



Periodic Review Report

Former Mimi Cleaners Site

NYSDEC VCP Site No. V00306-3

Scarsdale, New York

October 12, 2022

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1 Summary

1.1 Site, Nature and Extent of Contamination and Remedial History

This report is the Periodic Review Report (PRR) for the Former Mimi Cleaners site (the “site”) at 58 Christie Place in Scarsdale, Westchester County, New York (the CPB) and documents site management during the period 28 June 2019 to 28 June 2022 (see **Figure 1**). The CPB was reportedly constructed in the early 1950s; a dry cleaner had reportedly operated in the building at 58 Christie Place since approximately 1955. Mimi Cleaners, which sub-leased the space from Hausman Realty Co., Inc. (Remedial Party) until 1999, used PCE as its cleaning fluid (at least in the last years of its operation). The Remedial Party applied to New York State Department of Environmental Conservation (NYSDEC) to enter the Voluntary Cleanup Program (VCP) on 17 September 1999 and signed the agreement (VCA) on 26 June 2000. In July 2000, contaminated soil and concrete were removed from beneath the CPB; a soil vapor extraction (SVE) system was installed and operated for several years. After completion of the remedial work, some contamination was left in the subsurface, which is hereafter referred to as “remaining contamination.”

Potential subsurface vapor intrusion into the site building is controlled with a sub-slab depressurization system (SSDS), which has been in operation since 2007. Additional SSDSs were constructed and operated in nearby buildings and have since been shut down and removed due to decreasing sub-slab vapors and/or acceptable indoor vapors as approved by NYSDEC and New York State Department of Health (NYSDOH).

Groundwater at the site is contaminated with volatile organic compounds (VOCs), primarily tetrachloroethene (PCE), trichloroethene (TCE), and cis 1,2-dichloroethene (c12-DCE). Two monitoring wells were installed in 2003. Groundwater concentrations of the chlorinated solvents of concern have been decreasing since groundwater sampling was initiated in May 2003. The most recent groundwater sampling event was conducted in April 2022.

1.2 Effectiveness of the Remedial Program

The program has prevented exposure to the site contaminants and is meeting the remedial goals which are: (1) prevention of exposure to remaining contamination in the soils below the slab by maintaining a competent concrete cover system (building slab), (2) prevention of intrusion of sub-slab vapors through the continued operation of the SSDS, and (3) prevention of exposure to contaminated groundwater.

1.3 Compliance

The monitoring, sampling and operations & maintenance activities have been implemented in accordance with the site management plan (SMP). On two occasions, there was an unexpected shut down of the SSDS due to a blower malfunction. Each time, the issue was resolved, repairs were made as needed, and the SSDS resumed operation.

1.4 Recommendations

1. Requirements for discontinuing the operation of the SSDS at the CPB have not been met and the site management requirements for this building will not change.
2. The SMP is currently being revised to reflect the NYSDEC and NYSDOH approved changes in the monitoring program. The revised SMP will be submitted to NYSDEC and NYSDOH for review in the fall of 2022. In accordance with permission from the NYSDEC and NYSDOH, the SSDSs in five of the nearby buildings have been shut down and removed. Annual inspections are no longer required in these off-site buildings since the SSDS equipment has been permanently removed, extraction points removed, and the slab penetrations sealed (some sections of the SSDS lateral piping were capped and left in place instead of being removed as approved by the building owners).

2 Site Overview

2.1 Description

The site is located in the Village of Scarsdale, Westchester County, New York and is identified in the VCA as the northeast corner of the Christie Place Building (CPB). The CPB is designated as Section 2, Block 5, Lots 11 and 12 on the Tax Map, covering approximately 0.3098 acres, of which the site comprises approximately 0.06 acres. CPB is bounded by Christie Place to the north, Spencer Place to the south, the Scarsdale Post Office to the east, and a parking lot and the Spencer Place Building to the west (see **Figure 2**). The boundaries of the CPB site are more fully described in Appendix A of the Site Management Plan (SMP).

The site is in an area of mixed retail businesses and residential buildings and/or residents on the floors above the business tenants. The CPB is a slab-on-grade structure with a center hallway. The CPB tenants are all commercial businesses with no residential tenants. The southern portion of the building floor slab is about 4 ft. lower than the northern portion with the center hallway at the same grade as the northern portion of the building. It appears that the two sections of the building may have been constructed at different times. The two sections of the building are each divided into tenant spaces; currently there are five tenant spaces in the southern portion and five tenant spaces in the northern portion of the building. **Figure 3** shows location of the monitoring wells in relation to the CPB and the location of the former Mimi Cleaners tenant space in the building as well as a summary of the data collected from the monitoring wells.

Groundwater was contaminated with PCE, TCE, and environmental degradation products of TCE and PCE (primarily c12-DCE). Groundwater flows southwest towards the Bronx River in the shallow underlying bedrock comprised of metamorphic mica schist of the Manhattan Formation, which tends to slope southwest from the site. Contaminant concentrations in the groundwater monitoring wells have been decreasing since the wells were installed in 2003. During the most recent sampling event conducted in April 2022, no volatile organic compounds (VOCs) were detected in the sample from MW-2 except for acetone at a concentration of 11 mcg/l. It should be noted that acetone is not a chemical of concern at the site, and it is not typically detected in the groundwater samples at this project location. Acetone was also detected in the trip blank at a concentration of 9.0 mcg/l, indicating its detection in the MW-2 sample was likely a laboratory contaminant issue and was not representative of the groundwater conditions. MW-1 contained PCE at a concentration of 2.0 mcg/l; TCE and c12-DCE were not detected at their analytical detection limit of 1.0 mcg/l in MW-1. **Table 1** provides the analytical results from the April 2022 groundwater sampling event and **Table 2** provides a summary of the groundwater results since 2003. This was the first groundwater sampling event since the monitoring wells were installed where the VOCs in both wells were below the New York State drinking water standards. In accordance with the SMP, the next groundwater sampling event is scheduled for the summer of 2026.

The source of the remaining sub-slab vapor contamination under the CPB is believed to be NAPL in shallow bedrock above the groundwater table. A pilot test of in-situ chemical oxidation (ISCO) was performed at the CPB site in March 2012; however, it appears that it had little short-term success in reaching and degrading residual contamination remaining under the building. Based on the active tenants in the building, the available locations for delivery of the ISCO chemical was rather limited for the pilot test. In addition, the duration available for delivery of the ISCO chemical was limited to the overnight interval after the tenant spaces were closed; it was determined that a full-scale delivery of the ISCO chemical to the sub-slab area was not feasible with active business tenants occupying the building.

2.2 Remedial Program

Soil Excavation and SVE System Installation & Operation

In 2000, Lawler, Matusky and Skelly Engineers (which was subsequently acquired by HDR) developed an excavation work plan which was approved by NYSDEC; HDR inspected the soil excavation and removal activities were conducted by the contractor within the CPB in the area of the dry-cleaning equipment in July 2000. The work was performed after business hours to minimize disruption of business, and nuisance odor complaints. The excavation removed all contaminated soil and concrete that was accessible. **Figure 4** shows the area excavated within the building. A total of 73.5 tons of PCE-contaminated soil and concrete were removed and disposed of at a licensed disposal facility in Quebec, Canada. The removal extended to the top of bedrock (2-4 feet deep), which sloped to the southwest beneath the building. Laterally, the excavation extended northeastward toward Christie Place to near a utility vault; to the southwest at the excavation perimeter very low contaminant levels were evident; in other directions the building foundations and partitions limited excavation (depicted on **Figure 4**). The excavation was backfilled with clean gravel and the concrete slab was restored.

Because contamination was present at the top of the shallow bedrock and beneath building foundations, HDR with a subcontractor, INTEX Environmental Group (formally MEI Environmental) (Intex), designed a soil vapor extraction (SVE) system to remove additional contamination and to maintain a partial vacuum under the floor slab to prevent vapor intrusion into the occupied areas of the building. Intex and HDR inspected its installation and startup, and HDR conducted the operations, maintenance, and monitoring activities for the SVE system onward from its startup in May of 2001. **Figure 4** provides the layout of the SVE system. The SVE system removed volatile contaminants and operated until the source contaminants in the soils within the area of influence of the SVE were substantially depleted in 2004-2005. Diminishing recovery of contaminants by the SVE system led NYSDEC and NYSDOH to agree that a sub-slab depressurization system (SSDS) would better mitigate the potential for vapor intrusion of remaining sub-slab vapors.

Sub-Slab Depressurization System Installation & Operation

Soil vapor testing has been performed under the CPB and later under surrounding and down-gradient buildings. Sub-slab vapor testing conducted between 2011 and 2016 revealed concentrations of PCE under the CPB above 1,000 mcg/m³, the level at that time at which NYSDOH guidance recommended mitigation to minimize potential indoor air

exposure, and above 250 mcg/m³ for TCE, the level at that time at which NYSDOH guidance recommended mitigation. In May 2017 NYSDOH reduced the TCE sub-slab vapor guidance concentration recommendation for mitigation to minimize potential indoor air exposure to 60 mcg/m³ (the PCE sub-slab vapor guidance concentration recommendation for mitigation to minimize potential indoor air exposure was not revised by NYSDOH). Indoor air concentrations did not exceed concentrations deemed acceptable under NYSDOH guidance in any of the buildings investigated.

Sub-slab testing beneath nearby buildings and indoor air testing, down-gradient of the CPB progressed from 2004 through 2010. The buildings tested as part of the offsite investigation activities for the site are those noted on **Figure 5**. The building at 2 Spencer Place is currently occupied by an active dry cleaner and other tenants with residential housing above the first floor. The owner of 2 Spencer Place was reportedly investigating conditions at that location after initial sampling by HDR in July 2010 in this building revealed an indoor air PCE concentration of 290 mcg/m³, well above the current NYSDOH guidance value of 10 mcg/m³ for indoor air. No additional investigations at this location were conducted by HDR on behalf of Hausman Realty based upon correspondence from NYSDEC indicating the building owner at 2 Spencer Place was planning to install a SSDS for that building to mitigate their indoor air concentrations of PCE.

During 2005, a SSDS for the CPB was designed and approved by NYSDEC and NYSDOH. Extraction points were installed through the floor slab of CPB throughout the building and were piped to a blower mounted on the building roof. The SVE piping under the slab in the northeastern portion of the building was used as part of the SSDS to depressurize the area under the slab in this portion of the building. The discharge stack from the SVE system was connected into the SSDS blower on the roof. Additional details of the system are provided in Appendix E of the SMP. The SSDS at the CPB has a current 3-year certificate to operate a Source of Air Contamination permit issued by Westchester County Department of Health that is good through December 31, 2024. **Figure 6** contains the layout of the SSDS system as well as the sample ports used to measure the differential pressure on a quarterly basis. The results of the most recent sub-slab vapor and indoor air sampling event in the CPB in February 2020 are discussed in Section 5.2 of this report.

Five offsite buildings where sub-slab PCE concentrations historically exceeded 1,000 mcg/m³, and at which NYSDEC/NYSDOH requested that sub-slab depressurization systems be installed, are shown on **Figure 7**. They are the Scarsdale Post Office Building (SPOB), Spencer Place Building (SPB), DeCicco Building (DCB), Harwood Building (HWB), and the southern portion of the East Parkway Building (EPB). Although TCE is a degradation product of PCE, it was not found in the indoor samples collected in these buildings at concentrations above NYSDOH guidance concentrations except for the HWB. At HWB, it was determined that the source of elevated concentrations of TCE in the indoor samples was a tenant using a shoe polish containing TCE; the use of this polish was terminated, and the tenant subsequently left the building.

Contaminant concentrations have decreased beneath these offsite buildings and/or indoor air sampling documented that there was not a vapor intrusion pathway into these buildings; therefore, NYSDEC and NYSDOH approved the shutdown of the five offsite SSDSs. Three of the offsite systems were shut down in 2011; the other two offsite SSDS

were shut down in 2012 in accordance with the approved workplans that included additional indoor air and sub-slab vapor monitoring after the system shutdowns.

In June 2014, NYSDEC and NYSDOH approved the permanent shut down and removal of the SSDS equipment in the DCB, SPB, and SPOB based on the results of the sub-slab vapor sampling and indoor air sampling conducted in December 2013 after the SSDSs in these buildings had been shut down for more than two years.

As part of the approval of the 2016 PRR, NYSDEC and NYSDOH agreed with the recommendation for the permanent shut down and removal of the SSDS equipment in the HWB and EPB based on the results of sub-slab vapor sampling and indoor air sampling conducted in January 2016 after the SSDSs in these buildings had been shut down for more than three years.

3 Remedy Performance, Effectiveness and Protectiveness

There is a Declaration of Covenants and Restrictions recorded with the land records for the site in the Westchester County clerk's office that included the following restrictions:

1. "where contamination remains at the Property subject to the provisions of the Site Management Plan ("SMP"), there shall be no construction, use or occupancy of the Property that results in the disturbance or excavation of the Property which threatens the integrity of the engineering controls or which results in unacceptable human exposure to contaminated soils"
2. "the owner of the Property shall not disturb or otherwise interfere with the installation, use, operation, and maintenance of engineering controls required for the Remedy, which is described in the SMP, unless in each case the owner first obtains a written waiver of such prohibition from the Department or Relevant Agency."
3. "the owner of the Property shall prohibit the Property from ever being used for purposes other than for **Commercial as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and Industrial as described in 6 NYCRR Part 375-1.8(g)(2)(iv)** without the express written waiver of such prohibition from the Department or Relevant Agency."
4. "the use of groundwater underlying the property is prohibited without necessary water quality treatment, as determined by the Westchester County Department of Health to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department."

The owner of the building (Christie Place Owners LLC) and the building management team maintain a copy of the SMP and have instructed their tenants that there can be no improvements involving floor penetrations or disturbances without prior notification of the building management team such that any activities that compromise the floor in the building can be conducted in accordance with the Excavation Plan as described in the SMP.

The building tenants have been notified that they must not disturb any of the SSDS equipment including the extraction points, lateral piping, and the blower package. The tenants are notified by the building management team when HDR is required to be on site to conduct inspections, monitoring, or routine maintenance.

The area is served by municipal water and use of groundwater is prohibited by Westchester County regulations.

Reports previously provided to the NYSDEC demonstrate that the system adequately depressurizes the sub-slab environment. These reports are included in Attachment H of the Final Engineering Report (FER) prepared for this site. .

4 IC/EC Plan Compliance

4.1 IC/EC Requirements and Compliance

SSDS

Description. The SSDS is an engineering control that consists of one 5-horsepower regenerative blower on the roof of the building connected to 18 individual sub-slab vapor extraction points as well as the discharge piping from the SVE system in the northeast corner of the building. The performance of the system to meet its goal of sub-slab depressurization has been demonstrated in the reports submitted since the system was started up (see Attachment H of the FER to review these reports.) Ongoing performance is evaluated by routine quarterly monitoring of system pressures and vacuums and operating conditions (see additional details in Chapter 6).

Goal Status. The SSDS is fully in place and meeting its remediation goals; the system runs continuously (sub-slab depressurization).

In September 2019, the CPB SSDS had an unexpected shut down. HDR received an automated text message that there was no vacuum in the lateral legs and the unit had shut down. HDR conducted a site visit a few days later and it was determined that the vacuum tubing attached to the photohelic pressure gauge in the blower housing had become brittle and fell off the barbed connection. HDR cut back the end of tubing that was brittle and reattached it and the system was restarted.

In January to February of 2020, HDR conducted a scheduled shut down of the SSDS for thirteen days to allow the sub-slab vapors and indoor air concentrations to equilibrate without the SSDs in operation prior to the collection of sub-slab vapor and indoor air samples. The system was turned back on immediately after the samples were collected. The results of the indoor air samples collected at this time met the NYSDOH guidance values for PCE, TCE, and c12-DCE in indoor air.

In April 2020 the routine quarterly inspection event was canceled due to the COVID-19 pandemic concerns. The CPB management team indicated most of the tenants were closed at this time and they did not want HDR in the building due to the potential health concerns.

In July 2020, HDR installed a replacement differential pressure sample port (DPSP) in the floor to replace CP-DP-12a that was removed during the renovation activities in the winter and spring of 2022 in the newly renovated restaurant tenant space occupying TS-09 and TS-10 (see **Figure 6**).

In August 2020, HDR attempted to install a replacement DPSP in the floor to replace CP-DP-07 that was removed during the renovation activities. During installation of the DPSP, the drill bit met refusal, got stuck and could not be retrieved. The drill bit was cut off and the hole was sealed. It was determined that there was not another suitable location to install another sample port in this portion of the building.

The data from the site (differential pressure in the lateral legs and the blower power status) are transmitted to the Onset website through the Hobolink system via a cellular connection. The data is scheduled to be transmitted every four hours to the website to document the system is running and functioning as designed. In April 2022, HDR noted the HoboLink system was not routinely sending data to the website. After a troubleshooting visit and discussions with Onset technical support, it was determined that AT&T is beginning to shut down their support of the 3G service; occasionally the unit does not send data to the website every four hours. The data is being stored on the unit so the data can be downloaded manually if required. HDR will continue monitoring the data on the website to determine if there are any data gaps. We understand that AT&T will likely stop supporting their 3G service completely somewhere near the end of 2022. The data will still be collected by the onsite system; however, it will not be able to be transmitted to the website. An upgraded data logger will be installed in 2023. Some data was lost between April and May 2022; however, our site visit in April 2022 to conduct the quarterly monitoring and groundwater samples and another site visit in May 2022 to troubleshoot the data transmission issue confirmed the SSDS was in operation during this interval.

Corrective Measures. The alert system notification for low vacuum has been working well. HDR staff involved with the project receive prompt notification via email and text message if the vacuum in the SSDS piping is reduced to near zero inches of water which would be an indication of a malfunction in the SSDS system (or possibly a power outage) causing a reduction in depressurization under the slab. As part of the quarterly inspections, the blower package on the roof of the building is inspected for any loose connections or indications of a failing component. In addition, the vacuum data from the seven main legs of the SSDS that are transmitted to the secure website for viewing and storage are being reviewed monthly. An upgraded data logger will be installed in 2023.

Conclusions and Recommendations. The blower was replaced in 2017 and has had no issues since it was installed. As discussed previously, the Hobolink datalogger will need to be upgraded in 2023.

Building Slab (Concrete Cover System)

Description. The building slab is considered an engineering control that consists of a permanent concrete slab throughout the building. The performance of the system to meet its goal of preventing exposure to residual contamination in the soil/fill below the building has been demonstrated in the reports submitted since the system was started up and the quarterly inspections and observations conducted at the building. Performance of the cover system is evaluated by the quarterly inspections of the building as well as correspondence with the building management team to verify that the building tenants are not compromising or opening the floor slab without proper inspection and monitoring. As reported by the building management team and as observed during the quarterly inspections conducted at the site, the slab was not compromised during the interval between June 2019 and June 2022 except for one instance noted below due to tenant space renovation activities.

During this 3-year reporting interval, as part of tenant space renovation activities, the floor slab was cut open to facilitate the installation of sanitary drain lines for a sink and/or a bathroom in two tenant spaces (that were combined into one space for a restaurant). In January 2020 the floor slab was cut open to facilitate the installation of piping for new bathrooms and kitchen sinks as part of the renovation of Tenant Space # 09 (TS-09) and Tenant Space # 10 (TS-10) for a new restaurant. HDR conducted air monitoring of the tenant spaces when the slab was opened to install the piping. A portable photoionization detector (PID) was used to monitor for vapors in the tenant spaces and over the open slab areas. HDR did not measure any PID readings above background in the tenant spaces or over the open floor areas when they were opened. It should be noted that these tenant spaces were not open to the public or other tenants during renovation activities. The SSDS remained in operation during these renovation activities that required cuts in the floor slab. Typically, these renovations require the floor to be opened for several days to a week. After the drain lines were installed, soils removed from the cuts were placed back in the trenched areas and the floor slab was repaired with concrete and a flooring system (tile) was installed in both tenant spaces (the new restaurant occupies the two tenant spaces).

Goal Status. The concrete cover system is fully in place and meeting its remedial goals; PID monitoring was conducted during renovations when floor slabs were required to be cut open.

Corrective Measures. There are no deficiencies in the system and corrective measures are not needed. HDR routinely remains in contact with the building management team to determine if there are any tenant space renovation activities that require the floor slab to be opened or compromised or any other activities that would potentially compromise the effectiveness of the SSDS.

Conclusions and Recommendations. No changes to the system are needed.

Water Use Restrictions

Description. The restriction is an institutional control included in the Declaration of Covenants and Restrictions that prohibits use of the site's groundwater unless NYSDEC approves otherwise. The site is served by municipal water and use of groundwater is prohibited by Westchester County regulations.

Goal Status. The restriction is fully in place and there are no on-site wells, other than the two monitoring wells used to assess ground water quality in the area of the site. In accordance with the SMP, the groundwater monitoring wells were sampled in April 2022, and they are scheduled to be sampled again in the spring-summer of 2026.

Corrective Measures. There are no deficiencies and corrective measures are not needed.

Conclusions and Recommendations. No changes are needed.

Excavation Restrictions

Description. The restriction is an institutional control included in the Declaration of Covenants and Restrictions that prohibits the building slab from being opened or compromised which threatens the integrity of the slab as an engineering control unless the work is conducted in accordance with the Excavation Plan as described in the SMP. In accordance with correspondence with the building management team and the quarterly inspections conducted at the site, the slab was not opened or compromised during the interval between June 2019 and June 2022 except as described in the previous section. HDR conducted air monitoring of the tenant spaces and the floor openings with a PID when the slabs were opened; there were no PID measurements above background in the tenant spaces or over the open floor slab areas.

Goal Status. The restriction is fully in place and being complied with.

Corrective Measures. There are no deficiencies and corrective measures are not needed.

Conclusions and Recommendations. No changes are needed.

4.2 IC/EC Certification

A copy of the requisite certification is presented in **Appendix A** of this document. The Qualified Environmental Professional (QEP) section of the certification has been signed by Michael P. Musso, P.E., the engineer for remedial operations at the site.

In accordance with Appendix B of the SMP (Responsibilities of Owner and Remedial Party), the responsibilities for implementing the SMP are divided between Hausman Realty Co., Inc. (Remedial Party) and Christie Place Owners LLC (Owner). Attached in **Appendix A** of this PRR, is a letter from Christie Place Owners LLC, dated 11 October 2022, certifying they are in compliance with Questions 2, 3, and 5 in Box 1, Question 6 and that the ICs are in place in Box 2, and all of the information in Box 3 of the PRR Enclosure 2 (Institutional and Engineering Controls Certification Form), including a correction on p. 3 to indicate that the site owner is Christie Place Owners LLC, not the Remedial Party Hausman Realty Co., Inc..

5 Monitoring Plan Compliance

5.1 Components of the Monitoring Plan

In accordance with the SMP, the CPB is inspected on a quarterly basis to determine if the slab and/or the SSDS piping in areas that the inspector has access is in good condition and is not compromised in any areas of the building. During the inspection, the blower package is inspected for signs of wear and/or required maintenance. In addition, during the quarterly inspection events, differential pressure data are collected from various sample ports in the floor slab throughout the CPB that are accessible to document the system is generally maintaining a negative pressure under the slab and the data is consistent with previous measurements from the sample ports. Vacuum data from the main lateral legs of the SSDS are recorded during the inspection events as well. The vacuum data from the main legs of the SSDS are transmitted to a secure website via a cellular modem for viewing and documentation that the system is operating as designed.

In accordance with the SMP, groundwater samples are collected from the two monitoring wells installed at the site every four years. The monitoring wells were last sampled in April 2022.

It should be noted that the SSDS system components in the five offsite buildings were removed in September 2017. The blowers and associated components were removed, the sub-slab extraction points were removed, and the slab penetrations were sealed. In some locations, the lateral piping was capped and left in place as approved by the building owners. Annual inspections at these five locations are no longer required; the final annual inspection event conducted at these five locations was in January 2017.

An annual inspection event continues to be conducted at the CPB at the same time as one of the quarterly sampling events (typically in January). The annual inspection logs from the inspection events conducted at the CPB during January in 2020, 2021, and 2022 are included in **Appendix B** of this document. **Appendix B** also includes graphs depicting the differential pressure measurements in seven of the lateral legs of the SSDS from July 2019 through June 2022 documenting the system has been running consistently 24/7 with a few minor shutdowns.

As mentioned above, the CPB has a current permit (renewal certificate) to operate a source of air contamination permit issued by Westchester County Department of Health (WCDOH). This permit was renewed during this reporting period for a three-year term from January 2022 through December 2024. WCDOH inspected the system in October 2021 to document the SSDS had not been altered, prior to issuing the permit renewal. The permit for CPB is included in **Appendix C**.

5.2 Summary of the Monitoring Completed

Quadrennial Groundwater Monitoring

On 28 April 2022, HDR purged and sampled the two monitoring wells. MW-1 is located in the parking lot of the DCB between the trash compactor and the CPB) and MW-2 is located on the north side of Spencer Place adjacent to the sidewalk (see **Figure 3**). It should be noted that the curb box enclosure for MW-2 was paved over by the Village of Scarsdale recently when Spencer Place was resurfaced. HDR was given permission from the Village to remove the asphalt covering the monitoring well curb box to provide access to the well. There was a 3-to-4-inch layer of asphalt on top of the curb box. The concrete around the curb box was cracked and may need to be replaced during the next sampling event. After the sample was collected from MW-2, the curb box was closed, and asphalt patch was used to patch the hole so it would not be a potential trip hazard for the public.

The wells were purged and sampled with dedicated polyethylene bailers. The yield and recharge rate in these monitoring wells is rather low; both wells purged dry using a bailer. Approximately seven (7) gallons of groundwater were purged from MW-1 and six and a half (6.5) gallons were purged from MW-2 before they were purged dry. A set of field chemistries, including temperature, pH, and specific conductivity, were measured during the purging process and also during the sample collection interval. The water purged from the wells was initially rather clear; it became slightly cloudy and turbid as the purging with the bailer proceeded. After allowing the monitoring wells to recover prior to sampling, the groundwater collected for analysis from the two wells was rather clear. There was no visible sheen or noticeable odor noted from the groundwater removed from either well during purging or sampling.

After the wells were purged dry, they were allowed to recover prior to sampling. MW-2 is usually slower to recover; it recovered 63% in 45 minutes prior to collecting the sample and MW-1 recovered 99% in 40 minutes before it was sampled. The samples were collected with dedicated polyethylene bailers from the top of the water column. During sample collection, the bailer was gently lowered and raised in the water column to minimize sample turbidity. Samples were collected for Target Compound List (TCL) VOCs using EPA Method 8260B and submitted to Hampton-Clarke, Inc. of Fairfield, NJ for analysis.

Groundwater results from the April 2022 sampling event are provided in **Table 1**; **Figure 3** provides a summary of the detected compounds in the monitoring wells since the sampling program was initiated. No VOCs were detected in the sample from MW-2 except for acetone at a concentration of 11 mcg/l in the April 2022 sampling event. It should be noted that acetone is not typically detected in the groundwater samples at this project location and is not considered a chemical of concern for the site. Acetone was also detected in the trip blank at a concentration of 9.0 mcg/l, indicating its detection in the MW-2 sample was likely a laboratory contaminant issue and was not representative of the groundwater conditions. MW-1 contained no VOCs except for PCE at a concentration of 2.0 mcg/l. This was the first groundwater sampling event since the monitoring wells were installed in 2003 where the VOCs in both wells were below the New York State drinking water standard. In August 2018, MW-1 contained PCE at a

concentration of 5.4 mcg/l and MW-2 contained PCE and c12-DCE at 1.1 and 1.8 mcg/l, respectively. TCE was not detected in either of the monitoring wells during this sampling event and has not been detected in either monitoring well since July 2012. A trip blank that accompanies the sample containers during the sampling event contained acetone at a concentration of 9.0 mcg/l, as mentioned previously. **Figure 8** provides a graphical representation of the CVOC concentrations detected in both monitoring wells since they were initially sampled in May 2003.

The concentration of PCE in MW-1 was below its NYSDEC Class GA standard of 5 mcg/l and the concentration of acetone in MW-2 was below its NYSDEC Class GA guidance value of 50 mcg/l. No other VOCs were detected in either of the monitoring wells. This was the first groundwater sampling event since the monitoring wells were installed in 2003 where the VOCs in both wells were all below the NYSDEC drinking water standards. As shown on **Table 2**, **Figure 3**, and **Figure 8**, the CVOCs concentrations in the groundwater continue to show a decreasing trend in both wells based on a comparison of the historical data. MW-2 has not exceeded any NYSDEC VOC drinking water standards or guidance values since the June 2011 sampling event.

Overall, the CVOC concentrations in these two monitoring wells have shown a significant decrease since the wells were installed in 2003. As outlined in the SMP for the site, the two monitoring wells will be sampled again in 2026. After the next sampling event, an assessment will be made as to whether continued groundwater monitoring is warranted at this location for one or both monitoring wells. The groundwater sampling logs, and the analytical data report are included in **Appendix D** of this PRR. An electronic version of the groundwater data were submitted to NYSDEC in accordance with their Electronic Data Deliverable (EDD) protocols using the EQUIS™ software.

Quarterly SSDS Inspection & Monitoring Events

As discussed above, the SSDS at the CPB was inspected on a quarterly basis during this reporting period (29 June 2019 to 29 June 2022). Differential pressure readings were collected from the sample ports in the floor slab and vacuum readings were collected from the main legs of the SSDS. In addition, the accessible slab areas and SSDS piping were inspected for damage that could compromise the seal and allow for a vapor intrusion pathway into the buildings.

In the previous 36 months (July 2019 through June 2022), the inspections at the CPB were conducted on the following dates:

- July 03, 2019
- October 31, 2019
- January 27, 2020
- July 09, 2020
- October 26, 2020
- January 22, 2021
- April 29, 2021
- July 22, 2021
- October 06, 2021
- January 21, 2022
- April 28, 2022

Note: We have also included the results of the 05 July 2022 inspection event since it was conducted prior to the completion of this PRR. As noted previously, a quarterly inspection was not conducted in April 2020 due to the COVID-19 pandemic. Most of the tenant spaces were closed in the spring of 2020 due to the COVID-19 lock down restrictions.

Table 3 includes the vacuum readings in the main legs of the SSDS from July 2019 through July 2022 and **Table 4** includes the differential pressure measurements taken from the sample ports in the floor slab during the same interval. During the inspection conducted in October 2021, the particulate filter on the blower was replaced.

As shown on **Table 4**, the SSDS is providing sufficient negative pressure under the building slab area. As has been observed in the past, there are a couple of locations in the center hallway, where on occasion, there has been little or no negative pressure under the slab at the sample port. It appears there may be some voids under the floor slab in this area or possibly some short-circuiting with outdoor air in this area such that a negative pressure is not maintained in this area on occasion. As depicted in **Figure 6**, there are three SSDS extraction points in the center hallway. In addition, historically, on occasion, there has been little or no negative pressure under the slab at sample port CP-DP-9 in Tenant Space # 04 (TS-04); this location is near the outside edge of the building slab as well as the below grade vault in front of the store; it appears there may be occasional short-circuiting with the outside air at this location such that a negative pressure is not always maintained at this localized area. Based on the results of the differential pressure measurements from locations surrounding these areas, an assessment has been made that overall, the SSDS is providing sufficient vacuum to prevent vapor intrusion into the building. After the CPB SSDS became operational in 2009, the differential pressure results were discussed with the NYSDEC and NYSDOH and they concurred that the SSDS was providing sufficient overall vacuum under the slab to prevent vapor intrusion into the building.

Sub-Slab Vapor & Indoor Air Sampling Event

During this reporting period, sub-slab vapor and indoor air samples were collected from the CPB as per the SMP sample collection/monitoring schedule. The sub-slab vapor and indoor air samples were collected on 12 February 2020. The previous sub-slab vapor and indoor air sampling event at the CPB was conducted in January 2016 and was summarized in the previous PRR submitted in July 2016.

Although not required as part of the SMP monitoring/sample schedule, sub-slab vapor and indoor air sampling events have been conducted every 3-4 years at the CPB. Since the SSDS is operational 24/7, sub-slab vapor and indoor air sampling is not required as per the NYSDOH Vapor Intrusion Guidance Document; however, these sampling events provide data to compare against previous sampling events so we can assess the current vapor conditions under the slab and allows us to monitor for trends in the data. Two sub-slab samples and two co-located indoor air samples were collected from the CPB to provide an assessment of the condition of the sub-slab vapors and indoor air at this location during a sampling event conducted during the 2019-2020 heating season. In addition, an outdoor air sample was also collected during this monitoring event. In May 2017 NYSDOH revised their Vapor Intrusion Guidance Document Matrix Tables

guidance values and included several additional CVOCs in the tables. **Table 5** provides the revised NYSDOH matrix table guidance values.

Elevated concentrations of PCE and TCE are still present in both sub-slab vapor samples during the February 2020 sampling event; however, the overall CVOC concentrations have been decreasing significantly since April 2012 when samples were collected after the ISCO pilot test was conducted, especially the concentrations at the CPB-SS-02 sub-slab vapor location. The CPB-SS-02 and CPB-IA-02 (co-located indoor air) sample location is in TS-05 where the dry-cleaning machines of the former Mimi Cleaners were located. The CPB-SS-03 / CPB-IA-03 sample location is in the TS-02 space (see **Figure 9**).

Concentrations of PCE, c12-DCE, and TCE in these two sub-slab samples in the CPB (CPB SS-02 and CPB-SS-03) have been decreasing significantly since April 2012. PCE concentrations in these two sub-slab samples collected in February 2020 were 1,780 and 31,100 mcg/m³, respectively. TCE concentrations in these two sub-slab samples were 3.76 and 1,760 mcg/m³, respectively. Concentrations of c12-DCE in these two sub-slab samples were 5.23 and 7,890 mcg/m³, respectively. Vinyl chloride (VC) was detected in the CPB-SS-03 sample at a concentration of 10 mcg/m³; VC has not been detected in any of the sub-slab vapor or indoor air samples since the sub-slab vapor and indoor air sampling was initiated at the CPB. It should be noted that due to the elevated concentration of PCE in the sub-slab samples, the analytical laboratory had to dilute samples which causes the detection limits for all the analytes to be elevated.

PCE was detected in the indoor air samples at a concentration of 5.24 mcg/m³ in the CPB- IA-02 sample and 2.61 mcg/m³ in the CPB-IA-03 sample. The NYSDOH guidance value for PCE in indoor air is 10 mcg/m³. TCE was detected in the CPB- IA-02 indoor air sample at a concentration of 0.118 mcg/m³; TCE was not detected in the CPB- IA-03 sample at a detection limit of 0.107 mcg/m³. VC and c12-DCE were not detected in either of the indoor air samples. The outdoor air sample (MC-OA-02122020) contained PCE at a concentration of 3.3 mcg/m³.

During the sampling event conducted in January 2016, PCE concentrations were 16,000 and 36,000 mcg/m³, respectively in the two sub-slab samples. TCE concentrations in these two sub-slab samples were 160 and 2,000 mcg/m³, respectively. Concentrations of c12-DCE in these two sub-slab samples were 74 and 7,800 mcg/m³, respectively. PCE was detected in the indoor air samples at a concentration of 23 mcg/m³ in the CPB-IA-02 sample and 4.1 mcg/m³ in the CPB-IA-03 sample. The NYSDOH guidance value for PCE in indoor air was 30 mcg/m³ at the time of this sampling event; this guidance value was subsequently decreased to 10 mcg/m³ in May 2017. TCE and c12-DCE were also detected in the CPB-IA-02 indoor air sample at concentrations of 0.41 and 0.69 mcg/m³, respectively.

During the December 2013 sampling event conducted at the CPB, PCE concentrations in the two sub-slab samples collected (CPB-SS-02 and CPB-SS-03) were 37,000 and 46,000 mcg/m³, respectively; the co-located indoor air samples (CPB-IA-02 and CPB-IA-03) contained PCE concentrations of 19 and 7.2 mcg/m³, respectively. TCE concentrations in these two sub-slab samples during the December 2013 sampling event were 290 and 2,900 mcg/m³, respectively. Concentrations of c12-DCE in these two sub-slab samples were <220 and 7,400 mcg/m³, respectively.

During a sampling event conducted in November 2012, the PCE concentration in CPB-SS-03 was 460,000 mcg/m³; the indoor air sample (CPB-IA-03) during this sample event contained a PCE concentration of 5.2 mcg/m³. CPB-SS-03 and CPB-IA-03 were the only samples collected in the CPB during this sampling event. During the November 2012 sampling event, TCE and c12-DCE concentrations in this sub-slab sample were 7,600 and 11,000 mcg/m³, respectively; TCE was not detected in the indoor air. Concentrations of c12-DCE in these two sub-slab samples were <400 and 11,000 mcg/m³, respectively.

Figure 9 and **Table 6** provide a summary of the sub-slab vapor and indoor air data collected from the CPB since 2011 and the sample locations within the building. An electronic data summary report file was submitted to NYSDEC on 25 April 2020 and the EDD files for this sampling event were subsequently submitted to NYSDEC as well. The sub-slab vapor and indoor air sampling data summary report is included in **Appendix E** of this PRR.

5.3 Comparisons with Remedial Objectives

Groundwater Sampling Results - 2022

In the April 2022 sampling event, the concentration of PCE in MW-1 was below its NYSDEC Class GA standard of 5 mcg/l at a concentration of 2.0 mcg/l. No VOCs were detected in MW-2 with exception of Acetone at 11 mcg/l which is suspected to have been a laboratory contaminant. No other VOCs were detected in either of the monitoring wells. As shown on **Table 2**, **Figure 3**, and **Figure 8**, the CVOCs concentrations in the groundwater continue to show a decreasing trend in both wells based on a comparison of the historical data. MW-2 has not exceeded any NYSDEC VOC drinking water standards or guidance values since the June 2011 sampling event when PCE was detected at a concentration of 11 mcg/l. MW-1 contained the lowest concentration of PCE since the monitoring wells were installed in 2003 and for the first time it was below the NYSDEC VOC drinking water standards or guidance values.

Overall, the CVOc concentrations in these two monitoring wells have shown a significant decrease since the wells were installed in 2003. The two monitoring wells are scheduled to be sampled again in 2026.

Sub-Slab & Indoor Air Sampling - 2020

Figure 9 and **Table 6** provide a summary of the sub-slab and indoor air data collected from the CPB. As shown in the figure and the table, the sub-slab concentrations of CVOCs have decreased since the April 2012, November 2012, and January 2016 sampling events. The table and the figure also include the data collected from the building since November 2011, prior to the pilot ISCO treatment below the slab conducted in March 2012.

Elevated concentrations of PCE were still present in both sub-slab vapor samples during the February 2020 sampling event; however, concentrations have been decreasing significantly since the April and November 2012 sampling events. The sub-slab sample locations are in the TS-05 tenant space in the northeast corner of the building where dry-cleaning machines of the former Mimi Cleaners were located (CPB-SS-02) and in the TS-

02 tenant space (CPB-SS-03). CPB-SS-02 and CPB-SS-03 contained PCE concentrations of 1,780 and 31,100 mcg/m³, respectively, in February 2020. During the January 2016 sampling events, the CPB-SS-02 sub-slab sample contained PCE at concentrations of 16,000 mcg/m³. During the April 2012, November 2012 sampling events, December 2013 sampling event, and January 2016 sampling event, the CPB-SS-03 sub-slab sample contained PCE at concentrations of 280,000, 460,000, 46,000, and 36,000 mcg/m³, respectively.

The indoor air samples collected during the February 2020 sampling event (CPB-IA-02 and CPB-IA-03) contained PCE concentrations of 5.24 and 2.61 mcg/m³, respectively. During the January 2016 sampling event, these two indoor samples contained PCE at concentrations of 23 and 4.1 mcg/m³, respectively.

TCE was detected in the two sub-slab samples from CPB-SS-02 and CPB-SS-03 at concentrations of 3.76 and 1,760 mcg/m³, respectively during the February 2020 sampling event. During the April 2012, November 2012, December 2013, and January 2016 sampling events, CPB-SS-03 contained TCE concentrations of 13,000, 7,600, 2,900, and 2000 mcg/m³. There were no detectable concentrations of TCE in the samples collected from CPB-SS-02 in April 2012; however, the TCE detection limit for this sample was 540 mcg/m³, due to the elevated PCE concentration in the sample (the analytical laboratory was required to dilute the samples due to the elevated PCE concentrations). CPB-SS-02 was not sampled in November 2012. In December 2013 and January 2016, TCE was detected at a concentration of 290 and 160 mcg/m³ respectively in the CPB-SS-03 sample.

The indoor air samples collected in February 2020 contained TCE concentrations of 0.118 mcg/m³ and below the detection limit of 0.107 mcg/m³ in CPB-IA-02 and CPB-IA-03, respectively.

During the February 2020 sampling event, c12-DCE was detected in the CPB-SS-02 and CPB-SS-03 sub-slab samples at concentrations of 5.23 and 7,890 mcg/m³, respectively. The indoor air samples collected in February 2020 were below the detection limit of 0.079 mcg/m³ for c12-DCE in both indoor air samples.

VC was detected in the CPB-SS-03 sample at a concentration of 10 mcg/m³. VC has not been detected in the sub-slab samples before this; however, this may be due to the elevated detection limits for VC in the previous sub-slab sampling events because the analytical laboratory was required to dilute the samples due to the elevated PCE concentrations. As depicted in **Table 6**, since the PCE concentrations have been dropping the dilutions have been getting lower for the respective sampling events. Prior to the February 2020 sampling event, the lowest detection limit for VC has been 140 mcg/m³. The indoor air samples collected in February 2020 were below the detection limit of 0.051 mcg/m³ for VC in both indoor air samples.

In accordance with the NYSDOH vapor intrusion guidance document, the concentrations of PCE in the sub-slab samples places it in the “mitigate” category with respect to PCE under the original (October 2006) and revised (May 2017) guidance matrices. The concentrations of TCE in the sub-slab samples place it in the “mitigate” category for both samples based on the revised NYSDOH matrix table for TCE. Concentrations of c12-DCE in the sub-slab samples places it in the “mitigate” category for the CPB-SS-03 sample and no further action for the CPB-SS-02 sample based on the revised NYSDOH

matrix table for c12-DCE. The results of the February 2020 sampling event at the CPB indicate there is not a significant vapor intrusion pathway into the building and the CVOC concentrations continue to show a reduction; however, the sub-slab sampling results still warrant the continued operation of the SSDS in the CPB. See the July 2016 PRR for additional details of the January 2016 sub-slab / indoor air sampling event.

5.4 Monitoring Deficiencies

The monitoring fully complied with the Monitoring Plan.

5.5 Conclusions and Recommendations

The monitoring being conducted continues to achieve its goals. HDR is recommending the continued operation of the SSDS at the CPB. In addition, HDR recommends the collection of sub-slab and indoor samples from the same sample locations as the February 2020 sampling event during the 2023-2024 heating season to provide an updated assessment of the sub-slab vapor concentrations under the CPB and an updated assessment of soil vapor intrusion at the CPB.

6 Operation and Maintenance Plan Compliance

6.1 Components

The Operation and Maintenance (O&M) Plan requires inspection of the CPB building slab and SSDS on a quarterly basis.

Concrete Slab Inspections

As part of the quarterly inspections at the CPB, the building slab is inspected to determine if there has been any damage to the floor slab (cracks, holes, or penetrations/openings, that could compromise the cover system, allowing for a potential vapor intrusion pathway into the buildings. In addition, the building owners or their representative are interviewed on an annual basis, if available, to determine if the building floors may have been compromised or opened during the previous year.

As approved by NYSDEC and NYSDOH, the offsite buildings no longer require annual inspections since the SSDS components were removed or capped in September 2017; all the extraction points were removed, and the floor penetrations were sealed with concrete.

SSDS

The quarterly inspections at the CPB include recording the vacuums on the seven main extraction legs of the system, vacuums on the moisture accumulator and dilution (bypass) bleed, pressure on the blower exhaust. As stated previously, the SSDS at the CPB runs on a continuous basis. The measurements are entered onto the field data sheets that are then transferred to an electronic spreadsheet (see **Table 3**). Differential pressure readings are collected from the sample ports in the floor to document that the sub-slab maintains a negative pressure to remove a potential vapor intrusion pathway into the building. Inspection-to-inspection measurements are compared to identify possible degradation in system vacuum or the sub-slab vacuums.

As mentioned previously, there was one unscheduled CPB SSDS shutdown during this 3-year reporting period. In September 2019, the SSDS shut down because the tubing connected to the photohelic pressure gauge became brittle and fell off its fitting causing the unit to shut down due to a low vacuum condition. HDR received a text notification that there was no vacuum in any of the lateral legs of the system when this occurred. An HDR scientist conducted a site visit and found the issue with the tubing. The end of the tubing was cut off and it was reattached; this allowed the system to start up again. The system was down for approximately ten days during this outage.

During renovation activities in the TS-09 and TS-10 tenant spaces in January 2020, the floor had to be opened to install some new plumbing. HDR was notified of the renovation activities and conducted a site visit with a PID when the floor was opened. There were no readings above background during this monitoring with the PID. During our sub-slab sampling event conducted in February 2020, the HDR scientist noticed that the

contractor conducting the renovations in TS-09 and TS-10 had opened the floor to install additional sanitary lines below the slab. The building management team did not notify HDR that they had to open the floor again. HDR had a PID with them for the sub-slab vapor sampling was able to conduct some monitoring over the open floor area; there were no readings above background on the PID.

The email/test alert system for the CPB SSDS has been working well to notify HDR quickly if there is a significant loss of vacuum in one of the lateral piping legs that would indicate the blower has malfunctioned or possibly lateral leg piping has been damaged. Staff involved with the project receive a prompt notification via email and/or text message if the vacuum in the SSDS piping is reduced to near zero inches of water indicating a possible malfunction of the SSDS system that could cause a reduction in depressurization under the slab.

6.2 Summary of O&M Completed

Concrete Slab Inspections

The requisite inspection frequency was achieved during the reporting period except for the April 2020 visit due to the COVID-19 pandemic. Additional operator visits were completed as required to address system repairs at the CPB. The CPB SSDS ran continuously for this period, except as noted below:

1. In September 2019, the system shut down unexpectedly. After a site visit it was determined that the vacuum tubing attached to the photohelic pressure gauge had come loose causing the blower to shut down as the system perceived it as a loss of vacuum and automatically shut down the blower. HDR inspected the remainder of the tubing in the blower enclosure and determined that it was in good condition. After the tubing to the photohelic pressure gauge was reattached, the system was able to start back up.
2. In January 2020, the floor slab was opened in TS-09 and TS-10 to facilitate the installation of sanitary and water lines as part of renovation activities. HDR conducted air monitoring with a PID when the floor was opened.
3. In February 2020, sub-slab vapor and indoor air sampling was conducted. Prior to this sampling event, the SSDS was shut down to allow the sub-slab vapors and indoor air concentrations to equilibrate without the SSDs in operation prior to the collection of sub-slab vapor and indoor air samples. The SSDS was shut down for 13 days prior to sample collection event. Upon completion of the sampling event, the SSDS was restarted.
4. During the February 2020 sub-slab sampling event, HDR noticed additional trenching of the floor slab in TS-09 and TS-10 for the renovation activities. HDR was not notified about these additional floor trenching activities by the building management team. HDR conducted monitoring with a PID over the open floor areas; there were no readings above background.

5. In April 2020, the routine quarterly inspection event was canceled due to the COVID-19 pandemic concerns. The CPB management team indicated most of the tenants were closed at this time and they did not want HDR in the building due to the potential health concerns.
6. In July 2020, HDR conducted a site visit to install a replacement DPSP for CP-DP-12A that was removed and sealed up during the renovation activities in TS-TS-10.
7. In August 2020, HDR conducted a site visit to install a replacement DPSP for CP-DP-07 that was removed during a previous build-out in TS-09. During installation the drill bit got locked up in the concrete (likely caught on rebar) and could not be removed (or advanced). In September 2020 HDR tried several methods to retrieve the drill bit but was unsuccessful. HDR had to cut the drill bit flush with the floor and then seal up the hole. There was not another suitable location in this area to install a replacement DPSP.
8. In October of 2021, HDR conducted an onsite visit with the Westchester County Department of Health (WCDOH) as part of the 3-year air discharge permit renewal.

6.3 Evaluation

During the reporting period, there were two short-term shutdowns of the SSDS (one was scheduled, and one was due to an equipment malfunction). Nevertheless, the system operated as designed and continued to achieve its remedial goal of preventing vapor intrusion into the building.

During the reporting period, the concrete cover system (building slab) functioned as designed. As noted previously, the floor was opened in two tenant spaces for short durations to facilitate the installation of sanitary and/or water lines as part of renovation activities.

6.4 Deficiencies

There were no deficiencies in complying with the O&M Plan during this reporting period.

6.5 Conclusions and Recommendations

Continued operation of the SSDS is required. No changes to the O&M Plan are needed.

7 Overall PRR Conclusions and Recommendations

7.1 Compliance with Site Management Plan

1. For each component of the Site Management Plan (IC/EC, Monitoring Plan, O&M Plan), all requirements were met during this reporting period.
2. The additional operations and maintenance procedures to provide prompt notification to HDR when the SSDS shuts down unexpectedly due to an equipment malfunction/failure or power outage that were instituted after the 2016 PRR are working well and will remain in place.

7.2 Performance and Effectiveness of the Remedy

The Site Management Plan is achieving the remedial objectives for the site:

1. The sub-slab of the Christie Place Building is depressurized on a continuous basis.
2. Excavation through the building slab and elsewhere at the site is controlled. There were short-term excavation activities in two tenant spaces during renovation activities that were monitored by HDR with a PID when the floor slabs were opened.
3. Groundwater at the site is not being used.

7.3 Recommendations

HDR recommends the continued operation of the SSDS at the CPB and the continued groundwater quadrennial monitoring schedule.

7.4 Future PRR Submittals

The remedial systems at the CPB have been operating reliably for many years and monitoring results show no adverse trends. Therefore, HDR recommends a reduction in the frequency for preparation and submittal of PRRs to a 5-year basis (once every five years); the next PRR would be due on 28 July 2027 if this recommendation is accepted by NYSDEC.

8 References

Documents Submitted to NYSDEC during the Reporting Period

Letter. John Guzewich (HDR) to Salvatore Priore. (25 April 2020).
Former Mimi Cleaners: 58 Christie Place, Scarsdale, NY
Voluntary Cleanup Program Site No. V00306-3
Sub Slab Vapor and Indoor Air Sampling - 2019-2020 Heating Season
Summary Report - Christie Place Building

Documents Received from NYSDEC during the Reporting Period

Letter. Salvatore F. Priore (NYSDEC) to Hausman Realty Corporation. (30 January 2020).
2019 Periodic Review Report (PRR) Response Letter,
Former Mimi Cleaners, 58 Christie Place in Scarsdale, Westchester County, New York
Site No. V00306-3, prepared by HDR Engineering Inc.

Appendix A.

IC/EC Certification



Enclosure 2
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form



Site Details

Box 1

Site No. **V00306**

Site Name **Mimi Cleaners**

Site Address: 58 Christie Place Zip Code: 10583
City/Town: Scarsdale
County: Westchester
Site Acreage: 0.060

Reporting Period: June 28, 2019 to June 28, 2022

YES NO

1. Is the information above correct? ☒ ☐

If NO, include handwritten above or on a separate sheet.

2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period? ☐ ☒

3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))? ☐ ☒

4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period? ☒ ☐

If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.

5. Is the site currently undergoing development? ☐ ☒

Box 2

YES NO

6. Is the current site use consistent with the use(s) listed below? ☒ ☐
Commercial and Industrial

7. Are all ICs in place and functioning as designed? ☒ ☐

IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

Description of Institutional ControlsParcelOwnerInstitutional Control**2-5-12**~~Hausman Realty Company, Inc.~~
Christie Place Owners LLCGround Water Use Restriction
Soil Management Plan
Landuse Restriction
Monitoring Plan
Site Management Plan
O&M Plan

Declaration of Covenant and Restrictions including commercial land use, groundwater use restriction, farming/vegetable garden restriction, evaluation of the potential for vapor intrusion in and future site buildings.

Description of Engineering ControlsParcelEngineering Control**2-5-12**Vapor Mitigation
Cover System
~~Air Sparging/Soil Vapor Extraction~~

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the Engineering Control certification;

b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and complete.

YES NO

☒

☐

2. For each Engineering control listed in Box 4, I certify by checking "YES" below that all of the following statements are true:

(a) The Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

(b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

(c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

(d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

(e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES NO

☒

☐

**IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and
DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.**

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

IC CERTIFICATIONS
SITE NO. V00306

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1,2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210 45 of the Penal Law

I Michael P. Musso at HDR - 50 Tice Blvd., Suite 210, Woodcliff Lake, NJ 07677
Michael P. Musso print name print business address

am certifying as Remedial Party's Designated Representative (Owner or Remedial Party)

for the Site named in the Site Details Section of this form

Michael P. Musso, P.E.
Signature of Owner, Remedial Party, or Designated Representative
Rendering Certification

10/12/2022
Date

EC CERTIFICATIONS

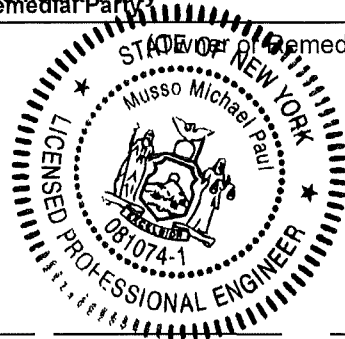
Box 7

Professional Engineer Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Michael P. Musso at HDR - 50 Tice Blvd., Suite 210, Woodcliff Lake, NJ 07677
Michael P. Musso HDR - 50 Tice Blvd., Suite 210, Woodcliff Lake, NJ 07677
print name print business address

I am certifying as a Professional Engineer for the Remedial Party
Remedial Party (Owner of Remedial Party)



Michael P. Musso, P.E.
Signature of Professional Engineer, for the Owner or
Remedial Party, Rendering Certification

Stamp
(Required for PE)

10/12/2022
Date

October 11, 2022

Peter Blumenthal
Hausman Realty Company, Inc.
% WestEx Associates, Inc.
119 E. Hartsdale Avenue
Hartsdale New York, 10530

Re: Site No. V00306, Mimi Cleaners, 58 Christie Place, Scarsdale, New York 10583

Dear Mr. Blumenthal:

We are writing pursuant to Appendix B of the Site Management Plan (“SMP”) for the above referenced site (the “Site”) to certify to Hausman Realty Company, Inc. (the “Remedial Party”) that to the best of our knowledge and belief:

1. No portion of the Site property (the “Property”) has been sold, subdivided, merged, or undergone a tax map amendment during the period from June 28, 2019 to June 28, 2022 (the “Reporting Period”).
2. There has been no change of the use at the Site within the meaning of 6 N.Y.C.R.R. 375-1.11 (d) during the Reporting Period.
3. No federal, state and/or local permits have been issued for or at the Property during the Reporting Period, except for any permit that may have been issued to the Remedial Party’s consultant HDR (“HDR”) to authorize the continued operation of the Sub-Slab Depressurization System at the Property.
4. The Site use is consistent with “Commercial and Industrial” uses as those terms are defined in 6 N.Y.C.R.R. Part 375.
5. The Declaration of Covenants and Restrictions executed on July 24th, 2014 (the “Declaration”) remains in effect.

6. As required by the Declarations, the groundwater restrictions, soil management plan, land use restriction, farming/vegetable garden restriction and requirement to evaluate the potential for vapor intrusion into future Site building all remain in effect in accordance with the SMP, and based upon the facts presented in the Periodic Review Report prepared by HDR for the Reporting Period, the monitoring plan, site management plan and O&M plan also remain in effect in accordance with the SMP.
7. Christie Place Owners LLC is the owner of the Property.

Very truly yours,

Christie Place Owners LLC, by:

A handwritten signature in black ink, appearing to read 'D. Petta', written in a cursive style.

Damian R. Petta
Vice President

Appendix B.

SSDS Inspection Forms

F-7 INSPECTION FORM

Former Mimi Cleaners Site - Christie Building

Inspecting Company:

- HDR

Inspector:

- MTP

Date & Time:

- 10/31/2019 / 1200

Floor condition (report any cracks or penetrations).

- Good

Wall condition (report any cracks or penetrations).

- Good

Piping condition (report any damage).

- Good

Are system extraction (suction) points sealed?

- Good

Any noted odors or liquids?

- 1 gallon Green Solid of Building, 1 Gallon Green Vault

Any complaints from contact person?

- None

Comments:

- CP-DR-16a Unaccessibly, CRPP-17 Behind Doors

F-7 INSPECTION FORM

Former Mimi Cleaners Site - Christie Building

Inspecting Company:

- MDR

Inspector:

- MTP

Date & Time:

- 10/26/2022 / 1230

Floor condition (report any cracks or penetrations).

- Good

Wall condition (report any cracks or penetrations).

- Good

Piping condition (report any damage).

- Good

Are system extraction (suction) points sealed?

- Good

Any noted odors or liquids?

- 1/4 Gallon from Drainpipe

Any complaints from contact person?

- None

Comments:

- None

F-7 INSPECTION FORM

Former Mimi Cleaners Site - Christie Building

Inspecting Company:

- MDR

Inspector:

- MTP

Date & Time:

- 01/22/2022 / 1245

Floor condition (report any cracks or penetrations).

- Good

Wall condition (report any cracks or penetrations).

- Good

Piping condition (report any damage).

- Good

Are system extraction (suction) points sealed?

- Good

Any noted odors or liquids?

- 1/4 Gallon from Drainpipe, 1/2 Gallon from Vault

Any complaints from contact person?

- NONE

Comments:

- None

F-7 INSPECTION FORM

Former Mimi Cleaners Site - Christie Building

Inspecting Company:

- MDR

Inspector:

- MTP

Date & Time:

- 04/29/2021 / 1260

Floor condition (report any cracks or penetrations).

- Good

Wall condition (report any cracks or penetrations).

- Good

Piping condition (report any damage).

- Good

Are system extraction (suction) points sealed?

- Good

Any noted odors or liquids?

- 1/4 gallon from Drainpipe

Any complaints from contact person?

- NONE

Comments:

- NONE

F-7 INSPECTION FORM

Former Mimi Cleaners Site - Christie Building

Inspecting Company:

- HDR

Inspector:

- WTP

Date & Time:

- 07/22/2021 / 1245

Floor condition (report any cracks or penetrations).

- Good

Wall condition (report any cracks or penetrations).

- Good

Piping condition (report any damage).

- Good

Are system extraction (suction) points sealed?

- Good

Any noted odors or liquids?

- NONE

Any complaints from contact person?

- NONE

Comments:

- NONE

F-7 INSPECTION FORM

Former Mimi Cleaners Site - Christie Building

Inspecting Company:

- HDR

Inspector:

- MTP

Date & Time:

- 10/06/2021 / 1215

Floor condition (report any cracks or penetrations).

- Good

Wall condition (report any cracks or penetrations).

- Good

Piping condition (report any damage).

- Good

Are system extraction (suction) points sealed?

- Good

Any noted odors or liquids?

- 1/2 Gallon from Drainpipe,

Any complaints from contact person?

- None

Comments:

- None

F-7 INSPECTION FORM

Former Mimi Cleaners Site - Christie Building

Inspecting Company:

- RDR

Inspector:

- MP

Date & Time:

- 01/21/2022 / 1300

Floor condition (report any cracks or penetrations).

- Good

Wall condition (report any cracks or penetrations).

- Good

Piping condition (report any damage).

- Good

Are system extraction (suction) points sealed?

- Good

Any noted odors or liquids?

- 1 Gallon from Drainpipe / 1/4 Gallon from Vault

Any complaints from contact person?

- NONE

Comments:

- NONE

F-7 INSPECTION FORM

Former Mimi Cleaners Site - Charstree Building

Inspecting Company:

- HDR

Inspector:

- MTP

Date & Time:

- 4/28/2022 / 1145

Floor condition (report any cracks or penetrations).

- Good

Wall condition (report any cracks or penetrations).

- Good

Piping condition (report any damage).

- Good

Are system extraction (suction) points sealed?

- Good

Any noted odors or liquids?

- 1/2 Gallon Brown Drain pipe, 1/4 Gallon Brown Vault

Any complaints from contact person?

- None

Comments:

- None.

F-7 INSPECTION FORM

Former Mimi Cleaners Site - Christie Building

Inspecting Company:

- HIDR

Inspector:

- MTP

Date & Time:

- 7/5/2022 / 1215

Floor condition (report any cracks or penetrations).

- Good

Wall condition (report any cracks or penetrations).

- Good

Piping condition (report any damage).

- Good

Are system extraction (suction) points sealed?

- Good

Any noted odors or liquids?

- 114 Gallon Green Drainpipe

Any complaints from contact person?

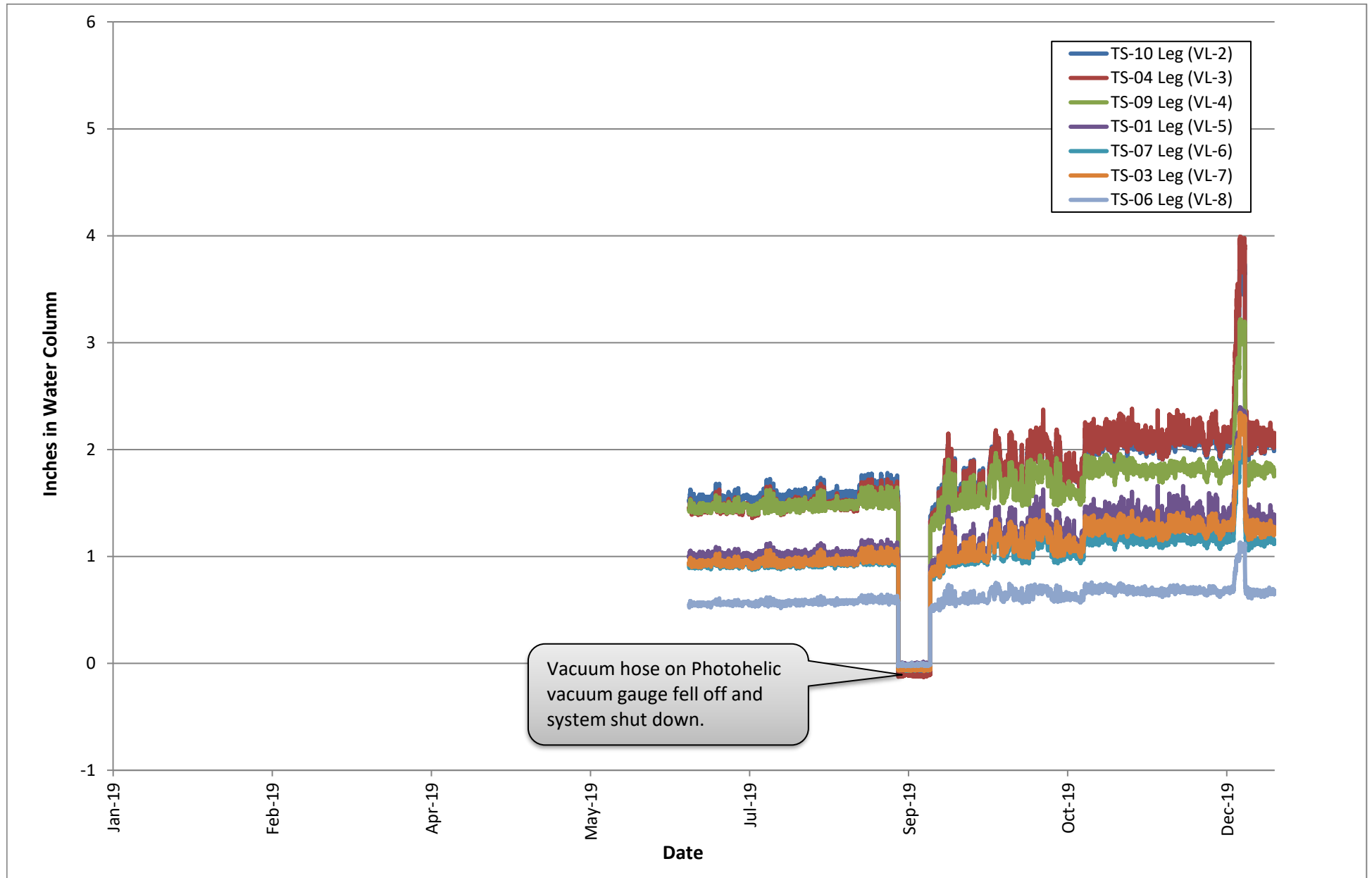
- NONE

Comments:

- NONE

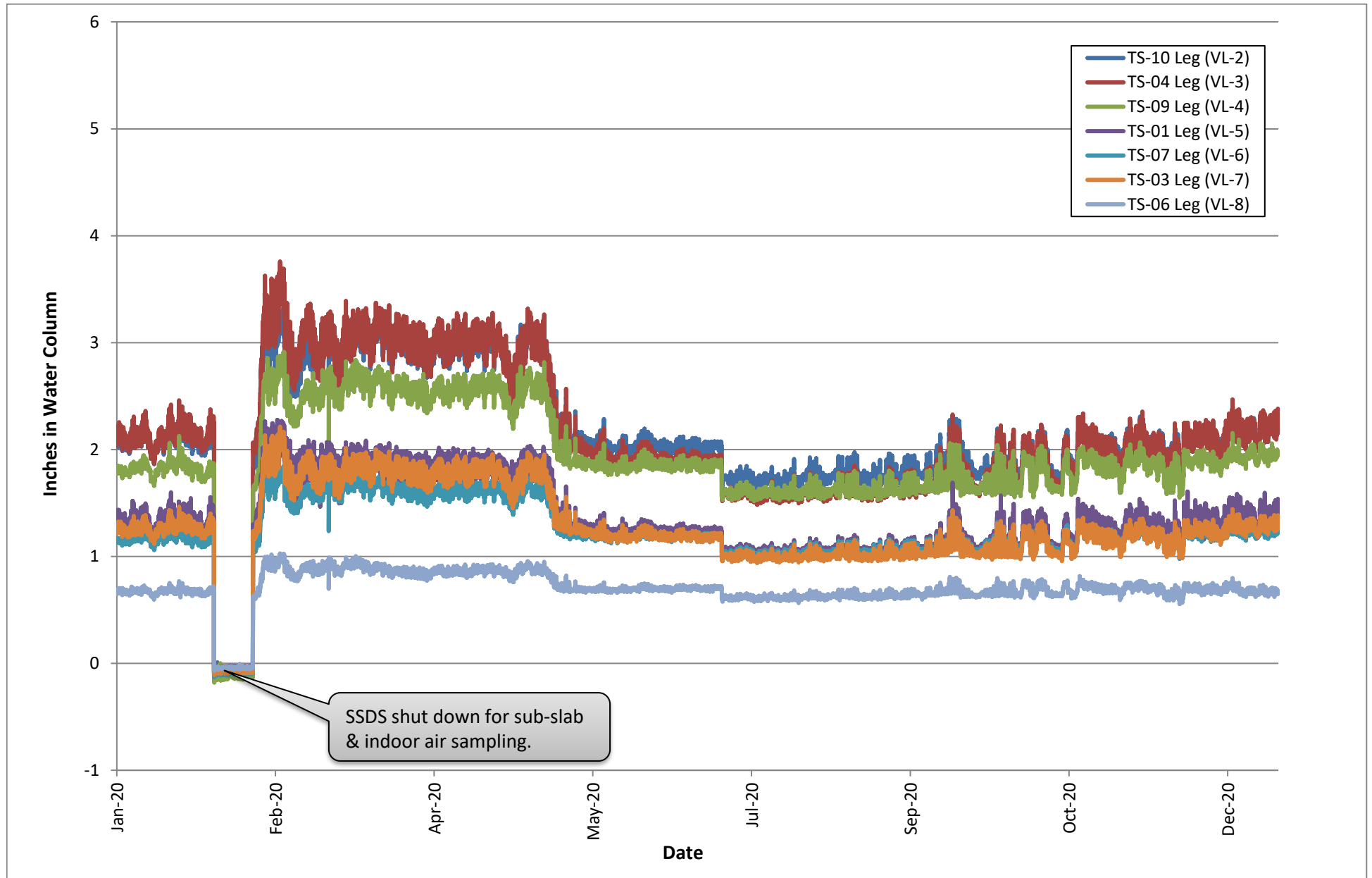


Former Mimi Cleaners - Christie Place Building
Sub-Slab Depressurization System - Lateral Suction Leg Vacuum Data
(July - December 2019)



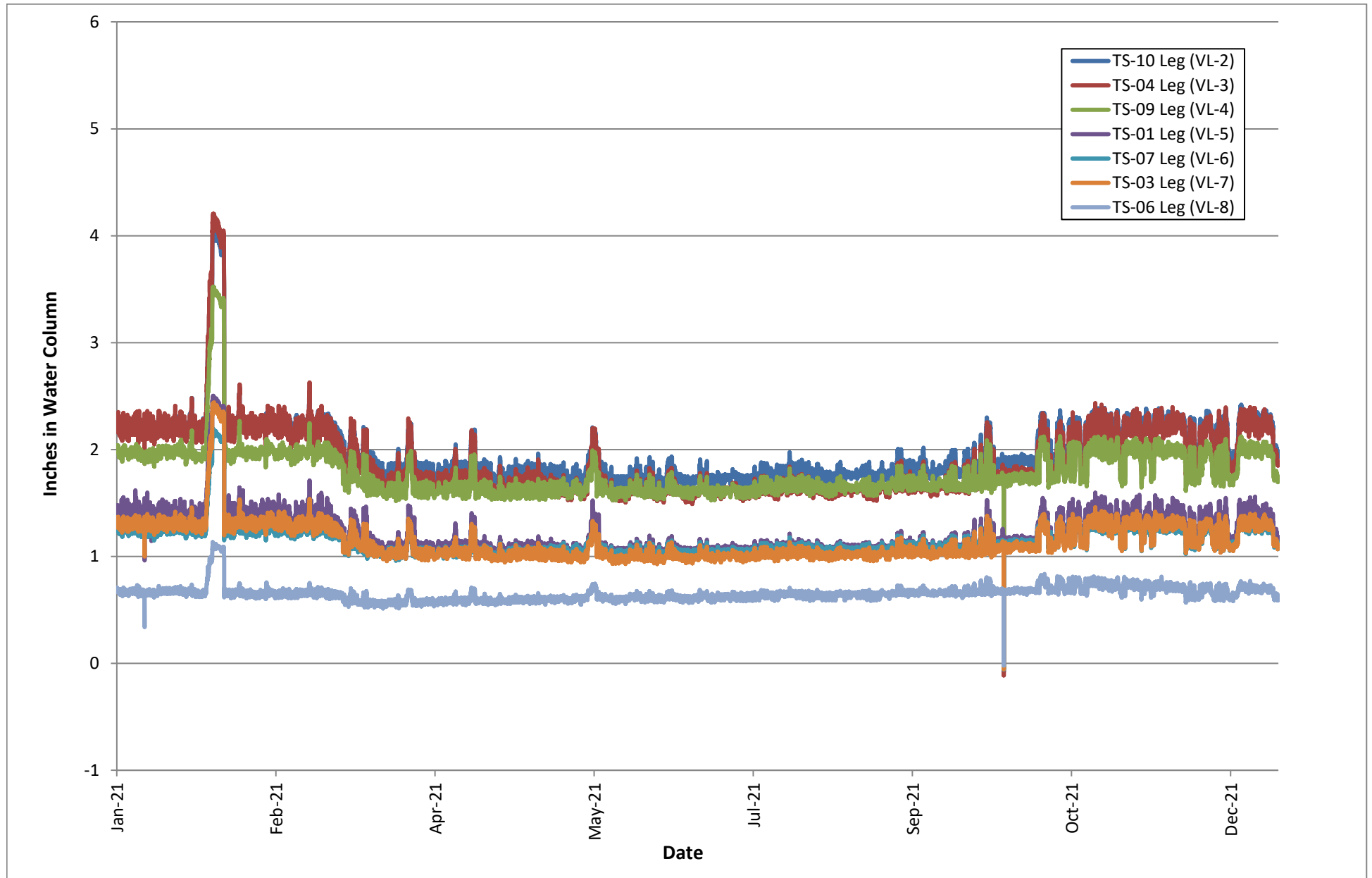


Former Mimi Cleaners - Christie Place Building
Sub-Slab Depressurization System - Lateral Suction Leg Vacuum Data
(January - December 2020)



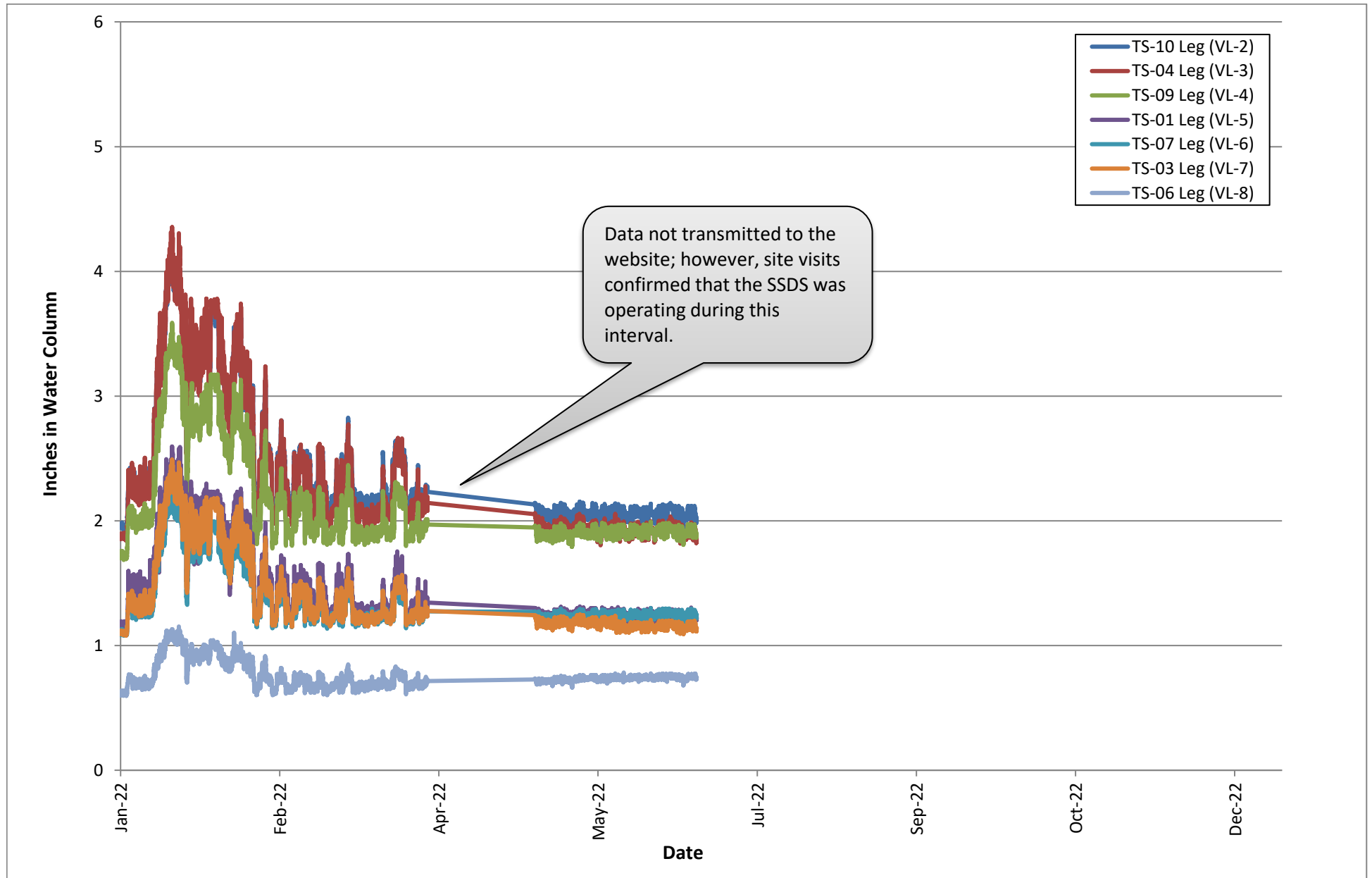


Former Mimi Cleaners - Christie Place Building
Sub-Slab Depressurization System - Lateral Suction Leg Vacuum Data
(January - December 2021)





Former Mimi Cleaners - Christie Place Building
Sub-Slab Depressurization System - Lateral Suction Leg Vacuum Data
(January - June 2022)



Appendix C.

WCDOH SSDS Certificate to Operate Sources of Air Contamination Permit

- Christie Place Building 3-Year
Air Discharge Permit Renewal
(2022-2024)



George Latimer
County Executive

Sherlita Amler, MD
Commissioner of Health

October 27, 2021

Hausman Realty Co., Inc.
c/o West-Ex Associates, Inc.
119 E. Hartsdale Avenue
Hartsdale, NY 10530
Att: Peter Blumenthal

**RE: Renewal Certificate to Operate
A-L Industrial
Emission Point: 1**

Dear Mr. Blumenthal:

Receipt of your fees for the above-referenced facility is hereby acknowledged. Please be advised that our records reveal that your facility is being operated in compliance with applicable County Laws and Regulations.

Enclosed please find your renewal Certificate to Operate which is valid until December 31, 2024.

Respectfully,

Natasha Court, P.E.
Associate Engineer
Bureau of Environmental Quality

NC/EA:cd
Enclosure

cc: File



George Latimer
County Executive
Department of Health
Sherlita Amler, M.D.
Commissioner of Health

Westchester
gov.com
Westchester County
Department of Health
Bureau of Environmental Quality
**CERTIFICATE TO OPERATE SOURCES
OF AIR CONTAMINATION**

Facility Information:

Emission Point Number: 00001

Facility Name: Hausman Realty Co., Inc.

Facility Telephone: (914) 948-5800

Street Address: 58 Christie Place Scarsdale, NY 10583

Municipality:

Facility Owner Information:

Owner's Name: Hausman Realty Co., Inc.

Owner Telephone: (914) 948-5800

Mailing Address: Peter Blumenthal c/o West-Ex Associates, Inc. 119 E. Hartsdale Ave. Hartsdale, NY 10530

Description Process:

To operate sub-slab depressurization system installed to mitigate potential perchloroethylene vapor intrusion into the building. The system consist of 18 shallow extraction points, 8 differential pressure gages (Dwyer Minihelic II) and the existing extraction piping from the former SVE system. One 4.5 HP regenerative blower (Fuji Electric Model VFC600A-7WS) producing 206 cfm maximum discharge mounted on the roof; 20 gal. moisture separation tank, discharge stock is located 9 ft above the structure; and the system includes various controls and appurtenances.

The Certificate supersedes any earlier Certificate to Operate issued for this source by the Department pursuant to Chapter 873, Article XIII, Section 873.1306.1 of the Laws of Westchester County.

That the operation of this source is in accordance with the source description, approved plans, and emission limits for this source on file with the Department.

The source of air contamination shall be operated in compliance with the provisions of Chapter 873, Article XIII of the Laws of Westchester County and 6NYCRRR.

This certificate shall be suspended or revoked as provided by the laws of Westchester County, if this source of air contamination is maintained or operated other than in compliance with the above.

Air contaminants collected by air cleaning devices shall be handled and disposed of in an approved manner.

FOR THE COMMISSIONER

Sherlita Amler MD

BY: _____
Sherlita Amler, M.D.
Commissioner of Health

SHERLITA AMLER, M.D.

BY:

[Signature]
Delroy Taylor, P.E., Assistant Commissioner
Bureau of Environmental Quality

Certificate Issued: 10/27/2021

Certificate Expires: 12/31/2024

25 Moore Avenue • Mount Kisco, NY 10549

THIS PERMIT MUST BE POSTED CONSPICUOUSLY

Appendix D.

Groundwater Monitoring Event Documentation (April 2022)

- Field Sampling Logs
- Analytical Data Report

HDR Well Sampling Log

Date: 4/28/2022
Crew: MTP
Job No: 10017039 - 23473
Project: Former Mimi Cleaners
Project Site: Scarsdale, NY

METERS USED
Temp.: YSI HDR 1
pH: Pocket Pen PVSC 09
Cond.: YSI HDR1
Turb.: Lab #2

Well ID No.: MW-1
Well Condition: fair *
Well Depth/Diameter: 31.46'/2"
Well Casing Type: PVC
Screened Interval: Bottom 20 feet
Casing Ht./Lock No.: flush mount/NA
Reference Pt.: Top of PVC
Depth to Water (DTW): 12.62
Water Column Ht./Vol.: 18.84 / 3.1
Purge Est.: 9.3
Purge Method(s): hand bailed - Polyethylene Bailer
Purge Date/Time(s): 4/28/2022 / 1320 - 1350

Depth(s): Surface to bottom
Rates (gpm): NA
Purged Volume: 7.0 gal
DTW After Purging: Dry
Yield Rate: L - M - H L

Purge Observations:
clear at first, then cloudy, milky gray color, no noticeable odor
(purged to dryness)

DTW Before Sampling: 12.78
Sample Date/Time: 4/28/2022 / 1430
Sampling Method: Polyethylene Bailer
Sampling Depth(s): top of water column
DTW After Sampling: 12.78
Chain-of-Custody No.(s): NA
Analytical Lab(s): Hampton Clarke
Sampling Observations: clear, no odor

SAMPLE CHEMISTRIES				
	Temp. (°C)	pH	Sp. Cond.	Turb.
Start	(mS/cm)			
End	15.4	7.7	7.628	35.6

SAMPLE ANALYSES			
Parameters	Inv. No.	Pres. Meth.	Filter
8260B	NA	4°C	N

Sample ID: MW-1_20220428

PURGE CHEMISTRIES

Vol.	Temp. (°C)	pH	Sp. Cond.	Turb.
0	15.2	7.7	5.328	53.38
3	15.4	7.8	6.324	560.1
6	16.2	7.4	8.746	438.5

(mS/cm)

Comments:

Air Temp: 48 F

Weather Conditions: 20 mph NW, Clear

Well is in DeCicco's parking lot between the trash compactor
and the side entrance to the center hallway of the Christie Pl. Bld

* The concrete seal at the top of the curb box is cracked and the metal rim of the curb box is loose.

This is most likely due the dumpster in this area being dragged across the well when it the dumpster is serviced.

Crew Chief Signature MTP Date: 4/28/2022

HDR Well Sampling Log

Date: 4/28/2022
Crew: MTP
Job No: 10017039 - 23473
Project: Former Mimi Cleaners
Project Site: Scarsdale, NY

Well ID No.: MW-2
Well Condition: Poor
Well Depth/Diameter: 29.95/2"
Well Casing Type: PVC
Screened Interval: Bottom 20 feet
Casing Ht./Lock No.: flush mount/NA
Reference Pt.: Top of PVC
Depth to Water (DTW): 11.83
Water Column Ht./Vol.: 18.12 / 2.9
Purge Est.: 8.7
Purge Method(s): hand bailed - Polyethylene Bailer
Purge Date/Time(s): 4/28/2022 / 1030 - 1120

Depth(s): Surface to bottom (dry)
Rates (gpm): na
Purged Volume: 6.5 Gal
DTW After Purging: Dry
Yield Rate: L - M - H L
Purge Observations:
cloudy, gray color, slight sulfur odor
(purged to dryness)

PURGE CHEMISTRIES

Vol.	Temp. (°C)	pH	Sp. Cond.	Turb.
0	11.3	8.9	1.446	8.1
3	14	7.5	-	51.6
6	15.1	7.5	-	147.2

(mS/cm)

Comments: well went dry at 6.5 gal

Well is in parking space on north side of Spencer Place

* Concrete collar around curb box is cracking

METERS USED

Temp.: YSI HDR 1
pH: Pocket Pen PVSC 09
Cond.: YSI HDR1
Turb.: Lab #2

DTW Before Sampling: 18.48
Sample Date/Time: 4/28/2022 / 1145
Sampling Method: Polyethylene Bailer
Sampling Depth(s): top of water column
DTW After Sampling: 18.48
Chain-of-Custody No.(s): N/A
Analytical Lab(s): Hampton Clarke
Sampling Observations: clear, no odor

SAMPLE CHEMISTRIES

	Temp. (°C)	pH	Sp. Cond.	Turb.
Start				
End	14.9	7.6	-	12.7

SAMPLE ANALYSES

Parameters	Inv. No.	Pres. Meth.	Filter
8260B	NA	4°C	N

Sample ID: MW-2_20220428

Crew Chief Signature MTP Date: 4/28/2022

Project: Mimi Cleaners

Client PO: 10017039

Report To: Henningson, Durham & Richardson
Architecture and Engineering, PC
1 International Blvd.
10th Floor, Suite 1000
Mahwah, NJ 07495
Attn: John Guzewich

Received Date: 4/29/2022

Report Date: 6/2/2022

Deliverables: NYDOH-CatB

Lab ID: AD30488

Lab Project No: 2043007

This report is a true report of results obtained from our tests of this material. The report relates only to those samples received and analyzed by the laboratory. All results meet the requirements of the NELAC Institute standards. Laboratory reports may not be reproduced, except in full, without the written approval of the laboratory.

In lieu of a formal contract document, the total aggregate liability of Hampton-Clarke to all parties shall not exceed Hampton-Clarke's total fee for analytical services rendered.


Sean Berls - Quality Assurance Officer

OR

Jean Revolus - Laboratory Director

NJ (07071)
PA (68-00463)

NY (ELAP11408)
KY (90124)

CT (PH-0671)





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SDG Narrative

HC Case Narrative

Client: Henningson, Durham & Richardson Architecture and Engineering, P.C.
Project: Mimi Cleaners

HC Project: 2043007

Hampton-Clarke (HC) received the following samples on 4/29/2022:

<u>Client ID</u>	<u>HC Sample ID</u>	<u>Matrix</u>	<u>Analysis</u>
MW-2_20220428	AD30488-001	Aqueous	Volatile Organics 8260D
MW-1_20220428	AD30488-002	Aqueous	Volatile Organics 8260D
TB_20220428	AD30488-003	Aqueous	Volatile Organics 8260D

This case narrative is in the form of an exception report. Method specific and/or QA/QC anomalies related to this report only are detailed below.

Volatile Organic Analysis:

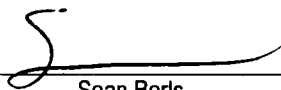
Acetone was recovered in samples AD30488-003 due to possible laboratory contamination.

The Method Blank Spike for batch 101491 had recoveries outside QC limits. Please refer to the applicable Form 3 for the recoveries. Please refer to Form 4 to see which samples are associated with the Method Blank Spike.

The MS/MSD RPD, Matrix Spike and/or Matrix Spike Duplicate for batch 101485 had recoveries outside QC limits. Please refer to the applicable Form 3 for the recoveries.

2-Chloroethylvinylether did not recover in the Matrix Spike and Matrix Spike Duplicate in batch 101485 due to acid preservation of sample. 2-Chloroethylvinylether readily decomposes under acidic conditions. The recovery of 2-Chloroethylvinylether is within QC limits in the Laboratory Control Sample. Please refer to the applicable Form 3 for the recoveries.

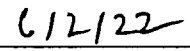
I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data has been authorized by the Laboratory Manager or his designee, as verified by the following signature.



Sean Berls
Quality Assurance Officer

Or

Jean Revolus
Laboratory Director



Date

Reporting Limit Definitions

HC Reporting Limit Definitions/Data Qualifiers

REPORTING DEFINITIONS

DF = Dilution Factor	MR = Matrix Replicate	PS = Post Digestion Spike
DUP = Duplicate	MS = Matrix Spike	RL* = Reporting Limit
LCS = Laboratory Control Spike	MSD = Matrix Spike Duplicate	RT = Retention Time
MBS = Method Blank Spike	NA = Not Applicable	SD = Serial Dilution
MDL = Method Detection Limit	ND = Not Detected	

**Samples with elevated Reporting Limits (RLs) as a result of a dilution may not achieve client reporting limits in some cases. The elevated RLs are unavoidable consequences of sample dilution required to quantitate target analytes that exceed the calibration range of the instrument.*

DATA QUALIFIERS

- A-** Indicates that the Tentatively Identified Compound (TIC) is suspected to be an aldol-condensation product. These compounds are by-products of acetone and methylene chloride used in the extraction process.
- B-** Indicates analyte was present in the Method Blank and sample.
- d-** For Pesticide and PCB analysis, the concentration between primary and secondary columns is greater than 40%. The lower concentration is generally reported.
- E-** Indicates the concentration exceeded the upper calibration range of the instrument.
- J-** Indicates the value is estimated because it is either a Tentatively Identified Compound (TIC) or the reported concentration is greater than the MDL but less than the RL. For samples results between the MDL and RL there is a possibility of false positives or misidentification at the quantitation levels. Additionally, the acceptance criteria for QC samples may not be met.
- R-** Retention Time is out.
- Y-** Indicates a contaminant found in the blank at less than 10% of the concentration of a contaminant found in the sample.

Data Package Summary Forms

HC Report of Analysis

Client: HDR
Project: Mimi Cleaners

HC Project #: 2043007

Sample ID: MW-2_20220428

Lab#: AD30488-001

Matrix: Aqueous

Collection Date: 4/28/2022

Receipt Date: 4/29/2022

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichlorobenzene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.66	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	11
Benzene	1	ug/l	0.50	ND
Bromochloromethane	1	ug/l	1.0	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.87	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND

NOTE: Soil Results are reported to Dry Weigh

Project #: 2043007

Page 1 of 4

Sample ID: MW-2_20220428**Collection Date: 4/28/2022****Lab#: AD30488-001****Receipt Date: 4/29/2022****Matrix: Aqueous**

trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: MW-1_20220428

Lab#: AD30488-002

Matrix: Aqueous

Collection Date: 4/28/2022

Receipt Date: 4/29/2022

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichlorobenzene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.66	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromochloromethane	1	ug/l	1.0	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.87	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	2.0
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: TB_20220428

Lab#: AD30488-003

Matrix: Aqueous

Collection Date: 4/28/2022

Receipt Date: 4/29/2022

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichlorobenzene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.66	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	9.0
Benzene	1	ug/l	0.50	ND
Bromochloromethane	1	ug/l	1.0	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.87	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD30488-001

Client Id: MW-2_20220428

Data File: 1M161220.D

Analysis Date: 05/02/22 22:42

Date Rec/Extracted: 04/29/22-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260D

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	110-82-7	Cyclohexane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	100-41-4	Ethylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.66	U	98-82-8	Isopropylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	79-20-9	Methyl Acetate	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
123-91-1	1,4-Dioxane	50	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.87	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	11	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
74-97-5	Bromochloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-25-2	Bromoform	1.0	U	79-01-6	Trichloroethene	1.0	U
74-83-9	Bromomethane	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-01-4	Vinyl Chloride	1.0	U
1330-20-7	Xylenes (Total)	1.0	U				

Worksheet #: 639376

Total Target Concentration } |

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD30488-002

Client Id: MW-1_20220428

Data File: 1M161221.D

Analysis Date: 05/02/22 23:00

Date Rec/Extracted: 04/29/22-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260D

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	110-82-7	Cyclohexane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	100-41-4	Ethylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.66	U	98-82-8	Isopropylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	79-20-9	Methyl Acetate	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
123-91-1	1,4-Dioxane	50	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.87	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	2.0
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
74-97-5	Bromochloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-25-2	Bromoform	1.0	U	79-01-6	Trichloroethene	1.0	U
74-83-9	Bromomethane	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-01-4	Vinyl Chloride	1.0	U
1330-20-7	Xylenes (Total)	1.0	U				

Worksheet #: 639376

Total Target Concentration 2

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration use a

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD30488-003

Client Id: TB_20220428

Data File: 2M167449.D

Analysis Date: 05/02/22 17:10

Date Rec/Extracted: 04/29/22-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260D

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	110-82-7	Cyclohexane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	100-41-4	Ethylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.66	U	98-82-8	Isopropylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	79-20-9	Methyl Acetate	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
123-91-1	1,4-Dioxane	50	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.87	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	9.0	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
74-97-5	Bromochloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-25-2	Bromoform	1.0	U	79-01-6	Trichloroethene	1.0	U
74-83-9	Bromomethane	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-01-4	Vinyl Chloride	1.0	U
1330-20-7	Xylenes (Total)	1.0	U				

Worksheet #: 639376

Total Target Concentration 9

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration use a

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Chain of Custody Forms

CONDITION UPON RECEIPT

Batch Number AD30488

Entered By: maxwell

Date Entered 4/30/2022 6:48:00 AM

-
- 1 Yes Is there a corresponding COC included with the samples?
 - 2 Yes Are the samples in a container such as a cooler or ice chest?
 - 3 No Are the COC seals intact?
 - 4 T0054 <--- Thermometer ID. Please specify the Temperature inside the container (in degC).
2.9
 - 5 Yes Are the samples refrigerated (where required)/have they arrived on ice?
 - 6 Yes Are the samples within the holding times for the parameters listed on the COC? IF no, list parameters and samples:
 - 7 Yes Are all of the sample bottles intact? If no, specify sample numbers broken/leaking
 - 8 Yes Are all of the sample labels or numbers legible? If no specify:
 - 9 Yes Do the contents match the COC? If no, specify
 - 10 Yes Is there enough sample sent for the analyses listed on the COC? If no, specify:
 - 11 Yes Are samples preserved correctly?
 - 12 Yes Was temperature blank present (Place comment below if not)? If not was temperature of samples verified?
 - 13 No Other comments ...Specify (TB date, sample matrix, any missing info, etc.)
 - 14 NA Corrective actions (Specify item number and corrective action taken).
 - 15 NA Were any samples for ortho-phosphate or dissolved ferrous iron field filtered?

PRESERVATION DOCUMENT

Batch Number AD30488

Entered By: maxwell

Date Entered 4/30/2022 6:49:00 AM

Lab#	Container Size	Container/Vial Check	Parameter	Preservative	Preservative Lot#	PH	pH Lot#
AD30488-001	40ML	G	VO	HCL	253057	1	HC160347
AD30488-002	40ML	G	VO	HCL	253057	1	HC160347
AD30488-003	40ML	G	VO	HCL	253057	1	HC160347

Internal Chain of Custody

Lab#:	DateTime:	Loc or User	Bot Nu	A/ M	Analysis	Lab#:	DateTime:	Loc or User	Bot Nu	A/ M	Analysis
AD30488-001	04/29/22 16:00	MAXW	0	M	Received						
AD30488-001	04/30/22 06:48	MAXW	0	M	Login						
AD30488-001	04/30/22 07:41	R31	1	A	NONE						
AD30488-001	04/30/22 07:41	R31	2	A	NONE						
AD30488-001	05/02/22 17:19	WP	2	A	VOA						
AD30488-001	04/30/22 07:39	R31	3	A	PH/CHECK						
AD30488-002	04/29/22 16:00	MAXW	0	M	Received						
AD30488-002	04/30/22 06:48	MAXW	0	M	Login						
AD30488-002	04/30/22 07:41	R31	1	A	NONE						
AD30488-002	04/30/22 07:41	R31	2	A	NONE						
AD30488-002	05/02/22 17:19	WP	2	A	VOA						
AD30488-002	04/30/22 07:39	R31	3	A	PH/CHECK						
AD30488-003	04/29/22 16:00	MAXW	0	M	Received						
AD30488-003	04/30/22 06:48	MAXW	0	M	Login						
AD30488-003	04/30/22 07:41	R31	1	A	NONE						
AD30488-003	04/30/22 07:41	R31	2	A	NONE						
AD30488-003	05/02/22 11:16	JM	2	A	VOA						
AD30488-003	04/30/22 07:39	R31	3	A	PH/CHECK						

Samples marked as received are stored in coolers or refrigerator R12, or R24 at 4 deg C until Login

GC/MS Volatile Data

GC/MS Volatile Data
QC Summary

FORM2

Surrogate Recovery

Method: EPA 8260D

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column1 S2 Recov	Column1 S3 Recov	Column1 S4 Recov	Column0 S5 Recov	Column0 S6 Recov
1M161196.D	DAILY BLANK	A	05/02/22 15:12	1		105	108	99	101		
2M167430.D	DAILY BLANK	A	05/02/22 10:55	1		98	101	98	99		
1M161220.D	AD30488-001	A	05/02/22 22:42	1		106	109	96	97		
1M161221.D	AD30488-002	A	05/02/22 23:00	1		104	107	97	101		
2M167449.D	AD30488-003	A	05/02/22 17:10	1		99	102	98	100		
1M161197.D	AD30343-004(T)	A	05/02/22 15:30	1		104	106	97	97		
1M161206.D	AD30343-004(T:MS)	A	05/02/22 18:19	1		101	106	97	100		
1M161207.D	AD30343-004(T:MSD)	A	05/02/22 18:37	1		101	98	101	100		
1M161208.D	MBS101491	A	05/02/22 18:56	1		101	101	100	101		
2M167431.D	AD30470-001	A	05/02/22 11:15	1		100	102	98	99		
2M167434.D	MBS101485	A	05/02/22 12:15	1		99	100	100	102		
2M167443.D	AD30470-001(MS)	A	05/02/22 15:12	1		100	100	98	101		
2M167444.D	AD30470-001(MSD)	A	05/02/22 15:31	1		100	98	100	101		

Flags: SD=Surrogate diluted out

*=Surrogate out

Method: EPA 8260D

Aqueous Laboratory Limits

Compound	Spike Amt	Limits
S1=Dibromofluoromethane	30	73-131
S2=1,2-Dichloroethane-d4	30	78-128
S3=Toluene-d8	30	79-111
S4=Bromofluorobenzene	30	82-112

Form3
Recovery Data Laboratory Limits
QC Batch: MBS101485

Data File		Sample ID:		Analysis Date			
Spike or Dup: 2M167434.D		MBS101485		5/2/2022 12:15:00 PM			
Non Spike(If applicable):							
Inst Blank(If applicable):							
Method: 8260D		Matrix: Aqueous		Units: ug/L		QC Type: MBS	
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	20.1432	0	20	101	50	150
Dichlorodifluoromethane	1	19.4903	0	20	97	50	150
Chloromethane	1	19.7872	0	20	99	50	150
Bromomethane	1	17.122	0	20	86	50	150
Vinyl Chloride	1	20.5394	0	20	103	50	150
Chloroethane	1	20.8976	0	20	104	50	150
Trichlorofluoromethane	1	20.4959	0	20	102	50	150
Ethyl ether	1	20.3128	0	20	102	50	150
Furan	1	20.4755	0	20	102	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	19.4844	0	20	97	50	150
Methylene Chloride	1	21.9772	0	20	110	70	130
Acrolein	1	102.4462	0	100	102	50	150
Acrylonitrile	1	21.0006	0	20	105	50	150
Iodomethane	1	14.1934	0	20	71	50	150
Acetone	1	107.3792	0	100	107	50	150
Carbon Disulfide	1	20.3269	0	20	102	50	150
t-Butyl Alcohol	1	109.6966	0	100	110	50	150
n-Hexane	1	19.8229	0	20	99	70	130
Di-isopropyl-ether	1	21.2025	0	20	106	70	130
1,1-Dichloroethene	1	22.1701	0	20	111	70	130
Methyl Acetate	1	21.1627	0	20	106	50	150
Methyl-t-butyl ether	1	20.814	0	20	104	70	130
1,1-Dichloroethane	1	21.7193	0	20	109	70	130
trans-1,2-Dichloroethene	1	21.7076	0	20	109	70	130
Ethyl-t-butyl ether	1	21.1501	0	20	106	70	130
cis-1,2-Dichloroethene	1	22.3486	0	20	112	70	130
Bromochloromethane	1	22.5572	0	20	113	70	130
2,2-Dichloropropane	1	21.9924	0	20	110	70	130
Ethyl acetate	1	21.0743	0	20	105	50	150
1,4-Dioxane	1	1145.437	0	1000	115	50	150
1,1-Dichloropropene	1	21.4949	0	20	107	70	130
Chloroform	1	21.705	0	20	109	70	130
Cyclohexane	1	19.9737	0	20	100	70	130
1,2-Dichloroethane	1	21.8574	0	20	109	70	130
2-Butanone	1	21.6709	0	20	108	50	150
1,1,1-Trichloroethane	1	21.4558	0	20	107	70	130
Carbon Tetrachloride	1	21.1951	0	20	106	50	150
Vinyl Acetate	1	20.8828	0	20	104	50	150
Bromodichloromethane	1	22.1495	0	20	111	70	130
Methylcyclohexane	1	19.7403	0	20	99	70	130
Dibromomethane	1	22.1353	0	20	111	70	130
1,2-Dichloropropane	1	22	0	20	110	70	130
Trichloroethene	1	22.2232	0	20	111	70	130
Benzene	1	21.1677	0	20	106	70	130
tert-Amyl methyl ether	1	21.1163	0	20	106	70	130
Iso-propylacetate	1	21.0398	0	20	105	70	130
Methyl methacrylate	1	21.928	0	20	110	70	130
Dibromochloromethane	1	22.642	0	20	113	70	130
2-Chloroethylvinylether	1	20.1789	0	20	101	70	130
cis-1,3-Dichloropropene	1	21.4703	0	20	107	70	130
trans-1,3-Dichloropropene	1	21.7258	0	20	109	70	130
Ethyl methacrylate	1	21.0543	0	20	105	70	130
1,1,2-Trichloroethane	1	22.3801	0	20	112	70	130
1,2-Dibromoethane	1	22.0734	0	20	110	70	130
1,3-Dichloropropane	1	21.8663	0	20	109	70	130
4-Methyl-2-Pentanone	1	20.4514	0	20	102	50	150
2-Hexanone	1	21.2628	0	20	106	50	150
Tetrachloroethene	1	21.4307	0	20	107	50	150
Toluene	1	21.5579	0	20	108	70	130
1,1,1,2-Tetrachloroethane	1	21.1001	0	20	106	70	130
Chlorobenzene	1	21.2419	0	20	106	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS101485

Method: 8260D	Matrix: Aqueous		Units: ug/L		QC Type: MBS		
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	21.1485	0	20	106	70	130
n-Amyl acetate	1	21.228	0	20	106	70	130
Bromoform	1	21.3691	0	20	107	70	130
Ethylbenzene	1	21.4749	0	20	107	70	130
1,1,2,2-Tetrachloroethane	1	21.4525	0	20	107	70	130
Styrene	1	21.0488	0	20	105	70	130
m&p-Xylenes	1	41.5209	0	40	104	70	130
o-Xylene	1	21.0103	0	20	105	70	130
trans-1,4-Dichloro-2-butene	1	19.9295	0	20	100	50	150
1,3-Dichlorobenzene	1	21.1601	0	20	106	70	130
1,4-Dichlorobenzene	1	20.8282	0	20	104	70	130
1,2-Dichlorobenzene	1	21.1186	0	20	106	70	130
Isopropylbenzene	1	21.2914	0	20	106	70	130
Cyclohexanone	1	103.0833	0	100	103	50	150
Camphene	1	20.4342	0	20	102	70	130
1,2,3-Trichloropropane	1	20.8318	0	20	104	70	130
2-Chlorotoluene	1	21.9909	0	20	110	70	130
p-Ethyltoluene	1	20.2102	0	20	101	70	130
4-Chlorotoluene	1	21.4408	0	20	107	70	130
n-Propylbenzene	1	21.51	0	20	108	70	130
Bromobenzene	1	21.2509	0	20	106	70	130
1,3,5-Trimethylbenzene	1	21.1658	0	20	106	70	130
Butyl methacrylate	1	21.1729	0	20	106	70	130
t-Butylbenzene	1	21.1989	0	20	106	70	130
1,2,4-Trimethylbenzene	1	21.23	0	20	106	70	130
sec-Butylbenzene	1	20.978	0	20	105	70	130
4-Isopropyltoluene	1	20.7433	0	20	104	70	130
n-Butylbenzene	1	21.1822	0	20	106	70	130
p-Diethylbenzene	1	20.1323	0	20	101	70	130
1,2,4,5-Tetramethylbenzene	1	20.4748	0	20	102	70	130
1,2-Dibromo-3-Chloropropane	1	21.6755	0	20	108	50	150
Camphor	1	225.8927	0	200	113	20	150
Hexachlorobutadiene	1	22.0317	0	20	110	50	150
1,2,4-Trichlorobenzene	1	21.9829	0	20	110	70	130
1,2,3-Trichlorobenzene	1	22.9178	0	20	115	70	130
Naphthalene	1	22.3124	0	20	112	50	150

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Bold and underline - Indicates the compounds reported on form 1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS101485

Data File		Sample ID:		Analysis Date			
Spike or Dup: 2M167443.D		AD30470-001(MS)		5/2/2022 3:12:00 PM			
Non Spike(If applicable): 2M167431.D		AD30470-001		5/2/2022 11:15:00 AM			
Inst Blank(If applicable):							
Method: 8260D		Matrix: Aqueous		Units: ug/L		QC Type: MS	
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	20.6814	0	20	103	50	150
<u>Dichlorodifluoromethane</u>	1	<u>18.3854</u>	0	<u>20</u>	<u>92</u>	<u>50</u>	<u>150</u>
<u>Chloromethane</u>	1	<u>16.0856</u>	0	<u>20</u>	<u>80</u>	<u>50</u>	<u>150</u>
<u>Bromomethane</u>	1	<u>10.5391</u>	0	<u>20</u>	<u>53</u>	<u>50</u>	<u>150</u>
<u>Vinyl Chloride</u>	1	<u>18.4809</u>	0	<u>20</u>	<u>92</u>	<u>50</u>	<u>150</u>
<u>Chloroethane</u>	1	<u>17.597</u>	0	<u>20</u>	<u>88</u>	<u>50</u>	<u>150</u>
<u>Trichlorofluoromethane</u>	1	<u>18.9682</u>	0	<u>20</u>	<u>95</u>	<u>50</u>	<u>150</u>
Ethyl ether	1	17.0693	0	20	85	50	150
Furan	1	17.8	0	20	89	50	150
<u>1,1,2-Trichloro-1,2,2-trifluoroethane</u>	1	<u>17.7533</u>	0	<u>20</u>	<u>89</u>	<u>50</u>	<u>150</u>
<u>Methylene Chloride</u>	1	<u>18.334</u>	0	<u>20</u>	<u>92</u>	<u>70</u>	<u>130</u>
Acrolein	1	83.1581	0	100	83	50	150
Acrylonitrile	1	17.0264	0	20	85	50	150
Iodomethane	1	9.0212	0	20	45 *	50	150
<u>Acetone</u>	1	<u>86.0306</u>	0	<u>100</u>	<u>86</u>	<u>50</u>	<u>150</u>
<u>Carbon Disulfide</u>	1	<u>18.7384</u>	0	<u>20</u>	<u>94</u>	<u>50</u>	<u>150</u>
t-Butyl Alcohol	1	84.4587	0	100	84	50	150
n-Hexane	1	18.351	0	20	92	70	130
Di-isopropyl-ether	1	17.8754	0	20	89	70	130
<u>1,1-Dichloroethene</u>	1	<u>20.0553</u>	0	<u>20</u>	<u>100</u>	<u>70</u>	<u>130</u>
<u>Methyl Acetate</u>	1	<u>16.8306</u>	0	<u>20</u>	<u>84</u>	<u>50</u>	<u>150</u>
<u>Methyl-t-butyl ether</u>	1	<u>17.0558</u>	0	<u>20</u>	<u>85</u>	<u>70</u>	<u>130</u>
<u>1,1-Dichloroethane</u>	1	<u>18.3843</u>	0	<u>20</u>	<u>92</u>	<u>70</u>	<u>130</u>
<u>trans-1,2-Dichloroethene</u>	1	<u>19.2417</u>	0	<u>20</u>	<u>96</u>	<u>70</u>	<u>130</u>
Ethyl-t-butyl ether	1	17.4172	0	20	87	70	130
<u>cis-1,2-Dichloroethene</u>	1	<u>18.6935</u>	0	<u>20</u>	<u>93</u>	<u>70</u>	<u>130</u>
<u>Bromochloromethane</u>	1	<u>18.5826</u>	0	<u>20</u>	<u>93</u>	<u>70</u>	<u>130</u>
2,2-Dichloropropane	1	18.0587	0	20	90	70	130
Ethyl acetate	1	17.5622	0	20	88	50	150
<u>1,4-Dioxane</u>	1	<u>855.0904</u>	0	<u>1000</u>	<u>86</u>	<u>50</u>	<u>150</u>
1,1-Dichloropropene	1	19.1642	0	20	96	70	130
<u>Chloroform</u>	1	<u>20.8612</u>	<u>2.5845</u>	<u>20</u>	<u>91</u>	<u>70</u>	<u>130</u>
<u>Cyclohexane</u>	1	<u>18.4746</u>	0	<u>20</u>	<u>92</u>	<u>70</u>	<u>130</u>
<u>1,2-Dichloroethane</u>	1	<u>18.0172</u>	0	<u>20</u>	<u>90</u>	<u>70</u>	<u>130</u>
<u>2-Butanone</u>	1	<u>17.6823</u>	0	<u>20</u>	<u>88</u>	<u>50</u>	<u>150</u>
<u>1,1,1-Trichloroethane</u>	1	<u>18.8749</u>	0	<u>20</u>	<u>94</u>	<u>70</u>	<u>130</u>
<u>Carbon Tetrachloride</u>	1	<u>19.0264</u>	0	<u>20</u>	<u>95</u>	<u>50</u>	<u>150</u>
Vinyl Acetate	1	16.8941	0	20	84	50	150
<u>Bromodichloromethane</u>	1	<u>18.7372</u>	0	<u>20</u>	<u>94</u>	<u>70</u>	<u>130</u>
<u>Methylcyclohexane</u>	1	<u>18.232</u>	0	<u>20</u>	<u>91</u>	<u>70</u>	<u>130</u>
Dibromomethane	1	18.4126	0	20	92	70	130
<u>1,2-Dichloropropane</u>	1	<u>18.3428</u>	0	<u>20</u>	<u>92</u>	<u>70</u>	<u>130</u>
<u>Trichloroethene</u>	1	<u>18.8196</u>	0	<u>20</u>	<u>94</u>	<u>70</u>	<u>130</u>
<u>Benzene</u>	1	<u>18.3621</u>	0	<u>20</u>	<u>92</u>	<u>70</u>	<u>130</u>
tert-Amyl methyl ether	1	17.4884	0	20	87	70	130
Iso-propylacetate	1	16.5587	0	20	83	70	130
Methyl methacrylate	1	17.2835	0	20	86	70	130
<u>Dibromochloromethane</u>	1	<u>18.8952</u>	0	<u>20</u>	<u>94</u>	<u>70</u>	<u>130</u>
2-Chloroethylvinylether	1	0	0	20	0 *	70	130
<u>cis-1,3-Dichloropropene</u>	1	<u>16.966</u>	0	<u>20</u>	<u>85</u>	<u>70</u>	<u>130</u>
<u>trans-1,3-Dichloropropene</u>	1	<u>17.2752</u>	0	<u>20</u>	<u>86</u>	<u>70</u>	<u>130</u>
Ethyl methacrylate	1	17.2477	0	20	86	70	130
<u>1,1,2-Trichloroethane</u>	1	<u>17.9821</u>	0	<u>20</u>	<u>90</u>	<u>70</u>	<u>130</u>
<u>1,2-Dibromoethane</u>	1	<u>18.0533</u>	0	<u>20</u>	<u>90</u>	<u>70</u>	<u>130</u>
1,3-Dichloropropane	1	17.9066	0	20	90	70	130
<u>4-Methyl-2-Pentanone</u>	1	<u>16.6885</u>	0	<u>20</u>	<u>83</u>	<u>50</u>	<u>150</u>
<u>2-Hexanone</u>	1	<u>16.9039</u>	0	<u>20</u>	<u>85</u>	<u>50</u>	<u>150</u>
<u>Tetrachloroethene</u>	1	<u>18.0168</u>	0	<u>20</u>	<u>90</u>	<u>50</u>	<u>150</u>
<u>Toluene</u>	1	<u>18.1431</u>	0	<u>20</u>	<u>91</u>	<u>70</u>	<u>130</u>
1,1,1,2-Tetrachloroethane	1	17.2189	0	20	86	70	130
<u>Chlorobenzene</u>	1	<u>17.7781</u>	0	<u>20</u>	<u>89</u>	<u>70</u>	<u>130</u>

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Recovery Data Laboratory Limits

QC Batch: MBS101485

Method: 8260D	Matrix: Aqueous		Units: ug/L		QC Type: MS		
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	17.4063	0	20	87	70	130
n-Amyl acetate	1	17.1678	0	20	86	70	130
Bromoform	1	17.2029	0	20	86	70	130
Ethylbenzene	1	17.1739	0	20	86	70	130
1,1,2,2-Tetrachloroethane	1	17.4733	0	20	87	70	130
Styrene	1	17.5048	0	20	88	70	130
m&p-Xylenes	1	35.101	0	40	88	70	130
o-Xylene	1	17.4361	0	20	87	70	130
trans-1,4-Dichloro-2-butene	1	12.8051	0	20	64	50	150
1,3-Dichlorobenzene	1	17.3442	0	20	87	70	130
1,4-Dichlorobenzene	1	17.0996	0	20	85	70	130
1,2-Dichlorobenzene	1	17.2827	0	20	86	70	130
Isopropylbenzene	1	18.1902	0	20	91	70	130
Cyclohexanone	1	75.9912	0	100	76	50	150
Camphene	1	5.3614	0	20	27*	70	130
1,2,3-Trichloropropane	1	16.7128	0	20	84	70	130
2-Chlorotoluene	1	17.8703	0	20	89	70	130
p-Ethyltoluene	1	17.0107	0	20	85	70	130
4-Chlorotoluene	1	17.4552	0	20	87	70	130
n-Propylbenzene	1	18.2475	0	20	91	70	130
Bromobenzene	1	16.061	0	20	80	70	130
1,3,5-Trimethylbenzene	1	17.9859	0	20	90	70	130
Butyl methacrylate	1	17.6167	0	20	88	70	130
t-Butylbenzene	1	18.2217	0	20	91	70	130
1,2,4-Trimethylbenzene	1	17.7348	0	20	89	70	130
sec-Butylbenzene	1	18.3667	0	20	92	70	130
4-Isopropyltoluene	1	17.7467	0	20	89	70	130
n-Butylbenzene	1	18.0986	0	20	90	70	130
p-Diethylbenzene	1	17.2143	0	20	86	70	130
1,2,4,5-Tetramethylbenzene	1	17.3321	0	20	87	70	130
1,2-Dibromo-3-Chloropropane	1	16.7391	0	20	84	50	150
Camphor	1	181.5139	0	200	91	20	150
Hexachlorobutadiene	1	18.8327	0	20	94	50	150
1,2,4-Trichlorobenzene	1	17.659	0	20	88	70	130
1,2,3-Trichlorobenzene	1	17.9351	0	20	90	70	130
Naphthalene	1	17.2035	0	20	86	50	150

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Bold and underline - Indicates the compounds reported on form1

Recovery Data Laboratory Limits

QC Batch: MBS101485

Data File		Sample ID:		Analysis Date			
Spike or Dup: 2M167444.D		AD30470-001(MSD)		5/2/2022 3:31:00 PM			
Non Spike(If applicable): 2M167431.D		AD30470-001		5/2/2022 11:15:00 AM			
Inst Blank(If applicable):							
Method: 8260D		Matrix: Aqueous		Units: ug/L			
				QC Type: MSD			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	21.8896	0	20	109	50	150
<u>Dichlorodifluoromethane</u>	1	<u>19.5054</u>	0	20	<u>98</u>	<u>50</u>	<u>150</u>
<u>Chloromethane</u>	1	<u>17.6473</u>	0	20	<u>88</u>	<u>50</u>	<u>150</u>
<u>Bromomethane</u>	1	<u>13.7953</u>	0	20	<u>69</u>	<u>50</u>	<u>150</u>
<u>Vinyl Chloride</u>	1	<u>19.4514</u>	0	20	<u>97</u>	<u>50</u>	<u>150</u>
<u>Chloroethane</u>	1	<u>18.9707</u>	0	20	<u>95</u>	<u>50</u>	<u>150</u>
<u>Trichlorofluoromethane</u>	1	<u>20.5658</u>	0	20	<u>103</u>	<u>50</u>	<u>150</u>
Ethyl ether	1	18.2253	0	20	91	50	150
Furan	1	18.8554	0	20	94	50	150
<u>1,1,2-Trichloro-1,2,2-trifluoroethane</u>	1	<u>19.3933</u>	0	20	<u>97</u>	<u>50</u>	<u>150</u>
<u>Methylene Chloride</u>	1	<u>19.9289</u>	0	20	<u>100</u>	<u>70</u>	<u>130</u>
Acrolein	1	90.714	0	100	91	50	150
Acrylonitrile	1	19.0555	0	20	95	50	150
Iodomethane	1	12.9745	0	20	65	50	150
<u>Acetone</u>	1	<u>96.0564</u>	0	100	<u>96</u>	<u>50</u>	<u>150</u>
<u>Carbon Disulfide</u>	1	<u>18.7719</u>	0	20	<u>94</u>	<u>50</u>	<u>150</u>
t-Butyl Alcohol	1	98.7885	0	100	99	50	150
n-Hexane	1	20.9006	0	20	105	70	130
Di-isopropyl-ether	1	19.0284	0	20	95	70	130
<u>1,1-Dichloroethene</u>	1	<u>21.0692</u>	0	20	<u>105</u>	<u>70</u>	<u>130</u>
<u>Methyl Acetate</u>	1	<u>18.2167</u>	0	20	<u>91</u>	<u>50</u>	<u>150</u>
<u>Methyl-t-butyl ether</u>	1	<u>18.3979</u>	0	20	<u>92</u>	<u>70</u>	<u>130</u>
<u>1,1-Dichloroethane</u>	1	<u>19.6594</u>	0	20	<u>98</u>	<u>70</u>	<u>130</u>
<u>trans-1,2-Dichloroethene</u>	1	<u>20.2815</u>	0	20	<u>101</u>	<u>70</u>	<u>130</u>
Ethyl-t-butyl ether	1	18.9649	0	20	95	70	130
<u>cis-1,2-Dichloroethene</u>	1	<u>19.805</u>	0	20	<u>99</u>	<u>70</u>	<u>130</u>
<u>Bromochloromethane</u>	1	<u>19.8466</u>	0	20	<u>99</u>	<u>70</u>	<u>130</u>
2,2-Dichloropropane	1	19.4294	0	20	97	70	130
Ethyl acetate	1	18.4776	0	20	92	50	150
<u>1,4-Dioxane</u>	1	<u>1010.448</u>	0	1000	<u>101</u>	<u>50</u>	<u>150</u>
1,1-Dichloropropene	1	20.1239	0	20	101	70	130
<u>Chloroform</u>	1	<u>22.0826</u>	<u>2.5845</u>	20	<u>97</u>	<u>70</u>	<u>130</u>
<u>Cyclohexane</u>	1	<u>21.0577</u>	0	20	<u>105</u>	<u>70</u>	<u>130</u>
<u>1,2-Dichloroethane</u>	1	<u>19.6279</u>	0	20	<u>98</u>	<u>70</u>	<u>130</u>
<u>2-Butanone</u>	1	<u>18.5904</u>	0	20	<u>93</u>	<u>50</u>	<u>150</u>
<u>1,1,1-Trichloroethane</u>	1	<u>20.211</u>	0	20	<u>101</u>	<u>70</u>	<u>130</u>
<u>Carbon Tetrachloride</u>	1	<u>20.4572</u>	0	20	<u>102</u>	<u>50</u>	<u>150</u>
Vinyl Acetate	1	18.1567	0	20	91	50	150
<u>Bromodichloromethane</u>	1	<u>20.2901</u>	0	20	<u>101</u>	<u>70</u>	<u>130</u>
<u>Methylcyclohexane</u>	1	<u>20.9927</u>	0	20	<u>105</u>	<u>70</u>	<u>130</u>
Dibromomethane	1	19.4401	0	20	97	70	130
<u>1,2-Dichloropropane</u>	1	<u>20.2869</u>	0	20	<u>101</u>	<u>70</u>	<u>130</u>
<u>Trichloroethene</u>	1	<u>19.9612</u>	0	20	<u>100</u>	<u>70</u>	<u>130</u>
<u>Benzene</u>	1	<u>19.4289</u>	0	20	<u>97</u>	<u>70</u>	<u>130</u>
tert-Amyl methyl ether	1	19.0718	0	20	95	70	130
Iso-propylacetate	1	18.1572	0	20	91	70	130
Methyl methacrylate	1	19.0593	0	20	95	70	130
<u>Dibromochloromethane</u>	1	<u>20.5526</u>	0	20	<u>103</u>	<u>70</u>	<u>130</u>
2-Chloroethylvinylether	1	0	0	20	0*	70	130
<u>cis-1,3-Dichloropropene</u>	1	<u>19.0907</u>	0	20	<u>95</u>	<u>70</u>	<u>130</u>
<u>trans-1,3-Dichloropropene</u>	1	<u>19.1509</u>	0	20	<u>96</u>	<u>70</u>	<u>130</u>
Ethyl methacrylate	1	18.582	0	20	93	70	130
<u>1,1,2-Trichloroethane</u>	1	<u>19.7398</u>	0	20	<u>99</u>	<u>70</u>	<u>130</u>
<u>1,2-Dibromoethane</u>	1	<u>19.9514</u>	0	20	<u>100</u>	<u>70</u>	<u>130</u>
1,3-Dichloropropane	1	19.6959	0	20	98	70	130
<u>4-Methyl-2-Pentanone</u>	1	<u>18.4014</u>	0	20	<u>92</u>	<u>50</u>	<u>150</u>
<u>2-Hexanone</u>	1	<u>18.5734</u>	0	20	<u>93</u>	<u>50</u>	<u>150</u>
<u>Tetrachloroethene</u>	1	<u>20.215</u>	0	20	<u>101</u>	<u>50</u>	<u>150</u>
<u>Toluene</u>	1	<u>19.6796</u>	0	20	<u>98</u>	<u>70</u>	<u>130</u>
1,1,1,2-Tetrachloroethane	1	19.1244	0	20	96	70	130
<u>Chlorobenzene</u>	1	<u>19.547</u>	0	20	<u>98</u>	<u>70</u>	<u>130</u>

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form 1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS101485

Method: 8260D	Matrix: Aqueous		Units: ug/L		QC Type: MSD		
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	18.737	0	20	94	70	130
n-Amyl acetate	1	18.8726	0	20	94	70	130
<u>Bromoform</u>	1	<u>19.1996</u>	0	20	96	70	130
<u>Ethylbenzene</u>	1	<u>19.6707</u>	0	20	98	70	130
<u>1,1,2,2-Tetrachloroethane</u>	1	<u>19.2854</u>	0	20	96	70	130
<u>Styrene</u>	1	<u>19.058</u>	0	20	95	70	130
<u>m&p-Xylenes</u>	1	<u>38.3905</u>	0	40	96	70	130
<u>o-Xylene</u>	1	<u>19.1961</u>	0	20	96	70	130
trans-1,4-Dichloro-2-butene	1	13.5994	0	20	68	50	150
<u>1,3-Dichlorobenzene</u>	1	<u>19.6818</u>	0	20	98	70	130
<u>1,4-Dichlorobenzene</u>	1	<u>19.0469</u>	0	20	95	70	130
<u>1,2-Dichlorobenzene</u>	1	<u>19.6776</u>	0	20	98	70	130
<u>Isopropylbenzene</u>	1	<u>20.4289</u>	0	20	102	70	130
Cyclohexanone	1	90.7588	0	100	91	50	150
Camphene	1	5.394	0	20	27 *	70	130
1,2,3-Trichloropropane	1	18.261	0	20	91	70	130
2-Chlorotoluene	1	19.518	0	20	98	70	130
p-Ethyltoluene	1	19.4028	0	20	97	70	130
4-Chlorotoluene	1	19.9641	0	20	100	70	130
n-Propylbenzene	1	20.7221	0	20	104	70	130
Bromobenzene	1	17.6331	0	20	88	70	130
1,3,5-Trimethylbenzene	1	20.2168	0	20	101	70	130
Butyl methacrylate	1	19.3703	0	20	97	70	130
t-Butylbenzene	1	20.652	0	20	103	70	130
1,2,4-Trimethylbenzene	1	19.8508	0	20	99	70	130
sec-Butylbenzene	1	20.9148	0	20	105	70	130
4-Isopropyltoluene	1	20.1589	0	20	101	70	130
n-Butylbenzene	1	20.7105	0	20	104	70	130
p-Diethylbenzene	1	19.715	0	20	99	70	130
1,2,4,5-Tetramethylbenzene	1	19.5923	0	20	98	70	130
<u>1,2-Dibromo-3-Chloropropane</u>	1	<u>18.9774</u>	0	20	95	50	150
Camphor	1	212.2704	0	200	106	20	150
Hexachlorobutadiene	1	18.9752	0	20	95	50	150
<u>1,2,4-Trichlorobenzene</u>	1	<u>20.5047</u>	0	20	103	70	130
<u>1,2,3-Trichlorobenzene</u>	1	<u>21.0709</u>	0	20	105	70	130
Naphthalene	1	20.2069	0	20	101	50	150

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
 Bold and underline - Indicates the compounds reported on form1

Form3
RPD Data Laboratory Limits
 QC Batch: MBS101485

Data File	Sample ID:	Analysis Date
Spike or Dup: 2M167444.D	AD30470-001(MSD)	5/2/2022 3:31:00 PM
Duplicate(If applicable): 2M167443.D	AD30470-001(MS)	5/2/2022 3:12:00 PM
Inst Blank(If applicable):		
Method: 8260D	Matrix: Aqueous	Units: ug/L
		QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Chlorodifluoromethane	1	21.8896	20.6814	5.7	30
Dichlorodifluoromethane	1	19.5054	18.3854	5.9	30
Chloromethane	1	17.6473	16.0856	9.3	30
Bromomethane	1	13.7953	10.5391	27	30
Vinyl Chloride	1	19.4514	18.4809	5.1	40
Chloroethane	1	18.9707	17.597	7.5	30
Trichlorofluoromethane	1	20.5658	18.9682	8.1	30
Ethyl ether	1	18.2253	17.0693	6.6	30
Furan	1	18.8554	17.8	5.8	30
1,1,2-Trichloro-1,2,2-trifluoroethane	1	19.3933	17.7533	8.8	30
Methylene Chloride	1	19.9289	18.334	8.3	30
Acrolein	1	90.714	83.1581	8.7	30
Acrylonitrile	1	19.0555	17.0264	11	30
Iodomethane	1	12.9745	9.0212	36*	30
Acetone	1	96.0564	86.0306	11	30
Carbon Disulfide	1	18.7719	18.7384	0.18	30
t-Butyl Alcohol	1	98.7885	84.4587	16	30
n-Hexane	1	20.9006	18.351	13	30
Di-isopropyl-ether	1	19.0284	17.8754	6.2	30
1,1-Dichloroethene	1	21.0692	20.0553	4.9	40
Methyl Acetate	1	18.2167	16.8306	7.9	30
Methyl-t-butyl ether	1	18.3979	17.0558	7.6	30
1,1-Dichloroethane	1	19.6594	18.3843	6.7	40
trans-1,2-Dichloroethene	1	20.2815	19.2417	5.3	30
Ethyl-t-butyl ether	1	18.9649	17.4172	8.5	30
cis-1,2-Dichloroethene	1	19.805	18.6935	5.8	30
Bromochloromethane	1	19.8466	18.5826	6.6	30
2,2-Dichloropropane	1	19.4294	18.0587	7.3	30
Ethyl acetate	1	18.4776	17.5622	5.1	30
1,4-Dioxane	1	1010.448	855.0904	17	30
1,1-Dichloropropene	1	20.1239	19.1642	4.9	30
Chloroform	1	22.0826	20.8612	5.7	40
Cyclohexane	1	21.0577	18.4746	13	30
1,2-Dichloroethane	1	19.6279	18.0172	8.6	40
2-Butanone	1	18.5904	17.6823	5	40
1,1,1-Trichloroethane	1	20.211	18.8749	6.8	30
Carbon Tetrachloride	1	20.4572	19.0264	7.2	40
Vinyl Acetate	1	18.1567	16.8941	7.2	30
Bromodichloromethane	1	20.2901	18.7372	8	30
Methylcyclohexane	1	20.9927	18.232	14	30
Dibromomethane	1	19.4401	18.4126	5.4	30
1,2-Dichloropropane	1	20.2869	18.3428	10	30
Trichloroethene	1	19.9612	18.8196	5.9	40
Benzene	1	19.4289	18.3621	5.6	40
tert-Amyl methyl ether	1	19.0718	17.4884	8.7	30
Iso-propylacetate	1	18.1572	16.5587	9.2	30
Methyl methacrylate	1	19.0593	17.2835	9.8	30
Dibromochloromethane	1	20.5526	18.8952	8.4	30
2-Chloroethylvinylether	1	0	0	NA	30
cis-1,3-Dichloropropene	1	19.0907	16.966	12	30
trans-1,3-Dichloropropene	1	19.1509	17.2752	10	30
Ethyl methacrylate	1	18.582	17.2477	7.4	30
1,1,2-Trichloroethane	1	19.7398	17.9821	9.3	30
1,2-Dibromoethane	1	19.9514	18.0533	10	30
1,3-Dichloropropane	1	19.6959	17.9066	9.5	30
4-Methyl-2-Pentanone	1	18.4014	16.6885	9.8	30
2-Hexanone	1	18.5734	16.9039	9.4	30
Tetrachloroethene	1	20.215	18.0168	11	40
Toluene	1	19.6796	18.1431	8.1	40
1,1,1,2-Tetrachloroethane	1	19.1244	17.2189	10	30
Chlorobenzene	1	19.547	17.7781	9.5	40

* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form 1

Form3

RPD Data Laboratory Limits

QC Batch: MBS101485

Method: 8260D	Matrix: Aqueous	Units: ug/L	QC Type: MSD			
Analyte:	Column	Dup/MSD/MBS Conc	Sample/MS/MBS Conc	RPD	Limit	
n-Butyl acrylate	1	18.737	17.4063	7.4	30	
n-Amyl acetate	1	18.8726	17.1678	9.5	30	
Bromofom	1	19.1996	17.2029	11	30	
Ethylbenzene	1	19.6707	17.1739	14	30	
1,1,2,2-Tetrachloroethane	1	19.2854	17.4733	9.9	30	
Styrene	1	19.058	17.5048	8.5	30	
m&p-Xylenes	1	38.3905	35.101	9	30	
o-Xylene	1	19.1961	17.4361	9.6	30	
trans-1,4-Dichloro-2-butene	1	13.5994	12.8051	6	30	
1,3-Dichlorobenzene	1	19.6818	17.3442	13	30	
1,4-Dichlorobenzene	1	19.0469	17.0996	11	40	
1,2-Dichlorobenzene	1	19.6776	17.2827	13	40	
Isopropylbenzene	1	20.4289	18.1902	12	30	
Cyclohexanone	1	90.7588	75.9912	18	30	
Camphene	1	5.394	5.3614	0.61	30	
1,2,3-Trichloropropane	1	18.261	16.7128	8.9	30	
2-Chlorotoluene	1	19.518	17.8703	8.8	30	
p-Ethyltoluene	1	19.4028	17.0107	13	30	
4-Chlorotoluene	1	19.9641	17.4552	13	30	
n-Propylbenzene	1	20.7221	18.2475	13	40	
Bromobenzene	1	17.6331	16.061	9.3	30	
1,3,5-Trimethylbenzene	1	20.2168	17.9859	12	30	
Butyl methacrylate	1	19.3703	17.6167	9.5	30	
t-Butylbenzene	1	20.652	18.2217	13	30	
1,2,4-Trimethylbenzene	1	19.8508	17.7348	11	30	
sec-Butylbenzene	1	20.9148	18.3667	13	40	
4-Isopropyltoluene	1	20.1589	17.7467	13	30	
n-Butylbenzene	1	20.7105	18.0986	13	30	
p-Diethylbenzene	1	19.715	17.2143	14	30	
1,2,4,5-Tetramethylbenzene	1	19.5923	17.3321	12	30	
1,2-Dibromo-3-Chloropropane	1	18.9774	16.7391	13	30	
Camphor	1	212.2704	181.5139	16	30	
Hexachlorobutadiene	1	18.9752	18.8327	0.75	30	
1,2,4-Trichlorobenzene	1	20.5047	17.659	15	30	
1,2,3-Trichlorobenzene	1	21.0709	17.9351	16	30	
Naphthalene	1	20.2069	17.2035	16	30	

* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS101491

Data File		Sample ID:		Analysis Date			
Spike or Dup: 1M161208.D		MBS101491		5/2/2022 6:56:00 PM			
Non Spike(If applicable):							
Inst Blank(If applicable):							
Method: 8260D		Matrix: Aqueous		Units: ug/L		QC Type: MBS	
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	20.7506	0	20	104	50	150
Dichlorodifluoromethane	1	27.5585	0	20	138	50	150
Chloromethane	1	29.148	0	20	146	50	150
Bromomethane	1	20.9914	0	20	105	50	150
Vinyl Chloride	1	24.422	0	20	122	50	150
Chloroethane	1	22.4718	0	20	112	50	150
Trichlorofluoromethane	1	20.0835	0	20	100	50	150
Ethyl ether	1	21.5722	0	20	108	50	150
Furan	1	20.8861	0	20	104	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	18.9233	0	20	95	50	150
Methylene Chloride	1	24.6869	0	20	123	70	130
Acrolein	1	117.9621	0	100	118	50	150
Acrylonitrile	1	24.7053	0	20	124	50	150
Iodomethane	1	17.2577	0	20	86	50	150
Acetone	1	122.1352	0	100	122	50	150
Carbon Disulfide	1	19.1552	0	20	96	50	150
t-Butyl Alcohol	1	115.576	0	100	116	50	150
n-Hexane	1	21.1484	0	20	106	70	130
Di-isopropyl-ether	1	23.6386	0	20	118	70	130
1,1-Dichloroethene	1	22.4096	0	20	112	70	130
Methyl Acetate	1	23.5295	0	20	118	50	150
Methyl-t-butyl ether	1	21.9093	0	20	110	70	130
1,1-Dichloroethane	1	22.7992	0	20	114	70	130
trans-1,2-Dichloroethene	1	22.264	0	20	111	70	130
Ethyl-t-butyl ether	1	21.9754	0	20	110	70	130
cis-1,2-Dichloroethene	1	24.0381	0	20	120	70	130
Bromochloromethane	1	27.2502	0	20	136*	70	130
2,2-Dichloropropane	1	21.0825	0	20	105	70	130
Ethyl acetate	1	23.0285	0	20	115	50	150
1,4-Dioxane	1	1081.915	0	1000	108	50	150
1,1-Dichloropropene	1	19.4738	0	20	97	70	130
Chloroform	1	22.1273	0	20	111	70	130
Cyclohexane	1	18.9148	0	20	95	70	130
1,2-Dichloroethane	1	21.5503	0	20	108	70	130
2-Butanone	1	30.3429	0	20	152*	50	150
1,1,1-Trichloroethane	1	19.8801	0	20	99	70	130
Carbon Tetrachloride	1	19.5827	0	20	98	50	150
Vinyl Acetate	1	23.9161	0	20	120	50	150
Bromodichloromethane	1	22.6088	0	20	113	70	130
Methylcyclohexane	1	18.3142	0	20	92	70	130
Dibromomethane	1	22.5211	0	20	113	70	130
1,2-Dichloropropane	1	22.6939	0	20	113	70	130
Trichloroethene	1	20.2375	0	20	101	70	130
Benzene	1	21.9385	0	20	110	70	130
tert-Amyl methyl ether	1	21.134	0	20	106	70	130
Iso-propylacetate	1	23.4822	0	20	117	70	130
Methyl methacrylate	1	24.5515	0	20	123	70	130
Dibromochloromethane	1	23.2559	0	20	116	70	130
2-Chloroethylvinylether	1	17.9987	0	20	90	70	130
cis-1,3-Dichloropropene	1	21.8521	0	20	109	70	130
trans-1,3-Dichloropropene	1	22.1482	0	20	111	70	130
Ethyl methacrylate	1	22.7675	0	20	114	70	130
1,1,2-Trichloroethane	1	23.5693	0	20	118	70	130
1,2-Dibromoethane	1	23.4867	0	20	117	70	130
1,3-Dichloropropane	1	23.1643	0	20	116	70	130
4-Methyl-2-Pentanone	1	21.7716	0	20	109	50	150
2-Hexanone	1	24.7767	0	20	124	50	150
Tetrachloroethene	1	19.7896	0	20	99	50	150
Toluene	1	21.8454	0	20	109	70	130
1,1,1,2-Tetrachloroethane	1	21.6324	0	20	108	70	130
Chlorobenzene	1	22.8742	0	20	114	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS101491

Method: 8260D	Matrix: Aqueous		Units: ug/L		QC Type: MBS		
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	22.7343	0	20	114	70	130
n-Amyl acetate	1	24.09	0	20	120	70	130
Bromoform	1	22.0866	0	20	110	70	130
Ethylbenzene	1	21.6627	0	20	108	70	130
1,1,2,2-Tetrachloroethane	1	22.5088	0	20	113	70	130
Styrene	1	22.7419	0	20	114	70	130
m&p-Xylenes	1	44.258	0	40	111	70	130
o-Xylene	1	20.6871	0	20	103	70	130
trans-1,4-Dichloro-2-butene	1	20.5128	0	20	103	50	150
1,3-Dichlorobenzene	1	21.1801	0	20	106	70	130
1,4-Dichlorobenzene	1	20.5762	0	20	103	70	130
1,2-Dichlorobenzene	1	20.6501	0	20	103	70	130
Isopropylbenzene	1	21.6571	0	20	108	70	130
Cyclohexanone	1	179.6805	0	100	180*	50	150
Camphene	1	17.4022	0	20	87	70	130
1,2,3-Trichloropropane	1	21.8481	0	20	109	70	130
2-Chlorotoluene	1	20.8733	0	20	104	70	130
p-Ethyltoluene	1	20.0663	0	20	100	70	130
4-Chlorotoluene	1	19.9899	0	20	100	70	130
n-Propylbenzene	1	21.2234	0	20	106	70	130
Bromobenzene	1	23.1874	0	20	116	70	130
1,3,5-Trimethylbenzene	1	21.6611	0	20	108	70	130
Butyl methacrylate	1	22.0053	0	20	110	70	130
t-Butylbenzene	1	20.1589	0	20	101	70	130
1,2,4-Trimethylbenzene	1	21.4611	0	20	107	70	130
sec-Butylbenzene	1	20.5364	0	20	103	70	130
4-Isopropyltoluene	1	19.7911	0	20	99	70	130
n-Butylbenzene	1	19.9215	0	20	100	70	130
p-Diethylbenzene	1	17.3415	0	20	87	70	130
1,2,4,5-Tetramethylbenzene	1	16.9368	0	20	85	70	130
1,2-Dibromo-3-Chloropropane	1	19.7474	0	20	99	50	150
Camphor	1	176.1578	0	200	88	20	150
Hexachlorobutadiene	1	19.4314	0	20	97	50	150
1,2,4-Trichlorobenzene	1	20.2515	0	20	101	70	130
1,2,3-Trichlorobenzene	1	22.577	0	20	113	70	130
Naphthalene	1	22.5228	0	20	113	50	150

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 Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS101491

Data File		Sample ID:		Analysis Date			
Spike or Dup: 1M161206.D		AD30343-004(T:MS)		5/2/2022 6:19:00 PM			
Non Spike(If applicable): 1M161197.D		AD30343-004(T)		5/2/2022 3:30:00 PM			
Inst Blank(If applicable):							
Method: 8260D		Matrix: Aqueous		Units: ug/L		QC Type: MS	
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	21.9641	0	20	110	50	150
Dichlorodifluoromethane	1	33.7946	0	20	169 *	50	150
Chloromethane	1	32.1687	0	20	161 *	50	150
Bromomethane	1	24.3065	0	20	122	50	150
Vinyl Chloride	1	30.4302	0	20	152 *	50	150
Chloroethane	1	26.1892	0	20	131	50	150
Trichlorofluoromethane	1	24.5498	0	20	123	50	150
Ethyl ether	1	20.5777	0	20	103	50	150
Furan	1	22.6955	0	20	113	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	23.9657	0	20	120	50	150
Methylene Chloride	1	30.3061	10.052	20	101	70	130
Acrolein	1	118.2774	0	100	118	50	150
Acrylonitrile	1	21.9032	0	20	110	50	150
Iodomethane	1	18.6379	0	20	93	50	150
Acetone	1	146.191	7.4097	100	139	50	150
Carbon Disulfide	1	23.4147	0	20	117	50	150
t-Butyl Alcohol	1	114.4178	0	100	114	50	150
n-Hexane	1	26.2549	0	20	131 *	70	130
Di-isopropyl-ether	1	23.6028	0	20	118	70	130
1,1-Dichloroethene	1	26.7804	0	20	134 *	70	130
Methyl Acetate	1	22.7469	0	20	114	50	150
Methyl-t-butyl ether	1	21.464	0	20	107	70	130
1,1-Dichloroethane	1	25.0582	0	20	125	70	130
trans-1,2-Dichloroethene	1	25.7655	0	20	129	70	130
Ethyl-t-butyl ether	1	21.6367	0	20	108	70	130
cis-1,2-Dichloroethene	1	23.5217	0	20	118	70	130
Bromochloromethane	1	24.8005	0	20	124	70	130
2,2-Dichloropropane	1	23.704	0	20	119	70	130
Ethyl acetate	1	21.5425	0	20	108	50	150
1,4-Dioxane	1	1047.123	0	1000	105	50	150
1,1-Dichloropropene	1	24.258	0	20	121	70	130
Chloroform	1	22.8776	0	20	114	70	130
Cyclohexane	1	23.0176	0	20	115	70	130
1,2-Dichloroethane	1	21.7959	0	20	109	70	130
2-Butanone	1	24.3723	0	20	122	50	150
1,1,1-Trichloroethane	1	22.7435	0	20	114	70	130
Carbon Tetrachloride	1	22.693	0	20	113	50	150
Vinyl Acetate	1	20.0287	0	20	100	50	150
Bromodichloromethane	1	23.6247	0	20	118	70	130
Methylcyclohexane	1	21.9297	0	20	110	70	130
Dibromomethane	1	22.4155	0	20	112	70	130
1,2-Dichloropropane	1	24.202	0	20	121	70	130
Trichloroethene	1	23.4177	0	20	117	70	130
Benzene	1	23.7426	0	20	119	70	130
tert-Amyl methyl ether	1	20.8879	0	20	104	70	130
Iso-propylacetate	1	22.4065	0	20	112	70	130
Methyl methacrylate	1	22.0578	0	20	110	70	130
Dibromochloromethane	1	22.2321	0	20	111	70	130
2-Chloroethylvinylether	1	16.972	0	20	85	70	130
cis-1,3-Dichloropropene	1	21.0951	0	20	105	70	130
trans-1,3-Dichloropropene	1	21.8217	0	20	109	70	130
Ethyl methacrylate	1	20.831	0	20	104	70	130
1,1,2-Trichloroethane	1	23.2346	0	20	116	70	130
1,2-Dibromoethane	1	22.4192	0	20	112	70	130
1,3-Dichloropropane	1	22.5782	0	20	113	70	130
4-Methyl-2-Pentanone	1	21.9935	0	20	110	50	150
2-Hexanone	1	24.0189	0	20	120	50	150
Tetrachloroethene	1	23.5157	0	20	118	50	150
Toluene	1	23.732	0	20	119	70	130
1,1,1,2-Tetrachloroethane	1	22.0041	0	20	110	70	130
Chlorobenzene	1	23.5671	0	20	118	70	130

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Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS101491

Method: 8260D	Matrix: Aqueous	Units: ug/L	QC Type: MS				
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	21.0099	0	20	105	70	130
n-Amyl acetate	1	23.1109	0	20	116	70	130
<u>Bromoform</u>	1	<u>20.5268</u>	0	20	103	70	130
<u>Ethylbenzene</u>	1	<u>21.6929</u>	0	20	108	70	130
<u>1,1,2,2-Tetrachloroethane</u>	1	<u>20.5721</u>	0	20	103	70	130
<u>Styrene</u>	1	<u>22.1348</u>	0	20	111	70	130
<u>m&p-Xylenes</u>	1	<u>46.8239</u>	0	40	117	70	130
<u>o-Xylene</u>	1	<u>21.5211</u>	0	20	108	70	130
trans-1,4-Dichloro-2-butene	1	21.6562	0	20	108	50	150
<u>1,3-Dichlorobenzene</u>	1	<u>21.9319</u>	0	20	110	70	130
<u>1,4-Dichlorobenzene</u>	1	<u>20.5514</u>	0	20	103	70	130
<u>1,2-Dichlorobenzene</u>	1	<u>20.8073</u>	0	20	104	70	130
<u>Isopropylbenzene</u>	1	<u>23.3868</u>	0	20	117	70	130
Cyclohexanone	1	184.8483	0	100	185*	50	150
Camphene	1	21.011	0	20	105	70	130
1,2,3-Trichloropropane	1	21.6131	0	20	108	70	130
2-Chlorotoluene	1	21.5841	0	20	108	70	130
p-Ethyltoluene	1	21.432	0	20	107	70	130
4-Chlorotoluene	1	20.7342	0	20	104	70	130
n-Propylbenzene	1	22.5553	0	20	113	70	130
Bromobenzene	1	23.8901	0	20	119	70	130
1,3,5-Trimethylbenzene	1	22.792	0	20	114	70	130
Butyl methacrylate	1	21.8133	0	20	109	70	130
t-Butylbenzene	1	21.3432	0	20	107	70	130
1,2,4-Trimethylbenzene	1	22.8468	0	20	114	70	130
sec-Butylbenzene	1	23.0896	0	20	115	70	130
4-Isopropyltoluene	1	21.9379	0	20	110	70	130
n-Butylbenzene	1	22.8945	0	20	114	70	130
p-Diethylbenzene	1	18.6373	0	20	93	70	130
1,2,4,5-Tetramethylbenzene	1	19.0195	0	20	95	70	130
<u>1,2-Dibromo-3-Chloropropane</u>	1	<u>19.1455</u>	0	20	96	50	150
Camphor	1	175.5559	0	200	88	20	150
Hexachlorobutadiene	1	22.7429	0	20	114	50	150
<u>1,2,4-Trichlorobenzene</u>	1	<u>22.3467</u>	0	20	112	70	130
<u>1,2,3-Trichlorobenzene</u>	1	<u>23.3882</u>	0	20	117	70	130
Naphthalene	1	23.7776	0	20	119	50	150

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Form3
Recovery Data Laboratory Limits
 QC Batch: MBS101491

Data File		Sample ID:		Analysis Date			
Spike or Dup: 1M161207.D		AD30343-004(T:MSD)		5/2/2022 6:37:00 PM			
Non Spike(If applicable): 1M161197.D		AD30343-004(T)		5/2/2022 3:30:00 PM			
Inst Blank(If applicable):							
Method: 8260D		Matrix: Aqueous		Units: ug/L		QC Type: MSD	
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	20.6158	0	20	103	50	150
Dichlorodifluoromethane	1	29.5948	0	20	148	50	150
Chloromethane	1	30.8687	0	20	154*	50	150
Bromomethane	1	22.156	0	20	111	50	150
Vinyl Chloride	1	28.9604	0	20	145	50	150
Chloroethane	1	25.0213	0	20	125	50	150
Trichlorofluoromethane	1	23.3358	0	20	117	50	150
Ethyl ether	1	20.2712	0	20	101	50	150
Furan	1	22.1905	0	20	111	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	22.4963	0	20	112	50	150
Methylene Chloride	1	29.7311	10.052	20	98	70	130
Acrolein	1	105.6866	0	100	106	50	150
Acrylonitrile	1	23.2117	0	20	116	50	150
Iodomethane	1	18.2448	0	20	91	50	150
Acetone	1	145.7616	7.4097	100	138	50	150
Carbon Disulfide	1	21.6748	0	20	108	50	150
t-Butyl Alcohol	1	121.0566	0	100	121	50	150
n-Hexane	1	24.6025	0	20	123	70	130
Di-isopropyl-ether	1	22.7348	0	20	114	70	130
1,1-Dichloroethene	1	25.2649	0	20	126	70	130
Methyl Acetate	1	21.2315	0	20	106	50	150
Methyl-t-butyl ether	1	20.2654	0	20	101	70	130
1,1-Dichloroethane	1	23.5124	0	20	118	70	130
trans-1,2-Dichloroethene	1	24.6835	0	20	123	70	130
Ethyl-t-butyl ether	1	20.8235	0	20	104	70	130
cis-1,2-Dichloroethene	1	24.567	0	20	123	70	130
Bromochloromethane	1	24.7835	0	20	124	70	130
2,2-Dichloropropane	1	23.7199	0	20	119	70	130
Ethyl acetate	1	22.2178	0	20	111	50	150
1,4-Dioxane	1	993.8497	0	1000	99	50	150
1,1-Dichloropropene	1	21.9719	0	20	110	70	130
Chloroform	1	22.6097	0	20	113	70	130
Cyclohexane	1	21.8173	0	20	109	70	130
1,2-Dichloroethane	1	20.5948	0	20	103	70	130
2-Butanone	1	24.4539	0	20	122	50	150
1,1,1-Trichloroethane	1	21.6659	0	20	108	70	130
Carbon Tetrachloride	1	21.1577	0	20	106	50	150
Vinyl Acetate	1	18.6713	0	20	93	50	150
Bromodichloromethane	1	22.8858	0	20	114	70	130
Methylcyclohexane	1	22.1324	0	20	111	70	130
Dibromomethane	1	21.7104	0	20	109	70	130
1,2-Dichloropropane	1	23.2324	0	20	116	70	130
Trichloroethene	1	23.0499	0	20	115	70	130
Benzene	1	22.3048	0	20	112	70	130
tert-Amyl methyl ether	1	20.6748	0	20	103	70	130
Iso-propylacetate	1	21.5683	0	20	108	70	130
Methyl methacrylate	1	21.7829	0	20	109	70	130
Dibromochloromethane	1	22.898	0	20	114	70	130
2-Chloroethylvinylether	1	16.5941	0	20	83	70	130
cis-1,3-Dichloropropene	1	21.9029	0	20	110	70	130
trans-1,3-Dichloropropene	1	22.0512	0	20	110	70	130
Ethyl methacrylate	1	22.0499	0	20	110	70	130
1,1,2-Trichloroethane	1	22.6771	0	20	113	70	130
1,2-Dibromoethane	1	22.2088	0	20	111	70	130
1,3-Dichloropropane	1	22.819	0	20	114	70	130
4-Methyl-2-Pentanone	1	22.549	0	20	113	50	150
2-Hexanone	1	23.8402	0	20	119	50	150
Tetrachloroethene	1	22.0787	0	20	110	50	150
Toluene	1	23.5709	0	20	118	70	130
1,1,1,2-Tetrachloroethane	1	21.7881	0	20	109	70	130
Chlorobenzene	1	23.5708	0	20	118	70	130

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Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS101491

Method: 8260D	Matrix: Aqueous	Units: ug/L	QC Type: MSD				
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	21.4573	0	20	107	70	130
n-Amyl acetate	1	23.2813	0	20	116	70	130
<u>Bromoform</u>	1	<u>20.8707</u>	0	<u>20</u>	<u>104</u>	<u>70</u>	<u>130</u>
<u>Ethylbenzene</u>	1	<u>21.7838</u>	0	<u>20</u>	<u>109</u>	<u>70</u>	<u>130</u>
<u>1,1,2,2-Tetrachloroethane</u>	1	<u>20.3771</u>	0	<u>20</u>	<u>102</u>	<u>70</u>	<u>130</u>
<u>Styrene</u>	1	<u>23.0865</u>	0	<u>20</u>	<u>115</u>	<u>70</u>	<u>130</u>
<u>m&p-Xylenes</u>	1	<u>46.6286</u>	0	<u>40</u>	<u>117</u>	<u>70</u>	<u>130</u>
<u>o-Xylene</u>	1	<u>22.38</u>	0	<u>20</u>	<u>112</u>	<u>70</u>	<u>130</u>
trans-1,4-Dichloro-2-butene	1	21.4348	0	20	107	50	150
<u>1,3-Dichlorobenzene</u>	1	<u>22.0976</u>	0	<u>20</u>	<u>110</u>	<u>70</u>	<u>130</u>
<u>1,4-Dichlorobenzene</u>	1	<u>20.9313</u>	0	<u>20</u>	<u>105</u>	<u>70</u>	<u>130</u>
<u>1,2-Dichlorobenzene</u>	1	<u>21.0202</u>	0	<u>20</u>	<u>105</u>	<u>70</u>	<u>130</u>
<u>Isopropylbenzene</u>	1	<u>23.4949</u>	0	<u>20</u>	<u>117</u>	<u>70</u>	<u>130</u>
Cyclohexanone	1	173.1624	0	100	173*	50	150
Camphene	1	21.2335	0	20	106	70	130
1,2,3-Trichloropropane	1	20.8146	0	20	104	70	130
2-Chlorotoluene	1	22.3877	0	20	112	70	130
p-Ethyltoluene	1	22.1446	0	20	111	70	130
4-Chlorotoluene	1	22.5405	0	20	113	70	130
n-Propylbenzene	1	23.3265	0	20	117	70	130
Bromobenzene	1	24.2542	0	20	121	70	130
1,3,5-Trimethylbenzene	1	22.9822	0	20	115	70	130
Butyl methacrylate	1	20.4223	0	20	102	70	130
t-Butylbenzene	1	22.5517	0	20	113	70	130
1,2,4-Trimethylbenzene	1	23.0003	0	20	115	70	130
sec-Butylbenzene	1	23.8238	0	20	119	70	130
4-Isopropyltoluene	1	22.7434	0	20	114	70	130
n-Butylbenzene	1	23.5698	0	20	118	70	130
p-Diethylbenzene	1	19.303	0	20	97	70	130
1,2,4,5-Tetramethylbenzene	1	19.1447	0	20	96	70	130
<u>1,2-Dibromo-3-Chloropropane</u>	1	<u>19.2616</u>	0	<u>20</u>	<u>96</u>	<u>50</u>	<u>150</u>
Camphor	1	170.7308	0	200	85	20	150
Hexachlorobutadiene	1	23.9713	0	20	120	50	150
<u>1,2,4-Trichlorobenzene</u>	1	<u>22.8515</u>	0	<u>20</u>	<u>114</u>	<u>70</u>	<u>130</u>
<u>1,2,3-Trichlorobenzene</u>	1	<u>23.8659</u>	0	<u>20</u>	<u>119</u>	<u>70</u>	<u>130</u>
Naphthalene	1	23.6368	0	20	118	50	150

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 Bold and underline - Indicates the compounds reported on form1

Form3

RPD Data Laboratory Limits

QC Batch: MBS101491

Data File	Sample ID:	Analysis Date
Spike or Dup: 1M161207.D	AD30343-004(T:MSD)	5/2/2022 6:37:00 PM
Duplicate(If applicable): 1M161206.D	AD30343-004(T:MS)	5/2/2022 6:19:00 PM
Inst Blank(If applicable):		
Method: 8260D	Matrix: Aqueous	Units: ug/L
		QC Type: MSD

Analyte:	Column	Dup/MSD/MSD Conc	Sample/MS/MSB Conc	RPD	Limit
Chlorodifluoromethane	1	20.6158	21.9641	6.3	30
<u>Dichlorodifluoromethane</u>	1	<u>29.5948</u>	<u>33.7946</u>	<u>13</u>	<u>30</u>
<u>Chloromethane</u>	1	<u>30.8687</u>	<u>32.1687</u>	<u>4.1</u>	<u>30</u>
<u>Bromomethane</u>	1	<u>22.156</u>	<u>24.3065</u>	<u>9.3</u>	<u>30</u>
<u>Vinyl Chloride</u>	1	<u>28.9604</u>	<u>30.4302</u>	<u>4.9</u>	<u>40</u>
<u>Chloroethane</u>	1	<u>25.0213</u>	<u>26.1892</u>	<u>4.6</u>	<u>30</u>
<u>Trichlorofluoromethane</u>	1	<u>23.3358</u>	<u>24.5498</u>	<u>5.1</u>	<u>30</u>
Ethyl ether	1	20.2712	20.5777	1.5	30
Furan	1	22.1905	22.6955	2.3	30
<u>1,1,2-Trichloro-1,2,2-trifluoroethane</u>	1	<u>22.4963</u>	<u>23.9657</u>	<u>6.3</u>	<u>30</u>
<u>Methylene Chloride</u>	1	<u>29.7311</u>	<u>30.3061</u>	<u>1.9</u>	<u>30</u>
Acrolein	1	105.6866	118.2774	11	30
Acrylonitrile	1	23.2117	21.9032	5.8	30
Iodomethane	1	18.2448	18.6379	2.1	30
<u>Acetone</u>	1	<u>145.7616</u>	<u>146.191</u>	<u>0.29</u>	<u>30</u>
<u>Carbon Disulfide</u>	1	<u>21.6748</u>	<u>23.4147</u>	<u>7.7</u>	<u>30</u>
t-Butyl Alcohol	1	121.0566	114.4178	5.6	30
n-Hexane	1	24.6025	26.2549	6.5	30
Di-isopropyl-ether	1	22.7348	23.6028	3.7	30
<u>1,1-Dichloroethene</u>	1	<u>25.2649</u>	<u>26.7804</u>	<u>5.8</u>	<u>40</u>
<u>Methyl Acetate</u>	1	<u>21.2315</u>	<u>22.7469</u>	<u>6.9</u>	<u>30</u>
<u>Methyl-t-butyl ether</u>	1	<u>20.2654</u>	<u>21.464</u>	<u>5.7</u>	<u>30</u>
<u>1,1-Dichloroethane</u>	1	<u>23.5124</u>	<u>25.0582</u>	<u>6.4</u>	<u>40</u>
<u>trans-1,2-Dichloroethene</u>	1	<u>24.6835</u>	<u>25.7655</u>	<u>4.3</u>	<u>30</u>
Ethyl-t-butyl ether	1	20.8235	21.6367	3.8	30
<u>cis-1,2-Dichloroethene</u>	1	<u>24.567</u>	<u>23.5217</u>	<u>4.3</u>	<u>30</u>
<u>Bromochloromethane</u>	1	<u>24.7835</u>	<u>24.8005</u>	<u>0.07</u>	<u>30</u>
2,2-Dichloropropane	1	23.7199	23.704	0.07	30
Ethyl acetate	1	22.2178	21.5425	3.1	30
<u>1,4-Dioxane</u>	1	<u>993.8497</u>	<u>1047.123</u>	<u>5.2</u>	<u>30</u>
1,1-Dichloropropene	1	21.9719	24.258	9.9	30
<u>Chloroform</u>	1	<u>22.6097</u>	<u>22.8776</u>	<u>1.2</u>	<u>40</u>
<u>Cyclohexane</u>	1	<u>21.8173</u>	<u>23.0176</u>	<u>5.4</u>	<u>30</u>
<u>1,2-Dichloroethane</u>	1	<u>20.5948</u>	<u>21.7959</u>	<u>5.7</u>	<u>40</u>
<u>2-Butanone</u>	1	<u>24.4539</u>	<u>24.3723</u>	<u>0.33</u>	<u>40</u>
<u>1,1,1-Trichloroethane</u>	1	<u>21.6659</u>	<u>22.7435</u>	<u>4.9</u>	<u>30</u>
<u>Carbon Tetrachloride</u>	1	<u>21.1577</u>	<u>22.693</u>	<u>7</u>	<u>40</u>
Vinyl Acetate	1	18.6713	20.0287	7	30
<u>Bromodichloromethane</u>	1	<u>22.8858</u>	<u>23.6247</u>	<u>3.2</u>	<u>30</u>
<u>Methylcyclohexane</u>	1	<u>22.1324</u>	<u>21.9297</u>	<u>0.92</u>	<u>30</u>
Dibromomethane	1	21.7104	22.4155	3.2	30
<u>1,2-Dichloropropane</u>	1	<u>23.2324</u>	<u>24.202</u>	<u>4.1</u>	<u>30</u>
<u>Trichloroethene</u>	1	<u>23.0499</u>	<u>23.4177</u>	<u>1.6</u>	<u>40</u>
<u>Benzene</u>	1	<u>22.3048</u>	<u>23.7426</u>	<u>6.2</u>	<u>40</u>
tert-Amyl methyl ether	1	20.6748	20.8879	1	30
Iso-propylacetate	1	21.5683	22.4065	3.8	30
Methyl methacrylate	1	21.7829	22.0578	1.3	30
<u>Dibromochloromethane</u>	1	<u>22.898</u>	<u>22.2321</u>	<u>3</u>	<u>30</u>
2-Chloroethylvinylether	1	16.5941	16.972	2.3	30
<u>cis-1,3-Dichloropropene</u>	1	<u>21.9029</u>	<u>21.0951</u>	<u>3.8</u>	<u>30</u>
<u>trans-1,3-Dichloropropene</u>	1	<u>22.0512</u>	<u>21.8217</u>	<u>1</u>	<u>30</u>
Ethyl methacrylate	1	22.0499	20.831	5.7	30
<u>1,1,2-Trichloroethane</u>	1	<u>22.6771</u>	<u>23.2346</u>	<u>2.4</u>	<u>30</u>
<u>1,2-Dibromoethane</u>	1	<u>22.2088</u>	<u>22.4192</u>	<u>0.94</u>	<u>30</u>
1,3-Dichloropropane	1	22.819	22.5782	1.1	30
<u>4-Methyl-2-Pentanone</u>	1	<u>22.549</u>	<u>21.9935</u>	<u>2.5</u>	<u>30</u>
<u>2-Hexanone</u>	1	<u>23.8402</u>	<u>24.0189</u>	<u>0.75</u>	<u>30</u>
<u>Tetrachloroethene</u>	1	<u>22.0787</u>	<u>23.5157</u>	<u>6.3</u>	<u>40</u>
<u>Toluene</u>	1	<u>23.5709</u>	<u>23.732</u>	<u>0.68</u>	<u>40</u>
1,1,1,2-Tetrachloroethane	1	21.7881	22.0041	0.99	30
<u>Chlorobenzene</u>	1	<u>23.5708</u>	<u>23.5671</u>	<u>0.02</u>	<u>40</u>

* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

Form3

RPD Data Laboratory Limits

QC Batch: MBS101491

Method: 8260D	Matrix: Aqueous	Units: ug/L	QC Type: MSD		
Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
n-Butyl acrylate	1	21.4573	21.0099	2.1	30
n-Amyl acetate	1	23.2813	23.1109	0.73	30
Bromoform	1	20.8707	20.5268	1.7	30
Ethylbenzene	1	21.7838	21.6929	0.42	30
1,1,2,2-Tetrachloroethane	1	20.3771	20.5721	0.95	30
Styrene	1	23.0865	22.1348	4.2	30
m&p-Xylenes	1	46.6286	46.8239	0.42	30
o-Xylene	1	22.38	21.5211	3.9	30
trans-1,4-Dichloro-2-butene	1	21.4348	21.6562	1	30
1,3-Dichlorobenzene	1	22.0976	21.9319	0.75	30
1,4-Dichlorobenzene	1	20.9313	20.5514	1.8	40
1,2-Dichlorobenzene	1	21.0202	20.8073	1	40
Isopropylbenzene	1	23.4949	23.3868	0.46	30
Cyclohexanone	1	173.1624	184.8483	6.5	30
Camphene	1	21.2335	21.011	1.1	30
1,2,3-Trichloropropane	1	20.8146	21.6131	3.8	30
2-Chlorotoluene	1	22.3877	21.5841	3.7	30
p-Ethyltoluene	1	22.1446	21.432	3.3	30
4-Chlorotoluene	1	22.5405	20.7342	8.3	30
n-Propylbenzene	1	23.3265	22.5553	3.4	40
Bromobenzene	1	24.2542	23.8901	1.5	30
1,3,5-Trimethylbenzene	1	22.9822	22.792	0.83	30
Butyl methacrylate	1	20.4223	21.8133	6.6	30
t-Butylbenzene	1	22.5517	21.3432	5.5	30
1,2,4-Trimethylbenzene	1	23.0003	22.8468	0.67	30
sec-Butylbenzene	1	23.8238	23.0896	3.1	40
4-Isopropyltoluene	1	22.7434	21.9379	3.6	30
n-Butylbenzene	1	23.5698	22.8945	2.9	30
p-Diethylbenzene	1	19.303	18.6373	3.5	30
1,2,4,5-Tetramethylbenzene	1	19.1447	19.0195	0.66	30
1,2-Dibromo-3-Chloropropane	1	19.2616	19.1455	0.6	30
Camphor	1	170.7308	175.5559	2.8	30
Hexachlorobutadiene	1	23.9713	22.7429	5.3	30
1,2,4-Trichlorobenzene	1	22.8515	22.3467	2.2	30
1,2,3-Trichlorobenzene	1	23.8659	23.3882	2	30
Naphthalene	1	23.6368	23.7776	0.59	30

* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

FORM 4
Blank Summary

Blank Number: DAILY BLANK
Blank Data File: 2M167430.D
Matrix: Aqueous

Blank Analysis Date: 05/02/22 10:55
Blank Extraction Date: NA
(If Applicable)
Method: EPA 8260D

Sample Number	Data File	Analysis Date
AD30488-003	2M167449.D	05/02/22 17:10
AD30470-001(MSD)	2M167444.D	05/02/22 15:31
AD30470-001(MS)	2M167443.D	05/02/22 15:12
MBS101485	2M167434.D	05/02/22 12:15
AD30470-001	2M167431.D	05/02/22 11:15

FORM 4
Blank Summary

Blank Number: DAILY BLANK
Blank Data File: 1M161196.D
Matrix: Aqueous

Blank Analysis Date: 05/02/22 15:12
Blank Extraction Date: NA
(If Applicable)
Method: EPA 8260D

Sample Number	Data File	Analysis Date
AD30488-001	1M161220.D	05/02/22 22:42
AD30488-002	1M161221.D	05/02/22 23:00
MBS101491	1M161208.D	05/02/22 18:56
AD30343-004(T:M	1M161207.D	05/02/22 18:37
AD30343-004(T:M	1M161206.D	05/02/22 18:19
AD30343-004(T)	1M161197.D	05/02/22 15:30

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 1

Data File: 1M160725.D
Analysis Date: 04/21/22 16:24
Method: EPA 8260D

Tune Scan/Time Range: Average of 7.515 to 7.544 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	20.5	47634	PASS
75	95	30	60	52.9	123226	PASS
95	95	100	100	100.0	232903	PASS
96	95	5	9	6.8	15947	PASS
173	174	0.00	2	0.9	1800	PASS
174	95	50	100	82.7	192578	PASS
175	174	5	9	7.4	14181	PASS
176	174	95	101	96.9	186666	PASS
177	176	5	9	6.4	11957	PASS

Data File	Sample Number	Analysis Date:
1M160726.D	CAL @ 0.5 PPB	04/21/22 16:45
1M160727.D	CAL @ 1 PPB	04/21/22 17:06
1M160728.D	CAL @ 5 PPB	04/21/22 17:27
1M160729.D	CAL @ 10 PPB	04/21/22 17:48
1M160730.D	CAL @ 20 PPB	04/21/22 18:09
1M160731.D	CAL @ 50 PPB	04/21/22 18:29
1M160732.D	CAL @ 500 PPB	04/21/22 18:50
1M160734.D	CAL @ 250 PPB	04/21/22 19:32
1M160736.D	CAL @ 100 PPB	04/21/22 20:14
1M160741.D	ICV	04/21/22 21:58

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 2

Data File: 2M167162.D
Analysis Date: 04/26/22 16:03
Method: EPA 8260D

Tune Scan/Time Range: Average of 7.342 to 7.361 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	21.8	2970	PASS
75	95	30	60	53.2	7229	PASS
95	95	100	100	100.0	13600	PASS
96	95	5	9	7.1	967	PASS
173	174	0.00	2	0.4	54	PASS
174	95	50	100	93.3	12686	PASS
175	174	5	9	7.6	967	PASS
176	174	95	101	98.0	12436	PASS
177	176	5	9	6.6	817	PASS

Data File	Sample Number	Analysis Date:
2M167164.D	CAL @ 0.5 PPB	04/26/22 16:38
2M167165.D	CAL @ 1 PPB	04/26/22 16:58
2M167166.D	CAL @ 5 PPB	04/26/22 17:17
2M167168.D	CAL @ 10 PPB	04/26/22 17:57
2M167170.D	CAL @ 20 PPB	04/26/22 18:36
2M167172.D	CAL @ 50 PPB	04/26/22 19:16
2M167175.D	CAL @ 100 PPB	04/26/22 20:15
2M167178.D	CAL @ 250 PPB	04/26/22 21:14
2M167181.D	CAL @ 500 PPB	04/26/22 22:13
2M167184.D	BLK	04/26/22 23:13
2M167186.D	STD	04/26/22 23:52
2M167187.D	ICV	04/27/22 00:12

Form 5

Tune Name: BFB TUNE

Data File: 2M167423.D

Instrument: GCMS 2

Analysis Date: 05/02/22 08:42

Method: EPA 8260D

Tune Scan/Time Range: Average of 7.336 to 7.373 min

Tgt	Rel	Lo	Hi	Lim	Rel	Raw	Pass/
Mass	Mass	Lim			Abund	Abund	Fail
50	95	15	40	22.3	817	PASS	
75	95	30	60	53.6	1964	PASS	
95	95	100	100	100.0	3665	PASS	
96	95	5	9	6.4	234	PASS	
173	174	0.00	2	0.3	10	PASS	
174	95	50	100	94.6	3469	PASS	
175	174	5	9	7.9	274	PASS	
176	174	95	101	96.0	3329	PASS	
177	176	5	9	7.3	244	PASS	

Data File	Sample Number	Analysis Date:
2M167425.D	CAL @ 20 PPB	05/02/22 09:17
2M167427.D	DI	05/02/22 09:56
2M167428.D	DI	05/02/22 10:16
2M167429.D	DAILY BLANK	05/02/22 10:35
2M167430.D	DAILY BLANK	05/02/22 10:55
2M167431.D	AD30470-001	05/02/22 11:15
2M167432.D	AD30261-022(10X)	05/02/22 11:35
2M167433.D	MBS101484	05/02/22 11:55
2M167434.D	MBS101485	05/02/22 12:15
2M167435.D	AD30460-001	05/02/22 12:34
2M167436.D	AD30453-001	05/02/22 12:54
2M167437.D	AD30442-011	05/02/22 13:14
2M167438.D	AD30442-012	05/02/22 13:33
2M167439.D	AD30442-013	05/02/22 13:53
2M167440.D	AD30442-014	05/02/22 14:13
2M167441.D	AD30442-010	05/02/22 14:32
2M167442.D	30465-002	05/02/22 14:52
2M167443.D	AD30470-001(MS)	05/02/22 15:12
2M167444.D	AD30470-001(MSD	05/02/22 15:31
2M167445.D	BLK	05/02/22 15:51
2M167446.D	AD30444-006	05/02/22 16:11
2M167447.D	AD30444-005	05/02/22 16:30
2M167448.D	AD30475-004	05/02/22 16:50
2M167449.D	AD30488-003	05/02/22 17:10
2M167450.D	AD30481-013	05/02/22 17:29
2M167451.D	AD30470-002	05/02/22 17:49
2M167452.D	AD30475-001	05/02/22 18:09
2M167453.D	AD30475-002	05/02/22 18:29
2M167454.D	AD30475-003	05/02/22 18:48
2M167455.D	AD30454-001	05/02/22 19:08
2M167456.D	BLK	05/02/22 19:28
2M167457.D	AD30465-002	05/02/22 19:48
2M167458.D	BLK	05/02/22 20:07
2M167459.D	AD30475-002	05/02/22 20:27
2M167460.D	AD30475-001(5X)	05/02/22 20:47

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 1

Data File: 1M161189.D
Analysis Date: 05/02/22 13:04
Method: EPA 8260D

Tune Scan/Time Range: Average of 7.502 to 7.515 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	20.8	5266	PASS
75	95	30	60	50.0	12681	PASS
95	95	100	100	100.0	25353	PASS
96	95	5	9	6.5	1636	PASS
173	174	0.00	2	0.7	135	PASS
174	95	50	100	76.8	19463	PASS
175	174	5	9	8.9	1732	PASS
176	174	95	101	100.1	19488	PASS
177	176	5	9	5.1	999	PASS

Data File	Sample Number	Analysis Date:
1M161191.D	CAL @ 20 PPB	05/02/22 13:38
1M161193.D	BLK	05/02/22 14:15
1M161194.D	BLK-HCL	05/02/22 14:34
1M161195.D	DAILY BLANK	05/02/22 14:53
1M161196.D	DAILY BLANK	05/02/22 15:12
1M161197.D	AD30343-004(T)	05/02/22 15:30
1M161198.D	AD30153-007(T)	05/02/22 15:49
1M161199.D	AD30153-001(T)	05/02/22 16:08
1M161200.D	BLK	05/02/22 16:27
1M161201.D	AD30177-003(T)	05/02/22 16:46
1M161202.D	AD30177-007(T)	05/02/22 17:04
1M161203.D	AD30343-005(T)	05/02/22 17:23
1M161204.D	STD	05/02/22 17:42
1M161205.D	MBS101490	05/02/22 18:00
1M161206.D	AD30343-004(T:M)	05/02/22 18:19
1M161207.D	AD30343-004(T:M)	05/02/22 18:37
1M161208.D	MBS101491	05/02/22 18:56
1M161209.D	BLK	05/02/22 19:15
1M161210.D	BLK	05/02/22 19:34
1M161211.D	AD30489-001	05/02/22 19:53
1M161212.D	AD30489-002	05/02/22 20:12
1M161213.D	AD30489-003	05/02/22 20:30
1M161214.D	AD30489-004	05/02/22 20:49
1M161215.D	AD30489-005	05/02/22 21:08
1M161216.D	AD30489-006	05/02/22 21:26
1M161217.D	AD30489-007	05/02/22 21:45
1M161218.D	AD30489-008	05/02/22 22:04
1M161219.D	AD30489-009	05/02/22 22:23
1M161220.D	AD30488-001	05/02/22 22:42
1M161221.D	AD30488-002	05/02/22 23:00
1M161222.D	AD30487-001	05/02/22 23:19
1M161223.D	AD30475-001(5X)	05/02/22 23:38
1M161224.D	AD30506-011(50X)	05/02/22 23:57
1M161225.D	AD30506-009(50X)	05/03/22 00:15
1M161226.D	AD30506-010(50X)	05/03/22 00:34
1M161227.D	BLK	05/03/22 00:53

FORM8

Internal Standard Areas

Evaluation Std Data File: 1M160730.D

Analysis Date/Time: 04/21/22 18:09

Lab File ID: CAL @ 20 PPB

Method: EPA 8260D

	11		12		13		14		15		16		17	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	1400547	5.16	1030203	6.88	497699	8.19								
Eval File Area Limit:	700274-2801094		515102-2060406		248850-995398									
Eval File Rt Limit:	4.66-5.66		6.38-7.38		7.69-8.69									

Data File	Sample#													
1M160726.D	CAL @ 0.5 PPB	1319158	5.16	972005	6.88	421013	8.19							
1M160727.D	CAL @ 1 PPB	1424400	5.16	1059942	6.88	470198	8.19							
1M160728.D	CAL @ 5 PPB	1470235	5.16	1082026	6.88	520332	8.19							
1M160729.D	CAL @ 10 PPB	1396689	5.16	1014298	6.88	472851	8.19							
1M160730.D	CAL @ 20 PPB	1400547	5.16	1030203	6.88	497699	8.19							
1M160731.D	CAL @ 50 PPB	1429558	5.15	1043113	6.88	512387	8.19							
1M160732.D	CAL @ 500 PPB	1511165	5.15	1105937	6.88	656638	8.19							
1M160734.D	CAL @ 250 PPB	1587347	5.16	1153397	6.88	599672	8.19							
1M160736.D	CAL @ 100 PPB	1556056	5.16	1132587	6.88	530437	8.19							
1M160741.D	ICV	1361844	5.16	993098	6.88	469962	8.19							

11 =	Fluorobenzene	14 =	17 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
12 =	Chlorobenzene-d5	15 =		624/8260 Internal Standard concentration = 30ug/L
13 =	1,4-Dichlorobenzene-d4	16 =		524 Internal Standard concentration = 5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times:

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

FORM8

Internal Standard Areas

Evaluation Std Data File: 2M167170.D

Analysis Date/Time: 04/26/22 18:36

Lab File ID: CAL @ 20 PPB

Method: EPA 8260D

	11		12		13		14		15		16		17	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	157490	5.09	112566	6.73	53722	8.01								
Eval File Area Limit:	78745-314980		56283-225132		26861-107444									
Eval File Rt Limit:	4.59-5.59		6.23-7.23		7.51-8.51									

Data File	Sample#													
2M167164.D	CAL @ 0.5 PPB	152633	5.09	112652	6.73	51693	8.01							
2M167165.D	CAL @ 1 PPB	162672	5.09	118310	6.73	53396	8.02							
2M167166.D	CAL @ 5 PPB	153877	5.09	113762	6.73	52321	8.01							
2M167168.D	CAL @ 10 PPB	158021	5.09	114435	6.73	53653	8.01							
2M167170.D	CAL @ 20 PPB	157490	5.09	112566	6.73	53722	8.01							
2M167172.D	CAL @ 50 PPB	162265	5.09	117163	6.73	53182	8.01							
2M167175.D	CAL @ 100 PPB	160949	5.09	114750	6.73	52579	8.01							
2M167178.D	CAL @ 250 PPB	154857	5.09	115507	6.73	54963	8.02							
2M167181.D	CAL @ 500 PPB	169363	5.09	131229	6.73	64155	8.02							
2M167184.D	BLK	158312	5.09	115921	6.73	52798	8.01							
2M167186.D	STD	150377	5.09	108091	6.73	50836	8.01							
2M167187.D	ICV	163142	5.09	118770	6.73	56426	8.01							

11 =	Fluorobenzene	14 =	17 =
12 =	Chlorobenzene-d5	15 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
13 =	1,4-Dichlorobenzene-d4	16 =	624/8260 Internal Standard concentration = 30µg/L
			524 Internal Standard concentration = 5µg/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times:

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

FORM8

Internal Standard Areas

Evaluation Std Data File: 2M167425.D

Method: EPA 8260D

Analysis Date/Time: 05/02/22 09:17

Lab File ID: CAL @ 20 PPB

	11		12		13		14		15		16		17	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	157280	5.09	112712	6.73	53602	8.01								
Eval File Area Limit:	78640-314560		56356-225424		26801-107204									
Eval File Rt Limit:	4.59-5.59		6.23-7.23		7.51-8.51									

Data File	Sample#													
2M167427.D	DI	162579	5.09	119500	6.73	55609	8.01							
2M167428.D	DI	160803	5.09	119188	6.73	54461	8.02							
2M167429.D	DAILY BLANK	157663	5.09	116402	6.73	54625	8.01							
2M167430.D	DAILY BLANK	184731	5.09	138775	6.73	64624	8.01							
2M167431.D	AD30470-001	179521	5.09	133569	6.73	62338	8.02							
2M167432.D	AD30261-022(10X)	159281	5.09	117696	6.73	55481	8.01							
2M167433.D	MBS101484	158874	5.09	116109	6.73	55407	8.01							
2M167434.D	MBS101485	161147	5.09	117400	6.73	54921	8.01							
2M167435.D	AD30460-001	162197	5.09	119181	6.73	54528	8.01							
2M167437.D	AD30442-011	158608	5.09	119278	6.73	55099	8.01							
2M167438.D	AD30442-012	154058	5.09	116522	6.73	54206	8.01							
2M167439.D	AD30442-013	156262	5.09	116335	6.73	52945	8.02							
2M167440.D	AD30442-014	155396	5.09	116842	6.73	54386	8.01							
2M167441.D	AD30442-010	156256	5.09	117275	6.73	56017	8.01							
2M167442.D	30465-002	156048	5.09	117826	6.73	55322	8.01							
2M167443.D	AD30470-001(MS)	164273	5.09	123350	6.73	57438	8.01							
2M167444.D	AD30470-001(MSD)	156618	5.09	115315	6.73	54403	8.01							
2M167445.D	BLK	156443	5.09	117389	6.73	54405	8.02							
2M167446.D	AD30444-006	154721	5.09	116390	6.73	55124	8.01							
2M167447.D	AD30444-005	155032	5.09	116814	6.73	53913	8.01							
2M167449.D	AD30488-003	153520	5.09	116052	6.73	53822	8.01							
2M167450.D	AD30481-013	153959	5.09	115326	6.73	54156	8.01							
2M167451.D	AD30470-002	153869	5.09	115604	6.73	53453	8.01							
2M167455.D	AD30454-001	152543	5.09	115056	6.73	54081	8.02							
2M167456.D	BLK	150770	5.09	113410	6.73	53562	8.01							
2M167457.D	AD30465-002	154534	5.09	117556	6.73	55551	8.01							
2M167458.D	BLK	154520	5.09	116134	6.73	54559	8.01							

Internal Standard Areas

11 = Fluorobenzene
12 = Chlorobenzene-d5
13 = 1,4-Dichlorobenzene-d4

14 =
15 =
16 =

17 =

625/8270 Internal Standard concentration = 40 mg/L (in final extract)
624/8260 Internal Standard concentration = 30mg/L
524 Internal Standard concentration = 5mg/L

Flags:

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

A - Indicates the compound failed the internal standard area criteria

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times:

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

FORM8

Internal Standard Areas

Evaluation Std Data File: 1M161191.D

Analysis Date/Time: 05/02/22 13:38

Lab File ID: CAL @ 20 PPB

Method: EPA 8260D

Eval File Area/RT:	11		12		13		14		15		16		17	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	1101897	5.15	825586	6.87	405817	8.19								
Eval File Area Limit:	550948-2203794		412793-1651172		202908-811634									
Eval File Rt Limit:	4.65-5.65		6.37-7.37		7.69-8.69									

Data File		Sample#		11		12		13		14		15		16		17	
				Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
1M161193.D	BLK			1087628	5.15	810971	6.87	365306	8.19								
1M161194.D	BLK-HCL			1106074	5.15	833992	6.87	380129	8.19								
1M161195.D	DAILY BLANK			1080434	5.15	788420	6.87	345868	8.19								
1M161196.D	DAILY BLANK			1042887	5.15	798683	6.87	358277	8.19								
1M161197.D	AD30343-004(T)			1046732	5.15	798325	6.87	354465	8.19								
1M161198.D	AD30153-007(T)			1087370	5.15	820177	6.87	368266	8.19								
1M161199.D	AD30153-001(T)			1081692	5.15	825757	6.87	378289	8.19								
1M161200.D	BLK			1048088	5.15	799865	6.87	350087	8.19								
1M161201.D	AD30177-003(T)			1051708	5.15	818496	6.87	368277	8.19								
1M161202.D	AD30177-007(T)			1034653	5.15	767309	6.87	339729	8.19								
1M161203.D	AD30343-005(T)			1052687	5.15	819914	6.87	400957	8.19								
1M161204.D	STD			1134555	5.15	886079	6.87	443733	8.19								
1M161205.D	MBS101490			1159092	5.15	883418	6.87	455101	8.19								
1M161206.D	AD30343-004(T)MS			1138633	5.15	862614	6.87	453546	8.19								
1M161207.D	AD30343-004(T)MSD			1145097	5.15	830008	6.87	429059	8.19								
1M161208.D	MBS101491			1159998	5.15	853980	6.87	440985	8.19								
1M161209.D	BLK			1153953	5.15	875148	6.87	420598	8.19								
1M161210.D	BLK			1105811	5.15	821247	6.87	392683	8.19								
1M161211.D	AD30489-001			1090074	5.15	822116	6.87	381682	8.19								
1M161212.D	AD30489-002			1038412	5.15	772039	6.87	354253	8.19								
1M161213.D	AD30489-003			1059961	5.15	821298	6.87	372632	8.19								
1M161214.D	AD30489-004			1084155	5.15	821529	6.87	369688	8.19								
1M161215.D	AD30489-005			1091429	5.15	837400	6.87	376785	8.19								
1M161216.D	AD30489-006			1024591	5.15	796835	6.87	355110	8.19								
1M161217.D	AD30489-007			1073901	5.15	804669	6.87	354940	8.19								
1M161218.D	AD30489-008			1084476	5.15	838818	6.87	381712	8.19								
1M161219.D	AD30489-009			1066728	5.15	800121	6.87	346940	8.19								
1M161220.D	AD30488-001			1087431	5.15	846195	6.87	389578	8.19								
1M161221.D	AD30488-002			1015168	5.15	781037	6.87	342568	8.19								
1M161222.D	AD30487-001			1079735	5.15	837659	6.87	362166	8.19								
1M161224.D	AD30506-011(50X)			1019954	5.15	800385	6.87	362190	8.19								
1M161225.D	AD30506-009(50X)			991376	5.15	731404	6.87	321820	8.19								

11 = Fluorobenzene
12 = Chlorobenzene-d5
13 = 1,4-Dichlorobenzene-d4

14 =
15 =
16 =

625/8270 Internal Standard concentration = 40 mg/L (in final extract)
624/8260 Internal Standard concentration = 30mg/L
524 Internal Standard concentration =5mg/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Retention Times:

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

FORM8

Internal Standard Areas

Evaluation Std Data File: 1M161191.D

Analysis Date/Time: 05/02/22 13:38

Lab File ID: CAL @ 20 PPB

Method: EPA 8260D

	11		12		13		14		15		16		17	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	1101897	5.15	825586	6.87	405817	8.19								
Eval File Area Limit:	550948-2203794		412793-1651172		202908-811634									
Eval File RT Limit:	4.65-5.65		6.37-7.37		7.69-8.69									

Data File	Sample#													
1M161226.D	AD30506-010(50X)	1012768	5.15	783551	6.87	349224	8.19							
1M161227.D	BLK	1021296	5.15	801461	6.87	354946	8.19							

11 =	Fluorobenzene	14 =	17 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
12 =	Chlorobenzene-d5	15 =		624/8260 Internal Standard concentration = 30ug/L
13 =	1,4-Dichlorobenzene-d4	16 =		524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times:

Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

GC/MS Volatile Data
Sample Data

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD30488-001

Client Id: MW-2_20220428

Data File: 1M161220.D

Analysis Date: 05/02/22 22:42

Date Rec/Extracted: 04/29/22-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260D

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	110-82-7	Cyclohexane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	100-41-4	Ethylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.66	U	98-82-8	Isopropylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	79-20-9	Methyl Acetate	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
123-91-1	1,4-Dioxane	50	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.87	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	11	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
74-97-5	Bromochloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-25-2	Bromoform	1.0	U	79-01-6	Trichloroethene	1.0	U
74-83-9	Bromomethane	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-01-4	Vinyl Chloride	1.0	U
1330-20-7	Xylenes (Total)	1.0	U				

Worksheet #: 639376

Total Target Concentration 11

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration use a

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

SampleID : AD30488-001 Operator : SG Qt Meth : 1M_A0421.M
Data File: 1M161220.D Sam Mult : 1 Vial# : 18 Qt On : 05/02/22 23:40
Acq On : 05/02/22 22:42 Misc : A,5ML12 Qt Upd On: 04/22/22 09:35

Data Path : G:\GcMsData\2022\GCMS_1\Data\05-02-22\
Qt Path : G:\GcMsData\2022\GCMS_1\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
4) Fluorobenzene	5.151	96	1087431	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.875	117	846195	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.187	152	389578	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.730	111	308125	31.79	ug/l	0.00
Spiked Amount 30.000			Recovery =	105.97%		
39) 1,2-Dichloroethane-d4	4.952	67	170543	32.79	ug/l	0.00
Spiked Amount 30.000			Recovery =	109.30%		
66) Toluene-d8	6.061	98	1089607	28.80	ug/l	0.00
Spiked Amount 30.000			Recovery =	96.00%		
76) Bromofluorobenzene	7.524	174	311002	29.06	ug/l	0.00
Spiked Amount 30.000			Recovery =	96.87%		
Target Compounds						
19) Acetone	2.984	43	22316m	11.2088	ug/l	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed



Abundance

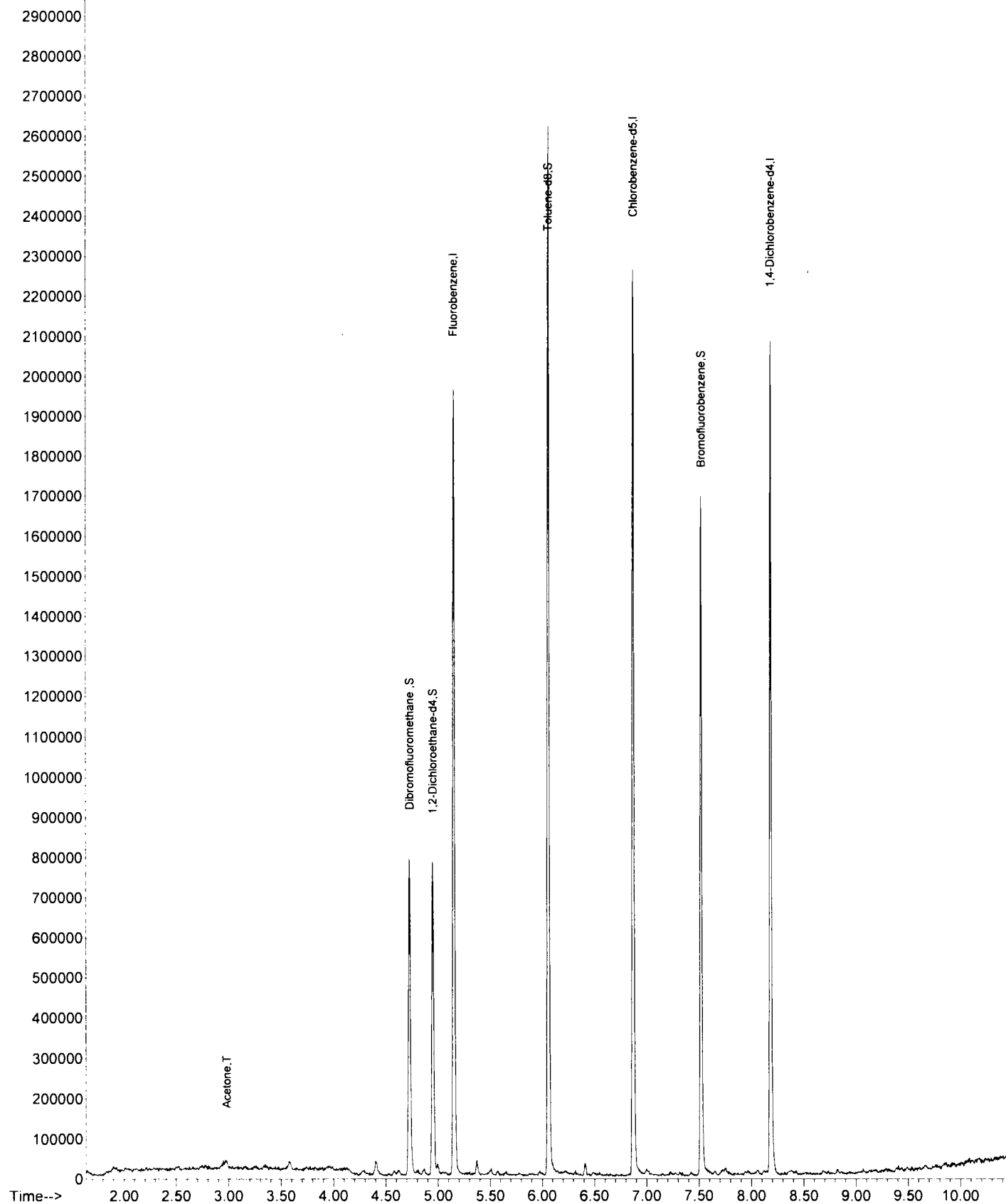
TIC: 1M161220.D\data.ms

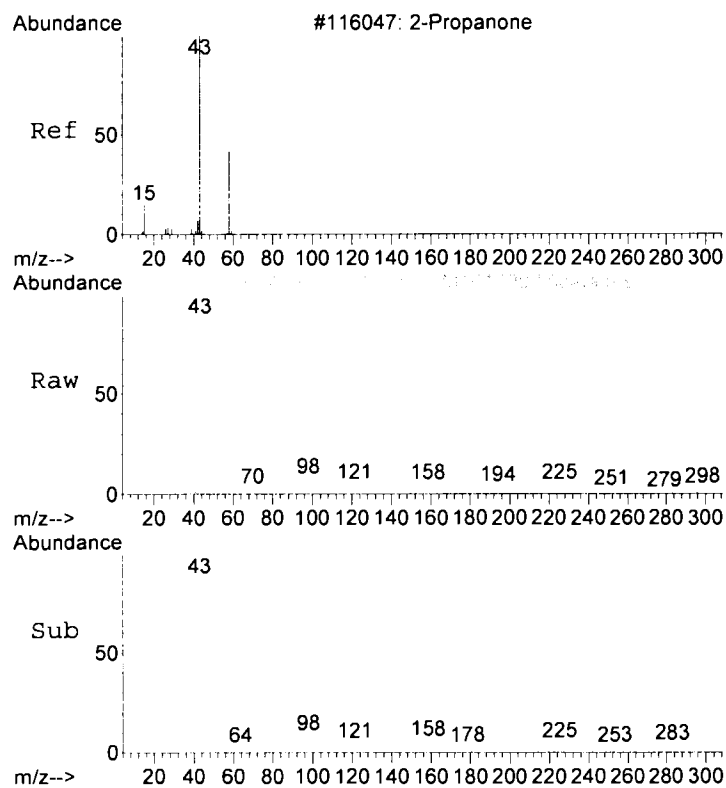
Quant QT Reviewed

SampleID : AD30488-001
Data File: 1M161220.D
Acq On : 05/02/22 22:42

Operator : SG
Sam Mult : 1 Vial# : 18
Misc : A,5ML12

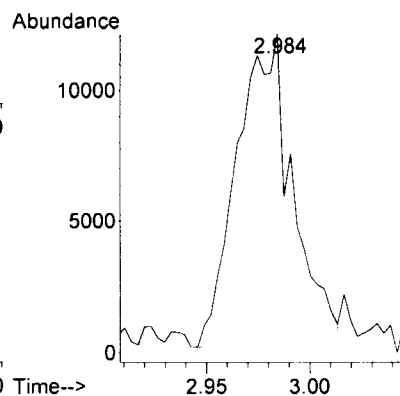
Qt Meth : 1M_A0421.M
Qt On : 05/02/22 23:40
Qt Upd On: 04/22/22 09:35





#19
Acetone
Concen: 11.21 ug/l m
RT: 2.984 min Scan# 419
Delta R.T. 0.003 min
Lab File: 1M161220.D
Acq: 02 May 2022 22:42

Tgt Ion:	43	Resp:	22316
Ion	Ratio	Lower	Upper
43	100		
58	27.9	0.0	64.2



Form1

ORGANICS VOLATILE REPORT

Sample Number: AD30488-002

Client Id: MW-1_20220428

Data File: 1M161221.D

Analysis Date: 05/02/22 23:00

Date Rec/Extracted: 04/29/22-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260D

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	110-82-7	Cyclohexane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	100-41-4	Ethylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.66	U	98-82-8	Isopropylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	79-20-9	Methyl Acetate	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
123-91-1	1,4-Dioxane	50	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.87	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	2.0
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
74-97-5	Bromochloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-25-2	Bromoform	1.0	U	79-01-6	Trichloroethene	1.0	U
74-83-9	Bromomethane	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-01-4	Vinyl Chloride	1.0	U
1330-20-7	Xylenes (Total)	1.0	U				

Worksheet #: 639376

Total Target Concentration 2

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

SampleID : AD30488-002
Data File: 1M161221.D
Acq On : 05/02/22 23:00

Operator : SG
Sam Mult : 1 Vial# : 19
Misc : A,5ML!2

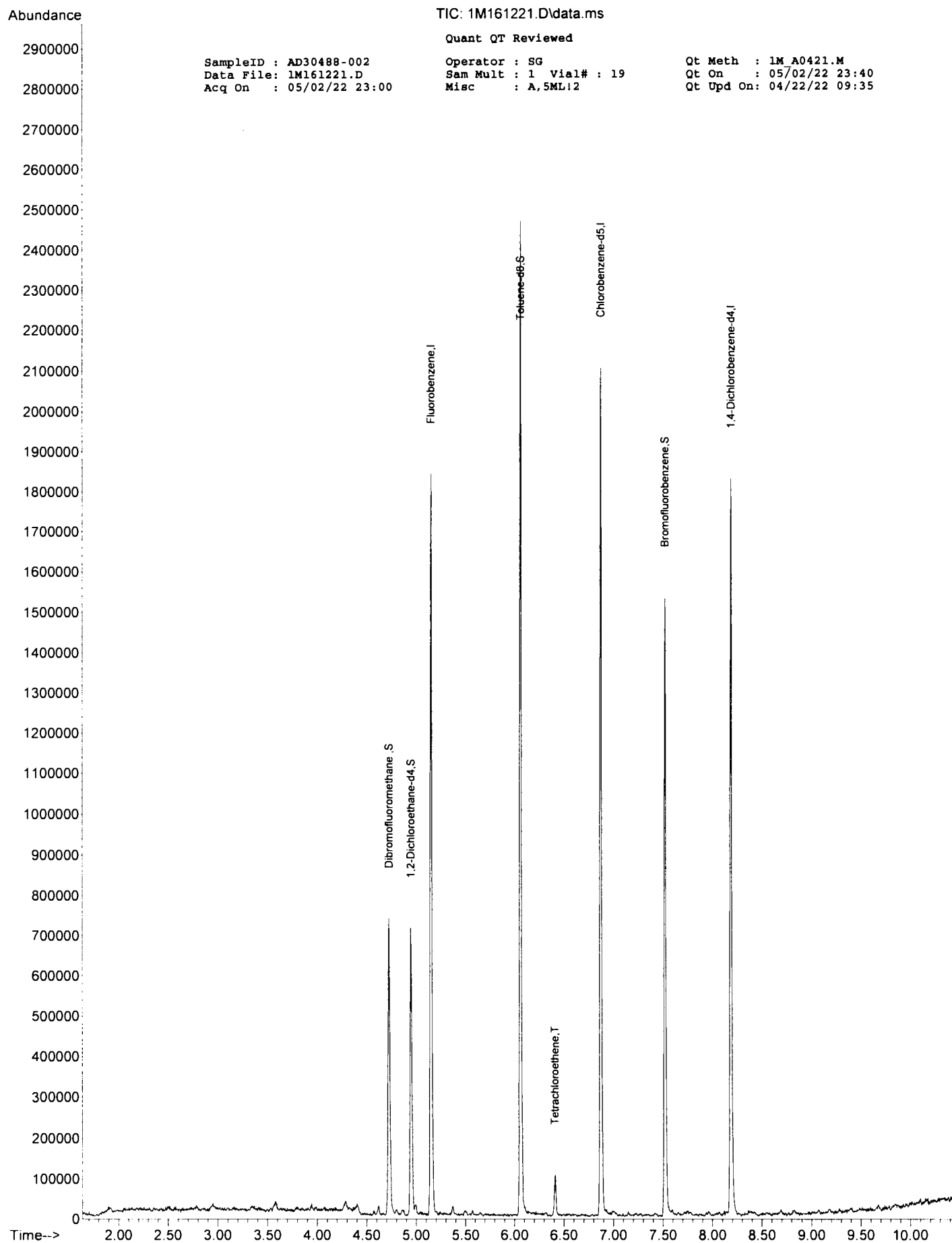
Qt Meth : 1M_A0421.M
Qt On : 05/02/22 23:40
Qt Upd On: 04/22/22 09:35

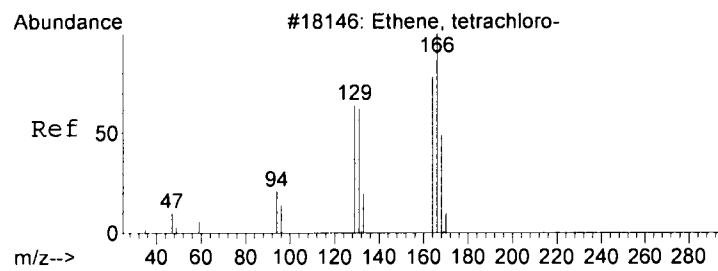
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Qt Path : G:\GcMsData\2022\GCMS_1\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.151	96	1015168	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.875	117	781037	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.187	152	342568	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.727	111	281311	31.09	ug/l	0.00
Spiked Amount 30.000			Recovery = 103.63%			
39) 1,2-Dichloroethane-d4	4.949	67	156184	32.16	ug/l	0.00
Spiked Amount 30.000			Recovery = 107.20%			
66) Toluene-d8	6.061	98	1020504	29.22	ug/l	0.00
Spiked Amount 30.000			Recovery = 97.40%			
76) Bromofluorobenzene	7.521	174	285986	30.39	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.30%			
Target Compounds						
65) Tetrachloroethene	6.412	164	11998m	1.9538	ug/l	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

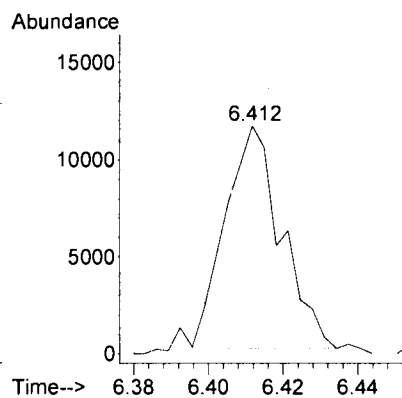
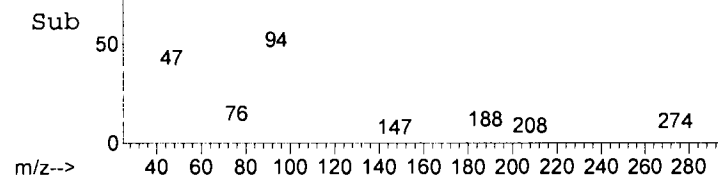
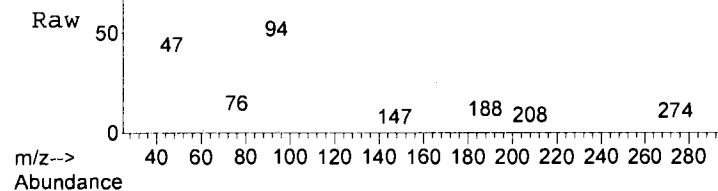






#65
Tetrachloroethene
Concen: 1.95 ug/l m
RT: 6.412 min Scan# 1485
Delta R.T. -0.003 min
Lab File: 1M161221.D
Acq: 02 May 2022 23:00

Tgt Ion	164	Resp	11998
Ion	Ratio	Lower	Upper
164	100		
166	108.1	53.0	193.0



Form1

ORGANICS VOLATILE REPORT

Sample Number: AD30488-003

Client Id: TB_20220428

Data File: 2M167449.D

Analysis Date: 05/02/22 17:10

Date Rec/Extracted: 04/29/22-NA

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260D

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	110-82-7	Cyclohexane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	100-41-4	Ethylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.66	U	98-82-8	Isopropylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	79-20-9	Methyl Acetate	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
123-91-1	1,4-Dioxane	50	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.87	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	9.0	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
74-97-5	Bromochloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-25-2	Bromoform	1.0	U	79-01-6	Trichloroethene	1.0	U
74-83-9	Bromomethane	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-01-4	Vinyl Chloride	1.0	U
1330-20-7	Xylenes (Total)	1.0	U				

Worksheet #: 639376

Total Target Concentration 9

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration use a

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

SampleID : AD30488-003 Operator : JM Qt Meth : 2M_A0426.M
Data File: 2M167449.D Sam Mult : 1 Vial# : 27 Qt On : 05/02/22 18:29
Acq On : 05/02/22 17:10 Misc : A,5ML!2 Qt Upd On: 04/26/22 23:20

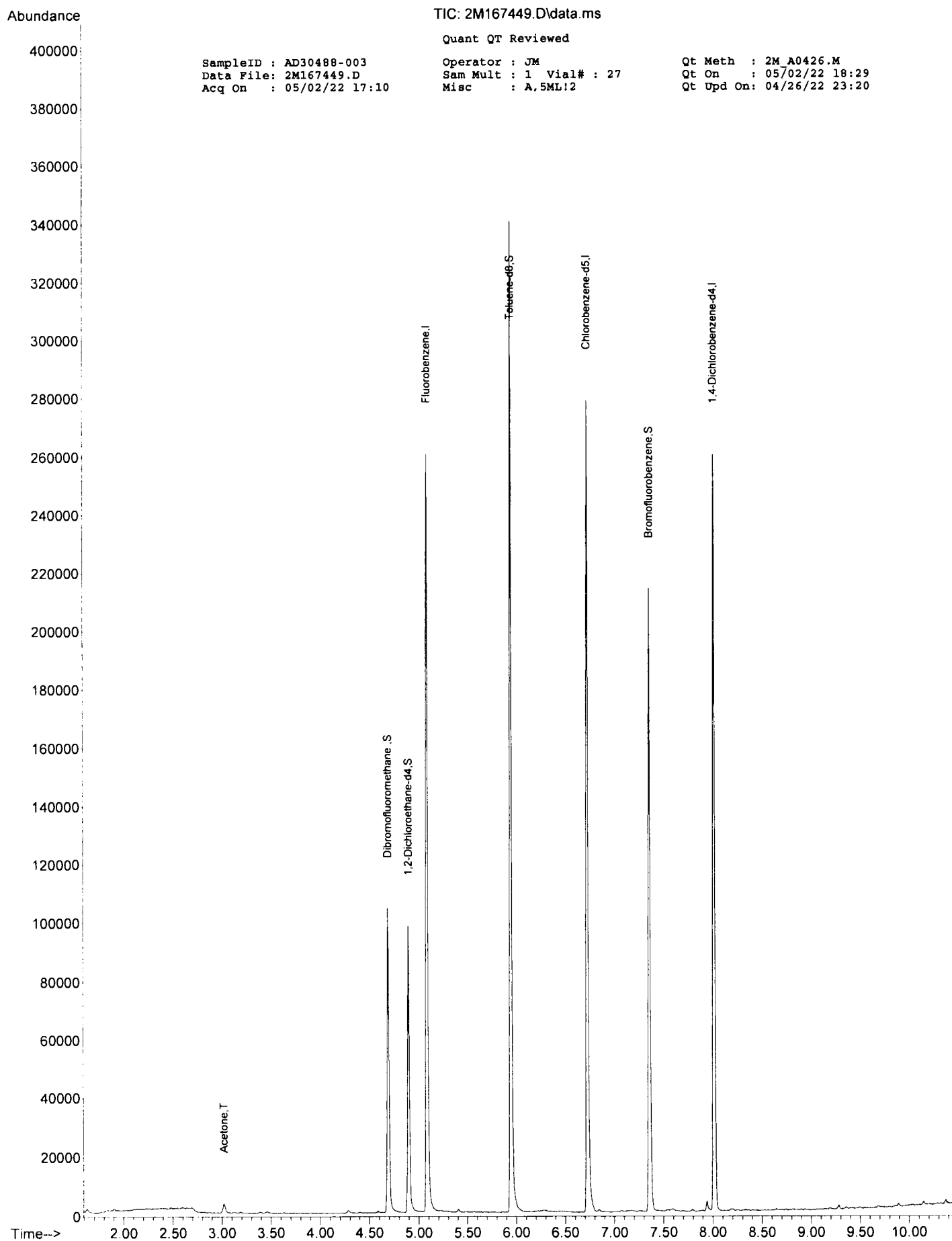
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Qt Resp Via : Initial Calibration

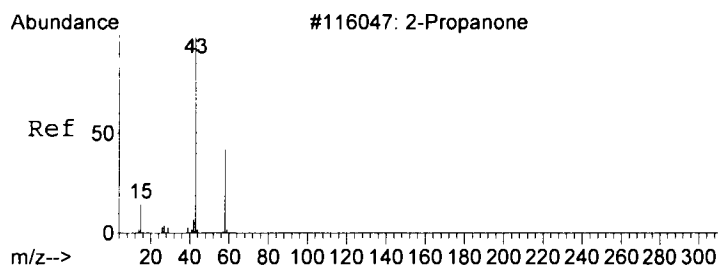
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
4) Fluorobenzene	5.087	96	153520	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.726	117	116052	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.013	152	53822	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.690	111	41425	29.77	ug/l	0.00
Spiked Amount	30.000		Recovery	=	99.23%	
39) 1,2-Dichloroethane-d4	4.898	67	22875	30.49	ug/l	0.00
Spiked Amount	30.000		Recovery	=	101.63%	
66) Toluene-d8	5.946	98	151780	29.27	ug/l	0.00
Spiked Amount	30.000		Recovery	=	97.57%	
76) Bromofluorobenzene	7.361	174	48633	29.85	ug/l	0.00
Spiked Amount	30.000		Recovery	=	99.50%	
Target Compounds						
19) Acetone	3.020	43	3573m	8.9792	ug/l	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

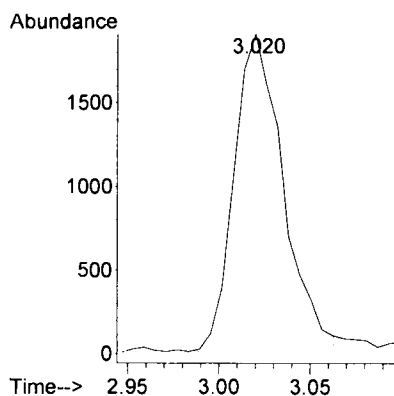
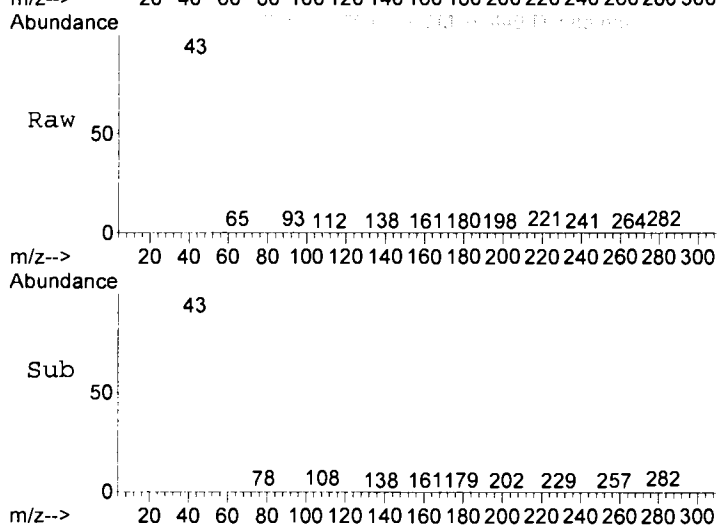






#19
Acetone
Concen: 8.98 ug/l m
RT: 3.020 min Scan# 235
Delta R.T. 0.000 min
Lab File: 2M167449.D
Acq: 02 May 2022 17:10

Tgt Ion: 43 Resp: 3573
Ion Ratio Lower Upper
43 100
58 33.2 0.0 71.6



GC/MS Volatile Data
Standards Data

Method: EPA 8260D

Form 6
Initial Calibration

Instrument: GCMS_1

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Calibration Level Concentrations																		
								Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9										
1	1M160730.D	CAL @ 20 PPB	04/21/22 18:09	2	1M160728.D	CAL @ 5 PPB	04/21/22 17:27																			
3	1M160729.D	CAL @ 10 PPB	04/21/22 17:48	4	1M160731.D	CAL @ 50 PPB	04/21/22 18:29																			
5	1M160736.D	CAL @ 100 PPB	04/21/22 20:14	6	1M160734.D	CAL @ 250 PPB	04/21/22 19:32																			
7	1M160732.D	CAL @ 500 PPB	04/21/22 18:50	8	1M160727.D	CAL @ 1 PPB	04/21/22 17:06																			
9	1M160726.D	CAL @ 0.5 PPB	04/21/22 16:45																							
Compound	Col	Mr	Flt	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRt	RT	Corr1	Corr2	%Rsd	Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Chlorodifluoromethane	1	0	Qua	0.2023	0.1561	0.1797	0.2140	0.2743	0.2783	0.2699	0.1719	---	0.2181.67	0.999	0.999	23	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Dichlorodifluorometha	1	0	Qua	0.1224	0.0979	0.1177	0.1432	0.1815	0.1758	0.1690	0.0853	---	0.1371.66	0.999	1.00	27	0.10 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Chloromethane	1	0	Avg	0.1553	0.1530	0.1712	0.1658	0.1778	0.1704	0.1649	0.1899	---	0.1691.83	1.00	1.00	7.1	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromomethane	1	0	Avg	0.1456	0.1551	0.1627	0.1388	0.1747	0.1753	0.2095	0.2068	---	0.1712.21	0.994	1.00	15	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Vinyl Chloride	1	0	Avg	0.1994	0.1831	0.2086	0.2072	0.2271	0.2152	0.2109	0.2134	---	0.2081.92	1.00	1.00	6.2	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Chloroethane	1	0	Avg	0.1390	0.1416	0.1505	0.1439	0.1501	0.1482	0.1524	0.1850	---	0.1512.29	1.00	1.00	9.5	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Trichlorofluoromethan	1	0	Avg	0.3682	0.3827	0.3927	0.3857	0.3973	0.3953	0.3724	0.4382	---	0.3922.51	0.999	1.00	5.5	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethyl ether	1	0	Avg	0.1707	0.1697	0.1892	0.1804	0.1815	0.1858	0.1861	0.2170	---	0.1852.74	1.00	1.00	7.9	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Furan	1	0	Avg	0.3435	0.3426	0.3614	0.3622	0.3529	0.3540	0.3404	0.4402	---	0.3622.78	1.00	1.00	9.0	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1,2-Trichloro-1,2,2-tr	1	0	Avg	0.1693	0.1807	0.1852	0.1772	0.1811	0.1852	0.1827	0.2330	---	0.1872.93	1.00	1.00	10	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Methylene Chloride	1	0	Avg	0.1892	0.1890	0.2036	0.1919	0.1972	0.1969	0.1943	0.2527	---	0.2023.34	1.00	1.00	10	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Acrolein	1	0	Avg	0.0349	0.0325	0.0353	0.0359	0.0379	0.0387	0.0372	0.0399	---	0.03662.86	1.00	1.00	6.5		100.0	25.00	50.00	250.0	500.0	1250.0	2500.0	5.00	
Acrylonitrile	1	0	Avg	0.0695	0.0667	0.0855	0.0748	0.0751	0.0756	0.0764	0.0871	---	0.07643.55	1.00	1.00	9.2		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Iodomethane	1	0	Qua	0.2190	0.1418	0.2032	0.2629	0.2413	0.2721	0.2818	0.1411	---	0.22033.09	0.999	1.00	25		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Acetone	1	0	Avg	0.0485	0.0497	0.0539	0.0507	0.0526	0.0516	0.0548	0.0773	---	0.05492.98	0.999	1.00	17	0.10 a	100.0	25.00	50.00	250.0	500.0	1250.0	2500.0	5.00	
Carbon Disulfide	1	0	Avg	0.4693	0.4331	0.4745	0.5060	0.5350	0.5462	0.5387	0.5599	---	0.5083.16	1.00	1.00	8.8	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
t-Butyl Alcohol	1	0	Avg	0.0183	0.0177	0.0208	0.0192	0.0199	0.0199	0.0196	0.0226	---	0.01983.42	1.00	1.00	7.6		100.0	25.00	50.00	250.0	500.0	1250.0	2500.0	5.00	
n-Hexane	1	0	Avg	0.1733	0.1676	0.1850	0.1787	0.1775	0.1823	0.1822	0.2277	---	0.1843.82	1.00	1.00	10		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Di-isopropyl-ether	1	0	Avg	0.5670	0.5400	0.5842	0.5813	0.5962	0.6120	0.6062	0.6441	---	0.5913.99	1.00	1.00	5.3		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1-Dichloroethene	1	0	Avg	0.2906	0.3010	0.3213	0.3018	0.3146	0.3137	0.3035	0.3996	---	0.3182.95	1.00	1.00	11	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Methyl Acetate	1	0	Avg	0.1383	0.1310	0.1577	0.1374	0.1411	0.1422	0.1437	0.1930	---	0.1483.25	1.00	1.00	13	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Methyl-t-butyl ether	1	0	Qua	0.5514	0.5272	0.5968	0.5586	0.5795	0.5851	0.5857	0.7076	1.0206	0.6353.58	1.00	1.00	24	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	0.50
1,1-Dichloroethane	1	0	Avg	0.3463	0.3559	0.3856	0.3667	0.3733	0.3715	0.3707	0.4727	---	0.3803.95	1.00	1.00	10	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
trans-1,2-Dichloroeth	1	0	Avg	0.1982	0.2076	0.2194	0.2106	0.2131	0.2141	0.2154	0.2362	---	0.2143.59	1.00	1.00	5.1	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethyl-t-butyl ether	1	0	Avg	0.5331	0.5343	0.5978	0.5603	0.6198	0.6235	0.6054	0.6226	---	0.5874.28	1.00	1.00	6.6	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
cis-1,2-Dichloroethene	1	0	Avg	0.3037	0.3316	0.3693	0.3222	0.3655	0.3567	0.3703	0.4494	---	0.3594.41	1.00	1.00	12	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromochloromethane	1	0	Avg	0.1579	0.1619	0.1793	0.1645	0.1757	0.1618	0.1520	0.1981	---	0.1694.58	0.998	1.00	8.8		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
2,2-Dichloropropane	1	0	Avg	0.3112	0.3096	0.3534	0.3231	0.3262	0.3319	0.3443	0.4084	---	0.3394.42	1.00	1.00	9.4		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethyl acetate	1	0	Avg	0.1755	0.1694	0.1924	0.1770	0.2024	0.1938	0.2028	0.1980	---	0.1894.44	0.999	1.00	6.9		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,4-Dioxane	1	0	Avg	0.0017	0.0017	0.0022	0.0020	0.0020	0.0024	0.0024	0.0015	---	0.002075.58	1.00	1.00	18		100.0	25.00	50.00	250.0	500.0	1250.0	2500.0	50.00	
1,1-Dichloropropene	1	0	Avg	0.2651	0.2562	0.2836	0.2766	0.2859	0.2942	0.2940	0.3010	---	0.2824.87	1.00	1.00	5.4		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Chloroform	1	0	Avg	0.3528	0.3416	0.3949	0.3750	0.3940	0.3804	0.3771	0.4355	---	0.3814.62	1.00	1.00	7.5	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Dibromofluoromethan	1	0	Avg	0.2681	0.2592	0.2629	0.2693	0.2777	0.2683	0.2740	0.2616	0.2653	0.2674.73	-1	-1	2.2		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	
Cyclohexane	1	0	Avg	0.2338	0.2328	0.2533	0.2511	0.2607	0.2645	0.2664	0.3288	---	0.2614.81	1.00	1.00	11	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2-Dichloroethane-d4	1	0	Avg	0.1431	0.1469	0.1364	0.1397	0.1429	0.1436	0.1450	0.1484	1.451	0.1444.96	-1	-1	2.5		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	
1,2-Dichloroethane	1	0	Avg	0.2942	0.2880	0.3206	0.2954	0.3023	0.3068	0.3102	0.3575	0.4819	0.3295.00	1.00	1.00	19	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	0.50
2-Butanone	1	0	Qua	0.0679	0.0464	0.0928	0.0764	0.0797	0.0765	0.0878	0.0982	---	0.07824.41	0.996	1.00	21	0.10 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1,1-Trichloroethane	1	0	Avg	0.3389	0.3426	0.3704	0.3560	0.3654	0.3729	0.3670	0.4286	---	0.3684.77	1.00	1.00	7.5	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	

Flags

a - failed the min rf criteria

c - failed the minimum correlation coeff criteria(if applicable)

Avg Rsd: 10.27

Page 1 of 3

Note:

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg Rf, Linear, or Quadratic Curve was used for compound.

Method: EPA 8260D

Form 6
Initial Calibration

Instrument: GCMS_1

Level #:	Data File:	Cal Identifier:	Analysis Date/Time									Level #:	Data File:	Cal Identifier:	Analysis Date/Time																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
			RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9				AvgRt	RT	Corr1	Corr2	%Rsd	Lv1	Lv2	Lv3	Lv4	Lv5	Lv6	Lv7	Lv8	Lv9																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
1	1M160730.D	CAL @ 20 PPB											2	1M160728.D	CAL @ 5 PPB																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											</

Flags

a - failed the min rf criteria

c - failed the minimum correlation coeff criteria(if applicable)

Note:

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg, RF, Linear, or Quadratic Curve was used for compound

Method: EPA 8260D

Form 6
Initial Calibration

Instrument: GCMS_1

Level #:	Data File:		Cal Identifier:		Analysis Date/Time				Level #:	Data File:		Cal Identifier:		Analysis Date/Time												
1	1M160730.D	CAL @ 20 PPB		04/21/22	18:09				2	1M160728.D	CAL @ 5 PPB		04/21/22	17:27												
3	1M160729.D	CAL @ 10 PPB		04/21/22	17:48				4	1M160731.D	CAL @ 50 PPB		04/21/22	18:29												
5	1M160736.D	CAL @ 100 PPB		04/21/22	20:14				6	1M160734.D	CAL @ 250 PPB		04/21/22	19:32												
7	1M160732.D	CAL @ 500 PPB		04/21/22	18:50				8	1M160727.D	CAL @ 1 PPB		04/21/22	17:06												
9	1M160726.D	CAL @ 0.5 PPB		04/21/22	16:45																					
Compound	Col	Mr	Fit	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRt	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations								
p-Ethyltoluene	1	0	Avg	2.2764	2.0120	2.4614	2.4053	2.4932	2.1149	1.3519	2.1944	----	2.167.72	0.932	1.00	17	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
4-Chlorotoluene	1	0	Avg	1.4139	1.3118	1.6057	1.4854	1.5320	1.3620	----	1.7492	----	1.497.78	0.997	1.00	10	----	20.00	5.00	10.00	50.00	100.0	250.0	----	1.00	
n-Propylbenzene	1	0	Avg	2.5348	2.3835	2.8011	2.6967	2.7734	2.2103	----	2.6602	----	2.587.66	0.990	0.999	8.4	----	20.00	5.00	10.00	50.00	100.0	250.0	----	1.00	
Bromobenzene	1	0	Avg	1.2670	1.1776	1.4137	1.3406	1.3903	1.2520	1.1694	1.2996	----	1.297.63	0.998	1.00	7.0	----	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,3,5-Trimethylbenzen	1	0	Avg	1.7210	1.6104	1.8704	1.7923	1.8629	1.7307	1.0964	1.7173	----	1.687.75	0.934	0.998	15	----	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Butyl methacrylate	1	0	Avg	0.6128	0.4796	0.6550	0.6748	0.7227	0.7058	0.6704	0.6083	----	0.6417.76	0.999	1.00	12	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
t-Butylbenzene	1	0	Avg	1.6206	1.4493	1.7385	1.6988	1.7787	1.6556	1.3514	1.5456	----	1.607.95	0.988	1.00	9.2	----	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2,4-Trimethylbenzen	1	0	Avg	1.7375	1.5265	1.8602	1.8671	1.9396	1.8085	1.2068	1.7254	----	1.717.97	0.949	0.999	14	----	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
sec-Butylbenzene	1	0	Avg	1.9208	1.7092	2.1136	2.0770	2.1068	1.9828	1.2631	1.8455	----	1.888.07	0.936	0.998	15	----	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
4-Isopropyltoluene	1	0	Avg	1.6249	1.4154	1.7143	1.7507	1.8281	1.7669	1.1962	1.4938	----	1.608.14	0.954	0.998	13	----	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
n-Butylbenzene	1	0	Avg	1.7002	1.5321	1.8086	1.8105	1.8587	1.8551	1.4150	1.7319	----	1.718.38	0.980	0.999	9.4	----	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
p-Diethylbenzene	1	0	Avg	0.9279	0.8295	0.9736	0.9983	1.0628	1.0803	0.9537	1.0058	----	0.979.8.36	0.996	1.00	8.1	----	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2,4,5-Tetramethylbe	1	0	Avg	1.1814	1.0403	1.1751	1.3473	1.5629	1.6240	1.1529	1.1866	----	1.288.82	0.966	0.997	16	----	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2-Dibromo-3-Chloro	1	0	Avg	0.1221	0.0935	0.1291	0.1252	0.1502	0.1514	0.1410	0.1360	----	0.1318.88	0.998	1.00	14	0.05	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Camphor	1	0	Avg	0.0539	0.0450	0.0555	0.0575	0.0702	0.0674	0.0626	0.0542	0.0512	0.0575.9.32	0.998	1.00	14	----	200.0	50.00	100.0	500.0	1000	2500	5000	10.00	
Hexachlorobutadiene	1	0	Avg	0.2216	0.2162	0.2177	0.2354	0.2562	0.2687	0.2408	0.2475	----	0.2389.46	0.997	0.999	8.0	----	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2,4-Trichlorobenzen	1	0	Avg	0.4913	0.4268	0.4734	0.5280	0.6047	0.5968	0.5410	0.5392	----	0.5259.38	0.997	1.00	11	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2,3-Trichlorobenzen	1	0	Avg	0.4102	0.3524	0.4367	0.4513	0.5275	0.5002	0.4542	0.4142	----	0.4439.68	0.997	1.00	12	----	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Naphthalene	1	0	Avg	1.2834	1.0710	1.3110	1.3842	1.6667	1.5760	1.1660	1.1765	----	1.339.54	0.973	0.999	15	----	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	

Flags
a - failed the min rf criteria

c - failed the minimum correlation coeff criteria(if applicable)

Avg Rsd: 10.27

Note:
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

SampleID : CAL @ 20 PPB
Data File: 1M160730.D
Acq On : 04/21/22 18:09

Operator : JM
Sam Mult : 1 Vial# : 7
Misc : A,5ML

Qt Meth : 1M_A0421.M
Qt On : 04/22/22 08:52
Qt Upd On: 04/22/22 08:51

Data Path : G:\GcMsData\2022\GCMS_1\Data\04-21-22\
Qt Path : G:\GcMsData\2022\GCMS_1\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.158	96	1400547	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.878	117	1030203	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.190	152	497699	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.730	111	375520	30.08	ug/l	0.00
Spiked Amount 30.000			Recovery	=	100.27%	
39) 1,2-Dichloroethane-d4	4.955	67	200437	29.92	ug/l	0.00
Spiked Amount 30.000			Recovery	=	99.73%	
66) Toluene-d8	6.068	98	1377946	29.92	ug/l	0.00
Spiked Amount 30.000			Recovery	=	99.73%	
76) Bromofluorobenzene	7.528	174	412611	30.18	ug/l	0.00
Spiked Amount 30.000			Recovery	=	100.60%	
Target Compounds						
5) Chlorodifluoromethane	1.672	51	188964	18.5372	ug/l	69
6) Dichlorodifluoromethane	1.663	85	114360	18.4778	ug/l	96
7) Chloromethane	1.827	50	145056	18.4304	ug/l	90
8) Bromomethane	2.209	94	136005	17.0269	ug/l	99
9) Vinyl Chloride	1.920	62	186217	19.1622	ug/l	98
10) Chloroethane	2.290	64	129806	18.3702	ug/l	98
11) Trichlorofluoromethane	2.512	101	343821	18.8070	ug/l	88
12) Ethyl ether	2.740	59	159460	18.4540	ug/l	91
13) Furan	2.779	39	320795	18.9712	ug/l	90
14) 1,1,2-Trichloro-1,2,2-...	2.933	101	158095	18.1220	ug/l	# 71
15) Methylene Chloride	3.344	84	176658	18.7439	ug/l	90
16) Acrolein	2.856	56	163189	96.8797	ug/l	98
17) Acrylonitrile	3.553	53	64960	18.2134	ug/l	94
18) Iodomethane	3.090	142	204481	19.9644	ug/l	97
19) Acetone	2.981	43	226570	88.4057	ug/l	83
20) Carbon Disulfide	3.158	76	438220	18.4823	ug/l	100
21) t-Butyl Alcohol	3.415	59	85767	97.9459	ug/l	80
22) n-Hexane	3.817	57	161871	18.8109	ug/l	96
23) Di-isopropyl-ether	3.987	45	529408	19.1746	ug/l	86
24) 1,1-Dichloroethene	2.946	61	271331	18.2594	ug/l	94
25) Methyl Acetate	3.251	43	129206	18.6509	ug/l	100
26) Methyl-t-butyl ether	3.582	73	514895	17.3033	ug/l	97
27) 1,1-Dichloroethane	3.946	63	323389	18.2106	ug/l	99
28) trans-1,2-Dichloroethene	3.586	96	185111	18.4959	ug/l	94
29) Ethyl-t-butyl ether	4.283	59	497815	18.1752	ug/l	97
30) cis-1,2-Dichloroethene	4.409	61	283642	16.9411	ug/l	97
31) Bromochloromethane	4.579	49	147439	18.6940	ug/l	93
32) 2,2-Dichloropropane	4.415	77	290653	18.3885	ug/l	91
33) Ethyl acetate	4.441	43	163933	19.1087	ug/l	99
34) 1,4-Dioxane	5.579	88	79143	829.8020	ug/l	96
35) 1,1-Dichloropropene	4.865	75	247592	18.7985	ug/l	94
36) Chloroform	4.624	83	329491	18.5019	ug/l	93
38) Cyclohexane	4.807	56	218333	17.8862	ug/l	97
40) 1,2-Dichloroethane	5.000	62	274716	17.9088	ug/l	95
41) 2-Butanone	4.412	43	63410m	17.3683	ug/l	
42) 1,1,1-Trichloroethane	4.766	97	316489	18.4336	ug/l	98
43) Carbon Tetrachloride	4.875	117	274251	18.8268	ug/l	97
44) Vinyl Acetate	3.978	43	608388	19.5402	ug/l	100
45) Bromodichloromethane	5.656	83	232831	18.3965	ug/l	93
46) Methylcyclohexane	5.495	83	209904	19.0530	ug/l	98
47) Dibromomethane	5.576	174	121933	18.2749	ug/l	80
48) 1,2-Dichloropropane	5.505	63	173930	18.8088	ug/l	96
49) Trichloroethene	5.373	130	194232	18.5779	ug/l	96
50) Benzene	4.997	78	689392	18.8245	ug/l	100
51) tert-Amyl methyl ether	5.049	73	466795	19.0215	ug/l	98
53) Iso-propylacetate	5.004	43	331744	19.0733	ug/l	97
54) Methyl methacrylate	5.544	41	134659	19.2369	ug/l	85
55) Dibromochloromethane	6.550	129	162427	18.1262	ug/l	95
56) 2-Chloroethylvinylether	5.807	63	23500	17.5335	ug/l	89
57) cis-1,3-Dichloropropene	5.907	75	271518	18.7292	ug/l	94
58) trans-1,3-Dichloropropene	6.209	75	251887	18.6899	ug/l	99
59) Ethyl methacrylate	6.235	41	149864	18.9155	ug/l	85
60) 1,1,2-Trichloroethane	6.319	97	160630	19.4940	ug/l	99
61) 1,2-Dibromoethane	6.630	107	172166	19.8050	ug/l	93
62) 1,3-Dichloropropane	6.415	76	276190	19.2882	ug/l	93
63) 4-Methyl-2-Pentanone	5.981	43	150226	19.0493	ug/l	95
64) 2-Hexanone	6.438	43	103441	19.7650	ug/l	99
65) Tetrachloroethene	6.415	164	150143	18.5367	ug/l	97
67) Toluene	6.103	92	439646	19.1101	ug/l	83

Quantitation Report (QT Reviewed)

SampleID : CAL @ 20 PPB
 Data File: 1M160730.D
 Acq On : 04/21/22 18:09

Operator : JM
 Sam Mult : 1 Vial# : 7
 Misc : A,5ML

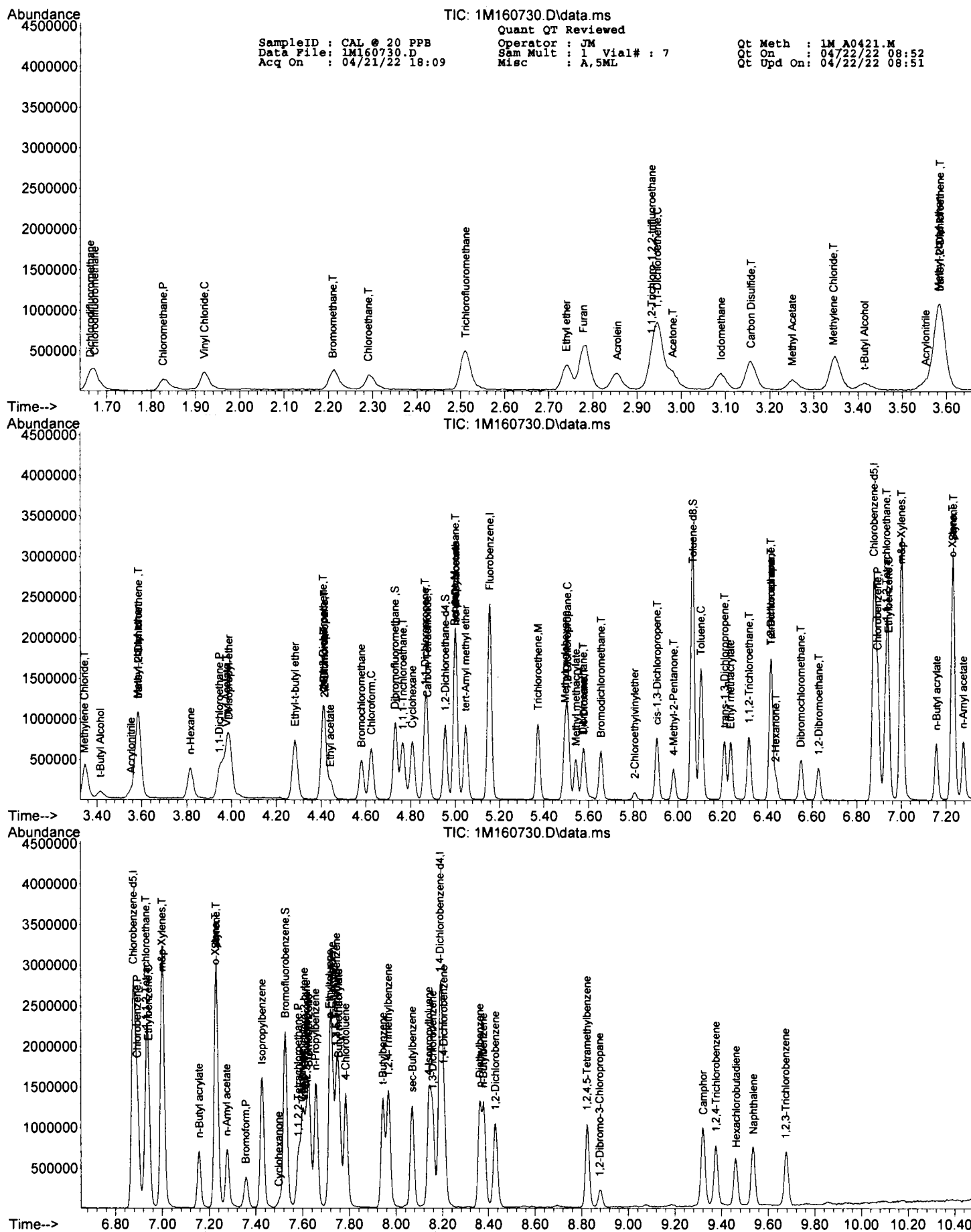
Qt Meth : 1M_A0421.M
 Qt On : 04/22/22 08:52
 Qt Upd On: 04/22/22 08:51

Data Path : G:\GcMsData\2022\GCMS_1\Data\04-21-22\
 Qt Path : G:\GcMsData\2022\GCMS_1\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1,1,1,2-Tetrachloroethane	6.933	133	161401	18.5698	ug/l	97
69) Chlorobenzene	6.894	112	494953	19.8981	ug/l	92
71) n-Butyl acrylate	7.158	55	295348	19.1675	ug/l	95
72) n-Amyl acetate	7.277	43	258965	19.3987	ug/l	93
73) Bromoform	7.357	173	111228	18.5026	ug/l	91
74) Ethylbenzene	6.942	106	223168	18.5402	ug/l	87
75) 1,1,2,2-Tetrachloroethane	7.582	83	204144	19.5846	ug/l	100
77) Styrene	7.232	104	529033	20.7362	ug/l	99
78) m&p-Xylenes	7.000	106	625288	40.5943	ug/l	98
79) o-Xylene	7.229	106	316411	19.8951	ug/l	88
80) trans-1,4-Dichloro-2-b...	7.608	53	94939	20.4700	ug/l	96
81) 1,3-Dichlorobenzene	8.158	146	339577	19.7755	ug/l	95
82) 1,4-Dichlorobenzene	8.206	146	346735	18.9104	ug/l	98
83) 1,2-Dichlorobenzene	8.431	146	319581	19.2943	ug/l	95
84) Isopropylbenzene	7.428	105	760491	21.0467	ug/l	99
85) Cyclohexanone	7.499	55	32981	92.4804	ug/l	95
86) Camphene	7.598	93	205528	20.4774	ug/l	100
87) 1,2,3-Trichloropropane	7.618	75	266548	19.8180	ug/l	98
88) 2-Chlorotoluene	7.727	91	491113	20.7339	ug/l	94
89) p-Ethyltoluene	7.717	105	755328	21.0511	ug/l	99
90) 4-Chlorotoluene	7.785	91	469156	20.1515	ug/l	97
91) n-Propylbenzene	7.656	91	841051	20.9320	ug/l	99
92) Bromobenzene	7.627	77	420390	19.6614	ug/l	81
93) 1,3,5-Trimethylbenzene	7.746	105	571050	20.5599	ug/l	98
94) Butyl methacrylate	7.756	41	203332	19.1244	ug/l	73
95) t-Butylbenzene	7.946	119	537719	20.1966	ug/l	99
96) 1,2,4-Trimethylbenzene	7.968	105	576521	20.3311	ug/l	99
97) sec-Butylbenzene	8.071	105	637347	20.4609	ug/l	97
98) 4-Isopropyltoluene	8.142	119	539164	20.3255	ug/l	99
99) n-Butylbenzene	8.380	91	564135	19.8375	ug/l	99
100) p-Diethylbenzene	8.364	119	307890	18.9563	ug/l	97
101) 1,2,4,5-Tetramethylben...	8.823	119	392013	18.4069	ug/l	97
102) 1,2-Dibromo-3-Chloropr...	8.878	157	40525	18.6323	ug/l	85
103) Camphor	9.322	95	179000	187.4829	ug/l	96
104) Hexachlorobutadiene	9.463	225	73539	18.6202	ug/l	99
105) 1,2,4-Trichlorobenzene	9.376	180	163026	18.7113	ug/l	97
106) 1,2,3-Trichlorobenzene	9.675	180	136128	18.5059	ug/l	96
107) Naphthalene	9.537	128	425831	19.3081	ug/l	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

unc



SampleID : CAL @ 5 PPB
 Data File: 1M160728.D
 Acq On : 04/21/22 17:27

Operator : JM
 Sam Mult : 1 Vial# : 5
 Misc : A,5ML

Qt Meth : 1M_A0421.M
 Qt On : 04/22/22 08:57
 Qt Upd On: 04/22/22 08:51

Data Path : G:\GcMsData\2022\GCMS_1\Data\04-21-22\
 Qt Path : G:\GcMsData\2022\GCMS_1\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.158	96	1470235	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.878	117	1082026	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.190	152	520332	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.733	111	381217	29.09	ug/l	0.00
Spiked Amount 30.000			Recovery	=	96.97%	
39) 1,2-Dichloroethane-d4	4.955	67	216069	30.72	ug/l	0.00
Spiked Amount 30.000			Recovery	=	102.40%	
66) Toluene-d8	6.064	98	1450061	29.97	ug/l	0.00
Spiked Amount 30.000			Recovery	=	99.90%	
76) Bromofluorobenzene	7.527	174	422307	29.55	ug/l	0.00
Spiked Amount 30.000			Recovery	=	98.50%	
Target Compounds						
5) Chlorodifluoromethane	1.676	51	38250	3.5744	ug/l	72
6) Dichlorodifluoromethane	1.666	85	23989	3.6923	ug/l	95
7) Chloromethane	1.823	50	37508	4.5398	ug/l	98
8) Bromomethane	2.209	94	38026	4.5349	ug/l	80
9) Vinyl Chloride	1.917	62	44880	4.3994	ug/l	89
10) Chloroethane	2.293	64	34699	4.6779	ug/l	90
11) Trichlorofluoromethane	2.508	101	93783	4.8868	ug/l	97
12) Ethyl ether	2.737	59	41589	4.5849	ug/l	90
13) Furan	2.782	39	83952	4.7294	ug/l	83
14) 1,1,2-Trichloro-1,2,2-...	2.939	101	44281m	4.8352	ug/l	
15) Methylene Chloride	3.348	84	46325	4.6822	ug/l	78
16) Acrolein	2.859	56	39822	22.5204	ug/l	92
17) Acrylonitrile	3.557	53	16356	4.3685	ug/l	81
18) Iodomethane	3.087	142	34752	3.2322	ug/l	80
19) Acetone	2.975	43	60894	22.6341	ug/l	90
20) Carbon Disulfide	3.158	76	106126	4.2638	ug/l	100
21) t-Butyl Alcohol	3.425	59	21709	23.6166	ug/l	77
22) n-Hexane	3.817	57	41069	4.5464	ug/l	96
23) Di-isopropyl-ether	3.987	45	132339	4.5660	ug/l	96
24) 1,1-Dichloroethene	2.949	61	73777	4.7295	ug/l	95
25) Methyl Acetate	3.248	43	32120m	4.4168	ug/l	
26) Methyl-t-butyl ether	3.582	73	129187	4.1356	ug/l	91
27) 1,1-Dichloroethane	3.949	63	87224	4.6789	ug/l	88
28) trans-1,2-Dichloroethene	3.589	96	50875	4.8424	ug/l	85
29) Ethyl-t-butyl ether	4.283	59	130941	4.5540	ug/l	99
30) cis-1,2-Dichloroethene	4.409	61	81265	4.6237	ug/l	97
31) Bromochloromethane	4.576	49	39695	4.7944	ug/l	78
32) 2,2-Dichloropropane	4.415	77	75881	4.5731	ug/l	98
33) Ethyl acetate	4.444	43	41523	4.6107	ug/l	92
34) 1,4-Dioxane	5.582	88	21141	211.1536	ug/l	98
35) 1,1-Dichloropropene	4.868	75	62781	4.5407	ug/l	97
36) Chloroform	4.627	83	83723	4.4785	ug/l	99
38) Cyclohexane	4.807	56	57065	4.4533	ug/l	94
40) 1,2-Dichloroethane	5.000	62	70571	4.3825	ug/l	91
41) 2-Butanone	4.409	43	11373	2.9675	ug/l	45
42) 1,1,1-Trichloroethane	4.766	97	83957	4.6582	ug/l	94
43) Carbon Tetrachloride	4.875	117	65822	4.3044	ug/l	100
44) Vinyl Acetate	3.978	43	141601	4.3324	ug/l	100
45) Bromodichloromethane	5.656	83	56257	4.2343	ug/l	94
46) Methylcyclohexane	5.495	83	55979	4.8404	ug/l	97
47) Dibromomethane	5.579	174	31740	4.5316	ug/l	86
48) 1,2-Dichloropropane	5.508	63	44506	4.5847	ug/l	99
49) Trichloroethene	5.376	130	49283	4.4904	ug/l	96
50) Benzene	4.997	78	176532	4.5919	ug/l	100
51) tert-Amyl methyl ether	5.048	73	115240	4.4733	ug/l	96
53) Iso-propylacetate	5.003	43	78962	4.3224	ug/l	99
54) Methyl methacrylate	5.544	41	29794	4.0524	ug/l	97
55) Dibromochloromethane	6.553	129	40180	4.2692	ug/l	97
56) 2-Chloroethylvinylether	5.804	63	6492	4.6117	ug/l	78
57) cis-1,3-Dichloropropene	5.907	75	66060	4.3385	ug/l	97
58) trans-1,3-Dichloropropene	6.209	75	61653	4.3555	ug/l	90
59) Ethyl methacrylate	6.235	41	33224	3.9926	ug/l	90
60) 1,1,2-Trichloroethane	6.319	97	38107	4.4032	ug/l	93
61) 1,2-Dibromoethane	6.627	107	41278	4.5210	ug/l	97
62) 1,3-Dichloropropane	6.415	76	69628	4.6297	ug/l	89
63) 4-Methyl-2-Pentanone	5.981	43	34720	4.1918	ug/l	92
64) 2-Hexanone	6.437	43	22505	4.0942	ug/l	91
65) Tetrachloroethene	6.415	164	36973	4.3461	ug/l	90
67) Toluene	6.106	92	110983	4.5931	ug/l	93

Quantitation Report (QT Reviewed)

SampleID : CAL @ 5 PPB
 Data File: 1M160728.D
 Acq On : 04/21/22 17:27

Operator : JM
 Sam Mult : 1 Vial# : 5
 Misc : A,5ML

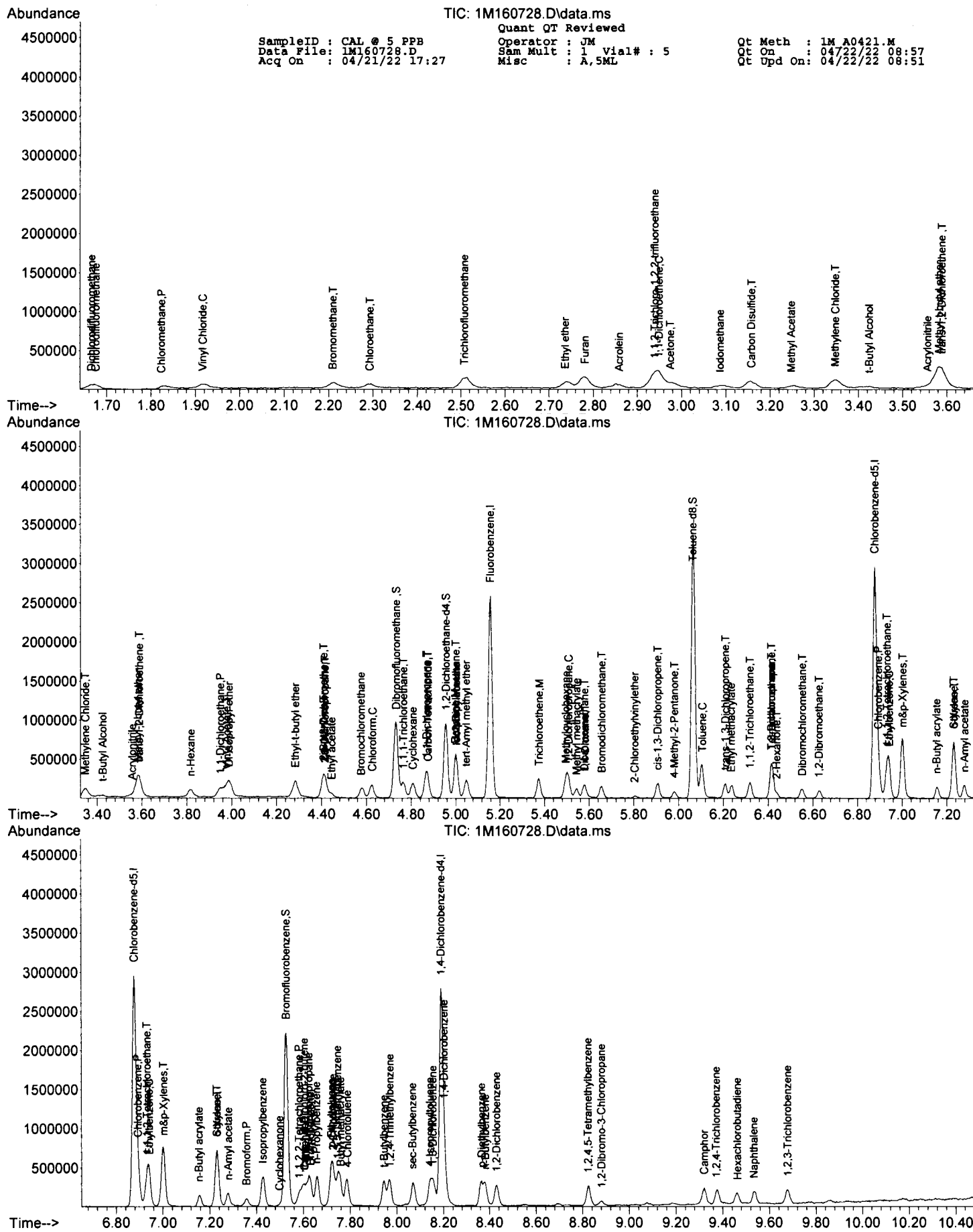
Qt Meth : 1M_A0421.M
 Qt On : 04/22/22 08:57
 Qt Upd On: 04/22/22 08:51

Data Path : G:\GcMsData\2022\GCMS_1\Data\04-21-22\
 Qt Path : G:\GcMsData\2022\GCMS_1\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1,1,1,2-Tetrachloroethane	6.933	133	39465	4.3231	ug/l	98
69) Chlorobenzene	6.894	112	121058	4.6337	ug/l	97
71) n-Butyl acrylate	7.154	55	60887	3.7796	ug/l	95
72) n-Amyl acetate	7.280	43	55337	3.9649	ug/l	92
73) Bromoform	7.357	173	25212	4.0116	ug/l	75
74) Ethylbenzene	6.942	106	55104	4.3788	ug/l	86
75) 1,1,2,2-Tetrachloroethane	7.582	83	51882	4.7608	ug/l	99
77) Styrene	7.232	104	118495	4.4426	ug/l	85
78) m&p-Xylenes	7.003	106	145607	9.0418	ug/l	92
79) o-Xylene	7.232	106	74850	4.5016	ug/l	94
80) trans-1,4-Dichloro-2-b...	7.605	53	22256	4.5899	ug/l	90
81) 1,3-Dichlorobenzene	8.154	146	79211	4.4122	ug/l	98
82) 1,4-Dichlorobenzene	8.203	146	87261	4.5521	ug/l	95
83) 1,2-Dichlorobenzene	8.431	146	77639	4.4835	ug/l	97
84) Isopropylbenzene	7.428	105	182430	4.8292	ug/l	99
85) Cyclohexanone	7.499	55	10774	28.8968	ug/l	95
86) Camphene	7.605	93	46428	4.4246	ug/l	99
87) 1,2,3-Trichloropropane	7.624	75	62984	4.4792	ug/l	98
88) 2-Chlorotoluene	7.727	91	121160	4.8927	ug/l	94
89) p-Ethyltoluene	7.720	105	174487	4.6514	ug/l	94
90) 4-Chlorotoluene	7.788	91	113768	4.6741	ug/l	96
91) n-Propylbenzene	7.656	91	206703	4.9206	ug/l	97
92) Bromobenzene	7.630	77	102127	4.5687	ug/l	82
93) 1,3,5-Trimethylbenzene	7.746	105	139657	4.8094	ug/l	96
94) Butyl methacrylate	7.759	41	41593	3.7419	ug/l	77
95) t-Butylbenzene	7.945	119	125688	4.5155	ug/l	97
96) 1,2,4-Trimethylbenzene	7.971	105	132387	4.4656	ug/l	93
97) sec-Butylbenzene	8.068	105	148226	4.5516	ug/l	99
98) 4-Isopropyltoluene	8.142	119	122748	4.4261	ug/l	98
99) n-Butylbenzene	8.383	91	132870	4.4691	ug/l	85
100) p-Diethylbenzene	8.367	119	71941	4.2366	ug/l	82
101) 1,2,4,5-Tetramethylben...	8.823	119	90221	4.0520	ug/l	100
102) 1,2-Dibromo-3-Chloropr...	8.881	157	8114	3.5683	ug/l	85
103) Camphor	9.322	95	39058	39.1295	ug/l	99
104) Hexachlorobutadiene	9.463	225	18753	4.5417	ug/l	95
105) 1,2,4-Trichlorobenzene	9.373	180	37015	4.0636	ug/l	95
106) 1,2,3-Trichlorobenzene	9.678	180	30564	3.9743	ug/l	96
107) Naphthalene	9.534	128	92884	4.0284	ug/l	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

duc



SampleID : CAL @ 10 PPB
Data File: 1M160729.D
Acq On : 04/21/22 17:48

Operator : JM
Sam Mult : 1 Vial# : 6
Misc : A,5ML

Qt Meth : 1M_A0421.M
Qt On : 04/22/22 09:00
Qt Upd On: 04/22/22 08:51

Data Path : G:\GcMsData\2022\GCMS_1\Data\04-21-22\
Qt Path : G:\GcMsData\2022\GCMS_1\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.158	96	1396689	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.878	117	1014298	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.190	152	472851	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.730	111	367222	29.50	ug/l	0.00
Spiked Amount 30.000			Recovery =	98.33%		
39) 1,2-Dichloroethane-d4	4.955	67	190516	28.52	ug/l	0.00
Spiked Amount 30.000			Recovery =	95.07%		
66) Toluene-d8	6.065	98	1375491	30.33	ug/l	0.00
Spiked Amount 30.000			Recovery =	101.10%		
76) Bromofluorobenzene	7.528	174	398499	30.68	ug/l	0.00
Spiked Amount 30.000			Recovery =	102.27%		
Target Compounds						
5) Chlorodifluoromethane	1.673	51	83680	8.2316	ug/l	75
6) Dichlorodifluoromethane	1.663	85	54816	8.8814	ug/l	97
7) Chloromethane	1.830	50	79710	10.1557	ug/l	95
8) Bromomethane	2.210	94	75750	9.5096	ug/l	99
9) Vinyl Chloride	1.920	62	97130	10.0225	ug/l	96
10) Chloroethane	2.290	64	70072	9.9440	ug/l	90
11) Trichlorofluoromethane	2.512	101	182860	10.0301	ug/l	98
12) Ethyl ether	2.737	59	88097	10.2234	ug/l	90
13) Furan	2.779	39	168297	9.9803	ug/l	93
14) 1,1,2-Trichloro-1,2,2-...	2.936	101	86240	9.9128	ug/l	# 69
15) Methylene Chloride	3.345	84	94794	10.0857	ug/l	77
16) Acrolein	2.853	56	82384	49.0437	ug/l	99
17) Acrylonitrile	3.547	53	39825	11.1969	ug/l	93
18) Iodomethane	3.091	142	94620	9.2637	ug/l	97
19) Acetone	2.978	43	125527	49.1149	ug/l	92
20) Carbon Disulfide	3.155	76	220939	9.3440	ug/l	100
21) t-Butyl Alcohol	3.415	59	48573	55.6236	ug/l	96
22) n-Hexane	3.817	57	86140	10.0379	ug/l	95
23) Di-isopropyl-ether	3.991	45	272014	9.8793	ug/l	85
24) 1,1-Dichloroethene	2.949	61	149595	10.0949	ug/l	94
25) Methyl Acetate	3.251	43	73423	10.6279	ug/l	100
26) Methyl-t-butyl ether	3.576	73	277853	9.3632	ug/l	97
27) 1,1-Dichloroethane	3.952	63	179531	10.1376	ug/l	89
28) trans-1,2-Dichloroethene	3.586	96	102183	10.2381	ug/l	97
29) Ethyl-t-butyl ether	4.283	59	278355	10.1908	ug/l	95
30) cis-1,2-Dichloroethene	4.409	61	171951	10.2985	ug/l	94
31) Bromochloromethane	4.579	49	83506	10.6171	ug/l	90
32) 2,2-Dichloropropane	4.415	77	164533	10.4381	ug/l	93
33) Ethyl acetate	4.441	43	89598	10.4728	ug/l	95
34) 1,4-Dioxane	5.579	88	53031	557.5577	ug/l	97
35) 1,1-Dichloropropene	4.869	75	132064	10.0547	ug/l	92
36) Chloroform	4.624	83	183879	10.3539	ug/l	96
38) Cyclohexane	4.804	56	117952	9.6895	ug/l	95
40) 1,2-Dichloroethane	5.000	62	149268	9.7577	ug/l	97
41) 2-Butanone	4.409	43	43241	11.8766	ug/l	53
42) 1,1,1-Trichloroethane	4.762	97	172485	10.0740	ug/l	95
43) Carbon Tetrachloride	4.872	117	142225	9.7904	ug/l	90
44) Vinyl Acetate	3.978	43	316902	10.2064	ug/l	100
45) Bromodichloromethane	5.653	83	124338	9.8513	ug/l	95
46) Methylcyclohexane	5.492	83	106809	9.7219	ug/l	95
47) Dibromomethane	5.579	174	66760	10.0334	ug/l	85
48) 1,2-Dichloropropane	5.508	63	90855	9.8522	ug/l	96
49) Trichloroethene	5.373	130	103150	9.8933	ug/l	87
50) Benzene	5.000	78	368136	10.0801	ug/l	100
51) tert-Amyl methyl ether	5.049	73	244637	9.9963	ug/l	99
53) Iso-propylacetate	5.007	43	173094	10.1079	ug/l	98
54) Methyl methacrylate	5.544	41	67866	9.8471	ug/l	94
55) Dibromochloromethane	6.550	129	83777	9.4958	ug/l	93
56) 2-Chloroethylvinylether	5.807	63	11778	8.9254	ug/l	78
57) cis-1,3-Dichloropropene	5.907	75	143995	10.0884	ug/l	99
58) trans-1,3-Dichloropropene	6.209	75	135270	10.1944	ug/l	95
59) Ethyl methacrylate	6.235	41	79250	10.1596	ug/l	80
60) 1,1,2-Trichloroethane	6.315	97	80538	9.9273	ug/l	96
61) 1,2-Dibromoethane	6.631	107	86793	10.1408	ug/l	78
62) 1,3-Dichloropropane	6.415	76	145554	10.3244	ug/l	96
63) 4-Methyl-2-Pentanone	5.981	43	79519	10.2415	ug/l	94
64) 2-Hexanone	6.441	43	53352	10.3541	ug/l	87
65) Tetrachloroethene	6.412	164	79848	10.0126	ug/l	83
67) Toluene	6.103	92	237887	10.5024	ug/l	95

Quantitation Report (QT Reviewed)

SampleID : CAL @ 10 PPB
 Data File: 1M160729.D
 Acq On : 04/21/22 17:48

Operator : JM
 Sam Mult : 1 Vial# : 6
 Misc : A,5ML

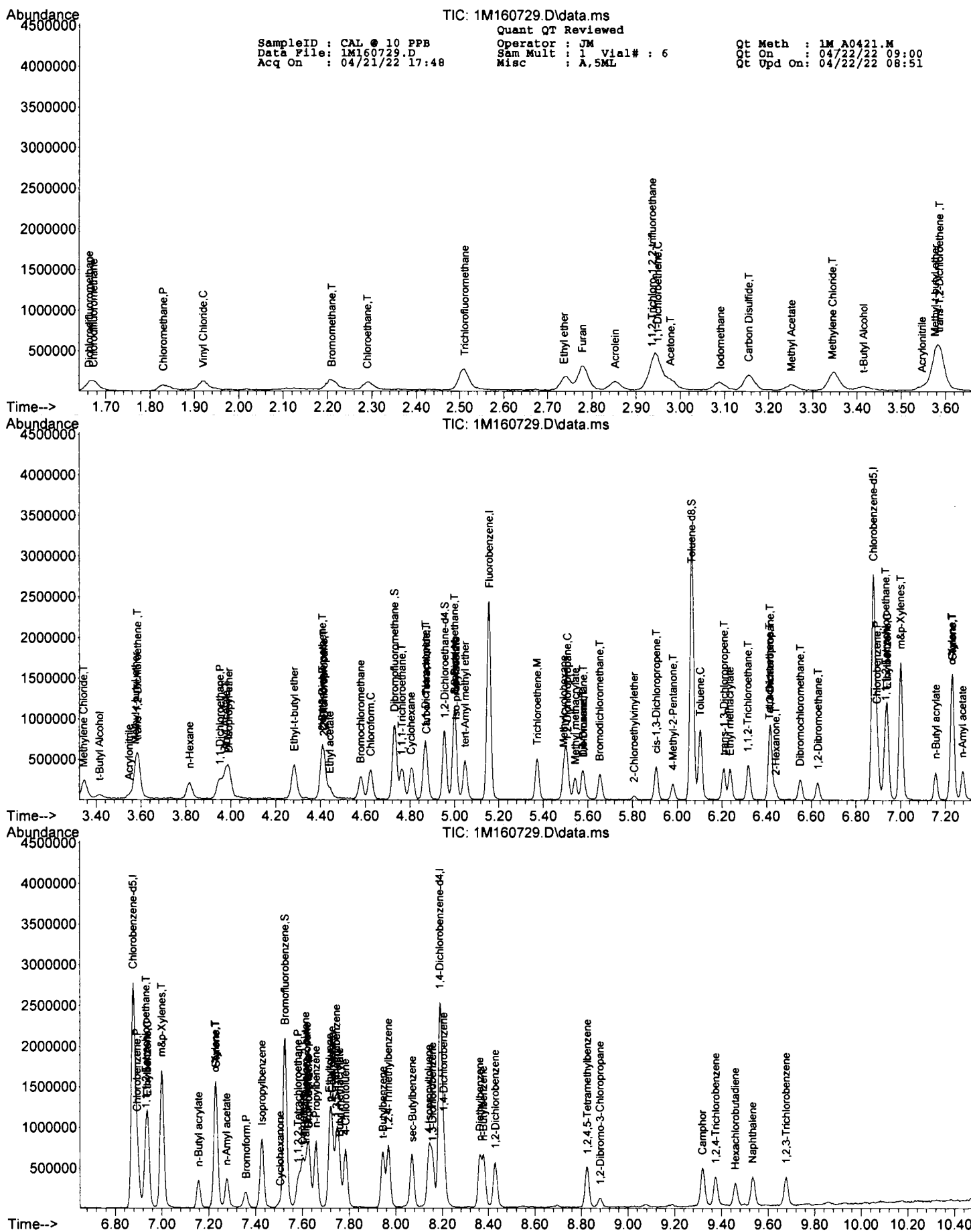
Qt Meth : 1M_A0421.M
 Qt On : 04/22/22 09:00
 Qt Upd On: 04/22/22 08:51

Data Path : G:\GcMsData\2022\GCMS_1\Data\04-21-22\
 Qt Path : G:\GcMsData\2022\GCMS_1\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1,1,1,2-Tetrachloroethane	6.933	133	85470	9.9878	ug/l	98
69) Chlorobenzene	6.894	112	260889	10.6527	ug/l	98
71) n-Butyl acrylate	7.158	55	148699	10.1574	ug/l	93
72) n-Amyl acetate	7.277	43	129608	10.2189	ug/l	92
73) Bromoform	7.360	173	55386	9.6976	ug/l	94
74) Ethylbenzene	6.939	106	132221	11.5618	ug/l	86
75) 1,1,2,2-Tetrachloroethane	7.582	83	106423	10.7462	ug/l	96
77) Styrene	7.232	104	266217	10.9831	ug/l	94
78) m&p-Xylenes	7.000	106	328702	22.4610	ug/l	97
79) o-Xylene	7.229	106	166164	10.9970	ug/l	90
80) trans-1,4-Dichloro-2-b...	7.614	53	46522	10.5578	ug/l	94
81) 1,3-Dichlorobenzene	8.158	146	172278	10.5599	ug/l	96
82) 1,4-Dichlorobenzene	8.206	146	183450	10.5308	ug/l	98
83) 1,2-Dichlorobenzene	8.431	146	159255	10.1201	ug/l	99
84) Isopropylbenzene	7.428	105	389076	11.3336	ug/l	98
85) Cyclohexanone	7.505	55	18058	53.2964	ug/l	93
86) Camphene	7.602	93	96357	10.1048	ug/l	98
87) 1,2,3-Trichloropropane	7.621	75	134248	10.5059	ug/l	98
88) 2-Chlorotoluene	7.727	91	258357	11.4805	ug/l	95
89) p-Ethyltoluene	7.717	105	387963	11.3808	ug/l	98
90) 4-Chlorotoluene	7.785	91	253090	11.4421	ug/l	94
91) n-Propylbenzene	7.659	91	441512	11.5658	ug/l	99
92) Bromobenzene	7.627	77	222835	10.9696	ug/l	83
93) 1,3,5-Trimethylbenzene	7.746	105	294810	11.1720	ug/l	99
94) Butyl methacrylate	7.759	41	103241	10.2206	ug/l	72
95) t-Butylbenzene	7.946	119	274017	10.8329	ug/l	99
96) 1,2,4-Trimethylbenzene	7.968	105	293207	10.8833	ug/l	99
97) sec-Butylbenzene	8.071	105	333141	11.2569	ug/l	97
98) 4-Isopropyltoluene	8.142	119	270210	10.7217	ug/l	99
99) n-Butylbenzene	8.380	91	285066	10.5510	ug/l	97
100) p-Diethylbenzene	8.364	119	153461	9.9448	ug/l	98
101) 1,2,4,5-Tetramethylben...	8.827	119	185223	9.1541	ug/l	100
102) 1,2-Dibromo-3-Chloropr...	8.881	157	20356	9.8510	ug/l	92
103) Camphor	9.319	95	87616	96.5905	ug/l	95
104) Hexachlorobutadiene	9.460	225	34327	9.1484	ug/l	97
105) 1,2,4-Trichlorobenzene	9.376	180	74621	9.0147	ug/l	95
106) 1,2,3-Trichlorobenzene	9.679	180	68843	9.8507	ug/l	98
107) Naphthalene	9.534	128	206640	9.8619	ug/l	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

DMC



SampleID : CAL @ 50 PPB
Data File: 1M160731.D
Acq On : 04/21/22 18:29

Operator : JM
Sam Mult : 1 Vial# : 8
Misc : A,5ML

Qt Meth : 1M A0421.M
Qt On : 04/22/22 09:01
Qt Upd On: 04/22/22 08:51

Data Path : G:\GCMSData\2022\GCMS_1\Data\04-21-22\
Qt Path : G:\GCMSData\2022\GCMS_1\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.155	96	1429558	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.878	117	1043113	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.190	152	512387	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.730	111	384988	30.21	ug/l	0.00
Spiked Amount 30.000			Recovery =	100.70%		
39) 1,2-Dichloroethane-d4	4.955	67	199771	29.21	ug/l	0.00
Spiked Amount 30.000			Recovery =	97.37%		
66) Toluene-d8	6.065	98	1412075	30.28	ug/l	0.00
Spiked Amount 30.000			Recovery =	100.93%		
76) Bromofluorobenzene	7.528	174	434813	30.89	ug/l	0.00
Spiked Amount 30.000			Recovery =	102.97%		
Target Compounds						
5) Chlorodifluoromethane	1.676	51	509867	49.0024	ug/l	76
6) Dichlorodifluoromethane	1.663	85	341241	54.0173	ug/l	94
7) Chloromethane	1.830	50	395077	49.1786	ug/l	98
8) Bromomethane	2.210	94	330707	40.5620	ug/l	88
9) Vinyl Chloride	1.920	62	493879	49.7900	ug/l	97
10) Chloroethane	2.293	64	342898	47.5422	ug/l	99
11) Trichlorofluoromethane	2.509	101	919043	49.2515	ug/l	95
12) Ethyl ether	2.737	59	429915	48.7435	ug/l	86
13) Furan	2.782	39	863179	50.0109	ug/l	88
14) 1,1,2-Trichloro-1,2,2-...	2.936	101	422291	47.4237	ug/l	# 71
15) Methylene Chloride	3.348	84	457257	47.5316	ug/l	86
16) Acrolein	2.853	56	428163	249.0274	ug/l	86
17) Acrylonitrile	3.550	53	178313	48.9806	ug/l	97
18) Iodomethane	3.087	142	626577	59.9340	ug/l	98
19) Acetone	2.975	43	604572	231.1116	ug/l	90
20) Carbon Disulfide	3.155	76	1205812	49.8240	ug/l	100
21) t-Butyl Alcohol	3.422	59	228848	256.0408	ug/l	81
22) n-Hexane	3.814	57	425952	48.4949	ug/l	99
23) Di-isopropyl-ether	3.988	45	1385066	49.1476	ug/l	93
24) 1,1-Dichloroethene	2.946	61	719222	47.4182	ug/l	94
25) Methyl Acetate	3.251	43	327581	46.3267	ug/l	100
26) Methyl-t-butyl ether	3.582	73	1330954	43.8196	ug/l	97
27) 1,1-Dichloroethane	3.949	63	873913	48.2129	ug/l	94
28) trans-1,2-Dichloroethene	3.586	96	501938	49.1349	ug/l	96
29) Ethyl-t-butyl ether	4.283	59	1334967	47.7504	ug/l	97
30) cis-1,2-Dichloroethene	4.406	61	767708	44.9224	ug/l	97
31) Bromochloromethane	4.576	49	391937	48.6858	ug/l	88
32) 2,2-Dichloropropane	4.412	77	770029	47.7281	ug/l	98
33) Ethyl acetate	4.444	43	421817	48.1710	ug/l	98
34) 1,4-Dioxane	5.582	88	245685	2523.6931	ug/l	99
35) 1,1-Dichloropropene	4.865	75	659083	49.0255	ug/l	94
36) Chloroform	4.624	83	893484	49.1537	ug/l	95
38) Cyclohexane	4.808	56	598349	48.0230	ug/l	94
40) 1,2-Dichloroethane	5.000	62	703911	44.9569	ug/l	100
41) 2-Butanone	4.409	43	182145m	48.8779	ug/l	
42) 1,1,1-Trichloroethane	4.762	97	848377	48.4101	ug/l	98
43) Carbon Tetrachloride	4.872	117	727417	48.9224	ug/l	98
44) Vinyl Acetate	3.978	43	1625505	51.1484	ug/l	100
45) Bromodichloromethane	5.653	83	654089	50.6322	ug/l	95
46) Methylcyclohexane	5.496	83	562707	50.0405	ug/l	100
47) Dibromomethane	5.576	174	321207	47.1644	ug/l	91
48) 1,2-Dichloropropane	5.508	63	461856	48.9315	ug/l	95
49) Trichloroethene	5.373	130	513022	48.0736	ug/l	96
50) Benzene	4.997	78	1822761	48.7622	ug/l	100
51) tert-Amyl methyl ether	5.049	73	1275685	50.9281	ug/l	99
53) Iso-propylacetate	5.004	43	887282	50.3821	ug/l	96
54) Methyl methacrylate	5.544	41	366798	51.7510	ug/l	87
55) Dibromochloromethane	6.550	129	460311	50.7330	ug/l	100
56) 2-Chloroethylvinylether	5.807	63	63299	46.6433	ug/l	91
57) cis-1,3-Dichloropropene	5.907	75	757042	51.5740	ug/l	99
58) trans-1,3-Dichloropropene	6.206	75	708118	51.8917	ug/l	98
59) Ethyl methacrylate	6.235	41	410876	51.2180	ug/l	87
60) 1,1,2-Trichloroethane	6.319	97	426596	51.1308	ug/l	97
61) 1,2-Dibromoethane	6.627	107	460270	52.2916	ug/l	97
62) 1,3-Dichloropropane	6.415	76	730621	50.3925	ug/l	99
63) 4-Methyl-2-Pentanone	5.981	43	401604	50.2949	ug/l	98
64) 2-Hexanone	6.438	43	273828	51.6742	ug/l	99
65) Tetrachloroethene	6.415	164	411846	50.2172	ug/l	97
67) Toluene	6.103	92	1207516	51.8376	ug/l	93

Quantitation Report (QT Reviewed)

SampleID : CAL @ 50 PPB
 Data File: 1M160731.D
 Acq On : 04/21/22 18:29

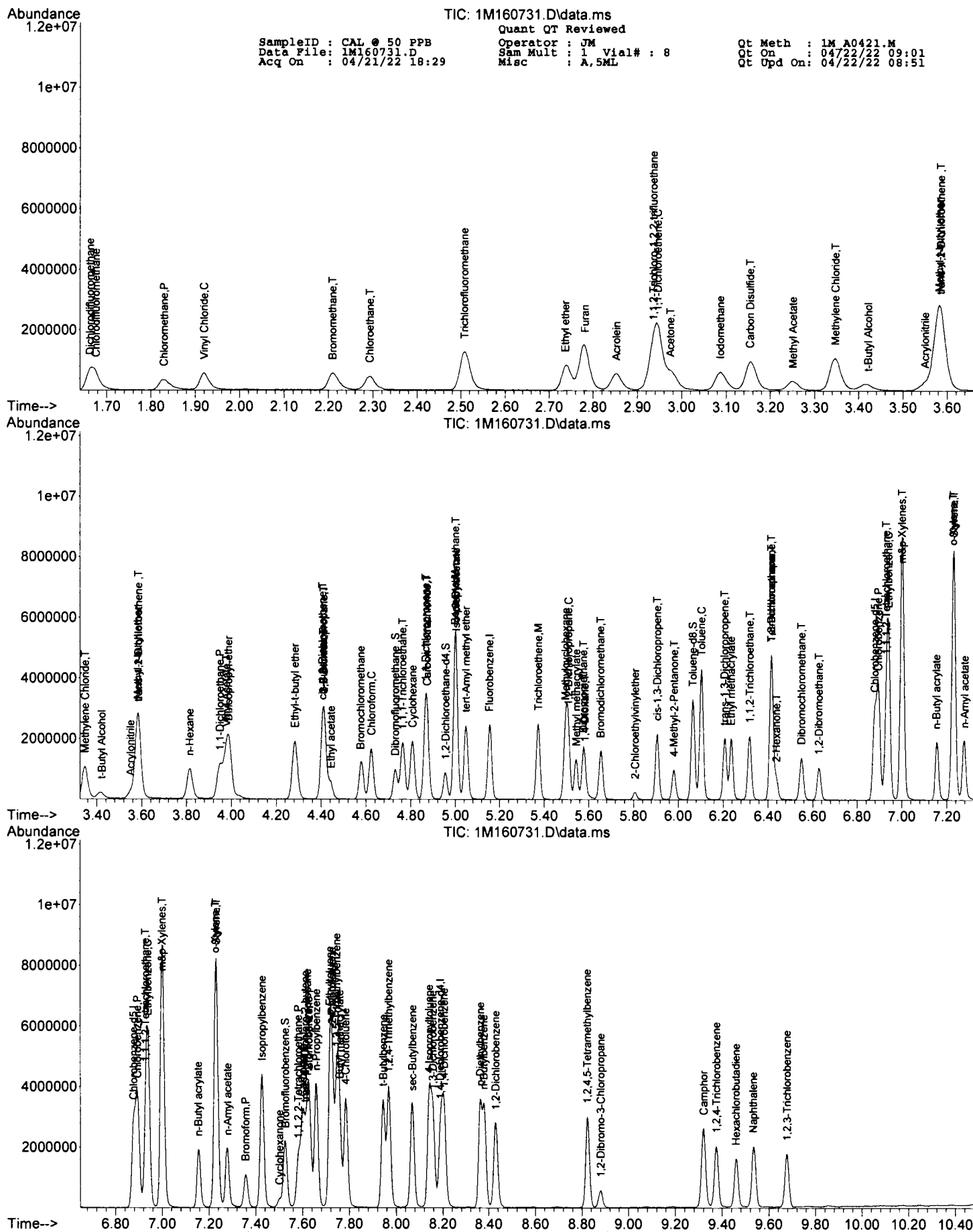
Operator : JM
 Sam Mult : 1 Vial# : 8
 Misc : A,5ML

Qt Meth : 1M_A0421.M
 Qt On : 04/22/22 09:01
 Qt Upd On: 04/22/22 08:51

Data Path : G:\GcMsData\2022\GCMS_1\Data\04-21-22\
 Qt Path : G:\GcMsData\2022\GCMS_1\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1,1,1,2-Tetrachloroethane	6.930	133	461954	52.4917	ug/l	96
69) Chlorobenzene	6.894	112	1335720	53.0341	ug/l	97
71) n-Butyl acrylate	7.155	55	863722	54.4469	ug/l	92
72) n-Amyl acetate	7.280	43	733052	53.3377	ug/l	92
73) Bromoform	7.357	173	319995	51.7049	ug/l	91
74) Ethylbenzene	6.939	106	618880	49.9411	ug/l	96
75) 1,1,2,2-Tetrachloroethane	7.582	83	548306	51.0940	ug/l	98
77) Styrene	7.232	104	1422425	54.1558	ug/l	93
78) m&p-Xylenes	7.000	106	1733808	109.3339	ug/l	98
79) o-Xylene	7.229	106	864272	52.7853	ug/l	92
80) trans-1,4-Dichloro-2-b...	7.611	53	252687	52.9207	ug/l	98
81) 1,3-Dichlorobenzene	8.158	146	922764	52.1972	ug/l	95
82) 1,4-Dichlorobenzene	8.206	146	952131	50.4391	ug/l	95
83) 1,2-Dichlorobenzene	8.431	146	861180	50.5023	ug/l	96
84) Isopropylbenzene	7.428	105	2046410	55.0112	ug/l	98
85) Cyclohexanone	7.502	55	81317	221.4807	ug/l	97
86) Camphene	7.602	93	544652	52.7098	ug/l	99
87) 1,2,3-Trichloropropane	7.621	75	696869	50.3274	ug/l	99
88) 2-Chlorotoluene	7.727	91	1295066	53.1081	ug/l	94
89) p-Ethyltoluene	7.717	105	2054126	55.6077	ug/l	97
90) 4-Chlorotoluene	7.785	91	1268543	52.9253	ug/l	99
91) n-Propylbenzene	7.659	91	2302953	55.6728	ug/l	98
92) Bromobenzene	7.627	77	1144912	52.0120	ug/l	82
93) 1,3,5-Trimethylbenzene	7.746	105	1530587	53.5270	ug/l	96
94) Butyl methacrylate	7.759	41	576308	52.6507	ug/l	75
95) t-Butylbenzene	7.946	119	1450793	52.9294	ug/l	100
96) 1,2,4-Trimethylbenzene	7.968	105	1594542	54.6198	ug/l	97
97) sec-Butylbenzene	8.071	105	1773739	55.3105	ug/l	98
98) 4-Isopropyltoluene	8.142	119	1495084	54.7464	ug/l	97
99) n-Butylbenzene	8.380	91	1546190	52.8125	ug/l	98
100) p-Diethylbenzene	8.364	119	852565	50.9863	ug/l	96
101) 1,2,4,5-Tetramethylben...	8.823	119	1150561	52.4756	ug/l	98
102) 1,2-Dibromo-3-Chloropr...	8.881	157	106922	47.7506	ug/l	86
103) Camphor	9.322	95	491575	500.1118	ug/l	99
104) Hexachlorobutadiene	9.460	225	201033	49.4427	ug/l	99
105) 1,2,4-Trichlorobenzene	9.376	180	450941	50.2730	ug/l	96
106) 1,2,3-Trichlorobenzene	9.679	180	385475	50.9012	ug/l	97
107) Naphthalene	9.534	128	1182142	52.0644	ug/l	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed



SampleID : CAL @ 100 PPB
 Data File: 1M160736.D
 Acq On : 04/21/22 20:14

Operator : JM
 Sam Mult : 1 Vial# : 13
 Misc : A,5ML

Qt Meth : 1M_A0421.M
 Qt On : 04/22/22 09:09
 Qt Upd On: 04/22/22 08:51

Data Path : G:\GcMsData\2022\GCMS_1\Data\04-21-22\
 Qt Path : G:\GcMsData\2022\GCMS_1\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.158	96	1556056	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.878	117	1132587	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.190	152	530437	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.730	111	432116	31.15	ug/l	0.00
Spiked Amount 30.000			Recovery =	103.83%		
39) 1,2-Dichloroethane-d4	4.955	67	222504	29.89	ug/l	0.00
Spiked Amount 30.000			Recovery =	99.63%		
66) Toluene-d8	6.065	98	1520136	30.02	ug/l	0.00
Spiked Amount 30.000			Recovery =	100.07%		
76) Bromofluorobenzene	7.528	174	455182	31.24	ug/l	0.00
Spiked Amount 30.000			Recovery =	104.13%		
Target Compounds						
5) Chlorodifluoromethane	1.669	51	1422854	125.6311	ug/l	75
6) Dichlorodifluoromethane	1.660	85	941622	136.9384	ug/l	96
7) Chloromethane	1.827	50	922702	105.5194	ug/l	95
8) Bromomethane	2.209	94	906488	102.1445	ug/l	97
9) Vinyl Chloride	1.920	62	1178274	109.1300	ug/l	99
10) Chloroethane	2.293	64	778795	99.2006	ug/l	99
11) Trichlorofluoromethane	2.508	101	2060780	101.4593	ug/l	97
12) Ethyl ether	2.740	59	941573	98.0763	ug/l	91
13) Furan	2.782	39	1830555	97.4368	ug/l	93
14) 1,1,2-Trichloro-1,2,2-...	2.936	101	939613	96.9414	ug/l	# 72
15) Methylene Chloride	3.348	84	1022858	97.6819	ug/l	88
16) Acrolein	2.849	56	984089	525.8344	ug/l	99
17) Acrylonitrile	3.547	53	389855	98.3832	ug/l	96
18) Iodomethane	3.090	142	1252021	110.0238	ug/l	98
19) Acetone	2.978	43	1364614	479.2477	ug/l	83
20) Carbon Disulfide	3.155	76	2775390	105.3561	ug/l	100
21) t-Butyl Alcohol	3.415	59	516852	531.2572	ug/l	81
22) n-Hexane	3.817	57	920941	96.3261	ug/l	98
23) Di-isopropyl-ether	3.991	45	3092555	100.8153	ug/l	91
24) 1,1-Dichloroethene	2.949	61	1632124	98.8581	ug/l	98
25) Methyl Acetate	3.248	43	731968	95.1001	ug/l	100
26) Methyl-t-butyl ether	3.579	73	3005781	90.9157	ug/l	98
27) 1,1-Dichloroethane	3.949	63	1936253	98.1371	ug/l	97
28) trans-1,2-Dichloroethene	3.586	96	1105455	99.4164	ug/l	93
29) Ethyl-t-butyl ether	4.283	59	3215203	105.6553	ug/l	96
30) cis-1,2-Dichloroethene	4.409	61	1895922	101.9211	ug/l	98
31) Bromochloromethane	4.579	49	911449	104.0147	ug/l	96
32) 2,2-Dichloropropane	4.412	77	1692202	96.3597	ug/l	96
33) Ethyl acetate	4.441	43	1050169	110.1786	ug/l	98
34) 1,4-Dioxane	5.582	88	606723	5725.6515	ug/l	99
35) 1,1-Dichloropropene	4.865	75	1483191	101.3575	ug/l	93
36) Chloroform	4.624	83	2044085	103.3106	ug/l	99
38) Cyclohexane	4.807	56	1352283	99.7100	ug/l	92
40) 1,2-Dichloroethane	5.000	62	1568261	92.0182	ug/l	98
41) 2-Butanone	4.409	43	413401m	101.9162	ug/l	
42) 1,1,1-Trichloroethane	4.766	97	1895280	99.3567	ug/l	97
43) Carbon Tetrachloride	4.872	117	1669859	103.1764	ug/l	98
44) Vinyl Acetate	3.975	43	3637404	105.1507	ug/l	100
45) Bromodichloromethane	5.656	83	1488798	105.8771	ug/l	98
46) Methylcyclohexane	5.495	83	1248224	101.9785	ug/l	99
47) Dibromomethane	5.576	174	737955	99.5487	ug/l	90
48) 1,2-Dichloropropane	5.508	63	1009370	98.2447	ug/l	100
49) Trichloroethene	5.373	130	1161082	99.9564	ug/l	98
50) Benzene	4.997	78	4085824	100.4176	ug/l	100
51) tert-Amyl methyl ether	5.049	73	2880990	105.6652	ug/l	100
53) Iso-propylacetate	5.004	43	2025574	105.9308	ug/l	96
54) Methyl methacrylate	5.544	41	835879	108.6163	ug/l	86
55) Dibromochloromethane	6.550	129	1088592	110.5004	ug/l	99
56) 2-Chloroethylvinylether	5.807	63	152638	103.5892	ug/l	95
57) cis-1,3-Dichloropropene	5.907	75	1699561	106.6369	ug/l	99
58) trans-1,3-Dichloropropene	6.209	75	1590031	107.3143	ug/l	98
59) Ethyl methacrylate	6.238	41	929101	106.6680	ug/l	89
60) 1,1,2-Trichloroethane	6.319	97	949674	104.8336	ug/l	99
61) 1,2-Dibromoethane	6.627	107	1007787	105.4504	ug/l	97
62) 1,3-Dichloropropane	6.415	76	1611272	102.3535	ug/l	96
63) 4-Methyl-2-Pentanone	5.981	43	901890	104.0254	ug/l	99
64) 2-Hexanone	6.438	43	620244	107.7999	ug/l	98
65) Tetrachloroethene	6.415	164	910605	102.2604	ug/l	97
67) Toluene	6.103	92	2664391	105.3439	ug/l	92

Quantitation Report (QT Reviewed)

SampleID : CAL @ 100 PPB
 Data File: 1M160736.D
 Acq On : 04/21/22 20:14

Operator : JM
 Sam Mult : 1 Vial# : 13
 Misc : A,5ML

Qt Meth : 1M A0421.M
 Qt On : 04/22/22 09:09
 Qt Upd On: 04/22/22 08:51

Data Path : G:\GcMsData\2022\GCMS_1\Data\04-21-22\
 Qt Path : G:\GcMsData\2022\GCMS_1\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1,1,1,2-Tetrachloroethane	6.930	133	1035363	108.3539	ug/l	96
69) Chlorobenzene	6.894	112	2902854	106.1512	ug/l	97
71) n-Butyl acrylate	7.158	55	2010419	122.4193	ug/l	92
72) n-Amyl acetate	7.277	43	1658419	116.5623	ug/l	92
73) Bromoform	7.357	173	762538	119.0184	ug/l	96
74) Ethylbenzene	6.939	106	1406464	109.6338	ug/l	95
75) 1,1,2,2-Tetrachloroethane	7.582	83	1189303	107.0543	ug/l	99
77) Styrene	7.232	104	3218149	118.3547	ug/l	97
78) m&p-Xylenes	7.000	106	3815815	232.4371	ug/l	97
79) o-Xylene	7.229	106	1909784	112.6706	ug/l	93
80) trans-1,4-Dichloro-2-b...	7.611	53	541077	109.4627	ug/l	97
81) 1,3-Dichlorobenzene	8.158	146	1974311	107.8790	ug/l	95
82) 1,4-Dichlorobenzene	8.206	146	2046016	104.6994	ug/l	95
83) 1,2-Dichlorobenzene	8.431	146	1863511	105.5635	ug/l	97
84) Isopropylbenzene	7.428	105	4446110	115.4523	ug/l	99
85) Cyclohexanone	7.502	55	185878	489.0429	ug/l	93
86) Camphene	7.601	93	1161664	108.5968	ug/l	97
87) 1,2,3-Trichloropropane	7.621	75	1516381	105.7854	ug/l	99
88) 2-Chlorotoluene	7.727	91	2803503	111.0539	ug/l	94
89) p-Ethyltoluene	7.717	105	4408325	115.2777	ug/l	97
90) 4-Chlorotoluene	7.785	91	2708775	109.1679	ug/l	98
91) n-Propylbenzene	7.659	91	4903825	114.5136	ug/l	98
92) Bromobenzene	7.627	77	2458226	107.8742	ug/l	81
93) 1,3,5-Trimethylbenzene	7.746	105	3293834	111.2707	ug/l	98
94) Butyl methacrylate	7.759	41	1277864	112.7714	ug/l	80
95) t-Butylbenzene	7.946	119	3144996	110.8348	ug/l	98
96) 1,2,4-Trimethylbenzene	7.968	105	3429578	113.4800	ug/l	99
97) sec-Butylbenzene	8.071	105	3725247	112.2114	ug/l	98
98) 4-Isopropyltoluene	8.142	119	3232417	114.3356	ug/l	97
99) n-Butylbenzene	8.380	91	3286459	108.4341	ug/l	98
100) p-Diethylbenzene	8.364	119	1879279	108.5629	ug/l	97
101) 1,2,4,5-Tetramethylben...	8.823	119	2763397	121.7463	ug/l	98
102) 1,2-Dibromo-3-Chloropr...	8.881	157	265579	114.5698	ug/l	83
103) Camphor	9.318	95	1241181	1219.7665	ug/l	98
104) Hexachlorobutadiene	9.460	225	453058	107.6348	ug/l	97
105) 1,2,4-Trichlorobenzene	9.376	180	1069267	115.1504	ug/l	97
106) 1,2,3-Trichlorobenzene	9.675	180	932779	118.9802	ug/l	98
107) Naphthalene	9.534	128	2946947	125.3740	ug/l	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

done

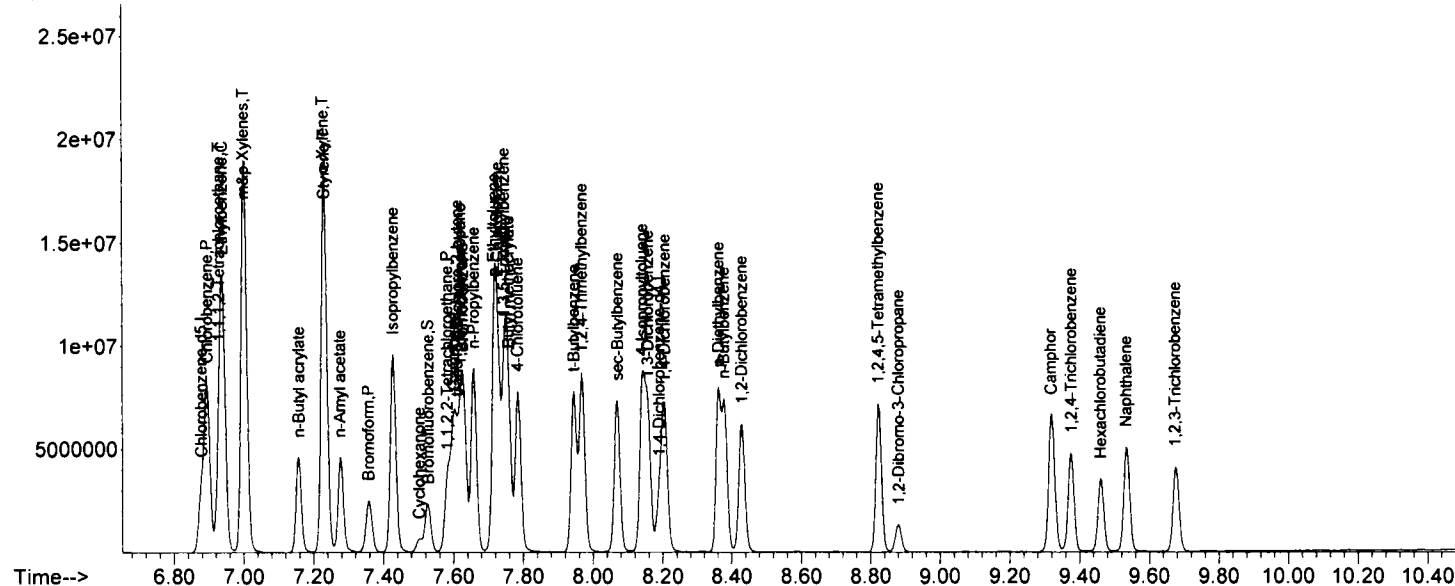
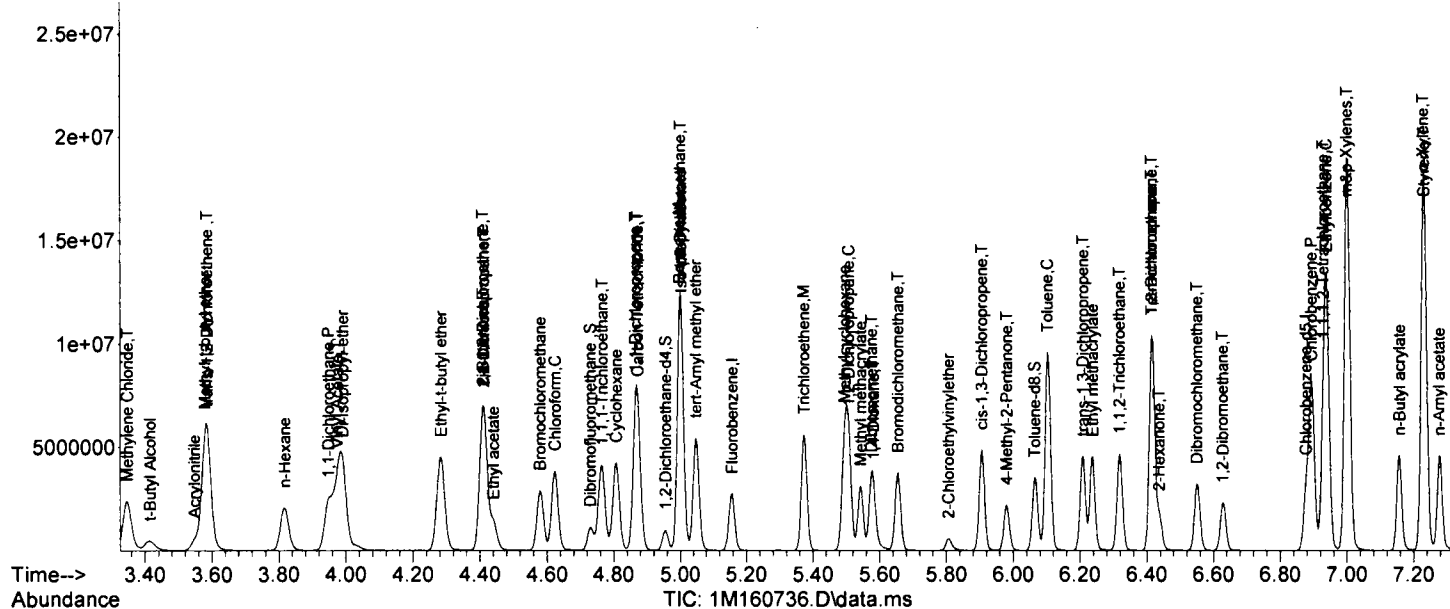
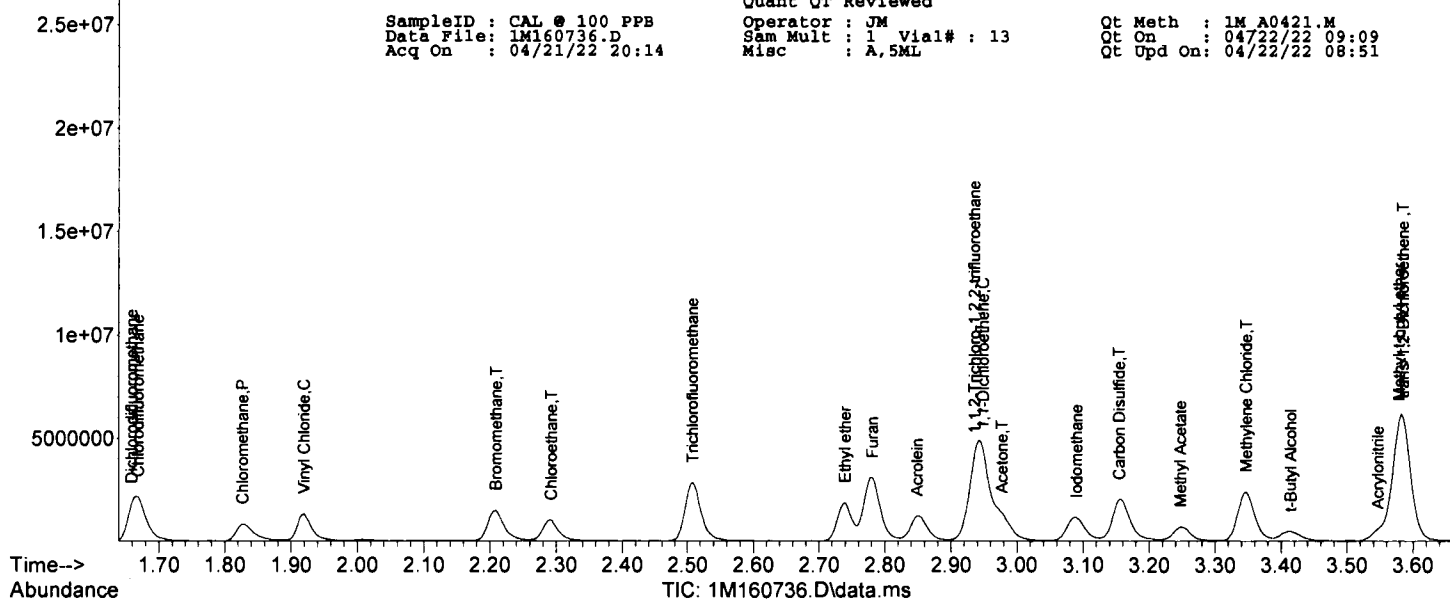
Abundance

TIC: 1M160736.D\data.ms

SampleID : CAL @ 100 PPB
 Data File: 1M160736.D
 Acq On : 04/21/22 20:14

Quant QT Reviewed
 Operator : JM
 Sam Mult : 1 Vial# : 13
 Misc : A, 5ML

Qt Meth : 1M_A0421.M
 Qt On : 04/22/22 09:09
 Qt Upd On: 04/22/22 08:51



SampleID : CAL @ 250 PPB
Data File: 1M160734.D
Acq On : 04/21/22 19:32

Operator : JM
Sam Mult : 1 Vial# : 11
Misc : A,5ML

Qt Meth : 1M_A0421.M
Qt On : 04/22/22 09:06
Qt Upd On: 04/22/22 08:51

Data Path : G:\GcMsData\2022\GCMS_1\Data\04-21-22\
Qt Path : G:\GcMsData\2022\GCMS_1\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.158	96	1587347	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.878	117	1153397	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.193	152	599672	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.730	111	425997	30.11	ug/l	0.00
Spiked Amount 30.000			Recovery	=	100.37%	
39) 1,2-Dichloroethane-d4	4.955	67	228073	30.04	ug/l	0.00
Spiked Amount 30.000			Recovery	=	100.13%	
66) Toluene-d8	6.068	98	1552016	30.10	ug/l	0.00
Spiked Amount 30.000			Recovery	=	100.33%	
76) Bromofluorobenzene	7.528	174	459876	27.92	ug/l	0.00
Spiked Amount 30.000			Recovery	=	93.07%	
Target Compounds						
5) Chlorodifluoromethane	1.669	51	3682534	318.7403	ug/l	72
6) Dichlorodifluoromethane	1.660	85	2325914	331.5855	ug/l	97
7) Chloromethane	1.827	50	2255126	252.8104	ug/l	93
8) Bromomethane	2.203	94	2319314	256.1921	ug/l	91
9) Vinyl Chloride	1.920	62	2846597	258.4505	ug/l	97
10) Chloroethane	2.287	64	1960569	244.8087	ug/l	97
11) Trichlorofluoromethane	2.505	101	5229657	252.3984	ug/l	94
12) Ethyl ether	2.737	59	2458755	251.0608	ug/l	90
13) Furan	2.779	39	4683329	244.3702	ug/l	90
14) 1,1,2-Trichloro-1,2,2-...	2.936	101	2450101	247.7979	ug/l	# 71
15) Methylene Chloride	3.348	84	2605827	243.9482	ug/l	85
16) Acrolein	2.849	56	2559351	1340.5956	ug/l	96
17) Acrylonitrile	3.547	53	1001122	247.6614	ug/l	97
18) Iodomethane	3.087	142	3599582	310.0849	ug/l	98
19) Acetone	2.978	43	3419004	1177.0724	ug/l	82
20) Carbon Disulfide	3.155	76	7225490	268.8787	ug/l	100
21) t-Butyl Alcohol	3.412	59	1319824	1329.8664	ug/l	84
22) n-Hexane	3.814	57	2411406	247.2496	ug/l	97
23) Di-isopropyl-ether	3.988	45	8095412	258.7028	ug/l	91
24) 1,1-Dichloroethene	2.946	61	4149857	246.4028	ug/l	97
25) Methyl Acetate	3.251	43	1881895	239.6833	ug/l	100
26) Methyl-t-butyl ether	3.579	73	7740340	229.5065	ug/l	97
27) 1,1-Dichloroethane	3.949	63	4915075	244.2051	ug/l	95
28) trans-1,2-Dichloroethene	3.586	96	2833299	249.7828	ug/l	95
29) Ethyl-t-butyl ether	4.283	59	8248801	265.7217	ug/l	96
30) cis-1,2-Dichloroethene	4.409	61	4719480	248.7089	ug/l	96
31) Bromochloromethane	4.579	49	2141115	239.5276	ug/l	94
32) 2,2-Dichloropropane	4.415	77	4390452	245.0788	ug/l	96
33) Ethyl acetate	4.441	43	2564445	263.7454	ug/l	98
34) 1,4-Dioxane	5.582	88	1633996	15116.0664	ug/l	99
35) 1,1-Dichloropropene	4.865	75	3892802	260.7800	ug/l	94
36) Chloroform	4.621	83	5032088	249.3144	ug/l	99
38) Cyclohexane	4.808	56	3499987	252.9828	ug/l	93
40) 1,2-Dichloroethane	5.000	62	4058908	233.4629	ug/l	97
41) 2-Butanone	4.412	43	1012328m	244.6507	ug/l	
42) 1,1,1-Trichloroethane	4.763	97	4932787	253.4951	ug/l	98
43) Carbon Tetrachloride	4.872	117	4374339	264.9516	ug/l	100
44) Vinyl Acetate	3.975	43	9530583	270.0806	ug/l	100
45) Bromodichloromethane	5.656	83	3879892	270.4826	ug/l	97
46) Methylcyclohexane	5.496	83	3222549	258.0886	ug/l	99
47) Dibromomethane	5.576	174	1950997	257.9976	ug/l	91
48) 1,2-Dichloropropane	5.508	63	2674356	255.1709	ug/l	100
49) Trichloroethene	5.373	130	3028041	255.5422	ug/l	96
50) Benzene	4.997	78	10440697	251.5434	ug/l	100
51) tert-Amyl methyl ether	5.049	73	7531200	270.7746	ug/l	99
53) Iso-propylacetate	5.004	43	5309482	272.6584	ug/l	96
54) Methyl methacrylate	5.544	41	2250259	287.1290	ug/l	85
55) Dibromochloromethane	6.550	129	2892012	288.2648	ug/l	98
56) 2-Chloroethylvinylether	5.807	63	407054	271.2668	ug/l	95
57) cis-1,3-Dichloropropene	5.907	75	4529508	279.0709	ug/l	99
58) trans-1,3-Dichloropropene	6.209	75	4181559	277.1297	ug/l	100
59) Ethyl methacrylate	6.238	41	2416744	272.4550	ug/l	87
60) 1,1,2-Trichloroethane	6.319	97	2429033	263.3007	ug/l	98
61) 1,2-Dibromoethane	6.631	107	2606889	267.8519	ug/l	99
62) 1,3-Dichloropropane	6.418	76	4191685	261.4661	ug/l	98
63) 4-Methyl-2-Pentanone	5.981	43	2294303	259.8541	ug/l	98
64) 2-Hexanone	6.438	43	1556252	265.6002	ug/l	98
65) Tetrachloroethene	6.418	164	2377703	262.1971	ug/l	97
67) Toluene	6.103	92	6886602	267.3679	ug/l	86

Quantitation Report (QT Reviewed)

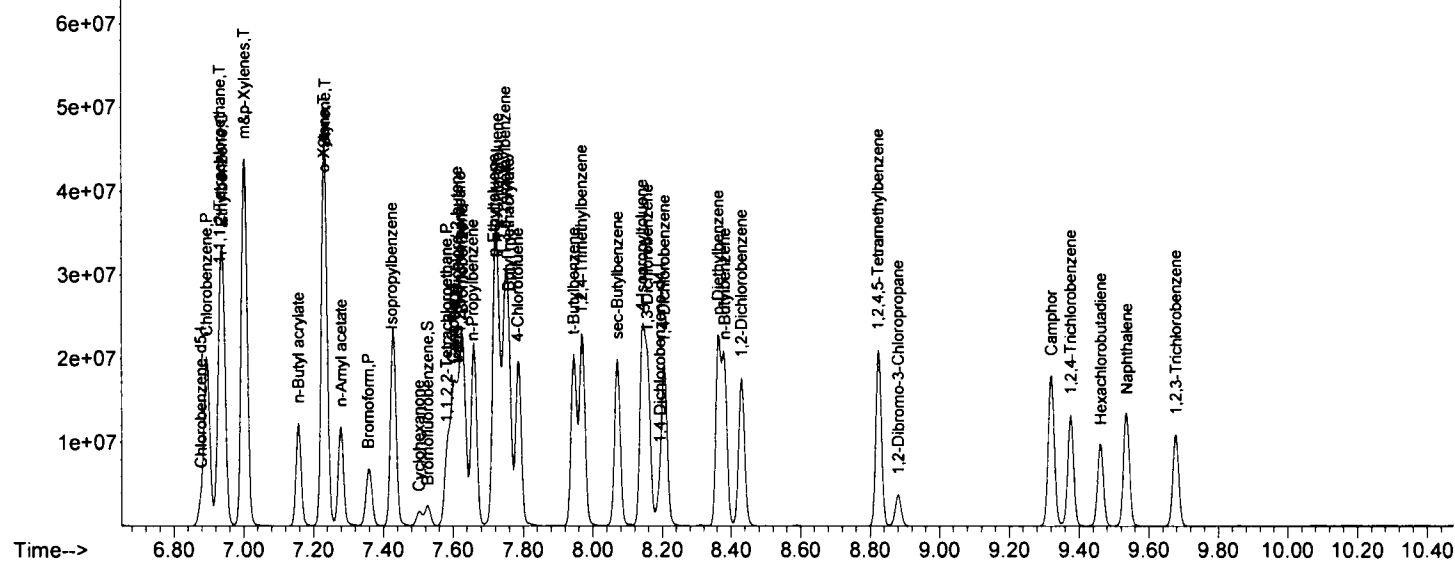
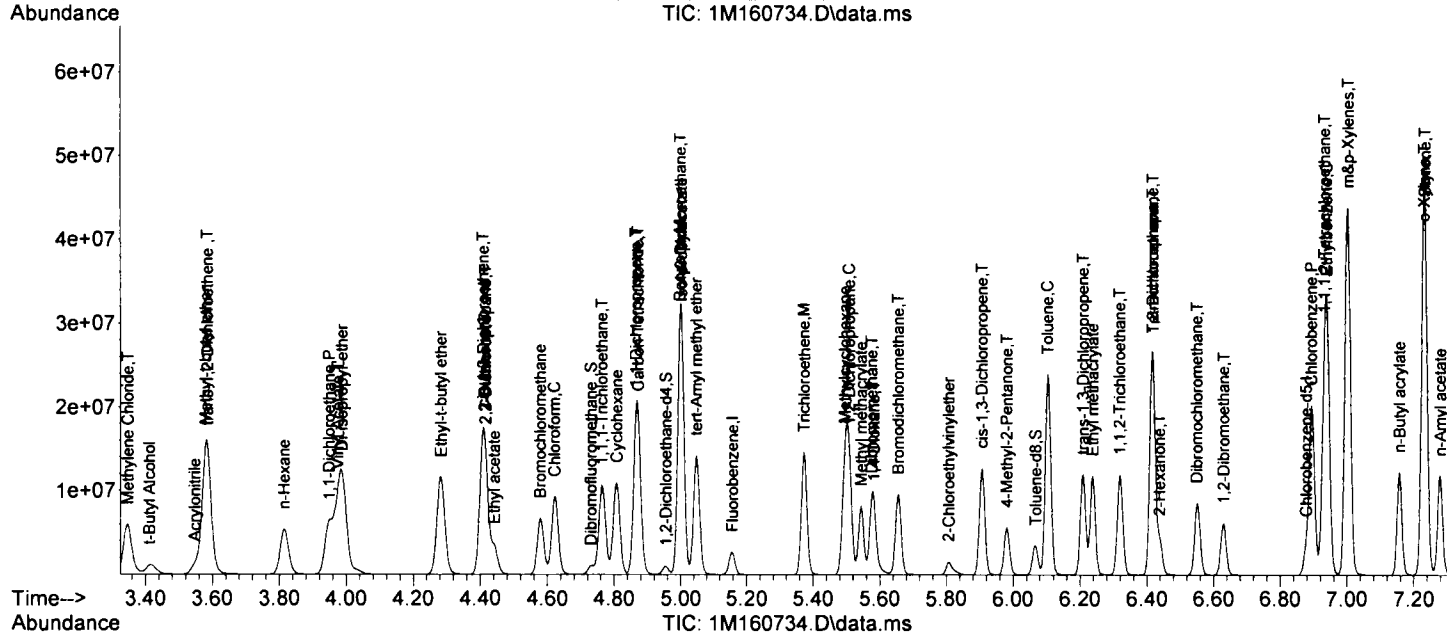
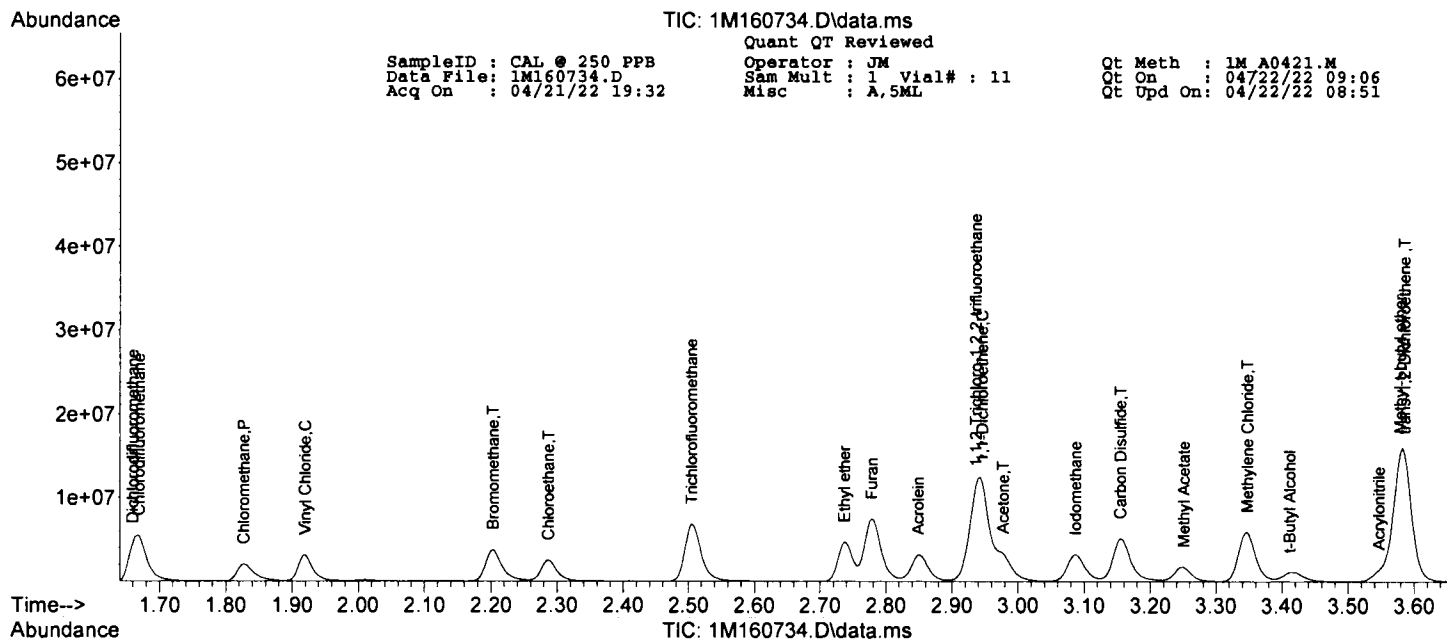
SampleID : CAL @ 250 PPB Operator : JM Qt Meth : 1M_A0421.M
 Data File: 1M160734.D Sam Mult : 1 Vial# : 11 Qt On : 04/22/22 09:06
 Acq On : 04/21/22 19:32 Misc : A,5ML Qt Upd On: 04/22/22 08:51

Data Path : G:\GcMsData\2022\GCMS_1\Data\04-21-22\
 Qt Path : G:\GcMsData\2022\GCMS_1\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1,1,1,2-Tetrachloroethane	6.933	133	2673219	274.7131	ug/l	97
69) Chlorobenzene	6.894	112	7369517	264.6253	ug/l	97
71) n-Butyl acrylate	7.158	55	5193112	279.7120	ug/l	92
72) n-Amyl acetate	7.280	43	4317124	268.3975	ug/l	90
73) Bromoform	7.357	173	2062250	284.7173	ug/l	94
74) Ethylbenzene	6.939	106	3512171	242.1650	ug/l	59
75) 1,1,2,2-Tetrachloroethane	7.582	83	3078336	245.1024	ug/l	100
77) Styrene	7.235	104	8120499	264.1693	ug/l	96
78) m&p-Xylenes	7.004	106	9432439m	508.2321	ug/l	
79) o-Xylene	7.232	106	4748808	247.8170	ug/l	100
80) trans-1,4-Dichloro-2-b...	7.611	53	1410214	252.3552	ug/l	92
81) 1,3-Dichlorobenzene	8.158	146	5372376	259.6615	ug/l	95
82) 1,4-Dichlorobenzene	8.206	146	5565469	251.9168	ug/l	96
83) 1,2-Dichlorobenzene	8.431	146	5216825	261.4015	ug/l	96
84) Isopropylbenzene	7.425	105	10560220	242.5579	ug/l	97
85) Cyclohexanone	7.502	55	510566	1188.2036	ug/l	96
86) Camphene	7.602	93	2927348	242.0645	ug/l	98
87) 1,2,3-Trichloropropane	7.621	75	4041135	249.3680	ug/l	98
88) 2-Chlorotoluene	7.727	91	6997105	245.1722	ug/l	95
89) p-Ethyltoluene	7.717	105	10568803	244.4655	ug/l	99
90) 4-Chlorotoluene	7.785	91	6806654	242.6475	ug/l	96
91) n-Propylbenzene	7.656	91	11045616	228.1561	ug/l	96
92) Bromobenzene	7.627	77	6256715	242.8636	ug/l	82
93) 1,3,5-Trimethylbenzene	7.750	105	8649037	258.4443	ug/l	98
94) Butyl methacrylate	7.759	41	3527158	275.3335	ug/l	81
95) t-Butylbenzene	7.946	119	8273554	257.9100	ug/l	98
96) 1,2,4-Trimethylbenzene	7.968	105	9037632	264.5169	ug/l	99
97) sec-Butylbenzene	8.071	105	9908998	264.0170	ug/l	99
98) 4-Isopropyltoluene	8.142	119	8829708	276.2615	ug/l	98
99) n-Butylbenzene	8.383	91	9270685	270.5638	ug/l	84
100) p-Diethylbenzene	8.364	119	5398723	275.8679	ug/l	81
101) 1,2,4,5-Tetramethylben...	8.823	119	8116031	316.2832	ug/l	99
102) 1,2-Dibromo-3-Chloropr...	8.881	157	756910	288.8290	ug/l	83
103) Camphor	9.322	95	3370209	2929.6682	ug/l	99
104) Hexachlorobutadiene	9.463	225	1343162	282.2588	ug/l	98
105) 1,2,4-Trichlorobenzene	9.376	180	2982509	284.1066	ug/l	96
106) 1,2,3-Trichlorobenzene	9.679	180	2499702	282.0357	ug/l	98
107) Naphthalene	9.537	128	7875851	296.3827	ug/l	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

unc



SampleID : CAL @ 500 PPB
Data File: 1M160732.D
Acq On : 04/21/22 18:50

Operator : JM
Sam Mult : 1 Vial# : 9
Misc : A,5ML

Qt Meth : 1M_A0421.M
Qt On : 04/22/22 09:03
Qt Upd On: 04/22/22 08:51

Data Path : G:\GcMsData\2022\GCMS_1\Data\04-21-22\
Qt Path : G:\GcMsData\2022\GCMS_1\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.155	96	1511165	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.878	117	1105937	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.193	152	656638	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.730	111	414111	30.74	ug/l	0.00
Spiked Amount 30.000			Recovery =	102.47%		
39) 1,2-Dichloroethane-d4	4.952	67	219148	30.32	ug/l	0.00
Spiked Amount 30.000			Recovery =	101.07%		
66) Toluene-d8	6.065	98	1486025	30.05	ug/l	0.00
Spiked Amount 30.000			Recovery =	100.17%		
76) Bromofluorobenzene	7.528	174	480841	26.66	ug/l	0.00
Spiked Amount 30.000			Recovery =	88.87%		
Target Compounds						
5) Chlorodifluoromethane	1.669	51	6799023	618.1540	ug/l	71
6) Dichlorodifluoromethane	1.660	85	4258165	637.6529	ug/l	94
7) Chloromethane	1.827	50	4153569	489.1088	ug/l	93
8) Bromomethane	2.193	94	5276481	612.2242	ug/l	91
9) Vinyl Chloride	1.920	62	5313073	506.7072	ug/l	99
10) Chloroethane	2.280	64	3838780	503.4982	ug/l	98
11) Trichlorofluoromethane	2.505	101	9379307	475.4930	ug/l	94
12) Ethyl ether	2.737	59	4687914	502.8092	ug/l	89
13) Furan	2.775	39	8574069	469.9381	ug/l	92
14) 1,1,2-Trichloro-1,2,2-...	2.933	101	4603830	489.0946	ug/l	# 71
15) Methylene Chloride	3.345	84	4893588	481.2153	ug/l	82
16) Acrolein	2.849	56	4691884	2581.5181	ug/l	95
17) Acrylonitrile	3.550	53	1925661	500.3930	ug/l	90
18) Iodomethane	3.084	142	7097377	642.2237	ug/l	98
19) Acetone	2.978	43	6908086	2498.1661	ug/l	84
20) Carbon Disulfide	3.155	76	13568505	530.3725	ug/l	100
21) t-Butyl Alcohol	3.422	59	2475260	2619.8282	ug/l	87
22) n-Hexane	3.811	57	4590023	494.3564	ug/l	97
23) Di-isopropyl-ether	3.988	45	15267898	512.5089	ug/l	93
24) 1,1-Dichloroethene	2.943	61	7644709	476.7968	ug/l	96
25) Methyl Acetate	3.248	43	3620059	484.3039	ug/l	100
26) Methyl-t-butyl ether	3.579	73	14751683	459.4482	ug/l	97
27) 1,1-Dichloroethane	3.946	63	9337757	487.3345	ug/l	97
28) trans-1,2-Dichloroethene	3.582	96	5425283	502.4033	ug/l	95
29) Ethyl-t-butyl ether	4.280	59	15249346	515.9973	ug/l	97
30) cis-1,2-Dichloroethene	4.406	61	9328441	516.3762	ug/l	97
31) Bromochloromethane	4.579	49	3828846	449.9284	ug/l	93
32) 2,2-Dichloropropane	4.412	77	8673732	508.5838	ug/l	95
33) Ethyl acetate	4.441	43	5109435	551.9814	ug/l	98
34) 1,4-Dioxane	5.586	88	3089328	30020.0777	ug/l	99
35) 1,1-Dichloropropene	4.865	75	7405628	521.1153	ug/l	94
36) Chloroform	4.621	83	9498393	494.3212	ug/l	98
38) Cyclohexane	4.804	56	6709829	509.4435	ug/l	92
40) 1,2-Dichloroethane	5.000	62	7814143	472.1174	ug/l	99
41) 2-Butanone	4.409	43	2212115m	561.5557	ug/l	
42) 1,1,1-Trichloroethane	4.763	97	9244054	498.9990	ug/l	95
43) Carbon Tetrachloride	4.872	117	8293505	527.6575	ug/l	99
44) Vinyl Acetate	3.975	43	17184099	511.5178	ug/l	100
45) Bromodichloromethane	5.656	83	7433994	544.3797	ug/l	96
46) Methylcyclohexane	5.496	83	6286171	528.8292	ug/l	99
47) Dibromomethane	5.576	174	3731415	518.3136	ug/l	93
48) 1,2-Dichloropropane	5.508	63	5147189	515.8721	ug/l	98
49) Trichloroethene	5.373	130	5844587	518.1013	ug/l	99
50) Benzene	4.991	78	14843012m	375.6345	ug/l	
51) tert-Amyl methyl ether	5.045	73	13119720	495.4825	ug/l	96
53) Iso-propylacetate	5.004	43	10152530	543.7377	ug/l	97
54) Methyl methacrylate	5.544	41	4170221	554.9477	ug/l	88
55) Dibromochloromethane	6.550	129	5607772	582.9486	ug/l	98
56) 2-Chloroethylvinylether	5.807	63	764842	531.5754	ug/l	96
57) cis-1,3-Dichloropropene	5.907	75	8611808	553.3581	ug/l	98
58) trans-1,3-Dichloropropene	6.209	75	7932400	548.2743	ug/l	100
59) Ethyl methacrylate	6.238	41	4611830	542.2328	ug/l	87
60) 1,1,2-Trichloroethane	6.319	97	4594146	519.3640	ug/l	99
61) 1,2-Dibromopropane	6.631	107	4977028	533.3235	ug/l	99
62) 1,3-Dichloropropane	6.418	76	7943101	516.7318	ug/l	99
63) 4-Methyl-2-Pentanone	5.981	43	4472291	528.2716	ug/l	98
64) 2-Hexanone	6.441	43	3096275	551.1077	ug/l	100
65) Tetrachloroethene	6.418	164	4558706	524.2763	ug/l	96
67) Toluene	6.100	92	11657511	472.0179	ug/l	55

Quantitation Report (QT Reviewed)

SampleID : CAL @ 500 PPB
 Data File: 1M160732.D
 Acq On : 04/21/22 18:50

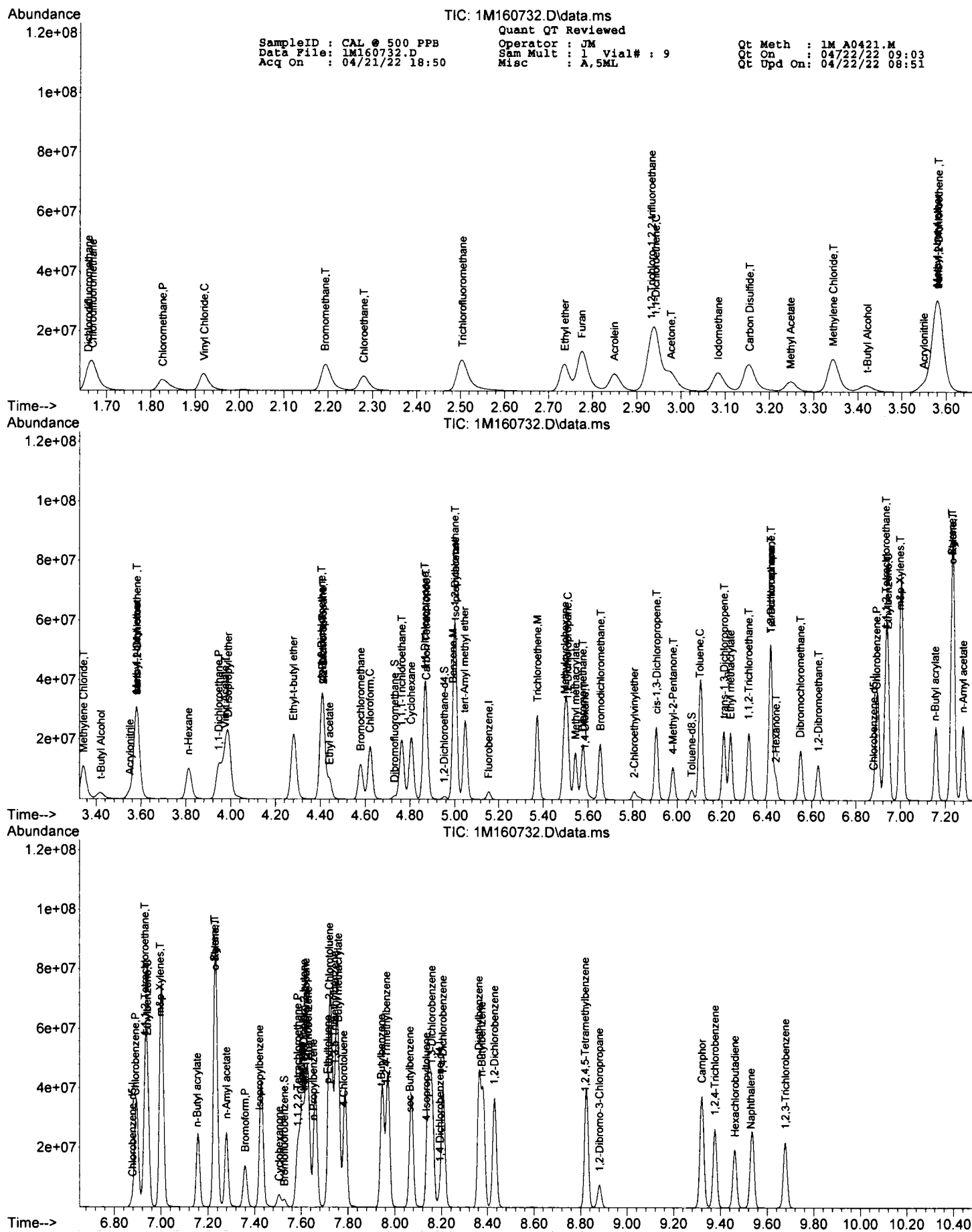
Operator : JM
 Sam Mult : 1 Vial# : 9
 Misc : A,5ML

Qt Meth : 1M A0421.M
 Qt On : 04/22/22 09:03
 Qt Upd On: 04/22/22 08:51

Data Path : G:\GcMsData\2022\GCMS_1\Data\04-21-22\
 Qt Path : G:\GcMsData\2022\GCMS_1\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1,1,1,2-Tetrachloroethane	6.933	133	5099712	546.5613	ug/l	97
69) Chlorobenzene	6.891	112	12017888	450.0585	ug/l	89
71) n-Butyl acrylate	7.155	55	9940033	488.9438	ug/l	96
72) n-Amyl acetate	7.280	43	8698256	493.8600	ug/l	92
73) Bromoform	7.360	173	4222953	532.4472	ug/l	96
74) Ethylbenzene	6.942	106	6731776	423.8900	ug/l	# 4
75) 1,1,2,2-Tetrachloroethane	7.586	83	6341515	461.1183	ug/l	97
77) Styrene	7.229	104	12487051m	370.9772	ug/l	
78) m&p-Xylenes	6.997	106	13191024m	649.0892	ug/l	
79) o-Xylene	7.232	106	9435741	449.6870	ug/l	# 35
80) trans-1,4-Dichloro-2-b...	7.611	53	2981853	487.3054	ug/l	90
81) 1,3-Dichlorobenzene	8.158	146	10648664	470.0284	ug/l	96
82) 1,4-Dichlorobenzene	8.206	146	10820294	447.2828	ug/l	95
83) 1,2-Dichlorobenzene	8.431	146	10445728	478.0005	ug/l	97
84) Isopropylbenzene	7.422	105	13994416m	293.5520	ug/l	
85) Cyclohexanone	7.505	55	1193149	2535.8374	ug/l	94
86) Camphene	7.602	93	5854834	442.1392	ug/l	98
87) 1,2,3-Trichloropropane	7.621	75	8572696	483.1062	ug/l	97
88) 2-Chlorotoluene	7.721	91	8388096m	268.4133	ug/l	
89) p-Ethyltoluene	7.714	105	14795111m	312.5344	ug/l	
90) 4-Chlorotoluene	7.782	91	8386180m	273.0197	ug/l	
91) n-Propylbenzene	7.653	91	14349183m	270.6806	ug/l	
92) Bromobenzene	7.631	77	12798457	453.6923	ug/l	83
93) 1,3,5-Trimethylbenzene	7.743	105	11999903m	327.4649	ug/l	
94) Butyl methacrylate	7.759	41	7337729	523.0987	ug/l	82
95) t-Butylbenzene	7.942	119	14790200	421.0542	ug/l	89
96) 1,2,4-Trimethylbenzene	7.965	105	13207895m	353.0369	ug/l	
97) sec-Butylbenzene	8.065	105	13824263m	336.3813	ug/l	
98) 4-Isopropyltoluene	8.135	119	13092069m	374.0849	ug/l	
99) n-Butylbenzene	8.377	91	15486286m	412.7555	ug/l	
100) p-Diethylbenzene	8.364	119	10437626	487.0792	ug/l	96
101) 1,2,4,5-Tetramethylben...	8.820	119	12617296	449.0415	ug/l	80
102) 1,2-Dibromo-3-Chloropr...	8.881	157	1543168	537.7711	ug/l	81
103) Camphor	9.322	95	6859692	5445.7034	ug/l	99
104) Hexachlorobutadiene	9.463	225	2635773	505.8420	ug/l	99
105) 1,2,4-Trichlorobenzene	9.376	180	5920930	515.0830	ug/l	97
106) 1,2,3-Trichlorobenzene	9.679	180	4971385	512.2488	ug/l	97
107) Naphthalene	9.531	128	12760969	438.5577	ug/l	90

(#) = qualifier out of range (m) = manual integration (+) = signals summed



SampleID : CAL @ 1 PPB
Data File: 1M160727.D
Acq On : 04/21/22 17:06

Operator : JM
Sam Mult : 1 Vial# : 4
Misc : A,5ML

Qt Meth : 1M_A0421.M
Qt On : 04/22/22 08:54
Qt Upd On: 04/22/22 08:51

Data Path : G:\GCMSData\2022\GCMS_1\Data\04-21-22\
Qt Path : G:\GCMSData\2022\GCMS_1\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.158	96	1424400	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.878	117	1059942	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.190	152	470198	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.730	111	372686	29.35	ug/l	0.00
Spiked Amount 30.000			Recovery =	97.83%		
39) 1,2-Dichloroethane-d4	4.955	67	211476	31.04	ug/l	0.00
Spiked Amount 30.000			Recovery =	103.47%		
66) Toluene-d8	6.065	98	1402398	29.59	ug/l	0.00
Spiked Amount 30.000			Recovery =	98.63%		
76) Bromofluorobenzene	7.528	174	409122	31.67	ug/l	0.00
Spiked Amount 30.000			Recovery =	105.57%		
Target Compounds						
5) Chlorodifluoromethane	1.669	51	8164	0.7875	ug/l	51
6) Dichlorodifluoromethane	1.663	85	4050m	0.6434	ug/l	
7) Chloromethane	1.830	50	9019	1.1267	ug/l	91
8) Bromomethane	2.213	94	9820	1.2088	ug/l	61
9) Vinyl Chloride	1.917	62	10135	1.0255	ug/l	100
10) Chloroethane	2.296	64	8785	1.2224	ug/l	87
11) Trichlorofluoromethane	2.509	101	20807	1.1191	ug/l	82
12) Ethyl ether	2.743	59	10304	1.1725	ug/l	64
13) Furan	2.785	39	20905	1.2156	ug/l	84
14) 1,1,2-Trichloro-1,2,2-...	2.939	101	11065m	1.2471	ug/l	
15) Methylene Chloride	3.345	84	12002	1.2521	ug/l	94
16) Acrolein	2.859	56	9477m	5.5320	ug/l	
17) Acrylonitrile	3.547	53	4139	1.1411	ug/l	71
18) Iodomethane	3.091	142	6700m	0.6432	ug/l	
19) Acetone	2.978	43	18358	7.0432	ug/l	79
20) Carbon Disulfide	3.155	76	26584	1.1024	ug/l	100
21) t-Butyl Alcohol	3.422	59	5370m	6.0298	ug/l	
22) n-Hexane	3.817	57	10813	1.2355	ug/l	93
23) Di-isopropyl-ether	3.988	45	30585	1.0892	ug/l	91
24) 1,1-Dichloroethene	2.949	61	18974	1.2555	ug/l	87
25) Methyl Acetate	3.251	43	9167	1.3011	ug/l	100
26) Methyl-t-butyl ether	3.589	73	33597m	1.1101	ug/l	
27) 1,1-Dichloroethane	3.949	63	22446	1.2428	ug/l	99
28) trans-1,2-Dichloroethene	3.586	96	11218	1.1021	ug/l	89
29) Ethyl-t-butyl ether	4.280	59	29563m	1.0613	ug/l	
30) cis-1,2-Dichloroethene	4.409	61	21338	1.2531	ug/l	96
31) Bromochloromethane	4.582	49	9408	1.1729	ug/l	74
32) 2,2-Dichloropropane	4.412	77	19395	1.2065	ug/l	95
33) Ethyl acetate	4.438	43	9402m	1.0776	ug/l	
34) 1,4-Dioxane	5.586	88	3633m	37.4536	ug/l	
35) 1,1-Dichloropropene	4.865	75	14293	1.0670	ug/l	97
36) Chloroform	4.624	83	20679	1.1417	ug/l	82
38) Cyclohexane	4.811	56	15614	1.2577	ug/l	81
40) 1,2-Dichloroethane	5.000	62	16976	1.0881	ug/l	99
41) 2-Butanone	4.415	43	4663	1.2558	ug/l	61
42) 1,1,1-Trichloroethane	4.763	97	20352	1.1655	ug/l	83
43) Carbon Tetrachloride	4.872	117	16199	1.0934	ug/l	99
44) Vinyl Acetate	3.968	43	21538m	0.6802	ug/l	
45) Bromodichloromethane	5.656	83	12948	1.0059	ug/l	92
46) Methylcyclohexane	5.496	83	11165	0.9965	ug/l	90
47) Dibromomethane	5.576	174	7934	1.1692	ug/l	73
48) 1,2-Dichloropropane	5.505	63	10758	1.1439	ug/l	90
49) Trichloroethene	5.367	130	12380	1.1643	ug/l	# 68
50) Benzene	5.000	78	41689	1.1193	ug/l	100
51) tert-Amyl methyl ether	5.049	73	25092	1.0054	ug/l	86
53) Iso-propylacetate	5.004	43	16571	0.9260	ug/l	93
54) Methyl methacrylate	5.544	41	6218	0.8634	ug/l	86
55) Dibromochloromethane	6.550	129	7852	0.8517	ug/l	98
56) 2-Chloroethylvinylether	5.811	63	1643	1.1915	ug/l	92
57) cis-1,3-Dichloropropene	5.904	75	12919	0.8661	ug/l	93
58) trans-1,3-Dichloropropene	6.206	75	11910	0.8589	ug/l	79
59) Ethyl methacrylate	6.235	41	7943	0.9744	ug/l	64
60) 1,1,2-Trichloroethane	6.319	97	8385	0.9891	ug/l	77
61) 1,2-Dibromoethane	6.634	107	7630	0.8531	ug/l	93
62) 1,3-Dichloropropane	6.412	76	14239	0.9665	ug/l	95
63) 4-Methyl-2-Pentanone	5.984	43	8462	1.0429	ug/l	63
64) 2-Hexanone	6.441	43	4746	0.8814	ug/l	80
65) Tetrachloroethene	6.418	164	8987	1.0784	ug/l	78
67) Toluene	6.103	92	23006	0.9719	ug/l	79

Quantitation Report (QT Reviewed)

SampleID : CAL @ 1 PPB
 Data File: 1M160727.D
 Acq On : 04/21/22 17:06

Operator : JM
 Sam Mult : 1 Vial# : 4
 Misc : A,5ML

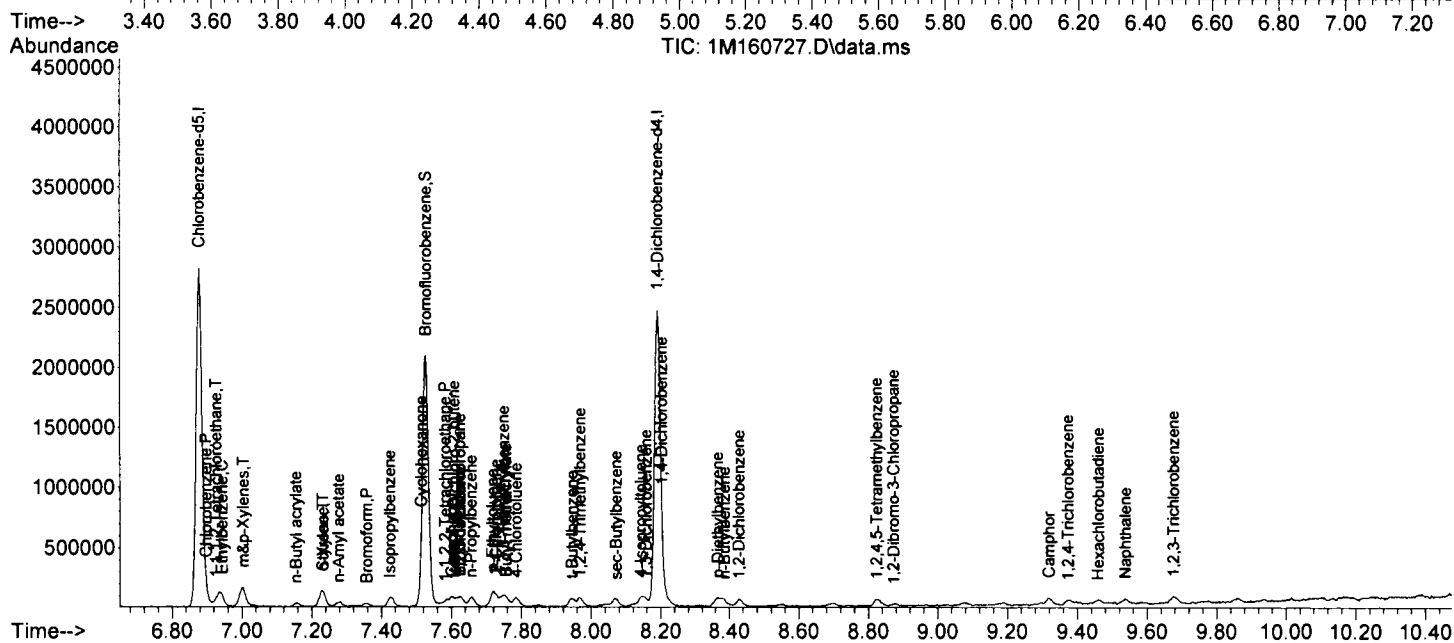
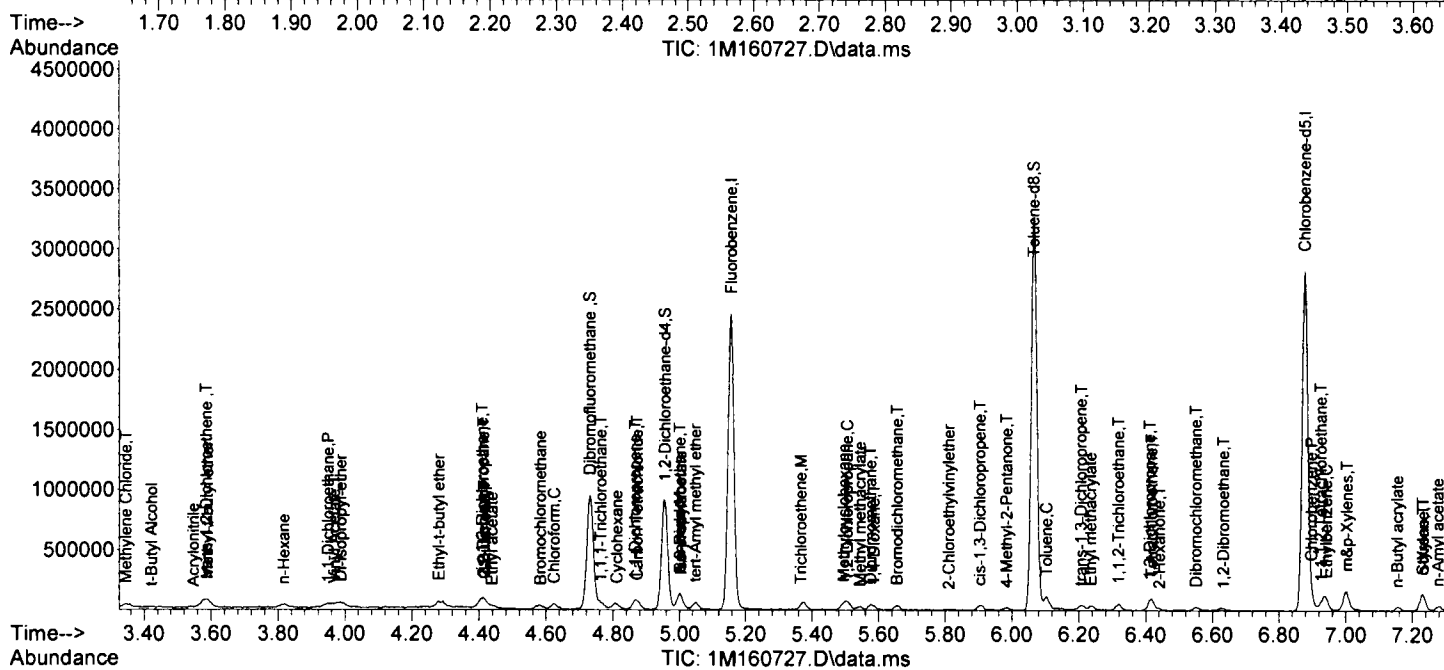
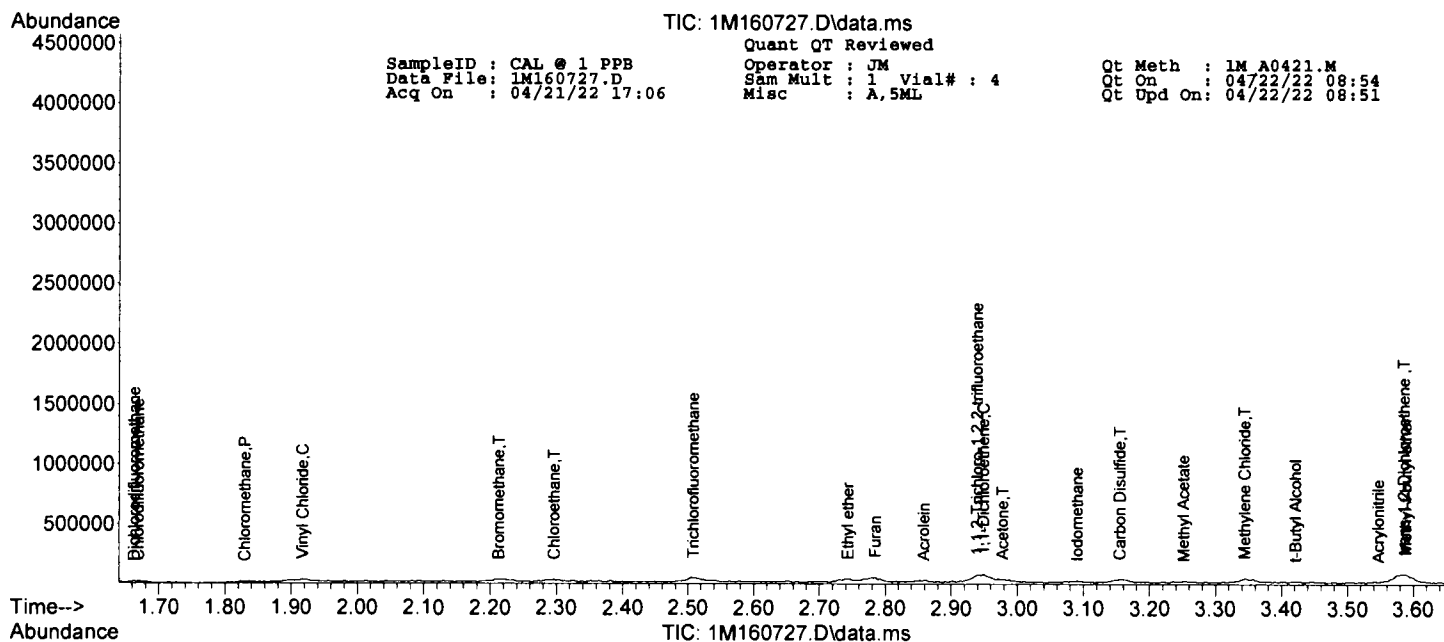
Qt Meth : 1M A0421.M
 Qt On : 04/22/22 08:54
 Qt Upd On: 04/22/22 08:51

Data Path : G:\GcMsData\2022\GCMS_1\Data\04-21-22\
 Qt Path : G:\GcMsData\2022\GCMS_1\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1,1,1,2-Tetrachloroethane	6.926	133	7894	0.8828	ug/l	74
69) Chlorobenzene	6.897	112	23859	0.9323	ug/l	93
71) n-Butyl acrylate	7.155	55	12521	0.8601	ug/l	96
72) n-Amyl acetate	7.277	43	11622	0.9215	ug/l	87
73) Bromoform	7.357	173	4968	0.8748	ug/l	96
74) Ethylbenzene	6.942	106	12844m	1.1295	ug/l	
75) 1,1,2,2-Tetrachloroethane	7.582	83	9837	0.9989	ug/l	77
77) Styrene	7.232	104	21994	0.9125	ug/l	85
78) m&p-Xylenes	7.004	106	28010	1.9248	ug/l	96
79) o-Xylene	7.232	106	14006	0.9322	ug/l	89
80) trans-1,4-Dichloro-2-b...	7.608	53	3793	0.8657	ug/l	88
81) 1,3-Dichlorobenzene	8.158	146	15758	0.9713	ug/l	92
82) 1,4-Dichlorobenzene	8.203	146	19626	1.1330	ug/l	84
83) 1,2-Dichlorobenzene	8.428	146	16576	1.0593	ug/l	94
84) Isopropylbenzene	7.425	105	35265	1.0330	ug/l	89
85) Cyclohexanone	7.515	55	2635m	7.8208	ug/l	
86) Camphene	7.602	93	10362	1.0928	ug/l	91
87) 1,2,3-Trichloropropane	7.624	75	13526m	1.0645	ug/l	
88) 2-Chlorotoluene	7.727	91	25656	1.1465	ug/l	89
89) p-Ethyltoluene	7.717	105	34394	1.0146	ug/l	94
90) 4-Chlorotoluene	7.785	91	27416	1.2465	ug/l	94
91) n-Propylbenzene	7.656	91	41694	1.0984	ug/l	98
92) Bromobenzene	7.624	77	20370	1.0084	ug/l	88
93) 1,3,5-Trimethylbenzene	7.750	105	26916	1.0258	ug/l	94
94) Butyl methacrylate	7.756	41	9535	0.9493	ug/l	72
95) t-Butylbenzene	7.946	119	24225	0.9631	ug/l	90
96) 1,2,4-Trimethylbenzene	7.968	105	27044	1.0095	ug/l	92
97) sec-Butylbenzene	8.071	105	28925	0.9829	ug/l	94
98) 4-Isopropyltoluene	8.142	119	23413	0.9343	ug/l	84
99) n-Butylbenzene	8.386	91	27145	1.0104	ug/l	82
100) p-Diethylbenzene	8.367	119	15765	1.0274	ug/l	74
101) 1,2,4,5-Tetramethylben...	8.823	119	18598	0.9243	ug/l	89
102) 1,2-Dibromo-3-Chloropr...	8.872	157	2133	1.0381	ug/l	85
103) Camphor	9.319	95	8500	9.4235	ug/l	90
104) Hexachlorobutadiene	9.460	225	3880	1.0399	ug/l	# 68
105) 1,2,4-Trichlorobenzene	9.373	180	8451	1.0267	ug/l	82
106) 1,2,3-Trichlorobenzene	9.675	180	6493	0.9343	ug/l	90
107) Naphthalene	9.537	128	18441	0.8851	ug/l	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

JMC



SampleID : CAL @ 0.5 PPB
Data File: 1M160726.D
Acq On : 04/21/22 16:45

Operator : JM
Sam Mult : 1 Vial# : 3
Misc : A,5ML

Qt Meth : 1M_A0421.M
Qt On : 04/22/22 08:42
Qt Upd On: 04/22/22 08:41

Data Path : G:\GCMSData\2022\GCMS_1\Data\04-21-22\
Qt Path : G:\GCMSData\2022\GCMS_1\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.158	96	1319158	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.878	117	972005	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.190	152	421013	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.730	111	350077	29.77	ug/l	0.00
Spiked Amount 30.000			Recovery	=	99.23%	
39) 1,2-Dichloroethane-d4	4.952	67	191522	30.35	ug/l	0.00
Spiked Amount 30.000			Recovery	=	101.17%	
66) Toluene-d8	6.065	98	1292623	29.74	ug/l	0.00
Spiked Amount 30.000			Recovery	=	99.13%	
76) Bromofluorobenzene	7.528	174	360999	31.21	ug/l	0.00
Spiked Amount 30.000			Recovery	=	104.03%	
Target Compounds						
5) Chlorodifluoromethane	0.000		0	N.D.	d	
6) Dichlorodifluoromethane	0.000		0	N.D.	d	
7) Chloromethane	0.000		0	N.D.	d	
8) Bromomethane	0.000		0	N.D.	d	
9) Vinyl Chloride	0.000		0	N.D.	d	
10) Chloroethane	0.000		0	N.D.	d	
11) Trichlorofluoromethane	0.000		0	N.D.	d	
12) Ethyl ether	0.000		0	N.D.	d	
13) Furan	0.000		0	N.D.	d	
14) 1,1,2-Trichloro-1,2,2-...	0.000		0	N.D.	d	
15) Methylene Chloride	0.000		0	N.D.	d	
16) Acrolein	0.000		0	N.D.	d	
17) Acrylonitrile	0.000		0	N.D.	d	
18) Iodomethane	0.000		0	N.D.	d	
19) Acetone	0.000		0	N.D.	d	
20) Carbon Disulfide	0.000		0	N.D.	d	
21) t-Butyl Alcohol	0.000		0	N.D.	d	
22) n-Hexane	0.000		0	N.D.	d	
23) Di-isopropyl-ether	0.000		0	N.D.	d	
24) 1,1-Dichloroethene	0.000		0	N.D.	d	
25) Methyl Acetate	0.000		0	N.D.	d	
26) Methyl-t-butyl ether	3.586	73	22439	0.8006	ug/l	87
27) 1,1-Dichloroethane	0.000		0	N.D.	d	
28) trans-1,2-Dichloroethene	0.000		0	N.D.	d	
29) Ethyl-t-butyl ether	0.000		0	N.D.	d	
30) cis-1,2-Dichloroethene	0.000		0	N.D.	d	
31) Bromochloromethane	0.000		0	N.D.	d	
32) 2,2-Dichloropropane	0.000		0	N.D.	d	
33) Ethyl acetate	0.000		0	N.D.	d	
34) 1,4-Dioxane	0.000		0	N.D.	d	
35) 1,1-Dichloropropene	0.000		0	N.D.	d	
36) Chloroform	0.000		0	N.D.	d	
38) Cyclohexane	0.000		0	N.D.	d	
40) 1,2-Dichloroethane	4.997	62	10596	0.7334	ug/l	80
41) 2-Butanone	0.000		0	N.D.	d	
42) 1,1,1-Trichloroethane	0.000		0	N.D.	d	
43) Carbon Tetrachloride	0.000		0	N.D.	d	
44) Vinyl Acetate	0.000		0	N.D.	d	
45) Bromodichloromethane	0.000		0	N.D.	d	
46) Methylcyclohexane	0.000		0	N.D.	d	
47) Dibromomethane	0.000		0	N.D.	d	
48) 1,2-Dichloropropane	0.000		0	N.D.	d	
49) Trichloroethene	0.000		0	N.D.	d	
50) Benzene	5.000	78	22004	0.6379	ug/l	100
51) tert-Amyl methyl ether	0.000		0	N.D.	d	
53) Iso-propylacetate	0.000		0	N.D.	d	
54) Methyl methacrylate	0.000		0	N.D.	d	
55) Dibromochloromethane	0.000		0	N.D.	d	
56) 2-Chloroethylvinylether	0.000		0	N.D.	d	
57) cis-1,3-Dichloropropene	0.000		0	N.D.	d	
58) trans-1,3-Dichloropropene	0.000		0	N.D.	d	
59) Ethyl methacrylate	0.000		0	N.D.	d	
60) 1,1,2-Trichloroethane	0.000		0	N.D.	d	
61) 1,2-Dibromoethane	0.000		0	N.D.	d	
62) 1,3-Dichloropropane	0.000		0	N.D.	d	
63) 4-Methyl-2-Pentanone	0.000		0	N.D.	d	
64) 2-Hexanone	0.000		0	N.D.	d	
65) Tetrachloroethene	0.000		0	N.D.	d	
67) Toluene	0.000		0	N.D.	d	

Quantitation Report (QT Reviewed)

SampleID : CAL @ 0.5 PPB Operator : JM Qt Meth : 1M_A0421.M
 Data File: 1M160726.D Sam Mult : 1 Vial# : 3 Qt On : 04/22/22 08:42
 Acq On : 04/21/22 16:45 Misc : A,5ML Qt Upd On: 04/22/22 08:41

Data Path : G:\GcMsData\2022\GCMS_1\Data\04-21-22\
 Qt Path : G:\GcMsData\2022\GCMS_1\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1,1,1,2-Tetrachloroethane	0.000		0	N.D.	d	
69) Chlorobenzene	0.000		0	N.D.	d	
71) n-Butyl acrylate	0.000		0	N.D.	d	
72) n-Amyl acetate	0.000		0	N.D.	d	
73) Bromoform	0.000		0	N.D.	d	
74) Ethylbenzene	0.000		0	N.D.	d	
75) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.	d	
77) Styrene	0.000		0	N.D.	d	
78) m&p-Xylenes	7.000	106	13921	1.0684	ug/l	89
79) o-Xylene	0.000		0	N.D.	d	
80) trans-1,4-Dichloro-2-b...	0.000		0	N.D.	d	
81) 1,3-Dichlorobenzene	0.000		0	N.D.	d	
82) 1,4-Dichlorobenzene	0.000		0	N.D.	d	
83) 1,2-Dichlorobenzene	0.000		0	N.D.	d	
84) Isopropylbenzene	0.000		0	N.D.	d	
85) Cyclohexanone	0.000		0	N.D.	d	
86) Camphene	0.000		0	N.D.	d	
87) 1,2,3-Trichloropropane	0.000		0	N.D.	d	
88) 2-Chlorotoluene	0.000		0	N.D.	d	
89) p-Ethyltoluene	0.000		0	N.D.	d	
90) 4-Chlorotoluene	0.000		0	N.D.	d	
91) n-Propylbenzene	0.000		0	N.D.	d	
92) Bromobenzene	0.000		0	N.D.	d	
93) 1,3,5-Trimethylbenzene	0.000		0	N.D.	d	
94) Butyl methacrylate	0.000		0	N.D.	d	
95) t-Butylbenzene	0.000		0	N.D.	d	
96) 1,2,4-Trimethylbenzene	0.000		0	N.D.	d	
97) sec-Butylbenzene	0.000		0	N.D.	d	
98) 4-Isopropyltoluene	0.000		0	N.D.	d	
99) n-Butylbenzene	0.000		0	N.D.	d	
100) p-Diethylbenzene	0.000		0	N.D.	d	
101) 1,2,4,5-Tetramethylben...	0.000		0	N.D.	d	
102) 1,2-Dibromo-3-Chloropr...	0.000		0	N.D.	d	
103) Camphor	9.322	95	3597	4.4537	ug/l	79
104) Hexachlorobutadiene	0.000		0	N.D.	d	
105) 1,2,4-Trichlorobenzene	0.000		0	N.D.	d	
106) 1,2,3-Trichlorobenzene	0.000		0	N.D.	d	
107) Naphthalene	0.000		0	N.D.	d	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Handwritten signature

Abundance

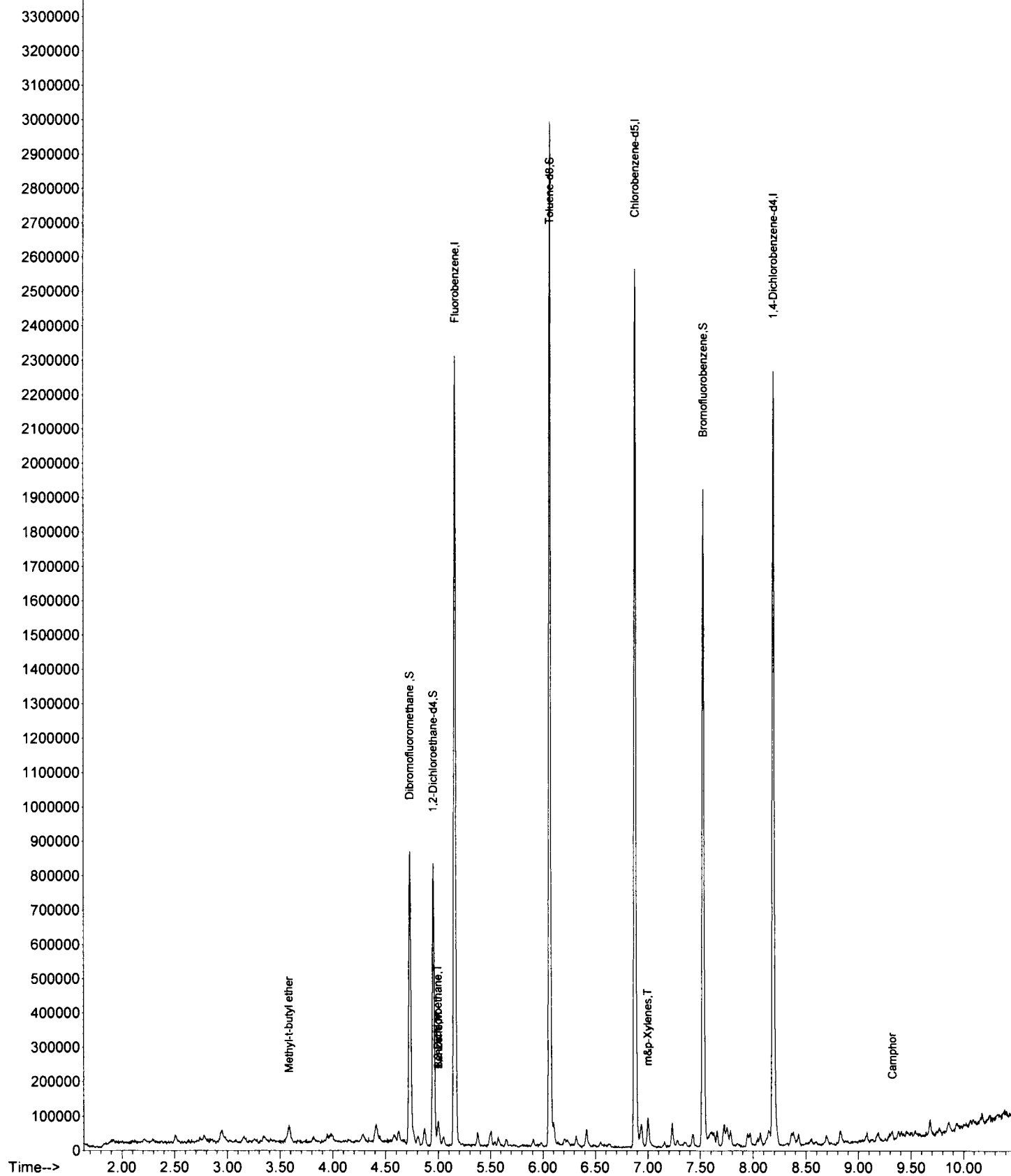
TIC: 1M160726.D\data.ms

Quant QT Reviewed

SampleID : CAL @ 0.5 PPB
Data File: 1M160726.D
Acq On : 04/21/22 16:45

Operator : JM
Sam Mult : 1 Vial# : 3
Misc : A,5ML

Qt Meth : 1M A0421.M
Qt On : 04/22/22 08:42
Qt Upd On: 04/22/22 08:41



Method: EPA 8260D

Form 6
Initial Calibration

Instrument: GCMS_2

Level #:	Data File:	Cal Identifier:	Analysis Date/Time									Level #:	Data File:	Cal Identifier:	Analysis Date/Time																				
			1	2	3	4	5	6	7	8	9				10	11	12	13	14	15	16	17	18	19	20										
1	2M167170.D	CAL @ 20 PPB	04/26/22 18:36	2	2M167166.D	CAL @ 5 PPB	04/26/22 17:17	3	2M167168.D	CAL @ 10 PPB	04/26/22 17:57	4	2M167172.D	CAL @ 50 PPB	04/26/22 19:16	5	2M167175.D	CAL @ 100 PPB	04/26/22 20:15	6	2M167178.D	CAL @ 250 PPB	04/26/22 21:14	7	2M167181.D	CAL @ 500 PPB	04/26/22 22:13	8	2M167165.D	CAL @ 1 PPB	04/26/22 16:58	9	2M167164.D	CAL @ 0.5 PPB	04/26/22 16:38
Compound	Col	Mt. Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRt	RT	Corr1	Corr2	%Rsd	Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9										
Chlorodifluoromethane	1	0	Avg	0.3336	0.3220	0.3225	0.3241	0.3295	0.3389	0.3141	0.3009	0.3231	67	0.999	1.00	3.6	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00										
Dichlorodifluoromethane	1	0	Avg	0.2873	0.2860	0.2718	0.2887	0.2830	0.2945	0.2752	0.2760	0.2831	65	0.999	1.00	2.8	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00										
Chloromethane	1	0	Avg	0.2437	0.2465	0.2400	0.2336	0.2334	0.2414	0.2299	0.2539	0.2401	83	0.999	1.00	3.3	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00										
Bromomethane	1	0	Avg	0.0989	0.1011	0.0949	0.1124	0.1402	---	---	0.1062	0.1092	23	0.990	1.00	15	0.10	20.00	5.00	10.00	50.00	100.0	---	---	1.00										
Vinyl Chloride	1	0	Avg	0.2797	0.2879	0.2787	0.2797	0.2788	0.2910	0.2698	0.2681	0.2791	93	0.999	1.00	2.8	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00										
Chloroethane	1	0	Avg	0.1785	0.1845	0.1844	0.1764	0.1801	0.1955	0.1939	0.1982	0.1862	31	1.00	1.00	4.5	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00										
Trichlorofluoromethane	1	0	Avg	0.4392	0.4445	0.4330	0.4406	0.4374	0.4667	0.4426	0.4016	0.4382	54	0.999	1.00	4.1	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00										
Ethyl ether	1	0	Avg	0.1929	0.1968	0.1925	0.1874	0.1938	0.1963	0.1819	0.1916	0.1922	78	0.999	1.00	2.6	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00										
Furan	1	0	Avg	0.3836	0.3919	0.3867	0.3753	0.3826	0.3924	0.3628	0.3917	0.3832	81	0.999	1.00	2.7	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00										
1,1,2-Trichloro-1,2,2-t	1	0	Avg	0.1882	0.1973	0.1896	0.1931	0.1858	0.1962	0.1833	0.1763	0.1892	97	0.999	1.00	3.7	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00										
Methylene Chloride	1	0	Avg	0.2181	0.2190	0.2207	0.2121	0.2155	0.2178	0.1985	0.2240	0.2163	39	0.998	1.00	3.6	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00										
Acrolein	1	0	Avg	0.0495	0.0485	0.0487	0.0488	0.0505	0.0510	0.0460	0.0457	0.0486	28	0.997	1.00	3.9		100.0	25.00	50.00	250.0	500.0	1250.0	2500.0	5.00										
Acrylonitrile	1	0	Avg	0.0986	0.1027	0.1006	0.0990	0.1027	0.1047	0.0952	0.0988	0.1003	30	0.998	1.00	3.0		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00										
Iodomethane	1	0	Qua	0.2382	0.1698	0.1969	0.2568	0.2717	0.2864	0.2620	0.1217	0.2253	12	0.998	0.998	25		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00										
Acetone	1	0	Avg	0.0768	0.0800	0.0770	0.0755	0.0771	0.0789	0.0705	0.0859	0.0778	30	0.997	1.00	5.6	0.10	100.0	25.00	50.00	250.0	500.0	1250.0	2500.0	5.00										
Carbon Disulfide	1	0	Avg	0.5053	0.5053	0.5026	0.5058	0.5162	0.5363	0.5005	0.5090	0.5103	19	0.999	1.00	2.3	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00										
t-Butyl Alcohol	1	0	Avg	0.0265	0.0278	0.0275	0.0273	0.0286	0.0282	0.0259	0.0249	0.0271	34	0.998	1.00	4.6		100.0	25.00	50.00	250.0	500.0	1250.0	2500.0	5.00										
n-Hexane	1	0	Avg	0.2191	0.2309	0.2157	0.2226	0.2144	0.2229	0.2043	0.2100	0.2183	85	0.998	1.00	3.8		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00										
Di-isopropyl-ether	1	0	Avg	0.6745	0.6585	0.6720	0.6533	0.6724	0.6820	0.6264	0.6215	0.6654	01	0.998	1.00	3.5		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00										
1,1-Dichloroethene	1	0	Avg	0.3329	0.3471	0.3284	0.3296	0.3251	0.3400	0.3168	0.3214	0.3302	28	0.999	1.00	3.0	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00										
Methyl Acetate	1	0	Avg	0.1853	0.1935	0.1927	0.1840	0.1905	0.1948	0.1774	0.1936	0.1893	29	0.998	1.00	3.3	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00										
Methyl-t-butyl ether	1	0	Avg	0.6187	0.6188	0.6077	0.6063	0.6234	0.6308	0.5796	0.5722	0.6093	62	0.998	1.00	3.3	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00										
trans-1,2-Dichloroethene	1	0	Avg	0.3992	0.4049	0.4000	0.3858	0.3910	0.3986	0.3674	0.3859	0.3923	98	0.998	1.00	3.1	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00										
Ethyl-t-butyl ether	1	0	Avg	0.2240	0.2251	0.2206	0.2176	0.2192	0.2241	0.2101	0.2017	0.2183	62	0.999	1.00	3.7	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00										
1,4-Dioxane	1	0	Avg	0.6347	0.6392	0.6338	0.6180	0.6382	0.6486	0.5936	0.5993	0.6283	62	0.998	1.00	3.2	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00										
cis-1,2-Dichloroethene	1	0	Avg	0.4012	0.4007	0.4052	0.3918	0.3979	0.4073	0.3768	0.3871	0.3964	40	0.999	1.00	2.6	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00										
Bromochloromethane	1	0	Avg	0.1878	0.1927	0.1916	0.1808	0.1795	0.1769	0.1615	0.1934	0.1834	55	0.998	1.00	5.9		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00										
2,2-Dichloropropane	1	0	Avg	0.3343	0.3278	0.3197	0.3290	0.3322	0.3406	0.3151	0.2941	0.3244	40	0.999	1.00	4.4		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00										
Ethyl acetate	1	0	Avg	0.2613	0.2723	0.2669	0.2515	0.2604	0.2682	0.2401	0.2781	0.2624	42	0.997	1.00	4.6		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00										
1,4-Dioxane	1	0	Avg	0.0033	0.0035	0.0033	0.0033	0.0033	0.0033	0.0030	0.0033	0.0033	58	0.999	1.00	3.6		100.0	25.00	50.00	250.0	500.0	1250.0	2500.0	50.00										
1,1-Dichloropropene	1	0	Avg	0.3038	0.3055	0.3056	0.2986	0.2947	0.3056	0.2838	0.2976	0.2994	81	0.999	1.00	2.5		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00										
Chloroform	1	0	Avg	0.3994	0.3985	0.4026	0.3884	0.3946	0.3993	0.3680	0.3930	0.3934	59	0.998	1.00	2.8	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00										
Dibromofluoromethane	1	0	Avg	0.2701	0.2757	0.2689	0.2709	0.2763	0.2736	0.2780	0.2656	0.2724	69	-1	-1	1.5		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00										
Cyclohexane	1	0	Avg	0.3014	0.3074	0.2987	0.3031	0.2929	0.3073	0.2839	0.2928	0.2984	76	0.999	1.00	2.7	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00										
1,2-Dichloroethane-d4	1	0	Avg	0.1426	0.1494	0.1486	0.1447	0.1459	0.1474	0.1474	0.1463	0.1474	90	-1	-1	1.4		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00										
1,2-Dichloroethane	1	0	Avg	0.3333	0.3326	0.3401	0.3223	0.3333	0.3417	0.3289	0.3450	0.3344	94	1.00	1.00	2.2	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00										
2-Butanone	1	0	Avg	0.1067	0.0993	0.1024	0.1109	0.1147	0.1154	0.1058	0.0831	0.1054	39	0.998	1.00	9.9	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00										
1,1,1-Trichloroethane	1	0	Avg	0.3661	0.3664	0.3621	0.3584	0.3607	0.3731	0.3494	0.3537	0.3614	72	0.999	1.00	2.1	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00										
Carbon Tetrachloride	1	0	Avg	0.3174	0.3181	0.3076	0.3176	0.3186	0.3388	0.3274	0.2725	0.3154	82	1.00	1.00	6.1	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00										
Vinyl Acetate	1	0	Avg	0.8035	0.7680	0.7856	0.7909	0.8160	0.8270	0.7455	0.7668	0.7884	00	0.998	1.00	3.4		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00										
Bromodichloromethane	1	0	Avg	0.2945	0.2791	0.2959	0.2921	0.3048	0.3111	0.2899	0.2628	0.2915	56	0.999	1.00	5.1	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00										

Flags

a - failed the min rf criteria

c - failed the minimum correlation coeff criteria(if applicable)

Note:

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg Rf, Linear, or Quadratic Curve was used for compound.

Method: EPA 8260D

Form 6

Initial Calibration

Instrument: GCMS_2

Level #:	Data File:	Cal Identifier:	Analysis Date/Time					Level #:	Data File:	Cal Identifier:	Analysis Date/Time															
			RF1	RF2	RF3	RF4	RF5				RF6	RF7	RF8	RF9	AvgRt	RT	Corr1	Corr2	%Rsd	Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7
1	2M167170.D	CAL @ 20 PPB							2	2M167166.D	CAL @ 5 PPB							04/26/22 17:17								
3	2M167168.D	CAL @ 10 PPB							4	2M167172.D	CAL @ 50 PPB							04/26/22 19:16								
5	2M167175.D	CAL @ 100 PPB							6	2M167178.D	CAL @ 250 PPB							04/26/22 21:14								
7	2M167181.D	CAL @ 500 PPB							8	2M167165.D	CAL @ 1 PPB							04/26/22 16:58								
9	2M167164.D	CAL @ 0.5 PPB																								
Compound	Col	Mt. Filt.	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRt	RT	Corr1	Corr2	%Rsd	Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9	
Methylcyclohexane	1	0	Avg	0.2677	0.2715	0.2583	0.2600	0.2559	0.2689	0.2510	0.2687	0.2635	5.40	0.999	1.00	2.8	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Dibromomethane	1	0	Avg	0.1836	0.1818	0.1835	0.1760	0.1832	0.1874	0.1742	0.1713	0.1805	5.49	0.999	1.00	3.1	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2-Dichloropropane	1	0	Avg	0.2299	0.2306	0.2307	0.2192	0.2246	0.2261	0.2098	0.2135	0.2235	5.42	0.999	1.00	3.6	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Trichloroethene	1	0	Avg	0.2546	0.2449	0.2557	0.2462	0.2497	0.2572	0.2436	0.2452	0.2505	5.29	0.999	1.00	2.2	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Benzene	1	0	Avg	0.8529	0.8868	0.8555	0.8170	0.8271	0.8368	0.7888	0.8468	0.8454	4.93	0.999	1.00	3.9	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
tert-Amyl methyl ether	1	0	Avg	0.5844	0.5880	0.5926	0.5768	0.5948	0.5904	0.5349	0.5665	0.5794	4.98	0.998	1.00	3.4	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Iso-propylacetate	1	0	Avg	0.6741	0.6390	0.6661	0.6719	0.7111	0.6892	0.6254	0.6298	0.6634	4.93	0.997	1.00	4.5	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Methyl methacrylate	1	0	Avg	0.3327	0.3184	0.3251	0.3256	0.3443	0.3361	0.2943	0.2690	0.3185	5.45	0.995	1.00	7.8	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Dibromochloromethan	1	0	Avg	0.3269	0.2972	0.3079	0.3234	0.3449	0.3425	0.3106	0.2743	0.3166	6.42	0.998	1.00	7.5	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
2-Chloroethylvinylthe	1	0	Avg	0.0500	0.0475	0.0477	0.0487	0.0497	0.0441	0.0363	0.0502	0.0468	5.70	0.998	1.00	10		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
cis-1,3-Dichloropropen	1	0	Avg	0.4921	0.4483	0.4771	0.4834	0.5110	0.4958	0.4439	0.4394	0.4745	5.79	0.997	1.00	5.7	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
trans-1,3-Dichloroprop	1	0	Avg	0.4433	0.3956	0.4194	0.4416	0.4684	0.4630	0.4152	0.3783	0.4286	6.08	0.997	1.00	7.4	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethyl methacrylate	1	0	Avg	0.3201	0.3033	0.3161	0.3187	0.3364	0.3309	0.2948	0.3086	0.3166	6.10	0.997	1.00	4.4	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1,2-Trichloroethane	1	0	Avg	0.2826	0.2810	0.2858	0.2694	0.2826	0.2729	0.2444	0.2621	0.2736	6.19	0.997	1.00	5.1	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2-Dibromoethane	1	0	Avg	0.3137	0.2960	0.3107	0.3024	0.3139	0.3059	0.2726	0.2677	0.2986	6.49	0.997	1.00	6.1	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,3-Dichloropropane	1	0	Avg	0.4899	0.4752	0.4900	0.4641	0.4789	0.4616	0.4167	0.4424	0.4656	6.28	0.997	1.00	5.4	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
4-Methyl-2-Pentanone	1	0	Avg	0.3371	0.3263	0.3281	0.3336	0.3465	0.3397	0.3001	0.3220	0.3295	5.86	0.996	1.00	4.3	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
2-Hexanone	1	0	Avg	0.2437	0.2387	0.2394	0.2399	0.2524	0.2463	0.2160	0.2198	0.2376	6.29	0.995	1.00	5.3	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Tetrachloroethene	1	0	Avg	0.2822	0.2806	0.2780	0.2769	0.2810	0.2821	0.2666	0.2685	0.2776	6.28	0.999	1.00	2.2	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Toluene-d8	1	0	Avg	1.3515	1.3294	1.3472	1.3634	1.3732	1.3287	1.2958	1.3432	1.3459	5.95	-1	-1	1.7		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	
Toluene	1	0	Avg	0.7678	0.7543	0.7630	0.7293	0.7492	0.7352	0.6629	0.7528	0.7395	5.98	0.997	1.00	4.5	0.40	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1,1,2-Tetrachloroeth	1	0	Avg	0.3032	0.2843	0.2963	0.2943	0.3146	0.3154	0.2981	0.2855	0.2996	6.78	0.999	1.00	3.9		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Chlorobenzene	1	0	Avg	0.8573	0.8367	0.8529	0.8106	0.8383	0.8196	0.7402	0.8312	0.8235	6.74	0.997	1.00	4.5	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
n-Butyl acrylate	1	0	Avg	1.3927	1.3034	1.3725	1.4639	1.5509	1.4741	1.2817	1.2231	1.3869	9.99	0.994	1.00	8.0	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
n-Amyl acetate	1	0	Avg	1.2453	1.2038	1.2647	1.2981	1.3755	1.3059	1.1346	1.0506	1.2377	7.10	0.994	1.00	8.4	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromoforn	1	0	Avg	0.5133	0.4739	0.5111	0.5586	0.6042	0.5963	0.5372	0.4848	0.5357	7.20	0.997	1.00	9.0	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethylbenzene	1	0	Avg	0.7235	0.7494	0.7667	0.7356	0.7633	0.7577	0.7270	0.7483	0.7466	6.78	1.00	1.00	2.2	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1,2,2-Tetrachloroeth	1	0	Avg	0.8256	0.8230	0.8429	0.8334	0.8616	0.7984	0.6989	0.7916	0.8097	7.42	0.995	1.00	6.2	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromofluorobenzene	1	0	Avg	0.9046	0.9207	0.9053	0.9275	0.9353	0.8885	0.8701	0.9170	0.9026	7.36	-1	-1	2.2		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	
Stivene	1	0	Avg	1.8821	1.8475	1.8895	1.9074	1.9753	1.9104	1.7656	1.7765	1.8770	7.07	0.998	1.00	3.8	0.30	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
m&o-Xylenes	1	0	Avg	1.1296	1.1362	1.1489	1.1240	1.1505	1.1038	1.0146	1.1961	1.1468	8.4	0.998	1.00	5.0	0.10	40.00	10.00	20.00	100.0	200.0	500.0	1000.0	2.00	
o-Xylene	1	0	Avg	1.0873	1.1033	1.1022	1.1086	1.1363	1.0986	1.0292	1.1034	1.1070	7.07	0.999	1.00	2.8	0.30	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
trans-1,4-Dichloro-2-b	1	0	Avg	0.3620	0.3443	0.3541	0.3825	0.4040	0.3987	0.3556	0.3769	0.3727	7.44	0.997	1.00	5.9		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,3-Dichlorobenzene	1	0	Avg	1.1732	1.1869	1.1979	1.1778	1.2244	1.1858	1.0702	1.1956	1.1878	9.98	0.997	1.00	3.9	0.60	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,4-Dichlorobenzene	1	0	Avg	1.2124	1.2750	1.2421	1.2118	1.2587	1.2108	1.0980	1.3540	1.2380	8.03	0.997	1.00	5.9	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2-Dichlorobenzene	1	0	Avg	1.1122	1.1333	1.1446	1.1221	1.1690	1.1291	1.0158	1.1276	1.1288	8.26	0.997	1.00	4.0	0.40	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Isopropylbenzene	1	0	Avg	2.5527	2.6468	2.6039	2.6096	2.6217	2.5187	2.2086	2.5844	2.5472	7.26	0.995	1.00	5.5	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Cyclo																										

Flags

a - failed the min rf criteria

c - failed the minimum correlation coeff criteria(if applicable)

Note:

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg Rf, Linear, or Quadratic Curve was used for compound.

Method: EPA 8260D

Form 6
Initial Calibration

Instrument: GCMS_2

Level #	Data File	Cal Identifier	Analysis Date/Time	Level #	Data File	Cal Identifier	Analysis Date/Time	Calibration Level Concentrations																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
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Flags

a - failed the min rf criteria

c - failed the minimum correlation coeff criteria(if applicable)

Note:

Avg Rsd: 4.693

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Ft1 = Indicates whether Avg Rt, Linear, or Quadratic Curve was used for compound.

SampleID : CAL @ 20 PPB
Data File: 2M167170.D
Acq On : 04/26/22 18:36

Operator : JM
Sam Mult : 1 Vial# : 8
Misc : A,5ML

Qt Meth : 2M A0426.M
Qt On : 04/26/22 20:37
Qt Upd On: 04/26/22 20:36

Data Path : G:\GCMSData\2022\GCMS_2\Data\04-26-22\
Qt Path : G:\GCMSData\2022\GCMS_2\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
4) Fluorobenzene	5.086	96	157490	30.00	ug/l	0.00	
52) Chlorobenzene-d5	6.726	117	112566	30.00	ug/l	0.00	
70) 1,4-Dichlorobenzene-d4	8.013	152	53722	30.00	ug/l	0.00	
System Monitoring Compounds							
37) Dibromofluoromethane	4.690	111	42541	29.99	ug/l	0.00	
Spiked Amount	30.000		Recovery	=	99.97%		
39) 1,2-Dichloroethane-d4	4.897	67	22470	29.21	ug/l	0.00	
Spiked Amount	30.000		Recovery	=	97.37%		
66) Toluene-d8	5.946	98	152139	30.41	ug/l	0.00	
Spiked Amount	30.000		Recovery	=	101.37%		
76) Bromofluorobenzene	7.360	174	48597	30.12	ug/l	0.00	
Spiked Amount	30.000		Recovery	=	100.40%		
Target Compounds							Qvalue
5) Chlorodifluoromethane	1.672	51	35029	20.1841	ug/l		90
6) Dichlorodifluoromethane	1.654	85	30170	31.0580	ug/l		97
7) Chloromethane	1.831	50	25590	25.9327	ug/l		99
8) Bromomethane	2.227	94	10390	15.9102	ug/l		95
9) Vinyl Chloride	1.929	62	29371	23.2740	ug/l		98
10) Chloroethane	2.313	64	18745	21.6490	ug/l		100
11) Trichlorofluoromethane	2.538	101	46114	21.6629	ug/l		97
12) Ethyl ether	2.776	59	20263	19.3418	ug/l		88
13) Furan	2.812	39	40281	19.6068	ug/l		93
14) 1,1,2-Trichloro-1,2,2-...	2.971	101	19766	21.2337	ug/l		99
15) Methylene Chloride	3.392	84	22902	21.0934	ug/l		89
16) Acrolein	2.892	56	25997	106.5797	ug/l		99
17) Acrylonitrile	3.599	53	10356	20.1304	ug/l		100
18) Iodomethane	3.123	142	25012	24.9625	ug/l		97
19) Acetone	3.020	43	40326	102.0038	ug/l		98
20) Carbon Disulfide	3.190	76	53059	18.2869	ug/l		100
21) t-Butyl Alcohol	3.459	59	13931	91.8610	ug/l		92
22) n-Hexane	3.849	57	23009	22.2208	ug/l		98
23) Di-isopropyl-ether	4.007	45	70827	21.1968	ug/l		92
24) 1,1-Dichloroethene	2.983	61	34960	21.4767	ug/l		89
25) Methyl Acetate	3.294	43	19461	19.5479	ug/l		100
26) Methyl-t-butyl ether	3.617	73	64961	21.0050	ug/l		93
27) 1,1-Dichloroethane	3.977	63	41917	21.1268	ug/l		98
28) trans-1,2-Dichloroethene	3.623	96	23525	21.0969	ug/l		88
29) Ethyl-t-butyl ether	4.276	59	66648	19.6160	ug/l		94
30) cis-1,2-Dichloroethene	4.398	61	42125	20.9263	ug/l		91
31) Bromochloromethane	4.550	49	19723	22.2349	ug/l		87
32) 2,2-Dichloropropane	4.398	77	35102	20.7267	ug/l		97
33) Ethyl acetate	4.422	43	27440m	20.5055	ug/l		
34) 1,4-Dioxane	5.483	88	17744	997.1140	ug/l		89
35) 1,1-Dichloropropene	4.812	75	31898	20.8207	ug/l		99
36) Chloroform	4.593	83	41936	21.3226	ug/l		98
38) Cyclohexane	4.757	56	31651	20.7981	ug/l		87
40) 1,2-Dichloroethane	4.940	62	35000	21.0665	ug/l		99
41) 2-Butanone	4.391	43	11212m	19.3666	ug/l		
42) 1,1,1-Trichloroethane	4.721	97	38443	21.0091	ug/l		99
43) Carbon Tetrachloride	4.818	117	33334	20.4168	ug/l		97
44) Vinyl Acetate	4.001	43	84365	20.6771	ug/l		100
45) Bromodichloromethane	5.556	83	30930	20.6356	ug/l		98
46) Methylcyclohexane	5.403	83	28112	20.9439	ug/l		92
47) Dibromomethane	5.489	174	19279	21.1586	ug/l		100
48) 1,2-Dichloropropane	5.416	63	24139	21.4372	ug/l		95
49) Trichloroethene	5.294	130	26732	20.9578	ug/l		100
50) Benzene	4.934	78	89556	21.1726	ug/l		100
51) tert-Amyl methyl ether	4.977	73	61367	19.4979	ug/l		96
53) Iso-propylacetate	4.934	43	50590	20.5385	ug/l		96
54) Methyl methacrylate	5.446	41	24968	21.6272	ug/l		87
55) Dibromochloromethane	6.415	129	24536	21.2733	ug/l		96
56) 2-Chloroethylvinylether	5.696	63	3756	21.0789	ug/l		96
57) cis-1,3-Dichloropropene	5.794	75	36934	20.9746	ug/l		98
58) trans-1,3-Dichloropropene	6.080	75	33273	20.7185	ug/l		98
59) Ethyl methacrylate	6.098	41	24027	20.5177	ug/l		87
60) 1,1,2-Trichloroethane	6.190	97	21210	21.4259	ug/l		93
61) 1,2-Dibromoethane	6.489	107	23544	21.4457	ug/l		99
62) 1,3-Dichloropropane	6.281	76	36764	21.6893	ug/l		99
63) 4-Methyl-2-Pentanone	5.861	43	25299	20.8116	ug/l		99
64) 2-Hexanone	6.294	43	18292	20.4499	ug/l		97
65) Tetrachloroethene	6.281	164	21181	20.9888	ug/l		99
67) Toluene	5.983	92	57623	21.3870	ug/l		100

Quantitation Report (QT Reviewed)

SampleID : CAL @ 20 PPB
 Data File: 2M167170.D
 Acq On : 04/26/22 18:36

Operator : JM
 Sam Mult : 1 Vial# : 8
 Misc : A,5ML

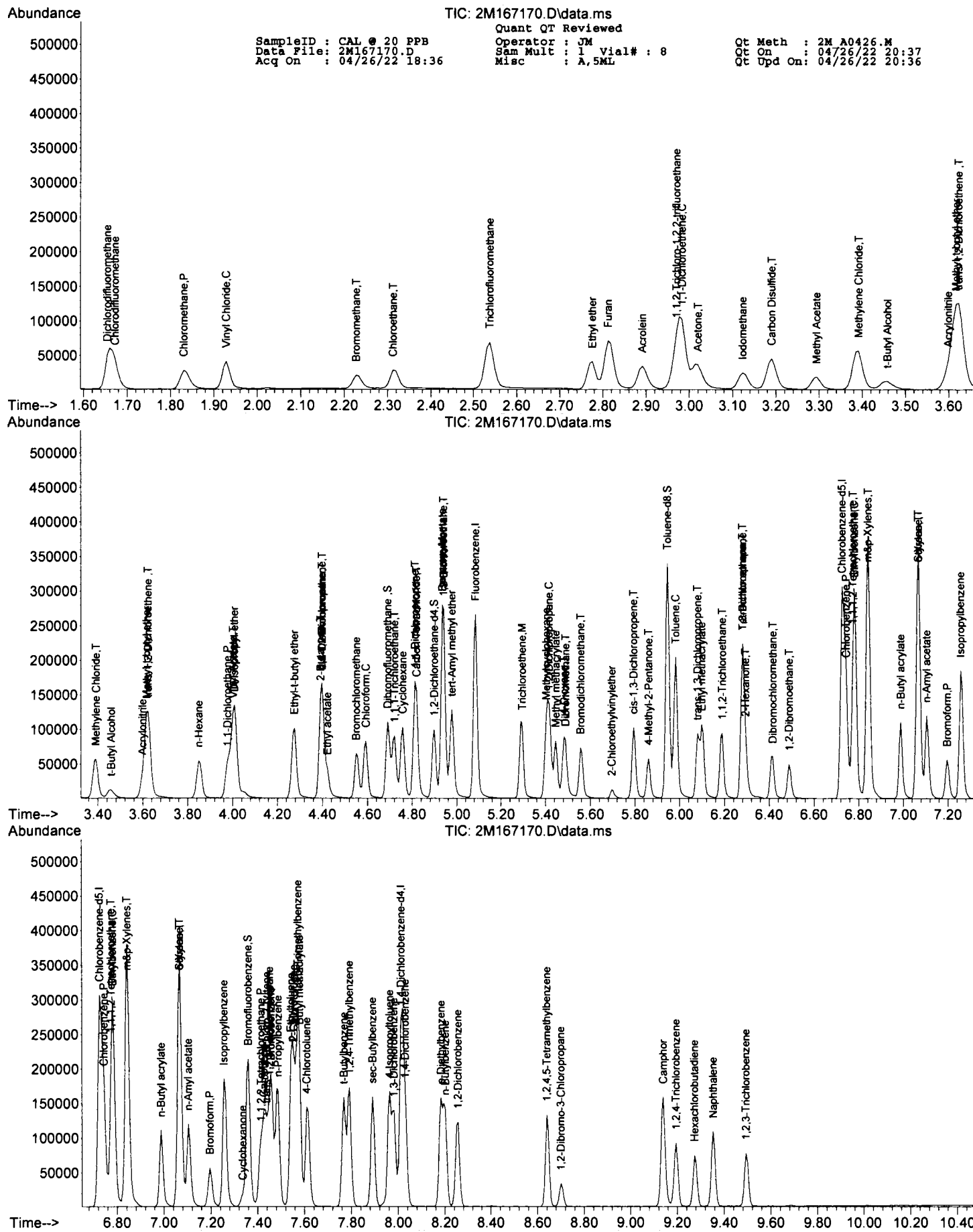
Qt Meth : 2M_A0426.M
 Qt On : 04/26/22 20:37
 Qt Upd On: 04/26/22 20:36

Data Path : G:\GcMsData\2022\GCMS_2\Data\04-26-22\
 Qt Path : G:\GcMsData\2022\GCMS_2\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1,1,1,2-Tetrachloroethane	6.775	133	22756	21.0703	ug/l	98
69) Chlorobenzene	6.745	112	64336	21.5375	ug/l	99
71) n-Butyl acrylate	6.989	55	49879	20.8653	ug/l	96
72) n-Amyl acetate	7.104	43	44603	21.2144	ug/l	95
73) Bromoform	7.196	173	18386	20.1293	ug/l	100
74) Ethylbenzene	6.781	106	25912	20.3493	ug/l	95
75) 1,1,2,2-Tetrachloroethane	7.415	83	29570	21.3014	ug/l	99
77) Styrene	7.068	104	67410	21.0301	ug/l	94
78) m&p-Xylenes	6.842	106	80917	43.3185	ug/l	97
79) o-Xylene	7.068	106	38942	20.7723	ug/l	99
80) trans-1,4-Dichloro-2-b...	7.440	53	12967	20.0301	ug/l	82
81) 1,3-Dichlorobenzene	7.982	146	42021	21.1336	ug/l	98
82) 1,4-Dichlorobenzene	8.031	146	43423	21.0416	ug/l	99
83) 1,2-Dichlorobenzene	8.257	146	39836	20.9288	ug/l	99
84) Isopropylbenzene	7.257	105	91427	21.0851	ug/l	100
85) Cyclohexanone	7.336	55	5367	81.7670	ug/l	93
86) Camphene	7.428	93	23101	19.3919	ug/l	100
87) 1,2,3-Trichloropropane	7.452	75	36281	20.0352	ug/l	98
88) 2-Chlorotoluene	7.556	91	52006	20.3539	ug/l	98
89) p-Ethyltoluene	7.543	105	92834	20.4980	ug/l	93
90) 4-Chlorotoluene	7.610	91	49771	20.1687	ug/l	98
91) n-Propylbenzene	7.488	91	100822	21.2752	ug/l	99
92) Bromobenzene	7.458	77	56599	20.5145	ug/l	96
93) 1,3,5-Trimethylbenzene	7.574	105	59708	20.5490	ug/l	90
94) Butyl methacrylate	7.580	41	30624	19.1031	ug/l	83
95) t-Butylbenzene	7.769	119	65441	20.7539	ug/l	99
96) 1,2,4-Trimethylbenzene	7.793	105	69578	21.1429	ug/l	99
97) sec-Butylbenzene	7.891	105	77407	20.7845	ug/l	99
98) 4-Isopropyltoluene	7.964	119	66471	20.6455	ug/l	98
99) n-Butylbenzene	8.202	91	66969	20.6210	ug/l	99
100) p-Diethylbenzene	8.183	119	37312	19.8728	ug/l	99
101) 1,2,4,5-Tetramethylben...	8.641	119	51238	19.0639	ug/l	97
102) 1,2-Dibromo-3-Chloropr...	8.702	157	6861	19.4398	ug/l	87
103) Camphor	9.141	95	29607	180.1425	ug/l	100
104) Hexachlorobutadiene	9.275	225	10982	19.7750	ug/l	95
105) 1,2,4-Trichlorobenzene	9.195	180	22199	20.5243	ug/l	98
106) 1,2,3-Trichlorobenzene	9.494	180	18430	19.6701	ug/l	97
107) Naphthalene	9.354	128	62335	20.0617	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

unc



SampleID : CAL @ 5 PPB
 Data File: 2M167166.D
 Acq On : 04/26/22 17:17

Operator : JM
 Sam Mult : 1 Vial# : 4
 Misc : A,5ML

Qt Meth : 2M_A0426.M
 Qt On : 04/26/22 20:42
 Qt Upd On: 04/26/22 20:36

Data Path : G:\GcMsData\2022\GCMS_2\Data\04-26-22\
 Qt Path : G:\GcMsData\2022\GCMS_2\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.087	96	153877	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.727	117	113762	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.013	152	52321	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.690	111	42425	30.61	ug/l	0.00
Spiked Amount 30.000			Recovery	=	102.03%	
39) 1,2-Dichloroethane-d4	4.898	67	22996	30.59	ug/l	0.00
Spiked Amount 30.000			Recovery	=	101.97%	
66) Toluene-d8	5.946	98	151235	29.91	ug/l	0.00
Spiked Amount 30.000			Recovery	=	99.70%	
76) Bromofluorobenzene	7.361	174	48176	30.66	ug/l	0.00
Spiked Amount 30.000			Recovery	=	102.20%	
Target Compounds						
5) Chlorodifluoromethane	1.673	51	8258	4.8701	ug/l	92
6) Dichlorodifluoromethane	1.660	85	7336	7.7292	ug/l	100
7) Chloromethane	1.831	50	6323	6.5581	ug/l	92
8) Bromomethane	2.227	94	2595	4.0670	ug/l	91
9) Vinyl Chloride	1.929	62	7384	5.9886	ug/l	99
10) Chloroethane	2.319	64	4732	5.5934	ug/l	100
11) Trichlorofluoromethane	2.538	101	11400	5.4811	ug/l	100
12) Ethyl ether	2.776	59	5049	4.9326	ug/l	87
13) Furan	2.813	39	10051	5.0072	ug/l	88
14) 1,1,2-Trichloro-1,2,2-...	2.977	101	5060	5.5634	ug/l	99
15) Methylene Chloride	3.392	84	5618	5.2958	ug/l	87
16) Acrolein	2.892	56	6220	26.0988	ug/l	90
17) Acrylonitrile	3.599	53	2636	5.2443	ug/l	93
18) Iodomethane	3.124	142	4357	4.4505	ug/l	99
19) Acetone	3.020	43	10266	26.5774	ug/l	100
20) Carbon Disulfide	3.191	76	12961	4.5719	ug/l	100
21) t-Butyl Alcohol	3.453	59	3565	24.0596	ug/l	91
22) n-Hexane	3.849	57	5923	5.8544	ug/l	98
23) Di-isopropyl-ether	4.008	45	16889	5.1732	ug/l	93
24) 1,1-Dichloroethene	2.983	61	8902	5.5971	ug/l	88
25) Methyl Acetate	3.294	43	4964	5.1033	ug/l	100
26) Methyl-t-butyl ether	3.617	73	15871	5.2523	ug/l	93
27) 1,1-Dichloroethane	3.977	63	10386	5.3576	ug/l	98
28) trans-1,2-Dichloroethene	3.623	96	5775	5.3006	ug/l	93
29) Ethyl-t-butyl ether	4.276	59	16395	4.9387	ug/l	95
30) cis-1,2-Dichloroethene	4.398	61	10277	5.2251	ug/l	95
31) Bromochloromethane	4.550	49	4944	5.7045	ug/l	85
32) 2,2-Dichloropropane	4.404	77	8408	5.0812	ug/l	95
33) Ethyl acetate	4.422	43	6984m	5.3416	ug/l	
34) 1,4-Dioxane	5.483	88	4513	259.5601	ug/l	92
35) 1,1-Dichloropropene	4.812	75	7837	5.2355	ug/l	96
36) Chloroform	4.593	83	10222	5.3195	ug/l	99
38) Cyclohexane	4.757	56	7884	5.3023	ug/l	88
40) 1,2-Dichloroethane	4.940	62	8530	5.2548	ug/l	99
41) 2-Butanone	4.398	43	2548m	4.5045	ug/l	
42) 1,1,1-Trichloroethane	4.721	97	9398	5.2566	ug/l	99
43) Carbon Tetrachloride	4.818	117	8159	5.1146	ug/l	92
44) Vinyl Acetate	4.001	43	19698	4.9412	ug/l	100
45) Bromodichloromethane	5.556	83	7159	4.8884	ug/l	99
46) Methylcyclohexane	5.404	83	6965	5.3109	ug/l	92
47) Dibromomethane	5.489	174	4663	5.2378	ug/l	96
48) 1,2-Dichloropropane	5.416	63	5914	5.3754	ug/l	99
49) Trichloroethene	5.294	130	6282	5.0407	ug/l	93
50) Benzene	4.934	78	22745	5.5036	ug/l	100
51) tert-Amyl methyl ether	4.977	73	15082	4.9045	ug/l	95
53) Iso-propylacetate	4.934	43	12116	4.8671	ug/l	96
54) Methyl methacrylate	5.446	41	6037	5.1743	ug/l	86
55) Dibromochloromethane	6.416	129	5636	4.8352	ug/l	96
56) 2-Chloroethylvinylether	5.696	63	901	5.0033	ug/l	94
57) cis-1,3-Dichloropropene	5.794	75	8501	4.7769	ug/l	98
58) trans-1,3-Dichloropropene	6.080	75	7502	4.6223	ug/l	92
59) Ethyl methacrylate	6.099	41	5752	4.8602	ug/l	85
60) 1,1,2-Trichloroethane	6.190	97	5329	5.3266	ug/l	94
61) 1,2-Dibromoethane	6.489	107	5613	5.0590	ug/l	99
62) 1,3-Dichloropropane	6.281	76	9010	5.2597	ug/l	94
63) 4-Methyl-2-Pentanone	5.861	43	6187	5.0361	ug/l	99
64) 2-Hexanone	6.300	43	4527	5.0078	ug/l	99
65) Tetrachloroethene	6.281	164	5321	5.2173	ug/l	95
67) Toluene	5.983	92	14302	5.2524	ug/l	98

Quantitation Report (QT Reviewed)

SampleID : CAL @ 5 PPB
 Data File: 2M167166.D
 Acq On : 04/26/22 17:17

Operator : JM
 Sam Mult : 1 Vial# : 4
 Misc : A,5ML

Qt Meth : 2M A0426.M
 Qt On : 04/26/22 20:42
 Qt Upd On: 04/26/22 20:36

Data Path : G:\GcMsData\2022\GCMS_2\Data\04-26-22\
 Qt Path : G:\GcMsData\2022\GCMS_2\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1,1,1,2-Tetrachloroethane	6.775	133	5391	4.9392	ug/l	90
69) Chlorobenzene	6.745	112	15865	5.2552	ug/l	99
71) n-Butyl acrylate	6.989	55	11366	4.8819	ug/l	95
72) n-Amyl acetate	7.104	43	10498	5.1268	ug/l	93
73) Bromoform	7.196	173	4133	4.6460	ug/l	100
74) Ethylbenzene	6.781	106	6535	5.2695	ug/l	100
75) 1,1,2,2-Tetrachloroethane	7.415	83	7177	5.3085	ug/l	98
77) Styrene	7.068	104	16111	5.1608	ug/l	92
78) m&p-Xylenes	6.842	106	19817	10.8930	ug/l	98
79) o-Xylene	7.068	106	9621	5.2694	ug/l	89
80) trans-1,4-Dichloro-2-b...	7.440	53	3003	4.7629	ug/l	82
81) 1,3-Dichlorobenzene	7.982	146	10350	5.3447	ug/l	98
82) 1,4-Dichlorobenzene	8.031	146	11119	5.5322	ug/l	96
83) 1,2-Dichlorobenzene	8.257	146	9883	5.3313	ug/l	99
84) Isopropylbenzene	7.257	105	23081	5.4655	ug/l	99
85) Cyclohexanone	7.336	55	1414	22.1193	ug/l	93
86) Camphene	7.428	93	5697	4.9103	ug/l	99
87) 1,2,3-Trichloropropane	7.452	75	8864	5.0260	ug/l	98
88) 2-Chlorotoluene	7.556	91	13391	5.3812	ug/l	97
89) p-Ethyltoluene	7.543	105	23301	5.2827	ug/l	91
90) 4-Chlorotoluene	7.617	91	12521	5.2097	ug/l	98
91) n-Propylbenzene	7.489	91	25188	5.4574	ug/l	100
92) Bromobenzene	7.458	77	14051	5.2292	ug/l	95
93) 1,3,5-Trimethylbenzene	7.574	105	15214	5.3762	ug/l	90
94) Butyl methacrylate	7.580	41	7301	4.6763	ug/l	80
95) t-Butylbenzene	7.769	119	16519	5.3791	ug/l	99
96) 1,2,4-Trimethylbenzene	7.793	105	17080	5.3291	ug/l	98
97) sec-Butylbenzene	7.891	105	19413	5.3521	ug/l	96
98) 4-Isopropyltoluene	7.964	119	16472	5.2531	ug/l	98
99) n-Butylbenzene	8.202	91	16727	5.2885	ug/l	98
100) p-Diethylbenzene	8.184	119	9061	4.9552	ug/l	99
101) 1,2,4,5-Tetramethylben...	8.641	119	12555	4.7964	ug/l	93
102) 1,2-Dibromo-3-Chloropr...	8.702	157	1638	4.7653	ug/l	94
103) Camphor	9.141	95	7074	44.1940	ug/l	95
104) Hexachlorobutadiene	9.275	225	2787	5.1529	ug/l	95
105) 1,2,4-Trichlorobenzene	9.196	180	5537	5.2564	ug/l	99
106) 1,2,3-Trichlorobenzene	9.494	180	4543	4.9785	ug/l	95
107) Naphthalene	9.354	128	15574	5.1465	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

OK

SampleID : CAL @ 10 PPB
Data File: 2M167168.D
Acq On : 04/26/22 17:57

Operator : JM
Sam Mult : 1 Vial# : 6
Misc : A,5ML

Qt Meth : 2M_A0426.M
Qt On : 04/26/22 20:39
Qt Upd On: 04/26/22 20:36

Data Path : G:\GcMsData\2022\GCMS_2\Data\04-26-22\
Qt Path : G:\GcMsData\2022\GCMS_2\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.087	96	158021	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.726	117	114435	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.013	152	53653	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.690	111	42503	29.87	ug/l	0.00
Spiked Amount 30.000			Recovery	=	99.57%	
39) 1,2-Dichloroethane-d4	4.898	67	23490	30.43	ug/l	0.00
Spiked Amount 30.000			Recovery	=	101.43%	
66) Toluene-d8	5.946	98	154173	30.31	ug/l	0.00
Spiked Amount 30.000			Recovery	=	101.03%	
76) Bromofluorobenzene	7.360	174	48573	30.15	ug/l	0.00
Spiked Amount 30.000			Recovery	=	100.50%	
Target Compounds						
5) Chlorodifluoromethane	1.672	51	16988	9.7558	ug/l	88
6) Dichlorodifluoromethane	1.654	85	14321	14.6930	ug/l	95
7) Chloromethane	1.831	50	12645	12.7713	ug/l	99
8) Bromomethane	2.227	94	5001	7.6323	ug/l	99
9) Vinyl Chloride	1.929	62	14682	11.5951	ug/l	99
10) Chloroethane	2.313	64	9713	11.1801	ug/l	97
11) Trichlorofluoromethane	2.532	101	22808	10.6785	ug/l	98
12) Ethyl ether	2.770	59	10143	9.6493	ug/l	92
13) Furan	2.813	39	20372	9.8828	ug/l	93
14) 1,1,2-Trichloro-1,2,2-...	2.971	101	9991	10.6968	ug/l	96
15) Methylene Chloride	3.386	84	11628	10.6737	ug/l	86
16) Acrolein	2.892	56	12838	52.4550	ug/l	97
17) Acrylonitrile	3.599	53	5303	10.2735	ug/l	94
18) Iodomethane	3.123	142	10374	10.3187	ug/l	99
19) Acetone	3.020	43	20295	51.1633	ug/l	98
20) Carbon Disulfide	3.191	76	26475	9.0940	ug/l	100
21) t-Butyl Alcohol	3.453	59	7243	47.5999	ug/l	90
22) n-Hexane	3.849	57	11363	10.9369	ug/l	99
23) Di-isopropyl-ether	4.007	45	35399	10.5585	ug/l	94
24) 1,1-Dichloroethene	2.983	61	17300	10.5921	ug/l	92
25) Methyl Acetate	3.294	43	10150	10.1611	ug/l	100
26) Methyl-t-butyl ether	3.617	73	32010	10.3156	ug/l	92
27) 1,1-Dichloroethane	3.977	63	21071	10.5844	ug/l	97
28) trans-1,2-Dichloroethene	3.623	96	11622	10.3875	ug/l	86
29) Ethyl-t-butyl ether	4.276	59	33389	9.7941	ug/l	95
30) cis-1,2-Dichloroethene	4.391	61	21345	10.5678	ug/l	89
31) Bromochloromethane	4.550	49	10094	11.3413	ug/l	89
32) 2,2-Dichloropropane	4.398	77	16843	9.9119	ug/l	97
33) Ethyl acetate	4.422	43	14063m	10.4737	ug/l	
34) 1,4-Dioxane	5.483	88	8825	494.2494	ug/l	87
35) 1,1-Dichloropropene	4.812	75	16101	10.4743	ug/l	96
36) Chloroform	4.593	83	21207	10.7466	ug/l	99
38) Cyclohexane	4.757	56	15737	10.3061	ug/l	88
40) 1,2-Dichloroethane	4.940	62	17919	10.7492	ug/l	98
41) 2-Butanone	4.398	43	5398m	9.2927	ug/l	
42) 1,1,1-Trichloroethane	4.721	97	19077	10.3905	ug/l	97
43) Carbon Tetrachloride	4.818	117	16203	9.8908	ug/l	99
44) Vinyl Acetate	4.001	43	41382	10.1083	ug/l	100
45) Bromodichloromethane	5.556	83	15588	10.3649	ug/l	94
46) Methylcyclohexane	5.404	83	13610	10.1056	ug/l	92
47) Dibromomethane	5.489	174	9669	10.5760	ug/l	96
48) 1,2-Dichloropropane	5.416	63	12153	10.7565	ug/l	98
49) Trichloroethene	5.288	130	13469	10.5241	ug/l	93
50) Benzene	4.934	78	45065	10.6184	ug/l	100
51) tert-Amyl methyl ether	4.977	73	31215	9.8845	ug/l	96
53) Iso-propylacetate	4.934	43	25409	10.1470	ug/l	94
54) Methyl methacrylate	5.446	41	12404	10.5688	ug/l	87
55) Dibromochloromethane	6.409	129	11745	10.0169	ug/l	98
56) 2-Chloroethylvinylether	5.696	63	1823	10.0637	ug/l	94
57) cis-1,3-Dichloropropene	5.794	75	18200	10.1669	ug/l	98
58) trans-1,3-Dichloropropene	6.080	75	16000	9.8002	ug/l	96
59) Ethyl methacrylate	6.099	41	12058	10.1287	ug/l	86
60) 1,1,2-Trichloroethane	6.190	97	10902	10.8331	ug/l	98
61) 1,2-Dibromoethane	6.489	107	11852	10.6194	ug/l	100
62) 1,3-Dichloropropane	6.281	76	18694	10.8486	ug/l	97
63) 4-Methyl-2-Pentanone	5.861	43	12518	10.1294	ug/l	97
64) 2-Hexanone	6.294	43	9134	10.0448	ug/l	98
65) Tetrachloroethene	6.281	164	10607	10.3391	ug/l	91
67) Toluene	5.983	92	29106	10.6264	ug/l	99

Quantitation Report (QT Reviewed)

SampleID : CAL @ 10 PPB Operator : JM Qt Meth : 2M_A0426.M
 Data File: 2M167168.D Sam Mult : 1 Vial# : 6 Qt On : 04/26/22 20:39
 Acq On : 04/26/22 17:57 Misc : A,5ML Qt Upd On: 04/26/22 20:36

Data Path : G:\GcMsData\2022\GCMS_2\Data\04-26-22\
 Qt Path : G:\GcMsData\2022\GCMS_2\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1,1,1,2-Tetrachloroethane	6.775	133	11303	10.2948	ug/l	95
69) Chlorobenzene	6.745	112	32535	10.7137	ug/l	99
71) n-Butyl acrylate	6.989	55	24547	10.2816	ug/l	96
72) n-Amyl acetate	7.104	43	22619	10.7720	ug/l	94
73) Bromoform	7.196	173	9141	10.0206	ug/l	98
74) Ethylbenzene	6.781	106	13712	10.7822	ug/l	100
75) 1,1,2,2-Tetrachloroethane	7.415	83	15075	10.8736	ug/l	99
77) Styrene	7.068	104	33793	10.5561	ug/l	94
78) m&p-Xylenes	6.842	106	41098	22.0299	ug/l	97
79) o-Xylene	7.068	106	19713	10.5287	ug/l	95
80) trans-1,4-Dichloro-2-b...	7.440	53	6333	9.7952	ug/l	79
81) 1,3-Dichlorobenzene	7.982	146	21425	10.7891	ug/l	99
82) 1,4-Dichlorobenzene	8.031	146	22215	10.7786	ug/l	98
83) 1,2-Dichlorobenzene	8.257	146	20471	10.7688	ug/l	98
84) Isopropylbenzene	7.257	105	46569	10.7536	ug/l	99
85) Cyclohexanone	7.336	55	2817	42.9726	ug/l	93
86) Camphene	7.428	93	11595	9.7458	ug/l	96
87) 1,2,3-Trichloropropane	7.452	75	18327	10.1336	ug/l	100
88) 2-Chlorotoluene	7.556	91	27248	10.6779	ug/l	96
89) p-Ethyltoluene	7.543	105	48186	10.6533	ug/l	93
90) 4-Chlorotoluene	7.610	91	25774	10.4578	ug/l	99
91) n-Propylbenzene	7.482	91	50850	10.7441	ug/l	100
92) Bromobenzene	7.458	77	29185	10.5918	ug/l	95
93) 1,3,5-Trimethylbenzene	7.574	105	30056	10.3573	ug/l	89
94) Butyl methacrylate	7.580	41	15553	9.7143	ug/l	82
95) t-Butylbenzene	7.769	119	32971	10.4699	ug/l	99
96) 1,2,4-Trimethylbenzene	7.793	105	34660	10.5458	ug/l	98
97) sec-Butylbenzene	7.891	105	39020	10.4907	ug/l	98
98) 4-Isopropyltoluene	7.964	119	33425	10.3950	ug/l	98
99) n-Butylbenzene	8.202	91	33690	10.3871	ug/l	98
100) p-Diethylbenzene	8.184	119	18950	10.1060	ug/l	99
101) 1,2,4,5-Tetramethylben...	8.641	119	25948	9.6668	ug/l	96
102) 1,2-Dibromo-3-Chloropr...	8.702	157	3421	9.7054	ug/l	89
103) Camphor	9.141	95	15081	91.8777	ug/l	100
104) Hexachlorobutadiene	9.275	225	5545	9.9976	ug/l	95
105) 1,2,4-Trichlorobenzene	9.196	180	11258	10.4221	ug/l	99
106) 1,2,3-Trichlorobenzene	9.494	180	9553	10.2089	ug/l	97
107) Naphthalene	9.354	128	31642	10.1966	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

KMC

Abundance

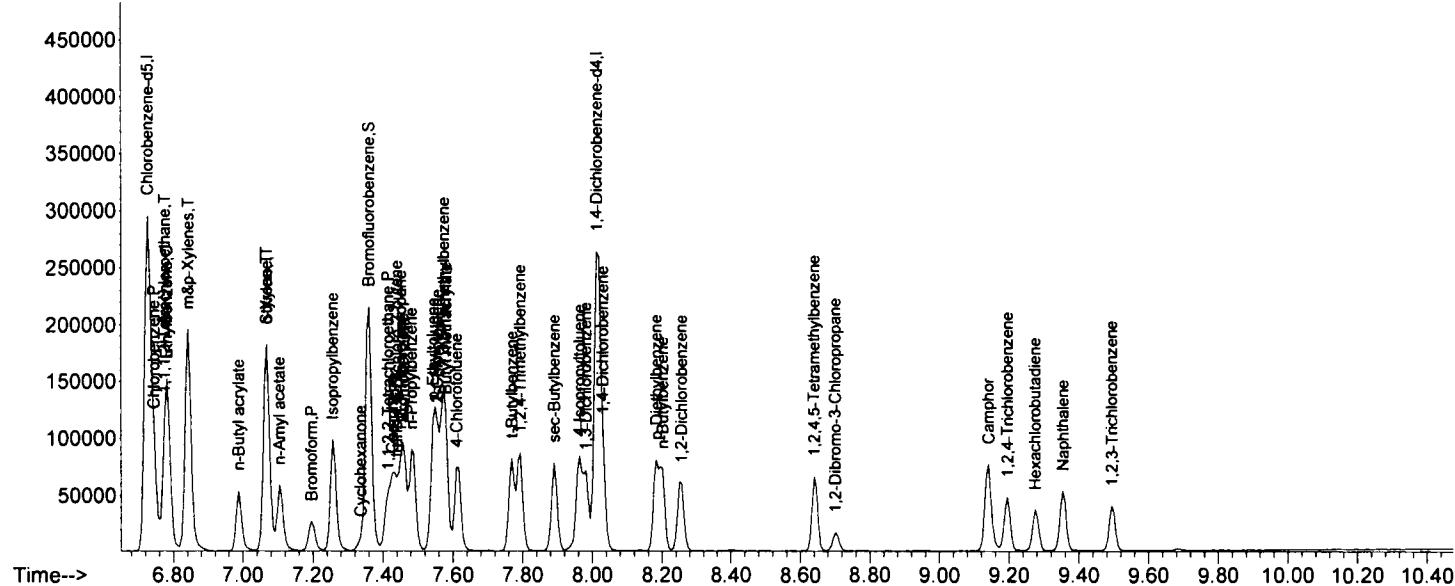
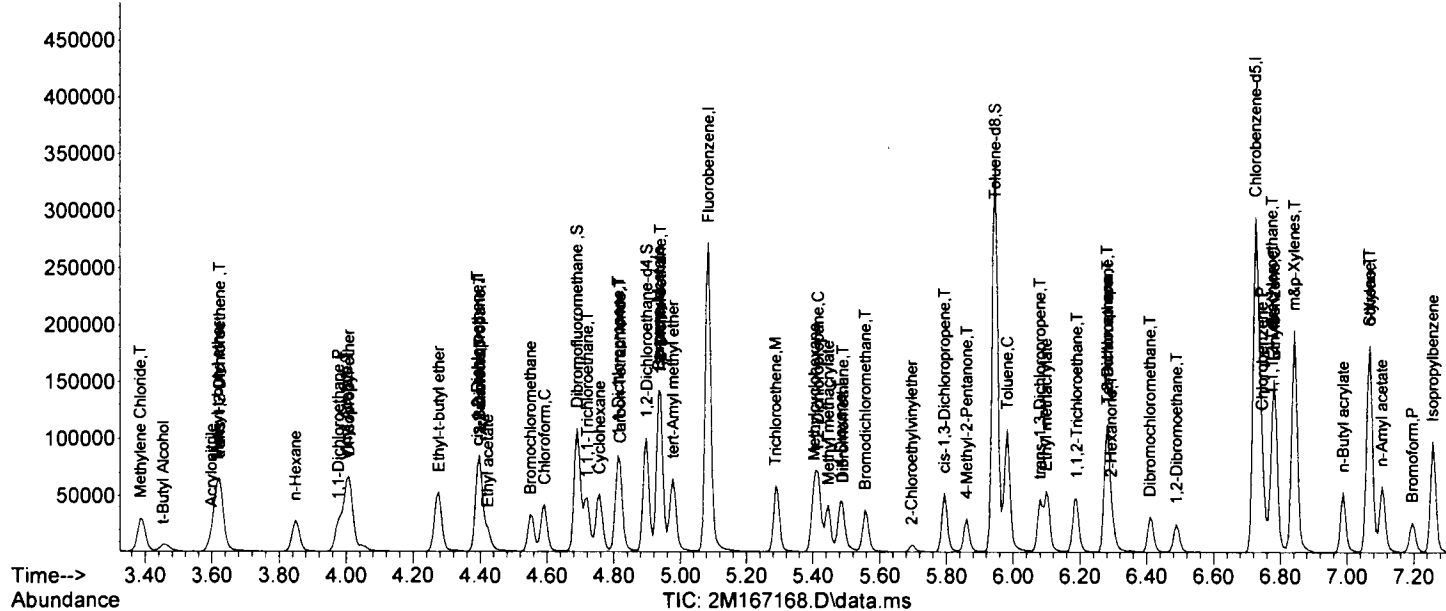
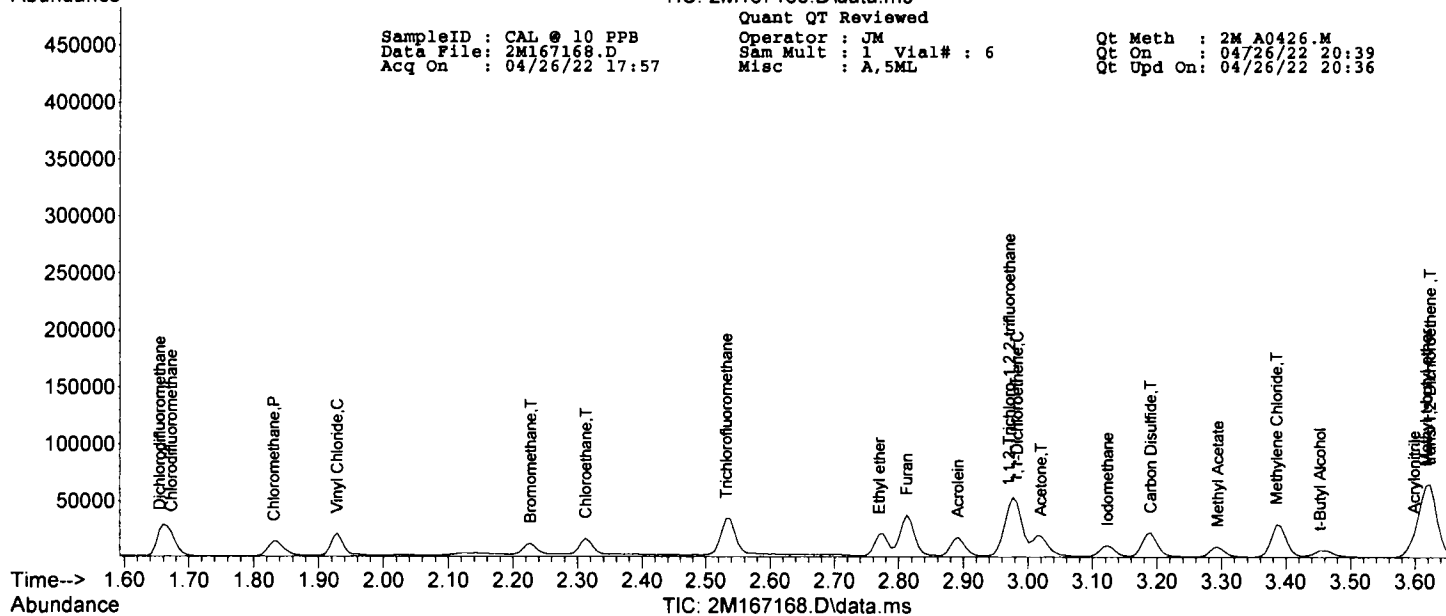
TIC: 2M167168.D\data.ms

Quant QT Reviewed

SampleID : CAL @ 10 PPB
 Data File: 2M167168.D
 Acq On : 04/26/22 17:57

Operator : JM
 Sam Mult : 1 Vial# : 6
 Misc : A, 5ML

Qt Meth : 2M A0426.M
 Qt On : 04/26/22 20:39
 Qt Upd On: 04/26/22 20:36



SampleID : CAL @ 50 PPB
Data File: 2M167172.D
Acq On : 04/26/22 19:16

Operator : JM
Sam Mult : 1 Vial# : 10
Misc : A,5ML

Qt Meth : 2M_A0426.M
Qt On : 04/26/22 20:38
Qt Upd On: 04/26/22 20:36

Data Path : G:\GcMsData\2022\GCMS_2\Data\04-26-22\
Qt Path : G:\GcMsData\2022\GCMS_2\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QI on	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.087	96	162265	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.727	117	117163	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.013	152	53182	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.690	111	43972	30.09	ug/l	0.00
Spiked Amount 30.000			Recovery	=	100.30%	
39) 1,2-Dichloroethane-d4	4.898	67	23483	29.63	ug/l	0.00
Spiked Amount 30.000			Recovery	=	98.77%	
66) Toluene-d8	5.946	98	159740	30.68	ug/l	0.00
Spiked Amount 30.000			Recovery	=	102.27%	
76) Bromofluorobenzene	7.361	174	49328	30.89	ug/l	0.00
Spiked Amount 30.000			Recovery	=	102.97%	
Target Compounds						
5) Chlorodifluoromethane	1.673	51	87652	49.0198	ug/l	93
6) Dichlorodifluoromethane	1.654	85	78091	78.0237	ug/l	99
7) Chloromethane	1.831	50	63174	62.1361	ug/l	97
8) Bromomethane	2.227	94	30416	45.2053	ug/l	99
9) Vinyl Chloride	1.929	62	75663	58.1920	ug/l	99
10) Chloroethane	2.313	64	47717	53.4877	ug/l	96
11) Trichlorofluoromethane	2.538	101	119157	54.3290	ug/l	97
12) Ethyl ether	2.770	59	50687	46.9589	ug/l	91
13) Furan	2.813	39	101500	47.9514	ug/l	90
14) 1,1,2-Trichloro-1,2,2-...	2.971	101	52226	54.4530	ug/l	99
15) Methylene Chloride	3.392	84	57360	51.2756	ug/l	90
16) Acrolein	2.892	56	66031	262.7407	ug/l	99
17) Acrylonitrile	3.593	53	26799	50.5599	ug/l	99
18) Iodomethane	3.124	142	69471	67.2932	ug/l	99
19) Acetone	3.014	43	102164	250.8172	ug/l	97
20) Carbon Disulfide	3.191	76	136801	45.7613	ug/l	100
21) t-Butyl Alcohol	3.459	59	36945	236.4465	ug/l	96
22) n-Hexane	3.849	57	60221	56.4467	ug/l	98
23) Di-isopropyl-ether	4.008	45	176697	51.3251	ug/l	93
24) 1,1-Dichloroethene	2.983	61	89160	53.1612	ug/l	91
25) Methyl Acetate	3.288	43	49767	48.5183	ug/l	100
26) Methyl-t-butyl ether	3.617	73	163992	51.4660	ug/l	94
27) 1,1-Dichloroethane	3.977	63	104345	51.0437	ug/l	99
28) trans-1,2-Dichloroethene	3.623	96	58861	51.2325	ug/l	90
29) Ethyl-t-butyl ether	4.276	59	167134	47.7437	ug/l	94
30) cis-1,2-Dichloroethene	4.392	61	105969	51.0927	ug/l	90
31) Bromochloromethane	4.550	49	48907	53.5133	ug/l	86
32) 2,2-Dichloropropane	4.398	77	88985	50.9968	ug/l	98
33) Ethyl acetate	4.422	43	68030m	49.3417	ug/l	
34) 1,4-Dioxane	5.483	88	45573	2485.5874	ug/l	92
35) 1,1-Dichloropropene	4.812	75	80759	51.1624	ug/l	99
36) Chloroform	4.593	83	105055	51.8440	ug/l	100
38) Cyclohexane	4.757	56	81992	52.2920	ug/l	86
40) 1,2-Dichloroethane	4.940	62	87175	50.9266	ug/l	100
41) 2-Butanone	4.392	43	29996m	50.2876	ug/l	
42) 1,1,1-Trichloroethane	4.721	97	96938	51.4176	ug/l	98
43) Carbon Tetrachloride	4.818	117	85903	51.0665	ug/l	95
44) Vinyl Acetate	4.001	43	213914	50.8855	ug/l	100
45) Bromodichloromethane	5.556	83	79013	51.1638	ug/l	99
46) Methylcyclohexane	5.404	83	70331	50.8559	ug/l	92
47) Dibromomethane	5.489	174	47621	50.7259	ug/l	99
48) 1,2-Dichloropropane	5.416	63	59300	51.1131	ug/l	98
49) Trichloroethene	5.288	130	66605	50.6814	ug/l	96
50) Benzene	4.934	78	220970	50.7040	ug/l	100
51) tert-Amyl methyl ether	4.977	73	155995	48.1051	ug/l	97
53) Iso-propylacetate	4.934	43	131204	51.1762	ug/l	95
54) Methyl methacrylate	5.446	41	63589	52.9195	ug/l	88
55) Dibromochloromethane	6.410	129	63152	52.6060	ug/l	99
56) 2-Chloroethylvinylether	5.696	63	9510	51.2766	ug/l	98
57) cis-1,3-Dichloropropene	5.794	75	94407	51.5096	ug/l	99
58) trans-1,3-Dichloropropene	6.080	75	86249	51.5986	ug/l	99
59) Ethyl methacrylate	6.099	41	62236	51.0608	ug/l	85
60) 1,1,2-Trichloroethane	6.190	97	52614	51.0641	ug/l	95
61) 1,2-Dibromoethane	6.489	107	59066	51.6909	ug/l	100
62) 1,3-Dichloropropane	6.281	76	90644	51.3783	ug/l	100
63) 4-Methyl-2-Pentanone	5.861	43	65145	51.4872	ug/l	97
64) 2-Hexanone	6.294	43	46851	50.3229	ug/l	96
65) Tetrachloroethene	6.281	164	54076	51.4827	ug/l	98
67) Toluene	5.983	92	142426	50.7879	ug/l	98

Quantitation Report (QT Reviewed)

SampleID : CAL @ 50 PPB Operator : JM Qt Meth : 2M_A0426.M
 Data File: 2M167172.D Sam Mult : 1 Vial# : 10 Qt On : 04/26/22 20:38
 Acq On : 04/26/22 19:16 Misc : A,5ML Qt Upd On: 04/26/22 20:36

Data Path : G:\GcMsData\2022\GCMS_2\Data\04-26-22\
 Qt Path : G:\GcMsData\2022\GCMS_2\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1,1,1,2-Tetrachloroethane	6.775	133	57475	51.1295	ug/l	100
69) Chlorobenzene	6.745	112	158300	50.9142	ug/l	100
71) n-Butyl acrylate	6.989	55	129759	54.8316	ug/l	96
72) n-Amyl acetate	7.104	43	115062	55.2822	ug/l	94
73) Bromoform	7.196	173	49513	54.7580	ug/l	97
74) Ethylbenzene	6.781	106	65204	51.7263	ug/l	95
75) 1,1,2,2-Tetrachloroethane	7.415	83	73877	53.7592	ug/l	99
77) Styrene	7.068	104	169066	53.2796	ug/l	93
78) m&p-Xylenes	6.842	106	199264	107.7582	ug/l	94
79) o-Xylene	7.068	106	98266	52.9488	ug/l	100
80) trans-1,4-Dichloro-2-b...	7.440	53	33905	52.9048	ug/l	90
81) 1,3-Dichlorobenzene	7.982	146	104404	53.0411	ug/l	99
82) 1,4-Dichlorobenzene	8.031	146	107415	52.5788	ug/l	99
83) 1,2-Dichlorobenzene	8.257	146	99464	52.7863	ug/l	100
84) Isopropylbenzene	7.257	105	231310	53.8868	ug/l	99
85) Cyclohexanone	7.336	55	13899	213.9034	ug/l	94
86) Camphene	7.428	93	59511	50.4631	ug/l	98
87) 1,2,3-Trichloropropane	7.452	75	94985	52.9856	ug/l	96
88) 2-Chlorotoluene	7.556	91	137692	54.4365	ug/l	97
89) p-Ethyltoluene	7.543	105	234982	52.4115	ug/l	93
90) 4-Chlorotoluene	7.617	91	126089	51.6139	ug/l	99
91) n-Propylbenzene	7.482	91	252495	53.8219	ug/l	99
92) Bromobenzene	7.458	77	143432	52.5154	ug/l	95
93) 1,3,5-Trimethylbenzene	7.574	105	151873	52.7992	ug/l	91
94) Butyl methacrylate	7.580	41	79524	50.1103	ug/l	83
95) t-Butylbenzene	7.769	119	165858	53.1342	ug/l	99
96) 1,2,4-Trimethylbenzene	7.793	105	172999	53.1035	ug/l	100
97) sec-Butylbenzene	7.891	105	195986	53.1583	ug/l	98
98) 4-Isopropyltoluene	7.964	119	169811	53.2778	ug/l	98
99) n-Butylbenzene	8.202	91	168956	52.5529	ug/l	99
100) p-Diethylbenzene	8.184	119	95776	51.5294	ug/l	99
101) 1,2,4,5-Tetramethylben...	8.641	119	131563	49.4471	ug/l	96
102) 1,2-Dibromo-3-Chloropr...	8.702	157	18714	53.5621	ug/l	91
103) Camphor	9.141	95	79542	488.8841	ug/l	99
104) Hexachlorobutadiene	9.275	225	27778	50.5271	ug/l	96
105) 1,2,4-Trichlorobenzene	9.196	180	55702	52.0227	ug/l	99
106) 1,2,3-Trichlorobenzene	9.494	180	48114	51.8729	ug/l	98
107) Naphthalene	9.354	128	161897	52.6334	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Abundance

TIC: 2M167172.D\data.ms

Quant QT Reviewed

SampleID : CAL @ 50 PPB
 Data File: 2M167172.D
 Acq On : 04/26/22 19:16

Operator : JM
 Sam Mult : 1 Vial# : 10
 Misc : A, 5ML

Qt Meth : 2M_A0426.M
 Qt On : 04/26/22 20:38
 Qt Upd On : 04/26/22 20:36

1200000

1000000

800000

600000

400000

200000

Time--> 1.60

Abundance

TIC: 2M167172.D\data.ms

1200000

1000000

800000

600000

400000

200000

Time--> 3.40

Abundance

TIC: 2M167172.D\data.ms

1200000

1000000

800000

600000

400000

200000

Time-->

6.80

7.00

7.20

7.40

7.60

7.80

8.00

8.20

8.40

8.60

8.80

9.00

9.20

9.40

9.60

9.80

10.00

10.20

10.40

SampleID : CAL @ 100 PPB
Data File: 2M167175.D
Acq On : 04/26/22 20:15

Operator : JM
Sam Mult : 1 Vial# : 13
Misc : A,5ML

Qt Meth : 2M_A0426.M
Qt On : 04/26/22 20:39
Qt Upd On: 04/26/22 20:36

Data Path : G:\GcMsData\2022\GCMS_2\Data\04-26-22\
Qt Path : G:\GcMsData\2022\GCMS_2\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.087	96	160949	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.727	117	114750	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.013	152	52579	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.690	111	44471	30.68	ug/l	0.00
Spiked Amount 30.000			Recovery =	102.27%		
39) 1,2-Dichloroethane-d4	4.898	67	23492	29.88	ug/l	0.00
Spiked Amount 30.000			Recovery =	99.60%		
66) Toluene-d8	5.946	98	157585	30.90	ug/l	0.00
Spiked Amount 30.000			Recovery =	103.00%		
76) Bromofluorobenzene	7.361	174	49177	31.15	ug/l	0.00
Spiked Amount 30.000			Recovery =	103.83%		
Target Compounds						
5) Chlorodifluoromethane	1.673	51	176780	99.6734	ug/l	90
6) Dichlorodifluoromethane	1.660	85	151872	152.9819	ug/l	98
7) Chloromethane	1.831	50	125262	124.2114	ug/l	99
8) Bromomethane	2.227	94	75265	112.7760	ug/l	98
9) Vinyl Chloride	1.929	62	149585	115.9857	ug/l	99
10) Chloroethane	2.313	64	96639	109.2119	ug/l	99
11) Trichlorofluoromethane	2.538	101	234687	107.8792	ug/l	99
12) Ethyl ether	2.776	59	104004	97.1422	ug/l	91
13) Furan	2.813	39	205292	97.7786	ug/l	91
14) 1,1,2-Trichloro-1,2,2-...	2.971	101	99689	104.7898	ug/l	99
15) Methylene Chloride	3.392	84	115619	104.1999	ug/l	89
16) Acrolein	2.892	56	135558	543.8025	ug/l	98
17) Acrylonitrile	3.593	53	55125	104.8510	ug/l	99
18) Iodomethane	3.123	142	145786	142.3705	ug/l	99
19) Acetone	3.020	43	207014	512.3842	ug/l	100
20) Carbon Disulfide	3.191	76	276972	93.4075	ug/l	100
21) t-Butyl Alcohol	3.459	59	76879	496.0455	ug/l	95
22) n-Hexane	3.849	57	115059	108.7296	ug/l	99
23) Di-isopropyl-ether	4.008	45	360785	105.6539	ug/l	93
24) 1,1-Dichloroethene	2.983	61	174446	104.8630	ug/l	91
25) Methyl Acetate	3.294	43	102243	100.4926	ug/l	100
26) Methyl-t-butyl ether	3.617	73	334481	105.8293	ug/l	93
27) 1,1-Dichloroethane	3.977	63	209799	103.4691	ug/l	98
28) trans-1,2-Dichloroethene	3.623	96	117636	103.2274	ug/l	89
29) Ethyl-t-butyl ether	4.276	59	342423	98.6168	ug/l	95
30) cis-1,2-Dichloroethene	4.392	61	213502	103.7811	ug/l	90
31) Bromochloromethane	4.550	49	96320	106.2537	ug/l	86
32) 2,2-Dichloropropane	4.398	77	176619	102.0470	ug/l	98
33) Ethyl acetate	4.422	43	139737	102.1790	ug/l	99
34) 1,4-Dioxane	5.483	88	90537	4978.3346	ug/l	90
35) 1,1-Dichloropropene	4.812	75	158106	100.9823	ug/l	99
36) Chloroform	4.593	83	211702	105.3278	ug/l	99
38) Cyclohexane	4.757	56	157145	101.0417	ug/l	87
40) 1,2-Dichloroethane	4.940	62	178848	105.3352	ug/l	98
41) 2-Butanone	4.392	43	61550	104.0309	ug/l	95
42) 1,1,1-Trichloroethane	4.721	97	193517	103.4841	ug/l	100
43) Carbon Tetrachloride	4.818	117	170961	102.4617	ug/l	96
44) Vinyl Acetate	4.001	43	437822	105.0000	ug/l	100
45) Bromodichloromethane	5.556	83	163537	106.7620	ug/l	100
46) Methylcyclohexane	5.404	83	137337	100.1195	ug/l	92
47) Dibromomethane	5.489	174	98311	105.5771	ug/l	98
48) 1,2-Dichloropropane	5.416	63	120523	104.7331	ug/l	97
49) Trichloroethene	5.294	130	133983	102.7845	ug/l	98
50) Benzene	4.934	78	443771	102.6607	ug/l	100
51) tert-Amyl methyl ether	4.977	73	319157	99.2250	ug/l	97
53) Iso-propylacetate	4.934	43	272012	108.3294	ug/l	94
54) Methyl methacrylate	5.446	41	131704	111.9104	ug/l	88
55) Dibromochloromethane	6.410	129	131932	112.2112	ug/l	100
56) 2-Chloroethylvinylether	5.696	63	19012	104.6656	ug/l	99
57) cis-1,3-Dichloropropene	5.794	75	195481	108.8996	ug/l	99
58) trans-1,3-Dichloropropene	6.080	75	179168	109.4414	ug/l	99
59) Ethyl methacrylate	6.099	41	128704	107.8141	ug/l	85
60) 1,1,2-Trichloroethane	6.190	97	108106	107.1278	ug/l	95
61) 1,2-Dibromoethane	6.489	107	120101	107.3150	ug/l	99
62) 1,3-Dichloropropane	6.281	76	183212	106.0308	ug/l	99
63) 4-Methyl-2-Pentanone	5.861	43	132545	106.9595	ug/l	99
64) 2-Hexanone	6.294	43	96546	105.8812	ug/l	97
65) Tetrachloroethene	6.281	164	107483	104.4804	ug/l	99
67) Toluene	5.983	92	286576	104.3395	ug/l	99

Quantitation Report (QT Reviewed)

SampleID : CAL @ 100 PPB
 Data File: 2M167175.D
 Acq On : 04/26/22 20:15

Operator : JM
 Sam Mult : 1 Vial# : 13
 Misc : A,5ML

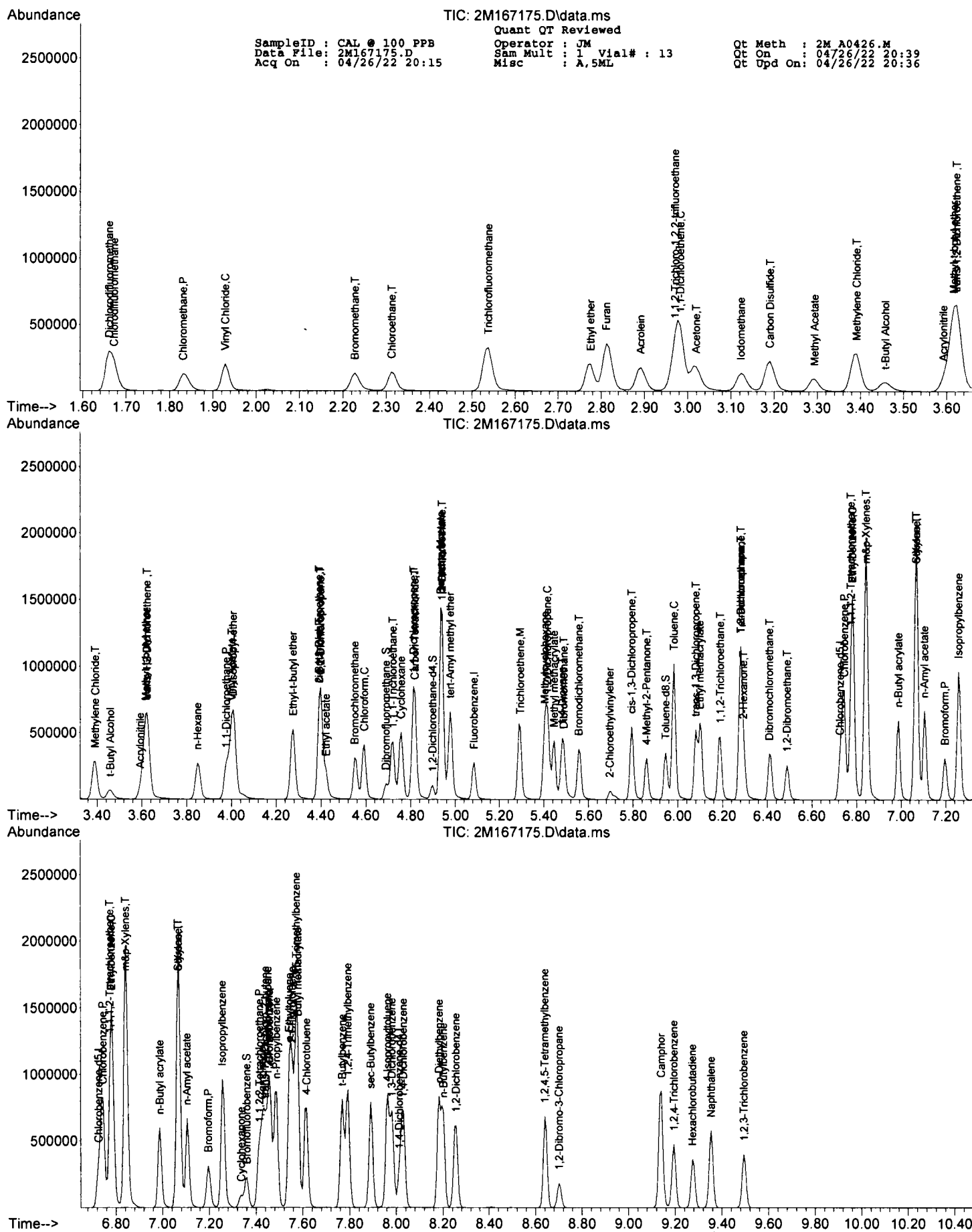
Qt Meth : 2M_A0426.M
 Qt On : 04/26/22 20:39
 Qt Upd On: 04/26/22 20:36

Data Path : G:\GcMsData\2022\GCMS_2\Data\04-26-22\
 Qt Path : G:\GcMsData\2022\GCMS_2\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1,1,1,2-Tetrachloroethane	6.775	133	120337	109.3023	ug/l	100
69) Chlorobenzene	6.745	112	320685	105.3111	ug/l	99
71) n-Butyl acrylate	6.989	55	271825	116.1810	ug/l	96
72) n-Amyl acetate	7.104	43	241081	117.1572	ug/l	93
73) Bromoform	7.196	173	105901	118.4625	ug/l	99
74) Ethylbenzene	6.781	106	133794	107.3559	ug/l	96
75) 1,1,2,2-Tetrachloroethane	7.415	83	151013	111.1503	ug/l	98
77) Styrene	7.068	104	346205	110.3546	ug/l	93
78) m&p-Xylenes	6.842	106	403294	220.5949	ug/l	96
79) o-Xylene	7.068	106	199155	108.5417	ug/l	99
80) trans-1,4-Dichloro-2-b...	7.440	53	70823	111.7785	ug/l	92
81) 1,3-Dichlorobenzene	7.982	146	214595	110.2724	ug/l	99
82) 1,4-Dichlorobenzene	8.031	146	220614	109.2273	ug/l	99
83) 1,2-Dichlorobenzene	8.257	146	204896	109.9870	ug/l	99
84) Isopropylbenzene	7.257	105	459496	108.2734	ug/l	99
85) Cyclohexanone	7.336	55	28504	443.7028	ug/l	94
86) Camphene	7.428	93	118235	101.4087	ug/l	99
87) 1,2,3-Trichloropropane	7.452	75	195600	110.3632	ug/l	96
88) 2-Chlorotoluene	7.556	91	277782	111.0805	ug/l	98
89) p-Ethyltoluene	7.543	105	471696	106.4158	ug/l	93
90) 4-Chlorotoluene	7.617	91	261711	108.3586	ug/l	99
91) n-Propylbenzene	7.489	91	502696	108.3838	ug/l	100
92) Bromobenzene	7.458	77	293902	108.8417	ug/l	95
93) 1,3,5-Trimethylbenzene	7.574	105	308824	108.5950	ug/l	91
94) Butyl methacrylate	7.580	41	166054	105.8352	ug/l	83
95) t-Butylbenzene	7.769	119	332563	107.7617	ug/l	99
96) 1,2,4-Trimethylbenzene	7.793	105	351189	109.0368	ug/l	100
97) sec-Butylbenzene	7.891	105	393858	108.0533	ug/l	98
98) 4-Isopropyltoluene	7.964	119	340860	108.1706	ug/l	99
99) n-Butylbenzene	8.202	91	340513	107.1296	ug/l	99
100) p-Diethylbenzene	8.184	119	194536	105.8645	ug/l	99
101) 1,2,4,5-Tetramethylben...	8.641	119	272235	103.4912	ug/l	96
102) 1,2-Dibromo-3-Chloropr...	8.702	157	39302	113.7780	ug/l	90
103) Camphor	9.141	95	163577	1016.9134	ug/l	99
104) Hexachlorobutadiene	9.275	225	56708	104.3325	ug/l	97
105) 1,2,4-Trichlorobenzene	9.196	180	114982	108.6186	ug/l	99
106) 1,2,3-Trichlorobenzene	9.494	180	97907	106.7666	ug/l	97
107) Naphthalene	9.354	128	332852	109.4525	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

unc



SampleID : CAL @ 250 PPB
Data File: 2M167178.D
Acq On : 04/26/22 21:14

Operator : JM
Sam Mult: 1 Vial# : 16
Misc : A,5ML

Qt Meth : 2M A0426.M
Qt On : 04/26/22 21:32
Qt Upd On: 04/26/22 20:36

Data Path : G:\GCMSData\2022\GCMS_2\Data\04-26-22\
Qt Path : G:\GCMSData\2022\GCMS_2\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.087	96	154857	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.727	117	115507	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	54963	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.690	111	42373	30.38	ug/l	0.00
Spiked Amount	30.000		Recovery	=	101.27%	
39) 1,2-Dichloroethane-d4	4.898	67	22833	30.18	ug/l	0.00
Spiked Amount	30.000		Recovery	=	100.60%	
66) Toluene-d8	5.946	98	153481	29.90	ug/l	0.00
Spiked Amount	30.000		Recovery	=	99.67%	
76) Bromofluorobenzene	7.361	174	48839	29.59	ug/l	0.00
Spiked Amount	30.000		Recovery	=	98.63%	
Target Compounds						
5) Chlorodifluoromethane	1.673	51	437345	256.2877	ug/l	91
6) Dichlorodifluoromethane	1.654	85	380156	397.9986	ug/l	99
7) Chloromethane	1.831	50	311539	321.0790	ug/l	100
8) Bromomethane	2.221	94	243954	379.9174	ug/l	99
9) Vinyl Chloride	1.929	62	375590	302.6829	ug/l	100
10) Chloroethane	2.307	64	252307	296.3495	ug/l	99
11) Trichlorofluoromethane	2.532	101	602262	287.7343	ug/l	98
12) Ethyl ether	2.770	59	253337	245.9313	ug/l	90
13) Furan	2.813	39	506414	250.6889	ug/l	90
14) 1,1,2-Trichloro-1,2,2-...	2.971	101	253189	276.6138	ug/l	99
15) Methylene Chloride	3.386	84	281103	263.3062	ug/l	88
16) Acrolein	2.892	56	329077	1372.0533	ug/l	97
17) Acrylonitrile	3.593	53	135131	267.1386	ug/l	97
18) Iodomethane	3.124	142	369607	375.1473	ug/l	98
19) Acetone	3.014	43	509334	1310.2559	ug/l	98
20) Carbon Disulfide	3.184	76	692165	242.6124	ug/l	100
21) t-Butyl Alcohol	3.459	59	182046	1220.8220	ug/l	97
22) n-Hexane	3.849	57	287751	282.6192	ug/l	99
23) Di-isopropyl-ether	4.008	45	880099	267.8711	ug/l	93
24) 1,1-Dichloroethene	2.977	61	438776	274.1331	ug/l	89
25) Methyl Acetate	3.288	43	251467	256.8852	ug/l	100
26) Methyl-t-butyl ether	3.617	73	814104	267.7146	ug/l	93
27) 1,1-Dichloroethane	3.977	63	514416	263.6813	ug/l	99
28) trans-1,2-Dichloroethene	3.623	96	289306	263.8575	ug/l	91
29) Ethyl-t-butyl ether	4.276	59	837002	250.5370	ug/l	94
30) cis-1,2-Dichloroethene	4.392	61	525614	265.5467	ug/l	90
31) Bromochloromethane	4.550	49	228322	261.7778	ug/l	86
32) 2,2-Dichloropropane	4.398	77	439613	263.9919	ug/l	99
33) Ethyl acetate	4.422	43	346172	263.0871	ug/l	100
34) 1,4-Dioxane	5.483	88	213131	12180.4139	ug/l	91
35) 1,1-Dichloropropene	4.812	75	394375	261.7964	ug/l	98
36) Chloroform	4.593	83	515294	266.4591	ug/l	99
38) Cyclohexane	4.757	56	396658	265.0780	ug/l	87
40) 1,2-Dichloroethane	4.940	62	440978	269.9378	ug/l	100
41) 2-Butanone	4.392	43	149006	261.7552	ug/l	96
42) 1,1,1-Trichloroethane	4.721	97	481526	267.6281	ug/l	98
43) Carbon Tetrachloride	4.818	117	437218	272.3453	ug/l	96
44) Vinyl Acetate	4.001	43	1067278	266.0276	ug/l	100
45) Bromodichloromethane	5.556	83	401535	272.4468	ug/l	99
46) Methylcyclohexane	5.404	83	347087	262.9825	ug/l	92
47) Dibromomethane	5.489	174	241835	269.9256	ug/l	99
48) 1,2-Dichloropropane	5.416	63	291794	263.5408	ug/l	98
49) Trichloroethene	5.288	130	331906	264.6370	ug/l	98
50) Benzene	4.934	78	1079958	259.6626	ug/l	100
51) tert-Amyl methyl ether	4.977	73	761924	246.1989	ug/l	97
53) Iso-propylacetate	4.934	43	663423	262.4782	ug/l	96
54) Methyl methacrylate	5.446	41	323544	273.1173	ug/l	87
55) Dibromochloromethane	6.416	129	329715	278.5924	ug/l	100
56) 2-Chloroethylvinylether	5.696	63	42481	232.3354	ug/l	98
57) cis-1,3-Dichloropropene	5.794	75	477246	264.1243	ug/l	100
58) trans-1,3-Dichloropropene	6.080	75	445672	270.4463	ug/l	99
59) Ethyl methacrylate	6.105	41	318513	265.0666	ug/l	84
60) 1,1,2-Trichloroethane	6.190	97	262724	258.6404	ug/l	94
61) 1,2-Dibromoethane	6.489	107	294479	261.4042	ug/l	100
62) 1,3-Dichloropropane	6.281	76	444357	255.4787	ug/l	99
63) 4-Methyl-2-Pentanone	5.861	43	327007	262.1546	ug/l	98
64) 2-Hexanone	6.294	43	237167	258.3944	ug/l	97
65) Tetrachloroethene	6.281	164	271540	262.2244	ug/l	98
67) Toluene	5.983	92	707737	255.9914	ug/l	97

Quantitation Report (QT Reviewed)

SampleID : CAL @ 250 PPB
 Data File: 2M167178.D
 Acq On : 04/26/22 21:14

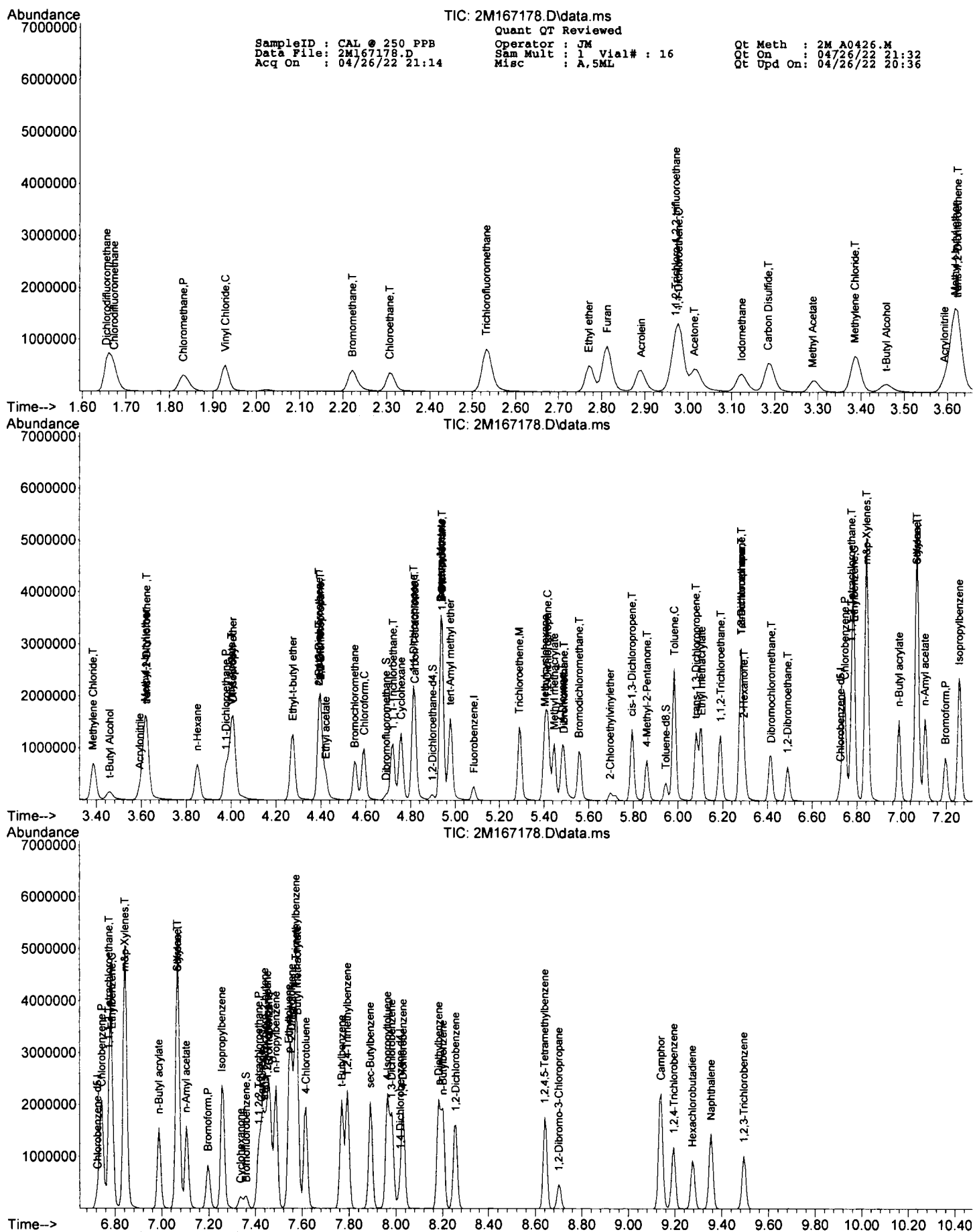
Operator : JM
 Sam Mult : 1 Vial# : 16
 Misc : A,5ML

Qt Meth : 2M A0426.M
 Qt On : 04/26/22 21:32
 Qt Upd On: 04/26/22 20:36

Data Path : G:\GcMsData\2022\GCMS_2\Data\04-26-22\
 Qt Path : G:\GcMsData\2022\GCMS_2\MethodQt\
 Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.775	133	303638	273.9874	ug/l	99
69)	Chlorobenzene	6.745	112	788950	257.3887	ug/l	99
71)	n-Butyl acrylate	6.989	55	675175	276.0604	ug/l	96
72)	n-Amyl acetate	7.104	43	598151	278.0728	ug/l	93
73)	Bromoform	7.196	173	273137	292.2829	ug/l	99
74)	Ethylbenzene	6.787	106	347069	266.4078	ug/l	95
75)	1,1,2,2-Tetrachloroethane	7.415	83	365698	257.4902	ug/l	98
77)	Styrene	7.068	104	875043	266.8262	ug/l	92
78)	m&p-Xylenes	6.842	106	1011133	529.0832	ug/l	99
79)	o-Xylene	7.068	106	503211	262.3598	ug/l	99
80)	trans-1,4-Dichloro-2-b...	7.440	53	182627	275.7344	ug/l	93
81)	1,3-Dichlorobenzene	7.982	146	543166	267.0065	ug/l	99
82)	1,4-Dichlorobenzene	8.031	146	554599	262.6751	ug/l	99
83)	1,2-Dichlorobenzene	8.257	146	517196	265.5859	ug/l	99
84)	Isopropylbenzene	7.257	105	1153658	260.0513	ug/l	100
85)	Cyclohexanone	7.336	55	69335	1032.4780	ug/l	93
86)	Camphene	7.428	93	304912	250.1759	ug/l	98
87)	1,2,3-Trichloropropane	7.452	75	493589	266.4175	ug/l	95
88)	2-Chlorotoluene	7.556	91	688653	263.4365	ug/l	96
89)	p-Ethyltoluene	7.543	105	1173946	253.3576	ug/l	99
90)	4-Chlorotoluene	7.617	91	678747	268.8385	ug/l	99
91)	n-Propylbenzene	7.489	91	1253504	258.5393	ug/l	100
92)	Bromobenzene	7.458	77	733268	259.7750	ug/l	95
93)	1,3,5-Trimethylbenzene	7.574	105	794107	267.1283	ug/l	99
94)	Butyl methacrylate	7.580	41	419171	255.5724	ug/l	82
95)	t-Butylbenzene	7.769	119	841465	260.8365	ug/l	98
96)	1,2,4-Trimethylbenzene	7.793	105	882982	262.2562	ug/l	99
97)	sec-Butylbenzene	7.891	105	997591	261.8140	ug/l	98
98)	4-Isopropyltoluene	7.964	119	868015	263.5132	ug/l	98
99)	n-Butylbenzene	8.202	91	867928	261.2170	ug/l	99
100)	p-Diethylbenzene	8.184	119	496001	258.2110	ug/l	99
101)	1,2,4,5-Tetramethylben...	8.641	119	700427	254.7206	ug/l	96
102)	1,2-Dibromo-3-Chloropr...	8.702	157	101857	282.0826	ug/l	88
103)	Camphor	9.141	95	414103	2462.7029	ug/l	99
104)	Hexachlorobutadiene	9.275	225	142423	250.6671	ug/l	95
105)	1,2,4-Trichlorobenzene	9.196	180	289285	261.4219	ug/l	99
106)	1,2,3-Trichlorobenzene	9.494	180	244525	255.0861	ug/l	97
107)	Naphthalene	9.354	128	829609	260.9696	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed



SampleID : CAL @ 500 PPB
Data File: 2M167181.D
Acq On : 04/26/22 22:13

Operator : JM
Sam Mult : 1 Vial# : 19
Misc : A,5ML

Qt Meth : 2M_A0426.M
Qt On : 04/26/22 23:15
Qt Upd On: 04/26/22 20:36

Data Path : G:\GcMsData\2022\GCMS_2\Data\04-26-22\
Qt Path : G:\GcMsData\2022\GCMS_2\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.087	96	169363	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.727	117	131229	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	64155	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.690	111	47095	30.88	ug/l	0.00
Spiked Amount 30.000			Recovery	=	102.93%	
39) 1,2-Dichloroethane-d4	4.898	67	24970	30.18	ug/l	0.00
Spiked Amount 30.000			Recovery	=	100.60%	
66) Toluene-d8	5.946	98	170059	29.16	ug/l	0.00
Spiked Amount 30.000			Recovery	=	97.20%	
76) Bromofluorobenzene	7.361	174	55827	28.98	ug/l	0.00
Spiked Amount 30.000			Recovery	=	96.60%	
Target Compounds						
5) Chlorodifluoromethane	1.666	51	886773	475.1474	ug/l	91
6) Dichlorodifluoromethane	1.654	85	776842	743.6434	ug/l	98
7) Chloromethane	1.831	50	649203	611.7758	ug/l	99
8) Bromomethane	2.209	94	547739	779.9508	ug/l	100
9) Vinyl Chloride	1.929	62	761562	561.1660	ug/l	99
10) Chloroethane	2.301	64	547378	587.8609	ug/l	98
11) Trichlorofluoromethane	2.526	101	1249437	545.7992	ug/l	98
12) Ethyl ether	2.770	59	513714	455.9833	ug/l	90
13) Furan	2.807	39	1024123	463.5470	ug/l	90
14) 1,1,2-Trichloro-1,2,2-...	2.965	101	517506	516.9597	ug/l	98
15) Methylene Chloride	3.386	84	560513	480.0580	ug/l	88
16) Acrolein	2.886	56	649604	2476.4778	ug/l	97
17) Acrylonitrile	3.593	53	268787	485.8499	ug/l	96
18) Iodomethane	3.117	142	739772	686.5494	ug/l	98
19) Acetone	3.014	43	994976	2340.3367	ug/l	98
20) Carbon Disulfide	3.184	76	1412852	452.8061	ug/l	100
21) t-Butyl Alcohol	3.465	59	366012	2244.2894	ug/l	96
22) n-Hexane	3.849	57	576824	518.0127	ug/l	98
23) Di-isopropyl-ether	4.008	45	1768332	492.1193	ug/l	93
24) 1,1-Dichloroethene	2.977	61	894411	510.9378	ug/l	91
25) Methyl Acetate	3.288	43	500856	467.8248	ug/l	100
26) Methyl-t-butyl ether	3.617	73	1636076	491.9352	ug/l	92
27) 1,1-Dichloroethane	3.977	63	1037334	486.1786	ug/l	99
28) trans-1,2-Dichloroethene	3.623	96	593306	494.7697	ug/l	91
29) Ethyl-t-butyl ether	4.276	59	1675647	458.6064	ug/l	94
30) cis-1,2-Dichloroethene	4.392	61	1063773	491.4000	ug/l	92
31) Bromochloromethane	4.550	49	455958	477.9938	ug/l	87
32) 2,2-Dichloropropane	4.398	77	889632	488.4756	ug/l	99
33) Ethyl acetate	4.422	43	677911m	471.0778	ug/l	
34) 1,4-Dioxane	5.483	88	436705	22820.0133	ug/l	91
35) 1,1-Dichloropropene	4.812	75	801340	486.3886	ug/l	98
36) Chloroform	4.593	83	1038890	491.1988	ug/l	99
38) Cyclohexane	4.757	56	801532	489.7683	ug/l	88
40) 1,2-Dichloroethane	4.940	62	928519	519.6966	ug/l	99
41) 2-Butanone	4.392	43	298687m	479.7557	ug/l	
42) 1,1,1-Trichloroethane	4.721	97	986448	501.3008	ug/l	97
43) Carbon Tetrachloride	4.818	117	924146	526.3501	ug/l	97
44) Vinyl Acetate	4.001	43	2115701	482.1873	ug/l	100
45) Bromodichloromethane	5.556	83	818338	507.6955	ug/l	99
46) Methylcyclohexane	5.404	83	708562	490.8838	ug/l	92
47) Dibromomethane	5.489	174	491705	501.8129	ug/l	99
48) 1,2-Dichloropropane	5.416	63	592386	489.2024	ug/l	98
49) Trichloroethene	5.288	130	687628	501.3041	ug/l	97
50) Benzene	4.934	78	2226748	489.5375	ug/l	100
51) tert-Amyl methyl ether	4.977	73	1510018	446.1376	ug/l	96
53) Iso-propylacetate	4.934	43	1367939	476.3739	ug/l	96
54) Methyl methacrylate	5.446	41	643748	478.3108	ug/l	87
55) Dibromochloromethane	6.416	129	679390	505.2754	ug/l	100
56) 2-Chloroethylvinylether	5.696	63	79453	382.4806	ug/l	97
57) cis-1,3-Dichloropropene	5.794	75	970979	472.9926	ug/l	100
58) trans-1,3-Dichloropropene	6.080	75	908149	485.0664	ug/l	98
59) Ethyl methacrylate	6.105	41	644801	472.3153	ug/l	83
60) 1,1,2-Trichloroethane	6.190	97	534568	463.2101	ug/l	95
61) 1,2-Dibromoethane	6.489	107	596341	465.9416	ug/l	100
62) 1,3-Dichloropropane	6.281	76	911512	461.2789	ug/l	100
63) 4-Methyl-2-Pentanone	5.861	43	656383	463.1656	ug/l	98
64) 2-Hexanone	6.300	43	472425	453.0437	ug/l	99
65) Tetrachloroethene	6.281	164	583104	495.6370	ug/l	99
67) Toluene	5.983	92	1450017	461.6418	ug/l	96

Quantitation Report (QT Reviewed)

SampleID : CAL @ 500 PPB
 Data File: 2M167181.D
 Acq On : 04/26/22 22:13

Operator : JM
 Sam Mult : 1 Vial# : 19
 Misc : A,5ML

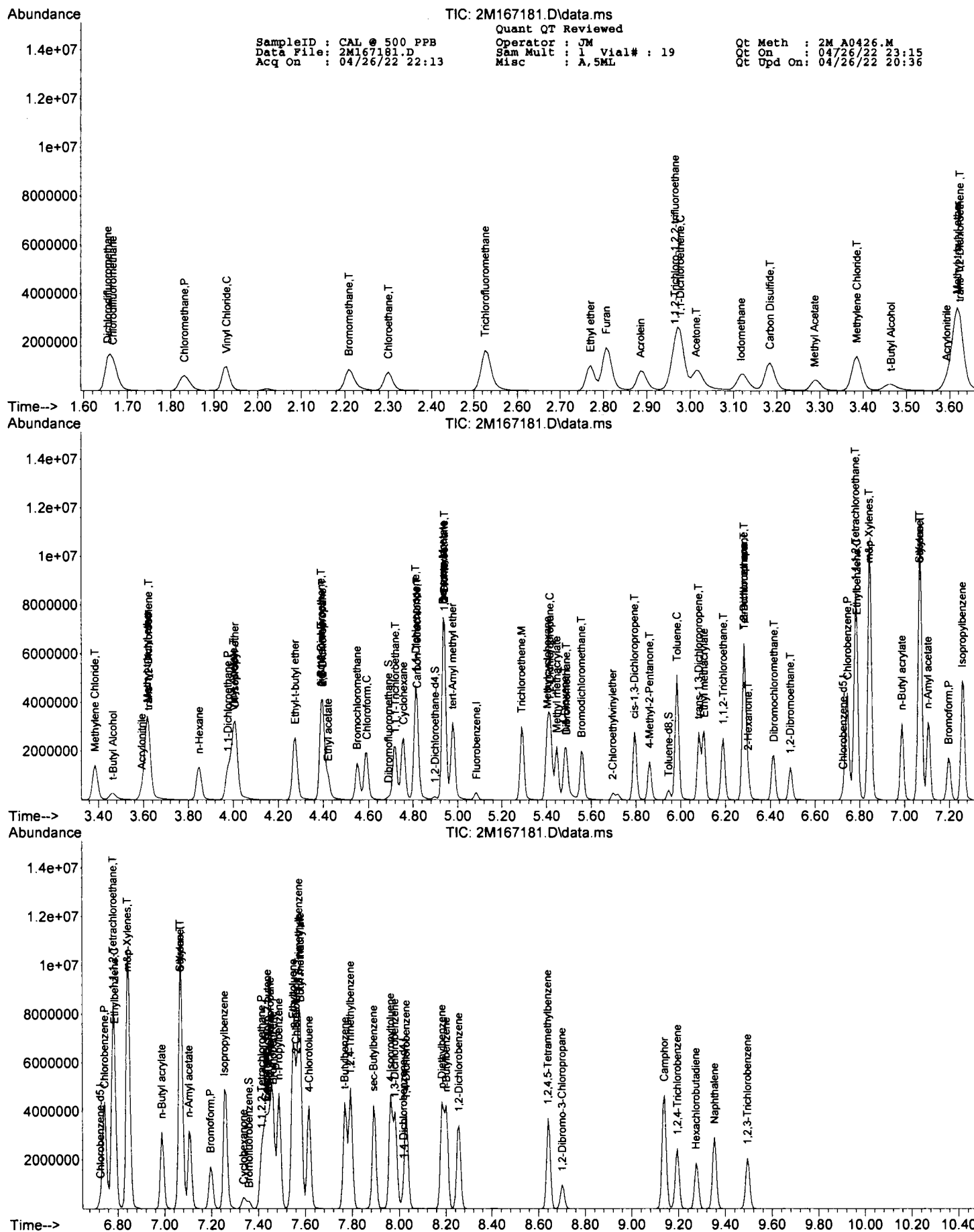
Qt Meth : 2M_A0426.M
 Qt On : 04/26/22 23:15
 Qt Upd On: 04/26/22 20:36

Data Path : G:\GcMsData\2022\GCMS_2\Data\04-26-22\
 Qt Path : G:\GcMsData\2022\GCMS_2\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1,1,1,2-Tetrachloroethane	6.781	133	652035	517.8738	ug/l	98
69) Chlorobenzene	6.745	112	1619064	464.9246	ug/l	98
71) n-Butyl acrylate	6.989	55	1370559	480.0930	ug/l	96
72) n-Amyl acetate	7.105	43	1213168	483.1796	ug/l	94
73) Bromoform	7.196	173	574429	526.6222	ug/l	99
74) Ethylbenzene	6.787	106	777397	511.2270	ug/l	89
75) 1,1,2,2-Tetrachloroethane	7.415	83	747311	450.7953	ug/l	98
77) Styrene	7.068	104	1887895	493.1929	ug/l	94
78) m&p-Xylenes	6.842	106	2169817	972.6995	ug/l	96
79) o-Xylene	7.068	106	1100564	491.5892	ug/l	94
80) trans-1,4-Dichloro-2-b...	7.440	53	380303	491.9213	ug/l	96
81) 1,3-Dichlorobenzene	7.982	146	1144346	481.9329	ug/l	99
82) 1,4-Dichlorobenzene	8.031	146	1174120	476.4225	ug/l	99
83) 1,2-Dichlorobenzene	8.257	146	1086218	477.8667	ug/l	99
84) Isopropylbenzene	7.257	105	2361619	456.0702	ug/l	99
85) Cyclohexanone	7.336	55	144127	1838.7113	ug/l	93
86) Camphene	7.434	93	632841	444.8417	ug/l	99
87) 1,2,3-Trichloropropane	7.452	75	1020985	472.1245	ug/l	96
88) 2-Chlorotoluene	7.562	91	1393956	456.8403	ug/l	97
89) p-Ethyltoluene	7.550	105	2413844	446.3084	ug/l	98
90) 4-Chlorotoluene	7.617	91	1458741	494.9959	ug/l	99
91) n-Propylbenzene	7.489	91	2545875	449.8604	ug/l	99
92) Bromobenzene	7.464	77	1520149	461.3820	ug/l	96
93) 1,3,5-Trimethylbenzene	7.574	105	1773251	511.0354	ug/l	98
94) Butyl methacrylate	7.580	41	876230	457.6998	ug/l	85
95) t-Butylbenzene	7.769	119	1772247	470.6482	ug/l	98
96) 1,2,4-Trimethylbenzene	7.793	105	1849690	470.6660	ug/l	98
97) sec-Butylbenzene	7.891	105	2065240	464.3557	ug/l	97
98) 4-Isopropyltoluene	7.964	119	1829177	475.7412	ug/l	99
99) n-Butylbenzene	8.202	91	1807917	466.1611	ug/l	100
100) p-Diethylbenzene	8.184	119	1054790	470.4334	ug/l	99
101) 1,2,4,5-Tetramethylben...	8.641	119	1444935	450.1834	ug/l	97
102) 1,2-Dibromo-3-Chloropr...	8.702	157	210710	499.9314	ug/l	90
103) Camphor	9.141	95	855160	4357.0339	ug/l	100
104) Hexachlorobutadiene	9.275	225	286858	432.5379	ug/l	95
105) 1,2,4-Trichlorobenzene	9.196	180	594909	460.5815	ug/l	99
106) 1,2,3-Trichlorobenzene	9.494	180	503778	450.2385	ug/l	97
107) Naphthalene	9.354	128	1687865	454.8771	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

DMC



SampleID : CAL @ 1 **PPB**
 Data File: 2M167165.D
 Acq On : 04/26/22 16:58

Operator : JM
 Sam Mult : 1 Vial# : 3
 Misc : A,5ML

Qt Meth : 2M_A0426.M
 Qt On : 04/26/22 20:43
 Qt Upd On: 04/26/22 20:36

Data Path : G:\GcMsData\2022\GCMS_2\Data\04-26-22\
 Qt Path : G:\GcMsData\2022\GCMS_2\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.086	96	162672	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.726	117	118310	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	53396	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.690	111	43214	29.50	ug/l	0.00
Spiked Amount 30.000			Recovery	=	98.33%	
39) 1,2-Dichloroethane-d4	4.897	67	23813	29.97	ug/l	0.00
Spiked Amount 30.000			Recovery	=	99.90%	
66) Toluene-d8	5.946	98	158916	30.22	ug/l	0.00
Spiked Amount 30.000			Recovery	=	100.73%	
76) Bromofluorobenzene	7.360	174	48968	30.54	ug/l	0.00
Spiked Amount 30.000			Recovery	=	101.80%	
Target Compounds						
5) Chlorodifluoromethane	1.672	51	1632	0.9104	ug/l	95
6) Dichlorodifluoromethane	1.660	85	1497	1.4920	ug/l	99
7) Chloromethane	1.831	50	1377	1.3510	ug/l	99
8) Bromomethane	2.233	94	576	0.8539	ug/l	90
9) Vinyl Chloride	1.928	62	1454	1.1155	ug/l	91
10) Chloroethane	2.319	64	1075m	1.2020	ug/l	
11) Trichlorofluoromethane	2.538	101	2178	0.9906	ug/l	99
12) Ethyl ether	2.776	59	1039	0.9602	ug/l	87
13) Furan	2.812	39	2124	1.0009	ug/l	93
14) 1,1,2-Trichloro-1,2,2-...	2.971	101	956	0.9943	ug/l	97
15) Methylene Chloride	3.392	84	1215	1.0834	ug/l	95
16) Acrolein	2.898	56	1239	4.9177	ug/l	83
17) Acrylonitrile	3.599	53	536	1.0087	ug/l	96
18) Iodomethane	3.123	142	660	0.6377	ug/l	87
19) Acetone	3.020	43	2331	5.7084	ug/l	98
20) Carbon Disulfide	3.190	76	2760	0.9209	ug/l	100
21) t-Butyl Alcohol	3.459	59	676	4.3155	ug/l	94
22) n-Hexane	3.849	57	1139	1.0649	ug/l	91
23) Di-isopropyl-ether	4.007	45	3370	0.9764	ug/l	87
24) 1,1-Dichloroethene	2.983	61	1743	1.0367	ug/l	90
25) Methyl Acetate	3.294	43	1050	1.0211	ug/l	100
26) Methyl-t-butyl ether	3.617	73	3103	0.9714	ug/l	91
27) 1,1-Dichloroethane	3.977	63	2093	1.0213	ug/l	97
28) trans-1,2-Dichloroethene	3.629	96	1094	0.9498	ug/l	91
29) Ethyl-t-butyl ether	4.276	59	3250	0.9261	ug/l	94
30) cis-1,2-Dichloroethene	4.398	61	2099	1.0095	ug/l	96
31) Bromochloromethane	4.550	49	1049	1.1449	ug/l	80
32) 2,2-Dichloropropane	4.398	77	1595	0.9118	ug/l	92
33) Ethyl acetate	4.428	43	1508m	1.0910	ug/l	
34) 1,4-Dioxane	5.483	88	916	49.8344	ug/l	80
35) 1,1-Dichloropropene	4.812	75	1614	1.0199	ug/l	99
36) Chloroform	4.593	83	2131	1.0490	ug/l	83
38) Cyclohexane	4.757	56	1588	1.0102	ug/l	89
40) 1,2-Dichloroethane	4.940	62	1871	1.0903	ug/l	91
41) 2-Butanone	4.398	43	451m	0.7542	ug/l	
42) 1,1,1-Trichloroethane	4.721	97	1918	1.0148	ug/l	93
43) Carbon Tetrachloride	4.818	117	1478	0.8764	ug/l	89
44) Vinyl Acetate	4.007	43	4158	0.9866	ug/l	100
45) Bromodichloromethane	5.556	83	1425	0.9204	ug/l	99
46) Methylcyclohexane	5.403	83	1457	1.0509	ug/l	94
47) Dibromomethane	5.489	174	929	0.9871	ug/l	95
48) 1,2-Dichloropropane	5.422	63	1158	0.9956	ug/l	96
49) Trichloroethene	5.294	130	1330	1.0095	ug/l	94
50) Benzene	4.940	78	4592	1.0510	ug/l	100
51) tert-Amyl methyl ether	4.977	73	3072	0.9450	ug/l	95
53) Iso-propylacetate	4.934	43	2484	0.9595	ug/l	94
54) Methyl methacrylate	5.446	41	1061	0.8744	ug/l	96
55) Dibromochloromethane	6.409	129	1082	0.8926	ug/l	99
56) 2-Chloroethylvinylether	5.702	63	198m	1.0572	ug/l	
57) cis-1,3-Dichloropropene	5.794	75	1733	0.9364	ug/l	95
58) trans-1,3-Dichloropropene	6.080	75	1492	0.8839	ug/l	97
59) Ethyl methacrylate	6.105	41	1217	0.9888	ug/l	78
60) 1,1,2-Trichloroethane	6.190	97	1034	0.9938	ug/l	92
61) 1,2-Dibromoethane	6.489	107	1056	0.9152	ug/l	93
62) 1,3-Dichloropropane	6.281	76	1745	0.9795	ug/l	98
63) 4-Methyl-2-Pentanone	5.861	43	1270	0.9940	ug/l	92
64) 2-Hexanone	6.300	43	867	0.9222	ug/l	90
65) Tetrachloroethene	6.281	164	1059	0.9984	ug/l	100
67) Toluene	5.983	92	2969	1.0485	ug/l	100

Quantitation Report (QT Reviewed)

SampleID : CAL @ 1 PPB
 Data File: 2M167165.D
 Acq On : 04/26/22 16:58

Operator : JM
 Sam Mult : 1 Vial# : 3
 Misc : A,5ML

Qt Meth : 2M_A0426.M
 Qt On : 04/26/22 20:43
 Qt Upd On: 04/26/22 20:36

Data Path : G:\GcMsData\2022\GCMS_2\Data\04-26-22\
 Qt Path : G:\GcMsData\2022\GCMS_2\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1,1,1,2-Tetrachloroethane	6.775	133	1126	0.9920	ug/l	60
69) Chlorobenzene	6.739	112	3278	1.0441	ug/l	98
71) n-Butyl acrylate	6.989	55	2177	0.9162	ug/l	96
72) n-Amyl acetate	7.104	43	1870	0.8949	ug/l	90
73) Bromoform	7.202	173	863	0.9506	ug/l	82
74) Ethylbenzene	6.787	106	1332	1.0524	ug/l	89
75) 1,1,2,2-Tetrachloroethane	7.415	83	1409	1.0212	ug/l	86
77) Styrene	7.074	104	3162	0.9925	ug/l	96
78) m&p-Xylenes	6.842	106	4258	2.2934	ug/l	95
79) o-Xylene	7.068	106	1964	1.0540	ug/l	91
80) trans-1,4-Dichloro-2-b...	7.440	53	671	1.0428	ug/l	73
81) 1,3-Dichlorobenzene	7.982	146	2128m	1.0768	ug/l	
82) 1,4-Dichlorobenzene	8.031	146	2410	1.1749	ug/l	80
83) 1,2-Dichlorobenzene	8.257	146	2007	1.0609	ug/l	94
84) Isopropylbenzene	7.257	105	4600	1.0673	ug/l	98
85) Cyclohexanone	7.342	55	376m	5.7634	ug/l	
86) Camphene	7.427	93	1152	0.9729	ug/l	99
87) 1,2,3-Trichloropropane	7.452	75	1831	1.0173	ug/l	97
88) 2-Chlorotoluene	7.555	91	2576	1.0143	ug/l	99
89) p-Ethyltoluene	7.543	105	4602	1.0223	ug/l	96
90) 4-Chlorotoluene	7.616	91	2569	1.0474	ug/l	98
91) n-Propylbenzene	7.488	91	5027	1.0673	ug/l	98
92) Bromobenzene	7.464	77	2958	1.0787	ug/l	95
93) 1,3,5-Trimethylbenzene	7.574	105	3021	1.0461	ug/l	87
94) Butyl methacrylate	7.580	41	1355	0.8504	ug/l	81
95) t-Butylbenzene	7.769	119	3193	1.0188	ug/l	94
96) 1,2,4-Trimethylbenzene	7.793	105	3738	1.1428	ug/l	99
97) sec-Butylbenzene	7.891	105	3790	1.0239	ug/l	95
98) 4-Isopropyltoluene	7.964	119	3331	1.0409	ug/l	92
99) n-Butylbenzene	8.202	91	3278	1.0155	ug/l	96
100) p-Diethylbenzene	8.183	119	1836	0.9838	ug/l	97
101) 1,2,4,5-Tetramethylben...	8.641	119	2522	0.9441	ug/l	97
102) 1,2-Dibromo-3-Chloropr...	8.708	157	304	0.8666	ug/l	77
103) Camphor	9.141	95	1455	8.9069	ug/l	100
104) Hexachlorobutadiene	9.281	225	544	0.9855	ug/l	82
105) 1,2,4-Trichlorobenzene	9.195	180	1184	1.1014	ug/l	93
106) 1,2,3-Trichlorobenzene	9.494	180	966	1.0373	ug/l	92
107) Naphthalene	9.354	128	3340	1.0815	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

DMC

SampleID : CAL @ 0.5 PPB
 Data File: 2M167164.D
 Acq On : 04/26/22 16:38

Operator : JM
 Sam Mult : 1 Vial# : 2
 Misc : A,5ML

Qt Meth : 2M_A0426.M
 Qt On : 04/26/22 20:46
 Qt Upd On: 04/26/22 20:36

Data Path : G:\GcMsData\2022\GCMS_2\Data\04-26-22\
 Qt Path : G:\GcMsData\2022\GCMS_2\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.087	96	152633	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.727	117	112652	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.013	152	51693	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.690	111	40929	29.78	ug/l	0.00
Spiked Amount 30.000			Recovery	=	99.27%	
39) 1,2-Dichloroethane-d4	4.898	67	22432	30.09	ug/l	0.00
Spiked Amount 30.000			Recovery	=	100.30%	
66) Toluene-d8	5.946	98	149852	29.93	ug/l	0.00
Spiked Amount 30.000			Recovery	=	99.77%	
76) Bromofluorobenzene	7.361	174	46663	30.06	ug/l	0.00
Spiked Amount 30.000			Recovery	=	100.20%	
Target Compounds						
5) Chlorodifluoromethane	0.000		0	N.D.	d	
6) Dichlorodifluoromethane	0.000		0	N.D.	d	
7) Chloromethane	0.000		0	N.D.	d	
8) Bromomethane	0.000		0	N.D.	d	
9) Vinyl Chloride	0.000		0	N.D.	d	
10) Chloroethane	0.000		0	N.D.	d	
11) Trichlorofluoromethane	0.000		0	N.D.	d	
12) Ethyl ether	0.000		0	N.D.	d	
13) Furan	0.000		0	N.D.	d	
14) 1,1,2-Trichloro-1,2,2-...	0.000		0	N.D.	d	
15) Methylene Chloride	0.000		0	N.D.	d	
16) Acrolein	0.000		0	N.D.	d	
17) Acrylonitrile	0.000		0	N.D.	d	
18) Iodomethane	0.000		0	N.D.	d	
19) Acetone	0.000		0	N.D.	d	
20) Carbon Disulfide	0.000		0	N.D.	d	
21) t-Butyl Alcohol	0.000		0	N.D.	d	
22) n-Hexane	0.000		0	N.D.	d	
23) Di-isopropyl-ether	0.000		0	N.D.	d	
24) 1,1-Dichloroethene	0.000		0	N.D.	d	
25) Methyl Acetate	0.000		0	N.D.	d	
26) Methyl-t-butyl ether	3.617	73	1579	0.5268	ug/l	85
27) 1,1-Dichloroethane	0.000		0	N.D.	d	
28) trans-1,2-Dichloroethene	0.000		0	N.D.	d	
29) Ethyl-t-butyl ether	0.000		0	N.D.	d	
30) cis-1,2-Dichloroethene	0.000		0	N.D.	d	
31) Bromochloromethane	0.000		0	N.D.	d	
32) 2,2-Dichloropropane	0.000		0	N.D.	d	
33) Ethyl acetate	0.000		0	N.D.	d	
34) 1,4-Dioxane	0.000		0	N.D.	d	
35) 1,1-Dichloropropene	0.000		0	N.D.	d	
36) Chloroform	0.000		0	N.D.	d	
38) Cyclohexane	0.000		0	N.D.	d	
40) 1,2-Dichloroethane	4.940	62	836m	0.5192	ug/l	
41) 2-Butanone	0.000		0	N.D.	d	
42) 1,1,1-Trichloroethane	0.000		0	N.D.	d	
43) Carbon Tetrachloride	0.000		0	N.D.	d	
44) Vinyl Acetate	0.000		0	N.D.	d	
45) Bromodichloromethane	0.000		0	N.D.	d	
46) Methylcyclohexane	0.000		0	N.D.	d	
47) Dibromomethane	0.000		0	N.D.	d	
48) 1,2-Dichloropropane	0.000		0	N.D.	d	
49) Trichloroethene	0.000		0	N.D.	d	
50) Benzene	4.934	78	2275	0.5550	ug/l	100
51) tert-Amyl methyl ether	0.000		0	N.D.	d	
53) Iso-propylacetate	0.000		0	N.D.	d	
54) Methyl methacrylate	0.000		0	N.D.	d	
55) Dibromochloromethane	0.000		0	N.D.	d	
56) 2-Chloroethylvinylether	0.000		0	N.D.	d	
57) cis-1,3-Dichloropropene	0.000		0	N.D.	d	
58) trans-1,3-Dichloropropene	0.000		0	N.D.	d	
59) Ethyl methacrylate	0.000		0	N.D.	d	
60) 1,1,2-Trichloroethane	0.000		0	N.D.	d	
61) 1,2-Dibromoethane	0.000		0	N.D.	d	
62) 1,3-Dichloropropane	0.000		0	N.D.	d	
63) 4-Methyl-2-Pentanone	0.000		0	N.D.	d	
64) 2-Hexanone	0.000		0	N.D.	d	
65) Tetrachloroethene	0.000		0	N.D.	d	
67) Toluene	0.000		0	N.D.	d	

Quantitation Report (QT Reviewed)

SampleID : CAL @ 0.5 PPB
 Data File: 2M167164.D
 Acq On : 04/26/22 16:38

Operator : JM
 Sam Mult : 1 Vial# : 2
 Misc : A,5ML

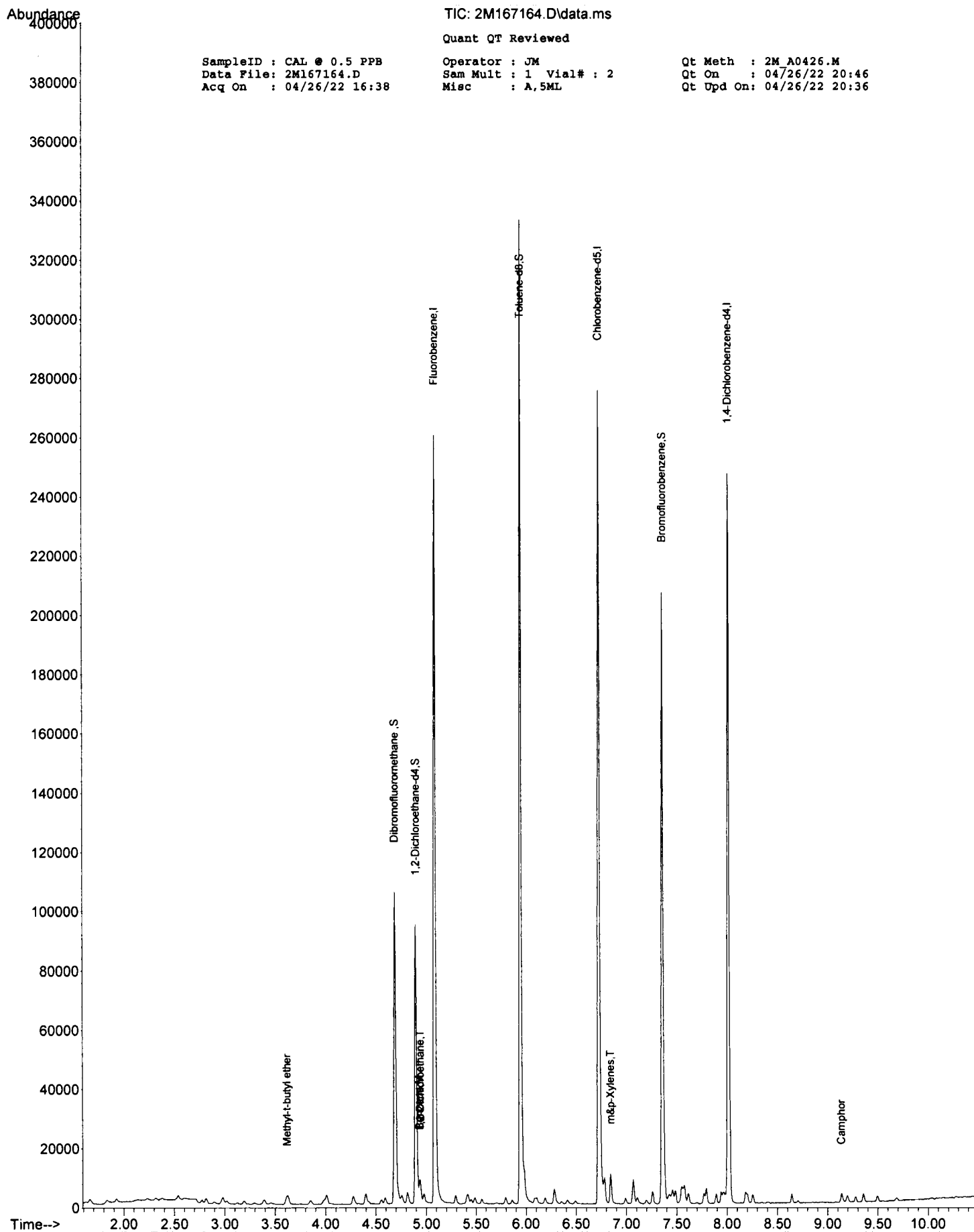
Qt Meth : 2M_A0426.M
 Qt On : 04/26/22 20:46
 Qt Upd On: 04/26/22 20:36

Data Path : G:\GcMsData\2022\GCMS_2\Data\04-26-22\
 Qt Path : G:\GcMsData\2022\GCMS_2\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1,1,1,2-Tetrachloroethane	0.000		0	N.D.	d	
69) Chlorobenzene	0.000		0	N.D.	d	
71) n-Butyl acrylate	0.000		0	N.D.	d	
72) n-Amyl acetate	0.000		0	N.D.	d	
73) Bromoform	0.000		0	N.D.	d	
74) Ethylbenzene	0.000		0	N.D.	d	
75) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.	d	
77) Styrene	0.000		0	N.D.	d	
78) m&p-Xylenes	6.842	106	2092m	1.1639	ug/l	
79) o-Xylene	0.000		0	N.D.	d	
80) trans-1,4-Dichloro-2-b...	0.000		0	N.D.	d	
81) 1,3-Dichlorobenzene	0.000		0	N.D.	d	
82) 1,4-Dichlorobenzene	0.000		0	N.D.	d	
83) 1,2-Dichlorobenzene	0.000		0	N.D.	d	
84) Isopropylbenzene	0.000		0	N.D.	d	
85) Cyclohexanone	0.000		0	N.D.	d	
86) Camphene	0.000		0	N.D.	d	
87) 1,2,3-Trichloropropane	0.000		0	N.D.	d	
88) 2-Chlorotoluene	0.000		0	N.D.	d	
89) p-Ethyltoluene	0.000		0	N.D.	d	
90) 4-Chlorotoluene	0.000		0	N.D.	d	
91) n-Propylbenzene	0.000		0	N.D.	d	
92) Bromobenzene	0.000		0	N.D.	d	
93) 1,3,5-Trimethylbenzene	0.000		0	N.D.	d	
94) Butyl methacrylate	0.000		0	N.D.	d	
95) t-Butylbenzene	0.000		0	N.D.	d	
96) 1,2,4-Trimethylbenzene	0.000		0	N.D.	d	
97) sec-Butylbenzene	0.000		0	N.D.	d	
98) 4-Isopropyltoluene	0.000		0	N.D.	d	
99) n-Butylbenzene	0.000		0	N.D.	d	
100) p-Diethylbenzene	0.000		0	N.D.	d	
101) 1,2,4,5-Tetramethylben...	0.000		0	N.D.	d	
102) 1,2-Dibromo-3-Chloropr...	0.000		0	N.D.	d	
103) Camphor	9.135	95	627m	3.9647	ug/l	
104) Hexachlorobutadiene	0.000		0	N.D.	d	
105) 1,2,4-Trichlorobenzene	0.000		0	N.D.	d	
106) 1,2,3-Trichlorobenzene	0.000		0	N.D.	d	
107) Naphthalene	0.000		0	N.D.	d	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

ANC



Form7

Continuing Calibration

Calibration Name: CAL @ 20 PPB
Cont Calibration Date/Time 5/2/2022 9:17:00 AMData File: 2M167425.D
Method: EPA 8260D

Instrument: GCMS 2

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	5.09	30.00	30	**			0.000	0.00	
Chlorodifluoromethane	1	0		1.67	21.82	20	20	0.1	0.323	0.353	9.11	
Dichlorodifluoromethane	1	0		1.66	19.16	20	20	0.1	0.283	0.271	4.20	
Chloromethane	1	0		1.84	18.56	20	20	0.1	0.240	0.223	7.21	
Bromomethane	1	0		2.23	14.92	20	20	0.1	0.109	0.081	25.39	C1
Vinyl Chloride	1	0		1.93	19.81	20	20	0.1	0.279	0.277	0.93	
Chloroethane	1	0		2.32	20.14	20	20	0.1	0.186	0.188	0.71	
Trichlorofluoromethane	1	0		2.54	19.83	20	20	0.1	0.438	0.434	0.86	
Ethyl ether	1	0		2.78	21.97	20	20	0.5	0.192	0.211	9.87	
Furan	1	0		2.81	22.08	20	20	0.5	0.383	0.423	10.41	
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		2.98	20.91	20	20	0.1	0.189	0.197	4.54	
Methylene Chloride	1	0		3.39	20.01	20	20	0.1	0.216	0.216	0.05	
Acrolein	1	0		2.89	101.13	100	20		0.049	0.049	1.13	
Acrylonitrile	1	0		3.60	21.31	20	20		0.100	0.107	6.54	
Iodomethane	1	0		3.12	12.46	20	20		0.225	0.168	37.70	C1
Acetone	1	0		3.02	105.89	100	20	0.1	0.078	0.082	5.89	
Carbon Disulfide	1	0		3.19	20.79	20	20	0.1	0.510	0.530	3.96	
t-Butyl Alcohol	1	0		3.46	102.37	100	20		0.027	0.028	2.37	
n-Hexane	1	0		3.85	21.62	20	20		0.218	0.235	8.11	
Di-isopropyl-ether	1	0		4.01	21.91	20	20		0.658	0.720	9.55	
1,1-Dichloroethene	1	0		2.98	19.92	20	20	0.1	0.330	0.329	0.39	
Methyl Acetate	1	0		3.29	21.46	20	20	0.1	0.189	0.203	7.29	
Methyl-t-butyl ether	1	0		3.62	21.26	20	20	0.1	0.609	0.647	6.31	
1,1-Dichloroethane	1	0		3.98	20.21	20	20	0.2	0.392	0.396	1.03	
trans-1,2-Dichloroethene	1	0		3.63	20.56	20	20	0.1	0.218	0.224	2.78	
Ethyl-t-butyl ether	1	0		4.28	22.51	20	20	0.5	0.626	0.704	12.53	
cis-1,2-Dichloroethene	1	0		4.40	20.35	20	20	0.1	0.396	0.403	1.73	
Bromochloromethane	1	0		4.55	21.31	20	20		0.183	0.195	6.56	
2,2-Dichloropropane	1	0		4.40	20.52	20	20		0.324	0.332	2.62	
Ethyl acetate	1	0		4.42	21.69	20	20		0.262	0.285	8.46	
1,4-Dioxane	1	0		5.48	1007.68	1000	20		0.003	0.003	0.77	
1,1-Dichloropropene	1	0		4.81	20.11	20	20		0.299	0.301	0.55	
Chloroform	1	0		4.59	20.16	20	20	0.2	0.393	0.396	0.81	
Dibromofluoromethane	1	0	S	4.69	29.74	30	**		0.272	0.270	0.88	
Cyclohexane	1	0		4.76	21.30	20	20	0.1	0.298	0.318	6.52	
1,2-Dichloroethane-d4	1	0	S	4.90	30.24	30	**		0.147	0.148	0.81	
1,2-Dichloroethane	1	0		4.94	20.18	20	20	0.1	0.334	0.337	0.88	
2-Butanone	1	0		4.40	20.91	20	20	0.1	0.105	0.110	4.55	
1,1,1-Trichloroethane	1	0		4.72	20.23	20	20	0.1	0.361	0.366	1.17	
Carbon Tetrachloride	1	0		4.82	19.88	20	20	0.1	0.315	0.313	0.61	
Vinyl Acetate	1	0		4.00	21.32	20	20		0.788	0.840	6.59	
Bromodichloromethane	1	0		5.56	20.30	20	20	0.2	0.291	0.296	1.48	
Methylcyclohexane	1	0		5.40	21.07	20	20	0.1	0.263	0.277	5.36	
Dibromomethane	1	0		5.49	20.59	20	20		0.180	0.185	2.96	
1,2-Dichloropropane	1	0		5.42	20.44	20	20	0.1	0.223	0.228	2.19	
Trichloroethene	1	0		5.29	20.45	20	20	0.2	0.250	0.255	2.24	
Benzene	1	0		4.93	19.97	20	20	0.5	0.845	0.844	0.15	
tert-Amyl methyl ether	1	0		4.98	22.61	20	20		0.579	0.654	13.05	
Chlorobenzene-d5	1	0	I	6.73	30.00	30	**			0.000	0.00	
Iso-propylacetate	1	0		4.93	22.50	20	20	0.5	0.663	0.746	12.52	
Methyl methacrylate	1	0		5.45	23.36	20	20	0.5	0.318	0.372	16.78	
Dibromochloromethane	1	0		6.42	20.85	20	20	0.1	0.316	0.329	4.27	

S-Surrogate Compound
N/O or N/Q - Not applicable for this runI-Internal Standard Compound
C1-Compound %Diff exceeds limits

** - No limit specified in method

Page 1 of 2

Note: 8260/8270 limits are compared against the %DIFF/R.F.
624 limits are compared against the concentration found.625 limits are compared against the %DIFF.
524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL @ 20 PPB
Cont Calibration Date/Time 5/2/2022 9:17:00 AMData File: 2M167425.D
Method: EPA 8260D

Instrument: GCMS 2

TxtCompd:	Co#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
2-Chloroethylvinylether	1	0		5.70	21.31	20	20		0.047	0.050	6.57	
cis-1,3-Dichloropropene	1	0		5.79	21.15	20	20	0.2	0.474	0.501	5.73	
trans-1,3-Dichloropropene	1	0		6.08	21.03	20	20	0.1	0.428	0.450	5.16	
Ethyl methacrylate	1	0		6.10	22.89	20	20	0.5	0.316	0.362	14.44	
1,1,2-Trichloroethane	1	0		6.19	20.98	20	20	0.1	0.273	0.286	4.90	
1,2-Dibromoethane	1	0		6.49	21.05	20	20	0.1	0.298	0.314	5.26	
1,3-Dichloropropane	1	0		6.28	20.91	20	20		0.465	0.486	4.54	
4-Methyl-2-Pentanone	1	0		5.86	21.05	20	20	0.1	0.329	0.346	5.24	
2-Hexanone	1	0		6.29	21.15	20	20	0.1	0.237	0.251	5.77	
Tetrachloroethene	1	0		6.28	20.61	20	20	0.2	0.277	0.286	3.07	
Toluene-d8	1	0	S	5.95	30.19	30	**		1.340	1.349	0.64	
Toluene	1	0		5.98	20.51	20	20	0.4	0.739	0.758	2.55	
1,1,1,2-Tetrachloroethane	1	0		6.77	20.34	20	20		0.299	0.304	1.70	
Chlorobenzene	1	0		6.74	20.45	20	20	0.5	0.823	0.842	2.23	
1,4-Dichlorobenzene-d4	1	0	I	8.01	30.00	30	**			0.000	0.00	
n-Butyl acrylate	1	0		6.99	22.37	20	20	0.5	1.383	1.546	11.83	
n-Amyl acetate	1	0		7.10	22.49	20	20	0.5	1.235	1.388	12.43	
Bromoform	1	0		7.20	19.78	20	20	0.1	0.535	0.529	1.10	
Ethylbenzene	1	0		6.78	19.46	20	20	0.1	0.746	0.726	2.70	
1,1,1,2-Tetrachloroethane	1	0		7.42	20.31	20	20	0.1	0.809	0.822	1.57	
Bromofluorobenzene	1	0	S	7.36	29.95	30	**		0.908	0.907	0.16	
Styrene	1	0		7.07	19.98	20	20	0.3	1.869	1.867	0.11	
m&p-Xylenes	1	0		6.84	39.04	40	20	0.1	1.135	1.108	2.39	
o-Xylene	1	0		7.07	19.79	20	20	0.3	1.096	1.084	1.07	
trans-1,4-Dichloro-2-butene	1	0		7.44	20.98	20	20		0.372	0.391	4.91	
1,3-Dichlorobenzene	1	0		7.98	20.21	20	20	0.6	1.177	1.189	1.07	
1,4-Dichlorobenzene	1	0		8.03	19.62	20	20	0.5	1.233	1.210	1.89	
1,2-Dichlorobenzene	1	0		8.26	20.11	20	20	0.4	1.119	1.125	0.53	
Isopropylbenzene	1	0		7.26	20.14	20	20	0.1	2.543	2.561	0.71	
Cyclohexanone	1	0		7.34	119.37	100	20		0.032	0.038	19.37	
Camphene	1	0		7.43	22.04	20	20		0.650	0.716	10.19	
1,2,3-Trichloropropane	1	0		7.45	20.20	20	20		1.038	1.048	0.99	
2-Chlorotoluene	1	0		7.56	20.34	20	20		1.488	1.513	1.70	
p-Ethyltoluene	1	0		7.54	21.74	20	20		2.588	2.814	8.71	
4-Chlorotoluene	1	0		7.61	20.25	20	20		1.434	1.452	1.27	
n-Propylbenzene	1	0		7.48	20.37	20	20		2.776	2.827	1.83	
Bromobenzene	1	0		7.46	20.52	20	20		1.600	1.642	2.61	
1,3,5-Trimethylbenzene	1	0		7.57	20.32	20	20		1.707	1.734	1.60	
Butyl methacrylate	1	0		7.58	22.68	20	20	0.5	0.863	0.978	13.39	
t-Butylbenzene	1	0		7.77	20.24	20	20		1.828	1.849	1.18	
1,2,4-Trimethylbenzene	1	0		7.79	20.12	20	20		1.944	1.956	0.61	
sec-Butylbenzene	1	0		7.89	20.88	20	20		2.158	2.254	4.42	
4-Isopropyltoluene	1	0		7.96	20.44	20	20		1.869	1.910	2.22	
n-Butylbenzene	1	0		8.20	21.04	20	20		1.869	1.965	5.19	
p-Diethylbenzene	1	0		8.18	22.20	20	20		1.054	1.170	11.02	
1,2,4,5-Tetramethylbenzene	1	0		8.64	22.36	20	20		1.457	1.629	11.82	
1,2-Dibromo-3-Chloropropane	1	0		8.70	19.53	20	20	0.05	0.200	0.195	2.35	
Camphor	1	0		9.14	209.19	200	20		0.084	0.088	4.60	
Hexachlorobutadiene	1	0		9.27	20.70	20	20		0.307	0.318	3.52	
1,2,4-Trichlorobenzene	1	0		9.20	20.74	20	20	0.2	0.628	0.651	3.69	
1,2,3-Trichlorobenzene	1	0		9.49	20.06	20	20		0.527	0.529	0.32	
Naphthalene	1	0		9.35	19.87	20	20		1.786	1.775	0.64	

S-Surrogate Compound
N/O or N/Q - Not applicable for this runI-Internal Standard Compound
CI-Compound %Diff exceeds limits

** - No limit specified in method

Page 2 of 2

Note: 8260/8270 limits are compared against the %DIFF/R.F.
624 limits are compared against the concentration found.625 limits are compared against the %DIFF.
524.2 limits are compared against the %DIFF

SampleID : CAL @ 20 PPB
Data File: 2M167425.D
Acq On : 05/02/22 09:17

Operator : JM
Sam Mult : 1 Vial# : 3
Misc : A,5ML

Qt Meth : 2M.A0426.M
Qt On : 05/02/22 09:40
Qt Upd On: 04/26/22 23:20

Data Path : G:\GcMsData\2022\GCMS_2\Data\05-02-22\
Qt Path : G:\GcMsData\2022\GCMS_2\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.086	96	157280	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.726	117	112712	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.012	152	53602	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.690	111	42396	29.74	ug/l	0.00
Spiked Amount 30.000			Recovery =	99.13%		
39) 1,2-Dichloroethane-d4	4.897	67	23250	30.24	ug/l	0.00
Spiked Amount 30.000			Recovery =	100.80%		
66) Toluene-d8	5.946	98	152035	30.19	ug/l	0.00
Spiked Amount 30.000			Recovery =	100.63%		
76) Bromofluorobenzene	7.360	174	48594	29.95	ug/l	0.00
Spiked Amount 30.000			Recovery =	99.83%		
Target Compounds						
5) Chlorodifluoromethane	1.672	51	36978	21.8217	ug/l	80
6) Dichlorodifluoromethane	1.660	85	28415	19.1603	ug/l	99
7) Chloromethane	1.837	50	23385	18.5587	ug/l	99
8) Bromomethane	2.233	94	8528	14.9218	ug/l	97
9) Vinyl Chloride	1.928	62	29009	19.8149	ug/l	99
10) Chloroethane	2.318	64	19691	20.1430	ug/l	100
11) Trichlorofluoromethane	2.538	101	45554	19.8281	ug/l	99
12) Ethyl ether	2.776	59	22085	21.9743	ug/l	89
13) Furan	2.812	39	44388	22.0829	ug/l	90
14) 1,1,2-Trichloro-1,2,2-...	2.977	101	20690	20.9083	ug/l	99
15) Methylene Chloride	3.391	84	22634	20.0103	ug/l	87
16) Acrolein	2.891	56	25772	101.1312	ug/l	96
17) Acrylonitrile	3.599	53	11209	21.3078	ug/l	98
18) Iodomethane	3.123	142	17605	12.4591	ug/l	95
19) Acetone	3.019	43	43169	105.8934	ug/l	98
20) Carbon Disulfide	3.190	76	55611	20.7919	ug/l	100
21) t-Butyl Alcohol	3.458	59	14551	102.3686	ug/l	98
22) n-Hexane	3.849	57	24659	21.6211	ug/l	98
23) Di-isopropyl-ether	4.007	45	75539	21.9100	ug/l	92
24) 1,1-Dichloroethene	2.983	61	34490	19.9228	ug/l	88
25) Methyl Acetate	3.294	43	21264	21.4580	ug/l	100
26) Methyl-t-butyl ether	3.617	73	67855	21.2622	ug/l	91
27) 1,1-Dichloroethane	3.977	63	41488	20.2054	ug/l	97
28) trans-1,2-Dichloroethene	3.629	96	23480	20.5568	ug/l	90
29) Ethyl-t-butyl ether	4.275	59	73833	22.5069	ug/l	93
30) cis-1,2-Dichloroethene	4.397	61	42244	20.3464	ug/l	91
31) Bromochloromethane	4.550	49	20454	21.3113	ug/l	83
32) 2,2-Dichloropropane	4.397	77	34839	20.5247	ug/l	98
33) Ethyl acetate	4.422	43	29841m	21.6920	ug/l	
34) 1,4-Dioxane	5.482	88	17679	1007.6765	ug/l	88
35) 1,1-Dichloropropene	4.812	75	31570	20.1099	ug/l	99
36) Chloroform	4.592	83	41541	20.1618	ug/l	99
38) Cyclohexane	4.757	56	33338	21.3039	ug/l	87
40) 1,2-Dichloroethane	4.940	62	35330	20.1751	ug/l	99
41) 2-Butanone	4.397	43	11493m	20.9101	ug/l	
42) 1,1,1-Trichloroethane	4.720	97	38324	20.2337	ug/l	98
43) Carbon Tetrachloride	4.818	117	32805	19.8778	ug/l	98
44) Vinyl Acetate	4.001	43	88119	21.3176	ug/l	100
45) Bromodichloromethane	5.556	83	30996	20.2951	ug/l	98
46) Methylcyclohexane	5.403	83	29032	21.0712	ug/l	90
47) Dibromomethane	5.489	174	19450	20.5928	ug/l	97
48) 1,2-Dichloropropane	5.415	63	23904	20.4384	ug/l	100
49) Trichloroethene	5.293	130	26766	20.4486	ug/l	100
50) Benzene	4.934	78	88489	19.9707	ug/l	100
51) tert-Amyl methyl ether	4.976	73	68583	22.6093	ug/l	96
53) Iso-propylacetate	4.934	43	56088	22.5047	ug/l	94
54) Methyl methacrylate	5.446	41	27923	23.3553	ug/l	85
55) Dibromochloromethane	6.415	129	24759	20.8546	ug/l	95
56) 2-Chloroethylvinylether	5.696	63	3748	21.3139	ug/l	97
57) cis-1,3-Dichloropropene	5.793	75	37653	21.1468	ug/l	100
58) trans-1,3-Dichloropropene	6.080	75	33832	21.0324	ug/l	99
59) Ethyl methacrylate	6.098	41	27185	22.8873	ug/l	81
60) 1,1,2-Trichloroethane	6.190	97	21491	20.9806	ug/l	95
61) 1,2-Dibromoethane	6.488	107	23563	21.0518	ug/l	99
62) 1,3-Dichloropropane	6.281	76	36519	20.9077	ug/l	97
63) 4-Methyl-2-Pentanone	5.860	43	26032	21.0473	ug/l	99
64) 2-Hexanone	6.293	43	18841	21.1535	ug/l	93
65) Tetrachloroethene	6.281	164	21454	20.6137	ug/l	99
67) Toluene	5.982	92	56973	20.5099	ug/l	100

Quantitation Report (QT Reviewed)

SampleID : CAL @ 20 PPB
 Data File: 2M167425.D
 Acq On : 05/02/22 09:17

Operator : JM
 Sam Mult : 1 Vial# : 3
 Misc : A,5ML

Qt Meth : 2M A0426.M
 Qt On : 05/02/22 09:40
 Qt Upd On: 04/26/22 23:20

Data Path : G:\GcMsData\2022\GCMS_2\Data\05-02-22\
 Qt Path : G:\GcMsData\2022\GCMS_2\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1,1,1,2-Tetrachloroethane	6.775	133	22848	20.3397	ug/l	99
69) Chlorobenzene	6.744	112	63248	20.4451	ug/l	98
71) n-Butyl acrylate	6.988	55	55261	22.3662	ug/l	96
72) n-Amyl acetate	7.104	43	49612	22.4859	ug/l	94
73) Bromoform	7.196	173	18906	19.7795	ug/l	98
74) Ethylbenzene	6.781	106	25955	19.4601	ug/l	98
75) 1,1,2,2-Tetrachloroethane	7.415	83	29381	20.3148	ug/l	99
77) Styrene	7.067	104	66725	19.9776	ug/l	93
78) m&p-Xylenes	6.842	106	79201	39.0426	ug/l	95
79) o-Xylene	7.067	106	38753	19.7867	ug/l	100
80) trans-1,4-Dichloro-2-b...	7.439	53	13958	20.9821	ug/l	85
81) 1,3-Dichlorobenzene	7.982	146	42493	20.2142	ug/l	98
82) 1,4-Dichlorobenzene	8.031	146	43226	19.6225	ug/l	99
83) 1,2-Dichlorobenzene	8.256	146	40210	20.1066	ug/l	99
84) Isopropylbenzene	7.256	105	91534	20.1426	ug/l	99
85) Cyclohexanone	7.336	55	6859	119.3685	ug/l	93
86) Camphene	7.427	93	25581	22.0371	ug/l	99
87) 1,2,3-Trichloropropane	7.452	75	37457	20.1985	ug/l	97
88) 2-Chlorotoluene	7.555	91	54077	20.3396	ug/l	97
89) p-Ethyltoluene	7.543	105	100555	21.7428	ug/l	92
90) 4-Chlorotoluene	7.610	91	51894	20.2539	ug/l	99
91) n-Propylbenzene	7.482	91	101005	20.3660	ug/l	100
92) Bromobenzene	7.458	77	58680	20.5212	ug/l	94
93) 1,3,5-Trimethylbenzene	7.574	105	61981	20.3199	ug/l	92
94) Butyl methacrylate	7.580	41	34961	22.6780	ug/l	80
95) t-Butylbenzene	7.769	119	66084	20.2352	ug/l	97
96) 1,2,4-Trimethylbenzene	7.793	105	69894	20.1215	ug/l	100
97) sec-Butylbenzene	7.891	105	80535	20.8838	ug/l	100
98) 4-Isopropyltoluene	7.964	119	68270	20.4440	ug/l	98
99) n-Butylbenzene	8.201	91	70234	21.0370	ug/l	100
100) p-Diethylbenzene	8.183	119	41814	22.2037	ug/l	98
101) 1,2,4,5-Tetramethylben...	8.640	119	58220	22.3634	ug/l	96
102) 1,2-Dibromo-3-Chloropr...	8.701	157	6963	19.5302	ug/l	88
103) Camphor	9.140	95	31401	209.1935	ug/l	99
104) Hexachlorobutadiene	9.274	225	11366	20.7032	ug/l	96
105) 1,2,4-Trichlorobenzene	9.195	180	23259	20.7371	ug/l	98
106) 1,2,3-Trichlorobenzene	9.494	180	18905	20.0634	ug/l	95
107) Naphthalene	9.354	128	63414	19.8724	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Abundance

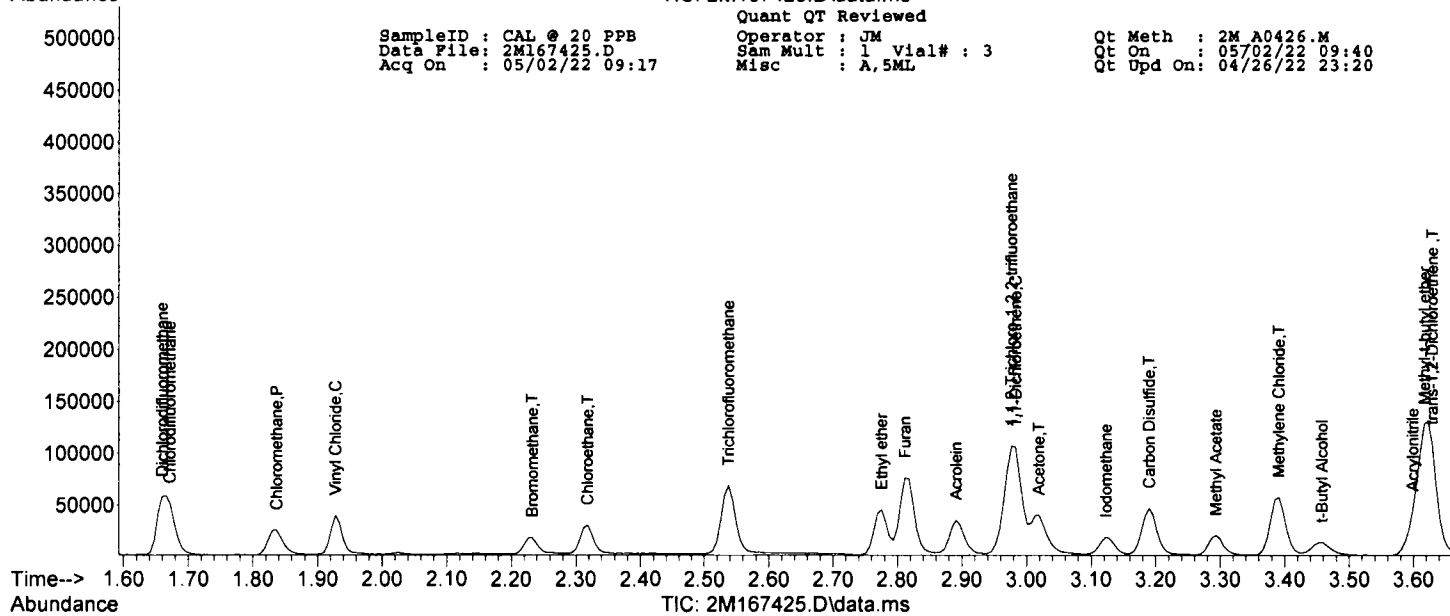
TIC: 2M167425.D\data.ms

Quant QT Reviewed

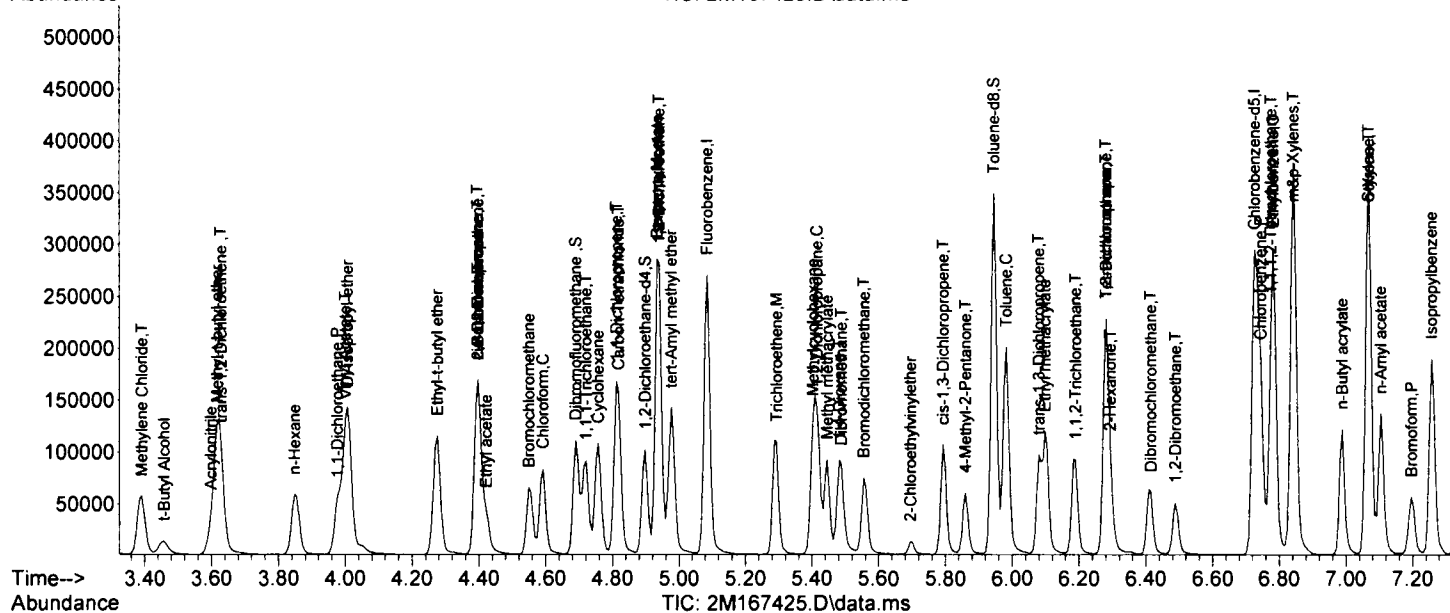
SampleID : CAL @ 20 PPB
 Data File: 2M167425.D
 Acq On : 05/02/22 09:17

Operator : JM
 Sam Mult : 1 Vial# : 3
 Misc : A, 5ML

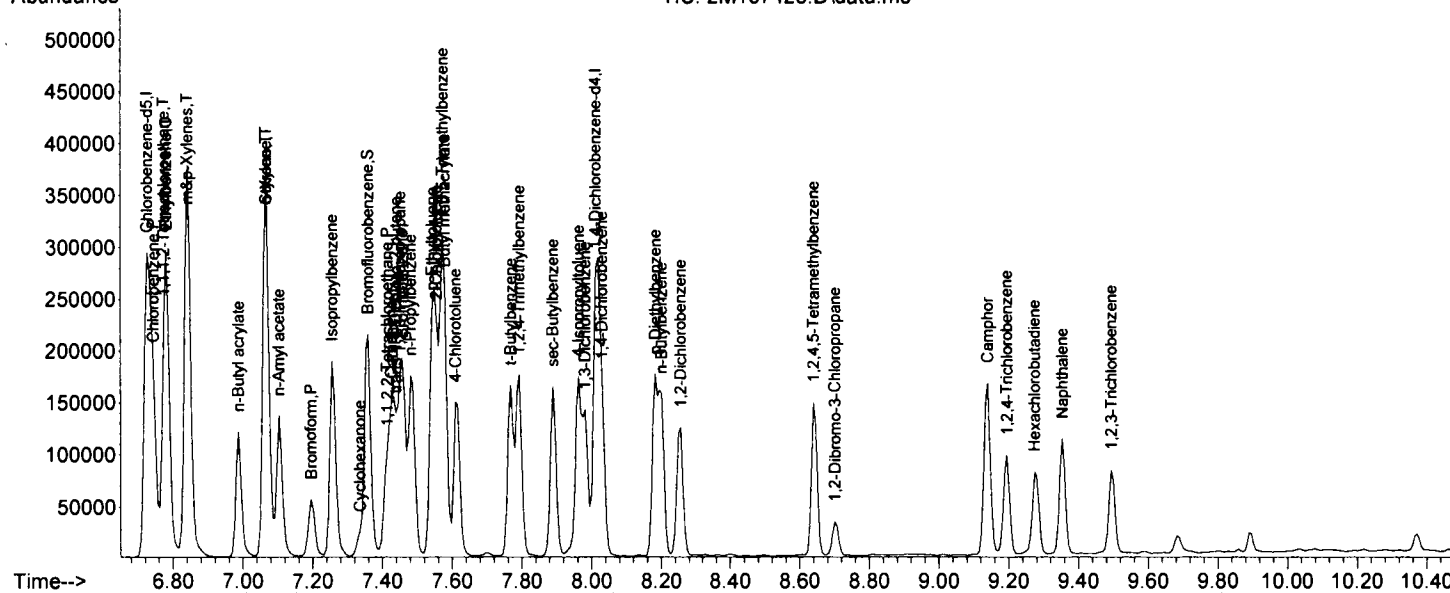
Qt Meth : 2M A0426.M
 Qt On : 05/02/22 09:40
 Qt Upd On: 04/26/22 23:20



Abundance



Abundance



Form7

Continuing Calibration

Calibration Name: CAL @ 20 PPB
Cont Calibration Date/Time 5/2/2022 1:38:00 PMData File: 1M161191.D
Method: EPA 8260D

Instrument: GCMS 1

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	5.15	30.00	30	**			0.000	0.00	
Chlorodifluoromethane	1	0		1.67	20.32	20	20	0.1	0.218	0.279	1.61	
Dichlorodifluoromethane	1	0		1.66	27.17	20	20	0.1	0.137	0.241	35.84	C1
Chloromethane	1	0		1.83	27.27	20	20	0.1	0.169	0.230	36.35	C1
Bromomethane	1	0		2.21	24.09	20	20	0.1	0.171	0.206	20.46	
Vinyl Chloride	1	0		1.92	23.68	20	20	0.1	0.208	0.246	18.39	
Chloroethane	1	0		2.29	21.62	20	20	0.1	0.151	0.164	8.11	
Trichlorofluoromethane	1	0		2.51	21.13	20	20	0.1	0.392	0.414	5.67	
Ethyl ether	1	0		2.73	20.38	20	20	0.5	0.185	0.189	1.91	
Furan	1	0		2.78	21.71	20	20	0.5	0.362	0.393	8.56	
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		2.93	22.55	20	20	0.1	0.187	0.211	12.76	
Methylene Chloride	1	0		3.34	21.29	20	20	0.1	0.202	0.215	6.46	
Acrolein	1	0		2.85	101.84	100	20		0.037	0.037	1.84	
Acrylonitrile	1	0		3.55	23.88	20	20		0.076	0.091	19.39	
Iodomethane	1	0		3.08	7.85	20	20		0.220	0.099	60.76	C1
Acetone	1	0		2.97	107.52	100	20	0.1	0.055	0.059	7.52	
Carbon Disulfide	1	0		3.15	20.33	20	20	0.1	0.508	0.516	1.67	
t-Butyl Alcohol	1	0		3.41	99.47	100	20		0.020	0.020	0.53	
n-Hexane	1	0		3.81	24.37	20	20		0.184	0.225	21.83	C1
Di-isopropyl-ether	1	0		3.98	22.44	20	20		0.591	0.664	12.21	
1,1-Dichloroethene	1	0		2.95	20.95	20	20	0.1	0.318	0.333	4.75	
Methyl Acetate	1	0		3.24	23.34	20	20	0.1	0.148	0.173	16.68	
Methyl-t-butyl ether	1	0		3.57	20.84	20	20	0.1	0.635	0.604	4.21	
1,1-Dichloroethane	1	0		3.94	21.35	20	20	0.2	0.380	0.406	6.73	
trans-1,2-Dichloroethene	1	0		3.58	20.48	20	20	0.1	0.214	0.219	2.39	
Ethyl-t-butyl ether	1	0		4.28	21.46	20	20	0.5	0.587	0.630	7.28	
cis-1,2-Dichloroethene	1	0		4.40	21.70	20	20	0.1	0.359	0.389	8.51	
Bromochloromethane	1	0		4.58	21.57	20	20		0.169	0.182	7.85	
2,2-Dichloropropane	1	0		4.41	21.92	20	20		0.339	0.371	9.62	
Ethyl acetate	1	0		4.44	23.23	20	20		0.189	0.220	16.16	
1,4-Dioxane	1	0		5.58	798.01	1000	20		0.002	0.002	20.20	
1,1-Dichloropropene	1	0		4.86	19.49	20	20		0.282	0.275	2.57	
Chloroform	1	0		4.61	20.19	20	20	0.2	0.381	0.385	0.94	
Dibromofluoromethane	1	0	S	4.73	30.92	30	**		0.267	0.276	3.05	
Cyclohexane	1	0		4.80	20.85	20	20	0.1	0.261	0.273	4.25	
1,2-Dichloroethane-d4	1	0	S	4.95	30.59	30	**		0.144	0.146	1.96	
1,2-Dichloroethane	1	0		4.99	18.47	20	20	0.1	0.329	0.303	7.65	
2-Butanone	1	0		4.41	24.03	20	20	0.1	0.078	0.085	20.13	
1,1,1-Trichloroethane	1	0		4.76	20.05	20	20	0.1	0.368	0.369	0.25	
Carbon Tetrachloride	1	0		4.87	19.70	20	20	0.1	0.312	0.307	1.51	
Vinyl Acetate	1	0		3.97	23.35	20	20		0.644	0.751	16.73	
Bromodichloromethane	1	0		5.65	20.93	20	20	0.2	0.271	0.284	4.63	
Methylcyclohexane	1	0		5.49	21.00	20	20	0.1	0.236	0.248	5.00	
Dibromomethane	1	0		5.57	19.91	20	20		0.143	0.142	0.43	
1,2-Dichloropropane	1	0		5.50	21.63	20	20	0.1	0.198	0.214	8.16	
Trichloroethene	1	0		5.37	19.65	20	20	0.2	0.224	0.220	1.77	
Benzene	1	0		4.99	20.69	20	20	0.5	0.784	0.811	3.45	
tert-Amyl methyl ether	1	0		5.04	20.25	20	20		0.526	0.532	1.23	
Chlorobenzene-d5	1	0	I	6.87	30.00	30	**			0.000	0.00	
Iso-propylacetate	1	0		5.00	21.39	20	20	0.5	0.507	0.542	6.97	
Methyl methacrylate	1	0		5.54	22.35	20	20	0.5	0.204	0.228	11.76	
Dibromochloromethane	1	0		6.55	18.62	20	20	0.1	0.261	0.243	6.92	

S-Surrogate Compound
N/O or N/Q - Not applicable for this runI-Internal Standard Compound
C1-Compound %Diff exceeds limits

**- No limit specified in method

Page 1 of 2

Note: 8260/8270 limits are compared against the %DIFF/R.F.
624 limits are compared against the concentration found.625 limits are compared against the %DIFF.
524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL @ 20 PPB
Cont Calibration Date/Time 5/2/2022 1:38:00 PM

Data File: IM161191.D
Method: EPA 8260D

Instrument: GCMS 1

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
2-Chloroethylvinylether	1	0		5.80	16.57	20	20		0.039	0.032	17.16	
cis-1,3-Dichloropropene	1	0		5.90	19.89	20	20	0.2	0.422	0.420	0.53	
trans-1,3-Dichloropropene	1	0		6.20	19.26	20	20	0.1	0.392	0.378	3.69	
Ethyl methacrylate	1	0		6.23	20.34	20	20	0.5	0.231	0.235	1.71	
1,1,2-Trichloroethane	1	0		6.31	21.25	20	20	0.1	0.240	0.255	6.25	
1,2-Dibromoethane	1	0		6.62	19.89	20	20	0.1	0.253	0.252	0.53	
1,3-Dichloropropane	1	0		6.41	20.05	20	20		0.417	0.418	0.23	
4-Methyl-2-Pentanone	1	0		5.97	18.73	20	20	0.1	0.230	0.215	6.34	
2-Hexanone	1	0		6.43	19.72	20	20	0.1	0.152	0.150	1.41	
Tetrachloroethene	1	0		6.41	19.80	20	20	0.2	0.236	0.234	1.00	
Toluene-d8	1	0	S	6.06	30.72	30	**		1.341	1.373	2.39	
Toluene	1	0		6.10	20.00	20	20	0.4	0.670	0.670	0.00	
1,1,1,2-Tetrachloroethane	1	0		6.93	20.15	20	20		0.253	0.255	0.73	
Chlorobenzene	1	0		6.89	19.97	20	20	0.5	0.724	0.723	0.14	
1,4-Dichlorobenzene-d4	1	0	I	8.19	30.00	30	**			0.000	0.00	
n-Butyl acrylate	1	0		7.15	20.70	20	20	0.5	0.929	0.961	3.52	
n-Amyl acetate	1	0		7.27	22.39	20	20	0.5	0.805	0.901	11.93	
Bromoform	1	0		7.35	19.87	20	20	0.1	0.362	0.360	0.66	
Ethylbenzene	1	0		6.94	18.94	20	20	0.1	0.726	0.687	5.29	
1,1,2,2-Tetrachloroethane	1	0		7.58	20.50	20	20	0.1	0.628	0.644	2.52	
Bromofluorobenzene	1	0	S	7.52	29.52	30	**		0.824	0.811	1.62	
Styrene	1	0		7.23	20.14	20	20	0.3	1.538	1.549	0.70	
m&p-Xylenes	1	0		7.00	40.41	40	20	0.1	0.928	0.937	1.03	
o-Xylene	1	0		7.23	19.44	20	20	0.3	0.959	0.932	2.81	
trans-1,4-Dichloro-2-butene	1	0		7.60	21.13	20	20		0.280	0.295	5.66	
1,3-Dichlorobenzene	1	0		8.15	20.37	20	20	0.6	1.035	1.054	1.85	
1,4-Dichlorobenzene	1	0		8.20	19.14	20	20	0.5	1.105	1.058	4.30	
1,2-Dichlorobenzene	1	0		8.42	19.74	20	20	0.4	0.998	0.986	1.28	
Isopropylbenzene	1	0		7.42	19.95	20	20	0.1	2.177	2.172	0.24	
Cyclohexanone	1	0		7.50	102.62	100	20		0.023	0.020	2.62	
Camphene	1	0		7.59	20.74	20	20		0.605	0.628	3.68	
1,2,3-Trichloropropane	1	0		7.62	20.75	20	20		0.814	0.844	3.77	
2-Chlorotoluene	1	0		7.72	19.60	20	20		1.428	1.399	2.00	
p-Ethyltoluene	1	0		7.71	21.68	20	20		2.164	2.345	8.38	
4-Chlorotoluene	1	0		7.78	18.51	20	20		1.494	1.383	7.44	
n-Propylbenzene	1	0		7.65	19.77	20	20		2.580	2.550	1.16	
Bromobenzene	1	0		7.62	19.96	20	20		1.289	1.286	0.22	
1,3,5-Trimethylbenzene	1	0		7.74	20.24	20	20		1.675	1.695	1.19	
Butyl methacrylate	1	0		7.75	19.43	20	20	0.5	0.641	0.623	2.86	
t-Butylbenzene	1	0		7.94	19.69	20	20		1.605	1.580	1.54	
1,2,4-Trimethylbenzene	1	0		7.96	20.06	20	20		1.709	1.714	0.31	
sec-Butylbenzene	1	0		8.07	20.66	20	20		1.877	1.940	3.32	
4-Isopropyltoluene	1	0		8.14	20.16	20	20		1.599	1.611	0.79	
n-Butylbenzene	1	0		8.38	21.25	20	20		1.714	1.821	6.25	
p-Diethylbenzene	1	0		8.36	19.71	20	20		0.979	0.965	1.46	
1,2,4,5-Tetramethylbenzene	1	0		8.82	19.08	20	20		1.284	1.225	4.59	
1,2-Dibromo-3-Chloropropane	1	0		8.88	18.37	20	20	0.05	0.131	0.120	8.13	
Camphor	1	0		9.32	165.71	200	20		0.058	0.048	17.15	
Hexachlorobutadiene	1	0		9.46	20.72	20	20		0.238	0.247	3.59	
1,2,4-Trichlorobenzene	1	0		9.37	20.29	20	20	0.2	0.525	0.533	1.45	
1,2,3-Trichlorobenzene	1	0		9.67	20.83	20	20		0.443	0.462	4.16	
Naphthalene	1	0		9.53	19.69	20	20		1.329	1.309	1.53	

S-Surrogate Compound
N/O or N/Q - Not applicable for this run

I-Internal Standard Compound
C1-Compound %Diff exceeds limits

** - No limit specified in method
Page 2 of 2

Note: 8260/8270 limits are compared against the %DIFF/R.F.
624 limits are compared against the concentration found.

625 limits are compared against the %DIFF.
524.2 limits are compared against the %DIFF

SampleID : CAL @ 20 PPB
Data File: 1M161191.D
Acq On : 05/02/22 13:38

Operator : SG
Sam Mult : 1 Vial# : 5
Misc : A,5ML

Qt Meth : 1M_A0421.M
Qt On : 05/02/22 14:16
Qt Upd On: 04/22/22 09:35

Data Path : G:\GcMsData\2022\GCMS_1\Data\05-02-22\
Qt Path : G:\GcMsData\2022\GCMS_1\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.151	96	1101897	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.875	117	825586	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.187	152	405817	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.727	111	303669	30.92	ug/l	0.00
Spiked Amount 30.000			Recovery	=	103.07%	
39) 1,2-Dichloroethane-d4	4.952	67	161234	30.59	ug/l	0.00
Spiked Amount 30.000			Recovery	=	101.97%	
66) Toluene-d8	6.061	98	1133789	30.72	ug/l	0.00
Spiked Amount 30.000			Recovery	=	102.40%	
76) Bromofluorobenzene	7.524	174	329025	29.52	ug/l	0.00
Spiked Amount 30.000			Recovery	=	98.40%	
Target Compounds						
5) Chlorodifluoromethane	1.669	51	205130	20.3214	ug/l	97
6) Dichlorodifluoromethane	1.660	85	177331	27.1688	ug/l	96
7) Chloromethane	1.830	50	168863	27.2703	ug/l	95
8) Bromomethane	2.209	94	151408	24.0927	ug/l	94
9) Vinyl Chloride	1.917	62	181030	23.6773	ug/l	95
10) Chloroethane	2.293	64	120209	21.6228	ug/l	99
11) Trichlorofluoromethane	2.508	101	303983	21.1346	ug/l	97
12) Ethyl ether	2.733	59	138563	20.3818	ug/l	88
13) Furan	2.775	39	288851	21.7119	ug/l	84
14) 1,1,2-Trichloro-1,2,2-...	2.933	101	154762m	22.5514	ug/l	
15) Methylene Chloride	3.344	84	157877	21.2913	ug/l	79
16) Acrolein	2.846	56	136813	101.8378	ug/l	90
17) Acrylonitrile	3.547	53	67004	23.8783	ug/l	86
18) Iodomethane	3.084	142	73003	7.8473	ug/l	94
19) Acetone	2.975	43	216916	107.5219	ug/l	92
20) Carbon Disulfide	3.155	76	379304	20.3333	ug/l	100
21) t-Butyl Alcohol	3.412	59	72306	99.4695	ug/l	76
22) n-Hexane	3.811	57	164961	24.3656	ug/l	97
23) Di-isopropyl-ether	3.984	45	487495	22.4421	ug/l	90
24) 1,1-Dichloroethene	2.946	61	244934	20.9504	ug/l	96
25) Methyl Acetate	3.245	43	126947	23.3362	ug/l	100
26) Methyl-t-butyl ether	3.573	73	444019	20.8415	ug/l	95
27) 1,1-Dichloroethane	3.942	63	298228	21.3454	ug/l	95
28) trans-1,2-Dichloroethene	3.582	96	161242	20.4776	ug/l	89
29) Ethyl-t-butyl ether	4.277	59	462713	21.4553	ug/l	93
30) cis-1,2-Dichloroethene	4.402	61	285882	21.7028	ug/l	92
31) Bromochloromethane	4.576	49	133850	21.5707	ug/l	83
32) 2,2-Dichloropropane	4.409	77	272629	21.9230	ug/l	94
33) Ethyl acetate	4.438	43	161245	23.2316	ug/l	91
34) 1,4-Dioxane	5.576	88	60654	798.0062	ug/l	97
35) 1,1-Dichloropropene	4.859	75	201914	19.4854	ug/l	95
36) Chloroform	4.614	83	282848	20.1875	ug/l	89
38) Cyclohexane	4.801	56	200236	20.8496	ug/l	90
40) 1,2-Dichloroethane	4.994	62	222917	18.4707	ug/l	96
41) 2-Butanone	4.405	43	62146m	24.0253	ug/l	
42) 1,1,1-Trichloroethane	4.759	97	270843	20.0505	ug/l	92
43) Carbon Tetrachloride	4.865	117	225758	19.6983	ug/l	98
44) Vinyl Acetate	3.968	43	552034	23.3466	ug/l	100
45) Bromodichloromethane	5.650	83	208358	20.9252	ug/l	97
46) Methylcyclohexane	5.492	83	182025	21.0006	ug/l	98
47) Dibromomethane	5.573	174	104532	19.9131	ug/l	91
48) 1,2-Dichloropropane	5.502	63	157377	21.6314	ug/l	90
49) Trichloroethene	5.367	130	161593	19.6451	ug/l	95
50) Benzene	4.994	78	596124	20.6905	ug/l	100
51) tert-Amyl methyl ether	5.042	73	390889	20.2455	ug/l	95
53) Iso-propylacetate	5.000	43	298209	21.3946	ug/l	96
54) Methyl methacrylate	5.540	41	125384	22.3513	ug/l	82
55) Dibromochloromethane	6.547	129	133686	18.6163	ug/l	100
56) 2-Chloroethylvinylether	5.801	63	17796	16.5685	ug/l	90
57) cis-1,3-Dichloropropene	5.904	75	231131	19.8947	ug/l	89
58) trans-1,3-Dichloropropene	6.203	75	208046	19.2629	ug/l	100
59) Ethyl methacrylate	6.232	41	129156	20.3421	ug/l	81
60) 1,1,2-Trichloroethane	6.312	97	140320	21.2498	ug/l	97
61) 1,2-Dibromoethane	6.624	107	138590	19.8939	ug/l	97
62) 1,3-Dichloropropane	6.412	76	230039	20.0468	ug/l	99
63) 4-Methyl-2-Pentanone	5.974	43	118377	18.7311	ug/l	99
64) 2-Hexanone	6.434	43	82697	19.7176	ug/l	94
65) Tetrachloroethene	6.412	164	128519	19.7995	ug/l	100
67) Toluene	6.100	92	368741	20.0006	ug/l	94

Quantitation Report (QT Reviewed)

SampleID : CAL @ 20 PPB
 Data File: 1M161191.D
 Acq On : 05/02/22 13:38

Operator : SG
 Sam Mult : 1 Vial# : 5
 Misc : A,5ML

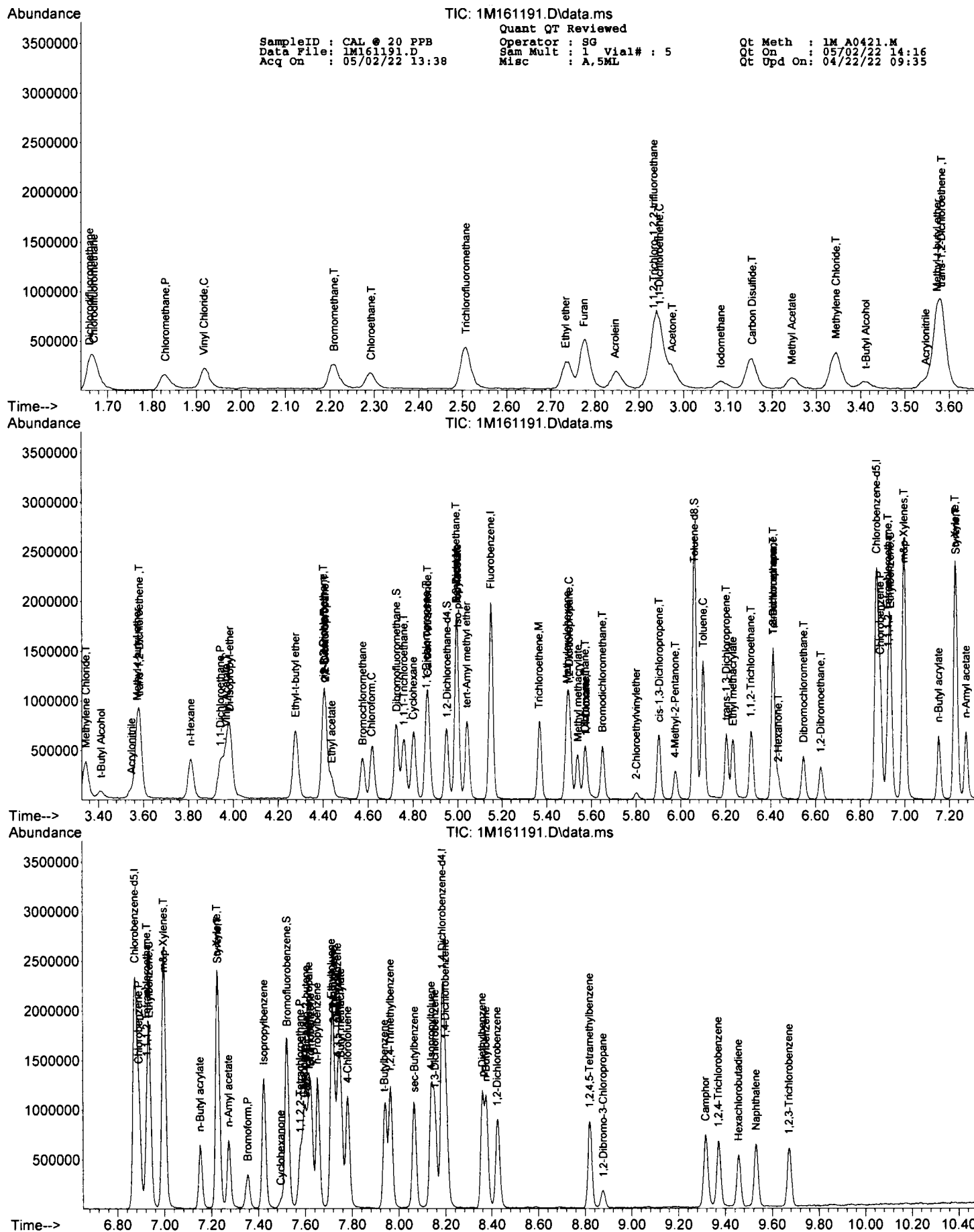
Qt Meth : 1M A0421.M
 Qt On : 05/02/22 14:16
 Qt Upd On: 04/22/22 09:35

Data Path : G:\GcMsData\2022\GCMS_1\Data\05-02-22\
 Qt Path : G:\GcMsData\2022\GCMS_1\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1,1,1,2-Tetrachloroethane	6.926	133	140316	20.1451	ug/l	95
69) Chlorobenzene	6.891	112	398126	19.9724	ug/l	97
71) n-Butyl acrylate	7.151	55	260124	20.7037	ug/l	93
72) n-Amyl acetate	7.273	43	243682	22.3867	ug/l	91
73) Bromoform	7.354	173	97386	19.8679	ug/l	93
74) Ethylbenzene	6.936	106	185920	18.9429	ug/l	96
75) 1,1,2,2-Tetrachloroethane	7.579	83	174269	20.5038	ug/l	99
77) Styrene	7.228	104	419019	20.1391	ug/l	97
78) m&p-Xylenes	6.997	106	507241	40.4137	ug/l	98
79) o-Xylene	7.225	106	252083	19.4390	ug/l	90
80) trans-1,4-Dichloro-2-b...	7.605	53	79917	21.1325	ug/l	93
81) 1,3-Dichlorobenzene	8.154	146	285222	20.3708	ug/l	95
82) 1,4-Dichlorobenzene	8.199	146	286160	19.1403	ug/l	97
83) 1,2-Dichlorobenzene	8.425	146	266660	19.7444	ug/l	96
84) Isopropylbenzene	7.425	105	587622	19.9529	ug/l	99
85) Cyclohexanone	7.495	55	27258	102.6163	ug/l	87
86) Camphene	7.595	93	169809	20.7369	ug/l	96
87) 1,2,3-Trichloropropane	7.617	75	228459	20.7543	ug/l	96
88) 2-Chlorotoluene	7.724	91	378560	19.6007	ug/l	95
89) p-Ethyltoluene	7.714	105	634457	21.6767	ug/l	93
90) 4-Chlorotoluene	7.781	91	374218	18.5126	ug/l	95
91) n-Propylbenzene	7.653	91	689892	19.7673	ug/l	98
92) Bromobenzene	7.624	77	347910	19.9557	ug/l	81
93) 1,3,5-Trimethylbenzene	7.740	105	458625	20.2386	ug/l	97
94) Butyl methacrylate	7.753	41	168522	19.4289	ug/l	73
95) t-Butylbenzene	7.939	119	427506	19.6925	ug/l	97
96) 1,2,4-Trimethylbenzene	7.965	105	463818	20.0629	ug/l	98
97) sec-Butylbenzene	8.068	105	524769	20.6634	ug/l	97
98) 4-Isopropyltoluene	8.138	119	435954	20.1572	ug/l	98
99) n-Butylbenzene	8.376	91	492730	21.2509	ug/l	97
100) p-Diethylbenzene	8.360	119	260997	19.7074	ug/l	100
101) 1,2,4,5-Tetramethylben...	8.820	119	331381	19.0812	ug/l	99
102) 1,2-Dibromo-3-Chloropr...	8.878	157	32585	18.3737	ug/l	90
103) Camphor	9.315	95	129001	165.7060	ug/l	98
104) Hexachlorobutadiene	9.457	225	66716	20.7173	ug/l	97
105) 1,2,4-Trichlorobenzene	9.370	180	144148	20.2904	ug/l	95
106) 1,2,3-Trichlorobenzene	9.672	180	124945	20.8314	ug/l	96
107) Naphthalene	9.531	128	354141	19.6931	ug/l	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

ANC



GC/MS Volatile Data
Raw QC Data

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 1

Data File: 1M160725.D
Analysis Date: 04/21/22 16:24
Method: EPA 8260D

Tune Scan/Time Range: Average of 7.515 to 7.544 min

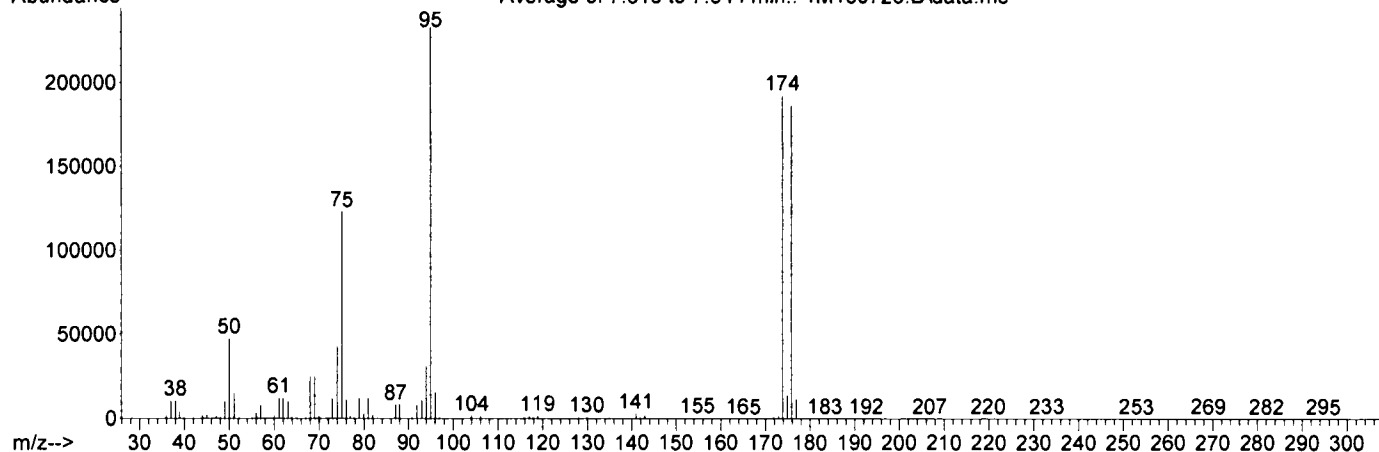
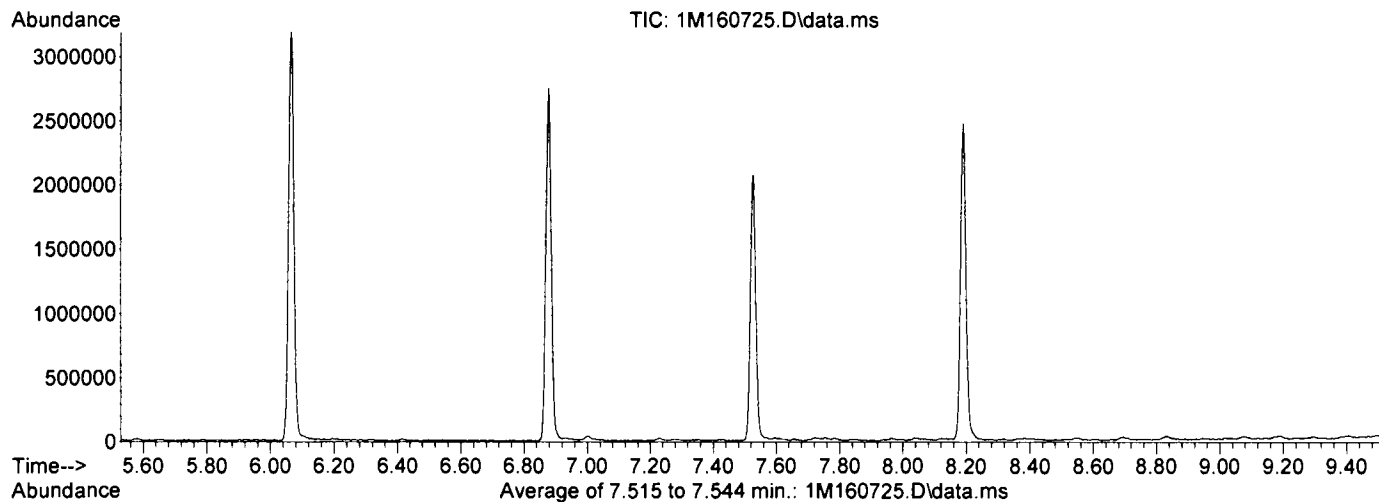
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	20.5	47634	PASS
75	95	30	60	52.9	123226	PASS
95	95	100	100	100.0	232903	PASS
96	95	5	9	6.8	15947	PASS
173	174	0.00	2	0.9	1800	PASS
174	95	50	100	82.7	192578	PASS
175	174	5	9	7.4	14181	PASS
176	174	95	101	96.9	186666	PASS
177	176	5	9	6.4	11957	PASS

Data File	Sample Number	Analysis Date:
1M160726.D	CAL @ 0.5 PPB	04/21/22 16:45
1M160727.D	CAL @ 1 PPB	04/21/22 17:06
1M160728.D	CAL @ 5 PPB	04/21/22 17:27
1M160729.D	CAL @ 10 PPB	04/21/22 17:48
1M160730.D	CAL @ 20 PPB	04/21/22 18:09
1M160731.D	CAL @ 50 PPB	04/21/22 18:29
1M160732.D	CAL @ 500 PPB	04/21/22 18:50
1M160734.D	CAL @ 250 PPB	04/21/22 19:32
1M160736.D	CAL @ 100 PPB	04/21/22 20:14
1M160741.D	ICV	04/21/22 21:58

Data Path : G:\GcMsData\2022\GCMS_1\Data\04-21-22\
Data File : 1M160725.D
Acq On : 21 Apr 2022 16:24
Operator : JM
Sample : BFB TUNE
Misc : A, 5ML
ALS Vial : 2 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GcMsData\2022\GCMS_1\MethodQt\1M_A0317.M
Title : @GCMS_1, ug, 624, 8260
Last Update : Thu Mar 17 18:06:57 2022



Spectrum Information: Average of 7.515 to 7.544 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.5	47634	PASS
75	95	30	60	52.9	123226	PASS
95	95	100	100	100.0	232903	PASS
96	95	5	9	6.8	15947	PASS
173	174	0.00	2	0.9	1800	PASS
174	95	50	100	82.7	192578	PASS
175	174	5	9	7.4	14181	PASS
176	174	95	101	96.9	186666	PASS
177	176	5	9	6.4	11957	PASS

unc

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 2

Data File: 2M167162.D
Analysis Date: 04/26/22 16:03
Method: EPA 8260D

Tune Scan/Time Range: Average of 7.342 to 7.361 min

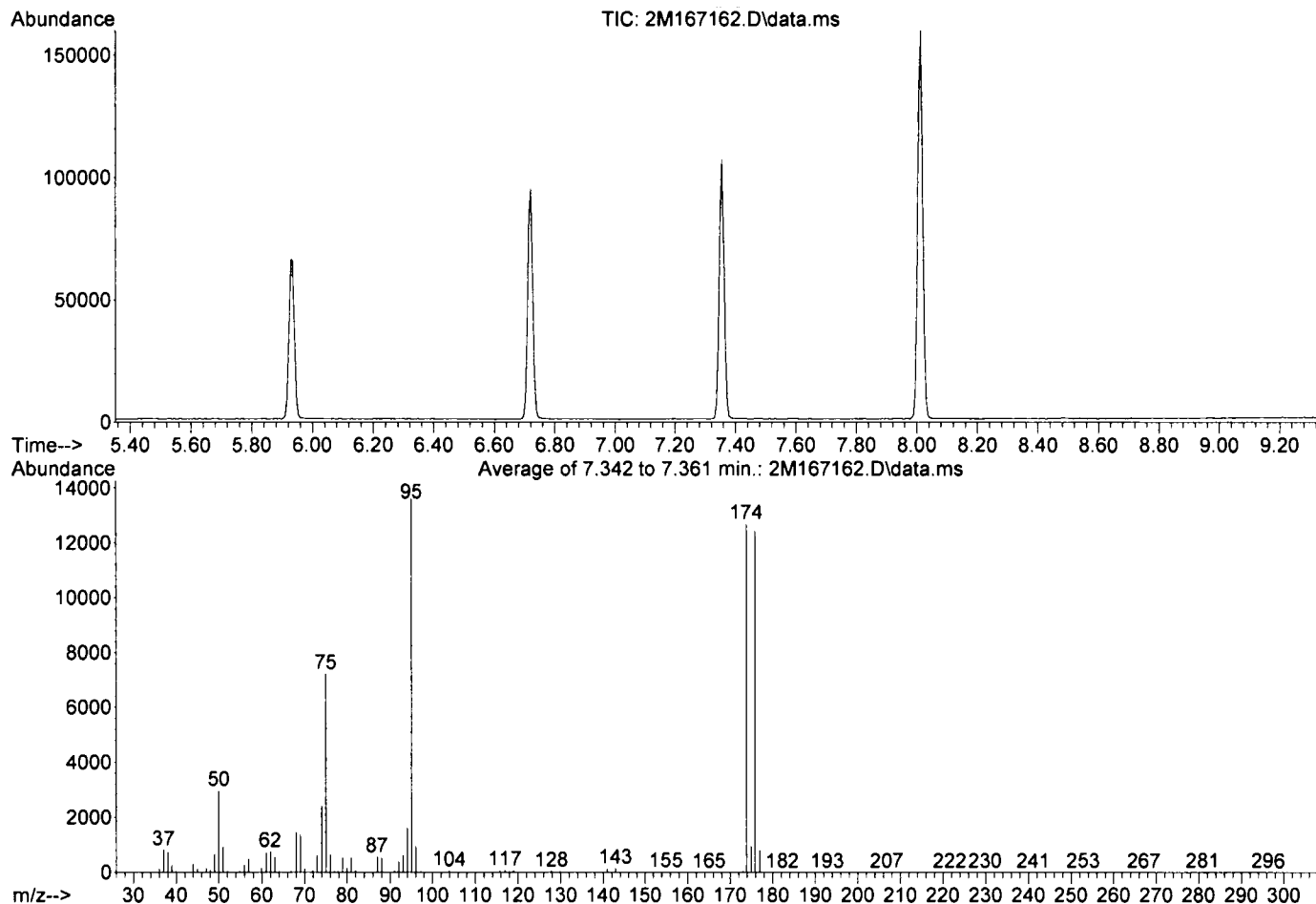
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	21.8	2970	PASS
75	95	30	60	53.2	7229	PASS
95	95	100	100	100.0	13600	PASS
96	95	5	9	7.1	967	PASS
173	174	0.00	2	0.4	54	PASS
174	95	50	100	93.3	12686	PASS
175	174	5	9	7.6	967	PASS
176	174	95	101	98.0	12436	PASS
177	176	5	9	6.6	817	PASS

Data File	Sample Number	Analysis Date:
2M167164.D	CAL @ 0.5 PPB	04/26/22 16:38
2M167165.D	CAL @ 1 PPB	04/26/22 16:58
2M167166.D	CAL @ 5 PPB	04/26/22 17:17
2M167168.D	CAL @ 10 PPB	04/26/22 17:57
2M167170.D	CAL @ 20 PPB	04/26/22 18:36
2M167172.D	CAL @ 50 PPB	04/26/22 19:16
2M167175.D	CAL @ 100 PPB	04/26/22 20:15
2M167178.D	CAL @ 250 PPB	04/26/22 21:14
2M167181.D	CAL @ 500 PPB	04/26/22 22:13
2M167184.D	BLK	04/26/22 23:13
2M167186.D	STD	04/26/22 23:52
2M167187.D	ICV	04/27/22 00:12

Data Path : G:\GcMsData\2022\GCMS_2\Data\04-26-22\
Data File : 2M167162.D
Acq On : 26 Apr 2022 16:03
Operator : JM
Sample : BFB TUNE
Misc : A, 5ML
ALS Vial : 20 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GcMsData\2022\GCMS_2\MethodQt\2M_A0421.M
Title : @GCMS_2,ug,624,8260
Last Update : Fri Apr 22 07:42:26 2022



Spectrum Information: Average of 7.342 to 7.361 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.8	2970	PASS
75	95	30	60	53.2	7229	PASS
95	95	100	100	100.0	13600	PASS
96	95	5	9	7.1	967	PASS
173	174	0.00	2	0.4	54	PASS
174	95	50	100	93.3	12686	PASS
175	174	5	9	7.6	967	PASS
176	174	95	101	98.0	12436	PASS
177	176	5	9	6.6	817	PASS

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 2

Data File: 2M167423.D
Analysis Date: 05/02/22 08:42
Method: EPA 8260D

Tune Scan/Time Range: Average of 7.336 to 7.373 min

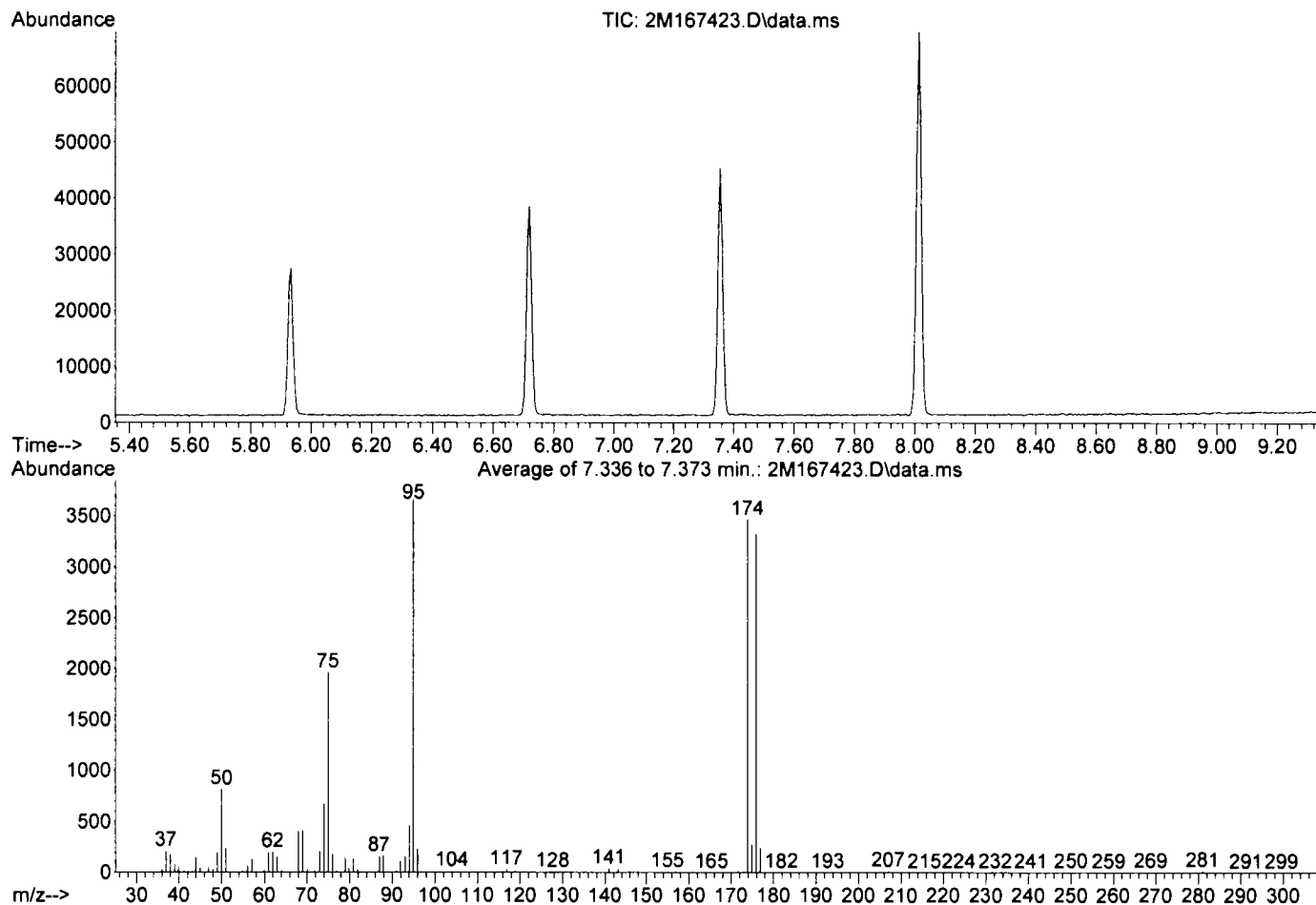
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	22.3	817	PASS
75	95	30	60	53.6	1964	PASS
95	95	100	100	100.0	3665	PASS
96	95	5	9	6.4	234	PASS
173	174	0.00	2	0.3	10	PASS
174	95	50	100	94.6	3469	PASS
175	174	5	9	7.9	274	PASS
176	174	95	101	96.0	3329	PASS
177	176	5	9	7.3	244	PASS

Data File	Sample Number	Analysis Date:
2M167425.D	CAL @ 20 PPB	05/02/22 09:17
2M167427.D	DI	05/02/22 09:56
2M167428.D	DI	05/02/22 10:16
2M167429.D	DAILY BLANK	05/02/22 10:35
2M167430.D	DAILY BLANK	05/02/22 10:55
2M167431.D	AD30470-001	05/02/22 11:15
2M167432.D	AD30261-022(10X)	05/02/22 11:35
2M167433.D	MBS101484	05/02/22 11:55
2M167434.D	MBS101485	05/02/22 12:15
2M167435.D	AD30460-001	05/02/22 12:34
2M167436.D	AD30453-001	05/02/22 12:54
2M167437.D	AD30442-011	05/02/22 13:14
2M167438.D	AD30442-012	05/02/22 13:33
2M167439.D	AD30442-013	05/02/22 13:53
2M167440.D	AD30442-014	05/02/22 14:13
2M167441.D	AD30442-010	05/02/22 14:32
2M167442.D	30465-002	05/02/22 14:52
2M167443.D	AD30470-001(MS)	05/02/22 15:12
2M167444.D	AD30470-001(MSD)	05/02/22 15:31
2M167445.D	BLK	05/02/22 15:51
2M167446.D	AD30444-006	05/02/22 16:11
2M167447.D	AD30444-005	05/02/22 16:30
2M167448.D	AD30475-004	05/02/22 16:50
2M167449.D	AD30488-003	05/02/22 17:10
2M167450.D	AD30481-013	05/02/22 17:29
2M167451.D	AD30470-002	05/02/22 17:49
2M167452.D	AD30475-001	05/02/22 18:09
2M167453.D	AD30475-002	05/02/22 18:29
2M167454.D	AD30475-003	05/02/22 18:48
2M167455.D	AD30454-001	05/02/22 19:08
2M167456.D	BLK	05/02/22 19:28
2M167457.D	AD30465-002	05/02/22 19:48
2M167458.D	BLK	05/02/22 20:07
2M167459.D	AD30475-002	05/02/22 20:27
2M167460.D	AD30475-001(5X)	05/02/22 20:47

Data Path : G:\GcMsData\2022\GCMS_2\Data\05-02-22\
 Data File : 2M167423.D
 Acq On : 02 May 2022 08:42
 Operator : JM
 Sample : BFB TUNE
 Misc : A,5ML
 ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GcMsData\2022\GCMS_2\MethodQt\2M_A0426.M
 Title : @GCMS_2,ug,624,8260
 Last Update : Tue Apr 26 23:19:25 2022



Spectrum Information: Average of 7.336 to 7.373 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	22.3	817	PASS
75	95	30	60	53.6	1964	PASS
95	95	100	100	100.0	3665	PASS
96	95	5	9	6.4	234	PASS
173	174	0.00	2	0.3	10	PASS
174	95	50	100	94.6	3469	PASS
175	174	5	9	7.9	274	PASS
176	174	95	101	96.0	3329	PASS
177	176	5	9	7.3	244	PASS

unc

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 1

Data File: 1M161189.D
Analysis Date: 05/02/22 13:04
Method: EPA 8260D

Tune Scan/Time Range: Average of 7.502 to 7.515 min

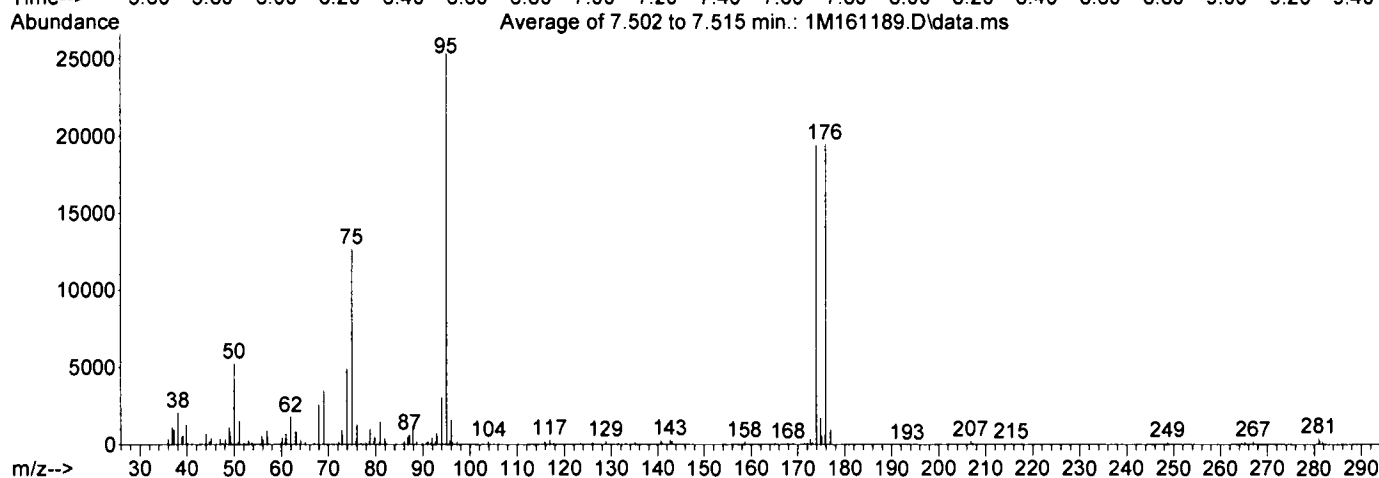
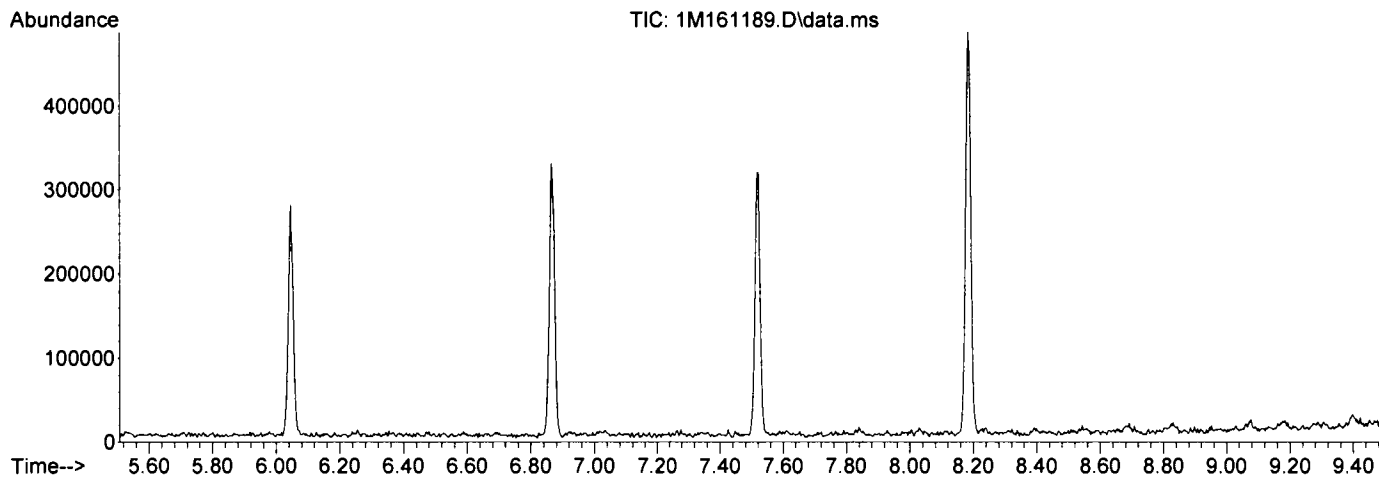
Tgt	Rel	Lo	Hi	Lim	Rel	Raw	Pass/
Mass	Mass	Lim			Abund	Abund	Fail
50	95	15	40		20.8	5266	PASS
75	95	30	60		50.0	12681	PASS
95	95	100	100		100.0	25353	PASS
96	95	5	9		6.5	1636	PASS
173	174	0.00	2		0.7	135	PASS
174	95	50	100		76.8	19463	PASS
175	174	5	9		8.9	1732	PASS
176	174	95	101		100.1	19488	PASS
177	176	5	9		5.1	999	PASS

Data File	Sample Number	Analysis Date:
1M161191.D	CAL @ 20 PPB	05/02/22 13:38
1M161193.D	BLK	05/02/22 14:15
1M161194.D	BLK-HCL	05/02/22 14:34
1M161195.D	DAILY BLANK	05/02/22 14:53
1M161196.D	DAILY BLANK	05/02/22 15:12
1M161197.D	AD30343-004(T)	05/02/22 15:30
1M161198.D	AD30153-007(T)	05/02/22 15:49
1M161199.D	AD30153-001(T)	05/02/22 16:08
1M161200.D	BLK	05/02/22 16:27
1M161201.D	AD30177-003(T)	05/02/22 16:46
1M161202.D	AD30177-007(T)	05/02/22 17:04
1M161203.D	AD30343-005(T)	05/02/22 17:23
1M161204.D	STD	05/02/22 17:42
1M161205.D	MBS101490	05/02/22 18:00
1M161206.D	AD30343-004(T:M)	05/02/22 18:19
1M161207.D	AD30343-004(T:M)	05/02/22 18:37
1M161208.D	MBS101491	05/02/22 18:56
1M161209.D	BLK	05/02/22 19:15
1M161210.D	BLK	05/02/22 19:34
1M161211.D	AD30489-001	05/02/22 19:53
1M161212.D	AD30489-002	05/02/22 20:12
1M161213.D	AD30489-003	05/02/22 20:30
1M161214.D	AD30489-004	05/02/22 20:49
1M161215.D	AD30489-005	05/02/22 21:08
1M161216.D	AD30489-006	05/02/22 21:26
1M161217.D	AD30489-007	05/02/22 21:45
1M161218.D	AD30489-008	05/02/22 22:04
1M161219.D	AD30489-009	05/02/22 22:23
1M161220.D	AD30488-001	05/02/22 22:42
1M161221.D	AD30488-002	05/02/22 23:00
1M161222.D	AD30487-001	05/02/22 23:19
1M161223.D	AD30475-001(5X)	05/02/22 23:38
1M161224.D	AD30506-011(50X)	05/02/22 23:57
1M161225.D	AD30506-009(50X)	05/03/22 00:15
1M161226.D	AD30506-010(50X)	05/03/22 00:34
1M161227.D	BLK	05/03/22 00:53

Data Path : G:\GcMsData\2022\GCMS_1\Data\05-02-22\
Data File : 1M161189.D
Acq On : 02 May 2022 13:04
Operator : SG
Sample : BFB TUNE
Misc : A, 5ML
ALS Vial : 3 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GcMsData\2022\GCMS_1\MethodQt\1M_A0421.M
Title : @GCMS_1,ug,624,8260
Last Update : Fri Apr 22 09:16:07 2022



Spectrum Information: Average of 7.502 to 7.515 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.8	5266	PASS
75	95	30	60	50.0	12681	PASS
95	95	100	100	100.0	25353	PASS
96	95	5	9	6.5	1636	PASS
173	174	0.00	2	0.7	135	PASS
174	95	50	100	76.8	19463	PASS
175	174	5	9	8.9	1732	PASS
176	174	95	101	100.1	19488	PASS
177	176	5	9	5.1	999	PASS

Form1

ORGANICS VOLATILE REPORT

Sample Number: DAILY BLANK

Client Id:

Data File: 1M161196.D

Analysis Date: 05/02/22 15:12

Date Rec/Extracted:

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260D

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	110-82-7	Cyclohexane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	100-41-4	Ethylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.66	U	98-82-8	Isopropylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	79-20-9	Methyl Acetate	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
123-91-1	1,4-Dioxane	50	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.87	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
74-97-5	Bromochloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-25-2	Bromoform	1.0	U	79-01-6	Trichloroethene	1.0	U
74-83-9	Bromomethane	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-01-4	Vinyl Chloride	1.0	U

Worksheet #: 639376

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used - Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

SampleID : DAILY BLANK
Data File: 1M161196.D
Acq On : 05/02/22 15:12

Operator : SG
Sam Mult : 1 Vial# : 10
Misc : A,5ML

Qt Meth : 1M_A0421.M
Qt On : 05/02/22 15:27
Qt Upd On: 04/22/22 09:35

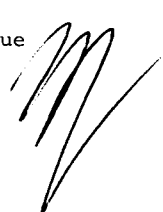
Data Path : G:\GcMsData\2022\GCMS_1\Data\05-02-22\
Qt Path : G:\GcMsData\2022\GCMS_1\MethodQt\
Qt Resp Via : Initial Calibration

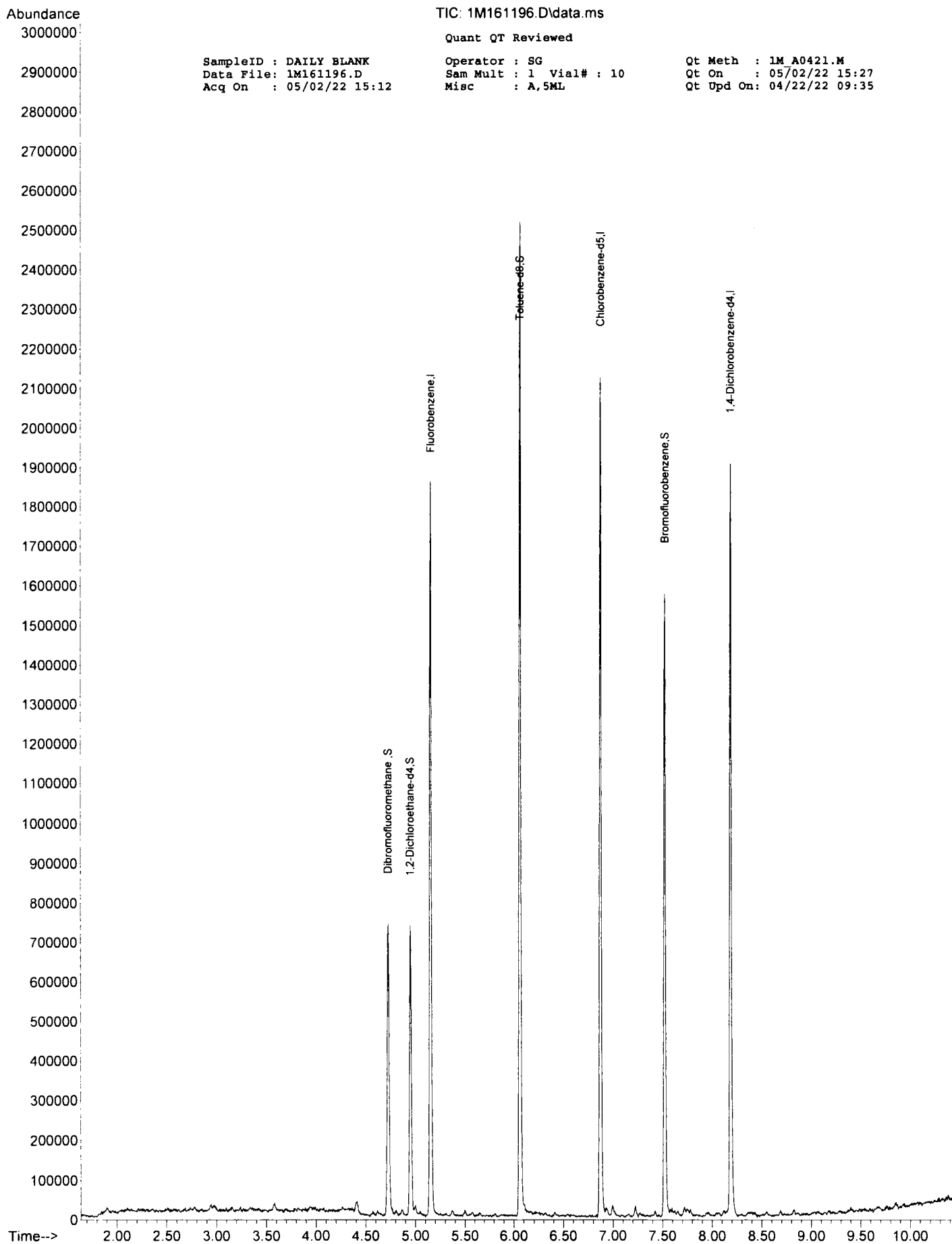
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.155	96	1042887	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.875	117	798683	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.187	152	358277	30.00	ug/l	0.00

System Monitoring Compounds						
37) Dibromofluoromethane	4.727	111	293026	31.52	ug/l	0.00
Spiked Amount	30.000		Recovery	=	105.07%	
39) 1,2-Dichloroethane-d4	4.949	67	161367	32.35	ug/l	0.00
Spiked Amount	30.000		Recovery	=	107.83%	
66) Toluene-d8	6.061	98	1059615	29.67	ug/l	0.00
Spiked Amount	30.000		Recovery	=	98.90%	
76) Bromofluorobenzene	7.524	174	297661	30.24	ug/l	0.00
Spiked Amount	30.000		Recovery	=	100.80%	

Target Compounds	Qvalue
------------------	--------

(#) = qualifier out of range (m) = manual integration (+) = signals summed





Form1

ORGANICS VOLATILE REPORT

Sample Number: DAILY BLANK

Client Id:

Data File: 2M167430.D

Analysis Date: 05/02/22 10:55

Date Rec/Extracted:

Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260D

Matrix: Aqueous

Initial Vol: 5ml

Final Vol: NA

Dilution: 1.00

Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	110-82-7	Cyclohexane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	100-41-4	Ethylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.66	U	98-82-8	Isopropylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	79-20-9	Methyl Acetate	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
123-91-1	1,4-Dioxane	50	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.87	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
74-97-5	Bromochloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-25-2	Bromoform	1.0	U	79-01-6	Trichloroethene	1.0	U
74-83-9	Bromomethane	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-01-4	Vinyl Chloride	1.0	U

Worksheet #: 639376

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

d - Pesticide %Diff>40% between columns due to coelution. Lower concentration use a

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

SampleID : DAILY BLANK
Data File: 2M167430.D
Acq On : 05/02/22 10:55

Operator : JM
Sam Mult : 1 Vial# : 8
Misc : A,5ML

Qt Meth : 2M A0426.M
Qt On : 05/02/22 11:12
Qt Upd On: 04/26/22 23:20

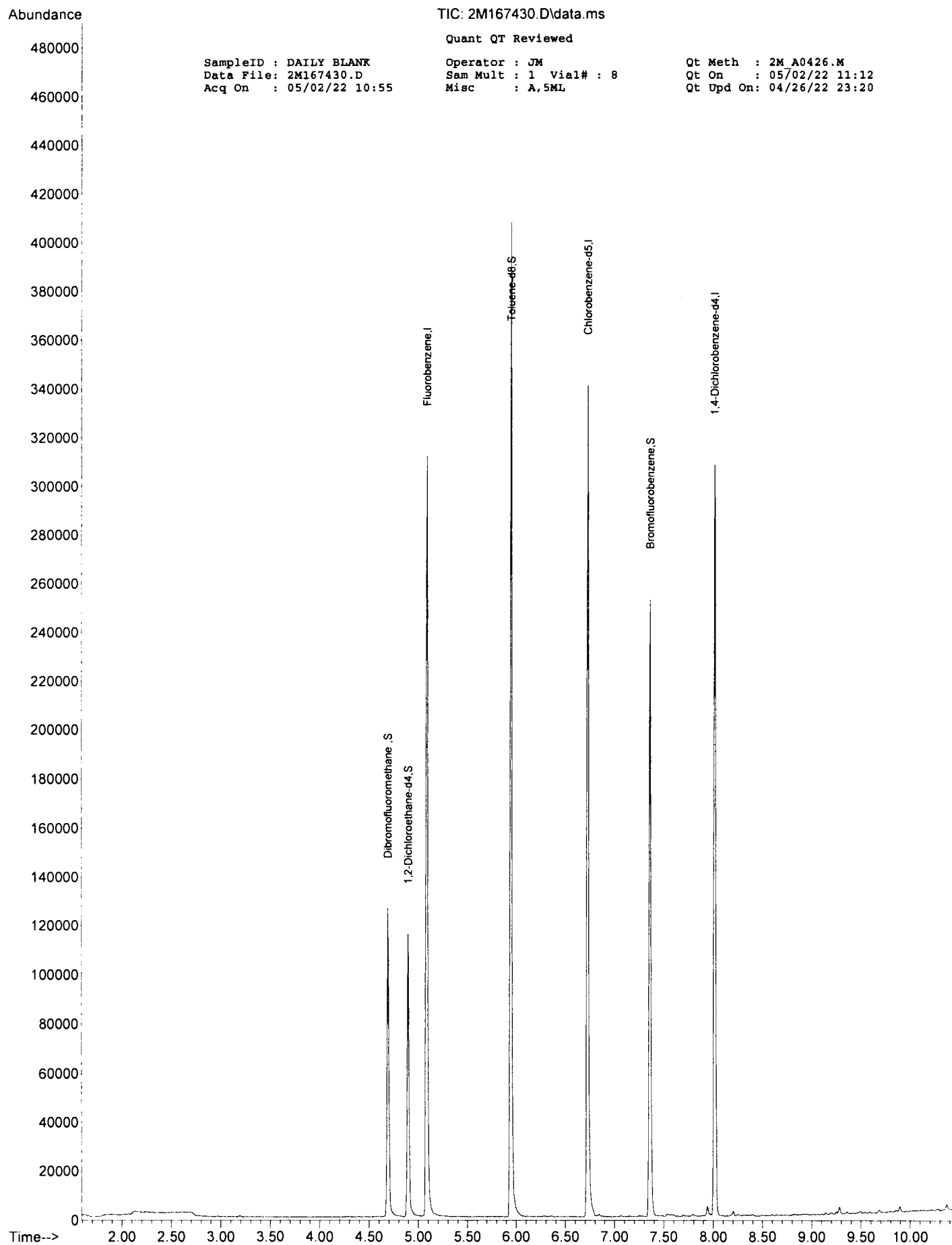
Data Path : G:\GcMsData\2022\GCMS_2\Data\05-02-22\
Qt Path : G:\GcMsData\2022\GCMS_2\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
4) Fluorobenzene	5.086	96	184731	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.726	117	138775	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.013	152	64624	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.690	111	49166	29.36	ug/l	0.00
Spiked Amount 30.000			Recovery =	97.87%		
39) 1,2-Dichloroethane-d4	4.897	67	27267	30.20	ug/l	0.00
Spiked Amount 30.000			Recovery =	100.67%		
66) Toluene-d8	5.946	98	182032	29.36	ug/l	0.00
Spiked Amount 30.000			Recovery =	97.87%		
76) Bromofluorobenzene	7.360	174	58199	29.75	ug/l	0.00
Spiked Amount 30.000			Recovery =	99.17%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed





Form3
Recovery Data Laboratory Limits
QC Batch: MBS101485

Data File		Sample ID:		Analysis Date			
Spike or Dup: 2M167434.D		MBS101485		5/2/2022 12:15:00 PM			
Non Spike(If applicable):							
Inst Blank(If applicable):							
Method: 8260D		Matrix: Aqueous		Units: ug/L		QC Type: MBS	
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	20.1432	0	20	101	50	150
Dichlorodifluoromethane	1	19.4903	0	20	97	50	150
Chloromethane	1	19.7872	0	20	99	50	150
Bromomethane	1	17.122	0	20	86	50	150
Vinyl Chloride	1	20.5394	0	20	103	50	150
Chloroethane	1	20.8976	0	20	104	50	150
Trichlorofluoromethane	1	20.4959	0	20	102	50	150
Ethyl ether	1	20.3128	0	20	102	50	150
Furan	1	20.4755	0	20	102	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	19.4844	0	20	97	50	150
Methylene Chloride	1	21.9772	0	20	110	70	130
Acrolein	1	102.4462	0	100	102	50	150
Acrylonitrile	1	21.0006	0	20	105	50	150
Iodomethane	1	14.1934	0	20	71	50	150
Acetone	1	107.3792	0	100	107	50	150
Carbon Disulfide	1	20.3269	0	20	102	50	150
t-Butyl Alcohol	1	109.6966	0	100	110	50	150
n-Hexane	1	19.8229	0	20	99	70	130
Di-isopropyl-ether	1	21.2025	0	20	106	70	130
1,1-Dichloroethene	1	22.1701	0	20	111	70	130
Methyl Acetate	1	21.1627	0	20	106	50	150
Methyl-t-butyl ether	1	20.814	0	20	104	70	130
1,1-Dichloroethane	1	21.7193	0	20	109	70	130
trans-1,2-Dichloroethene	1	21.7076	0	20	109	70	130
Ethyl-t-butyl ether	1	21.1501	0	20	106	70	130
cis-1,2-Dichloroethene	1	22.3486	0	20	112	70	130
Bromochloromethane	1	22.5572	0	20	113	70	130
2,2-Dichloropropane	1	21.9924	0	20	110	70	130
Ethyl acetate	1	21.0743	0	20	105	50	150
1,4-Dioxane	1	1145.437	0	1000	115	50	150
1,1-Dichloropropene	1	21.4949	0	20	107	70	130
Chloroform	1	21.705	0	20	109	70	130
Cyclohexane	1	19.9737	0	20	100	70	130
1,2-Dichloroethane	1	21.8574	0	20	109	70	130
2-Butanone	1	21.6709	0	20	108	50	150
1,1,1-Trichloroethane	1	21.4558	0	20	107	70	130
Carbon Tetrachloride	1	21.1951	0	20	106	50	150
Vinyl Acetate	1	20.8828	0	20	104	50	150
Bromodichloromethane	1	22.1495	0	20	111	70	130
Methylcyclohexane	1	19.7403	0	20	99	70	130
Dibromomethane	1	22.1353	0	20	111	70	130
1,2-Dichloropropane	1	22	0	20	110	70	130
Trichloroethene	1	22.2232	0	20	111	70	130
Benzene	1	21.1677	0	20	106	70	130
tert-Amyl methyl ether	1	21.1163	0	20	106	70	130
Iso-propylacetate	1	21.0398	0	20	105	70	130
Methyl methacrylate	1	21.928	0	20	110	70	130
Dibromochloromethane	1	22.642	0	20	113	70	130
2-Chloroethylvinylether	1	20.1789	0	20	101	70	130
cis-1,3-Dichloropropene	1	21.4703	0	20	107	70	130
trans-1,3-Dichloropropene	1	21.7258	0	20	109	70	130
Ethyl methacrylate	1	21.0543	0	20	105	70	130
1,1,2-Trichloroethane	1	22.3801	0	20	112	70	130
1,2-Dibromoethane	1	22.0734	0	20	110	70	130
1,3-Dichloropropane	1	21.8663	0	20	109	70	130
4-Methyl-2-Pentanone	1	20.4514	0	20	102	50	150
2-Hexanone	1	21.2628	0	20	106	50	150
Tetrachloroethene	1	21.4307	0	20	107	50	150
Toluene	1	21.5579	0	20	108	70	130
1,1,1,2-Tetrachloroethane	1	21.1001	0	20	106	70	130
Chlorobenzene	1	21.2419	0	20	106	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS101485

Method: 8260D	Matrix: Aqueous		Units: ug/L		QC Type: MBS		
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	21.1485	0	20	106	70	130
n-Amyl acetate	1	21.228	0	20	106	70	130
Bromoform	1	21.3691	0	20	107	70	130
Ethylbenzene	1	21.4749	0	20	107	70	130
1,1,2,2-Tetrachloroethane	1	21.4525	0	20	107	70	130
Styrene	1	21.0488	0	20	105	70	130
m&p-Xylenes	1	41.5209	0	40	104	70	130
o-Xylene	1	21.0103	0	20	105	70	130
trans-1,4-Dichloro-2-butene	1	19.9295	0	20	100	50	150
1,3-Dichlorobenzene	1	21.1601	0	20	106	70	130
1,4-Dichlorobenzene	1	20.8282	0	20	104	70	130
1,2-Dichlorobenzene	1	21.1186	0	20	106	70	130
Isopropylbenzene	1	21.2914	0	20	106	70	130
Cyclohexanone	1	103.0833	0	100	103	50	150
Camphene	1	20.4342	0	20	102	70	130
1,2,3-Trichloropropane	1	20.8318	0	20	104	70	130
2-Chlorotoluene	1	21.9909	0	20	110	70	130
p-Ethyltoluene	1	20.2102	0	20	101	70	130
4-Chlorotoluene	1	21.4408	0	20	107	70	130
n-Propylbenzene	1	21.51	0	20	108	70	130
Bromobenzene	1	21.2509	0	20	106	70	130
1,3,5-Trimethylbenzene	1	21.1658	0	20	106	70	130
Butyl methacrylate	1	21.1729	0	20	106	70	130
t-Butylbenzene	1	21.1989	0	20	106	70	130
1,2,4-Trimethylbenzene	1	21.23	0	20	106	70	130
sec-Butylbenzene	1	20.978	0	20	105	70	130
4-Isopropyltoluene	1	20.7433	0	20	104	70	130
n-Butylbenzene	1	21.1822	0	20	106	70	130
p-Diethylbenzene	1	20.1323	0	20	101	70	130
1,2,4,5-Tetramethylbenzene	1	20.4748	0	20	102	70	130
1,2-Dibromo-3-Chloropropane	1	21.6755	0	20	108	50	150
Camphor	1	225.8927	0	200	113	20	150
Hexachlorobutadiene	1	22.0317	0	20	110	50	150
1,2,4-Trichlorobenzene	1	21.9829	0	20	110	70	130
1,2,3-Trichlorobenzene	1	22.9178	0	20	115	70	130
Naphthalene	1	22.3124	0	20	112	50	150

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
 Bold and underline - Indicates the compounds reported on form1

SampleID : MBS
Data File: 2M167434.D
Acq On : 05/02/22 12:15

Operator : JM
Sam Mult : 1 Vial# : 12
Misc : A,5ML

Qt Meth : 2M A0426.M
Qt On : 05/02/22 12:30
Qt Upd On: 04/26/22 23:20

Data Path : G:\GcMsData\2022\GCMS_2\Data\05-02-22\
Qt Path : G:\GcMsData\2022\GCMS_2\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.087	96	161147	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.727	117	117400	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.013	152	54921	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.690	111	43233	29.59	ug/l	0.00
Spiked Amount 30.000			Recovery	=	98.63%	
39) 1,2-Dichloroethane-d4	4.898	67	23659	30.04	ug/l	0.00
Spiked Amount 30.000			Recovery	=	100.13%	
66) Toluene-d8	5.946	98	156591	29.85	ug/l	0.00
Spiked Amount 30.000			Recovery	=	99.50%	
76) Bromofluorobenzene	7.361	174	50929	30.64	ug/l	0.00
Spiked Amount 30.000			Recovery	=	102.13%	
Target Compounds						
5) Chlorodifluoromethane	1.673	51	34973	20.1432	ug/l	88
6) Dichlorodifluoromethane	1.654	85	29615	19.4903	ug/l	96
7) Chloromethane	1.831	50	25546	19.7872	ug/l	98
8) Bromomethane	2.227	94	10026	17.1220	ug/l	93
9) Vinyl Chloride	1.929	62	30809	20.5394	ug/l	99
10) Chloroethane	2.313	64	20931	20.8976	ug/l	98
11) Trichlorofluoromethane	2.538	101	48246	20.4959	ug/l	98
12) Ethyl ether	2.770	59	20917	20.3128	ug/l	89
13) Furan	2.813	39	42169	20.4755	ug/l	91
14) 1,1,2-Trichloro-1,2,2-...	2.971	101	19755	19.4844	ug/l	98
15) Methylene Chloride	3.392	84	25470	21.9772	ug/l	89
16) Acrolein	2.892	56	26749	102.4462	ug/l	99
17) Acrylonitrile	3.593	53	11319	21.0006	ug/l	99
18) Iodomethane	3.124	142	20548	14.1934	ug/l	99
19) Acetone	3.020	43	44851	107.3792	ug/l	97
20) Carbon Disulfide	3.191	76	55704	20.3269	ug/l	100
21) t-Butyl Alcohol	3.453	59	15976	109.6966	ug/l	96
22) n-Hexane	3.849	57	23164	19.8229	ug/l	98
23) Di-isopropyl-ether	4.008	45	74897	21.2025	ug/l	90
24) 1,1-Dichloroethene	2.983	61	39324	22.1701	ug/l	90
25) Methyl Acetate	3.294	43	21487	21.1627	ug/l	100
26) Methyl-t-butyl ether	3.617	73	68058	20.8140	ug/l	93
27) 1,1-Dichloroethane	3.977	63	45693	21.7193	ug/l	100
28) trans-1,2-Dichloroethene	3.623	96	25404	21.7076	ug/l	91
29) Ethyl-t-butyl ether	4.276	59	71088	21.1501	ug/l	94
30) cis-1,2-Dichloroethene	4.392	61	47542	22.3486	ug/l	89
31) Bromochloromethane	4.550	49	22182	22.5572	ug/l	84
32) 2,2-Dichloropropane	4.398	77	38248	21.9924	ug/l	99
33) Ethyl acetate	4.422	43	29704m	21.0743	ug/l	
34) 1,4-Dioxane	5.483	88	20590	1145.4366	ug/l	90
35) 1,1-Dichloropropene	4.812	75	34574	21.4949	ug/l	98
36) Chloroform	4.593	83	45820	21.7050	ug/l	99
38) Cyclohexane	4.757	56	32025	19.9737	ug/l	87
40) 1,2-Dichloroethane	4.940	62	39217	21.8574	ug/l	99
41) 2-Butanone	4.392	43	12204m	21.6709	ug/l	
42) 1,1,1-Trichloroethane	4.721	97	41638	21.4558	ug/l	99
43) Carbon Tetrachloride	4.818	117	35839	21.1951	ug/l	99
44) Vinyl Acetate	4.001	43	88444	20.8828	ug/l	100
45) Bromodichloromethane	5.556	83	34660	22.1495	ug/l	98
46) Methylcyclohexane	5.404	83	27867	19.7403	ug/l	91
47) Dibromomethane	5.489	174	21421	22.1353	ug/l	96
48) 1,2-Dichloropropane	5.416	63	26363	22.0000	ug/l	100
49) Trichloroethene	5.288	130	29804	22.2232	ug/l	98
50) Benzene	4.934	78	96099	21.1677	ug/l	100
51) tert-Amyl methyl ether	4.977	73	65629	21.1163	ug/l	95
53) Iso-propylacetate	4.934	43	54618	21.0398	ug/l	94
54) Methyl methacrylate	5.446	41	27307	21.9280	ug/l	85
55) Dibromochloromethane	6.410	129	27999	22.6420	ug/l	99
56) 2-Chloroethylvinylether	5.696	63	3696	20.1789	ug/l	99
57) cis-1,3-Dichloropropene	5.794	75	39819	21.4703	ug/l	98
58) trans-1,3-Dichloropropene	6.080	75	36401	21.7258	ug/l	98
59) Ethyl methacrylate	6.099	41	26048	21.0543	ug/l	83
60) 1,1,2-Trichloroethane	6.190	97	23878	22.3801	ug/l	96
61) 1,2-Dibromoethane	6.489	107	25734	22.0734	ug/l	97
62) 1,3-Dichloropropane	6.282	76	39782	21.8663	ug/l	98
63) 4-Methyl-2-Pentanone	5.861	43	26347	20.4514	ug/l	98
64) 2-Hexanone	6.294	43	19726	21.2628	ug/l	95
65) Tetrachloroethene	6.282	164	23232	21.4307	ug/l	99
67) Toluene	5.983	92	62375	21.5579	ug/l	98

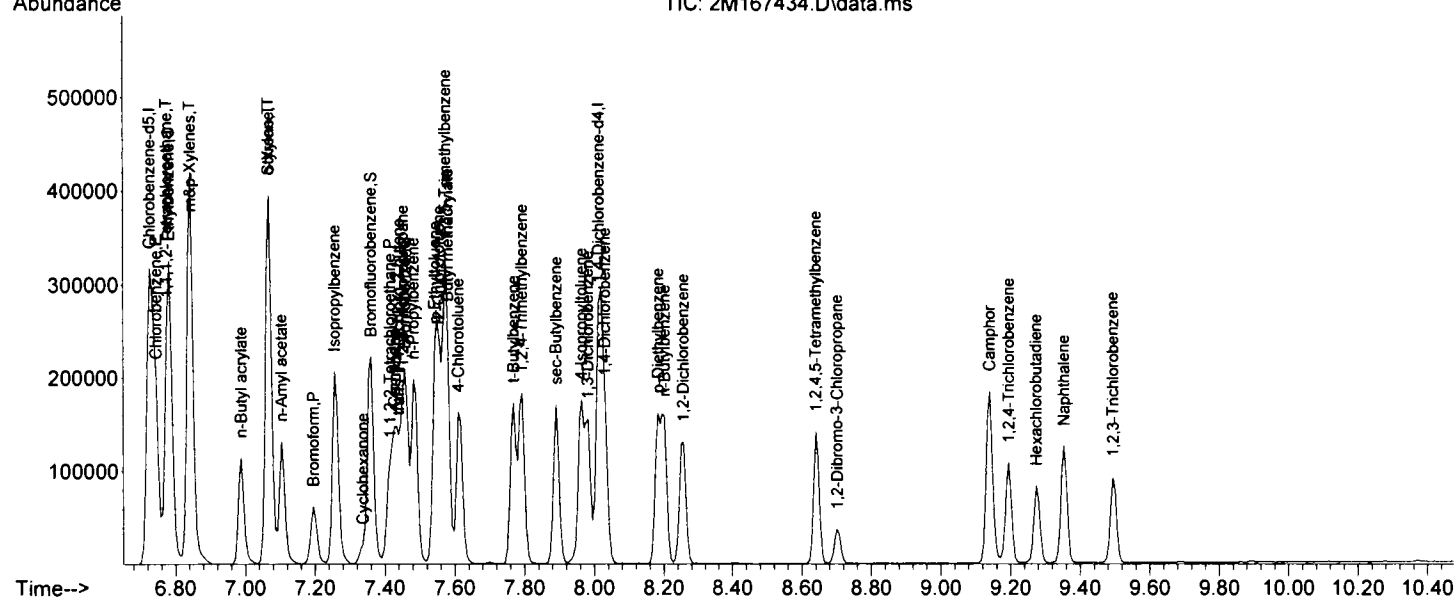
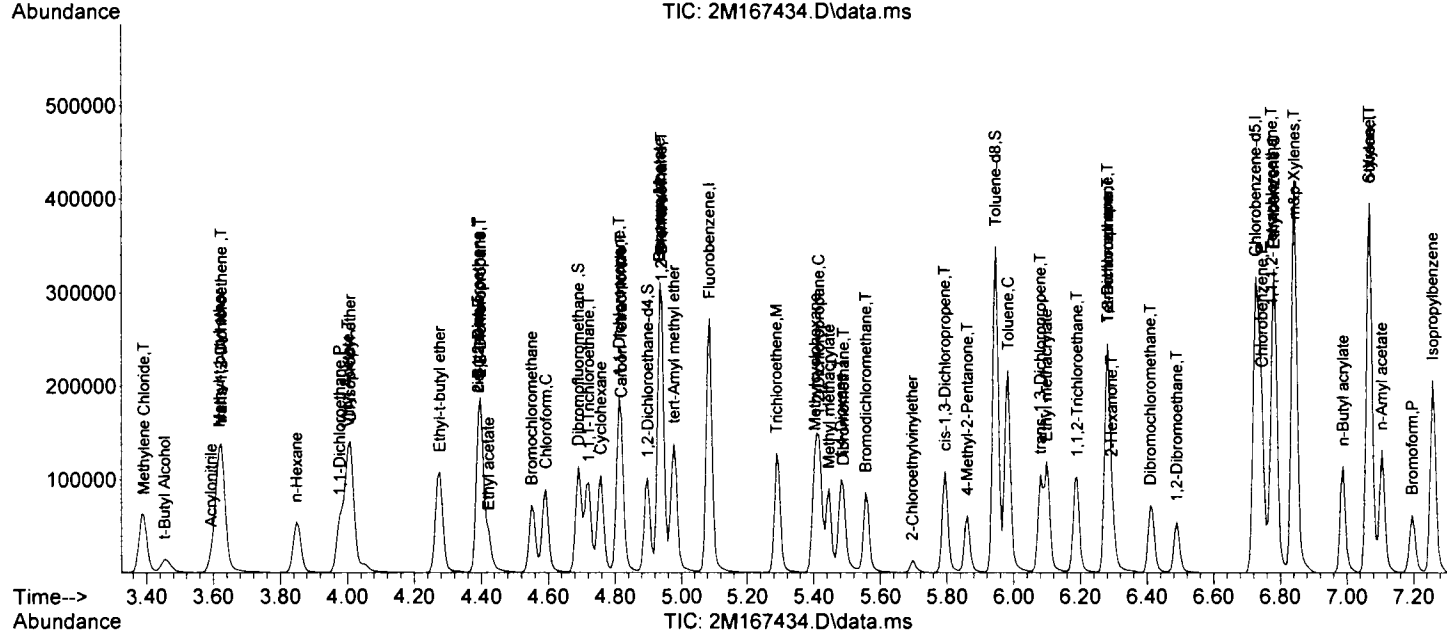
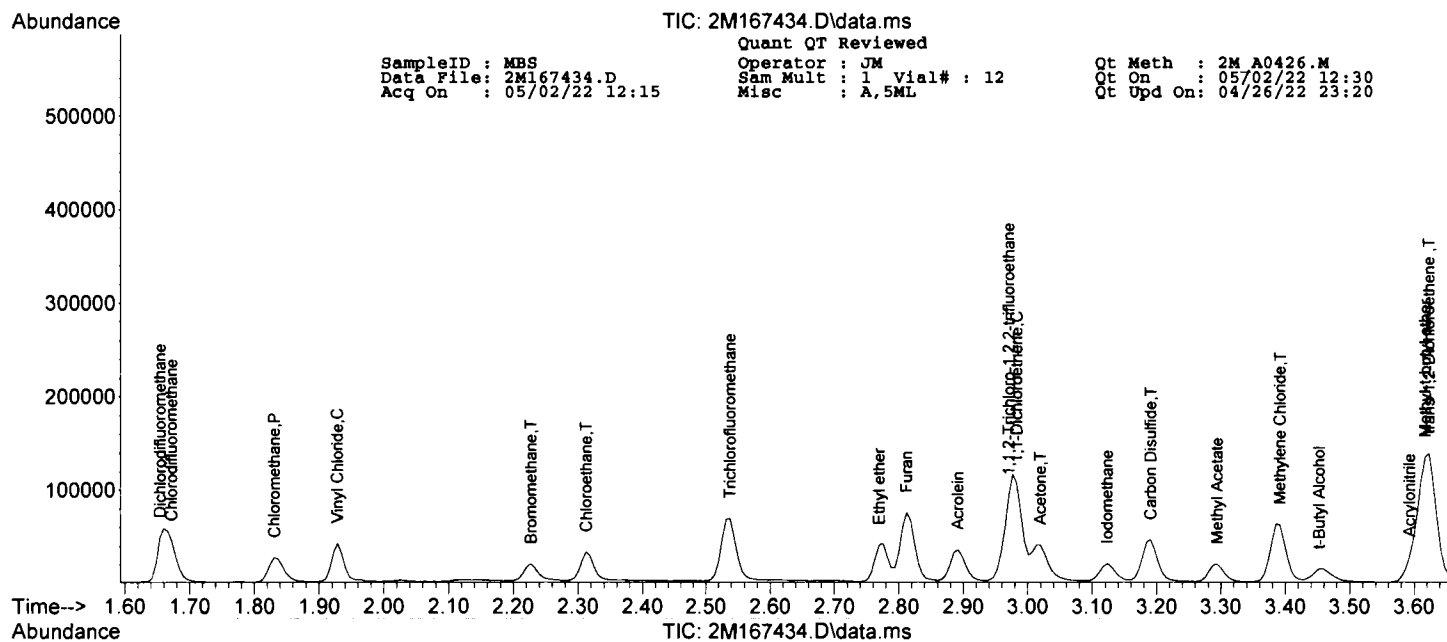
Quantitation Report (QT Reviewed)

SampleID : MBS Operator : JM Qt Meth : 2M_A0426.M
 Data File: 2M167434.D Sam Mult : 1 Vial# : 12 Qt On : 05/02/22 12:30
 Acq On : 05/02/22 12:15 Misc : A,5ML Qt Upd On: 04/26/22 23:20

Data Path : G:\GcMsData\2022\GCMS_2\Data\05-02-22\
 Qt Path : G:\GcMsData\2022\GCMS_2\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1,1,1,2-Tetrachloroethane	6.775	133	24688	21.1001	ug/l	100
69) Chlorobenzene	6.745	112	68446	21.2419	ug/l	100
71) n-Butyl acrylate	6.989	55	53538	21.1485	ug/l	95
72) n-Amyl acetate	7.105	43	47989	21.2280	ug/l	93
73) Bromoform	7.196	173	20928	21.3691	ug/l	100
74) Ethylbenzene	6.781	106	29347	21.4749	ug/l	98
75) 1,1,2,2-Tetrachloroethane	7.415	83	31790	21.4525	ug/l	97
77) Styrene	7.068	104	72033	21.0488	ug/l	94
78) m&p-Xylenes	6.842	106	86301	41.5209	ug/l	95
79) o-Xylene	7.068	106	42162	21.0103	ug/l	99
80) trans-1,4-Dichloro-2-b...	7.440	53	13584	19.9295	ug/l	85
81) 1,3-Dichlorobenzene	7.982	146	45576	21.1601	ug/l	99
82) 1,4-Dichlorobenzene	8.031	146	47011	20.8282	ug/l	100
83) 1,2-Dichlorobenzene	8.257	146	43273	21.1186	ug/l	99
84) Isopropylbenzene	7.257	105	99135	21.2914	ug/l	99
85) Cyclohexanone	7.336	55	6069	103.0833	ug/l	93
86) Camphene	7.428	93	24304	20.4342	ug/l	96
87) 1,2,3-Trichloropropane	7.452	75	39582	20.8318	ug/l	100
88) 2-Chlorotoluene	7.556	91	59906	21.9909	ug/l	97
89) p-Ethyltoluene	7.543	105	95767	20.2102	ug/l	92
90) 4-Chlorotoluene	7.611	91	56287	21.4408	ug/l	97
91) n-Propylbenzene	7.483	91	109304	21.5100	ug/l	99
92) Bromobenzene	7.458	77	62262	21.2509	ug/l	95
93) 1,3,5-Trimethylbenzene	7.574	105	66150	21.1658	ug/l	91
94) Butyl methacrylate	7.580	41	33444	21.1729	ug/l	81
95) t-Butylbenzene	7.769	119	70935	21.1989	ug/l	98
96) 1,2,4-Trimethylbenzene	7.793	105	75559	21.2300	ug/l	99
97) sec-Butylbenzene	7.891	105	82889	20.9780	ug/l	98
98) 4-Isopropyltoluene	7.964	119	70974	20.7433	ug/l	99
99) n-Butylbenzene	8.202	91	72459	21.1822	ug/l	97
100) p-Diethylbenzene	8.184	119	38846	20.1323	ug/l	98
101) 1,2,4,5-Tetramethylben...	8.641	119	54615	20.4748	ug/l	96
102) 1,2-Dibromo-3-Chloropr...	8.702	157	7918	21.6755	ug/l	86
103) Camphor	9.141	95	34742	225.8927	ug/l	98
104) Hexachlorobutadiene	9.275	225	12393	22.0317	ug/l	97
105) 1,2,4-Trichlorobenzene	9.196	180	25263	21.9829	ug/l	99
106) 1,2,3-Trichlorobenzene	9.494	180	22126	22.9178	ug/l	97
107) Naphthalene	9.354	128	72952	22.3124	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed



Form3
Recovery Data Laboratory Limits
QC Batch: MBS101485

Data File		Sample ID:		Analysis Date			
Spike or Dup: 2M167443.D		AD30470-001(MS)		5/2/2022 3:12:00 PM			
Non Spike(If applicable): 2M167431.D		AD30470-001		5/2/2022 11:15:00 AM			
Inst Blank(If applicable):							
Method: 8260D		Matrix: Aqueous		Units: ug/L		QC Type: MS	
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	20.6814	0	20	103	50	150
Dichlorodifluoromethane	1	18.3854	0	20	92	50	150
Chloromethane	1	16.0856	0	20	80	50	150
Bromomethane	1	10.5391	0	20	53	50	150
Vinyl Chloride	1	18.4809	0	20	92	50	150
Chloroethane	1	17.597	0	20	88	50	150
Trichlorofluoromethane	1	18.9682	0	20	95	50	150
Ethyl ether	1	17.0693	0	20	85	50	150
Furan	1	17.8	0	20	89	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	17.7533	0	20	89	50	150
Methylene Chloride	1	18.334	0	20	92	70	130
Acrolein	1	83.1581	0	100	83	50	150
Acrylonitrile	1	17.0264	0	20	85	50	150
Iodomethane	1	9.0212	0	20	45 *	50	150
Acetone	1	86.0306	0	100	86	50	150
Carbon Disulfide	1	18.7384	0	20	94	50	150
t-Butyl Alcohol	1	84.4587	0	100	84	50	150
n-Hexane	1	18.351	0	20	92	70	130
Di-isopropyl-ether	1	17.8754	0	20	89	70	130
1,1-Dichloroethene	1	20.0553	0	20	100	70	130
Methyl Acetate	1	16.8306	0	20	84	50	150
Methyl-t-butyl ether	1	17.0558	0	20	85	70	130
1,1-Dichloroethane	1	18.3843	0	20	92	70	130
trans-1,2-Dichloroethene	1	19.2417	0	20	96	70	130
Ethyl-t-butyl ether	1	17.4172	0	20	87	70	130
cis-1,2-Dichloroethene	1	18.6935	0	20	93	70	130
Bromochloromethane	1	18.5826	0	20	93	70	130
2,2-Dichloropropane	1	18.0587	0	20	90	70	130
Ethyl acetate	1	17.5622	0	20	88	50	150
1,4-Dioxane	1	855.0904	0	1000	86	50	150
1,1-Dichloropropene	1	19.1642	0	20	96	70	130
Chloroform	1	20.8612	2.5845	20	91	70	130
Cyclohexane	1	18.4746	0	20	92	70	130
1,2-Dichloroethane	1	18.0172	0	20	90	70	130
2-Butanone	1	17.6823	0	20	88	50	150
1,1,1-Trichloroethane	1	18.8749	0	20	94	70	130
Carbon Tetrachloride	1	19.0264	0	20	95	50	150
Vinyl Acetate	1	16.8941	0	20	84	50	150
Bromodichloromethane	1	18.7372	0	20	94	70	130
Methylcyclohexane	1	18.232	0	20	91	70	130
Dibromomethane	1	18.4126	0	20	92	70	130
1,2-Dichloropropane	1	18.3428	0	20	92	70	130
Trichloroethene	1	18.8196	0	20	94	70	130
Benzene	1	18.3621	0	20	92	70	130
tert-Amyl methyl ether	1	17.4884	0	20	87	70	130
Iso-propylacetate	1	16.5587	0	20	83	70	130
Methyl methacrylate	1	17.2835	0	20	86	70	130
Dibromochloromethane	1	18.8952	0	20	94	70	130
2-Chloroethylvinylether	1	0	0	20	0 *	70	130
cis-1,3-Dichloropropene	1	16.966	0	20	85	70	130
trans-1,3-Dichloropropene	1	17.2752	0	20	86	70	130
Ethyl methacrylate	1	17.2477	0	20	86	70	130
1,1,2-Trichloroethane	1	17.9821	0	20	90	70	130
1,2-Dibromoethane	1	18.0533	0	20	90	70	130
1,3-Dichloropropane	1	17.9066	0	20	90	70	130
4-Methyl-2-Pentanone	1	16.6885	0	20	83	50	150
2-Hexanone	1	16.9039	0	20	85	50	150
Tetrachloroethene	1	18.0168	0	20	90	50	150
Toluene	1	18.1431	0	20	91	70	130
1,1,1,2-Tetrachloroethane	1	17.2189	0	20	86	70	130
Chlorobenzene	1	17.7781	0	20	89	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS101485

Method: 8260D	Matrix: Aqueous	Units: ug/L	QC Type: MS				
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	17.4063	0	20	87	70	130
n-Amyl acetate	1	17.1678	0	20	86	70	130
Bromoform	1	17.2029	0	20	86	70	130
Ethylbenzene	1	17.1739	0	20	86	70	130
1,1,2,2-Tetrachloroethane	1	17.4733	0	20	87	70	130
Styrene	1	17.5048	0	20	88	70	130
m&p-Xylenes	1	35.101	0	40	88	70	130
o-Xylene	1	17.4361	0	20	87	70	130
trans-1,4-Dichloro-2-butene	1	12.8051	0	20	64	50	150
1,3-Dichlorobenzene	1	17.3442	0	20	87	70	130
1,4-Dichlorobenzene	1	17.0996	0	20	85	70	130
1,2-Dichlorobenzene	1	17.2827	0	20	86	70	130
Isopropylbenzene	1	18.1902	0	20	91	70	130
Cyclohexanone	1	75.9912	0	100	76	50	150
Camphene	1	5.3614	0	20	27*	70	130
1,2,3-Trichloropropane	1	16.7128	0	20	84	70	130
2-Chlorotoluene	1	17.8703	0	20	89	70	130
p-Ethyltoluene	1	17.0107	0	20	85	70	130
4-Chlorotoluene	1	17.4552	0	20	87	70	130
n-Propylbenzene	1	18.2475	0	20	91	70	130
Bromobenzene	1	16.061	0	20	80	70	130
1,3,5-Trimethylbenzene	1	17.9859	0	20	90	70	130
Butyl methacrylate	1	17.6167	0	20	88	70	130
t-Butylbenzene	1	18.2217	0	20	91	70	130
1,2,4-Trimethylbenzene	1	17.7348	0	20	89	70	130
sec-Butylbenzene	1	18.3667	0	20	92	70	130
4-Isopropyltoluene	1	17.7467	0	20	89	70	130
n-Butylbenzene	1	18.0986	0	20	90	70	130
p-Diethylbenzene	1	17.2143	0	20	86	70	130
1,2,4,5-Tetramethylbenzene	1	17.3321	0	20	87	70	130
1,2-Dibromo-3-Chloropropane	1	16.7391	0	20	84	50	150
Camphor	1	181.5139	0	200	91	20	150
Hexachlorobutadiene	1	18.8327	0	20	94	50	150
1,2,4-Trichlorobenzene	1	17.659	0	20	88	70	130
1,2,3-Trichlorobenzene	1	17.9351	0	20	90	70	130
Naphthalene	1	17.2035	0	20	86	50	150

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS101485

Data File		Sample ID:		Analysis Date			
Spike or Dup: 2M167444.D		AD30470-001(MSD)		5/2/2022 3:31:00 PM			
Non Spike(If applicable): 2M167431.D		AD30470-001		5/2/2022 11:15:00 AM			
Inst Blank(If applicable):							
Method: 8260D		Matrix: Aqueous		Units: ug/L		QC Type: MSD	
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	21.8896	0	20	109	50	150
Dichlorodifluoromethane	1	19.5054	0	20	98	50	150
Chloromethane	1	17.6473	0	20	88	50	150
Bromomethane	1	13.7953	0	20	69	50	150
Vinyl Chloride	1	19.4514	0	20	97	50	150
Chloroethane	1	18.9707	0	20	95	50	150
Trichlorofluoromethane	1	20.5658	0	20	103	50	150
Ethyl ether	1	18.2253	0	20	91	50	150
Furan	1	18.8554	0	20	94	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	19.3933	0	20	97	50	150
Methylene Chloride	1	19.9289	0	20	100	70	130
Acrolein	1	90.714	0	100	91	50	150
Acrylonitrile	1	19.0555	0	20	95	50	150
Iodomethane	1	12.9745	0	20	65	50	150
Acetone	1	96.0564	0	100	96	50	150
Carbon Disulfide	1	18.7719	0	20	94	50	150
t-Butyl Alcohol	1	98.7885	0	100	99	50	150
n-Hexane	1	20.9006	0	20	105	70	130
Di-isopropyl-ether	1	19.0284	0	20	95	70	130
1,1-Dichloroethene	1	21.0692	0	20	105	70	130
Methyl Acetate	1	18.2167	0	20	91	50	150
Methyl-t-butyl ether	1	18.3979	0	20	92	70	130
1,1-Dichloroethane	1	19.6594	0	20	98	70	130
trans-1,2-Dichloroethene	1	20.2815	0	20	101	70	130
Ethyl-t-butyl ether	1	18.9649	0	20	95	70	130
cis-1,2-Dichloroethene	1	19.805	0	20	99	70	130
Bromochloromethane	1	19.8466	0	20	99	70	130
2,2-Dichloropropane	1	19.4294	0	20	97	70	130
Ethyl acetate	1	18.4776	0	20	92	50	150
1,4-Dioxane	1	1010.448	0	1000	101	50	150
1,1-Dichloropropene	1	20.1239	0	20	101	70	130
Chloroform	1	22.0826	2.5845	20	97	70	130
Cyclohexane	1	21.0577	0	20	105	70	130
1,2-Dichloroethane	1	19.6279	0	20	98	70	130
2-Butanone	1	18.5904	0	20	93	50	150
1,1,1-Trichloroethane	1	20.211	0	20	101	70	130
Carbon Tetrachloride	1	20.4572	0	20	102	50	150
Vinyl Acetate	1	18.1567	0	20	91	50	150
Bromodichloromethane	1	20.2901	0	20	101	70	130
Methylcyclohexane	1	20.9927	0	20	105	70	130
Dibromomethane	1	19.4401	0	20	97	70	130
1,2-Dichloropropane	1	20.2869	0	20	101	70	130
Trichloroethene	1	19.9612	0	20	100	70	130
Benzene	1	19.4289	0	20	97	70	130
tert-Amyl methyl ether	1	19.0718	0	20	95	70	130
Iso-propylacetate	1	18.1572	0	20	91	70	130
Methyl methacrylate	1	19.0593	0	20	95	70	130
Dibromochloromethane	1	20.5526	0	20	103	70	130
2-Chloroethylvinylether	1	0	0	20	0*	70	130
cis-1,3-Dichloropropene	1	19.0907	0	20	95	70	130
trans-1,3-Dichloropropene	1	19.1509	0	20	96	70	130
Ethyl methacrylate	1	18.582	0	20	93	70	130
1,1,2-Trichloroethane	1	19.7398	0	20	99	70	130
1,2-Dibromoethane	1	19.9514	0	20	100	70	130
1,3-Dichloropropane	1	19.6959	0	20	98	70	130
4-Methyl-2-Pentanone	1	18.4014	0	20	92	50	150
2-Hexanone	1	18.5734	0	20	93	50	150
Tetrachloroethene	1	20.215	0	20	101	50	150
Toluene	1	19.6796	0	20	98	70	130
1,1,1,2-Tetrachloroethane	1	19.1244	0	20	96	70	130
Chlorobenzene	1	19.547	0	20	98	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS101485

Method: 8260D	Matrix: Aqueous		Units: ug/L		QC Type: MSD		
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	18.737	0	20	94	70	130
n-Amyl acetate	1	18.8726	0	20	94	70	130
Bromoform	1	19.1996	0	20	96	70	130
Ethylbenzene	1	19.6707	0	20	98	70	130
1,1,2,2-Tetrachloroethane	1	19.2854	0	20	96	70	130
Styrene	1	19.058	0	20	95	70	130
m&p-Xylenes	1	38.3905	0	40	96	70	130
o-Xylene	1	19.1961	0	20	96	70	130
trans-1,4-Dichloro-2-butene	1	13.5994	0	20	68	50	150
1,3-Dichlorobenzene	1	19.6818	0	20	98	70	130
1,4-Dichlorobenzene	1	19.0469	0	20	95	70	130
1,2-Dichlorobenzene	1	19.6776	0	20	98	70	130
Isopropylbenzene	1	20.4289	0	20	102	70	130
Cyclohexanone	1	90.7588	0	100	91	50	150
Camphene	1	5.394	0	20	27 *	70	130
1,2,3-Trichloropropane	1	18.261	0	20	91	70	130
2-Chlorotoluene	1	19.518	0	20	98	70	130
p-Ethyltoluene	1	19.4028	0	20	97	70	130
4-Chlorotoluene	1	19.9641	0	20	100	70	130
n-Propylbenzene	1	20.7221	0	20	104	70	130
Bromobenzene	1	17.6331	0	20	88	70	130
1,3,5-Trimethylbenzene	1	20.2168	0	20	101	70	130
Butyl methacrylate	1	19.3703	0	20	97	70	130
t-Butylbenzene	1	20.652	0	20	103	70	130
1,2,4-Trimethylbenzene	1	19.8508	0	20	99	70	130
sec-Butylbenzene	1	20.9148	0	20	105	70	130
4-Isopropyltoluene	1	20.1589	0	20	101	70	130
n-Butylbenzene	1	20.7105	0	20	104	70	130
p-Diethylbenzene	1	19.715	0	20	99	70	130
1,2,4,5-Tetramethylbenzene	1	19.5923	0	20	98	70	130
1,2-Dibromo-3-Chloropropane	1	18.9774	0	20	95	50	150
Camphor	1	212.2704	0	200	106	20	150
Hexachlorobutadiene	1	18.9752	0	20	95	50	150
1,2,4-Trichlorobenzene	1	20.5047	0	20	103	70	130
1,2,3-Trichlorobenzene	1	21.0709	0	20	105	70	130
Naphthalene	1	20.2069	0	20	101	50	150

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
 Bold and underline - Indicates the compounds reported on form1

Form3

RPD Data Laboratory Limits

QC Batch: MBS101485

Data File	Sample ID:	Analysis Date
Spike or Dup: 2M167444.D	AD30470-001(MSD)	5/2/2022 3:31:00 PM
Duplicate(If applicable): 2M167443.D	AD30470-001(MS)	5/2/2022 3:12:00 PM
Inst Blank(If applicable):		
Method: 8260D	Matrix: Aqueous	Units: ug/L
		QC Type: MSD

Analyte:	Column	Dup/MSD/MBS Conc	Sample/MS/MBS Conc	RPD	Limit
Chlorodifluoromethane	1	21.8896	20.6814	5.7	30
Dichlorodifluoromethane	1	19.5054	18.3854	5.9	30
Chloromethane	1	17.6473	16.0856	9.3	30
Bromomethane	1	13.7953	10.5391	27	30
Vinyl Chloride	1	19.4514	18.4809	5.1	40
Chloroethane	1	18.9707	17.597	7.5	30
Trichlorofluoromethane	1	20.5658	18.9682	8.1	30
Ethyl ether	1	18.2253	17.0693	6.6	30
Furan	1	18.8554	17.8	5.8	30
1,1,2-Trichloro-1,2,2-trifluoroethane	1	19.3933	17.7533	8.8	30
Methylene Chloride	1	19.9289	18.334	8.3	30
Acrolein	1	90.714	83.1581	8.7	30
Acrylonitrile	1	19.0555	17.0264	11	30
Iodomethane	1	12.9745	9.0212	36*	30
Acetone	1	96.0564	86.0306	11	30
Carbon Disulfide	1	18.7719	18.7384	0.18	30
t-Butyl Alcohol	1	98.7885	84.4587	16	30
n-Hexane	1	20.9006	18.351	13	30
Di-isopropyl-ether	1	19.0284	17.8754	6.2	30
1,1-Dichloroethene	1	21.0692	20.0553	4.9	40
Methyl Acetate	1	18.2167	16.8306	7.9	30
Methyl-t-butyl ether	1	18.3979	17.0558	7.6	30
1,1-Dichloroethane	1	19.6594	18.3843	6.7	40
trans-1,2-Dichloroethene	1	20.2815	19.2417	5.3	30
Ethyl-t-butyl ether	1	18.9649	17.4172	8.5	30
cis-1,2-Dichloroethene	1	19.805	18.6935	5.8	30
Bromochloromethane	1	19.8466	18.5826	6.6	30
2,2-Dichloropropane	1	19.4294	18.0587	7.3	30
Ethyl acetate	1	18.4776	17.5622	5.1	30
1,4-Dioxane	1	1010.448	855.0904	17	30
1,1-Dichloropropene	1	20.1239	19.1642	4.9	30
Chloroform	1	22.0826	20.8612	5.7	40
Cyclohexane	1	21.0577	18.4746	13	30
1,2-Dichloroethane	1	19.6279	18.0172	8.6	40
2-Butanone	1	18.5904	17.6823	5	40
1,1,1-Trichloroethane	1	20.211	18.8749	6.8	30
Carbon Tetrachloride	1	20.4572	19.0264	7.2	40
Vinyl Acetate	1	18.1567	16.8941	7.2	30
Bromodichloromethane	1	20.2901	18.7372	8	30
Methylcyclohexane	1	20.9927	18.232	14	30
Dibromomethane	1	19.4401	18.4126	5.4	30
1,2-Dichloropropane	1	20.2869	18.3428	10	30
Trichloroethene	1	19.9612	18.8196	5.9	40
Benzene	1	19.4289	18.3621	5.6	40
tert-Amyl methyl ether	1	19.0718	17.4884	8.7	30
Iso-propylacetate	1	18.1572	16.5587	9.2	30
Methyl methacrylate	1	19.0593	17.2835	9.8	30
Dibromochloromethane	1	20.5526	18.8952	8.4	30
2-Chloroethylvinylether	1	0	0	NA	30
cis-1,3-Dichloropropene	1	19.0907	16.966	12	30
trans-1,3-Dichloropropene	1	19.1509	17.2752	10	30
Ethyl methacrylate	1	18.582	17.2477	7.4	30
1,1,2-Trichloroethane	1	19.7398	17.9821	9.3	30
1,2-Dibromoethane	1	19.9514	18.0533	10	30
1,3-Dichloropropane	1	19.6959	17.9066	9.5	30
4-Methyl-2-Pentanone	1	18.4014	16.6885	9.8	30
2-Hexanone	1	18.5734	16.9039	9.4	30
Tetrachloroethene	1	20.215	18.0168	11	40
Toluene	1	19.6796	18.1431	8.1	40
1,1,1,2-Tetrachloroethane	1	19.1244	17.2189	10	30
Chlorobenzene	1	19.547	17.7781	9.5	40

* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

Form3

RPD Data Laboratory Limits

QC Batch: MBS101485

Method: 8260D

Matrix: Aqueous

Units: ug/L

QC Type: MSD

Analyte:	Column	Dup/MSD/MBS Conc	Sample/MS/MBS Conc	RPD	Limit
n-Butyl acrylate	1	18.737	17.4063	7.4	30
n-Amyl acetate	1	18.8726	17.1678	9.5	30
Bromoform	1	19.1996	17.2029	11	30
Ethylbenzene	1	19.6707	17.1739	14	30
1,1,2,2-Tetrachloroethane	1	19.2854	17.4733	9.9	30
Styrene	1	19.058	17.5048	8.5	30
m&p-Xylenes	1	38.3905	35.101	9	30
o-Xylene	1	19.1961	17.4361	9.6	30
trans-1,4-Dichloro-2-butene	1	13.5994	12.8051	6	30
1,3-Dichlorobenzene	1	19.6818	17.3442	13	30
1,4-Dichlorobenzene	1	19.0469	17.0996	11	40
1,2-Dichlorobenzene	1	19.6776	17.2827	13	40
Isopropylbenzene	1	20.4289	18.1902	12	30
Cyclohexanone	1	90.7588	75.9912	18	30
Camphene	1	5.394	5.3614	0.61	30
1,2,3-Trichloropropane	1	18.261	16.7128	8.9	30
2-Chlorotoluene	1	19.518	17.8703	8.8	30
p-Ethyltoluene	1	19.4028	17.0107	13	30
4-Chlorotoluene	1	19.9641	17.4552	13	30
n-Propylbenzene	1	20.7221	18.2475	13	40
Bromobenzene	1	17.6331	16.061	9.3	30
1,3,5-Trimethylbenzene	1	20.2168	17.9859	12	30
Butyl methacrylate	1	19.3703	17.6167	9.5	30
t-Butylbenzene	1	20.652	18.2217	13	30
1,2,4-Trimethylbenzene	1	19.8508	17.7348	11	30
sec-Butylbenzene	1	20.9148	18.3667	13	40
4-Isopropyltoluene	1	20.1589	17.7467	13	30
n-Butylbenzene	1	20.7105	18.0986	13	30
p-Diethylbenzene	1	19.715	17.2143	14	30
1,2,4,5-Tetramethylbenzene	1	19.5923	17.3321	12	30
1,2-Dibromo-3-Chloropropane	1	18.9774	16.7391	13	30
Camphor	1	212.2704	181.5139	16	30
Hexachlorobutadiene	1	18.9752	18.8327	0.75	30
1,2,4-Trichlorobenzene	1	20.5047	17.659	15	30
1,2,3-Trichlorobenzene	1	21.0709	17.9351	16	30
Naphthalene	1	20.2069	17.2035	16	30

* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

SampleID : AD30470-001
Data File: 2M167431.D
Acq On : 05/02/22 11:15

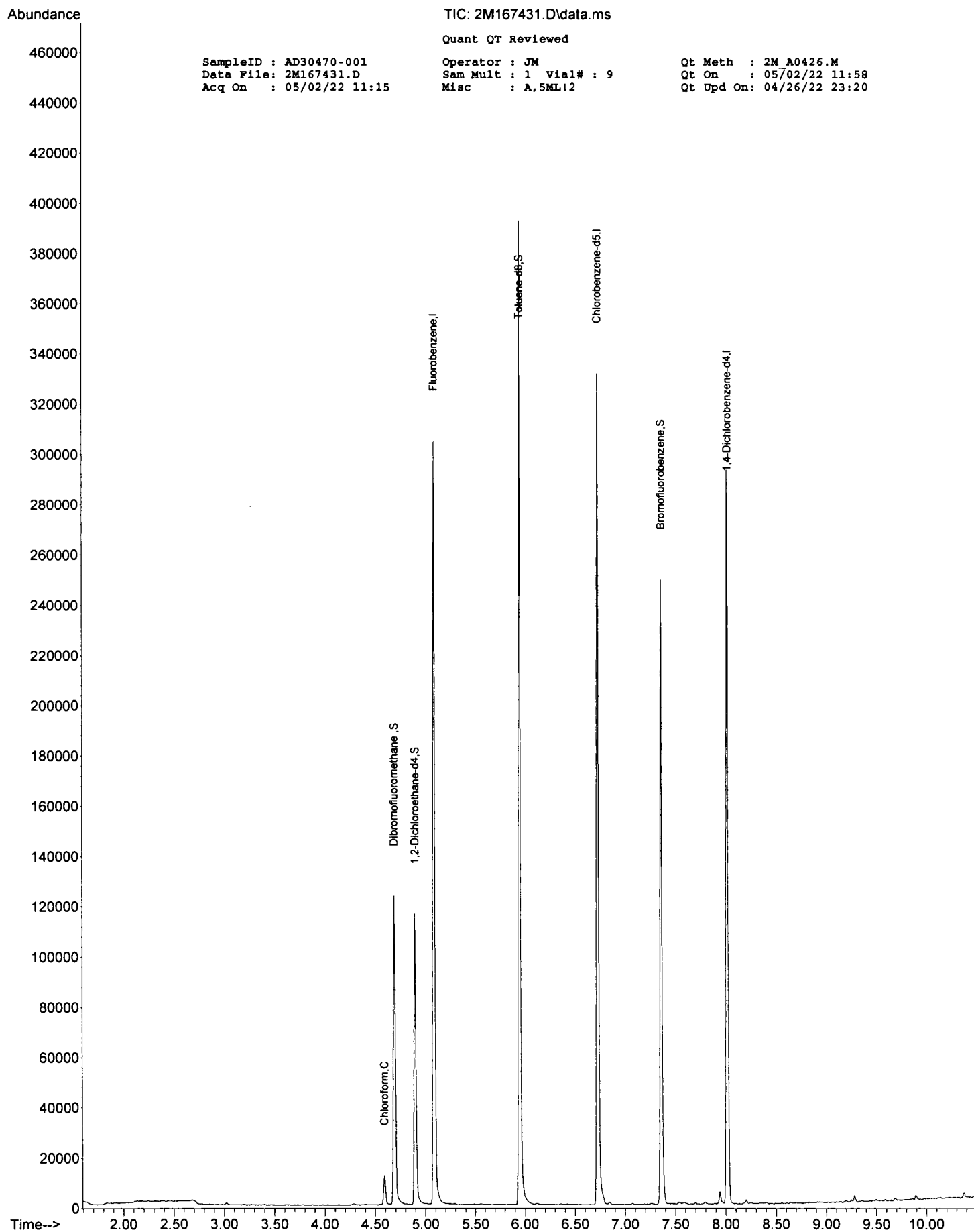
Operator : JM
Sam Mult : 1 Vial# : 9
Misc : A,5ML12

Qt Meth : 2M_A0426.M
Qt On : 05/02/22 11:58
Qt Upd On: 04/26/22 23:20

Data Path : G:\GcMsData\2022\GCMS_2\Data\05-02-22\
Qt Path : G:\GcMsData\2022\GCMS_2\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.087	96	179521	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.726	117	133569	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.019	152	62338	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.690	111	48642	29.89	ug/l	0.00
Spiked Amount 30.000			Recovery =	99.63%		
39) 1,2-Dichloroethane-d4	4.898	67	26939	30.70	ug/l	0.00
Spiked Amount 30.000			Recovery =	102.33%		
66) Toluene-d8	5.946	98	176282	29.54	ug/l	0.00
Spiked Amount 30.000			Recovery =	98.47%		
76) Bromofluorobenzene	7.361	174	56306	29.84	ug/l	0.00
Spiked Amount 30.000			Recovery =	99.47%		
Target Compounds						
36) Chloroform	4.593	83	6078m	2.5845	ug/l	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed



SampleID : AD30470-001(MS)
 Data File: 2M167443.D
 Acq On : 05/02/22 15:12

Operator : JM
 Sam Mult : 1 Vial# : 21
 Misc : A,5ML12

Qt Meth : 2M_A0426.M
 Qt On : 05/02/22 15:26
 Qt Upd On: 04/26/22 23:20

Data Path : G:\GcMsData\2022\GCMS_2\Data\05-02-22\
 Qt Path : G:\GcMsData\2022\GCMS_2\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.086	96	164273	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.726	117	123350	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.013	152	57438	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.690	111	44620	29.96	ug/l	0.00
Spiked Amount 30.000			Recovery	=	99.87%	
39) 1,2-Dichloroethane-d4	4.897	67	24010	29.90	ug/l	0.00
Spiked Amount 30.000			Recovery	=	99.67%	
66) Toluene-d8	5.946	98	162741	29.53	ug/l	0.00
Spiked Amount 30.000			Recovery	=	98.43%	
76) Bromofluorobenzene	7.360	174	52642	30.28	ug/l	0.00
Spiked Amount 30.000			Recovery	=	100.93%	
Target Compounds						
5) Chlorodifluoromethane	1.672	51	36604	20.6814	ug/l	81
6) Dichlorodifluoromethane	1.660	85	28478	18.3854	ug/l	98
7) Chloromethane	1.831	50	21170	16.0856	ug/l	99
8) Bromomethane	2.227	94	6291	10.5391	ug/l	100
9) Vinyl Chloride	1.928	62	28259	18.4809	ug/l	99
10) Chloroethane	2.319	64	17967	17.5970	ug/l	97
11) Trichlorofluoromethane	2.538	101	45516	18.9682	ug/l	97
12) Ethyl ether	2.776	59	17918	17.0693	ug/l	89
13) Furan	2.812	39	37370	17.8000	ug/l	90
14) 1,1,2-Trichloro-1,2,2-...	2.971	101	18349	17.7533	ug/l	98
15) Methylene Chloride	3.392	84	21660	18.3340	ug/l	88
16) Acrolein	2.892	56	22134	83.1581	ug/l	99
17) Acrylonitrile	3.599	53	9355	17.0264	ug/l	99
18) Iodomethane	3.123	142	13315	9.0212	ug/l	100
19) Acetone	3.020	43	36631	86.0306	ug/l	98
20) Carbon Disulfide	3.190	76	52347	18.7384	ug/l	100
21) t-Butyl Alcohol	3.459	59	12539	84.4587	ug/l	99
22) n-Hexane	3.849	57	21860	18.3510	ug/l	99
23) Di-isopropyl-ether	4.007	45	64369	17.8754	ug/l	94
24) 1,1-Dichloroethene	2.983	61	36263	20.0553	ug/l	88
25) Methyl Acetate	3.294	43	17420	16.8306	ug/l	100
26) Methyl-t-butyl ether	3.617	73	56851	17.0558	ug/l	91
27) 1,1-Dichloroethane	3.977	63	39427	18.3843	ug/l	97
28) trans-1,2-Dichloroethene	3.629	96	22955	19.2417	ug/l	95
29) Ethyl-t-butyl ether	4.276	59	59677	17.4172	ug/l	94
30) cis-1,2-Dichloroethene	4.398	61	40538	18.6935	ug/l	89
31) Bromochloromethane	4.550	49	18628	18.5826	ug/l	87
32) 2,2-Dichloropropane	4.398	77	32016	18.0587	ug/l	96
33) Ethyl acetate	4.422	43	25234m	17.5622	ug/l	
34) 1,4-Dioxane	5.483	88	15669	855.0904	ug/l	89
35) 1,1-Dichloropropene	4.812	75	31423	19.1642	ug/l	98
36) Chloroform	4.593	83	44893	20.8612	ug/l	100
38) Cyclohexane	4.757	56	30196	18.4746	ug/l	85
40) 1,2-Dichloroethane	4.940	62	32954	18.0172	ug/l	98
41) 2-Butanone	4.391	43	10151m	17.6823	ug/l	
42) 1,1,1-Trichloroethane	4.721	97	37340	18.8749	ug/l	96
43) Carbon Tetrachloride	4.818	117	32796	19.0264	ug/l	94
44) Vinyl Acetate	4.001	43	72939	16.8941	ug/l	100
45) Bromodichloromethane	5.556	83	29889	18.7372	ug/l	99
46) Methylcyclohexane	5.403	83	26237	18.2320	ug/l	92
47) Dibromomethane	5.489	174	18164	18.4126	ug/l	97
48) 1,2-Dichloropropane	5.416	63	22407	18.3428	ug/l	98
49) Trichloroethene	5.288	130	25729	18.8196	ug/l	95
50) Benzene	4.940	78	84979	18.3621	ug/l	100
51) tert-Amyl methyl ether	4.977	73	55408	17.4884	ug/l	96
53) Iso-propylacetate	4.934	43	45164	16.5587	ug/l	96
54) Methyl methacrylate	5.446	41	22614	17.2835	ug/l	85
55) Dibromochloromethane	6.409	129	24550	18.8952	ug/l	100
57) cis-1,3-Dichloropropene	5.794	75	33060	16.9660	ug/l	98
58) trans-1,3-Dichloropropene	6.080	75	30411	17.2752	ug/l	100
59) Ethyl methacrylate	6.098	41	22420	17.2477	ug/l	84
60) 1,1,2-Trichloroethane	6.190	97	20158	17.9821	ug/l	94
61) 1,2-Dibromoethane	6.489	107	22114	18.0533	ug/l	99
62) 1,3-Dichloropropane	6.281	76	34229	17.9066	ug/l	99
63) 4-Methyl-2-Pentanone	5.861	43	22589	16.6885	ug/l	96
64) 2-Hexanone	6.294	43	16477	16.9039	ug/l	94
65) Tetrachloroethene	6.281	164	20521	18.0168	ug/l	98
67) Toluene	5.983	92	55155	18.1431	ug/l	98
68) 1,1,1,2-Tetrachloroethane	6.775	133	21168	17.2189	ug/l	99

Quantitation Report (QT Reviewed)

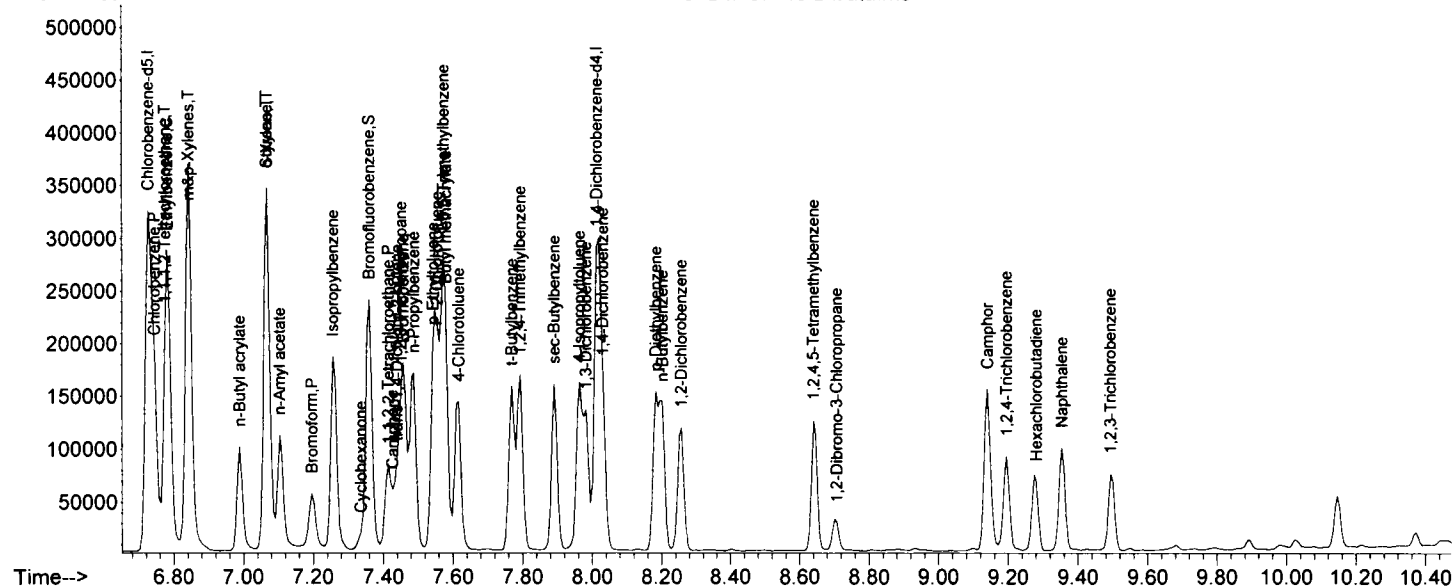
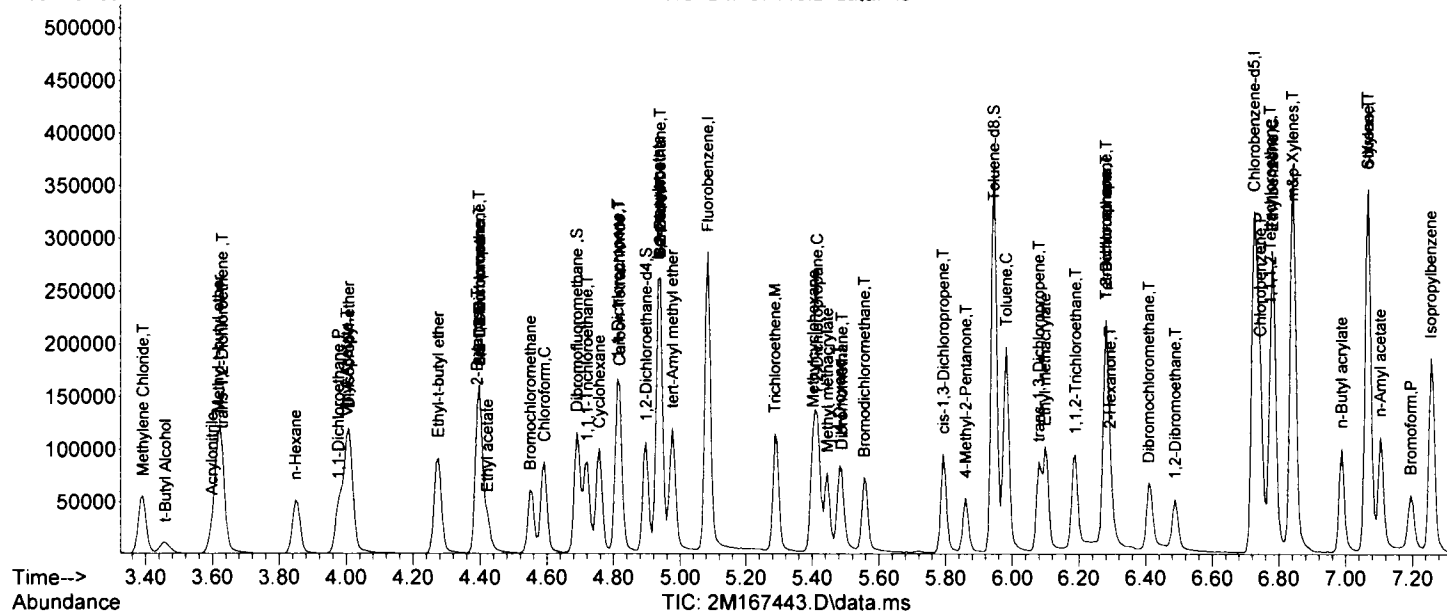
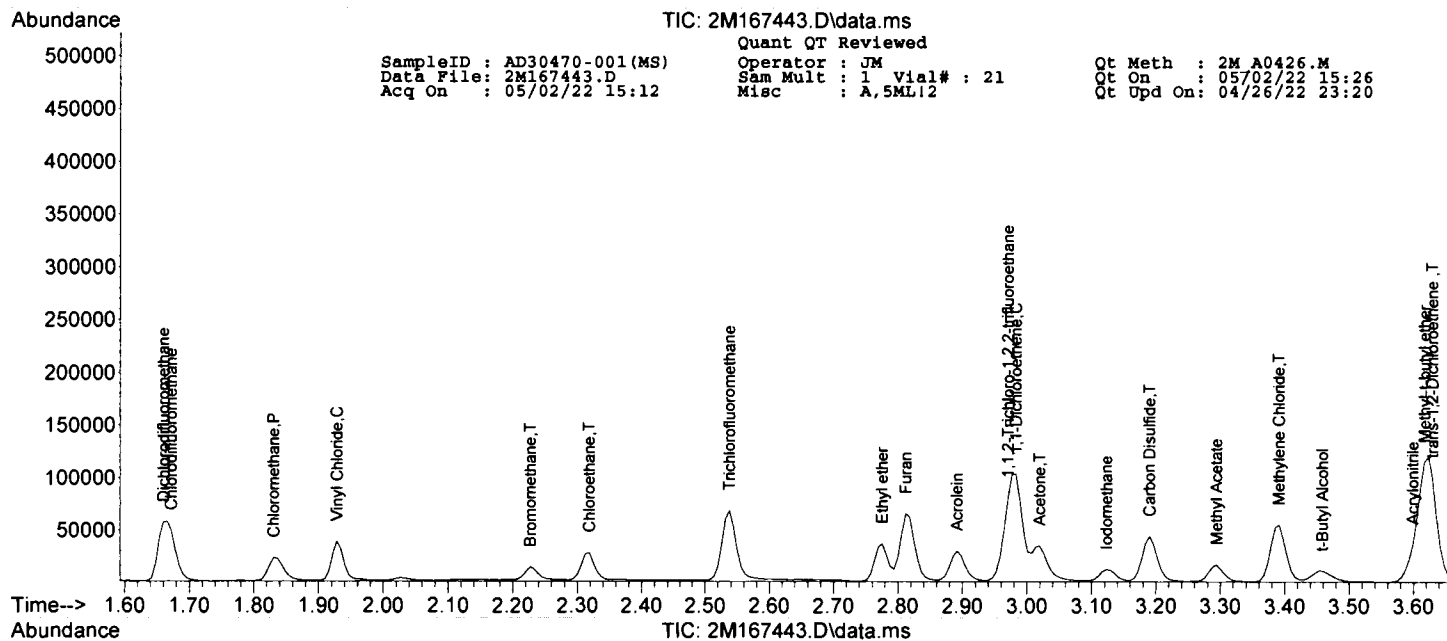
SampleID : AD30470-001(MS) Operator : JM Qt Meth : 2M_A0426.M
 Data File: 2M167443.D Sam Mult : 1 Vial# : 21 Qt On : 05/02/22 15:26
 Acq On : 05/02/22 15:12 Misc : A,5ML12 Qt Upd On: 04/26/22 23:20

Data Path : G:\GcMsData\2022\GCMS_2\Data\05-02-22\
 Qt Path : G:\GcMsData\2022\GCMS_2\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
69) Chlorobenzene	6.745	112	60188	17.7781	ug/l	99
71) n-Butyl acrylate	6.989	55	46084	17.4063	ug/l	95
72) n-Amyl acetate	7.104	43	40589	17.1678	ug/l	94
73) Bromoform	7.196	173	17620	17.2029	ug/l	95
74) Ethylbenzene	6.781	106	24545	17.1739	ug/l	94
75) 1,1,2,2-Tetrachloroethane	7.415	83	27080	17.4733	ug/l	99
77) Styrene	7.068	104	62650	17.5048	ug/l	92
78) m&p-Xylenes	6.842	106	76301	35.1010	ug/l	93
79) o-Xylene	7.068	106	36593	17.4361	ug/l	97
80) trans-1,4-Dichloro-2-b...	7.440	53	9128	12.8051	ug/l	93
81) 1,3-Dichlorobenzene	7.982	146	39069	17.3442	ug/l	98
82) 1,4-Dichlorobenzene	8.031	146	40364	17.0996	ug/l	100
83) 1,2-Dichlorobenzene	8.257	146	37036	17.2827	ug/l	99
84) Isopropylbenzene	7.257	105	88577	18.1902	ug/l	99
85) Cyclohexanone	7.336	55	4679	75.9912	ug/l	92
86) Camphene	7.428	93	6669	5.3614	ug/l	99
87) 1,2,3-Trichloropropane	7.452	75	33211	16.7128	ug/l	99
88) 2-Chlorotoluene	7.556	91	50912	17.8703	ug/l	98
89) p-Ethyltoluene	7.543	105	84300	17.0107	ug/l	91
90) 4-Chlorotoluene	7.616	91	47924	17.4552	ug/l	99
91) n-Propylbenzene	7.488	91	96975	18.2475	ug/l	100
92) Bromobenzene	7.458	77	49213	16.0610	ug/l	92
93) 1,3,5-Trimethylbenzene	7.574	105	58788	17.9859	ug/l	90
94) Butyl methacrylate	7.580	41	29102	17.6167	ug/l	79
95) t-Butylbenzene	7.769	119	63767	18.2217	ug/l	98
96) 1,2,4-Trimethylbenzene	7.793	105	66012	17.7348	ug/l	100
97) sec-Butylbenzene	7.891	105	75897	18.3667	ug/l	99
98) 4-Isopropyltoluene	7.964	119	63504	17.7467	ug/l	98
99) n-Butylbenzene	8.202	91	64748	18.0986	ug/l	98
100) p-Diethylbenzene	8.183	119	34738	17.2143	ug/l	98
101) 1,2,4,5-Tetramethylben...	8.641	119	48351	17.3321	ug/l	97
102) 1,2-Dibromo-3-Chloropr...	8.708	157	6395	16.7391	ug/l	87
103) Camphor	9.141	95	29196	181.5139	ug/l	99
104) Hexachlorobutadiene	9.281	225	11079	18.8327	ug/l	96
105) 1,2,4-Trichlorobenzene	9.195	180	21224	17.6590	ug/l	99
106) 1,2,3-Trichlorobenzene	9.494	180	18109	17.9351	ug/l	96
107) Naphthalene	9.354	128	58826	17.2035	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

WUC



SampleID : AD30470-001(MSD) Operator : JM Qt Meth : 2M_A0426.M
 Data File: 2M167444.D Sam Mult : 1 Vial# : 22 Qt On : 05/02/22 15:46
 Acq On : 05/02/22 15:31 Misc : A,5ML12 Qt Upd On: 04/26/22 23:20

Data Path : G:\GcMsData\2022\GCMS_2\Data\05-02-22\
 Qt Path : G:\GcMsData\2022\GCMS_2\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.087	96	156618	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.727	117	115315	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.013	152	54403	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.690	111	42643	30.04	ug/l	0.00
Spiked Amount 30.000			Recovery =	100.13%		
39) 1,2-Dichloroethane-d4	4.898	67	22547	29.45	ug/l	0.00
Spiked Amount 30.000			Recovery =	98.17%		
66) Toluene-d8	5.946	98	155316	30.15	ug/l	0.00
Spiked Amount 30.000			Recovery =	100.50%		
76) Bromofluorobenzene	7.361	174	49764	30.22	ug/l	0.00
Spiked Amount 30.000			Recovery =	100.73%		
Target Compounds						
5) Chlorodifluoromethane	1.673	51	36937	21.8896	ug/l	81
6) Dichlorodifluoromethane	1.660	85	28805	19.5054	ug/l	99
7) Chloromethane	1.831	50	22143	17.6473	ug/l	99
8) Bromomethane	2.227	94	7851	13.7953	ug/l	97
9) Vinyl Chloride	1.929	62	28357	19.4514	ug/l	99
10) Chloroethane	2.313	64	18467	18.9707	ug/l	100
11) Trichlorofluoromethane	2.538	101	47050	20.5658	ug/l	99
12) Ethyl ether	2.776	59	18240	18.2253	ug/l	89
13) Furan	2.813	39	37741	18.8554	ug/l	89
14) 1,1,2-Trichloro-1,2,2-...	2.977	101	19110	19.3933	ug/l	99
15) Methylene Chloride	3.392	84	22447	19.9289	ug/l	91
16) Acrolein	2.892	56	23020	90.7140	ug/l	98
17) Acrylonitrile	3.599	53	9982	19.0555	ug/l	98
18) Iodomethane	3.124	142	18256	12.9745	ug/l	97
19) Acetone	3.020	43	38994	96.0564	ug/l	98
20) Carbon Disulfide	3.191	76	49997	18.7719	ug/l	100
21) t-Butyl Alcohol	3.453	59	13983	98.7885	ug/l	99
22) n-Hexane	3.849	57	23737	20.9006	ug/l	99
23) Di-isopropyl-ether	4.008	45	65328	19.0284	ug/l	95
24) 1,1-Dichloroethene	2.983	61	36321	21.0692	ug/l	90
25) Methyl Acetate	3.294	43	17976	18.2167	ug/l	100
26) Methyl-t-butyl ether	3.617	73	58467	18.3979	ug/l	91
27) 1,1-Dichloroethane	3.977	63	40197	19.6594	ug/l	100
28) trans-1,2-Dichloroethene	3.623	96	23068	20.2815	ug/l	88
29) Ethyl-t-butyl ether	4.276	59	61952	18.9649	ug/l	94
30) cis-1,2-Dichloroethene	4.398	61	40947	19.8050	ug/l	92
31) Bromochloromethane	4.550	49	18968	19.8466	ug/l	83
32) 2,2-Dichloropropane	4.398	77	32841	19.4294	ug/l	99
33) Ethyl acetate	4.422	43	25312m	18.4776	ug/l	
34) 1,4-Dioxane	5.483	88	17653	1010.4476	ug/l	91
35) 1,1-Dichloropropene	4.812	75	31459	20.1239	ug/l	99
36) Chloroform	4.593	83	45307	22.0826	ug/l	98
38) Cyclohexane	4.757	56	32814	21.0577	ug/l	86
40) 1,2-Dichloroethane	4.940	62	34227	19.6279	ug/l	99
41) 2-Butanone	4.392	43	10175m	18.5904	ug/l	
42) 1,1,1-Trichloroethane	4.721	97	38120	20.2110	ug/l	95
43) Carbon Tetrachloride	4.818	117	33619	20.4572	ug/l	96
44) Vinyl Acetate	4.001	43	74737	18.1567	ug/l	100
45) Bromodichloromethane	5.556	83	30858	20.2901	ug/l	99
46) Methylcyclohexane	5.404	83	28802	20.9927	ug/l	90
47) Dibromomethane	5.489	174	18284	19.4401	ug/l	98
48) 1,2-Dichloropropane	5.416	63	23627	20.2869	ug/l	97
49) Trichloroethene	5.288	130	26018	19.9612	ug/l	92
50) Benzene	4.934	78	85726	19.4289	ug/l	100
51) tert-Amyl methyl ether	4.977	73	57609	19.0718	ug/l	96
53) Iso-propylacetate	4.934	43	46298	18.1572	ug/l	94
54) Methyl methacrylate	5.446	41	23313	19.0593	ug/l	85
55) Dibromochloromethane	6.410	129	24964	20.5526	ug/l	99
57) cis-1,3-Dichloropropene	5.794	75	34777	19.0907	ug/l	98
58) trans-1,3-Dichloropropene	6.080	75	31517	19.1509	ug/l	100
59) Ethyl methacrylate	6.099	41	22581	18.5820	ug/l	84
60) 1,1,2-Trichloroethane	6.190	97	20687	19.7398	ug/l	96
61) 1,2-Dibromoethane	6.489	107	22847	19.9514	ug/l	99
62) 1,3-Dichloropropane	6.282	76	35197	19.6959	ug/l	97
63) 4-Methyl-2-Pentanone	5.861	43	23285	18.4014	ug/l	99
64) 2-Hexanone	6.294	43	16925	18.5734	ug/l	97
65) Tetrachloroethene	6.282	164	21525	20.2150	ug/l	99
67) Toluene	5.983	92	55929	19.6796	ug/l	99
68) 1,1,1,2-Tetrachloroethane	6.775	133	21979	19.1244	ug/l	99

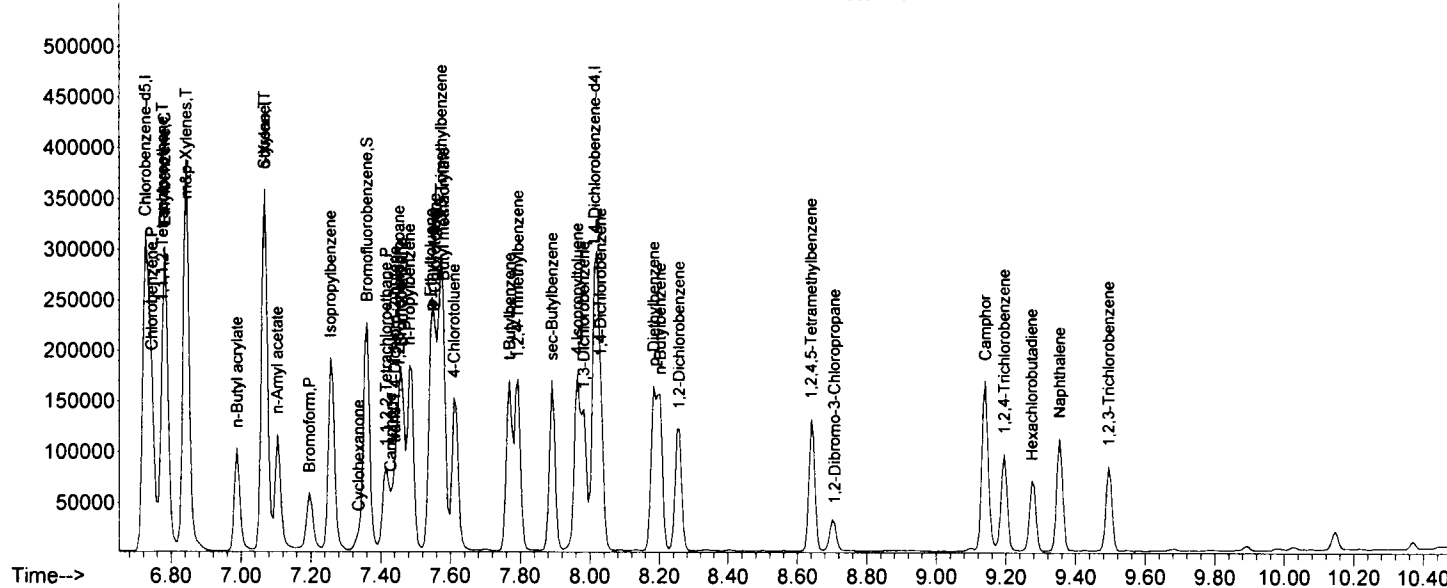
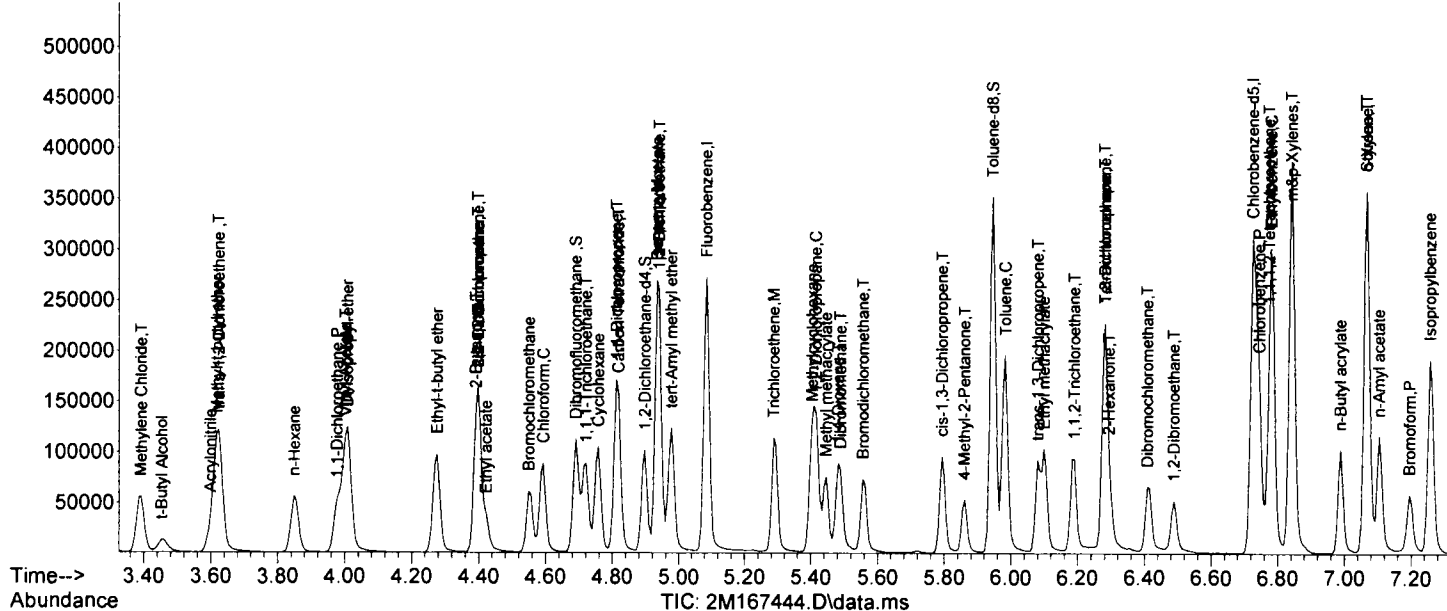
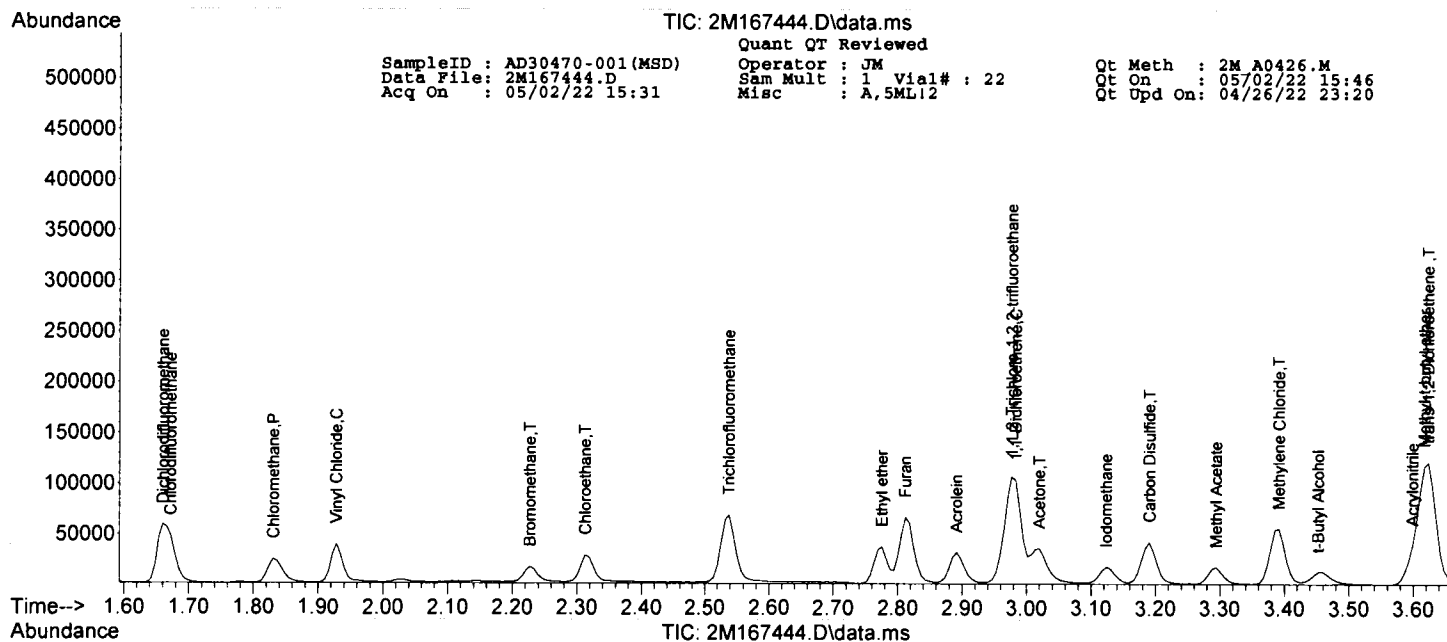
Quantitation Report (QT Reviewed)

SampleID : AD30470-001(MSD) Operator : JM Qt Meth : 2M_A0426.M
 Data File: 2M167444.D Sam Mult : 1 Vial# : 22 Qt On : 05/02/22 15:46
 Acq On : 05/02/22 15:31 Misc : A,5ML!2 Qt Upd On: 04/26/22 23:20

Data Path : G:\GcMsData\2022\GCMS_2\Data\05-02-22\
 Qt Path : G:\GcMsData\2022\GCMS_2\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
69) Chlorobenzene	6.745	112	61866	19.5470	ug/l	98
71) n-Butyl acrylate	6.989	55	46986	18.7370	ug/l	95
72) n-Amyl acetate	7.105	43	42262	18.8726	ug/l	93
73) Bromoform	7.196	173	18626	19.1996	ug/l	96
74) Ethylbenzene	6.781	106	26628	19.6707	ug/l	97
75) 1,1,2,2-Tetrachloroethane	7.415	83	28309	19.2854	ug/l	97
77) Styrene	7.068	104	64605	19.0580	ug/l	93
78) m&p-Xylenes	6.842	106	79042	38.3905	ug/l	96
79) o-Xylene	7.068	106	38158	19.1961	ug/l	100
80) trans-1,4-Dichloro-2-b...	7.440	53	9182	13.5994	ug/l	97
81) 1,3-Dichlorobenzene	7.982	146	41992	19.6818	ug/l	99
82) 1,4-Dichlorobenzene	8.031	146	42585	19.0469	ug/l	99
83) 1,2-Dichlorobenzene	8.257	146	39940	19.6776	ug/l	99
84) Isopropylbenzene	7.257	105	94222	20.4289	ug/l	99
85) Cyclohexanone	7.336	55	5293	90.7588	ug/l	92
86) Camphene	7.428	93	6355	5.3940	ug/l	98
87) 1,2,3-Trichloropropane	7.452	75	34370	18.2610	ug/l	100
88) 2-Chlorotoluene	7.556	91	52668	19.5180	ug/l	97
89) p-Ethyltoluene	7.544	105	91074	19.4028	ug/l	92
90) 4-Chlorotoluene	7.611	91	51916	19.9641	ug/l	97
91) n-Propylbenzene	7.483	91	104307	20.7221	ug/l	99
92) Bromobenzene	7.458	77	51175	17.6331	ug/l	92
93) 1,3,5-Trimethylbenzene	7.574	105	62588	20.2168	ug/l	90
94) Butyl methacrylate	7.580	41	30308	19.3703	ug/l	80
95) t-Butylbenzene	7.769	119	68453	20.6520	ug/l	98
96) 1,2,4-Trimethylbenzene	7.793	105	69984	19.8508	ug/l	99
97) sec-Butylbenzene	7.891	105	81860	20.9148	ug/l	98
98) 4-Isopropyltoluene	7.964	119	68324	20.1589	ug/l	98
99) n-Butylbenzene	8.202	91	70177	20.7105	ug/l	98
100) p-Diethylbenzene	8.184	119	37682	19.7150	ug/l	99
101) 1,2,4,5-Tetramethylben...	8.641	119	51768	19.5923	ug/l	97
102) 1,2-Dibromo-3-Chloropr...	8.708	157	6867	18.9774	ug/l	88
103) Camphor	9.141	95	32339	212.2704	ug/l	100
104) Hexachlorobutadiene	9.275	225	10573	18.9752	ug/l	94
105) 1,2,4-Trichlorobenzene	9.196	180	23342	20.5047	ug/l	99
106) 1,2,3-Trichlorobenzene	9.494	180	20151	21.0709	ug/l	96
107) Naphthalene	9.354	128	65445	20.2069	ug/l	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed



Form3
Recovery Data Laboratory Limits
 QC Batch: MBS101491

Data File		Sample ID:		Analysis Date			
Spike or Dup: 1M161208.D		MBS101491		5/2/2022 6:56:00 PM			
Non Spike(If applicable):							
Inst Blank(If applicable):							
Method: 8260D		Matrix: Aqueous		Units: ug/L		QC Type: MBS	
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	20.7506	0	20	104	50	150
<u>Dichlorodifluoromethane</u>	1	<u>27.5585</u>	0	20	138	50	150
<u>Chloromethane</u>	1	<u>29.148</u>	0	20	146	50	150
<u>Bromomethane</u>	1	<u>20.9914</u>	0	20	105	50	150
<u>Vinyl Chloride</u>	1	<u>24.422</u>	0	20	122	50	150
<u>Chloroethane</u>	1	<u>22.4718</u>	0	20	112	50	150
<u>Trichlorofluoromethane</u>	1	<u>20.0835</u>	0	20	100	50	150
Ethyl ether	1	21.5722	0	20	108	50	150
Furan	1	20.8861	0	20	104	50	150
<u>1,1,2-Trichloro-1,2,2-trifluoroethane</u>	1	<u>18.9233</u>	0	20	95	50	150
<u>Methylene Chloride</u>	1	<u>24.6869</u>	0	20	123	70	130
Acrolein	1	117.9621	0	100	118	50	150
Acrylonitrile	1	24.7053	0	20	124	50	150
Iodomethane	1	17.2577	0	20	86	50	150
<u>Acetone</u>	1	<u>122.1352</u>	0	100	122	50	150
<u>Carbon Disulfide</u>	1	<u>19.1552</u>	0	20	96	50	150
t-Butyl Alcohol	1	115.576	0	100	116	50	150
n-Hexane	1	21.1484	0	20	106	70	130
Di-isopropyl-ether	1	23.6386	0	20	118	70	130
<u>1,1-Dichloroethene</u>	1	<u>22.4096</u>	0	20	112	70	130
<u>Methyl Acetate</u>	1	<u>23.5295</u>	0	20	118	50	150
<u>Methyl-t-butyl ether</u>	1	<u>21.9093</u>	0	20	110	70	130
<u>1,1-Dichloroethane</u>	1	<u>22.7992</u>	0	20	114	70	130
<u>trans-1,2-Dichloroethene</u>	1	<u>22.264</u>	0	20	111	70	130
Ethyl-t-butyl ether	1	21.9754	0	20	110	70	130
<u>cis-1,2-Dichloroethene</u>	1	<u>24.0381</u>	0	20	120	70	130
<u>Bromochloromethane</u>	1	<u>27.2502</u>	0	20	136*	70	130
2,2-Dichloropropane	1	21.0825	0	20	105	70	130
Ethyl acetate	1	23.0285	0	20	115	50	150
<u>1,4-Dioxane</u>	1	<u>1081.915</u>	0	1000	108	50	150
1,1-Dichloropropene	1	19.4738	0	20	97	70	130
<u>Chloroform</u>	1	<u>22.1273</u>	0	20	111	70	130
<u>Cyclohexane</u>	1	<u>18.9148</u>	0	20	95	70	130
<u>1,2-Dichloroethane</u>	1	<u>21.5503</u>	0	20	108	70	130
<u>2-Butanone</u>	1	<u>30.3429</u>	0	20	152*	50	150
<u>1,1,1-Trichloroethane</u>	1	<u>19.8801</u>	0	20	99	70	130
<u>Carbon Tetrachloride</u>	1	<u>19.5827</u>	0	20	98	50	150
Vinyl Acetate	1	23.9161	0	20	120	50	150
<u>Bromodichloromethane</u>	1	<u>22.6088</u>	0	20	113	70	130
<u>Methylcyclohexane</u>	1	<u>18.3142</u>	0	20	92	70	130
Dibromomethane	1	22.5211	0	20	113	70	130
<u>1,2-Dichloropropane</u>	1	<u>22.6939</u>	0	20	113	70	130
<u>Trichloroethene</u>	1	<u>20.2375</u>	0	20	101	70	130
<u>Benzene</u>	1	<u>21.9385</u>	0	20	110	70	130
tert-Amyl methyl ether	1	21.134	0	20	106	70	130
Iso-propylacetate	1	23.4822	0	20	117	70	130
Methyl methacrylate	1	24.5515	0	20	123	70	130
<u>Dibromochloromethane</u>	1	<u>23.2559</u>	0	20	116	70	130
2-Chloroethylvinylether	1	17.9987	0	20	90	70	130
<u>cis-1,3-Dichloropropene</u>	1	<u>21.8521</u>	0	20	109	70	130
<u>trans-1,3-Dichloropropene</u>	1	<u>22.1482</u>	0	20	111	70	130
Ethyl methacrylate	1	22.7675	0	20	114	70	130
<u>1,1,2-Trichloroethane</u>	1	<u>23.5693</u>	0	20	118	70	130
<u>1,2-Dibromoethane</u>	1	<u>23.4867</u>	0	20	117	70	130
1,3-Dichloropropane	1	23.1643	0	20	116	70	130
<u>4-Methyl-2-Pentanone</u>	1	<u>21.7716</u>	0	20	109	50	150
<u>2-Hexanone</u>	1	<u>24.7767</u>	0	20	124	50	150
<u>Tetrachloroethene</u>	1	<u>19.7896</u>	0	20	99	50	150
<u>Toluene</u>	1	<u>21.8454</u>	0	20	109	70	130
1,1,1,2-Tetrachloroethane	1	21.6324	0	20	108	70	130
<u>Chlorobenzene</u>	1	<u>22.8742</u>	0	20	114	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS101491

Method: 8260D	Matrix: Aqueous	Units: ug/L	QC Type: MBS				
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	22.7343	0	20	114	70	130
n-Amyl acetate	1	24.09	0	20	120	70	130
<u>Bromoform</u>	1	<u>22.0866</u>	0	20	110	70	130
<u>Ethylbenzene</u>	1	<u>21.6627</u>	0	20	108	70	130
<u>1,1,2,2-Tetrachloroethane</u>	1	<u>22.5088</u>	0	20	113	70	130
<u>Styrene</u>	1	<u>22.7419</u>	0	20	114	70	130
<u>m&p-Xylenes</u>	1	<u>44.258</u>	0	40	111	70	130
<u>o-Xylene</u>	1	<u>20.6871</u>	0	20	103	70	130
trans-1,4-Dichloro-2-butene	1	20.5128	0	20	103	50	150
<u>1,3-Dichlorobenzene</u>	1	<u>21.1801</u>	0	20	106	70	130
<u>1,4-Dichlorobenzene</u>	1	<u>20.5762</u>	0	20	103	70	130
<u>1,2-Dichlorobenzene</u>	1	<u>20.6501</u>	0	20	103	70	130
<u>Isopropylbenzene</u>	1	<u>21.6571</u>	0	20	108	70	130
Cyclohexanone	1	179.6805	0	100	180*	50	150
Camphene	1	17.4022	0	20	87	70	130
1,2,3-Trichloropropane	1	21.8481	0	20	109	70	130
2-Chlorotoluene	1	20.8733	0	20	104	70	130
p-Ethyltoluene	1	20.0663	0	20	100	70	130
4-Chlorotoluene	1	19.9899	0	20	100	70	130
n-Propylbenzene	1	21.2234	0	20	106	70	130
Bromobenzene	1	23.1874	0	20	116	70	130
1,3,5-Trimethylbenzene	1	21.6611	0	20	108	70	130
Butyl methacrylate	1	22.0053	0	20	110	70	130
t-Butylbenzene	1	20.1589	0	20	101	70	130
1,2,4-Trimethylbenzene	1	21.4611	0	20	107	70	130
sec-Butylbenzene	1	20.5364	0	20	103	70	130
4-Isopropyltoluene	1	19.7911	0	20	99	70	130
n-Butylbenzene	1	19.9215	0	20	100	70	130
p-Diethylbenzene	1	17.3415	0	20	87	70	130
1,2,4,5-Tetramethylbenzene	1	16.9368	0	20	85	70	130
<u>1,2-Dibromo-3-Chloropropane</u>	1	<u>19.7474</u>	0	20	99	50	150
Camphor	1	176.1578	0	200	88	20	150
Hexachlorobutadiene	1	19.4314	0	20	97	50	150
<u>1,2,4-Trichlorobenzene</u>	1	<u>20.2515</u>	0	20	101	70	130
<u>1,2,3-Trichlorobenzene</u>	1	<u>22.577</u>	0	20	113	70	130
Naphthalene	1	22.5228	0	20	113	50	150

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
 Bold and underline - Indicates the compounds reported on form1

SampleID : MBS
Data File: 1M161208.D
Acq On : 05/02/22 18:56

Operator : SG
Sam Mult : 1 Vial# : 6
Misc : A,5ML

Qt Meth : 1M_A0421.M
Qt On : 05/02/22 20:00
Qt Upd On: 04/22/22 09:35

Data Path : G:\GcMsData\2022\GCMS_1\Data\05-02-22\
Qt Path : G:\GcMsData\2022\GCMS_1\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.151	96	1159998	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.875	117	853980	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.187	152	440985	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.727	111	313613	30.33	ug/l	0.00
Spiked Amount 30.000			Recovery =	101.10%		
39) 1,2-Dichloroethane-d4	4.952	67	167919	30.26	ug/l	0.00
Spiked Amount 30.000			Recovery =	100.87%		
66) Toluene-d8	6.061	98	1141792	29.90	ug/l	0.00
Spiked Amount 30.000			Recovery =	99.67%		
76) Bromofluorobenzene	7.524	174	366979	30.29	ug/l	0.00
Spiked Amount 30.000			Recovery =	100.97%		
Target Compounds						
						Qvalue
5) Chlorodifluoromethane	1.669	51	220504m	20.7506	ug/l	
6) Dichlorodifluoromethane	1.663	85	189352m	27.5585	ug/l	
7) Chloromethane	1.830	50	190007	29.1480	ug/l	97
8) Bromomethane	2.209	94	138874	20.9914	ug/l	98
9) Vinyl Chloride	1.920	62	196569	24.4220	ug/l	99
10) Chloroethane	2.293	64	131516	22.4718	ug/l	94
11) Trichlorofluoromethane	2.508	101	304097	20.0835	ug/l	88
12) Ethyl ether	2.737	59	154389	21.5722	ug/l	88
13) Furan	2.775	39	292516	20.8861	ug/l	87
14) 1,1,2-Trichloro-1,2,2-...	2.936	101	136711m	18.9233	ug/l	
15) Methylene Chloride	3.344	84	192708	24.6869	ug/l	79
16) Acrolein	2.846	56	166831	117.9621	ug/l	98
17) Acrylonitrile	3.541	53	72980	24.7053	ug/l	82
18) Iodomethane	3.087	142	169382	17.2577	ug/l	95
19) Acetone	2.975	43	259389	122.1352	ug/l	88
20) Carbon Disulfide	3.151	76	376169	19.1552	ug/l	100
21) t-Butyl Alcohol	3.405	59	88444	115.5760	ug/l	87
22) n-Hexane	3.811	57	150729	21.1484	ug/l	97
23) Di-isopropyl-ether	3.981	45	540562	23.6386	ug/l	82
24) 1,1-Dichloroethene	2.942	61	275808	22.4096	ug/l	95
25) Methyl Acetate	3.245	43	134748	23.5295	ug/l	100
26) Methyl-t-butyl ether	3.576	73	491391	21.9093	ug/l	91
27) 1,1-Dichloroethane	3.946	63	335336	22.7992	ug/l	95
28) trans-1,2-Dichloroethene	3.586	96	184552	22.2640	ug/l	98
29) Ethyl-t-butyl ether	4.277	59	498919	21.9754	ug/l	94
30) cis-1,2-Dichloroethene	4.405	61	333341	24.0381	ug/l	92
31) Bromochloromethane	4.576	49	178008	27.2502	ug/l	86
32) 2,2-Dichloropropane	4.409	77	276001	21.0825	ug/l	94
33) Ethyl acetate	4.438	43	168263	23.0285	ug/l	99
34) 1,4-Dioxane	5.576	88	86569m	1081.9146	ug/l	
35) 1,1-Dichloropropene	4.862	75	212434	19.4738	ug/l	96
36) Chloroform	4.621	83	326373	22.1273	ug/l	100
38) Cyclohexane	4.804	56	191233	18.9148	ug/l	92
40) 1,2-Dichloroethane	4.997	62	273798	21.5503	ug/l	97
41) 2-Butanone	4.402	43	82894m	30.3429	ug/l	
42) 1,1,1-Trichloroethane	4.759	97	282700	19.8801	ug/l	99
43) Carbon Tetrachloride	4.868	117	236268	19.5827	ug/l	93
44) Vinyl Acetate	3.968	43	595318	23.9161	ug/l	100
45) Bromodichloromethane	5.650	83	236992	22.6088	ug/l	93
46) Methylcyclohexane	5.489	83	167111	18.3142	ug/l	98
47) Dibromomethane	5.576	174	124456	22.5211	ug/l	87
48) 1,2-Dichloropropane	5.505	63	173813	22.6939	ug/l	97
49) Trichloroethene	5.370	130	175243	20.2375	ug/l	93
50) Benzene	4.997	78	665410	21.9385	ug/l	100
51) tert-Amyl methyl ether	5.045	73	429560	21.1340	ug/l	96
53) Iso-propylacetate	4.997	43	338564	23.4822	ug/l	95
54) Methyl methacrylate	5.537	41	142463m	24.5515	ug/l	
55) Dibromochloromethane	6.547	129	172747	23.2559	ug/l	94
56) 2-Chloroethylvinylether	5.801	63	19997	17.9987	ug/l	84
57) cis-1,3-Dichloropropene	5.901	75	262602	21.8521	ug/l	99
58) trans-1,3-Dichloropropene	6.203	75	247436	22.1482	ug/l	100
59) Ethyl methacrylate	6.232	41	149527	22.7675	ug/l	83
60) 1,1,2-Trichloroethane	6.315	97	160989	23.5693	ug/l	97
61) 1,2-Dibromoethane	6.627	107	169246	23.4867	ug/l	94
62) 1,3-Dichloropropane	6.412	76	274955	23.1643	ug/l	99
63) 4-Methyl-2-Pentanone	5.978	43	142325	21.7716	ug/l	99
64) 2-Hexanone	6.434	43	107489	24.7767	ug/l	97
65) Tetrachloroethene	6.412	164	132873	19.7896	ug/l	80
67) Toluene	6.100	92	416606	21.8454	ug/l	90

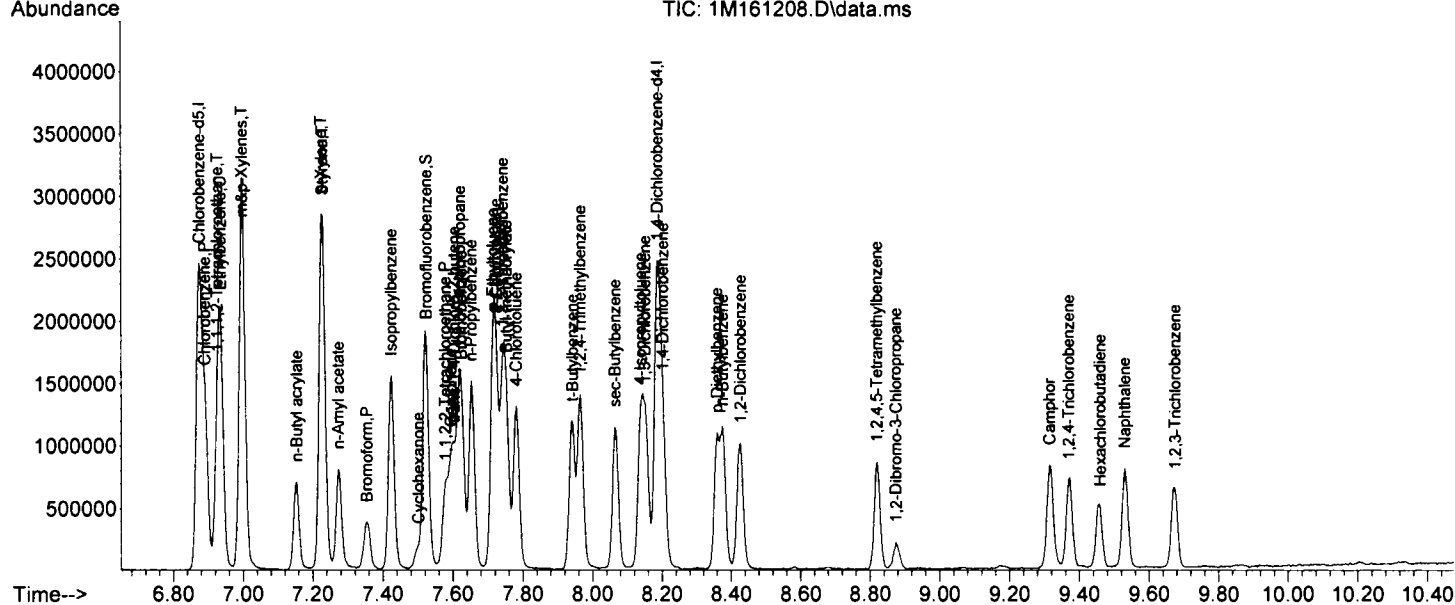
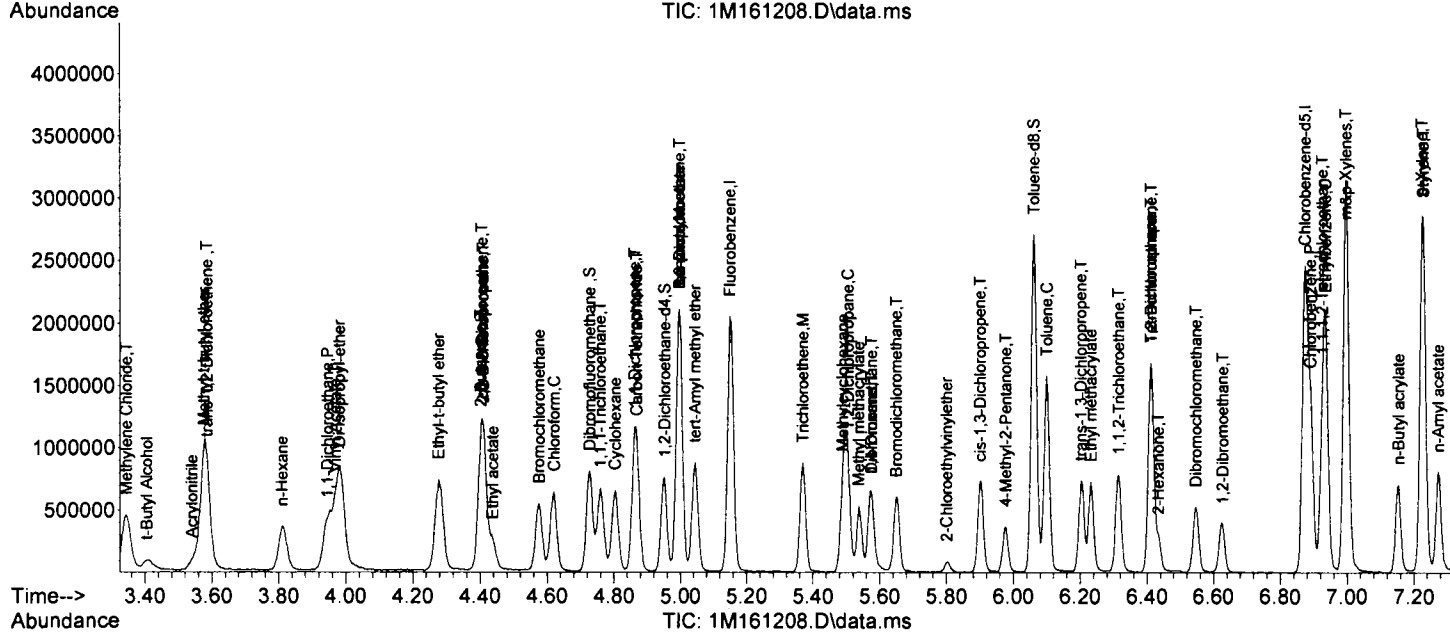
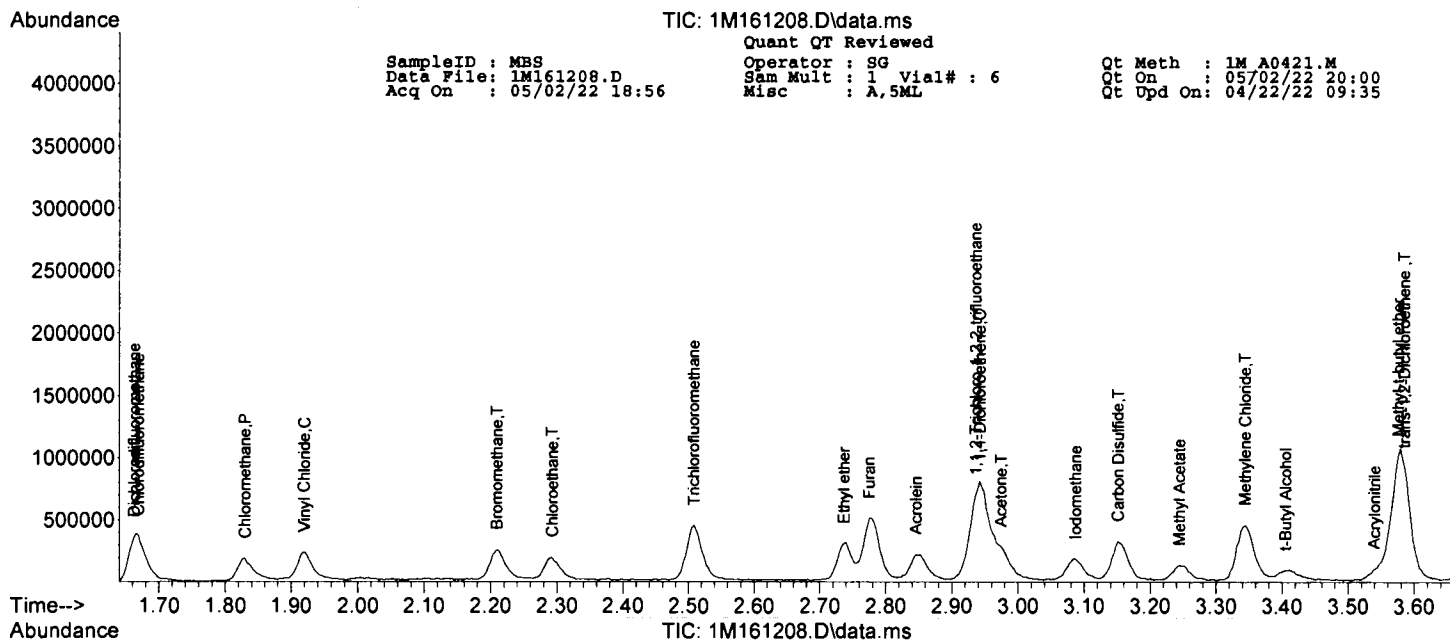
Quantitation Report (QT Reviewed)

SampleID : MBS Operator : SG Qt Meth : 1M_A0421.M
 Data File: 1M161208.D Sam Mult : 1 Vial# : 6 Qt On : 05/02/22 20:00
 Acq On : 05/02/22 18:56 Misc : A,5ML Qt Upd On: 04/22/22 09:35

Data Path : G:\GcMsData\2022\GCMS_1\Data\05-02-22\
 Qt Path : G:\GcMsData\2022\GCMS_1\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1,1,1,2-Tetrachloroethane	6.926	133	155858	21.6324	ug/l	95
69) Chlorobenzene	6.891	112	471652	22.8742	ug/l	92
71) n-Butyl acrylate	7.155	55	310391	22.7343	ug/l	90
72) n-Amyl acetate	7.273	43	284946	24.0900	ug/l	91
73) Bromoform	7.354	173	117643	22.0866	ug/l	82
74) Ethylbenzene	6.936	106	231040	21.6627	ug/l	88
75) 1,1,2,2-Tetrachloroethane	7.579	83	207889	22.5088	ug/l	98
77) Styrene	7.228	104	514179	22.7419	ug/l	98
78) m&p-Xylenes	6.997	106	603631	44.2580	ug/l	98
79) o-Xylene	7.225	106	291516	20.6871	ug/l	98
80) trans-1,4-Dichloro-2-b...	7.605	53	84296	20.5128	ug/l	94
81) 1,3-Dichlorobenzene	8.151	146	322253	21.1801	ug/l	96
82) 1,4-Dichlorobenzene	8.203	146	334288	20.5762	ug/l	96
83) 1,2-Dichlorobenzene	8.428	146	303061	20.6501	ug/l	96
84) Isopropylbenzene	7.425	105	693085	21.6571	ug/l	99
85) Cyclohexanone	7.502	55	52047	179.6805	ug/l	96
86) Camphene	7.595	93	154851	17.4022	ug/l	99
87) 1,2,3-Trichloropropane	7.621	75	261341	21.8481	ug/l	97
88) 2-Chlorotoluene	7.724	91	438074	20.8733	ug/l	94
89) p-Ethyltoluene	7.714	105	638220	20.0663	ug/l	94
90) 4-Chlorotoluene	7.782	91	439097	19.9899	ug/l	98
91) n-Propylbenzene	7.653	91	804901	21.2234	ug/l	96
92) Bromobenzene	7.624	77	439285	23.1874	ug/l	86
93) 1,3,5-Trimethylbenzene	7.743	105	533397	21.6611	ug/l	98
94) Butyl methacrylate	7.753	41	207410m	22.0053	ug/l	
95) t-Butylbenzene	7.942	119	475556	20.1589	ug/l	98
96) 1,2,4-Trimethylbenzene	7.965	105	539139	21.4611	ug/l	98
97) sec-Butylbenzene	8.064	105	566740	20.5364	ug/l	97
98) 4-Isopropyltoluene	8.138	119	465130	19.7911	ug/l	97
99) n-Butylbenzene	8.376	91	501936	19.9215	ug/l	97
100) p-Diethylbenzene	8.360	119	249567	17.3415	ug/l	97
101) 1,2,4,5-Tetramethylben...	8.820	119	319630	16.9368	ug/l	96
102) 1,2-Dibromo-3-Chloropr...	8.875	157	38056	19.7474	ug/l	89
103) Camphor	9.315	95	149022	176.1578	ug/l	99
104) Hexachlorobutadiene	9.460	225	67998	19.4314	ug/l	96
105) 1,2,4-Trichlorobenzene	9.370	180	156339	20.2515	ug/l	95
106) 1,2,3-Trichlorobenzene	9.675	180	147150	22.5770	ug/l	94
107) Naphthalene	9.531	128	440126	22.5228	ug/l	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed



Form3
Recovery Data Laboratory Limits
QC Batch: MBS101491

Data File		Sample ID:		Analysis Date			
Spike or Dup: 1M161206.D		AD30343-004(T:MS)		5/2/2022 6:19:00 PM			
Non Spike(If applicable): 1M161197.D		AD30343-004(T)		5/2/2022 3:30:00 PM			
Inst Blank(If applicable):							
Method: 8260D		Matrix: Aqueous		Units: ug/L		QC Type: MS	
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	21.9641	0	20	110	50	150
Dichlorodifluoromethane	1	33.7946	0	20	169 *	50	150
Chloromethane	1	32.1687	0	20	161 *	50	150
Bromomethane	1	24.3065	0	20	122	50	150
Vinyl Chloride	1	30.4302	0	20	152 *	50	150
Chloroethane	1	26.1892	0	20	131	50	150
Trichlorofluoromethane	1	24.5498	0	20	123	50	150
Ethyl ether	1	20.5777	0	20	103	50	150
Furan	1	22.6955	0	20	113	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	23.9657	0	20	120	50	150
Methylene Chloride	1	30.3061	10.052	20	101	70	130
Acrolein	1	118.2774	0	100	118	50	150
Acrylonitrile	1	21.9032	0	20	110	50	150
Iodomethane	1	18.6379	0	20	93	50	150
Acetone	1	146.191	7.4097	100	139	50	150
Carbon Disulfide	1	23.4147	0	20	117	50	150
t-Butyl Alcohol	1	114.4178	0	100	114	50	150
n-Hexane	1	26.2549	0	20	131 *	70	130
Di-isopropyl-ether	1	23.6028	0	20	118	70	130
1,1-Dichloroethene	1	26.7804	0	20	134 *	70	130
Methyl Acetate	1	22.7469	0	20	114	50	150
Methyl-t-butyl ether	1	21.464	0	20	107	70	130
1,1-Dichloroethane	1	25.0582	0	20	125	70	130
trans-1,2-Dichloroethene	1	25.7655	0	20	129	70	130
Ethyl-t-butyl ether	1	21.6367	0	20	108	70	130
cis-1,2-Dichloroethene	1	23.5217	0	20	118	70	130
Bromochloromethane	1	24.8005	0	20	124	70	130
2,2-Dichloropropane	1	23.704	0	20	119	70	130
Ethyl acetate	1	21.5425	0	20	108	50	150
1,4-Dioxane	1	1047.123	0	1000	105	50	150
1,1-Dichloropropene	1	24.258	0	20	121	70	130
Chloroform	1	22.8776	0	20	114	70	130
Cyclohexane	1	23.0176	0	20	115	70	130
1,2-Dichloroethane	1	21.7959	0	20	109	70	130
2-Butanone	1	24.3723	0	20	122	50	150
1,1,1-Trichloroethane	1	22.7435	0	20	114	70	130
Carbon Tetrachloride	1	22.693	0	20	113	50	150
Vinyl Acetate	1	20.0287	0	20	100	50	150
Bromodichloromethane	1	23.6247	0	20	118	70	130
Methylcyclohexane	1	21.9297	0	20	110	70	130
Dibromomethane	1	22.4155	0	20	112	70	130
1,2-Dichloropropane	1	24.202	0	20	121	70	130
Trichloroethene	1	23.4177	0	20	117	70	130
Benzene	1	23.7426	0	20	119	70	130
tert-Amyl methyl ether	1	20.8879	0	20	104	70	130
Iso-propylacetate	1	22.4065	0	20	112	70	130
Methyl methacrylate	1	22.0578	0	20	110	70	130
Dibromochloromethane	1	22.2321	0	20	111	70	130
2-Chloroethylvinylether	1	16.972	0	20	85	70	130
cis-1,3-Dichloropropene	1	21.0951	0	20	105	70	130
trans-1,3-Dichloropropene	1	21.8217	0	20	109	70	130
Ethyl methacrylate	1	20.831	0	20	104	70	130
1,1,2-Trichloroethane	1	23.2346	0	20	116	70	130
1,2-Dibromoethane	1	22.4192	0	20	112	70	130
1,3-Dichloropropane	1	22.5782	0	20	113	70	130
4-Methyl-2-Pentanone	1	21.9935	0	20	110	50	150
2-Hexanone	1	24.0189	0	20	120	50	150
Tetrachloroethene	1	23.5157	0	20	118	50	150
Toluene	1	23.732	0	20	119	70	130
1,1,1,2-Tetrachloroethane	1	22.0041	0	20	110	70	130
Chlorobenzene	1	23.5671	0	20	118	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
 QC Batch: MBS101491

Method: 8260D	Matrix: Aqueous	Units: ug/L	QC Type: MS				
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	21.0099	0	20	105	70	130
n-Amyl acetate	1	23.1109	0	20	116	70	130
Bromoform	1	20.5268	0	20	103	70	130
Ethylbenzene	1	21.6929	0	20	108	70	130
1,1,2,2-Tetrachloroethane	1	20.5721	0	20	103	70	130
Styrene	1	22.1348	0	20	111	70	130
m&p-Xylenes	1	46.8239	0	40	117	70	130
o-Xylene	1	21.5211	0	20	108	70	130
trans-1,4-Dichloro-2-butene	1	21.6562	0	20	108	50	150
1,3-Dichlorobenzene	1	21.9319	0	20	110	70	130
1,4-Dichlorobenzene	1	20.5514	0	20	103	70	130
1,2-Dichlorobenzene	1	20.8073	0	20	104	70	130
Isopropylbenzene	1	23.3868	0	20	117	70	130
Cyclohexanone	1	184.8483	0	100	185*	50	150
Camphene	1	21.011	0	20	105	70	130
1,2,3-Trichloropropane	1	21.6131	0	20	108	70	130
2-Chlorotoluene	1	21.5841	0	20	108	70	130
p-Ethyltoluene	1	21.432	0	20	107	70	130
4-Chlorotoluene	1	20.7342	0	20	104	70	130
n-Propylbenzene	1	22.5553	0	20	113	70	130
Bromobenzene	1	23.8901	0	20	119	70	130
1,3,5-Trimethylbenzene	1	22.792	0	20	114	70	130
Butyl methacrylate	1	21.8133	0	20	109	70	130
t-Butylbenzene	1	21.3432	0	20	107	70	130
1,2,4-Trimethylbenzene	1	22.8468	0	20	114	70	130
sec-Butylbenzene	1	23.0896	0	20	115	70	130
4-Isopropyltoluene	1	21.9379	0	20	110	70	130
n-Butylbenzene	1	22.8945	0	20	114	70	130
p-Diethylbenzene	1	18.6373	0	20	93	70	130
1,2,4,5-Tetramethylbenzene	1	19.0195	0	20	95	70	130
1,2-Dibromo-3-Chloropropane	1	19.1455	0	20	96	50	150
Camphor	1	175.5559	0	200	88	20	150
Hexachlorobutadiene	1	22.7429	0	20	114	50	150
1,2,4-Trichlorobenzene	1	22.3467	0	20	112	70	130
1,2,3-Trichlorobenzene	1	23.3882	0	20	117	70	130
Naphthalene	1	23.7776	0	20	119	50	150

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
 Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
 QC Batch: MBS101491

Data File		Sample ID:		Analysis Date			
Spike or Dup: 1M161207.D		AD30343-004(T:MSD)		5/2/2022 6:37:00 PM			
Non Spike(If applicable): 1M161197.D		AD30343-004(T)		5/2/2022 3:30:00 PM			
Inst Blank(If applicable):							
Method: 8260D		Matrix: Aqueous		Units: ug/L		QC Type: MSD	
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	20.6158	0	20	103	50	150
Dichlorodifluoromethane	1	29.5948	0	20	148	50	150
Chloromethane	1	30.8687	0	20	154 *	50	150
Bromomethane	1	22.156	0	20	111	50	150
Vinyl Chloride	1	28.9604	0	20	145	50	150
Chloroethane	1	25.0213	0	20	125	50	150
Trichlorofluoromethane	1	23.3358	0	20	117	50	150
Ethyl ether	1	20.2712	0	20	101	50	150
Furan	1	22.1905	0	20	111	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	22.4963	0	20	112	50	150
Methylene Chloride	1	29.7311	10.052	20	98	70	130
Acrolein	1	105.6866	0	100	106	50	150
Acrylonitrile	1	23.2117	0	20	116	50	150
Iodomethane	1	18.2448	0	20	91	50	150
Acetone	1	145.7616	7.4097	100	138	50	150
Carbon Disulfide	1	21.6748	0	20	108	50	150
t-Butyl Alcohol	1	121.0566	0	100	121	50	150
n-Hexane	1	24.6025	0	20	123	70	130
Di-isopropyl-ether	1	22.7348	0	20	114	70	130
1,1-Dichloroethene	1	25.2649	0	20	126	70	130
Methyl Acetate	1	21.2315	0	20	106	50	150
Methyl-t-butyl ether	1	20.2654	0	20	101	70	130
1,1-Dichloroethane	1	23.5124	0	20	118	70	130
trans-1,2-Dichloroethene	1	24.6835	0	20	123	70	130
Ethyl-t-butyl ether	1	20.8235	0	20	104	70	130
cis-1,2-Dichloroethene	1	24.567	0	20	123	70	130
Bromochloromethane	1	24.7835	0	20	124	70	130
2,2-Dichloropropane	1	23.7199	0	20	119	70	130
Ethyl acetate	1	22.2178	0	20	111	50	150
1,4-Dioxane	1	993.8497	0	1000	99	50	150
1,1-Dichloropropene	1	21.9719	0	20	110	70	130
Chloroform	1	22.6097	0	20	113	70	130
Cyclohexane	1	21.8173	0	20	109	70	130
1,2-Dichloroethane	1	20.5948	0	20	103	70	130
2-Butanone	1	24.4539	0	20	122	50	150
1,1,1-Trichloroethane	1	21.6659	0	20	108	70	130
Carbon Tetrachloride	1	21.1577	0	20	106	50	150
Vinyl Acetate	1	18.6713	0	20	93	50	150
Bromodichloromethane	1	22.8858	0	20	114	70	130
Methylcyclohexane	1	22.1324	0	20	111	70	130
Dibromomethane	1	21.7104	0	20	109	70	130
1,2-Dichloropropane	1	23.2324	0	20	116	70	130
Trichloroethene	1	23.0499	0	20	115	70	130
Benzene	1	22.3048	0	20	112	70	130
tert-Amyl methyl ether	1	20.6748	0	20	103	70	130
Iso-propylacetate	1	21.5683	0	20	108	70	130
Methyl methacrylate	1	21.7829	0	20	109	70	130
Dibromochloromethane	1	22.898	0	20	114	70	130
2-Chloroethylvinylether	1	16.5941	0	20	83	70	130
cis-1,3-Dichloropropene	1	21.9029	0	20	110	70	130
trans-1,3-Dichloropropene	1	22.0512	0	20	110	70	130
Ethyl methacrylate	1	22.0499	0	20	110	70	130
1,1,2-Trichloroethane	1	22.6771	0	20	113	70	130
1,2-Dibromoethane	1	22.2088	0	20	111	70	130
1,3-Dichloropropane	1	22.819	0	20	114	70	130
4-Methyl-2-Pentanone	1	22.549	0	20	113	50	150
2-Hexanone	1	23.8402	0	20	119	50	150
Tetrachloroethene	1	22.0787	0	20	110	50	150
Toluene	1	23.5709	0	20	118	70	130
1,1,1,2-Tetrachloroethane	1	21.7881	0	20	109	70	130
Chlorobenzene	1	23.5708	0	20	118	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS101491

Method: 8260D	Matrix: Aqueous		Units: ug/L		QC Type: MSD		
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	21.4573	0	20	107	70	130
n-Amyl acetate	1	23.2813	0	20	116	70	130
<u>Bromoform</u>	1	<u>20.8707</u>	0	20	104	70	130
<u>Ethylbenzene</u>	1	<u>21.7838</u>	0	20	109	70	130
<u>1,1,2,2-Tetrachloroethane</u>	1	<u>20.3771</u>	0	20	102	70	130
<u>Styrene</u>	1	<u>23.0865</u>	0	20	115	70	130
<u>m&p-Xylenes</u>	1	<u>46.6286</u>	0	40	117	70	130
<u>o-Xylene</u>	1	<u>22.38</u>	0	20	112	70	130
trans-1,4-Dichloro-2-butene	1	21.4348	0	20	107	50	150
<u>1,3-Dichlorobenzene</u>	1	<u>22.0976</u>	0	20	110	70	130
<u>1,4-Dichlorobenzene</u>	1	<u>20.9313</u>	0	20	105	70	130
<u>1,2-Dichlorobenzene</u>	1	<u>21.0202</u>	0	20	105	70	130
<u>Isopropylbenzene</u>	1	<u>23.4949</u>	0	20	117	70	130
Cyclohexanone	1	173.1624	0	100	173*	50	150
Camphene	1	21.2335	0	20	106	70	130
1,2,3-Trichloropropane	1	20.8146	0	20	104	70	130
2-Chlorotoluene	1	22.3877	0	20	112	70	130
p-Ethyltoluene	1	22.1446	0	20	111	70	130
4-Chlorotoluene	1	22.5405	0	20	113	70	130
n-Propylbenzene	1	23.3265	0	20	117	70	130
Bromobenzene	1	24.2542	0	20	121	70	130
1,3,5-Trimethylbenzene	1	22.9822	0	20	115	70	130
Butyl methacrylate	1	20.4223	0	20	102	70	130
t-Butylbenzene	1	22.5517	0	20	113	70	130
1,2,4-Trimethylbenzene	1	23.0003	0	20	115	70	130
sec-Butylbenzene	1	23.8238	0	20	119	70	130
4-Isopropyltoluene	1	22.7434	0	20	114	70	130
n-Butylbenzene	1	23.5698	0	20	118	70	130
p-Diethylbenzene	1	19.303	0	20	97	70	130
1,2,4,5-Tetramethylbenzene	1	19.1447	0	20	96	70	130
<u>1,2-Dibromo-3-Chloropropane</u>	1	<u>19.2616</u>	0	20	96	50	150
Camphor	1	170.7308	0	200	85	20	150
Hexachlorobutadiene	1	23.9713	0	20	120	50	150
<u>1,2,4-Trichlorobenzene</u>	1	<u>22.8515</u>	0	20	114	70	130
<u>1,2,3-Trichlorobenzene</u>	1	<u>23.8659</u>	0	20	119	70	130
Naphthalene	1	23.6368	0	20	118	50	150

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
 Bold and underline - Indicates the compounds reported on form1

Form3
RPD Data Laboratory Limits
QC Batch: MBS101491

Data File	Sample ID:	Analysis Date
Spike or Dup: 1M161207.D	AD30343-004(T:MSD)	5/2/2022 6:37:00 PM
Duplicate(If applicable): 1M161206.D	AD30343-004(T:MS)	5/2/2022 6:19:00 PM
Inst Blank(If applicable):		
Method: 8260D	Matrix: Aqueous	Units: ug/L
QC Type: MSD		

Analyte:	Column	Dup/MSD/MBS Conc	Sample/MS/MBS Conc	RPD	Limit
Chlorodifluoromethane	1	20.6158	21.9641	6.3	30
Dichlorodifluoromethane	1	29.5948	33.7946	13	30
Chloromethane	1	30.8687	32.1687	4.1	30
Bromomethane	1	22.156	24.3065	9.3	30
Vinyl Chloride	1	28.9604	30.4302	4.9	40
Chloroethane	1	25.0213	26.1892	4.6	30
Trichlorofluoromethane	1	23.3358	24.5498	5.1	30
Ethyl ether	1	20.2712	20.5777	1.5	30
Furan	1	22.1905	22.6955	2.3	30
1,1,2-Trichloro-1,2,2-trifluoroethane	1	22.4963	23.9657	6.3	30
Methylene Chloride	1	29.7311	30.3061	1.9	30
Acrolein	1	105.6866	118.2774	11	30
Acrylonitrile	1	23.2117	21.9032	5.8	30
Iodomethane	1	18.2448	18.6379	2.1	30
Acetone	1	145.7616	146.191	0.29	30
Carbon Disulfide	1	21.6748	23.4147	7.7	30
t-Butyl Alcohol	1	121.0566	114.4178	5.6	30
n-Hexane	1	24.6025	26.2549	6.5	30
Di-isopropyl-ether	1	22.7348	23.6028	3.7	30
1,1-Dichloroethane	1	25.2649	26.7804	5.8	40
Methyl Acetate	1	21.2315	22.7469	6.9	30
Methyl-t-butyl ether	1	20.2654	21.464	5.7	30
1,1-Dichloroethane	1	23.5124	25.0582	6.4	40
trans-1,2-Dichloroethane	1	24.6835	25.7655	4.3	30
Ethyl-t-butyl ether	1	20.8235	21.6367	3.8	30
cis-1,2-Dichloroethane	1	24.567	23.5217	4.3	30
Bromochloromethane	1	24.7835	24.8005	0.07	30
2,2-Dichloropropane	1	23.7199	23.704	0.07	30
Ethyl acetate	1	22.2178	21.5425	3.1	30
1,4-Dioxane	1	993.8497	1047.123	5.2	30
1,1-Dichloropropene	1	21.9719	24.258	9.9	30
Chloroform	1	22.6097	22.8776	1.2	40
Cyclohexane	1	21.8173	23.0176	5.4	30
1,2-Dichloroethane	1	20.5948	21.7959	5.7	40
2-Butanone	1	24.4539	24.3723	0.33	40
1,1,1-Trichloroethane	1	21.6659	22.7435	4.9	30
Carbon Tetrachloride	1	21.1577	22.693	7	40
Vinyl Acetate	1	18.6713	20.0287	7	30
Bromodichloromethane	1	22.8858	23.6247	3.2	30
Methylcyclohexane	1	22.1324	21.9297	0.92	30
Dibromomethane	1	21.7104	22.4155	3.2	30
1,2-Dichloropropane	1	23.2324	24.202	4.1	30
Trichloroethene	1	23.0499	23.4177	1.6	40
Benzene	1	22.3048	23.7426	6.2	40
tert-Amyl methyl ether	1	20.6748	20.8879	1	30
Iso-propylacetate	1	21.5683	22.4065	3.8	30
Methyl methacrylate	1	21.7829	22.0578	1.3	30
Dibromochloromethane	1	22.898	22.2321	3	30
2-Chloroethylvinylether	1	16.5941	16.972	2.3	30
cis-1,3-Dichloropropene	1	21.9029	21.0951	3.8	30
trans-1,3-Dichloropropene	1	22.0512	21.8217	1	30
Ethyl methacrylate	1	22.0499	20.831	5.7	30
1,1,2-Trichloroethane	1	22.6771	23.2346	2.4	30
1,2-Dibromoethane	1	22.2088	22.4192	0.94	30
1,3-Dichloropropane	1	22.819	22.5782	1.1	30
4-Methyl-2-Pentanone	1	22.549	21.9935	2.5	30
2-Hexanone	1	23.8402	24.0189	0.75	30
Tetrachloroethene	1	22.0787	23.5157	6.3	40
Toluene	1	23.5709	23.732	0.68	40
1,1,1,2-Tetrachloroethane	1	21.7881	22.0041	0.99	30
Chlorobenzene	1	23.5708	23.5671	0.02	40

* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

Form3

RPD Data Laboratory Limits

QC Batch: MBS101491

Method: 8260D	Matrix: Aqueous	Units: ug/L	QC Type: MSD			
Analyte:	Column	Dup/MSD/MBS Conc	Sample/MS/MBS Conc	RPD	Limit	
n-Butyl acrylate	1	21.4573	21.0099	2.1	30	
n-Amyl acetate	1	23.2813	23.1109	0.73	30	
Bromoform	1	20.8707	20.5268	1.7	30	
Ethylbenzene	1	21.7838	21.6929	0.42	30	
1,1,2,2-Tetrachloroethane	1	20.3771	20.5721	0.95	30	
Styrene	1	23.0865	22.1348	4.2	30	
m&p-Xylenes	1	46.6286	46.8239	0.42	30	
o-Xylene	1	22.38	21.5211	3.9	30	
trans-1,4-Dichloro-2-butene	1	21.4348	21.6562	1	30	
1,3-Dichlorobenzene	1	22.0976	21.9319	0.75	30	
1,4-Dichlorobenzene	1	20.9313	20.5514	1.8	40	
1,2-Dichlorobenzene	1	21.0202	20.8073	1	40	
Isopropylbenzene	1	23.4949	23.3868	0.46	30	
Cyclohexanone	1	173.1624	184.8483	6.5	30	
Camphene	1	21.2335	21.011	1.1	30	
1,2,3-Trichloropropane	1	20.8146	21.6131	3.8	30	
2-Chlorotoluene	1	22.3877	21.5841	3.7	30	
p-Ethyltoluene	1	22.1446	21.432	3.3	30	
4-Chlorotoluene	1	22.5405	20.7342	8.3	30	
n-Propylbenzene	1	23.3265	22.5553	3.4	40	
Bromobenzene	1	24.2542	23.8901	1.5	30	
1,3,5-Trimethylbenzene	1	22.9822	22.792	0.83	30	
Butyl methacrylate	1	20.4223	21.8133	6.6	30	
t-Butylbenzene	1	22.5517	21.3432	5.5	30	
1,2,4-Trimethylbenzene	1	23.0003	22.8468	0.67	30	
sec-Butylbenzene	1	23.8238	23.0896	3.1	40	
4-Isopropyltoluene	1	22.7434	21.9379	3.6	30	
n-Butylbenzene	1	23.5698	22.8945	2.9	30	
p-Diethylbenzene	1	19.303	18.6373	3.5	30	
1,2,4,5-Tetramethylbenzene	1	19.1447	19.0195	0.66	30	
1,2-Dibromo-3-Chloropropane	1	19.2616	19.1455	0.6	30	
Camphor	1	170.7308	175.5559	2.8	30	
Hexachlorobutadiene	1	23.9713	22.7429	5.3	30	
1,2,4-Trichlorobenzene	1	22.8515	22.3467	2.2	30	
1,2,3-Trichlorobenzene	1	23.8659	23.3882	2	30	
Naphthalene	1	23.6368	23.7776	0.59	30	

* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

SampleID : AD30343-004 (T)
Data File: 1M161197.D
Acq On : 05/02/22 15:30

Operator : SG
Sam Mult : 1 Vial# : 11
Misc : A,5ML125

Qt Meth : 1M_A0421.M
Qt On : 05/02/22 15:48
Qt Upd On: 04/22/22 09:35

Data Path : G:\GcMsData\2022\GCMS_1\Data\05-02-22\
Qt Path : G:\GcMsData\2022\GCMS_1\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.152	96	1046732	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.875	117	798325	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.187	152	354465	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.727	111	291318	31.22	ug/l	0.00
Spiked Amount	30.000		Recovery	=	104.07%	
39) 1,2-Dichloroethane-d4	4.949	67	158877	31.73	ug/l	0.00
Spiked Amount	30.000		Recovery	=	105.77%	
66) Toluene-d8	6.061	98	1042167	29.20	ug/l	0.00
Spiked Amount	30.000		Recovery	=	97.33%	
76) Bromofluorobenzene	7.524	174	284685	29.24	ug/l	0.00
Spiked Amount	30.000		Recovery	=	97.47%	
Target Compounds						
15) Methylene Chloride	3.341	84	70805m	10.0520	ug/l	Qvalue
19) Acetone	2.978	43	14200m	7.4097	ug/l	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

duc

Abundance
3000000

TIC: 1M161197.D\data.ms

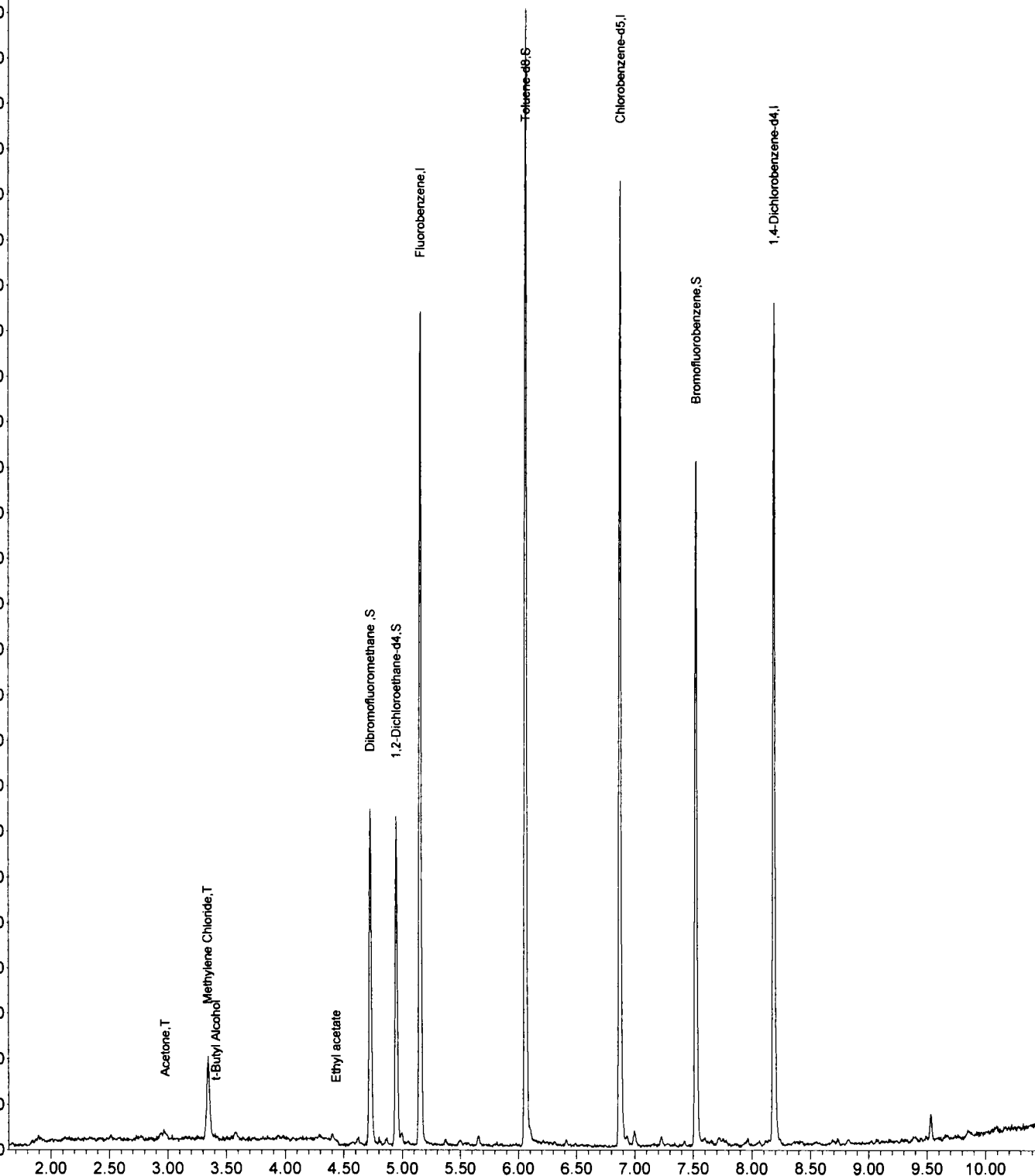
Quant QT Reviewed

SampleID : AD30343-004(T)
Data File: 1M161197.D
Acq On : 05/02/22 15:30

Operator : SG
Sam Mult : 1 Vial# : 11
Misc : A,5ML125

Qt Meth : 1M_A0421.M
Qt On : 05/02/22 15:48
Qt Upd On: 04/22/22 09:35

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Quantitation Report (QT Reviewed)

SampleID : AD30343-004 (T:MS) Operator : SG Qt Meth : 1M_A0421.M
 Data File: 1M161206.D Sam Mult : 1 Vial# : 4 Qt On : 05/02/22 19:02
 Acq On : 05/02/22 18:19 Misc : A,5ML125 Qt Upd On: 04/22/22 09:35

Data Path : G:\GcMsData\2022\GCMS_1\Data\05-02-22\
 Qt Path : G:\GcMsData\2022\GCMS_1\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
4) Fluorobenzene	5.155	96	1138633	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.875	117	862614	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.187	152	453546	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.727	111	308800	30.42	ug/l	0.00
Spiked Amount 30.000			Recovery	=	101.40%	
39) 1,2-Dichloroethane-d4	4.949	67	173725	31.90	ug/l	0.00
Spiked Amount 30.000			Recovery	=	106.33%	
66) Toluene-d8	6.061	98	1127313	29.23	ug/l	0.00
Spiked Amount 30.000			Recovery	=	97.43%	
76) Bromofluorobenzene	7.524	174	374191	30.03	ug/l	0.00
Spiked Amount 30.000			Recovery	=	100.10%	
Target Compounds						
						Qvalue
5) Chlorodifluoromethane	1.673	51	229092	21.9641	ug/l	95
6) Dichlorodifluoromethane	1.660	85	227781m	33.7946	ug/l	
7) Chloromethane	1.827	50	205836	32.1687	ug/l	96
8) Bromomethane	2.206	94	157844	24.3065	ug/l	99
9) Vinyl Chloride	1.920	62	240417	30.4302	ug/l	97
10) Chloroethane	2.290	64	150449	26.1892	ug/l	96
11) Trichlorofluoromethane	2.509	101	364877	24.5498	ug/l	97
12) Ethyl ether	2.737	59	144559	20.5777	ug/l	90
13) Furan	2.779	39	312003	22.6955	ug/l	86
14) 1,1,2-Trichloro-1,2,2-...	2.939	101	169951m	23.9657	ug/l	
15) Methylene Chloride	3.341	84	232215	30.3061	ug/l	83
16) Acrolein	2.846	56	164196	118.2774	ug/l	97
17) Acrylonitrile	3.544	53	63511	21.9032	ug/l	100
18) Iodomethane	3.087	142	179617	18.6379	ug/l	93
19) Acetone	2.975	43	304760	146.1910	ug/l	80
20) Carbon Disulfide	3.148	76	451347	23.4147	ug/l	100
21) t-Butyl Alcohol	3.412	59	85945	114.4178	ug/l	82
22) n-Hexane	3.811	57	183678	26.2549	ug/l	99
23) Di-isopropyl-ether	3.984	45	529802	23.6028	ug/l	91
24) 1,1-Dichloroethene	2.946	61	323531	26.7804	ug/l	94
25) Methyl Acetate	3.245	43	127867	22.7469	ug/l	100
26) Methyl-t-butyl ether	3.576	73	472532	21.4640	ug/l	95
27) 1,1-Dichloroethane	3.943	63	361774	25.0582	ug/l	100
28) trans-1,2-Dichloroethene	3.582	96	209643	25.7655	ug/l	95
29) Ethyl-t-butyl ether	4.280	59	482182	21.6367	ug/l	95
30) cis-1,2-Dichloroethene	4.406	61	320172	23.5217	ug/l	92
31) Bromochloromethane	4.573	49	159022	24.8005	ug/l	83
32) 2,2-Dichloropropane	4.409	77	304605	23.7040	ug/l	98
33) Ethyl acetate	4.438	43	154506	21.5425	ug/l	99
34) 1,4-Dioxane	5.579	88	82242m	1047.1230	ug/l	
35) 1,1-Dichloropropene	4.862	75	259750	24.2580	ug/l	93
36) Chloroform	4.621	83	331225	22.8776	ug/l	97
38) Cyclohexane	4.804	56	228427	23.0176	ug/l	92
40) 1,2-Dichloroethane	4.997	62	271818	21.7959	ug/l	99
41) 2-Butanone	4.409	43	65157m	24.3723	ug/l	
42) 1,1,1-Trichloroethane	4.762	97	317462	22.7435	ug/l	95
43) Carbon Tetrachloride	4.869	117	268751	22.6930	ug/l	99
44) Vinyl Acetate	3.978	43	489370	20.0287	ug/l	100
45) Bromodichloromethane	5.650	83	243080	23.6247	ug/l	99
46) Methylcyclohexane	5.492	83	196415	21.9297	ug/l	93
47) Dibromomethane	5.573	174	121591	22.4155	ug/l	90
48) 1,2-Dichloropropane	5.502	63	181950	24.2020	ug/l	93
49) Trichloroethene	5.367	130	199047	23.4177	ug/l	95
50) Benzene	4.997	78	706867	23.7426	ug/l	100
51) tert-Amyl methyl ether	5.045	73	416738	20.8879	ug/l	97
53) Iso-propylacetate	5.000	43	326321	22.4065	ug/l	95
54) Methyl methacrylate	5.537	41	129287	22.0578	ug/l	86
55) Dibromochloromethane	6.547	129	166812	22.2321	ug/l	100
56) 2-Chloroethylvinylether	5.801	63	19047	16.9720	ug/l	97
57) cis-1,3-Dichloropropene	5.904	75	256068	21.0951	ug/l	94
58) trans-1,3-Dichloropropene	6.203	75	246253	21.8217	ug/l	96
59) Ethyl methacrylate	6.232	41	138192	20.8310	ug/l	85
60) 1,1,1-Trichloroethane	6.315	97	160308	23.2346	ug/l	95
61) 1,2-Dibromoethane	6.624	107	163187	22.4192	ug/l	95
62) 1,3-Dichloropropane	6.412	76	270708	22.5782	ug/l	99
63) 4-Methyl-2-Pentanone	5.978	43	145229	21.9935	ug/l	94
64) 2-Hexanone	6.434	43	105255	24.0189	ug/l	97
65) Tetrachloroethene	6.412	164	159487	23.5157	ug/l	96
67) Toluene	6.100	92	457160	23.7320	ug/l	89

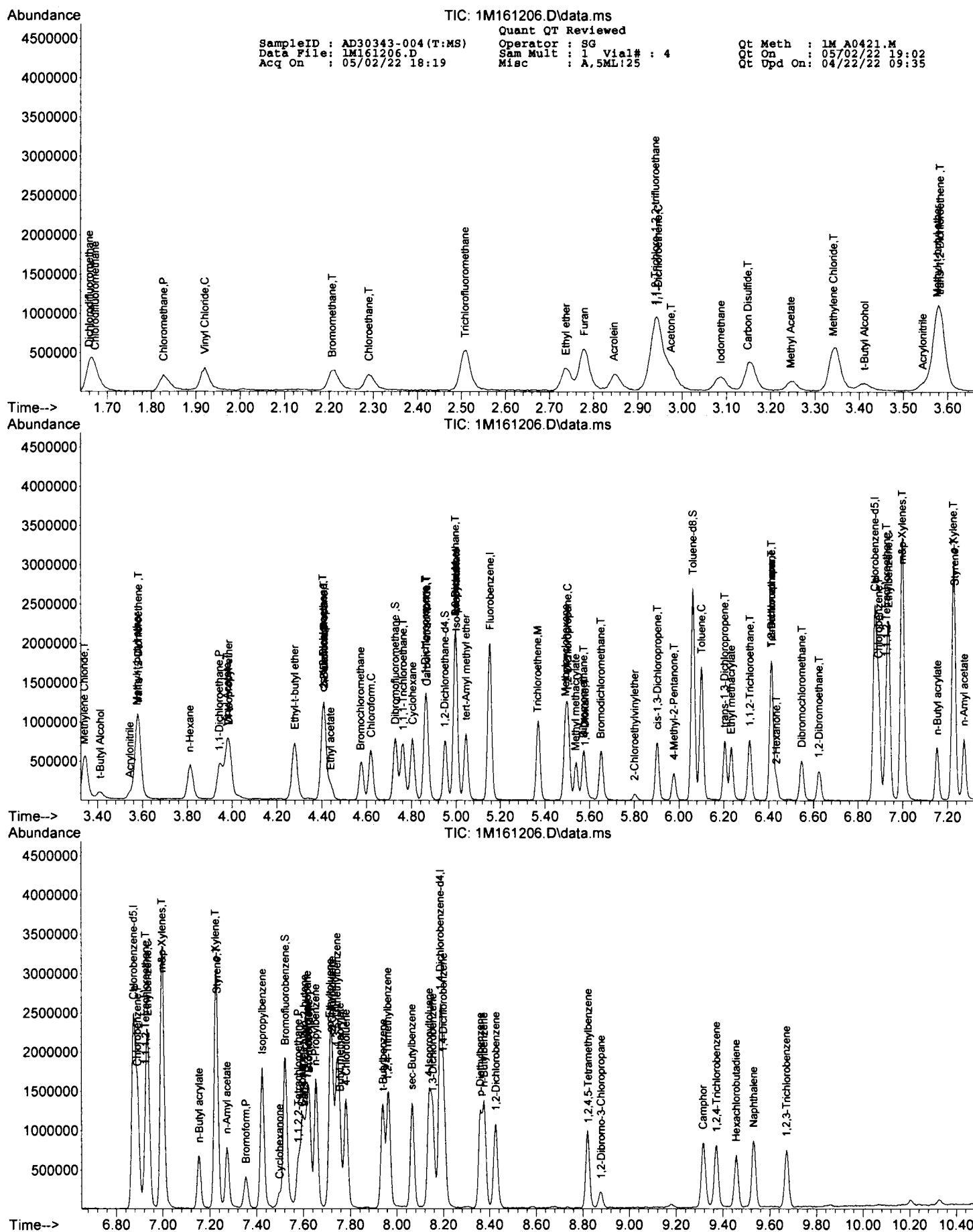
Quantitation Report (QT Reviewed)

SampleID : AD30343-004 (T:MS) Operator : SG Qt Meth : 1M_A0421.M
 Data File: 1M161206.D Sam Mult : 1 Vial# : 4 Qt On : 05/02/22 19:02
 Acq On : 05/02/22 18:19 Misc : A,5ML!25 Qt Upd On: 04/22/22 09:35

Data Path : G:\GcMsData\2022\GCMS_1\Data\05-02-22\
 Qt Path : G:\GcMsData\2022\GCMS_1\MethodQt\
 Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	1,1,1,2-Tetrachloroethane	6.926	133	160139	22.0041	ug/l	98
69)	Chlorobenzene	6.891	112	490852	23.5671	ug/l	96
71)	n-Butyl acrylate	7.155	55	295018	21.0099	ug/l	92
72)	n-Amyl acetate	7.274	43	281151	23.1109	ug/l	90
73)	Bromoform	7.354	173	112449	20.5268	ug/l	92
74)	Ethylbenzene	6.936	106	237952	21.6929	ug/l	99
75)	1,1,2,2-Tetrachloroethane	7.579	83	195414m	20.5721	ug/l	
77)	Styrene	7.232	104	514709	22.1348	ug/l	93
78)	m&p-Xylenes	6.997	106	656818	46.8239	ug/l	93
79)	o-Xylene	7.225	106	311907	21.5211	ug/l	93
80)	trans-1,4-Dichloro-2-b...	7.605	53	91530	21.6562	ug/l	93
81)	1,3-Dichlorobenzene	8.155	146	343197	21.9319	ug/l	94
82)	1,4-Dichlorobenzene	8.200	146	343395	20.5514	ug/l	99
83)	1,2-Dichlorobenzene	8.428	146	314067	20.8073	ug/l	98
84)	Isopropylbenzene	7.425	105	769758	23.3868	ug/l	99
85)	Cyclohexanone	7.499	55	55082	184.8483	ug/l	99
86)	Camphene	7.595	93	192289	21.0110	ug/l	100
87)	1,2,3-Trichloropropane	7.618	75	265894m	21.6131	ug/l	
88)	2-Chlorotoluene	7.724	91	465896	21.5841	ug/l	97
89)	p-Ethyltoluene	7.714	105	701072	21.4320	ug/l	93
90)	4-Chlorotoluene	7.782	91	468418	20.7342	ug/l	96
91)	n-Propylbenzene	7.653	91	879780	22.5553	ug/l	98
92)	Bromobenzene	7.624	77	465489m	23.8901	ug/l	
93)	1,3,5-Trimethylbenzene	7.743	105	577233	22.7920	ug/l	99
94)	Butyl methacrylate	7.756	41	211457m	21.8133	ug/l	
95)	t-Butylbenzene	7.942	119	517835	21.3432	ug/l	100
96)	1,2,4-Trimethylbenzene	7.962	105	590298	22.8468	ug/l	99
97)	sec-Butylbenzene	8.065	105	655349	23.0896	ug/l	97
98)	4-Isopropyltoluene	8.139	119	530269	21.9379	ug/l	98
99)	n-Butylbenzene	8.376	91	593273	22.8945	ug/l	97
100)	p-Diethylbenzene	8.360	119	275854	18.6373	ug/l	94
101)	1,2,4,5-Tetramethylben...	8.823	119	369157	19.0195	ug/l	99
102)	1,2-Dibromo-3-Chloropr...	8.878	157	37947	19.1455	ug/l	88
103)	Camphor	9.315	95	152743	175.5559	ug/l	99
104)	Hexachlorobutadiene	9.457	225	81853	22.7429	ug/l	97
105)	1,2,4-Trichlorobenzene	9.373	180	177428	22.3467	ug/l	98
106)	1,2,3-Trichlorobenzene	9.672	180	156779	23.3882	ug/l	98
107)	Naphthalene	9.531	128	477882	23.7776	ug/l	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed



Quantitation Report (QT Reviewed)

SampleID : AD30343-004(T:MSD) Operator : SG Qt Meth : 1M_A0421.M
 Data File: 1M161207.D Sam Mult : 1 Vial# : 5 Qt On : 05/02/22 19:08
 Acq On : 05/02/22 18:37 Misc : A,5ML125 Qt Upd On: 04/22/22 09:35

Data Path : G:\GcMsData\2022\GCMS_1\Data\05-02-22\
 Qt Path : G:\GcMsData\2022\GCMS_1\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
4) Fluorobenzene	5.151	96	1145097	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.875	117	830008	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.187	152	429059	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.727	111	308128	30.19	ug/l	0.00
Spiked Amount 30.000			Recovery	=	100.63%	
39) 1,2-Dichloroethane-d4	4.949	67	161414	29.47	ug/l	0.00
Spiked Amount 30.000			Recovery	=	98.23%	
66) Toluene-d8	6.061	98	1124240	30.29	ug/l	0.00
Spiked Amount 30.000			Recovery	=	100.97%	
76) Bromofluorobenzene	7.524	174	354386	30.07	ug/l	0.00
Spiked Amount 30.000			Recovery	=	100.23%	
Target Compounds						
						Qvalue
5) Chlorodifluoromethane	1.669	51	216259	20.6158	ug/l	96
6) Dichlorodifluoromethane	1.663	85	200690	29.5948	ug/l	95
7) Chloromethane	1.830	50	198639	30.8687	ug/l	97
8) Bromomethane	2.209	94	144696	22.1560	ug/l	91
9) Vinyl Chloride	1.920	62	230104	28.9604	ug/l	96
10) Chloroethane	2.290	64	144556	25.0213	ug/l	95
11) Trichlorofluoromethane	2.508	101	348803	23.3358	ug/l	99
12) Ethyl ether	2.740	59	143214	20.2712	ug/l	87
13) Furan	2.778	39	306792	22.1905	ug/l	86
14) 1,1,2-Trichloro-1,2,2-...	2.933	101	160436m	22.4963	ug/l	
15) Methylene Chloride	3.341	84	229102	29.7311	ug/l	82
16) Acrolein	2.849	56	147550	105.6866	ug/l	90
17) Acrylonitrile	3.544	53	67687	23.2117	ug/l	83
18) Iodomethane	3.084	142	176811	18.2448	ug/l	94
19) Acetone	2.971	43	305590	145.7616	ug/l	85
20) Carbon Disulfide	3.155	76	420182	21.6748	ug/l	100
21) t-Butyl Alcohol	3.412	59	91448m	121.0566	ug/l	
22) n-Hexane	3.811	57	173095	24.6025	ug/l	97
23) Di-isopropyl-ether	3.984	45	513216	22.7348	ug/l	86
24) 1,1-Dichloroethene	2.946	61	306955	25.2649	ug/l	97
25) Methyl Acetate	3.245	43	120026	21.2315	ug/l	100
26) Methyl-t-butyl ether	3.579	73	448666	20.2654	ug/l	93
27) 1,1-Dichloroethane	3.942	63	341383	23.5124	ug/l	94
28) trans-1,2-Dichloroethene	3.582	96	201979	24.6835	ug/l	93
29) Ethyl-t-butyl ether	4.277	59	466695	20.8235	ug/l	92
30) cis-1,2-Dichloroethene	4.405	61	336299	24.5670	ug/l	88
31) Bromochloromethane	4.576	49	159815	24.7835	ug/l	90
32) 2,2-Dichloropropane	4.409	77	306540	23.7199	ug/l	94
33) Ethyl acetate	4.438	43	160254	22.2178	ug/l	98
34) 1,4-Dioxane	5.576	88	78501m	993.8497	ug/l	
35) 1,1-Dichloropropene	4.862	75	236606	21.9719	ug/l	95
36) Chloroform	4.621	83	329205	22.6097	ug/l	95
38) Cyclohexane	4.804	56	217744	21.8173	ug/l	89
40) 1,2-Dichloroethane	5.000	62	258297	20.5948	ug/l	95
41) 2-Butanone	4.409	43	65749	24.4539	ug/l	46
42) 1,1,1-Trichloroethane	4.762	97	304138	21.6659	ug/l	95
43) Carbon Tetrachloride	4.868	117	251991	21.1577	ug/l	95
44) Vinyl Acetate	3.978	43	458793	18.6713	ug/l	100
45) Bromodichloromethane	5.650	83	236814	22.8858	ug/l	95
46) Methylcyclohexane	5.492	83	199356	22.1324	ug/l	98
47) Dibromomethane	5.573	174	118435	21.7104	ug/l	93
48) 1,2-Dichloropropane	5.502	63	175652	23.2324	ug/l	94
49) Trichloroethene	5.370	130	197033	23.0499	ug/l	98
50) Benzene	4.994	78	667831	22.3048	ug/l	100
51) tert-Amyl methyl ether	5.045	73	414827	20.6748	ug/l	98
53) Iso-propylacetate	5.000	43	302240	21.5683	ug/l	95
54) Methyl methacrylate	5.537	41	122850	21.7829	ug/l	84
55) Dibromochloromethane	6.544	129	165314	22.8980	ug/l	98
56) 2-Chloroethylvinylether	5.804	63	17919	16.5941	ug/l	92
57) cis-1,3-Dichloropropene	5.904	75	255824	21.9029	ug/l	96
58) trans-1,3-Dichloropropene	6.203	75	239437	22.0512	ug/l	98
59) Ethyl methacrylate	6.232	41	140749	22.0499	ug/l	78
60) 1,1,2-Trichloroethane	6.315	97	150547	22.6771	ug/l	97
61) 1,2-Dibromoethane	6.624	107	155545	22.2088	ug/l	94
62) 1,3-Dichloropropane	6.412	76	263253	22.8190	ug/l	98
63) 4-Methyl-2-Pentanone	5.978	43	143269	22.5490	ug/l	90
64) 2-Hexanone	6.434	43	100523	23.8402	ug/l	95
65) Tetrachloroethene	6.412	164	144081	22.0787	ug/l	87
67) Toluene	6.100	92	436894	23.5709	ug/l	96

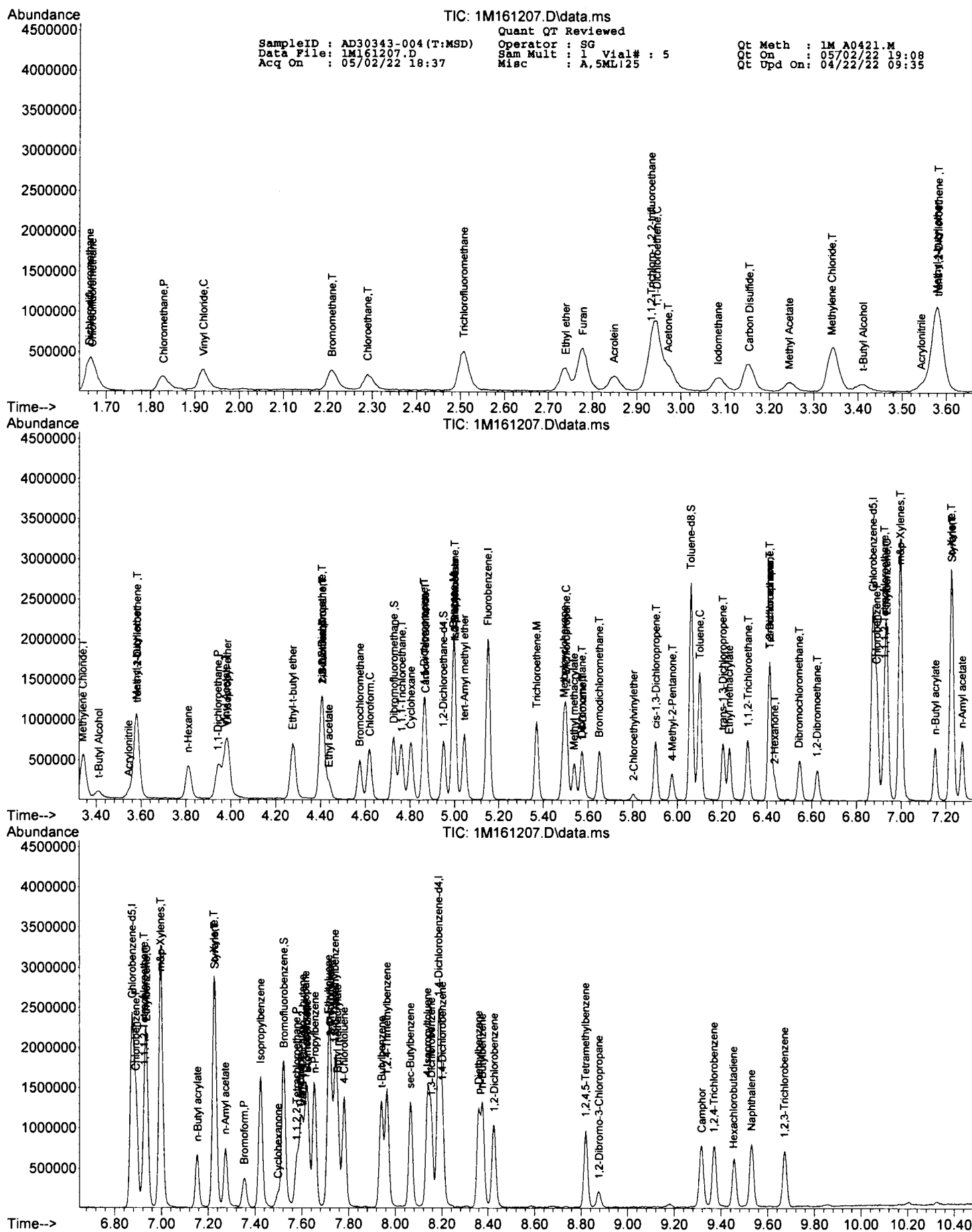
Quantitation Report (QT Reviewed)

SampleID : AD30343-004 (T:MSD) Operator : SG Qt Meth : 1M_A0421.M
 Data File: 1M161207.D Sam Mult : 1 Vial# : 5 Qt On : 05/02/22 19:08
 Acq On : 05/02/22 18:37 Misc : A,5ML:25 Qt Upd On: 04/22/22 09:35

Data Path : G:\GCMSData\2022\GCMS_1\Data\05-02-22\
 Qt Path : G:\GCMSData\2022\GCMS_1\MethodQt\
 Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1,1,1,2-Tetrachloroethane	6.926	133	152573	21.7881	ug/l	99
69) Chlorobenzene	6.891	112	472374	23.5708	ug/l	100
71) n-Butyl acrylate	7.154	55	285033	21.4573	ug/l	92
72) n-Amyl acetate	7.273	43	267933	23.2813	ug/l	91
73) Bromoform	7.354	173	108160	20.8707	ug/l	95
74) Ethylbenzene	6.936	106	226048	21.7838	ug/l	95
75) 1,1,2,2-Tetrachloroethane	7.579	83	183111	20.3771	ug/l	98
77) Styrene	7.228	104	507855	23.0865	ug/l	98
78) m&p-Xylenes	6.997	106	618764	46.6286	ug/l	97
79) o-Xylene	7.225	106	306844	22.3800	ug/l	94
80) trans-1,4-Dichloro-2-b...	7.605	53	85703	21.4348	ug/l	96
81) 1,3-Dichlorobenzene	8.154	146	327120	22.0976	ug/l	96
82) 1,4-Dichlorobenzene	8.203	146	330860	20.9313	ug/l	98
83) 1,2-Dichlorobenzene	8.428	146	300150	21.0202	ug/l	95
84) Isopropylbenzene	7.425	105	731563	23.4949	ug/l	99
85) Cyclohexanone	7.498	55	48788	173.1624	ug/l	88
86) Camphene	7.595	93	183834	21.2335	ug/l	97
87) 1,2,3-Trichloropropane	7.617	75	242245	20.8146	ug/l	99
88) 2-Chlorotoluene	7.724	91	457152	22.3877	ug/l	94
89) p-Ethyltoluene	7.714	105	685275	22.1446	ug/l	94
90) 4-Chlorotoluene	7.781	91	481733	22.5405	ug/l	96
91) n-Propylbenzene	7.656	91	860737	23.3265	ug/l	97
92) Bromobenzene	7.624	77	447068m	24.2542	ug/l	
93) 1,3,5-Trimethylbenzene	7.743	105	550624	22.9822	ug/l	96
94) Butyl methacrylate	7.753	41	187284	20.4223	ug/l	69
95) t-Butylbenzene	7.942	119	517615	22.5517	ug/l	98
96) 1,2,4-Trimethylbenzene	7.965	105	562180	23.0003	ug/l	99
97) sec-Butylbenzene	8.064	105	639680	23.8238	ug/l	98
98) 4-Isopropyltoluene	8.138	119	520059	22.7434	ug/l	98
99) n-Butylbenzene	8.376	91	577796	23.5698	ug/l	94
100) p-Diethylbenzene	8.360	119	270283	19.3030	ug/l	97
101) 1,2,4,5-Tetramethylben...	8.820	119	351526	19.1447	ug/l	96
102) 1,2-Dibromo-3-Chloropr...	8.878	157	36116	19.2616	ug/l	84
103) Camphor	9.318	95	140525	170.7308	ug/l	100
104) Hexachlorobutadiene	9.453	225	81616	23.9713	ug/l	94
105) 1,2,4-Trichlorobenzene	9.370	180	171640	22.8515	ug/l	98
106) 1,2,3-Trichlorobenzene	9.672	180	151344	23.8659	ug/l	97
107) Naphthalene	9.531	128	449403	23.6368	ug/l	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed



GC/MS Volatile Data
Logbook Data



RUN LOG

2043007 0186
Instrument: GCMS_1 Year: 2022
Analyst: JM

1-1-1M160725

Data File	Sample Number	Flags	Comments	Reviewed By	Test Group	Matrix	Surr Dil	Sam Dil	Method(s)	Analysis Date
1M160725.	BFB TUNE		V-363107,V-361878,V-368185	SG 04/22/22						04/21 16:24
1M160726.	CAL @ 0.5 PPB		B-32717	SG 04/22/22		Aqueous	1	1	624\8260	04/21 16:45
1M160727.	CAL @ 1 PPB		B-32717	SG 04/22/22		Aqueous	1	1	624\8260	04/21 17:06
1M160728.	CAL @ 5 PPB		B-32717	SG 04/22/22		Aqueous	1	1	624\8260	04/21 17:27
1M160729.	CAL @ 10 PPB		B-32717	SG 04/22/22		Aqueous	1	1	624\8260	04/21 17:48
1M160730.	CAL @ 20 PPB		B-32717	SG 04/22/22		Aqueous	1	1	624\8260	04/21 18:09
1M160731.	CAL @ 50 PPB		B-32717	SG 04/22/22		Aqueous	1	1	624\8260	04/21 18:29
1M160732.	CAL @ 500 PPB		B-32717	SG 04/22/22		Aqueous	1	1	624\8260	04/21 18:50
1M160734.	CAL @ 250 PPB		B-32717	SG 04/22/22		Aqueous	1	1	624\8260	04/21 19:32
1M160736.	CAL @ 100 PPB		B-32717	SG 04/22/22		Aqueous	1	1	624\8260	04/21 20:14
1M160741.	ICV	IslvoBnf	V-371145	SG 04/22/22		Aqueous	1	1	624\8260	04/21 21:58

Ans	Area Not Checked	En	Extraction Performed Past Hold	Cn	Warning Possible Carry Over
An	Area Out	EsM	Solvent Extraction Date Missin/Not check'd	CRN	Warning c30/c20 not checked
R6m	Blank 8000 series missing	ETn	ToluSolvent Extraction Date Missin/Not check'd	Cm	C30/C20 failed for anh
R6m	Blank 8000 series missing	ETn	Tolu Extraction Performed Outside of Hold	EvF	Eval Mix Failed
Rnf	Blank Not Found/Assigned	Ev	Eval Time Exceeded	Evnc	Eval Mix Not Checked
C16	Calibration Column 1 Out (8000 Series)	Hh	Analysis Before Collection Date	Evnc	Eval Mix missing dttf or endrin
C18	Calibration Column 1 Out (8000 Series)	Ho	Sample Analyzed outside of hold time	R16 R26	Rnd Out on MsMet (cal1 and or cal2) 800 series
C26	Calibration Column 2 Out (8000 Series)	l16 l26	Initial cal 800 series failed Column 1 and or 2	R16 R26	Rnd Out on MsMet (cal1 and or cal2) 8000 series
C26	Calibration Column 2 Out (8000 Series)	l16 l26	Initial cal 8000 series failed Column 1 and or 2	Rn	Retention Time Out Or %Diff Out
C6f	8000 series sample/blank did not have passin cal	ls	Initial Cal Not Checked	Rtn	Can't Calculate Drift
C6f	8000 series sample/blank did not have passin cal	lv	Pmh with calmi csv for init calibration check rts	SA	8000 series surrogate out
Cme	Endrin Cal missing for sample (8000 series)	lw	Initial cal warning. Ini cal file <> method	SR	8000 series surrogate out
Cn	Calibration Not Checked for sample/blank/eval	ly	Initial Cal Files Not Updated Properly for a sampl	SA6 SR6	Acid and or RN Surrogate Out (800 series)



RUN LOG

2043007 0187
Instrument: GCMS_2 Year: 2022
Analyst: JM

1-1-2M167162

Data File	Sample Number	Flags	Comments	Reviewed By	Test Group	Matrix	Surr Dil	Sam Dil	Method(s)	Analysis Date
2M167162.	BFB TUNE		V-371294,V-369966,V-370456	SG 05/09/22						04/26 16:03
2M167164.	CAL @ 0.5 PPB		B32743	SG 05/09/22		Aqueous	1	1	624\8260	04/26 16:38
2M167165.	CAL @ 1 PPB		B32743	SG 05/09/22		Aqueous	1	1	624\8260	04/26 16:58
2M167166.	CAL @ 5 PPB		B32743	SG 05/09/22		Aqueous	1	1	624\8260	04/26 17:17
2M167168.	CAL @ 10 PPB		B32743	SG 05/09/22		Aqueous	1	1	624\8260	04/26 17:57
2M167170.	CAL @ 20 PPB		B32743	SG 05/09/22		Aqueous	1	1	624\8260	04/26 18:36
2M167172.	CAL @ 50 PPB		B32743	SG 05/09/22		Aqueous	1	1	624\8260	04/26 19:16
2M167175.	CAL @ 100 PPB		B32743	SG 05/09/22		Aqueous	1	1	624\8260	04/26 20:15
2M167178.	CAL @ 250 PPB		B32743	SG 05/09/22		Aqueous	1	1	624\8260	04/26 21:14
2M167181.	CAL @ 500 PPB		B32743	SG 05/09/22		Aqueous	1	1	624\8260	04/26 22:13
2M167184.	BLK	Bnf				Aqueous	1	1	624\8260	04/26 23:13
2M167186.	STD	Bnf				Aqueous	1	1	624\8260	04/26 23:52
2M167187.	ICV	IvoBnf	V-371481	SG 05/09/22		Aqueous	1	1	624\8260	04/27 00:12

Ann	Area Not Checked	En	Extraction Performed Past Hold	Cn	Warning Possible Carry Over
An	Area Out	Enm	Solvent Extraction Date Missing/Not checked	CRN	Warning c30/c20 not checked
Rbm	Blank R000 series missing	En	Toln/Solvent Extraction Date Missing/Not checked	Cm	C30/C20 failed for anh
Rbm	Blank R000 series missing	En	Toln Extraction Performed Outside of Hold	EvE	Eval Mix Failed
Rnf	Blank Not Found/Assigned	Ev	Eval Time Exceeded	Evnc	Eval Mix Not Checked
C16	Calibration Column 1 Out (R000 Series)	Hh	Analysis Before Collection Date	Evrc	Eval Mix missing dft or endfin
C16	Calibration Column 1 Out (R000 Series)	Hc	Sample Analyzed outside of hold time	R16 R26	Rnd Out on McMet (col1 and or col2) R000 series
C26	Calibration Column 2 Out (R000 Series)	H16 H26	Initial cal R000 series failed Column 1 and or 2	R18 R26	Rnd Out on McMet (col1 and or col2) R000 series
C26	Calibration Column 2 Out (R000 Series)	H18 H26	Initial cal R000 series failed Column 1 and or 2	Rc	Retention Time Out Or %Diff Out
CRF	R000 series sample/blank did not have passing cal	Is	Initial Cal Not Checked	Rin	Can't Calculate Drift
CRF	R000 series sample/blank did not have passing cal	Iv	Prob with calint csv for init calibration check rfs	SA	R000 series surrogate out
Cme	Fortion Cal missing for sample (R000 series)	Iw	Initial cal warning: Ini cal file <> method	SA	R000 series surrogate out
Cn	Calibration Not Checked for sample/blank/eval	Iy	Initial Cal Files Not Updated Properly for a sample	SA6 SHA	Acid and or RN Surrogate Out (R000 series)



RUN LOG

2043007 0188
Instrument: GCMS_2 Year: 2022
Analyst: JM

1-1-2M167423

Data File	Sample Number	Flags	Comments	Reviewed By	Test Group	Matrix	Surr Dil	Sam Dil	Method(s)	Analysis Date
2M167423.	BFB TUNE		V-370625,V-369966,V-370456,V-371721	JM 05/02/22						05/02 08:42
2M167425.	CAL @ 20 PPB		OK	JM 05/02/22		Aqueous	1	1	624\8260	05/02 09:17
2M167427.	DI					Aqueous	1	1	624\8260	05/02 09:56
2M167428.	DI					Aqueous	1	1	624\8260	05/02 10:16
2M167429.	DAILY BLANK		OK,V-14150	JM 05/02/22		Methano	1	1	8260D	05/02 10:35
2M167430.	DAILY BLANK		OK	JM 05/02/22		Aqueous	1	1	624\8260	05/02 10:55
2M167431.	AD30470-001		OK MBS101485	JM 05/02/22	VO15-8260	Aqueous	1	1	624\8260	05/02 11:15
2M167432.	AD30261-022(10X)		OK	JM 05/02/22	VO15-8260	Aqueous	1	10	8260D	05/02 11:35
2M167433.	MBS101484		OK MBS101484	JM 05/02/22		Methano	1	1	8260D	05/02 11:55
2M167434.	MBS101485		OK MBS101485	JM 05/02/22		Aqueous	1	1	624\8260	05/02 12:15
2M167435.	AD30460-001		OK	JM 05/02/22	VO-8260	Aqueous	1	1	8260D	05/02 12:34
2M167436.	AD30453-001		OK	JM 05/02/22	VO-824.1	Aqueous	1	1	624	05/02 12:54
2M167437.	AD30442-011		OK	JM 05/02/22	VO-8260	Aqueous	1	1	8260D	05/02 13:14
2M167438.	AD30442-012		OK	JM 05/02/22	VO-8260	Aqueous	1	1	8260D	05/02 13:33
2M167439.	AD30442-013		OK	JM 05/02/22	VO-8260	Aqueous	1	1	8260D	05/02 13:53
2M167440.	AD30442-014		OK	JM 05/02/22	VO-8260	Aqueous	1	1	8260D	05/02 14:13
2M167441.	AD30442-010		OK	JM 05/02/22	VO-8260	Aqueous	1	1	8260D	05/02 14:32
2M167442.	30465-002		OK	JM 05/02/22		Aqueous	1	1	624\8260	05/02 14:52
2M167443.	AD30470-001(MS) M16M18		OK MBS101485	JM 05/02/22	VO15-8260	Aqueous	1	1	624\8260	05/02 15:12
2M167444.	AD30470-001(MSD)R18M16M18		OK MBS101485	JM 05/02/22	VO15-8260	Aqueous	1	1	624\8260	05/02 15:31
2M167445.	BLK					Aqueous	1	1	624\8260	05/02 15:51
2M167446.	AD30444-006		OK	WP 05/02/22	VOBTEXM-82	Aqueous	1	1	8260D	05/02 16:11
2M167447.	AD30444-005		OK	WP 05/02/22	VOBTEXM-82	Aqueous	1	1	8260D	05/02 16:30
2M167448.	AD30475-004		OK	WP 05/02/22	ERROR	Aqueous	1	1	624	05/02 16:50
2M167449.	AD30488-003		OK	WP 05/02/22	VO-8260	Aqueous	1	1	8260D	05/02 17:10
2M167450.	AD30481-013		OK	WP 05/02/22	VO15-8260	Aqueous	1	1	8260D	05/02 17:29
2M167451.	AD30470-002		OK	WP 05/02/22	VO15-8260	Aqueous	1	1	8260D	05/02 17:49
2M167452.	AD30475-001	Oc			ERROR	Aqueous	1	1	624	05/02 18:09
2M167453.	AD30475-002		RR-1X,possible co	WP 05/02/22	ERROR	Aqueous	1	1	624	05/02 18:29
2M167454.	AD30475-003				ERROR	Aqueous	1	1	624	05/02 18:48
2M167455.	AD30454-001		OK	WP 05/02/22	VO15-8260	Aqueous	1	1	8260D	05/02 19:08
2M167456.	BLK					Aqueous	1	1	624\8260	05/02 19:28
2M167457.	AD30465-002		OK	WP 05/02/22	VO-8260	Aqueous	1	1	8260D	05/02 19:48
2M167458.	BLK					Aqueous	1	1	624\8260	05/02 20:07
2M167459.	AD30475-002				ERROR	Aqueous	1	1	624	05/02 20:27
2M167460.	AD30475-001(5X) Ti6				ERROR	Aqueous	1	5	624	05/02 20:47

Ans	Area Not Checked	Fo	Extraction Performed Post Hold	Co	Warning Possible Carry Over
An	Area Out	Fsm	Solvent Extraction Date Missing/Not checked	CRN	Warning c30/c20 not checked
RAm	Blank 8000 series missing	Flm	Trch/Solvent Extraction Date Missing/Not checked	Crn	C30/C20 failed for anh
RAm	Blank 8000 series missing	Flm	Trch Extraction Performed Outside of Hold	FvF	Eval Mix Failed
Rnf	Blank Not Found/Assigned	Fv	Eval Time Exceeded	Fvnc	Eval Mix Not Checked
C18	Calibration Column 1 Out (8000 Series)	Hh	Analysis Before Collection Date	Fvnc	Eval Mix missing diff or anoin
C18	Calibration Column 1 Out (8000 Series)	Hn	Sample Analyzed outside of hold time	R18 R28	Rnd Out on MeMet (col1 and or col2) 8000 series
C28	Calibration Column 2 Out (8000 Series)	118 128	Initial cal 8000 series failed Column 1 and or 2	R18 R28	Rnd Out on MeMet (col1 and or col2) 8000 series
C28	Calibration Column 2 Out (8000 Series)	118 128	Initial cal 8000 series failed Column 1 and or 2	Rn	Retention Time Out Or %Diff Out
CRI	8000 series sample/blank did not have passing cal	Is	Initial Cal Not Checked	Rin	Can't Calculate Diff
CRI	8000 series sample/blank did not have passing cal	Iv	Prob with calmt csv for init calibration check rfs	SA	8000 series surrogate out
Cme	Ending Cal missing for sample (8000 series)	Iw	Initial cal warning. Ini cal file <> method	SA	8000 series surrogate out
Co	Calibration Not Checked for sample/blank/eval	Iy	Initial Cal Files Not Updated Properly for a sampl	SA8 Sh8	Acid and or RN Surrogate Out (800 series)



RUN LOG

2043007 0189
Instrument: GCMS_1 Year: 2022
Analyst: SG

1-1-1M161189

Data File	Sample Number	Flags	Comments	Reviewed By	Test Group	Matrix	Surr Dil	Sam Dil	Method(s)	Analysis Date
1M161189	BFB TUNE		V-370625,V-369966,V-370456,V-371700	SG 05/03/22						05/02 13:04
1M161191	CAL @ 20 PPB		OK	SG 05/02/22		Aqueous	1	1	624\8260	05/02 13:38
1M161193	BLK					Aqueous	1	1	624\8260	05/02 14:15
1M161194	BLK-HCL					Aqueous	1	1	624\8260	05/02 14:34
1M161195	DAILY BLANK		OK,14375	SG 05/02/22		Methano	1	1	8260D	05/02 14:53
1M161196	DAILY BLANK		OK	SG 05/02/22		Aqueous	1	1	624\8260	05/02 15:12
1M161197	AD30343-004(T)		MBS101491		ERROR	Aqueous	1	1	624\8260	05/02 15:30
1M161198	AD30153-007(T)	Eto	OK,late activation	WP 05/02/22	VOSPLP-826	Aqueous	1	1	8260D	05/02 15:49
1M161199	AD30153-001(T)	Eto	OK,late activation	WP 05/02/22	VOSPLP-826	Aqueous	1	1	8260D	05/02 16:08
1M161200	BLK					Aqueous	1	1	624\8260	05/02 16:27
1M161201	AD30177-003(T)		OK	WP 05/02/22	VOSPLP-826	Aqueous	1	1	8260D	05/02 16:46
1M161202	AD30177-007(T)		OK	WP 05/02/22	VOSPLP-826	Aqueous	1	1	8260D	05/02 17:04
1M161203	AD30343-005(T)				VO10-8260	Aqueous	1	1	8260D	05/02 17:23
1M161204	STD					Aqueous	1	1	624\8260	05/02 17:42
1M161205	MBS101490		MBS101490			Methano	1	1	8260D	05/02 18:00
1M161206	AD30343-004(T:MSM18		OK MBS101491	WP 05/02/22	ERROR	Aqueous	1	1	624\8260	05/02 18:19
1M161207	AD30343-004(T:MSM18		OK MBS101491	WP 05/02/22	ERROR	Aqueous	1	1	624\8260	05/02 18:37
1M161208	MBS101491	M18	OK MBS101491	WP 05/02/22		Aqueous	1	1	624\8260	05/02 18:56
1M161209	BLK					Aqueous	1	1	624\8260	05/02 19:15
1M161210	BLK					Aqueous	1	1	624\8260	05/02 19:34
1M161211	AD30489-001		OK	WP 05/02/22	VO15-8260	Aqueous	1	1	8260D	05/02 19:53
1M161212	AD30489-002		OK	WP 05/02/22	VO15-8260	Aqueous	1	1	8260D	05/02 20:12
1M161213	AD30489-003		OK	WP 05/02/22	VO15-8260	Aqueous	1	1	8260D	05/02 20:30
1M161214	AD30489-004		OK	WP 05/02/22	VO15-8260	Aqueous	1	1	8260D	05/02 20:49
1M161215	AD30489-005		OK	WP 05/02/22	VO15-8260	Aqueous	1	1	8260D	05/02 21:08
1M161216	AD30489-006		OK	WP 05/02/22	VO15-8260	Aqueous	1	1	8260D	05/02 21:26
1M161217	AD30489-007		OK	WP 05/02/22	VO15-8260	Aqueous	1	1	8260D	05/02 21:45
1M161218	AD30489-008		OK	WP 05/02/22	VO15-8260	Aqueous	1	1	8260D	05/02 22:04
1M161219	AD30489-009		OK	WP 05/02/22	VO15-8260	Aqueous	1	1	8260D	05/02 22:23
1M161220	AD30488-001		OK	WP 05/02/22	VO-8260	Aqueous	1	1	8260D	05/02 22:42
1M161221	AD30488-002		OK	WP 05/02/22	VO-8260	Aqueous	1	1	8260D	05/02 23:00
1M161222	AD30487-001		OK	WP 05/02/22	VO15-8260	Aqueous	1	1	8260D	05/02 23:19
1M161223	AD30475-001(5X)				ERROR	Aqueous	1	5	624	05/02 23:38
1M161224	AD30506-011(50X)		RR-1X	SG 05/03/22	VO-8260	Aqueous	1	50	8260D	05/02 23:57
1M161225	AD30506-009(50X)		RR-1X	SG 05/03/22	VO-8260	Aqueous	1	50	8260D	05/03 00:15
1M161226	AD30506-010(50X)		RR-1X	SG 05/03/22	VO-8260	Aqueous	1	50	8260D	05/03 00:34
1M161227	BLK					Aqueous	1	1	624\8260	05/03 00:53

Ann	Area Not Checked	Fn	Extraction Performed Past Hold	Cn	Warning Possible Carry Over
An	Area Out	Fcm	Solvent Extraction Date Missing/Not checked	CRN	Warning c30/c20 not checked
Rbm	Blank R00 series missing	Flm	Totn/Solvent Extraction Date Missing/Not checked	Cm	C30/C20 failed for enh
Rbm	Blank R000 series missing	Flm	Totn Extraction Performed Outside of Hold	FvF	Eval Mix Failed
Rnf	Blank Not Found/Assigned	Fv	Eval Time Exceeded	Fvnc	Eval Mix Not Checked
C1R	Calibration Column 1 Out (R000 Series)	Hh	Analysis Before Collection Date	Fvnc	Eval Mix missing diff or endrin
C1R	Calibration Column 1 Out (R000 Series)	Hh	Sample Analyzed outside of hold time	R1R R2R	Rnd Out no McMed (col1 and or col2) R000 series
C2R	Calibration Column 2 Out (R000 Series)	I1R I2R	Initial cal R000 series failed Column 1 and or 2	R1R R2R	Rnd Out no McMed (col1 and or col2) R000 series
C2R	Calibration Column 2 Out (R000 Series)	I1R I2R	Initial cal R000 series failed Column 1 and or 2	Rn	Retention Time Out Or %Diff Out
CRF	R00 series sample/blank did not have passing cal	Is	Initial Cal Not Checked	Rn	Can't Calculate Drift
CRF	R000 series sample/blank did not have passing cal	Iv	Print with calint rev for init calibration check rts	SA	R00 series surrogate out
Cme	Forcing Cal missing for sample (R000 series)	Iw	Initial cal warning ini cal file <> method	SA	R000 series surrogate out
Cn	Calibration Not Checked for sample/blank/eval	Iy	Initial Cal Files Not Updated Properly for a sample	SA& SH&	And or RN Surrogate Out (R00 series)

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-340303



Prepared By: Revolus, Jean		Department: Organics	ApprovedBy: jean	
Description: VOA ADD MIX		BatchNumber:	ApproveDate: 12/20/20	
Prep Date: 12/18/2020		Concentration: 5000/25000 p	Checked: Yes	
Expiration Date: 12/18/2021		Final Volume: 10 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
2889	1,2,4,5-TETRAMETHYLBENZENE	50 mg	NEAT	5000 ppm
12762	p-Diethylbenzene	50 mg	NEAT	5000 ppm
13605	methyl alcohol		neat neat	
12764	Cyclohexanone	250 mg	NEAT	25000 ppm
12815	p-Ethyltoluene	50 mg	NEAT	5000 ppm

Veritech Lot Number: V-340304



Prepared By: Revolus, Jean		Department: Organics	ApprovedBy: jean	
Description: VOA ADD MIX(2nd Source)		BatchNumber:	ApproveDate: 12/20/20	
Prep Date: 12/18/2020		Concentration: 5000/25000 p	Checked: Yes	
Expiration Date: 12/18/2021		Final Volume: 10 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
2889	1,2,4,5-TETRAMETHYLBENZENE	50 mg	NEAT	5000 ppm
12762	p-Diethylbenzene	50 mg	NEAT	5000 ppm
13605	methyl alcohol		neat neat	
12764	Cyclohexanone	250 mg	NEAT	25000 ppm
12815	p-Ethyltoluene	50 mg	NEAT	5000 ppm

Veritech Lot Number: V-340305



Prepared By: Revolus, Jean		Department: Organics	ApprovedBy: jean	
Description: Voa Extra Add Mix		BatchNumber:	ApproveDate: 12/20/20	
Prep Date: 12/18/2020		Concentration: 2000-20000 p	Checked: Yes	
Expiration Date: 12/18/2021		Final Volume: 10 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12763	Isopropyl acetate	20 mg	NEAT	2000 ppm
11935	Ethyl acetate	20 mg	Neat	2000 ppm
13605	methyl alcohol	10 ml	neat neat	
13191	d-Camphor	200 mg	Neat	20000 ppm
13192	n-Amyl acetate	20 mg	NEAT	2000 ppm
13194	n-Butyl acrylate	20 mg	Neat	2000 ppm
13195	Methyl methacrylate	20 mg	Neat	2000 ppm
12766	Ethyl methacrylate	20 mg	NEAT	2000 ppm
12761	Camphene	20 mg	NEAT	2000 ppm
11932	Butyl methacrylate	20 mg	Neat	2000 ppm

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-340306



Prepared By: Revolus, Jean		Department: Organics	ApprovedBy: jean	
Description: Voa Extra Add Mix(2nd Source)		BatchNumber:	ApproveDate: 12/20/20	
Prep Date: 12/18/2020		Concentration: 2000-20000 p	Checked: Yes	
Expiration Date: 12/18/2021		Final Volume: 10 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
11935	Ethyl acetate	20 mg	Neat	2000 ppm
12763	Isopropyl acetate	20 mg	NEAT	2000 ppm
13194	n-Butyl acrylate	20 mg	Neat	2000 ppm
13605	methyl alcohol	10 ml	neat neat	
13195	Methyl methacrylate	20 mg	Neat	2000 ppm
13192	n-Amyl acetate	20 mg	NEAT	2000 ppm
13191	d-Camphor	200 mg	Neat	20000 ppm
12766	Ethyl methacrylate	20 mg	NEAT	2000 ppm
12761	Camphene	20 mg	NEAT	2000 ppm
11932	Butyl methacrylate	20 mg	Neat	2000 ppm

Veritech Lot Number: V-351304



Prepared By: Previlon, Wilner		Department: Organics	ApprovedBy: akmal	
Description: VOA WORKING INT/SURR MIX		BatchNumber:	ApproveDate: 06/08/21	
Prep Date: 6/7/2021		Concentration: 150 ppm	Checked: Yes	
Expiration Date: 6/7/2022		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13605	methyl alcohol	88 ml	neat neat	
13053	8260A Surrogate Mix	6 ml	2500 ppm	150 ppm
13052	Internal Standard Mix	6 ml	2500 ppm	150 ppm

Veritech Lot Number: V-351460



Prepared By: Revolus, Jean		Department: Organics	ApprovedBy: akmal	
Description: Ethyl ether/Furan Mix		BatchNumber:	ApproveDate: 06/09/21	
Prep Date: 6/9/2021		Concentration: 5000 ppm	Checked: Yes	
Expiration Date: 6/9/2022		Final Volume: 10 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13905	methyl alcohol	10 ml	neat neat	
11587	Furan	50 mg	NEAT neat	5000 ppm
13987	Ethyl Ether	50 mg	NEAT	5000 ppm

Veritech Lot Number: V-351461



Prepared By: Revolus, Jean		Department: Organics	ApprovedBy: akmal	
Description: Ethyl ether/Furan Mix(2nd Source)		BatchNumber:	ApproveDate: 06/09/21	
Prep Date: 6/9/2021		Concentration: 5000 ppm	Checked: Yes	
Expiration Date: 6/9/2022		Final Volume: 10 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
11587	Furan	50 mg	NEAT neat	5000 ppm
13987	Ethyl Ether	50 mg	NEAT	5000 ppm
13905	methyl alcohol	10 ml	neat neat	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-361878



Prepared By: Previlon, Wilner		Department: Organics	ApprovedBy: akmal	
Description: VOA WORKING INT/SURR MIX		BatchNumber:	ApproveDate: 11/17/21	
Prep Date: 11/15/2021		Concentration: 150 ppm	Checked: Yes	
Expiration Date: 5/15/2022		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13605	methyl alcohol	88 ml	neat neat	
13053	8260A Surrogate Mix	6 ml	2500 ppm	150 ppm
13052	Internal Standard Mix	6 ml	2500 ppm	150 ppm

Veritech Lot Number: V-363107



Prepared By: Mercado, Jonathon		Department: Organics	ApprovedBy: akmal	
Description: BFB Tune Mix		BatchNumber:	ApproveDate: 12/09/21	
Prep Date: 12/6/2021		Concentration: 50 ppm	Checked: Yes	
Expiration Date: 6/7/2022		Final Volume: 1.5 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-351304	VOA WORKING INT/SURR MIX	500 ul	150 ppm	50 ppm
14143	Methyl Alcohol	1000 ul	neat neat	

Veritech Lot Number: V-367113



Prepared By: Mercado, Jonathon		Department: Organics	ApprovedBy: akmal	
Description: 20ppm Freon VOA Working Std		BatchNumber:	ApproveDate: 02/14/22	
Prep Date: 2/11/2022		Concentration: VARIOUS pp	Checked: Yes	
Expiration Date: 5/22/2022		Final Volume: 1 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
14150	Methyl Alcohol	900 ul	neat neat	neat
14443	Chlorodifluoromethane(Freon#22)	100 ul	200 ppm	200 ppm

Veritech Lot Number: V-368183



Prepared By: Mercado, Jonathon		Department: Organics	ApprovedBy: akmal	
Description: 200ppm VOA Working Std		BatchNumber:	ApproveDate: 03/08/22	
Prep Date: 3/7/2022		Concentration: VARIOUS pp	Checked: Yes	
Expiration Date: 6/9/2022		Final Volume: 1 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
14150	Methyl Alcohol	220 ul	neat neat	neat
13964	502.2 Calibration Mix #1	100 ul	2000 ppm	200 ppm
13959	502.2 Cal2000 Mega-Mix	100 ul	2000 ppm	200 ppm
14000	Epa 8260 Calibration MIX 2	100 ul	2000 ppm	200 ppm
14441	Custom VOC Standard	100 ul	VARIOUS	various ppm
14338	tert-Amyl Methyl Ether Standard	100 ul	2000 ppm	200 ppm
V-340303	VOA ADD MIX	40 ul	5000/25000 p	various ppm
V-340305	Voa Extra Add Mix	100 ul	2000-20000 p	200 ppm
V-351460	Ethyl ether/Furan Mix	40 ul	5000 ppm	200 ppm
13998	Ethyl-tert-Butyl Ether(ETBE)	100 ul	2000 ppm	200 ppm

Veritech Lot Number: V-368184



Prepared By: Mercado, Jonathon		Department: Organics	ApprovedBy: akmal	
Description: 20ppm VOA Working Std		BatchNumber:	ApproveDate: 03/08/22	
Prep Date: 3/7/2022		Concentration: VARIOUS pp	Checked: Yes	
Expiration Date: 6/9/2022		Final Volume: 1 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
14150	Methyl Alcohol	900 ul	neat neat	neat
V-368183	200ppm VOA Working Std	100 ul	VARIOUS pp	200 ppm

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-369836



Prepared By: Previlon, Wilner		Department: Organics	ApprovedBy: akmal	
Description: 200ppm VOA Working Std		BatchNumber:	ApproveDate: 03/31/22	
Prep Date: 3/29/2022		Concentration: VARIOUS pp	Checked: Yes	
Expiration Date: 6/9/2022		Final Volume: 1 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
14150	Methyl Alcohol	220 ul	neat neat	neat
13964	502.2 Calibration Mix #1	100 ul	2000 ppm	200 ppm
13959	502.2 Cal2000 Mega-Mix	100 ul	2000 ppm	200 ppm
14000	Epa 8260 Calibration MIX 2	100 ul	2000 ppm	200 ppm
14441	Custom VOC Standard	100 ul	VARIOUS	various ppm
14338	tert-Amyl Methyl Ether Standard	100 ul	2000 ppm	200 ppm
V-340303	VOA ADD MIX	40 ul	5000/25000 p	various ppm
V-351460	Ethyl ether/Furan Mix	40 ul	5000 ppm	200 ppm
V-340305	Voa Extra Add Mix	100 ul	2000-20000 p	200 ppm
13998	Ethyl-tert-Butyl Ether(ETBE)	100 ul	2000 ppm	200 ppm

Veritech Lot Number: V-369837



Prepared By: Previlon, Wilner		Department: Organics	ApprovedBy: akmal	
Description: MBS		BatchNumber:	ApproveDate: 03/31/22	
Prep Date: 3/29/2022		Concentration: 100 ppm	Checked: Yes	
Expiration Date: 6/9/2022		Final Volume: 1 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13905	methyl alcohol	610 ul	neat neat	neat neat
13963	502.2 Calibration Mix #1	50 ul	2000 ppm	100 ppm
14001	Epa 502/524 Volatile Organic Cal Mix	50 ul	2000 ppm	100 ppm
13705	EPA 8260 Calibration Mix 2	50 ul	2000 ppm	100 ppm
14442	Custom VOC Standard	50 ul	VARIOUS	various ppm
13961	tert-Amyl Methyl Ether Std.(TAME)	50 ul	2000 ppm	100 ppm
V-340304	VOA ADD MIX(2nd Source)	20 ul	5000/25000 p	various ppm
V-340306	Voa Extra Add Mix(2nd Source)	50 ul	2000-20000 p	100-1000 pp
V-351461	Ethyl ether/Furan Mix(2nd Source)	20 ul	5000 ppm	100 ppm
13997	Ethyl-tert-Butyl Ether(ETBE)	50 ul	2000 ppm	100 ppm

Veritech Lot Number: V-369966



Prepared By: Previlon, Wilner		Department: Organics	ApprovedBy: akmal	
Description: VOA WORKING INT/SURR MIX		BatchNumber:	ApproveDate: 04/06/22	
Prep Date: 3/31/2022		Concentration: 150 ppm	Checked: Yes	
Expiration Date: 9/30/2022		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
14375	Methyl Alcohol	88 ml	neat neat	
13053	8260A Surrogate Mix	6 ml	2500 ppm	150 ppm
13052	Internal Standard Mix	6 ml	2500 ppm	150 ppm

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-370456



Prepared By: Mercado, Jonathon		Department: Organics	ApprovedBy: akmal	
Description: MBS		BatchNumber:	ApproveDate: 04/15/22	
Prep Date: 4/12/2022		Concentration: 100 ppm	Checked: Yes	
Expiration Date: 6/9/2022		Final Volume: 1 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13905	methyl alcohol	610 ul	neat neat	neat neat
13963	502.2 Calibration Mix #1	50 ul	2000 ppm	100 ppm
14001	Epa 502/524 Volatile Organic Cal Mix	50 ul	2000 ppm	100 ppm
13705	EPA 8260 Calibration Mix 2	50 ul	2000 ppm	100 ppm
14442	Custom VOC Standard	50 ul	VARIOUS	various ppm
13961	tert-Amyl Methyl Ether Std.(TAME)	50 ul	2000 ppm	100 ppm
V-340304	VOA ADD MIX(2nd Source)	20 ul	5000/25000 p	various ppm
V-340306	Voa Extra Add Mix(2nd Source)	50 ul	2000-20000 p	100-1000 pp
V-351461	Ethyl ether/Furan Mix(2nd Source)	20 ul	5000 ppm	100 ppm
13997	Ethyl-tert-Butyl Ether(ETBE)	50 ul	2000 ppm	100 ppm

Veritech Lot Number: V-371136



Prepared By: Goring, Shawn		Department: Organics	ApprovedBy: akmal	
Description: 624/8260 CAL @ 250 PPB		BatchNumber: B-32717	ApproveDate: 04/22/22	
Prep Date: 4/21/2022		Concentration: VARIOUS ppb	Checked: Yes	
Expiration Date: 4/27/2022		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-369836	200ppm VOA Working Std	125 ul	VARIOUS pp	250 ppb
12833	P&T Water	100 ml	NEAT neat	
14443	Chlorodifluoromethane(Freon#22)	125 ul	200 ppm	250 ppb

Veritech Lot Number: V-371137



Prepared By: Goring, Shawn		Department: Organics	ApprovedBy: akmal	
Description: 624/8260 CAL @ 100 PPB		BatchNumber: B-32717	ApproveDate: 04/22/22	
Prep Date: 4/21/2022		Concentration: VARIOUS ppb	Checked: Yes	
Expiration Date: 4/27/2022		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-369836	200ppm VOA Working Std	50 ul	VARIOUS pp	100 ppb
12833	P&T Water	100 ml	NEAT neat	
14443	Chlorodifluoromethane(Freon#22)	50 ul	200 ppm	100 ppb

Veritech Lot Number: V-371138



Prepared By: Goring, Shawn		Department: Organics	ApprovedBy: akmal	
Description: 624/8260 CAL @ 50 PPB		BatchNumber: B-32717	ApproveDate: 04/22/22	
Prep Date: 4/21/2022		Concentration: VARIOUS ppb	Checked: Yes	
Expiration Date: 4/27/2022		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-369836	200ppm VOA Working Std	25 ul	VARIOUS pp	50 ppb
12833	P&T Water	100 ml	NEAT neat	
14443	Chlorodifluoromethane(Freon#22)	25 ul	200 ppm	50 ppb

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-371139



Prepared By: Goring, Shawn		Department: Organics	ApprovedBy: akmal	
Description: 624/8260 CAL @ 20 PPB		BatchNumber: B-32717	ApproveDate: 04/22/22	
Prep Date: 4/21/2022		Concentration: VARIOUS ppb	Checked: Yes	
Expiration Date: 4/27/2022		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-369836	200ppm VOA Working Std	10 ul	VARIOUS pp	20 ppb
12833	P&T Water	100 ml	NEAT neat	
14443	Chlorodifluoromethane(Freon#22)	10 ul	200 ppm	20 ppb

Veritech Lot Number: V-371140



Prepared By: Goring, Shawn		Department: Organics	ApprovedBy: akmal	
Description: 624/8260 CAL @ 10 PPB		BatchNumber: B-32717	ApproveDate: 04/22/22	
Prep Date: 4/21/2022		Concentration: VARIOUS ppb	Checked: Yes	
Expiration Date: 4/27/2022		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-368184	20ppm VOA Working Std	50 ul	VARIOUS pp	10 ppb
12833	P&T Water	100 ml	NEAT neat	
V-367113	20ppm Freon VOA Working Std	50 ul	VARIOUS pp	10 ppb

Veritech Lot Number: V-371141



Prepared By: Goring, Shawn		Department: Organics	ApprovedBy: akmal	
Description: 624/8260 CAL @ 5 PPB		BatchNumber: B-32717	ApproveDate: 04/22/22	
Prep Date: 4/21/2022		Concentration: VARIOUS ppb	Checked: Yes	
Expiration Date: 4/27/2022		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-368184	20ppm VOA Working Std	25 ul	VARIOUS pp	5 ppb
12833	P&T Water	100 ml	NEAT neat	
V-367113	20ppm Freon VOA Working Std	25 ul	VARIOUS pp	5 ppb

Veritech Lot Number: V-371142



Prepared By: Goring, Shawn		Department: Organics	ApprovedBy: akmal	
Description: 624/8260 CAL @ 1 PPB		BatchNumber: B-32717	ApproveDate: 04/22/22	
Prep Date: 4/21/2022		Concentration: VARIOUS ppb	Checked: Yes	
Expiration Date: 4/27/2022		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-368184	20ppm VOA Working Std	5 ul	VARIOUS pp	1 ppb
12833	P&T Water	100 ml	NEAT neat	
V-367113	20ppm Freon VOA Working Std	5 ul	VARIOUS pp	1 ppb

Veritech Lot Number: V-371143



Prepared By: Goring, Shawn		Department: Organics	ApprovedBy: akmal	
Description: 624/8260 CAL @ 0.5 PPB		BatchNumber: B-32717	ApproveDate: 04/22/22	
Prep Date: 4/21/2022		Concentration: VARIOUS ppb	Checked: Yes	
Expiration Date: 4/27/2022		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-368184	20ppm VOA Working Std	2.5 ul	VARIOUS pp	0.5 ppb
12833	P&T Water	100 ml	NEAT neat	
V-367113	20ppm Freon VOA Working Std	2.5 ul	VARIOUS pp	0.5 ppb

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-371144



Prepared By: Goring, Shawn		Department: Organics	ApprovedBy: akmal	
Description: 624/8260 CAL @ 500 PPB		BatchNumber: B-32717	ApproveDate: 04/22/22	
Prep Date: 4/21/2022		Concentration: VARIOUS ppb	Checked: Yes	
Expiration Date: 4/27/2022		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-369836	200ppm VOA Working Std	250 ul	VARIOUS pp	500 ppb
12833	P&T Water	100 ml	NEAT neat	
14443	Chlorodifluoromethane(Freon#22)	250 ul	200 ppm	500 ppb

Veritech Lot Number: V-371145



Prepared By: Goring, Shawn		Department: Organics	ApprovedBy: akmal	
Description: ICV CAL @ 20 PPB		BatchNumber:	ApproveDate: 04/22/22	
Prep Date: 4/21/2022		Concentration: VARIOUS ppb	Checked: Yes	
Expiration Date: 4/27/2022		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-369837	MBS	20 ul	100 ppm	20 ppb
12833	P&T Water	100 ml	NEAT neat	neat
14269	Chlorodifluoromethane	10 ul	200 ppm	20 ppb

Veritech Lot Number: V-371294



Prepared By: Previlon, Wilner		Department: Organics	ApprovedBy: akmal	
Description: BFB Tune Mix		BatchNumber:	ApproveDate: 04/26/22	
Prep Date: 4/25/2022		Concentration: 50 ppm	Checked: Yes	
Expiration Date: 9/30/2022		Final Volume: 1.5 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-369966	VOA WORKING INT/SURR MIX	500 ul	150 ppm	50 ppm
14143	Methyl Alcohol	1000 ul	neat neat	

Veritech Lot Number: V-371358



Prepared By: Revolus, Jean		Department: Organics	ApprovedBy: akmal	
Description: VOA ADD MIX		BatchNumber:	ApproveDate: 04/27/22	
Prep Date: 4/22/2022		Concentration: 5000/25000 p	Checked: Yes	
Expiration Date: 4/1/2023		Final Volume: 10 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
2889	1,2,4,5-TETRAMETHYLBENZENE	50 mg	NEAT	5000 ppm
12762	p-Diethylbenzene	50 mg	NEAT	5000 ppm
14554	Cyclohexanone	250 mg	NEAT	25000 ppm
14548	p-Ethyltoluene	50 mg	NEAT	5000 ppm
14375	Methyl Alcohol		neat neat	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-371359



Prepared By: Revolus, Jean
 Description: Voa Extra Add Mix
 Prep Date: 4/22/2022
 Expiration Date: 4/1/2023

Department: Organics
 BatchNumber:
 Concentration: 2000-20000 p
 Final Volume: 10 ml

ApprovedBy: akmal
 ApproveDate: 04/27/22
 Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12763	Isopropyl acetate	20 mg	NEAT	2000 ppm
14375	Methyl Alcohol		neat neat	
13195	Methyl methacrylate	20 mg	Neat	2000 ppm
13192	n-Amyl acetate	20 mg	NEAT	2000 ppm
13191	d-Camphor	200 mg	Neat	20000 ppm
13194	n-Butyl acrylate	20 mg	Neat	2000 ppm
14553	Ethyl methacrylate	20 mg	NEAT	2000 ppm
14552	Camphene	20 mg	NEAT	2000 ppm
14550	Butyl methacrylate	20 mg	NEAT	2000 ppm
14549	Ethyl acetate	20 mg	NEAT	2000 ppm

Veritech Lot Number: V-371360



Prepared By: Revolus, Jean
 Description: Voa Extra Add Mix(2nd Source)
 Prep Date: 4/26/2022
 Expiration Date: 10/23/2022

Department: Organics
 BatchNumber:
 Concentration: 2000-20000 p
 Final Volume: 10 ml

ApprovedBy: akmal
 ApproveDate: 04/27/22
 Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
12763	Isopropyl acetate	20 mg	NEAT	2000 ppm
14375	Methyl Alcohol		neat neat	
13194	n-Butyl acrylate	20 mg	Neat	2000 ppm
13191	d-Camphor	200 mg	Neat	20000 ppm
13192	n-Amyl acetate	20 mg	NEAT	2000 ppm
13195	Methyl methacrylate	20 mg	Neat	2000 ppm
14553	Ethyl methacrylate	20 mg	NEAT	2000 ppm
14552	Camphene	20 mg	NEAT	2000 ppm
14550	Butyl methacrylate	20 mg	NEAT	2000 ppm
14549	Ethyl acetate	20 mg	NEAT	2000 ppm

Veritech Lot Number: V-371361



Prepared By: Revolus, Jean
 Description: VOA ADD MIX(2nd Sources)
 Prep Date: 4/22/2022
 Expiration Date: 4/1/2023

Department: Organics
 BatchNumber:
 Concentration: 5000/25000 p
 Final Volume: 10 ml

ApprovedBy: akmal
 ApproveDate: 04/27/22
 Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
2889	1,2,4,5-TETRAMETHYLBENZENE	50 mg	NEAT	5000 ppm
14554	Cyclohexanone	250 mg	NEAT	25000 ppm
12762	p-Diethylbenzene	50 mg	NEAT	5000 ppm
14548	p-Ethyltoluene	50 mg	NEAT	5000 ppm
14375	Methyl Alcohol		neat neat	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-371468



Prepared By: Goring, Shawn		Department: Organics	ApprovedBy: akmal	
Description: 200ppm VOA Working Std		BatchNumber:	ApproveDate: 04/28/22	
Prep Date: 4/26/2022		Concentration: VARIOUS pp	Checked: Yes	
Expiration Date: 6/9/2022		Final Volume: 1 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
14150	Methyl Alcohol	220 ul	neat neat	neat
13964	502.2 Calibration Mix #1	100 ul	2000 ppm	200 ppm
13959	502.2 Cal2000 Mega-Mix	100 ul	2000 ppm	200 ppm
14000	Epa 8260 Calibration MIX 2	100 ul	2000 ppm	200 ppm
14441	Custom VOC Standard	100 ul	VARIOUS	various ppm
14338	tert-Amyl Methyl Ether Standard	100 ul	2000 ppm	200 ppm
V-371358	VOA ADD MIX	40 ul	5000/25000 p	various ppm
V-371359	Voa Extra Add Mix	100 ul	2000-20000 p	200 ppm
V-351460	Ethyl ether/Furan Mix	40 ul	5000 ppm	200 ppm
13998	Ethyl-tert-Butyl Ether(ETBE)	100 ul	2000 ppm	200 ppm

Veritech Lot Number: V-371469



Prepared By: Revolus, Jean		Department: Organics	ApprovedBy: akmal	
Description: MBS		BatchNumber:	ApproveDate: 04/28/22	
Prep Date: 4/26/2022		Concentration: 100 ppm	Checked: Yes	
Expiration Date: 6/9/2022		Final Volume: 1 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
13905	methyl alcohol	610 ul	neat neat	neat neat
13963	502.2 Calibration Mix #1	50 ul	2000 ppm	100 ppm
14001	Epa 502/524 Volatile Organic Cal Mix	50 ul	2000 ppm	100 ppm
13705	EPA 8260 Calibration Mix 2	50 ul	2000 ppm	100 ppm
14442	Custom VOC Standard	50 ul	VARIOUS	various ppm
13961	tert-Amyl Methyl Ether Std.(TAME)	50 ul	2000 ppm	100 ppm
V-371361	VOA ADD MIX(2nd Sources)	20 ul	5000/25000 p	various ppm
V-371360	Voa Extra Add Mix(2nd Source)	50 ul	2000-20000 p	100-1000 pp
V-351461	Ethyl ether/Furan Mix(2nd Source)	20 ul	5000 ppm	100 ppm
13997	Ethyl-tert-Butyl Ether(ETBE)	50 ul	2000 ppm	100 ppm

Veritech Lot Number: V-371470



Prepared By: Revolus, Jean		Department: Organics	ApprovedBy: akmal	
Description: 20ppm VOA Working Std		BatchNumber:	ApproveDate: 04/28/22	
Prep Date: 4/26/2022		Concentration: VARIOUS pp	Checked: Yes	
Expiration Date: 6/9/2022		Final Volume: 1 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
14150	Methyl Alcohol	900 ul	neat neat	neat
V-371468	200ppm VOA Working Std	100 ul	VARIOUS pp	200 ppm

Veritech Lot Number: V-371471



Prepared By: Revolus, Jean		Department: Organics	ApprovedBy: akmal	
Description: 20ppm Freon VOA Working Std		BatchNumber:	ApproveDate: 04/28/22	
Prep Date: 4/26/2022		Concentration: VARIOUS pp	Checked: Yes	
Expiration Date: 10/24/2022		Final Volume: 1 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
14375	mthyl alcohol	900 ul	neat neat	neat
14443	Chlorodifluoromethane(Freon#22)	100 ul	200 ppm	200 ppm

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-371472



Prepared By: Revolus, Jean		Department: Organics	ApprovedBy: akmal	
Description: 624/8260 CAL @ 250 PPB		BatchNumber: B-32743	ApproveDate: 04/28/22	
Prep Date: 4/26/2022		Concentration: VARIOUS ppb	Checked: Yes	
Expiration Date: 5/3/2022		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-371468	200ppm VOA Working Std	125 ul	VARIOUS pp	250 ppb
12833	P&T Water	100 ml	NEAT neat	
14443	Chlorodifluoromethane(Freon#22)	125 ul	200 ppm	250 ppb

Veritech Lot Number: V-371473



Prepared By: Revolus, Jean		Department: Organics	ApprovedBy: akmal	
Description: 624/8260 CAL @ 100 PPB		BatchNumber: B-32743	ApproveDate: 04/28/22	
Prep Date: 4/26/2022		Concentration: VARIOUS ppb	Checked: Yes	
Expiration Date: 5/3/2022		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-371468	200ppm VOA Working Std	50 ul	VARIOUS pp	100 ppb
12833	P&T Water	100 ml	NEAT neat	
14443	Chlorodifluoromethane(Freon#22)	50 ul	200 ppm	100 ppb

Veritech Lot Number: V-371474



Prepared By: Revolus, Jean		Department: Organics	ApprovedBy: akmal	
Description: 624/8260 CAL @ 50 PPB		BatchNumber: B-32743	ApproveDate: 04/28/22	
Prep Date: 4/26/2022		Concentration: VARIOUS ppb	Checked: Yes	
Expiration Date: 5/3/2022		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-371468	200ppm VOA Working Std	25 ul	VARIOUS pp	50 ppb
12833	P&T Water	100 ml	NEAT neat	
14443	Chlorodifluoromethane(Freon#22)	25 ul	200 ppm	50 ppb

Veritech Lot Number: V-371475



Prepared By: Revolus, Jean		Department: Organics	ApprovedBy: akmal	
Description: 624/8260 CAL @ 20 PPB		BatchNumber: B-32743	ApproveDate: 04/28/22	
Prep Date: 4/26/2022		Concentration: VARIOUS ppb	Checked: Yes	
Expiration Date: 5/3/2022		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-371468	200ppm VOA Working Std	10 ul	VARIOUS pp	20 ppb
12833	P&T Water	100 ml	NEAT neat	
14443	Chlorodifluoromethane(Freon#22)	10 ul	200 ppm	20 ppb

Veritech Lot Number: V-371476



Prepared By: Revolus, Jean		Department: Organics	ApprovedBy: akmal	
Description: 624/8260 CAL @ 10 PPB		BatchNumber: B-32743	ApproveDate: 04/28/22	
Prep Date: 4/26/2022		Concentration: VARIOUS ppb	Checked: Yes	
Expiration Date: 5/3/2022		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-371470	20ppm VOA Working Std	50 ul	VARIOUS pp	10 ppb
12833	P&T Water	100 ml	NEAT neat	
V-371471	20ppm Freon VOA Working Std	50 ul	VARIOUS pp	10 ppb

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-371477

Prepared By: Revolus, Jean
 Description: 624/8260 CAL @ 5 PPB
 Prep Date: 4/26/2022
 Expiration Date: 5/3/2022

Department: Organics
 BatchNumber: B-32743
 Concentration: VARIOUS ppb
 Final Volume: 100 ml
 ApprovedBy: akmal
 ApproveDate: 04/28/22
 Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-371470	20ppm VOA Working Std	25 ul	VARIOUS pp	5 ppb
12833	P&T Water	100 ml	NEAT neat	
V-371471	20ppm Freon VOA Working Std	25 ul	VARIOUS pp	5 ppb

Veritech Lot Number: V-371478

Prepared By: Revolus, Jean
 Description: 624/8260 CAL @ 1 PPB
 Prep Date: 4/26/2022
 Expiration Date: 5/3/2022

Department: Organics
 BatchNumber: B-32743
 Concentration: VARIOUS ppb
 Final Volume: 100 ml
 ApprovedBy: akmal
 ApproveDate: 04/28/22
 Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-371470	20ppm VOA Working Std	5 ul	VARIOUS pp	1 ppb
12833	P&T Water	100 ml	NEAT neat	
V-371471	20ppm Freon VOA Working Std	5 ul	VARIOUS pp	1 ppb

Veritech Lot Number: V-371479

Prepared By: Revolus, Jean
 Description: 624/8260 CAL @ 0.5 PPB
 Prep Date: 4/26/2022
 Expiration Date: 5/3/2022

Department: Organics
 BatchNumber: B-32743
 Concentration: VARIOUS ppb
 Final Volume: 100 ml
 ApprovedBy: akmal
 ApproveDate: 04/28/22
 Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-371470	20ppm VOA Working Std	2.5 ul	VARIOUS pp	0.5 ppb
12833	P&T Water	100 ml	NEAT neat	
V-371471	20ppm Freon VOA Working Std	2.5 ul	VARIOUS pp	0.5 ppb

Veritech Lot Number: V-371480

Prepared By: Revolus, Jean
 Description: 624/8260 CAL @ 500 PPB
 Prep Date: 4/26/2022
 Expiration Date: 5/3/2022

Department: Organics
 BatchNumber: B-32743
 Concentration: VARIOUS ppb
 Final Volume: 100 ml
 ApprovedBy: akmal
 ApproveDate: 04/28/22
 Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-371468	200ppm VOA Working Std	250 ul	VARIOUS pp	500 ppb
12833	P&T Water	100 ml	NEAT neat	
14443	Chlorodifluoromethane(Freon#22)	250 ul	200 ppm	500 ppb

Veritech Lot Number: V-371481

Prepared By: Revolus, Jean
 Description: ICV CAL @ 20 PPB
 Prep Date: 4/26/2022
 Expiration Date: 5/3/2022

Department: Organics
 BatchNumber:
 Concentration: VARIOUS ppb
 Final Volume: 100 ml
 ApprovedBy: akmal
 ApproveDate: 04/28/22
 Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-371469	MBS	20 ul	100 ppm	20 ppb
12833	P&T Water	100 ml	NEAT neat	neat
14269	Chlorodifluoromethane	10 ul	200 ppm	20 ppb

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-371700



Prepared By: Mercado, Jonathon		Department: Organics	ApprovedBy: akmal	
Description: CAL @ 20 PPB		BatchNumber:	ApproveDate: 05/04/22	
Prep Date: 5/2/2022		Concentration: VARIOUS ppb	Checked: Yes	
Expiration Date: 5/9/2022		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-371468	200ppm VOA Working Std	10 ul	VARIOUS pp	20 ppb
12833	P&T Water	100 ml	NEAT neat	
14269	Chlorodifluoromethane	10 ul	200 ppm	20 ppb

Veritech Lot Number: V-371721



Prepared By: Mercado, Jonathon		Department: Organics	ApprovedBy: akmal	
Description: CAL @ 50 PPB		BatchNumber:	ApproveDate: 05/04/22	
Prep Date: 5/2/2022		Concentration: VARIOUS ppb	Checked: Yes	
Expiration Date: 5/3/2022		Final Volume: 5 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-369836	200ppm VOA Working Std	1.25 ul	VARIOUS pp	50 ppb
12833	P&T Water	5 ml	NEAT neat	
14269	Chlorodifluoromethane	1.25 ul	200 ppm	50 ppb

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 2889



Description
1,2,4,5-TETRAMETHYLBENZENE

ApprovedBy: jean
ApproveDate: 12/18/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Acros Organics	409390050	A0214190	11/20/07	11/30/27	Revolus, Jean	1	1ML	NEAT	

Veritech Control/Receipt Number: 11587



Description
Furan

ApprovedBy: akmal
ApproveDate: 04/05/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Aldrich	185922	SHBG4510V	04/05/18	08/31/25	Hamid, Akmal	1	5ML	NEAT	NEAT

Veritech Control/Receipt Number: 11932



Description
Butyl methacrylate

ApprovedBy: jean
ApproveDate: 08/27/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Chem Service	N-11371-1G	4695500	08/22/18	01/31/23	Revolus, Jean	1	1g	Neat	

Veritech Control/Receipt Number: 11935



Description
Ethyl acetate

ApprovedBy: jean
ApproveDate: 08/27/18
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Chem Service	N-11881-1G	7518400	08/22/18	05/31/22	Revolus, Jean	1	1g	Neat	

Veritech Control/Receipt Number: 12761



Description
Camphene

ApprovedBy: akmal
ApproveDate: 09/19/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
ChemService	N-11395-250G	8199400	09/19/19	01/31/22	Revolus, Jean	2	250m	NEAT	

Veritech Control/Receipt Number: 12762



Description
p-Diethylbenzene

ApprovedBy: akmal
ApproveDate: 09/19/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
ChemService	N-12771-100MG	8949700	09/19/19	08/31/23	Revolus, Jean	4	100m	NEAT	

Veritech Control/Receipt Number: 12763



Description
Isopropyl acetate

ApprovedBy: akmal
ApproveDate: 10/07/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
ChemService	N-12223-1G	8816500	09/19/19	04/30/24	Revolus, Jean	1	1g	NEAT	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 12764



Description
Cyclohexanone

ApprovedBy: akmal
ApproveDate: 09/19/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
ChemService	N-11531-1G	8743900	09/19/19	05/31/23	Revolus, Jean	1	1g	NEAT	

Veritech Control/Receipt Number: 12766



Description
Ethyl methacrylate

ApprovedBy: jean
ApproveDate: 09/25/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
ChemService	N-11903-1G	8239900	09/19/19	01/31/23	Revolus, Jean	1	1g	NEAT	

Veritech Control/Receipt Number: 12815



Description
p-Ethyltoluene

ApprovedBy: akmal
ApproveDate: 10/07/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
CHEMSERVICE	N-12776-1G	7926200	10/03/19	12/31/21	Revolus, Jean	4	250 m	NEAT	

Veritech Control/Receipt Number: 12833



Description
P&T Water

ApprovedBy: akmal
ApproveDate: 10/16/19
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Veritech	N/A	N/A	10/14/19	10/14/25	Goring, Shawn	1	N/A	NEAT	NEAT

Veritech Control/Receipt Number: 13052



Description
Internal Standard Mix

ApprovedBy: jean
ApproveDate: 02/13/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Restek	30241	A0156714	02/11/20	01/31/25	Revolus, Jean	12	1ml	2500	PPM

Veritech Control/Receipt Number: 13053



Description
8260A Surrogate Mix

ApprovedBy: jean
ApproveDate: 02/13/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Restek	30240	A0156492	02/11/20	01/31/25	Revolus, Jean	12	1ml	2500	PPM

Veritech Control/Receipt Number: 13191



Description
d-Camphor

ApprovedBy: jean
ApproveDate: 04/17/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Chem Service	N-11556-100MG	9259300	04/17/20	12/31/25	Revolus, Jean	5	100m	Neat	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13192



Description
n-Amyl acetate

ApprovedBy: jean
ApproveDate: 04/17/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Chem Service	N-12508-1G	9676300	04/17/20	03/31/26	Revolus, Jean	1	1g	NEAT	

Veritech Control/Receipt Number: 13194



Description
n-Butyl acrylate

ApprovedBy: jean
ApproveDate: 04/17/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Chem Service	N-12513-1G	9919500	04/17/20	01/31/26	Revolus, Jean	1	1g	Neat	

Veritech Control/Receipt Number: 13195



Description
Methyl methacrylate

ApprovedBy: jean
ApproveDate: 04/17/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Chem Service	N-12443-1G	9827400	04/17/20	03/30/26	Revolus, Jean	1	1g	Neat	

Veritech Control/Receipt Number: 13605



Description
Methyl Alcohol

ApprovedBy: akmal
ApproveDate: 11/17/20
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Tedia	MP1924-002	20060571	11/16/20	06/25/22	Lopez, Jose	36	1L	neat	neat

Veritech Control/Receipt Number: 13705



Description
EPA 8260 Calibration Mix 2

ApprovedBy: akmal
ApproveDate: 01/12/21
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Sigma-Aldrich	46831-U	LRAC3827	01/08/21	10/31/22	Revolus, Jean	6	1ml	2000	PPM

Veritech Control/Receipt Number: 13905



Description
Methyl Alcohol

ApprovedBy: akmal
ApproveDate: 05/06/21
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Tedia	MP1924-002	20100613	05/04/21	10/30/22	Lopez, Jose	30	1L	neat	neat

Veritech Control/Receipt Number: 13959



Description
502.2 Cal2000 Mega-Mix

ApprovedBy: akmal
ApproveDate: 05/28/21
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Restek	30431	A0168517	05/28/21	01/31/23	Hamid, Akmal	5	1ML	2000	PPM

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 13961



Description
tert-Amyl Methyl Ether Std.(TAME)

ApprovedBy: akmal
ApproveDate: 05/28/21
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Restek	30629	A0156516	05/28/21	01/31/25	Hamid, Akmal	6	1ml	2000	ppm

Veritech Control/Receipt Number: 13963



Description
502.2 Calibration Mix #1

ApprovedBy: akmal
ApproveDate: 05/28/21
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Restek	30042	A0168013	05/28/21	09/30/27	Hamid, Akmal	5	1ML	2000	PPM

Veritech Control/Receipt Number: 13964



Description
502.2 Calibration Mix #1

ApprovedBy: akmal
ApproveDate: 05/28/21
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Restek	30042	A0169954	05/28/21	11/30/27	Hamid, Akmal	5	1ML	2000	PPM

Veritech Control/Receipt Number: 13987



Description
Ethyl Ether

ApprovedBy: akmal
ApproveDate: 06/09/21
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Chem Service	N-11897-1G	11096100	05/25/21	12/31/25	Revolus, Jean	1	1g	NEAT	

Veritech Control/Receipt Number: 13997



Description
Ethyl-tert-Butyl Ether(ETBE)

ApprovedBy: akmal
ApproveDate: 06/16/21
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Restek	30628	A0173183	06/16/21	06/30/26	Hamid, Akmal	6	1ML	2000	PPM

Veritech Control/Receipt Number: 13998



Description
Ethyl-tert-Butyl Ether(ETBE)

ApprovedBy: akmal
ApproveDate: 06/16/21
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Restek	30628	A0172879	06/16/21	05/31/26	Hamid, Akmal	6	1ML	2000	PPM

Veritech Control/Receipt Number: 14000



Description
Epa 8260 Calibration MIX 2

ApprovedBy: akmal
ApproveDate: 06/16/21
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Sigma-Aldrich	46831-U	LRAC3827	06/15/21	10/31/22	Revolus, Jean	10	1ml	2000	PPM

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 14001



Description
Epa 502/524 Volatile Organic Cal Mix

ApprovedBy: akmal
ApproveDate: 06/17/21
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Sigma-Aldrich	502111	LRAC7008	06/17/21	09/30/22	Revolus, Jean	10	1ml	2000	PPM

Veritech Control/Receipt Number: 14143



Description
Methyl Alcohol

ApprovedBy: akmal
ApproveDate: 08/19/21
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Tedia	MP1924-002	21070089	08/17/21	04/01/23	Lopez, Jose	6	1L	neat	neat

Veritech Control/Receipt Number: 14150



Description
Methyl Alcohol

ApprovedBy: akmal
ApproveDate: 08/27/21
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Tedia	MP1924-002	21088065	08/25/21	04/01/23	Lopez, Jose	30	1L	neat	neat

Veritech Control/Receipt Number: 14269



Description
Chlorodifluoromethane

ApprovedBy: jean
ApproveDate: 10/29/21
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
AccuStandard	M-REF-03	219081587	10/29/21	09/11/29	Revolus, Jean	10	1ml	200	PPM

Veritech Control/Receipt Number: 14338



Description
tert-Amyl Methyl Ether Standard

ApprovedBy: jean
ApproveDate: 12/07/21
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Restek	30629	A0178873	12/03/21	11/30/26	Revolus, Jean	8	1ml	2000	PPM

Veritech Control/Receipt Number: 14375



Description
Methyl Alcohol

ApprovedBy: akmal
ApproveDate: 12/28/21
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
Tedia	MP1924-002	21080065	12/27/21	04/01/23	Burwell, John	42	1L	neat	neat

Veritech Control/Receipt Number: 14441



Description
Custom VOC Standard

ApprovedBy: jean
ApproveDate: 02/09/22
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
AccuStandard	S-16418	222021123	02/09/22	08/07/22	Revolus, Jean	5	1ml	VARIOU	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 14442



Description
Custom VOC Standard

ApprovedBy: jean
ApproveDate: 02/09/22
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
AccuStandard	S-16418	222021127	02/09/22	08/07/22	Revolus, Jean	5	1ml	VARIOU	

Veritech Control/Receipt Number: 14443



Description
Chlorodifluoromethane(Freon#22)

ApprovedBy: jean
ApproveDate: 02/09/22
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
AccuStandard	M-REF-03	221081279	02/09/22	08/31/31	Revolus, Jean	10	1ml	200	PPM

Veritech Control/Receipt Number: 14548



Description
p-Ethyltoluene

ApprovedBy: jean
ApproveDate: 05/01/22
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
CHEMSERVICE	N-12776-1G	12503700	04/12/22	12/31/25	Revolus, Jean	1	1g	NEAT	

Veritech Control/Receipt Number: 14549



Description
Ethyl acetate

ApprovedBy: jean
ApproveDate: 05/01/22
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
CHEMSERVICE	N-11881-1G	12841300	04/12/22	11/30/24	Revolus, Jean	1	1g	NEAT	

Veritech Control/Receipt Number: 14550



Description
Butyl methacrylate

ApprovedBy: jean
ApproveDate: 05/01/22
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
CHEMSERVICE	N-11371-1G	12981700	04/12/22	02/28/29	Revolus, Jean	1	1g	NEAT	

Veritech Control/Receipt Number: 14552



Description
Camphene

ApprovedBy: jean
ApproveDate: 05/01/22
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
CHEMSERVICE	N-11395-250MG	13119400	04/12/22	04/30/27	Revolus, Jean	1	0.25g	NEAT	

Veritech Control/Receipt Number: 14553



Description
Ethyl methacrylate

ApprovedBy: jean
ApproveDate: 05/01/22
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
CHEMSERVICE	N-11903-1G	12985900	04/12/22	02/28/26	Revolus, Jean	1	1g	NEAT	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 14554



Description

Cyclohexanone

ApprovedBy: jean

ApproveDate: 05/01/22

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume/ Cont	Conc:	Units:
CHEMSERVICE	N-11531-1G	13043700	04/19/22	05/31/23	Revolus, Jean	1	1g	NEAT	



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Appendix E.

Sub-Slab Vapor & Indoor Air Monitoring Event Documentation

- Sub Slab and Indoor Air Sampling –
2019-2020 Heating Season Summary
Report (25 April 2020)



25 April 2020
File: 10017039 234973-003

Mr. Salvatore Priore, P.E.
Project Manager
625 Broadway, 12th Floor
Albany, NY 12233-7016

**Re: Former Mimi Cleaners: 58 Christie Place, Scarsdale, NY
Voluntary Cleanup Program Site No. V00306-3
Sub Slab Vapor and Indoor Air Sampling - 2019-2020 Heating Season
Summary Report - Christie Place Building**

Dear Mr. Priore:

Henningson, Durham & Richardson Architecture and Engineering, P.C. in association with HDR Engineering, Inc. (HDR) on behalf of Hausman Realty Company (Hausman) is providing this letter report summarizing the results of the Christie Place Building (CPB) sub-slab vapor and indoor air sampling event conducted on 12 February 2020. In April 2014 HDR submitted sub slab and indoor sampling summary letter report entitled "Former Mimi Cleaners: 58 Christie Place, Scarsdale, NY; Voluntary Cleanup Program Site No. V00306-3; Sub Slab Vapor and Indoor Air Sampling - 2013-2014 Heating Season; Summary Report - Christie Place Building" (April 2014 Report) that was approved by New York State Department of Environmental Conservation (NYSDEC) and New York State Department of Health (NYSDOH). The report summarized the results of the previous sampling event conducted in December 2013.

In March 2016 HDR submitted sub slab and indoor sampling summary letter report entitled "Former Mimi Cleaners: 58 Christie Place, Scarsdale, NY; Voluntary Cleanup Program Site No. V00306-3; Sub Slab Vapor and Indoor Air Sampling - 2015-2016 Heating Season; Summary Report - Christie Place Building" (March 2016 Report) that was accepted by New York State Department of Environmental Conservation (NYSDEC) and New York State Department of Health (NYSDOH). The report summarized the results of the previous sampling event conducted in January 2016. In addition, the results of the sub-slab and indoor air sampling were included in the Periodic Review Report (PRR) submitted to NYSDOH in July 2016.

The results of the February 2020 sampling indicated elevated chlorinated volatile organic compound (CVOCs) concentrations remain in the sub-slab vapors under portions of the building; however, indoor air concentrations of CVOCs remain below NYSDOH guidelines and indicate there is not a significant vapor intrusion pathway from the sub-slab to the interior of the building.

Investigation and mitigation activities for the Former Mimi Cleaners (Site) and surrounding buildings were being conducted under a voluntary cleanup program (VCP) agreement (VCP Site No. V00306-3) between Hausman (the former land lease holder of the CPB where the Site is located) and NYSDOH. The current sampling and monitoring activities at the Site are being conducted under a Site Management Plan (SMP). A Sub-Slab Depressurization System (SSDS) was installed at the CPB as mitigation consistent with the NYSDOH *Guidance for Evaluating Soil Vapor Intrusion in the*

State of New York, October 2006 (SVI document), and recommendations from NYSDEC and NYSDOH representatives overseeing the project. The CPB location is shown on Figure 1 and Figure 2 (Attachment 1).

Background Information

In July 2000, a total of 73.5 cubic yards of soil and contaminated concrete were removed from directly beneath the former Mimi dry cleaners machines. The excavation was limited to depths of 2-6 ft by shallow bedrock. The excavation was limited laterally by building foundations and separating walls among tenant spaces. An SVE system for the CPB was designed by HDR and INTEX Environmental Group, Inc. (INTEX) and it was installed by INTEX under the direction of HDR. The SVE system was started up in May 2001 and it was shut down in the spring 2005 with approval from NYSDEC after it had effectively removed all of the residual contamination from the surrounding soil and bedrock that it could. The sub-slab piping from the SVE the northeast corner area of the building was then incorporated as part of a sub-slab depressurization system (SSDS) for the building. The CPB SSDS was initially tested in the fall of 2007. After reviewing the initial data, several modifications were made to the system including the installation of three extraction points in the center hallway where there appeared to be minimal influence. The SSDS in the CPB became fully operational in January 2008.

At the request of NYSDEC and NYSDOH, HDR conducted indoor air sampling and sub-slab vapor testing in the CPB in March 2004. The indoor air samples were collected with 3M Passive Diffusion Air Monitoring Badges and analyzed for tetrachloroethene, also known as perchloroethene (PCE), by NYSDOH Method 311-9; nine indoor air samples were collected. Four (4) sub-slab vapor samples were also collected from this building with mini-canisters (400 cc) and analyzed for PCE by OSHA Method PV2120.

The indoor air PCE sample results from the March 2004 sampling event ranged from 38 to 562 mcg/m³. The highest concentrations (532 mcg/m³, and 562 mcg/m³ in a blind duplicate sample) were detected in the Tenant Space #04 (TS-04) where they were storing dry-cleaned clothing when Mimi Cleaners was in operation (See Figure 3). It is believed that these elevated PCE concentrations were likely caused by off-gassing of residual PCE from the dry-cleaned clothing rather than vapor intrusion. The sub-slab vapor PCE results ranged from 100 to 1,200 mcg/m³ in the CPB. The highest concentration was detected in the sub-slab sample collected from the foot print area of the former Mimi Cleaners.

In November 2011, a sampling event was conducted that revealed concentrations of PCE and related CVOCs in the sub-slab vapors that were more elevated compared with concentrations detected during prior sampling events at several locations in the CPB including the footprint area of the former Mimi Cleaners Site and an additional location further to the west from the former Mimi Cleaners tenant space. In the 2011 assessment study summary report, HDR concluded that the probable source of the sub-slab CVOC vapor concentrations detected in the samples are the result of PCE in the soil above the bedrock or possibly in the fractures of the shallow bedrock above the groundwater. Highest CVOC concentrations were found at CPB-SS-02 and CPB-SS-03 in the northern portion of the building where the samples were collected from during the recent February 2020 sampling event.

An in situ chemical oxidation (ISCO) treatment pilot test using sodium persulfate and hydrogen peroxide was conducted in March-April 2012 at the CPB based on the results of the sub-slab vapor assessment study conducted in 2011. The results of the ISCO pilot test indicate that the soil and rock formations under the building did not permit effective contact of the treatment chemicals with the contaminants causing the elevated sub-slab CVOC concentrations under the CPB slab. In addition, due to business tenants occupying the building, a sufficient dosage amount of the ISCO chemicals could not be delivered effectively and the limited number of available ISCO chemical injection locations limited the area under the slab that was able to be dosed with the ISCO chemicals.

HDR has come to the conclusion that PCE is likely hung up in the cracks/fissures in the shallow bedrock above the groundwater and it appears that the chemical treatment in the pilot test was not able to reach all of the locations(s) in the bedrock where the PCE is likely located. Bedrock was encountered at a shallow depth in the area of the Tenant Space #02 (TS-02) when the injection port was installed (less than 2 feet below the top of the slab). It is possible we are observing the highest PCE concentrations under the slab in the area of the TS-02 location because the PCE is off-gassing from where it is caught up in the shallow bedrock and it is following along the top of the bedrock as it rises to this area close to the slab.

HDR conducted additional rounds of sub-slab vapor and indoor air sampling after the ISCO pilot test in April and November 2012, and also December 2013. An additional round of sub-slab vapor and indoor air sampling was conducted in January 2016. The results of these sampling events are included with the discussion of the recent sampling event conducted in February 2020.

Air Sampling Procedures

During the February 2020 sampling event, sub-slab vapor samples and co-located indoor air samples were collected from the TS-02 location (CPB-SS-03 & CPB-IA-03) and the tenant space where the excavation was conducted that is currently vacant, referred to as Tenant Space #05 (TS-05) (CPB-SS-02 & CPB-IA-02). These samples were collected to determine current conditions in the building and to compare the data with the data collected in 2012, 2013, and 2016. The SSDS was shut down for twelve (12) days prior to the sub-slab sample collection event. The sub-slab vapor samples were collected from permanent differential pressure sample ports (DPSPs) used to monitor and document the differential pressure when the SSDS is operational. In addition, HDR collected an ambient outdoor air sample during this sampling event (MC-OA-021220). The samples were collected as described for the previous sampling events for this project. The samples were collected with laboratory-supplied 6-L capacity air sample canisters and 4-hr regulators.

During the sampling events, the pressure on each canister was periodically recorded. At the end of the targeted approximate 4-hr sampling interval and/or before the negative pressure in the canister was allowed to get to ambient pressure, the canister valve was closed, the tubing and regulator were disconnected, and the canister was prepared for shipment to the analytical laboratory. The field sampling log for the air sampling event conducted in February 2020 are included in Attachment 2.

During the sampling event, the sub-slab vapor and indoor air samples were collected between 11:14 am and 3:59 pm. Sample collection intervals for the samples were 248 and 249 minutes for sub-slab samples CPB-SS-02 & CPB-SS-03 and 248 and 247 minutes for indoor air samples CPB-IA-02 &

CPB-IA-03, respectively. The outdoor air sample canister was set up in the parking lot on the west side of the CPB.

Air sample canisters were picked up by an Alpha Analytical Laboratories (Alpha Labs) courier and delivered to their Mansfield, MA analytical facility under chain-of-custody. Alpha Labs is a NYSDOH-approved analytical laboratory, for CVOC analyses by EPA T0-15 analytical method. For this sampling event, Alpha Labs use a low-level TO-15 Selective Ion Monitoring (SIM) analytical method that allows them to obtain a lower detection limit for the indoor air and outdoor air samples, as well as the sub-slab vapor samples. The two sub-slab samples had to be diluted; however, Alpha Labs was able to provide the sub-slab vapor results with a much lower detection than previously achieved.

No deviations from the previously approved sampling collection procedures occurred during the February 2020 sample collection event. As recommended in the July 2019 Periodic Review Report (PRR) and approved by NYSDEC and NYSDOH, the SSDS runs continuously at this location; the SSDS was turned back on after the sampling event was completed.

Analytical Results

Results of the February 2020 sub-slab vapor and indoor air sampling event are summarized on Table 1 and Figure 3 (Attachment 1). Table 1 and Figure 3 and the figure also include the data collected in 2011, 2012, 2013 and 2016 in the CPB at these locations. The sub-slab vapor and indoor air sample results are compared to the revised (May 2017) Matrix Tables in the NYSDOH SVI document as presented in Table 2 in this summary report. The analytical data package was submitted to Data Validation Services (DVS) for validation. Based on the data validation report, there were no changes or qualifications to the laboratory data results. The analytical data report and data validation report are included in electronic format as Attachment 3 at the back of this report.

Elevated concentrations of PCE were still present in both of the sub-slab vapor samples during the February 2020 sampling event; however, concentrations have been decreasing significantly since the April and November 2012 sampling events, especially at the CPB-SS-02 location. During the February 2020 sampling event, the CPB-SS-02 sub-slab sample, collected in TS-05 where the dry cleaning machines of the former Mimi Cleaners were located, contained a PCE concentration of 1,780 mcg/m³; the CPB-SS-03 sub-slab sample, collected in the TS-02 tenant space, contained a PCE concentration of 31,100 mcg/m³. During the April 2012, December 2013 and January 2016 sampling events, the CPB-SS-02 sub-slab sample contained PCE at concentrations of 83,000, 37,000, and 16,000 mcg/m³, respectively. During the April 2012, November 2012, December 2013, and the January 2016 sampling events, the CPB-SS-03 sub-slab sample contained PCE at concentrations of 280,000, 460,000, 46,000, & 36,000 mcg/m³, respectively.

The indoor air samples collected during the February 2020 sampling event (CPB-IA-02 & CPB-IA-03) contained PCE concentrations of 5.24 and 2.61 mcg/m³, respectively. During the January 2016 sampling event, these two indoor samples contained PCE at concentrations of 23 and 4.1 mcg/m³, respectively. During the November 2012 sampling event, these two indoor samples contained PCE at concentrations of 19 and 7.2 mcg/m³, respectively.

During the February 2020 sampling event, cis-12-DCE was detected in the CPB-SS-02 sub-slab sample at a concentration of 5.23 mcg/m³; 12-DCE (total) was detected in the CPB-SS-03 sub-slab sample at a concentration of 8,058 mcg/m³ (cis-12-DCE and trans-12-DCE were detected in this sample at concentrations of 7,890 and 168 mcg/m³, respectively). During the January 2016 sampling event, cis-12-DCE was detected in the CPB-SS-02 sub-slab sample at a concentration of 74 mcg/m³; 12-DCE (total) was detected in the CPB-SS-03 sub-slab sample at a concentration of 7,900 mcg/m³ (cis-12-DCE was detected at a concentration of 7,800 mcg/m³ in this sample). During the April 2012 and December 2013 sampling events CPB-SS-02 contained no detectable 12-DCE; however, the detection limits for 12-DCE in these samples were 400 and 220 mcg/m³, respectively, due to the elevated PCE concentrations in the sample. The analytical laboratory was required to dilute these samples so they could be analyzed within the calibration range of their instrumentation for PCE. The dilution process increases the analytical detection limits of the analysis, which may have caused some low-level concentrations of additional CVOCs to possibly not be detected in the analysis for these previous sampling events.

During the April 2012, November 2012, December 2013, and January 2016 sampling events, CPB-SS-03 contained total 12-DCE concentrations of 36,000, 11,000, 7,400, and 7,900 mcg/m³, respectively. The indoor air samples collected in February 2020 contained 12-DCE concentrations of 0.69 mcg/m³ and below the detection limit of 0.16 mcg/m³ in CPB-IA-02 and CPB-IA-03, respectively. During the December 2013 and January 2016 sampling events, the concentrations of total 12-DCE at CPB-IA-02 were 0.86 and 0.69 mcg/m³, and the concentrations of total 12-DCE at CPB-IA-03 were 0.38 mcg/m³ and below the detection limit of 0.16 mcg/m³.

TCE was detected in the two sub-slab samples from CPB-SS-02 and CPB-SS-03 at concentrations of 3.76 and 1,760 mcg/m³, respectively during the February 2020 sampling event. During the April and November 2012 sampling events and the December 2013 sampling event, CPB-SS-03 contained TCE concentrations of 13,000, 7,600, and 2,900 mcg/m³. There were no detectable concentrations of TCE in the samples collected from CPB-SS-02 in April 2012; however, the TCE detection limit for this sample was 540 mcg/m³, due to the elevated PCE concentrations in the sample. The indoor air samples collected in February 2020 contained TCE concentrations of 0.118 mcg/m³ in CPB-IA-02 and below the detection limit of 0.107 mcg/m³ in CPB-IA-03. TCE has not been detected in either location in the indoor air samples above the detection limits with the exception of a concentration of 0.24 mcg/m³ in CPB-IA-03 in December 2013.

Vinyl Chloride (VC) was detected in the CPB-SS-02 sample at a concentration of 10 mcg/m³; VC was not detected in the CPB-SS-03 sample at a detection limit of 0.427 mcg/m³. VC has not been detected previously in the sub-slab vapor samples; however, this is likely due to the fact that previously the sub-slab vapor samples were analyzed by the standard TO-15 analytical method and the samples had to be diluted such that the detection limits ranged from 38 to 1,100 mcg/m³ in the previous samples collected at CPB-SS-02 and CPB-SS-03. VC was not detected in either of the co-located indoor air samples at a detection limit of 0.051 mcg/m³.

The ambient outdoor air sample, MC-OA-02122020, contained a PCE concentration of 3.3 mcg/m³; no other CVOCs were detected in the outdoor air sample. The ambient outdoor air sample PCE concentration was similar to the concentrations detected in the indoor air samples (5.24 and 2.61 mcg/m³), indicating the outdoor air sample concentration could have contributed to the indoor air concentrations in the building. The ambient outdoor air sample contained no other CVOCs.

According to the SVI document, published literature from studies nationwide show a wide range of PCE concentrations in the ambient air in locations with no known sources of PCE or similar chemicals. The NYSDOH PCE Fact Sheet included in Appendix H of the SVI document, indicates the middle half (25th to 75th percentile) of PCE levels in indoor and outdoor air samples is about 1 to 10 mcg/m³.

NYSDOH Vapor Intrusion Guidance Comparison

In accordance with the Air Matrix A table in the NYSDOH SVI Guidance document, the TCE results from the sub-slab vapor samples are above 60 mcg/m³ in one location and under 60 mcg/m³ in the other location and the indoor air concentrations are >0.2 mcg/m³ in both co-located sample locations. In accordance with the Air Matrix A table in the NYSDOH SVI Guidance document, these results place the building in the "Mitigate" category, for one sample (CPB-SS-03) and the "No Further Action" category for the other sample (CPB-SS-02) with respect to the procedures necessary to address human exposures with regard to this contaminant.

The cis-12-DCE results from the sub-slab vapor samples are above 60 mcg/m³ in one location and under 60 mcg/m³ in the other location and the indoor air concentrations are >0.2 mcg/m³ in both co-located sample locations. In accordance with the Air Matrix A table in the NYSDOH SVI Guidance document, these results place the building in the "Mitigate" category, for one sample (CPB-SS-03) and the "No Further Action" category for the other sample (CPB-SS-02) with respect to the procedures necessary to address human exposures with regard to this contaminant. This is the first time that the TCE concentrations in the CPB-SS-02 sample were below the guidance value for mitigation.

In accordance with the Air Matrix B table in the NYSDOH SVI Guidance document, the PCE results from both sub-slab vapor samples are over 1,000 mcg/m³ and places the building in the "Mitigate" category, regardless of the level of PCE detected in indoor air with respect to the procedures necessary to address human exposures with regard to this contaminant. It should be noted that the PCE results for the two indoor air samples were 5.24 and 2.61 mcg/m³ and are the lowest concentrations of PCE detected in the indoor at both locations.

In accordance with the Air Matrix C table in the NYSDOH SVI Guidance document, the VC result in the CBP-SS-03 sub-slab vapor sample is between 6 and 60 mcg/m³ and the co-located indoor air sample was >0.2 mcg/m³; this places the building in the "Monitor" category with respect to the procedures necessary to address human exposures with regard to this contaminant. VC was not detected in the CBP-SS-03 sub-slab vapor sample or the co-located indoor air sample at detection limits of 0.427 and 0.051 mcg/m³, respectively.

The existing CPB SSDS mitigates the potential for vapor intrusion and exposure inside the building and was turned back on after the sampling was completed in February 2020 and is currently running continuously. As in the past, any changes in the operation of the SSDS will be made only with approval of NYSDEC and NYSDOH, to insure that mitigation is being implemented consistent with NYSDOH guidance and the SMP.

Conclusions & Recommendations

The PCE and TCE results of the sub-slab vapor samples collected at the CPB during the February 2020 continue to show a downward trend when compared with the results of the sub-slab samples collected in 2012 (May and November sampling events) after the ISCO treatment pilot test was conducted in March 2012. The February 2020 data revealed similar results in the CPB-SS-03 sample compared to the January 2016 results and a continued decrease in CVOC concentrations in the CPB-SS-02 samples compared to the January 2016 results.

The PCE concentration in the CPB-SS-03 sample was an order of magnitude lower than the results from this location in 2012 and showed a 14% decrease when compared with the January 2016 sampling event results at this location (31,100 mcg/m³ compared to 36,000 mcg/m³). The PCE concentration in the CPB-SS-02 sample showed an order of magnitude decrease when compared with the January 2016 sampling results at this location (1,780 mcg/m³ compared to 16,000 mcg/m³).

The TCE concentration in the CPB-SS-03 sample revealed an 86% decrease when compared with the TCE concentration in this sample location in April 2012, and showed a 12% decrease when compared with the January 2016 sampling results at this location (1,760 mcg/m³ compared to 2,000 mcg/m³). The TCE concentration in the CPB-SS-02 sample showed a 93% decrease when compared with the January 2016 sampling results at this location (3.76 mcg/m³ compared to 160 mcg/m³).

The total 12-DCE concentration in the CPB-SS-03 sample in February 2020 was 78% lower than the concentration detected in April 2012 (8,058 mcg/m³ compared to 36,000 mcg/m³). However, during the recent sampling event the total 12-DCE concentration increased by about 1% when compared with the January 2016 sampling event (8,058 mcg/m³ compared to 7,900 mcg/m³). This increase in the total 12-DCE concentration could be due to the degradation of the remaining PCE vapors to TCE and then to 12-DCE.

The PCE results of the indoor air samples from CPB-IA-02 (TS-05) and CPB-IA-03 (TS-02) were 5.49 and 2.61 mcg/m³, respectively. The ambient outdoor air PCE concentration was 3.3 mcg/m³. Previous to this sampling event, the TS-05 tenant space revealed elevated PCE concentrations in the indoor air of 19 and 23 mcg/m³ during the last two sampling events conducted in December 2013 and January 2016 (CPB-IA-02). Previously, a furrier occupied this space from the fall of 2013 through fall 2017. This is the location where the former Mimi Cleaners was historically located. The indoor air PCE concentration in the CPB-IA-02 sample from May 2011 (prior to the ISCO treatment pilot test) was 52 mcg/m³. The indoor air PCE concentrations in the CPB-IA-03 sample in November 2012 (after the ISCO pilot test), December 2013, and January 2016 were 5.2, 7.2, and 4.1 mcg/m³, respectively.

The NYSDOH revised their PCE Fact Sheet in September 2013 and reduced the acceptable indoor air concentration guidance value for PCE to 30 mcg/m³ from 100 mcg/m³. In a study of indoor air concentrations in mixed use buildings from 1999 to 2011 in New York State that was cited in the fact sheet, the 50th percentile (median) concentration of PCE in indoor air was 0.72 mcg/m³ and the 95th percentile concentration was 6.6 mcg/m³. The results of the indoor air samples collected in February 2020 were both less than the 95th percentile concentration of 6.6 mcg/m³.

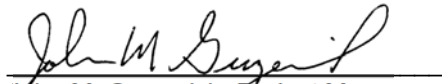
It is possible that potential indoor sources of PCE in the furrier tenant space were contributing to the indoor air concentrations of PCE detected in the TS-05 tenant space during previous sampling events. The former furrier tenant space (TS-05) was adjacent to TS-04 where garments are currently dropped off for dry cleaning (dry cleaned at an off-site facility) and dry cleaned clothes are stored for pick-up (Embassy Cleaners). In addition, the furrier had a lot of inventory (furs) stored on racks in the space. After the December 2013 sampling event, HDR inquired about the cleaning process for the furs. The tenant indicated they use Central Fur Storage Co., Inc. in Garfield, NJ (Central Fur Storage) to clean their furs. HDR contacted Central Fur Storage and we were informed they use a petroleum hydrocarbon-based solvent called EcoSolve® as part of their fur cleaning process which does not contain chlorinated solvents. However, the tenant indicated some clients bring their furs in for storage and they have already been cleaned; some furs are still cleaned with a process that uses PCE. Now that the furrier has left this location (TS-05), the indoor air concentrations at this location (CPB-IA-02) have returned back to typical PCE indoor air concentrations.

HDR recommends the continued operation of the SSDS at the CPB. In addition, HDR recommends the collection of sub-slab vapor and indoor air samples on a three to four year frequency during the heating season from the same locations to provide assessments over time of the CVOC concentrations in the sub-slab vapors and in the indoor air to determine if the decreasing trend for the CVOCs in the sub-slab vapors continues and if the SSDS should remain in operation. For these sampling events, the SSDS will be shut down for approximately one to two weeks prior to sample collection. Sub-slab vapor and indoor air samples will be collected from the same locations as the recent February 2020 sampling event for CVOC analysis. After reviewing the data from the next sampling event, an assessment will be made to determine if the SSDS should continue operating or possibly shut down with an increased monitoring frequency of the sub-slab vapors and indoor air.

If you have any questions, please feel free to contact me at (201) 335-9371 or john.guzewich@hdrinc.com.

Very truly yours,

Henningson, Durham & Richardson Architecture and Engineering, P.C.
in association with HDR Engineering Inc.



John M. Guzewich, Project Manager
Environmental Restoration Group

Enclosures: Attachment 1 Figures & Tables
 Attachment 2 Field Sampling Log
 Attachment 3 Laboratory Analytical Data Package & Data Validation Report

Cc: A. Perretta, NYSDOH
 P. Blumenthal, Hausman
 B. Groden, West-Ex Associates
 C. Leas, Esq. Sive, Paget & Riesel, P.C.

Attachment 1
Figures & Tables

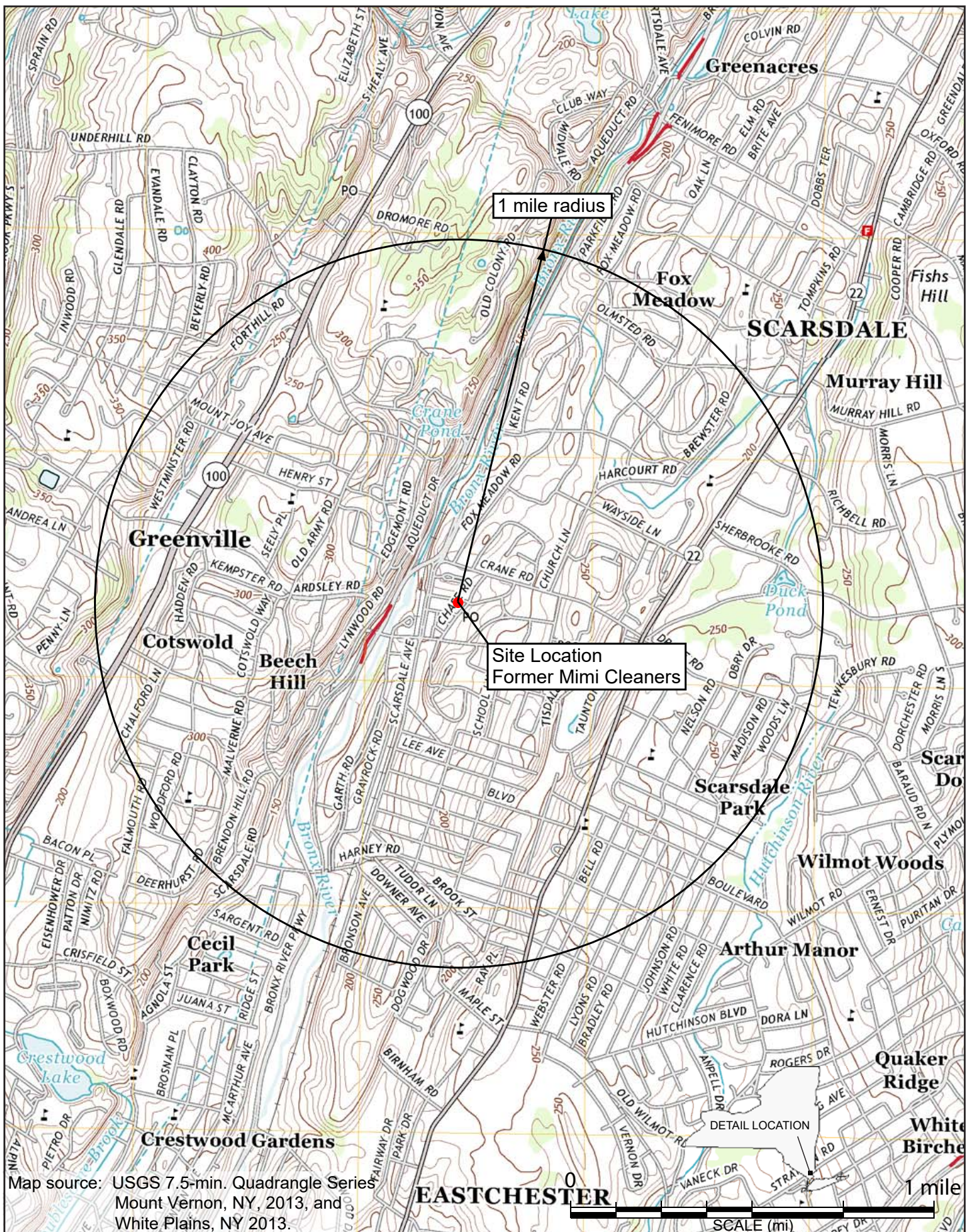


Figure 1

Site Location Map

Former Mimi Dry Cleaners
Scarsdale, NY



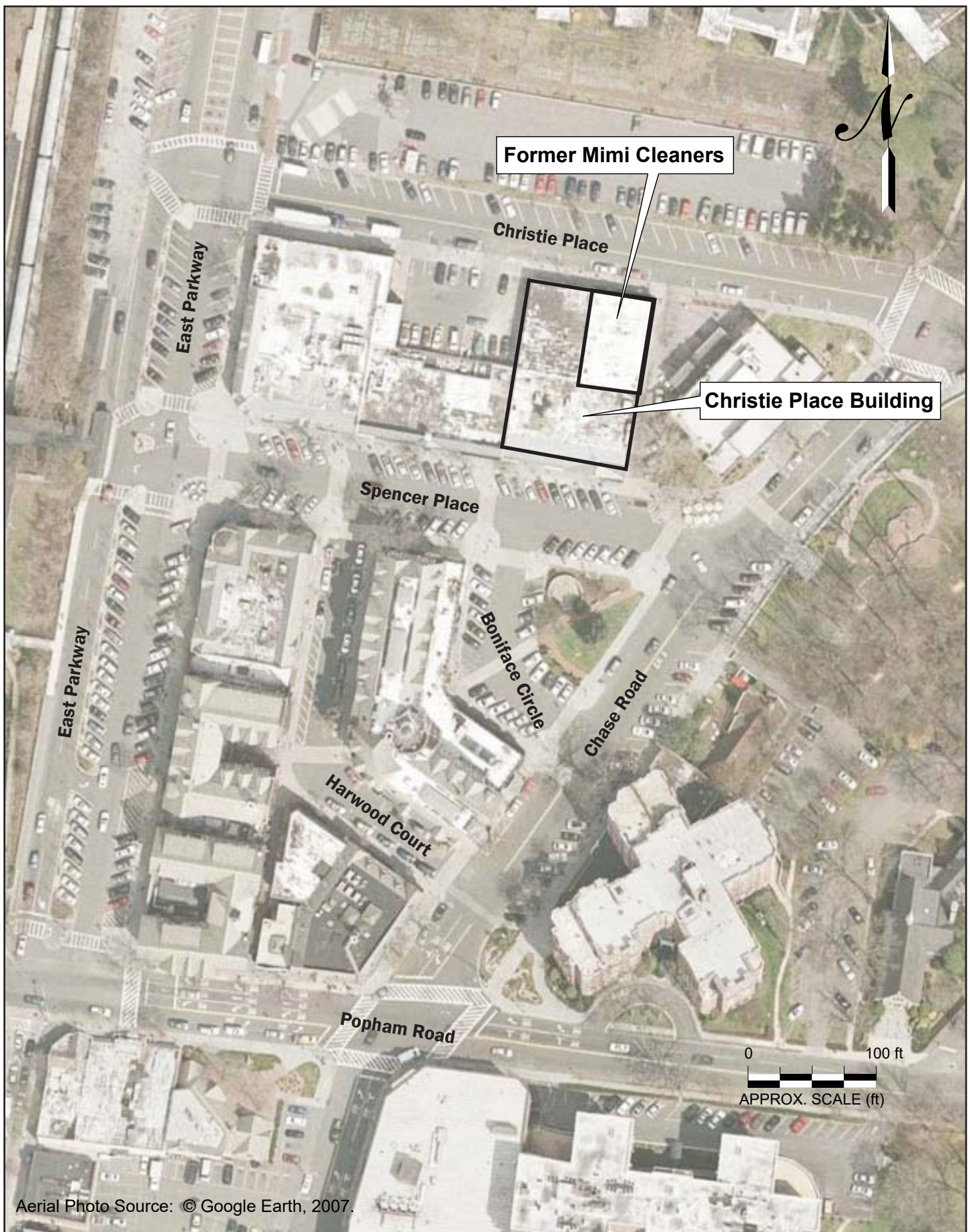


Figure 2
 Location of Former Mimi Cleaners
 Former Mimi Dry Cleaners
 Scarsdale, NY



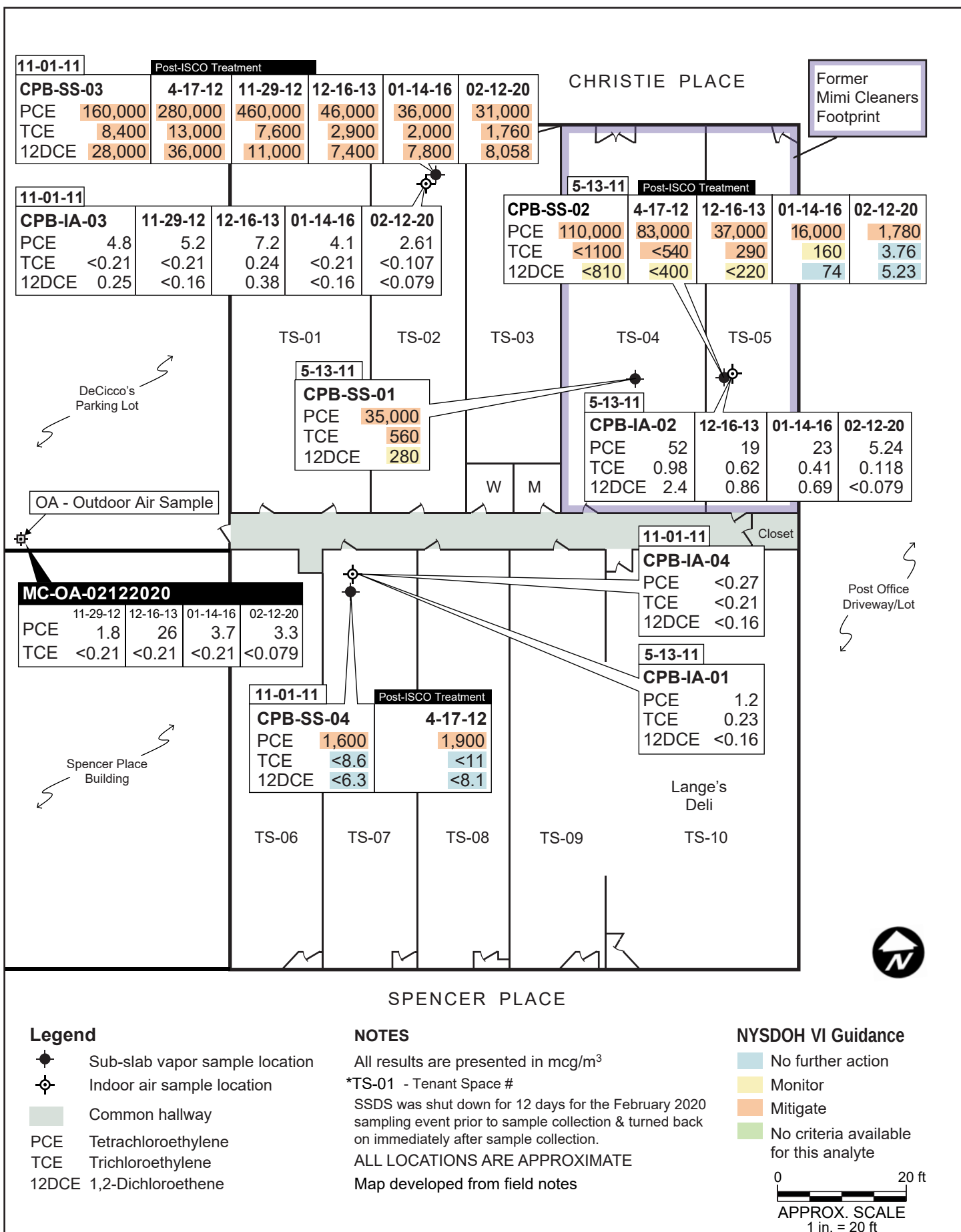


Figure 3
Sub-Slab and Indoor Air Sample Results Summary (PCE, TCE & 12-DCE)
Christie Place Building (February 2020)
 Former Mimi Dry Cleaners
 Scarsdale, NY



Table 1

Former Mimi Cleaners Site - Christie Place Building
Sub-Slab Vapor & Indoor Air Sampling Data Summary

HDR Sample ID	CPB-SS-02 Christie Pl. Bld. Tenant Space #05 ^Δ					CPB-IA-02 Christie Pl. Bld. Tenant Space #05 ^Δ				SPOB-OA-01 Post Office Prop. (off SW Corner of Bld.)	MC-OA-121613 East P'kway Bld (Along East side of Bld.)	MC-OA-011416 DeCicco Park. Lot (Along West side of CPB)	MC-OA-02122020 DeCicco Park. Lot (Along West side of CPB)
Sample Location													
Lab Sample ID	200-5198-19	200-10413-1	200-20183-16	200-31589-8	L2006594-01	200-5198-20	200-20183-17	200-31589-9	L2006594-02	200-13989-3	200-20183-18	200-31589-5	L2006594-03
Sample Type	Sub-Slab	Sub-Slab	Sub-Slab	Sub-Slab	Sub-Slab	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Outdoor Air	Outdoor Air	Outdoor Air	Outdoor Air
Sample Date	5/13/11	4/17/12	12/16/13	1/14/16	2/12/20	5/13/11	12/16/13	1/14/16	2/12/20	11/29/12	12/16/13	1/14/16	2/12/20
	(Pre-ISCO Treatment)	(Post-ISCO Treatment)				(Pre-ISCO Treatment)							
TO-15 (mcg/m ³)	Results DF [1020:1]	Results DF [501:1]	Results DF [277:1]	Results DF [74.5:1]	Results DF [8.33:1]	Results DF [4:1]	Results DF [4:1]	Results DF [4:1]	Results DF [1:1]	Results DF [4:1]	Results DF [4:1]	Results DF [4:1]	Results DF [1:1]
Vinyl Chloride	<520	<260	<140	<38	<0.427	<0.20	<0.20	<0.20	<0.051	<0.20	<0.20	<0.20	<0.051
1,1-Dichloroethene	<810	<400	<220	<59	<0.662	<0.16	<0.16	<0.16	<0.079	<0.16	<0.16	<0.16	<0.079
1,1-Dichloroethane	<8300	<410	<220	<60	<0.676	<0.16	<0.16	<0.16	<0.081	<0.16	<0.16	<0.16	<0.081
cis 1,2-Dichloroethene	<810	<400	<220	74	5.23	2.4	0.86	0.69	<0.079	<0.16	<0.16	<0.16	<0.079
trans 1,2-Dichloroethene	<810	<400	<220	<59	<0.662	<0.16	<0.16	<0.16	<0.079	<0.16	<0.16	<0.16	<0.079
1,2-Dichloroethene, Total	<810	<400	<220	<120	5.23	2.4	0.86	0.69	<0.079	<0.16	<0.16	<0.16	<0.079
1,1,1-Trichloroethane	<1100	<550	<300	<81	<0.911	<0.22	<0.22	<0.22	<0.109	<0.22	<0.22	<0.22	<0.109
1,2-Dichloroethane	<830	<410	<220	<60	<0.676	<0.32	<0.32	<0.32	<0.081	<0.32	<0.32	<0.32	<0.081
Trichloroethene	<1100 **	<540 **	290	160	3.76	0.98	0.62	0.40	0.118	<0.21	<0.21	<0.21	<0.107
1,1,2-Trichloroethane	<1100	<550	<300	<81	<0.911	<0.22	<0.22	<0.22	<0.109	<0.22	<0.22	<0.22	<0.109
1,1,2,2-Tetrachloroethane	<1400	<690	<380	<100	<1.15	<0.27	<0.27	<0.27	<0.137	<0.27	<0.27	<0.27	<0.137
Tetrachloroethene	110,000	83,000	37,000	16,000	1,780	52	19	23	5.24	1.8	26	3.7	3.3

HDR Sample ID	CPB-SS-03 Christie Pl. Bld. Tenant Space #02 (Front Area)						CPB-IA-03 Christie Pl. Bld. Tenant Space #02 (Front Area)				
Sample Location											
Lab Sample ID	200-7920-1	200-10413-3	200-13990-5	200-20183-14	200-31589-6	L2006594-04	200-7920-2	200-13990-6	200-20183-15	200-31589-7	L2006594-05
Sample Type	Sub-Slab	Sub-Slab	Sub-Slab	Sub-Slab	Sub-Slab	Sub-Slab	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air
Sample Date	11/1/11	4/17/12	11/29/12	12/16/13	1/14/16	2/12/20	11/1/11	11/29/12	12/16/13	1/14/16	2/12/20
	(Pre-ISCO Treatment)	(Post-ISCO Treatment)					(Pre-ISCO Treatment)				
TO-15 (mcg/m ³)	Results DF [1560:1]	Results DF [1450:1]	Results DF [2070:1]	Results DF[353:1]	Results DF[300:1]	Results DF [119:1]	Results DF [4:1]	Results DF [4:1]	Results DF [4:1]	Results DF [4:1]	Results DF [1:1]
Vinyl Chloride	<800	<740	<1100	<180	<150	10	<0.20	<0.20	<0.20	<0.20	<0.051
1,1-Dichloroethene	<1200	<1100	<1600	<280	<240	<9.44	<0.16	<0.16	<0.16	<0.16	<0.079
1,1-Dichloroethane	<1300	<1200	<1700	<290	<240	<9.63	<0.16	<0.16	<0.16	<0.16	<0.081
cis 1,2-Dichloroethene	27,000	34,000	11,000	7,100	7,800	7,890	0.25	<0.16	0.38	<0.16	<0.079
trans 1,2-Dichloroethene	<1200	<1100	<1600	310	310	168	<0.16	<0.16	<0.16	<0.16	<0.079
1,2-Dichloroethene, Total	28,000	36,000	11,000	7,400	7,900	8,058	0.25 nj	<0.16	0.38	<0.16	<0.079
1,1,1-Trichloroethane	<1700	<1600	<2300	<390	<330	<13	<0.22	<0.22	<0.22	<0.22	<0.109
1,2-Dichloroethane	<1300	<1200	<1700	<290	<240	<9.63	<0.32	<0.32	<0.32	<0.32	<0.081
Trichloroethene	8,400	13,000	7,600	2,900	2,000	1,760	<0.21	<0.21	0.24	<0.21	<0.107
1,1,2-Trichloroethane	<1700	<1600	<2300	<390	<330	<13	<0.22	<0.22	<0.22	<0.22	<0.109
1,1,2,2-Tetrachloroethane	<2100	<2000	<2800	<480	<410	<16.3	<0.27	<0.27	<0.27	<0.27	<0.137
Tetrachloroethene	160,000	280,000	460,000	46,000	36,000	31,100	4.8	5.2	7.2	4.1	2.61

<0.22 - Less Than the Reporting Detection Limit

DF [] - Dilution Factor (e.g. [4:1])

- Sample results from February 2020 sampling event (SSDS shut down 12 days prior to sample collection).

Data Validation Notes

Note: - No changes to the data results based on the validation report for the April & November 2012 sampling events.

NYSDOH Vapor Intrusion Guidance matrix decision for this analyte

- No Further Action

- Monitor

- Mitigate

- No guidance criteria for this analyte

**

**

Note:

Δ

mcg/m3

- Sample had to be diluted due to elevated PCE concentration in sample,

TCE may be present at concentration below elevated RDL that is above NYSDOH criteria.

- Table only includes CVOCs that were detected in the samples.

See analytical laboratory report for the full analytical parameter list.

- this tenant space was the area where the Mimi Cleaners dry cleaning machines were located.

- microgram per cubic meter



Table 2

**NYSDOH Vapor Intrusion Guidance Document Matrix Tables
(Revised May 2017)****NYSDOH Soil Vapor/Indoor Air Matrix A (May 2017)**

Analytes Assigned: TCE, c12-DCE, 11-DCE, Carbon Tetrachloride

Sub-Slab Vapor Concentration (mcg/m ³)	Indoor Air Concentration (mcg/m ³)		
	< 0.2	0.2 to < 1	1 and above
< 6	No Further Action	No Further Action	Identify Source(s) & Resample or Mitigate
6 to < 60	No Further Action	Monitor	Mitigate
60 and above	Mitigate	Mitigate	Mitigate

NYSDOH Soil Vapor/Indoor Air Matrix B (May 2017)

Analytes Assigned: PCE, 111-TCA, Methylene Chloride

Sub-Slab Vapor Concentration (mcg/m ³)	Indoor Air Concentration (mcg/m ³)		
	< 3	3 to < 10	10 and above
< 100	No Further Action	No Further Action	Identify Source(s) & Resample or Mitigate
100 to < 1,000	No Further Action	Monitor	Mitigate
1,000 and above	Mitigate	Mitigate	Mitigate

NYSDOH Soil Vapor/Indoor Air Matrix C (May 2017)

Analytes Assigned: Vinyl Chloride

Sub-Slab Vapor Concentration (mcg/m ³)	Indoor Air Concentration (mcg/m ³)	
	< 0.2	0.2 and above
< 6	No Further Action	Identify Source(s) & Resample or Mitigate
6 to < 60	Monitor	Mitigate
60 and above	Mitigate	Mitigate

Attachment 2
Field Sampling Log



SOIL VAPOR SAMPLING LOG

Project Name: Former Mimi Cleaners
Client: Hausman Realty / West-Ex Associates
Drilling/Boring Method: For the sub-slab sample a hammer drill was used to install the permanent sample port during previous work at the site.
Purging Method: N/A
Boring Location: Christie Place Building
Monitoring Instrument: (None)

Crew: MTP
Sheet: 1 of 1
Project No.: 147-234973-003
Date: Start Time 0900
Finish Time 1800
Pump ID #: N/A
DTW: N/A
Surf. Elev.: (varies)
Hole Dia.: approx. 9/16 in.

Sample ID	Start Time (24 hr)	End Time (24 hr)	Total Time (hr:mins.) / (tot. min.)	Start Pressure (in Hg)	End Pressure (in Hg)	Sample Rate (mLPM)	Sample Depth (ft above/ below g.s.)	Cannister ID No.	Regulator ID No.	Remarks and Observations
CPB-SS-03	1150	1557	4:07 / 247	-30.11	-4.28	20	Sub Slab	2934	0215	Sample collected from sample port CP-DP-13 behind the counter in TS-02.
CPB-IA-03	1152	1559	4:07 / 247	-30.18	-3.39	20	~ 5' Above	2060	0775	Indoor air sample collected from the area behind the counter in TS-02.
CPB-SS-02	1114	1552	4:08 / 248	-30.25	-3.77	20	Sub Slab	2573	0076	Soil vapor sample collected from the TS-05 tenant space where the former Mimi Cleaners dry cleaning machines were located.
CPB-IA-02	1115	1523	4:08 / 248	-29.56	-3.07	20	~ 4' Above	1843	01781	Indoor air sample collected from the TS-05 tenant space.
MC-OA-02122020	1134	1534	4:00 / 240	-30.21	-4.67	20	~ 4' Above	1791	01829	Outside in the DeCicco's Parking lot along side the South Wall

General Notes:

1. Start Time & End Time refers to Start and end time for sample collection only.
2. Sub-slab vapor and indoor air samples collected with 6-liter summa canisters.

Note

Attachment 3
Laboratory Analytical Data Summary Report
&
Data Validation Report
(February 2020 Sampling Event)



ANALYTICAL REPORT

Lab Number:	L2006594
Client:	HDR, Engineering Inc. One International Blvd, 10th Floor Suite 1000 Mahwah, NJ 07495
ATTN:	John Guzewich
Phone:	(845) 735-8300
Project Name:	MIMI CLEANERS
Project Number:	10017039
Report Date:	02/21/20

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320 Forbes Boulevard, Mansfield, MA 02048-1806
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Project Name: MIMI CLEANERS
Project Number: 10017039

Lab Number: L2006594
Report Date: 02/21/20

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2006594-01	CPB-SS-02	SOIL_VAPOR	SCARSDALE, NY	02/12/20 15:22	02/13/20
L2006594-02	CPB-IA-02	AIR	SCARSDALE, NY	02/12/20 15:23	02/13/20
L2006594-03	MC-OA-02122020	AIR	SCARSDALE, NY	02/12/20 15:34	02/13/20
L2006594-04	CPB-SS-03	SOIL_VAPOR	SCARSDALE, NY	02/12/20 15:57	02/13/20
L2006594-05	CPB-IA-03	AIR	SCARSDALE, NY	02/12/20 15:59	02/13/20

Project Name: MIMI CLEANERS
Project Number: 10017039

Lab Number: L2006594
Report Date: 02/21/20

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: MIMI CLEANERS
Project Number: 10017039

Lab Number: L2006594
Report Date: 02/21/20

Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on February 7, 2020. The canister certification results are provided as an addendum.

L2006594-01 & -04: The samples have elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the samples.

The WG1342812-4 Method Blank, associated with L2006594-01 through -05, has a concentration above the reporting limit for 1,2,4-trichlorobenzene. Since the sample(s) were non-detect to the RL for this target analyte, no further actions were taken. The results of the original analysis are reported.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Christopher J. Anderson

Title: Technical Director/Representative

Date: 02/21/20

AIR

Project Name: MIMI CLEANERS**Project Number:** 10017039**Lab Number:** L2006594**Report Date:** 02/21/20**SAMPLE RESULTS**

Lab ID: L2006594-01 D

Client ID: CPB-SS-02

Sample Location: SCARSDALE, NY

Date Collected: 02/12/20 15:22

Date Received: 02/13/20

Field Prep: Not Specified

Sample Depth:

Matrix: Soil_Vapor

Analytical Method: 48,TO-15-SIM

Analytical Date: 02/21/20 07:54

Analyst: EW

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.167	--	ND	0.427	--		8.333
1,1-Dichloroethene	ND	0.167	--	ND	0.662	--		8.333
trans-1,2-Dichloroethene	ND	0.167	--	ND	0.662	--		8.333
1,1-Dichloroethane	ND	0.167	--	ND	0.676	--		8.333
cis-1,2-Dichloroethene	1.32	0.167	--	5.23	0.662	--		8.333
1,2-Dichloroethane	ND	0.167	--	ND	0.676	--		8.333
1,1,1-Trichloroethane	ND	0.167	--	ND	0.911	--		8.333
Trichloroethene	0.700	0.167	--	3.76	0.897	--		8.333
1,1,2-Trichloroethane	ND	0.167	--	ND	0.911	--		8.333
Tetrachloroethene	262	0.167	--	1780	1.13	--		8.333
1,1,2,2-Tetrachloroethane	ND	0.167	--	ND	1.15	--		8.333

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	104		60-140
bromochloromethane	102		60-140
chlorobenzene-d5	102		60-140



Project Name: MIMI CLEANERS**Project Number:** 10017039**Lab Number:** L2006594**Report Date:** 02/21/20**SAMPLE RESULTS**

Lab ID: L2006594-02
 Client ID: CPB-IA-02
 Sample Location: SCARSDALE, NY

Date Collected: 02/12/20 15:23
 Date Received: 02/13/20
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 02/21/20 05:38
 Analyst: EW

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	0.022	0.020	--	0.118	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.772	0.020	--	5.24	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	103		60-140
bromochloromethane	101		60-140
chlorobenzene-d5	102		60-140



Project Name: MIMI CLEANERS**Project Number:** 10017039**Lab Number:** L2006594**Report Date:** 02/21/20**SAMPLE RESULTS**

Lab ID: L2006594-03
 Client ID: MC-OA-02122020
 Sample Location: SCARSDALE, NY

Date Collected: 02/12/20 15:34
 Date Received: 02/13/20
 Field Prep: Not Specified

Sample Depth:

Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 02/20/20 17:42
 Analyst: EW

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.486	0.020	--	3.30	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	101		60-140
bromochloromethane	101		60-140
chlorobenzene-d5	100		60-140



Project Name: MIMI CLEANERS**Project Number:** 10017039**Lab Number:** L2006594**Report Date:** 02/21/20**SAMPLE RESULTS**

Lab ID: L2006594-04 D

Client ID: CPB-SS-03

Sample Location: SCARSDALE, NY

Date Collected: 02/12/20 15:57

Date Received: 02/13/20

Field Prep: Not Specified

Sample Depth:

Matrix: Soil_Vapor

Analytical Method: 48,TO-15-SIM

Analytical Date: 02/21/20 08:34

Analyst: EW

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	3.93	2.38	--	10.0	6.08	--		119
1,1-Dichloroethene	ND	2.38	--	ND	9.44	--		119
trans-1,2-Dichloroethene	42.4	2.38	--	168	9.44	--		119
1,1-Dichloroethane	ND	2.38	--	ND	9.63	--		119
cis-1,2-Dichloroethene	1990	2.38	--	7890	9.44	--		119
1,2-Dichloroethane	ND	2.38	--	ND	9.63	--		119
1,1,1-Trichloroethane	ND	2.38	--	ND	13.0	--		119
Trichloroethene	327	2.38	--	1760	12.8	--		119
1,1,2-Trichloroethane	ND	2.38	--	ND	13.0	--		119
Tetrachloroethene	4590	2.38	--	31100	16.1	--		119
1,1,2,2-Tetrachloroethane	ND	2.38	--	ND	16.3	--		119

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	105		60-140
bromochloromethane	103		60-140
chlorobenzene-d5	104		60-140



Project Name: MIMI CLEANERS**Project Number:** 10017039**Lab Number:** L2006594**Report Date:** 02/21/20**SAMPLE RESULTS**

Lab ID: L2006594-05
 Client ID: CPB-IA-03
 Sample Location: SCARSDALE, NY

Date Collected: 02/12/20 15:59
 Date Received: 02/13/20
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 02/21/20 06:18
 Analyst: EW

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	0.385	0.020	--	2.61	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	103		60-140
bromochloromethane	102		60-140
chlorobenzene-d5	102		60-140



Project Name: MIMI CLEANERS

Lab Number: L2006594

Project Number: 10017039

Report Date: 02/21/20

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15-SIM

Analytical Date: 02/20/20 15:20

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01-05 Batch: WG1342812-4								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1

Lab Control Sample Analysis Batch Quality Control

Project Name: MIMI CLEANERS

Project Number: 10017039

Lab Number: L2006594

Report Date: 02/21/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-05 Batch: WG1342812-3								
Vinyl chloride	99		-		70-130	-		25
1,1-Dichloroethene	103		-		70-130	-		25
trans-1,2-Dichloroethene	92		-		70-130	-		25
1,1-Dichloroethane	98		-		70-130	-		25
cis-1,2-Dichloroethene	99		-		70-130	-		25
1,2-Dichloroethane	91		-		70-130	-		25
1,1,1-Trichloroethane	99		-		70-130	-		25
Trichloroethene	101		-		70-130	-		25
1,1,2-Trichloroethane	99		-		70-130	-		25
Tetrachloroethene	101		-		70-130	-		25
1,1,2,2-Tetrachloroethane	111		-		70-130	-		25

Project Name: MIMI CLEANERS

Serial_No:02212016:54
Lab Number: L2006594

Project Number: 10017039

Report Date: 02/21/20

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controller Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L2006594-01	CPB-SS-02	0076	Flow 3	02/07/20	313046		-	-	-	Pass	20.0	22.4	11
L2006594-01	CPB-SS-02	2573	6.0L Can	02/07/20	313046	L2004828-04	Pass	-29.2	-3.1	-	-	-	-
L2006594-02	CPB-IA-02	01781	Flow 3	02/07/20	313046		-	-	-	Pass	20.0	18.2	9
L2006594-02	CPB-IA-02	1843	6.0L Can	02/07/20	313046	L2004828-04	Pass	-29.6	-1.5	-	-	-	-
L2006594-03	MC-OA-02122020	01829	Flow 3	02/07/20	313046		-	-	-	Pass	20.0	20.8	4
L2006594-03	MC-OA-02122020	1791	6.0L Can	02/07/20	313046	L2004828-04	Pass	-29.2	-3.1	-	-	-	-
L2006594-04	CPB-SS-03	0215	Flow 3	02/07/20	313046		-	-	-	Pass	20.0	21.8	9
L2006594-04	CPB-SS-03	2934	6.0L Can	02/07/20	313046	L2004828-04	Pass	-29.4	-4.0	-	-	-	-
L2006594-05	CPB-IA-03	0775	Flow 4	02/07/20	313046		-	-	-	Pass	20.0	22.2	10
L2006594-05	CPB-IA-03	2060	6.0L Can	02/07/20	313046	L2004828-04	Pass	-29.0	-2.6	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2004828
Report Date: 02/21/20

Air Canister Certification Results

Lab ID: L2004828-04
Client ID: CAN 3147 SHELF 52
Sample Location:

Date Collected: 02/03/20 16:00
Date Received: 02/04/20
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 02/04/20 18:43
Analyst: TS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2004828
Report Date: 02/21/20

Air Canister Certification Results

Lab ID: L2004828-04
Client ID: CAN 3147 SHELF 52
Sample Location:

Date Collected: 02/03/20 16:00
Date Received: 02/04/20
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2004828
Report Date: 02/21/20

Air Canister Certification Results

Lab ID: L2004828-04
Client ID: CAN 3147 SHELF 52
Sample Location:

Date Collected: 02/03/20 16:00
Date Received: 02/04/20
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2004828
Report Date: 02/21/20

Air Canister Certification Results

Lab ID: L2004828-04
Client ID: CAN 3147 SHELF 52
Sample Location:

Date Collected: 02/03/20 16:00
Date Received: 02/04/20
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2004828**Project Number:** CANISTER QC BAT**Report Date:** 02/21/20**Air Canister Certification Results**

Lab ID: L2004828-04

Date Collected: 02/03/20 16:00

Client ID: CAN 3147 SHELF 52

Date Received: 02/04/20

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				
No Tentatively Identified Compounds				

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	94		60-140
Bromochloromethane	99		60-140
chlorobenzene-d5	96		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2004828
Report Date: 02/21/20

Air Canister Certification Results

Lab ID: L2004828-04
Client ID: CAN 3147 SHELF 52
Sample Location:

Date Collected: 02/03/20 16:00
Date Received: 02/04/20
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 02/04/20 18:43
Analyst: TS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2004828
Report Date: 02/21/20

Air Canister Certification Results

Lab ID: L2004828-04
Client ID: CAN 3147 SHELF 52
Sample Location:

Date Collected: 02/03/20 16:00
Date Received: 02/04/20
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2004828**Project Number:** CANISTER QC BAT**Report Date:** 02/21/20**Air Canister Certification Results**

Lab ID: L2004828-04

Date Collected: 02/03/20 16:00

Client ID: CAN 3147 SHELF 52

Date Received: 02/04/20

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	95		60-140
bromochloromethane	101		60-140
chlorobenzene-d5	93		60-140

Project Name: MIMI CLEANERS**Lab Number:** L2006594**Project Number:** 10017039**Report Date:** 02/21/20**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information**Cooler** **Custody Seal**

NA Present/Intact

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2006594-01A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-SIM(30)
L2006594-02A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-SIM(30)
L2006594-03A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-SIM(30)
L2006594-04A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-SIM(30)
L2006594-05A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-SIM(30)

Project Name: MIMI CLEANERS
Project Number: 10017039

Lab Number: L2006594
Report Date: 02/21/20

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCS D	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

Report Format: Data Usability Report



Project Name: MIMI CLEANERS
Project Number: 10017039

Lab Number: L2006594
Report Date: 02/21/20

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the reporting limit (RL) for the sample.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less

Report Format: Data Usability Report



Project Name: MIMI CLEANERS**Project Number:** 10017039**Lab Number:** L2006594**Report Date:** 02/21/20**Data Qualifiers**

than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.**RE** - Analytical results are from sample re-extraction.**S** - Analytical results are from modified screening analysis.

Project Name: MIMI CLEANERS
Project Number: 10017039

Lab Number: L2006594
Report Date: 02/21/20

REFERENCES

- 48 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Alpha Analytical, Inc.Facility: **Company-wide**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

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Published Date: 2/17/2020 10:46:05 AM

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Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility**EPA 624/624.1:** m/p-xylene, o-xylene**EPA 8260C:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270D:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.**Mansfield Facility****SM 2540D:** TSS**EPA 8082A:** NPW: PCB: 1, 5, 31, 87, 101, 110, 141, 151, 153, 180, 183, 187.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.**EPA TO-12** Non-methane organics**EPA 3C** Fixed gases**Biological Tissue Matrix:** EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:**Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 332:** Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.****Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.****Mansfield Facility:****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg. **EPA 522.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1** Hg.**SM2340B**

For a complete listing of analytes and methods, please contact your Alpha Project Manager.



CHAIN OF CUSTODY

AIR ANALYSIS

PAGE _____ OF _____

320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: **MDI**
Address: **One International Blvd, Fl 10 Mahwah, NJ 07495**
Phone: **845-548-5413 (JMG)**
Fax: **201-335-9301**
Email: **John.Guzewich@MDIINC.com**

Project Information

Project Name: **Mimi Cleaners**
Project Location: **Scarsdale, NY**
Project #: **10017039**
Project Manager: **J. Guzewich**
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved)

Date Due:

Time:

Date Rec'd in Lab: **2/14/20**ALPHA Job #: **L2006594**

Report Information - Data Deliverables

☐ FAX
☒ ADEx
Criteria Checker: **NYSDOH VI**
(Default based on Regulatory Criteria Indicated)
Other Formats:
☒ EMAIL (standard pdf report)
☐ Additional Deliverables:

Report to: (if different than Project Manager)

John.Guzewich@MDIINC.com

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed	Program	Res / Comm

ANALYSIS

☐ TO-15
☐ TO-15 SIM
☐ APH (Subject Non-petroleum HCs)
☐ Fixed Gases
☐ Sulfides & Mercaptans by TO-15

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	COLLECTION											TO-15	TO-15 SIM	APH	Fixed Gases	Sulfides & Mercaptans	Sample Comments (i.e. PID)
		End Date	Start Time	End Time	Initial Vacuum	Final Vacuum	Sample Matrix*	Sampler's Initials	Can Size	ID Can	ID - Flow Controller							
00594-01	CPB-SS-02	2/12/2020	1114	1522	-30.25	-3.77	SV	MTP	6L	2573	0076	X					Sub Slab	
-02	CPB-IA-02	2/12/2020	1115	1523	-29.56	-3.07	AA	MTP	6L	1843	0178	X					Indoor Air	
-03	MC-OA-02122020	2/12/2020	1134	1534	-30.21	-4.67	AA	MTP	6L	1791	0183	X					Outdoor Air	
-04	CPB-SS-03	2/12/2020	1150	1557	-30.11	-4.28	SV	MTP	6L	2934	0215	X					Sub Slab	
-05	CPB-IA-03	2/12/2020	1152	1559	-30.18	-3.35	AA	MTP	6L	2060	0775	X					Indoor Air	

*SAMPLE MATRIX CODES

AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Container Type

6L

Relinquished By:

Date/Time

Received By:

Date/Time:

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

Vinyl chloride

1,1-Dichloroethene

trans-1,2-Dichloroethene

1,1-Dichloroethane

cis-1,2-Dichloroethene

1,1,1-Trichloroethane

1,2-Dichloroethane

Trichloroethene

1,1,2-Trichloroethane

1,1,2,2-Tetrachloroethane

Tetrachloroethene

Data Validation Services

120 Cobble Creek Road P. O. Box 208

North Creek, NY 12853

Phone (518) 251-4429

harry@frontiernet.net

April 2, 2020

John Guzewich

HDR

One international Blvd

10th Floor

Mahwah, NJ 07495

RE: Validation of Former Mimi Cleaners site analytical data package
Alpha Analytical SDG No. L2006594

Dear Mr. Guzewich:

Review has been completed for the data package generated by Alpha Analytical that pertains to air samples collected 02/12/20 at the Former Mimi Cleaners site. Five air samples were collected in 6-L summa canister samples and analyzed for eleven chlorinated volatile analytes by USEPA method TO-15.

Data validation was performed with guidance from the USEPA Region 2 SOP HW-31, with consideration for the requirements of the analytical methodology. The following items were reviewed:

- * Data Completeness
- * Case Narrative
- * Custody Documentation
- * Canister Pressures
- * Holding Times
- * Internal Standard Recoveries
- * Method Blanks
- * Laboratory Control Samples (LCSs)
- * Instrumental Tunes
- * Calibration Standards
- * Method Compliance
- * Clean Canister Certification
- * Sample Result Verification

Those items showing deficiencies are discussed in the following sections of this report. All others were found to be acceptable as outlined in the above-mentioned validation procedure, and as applicable for the methodology. Unless noted specifically in the following text, reported results are substantiated by the raw data, and generated in compliance with project requirements.

In summary, sample processing was conducted in compliance with, and adherence to, protocol requirements. Sample results are usable as reported.

The sample identifications and sample results laboratory report forms are attached to this text.

Chain-of-Custody/Sample Receipt

The minor correction was made to a sample identification after sample receipt.

Volatiles in Air by EPA TO-15

The samples were processed by a low level (SIM) method that provided lower reporting limits.

Laboratory Control Samples show compliant recoveries.

Holding times and instrument tunes meet requirements. Internal standard recoveries are acceptable. Method and canister blanks show no contamination. The clean canister certification data documentation was reviewed during validation.

Initial and continuing calibration standard responses were within validation guidelines, with all response factors (RRFs) above 0.05 and linearity within the 30%RSD limit. The continuing calibration responses are below 30%D, with the exception of an elevated response for an analyte not detected in the associated project samples.

Some of the samples were processed only at dilution due to high target analyte concentrations. This results in elevated reporting limits for analytes not detected in those samples.

Sample results are substantiated by the raw data.

Please do not hesitate to contact me if questions or comments arise during your review of this report.

Very truly yours,



Judy Harry

Att: Sample Identifications
Sample Results Forms

Sample Summaries

Project Name: MIMI CLEANERS
Project Number: 10017039

Lab Number: L2006594
Report Date: 02/24/20

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2006594-01	CPB-SS-02	SOIL_VAPOR	SCARSDALE, NY	02/12/20 15:22	02/13/20
L2006594-02	CPB-IA-02	AIR	SCARSDALE, NY	02/12/20 15:23	02/13/20
L2006594-03	MC-OA-02122020	AIR	SCARSDALE, NY	02/12/20 15:34	02/13/20
L2006594-04	CPB-SS-03	SOIL_VAPOR	SCARSDALE, NY	02/12/20 15:57	02/13/20
L2006594-05	CPB-IA-03	AIR	SCARSDALE, NY	02/12/20 15:59	02/13/20

Form I Analysis Data Sheets

Results Summary

Form 1

Volatile Organics in Air by SIM

Client : HDR, Engineering Inc.
 Project Name : MIMI CLEANERS
 Lab ID : L2006594-01D
 Client ID : CPB-SS-02
 Sample Location : SCARSDALE, NY
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15-SIM
 Lab File ID : R1615525_EV2
 Sample Amount : 30.0 ml

Lab Number : L2006594
 Project Number : 10017039
 Date Collected : 02/12/20 15:22
 Date Received : 02/13/20
 Date Analyzed : 02/21/20 07:54
 Dilution Factor : 8.333
 Analyst : EW
 Instrument ID : AIRLAB16
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-01-4	Vinyl chloride	ND	0.167	--	ND	0.427	--	U
75-35-4	1,1-Dichloroethene	ND	0.167	--	ND	0.662	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.167	--	ND	0.662	--	U
75-34-3	1,1-Dichloroethane	ND	0.167	--	ND	0.676	--	U
156-59-2	cis-1,2-Dichloroethene	1.32	0.167	--	5.23	0.662	--	
107-06-2	1,2-Dichloroethane	ND	0.167	--	ND	0.676	--	U
71-55-6	1,1,1-Trichloroethane	ND	0.167	--	ND	0.911	--	U
79-01-6	Trichloroethene	0.700	0.167	--	3.76	0.897	--	
79-00-5	1,1,2-Trichloroethane	ND	0.167	--	ND	0.911	--	U
127-18-4	Tetrachloroethene	262	0.167	--	1780	1.13	--	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.167	--	ND	1.15	--	U

Results Summary

Form 1

Volatile Organics in Air by SIM

Client : HDR, Engineering Inc.
 Project Name : MIMI CLEANERS
 Lab ID : L2006594-02
 Client ID : CPB-IA-02
 Sample Location : SCARSDALE, NY
 Sample Matrix : AIR
 Analytical Method : 48,TO-15-SIM
 Lab File ID : R1615523_EV2
 Sample Amount : 250 ml

Lab Number : L2006594
 Project Number : 10017039
 Date Collected : 02/12/20 15:23
 Date Received : 02/13/20
 Date Analyzed : 02/21/20 05:38
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRLAB16
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-01-4	Vinyl chloride	ND	0.020	--	ND	0.051	--	U
75-35-4	1,1-Dichloroethene	ND	0.020	--	ND	0.079	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
75-34-3	1,1-Dichloroethane	ND	0.020	--	ND	0.081	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
107-06-2	1,2-Dichloroethane	ND	0.020	--	ND	0.081	--	U
71-55-6	1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--	U
79-01-6	Trichloroethene	0.022	0.020	--	0.118	0.107	--	
79-00-5	1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--	U
127-18-4	Tetrachloroethene	0.772	0.020	--	5.24	0.136	--	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--	U

Results Summary

Form 1

Volatile Organics in Air by SIM

Client : HDR, Engineering Inc.
 Project Name : MIMI CLEANERS
 Lab ID : L2006594-03
 Client ID : MC-OA-02122020
 Sample Location : SCARSDALE, NY
 Sample Matrix : AIR
 Analytical Method : 48,TO-15-SIM
 Lab File ID : R1615506_EV2
 Sample Amount : 250 ml

Lab Number : L2006594
 Project Number : 10017039
 Date Collected : 02/12/20 15:34
 Date Received : 02/13/20
 Date Analyzed : 02/20/20 17:42
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRLAB16
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-01-4	Vinyl chloride	ND	0.020	--	ND	0.051	--	U
75-35-4	1,1-Dichloroethene	ND	0.020	--	ND	0.079	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
75-34-3	1,1-Dichloroethane	ND	0.020	--	ND	0.081	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
107-06-2	1,2-Dichloroethane	ND	0.020	--	ND	0.081	--	U
71-55-6	1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--	U
79-01-6	Trichloroethene	ND	0.020	--	ND	0.107	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--	U
127-18-4	Tetrachloroethene	0.486	0.020	--	3.30	0.136	--	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--	U

Results Summary

Form 1

Volatile Organics in Air by SIM

Client : HDR, Engineering Inc.
 Project Name : MIMI CLEANERS
 Lab ID : L2006594-04D
 Client ID : CPB-SS-03
 Sample Location : SCARSDALE, NY
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15-SIM
 Lab File ID : R1615526_EV2
 Sample Amount : 2.10 ml

Lab Number : L2006594
 Project Number : 10017039
 Date Collected : 02/12/20 15:57
 Date Received : 02/13/20
 Date Analyzed : 02/21/20 08:34
 Dilution Factor : 119
 Analyst : EW
 Instrument ID : AIRLAB16
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-01-4	Vinyl chloride	3.93	2.38	--	10.0	6.08	--	
75-35-4	1,1-Dichloroethene	ND	2.38	--	ND	9.44	--	U
156-60-5	trans-1,2-Dichloroethene	42.4	2.38	--	168	9.44	--	
75-34-3	1,1-Dichloroethane	ND	2.38	--	ND	9.63	--	U
156-59-2	cis-1,2-Dichloroethene	1990	2.38	--	7890	9.44	--	
107-06-2	1,2-Dichloroethane	ND	2.38	--	ND	9.63	--	U
71-55-6	1,1,1-Trichloroethane	ND	2.38	--	ND	13.0	--	U
79-01-6	Trichloroethene	327	2.38	--	1760	12.8	--	
79-00-5	1,1,2-Trichloroethane	ND	2.38	--	ND	13.0	--	U
127-18-4	Tetrachloroethene	4590	2.38	--	31100	16.1	--	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.38	--	ND	16.3	--	U

Results Summary

Form 1

Volatile Organics in Air by SIM

Client : HDR, Engineering Inc.
 Project Name : MIMI CLEANERS
 Lab ID : L2006594-05
 Client ID : CPB-IA-03
 Sample Location : SCARSDALE, NY
 Sample Matrix : AIR
 Analytical Method : 48,TO-15-SIM
 Lab File ID : R1615524_EV2
 Sample Amount : 250 ml

Lab Number : L2006594
 Project Number : 10017039
 Date Collected : 02/12/20 15:59
 Date Received : 02/13/20
 Date Analyzed : 02/21/20 06:18
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRLAB16
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-01-4	Vinyl chloride	ND	0.020	--	ND	0.051	--	U
75-35-4	1,1-Dichloroethene	ND	0.020	--	ND	0.079	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
75-34-3	1,1-Dichloroethane	ND	0.020	--	ND	0.081	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
107-06-2	1,2-Dichloroethane	ND	0.020	--	ND	0.081	--	U
71-55-6	1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--	U
79-01-6	Trichloroethene	ND	0.020	--	ND	0.107	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--	U
127-18-4	Tetrachloroethene	0.385	0.020	--	2.61	0.136	--	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--	U