked Amount 10.000			Recovery =	5.20%		
77) 4-Bromofluorobenzene	17.55	95	52549	0.45	ug/l	0.00
Spiked Amount 10.000			Recovery =	4.50%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.63	85	51031	0.54	ug/l	89
3) Chloromethane	1.87	50	69330	0.48	ug/l	97
4) Vinyl chloride	1.97	62	48506	0.48	ug/l	85
5) Bromomethane	2.42	94	39447	0.43	ug/l	76
6) Chloroethane	2.52	64	34097	0.43	ug/l	87
7) Dichlorofluoromethane	2.56	67	92381	0.48	ug/l	99
8) Trichlorofluoromethane	2.80	101	61437	0.48	ug/l	100
9) Acrolein	3.34	56	15295	2.36	ug/l	77
10) 1,1,2-Trichloro-1,2,2-trif	3.38	151	26359	0.45	ug/l	99
11) Acetone	3.43	43	35350	3.25	ug/l	89
12) 1,1-Dichloroethene	3.57	61	77787	0.46	ug/l	93
13) tert-Butyl alcohol	3.74	59	34788	10.50	ug/l	89
16) Iodomethane	4.01	142	72521	0.43	ug/l	99
18) Methylene chloride	4.33	49	66954	0.47	ug/l	97
19) Carbon disulfide	4.28	76	211303	0.48	ug/l	96
20) Acrylonitrile	4.58	53	32558	2.20	ug/l	96
21) tert-Butyl methyl ether (M	4.62	73	74128	0.46	ug/l	79
22) trans-1,2-Dichloroethene	4.85	96	55731	0.48	ug/l	94
23) Isopropyl ether (DIPE)	5.54	45	157713	0.43	ug/l	89
24) Vinyl acetate	5.81	43	40289	0.40	ug/l	92
25) 1,1-Dichloroethane	5.69	63	88938	0.45	ug/l	86
27) tert-Butyl ethyl ether (ET	6.46	59	122162	0.46	ug/l	92
28) 2-Butanone	6.78	43	44541	2.56	ug/l	87
29) 2,2-Dichloropropane	7.01	77	51390	0.46	ug/l	72
30) cis-1,2-Dichloroethene	7.14	96	53240	0.47	ug/l	95
31) Chloroform	7.53	83	91402	0.50	ug/l	95
32) Bromochloromethane	7.91	130	20930	0.42	ug/l	94

(#) = qualifier out of range (m) = manual integration
RFW003.D VO06F03.M Mon Jun 10 16:53:04 2024 6/13/24 Page 1

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW003.D Vial: 3
Acq On : 3 Jun 2024 3:29 pm Operator: DHuynh
Sample : VO06F032 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: Jun 10 16:52 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
33)	Tetrahydrofuran	8.06	42	11787	1.11	ug/l	83
34)	tert-Amyl alcohol	8.08	59	6731	2.69	ug/l	67
36)	1,1,1-Trichloroethane	8.43	97	62315	0.45	ug/l	94
37)	Cyclohexane	8.43	84	72500	0.51	ug/l	95
38)	2,2,4-Trimethylpentane	8.60	57	180510	0.50	ug/l	99
39)	1,1-Dichloropropene	8.81	110	22222	0.47	ug/l	90
40)	Carbon tetrachloride	8.98	119	53625	0.48	ug/l	91
41)	tert-Amyl methyl ether (TA	9.17	73	81556	0.41	ug/l	71
43)	1,2-Dichloroethane	9.38	62	34125	0.42	ug/l	80
44)	Benzene	9.36	78	199788	0.47	ug/l	96
45)	Trichloroethene	10.64	130	48285	0.45	ug/l	91
46)	Methylcyclohexane	10.72	83	79010	0.48	ug/l	88
47)	1,2-Dichloropropane	10.99	63	43704	0.43	ug/l	92
49)	Bromodichloromethane	11.43	83	54681	0.47	ug/l	94
50)	Dibromomethane	11.52	93	21279	0.49	ug/l	86
51)	2-Chloroethyl vinyl ether	12.14	63	16421	0.49	ug/l	86
52)	4-Methyl-2-pentanone	12.21	43	97860	1.98	ug/l	98
53)	cis-1,3-Dichloropropene	12.50	75	66100	0.44	ug/l	89
56)	Toluene	13.05	91	212717	0.50	ug/l	92
57)	Ethyl methacrylate	13.49	69	33950	0.47	ug/l	95
58)	trans-1,3-Dichloropropene	13.42	75	49657	0.48	ug/l	98
59)	1,1,2-Trichloroethane	13.67	97	26018	0.52	ug/l	89
60)	2-Hexanone	13.78	43	54224	1.85	ug/l	84
61)	1,3-Dichloropropane	14.11	76	44297	0.47	ug/l	83
62)	Tetrachloroethene	14.18	164	34885	0.45	ug/l	98
63)	Dibromochloromethane	14.53	129	33103	0.50	ug/l	98
65)	1,2-Dibromoethane	14.87	107	23477	0.47	ug/l	99
66)	1-Chlorohexane	15.22	91	96386	0.48	ug/l	90
67)	Chlorobenzene	15.60	112	114123	0.48	ug/l	98
68)	1,1,1,2-Tetrachloroethane	15.68	131	35271	0.44	ug/l	99
69)	Ethylbenzene	15.70	91	223475	0.48	ug/l	92
70)	m-Xylene & p-Xylene	15.83	91	358161	1.04	ug/l	96
71)	o-Xylene	16.56	91	174036	0.49	ug/l	92
72)	Styrene	16.64	104	115889	0.46	ug/l	95
73)	Isopropylbenzene	17.18	105	215536	0.49	ug/l	98
75)	Bromoform	17.17	173	10015	0.41	ug/l	75
76)	1,1,2,2-Tetrachloroethane	17.45	83	28871	0.50	ug/l	89
79)	trans-1,4-Dichloro-2-buten	17.78	53	6701	0.47	ug/l	86
80)	n-Propylbenzene	17.77	91	285594	0.51	ug/l	95
81)	Bromobenzene	17.80	156	35009	0.43	ug/l	96
82)	1,3,5-Trimethylbenzene	17.97	105	178718	0.49	ug/l	95

(#) = qualifier out of range (m) = manual integration

SC 6/13/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW003.D Vial: 3
Acq On : 3 Jun 2024 3:29 pm Operator: DHuynh
Sample : VO06F032 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: Jun 10 16:52 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
83)	2-Chlorotoluene	17.99	91	168405	0.46	ug/l	94
84)	4-Chlorotoluene	18.05	91	153007	0.49	ug/l	93
85)	tert-Butylbenzene	18.43	134	39059	0.49	ug/l	92
86)	1,2,4-Trimethylbenzene	18.47	105	174623	0.49	ug/l	90
87)	sec-Butylbenzene	18.67	105	242091	0.50	ug/l	97
88)	p-Isopropyltoluene	18.84	119	190233	0.48	ug/l	98
89)	1,3-Dichlorobenzene	18.95	146	72170	0.42	ug/l	95
90)	1,2,3-Trimethylbenzene	19.01	105	151840	0.46	ug/l	98
91)	1,4-Dichlorobenzene	19.06	146	79440	0.46	ug/l	97
92)	n-Butylbenzene	19.28	91	205360	0.50	ug/l	98
93)	1,2-Dichlorobenzene	19.45	146	63829	0.45	ug/l	91
95)	1,2,4-Trichlorobenzene	21.06	180	34833	0.41	ug/l	94
96)	Hexachlorobutadiene	21.19	225	27446	0.51	ug/l	93
97)	Naphthalene	21.35	128	52298	0.44	ug/l	97
98)	1,2,3-Trichlorobenzene	21.59	180	28965	0.45	ug/l	92

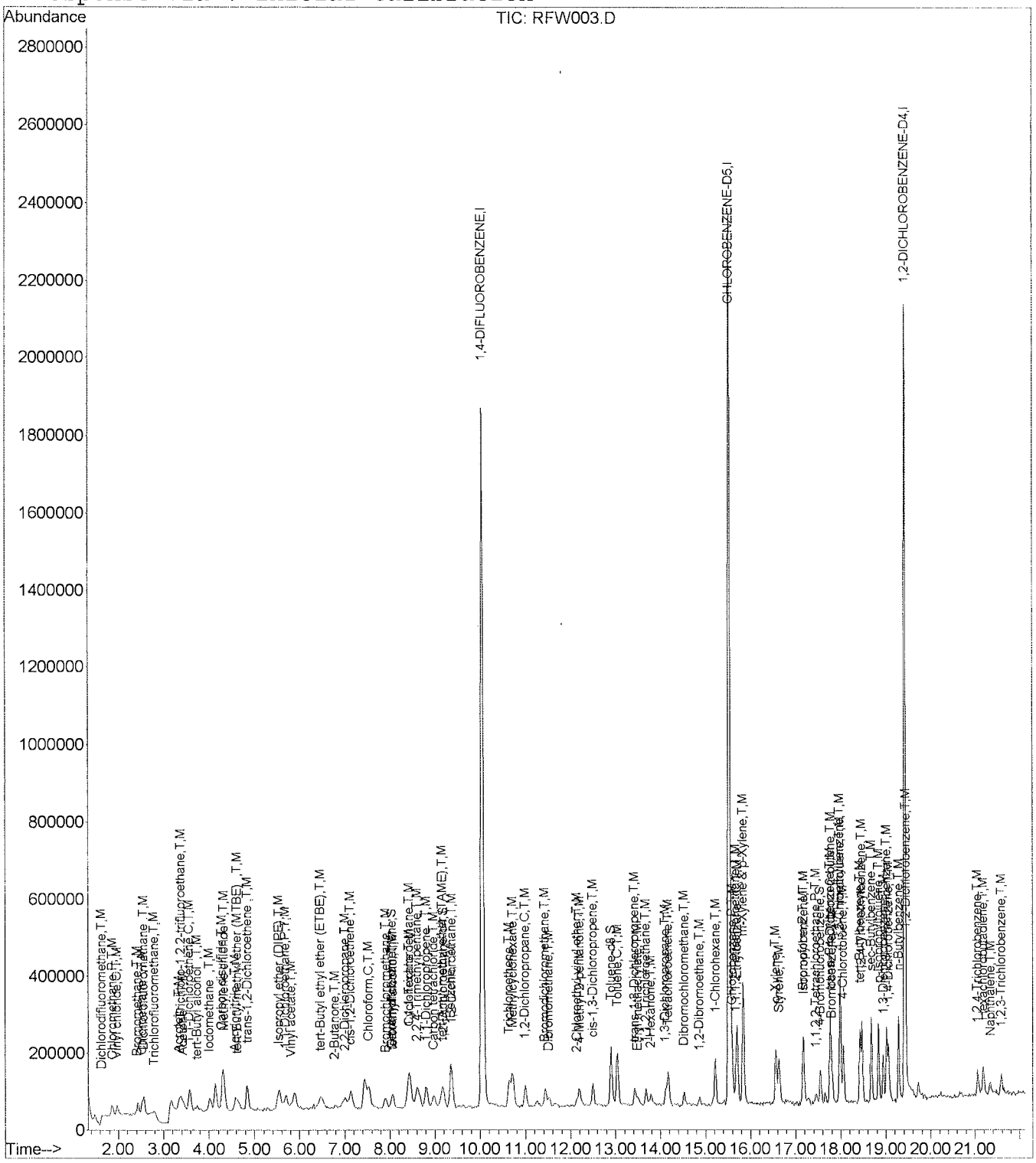
SU 6/13/24

(#) = qualifier out of range (m) = manual integration
RFW003.D VO06F03.M Mon Jun 10 16:53:05 2024 Page 3

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F03\RFW003.D Vial: 3
Acq On : 3 Jun 2024 3:29 pm Operator: DHuynh
Sample : VO06F032 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: Jun 10 16:52 2024 Quant Results File: VO06F03.RE

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration



Su 6/13/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW004.D Vial: 4
Acq On : 3 Jun 2024 3:55 pm Operator: DHuynh
Sample : VO06F033 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: Jun 10 16:52 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.05	114	3052232	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.53	117	2368110	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.43	152	842690	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	8.06	111	74638	0.81	ug/l	0.00
Spiked Amount 10.000			Recovery =	8.10%		
42) 1,2-Dichloroethane-d4	9.17	65	55828	0.85	ug/l	-0.02
Spiked Amount 10.000			Recovery =	8.50%		
55) Toluene-d8	12.90	98	332601	0.93	ug/l	0.00
Spiked Amount 10.000			Recovery =	9.30%		
77) 4-Bromofluorobenzene	17.56	95	100285	0.90	ug/l	0.01
Spiked Amount 10.000			Recovery =	9.00%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.63	85	79266	0.88	ug/l	92
3) Chloromethane	1.86	50	120975	0.88	ug/l	90
4) Vinyl chloride	1.98	62	85944	0.88	ug/l	88
5) Bromomethane	2.44	94	84860	0.95	ug/l	99
6) Chloroethane	2.51	64	73427	0.97	ug/l	99
7) Dichlorofluoromethane	2.55	67	161737	0.87	ug/l	94
8) Trichlorofluoromethane	2.79	101	104020	0.85	ug/l	97
9) Acrolein	3.34	56	29169	4.68	ug/l	95
10) 1,1,2-Trichloro-1,2,2-trif	3.36	151	52502	0.93	ug/l	98
11) Acetone	3.43	43	49520	4.74	ug/l	86
12) 1,1-Dichloroethene	3.57	61	143933	0.89	ug/l	95
13) tert-Butyl alcohol	3.74	59	67768	21.28	ug/l	99
16) Iodomethane	4.01	142	144359	0.90	ug/l	99
18) Methylene chloride	4.33	49	126715	0.93	ug/l	96
19) Carbon disulfide	4.29	76	383840	0.91	ug/l	99
20) Acrylonitrile	4.58	53	62058	4.37	ug/l	97
21) tert-Butyl methyl ether (M	4.62	73	133243	0.85	ug/l	92
22) trans-1,2-Dichloroethene	4.85	96	104737	0.93	ug/l	96
23) Isopropyl ether (DIPE)	5.54	45	312818	0.89	ug/l	98
24) Vinyl acetate	5.79	43	74544	0.77	ug/l	95
25) 1,1-Dichloroethane	5.71	63	174689	0.92	ug/l	93
27) tert-Butyl ethyl ether (ET	6.46	59	214155	0.83	ug/l	95
28) 2-Butanone	6.78	43	68628	4.10	ug/l	83
29) 2,2-Dichloropropane	7.01	77	106431	0.99	ug/l	98
30) cis-1,2-Dichloroethene	7.16	96	94871	0.86	ug/l	92
31) Chloroform	7.53	83	164032	0.94	ug/l	95
32) Bromochloromethane	7.91	130	41131	0.86	ug/l	98

(#) = qualifier out of range (m) = manual integration
RFW004.D VO06F03.M Mon Jun 10 16:52:32 2024 Page 1

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Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW004.D Vial: 4
Acq On : 3 Jun 2024 3:55 pm Operator: DHuynh
Sample : VO06F033 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: Jun 10 16:52 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
33)	Tetrahydrofuran	8.06	42	11970	1.17 ug/l	93
36)	1,1,1-Trichloroethane	8.46	97	121437	0.90 ug/l	98
37)	Cyclohexane	8.43	84	121806	0.90 ug/l	99
38)	2,2,4-Trimethylpentane	8.62	57	298451	0.86 ug/l	92
39)	1,1-Dichloropropene	8.81	110	41876	0.92 ug/l	99
40)	Carbon tetrachloride	9.00	119	93426	0.86 ug/l	99
41)	tert-Amyl methyl ether (TA	9.17	73	164987	0.86 ug/l	94
43)	1,2-Dichloroethane	9.38	62	70670	0.91 ug/l	94
44)	Benzene	9.36	78	386927	0.95 ug/l	99
45)	Trichloroethene	10.64	130	85601	0.83 ug/l	93
46)	Methylcyclohexane	10.72	83	134210	0.84 ug/l	90
47)	1,2-Dichloropropane	10.99	63	86920	0.88 ug/l	97
49)	Bromodichloromethane	11.43	83	102604	0.91 ug/l	97
50)	Dibromomethane	11.52	93	40171	0.97 ug/l	89
51)	2-Chloroethyl vinyl ether	12.14	63	27474	0.85 ug/l	94
52)	4-Methyl-2-pentanone	12.19	43	203343	4.27 ug/l	95
53)	cis-1,3-Dichloropropene	12.50	75	127852	0.89 ug/l	97
56)	Toluene	13.05	91	398297	0.96 ug/l	96
57)	Ethyl methacrylate	13.49	69	61030	0.87 ug/l	98
58)	trans-1,3-Dichloropropene	13.42	75	91290	0.90 ug/l	96
59)	1,1,2-Trichloroethane	13.67	97	44124	0.91 ug/l	91
60)	2-Hexanone	13.78	43	106269	3.72 ug/l	92
61)	1,3-Dichloropropane	14.11	76	78806	0.86 ug/l	90
62)	Tetrachloroethene	14.18	164	65462	0.86 ug/l	97
63)	Dibromochloromethane	14.53	129	57465	0.89 ug/l	99
65)	1,2-Dibromoethane	14.87	107	44548	0.92 ug/l	90
66)	1-Chlorohexane	15.22	91	175022	0.90 ug/l	99
67)	Chlorobenzene	15.60	112	217106	0.93 ug/l	96
68)	1,1,1,2-Tetrachloroethane	15.68	131	67883	0.87 ug/l	99
69)	Ethylbenzene	15.70	91	432104	0.96 ug/l	99
70)	m-Xylene & p-Xylene	15.83	91	682033	2.02 ug/l	95
71)	o-Xylene	16.57	91	318617	0.92 ug/l	99
72)	Styrene	16.64	104	229794	0.94 ug/l	96
73)	Isopropylbenzene	17.17	105	418387	0.99 ug/l	96
75)	Bromoform	17.17	173	22214	0.93 ug/l	95
76)	1,1,2,2-Tetrachloroethane	17.45	83	46642	0.84 ug/l	84
78)	1,2,3-Trichloropropane	17.66	110	11473	0.89 ug/l	67
79)	trans-1,4-Dichloro-2-buten	17.76	53	14190	1.02 ug/l	95
80)	n-Propylbenzene	17.76	91	535086	0.98 ug/l	95
81)	Bromobenzene	17.80	156	70158	0.89 ug/l	97
82)	1,3,5-Trimethylbenzene	17.98	105	336728	0.95 ug/l	98

(#) = qualifier out of range (m) = manual integration

SU 6/13/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW004.D Vial: 4
Acq On : 3 Jun 2024 3:55 pm Operator: DHuynh
Sample : VO06F033 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: Jun 10 16:52 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
83)	2-Chlorotoluene	17.98	91	328104	0.93	ug/l	97
84)	4-Chlorotoluene	18.05	91	284435	0.95	ug/l	95
85)	tert-Butylbenzene	18.43	134	65692	0.85	ug/l	83
86)	1,2,4-Trimethylbenzene	18.46	105	321788	0.95	ug/l	99
87)	sec-Butylbenzene	18.67	105	466639	1.00	ug/l	98
88)	p-Isopropyltoluene	18.84	119	362670	0.94	ug/l	98
89)	1,3-Dichlorobenzene	18.95	146	151692	0.91	ug/l	97
90)	1,2,3-Trimethylbenzene	19.01	105	293148	0.92	ug/l	99
91)	1,4-Dichlorobenzene	19.06	146	145591	0.88	ug/l	99
92)	n-Butylbenzene	19.28	91	387975	0.98	ug/l	96
93)	1,2-Dichlorobenzene	19.45	146	131366	0.95	ug/l	98
95)	1,2,4-Trichlorobenzene	21.06	180	71899	0.88	ug/l	99
96)	Hexachlorobutadiene	21.19	225	47003	0.91	ug/l	97
97)	Naphthalene	21.35	128	97222	0.84	ug/l	96
98)	1,2,3-Trichlorobenzene	21.59	180	53227	0.86	ug/l	95

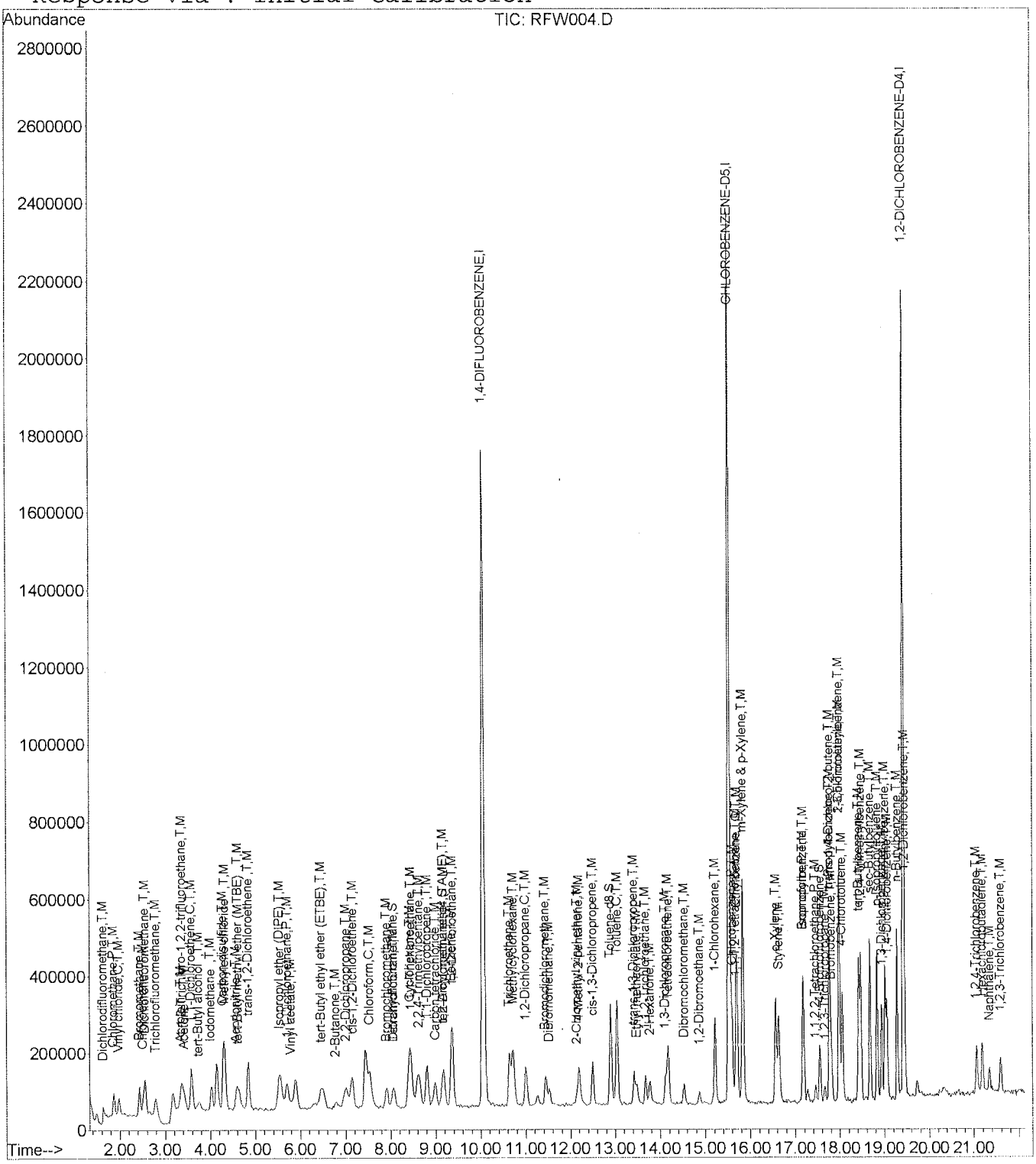
(#) = qualifier out of range (m) = manual integration
RFW004.D VO06F03.M Mon Jun 10 16:52:33 2024 Page 3

SA 6/13/24

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F03\RFW004.D Vial: 4
Acq On : 3 Jun 2024 3:55 pm Operator: DHuynh
Sample : VO06F033 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: Jun 10 16:52 2024 Quant Results File: VO06F03.RE

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration



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Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW005.D Vial: 5
Acq On : 3 Jun 2024 4:21 pm Operator: DHuynh
Sample : VO06F034 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: Jun 10 17:54 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.05	114	3129284	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.53	117	2422056	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.43	152	831427	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	8.06	111	170298	1.81	ug/l	0.00
Spiked Amount 10.000			Recovery =	18.10%		
42) 1,2-Dichloroethane-d4	9.19	65	127587	1.89	ug/l	0.00
Spiked Amount 10.000			Recovery =	18.90%		
55) Toluene-d8	12.90	98	706579	1.94	ug/l	0.00
Spiked Amount 10.000			Recovery =	19.40%		
77) 4-Bromofluorobenzene	17.54	95	223210	2.02	ug/l	0.00
Spiked Amount 10.000			Recovery =	20.20%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.63	85	190067	2.05	ug/l	100
3) Chloromethane	1.86	50	268957	1.91	ug/l	97
4) Vinyl chloride	1.98	62	198229	1.97	ug/l	99
5) Bromomethane	2.44	94	170087	1.87	ug/l	98
6) Chloroethane	2.51	64	151321	1.96	ug/l	94
7) Dichlorofluoromethane	2.55	67	348361	1.83	ug/l	99
8) Trichlorofluoromethane	2.79	101	237215	1.90	ug/l	99
9) Acrolein	3.34	56	51143	8.01	ug/l	95
10) 1,1,2-Trichloro-1,2,2-trif	3.38	151	105580	1.83	ug/l	98
11) Acetone	3.43	43	102528	9.57	ug/l	95
12) 1,1-Dichloroethene	3.57	61	312259	1.88	ug/l	98
13) tert-Butyl alcohol	3.74	59	146153	44.77	ug/l	81
15) Methyl acetate	4.14	74	14058	1.93	ug/l	56
16) Iodomethane	4.03	142	309490	1.88	ug/l	100
18) Methylene chloride	4.33	49	251788	1.81	ug/l	99
19) Carbon disulfide	4.31	76	848787	1.96	ug/l	98
20) Acrylonitrile	4.58	53	129197	8.87	ug/l	96
21) tert-Butyl methyl ether (M	4.62	73	286341	1.78	ug/l	98
22) trans-1,2-Dichloroethene	4.85	96	210154	1.82	ug/l	100
23) Isopropyl ether (DIPE)	5.54	45	685964	1.89	ug/l	100
24) Vinyl acetate	5.79	43	177844	1.80	ug/l	99
25) 1,1-Dichloroethane	5.71	63	365292	1.87	ug/l	97
27) tert-Butyl ethyl ether (ET	6.49	59	481319	1.83	ug/l	99
28) 2-Butanone	6.78	43	147559	8.60	ug/l	96
29) 2,2-Dichloropropane	7.01	77	211425	1.91	ug/l	91
30) cis-1,2-Dichloroethene	7.16	96	208927	1.85	ug/l	99
31) Chloroform	7.53	83	328711	1.84	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW005.D Vial: 5
Acq On : 3 Jun 2024 4:21 pm Operator: DHuynh
Sample : VO06F034 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: Jun 10 17:54 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
32) Bromochloromethane	7.91	130	88904	1.82 ug/l		97
33) Tetrahydrofuran	8.04	42	19694	1.88 ug/l	#	70
34) tert-Amyl alcohol	8.08	59	25264	10.26 ug/l		82
36) 1,1,1-Trichloroethane	8.46	97	250555	1.82 ug/l		99
37) Cyclohexane	8.43	84	280291	2.01 ug/l		97
38) 2,2,4-Trimethylpentane	8.62	57	710614	1.99 ug/l		97
39) 1,1-Dichloropropene	8.81	110	86041	1.84 ug/l		98
40) Carbon tetrachloride	8.98	119	206721	1.86 ug/l		98
41) tert-Amyl methyl ether (TA	9.15	73	357580	1.82 ug/l		96
43) 1,2-Dichloroethane	9.38	62	144235	1.81 ug/l		99
44) Benzene	9.36	78	831623	2.00 ug/l		98
45) Trichloroethene	10.64	130	201748	1.90 ug/l		99
46) Methylcyclohexane	10.72	83	332717	2.04 ug/l		100
47) 1,2-Dichloropropane	10.99	63	189073	1.88 ug/l		95
48) 1,4-Dioxane	11.56	88	10544	34.60 ug/l	#	40
49) Bromodichloromethane	11.43	83	211865	1.83 ug/l		98
50) Dibromomethane	11.52	93	73278	1.72 ug/l		95
51) 2-Chloroethyl vinyl ether	12.12	63	55571	1.67 ug/l		97
52) 4-Methyl-2-pentanone	12.19	43	448700	9.20 ug/l		99
53) cis-1,3-Dichloropropene	12.50	75	274644	1.87 ug/l		97
56) Toluene	13.05	91	847391	2.01 ug/l		99
57) Ethyl methacrylate	13.49	69	128364	1.78 ug/l		92
58) trans-1,3-Dichloropropene	13.42	75	192571	1.85 ug/l		100
59) 1,1,2-Trichloroethane	13.67	97	87493	1.77 ug/l		98
60) 2-Hexanone	13.76	43	254411	8.70 ug/l		94
61) 1,3-Dichloropropane	14.11	76	174929	1.87 ug/l		96
62) Tetrachloroethene	14.18	164	143047	1.84 ug/l		96
63) Dibromochloromethane	14.53	129	116600	1.76 ug/l		98
65) 1,2-Dibromoethane	14.87	107	91182	1.85 ug/l		97
66) 1-Chlorohexane	15.22	91	379187	1.91 ug/l		97
67) Chlorobenzene	15.60	112	472295	1.98 ug/l		95
68) 1,1,1,2-Tetrachloroethane	15.69	131	146765	1.83 ug/l		96
69) Ethylbenzene	15.70	91	922707	2.00 ug/l		99
70) m-Xylene & p-Xylene	15.83	91	1440256	4.18 ug/l		97
71) o-Xylene	16.56	91	691495	1.95 ug/l		95
72) Styrene	16.64	104	495591	1.98 ug/l		92
73) Isopropylbenzene	17.17	105	867026	2.00 ug/l		99
75) Bromoform	17.18	173	46146	1.97 ug/l		89
76) 1,1,2,2-Tetrachloroethane	17.45	83	100473	1.84 ug/l		98
78) 1,2,3-Trichloropropane	17.66	110	24308	1.92 ug/l		89
79) trans-1,4-Dichloro-2-buten	17.76	53	27784	2.03 ug/l		97

(#) = qualifier out of range (m) = manual integration
RFW005.D VO06F03.M Mon Jun 10 17:55:03 2024 Page 2

SV 6/13/24

Data File : D:\HPCHEM\1\DATA\24F03\RFW005.D Vial: 5
Acq On : 3 Jun 2024 4:21 pm Operator: DHuynh
Sample : VO06F034 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: Jun 10 17:54 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	n-Propylbenzene	17.76	91	1156943	2.15	ug/l	97
81)	Bromobenzene	17.80	156	148459	1.90	ug/l	97
82)	1,3,5-Trimethylbenzene	17.97	105	714630	2.05	ug/l	99
83)	2-Chlorotoluene	17.98	91	703553	2.02	ug/l	97
84)	4-Chlorotoluene	18.05	91	626255	2.12	ug/l	96
85)	tert-Butylbenzene	18.43	134	142262	1.87	ug/l	90
86)	1,2,4-Trimethylbenzene	18.46	105	690301	2.06	ug/l	100
87)	sec-Butylbenzene	18.67	105	993062	2.16	ug/l	97
88)	p-Isopropyltoluene	18.84	119	821827	2.17	ug/l	97
89)	1,3-Dichlorobenzene	18.93	146	333222	2.02	ug/l	98
90)	1,2,3-Trimethylbenzene	19.01	105	633564	2.03	ug/l	98
91)	1,4-Dichlorobenzene	19.06	146	324594	1.99	ug/l	95
92)	n-Butylbenzene	19.28	91	810054	2.08	ug/l	99
93)	1,2-Dichlorobenzene	19.45	146	276536	2.03	ug/l	98
94)	1,2-Dibromo-3-chloropropan	20.24	157	12650	1.89	ug/l	93
95)	1,2,4-Trichlorobenzene	21.07	180	149379	1.85	ug/l	97
96)	Hexachlorobutadiene	21.20	225	102649	2.02	ug/l	94
97)	Naphthalene	21.35	128	222587	1.95	ug/l	95
98)	1,2,3-Trichlorobenzene	21.59	180	113102	1.86	ug/l	96

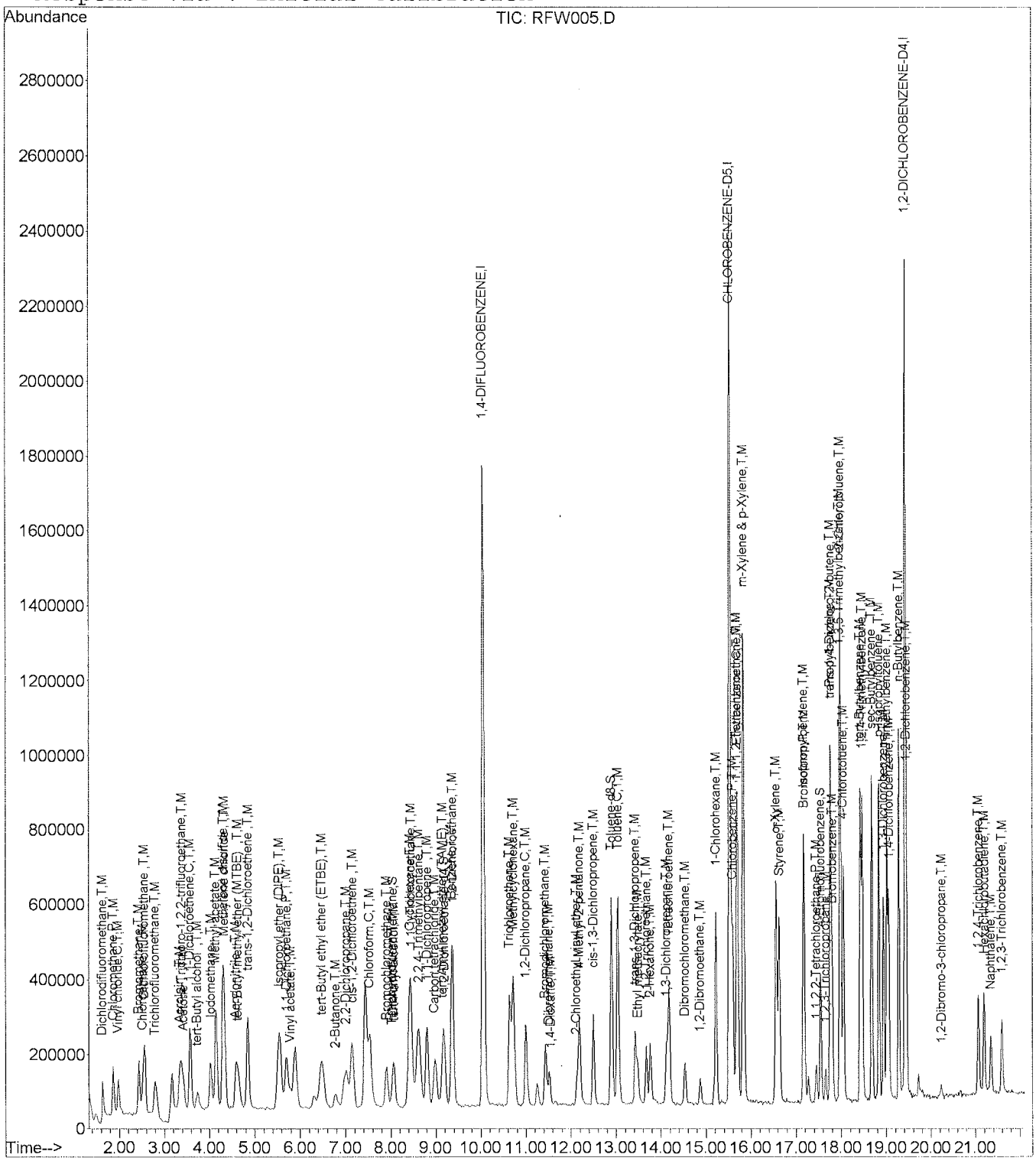
SH 6/13/24

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F03\RFW005.D Vial: 5
Acq On : 3 Jun 2024 4:21 pm Operator: DHuynh
Sample : VO06F034 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: Jun 10 17:54 2024 Quant Results File: VO06F03.RE

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration



SA 6/13/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW006.D Vial: 6
Acq On : 3 Jun 2024 4:47 pm Operator: DHuynh
Sample : VO06F035 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: Jun 11 13:17 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.07	114	3048752	10.00	ug/l	0.02
54) CHLOROBENZENE-D5	15.53	117	2411903	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.43	152	836067	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	8.06	111	446932	4.88	ug/l	0.00
Spiked Amount 10.000			Recovery = 48.80%			
42) 1,2-Dichloroethane-d4	9.17	65	308399	4.69	ug/l	-0.02
Spiked Amount 10.000			Recovery = 46.90%			
55) Toluene-d8	12.90	98	1841858	5.07	ug/l	0.00
Spiked Amount 10.000			Recovery = 50.70%			
77) 4-Bromofluorobenzene	17.55	95	569971	5.14	ug/l	0.00
Spiked Amount 10.000			Recovery = 51.40%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.63	85	445801	4.94	ug/l	99
3) Chloromethane	1.87	50	668998	4.87	ug/l	99
4) Vinyl chloride	1.97	62	503619	5.14	ug/l	100
5) Bromomethane	2.44	94	449862	5.06	ug/l	100
6) Chloroethane	2.52	64	381404	5.07	ug/l	95
7) Dichlorofluoromethane	2.56	67	926295	5.00	ug/l	100
8) Trichlorofluoromethane	2.80	101	580968	4.77	ug/l	99
9) Acrolein	3.34	56	136831	21.99	ug/l	97
10) 1,1,2-Trichloro-1,2,2-trif	3.38	151	264867	4.72	ug/l	93
11) Acetone	3.43	43	226679	21.71	ug/l	99
12) 1,1-Dichloroethene	3.57	61	796306	4.93	ug/l	99
13) tert-Butyl alcohol	3.74	59	343199	107.90	ug/l	97
15) Methyl acetate	4.12	74	34610	4.87	ug/l	96
16) Iodomethane	4.01	142	808491	5.04	ug/l	100
18) Methylene chloride	4.33	49	674793	4.98	ug/l	97
19) Carbon disulfide	4.28	76	2135077	5.07	ug/l	99
20) Acrylonitrile	4.58	53	337425	23.79	ug/l	99
21) tert-Butyl methyl ether (M	4.62	73	754528	4.83	ug/l	99
22) trans-1,2-Dichloroethene	4.85	96	547598	4.88	ug/l	99
23) Isopropyl ether (DIPE)	5.54	45	1820142	5.16	ug/l	99
24) Vinyl acetate	5.77	43	476177	4.95	ug/l	100
25) 1,1-Dichloroethane	5.71	63	949397	4.99	ug/l	97
27) tert-Butyl ethyl ether (ET	6.46	59	1246707	4.86	ug/l	98
28) 2-Butanone	6.76	43	399024	23.88	ug/l	99
29) 2,2-Dichloropropane	7.01	77	530177	4.92	ug/l	96
30) cis-1,2-Dichloroethene	7.13	96	526275	4.79	ug/l	97
31) Chloroform	7.53	83	859016	4.93	ug/l	98

(#) = qualifier out of range (m) = manual integration
RFW006.D VO06F03.M Tue Jun 11 13:17:34 2024 Page 1

SA 6/13/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW006.D Vial: 6
Acq On : 3 Jun 2024 4:47 pm Operator: DHuynh
Sample : VO06F035 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: Jun 11 13:17 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32) Bromochloromethane	7.91	130	223614	4.71	ug/l	97
33) Tetrahydrofuran	8.04	42	50584	4.94	ug/l	95
34) tert-Amyl alcohol	8.08	59	50106	20.89	ug/l	77
36) 1,1,1-Trichloroethane	8.46	97	658574	4.91	ug/l	98
37) Cyclohexane	8.43	84	666195	4.91	ug/l	99
38) 2,2,4-Trimethylpentane	8.62	57	1728147	4.96	ug/l	98
39) 1,1-Dichloropropene	8.81	110	214051	4.69	ug/l	97
40) Carbon tetrachloride	8.98	119	522679	4.82	ug/l	96
41) tert-Amyl methyl ether (TA	9.15	73	958314	5.01	ug/l	98
43) 1,2-Dichloroethane	9.38	62	400697	5.17	ug/l	98
44) Benzene	9.36	78	2139559	5.27	ug/l	98
45) Trichloroethene	10.63	130	533311	5.16	ug/l	97
46) Methylcyclohexane	10.72	83	782512	4.92	ug/l	97
47) 1,2-Dichloropropane	10.99	63	493646	5.03	ug/l	99
48) 1,4-Dioxane	11.54	88	28163	94.84	ug/l	66
49) Bromodichloromethane	11.43	83	577531	5.13	ug/l	94
50) Dibromomethane	11.52	93	193398	4.66	ug/l	95
51) 2-Chloroethyl vinyl ether	12.12	63	165714	5.11	ug/l	96
52) 4-Methyl-2-pentanone	12.19	43	1271413	26.75	ug/l	99
53) cis-1,3-Dichloropropene	12.50	75	727269	5.08	ug/l	99
56) Toluene	13.05	91	2152486	5.12	ug/l	99
57) Ethyl methacrylate	13.46	69	341379	4.77	ug/l	97
58) trans-1,3-Dichloropropene	13.42	75	525982	5.08	ug/l	97
59) 1,1,2-Trichloroethane	13.67	97	242497	4.92	ug/l	95
60) 2-Hexanone	13.76	43	727433	24.97	ug/l	97
61) 1,3-Dichloropropane	14.11	76	464349	4.99	ug/l	97
62) Tetrachloroethene	14.18	164	381698	4.94	ug/l	98
63) Dibromochloromethane	14.53	129	315432	4.79	ug/l	97
65) 1,2-Dibromoethane	14.87	107	223728	4.55	ug/l	100
66) 1-Chlorohexane	15.22	91	1027080	5.19	ug/l	92
67) Chlorobenzene	15.60	112	1228748	5.18	ug/l	98
68) 1,1,1,2-Tetrachloroethane	15.69	131	393002	4.93	ug/l	98
69) Ethylbenzene	15.70	91	2389553	5.21	ug/l	99
70) m-Xylene & p-Xylene	15.83	91	3669256	10.69	ug/l	98
71) o-Xylene	16.56	91	1811531	5.14	ug/l	99
72) Styrene	16.62	104	1276784	5.12	ug/l	99
73) Isopropylbenzene	17.17	105	2229624	5.15	ug/l	99
75) Bromoform	17.17	173	127484	5.41	ug/l	97
76) 1,1,2,2-Tetrachloroethane	17.45	83	254016	4.62	ug/l	96
78) 1,2,3-Trichloropropane	17.66	110	61289	4.82	ug/l	95
79) trans-1,4-Dichloro-2-buten	17.77	53	66694	4.85	ug/l	98

(#) = qualifier out of range (m) = manual integration

SU 6/13/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW006.D Vial: 6
Acq On : 3 Jun 2024 4:47 pm Operator: DHuynh
Sample : VO06F035 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: Jun 11 13:17 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

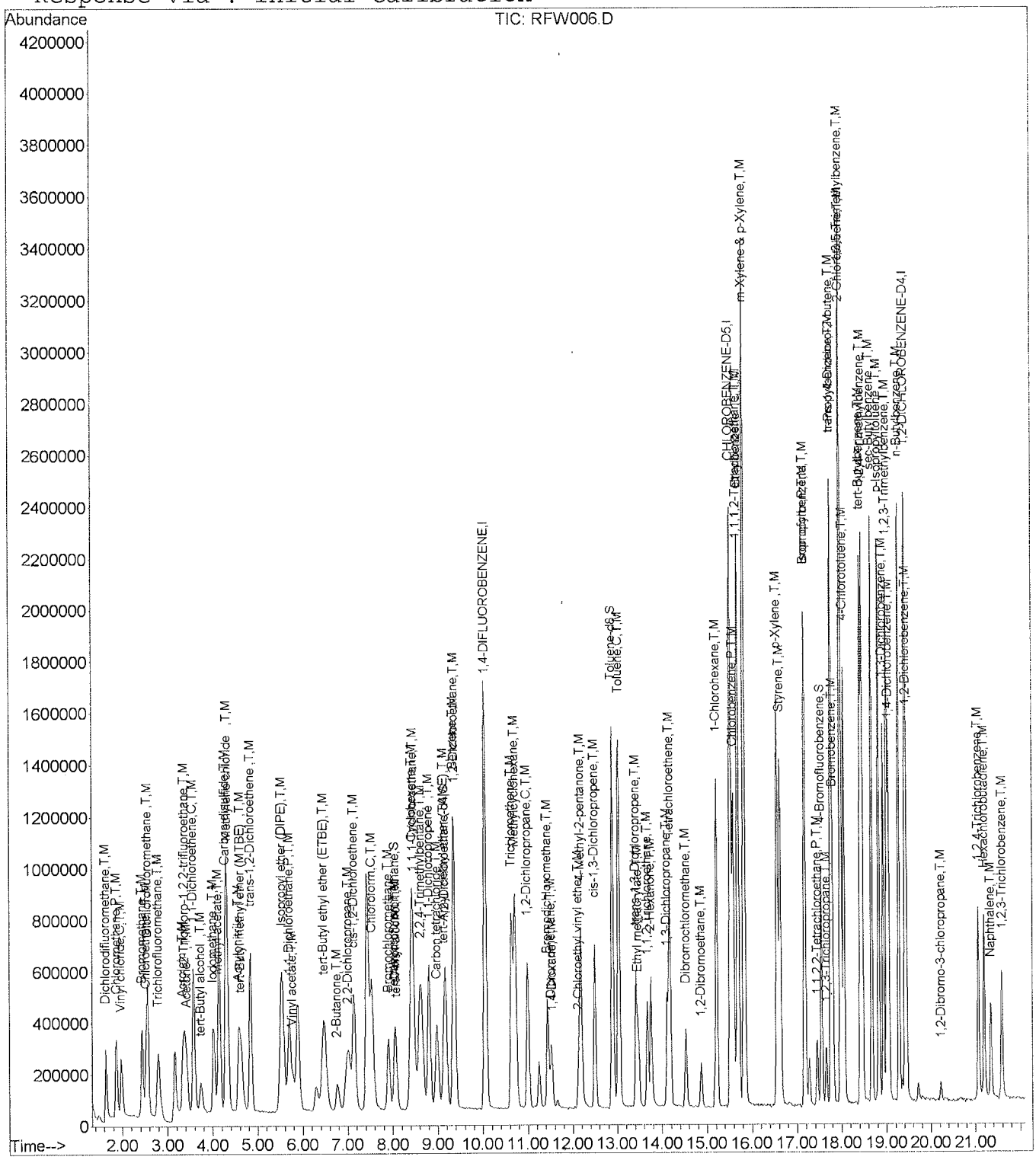
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	n-Propylbenzene	17.77	91	2903686	5.37	ug/l	99
81)	Bromobenzene	17.80	156	403979	5.15	ug/l	99
82)	1,3,5-Trimethylbenzene	17.97	105	1821129	5.18	ug/l	99
83)	2-Chlorotoluene	17.99	91	1860595	5.30	ug/l	98
84)	4-Chlorotoluene	18.05	91	1536082	5.17	ug/l	99
85)	tert-Butylbenzene	18.43	134	383916	5.02	ug/l	99
86)	1,2,4-Trimethylbenzene	18.47	105	1776678	5.26	ug/l	99
87)	sec-Butylbenzene	18.67	105	2475584	5.36	ug/l	99
88)	p-Isopropyltoluene	18.83	119	2013782	5.28	ug/l	97
89)	1,3-Dichlorobenzene	18.93	146	881465	5.30	ug/l	98
90)	1,2,3-Trimethylbenzene	19.01	105	1677580	5.33	ug/l	98
91)	1,4-Dichlorobenzene	19.06	146	843622	5.13	ug/l	100
92)	n-Butylbenzene	19.28	91	2052151	5.24	ug/l	99
93)	1,2-Dichlorobenzene	19.45	146	711188	5.20	ug/l	98
94)	1,2-Dibromo-3-chloropropan	20.23	157	32604	4.85	ug/l	99
95)	1,2,4-Trichlorobenzene	21.06	180	414151	5.11	ug/l	98
96)	Hexachlorobutadiene	21.19	225	256385	5.02	ug/l	99
97)	Naphthalene	21.33	128	562291	4.90	ug/l	98
98)	1,2,3-Trichlorobenzene	21.59	180	309816	5.05	ug/l	97

(#) = qualifier out of range (m) = manual integration
RFW006.D VO06F03.M Tue Jun 11 13:17:35 2024 SG 6/13/24 Page 3

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F03\RFW006.D Vial: 6
Acq On : 3 Jun 2024 4:47 pm Operator: DHuynh
Sample : VO06F035 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: Jun 11 13:17 2024 Quant Results File: VO06F03.RE

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration



Su 6/13/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW007.D Vial: 7
Acq On : 3 Jun 2024 5:14 pm Operator: DHuynh
Sample : VO06F036 1.00/5.00uL Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 10 16:47 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.05	114	3175665	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.53	117	2524233	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.43	152	865825	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	8.06	111	955711	10.03	ug/l	0.00
Spiked Amount 10.000			Recovery = 100.30%			
42) 1,2-Dichloroethane-d4	9.19	65	683634	9.97	ug/l	0.00
Spiked Amount 10.000			Recovery = 99.70%			
55) Toluene-d8	12.90	98	3702851	9.75	ug/l	0.00
Spiked Amount 10.000			Recovery = 97.50%			
77) 4-Bromofluorobenzene	17.54	95	1175426	10.24	ug/l	0.00
Spiked Amount 10.000			Recovery = 102.40%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.63	85	944148	10.04	ug/l	100
3) Chloromethane	1.86	50	1379661	9.64	ug/l	100
4) Vinyl chloride	1.98	62	1057816	10.36	ug/l	100
5) Bromomethane	2.44	94	926181	10.01	ug/l	100
6) Chloroethane	2.52	64	770397	9.83	ug/l	100
7) Dichlorofluoromethane	2.56	67	1927624	9.99	ug/l	100
8) Trichlorofluoromethane	2.79	101	1227432	9.68	ug/l	100
9) Acrolein	3.34	56	329881	50.90	ug/l	100
10) 1,1,2-Trichloro-1,2,2-trif	3.38	151	568290	9.72	ug/l	100
11) Acetone	3.42	43	493816	45.40	ug/l	100
12) 1,1-Dichloroethene	3.57	61	1740095	10.33	ug/l	100
13) tert-Butyl alcohol	3.74	59	827866	249.88	ug/l	100
15) Methyl acetate	4.14	74	70878	9.57	ug/l	100
16) Iodomethane	4.03	142	1690731	10.11	ug/l	100
18) Methylene chloride	4.33	49	1398164	9.91	ug/l	100
19) Carbon disulfide	4.28	76	4559062	10.38	ug/l	100
20) Acrylonitrile	4.58	53	738025	49.95	ug/l	100
21) tert-Butyl methyl ether (M	4.62	73	1658863	10.19	ug/l	100
22) trans-1,2-Dichloroethene	4.85	96	1165892	9.97	ug/l	100
23) Isopropyl ether (DIPE)	5.54	45	3862672	10.51	ug/l	100
24) Vinyl acetate	5.77	43	974695	9.72	ug/l	100
25) 1,1-Dichloroethane	5.71	63	2033904	10.27	ug/l	100
27) tert-Butyl ethyl ether (ET	6.46	59	2724914	10.20	ug/l	100
28) 2-Butanone	6.76	43	888916	51.07	ug/l	100
29) 2,2-Dichloropropane	7.01	77	1127535	10.05	ug/l	100
30) cis-1,2-Dichloroethene	7.13	96	1154449	10.08	ug/l	100
31) Chloroform	7.53	83	1784668	9.84	ug/l	100

(#) = qualifier out of range (m) = manual integration
RFW007.D VO06F03.M Mon Jun 10 17:16:55 2024 Page 1

SU 6/13/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW007.D Vial: 7
Acq On : 3 Jun 2024 5:14 pm Operator: DHuynh
Sample : VO06F036 1.00/5.00uL Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 10 16:47 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.91	130	511769	10.34	ug/l	100
33)	Tetrahydrofuran	8.04	42	100150	9.40	ug/l	100
34)	tert-Amyl alcohol	8.06	59	130079	52.05	ug/l	100
36)	1,1,1-Trichloroethane	8.46	97	1382807	9.89	ug/l	100
37)	Cyclohexane	8.43	84	1468844	10.39	ug/l	100
38)	2,2,4-Trimethylpentane	8.62	57	3637165	10.03	ug/l	100
39)	1,1-Dichloropropene	8.81	110	472805	9.94	ug/l	100
40)	Carbon tetrachloride	8.98	119	1130682	10.02	ug/l	100
41)	tert-Amyl methyl ether (TA	9.15	73	2084558	10.46	ug/l	100
43)	1,2-Dichloroethane	9.38	62	849179	10.51	ug/l	100
44)	Benzene	9.36	78	4457037	10.54	ug/l	100
45)	Trichloroethene	10.63	130	1123791	10.44	ug/l	100
46)	Methylcyclohexane	10.72	83	1814653	10.96	ug/l	100
47)	1,2-Dichloropropane	10.99	63	1042417	10.20	ug/l	100
48)	1,4-Dioxane	11.54	88	57099	184.61	ug/l	100
49)	Bromodichloromethane	11.43	83	1169828	9.97	ug/l	100
50)	Dibromomethane	11.51	93	415449	9.61	ug/l	100
51)	2-Chloroethyl vinyl ether	12.12	63	338413	10.03	ug/l	100
52)	4-Methyl-2-pentanone	12.19	43	2733672	55.22	ug/l	100
53)	cis-1,3-Dichloropropene	12.50	75	1525685	10.22	ug/l	100
56)	Toluene	13.04	91	4506298	10.24	ug/l	100
57)	Ethyl methacrylate	13.46	69	765503	10.21	ug/l	100
58)	trans-1,3-Dichloropropene	13.42	75	1113685	10.27	ug/l	100
59)	1,1,2-Trichloroethane	13.67	97	509239	9.87	ug/l	100
60)	2-Hexanone	13.76	43	1577687	51.76	ug/l	100
61)	1,3-Dichloropropane	14.11	76	1003947	10.32	ug/l	100
62)	Tetrachloroethene	14.18	164	819957	10.13	ug/l	100
63)	Dibromochloromethane	14.53	129	672925	9.77	ug/l	100
65)	1,2-Dibromoethane	14.87	107	490706	9.54	ug/l	100
66)	1-Chlorohexane	15.22	91	2038068	9.84	ug/l	100
67)	Chlorobenzene	15.60	112	2568732	10.36	ug/l	100
68)	1,1,1,2-Tetrachloroethane	15.69	131	860214	10.31	ug/l	100
69)	Ethylbenzene	15.70	91	4946602	10.30	ug/l	100
70)	m-Xylene & p-Xylene	15.83	91	7472985	20.80	ug/l	100
71)	o-Xylene	16.56	91	3716621	10.07	ug/l	100
72)	Styrene	16.62	104	2755841	10.56	ug/l	100
73)	Isopropylbenzene	17.17	105	4611756	10.19	ug/l	100
75)	Bromoform	17.17	173	279362	11.44	ug/l	100
76)	1,1,2,2-Tetrachloroethane	17.45	83	557204	9.79	ug/l	100
78)	1,2,3-Trichloropropane	17.66	110	128404	9.75	ug/l	100
79)	trans-1,4-Dichloro-2-buten	17.77	53	142575	10.00	ug/l	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW007.D Vial: 7
Acq On : 3 Jun 2024 5:14 pm Operator: DHuynh
Sample : VO06F036 1.00/5.00uL Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 10 16:47 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80) n-Propylbenzene	17.77	91	5986695	10.70	ug/l	100
81) Bromobenzene	17.80	156	848065	10.45	ug/l	100
82) 1,3,5-Trimethylbenzene	17.97	105	3781174	10.39	ug/l	100
83) 2-Chlorotoluene	17.99	91	3824144	10.52	ug/l	100
84) 4-Chlorotoluene	18.05	91	3132014	10.17	ug/l	100
85) tert-Butylbenzene	18.43	134	819804	10.36	ug/l	100
86) 1,2,4-Trimethylbenzene	18.47	105	3657381	10.46	ug/l	100
87) sec-Butylbenzene	18.67	105	5015585	10.48	ug/l	100
88) p-Isopropyltoluene	18.83	119	4124841	10.45	ug/l	100
89) 1,3-Dichlorobenzene	18.93	146	1826041	10.61	ug/l	100
90) 1,2,3-Trimethylbenzene	19.01	105	3388303	10.40	ug/l	100
91) 1,4-Dichlorobenzene	19.06	146	1787165	10.50	ug/l	100
92) n-Butylbenzene	19.28	91	4127265	10.18	ug/l	100
93) 1,2-Dichlorobenzene	19.45	146	1491869	10.53	ug/l	100
94) 1,2-Dibromo-3-chloropropan	20.23	157	66299	9.52	ug/l	100
95) 1,2,4-Trichlorobenzene	21.06	180	835662	9.96	ug/l	100
96) Hexachlorobutadiene	21.19	225	512877	9.69	ug/l	100
97) Naphthalene	21.33	128	1156511	9.73	ug/l	100
98) 1,2,3-Trichlorobenzene	21.58	180	582836	9.18	ug/l	100

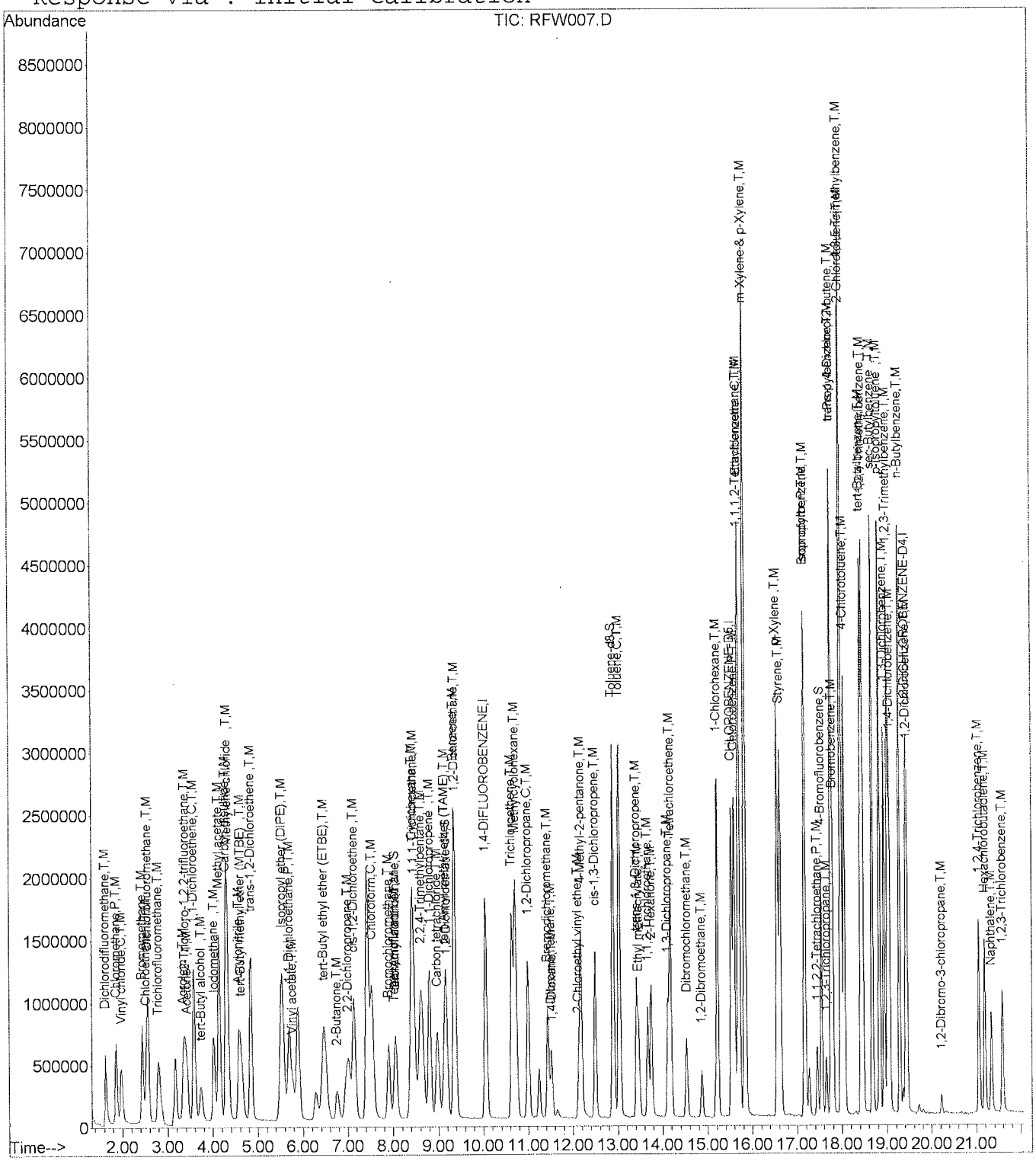
(#) = qualifier out of range (m) = manual integration
RFW007.D VO06F03.M Mon Jun 10 17:16:56 2024 Page 3

SG 6/13/24

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F03\RFW007.D Vial: 7
Acq On : 3 Jun 2024 5:14 pm Operator: DHuynh
Sample : VO06F036 1.00/5.00uL Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 10 16:47 2024 Quant Results File: VO06F03.RE

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration



SU 6/13/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW008.D Vial: 8
Acq On : 3 Jun 2024 5:40 pm Operator: DHuynh
Sample : VO06F037 2.00/10.0uL Inst : 06
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 10 15:24 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.07	114	3129127	10.00	ug/l	0.02
54) CHLOROBENZENE-D5	15.53	117	2471333	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.43	152	840170	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	8.06	111	1953155	20.80	ug/l	0.00
Spiked Amount 10.000			Recovery = 208.00%			
42) 1,2-Dichloroethane-d4	9.19	65	1412289	20.91	ug/l	0.00
Spiked Amount 10.000			Recovery = 209.10%			
55) Toluene-d8	12.90	98	7418347	19.94	ug/l	0.00
Spiked Amount 10.000			Recovery = 199.40%			
77) 4-Bromofluorobenzene	17.54	95	2362992	21.21	ug/l	0.00
Spiked Amount 10.000			Recovery = 212.10%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.63	85	1954855	21.10	ug/l	100
3) Chloromethane	1.87	50	2763462	19.59	ug/l	98
4) Vinyl chloride	1.97	62	2196831	21.84	ug/l	99
5) Bromomethane	2.42	94	1951629	21.41	ug/l	97
6) Chloroethane	2.52	64	1631266	21.12	ug/l	100
7) Dichlorofluoromethane	2.56	67	3926825	20.66	ug/l	98
8) Trichlorofluoromethane	2.80	101	2580921	20.67	ug/l	99
9) Acrolein	3.34	56	653410	102.31	ug/l	99
10) 1,1,2-Trichloro-1,2,2-trif	3.38	151	1186603	20.59	ug/l	99
11) Acetone	3.42	43	995917	92.93	ug/l	99
12) 1,1-Dichloroethene	3.57	61	3500152	21.09	ug/l	99
13) tert-Butyl alcohol	3.74	59	1597458	489.34	ug/l	99
15) Methyl acetate	4.12	74	136124	18.65	ug/l	94
16) Iodomethane	4.03	142	3443671	20.90	ug/l	98
18) Methylene chloride	4.33	49	2824713	20.32	ug/l	97
19) Carbon disulfide	4.28	76	9088666	21.01	ug/l	98
20) Acrylonitrile	4.58	53	1473774	101.24	ug/l	98
21) tert-Butyl methyl ether (M	4.62	73	3295676	20.54	ug/l	99
22) trans-1,2-Dichloroethene	4.85	96	2376655	20.62	ug/l	98
23) Isopropyl ether (DIPE)	5.54	45	7693292	21.24	ug/l	99
24) Vinyl acetate	5.77	43	2214955	22.42	ug/l	99
25) 1,1-Dichloroethane	5.71	63	4110836	21.07	ug/l	99
27) tert-Butyl ethyl ether (ET	6.46	59	5384784	20.46	ug/l	99
28) 2-Butanone	6.76	43	1759508	102.58	ug/l	100
29) 2,2-Dichloropropane	7.01	77	2381701	21.55	ug/l	99
30) cis-1,2-Dichloroethene	7.13	96	2362597	20.95	ug/l	99
31) Chloroform	7.53	83	3635213	20.33	ug/l	98

(#) = qualifier out of range (m) = manual integration

6/13/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW008.D Vial: 8
Acq On : 3 Jun 2024 5:40 pm Operator: DHuynh
Sample : VO06F037 2.00/10.0uL Inst : 06
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 10 15:24 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.91	130	1019400	20.91	ug/l	96
33)	Tetrahydrofuran	8.01	42	186150	17.73	ug/l	98
34)	tert-Amyl alcohol	8.06	59	233623	94.88	ug/l	85
36)	1,1,1-Trichloroethane	8.46	97	2903352	21.08	ug/l	100
37)	Cyclohexane	8.43	84	2930303	21.03	ug/l	99
38)	2,2,4-Trimethylpentane	8.62	57	7242682	20.26	ug/l	100
39)	1,1-Dichloropropene	8.81	110	981400	20.95	ug/l	97
40)	Carbon tetrachloride	8.98	119	2351636	21.15	ug/l	100
41)	tert-Amyl methyl ether (TA	9.15	73	4077449	20.75	ug/l	98
43)	1,2-Dichloroethane	9.38	62	1705928	21.43	ug/l	100
44)	Benzene	9.36	78	8774659	21.06	ug/l	99
45)	Trichloroethene	10.63	130	2219080	20.92	ug/l	98
46)	Methylcyclohexane	10.72	83	3487747	21.38	ug/l	98
47)	1,2-Dichloropropane	10.99	63	2140358	21.25	ug/l	100
48)	1,4-Dioxane	11.54	88	119866	393.30	ug/l	89
49)	Bromodichloromethane	11.43	83	2376338	20.56	ug/l	98
50)	Dibromomethane	11.52	93	843279	19.79	ug/l	98
51)	2-Chloroethyl vinyl ether	12.12	63	684959	20.60	ug/l	97
52)	4-Methyl-2-pentanone	12.19	43	5236453	107.35	ug/l	98
53)	cis-1,3-Dichloropropene	12.50	75	3110855	21.16	ug/l	98
56)	Toluene	13.05	91	8946641	20.76	ug/l	99
57)	Ethyl methacrylate	13.46	69	1528847	20.83	ug/l	98
58)	trans-1,3-Dichloropropene	13.42	75	2229605	21.01	ug/l	99
59)	1,1,2-Trichloroethane	13.67	97	1034105	20.47	ug/l	97
60)	2-Hexanone	13.76	43	3069633	102.85	ug/l	100
61)	1,3-Dichloropropane	14.11	76	2022114	21.22	ug/l	97
62)	Tetrachloroethene	14.18	164	1671054	21.09	ug/l	99
63)	Dibromochloromethane	14.53	129	1355574	20.10	ug/l	99
65)	1,2-Dibromoethane	14.87	107	952859	18.93	ug/l	97
66)	1-Chlorohexane	15.22	91	4298726	21.21	ug/l	98
67)	Chlorobenzene	15.60	112	5125670	21.11	ug/l	99
68)	1,1,1,2-Tetrachloroethane	15.69	131	1702271	20.84	ug/l	98
69)	Ethylbenzene	15.70	91	9840310	20.93	ug/l	99
70)	m-Xylene & p-Xylene	15.83	91	14946607	42.50	ug/l	100
71)	o-Xylene	16.56	91	7407735	20.50	ug/l	99
72)	Styrene	16.62	104	5455597	21.35	ug/l	99
73)	Isopropylbenzene	17.17	105	9126079	20.59	ug/l	99
75)	Bromoform	17.17	173	568741	24.00	ug/l	100
76)	1,1,2,2-Tetrachloroethane	17.45	83	1121726	20.32	ug/l	96
78)	1,2,3-Trichloropropane	17.66	110	252451	19.75	ug/l	96
79)	trans-1,4-Dichloro-2-buten	17.77	53	293526	21.23	ug/l	98

(#) = qualifier out of range (m) = manual integration

SA 6/13/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW008.D Vial: 8
Acq On : 3 Jun 2024 5:40 pm Operator: DHuynh
Sample : VO06F037 2.00/10.0uL Inst : 06
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 10 15:24 2024 Quant Results File: VO06F03.RES

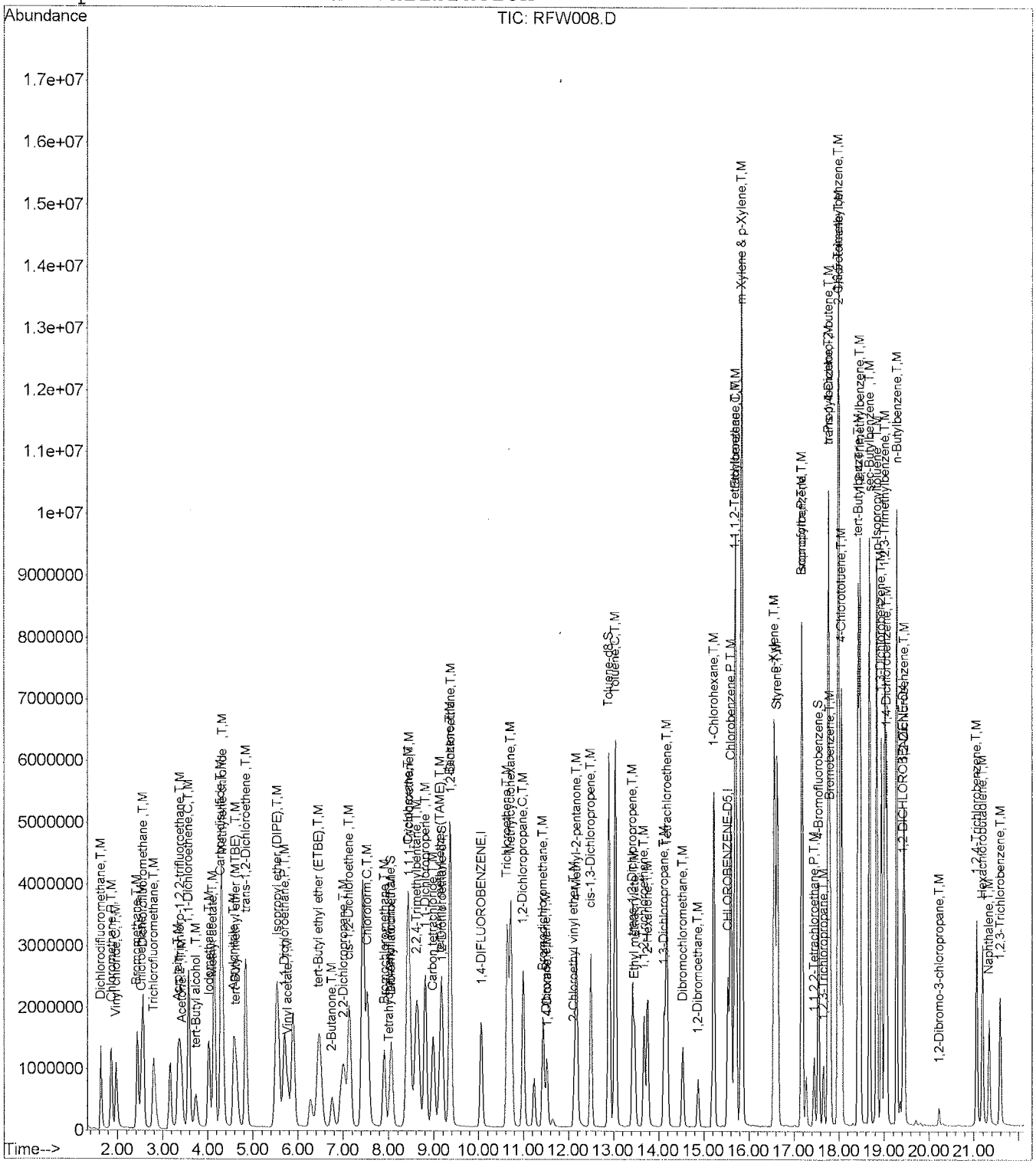
Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	n-Propylbenzene	17.77	91	11733040	21.61	ug/l	99
81)	Bromobenzene	17.80	156	1682480	21.36	ug/l	97
82)	1,3,5-Trimethylbenzene	17.97	105	7482685	21.20	ug/l	99
83)	2-Chlorotoluene	17.99	91	7613267	21.59	ug/l	99
84)	4-Chlorotoluene	18.05	91	6316846	21.14	ug/l	99
85)	tert-Butylbenzene	18.43	134	1611011	20.98	ug/l	96
86)	1,2,4-Trimethylbenzene	18.47	105	7307578	21.54	ug/l	98
87)	sec-Butylbenzene	18.67	105	9798072	21.09	ug/l	99
88)	p-Isopropyltoluene	18.84	119	8130968	21.22	ug/l	98
89)	1,3-Dichlorobenzene	18.93	146	3638567	21.78	ug/l	98
90)	1,2,3-Trimethylbenzene	19.01	105	6762541	21.40	ug/l	100
91)	1,4-Dichlorobenzene	19.06	146	3601199	21.81	ug/l	99
92)	n-Butylbenzene	19.28	91	8325699	21.17	ug/l	98
93)	1,2-Dichlorobenzene	19.45	146	2930846	21.31	ug/l	98
94)	1,2-Dibromo-3-chloropropan	20.23	157	128108	18.96	ug/l	96
95)	1,2,4-Trichlorobenzene	21.06	180	1743210	21.41	ug/l	100
96)	Hexachlorobutadiene	21.19	225	1065548	20.75	ug/l	98
97)	Naphthalene	21.33	128	2398284	20.78	ug/l	98
98)	1,2,3-Trichlorobenzene	21.59	180	1253940	20.36	ug/l	97

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24F03\RFW008.D Vial: 8
Acq On : 3 Jun 2024 5:40 pm Operator: DHuynh
Sample : VO06F037 2.00/10.0uL Inst : 06
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 10 15:24 2024 Quant Results File: VO06F03.RE

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration



6/12/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW009.D Vial: 9
Acq On : 3 Jun 2024 6:06 pm Operator: DHuynh
Sample : VO06F038 3.00/15.0uL Inst : 06
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 10 15:24 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.07	114	3157508	10.00	ug/l	0.02
54) CHLOROBENZENE-D5	15.53	117	2502488	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.43	152	847553	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	8.06	111	2995949	31.61	ug/l	0.00
Spiked Amount 10.000			Recovery = 316.10%			
42) 1,2-Dichloroethane-d4	9.17	65	2207389	32.38	ug/l	-0.02
Spiked Amount 10.000			Recovery = 323.80%			
55) Toluene-d8	12.90	98	11185485	29.69	ug/l	0.00
Spiked Amount 10.000			Recovery = 296.90%			
77) 4-Bromofluorobenzene	17.54	95	3614143	32.16	ug/l	0.00
Spiked Amount 10.000			Recovery = 321.60%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.63	85	2800651	29.95	ug/l	98
3) Chloromethane	1.86	50	4254165	29.89	ug/l	97
4) Vinyl chloride	1.96	62	3137161	30.91	ug/l	99
5) Bromomethane	2.44	94	2990484	32.50	ug/l	97
6) Chloroethane	2.52	64	2489208	31.93	ug/l	99
7) Dichlorofluoromethane	2.56	67	5966515	31.11	ug/l	97
8) Trichlorofluoromethane	2.79	101	3776250	29.97	ug/l	97
9) Acrolein	3.34	56	1070508	166.12	ug/l	96
10) 1,1,2-Trichloro-1,2,2-trif	3.38	151	1811163	31.14	ug/l	98
11) Acetone	3.42	43	1675156	154.91	ug/l	98
12) 1,1-Dichloroethene	3.57	61	5310316	31.71	ug/l	99
13) tert-Butyl alcohol	3.74	59	2780708	844.14	ug/l	100
15) Methyl acetate	4.12	74	222506	30.21	ug/l	96
16) Iodomethane	4.01	142	5242673	31.54	ug/l	98
18) Methylene chloride	4.33	49	4343883	30.96	ug/l	99
19) Carbon disulfide	4.28	76	13690067	31.36	ug/l	98
20) Acrylonitrile	4.58	53	2435302	165.79	ug/l	99
21) tert-Butyl methyl ether (M	4.62	73	5371709	33.18	ug/l	99
22) trans-1,2-Dichloroethene	4.85	96	3616808	31.10	ug/l	99
23) Isopropyl ether (DIPE)	5.54	45	11981874	32.78	ug/l	98
24) Vinyl acetate	5.77	43	3549160	35.60	ug/l	100
25) 1,1-Dichloroethane	5.69	63	6347802	32.24	ug/l	98
27) tert-Butyl ethyl ether (ET	6.46	59	8568963	32.26	ug/l	98
28) 2-Butanone	6.76	43	2920001	168.71	ug/l	98
29) 2,2-Dichloropropane	7.01	77	3505603	31.43	ug/l	99
30) cis-1,2-Dichloroethene	7.13	96	3609646	31.71	ug/l	97
31) Chloroform	7.53	83	5584053	30.95	ug/l	99

(#) = qualifier out of range (m) = manual integration
RFW009.D VO06F03.M Mon Jun 10 17:17:39 2024 Page 1

Sab 13/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW009.D Vial: 9
Acq On : 3 Jun 2024 6:06 pm Operator: DHuynh
Sample : VO06F038 3.00/15.0uL Inst : 06
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 10 15:24 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) Bromochloromethane	7.91	130	1622195	32.97 ug/l	98
33) Tetrahydrofuran	8.01	42	333513	31.47 ug/l	99
34) tert-Amyl alcohol	8.04	59	428166	172.32 ug/l	95
36) 1,1,1-Trichloroethane	8.45	97	4314838	31.05 ug/l	99
37) Cyclohexane	8.43	84	4222551	30.03 ug/l	98
38) 2,2,4-Trimethylpentane	8.62	57	10301198	28.56 ug/l	100
39) 1,1-Dichloropropene	8.81	110	1507038	31.88 ug/l	97
40) Carbon tetrachloride	8.98	119	3533249	31.49 ug/l	99
41) tert-Amyl methyl ether (TA	9.15	73	6651534	33.55 ug/l	97
43) 1,2-Dichloroethane	9.38	62	2643256	32.90 ug/l	98
44) Benzene	9.36	78	13421260	31.93 ug/l	98
45) Trichloroethene	10.63	130	3402142	31.79 ug/l	99
46) Methylcyclohexane	10.72	83	5103144	31.00 ug/l	99
47) 1,2-Dichloropropane	10.99	63	3253064	32.01 ug/l	99
48) 1,4-Dioxane	11.54	88	199825	649.77 ug/l	97
49) Bromodichloromethane	11.43	83	3707290	31.78 ug/l	99
50) Dibromomethane	11.51	93	1309300	30.45 ug/l	96
51) 2-Chloroethyl vinyl ether	12.12	63	1104169	32.91 ug/l	98
52) 4-Methyl-2-pentanone	12.16	43	8558125	173.87 ug/l	98
53) cis-1,3-Dichloropropene	12.50	75	4826803	32.53 ug/l	97
56) Toluene	13.04	91	13493461	30.93 ug/l	98
57) Ethyl methacrylate	13.46	69	2459154	33.08 ug/l	97
58) trans-1,3-Dichloropropene	13.42	75	3534293	32.89 ug/l	96
59) 1,1,2-Trichloroethane	13.67	97	1668591	32.62 ug/l	98
60) 2-Hexanone	13.74	43	5097874	168.69 ug/l	98
61) 1,3-Dichloropropane	14.11	76	3169248	32.85 ug/l	98
62) Tetrachloroethene	14.18	164	2532429	31.57 ug/l	99
63) Dibromochloromethane	14.53	129	2137573	31.30 ug/l	99
65) 1,2-Dibromoethane	14.87	107	1575709	30.91 ug/l	98
66) 1-Chlorohexane	15.22	91	6224918	30.33 ug/l	99
67) Chlorobenzene	15.60	112	7880377	32.05 ug/l	98
68) 1,1,1,2-Tetrachloroethane	15.69	131	2665278	32.22 ug/l	98
69) Ethylbenzene	15.70	91	15004399	31.52 ug/l	98
70) m-Xylene & p-Xylene	15.83	91	20728474	58.21 ug/l	93
71) o-Xylene	16.56	91	11202924	30.62 ug/l	100
72) Styrene	16.62	104	8419372	32.54 ug/l	98
73) Isopropylbenzene	17.17	105	13587375	30.27 ug/l	98
75) Bromoform	17.17	173	927360	38.79 ug/l	99
76) 1,1,2,2-Tetrachloroethane	17.45	83	1799348	32.31 ug/l	96
78) 1,2,3-Trichloropropane	17.66	110	406032	31.48 ug/l	95
79) trans-1,4-Dichloro-2-buten	17.77	53	470821	33.75 ug/l	98

(#) = qualifier out of range (m) = manual integration

SU 6/13/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW009.D Vial: 9
Acq On : 3 Jun 2024 6:06 pm Operator: DHuynh
Sample : VO06F038 3.00/15.0uL Inst : 06
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 10 15:24 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

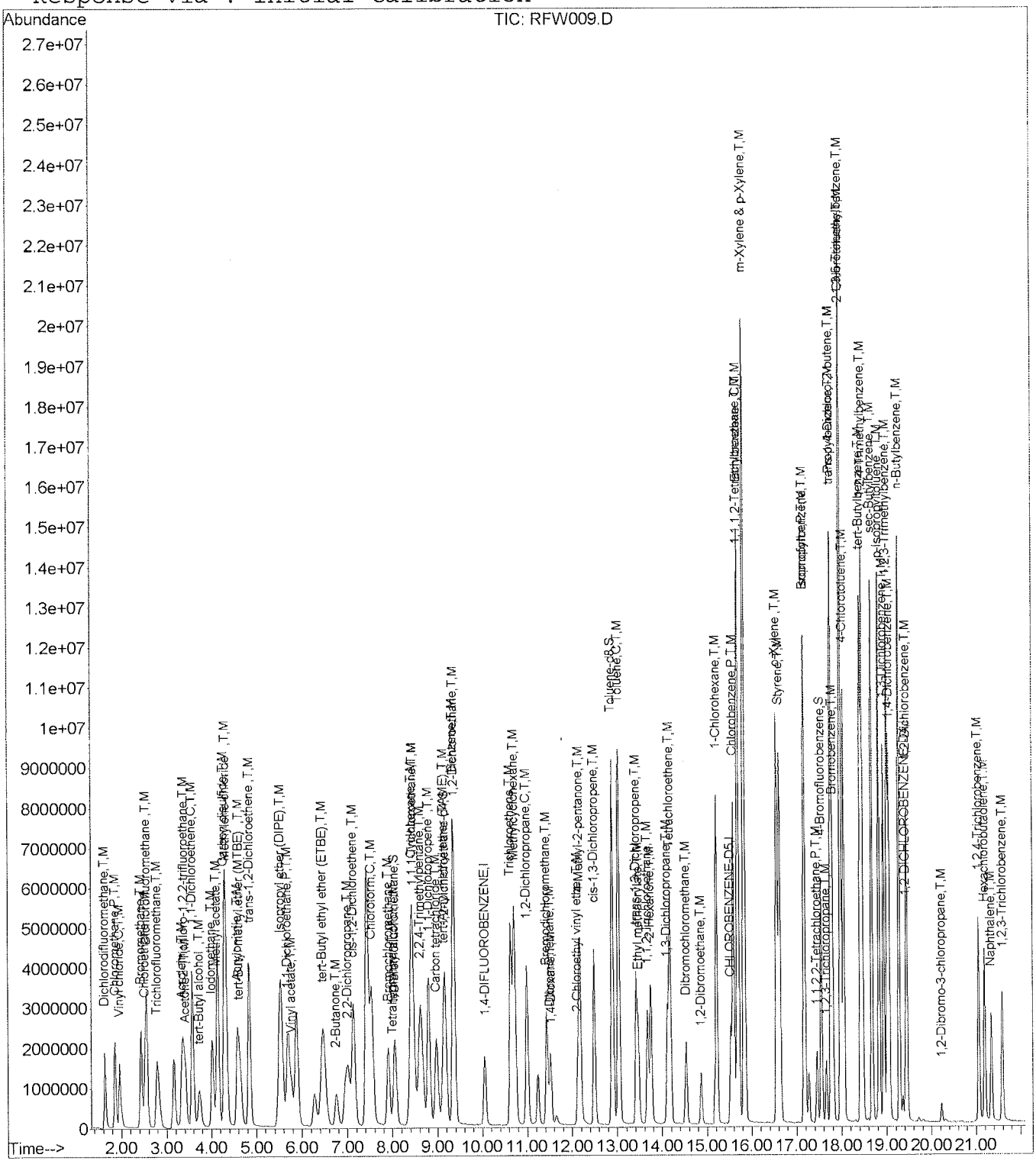
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	n-Propylbenzene	17.77	91	16541405	30.20	ug/l	96
81)	Bromobenzene	17.80	156	2594135	32.65	ug/l	98
82)	1,3,5-Trimethylbenzene	17.97	105	11223942	31.52	ug/l	99
83)	2-Chlorotoluene	17.99	91	11522522	32.39	ug/l	99
84)	4-Chlorotoluene	18.05	91	9516913	31.57	ug/l	99
85)	tert-Butylbenzene	18.43	134	2371986	30.61	ug/l	94
86)	1,2,4-Trimethylbenzene	18.47	105	10870803	31.76	ug/l	99
87)	sec-Butylbenzene	18.67	105	14064799	30.01	ug/l	97
88)	p-Isopropyltoluene	18.84	119	11987182	31.01	ug/l	98
89)	1,3-Dichlorobenzene	18.93	146	5513287	32.72	ug/l	98
90)	1,2,3-Trimethylbenzene	19.01	105	10147741	31.83	ug/l	99
91)	1,4-Dichlorobenzene	19.06	146	5460306	32.79	ug/l	99
92)	n-Butylbenzene	19.28	91	12138274	30.60	ug/l	98
93)	1,2-Dichlorobenzene	19.45	146	4441577	32.01	ug/l	97
94)	1,2-Dibromo-3-chloropropan	20.23	157	213114	31.27	ug/l	94
95)	1,2,4-Trichlorobenzene	21.06	180	2661527	32.41	ug/l	99
96)	Hexachlorobutadiene	21.19	225	1535231	29.63	ug/l	100
97)	Naphthalene	21.33	128	3796941	32.62	ug/l	97
98)	1,2,3-Trichlorobenzene	21.59	180	1971100	31.72	ug/l	99

(#) = qualifier out of range (m) = manual integration
RFW009.D VO06F03.M Mon Jun 10 17:17:40 2024 6/13/24 Page 3

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F03\RFW009.D Vial: 9
Acq On : 3 Jun 2024 6:06 pm Operator: DHuynh
Sample : VO06F038 3.00/15.0uL Inst : 06
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 10 15:24 2024 Quant Results File: VO06F03.RE

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration



SA 6/13/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW010.D Vial: 10
Acq On : 3 Jun 2024 6:32 pm Operator: DHuynh
Sample : VO06F039 5.00/25.0uL Inst : 06
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 13 14:44 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.05	114	3116397	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.53	117	2463139	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.43	152	817022	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	8.06	111	2047	0.02	ug/l	0.00
Spiked Amount 10.000			Recovery =	0.20%		
42) 1,2-Dichloroethane-d4	9.38	65	146280	2.17	ug/l	0.19
Spiked Amount 10.000			Recovery =	21.70%		
55) Toluene-d8	12.90	98	11699	0.03	ug/l	0.00
Spiked Amount 10.000			Recovery =	0.30%		
77) 4-Bromofluorobenzene	17.45	95	334633	3.09	ug/l	-0.09
Spiked Amount 10.000			Recovery =	30.90%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.63	85	4565047	49.46	ug/l	98
3) Chloromethane	1.85	50	6929109	49.33	ug/l	98
4) Vinyl chloride	1.97	62	5011281	50.03	ug/l	98
5) Bromomethane	2.42	94	4814336	53.02	ug/l	97
6) Chloroethane	2.52	64	4047626	52.61	ug/l	99
7) Dichlorofluoromethane	2.56	67	9684492	51.16	ug/l	97
8) Trichlorofluoromethane	2.80	101	6086554	48.94	ug/l	97
9) Acrolein	3.34	56	1841817	289.58	ug/l	97
10) 1,1,2-Trichloro-1,2,2-trif	3.38	151	2860019	49.83	ug/l	100
11) Acetone	3.43	43	2697286	252.72	ug/l	98
12) 1,1-Dichloroethene	3.57	61	8540321	51.68	ug/l	98
13) tert-Butyl alcohol	3.74	59	4639511	1426.99	ug/l	99
16) Iodomethane	4.01	142	8573910	52.26	ug/l	98
18) Methylene chloride	4.33	49	7063550	51.02	ug/l	98
20) Acrylonitrile	4.58	53	3948572	272.35	ug/l	97
21) tert-Butyl methyl ether (M	4.62	73	8363740	52.34	ug/l	99
22) trans-1,2-Dichloroethene	4.83	96	5964803	51.97	ug/l	99
23) Isopropyl ether (DIPE)	5.52	45	19403541	53.78	ug/l	97
24) Vinyl acetate	5.77	43	5655446	57.47	ug/l	100
25) 1,1-Dichloroethane	5.69	63	10451406	53.79	ug/l	97
27) tert-Butyl ethyl ether (ET	6.46	59	14041355	53.56	ug/l	99
28) 2-Butanone	6.76	43	4797015	280.82	ug/l	99
29) 2,2-Dichloropropane	7.01	77	5641443	51.25	ug/l	97
30) cis-1,2-Dichloroethene	7.13	96	6044518	53.81	ug/l	99
31) Chloroform	7.53	83	9277417	52.11	ug/l	98
32) Bromochloromethane	7.91	130	2637941	54.32	ug/l	97
33) Tetrahydrofuran	8.02	42	501965	47.99	ug/l	95

(#) = qualifier out of range (m) = manual integration
RFW010.D VO06F03.M Thu Jun 13 14:44:21 2024 Page 1

Su 6/13/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW010.D Vial: 10
Acq On : 3 Jun 2024 6:32 pm Operator: DHuynh
Sample : VO06F039 5.00/25.0uL Inst : 06
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 13 14:44 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
36) 1,1,1-Trichloroethane	8.43	97	7077776	51.60	ug/l	99
39) 1,1-Dichloropropene	8.81	110	2477374	53.10	ug/l	100
40) Carbon tetrachloride	8.98	119	5780512	52.19	ug/l	100
41) tert-Amyl methyl ether (TA	9.15	73	10601434	54.18	ug/l	97
43) 1,2-Dichloroethane	9.38	62	4390464	55.37	ug/l	98
44) Benzene	9.36	78	21964137	52.94	ug/l	97
45) Trichloroethene	10.63	130	5651998	53.51	ug/l	99
47) 1,2-Dichloropropane	10.99	63	5325088	53.09	ug/l	99
48) 1,4-Dioxane	11.54	88	329428	1085.34	ug/l	98
49) Bromodichloromethane	11.43	83	6095730	52.95	ug/l	99
50) Dibromomethane	11.52	93	2182574	51.42	ug/l	97
51) 2-Chloroethyl vinyl ether	12.12	63	1813000	54.74	ug/l	98
52) 4-Methyl-2-pentanone	12.16	43	13663024	281.24	ug/l	97
53) cis-1,3-Dichloropropene	12.50	75	7839555	53.53	ug/l	98
56) Toluene	13.05	91	21264151	49.52	ug/l	94
57) Ethyl methacrylate	13.46	69	3878172	53.01	ug/l	97
58) trans-1,3-Dichloropropene	13.42	75	5631346	53.24	ug/l	97
59) 1,1,2-Trichloroethane	13.67	97	2705802	53.75	ug/l	96
60) 2-Hexanone	13.74	43	8067704	271.22	ug/l	98
61) 1,3-Dichloropropane	14.11	76	5112268	53.83	ug/l	95
62) Tetrachloroethene	14.18	164	4182240	52.96	ug/l	99
63) Dibromochloromethane	14.53	129	3484995	51.84	ug/l	98
65) 1,2-Dibromoethane	14.87	107	2567529	51.16	ug/l	100
66) 1-Chlorohexane	15.22	91	10567556	52.31	ug/l	97
67) Chlorobenzene	15.60	112	12745643	52.66	ug/l	98
68) 1,1,1,2-Tetrachloroethane	15.69	131	4366242	53.63	ug/l	97
69) Ethylbenzene	15.70	91	21836386	46.61	ug/l	91
70) m-Xylene & p-Xylene	15.83	91	26257770	74.91	ug/l	73
71) o-Xylene	16.56	91	17806915	49.45	ug/l	98
72) Styrene	16.62	104	13719753	53.87	ug/l	98
73) Isopropylbenzene	17.17	105	20112820	45.53	ug/l	94
75) Bromoform	17.17	173	1500807	65.11	ug/l	100
76) 1,1,2,2-Tetrachloroethane	17.45	83	2792590	52.02	ug/l	94
78) 1,2,3-Trichloropropane	17.66	110	663613	53.38	ug/l	97
79) trans-1,4-Dichloro-2-buten	17.77	53	778748	57.91	ug/l	100
80) n-Propylbenzene	17.77	91	21004725	39.79	ug/l	85
81) Bromobenzene	17.80	156	4289938	56.01	ug/l	99
82) 1,3,5-Trimethylbenzene	17.97	105	16371249	47.69	ug/l	91
83) 2-Chlorotoluene	17.99	91	17518844	51.09	ug/l	95
84) 4-Chlorotoluene	18.05	91	14688103	50.55	ug/l	95
85) tert-Butylbenzene	18.43	134	3926370	52.57	ug/l	95

(#) = qualifier out of range (m) = manual integration
RFW010.D VO06F03.M Thu Jun 13 14:44:22 2024 Page 2

6/13/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW010.D Vial: 10
Acq On : 3 Jun 2024 6:32 pm Operator: DHuynh
Sample : VO06F039 5.00/25.0uL Inst : 06
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 13 14:44 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
86)	1,2,4-Trimethylbenzene	18.47	105	15705453	47.60	ug/l	90
87)	sec-Butylbenzene	18.67	105	18287261	40.48	ug/l	87
88)	p-Isopropyltoluene	18.84	119	16389807	43.99	ug/l	89
89)	1,3-Dichlorobenzene	18.93	146	8906956	54.83	ug/l	98
90)	1,2,3-Trimethylbenzene	19.01	105	14888062	48.44	ug/l	93
91)	1,4-Dichlorobenzene	19.06	146	8812762	54.89	ug/l	99
92)	n-Butylbenzene	19.28	91	16162238	42.26	ug/l	85
93)	1,2-Dichlorobenzene	19.45	146	7098849	53.08	ug/l	98
94)	1,2-Dibromo-3-chloropropan	20.23	157	342277	52.10	ug/l	92
95)	1,2,4-Trichlorobenzene	21.06	180	4284870	54.12	ug/l	98
96)	Hexachlorobutadiene	21.19	225	2390381	47.86	ug/l	100
97)	Naphthalene	21.33	128	6058211	53.99	ug/l	96
98)	1,2,3-Trichlorobenzene	21.58	180	3217149	53.71	ug/l	97

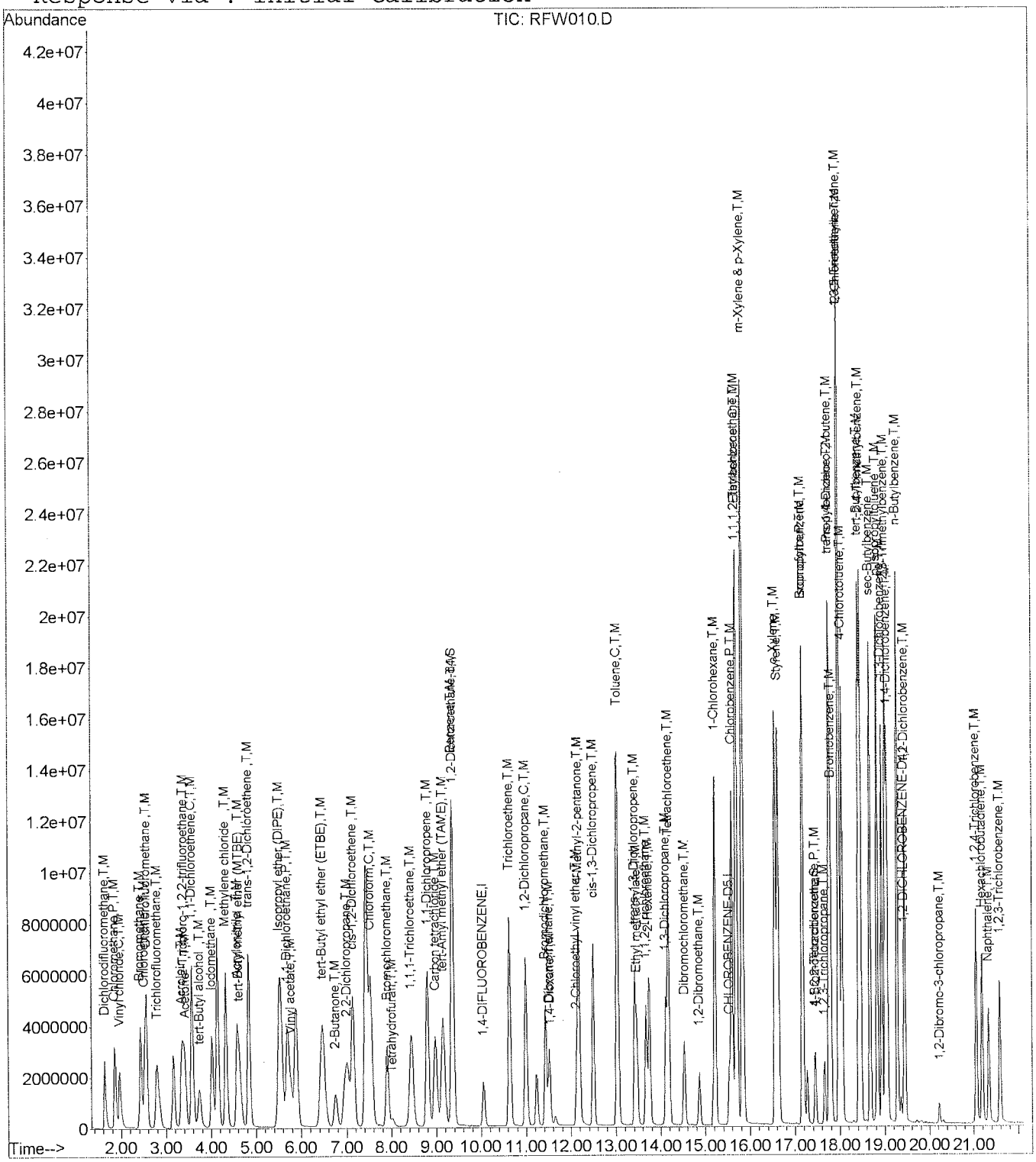
SY 6/13/24

(#) = qualifier out of range (m) = manual integration
RFW010.D VO06F03.M Thu Jun 13 14:44:22 2024 Page 3

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F03\RFW010.D Vial: 10
Acq On : 3 Jun 2024 6:32 pm Operator: DHuynh
Sample : VO06F039 5.00/25.0uL Inst : 06
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 13 14:44 2024 Quant Results File: VO06F03.RE

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration



6/13/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW011.D Vial: 11
Acq On : 3 Jun 2024 6:59 pm Operator: DHuynh
Sample : VO06F0310 10.0/50.0uL Inst : 06
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 13 14:45 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.05	114	3267276	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.53	117	2470521	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.43	152	807954	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	8.06	111	1654	0.02	ug/l	0.00
Spiked Amount 10.000			Recovery =	0.20%		
42) 1,2-Dichloroethane-d4	9.38	65	322551	4.57	ug/l	0.19
Spiked Amount 10.000			Recovery =	45.70%		
55) Toluene-d8	12.90	98	7845	0.02	ug/l	0.00
Spiked Amount 10.000			Recovery =	0.20%		
77) 4-Bromofluorobenzene	17.66	95	9716	0.09	ug/l	0.12
Spiked Amount 10.000			Recovery =	0.90%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.63	85	9468664	97.86	ug/l	97
3) Chloromethane	1.85	50	13830085	93.91	ug/l	97
4) Vinyl chloride	1.95	62	9844460	93.75	ug/l	96
5) Bromomethane	2.42	94	9831475	103.27	ug/l	96
6) Chloroethane	2.52	64	8125496	100.74	ug/l	97
7) Dichlorofluoromethane	2.56	67	19366118	97.58	ug/l	95
8) Trichlorofluoromethane	2.80	101	12785329	98.05	ug/l	98
9) Acrolein	3.32	56	3775794	566.23	ug/l	92
10) 1,1,2-Trichloro-1,2,2-trif	3.38	151	6197712	102.99	ug/l	100
11) Acetone	3.43	43	5855592	523.29	ug/l	98
12) 1,1-Dichloroethene	3.57	61	17775935	102.59	ug/l	96
13) tert-Butyl alcohol	3.74	59	9663719	2835.05	ug/l	100
16) Iodomethane	4.01	142	17413665	101.24	ug/l	97
18) Methylene chloride	4.33	49	14522196	100.04	ug/l	97
20) Acrylonitrile	4.58	53	8329195	547.97	ug/l	96
21) tert-Butyl methyl ether (M	4.62	73	17802450	106.27	ug/l	98
22) trans-1,2-Dichloroethene	4.83	96	12383476	102.91	ug/l	98
23) Isopropyl ether (DIPE)	5.54	45	39445303	104.29	ug/l	96
24) Vinyl acetate	5.77	43	11713328	113.54	ug/l	98
25) 1,1-Dichloroethane	5.69	63	21713208	106.59	ug/l	96
27) tert-Butyl ethyl ether (ET	6.46	59	29245164	106.41	ug/l	98
28) 2-Butanone	6.76	43	10187613	568.85	ug/l	98
29) 2,2-Dichloropropane	7.01	77	10704225	92.75	ug/l	96
30) cis-1,2-Dichloroethene	7.14	96	12640667	107.32	ug/l	98
31) Chloroform	7.53	83	19463376	104.27	ug/l	97
32) Bromochloromethane	7.91	130	5571840	109.43	ug/l	95
33) Tetrahydrofuran	8.02	42	1173408	107.01	ug/l	92

(#) = qualifier out of range (m) = manual integration
RFW011.D VO06F03.M Thu Jun 13 14:45:19 2024 SC 6/13/24 Page 1

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW011.D Vial: 11
Acq On : 3 Jun 2024 6:59 pm Operator: DHuynh
Sample : VO06F0310 10.0/50.0uL Inst : 06
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 13 14:45 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
36)	1,1,1-Trichloroethane	8.44	97	14425577	100.31	ug/l	99
39)	1,1-Dichloropropene	8.81	110	5382858	110.05	ug/l	100
40)	Carbon tetrachloride	8.98	119	12054731	103.82	ug/l	100
41)	tert-Amyl methyl ether (TA	9.15	73	21967113	107.09	ug/l	96
43)	1,2-Dichloroethane	9.38	62	9352958	112.50	ug/l	97
44)	Benzene	9.36	78	35835145	82.38	ug/l	83
45)	Trichloroethene	10.64	130	11922526	107.67	ug/l	99
47)	1,2-Dichloropropane	10.99	63	11123729	105.78	ug/l	97
48)	1,4-Dioxane	11.54	88	707776	2224.16	ug/l	94
49)	Bromodichloromethane	11.43	83	12613415	104.50	ug/l	100
50)	Dibromomethane	11.52	93	4553076	102.32	ug/l	97
51)	2-Chloroethyl vinyl ether	12.12	63	3808698	109.69	ug/l	99
52)	4-Methyl-2-pentanone	12.19	43	26391574	518.16	ug/l	93
53)	cis-1,3-Dichloropropene	12.50	75	16116476	104.97	ug/l	97
56)	Toluene	13.05	91	30011235	69.68	ug/l	73
57)	Ethyl methacrylate	13.47	69	8228972	112.14	ug/l	97
58)	trans-1,3-Dichloropropene	13.42	75	11564165	109.00	ug/l	96
59)	1,1,2-Trichloroethane	13.67	97	5624363	111.39	ug/l	97
60)	2-Hexanone	13.74	43	16630636	557.43	ug/l	96
61)	1,3-Dichloropropane	14.11	76	10522894	110.48	ug/l	95
62)	Tetrachloroethene	14.18	164	8719325	110.09	ug/l	99
63)	Dibromochloromethane	14.53	129	7129209	105.74	ug/l	99
65)	1,2-Dibromoethane	14.87	107	5272512	104.76	ug/l	99
66)	1-Chlorohexane	15.22	91	19587233	96.66	ug/l	98
67)	Chlorobenzene	15.60	112	22363149	92.12	ug/l	88
68)	1,1,1,2-Tetrachloroethane	15.69	131	8963057	109.75	ug/l	97
71)	o-Xylene	16.56	91	26444346	73.22	ug/l	74
72)	Styrene	16.64	104	23427132	91.71	ug/l	83
73)	Isopropylbenzene	17.18	105	27248613	61.50	ug/l	71
75)	Bromoform	17.17	173	3019818	132.49	ug/l	97
76)	1,1,2,2-Tetrachloroethane	17.45	83	5499706	103.59	ug/l	94
78)	1,2,3-Trichloropropane	17.66	110	1354845	110.20	ug/l	98
79)	trans-1,4-Dichloro-2-buten	17.76	53	1611642	121.19	ug/l	98
80)	n-Propylbenzene	17.76	91	26824584	51.38	ug/l	53
81)	Bromobenzene	17.80	156	8764926	115.71	ug/l	100
82)	1,3,5-Trimethylbenzene	17.98	105	22472794	66.20	ug/l	66
85)	tert-Butylbenzene	18.43	134	7928634	107.35	ug/l	93
86)	1,2,4-Trimethylbenzene	18.48	105	21772080	66.73	ug/l	59
87)	sec-Butylbenzene	18.67	105	23290361	52.14	ug/l	56
88)	p-Isopropyltoluene	18.84	119	21695698	58.88	ug/l	59
89)	1,3-Dichlorobenzene	18.94	146	15731281	97.93	ug/l	89

(#) = qualifier out of range (m) = manual integration

SA 6/13/24

Data File : D:\HPCHEM\1\DATA\24F03\RFW011.D Vial: 11
Acq On : 3 Jun 2024 6:59 pm Operator: DHuynh
Sample : VO06F0310 10.0/50.0uL Inst : 06
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 13 14:45 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
90)	1,2,3-Trimethylbenzene	19.02	105	20399117	67.12	ug/l	66
91)	1,4-Dichlorobenzene	19.06	146	15775580	99.36	ug/l	90
92)	n-Butylbenzene	19.28	91	21174049	55.99	ug/l	64
93)	1,2-Dichlorobenzene	19.45	146	13588099	102.74	ug/l	95
94)	1,2-Dibromo-3-chloropropan	20.23	157	714222	109.93	ug/l	90
95)	1,2,4-Trichlorobenzene	21.06	180	8833037	112.82	ug/l	99
96)	Hexachlorobutadiene	21.19	225	5085714	102.97	ug/l	100
97)	Naphthalene	21.33	128	12437403	112.08	ug/l	95
98)	1,2,3-Trichlorobenzene	21.59	180	6671220	112.62	ug/l	98

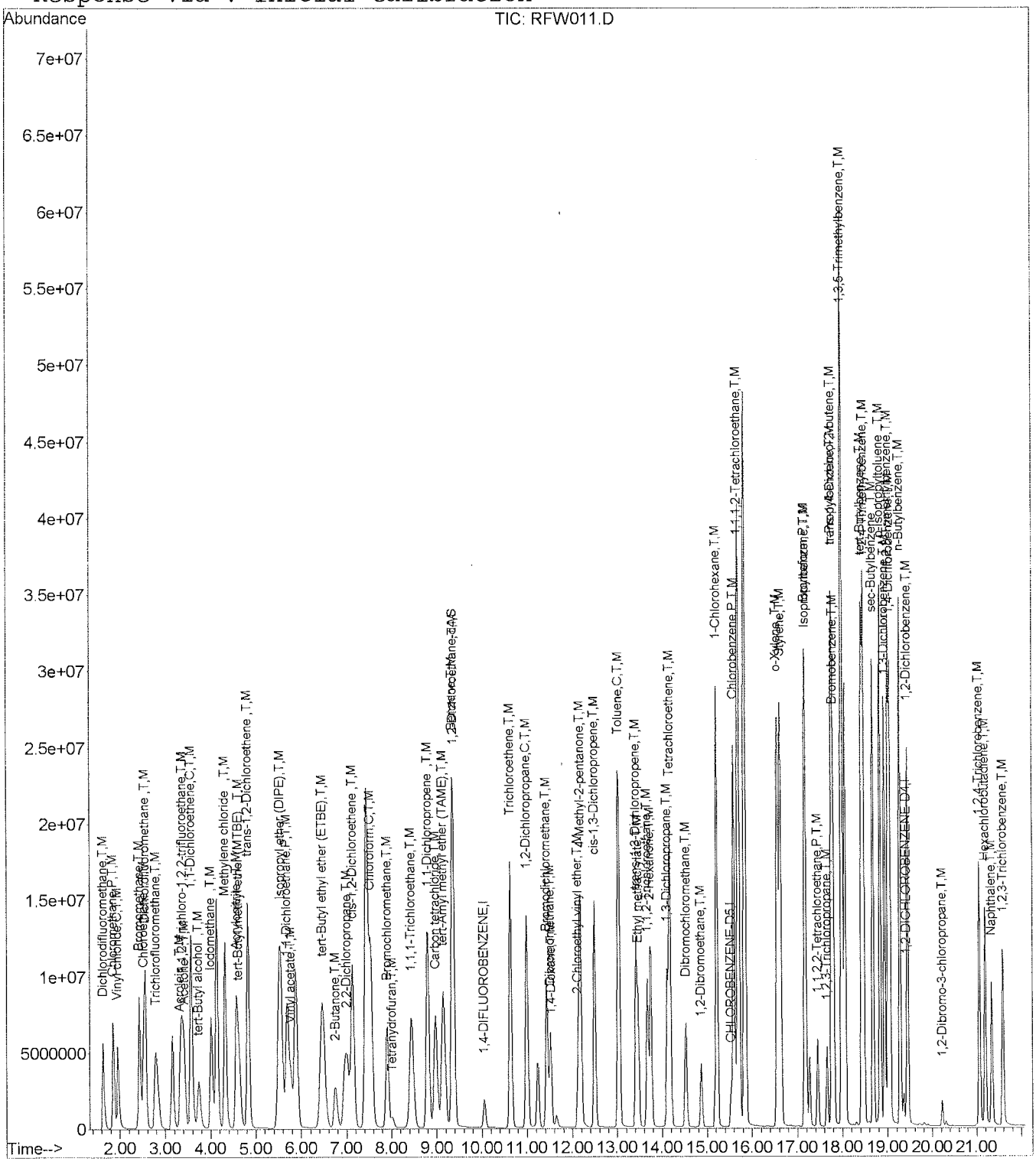
SC 6/13/24

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F03\RFW011.D Vial: 11
Acq On : 3 Jun 2024 6:59 pm Operator: DHuynh
Sample : VO06F0310 10.0/50.0uL Inst : 06
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 13 14:45 2024 Quant Results File: VO06F03.RE

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration



6/13/24

SECOND SOURCE VERIFICATION

CONTINUE_CALIBRATION - CALIBRATION VERIFICATION

Instrument ID :06
IC_Beginning DateTime :06/03/24 15:03
Spike Amount :10 PPB
CC/CV File :RFW014
IC File :RFW007

Column Spec :RTX502.2 ID :0.25MM
IC_Ending DateTime :06/03/24 18:59
HPChem Method :VO06F03
Date_Time :06/03/24 20:18

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	3067327	1	1	10.047	10.057	0				
	2	Dichlorodifluoromethane	9.678	-3.2	879158	0.287	0.296	1.627	1.631	5.79				
	3	Chloromethane	9.688	-3.1	1339526	0.437	0.451	1.864	1.864	13.06				
	4	Vinyl chloride	9.959	-0.4	981772	0.320	0.321	1.982	1.973	6.50				
	5	Bromomethane	10.119	1.2	904417	0.295	0.291	2.436	2.431	7.51				
	6	Chloroethane	9.961	-0.4	754301	0.246	0.247	2.515	2.519	5.98				
	7	Dichlorofluoromethane	9.943	-0.6	1852639	0.604	0.607	2.555	2.559	8.37				
	8	Trichlorofluoromethane	9.296	-7.0	1137996	0.371	0.399	2.792	2.795	11.88				
5	9	Acrolein	49.804	-0.4	311789	0.020	0.020	3.340	3.339	12.06				
	10	1,1,2-Trichloro-1,2,2-trifluoroethane	9.379	-6.2	529874	0.173	0.184	3.382	3.379	9.77				
5	11	Acetone	44.998	-10.0	472714	0.031	0.034	3.424	3.425	12.69				
	12	1,1-Dichloroethene	9.982	-0.2	1623684	0.529	0.530	3.571	3.572	6.16				
25	13	tert-Butyl alcohol	244.740	-2.1	783184	0.010	0.010	3.739	3.742	13.37				
	14	Acetonitrile												
	15	Methyl acetate	8.925	-10.7	63857	0.021	0.023	4.116	4.124	8.55				
	16	Iodomethane	10.198	2.0	1646901	0.537	0.526	4.032	4.020	7.71				
	17	Allyl chloride												
	18	Methylene chloride	9.859	-1.4	1343657	0.438	0.444	4.325	4.326	6.80				
	19	Carbon disulfide	10.237	2.4	4341402	1.415	1.383	4.283	4.287	5.19				
5	20	Acrylonitrile	49.481	-1.0	706101	0.046	0.047	4.577	4.578	9.66				
	21	tert-Butyl methyl ether (MTBE)	10.102	1.0	1588780	0.518	0.513	4.619	4.622	9.16				
	22	trans-1,2-Dichloroethene	10.086	0.9	1139396	0.371	0.368	4.849	4.846	5.68				
	23	Isopropyl ether (DIPE)	10.471	4.7	3718267	1.212	1.158	5.541	5.544	8.51				
	24	Vinyl acetate	9.683	-3.2	937837	0.306	0.316	5.772	5.785	14.60				
	25	1,1-Dichloroethane	10.232	2.3	1956927	0.638	0.623	5.709	5.701	6.90				
25	26	2-Butanol												
	27	tert-Butyl ethyl ether (ETBE)	10.308	3.1	2659759	0.867	0.841	6.463	6.470	8.89				
5	28	2-Butanone	50.421	0.8	847750	0.055	0.055	6.756	6.770	11.24				
	29	2,2-Dichloropropane	9.763	-2.4	1057750	0.345	0.353	7.008	7.009	5.11				
	30	cis-1,2-Dichloroethene	10.001	0.0	1105829	0.361	0.360	7.134	7.141	7.58				
	31	Chloroform	9.891	-1.1	1733464	0.565	0.571	7.532	7.533	4.25				
	32	Bromochloromethane	9.904	-1.0	473424	0.154	0.156	7.909	7.910	9.93				
	33	Tetrahydrofuran	8.620	-13.8	88738	0.029	0.034	8.014	8.028	9.10				
5	34	tert-Amyl alcohol												
	35	Dibromofluoromethane	9.920	-0.8	913355	0.298	0.300	8.056	8.057	11.72				
	36	1,1,1-Trichloroethane	9.930	-0.7	1340703	0.437	0.440	8.454	8.449	9.11				
	37	Cyclohexane	9.605	-4.0	1311974	0.428	0.445	8.433	8.434	5.16				
	38	2,2,4-Trimethylpentane	10.670	6.7	3739017	1.219	1.142	8.622	8.620	9.38				
	39	1,1-Dichloropropene	9.944	-0.6	456656	0.149	0.150	8.811	8.812	6.88				
	40	Carbon tetrachloride	9.921	-0.8	1081570	0.353	0.355	8.978	8.981	7.29				
	41	tert-Amyl methyl ether (TAME)	10.291	2.9	1981882	0.646	0.628	9.146	9.151	10.16				
	42	1,2-Dichloroethane-d4	10.263	2.6	679675	0.222	0.216	9.188	9.180	10.10				
	43	1,2-Dichloroethane	10.217	2.2	797432	0.260	0.254	9.376	9.380	10.92				
	44	Benzene	10.347	3.5	4225842	1.378	1.331	9.355	9.359	7.65				
	45	Trichloroethene	10.297	3.0	1070513	0.349	0.339	10.634	10.637	8.32				
	46	Methylcyclohexane	10.525	5.2	1683252	0.549	0.521	10.718	10.719	8.40				
	47	1,2-Dichloropropane	10.309	3.1	1017751	0.332	0.322	10.990	10.991	7.90				
20	48	1,4-Dioxane	208.701	4.4	62349	0.001	0.001	11.535	11.539	9.47				
	49	Bromodichloromethane	10.053	0.5	1139212	0.371	0.369	11.430	11.431	5.86				
	50	Dibromomethane	9.480	-5.2	396050	0.129	0.136	11.514	11.515	9.86				
	51	2-Chloroethyl vinyl ether	9.481	-5.2	309067	0.101	0.106	12.122	12.128	10.02				
5	52	4-Methyl-2-pentanone	54.066	8.1	2585228	0.169	0.156	12.185	12.186	13.02				
	53	cis-1,3-Dichloropropene	10.266	2.7	1479718	0.482	0.470	12.499	12.500	7.30				
	54	CHLOROBENZENE-D5	10.000	0	2447078	1	1	15.534	15.533	0				
	55	Toluene-d8	9.892	-1.1	3643693	1.489	1.505	12.898	12.898	4.62				
	56	Toluene	10.227	2.3	4363244	1.783	1.743	13.044	13.045	3.75				
	57	Ethyl methacrylate	10.122	1.2	735734	0.301	0.297	13.463	13.472	9.08				
	58	trans-1,3-Dichloropropene	10.025	0.2	1053504	0.431	0.429	13.421	13.425	8.01				
	59	1,1,2-Trichloroethane	10.287	2.9	514511	0.210	0.204	13.673	13.674	7.35				
5	60	2-Hexanone	49.960	-0.1	1476393	0.121	0.121	13.757	13.753	13.14				
	61	1,3-Dichloropropane	10.502	5.0	990803	0.405	0.386	14.113	14.116	8.77				
	62	Tetrachloroethene	10.153	1.5	796511	0.325	0.321	14.176	14.177	8.08				
	63	Dibromochloromethane	9.555	-4.4	638152	0.261	0.273	14.532	14.533	8.06				
	64	2-Ethyl-1-butanol												
	65	1,2-Dibromoethane	9.437	-5.6	470472	0.192	0.204	14.868	14.869	11.37				
	66	1-Chlorohexane	9.968	-0.3	2000900	0.818	0.820	15.222	15.222	5.44				
	67	Chlorobenzene	10.446	4.5	2511716	1.026	0.983	15.599	15.598	5.64				
	68	1,1,1,2-Tetrachloroethane	10.002	0.0	809112	0.331	0.331	15.689	15.686	8.42				
	69	Ethylbenzene	10.286	2.9	4787709	1.957	1.902	15.703	15.704	4.42				
2	70	m-Xylene & p-Xylene	21.077	5.4	7339907	1.500	1.423	15.832	15.833	9.86				
	71	o-Xylene	10.208	2.1	3651913	1.492	1.462	16.559	16.561	3.90				
	72	Styrene	10.531	5.3	2664833	1.089	1.034	16.624	16.630	6.99				
	73	Isopropylbenzene	10.095	1.0	4430704	1.811	1.793	17.169	17.170	3.78				
	74	1,2-DICHLOROBENZENE-D4	10.000	0	825620	1	1	19.426	19.426	0				
	75	Bromoform	11.182	11.8	260456	0.315	0.282	17.169	17.168	14.77				
	76	1,1,2,2-Tetrachloroethane	9.774	-2.3	530261	0.642	0.657	17.454	17.454	8.96				
	77	4-Bromofluorobenzene	10.396	4.0	1138289	1.379	1.326	17.545	17.546	7.03				
	78	1,2,3-Trichloropropane	9.624	-3.8	120911	0.146	0.152	17.662	17.661	6.78				
	79	trans-1,4-Dichloro-2-butene	9.953	-0.5	135264	0.164	0.165	17.765	17.767	4.52				
	80	n-Propylbenzene	10.835	8.4	5780527	7.001	6.462	17.765	17.765	9.67				
	81	Bromobenzene	10.475	4.8	810814	0.982	0.938	17.804	17.804	12.11				
	82	1,3,5-Trimethylbenzene	10.489	4.9	3638846	4.407	4.202	17.973	17.976	5.29				
	83	2-Chlorotoluene	10.783	7.8	3736634	4.526	4.197	17.986	17.987	8.17				
	84	4-Chlorotoluene	10.466	4.7	3073073	3.722	3.556	18.051	18.052	7.10				
	85	tert-Butylbenzene	10.290	2.9	776673	0.941	0.914	18.427	18.427	6.93				
	86	1,2,4-Trimethylbenzene	10.623	6.2	3541709	4.290	4.038	18.466	18.466	7.30				
	87	sec-Butylbenzene	10.494	4.9	4790341	5.802	5.529	18.674	18.673	8.47				
	88	p-Isopropyltoluene	10.600	6.0	3991585	4.835	4.561	18.829	18.839	7.07				
	89	1,3-Dichlorobenzene	10.673	6.7	1752008	2.122	1.988	18.933	18.938	9.76				
	90	1,2,3-Trimethylbenzene	10.570	5.7	3283086	3.977	3.762	19.011	19.011	6.32				
	91	1,4-Dichlorobenzene	10.708	7.1	1737227	2.104	1.965	19.063	19.063	8.97				
	92	n-Butylbenzene	10.472	4.7	4047343	4.902	4.681	19.283	19.283	6.40				
	93	1,2-Dichlorobenzene	10.592	5.9	1431584	1.734	1.637	19.452	19.452	8.31				
	94	1,2-Dibromo-3-chloropropane	9.196	-8.0	61053	0.074	0.080	20.218	20.232	6.08				
	95	1,2,4-Trichlorobenzene	10.310	3.1	824868	0.999	0.969	21.061	21.063	9.81				
	96	Hexachlorobutadiene	10.087	0.9	509117	0.617	0.611	21.191	21.190	4.49				
	97	Naphthalene	10.222	2.2	1159111	1.404	1.373	21.333	21.338	9.16				
	98	1,2,3-Trichlorobenzene	10.042	0.4	607870	0.736	0.733	21.580	21.591	9.20				

Spike Amount = Nominal Amount * M

SU 6/13/24

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F03\RFW014.D Vial: 14
Acq On : 3 Jun 2024 8:18 pm Operator: DHuynh
Sample : IVO06F0301 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 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	97	0.00
2	T,M	Dichlorodifluoromethane	10.000	9.678	3.2	93	0.00
3	P,T,M	Chloromethane	10.000	9.688	3.1	97	0.00
4	C,T,M	Vinyl chloride	10.000	9.959	0.4	93	0.00
5	T,M	Bromomethane	10.000	10.119	-1.2	98	0.00
6	T,M	Chloroethane	10.000	9.962	0.4	98	0.00
7	T,M	Dichlorofluoromethane	10.000	9.943	0.6	96	0.00
8	T,M	Trichlorofluoromethane	10.000	9.296	7.0	93	0.00
9	T,M	Acrolein	50.000	49.804	0.4	95	0.00
10	T,M	1,1,2-Trichloro-1,2,2-trifl	10.000	9.379	6.2	93	0.00
11	T,M	Acetone	50.000	44.998	10.0	96	0.00
12	C,T,M	1,1-Dichloroethene	10.000	9.982	0.2	93	0.00
13	T,M	tert-Butyl alcohol	250.000	244.741	2.1	95	0.00
14	T,M	Acetonitrile	-1.000	0.000	0.0	0	0.00
15	T,M	Methyl acetate	10.000	8.925	10.7	90	-0.02
16	T,M	Iodomethane	10.000	10.199	-2.0	97	0.00
17	T,M	Allyl chloride	10.000	0.000	100.0#	0	0.00
18	T,M	Methylene chloride	10.000	9.860	1.4	96	0.00
19	T,M	Carbon disulfide	10.000	10.237	-2.4	95	0.00
20	T,M	Acrylonitrile	50.000	49.482	1.0	96	0.00
21	T,M	tert-Butyl methyl ether (MT	10.000	10.102	-1.0	96	0.00
22	T,M	trans-1,2-Dichloroethene	10.000	10.086	-0.9	98	0.00
23	T,M	Isopropyl ether (DIPE)	10.000	10.471	-4.7	96	0.00
24	T,M	Vinyl acetate	10.000	9.683	3.2	96	0.00
25	P,T,M	1,1-Dichloroethane	10.000	10.233	-2.3	96	0.00
26	T,M	2-Butanol	250.000	0.000	100.0#	0	-0.17#
27	T,M	tert-Butyl ethyl ether (ETB	10.000	10.308	-3.1	98	0.00
28	T,M	2-Butanone	50.000	50.422	-0.8	95	0.00
29	T,M	2,2-Dichloropropane	10.000	9.763	2.4	94	0.00
30	T,M	cis-1,2-Dichloroethene	10.000	10.001	-0.0	96	0.00
31	C,T,M	Chloroform	10.000	9.892	1.1	97	0.00
32	T,M	Bromochloromethane	10.000	9.904	1.0	93	0.00
33	T,M	Tetrahydrofuran	10.000	8.620	13.8	89	-0.02
34	T,M	tert-Amyl alcohol	50.000	0.000	100.0#	0	-8.06#
35	S	Dibromofluoromethane	10.000	9.920	0.8	96	0.00
36	T,M	1,1,1-Trichloroethane	10.000	9.931	0.7	97	0.00
37	T,M	Cyclohexane	10.000	9.605	3.9	89	0.00
38	T,M	2,2,4-Trimethylpentane	10.000	10.670	-6.7	103	0.00
39	T,M	1,1-Dichloropropene	10.000	9.944	0.6	97	0.00
40	T,M	Carbon tetrachloride	10.000	9.922	0.8	96	0.00
41	T,M	tert-Amyl methyl ether (TAM	10.000	10.291	-2.9	95	0.00

(#) = Out of Range
RFW014.D VO06F03.M Thu Jun 13 10:30:39 2024 Sa 6/13/24 Page 1

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F03\RFW014.D Vial: 14
Acq On : 3 Jun 2024 8:18 pm Operator: DHuynh
Sample : IVO06F0301 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 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	S	1,2-Dichloroethane-d4	10.000	10.264	-2.6	99	0.00
43	T,M	1,2-Dichloroethane	10.000	10.217	-2.2	94	0.00
44	T,M	Benzene	10.000	10.348	-3.5	95	0.00
45	T,M	Trichloroethene	10.000	10.298	-3.0	95	0.00
46	T,M	Methylcyclohexane	10.000	10.525	-5.3	93	0.00
47	C,T,M	1,2-Dichloropropane	10.000	10.309	-3.1	98	0.00
48	T,M	1,4-Dioxane	200.000	208.702	-4.4	109	0.00
49	T,M	Bromodichloromethane	10.000	10.054	-0.5	97	0.00
50	T,M	Dibromomethane	10.000	9.481	5.2	95	0.00
51	T,M	2-Chloroethyl vinyl ether	10.000	9.482	5.2	91	0.00
52	T,M	4-Methyl-2-pentanone	50.000	54.066	-8.1	95	0.00
53	T,M	cis-1,3-Dichloropropene	10.000	10.266	-2.7	97	0.00
54	I	CHLOROBENZENE-D5	10.000	10.000	0.0	97	0.00
55	S	Toluene-d8	10.000	9.892	1.1	98	0.00
56	C,T,M	Toluene	10.000	10.227	-2.3	97	0.00
57	T,M	Ethyl methacrylate	10.000	10.122	-1.2	96	0.00
58	T,M	trans-1,3-Dichloropropene	10.000	10.025	-0.3	95	0.00
59	T,M	1,1,2-Trichloroethane	10.000	10.287	-2.9	101	0.00
60	T,M	2-Hexanone	50.000	49.960	0.1	94	0.00
61	T,M	1,3-Dichloropropane	10.000	10.502	-5.0	99	0.00
62	T,M	Tetrachloroethene	10.000	10.153	-1.5	97	0.00
63	T,M	Dibromochloromethane	10.000	9.555	4.5	95	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	9.437	5.6	96	0.00
66	T,M	1-Chlorohexane	10.000	9.969	0.3	98	0.00
67	P,T,M	Chlorobenzene	10.000	10.446	-4.5	98	0.00
68	T,M	1,1,1,2-Tetrachloroethane	10.000	10.003	-0.0	94	0.00
69	C,T,M	Ethylbenzene	10.000	10.286	-2.9	97	0.00
70	T,M	m-Xylene & p-Xylene	20.000	21.078	-5.4	98	0.00
71	T,M	o-Xylene	10.000	10.209	-2.1	98	0.00
72	T,M	Styrene	10.000	10.532	-5.3	97	0.00
73	T,M	Isopropylbenzene	10.000	10.096	-1.0	96	0.00
74	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	95	0.00
75	P,T,M	Bromoform	10.000	11.182	-11.8	93	0.00
76	P,T,M	1,1,2,2-Tetrachloroethane	10.000	9.774	2.3	95	0.00
77	S	4-Bromofluorobenzene	10.000	10.397	-4.0	97	0.00
78	T,M	1,2,3-Trichloropropane	10.000	9.624	3.8	94	0.00
79	T,M	trans-1,4-Dichloro-2-butene	10.000	9.953	0.5	95	0.00
80	T,M	n-Propylbenzene	10.000	10.835	-8.4	97	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F03\RFW014.D Vial: 14
Acq On : 3 Jun 2024 8:18 pm Operator: DHuynh
Sample : IVO06F0301 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 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	Bromobenzene	10.000	10.475	-4.7	96	0.00
82	T,M	1,3,5-Trimethylbenzene	10.000	10.489	-4.9	96	0.00
83	T,M	2-Chlorotoluene	10.000	10.784	-7.8	98	0.00
84	T,M	4-Chlorotoluene	10.000	10.466	-4.7	98	0.00
85	T,M	tert-Butylbenzene	10.000	10.290	-2.9	95	0.00
86	T,M	1,2,4-Trimethylbenzene	10.000	10.624	-6.2	97	0.00
87	T,M	sec-Butylbenzene	10.000	10.494	-4.9	96	0.00
88	T,M	p-Isopropyltoluene	10.000	10.601	-6.0	97	0.00
89	T,M	1,3-Dichlorobenzene	10.000	10.674	-6.7	96	0.00
90	T,M	1,2,3-Trimethylbenzene	10.000	10.571	-5.7	97	0.00
91	T,M	1,4-Dichlorobenzene	10.000	10.708	-7.1	97	0.00
92	T,M	n-Butylbenzene	10.000	10.473	-4.7	98	0.00
93	T,M	1,2-Dichlorobenzene	10.000	10.593	-5.9	96	0.00
94	T,M	1,2-Dibromo-3-chloropropane	10.000	9.196	8.0	92	-0.01
95	T,M	1,2,4-Trichlorobenzene	10.000	10.311	-3.1	99	0.00
96	T,M	Hexachlorobutadiene	10.000	10.088	-0.9	99	0.00
97	T,M	Naphthalene	10.000	10.222	-2.2	100	0.00
98	T,M	1,2,3-Trichlorobenzene	10.000	10.042	-0.4	104	0.00

Sa 6/11 3/29

(#) = Out of Range SPCC's out = 0 CCC's out = 0
RFW014.D VO06F03.M Thu Jun 13 10:30:40 2024 Page 3

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F03\RFW014.D Vial: 14
Acq On : 3 Jun 2024 8:18 pm Operator: DHuynh
Sample : IVO06F0301 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 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	97	0.00
2	T,M	Dichlorodifluoromethane	0.296	0.287	3.0	93	0.00
3	P,T,M	Chloromethane	0.451	0.437	3.1	97	0.00
4	C,T,M	Vinyl chloride	0.321	0.320	0.3	93	0.00
5	T,M	Bromomethane	0.291	0.295	-1.4	98	0.00
6	T,M	Chloroethane	0.247	0.246	0.4	98	0.00
7	T,M	Dichlorofluoromethane	0.607	0.604	0.5	96	0.00
8	T,M	Trichlorofluoromethane	0.399	0.371	7.0	93	0.00
9	T,M	Acrolein	0.020	0.020	0.0	95	0.00
10	T,M	1,1,2-Trichloro-1,2,2-trifl	0.184	0.173	6.0	93	0.00
11	T,M	Acetone	0.034	0.031	8.8	96	0.00
12	C,T,M	1,1-Dichloroethene	0.530	0.529	0.2	93	0.00
13	T,M	tert-Butyl alcohol	0.010	0.010	0.0	95	0.00
14	T,M	Acetonitrile	0.000	0.000	0.0	0#	0.00
15	T,M	Methyl acetate	0.023	0.021	8.7	90	-0.02
16	T,M	Iodomethane	0.526	0.537	-2.1	97	0.00
17	T,M	Allyl chloride	0.000	0.212	0.0	0#	0.00
18	T,M	Methylene chloride	0.444	0.438	1.4	96	0.00
19	T,M	Carbon disulfide	1.383	1.415	-2.3	95	0.00
20	T,M	Acrylonitrile	0.047	0.046	2.1	96	0.00
21	T,M	tert-Butyl methyl ether (MT	0.513	0.518	-1.0	96	0.00
22	T,M	trans-1,2-Dichloroethene	0.368	0.371	-0.8	98	0.00
23	T,M	Isopropyl ether (DIPE)	1.158	1.212	-4.7	96	0.00
24	T,M	Vinyl acetate	0.316	0.306	3.2	96	0.00
25	P,T,M	1,1-Dichloroethane	0.623	0.638	-2.4	96	0.00
26	T,M	2-Butanol	0.000	0.000	0.0	0#	-0.17#
27	T,M	tert-Butyl ethyl ether (ETB	0.841	0.867	-3.1	98	0.00
28	T,M	2-Butanone	0.055	0.055	0.0	95	0.00
29	T,M	2,2-Dichloropropane	0.353	0.345	2.3	94	0.00
30	T,M	cis-1,2-Dichloroethene	0.360	0.361	-0.3	96	0.00
31	C,T,M	Chloroform	0.571	0.565	1.1	97	0.00
32	T,M	Bromochloromethane	0.156	0.154	1.3	93	0.00
33	T,M	Tetrahydrofuran	0.034	0.029	14.7	89	-0.02
34	T,M	tert-Amyl alcohol	0.008	0.000	100.0#	0#	-8.06#
35	S	Dibromofluoromethane	0.300	0.298	0.7	96	0.00
36	T,M	1,1,1-Trichloroethane	0.440	0.437	0.7	97	0.00
37	T,M	Cyclohexane	0.445	0.428	3.8	89	0.00
38	T,M	2,2,4-Trimethylpentane	1.142	1.219	-6.7	103	0.00
39	T,M	1,1-Dichloropropene	0.150	0.149	0.7	97	0.00
40	T,M	Carbon tetrachloride	0.355	0.353	0.6	96	0.00
41	T,M	tert-Amyl methyl ether (TAM	0.628	0.646	-2.9	95	0.00

(#) = Out of Range

6/13/24

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F03\RFW014.D Vial: 14
Acq On : 3 Jun 2024 8:18 pm Operator: DHuynh
Sample : IVO06F0301 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 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	S	1,2-Dichloroethane-d4	0.216	0.222	-2.8	99	0.00
43	T,M	1,2-Dichloroethane	0.254	0.260	-2.4	94	0.00
44	T,M	Benzene	1.331	1.378	-3.5	95	0.00
45	T,M	Trichloroethene	0.339	0.349	-2.9	95	0.00
46	T,M	Methylcyclohexane	0.521	0.549	-5.4	93	0.00
47	C,T,M	1,2-Dichloropropane	0.322	0.332	-3.1	98	0.00
48	T,M	1,4-Dioxane	0.001	0.001	0.0	109	0.00
49	T,M	Bromodichloromethane	0.369	0.371	-0.5	97	0.00
50	T,M	Dibromomethane	0.136	0.129	5.1	95	0.00
51	T,M	2-Chloroethyl vinyl ether	0.106	0.101	4.7	91	0.00
52	T,M	4-Methyl-2-pentanone	0.156	0.169	-8.3	95	0.00
53	T,M	cis-1,3-Dichloropropene	0.470	0.482	-2.6	97	0.00
54	I	CHLOROBENZENE-D5	1.000	1.000	0.0	97	0.00
55	S	Toluene-d8	1.505	1.489	1.1	98	0.00
56	C,T,M	Toluene	1.743	1.783	-2.3	97	0.00
57	T,M	Ethyl methacrylate	0.297	0.301	-1.3	96	0.00
58	T,M	trans-1,3-Dichloropropene	0.429	0.431	-0.5	95	0.00
59	T,M	1,1,2-Trichloroethane	0.204	0.210	-2.9	101	0.00
60	T,M	2-Hexanone	0.121	0.121	0.0	94	0.00
61	T,M	1,3-Dichloropropane	0.386	0.405	-4.9	99	0.00
62	T,M	Tetrachloroethene	0.321	0.325	-1.2	97	0.00
63	T,M	Dibromochloromethane	0.273	0.261	4.4	95	0.00
64	T,M	2-Ethyl-1-butanol	0.000	0.000	0.0	0#	0.00
65	T,M	1,2-Dibromoethane	0.204	0.192	5.9	96	0.00
66	T,M	1-Chlorohexane	0.820	0.818	0.2	98	0.00
67	P,T,M	Chlorobenzene	0.983	1.026	-4.4	98	0.00
68	T,M	1,1,1,2-Tetrachloroethane	0.331	0.331	0.0	94	0.00
69	C,T,M	Ethylbenzene	1.902	1.957	-2.9	97	0.00
70	T,M	m-Xylene & p-Xylene	1.423	1.500	-5.4	98	0.00
71	T,M	o-Xylene	1.462	1.492	-2.1	98	0.00
72	T,M	Styrene	1.034	1.089	-5.3	97	0.00
73	T,M	Isopropylbenzene	1.793	1.811	-1.0	96	0.00
74	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	95	0.00
75	P,T,M	Bromoform	0.282	0.315	-11.7	93	0.00
76	P,T,M	1,1,2,2-Tetrachloroethane	0.657	0.642	2.3	95	0.00
77	S	4-Bromofluorobenzene	1.326	1.379	-4.0	97	0.00
78	T,M	1,2,3-Trichloropropane	0.152	0.146	3.9	94	0.00
79	T,M	trans-1,4-Dichloro-2-butene	0.165	0.164	0.6	95	0.00
80	T,M	n-Propylbenzene	6.462	7.001	-8.3	97	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F03\RFW014.D Vial: 14
Acq On : 3 Jun 2024 8:18 pm Operator: DHuynh
Sample : IVO06F0301 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 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	Bromobenzene	0.938	0.982	-4.7	96	0.00
82	T,M	1,3,5-Trimethylbenzene	4.202	4.407	-4.9	96	0.00
83	T,M	2-Chlorotoluene	4.197	4.526	-7.8	98	0.00
84	T,M	4-Chlorotoluene	3.556	3.722	-4.7	98	0.00
85	T,M	tert-Butylbenzene	0.914	0.941	-3.0	95	0.00
86	T,M	1,2,4-Trimethylbenzene	4.038	4.290	-6.2	97	0.00
87	T,M	sec-Butylbenzene	5.529	5.802	-4.9	96	0.00
88	T,M	p-Isopropyltoluene	4.561	4.835	-6.0	97	0.00
89	T,M	1,3-Dichlorobenzene	1.988	2.122	-6.7	96	0.00
90	T,M	1,2,3-Trimethylbenzene	3.762	3.977	-5.7	97	0.00
91	T,M	1,4-Dichlorobenzene	1.965	2.104	-7.1	97	0.00
92	T,M	n-Butylbenzene	4.681	4.902	-4.7	98	0.00
93	T,M	1,2-Dichlorobenzene	1.637	1.734	-5.9	96	0.00
94	T,M	1,2-Dibromo-3-chloropropane	0.080	0.074	7.5	92	-0.01
95	T,M	1,2,4-Trichlorobenzene	0.969	0.999	-3.1	99	0.00
96	T,M	Hexachlorobutadiene	0.611	0.617	-1.0	99	0.00
97	T,M	Naphthalene	1.373	1.404	-2.3	100	0.00
98	T,M	1,2,3-Trichlorobenzene	0.733	0.736	-0.4	104	0.00

SG 6/13/24

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW014.D Vial: 14
Acq On : 3 Jun 2024 8:18 pm Operator: DHuynh
Sample : IVO06F0301 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 13 10:30 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.05	114	3067327	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.53	117	2447078	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.43	152	825620	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	8.06	111	913355	9.92	ug/l	0.00
Spiked Amount 10.000			Recovery = 99.20%			
42) 1,2-Dichloroethane-d4	9.19	65	679675	10.26	ug/l	0.00
Spiked Amount 10.000			Recovery = 102.60%			
55) Toluene-d8	12.90	98	3643693	9.89	ug/l	0.00
Spiked Amount 10.000			Recovery = 98.90%			
77) 4-Bromofluorobenzene	17.54	95	1138289	10.40	ug/l	0.00
Spiked Amount 10.000			Recovery = 104.00%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.63	85	879158	9.68	ug/l	98
3) Chloromethane	1.86	50	1339526	9.69	ug/l	99
4) Vinyl chloride	1.98	62	981772	9.96	ug/l	100
5) Bromomethane	2.44	94	904417	10.12	ug/l	98
6) Chloroethane	2.52	64	754301	9.96	ug/l	98
7) Dichlorofluoromethane	2.55	67	1852639	9.94	ug/l	100
8) Trichlorofluoromethane	2.79	101	1137996	9.30	ug/l	98
9) Acrolein	3.34	56	311789	49.80	ug/l	97
10) 1,1,2-Trichloro-1,2,2-trif	3.38	151	529874	9.38	ug/l	99
11) Acetone	3.42	43	472714	45.00	ug/l	98
12) 1,1-Dichloroethene	3.57	61	1623684	9.98	ug/l	99
13) tert-Butyl alcohol	3.74	59	783184	244.74	ug/l	100
15) Methyl acetate	4.12	74	63857	8.93	ug/l	95
16) Iodomethane	4.03	142	1646901	10.20	ug/l	100
18) Methylene chloride	4.33	49	1343657	9.86	ug/l	98
19) Carbon disulfide	4.28	76	4341402	10.24	ug/l	99
20) Acrylonitrile	4.58	53	706101	49.48	ug/l	99
21) tert-Butyl methyl ether (M	4.62	73	1588780	10.10	ug/l	99
22) trans-1,2-Dichloroethene	4.85	96	1139396	10.09	ug/l	99
23) Isopropyl ether (DIPE)	5.54	45	3718267	10.47	ug/l	100
24) Vinyl acetate	5.77	43	937837	9.68	ug/l	100
25) 1,1-Dichloroethane	5.71	63	1956927	10.23	ug/l	99
27) tert-Butyl ethyl ether (ET	6.46	59	2659759	10.31	ug/l	99
28) 2-Butanone	6.76	43	847750	50.42	ug/l	99
29) 2,2-Dichloropropane	7.01	77	1057750	9.76	ug/l	98
30) cis-1,2-Dichloroethene	7.13	96	1105829	10.00	ug/l	99
31) Chloroform	7.53	83	1733464	9.89	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW014.D Vial: 14
Acq On : 3 Jun 2024 8:18 pm Operator: DHuynh
Sample : IVO06F0301 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 13 10:30 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.91	130	473424	9.90	ug/l	99
33)	Tetrahydrofuran	8.01	42	88738	8.62	ug/l	91
36)	1,1,1-Trichloroethane	8.45	97	1340703	9.93	ug/l	99
37)	Cyclohexane	8.43	84	1311974	9.61	ug/l	100
38)	2,2,4-Trimethylpentane	8.62	57	3739017	10.67	ug/l	100
39)	1,1-Dichloropropene	8.81	110	456656	9.94	ug/l	96
40)	Carbon tetrachloride	8.98	119	1081570	9.92	ug/l	98
41)	tert-Amyl methyl ether (TA	9.15	73	1981882	10.29	ug/l	99
43)	1,2-Dichloroethane	9.38	62	797432	10.22	ug/l	99
44)	Benzene	9.36	78	4225842	10.35	ug/l	99
45)	Trichloroethene	10.63	130	1070513	10.30	ug/l	98
46)	Methylcyclohexane	10.72	83	1683252	10.53	ug/l	97
47)	1,2-Dichloropropane	10.99	63	1017751	10.31	ug/l	98
48)	1,4-Dioxane	11.54	88	62349	208.70	ug/l	100
49)	Bromodichloromethane	11.43	83	1139212	10.05	ug/l	98
50)	Dibromomethane	11.51	93	396050	9.48	ug/l	98
51)	2-Chloroethyl vinyl ether	12.12	63	309067	9.48	ug/l	96
52)	4-Methyl-2-pentanone	12.18	43	2585228	54.07	ug/l	98
53)	cis-1,3-Dichloropropene	12.50	75	1479718	10.27	ug/l	100
56)	Toluene	13.04	91	4363244	10.23	ug/l	99
57)	Ethyl methacrylate	13.46	69	735734	10.12	ug/l	98
58)	trans-1,3-Dichloropropene	13.42	75	1053504	10.03	ug/l	98
59)	1,1,2-Trichloroethane	13.67	97	514511	10.29	ug/l	97
60)	2-Hexanone	13.76	43	1476393	49.96	ug/l	98
61)	1,3-Dichloropropane	14.11	76	990803	10.50	ug/l	99
62)	Tetrachloroethene	14.18	164	796511	10.15	ug/l	98
63)	Dibromochloromethane	14.53	129	638152	9.56	ug/l	98
65)	1,2-Dibromoethane	14.87	107	470472	9.44	ug/l	99
66)	1-Chlorohexane	15.22	91	2000900	9.97	ug/l	100
67)	Chlorobenzene	15.60	112	2511716	10.45	ug/l	100
68)	1,1,1,2-Tetrachloroethane	15.69	131	809112	10.00	ug/l	97
69)	Ethylbenzene	15.70	91	4787709	10.29	ug/l	100
70)	m-Xylene & p-Xylene	15.83	91	7339907	21.08	ug/l	98
71)	o-Xylene	16.56	91	3651913	10.21	ug/l	99
72)	Styrene	16.62	104	2664833	10.53	ug/l	99
73)	Isopropylbenzene	17.17	105	4430704	10.10	ug/l	100
75)	Bromoform	17.17	173	260456	11.18	ug/l	99
76)	1,1,2,2-Tetrachloroethane	17.45	83	530261	9.77	ug/l	95
78)	1,2,3-Trichloropropane	17.66	110	120911	9.62	ug/l	95
79)	trans-1,4-Dichloro-2-buten	17.77	53	135264	9.95	ug/l	100
80)	n-Propylbenzene	17.77	91	5780527	10.84	ug/l	100

(#) = qualifier out of range (m) = manual integration

Su 6/13/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW014.D Vial: 14
Acq On : 3 Jun 2024 8:18 pm Operator: DHuynh
Sample : IVO06F0301 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 13 10:30 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
81)	Bromobenzene	17.80	156	810814	10.48 ug/l	100
82)	1,3,5-Trimethylbenzene	17.97	105	3638846	10.49 ug/l	99
83)	2-Chlorotoluene	17.99	91	3736634	10.78 ug/l	98
84)	4-Chlorotoluene	18.05	91	3073073	10.47 ug/l	99
85)	tert-Butylbenzene	18.43	134	776673	10.29 ug/l	99
86)	1,2,4-Trimethylbenzene	18.47	105	3541709	10.62 ug/l	99
87)	sec-Butylbenzene	18.67	105	4790341	10.49 ug/l	99
88)	p-Isopropyltoluene	18.83	119	3991585	10.60 ug/l	99
89)	1,3-Dichlorobenzene	18.93	146	1752008	10.67 ug/l	98
90)	1,2,3-Trimethylbenzene	19.01	105	3283086	10.57 ug/l	99
91)	1,4-Dichlorobenzene	19.06	146	1737227	10.71 ug/l	98
92)	n-Butylbenzene	19.28	91	4047343	10.47 ug/l	100
93)	1,2-Dichlorobenzene	19.45	146	1431584	10.59 ug/l	100
94)	1,2-Dibromo-3-chloropropan	20.22	157	61053	9.20 ug/l	98
95)	1,2,4-Trichlorobenzene	21.06	180	824868	10.31 ug/l	99
96)	Hexachlorobutadiene	21.19	225	509117	10.09 ug/l	98
97)	Naphthalene	21.33	128	1159111	10.22 ug/l	99
98)	1,2,3-Trichlorobenzene	21.58	180	607870	10.04 ug/l	98

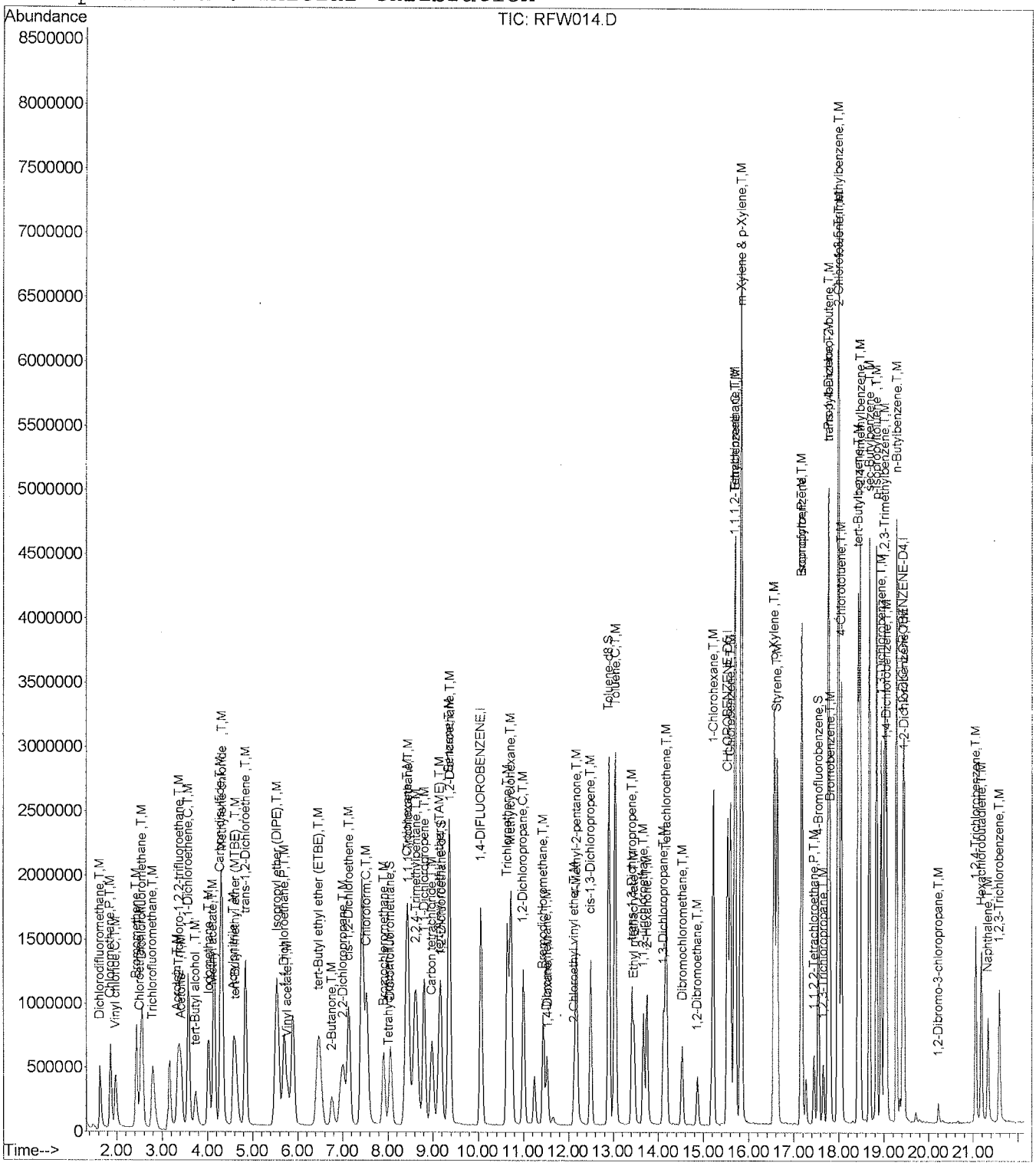
(#) = qualifier out of range (m) = manual integration

Su 6/13/24

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F03\RFW014.D Vial: 14
Acq On : 3 Jun 2024 8:18 pm Operator: DHuynh
Sample : IVO06F0301 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 13 10:30 2024 Quant Results File: VO06F03.RE

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration



Su 6/13/24

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 : 24F147

Lab File ID: RGW030
BFB Injection Date: 07/02/24

Instrument ID: 06
BFB Injection Time: 11:2B

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	15.946
75	30 - 60% of mass 95	42.254
95	Base Peak, 100% relative abundance	100.000
96	5 - 9% of mass 95	6.114
173	Less than 2% of mass 174	0.000(0)1
174	Greater than 50% of mass 95	77.B5B
175	5 - 9% of mass 174	5.2B5(6.79)1
176	95 - 101% % of mass 174	77.634(99.71)1
177	5 - 9% % of mass 176	4.430(5.71)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	CVO06F0319	RGW031	07/02/24	12:05
2	LCD1W	VO06G02C	RGW033	07/02/24	13:02
3	MBLK1W	VO06G02B	RGW035	07/02/24	13:56
4	LCS1W	VO06G02X	RGW049	07/02/24	20:05
5	TB13-GW062B24	24F147-01	RGW051	07/02/24	20:57
6	EB12-GW062B24	24F147-03	RGW052	07/02/24	21:23
7	MW4S-GW062B24	24F147-02	RGW053	07/02/24	21:49

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

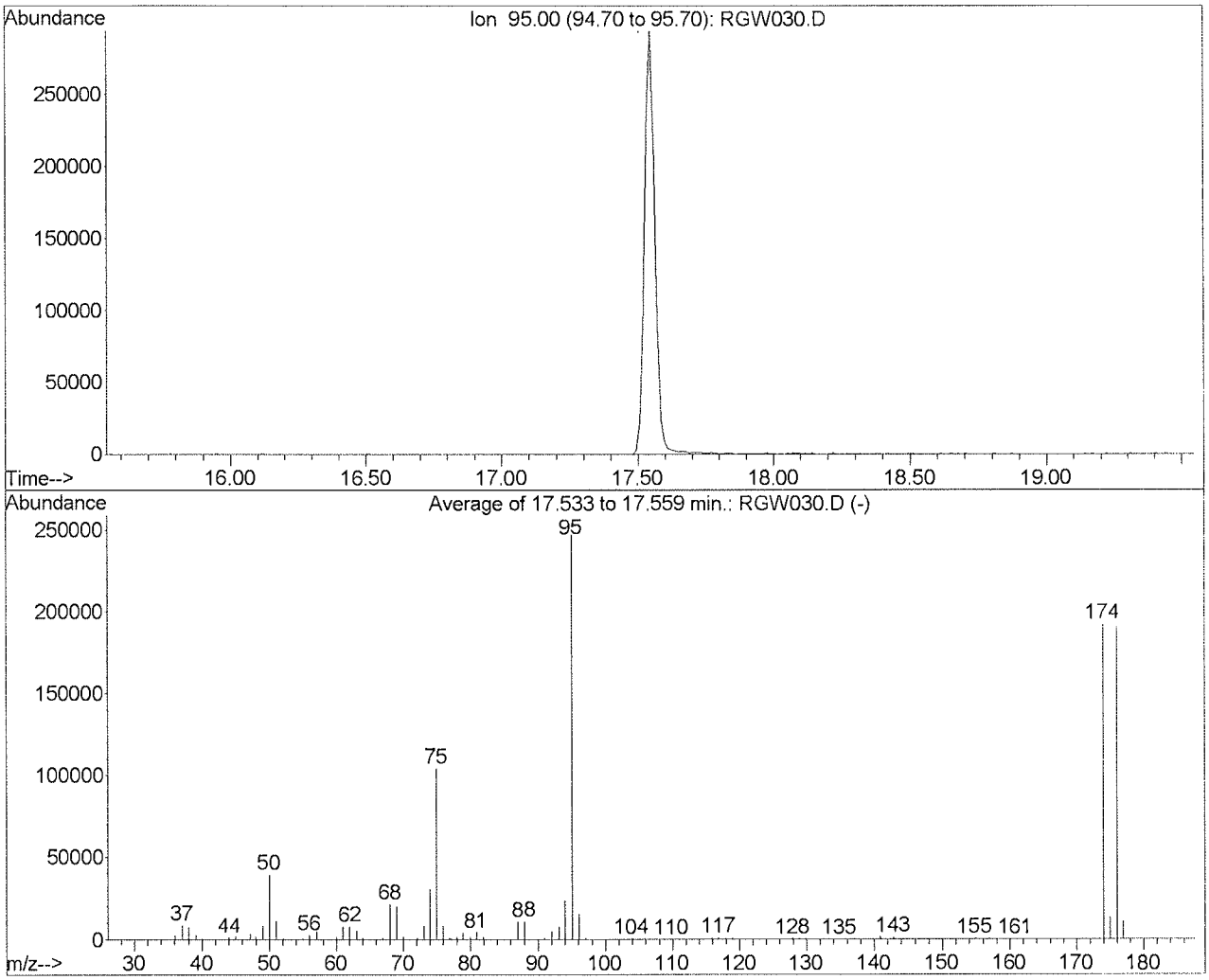
Lab Name: EMAX Laboratories, Inc.
Lab Code: EMAX
Lab File ID: RFW007
Instrument ID: 06

Project: VA SALT LAKE CITY
SDG No: 24F147
Date Analyzed: 06/03/24
Time Analyzed: 17:14

	INTERNAL STANDARD (IS)	1,4-DIFLUOROBENZENE		CHLOROBENZENE-D5		1,2-DICHLOROBENZENE-D4	
		Area #	RT #	Area #	RT #	Area #	RT #
	12 HOUR STD	3175665	10.05	2524233	15.53	B65825	19.43
	UPPER LIMIT	6351330	10.22	5048466	15.70	1731650	19.60
	LOWER LIMIT	1587833	9.883	1262117	15.36	432913	19.26
		Area #	RT #	Area #	RT #	Area #	RT #
1	VSTD10	2699803	10.07	2184024	15.53	813346	19.43
2	LCD1W	2959127	10.05	2392814	15.53	866264	19.43
3	MBLK1W	3002485	10.05	2446561	15.53	895062	19.43
4	LCS1W	2892169	10.07	2399864	15.53	906072	19.43
5	TB13-GW062824	2981195	10.07	2407041	15.53	874896	19.43
6	EB12-GW062824	2863818	10.07	2318980	15.53	879725	19.43
7	MW4S-GW062824	2691873	10.07	2202288	15.53	801784	19.43

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\24G02\RGW030.D Vial: 1
Acq On : 2 Jul 2024 11:28 am Operator: LPriet
Sample : BFB06G02 Inst : 06
Misc : T/CHK Multiplr: 1.00
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260



AutoFind: Scans 846, 847, 848; Background Corrected with Scan 840

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	15.9	39363	PASS
75	95	30	60	42.3	104304	PASS
95	95	100	100	100.0	246848	PASS
96	95	5	9	6.1	15092	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	77.9	192192	PASS
175	174	5	9	6.8	13045	PASS
176	174	95	101	99.7	191637	PASS
177	176	5	9	5.7	10936	PASS

RGW030.D VO06F03.M Wed Jul 03 14:05:19 2024

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24G02\RGW031.D Vial: 2
Acq On : 2 Jul 2024 12:05 pm Operator: LPriet
Sample : CVO06F0319 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 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	0.02
2	T,M	Dichlorodifluoromethane	10.000	9.521	4.8	81	0.00
3	P,T,M	Chloromethane	10.000	8.471	15.3	75	0.00
4	C,T,M	Vinyl chloride	10.000	8.988	10.1	74	0.00
5	T,M	Bromomethane	10.000	9.858	1.4	84	0.00
6	T,M	Chloroethane	10.000	9.972	0.3	86	0.00
7	T,M	Dichlorofluoromethane	10.000	9.642	3.6	82	0.00
8	T,M	Trichlorofluoromethane	10.000	9.794	2.1	86	0.00
9	T,M	Acrolein	50.000	37.331	25.3#	62	0.00
10	T,M	1,1,2-Trichloro-1,2,2-trifl	10.000	11.463	-14.6	100	0.00
11	T,M	Acetone	50.000	48.029	3.9	90	0.00
12	C,T,M	1,1-Dichloroethene	10.000	9.783	2.2	80	0.00
13	T,M	tert-Butyl alcohol	250.000	260.252	-4.1	89	0.00
14	T,M	Acetonitrile	-1.000	0.000	0.0	0	0.00
15	T,M	Methyl acetate	10.000	9.428	5.7	84	0.00
16	T,M	Iodomethane	10.000	10.595	-6.0	89	0.00
17	T,M	Allyl chloride	10.000	0.000	100.0#	0	0.00
18	T,M	Methylene chloride	10.000	9.413	5.9	81	0.00
19	T,M	Carbon disulfide	10.000	9.829	1.7	80	0.02
20	T,M	Acrylonitrile	50.000	53.528	-7.1	91	0.00
21	T,M	tert-Butyl methyl ether (MT	10.000	11.056	-10.6	92	0.00
22	T,M	trans-1,2-Dichloroethene	10.000	10.325	-3.2	88	0.00
23	T,M	Isopropyl ether (DIPE)	10.000	9.441	5.6	76	0.00
24	T,M	Vinyl acetate	10.000	9.393	6.1	82	0.02
25	P,T,M	1,1-Dichloroethane	10.000	9.728	2.7	81	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	9.545	4.6	80	0.00
28	T,M	2-Butanone	50.000	47.516	5.0	79	0.00
29	T,M	2,2-Dichloropropane	10.000	11.959	-19.6	101	0.02
30	T,M	cis-1,2-Dichloroethene	10.000	10.412	-4.1	88	0.02
31	C,T,M	Chloroform	10.000	9.493	5.1	82	0.00
32	T,M	Bromochloromethane	10.000	10.646	-6.5	88	0.00
33	T,M	Tetrahydrofuran	10.000	8.954	10.5	81	0.00
34	T,M	tert-Amyl alcohol	50.000	1.035	97.9#	2	0.06
35	S	Dibromofluoromethane	10.000	10.896	-9.0	92	0.00
36	T,M	1,1,1-Trichloroethane	10.000	10.168	-1.7	87	0.00
37	T,M	Cyclohexane	10.000	10.250	-2.5	84	0.00
38	T,M	2,2,4-Trimethylpentane	10.000	0.006	99.9#	0	0.04
39	T,M	1,1-Dichloropropene	10.000	10.145	-1.4	87	0.00
40	T,M	Carbon tetrachloride	10.000	10.327	-3.3	88	0.00
41	T,M	tert-Amyl methyl ether (TAM	10.000	10.655	-6.5	87	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24G02\RGW031.D Vial: 2
Acq On : 2 Jul 2024 12:05 pm Operator: LPriet
Sample : CVO06F0319 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 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	S	1,2-Dichloroethane-d4	10.000	10.111	-1.1	86	0.00
43	T,M	1,2-Dichloroethane	10.000	9.158	8.4	74	0.00
44	T,M	Benzene	10.000	9.875	1.3	80	0.00
45	T,M	Trichloroethene	10.000	10.183	-1.8	83	0.00
46	T,M	Methylcyclohexane	10.000	10.721	-7.2	83	0.00
47	C,T,M	1,2-Dichloropropane	10.000	9.130	8.7	76	0.00
48	T,M	1,4-Dioxane	200.000	184.623	7.7	85	0.00
49	T,M	Bromodichloromethane	10.000	9.300	7.0	79	0.00
50	T,M	Dibromomethane	10.000	9.721	2.8	86	0.00
51	T,M	2-Chloroethyl vinyl ether	10.000	6.782	32.2#	57	0.00
52	T,M	4-Methyl-2-pentanone	50.000	49.022	2.0	75	0.00
53	T,M	cis-1,3-Dichloropropene	10.000	9.131	8.7	76	0.00
54	I	CHLOROBENZENE-D5	10.000	10.000	0.0	87	0.00
55	S	Toluene-d8	10.000	10.046	-0.5	89	0.00
56	C,T,M	Toluene	10.000	9.283	7.2	78	0.00
57	T,M	Ethyl methacrylate	10.000	9.313	6.9	79	0.00
58	T,M	trans-1,3-Dichloropropene	10.000	8.741	12.6	74	0.00
59	T,M	1,1,2-Trichloroethane	10.000	10.088	-0.9	88	0.00
60	T,M	2-Hexanone	50.000	47.747	4.5	80	0.00
61	T,M	1,3-Dichloropropane	10.000	9.348	6.5	78	0.00
62	T,M	Tetrachloroethene	10.000	10.247	-2.5	87	0.00
63	T,M	Dibromochloromethane	10.000	9.426	5.7	83	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	9.103	9.0	83	0.00
66	T,M	1-Chlorohexane	10.000	9.038	9.6	79	0.00
67	P,T,M	Chlorobenzene	10.000	9.928	0.7	83	0.00
68	T,M	1,1,1,2-Tetrachloroethane	10.000	10.069	-0.7	85	0.00
69	C,T,M	Ethylbenzene	10.000	9.533	4.7	80	0.00
70	T,M	m-Xylene & p-Xylene	20.000	19.375	3.1	81	0.00
71	T,M	o-Xylene	10.000	9.653	3.5	83	0.00
72	T,M	Styrene	10.000	9.918	0.8	81	0.00
73	T,M	Isopropylbenzene	10.000	9.953	0.5	85	0.00
74	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	94	0.00
75	P,T,M	Bromoform	10.000	10.887	-8.9	89	0.00
76	P,T,M	1,1,2,2-Tetrachloroethane	10.000	9.255	7.4	89	0.00
77	S	4-Bromofluorobenzene	10.000	9.581	4.2	88	0.00
78	T,M	1,2,3-Trichloropropane	10.000	9.284	7.2	89	0.00
79	T,M	trans-1,4-Dichloro-2-butene	10.000	7.395	26.1#	69	0.00
80	T,M	n-Propylbenzene	10.000	9.208	7.9	81	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24G02\RGW031.D Vial: 2
Acq On : 2 Jul 2024 12:05 pm Operator: LPriet
Sample : CVO06F0319 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 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	Bromobenzene	10.000	9.681	3.2	87	0.00
82	T,M	1,3,5-Trimethylbenzene	10.000	9.221	7.8	83	0.00
83	T,M	2-Chlorotoluene	10.000	9.187	8.1	82	0.00
84	T,M	4-Chlorotoluene	10.000	8.386	16.1	77	0.00
85	T,M	tert-Butylbenzene	10.000	9.470	5.3	86	0.00
86	T,M	1,2,4-Trimethylbenzene	10.000	9.258	7.4	83	0.00
87	T,M	sec-Butylbenzene	10.000	9.516	4.8	85	0.00
88	T,M	p-Isopropyltoluene	10.000	9.068	9.3	82	0.00
89	T,M	1,3-Dichlorobenzene	10.000	9.103	9.0	81	0.00
90	T,M	1,2,3-Trimethylbenzene	10.000	9.498	5.0	86	0.00
91	T,M	1,4-Dichlorobenzene	10.000	8.821	11.8	79	-0.01
92	T,M	n-Butylbenzene	10.000	8.952	10.5	83	0.00
93	T,M	1,2-Dichlorobenzene	10.000	9.495	5.1	85	0.00
94	T,M	1,2-Dibromo-3-chloropropane	10.000	10.230	-2.3	101	0.02
95	T,M	1,2,4-Trichlorobenzene	10.000	9.985	0.2	94	0.02
96	T,M	Hexachlorobutadiene	10.000	9.830	1.7	95	0.02
97	T,M	Naphthalene	10.000	9.761	2.4	94	0.02
98	T,M	1,2,3-Trichlorobenzene	10.000	9.561	4.4	98	0.03

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24G02\RGW031.D Vial: 2
Acq On : 2 Jul 2024 12:05 pm Operator: LPriet
Sample : CVO06F0319 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 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	0.02
2	T,M	Dichlorodifluoromethane	0.296	0.282	4.7	81	0.00
3	P,T,M	Chloromethane	0.451	0.382	15.3	75	0.00
4	C,T,M	Vinyl chloride	0.321	0.289	10.0	74	0.00
5	T,M	Bromomethane	0.291	0.287	1.4	84	0.00
6	T,M	Chloroethane	0.247	0.246	0.4	86	0.00
7	T,M	Dichlorofluoromethane	0.607	0.586	3.5	82	0.00
8	T,M	Trichlorofluoromethane	0.399	0.391	2.0	86	0.00
9	T,M	Acrolein	0.020	0.015	25.0#	62	0.00
10	T,M	1,1,2-Trichloro-1,2,2-trifl	0.184	0.211	-14.7	100	0.00
11	T,M	Acetone	0.034	0.033	2.9	90	0.00
12	C,T,M	1,1-Dichloroethene	0.530	0.519	2.1	80	0.00
13	T,M	tert-Butyl alcohol	0.010	0.011	-10.0	89	0.00
14	T,M	Acetonitrile	0.000	0.000	0.0	0#	0.00
15	T,M	Methyl acetate	0.023	0.022	4.3	84	0.00
16	T,M	Iodomethane	0.526	0.558	-6.1	89	0.00
17	T,M	Allyl chloride	0.000	0.217	0.0	0#	0.00
18	T,M	Methylene chloride	0.444	0.418	5.9	81	0.00
19	T,M	Carbon disulfide	1.383	1.359	1.7	80	0.02
20	T,M	Acrylonitrile	0.047	0.050	-6.4	91	0.00
21	T,M	tert-Butyl methyl ether (MT	0.513	0.567	-10.5	92	0.00
22	T,M	trans-1,2-Dichloroethene	0.368	0.380	-3.3	88	0.00
23	T,M	Isopropyl ether (DIPE)	1.158	1.093	5.6	76	0.00
24	T,M	Vinyl acetate	0.316	0.297	6.0	82	0.02
25	P,T,M	1,1-Dichloroethane	0.623	0.607	2.6	81	0.00
26	T,M	2-Butanol	0.000	0.009	0.0	0#	0.00
27	T,M	tert-Butyl ethyl ether (ETB	0.841	0.803	4.5	80	0.00
28	T,M	2-Butanone	0.055	0.052	5.5	79	0.00
29	T,M	2,2-Dichloropropane	0.353	0.422	-19.5	101	0.02
30	T,M	cis-1,2-Dichloroethene	0.360	0.375	-4.2	88	0.02
31	C,T,M	Chloroform	0.571	0.542	5.1	82	0.00
32	T,M	Bromochloromethane	0.156	0.166	-6.4	88	0.00
33	T,M	Tetrahydrofuran	0.034	0.030	11.8	81	0.00
34	T,M	tert-Amyl alcohol	0.008	0.000	100.0#	2#	0.06
35	S	Dibromofluoromethane	0.300	0.327	-9.0	92	0.00
36	T,M	1,1,1-Trichloroethane	0.440	0.448	-1.8	87	0.00
37	T,M	Cyclohexane	0.445	0.456	-2.5	84	0.00
38	T,M	2,2,4-Trimethylpentane	1.142	0.001	99.9#	0#	0.04
39	T,M	1,1-Dichloropropene	0.150	0.152	-1.3	87	0.00
40	T,M	Carbon tetrachloride	0.355	0.367	-3.4	88	0.00
41	T,M	tert-Amyl methyl ether (TAM	0.628	0.669	-6.5	87	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24G02\RGW031.D Vial: 2
Acq On : 2 Jul 2024 12:05 pm Operator: LPriet
Sample : CVO06F0319 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 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	S	1,2-Dichloroethane-d4	0.216	0.218	-0.9	86	0.00
43	T,M	1,2-Dichloroethane	0.254	0.233	8.3	74	0.00
44	T,M	Benzene	1.331	1.315	1.2	80	0.00
45	T,M	Trichloroethene	0.339	0.345	-1.8	83	0.00
46	T,M	Methylcyclohexane	0.521	0.559	-7.3	83	0.00
47	C,T,M	1,2-Dichloropropane	0.322	0.294	8.7	76	0.00
48	T,M	1,4-Dioxane	0.001	0.001	0.0	85	0.00
49	T,M	Bromodichloromethane	0.369	0.344	6.8	79	0.00
50	T,M	Dibromomethane	0.136	0.132	2.9	86	0.00
51	T,M	2-Chloroethyl vinyl ether	0.106	0.072	32.1#	57	0.00
52	T,M	4-Methyl-2-pentanone	0.156	0.153	1.9	75	0.00
53	T,M	cis-1,3-Dichloropropene	0.470	0.429	8.7	76	0.00
54	I	CHLOROBENZENE-D5	1.000	1.000	0.0	87	0.00
55	S	Toluene-d8	1.505	1.512	-0.5	89	0.00
56	C,T,M	Toluene	1.743	1.618	7.2	78	0.00
57	T,M	Ethyl methacrylate	0.297	0.277	6.7	79	0.00
58	T,M	trans-1,3-Dichloropropene	0.429	0.375	12.6	74	0.00
59	T,M	1,1,2-Trichloroethane	0.204	0.206	-1.0	88	0.00
60	T,M	2-Hexanone	0.121	0.115	5.0	80	0.00
61	T,M	1,3-Dichloropropane	0.386	0.360	6.7	78	0.00
62	T,M	Tetrachloroethene	0.321	0.328	-2.2	87	0.00
63	T,M	Dibromochloromethane	0.273	0.257	5.9	83	0.00
64	T,M	2-Ethyl-1-butanol	0.000	0.000	0.0	0#	0.00
65	T,M	1,2-Dibromoethane	0.204	0.185	9.3	83	0.00
66	T,M	1-Chlorohexane	0.820	0.741	9.6	79	0.00
67	P,T,M	Chlorobenzene	0.983	0.976	0.7	83	0.00
68	T,M	1,1,1,2-Tetrachloroethane	0.331	0.333	-0.6	85	0.00
69	C,T,M	Ethylbenzene	1.902	1.813	4.7	80	0.00
70	T,M	m-Xylene & p-Xylene	1.423	1.379	3.1	81	0.00
71	T,M	o-Xylene	1.462	1.411	3.5	83	0.00
72	T,M	Styrene	1.034	1.026	0.8	81	0.00
73	T,M	Isopropylbenzene	1.793	1.785	0.4	85	0.00
74	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	94	0.00
75	P,T,M	Bromoform	0.282	0.307	-8.9	89	0.00
76	P,T,M	1,1,2,2-Tetrachloroethane	0.657	0.608	7.5	89	0.00
77	S	4-Bromofluorobenzene	1.326	1.270	4.2	88	0.00
78	T,M	1,2,3-Trichloropropane	0.152	0.141	7.2	89	0.00
79	T,M	trans-1,4-Dichloro-2-butene	0.165	0.122	26.1#	69	0.00
80	T,M	n-Propylbenzene	6.462	5.950	7.9	81	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24G02\RGW031.D Vial: 2
Acq On : 2 Jul 2024 12:05 pm Operator: LPriet
Sample : CVO06F0319 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 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	Bromobenzene	0.938	0.908	3.2	87	0.00
82	T,M	1,3,5-Trimethylbenzene	4.202	3.874	7.8	83	0.00
83	T,M	2-Chlorotoluene	4.197	3.856	8.1	82	0.00
84	T,M	4-Chlorotoluene	3.556	2.982	16.1	77	0.00
85	T,M	tert-Butylbenzene	0.914	0.866	5.3	86	0.00
86	T,M	1,2,4-Trimethylbenzene	4.038	3.738	7.4	83	0.00
87	T,M	sec-Butylbenzene	5.529	5.262	4.8	85	0.00
88	T,M	p-Isopropyltoluene	4.561	4.136	9.3	82	0.00
89	T,M	1,3-Dichlorobenzene	1.988	1.810	9.0	81	0.00
90	T,M	1,2,3-Trimethylbenzene	3.762	3.573	5.0	86	0.00
91	T,M	1,4-Dichlorobenzene	1.965	1.733	11.8	79	-0.01
92	T,M	n-Butylbenzene	4.681	4.190	10.5	83	0.00
93	T,M	1,2-Dichlorobenzene	1.637	1.554	5.1	85	0.00
94	T,M	1,2-Dibromo-3-chloropropane	0.080	0.082	-2.5	101	0.02
95	T,M	1,2,4-Trichlorobenzene	0.969	0.968	0.1	94	0.02
96	T,M	Hexachlorobutadiene	0.611	0.601	1.6	95	0.02
97	T,M	Naphthalene	1.373	1.341	2.3	94	0.02
98	T,M	1,2,3-Trichlorobenzene	0.733	0.701	4.4	98	0.03

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24G02\RGW031.D Vial: 2
Acq On : 2 Jul 2024 12:05 pm Operator: LPriet
Sample : CVO06F0319 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jul 2 12:27 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.07	114	2699803	10.00	ug/l	0.02
54) CHLOROBENZENE-D5	15.53	117	2184024	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.43	152	813346	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	8.06	111	883013	10.90	ug/l	0.00
Spiked Amount 10.000			Recovery =	109.00%		
42) 1,2-Dichloroethane-d4	9.19	65	589327	10.11	ug/l	0.00
Spiked Amount 10.000			Recovery =	101.10%		
55) Toluene-d8	12.90	98	3302686	10.05	ug/l	0.00
Spiked Amount 10.000			Recovery =	100.50%		
77) 4-Bromofluorobenzene	17.55	95	1033349	9.58	ug/l	0.00
Spiked Amount 10.000			Recovery =	95.80%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.64	85	761271	9.52	ug/l	98
3) Chloromethane	1.87	50	1030911	8.47	ug/l	97
4) Vinyl chloride	1.99	62	779882	8.99	ug/l	92
5) Bromomethane	2.45	94	775467	9.86	ug/l	97
6) Chloroethane	2.52	64	664584	9.97	ug/l	97
7) Dichlorofluoromethane	2.56	67	1581207	9.64	ug/l	97
8) Trichlorofluoromethane	2.80	101	1055260	9.79	ug/l	98
9) Acrolein	3.34	56	205700	37.33	ug/l	94
10) 1,1,2-Trichloro-1,2,2-trif	3.38	151	570018	11.46	ug/l	98
11) Acetone	3.42	43	444100	48.03	ug/l	98
12) 1,1-Dichloroethene	3.57	61	1400658	9.78	ug/l	94
13) tert-Butyl alcohol	3.74	59	733035	260.25	ug/l	99
15) Methyl acetate	4.14	74	59374	9.43	ug/l	99
16) Iodomethane	4.03	142	1505854	10.59	ug/l	94
18) Methylene chloride	4.33	49	1129128	9.41	ug/l	90
19) Carbon disulfide	4.31	76	3669077	9.83	ug/l	99
20) Acrylonitrile	4.58	53	672313	53.53	ug/l	99
21) tert-Butyl methyl ether (M	4.62	73	1530372	11.06	ug/l	99
22) trans-1,2-Dichloroethene	4.85	96	1026634	10.32	ug/l	99
23) Isopropyl ether (DIPE)	5.54	45	2950562	9.44	ug/l	94
24) Vinyl acetate	5.79	43	800688	9.39	ug/l	96
25) 1,1-Dichloroethane	5.71	63	1637439	9.73	ug/l	99
27) tert-Butyl ethyl ether (ET	6.46	59	2167633	9.54	ug/l	93
28) 2-Butanone	6.76	43	703172	47.52	ug/l	95
29) 2,2-Dichloropropane	7.03	77	1140390	11.96	ug/l	98
30) cis-1,2-Dichloroethene	7.16	96	1013325	10.41	ug/l	98
31) Chloroform	7.53	83	1464276	9.49	ug/l	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24G02\RGW031.D Vial: 2
Acq On : 2 Jul 2024 12:05 pm Operator: LPriet
Sample : CVO06F0319 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jul 2 12:27 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
32)	Bromochloromethane	7.91	130	447887	10.65	ug/l		96
33)	Tetrahydrofuran	8.04	42	81128	8.95	ug/l		98
34)	tert-Amyl alcohol	8.12	59	2198	1.03	ug/l	#	26
36)	1,1,1-Trichloroethane	8.45	97	1208207	10.17	ug/l		98
37)	Cyclohexane	8.43	84	1232291	10.25	ug/l		97
39)	1,1-Dichloropropene	8.81	110	410061	10.15	ug/l		98
40)	Carbon tetrachloride	8.98	119	990895	10.33	ug/l		99
41)	tert-Amyl methyl ether (TA	9.15	73	1806029	10.65	ug/l		98
43)	1,2-Dichloroethane	9.38	62	629123	9.16	ug/l		98
44)	Benzene	9.36	78	3549498	9.87	ug/l		98
45)	Trichloroethene	10.63	130	931738	10.18	ug/l		97
46)	Methylcyclohexane	10.72	83	1509122	10.72	ug/l		94
47)	1,2-Dichloropropane	10.99	63	793324	9.13	ug/l		99
48)	1,4-Dioxane	11.54	88	48547	184.62	ug/l		95
49)	Bromodichloromethane	11.43	83	927523	9.30	ug/l		99
50)	Dibromomethane	11.51	93	357424	9.72	ug/l		93
51)	2-Chloroethyl vinyl ether	12.12	63	194567	6.78	ug/l		97
52)	4-Methyl-2-pentanone	12.19	43	2063188	49.02	ug/l		93
53)	cis-1,3-Dichloropropene	12.50	75	1158401	9.13	ug/l		96
56)	Toluene	13.04	91	3534621	9.28	ug/l		99
57)	Ethyl methacrylate	13.46	69	604137	9.31	ug/l		96
58)	trans-1,3-Dichloropropene	13.42	75	819834	8.74	ug/l		95
59)	1,1,2-Trichloroethane	13.67	97	450312	10.09	ug/l		94
60)	2-Hexanone	13.76	43	1259327	47.75	ug/l		95
61)	1,3-Dichloropropane	14.11	76	787085	9.35	ug/l		97
62)	Tetrachloroethene	14.18	164	717450	10.25	ug/l		96
63)	Dibromochloromethane	14.53	129	561849	9.43	ug/l		99
65)	1,2-Dibromoethane	14.87	107	405050	9.10	ug/l		100
66)	1-Chlorohexane	15.22	91	1619104	9.04	ug/l		99
67)	Chlorobenzene	15.60	112	2130526	9.93	ug/l		100
68)	1,1,1,2-Tetrachloroethane	15.69	131	726927	10.07	ug/l		98
69)	Ethylbenzene	15.70	91	3960157	9.53	ug/l		99
70)	m-Xylene & p-Xylene	15.83	91	6021692	19.37	ug/l		99
71)	o-Xylene	16.56	91	3081865	9.65	ug/l		100
72)	Styrene	16.62	104	2239791	9.92	ug/l		98
73)	Isopropylbenzene	17.17	105	3898511	9.95	ug/l		99
75)	Bromoform	17.17	173	249810	10.89	ug/l		98
76)	1,1,2,2-Tetrachloroethane	17.46	83	494635	9.26	ug/l		95
78)	1,2,3-Trichloropropane	17.66	110	114896	9.28	ug/l		93
79)	trans-1,4-Dichloro-2-buten	17.77	53	99005	7.40	ug/l		100
80)	n-Propylbenzene	17.77	91	4839407	9.21	ug/l		99

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24G02\RGW031.D Vial: 2
Acq On : 2 Jul 2024 12:05 pm Operator: LPriet
Sample : CVO06F0319 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jul 2 12:27 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

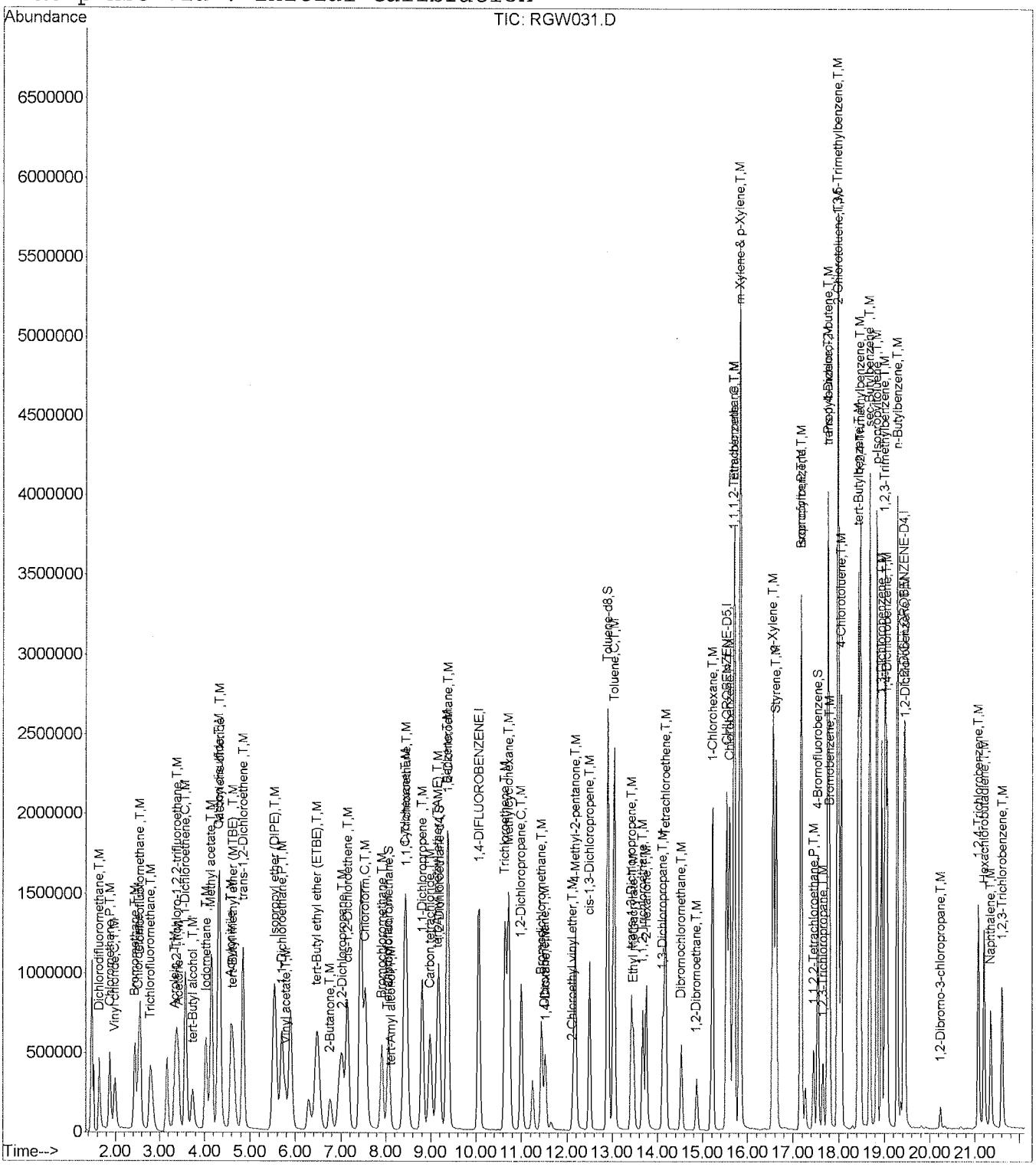
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
81)	Bromobenzene	17.81	156	738173	9.68	ug/l	100
82)	1,3,5-Trimethylbenzene	17.97	105	3151115	9.22	ug/l	99
83)	2-Chlorotoluene	17.99	91	3136166	9.19	ug/l	99
84)	4-Chlorotoluene	18.05	91	2425665	8.39	ug/l	98
85)	tert-Butylbenzene	18.43	134	704166	9.47	ug/l	96
86)	1,2,4-Trimethylbenzene	18.47	105	3040645	9.26	ug/l	100
87)	sec-Butylbenzene	18.68	105	4279428	9.52	ug/l	97
88)	p-Isopropyltoluene	18.83	119	3363767	9.07	ug/l	98
89)	1,3-Dichlorobenzene	18.93	146	1472055	9.10	ug/l	97
90)	1,2,3-Trimethylbenzene	19.01	105	2906122	9.50	ug/l	99
91)	1,4-Dichlorobenzene	19.05	146	1409788	8.82	ug/l	99
92)	n-Butylbenzene	19.29	91	3408191	8.95	ug/l	98
93)	1,2-Dichlorobenzene	19.45	146	1264100	9.49	ug/l	100
94)	1,2-Dibromo-3-chloropropan	20.25	157	66909	10.23	ug/l	98
95)	1,2,4-Trichlorobenzene	21.08	180	786965	9.99	ug/l	97
96)	Hexachlorobutadiene	21.21	225	488748	9.83	ug/l	98
97)	Naphthalene	21.35	128	1090384	9.76	ug/l	98
98)	1,2,3-Trichlorobenzene	21.61	180	570163	9.56	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24G02\RGW031.D Vial: 2
Acq On : 2 Jul 2024 12:05 pm Operator: LPriet
Sample : CVO06F0319 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jul 2 12:27 2024 Quant Results File: VO06F03.RE

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration



ANALYTICAL LOG(S)

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

Book #:	A06-082
Instrument No.:	06
Analytical Sequence:	24G02
Method File:	V006F03
Analytical Batch:	CV006F0319

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	6/3/24		
ICAL ID	V006F03		
STANDARDS			
NAME	ID	Amount (µl)	Conc. (mg/L)
DCC	SVI-43-98-01 -43-53-01	1 1	
DCC	-43-95-02	1	
DCC	-45-01-03	5	
DCC	-45-04-03	5	
BFB	-45-01-01	1	
IS/SURR.	-43-95-03	5	50/250
ICV/LCS	-43-79-02 -43-80-02	1	
ICV/LCS	-43-81-03	5	
ICV/LCS	-43-85-02	5	
ICV/LCS	-43-94-02	5	
Data File Folder			
	LOT #	Syringe Lot #	
pH strip	HC439975	MSV-03-04-12-2	
Chlorine strip	301802	↓ -6	
Methanol			
$NaHSO_4$			
Reagent Water	RW4-23-001		
Sand			

ELECTRONIC DATA ARCHIVAL	
Location	Date
HPCHEM_VOA/TO06	

Analyzed By: LAP
Date: 6/2/24
Disposed By: LAP
Date Disposed: 6/3/24

Injection Log

Directory: D:\HPCHEM\1\DATA\24G02

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	RGW030.D	1.	BFB06G02	T/CHK	2 Jul 2024 11:28
2	2	RGW031.D	1.	CVO06F0319	10ppb 8260/50ppb KET-AA/250ppb TBA	2 Jul 2024 12:05
3	3	RGW032.D	1.	VO06G02L 1.R↑	10ppb 8260/50ppb KET-AA/250ppb TBA	2 Jul 2024 12:36
4	4	RGW033.D	1.	VO06G02C	10ppb 8260/50ppb KET-AA/250ppb TBA	2 Jul 2024 13:02
5	5	RGW034.D	1.	RINSE	25mL	2 Jul 2024 13:30
6	6	RGW035.D	1.	VO06G02B	25mL	2 Jul 2024 13:56
7	7	RGW036.D	1.	24F124-02I 10X	2.5mL	2 Jul 2024 14:25
8	8	RGW037.D	1.	24F124-03I 50X	0.5mL	2 Jul 2024 14:51
9	9	RGW038.D	1.	24F124-04I 50X	0.5mL	2 Jul 2024 15:17
10	10	RGW039.D	1.	24F093-02	25mL	2 Jul 2024 15:43
11	11	RGW040.D	1.	24F100-05	25mL	2 Jul 2024 16:09
12	12	RGW041.D	1.	24F100-04	25mL	2 Jul 2024 16:35
13	13	RGW042.D	1.	24F100-06	25mL	2 Jul 2024 17:02
14	14	RGW043.D	1.	24F100-16	25mL	2 Jul 2024 17:28
15	15	RGW044.D	1.	24F100-17	25mL	2 Jul 2024 17:54
16	16	RGW045.D	1.	24F093-02M	25mL	2 Jul 2024 18:20
17	17	RGW046.D	1.	24F093-02S	25mL	2 Jul 2024 18:47
18	18	RGW047.D	1.	24F100-05M	25mL	2 Jul 2024 19:13
19	19	RGW048.D	1.	24F100-05S	25mL	2 Jul 2024 19:39
20	20	RGW049.D	1.	VO06G02X	10ppb 8260/50ppb KET-AA/250ppb TBA	2 Jul 2024 20:05
21	21	RGW050.D	1.	RINSE		2 Jul 2024 20:31
22	22	RGW051.D	1.	24F147-01 TB-006-06-05	25mL	2 Jul 2024 20:57
23	23	RGW052.D	1.	24F147-03	25mL	2 Jul 2024 21:23
24	24	RGW053.D	1.	24F147-02 pH 6	25mL	2 Jul 2024 21:49
25	25	RGW054.D	1.	24F116-01	25mL	2 Jul 2024 22:15
26	26	RGW055.D	1.	24F116-02	25mL	2 Jul 2024 22:41
27	27	RGW056.D	1.	24F116-03	25mL	2 Jul 2024 23:07
28	28	RGW057.D	1.	EVO06F0319	10ppb 8260/50ppb KET-AA/250ppb TBA	2 Jul 2024 23:33
29	29	RGW058.D	1.	EVO06F03191	10ppb 8260/50ppb KET-AA/250ppb TBA	3 Jul 2024 00:00
30	30	RGW059.D	1.	EVO06F03192	10ppb 8260/50ppb KET-AA/250ppb TBA	3 Jul 2024 00:26
31	31	RGW060.D	1.	RINSE		3 Jul 2024 00:52
32	32	RGW061.D	1.	RINSE		3 Jul 2024 01:18

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments: (*) varied amount
A: Gas, CS2, 4Add, TAA-224, SS
B: 8260, Ket-AA

Book #: A06-082
Instrument No.: 06
Analytical Sequence: 24F03
Method File: V006F03
Analytical Batch: V006F03D6

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	6/3/24
ICAL ID	V006F03

STANDARDS

NAME	ID	Amount (ul)	Conc. (mg/L)
DCC Gas	SVA-43-53-01	(*)	
DCC CS2	43-91-01		
DCC 4Add	43-95-02		
DCC 8260 Ket	45-01-03 43-82-02		
DCC TAA-224	43-40-03		
BFB	45-01-01	1	
IS/SURR. IS	43-35-02	1	50/250
IS/SURR. SS	43-35-03	1	
ICV/LCS Gas	43-76-03	1	
ICV/LCS CS2	43-55-02	1	
ICV/LCS 4Add	43-81-03	5	
ICV/LCS 8260 Ket	43-86-03	5	
	43-94-02	5	
ICV/LCS TAA	43-69-01	5	
ICV/LCS 224-TMP	43-69-02	5	
Data File Folder	24F03		

	LOT #	Syringe Lot #
pH strip	N/A	MSV-03-02-24
Chlorine strip		03-02-15-5
Methanol		02-01-19
$NaHSO_4$		03-01-11
Reagent Water	RW4-23-001	03-04-17
Sand		

ELECTRONIC DATA ARCHIVAL	
Location	Date
HPCHEM_VOA/TO06	

Analyzed By: DH
Date: 6/3/24
Disposed By: DH
Date Disposed: 6/4/24

Injection Log

Directory: D:\HPCHEM\1\DATA\24F03

Line	Vial	FileName	Multiplier	SampleName		Misc Info	Injected
1	1	RFW001.D	1.	BFB06F01		T/CHK	3 Jun 2024 14:25
2	2	RFW002.D	1.	VO06F031	0.03/0.15uL	0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA	3 Jun 2024 15:03
3	3	RFW003.D	1.	VO06F032	0.05/0.25uL	0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA	3 Jun 2024 15:29
4	4	RFW004.D	1.	VO06F033	0.10/0.50uL	1.0ppb 8260/5.0ppb KET-AA/25ppb TBA	3 Jun 2024 15:55
5	5	RFW005.D	1.	VO06F034	0.20/1.00uL	2.0ppb 8260/10ppb KET-AA/50ppb TBA	3 Jun 2024 16:21
6	6	RFW006.D	1.	VO06F035	0.50/2.50uL	5.0ppb 8260/25ppb KET-AA/125ppb TBA	3 Jun 2024 16:47
7	7	RFW007.D	1.	VO06F036	1.00/5.00uL	10ppb 8260/50ppb KET-AA/250ppb TBA	3 Jun 2024 17:14
8	8	RFW008.D	1.	VO06F037	2.00/10.0uL	20ppb 8260/100ppb KET-AA/500ppb TBA	3 Jun 2024 17:40
9	9	RFW009.D	1.	VO06F038	3.00/15.0uL	30ppb 8260/150ppb KET-AA/750ppb TBA	3 Jun 2024 18:06
10	10	RFW010.D	1.	VO06F039	5.00/25.0uL	50ppb 8260/250ppb KET-AA/1250ppb TBA	3 Jun 2024 18:32
11	11	RFW011.D	1.	VO06F0310	10.0/50.0uL	100ppb 8260/500ppb KET-AA/2500ppb TBA	3 Jun 2024 18:59
12	12	RFW012.D	1.	RINSE			3 Jun 2024 19:25
13	13	RFW013.D	1.	RINSE			3 Jun 2024 19:51
14	14	RFW014.D	1.	IVO06F0301		10ppb 8260/50ppb KET-AA/250ppb TBA	3 Jun 2024 20:18
15	15	RFW015.D	1.	RINSE			3 Jun 2024 20:44

DH 6/10/24

EMAX LABORATORIES, INC.
3051 Fujita Street
Torrance, CA 90505
Tel: (310)-618-8889

Date: 07-10-2024
EMAX Batch No.: 24G002

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 07/02/24.
The data reported relate only to samples listed below :

Sample ID	Control #	Col Date	Matrix	Analysis
TB14-GW062924	G002-01	06/29/24	WATER	VOCS BY 8260C
MW44-GW062924-260	G002-02	06/29/24	WATER	VOCS BY 8260C
EB13-GW062924	G002-03	06/29/24	WATER	VOCS BY 8260C
MW44-GW062924-260MS	G002-02M	06/29/24	WATER	VOCS BY 8260C
MW44-GW062924-260MSD	G002-02S	06/29/24	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:	EMAX CONTROL NO. 24G002
		SAMPLE STORAGE	PROJECT CODE:

CLIENT: CDM Smith
PROJECT: 700 S. 1600 E. PCE Plume
COORDINATOR: Cherie Zakowski
TEL: 720-264-4109 FAX: EMAIL: ZakowskiCA@cdmsmith.com
SEND REPORT TO:
COMPANY: CDM Smith
ADDRESS: 555 17th St. Ste 500
Denver, CO 80201
EMAX PM: Linh Pham

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 8260; VOCs 8260

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 pH	IC	COMMENTS
1	TB14-GW062924		6/29/24	0800	3	40ml	VOAs			X		
2	MW44-GW062924-260		6/29/24	1505	9	40ml	VOAs				X	MS/MSD unpreserved
3	EB13-GW062924		6/29/24	1550	3	40ml	VOAs			X		
4												
5												
6												
7												
8												
9												
10												

Instructions: CC. Joe Miller: millerjc@cdmsmith.com and SmithNL@cdmsmith.com

Cooler #	Temp. (°C)	Sample #s
1	2.5°	

SAMPLER: Laura Mulrooney

COURIER/AIRBILL: FedEX

RELINQUISHED BY	Date	Time	RECEIVED BY
Laura Mulrooney	7/1/24	1430	
	07/02/24	0940	

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 246002
☑ Fedex ☐ UPS ☐ GSO ☐ Others	276567219578	Recipient Jocelyne Solis-Ramos
☐ EMAX Courier ☐ Client Delivery		Date 07/02/24 Time 0940

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 2.5 °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* 216706272	*(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 2 has slight sediment.

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 Jocelyne Solis-Ramos Date 07/02/24 7/2/24

SRF Date 7/2/24

PM Date 7/2/24


ORIGIN ID:NPHA (111) 111-1111

CDM SMITH, INC
555 17TH ST STE 500

DENVER, CO 80202
UNITED STATES US

SHIP DATE: 01
ACTWGT: 13.35
CAD: 6997117/
DIMS: 13x9x9

BILL THIRD PA

RT 467 ST 25

435 RRDB EXP 11/24

TO

EMAX LABORATORIES
3051 FUJITA ST

TORRANCE CA 90505

(310) 618-8889

REF: 275859[S1.DRILL

INV:
PO:

DEPT:

FedEx Express

TUE - 02 JUL 10:30A
PRIORITY OVERNIGHT
AHS
90505
CA-US LAX

TRK# 0201 2765 6721 9578

WZ 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 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#: 24G002

CASE NARRATIVE

Client : CDM SMITH

Project: VA SALT LAKE CITY

SDG : 24G002

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

A total of three(3) water samples were received on 07/02/24 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. There was one(1)CCV associated with this SDG. Target analytes in CCV(Data File ID: RGW063) were within calibration acceptance criteria. All calibration requirements were satisfied. 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. VO06G03B - 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. VO06G03L/VO06G03Y 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. 24G002-02M/24G002-02S - all analytes were within MS QC limits. 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.

LAB CHRONICLE
VOLATILE ORGANICS BY GC/MS

Client : CDM SMITH
Project : VA SALT LAKE CITY

SDG NO. : 24G002
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	VO06G03L	1	NA	07/03/2411:07	07/03/2411:07	RGW064	RFW007	VO06G03	Lab Control Sample (LCS)
LCD1W	VO06G03Y	1	NA	07/03/2412:08	07/03/2412:08	RGW066	RFW007	VO06G03	LCS Duplicate
MBLK1W	VO06G03B	1	NA	07/03/2413:11	07/03/2413:11	RGW068	RFW007	VO06G03	Method Blank
TB14-GW062924	24G002-01	1	NA	07/03/2413:42	07/03/2413:42	RGW069	RFW007	VO06G03	Field Sample
EB13-GW062924	24G002-03	1	NA	07/03/2414:09	07/03/2414:09	RGW070	RFW007	VO06G03	Field Sample
MW44-GW062924-260	24G002-02	1	NA	07/03/2414:35	07/03/2414:35	RGW071	RFW007	VO06G03	Field Sample
MW44-GW062924-260MS	24G002-02M	1	NA	07/03/2415:27	07/03/2415:27	RGW073	RFW007	VO06G03	Matrix Spike Sample (MS)
MW44-GW062924-260MSD	24G002-02S	1	NA	07/03/2415:53	07/03/2415:53	RGW074	RFW007	VO06G03	MS Duplicate (MSD)

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	06/29/24 08:00
Project	: VA SALT LAKE CITY	Date Received:	07/02/24
Batch No.	: 24G002	Date Extracted:	07/03/24 13:42
Sample ID	: TB14-GW062924	Date Analyzed:	07/03/24 13:42
Lab Samp ID:	24G002-01	Dilution Factor:	1
Lab File ID:	RGW069	Matrix:	WATER
Ext Btch ID:	VD06G03	% Moisture:	NA
Calib. Ref.:	RFW007	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	9.99	10.0	100	70-130
Bromofluorobenzene	9.34	10.0	93	70-130
Toluene-d8	9.98	10.0	100	70-130
Dibromofluoromethane	10.8	10.0	108	70-130

Notes:
Sample Amount : 25ml
Final Volume : 25ml
Prepared by : LPriet
Analyzed by : LPriet
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24G03\RGW069.D Vial: 8
Acq On : 3 Jul 2024 1:42 pm Operator: LPriet
Sample : 24G002-01 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jul 5 14:08 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

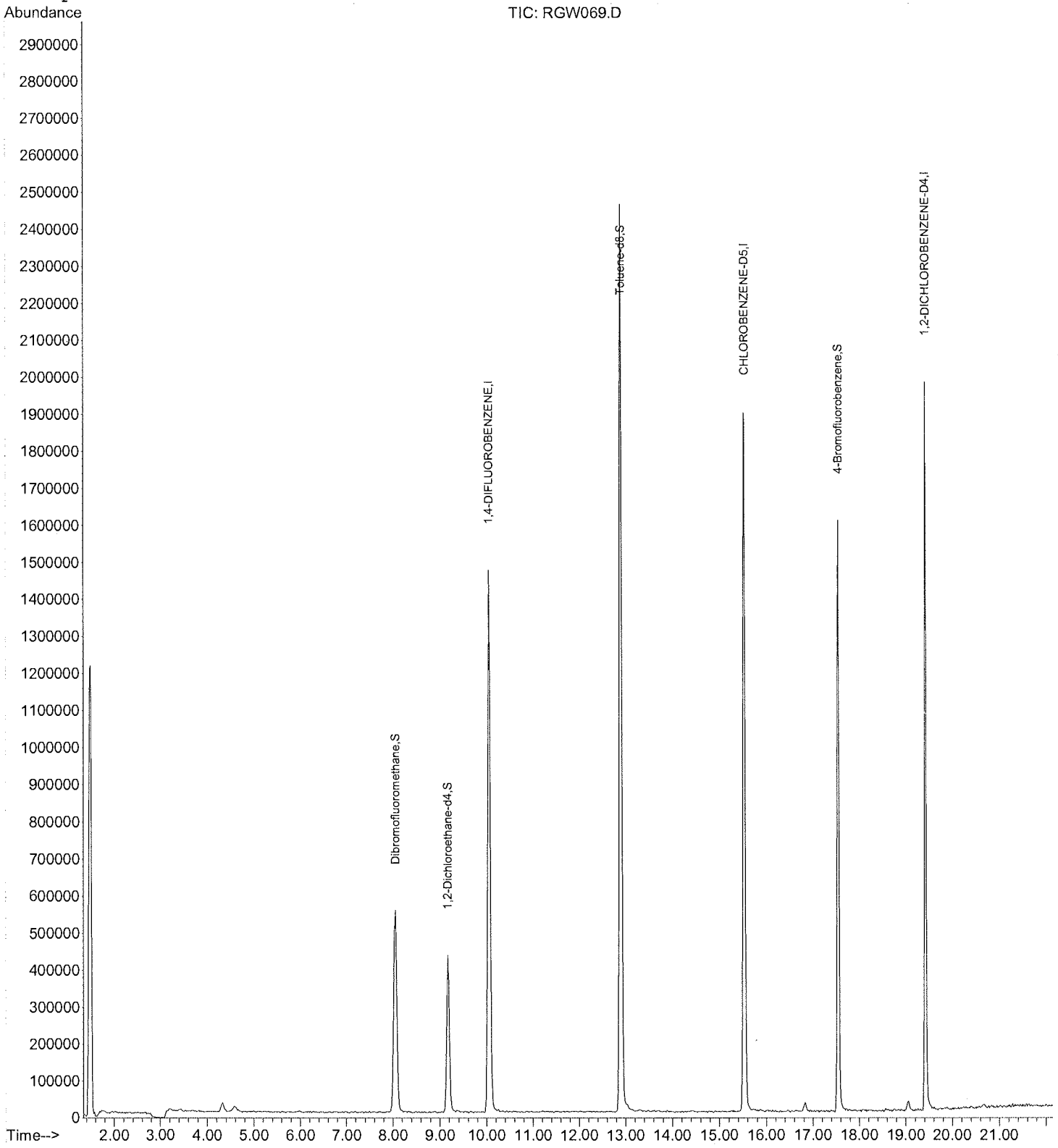
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.05	114	2634234	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.53	117	2139489	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.42	152	805086	10.00	ug/l	-0.01
System Monitoring Compounds						
35) Dibromofluoromethane	8.06	111	851351	10.77	ug/l	0.00
Spiked Amount 10.000			Recovery =	107.70%		
42) 1,2-Dichloroethane-d4	9.17	65	568284	9.99	ug/l	-0.02
Spiked Amount 10.000			Recovery =	99.90%		
55) Toluene-d8	12.90	98	3213274	9.98	ug/l	0.00
Spiked Amount 10.000			Recovery =	99.80%		
77) 4-Bromofluorobenzene	17.55	95	997348	9.34	ug/l	0.00
Spiked Amount 10.000			Recovery =	93.40%		

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24G03\RGW069.D Vial: 8
Acq On : 3 Jul 2024 1:42 pm Operator: LPriet
Sample : 24G002-01 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jul 5 14:08 2024 Quant Results File: VO06F03.RES

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration



METHOD SW5030B/8260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	06/29/24 15:05
Project	: VA SALT LAKE CITY	Date Received:	07/02/24
Batch No.	: 24G002	Date Extracted:	07/03/24 14:35
Sample ID	: MW44-GW062924-260	Date Analyzed:	07/03/24 14:35
Lab Samp ID:	24G002-02	Dilution Factor:	1
Lab File ID:	RGW071	Matrix:	WATER
Ext Btch ID:	VO06G03	% Moisture:	NA
Calib. Ref.:	RFW007	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	2.7	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	2.0	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	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	9.67	10.0	97	70-130
Toluene-d8	9.86	10.0	99	70-130
Oibromofluoromethane	10.3	10.0	103	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : LPriet Analyzed by : LPriet
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24G03\RGW071.D Vial: 10
Acq On : 3 Jul 2024 2:35 pm Operator: LPriet
Sample : 24G002-02 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jul 5 14:10 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.05	114	2899003	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.53	117	2343249	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.41	152	874896	10.00	ug/l	-0.01
System Monitoring Compounds						
35) Dibromofluoromethane	8.06	111	900474	10.35	ug/l	0.00
Spiked Amount 10.000			Recovery =	103.50%		
42) 1,2-Dichloroethane-d4	9.17	65	645902	10.32	ug/l	-0.02
Spiked Amount 10.000			Recovery =	103.20%		
55) Toluene-d8	12.90	98	3479318	9.86	ug/l	0.00
Spiked Amount 10.000			Recovery =	98.60%		
77) 4-Bromofluorobenzene	17.55	95	1122078	9.67	ug/l	0.00
Spiked Amount 10.000			Recovery =	96.70%		
Target Compounds						Qvalue
30) cis-1,2-Dichloroethene	7.14	96	10462	0.10	ug/l	94
31) Chloroform	7.53	83	453185	2.74	ug/l	96
49) Bromodichloromethane	11.43	83	37564	0.35	ug/l	98
62) Tetrachloroethene	14.18	164	147838	1.97	ug/l	96

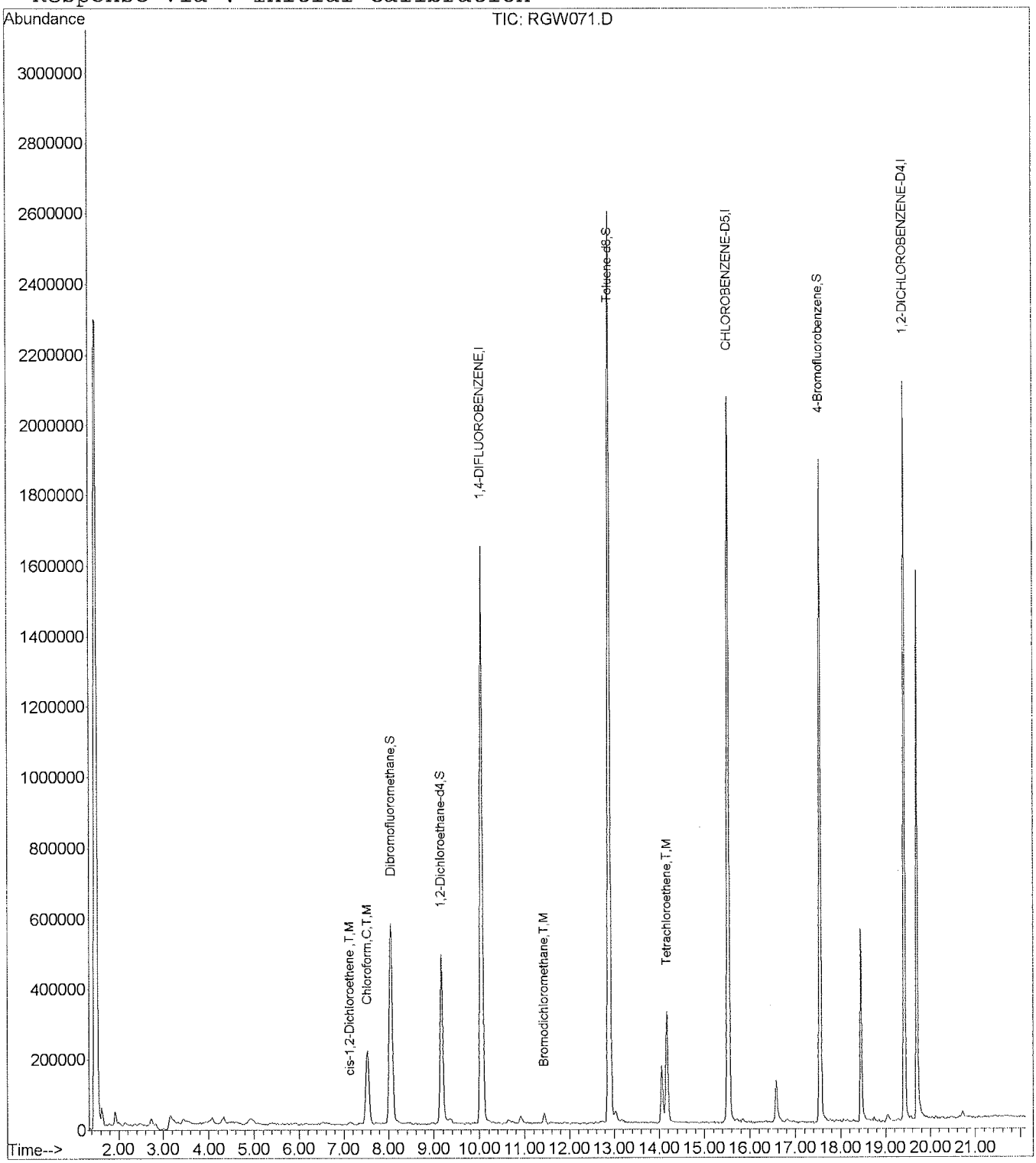
(#) = qualifier out of range (m) = manual integration
RGW071.D VO06F03.M Fri Jul 05 14:12:34 2024 Page 1

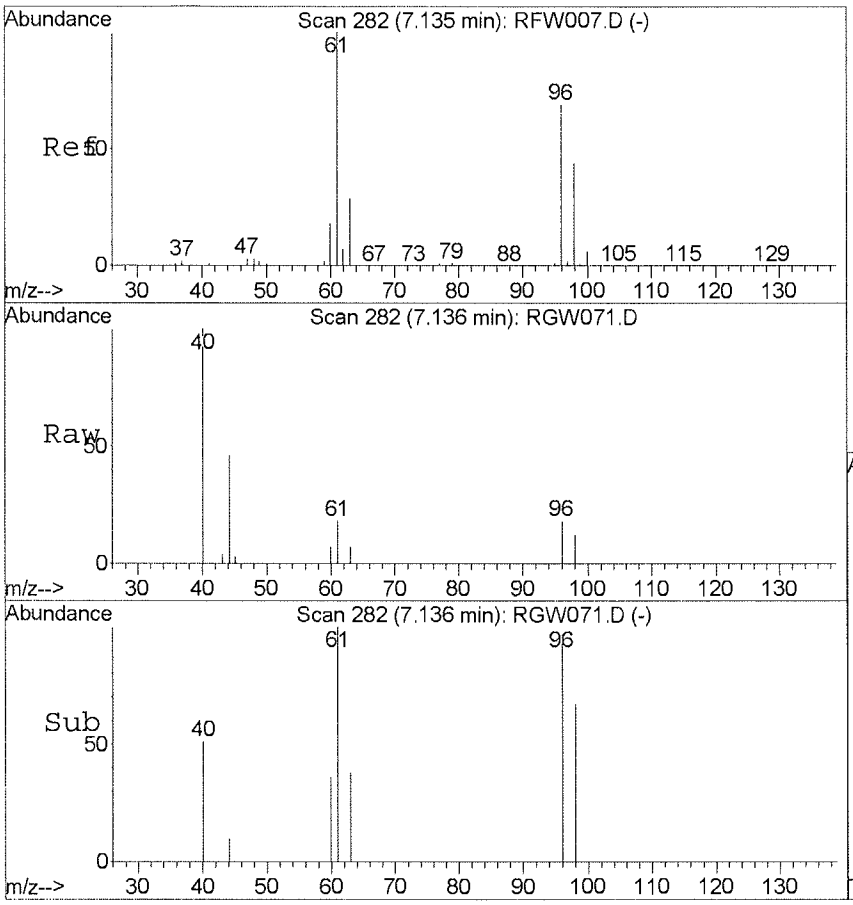
Quantitation Report

Data File : D:\HPCHEM\1\DATA\24G03\RGW071.D
Acq On : 3 Jul 2024 2:35 pm
Sample : 24G002-02
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Jul 5 14:10 2024

Vial: 10
Operator: LPriet
Inst : 06
Multiplr: 1.00
Quant Results File: VO06F03.RE

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration

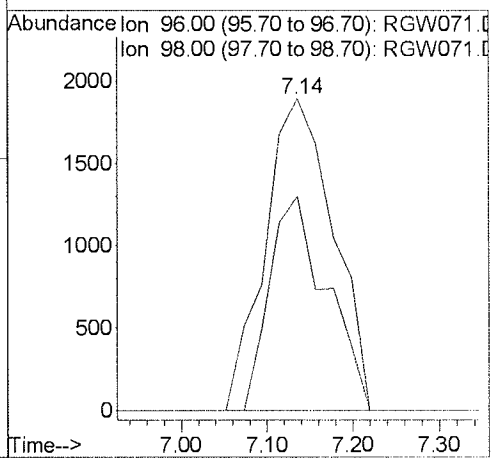


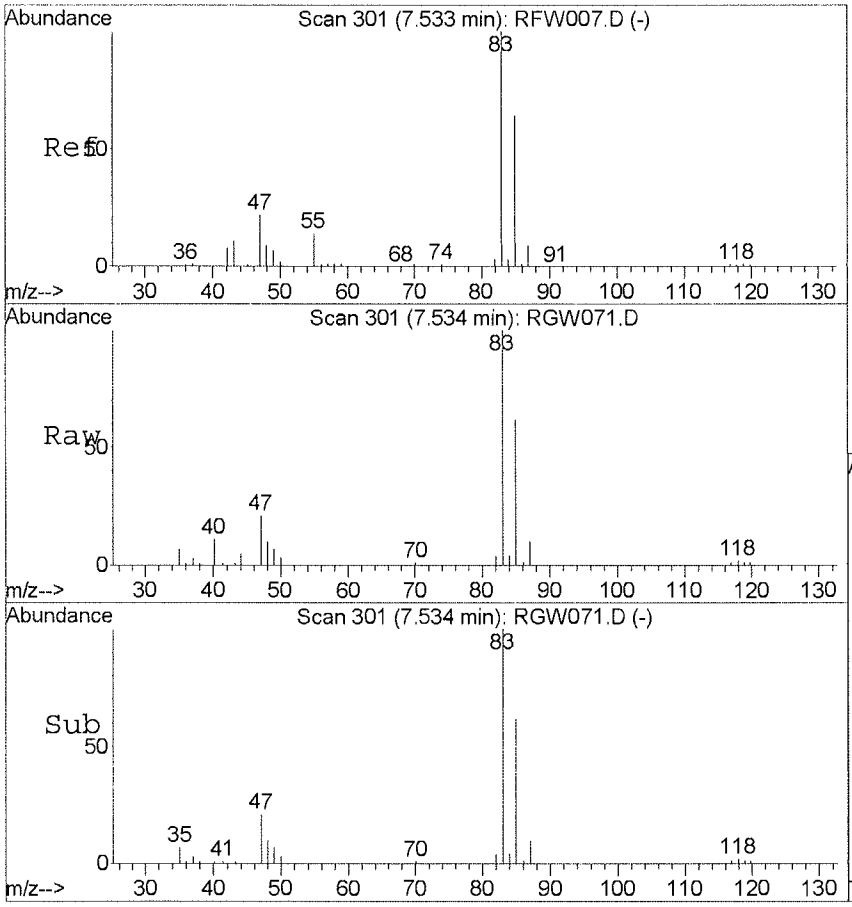


#30
cis-1,2-Dichloroethene
Concen: 0.10 ug/l
RT: 7.14 min Scan# 282
Delta R.T. 0.00 min
Lab File: RGW071.D
Acq: 3 Jul 2024 2:35 pm

Tgt Ion: 96 Resp: 10462

Ion	Ratio	Lower	Upper
96	100		
98	57.7	32.5	92.5

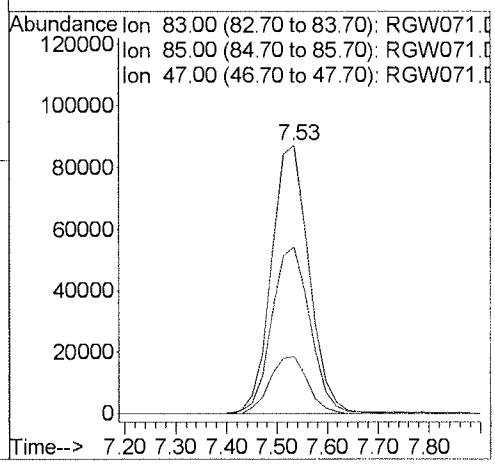


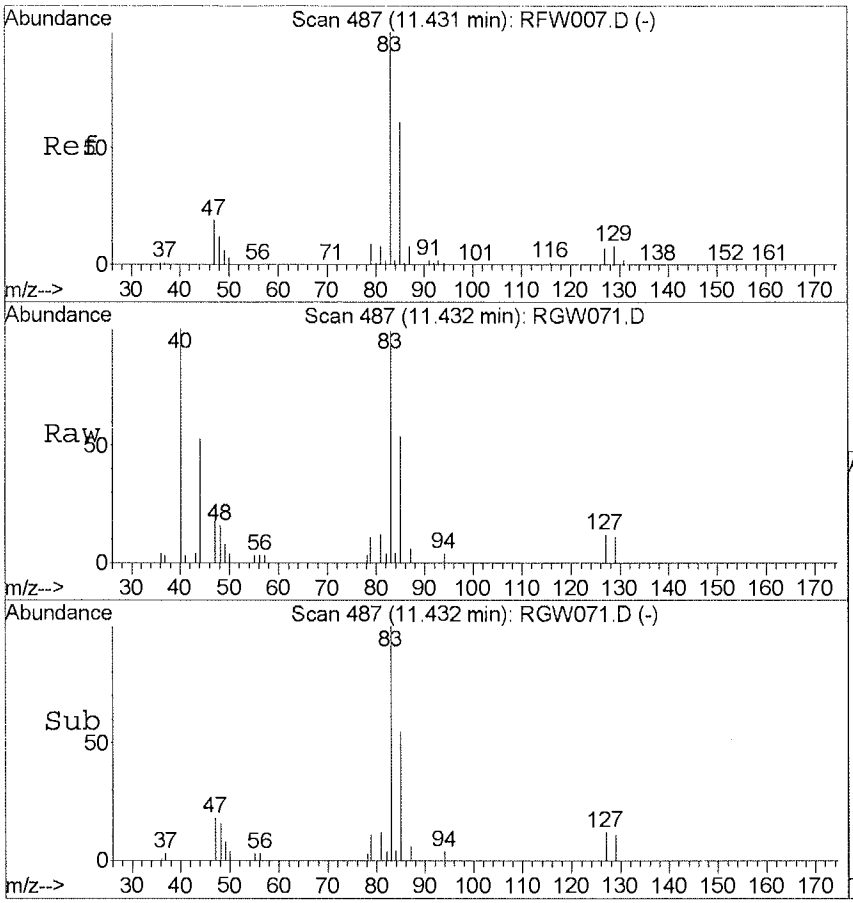


#31
Chloroform
Concen: 2.74 ug/l
RT: 7.53 min Scan# 301
Delta R.T. 0.00 min
Lab File: RGW071.D
Acq: 3 Jul 2024 2:35 pm

Tgt Ion: 83 Resp: 453185

Ion	Ratio	Lower	Upper
83	100		
85	63.3	36.2	96.2
47	21.5	0.0	53.3

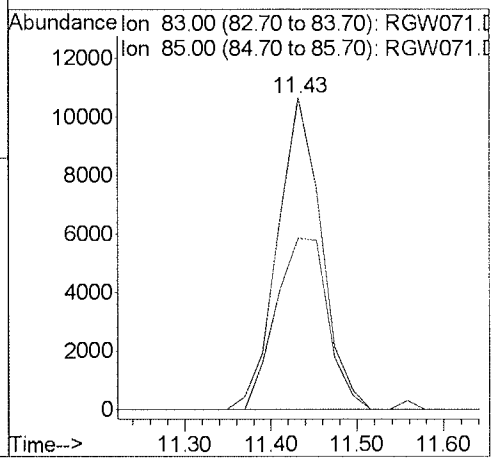


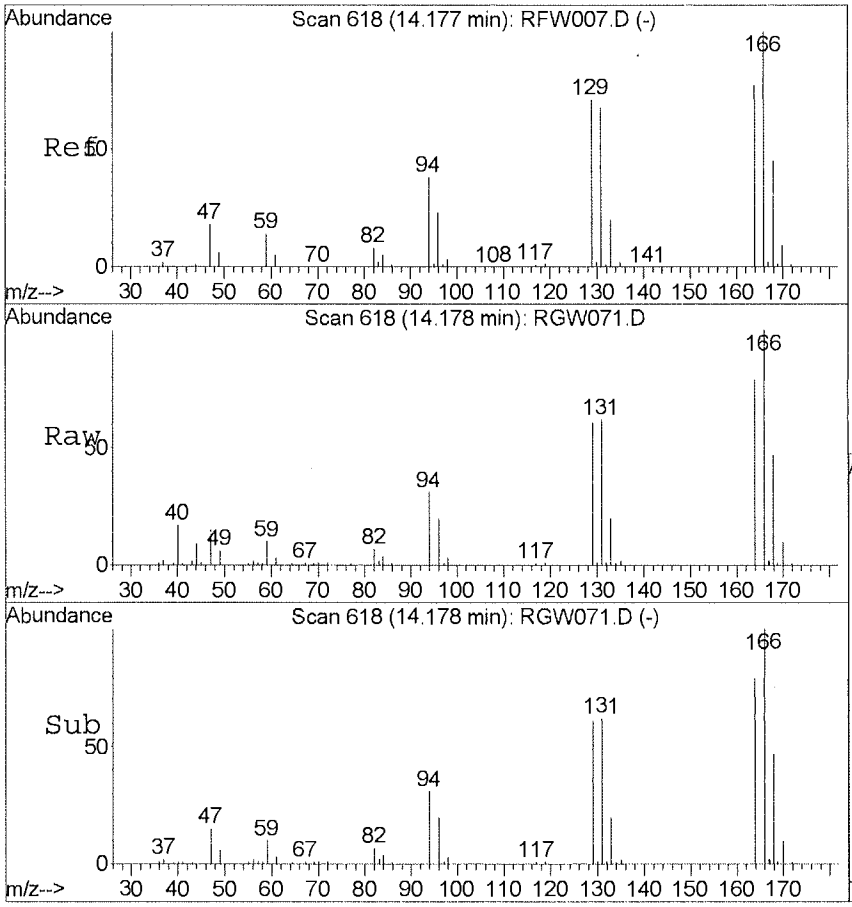


#49
Bromodichloromethane
Concen: 0.35 ug/l
RT: 11.43 min Scan# 487
Delta R.T. 0.00 min
Lab File: RGW071.D
Acq: 3 Jul 2024 2:35 pm

Tgt Ion: 83 Resp: 37564

Ion	Ratio	Lower	Upper
83	100		
85	65.5	33.9	93.9

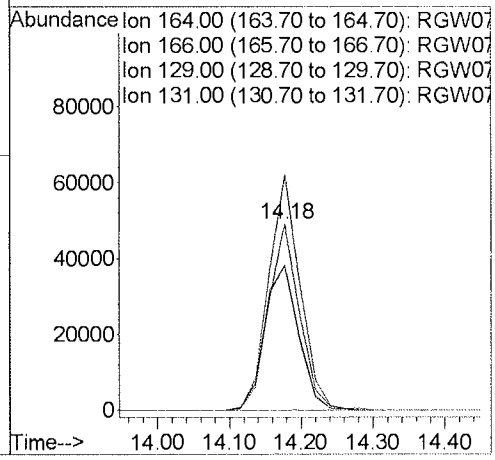




#62
Tetrachloroethene
Concen: 1.97 ug/l
RT: 14.18 min Scan# 618
Delta R.T. 0.00 min
Lab File: RGW071.D
Acq: 3 Jul 2024 2:35 pm

Tgt Ion:164 Resp: 147838

Ion	Ratio	Lower	Upper
164	100		
166	128.4	98.8	158.8
129	84.9	62.9	122.9
131	85.6	58.6	118.6



METHOD SW5030B/B260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	06/29/24 15:50
Project	: VA SALT LAKE CITY	Date Received:	07/02/24
Batch No.	: 24G002	Date Extracted:	07/03/24 14:09
Sample ID	: EB13-GW062924	Date Analyzed:	07/03/24 14:09
Lab Samp ID:	24G002-03	Dilution Factor:	1
Lab File ID:	RGW070	Matrix:	WATER
Ext Btch ID:	VOO6G03	% Moisture:	NA
Calib. Ref.:	RFW007	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	10.1	10.0	101	70-130
Bromofluorobenzene	9.88	10.0	99	70-130
Toluene-dB	10.0	10.0	100	70-130
Dibromofluoromethane	10.4	10.0	104	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : LPriet Analyzed by : LPriet
Detection limits are reported relative to sample result significant figures.

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24G03\RGW070.D Vial: 9
Acq On : 3 Jul 2024 2:09 pm Operator: LPriet
Sample : 24G002-03 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jul 5 14:09 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.05	114	2888504	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.52	117	2327461	10.00	ug/l	-0.01
74) 1,2-DICHLOROBENZENE-D4	19.42	152	859356	10.00	ug/l	-0.01
System Monitoring Compounds						
35) Dibromofluoromethane	8.06	111	901626	10.40	ug/l	0.00
Spiked Amount 10.000			Recovery =	104.00%		
42) 1,2-Dichloroethane-d4	9.17	65	631066	10.12	ug/l	-0.02
Spiked Amount 10.000			Recovery =	101.20%		
55) Toluene-d8	12.90	98	3506768	10.01	ug/l	0.00
Spiked Amount 10.000			Recovery =	100.10%		
77) 4-Bromofluorobenzene	17.55	95	1126469	9.88	ug/l	0.00
Spiked Amount 10.000			Recovery =	98.80%		

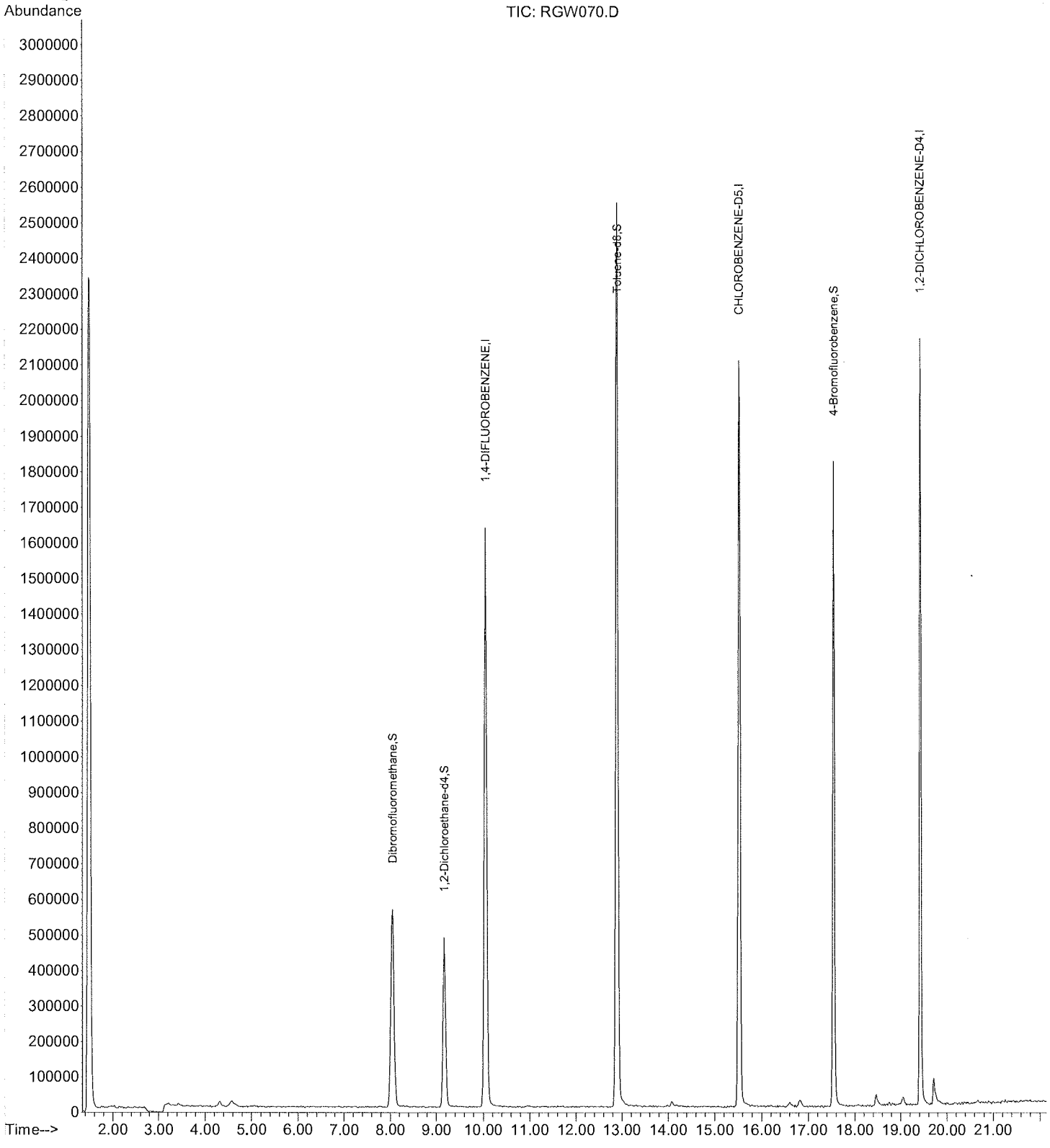
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24G03\RGW070.D Vial: 9
Acq On : 3 Jul 2024 2:09 pm Operator: LPriet
Sample : 24G002-03 Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jul 5 14:09 2024 Quant Results File: VO06F03.RES

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration



QC SUMMARIES

METHDD SW5030B/B260C
VOLATILE ORGANICS BY GC/MS

Client	: CDM SMITH	Date Collected:	07/03/24 13:11
Project	: VA SALT LAKE CITY	Date Received:	07/03/24
Batch No.	: 24G002	Date Extracted:	07/03/24 13:11
Sample ID	: MBLK1W	Date Analyzed:	07/03/24 13:11
Lab Samp ID:	VD06G03B	Dilution Factor:	1
Lab File ID:	RGW06B	Matrix:	WATER
Ext Btch ID:	VO06G03	% Moisture:	NA
Calib. Ref.:	RFW007	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	10.7	10.0	107	70-130
Bromofluorobenzene	9.65	10.0	97	70-130
Toluene-dB	9.90	10.0	99	70-130
Dibromofluoromethane	10.6	10.0	106	70-130

Notes:
Sample Amount : 25ml Final Volume : 25ml
Prepared by : LPriet Analyzed by : LPriet
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. : 24G002
METHOD : SW5030B/8260C

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR:	1	1	1
SAMPLE ID	: MBLK1W	LCS1W	LCD1W
LAB SAMPLE ID	: VD06G03B	VQ06G03L	VD06G03Y
LAB FILE ID	: RGW068	RGW064	RGW066
DATE PREPARED	: 07/03/24 13:11	07/03/24 11:07	07/03/24 12:08
DATE ANALYZED	: 07/03/24 13:11	07/03/24 11:07	07/03/24 12:08
PREP BATCH	: VD06G03	VD06G03	VD06G03
CALIBRATION REF:	RFW007	RFW007	RFW007

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	10.7	107	10.0	9.98	100	7	74-131	20
1,1,2,2-Tetrachloroethane	ND	10.0	9.87	99	10.0	9.09	91	8	71-121	20
1,1,2-Trichloroethane	ND	10.0	10.1	101	10.0	10.0	100	1	80-119	20
1,1-Dichloroethane	ND	10.0	10.1	101	10.0	9.55	96	6	77-125	20
1,1-Dichloroethene	ND	10.0	9.76	98	10.0	9.59	96	2	71-131	20
1,2,3-Trichlorobenzene	ND	10.0	10.0	100	10.0	9.84	98	2	69-129	20
1,2,4-Trichlorobenzene	ND	10.0	10.5	105	10.0	10.2	102	3	69-130	20
1,2,4-Trimethylbenzene	ND	10.0	9.65	97	10.0	9.30	93	4	76-124	20
1,2-Dibromo-3-chloropropane	ND	10.0	9.84	98	10.0	9.92	99	1	62-138	20
1,2-Dichlorobenzene	ND	10.0	9.84	98	10.0	9.59	96	3	80-119	20
1,2-Dichloroethane	ND	10.0	9.56	96	10.0	8.96	90	6	73-128	20
1,2-Dichloropropane	ND	10.0	9.62	96	10.0	9.20	92	4	78-122	20
1,3,5-Trimethylbenzene	ND	10.0	9.51	95	10.0	9.30	93	2	75-124	20
1,3-Dichlorobenzene	ND	10.0	9.52	95	10.0	9.22	92	3	80-119	20
1,4-Dichlorobenzene	ND	10.0	9.24	92	10.0	9.14	91	1	79-118	20
2-Butanone	ND	50.0	49.4	99	50.0	45.5	91	8	56-143	20
2-Hexanone	ND	50.0	51.6	103	50.0	48.8	98	6	57-139	20
Acetone	ND	50.0	51.5	103	50.0	45.6	91	12	39-160	20
Benzene	ND	10.0	10.3	103	10.0	9.73	97	6	79-120	20
Bromochloromethane	ND	10.0	11.5	115	10.0	10.6	106	8	78-120	20
Bromodichloromethane	ND	10.0	9.88	99	10.0	9.30	93	6	79-125	20
Bromoform	ND	10.0	10.8	108	10.0	10.4	104	4	66-130	20
Bromomethane	ND	10.0	10.0	100	10.0	9.02	90	10	53-141	20
Carbon Disulfide	ND	10.0	8.67	87	10.0	8.45	85	3	64-133	20
Carbon Tetrachloride	ND	10.0	10.4	104	10.0	10.1	101	3	72-136	20
Chlorobenzene	ND	10.0	10.2	102	10.0	10.1	101	1	82-118	20
Chloroethane	ND	10.0	9.98	100	10.0	9.38	94	6	60-138	20
Chloroform	ND	10.0	10.2	102	10.0	9.49	95	7	79-124	20
Chloromethane	ND	10.0	8.57	86	10.0	7.98	80	7	50-139	20
cis-1,2-Dichloroethylene	ND	10.0	11.1	111	10.0	10.2	102	8	78-123	20
Dibromochloromethane	ND	10.0	9.32	93	10.0	9.08	91	3	74-126	20
Dichlorodifluoromethane	ND	10.0	8.98	90	10.0	8.66	87	4	32-152	20
Ethylbenzene	ND	10.0	9.90	99	10.0	9.74	97	2	79-121	20
Isopropylbenzene	ND	10.0	10.0	100	10.0	9.99	100	0	72-131	20
m,p-Xylene	ND	20.0	19.7	99	20.0	19.5	98	1	80-121	20
4-Methyl-2-Pentanone	ND	50.0	55.0	110	50.0	48.9	98	12	67-130	20
Methylene Chloride	ND	10.0	10.7	107	10.0	9.48	95	12	74-124	20
tert-Butyl Methyl Ether	ND	10.0	11.9	119	10.0	10.2	102	15	71-124	20
o-Xylene	ND	10.0	9.98	100	10.0	9.67	97	3	78-122	20
Styrene	ND	10.0	10.3	103	10.0	9.93	99	4	78-123	20
Tetrachloroethene	ND	10.0	10.0	100	10.0	9.93	99	1	74-129	20
Toluene	ND	10.0	9.41	94	10.0	9.26	93	2	80-121	20
Trans-1,2-DCE	ND	10.0	11.0	110	10.0	10.2	102	8	75-124	20
cis-1,3-Dichloropropene	ND	10.0	9.49	95	10.0	9.01	90	5	75-124	20
Trans-1,3-Dichloropropene	ND	10.0	8.83	88	10.0	8.61	86	3	73-127	20
TCE	ND	10.0	10.2	102	10.0	9.80	98	4	79-123	20
Trichlorofluoromethane	ND	10.0	9.51	95	10.0	8.82	88	8	65-141	20
Vinyl Chloride	ND	10.0	8.17	82	10.0	8.03	80	2	58-137	20
1,2-Dibromoethane	ND	10.0	9.19	92	10.0	8.90	89	3	77-121	20
Vinyl Acetate	ND	10.0	9.14	91	10.0	8.16	82	11	54-146	20
Trichlorotrifluoroethane	ND	10.0	11.4	114	10.0	11.0	110	4	70-136	20
Methyl Acetate	ND	10.0	10.2	102	10.0	9.47	95	7	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	10.0	100	70-130
Bromofluorobenzene	10.0	9.66	97	10.0	9.69	97	70-130
Toluene-d8	10.0	9.79	98	10.0	9.93	99	70-130
Dibromofluoromethane	10.0	11.1	111	10.0	10.8	108	70-130

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
8ATCH NO. : 24G002
METHOD : SW50308/8260C

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR:	1	1	1
SAMPLE ID	: MW44-GW062924-260	MW44-GW062924-260MS	MW44-GW062924-260MSD
LAB SAMPLE ID	: 24G002-02	24G002-02M	24G002-02S
LAB FILE ID	: RGW071	RGW073	RGW074
DATE PREPARED	: 07/03/24 14:35	07/03/24 15:27	07/03/24 15:53
DATE ANALYZED	: 07/03/24 14:35	07/03/24 15:27	07/03/24 15:53
PREP BATCH	: V006G03	VD06G03	V006G03
CALI8RATION REF:	RFW007	RFW007	RFW007

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	8.88	89	10.0	8.80	88	1	74-131	20
1,1,2,2-Tetrachloroethane	ND	10.0	9.74	97	10.0	10.1	101	4	71-121	20
1,1,2-Trichloroethane	ND	10.0	10.8	108	10.0	10.9	109	1	80-119	20
1,1-Dichloroethane	ND	10.0	8.89	89	10.0	8.72	87	2	77-125	20
1,1-Dichloroethene	ND	10.0	8.25	83	10.0	8.19	82	1	71-131	20
1,2,3-Trichlorobenzene	ND	10.0	9.26	93	10.0	8.93	89	4	69-129	20
1,2,4-Trichlorobenzene	ND	10.0	9.65	97	10.0	9.48	95	2	69-130	20
1,2,4-Trimethylbenzene	ND	10.0	8.85	89	10.0	8.62	86	3	76-124	20
1,2-Dibromo-3-chloropropane	ND	10.0	10.4	104	10.0	11.1	111	7	62-138	20
1,2-Dichlorobenzene	ND	10.0	9.46	95	10.0	9.32	93	1	80-119	20
1,2-Dichloroethane	ND	10.0	9.56	96	10.0	9.50	95	1	73-128	20
1,2-Dichloropropane	ND	10.0	9.21	92	10.0	9.13	91	1	78-122	20
1,3,5-Trimethylbenzene	ND	10.0	8.72	87	10.0	8.43	84	3	75-124	20
1,3-Dichlorobenzene	ND	10.0	9.46	95	10.0	9.08	91	4	80-119	20
1,4-Dichlorobenzene	ND	10.0	9.38	94	10.0	9.13	91	3	79-118	20
2-8utanone	ND	50.0	54.0	108	50.0	60.7	121	12	56-143	20
2-Hexanone	ND	50.0	56.8	114	50.0	60.7	121	7	57-139	20
Acetone	ND	50.0	50.8	102	50.0	55.9	112	10	39-160	20
8enzene	ND	10.0	9.47	95	10.0	9.22	92	3	79-120	20
8romochloromethane	ND	10.0	10.2	102	10.0	10.4	104	2	78-120	20
8romodichloromethane	0.351J	10.0	9.93	96	10.0	9.82	95	1	79-125	20
8romoform	ND	10.0	11.5	115	10.0	12.1	121	5	66-130	20
8romomethane	ND	10.0	8.27	83	10.0	8.59	86	4	53-141	20
Carbon Disulfide	ND	10.0	8.23	82	10.0	8.13	81	1	64-133	20
Carbon Tetrachloride	ND	10.0	9.18	92	10.0	9.09	91	1	72-136	20
Chlorobenzene	ND	10.0	9.88	99	10.0	9.68	97	2	82-118	20
Chloroethane	ND	10.0	8.09	81	10.0	8.42	84	4	60-138	20
Chloroform	2.74	10.0	11.7	90	10.0	11.4	87	3	79-124	20
Chloromethane	ND	10.0	7.66	77	10.0	7.92	79	3	50-139	20
cis-1,2-Dichloroethylene	0.100J	10.0	9.60	95	10.0	9.53	94	1	78-123	20
Dibromochloromethane	ND	10.0	9.59	96	10.0	9.83	98	2	74-126	20
Dichlorodifluoromethane	ND	10.0	8.53	85	10.0	8.66	87	2	32-152	20
Ethylbenzene	ND	10.0	9.54	95	10.0	9.21	92	4	79-121	20
Isopropylbenzene	ND	10.0	9.38	94	10.0	9.11	91	3	72-131	20
m,p-Xylene	ND	20.0	18.9	95	20.0	18.3	92	3	80-121	20
4-Methyl-2-Pentanone	ND	50.0	56.9	114	50.0	61.0	122	7	67-130	20
Methylene Chloride	ND	10.0	8.16	82	10.0	8.46	85	4	74-124	20
tert-8utyl Methyl Ether	ND	10.0	10.0	100	10.0	10.5	105	5	71-124	20
o-Xylene	ND	10.0	9.23	92	10.0	9.04	90	2	78-122	20
Styrene	ND	10.0	10.1	101	10.0	9.78	98	3	78-123	20
Tetrachloroethene	1.97	10.0	12.0	100	10.0	11.5	95	4	74-129	20
Toluene	ND	10.0	9.15	92	10.0	8.97	90	2	80-121	20
Trans-1,2-DCE	ND	10.0	8.86	89	10.0	8.96	90	1	75-124	20
cis-1,3-Dichloropropene	ND	10.0	9.52	95	10.0	9.41	94	1	75-124	20
Trans-1,3-Dichloropropene	ND	10.0	9.45	95	10.0	9.57	96	1	73-127	20
TCE	ND	10.0	9.78	98	10.0	9.57	96	2	79-123	20
Trichlorofluoromethane	ND	10.0	8.42	84	10.0	9.03	90	7	65-141	20
Vinyl Chloride	ND	10.0	8.09	81	10.0	8.78	88	8	58-137	20
1,2-Dibromoethane	ND	10.0	9.82	98	10.0	10.0	100	2	77-121	20
Vinyl Acetate	ND	10.0	10.5	105	10.0	11.1	111	6	54-146	20
Trichlorotrifluoroethane	ND	10.0	9.52	95	10.0	9.30	93	2	70-136	20
Methyl Acetate	ND	10.0	9.93	99	10.0	9.97	100	0	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	10.2	102	10.0	10.8	108	70-130
8romofluorobenzene	10.0	9.97	100	10.0	9.73	97	70-130
Toluene-d8	10.0	9.97	100	10.0	9.85	99	70-130
Dibromofluoromethane	10.0	10.5	105	10.0	10.7	107	70-130

PS: Parent Sample MS: Matrix Spike MSD: Matrix Spike Duplicate

QC DATA

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24G03\RGW068.D Vial: 7
Acq On : 3 Jul 2024 1:11 pm Operator: LPriet
Sample : VO06G03B Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jul 5 14:38 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.05	114	2969579	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.52	117	2437311	10.00	ug/l	-0.01
74) 1,2-DICHLOROBENZENE-D4	19.41	152	936647	10.00	ug/l	-0.01
System Monitoring Compounds						
35) Dibromofluoromethane	8.06	111	941720	10.57	ug/l	0.00
Spiked Amount 10.000			Recovery =	105.70%		
42) 1,2-Dichloroethane-d4	9.17	65	685784	10.70	ug/l	-0.02
Spiked Amount 10.000			Recovery =	107.00%		
55) Toluene-d8	12.90	98	3631597	9.90	ug/l	0.00
Spiked Amount 10.000			Recovery =	99.00%		
77) 4-Bromofluorobenzene	17.55	95	1198811	9.65	ug/l	0.00
Spiked Amount 10.000			Recovery =	96.50%		

Target Compounds Qvalue

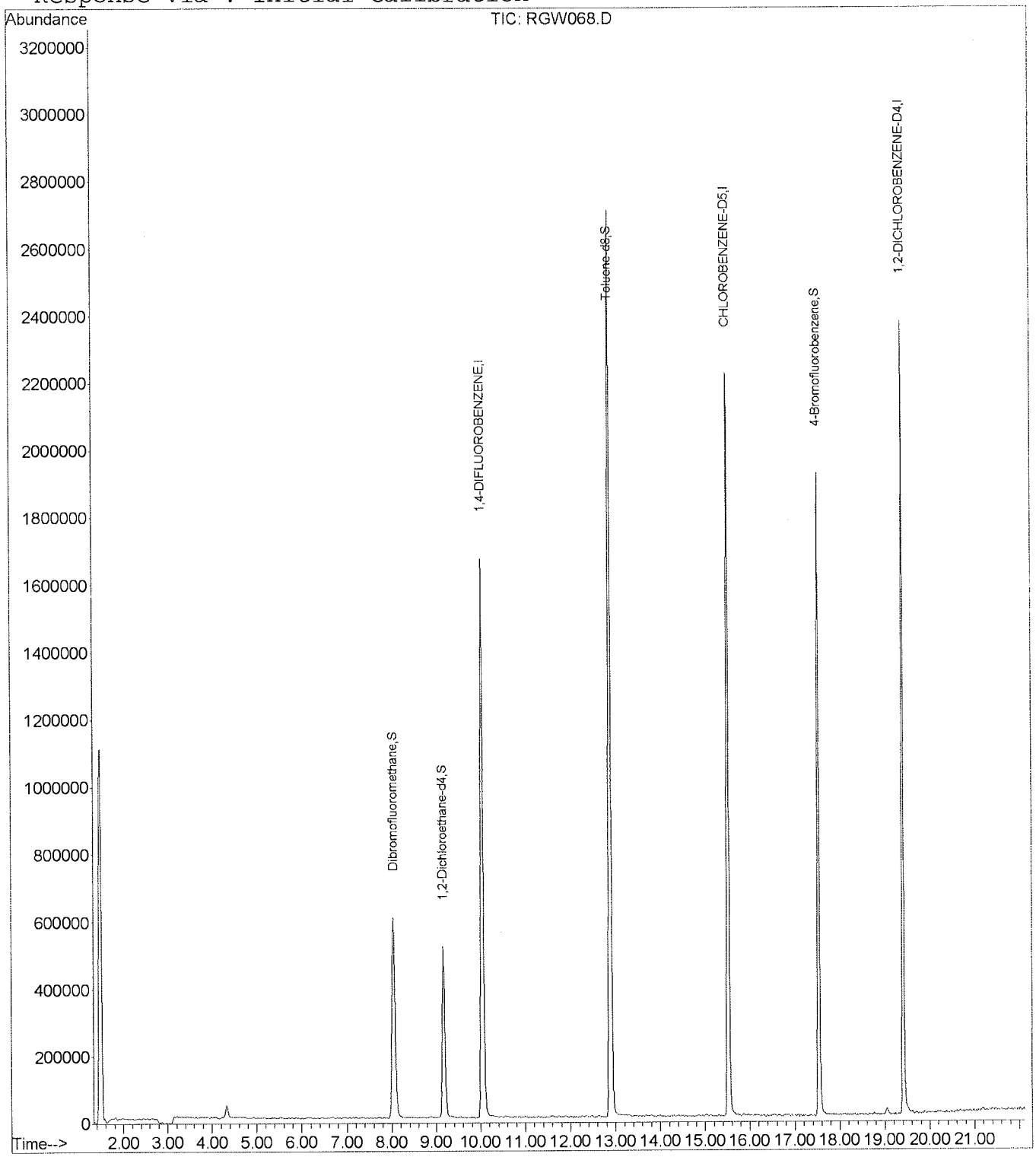
(#) = qualifier out of range (m) = manual integration
RGW068.D VO06F03.M Fri Jul 05 14:38:45 2024 Page 1

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24G03\RGW068.D
Acq On : 3 Jul 2024 1:11 pm
Sample : VO06G03B
Misc : 25mL
MS Integration Params: RTE.P
Quant Time: Jul 5 14:38 2024

Vial: 7
Operator: LPriet
Inst : 06
Multiplr: 1.00
Quant Results File: VO06F03.RE

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24G03\RGW064.D Vial: 3
Acq On : 3 Jul 2024 11:07 am Operator: LPriet
Sample : VO06G03L Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jul 3 11:29 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.05	114	2415989	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.52	117	2008270	10.00	ug/l	-0.01
74) 1,2-DICHLOROBENZENE-D4	19.42	152	742423	10.00	ug/l	-0.01
System Monitoring Compounds						
35) Dibromofluoromethane	8.06	111	802944	11.07	ug/l	0.00
Spiked Amount 10.000			Recovery =	110.70%		
42) 1,2-Dichloroethane-d4	9.17	65	534468	10.25	ug/l	-0.02
Spiked Amount 10.000			Recovery =	102.50%		
55) Toluene-d8	12.90	98	2959282	9.79	ug/l	0.00
Spiked Amount 10.000			Recovery =	97.90%		
77) 4-Bromofluorobenzene	17.53	95	950758	9.66	ug/l	-0.01
Spiked Amount 10.000			Recovery =	96.60%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.63	85	642793	8.98	ug/l	98
3) Chloromethane	1.87	50	933267	8.57	ug/l	98
4) Vinyl chloride	1.99	62	634363	8.17	ug/l	98
5) Bromomethane	2.44	94	703874	10.00	ug/l	96
6) Chloroethane	2.52	64	595450	9.98	ug/l	100
7) Dichlorofluoromethane	2.56	67	1485493	10.12	ug/l	97
8) Trichlorofluoromethane	2.80	101	916904	9.51	ug/l	99
9) Acrolein	3.32	56	200013	40.56	ug/l	94
10) 1,1,2-Trichloro-1,2,2-trif	3.38	151	507449	11.40	ug/l	97
11) Acetone	3.43	43	426450	51.54	ug/l	96
12) 1,1-Dichloroethene	3.57	61	1250774	9.76	ug/l	93
13) tert-Butyl alcohol	3.74	59	686025	272.17	ug/l	99
15) Methyl acetate	4.12	74	57443	10.19	ug/l	99
16) Iodomethane	4.01	142	1450355	11.40	ug/l	93
18) Methylene chloride	4.33	49	1146025	10.68	ug/l	91
19) Carbon disulfide	4.28	76	2896141	8.67	ug/l	99
20) Acrylonitrile	4.58	53	672012	59.79	ug/l	98
21) tert-Butyl methyl ether (M	4.62	73	1471916	11.88	ug/l	100
22) trans-1,2-Dichloroethene	4.83	96	974365	10.95	ug/l	98
23) Isopropyl ether (DIPE)	5.52	45	2807783	10.04	ug/l	94
24) Vinyl acetate	5.77	43	697503	9.14	ug/l	95
25) 1,1-Dichloroethane	5.69	63	1517833	10.08	ug/l	98
27) tert-Butyl ethyl ether (ET	6.46	59	2151464	10.59	ug/l	94
28) 2-Butanone	6.76	43	654276	49.41	ug/l	93
29) 2,2-Dichloropropane	7.01	77	1060976	12.43	ug/l	97
30) cis-1,2-Dichloroethene	7.13	96	964208	11.07	ug/l	99
31) Chloroform	7.53	83	1403799	10.17	ug/l	97

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24G03\RGW064.D Vial: 3
Acq On : 3 Jul 2024 11:07 am Operator: LPriet
Sample : VO06G03L Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jul 3 11:29 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
32)	Bromochloromethane	7.91	130	432614	11.49	ug/l		99
33)	Tetrahydrofuran	8.02	42	78601	9.69	ug/l		96
34)	tert-Amyl alcohol	7.93	59	1911	1.01	ug/l	#	1
36)	1,1,1-Trichloroethane	8.43	97	1136047	10.68	ug/l		97
37)	Cyclohexane	8.43	84	1138576	10.58	ug/l		96
39)	1,1-Dichloropropene	8.79	110	367724	10.17	ug/l		99
40)	Carbon tetrachloride	8.98	119	893676	10.41	ug/l		100
41)	tert-Amyl methyl ether (TA	9.15	73	1725020	11.37	ug/l		97
43)	1,2-Dichloroethane	9.38	62	587799	9.56	ug/l		96
44)	Benzene	9.36	78	3328092	10.35	ug/l		99
45)	Trichloroethene	10.63	130	839144	10.25	ug/l		97
46)	Methylcyclohexane	10.72	83	1450087	11.51	ug/l		94
47)	1,2-Dichloropropane	10.99	63	748202	9.62	ug/l		100
48)	1,4-Dioxane	11.54	88	45109	191.70	ug/l		99
49)	Bromodichloromethane	11.43	83	881699	9.88	ug/l		100
50)	Dibromomethane	11.52	93	321441	9.77	ug/l		88
51)	2-Chloroethyl vinyl ether	12.12	63	183544	7.15	ug/l		97
52)	4-Methyl-2-pentanone	12.16	43	2072107	55.02	ug/l		93
53)	cis-1,3-Dichloropropene	12.50	75	1077113	9.49	ug/l		95
56)	Toluene	13.02	91	3296268	9.41	ug/l		98
57)	Ethyl methacrylate	13.46	69	567967	9.52	ug/l		99
58)	trans-1,3-Dichloropropene	13.42	75	761371	8.83	ug/l		96
59)	1,1,2-Trichloroethane	13.67	97	414854	10.11	ug/l		95
60)	2-Hexanone	13.74	43	1251813	51.62	ug/l		95
61)	1,3-Dichloropropane	14.11	76	750504	9.69	ug/l		97
62)	Tetrachloroethene	14.18	164	645620	10.03	ug/l		95
63)	Dibromochloromethane	14.53	129	511049	9.32	ug/l		99
65)	1,2-Dibromoethane	14.87	107	375814	9.19	ug/l		97
66)	1-Chlorohexane	15.21	91	1404686	8.53	ug/l		96
67)	Chlorobenzene	15.59	112	2003715	10.15	ug/l		99
68)	1,1,1,2-Tetrachloroethane	15.68	131	706404	10.64	ug/l		98
69)	Ethylbenzene	15.70	91	3781437	9.90	ug/l		100
70)	m-Xylene & p-Xylene	15.83	91	5638504	19.73	ug/l		100
71)	o-Xylene	16.56	91	2929789	9.98	ug/l		100
72)	Styrene	16.62	104	2129638	10.26	ug/l		98
73)	Isopropylbenzene	17.17	105	3619223	10.05	ug/l		99
75)	Bromoform	17.16	173	226582	10.82	ug/l		95
76)	1,1,2,2-Tetrachloroethane	17.44	83	481419	9.87	ug/l		95
78)	1,2,3-Trichloropropane	17.65	110	109211	9.67	ug/l		96
79)	trans-1,4-Dichloro-2-buten	17.75	53	84595	6.92	ug/l		96
80)	n-Propylbenzene	17.75	91	4491402	9.36	ug/l		98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24G03\RGW064.D Vial: 3
Acq On : 3 Jul 2024 11:07 am Operator: LPriet
Sample : VO06G03L Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jul 3 11:29 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

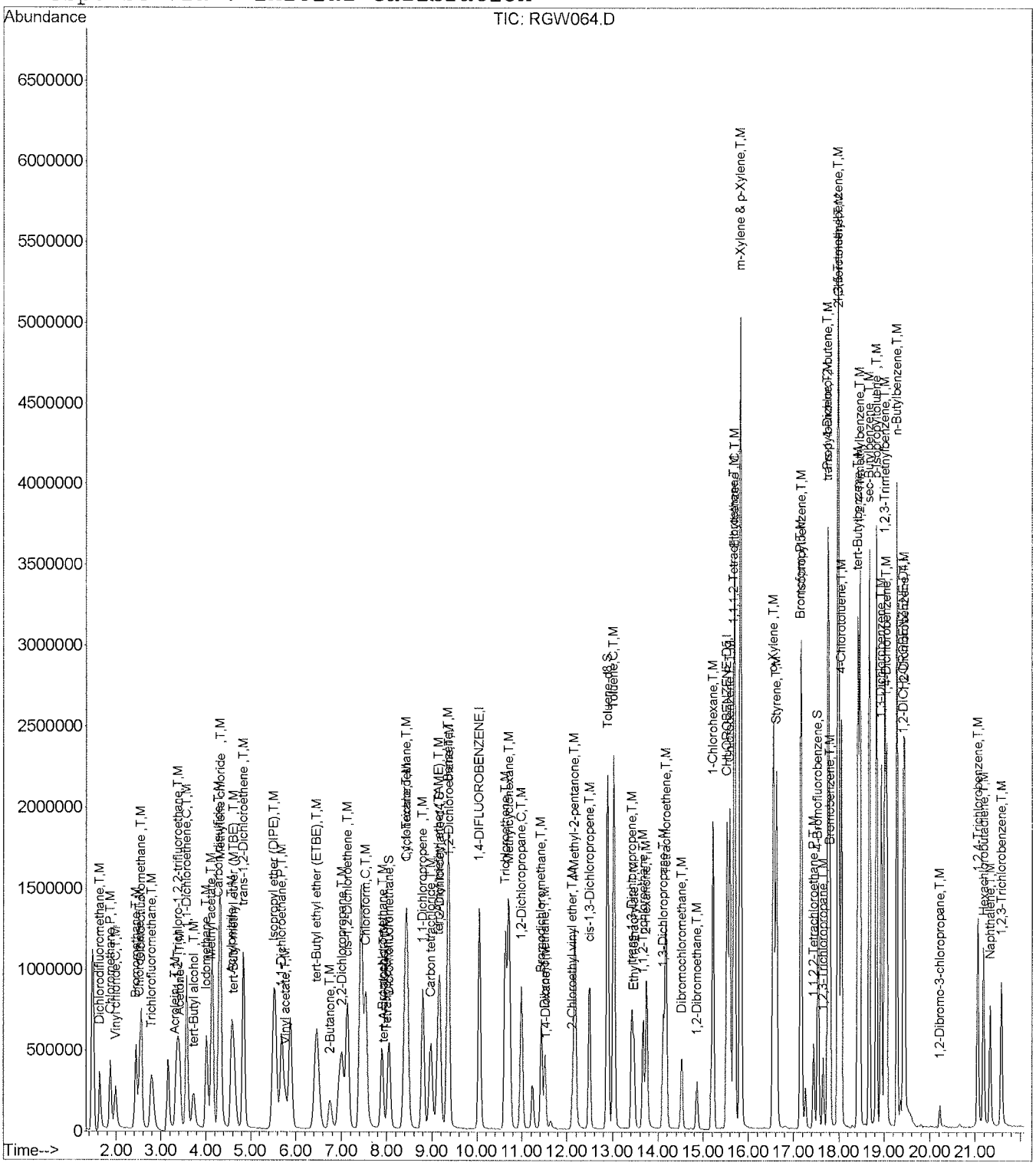
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
81)	Bromobenzene	17.81	156	698603	10.04	ug/l	100
82)	1,3,5-Trimethylbenzene	17.97	105	2966489	9.51	ug/l	99
83)	2-Chlorotoluene	17.99	91	2874423	9.23	ug/l	100
84)	4-Chlorotoluene	18.05	91	2429000	9.20	ug/l	98
85)	tert-Butylbenzene	18.42	134	622805	9.18	ug/l	100
86)	1,2,4-Trimethylbenzene	18.47	105	2893332	9.65	ug/l	99
87)	sec-Butylbenzene	18.68	105	3893405	9.49	ug/l	98
88)	p-Isopropyltoluene	18.83	119	3153593	9.31	ug/l	98
89)	1,3-Dichlorobenzene	18.94	146	1404638	9.52	ug/l	98
90)	1,2,3-Trimethylbenzene	19.01	105	2748821	9.84	ug/l	99
91)	1,4-Dichlorobenzene	19.05	146	1347867	9.24	ug/l	99
92)	n-Butylbenzene	19.27	91	3132819	9.01	ug/l	98
93)	1,2-Dichlorobenzene	19.44	146	1195850	9.84	ug/l	95
94)	1,2-Dibromo-3-chloropropan	20.22	157	58748	9.84	ug/l	92
95)	1,2,4-Trichlorobenzene	21.06	180	752881	10.47	ug/l	98
96)	Hexachlorobutadiene	21.19	225	425266	9.37	ug/l	97
97)	Naphthalene	21.34	128	1083978	10.63	ug/l	98
98)	1,2,3-Trichlorobenzene	21.58	180	546647	10.04	ug/l	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24G03\RGW064.D Vial: 3
Acq On : 3 Jul 2024 11:07 am Operator: LPriet
Sample : VO06G03L Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jul 3 11:29 2024 Quant Results File: VO06F03.RE

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24G03\RGW066.D Vial: 5
Acq On : 3 Jul 2024 12:08 pm Operator: LPriet
Sample : VO06G03Y Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jul 3 12:30 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.05	114	2639120	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.52	117	2132398	10.00	ug/l	-0.01
74) 1,2-DICHLOROBENZENE-D4	19.42	152	799227	10.00	ug/l	-0.01
System Monitoring Compounds						
35) Dibromofluoromethane	8.06	111	852918	10.77	ug/l	0.00
Spiked Amount 10.000			Recovery = 107.70%			
42) 1,2-Dichloroethane-d4	9.17	65	571641	10.03	ug/l	-0.02
Spiked Amount 10.000			Recovery = 100.30%			
55) Toluene-d8	12.90	98	3186120	9.93	ug/l	0.00
Spiked Amount 10.000			Recovery = 99.30%			
77) 4-Bromofluorobenzene	17.53	95	1027367	9.69	ug/l	-0.01
Spiked Amount 10.000			Recovery = 96.90%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.63	85	676458	8.66	ug/l	99
3) Chloromethane	1.87	50	949481	7.98	ug/l	97
4) Vinyl chloride	1.99	62	680901	8.03	ug/l	97
5) Bromomethane	2.44	94	693358	9.02	ug/l	96
6) Chloroethane	2.52	64	610825	9.38	ug/l	98
7) Dichlorofluoromethane	2.56	67	1548603	9.66	ug/l	98
8) Trichlorofluoromethane	2.80	101	928529	8.82	ug/l	96
9) Acrolein	3.32	56	207114	38.45	ug/l	99
10) 1,1,2-Trichloro-1,2,2-trif	3.38	151	535129	11.01	ug/l	99
11) Acetone	3.43	43	411733	45.55	ug/l	95
12) 1,1-Dichloroethene	3.57	61	1341662	9.59	ug/l	96
13) tert-Butyl alcohol	3.74	59	690374	250.74	ug/l	99
15) Methyl acetate	4.12	74	58296	9.47	ug/l	90
16) Iodomethane	4.01	142	1452648	10.46	ug/l	94
18) Methylene chloride	4.33	49	1112023	9.48	ug/l	91
19) Carbon disulfide	4.28	76	3083872	8.45	ug/l	99
20) Acrylonitrile	4.58	53	646265	52.64	ug/l	99
21) tert-Butyl methyl ether (M	4.62	73	1384964	10.24	ug/l	100
22) trans-1,2-Dichloroethene	4.83	96	989949	10.18	ug/l	99
23) Isopropyl ether (DIPE)	5.54	45	2816033	9.22	ug/l	94
24) Vinyl acetate	5.77	43	679960	8.16	ug/l	95
25) 1,1-Dichloroethane	5.69	63	1570873	9.55	ug/l	98
27) tert-Butyl ethyl ether (ET	6.46	59	2119670	9.55	ug/l	96
28) 2-Butanone	6.76	43	658308	45.51	ug/l	94
29) 2,2-Dichloropropane	7.01	77	1108283	11.89	ug/l	98
30) cis-1,2-Dichloroethene	7.14	96	968468	10.18	ug/l	99
31) Chloroform	7.53	83	1430939	9.49	ug/l	99

(#) = qualifier out of range (m) = manual integration
RGW066.D VO06F03.M Fri Jul 05 14:15:17 2024 Page 1

Data File : D:\HPCHEM\1\DATA\24G03\RGW066.D Vial: 5
Acq On : 3 Jul 2024 12:08 pm Operator: LPriet
Sample : VO06G03Y Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jul 3 12:30 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
32)	Bromochloromethane	7.91	130	436193	10.61	ug/l		97
33)	Tetrahydrofuran	8.02	42	68373	7.72	ug/l		94
34)	tert-Amyl alcohol	8.06	59	472	0.23	ug/l	#	26
36)	1,1,1-Trichloroethane	8.43	97	1159337	9.98	ug/l		98
37)	Cyclohexane	8.41	84	1189690	10.12	ug/l		100
39)	1,1-Dichloropropene	8.79	110	386496	9.78	ug/l		98
40)	Carbon tetrachloride	8.98	119	949583	10.12	ug/l		98
41)	tert-Amyl methyl ether (TA	9.15	73	1675787	10.11	ug/l		98
43)	1,2-Dichloroethane	9.38	62	601495	8.96	ug/l		100
44)	Benzene	9.36	78	3418443	9.73	ug/l		98
45)	Trichloroethene	10.64	130	876223	9.80	ug/l		98
46)	Methylcyclohexane	10.72	83	1528231	11.11	ug/l		96
47)	1,2-Dichloropropane	10.99	63	781901	9.21	ug/l		100
48)	1,4-Dioxane	11.54	88	48951	190.44	ug/l		96
49)	Bromodichloromethane	11.43	83	906347	9.30	ug/l		99
50)	Dibromomethane	11.52	93	332346	9.25	ug/l		92
51)	2-Chloroethyl vinyl ether	12.12	63	188694	6.73	ug/l		96
52)	4-Methyl-2-pentanone	12.17	43	2010498	48.87	ug/l		92
53)	cis-1,3-Dichloropropene	12.50	75	1117706	9.01	ug/l		95
56)	Toluene	13.02	91	3440951	9.26	ug/l		99
57)	Ethyl methacrylate	13.46	69	585619	9.25	ug/l		97
58)	trans-1,3-Dichloropropene	13.42	75	788859	8.61	ug/l		94
59)	1,1,2-Trichloroethane	13.67	97	435615	10.00	ug/l		94
60)	2-Hexanone	13.74	43	1257312	48.83	ug/l		96
61)	1,3-Dichloropropane	14.11	76	765327	9.31	ug/l		95
62)	Tetrachloroethene	14.18	164	678492	9.93	ug/l		96
63)	Dibromochloromethane	14.53	129	528511	9.08	ug/l		100
65)	1,2-Dibromoethane	14.87	107	386751	8.90	ug/l		98
66)	1-Chlorohexane	15.21	91	1595405	9.12	ug/l		98
67)	Chlorobenzene	15.59	112	2109015	10.07	ug/l		100
68)	1,1,1,2-Tetrachloroethane	15.68	131	724940	10.28	ug/l		100
69)	Ethylbenzene	15.70	91	3949643	9.74	ug/l		100
70)	m-Xylene & p-Xylene	15.83	91	5909158	19.47	ug/l		100
71)	o-Xylene	16.56	91	3013336	9.67	ug/l		100
72)	Styrene	16.62	104	2189470	9.93	ug/l		98
73)	Isopropylbenzene	17.17	105	3821369	9.99	ug/l		99
75)	Bromoform	17.16	173	233404	10.35	ug/l		97
76)	1,1,2,2-Tetrachloroethane	17.44	83	477544	9.09	ug/l		96
78)	1,2,3-Trichloropropane	17.65	110	110029	9.05	ug/l		99
79)	trans-1,4-Dichloro-2-buten	17.77	53	97387	7.40	ug/l		96
80)	n-Propylbenzene	17.75	91	4799632	9.29	ug/l		98

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24G03\RGW066.D Vial: 5
Acq On : 3 Jul 2024 12:08 pm Operator: LPriet
Sample : VO06G03Y Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jul 3 12:30 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

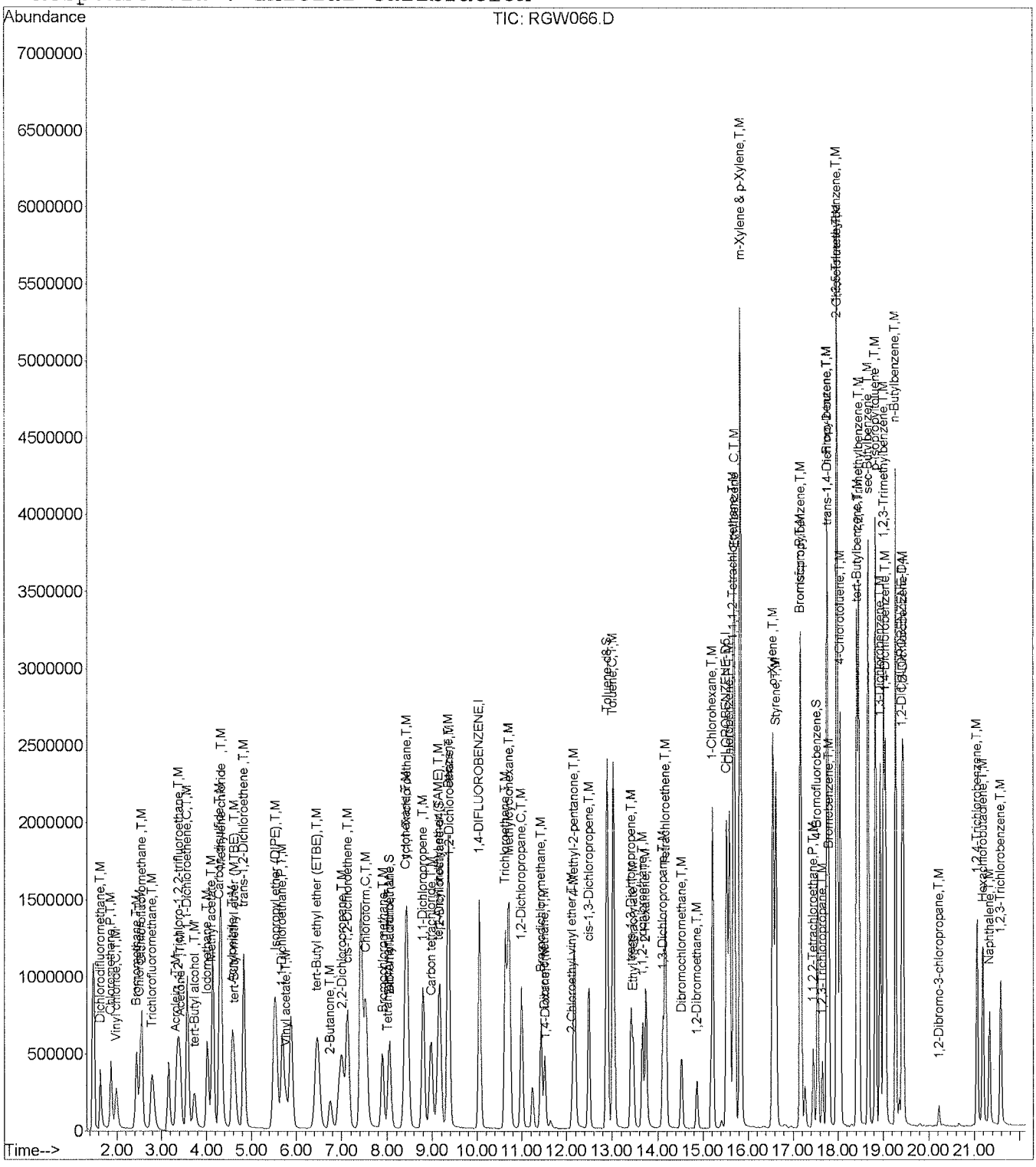
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
81)	Bromobenzene	17.81	156	721066	9.62	ug/l	100
82)	1,3,5-Trimethylbenzene	17.97	105	3121575	9.30	ug/l	99
83)	2-Chlorotoluene	17.99	91	2920244	8.71	ug/l	98
84)	4-Chlorotoluene	18.05	91	2553434	8.98	ug/l	99
85)	tert-Butylbenzene	18.43	134	677411	9.27	ug/l	98
86)	1,2,4-Trimethylbenzene	18.47	105	3002848	9.30	ug/l	99
87)	sec-Butylbenzene	18.68	105	4116112	9.31	ug/l	98
88)	p-Isopropyltoluene	18.83	119	3369465	9.24	ug/l	98
89)	1,3-Dichlorobenzene	18.94	146	1465730	9.22	ug/l	98
90)	1,2,3-Trimethylbenzene	19.01	105	2856202	9.50	ug/l	100
91)	1,4-Dichlorobenzene	19.05	146	1436018	9.14	ug/l	99
92)	n-Butylbenzene	19.27	91	3354028	8.97	ug/l	98
93)	1,2-Dichlorobenzene	19.44	146	1254645	9.59	ug/l	98
94)	1,2-Dibromo-3-chloropropan	20.22	157	63756	9.92	ug/l	98
95)	1,2,4-Trichlorobenzene	21.06	180	786810	10.16	ug/l	99
96)	Hexachlorobutadiene	21.19	225	486499	9.96	ug/l	99
97)	Naphthalene	21.34	128	1080510	9.84	ug/l	98
98)	1,2,3-Trichlorobenzene	21.58	180	576808	9.84	ug/l	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24G03\RGW066.D Vial: 5
Acq On : 3 Jul 2024 12:08 pm Operator: LPriet
Sample : VO06G03Y Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jul 3 12:30 2024 Quant Results File: VO06F03.RE

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24G03\RGW073.D Vial: 12
Acq On : 3 Jul 2024 3:27 pm Operator: LPriet
Sample : 24G002-02M Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jul 3 15:49 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.05	114	2815414	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.53	117	2287884	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.41	152	855294	10.00	ug/l	-0.01
System Monitoring Compounds						
35) Dibromofluoromethane	8.06	111	890503	10.54	ug/l	0.00
Spiked Amount 10.000			Recovery =	105.40%		
42) 1,2-Dichloroethane-d4	9.17	65	622590	10.24	ug/l	-0.02
Spiked Amount 10.000			Recovery =	102.40%		
55) Toluene-d8	12.90	98	3433083	9.97	ug/l	0.00
Spiked Amount 10.000			Recovery =	99.70%		
77) 4-Bromofluorobenzene	17.55	95	1130545	9.97	ug/l	0.00
Spiked Amount 10.000			Recovery =	99.70%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.63	85	710932	8.53	ug/l	98
3) Chloromethane	1.87	50	971754	7.66	ug/l	97
4) Vinyl chloride	1.99	62	732365	8.09	ug/l	99
5) Bromomethane	2.44	94	678547	8.27	ug/l	95
6) Chloroethane	2.52	64	562608	8.09	ug/l	99
7) Dichlorofluoromethane	2.56	67	1415592	8.28	ug/l	98
8) Trichlorofluoromethane	2.80	101	946433	8.42	ug/l	97
9) Acrolein	3.32	56	237551	41.34	ug/l	92
10) 1,1,2-Trichloro-1,2,2-trif	3.38	151	493738	9.52	ug/l	98
11) Acetone	3.43	43	489485	50.76	ug/l	90
12) 1,1-Dichloroethene	3.57	61	1231257	8.25	ug/l	94
13) tert-Butyl alcohol	3.72	59	865271	294.59	ug/l	100
15) Methyl acetate	4.12	74	65237	9.93	ug/l	92
16) Iodomethane	4.01	142	1335906	9.01	ug/l	95
18) Methylene chloride	4.33	49	1020415	8.16	ug/l	91
19) Carbon disulfide	4.28	76	3204124	8.23	ug/l	99
20) Acrylonitrile	4.56	53	731455	55.85	ug/l	98
21) tert-Butyl methyl ether (M	4.62	73	1443936	10.00	ug/l	98
22) trans-1,2-Dichloroethene	4.83	96	918498	8.86	ug/l	98
23) Isopropyl ether (DIPE)	5.52	45	2941219	9.02	ug/l	94
24) Vinyl acetate	5.77	43	929010	10.45	ug/l	96
25) 1,1-Dichloroethane	5.69	63	1560089	8.89	ug/l	98
27) tert-Butyl ethyl ether (ET	6.46	59	2192507	9.26	ug/l	96
28) 2-Butanone	6.74	43	833242	53.99	ug/l	93
29) 2,2-Dichloropropane	7.01	77	936480	9.42	ug/l	97
30) cis-1,2-Dichloroethene	7.13	96	974494	9.60	ug/l	99
31) Chloroform	7.53	83	1885265	11.72	ug/l	97
32) Bromochloromethane	7.91	130	448795	10.23	ug/l	98
33) Tetrahydrofuran	8.02	42	91196	9.65	ug/l	96
34) tert-Amyl alcohol	8.06	59	1383	0.62	ug/l #	1
36) 1,1,1-Trichloroethane	8.43	97	1100151	8.88	ug/l	98
37) Cyclohexane	8.41	84	1121733	8.95	ug/l	99
39) 1,1-Dichloropropene	8.81	110	400746	9.51	ug/l	98
40) Carbon tetrachloride	8.98	119	918769	9.18	ug/l	97
41) tert-Amyl methyl ether (TA	9.15	73	1779911	10.07	ug/l	97
43) 1,2-Dichloroethane	9.38	62	684998	9.56	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24G03\RGW073.D Vial: 12
Acq On : 3 Jul 2024 3:27 pm Operator: LPriet
Sample : 24G002-02M Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jul 3 15:49 2024 Quant Results File: VO06F03.RES

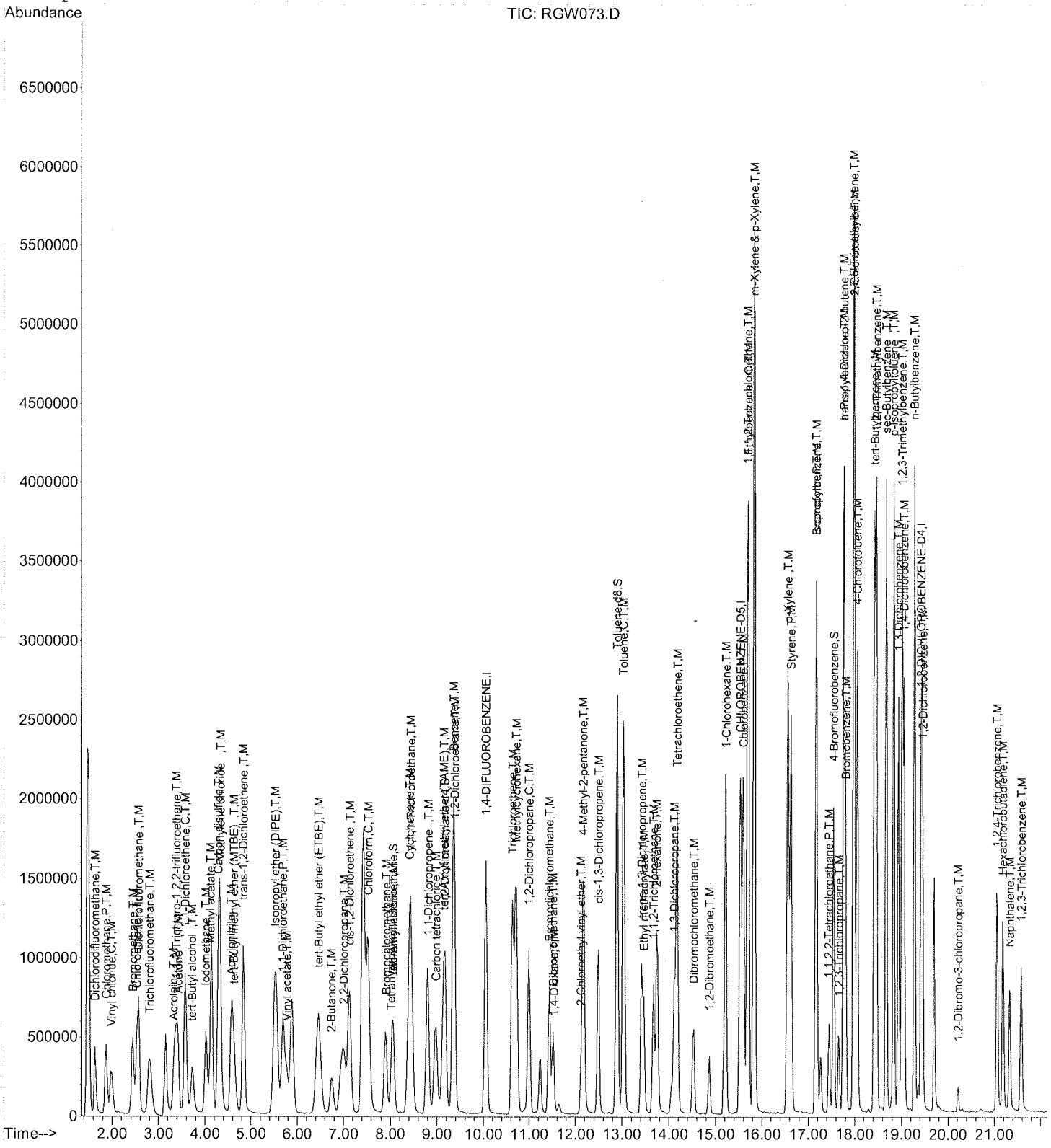
Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
44)	Benzene	9.36	78	3550166	9.47	ug/l	98
45)	Trichloroethene	10.64	130	933283	9.78	ug/l	97
46)	Methylcyclohexane	10.72	83	1489381	10.15	ug/l	95
47)	1,2-Dichloropropane	10.99	63	834257	9.21	ug/l	99
48)	1,4-Dioxane	11.54	88	59068	215.41	ug/l	92
49)	Bromodichloromethane	11.43	83	1032346	9.93	ug/l	99
50)	Dibromomethane	11.52	93	369076	9.63	ug/l	92
51)	2-Chloroethyl vinyl ether	12.12	63	236843	7.92	ug/l	98
52)	4-Methyl-2-pentanone	12.17	43	2497855	56.91	ug/l	93
53)	cis-1,3-Dichloropropene	12.50	75	1258985	9.52	ug/l	96
56)	Toluene	13.02	91	3648625	9.15	ug/l	98
57)	Ethyl methacrylate	13.46	69	731180	10.76	ug/l	94
58)	trans-1,3-Dichloropropene	13.42	75	928563	9.45	ug/l	95
59)	1,1,2-Trichloroethane	13.67	97	504110	10.78	ug/l	96
60)	2-Hexanone	13.74	43	1570590	56.85	ug/l	95
61)	1,3-Dichloropropane	14.11	76	890673	10.10	ug/l	97
62)	Tetrachloroethene	14.18	164	883068	12.04	ug/l	97
63)	Dibromochloromethane	14.53	129	598660	9.59	ug/l	100
65)	1,2-Dibromoethane	14.87	107	457570	9.82	ug/l	99
66)	1-Chlorohexane	15.22	91	1704372	9.08	ug/l	98
67)	Chlorobenzene	15.60	112	2220156	9.88	ug/l	100
68)	1,1,1,2-Tetrachloroethane	15.69	131	745415	9.86	ug/l	99
69)	Ethylbenzene	15.70	91	4152303	9.54	ug/l	99
70)	m-Xylene & p-Xylene	15.83	91	6149506	18.89	ug/l	100
71)	o-Xylene	16.56	91	3087498	9.23	ug/l	99
72)	Styrene	16.62	104	2387809	10.09	ug/l	97
73)	Isopropylbenzene	17.17	105	3849786	9.38	ug/l	99
75)	Bromoform	17.17	173	277809	11.51	ug/l	97
76)	1,1,2,2-Tetrachloroethane	17.44	83	547357	9.74	ug/l	95
78)	1,2,3-Trichloropropane	17.66	110	133109	10.23	ug/l	96
79)	trans-1,4-Dichloro-2-buten	17.77	53	133371	9.47	ug/l	96
80)	n-Propylbenzene	17.77	91	4891375	8.85	ug/l	99
81)	Bromobenzene	17.81	156	807386	10.07	ug/l	98
82)	1,3,5-Trimethylbenzene	17.97	105	3133205	8.72	ug/l	99
83)	2-Chlorotoluene	17.99	91	3215332	8.96	ug/l	98
84)	4-Chlorotoluene	18.05	91	2513995	8.27	ug/l	98
85)	tert-Butylbenzene	18.43	134	710607	9.09	ug/l	96
86)	1,2,4-Trimethylbenzene	18.47	105	3055828	8.85	ug/l	99
87)	sec-Butylbenzene	18.68	105	4215613	8.91	ug/l	98
88)	p-Isopropyltoluene	18.83	119	3424158	8.78	ug/l	98
89)	1,3-Dichlorobenzene	18.93	146	1609336	9.46	ug/l	98
90)	1,2,3-Trimethylbenzene	19.01	105	2930499	9.11	ug/l	99
91)	1,4-Dichlorobenzene	19.05	146	1576558	9.38	ug/l	99
92)	n-Butylbenzene	19.27	91	3389776	8.47	ug/l	98
93)	1,2-Dichlorobenzene	19.45	146	1324369	9.46	ug/l	98
94)	1,2-Dibromo-3-chloropropan	20.22	157	71224	10.36	ug/l	96
95)	1,2,4-Trichlorobenzene	21.05	180	800092	9.65	ug/l	98
96)	Hexachlorobutadiene	21.18	225	474274	9.07	ug/l	99
97)	Naphthalene	21.34	128	1139235	9.70	ug/l	97
98)	1,2,3-Trichlorobenzene	21.58	180	580531	9.26	ug/l	99

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\1\DATA\24G03\RGW073.D Vial: 12
Acq On : 3 Jul 2024 3:27 pm Operator: LPriet
Sample : 24G002-02M Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jul 3 15:49 2024 Quant Results File: VO06F03.RES

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24G03\RGW074.D Vial: 13
Acq On : 3 Jul 2024 3:53 pm Operator: LPriet
Sample : 24G002-02S Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jul 3 16:15 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.05	114	2825283	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.53	117	2320195	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.43	152	864903	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	8.06	111	905274	10.67	ug/l	0.00
Spiked Amount 10.000			Recovery = 106.70%			
42) 1,2-Dichloroethane-d4	9.17	65	656686	10.77	ug/l	-0.02
Spiked Amount 10.000			Recovery = 107.70%			
55) Toluene-d8	12.90	98	3439950	9.85	ug/l	0.00
Spiked Amount 10.000			Recovery = 98.50%			
77) 4-Bromofluorobenzene	17.55	95	1116560	9.74	ug/l	0.00
Spiked Amount 10.000			Recovery = 97.40%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.63	85	724715	8.66	ug/l	98
3) Chloromethane	1.87	50	1008893	7.92	ug/l	99
4) Vinyl chloride	1.99	62	797499	8.78	ug/l	98
5) Bromomethane	2.44	94	707554	8.59	ug/l	96
6) Chloroethane	2.52	64	587100	8.42	ug/l	97
7) Dichlorofluoromethane	2.56	67	1400801	8.16	ug/l	98
8) Trichlorofluoromethane	2.80	101	1017693	9.03	ug/l	98
9) Acrolein	3.34	56	272558	47.27	ug/l	89
10) 1,1,2-Trichloro-1,2,2-trif	3.38	151	484146	9.30	ug/l	100
11) Acetone	3.42	43	540860	55.90	ug/l	76
12) 1,1-Dichloroethene	3.57	61	1227537	8.19	ug/l	94
13) tert-Butyl alcohol	3.72	59	934433	317.02	ug/l	98
15) Methyl acetate	4.12	74	65698	9.97	ug/l	89
16) Iodomethane	4.01	142	1320825	8.88	ug/l	97
18) Methylene chloride	4.33	49	1061636	8.46	ug/l	94
19) Carbon disulfide	4.28	76	3174525	8.13	ug/l	99
20) Acrylonitrile	4.58	53	777672	59.17	ug/l	98
21) tert-Butyl methyl ether (M	4.62	73	1519866	10.49	ug/l	98
22) trans-1,2-Dichloroethene	4.83	96	932001	8.96	ug/l	99
23) Isopropyl ether (DIPE)	5.52	45	2937197	8.98	ug/l	94
24) Vinyl acetate	5.77	43	992186	11.12	ug/l	98
25) 1,1-Dichloroethane	5.69	63	1536869	8.72	ug/l	98
27) tert-Butyl ethyl ether (ET	6.46	59	2231365	9.39	ug/l	95
28) 2-Butanone	6.76	43	940391	60.72	ug/l	94
29) 2,2-Dichloropropane	7.01	77	902640	9.05	ug/l	96
30) cis-1,2-Dichloroethene	7.13	96	970165	9.53	ug/l	99
31) Chloroform	7.53	83	1838378	11.39	ug/l	98
32) Bromochloromethane	7.91	130	459065	10.43	ug/l	97
33) Tetrahydrofuran	8.01	42	95957	10.12	ug/l	96
34) tert-Amyl alcohol	8.08	59	3158	1.42	ug/l	99
36) 1,1,1-Trichloroethane	8.43	97	1094808	8.80	ug/l	98
37) Cyclohexane	8.43	84	1133627	9.01	ug/l	98
39) 1,1-Dichloropropene	8.81	110	395179	9.34	ug/l	99
40) Carbon tetrachloride	8.98	119	913187	9.09	ug/l	98
41) tert-Amyl methyl ether (TA	9.15	73	1846108	10.41	ug/l	97
43) 1,2-Dichloroethane	9.38	62	682989	9.50	ug/l	96

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\24G03\RGW074.D Vial: 13
Acq On : 3 Jul 2024 3:53 pm Operator: LPriet
Sample : 24G002-02S Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jul 3 16:15 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

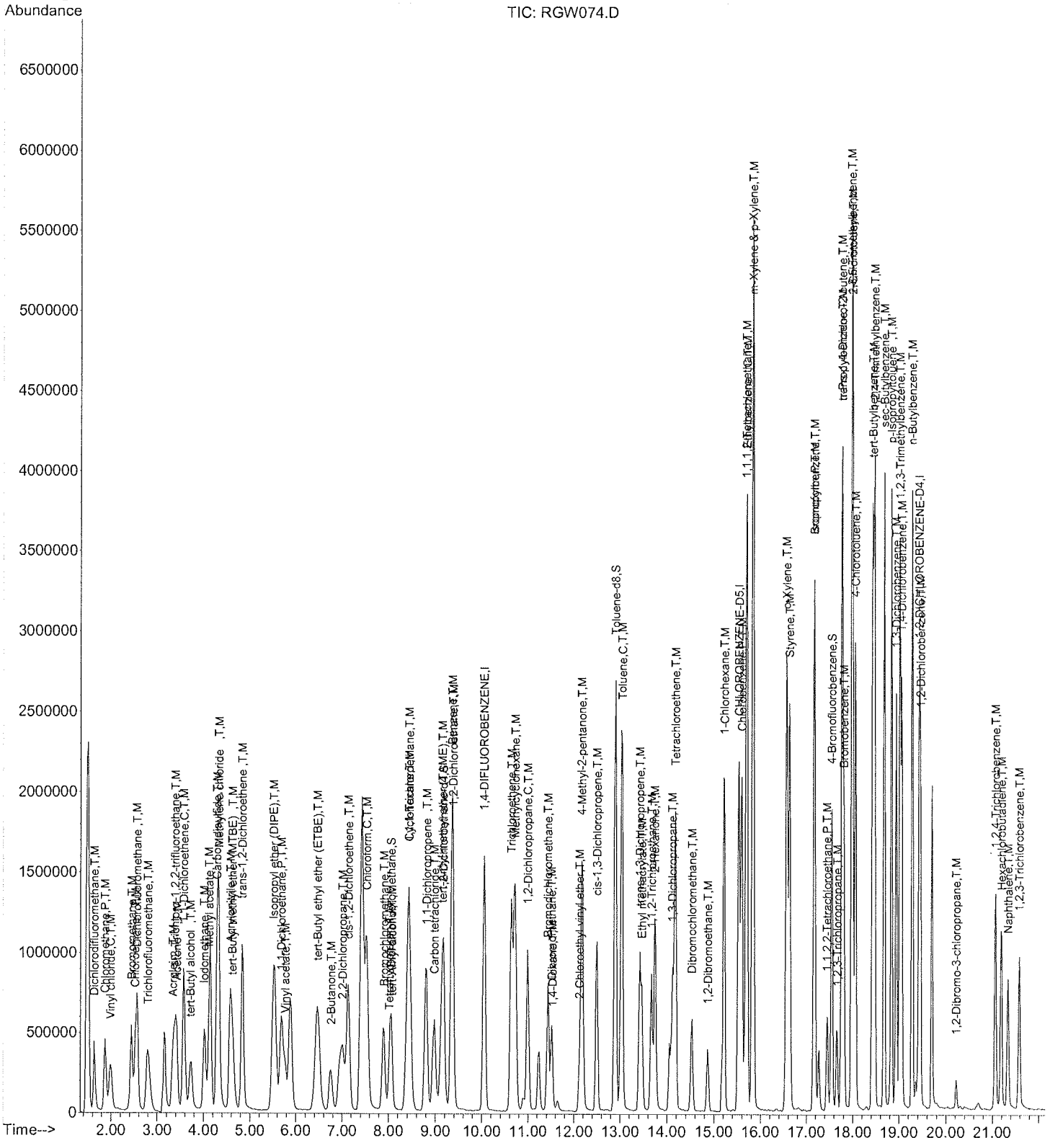
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
44)	Benzene	9.36	78	3468197	9.22	ug/l	98
45)	Trichloroethene	10.63	130	916028	9.57	ug/l	98
46)	Methylcyclohexane	10.72	83	1477754	10.03	ug/l	95
47)	1,2-Dichloropropane	10.99	63	829939	9.13	ug/l	99
48)	1,4-Dioxane	11.54	88	68330	248.32	ug/l	90
49)	Bromodichloromethane	11.43	83	1024580	9.82	ug/l	98
50)	Dibromomethane	11.51	93	376822	9.79	ug/l	91
51)	2-Chloroethyl vinyl ether	12.12	63	256868	8.56	ug/l	97
52)	4-Methyl-2-pentanone	12.16	43	2687686	61.02	ug/l	92
53)	cis-1,3-Dichloropropene	12.50	75	1249355	9.41	ug/l	95
56)	Toluene	13.04	91	3626684	8.97	ug/l	98
57)	Ethyl methacrylate	13.46	69	770946	11.19	ug/l	93
58)	trans-1,3-Dichloropropene	13.42	75	954006	9.58	ug/l	97
59)	1,1,2-Trichloroethane	13.67	97	517846	10.92	ug/l	94
60)	2-Hexanone	13.74	43	1699471	60.65	ug/l	93
61)	1,3-Dichloropropane	14.11	76	931896	10.42	ug/l	98
62)	Tetrachloroethene	14.18	164	857177	11.52	ug/l	97
63)	Dibromochloromethane	14.53	129	622408	9.83	ug/l	100
65)	1,2-Dibromoethane	14.87	107	473532	10.02	ug/l	98
66)	1-Chlorohexane	15.22	91	1704399	8.96	ug/l	98
67)	Chlorobenzene	15.60	112	2207811	9.68	ug/l	99
68)	1,1,1,2-Tetrachloroethane	15.69	131	731252	9.53	ug/l	94
69)	Ethylbenzene	15.70	91	4065879	9.21	ug/l	99
70)	m-Xylene & p-Xylene	15.83	91	6029659	18.26	ug/l	99
71)	o-Xylene	16.56	91	3067331	9.04	ug/l	100
72)	Styrene	16.62	104	2346856	9.78	ug/l	98
73)	Isopropylbenzene	17.17	105	3790038	9.11	ug/l	99
75)	Bromoform	17.17	173	295482	12.11	ug/l	99
76)	1,1,2,2-Tetrachloroethane	17.44	83	576409	10.14	ug/l	95
78)	1,2,3-Trichloropropane	17.66	110	134722	10.24	ug/l	93
79)	trans-1,4-Dichloro-2-buten	17.77	53	130765	9.19	ug/l	94
80)	n-Propylbenzene	17.77	91	4845135	8.67	ug/l	98
81)	Bromobenzene	17.80	156	790768	9.75	ug/l	99
82)	1,3,5-Trimethylbenzene	17.97	105	3064033	8.43	ug/l	98
83)	2-Chlorotoluene	17.99	91	3174989	8.75	ug/l	99
84)	4-Chlorotoluene	18.05	91	2513822	8.17	ug/l	99
85)	tert-Butylbenzene	18.43	134	685746	8.67	ug/l	96
86)	1,2,4-Trimethylbenzene	18.47	105	3009395	8.62	ug/l	99
87)	sec-Butylbenzene	18.67	105	4109414	8.59	ug/l	97
88)	p-Isopropyltoluene	18.83	119	3294424	8.35	ug/l	98
89)	1,3-Dichlorobenzene	18.93	146	1561425	9.08	ug/l	99
90)	1,2,3-Trimethylbenzene	19.01	105	2845353	8.75	ug/l	99
91)	1,4-Dichlorobenzene	19.05	146	1552263	9.13	ug/l	99
92)	n-Butylbenzene	19.27	91	3297413	8.14	ug/l	99
93)	1,2-Dichlorobenzene	19.45	146	1319332	9.32	ug/l	98
94)	1,2-Dibromo-3-chloropropan	20.22	157	77544	11.15	ug/l	97
95)	1,2,4-Trichlorobenzene	21.06	180	794740	9.48	ug/l	98
96)	Hexachlorobutadiene	21.19	225	455990	8.62	ug/l	98
97)	Naphthalene	21.34	128	1188775	10.01	ug/l	97
98)	1,2,3-Trichlorobenzene	21.58	180	566176	8.93	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24G03\RGW074.D Vial: 13
Acq On : 3 Jul 2024 3:53 pm Operator: LPriet
Sample : 24G002-02S Inst : 06
Misc : 25mL Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jul 3 16:15 2024 Quant Results File: VO06F03.RES

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 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: RFW001 BFB Injection Date: 06/03/24

Instrument ID: 06 BFB Injection Time: 14:25

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	17.714
75	30 - 60% of mass 95	43.812
95	Base Peak, 100% relative abundance	100.000
96	5 - 9% of mass 95	5.660
173	Less than 2% of mass 174	0.000(0)1
174	Greater than 50% of mass 95	66.801
175	5 - 9% of mass 174	4.543(6.8)1
176	95 - 101% % of mass 174	65.298(97.75)1
177	5 - 9% % of mass 176	3.804(5.83)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	VO06F031	RFW002	06/03/24	15:03
2	VSTD0.5	VO06F032	RFW003	06/03/24	15:29
3	VSTD1	VO06F033	RFW004	06/03/24	15:55
4	VSTD2	VO06F034	RFW005	06/03/24	16:21
5	VSTD5	VO06F035	RFW006	06/03/24	16:47
6	VSTD10	VO06F036	RFW007	06/03/24	17:14
7	VSTD20	VO06F037	RFW008	06/03/24	17:40
8	VSTD30	VO06F038	RFW009	06/03/24	18:06
9	VSTD50	VO06F039	RFW010	06/03/24	18:32
10	VSTD100	VO06F0310	RFW011	06/03/24	18:59
11	VSTD10	IVO06F0301	RFW014	06/03/24	20:18

SLC

6/13/24

INITIAL_CALIBRATION - RELATIVE_RESPONSE_FACTOR

Instrument ID :06
Beginning DateTime :06/03/24 15:03
Spike Units :PPB
IC File :RFW007

Column Spec :RTX502.2 ID :0.25MM
Ending DateTime :06/03/24 18:59
HPChem Method :VO06F03

M	IDX	Parameters	.3 15:03 RFW002	.5 15:29 RFW003	1 15:55 RFW004	2 16:21 RFW005	5 16:47 RFW006	10 17:14 RFW007	20 17:40 RFW008	30 18:06 RFW009	50 18:32 RFW010	100 18:59 RFW011	Av_RRF	%_RSD	Av_Rt_M
	1	1,4-DIFLUOROBENZENE	1	1	1	1	1	1	1	1	1	1	1	0	10.0565
	2	Dichlorodifluoromethane	------	0.321	0.260	0.304	0.292	0.297	0.312	0.296	0.293	0.290	0.296	5.79	1.6306
	3	Chloromethane	0.613	0.437	0.396	0.430	0.439	0.434	0.442	0.449	0.445	0.423	0.451	13.06	1.8637
	4	Vinyl chloride	------	0.305	0.282	0.317	0.330	0.333	0.351	0.331	0.322	------	0.321	6.50	1.9733
	5	Bromomethane	------	0.248	0.278	0.272	0.295	0.292	0.312	0.316	0.309	0.301	0.291	7.51	2.4311
	6	Chloroethane	------	0.215	0.241	0.242	0.250	0.243	0.261	0.263	0.260	0.249	0.247	5.98	2.5188
	7	Dichlorofluoromethane	0.720	0.582	0.530	0.557	0.608	0.607	0.627	0.630	0.622	0.593	0.607	8.37	2.5585
	8	Trichlorofluoromethane	0.524	0.387	0.341	0.379	0.381	0.387	0.412	0.399	0.391	0.391	0.399	11.88	2.7954
5	9	Acrolein	------	0.019	0.019	0.016	0.018	0.021	0.021	0.023	0.024	0.023	0.020	12.06	3.3391
	10	1,1,2-Trichloro-1,2,2-trifluoroethane	0.228	0.166	0.172	0.169	0.174	0.179	0.190	0.191	0.184	0.190	0.184	9.77	3.3791
5	11	Acetone	------	0.045	0.032	0.033	0.030	0.031	0.032	0.035	0.035	0.036	0.034	12.69	3.4253
	12	1,1-Dichloroethene	0.560	0.490	0.472	0.499	0.522	0.548	0.559	0.561	0.548	0.544	0.530	6.16	3.5719
25	13	tert-Butyl alcohol	0.012	0.009	0.009	0.009	0.009	0.010	0.010	0.012	0.012	0.012	0.010	13.37	3.7417
	14	Acetonitrile	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	15	Methyl acetate	------	------	0.027	0.022	0.023	0.022	0.022	0.023	------	------	0.023	8.55	4.1238
	16	Iodomethane	0.591	0.457	0.473	0.495	0.530	0.532	0.550	0.553	0.550	0.533	0.526	7.71	4.0204
	17	Allyl chloride	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	18	Methylene chloride	0.513	0.422	0.415	0.402	0.443	0.440	0.451	0.459	0.453	0.444	0.444	6.80	4.3264
	19	Carbon disulfide	------	1.331	1.258	1.356	1.401	1.436	1.452	1.445	------	------	1.383	5.19	4.2875
5	20	Acrylonitrile	0.051	0.041	0.041	0.041	0.044	0.046	0.047	0.051	0.051	0.051	0.047	9.66	4.5779
	21	tert-Butyl methyl ether (MTBE)	0.574	0.467	0.437	0.458	0.495	0.522	0.527	0.567	0.537	0.545	0.513	9.16	4.6219
	22	trans-1,2-Dichloroethene	0.403	0.351	0.343	0.336	0.359	0.367	0.380	0.382	0.383	0.379	0.368	5.68	4.8462
	23	Isopropyl ether (DIPE)	1.155	0.993	1.025	1.096	1.194	1.216	1.229	1.265	1.245	------	1.158	8.51	5.5442
	24	Vinyl acetate	0.306	0.254	0.244	0.284	0.312	0.307	0.354	0.375	0.363	0.359	0.316	14.60	5.7851
	25	1,1-Dichloroethane	0.593	0.560	0.572	0.584	0.623	0.640	0.657	0.670	0.671	0.665	0.623	6.90	5.7013
25	26	2-Butanol	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	27	tert-Butyl ethyl ether (ETBE)	0.935	0.769	0.702	0.769	0.818	0.858	0.860	0.905	0.901	0.895	0.841	8.89	6.4705
5	28	2-Butanone	0.050	0.056	0.045	0.047	0.052	0.056	0.056	0.062	0.062	0.062	0.055	11.24	6.7702
	29	2,2-Dichloropropane	------	0.324	0.349	0.338	0.348	0.355	0.381	0.370	0.362	------	0.353	5.11	7.0091
	30	cis-1,2-Dichloroethene	0.383	0.335	0.311	0.334	0.345	0.364	0.378	0.381	0.388	0.387	0.360	7.58	7.1411
	31	Chloroform	0.588	0.576	0.537	0.525	0.564	0.562	0.581	0.590	0.595	0.596	0.571	4.25	7.5331
	32	Bromochloromethane	0.168	0.132	0.135	0.142	0.147	0.161	0.163	0.171	0.169	0.171	0.156	9.93	7.9103
	33	Tetrahydrofuran	------	------	0.039	0.031	0.033	0.032	0.030	0.035	0.032	0.036	0.034	9.10	8.0283
5	34	tert-Amyl alcohol	------	------	------	0.008	0.007	0.008	0.007	0.009	------	------	0.008	11.64	8.0611
	35	Dibromofluoromethane	0.366	0.296	0.245	0.272	0.293	0.301	0.312	0.316	------	------	0.300	11.72	8.0570
	36	1,1,1-Trichloroethane	0.528	0.392	0.398	0.400	0.432	0.435	0.464	0.456	0.454	0.442	0.440	9.11	8.4490
	37	Cyclohexane	------	0.457	0.399	0.448	0.437	0.463	0.468	0.446	------	------	0.445	5.16	8.4343
	38	2,2,4-Trimethylpentane	1.366	1.137	0.978	1.135	1.134	1.145	1.157	1.087	------	------	1.142	9.38	8.6202
	39	1,1-Dichloropropene	0.154	0.140	0.137	0.137	0.140	0.149	0.157	0.159	0.159	0.165	0.150	6.88	8.8116
	40	Carbon tetrachloride	0.392	0.338	0.306	0.330	0.343	0.356	0.376	0.373	0.371	0.369	0.355	7.29	8.9813
	41	tert-Amyl methyl ether (TAME)	0.661	0.514	0.541	0.571	0.629	0.656	0.652	0.702	0.680	0.672	0.628	10.16	9.1511
	42	1,2-Dichloroethane-d4	------	0.248	0.183	0.204	0.202	0.215	0.226	0.233	------	------	0.216	10.10	9.1798
	43	1,2-Dichloroethane	0.218	0.215	0.232	0.230	0.263	0.267	0.273	0.279	0.282	0.286	0.254	10.92	9.3795
	44	Benzene	1.327	1.258	1.268	1.329	1.404	1.403	1.402	1.417	1.410	1.097	1.331	7.65	9.3586
	45	Trichloroethene	0.337	0.304	0.280	0.322	0.350	0.354	0.355	0.359	0.363	0.365	0.339	8.32	10.6371
	46	Methylcyclohexane	------	0.498	0.440	0.532	0.513	0.571	0.557	0.539	------	------	0.521	8.40	10.7188
	47	1,2-Dichloropropane	0.337	0.275	0.285	0.302	0.324	0.328	0.342	0.343	0.342	0.340	0.322	7.90	10.9913
20	48	1,4-Dioxane	------	------	------	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	9.47	11.5392
	49	Bromodichloromethane	0.380	0.344	0.336	0.339	0.379	0.368	0.380	0.391	0.391	0.386	0.369	5.86	11.4314
	50	Dibromomethane	0.169	0.134	0.132	0.117	0.127	0.131	0.135	0.138	0.140	0.139	0.136	9.86	11.5152
	51	2-Chloroethyl vinyl ether	------	0.103	0.090	0.089	0.109	0.107	0.109	0.117	0.116	0.117	0.106	10.02	12.1278
5	52	4-Methyl-2-pentanone	0.135	0.123	0.133	0.143	0.167	0.172	0.167	0.181	0.175	0.162	0.156	13.02	12.1859
	53	cis-1,3-Dichloropropene	0.465	0.416	0.419	0.439	0.477	0.480	0.497	0.510	0.503	0.493	0.470	7.30	12.5003
	54	CHLOROBENZENE-D5	1	1	1	1	1	1	1	1	1	1	1	0	15.5334
	55	Toluene-d8	1.632	1.561	1.404	1.459	1.527	1.467	1.501	1.490	------	------	1.505	4.62	12.8984
	56	Toluene	1.605	1.751	1.682	1.749	1.785	1.785	1.810	1.797	1.727	------	1.743	3.75	13.0452
	57	Ethyl methacrylate	------	0.279	0.258	0.265	0.283	0.303	0.309	0.328	0.315	0.333	0.297	9.08	13.4715
	58	trans-1,3-Dichloropropene	0.378	0.409	0.385	0.398	0.436	0.441	0.451	0.471	0.457	0.468	0.429	8.01	13.4246
	59	1,1,2-Trichloroethane	------	0.214	0.186	0.181	0.201	0.202	0.209	0.222	0.220	------	0.204	7.35	13.6740
5	60	2-Hexanone	------	------	0.090	0.105	0.121	0.125	0.124	0.136	0.131	0.135	0.121	13.14	13.7527
	61	1,3-Dichloropropane	0.342	0.365	0.333	0.361	0.385	0.398	0.409	0.422	0.415	0.426	0.386	8.77	14.1163
	62	Tetrachloroethene	0.338	0.287	0.276	0.295	0.317	0.325	0.338	0.337	0.340	0.353	0.321	8.08	14.1770
	63	Dibromochloromethane	0.315	0.272	0.243	0.241	0.262	0.267	0.274	0.285	0.283	0.289	0.273	8.06	14.5333
	64	2-Ethyl-1-butanol	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
	65	1,2-Dibromoethane	0.263	0.193	0.188	0.188	0.186	0.194	0.193	0.210	0.208	0.213	0.204	11.37	14.8686
	66	1-Chlorohexane	0.878	0.793	0.739	0.783	0.852	0.807	0.870	0.829	0.858	0.793	0.820	5.44	15.2220
	67	Chlorobenzene	0.932	0.939	0.917	0.975	1.019	1.018	1.037	1.050	1.035	0.905	0.983	5.64	15.5983
	68	1,1,1,2-Tetrachloroethane	0.342	0.290	0.287	0.303	0.326	0.341	0.344	0.355	0.355	0.363	0.331	8.42	15.6865
	69	Ethylbenzene	1.846	1.839	1.825	1.905	1.981	1.960	1.991	1.999	1.773	------	1.902	4.42	15.7036
2	70	m-Xylene & p-Xylene	1.447	1.474	1.440	1.487	1.521	1.480	1.512	1.381	1.066	------	1.423	9.86	15.8334
	71	o-Xylene	1.540	1.432	1.345	1.427	1.502	1.472	1.499	1.492	1.446	------	1.462	3.90	16.5614
	72	Styrene	0.955	0.954	0.970	1.023	1.059	1.092	1.104	1.121	1.114	0.948	1.034	6.99	16.6298
	73	Isopropylbenzene	1.846	1.774	1.767	1.790	1.849	1.827	1.846	1.810	1.633	------	1.793	3.78	17.1697
	74	1,2-DICHLOROBENZENE-D4	1	1	1	1	1	1	1	1	1	1	1	0	19.4258
	75	Bromoform	0.239	0.229	0.264	0.278	0.305	0.323	0.338	------	------	------	0.282	14.77	17.1682
	76	1,1,2,2-Tetrachloroethane	0.762	0.660	0.553	0.604	0.608	0.644	0.668	0.708	0.684	0.681	0.657	8.96	17.4536
	77	4-Bromofluorobenzene	------	1.202	1.190	1.342	1.363	1.358	1.406	1.421	------	------	1.326	7.03	17.5464
	78	1,2,3-Trichloropropane	------	------	0.136	0.146	0.147	0.148	0.150	0.160	0.162	0.168	0.152	6.78	17.6612
	79	trans-1,4-Dichloro-2-butene	------	0.153	0.168	0.167	0.160	0.165	0.175	------	------	------	0.165	4.52	17.7673
	80	n-Propylbenzene	5.827	6.531	6.350	6.958	6.946	6.914	6.983	6.506	5.142	------	6.462	9.67	17.7651
	81	Bromobenzene	0.747	0.801	0.833	0.893	0.966	0.979	1.001	1.020	1.050	1.085	0.938	12.11	17.8040
	82	1,3,5-Trimethylbenzene	3.837	4.087	3.996	4.298	4.356	4.367	4.453	4.414	4.008	------	4.202	5.29	17.9756
	83	2-Chlorotoluene	3.578	3.851	3.894	4.231	4.451	4.417	4.531	4.532	4.288	------	4.197	8.17	17.9871
	84	4-Chlorotoluene	2.977	3.499	3.375	3.766	3.675	3.617	3.759	3.743	3.596	------	3.556	7.10	18.0520
	85	tert-Butylbenzene	------	0.893	0.780	0.856	0.918	0.947	0.959	0.933	0.961	0.981	0.914	6.93	18.4268
	86	1,2,4-Trimethylbenzene	3.436	3.993	3.819	4.151	4.250	4.224	4.349	4.275	3.845	------	4.038	7.30	18.4658
	87	sec-Butylbenzene	5.161	5.536	5.537	5.972	5.922	5.793	5.831	5.532	4.477	------	5.529	8.47	18.6733
	88	p-Isopropyltoluene	4.304	4.350	4.304	4.942	4.817	4.764	4.839	4.714	4.012	------	4.561	7.07	18.8391
	89	1,3-Dichlorobenzene	1.748	1.650	1.800	2.004	2.109	2.109	2.165	2.168	2.180	1.947	1.988	9.76	18.9379
	90	1,2,3-Trimethylbenzene	3.509	3.472	3.479	3.810	4.013	3.913	4.025	3.991	3.644	------	3.762	6.32	19.0107
	91	1,4-Dichlorobenzene	1.671	1.817	1.728	1.952	2.018	2.064	2.143	2.147	2.157	1.953	1.965	8.97	19.0625
	92	n-Butylbenzene	4.595	4.696	4.604	4.871	4.909	4.767	4.955	4.774	3.956	------	4.681	6.40	19.2831
	93	1,2-Dichlorobenzene	1.353	1.460	1.559	1.663	1.701	1.723	1.744	1.747	1.738	1.682	1.637	8.31	19.4517
	94	1,2-Dibromo-3-chloropropane	------	------	------	0.076	0.078	0.077	0.076	0.084	0.084	0.088	0.080	6.08	20.2321
	95	1,2,4-Trichlorobenzene	0.960	0.797	0.853	0.898	0.991	0.965	1.037	1.047	1.049	1.093	0.969	9.81	21.0632
	96	Hexachlorobutadiene	0.652	0.628	0.558	0.617	0.613	0.592	0.634	0.604	0.585	0.629	0.611	4.49	21.1903
	97	Naphthalene	1.422	1.196	1.154	1.339	1.345	1.336	1.427	1.493	1.483	1.539	1.373	9.16	21.3382
	98	1,2,3-Trichlorobenzene	0.809	0.662	0.632	0.680	0.741	0.673	0.746	0.775	0.788	0.826	0.733	9.20	21.5912

Spike Amount = Nominal Amount * M
Ave_%RSD : 8.3 Max_%RSD : 14.8

SM 6/13/24

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 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	10.05	1.000	A	1	A	B
2	T	Dichlorodifluoromethane	85	1.63	0.162	A	1	A	B
3	T	Chloromethane	50	1.86	0.186	A	1	A	B
4	T	Vinyl chloride	62	1.98	0.197	A	1	A	B
5	T	Bromomethane	94	2.44	0.243	A	1	A	B
6	T	Chloroethane	64	2.52	0.250	A	1	A	B
7	T	Dichlorofluoromethane	67	2.56	0.254	A	1	A	B
8	T	Trichlorofluoromethane	101	2.79	0.278	A	1	A	B
9	T	Acrolein	56	3.34	0.333	A	1	A	B
10	T	1,1,2-Trichloro-1,2,2-trifluor	151	3.38	0.337	A	1	A	B
11	T	Acetone	43	3.42	0.341	A	1	A	B
12	T	1,1-Dichloroethene	61	3.57	0.355	A	2	A	B
13	T	tert-Butyl alcohol	59	3.74	0.372	A	1	A	B
14	T	Acetonitrile	41	0.00	0.000	A	2	A	B
15	T	Methyl acetate	74	4.14	0.412	A	1	A	B
16	T	Iodomethane	142	4.03	0.401	A	1	A	B
17	T	Allyl chloride	76	4.16	0.414	A	1	A	B
18	T	Methylene chloride	49	4.33	0.431	A	2	A	B
19	T	Carbon disulfide	76	4.28	0.426	A	1	A	B
20	T	Acrylonitrile	53	4.58	0.456	A	2	A	B
21	T	tert-Butyl methyl ether (MTBE)	73	4.62	0.460	A	1	A	B
22	T	trans-1,2-Dichloroethene	96	4.85	0.483	A	1	A	B
23	T	Isopropyl ether (DIPE)	45	5.54	0.552	A	1	A	B
24	T	Vinyl acetate	43	5.77	0.574	A	1	A	B
25	T	1,1-Dichloroethane	63	5.71	0.568	A	2	A	B
26	T	2-Butanol	45	6.28	0.625	A	1	A	B
27	T	tert-Butyl ethyl ether (ETBE)	59	6.46	0.643	A	1	A	B
28	T	2-Butanone	43	6.76	0.673	A	1	A	B
29	T	2,2-Dichloropropane	77	7.01	0.698	A	2	A	B
30	T	cis-1,2-Dichloroethene	96	7.13	0.710	A	1	A	B
31	T	Chloroform	83	7.53	0.750	A	2	A	B
32	T	Bromochloromethane	130	7.91	0.787	A	1	A	B
33	T	Tetrahydrofuran	42	8.04	0.800	A	2	A	B
34	T	tert-Amyl alcohol	59	8.06	0.802	A	1	A	B
35	S	Dibromofluoromethane	111	8.06	0.802	A	1	A	B
36	T	1,1,1-Trichloroethane	97	8.46	0.841	A	2	A	B
37	T	Cyclohexane	84	8.43	0.839	A	1	A	B
38	T	2,2,4-Trimethylpentane	57	8.62	0.858	A	1	A	B
39	T	1,1-Dichloropropene	110	8.81	0.877	A	1	A	B
40	T	Carbon tetrachloride	119	8.98	0.894	A	1	A	B
41	T	tert-Amyl methyl ether (TAME)	73	9.15	0.910	A	2	A	B
42	S	1,2-Dichloroethane-d4	65	9.19	0.914	A	1	A	B
43	T	1,2-Dichloroethane	62	9.38	0.933	A	1	A	B
44	T	Benzene	78	9.36	0.931	A	2	A	B
45	T	Trichloroethene	130	10.63	1.058	A	3	A	B
46	T	Methylcyclohexane	83	10.72	1.067	A	2	A	B
47	T	1,2-Dichloropropane	63	10.99	1.094	A	1	A	B
48	T	1,4-Dioxane	88	11.54	1.148	A	1	A	B
49	T	Bromodichloromethane	83	11.43	1.138	A	1	A	B
50	T	Dibromomethane	93	11.51	1.146	A	2	A	B
51	T	2-Chloroethyl vinyl ether	63	12.12	1.207	A	1	A	B
52	T	4-Methyl-2-pentanone	43	12.19	1.213	A	3	A	B
53	T	cis-1,3-Dichloropropene	75	12.50	1.244	A	3	A	B

6/13/24

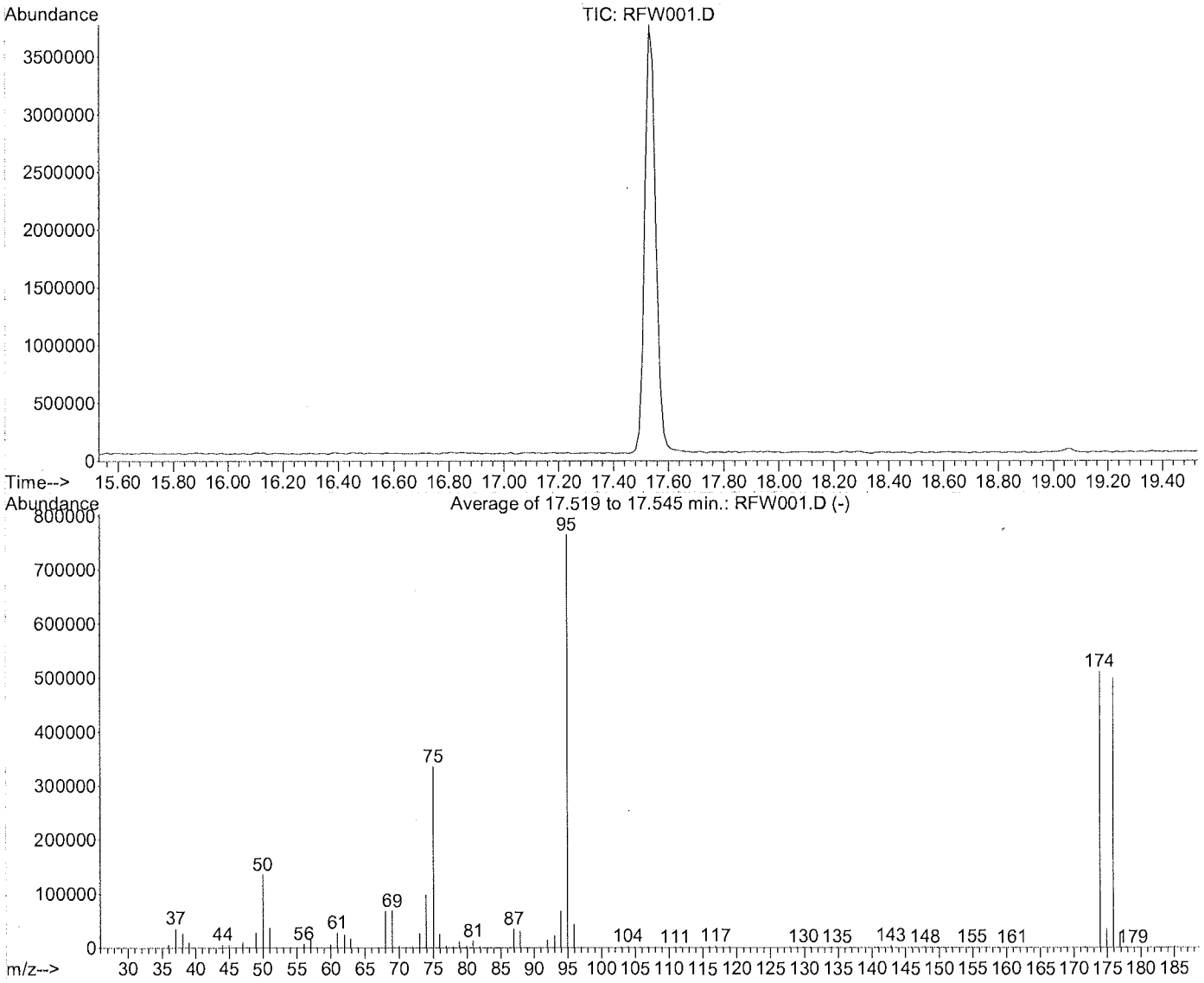
54	I		CHLOROBENZENE-D5	117	15.53	1.000	A	2	A	B
55		S	Toluene-d8	98	12.90	0.830	A	1	A	B
56		T	Toluene	91	13.04	0.840	A	1	A	B
57		T	Ethyl methacrylate	69	13.46	0.867	A	1	A	B
58		T	trans-1,3-Dichloropropene	75	13.42	0.864	A	1	A	B
59		T	1,1,2-Trichloroethane	97	13.67	0.880	A	2	A	B
60		T	2-Hexanone	43	13.76	0.886	A	1	A	B
61		T	1,3-Dichloropropane	76	14.11	0.909	A	1	A	B
62		T	Tetrachloroethene	164	14.18	0.913	A	3	A	B
63		T	Dibromochloromethane	129	14.53	0.936	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	14.87	0.957	A	1	A	B
66		T	1-Chlorohexane	91	15.22	0.980	A	1	A	B
67		T	Chlorobenzene	112	15.60	1.004	A	1	A	B
68		T	1,1,1,2-Tetrachloroethane	131	15.69	1.010	A	1	A	B
69		T	Ethylbenzene	91	15.70	1.011	A	1	A	B
70		T	m-Xylene & p-Xylene	91	15.83	1.019	A	1	A	B
71		T	o-Xylene	91	16.56	1.066	A	1	A	B
72		T	Styrene	104	16.62	1.070	A	2	A	B
73		T	Isopropylbenzene	105	17.17	1.105	A	3	A	B
74	I		1,2-DICHLOROBENZENE-D4	152	19.43	1.000	A	1	A	B
75		T	Bromoform	173	17.17	0.884	A	2	A	B
76		T	1,1,2,2-Tetrachloroethane	83	17.45	0.898	A	1	A	B
77		S	4-Bromofluorobenzene	95	17.54	0.903	A	2	A	B
78		T	1,2,3-Trichloropropane	110	17.66	0.909	A	1	A	B
79		T	trans-1,4-Dichloro-2-butene	53	17.77	0.915	A	1	A	B
80		T	n-Propylbenzene	91	17.77	0.915	A	2	A	B
81		T	Bromobenzene	156	17.80	0.917	A	1	A	B
82		T	1,3,5-Trimethylbenzene	105	17.97	0.925	A	2	A	B
83		T	2-Chlorotoluene	91	17.99	0.926	A	1	A	B
84		T	4-Chlorotoluene	91	18.05	0.929	A	1	A	B
85		T	tert-Butylbenzene	134	18.43	0.949	A	1	A	B
86		T	1,2,4-Trimethylbenzene	105	18.47	0.951	A	1	A	B
87		T	sec-Butylbenzene	105	18.67	0.961	A	1	A	B
88		T	p-Isopropyltoluene	119	18.83	0.969	A	2	A	B
89		T	1,3-Dichlorobenzene	146	18.93	0.975	A	2	A	B
90		T	1,2,3-Trimethylbenzene	105	19.01	0.979	A	2	A	B
91		T	1,4-Dichlorobenzene	146	19.06	0.981	A	2	A	B
92		T	n-Butylbenzene	91	19.28	0.993	A	2	A	B
93		T	1,2-Dichlorobenzene	146	19.45	1.001	A	1	A	B
94		T	1,2-Dibromo-3-chloropropane	157	20.23	1.041	A	1	A	B
95		T	1,2,4-Trichlorobenzene	180	21.06	1.084	A	2	A	B
96		T	Hexachlorobutadiene	225	21.19	1.091	A	2	A	B
97		T	Naphthalene	128	21.33	1.098	A	1	A	B
98		T	1,2,3-Trichlorobenzene	180	21.58	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

VO06F03.M Mon Jun 10 17:42:01 2024

SM 6/13/24

Data File : D:\HPCHEM\1\DATA\24F03\RFW001.D Vial: 1
Acq On : 3 Jun 2024 2:25 pm Operator: DHuynh
Sample : BFB06F01 Inst : 06
Misc : T/CHK Multiplr: 1.00
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260



AutoFind: Scans 845, 846, 847; Background Corrected with Scan 838

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.7	135578	PASS
75	95	30	60	43.8	335326	PASS
95	95	100	100	100.0	765375	PASS
96	95	5	9	5.7	43319	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	66.8	511275	PASS
175	174	5	9	6.8	34773	PASS
176	174	95	101	97.8	499776	PASS
177	176	5	9	5.8	29114	PASS

SC
6/13/24

RFW001.D VO06F03.M Mon Jun 10 16:45:31 2024

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW002.D Vial: 2
Acq On : 3 Jun 2024 3:03 pm Operator: DHuynh
Sample : VO06F031 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: Jun 10 16:49 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.07	114	2525414	10.00	ug/l	0.02
54) CHLOROBENZENE-D5	15.53	117	1862974	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.43	152	750796	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	8.06	111	27720	0.37	ug/l	0.00
Spiked Amount 10.000			Recovery =	3.70%		
42) 1,2-Dichloroethane-d4	9.19	65	20939	0.38	ug/l	0.00
Spiked Amount 10.000			Recovery =	3.80%		
55) Toluene-d8	12.90	98	91236	0.33	ug/l	0.00
Spiked Amount 10.000			Recovery =	3.30%		
77) 4-Bromofluorobenzene	17.56	95	36089	0.36	ug/l	0.01
Spiked Amount 10.000			Recovery =	3.60%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.63	85	33680	0.45	ug/l	75
3) Chloromethane	1.87	50	46435	0.41	ug/l	90
4) Vinyl chloride	1.99	62	35381	0.44	ug/l	97
5) Bromomethane	2.44	94	34640	0.47	ug/l	98
6) Chloroethane	2.52	64	29572	0.47	ug/l	98
7) Dichlorofluoromethane	2.56	67	54547	0.36	ug/l	93
8) Trichlorofluoromethane	2.80	101	39669	0.39	ug/l	96
9) Acrolein	3.34	56	10589	2.05	ug/l	71
10) 1,1,2-Trichloro-1,2,2-trif	3.36	151	17300	0.37	ug/l	96
11) Acetone	3.45	43	17658	2.04	ug/l	64
12) 1,1-Dichloroethene	3.57	61	42447	0.32	ug/l	87
13) tert-Butyl alcohol	3.76	59	23137	8.78	ug/l	67
16) Iodomethane	4.03	142	44746	0.34	ug/l	97
18) Methylene chloride	4.33	49	38878	0.35	ug/l	93
19) Carbon disulfide	4.30	76	152496	0.44	ug/l	97
20) Acrylonitrile	4.58	53	19445	1.66	ug/l	96
21) tert-Butyl methyl ether (M	4.64	73	43458	0.34	ug/l	77
22) trans-1,2-Dichloroethene	4.85	96	30555	0.33	ug/l	95
23) Isopropyl ether (DIPE)	5.58	45	87492	0.30	ug/l	86
24) Vinyl acetate	5.81	43	23182	0.29	ug/l	97
25) 1,1-Dichloroethane	5.71	63	44933	0.29	ug/l	90
27) tert-Butyl ethyl ether (ET	6.51	59	70816	0.33	ug/l	95
28) 2-Butanone	6.82	43	18852	1.36	ug/l	78
29) 2,2-Dichloropropane	7.01	77	45437	0.51	ug/l	78
30) cis-1,2-Dichloroethene	7.15	96	28998	0.32	ug/l	99
31) Chloroform	7.53	83	44544	0.31	ug/l	78
32) Bromochloromethane	7.91	130	12720	0.32	ug/l	100

(#) = qualifier out of range (m) = manual integration
RFW002.D VO06F03.M Mon Jun 10 16:49:42 2024 SU 6/13/24 Page 1

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW002.D Vial: 2
Acq On : 3 Jun 2024 3:03 pm Operator: DHuynh
Sample : VO06F031 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: Jun 10 16:49 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
34)	tert-Amyl alcohol	8.12	59	7687	3.87 ug/l	85
36)	1,1,1-Trichloroethane	8.45	97	40006	0.36 ug/l	92
37)	Cyclohexane	8.43	84	48550	0.43 ug/l	98
38)	2,2,4-Trimethylpentane	8.62	57	103467	0.36 ug/l	98
39)	1,1-Dichloropropene	8.81	110	11632	0.31 ug/l	93
40)	Carbon tetrachloride	8.98	119	29712	0.33 ug/l	95
41)	tert-Amyl methyl ether (TA	9.15	73	50116	0.32 ug/l	71
43)	1,2-Dichloroethane	9.40	62	16490	0.26 ug/l	78
44)	Benzene	9.38	78	100533	0.30 ug/l	99
45)	Trichloroethene	10.65	130	25541	0.30 ug/l	88
46)	Methylcyclohexane	10.72	83	57113	0.43 ug/l	98
47)	1,2-Dichloropropane	10.99	63	25515	0.31 ug/l	98
49)	Bromodichloromethane	11.43	83	28753	0.31 ug/l	98
50)	Dibromomethane	11.51	93	12815	0.37 ug/l	73
52)	4-Methyl-2-pentanone	12.21	43	51163	1.30 ug/l	90
53)	cis-1,3-Dichloropropene	12.50	75	35200	0.30 ug/l	92
56)	Toluene	13.04	91	89701	0.28 ug/l	98
58)	trans-1,3-Dichloropropene	13.44	75	21125	0.26 ug/l	78
60)	2-Hexanone	13.80	43	21584	0.96 ug/l	94
61)	1,3-Dichloropropane	14.13	76	19106	0.27 ug/l	90
62)	Tetrachloroethene	14.18	164	18876	0.32 ug/l	92
63)	Dibromochloromethane	14.53	129	17586	0.35 ug/l	97
65)	1,2-Dibromoethane	14.87	107	14713	0.39 ug/l	85
66)	1-Chlorohexane	15.22	91	49082	0.32 ug/l	96
67)	Chlorobenzene	15.60	112	52061	0.28 ug/l	95
68)	1,1,1,2-Tetrachloroethane	15.69	131	19128	0.31 ug/l	99
69)	Ethylbenzene	15.71	91	103166	0.29 ug/l	94
70)	m-Xylene & p-Xylene	15.84	91	161737	0.61 ug/l	93
71)	o-Xylene	16.57	91	86072	0.32 ug/l	97
72)	Styrene	16.64	104	53371	0.28 ug/l	95
73)	Isopropylbenzene	17.17	105	103149	0.31 ug/l	96
75)	Bromoform	17.15	173	5373	0.25 ug/l	71
76)	1,1,2,2-Tetrachloroethane	17.45	83	17171	0.35 ug/l	75
79)	trans-1,4-Dichloro-2-buten	17.75	53	5262	0.43 ug/l	56
80)	n-Propylbenzene	17.76	91	131246	0.27 ug/l	94
81)	Bromobenzene	17.80	156	16823	0.24 ug/l	91
82)	1,3,5-Trimethylbenzene	17.99	105	86433	0.27 ug/l	94
83)	2-Chlorotoluene	18.00	91	80596	0.26 ug/l	96
84)	4-Chlorotoluene	18.06	91	67061	0.25 ug/l	98
86)	1,2,4-Trimethylbenzene	18.47	105	77390	0.26 ug/l	97
87)	sec-Butylbenzene	18.67	105	116245	0.28 ug/l	97

(#) = qualifier out of range (m) = manual integration SA 6/13/24

Data File : D:\HPCHEM\1\DATA\24F03\RFW002.D Vial: 2
Acq On : 3 Jun 2024 3:03 pm Operator: DHuynh
Sample : VO06F031 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: Jun 10 16:49 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
88) p-Isopropyltoluene	18.84	119	96932	0.28 ug/l	96
89) 1,3-Dichlorobenzene	18.95	146	39379	0.26 ug/l	95
90) 1,2,3-Trimethylbenzene	19.01	105	79035	0.28 ug/l	89
91) 1,4-Dichlorobenzene	19.06	146	37647	0.26 ug/l	93
92) n-Butylbenzene	19.28	91	103497	0.29 ug/l	98
93) 1,2-Dichlorobenzene	19.45	146	30468	0.25 ug/l	77
94) 1,2-Dibromo-3-chloropropan	20.23	157	3259	0.54 ug/l	67
95) 1,2,4-Trichlorobenzene	21.07	180	21615	0.30 ug/l	87
96) Hexachlorobutadiene	21.18	225	14687	0.32 ug/l	90
97) Naphthalene	21.35	128	32040	0.31 ug/l	86
98) 1,2,3-Trichlorobenzene	21.61	180	18211	0.33 ug/l	94

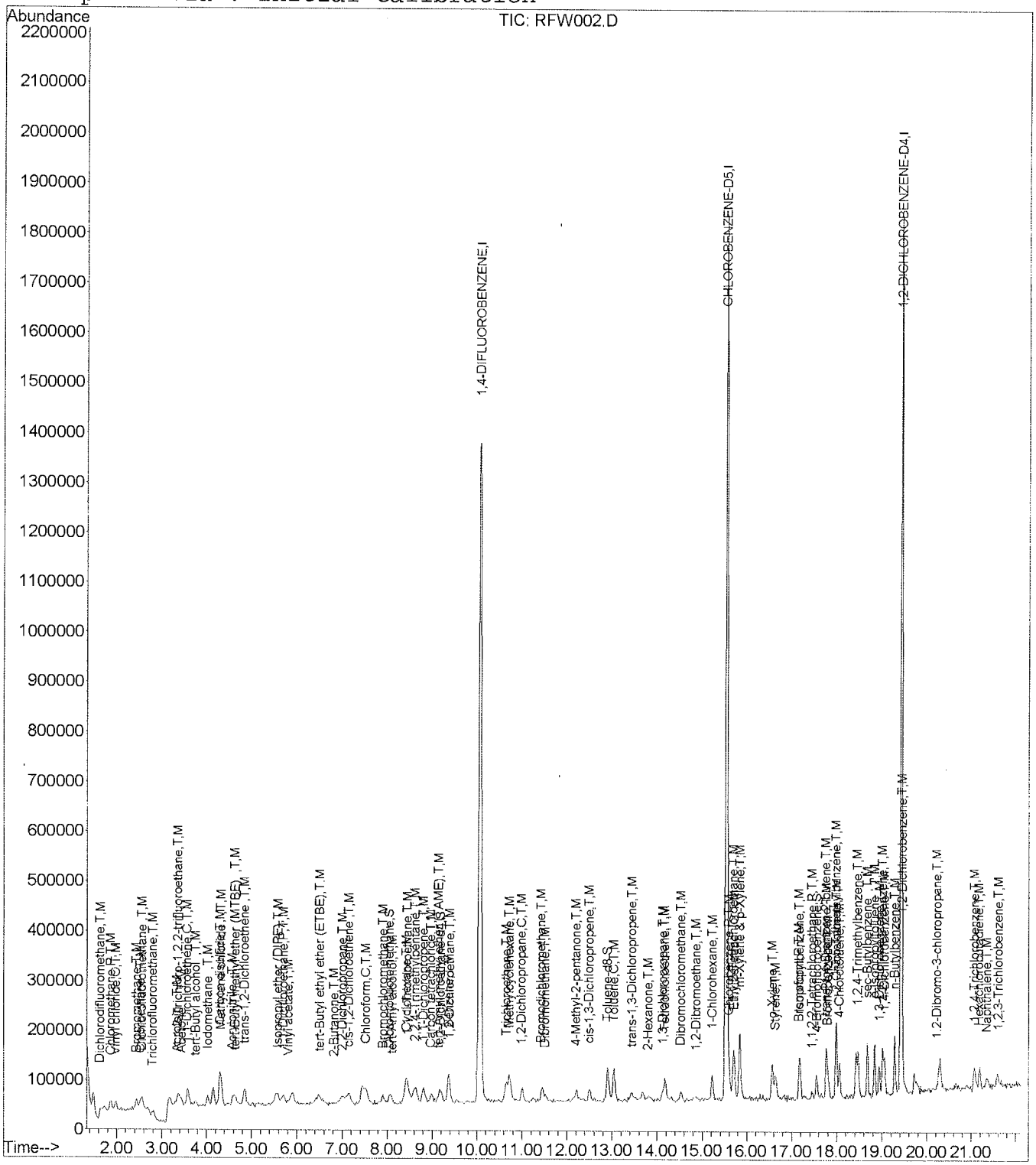
SA 6/13/24

(#) = qualifier out of range (m) = manual integration
RFW002.D VO06F03.M Mon Jun 10 16:49:43 2024 Page 3

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F03\RFW002.D Vial: 2
Acq On : 3 Jun 2024 3:03 pm Operator: DHuynh
Sample : VO06F031 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: Jun 10 16:49 2024 Quant Results File: VO06F03.RE

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration



RFW002.D VO06F03.M Mon Jun 10 16:49:46 2024 Page 4

Su 6/13/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW003.D Vial: 3
Acq On : 3 Jun 2024 3:29 pm Operator: DHuynh
Sample : VO06F032 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: Jun 10 16:52 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.05	114	3175879	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.53	117	2430140	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.43	152	874635	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	8.06	111	47042	0.49	ug/l	0.00
Spiked Amount 10.000			Recovery =	4.90%		
42) 1,2-Dichloroethane-d4	9.19	65	39413	0.57	ug/l	0.00
Spiked Amount 10.000			Recovery =	5.70%		
55) Toluene-d8	12.90	98	189709	0.52	ug/l	0.00
Spiked Amount 10.000			Recovery =	5.20%		
77) 4-Bromofluorobenzene	17.55	95	52549	0.45	ug/l	0.00
Spiked Amount 10.000			Recovery =	4.50%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.63	85	51031	0.54	ug/l	89
3) Chloromethane	1.87	50	69330	0.48	ug/l	97
4) Vinyl chloride	1.97	62	48506	0.48	ug/l	85
5) Bromomethane	2.42	94	39447	0.43	ug/l	76
6) Chloroethane	2.52	64	34097	0.43	ug/l	87
7) Dichlorofluoromethane	2.56	67	92381	0.48	ug/l	99
8) Trichlorofluoromethane	2.80	101	61437	0.48	ug/l	100
9) Acrolein	3.34	56	15295	2.36	ug/l	77
10) 1,1,2-Trichloro-1,2,2-trif	3.38	151	26359	0.45	ug/l	99
11) Acetone	3.43	43	35350	3.25	ug/l	89
12) 1,1-Dichloroethene	3.57	61	77787	0.46	ug/l	93
13) tert-Butyl alcohol	3.74	59	34788	10.50	ug/l	89
16) Iodomethane	4.01	142	72521	0.43	ug/l	99
18) Methylene chloride	4.33	49	66954	0.47	ug/l	97
19) Carbon disulfide	4.28	76	211303	0.48	ug/l	96
20) Acrylonitrile	4.58	53	32558	2.20	ug/l	96
21) tert-Butyl methyl ether (M	4.62	73	74128	0.46	ug/l	79
22) trans-1,2-Dichloroethene	4.85	96	55731	0.48	ug/l	94
23) Isopropyl ether (DIPE)	5.54	45	157713	0.43	ug/l	89
24) Vinyl acetate	5.81	43	40289	0.40	ug/l	92
25) 1,1-Dichloroethane	5.69	63	88938	0.45	ug/l	86
27) tert-Butyl ethyl ether (ET	6.46	59	122162	0.46	ug/l	92
28) 2-Butanone	6.78	43	44541	2.56	ug/l	87
29) 2,2-Dichloropropane	7.01	77	51390	0.46	ug/l	72
30) cis-1,2-Dichloroethene	7.14	96	53240	0.47	ug/l	95
31) Chloroform	7.53	83	91402	0.50	ug/l	95
32) Bromochloromethane	7.91	130	20930	0.42	ug/l	94

(#) = qualifier out of range (m) = manual integration
RFW003.D VO06F03.M Mon Jun 10 16:53:04 2024 6/13/24 Page 1

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW003.D Vial: 3
Acq On : 3 Jun 2024 3:29 pm Operator: DHuynh
Sample : VO06F032 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: Jun 10 16:52 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
33)	Tetrahydrofuran	8.06	42	11787	1.11	ug/l	83
34)	tert-Amyl alcohol	8.08	59	6731	2.69	ug/l	67
36)	1,1,1-Trichloroethane	8.43	97	62315	0.45	ug/l	94
37)	Cyclohexane	8.43	84	72500	0.51	ug/l	95
38)	2,2,4-Trimethylpentane	8.60	57	180510	0.50	ug/l	99
39)	1,1-Dichloropropene	8.81	110	22222	0.47	ug/l	90
40)	Carbon tetrachloride	8.98	119	53625	0.48	ug/l	91
41)	tert-Amyl methyl ether (TA	9.17	73	81556	0.41	ug/l	71
43)	1,2-Dichloroethane	9.38	62	34125	0.42	ug/l	80
44)	Benzene	9.36	78	199788	0.47	ug/l	96
45)	Trichloroethene	10.64	130	48285	0.45	ug/l	91
46)	Methylcyclohexane	10.72	83	79010	0.48	ug/l	88
47)	1,2-Dichloropropane	10.99	63	43704	0.43	ug/l	92
49)	Bromodichloromethane	11.43	83	54681	0.47	ug/l	94
50)	Dibromomethane	11.52	93	21279	0.49	ug/l	86
51)	2-Chloroethyl vinyl ether	12.14	63	16421	0.49	ug/l	86
52)	4-Methyl-2-pentanone	12.21	43	97860	1.98	ug/l	98
53)	cis-1,3-Dichloropropene	12.50	75	66100	0.44	ug/l	89
56)	Toluene	13.05	91	212717	0.50	ug/l	92
57)	Ethyl methacrylate	13.49	69	33950	0.47	ug/l	95
58)	trans-1,3-Dichloropropene	13.42	75	49657	0.48	ug/l	98
59)	1,1,2-Trichloroethane	13.67	97	26018	0.52	ug/l	89
60)	2-Hexanone	13.78	43	54224	1.85	ug/l	84
61)	1,3-Dichloropropane	14.11	76	44297	0.47	ug/l	83
62)	Tetrachloroethene	14.18	164	34885	0.45	ug/l	98
63)	Dibromochloromethane	14.53	129	33103	0.50	ug/l	98
65)	1,2-Dibromoethane	14.87	107	23477	0.47	ug/l	99
66)	1-Chlorohexane	15.22	91	96386	0.48	ug/l	90
67)	Chlorobenzene	15.60	112	114123	0.48	ug/l	98
68)	1,1,1,2-Tetrachloroethane	15.68	131	35271	0.44	ug/l	99
69)	Ethylbenzene	15.70	91	223475	0.48	ug/l	92
70)	m-Xylene & p-Xylene	15.83	91	358161	1.04	ug/l	96
71)	o-Xylene	16.56	91	174036	0.49	ug/l	92
72)	Styrene	16.64	104	115889	0.46	ug/l	95
73)	Isopropylbenzene	17.18	105	215536	0.49	ug/l	98
75)	Bromoform	17.17	173	10015	0.41	ug/l	75
76)	1,1,2,2-Tetrachloroethane	17.45	83	28871	0.50	ug/l	89
79)	trans-1,4-Dichloro-2-buten	17.78	53	6701	0.47	ug/l	86
80)	n-Propylbenzene	17.77	91	285594	0.51	ug/l	95
81)	Bromobenzene	17.80	156	35009	0.43	ug/l	96
82)	1,3,5-Trimethylbenzene	17.97	105	178718	0.49	ug/l	95

(#) = qualifier out of range (m) = manual integration

SC 6/13/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW003.D Vial: 3
Acq On : 3 Jun 2024 3:29 pm Operator: DHuynh
Sample : VO06F032 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: Jun 10 16:52 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
83)	2-Chlorotoluene	17.99	91	168405	0.46	ug/l	94
84)	4-Chlorotoluene	18.05	91	153007	0.49	ug/l	93
85)	tert-Butylbenzene	18.43	134	39059	0.49	ug/l	92
86)	1,2,4-Trimethylbenzene	18.47	105	174623	0.49	ug/l	90
87)	sec-Butylbenzene	18.67	105	242091	0.50	ug/l	97
88)	p-Isopropyltoluene	18.84	119	190233	0.48	ug/l	98
89)	1,3-Dichlorobenzene	18.95	146	72170	0.42	ug/l	95
90)	1,2,3-Trimethylbenzene	19.01	105	151840	0.46	ug/l	98
91)	1,4-Dichlorobenzene	19.06	146	79440	0.46	ug/l	97
92)	n-Butylbenzene	19.28	91	205360	0.50	ug/l	98
93)	1,2-Dichlorobenzene	19.45	146	63829	0.45	ug/l	91
95)	1,2,4-Trichlorobenzene	21.06	180	34833	0.41	ug/l	94
96)	Hexachlorobutadiene	21.19	225	27446	0.51	ug/l	93
97)	Naphthalene	21.35	128	52298	0.44	ug/l	97
98)	1,2,3-Trichlorobenzene	21.59	180	28965	0.45	ug/l	92

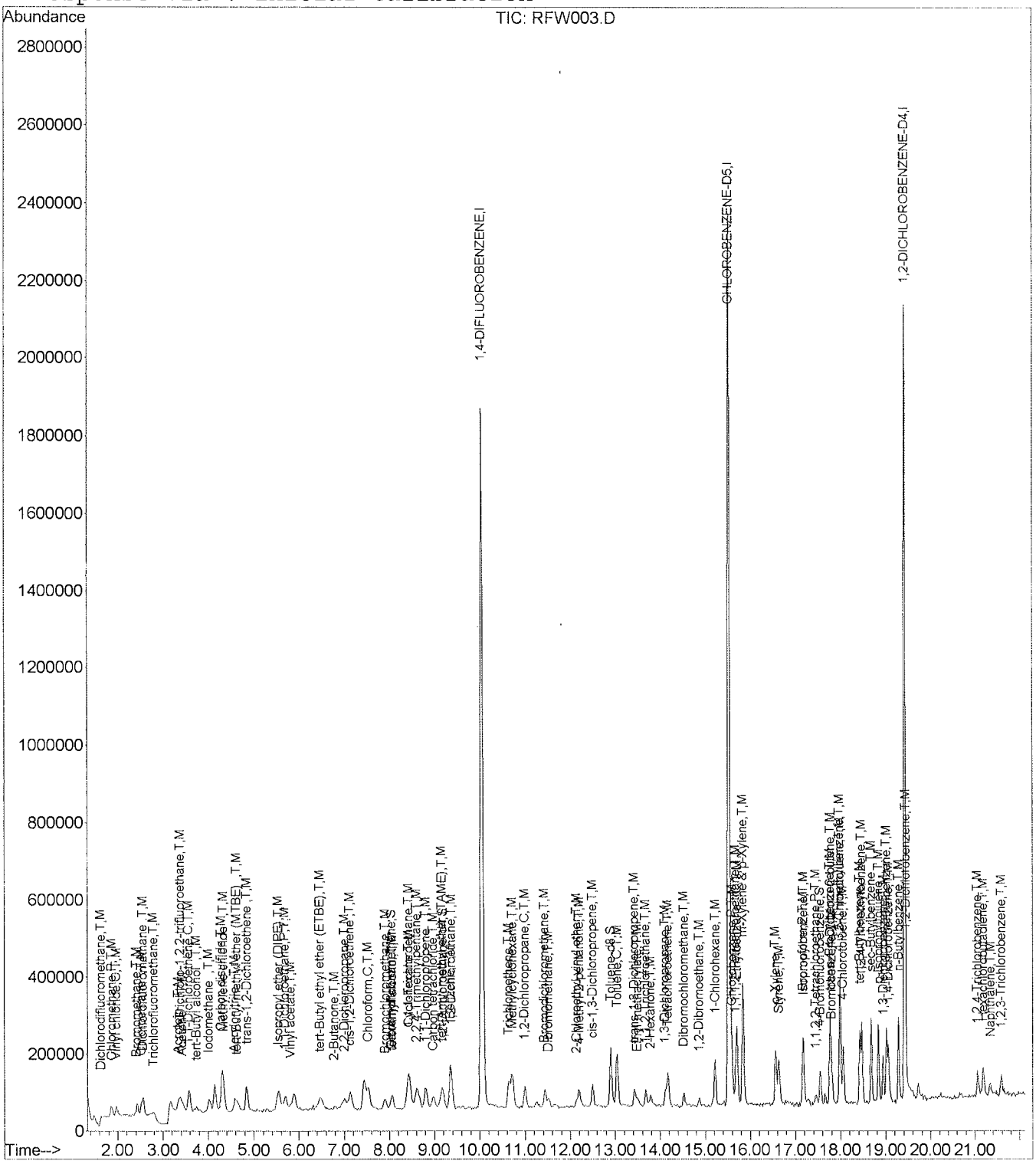
SU 6/13/24

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F03\RFW003.D Vial: 3
Acq On : 3 Jun 2024 3:29 pm Operator: DHuynh
Sample : VO06F032 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: Jun 10 16:52 2024 Quant Results File: VO06F03.RE

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration



Su 6/13/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW004.D Vial: 4
Acq On : 3 Jun 2024 3:55 pm Operator: DHuynh
Sample : VO06F033 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: Jun 10 16:52 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.05	114	3052232	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.53	117	2368110	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.43	152	842690	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	8.06	111	74638	0.81	ug/l	0.00
Spiked Amount 10.000			Recovery =	8.10%		
42) 1,2-Dichloroethane-d4	9.17	65	55828	0.85	ug/l	-0.02
Spiked Amount 10.000			Recovery =	8.50%		
55) Toluene-d8	12.90	98	332601	0.93	ug/l	0.00
Spiked Amount 10.000			Recovery =	9.30%		
77) 4-Bromofluorobenzene	17.56	95	100285	0.90	ug/l	0.01
Spiked Amount 10.000			Recovery =	9.00%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.63	85	79266	0.88	ug/l	92
3) Chloromethane	1.86	50	120975	0.88	ug/l	90
4) Vinyl chloride	1.98	62	85944	0.88	ug/l	88
5) Bromomethane	2.44	94	84860	0.95	ug/l	99
6) Chloroethane	2.51	64	73427	0.97	ug/l	99
7) Dichlorofluoromethane	2.55	67	161737	0.87	ug/l	94
8) Trichlorofluoromethane	2.79	101	104020	0.85	ug/l	97
9) Acrolein	3.34	56	29169	4.68	ug/l	95
10) 1,1,2-Trichloro-1,2,2-trif	3.36	151	52502	0.93	ug/l	98
11) Acetone	3.43	43	49520	4.74	ug/l	86
12) 1,1-Dichloroethene	3.57	61	143933	0.89	ug/l	95
13) tert-Butyl alcohol	3.74	59	67768	21.28	ug/l	99
16) Iodomethane	4.01	142	144359	0.90	ug/l	99
18) Methylene chloride	4.33	49	126715	0.93	ug/l	96
19) Carbon disulfide	4.29	76	383840	0.91	ug/l	99
20) Acrylonitrile	4.58	53	62058	4.37	ug/l	97
21) tert-Butyl methyl ether (M	4.62	73	133243	0.85	ug/l	92
22) trans-1,2-Dichloroethene	4.85	96	104737	0.93	ug/l	96
23) Isopropyl ether (DIPE)	5.54	45	312818	0.89	ug/l	98
24) Vinyl acetate	5.79	43	74544	0.77	ug/l	95
25) 1,1-Dichloroethane	5.71	63	174689	0.92	ug/l	93
27) tert-Butyl ethyl ether (ET	6.46	59	214155	0.83	ug/l	95
28) 2-Butanone	6.78	43	68628	4.10	ug/l	83
29) 2,2-Dichloropropane	7.01	77	106431	0.99	ug/l	98
30) cis-1,2-Dichloroethene	7.16	96	94871	0.86	ug/l	92
31) Chloroform	7.53	83	164032	0.94	ug/l	95
32) Bromochloromethane	7.91	130	41131	0.86	ug/l	98

(#) = qualifier out of range (m) = manual integration
RFW004.D VO06F03.M Mon Jun 10 16:52:32 2024 Page 1

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Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW004.D Vial: 4
Acq On : 3 Jun 2024 3:55 pm Operator: DHuynh
Sample : VO06F033 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: Jun 10 16:52 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
33)	Tetrahydrofuran	8.06	42	11970	1.17	ug/l	93
36)	1,1,1-Trichloroethane	8.46	97	121437	0.90	ug/l	98
37)	Cyclohexane	8.43	84	121806	0.90	ug/l	99
38)	2,2,4-Trimethylpentane	8.62	57	298451	0.86	ug/l	92
39)	1,1-Dichloropropene	8.81	110	41876	0.92	ug/l	99
40)	Carbon tetrachloride	9.00	119	93426	0.86	ug/l	99
41)	tert-Amyl methyl ether (TA	9.17	73	164987	0.86	ug/l	94
43)	1,2-Dichloroethane	9.38	62	70670	0.91	ug/l	94
44)	Benzene	9.36	78	386927	0.95	ug/l	99
45)	Trichloroethene	10.64	130	85601	0.83	ug/l	93
46)	Methylcyclohexane	10.72	83	134210	0.84	ug/l	90
47)	1,2-Dichloropropane	10.99	63	86920	0.88	ug/l	97
49)	Bromodichloromethane	11.43	83	102604	0.91	ug/l	97
50)	Dibromomethane	11.52	93	40171	0.97	ug/l	89
51)	2-Chloroethyl vinyl ether	12.14	63	27474	0.85	ug/l	94
52)	4-Methyl-2-pentanone	12.19	43	203343	4.27	ug/l	95
53)	cis-1,3-Dichloropropene	12.50	75	127852	0.89	ug/l	97
56)	Toluene	13.05	91	398297	0.96	ug/l	96
57)	Ethyl methacrylate	13.49	69	61030	0.87	ug/l	98
58)	trans-1,3-Dichloropropene	13.42	75	91290	0.90	ug/l	96
59)	1,1,2-Trichloroethane	13.67	97	44124	0.91	ug/l	91
60)	2-Hexanone	13.78	43	106269	3.72	ug/l	92
61)	1,3-Dichloropropane	14.11	76	78806	0.86	ug/l	90
62)	Tetrachloroethene	14.18	164	65462	0.86	ug/l	97
63)	Dibromochloromethane	14.53	129	57465	0.89	ug/l	99
65)	1,2-Dibromoethane	14.87	107	44548	0.92	ug/l	90
66)	1-Chlorohexane	15.22	91	175022	0.90	ug/l	99
67)	Chlorobenzene	15.60	112	217106	0.93	ug/l	96
68)	1,1,1,2-Tetrachloroethane	15.68	131	67883	0.87	ug/l	99
69)	Ethylbenzene	15.70	91	432104	0.96	ug/l	99
70)	m-Xylene & p-Xylene	15.83	91	682033	2.02	ug/l	95
71)	o-Xylene	16.57	91	318617	0.92	ug/l	99
72)	Styrene	16.64	104	229794	0.94	ug/l	96
73)	Isopropylbenzene	17.17	105	418387	0.99	ug/l	96
75)	Bromoform	17.17	173	22214	0.93	ug/l	95
76)	1,1,2,2-Tetrachloroethane	17.45	83	46642	0.84	ug/l	84
78)	1,2,3-Trichloropropane	17.66	110	11473	0.89	ug/l	67
79)	trans-1,4-Dichloro-2-buten	17.76	53	14190	1.02	ug/l	95
80)	n-Propylbenzene	17.76	91	535086	0.98	ug/l	95
81)	Bromobenzene	17.80	156	70158	0.89	ug/l	97
82)	1,3,5-Trimethylbenzene	17.98	105	336728	0.95	ug/l	98

(#) = qualifier out of range (m) = manual integration

SU 6/13/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW004.D Vial: 4
Acq On : 3 Jun 2024 3:55 pm Operator: DHuynh
Sample : VO06F033 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: Jun 10 16:52 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
83)	2-Chlorotoluene	17.98	91	328104	0.93	ug/l	97
84)	4-Chlorotoluene	18.05	91	284435	0.95	ug/l	95
85)	tert-Butylbenzene	18.43	134	65692	0.85	ug/l	83
86)	1,2,4-Trimethylbenzene	18.46	105	321788	0.95	ug/l	99
87)	sec-Butylbenzene	18.67	105	466639	1.00	ug/l	98
88)	p-Isopropyltoluene	18.84	119	362670	0.94	ug/l	98
89)	1,3-Dichlorobenzene	18.95	146	151692	0.91	ug/l	97
90)	1,2,3-Trimethylbenzene	19.01	105	293148	0.92	ug/l	99
91)	1,4-Dichlorobenzene	19.06	146	145591	0.88	ug/l	99
92)	n-Butylbenzene	19.28	91	387975	0.98	ug/l	96
93)	1,2-Dichlorobenzene	19.45	146	131366	0.95	ug/l	98
95)	1,2,4-Trichlorobenzene	21.06	180	71899	0.88	ug/l	99
96)	Hexachlorobutadiene	21.19	225	47003	0.91	ug/l	97
97)	Naphthalene	21.35	128	97222	0.84	ug/l	96
98)	1,2,3-Trichlorobenzene	21.59	180	53227	0.86	ug/l	95

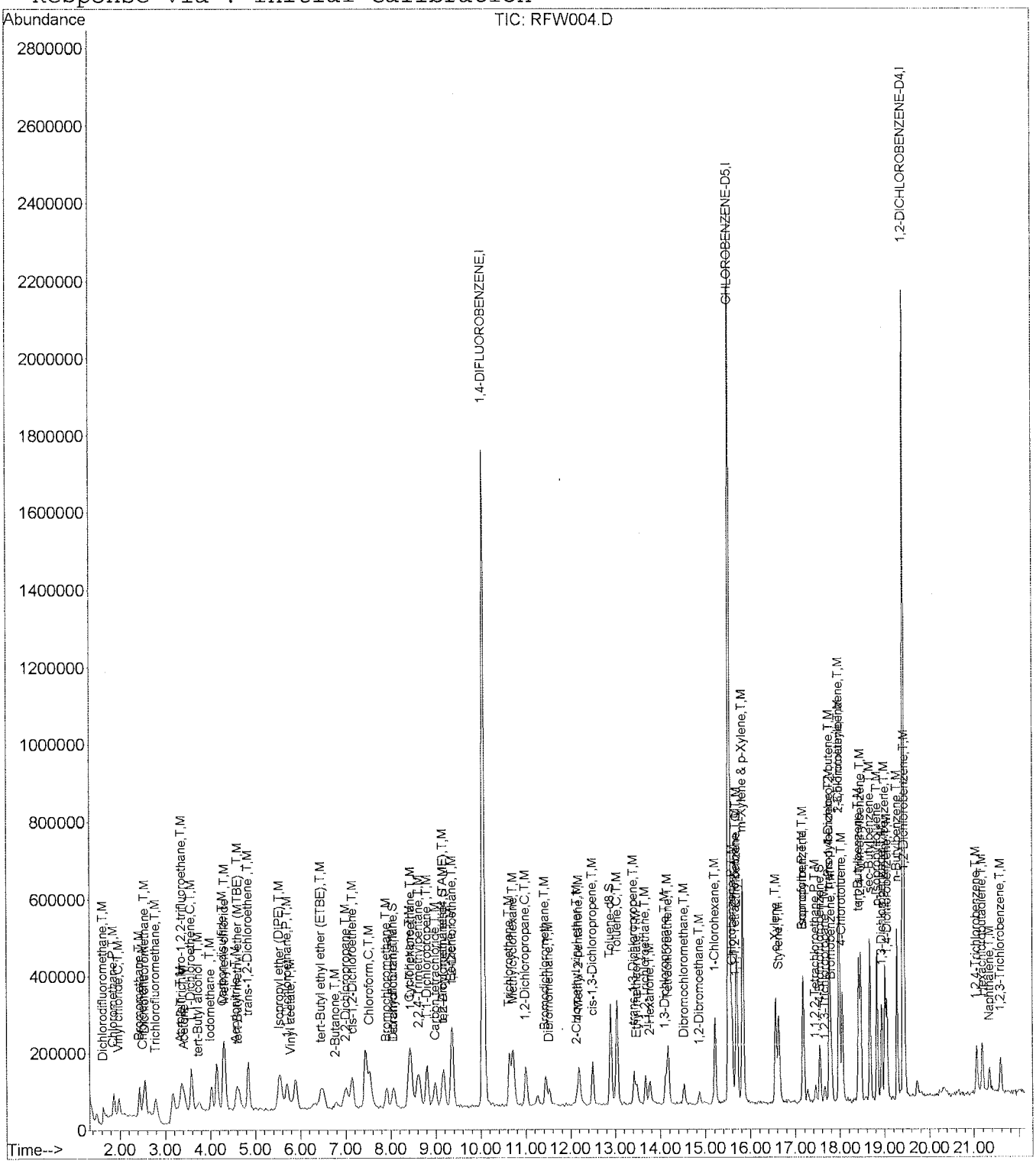
(#) = qualifier out of range (m) = manual integration

SA 6/13/24

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F03\RFW004.D Vial: 4
Acq On : 3 Jun 2024 3:55 pm Operator: DHuynh
Sample : VO06F033 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: Jun 10 16:52 2024 Quant Results File: VO06F03.RE

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration



6/13/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW005.D Vial: 5
Acq On : 3 Jun 2024 4:21 pm Operator: DHuynh
Sample : VO06F034 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: Jun 10 17:54 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.05	114	3129284	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.53	117	2422056	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.43	152	831427	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	8.06	111	170298	1.81	ug/l	0.00
Spiked Amount 10.000			Recovery =	18.10%		
42) 1,2-Dichloroethane-d4	9.19	65	127587	1.89	ug/l	0.00
Spiked Amount 10.000			Recovery =	18.90%		
55) Toluene-d8	12.90	98	706579	1.94	ug/l	0.00
Spiked Amount 10.000			Recovery =	19.40%		
77) 4-Bromofluorobenzene	17.54	95	223210	2.02	ug/l	0.00
Spiked Amount 10.000			Recovery =	20.20%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.63	85	190067	2.05	ug/l	100
3) Chloromethane	1.86	50	268957	1.91	ug/l	97
4) Vinyl chloride	1.98	62	198229	1.97	ug/l	99
5) Bromomethane	2.44	94	170087	1.87	ug/l	98
6) Chloroethane	2.51	64	151321	1.96	ug/l	94
7) Dichlorofluoromethane	2.55	67	348361	1.83	ug/l	99
8) Trichlorofluoromethane	2.79	101	237215	1.90	ug/l	99
9) Acrolein	3.34	56	51143	8.01	ug/l	95
10) 1,1,2-Trichloro-1,2,2-trif	3.38	151	105580	1.83	ug/l	98
11) Acetone	3.43	43	102528	9.57	ug/l	95
12) 1,1-Dichloroethene	3.57	61	312259	1.88	ug/l	98
13) tert-Butyl alcohol	3.74	59	146153	44.77	ug/l	81
15) Methyl acetate	4.14	74	14058	1.93	ug/l	56
16) Iodomethane	4.03	142	309490	1.88	ug/l	100
18) Methylene chloride	4.33	49	251788	1.81	ug/l	99
19) Carbon disulfide	4.31	76	848787	1.96	ug/l	98
20) Acrylonitrile	4.58	53	129197	8.87	ug/l	96
21) tert-Butyl methyl ether (M	4.62	73	286341	1.78	ug/l	98
22) trans-1,2-Dichloroethene	4.85	96	210154	1.82	ug/l	100
23) Isopropyl ether (DIPE)	5.54	45	685964	1.89	ug/l	100
24) Vinyl acetate	5.79	43	177844	1.80	ug/l	99
25) 1,1-Dichloroethane	5.71	63	365292	1.87	ug/l	97
27) tert-Butyl ethyl ether (ET	6.49	59	481319	1.83	ug/l	99
28) 2-Butanone	6.78	43	147559	8.60	ug/l	96
29) 2,2-Dichloropropane	7.01	77	211425	1.91	ug/l	91
30) cis-1,2-Dichloroethene	7.16	96	208927	1.85	ug/l	99
31) Chloroform	7.53	83	328711	1.84	ug/l	98

(#) = qualifier out of range (m) = manual integration

RFW005.D VO06F03.M Mon Jun 10 17:55:02 2024 6/13/24 Page 1

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW005.D Vial: 5
Acq On : 3 Jun 2024 4:21 pm Operator: DHuynh
Sample : VO06F034 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: Jun 10 17:54 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
32) Bromochloromethane	7.91	130	88904	1.82 ug/l		97
33) Tetrahydrofuran	8.04	42	19694	1.88 ug/l	#	70
34) tert-Amyl alcohol	8.08	59	25264	10.26 ug/l		82
36) 1,1,1-Trichloroethane	8.46	97	250555	1.82 ug/l		99
37) Cyclohexane	8.43	84	280291	2.01 ug/l		97
38) 2,2,4-Trimethylpentane	8.62	57	710614	1.99 ug/l		97
39) 1,1-Dichloropropene	8.81	110	86041	1.84 ug/l		98
40) Carbon tetrachloride	8.98	119	206721	1.86 ug/l		98
41) tert-Amyl methyl ether (TA	9.15	73	357580	1.82 ug/l		96
43) 1,2-Dichloroethane	9.38	62	144235	1.81 ug/l		99
44) Benzene	9.36	78	831623	2.00 ug/l		98
45) Trichloroethene	10.64	130	201748	1.90 ug/l		99
46) Methylcyclohexane	10.72	83	332717	2.04 ug/l		100
47) 1,2-Dichloropropane	10.99	63	189073	1.88 ug/l		95
48) 1,4-Dioxane	11.56	88	10544	34.60 ug/l	#	40
49) Bromodichloromethane	11.43	83	211865	1.83 ug/l		98
50) Dibromomethane	11.52	93	73278	1.72 ug/l		95
51) 2-Chloroethyl vinyl ether	12.12	63	55571	1.67 ug/l		97
52) 4-Methyl-2-pentanone	12.19	43	448700	9.20 ug/l		99
53) cis-1,3-Dichloropropene	12.50	75	274644	1.87 ug/l		97
56) Toluene	13.05	91	847391	2.01 ug/l		99
57) Ethyl methacrylate	13.49	69	128364	1.78 ug/l		92
58) trans-1,3-Dichloropropene	13.42	75	192571	1.85 ug/l		100
59) 1,1,2-Trichloroethane	13.67	97	87493	1.77 ug/l		98
60) 2-Hexanone	13.76	43	254411	8.70 ug/l		94
61) 1,3-Dichloropropane	14.11	76	174929	1.87 ug/l		96
62) Tetrachloroethene	14.18	164	143047	1.84 ug/l		96
63) Dibromochloromethane	14.53	129	116600	1.76 ug/l		98
65) 1,2-Dibromoethane	14.87	107	91182	1.85 ug/l		97
66) 1-Chlorohexane	15.22	91	379187	1.91 ug/l		97
67) Chlorobenzene	15.60	112	472295	1.98 ug/l		95
68) 1,1,1,2-Tetrachloroethane	15.69	131	146765	1.83 ug/l		96
69) Ethylbenzene	15.70	91	922707	2.00 ug/l		99
70) m-Xylene & p-Xylene	15.83	91	1440256	4.18 ug/l		97
71) o-Xylene	16.56	91	691495	1.95 ug/l		95
72) Styrene	16.64	104	495591	1.98 ug/l		92
73) Isopropylbenzene	17.17	105	867026	2.00 ug/l		99
75) Bromoform	17.18	173	46146	1.97 ug/l		89
76) 1,1,2,2-Tetrachloroethane	17.45	83	100473	1.84 ug/l		98
78) 1,2,3-Trichloropropane	17.66	110	24308	1.92 ug/l		89
79) trans-1,4-Dichloro-2-buten	17.76	53	27784	2.03 ug/l		97

(#) = qualifier out of range (m) = manual integration
RFW005.D VO06F03.M Mon Jun 10 17:55:03 2024 Page 2

SV 6/13/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW005.D Vial: 5
Acq On : 3 Jun 2024 4:21 pm Operator: DHuynh
Sample : VO06F034 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: Jun 10 17:54 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	n-Propylbenzene	17.76	91	1156943	2.15	ug/l	97
81)	Bromobenzene	17.80	156	148459	1.90	ug/l	97
82)	1,3,5-Trimethylbenzene	17.97	105	714630	2.05	ug/l	99
83)	2-Chlorotoluene	17.98	91	703553	2.02	ug/l	97
84)	4-Chlorotoluene	18.05	91	626255	2.12	ug/l	96
85)	tert-Butylbenzene	18.43	134	142262	1.87	ug/l	90
86)	1,2,4-Trimethylbenzene	18.46	105	690301	2.06	ug/l	100
87)	sec-Butylbenzene	18.67	105	993062	2.16	ug/l	97
88)	p-Isopropyltoluene	18.84	119	821827	2.17	ug/l	97
89)	1,3-Dichlorobenzene	18.93	146	333222	2.02	ug/l	98
90)	1,2,3-Trimethylbenzene	19.01	105	633564	2.03	ug/l	98
91)	1,4-Dichlorobenzene	19.06	146	324594	1.99	ug/l	95
92)	n-Butylbenzene	19.28	91	810054	2.08	ug/l	99
93)	1,2-Dichlorobenzene	19.45	146	276536	2.03	ug/l	98
94)	1,2-Dibromo-3-chloropropan	20.24	157	12650	1.89	ug/l	93
95)	1,2,4-Trichlorobenzene	21.07	180	149379	1.85	ug/l	97
96)	Hexachlorobutadiene	21.20	225	102649	2.02	ug/l	94
97)	Naphthalene	21.35	128	222587	1.95	ug/l	95
98)	1,2,3-Trichlorobenzene	21.59	180	113102	1.86	ug/l	96

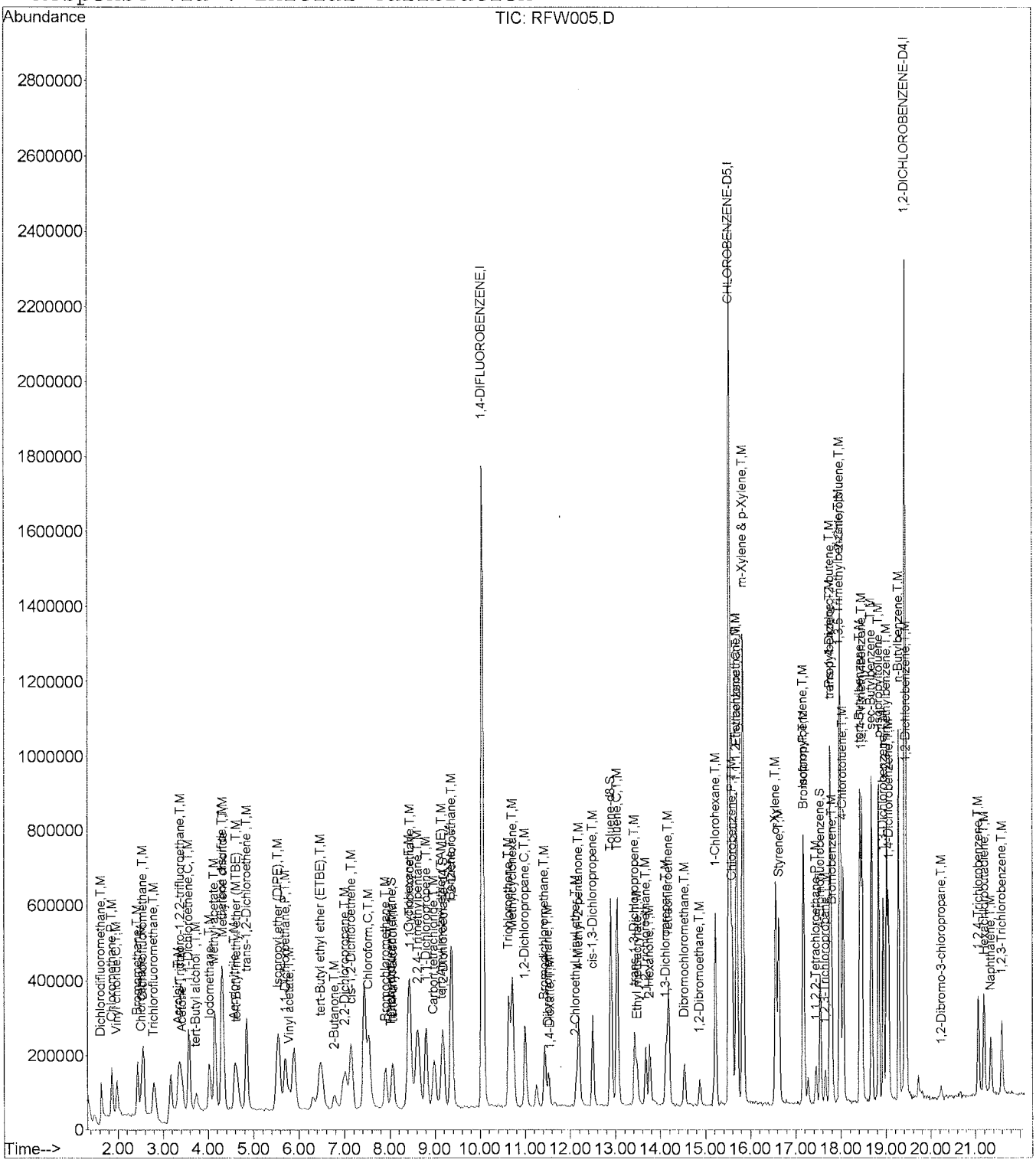
SH 6/13/24

(#) = qualifier out of range (m) = manual integration
RFW005.D VO06F03.M Mon Jun 10 17:55:03 2024 Page 3

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F03\RFW005.D Vial: 5
Acq On : 3 Jun 2024 4:21 pm Operator: DHuynh
Sample : VO06F034 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: Jun 10 17:54 2024 Quant Results File: VO06F03.RE

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration



SA 6/13/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW006.D Vial: 6
Acq On : 3 Jun 2024 4:47 pm Operator: DHuynh
Sample : VO06F035 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: Jun 11 13:17 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.07	114	3048752	10.00	ug/l	0.02
54) CHLOROBENZENE-D5	15.53	117	2411903	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.43	152	836067	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	8.06	111	446932	4.88	ug/l	0.00
Spiked Amount 10.000			Recovery = 48.80%			
42) 1,2-Dichloroethane-d4	9.17	65	308399	4.69	ug/l	-0.02
Spiked Amount 10.000			Recovery = 46.90%			
55) Toluene-d8	12.90	98	1841858	5.07	ug/l	0.00
Spiked Amount 10.000			Recovery = 50.70%			
77) 4-Bromofluorobenzene	17.55	95	569971	5.14	ug/l	0.00
Spiked Amount 10.000			Recovery = 51.40%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.63	85	445801	4.94	ug/l	99
3) Chloromethane	1.87	50	668998	4.87	ug/l	99
4) Vinyl chloride	1.97	62	503619	5.14	ug/l	100
5) Bromomethane	2.44	94	449862	5.06	ug/l	100
6) Chloroethane	2.52	64	381404	5.07	ug/l	95
7) Dichlorofluoromethane	2.56	67	926295	5.00	ug/l	100
8) Trichlorofluoromethane	2.80	101	580968	4.77	ug/l	99
9) Acrolein	3.34	56	136831	21.99	ug/l	97
10) 1,1,2-Trichloro-1,2,2-trif	3.38	151	264867	4.72	ug/l	93
11) Acetone	3.43	43	226679	21.71	ug/l	99
12) 1,1-Dichloroethene	3.57	61	796306	4.93	ug/l	99
13) tert-Butyl alcohol	3.74	59	343199	107.90	ug/l	97
15) Methyl acetate	4.12	74	34610	4.87	ug/l	96
16) Iodomethane	4.01	142	808491	5.04	ug/l	100
18) Methylene chloride	4.33	49	674793	4.98	ug/l	97
19) Carbon disulfide	4.28	76	2135077	5.07	ug/l	99
20) Acrylonitrile	4.58	53	337425	23.79	ug/l	99
21) tert-Butyl methyl ether (M	4.62	73	754528	4.83	ug/l	99
22) trans-1,2-Dichloroethene	4.85	96	547598	4.88	ug/l	99
23) Isopropyl ether (DIPE)	5.54	45	1820142	5.16	ug/l	99
24) Vinyl acetate	5.77	43	476177	4.95	ug/l	100
25) 1,1-Dichloroethane	5.71	63	949397	4.99	ug/l	97
27) tert-Butyl ethyl ether (ET	6.46	59	1246707	4.86	ug/l	98
28) 2-Butanone	6.76	43	399024	23.88	ug/l	99
29) 2,2-Dichloropropane	7.01	77	530177	4.92	ug/l	96
30) cis-1,2-Dichloroethene	7.13	96	526275	4.79	ug/l	97
31) Chloroform	7.53	83	859016	4.93	ug/l	98

(#) = qualifier out of range (m) = manual integration

SA 6/13/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW006.D Vial: 6
Acq On : 3 Jun 2024 4:47 pm Operator: DHuynh
Sample : VO06F035 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: Jun 11 13:17 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) Bromochloromethane	7.91	130	223614	4.71 ug/l	97
33) Tetrahydrofuran	8.04	42	50584	4.94 ug/l	95
34) tert-Amyl alcohol	8.08	59	50106	20.89 ug/l	77
36) 1,1,1-Trichloroethane	8.46	97	658574	4.91 ug/l	98
37) Cyclohexane	8.43	84	666195	4.91 ug/l	99
38) 2,2,4-Trimethylpentane	8.62	57	1728147	4.96 ug/l	98
39) 1,1-Dichloropropene	8.81	110	214051	4.69 ug/l	97
40) Carbon tetrachloride	8.98	119	522679	4.82 ug/l	96
41) tert-Amyl methyl ether (TA	9.15	73	958314	5.01 ug/l	98
43) 1,2-Dichloroethane	9.38	62	400697	5.17 ug/l	98
44) Benzene	9.36	78	2139559	5.27 ug/l	98
45) Trichloroethene	10.63	130	533311	5.16 ug/l	97
46) Methylcyclohexane	10.72	83	782512	4.92 ug/l	97
47) 1,2-Dichloropropane	10.99	63	493646	5.03 ug/l	99
48) 1,4-Dioxane	11.54	88	28163	94.84 ug/l	66
49) Bromodichloromethane	11.43	83	577531	5.13 ug/l	94
50) Dibromomethane	11.52	93	193398	4.66 ug/l	95
51) 2-Chloroethyl vinyl ether	12.12	63	165714	5.11 ug/l	96
52) 4-Methyl-2-pentanone	12.19	43	1271413	26.75 ug/l	99
53) cis-1,3-Dichloropropene	12.50	75	727269	5.08 ug/l	99
56) Toluene	13.05	91	2152486	5.12 ug/l	99
57) Ethyl methacrylate	13.46	69	341379	4.77 ug/l	97
58) trans-1,3-Dichloropropene	13.42	75	525982	5.08 ug/l	97
59) 1,1,2-Trichloroethane	13.67	97	242497	4.92 ug/l	95
60) 2-Hexanone	13.76	43	727433	24.97 ug/l	97
61) 1,3-Dichloropropane	14.11	76	464349	4.99 ug/l	97
62) Tetrachloroethene	14.18	164	381698	4.94 ug/l	98
63) Dibromochloromethane	14.53	129	315432	4.79 ug/l	97
65) 1,2-Dibromoethane	14.87	107	223728	4.55 ug/l	100
66) 1-Chlorohexane	15.22	91	1027080	5.19 ug/l	92
67) Chlorobenzene	15.60	112	1228748	5.18 ug/l	98
68) 1,1,1,2-Tetrachloroethane	15.69	131	393002	4.93 ug/l	98
69) Ethylbenzene	15.70	91	2389553	5.21 ug/l	99
70) m-Xylene & p-Xylene	15.83	91	3669256	10.69 ug/l	98
71) o-Xylene	16.56	91	1811531	5.14 ug/l	99
72) Styrene	16.62	104	1276784	5.12 ug/l	99
73) Isopropylbenzene	17.17	105	2229624	5.15 ug/l	99
75) Bromoform	17.17	173	127484	5.41 ug/l	97
76) 1,1,2,2-Tetrachloroethane	17.45	83	254016	4.62 ug/l	96
78) 1,2,3-Trichloropropane	17.66	110	61289	4.82 ug/l	95
79) trans-1,4-Dichloro-2-buten	17.77	53	66694	4.85 ug/l	98

(#) = qualifier out of range (m) = manual integration

SU 6/13/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW006.D Vial: 6
Acq On : 3 Jun 2024 4:47 pm Operator: DHuynh
Sample : VO06F035 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: Jun 11 13:17 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

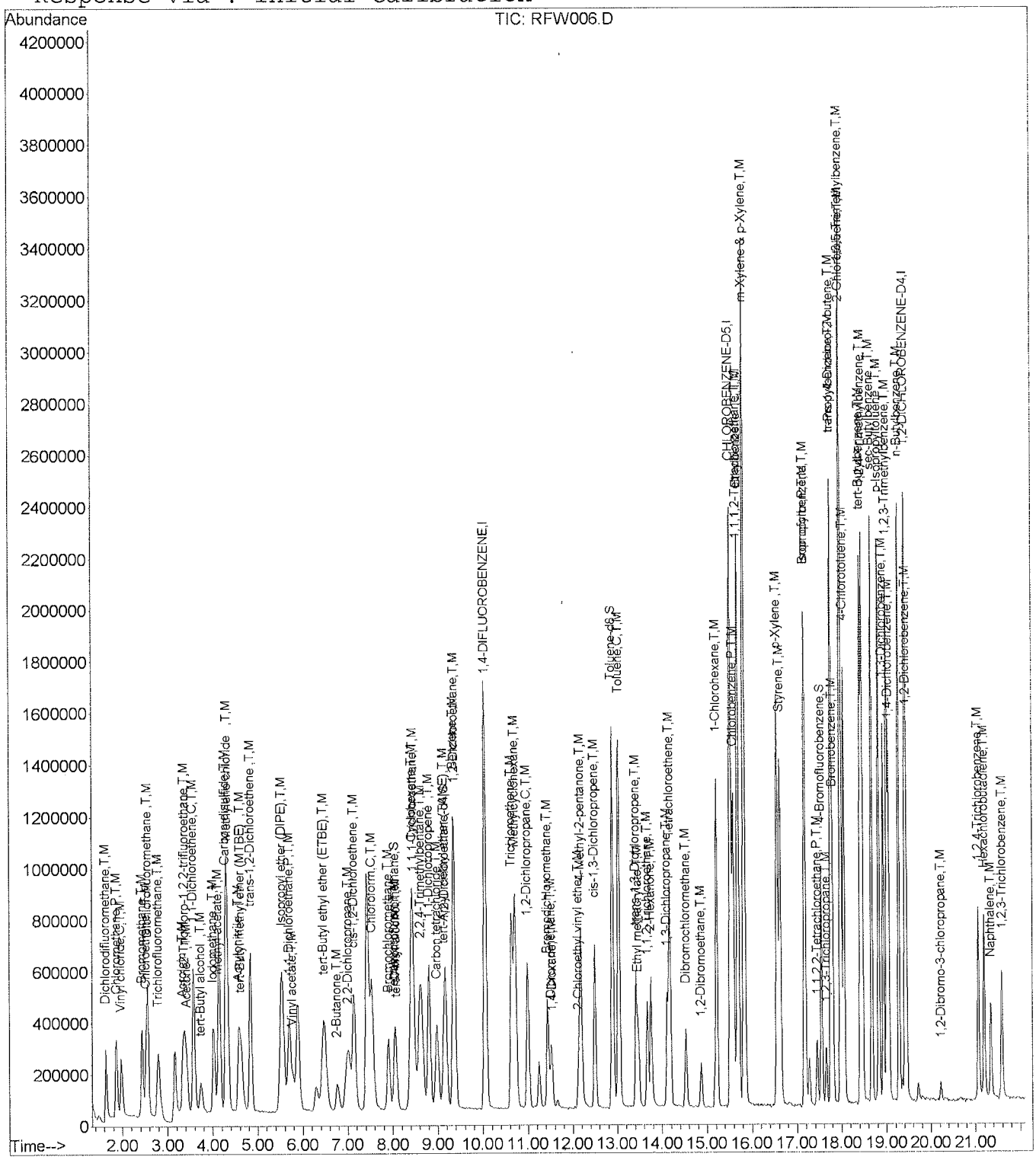
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	n-Propylbenzene	17.77	91	2903686	5.37	ug/l	99
81)	Bromobenzene	17.80	156	403979	5.15	ug/l	99
82)	1,3,5-Trimethylbenzene	17.97	105	1821129	5.18	ug/l	99
83)	2-Chlorotoluene	17.99	91	1860595	5.30	ug/l	98
84)	4-Chlorotoluene	18.05	91	1536082	5.17	ug/l	99
85)	tert-Butylbenzene	18.43	134	383916	5.02	ug/l	99
86)	1,2,4-Trimethylbenzene	18.47	105	1776678	5.26	ug/l	99
87)	sec-Butylbenzene	18.67	105	2475584	5.36	ug/l	99
88)	p-Isopropyltoluene	18.83	119	2013782	5.28	ug/l	97
89)	1,3-Dichlorobenzene	18.93	146	881465	5.30	ug/l	98
90)	1,2,3-Trimethylbenzene	19.01	105	1677580	5.33	ug/l	98
91)	1,4-Dichlorobenzene	19.06	146	843622	5.13	ug/l	100
92)	n-Butylbenzene	19.28	91	2052151	5.24	ug/l	99
93)	1,2-Dichlorobenzene	19.45	146	711188	5.20	ug/l	98
94)	1,2-Dibromo-3-chloropropan	20.23	157	32604	4.85	ug/l	99
95)	1,2,4-Trichlorobenzene	21.06	180	414151	5.11	ug/l	98
96)	Hexachlorobutadiene	21.19	225	256385	5.02	ug/l	99
97)	Naphthalene	21.33	128	562291	4.90	ug/l	98
98)	1,2,3-Trichlorobenzene	21.59	180	309816	5.05	ug/l	97

(#) = qualifier out of range (m) = manual integration
RFW006.D VO06F03.M Tue Jun 11 13:17:35 2024 SG 6/13/24 Page 3

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F03\RFW006.D Vial: 6
Acq On : 3 Jun 2024 4:47 pm Operator: DHuynh
Sample : VO06F035 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: Jun 11 13:17 2024 Quant Results File: VO06F03.RE

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration



SU 6/13/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW007.D Vial: 7
Acq On : 3 Jun 2024 5:14 pm Operator: DHuynh
Sample : VO06F036 1.00/5.00uL Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 10 16:47 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.05	114	3175665	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.53	117	2524233	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.43	152	865825	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	8.06	111	955711	10.03	ug/l	0.00
Spiked Amount 10.000			Recovery = 100.30%			
42) 1,2-Dichloroethane-d4	9.19	65	683634	9.97	ug/l	0.00
Spiked Amount 10.000			Recovery = 99.70%			
55) Toluene-d8	12.90	98	3702851	9.75	ug/l	0.00
Spiked Amount 10.000			Recovery = 97.50%			
77) 4-Bromofluorobenzene	17.54	95	1175426	10.24	ug/l	0.00
Spiked Amount 10.000			Recovery = 102.40%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.63	85	944148	10.04	ug/l	100
3) Chloromethane	1.86	50	1379661	9.64	ug/l	100
4) Vinyl chloride	1.98	62	1057816	10.36	ug/l	100
5) Bromomethane	2.44	94	926181	10.01	ug/l	100
6) Chloroethane	2.52	64	770397	9.83	ug/l	100
7) Dichlorofluoromethane	2.56	67	1927624	9.99	ug/l	100
8) Trichlorofluoromethane	2.79	101	1227432	9.68	ug/l	100
9) Acrolein	3.34	56	329881	50.90	ug/l	100
10) 1,1,2-Trichloro-1,2,2-trif	3.38	151	568290	9.72	ug/l	100
11) Acetone	3.42	43	493816	45.40	ug/l	100
12) 1,1-Dichloroethene	3.57	61	1740095	10.33	ug/l	100
13) tert-Butyl alcohol	3.74	59	827866	249.88	ug/l	100
15) Methyl acetate	4.14	74	70878	9.57	ug/l	100
16) Iodomethane	4.03	142	1690731	10.11	ug/l	100
18) Methylene chloride	4.33	49	1398164	9.91	ug/l	100
19) Carbon disulfide	4.28	76	4559062	10.38	ug/l	100
20) Acrylonitrile	4.58	53	738025	49.95	ug/l	100
21) tert-Butyl methyl ether (M	4.62	73	1658863	10.19	ug/l	100
22) trans-1,2-Dichloroethene	4.85	96	1165892	9.97	ug/l	100
23) Isopropyl ether (DIPE)	5.54	45	3862672	10.51	ug/l	100
24) Vinyl acetate	5.77	43	974695	9.72	ug/l	100
25) 1,1-Dichloroethane	5.71	63	2033904	10.27	ug/l	100
27) tert-Butyl ethyl ether (ET	6.46	59	2724914	10.20	ug/l	100
28) 2-Butanone	6.76	43	888916	51.07	ug/l	100
29) 2,2-Dichloropropane	7.01	77	1127535	10.05	ug/l	100
30) cis-1,2-Dichloroethene	7.13	96	1154449	10.08	ug/l	100
31) Chloroform	7.53	83	1784668	9.84	ug/l	100

(#) = qualifier out of range (m) = manual integration

SU 6/13/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW007.D Vial: 7
Acq On : 3 Jun 2024 5:14 pm Operator: DHuynh
Sample : VO06F036 1.00/5.00uL Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 10 16:47 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.91	130	511769	10.34	ug/l	100
33)	Tetrahydrofuran	8.04	42	100150	9.40	ug/l	100
34)	tert-Amyl alcohol	8.06	59	130079	52.05	ug/l	100
36)	1,1,1-Trichloroethane	8.46	97	1382807	9.89	ug/l	100
37)	Cyclohexane	8.43	84	1468844	10.39	ug/l	100
38)	2,2,4-Trimethylpentane	8.62	57	3637165	10.03	ug/l	100
39)	1,1-Dichloropropene	8.81	110	472805	9.94	ug/l	100
40)	Carbon tetrachloride	8.98	119	1130682	10.02	ug/l	100
41)	tert-Amyl methyl ether (TA	9.15	73	2084558	10.46	ug/l	100
43)	1,2-Dichloroethane	9.38	62	849179	10.51	ug/l	100
44)	Benzene	9.36	78	4457037	10.54	ug/l	100
45)	Trichloroethene	10.63	130	1123791	10.44	ug/l	100
46)	Methylcyclohexane	10.72	83	1814653	10.96	ug/l	100
47)	1,2-Dichloropropane	10.99	63	1042417	10.20	ug/l	100
48)	1,4-Dioxane	11.54	88	57099	184.61	ug/l	100
49)	Bromodichloromethane	11.43	83	1169828	9.97	ug/l	100
50)	Dibromomethane	11.51	93	415449	9.61	ug/l	100
51)	2-Chloroethyl vinyl ether	12.12	63	338413	10.03	ug/l	100
52)	4-Methyl-2-pentanone	12.19	43	2733672	55.22	ug/l	100
53)	cis-1,3-Dichloropropene	12.50	75	1525685	10.22	ug/l	100
56)	Toluene	13.04	91	4506298	10.24	ug/l	100
57)	Ethyl methacrylate	13.46	69	765503	10.21	ug/l	100
58)	trans-1,3-Dichloropropene	13.42	75	1113685	10.27	ug/l	100
59)	1,1,2-Trichloroethane	13.67	97	509239	9.87	ug/l	100
60)	2-Hexanone	13.76	43	1577687	51.76	ug/l	100
61)	1,3-Dichloropropane	14.11	76	1003947	10.32	ug/l	100
62)	Tetrachloroethene	14.18	164	819957	10.13	ug/l	100
63)	Dibromochloromethane	14.53	129	672925	9.77	ug/l	100
65)	1,2-Dibromoethane	14.87	107	490706	9.54	ug/l	100
66)	1-Chlorohexane	15.22	91	2038068	9.84	ug/l	100
67)	Chlorobenzene	15.60	112	2568732	10.36	ug/l	100
68)	1,1,1,2-Tetrachloroethane	15.69	131	860214	10.31	ug/l	100
69)	Ethylbenzene	15.70	91	4946602	10.30	ug/l	100
70)	m-Xylene & p-Xylene	15.83	91	7472985	20.80	ug/l	100
71)	o-Xylene	16.56	91	3716621	10.07	ug/l	100
72)	Styrene	16.62	104	2755841	10.56	ug/l	100
73)	Isopropylbenzene	17.17	105	4611756	10.19	ug/l	100
75)	Bromoform	17.17	173	279362	11.44	ug/l	100
76)	1,1,2,2-Tetrachloroethane	17.45	83	557204	9.79	ug/l	100
78)	1,2,3-Trichloropropane	17.66	110	128404	9.75	ug/l	100
79)	trans-1,4-Dichloro-2-buten	17.77	53	142575	10.00	ug/l	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW007.D Vial: 7
Acq On : 3 Jun 2024 5:14 pm Operator: DHuynh
Sample : VO06F036 1.00/5.00uL Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 10 16:47 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80) n-Propylbenzene	17.77	91	5986695	10.70	ug/l	100
81) Bromobenzene	17.80	156	848065	10.45	ug/l	100
82) 1,3,5-Trimethylbenzene	17.97	105	3781174	10.39	ug/l	100
83) 2-Chlorotoluene	17.99	91	3824144	10.52	ug/l	100
84) 4-Chlorotoluene	18.05	91	3132014	10.17	ug/l	100
85) tert-Butylbenzene	18.43	134	819804	10.36	ug/l	100
86) 1,2,4-Trimethylbenzene	18.47	105	3657381	10.46	ug/l	100
87) sec-Butylbenzene	18.67	105	5015585	10.48	ug/l	100
88) p-Isopropyltoluene	18.83	119	4124841	10.45	ug/l	100
89) 1,3-Dichlorobenzene	18.93	146	1826041	10.61	ug/l	100
90) 1,2,3-Trimethylbenzene	19.01	105	3388303	10.40	ug/l	100
91) 1,4-Dichlorobenzene	19.06	146	1787165	10.50	ug/l	100
92) n-Butylbenzene	19.28	91	4127265	10.18	ug/l	100
93) 1,2-Dichlorobenzene	19.45	146	1491869	10.53	ug/l	100
94) 1,2-Dibromo-3-chloropropan	20.23	157	66299	9.52	ug/l	100
95) 1,2,4-Trichlorobenzene	21.06	180	835662	9.96	ug/l	100
96) Hexachlorobutadiene	21.19	225	512877	9.69	ug/l	100
97) Naphthalene	21.33	128	1156511	9.73	ug/l	100
98) 1,2,3-Trichlorobenzene	21.58	180	582836	9.18	ug/l	100

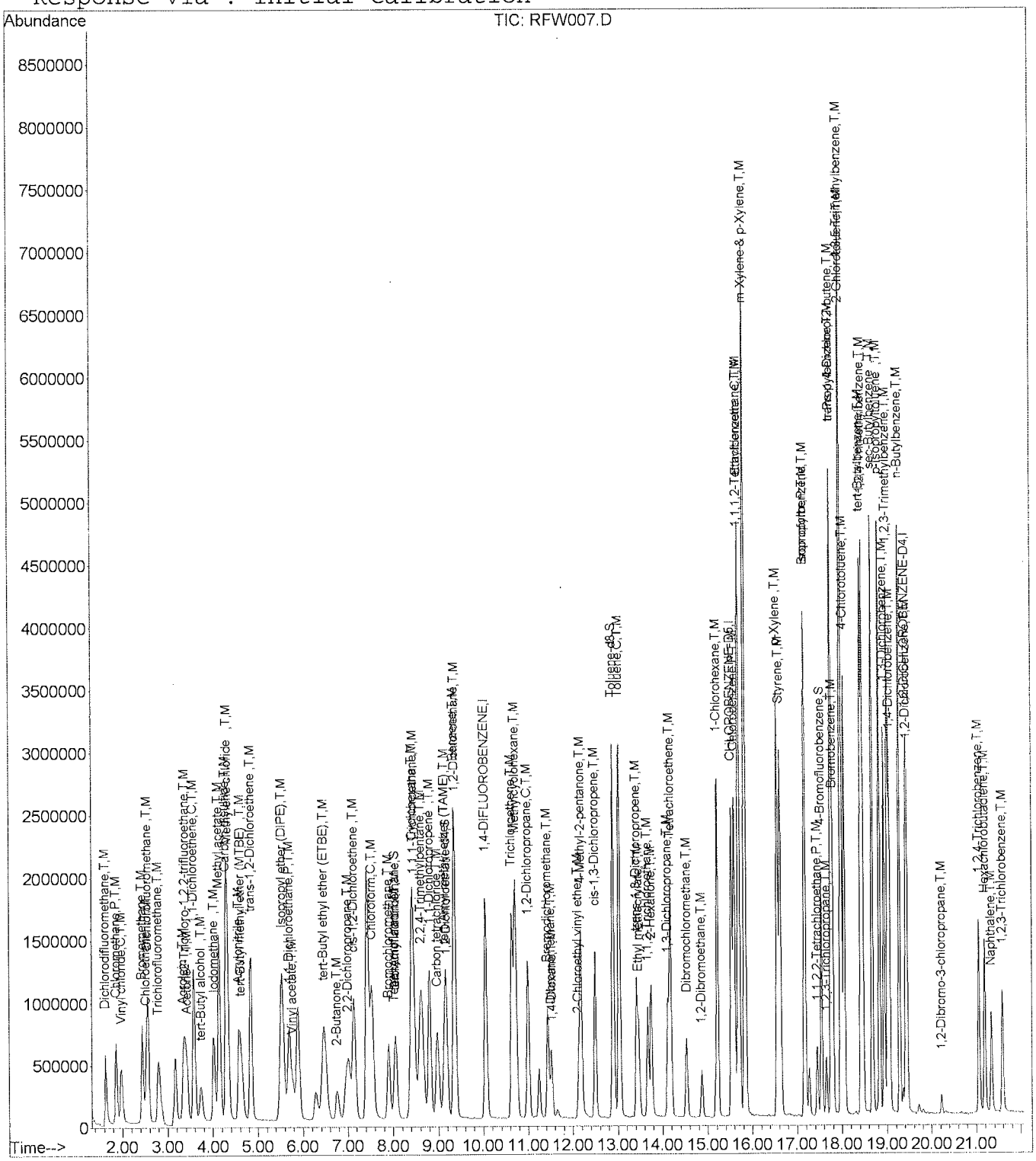
(#) = qualifier out of range (m) = manual integration
RFW007.D VO06F03.M Mon Jun 10 17:16:56 2024 Page 3

SG 6/13/24

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F03\RFW007.D Vial: 7
Acq On : 3 Jun 2024 5:14 pm Operator: DHuynh
Sample : VO06F036 1.00/5.00uL Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 10 16:47 2024 Quant Results File: VO06F03.RE

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration



SU 6/13/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW008.D Vial: 8
Acq On : 3 Jun 2024 5:40 pm Operator: DHuynh
Sample : VO06F037 2.00/10.0uL Inst : 06
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 10 15:24 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.07	114	3129127	10.00	ug/l	0.02
54) CHLOROBENZENE-D5	15.53	117	2471333	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.43	152	840170	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	8.06	111	1953155	20.80	ug/l	0.00
Spiked Amount 10.000			Recovery = 208.00%			
42) 1,2-Dichloroethane-d4	9.19	65	1412289	20.91	ug/l	0.00
Spiked Amount 10.000			Recovery = 209.10%			
55) Toluene-d8	12.90	98	7418347	19.94	ug/l	0.00
Spiked Amount 10.000			Recovery = 199.40%			
77) 4-Bromofluorobenzene	17.54	95	2362992	21.21	ug/l	0.00
Spiked Amount 10.000			Recovery = 212.10%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.63	85	1954855	21.10	ug/l	100
3) Chloromethane	1.87	50	2763462	19.59	ug/l	98
4) Vinyl chloride	1.97	62	2196831	21.84	ug/l	99
5) Bromomethane	2.42	94	1951629	21.41	ug/l	97
6) Chloroethane	2.52	64	1631266	21.12	ug/l	100
7) Dichlorofluoromethane	2.56	67	3926825	20.66	ug/l	98
8) Trichlorofluoromethane	2.80	101	2580921	20.67	ug/l	99
9) Acrolein	3.34	56	653410	102.31	ug/l	99
10) 1,1,2-Trichloro-1,2,2-trif	3.38	151	1186603	20.59	ug/l	99
11) Acetone	3.42	43	995917	92.93	ug/l	99
12) 1,1-Dichloroethene	3.57	61	3500152	21.09	ug/l	99
13) tert-Butyl alcohol	3.74	59	1597458	489.34	ug/l	99
15) Methyl acetate	4.12	74	136124	18.65	ug/l	94
16) Iodomethane	4.03	142	3443671	20.90	ug/l	98
18) Methylene chloride	4.33	49	2824713	20.32	ug/l	97
19) Carbon disulfide	4.28	76	9088666	21.01	ug/l	98
20) Acrylonitrile	4.58	53	1473774	101.24	ug/l	98
21) tert-Butyl methyl ether (M	4.62	73	3295676	20.54	ug/l	99
22) trans-1,2-Dichloroethene	4.85	96	2376655	20.62	ug/l	98
23) Isopropyl ether (DIPE)	5.54	45	7693292	21.24	ug/l	99
24) Vinyl acetate	5.77	43	2214955	22.42	ug/l	99
25) 1,1-Dichloroethane	5.71	63	4110836	21.07	ug/l	99
27) tert-Butyl ethyl ether (ET	6.46	59	5384784	20.46	ug/l	99
28) 2-Butanone	6.76	43	1759508	102.58	ug/l	100
29) 2,2-Dichloropropane	7.01	77	2381701	21.55	ug/l	99
30) cis-1,2-Dichloroethene	7.13	96	2362597	20.95	ug/l	99
31) Chloroform	7.53	83	3635213	20.33	ug/l	98

(#) = qualifier out of range (m) = manual integration

6/13/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW008.D Vial: 8
Acq On : 3 Jun 2024 5:40 pm Operator: DHuynh
Sample : VO06F037 2.00/10.0uL Inst : 06
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 10 15:24 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.91	130	1019400	20.91	ug/l	96
33)	Tetrahydrofuran	8.01	42	186150	17.73	ug/l	98
34)	tert-Amyl alcohol	8.06	59	233623	94.88	ug/l	85
36)	1,1,1-Trichloroethane	8.46	97	2903352	21.08	ug/l	100
37)	Cyclohexane	8.43	84	2930303	21.03	ug/l	99
38)	2,2,4-Trimethylpentane	8.62	57	7242682	20.26	ug/l	100
39)	1,1-Dichloropropene	8.81	110	981400	20.95	ug/l	97
40)	Carbon tetrachloride	8.98	119	2351636	21.15	ug/l	100
41)	tert-Amyl methyl ether (TA	9.15	73	4077449	20.75	ug/l	98
43)	1,2-Dichloroethane	9.38	62	1705928	21.43	ug/l	100
44)	Benzene	9.36	78	8774659	21.06	ug/l	99
45)	Trichloroethene	10.63	130	2219080	20.92	ug/l	98
46)	Methylcyclohexane	10.72	83	3487747	21.38	ug/l	98
47)	1,2-Dichloropropane	10.99	63	2140358	21.25	ug/l	100
48)	1,4-Dioxane	11.54	88	119866	393.30	ug/l	89
49)	Bromodichloromethane	11.43	83	2376338	20.56	ug/l	98
50)	Dibromomethane	11.52	93	843279	19.79	ug/l	98
51)	2-Chloroethyl vinyl ether	12.12	63	684959	20.60	ug/l	97
52)	4-Methyl-2-pentanone	12.19	43	5236453	107.35	ug/l	98
53)	cis-1,3-Dichloropropene	12.50	75	3110855	21.16	ug/l	98
56)	Toluene	13.05	91	8946641	20.76	ug/l	99
57)	Ethyl methacrylate	13.46	69	1528847	20.83	ug/l	98
58)	trans-1,3-Dichloropropene	13.42	75	2229605	21.01	ug/l	99
59)	1,1,2-Trichloroethane	13.67	97	1034105	20.47	ug/l	97
60)	2-Hexanone	13.76	43	3069633	102.85	ug/l	100
61)	1,3-Dichloropropane	14.11	76	2022114	21.22	ug/l	97
62)	Tetrachloroethene	14.18	164	1671054	21.09	ug/l	99
63)	Dibromochloromethane	14.53	129	1355574	20.10	ug/l	99
65)	1,2-Dibromoethane	14.87	107	952859	18.93	ug/l	97
66)	1-Chlorohexane	15.22	91	4298726	21.21	ug/l	98
67)	Chlorobenzene	15.60	112	5125670	21.11	ug/l	99
68)	1,1,1,2-Tetrachloroethane	15.69	131	1702271	20.84	ug/l	98
69)	Ethylbenzene	15.70	91	9840310	20.93	ug/l	99
70)	m-Xylene & p-Xylene	15.83	91	14946607	42.50	ug/l	100
71)	o-Xylene	16.56	91	7407735	20.50	ug/l	99
72)	Styrene	16.62	104	5455597	21.35	ug/l	99
73)	Isopropylbenzene	17.17	105	9126079	20.59	ug/l	99
75)	Bromoform	17.17	173	568741	24.00	ug/l	100
76)	1,1,2,2-Tetrachloroethane	17.45	83	1121726	20.32	ug/l	96
78)	1,2,3-Trichloropropane	17.66	110	252451	19.75	ug/l	96
79)	trans-1,4-Dichloro-2-buten	17.77	53	293526	21.23	ug/l	98

(#) = qualifier out of range (m) = manual integration

SA 6/13/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW008.D Vial: 8
Acq On : 3 Jun 2024 5:40 pm Operator: DHuynh
Sample : VO06F037 2.00/10.0uL Inst : 06
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 10 15:24 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	n-Propylbenzene	17.77	91	11733040	21.61	ug/l	99
81)	Bromobenzene	17.80	156	1682480	21.36	ug/l	97
82)	1,3,5-Trimethylbenzene	17.97	105	7482685	21.20	ug/l	99
83)	2-Chlorotoluene	17.99	91	7613267	21.59	ug/l	99
84)	4-Chlorotoluene	18.05	91	6316846	21.14	ug/l	99
85)	tert-Butylbenzene	18.43	134	1611011	20.98	ug/l	96
86)	1,2,4-Trimethylbenzene	18.47	105	7307578	21.54	ug/l	98
87)	sec-Butylbenzene	18.67	105	9798072	21.09	ug/l	99
88)	p-Isopropyltoluene	18.84	119	8130968	21.22	ug/l	98
89)	1,3-Dichlorobenzene	18.93	146	3638567	21.78	ug/l	98
90)	1,2,3-Trimethylbenzene	19.01	105	6762541	21.40	ug/l	100
91)	1,4-Dichlorobenzene	19.06	146	3601199	21.81	ug/l	99
92)	n-Butylbenzene	19.28	91	8325699	21.17	ug/l	98
93)	1,2-Dichlorobenzene	19.45	146	2930846	21.31	ug/l	98
94)	1,2-Dibromo-3-chloropropan	20.23	157	128108	18.96	ug/l	96
95)	1,2,4-Trichlorobenzene	21.06	180	1743210	21.41	ug/l	100
96)	Hexachlorobutadiene	21.19	225	1065548	20.75	ug/l	98
97)	Naphthalene	21.33	128	2398284	20.78	ug/l	98
98)	1,2,3-Trichlorobenzene	21.59	180	1253940	20.36	ug/l	97

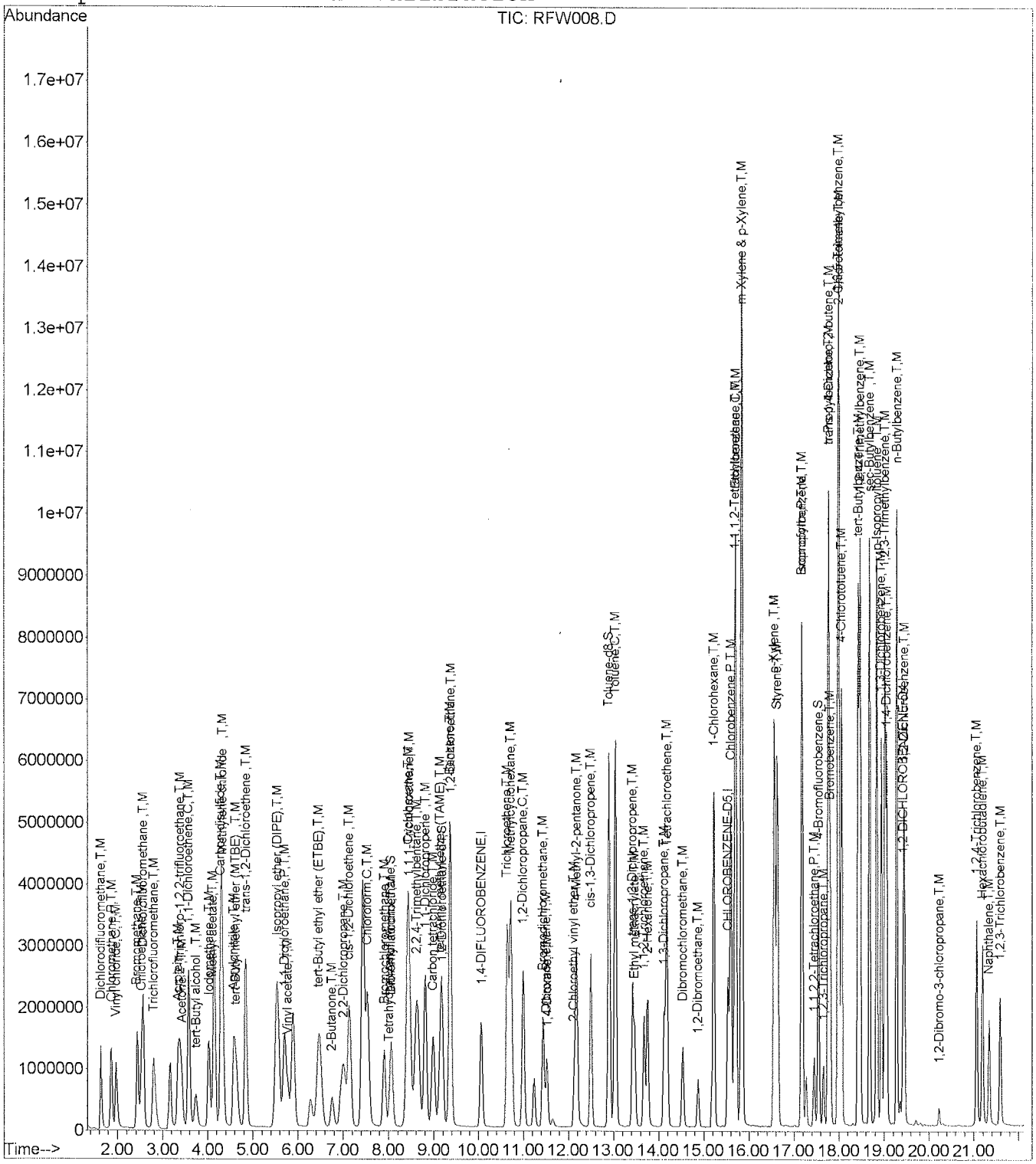
(#) = qualifier out of range (m) = manual integration

6/13/24

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F03\RFW008.D Vial: 8
Acq On : 3 Jun 2024 5:40 pm Operator: DHuynh
Sample : VO06F037 2.00/10.0uL Inst : 06
Misc : 20ppb 8260/100ppb KET-AA/500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 10 15:24 2024 Quant Results File: VO06F03.RE

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration



6/12/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW009.D Vial: 9
Acq On : 3 Jun 2024 6:06 pm Operator: DHuynh
Sample : VO06F038 3.00/15.0uL Inst : 06
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 10 15:24 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.07	114	3157508	10.00	ug/l	0.02
54) CHLOROBENZENE-D5	15.53	117	2502488	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.43	152	847553	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	8.06	111	2995949	31.61	ug/l	0.00
Spiked Amount 10.000			Recovery =	316.10%		
42) 1,2-Dichloroethane-d4	9.17	65	2207389	32.38	ug/l	-0.02
Spiked Amount 10.000			Recovery =	323.80%		
55) Toluene-d8	12.90	98	11185485	29.69	ug/l	0.00
Spiked Amount 10.000			Recovery =	296.90%		
77) 4-Bromofluorobenzene	17.54	95	3614143	32.16	ug/l	0.00
Spiked Amount 10.000			Recovery =	321.60%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.63	85	2800651	29.95	ug/l	98
3) Chloromethane	1.86	50	4254165	29.89	ug/l	97
4) Vinyl chloride	1.96	62	3137161	30.91	ug/l	99
5) Bromomethane	2.44	94	2990484	32.50	ug/l	97
6) Chloroethane	2.52	64	2489208	31.93	ug/l	99
7) Dichlorofluoromethane	2.56	67	5966515	31.11	ug/l	97
8) Trichlorofluoromethane	2.79	101	3776250	29.97	ug/l	97
9) Acrolein	3.34	56	1070508	166.12	ug/l	96
10) 1,1,2-Trichloro-1,2,2-trif	3.38	151	1811163	31.14	ug/l	98
11) Acetone	3.42	43	1675156	154.91	ug/l	98
12) 1,1-Dichloroethene	3.57	61	5310316	31.71	ug/l	99
13) tert-Butyl alcohol	3.74	59	2780708	844.14	ug/l	100
15) Methyl acetate	4.12	74	222506	30.21	ug/l	96
16) Iodomethane	4.01	142	5242673	31.54	ug/l	98
18) Methylene chloride	4.33	49	4343883	30.96	ug/l	99
19) Carbon disulfide	4.28	76	13690067	31.36	ug/l	98
20) Acrylonitrile	4.58	53	2435302	165.79	ug/l	99
21) tert-Butyl methyl ether (M	4.62	73	5371709	33.18	ug/l	99
22) trans-1,2-Dichloroethene	4.85	96	3616808	31.10	ug/l	99
23) Isopropyl ether (DIPE)	5.54	45	11981874	32.78	ug/l	98
24) Vinyl acetate	5.77	43	3549160	35.60	ug/l	100
25) 1,1-Dichloroethane	5.69	63	6347802	32.24	ug/l	98
27) tert-Butyl ethyl ether (ET	6.46	59	8568963	32.26	ug/l	98
28) 2-Butanone	6.76	43	2920001	168.71	ug/l	98
29) 2,2-Dichloropropane	7.01	77	3505603	31.43	ug/l	99
30) cis-1,2-Dichloroethene	7.13	96	3609646	31.71	ug/l	97
31) Chloroform	7.53	83	5584053	30.95	ug/l	99

(#) = qualifier out of range (m) = manual integration
RFW009.D VO06F03.M Mon Jun 10 17:17:39 2024 Page 1

Sab 13/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW009.D Vial: 9
Acq On : 3 Jun 2024 6:06 pm Operator: DHuynh
Sample : VO06F038 3.00/15.0uL Inst : 06
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 10 15:24 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
32) Bromochloromethane	7.91	130	1622195	32.97 ug/l	98
33) Tetrahydrofuran	8.01	42	333513	31.47 ug/l	99
34) tert-Amyl alcohol	8.04	59	428166	172.32 ug/l	95
36) 1,1,1-Trichloroethane	8.45	97	4314838	31.05 ug/l	99
37) Cyclohexane	8.43	84	4222551	30.03 ug/l	98
38) 2,2,4-Trimethylpentane	8.62	57	10301198	28.56 ug/l	100
39) 1,1-Dichloropropene	8.81	110	1507038	31.88 ug/l	97
40) Carbon tetrachloride	8.98	119	3533249	31.49 ug/l	99
41) tert-Amyl methyl ether (TA	9.15	73	6651534	33.55 ug/l	97
43) 1,2-Dichloroethane	9.38	62	2643256	32.90 ug/l	98
44) Benzene	9.36	78	13421260	31.93 ug/l	98
45) Trichloroethene	10.63	130	3402142	31.79 ug/l	99
46) Methylcyclohexane	10.72	83	5103144	31.00 ug/l	99
47) 1,2-Dichloropropane	10.99	63	3253064	32.01 ug/l	99
48) 1,4-Dioxane	11.54	88	199825	649.77 ug/l	97
49) Bromodichloromethane	11.43	83	3707290	31.78 ug/l	99
50) Dibromomethane	11.51	93	1309300	30.45 ug/l	96
51) 2-Chloroethyl vinyl ether	12.12	63	1104169	32.91 ug/l	98
52) 4-Methyl-2-pentanone	12.16	43	8558125	173.87 ug/l	98
53) cis-1,3-Dichloropropene	12.50	75	4826803	32.53 ug/l	97
56) Toluene	13.04	91	13493461	30.93 ug/l	98
57) Ethyl methacrylate	13.46	69	2459154	33.08 ug/l	97
58) trans-1,3-Dichloropropene	13.42	75	3534293	32.89 ug/l	96
59) 1,1,2-Trichloroethane	13.67	97	1668591	32.62 ug/l	98
60) 2-Hexanone	13.74	43	5097874	168.69 ug/l	98
61) 1,3-Dichloropropane	14.11	76	3169248	32.85 ug/l	98
62) Tetrachloroethene	14.18	164	2532429	31.57 ug/l	99
63) Dibromochloromethane	14.53	129	2137573	31.30 ug/l	99
65) 1,2-Dibromoethane	14.87	107	1575709	30.91 ug/l	98
66) 1-Chlorohexane	15.22	91	6224918	30.33 ug/l	99
67) Chlorobenzene	15.60	112	7880377	32.05 ug/l	98
68) 1,1,1,2-Tetrachloroethane	15.69	131	2665278	32.22 ug/l	98
69) Ethylbenzene	15.70	91	15004399	31.52 ug/l	98
70) m-Xylene & p-Xylene	15.83	91	20728474	58.21 ug/l	93
71) o-Xylene	16.56	91	11202924	30.62 ug/l	100
72) Styrene	16.62	104	8419372	32.54 ug/l	98
73) Isopropylbenzene	17.17	105	13587375	30.27 ug/l	98
75) Bromoform	17.17	173	927360	38.79 ug/l	99
76) 1,1,2,2-Tetrachloroethane	17.45	83	1799348	32.31 ug/l	96
78) 1,2,3-Trichloropropane	17.66	110	406032	31.48 ug/l	95
79) trans-1,4-Dichloro-2-buten	17.77	53	470821	33.75 ug/l	98

(#) = qualifier out of range (m) = manual integration

SU 6/13/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW009.D Vial: 9
Acq On : 3 Jun 2024 6:06 pm Operator: DHuynh
Sample : VO06F038 3.00/15.0uL Inst : 06
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 10 15:24 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

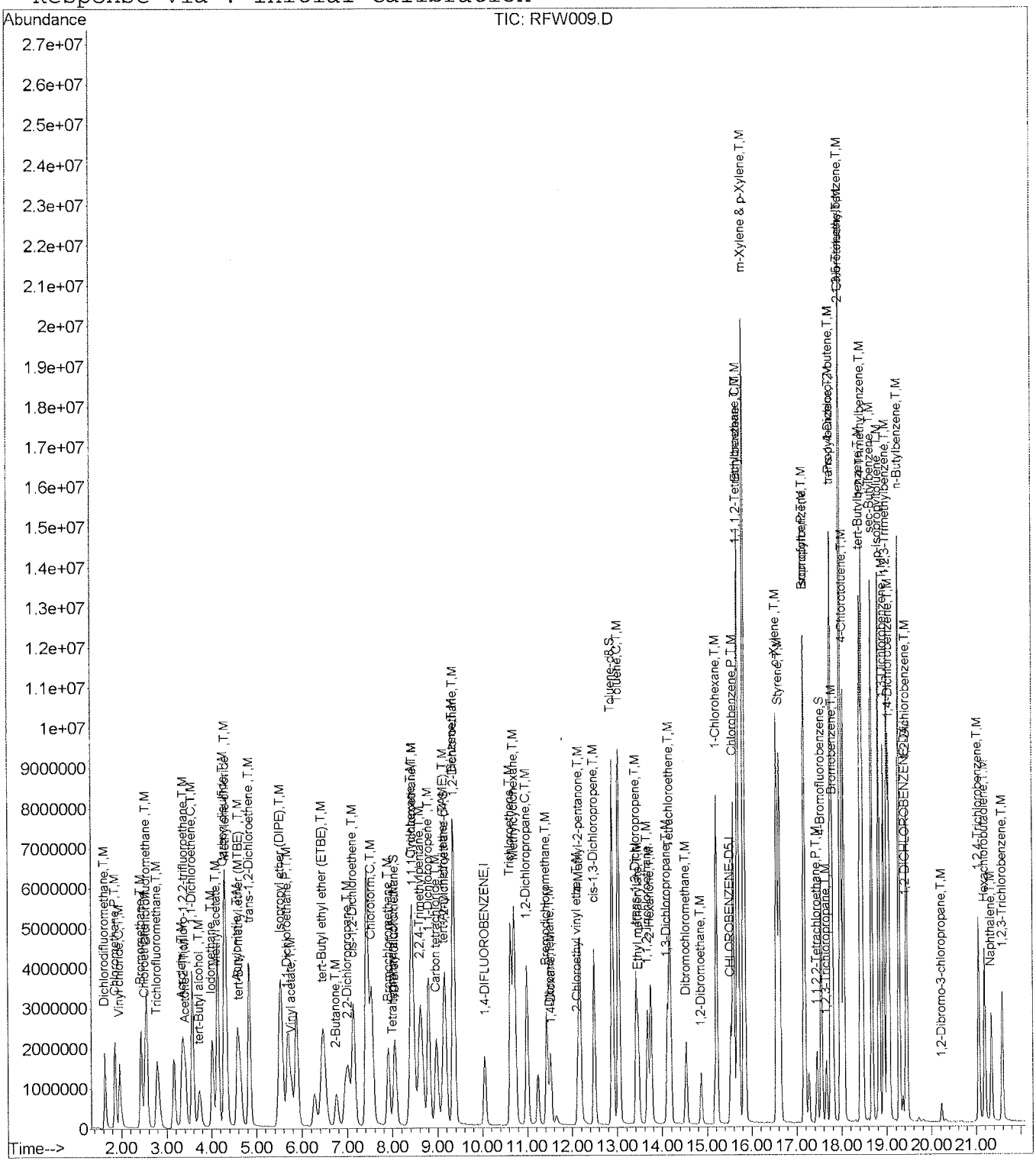
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	n-Propylbenzene	17.77	91	16541405	30.20	ug/l	96
81)	Bromobenzene	17.80	156	2594135	32.65	ug/l	98
82)	1,3,5-Trimethylbenzene	17.97	105	11223942	31.52	ug/l	99
83)	2-Chlorotoluene	17.99	91	11522522	32.39	ug/l	99
84)	4-Chlorotoluene	18.05	91	9516913	31.57	ug/l	99
85)	tert-Butylbenzene	18.43	134	2371986	30.61	ug/l	94
86)	1,2,4-Trimethylbenzene	18.47	105	10870803	31.76	ug/l	99
87)	sec-Butylbenzene	18.67	105	14064799	30.01	ug/l	97
88)	p-Isopropyltoluene	18.84	119	11987182	31.01	ug/l	98
89)	1,3-Dichlorobenzene	18.93	146	5513287	32.72	ug/l	98
90)	1,2,3-Trimethylbenzene	19.01	105	10147741	31.83	ug/l	99
91)	1,4-Dichlorobenzene	19.06	146	5460306	32.79	ug/l	99
92)	n-Butylbenzene	19.28	91	12138274	30.60	ug/l	98
93)	1,2-Dichlorobenzene	19.45	146	4441577	32.01	ug/l	97
94)	1,2-Dibromo-3-chloropropan	20.23	157	213114	31.27	ug/l	94
95)	1,2,4-Trichlorobenzene	21.06	180	2661527	32.41	ug/l	99
96)	Hexachlorobutadiene	21.19	225	1535231	29.63	ug/l	100
97)	Naphthalene	21.33	128	3796941	32.62	ug/l	97
98)	1,2,3-Trichlorobenzene	21.59	180	1971100	31.72	ug/l	99

(#) = qualifier out of range (m) = manual integration
RFW009.D VO06F03.M Mon Jun 10 17:17:40 2024 6/13/24 Page 3

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F03\RFW009.D Vial: 9
Acq On : 3 Jun 2024 6:06 pm Operator: DHuynh
Sample : VO06F038 3.00/15.0uL Inst : 06
Misc : 30ppb 8260/150ppb KET-AA/750ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 10 15:24 2024 Quant Results File: VO06F03.RE

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration



SA 6/13/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW010.D Vial: 10
Acq On : 3 Jun 2024 6:32 pm Operator: DHuynh
Sample : VO06F039 5.00/25.0uL Inst : 06
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 13 14:44 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.05	114	3116397	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.53	117	2463139	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.43	152	817022	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	8.06	111	2047	0.02	ug/l	0.00
Spiked Amount 10.000			Recovery = 0.20%			
42) 1,2-Dichloroethane-d4	9.38	65	146280	2.17	ug/l	0.19
Spiked Amount 10.000			Recovery = 21.70%			
55) Toluene-d8	12.90	98	11699	0.03	ug/l	0.00
Spiked Amount 10.000			Recovery = 0.30%			
77) 4-Bromofluorobenzene	17.45	95	334633	3.09	ug/l	-0.09
Spiked Amount 10.000			Recovery = 30.90%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.63	85	4565047	49.46	ug/l	98
3) Chloromethane	1.85	50	6929109	49.33	ug/l	98
4) Vinyl chloride	1.97	62	5011281	50.03	ug/l	98
5) Bromomethane	2.42	94	4814336	53.02	ug/l	97
6) Chloroethane	2.52	64	4047626	52.61	ug/l	99
7) Dichlorofluoromethane	2.56	67	9684492	51.16	ug/l	97
8) Trichlorofluoromethane	2.80	101	6086554	48.94	ug/l	97
9) Acrolein	3.34	56	1841817	289.58	ug/l	97
10) 1,1,2-Trichloro-1,2,2-trif	3.38	151	2860019	49.83	ug/l	100
11) Acetone	3.43	43	2697286	252.72	ug/l	98
12) 1,1-Dichloroethene	3.57	61	8540321	51.68	ug/l	98
13) tert-Butyl alcohol	3.74	59	4639511	1426.99	ug/l	99
16) Iodomethane	4.01	142	8573910	52.26	ug/l	98
18) Methylene chloride	4.33	49	7063550	51.02	ug/l	98
20) Acrylonitrile	4.58	53	3948572	272.35	ug/l	97
21) tert-Butyl methyl ether (M	4.62	73	8363740	52.34	ug/l	99
22) trans-1,2-Dichloroethene	4.83	96	5964803	51.97	ug/l	99
23) Isopropyl ether (DIPE)	5.52	45	19403541	53.78	ug/l	97
24) Vinyl acetate	5.77	43	5655446	57.47	ug/l	100
25) 1,1-Dichloroethane	5.69	63	10451406	53.79	ug/l	97
27) tert-Butyl ethyl ether (ET	6.46	59	14041355	53.56	ug/l	99
28) 2-Butanone	6.76	43	4797015	280.82	ug/l	99
29) 2,2-Dichloropropane	7.01	77	5641443	51.25	ug/l	97
30) cis-1,2-Dichloroethene	7.13	96	6044518	53.81	ug/l	99
31) Chloroform	7.53	83	9277417	52.11	ug/l	98
32) Bromochloromethane	7.91	130	2637941	54.32	ug/l	97
33) Tetrahydrofuran	8.02	42	501965	47.99	ug/l	95

(#) = qualifier out of range (m) = manual integration
RFW010.D VO06F03.M Thu Jun 13 14:44:21 2024 Page 1

Su 6/13/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW010.D Vial: 10
Acq On : 3 Jun 2024 6:32 pm Operator: DHuynh
Sample : VO06F039 5.00/25.0uL Inst : 06
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 13 14:44 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
36) 1,1,1-Trichloroethane	8.43	97	7077776	51.60 ug/l	99
39) 1,1-Dichloropropene	8.81	110	2477374	53.10 ug/l	100
40) Carbon tetrachloride	8.98	119	5780512	52.19 ug/l	100
41) tert-Amyl methyl ether (TA	9.15	73	10601434	54.18 ug/l	97
43) 1,2-Dichloroethane	9.38	62	4390464	55.37 ug/l	98
44) Benzene	9.36	78	21964137	52.94 ug/l	97
45) Trichloroethene	10.63	130	5651998	53.51 ug/l	99
47) 1,2-Dichloropropane	10.99	63	5325088	53.09 ug/l	99
48) 1,4-Dioxane	11.54	88	329428	1085.34 ug/l	98
49) Bromodichloromethane	11.43	83	6095730	52.95 ug/l	99
50) Dibromomethane	11.52	93	2182574	51.42 ug/l	97
51) 2-Chloroethyl vinyl ether	12.12	63	1813000	54.74 ug/l	98
52) 4-Methyl-2-pentanone	12.16	43	13663024	281.24 ug/l	97
53) cis-1,3-Dichloropropene	12.50	75	7839555	53.53 ug/l	98
56) Toluene	13.05	91	21264151	49.52 ug/l	94
57) Ethyl methacrylate	13.46	69	3878172	53.01 ug/l	97
58) trans-1,3-Dichloropropene	13.42	75	5631346	53.24 ug/l	97
59) 1,1,2-Trichloroethane	13.67	97	2705802	53.75 ug/l	96
60) 2-Hexanone	13.74	43	8067704	271.22 ug/l	98
61) 1,3-Dichloropropane	14.11	76	5112268	53.83 ug/l	95
62) Tetrachloroethene	14.18	164	4182240	52.96 ug/l	99
63) Dibromochloromethane	14.53	129	3484995	51.84 ug/l	98
65) 1,2-Dibromoethane	14.87	107	2567529	51.16 ug/l	100
66) 1-Chlorohexane	15.22	91	10567556	52.31 ug/l	97
67) Chlorobenzene	15.60	112	12745643	52.66 ug/l	98
68) 1,1,1,2-Tetrachloroethane	15.69	131	4366242	53.63 ug/l	97
69) Ethylbenzene	15.70	91	21836386	46.61 ug/l	91
70) m-Xylene & p-Xylene	15.83	91	26257770	74.91 ug/l	73
71) o-Xylene	16.56	91	17806915	49.45 ug/l	98
72) Styrene	16.62	104	13719753	53.87 ug/l	98
73) Isopropylbenzene	17.17	105	20112820	45.53 ug/l	94
75) Bromoform	17.17	173	1500807	65.11 ug/l	100
76) 1,1,2,2-Tetrachloroethane	17.45	83	2792590	52.02 ug/l	94
78) 1,2,3-Trichloropropane	17.66	110	663613	53.38 ug/l	97
79) trans-1,4-Dichloro-2-buten	17.77	53	778748	57.91 ug/l	100
80) n-Propylbenzene	17.77	91	21004725	39.79 ug/l	85
81) Bromobenzene	17.80	156	4289938	56.01 ug/l	99
82) 1,3,5-Trimethylbenzene	17.97	105	16371249	47.69 ug/l	91
83) 2-Chlorotoluene	17.99	91	17518844	51.09 ug/l	95
84) 4-Chlorotoluene	18.05	91	14688103	50.55 ug/l	95
85) tert-Butylbenzene	18.43	134	3926370	52.57 ug/l	95

(#) = qualifier out of range (m) = manual integration
RFW010.D VO06F03.M Thu Jun 13 14:44:22 2024 Page 2

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Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW010.D Vial: 10
Acq On : 3 Jun 2024 6:32 pm Operator: DHuynh
Sample : VO06F039 5.00/25.0uL Inst : 06
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 13 14:44 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
86)	1,2,4-Trimethylbenzene	18.47	105	15705453	47.60	ug/l	90
87)	sec-Butylbenzene	18.67	105	18287261	40.48	ug/l	87
88)	p-Isopropyltoluene	18.84	119	16389807	43.99	ug/l	89
89)	1,3-Dichlorobenzene	18.93	146	8906956	54.83	ug/l	98
90)	1,2,3-Trimethylbenzene	19.01	105	14888062	48.44	ug/l	93
91)	1,4-Dichlorobenzene	19.06	146	8812762	54.89	ug/l	99
92)	n-Butylbenzene	19.28	91	16162238	42.26	ug/l	85
93)	1,2-Dichlorobenzene	19.45	146	7098849	53.08	ug/l	98
94)	1,2-Dibromo-3-chloropropan	20.23	157	342277	52.10	ug/l	92
95)	1,2,4-Trichlorobenzene	21.06	180	4284870	54.12	ug/l	98
96)	Hexachlorobutadiene	21.19	225	2390381	47.86	ug/l	100
97)	Naphthalene	21.33	128	6058211	53.99	ug/l	96
98)	1,2,3-Trichlorobenzene	21.58	180	3217149	53.71	ug/l	97

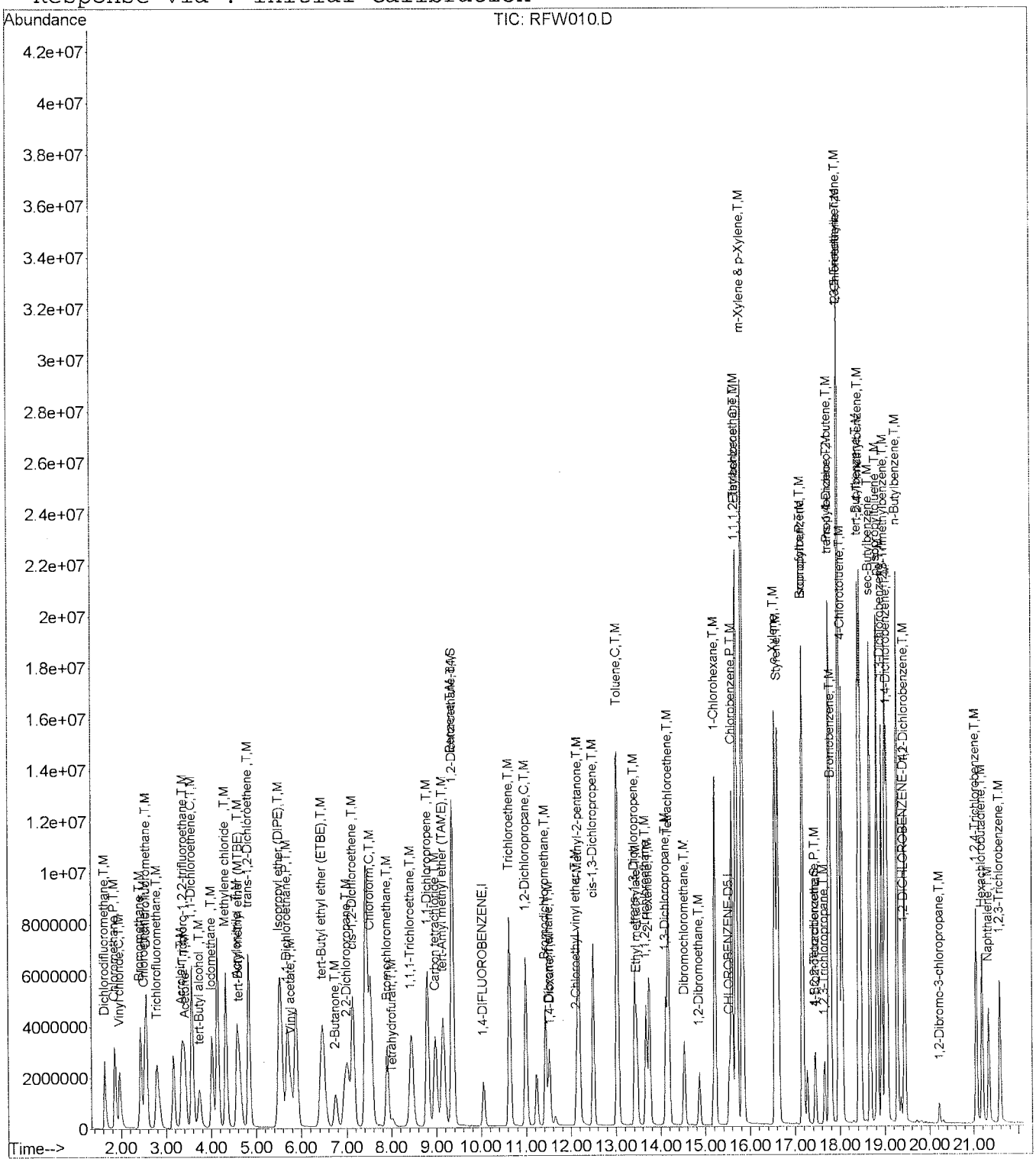
SY 6/13/24

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F03\RFW010.D Vial: 10
Acq On : 3 Jun 2024 6:32 pm Operator: DHuynh
Sample : VO06F039 5.00/25.0uL Inst : 06
Misc : 50ppb 8260/250ppb KET-AA/1250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 13 14:44 2024 Quant Results File: VO06F03.RE

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration



6/13/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW011.D Vial: 11
Acq On : 3 Jun 2024 6:59 pm Operator: DHuynh
Sample : VO06F0310 10.0/50.0uL Inst : 06
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 13 14:45 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.05	114	3267276	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.53	117	2470521	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.43	152	807954	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	8.06	111	1654	0.02	ug/l	0.00
Spiked Amount 10.000			Recovery =	0.20%		
42) 1,2-Dichloroethane-d4	9.38	65	322551	4.57	ug/l	0.19
Spiked Amount 10.000			Recovery =	45.70%		
55) Toluene-d8	12.90	98	7845	0.02	ug/l	0.00
Spiked Amount 10.000			Recovery =	0.20%		
77) 4-Bromofluorobenzene	17.66	95	9716	0.09	ug/l	0.12
Spiked Amount 10.000			Recovery =	0.90%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.63	85	9468664	97.86	ug/l	97
3) Chloromethane	1.85	50	13830085	93.91	ug/l	97
4) Vinyl chloride	1.95	62	9844460	93.75	ug/l	96
5) Bromomethane	2.42	94	9831475	103.27	ug/l	96
6) Chloroethane	2.52	64	8125496	100.74	ug/l	97
7) Dichlorofluoromethane	2.56	67	19366118	97.58	ug/l	95
8) Trichlorofluoromethane	2.80	101	12785329	98.05	ug/l	98
9) Acrolein	3.32	56	3775794	566.23	ug/l	92
10) 1,1,2-Trichloro-1,2,2-trif	3.38	151	6197712	102.99	ug/l	100
11) Acetone	3.43	43	5855592	523.29	ug/l	98
12) 1,1-Dichloroethene	3.57	61	17775935	102.59	ug/l	96
13) tert-Butyl alcohol	3.74	59	9663719	2835.05	ug/l	100
16) Iodomethane	4.01	142	17413665	101.24	ug/l	97
18) Methylene chloride	4.33	49	14522196	100.04	ug/l	97
20) Acrylonitrile	4.58	53	8329195	547.97	ug/l	96
21) tert-Butyl methyl ether (M	4.62	73	17802450	106.27	ug/l	98
22) trans-1,2-Dichloroethene	4.83	96	12383476	102.91	ug/l	98
23) Isopropyl ether (DIPE)	5.54	45	39445303	104.29	ug/l	96
24) Vinyl acetate	5.77	43	11713328	113.54	ug/l	98
25) 1,1-Dichloroethane	5.69	63	21713208	106.59	ug/l	96
27) tert-Butyl ethyl ether (ET	6.46	59	29245164	106.41	ug/l	98
28) 2-Butanone	6.76	43	10187613	568.85	ug/l	98
29) 2,2-Dichloropropane	7.01	77	10704225	92.75	ug/l	96
30) cis-1,2-Dichloroethene	7.14	96	12640667	107.32	ug/l	98
31) Chloroform	7.53	83	19463376	104.27	ug/l	97
32) Bromochloromethane	7.91	130	5571840	109.43	ug/l	95
33) Tetrahydrofuran	8.02	42	1173408	107.01	ug/l	92

(#) = qualifier out of range (m) = manual integration
RFW011.D VO06F03.M Thu Jun 13 14:45:19 2024 SC 6/13/24 Page 1

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW011.D Vial: 11
Acq On : 3 Jun 2024 6:59 pm Operator: DHuynh
Sample : VO06F0310 10.0/50.0uL Inst : 06
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 13 14:45 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
36)	1,1,1-Trichloroethane	8.44	97	14425577	100.31	ug/l	99
39)	1,1-Dichloropropene	8.81	110	5382858	110.05	ug/l	100
40)	Carbon tetrachloride	8.98	119	12054731	103.82	ug/l	100
41)	tert-Amyl methyl ether (TA	9.15	73	21967113	107.09	ug/l	96
43)	1,2-Dichloroethane	9.38	62	9352958	112.50	ug/l	97
44)	Benzene	9.36	78	35835145	82.38	ug/l	83
45)	Trichloroethene	10.64	130	11922526	107.67	ug/l	99
47)	1,2-Dichloropropane	10.99	63	11123729	105.78	ug/l	97
48)	1,4-Dioxane	11.54	88	707776	2224.16	ug/l	94
49)	Bromodichloromethane	11.43	83	12613415	104.50	ug/l	100
50)	Dibromomethane	11.52	93	4553076	102.32	ug/l	97
51)	2-Chloroethyl vinyl ether	12.12	63	3808698	109.69	ug/l	99
52)	4-Methyl-2-pentanone	12.19	43	26391574	518.16	ug/l	93
53)	cis-1,3-Dichloropropene	12.50	75	16116476	104.97	ug/l	97
56)	Toluene	13.05	91	30011235	69.68	ug/l	73
57)	Ethyl methacrylate	13.47	69	8228972	112.14	ug/l	97
58)	trans-1,3-Dichloropropene	13.42	75	11564165	109.00	ug/l	96
59)	1,1,2-Trichloroethane	13.67	97	5624363	111.39	ug/l	97
60)	2-Hexanone	13.74	43	16630636	557.43	ug/l	96
61)	1,3-Dichloropropane	14.11	76	10522894	110.48	ug/l	95
62)	Tetrachloroethene	14.18	164	8719325	110.09	ug/l	99
63)	Dibromochloromethane	14.53	129	7129209	105.74	ug/l	99
65)	1,2-Dibromoethane	14.87	107	5272512	104.76	ug/l	99
66)	1-Chlorohexane	15.22	91	19587233	96.66	ug/l	98
67)	Chlorobenzene	15.60	112	22363149	92.12	ug/l	88
68)	1,1,1,2-Tetrachloroethane	15.69	131	8963057	109.75	ug/l	97
71)	o-Xylene	16.56	91	26444346	73.22	ug/l	74
72)	Styrene	16.64	104	23427132	91.71	ug/l	83
73)	Isopropylbenzene	17.18	105	27248613	61.50	ug/l	71
75)	Bromoform	17.17	173	3019818	132.49	ug/l	97
76)	1,1,2,2-Tetrachloroethane	17.45	83	5499706	103.59	ug/l	94
78)	1,2,3-Trichloropropane	17.66	110	1354845	110.20	ug/l	98
79)	trans-1,4-Dichloro-2-buten	17.76	53	1611642	121.19	ug/l	98
80)	n-Propylbenzene	17.76	91	26824584	51.38	ug/l	53
81)	Bromobenzene	17.80	156	8764926	115.71	ug/l	100
82)	1,3,5-Trimethylbenzene	17.98	105	22472794	66.20	ug/l	66
85)	tert-Butylbenzene	18.43	134	7928634	107.35	ug/l	93
86)	1,2,4-Trimethylbenzene	18.48	105	21772080	66.73	ug/l	59
87)	sec-Butylbenzene	18.67	105	23290361	52.14	ug/l	56
88)	p-Isopropyltoluene	18.84	119	21695698	58.88	ug/l	59
89)	1,3-Dichlorobenzene	18.94	146	15731281	97.93	ug/l	89

(#) = qualifier out of range (m) = manual integration

SA 6/13/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW011.D Vial: 11
Acq On : 3 Jun 2024 6:59 pm Operator: DHuynh
Sample : VO06F0310 10.0/50.0uL Inst : 06
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 13 14:45 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
90)	1,2,3-Trimethylbenzene	19.02	105	20399117	67.12	ug/l	66
91)	1,4-Dichlorobenzene	19.06	146	15775580	99.36	ug/l	90
92)	n-Butylbenzene	19.28	91	21174049	55.99	ug/l	64
93)	1,2-Dichlorobenzene	19.45	146	13588099	102.74	ug/l	95
94)	1,2-Dibromo-3-chloropropan	20.23	157	714222	109.93	ug/l	90
95)	1,2,4-Trichlorobenzene	21.06	180	8833037	112.82	ug/l	99
96)	Hexachlorobutadiene	21.19	225	5085714	102.97	ug/l	100
97)	Naphthalene	21.33	128	12437403	112.08	ug/l	95
98)	1,2,3-Trichlorobenzene	21.59	180	6671220	112.62	ug/l	98

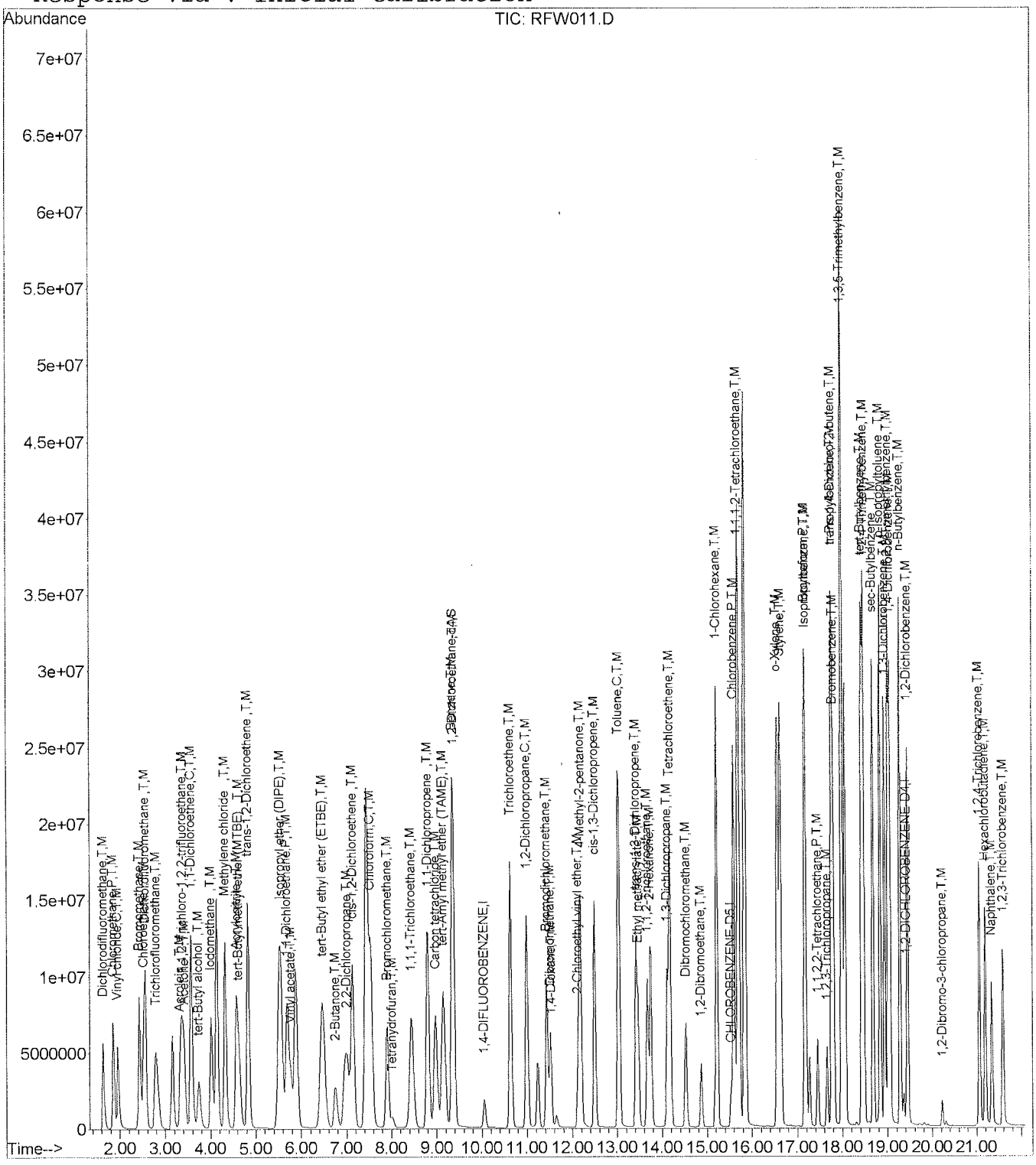
SC 6/13/24

(#) = qualifier out of range (m) = manual integration
RFW011.D VO06F03.M Thu Jun 13 14:45:20 2024 Page 3

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F03\RFW011.D Vial: 11
Acq On : 3 Jun 2024 6:59 pm Operator: DHuynh
Sample : VO06F0310 10.0/50.0uL Inst : 06
Misc : 100ppb 8260/500ppb KET-AA/2500ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 13 14:45 2024 Quant Results File: VO06F03.RE

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration



6/13/24

SECOND SOURCE VERIFICATION

CONTINUE_CALIBRATION - CALIBRATION VERIFICATION

Instrument ID :06
IC_Beginning DateTime :06/03/24 15:03
Spike Amount :10 PPB
CC/CV File :RFW014
IC File :RFW007

Column Spec :RTX502.2 ID :0.25MM
IC_Ending DateTime :06/03/24 18:59
HPChem Method :VO06F03
Date_Time :06/03/24 20:18

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	3067327	1	1	10.047	10.057	0				
	2	Dichlorodifluoromethane	9.678	-3.2	879158	0.287	0.296	1.627	1.631	5.79				
	3	Chloromethane	9.688	-3.1	1339526	0.437	0.451	1.864	1.864	13.06				
	4	Vinyl chloride	9.959	-0.4	981772	0.320	0.321	1.982	1.973	6.50				
	5	Bromomethane	10.119	1.2	904417	0.295	0.291	2.436	2.431	7.51				
	6	Chloroethane	9.961	-0.4	754301	0.246	0.247	2.515	2.519	5.98				
	7	Dichlorofluoromethane	9.943	-0.6	1852639	0.604	0.607	2.555	2.559	8.37				
	8	Trichlorofluoromethane	9.296	-7.0	1137996	0.371	0.399	2.792	2.795	11.88				
5	9	Acrolein	49.804	-0.4	311789	0.020	0.020	3.340	3.339	12.06				
	10	1,1,2-Trichloro-1,2,2-trifluoroethane	9.379	-6.2	529874	0.173	0.184	3.382	3.379	9.77				
5	11	Acetone	44.998	-10.0	472714	0.031	0.034	3.424	3.425	12.69				
	12	1,1-Dichloroethene	9.982	-0.2	1623684	0.529	0.530	3.571	3.572	6.16				
25	13	tert-Butyl alcohol	244.740	-2.1	783184	0.010	0.010	3.739	3.742	13.37				
	14	Acetonitrile												
	15	Methyl acetate	8.925	-10.7	63857	0.021	0.023	4.116	4.124	8.55				
	16	Iodomethane	10.198	2.0	1646901	0.537	0.526	4.032	4.020	7.71				
	17	Allyl chloride												
	18	Methylene chloride	9.859	-1.4	1343657	0.438	0.444	4.325	4.326	6.80				
	19	Carbon disulfide	10.237	2.4	4341402	1.415	1.383	4.283	4.287	5.19				
5	20	Acrylonitrile	49.481	-1.0	706101	0.046	0.047	4.577	4.578	9.66				
	21	tert-Butyl methyl ether (MTBE)	10.102	1.0	1588780	0.518	0.513	4.619	4.622	9.16				
	22	trans-1,2-Dichloroethene	10.086	0.9	1139396	0.371	0.368	4.849	4.846	5.68				
	23	Isopropyl ether (DIPE)	10.471	4.7	3718267	1.212	1.158	5.541	5.544	8.51				
	24	Vinyl acetate	9.683	-3.2	937837	0.306	0.316	5.772	5.785	14.60				
	25	1,1-Dichloroethane	10.232	2.3	1956927	0.638	0.623	5.709	5.701	6.90				
25	26	2-Butanol												
	27	tert-Butyl ethyl ether (ETBE)	10.308	3.1	2659759	0.867	0.841	6.463	6.470	8.89				
5	28	2-Butanone	50.421	0.8	847750	0.055	0.055	6.756	6.770	11.24				
	29	2,2-Dichloropropane	9.763	-2.4	1057750	0.345	0.353	7.008	7.009	5.11				
	30	cis-1,2-Dichloroethene	10.001	0.0	1105829	0.361	0.360	7.134	7.141	7.58				
	31	Chloroform	9.891	-1.1	1733464	0.565	0.571	7.532	7.533	4.25				
	32	Bromochloromethane	9.904	-1.0	473424	0.154	0.156	7.909	7.910	9.93				
	33	Tetrahydrofuran	8.620	-13.8	88738	0.029	0.034	8.014	8.028	9.10				
5	34	tert-Amyl alcohol												
	35	Dibromofluoromethane	9.920	-0.8	913355	0.298	0.300	8.056	8.057	11.72				
	36	1,1,1-Trichloroethane	9.930	-0.7	1340703	0.437	0.440	8.454	8.449	9.11				
	37	Cyclohexane	9.605	-4.0	1311974	0.428	0.445	8.433	8.434	5.16				
	38	2,2,4-Trimethylpentane	10.670	6.7	3739017	1.219	1.142	8.622	8.620	9.38				
	39	1,1-Dichloropropene	9.944	-0.6	456656	0.149	0.150	8.811	8.812	6.88				
	40	Carbon tetrachloride	9.921	-0.8	1081570	0.353	0.355	8.978	8.981	7.29				
	41	tert-Amyl methyl ether (TAME)	10.291	2.9	1981882	0.646	0.628	9.146	9.151	10.16				
	42	1,2-Dichloroethane-d4	10.263	2.6	679675	0.222	0.216	9.188	9.180	10.10				
	43	1,2-Dichloroethane	10.217	2.2	797432	0.260	0.254	9.376	9.380	10.92				
	44	Benzene	10.347	3.5	4225842	1.378	1.331	9.355	9.359	7.65				
	45	Trichloroethene	10.297	3.0	1070513	0.349	0.339	10.634	10.637	8.32				
	46	Methylcyclohexane	10.525	5.2	1683252	0.549	0.521	10.718	10.719	8.40				
	47	1,2-Dichloropropane	10.309	3.1	1017751	0.332	0.322	10.990	10.991	7.90				
20	48	1,4-Dioxane	208.701	4.4	62349	0.001	0.001	11.535	11.539	9.47				
	49	Bromodichloromethane	10.053	0.5	1139212	0.371	0.369	11.430	11.431	5.86				
	50	Dibromomethane	9.480	-5.2	396050	0.129	0.136	11.514	11.515	9.86				
	51	2-Chloroethyl vinyl ether	9.481	-5.2	309067	0.101	0.106	12.122	12.128	10.02				
5	52	4-Methyl-2-pentanone	54.066	8.1	2585228	0.169	0.156	12.185	12.186	13.02				
	53	cis-1,3-Dichloropropene	10.266	2.7	1479718	0.482	0.470	12.499	12.500	7.30				
	54	CHLOROBENZENE-D5	10.000	0	2447078	1	1	15.534	15.533	0				
	55	Toluene-d8	9.892	-1.1	3643693	1.489	1.505	12.898	12.898	4.62				
	56	Toluene	10.227	2.3	4363244	1.783	1.743	13.044	13.045	3.75				
	57	Ethyl methacrylate	10.122	1.2	735734	0.301	0.297	13.463	13.472	9.08				
	58	trans-1,3-Dichloropropene	10.025	0.2	1053504	0.431	0.429	13.421	13.425	8.01				
	59	1,1,2-Trichloroethane	10.287	2.9	514511	0.210	0.204	13.673	13.674	7.35				
5	60	2-Hexanone	49.960	-0.1	1476393	0.121	0.121	13.757	13.753	13.14				
	61	1,3-Dichloropropane	10.502	5.0	990803	0.405	0.386	14.113	14.116	8.77				
	62	Tetrachloroethene	10.153	1.5	796511	0.325	0.321	14.176	14.177	8.08				
	63	Dibromochloromethane	9.555	-4.4	638152	0.261	0.273	14.532	14.533	8.06				
	64	2-Ethyl-1-butanol												
	65	1,2-Dibromoethane	9.437	-5.6	470472	0.192	0.204	14.868	14.869	11.37				
	66	1-Chlorohexane	9.968	-0.3	2000900	0.818	0.820	15.222	15.222	5.44				
	67	Chlorobenzene	10.446	4.5	2511716	1.026	0.983	15.599	15.598	5.64				
	68	1,1,1,2-Tetrachloroethane	10.002	0.0	809112	0.331	0.331	15.689	15.686	8.42				
	69	Ethylbenzene	10.286	2.9	4787709	1.957	1.902	15.703	15.704	4.42				
2	70	m-Xylene & p-Xylene	21.077	5.4	7339907	1.500	1.423	15.832	15.833	9.86				
	71	o-Xylene	10.208	2.1	3651913	1.492	1.462	16.559	16.561	3.90				
	72	Styrene	10.531	5.3	2664833	1.089	1.034	16.624	16.630	6.99				
	73	Isopropylbenzene	10.095	1.0	4430704	1.811	1.793	17.169	17.170	3.78				
	74	1,2-DICHLOROBENZENE-D4	10.000	0	825620	1	1	19.426	19.426	0				
	75	Bromoform	11.182	11.8	260456	0.315	0.282	17.169	17.168	14.77				
	76	1,1,2,2-Tetrachloroethane	9.774	-2.3	530261	0.642	0.657	17.454	17.454	8.96				
	77	4-Bromofluorobenzene	10.396	4.0	1138289	1.379	1.326	17.545	17.546	7.03				
	78	1,2,3-Trichloropropane	9.624	-3.8	120911	0.146	0.152	17.662	17.661	6.78				
	79	trans-1,4-Dichloro-2-butene	9.953	-0.5	135264	0.164	0.165	17.765	17.767	4.52				
	80	n-Propylbenzene	10.835	8.4	5780527	7.001	6.462	17.765	17.765	9.67				
	81	Bromobenzene	10.475	4.8	810814	0.982	0.938	17.804	17.804	12.11				
	82	1,3,5-Trimethylbenzene	10.489	4.9	3638846	4.407	4.202	17.973	17.976	5.29				
	83	2-Chlorotoluene	10.783	7.8	3736634	4.526	4.197	17.986	17.987	8.17				
	84	4-Chlorotoluene	10.466	4.7	3073073	3.722	3.556	18.051	18.052	7.10				
	85	tert-Butylbenzene	10.290	2.9	776673	0.941	0.914	18.427	18.427	6.93				
	86	1,2,4-Trimethylbenzene	10.623	6.2	3541709	4.290	4.038	18.466	18.466	7.30				
	87	sec-Butylbenzene	10.494	4.9	4790341	5.802	5.529	18.674	18.673	8.47				
	88	p-Isopropyltoluene	10.600	6.0	3991585	4.835	4.561	18.829	18.839	7.07				
	89	1,3-Dichlorobenzene	10.673	6.7	1752008	2.122	1.988	18.933	18.938	9.76				
	90	1,2,3-Trimethylbenzene	10.570	5.7	3283086	3.977	3.762	19.011	19.011	6.32				
	91	1,4-Dichlorobenzene	10.708	7.1	1737227	2.104	1.965	19.063	19.063	8.97				
	92	n-Butylbenzene	10.472	4.7	4047343	4.902	4.681	19.283	19.283	6.40				
	93	1,2-Dichlorobenzene	10.592	5.9	1431584	1.734	1.637	19.452	19.452	8.31				
	94	1,2-Dibromo-3-chloropropane	9.196	-8.0	61053	0.074	0.080	20.218	20.232	6.08				
	95	1,2,4-Trichlorobenzene	10.310	3.1	824868	0.999	0.969	21.061	21.063	9.81				
	96	Hexachlorobutadiene	10.087	0.9	509117	0.617	0.611	21.191	21.190	4.49				
	97	Naphthalene	10.222	2.2	1159111	1.404	1.373	21.333	21.338	9.16				
	98	1,2,3-Trichlorobenzene	10.042	0.4	607870	0.736	0.733	21.580	21.591	9.20				

Spike Amount = Nominal Amount * M

SU 6/13/24

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F03\RFW014.D Vial: 14
Acq On : 3 Jun 2024 8:18 pm Operator: DHuynh
Sample : IVO06F0301 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 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	97	0.00
2	T,M	Dichlorodifluoromethane	10.000	9.678	3.2	93	0.00
3	P,T,M	Chloromethane	10.000	9.688	3.1	97	0.00
4	C,T,M	Vinyl chloride	10.000	9.959	0.4	93	0.00
5	T,M	Bromomethane	10.000	10.119	-1.2	98	0.00
6	T,M	Chloroethane	10.000	9.962	0.4	98	0.00
7	T,M	Dichlorofluoromethane	10.000	9.943	0.6	96	0.00
8	T,M	Trichlorofluoromethane	10.000	9.296	7.0	93	0.00
9	T,M	Acrolein	50.000	49.804	0.4	95	0.00
10	T,M	1,1,2-Trichloro-1,2,2-trifl	10.000	9.379	6.2	93	0.00
11	T,M	Acetone	50.000	44.998	10.0	96	0.00
12	C,T,M	1,1-Dichloroethene	10.000	9.982	0.2	93	0.00
13	T,M	tert-Butyl alcohol	250.000	244.741	2.1	95	0.00
14	T,M	Acetonitrile	-1.000	0.000	0.0	0	0.00
15	T,M	Methyl acetate	10.000	8.925	10.7	90	-0.02
16	T,M	Iodomethane	10.000	10.199	-2.0	97	0.00
17	T,M	Allyl chloride	10.000	0.000	100.0#	0	0.00
18	T,M	Methylene chloride	10.000	9.860	1.4	96	0.00
19	T,M	Carbon disulfide	10.000	10.237	-2.4	95	0.00
20	T,M	Acrylonitrile	50.000	49.482	1.0	96	0.00
21	T,M	tert-Butyl methyl ether (MT	10.000	10.102	-1.0	96	0.00
22	T,M	trans-1,2-Dichloroethene	10.000	10.086	-0.9	98	0.00
23	T,M	Isopropyl ether (DIPE)	10.000	10.471	-4.7	96	0.00
24	T,M	Vinyl acetate	10.000	9.683	3.2	96	0.00
25	P,T,M	1,1-Dichloroethane	10.000	10.233	-2.3	96	0.00
26	T,M	2-Butanol	250.000	0.000	100.0#	0	-0.17#
27	T,M	tert-Butyl ethyl ether (ETB	10.000	10.308	-3.1	98	0.00
28	T,M	2-Butanone	50.000	50.422	-0.8	95	0.00
29	T,M	2,2-Dichloropropane	10.000	9.763	2.4	94	0.00
30	T,M	cis-1,2-Dichloroethene	10.000	10.001	-0.0	96	0.00
31	C,T,M	Chloroform	10.000	9.892	1.1	97	0.00
32	T,M	Bromochloromethane	10.000	9.904	1.0	93	0.00
33	T,M	Tetrahydrofuran	10.000	8.620	13.8	89	-0.02
34	T,M	tert-Amyl alcohol	50.000	0.000	100.0#	0	-8.06#
35	S	Dibromofluoromethane	10.000	9.920	0.8	96	0.00
36	T,M	1,1,1-Trichloroethane	10.000	9.931	0.7	97	0.00
37	T,M	Cyclohexane	10.000	9.605	3.9	89	0.00
38	T,M	2,2,4-Trimethylpentane	10.000	10.670	-6.7	103	0.00
39	T,M	1,1-Dichloropropene	10.000	9.944	0.6	97	0.00
40	T,M	Carbon tetrachloride	10.000	9.922	0.8	96	0.00
41	T,M	tert-Amyl methyl ether (TAM	10.000	10.291	-2.9	95	0.00

(#) = Out of Range
RFW014.D VO06F03.M Thu Jun 13 10:30:39 2024 Sa 6/13/24 Page 1

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F03\RFW014.D Vial: 14
Acq On : 3 Jun 2024 8:18 pm Operator: DHuynh
Sample : IVO06F0301 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 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	S	1,2-Dichloroethane-d4	10.000	10.264	-2.6	99	0.00
43	T,M	1,2-Dichloroethane	10.000	10.217	-2.2	94	0.00
44	T,M	Benzene	10.000	10.348	-3.5	95	0.00
45	T,M	Trichloroethene	10.000	10.298	-3.0	95	0.00
46	T,M	Methylcyclohexane	10.000	10.525	-5.3	93	0.00
47	C,T,M	1,2-Dichloropropane	10.000	10.309	-3.1	98	0.00
48	T,M	1,4-Dioxane	200.000	208.702	-4.4	109	0.00
49	T,M	Bromodichloromethane	10.000	10.054	-0.5	97	0.00
50	T,M	Dibromomethane	10.000	9.481	5.2	95	0.00
51	T,M	2-Chloroethyl vinyl ether	10.000	9.482	5.2	91	0.00
52	T,M	4-Methyl-2-pentanone	50.000	54.066	-8.1	95	0.00
53	T,M	cis-1,3-Dichloropropene	10.000	10.266	-2.7	97	0.00
54	I	CHLOROBENZENE-D5	10.000	10.000	0.0	97	0.00
55	S	Toluene-d8	10.000	9.892	1.1	98	0.00
56	C,T,M	Toluene	10.000	10.227	-2.3	97	0.00
57	T,M	Ethyl methacrylate	10.000	10.122	-1.2	96	0.00
58	T,M	trans-1,3-Dichloropropene	10.000	10.025	-0.3	95	0.00
59	T,M	1,1,2-Trichloroethane	10.000	10.287	-2.9	101	0.00
60	T,M	2-Hexanone	50.000	49.960	0.1	94	0.00
61	T,M	1,3-Dichloropropane	10.000	10.502	-5.0	99	0.00
62	T,M	Tetrachloroethene	10.000	10.153	-1.5	97	0.00
63	T,M	Dibromochloromethane	10.000	9.555	4.5	95	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	9.437	5.6	96	0.00
66	T,M	1-Chlorohexane	10.000	9.969	0.3	98	0.00
67	P,T,M	Chlorobenzene	10.000	10.446	-4.5	98	0.00
68	T,M	1,1,1,2-Tetrachloroethane	10.000	10.003	-0.0	94	0.00
69	C,T,M	Ethylbenzene	10.000	10.286	-2.9	97	0.00
70	T,M	m-Xylene & p-Xylene	20.000	21.078	-5.4	98	0.00
71	T,M	o-Xylene	10.000	10.209	-2.1	98	0.00
72	T,M	Styrene	10.000	10.532	-5.3	97	0.00
73	T,M	Isopropylbenzene	10.000	10.096	-1.0	96	0.00
74	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	95	0.00
75	P,T,M	Bromoform	10.000	11.182	-11.8	93	0.00
76	P,T,M	1,1,2,2-Tetrachloroethane	10.000	9.774	2.3	95	0.00
77	S	4-Bromofluorobenzene	10.000	10.397	-4.0	97	0.00
78	T,M	1,2,3-Trichloropropane	10.000	9.624	3.8	94	0.00
79	T,M	trans-1,4-Dichloro-2-butene	10.000	9.953	0.5	95	0.00
80	T,M	n-Propylbenzene	10.000	10.835	-8.4	97	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F03\RFW014.D Vial: 14
Acq On : 3 Jun 2024 8:18 pm Operator: DHuynh
Sample : IVO06F0301 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 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	Bromobenzene	10.000	10.475	-4.7	96	0.00
82	T,M	1,3,5-Trimethylbenzene	10.000	10.489	-4.9	96	0.00
83	T,M	2-Chlorotoluene	10.000	10.784	-7.8	98	0.00
84	T,M	4-Chlorotoluene	10.000	10.466	-4.7	98	0.00
85	T,M	tert-Butylbenzene	10.000	10.290	-2.9	95	0.00
86	T,M	1,2,4-Trimethylbenzene	10.000	10.624	-6.2	97	0.00
87	T,M	sec-Butylbenzene	10.000	10.494	-4.9	96	0.00
88	T,M	p-Isopropyltoluene	10.000	10.601	-6.0	97	0.00
89	T,M	1,3-Dichlorobenzene	10.000	10.674	-6.7	96	0.00
90	T,M	1,2,3-Trimethylbenzene	10.000	10.571	-5.7	97	0.00
91	T,M	1,4-Dichlorobenzene	10.000	10.708	-7.1	97	0.00
92	T,M	n-Butylbenzene	10.000	10.473	-4.7	98	0.00
93	T,M	1,2-Dichlorobenzene	10.000	10.593	-5.9	96	0.00
94	T,M	1,2-Dibromo-3-chloropropane	10.000	9.196	8.0	92	-0.01
95	T,M	1,2,4-Trichlorobenzene	10.000	10.311	-3.1	99	0.00
96	T,M	Hexachlorobutadiene	10.000	10.088	-0.9	99	0.00
97	T,M	Naphthalene	10.000	10.222	-2.2	100	0.00
98	T,M	1,2,3-Trichlorobenzene	10.000	10.042	-0.4	104	0.00

Sa 6/11 3/29

(#) = Out of Range SPCC's out = 0 CCC's out = 0
RFW014.D VO06F03.M Thu Jun 13 10:30:40 2024 Page 3

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F03\RFW014.D Vial: 14
Acq On : 3 Jun 2024 8:18 pm Operator: DHuynh
Sample : IVO06F0301 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 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	97	0.00
2	T,M	Dichlorodifluoromethane	0.296	0.287	3.0	93	0.00
3	P,T,M	Chloromethane	0.451	0.437	3.1	97	0.00
4	C,T,M	Vinyl chloride	0.321	0.320	0.3	93	0.00
5	T,M	Bromomethane	0.291	0.295	-1.4	98	0.00
6	T,M	Chloroethane	0.247	0.246	0.4	98	0.00
7	T,M	Dichlorofluoromethane	0.607	0.604	0.5	96	0.00
8	T,M	Trichlorofluoromethane	0.399	0.371	7.0	93	0.00
9	T,M	Acrolein	0.020	0.020	0.0	95	0.00
10	T,M	1,1,2-Trichloro-1,2,2-trifl	0.184	0.173	6.0	93	0.00
11	T,M	Acetone	0.034	0.031	8.8	96	0.00
12	C,T,M	1,1-Dichloroethene	0.530	0.529	0.2	93	0.00
13	T,M	tert-Butyl alcohol	0.010	0.010	0.0	95	0.00
14	T,M	Acetonitrile	0.000	0.000	0.0	0#	0.00
15	T,M	Methyl acetate	0.023	0.021	8.7	90	-0.02
16	T,M	Iodomethane	0.526	0.537	-2.1	97	0.00
17	T,M	Allyl chloride	0.000	0.212	0.0	0#	0.00
18	T,M	Methylene chloride	0.444	0.438	1.4	96	0.00
19	T,M	Carbon disulfide	1.383	1.415	-2.3	95	0.00
20	T,M	Acrylonitrile	0.047	0.046	2.1	96	0.00
21	T,M	tert-Butyl methyl ether (MT	0.513	0.518	-1.0	96	0.00
22	T,M	trans-1,2-Dichloroethene	0.368	0.371	-0.8	98	0.00
23	T,M	Isopropyl ether (DIPE)	1.158	1.212	-4.7	96	0.00
24	T,M	Vinyl acetate	0.316	0.306	3.2	96	0.00
25	P,T,M	1,1-Dichloroethane	0.623	0.638	-2.4	96	0.00
26	T,M	2-Butanol	0.000	0.000	0.0	0#	-0.17#
27	T,M	tert-Butyl ethyl ether (ETB	0.841	0.867	-3.1	98	0.00
28	T,M	2-Butanone	0.055	0.055	0.0	95	0.00
29	T,M	2,2-Dichloropropane	0.353	0.345	2.3	94	0.00
30	T,M	cis-1,2-Dichloroethene	0.360	0.361	-0.3	96	0.00
31	C,T,M	Chloroform	0.571	0.565	1.1	97	0.00
32	T,M	Bromochloromethane	0.156	0.154	1.3	93	0.00
33	T,M	Tetrahydrofuran	0.034	0.029	14.7	89	-0.02
34	T,M	tert-Amyl alcohol	0.008	0.000	100.0#	0#	-8.06#
35	S	Dibromofluoromethane	0.300	0.298	0.7	96	0.00
36	T,M	1,1,1-Trichloroethane	0.440	0.437	0.7	97	0.00
37	T,M	Cyclohexane	0.445	0.428	3.8	89	0.00
38	T,M	2,2,4-Trimethylpentane	1.142	1.219	-6.7	103	0.00
39	T,M	1,1-Dichloropropene	0.150	0.149	0.7	97	0.00
40	T,M	Carbon tetrachloride	0.355	0.353	0.6	96	0.00
41	T,M	tert-Amyl methyl ether (TAM	0.628	0.646	-2.9	95	0.00

(#) = Out of Range

6/13/24

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F03\RFW014.D Vial: 14
Acq On : 3 Jun 2024 8:18 pm Operator: DHuynh
Sample : IVO06F0301 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 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	S	1,2-Dichloroethane-d4	0.216	0.222	-2.8	99	0.00
43	T,M	1,2-Dichloroethane	0.254	0.260	-2.4	94	0.00
44	T,M	Benzene	1.331	1.378	-3.5	95	0.00
45	T,M	Trichloroethene	0.339	0.349	-2.9	95	0.00
46	T,M	Methylcyclohexane	0.521	0.549	-5.4	93	0.00
47	C,T,M	1,2-Dichloropropane	0.322	0.332	-3.1	98	0.00
48	T,M	1,4-Dioxane	0.001	0.001	0.0	109	0.00
49	T,M	Bromodichloromethane	0.369	0.371	-0.5	97	0.00
50	T,M	Dibromomethane	0.136	0.129	5.1	95	0.00
51	T,M	2-Chloroethyl vinyl ether	0.106	0.101	4.7	91	0.00
52	T,M	4-Methyl-2-pentanone	0.156	0.169	-8.3	95	0.00
53	T,M	cis-1,3-Dichloropropene	0.470	0.482	-2.6	97	0.00
54	I	CHLOROBENZENE-D5	1.000	1.000	0.0	97	0.00
55	S	Toluene-d8	1.505	1.489	1.1	98	0.00
56	C,T,M	Toluene	1.743	1.783	-2.3	97	0.00
57	T,M	Ethyl methacrylate	0.297	0.301	-1.3	96	0.00
58	T,M	trans-1,3-Dichloropropene	0.429	0.431	-0.5	95	0.00
59	T,M	1,1,2-Trichloroethane	0.204	0.210	-2.9	101	0.00
60	T,M	2-Hexanone	0.121	0.121	0.0	94	0.00
61	T,M	1,3-Dichloropropane	0.386	0.405	-4.9	99	0.00
62	T,M	Tetrachloroethene	0.321	0.325	-1.2	97	0.00
63	T,M	Dibromochloromethane	0.273	0.261	4.4	95	0.00
64	T,M	2-Ethyl-1-butanol	0.000	0.000	0.0	0#	0.00
65	T,M	1,2-Dibromoethane	0.204	0.192	5.9	96	0.00
66	T,M	1-Chlorohexane	0.820	0.818	0.2	98	0.00
67	P,T,M	Chlorobenzene	0.983	1.026	-4.4	98	0.00
68	T,M	1,1,1,2-Tetrachloroethane	0.331	0.331	0.0	94	0.00
69	C,T,M	Ethylbenzene	1.902	1.957	-2.9	97	0.00
70	T,M	m-Xylene & p-Xylene	1.423	1.500	-5.4	98	0.00
71	T,M	o-Xylene	1.462	1.492	-2.1	98	0.00
72	T,M	Styrene	1.034	1.089	-5.3	97	0.00
73	T,M	Isopropylbenzene	1.793	1.811	-1.0	96	0.00
74	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	95	0.00
75	P,T,M	Bromoform	0.282	0.315	-11.7	93	0.00
76	P,T,M	1,1,2,2-Tetrachloroethane	0.657	0.642	2.3	95	0.00
77	S	4-Bromofluorobenzene	1.326	1.379	-4.0	97	0.00
78	T,M	1,2,3-Trichloropropane	0.152	0.146	3.9	94	0.00
79	T,M	trans-1,4-Dichloro-2-butene	0.165	0.164	0.6	95	0.00
80	T,M	n-Propylbenzene	6.462	7.001	-8.3	97	0.00

(#) = Out of Range
RFW014.D VO06F03.M Thu Jun 13 10:31:05 2024 Sa 6/13/24 Page 2

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24F03\RFW014.D Vial: 14
Acq On : 3 Jun 2024 8:18 pm Operator: DHuynh
Sample : IVO06F0301 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 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	Bromobenzene	0.938	0.982	-4.7	96	0.00
82	T,M	1,3,5-Trimethylbenzene	4.202	4.407	-4.9	96	0.00
83	T,M	2-Chlorotoluene	4.197	4.526	-7.8	98	0.00
84	T,M	4-Chlorotoluene	3.556	3.722	-4.7	98	0.00
85	T,M	tert-Butylbenzene	0.914	0.941	-3.0	95	0.00
86	T,M	1,2,4-Trimethylbenzene	4.038	4.290	-6.2	97	0.00
87	T,M	sec-Butylbenzene	5.529	5.802	-4.9	96	0.00
88	T,M	p-Isopropyltoluene	4.561	4.835	-6.0	97	0.00
89	T,M	1,3-Dichlorobenzene	1.988	2.122	-6.7	96	0.00
90	T,M	1,2,3-Trimethylbenzene	3.762	3.977	-5.7	97	0.00
91	T,M	1,4-Dichlorobenzene	1.965	2.104	-7.1	97	0.00
92	T,M	n-Butylbenzene	4.681	4.902	-4.7	98	0.00
93	T,M	1,2-Dichlorobenzene	1.637	1.734	-5.9	96	0.00
94	T,M	1,2-Dibromo-3-chloropropane	0.080	0.074	7.5	92	-0.01
95	T,M	1,2,4-Trichlorobenzene	0.969	0.999	-3.1	99	0.00
96	T,M	Hexachlorobutadiene	0.611	0.617	-1.0	99	0.00
97	T,M	Naphthalene	1.373	1.404	-2.3	100	0.00
98	T,M	1,2,3-Trichlorobenzene	0.733	0.736	-0.4	104	0.00

SG 6/13/24

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW014.D Vial: 14
Acq On : 3 Jun 2024 8:18 pm Operator: DHuynh
Sample : IVO06F0301 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 13 10:30 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.05	114	3067327	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.53	117	2447078	10.00	ug/l	0.00
74) 1,2-DICHLOROBENZENE-D4	19.43	152	825620	10.00	ug/l	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	8.06	111	913355	9.92	ug/l	0.00
Spiked Amount 10.000			Recovery =	99.20%		
42) 1,2-Dichloroethane-d4	9.19	65	679675	10.26	ug/l	0.00
Spiked Amount 10.000			Recovery =	102.60%		
55) Toluene-d8	12.90	98	3643693	9.89	ug/l	0.00
Spiked Amount 10.000			Recovery =	98.90%		
77) 4-Bromofluorobenzene	17.54	95	1138289	10.40	ug/l	0.00
Spiked Amount 10.000			Recovery =	104.00%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.63	85	879158	9.68	ug/l	98
3) Chloromethane	1.86	50	1339526	9.69	ug/l	99
4) Vinyl chloride	1.98	62	981772	9.96	ug/l	100
5) Bromomethane	2.44	94	904417	10.12	ug/l	98
6) Chloroethane	2.52	64	754301	9.96	ug/l	98
7) Dichlorofluoromethane	2.55	67	1852639	9.94	ug/l	100
8) Trichlorofluoromethane	2.79	101	1137996	9.30	ug/l	98
9) Acrolein	3.34	56	311789	49.80	ug/l	97
10) 1,1,2-Trichloro-1,2,2-trif	3.38	151	529874	9.38	ug/l	99
11) Acetone	3.42	43	472714	45.00	ug/l	98
12) 1,1-Dichloroethene	3.57	61	1623684	9.98	ug/l	99
13) tert-Butyl alcohol	3.74	59	783184	244.74	ug/l	100
15) Methyl acetate	4.12	74	63857	8.93	ug/l	95
16) Iodomethane	4.03	142	1646901	10.20	ug/l	100
18) Methylene chloride	4.33	49	1343657	9.86	ug/l	98
19) Carbon disulfide	4.28	76	4341402	10.24	ug/l	99
20) Acrylonitrile	4.58	53	706101	49.48	ug/l	99
21) tert-Butyl methyl ether (M	4.62	73	1588780	10.10	ug/l	99
22) trans-1,2-Dichloroethene	4.85	96	1139396	10.09	ug/l	99
23) Isopropyl ether (DIPE)	5.54	45	3718267	10.47	ug/l	100
24) Vinyl acetate	5.77	43	937837	9.68	ug/l	100
25) 1,1-Dichloroethane	5.71	63	1956927	10.23	ug/l	99
27) tert-Butyl ethyl ether (ET	6.46	59	2659759	10.31	ug/l	99
28) 2-Butanone	6.76	43	847750	50.42	ug/l	99
29) 2,2-Dichloropropane	7.01	77	1057750	9.76	ug/l	98
30) cis-1,2-Dichloroethene	7.13	96	1105829	10.00	ug/l	99
31) Chloroform	7.53	83	1733464	9.89	ug/l	98

(#) = qualifier out of range (m) = manual integration
RFW014.D VO06F03.M Thu Jun 13 10:31:19 2024 Page 1

Sa 6/13/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW014.D Vial: 14
Acq On : 3 Jun 2024 8:18 pm Operator: DHuynh
Sample : IVO06F0301 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 13 10:30 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	Bromochloromethane	7.91	130	473424	9.90	ug/l	99
33)	Tetrahydrofuran	8.01	42	88738	8.62	ug/l	91
36)	1,1,1-Trichloroethane	8.45	97	1340703	9.93	ug/l	99
37)	Cyclohexane	8.43	84	1311974	9.61	ug/l	100
38)	2,2,4-Trimethylpentane	8.62	57	3739017	10.67	ug/l	100
39)	1,1-Dichloropropene	8.81	110	456656	9.94	ug/l	96
40)	Carbon tetrachloride	8.98	119	1081570	9.92	ug/l	98
41)	tert-Amyl methyl ether (TA	9.15	73	1981882	10.29	ug/l	99
43)	1,2-Dichloroethane	9.38	62	797432	10.22	ug/l	99
44)	Benzene	9.36	78	4225842	10.35	ug/l	99
45)	Trichloroethene	10.63	130	1070513	10.30	ug/l	98
46)	Methylcyclohexane	10.72	83	1683252	10.53	ug/l	97
47)	1,2-Dichloropropane	10.99	63	1017751	10.31	ug/l	98
48)	1,4-Dioxane	11.54	88	62349	208.70	ug/l	100
49)	Bromodichloromethane	11.43	83	1139212	10.05	ug/l	98
50)	Dibromomethane	11.51	93	396050	9.48	ug/l	98
51)	2-Chloroethyl vinyl ether	12.12	63	309067	9.48	ug/l	96
52)	4-Methyl-2-pentanone	12.18	43	2585228	54.07	ug/l	98
53)	cis-1,3-Dichloropropene	12.50	75	1479718	10.27	ug/l	100
56)	Toluene	13.04	91	4363244	10.23	ug/l	99
57)	Ethyl methacrylate	13.46	69	735734	10.12	ug/l	98
58)	trans-1,3-Dichloropropene	13.42	75	1053504	10.03	ug/l	98
59)	1,1,2-Trichloroethane	13.67	97	514511	10.29	ug/l	97
60)	2-Hexanone	13.76	43	1476393	49.96	ug/l	98
61)	1,3-Dichloropropane	14.11	76	990803	10.50	ug/l	99
62)	Tetrachloroethene	14.18	164	796511	10.15	ug/l	98
63)	Dibromochloromethane	14.53	129	638152	9.56	ug/l	98
65)	1,2-Dibromoethane	14.87	107	470472	9.44	ug/l	99
66)	1-Chlorohexane	15.22	91	2000900	9.97	ug/l	100
67)	Chlorobenzene	15.60	112	2511716	10.45	ug/l	100
68)	1,1,1,2-Tetrachloroethane	15.69	131	809112	10.00	ug/l	97
69)	Ethylbenzene	15.70	91	4787709	10.29	ug/l	100
70)	m-Xylene & p-Xylene	15.83	91	7339907	21.08	ug/l	98
71)	o-Xylene	16.56	91	3651913	10.21	ug/l	99
72)	Styrene	16.62	104	2664833	10.53	ug/l	99
73)	Isopropylbenzene	17.17	105	4430704	10.10	ug/l	100
75)	Bromoform	17.17	173	260456	11.18	ug/l	99
76)	1,1,2,2-Tetrachloroethane	17.45	83	530261	9.77	ug/l	95
78)	1,2,3-Trichloropropane	17.66	110	120911	9.62	ug/l	95
79)	trans-1,4-Dichloro-2-buten	17.77	53	135264	9.95	ug/l	100
80)	n-Propylbenzene	17.77	91	5780527	10.84	ug/l	100

(#) = qualifier out of range (m) = manual integration

Su 6/13/24

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24F03\RFW014.D Vial: 14
Acq On : 3 Jun 2024 8:18 pm Operator: DHuynh
Sample : IVO06F0301 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 13 10:30 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

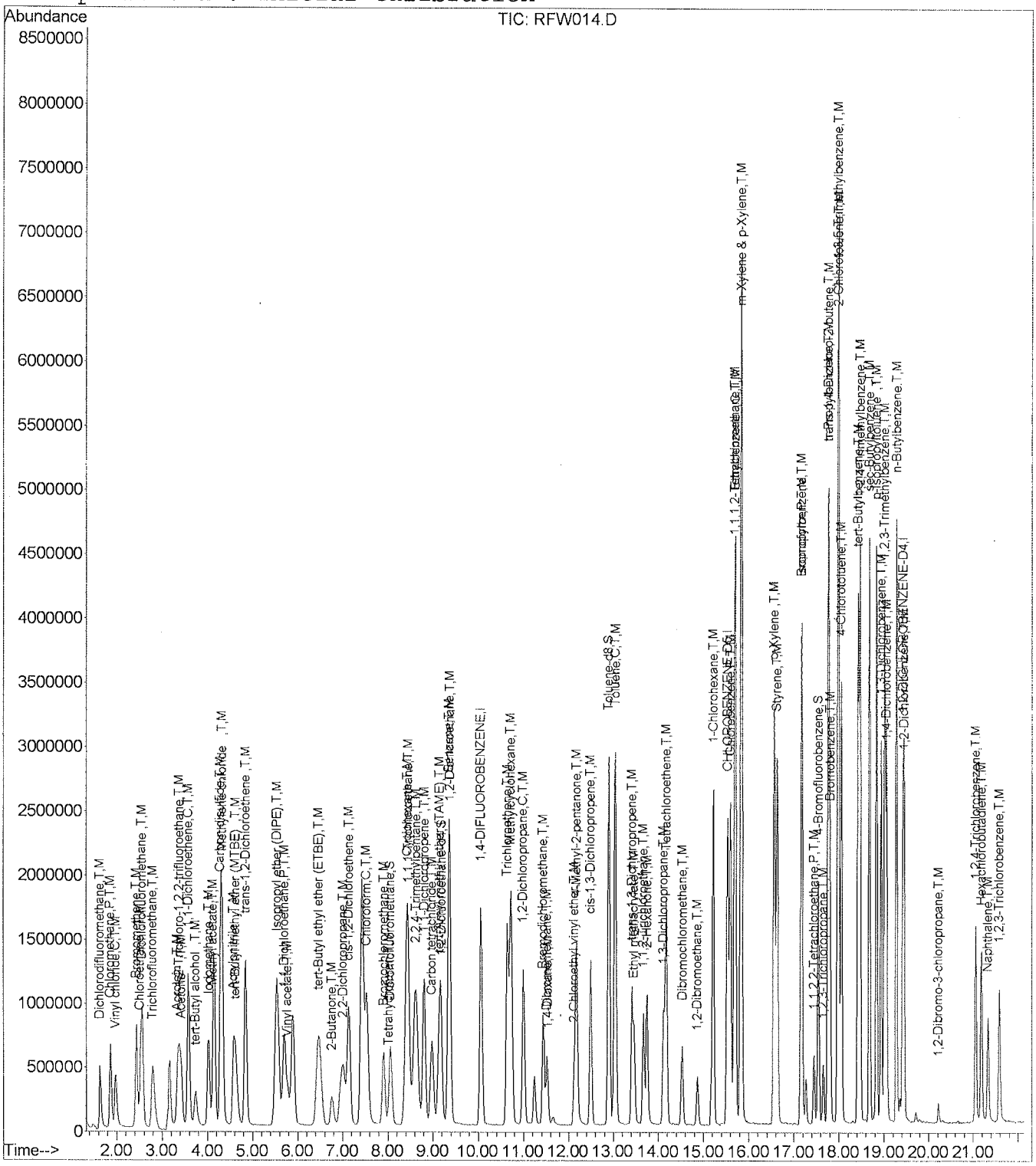
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
81)	Bromobenzene	17.80	156	810814	10.48	ug/l	100
82)	1,3,5-Trimethylbenzene	17.97	105	3638846	10.49	ug/l	99
83)	2-Chlorotoluene	17.99	91	3736634	10.78	ug/l	98
84)	4-Chlorotoluene	18.05	91	3073073	10.47	ug/l	99
85)	tert-Butylbenzene	18.43	134	776673	10.29	ug/l	99
86)	1,2,4-Trimethylbenzene	18.47	105	3541709	10.62	ug/l	99
87)	sec-Butylbenzene	18.67	105	4790341	10.49	ug/l	99
88)	p-Isopropyltoluene	18.83	119	3991585	10.60	ug/l	99
89)	1,3-Dichlorobenzene	18.93	146	1752008	10.67	ug/l	98
90)	1,2,3-Trimethylbenzene	19.01	105	3283086	10.57	ug/l	99
91)	1,4-Dichlorobenzene	19.06	146	1737227	10.71	ug/l	98
92)	n-Butylbenzene	19.28	91	4047343	10.47	ug/l	100
93)	1,2-Dichlorobenzene	19.45	146	1431584	10.59	ug/l	100
94)	1,2-Dibromo-3-chloropropan	20.22	157	61053	9.20	ug/l	98
95)	1,2,4-Trichlorobenzene	21.06	180	824868	10.31	ug/l	99
96)	Hexachlorobutadiene	21.19	225	509117	10.09	ug/l	98
97)	Naphthalene	21.33	128	1159111	10.22	ug/l	99
98)	1,2,3-Trichlorobenzene	21.58	180	607870	10.04	ug/l	98

(#) = qualifier out of range (m) = manual integration
RFW014.D VO06F03.M Thu Jun 13 10:31:20 2024 Su 6/13/24 Page 3

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24F03\RFW014.D Vial: 14
Acq On : 3 Jun 2024 8:18 pm Operator: DHuynh
Sample : IVO06F0301 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jun 13 10:30 2024 Quant Results File: VO06F03.RE

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration



Su 6/13/24

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 : 24G002
Lab File ID: RGW062 BF8 Injection Date: 07/03/24
Instrument ID: 06 BFB Injection Time: 09:54

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 - 40% of mass 95	15.380
75	30 - 60% of mass 95	41.445
95	Base Peak, 100% relative abundance	100.000
96	5 - 9% of mass 95	5.710
173	Less than 2% of mass 174	0.000(0)1
174	Greater than 50% of mass 95	77.483
175	5 - 9% of mass 174	5.433(7.01)1
176	95 - 101% % of mass 174	75.814(97.85)1
177	5 - 9% % of mass 176	4.610(6.08)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	CV006F0320	RGW063	07/03/24	10:27
2	LCS1W	V006G03L	RGW064	07/03/24	11:07
3	LCD1W	V006G03Y	RGW066	07/03/24	12:08
4	MBLK1W	V006G03B	RGW068	07/03/24	13:11
5	TB14-GW062924	24G002-01	RGW069	07/03/24	13:42
6	EB13-GW062924	24G002-03	RGW070	07/03/24	14:09
7	MW44-GW062924-260	24G002-02	RGW071	07/03/24	14:35
8	MW44-GW062924-260MS	24G002-02M	RGW073	07/03/24	15:27
9	MW44-GW062924-260MSD	24G002-02S	RGW074	07/03/24	15:53

FORM B
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

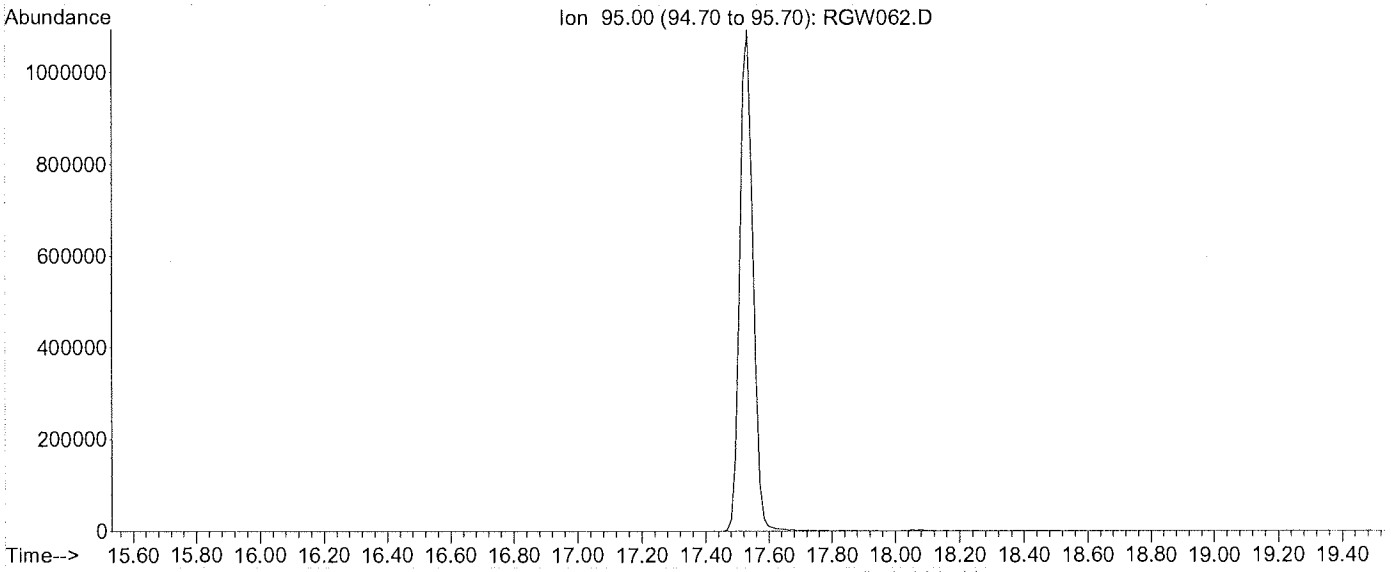
Lab Name: EMAX Laboratories, Inc.
Lab Code: EMAX
Lab File ID: RFW007
Instrument ID: 06

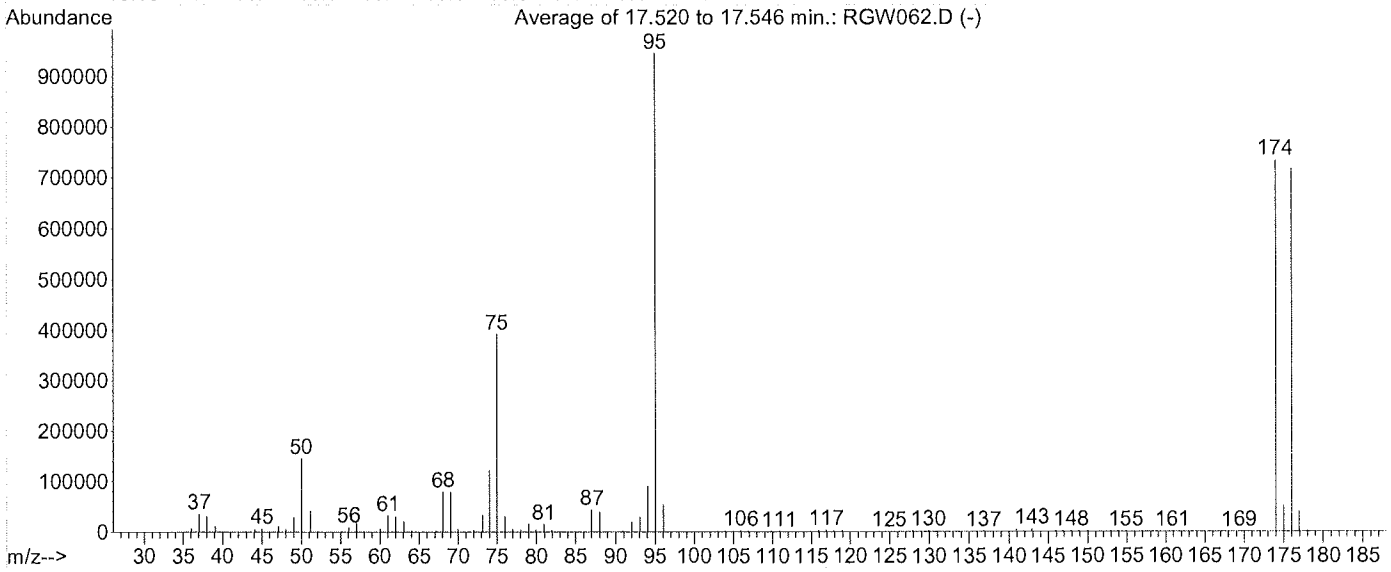
Project: VA SALT LAKE CITY
SDG No: 24G002
Date Analyzed: 06/03/24
Time Analyzed: 17:14

	INTERNAL STANDARD (IS)	1,4-DIFLUOROBENZENE		CHLOROBENZENE-D5		1,2-DICHLOROBENZENE-D4	
		Area #	RT #	Area #	RT #	Area #	RT #
	12 HOUR STD	3175665	10.05	2524233	15.53	B65B25	19.43
	UPPER LIMIT	6351330	10.22	5048466	15.70	1731650	19.60
	LOWER LIMIT	15B7B33	9.883	1262117	15.36	432913	19.26
		Area #	RT #	Area #	RT #	Area #	RT #
1	VSTD10	26026B3	10.05	211151B	15.52	742164	19.41
2	LCS1W	24159B9	10.05	200B270	15.52	742423	19.42
3	LCD1W	2639120	10.05	213239B	15.52	799227	19.42
4	MBLK1W	2969579	10.05	2437311	15.52	936647	19.41
5	TB14-GW062924	2634234	10.05	21394B9	15.53	B050B6	19.42
6	EB13-GW062924	2888504	10.05	2327461	15.52	B59356	19.42
7	MW44-GW062924-260	2B99003	10.05	2343249	15.53	B74B96	19.41
B	MW44-GW062924-260MS	2B15414	10.05	22B7B84	15.53	B55294	19.42
9	MW44-GW062924-260MSD	2B252B3	10.05	2320195	15.53	B64903	19.43

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\24G03\RGW062.D Vial: 1
Acq On : 3 Jul 2024 9:54 am Operator: LPriet
Sample : BFB06G03 Inst : 06
Misc : T/CHK Multiplr: 1.00
MS Integration Params: RTE.P
Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260





AutoFind: Scans 845, 846, 847; Background Corrected with Scan 838

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	15.4	145683	PASS
75	95	30	60	41.4	392576	PASS
95	95	100	100	100.0	947221	PASS
96	95	5	9	5.7	54091	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	77.5	733931	PASS
175	174	5	9	7.0	51467	PASS
176	174	95	101	97.8	718123	PASS
177	176	5	9	6.1	43664	PASS

RGW062.D VO06F03.M Fri Jul 05 14:11:30 2024

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24G03\RGW063.D Vial: 2
Acq On : 3 Jul 2024 10:27 am Operator: LPriet
Sample : CVO06F0320 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 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	82	0.00
2	T,M	Dichlorodifluoromethane	10.000	9.768	2.3	80	0.01
3	P,T,M	Chloromethane	10.000	8.787	12.1	75	0.00
4	C,T,M	Vinyl chloride	10.000	8.587	14.1	68	-0.01
5	T,M	Bromomethane	10.000	9.911	0.9	81	-0.01
6	T,M	Chloroethane	10.000	9.815	1.9	82	0.00
7	T,M	Dichlorofluoromethane	10.000	9.634	3.7	79	0.00
8	T,M	Trichlorofluoromethane	10.000	10.036	-0.4	85	0.00
9	T,M	Acrolein	50.000	32.344	35.3#	52	-0.02
10	T,M	1,1,2-Trichloro-1,2,2-trifl	10.000	10.930	-9.3	92	0.00
11	T,M	Acetone	50.000	44.038	11.9	79	0.00
12	C,T,M	1,1-Dichloroethene	10.000	9.622	3.8	76	0.00
13	T,M	tert-Butyl alcohol	250.000	204.148	18.3	67	-0.02
14	T,M	Acetonitrile	-1.000	0.000	0.0	0	0.00
15	T,M	Methyl acetate	10.000	9.737	2.6	83	-0.02
16	T,M	Iodomethane	10.000	10.654	-6.5	86	-0.02
17	T,M	Allyl chloride	10.000	0.000	100.0#	0	-0.02
18	T,M	Methylene chloride	10.000	9.759	2.4	81	0.00
19	T,M	Carbon disulfide	10.000	10.065	-0.6	79	0.00
20	T,M	Acrylonitrile	50.000	51.369	-2.7	84	-0.02
21	T,M	tert-Butyl methyl ether (MT	10.000	10.419	-4.2	84	0.00
22	T,M	trans-1,2-Dichloroethene	10.000	10.259	-2.6	84	-0.02
23	T,M	Isopropyl ether (DIPE)	10.000	9.373	6.3	73	-0.02
24	T,M	Vinyl acetate	10.000	9.049	9.5	76	0.00
25	P,T,M	1,1-Dichloroethane	10.000	9.777	2.2	78	-0.02
26	T,M	2-Butanol	250.000	0.000	100.0#	0	0.00
27	T,M	tert-Butyl ethyl ether (ETB	10.000	9.664	3.4	78	0.00
28	T,M	2-Butanone	50.000	44.724	10.6	72	0.00
29	T,M	2,2-Dichloropropane	10.000	11.944	-19.4	97	0.00
30	T,M	cis-1,2-Dichloroethene	10.000	10.454	-4.5	85	0.00
31	C,T,M	Chloroform	10.000	9.553	4.5	80	0.00
32	T,M	Bromochloromethane	10.000	10.539	-5.4	84	0.00
33	T,M	Tetrahydrofuran	10.000	8.296	17.0	72	-0.02
34	T,M	tert-Amyl alcohol	50.000	0.625	98.8#	1	0.02
35	S	Dibromofluoromethane	10.000	10.780	-7.8	88	0.00
36	T,M	1,1,1-Trichloroethane	10.000	10.422	-4.2	86	-0.02
37	T,M	Cyclohexane	10.000	10.747	-7.5	85	-0.02
38	T,M	2,2,4-Trimethylpentane	10.000	0.004	100.0#	0	0.04
39	T,M	1,1-Dichloropropene	10.000	10.079	-0.8	83	0.00
40	T,M	Carbon tetrachloride	10.000	10.319	-3.2	84	0.00
41	T,M	tert-Amyl methyl ether (TAM	10.000	10.255	-2.6	80	0.00

(#) = Out of Range
RGW063.D VO06F03.M Fri Jul 05 14:14:10 2024 Page 1

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24G03\RGW063.D Vial: 2
Acq On : 3 Jul 2024 10:27 am Operator: LPriet
Sample : CVO06F0320 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 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	S	1,2-Dichloroethane-d4	10.000	10.068	-0.7	83	-0.02
43	T,M	1,2-Dichloroethane	10.000	9.323	6.8	73	0.00
44	T,M	Benzene	10.000	9.999	0.0	78	0.00
45	T,M	Trichloroethene	10.000	10.054	-0.5	79	0.00
46	T,M	Methylcyclohexane	10.000	10.985	-9.8	82	0.00
47	C,T,M	1,2-Dichloropropane	10.000	9.397	6.0	76	0.00
48	T,M	1,4-Dioxane	200.000	170.380	14.8	76	0.00
49	T,M	Bromodichloromethane	10.000	9.272	7.3	76	0.00
50	T,M	Dibromomethane	10.000	9.162	8.4	78	0.00
51	T,M	2-Chloroethyl vinyl ether	10.000	6.660	33.4#	54	0.00
52	T,M	4-Methyl-2-pentanone	50.000	50.322	-0.6	75	-0.02
53	T,M	cis-1,3-Dichloropropene	10.000	9.067	9.3	73	0.00
54	I	CHLOROBENZENE-D5	10.000	10.000	0.0	84	-0.01
55	S	Toluene-d8	10.000	10.106	-1.1	87	0.00
56	C,T,M	Toluene	10.000	9.461	5.4	77	-0.02
57	T,M	Ethyl methacrylate	10.000	9.154	8.5	75	0.00
58	T,M	trans-1,3-Dichloropropene	10.000	8.475	15.3	69	0.00
59	T,M	1,1,2-Trichloroethane	10.000	9.803	2.0	83	0.00
60	T,M	2-Hexanone	50.000	48.358	3.3	78	-0.02
61	T,M	1,3-Dichloropropane	10.000	9.361	6.4	76	0.00
62	T,M	Tetrachloroethene	10.000	10.287	-2.9	85	0.00
63	T,M	Dibromochloromethane	10.000	8.749	12.5	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	8.836	11.6	77	0.00
66	T,M	1-Chlorohexane	10.000	9.079	9.2	77	-0.01
67	P,T,M	Chlorobenzene	10.000	10.050	-0.5	81	-0.01
68	T,M	1,1,1,2-Tetrachloroethane	10.000	10.082	-0.8	82	-0.01
69	C,T,M	Ethylbenzene	10.000	9.889	1.1	80	0.00
70	T,M	m-Xylene & p-Xylene	20.000	19.658	1.7	79	0.00
71	T,M	o-Xylene	10.000	9.856	1.4	82	0.00
72	T,M	Styrene	10.000	9.956	0.4	79	0.00
73	T,M	Isopropylbenzene	10.000	10.063	-0.6	83	0.00
74	I	1,2-DICHLOROBENZENE-D4	10.000	10.000	0.0	86	-0.01
75	P,T,M	Bromoform	10.000	10.458	-4.6	78	-0.01
76	P,T,M	1,1,2,2-Tetrachloroethane	10.000	9.399	6.0	82	-0.01
77	S	4-Bromofluorobenzene	10.000	10.050	-0.5	84	0.00
78	T,M	1,2,3-Trichloropropane	10.000	9.504	5.0	84	-0.01
79	T,M	trans-1,4-Dichloro-2-butene	10.000	6.486	35.1#	56	-0.01
80	T,M	n-Propylbenzene	10.000	9.790	2.1	78	-0.01

(#) = Out of Range

Data File : D:\HPCHEM\1\DATA\24G03\RGW063.D Vial: 2
Acq On : 3 Jul 2024 10:27 am Operator: LPriet
Sample : CVO06F0320 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 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	Bromobenzene	10.000	10.130	-1.3	83	0.00
82	T,M	1,3,5-Trimethylbenzene	10.000	9.859	1.4	81	0.00
83	T,M	2-Chlorotoluene	10.000	9.376	6.2	76	0.00
84	T,M	4-Chlorotoluene	10.000	9.595	4.0	81	0.00
85	T,M	tert-Butylbenzene	10.000	9.716	2.8	80	0.00
86	T,M	1,2,4-Trimethylbenzene	10.000	9.774	2.3	80	0.00
87	T,M	sec-Butylbenzene	10.000	9.798	2.0	80	0.00
88	T,M	p-Isopropyltoluene	10.000	9.500	5.0	78	0.00
89	T,M	1,3-Dichlorobenzene	10.000	9.696	3.0	78	0.00
90	T,M	1,2,3-Trimethylbenzene	10.000	9.812	1.9	81	0.00
91	T,M	1,4-Dichlorobenzene	10.000	9.363	6.4	76	-0.01
92	T,M	n-Butylbenzene	10.000	9.336	6.6	79	-0.01
93	T,M	1,2-Dichlorobenzene	10.000	9.711	2.9	79	-0.01
94	T,M	1,2-Dibromo-3-chloropropane	10.000	9.706	2.9	87	0.00
95	T,M	1,2,4-Trichlorobenzene	10.000	9.547	4.5	82	0.00
96	T,M	Hexachlorobutadiene	10.000	9.103	9.0	81	0.00
97	T,M	Naphthalene	10.000	9.107	8.9	80	0.00
98	T,M	1,2,3-Trichlorobenzene	10.000	8.849	11.5	83	0.00

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24G03\RGW063.D Vial: 2
Acq On : 3 Jul 2024 10:27 am Operator: LPriet
Sample : CVO06F0320 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 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	82	0.00
2	T,M	Dichlorodifluoromethane	0.296	0.289	2.4	80	0.01
3	P,T,M	Chloromethane	0.451	0.396	12.2	75	0.00
4	C,T,M	Vinyl chloride	0.321	0.276	14.0	68	-0.01
5	T,M	Bromomethane	0.291	0.289	0.7	81	-0.01
6	T,M	Chloroethane	0.247	0.242	2.0	82	0.00
7	T,M	Dichlorofluoromethane	0.607	0.585	3.6	79	0.00
8	T,M	Trichlorofluoromethane	0.399	0.401	-0.5	85	0.00
9	T,M	Acrolein	0.020	0.013	35.0#	52	-0.02
10	T,M	1,1,2-Trichloro-1,2,2-trifl	0.184	0.201	-9.2	92	0.00
11	T,M	Acetone	0.034	0.030	11.8	79	0.00
12	C,T,M	1,1-Dichloroethene	0.530	0.510	3.8	76	0.00
13	T,M	tert-Butyl alcohol	0.010	0.009	10.0	67	-0.02
14	T,M	Acetonitrile	0.000	0.000	0.0	0#	0.00
15	T,M	Methyl acetate	0.023	0.023	0.0	83	-0.02
16	T,M	Iodomethane	0.526	0.561	-6.7	86	-0.02
17	T,M	Allyl chloride	0.000	0.214	0.0	0#	-0.02
18	T,M	Methylene chloride	0.444	0.434	2.3	81	0.00
19	T,M	Carbon disulfide	1.383	1.392	-0.7	79	0.00
20	T,M	Acrylonitrile	0.047	0.048	-2.1	84	-0.02
21	T,M	tert-Butyl methyl ether (MT	0.513	0.534	-4.1	84	0.00
22	T,M	trans-1,2-Dichloroethene	0.368	0.378	-2.7	84	-0.02
23	T,M	Isopropyl ether (DIPE)	1.158	1.085	6.3	73	-0.02
24	T,M	Vinyl acetate	0.316	0.286	9.5	76	0.00
25	P,T,M	1,1-Dichloroethane	0.623	0.610	2.1	78	-0.02
26	T,M	2-Butanol	0.000	0.007	0.0	0#	0.00
27	T,M	tert-Butyl ethyl ether (ETB	0.841	0.813	3.3	78	0.00
28	T,M	2-Butanone	0.055	0.049	10.9	72	0.00
29	T,M	2,2-Dichloropropane	0.353	0.422	-19.5	97	0.00
30	T,M	cis-1,2-Dichloroethene	0.360	0.377	-4.7	85	0.00
31	C,T,M	Chloroform	0.571	0.546	4.4	80	0.00
32	T,M	Bromochloromethane	0.156	0.164	-5.1	84	0.00
33	T,M	Tetrahydrofuran	0.034	0.028	17.6	72	-0.02
34	T,M	tert-Amyl alcohol	0.008	0.000	100.0#	1#	0.02
35	S	Dibromofluoromethane	0.300	0.324	-8.0	88	0.00
36	T,M	1,1,1-Trichloroethane	0.440	0.459	-4.3	86	-0.02
37	T,M	Cyclohexane	0.445	0.479	-7.6	85	-0.02
38	T,M	2,2,4-Trimethylpentane	1.142	0.000	100.0#	0#	0.04
39	T,M	1,1-Dichloropropene	0.150	0.151	-0.7	83	0.00
40	T,M	Carbon tetrachloride	0.355	0.367	-3.4	84	0.00
41	T,M	tert-Amyl methyl ether (TAM	0.628	0.644	-2.5	80	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\24G03\RGW063.D Vial: 2
Acq On : 3 Jul 2024 10:27 am Operator: LPriet
Sample : CVO06F0320 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 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	S	1,2-Dichloroethane-d4	0.216	0.217	-0.5	83	-0.02
43	T,M	1,2-Dichloroethane	0.254	0.237	6.7	73	0.00
44	T,M	Benzene	1.331	1.331	0.0	78	0.00
45	T,M	Trichloroethene	0.339	0.341	-0.6	79	0.00
46	T,M	Methylcyclohexane	0.521	0.573	-10.0	82	0.00
47	C,T,M	1,2-Dichloropropane	0.322	0.302	6.2	76	0.00
48	T,M	1,4-Dioxane	0.001	0.001	0.0	76	0.00
49	T,M	Bromodichloromethane	0.369	0.343	7.0	76	0.00
50	T,M	Dibromomethane	0.136	0.125	8.1	78	0.00
51	T,M	2-Chloroethyl vinyl ether	0.106	0.071	33.0#	54	0.00
52	T,M	4-Methyl-2-pentanone	0.156	0.157	-0.6	75	-0.02
53	T,M	cis-1,3-Dichloropropene	0.470	0.426	9.4	73	0.00
54	I	CHLOROBENZENE-D5	1.000	1.000	0.0	84	-0.01
55	S	Toluene-d8	1.505	1.521	-1.1	87	0.00
56	C,T,M	Toluene	1.743	1.649	5.4	77	-0.02
57	T,M	Ethyl methacrylate	0.297	0.272	8.4	75	0.00
58	T,M	trans-1,3-Dichloropropene	0.429	0.364	15.2	69	0.00
59	T,M	1,1,2-Trichloroethane	0.204	0.200	2.0	83	0.00
60	T,M	2-Hexanone	0.121	0.117	3.3	78	-0.02
61	T,M	1,3-Dichloropropane	0.386	0.361	6.5	76	0.00
62	T,M	Tetrachloroethene	0.321	0.330	-2.8	85	0.00
63	T,M	Dibromochloromethane	0.273	0.239	12.5	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	0.204	0.180	11.8	77	0.00
66	T,M	1-Chlorohexane	0.820	0.745	9.1	77	-0.01
67	P,T,M	Chlorobenzene	0.983	0.987	-0.4	81	-0.01
68	T,M	1,1,1,2-Tetrachloroethane	0.331	0.333	-0.6	82	-0.01
69	C,T,M	Ethylbenzene	1.902	1.881	1.1	80	0.00
70	T,M	m-Xylene & p-Xylene	1.423	1.399	1.7	79	0.00
71	T,M	o-Xylene	1.462	1.441	1.4	82	0.00
72	T,M	Styrene	1.034	1.029	0.5	79	0.00
73	T,M	Isopropylbenzene	1.793	1.805	-0.7	83	0.00
74	I	1,2-DICHLOROBENZENE-D4	1.000	1.000	0.0	86	-0.01
75	P,T,M	Bromoform	0.282	0.295	-4.6	78	-0.01
76	P,T,M	1,1,2,2-Tetrachloroethane	0.657	0.618	5.9	82	-0.01
77	S	4-Bromofluorobenzene	1.326	1.333	-0.5	84	0.00
78	T,M	1,2,3-Trichloropropane	0.152	0.145	4.6	84	-0.01
79	T,M	trans-1,4-Dichloro-2-butene	0.165	0.107	35.2#	56	-0.01
80	T,M	n-Propylbenzene	6.462	6.326	2.1	78	-0.01

(#) = Out of Range

Data File : D:\HPCHEM\1\DATA\24G03\RGW063.D Vial: 2
Acq On : 3 Jul 2024 10:27 am Operator: LPriet
Sample : CVO06F0320 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 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	Bromobenzene	0.938	0.950	-1.3	83	0.00
82	T,M	1,3,5-Trimethylbenzene	4.202	4.143	1.4	81	0.00
83	T,M	2-Chlorotoluene	4.197	3.935	6.2	76	0.00
84	T,M	4-Chlorotoluene	3.556	3.412	4.0	81	0.00
85	T,M	tert-Butylbenzene	0.914	0.888	2.8	80	0.00
86	T,M	1,2,4-Trimethylbenzene	4.038	3.947	2.3	80	0.00
87	T,M	sec-Butylbenzene	5.529	5.417	2.0	80	0.00
88	T,M	p-Isopropyltoluene	4.561	4.332	5.0	78	0.00
89	T,M	1,3-Dichlorobenzene	1.988	1.928	3.0	78	0.00
90	T,M	1,2,3-Trimethylbenzene	3.762	3.691	1.9	81	0.00
91	T,M	1,4-Dichlorobenzene	1.965	1.840	6.4	76	-0.01
92	T,M	n-Butylbenzene	4.681	4.370	6.6	79	-0.01
93	T,M	1,2-Dichlorobenzene	1.637	1.590	2.9	79	-0.01
94	T,M	1,2-Dibromo-3-chloropropane	0.080	0.078	2.5	87	0.00
95	T,M	1,2,4-Trichlorobenzene	0.969	0.925	4.5	82	0.00
96	T,M	Hexachlorobutadiene	0.611	0.556	9.0	81	0.00
97	T,M	Naphthalene	1.373	1.251	8.9	80	0.00
98	T,M	1,2,3-Trichlorobenzene	0.733	0.649	11.5	83	0.00

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24G03\RGW063.D Vial: 2
Acq On : 3 Jul 2024 10:27 am Operator: LPriet
Sample : CVO06F0320 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jul 3 10:49 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-DIFLUOROBENZENE	10.05	114	2602683	10.00	ug/l	0.00
54) CHLOROBENZENE-D5	15.52	117	2111518	10.00	ug/l	-0.01
74) 1,2-DICHLOROBENZENE-D4	19.41	152	742164	10.00	ug/l	-0.01
System Monitoring Compounds						
35) Dibromofluoromethane	8.06	111	842141	10.78	ug/l	0.00
Spiked Amount 10.000			Recovery = 107.80%			
42) 1,2-Dichloroethane-d4	9.17	65	565729	10.07	ug/l	-0.02
Spiked Amount 10.000			Recovery = 100.70%			
55) Toluene-d8	12.90	98	3212070	10.11	ug/l	0.00
Spiked Amount 10.000			Recovery = 101.10%			
77) 4-Bromofluorobenzene	17.55	95	989125	10.05	ug/l	0.00
Spiked Amount 10.000			Recovery = 100.50%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.64	85	752892	9.77	ug/l	98
3) Chloromethane	1.87	50	1030926	8.79	ug/l	97
4) Vinyl chloride	1.97	62	718292	8.59	ug/l	88
5) Bromomethane	2.43	94	751621	9.91	ug/l	96
6) Chloroethane	2.53	64	630634	9.82	ug/l	100
7) Dichlorofluoromethane	2.57	67	1523126	9.63	ug/l	96
8) Trichlorofluoromethane	2.80	101	1042475	10.04	ug/l	98
9) Acrolein	3.32	56	171812	32.34	ug/l	92
10) 1,1,2-Trichloro-1,2,2-trif	3.38	151	523948	10.93	ug/l	96
11) Acetone	3.42	43	392546	44.04	ug/l	96
12) 1,1-Dichloroethene	3.57	61	1328053	9.62	ug/l	94
13) tert-Butyl alcohol	3.72	59	554325	204.15	ug/l	97
15) Methyl acetate	4.12	74	59114	9.74	ug/l	95
16) Iodomethane	4.01	142	1459830	10.65	ug/l	94
18) Methylene chloride	4.33	49	1128490	9.76	ug/l	92
19) Carbon disulfide	4.28	76	3621923	10.07	ug/l	99
20) Acrylonitrile	4.56	53	621987	51.37	ug/l	99
21) tert-Butyl methyl ether (M	4.62	73	1390331	10.42	ug/l	100
22) trans-1,2-Dichloroethene	4.83	96	983409	10.26	ug/l	98
23) Isopropyl ether (DIPE)	5.52	45	2824066	9.37	ug/l	94
24) Vinyl acetate	5.77	43	743668	9.05	ug/l	96
25) 1,1-Dichloroethane	5.69	63	1586458	9.78	ug/l	99
27) tert-Butyl ethyl ether (ET	6.46	59	2115821	9.66	ug/l	95
28) 2-Butanone	6.76	43	638046	44.72	ug/l	94
29) 2,2-Dichloropropane	7.01	77	1097993	11.94	ug/l	98
30) cis-1,2-Dichloroethene	7.13	96	980848	10.45	ug/l	99
31) Chloroform	7.53	83	1420548	9.55	ug/l	99

(#) = qualifier out of range (m) = manual integration
RGW063.D VO06F03.M Fri Jul 05 14:14:27 2024 Page 1

Data File : D:\HPCHEM\1\DATA\24G03\RGW063.D Vial: 2
Acq On : 3 Jul 2024 10:27 am Operator: LPriet
Sample : CVO06F0320 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jul 3 10:49 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
32)	Bromochloromethane	7.91	130	427462	10.54	ug/l		99
33)	Tetrahydrofuran	8.01	42	72462	8.30	ug/l		97
34)	tert-Amyl alcohol	8.08	59	1281	0.63	ug/l	#	24
36)	1,1,1-Trichloroethane	8.43	97	1193895	10.42	ug/l		97
37)	Cyclohexane	8.41	84	1245520	10.75	ug/l		99
39)	1,1-Dichloropropene	8.81	110	392720	10.08	ug/l		99
40)	Carbon tetrachloride	8.98	119	954498	10.32	ug/l		99
41)	tert-Amyl methyl ether (TA	9.15	73	1675707	10.25	ug/l		97
43)	1,2-Dichloroethane	9.38	62	617384	9.32	ug/l		99
44)	Benzene	9.36	78	3464951	10.00	ug/l		98
45)	Trichloroethene	10.63	130	886810	10.05	ug/l		98
46)	Methylcyclohexane	10.72	83	1490686	10.99	ug/l		94
47)	1,2-Dichloropropane	10.99	63	787149	9.40	ug/l		100
48)	1,4-Dioxane	11.54	88	43190	170.38	ug/l		95
49)	Bromodichloromethane	11.43	83	891514	9.27	ug/l		100
50)	Dibromomethane	11.51	93	324746	9.16	ug/l		90
51)	2-Chloroethyl vinyl ether	12.12	63	184202	6.66	ug/l		99
52)	4-Methyl-2-pentanone	12.16	43	2041713	50.32	ug/l		93
53)	cis-1,3-Dichloropropene	12.50	75	1108967	9.07	ug/l		95
56)	Toluene	13.02	91	3482945	9.46	ug/l		99
57)	Ethyl methacrylate	13.46	69	574116	9.15	ug/l		95
58)	trans-1,3-Dichloropropene	13.42	75	768449	8.47	ug/l		96
59)	1,1,2-Trichloroethane	13.67	97	423061	9.80	ug/l		96
60)	2-Hexanone	13.74	43	1233082	48.36	ug/l		95
61)	1,3-Dichloropropane	14.11	76	762074	9.36	ug/l		97
62)	Tetrachloroethene	14.18	164	696360	10.29	ug/l		97
63)	Dibromochloromethane	14.53	129	504157	8.75	ug/l		100
65)	1,2-Dibromoethane	14.87	107	380091	8.84	ug/l		98
66)	1-Chlorohexane	15.21	91	1572354	9.08	ug/l		100
67)	Chlorobenzene	15.59	112	2085035	10.05	ug/l		100
68)	1,1,1,2-Tetrachloroethane	15.68	131	703689	10.08	ug/l		97
69)	Ethylbenzene	15.70	91	3971629	9.89	ug/l		99
70)	m-Xylene & p-Xylene	15.83	91	5906843	19.66	ug/l		100
71)	o-Xylene	16.56	91	3042139	9.86	ug/l		99
72)	Styrene	16.62	104	2173671	9.96	ug/l		98
73)	Isopropylbenzene	17.17	105	3810759	10.06	ug/l		99
75)	Bromoform	17.16	173	218950	10.46	ug/l		98
76)	1,1,2,2-Tetrachloroethane	17.44	83	458386	9.40	ug/l		95
78)	1,2,3-Trichloropropane	17.65	110	107324	9.50	ug/l		96
79)	trans-1,4-Dichloro-2-buten	17.75	53	79239	6.49	ug/l		95
80)	n-Propylbenzene	17.75	91	4695125	9.79	ug/l		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : D:\HPCHEM\1\DATA\24G03\RGW063.D Vial: 2
Acq On : 3 Jul 2024 10:27 am Operator: LPriet
Sample : CVO06F0320 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jul 3 10:49 2024 Quant Results File: VO06F03.RES

Quant Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration
DataAcq Meth : VO06F03

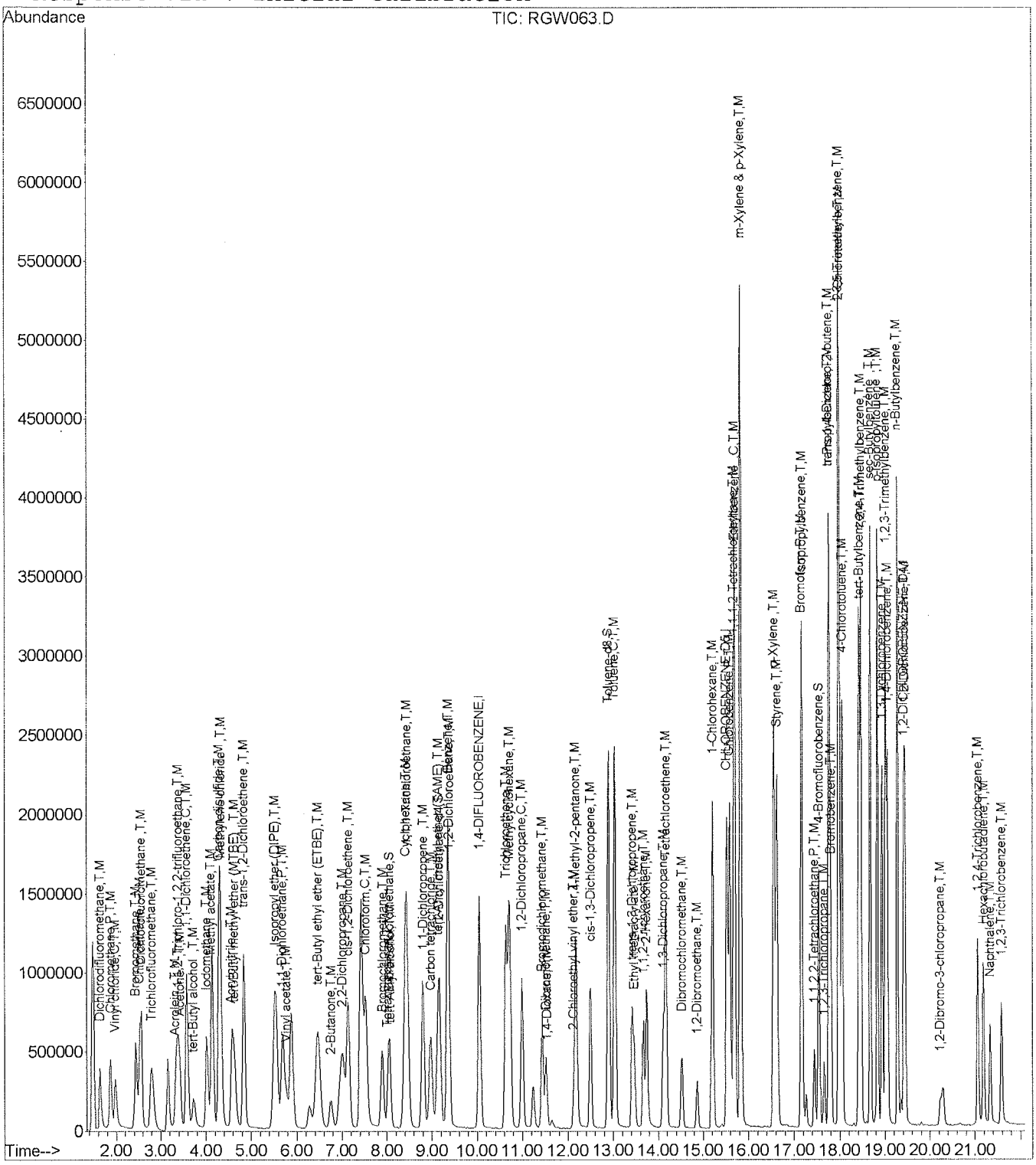
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
81)	Bromobenzene	17.81	156	704868	10.13	ug/l	99
82)	1,3,5-Trimethylbenzene	17.97	105	3074542	9.86	ug/l	99
83)	2-Chlorotoluene	17.99	91	2920319	9.38	ug/l	98
84)	4-Chlorotoluene	18.05	91	2532617	9.60	ug/l	98
85)	tert-Butylbenzene	18.43	134	659193	9.72	ug/l	99
86)	1,2,4-Trimethylbenzene	18.47	105	2929114	9.77	ug/l	99
87)	sec-Butylbenzene	18.67	105	4020420	9.80	ug/l	98
88)	p-Isopropyltoluene	18.83	119	3215403	9.50	ug/l	99
89)	1,3-Dichlorobenzene	18.93	146	1430715	9.70	ug/l	98
90)	1,2,3-Trimethylbenzene	19.01	105	2739398	9.81	ug/l	100
91)	1,4-Dichlorobenzene	19.05	146	1365472	9.36	ug/l	99
92)	n-Butylbenzene	19.27	91	3243265	9.34	ug/l	99
93)	1,2-Dichlorobenzene	19.44	146	1179689	9.71	ug/l	99
94)	1,2-Dibromo-3-chloropropan	20.23	157	57927	9.71	ug/l	97
95)	1,2,4-Trichlorobenzene	21.06	180	686557	9.55	ug/l	99
96)	Hexachlorobutadiene	21.19	225	412991	9.10	ug/l	99
97)	Naphthalene	21.34	128	928296	9.11	ug/l	99
98)	1,2,3-Trichlorobenzene	21.58	180	481476	8.85	ug/l	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\24G03\RGW063.D Vial: 2
Acq On : 3 Jul 2024 10:27 am Operator: LPriet
Sample : CVO06F0320 Inst : 06
Misc : 10ppb 8260/50ppb KET-AA/250ppb TBA Multiplr: 1.00
MS Integration Params: RTE.P
Quant Time: Jul 3 10:49 2024 Quant Results File: VO06F03.RE

Method : D:\HPCHEM\1\METHODS\VO06F03.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Jun 10 11:39:03 2024
Response via : Initial Calibration



ANALYTICAL LOG(S)

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments: (*) varied amount
A: Gas, CS2, 4Add, TAA-224, SS
B: 8260, Ket-AA

Book #: A06-082
Instrument No.: 06
Analytical Sequence: 24F03
Method File: V006F03
Analytical Batch: V006F03D6

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: 6/3/24
ICAL ID: V006F03

STANDARDS

	NAME	ID	Amount (ul)	Conc. (mg/L)
DCC	Gas	SV1-43-53-01	(*)	
DCC	CS2	43-91-01		
DCC	4Add	43-95-02		
DCC	8260 Ket	45-01-03 43-82-02		
DCC	TAA-224	43-40-03	↓	
BFB		45-01-01	1	
IS/SURR.	IS	43-35-02	1	50/250
IS/SURR.	SS	43-35-03	1	
ICV/LCS	Gas	43-76-03	1	
ICV/LCS	CS2	43-55-02	1	
ICV/LCS	4Add	43-81-03	5	
ICV/LCS	8260 Ket	43-86-03 43-94-02	5 5	
ICV/LCS	TAA 224+TMB	43-69-01 43-69-02	5 5	
Data File Folder		24F03		

	LOT #	Syringe Lot #
pH strip	N/A	MSV-03-02-24
Chlorine strip	↓	03-02-15-5
Methanol		02-01-19
$NaHSO_4$		03-01-11
Reagent Water	RW4-23-001	↓ 03-04-17
Sand		

ELECTRONIC DATA ARCHIVAL

Location	Date
HPCHEM_VOA/TO06	

Analyzed By: DH
Date: 6/3/24
Disposed By: DH
Date Disposed: 6/4/24

Injection Log

Directory: D:\HPCHEM\1\DATA\24F03

Line	Vial	FileName	Multiplier	SampleName		Misc Info	Injected
1	1	RFW001.D	1.	BFB06F01		T/CHK	3 Jun 2024 14:25
2	2	RFW002.D	1.	VO06F031	0.03/0.15uL	0.3ppb 8260/1.5ppb KET-AA/7.5ppb TBA	3 Jun 2024 15:03
3	3	RFW003.D	1.	VO06F032	0.05/0.25uL	0.5ppb 8260/2.5ppb KET-AA/12.5ppb TBA	3 Jun 2024 15:29
4	4	RFW004.D	1.	VO06F033	0.10/0.50uL	1.0ppb 8260/5.0ppb KET-AA/25ppb TBA	3 Jun 2024 15:55
5	5	RFW005.D	1.	VO06F034	0.20/1.00uL	2.0ppb 8260/10ppb KET-AA/50ppb TBA	3 Jun 2024 16:21
6	6	RFW006.D	1.	VO06F035	0.50/2.50uL	5.0ppb 8260/25ppb KET-AA/125ppb TBA	3 Jun 2024 16:47
7	7	RFW007.D	1.	VO06F036	1.00/5.00uL	10ppb 8260/50ppb KET-AA/250ppb TBA	3 Jun 2024 17:14
8	8	RFW008.D	1.	VO06F037	2.00/10.0uL	20ppb 8260/100ppb KET-AA/500ppb TBA	3 Jun 2024 17:40
9	9	RFW009.D	1.	VO06F038	3.00/15.0uL	30ppb 8260/150ppb KET-AA/750ppb TBA	3 Jun 2024 18:06
10	10	RFW010.D	1.	VO06F039	5.00/25.0uL	50ppb 8260/250ppb KET-AA/1250ppb TBA	3 Jun 2024 18:32
11	11	RFW011.D	1.	VO06F0310	10.0/50.0uL	100ppb 8260/500ppb KET-AA/2500ppb TBA	3 Jun 2024 18:59
12	12	RFW012.D	1.	RINSE			3 Jun 2024 19:25
13	13	RFW013.D	1.	RINSE			3 Jun 2024 19:51
14	14	RFW014.D	1.	IVO06F0301		10ppb 8260/50ppb KET-AA/250ppb TBA	3 Jun 2024 20:18
15	15	RFW015.D	1.	RINSE			3 Jun 2024 20:44

DH 6/10/24

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

Book #:	A06-082
Instrument No.:	06
Analytical Sequence:	24G03
Method File:	V006F03
Analytical Batch:	CV006F0320

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	6/3/24		
ICAL ID	VO06_F03		
STANDARDS			
NAME	ID	Amount (µl)	Conc. (mg/L)
DCC	SVI-43-98-01 -43-53-01	1 1	
DCC	-43-95-02	1	
DCC	-45-01-03 LAP 7/3/24	5	
DCC	-45-04-03	5	
BFB	-43-01-01	1	
IS/SURR.	-43-95-03	5	50/250
ICV/LCS	-43-79-02 -43-88-02	1 1	
ICV/LCS	-43-81-03	5	
ICV/LCS	-43-85-02	5	
ICV/LCS	-43-94-02	5	
Data File Folder			
	LOT #	Syringe Lot #	
pH strip	HC439975	MSV-03-04-12-6	
Chlorine strip	301802	↓ -4	
Methanol			
$NaHSO_4$			
Reagent Water	RW4-23-001		
Sand			

ELECTRONIC DATA ARCHIVAL	
Location	Date
HPCHEM_VOA/TO06	

Analyzed By: LAP
Date: 6/3/24
Disposed By: LAP
Date Disposed: 6/5/24

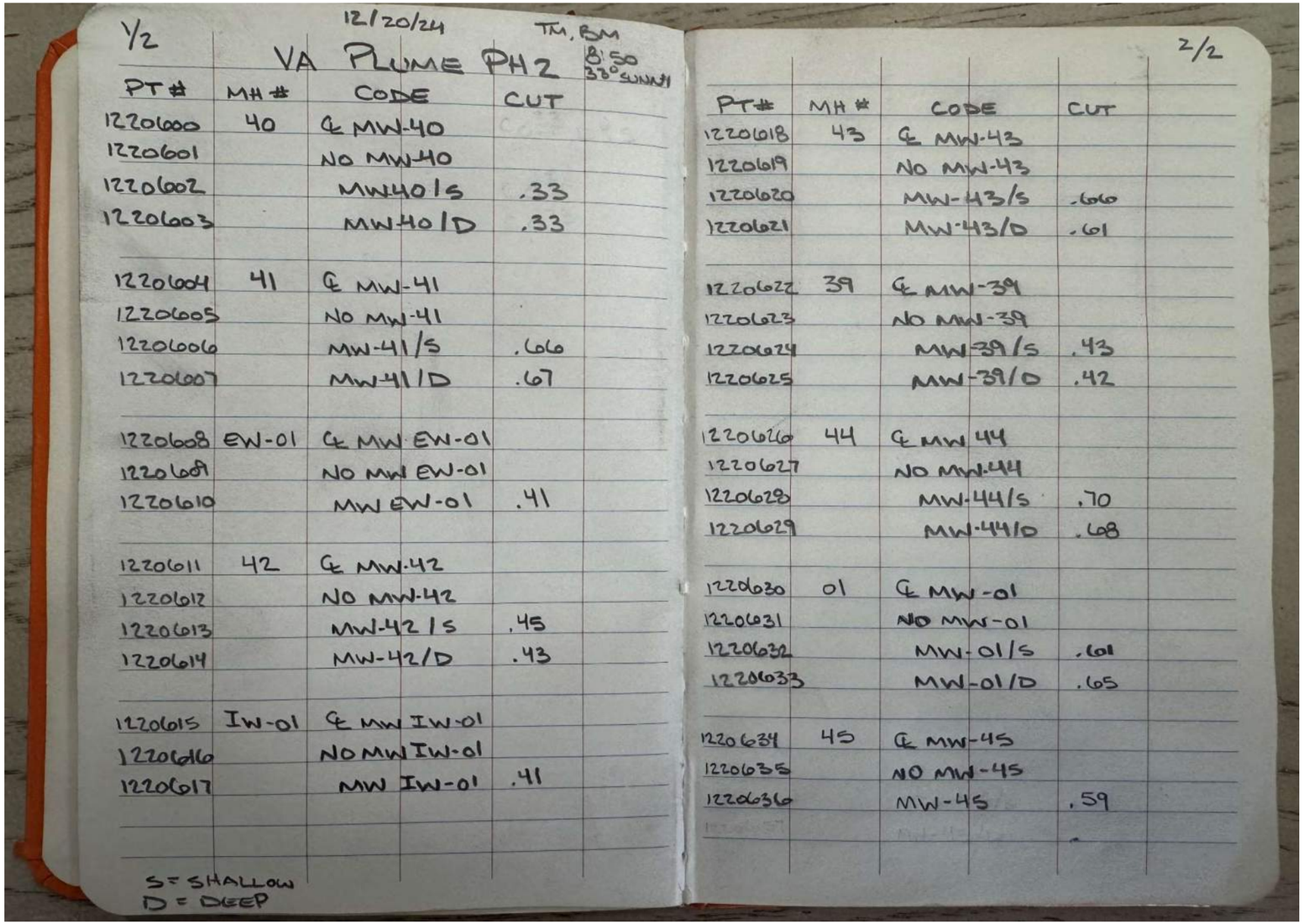
Injection Log

Directory: D:\HPCHEM\1\DATA\24G03

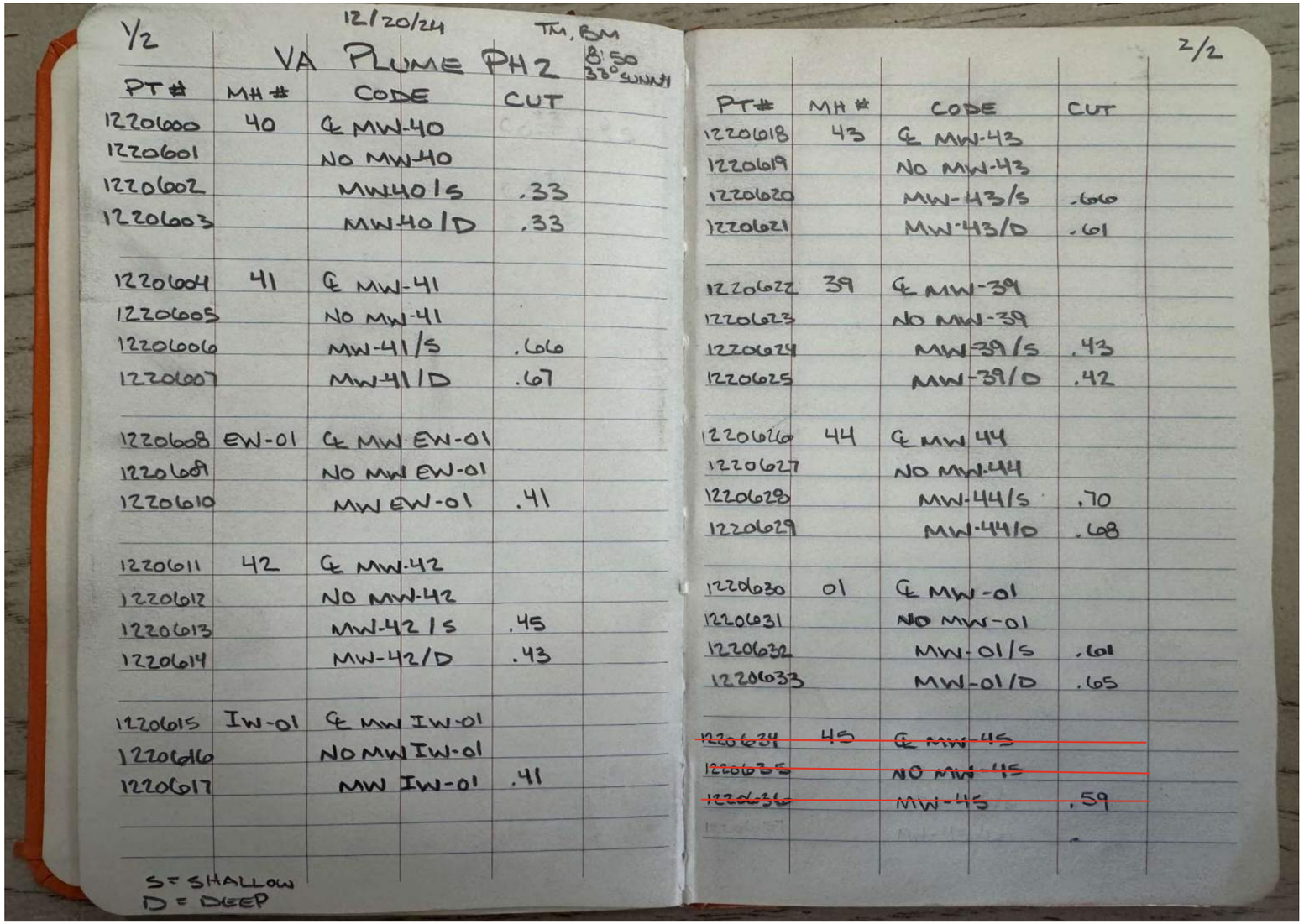
Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	RGW062.D	1.	BFB06G03	T/CHK	3 Jul 2024 09:54
2	2	RGW063.D	1.	CVO06F0320	10ppb 8260/50ppb KET-AA/250ppb TBA	3 Jul 2024 10:27
3	3	RGW064.D	1.	VO06G03L	10ppb 8260/50ppb KET-AA/250ppb TBA	3 Jul 2024 11:07
4	4	RGW065.D	1.	VO06G03C 1.R↓	10ppb 8260/50ppb KET-AA/250ppb TBA	3 Jul 2024 11:34
5	5	RGW066.D	1.	VO06G03Y	10ppb 8260/50ppb KET-AA/250ppb TBA	3 Jul 2024 12:08
6	6	RGW067.D	1.	RINSE		3 Jul 2024 12:44
7	7	RGW068.D	1.	VO06G03B	25mL	3 Jul 2024 13:11
8	8	RGW069.D	1.	24G002-01	25mL	3 Jul 2024 13:42
9	9	RGW070.D	1.	24G002-03	25mL	3 Jul 2024 14:09
10	10	RGW071.D	1.	24G002-02	25mL	3 Jul 2024 14:35
11	11	RGW072.D	1.	24F109-03	25mL	3 Jul 2024 15:01
12	12	RGW073.D	1.	24G002-02M	25mL	3 Jul 2024 15:27
13	13	RGW074.D	1.	24G002-02S	25mL	3 Jul 2024 15:53
14	14	RGW075.D	1.	24F109-03M	25mL	3 Jul 2024 16:19
15	15	RGW076.D	1.	24F109-03S	25mL	3 Jul 2024 16:45
16	16	RGW077.D	1.	RINSE		3 Jul 2024 17:11
17	17	RGW078.D	1.	24F100-01J 50X	0.5mL	3 Jul 2024 17:37
18	18	RGW079.D	1.	RINSE	10ppb 8260/50ppb KET-AA/250ppb TBA	3 Jul 2024 18:03
19	19	RGW080.D	1.	RINSE		3 Jul 2024 18:30
20	20	RGW081.D	1.	24F109-01	25mL	3 Jul 2024 18:56
21	21	RGW082.D	1.	24F100-01K 250X	250uL	3 Jul 2024 19:22
22	22	RGW083.D	1.	24F109-02	25mL	3 Jul 2024 19:48
23	23	RGW084.D	1.	24F109-04	25mL	3 Jul 2024 20:14
24	24	RGW085.D	1.	24F109-05 C10? RR	25mL	3 Jul 2024 20:40
25	25	RGW086.D	1.	24F109-07	25mL	3 Jul 2024 21:07
26	26	RGW087.D	1.	24F109-08 C10? RR	25mL	3 Jul 2024 21:32
27	27	RGW088.D	1.	EVO06F0320	10ppb 8260/50ppb KET-AA/250ppb TBA	3 Jul 2024 21:59
28	28	RGW089.D	1.	EVO06F03201	10ppb 8260/50ppb KET-AA/250ppb TBA	3 Jul 2024 22:25
29	29	RGW090.D	1.	EVO06F03202	10ppb 8260/50ppb KET-AA/250ppb TBA	3 Jul 2024 22:52
30	30	RGW091.D	1.	RINSE		3 Jul 2024 23:17
31	31	RGW092.D	1.	RINSE		3 Jul 2024 23:43

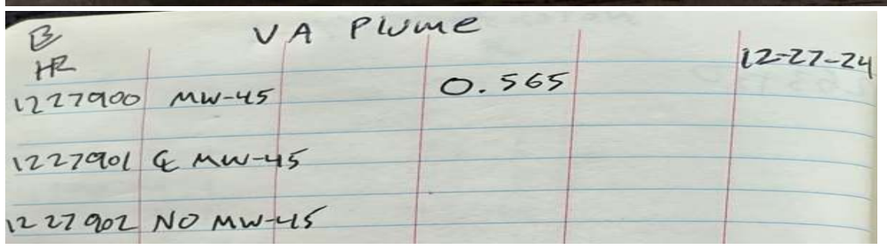
Appendix I Survey Data

1220600	7444096.94	1545568.64	4702.20	CL MW-40
1220601	7444097.45	1545568.84	4702.21	NO MW-40
1220602	7444096.78	1545568.83	4701.87	MW-40/S
1220603	7444097.12	1545568.43	4701.86	MW-40/D
1220604	7443799.94	1545453.33	4690.49	CL MW-41
1220605	7443800.46	1545453.31	4690.50	NO MW-41
1220606	7443799.86	1545453.35	4689.83	MW-41/S
1220607	7443800.17	1545453.34	4689.84	MW-41/D
1220608	7444098.17	1545446.24	4697.28	CL MW EW-01
1220609	7444098.74	1545446.22	4697.28	NO MW EW-01
1220610	7444098.40	1545446.41	4696.89	MW EW-01
1220611	7444066.54	1545474.49	4697.59	CL MW-42
1220612	7444067.11	1545474.64	4697.59	NO MW-42
1220613	7444066.68	1545474.59	4697.12	MW-42/S
1220615	7444068.76	1545485.69	4698.15	CL MW IW-01
1220616	7444069.33	1545485.73	4698.16	NO MW IW-01
1220617	7444068.90	1545485.70	4697.74	MW IW-01
1220618	7444366.98	1545472.66	4707.80	CL MW-43
1220619	7444367.51	1545472.71	4707.81	NO MW-43
1220620	7444367.04	1545472.72	4707.17	MW-43/S
1220621	7444367.36	1545472.54	4707.21	MW-43/D
1220622	7444885.98	1544921.14	4698.77	CL MW-39
1220623	7444886.48	1544921.18	4698.78	NO MW-39
1220624	7444885.96	1544921.12	4698.34	MW-39/S
1220625	7444885.82	1544921.30	4698.35	MW 39/D
1220626	7443277.81	1545410.32	4674.13	CL MW-44
1220627	7443278.33	1545410.32	4674.13	NO MW-44
1220629	7443277.99	1545410.38	4673.44	MW-44/D
1220630	7443663.77	1544832.79	4665.44	CL MW-01
1220631	7443664.28	1544832.81	4665.44	NO MW-01
1220632	7443663.86	1544832.96	4664.77	MW-01/S
1227901	7442104.33	1541810.53	4481.36	CL MW-45
1227902	7442104.87	1541810.50	4481.37	NO MW-45
1227900	7442104.40	1541810.52	4480.77	MW-45



1220600	7444096.94	1545568.64	4702.20	CL MW-40
1220601	7444097.45	1545568.84	4702.21	NO MW-40
1220602	7444096.78	1545568.83	4701.87	MW-40/S
1220603	7444097.12	1545568.43	4701.87	MW-40/D
1220604	7443799.94	1545453.33	4690.49	CL MW-41
1220605	7443800.46	1545453.31	4690.50	NO MW-41
1220606	7443799.86	1545453.35	4689.83	MW-41/S
1220607	7443800.17	1545453.34	4689.82	MW-41/D
1220608	7444098.17	1545446.24	4697.28	CL MW EW-01
1220609	7444098.74	1545446.22	4697.28	NO MW EW-01
1220610	7444098.40	1545446.41	4696.87	MW EW-01
1220611	7444066.54	1545474.49	4697.59	CL MW-42
1220612	7444067.11	1545474.64	4697.59	NO MW-42
1220613	7444066.68	1545474.59	4697.14	MW-42/S
1220614	7444066.49	1545474.39	4697.16	MW-42/D
1220615	7444068.76	1545485.69	4698.15	CL MW IW-01
1220616	7444069.33	1545485.73	4698.16	NO MW IW-01
1220617	7444068.90	1545485.70	4697.74	MW IW-01
1220618	7444366.98	1545472.66	4707.80	CL MW-43
1220619	7444367.51	1545472.71	4707.81	NO MW-43
1220620	7444367.04	1545472.72	4707.14	MW-43/S
1220621	7444367.36	1545472.54	4707.19	MW-43/D
1220622	7444885.98	1544921.14	4698.77	CL MW-39
1220623	7444886.48	1544921.18	4698.78	NO MW-39
1220624	7444885.96	1544921.12	4698.34	MW-39/S
1220625	7444885.82	1544921.30	4698.35	MW 39/D
1220626	7443277.81	1545410.32	4674.13	CL MW-44
1220627	7443278.33	1545410.32	4674.13	NO MW-44
1220628	7443277.73	1545410.29	4673.43	NW-44/S
1220629	7443277.99	1545410.38	4673.45	MW-44/D
1220630	7443663.77	1544832.79	4665.44	CL MW-01
1220631	7443664.28	1544832.81	4665.44	NO MW-01
1220632	7443663.86	1544832.96	4664.83	MW-01/S
1220633	7443663.75	1544832.78	4664.79	MW-01/D
1227901	7442104.33	1541810.53	4481.36	CL MW-45
1227902	7442104.87	1541810.50	4481.37	NO MW-45
1227900	7442104.40	1541810.52	4480.78	MW-45





Appendix J Well Development Purge Logs

MONITORING WELL INSTALLATION AND DEVELOPMENT CHECKLIST

Activity: MW-39S/MW-39-D **Date:** 8/7/24

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. Any deviations from approved drilling procedures and/or well construction protocols must be approved by the Project Manager.

Monitoring Well Installation	**Yes**	**No**	**N/A**
1. Were the utilities properly cleared prior to drilling?			
2. Was the drilling methodology consistent with the UFP-QAPP and work plans?			
3. Were cuttings properly containerized as IDW?			
4. Were boreholes advanced to the appropriate depth as per the UFP-QAPP?			
5. Did the drilling subcontractor follow the well construction procedures described in the driller's SOW?			
6. Did the driller prevent grease, oil, and other fluids from the drill rig from coming into contact with the ground around the area of well installation?			
Development of Monitoring Wells			
7. Were depth to water and bottom of casing recorded and the measuring point specified, either ground surface or top of casing?	X		
8. If top of casing used for measuring point, was height of stickup recorded?	X		
9. Did development begin at least 24 hours following initial well installation?	X		
10. Was the correct technique of surging and pumping used in the development process (as specified in the driller's SOW)?	X		
11. Were the specified water quality parameters recorded throughout the development process?	X		
12. Was the depth to water recorded periodically during development?	X		
13. Was the flow rate recorded during development, initial and if changed?			X
14. Did development continue until the well produced water that was clear, free of suspended solids, and had stabilized parameters (less than 0.1 pH units, less than 1° temperature change, less than 0.3 feet drawdown, less than 10 mV for ORP, and less than 10 % change for the other parameters between three consecutive readings?		X	

Comments and Corrective Actions

List all corrective actions. Initial and date when corrective actions have been implemented.

TURBIDITY NOT STABLE

The Field Team Leader and Project Manager shall sign this checklist upon completion of all items on the checklist.

Field Team Leader: [signature] Date 8/9/24

Project Manager: _____ Date _____

DTW=206.96
TD=286.41

MW-395

Appendix A.3. Well Development Log

= 79.45 x 0.163 x 5 = [64.8 GAL]

Monitoring Point: MW-395 Date: 8/7/24 Sampler: RP

Weather: _____ Visitors: _____

Boring Dia. _____ Casing Dia. 2" DTW: _____ TD: _____ Pump Intake Depth: _____ Pump Top Depth: _____

Purge/Sampling Method: _____ Vial pH: _____ Depth to Water @Sampling: _____

Calculated Purge Volume[1] (Method 1) _____ (Water added during construction (gal)) x 2 = _____ (Purge Volume (gal) (0.0))

[1] = Calculate the purge volume using both methods. Purge the well to whichever volume is greater.

Calculated Purge Volume[1] (Method 2) [Casing and Annular Volume: [(_____ (TD (ft)) - _____ (DTW (ft))) x (_____ (CF) + _____ (BF))]] + [Vol. Above Filter Pack: (_____ (Casing Leng. (ft)) x _____ (CF))] = _____ x 5 + _____ (Water added during construction (gal)) = _____ (Purge Volume (gal) (0.0))

Casing Volume Factors (gal/ft): 2"= 0.17; 4"=0.66; 5"=0.95 Borehole Factor Vols. (Cas.Dia/Bor.Dia.)(in): 2/8"= 0.71 gal/ft; 4/10"= 0.98 gal/ft; 4/12"= 1.18 gal/ft; 5"/12"= 1.38 gal/ft

Site Safety: _____ PPE Disposal: _____ Disposition of Purge Water: _____ 90% Recharge Level: _____ ft

Time	Purge Vol specify ml or gal	Temp (C) (0.0)	pH (0.0)	Specific Cond. (mS/cm) (0.000)	Turbidity (NTU) (0.0)	GW Level (ft below MP)	Comments (Color/Odor)
1136							START BAIL
1205							STOP BAIL, SWABS
1253							STOP SWABS BAIL
1435		16.2	7.64	663	HH		START PARAMETERS, HH = HIGH OVERRANGE
1440		14.5	7.61	829	HH		
1445		13.2	7.53	869	HH		
1450		13.0	7.45	613	HH		
1455		13.2	7.41	789	HH		
1500		13.0	7.44	852	485		
1505		13.4	7.53	752	436		
1510		13.2	753	745	431		
1515		13.1	7.54	747	430		STOP PARAMETERS [85 GAL BAILED TOTAL] ✓

Time	Purge Vol specify ml or gal	Temp (C) (0.0)	pH (0.0)	Specific Cond. (mS/cm) (0.000)	Turbidity (NTU) (0.0)	GW Level (ft below MP)	Comments (Color/Odor)
Field parameters stable?		Y N	Y N	Y N	Y N	Total Purge Volume (mL or gallons) =	

Flow-through Cell Calibration Meter:

Parameter	Calibration	Check	Date	Time	Calibration Standards	Initial Reading	Final Reading	Calibration within Specifications
pH			8/6/24	1023	10 pH	7.30	6.99	✓
Turbidity			8/7/24	1307	10 NTU	9.34	9.86	✓
Spec Cond			8/5/24	1302	1409	1466	1497	✓

General Notes:

DTW = 706.98

TD = 349.92 [= 142.9' x 0.163 x 5 = 116.5 GAL]

Appendix A.3. Well Development Log

Monitoring Point: MW-39D Date: 8/7/24 Sampler: RP

Weather: _____ Visitors: _____

Boring Dia. _____ Casing Dia. 2" DTW: _____ TD: _____ Pump Intake Depth: _____ Pump Top Depth: _____

Purge/Sampling Method: _____ Vial pH: _____ Depth to Water @Sampling: _____

Calculated Purge Volume[1] (Method 1) _____ (Water added during construction (gal)) x 2 = _____ (Purge Volume (gal) (0.0))

[1] = Calculate the purge volume using both methods. Purge the well to whichever volume is greater.

Calculated Purge Volume[1] (Method 2) [Casing and Annular Volume: [(_____ (TD (ft)) - _____ (DTW (ft))) x (_____ (CF) + _____ (BF))]] + [Vol. Above Filter Pack: (_____ (Casing Leng. (ft)) x _____ (CF))] = _____ x 5 + _____ (Water added during construction (gal)) = _____ (Purge Volume (gal) (0.0))

Casing Volume Factors (gal/ft): 2"= 0.17; 4"=0.66; 5"=0.95 Borehole Factor Vols. (Cas.Dia/Bor.Dia.)(in): 2/8"= 0.71 gal/ft; 4/10"= 0.98 gal/ft; 4/12"= 1.18 gal/ft; 5"/12"= 1.38 gal/ft

Site Safety: _____ PPE Disposal: _____ Disposition of Purge Water: _____ 90% Recharge Level: _____ ft

Time	Purge Vol specify ml or gal	Temp (C) (0.0)	pH (0.0)	Specific Cond. (mS/cm) (0.000)	Turbidity (NTU) (0.0)	GW Level (ft below MP)	Comments (Color/Odor)
~~1328~~	1428						START BAILING
1652							STOP BAIL, START SLUGS
1647							STOP SLUGS, BAIL
1730							STOP BAILING [50 GAL]
~~							RESUME BAILING 8/8/24, NEXT DAY
0730							START BAILING
0900		13.7	7.64	623	+++		START PARAMETERS, +++ = HACH OVERRANGE
0905		12.9	7.56	518	+++		
0910		12.5	7.56	561	+++		
0915		12.5	7.53	560	+++		
0920		12.4	7.53	579	+++		
0925		12.4	7.54	525	+++		
0930		12.4	7.53	591	+++		
0935		12.7	7.58	562	+++		
0940		12.5	7.55	589	+++		
0945		12.4	7.55	563	+++		STOP PARAMETERS [150 GAL BAILED TOTAL]

Time	Purge Vol specify ml or gal	Temp (C) (0.0)	pH (0.0)	Specific Cond. (mS/cm) (0.000)	Turbidity (NTU) (0.0)	GW Level (ft below MP)	Comments (Color/Odor)
Field parameters stable?		Y N	Y N	Y N	Y N	Total Purge Volume (mL or gallons) =	

Flow-through Cell Calibration Meter:

Parameter	Calibration	Check	Date	Time	Calibration Standards	Initial Reading	Final Reading	Calibration within Specifications
pH			8/6/24	1023	7.0 4 H	7.30	6.99	✓
Turbidity			8/7/24	1307	10 NU	9.43	9.86	✓
Spec Cond			8/5/24	1302	1409	~~9.86~~ 1464	1497	✓

General Notes:

MONITORING WELL INSTALLATION AND DEVELOPMENT CHECKLIST

Activity: MW-405S / MW-407 **Date:** 8/3/24

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. Any deviations from approved drilling procedures and/or well construction protocols must be approved by the Project Manager.

Monitoring Well Installation	Yes	No	N/A
1. Were the utilities properly cleared prior to drilling?			
2. Was the drilling methodology consistent with the UFP-QAPP and work plans?			
3. Were cuttings properly containerized as IDW?			
4. Were boreholes advanced to the appropriate depth as per the UFP-QAPP?			
5. Did the drilling subcontractor follow the well construction procedures described in the driller's SOW?			
6. Did the driller prevent grease, oil, and other fluids from the drill rig from coming into contact with the ground around the area of well installation?			
Development of Monitoring Wells			
7. Were depth to water and bottom of casing recorded and the measuring point specified, either ground surface or top of casing?	X		
8. If top of casing used for measuring point, was height of stickup recorded?	Y		
9. Did development begin at least 24 hours following initial well installation?	Y		
10. Was the correct technique of surging and pumping used in the development process (as specified in the driller's SOW)?	Y		
11. Were the specified water quality parameters recorded throughout the development process?	Y		
12. Was the depth to water recorded periodically during development?	Y		
13. Was the flow rate recorded during development, initial and if changed?			Y
14. Did development continue until the well produced water that was clear, free of suspended solids, and had stabilized parameters (less than 0.1 pH units, less than 1° temperature change, less than 0.3 feet drawdown, less than 10 mV for ORP, and less than 10 % change for the other parameters between three consecutive readings?		Y	

Comments and Corrective Actions

List all corrective actions. Initial and date when corrective actions have been implemented.

TURBIDITY NOT STABLE

The Field Team Leader and Project Manager shall sign this checklist upon completion of all items on the checklist.

Field Team Leader: _____ Date 8/9/24

Project Manager: _____ Date _____

DTW = 189.90'
BOW = 241.53'
= 51.63' × 0.163 × 5 = 42.1 gal [5 well volumes]

Appendix A.3. Well Development Log

Monitoring Point: MW405 Date: 8/3/24, 8/4/24 Sampler: RP

Weather: Visitors:

Boring Dia. 12" Casing Dia. 2" DTW: TD: Pump Intake Depth: Pump Top Depth:

Purge/Sampling Method: Vial pH: Depth to Water @Sampling:

Calculated Purge Volume[1] (Method 1) _____ (Water added during construction (gal)) x 2 = _____ (Purge Volume (gal) (0.0))

[1] = Calculate the purge volume using both methods. Purge the well to whichever volume is greater.

Calculated Purge Volume[1] (Method 2) [(Casing and Annular Volume: (TD (ft) - DTW (ft)) x (CF + BF))] + (Vol. Above Filter Pack: Casing Leng. (ft) x CF) = ____ x 5 + Water added during construction (gal) = Purge Volume (gal) (0.0)

Casing Volume Factors (gal/ft): 2"= 0.17; 4"=0.66; 5"=0.95 Borehole Factor Vols. (Cas.Dia/Bor.Dia.)(in): 2/8"= 0.71 gal/ft; 4/10"= 0.98 gal/ft; 4/12"= 1.18 gal/ft; 5"/12"= 1.38 gal/ft

Site Safety: _____ PPE Disposal: _____ Disposition of Purge Water: _____ 90% Recharge Level: _____ ft

Time	Purge Vol specify ml or gal	Temp (C) (0.0)	pH (0.0)	Specific Cond. (mS/cm) (0.000)	Turbidity (NTU) (0.0)	GW Level (ft below MP)	Comments (Color/Odor)
1621							START BAIL [8/2/24]
1650							STOP BAIL, (15 GAL)
							END
0757							NEXT DAY, START BAIL [8/3/24]
0804							STOP BAIL, (15 GAL), EVANS
0825							START BAIL
0845		13.8	7.10	1122	+++		START PARAMETERS, +++ = HIGH, OVERRANGE
0850		12.7	7.20	1106	+++		
0855		13.0	7.24	1112	+++		
0900		12.7	7.26	1106	+++		
0905		12.7	7.28	1114	+++		
0910		13.2	7.28	1123	+++		
0915		13.4	7.32	1133	+++		
0920		13.4	7.35	1132	878		
0925		13.2	7.38	1131	765		
0930		13.1	7.38	1132	641		STOP PARAMETERS, [60 GAL BAILED IN TOTAL]

Time	Purge Vol specify ml or gal	Temp (C) (0.0)	pH (0.0)	Specific Cond. (mS/cm) (0.000)	Turbidity (NTU) (0.0)	GW Level (ft below MP)	Comments (Color/Odor)
Field parameters stable?		Y N	Y N	Y N	Y N	Total Purge Volume (mL or gallons) =	

Flow-through Cell Calibration Meter:

Parameter	Calibration	Check	Date	Time	Calibration Standards	Initial Reading	Final Reading	Calibration within Specifications
pH			8/4/24	0815	7.0 pH	7.12	6.99	✓
Turbidity			8/4/24	0825	10 NTU	9.20	9.25	✓
Spec Cond			8/4/24	0820	1409 uS/cm	1871	1473	✓

General Notes:

(DTW = 208.75' = 85.1 x pi x .163 x 5 = 69.4 gal, 5 well casings (
BGW = 293.85'

Appendix A.3. Well Development Log

Monitoring Point: MW-407 Date: 08/04/24 Sampler: KT

Weather: _____ Visitors: _____

Boring Dia. 12" Casing Dia. 2" DTW: _____ TD: _____ Pump Intake Depth: _____ Pump Top Depth: _____

Purge/Sampling Method: _____ Vial pH: _____ Depth to Water @Sampling: _____

Calculated Purge Volume[1] (Method 1) _____ (Water added during construction (gal)) x 2 = _____ (Purge Volume (gal) (0.0))

[1] = Calculate the purge volume using both methods. Purge the well to whichever volume is greater.

Calculated Purge Volume[1] (Method 2) [Casing and Annular Volume] [(_____ (TD (ft)) - _____ (DTW (ft))) x (_____ (CF) + _____ (BF))] + [Vol. Above Filter Pack] (_____ (Casing Leng. (ft)) x _____ (CF)) = _____ x 5 + _____ (Water added during construction (gal)) = _____ (Purge Volume (gal) (0.0))

Casing Volume Factors (gal/ft): 2"= 0.17; 4"=0.66; 5"=0.95 Borehole Factor Vols. (Cas.Dia/Bor.Dia.)(in): 2/8"= 0.71 gal/ft; 4/10"= 0.98 gal/ft; 4/12"= 1.18 gal/ft; 5"/12"= 1.38 gal/ft

Site Safety: _____ PPE Disposal: _____ Disposition of Purge Water: _____ 90% Recharge Level: _____ ft

Time	Purge Vol specify ml or gal	Temp (C) (0.0)	pH (0.0)	Specific Cond. (mS/cm) (0.000)	Turbidity (NTU) (0.0)	GW Level (ft below MP)	Comments (Color/Odor)
0948							START BAILING
1016							STOP BAIL, START PURGE
1075							STOP PURGE, BAIL
1214		13.0	7.61	581	+++		START PARAMETERS +++ = HIGH, OVER RANGE
1220		12.7	7.77	571	+++		
1225		12.8	7.76	571	+++		
1230		12.9	7.76	573	+++		
1235		12.9	7.73	574	+++		
1240		12.7	7.74	569	+++		
1245		12.7	7.73	569	+++		
1250		12.7	7.72	571	+++		
1255		12.8	7.76	572	+++		STOP PARAMETERS [TOTAL BAILED TOTAL]

Time	Purge Vol specify ml or gal	Temp (C) (0.0)	pH (0.0)	Specific Cond. (mS/cm) (0.000)	Turbidity (NTU) (0.0)	GW Level (ft below MP)	Comments (Color/Odor)
Field parameters stable?		Y N	Y N	Y N	Y N	Total Purge Volume (mL or gallons) =	

Flow-through Cell Calibration Meter:

Parameter	Calibration	Check	Date	Time	Calibration Standards	Initial Reading	Final Reading	Calibration within Specifications
pH			8/4/24	0815	7.0 pH	7.12	6.99	✓
Turbidity			8/4/24	0825	10 NTU	9.20	9.25	✓
Spec Cond			8/4/24	0820	1409 us/cm	1871	1473	✓

General Notes:

MONITORING WELL INSTALLATION AND DEVELOPMENT CHECKLIST

Activity: MW-415/D **Date:** 8/6/24

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. Any deviations from approved drilling procedures and/or well construction protocols must be approved by the Project Manager.

~~Monitoring~~ Well Installation	Yes	No	N/A
1. Were the utilities properly cleared prior to drilling?			
2. Was the drilling methodology consistent with the UFP-QAPP and work plans?			
3. Were cuttings properly containerized as IDW?			
4. Were boreholes advanced to the appropriate depth as per the UFP-QAPP?			
5. Did the drilling subcontractor follow the well construction procedures described in the driller's SOW?			
6. Did the driller prevent grease, oil, and other fluids from the drill rig from coming into contact with the ground around the area of well installation?			
Development of Monitoring Wells			
7. Were depth to water and bottom of casing recorded and the measuring point specified, either ground surface or top of casing?	Y		
8. If top of casing used for measuring point, was height of stickup recorded?	Y		
9. Did development begin at least 24 hours following initial well installation?	Y		
10. Was the correct technique of surging and pumping used in the development process (as specified in the driller's SOW)?	Y		
11. Were the specified water quality parameters recorded throughout the development process?	Y		
12. Was the depth to water recorded periodically during development?	Y		
13. Was the flow rate recorded during development, initial and if changed?			Y
14. Did development continue until the well produced water that was clear, free of suspended solids, and had stabilized parameters (less than 0.1 pH units, less than 1° temperature change, less than 0.3 feet drawdown, less than 10 mV for ORP, and less than 10 % change for the other parameters between three consecutive readings?		X	

Comments and Corrective Actions

List all corrective actions. Initial and date when corrective actions have been implemented.

TURBIDITY NOT STABLE

The Field Team Leader and Project Manager shall sign this checklist upon completion of all items on the checklist.

Field Team Leader: _____ Date 8/9/24

Project Manager: _____ Date _____

DTW = 175.38
TD = 220.09 = 44.71 × 0.163 × 5
= 36.4 GAL

Appendix A.3. Well Development Log

Monitoring Point: MW-41S Date: 8/6/24 Sampler:

Weather: Visitors:

Boring Dia. Casing Dia. DTW: TD: Pump Intake Depth: Pump Top Depth:

Purge/Sampling Method: Vial pH: Depth to Water @Sampling:

Calculated Purge Volume[1] (Method 1) _____ (Water added during construction (gal)) x 2 = _____ (Purge Volume (gal) (0.0))

[1] = Calculate the purge volume using both methods. Purge the well to whichever volume is greater.

Calculated Purge Volume[1] (Method 2) [Casing and Annular Volume: [(_____ (TD (ft)) - _____ (DTW (ft))) x (_____ (CF) + _____ (BF))]] + [Vol. Above Filter Pack: (_____ (Casing Leng. (ft)) x _____ (CF))] = _____ x 5 + _____ (Water added during construction (gal)) = _____ (Purge Volume (gal) (0.0))

Casing Volume Factors (gal/ft): 2"= 0.17; 4"=0.66; 5"=0.95 Borehole Factor Vols. (Cas.Dia/Bor.Dia.)(in): 2/8"= 0.71 gal/ft; 4/10"= 0.98 gal/ft; 4/12"= 1.18 gal/ft; 5"/12"= 1.38 gal/ft

Site Safety: PPE Disposal: Disposition of Purge Water: 90% Recharge Level: ft

Time	Purge Vol specify ml or gal	Temp (C) (0.0)	pH (0.0)	Specific Cond. (mS/cm) (0.000)	Turbidity (NTU) (0.0)	GW Level (ft below MP)	Comments (Color/Odor)
1360							START BAIL
1323							STOP BAIL, SWAB
1347							STOP SWAB, BAIL
1430		15.4	7.06	1398	++++		START PARAMETERS, ++++ = ITEM OVER RANGE
1434		13.9	7.27	1268	++++		
1440		12.4	7.24	1241	++++		
1445		13.9	7.42	1280	++++		
1450		13.9	7.43	1279	++++		
1455		12.9	7.27	1240	++++		
1500		14.0	7.42	1276	++++		START
1505		12.7	7.32	1244	945		
1510		13.1	7.33	1253	984		
1515		13.3	7.27	1290	967		
1520		13.6	7.42	1284	923		
1525		12.9	7.29	1291	617		
1530		13.5	7.36	1268	990		
1534		13.4	7.38	1284	829		
1540		13.3	7.39	1299	804		STOP PARAMETERS [60 GAL BAILED TOTAL]

Time	Purge Vol specify ml or gal	Temp (C) (0.0)	pH (0.0)	Specific Cond. (mS/cm) (0.000)	Turbidity (NTU) (0.0)	GW Level (ft below MP)	Comments (Color/Odor)
Field parameters stable?		Y N	Y N	Y N	Y N	Total Purge Volume (mL or gallons) =	

Flow-through Cell Calibration Meter:

Parameter	Calibration	Check	Date	Time	Calibration Standards	Initial Reading	Final Reading	Calibration within Specifications
pH			8/6/24	1023	7.0 pH	7.30	6.99	✓
Turbidity			8/5/24	1304	10 NTU	9.43	9.86	✓
Spec Cond			8/5/24	1302	1409	1466	1497	✓

General Notes:

DTW = 196.40'
TD = 277.69'
= 81.29 x 0.163 x 5 = [66.3 GAL]

Appendix A.3. Well Development Log

Monitoring Point: MW-41D Date: 8/7/24 Sampler: RT

Weather: _____ Visitors: _____

Boring Dia. _____ Casing Dia. _____ DTW: _____ TD: _____ Pump Intake Depth: _____ Pump Top Depth: _____

Purge/Sampling Method: _____ Vial pH: _____ Depth to Water @Sampling: _____

Calculated Purge Volume[1] (Method 1) _____ (Water added during construction (gal)) x 2 = _____ (Purge Volume (gal) (0.0))

[1] = Calculate the purge volume using both methods. Purge the well to whichever volume is greater.

Calculated Purge Volume[1] (Method 2) [Casing and Annular Volume: [(_____ (TD (ft)) - _____ (DTW (ft))) x (_____ (CF) + _____ (BF))]] + [Vol. Above Filter Pack: (_____ (Casing Leng. (ft)) x _____ (CF))] = _____ x 5 + _____ (Water added during construction (gal)) = _____ (Purge Volume (gal) (0.0))

Casing Volume Factors (gal/ft): 2"= 0.17; 4"=0.66; 5"=0.95 Borehole Factor Vols. (Cas.Dia/Bor.Dia.)(in): 2/8"= 0.71 gal/ft; 4/10"= 0.98 gal/ft; 4/12"= 1.18 gal/ft; 5"/12"= 1.38 gal/ft

Site Safety: _____ PPE Disposal: _____ Disposition of Purge Water: _____ 90% Recharge Level: _____ ft

Time	Purge Vol specify ml or gal	Temp (C) (0.0)	pH (0.0)	Specific Cond. (mS/cm) (0.000)	Turbidity (NTU) (0.0)	GW Level (ft below MP)	Comments (Color/Odor)
0723							START BAILING
0754							STOP BAIL, SWAB
0824							STOP SWAB, BAIL
0940		14.6	6.27	719	+++		START PARAMETERS, +++ = HIGH OVERRANGE
0945		12.4	7.56	661	+++		
0950		12.8	7.66	666	+++		
0955		12.3	7.93	642	+++		
1000		12.6	7.99	646	+++		
1005		12.1	7.56	637	+++		
1010		12.2	7.49	653	+++		
1015		12.7	7.61	645	+++		
1020		12.7	7.66	646	828		
1025		12.3	7.59	635	802		
1030		12.2	7.51	648	748		STOP PARAMETERS [75 GAL BAILED]

Time	Purge Vol specify ml or gal	Temp (C) (0.0)	pH (0.0)	Specific Cond. (mS/cm) (0.000)	Turbidity (NTU) (0.0)	GW Level (ft below MP)	Comments (Color/Odor)
Field parameters stable?		Y N	Y N	Y N	Y N	Total Purge Volume (mL or gallons) =	

Flow-through Cell Calibration Meter:

Parameter	Calibration	Check	Date	Time	Calibration Standards	Initial Reading	Final Reading	Calibration within Specifications
pH			8/6/24	1023	7.0, 4	7.30	6.99	✓
Turbidity			8/5/24	1307	10 NTU	9.43	9.86	✓
Spec Cond			8/5/24	1302	1409	~~9.86~~ 1466	1497	✓

General Notes:

8/7/24	0809	10 NTU	9.60	9.55	✓	

MONITORING WELL INSTALLATION AND DEVELOPMENT CHECKLIST

Activity: MW-42 **Date:** 8/5/24

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. Any deviations from approved drilling procedures and/or well construction protocols must be approved by the Project Manager.

Monitoring Well Installation	Yes	No	N/A
1. Were the utilities properly cleared prior to drilling?			
2. Was the drilling methodology consistent with the UFP-QAPP and work plans?			
3. Were cuttings properly containerized as IDW?			
4. Were boreholes advanced to the appropriate depth as per the UFP-QAPP?			
5. Did the drilling subcontractor follow the well construction procedures described in the driller's SOW?			
6. Did the driller prevent grease, oil, and other fluids from the drill rig from coming into contact with the ground around the area of well installation?			
Development of Monitoring Wells			
7. Were depth to water and bottom of casing recorded and the measuring point specified, either ground surface or top of casing?	Y		
8. If top of casing used for measuring point, was height of stickup recorded?	Y		
9. Did development begin at least 24 hours following initial well installation?	Y		
10. Was the correct technique of surging and pumping used in the development process (as specified in the driller's SOW)?	Y		
11. Were the specified water quality parameters recorded throughout the development process?	Y		
12. Was the depth to water recorded periodically during development?	Y		
13. Was the flow rate recorded during development, initial and if changed?			X
14. Did development continue until the well produced water that was clear, free of suspended solids, and had stabilized parameters (less than 0.1 pH units, less than 1° temperature change, less than 0.3 feet drawdown, less than 10 mV for ORP, and less than 10 % change for the other parameters between three consecutive readings?		X	

Comments and Corrective Actions

List all corrective actions. Initial and date when corrective actions have been implemented.

TURBIDITY NOT STABLE

The Field Team Leader and Project Manager shall sign this checklist upon completion of all items on the checklist.

Field Team Leader: _____ Date 8/9/24

Project Manager: _____ Date _____

TD = 255.46
DTW = 192.65 = 62.81 x 0.163 x 5
= [51.2 gal, 5 casings]

Appendix A.3. Well Development Log

Monitoring Point: MW-42S Date: 8/5/25 Sampler: KP

Weather: _____ Visitors: _____

Boring Dia. 2" Casing Dia. 12" DTW: _____ TD: _____ Pump Intake Depth: _____ Pump Top Depth: _____

Purge/Sampling Method: _____ Vial pH: _____ Depth to Water @Sampling: _____

Calculated Purge Volume[1] (Method 1) _____ (Water added during construction (gal)) x 2 = _____ (Purge Volume (gal) (0.0))

[1] = Calculate the purge volume using both methods. Purge the well to whichever volume is greater.

Calculated Purge Volume[1] (Method 2) [Casing and Annular Volume: [(_____ (TD (ft)) - _____ (DTW (ft))) x (_____ (CF) + _____ (BF))]] + [Vol. Above Filter Pack: (_____ (Casing Leng. (ft)) x _____ (CF))] = _____ x 5 + _____ (Water added during construction (gal)) = _____ (Purge Volume (gal) (0.0))

Casing Volume Factors (gal/ft): 2"= 0.17; 4"=0.66; 5"=0.95 Borehole Factor Vols. (Cas.Dia/Bor.Dia.)(in): 2/8"= 0.71 gal/ft; 4/10"= 0.98 gal/ft; 4/12"= 1.18 gal/ft; 5"/12"= 1.38 gal/ft

Site Safety: _____ PPE Disposal: _____ Disposition of Purge Water: _____ 90% Recharge Level: _____ ft

Time	Purge Vol specify ml or gal	Temp (C) (0.0)	pH (0.0)	Specific Cond. (mS/cm) (0.000)	Turbidity (NTU) (0.0)	GW Level (ft below MP)	Comments (Color/Odor)
1035							START PURGING
1103							STOP PUMP, SWAP
1120							PUMP
1215		13.0	2.84	1084	+++		START PARAMETERS
1220		13.4	2.97	533	+++		+++ = TURB, OVER RANGE
1225		13.0	2.93	1062	+++		
1230		13.2	2.91	1025	+++		
1234		13.7	3.09	1062	+++		
1240		14.0	3.03	1102	+++		
1244		14.2	2.91	1058	+++		
1250		12.7	2.71	1019	+++		
1255		17.0	2.77	1019	+++		
1300		12.6	2.79	1013	+++		STOP PARAMETERS [60 GAL TOTAL PURGED]

Time	Purge Vol specify ml or gal	Temp (C) (0.0)	pH (0.0)	Specific Cond. (mS/cm) (0.000)	Turbidity (NTU) (0.0)	GW Level (ft below MP)	Comments (Color/Odor)
Field parameters stable?		Y N	Y N	Y N	Y N	Total Purge Volume (mL or gallons) =	

Flow-through Cell Calibration Meter:

Parameter	Calibration	Check	Date	Time	Calibration Standards	Initial Reading	Final Reading	Calibration within Specifications
pH			8/4/24	0815	7.0 pH	7.12	6.99	
Turbidity			↓	0825	10 NTU	9.20	9.25	
Spec Cond			↓	0820	1409 uS/cm	1871	1475	

General Notes:

DTW = 70.33' TD = 275.44 7.11' x 0.163 x 5 = [57.9 gal]

Appendix A.3. Well Development Log

Monitoring Point: MW-420 Date: 8/5/24 Sampler: RT

Weather: _____ Visitors: _____

Boring Dia. _____ Casing Dia. _____ DTW: _____ TD: _____ Pump Intake Depth: _____ Pump Top Depth: _____

Purge/Sampling Method: _____ Vial pH: _____ Depth to Water @Sampling: _____

Calculated Purge Volume[1] (Method 1) _____ (Water added during construction (gal)) x 2 = _____ (Purge Volume (gal) (0.0))

[1] = Calculate the purge volume using both methods. Purge the well to whichever volume is greater.

Calculated Purge Volume[1] (Method 2) [Casing and Annular Volume: [(_____ (TD (ft)) - _____ (DTW (ft))) x (_____ (CF) + _____ (BF))]] + [Vol. Above Filter Pack: (_____ (Casing Leng. (ft)) x _____ (CF))] = _____ x 5 + _____ (Water added during construction (gal)) = _____ (Purge Volume (gal) (0.0))

Casing Volume Factors (gal/ft): 2"= 0.17; 4"=0.66; 5"=0.95 Borehole Factor Vols. (Cas.Dia/Bor.Dia.)(in): 2/8"= 0.71 gal/ft; 4/10"= 0.98 gal/ft; 4/12"= 1.18 gal/ft; 5"/12"= 1.38 gal/ft

Site Safety: _____ PPE Disposal: _____ Disposition of Purge Water: _____ 90% Recharge Level: _____ ft

Time	Purge Vol specify ml or gal	Temp (C) (0.0)	pH (0.0)	Specific Cond. (mS/cm) (0.000)	Turbidity (NTU) (0.0)	GW Level (ft below MP)	Comments (Color/Odor)
1345							START PUMPING
1340							STOP PUMP, START PUMP
1405							STOP PUMP, START PUMP
1525		13.5	7.44	644	+++		START PARAMETERS, +++ = HIGH OVERRANGE
1530		12.4	7.44	702	+++		
1535		12.3	7.41	309.0	+++		
1540		12.8	7.43	483	+++		
1545		13.0	7.34	712	+++		
1550		12.6	7.30	703	+++		
1555		13.3	7.34	711	418		
1600		12.7	7.21	710	434		
1605		12.4	7.23	686	146		STOP PARAMETERS [70 GAL PURGED TOTAL]

Time	Purge Vol specify ml or gal	Temp (C) (0.0)	pH (0.0)	Specific Cond. (mS/cm) (0.000)	Turbidity (NTU) (0.0)	GW Level (ft below MP)	Comments (Color/Odor)
Field parameters stable?		Y N	Y N	Y N	Y N	Total Purge Volume (mL or gallons) =	

Flow-through Cell Calibration Meter:

Parameter	Calibration	Check	Date	Time	Calibration Standards	3.90 Initial Reading	3.94 Final Reading	Calibration within Specifications
pH			8/5/24	1304	4.0 pH	~~9.09~~	~~9.07~~	✓
Turbidity			8/5/24	1307	10 NTU	9.43	9.86	✓
Spec Cond			8/5/24	1302	1409	1466	1697	✓

General Notes:

MONITORING WELL INSTALLATION AND DEVELOPMENT CHECKLIST

Activity: MW-43 **Date:** 8/3/24

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. Any deviations from approved drilling procedures and/or well construction protocols must be approved by the Project Manager.

Monitoring Well Installation	Yes	No	N/A
1. Were the utilities properly cleared prior to drilling?			
2. Was the drilling methodology consistent with the UFP-QAPP and work plans?			
3. Were cuttings properly containerized as IDW?			
4. Were boreholes advanced to the appropriate depth as per the UFP-QAPP?			
5. Did the drilling subcontractor follow the well construction procedures described in the driller's SOW?			
6. Did the driller prevent grease, oil, and other fluids from the drill rig from coming into contact with the ground around the area of well installation?			
Development of Monitoring Wells			
7. Were depth to water and bottom of casing recorded and the measuring point specified, either ground surface or top of casing?	Y		
8. If top of casing used for measuring point, was height of stickup recorded?	Y		
9. Did development begin at least 24 hours following initial well installation?	Y		
10. Was the correct technique of surging and pumping used in the development process (as specified in the driller's SOW)?	Y		
11. Were the specified water quality parameters recorded throughout the development process?	Y		
12. Was the depth to water recorded periodically during development?	Y		
13. Was the flow rate recorded during development, initial and if changed?			X
14. Did development continue until the well produced water that was clear, free of suspended solids, and had stabilized parameters (less than 0.1 pH units, less than 1° temperature change, less than 0.3 feet drawdown, less than 10 mV for ORP, and less than 10 % change for the other parameters between three consecutive readings?		X	

Comments and Corrective Actions

List all corrective actions. Initial and date when corrective actions have been implemented.

TURBIDITY NOT STABLE

The Field Team Leader and Project Manager shall sign this checklist upon completion of all items on the checklist.

Field Team Leader: _____ Date 8/9/24

Project Manager: _____ Date _____

(COND ±10% TUR CLOSED/ ±10%
(T ±1°C pH ±0.2

(DTW = 202.66'
BOW = 231.51' = 28.85 ft (WC)
× 0.163 × 5

Appendix A.3. Well Development Log

Monitoring Point: MW-43S Date: 8/3/24 Sampler: RP

Weather: _____ Visitors: _____

Boring Dia. 2" Casing Dia. 12" DTW: _____ TD: _____ Pump Intake Depth: _____ Pump Top Depth: _____

Purge/Sampling Method: _____ Vial pH: _____ Depth to Water @Sampling: _____

Calculated Purge Volume[1] (Method 1) _____ (Water added during construction (gal)) x 2 = _____ (Purge Volume (gal) (0.0))

[1] = Calculate the purge volume using both methods. Purge the well to whichever volume is greater.

Calculated Purge Volume[1] (Method 2) [Casing and Annular Volume: (_____ (TD (ft)) - _____ (DTW (ft))) x (_____ (CF) + _____ (BF))] + [Vol. Above Filter Pack: (_____ (Casing Leng. (ft)) x _____ (CF))] = _____ x 5 + _____ (Water added during construction (gal)) = _____ (Purge Volume (gal) (0.0))

Casing Volume Factors (gal/ft): 2"= 0.17; 4"=0.66; 5"=0.95 Borehole Factor Vols. (Cas.Dia/Bor.Dia.)(in): 2/8"= 0.71 gal/ft; 4/10"= 0.98 gal/ft; 4/12"= 1.18 gal/ft; 5"/12"= 1.38 gal/ft

Site Safety: _____ PPE Disposal: _____ Disposition of Purge Water: _____ 90% Recharge Level: _____ ft 5 WELL VOLUMES = 23.5 gal

Time	Purge Vol specify ml or gal	Temp (C) (0.0)	pH (0.0)	Specific Cond. (mS/cm) (0.000)	Turbidity (NTU) (0.0)	GW Level (ft below MP)	Comments (Color/Odor)
1011							PUMP BEGINS (15 GAL)
1106							SWAP
1126							PUMP
1150		15.2	7.45	1483	++++		++++ = MAX OVERRANGE
1155		13.6	7.50	1394	++++		TOTAL PUMPED = 30 GAL
1200		13.7	7.40	1392	++++		
1205		13.8	7.46	1396	++++		
1210		13.5	7.41	1371	++++		
1215		13.7	7.55	1391	++++		STOP PUMPING (40 GAL TOTAL)

Time	Purge Vol specify ml or gal	Temp (C) (0.0)	pH (0.0)	Specific Cond. (mS/cm) (0.000)	Turbidity (NTU) (0.0)	GW Level (ft below MP)	Comments (Color/Odor)
Field parameters stable?		Y N	Y N	Y N	Y N	Total Purge Volume (mL or gallons) =	

Flow-through Cell Calibration Meter: YSI / HACH

Parameter	Calibration	Check	Date	Time	Calibration Standards	Initial Reading	Final Reading	Calibration within Specifications
pH			8/8/24	1026	7.0, 4	7.12	7.02	✓
Turbidity			8/8/24	1042	10 NTU	8.96	9.57	✓
Spec Cond			8/8/24	1034	1253 µS/cm	1268	1387	✓

General Notes:

DTW = 214.48'
TOW = 283.75' = 69.27' × 0.163 × 5
= 56.5 gal

C ±10% Tur <10/±10%
T ±1°C pH ±0.2

Appendix A.3. Well Development Log

Monitoring Point: MW-43D Date: 8/3/24 Sampler: RP

Weather: _____ Visitors: _____

Boring Dia. 2" Casing Dia. 1" DTW: _____ TD: _____ Pump Intake Depth: _____ Pump Top Depth: _____

Purge/Sampling Method: _____ Vial pH: _____ Depth to Water @Sampling: _____

Calculated Purge Volume[1] (Method 1) _____ (Water added during construction (gal)) x 2 = _____ (Purge Volume (gal) (0.0))

[1] = Calculate the purge volume using both methods. Purge the well to whichever volume is greater.

Calculated Purge Volume[1] (Method 2) [(Casing and Annular Volume: _____ (TD (ft)) - _____ (DTW (ft)) x (_____ (CF) + _____ (BF))] + (_____ (Vol. Above Filter Pack: Casing Leng. (ft)) x _____ (CF)) = _____ x 5 + _____ (Water added during construction (gal)) = _____ (Purge Volume (gal) (0.0))

Casing Volume Factors (gal/ft): 2"= 0.17; 4"=0.66; 5"=0.95 Borehole Factor Vols. (Cas.Dia/Bor.Dia.)(in): 2/8"= 0.71 gal/ft; 4/10"= 0.98 gal/ft; 4/12"= 1.18 gal/ft; 5"/12"= 1.38 gal/ft

Site Safety: _____ PPE Disposal: _____ Disposition of Purge Water: _____ 90% Recharge Level: _____ ft

Time	Purge Vol specify ml or gal	Temp (C) (0.0)	pH (0.0)	Specific Cond. (mS/cm) (0.000)	Turbidity (NTU) (0.0)	GW Level (ft below MP)	Comments (Color/Odor)
1245							PUMP BEGINS (15 GAL)
1337							PUMP BAIL
1353							BAIL
1410		13.9	7.94	675	++++		++++ = HIGH, OVERLIMIT
1415		13.6	7.85	475	++++		
1420		12.7	7.65	421	++++		
1425		14.0	7.06	434	++++		
1430		13.6	7.19	453	++++		
1435		12.7	7.67	618	++++		
1440		13.2	7.69	546	++++		
1445		13.7	7.79	625	++++		
1450		13.2	7.64	718	++++		
1455		13.9	7.68	975	++++		
1500		12.8	7.67	621	++++		
1505		13.2	7.71	414.3	++++		
1510		13.4	7.64	435.2	++++		
1515		12.7	7.66	400.9	++++		
1520		12.9	7.64	397.2	296		
1525		13.1	7.69	409.7	217		

Time	Purge Vol specify ml or gal	Temp (C) (0.0)	pH (0.0)	Specific Cond. (mS/cm) (0.000)	Turbidity (NTU) (0.0)	GW Level (ft below MP)	Comments (Color/Odor)
1430		13.2	7.19	403.4	++++		SEE FIELDNOTES, 65 TOTAL GALLONS
Field parameters stable?		Y N	Y N	Y N	Y N	Total Purge Volume (mL or gallons) =	

Flow-through Cell Calibration Meter:

Parameter	Calibration	Check	Date	Time	Calibration Standards	Initial Reading	Final Reading	Calibration within Specifications
pH			8/3/24	1026	7.0 pH	7.12	7.07	✓
Turbidity			8/3/24	1042	10 NTU	8.96	9.57	✓
Spec Cond			8/3/24	1034	1253 uS/cm	1268	1387	✓

General Notes:

MONITORING WELL INSTALLATION AND DEVELOPMENT CHECKLIST

Activity: MW-44S / MW-44D **Date:** 8/8/24

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. Any deviations from approved drilling procedures and/or well construction protocols must be approved by the Project Manager.

Monitoring Well Installation	**Yes**	**No**	**N/A**
1. Were the utilities properly cleared prior to drilling?			
2. Was the drilling methodology consistent with the UFP-QAPP and work plans?			
3. Were cuttings properly containerized as IDW?			
4. Were boreholes advanced to the appropriate depth as per the UFP-QAPP?			
5. Did the drilling subcontractor follow the well construction procedures described in the driller's SOW?			
6. Did the driller prevent grease, oil, and other fluids from the drill rig from coming into contact with the ground around the area of well installation?			
Development of Monitoring Wells			
7. Were depth to water and bottom of casing recorded and the measuring point specified, either ground surface or top of casing?	Y		
8. If top of casing used for measuring point, was height of stickup recorded?	Y		
9. Did development begin at least 24 hours following initial well installation?	Y		
10. Was the correct technique of surging and pumping used in the development process (as specified in the driller's SOW)?	Y		
11. Were the specified water quality parameters recorded throughout the development process?	Y		
12. Was the depth to water recorded periodically during development?	Y		
13. Was the flow rate recorded during development, initial and if changed?			Y
14. Did development continue until the well produced water that was clear, free of suspended solids, and had stabilized parameters (less than 0.1 pH units, less than 1° temperature change, less than 0.3 feet drawdown, less than 10 mV for ORP, and less than 10 % change for the other parameters between three consecutive readings?		Y	

Comments and Corrective Actions

List all corrective actions. Initial and date when corrective actions have been implemented.

TURBIDITY NOT STABLE

The Field Team Leader and Project Manager shall sign this checklist upon completion of all items on the checklist.

Field Team Leader: _____ Date 8/9/24

Project Manager: _____ Date _____

DTW = 154.67

TD = 204.42

= 49.75' x 0.163 F T = [40.6 GAL]

Appendix A.3. Well Development Log

Monitoring Point: MW-44S Date: 8/8/24 Sampler: JT

Weather: _____ Visitors: _____

Boring Dia. _____ Casing Dia. _____ DTW: _____ TD: _____ Pump Intake Depth: _____ Pump Top Depth: _____

Purge/Sampling Method: _____ Vial pH: _____ Depth to Water @Sampling: _____

Calculated Purge Volume[1] (Method 1) _____ (Water added during construction (gal)) x 2 = _____ (Purge Volume (gal) (0.0))

[1] = Calculate the purge volume using both methods. Purge the well to whichever volume is greater.

Calculated Purge Volume[1] (Method 2) [Casing and Annular Volume: (_____ (TD (ft)) - _____ (DTW (ft))) x (_____ (CF) + _____ (BF))] + [Vol. Above Filter Pack: (_____ (Casing Leng. (ft)) x _____ (CF))] = _____ x 5 + _____ (Water added during construction (gal)) = _____ (Purge Volume (gal) (0.0))

Casing Volume Factors (gal/ft): 2"= 0.17; 4"=0.66; 5"=0.95 Borehole Factor Vols. (Cas.Dia/Bor.Dia.)(in): 2/8"= 0.71 gal/ft; 4/10"= 0.98 gal/ft; 4/12"= 1.18 gal/ft; 5"/12"= 1.38 gal/ft

Site Safety: _____ PPE Disposal: _____ Disposition of Purge Water: _____ 90% Recharge Level: _____ ft

Time	Purge Vol specify ml or gal	Temp (C) (0.0)	pH (0.0)	Specific Cond. (mS/cm) (0.000)	Turbidity (NTU) (0.0)	GW Level (ft below MP)	Comments (Color/Odor)
1124							START BAIL
1213							STOP BAIL, SWAP
1246							STOP SWAP, BAIL
1320		14.6	7.47	755	~~++++~~		START PARAMETERS, ~~++++~~ = MACH OVERRANGE
1325		12.9	7.54	724	~~++++~~		
1330		12.6	7.56	718	~~++++~~		
1335		12.3	7.59	~~7.63~~	~~++++~~		
1340		12.1	~~7.60~~	~~7.68~~	~~++++~~		
1345		12.4	7.53		726 ~~++++~~		
1350		12.6	7.64	721	~~++++~~		STOP PARAMETERS [50 GAL]

Time	Purge Vol specify ml or gal	Temp (C) (0.0)	pH (0.0)	Specific Cond. (mS/cm) (0.000)	Turbidity (NTU) (0.0)	GW Level (ft below MP)	Comments (Color/Odor)
Field parameters stable?		Y N	Y N	Y N	Y N	Total Purge Volume (mL or gallons) =	

Flow-through Cell Calibration Meter:

Parameter	Calibration	Check	Date	Time	Calibration Standards	Initial Reading	Final Reading	Calibration within Specifications
pH			8/8/24	1144	10.0 PH	9.72	9.95	✓
Turbidity			8/8/24	1139	10 NTU	9.49	9.53	✓
Spec Cond			8/8/24	1149	1409 us/cm	1591	1445	✓

General Notes:

DTW = 179.04
TD = 288.64'
= 108.8' x 0.163 x 4 = [88.7 GAL]

Appendix A.3. Well Development Log

Monitoring Point: MW-441 Date: 8/8/24 // 8/9/24 Sampler: ~~8/8/24~~ RT

Weather: _____ Visitors: _____

Boring Dia. _____ Casing Dia. _____ DTW: _____ TD: _____ Pump Intake Depth: _____ Pump Top Depth: _____

Purge/Sampling Method: _____ Vial pH: _____ Depth to Water @Sampling: _____

Calculated Purge Volume[1] (Method 1) _____ (Water added during construction (gal)) x 2 = _____ (Purge Volume (gal) (0.0))

[1] = Calculate the purge volume using both methods. Purge the well to whichever volume is greater.

Calculated Purge Volume[1] (Method 2) [Casing and Annular Volume: (_____ (TD (ft)) - _____ (DTW (ft))) x (_____ (CF) + _____ (BF))] + [Vol. Above Filter Pack: (_____ (Casing Leng. (ft)) x _____ (CF))] = _____ x 5 + _____ (Water added during construction (gal)) = _____ (Purge Volume (gal) (0.0))

Casing Volume Factors (gal/ft): 2"= 0.17; 4"=0.66; 5"=0.95 Borehole Factor Vols. (Cas.Dia/Bor.Dia.)(in): 2/8"= 0.71 gal/ft; 4/10"= 0.98 gal/ft; 4/12"= 1.18 gal/ft; 5"/12"= 1.38 gal/ft

Site Safety: _____ PPE Disposal: _____ Disposition of Purge Water: _____ 90% Recharge Level: _____ ft

Time	Purge Vol specify ml or gal	Temp (C) (0.0)	pH (0.0)	Specific Cond. (mS/cm) (0.000)	Turbidity (NTU) (0.0)	GW Level (ft below MP)	Comments (Color/Odor)
1413							START BAILING
1600							STOP BAIL, SWAB
1530							STOP SWAB, BAIL
1605							DTW @181.87', SET UP PUMP
1646							PUMP START, 0.3 GPM, ~200' FT
~~							NEXT DAY
0755							START BAILING
0845	~~150~~	13.0	7.72	534	~~+++~~		START PARAMETERS, +++ = HIGH OVER RANGE
0850		12.1	7.74	490	~~+++~~		
0855		11.9	7.63	443	~~+++~~		
0900		12.1	7.69	456	~~+++~~		
0905		12.1	7.73	477	~~+++~~		
0910		12.3	7.79	496	~~+++~~		
0915		12.4	7.74	483	~~+++~~		STOP PARAM [90 GAL ~~PARAM~~ TOTAL PURGED]

Time	Purge Vol specify ml or gal	Temp (C) (0.0)	pH (0.0)	Specific Cond. (mS/cm) (0.000)	Turbidity (NTU) (0.0)	GW Level (ft below MP)	Comments (Color/Odor)
Field parameters stable?		Y N	Y N	Y N	Y N	Total Purge Volume (mL or gallons) =	

Flow-through Cell Calibration Meter:

Parameter	Calibration	Check	Date	Time	Calibration Standards	Initial Reading	Final Reading	Calibration within Specifications
pH			8/8/24	1144	10.0 pH	9.72	9.95	
Turbidity			8/8/24	1139	10 NTU	9.49	9.53	
Spec Cond			8/8/24	1149	1409 uS/cm	1591	1445	

General Notes:

MONITORING WELL INSTALLATION AND DEVELOPMENT CHECKLIST 8/6/24 8/7/24

Activity: ~~MW-45~~ MW-45 Date: ~~8/7/24~~ 8/6/24

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. Any deviations from approved drilling procedures and/or well construction protocols must be approved by the Project Manager.

	Yes	No	N/A
Monitoring Well Installation			
1. Were the utilities properly cleared prior to drilling?			
2. Was the drilling methodology consistent with the UFP-QAPP and work plans?			
3. Were cuttings properly containerized as IDW?			
4. Were boreholes advanced to the appropriate depth as per the UFP-QAPP?			
5. Did the drilling subcontractor follow the well construction procedures described in the driller's SOW?			
6. Did the driller prevent grease, oil, and other fluids from the drill rig from coming into contact with the ground around the area of well installation?			
Development of Monitoring Wells			
7. Were depth to water and bottom of casing recorded and the measuring point specified, either ground surface or top of casing?	X		
8. If top of casing used for measuring point, was height of stickup recorded?	Y		
9. Did development begin at least 24 hours following initial well installation?	X		
10. Was the correct technique of surging and pumping used in the development process (as specified in the driller's SOW)?	Y		
11. Were the specified water quality parameters recorded throughout the development process?	Y		
12. Was the depth to water recorded periodically during development?	Y		
13. Was the flow rate recorded during development, initial and if changed?	Y		
14. Did development continue until the well produced water that was clear, free of suspended solids, and had stabilized parameters (less than 0.1 pH units, less than 1° temperature change, less than 0.3 feet drawdown, less than 10 mV for ORP, and less than 10 % change for the other parameters between three consecutive readings?	Y		

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: _____ Date 8/9/24

Project Manager: _____ Date _____

DTW = 20.98'

TD = 200.04 = 179.06 x 0.163 x 5 [= 146 GAL] ZP

Appendix A.3. Well Development Log

Monitoring Point: MW-4S Date: 8/15/24 Sampler:

Weather: Visitors:

Boring Dia. 2" Casing Dia. 12" DTW: TD: Pump Intake Depth: Pump Top Depth:

Purge/Sampling Method: Vial pH: Depth to Water @Sampling:

Calculated Purge Volume[1] (Method 1) _____ (Water added during construction (gal)) x 2 = _____ (Purge Volume (gal) (0.0))

[1] = Calculate the purge volume using both methods. Purge the well to whichever volume is greater.

Calculated Purge Volume[1] (Method 2) [Casing and Annular Volume: (_____ (TD (ft)) - _____ (DTW (ft))) x (_____ (CF) + _____ (BF))] + [Vol. Above Filter Pack: (_____ (Casing Leng. (ft)) x _____ (CF))] = _____ x 5 + _____ (Water added during construction (gal)) = _____ (Purge Volume (gal) (0.0))

Casing Volume Factors (gal/ft): 2"= 0.17; 4"=0.66; 5"=0.95 Borehole Factor Vols. (Cas.Dia/Bor.Dia.)(in): 2/8"= 0.71 gal/ft; 4/10"= 0.98 gal/ft; 4/12"= 1.18 gal/ft; 5"/12"= 1.38 gal/ft

Site Safety: _____ PPE Disposal: _____ Disposition of Purge Water: _____ 90% Recharge Level: _____ ft

Time	Purge Vol specify ml or gal	Temp (C) (0.0)	pH (0.0)	Specific Cond. (mS/cm) (0.000)	Turbidity (NTU) (0.0)	GW Level (ft below MP)	Comments (Color/Odor)
0821							START BAILING
0841							STOP BAIL, SWAB
0909							STOP SWAB, BAIL
0955							DTW = 21.44, START PUMPING @ 2.0 GPM
1015							~~START PARAMETERS~~ @ 2.5 GPM
1040		12.7	6.90	1192	13.2		START PARAMETERS
1045		19.4	7.13	1051	10.6		
1050		13.3	7.14	984	9.03		
1055		13.1	7.18	976	7.34		
1100		13.2	7.19	937	7.76		
1105		13.5	7.53	984	6.53		
1110		13.5	7.48	983	6.58		
1115		13.3	7.38	973	6.96		[180 GAL REMOVED TOTAL]

Time	Purge Vol specify ml or gal	Temp (C) (0.0)	pH (0.0)	Specific Cond. (mS/cm) (0.000)	Turbidity (NTU) (0.0)	GW Level (ft below MP)	Comments (Color/Odor)
Field parameters stable?		Y N	Y N	Y N	Y N	Total Purge Volume (mL or gallons) =	

Flow-through Cell Calibration Meter: _____

Parameter	Calibration	Check	Date	Time	Calibration Standards	Initial Reading	Final Reading	Calibration within Specifications
pH			8/4/24	0815	7.0, 4	7.12	699	✓
Turbidity			↓	0817	10 NTU	9.20	9.25	✓
Spec Cond			↓	0820	1409 us/cm	1871	1473	✓

General Notes: _____

MONITORING WELL INSTALLATION AND DEVELOPMENT CHECKLIST

Activity: JW-01 **Date:** 8/4/24

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. Any deviations from approved drilling procedures and/or well construction protocols must be approved by the Project Manager.

Monitoring Well Installation	Yes	No	N/A
1. Were the utilities properly cleared prior to drilling?			
2. Was the drilling methodology consistent with the UFP-QAPP and work plans?			
3. Were cuttings properly containerized as IDW?			
4. Were boreholes advanced to the appropriate depth as per the UFP-QAPP?			
5. Did the drilling subcontractor follow the well construction procedures described in the driller's SOW?			
6. Did the driller prevent grease, oil, and other fluids from the drill rig from coming into contact with the ground around the area of well installation?			
Development of Monitoring Wells			
7. Were depth to water and bottom of casing recorded and the measuring point specified, either ground surface or top of casing?	Y		
8. If top of casing used for measuring point, was height of stickup recorded?	Y		
9. Did development begin at least 24 hours following initial well installation?	Y		
10. Was the correct technique of surging and pumping used in the development process (as specified in the driller's SOW)?	Y		
11. Were the specified water quality parameters recorded throughout the development process?	Y		
12. Was the depth to water recorded periodically during development?	Y		
13. Was the flow rate recorded during development, initial and if changed?	Y		
14. Did development continue until the well produced water that was clear, free of suspended solids, and had stabilized parameters (less than 0.1 pH units, less than 1° temperature change, less than 0.3 feet drawdown, less than 10 mV for ORP, and less than 10 % change for the other parameters between three consecutive readings?		Y	

Comments and Corrective Actions

List all corrective actions. Initial and date when corrective actions have been implemented.

TURBIDITY NOT STABLE

The Field Team Leader and Project Manager shall sign this checklist upon completion of all items on the checklist.

Field Team Leader: _____ Date 8/9/24

Project Manager: _____ Date _____

DTW = 193.24' 70.8 x 0.1650 + 4 = ~~57.9~~ GAL
BOW = 264.04 0.653 = 231 GAL

Appendix A.3. Well Development Log

Monitoring Point: IW-01 Date: 8/4/24, 8/5/24 Sampler: RB

Weather: _____ Visitors: _____

Boring Dia. 12" Casing Dia. 4" DTW: _____ TD: _____ Pump Intake Depth: _____ Pump Top Depth: _____

Purge/Sampling Method: _____ Vial pH: _____ Depth to Water @Sampling: _____

Calculated Purge Volume[1] (Method 1) _____ (Water added during construction (gal)) x 2 = _____ (Purge Volume (gal) (0.0))

[1] = Calculate the purge volume using both methods. Purge the well to whichever volume is greater.

Calculated Purge Volume[1] (Method 2) [(Casing and Annular Volume: (_____ (TD (ft)) - _____ (DTW (ft))) x (_____ (CF) + _____ (BF)))] + (Vol. Above Filter Pack: _____ (Casing Leng. (ft)) x _____ (CF)) = _____ x 5 + _____ (Water added during construction (gal)) = _____ (Purge Volume (gal) (0.0))

Casing Volume Factors (gal/ft): 2"= 0.17; 4"=0.66; 5"=0.95 Borehole Factor Vols. (Cas.Dia/Bor.Dia.)(in): 2/8"= 0.71 gal/ft; 4/10"= 0.98 gal/ft; 4/12"= 1.18 gal/ft; 5"/12"= 1.38 gal/ft

Site Safety: _____ PPE Disposal: _____ Disposition of Purge Water: _____ 90% Recharge Level: _____ ft

Time	Purge Vol specify ml or gal	Temp (C) (0.0)	pH (0.0)	Specific Cond. (mS/cm) (0.000)	Turbidity (NTU) (0.0)	GW Level (ft below MP)	Comments (Color/Odor)
1405							BAIL
1519							FINISH BAILING (150 GAL), SAND
1555							BAIL
1621							FINISH BAILING (200 GAL TOTAL)
							NEXT DAY, START PUMPING
0725							START PUMPING @ 0.5 GPM
0750							STOP PUMPING, LOWER PUMP
0821							START PUMPING @ 1.3 GPM
0840		13.8	7.43	606	~~HHH~~		PARAMETERS START, ~~HHH~~ = HACH, OVERRANGE
0845		13.2	7.58	608	~~HHH~~		PUMP @ 260'
0850		12.8	7.62	604	~~HHH~~		
0855		12.8	7.55	584	~~HHH~~		
0900		12.7	7.46	589	~~HHH~~	8.9	
0905		12.5	7.48	590	994		
0910		12.5	7.50	587	869		
0915		12.6	7.49	586	~~HHH~~		STOP PARAMETERS, STOP PUMPING
0920		12.6	7.46	579	~~HHH~~		DTW = 216.75', [720 GAL]
							[790 GAL TOTAL]

Time	Purge Vol specify ml or gal	Temp (C) (0.0)	pH (0.0)	Specific Cond. (mS/cm) (0.000)	Turbidity (NTU) (0.0)	GW Level (ft below MP)	Comments (Color/Odor)
Field parameters stable?		Y N	Y N	Y N	Y N	Total Purge Volume (mL or gallons) =	

Flow-through Cell Calibration Meter:

Parameter	Calibration	Check	Date	Time	Calibration Standards	Initial Reading	Final Reading	Calibration within Specifications
pH			8/4/24	0815	7.0 pH	7.12	6.99	✓
Turbidity			↓	0824	10 NTU	9.20	9.25	✓
Spec Cond				0820	1409 us/cm	1371	1473	✓

General Notes:

MONITORING WELL INSTALLATION AND DEVELOPMENT CHECKLIST

Activity: EW01 **Date:** 8/1/24

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. Any deviations from approved drilling procedures and/or well construction protocols must be approved by the Project Manager.

Monitoring Well Installation	Yes	No	N/A
1. Were the utilities properly cleared prior to drilling?			
2. Was the drilling methodology consistent with the UFP-QAPP and work plans?			
3. Were cuttings properly containerized as IDW?			
4. Were boreholes advanced to the appropriate depth as per the UFP-QAPP?			
5. Did the drilling subcontractor follow the well construction procedures described in the driller's SOW?			
6. Did the driller prevent grease, oil, and other fluids from the drill rig from coming into contact with the ground around the area of well installation?			
Development of Monitoring Wells			
7. Were depth to water and bottom of casing recorded and the measuring point specified, either ground surface or top of casing?	X		
8. If top of casing used for measuring point, was height of stickup recorded?			X
9. Did development begin at least 24 hours following initial well installation?	X		
10. Was the correct technique of surging and pumping used in the development process (as specified in the driller's SOW)?	X		
11. Were the specified water quality parameters recorded throughout the development process?	X		
12. Was the depth to water recorded periodically during development?	X		
13. Was the flow rate recorded during development, initial and if changed?	X		
14. Did development continue until the well produced water that was clear, free of suspended solids, and had stabilized parameters (less than 0.1 pH units, less than 1° temperature change, less than 0.3 feet drawdown, less than 10 mV for ORP, and less than 10 % change for the other parameters between three consecutive readings?			X

Comments and Corrective Actions

List all corrective actions. Initial and date when corrective actions have been implemented.

ALL PARAMETERS STABLE EXCEPT FOR TURBIDITY.
TOLD TO MOVE ON TO NEXT WELL BY NEIL SMITH (COM

The Field Team Leader and Project Manager shall sign this checklist upon completion of all items on the checklist.

Field Team Leader: _____ Date 8/9/24

Project Manager: _____ Date _____

Appendix A.3. Well Development Log

Monitoring Point: EW-01 Date: 8/2/24 Sampler: RT

Weather: CLEAR, ~~60°F~~ HOT, SMOKY Visitors:

Boring Dia. 12" Casing Dia. ~~4"~~ 6" DTW: 204.31 TD: 305.95 Pump Intake Depth: Pump Top Depth:

Purge/Sampling Method: Vial pH: Depth to Water @Sampling:

Calculated Purge Volume[1] (Method 1) _____ (Water added during construction (gal)) x 2 = _____ (Purge Volume (gal) (0.0)) ~750 gal

[1] = Calculate the purge volume using both methods. Purge the well to whichever volume is greater.

Calculated Purge Volume[1] (Method 2) [Casing and Annular Volume: [(_____ (TD (ft) - _____ DTW (ft)) x (_____ CF + _____ BF)]] + [Vol. Above Filter Pack: (_____ Casing Leng. (ft) x _____ CF)] = _____ x 5 + _____ (Water added during construction (gal)) = _____ (Purge Volume (gal) (0.0))

Casing Volume Factors (gal/ft): 2"= 0.17; 4"=0.66; 5"=0.95 Borehole Factor Vols. (Cas.Dia/Bor.Dia.)(in): 2/8"= 0.71 gal/ft; 4/10"= 0.98 gal/ft; 4/12"= 1.18 gal/ft; 5"/12"= 1.38 gal/ft

Site Safety: _____ PPE Disposal: _____ Disposition of Purge Water: _____ 90% Recharge Level: _____ ft

Time	Purge Vol specify ml or gal	Temp (C) (0.0)	pH (0.0)	Specific Cond. (mS/cm) (0.000)	Turbidity (NTU) (0.0)	GW Level (ft below MP)	Comments (Color/Odor) BAIL = [350 GAL]
0920						204.31	PUMP @ 231', VERY TURBID, 10 GPM
0925						212.68	10 GPM
1002							10 GPM, PUMP @ 216' FOR 5 MIN
1035							STOP PUMPING = [750 gal]
1095						203.86	PUMP @ 273', 10 GPM, WATER TURBID
1113							RAISE PUMP TO ~258', LOWER TO 273' OVER 10 MIN
1159							STOP PUMPING = [560 GAL]
1158							PUMP @ 294', 13 GPM, WATER TURBID
1404							PUMP STOP, [1600 GAL]
1415							PUMP @ 305', 13 GPM
1455							STOP, [900 GAL]
1550							PUMP @ 238', 13 GPM
1610					265		
1633						219.38 @	13 GPM
1649							STOP PUMPING [1200 GAL]

Time	Purge Vol specify ml or gal	Temp (C) (0.0)	pH (0.0)	Specific Cond. (mS/cm) (0.000)	Turbidity (NTU) (0.0)	GW Level (ft below MP)	Comments (Color/Odor)
Field parameters stable?		Y N	Y N	Y N	Y N	Total Purge Volume (mL or gallons) =	

Flow-through Cell Calibration Meter: YSI / HACH

Parameter	Calibration	Check	Date	Time	Calibration Standards	Initial Reading	Final Reading	Calibration within Specifications
pH			8/1/24	1259	7.0 pH	7.04	6.99	✓
Turbidity			8/1/24	1305	10 NTU	9.46		✓
Spec Cond			8/1/24	1253	1409 µS/cm	1197	1459	✓

General Notes: ~~TURBIDITY METER DOES NOT READ LOW ENOUGH FOR 3 MONTHS AFTER LAMOTTE FACTORY~~ -

TEMP ±1°C TURBIDITY <10 NTU or ±10%
S COND ±10% pH ±0.2

Appendix A.3. Well Development Log

Monitoring Point: FW-01 Date: 8/3/24 Sampler: RT

Weather: C Visitors:

Boring Dia. 6" Casing Dia. 12" DTW: TD: Pump Intake Depth: Pump Top Depth:

Purge/Sampling Method: Vial pH: Depth to Water @Sampling:

Calculated Purge Volume[1] (Method 1) _____ (Water added during construction (gal)) x 2 = _____ (Purge Volume (gal) (0.0))

[1] = Calculate the purge volume using both methods. Purge the well to whichever volume is greater.

Calculated Purge Volume[1] (Method 2) [Casing and Annular Volume: [(_____ (TD (ft)) - _____ (DTW (ft))) x (_____ (CF) + _____ (BF))]] + [Vol. Above Filter Pack: (_____ (Casing Leng. (ft)) x _____ (CF))] = _____ x 5 + _____ (Water added during construction (gal)) = _____ (Purge Volume (gal) (0.0))

Casing Volume Factors (gal/ft): 2"= 0.17; 4"=0.66; 5"=0.95 Borehole Factor Vols. (Cas.Dia/Bor.Dia.)(in): 2/8"= 0.71 gal/ft; 4/10"= 0.98 gal/ft; 4/12"= 1.18 gal/ft; 5"/12"= 1.38 gal/ft

Site Safety: _____ PPE Disposal: _____ Disposition of Purge Water: _____ 90% Recharge Level: _____ ft

Time	Purge Vol specify ml or gal	Temp (C) (0.0)	pH (0.0)	Specific Cond. (mS/cm) (0.000)	Turbidity (NTU) (0.0)	GW Level (ft below MP)	Comments (Color/Odor)
0735		13.2	7.73	785	19.0	203.70	
0740		12.6	7.69	1022	317		
0745		12.4	7.69	878	295	218.93	
0750		12.4	7.69	787	+++		+++ = HACH METER, OVER RANGE
0755		12.4	7.64	764	+++	218.82	
0800		12.4	7.64	751	880	218.93	218.93'
0805		12.4	7.63	743	426	219.27	
0810		12.4	7.61	751	382	219.36	
0815		12.4	7.56	749	221	219.58	
0820		12.4	7.62	747	132	219.52	STOP PUMPING 4GPM x 15 MIN = 600 GAL

Time	Purge Vol specify ml or gal	Temp (C) (0.0)	pH (0.0)	Specific Cond. (mS/cm) (0.000)	Turbidity (NTU) (0.0)	GW Level (ft below MP)	Comments (Color/Odor)
Field parameters stable?		Y N	Y N	Y N	Y N	Total Purge Volume (mL or gallons) =	

Flow-through Cell Calibration Meter: YSI / HACH

Parameter	Calibration	Check	Date	Time	Calibration Standards	Initial Reading	Final Reading	Calibration within Specifications
pH	8/1/24		8/1/24	1259	7.0 pH	7.04	6.99	✓
Turbidity			8/1/24	1305	10 NTU	9.46	9.40	✓
Spec Cond	8/1/24		8/1/24	1253	1409 µS/cm	1197	1459	✓

General Notes: * TURBIDITY METER MANUFACTURER #7055 NOT CAPT TURBIDITY METER TO BE FLOW CALIBRATED FOR

Appendix K Nuclear Magnetic Resonance

borehole geophysics / hydrophysics

Nuclear Magnetic Resonance

Colog, Inc.
833 Hogback Dr.
Golden, CO 80403
colog.com

COMPANY: CDM Smith	**PROJECT:** 700 South/ 1600 West
DATE LOGGED: 11 November 2024	**WELL:** EW-01

LOCATION:	Salt Lake City, UT.	**LOG MEASURED FROM:**	Ground Surface
FIELD ENGINEER(S):	C.K. Lewis	**CASING DIA. & INTERVAL:**	6 in PVC
WITNESSED BY:	N. Smith	**BOREHOLE DIAMETER:**	10 in
DEPTH DRILLER:	305 ft	**FLUID LEVEL DEPTH:**	NA
DEPTH LOGGER:	303 ft	**PROBE MODEL:**	JPY350

COMMENTS:

Hydraulic Conductivity estimated using Unconsolidated parameters.
SOE = Sum of Echoes

NMR Processed Parameters

Processing Parameters used to generate the results in this folder.
This file was auto-generated during data export

Date of Export: 20-Nov-2024 11:27:47
Version of Javelin Pro Plus used: 4.13.6

ACQUISITION METADATA
==========

	Tr1	Tr2
Averages (#):	4	24
Tr Recovery Time (sec):	5.00	0.20

PROCESSING OPTIONS
==========

Frequency indices included in stack: 2 3
Stacking method: Noise-weighted
Q-scaling: Applied

Depth Units: ft
Depth averaging method: samples
Depth averaging (# of samples): 2
Depth offset applied: 0.00

T2 Regularization: 30

HYDROLOGY ESTIMATORS
==========

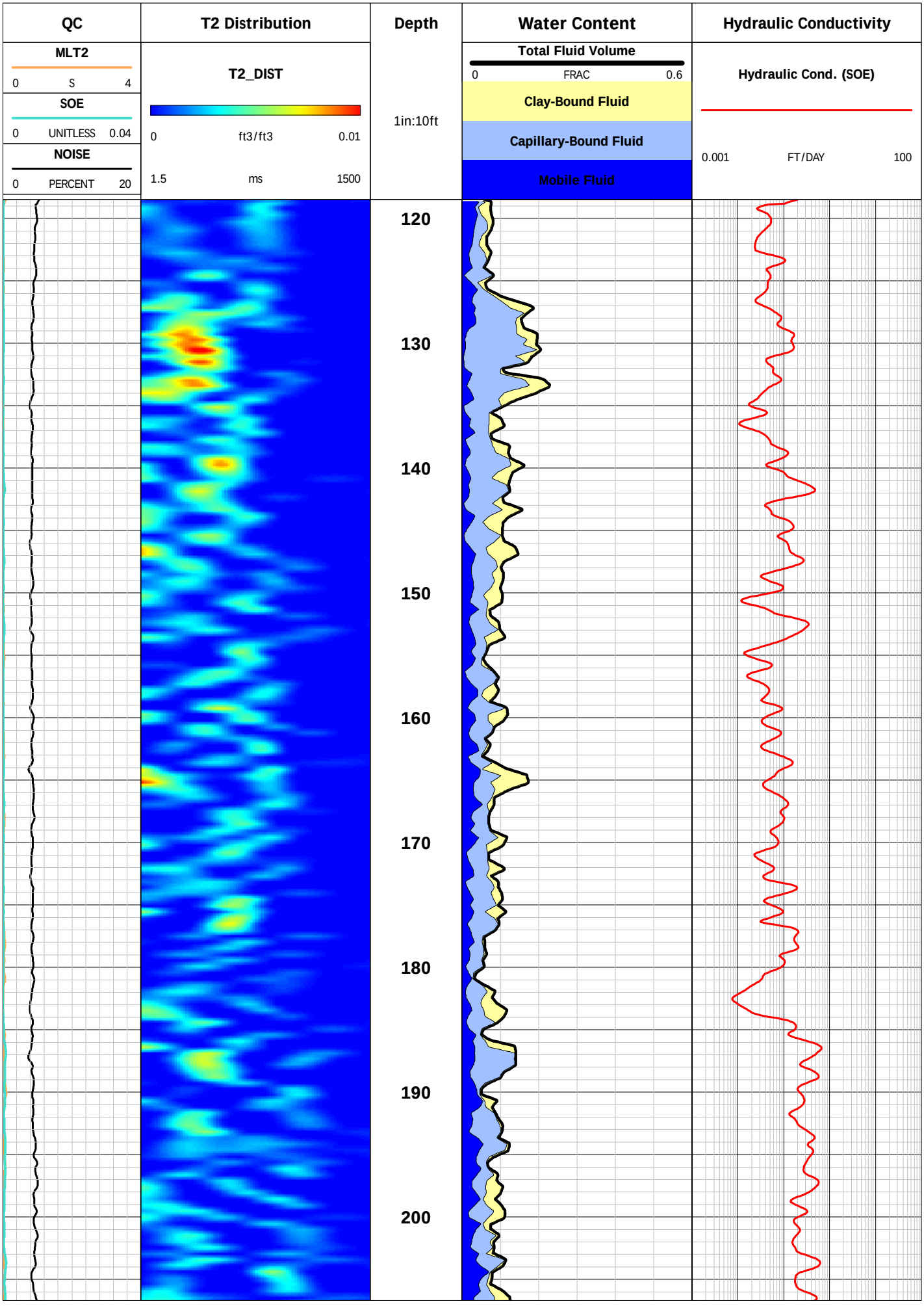
Clay cutoff (ms): 3
Cap. cutoff (ms): 33

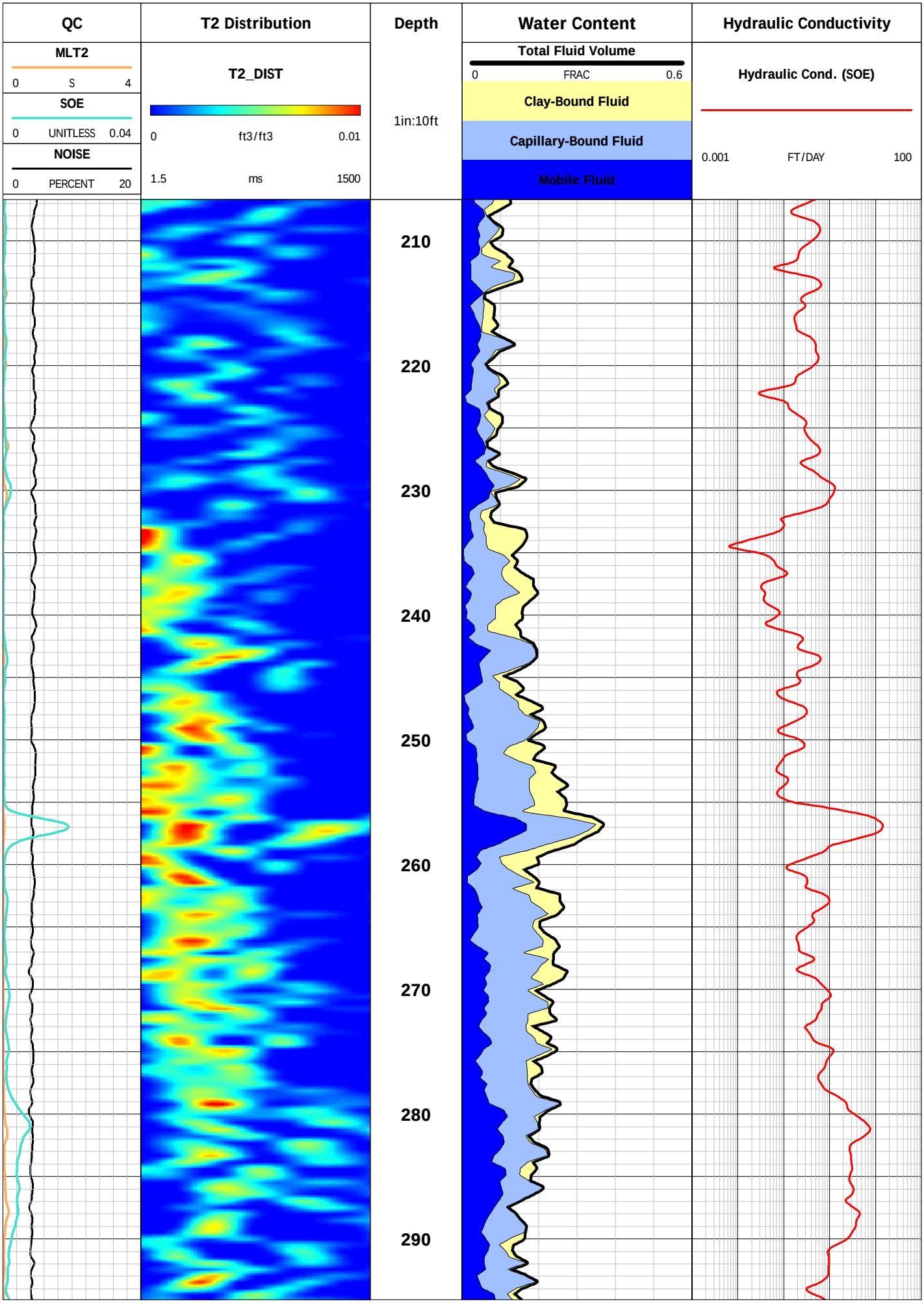
C_SDR: 8900
N_SDR: 1.0

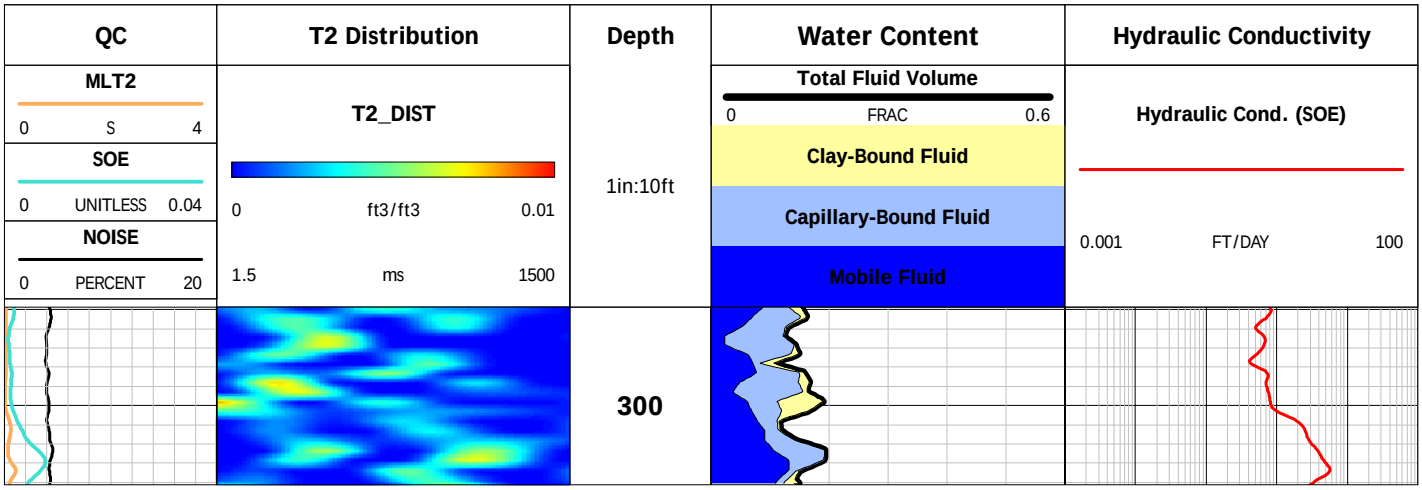
C_SOE: 4200
SOE_win: 500

SOURCE FILE INFORMATION
==========

Seed file:
C:\Users\Kent.Lewis\Documents\CDM Smith\SLC EW-01\SLC EW-01_001.jrd


QC
MLT2
0 S 4
SOE
0 UNITLESS 0.04
NOISE
0 PERCENT 20
T2 Distribution
T2_DIST
0 ft3/ft3 0.01
1.5 ms 1500
Depth
1in:10ft
120
130
140
150
160
170
180
190
200
Water Content
Total Fluid Volume
0 FRAC 0.6
Clay-Bound Fluid
Capillary-Bound Fluid
Mobile Fluid
Hydraulic Conductivity
Hydraulic Cond. (SOE)
0.001 FT/DAY 100


QC
MLT2
0 S 4
SOE
0 UNITLESS 0.04
NOISE
0 PERCENT 20
T2 Distribution
T2_DIST
0 ft3/ft3 0.01
1.5 ms 1500
Depth
1in:10ft
210
220
230
240
250
260
270
280
290
Water Content
Total Fluid Volume
0 FRAC 0.6
Clay-Bound Fluid
Capillary-Bound Fluid
Mobile Fluid
Hydraulic Conductivity
Hydraulic Cond. (SOE)
0.001 FT/DAY 100


QC
MLT2
0
S
4
SOE
0
UNITLESS
0.04
NOISE
0
PERCENT
20
T2 Distribution
T2_DIST
0
ft3/ft3
0.01
1.5
ms
1500
Depth
1in:10ft
300
Water Content
Total Fluid Volume
0
FRAC
0.6
Clay-Bound Fluid
Capillary-Bound Fluid
Mobile Fluid
Hydraulic Conductivity
Hydraulic Cond. (SOE)
0.001
FT/DAY
100

borehole geophysics / hydrophysics

Nuclear Magnetic Resonance

Colog, Inc.
833 Hogback Dr.
Golden, CO 80403
colog.com

COMPANY: CDM Smith	**PROJECT:** 700 South/1600 East
DATE LOGGED: 12 November 2024	**WELL:** IW-01

LOCATION:	Salt Lake City , UT.	**LOG MEASURED FROM:**	Ground Surface
FIELD ENGINEER(S):	C.K. Lewis	**CASING DIA. & INTERVAL:**	4 in PVC
WITNESSED BY:	N. Smith	**BOREHOLE DIAMETER:**	8 in
DEPTH DRILLER:	270 ft	**FLUID LEVEL DEPTH:**	NA
DEPTH LOGGER:	269 ft	**PROBE MODEL:**	JPY238

COMMENTS:

Hydraulic Conductivity estimated using Unconsolidated parameters.
SOE = Sum of Echoes

NMR Processed Parameters

Processing Parameters used to generate the results in this folder.
This file was auto-generated during data export

Date of Export: 20-Nov-2024 11:29:24
Version of Javelin Pro Plus used: 4.13.6

ACQUISITION METADATA
==========

	Tr1	Tr2
Averages (#):	6	36
Tr Recovery Time (sec):	1.50	0.10

PROCESSING OPTIONS
==========

Frequency indices included in stack: 1 2
Stacking method: Noise-weighted
Q-scaling: Applied

Depth Units: ft
Depth averaging method: samples
Depth averaging (# of samples): 2
Depth offset applied: 0.00

T2 Regularization: 30

HYDROLOGY ESTIMATORS
==========

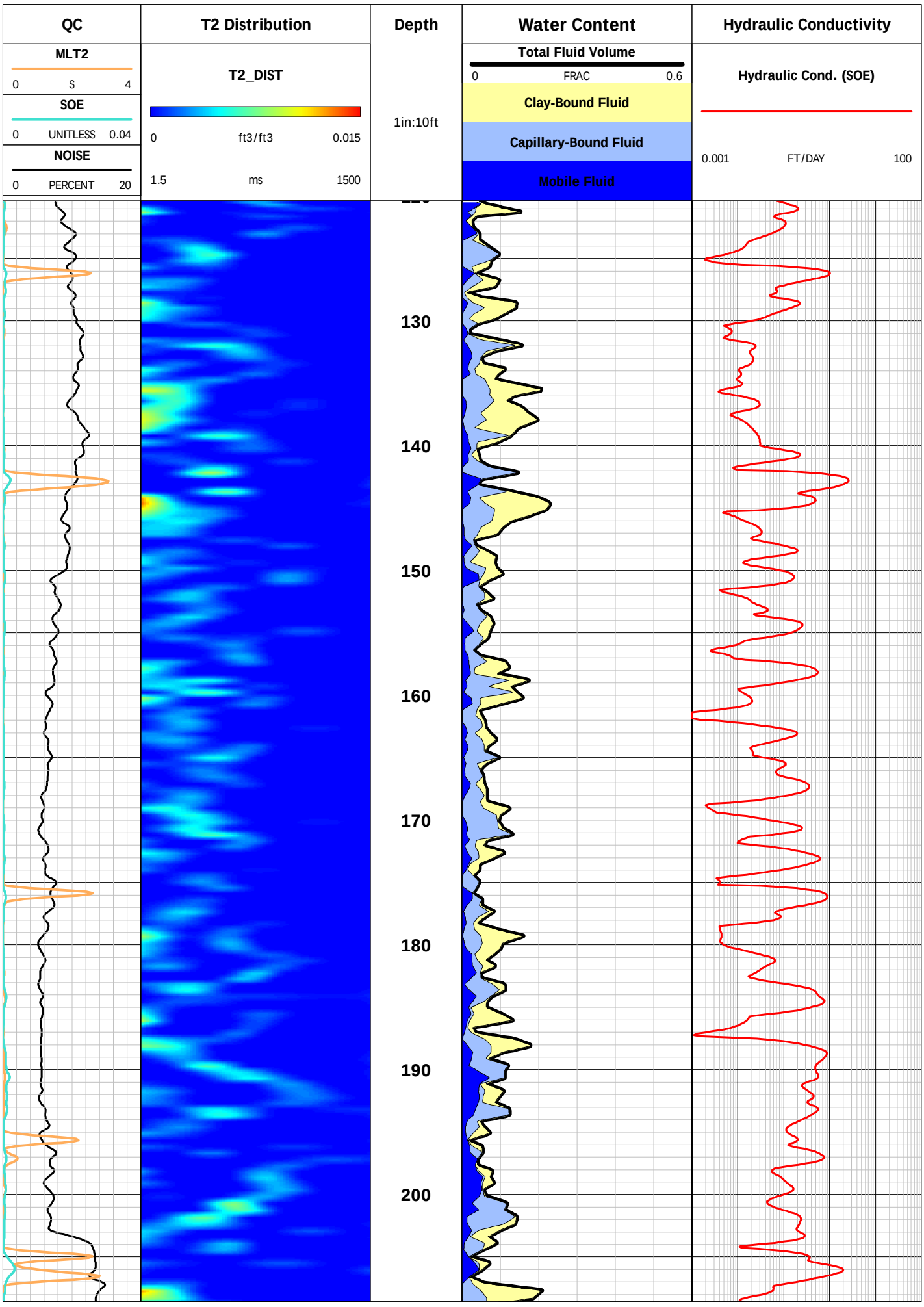
Clay cutoff (ms): 3
Cap. cutoff (ms): 33

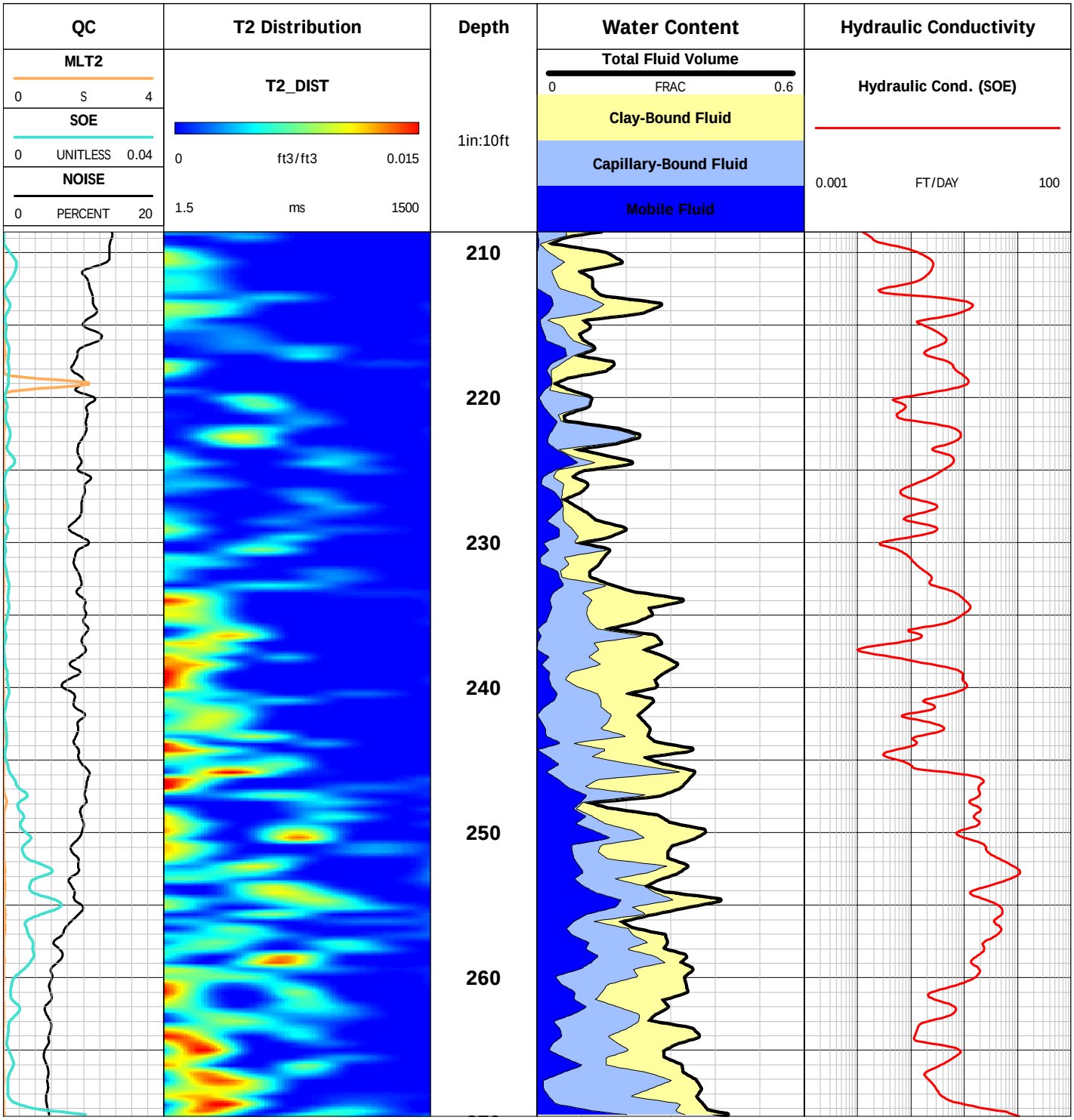
C_SDR: 8900
N_SDR: 1.0

C_SOE: 4200
SOE_win: 500

SOURCE FILE INFORMATION
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Seed file:
C:\Users\Kent.Lewis\Documents\CDM Smith\SLC IW-01\SLC IW-01_001.jrd


QC
MLT2
0
S
4
SOE
0
UNITLESS
0.04
NOISE
0
PERCENT
20
T2 Distribution
T2_DIST
0
ft3/ft3
0.015
1.5
ms
1500
Depth
1in:10ft
130
140
150
160
170
180
190
200
Water Content
Total Fluid Volume
0
FRAC
0.6
Clay-Bound Fluid
Capillary-Bound Fluid
Mobile Fluid
Hydraulic Conductivity
Hydraulic Cond. (SOE)
0.001
FT/DAY
100


QC
MLT2
0 S 4
SOE
0 UNITLESS 0.04
NOISE
0 PERCENT 20
T2 Distribution
T2_DIST
0 ft3/ft3 0.015
1.5 ms 1500
Depth
1in:10ft
210
220
230
240
250
260
Water Content
Total Fluid Volume
0 FRAC 0.6
Clay-Bound Fluid
Capillary-Bound Fluid
Mobile Fluid
Hydraulic Conductivity
Hydraulic Cond. (SOE)
0.001 FT/DAY 100

borehole geophysics / hydrophysics

Nuclear Magnetic Resonance

Colog, Inc.
833 Hogback Dr.
Golden, CO 80403
colog.com

COMPANY: CDM Smith	**PROJECT:** 700 South/1600 East
DATE LOGGED: 11 November 2024	**WELL:** MW-04

LOCATION:	Salt Lake City, UT.	**LOG MEASURED FROM:**	Ground Surface
FIELD ENGINEER(S):	C.K. Lewis	**CASING DIA. & INTERVAL:**	4 in PVC
WITNESSED BY:	N. Smith	**BOREHOLE DIAMETER:**	8 in
DEPTH DRILLER:	173 ft	**FLUID LEVEL DEPTH:**	NA
DEPTH LOGGER:	171 ft	**PROBE MODEL:**	JPY238

COMMENTS:

Hydraulic Conductivity estimated using Unconsolidated parameters.
SOE = Sum of Echoes

NMR Processed Parameters

Processing Parameters used to generate the results in this folder.
This file was auto-generated during data export

Date of Export: 20-Nov-2024 11:30:56
Version of Javelin Pro Plus used: 4.13.6

ACQUISITION METADATA
==========

	Tr1	Tr2
Averages (#):	6	36
Tr Recovery Time (sec):	1.50	0.10

PROCESSING OPTIONS
==========

Frequency indices included in stack: 1 2
Stacking method: Noise-weighted
Q-scaling: Applied

Depth Units: ft
Depth averaging method: samples
Depth averaging (# of samples): 2
Depth offset applied: 0.00

T2 Regularization: 30

HYDROLOGY ESTIMATORS
==========

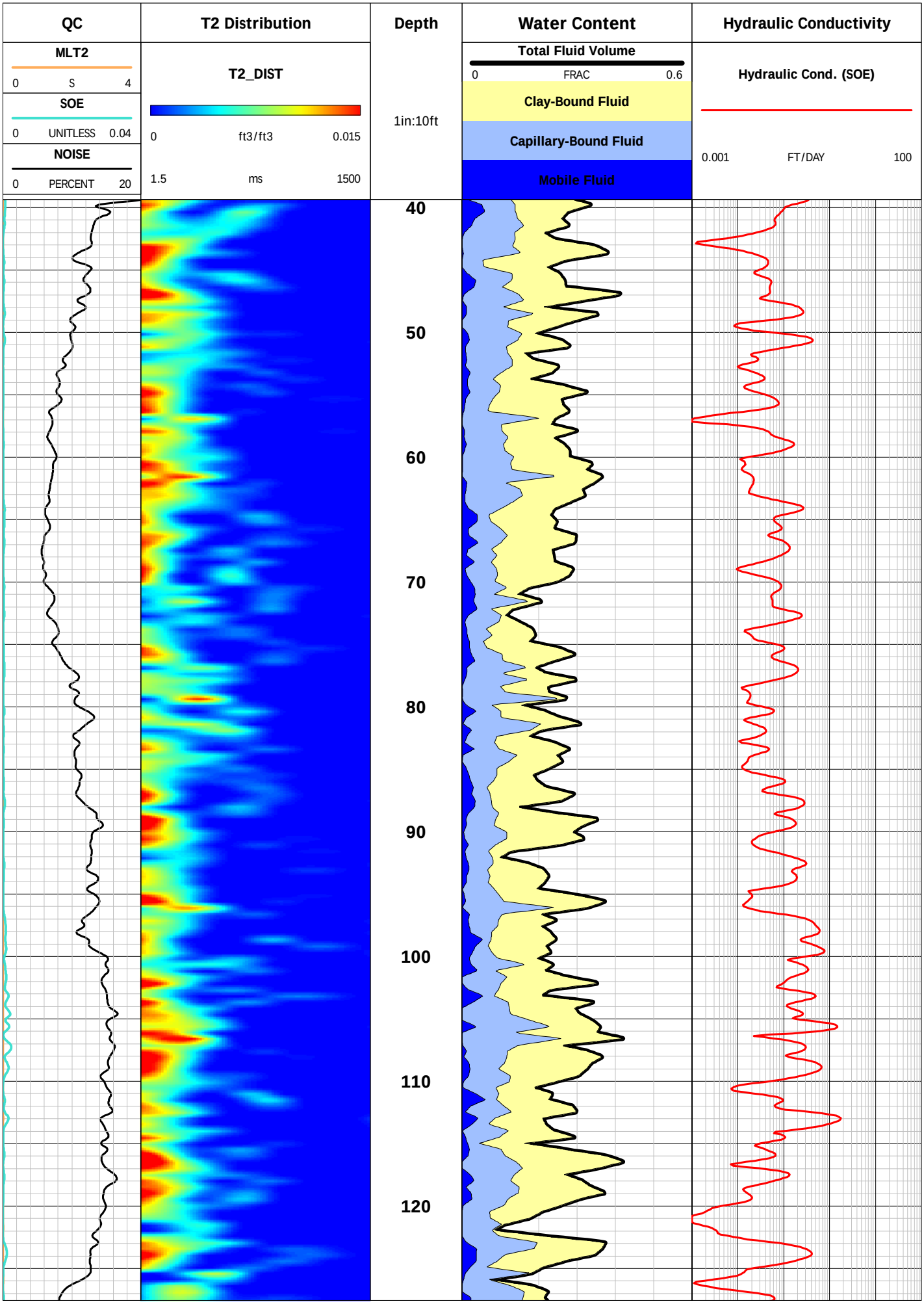
Clay cutoff (ms): 3
Cap. cutoff (ms): 33

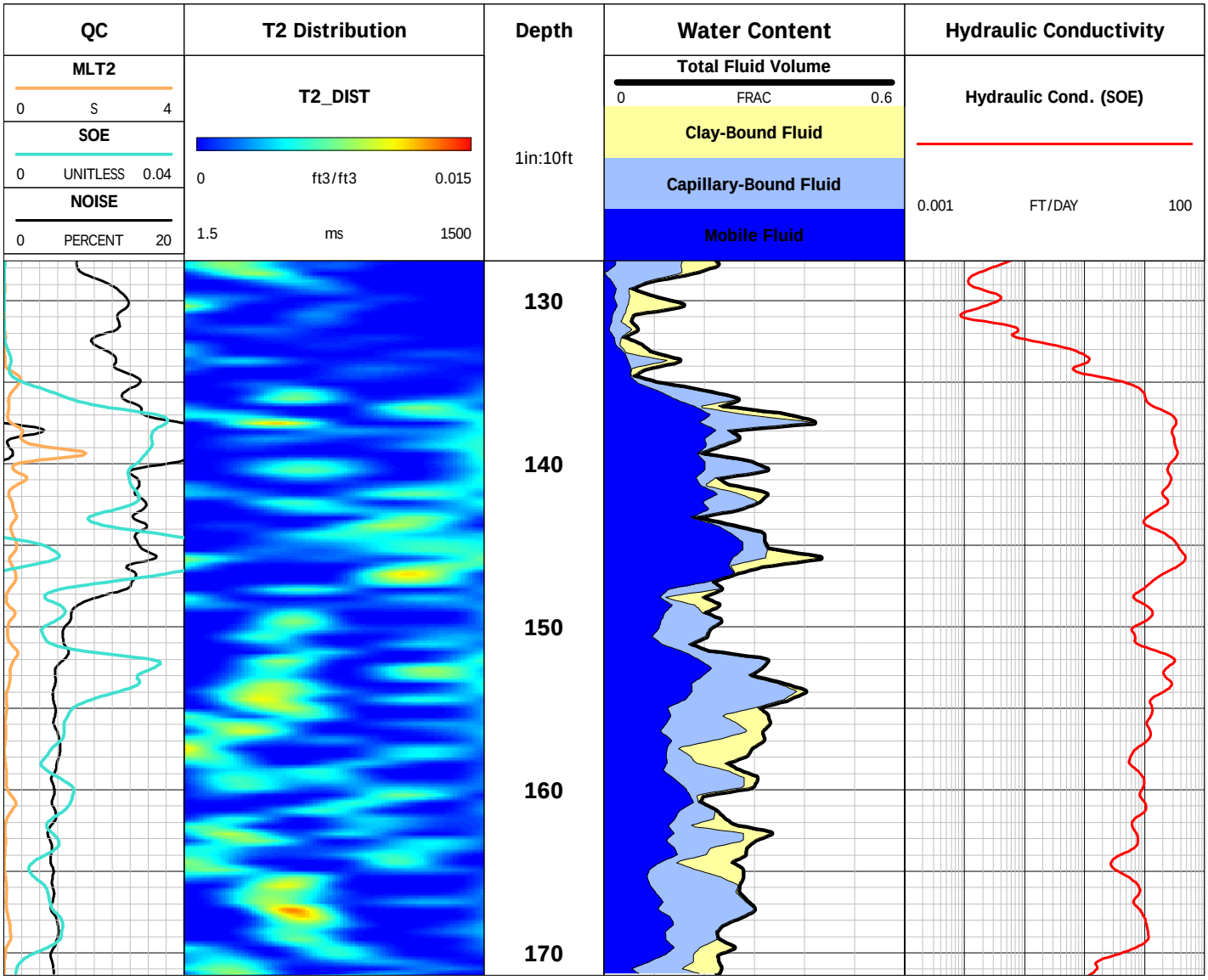
C_SDR: 8900
N_SDR: 1.0

C_SOE: 4200
SOE_win: 500

SOURCE FILE INFORMATION
==========

Seed file:
C:\Users\Kent.Lewis\Documents\CDM Smith\SLC MW-04\SLC MW-04_001.jrd


QC
MLT2
0 S 4
SOE
0 UNITLESS 0.04
NOISE
0 PERCENT 20
T2 Distribution
T2_DIST
0 ft3/ft3 0.015
1.5 ms 1500
Depth
1in:10ft
40
50
60
70
80
90
100
110
120
Water Content
Total Fluid Volume
0 FRAC 0.6
Clay-Bound Fluid
Capillary-Bound Fluid
Mobile Fluid
Hydraulic Conductivity
Hydraulic Cond. (SOE)
0.001 FT/DAY 100


QC
MLT2
0 S 4
SOE
0 UNITLESS 0.04
NOISE
0 PERCENT 20
T2 Distribution
T2_DIST
0 ft3/ft3 0.015
1.5 ms 1500
Depth
1in:10ft
130
140
150
160
170
Water Content
Total Fluid Volume
0 FRAC 0.6
Clay-Bound Fluid
Capillary-Bound Fluid
Mobile Fluid
Hydraulic Conductivity
Hydraulic Cond. (SOE)
0.001 FT/DAY 100

borehole geophysics / hydrophysics

Nuclear Magnetic Resonance

Colog, Inc.
833 Hogback Dr.
Golden, CO 80403
colog.com

COMPANY: CDM Smith	**PROJECT:** 700 South/1600 East
DATE LOGGED: 13 November 2024	**WELL:** MW-13L

LOCATION:	Salt Lake City, UT.	**LOG MEASURED FROM:**	Ground Surface
FIELD ENGINEER(S):	C.K. Lewis	**CASING DIA. & INTERVAL:**	2 in PVC
WITNESSED BY:	N. Smith	**BOREHOLE DIAMETER:**	6 in
DEPTH DRILLER:	160 ft	**FLUID LEVEL DEPTH:**	NA
DEPTH LOGGER:	158.4 ft	**PROBE MODEL:**	JPZ175E

COMMENTS:

Hydraulic Conductivity estimated using Unconsolidated parameters.
SOE = Sum of Echoes

NMR Processed Parameters

Processing Parameters used to generate the results in this folder.
This file was auto-generated during data export

Date of Export: 20-Nov-2024 11:32:27
Version of Javelin Pro Plus used: 4.13.6

ACQUISITION METADATA
==========

	Tr1	Tr2
Averages (#):	6	36
Tr Recovery Time (sec):	2.00	0.10

PROCESSING OPTIONS
==========

Frequency indices included in stack: 1 2
Stacking method: Noise-weighted
Q-scaling: Applied

Depth Units: ft
Depth averaging method: samples
Depth averaging (# of samples): 2
Depth offset applied: 0.00

T2 Regularization: 30

HYDROLOGY ESTIMATORS
==========

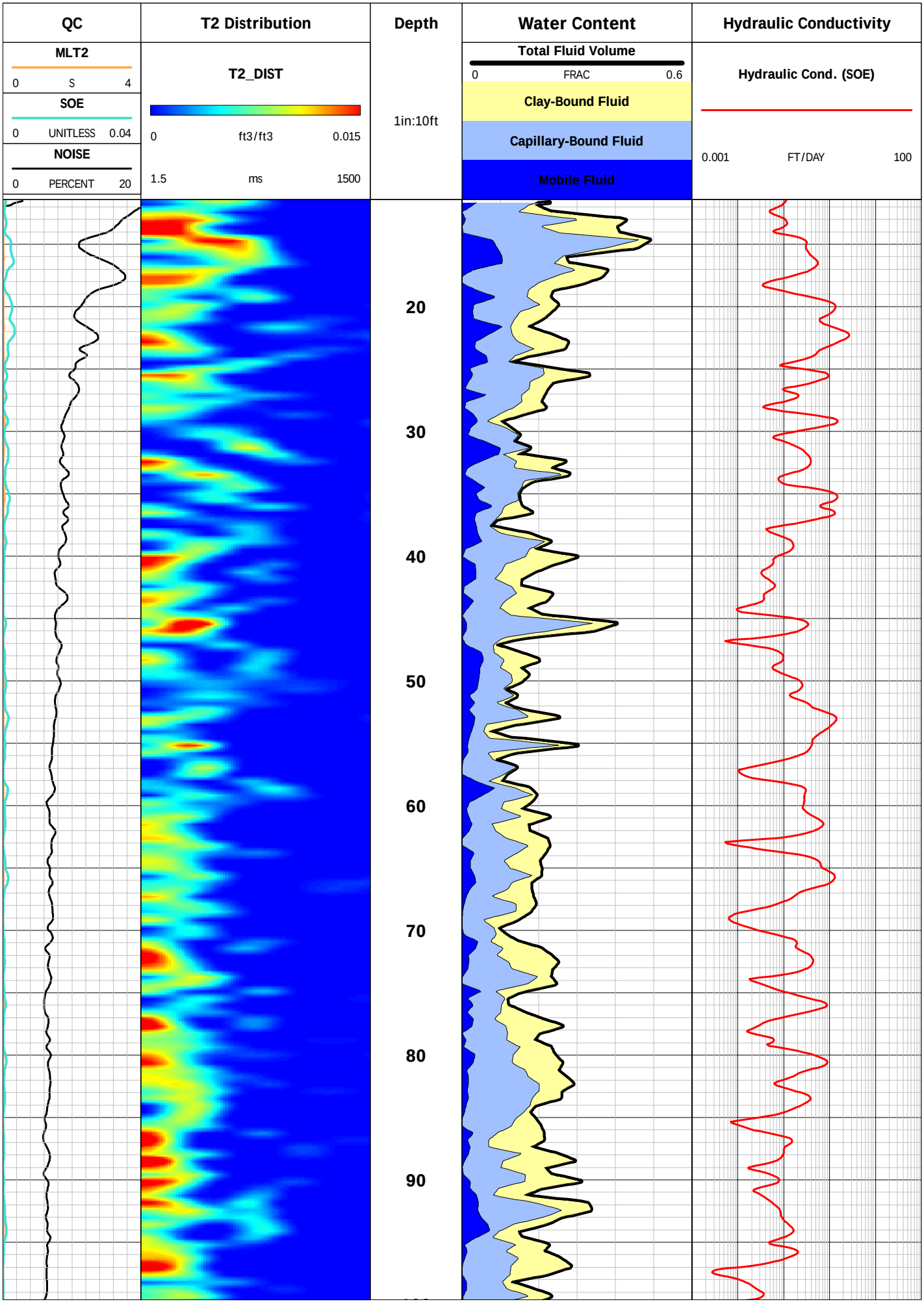
Clay cutoff (ms): 3
Cap. cutoff (ms): 33

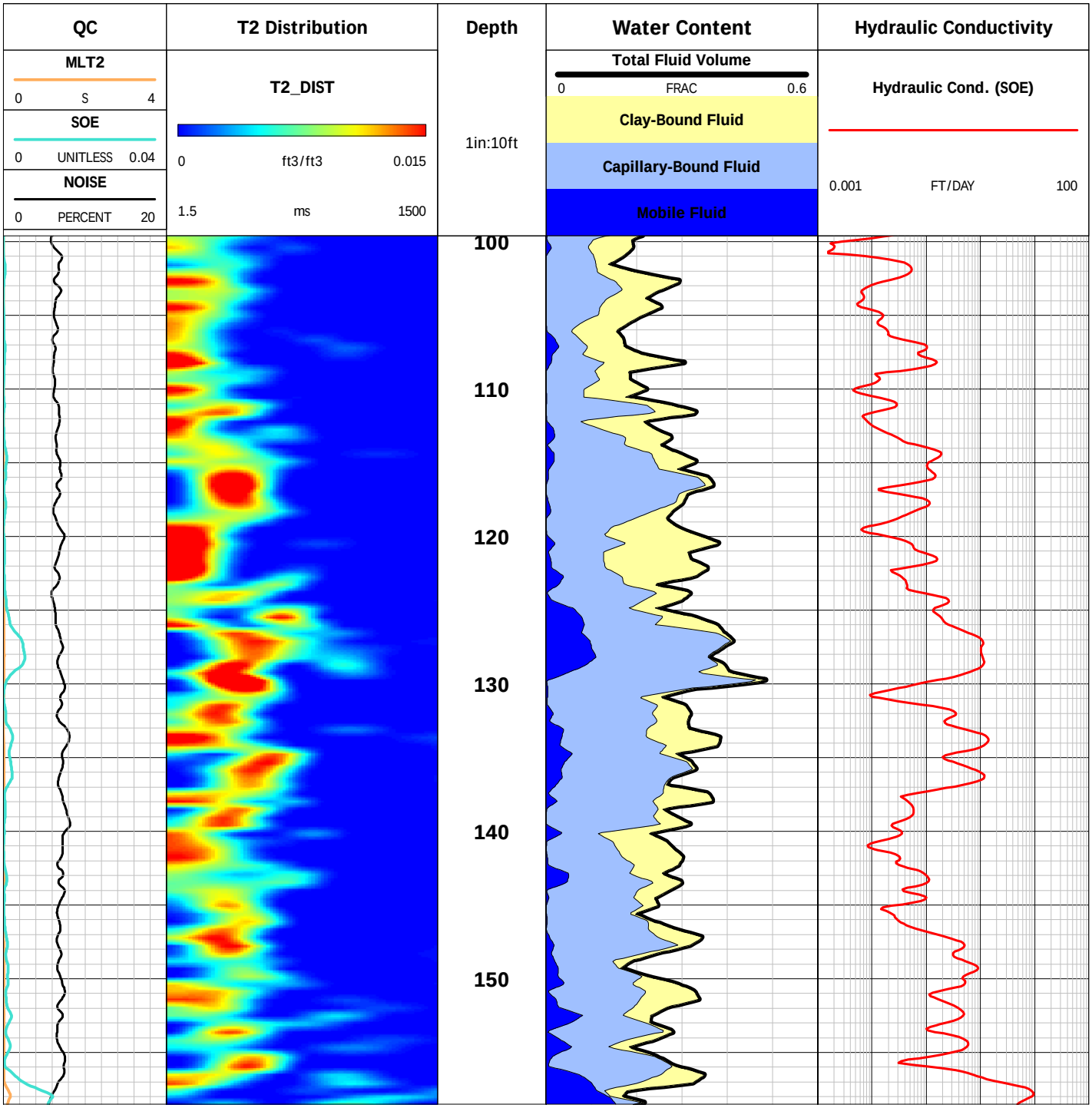
C_SDR: 8900
N_SDR: 1.0

C_SOE: 4200
SOE_win: 500

SOURCE FILE INFORMATION
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Seed file:
C:\Users\Kent.Lewis\Documents\CDM Smith\SLC MW-13L\SLC MW-13L_001.jrd


QC
MLT2
0 S 4
SOE
0 UNITLESS 0.04
NOISE
0 PERCENT 20
T2 Distribution
T2_DIST
0 ft3/ft3 0.015
1.5 ms 1500
Depth
1in:10ft
20
30
40
50
60
70
80
90
Water Content
Total Fluid Volume
0 FRAC 0.6
Clay-Bound Fluid
Capillary-Bound Fluid
Mobile Fluid
Hydraulic Conductivity
Hydraulic Cond. (SOE)
0.001 FT/DAY 100


QC
T2 Distribution
Depth
Water Content
Hydraulic Conductivity
MLT2
0 S 4
SOE
0 UNITLESS 0.04
NOISE
0 PERCENT 20
T2_DIST
0 ft3/ft3 0.015
1.5 ms 1500
1in:10ft
Total Fluid Volume
0 FRAC 0.6
Clay-Bound Fluid
Capillary-Bound Fluid
Mobile Fluid
Hydraulic Cond. (SOE)
0.001 FT/DAY 100
100
110
120
130
140
150

borehole geophysics / hydrophysics

Nuclear Magnetic Resonance

Colog, Inc.
833 Hogback Dr.
Golden, CO 80403
colog.com

COMPANY: CDM Smith	**PROJECT:** 700 South/1600 East
DATE LOGGED: 14 November 2024	**WELL:** MW-20D

LOCATION:	Salt Lake City, UT.	**LOG MEASURED FROM:**	Ground Surface
FIELD ENGINEER(S):	C.K. Lewis	**CASING DIA. & INTERVAL:**	2 in PVC
WITNESSED BY:	N. Smith	**BOREHOLE DIAMETER:**	6 in
DEPTH DRILLER:	150 ft	**FLUID LEVEL DEPTH:**	NA
DEPTH LOGGER:	127.5 ft	**PROBE MODEL:**	JPZ175E

COMMENTS:

Hydraulic Conductivity estimated using Unconsolidated parameters.
SOE = Sum of Echoes

NMR Processed Parameters

Processing Parameters used to generate the results in this folder.
This file was auto-generated during data export

Date of Export: 20-Nov-2024 15:18:25
Version of Javelin Pro Plus used: 4.13.6

ACQUISITION METADATA
==========

	Tr1	Tr2
Averages (#):	6	36
Tr Recovery Time (sec):	2.00	0.10

PROCESSING OPTIONS
==========

Frequency indices included in stack: 1 2
Stacking method: Noise-weighted
Q-scaling: Applied

Depth Units: ft
Depth averaging method: samples
Depth averaging (# of samples): 2
Depth offset applied: 0.00

T2 Regularization: 30

HYDROLOGY ESTIMATORS
==========

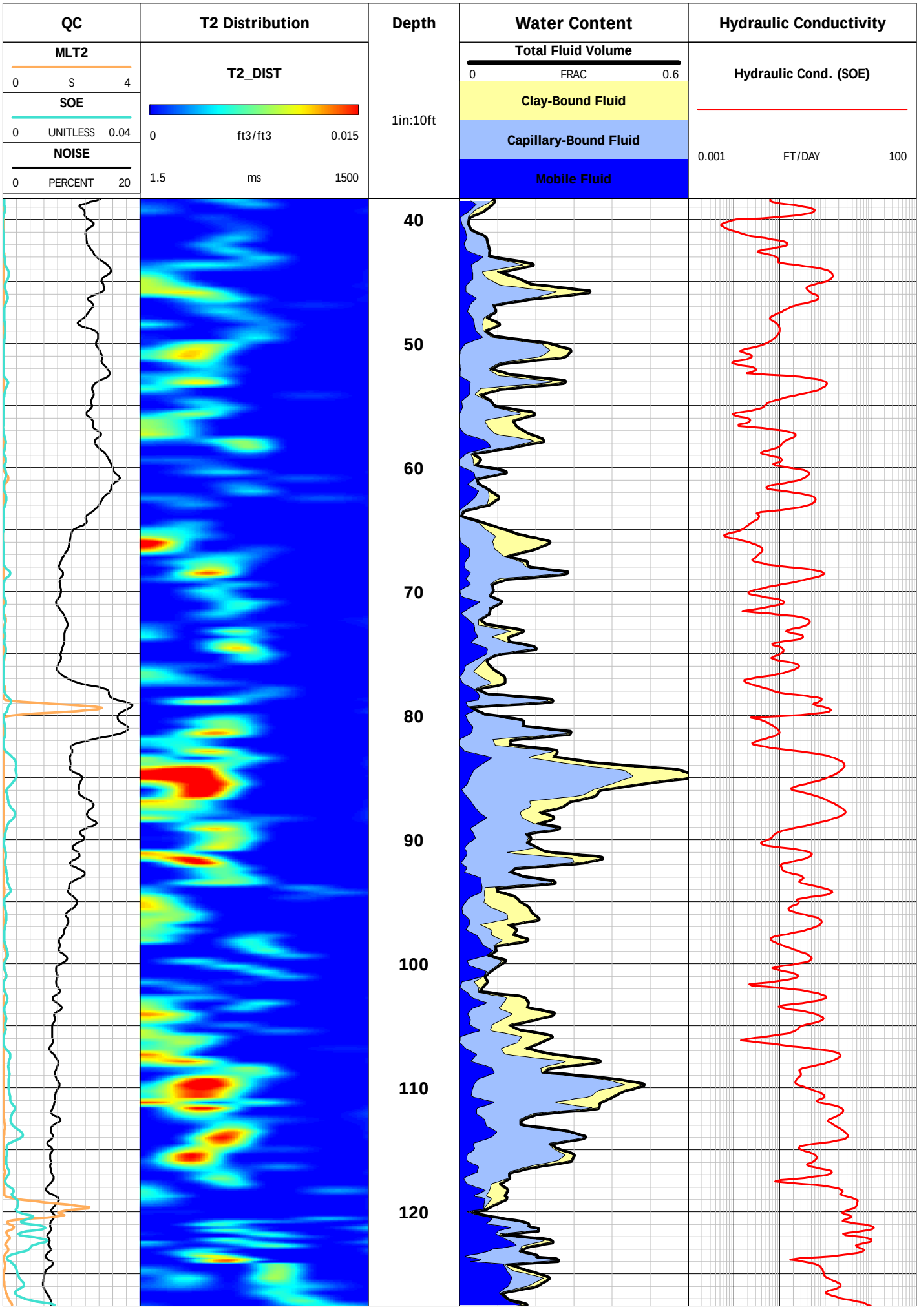
Clay cutoff (ms): 3
Cap. cutoff (ms): 33

C_SDR: 8900
N_SDR: 1.0

C_SOE: 4200
SOE_win: 500

SOURCE FILE INFORMATION
==========

Seed file:
C:\Users\Kent.Lewis\Documents\CDM Smith\SLC MW-20D combined\SLC MW-20D_001.jrd


QC
MLT2
0 S 4
SOE
0 UNITLESS 0.04
NOISE
0 PERCENT 20
T2 Distribution
T2_DIST
0 ft3/ft3 0.015
1.5 ms 1500
Depth
1in:10ft
40
50
60
70
80
90
100
110
120
Water Content
Total Fluid Volume
0 FRAC 0.6
Clay-Bound Fluid
Capillary-Bound Fluid
Mobile Fluid
Hydraulic Conductivity
Hydraulic Cond. (SOE)
0.001 FT/DAY 100

borehole geophysics / hydrophysics

Nuclear Magnetic Resonance

Colog, Inc.
833 Hogback Dr.
Golden, CO 80403
colog.com

COMPANY: CDM Smith	**PROJECT:** 700 South/1600 West
DATE LOGGED: 11 November 2024	**WELL:** MW-45

LOCATION:	Salt Lake City, UT.	**LOG MEASURED FROM:**	Ground Surface
FIELD ENGINEER(S):	C.K. Lewis	**CASING DIA. & INTERVAL:**	2 in PVC
WITNESSED BY:	N. Smith	**BOREHOLE DIAMETER:**	7 in
DEPTH DRILLER:	210 ft	**FLUID LEVEL DEPTH:**	NA
DEPTH LOGGER:	42.3 ft	**PROBE MODEL:**	JPZ175E

COMMENTS:

Hydraulic Conductivity estimated using Unconsolidated parameters.
SOE = Sum of Echoes

NMR Processed Parameters

Processing Parameters used to generate the results in this folder.
This file was auto-generated during data export

Date of Export: 20-Nov-2024 11:25:56
Version of Javelin Pro Plus used: 4.13.6

ACQUISITION METADATA
==========

	Tr1	Tr2
Averages (#):	6	36
Tr Recovery Time (sec):	2.00	0.10

PROCESSING OPTIONS
==========

Frequency indices included in stack: 1 2
Stacking method: Noise-weighted
Q-scaling: Applied

Depth Units: ft
Depth averaging method: samples
Depth averaging (# of samples): 2
Depth offset applied: 0.00

T2 Regularization: 30

HYDROLOGY ESTIMATORS
==========

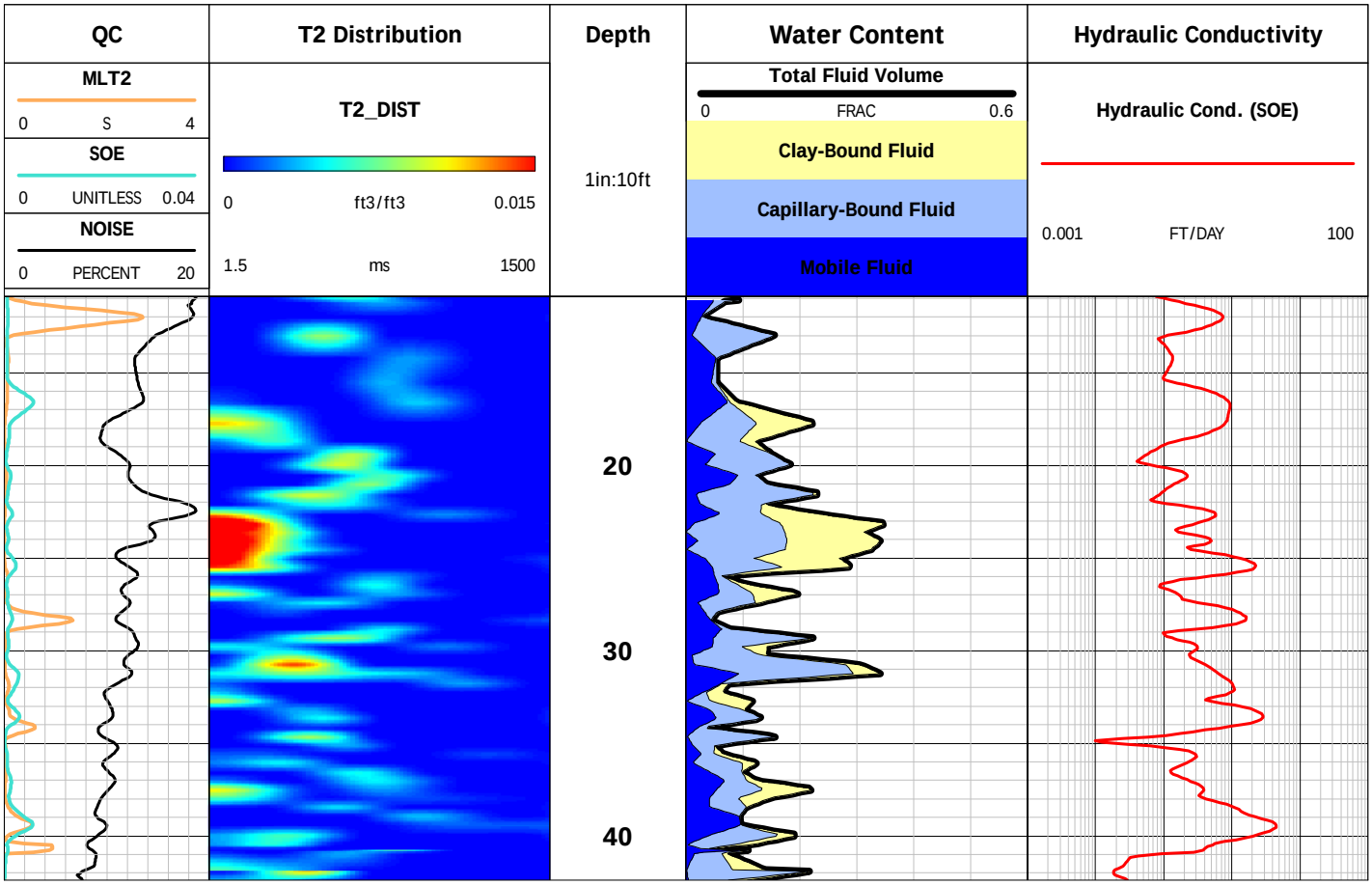
Clay cutoff (ms): 3
Cap. cutoff (ms): 33

C_SDR: 8900
N_SDR: 1.0

C_SOE: 4200
SOE_win: 500

SOURCE FILE INFORMATION
==========

Seed file:
C:\Users\Kent.Lewis\Documents\CDM Smith\SCL MW-45\SCL MW-45_001.jrd


QC
MLT2
0
S
4
SOE
0
UNITLESS
0.04
NOISE
0
PERCENT
20
T2 Distribution
T2_DIST
0
ft3/ft3
0.015
1.5
ms
1500
Depth
1in:10ft
20
30
40
Water Content
Total Fluid Volume
0
FRAC
0.6
Clay-Bound Fluid
Capillary-Bound Fluid
Mobile Fluid
Hydraulic Conductivity
Hydraulic Cond. (SOE)
0.001
FT/DAY
100

Appendix L Investigation-Derived Waste Manifests

Special Waste Profile

Disposal Facility: Wasatch Regional Landfill

Waste Profile #:

Sales Rep #:

I. Generator Information

Generator Name: Veterans Health Administration CERCLA Program

Generator Site Address: 500 Foothill Drive Mail Code 138 Building 6 CERCLA Program

City: Salt Lake City County: Salt Lake State: UT Zip: 84148

State ID/Reg No: N/A State Approval/Waste Code: N/A NAICS:

Generator Mailing Address: 500 Foothill Drive Mail Code 138 Building 6 CERCLA Program

City: Salt Lake City County: Salt Lake State: UT Zip: 84148

Generator Contact Name: William John Email: william.john@va.gov

Phone Number: 801-582-1565 Ext: 6603 Fax Number:

II. Billing Information

Bill To: Capitol Environmental Services, Inc. Contact Name: Ben Sisti

Billing Address: PO Box 9499 Email: apayable@capitolenv.com

City: Newark State: DE Zip: 19714 Phone: 732-672-9476

III. Waste Stream Information

Name of Waste: SOIL CUTTINGS from drilling Monitoring Wells

Process Generating Waste: Waste soil generated from installation of boring and monitoring wells at area contaminated with chlorinated solvents. Waste is not a listed waste. Source is undetermined.

Type of Waste: Pollution Control Physical State: Solid

Method of Shipment: Bulk Estimated Volume: 120 Volume Type: Cubic Yards

Frequency: Ongoing Disposal Consideration: Landfill

IV. Representative Sample Certification

☐ **No Sample Taken** ☑ **Sample Taken** Type of Sample: Composite

Is the representative sample collected to prepare this profile and laboratory analysis, collected in accordance with U.S. EPA 40 CFR 261.20(c) guidelines or equivalent? ☑ **Yes** ☐ **No**

Sample Date: Jun 3, 2024

Sample ID Numbers or SDS: IDW01-SB060324,

Remember to attach Laboratory Analytical Report (and/or Material Safety Data Sheet) including Chain of Custody and required parameters provided for this profile.

5692f308-882b-4ff8-a7e1-df7a3e731532

Special Waste Profile

REPUBLIC SERVICES

V. Physical Characteristics of Waste

	Characteristic Components (must equal 100%):	% By Weight (out of 100% - ranges acceptable):
1.	Soil	low: 95% - high: 100%
2.	Debris (plastic, concrete, asphalt)	low: 0% - high: 5%

V. Physical Characteristics of Waste cont.

Color: Brown ()

Odor (describe):	Does Waste Contain Free Liquids?	% Solids:	pH:	Flash Point:
none	☐ Yes ☑ No	100%	N/A	N/A °F

Attach Laboratory Analytical Report (and/or Material Safety Data Sheet) including Chain of Custody and required parameters provided for this profile.

RCRA Regulatory Questions

1.	Does this waste or generating process contain regulated concentrations of the following Pesticides and/ or Herbicides: Chlordane, Endrin, Heptachlor (and its epoxides), Lindane, Methoxychlor, Toxaphene, 2,4-D, or 2,4,5-TP Silvex as defined in 40 CFR 261.33?	☐ Yes	☑ No
2.	Does this waste contain reactive sulfides (greater than 500 ppm) or reactive cyanide (greater than 250 [reference 40 CFR 261.23(a)(5)]?	☐ Yes	☑ No
3.	Does this waste contain regulated concentrations of Polychlorinated Biphenyls (PCBs) as defined in 40 CFR Part 761?	☐ Yes	☑ No
4.	Does this waste contain concentrations of listed hazardous wastes defined in 40 CFR 261.31, 261.32, 261.33, including RCRA F-Listed Solvents?	☐ Yes	☑ No
5.	Has this waste been delisted under 40 CFR 260.20 and 260.22? If yes, attach the final decision to delist the waste as published in the Federal Register.	☐ Yes	☑ No
6.	Does this waste exhibit a Hazardous Characteristic as defined by Federal and/or State regulations?	☐ Yes	☑ No
7.	Does this waste contain regulated concentrations of 2,3,7,8-Tetrachlorodibenzodioxin (2,3,7,8-TCCD), or any other dioxin as defined in 40 CFR 261.31?	☐ Yes	☑ No
8.	Is this a regulated Medical or Infectious Waste as defined by Federal and/or State regulations?	☐ Yes	☑ No
9.	Is this a regulated Radioactive Waste as defined by Federal and/or State regulations?	☐ Yes	☑ No
10.	Is this a solid waste that is not a hazardous waste in accordance with 40 CFR 261.4(b)? If yes, please provide the corresponding regulatory citation.	☐ Yes	☑ No

Republic Services Waste Handling Questions

1.	Does this waste generate heat or react when contacted with water/moisture?	☐ Yes	☑ No
2.	Does the waste contain sulfur or sulfur by-products?	☐ Yes	☑ No
3.	Is this waste generated at a State or Federal Superfund cleanup site subject to regulation under CERCLA?	☑ Yes	☐ No
4.	Is this waste from a TSD facility, TSD-like facility or consolidator (i.e. multiple wastes/multiple generators)? . If yes, please provide clarification.	☐ Yes	☑ No

5692f308-882b-4ff8-a7e1-df7a3e731532

VI. Certification

I hereby certify that I have knowledge about the waste material being offered for disposal ("Waste") and have the requisite authority to bind the Generator to the information contained in this Special Waste Profile ("Profile"). I further certify that to the best of my knowledge and belief, the information contained herein is a true, complete and accurate description of the Waste and all known or suspected hazards have been disclosed. All Analytical Results/ Safety Data Sheets submitted are truthful and complete and are representative of the Waste.

I further certify that by utilizing this Profile, neither myself nor any other employee or representative of the company identified below ("Company") will deliver for disposal or attempt to deliver for disposal any Waste that: (i) is classified as toxic waste, hazardous waste or infectious waste; (ii) that does not conform to this Profile; or (iii) that this Disposal Facility is prohibiting from accepting by law. I shall immediately give written notice of any change or condition pertaining to the Waste not provided herein. Our Company hereby agrees to fully indemnify this Disposal Facility against any damages resulting from this Profile or Certification being inaccurate or untrue.

I understand that by attaching an electronic signature, I am signing this document and Company consents to complete this transaction and receive all related communications electronically, and agrees this document will be binding as though it had been physically signed. A printout of this Profile may be accepted with the same authority as the original.

William John		
Authorized Representative Name (Printed)	Title (Printed)	Company Name
	Jul 12, 2024	
Authorized Representative Signature	Date	

5692f308-882b-4ff8-a7e1-df7a3e731532

Republic Services

18500 N. Allied Way, Phoenix, AZ 85054

SPECIAL WASTE DEPARTMENT DECISION

	Waste Profile #	Expiration Date	
	41862418474	12/11/2025	

I. Decision Request: ☑ Initial ☐ Recertification ☐ Change

Disposal Facility: 4186 - Wasatch LF

Generator Name: Veterans Health Administration CERCLA Program

Generator Site Address: 500 Foothill Drive Mail Code 138 Building 6 CERCLA

City: Salt Lake City **County:** **State:** UT **Zip:**

Name of Waste: Non-Hazardous Groundwater

Estimated Annual Volume: 75000 Gallons

II. Special Waste Department Decision: ◉ Approved ○ Rejected

Management Method(s): ☐ Landfill ☑ Solidification ☐ Bioremediation ☐ Deep Well ☐ Transfer Facility

Problematic Special Waste according to Republic? ○ Yes ◉ No

If yes, which one?

Approved by Special Waste Review Committee? ○ Yes ○ No ◉ Not Applicable

Precautions, Conditions or Limitations on Approval

SOLIDIFICATION REQUIRED. Waste containing free liquid or failing the paint filter test must be solidified immediately upon receipt at the landfill facility. Once the material is able to pass a paint filter test, it is acceptable for landfill disposal.
Proper PPE must be worn when handling this material.

Special Waste Analyst Signature: Stephen Brown **Name (Printed):** Stephen Brown

Date: 12/11/2024

III. Facility Decision: ○ Approved ○ Rejected

Precautions, Conditions or Limitations on Approval

By signing below, the General Manager or Designee agrees that a fully executed Special Waste Service Agreement is on file for this profile and that the special waste file is complete.

General Manager or Designee: _____ **Name (Printed):** _____

Date: 12/11/2024

Docusign Envelope ID: B960ED8B-1D65-4F93-A5A3-1567E480066C

Special Waste Profile

Disposal Facility: Wasatch Regional Landfill

Waste Profile #: 4186 24 18474

Sales Rep #: 269

I. Generator Information

Generator Name: Veterans Health Administration CERCLA Program

Generator Site Address: 500 Foothill Drive Mail Code 138 Building 6 CERCLA Program

City: Salt Lake City County: Salt Lake State: UT Zip: 84148

State ID/Reg No: State Approval/Waste Code: N/A NAICS:

Generator Mailing Address: 500 Foothill Drive Mail Code 138 Building 6 CERCLA Program

City: Salt Lake City County: Salt Lake State: UT Zip: 84148

Generator Contact Name: Shannon Smith Email: Shannon.Smith92@va.gov

Phone Number: 801-582-1565 Ext: 2021 Fax Number:

II. Billing Information

Bill To: Capitol Environmental Services, Inc. Contact Name: Ben Sisti

Billing Address: PO Box 9499 Email: apayable@capitolenv.com

City: Newark State: DE Zip: 19714 Phone: 732-672-9476

III. Waste Stream Information

Name of Waste: Non-hazardous Groundwater

Process Generating Waste: Water generated from an aquifer performance (pump test) from monitoring wells at the 700 South 1600 East PCE Plume Superfund Site. The site is investigating groundwater containing chlorinated solvents. The contaminant source is not known. The contaminant of concern is tetrachloroethene (PCE). The water is not a listed waste. Drill cuttings from the installation of these monitoring wells was approved into Wasatch Regional on profile #41862410443. The site is a hospital facility. It's been a hospital since 1948. Previously it was part of Ft. Douglas. https://www.va.gov/salt-lake-city-health-care/about-us/history/

Type of Waste: Pollution Control Physical State: Liquid

Method of Shipment: Bulk Estimated Volume: 75000 Volume Type: Gallons

Frequency: One Time Disposal Consideration: Solidification

IV. Representative Sample Certification

☐ **No Sample Taken** ☑ **Sample Taken** Type of Sample: Grab

Is the representative sample collected to prepare this profile and laboratory analysis, collected in accordance with U.S. EPA 40 CFR 261.20(c) guidelines or equivalent? ☑ **Yes** ☐ **No**

Sample Date: Nov 1, 2024

Sample ID Numbers or SDS: IDW09-GW11012024,

4a4126d1-7936-4b51-9338-2650f2518243

Remember to attach Laboratory Analytical Report (and/or Material Safety Data Sheet) including Chain of Custody and required parameters provided for this profile.

Docusign Envelope ID: B960ED8B-1D65-4F93-A5A3-1567E480066C

Special Waste Profile

REPUBLIC SERVICES

V. Physical Characteristics of Waste

	Characteristic Components (must equal 100%):	% By Weight (out of 100% - ranges acceptable):
1.	water	typical/actual: 100%

V. Physical Characteristics of Waste cont.

Color: Colorless (Brown)

Odor (describe):	Does Waste Contain Free Liquids?	% Solids:	pH:	Flash Point:
none	☑ Yes ☐ No	1% - 2%	5 - 9	>150 °F

Attach Laboratory Analytical Report (and/or Material Safety Data Sheet) including Chain of Custody and required parameters provided for this profile.

RCRA Regulatory Questions

1.	Does this waste or generating process contain regulated concentrations of the following Pesticides and/ or Herbicides: Chlordane, Endrin, Heptachlor (and its epoxides), Lindane, Methoxychlor, Toxaphene, 2,4-D, or 2,4,5-TP Silvex as defined in 40 CFR 261.33?	☐ Yes	☑ No
2.	Does this waste contain reactive sulfides (greater than 500 ppm) or reactive cyanide (greater than 250 [reference 40 CFR 261.23(a)(5)]?	☐ Yes	☑ No
3.	Does this waste contain regulated concentrations of Polychlorinated Biphenyls (PCBs) as defined in 40 CFR Part 761?	☐ Yes	☑ No
4.	Does this waste contain concentrations of listed hazardous wastes defined in 40 CFR 261.31, 261.32, 261.33, including RCRA F-Listed Solvents?	☐ Yes	☑ No
5.	Has this waste been delisted under 40 CFR 260.20 and 260.22? If yes, attach the final decision to delist the waste as published in the Federal Register.	☐ Yes	☑ No
6.	Does this waste exhibit a Hazardous Characteristic as defined by Federal and/or State regulations?	☐ Yes	☑ No
7.	Does this waste contain regulated concentrations of 2,3,7,8-Tetrachlorodibenzodioxin (2,3,7,8-TCCD), or any other dioxin as defined in 40 CFR 261.31?	☐ Yes	☑ No
8.	Is this a regulated Medical or Infectious Waste as defined by Federal and/or State regulations?	☐ Yes	☑ No
9.	Is this a regulated Radioactive Waste as defined by Federal and/or State regulations?	☐ Yes	☑ No
10.	Is this a solid waste that is not a hazardous waste in accordance with 40 CFR 261.4(b)? If yes, please provide the corresponding regulatory citation.	☐ Yes	☑ No

Republic Services Waste Handling Questions

1.	Does this waste generate heat or react when contacted with water/moisture?	☐ Yes	☑ No
2.	Does the waste contain sulfur or sulfur by-products?	☐ Yes	☑ No
3.	Is this waste generated at a State or Federal Superfund cleanup site subject to regulation under CERCLA?	☑ Yes	☐ No
4.	Is this waste from a TSD facility, TSD-like facility or consolidator (i.e. multiple wastes/multiple generators)? . If yes, please provide clarification.	☐ Yes	☑ No

4a4126d1-7936-4b51-9338-2650f2518243

Docusign Envelope ID: B960ED8B-1D65-4F93-A5A3-1567E480066C

Special Waste Profile

VI. Certification

I hereby certify that I have knowledge about the waste material being offered for disposal ("Waste") and have the requisite authority to bind the Generator to the information contained in this Special Waste Profile ("Profile"). I further certify that to the best of my knowledge and belief, the information contained herein is a true, complete and accurate description of the Waste and all known or suspected hazards have been disclosed. All Analytical Results/ Safety Data Sheets submitted are truthful and complete and are representative of the Waste.

I further certify that by utilizing this Profile, neither myself nor any other employee or representative of the company identified below ("Company") will deliver for disposal or attempt to deliver for disposal any Waste that: (i) is classified as toxic waste, hazardous waste or infectious waste; (ii) that does not conform to this Profile; or (iii) that this Disposal Facility is prohibiting from accepting by law. I shall immediately give written notice of any change or condition pertaining to the Waste not provided herein. Our Company hereby agrees to fully indemnify this Disposal Facility against any damages resulting from this Profile or Certification being inaccurate or untrue.

I understand that by attaching an electronic signature, I am signing this document and Company consents to complete this transaction and receive all related communications electronically, and agrees this document will be binding as though it had been physically signed. A printout of this Profile may be accepted with the same authority as the original.

Shannon Smith	CERCLA Program Manager	SLC VA Medical Center
Authorized Representative Name (Printed)	Title (Printed)	Company Name
Signed by: Shannon Smith 90778245377C438...		Dec 11, 2024
Authorized Representative Signature		Date

4a4126d1-7936-4b51-9338-2650f2518243

REPUBLIC SERVICES

NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

1381814

If waste is asbestos waste, complete Sections I, II, III and IV
If waste is **NOT** asbestos waste, complete Sections I, II and III

I. GENERATOR (Generator completes Ia-r)

a. Generator's US EPA ID Number	b. Manifest Document Number	c. Page 1 of
N/A UTD981548985	1381814	1

d. Generator's Name and Location:
Veterans Health Administration CERCLA Program
500 Foothill Dr. Mail Code 138 Bldg 6 CERCLA Program
Salt Lake City, UT 84148
f. Phone:

e. Generator's Mailing Address:
500 Foothill Dr. Mail Code 138 Building 6 CERCLA Program
Salt Lake City, UT 84148 Attn: William John (801) 582-1565
g. Phone:

If owner of the generating facility differs from the generator, provide:
h. Owner's Name:

CESI # Bsisti
i. Owner's Phone No.:

j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	m. Containers Type	n. Total Quantity	o. Unit Wt/Vol
4186 241 0443 BIN # 5830	7-2027	Non-haz soil cuttings from drilling monitoring wells	001	CM	est.	Y

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

p. Generator Authorized Agent Name (Print)	q. Signature	r. Date
Zane Kozarec		8-14-24

II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address:
MP Environmental Services, Inc.
1043 N. Industrial Park Circle
b. Phone: Grantsville, UT 84029 (877) 300-5111

c. Driver Name (Print)	d. Signature	e. Date
Shane Sellers		8-14-24

III. DESTINATION (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address:	c. US EPA Number	d. Discrepancy Indication Space:
Republic Wasatch Regional Landfill 8833 North Rowley Road b. North Skull Valley, UT 84029 (801) 924 8538		

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

e. Name of Authorized Agent (Print)	f. Signature	g. Date
Ashley Hare	Ashley Hare	8-14-24

IV. ASBESTOS (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:	c. Responsible Agency Name and Address:
b. Phone:	d. Phone:

e. Special Handling Instructions and Additional Information:

f. ☐ Friable ☐ Non-Friable ☐ Both % Friable % Non-Friable

OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

g. Operator's Name and Title (Print)	h. Signature	i. Date

*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both

REPUBLIC SERVICES

NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

1381813

If waste is asbestos waste, complete Sections I, II, III and IV
If waste is **NOT** asbestos waste, complete Sections I, II and III

I. GENERATOR (Generator completes Ia-r)

a. Generator's US EPA ID Number	b. Manifest Document Number	c. Page 1 of
NA UTD981548985	1381813	1

d. Generator's Name and Location:
Veterans Health Administration CERCLA Program
500 Foothill Dr. Mail Code 138 Bldg 6 CERCLA Program
Salt Lake City, UT 84148
f. Phone:

e. Generator's Mailing Address:
500 Foothill Dr. Mail Code 138 Building 6 CERCLA Program
Salt Lake City, UT 84148 Attn: William John (801) 582-1565
g. Phone:

If owner of the generating facility differs from the generator, provide:
h. Owner's Name:

CESI # B5150
i. Owner's Phone No.:

j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	m. Containers Type	n. Total Quantity	o. Unit Wt/Vol
4186 241 0443 BIN # 6145	7-2027	Non-haz soil cuttings from drilling monitoring wells	001	CM	est.	Y

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

p. Generator Authorized Agent Name (Print)	q. Signature	r. Date
Zane Kozarek		8/14/24

II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address:
MP Environmental Services, Inc.
1043 N. Industrial Park Circle
b. Phone: Grantsville, UT 84029 (877) 800-5111

c. Driver Name (Print)	d. Signature	e. Date
Chris Sullivan Joseph Room		8-14-24 8-14-24

III. DESTINATION (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address:	c. US EPA Number	d. Discrepancy Indication Space:
Republic Wasatch Regional Landfill 8833 North Rowley Road b. North Skull Valley, UT 84029 (801) 924 8538		

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

e. Name of Authorized Agent (Print)	f. Signature	g. Date
Ashley Hare	Ashley Hare	8.14.24

IV. ASBESTOS (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:	c. Responsible Agency Name and Address:
b. Phone:	d. Phone:

e. Special Handling Instructions and Additional Information:

f. ☐ Friable ☐ Non-Friable ☐ Both % Friable % Non-Friable

OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

g. Operator's Name and Title (Print)	h. Signature	i. Date

*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both

REPUBLIC SERVICES

NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

1381816

If waste is asbestos waste, complete Sections I, II, III and IV
If waste is **NOT** asbestos waste, complete Sections I, II and III

I. GENERATOR (Generator completes Ia-r)

a. Generator's US EPA ID Number	b. Manifest Document Number	c. Page 1 of
N/A UTD981548985	1381816	1

d. Generator's Name and Location:
Veterans Health Administration CERCLA Program
500 Foothill Dr. Mail Code 138 Bldg 6 CERCLA Program
Salt Lake City, UT 84148
f. Phone:

e. Generator's Mailing Address:
500 Foothill Dr. Mail Code 138 Building 6 CERCLA Program
Salt Lake City, UT 84148 Attn: William John (801) 582-1565
g. Phone:

If owner of the generating facility differs from the generator, provide:
h. Owner's Name:
CESI # BSI5B
i. Owner's Phone No.:

j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	m. Containers Type	n. Total Quantity	o. Unit Wt/Vol
4186 241 0443 BTW # 6159	7-2027	Non-haz soil cuttings from drilling monitoring wells	001	CM	est.	Y

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

p. Generator Authorized Agent Name (Print)	q. Signature	r. Date
Zane Kozarec	Zane Kozarec	9-14-24

II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address:
MP Environmental Services, Inc.
1043 N. Industrial Park Circle
b. Phone: Grantsville, UT 84029 (877) 800-5111

c. Driver Name (Print)	d. Signature	e. Date
Joseph Brown	Joseph Brown	8-15-24

III. DESTINATION (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address:	c. US EPA Number	d. Discrepancy Indication Space:
Republic Wasatch Regional Landfill 8833 North Rowley Road b. North Skull Valley, UT 84029 (801) 924 8538		

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

e. Name of Authorized Agent (Print)	f. Signature	g. Date
Ashley Hare	Ashley Hare	8.14.24

IV. ASBESTOS (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:	c. Responsible Agency Name and Address:
b. Phone:	d. Phone:

e. Special Handling Instructions and Additional Information:

f. ☐ Friable ☐ Non-Friable ☐ Both % Friable % Non-Friable

OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

g. Operator's Name and Title (Print)	h. Signature	i. Date

*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both

REV 04/19

DESTINATION RETURN

RS-F11A

REPUBLIC SERVICES

NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

1381815

If waste is asbestos waste, complete Sections I, II, III and IV
If waste is **NOT** asbestos waste, complete Sections I, II and III

I. GENERATOR (Generator completes Ia-r)

a. Generator's US EPA ID Number	b. Manifest Document Number	c. Page 1 of
NA UTD981548985	1381815	1

d. Generator's Name and Location:
Veterans Health Administration CERCLA Program
500 Foothill Dr. Mail Code 138 Bldg 6 CERCLA Program
Salt Lake City, UT 84148
f. Phone:

e. Generator's Mailing Address:
500 Foothill Dr. Mail Code 138 Building 6 CERCLA Program
Salt Lake City, UT 84148 Attn: William John (801) 582-1565
g. Phone:

If owner of the generating facility differs from the generator, provide:
h. Owner's Name:
i. Owner's Phone No.:
CESI # Bsisu

j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	m. Containers Type	n. Total Quantity	o. Unit Wt/Vol
BW#6049 4186 241 0443	7-2027	Non-haz soil cuttings from drilling monitoring wells	001	CM	est.	Y

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

p. Generator Authorized Agent Name (Print)	q. Signature	r. Date
Zane Kozorec		9/14/24

II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address:
MP Environmental Services, Inc.
1043 N. Industrial Park Circle
b. Phone: Grantsville, UT 84029 (877) 800-5111

c. Driver Name (Print)	d. Signature	e. Date
Chris Schlekeu		9-14-24

III. DESTINATION (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address:
Republic Wasatch Regional Landfill
8833 North Rowley Road
b. North Skull Valley, UT 84029 (801) 924 8538

c. US EPA Number
d. Discrepancy Indication Space:

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

e. Name of Authorized Agent (Print)	f. Signature	g. Date
Ashley Hare	Ashley Hare	8-14-24

IV. ASBESTOS (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:
b. Phone:

c. Responsible Agency Name and Address:
d. Phone:

e. Special Handling Instructions and Additional Information:

f. ☐ Friable ☐ Non-Friable ☐ Both % Friable % Non-Friable

OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

g. Operator's Name and Title (Print)	h. Signature	i. Date

*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both

REPUBLIC SERVICES

NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

1381817

If waste is asbestos waste, complete Sections I, II, III and IV
If waste is **NOT** asbestos waste, complete Sections I, II and III

Bn # 6489

I. GENERATOR (Generator completes Ia-r)

a. Generator's US EPA ID Number	b. Manifest Document Number	c. Page 1 of
N/A		1

d. Generator's Name and Location:
Veterans Health Administration CERCLA Program
500 Foothill Dr. Mail Code 138 Bldg 6 CERCLA Program
Salt Lake City, UT 84148
f. Phone:

e. Generator's Mailing Address:
500 Foothill Dr. Mail Code 138 Building 6 CERCLA Program
Salt Lake City, UT 84148 Attn: William John (801) 582-1565
g. Phone:

If owner of the generating facility differs from the generator, provide:

h. Owner's Name:

CESI # B5151
i. Owner's Phone No.:

j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	m. Containers Type	n. Total Quantity	o. Unit Wt/Vol
4186 241 0443	7-2027	Non-haz soil cuttings from drilling monitoring wells	001	CM	est.	Y

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

p. Generator Authorized Agent Name (Print)	q. Signature	r. Date
William John	WJohn	9/27/2024

II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address:
MP Environmental Services, Inc.
1043 N. Industrial Park Circle
b. Phone: Grantsville, UT 84029 (877) 800-5111

c. Driver Name (Print)	d. Signature	e. Date
GARY Hill	Gary Hill	9-27-24

III. DESTINATION (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address:
Republic Wasatch Regional Landfill
8833 North Rowley Road
b. North Skull Valley, UT 84029 (801) 924 8538

c. US EPA Number:

d. Discrepancy Indication Space:

I hereby certify that the above named material has been accepted and to the best of my knowledge, the foregoing is true and accurate.

e. Name of Authorized Agent (Print)	f. Signature	g. Date
Ashley Hare	Ashley Hare	9.27.24

IV. ASBESTOS (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:

b. Phone:

c. Responsible Agency Name and Address:

d. Phone:

e. Special Handling Instructions and Additional Information:

f. ☐ Friable ☐ Non-Friable ☐ Both % Friable % Non-Friable

OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

g. Operator's Name and Title (Print)	h. Signature	i. Date

*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both

REPUBLIC SERVICES

NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

724206

If waste is asbestos waste, complete Sections I, II, III and IV
If waste is NOT asbestos waste, complete Sections I, II and III

Bin 6077

I. GENERATOR (Generator completes Ia-r)

a. Generator's US EPA ID Number	b. Manifest Document Number	c. Page 1 of
N/A		1

d. Generator's Name and Location:	e. Generator's Mailing Address:
Veterans Health Administration CERCLA Program 500 Foothill Dr. Mail Code 138 Bldg 6 CERCLA Program Salt Lake City, UT 84148 f. Phone:	500 Foothill Dr. Mail Code 138 Building 6 CERCLA Program Salt Lake City, UT 84148 Attn: William John (801) 582-1565 g. Phone:
If owner of the generating facility differs from the generator, provide: h. Owner's Name:	CEST# Bsisth i. Owner's Phone No.:

j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	m. Containers Type	n. Total Quantity	o. Unit Wt/Vol
4186 241 0443	7-2027	Non-haz soil cuttings from drilling monitoring wells	001	CM	est.	Y

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

p. Generator Authorized Agent Name (Print)	q. Signature	r. Date
William John	WJohn	9/27/2024

II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address:
MP Environmental Services, Inc.
1043 N. Industrial Park Circle
b. Phone: Grantsville, UT 84029 (877) 800-5111

c. Driver Name (Print)	d. Signature	e. Date
GARY HILL	Gary Hill	9-27-24

III. DESTINATION (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address:	c. US EPA Number	d. Discrepancy Indication Space:
Republic Wasatch Regional Landfill 8833 North Rowley Road b. North Skull Valley, UT 84029 (801) 924 8538		

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

e. Name of Authorized Agent (Print)	f. Signature	g. Date
Ashley Hare	Ashley Hare	OCT. 3, 2024

IV. ASBESTOS (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:	c. Responsible Agency Name and Address:
b. Phone:	d. Phone:

e. Special Handling Instructions and Additional Information:

f. ☐ Friable ☐ Non-Friable ☐ Both % Friable % Non-Friable

OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

g. Operator's Name and Title (Print)	h. Signature	i. Date

*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both

REPUBLIC SERVICES

NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

724207

If waste is asbestos waste, complete Sections I, II, III and IV
If waste is **NOT** asbestos waste, complete Sections I, II and III

Bin # 5966

I. GENERATOR (Generator completes Ia-r)

a. Generator's US EPA ID Number	b. Manifest Document Number	c. Page 1 of
N/A	09-27-24 B	1

d. Generator's Name and Location:
Veterans Health Administration CERCLA Program
500 Foothill Dr. Mail Code 138 Bldg 6 CERCLA Program
Salt Lake City, UT 84148
f. Phone:

e. Generator's Mailing Address:
500 Foothill Dr. Mail Code 138 Building 6 CERCLA Program
Salt Lake City, UT 84148 Attn: William John (801) 582-1565
g. Phone:

If owner of the generating facility differs from the generator, provide:
h. Owner's Name:

CESI # Bsisti
i. Owner's Phone No.:

j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	m. Containers Type	n. Total Quantity	o. Unit Wt/Vol
4186 241 0443	7-2027	Non-haz soil cuttings from drilling monitoring wells	001	CM	est	Y

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

p. Generator Authorized Agent Name (Print)	q. Signature	r. Date
William John	WJohn	9/27/2024

II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address:
MP Environmental Services, Inc.
1043 N. Industrial Park Circle
b. Phone: Grantsville, UT 84029 (877) 800-5111

c. Driver Name (Print)	d. Signature	e. Date
Richard Orr Joseph Brown	Richard Orr	9-27-24 10-3-24

III. DESTINATION (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address:	c. US EPA Number	d. Discrepancy Indication Space:
Republic Wasatch Regional Landfill 8833 North Rowley Road b. North Skull Valley, UT 84029 (801) 924 8538		

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

e. Name of Authorized Agent (Print)	f. Signature	g. Date
Ashley Hone	Ashley Hone	Oct. 3, 2024

IV. ASBESTOS (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:	c. Responsible Agency Name and Address:
b. Phone:	d. Phone:

e. Special Handling Instructions and Additional Information:

f. ☐ Friable ☐ Non-Friable ☐ Both % Friable % Non-Friable

OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

g. Operator's Name and Title (Print)	h. Signature	i. Date

*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both

REPUBLIC SERVICES

NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

1381818

If waste is asbestos waste, complete Sections I, II, III and IV
If waste is **NOT** asbestos waste, complete Sections I, II and III

Bin #6266

I. GENERATOR (Generator completes Ia-r)

a. Generator's US EPA ID Number	b. Manifest Document Number	c. Page 1 of
N/A	09-27-24 A	1

d. Generator's Name and Location:
Veterans Health Administration CERCLA Program
500 Foothill Dr. Mail Code 138 Bldg 6 CERCLA Program
Salt Lake City, UT 84148
f. Phone:

e. Generator's Mailing Address:
500 Foothill Dr. Mail Code 138 Building 6 CERCLA Program
Salt Lake City, UT 84148 Attn: William John (801) 582-1565
g. Phone:

If owner of the generating facility differs from the generator, provide:
h. Owner's Name:

CESI # BSISH
i. Owner's Phone No.:

j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	m. Containers Type	n. Total Quantity	o. Unit Wt/Vol
4186 241 0443	7-2027	Non-haz soil cuttings from drilling monitoring wells	001	CM	est.	Y

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

p. Generator Authorized Agent Name (Print)	q. Signature	r. Date
William John	W John	9/27/2024

II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address:
MP Environmental Services, Inc.
1043 N. Industrial Park Circle
b. Phone: Grantsville, UT 84029 (877) 800-5111

c. Driver Name (Print)	d. Signature	e. Date
Richard Orr	Richard Orr	9-27-24

III. DESTINATION (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address:	c. US EPA Number	d. Discrepancy Indication Space:
Republic Wasatch Regional Landfill 8833 North Rowley Road b. North Skull Valley, UT 84029 (801) 924 8338		

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

e. Name of Authorized Agent (Print)	f. Signature	g. Date
Ashley Hare	Ashley Hare	Oct. 4, 2024

IV. ASBESTOS (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:	c. Responsible Agency Name and Address:
b. Phone:	d. Phone:

e. Special Handling Instructions and Additional Information:

f. ☐ Friable ☐ Non-Friable ☐ Both % Friable % Non-Friable

OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

g. Operator's Name and Title (Print)	h. Signature	i. Date

*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both

REPUBLIC SERVICES

NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

1381867

If waste is asbestos waste, complete Sections I, II, III and IV
If waste is **NOT** asbestos waste, complete Sections I, II and III

I. GENERATOR (Generator completes Ia-r)

a. Generator's US EPA ID Number	b. Manifest Document Number	c. Page 1 of
UTD 981 548 985	1381867	1

d. Generator's Name and Location:	e. Generator's Mailing Address:
Veterans Health Administration CERCLA Program 500 Foothill Dr. Mail Code 138 Bldg 6 CERCLA Program Salt Lake City, UT 84148 f. Phone:	500 Foothill Dr. Mail Code 138 Building 6 CERCLA Program Salt Lake City, UT 84148 Attn: Shannon Smith (801) 582-1565 g. Phone:
If owner of the generating facility differs from the generator, provide: h. Owner's Name:	i. Owner's Phone No.: CESI # Bsisti

j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	m. Containers Type	n. Total Quantity	o. Unit Wt/Vol
4186 241 8474	7-2027	Non-haz Groundwater	001	TT	est.	G

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

p. Generator Authorized Agent Name (Print)	q. Signature	r. Date
Zane Kozarec	[signature]	12/17/2024

II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address:
MP Environmental Services, Inc.
1043 N. Industrial Park Circle
Grantsville, UT 84029 (877) 800-5111
b. Phone:

c. Driver Name (Print)	d. Signature	e. Date
GARY Hill	[signature]	12-17-24

III. DESTINATION (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address:	c. US EPA Number	d. Discrepancy Indication Space:
Republic Wasatch Regional Landfill 8833 North Rowley Road North Skull Valley, UT 84029 (801) 924 8538 b.		

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

e. Name of Authorized Agent (Print)	f. Signature	g. Date
Ashley Hare	[signature]	Dec 17, 2024

IV. ASBESTOS (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:	c. Responsible Agency Name and Address:
b. Phone:	d. Phone:

e. Special Handling Instructions and Additional Information:

f. ☐ Friable ☐ Non-Friable ☐ Both % Friable % Non-Friable

OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

g. Operator's Name and Title (Print)	h. Signature	i. Date

*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both

REPUBLIC SERVICES

NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

1381868

If waste is asbestos waste, complete Sections I, II, III and IV
If waste is **NOT** asbestos waste, complete Sections I, II and III

12/17 - TRUCK #2

I. GENERATOR (Generator completes Ia-r)

a. Generator's US EPA ID Number	b. Manifest Document Number	c. Page 1 of
UTD 981 548 985	1381868	1

d. Generator's Name and Location:	e. Generator's Mailing Address:
Veterans Health Administration CERCLA Program 500 Foothill Dr. Mail Code 138 Bldg 6 CERCLA Program Salt Lake City, UT 84148 f. Phone:	500 Foothill Dr. Mail Code 138 Building 6 CERCLA Program Salt Lake City, UT 84148 Attn: Shannon Smith (801) 582-1565 g. Phone:
If owner of the generating facility differs from the generator, provide: h. Owner's Name:	i. Owner's Phone No.: CESI # Bsisti

j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	m. Containers Type	n. Total Quantity	o. Unit Wt/Vol
4186 241 8474	7-2027	Non-haz Groundwater	001	TT	est.	G

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

p. Generator Authorized Agent Name (Print)	q. Signature	r. Date
Zane Kozarec	[signature]	12/17/2024

II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address:
MP Environmental Services, Inc.
1043 N. Industrial Park Circle
Grantsville, UT 84029 (877) 800-5111
b. Phone:

c. Driver Name (Print)	d. Signature	e. Date
Richard RRR	[signature]	12-17-24

III. DESTINATION (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address:	c. US EPA Number	d. Discrepancy Indication Space:
Republic Wasatch Regional Landfill 8833 North Rowley Road North Skull Valley, UT 84029 (801) 924 8538 b.		

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

e. Name of Authorized Agent (Print)	f. Signature	g. Date
Ashley Hare	[signature]	DEC 17, 2024

IV. ASBESTOS (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:	c. Responsible Agency Name and Address:
b. Phone:	d. Phone:

e. Special Handling Instructions and Additional Information:

f. ☐ Friable ☐ Non-Friable ☐ Both % Friable % Non-Friable

OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

g. Operator's Name and Title (Print)	h. Signature	i. Date

*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both

REPUBLIC SERVICES

NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

1381870

If waste is asbestos waste, complete Sections I, II, III and IV
If waste is **NOT** asbestos waste, complete Sections I, II and III

12/17 - TRUCK #4

I. GENERATOR (Generator completes Ia-r)

a. Generator's US EPA ID Number	b. Manifest Document Number	c. Page 1 of
UTD 981 548 925	1381870	1

d. Generator's Name and Location:	e. Generator's Mailing Address:
Veterans Health Administration CERCLA Program 500 Foothill Dr. Mail Code 139 Bldg 6 CERCLA Program Salt Lake City, UT 84148 f. Phone:	500 Foothill Dr. Mail Code 139 Building 6 CERCLA Program Salt Lake City, UT 84148 Attn: Shannon Smith (801) 582-1565 g. Phone:
If owner of the generating facility differs from the generator, provide:	
h. Owner's Name:	i. Owner's Phone No.: CESI @ Baisti

j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	m. Containers Type	n. Total Quantity	o. Unit Wt/Vol
4136 241 8474	7-2027	Non-haz Groundwater	001	TT	est.	G

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

p. Generator Authorized Agent Name (Print)	q. Signature	r. Date
Zane Kozarc		12/17/2024

II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address:
MP Environmental Services, Inc.
1043 N. Industrial Park Circle
Grantsville, UT 84029 (877) 800-9111
b. Phone:

c. Driver Name (Print)	d. Signature	e. Date
GARY W. LC		12-7-24

III. DESTINATION (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address:	c. US EPA Number	d. Discrepancy Indication Space:
Republic Wasatch Regional Landfill 8813 North Rowley Road North Skull Valley, UT 84029 (801) 924 8538 b.		

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

e. Name of Authorized Agent (Print)	f. Signature	g. Date
Ashley Hale	Ashley Hale	Dec. 18, 2024

IV. ASBESTOS (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:	c. Responsible Agency Name and Address:
b. Phone:	d. Phone:

e. Special Handling Instructions and Additional Information:

f. ☐ Friable ☐ Non-Friable ☐ Both % Friable % Non-Friable

OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

g. Operator's Name and Title (Print)	h. Signature	i. Date

*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both

REPUBLIC SERVICES

NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

1381869

If waste is asbestos waste, complete Sections I, II, III and IV
If waste is **NOT** asbestos waste, complete Sections I, II and III

12/17/24 - Truck #3

I. GENERATOR (Generator completes Ia-r)

a. Generator's US EPA ID Number	b. Manifest Document Number	c. Page 1 of
UTD 981 548 985	1381869	1

d. Generator's Name and Location:
Veterans Health Administration CERCLA Program
500 Foothill Dr. Mail Code 138 Bldg 6 CERCLA Program
Salt Lake City, UT 84148
f. Phone:

e. Generator's Mailing Address:
500 Foothill Dr. Mail Code 138 Building 6 CERCLA Program
Salt Lake City, UT 84148 Attn: Shannon Smith (801) 582-1565
g. Phone:

If owner of the generating facility differs from the generator, provide:
h. Owner's Name:
i. Owner's Phone No.: CESI # Bsisti

j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	m. Containers Type	n. Total Quantity	o. Unit Wt/Vol
4186 241 8474	7-2027	Non-haz Groundwater	001	TT	est.	G

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

p. Generator Authorized Agent Name (Print)	q. Signature	r. Date
Zane Kozarc	Zane Kozarc	12/17/2024

II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address:
MP Environmental Services, Inc.
1043 N. Industrial Park Circle
Grantsville, UT 84029 (877) 800-5111
b. Phone:

c. Driver Name (Print)	d. Signature	e. Date
Zach Snyder	Zach Snyder	12-17-2024

III. DESTINATION (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address:	c. US EPA Number	d. Discrepancy Indication Space:
Republic Wasatch Regional Landfill 8833 North Rowley Road North Skull Valley, UT 84029 (801) 924 8538 b.		

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

e. Name of Authorized Agent (Print)	f. Signature	g. Date
Ashley Hare	Ashley Hare	DEC 18, 2024

IV. ASBESTOS (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:	c. Responsible Agency Name and Address:
b. Phone:	d. Phone:

e. Special Handling Instructions and Additional Information:

f. ☐ Friable ☐ Non-Friable ☐ Both % Friable % Non-Friable

OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

g. Operator's Name and Title (Print)	h. Signature	i. Date

*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both

REPUBLIC SERVICES

NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

1381871

If waste is asbestos waste, complete Sections I, II, III and IV
If waste is **NOT** asbestos waste, complete Sections I, II and III

Truck 5 – 12/18

I. GENERATOR (Generator completes Ia-r)

a. Generator's US EPA ID Number	b. Manifest Document Number	c. Page 1 of
UTD 981 548 985	1381871	1

d. Generator's Name and Location:
Veterans Health Administration CERCLA Program
500 Foothill Dr. Mail Code 138 Bldg 6 CERCLA Program
Salt Lake City, UT 84148
f. Phone:

e. Generator's Mailing Address:
500 Foothill Dr. Mail Code 138 Building 6 CERCLA Program
Salt Lake City, UT 84148 Attn: Shannon Smith (801) 582-1565
g. Phone:

If owner of the generating facility differs from the generator, provide:
h. Owner's Name:
i. Owner's Phone No.:

CESI # Bsisti

j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	m. Containers Type	n. Total Quantity	o. Unit Wt/Vol
4186 241 8474	7-2027	Non-haz Groundwater	001	TT	est.	G

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

p. Generator Authorized Agent Name (Print)	q. Signature	r. Date
Zane Kozarek	Zane Kozarek	12/18/2024

II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address:
MP Environmental Services, Inc.
1043 N. Industrial Park Circle
Grantsville, UT 84029 (877) 800-5111
b. Phone:

c. Driver Name (Print)	d. Signature	e. Date
Bram Vega	Bram Vega	12-18-24

III. DESTINATION (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address:
Republic Wasatch Regional Landfill
8833 North Rowley Road
North Skull Valley, UT 84029 (801) 924 8538
b.

c. US EPA Number

d. Discrepancy Indication Space:

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

e. Name of Authorized Agent (Print)	f. Signature	g. Date
Ashley Hare	Ashley Hare	Dec 18, 2024

IV. ASBESTOS (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:

b. Phone:

c. Responsible Agency Name and Address:

d. Phone:

e. Special Handling Instructions and Additional Information:

f. ☐ Friable ☐ Non-Friable ☐ Both % Friable % Non-Friable

OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

g. Operator's Name and Title (Print)	h. Signature	i. Date

*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both

REPUBLIC SERVICES

NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

1381872

If waste is asbestos waste, complete Sections I, II, III and IV
If waste is **NOT** asbestos waste, complete Sections I, II and III

12/18 - TRUCK 6

I. GENERATOR (Generator completes Ia-r)

a. Generator's US EPA ID Number	b. Manifest Document Number	c. Page 1 of
UTD 981 548 925	1381872	1

d. Generator's Name and Location:	e. Generator's Mailing Address:
Veterans Health Administration CERCLA Program 500 Foothill Dr. Mail Code 138 Bldg 6 CERCLA Program Salt Lake City, UT 84148 f. Phone:	500 Foothill Dr. Mail Code 138 Building 6 CERCLA Program Salt Lake City, UT 84148 Attn: Shannon Smith (801) 582-1565 g. Phone:
If owner of the generating facility differs from the generator, provide: h. Owner's Name:	i. Owner's Phone No.: CESI # Bsisti

j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	m. Containers Type	n. Total Quantity	o. Unit Wt/Vol
4186 241 8474	7-2027	Non-haz Groundwater	001	TT	est.	G

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

p. Generator Authorized Agent Name (Print)	q. Signature	r. Date
Zane Kozarec	Zane Kozarec	12/18/2024

II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address:
MP Environmental Services, Inc.
1043 N. Industrial Park Circle
Grantsville, UT 84029 (877) 800-5111
b. Phone:

c. Driver Name (Print)	d. Signature	e. Date
Zach Snyder	Zach Snyder	12-18-2024

III. DESTINATION (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address:	c. US EPA Number	d. Discrepancy Indication Space:
Republic Wasatch Regional Landfill 8833 North Rowley Road North Skull Valley, UT 84029 (801) 924 8538 b.		

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

e. Name of Authorized Agent (Print)	f. Signature	g. Date
Stacie M Hill	Stacie M. Hill	12/18/24

IV. ASBESTOS (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:	c. Responsible Agency Name and Address:
b. Phone:	d. Phone:

e. Special Handling Instructions and Additional Information:

f. ☐ Friable ☐ Non-Friable ☐ Both % Friable % Non-Friable

OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

g. Operator's Name and Title (Print)	h. Signature	i. Date

*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both

REPUBLIC SERVICES

NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

1381873

If waste is asbestos waste, complete Sections I, II, III and IV
If waste is **NOT** asbestos waste, complete Sections I, II and III

12/18 -Truck 7

I. GENERATOR (Generator completes Ia-r)

a. Generator's US EPA ID Number	b. Manifest Document Number	c. Page 1 of
UTD 981 548 985	1381873	1

d. Generator's Name and Location:
Veterans Health Administration CERCLA Program
500 Foothill Dr. Mail Code 138 Bldg 6 CERCLA Program
Salt Lake City, UT 84148
f. Phone:

e. Generator's Mailing Address:
500 Foothill Dr. Mail Code 138 Building 6 CERCLA Program
Salt Lake City, UT 84148 Attn: Shannon Smith (801) 582-1565
g. Phone:

If owner of the generating facility differs from the generator, provide:
h. Owner's Name:
i. Owner's Phone No.: CESI # Bsisti

j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	m. Containers Type	n. Total Quantity	o. Unit Wt/Vol
4186 241 8474	7-2027	Non-haz Groundwater	001	TT	est.	G

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

p. Generator Authorized Agent Name (Print)	q. Signature	r. Date
Zane Kozasa	Zane	12/18/2024

II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address:
MP Environmental Services, Inc.
1043 N. Industrial Park Circle
Grantsville, UT 84029 (877) 800-5111
b. Phone:

c. Driver Name (Print)	d. Signature	e. Date
X GARY HILL	Gary Hill	12-08-24

III. DESTINATION (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address:
Republic Wasatch Regional Landfill
8833 North Rowley Road
North Skull Valley, UT 84029 (801) 924 9538
b.

c. US EPA Number:
d. Discrepancy Indication Space:

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

e. Name of Authorized Agent (Print)	f. Signature	g. Date
Stacie M. Hill	Stacie M. Hill	12.18.24

IV. ASBESTOS (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:
b. Phone:

c. Responsible Agency Name and Address:
d. Phone:

e. Special Handling Instructions and Additional Information:

f. ☐ Friable ☐ Non-Friable ☐ Both % Friable % Non-Friable

OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

g. Operator's Name and Title (Print)	h. Signature	i. Date

*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both

REPUBLIC SERVICES

NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

1381874

If waste is asbestos waste, complete Sections I, II, III and IV
If waste is **NOT** asbestos waste, complete Sections I, II and III

I. GENERATOR (Generator completes Ia-r)

a. Generator's US EPA ID Number	b. Manifest Document Number	c. Page 1 of
UTD 981 548 985	1381874	1

d. Generator's Name and Location:	e. Generator's Mailing Address:
Veterans Health Administration CERCLA Program 500 Foothill Dr. Mail Code 138 Bldg 6 CERCLA Program Salt Lake City, UT 84148 f. Phone:	500 Foothill Dr. Mail Code 138 Building 6 CERCLA Program Salt Lake City, UT 84148 Attn: Shannon Smith (801) 582-1565 g. Phone:
If owner of the generating facility differs from the generator, provide: h. Owner's Name:	i. Owner's Phone No.: CESI # Bsisti

j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	m. Containers Type	n. Total Quantity	o. Unit Wt/Vol
4186 241 8474	7-2027	Non-haz Groundwater	001	TT	est.	G

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

p. Generator Authorized Agent Name (Print)	q. Signature	r. Date
Zane Kozarec	Zane Kozarec	12/18/2024

II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address:
MP Environmental Services, Inc.
1043 N. Industrial Park Circle
Grantsville, UT 84029 (877) 800-5111
b. Phone:

c. Driver Name (Print)	d. Signature	e. Date
Bfraun Vega	Bfraun Vega	12-18-24

III. DESTINATION (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address:	c. US EPA Number	d. Discrepancy Indication Space:
Republic Wasatch Regional Landfill 8833 North Rowley Road North Skull Valley, UT 84029 (801) 924 8538 b.		

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

e. Name of Authorized Agent (Print)	f. Signature	g. Date
Ashley Hare	Ashley Hare	Dec. 18, 2024

IV. ASBESTOS (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:	c. Responsible Agency Name and Address:
b. Phone:	d. Phone:

e. Special Handling Instructions and Additional Information:

f. ☐ Friable ☐ Non-Friable ☐ Both % Friable % Non-Friable

OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

g. Operator's Name and Title (Print)	h. Signature	i. Date

*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both

REPUBLIC SERVICES

NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

1381876

If waste is asbestos waste, complete Sections I, II, III and IV
If waste is **NOT** asbestos waste, complete Sections I, II and III

Truck 10 - 1218

I. GENERATOR (Generator completes Ia-r)

a. Generator's US EPA ID Number	b. Manifest Document Number	c. Page 1 of
UTD 981 548 985	1381876	1

d. Generator's Name and Location:
Veterans Health Administration CERCLA Program
500 Foothill Dr. Mail Code 138 Bldg 6 CERCLA Program
Salt Lake City, UT 84148
f. Phone:

e. Generator's Mailing Address:
500 Foothill Dr. Mail Code 138 Building 6 CERCLA Program
Salt Lake City, UT 84148 Attn: Shannon Smith (801) 582-1565
g. Phone:

If owner of the generating facility differs from the generator, provide:
h. Owner's Name:
i. Owner's Phone No.: CESI # Bsisti

j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	m. Containers Type	n. Total Quantity	o. Unit Wt/Vol
4186 241 8474	7-2027	Non-haz Groundwater	001	TT	est.	G

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

p. Generator Authorized Agent Name (Print)	q. Signature	r. Date
Zark Kozarec		12/18/2024

II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address:
MP Environmental Services, Inc.
1043 N. Industrial Park Circle
Grantsville, UT 84029 (877) 800-5111
b. Phone:

c. Driver Name (Print)	d. Signature	e. Date
GARY HILL		12-18-24

III. DESTINATION (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address:	c. US EPA Number	d. Discrepancy Indication Space:
Republic Wasatch Regional Landfill 8833 North Rowley Road North Skull Valley, UT 84029 (801) 924 8538 b.		

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

e. Name of Authorized Agent (Print)	f. Signature	g. Date
Ashley Hill	Ashley Hill	DEC 19, 2024

IV. ASBESTOS (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:	c. Responsible Agency Name and Address:
b. Phone:	d. Phone:

e. Special Handling Instructions and Additional Information:

f. ☐ Friable ☐ Non-Friable ☐ Both % Friable % Non-Friable

OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

g. Operator's Name and Title (Print)	h. Signature	i. Date

*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both

REPUBLIC SERVICES

NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

1381875

If waste is asbestos waste, complete Sections I, II, III and IV
If waste is **NOT** asbestos waste, complete Sections I, II and III

Truck 9 - 12/18

I. GENERATOR (Generator completes Ia-r)

a. Generator's US EPA ID Number	b. Manifest Document Number	c. Page 1 of
UTD 981 548 925	1381875	1

d. Generator's Name and Location:
Veterans Health Administration CERCLA Program
500 Foothill Dr. Mail Code 138 Bldg 6 CERCLA Program
Salt Lake City, UT 84148
f. Phone:

e. Generator's Mailing Address:
500 Foothill Dr. Mail Code 138 Building 6 CERCLA Program
Salt Lake City, UT 84148 Attn: Shannon Smith (801) 582-1565
g. Phone:

If owner of the generating facility differs from the generator, provide:
h. Owner's Name:
i. Owner's Phone No.:

CESI # Bsisti

j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	m. Containers Type	n. Total Quantity	o. Unit Wt/Vol
4136 241 8474	7-2027	Non-haz Groundwater	001	TT	est	G

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

p. Generator Authorized Agent Name (Print)	q. Signature	r. Date
Zane Kozarc		12/18/2024

II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address:
MP Environmental Services, Inc.
1043 N. Industrial Park Circle
Grantsville, UT 84029 (877) 800-5111
b. Phone:

c. Driver Name (Print)	d. Signature	e. Date
Zach Snyder		12-18-2024

III. DESTINATION (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address:
Republic Wasatch Regional Landfill
8833 North Rowley Road
North Skull Valley, UT 84029 (801) 924 8538
b.

c. US EPA Number
d. Discrepancy Indication Space:

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

e. Name of Authorized Agent (Print)	f. Signature	g. Date
Ashley Hare	Ashley Hare	DEC. 19, 2024

IV. ASBESTOS (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:
b. Phone:

c. Responsible Agency Name and Address:
d. Phone:

e. Special Handling Instructions and Additional Information:

f. ☐ Friable ☐ Non-Friable ☐ Both % Friable % Non-Friable

OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

g. Operator's Name and Title (Print)	h. Signature	i. Date

*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both

REPUBLIC SERVICES

NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

1381877

If waste is asbestos waste, complete Sections I, II, III and IV
If waste is **NOT** asbestos waste, complete Sections I, II and III

TRUCK 11 - 12/19

I. GENERATOR (Generator completes Ia-r)

a. Generator's US EPA ID Number	b. Manifest Document Number	c. Page 1 of
UTD 981 548 985	1381877	1

d. Generator's Name and Location:
Veterans Health Administration CERCLA Program
500 Foothill Dr. Mail Code 138 Bldg 6 CERCLA Program
Salt Lake City, UT 84148
f. Phone:

e. Generator's Mailing Address:
500 Foothill Dr. Mail Code 138 Building 6 CERCLA Program
Salt Lake City, UT 84148 Attn: Shannon Smith (801) 582-1565
g. Phone:

If owner of the generating facility differs from the generator, provide:
h. Owner's Name:
i. Owner's Phone No.: CESI # Bsisti

j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	m. Containers Type	n. Total Quantity	o. Unit Wt/Vol
4186 241 8474	7-2027	Non-haz Groundwater	001	TT	est.	G

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

p. Generator Authorized Agent Name (Print)	q. Signature	r. Date
Zane Kozarc	Zane Kozarc	12/19/2024

II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address:
MP Environmental Services, Inc.
1043 N. Industrial Park Circle
Grantsville, UT 84029 (877) 800-5111
b. Phone:

c. Driver Name (Print)	d. Signature	e. Date
Zach Snyder	Zach Snyder	12-19-2024

III. DESTINATION (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address:
Republic Wasatch Regional Landfill
8833 North Rowley Road
North Skull Valley, UT 84029 (801) 924 8538
b.

c. US EPA Number:
d. Discrepancy Indication Space:

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

e. Name of Authorized Agent (Print)	f. Signature	g. Date
Ashley Hare	Ashley Hare	DEC 19, 2024

IV. ASBESTOS (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:
b. Phone:

c. Responsible Agency Name and Address:
d. Phone:

e. Special Handling Instructions and Additional Information:

f. ☐ Friable ☐ Non-Friable ☐ Both % Friable % Non-Friable

OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

g. Operator's Name and Title (Print)	h. Signature	i. Date

*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both

REPUBLIC SERVICES

NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

1381878

If waste is asbestos waste, complete Sections I, II, III and IV
If waste is **NOT** asbestos waste, complete Sections I, II and III

TRUCK 12-12/19

I. GENERATOR (Generator completes Ia-r)

a. Generator's US EPA ID Number	b. Manifest Document Number	c. Page 1 of
UTD 981 548 985	1381878	1

d. Generator's Name and Location:
Veterans Health Administration CERCLA Program
500 Foothill Dr. Mail Code 138 Bldg 6 CERCLA Program
Salt Lake City, UT 84148
f. Phone:

e. Generator's Mailing Address:
500 Foothill Dr. Mail Code 138 Building 6 CERCLA Program
Salt Lake City, UT 84148 Attn: Shannon Smith (801) 582-1565
g. Phone:

If owner of the generating facility differs from the generator, provide:
h. Owner's Name:
i. Owner's Phone No.: CESI # Bsisti

j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	m. Containers Type	n. Total Quantity	o. Unit Wt/Vol
4136 241 8474	7-2027	Non-haz Groundwater	001	TT	est.	G

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

p. Generator Authorized Agent Name (Print)	q. Signature	r. Date
Zane Kozar		12/19/2024

II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address:
MP Environmental Services, Inc.
1043 N. Industrial Park Circle
Grantsville, UT 84029 (877) 800-5111
b. Phone:

c. Driver Name (Print)	d. Signature	e. Date
Brian Vega	Brian Vega	12-19-24

III. DESTINATION (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address:	c. US EPA Number	d. Discrepancy Indication Space:
Republic Wasatch Regional Landfill 8833 North Rowley Road North Skull Valley, UT 84029 (801) 924 8538 b.		

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

e. Name of Authorized Agent (Print)	f. Signature	g. Date
Ashley Hall	Ashley Hall	Dec. 19, 2024

IV. ASBESTOS (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:	c. Responsible Agency Name and Address:
b. Phone:	d. Phone:

e. Special Handling Instructions and Additional Information:

f. ☐ Friable ☐ Non-Friable ☐ Both % Friable % Non-Friable

OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

g. Operator's Name and Title (Print)	h. Signature	i. Date

*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both

REV 04/19

DESTINATION RETURN

RS-F11A

REPUBLIC SERVICES

NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

1381879

If waste is asbestos waste, complete Sections I, II, III and IV
If waste is **NOT** asbestos waste, complete Sections I, II and III

12/19 – Truck 13

I. GENERATOR (Generator completes Ia-r)

a. Generator's US EPA ID Number	b. Manifest Document Number	c. Page 1 of
UTD 981 548 985	1381879	1

d. Generator's Name and Location:
Veterans Health Administration CERCLA Program
500 Foothill Dr. Mail Code 138 Bldg 6 CERCLA Program
Salt Lake City, UT 84148
f. Phone:

e. Generator's Mailing Address:
500 Foothill Dr. Mail Code 138 Building 6 CERCLA Program
Salt Lake City, UT 84148 Attn: Shannon Smith (801) 582-1565
g. Phone:

If owner of the generating facility differs from the generator, provide:
h. Owner's Name:
i. Owner's Phone No.: CESI # Bsisti

j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	m. Containers Type	n. Total Quantity	o. Unit Wt/Vol
4186 241 8474	7-2027	Non-haz Groundwater	001	TT	est	G

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

p. Generator Authorized Agent Name (Print)	q. Signature	r. Date
Zane Kozarec		12/19/2024

II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address:
MP Environmental Services, Inc.
1043 N. Industrial Park Circle
Grantsville, UT 84029 (877) 800-5111
b. Phone:

c. Driver Name (Print)	d. Signature	e. Date
X GARY Hill		12-19-24

III. DESTINATION (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address:
Republic Wasatch Regional Landfill
8533 North Rowley Road
North Skull Valley, UT 84029 (801) 924 8533
b.

c. US EPA Number:
d. Discrepancy Indication Space:

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

e. Name of Authorized Agent (Print)	f. Signature	g. Date
Ashley Hare		DEC. 19, 2024

IV. ASBESTOS (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:
b. Phone:

c. Responsible Agency Name and Address:
d. Phone:

e. Special Handling Instructions and Additional Information:

f. ☐ Friable ☐ Non-Friable ☐ Both % Friable % Non-Friable

OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

g. Operator's Name and Title (Print)	h. Signature	i. Date

*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both