JS|HELD

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August 6, 2024
*Revised October 2024

Mr. Brian Tozer
Seagis Property Group, LP
100 Front Street, Suite 350
Conshohocken, PA 19428

Via email: btozer@seagisproperty.com

Re: Phase II Subsurface Investigation
48-55 36th Street
Long Island City, NY 11101
Block: 236, Lot: 20

Dear Mr. Tozer:

J.S. Held LLC (J.S. Held) was retained to perform a Phase II Subsurface Investigation at the property located at 48-55 36th Street, Long Island City, New York ("Site" or "subject property"). The subject property is identified on local tax records as Block: 236, Lot: 20. Phase II Investigation activities conducted by J.S. Held consisted of a Ground Penetrating Radar (GPR) Survey and the installation and sampling of soil borings and sub-slab vapor points. A Site Location Map is provided as **Figure 1**.

Background Information

J.S. Held performed a Phase I Environmental Site Assessment (Phase I ESA) associated with the subject property in April 2024, in which the following Recognized Environmental Conditions (RECs) were identified:

- REC-1: Historical Site Operations

Based on J.S. Held's review of available historical documents, the subject property was formerly identified in the 1967 New York Telephone directory as "Amer Lndry Machy Industries Div of McGraw Edison Co". Additionally, the Sanborn Fire Insurance Map for 1970 depicts an apparent clothing warehouse on the subject property. Further research shows that The American Laundry Machinery Company produced commercial laundry and other textile equipment at their facilities. The potential exists for chemicals used in historic dry-cleaning/dry-cleaning manufacturing operations to have been discharged at the subject property. Additionally, the subject property is identified in the City Directory search as "Aberdeen Blower & Sheet metals Works Inc" in 1976. Aberdeen Blower & Sheet Metal Works has been identified as a commercial sheet metal and ventilation equipment manufacturer. According to City Directory listings, Jim's Pump Repair Inc., an industrial pump part manufacturer, operated at the subject property between 1983 and 2005.

The potential exists for hazardous materials or substances to have discharged to the subsurface as a result of the historical site operations described above. Therefore, J.S. Held recommended performing a Phase II Subsurface Investigation at the subject property to determine the presence or absence of a past discharge to the subsurface.

- REC-2: Potential Underground Storage Tanks (USTs)

  The subject property was originally constructed in 1953. Based on a review of historical documents, the subject property appeared to have operated as a clothing warehouse as early as 1970 and as a pump repair facility between 1988 and 2006. Past heating sources for the subject property were not identified during J.S. Held's review. Therefore, the potential exists for former structures to have been heated via heating oil USTs. J.S. Held recommended performing a GPR Survey at the subject property to determine the presence or absence of subsurface anomalies consistent with USTs.

Phase II Subsurface Investigation

Ground Penetrating Radar (GPR) Survey – April 2024

J.S. Held conducted a GPR survey at the subject property on April 11, 2024. The purpose of this survey was to locate and identify any potential utilities, anomalies, underground storage tanks (USTs), and other substructures affiliated with historical Site operations. The GPR Survey was conducted with a Geophysical Survey Systems, Inc. (GSSI) UtilityScan 250 MHz GPR System with a shielded antenna and a RadioDetection RD7100 Electromagnetic Utility Locator.

The exterior portions of the Site and the accessible interior areas of the Site were screened using the GPR to search for anomalies consistent with the possible existence of active or former USTs or other anomalies.

The GPR survey identified several anomalies representative of subsurface utilities within the surveyed area. Anomalies indicative of USTs were not identified during the GPR survey

Please refer to **Attachment A** for the GPR Summary Report.

Soil Investigation – April 2024

On April 27, 2024, J.S. Held mobilized to the subject property to install a total of three (3) soil borings designated SB-1, SB-2, and SB-3. SB-1 was installed inside the building's loading bay in the southwestern corner of the building on the subject property. SB-2 and SB-3 were installed within the parking area on the northern end of the subject property. All soil borings were advanced to a depth of 16-feet below ground surface (bgs). An exploratory probe was advanced to 40 feet bgs to determine depth to groundwater. Groundwater was not encountered at this depth, therefore no further investigation of groundwater is warranted. During the investigation, soil in each boring were logged and field-screened for visual and olfactory indications of gross contamination and were field-screened with a photoionization detector (PID) for volatile organic vapors. Visual and olfactory signs of contamination, as well as elevated PID readings, were not observed in SB-1, SB-2, or SB-3. Soil samples were collected from a depth of 15.5 to 16.0 feet bgs in each boring location.

Soils from 1.0 to 5.0 feet bgs were mostly characterized as dark brown, medium-to-fine grained sands. Soils from 5.0 to 16.0 feet bgs were mostly characterized as reddish-brown medium-to-fine sands. Soil samples were immediately placed on ice and transported, under standard chain of custody protocol, to Integrated Analytical Laboratories (IAL) of Randolph, New Jersey, a New Jersey-certified laboratory.

Soil sample SB-1 was submitted for analysis of volatile organic compounds (VOCs) via analytical method VOC+15. Soil samples SB-2 and SB-3 were placed on hold pending the analytical results of SB-1. Analysis SB-1 did not identify any VOC contaminants above the applicable New York State Department of Environmental Conservation (NYSDEC) Restricted Use Soil Cleanup Objectives (RUSCO) and Unrestricted Use Soil Cleanup Objectives (UUSCO). Following receipt of analytical results for SB-1, J.S. Held activated soil samples SB-2 and SB-3. Analytical results of SB-2 and SB-3 did not identify VOC contaminants above the applicable NYSDEC RUSCO or UUSCO.

Please refer to **Figure 2** for a Soil Sample Location and Results Map. Soil Boring Logs are included as **Attachment B.** Laboratory Analytical Data Packages are included as **Attachment C.** Analytical results of the April 2024 soil samples are provided as **Table 1.**

Soil Gas Investigation – April 2024

As part of the Phase II Subsurface Investigation conducted on April 27, 2024, J.S. Held also collected four (4) sub-slab soil gas samples, identified as SG-1 through SG-4. SG-1 was collected from the staging area in the northwestern portion of the building. SG-2 was collected from the hallway outside the breakroom, in the center portion of the building. SG-3 was collected from the loading dock in the southwestern portion of the building. SG-4 was collected from the storage area in the southern portion of the building.

All four (4) soil gas samples were collected over a period of 30 minutes and submitted for an analysis of Low-Level Toxic Organic (TO) compounds using USEPA Method TO-15. After collection, all samples were transported, under standard chain of custody, to IAL of Randolph, New Jersey, a New Jersey-certified laboratory.

Analytical results of the sub-slab soil gas samples identified levels of VOCs in soil gas that warranted further investigation. Tetrachloroethene (PCE), Trichloroethene (TCE), and cis-1,2-Dichloroethene (cis-1,2-DCE) were identified in the soil gas at levels that warrant either monitoring or mitigation in accordance with the New York State Department of Health (NYSDOH) Soil Vapor/Indoor Air Decision Matrices.

Please refer to **Figure 3** for a Soil Gas and Indoor Air Sample Location and Results Map. Laboratory Analytical Data Packages are included as **Attachment C.** Analytical results of the April 2024 soil gas samples are provided as **Table 2.**

Soil Investigation – May 2024

J.S. Held returned to the subject property between May 29th and May 30th, 2024 to install six (6) additional soil borings throughout the interior of the building.. One (1) soil boring, identified as SB-9, was installed within the eastern portion of the production area on May 30th, 2024. SB-4 was installed along the northern exterior of the subject building and was advanced to a depth of 40 feet bgs. SB-5 through SB-9 were installed throughout the interior of the subject building and were advanced to a depth of 20-feet bgs. During the investigation, soils in each boring were logged and field-screened for visual and olfactory indications of gross contamination and were field-screened with a PID for volatile organic vapors. PID readings are outlined in the table below.

Boring ID	Highest PID Reading (ppm)	Depth of Reading (Feet bgs)
SB-4	14.3	3.0-4.0
SB-5	73.2	13.0-14.0
SB-6	58.2	4.0-5.0
SB-7/SB-7R	59.6	6.0-7.0
SB-8	1.1	6.0-7.0
SB-9	0	-

Visual and olfactory signs of contamination were not observed in soil borings SB-4 through SB-9.

One (1) shallow "A" sample and one (1) deeper "B" sample was collected from each boring. SB-4A was collected from 4.5 to 5.0 feet bgs and SB-4B was collected from 15.0 to 15.5 feet bgs. SB-5A was collected from 2.5 to 3.0 feet bgs and SB-5B was collected from 13.5 to 14.0 feet bgs. SB-6A was collected from 4.0 to 4.5 feet bgs and SB-6B was collected from 15.5 to 16.0 feet bgs. SB-7A was collected from 6.5 to 7.0 feet bgs and SB-7B was collected from 15.5 to 16 feet bgs. SB-8A was collected from 6.5 to 7 feet bgs and SB-8B was collected from 15.5 to 16.0 feet bgs. Lastly, SB-9A was collected from 2.5 to 3.0 feet bgs and SB-9B was collected from 14.5 to 15.0 feet bgs.

Soils down to 16-feet in each boring were mostly characterized as brown and reddish-brown medium-to-fine sands, with intermittent coarse sands and silt. A confining layer was not observed in soil borings SB-4 through SB-9, indicating that the subsurface lithology is not consistent across the Site.

Soil samples were immediately placed on ice and transported, under standard chain of custody, to IAL of Randolph, New Jersey, a New Jersey-certified laboratory.

Soil samples SB-4 through SB-9 were submitted for an analysis of VOCs via analytical method VOC+15. Analytical results identified levels of acetone, a common laboratory contaminant, in soil samples SB-5B, SB-6A, SB-6B, SB-9A, and SB-9B at 0.227 ppm, 0.292 ppm, 0.079 ppm, 0.115 ppm, and 0.103 ppm, respectively. These levels are above the NYSDEC UUSCO standard and RUSCO Protection of Groundwater standard of 0.05 ppm. Additionally, PCE was identified in soil sample SB-7A at 9.13 ppm, above the UUSCO standard and RUSCO Protection of Groundwater standard of 1.3 ppm, and above the RUSCO Protection of Ecological Resources standard of 2.0 ppm. The deeper sample, SB-7B, did not identify any contaminants above UUSCO or RUSCO standards. As such, vertical delineation of PCE was achieved in the SB-7 sampling location.

Please refer to **Figure 2** for a Soil Sample Location and Results Map. Soil Boring Logs are included as **Attachment B.** Laboratory Analytical Data Packages are included as **Attachment C.** Analytical results of the May 2024 soil samples are provided as **Table 3.**

Soil Gas Investigation – May 2024

On May 29th and May 30th, 2024, J.S. Held also collected an additional six (6) sub-slab soil gas samples, identified as SG-1B, SG-5, SG-6, SG-7, SG-8, and SG-9, throughout the interior of the subject building. SG-1B was collected from the location of SB-6 and was performed to resample at a deeper interval of approximately ten (10) feet bgs, in the vicinity of SG-1. SG-5 was collected from the break room, along the western exterior wall. SG-6 was collected from the hot kitchen area, outside of the USDA room. SG-7 was collected from the

chemical room on the southern side of the building. SG-8 was collected from the northern portion of the production area. SG-9 was collected from the eastern portion of the production area.

All six (6) soil gas samples were collected over a period of 30 minutes and submitted for an analysis of Low-Level TO compounds using USEPA Method TO-15. After collection, all samples were transported, under standard chain of custody, to IAL of Randolph, New Jersey, a New Jersey-certified laboratory.

Analytical results of the sub-slab soil gas samples confirmed levels of PCE, TCE, and cis-1,2-DCE in soil gas that require either monitoring or mitigation in accordance with the NYSDOH Soil Vapor/Indoor Air Decision Matrices.

Please refer to **Figure 3** for a Soil Gas and Indoor Air Sample Location and Results Map. Laboratory Analytical Data Packages are included as **Attachment C.** Analytical results of the May 2024 soil gas samples are provided as **Table 4.**

Soil Investigation – July 2024

J.S. Held returned to the subject property on July 12th, July 15th, and July 16th, 2024 to install additional soil borings throughout the interior of the building. A total of thirteen (13) soil borings were installed. Two (2) soil borings were installed in the staging area to vertically and horizontally delineate the 9.13 ppm of PCE identified in the May 2024 soil investigation at SB-7. SB-7R, advanced in the same location as SB-7, vertically delineated the elevated PCE concentration. SB-10, installed to the south of SB-7/SB-7R within the staging area, horizontally delineated the PCE concentration previously identified in SB-7. The other eleven (11) soil borings were installed throughout the interior of the building. SB-12 was installed to the south of SB-7/SB-7R but refusal was encountered at five (5) feet bgs and no sample was collected. SB-11, SB-15, SB-16, SB-17, SB-18, and SB-21 were installed throughout the production area of the building. SB-19 was installed in the loading dock, along the southern wall of the building. SB-20 was installed in the warehouse of the building, just outside the changing room. SB-13 and SB-14 were installed adjacent to the walk-in cooler and freezer within the warehouse of the building, as Site restrictions limited the ability to drill inside these areas. All soil borings were advanced to a depth of 15-feet bgs, with the exceptions of SB-18 and SB-19 where refusal was reached at 8-feet bgs and 9.5-feet bgs, respectively. During the investigation, soils in each boring were logged and field-screened for visual and olfactory indications of gross contamination and were field-screened with a PID for volatile organic vapors. PID readings are outlined in the table below.

Boring ID	Highest PID Reading (ppm)	Depth of Reading (Feet bgs)
SB-7/SB-7R	59.6	6.0-7.0
SB-10	0	-
SB-11	0	-
SB-13	7.3	3.0-4.0
SB-14	0	-
SB-15	5.5	4.0-5.0
SB-16	0	-
SB-17	0	-
SB-18	0	-
SB-19	0	-
SB-20	0	-
SB-21	0	-

Slight soil staining and odors were observed at approximately two (2) to five (5) feet-bgs in soil borings SB-7R, SB-10, SB-11, SB-13, SB-15, SB-16, SB-18, and SB-19.

One (1) shallow "A" sample and one (1) deeper "B" sample was collected from each boring, with the exception of soil boring SB-7R and SB-19. Only one (1) deeper sample was collected from SB-7R to vertically delineate PCE concentrations previously identified in SB-7. One (1) shallow sample was collected from SB-19, in order to classify shallow soil staining observed in the boring.

Soils down to 15-feet in each boring were mostly characterized as brown and reddish-brown medium-to-fine sands, with intermittent coarse sands and silt. Soil samples were immediately placed on ice and transported, under standard chain of custody, to IAL of Randolph, New Jersey, a New York-certified laboratory.

Soil samples SB-7R and SB-10 through SB-21 were submitted for an analysis of VOCs via analytical method VOC+15. SB-13 was also submitted for analysis of the NY Petroleum List (CP-51) polyaromatic hydrocarbons (PAHs), due to the tar-like substance identified in the soil boring. Analytical results identified levels of acetone, a common laboratory contaminant, in soil sample SB-14A at 0.052 ppm. This concentration is above the NYSDEC UUSCO standard and RUSCO Protection of Groundwater standard of 0.05 ppm. VOC's were either non-detect or below the applicable NYSDEC UUSCO and RUSCO standards in all other samples. The PAHs identified as acenaphthene, fluorene, phenanthrene, anthracene, fluoranthene, pyrene, benzo[a]anthracene, chrysene, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[a]pyrene, indeno[1,2,3-cd]pyrene, dibenz[a,h]anthracene, and benzo[g,h,i]perylene were identified in soil sample SB-13A above both UUSCO and RUSCO standards. The deeper sample, SB-13B, did not identify any contaminants above UUSCO or RUSCO standards. Therefore vertical delineation of the PAH exceedances has been achieved.

Please refer to **Figure 2** for a Soil Sample Location and Results Map. Soil Boring Logs are included as **Attachment B.** Laboratory Analytical Data Packages are included as **Attachment C.** Analytical results of the July 2024 soil samples are provided as **Table 5.**

Soil Gas Investigation – July 2024

On July 12th and July 15th, 2024, J.S. Held collected an additional eight (8) sub-slab soil gas samples, identified as SG-10 through SG-17. SG-10 was collected from outside the SV room. SG-11 and SG-13 were collected from within the warehouse area. SG-12 was collected from the southern side of the hot kitchen. SG-14 and SG-16 were collected from along the southern side of the building, in the walk-in cooler and dish area, respectively. SG-15 was collected within the northern portion of the production area.

All eight (8) soil gas samples were collected over a period of 30 minutes and submitted for an analysis of Low-Level Toxic Organic (TO) compounds using USEPA Method TO-15. After collection, all samples were transported, under standard chain of custody, to IAL of Randolph, New Jersey, a New York-certified laboratory.

Analytical results of the sub-slab soil gas samples further identified levels of PCE and TCE in soil gas at the subject property that require either monitoring or mitigation in accordance with the NYSDOH Soil Vapor/Indoor Air Decision Matrices.

Please refer to **Figure 3** for a Soil Gas and Indoor Air Sample Location and Results Map. Laboratory Analytical Data Packages are included as **Attachment C.** Analytical results of the July 2024 soil gas samples are provided as **Table 6.**

Indoor Air Investigation – September 2024

Between September 16th and September 17th, 2024, J.S. Held performed an indoor air investigation at the subject property. J.S. Held collected seven (7) indoor air samples, designated IA-1 through IA-7, from the interior of the subject building. One ambient air sample, designated AA-1 was collected from the exterior of the subject building.

IA-1 was collected from within the chemical room on the southern side of the building. IA-2 was collected within the production area, along the eastern side of the building. IA-3 was collected within the production area, on the northern side of the building. IA-4 was collected from within the hot kitchen inside the production area. IA-5 was collected from within the warehouse. IA-6 was collected from within the employee breakroom and kitchen area. IA-7 was collected from within the staging area, in the northwest portion of the building. Lastly, AA-1 was collected in the parking area to the north of the subject building, adjacent to the building's northern exterior wall.

Each indoor/ambient air sample was collected over a period of 24 hours, using a 6-liter Summa canister and associated 24-hour flow controller. All eight (8) samples were submitted for analysis of Low-Level Toxic Organic (TO) compounds using USEPA Method TO-15. J.S. Held also completed NYSDOH Indoor Air Quality Questionnaire and Building Inventory form. The completed form is included as **Attachment D.**

Analytical results of the indoor/ambient air samples indicated that TCE, PCE, and cis-1,2-DCE, the chlorinated VOCs previously identified in soil gas, were not detected in any indoor air samples. However, toluene was detected in IA-1 and IA-7 at 11 µg/m^3 and 21 µg/m^3, respectively. These concentrations of toluene will be mitigated via a future sub slab depressurization system (SSDS).

Please refer to **Figure 3** for a Soil Gas and Indoor Air Sample Location and Results Map. Laboratory Analytical Data Packages are included as **Attachment C.** Analytical results of the September 2024 indoor/ambient samples are provided as **Table 7.**

Conclusions and Recommendations

Based on the analytical results of the April, May, and July 2024 Phase II Investigations performed at the subject property, J.S. Held identified PCE contaminated soil in the northwestern staging room inside the building on the subject property. PCE was identified in soil sample SB-7A at 9.13 ppm which is well below the commercial standard of 150 ppm.

During the July 2024 soil investigation, elevated levels of PAHs were identified in soil sample SB-13A, collected from the tar like material at a depth of 2.0 to 2.5 feet bgs. A second sample within the same boring location was taken at a depth of 5.0 to 5.5 feet bgs, delineating the PAHs at levels below NYSDEC USSCO and RUSCO requirements, and thus vertical delineation of these PAHs has been achieved. Surrounding soil samples, specifically SB-14, SB-19, and SB-20, confirm that the tar like material is limited to the immediate vicinity of SB-13. Access to the impacted soil is presently restricted by the existing concrete cover, and the contamination is not impacting groundwater.

Additionally, PCE was identified in soil gas samples throughout the building which requires mitigation per the NYSDOH Soil Vapor/Indoor Air Decision Matrices. TCE and cis-1,2-DCE are also present at elevated concentrations in the soil gas samples collected from the northern portion of the building. The identified TCE and cis-1,2-DCE soil gas contamination requires mitigation per the NYSDEC Soil Vapor/Indoor Air Decision Matrices. PCE, TCE, and cis-1,2-DCE were not identified in indoor air during J.S. Held's September 2024 indoor air investigation. However, the levels of PCE, TCE, and cis-1,2-DCE identified in soil gas will still require mitigation per the NYSDOH Soil Vapor/Indoor Air Decision Matrices. The predesign communication testing for the SSDS is currently being conducted and will be presented to the NYSDEC for approval prior to installation.

Along the southern property boundary, J.S. Held identified PCE at a concentration of 6,300 µg/m*3* in soil gas sample SG-7. No PCE soil impacts were identified in the vicinity of SG-7, or on the southern portion of the building. Soil gas samples showed decreasing concentrations of PCE with distance from the southern property boundary, indicating that the levels of PCE in soil gas at SG-7 are likely due to an offsite source.

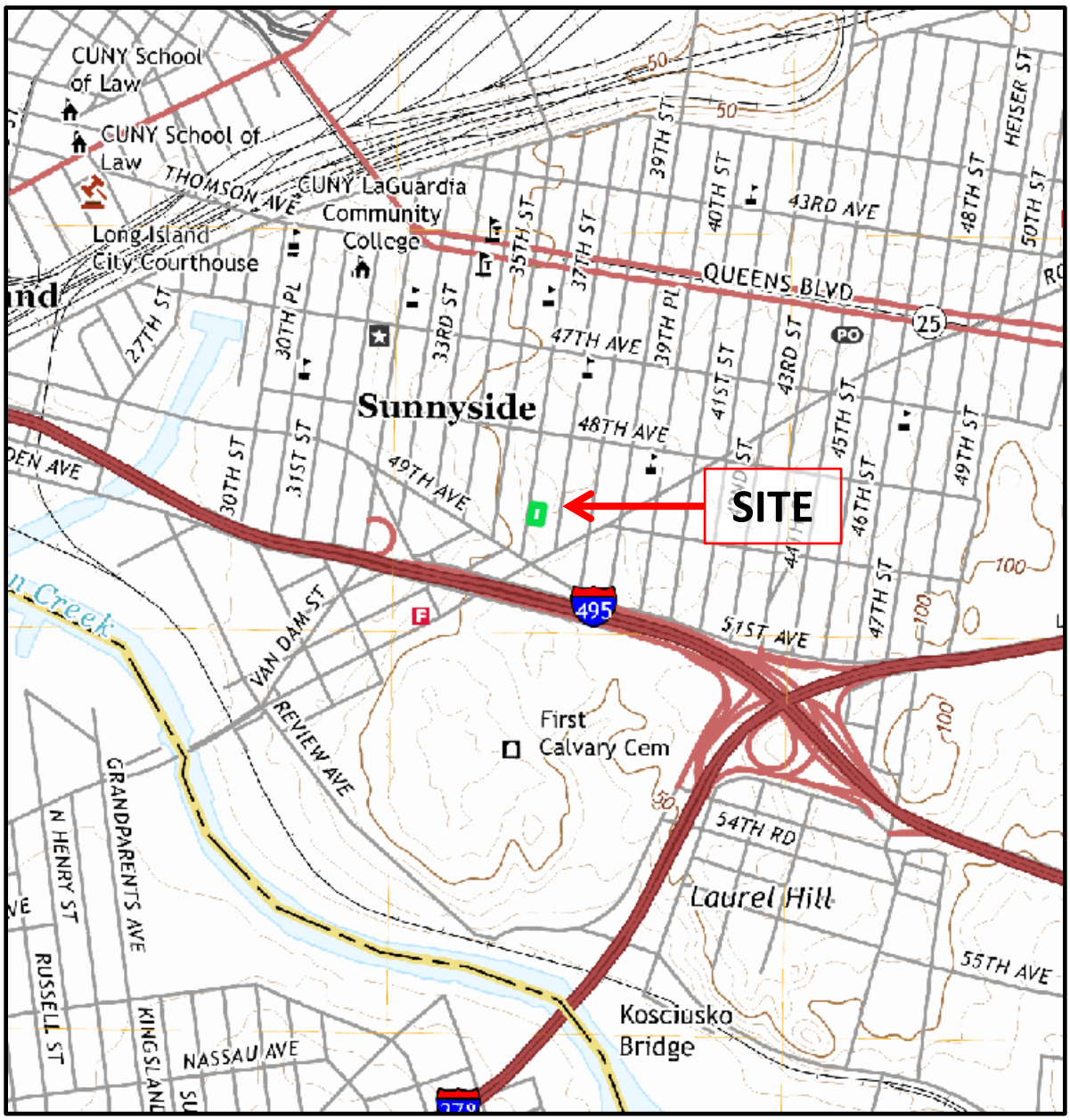
Please feel free to contact us at (201) 876-9400 if you have any questions or concerns.

Sincerely,

Ben Neumann
Environmental Scientist III

Leah DeEgidio
Project Manager

FIGURES



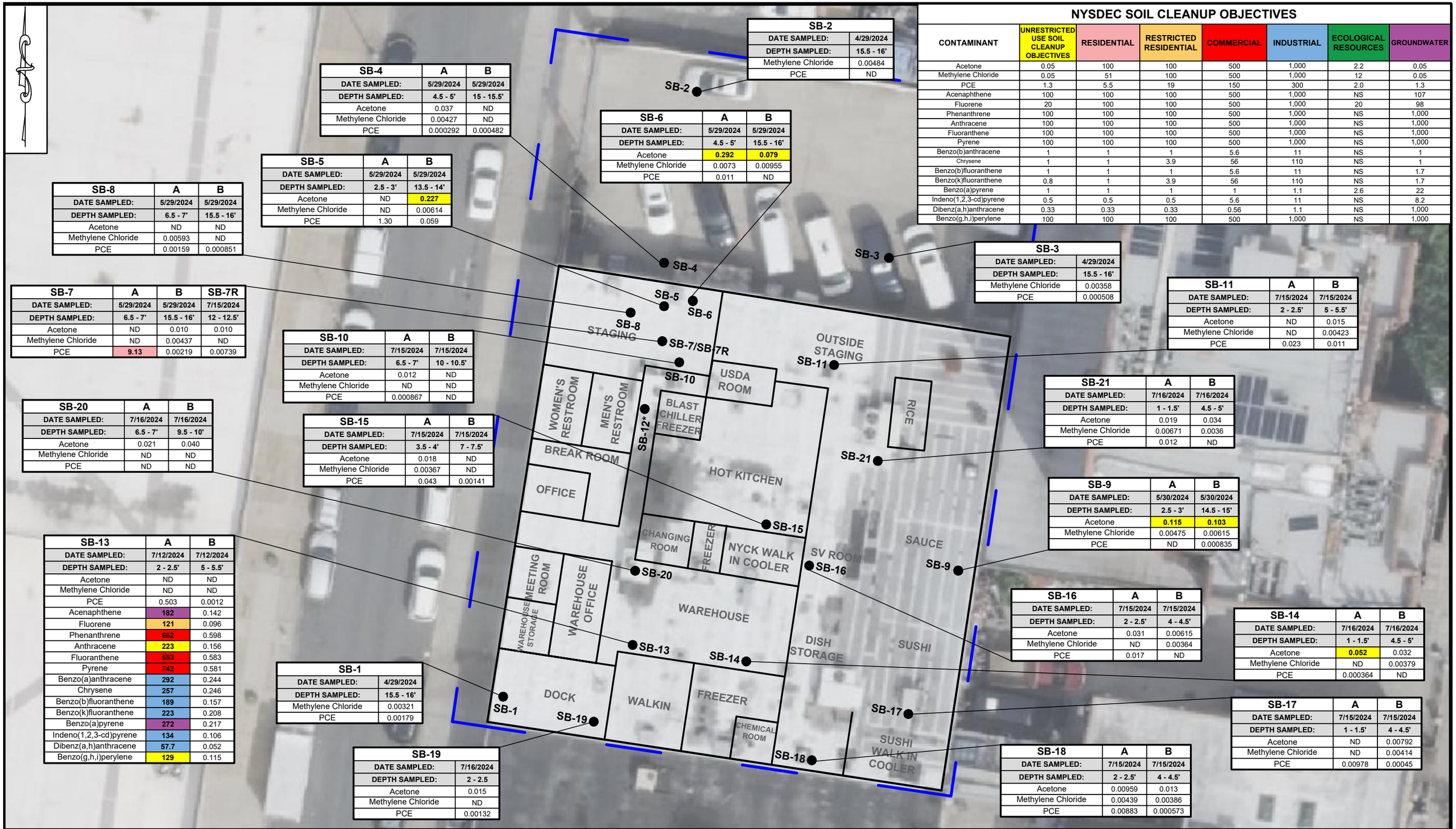
JS HELD

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48-55 36th Street
Long Island City, New York
Block: 236, Lot: 20

Figure 1
Site Location Map

J.S. Held, LLC
5 Marine View Plaza, Suite 401
Hoboken, New Jersey



SB-2	
DATE SAMPLED:	4/29/2024
DEPTH SAMPLED:	15.5 - 16'
Methylene Chloride	0.00484
PCE	ND

SB-4	A	B
DATE SAMPLED:	5/29/2024	5/29/2024
DEPTH SAMPLED:	4.5 - 5'	15 - 15.5'
Acetone	0.037	ND
Methylene Chloride	0.00427	ND
PCE	0.000292	0.000482

SB-6	A	B
DATE SAMPLED:	5/29/2024	5/29/2024
DEPTH SAMPLED:	4.5 - 5'	15.5 - 16'
Acetone	0.292	0.079
Methylene Chloride	0.0073	0.00955
PCE	0.011	ND

SB-5	A	B
DATE SAMPLED:	5/29/2024	5/29/2024
DEPTH SAMPLED:	2.5 - 3'	13.5 - 14'
Acetone	ND	0.227
Methylene Chloride	ND	0.00614
PCE	1.30	0.059

SB-8	A	B
DATE SAMPLED:	5/29/2024	5/29/2024
DEPTH SAMPLED:	6.5 - 7'	15.5 - 16'
Acetone	ND	ND
Methylene Chloride	0.00593	ND
PCE	0.00159	0.000851

SB-7	A	B	SB-7R
DATE SAMPLED:	5/29/2024	5/29/2024	7/15/2024
DEPTH SAMPLED:	6.5 - 7'	15.5 - 16'	12 - 12.5'
Acetone	ND	0.010	0.010
Methylene Chloride	ND	0.00437	ND
PCE	9.13	0.00219	0.00739

SB-10	A	B
DATE SAMPLED:	7/15/2024	7/15/2024
DEPTH SAMPLED:	6.5 - 7'	10 - 10.5'
Acetone	0.012	ND
Methylene Chloride	ND	ND
PCE	0.000867	ND

SB-20	A	B
DATE SAMPLED:	7/16/2024	7/16/2024
DEPTH SAMPLED:	6.5 - 7'	9.5 - 10'
Acetone	0.021	0.040
Methylene Chloride	ND	ND
PCE	ND	ND

SB-15	A	B
DATE SAMPLED:	7/15/2024	7/15/2024
DEPTH SAMPLED:	3.5 - 4'	7 - 7.5'
Acetone	0.018	ND
Methylene Chloride	0.00367	ND
PCE	0.043	0.00141

SB-13	A	B
DATE SAMPLED:	7/12/2024	7/12/2024
DEPTH SAMPLED:	2 - 2.5'	5 - 5.5'
Acetone	ND	ND
Methylene Chloride	ND	ND
PCE	0.503	0.0012
Acenaphthene	182	0.142
Fluorene	121	0.096
Phenanthrene	662	0.598
Anthracene	223	0.156
Fluoranthene	553	0.583
Pyrene	742	0.581
Benzo(a)anthracene	292	0.244
Chrysene	257	0.246
Benzo(b)fluoranthene	189	0.157
Benzo(k)fluoranthene	223	0.208
Benzo(a)pyrene	272	0.217
Indeno(1,2,3-cd)pyrene	134	0.106
Dibenz(a,h)anthracene	57.7	0.052
Benzo(g,h,i)perylene	129	0.115

SB-1	
DATE SAMPLED:	4/29/2024
DEPTH SAMPLED:	15.5 - 16'
Methylene Chloride	0.00321
PCE	0.00179

SB-19	
DATE SAMPLED:	7/16/2024
DEPTH SAMPLED:	2 - 2.5
Acetone	0.015
Methylene Chloride	ND
PCE	0.00132

SB-3	
DATE SAMPLED:	4/29/2024
DEPTH SAMPLED:	15.5 - 16'
Methylene Chloride	0.00358
PCE	0.000508

SB-11	A	B
DATE SAMPLED:	7/15/2024	7/15/2024
DEPTH SAMPLED:	2 - 2.5'	5 - 5.5'
Acetone	ND	0.015
Methylene Chloride	ND	0.00423
PCE	0.023	0.011

SB-21	A	B
DATE SAMPLED:	7/16/2024	7/16/2024
DEPTH SAMPLED:	1 - 1.5'	4.5 - 5'
Acetone	0.019	0.034
Methylene Chloride	0.00671	0.0036
PCE	0.012	ND

SB-9	A	B
DATE SAMPLED:	5/30/2024	5/30/2024
DEPTH SAMPLED:	2.5 - 3'	14.5 - 15'
Acetone	0.115	0.103
Methylene Chloride	0.00475	0.00615
PCE	ND	0.000835

SB-16	A	B
DATE SAMPLED:	7/15/2024	7/15/2024
DEPTH SAMPLED:	2 - 2.5'	4 - 4.5'
Acetone	0.031	0.00615
Methylene Chloride	ND	0.00364
PCE	0.017	ND

SB-14	A	B
DATE SAMPLED:	7/16/2024	7/16/2024
DEPTH SAMPLED:	1 - 1.5'	4.5 - 5'
Acetone	0.052	0.032
Methylene Chloride	ND	0.00379
PCE	0.000364	ND

SB-17	A	B
DATE SAMPLED:	7/15/2024	7/15/2024
DEPTH SAMPLED:	1 - 1.5'	4 - 4.5'
Acetone	ND	0.00792
Methylene Chloride	ND	0.00414
PCE	0.00978	0.00045

SB-18	A	B
DATE SAMPLED:	7/15/2024	7/15/2024
DEPTH SAMPLED:	2 - 2.5'	4 - 4.5'
Acetone	0.00959	0.013
Methylene Chloride	0.00439	0.00386
PCE	0.00883	0.000573

NYSDEC SOIL CLEANUP OBJECTIVES

CONTAMINANT	UNRESTRICTED USE SOIL CLEANUP OBJECTIVES	RESIDENTIAL	RESTRICTED RESIDENTIAL	COMMERCIAL	INDUSTRIAL	ECOLOGICAL RESOURCES	GROUNDWATER
Acetone	0.05	100	100	500	1,000	2.2	0.05
Methylene Chloride	0.05	51	100	500	1,000	12	0.05
PCE	1.3	5.5	19	150	300	2.0	1.3
Acenaphthene	100	100	100	500	1,000	NS	107
Fluorene	20	100	100	500	1,000	20	98
Phenanthrene	100	100	100	500	1,000	NS	1,000
Anthracene	100	100	100	500	1,000	NS	1,000
Fluoranthene	100	100	100	500	1,000	NS	1,000
Pyrene	100	100	100	500	1,000	NS	1,000
Benzo(b)anthracene	1	1	1	5.6	11	NS	1
Chrysene	1	1	3.9	56	110	NS	1
Benzo(b)fluoranthene	1	1	1	5.6	11	NS	1.7
Benzo(k)fluoranthene	0.8	1	3.9	56	110	NS	1.7
Benzo(a)pyrene	1	1	1	1	1.1	2.6	22
Indeno(1,2,3-cd)pyrene	0.5	0.5	0.5	5.6	11	NS	8.2
Dibenz(a,h)anthracene	0.33	0.33	0.33	0.56	1.1	NS	1,000
Benzo(g,h,i)perylene	100	100	100	500	1,000	NS	1,000

SOURCE:
NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF GEOGRAPHIC INFORMATION SYSTEMS DATA

0' 20' 40'
SCALE: 1" = 20'

LEGEND:

- SITE BOUNDARY
- SOIL SAMPLE LOCATION

*NO SAMPLE COLLECTED FROM SB-12 DUE TO REFUSAL WHICH WAS ENCOUNTERED AT 5' BGS

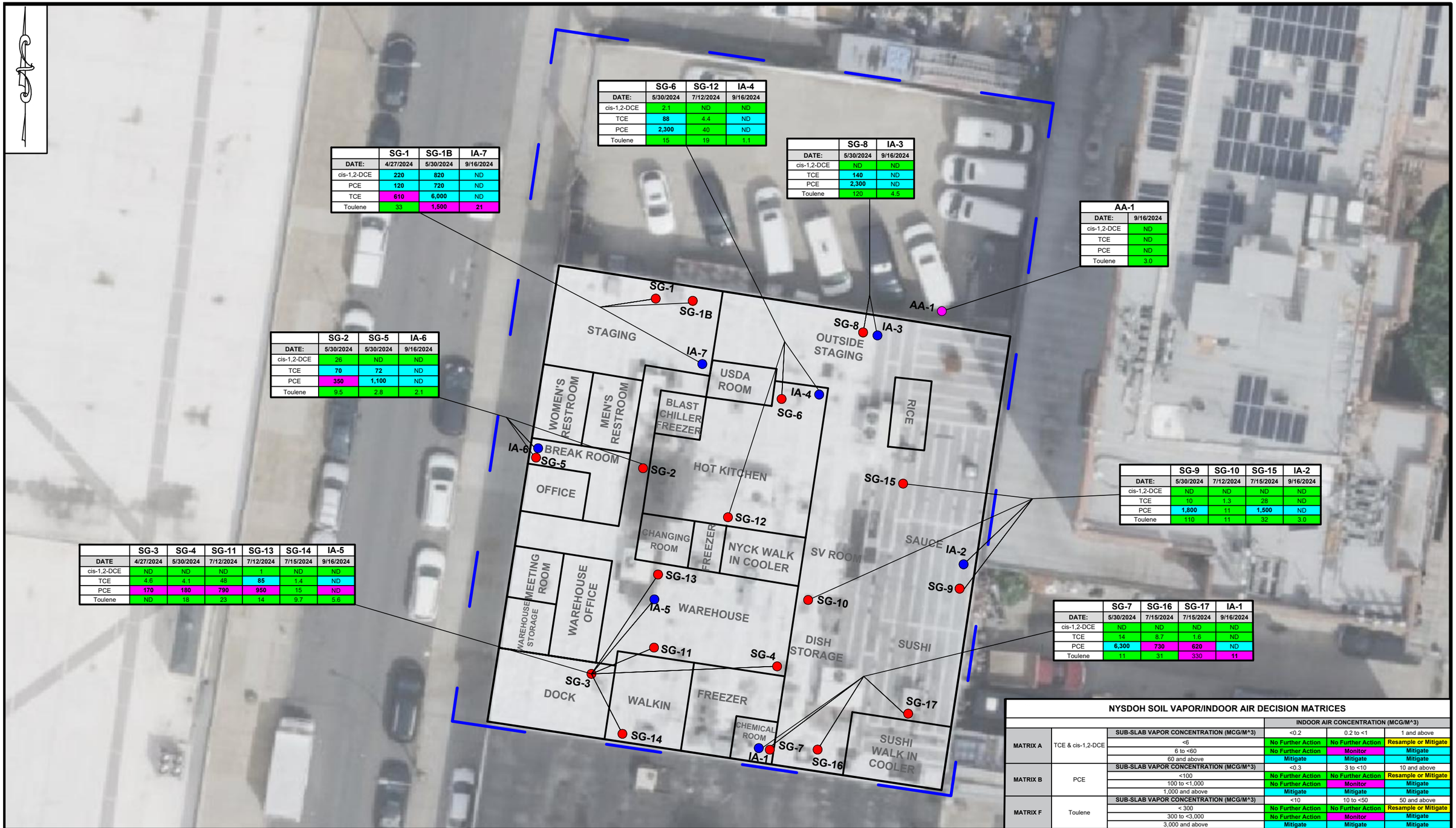
*ALL SAMPLE RESULTS MEASURED IN PARTS PER MILLION (PPM)
*PCE = TETRACHLOROETHENE
*VOCs = VOLATILE ORGANIC COMPOUNDS
*ND = NON-DETECT
*NS = NO STANDARD

JS|HELD
5 MARINE VIEW PLAZA
HOBOKEN, NJ 07030

BLOCK: 236, LOT: 20
48 - 55 36TH STREET
LONG ISLAND CITY, NEW YORK

FIGURE 2 - SOIL SAMPLE LOCATIONS AND RESULTS MAP

JSH JOB #	DRAWN	CHECKED	APPROVED	DATE
240302017	MM/SV	BN	LD	7/24/2024



	SG-1	SG-1B	IA-7
DATE:	4/27/2024	5/30/2024	9/16/2024
cis-1,2-DCE	220	820	ND
PCE	120	720	ND
TCE	610	6,000	ND
Toulene	33	1,500	21

	SG-6	SG-12	IA-4
DATE:	5/30/2024	7/12/2024	9/16/2024
cis-1,2-DCE	2.1	ND	ND
TCE	88	4.4	ND
PCE	2,300	40	ND
Toulene	15	19	1.1

	SG-8	IA-3
DATE:	5/30/2024	9/16/2024
cis-1,2-DCE	ND	ND
TCE	140	ND
PCE	2,300	ND
Toulene	120	4.5

AA-1	
DATE:	9/16/2024
cis-1,2-DCE	ND
TCE	ND
PCE	ND
Toulene	3.0

	SG-2	SG-5	IA-6
DATE:	5/30/2024	5/30/2024	9/16/2024
cis-1,2-DCE	26	ND	ND
TCE	70	72	ND
PCE	350	1,100	ND
Toulene	9.5	2.8	2.1

	SG-9	SG-10	SG-15	IA-2
DATE:	5/30/2024	7/12/2024	7/15/2024	9/16/2024
cis-1,2-DCE	ND	ND	ND	ND
TCE	10	1.3	28	ND
PCE	1,800	11	1,500	ND
Toulene	110	11	32	3.0

	SG-3	SG-4	SG-11	SG-13	SG-14	IA-5
DATE	4/27/2024	5/30/2024	7/12/2024	7/12/2024	7/15/2024	9/16/2024
cis-1,2-DCE	ND	ND	ND	1	ND	ND
TCE	4.6	4.1	48	85	1.4	ND
PCE	170	180	790	950	15	ND
Toulene	ND	18	23	14	9.7	5.6

	SG-7	SG-16	SG-17	IA-1
DATE:	5/30/2024	7/15/2024	7/15/2024	9/16/2024
cis-1,2-DCE	ND	ND	ND	ND
TCE	14	8.7	1.6	ND
PCE	6,300	730	620	ND
Toulene	11	31	330	11

NYSDOH SOIL VAPOR/INDOOR AIR DECISION MATRICES

			INDOOR AIR CONCENTRATION (MCG/M^3)		
MATRIX A	TCE & cis-1,2-DCE	SUB-SLAB VAPOR CONCENTRATION (MCG/M^3)	<0.2	0.2 to <1	1 and above
		<6	No Further Action	No Further Action	Resample or Mitigate
		6 to <60	No Further Action	Monitor	Mitigate
		60 and above	Mitigate	Mitigate	Mitigate
MATRIX B	PCE	SUB-SLAB VAPOR CONCENTRATION (MCG/M^3)	<0.3	3 to <10	10 and above
		<100	No Further Action	No Further Action	Resample or Mitigate
		100 to <1,000	No Further Action	Monitor	Mitigate
		1,000 and above	Mitigate	Mitigate	Mitigate
MATRIX F	Toulene	SUB-SLAB VAPOR CONCENTRATION (MCG/M^3)	<10	10 to <50	50 and above
		< 300	No Further Action	No Further Action	Resample or Mitigate
		300 to <3,000	No Further Action	Monitor	Mitigate
		3,000 and above	Mitigate	Mitigate	Mitigate

SOURCE:
NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF GEOGRAPHIC INFORMATION SYSTEMS DATA

0' 20' 40'
SCALE: 1" = 20'

LEGEND:

- SITE BOUNDARY
- SOIL GAS SAMPLE LOCATION
- INDOOR AIR LOCATION
- AMBIENT AIR LOCATION

**ALL SAMPLE RESULTS MEASURED IN MICROGRAMS PER METERES CUBED (UG/M^3)*
**PCE = TETRACHLOROETHENE*
**TCE = TRICHLOROETHENE*
**ND = NON-DETECT*
**NS = NO STANDARD*

JS|HELD
5 MARINE VIEW PLAZA
HOBOKEN, NJ 07030

BLOCK: 236, LOT: 20
48 - 55 36TH STREET
LONG ISLAND CITY, NEW YORK

FIGURE 3
SOIL GAS & INDOOR AIR RESULTS MAP

JSH JOB #	DRAWN	CHECKED	APPROVED	DATE
240302017	MM/SV	BN	LD	10/2/2024

TABLES



Table 1 - Analytical Results
April 2024 Soil Investigation
48-55 36th Street
Long Island City, Queens, NY

Sample #:		Part 375-6.8(a)	Part 375-6.8(b) Restricted Use Soil Cleanup Objectives						SB-1				SB-2				SB-3			
Field ID:		Unrestricted Use	Protection of																	
Lab ID:		Soil Cleanup	Public Health				Ecological	Groundwater	01488-001				01488-002				01488-003			
Date Sampled:		Objectives	Residential	Restricted Residential	Commercial	Industrial	Resources		04/29/2024				04/29/2024				04/29/2024			
Depth(ft):	CAS	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)												
Volatiles (mg/Kg)									**Conc**	**Q**	**RL**	**MDL**	**Conc**	**Q**	**RL**	**MDL**	**Conc**	**Q**	**RL**	**MDL**
Dichlorodifluoromethane	75-71-8	NS	NS	NS	NS	NS	NS	NS	ND		0.00102	0.000529	ND		0.00102	0.000529	ND		0.00099	0.000514
Chloromethane	74-87-3	NS	NS	NS	NS	NS	NS	NS	ND		0.00102	0.000323	ND		0.00102	0.000323	ND		0.00099	0.000314
Vinyl chloride	75-01-4	0.02	0.21	0.9	13	27	NS	0.02	ND		0.00102	0.00033	ND		0.00102	0.00033	ND		0.00099	0.000321
Bromomethane	74-83-9	NS	NS	NS	NS	NS	NS	NS	ND		0.00102	0.000889	ND		0.00102	0.000889	ND		0.00099	0.000863
Chloroethane	75-00-3	NS	NS	NS	NS	NS	NS	1.9	ND		0.00102	0.000303	ND		0.00102	0.000303	ND		0.00099	0.000294
Trichlorofluoromethane	75-69-4	NS	NS	NS	NS	NS	NS	NS	ND		0.00102	0.000414	ND		0.00102	0.000414	ND		0.00099	0.000402
1,1-Dichloroethene	75-35-4	0.33	100	100	500	1000	NS	0.33	ND		0.00102	0.000357	ND		0.00102	0.000357	ND		0.00099	0.000347
Acetone	67-64-1	0.05	100	100	500	1000	2.2	0.05	ND		0.010	0.0051	ND		0.010	0.0051	ND		0.0099	0.00495
Carbon disulfide	75-15-0	NS	100	NS	NS	NS	NS	2.7	ND		0.00102	0.000401	ND		0.00102	0.000401	ND		0.00099	0.000389
Methylene chloride	75-09-2	0.05	51	100	500	1000	12	0.05	0.00321	CJ	0.0051	0.00306	0.00484	C	0.0051	0.00306	0.00358	C	0.00495	0.00297
trans-1,2-Dichloroethene	156-60-5	0.19	100	100	500	1000	NS	0.19	ND		0.00102	0.000361	ND		0.00102	0.000361	ND		0.00099	0.00035
Methyl tert-butyl ether (MTBE)	1634-04-4	0.93	62	100	500	1000	NS	0.93	ND		0.00102	0.000222	ND		0.00102	0.000222	ND		0.00099	0.000216
1,1-Dichloroethane	75-34-3	0.27	19	26	240	480	NS	0.27	ND		0.00102	0.00026	ND		0.00102	0.00026	ND		0.00099	0.000252
cis-1,2-Dichloroethene	156-59-2	0.25	59	100	500	1000	NS	0.25	ND		0.00102	0.000218	ND		0.00102	0.000218	ND		0.00099	0.000212
2-Butanone (MEK)	78-93-3	0.12	100	100	500	1000	100	0.3	ND		0.00408	0.00204	ND		0.00408	0.00204	ND		0.00396	0.00198
Bromochloromethane	74-97-5	NS	NS	NS	NS	NS	NS	NS	ND		0.00102	0.000259	ND		0.00102	0.000259	ND		0.00099	0.000251
Chloroform	67-66-3	0.37	10	49	350	700	12	0.37	ND		0.00102	0.00051	ND		0.00102	0.00051	ND		0.00099	0.000495
1,1,1-Trichloroethane	71-55-6	0.68	100	100	500	1000	NS	0.68	ND		0.00102	0.000313	ND		0.00102	0.000313	ND		0.00099	0.000304
Carbon tetrachloride	56-23-5	0.76	1.4	2.4	22	44	NS	0.76	ND		0.00102	0.000204	ND		0.00102	0.000204	ND		0.00099	0.000198
1,2-Dichloroethane (EDC)	107-06-2	0.02	2.3	3.1	30	60	10	0.02	ND		0.00102	0.000236	ND		0.00102	0.000236	ND		0.00099	0.000229
Benzene	71-43-2	0.06	2.9	4.8	44	89	70	0.06	ND		0.00102	0.000251	ND		0.00102	0.000251	ND		0.00099	0.000244
Trichloroethene	79-01-6	0.47	10	21	200	400	2	0.47	ND		0.00102	0.000152	ND		0.00102	0.000152	ND		0.00099	0.000148
1,2-Dichloropropane	78-87-5	NS	NS	NS	NS	NS	700	NS	ND		0.00102	0.000242	ND		0.00102	0.000242	ND		0.00099	0.000235
Bromodichloromethane	75-27-4	NS	NS	NS	NS	NS	NS	NS	ND		0.00102	0.000121	ND		0.00102	0.000121	ND		0.00099	0.000118
cis-1,3-Dichloropropene	10061-01-5	NS	NS	NS	NS	NS	NS	NS	ND		0.00102	0.000156	ND		0.00102	0.000156	ND		0.00099	0.000151
4-Methyl-2-pentanone (MIBK)	108-10-1	NS	NS	NS	NS	NS	NS	1	ND		0.00204	0.000533	ND		0.00204	0.000533	ND		0.00198	0.000518
Toluene	108-88-3	0.7	100	100	500	1000	36	0.7	ND		0.00102	0.00051	ND		0.00102	0.00051	ND		0.00099	0.000495
trans-1,3-Dichloropropene	10061-02-6	NS	NS	NS	NS	NS	NS	NS	ND		0.00102	0.000324	ND		0.00102	0.000324	ND		0.00099	0.000315
1,1,2-Trichloroethane	79-00-5	NS	NS	NS	NS	NS	NS	NS	ND		0.00102	0.000218	ND		0.00102	0.000218	ND		0.00099	0.000212
Tetrachloroethene	127-18-4	1.3	5.5	19	150	300	2	1.3	0.00179		0.00102	0.000322	ND		0.00102	0.000322	0.000508	J	0.00099	0.000313
2-Hexanone	591-78-6	NS	NS	NS	NS	NS	NS	NS	ND		0.00204	0.00156	ND		0.00204	0.00156	ND		0.00198	0.00152
Dibromochloromethane	124-48-1	NS	NS	NS	NS	NS	10	NS	ND		0.00102	0.000169	ND		0.00102	0.000169	ND		0.00099	0.000164
1,2-Dibromoethane (EDB)	106-93-4	NS	NS	NS	NS	NS	NS	NS	ND		0.00102	0.000189	ND		0.00102	0.000189	ND		0.00099	0.000183
Chlorobenzene	108-90-7	1.1	100	100	500	1000	40	1.1	ND		0.00102	0.000176	ND		0.00102	0.000176	ND		0.00099	0.000171
Ethylbenzene	100-41-4	1	30	41	390	780	NS	1	ND		0.00102	0.000258	ND		0.00102	0.000258	ND		0.00099	0.00025
Total Xylenes	1330-20-7	0.26	100	100	500	1000	0.26	1.6	ND		0.00204	0.000143	ND		0.00204	0.000143	ND		0.00198	0.000139
Styrene	100-42-5	NS	NS	NS	NS	NS	300	NS	ND		0.00102	0.000219	ND		0.00102	0.000219	ND		0.00099	0.000213
Bromoform	75-25-2	NS	NS	NS	NS	NS	NS	NS	ND		0.00102	0.000317	ND		0.00102	0.000317	ND		0.00099	0.000308
Isopropylbenzene	98-82-8	NS	100	NS	NS	NS	NS	2.3	ND		0.00102	0.000217	ND		0.00102	0.000217	ND		0.00099	0.000211
1,1,2,2-Tetrachloroethane	79-34-5	NS	35	NS	NS	NS	NS	0.6	ND		0.00102	0.000242	ND		0.00102	0.000242	ND		0.00099	0.000235
1,3-Dichlorobenzene	541-73-1	2.4	17	49	280	560	NS	2.4	ND		0.00102	0.00027	ND		0.00102	0.00027	ND		0.00099	0.000262
1,4-Dichlorobenzene	106-46-7	1.8	9.8	13	130	250	20	1.8	ND		0.00102	0.000316	ND		0.00102	0.000316	ND		0.00099	0.000307
1,2-Dichlorobenzene	95-50-1	1.1	100	100	500	1000	NS	1.1	ND		0.00102	0.000256	ND		0.00102	0.000256	ND		0.00099	0.000248
1,2-Dibromo-3-chloropropane	96-12-8	NS	NS	NS	NS	NS	NS	NS	ND		0.00102	0.00084	ND		0.00102	0.00084	ND		0.00099	0.000816
1,2,4-Trichlorobenzene	120-82-1	NS	NS	NS	NS	NS	20	NS	ND		0.00102	0.000428	ND		0.00102	0.000428	ND		0.00099	0.000416
1,2,3-Trichlorobenzene	87-61-6	NS	NS	NS	NS	NS	20	NS	ND		0.00102	0.000324	ND		0.00102	0.000324	ND		0.00099	0.000315
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	NS	100	NS	NS	NS	NS	6	ND		0.00102	0.000609	ND		0.00102	0.000609	ND		0.00099	0.000591
Methyl acetate	79-20-9	NS	NS	NS	NS	NS	NS	NS	ND		0.0051	0.000824	ND		0.0051	0.000824	ND		0.00495	0.0008
Cyclohexane	110-82-7	NS	NS	NS	NS	NS	NS	NS	ND		0.00102	0.000565	ND		0.00102	0.000565	ND		0.00099	0.000548
Methylcyclohexane	108-87-2	NS	NS	NS	NS	NS	NS	NS	ND		0.00102	0.000375	ND		0.00102	0.000375	ND		0.00099	0.000364
1,3-Dichloropropene (cis- and trans-)	542-75-6	NS	NS	NS	NS	NS	NS	NS	ND		0.00102	0.000156	ND		0.00102	0.000156	ND		0.00099	0.000151
TOTAL VO's:		NS	NS	NS	NS	NS	NS	NS	0.005	CJ		NA	0.00484	C		NA	0.00409	CJ		NA
TOTAL TIC's:		NS	NS	NS	NS	NS	NS	NS	ND			NA	ND			NA	ND			NA
TOTAL VO's & TIC's:		NS	NS	NS	NS	NS	NS	NS	0.005	CJ		NA	0.00484	C		NA	0.00409	CJ		NA

6NYCRR Part 375-6.8(a) Unrestricted Use Soil Cleanup Objectives & NYCRR Part 375-6.8(b) Restricted Use Soil Cleanup Objectives December 2006

BOLD Conc Indicates a concentration that exceeds applicable criteria.
BOLD RL Indicates RL that exceeds applicable criteria.
BOLD MDL Indicates MDL that exceeds applicable criteria.
NS = No Standard Available
ND = Analyzed for but Not Detected at the MDL
C = Common Laboratory and/or Bottle Contaminant.
All qualifiers on individual Volatiles & Semivolatiles are carried down through summation.
J = Indicates an estimated value either when the concentration in the sample is greater than MDL and less than RL, or for qualification of TICs

Table 2 - Analytical Results
April 2024 Soil Gas Investigation
48-55 36th Street
Long Island City, Queens, NY

Sample Name:		SG-1			SG-2			SG-3			SG-4		
Lab ID:		E24-01487-01			E24-01487-02			E24-01487-03			E24-01487-04		
Date Sampled:		04/27/2024			04/27/2024			04/27/2024			04/27/2024		
			Conc	RL		Conc	RL		Conc	RL		Conc	RL
Compound	CAS	Q	ug/m3	ug/m3	Q	ug/m3	ug/m3	Q	ug/m3	ug/m3	Q	ug/m3	ug/m3
Acetone	67-64-1		87	0.48		22	0.48		18	0.48		61	0.48
Benzene	71-43-2		1.7	0.64		2.1	0.64		0.72	0.64		1.4	0.64
Bromodichloromethane	75-27-4		ND	1.3		ND	1.3		ND	1.3		ND	1.3
Bromoform	75-25-2		ND	2.1		ND	2.1		ND	2.1		ND	2.1
Bromomethane	74-83-9		ND	0.78		ND	0.78		ND	0.78		ND	0.78
1,3-Butadiene	106-99-0		ND	0.44		ND	0.44		ND	0.44		ND	0.44
Chlorobenzene	108-90-7		ND	0.92		ND	0.92		ND	0.92		ND	0.92
Chloroethane	75-00-3		ND	0.53		ND	0.53		ND	0.53		ND	0.53
Chloroform	67-66-3		4.4	0.98		4.4	0.98		ND	0.98		1.9	0.98
Chloromethane	74-87-3		ND	0.41		ND	0.41		ND	0.41		ND	0.41
Carbon disulfide	75-15-0		1.7	0.62		4.8	0.62		ND	0.62		ND	0.62
Carbon tetrachloride	56-23-5		ND	0.25		ND	0.25		ND	0.25		ND	0.25
Cyclohexane	110-82-7		ND	0.69		0.81	0.69		ND	0.69		ND	0.69
Dibromochloromethane	124-48-1		ND	1.7		ND	1.7		ND	1.7		ND	1.7
1,2-Dibromoethane	106-93-4		ND	1.5		ND	1.5		ND	1.5		ND	1.5
1,2-Dichlorobenzene	95-50-1		ND	1.2		ND	1.2		ND	1.2		ND	1.2
1,3-Dichlorobenzene	541-73-1		ND	1.2		ND	1.2		ND	1.2		ND	1.2
1,4-Dichlorobenzene	106-46-7		ND	1.2		ND	1.2		ND	1.2		ND	1.2
Dichlorodifluoromethane	75-71-8		ND	0.99		ND	0.99		ND	0.99		ND	0.99
1,1-Dichloroethane	75-34-3		ND	0.81		ND	0.81		ND	0.81		ND	0.81
1,2-Dichloroethane	107-06-2		ND	0.81		ND	0.81		ND	0.81		ND	0.81
1,1-Dichloroethene	75-35-4		ND	0.79		ND	0.79		ND	0.79		ND	0.79
1,2-Dichloroethene (cis)	156-59-2	D	220	4.0		26	0.79		ND	0.79		ND	0.79
1,2-Dichloroethene (trans)	156-60-5		4.6	0.79		1.5	0.79		ND	0.79		ND	0.79
1,2-Dichloropropane	78-87-5		ND	0.92		ND	0.92		ND	0.92		ND	0.92
1,3-Dichloropropene (cis)	10061-01-5		ND	0.91		ND	0.91		ND	0.91		ND	0.91
1,3-Dichloropropene (trans)	10061-02-6		ND	0.91		ND	0.91		ND	0.91		ND	0.91
1,3-Dichloropropene - TOTAL	542-75-6		ND	0.91		ND	0.91		ND	0.91		ND	0.91
1,2-Dichlorotetrafluoroethane	76-14-2		ND	1.4		ND	1.4		ND	1.4		ND	1.4
1,4-Dioxane	123-91-1		ND	0.72		ND	0.72		ND	0.72		ND	0.72
Ethylbenzene	100-41-4		ND	0.87		ND	0.87		ND	0.87		ND	0.87
n-Heptane	142-82-5		1.3	0.82		ND	0.82		ND	0.82		ND	0.82
1,3-Hexachlorobutadiene	87-68-3		ND	2.1		ND	2.1		ND	2.1		ND	2.1
n-Hexane	110-54-3		1.1	0.70		ND	0.70		ND	0.70		ND	0.70
Methylene chloride	75-09-2		ND	0.69		4.6	0.69		ND	0.69		ND	0.69
Methyl ethyl ketone	78-93-3		5.5	0.59		1.9	0.59		2.8	0.59		3.6	0.59
Methyl isobutyl ketone	108-10-1		1.8	0.82		ND	0.82		ND	0.82		ND	0.82
Methyl tert-butyl ether	1634-04-4		ND	0.72		ND	0.72		ND	0.72		ND	0.72
Styrene	100-42-5		ND	0.85		ND	0.85		ND	0.85		ND	0.85
Tert-butyl alcohol	75-65-0		1.2	0.61		ND	0.61		ND	0.61		ND	0.61
1,1,2,2-Tetrachloroethane	79-34-5		ND	1.4		ND	1.4		ND	1.4		ND	1.4
Tetrachloroethene	127-18-4	D	610	6.8	D	350	2.7		170	1.4		190	1.4
Toluene	108-88-3		33	0.75		9.5	0.75		ND	0.75		18	0.75
1,2,4-Trichlorobenzene	120-82-1		ND	1.5		ND	1.5		ND	1.5		ND	1.5
1,1,1-Trichloroethane	71-55-6		ND	1.1		ND	1.1		ND	1.1		ND	1.1
1,1,2-Trichloroethane	79-00-5		ND	1.1		ND	1.1		ND	1.1		ND	1.1
Trichloroethene	79-01-6		120	0.25		70	0.25		4.6	0.25		4.1	0.25
Trichlorofluoromethane	75-69-4		1.7	1.1		1.8	1.1		ND	1.1		ND	1.1
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1		ND	1.5		ND	1.5		ND	1.5		ND	1.5
1,2,4-Trimethylbenzene	95-63-6		ND	0.98		ND	0.98		ND	0.98		ND	0.98
1,3,5-Trimethylbenzene	108-67-8		ND	0.98		ND	0.98		ND	0.98		ND	0.98
2,2,4-Trimethylpentane	540-84-1		ND	0.93		ND	0.93		ND	0.93		ND	0.93
Vinyl bromide	593-60-2		ND	0.87		ND	0.87		ND	0.87		ND	0.87
Vinyl chloride	75-01-4		ND	0.51		ND	0.51		ND	0.51		ND	0.51
Xylenes (m&p)	179601-23-1		1.5	0.87		1.4	0.87		ND	0.87		2.0	0.87
Xylenes (o)	95-47-6		ND	0.87		ND	0.87		ND	0.87		ND	0.87
Xylenes - TOTAL	1330-20-7		1.5	0.87		1.4	0.87		ND	0.87		2.0	0.87

ND = Analyzed for but Not Detected at the RL

D = Extra dilution required for this compound

Table 3 - Analytical Results
May 2024 Soil Investigation
48-55 36th Street
Long Island City, Queens, NY

Sample #:		Part 375-6.8(a) Unrestricted Use Soil Cleanup Objectives	Part 375-6.8(b) Restricted Use Soil Cleanup Objectives						SB-4A				SB-4B				SB-5A				SB-5B				SB-6A				SB-7A				SB-7B				SB-8A				SB-8B				SB-9A				SB-9B			
Field ID:									01666-001				01666-002				01666-003				01666-004				01666-005				01666-006				01666-007				01666-008				01666-009				01666-010				01673-991				01673-992			
Lab ID:									05/29/2024				05/29/2024				05/29/2024				05/29/2024				05/29/2024				05/29/2024				05/29/2024				05/29/2024				05/29/2024				05/30/2024				05/30/2024			
Date Sampled:									4.5/5				15/15.5				2.5/3				13.5/14				4/4.5				15.5/16				6/7				15.5/16				6.5/7				15.5/16				2.5/3				14.5/15			
Depth(ft):																																																			
	CAS								Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL
Volatiles (mg/Kg)																																																				
Dichlorodifluoromethane	75-71-8	NS	NS	NS	NS	NS	NS	NS	ND		0.00086	0.000446	ND		0.0011	0.000575	ND		0.171	0.191	ND		0.00109	0.000585	ND		0.00106	0.00055	ND		0.00155	0.000804	ND		0.107	0.063	ND		0.00101	0.000524	ND		0.00128	0.000664	ND		0.0009	0.000407	ND		0.00168	0.000468	ND		0.00258	0.00087	
Chloromethane	74-87-3	NS	NS	NS	NS	NS	NS	NS	ND		0.00086	0.000273	ND		0.0011	0.000349	ND		0.085	0.091	ND		0.00109	0.000346	ND		0.00106	0.000336	ND		0.00155	0.000491	ND		0.054	0.038	ND		0.00101	0.00032	ND		0.00128	0.000406	ND		0.0009	0.000285	ND		0.00094	0.000258	ND		0.00129	0.000409	
Vinyl chloride	75-01-4	0.02	0.21	0.9	13	27	NS	0.02	ND		0.00086	0.000279	ND		0.0011	0.000356	ND		0.085	0.064	ND		0.00109	0.000353	ND		0.00106	0.000343	ND		0.00155	0.000502	ND		0.054	0.040	ND		0.00101	0.000327	ND		0.00128	0.000415	ND		0.0009	0.000292	ND		0.00094	0.000265	ND		0.00129	0.000418	
Bromomethane	74-83-9	NS	NS	NS	NS	NS	NS	NS	ND		0.00086	0.00075	ND		0.0011	0.000959	ND		0.171	0.193	ND		0.00109	0.00095	ND		0.00106	0.000924	ND		0.00155	0.00135	ND		0.107	0.058	ND		0.00101	0.000881	ND		0.00128	0.00112	ND		0.0009	0.000785	ND		0.00168	0.00082	ND		0.00258	0.00112	
Chloroethane	75-00-3	NS	NS	NS	NS	NS	NS	NS	ND		0.00086	0.000255	ND		0.0011	0.000327	ND		0.085	0.067	ND		0.00109	0.000324	ND		0.00106	0.000315	ND		0.00155	0.00046	ND		0.054	0.042	ND		0.00101	0.0003	ND		0.00128	0.00038	ND		0.0009	0.000267	ND		0.00094	0.000279	ND		0.00129	0.000383	
Trichlorofluoromethane	75-69-4	NS	NS	NS	NS	NS	NS	NS	ND		0.00086	0.000349	ND		0.0011	0.000447	ND		0.171	0.185	ND		0.00109	0.000443	ND		0.00106	0.00043	ND		0.00155	0.000629	ND		0.107	0.053	ND		0.00101	0.00041	ND		0.00128	0.00052	ND		0.0009	0.000365	ND		0.00094	0.000382	ND		0.00129	0.000524	
1,1-Dichloroethene	75-35-4	0.33	100	100	100	500	1000	0.33	ND		0.00086	0.000301	ND		0.0011	0.000385	ND		0.085	0.072	ND		0.00109	0.000382	ND		0.00106	0.000371	ND		0.00155	0.000543	ND		0.054	0.045	ND		0.00101	0.000354	ND		0.00128	0.000448	ND		0.0009	0.000315	ND		0.00094	0.000329	ND		0.00129	0.000452	
Acetone	67-64-1	0.05	100	100	500	500	1000	2.2	0.037		0.0086	0.0043	ND		0.011	0.0055	ND		**0.342**	**0.105**	**0.247**		0.011	0.00545	**0.292**		0.011	0.0053	**3.079**		0.016	0.00775	ND		**0.214**	**0.063**	0.010		0.010	0.00505	ND		0.013	0.0064	ND		0.009	0.0045	**0.118**		0.0094	0.0047	**0.193**		0.013	0.00645	
Carbon disulfide	75-15-0	NS	100	NS	NS	NS	NS	2.7	ND		0.00086	0.000338	ND		0.0011	0.000432	ND		0.085	0.053	0.000735	J	0.00109	0.000426	ND		0.00106	0.000417	ND		0.00155	0.000609	ND		0.054	0.033	ND		0.00101	0.000397	ND		0.00128	0.000503	ND		0.0009	0.000354	ND		0.00168	0.000356	ND		0.00258	0.000507	
Methylene chloride	75-09-2	0.05	51	100	500	1000	12	0.05	0.00427	CJ	0.0043	0.00258	ND		0.0055	0.0033	ND		**0.171**	**0.085**	0.00614	C	0.00545	0.00327	0.0073	C	0.0053	0.00318	0.00855	C	0.00775	0.00465	ND		**0.107**	**0.054**	0.00437	CJ	0.00505	0.00303	0.00593	CJ	0.0064	0.00384	ND		0.0045	0.0027	0.00475	C	0.0047	0.00282	0.00615	CJ	0.00645	0.00387	
trans-1,2-Dichloroethene	156-60-5	0.19	100	100	500	1000	1000	0.19	ND		0.00086	0.000304	ND		0.0011	0.000389	ND		0.085	0.051	ND		0.00109	0.000386	ND		0.00106	0.000375	ND		0.00155	0.000549	ND		0.054	0.032	ND		0.00101	0.000358	ND		0.00128	0.000453	ND		0.0009	0.000319	ND		0.00094	0.000333	ND		0.00129	0.000457	
Methyl tert-butyl ether (MTBE)	1634-04-4	0.93	62	100	500	1000	NS	0.93	ND		0.00086	0.000187	ND		0.0011	0.00024	ND		0.085	0.051	ND		0.00109	0.000238	ND		0.00106	0.000231	ND		0.00155	0.000338	ND		0.054	0.032	ND		0.00101	0.00022	ND		0.00128	0.000279	ND		0.0009	0.000196	ND		0.00094	0.000205	ND		0.00129	0.000281	
1,1-Dichloroethane	75-34-3	0.27	19	26	240	480	NS	0.27	ND		0.00086	0.000319	ND		0.0011	0.000381	ND		0.085	0.051	ND		0.00109	0.000376	ND		0.00106	0.000367	ND		0.00155	0.000535	ND		0.054	0.032	ND		0.00101	0.000348	ND		0.00128	0.000393	ND		0.0009	0.00023	ND		0.00094	0.00024	ND		0.00129	0.000329	
cis-1,2-Dichloroethene	156-59-2	0.25	59	100	500	1000	NS	0.25	ND		0.00086	0.000184	ND		0.0011	0.000235	0.163		0.085	0.042	0.010		0.00109	0.000233	0.00233		0.00106	0.000227	ND		0.00155	0.000332	ND		0.054	0.027	0.0094	J	0.00101	0.000216	0.000447	J	0.00128	0.000274	ND		0.0009	0.000193	ND		0.00094	0.000201	ND		0.00129	0.000278	
2-Butanone (MEK)	78-93-3	0.12	100	100	500	1000	100	0.3	ND		0.0086	0.00172	ND		0.011	0.0022	ND		0.171	0.158	0.025		0.011	0.00218	0.00927	J	0.011	0.00212	ND		0.016	0.0031	ND		0.107	0.098	ND		0.010	0.00202	ND		0.013	0.00256	ND		0.009	0.0018	0.00352	J	0.0094	0.00188	ND		0.013	0.0028	
Bromochloromethane	74-97-5	NS	NS	NS	NS	NS	NS	NS	ND		0.00086	0.000218	ND		0.0011	0.000278	ND		0.085	0.057	ND		0.00109	0.000277	ND		0.00106	0.000269	ND		0.00155	0.000394	ND		0.054	0.035	ND		0.00101	0.000257	ND		0.00128	0.000325	ND		0.0009	0.000229	ND		0.00094	0.000239	ND		0.00129	0.000328	
Chloroform	67-66-3	0.37	10	49	350	700	12	0.37	ND		0.00086	0.00045	ND		0.0011	0.00055	ND		0.085	0.046	ND		0.00109	0.000545	ND		0.00106	0.00053	ND		0.00155	0.000775	ND		0.054	0.029	ND		0.00101	0.000503	ND		0.00128	0.00064	ND		0.0009	0.00045	ND		0.00094	0.00047	ND		0.00129	0.000645	
1,1,1-Trichloroethane	71-55-6	0.68	100	100	500	1000	NS	0.68	ND		0.00086	0.000264	ND		0.0011	0.000338	ND		0.085	0.051	ND		0.00109	0.000335	ND		0.00106	0.000325	ND		0.00155	0.000476	ND		0.054	0.032	ND		0.00101	0.00031	ND		0.00128	0.000393	ND		0.0009	0.000276	ND		0.00094	0.000289	ND		0.00129	0.000396	
Carbon tetrachloride	56-23-5	0.76	1.4	2.4	22	44	NS	0.76	ND		0.00086	0.000172	ND		0.0011	0.00022	ND		0.085	0.058	ND		0.00109	0.000218	ND		0.00106	0.000212	ND		0.00155	0.000301	ND		0.054	0.037	ND		0.00101	0.000202	ND		0.00128	0.000256	ND		0.0009	0.00018	ND		0.00094	0.000186	ND		0.00129	0.000258	
1,2-Dichloroethane (EDC)	107-06-2	0.02	2.3	3.1	30	60	10	0.02	ND		0.00086	0.000199	ND		0.0011	0.000254	ND		**0.085**	**0.051**	ND		0.00109	0.000252	ND		0.00106	0.000245	ND		0.00155	0.000358	ND		**0.054**	**0.032**	ND		0.00101	0.000233	ND		0.00128	0.000296	ND		0.0009	0.000208	ND		0.00094	0.000217	ND		0.00129	0.000298	
Benzene	71-43-2	0.06	2.9	4.8	44	89	70	0.06	ND		0.00086	0.000212	ND		0.0011	0.000271	ND		**0.085**	0.040	ND		0.00109	0.000269	ND		0.00106	0.000261	ND		0.00155	0.000381	ND		0.054	0.025	ND		0.00101	0.000248	ND		0.00128	0.000315	ND		0.0009	0.000221	ND		0.00094	0.000231	ND		0.00129	0.000317	
Trichloroethene	79-01-6	0.47	10	21	200	400	2	0.47	ND		0.00086	0.000128	ND		0.0011	0.000164	0.128		0.085	0.051	0.00578		0.00109	0.000162	0.00158		0.00106	0.000158	ND		0.00155	0.000231	0.124		0.054	0.032	0.000476	J	0.00101	0.00015	0.000421	J	0.00128	0.000191	0.002219	J	0.0009	0.000134	ND		0.00094	0.00014	ND		0.00129	0.000192	
1,2-Dichloropropane	78-87-5	NS	NS	NS	NS	NS	760	NS	ND		0.00086	0.000264	ND		0.0011	0.000381	ND		0.085	0.037	ND		0.00109	0.000268	ND		0.00106	0.000261	ND		0.00155	0.000367	ND		0.054	0.024	ND		0.00101	0.000232	ND		0.00128	0.000303	ND		0.0009	0.000213	ND		0.00094	0.000223	ND		0.00129	0.000306	
Bromodichloromethane	75-27-4	NS	NS	NS	NS	NS	NS	NS	ND		0.00086	0.000102	ND		0.0011	0.000131	ND		0.085	0.039	ND		0.00109	0.00013	ND		0.00106	0.000126	ND		0.00155	0.000184	ND		0.054	0.025	ND		0.00101	0.00012	ND		0.00128	0.000152	ND		0.0009	0.000107	ND		0.00094	0.000112	ND		0.00129	0.000154	
cis-1,3-Dichloropropene	10061-01-5	NS	NS	NS	NS	NS	NS	NS	ND		0.00086	0.000132	ND		0.0011	0.000168	ND		0.085	0.039	ND		0.00109	0.000167	ND		0.00106	0.000162	ND		0.00155	0.000237	ND		0.054	0.023	ND		0.00101	0.000153	ND		0.00128	0.000196	ND		0.0009	0.000138	ND		0.00094	0.000144	ND		0.00129	0.000197	
4-Methyl-2-pentanone (MIBK)	108-10-1	NS	NS	NS	NS	NS	1	NS	ND		0.00172	0.00045	ND		0.0022	0.000575	ND		0.171	0.087	ND		0.00218	0.00057	0.00229		0.00212	0.000554	ND		0.0031	0.000811	ND		0.107	0.055	ND		0.00202	0.000528	ND		0.00256	0.000669	ND		0.0018	0.000471	ND		0.00188	0.000492	ND		0.00258	0.000675	
Toluene	108-88-3	0.7	100	100	500	1000	36	0.7	ND		0.00086	0.00043	ND		0.0011	0.00055	0.102		0.085	0.042	0.00242		0.00109	0.000545	0.00865		0.00106	0.00053	ND		0.00155	0.000775	ND		0.054	0.026	ND		0.00101	0.000505	ND		0.00128	0.00064	ND		0.0009	0.00045	ND		0.00094	0.00047	ND		0.00129	0.000645	
trans-1,3-Dichloropropene	10061-02-6	NS	NS	NS	NS	NS	NS	NS	ND		0.00086	0.000273	ND		0.0011	0.00035	ND		0.085	0.043	ND		0.00109	0.000347	ND		0.00106	0.000337	ND		0.00155	0.000463	ND		0.054	0.027	ND		0.00101	0.000321	ND		0.00128	0.000407	ND		0.0009	0.000286	ND		0.00094	0.000299	ND		0.00129	0.00041	
1,1,2-Trichloroethane	79-00-5	NS	NS	NS	NS	NS	NS	NS	ND		0.00086	0.000184	ND		0.0011	0.000235	ND		0.085	0.039	ND		0.00109	0.000233	ND		0.00106	0.000227	ND		0.00155	0.000332	ND		0.054	0.024	ND		0.00101	0.000216	ND		0.00128	0.000274	ND		0.0009	0.000193	ND		0.00094	0.000201	ND		0.00129	0.000275	
Tetrachloroethene	127-18-4	1.3	5.5	19	150	300	2	1.3	0.000292	J	0.00086	0.000272	0.000482	J	0.0011	0.000348	1.30		0.085	0.065	0.059		0.00109	0.000344	0.011		0.00106	0.000335	ND		0.00155	0.00049	**5.13**		0.054	0.041	0.00219		0.00101	0.000319	0.00159		0.00128	0.000404	0.000851	J	0.0009	0.000284	ND		0.00094	0.000297	0.000835	J	0.00129	0.000408	
2-Hexanone	591-78-6	NS	NS	NS	NS	NS	NS	NS	ND		0.00172	0.00132	ND		0.0022	0.00169	ND		0.171	0.138	ND		0.00218	0.00167	ND		0.00212	0.00162	ND		0.0031	0.00237	ND		0.107	0.087	ND		0.00202	0.00155	ND		0.00256	0.00196	ND		0.0018	0.00138	ND		0.00188	0.00144	ND		0.00258	0.00198	
Dibromochloromethane	124-48-1	NS	NS	NS	NS	NS	10	NS	ND		0.00086	0.000143	ND		0.0011	0.000183	ND		0.085	0.053	ND		0.00109	0.000181	ND		0.00106	0.000176	ND		0.00155	0.000257	ND		0.054	0.033	ND		0.00101	0.000168	ND		0.00128	0.000212	ND		0.0009	0.000149	ND		0.00094	0.000156	ND		0.00129	0.000214	
1,2-Dibromoethane (EDB)	106-93-4	NS	NS	NS	NS	NS	NS	NS	ND		0.00086	0.000159	ND		0.0011	0.000204	ND		0.085	0.038	ND		0.00109	0.000202	ND		0.00106	0.000196	ND		0.00155	0.000287	ND		0.054	0.024	ND		0.00101	0.000187	ND		0.00128	0.000237	ND		0.0009	0.000167	ND		0.00094	0.000174	ND		0.00129	0.000239	
Chlorobenzene	108-90-7	1.1	100	100	500	1000	40	1.1	ND		0.00086	0.000149	ND		0.0011	0.00019	ND		0.085	0.056	ND		0.00109	0.000189	ND		0.00106	0.000183	ND		0.00155	0.000268	ND		0.054	0.035	ND		0.00101	0.000175	ND		0.00128	0.000221	ND		0.0009	0.000156	ND		0.00094	0.000163	ND		0.00129	0.000223	
Ethylbenzene	100-41-4	1	30	41	390	780	NS	1	ND		0.00086	0.000218	ND		0.0011	0.000278	ND		0.085	0.056	ND		0.00109	0.000276	0.00129		0.00106	0.000268	ND		0.00155	0.000392	ND		0.054	0.035	ND		0.00101	0.000256	ND		0.00128	0.000324	ND		0.0009	0.000228	ND		0.00094	0.000238	ND		0.00129	0.000326	
Total Xylenes	1330-20-7	0.26	100	100	500	1000	0.26	1.6	ND		0.00172	0.00012	ND		0.0022	0.000154	ND		0.171	0.049	0.000866	J	0.00218	0.000153	0.011		0.00212	0.000148	ND		0.0031	0.000217	ND		0.107	0.031	ND		0.00202	0.000141	ND		0.00256	0.000179	ND		0.0018	0.000126	ND		0.00188	0.000132	ND		0.00258	0.000181	
Styrene	100-42-5	NS	NS	NS	NS	NS	360	NS	ND		0.00086	0.000185	ND		0.0011	0.000237	ND		0.085	0.044	ND		0.00109	0.000234	ND		0.00106	0.000228	ND		0.00155	0.000333	ND		0.054	0.028	ND		0.00101	0.000217	ND		0.00128	0.000275	ND		0.0009	0.000194	ND		0.00094	0.000202	ND		0.00129	0.000277	
Bromoform	75-25-2	NS	NS	NS	NS	NS	NS	NS	ND		0.00086	0.000267	ND		0.0011	0.000342	ND		0.085	0.043	ND		0.00109	0.000339	ND		0.00106	0.00033	ND		0.00155	0.000482	ND		0.054	0.027	ND		0.00101	0.000314	ND		0.00128	0.000398	ND		0.0009	0.00028	ND		0.00094	0.000292	ND		0.00129	0.000401	
Isopropylbenzene	98-82-8	NS	100	NS	NS	NS	NS	2.3	ND		0.00086	0.000183	ND		0.0011	0.000234	ND		0.085	0.057	ND		0.00109	0.000232	ND		0.00106	0.000226	ND		0.00155	0.00033	ND		0.054	0.042	ND		0.00101	0.000215	ND		0.00128	0.000273	ND		0.0009	0.000192	ND		0.00094	0.0002	ND		0.00129	0.000275	
1,1,2,2-Tetrachloroethane	79-34-5	NS	36	NS	NS	NS	NS	0.6	ND		0.00086	0.000264	ND		0.0011	0.000261	ND		0.085	0.040	ND		0.00109	0.000258	ND		0.00106	0.000251	ND		0.00155	0.000367	ND		0.054	0.025	ND		0.00101	0.000239	ND		0.00128	0.000303	ND		0.0009	0.000213	ND		0.00094	0.000223	ND		0.00129	0.000306	
1,3-Dichlorobenzene	541-73-1	2.4	17	49	280	560	NS	2.4	ND		0.00086	0.000228	ND		0.0011	0.000292	ND		0.085	0.044	ND		0.00109	0.000289	ND		0.00106	0.000281	ND		0.00155	0.000411	ND		0.054	0.040	ND		0.00101	0.000268	ND		0.00128	0.000339	ND		0.0009	0.000239	ND		0.00094	0.000249	ND		0.00129	0.000342	
1,4-Dichlorobenzene	106-46-7	1.8	9.8	13	130	250	30	1.8	ND		0.00086	0.000267	ND		0.0011	0.000341	ND		0.085	0.064	ND		0.00109	0.000338	ND		0.00106	0.000329	ND		0.00155	0.000481	ND		0.054	0.040	ND		0.00101	0.000313	ND		0.00128	0.000397	ND		0.0009	0.000279	ND		0.00094	0.000291	ND		0.00129	0.0004	
1,2-Dichlorobenzene	95-50-1	1.1	100	100	500	1000	NS	1.1	ND		0.00086	0.000276	ND		0.0011	0.000353	ND		0.085	0.062	ND		0.00109	0.000274	ND		0.00106	0.000266	ND		0.00155	0.000389	ND		0.054	0.039	ND		0.00101	0.000254	ND		0.00128	0.000321	ND		0.0009	0.000226	ND		0.00094	0.000236	ND		0.00129	0.000324	
1,2,4-Trimethylbenzene	95-63-6	NS	NS	NS	NS	NS	NS	NS	ND		0.00086	0.000769	ND		0.0011	0.000966	ND		0.171	0.085	ND		0.00109	0.000868	ND		0.00106	0.000873	ND		0.00155	0.00128	ND		0.054	0.107	ND		0.00101	0.000838	ND		0.00128	0.00105	ND		0.0009	0.000742	ND		0.00094	0.000775	ND		0.00129	0.00106	
1,2,4-Trichlorobenzene	120-82-1	NS	NS	NS	NS	NS	30	NS	ND		0.00086	0.000391	ND		0.0011	0.000492	ND		0.085	0.078	ND		0.00109	0.000492	ND		0.00106	0.000477	ND		0.00155	0.000651	ND		0.054	0.044	ND		0.00101	0.000424	ND		0.00128	0.000535	ND		0.0009	0.000376	ND		0.00094	0.000393	ND		0.00129	0.000542	
1,3,5-Trichlorobenzene	108-70-3	NS	NS	NS	NS	NS	NS	NS	ND		0.00086	0.000458	ND		0.0011	0.000576	ND		0.085	0.078	ND		0.00109	0.000577	ND		0.00106	0.000567	ND		0.00155	0.000763	ND		0.054	0.049	ND		0.00101	0.000497	ND		0.00128	0.000627	ND		0.0009	0.000441	ND		0.00094	0.000461	ND		0.00129	0.000636	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	NS	NS	NS	NS	NS	NS	NS	ND		0.00086	0.000513	ND		0.0011	0.000647	ND		0.171	0.085	ND		0.00109	0.000661	ND		0.00106	0.000625	ND		0.00155	0.000873	ND		0.054	0.053	ND		0.00101	0.000569	ND		0.00128	0.000717	ND		0.0009	0.000507	ND		0.00168	0.000541	ND		0.00258	0.00073	
Methyl acetate	79-20-9	NS	NS	NS	NS	NS	NS	NS	ND		0.0172	0.00439	ND		0.022	0.00488	0.468		0.343	0.093	ND		0.0218	0.00496	ND		0.0212	0.00468	ND		0.0311	0.00725	0.321		0.054	0.032	ND		0.00202	0.000458	ND		0.00256	0.00065	ND		0.0018	0.000427	ND		0.00188	0.000521	ND		0.00258	0.000704	
Cyclohexane	110-82-7	NS	NS	NS	NS	NS	NS	NS	ND		0.0043	0.000478	ND		0.0055	0.000608	ND		0.342	0.108	ND		0.00545	0.000861	ND		0.0053	0.000837	ND		0.00775	0.00205	ND		0.214	0.068	ND		0.00505	0.00133	ND		0.0064	0.00169	ND		0.0045	0.00119	ND		0.0047	0.00124	ND		0.00645	0.00171	
Methylcyclohexane	108-87-2	NS	NS	NS	NS	NS	NS	NS	ND		0.00086	0.000316	ND		0.0011	0.000408	ND		0.085	0.064	ND		0.00109	0.000401	ND		0.00106	0.00039	ND		0.00155	0.00057	ND		0.054	0.053	ND		0.00101	0.000332	ND		0.00128	0.000471	ND		0.0009	0.000335	ND		0.00094	0.000348	ND		0.00129	0.000475	
1,2-Dichloropropane (cis- and trans-)	542-75-6	NS	NS	NS	NS	NS	NS	NS	ND		0.00086	0.000132	ND		0.0011	0.000168	ND		0.085	0.036	ND		0.00109	0.000167	ND		0.00106	0.000162	ND		0.00155	0.000237	ND		0.054	0.023	ND		0.00101	0.000155	ND		0.00128	0.000196	ND		0.0009	0.000139	ND		0.00094	0.000144	ND		0.00129	0.000197	
TOTAL VOs:		NS	NS	NS	NS	NS	NS	NS	0.042	CJ	NA		ND		NA		2.56		NA		0.337	JC	NA		0.347	CJ	NA		0.699	C	NA		9.46		NA		0.678	CJ	NA		0.00839	CJ	NA		ND		NA		0.126	CJ	NA		0.170	CJ	NA	
TOTAL VOCs:		NS	NS	NS	NS	NS	NS	NS	0.042	CJ	NA		ND		NA		2.56		NA		0.00774	JN	NA		0.345	JCN	NA		0.699	C	NA		47.9	JN	NA		0.678	CJ	NA		0.00839	CJ	NA		ND		NA		0.126	CJ	NA		0.170	CJ	NA	
TOTAL VOs & TICs:		NS	NS	NS	NS	NS	NS	NS	0.042	CJ	NA		0.000482	J	NA		2.56		NA		0.345	JCN	NA		0.358	CJ	NA		0.699	C	NA		47.9	JN	NA		0.678	CJ	NA		0.00839	CJ	NA		ND		NA		0.126	CJ	NA		0.170	CJ	NA	

[1] - NYSDEC Part 375-6.8(b) Restricted Use Soil Cleanup Objectives December 2006 / NYSDEC CP-51 Soil Cleanup Objectives for Gasoline Contaminated Soils - Table 2. October 2010.

BOLD Conc Indicates a concentration that exceeds applicable criteria.

BOLD RL Indicates RL that exceeds applicable criteria.

BOLD MDL Indicates MDL that exceeds applicable criteria.

NS = Not Standard Available

ND = Analyzed for but Not Detected at the MDL

C = Common Laboratory and/or Bottle Contaminant.

N = Presumptive evidence of a compound from the use of GC/MS library search.

M qualifiers on individual Volatiles & Semivolatiles are carried down through summation.

J or J- Indicates an estimated value either when the concentration in the sample is greater than MDL and less than RL, or for qualification of TICs

Table 4 - Analytical Results
May 2024 Soil Gas Investigation
48-55 36th Street
Long Island City, Queens, NY

Sample Name:		SG-1B			SG-5			SG-6			SG-7			SG-8			SG-9		
Lab ID:		E24-01875-01			E24-01875-02			E24-01875-03			E24-01875-04			E24-01875-05			E24-01875-06		
Date Sampled:		05/29/2024			05/30/2024			05/30/2024			05/30/2024			05/30/2024			05/30/2024		
			Conc	RL		Conc	RL		Conc	RL		Conc	RL		Conc	RL		Conc	RL
Compound	**CAS**	**Q**	**ug/m3**	**ug/m3**	**Q**	**ug/m3**	**ug/m3**	**Q**	ug/m3	ug/m3	Q	ug/m3	ug/m3	Q	ug/m3	ug/m3	Q	ug/m3	ug/m3
Acetone	67-64-1	D	190	4.8		43	0.48	D	810	4.8	D	190	4.8	D	400	4.8	D	550	4.8
Benzene	71-43-2		ND	6.4		2.5	0.64	D	8.1	1.3	D	8.3	6.4	D	4.2	1.3		4.0	0.64
Bromodichloromethane	75-27-4		ND	13		ND	1.3		ND	2.7		ND	13		ND	2.7		ND	1.3
Bromoform	75-25-2		ND	21		ND	2.1		ND	4.1		ND	21		ND	4.1		ND	2.1
Bromomethane	74-83-9		ND	7.8		ND	0.78		ND	1.6		ND	7.8		ND	1.6		ND	0.78
1,3-Butadiene	106-99-0		ND	4.4		ND	0.44		ND	0.88		ND	4.4		ND	0.88		ND	0.44
Chlorobenzene	108-90-7		ND	9.2		ND	0.92		ND	1.8		ND	9.2		ND	1.8		ND	0.92
Chloroethane	75-00-3		ND	5.3		ND	0.53		ND	1.1		ND	5.3		ND	1.1		ND	0.53
Chloroform	67-66-3	D	23	9.8		2.3	0.98	D	11	2.0		ND	9.8	D	39	2.0		3.7	0.98
Chloromethane	74-87-3		ND	4.1		ND	0.41		ND	0.83		ND	4.1		ND	0.83		ND	0.41
Carbon disulfide	75-15-0		ND	6.2		1.3	0.62	D	2.8	1.2	D	16	6.2	D	5.9	1.2		1.5	0.62
Carbon tetrachloride	56-23-5		ND	2.5		ND	0.25		ND	0.50		ND	2.5		ND	0.50		ND	0.25
Cyclohexane	110-82-7		ND	6.9		ND	0.69	D	1.4	1.4		ND	6.9	D	4.8	1.4		1.1	0.69
Dibromochloromethane	124-48-1		ND	17		ND	1.7		ND	3.4		ND	17		ND	3.4		ND	1.7
1,2-Dibromoethane	106-93-4		ND	15		ND	1.5		ND	3.1		ND	15		ND	3.1		ND	1.5
1,2-Dichlorobenzene	95-50-1		ND	12		ND	1.2		ND	2.4		ND	12		ND	2.4		ND	1.2
1,3-Dichlorobenzene	541-73-1		ND	12		ND	1.2		ND	2.4		ND	12		ND	2.4		ND	1.2
1,4-Dichlorobenzene	106-46-7		ND	12		ND	1.2		ND	2.4		ND	12		ND	2.4		ND	1.2
Dichlorodifluoromethane	75-71-8		ND	9.9		ND	0.99		ND	2.0		ND	9.9		ND	2.0		ND	0.99
1,1-Dichloroethane	75-34-3		ND	8.1		ND	0.81		ND	1.6		ND	8.1		ND	1.6		ND	0.81
1,2-Dichloroethane	107-06-2		ND	8.1		ND	0.81		ND	1.6		ND	8.1		ND	1.6		ND	0.81
1,1-Dichloroethene	75-35-4		ND	7.9		ND	0.79		ND	1.6		ND	7.9		ND	1.6		ND	0.79
1,2-Dichloroethene (cis)	156-59-2	D	820	7.9		ND	0.79	D	2.1	1.6		ND	7.9		ND	1.6		ND	0.79
1,2-Dichloroethene (trans)	156-60-5	D	27	7.9		ND	0.79		ND	1.6		ND	7.9		ND	1.6		ND	0.79
1,2-Dichloropropane	78-87-5		ND	9.2		ND	0.92		ND	1.8		ND	9.2		ND	1.8		ND	0.92
1,3-Dichloropropene (cis)	10061-01-5		ND	9.1		ND	0.91		ND	1.8		ND	9.1		ND	1.8		ND	0.91
1,3-Dichloropropene (trans)	10061-02-6		ND	9.1		ND	0.91		ND	1.8		ND	9.1		ND	1.8		ND	0.91
1,3-Dichloropropene - TOTAL	542-75-6		ND	9.1		ND	0.91		ND	1.8		ND	9.1		ND	1.8		ND	0.91
1,2-Dichlorotetrafluoroethane	76-14-2		ND	14		ND	1.4		ND	2.8		ND	14		ND	2.8		ND	1.4
1,4-Dioxane	123-91-1		ND	7.2		ND	0.72	D	3.1	1.4	D	11	7.2		ND	1.4		9.7	0.72
Ethylbenzene	100-41-4	D	34	8.7		0.91	0.87	D	1.8	1.7		ND	8.7	D	3.1	1.7		4.6	0.87
n-Heptane	142-82-5		ND	8.2		0.83	0.82	D	3.1	1.6		ND	8.2	D	7.6	1.6		2.7	0.82
1,3-Hexachlorobutadiene	87-68-3		ND	21		ND	2.1		ND	4.3		ND	21		ND	4.3		ND	2.1
n-Hexane	110-54-3		ND	7.0		ND	0.70		ND	1.4		ND	7.0	D	6.1	1.4		ND	0.70
Methylene chloride	75-09-2		ND	6.9		ND	0.69		ND	1.4		ND	6.9		ND	1.4		ND	0.69
Methyl ethyl ketone	78-93-3	D	6.8	5.9		3.3	0.59	D	130	1.2	D	25	5.9	D	72	1.2		40	0.59
Methyl isobutyl ketone	108-10-1		ND	8.2		ND	0.82	D	9.2	1.6		ND	8.2	D	13	1.6		8.6	0.82
Methyl tert-butyl ether	1634-04-4		ND	7.2		ND	0.72		ND	1.4		ND	7.2		ND	1.4		ND	0.72
Styrene	100-42-5		ND	8.5		1.0	0.85	D	2.7	1.7		ND	8.5	D	2.9	1.7		1.9	0.85
Tert-butyl alcohol	75-65-0		ND	6.1		1.8	0.61	D	18	1.2	D	26	6.1	D	25	1.2	D	260	6.1
1,1,2,2-Tetrachloroethane	79-34-5		ND	14		ND	1.4		ND	2.7		ND	14		ND	2.7		ND	1.4
Tetrachloroethene	127-18-4	D	6000	68	D	1100	14	D	2300	14	D	6300	68	D	2300	14	D	1800	14
Toluene	108-88-3	D	1500	7.5		2.8	0.75	D	15	1.5	D	11	7.5	D	120	1.5		110	0.75
1,2,4-Trichlorobenzene	120-82-1		ND	15		ND	1.5		ND	3.0		ND	15		ND	3.0		ND	1.5
1,1,1-Trichloroethane	71-55-6		ND	11		1.6	1.1		ND	2.2		ND	11		ND	2.2		ND	1.1
1,1,2-Trichloroethane	79-00-5		ND	11		ND	1.1		ND	2.2		ND	11		ND	2.2		ND	1.1
Trichloroethene	79-01-6	D	770	2.5		72	0.25	D	89	0.49	D	14	2.5	D	140	0.49		10	0.25
Trichlorofluoromethane	75-69-4		ND	11		1.7	1.1		ND	2.2		ND	11		ND	2.2		2.1	1.1
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1		ND	15		ND	1.5		ND	3.1		ND	15	D	3.2	3.1		ND	1.5
1,2,4-Trimethylbenzene	95-63-6		ND	9.8		ND	0.98		ND	2.0		ND	9.8	D	8.2	2.0		27	0.98
1,3,5-Trimethylbenzene	108-67-8		ND	9.8		ND	0.98		ND	2.0		ND	9.8	D	5.0	2.0		16	0.98
2,2,4-Trimethylpentane	540-84-1		ND	9.3		ND	0.93		ND	1.9		ND	9.3		ND	1.9		7.4	0.93
Vinyl bromide	593-60-2		ND	8.7		ND	0.87		ND	1.7		ND	8.7		ND	1.7		ND	0.87
Vinyl chloride	75-01-4		ND	5.1		ND	0.51		ND	1.0		ND	5.1		ND	1.0		ND	0.51
Xylenes (m&p)	179601-23-1	D	110	8.7		2.8	0.87	D	4.8	1.7		ND	8.7	D	10	1.7		15	0.87
Xylenes (o)	95-47-6	D	35	8.7		0.95	0.87	D	2.1	1.7		ND	8.7	D	4.3	1.7		7.2	0.87
Xylenes - TOTAL	1330-20-7	D	145	8.7		3.75	0.87	D	6.9	1.7		ND	8.7	D	14.3	1.7		22.2	0.87

ND = Analyzed for but Not Detected at the RL
D = Extra dilution required for this compound

Table 5 Part 1 - Analytical Results
July 2024 Soil Investigation
48-55 36th Street
Long Island City, Queens, NY

Sample #:		Part 375-6.8(a)	Part 375-6.8(b)						SB-13A				SB-13B			
Field ID:		Unrestricted Use	Protection of													
Lab ID:		Soil Cleanup	Public Health				Ecological	Groundwater	02404-001				02404-002			
Date Sampled:		Objectives	Residential	Restricted Residentia	Commercial	Industrial	Resources		07/12/2024				07/12/2024			
Depth(ft):	CAS	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	2/2.5				5/5.5			
Volatiles (mg/Kg)									Conc	Q	RL	MDL	Conc	Q	RL	MDL
Vinyl chloride	75-01-4	0.02	0.21	0.9	13	27	NS	0.02	ND		**0.254**	**0.189**	ND		0.00105	0.00034
1,1-Dichloroethene	75-35-4	0.33	100	100	500	1000	NS	0.33	ND		**0.508**	0.213	ND		0.00105	0.000368
Acetone	67-64-1	0.05	100	100	500	1000	2.2	0.05	ND		**1.02**	**0.299**	ND		0.011	0.00525
Methylene chloride	75-09-2	0.05	51	100	500	1000	12	0.05	ND		**0.508**	**0.254**	ND		0.00525	0.00315
trans-1,2-Dichloroethene	156-60-5	0.19	100	100	500	1000	NS	0.19	ND		**0.254**	0.153	ND		0.00105	0.000372
Methyl tert-butyl ether (MTBE)	1634-04-4	0.93	62	100	500	1000	NS	0.93	ND		0.254	0.151	ND		0.00105	0.000229
1,1-Dichloroethane	75-34-3	0.27	19	26	240	480	NS	0.27	ND		0.254	0.153	ND		0.00105	0.000268
cis-1,2-Dichloroethene	156-59-2	0.25	59	100	500	1000	NS	0.25	ND		**0.254**	0.125	ND		0.00105	0.000225
2-Butanone (MEK)	78-93-3	0.12	100	100	500	1000	100	0.3	ND		**0.508**	**0.463**	ND		0.011	0.0021
Chloroform	67-66-3	0.37	10	49	350	700	12	0.37	ND		0.254	0.138	ND		0.00105	0.000525
1,1,1-Trichloroethane	71-55-6	0.68	100	100	500	1000	NS	0.68	ND		0.254	0.151	ND		0.00105	0.000322
Carbon tetrachloride	56-23-5	0.76	1.4	2.4	22	44	NS	0.76	ND		0.254	0.173	ND		0.00105	0.00021
1,2-Dichloroethane (EDC)	107-06-2	0.02	2.3	3.1	30	60	10	0.02	ND		**0.254**	**0.152**	ND		0.00105	0.000243
Benzene	71-43-2	0.06	2.9	4.8	44	89	70	0.06	ND		**0.254**	**0.119**	ND		0.00105	0.000258
Trichloroethene	79-01-6	0.47	10	21	200	400	2	0.47	ND		0.254	0.151	ND		0.00105	0.000156
Toluene	108-88-3	0.7	100	100	500	1000	36	0.7	ND		0.254	0.125	ND		0.00105	0.000525
Tetrachloroethene	127-18-4	1.3	5.5	19	150	300	2	1.3	0.503	D	0.254	0.194	0.0012		0.00105	0.000332
Chlorobenzene	108-90-7	1.1	100	100	500	1000	40	1.1	ND		0.254	0.168	ND		0.00105	0.000182
Ethylbenzene	100-41-4	1	30	41	390	780	NS	1	ND		0.254	0.165	ND		0.00105	0.000266
Total Xylenes	1330-20-7	0.26	100	100	500	1000	0.26	1.6	ND		**0.508**	0.145	ND		0.0021	0.000147
n-Propylbenzene	103-65-1	3.9	100	100	500	1000	NS	3.9	ND		0.254	0.185	ND		0.00105	0.000293
1,3,5-Trimethylbenzene	108-67-8	8.4	47	52	190	380	NS	8.4	ND		0.254	0.187	ND		0.00105	0.000223
tert-Butylbenzene	98-06-6	5.9	100	100	500	1000	NS	5.9	ND		0.254	0.218	ND		0.00105	0.000231
1,2,4-Trimethylbenzene	95-63-6	3.6	47	52	190	380	NS	3.6	ND		0.254	0.184	ND		0.00105	0.000285
sec-Butylbenzene	135-98-8	11	100	100	500	1000	NS	11	ND		0.254	0.231	ND		0.00105	0.000248
1,3-Dichlorobenzene	541-73-1	2.4	17	49	280	560	NS	2.4	ND		0.254	0.191	ND		0.00105	0.000278
1,4-Dichlorobenzene	106-46-7	1.8	9.8	13	130	250	20	1.8	ND		0.254	0.189	ND		0.00105	0.000326
n-Butylbenzene	104-51-8	12	100	100	500	1000	NS	12	ND		0.254	0.220	ND		0.00105	0.000387
1,2-Dichlorobenzene	95-50-1	1.1	100	100	500	1000	NS	1.1	ND		0.254	0.184	ND		0.00105	0.000264
m,p-Xylene	179601-23-1	NS	NS	NS	NS	NS	NS	NS	ND		0.508	0.282	ND		0.0021	0.000275
o-Xylene	95-47-6	NS	NS	NS	NS	NS	NS	NS	ND		0.254	0.145	ND		0.00105	0.000147
TOTAL VO's:		NS	NS	NS	NS	NS	NS	NS	0.503	D		NA	0.0012			NA
Semivolatiles - BN (mg/Kg)									Conc	Q	RL	MDL	Conc	Q	RL	MDL
Acenaphthylene	208-96-8	100	100	100	500	1000	NS	107	1.17	DJ	3.51	0.768	0.057		0.035	0.00765
Acenaphthene	83-32-9	20	100	100	500	1000	20	98	**182**	D	3.51	0.693	0.142		0.035	0.0069
Fluorene	86-73-7	30	100	100	500	1000	30	386	**121**	D	3.51	0.945	0.096		0.035	0.00941
Phenanthrene	85-01-8	100	100	100	500	1000	NS	1000	**662**	D	7.02	1.15	0.598		0.035	0.00572
Anthracene	120-12-7	100	100	100	500	1000	NS	1000	**223**	D	3.51	0.357	0.156		0.035	0.00356
Fluoranthene	206-44-0	100	100	100	500	1000	NS	1000	**553**	D	7.02	2.25	0.583		0.035	0.011
Pyrene	129-00-0	100	100	100	500	1000	NS	1000	**742**	D	7.02	1.63	0.581		0.035	0.00814
Benzo[a]anthracene	56-55-3	1	1	1	5.6	11	NS	1	**292**	D	**3.51**	**1.28**	0.244		0.035	0.013
Chrysene	218-01-9	1	1	3.9	56	110	NS	1	**257**	D	**3.51**	0.968	0.246		0.035	0.00965
Benzo[b]fluoranthene	205-99-2	1	1	1	5.6	11	NS	1.7	**189**	D	**3.51**	**1.73**	0.157		0.035	0.017
Benzo[k]fluoranthene	207-08-9	0.8	1	3.9	56	110	NS	1.7	**223**	D	**3.51**	**2.42**	0.208		0.035	0.024
Benzo[a]pyrene	50-32-8	1	1	1	1	1.1	2.6	22	**272**	D	**3.51**	**1.70**	0.217		0.035	0.017
Indeno[1,2,3-cd]pyrene	193-39-5	0.5	0.5	0.5	5.6	11	NS	8.2	**134**	D	**3.51**	**2.25**	0.106		0.035	0.022
Dibenz[a,h]anthracene	53-70-3	0.33	0.33	0.33	0.56	1.1	NS	1000	**57.7**	D	**3.51**	**1.40**	0.052		0.035	0.014
Benzo[g,h,i]perylene	191-24-2	100	100	100	500	1000	NS	1000	**129**	D	3.51	2.65	0.115		0.035	0.026
TOTAL BN'S:		NS	NS	NS	NS	NS	NS	NS	4040	DJ		NA	3.56			NA

6NYCRR Part 375-6.8(a) Unrestricted Use Soil Cleanup Objectives & NYCRR Part 375-6.8(b) Restricted Use Soil Cleanup Objectives December 2006

BOLD Conc Indicates a concentration that exceeds applicable criteria.

BOLD RL Indicates RL that exceeds applicable criteria.

BOLD MDL Indicates MDL that exceeds applicable criteria.

NS = No Standard Available

ND = Analyzed for but Not Detected at the MDL

D = The compound was reported from the Diluted analysis

Table 5, Part 2 - Analytical Results
July 2024 Soil Investigation
48-55 36th Street
Long Island City, Queens, NY

Sample #: Field ID: Lab ID: Date Sampled: Depth(ft):	CAS	Part 375-6.8(b) Unrestricted Use Soil Cleanup Objectives (ppm)	Public Health Protection of Residential (ppm)	Restricted Residential (ppm)	Commercial (ppm)	Industrial (ppm)	Ecological Resources (ppm)	Groundwater (ppm)	SB-7R 02428-001 07/10/2024 12/12.5			SB-10A 02428-002 07/10/2024 6.5/7			SB-10B 02428-003 07/10/2024 10/10.5			SB-15A 02428-004 07/10/2024 3.5/8			SB-15B 02428-005 07/10/2024 37.5			SB-11A 02428-006 07/10/2024 20/2.5			SB-11B 02428-007 07/10/2024 5/5.5			SB-16A 02428-008 07/10/2024 20/2.5			SB-16B 02428-009 07/10/2024 40/4.5			SB-17A 02428-010 07/10/2024 1.5/2			SB-17B 02428-011 07/10/2024 4/6.5			SB-18A 02428-012 07/10/2024 2.5/5			SB-18B 02428-013 07/10/2024 4.5/5		
Volatiles (mg/Kg)									Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL
Vinyl chloride	75-01-4	**0.02**	**0.21**	**0.9**	**13**	**27**	**NS**	**0.02**	ND		0.00097	0.000314	ND		0.00102	0.000337	ND		0.00099	0.000321	ND		0.00108	0.00035	ND		0.00109	0.000353	ND		0.00097	0.000314	ND		0.00096	0.000311	ND		0.00118	0.000382	ND		0.00096	0.000311	ND		0.00107	0.000347	ND		0.00106	0.000343	ND		0.00103	0.000334
1,1-Dichloroethane	75-35-4	**0.33**	**100**	**100**	**500**	**1000**	**NS**	**0.33**	ND		0.00097	0.00034	ND		0.00102	0.000337	ND		0.00099	0.000347	ND		0.00108	0.000379	ND		0.00109	0.000382	ND		0.00097	0.00034	ND		0.00096	0.000336	ND		0.00118	0.000413	ND		0.00112	0.000392	ND		0.00096	0.000336	ND		0.00107	0.000371	ND		0.00106	0.000371	ND		0.00103	0.000361
Acetone	67-64-1	**0.05**	**100**	**100**	**500**	**1000**	**2.2**	**0.05**	0.019		0.0097	0.00486	0.012		0.010	0.0051	ND		0.0099	0.00495	0.018		0.011	0.0054	ND		0.011	0.00545	ND		0.0097	0.00485	0.015		0.0096	0.0048	0.031		0.012	0.0059	0.00615	J	0.011	0.0052	0.00769	J	0.011	0.00526	0.00969	J	0.011	0.0052	0.013		0.010	0.00515
Methylene chloride	75-09-2	**0.05**	**51**	**100**	**500**	**1000**	**12**	**0.05**	ND		0.00486	0.00291	ND		0.0051	0.00306	ND		0.00495	0.00297	0.00367	CJ	0.0054	0.00324	ND		0.00545	0.00327	ND		0.00485	0.00291	0.00423	CJ	0.0048	0.00288	ND		0.0059	0.00354	0.00364	CJ	0.0056	0.00336	ND		0.0048	0.00288	0.00414	CJ	0.00535	0.00321	0.00439	CJ	0.0053	0.00318	0.00386	CJ	0.00515	0.00309
trans-1,2-Dichloroethene	156-60-5	**0.19**	**100**	**100**	**500**	**1000**	**NS**	**0.19**	ND		0.00097	0.000343	ND		0.00102	0.000361	ND		0.00099	0.00035	ND		0.00108	0.000382	ND		0.00109	0.000386	ND		0.00097	0.000342	ND		0.00118	0.000418	ND		0.00112	0.000396	ND		0.00096	0.00034	ND		0.00107	0.000379	ND		0.00106	0.000375	ND		0.00103	0.000365
Methyl tert-butyl ether (MTBE)	1634-04-4	**0.93**	**62**	**100**	**500**	**1000**	**NS**	**0.93**	ND		0.00097	0.000211	ND		0.00102	0.000222	ND		0.00099	0.000216	ND		0.00108	0.000235	ND		0.00109	0.000236	ND		0.00097	0.000211	ND		0.00096	0.000208	ND		0.00118	0.000257	ND		0.00112	0.000244	ND		0.00096	0.000209	ND		0.00107	0.000223	ND		0.00106	0.000231	ND		0.00103	0.000225
1,1-Dichloroethane	75-34-3	**0.27**	**19**	**26**	**240**	**480**	**NS**	**0.27**	ND		0.00097	0.000247	ND		0.00102	0.00026	ND		0.00099	0.000252	ND		0.00108	0.000275	ND		0.00109	0.000278	ND		0.00097	0.000247	ND		0.00096	0.000245	ND		0.00118	0.000301	ND		0.00112	0.000286	ND		0.00096	0.000245	ND		0.00107	0.000273	ND		0.00106	0.00027	ND		0.00103	0.000263
cis-1,2-Dichloroethene	156-59-2	**0.25**	**59**	**100**	**500**	**1000**	**NS**	**0.25**	0.000771	J	0.00097	0.000358	0.000635	J	0.00102	0.000378	0.000612		0.00099	0.000231	0.000573	J	0.00108	0.000231	ND		0.00109	0.000233	0.000758	J	0.00097	0.000358	0.000382	J	0.00096	0.000355	ND		0.00118	0.000253	ND		0.00112	0.000228	ND		0.00096	0.000355	ND		0.00107	0.000228	ND		0.00106	0.000227	ND		0.00103	0.00022
2-Butanone (MEK)	78-93-3	**0.12**	**100**	**100**	**500**	**1000**	**100**	**0.3**	ND		0.0097	0.00194	ND		0.010	0.00204	ND		0.0099	0.00198	ND		0.011	0.00218	ND		0.011	0.00218	ND		0.0097	0.00194	0.002	J	0.0096	0.00192	0.012		0.00236	0.001	0.00384	J	0.011	0.00212	ND		0.0096	0.00192	0.011		0.00214	0.000384	0.00384	J	0.011	0.00212	ND		0.010	0.00206
Chloroform	67-66-3	**0.37**	**10**	**49**	**350**	**700**	**12**	**0.37**	ND		0.00097	0.000465	ND		0.00102	0.00051	ND		0.00099	0.000495	ND		0.00108	0.00054	ND		0.00109	0.000545	ND		0.00097	0.000465	ND		0.00096	0.00048	ND		0.00118	0.00059	ND		0.00112	0.00056	ND		0.00096	0.00048	ND		0.00107	0.000535	ND		0.00106	0.00053	ND		0.00103	0.000515
1,1,1-Trichloroethane	71-55-6	**0.68**	**100**	**100**	**500**	**1000**	**NS**	**0.68**	ND		0.00097	0.000298	ND		0.00102	0.000313	ND		0.00099	0.00034	ND		0.00108	0.000332	ND		0.00109	0.000335	ND		0.00097	0.000298	ND		0.00096	0.000296	ND		0.00118	0.000362	ND		0.00112	0.000344	ND		0.00096	0.000295	ND		0.00107	0.000329	ND		0.00106	0.000325	ND		0.00103	0.000318
Carbon tetrachloride	56-23-5	**0.76**	**1.4**	**2.4**	**22**	**44**	**NS**	**0.76**	ND		0.00097	0.000194	ND		0.00102	0.000204	ND		0.00099	0.000198	ND		0.00108	0.000216	ND		0.00109	0.000218	ND		0.00097	0.000194	ND		0.00096	0.000192	ND		0.00118	0.000236	ND		0.00112	0.000228	ND		0.00096	0.000192	ND		0.00107	0.000214	ND		0.00106	0.000212	ND		0.00103	0.000206
1,2-Dichloroethane (EDC)	107-06-2	**0.02**	**2.3**	**3.1**	**30**	**60**	**10**	**0.02**	ND		0.00097	0.000224	ND		0.00102	0.000236	ND		0.00099	0.000229	ND		0.00108	0.000249	ND		0.00109	0.000252	ND		0.00097	0.000224	ND		0.00096	0.000222	ND		0.00118	0.000273	ND		0.00112	0.000259	ND		0.00096	0.000222	ND		0.00107	0.000247	ND		0.00106	0.000245	ND		0.00103	0.000238
Benzene	71-43-2	**0.06**	**2.9**	**4.8**	**44**	**89**	**70**	**0.06**	ND		0.00097	0.000239	ND		0.00102	0.000251	ND		0.00099	0.000244	ND		0.00108	0.000265	ND		0.00109	0.000268	ND		0.00097	0.000239	ND		0.00096	0.000236	ND		0.00118	0.00029	ND		0.00112	0.000275	ND		0.00096	0.000236	ND		0.00107	0.000263	ND		0.00106	0.000261	ND		0.00103	0.000252
Trichloroethene	79-01-6	**0.47**	**10**	**21**	**200**	**400**	**2**	**0.47**	0.000772	J	0.00097	0.000145	0.000281	J	0.00102	0.000152	ND		0.00099	0.000148	0.00388		0.00108	0.000161	ND		0.00109	0.000162	0.00291		0.00097	0.000145	0.00142		0.00096	0.000143	ND		0.00118	0.000176	ND		0.00112	0.000167	ND		0.00096	0.000143	ND		0.00107	0.000159	ND		0.00106	0.000158	ND		0.00103	0.000153
Toluene	108-88-3	**0.7**	**100**	**100**	**500**	**1000**	**36**	**0.7**	ND		0.00097	0.000465	ND		0.00102	0.00051	ND		0.00099	0.000495	ND		0.00108	0.00054	ND		0.00109	0.000545	ND		0.00097	0.000465	ND		0.00096	0.00048	ND		0.00118	0.00059	ND		0.00112	0.00056	ND		0.00096	0.00048	ND		0.00107	0.000535	ND		0.00106	0.00053	ND		0.00103	0.000515
Tetrachloroethene	127-18-4	**1.3**	**5.5**	**19**	**150**	**300**	**2**	**1.3**	0.00739		0.00097	0.000307	0.0006467	J	0.00102	0.000322	ND		0.00099	0.000312	0.043		0.00108	0.000341	0.00141		0.00109	0.000343	0.023		0.00097	0.000307	0.013		0.00096	0.000303	0.017		0.00118	0.000373	ND		0.00112	0.000354	0.00978		0.00096	0.000303	0.00645	J	0.00107	0.000338	0.00883		0.00106	0.000335	0.000573	J	0.00103	0.000325
Chlorobenzene	108-90-7	**1.1**	**100**	**100**	**500**	**1000**	**40**	**1.1**	ND		0.00097	0.000168	ND		0.00102	0.000178	ND		0.00099	0.000171	ND		0.00108	0.000187	ND		0.00109	0.000188	ND		0.00097	0.000168	ND		0.00096	0.000166	ND		0.00118	0.00024	ND		0.00112	0.000194	ND		0.00096	0.000166	ND		0.00107	0.000185	ND		0.00106	0.000183	ND		0.00103	0.000178
Ethylbenzene	100-41-4	**1**	**30**	**41**	**390**	**780**	**NS**	**1**	ND		0.00097	0.000245	ND		0.00102	0.000258	ND		0.00099	0.00025	ND		0.00108	0.000273	ND		0.00109	0.000275	ND		0.00097	0.000245	ND		0.00096	0.000243	ND		0.00118	0.000299	ND		0.00112	0.000283	ND		0.00096	0.000243	ND		0.00107	0.000271	ND		0.00106	0.000268	ND		0.00103	0.000261
Total Xylenes	1330-20-7	**0.26**	**100**	**100**	**500**	**1000**	**0.26**	**1.6**	ND		0.00194	0.000136	ND		0.00204	0.000143	ND		0.00198	0.000139	ND		0.00216	0.000151	ND		0.00218	0.000153	ND		0.00194	0.000136	ND		0.00192	0.000134	ND		0.00236	0.000165	ND		0.00224	0.000157	ND		0.00192	0.000134	ND		0.00214	0.00015	ND		0.00212	0.000148	ND		0.00206	0.000144
m+p-Xylenes	179601-23-1	**3.9**	**100**	**100**	**500**	**1000**	**NS**	**3.9**	ND		0.00097	0.000271	ND		0.00102	0.000285	ND		0.00099	0.000276	ND		0.00108	0.000301	ND		0.00109	0.000304	ND		0.00097	0.000271	ND		0.00096	0.000268	ND		0.00118	0.000329	ND		0.00112	0.000312	ND		0.00096	0.000268	ND		0.00107	0.000299	ND		0.00106	0.000296	ND		0.00103	0.000287
1,3,5-Trimethylbenzene	108-67-8	**8.4**	**47**	**52**	**190**	**380**	**NS**	**8.4**	ND		0.00097	0.000206	ND		0.00102	0.000216	ND		0.00099	0.00021	ND		0.00108	0.000229	ND		0.00109	0.000231	ND		0.00097	0.000206	ND		0.00096	0.000204	ND		0.00118	0.00025	ND		0.00112	0.000237	ND		0.00096	0.000204	ND		0.00107	0.000227	ND		0.00106	0.000225	ND		0.00103	0.000218
tert-Butylbenzene	98-06-6	**5.9**	**100**	**100**	**500**	**1000**	**NS**	**5.9**	ND		0.00097	0.000213	ND		0.00102	0.000224	ND		0.00099	0.000218	ND		0.00108	0.000236	ND		0.00109	0.00024	ND		0.00097	0.000213	ND		0.00096	0.000211	ND		0.00118	0.00026	ND		0.00112	0.000246	ND		0.00096	0.000211	ND		0.00107	0.000235	ND		0.00106	0.000233	ND		0.00103	0.00027
1,2,4-Trimethylbenzene	95-63-6	**3.6**	**47**	**52**	**190**	**380**	**NS**	**3.6**	ND		0.00097	0.000263	ND		0.00102	0.000275	ND		0.00099	0.000268	ND		0.00108	0.000292	ND		0.00109	0.000295	ND		0.00097	0.000263	ND		0.00096	0.00026	ND		0.00118	0.00032	ND		0.00112	0.000302	ND		0.00096	0.00026	ND		0.00107	0.00029	ND		0.00106	0.000287	ND		0.00103	0.000279
sec-Butylbenzene	135-98-8	**11**	**100**	**100**	**500**	**1000**	**NS**	**11**	ND		0.00097	0.000229	ND		0.00102	0.000241	ND		0.00099	0.000234	ND		0.00108	0.000253	ND		0.00109	0.000257	ND		0.00097	0.000229	ND		0.00096	0.000227	ND		0.00118	0.000278	ND		0.00112	0.000259	ND		0.00096	0.000227	ND		0.00107	0.000252	ND		0.00106	0.000251	ND		0.00103	0.000241
1,3-Dichlorobenzene	541-73-1	**2.4**	**17**	**49**	**280**	**560**	**NS**	**2.4**	ND		0.00097	0.000257	ND		0.00102	0.00027	ND		0.00099	0.000262	ND		0.00108	0.000286	ND		0.00109	0.000288	ND		0.00097	0.000257	ND		0.00096	0.000254	ND		0.00118	0.000313	ND		0.00112	0.000292	ND		0.00096	0.000254	ND		0.00107	0.000284	ND		0.00106	0.000281	ND		0.00103	0.000273
1,4-Dichlorobenzene	106-46-7	**1.8**	**9.8**	**13**	**130**	**250**	**20**	**1.8**	ND		0.00097	0.000261	ND		0.00102	0.000274	ND		0.00099	0.000267	ND		0.00108	0.000291	ND		0.00109	0.000293	ND		0.00097	0.000261	ND		0.00096	0.000258	ND		0.00118	0.000318	ND		0.00112	0.000297	ND		0.00096	0.000258	ND		0.00107	0.000288	ND		0.00106	0.000285	ND		0.00103	0.000278
n-Butylbenzene	104-51-8	**12**	**100**	**100**	**500**	**1000**	**NS**	**12**	ND		0.00097	0.000358	ND		0.00102	0.000375	ND		0.00099	0.000365	ND		0.00108	0.000399	ND		0.00109	0.000402	ND		0.00097	0.000358	ND		0.00096	0.000354	ND		0.00118	0.000435	ND		0.00112	0.000412	ND		0.00096	0.000354	ND		0.00107	0.000395	ND		0.00106	0.000391	ND		0.00103	0.00038
1,2-Dichlorobenzene	95-50-1	**1.1**	**100**	**100**	**500**	**1000**	**NS**	**1.1**	ND		0.00097	0.000243	ND		0.00102	0.000256	ND		0.00099	0.000248	ND		0.00108	0.000271	ND		0.00109	0.000274	ND		0.00097	0.000243	ND		0.00096	0.000241	ND		0.00118	0.000296	ND		0.00112	0.000281	ND		0.00096	0.000241	ND		0.00107	0.000269	ND		0.00106	0.000266	ND		0.00103	0.000258
m,p-Xylene	179601-23-1	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	ND		0.00194	0.000254	ND		0.00204	0.000267	ND		0.00198	0.000259	ND		0.00216	0.000282	ND		0.00218	0.000286	ND		0.00194	0.000254	ND		0.00192	0.000252	ND		0.00236	0.000309	ND		0.00224	0.000293	ND		0.00192	0.000252	ND		0.00214	0.00028	ND		0.00212	0.000278	ND		0.00206	0.00027
o-Xylene	95-47-6	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	ND		0.00097	0.000136	ND		0.00102	0.000143	ND		0.00099	0.000139	ND		0.00108	0.000151	ND		0.00109	0.000153	ND		0.00097	0.000136	ND		0.00096	0.000134	ND		0.00118	0.000165	ND		0.00112	0.000157	ND		0.00096	0.000134	ND		0.00107	0.00015	ND		0.00106	0.000148	ND		0.00103	0.000144
TOTAL VOCs		**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	0.819	J	NA		0.654	J	NA		ND		NA		0.868	CJ	NA		0.561		NA		0.497	J	NA		0.405	CJ	NA		0.448		NA		0.00978	JC	NA		0.00978		NA		0.913	JC	NA		0.827	JC	NA		0.917	CJ	NA	

Bold=SCO Part 375-6.8(b) Unrestricted Use Soil Cleanup Objectives & NYCRR Part 375-6.8(b) Restricted Use Soil Cleanup Objectives December 2006

BOLD Conc Indicates a concentration that exceeds applicable criteria.
BOLD RL Indicates RL that exceeds applicable criteria.
BOLD MDL Indicates MDL that exceeds applicable criteria.

NS = No Standard Available
ND = Analyzed for but Not Detected at the MDL.
C = Common Laboratory and/or Bottle Contaminant.
J = Indicates an estimated value (either when the concentration in the sample is greater than MDL and less than RL or for qualification of TICs

Table 5, Part 3 - Analytical Results
July 2024 Soil Investigation
48-55 36th Street
Long Island City, Queens, NY

Sample #:		Part 375-6.8(a) Unrestricted Use	Part 375-6.8(b) Protection of						SB-19						SB-20A						SB-20B						SB-14A						SB-14B						SB-21A						SB-21B					
Field ID:																																																	
Lab ID:		Soil Cleanup		Public Health			Ecological	Groundwater	02450-001						02450-002						02450-003						02450-004						02450-005						02450-006						02450-007					
Date Sampled:		Objectives	Residential	testricted Residenti	Commercial	Industrial	Resources		07/16/2024						07/16/2024						07/16/2024						07/16/2024						07/16/2024						07/16/2024						07/16/2024					
Depth(ft):									2.0/2.5						6.5/7.0						9.5/10.0						1/1.5						4.5/5.0						1/1.5						4.5/5					
	CAS	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL
Volatiles (mg/Kg)																																																
Vinyl chloride	75-01-4	0.02	0.21	0.9	13	27	NS	0.02	ND		0.00099	0.000321	ND		0.00094	0.000305	ND		0.001	0.000324	ND		0.001	0.000324	ND		0.00114	0.000369	ND		0.00114	0.000369	ND		0.00173	0.000561	ND		0.00107	0.000347
1,1-Dichloroethene	75-35-4	0.33	100	100	500	1000	NS	0.33	ND		0.00099	0.000347	ND		0.00094	0.000329	ND		0.001	0.00035	ND		0.001	0.00035	ND		0.00114	0.000399	ND		0.00114	0.000399	ND		0.00173	0.000606	ND		0.00107	0.000375
Acetone	67-64-1	0.05	100	100	500	1000	2.2	0.05	0.015		0.0099	0.00495	0.021		0.0094	0.0047	0.040		0.010	0.005	0.052		0.010	0.005	0.032		0.011	0.0057	0.019		0.017	0.00865	0.034		0.011	0.00535				
Methylene chloride	75-09-2	0.05	51	100	500	1000	12	0.05	ND		0.00495	0.00297	ND		0.0047	0.00282	ND		0.005	0.003	ND		0.005	0.003	0.00379	CJ	0.0057	0.00342	0.00671	CJ	0.00865	0.00519	0.0036	CJ	0.00535	0.00321				
trans-1,2-Dichloroethene	156-60-5	0.19	100	100	500	1000	NS	0.19	ND		0.00099	0.00035	ND		0.00094	0.000333	ND		0.001	0.000354	ND		0.001	0.000354	ND		0.00114	0.000404	ND		0.00173	0.000612	ND		0.00107	0.000379				
Methyl tert-butyl ether (MTBE)	1634-04-4	0.93	62	100	500	1000	NS	0.93	ND		0.00099	0.000216	ND		0.00094	0.000205	ND		0.001	0.000218	ND		0.001	0.000218	ND		0.00114	0.000249	ND		0.00173	0.000377	ND		0.00107	0.000233				
1,1-Dichloroethane	75-34-3	0.27	19	26	240	480	NS	0.27	ND		0.00099	0.000252	ND		0.00094	0.00024	ND		0.001	0.000255	ND		0.001	0.000255	ND		0.00114	0.000291	ND		0.00173	0.000441	ND		0.00107	0.000273				
cis-1,2-Dichloroethene	156-59-2	0.25	59	100	500	1000	NS	0.25	ND		0.00099	0.000212	ND		0.00094	0.000201	ND		0.001	0.000214	ND		0.001	0.000214	ND		0.00114	0.000244	ND		0.00173	0.00037	ND		0.00107	0.000229				
2-Butanone (MEK)	78-93-3	0.12	100	100	500	1000	100	0.3	ND		0.0099	0.00198	ND		0.0094	0.00188	ND		0.010	0.002	ND		0.010	0.002	ND		0.011	0.00228	ND		0.017	0.00346	ND		0.011	0.00214				
Chloroform	67-66-3	0.37	10	49	350	700	12	0.37	ND		0.00099	0.000495	ND		0.00094	0.00047	ND		0.001	0.0005	ND		0.001	0.0005	ND		0.00114	0.00057	ND		0.00173	0.000865	ND		0.00107	0.000535				
1,1,1-Trichloroethane	71-55-6	0.68	100	100	500	1000	NS	0.68	ND		0.00099	0.000304	ND		0.00094	0.000289	ND		0.001	0.000307	ND		0.001	0.000307	ND		0.00114	0.00035	ND		0.00173	0.000531	ND		0.00107	0.000328				
Carbon tetrachloride	56-23-5	0.76	1.4	2.4	22	44	NS	0.76	ND		0.00099	0.000198	ND		0.00094	0.000188	ND		0.001	0.0002	ND		0.001	0.0002	ND		0.00114	0.000228	ND		0.00173	0.000346	ND		0.00107	0.000214				
1,2-Dichloroethane (EDC)	107-06-2	0.02	2.3	3.1	30	60	10	0.02	ND		0.00099	0.000229	ND		0.00094	0.000217	ND		0.001	0.000231	ND		0.001	0.000231	ND		0.00114	0.000263	ND		0.00173	0.0004	ND		0.00107	0.000247				
Benzene	71-43-2	0.06	2.9	4.8	44	89	70	0.06	ND		0.00099	0.000244	ND		0.00094	0.000231	ND		0.001	0.000246	ND		0.001	0.000246	ND		0.00114	0.00028	ND		0.00173	0.000426	ND		0.00107	0.000263				
Trichloroethene	79-01-6	0.47	10	21	200	400	2	0.47	ND		0.00099	0.000148	ND		0.00094	0.00014	ND		0.001	0.000149	ND		0.001	0.000149	ND		0.00114	0.00017	ND		0.00173	0.000258	ND		0.00107	0.000159				
Toluene	108-88-3	0.7	100	100	500	1000	36	0.7	ND		0.00099	0.000495	ND		0.00094	0.00047	ND		0.001	0.0005	ND		0.001	0.0005	ND		0.00114	0.00057	ND		0.00173	0.000865	ND		0.00107	0.000535				
Tetrachloroethene	127-18-4	1.3	5.5	19	150	300	2	1.3	0.00132		0.00099	0.000313	ND		0.00094	0.000297	ND		0.001	0.000316	0.000364	J	0.001	0.000316	ND		0.00114	0.00036	0.012		0.00173	0.000547	ND		0.00107	0.000338				
Chlorobenzene	108-90-7	1.1	100	100	500	1000	40	1.1	ND		0.00099	0.000171	ND		0.00094	0.000163	ND		0.001	0.000173	ND		0.001	0.000173	ND		0.00114	0.000197	ND		0.00173	0.000299	ND		0.00107	0.000185				
Ethylbenzene	100-41-4	1	30	41	390	780	NS	1	ND		0.00099	0.00025	ND		0.00094	0.000238	ND		0.001	0.000253	ND		0.001	0.000253	ND		0.00114	0.000288	ND		0.00173	0.000438	ND		0.00107	0.000271				
Total Xylenes	1330-20-7	0.26	100	100	500	1000	0.26	1.6	ND		0.00198	0.000139	ND		0.00188	0.000132	ND		0.002	0.00014	ND		0.002	0.00014	ND		0.00228	0.00016	ND		0.00346	0.000242	ND		0.00214	0.00015				
n-Propylbenzene	103-65-1	3.9	100	100	500	1000	NS	3.9	ND		0.00099	0.000276	ND		0.00094	0.000262	ND		0.001	0.000279	ND		0.001	0.000279	ND		0.00114	0.000318	ND		0.00173	0.000483	ND		0.00107	0.000299				
1,3,5-Trimethylbenzene	108-67-8	8.4	47	52	190	380	NS	8.4	ND		0.00099	0.00021	ND		0.00094	0.000199	ND		0.001	0.000212	ND		0.001	0.000212	ND		0.00114	0.000242	ND		0.00173	0.000367	ND		0.00107	0.000227				
tert-Butylbenzene	98-06-6	5.9	100	100	500	1000	NS	5.9	ND		0.00099	0.000218	ND		0.00094	0.000207	ND		0.001	0.00022	ND		0.001	0.00022	ND		0.00114	0.000251	ND		0.00173	0.000381	ND		0.00107	0.000235				
1,2,4-Trimethylbenzene	95-63-6	3.6	47	52	190	380	NS	3.6	ND		0.00099	0.000268	ND		0.00094	0.000255	ND		0.001	0.000271	ND		0.001	0.000271	ND		0.00114	0.000309	ND		0.00173	0.000469	ND		0.00107	0.00029				
sec-Butylbenzene	135-98-8	11	100	100	500	1000	NS	11	ND		0.00099	0.000234	ND		0.00094	0.000222	ND		0.001	0.000236	ND		0.001	0.000236	ND		0.00114	0.000269	ND		0.00173	0.000408	ND		0.00107	0.000253				
1,3-Dichlorobenzene	541-73-1	2.4	17	49	280	560	NS	2.4	ND		0.00099	0.000262	ND		0.00094	0.000249	ND		0.001	0.000265	ND		0.001	0.000265	ND		0.00114	0.000302	ND		0.00173	0.000458	ND		0.00107	0.000284				
1,4-Dichlorobenzene	106-46-7	1.8	9.8	13	130	250	20	1.8	ND		0.00099	0.000307	ND		0.00094	0.000291	ND		0.001	0.00031	ND		0.001	0.00031	ND		0.00114	0.000353	ND		0.00173	0.000536	ND		0.00107	0.000332				
n-Butylbenzene	104-51-8	12	100	100	500	1000	NS	12	ND		0.00099	0.000365	ND		0.00094	0.000347	ND		0.001	0.000369	ND		0.001	0.000369	ND		0.00114	0.000421	ND		0.00173	0.000638	ND		0.00107	0.000395				
1,2-Dichlorobenzene	95-50-1	1.1	100	100	500	1000	NS	1.1	ND		0.00099	0.000248	ND		0.00094	0.000236	ND		0.001	0.000251	ND		0.001	0.000251	ND		0.00114	0.000286	ND		0.00173	0.000434	ND		0.00107	0.000269				
m,p-Xylene	179601-23-1	NS	NS	NS	NS	NS	NS	NS	ND		0.00198	0.000259	ND		0.00188	0.000246	ND		0.002	0.000262	ND		0.002	0.000262	ND		0.00228	0.000299	ND		0.00346	0.000453	ND		0.00214	0.00028				
o-Xylene	95-47-6	NS	NS	NS	NS	NS	NS	NS	ND		0.00099	0.000139	ND		0.00094	0.000132	ND		0.001	0.00014	ND		0.001	0.00014	ND		0.00114	0.00016	ND		0.00173	0.000242	ND		0.00107	0.00015				
TOTAL VO's:		NS	NS	NS	NS	NS	NS	NS	0.016			NA	0.021			NA	0.040			NA	0.052	J		NA	0.036	CJ		NA	0.038	CJ		NA	0.038	CJ		NA				

6NYCRR Part 375-6.8(a) Unrestricted Use Soil Cleanup Objectives & NYCRR Part 375-6.8(b) Restricted Use Soil Cleanup Objectives December 2006

BOLD Conc Indicates a concentration that exceeds applicable criteria.

BOLD RL Indicates RL that exceeds applicable criteria.

BOLD MDL Indicates MDL that exceeds applicable criteria.

NS = No Standard Available

ND = Analyzed for but Not Detected at the MDL

C = Common Laboratory and/or Bottle Contaminant.

J = Indicates an estimated value either when the concentration in the sample is greater than MDL and less than RL, or for qualification of TICs

Table 6 - Analytical Results
July 2024 Soil Gas Investigation
48-55 36th Street
Long Island City, Queens, NY

Sample Name:		SG-10			SG-11			SG-12			SG-13			SG-14			SG-15			SG-16			SG-17	
Lab ID:		E24-02398-01			E24-02398-02			E24-02398-03			E24-02398-04			E24-02427-01			E24-02427-02			E24-02427-03			E24-02427-04	
Date Sampled:		07/12/2024			07/12/2024			07/12/2024			07/12/2024			07/15/2024			07/15/2024			07/15/2024			07/15/2024	
		Conc	RL		Conc	RL		Conc	RL		Conc	RL		Conc	RL		Conc	RL		Conc	RL		Conc	RL
Compound	**CAS**	**Q**	**ug/m3**	**ug/m3**	**Q**	**ug/m3**	**ug/m3**	**Q**	ug/m3	ug/m3	**Q**	ug/m3	ug/m3	**Q**	**ug/m3**	**ug/m3**	**Q**	**ug/m3**	**ug/m3**	**Q**	ug/m3	ug/m3	Q	ug/m3	ug/m3
Acetone	67-64-1		61	0.48		81	0.48	D	200	2.4	D	180	2.4		33	0.48	D	570	4.8	D	180	2.4	D	500	4.8
Benzene	71-43-2		3.4	0.64		4.8	0.64		15	0.64		4.7	0.64		1.1	0.64		14	0.64		11	0.64		14	0.64
Bromodichloromethane	75-27-4		ND	1.3		ND	1.3		ND	1.3		ND	1.3		ND	1.3		ND	1.3		ND	1.3		ND	1.3
Bromoform	75-25-2		ND	2.1		ND	2.1		ND	2.1		ND	2.1		ND	2.1		ND	2.1		ND	2.1		ND	2.1
Bromomethane	74-83-9		ND	0.78		ND	0.78		ND	0.78		ND	0.78		ND	0.78		ND	0.78		ND	0.78		ND	0.78
1,3-Butadiene	106-99-0		ND	0.44		ND	0.44		ND	0.44		ND	0.44		ND	0.44		ND	0.44		ND	0.44		ND	0.44
Chlorobenzene	108-90-7		ND	0.92		ND	0.92		ND	0.92		ND	0.92		ND	0.92		ND	0.92		ND	0.92		ND	0.92
Chloroethane	75-00-3		ND	0.53		ND	0.53		ND	0.53		ND	0.53		ND	0.53		ND	0.53		ND	0.53		ND	0.53
Chloroform	67-66-3		1.3	0.98		4.9	0.98		3.3	0.98		16	0.98		2.1	0.98		4.0	0.98		6.0	0.98		ND	0.98
Chloromethane	74-87-3		ND	0.41		ND	0.41		ND	0.41		ND	0.41		ND	0.41		ND	0.41		ND	0.41		ND	0.41
Carbon disulfide	75-15-0		0.69	0.62		1.5	0.62		2.2	0.62		2.3	0.62		0.81	0.62		4.6	0.62		19	0.62		2.3	0.62
Carbon tetrachloride	56-23-5		ND	0.25		ND	0.25		ND	0.25		ND	0.25		ND	0.25		ND	0.25		ND	0.25		ND	0.25
Cyclohexane	110-82-7		1.8	0.69		3.0	0.69		5.7	0.69		2.3	0.69		ND	0.69		5.9	0.69		4.6	0.69		ND	0.69
Dibromochloromethane	124-48-1		ND	1.7		ND	1.7		ND	1.7		ND	1.7		ND	1.7		ND	1.7		ND	1.7		ND	1.7
1,2-Dibromoethane	106-93-4		ND	1.5		ND	1.5		ND	1.5		ND	1.5		ND	1.5		ND	1.5		ND	1.5		ND	1.5
1,2-Dichlorobenzene	95-50-1		ND	1.2		ND	1.2		ND	1.2		ND	1.2		ND	1.2		ND	1.2		ND	1.2		ND	1.2
1,3-Dichlorobenzene	541-73-1		2.4	1.2		4.3	1.2		5.2	1.2		4.4	1.2		ND	1.2		3.9	1.2		6.2	1.2		ND	1.2
1,4-Dichlorobenzene	106-46-7		ND	1.2		ND	1.2		ND	1.2		ND	1.2		ND	1.2		ND	1.2		ND	1.2		ND	1.2
Dichlorodifluoromethane	75-71-8		ND	0.99		ND	0.99		ND	0.99		ND	0.99		ND	0.99		ND	0.99		ND	0.99		ND	0.99
1,1-Dichloroethane	75-34-3		ND	0.81		ND	0.81		ND	0.81		ND	0.81		ND	0.81		ND	0.81		ND	0.81		ND	0.81
1,2-Dichloroethane	107-06-2		ND	0.81		ND	0.81		ND	0.81		ND	0.81		ND	0.81		ND	0.81		ND	0.81		ND	0.81
1,1-Dichloroethene	75-35-4		ND	0.79		ND	0.79		ND	0.79		ND	0.79		ND	0.79		ND	0.79		ND	0.79		ND	0.79
1,2-Dichloroethene (cis)	156-59-2		ND	0.79		ND	0.79		ND	0.79		1.0	0.79		ND	0.79		ND	0.79		ND	0.79		ND	0.79
1,2-Dichloroethene (trans)	156-60-5		ND	0.79		ND	0.79		ND	0.79		ND	0.79		ND	0.79		ND	0.79		ND	0.79		ND	0.79
1,2-Dichloropropane	78-87-5		ND	0.92		ND	0.92		ND	0.92		ND	0.92		ND	0.92		ND	0.92		ND	0.92		ND	0.92
1,3-Dichloropropene (cis)	10061-01-5		ND	0.91		ND	0.91		ND	0.91		ND	0.91		ND	0.91		ND	0.91		1.1	0.91		ND	0.91
1,3-Dichloropropene (trans)	10061-02-6		ND	0.91		ND	0.91		ND	0.91		ND	0.91		ND	0.91		ND	0.91		ND	0.91		ND	0.91
1,3-Dichloropropene - TOTAL	542-75-6		ND	0.91		ND	0.91		ND	0.91		ND	0.91		ND	0.91		ND	0.91		1.1	0.91		ND	0.91
1,2-Dichlorotetrafluoroethane	76-14-2		ND	1.4		ND	1.4		ND	1.4		ND	1.4		ND	1.4		ND	1.4		ND	1.4		ND	1.4
1,4-Dioxane	123-91-1		ND	0.72		2.3	0.72		ND	0.72		4.1	0.72		ND	0.72		2.5	0.72		ND	0.72		ND	0.72
Ethylbenzene	100-41-4		2.2	0.87		3.3	0.87		4.0	0.87		3.6	0.87		ND	0.87		1.3	0.87		ND	0.87		2.0	0.87
n-Heptane	142-82-5		2.4	0.82		2.9	0.82		7.6	0.82		3.5	0.82		0.91	0.82		7.2	0.82		7.2	0.82		88	0.82
1,3-Hexachlorobutadiene	87-68-3		ND	2.1		ND	2.1		ND	2.1		ND	2.1		ND	2.1		ND	2.1		ND	2.1		ND	2.1
n-Hexane	110-54-3		3.0	0.70		1.4	0.70		7.4	0.70		1.4	0.70		1.1	0.70		ND	0.70		ND	0.70		16	0.70
Methylene chloride	75-09-2		ND	0.69		8.5	0.69		79	0.69		15	0.69		ND	0.69		5.6	0.69		7.9	0.69		ND	0.69
Methyl ethyl ketone	78-93-3		4.8	0.59		8.2	0.59		13	0.59		10	0.59		2.7	0.59		55	0.59		34	0.59		21	0.59
Methyl isobutyl ketone	108-10-1		0.93	0.82		2.7	0.82		2.6	0.82		3.2	0.82		ND	0.82		4.1	0.82		1.7	0.82		ND	0.82
Methyl tert-butyl ether	1634-04-4		ND	0.72		ND	0.72		ND	0.72		ND	0.72		ND	0.72		ND	0.72		ND	0.72		ND	0.72
Styrene	100-42-5		ND	0.85		2.7	0.85		1.9	0.85		2.6	0.85		ND	0.85		2.1	0.85		1.5	0.85		1.5	0.85
Tert-butyl alcohol	75-65-0		9.7	0.61		35	0.61		25	0.61		30	0.61		1.7	0.61	D	300	6.1		30	0.61		18	0.61
1,1,2,2-Tetrachloroethane	79-34-5		ND	1.4		ND	1.4		ND	1.4		ND	1.4		ND	1.4		ND	1.4		ND	1.4		ND	1.4
Tetrachloroethene	127-18-4		11	1.4	D	790	14		40	1.4	D	950	6.8		15	1.4	D	1500	14	D	730	6.8	D	620	14
Toluene	108-88-3		11	0.75		23	0.75		19	0.75		14	0.75		9.7	0.75		32	0.75		31	0.75	D	330	7.5
1,2,4-Trichlorobenzene	120-82-1		ND	1.5		ND	1.5		ND	1.5		ND	1.5		ND	1.5		ND	1.5		ND	1.5		ND	1.5
1,1,1-Trichloroethane	71-55-6		ND	1.1		2.1	1.1		ND	1.1		3.8	1.1		ND	1.1		ND	1.1		1.5	1.1		ND	1.1
1,1,2-Trichloroethane	79-00-5		ND	1.1		ND	1.1		ND	1.1		ND	1.1		ND	1.1		ND	1.1		ND	1.1		ND	1.1
Trichloroethene	79-01-6		1.3	0.25		48	0.25		4.4	0.25		85	0.25		1.4	0.25		28	0.25		8.7	0.25		1.6	0.25
Trichlorofluoromethane	75-69-4		2.4	1.1		1.7	1.1		1.7	1.1		2.4	1.1		1.8	1.1		1.5	1.1		2.2	1.1		3.2	1.1
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1		4.5	1.5		ND	1.5		ND	1.5		ND	1.5		ND	1.5		ND	1.5		ND	1.5		ND	1.5
1,2,4-Trimethylbenzene	95-63-6		3.1	0.98		6.3	0.98		6.7	0.98		6.0	0.98		ND	0.98		ND	0.98		ND	0.98		1.9	0.98
1,3,5-Trimethylbenzene	108-67-8		ND	0.98		1.6	0.98		1.6	0.98		1.6	0.98		ND	0.98		ND	0.98		ND	0.98		1.0	0.98
2,2,4-Trimethylpentane	540-84-1		3.3	0.93		2.3	0.93		5.7	0.93		2.1	0.93		ND	0.93		2.9	0.93		ND	0.93		ND	0.93
Vinyl bromide	593-60-2		ND	0.87		ND	0.87		ND	0.87		ND	0.87		ND	0.87		ND	0.87		ND	0.87		ND	0.87
Vinyl chloride	75-01-4		ND	0.51		ND	0.51		ND	0.51		ND	0.51		ND	0.51		ND	0.51		ND	0.51		ND	0.51
Xylenes (m&p)	179601-23-1		8.2	0.87		12	0.87		15	0.87		14	0.87		1.5	0.87		3.9	0.87		2.6	0.87		6.8	0.87
Xylenes (o)	95-47-6		2.8	0.87		4.7	0.87		5.4	0.87		5.2	0.87		ND	0.87		1.4	0.87		0.90	0.87		2.4	0.87
Xylenes - TOTAL	1330-20-7		11	0.87		16.7	0.87		20.4	0.87		19.2	0.87		1.5	0.87		5.3	0.87		3.5	0.87		9.2	0.87

ND = Analyzed for but Not Detected at the RL
D = Extra dilution required for this compound

Table 7 - Analytical Results
September 2024 Indoor Air Investigation
48-55 36th Street
Long Island City, Queens, NY

Sample Name:		IA-1			IA-2			IA-3			IA-4			IA-5			IA-6			IA-7			AA-1	
Lab ID:		E24-03187-01			E24-03187-02			E24-03187-03			E24-03187-04			E24-03187-05			E24-03187-06			E24-03187-07			E24-03187-08	
Date Sampled:		09/16/2024			09/16/2024			09/16/2024			09/16/2024			09/16/2024			09/16/2024			09/16/2024			09/16/2024	
			Conc	RL		Conc	RL		Conc	RL		Conc	RL		Conc	RL		Conc	RL		Conc	RL		Conc	RL
Compound	CAS	Q	ug/m3	ug/m3	Q	ug/m3	ug/m3	Q	ug/m3	ug/m3	Q	ug/m3	ug/m3	Q	ug/m3	ug/m3	Q	ug/m3	ug/m3	Q	ug/m3	ug/m3	Q	ug/m3	ug/m3
Acetone	67-64-1		46	0.48		21	0.48		22	0.48		13	0.48		28	0.48		23	0.48		70	0.48		11	0.48
Benzene	71-43-2		0.71	0.64		0.83	0.64		ND	0.64		ND	0.64		0.90	0.64		0.83	0.64		1.4	0.64		ND	0.64
Bromodichloromethane	75-27-4		ND	1.3		ND	1.3		ND	1.3		ND	1.3		ND	1.3		ND	1.3		ND	1.3		ND	1.3
Bromoform	75-25-2		ND	2.1		ND	2.1		ND	2.1		ND	2.1		ND	2.1		ND	2.1		ND	2.1		ND	2.1
Bromomethane	74-83-9		ND	0.78		ND	0.78		ND	0.78		ND	0.78		ND	0.78		ND	0.78		ND	0.78		ND	0.78
1,3-Butadiene	106-99-0		ND	0.44		ND	0.44		ND	0.44		ND	0.44		ND	0.44		ND	0.44		ND	0.44		ND	0.44
Chlorobenzene	108-90-7		ND	0.92		ND	0.92		ND	0.92		ND	0.92		ND	0.92		ND	0.92		ND	0.92		ND	0.92
Chloroethane	75-00-3		ND	0.53		ND	0.53		ND	0.53		ND	0.53		ND	0.53		ND	0.53		ND	0.53		ND	0.53
Chloroform	67-66-3		2.4	0.98		3.4	0.98		ND	0.98		1.3	0.98		1.3	0.98		1.5	0.98		ND	0.98		ND	0.98
Chloromethane	74-87-3		ND	0.41		ND	0.41		ND	0.41		ND	0.41		ND	0.41		ND	0.41		ND	0.41		ND	0.41
Carbon disulfide	75-15-0		ND	0.62		ND	0.62		ND	0.62		ND	0.62		ND	0.62		ND	0.62		ND	0.62		ND	0.62
Carbon tetrachloride	56-23-5		ND	0.25		ND	0.25		ND	0.25		ND	0.25		ND	0.25		ND	0.25		ND	0.25		ND	0.25
Cyclohexane	110-82-7		0.79	0.69		ND	0.69		ND	0.69		ND	0.69		ND	0.69		ND	0.69		1.4	0.69		ND	0.69
Dibromochloromethane	124-48-1		ND	1.7		ND	1.7		ND	1.7		ND	1.7		ND	1.7		ND	1.7		ND	1.7		ND	1.7
1,2-Dibromoethane	106-93-4		ND	1.5		ND	1.5		ND	1.5		ND	1.5		ND	1.5		ND	1.5		ND	1.5		ND	1.5
1,2-Dichlorobenzene	95-50-1		ND	1.2		ND	1.2		ND	1.2		ND	1.2		ND	1.2		ND	1.2		ND	1.2		ND	1.2
1,3-Dichlorobenzene	541-73-1		ND	1.2		ND	1.2		ND	1.2		ND	1.2		ND	1.2		ND	1.2		ND	1.2		ND	1.2
1,4-Dichlorobenzene	106-46-7		ND	1.2		ND	1.2		ND	1.2		ND	1.2		ND	1.2		ND	1.2		ND	1.2		ND	1.2
Dichlorodifluoromethane	75-71-8		ND	0.99		ND	0.99		ND	0.99		ND	0.99		ND	0.99		ND	0.99		ND	0.99		ND	0.99
1,1-Dichloroethane	75-34-3		ND	0.81		ND	0.81		ND	0.81		ND	0.81		ND	0.81		ND	0.81		ND	0.81		ND	0.81
1,2-Dichloroethane	107-06-2		ND	0.81		ND	0.81		ND	0.81		ND	0.81		ND	0.81		ND	0.81		ND	0.81		ND	0.81
1,1-Dichloroethene	75-35-4		ND	0.79		ND	0.79		ND	0.79		ND	0.79		ND	0.79		ND	0.79		ND	0.79		ND	0.79
1,2-Dichloroethene (cis)	156-59-2		ND	0.79		ND	0.79		ND	0.79		ND	0.79		ND	0.79		ND	0.79		ND	0.79		ND	0.79
1,2-Dichloroethene (trans)	156-60-5		ND	0.79		ND	0.79		ND	0.79		ND	0.79		ND	0.79		ND	0.79		ND	0.79		ND	0.79
1,2-Dichloropropane	78-87-5		ND	0.92		ND	0.92		ND	0.92		ND	0.92		ND	0.92		ND	0.92		ND	0.92		ND	0.92
1,3-Dichloropropene (cis)	10061-01-5		ND	0.91		ND	0.91		ND	0.91		ND	0.91		ND	0.91		ND	0.91		ND	0.91		ND	0.91
1,3-Dichloropropene (trans)	10061-02-6		ND	0.91		ND	0.91		ND	0.91		ND	0.91		ND	0.91		ND	0.91		ND	0.91		ND	0.91
1,3-Dichloropropene - TOTAL	542-75-6		ND	0.91		ND	0.91		ND	0.91		ND	0.91		ND	0.91		ND	0.91		ND	0.91		ND	0.91
1,2-Dichlorotetrafluoroethane	76-14-2		ND	1.4		ND	1.4		ND	1.4		ND	1.4		ND	1.4		ND	1.4		ND	1.4		ND	1.4
1,4-Dioxane	123-91-1		ND	0.72		ND	0.72		ND	0.72		ND	0.72		ND	0.72		ND	0.72		ND	0.72		ND	0.72
Ethylbenzene	100-41-4		1.2	0.87		ND	0.87		ND	0.87		ND	0.87		ND	0.87		ND	0.87		2.3	0.87		ND	0.87
n-Heptane	142-82-5		1.2	0.82		ND	0.82		ND	0.82		ND	0.82		ND	0.82		ND	0.82		2.2	0.82		ND	0.82
1,3-Hexachlorobutadiene	87-68-3		ND	2.1		ND	2.1		ND	2.1		ND	2.1		ND	2.1		ND	2.1		ND	2.1		ND	2.1
n-Hexane	110-54-3		ND	0.70		ND	0.70		1.8	0.70		1.6	0.70		0.72	0.70		ND	0.70		2.1	0.70		ND	0.70
Methylene chloride	75-09-2		ND	0.69		6.6	0.69		ND	0.69		ND	0.69		34	0.69		2.3	0.69		ND	0.69		9.6	0.69
Methyl ethyl ketone	78-93-3		5.0	0.59		1.1	0.59		2.6	0.59		0.93	0.59		2.8	0.59		1.1	0.59		7.5	0.59		1.3	0.59
Methyl isobutyl ketone	108-10-1		1.1	0.82		ND	0.82		ND	0.82		ND	0.82		ND	0.82		ND	0.82		1.8	0.82		ND	0.82
Methyl tert-butyl ether	1634-04-4		ND	0.72		ND	0.72		ND	0.72		ND	0.72		ND	0.72		ND	0.72		ND	0.72		ND	0.72
Styrene	100-42-5		ND	0.85		1.3	0.85		ND	0.85		0.87	0.85		1.1	0.85		1.1	0.85		ND	0.85		ND	0.85
Tert-butyl alcohol	75-65-0		0.87	0.61		ND	0.61		ND	0.61		ND	0.61		ND	0.61		ND	0.61		ND	0.61		ND	0.61
1,1,2,2-Tetrachloroethane	79-34-5		ND	1.4		ND	1.4		ND	1.4		ND	1.4		ND	1.4		ND	1.4		ND	1.4		ND	1.4
Tetrachloroethene	127-18-4		ND	1.4		ND	1.4		ND	1.4		ND	1.4		ND	1.4		ND	1.4		ND	1.4		ND	1.4
Toluene	108-88-3		11	0.75		3.0	0.75		4.5	0.75		1.1	0.75		5.6	0.75		2.1	0.75		21	0.75		3.0	0.75
1,2,4-Trichlorobenzene	120-82-1		ND	1.5		ND	1.5		ND	1.5		ND	1.5		ND	1.5		ND	1.5		ND	1.5		ND	1.5
1,1,1-Trichloroethane	71-55-6		ND	1.1		ND	1.1		ND	1.1		ND	1.1		ND	1.1		ND	1.1		ND	1.1		ND	1.1
1,1,2-Trichloroethane	79-00-5		ND	1.1		ND	1.1		ND	1.1		ND	1.1		ND	1.1		ND	1.1		ND	1.1		ND	1.1
Trichloroethene	79-01-6		ND	0.25		ND	0.25		ND	0.25		ND	0.25		ND	0.25		ND	0.25		ND	0.25		ND	0.25
Trichlorofluoromethane	75-69-4		1.6	1.1		ND	1.1		1.5	1.1		1.5	1.1		1.5	1.1		1.7	1.1		3.3	1.1		1.5	1.1
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1		ND	1.5		ND	1.5		ND	1.5		ND	1.5		ND	1.5		ND	1.5		ND	1.5		ND	1.5
1,2,4-Trimethylbenzene	95-63-6		ND	0.98		ND	0.98		ND	0.98		ND	0.98		ND	0.98		ND	0.98		ND	0.98		ND	0.98
1,3,5-Trimethylbenzene	108-67-8		ND	0.98		ND	0.98		ND	0.98		ND	0.98		ND	0.98		ND	0.98		ND	0.98		ND	0.98
2,2,4-Trimethylpentane	540-84-1		ND	0.93		ND	0.93		ND	0.93		ND	0.93		ND	0.93		ND	0.93		ND	0.93		ND	0.93
Vinyl bromide	593-60-2		ND	0.87		ND	0.87		ND	0.87		ND	0.87		ND	0.87		ND	0.87		ND	0.87		ND	0.87
Vinyl chloride	75-01-4		ND	0.51		ND	0.51		ND	0.51		ND	0.51		ND	0.51		ND	0.51		ND	0.51		ND	0.51
Xylenes (m&p)	179601-23-1		4.2	0.87		1.5	0.87		2.0	0.87		ND	0.87		2.7	0.87		1.2	0.87		8.5	0.87		1.3	0.87
Xylenes (o)	95-47-6		1.2	0.87		ND	0.87		ND	0.87		ND	0.87		ND	0.87		ND	0.87		2.2	0.87		ND	0.87
Xylenes - TOTAL	1330-20-7		5.4	0.87		1.5	0.87		2.0	0.87		ND	0.87		2.7	0.87		1.2	0.87		10.7	0.87		1.3	0.87

ND = Analyzed for but Not Detected at the RL

D = Extra dilution required for this compound

Attachment A

GPR Summary Report



GEOPHYSICAL ENGINEERING SURVEY REPORT

Commercial Site
4855 36th Street
Long Island City, Queens County, New York 11101

NOVA PROJECT NUMBER:
24-4186

DATED:
May 2, 2024

PREPARED FOR:

JS|HELD

5 Marine View Plaza Suite 401, Hoboken, NJ 07030
www.Jsheld.com

PREPARED BY:

NOVA
GEOPHYSICAL
ENGINEERING
Subsurface Mapping Solutions
56-01 Marathon Parkway # 765
Douglaston, New York 11362
347-556-7787 (PHONE)
718-261-1527(FAX)
www.nova-gsi.com

NOVA GEOPHYSICAL SERVICES

SUBSURFACE MAPPING SOLUTIONS
56-01 Marathon Parkway #765, Douglaston, New York 11362
Ph. 347-556-7787 Fax. 718-261-1527
www.novagsi.com

May 2, 2024

Jake Twill | Environmental Scientist II

JS|HELD

5 Marine View Plaza Suite 401, Hoboken, NJ 07030
O 201 876 9400 | M 201.402.8240 E: Jtwill@jsheld.com

Re: Geophysical Engineering Survey (GES) Report
Commercial Site
4855 36th Street,
Long Island City, Queens County, New York 11101

Dear Mr. Twill,

Nova Geophysical Services (NOVA) is pleased to provide the findings of the geophysical engineering survey (GES) at the above referenced project site: 4855 36th Street, Long Island City, Queens County, New York (the "Site").

INTRODUCTION TO GEOPHYSICAL ENGINEERING SURVEY (GES)

NOVA performed a geophysical engineering survey (GES) consisting of a Ground Penetrating Radar (GPR) and Electromagnetic (EM) survey at the site. The purpose of this survey is to locate and identify utilities, underground storage tanks and other substructures in the vicinity of the proposed boring areas on April 27th, 2024.The equipment selected for this investigation was a GSSI UtilityScan 350 MHz ground penetrating radar (GPR) with a shielded antenna Sensors and Software Noggin 250 MHz GPR with a shielded antenna and a RadioDetection RD7100 Electromagnetic utility locator. A GPR system consists of a radar control unit, control cable, and transducer (antenna). The control unit transmits a trigger pulse at a

normal repetition rate of 250/350 MHz. The trigger pulse is sent to the transmitter electronics in the transducer via the control cable. The transmitter electronics amplify the trigger pulse into bipolar pulses that are radiated to the surface. The transformed pulses vary in shape and frequency according to the transducer used. In the subsurface, variations of the signal occur at boundaries where there is a dielectric contrast (void, steel, soil type, etc.). Signal reflections travel back to the control unit and are represented as color graphic images for interpolation.

A typical electromagnetic (EM) utility locating system consists of a transmitter unit and a receiver unit. The receiver unit can be used independently of the transmitter unit in order to detect utility lines with an inherent EM signature (electric utility lines, water lines, etc.). If needed a current at a specific frequency can also be placed on a utility that is being located. This can be done via the transmitter unit by either direct connection or induction via an EM field varying at specific frequency. The receiver unit is then set to the selected frequency and the electromagnetic field created by the current running through the utility can be located allowing the utility to be marked.

GEOPHYSICAL METHODS

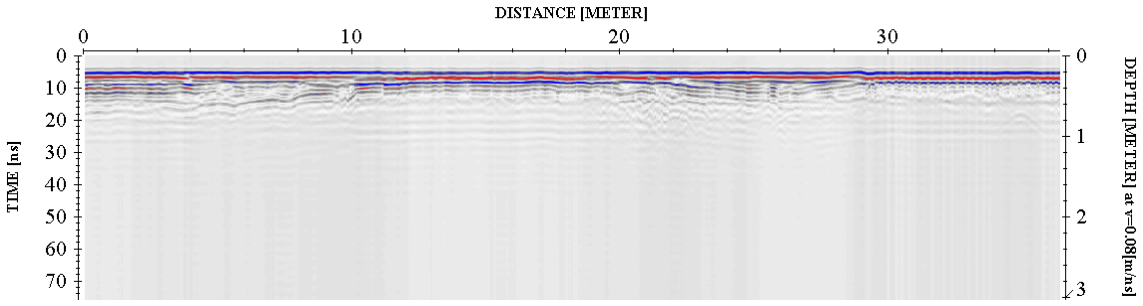
The project site was screened using GPR to search the specified area and inspected for reflections, which could be indicative of substructures and utilities within the subsurface. An EM utility locator was used to help determine the locations of utilities within the survey area.

EM data was collected and interpreted on site and suspected utilities marked as needed. GPR data profiles were collected for the areas of the Site specified by the client and processed as specified below.

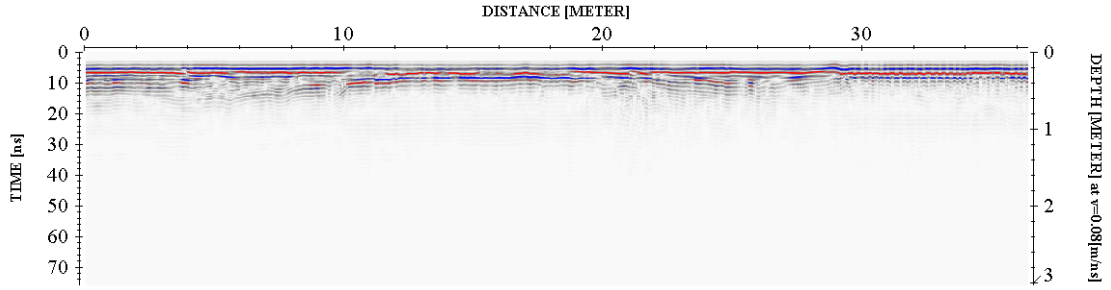
DATA PROCESSING

In order to improve the quality of the results and to better identify anomalies NOVA processed the collected data. The processing work flow is briefly described in this section.

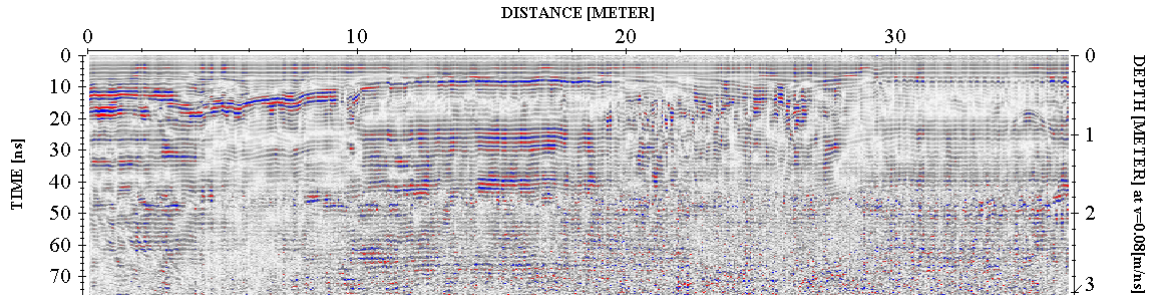
Step 1. Import Raw RAMAC data to standard processing format



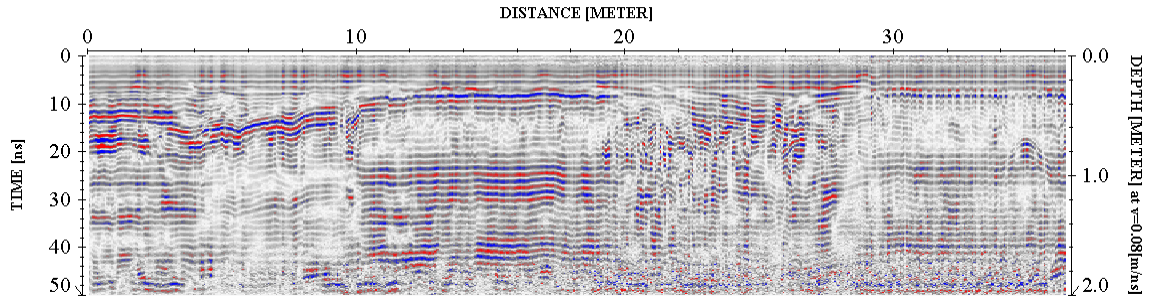
Step 2. Remove instrument noise *(dewow)*



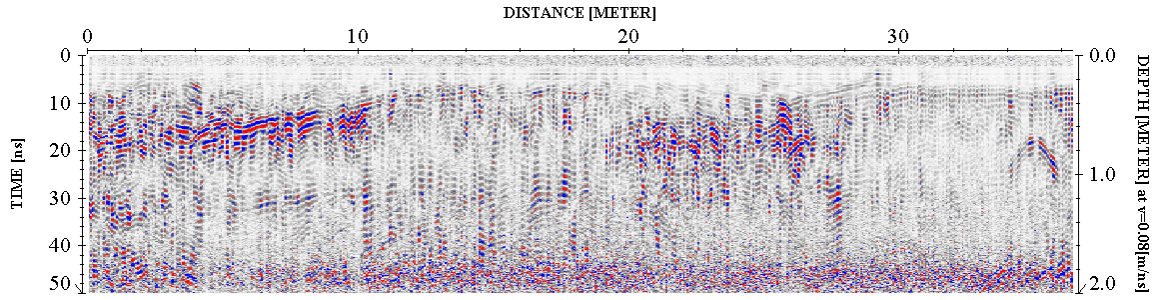
Step 3. Correct for attenuation losses *(energy decay function)*



Step 4. Remove static from bottom of profile *(time cut)*



Step 5. Mute horizontal ringing/noise *(subtracting average)*



The above example shows the significance of data processing. The last image (step 5) has higher resolution than the starting image (raw data – step 1) and represents the subsurface anomalies much more accurately.

PHYSICAL SETTINGS

NOVA observed the following physical conditions at the time of the survey.

Weather: Clear

Temperature: 55° F

Surface: Concrete, Asphalt, Vegetation

Survey Parameters: A GPR grid scan was conducted within the survey areas as shown on the survey plan. The approximate line spacing of the grid survey was approximately 2'. Additional GPR data was collected over features of interest. An EM utility locator was used in conjunction with GPR throughout the survey area.

Limitations: The geophysical noise level (GNL) at the site was medium to high due to being in an urban environment and other unknown anthropogenic noise sources. Utilities at depths greater than approximately 5 feet below ground surface or with insufficient dielectric contrast may not have been located with the applied geophysical techniques.

RESULTS

The results of the geophysical engineering survey (GES) identified the following at the project site:

- Anomalies resembling potential subsurface utilities (electric) were identified within the surveyed area coming in from the sidewalk and going overhead through the rest of the site. The approximate locations are shown in the survey plan.
- The GES did not identify any anomalies consistent with any major substructures at the surveyed areas.
- The GES did not identify any geophysical anomalies resembling any underground storage tanks (UST's) at site.
- NOVA cleared and marked all proposed boring areas.

If you have any questions, please do not hesitate to contact the undersigned.

Sincerely,

NOVA Geophysical Services



Levent Eskicakit, P.G., E.P.
Project Manager

Attachments:

Location Map
Survey Plan
Geophysical Images

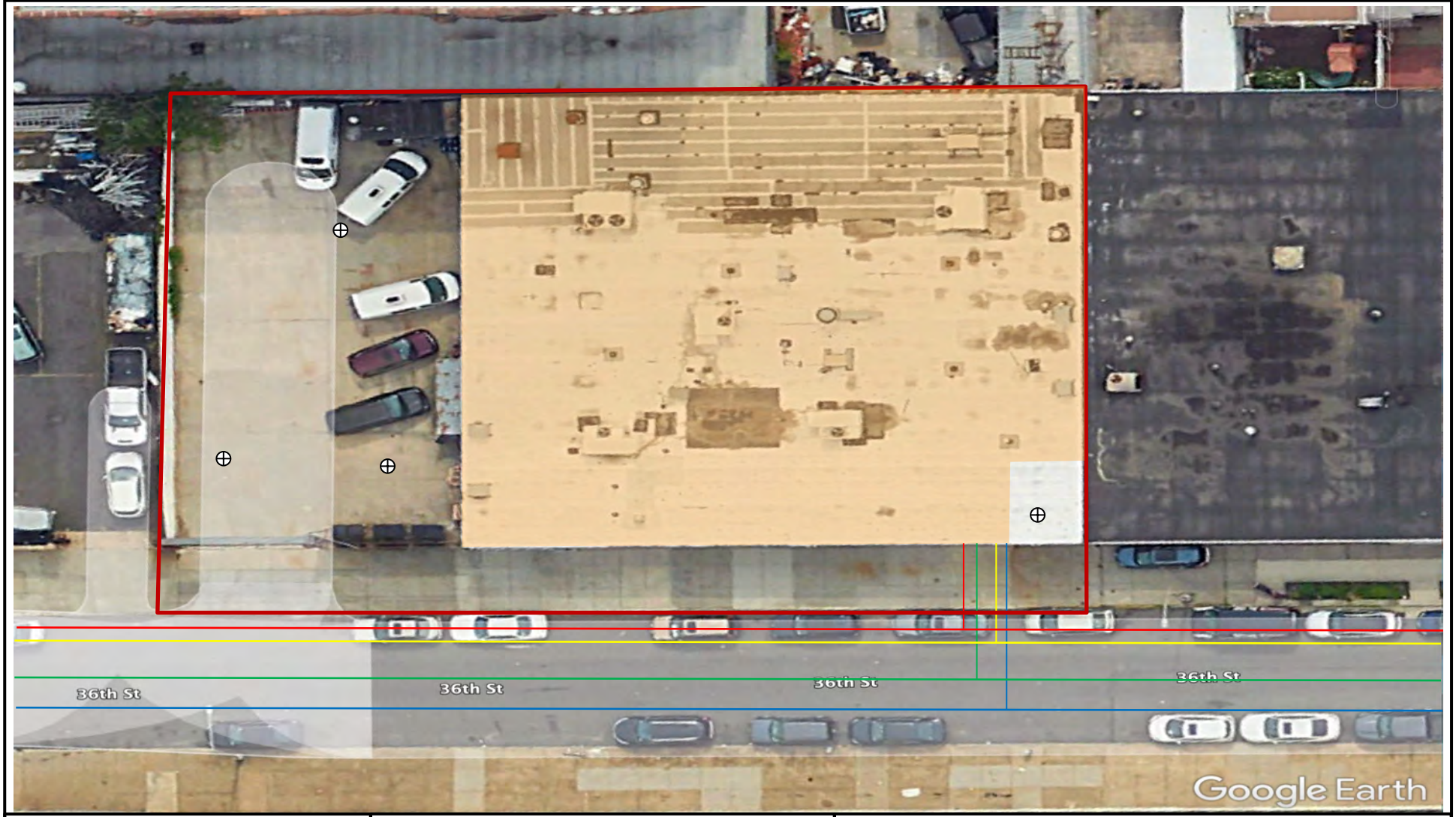


NOVA
Geophysical Services
Subsurface Mapping Solutions
56-01 Marathon Parkway, # 765
Douglaston, New York 11362
Phone (347) 556-7787 * Fax (718) 261-1527
www.novagsi.com

Location Map

SITE:	**Commercial Site** 48-55 36th Street Queens, New York 11101
CLIENT:	J.S. Held
DATE:	April 27, 2024
AUTH:	Levent Eskicakit

LEGEND



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Douglaston, New York 11362
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www.novagsi.com

SURVEY PLAN

SITE:	**Commercial Site** 70 Fernbrook Street Yonkers, New York 10705
CLIENT:	J.S. Held
DATE:	April 27th, 2024
AUTH:	Levent Eskicakit

LEGEND

- Survey Area
- Electric
- Sewer
- Water
- Drainage
- Proposed Boring Location
- Natural Gas
- No Access

Dashed lines represent assumed utilities found in the field but not located with GPR.



PROJECT AREA

GEOPHYSICAL IMAGES

Commercial Property

48-55 36th Street

Long Island City, Queens County, New York 11101

April 27th, 2024

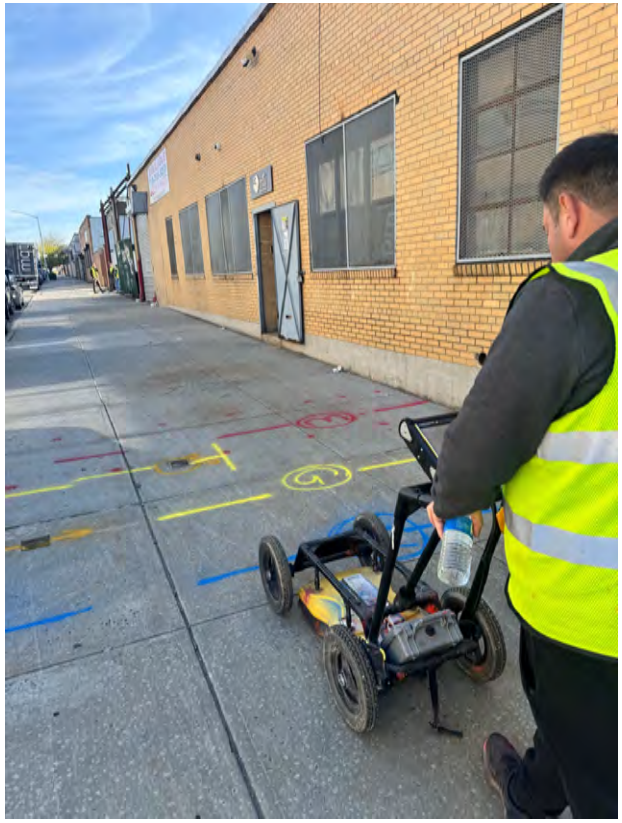




GEOPHYSICAL IMAGES

Commercial Property
48-55 36th Street
Long Island City, Queens County, New York 11101
April 27th, 2024

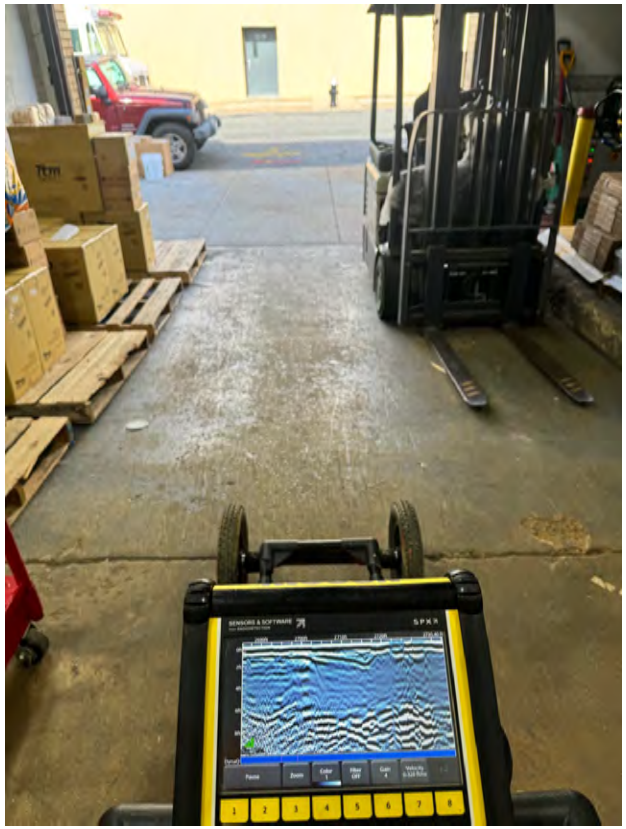






GEOPHYSICAL IMAGES

Commercial Property
48-55 36th Street
Long Island City, Queens County, New York 11101
April 27th, 2024





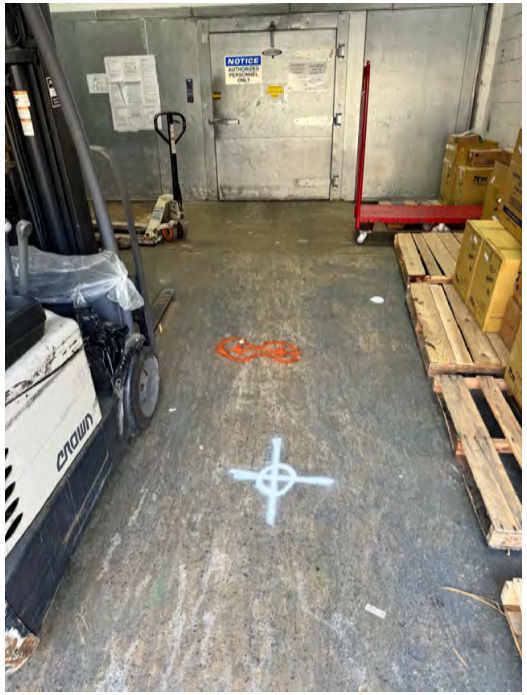


GEOPHYSICAL IMAGES

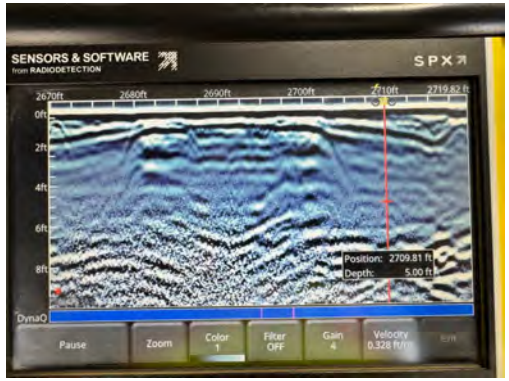
Commercial Property
48-55 36th Street
Long Island City, Queens County, New York 11101
April 27th, 2024













ATTACHMENT B

BORING LOGS

Soil Boring Log for: SB-1

Project Name: 48-55 36th Street Phase II Investigation
Site Name: 48-55 36th Street
Site Location: 48-55 36th Street, Long Island City, NY
J.S. Held Project #: 240302017
Geologist: JT/BN
Project Manager: Leah DeEgidio
Date Drilled 4/27/2024

Drilling Company: Tristate Drilling Technologies, Inc.
Driller/Helper: Paul
Drill Rig Type: GeoProbe
Drilling Method: Direct-Push
Sample: 4' Dual Tube

Depth (ft)	Sample	PID (mu)	Recvy. (ft)	From	To	Soil/Geologic Description	Depth (ft)	Details
0		0.0		0.0	1.0	CONCRETE	0	
1		0.0		1.0	2.0	Brown fine SAND	1	
2		0.0	3.0				2	
3		0.0		2.0	4.0	Black medium to fine SAND	3	
4		0.0					4	
5		0.0		4.0	6.0	Reddish brown medium to fine SAND	5	
6		0.0	3.0				6	
7		0.0		6.0	8.0	Black fine SANDY SILT	7	
8		0.0					8	
9		0.0					9	
10		0.0	3.0				10	
11		0.0					11	
12		0.0		8.0	16.0	Reddish brown medium to fine SAND	12	
13		0.0					13	
14		0.0	0.4				14	
15		0.0					15	
16	SB-1	0.0					16	

Boring Completed to: 16' bgs
Wet Soil Encountered:
Depth to Water:
Notes:

Samples collected:
SB-1 collected from 15.5-16.0' bgs

Boring Location Depicted on Site Figures

Soil Boring Log for: SB-2

Project Name: 48-55 36th Street Phase II Investigation
Site Name: 48-55 36th Street
Site Location: 48-55 36th Street, Long Island City, NY
J.S. Held Project #: 240302017
Geologist: JT/BN
Project Manager: Leah DeEgidio
Date Drilled 4/27/2024

Drilling Company: Tristate Drilling Technologies, Inc.
Driller/Helper: Paul
Drill Rig Type: GeoProbe
Drilling Method: Direct-Push
Sample: 4' Dual Tube

Depth (ft)	Sample	PID (mu)	Recvy. (ft)	From	To	Soil/Geologic Description	Depth (ft)	Details
0		0.0		0.0	1.0	CONCRETE	0	
1		0.0		1.0	4.5	Dark brown medium to fine SAND, with brick	1	
2		0.0	1.6				2	
3		0.0					3	
4		0.0					4	
5		0.0		4.5	15.0	Reddish brown medium to fine SAND	5	
6		0.0	3.0				6	
7		0.0					7	
8		0.0					8	
9		0.0					9	
10		0.0	3.0				10	
11		0.0					11	
12		0.0					12	
13		0.0					13	
14		0.0	2.0				14	
15		0.0					15	
16	SB-2	0.0		15.0	16.0	Light brown coarse SAND	16	

Boring Completed to: 16' bgs
Wet Soil Encountered:
Depth to Water:
Notes:

Samples collected:
SB-2 collected from 15.5-16.0' bgs

Boring Location Depicted on Site Figures

Soil Boring Log for: SB-3

Project Name: 48-55 36th Street Phase II Investigation
Site Name: 48-55 36th Street
Site Location: 48-55 36th Street, Long Island City, NY
J.S. Held Project #: 240302017
Geologist: JT/BN
Project Manager: Leah DeEgidio
Date Drilled 4/27/2024

Drilling Company: Tristate Drilling Technologies, Inc.
Driller/Helper: Paul
Drill Rig Type: GeoProbe
Drilling Method: Direct-Push
Sample: 4' Dual Tube

Depth (ft)	Sample	PID (mu)	Recvy. (ft)	From	To	Soil/Geologic Description	Depth (ft)	Details
0		0.0		0.0	1.0	CONCRETE	0	
1		0.0		1.0	4.5	Dark brown medium to fine SAND	1	
2		0.0	3.0				2	
3		0.0					3	
4		0.0					4	
5		0.0	2.0	4.5	5.0	CONCRETE	5	
6		0.0		5.0	6.0	Black medium to fine SAND	6	
7		0.0		6.0	12.5	Reddish brown medium to fine SAND, with rock	7	
8		0.0					8	
9		0.0	3.6				9	
10		0.0					10	
11		0.0					11	
12		0.0					12	
13		0.0	3.2	12.5	13.0	Grey medium to fine SAND	13	
14		0.0		13.0	16.0	Reddish brown medium to fine SAND	14	
15		0.0					15	
16	SB-3						16	

Boring Completed to: 16' bgs
Wet Soil Encountered:
Depth to Water:
Notes:

Samples collected:
SB-3 collected from 15.5-16.0' bgs

Boring Location Depicted on Site Figures

Soil Boring Log for: SB-4

Project Name: 48-55 36th Street Phase II Investigation
Site Name: 48-55 36th Street
Site Location: 48-55 36th Street, Long Island City, NY
J.S. Held Project #: 240302017
Geologist: JT/BN
Project Manager: Leah DeEgidio
Date Drilled 5/29/2024

Drilling Company: Eastern Environmental
Driller/Helper: Ernesto
Drill Rig Type: GeoProbe
Drilling Method: Direct-Push
Sample: 5' Dual Tube

Depth (ft)	Sample	PID (mu)	Recvy. (ft)	From	To	Soil/Geologic Description	Depth (ft)	Details
0		2.2		0.0	1.0	CONCRETE	0	
1		1.8					1	
2		1.7	2.8	1.0	4.0	Brown medium to fine SAND	2	
3		14.3					3	
4		4.2		4.0	4.5	CONCRETE	4	
5	SB-4A	0.0					5	
6		0.0					6	
7		0.0	3.2				7	
8		0.0					8	
9		0.0					9	
10		0.0					10	
11		0.0					11	
12		0.0	3.2	4.5	18.0	Brown medium to fine SAND	12	
13		0.0					13	
14		0.0					14	
15	SB-4B	0.0					15	
16		0.0					16	
17		0.0	5.0				17	
18		0.0					18	
19		0.0					19	
20		0.0		18.0	22.0	Light brown medium to fine SAND	20	
21		0.0					21	
22		0.0	5.0				22	
23		0.0		22.0	25.0	Brown SILTY SAND	23	
24		0.0					24	
25		0.0					25	
26		0.0		25.0	27.0	Brown coarse SAND	26	
27		0.0	5.0				27	
28		0.0		27.0	30.0	Light brown fine SAND, with coarse SAND	28	
29		0.0					29	
30		0.0					30	
31		0.0					31	
32		0.0	2.8				32	
33		0.0					33	
34		0.0					34	
35		0.0		30.0	40.0	Light brown fine SAND	35	
36		0.0					36	
37		0.0	5.0				37	
38		0.0					38	
39		0.0					39	
40		0.0					40	

Boring Completed to: 40' bgs
Wet Soil Encountered:
Depth to Water:
Notes:

Samples collected:
SB-4A collected from 4.5-5.0' bgs
SB-4B collected from 15.0-15.5' bgs

Boring Location Depicted on Site Figures

Soil Boring Log for: SB-5

Project Name: 48-55 36th Street Phase II Investigation
Site Name: 48-55 36th Street
Site Location: 48-55 36th Street, Long Island City, NY
J.S. Held Project #: 240302017
Geologist: JT/BN
Project Manager: Leah DeEgidio
Date Drilled 5/29/2024

Drilling Company: Eastern Environmental
Driller/Helper: Ernesto
Drill Rig Type: GeoProbe
Drilling Method: Direct-Push
Sample: 5' Dual Tube

Depth (ft)	Sample	PID (mu)	Recvy. (ft)	From	To	Soil/Geologic Description	Depth (ft)	Details
0		0.0		0.0	0.5	CONCRETE	0	
1		0.0		0.5	1.5	BRICK	1	
2		3.2	1.6	1.5	2.5	Light brown coarse SAND	2	
3	SB-5A	0.0		2.5	3.5	CONCRETE	3	
4		0.0		3.5	4.0	Brown medium to fine SAND	4	
5		0.0		4.0	7.0	Brown medium to fine SAND	5	
6		0.0	4.0				6	
7		0.0					7	
8		0.0		7.0	9.5	Brown loamy SAND, with brick	8	
9		13.3					9	
10		6.2	4.0				10	
11		15.5		9.5	12.5	Brown medium to fine SAND	11	
12		7.0					12	
13		73.2		12.5	14.0	Brown/black SILTY SAND, with rock	13	
14	SB-5B	0.0	3.0				14	
15		0.0		14.0	16.0	Brown medium to fine SAND	15	
16							16	

Boring Completed to: 16' bgs
Wet Soil Encountered:
Depth to Water:
Notes:

Samples collected:
SB-5A collected from 2.5-3.0' bgs
SB-5B collected from 13.5-14.0' bgs

Boring Location Depicted on Site Figures

Soil Boring Log for: SB-6

Project Name: 48-55 36th Street Phase II Investigation
Site Name: 48-55 36th Street
Site Location: 48-55 36th Street, Long Island City, NY
J.S. Held Project #: 240302017
Geologist: JT/BN
Project Manager: Leah DeEgidio
Date Drilled 5/29/2024

Drilling Company: Eastern Environmental
Driller/Helper: Ernesto
Drill Rig Type: GeoProbe
Drilling Method: Direct-Push
Sample: 5' Dual Tube

Depth (ft)	Sample	PID (mu)	Recvy. (ft)	From	To	Soil/Geologic Description	Depth (ft)	Details
0		0.0		0.0	1.0	CONCRETE	0	
1		0.0	0.2	1.0	4.0		1	
2		0.0					2	
3		0.0					3	
4	SB-6A	58.2	3.0	4.0	8.5	Brown medium to fine SAND	4	
5		13.5					5	
6		0.8					6	
7		0.6					7	
8		8.0	4.0	8.5	9.0	Grey medium to fine SAND, with rock	8	
9		1.3		9.0	12.5	Brown medium to fine SAND	9	
10		0.5					10	
11		0.2					11	
12		3.0	4.0	12.5	13.5	Brown/grey medium to fine SAND, with gravel	12	
13		4.7		13.5	14.5	Dark brown SILTY SAND	13	
14		0.0		14.5	16.0	Light brown medium to fine SAND	14	
15		0.0					15	
16	SB-6B						16	

Boring Completed to: 16' bgs
Wet Soil Encountered:
Depth to Water:
Notes:

Samples collected:
SB-6A collected fom 4.0-4.5' bgs
SB-6B collected from 15.5-16.0' bgs

Boring Location Depicted on Site Figures

Soil Boring Log for: SB-7

Project Name: 48-55 36th Street Phase II Investigation
Site Name: 48-55 36th Street
Site Location: 48-55 36th Street, Long Island City, NY
J.S. Held Project #: 240302017
Geologist: JT/BN
Project Manager: Leah DeEgidio
Date Drilled 5/29/2024

Drilling Company: Eastern Environmental
Driller/Helper: Ernesto
Drill Rig Type: GeoProbe
Drilling Method: Direct-Push
Sample: 5' Dual Tube

Depth (ft)	Sample	PID (mu)	Recvy. (ft)	From	To	Soil/Geologic Description	Depth (ft)	Details
0		0.0		0.0	1.0	CONCRETE	0	
1		0.0		1.0	2.0	BRICK	1	
2		0.0	1.2	2.0	3.0	Brown medium to fine SAND, with gravel	2	
3		0.0		3.0	4.0	Rubber material, metal	3	
4		2.9		4.0	5.0	Grey medium to fine SAND, with rock, concrete	4	
5		17.4					5	
6		59.6	3.2	5.0	7.0	Brown medium to fine SAND	6	
7	SB-7A	7.6					7	
8		2.9					8	
9		0.5					9	
10		0.2	4.0				10	
11		0.2		7.0	16.0	Light brown medium to fine SAND, with rock	11	
12		0.0					12	
13		0.0					13	
14		0.0	4.0				14	
15		0.0					15	
16	SB-7B						16	

Boring Completed to: 16' bgs
Wet Soil Encountered:
Depth to Water:
Notes:

Samples collected:
SB-7A collected from 6.5-7.0' bgs
SB-7B collected from 15.5-16.0' bgs

Boring Location Depicted on Site Figures

Soil Boring Log for: SB-7R

Project Name: 48-55 36th Street Phase II Investigation
Site Name: 48-55 36th Street
Site Location: 48-55 36th Street, Long Island City, NY
J.S. Held Project #: 240302017
Geologist: JT/BN
Project Manager: Leah DeEgidio
Date Drilled 5/29/2024

Drilling Company: Eastern Environmental
Driller/Helper: Ernesto
Drill Rig Type: GeoProbe
Drilling Method: Direct-Push
Sample: 5' Dual Tube

Depth (ft)	Sample	PID (mu)	Recvy. (ft)	From	To	Soil/Geologic Description	Depth (ft)	Details
0		0.0		0.0	1.0	CONCRETE	0	
1		0.0		1.0	2.0	BRICK	1	
2		0.0	3.0	2.0	3.0	Brown medium to fine SAND, with gravel	2	
3		0.0		3.0	4.0	Rubber material, metal	3	
4		2.9		4.0	5.0	Grey medium to fine SAND, with rock, concrete	4	
5		17.4		5.0	7.0	Brown medium to fine SAND	5	
6		59.6					6	
7		7.6	3.0	7.0	16.0	Light brown medium to fine SAND, with rock	7	
8		2.9					8	
9		0.5					9	
10		2.3					10	
11		0.4					11	
12	SB-7R	0.0	3.0				12	
13		2.2					13	
14		0.0					14	
15							15	
16							16	

Boring Completed to: 15' bgs
Wet Soil Encountered:
Depth to Water:
Notes:

Samples collected:
SB-7R collected om 12.0-12.5' bgs

Boring Location Depicted on Site Figures

Soil Boring Log for: SB-8

Project Name: 48-55 36th Street Phase II Investigation
Site Name: 48-55 36th Street
Site Location: 48-55 36th Street, Long Island City, NY
J.S. Held Project #: 240302017
Geologist: JT/BN
Project Manager: Leah DeEgidio
Date Drilled 5/29/2024

Drilling Company: Eastern Environmental
Driller/Helper: Ernesto
Drill Rig Type: GeoProbe
Drilling Method: Direct-Push
Sample: 5' Dual Tube

Depth (ft)	Sample	PID (mu)	Recvy. (ft)	From	To	Soil/Geologic Description	Depth (ft)	Details
0		0.0		0.0	1.0	CONCRETE	0	
1		0.0		1.0	2.0	Gret fine SAND, with ROCK	1	
2		0.4	2.0	2.0	4.0	Brown medium to fine SAND	2	
3		0.8					3	
4		0.0		4.0	5.5	CONCRETE	4	
5		1.1					5	
6		1.1	2.0	5.5	6.5	Brown medium to fine SAND	6	
7	SB-8A	0.0		6.5	8.0	Light brown coarse SAND	7	
8		0.1		8.0	12.0	Brown medium to fine SAND	8	
9		0.2					9	
10		0.0	4.0				10	
11		0.0					11	
12		0.0		12.0	13.0	Grey SAND with brick, gravel	12	
13		0.0		13.0	16.0	Brown medium to fine dense SAND	13	
14		0.0	4.0				14	
15		0.0					15	
16	SB-8B						16	

Boring Completed to: 16' bgs
Wet Soil Encountered:
Depth to Water:
Notes:

Samples collected:
SB-8A collected from 6.5-7.0' bgs
SB-8B collected from 15.5-16.0' bgs

Boring Location Depicted on Site Figures

Soil Boring Log for: SB-9

Project Name: 48-55 36th Street Phase II Investigation
Site Name: 48-55 36th Street
Site Location: 48-55 36th Street, Long Island City, NY
J.S. Held Project #: 240302017
Geologist: JT/BN
Project Manager: Leah DeEgidio
Date Drilled 5/30/2024

Drilling Company: Eastern Environmental
Driller/Helper: Ernesto
Drill Rig Type: GeoProbe
Drilling Method: Direct-Push
Sample: 5' Dual Tube

Depth (ft)	Sample	PID (mu)	Recvy. (ft)	From	To	Soil/Geologic Description	Depth (ft)	Details
0		0.0		0.0	1.0	CONCRETE	0	
1		0.0					1	
2		0.0	3.2				2	
3	SB-9A	0.0					3	
4		0.0					4	
5		0.0	4.0				5	
6		0.0					6	
7		0.0					7	
8		0.0		1.0	16.0	Dark brown medium to fine SAND	8	
9		0.0					9	
10		0.0	4.0				10	
11		0.0					11	
12		0.0					12	
13		0.0	2.8				13	
14		0.0					14	
15	SB-9B	0.0					15	
16		0.0					16	

Boring Completed to: 16' bgs
Wet Soil Encountered:
Depth to Water:
Notes:

Samples collected:
SB-9A collected from 2.5-3.0' bgs
SB-8B collected from 14.5-15.0' bgs

Boring Location Depicted on Site Figures

Soil Boring Log for: SB-10

Project Name: 48-55 36th Street Phase II Investigation
Site Name: 48-55 36th Street
Site Location: 48-55 36th Street, Long Island City, NY
J.S. Held Project #: 240302017
Geologist: JT/BN
Project Manager: Leah DeEgidio
Date Drilled 7/15/2024

Drilling Company: Eastern Environmental
Driller/Helper: Ernesto
Drill Rig Type: GeoProbe
Drilling Method: Direct-Push
Sample: 5' Dual Tube

Depth (ft)	Sample	PID (mu)	Recvy. (ft)	From	To	Soil/Geologic Description	Depth (ft)	Details
0		0.0		0.0	1.0	CONCRETE	0	
1		0.0		1.0	4.5	Brown medium to fine sand, with rock, trace silt	1	
2		0.0	1.5				2	
3		0.0					3	
4		0.0					4	
				4.5	5.0	CONCRETE		
5		0.0		5.0	8.0	Brown medium to fine SAND, with rock	5	
6		0.0					6	
7	SB-10A	0.0	4.0				7	
8		0.0					8	
9		0.0					9	
10	SB-10B	0.0		8.0	15.0	Dark brown medium to fine SAND	10	
11		0.0					11	
12		0.0	1.5				12	
13		0.0					13	
14		0.0					14	
15							15	

Boring Completed to: 15' bgs
Wet Soil Encountered:
Depth to Water:
Notes:

Samples collected:
SB-10A collected from 6.5-7.0' bgs
SB-10B collected from 10.0-10.5' bgs

Boring Location Depicted on Site Figures

Soil Boring Log for: SB-11

Project Name: 48-55 36th Street Phase II Investigation
Site Name: 48-55 36th Street
Site Location: 48-55 36th Street, Long Island City, NY
J.S. Held Project #: 240302017
Geologist: JT/BN
Project Manager: Leah DeEgidio
Date Drilled 7/16/2024

Drilling Company: Eastern Environmental
Driller/Helper: Ernesto
Drill Rig Type: GeoProbe
Drilling Method: Direct-Push
Sample: 5' Dual Tube

Depth (ft)	Sample	PID (mu)	Recvy. (ft)	From	To	Soil/Geologic Description	Depth (ft)	Details
0		0.0		0.0	1.0	CONCRETE	0	
1		0.0		1.0	6.5	Darn brown medium to fine SAND, trace silt	1	
2	SB-11A	0.0	1.5				2	
3		0.0					3	
4		0.0					4	
5	SB-11B	0.0					5	
6		0.0					6	
7		0.0	4.5	6.5	7.0	CONCRETE	7	
8		0.0		7.0	12.0	Darn brown medium to fine SAND, trace silt	8	
9		0.0					9	
10		0.0					10	
11		0.0					11	
12		0.0	4.5				12	
13		0.0		12.0	14.0	Dark bron clayey SILT	13	
14		0.0		14.0	15.0	Darn brown medium to fine SAND, trace silt	14	
15							15	

Boring Completed to: 15' bgs
Wet Soil Encountered:
Depth to Water:
Notes:

Samples collected:
SB-11A collected from 2.0-2.5' bgs
SB-11B collected from 5.0-5.5' bgs

Boring Location Depicted on Site Figures

Soil Boring Log for: SB-13

Project Name: 48-55 36th Street Phase II Investigation
Site Name: 48-55 36th Street
Site Location: 48-55 36th Street, Long Island City, NY
J.S. Held Project #: 240302017
Geologist: JT/BN
Project Manager: Leah DeEgidio
Date Drilled 7/12/2024

Drilling Company: Eastern Environmental
Driller/Helper: Ernesto
Drill Rig Type: GeoProbe
Drilling Method: Direct-Push
Sample: 5' Dual Tube

Depth (ft)	Sample	PID (mu)	Recvy. (ft)	From	To	Soil/Geologic Description	Depth (ft)	Details
0		0.0		0.0	1.0	CONCRETE	0	
1		0.0		1.0	2.0	Darn brown medium to fine SAND, trace silt	1	
2	SB-13A	0.0	4.5	2.0	2.5	Dark black tar material	2	
3		7.3		2.5	5.0	Darn brown medium to fine SAND, trace silt	3	
4		0.8					4	
5	SB-13B	0.0					5	
6		0.0					6	
7		0.0	4.5	5.0	8.5	Brown medium to fine SAND, trace silt	7	
8		0.0					8	
9		0.0					9	
10		0.0					10	
11		0.0					11	
12		0.0					12	
13		0.0					13	
14		0.0					14	
15							15	

Boring Completed to: 8.5' bgs
Wet Soil Encountered:
Depth to Water:
Notes:

Samples collected:
SB-13A collected from 2.0-2.5' bgs
SB-13B collected from 5.0-5.5' bgs

Boring Location Depicted on Site Figures

Soil Boring Log for: SB-14

Project Name: 48-55 36th Street Phase II Investigation
Site Name: 48-55 36th Street
Site Location: 48-55 36th Street, Long Island City, NY
J.S. Held Project #: 240302017
Geologist: JT/BN
Project Manager: Leah DeEgidio
Date Drilled 7/16/2024

Drilling Company: Eastern Environmental
Driller/Helper: Ernesto
Drill Rig Type: GeoProbe
Drilling Method: Direct-Push
Sample: 5' Dual Tube

Depth (ft)	Sample	PID (mu)	Recvy. (ft)	From	To	Soil/Geologic Description	Depth (ft)	Details
0		0.0		0.0	1.0	CONCRETE	0	
1	SB-14A	0.0					1	
2		0.0	4.0				2	
3		0.0		1.0	6.0	Brown medium to fine SAND	3	
4	SB-14B	0.0					4	
5		0.0					5	
6		0.0					6	
7		0.0	4.0	6.0	9.0	Light brown medium to fine SAND	7	
8		0.0					8	
9		0.0					9	
10		0.0					10	
11		0.0					11	
12		0.0		9.0	15.0	Light brown fine SAND	12	
13		0.0	4.0				13	
14		0.0					14	
15		0.0					15	

Boring Completed to: 15' bgs
Wet Soil Encountered:
Depth to Water:
Notes:

Samples collected:
SB-14A collected from 1.0-1.5' bgs
SB-14B collected from 4.0-4.5' bgs

Boring Location Depicted on Site Figures

Soil Boring Log for: SB-15

Project Name: 48-55 36th Street Phase II Investigation
Site Name: 48-55 36th Street
Site Location: 48-55 36th Street, Long Island City, NY
J.S. Held Project #: 240302017
Geologist: JT/BN
Project Manager: Leah DeEgidio
Date Drilled 7/15/2024

Drilling Company: Eastern Environmental
Driller/Helper: Ernesto
Drill Rig Type: GeoProbe
Drilling Method: Direct-Push
Sample: 5' Dual Tube

Depth (ft)	Sample	PID (mu)	Recvy. (ft)	From	To	Soil/Geologic Description	Depth (ft)	Details
0		0.0		0.0	1.0	CONCRETE	0	
1		0.0					1	
2		5.4	2.0				2	
3		3.8		1.0	5.0	Dark brown medium to fine SAND	3	
4	SB-15A	5.5					4	
5		0.3					5	
6		0.0					6	
7	SB-15B	0.0	3.5				7	
8		0.0					8	
9		0.0					9	
10		0.0		5.0	15.0	Light brown medium to fine SAND, trace silt	10	
11		0.0					11	
12		0.0	4.5				12	
13		0.0					13	
14		0.0					14	
15							15	

Boring Completed to: 15' bgs
Wet Soil Encountered:
Depth to Water:
Notes:

Samples collected:
SB-15A collected from 3.5-4.0' bgs
SB-15B collected from 7.0-7.5' bgs

Boring Location Depicted on Site Figures

Soil Boring Log for: SB-16

Project Name: 48-55 36th Street Phase II Investigation
Site Name: 48-55 36th Street
Site Location: 48-55 36th Street, Long Island City, NY
J.S. Held Project #: 240302017
Geologist: JT/BN
Project Manager: Leah DeEgidio
Date Drilled 7/15/2024

Drilling Company: Eastern Environmental
Driller/Helper: Ernesto
Drill Rig Type: GeoProbe
Drilling Method: Direct-Push
Sample: 5' Dual Tube

Depth (ft)	Sample	PID (mu)	Recvy. (ft)	From	To	Soil/Geologic Description	Depth (ft)	Details
0		0.0		0.0	1.0	CONCRETE	0	
1		0.0		1.0	5.0	Black, brown SAND, trace silt	1	
2	SB-16A	0.0	3.5				2	
3		0.0					3	
4	SB-16B	0.0					4	
5		0.0		5.0	15.0	Brown medium to fine sand, with rock, trace silt	5	
6		0.0					6	
7		0.0	4.0				7	
8		0.0					8	
9		0.0					9	
10		0.0					10	
11		0.0					11	
12		0.0	4.5				12	
13		0.0					13	
14		0.0					14	
15							15	

Boring Completed to: 15' bgs
Wet Soil Encountered:
Depth to Water:
Notes:

Samples collected:
SB-16A collected from 2.0-2.5' bgs
SB-16B collected from 4.0-4.5' bgs

Boring Location Depicted on Site Figures

Soil Boring Log for: SB-17

Project Name: 48-55 36th Street Phase II Investigation
Site Name: 48-55 36th Street
Site Location: 48-55 36th Street, Long Island City, NY
J.S. Held Project #: 240302017
Geologist: JT/BN
Project Manager: Leah DeEgidio
Date Drilled 7/15/2024

Drilling Company: Eastern Environmental
Driller/Helper: Ernesto
Drill Rig Type: GeoProbe
Drilling Method: Direct-Push
Sample: 5' Dual Tube

Depth (ft)	Sample	PID (mu)	Recvy. (ft)	From	To	Soil/Geologic Description	Depth (ft)	Details
0		0.0		0.0	1.0	CONCRETE	0	
1	SB-17A	0.0		1.0	8.5	Brown medium to fine SAND, with rock, trace silt	1	
2		0.0	2.0				2	
3		0.0					3	
4	SB-17B	0.0					4	
5		0.0					5	
6		0.0					6	
7		0.0	1.0				7	
8							8	
9							9	
10							10	

Boring Completed to: 8.0' bgs
Wet Soil Encountered:
Depth to Water:
Notes:

Samples collected:
SB-17A collected from 1.0-1.5' bgs
SB-17B collected from 4.0-4.5' bgs

Boring Location Depicted on Site Figures

Soil Boring Log for: SB-18

Project Name: 48-55 36th Street Phase II Investigation
Site Name: 48-55 36th Street
Site Location: 48-55 36th Street, Long Island City, NY
J.S. Held Project #: 240302017
Geologist: JT/BN
Project Manager: Leah DeEgidio
Date Drilled 7/15/2024

Drilling Company: Eastern Environmental
Driller/Helper: Ernesto
Drill Rig Type: GeoProbe
Drilling Method: Direct-Push
Sample: 5' Dual Tube

Depth (ft)	Sample	PID (mu)	Recvy. (ft)	From	To	Soil/Geologic Description	Depth (ft)	Details
0		0.0		0.0	1.0	CONCRETE	0	
1		0.0		1.0	4.0	Brown medium to fine SAND, trace silt	1	
2	SB-18A	0.0	3.0				2	
3		0.0					3	
4	SB-18B	0.0		4.0	5.0	CONCRETE	4	
5		0.0		5.0	8.5	Brown medium to fine SAND, trace silt	5	
6		0.0					6	
7		0.0	2.7				7	
8		0.0					8	
9		0.0					9	
10							10	

Boring Completed to: 9.5' bgs
Wet Soil Encountered:
Depth to Water:
Notes:

Samples collected:
SB-18A collected from 2.0-2.5' bgs
SB-18B collected from 4.0-4.5' bgs

Boring Location Depicted on Site Figures

Soil Boring Log for: SB-19

Project Name: 48-55 36th Street Phase II Investigation
Site Name: 48-55 36th Street
Site Location: 48-55 36th Street, Long Island City, NY
J.S. Held Project #: 240302017
Geologist: JT/BN
Project Manager: Leah DeEgidio
Date Drilled 7/16/2024

Drilling Company: Eastern Environmental
Driller/Helper: Ernesto
Drill Rig Type: GeoProbe
Drilling Method: Direct-Push
Sample: 5' Dual Tube

Depth (ft)	Sample	PID (mu)	Recvy. (ft)	From	To	Soil/Geologic Description	Depth (ft)	Details
0		0.0		0.0	1.0	CONCRETE	0	
1		0.0		1.0	3.0	Dark black fine SAND	1	
2	SB-19A	0.0	3.0				2	
3		0.0		3.0	3.5	CONCRETE	3	
4		0.0		3.5	5.0	Brown medium to fine SAND	4	
5		0.0		5.0	9.0	Dark brown fine SAND	5	
6		0.0					6	
7		0.0	4.0				7	
8		0.0					8	
9		0.0		9.0	15.0	Light brown medium to fine SAND, with rock	9	
10		0.0					10	
11		0.0					11	
12		0.0					12	
13		0.0	4.5				13	
14		0.0					14	
15		0.0					15	

Boring Completed to: 15' bgs
Wet Soil Encountered:
Depth to Water:
Notes:

Samples collected:
SB-19A collected from 2.0-2.5' bgs

Boring Location Depicted on Site Figures

Soil Boring Log for: SB-20

Project Name: 48-55 36th Street Phase II Investigation
Site Name: 48-55 36th Street
Site Location: 48-55 36th Street, Long Island City, NY
J.S. Held Project #: 240302017
Geologist: JT/BN
Project Manager: Leah DeEgidio
Date Drilled 7/16/2024

Drilling Company: Eastern Environmental
Driller/Helper: Ernesto
Drill Rig Type: GeoProbe
Drilling Method: Direct-Push
Sample: 5' Dual Tube

Depth (ft)	Sample	PID (mu)	Recvy. (ft)	From	To	Soil/Geologic Description	Depth (ft)	Details
0		0.0		0.0	1.0	CONCRETE	0	
1		0.0		1.0	4.0	Dark brown loamy SAND	1	
2		0.0	3.0				2	
3		0.0					3	
4		0.0		4.0	6.0	Brown medium to fine SAND, trace silt	4	
5		0.0					5	
6		0.0		6.0	8.0	Reddish brown medium to fine SAND	6	
7	SB-20A	0.0	3.0				7	
8		0.0		8.0	15.0	Light brown medium to fine SAND	8	
9		0.0					9	
10	SB-20B	0.0					10	
11		0.0					11	
12		0.0	3.0				12	
13		0.0					13	
14		0.0					14	
15		0.0					15	

Boring Completed to: 15' bgs
Wet Soil Encountered:
Depth to Water:
Notes:

Samples collected:
SB-20A collected from 1.0-1.5' bgs
SB-20B collected from 9.5-10.0' bgs

Boring Location Depicted on Site Figures

Soil Boring Log for: SB-21

Project Name: 48-55 36th Street Phase II Investigation
Site Name: 48-55 36th Street
Site Location: 48-55 36th Street, Long Island City, NY
J.S. Held Project #: 240302017
Geologist: JT/BN
Project Manager: Leah DeEgidio
Date Drilled 7/16/2024

Drilling Company: Eastern Environmental
Driller/Helper: Ernesto
Drill Rig Type: GeoProbe
Drilling Method: Direct-Push
Sample: 5' Dual Tube

Depth (ft)	Sample	PID (mu)	Recvy. (ft)	From	To	Soil/Geologic Description	Depth (ft)	Details
0		0.0		0.0	1.0	CONCRETE	0	
1	SB-21A	0.0		1.0	2.0	Grey, dark brown CLAYEY SILT	1	
2		0.0	3.0				2	
3		0.0		2.0	4.0	Brown medium to fine SAND	3	
4		0.0					4	
5	SB-21B	0.0					5	
6		0.0					6	
7		0.0		4.0	9.0	Brown medium to fine SAND	7	
8		0.0	3.0				8	
9		0.0					9	
10		0.0					10	
11		0.0		9.0	13.0	Light brown medium to fine SAND	11	
12		0.0					12	
13		0.0	5.0				13	
14		0.0		13.0	15.0	Brown medium to fine SAND, with rock	14	
15		0.0					15	

Boring Completed to: 15' bgs
Wet Soil Encountered:
Depth to Water:
Notes:

Samples collected:
SB-21A collected from 1.0-1.5' bgs
SB-21B collected from 4.5-5.0' bgs

Boring Location Depicted on Site Figures

ATTACHMENT C

ANALYTICAL LABORATORY DATA PACKAGES



Integrated Analytical Laboratories LLC

EPA TO-15 DATA PACKAGE

ANALYTICAL DATA PACKAGE FOR THE
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
ALBANY NEW YORK 12233

Integrated Analytical Laboratories, LLC — **Randolph, NJ 07869**
Project#: 48-55 36th St — **NY ELAP Certification#: 11402**
SDG #: E24-01487 — **NJDEP (Primary AB) Certification#: 14751**
Date of first sample receipt: 4/26/2024 — **Date of last sample receipt: 4/26/2024**

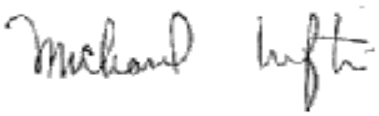
Client: JS Held-Hoboken

Project/Site: 48-55 36th St/NY

Client Sample Number	Laboratory Sample	Sample Location	Date/Time of Collection
SG-1	E24-01487-01	NA	4/27/2024 12:50
SG-2	E24-01487-02	NA	4/27/2024 14:05
SG-3	E24-01487-03	NA	4/27/2024 14:38
SG-4	E24-01487-04	NA	4/27/2024 13:45

This report shall not be reproduced, except in its entirety, without the written consent of Integrated Analytical Laboratories, LLC. The test results included in this report relate only to the samples analyzed. The results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

I certify that this data package is in compliance with the terms and conditions of this contract, both technically and for completeness, for other than the conditions detailed above. Release of data contained in this hardcopy data package and in the computer-readable data submitted on CD/diskette and by electronic mail has been authorized by the laboratory manager or his designee, as verified by the following signature.



Michael H. Leftin, Ph.D.
Laboratory Director

Date: May 21, 2024



Ming-Hwa Reitan
QA/QC Manager

Date: May 21, 2024

Integrated Analytical Laboratories LLC

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Laboratory Acronyms

The following is a list of laboratory acronyms commonly used in EPA Method TO-15 testing:

Acronym	Definition
BLK	Blank/Method Blank
BFB	4-Bromofluorobenzene (Tuning Standard)
CAS Number	Chemical Abstract Service Registry Number
cc	cubic centimeters
CCCVS	Closing Calibration Check Verification Standard
COC	Chain of Custody
DCVS	Daily Calibration Verification Standard
DF	Dilution Factor
EPA	U. S. Environmental Protection Agency (aka USEPA)
"Hg	Inches of Mercury
IA	Indoor Air
IASL	Indoor Air Screening Level
ICAL	Initial Calibration
ICVSS	Initial Calibration Verification Standard
ISTD	Internal Standard
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LCS	Laboratory Control Sample/Spike
LLTO-15	Low Level TO-15
MDL	Method Detection Limit
MDLV	Method Detection Limit Verification
ml	milliliters
ND	Not Detected (at or above RL)
NJDEP	New Jersey Department of Environmental Protection
PM	Project Manager
ppbv	parts per billion, volume-to-volume ratio
PQL	Practical Quantitation Limit - MDLx3
QA	Quality Assurance
QC	Quality Control
RAL	Rapid Action Limit
RL	Reporting Limit
RLLCS	Reporting Limit Laboratory Control Sample
RPD	Relative Percent Difference
RRF	Relative Response Factor
RSD	Relative Standard Deviation
SDG	Sample Delivery Group
SGSL	Soil Gas Screening Levels
SS	Sub Slab
TAT	Turnaround Time
TIC	Tentatively Identified Compound
µg/m3	micrograms per cubic meter

Section I: Chain of Custody

INTEGRATED ANALYTICAL LABORATORIES, LLC

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

External Chain of Custody Record/
Field Test Data Sheet
USEPA Method TO-15

Contact Us: 973-361-4252
Fax: 973-366-5613
Web: www.ialonline.com

Carrier (check one): X IAL Courier ____ Client Courier ____ FedEx/UPS

pg ____ of ____

Client Contact Information	Project Information	Invoice Information
Company: JS Held LLC	Project Name: 48-55 36th St	Attn:
Address: 5 marine View Plaza	Project Location (State): NY	Address: Same
Suite 401, Hoboken, NJ	Project Manager: Leah DeEgidio	
Phone: (201) 876-9400	PM Signature:	
Fax:	PM E-Mail: ldegidio@jsheld.com	PO #:
Report to: Leah DeEgidio	Sampler: JT/LD	Quote #:

Analysis Turnaround Time - IF NO TAT IS SPECIFIED, 2 WEEK TAT IS ASSUMED

IAL Standard: 2 weeks (10 business days)

Rush (**pre-approved by lab): 24hr** 48hr** 72hr** 96hr** 1wk**

Barometric Pressure: Start ____ Stop ____

	Sample Identification	Start DATE & TIME (24hr Clock)	End DATE & TIME (24hr Clock)	Starting Vacuum ("Hg)	Ending Vacuum ("Hg)	Starting Temp. (°F)	Ending Temp. (°F)	Outgoing Vacuum - Lab ("Hg)	Incoming Vacuum - Lab ("Hg)	Flow Regulator ID	Canister ID	Canister Size (1L or 6L)	Flow Controller Readout (cc/min)	EPA TO - 15	NJDEP LLTO-15 (includes 30 TICs)	Library Search (10, 20, or 30 TICs)	Other (Explain in Comments)	Regulatory/ NY Cat B / Full (NJ Required)	Reduced / NY Cat A Data Package	Results Only	Indoor Air	Ambient / Outdoor Air	Sub Slab / Soil Gas / Near Slab (Circle One)	Stack Emission / SVE System	High Concentrations Expected
①	SG-1	4/27/24 12:50	4/27/24 13:20	-30	-4	65	65	-29.0	-3.5	7342685	0402401*	6L	200	X				X							
②	SG-2	4/27/24 14:05	4/27/24 14:35	-29	0	70	70	-29.0	0.0	7341819	3279	6L	200	X				X							
③	SG-3	4/27/24 14:38	4/27/24 15:08	-30	-1	58	58	-29.0	-1.0	AC07031-10	0402240**	6L	200	X				X							
④	SG-4	4/27/24 13:45	4/27/24 14:15	-30	0	70	70	-29.0	0.0	7288555	2893	6L	200	X				X							

Comments/ Special Analysis Instructions / QC Requirements:

* #1: Canister Id = #3041A
** #3: Canister Id = #3012

Note: Hold or contingent samples may be designated by writing an "H" or "C" in the appropriate analysis box.

ALL FIELDS IN RED ARE REQUIRED

Shipping Information / Canister Preparation (for laboratory use only)

Individual Preparing Canisters / Title: ~~Padraic Jenkins, J. Walukiewicz~~ / Air Department Sample Custodians

Lab Affixed Seal Number(s): Desmond Flores

Date/Time Shipping Container Sealed: 3:22 PM 4/25/24

Laboratory Canister Certification

GC/MS Analyst Signature: Joseph J Walukiewicz III (SAL)

IAL SDG#: 01487

External Chain of Custody

Relinquished	Received	Date / Time	Reason for Change of External Custody
Desmond Flores		3:22 PM 4/25/24	shipment from laboratory to client
J. Twill			
	Joseph J Walukiewicz III (SAL)	4/29/24 1127	Received at lab

Name/Title Resealing Shipping Container Name: ____

Date/Time Sample Shipping Container Resealed: ____

Date/Time Sample Shipping Container Opened: 04/29/24 1130

NJDEP Affixed Seal Number: ____

Individual Opening Sample Shipping Container: ~~Padraic Jenkins~~ / Joseph Walukiewicz

Date/Time Internal Chain of Custody Initiated: 04/29/24 1135

White and yellow - lab copies; Pink - client copy

Use appropriate care with IAL sampling equipment when sampling and packing for shipment. The client is responsible for all damage incurred to IAL equipment. Notify IAL if equipment is damaged upon receipt. Holding time before sampling is 15 days, after sampling is 30 days; failure to follow these times may result in data rejection by regulatory agencies. The lab will contact you if your COC is not clear, incomplete, or if discrepancies exist. The use of initials is not permitted on the COC except when correcting errors. 06/2014

PROJECT INFORMATION

RUSH

E24-01487: 48-55 36TH ST

To: Leah DeEgidio
JS Held - Hoboken
Fax: 201-626-8095
EMail: Ldeegidio@jsheld.com

Report To

JS Held - Hoboken
5 Marine View Plaza
Suite 401
Hoboken, NJ 07030
Attn: Leah DeEgidio

Bill To

JS Held - Hoboken
J.S. Held
50 Jericho Quadrangle, Suite 117
Jericho, NY 11753
Attn: Accounts Payable

Report Format	P.O. #	Received At Lab	PHC Due	Verbal Due	Hardcopy Due
Air Regulatory		Apr 29, 2024 @ 11:27	NA	May 02, 2024	May 20, 2024 *

* Any ***Conditional or Hold*** status will delay final hardcopy report sent date.

Diskette Req. Not Required

Lab ID	Client Sample ID	Depth	Sampling Time	Matrix	Unit	Field pH/Temp
01487-001	SG-1	NA	04/27/24@13:20	Air-Soil Gas	ppbV	
01487-002	SG-2	NA	04/27/24@14:35	Air-Soil Gas	ppbV	
01487-003	SG-3	NA	04/27/24@15:08	Air-Soil Gas	ppbV	
01487-004	SG-4	NA	04/27/24@14:15	Air-Soil Gas	ppbV	

* No Cert = IAL does not hold certification for this test/method

Sample #	Test	Status	Analytical Method	TAT	Holding Time Expires
001	EPA TO-15	Analyze	TO-15	RUSH 72 HRS	5/27/2024
002	EPA TO-15	Analyze	TO-15	RUSH 72 HRS	5/27/2024
003	EPA TO-15	Analyze	TO-15	RUSH 72 HRS	5/27/2024
004	EPA TO-15	Analyze	TO-15	RUSH 72 HRS	5/27/2024

Project Notes:

NOTE 2 taken by kim on 04/29/2024 03:40
CLIENT DID NOT RECORD BAROMETRIC PRESSURE.

IAL is a NELAP accredited lab (TNI01284) and maintains certification in Connecticut (PH-0699), New Jersey (14751), New York (11402), and Pennsylvania (68-00773).

Internal Chain of Custody

Instructions: Use 1 form for each 20 samples of aliquot.

Laboratory Person Accepting Responsibility for Sample(s)			
Laboratory:	Integrated Analytical Laboratories	Location:	273 Franklin Rd Randolph, NJ 07869
Name:	Joseph Walukiewicz	Title:	Air Department Receiving
Case No.:	E24-01487	Analytical Parameter/Fraction: (check one)	____ NJDEP LLTO-15 __X__ EPA TO-15

Sample No.	Aliquot/Extract No.
881-1	E24-01487-01
" -2	E24- " -02
" -3	E24- " -03
" -4	E24- " -04
	E24-
	E24
	E24-
	E24-
	E24-
	E24-

Sample No.	Aliquot/Extract No.
	E24-
	E24-
	E24-
	E24-
	E24-
	E24-
	E24-
	E24-
	E24
	E24

Date	Time	Relinquished By	Received By	Purpose of Change of Custody
04 29 24	1135	SIGNATURE PRINTED NAME	SIGNATURE Joseph Walukiewicz PRINTED NAME JOSEPH WALUKIEWICZ	1. Sample log-in 2. Pressure Check 3. Pre-analysis storage
04 29 24	1140	SIGNATURE Joseph Walukiewicz PRINTED NAME JOSEPH WALUKIEWICZ	SIGNATURE PRINTED NAME	Placement in TO-15 sample storage area until ready for analysis
04 29 24	1600	SIGNATURE PRINTED NAME	SIGNATURE Joseph Walukiewicz PRINTED NAME JOSEPH WALUKIEWICZ	TO-15 analysis on: 01487-01 to -04
		SIGNATURE PRINTED NAME	SIGNATURE Joseph Walukiewicz PRINTED NAME JOSEPH WALUKIEWICZ	TO-15 analysis on:
		SIGNATURE PRINTED NAME	SIGNATURE PRINTED NAME	
		SIGNATURE PRINTED NAME	SIGNATURE PRINTED NAME	
		SIGNATURE PRINTED NAME	SIGNATURE PRINTED NAME	
		SIGNATURE PRINTED NAME	SIGNATURE PRINTED NAME	

Rev. 12/16

Section II: Methodology Review

Methodology Summary for Air Collected from Hazardous Waste Site Contract

Laboratory:	**Integrated Analytical Lab, LLC**	**Project No:**	**48-55 36th St**
Location:	**Randolph, NJ**	**SDG No:**	**E24-01487**

Name	Required Methodology	Indicate Method
Volatile Organics	US EPA TO-15	US EPA Method TO-15

Section III: Case Narrative

CASE NARRATIVE

Integrated Analytical Laboratories, LLC — **Randolph, NJ 07869**
Project #: 48-55 36th St — **NJDEP (Primary AB) Certification#: 14751**
SDG #: E24-01487 — **NY ELAP Certification #: 11402**
CT DPH Certification#: PH-0699
Analytical Method: EPA Method TO-15 — **PADEP Certification#: 68-00773**

Date of first sample receipt: 4/26/2024 — **Date of last sample receipt: 4/26/2024**

Client: JS Held-Hoboken
Project/Site: 48-55 36th St / NY

Client ID	Lab ID	Receipt Date	Analysis Date	DF	Diluted For
SG-1	E24-01487-01	04/26/2024	04/30/2024	5.0	1,2-Dichloroethene (cis) Tetrachloroethene
SG-1	E24-01487-01	04/26/2024	04/29/2024	1.0	NA
SG-2	E24-01487-02	04/26/2024	04/30/2024	2.0	Tetrachloroethene
SG-2	E24-01487-02	04/26/2024	04/29/2024	1.0	NA
SG-3	E24-01487-03	04/26/2024	04/29/2024	1.0	NA
SG-4	E24-01487-04	04/26/2024	04/29/2024	1.0	NA

IAL Sample ID	Canister ID	Outgoing Pressure ("Hg)	Incoming Pressure ("Hg)	Flow Controller ID	Outgoing Flow Rate (cc/min)	Incoming Flow Rate (cc/min)	Flow Rate RPD*
E24-01487-01	3041A	-29	-3.5	7342688	200.00	197.30	1.36
E24-01487-02	3279	-29	0	7341819	200.00	198.40	0.80
E24-01487-03	3012	-29	-1	A0070631-10	200.00	199.00	0.50
E24-01487-04	2893	-29	0	7288555	200.00	197.90	1.06

*Pre-sampling and Post-sampling Flow Controller calibration check RPD ≤ 20%

Flow Controller Note: none

Sample Receipt: Samples were received in good condition. Documentation was in order.
Samples were received at IAL by: Joseph Walukiewicz

Sample Preparation: None required.

Sample Analysis:

Hold Time: All within recommended hold times.

Instrument Calibration: Meets method criteria.

Analysis performed by: jjw

SDG Non-Conformances: none

Tentatively Identified Compounds: Tentatively Identified Compounds (TICs) are determined using a NIST library search. TICs are reported at 10% of the applicable internal standard. Dilution factors are calculated into the final reported result. Since the compounds found are tentatively identified, the conversion from ppbv to ug/m3 may not be made.

Canister-to-Canister dilutions: none

CASE NARRATIVE

Integrated Analytical Laboratories, LLC — **Randolph, NJ 07869**
Project #: 48-55 36th St — **NJDEP (Primary AB) Certification#: 14751**
SDG #: E24-01487 — **NY ELAP Certification #: 11402**
CT DPH Certification#: PH-0699
Analytical Method: EPA Method TO-15 — **PADEP Certification#: 68-00773**

Date of first sample receipt: 4/26/2024 — **Date of last sample receipt: 4/26/2024**

Client: JS Held-Hoboken
Project/Site: 48-55 36th St / NY

Dilutions: Dilutions, if necessary, will be conducted directly on the instrument up to a 500x dilution. When dilutions of 1000x or higher are necessary, the laboratory must inject a volume of sample into another certified clean canister and add humidified Z-1 zero air to the remainder of the canister volume. Tedlar bags are not used for dilutions.

If a sample is received with historically high levels of analytes, a 100x can-to-can dilution my be used from the start. A 100x canister-to-canister dilution may be also be used at the analyst's discretion.

On-instrument dilutions are conducted as follows:

Dilution Factor	Sample Volume Injected (cc)
1	500
2.5	200
5	100
10	50
20	25
25	20
50	10
100	5
200	2.5
250	2
500	1

Canister-to-canister dilutions are conducted as follows:

A certified clean canister is obtained and evacuated to approximately -30"Hg. Both the clean/dilution canister and sample canister are fitted with a ¼" Swagelok® nut fitting equipped with septa. Depending on dilution factor necessary, a sample aliquot is removed from the canister and injected into the clean canister using 30cc Multifit gas-tight syringe. Once the correct sample aliquot has been transferred, the dilution canister should be connected to the humidified Z-1 zero air supply and filled to ambient pressure (0"Hg).

Dilution Factor	Sample Aliquot	Z-1 Make-up Added
100	60ml	5940ml
1000	6ml	5994ml

If further dilutions need to be made from the dilution canister, they may be made on-instrument. Using a 100x dilution canister, the following on-instrument dilutions can be produced:

CASE NARRATIVE

Integrated Analytical Laboratories, LLC — **Randolph, NJ 07869**
Project #: 48-55 36th St — **NJDEP (Primary AB) Certification#: 14751**
SDG #: E24-01487 — **NY ELAP Certification #: 11402**
CT DPH Certification#: PH-0699
Analytical Method: EPA Method TO-15 — **PADEP Certification#: 68-00773**

Date of first sample receipt: 4/26/2024 — **Date of last sample receipt: 4/26/2024**

Client: JS Held-Hoboken
Project/Site: 48-55 36th St / NY

Dilution Factor	Sample Volume Injected
100	500ml
250	200ml
500	100ml
1000	50ml
2000	25ml
2500	20ml
5000	10ml

Using a 1000x dilution canister, the following on-instrument dilutions can be produced:

Dilution Factor	Sample Volume Injected
1000	500ml
2500	200ml
5000	100ml
10,000	50ml
20,000	25ml
25,000	20ml
50,000	10ml

If further dilutions need to be made from the dilution canister, beyond 50,000x, a subsequent canister-to-canister dilution must be made using the above prescribed protocol.

GC Column and ID: RTX-1 SN 1119138, RTX-VMS SN 1586881, or equivalent

Calibration Standards: Only gas phase standards were used. Primary and second-source standards provided by Scott Specialty Gases or Airgas Specialty Gases/ Air Liquide

Working Standards: Primary source standards* are created from:
- Airgas Specialty Gases #EB0103704, valid 1/18/2021 through 12/30/2024, @ approximately 100ppb per compound, with exception of m&p-xylenes @ 200ppb.

Standard is directly introduced into the instrument for all calibration standard concentrations. Dilutions are made accordingly, on instrument. The 10ppbv standard is also used for the Daily Calibration Verification Standard (DCVS), the Laboratory Control Sample (LCS) and Closing Calibration Verification Standard (CCCVS).

The second source standard*, used as the Initial Calibration Verification Standard (ICVSS), is introduced into the instrument in the same manner as the primary source standard, using:
- Airgas Specialty Gases Cylinder #EB0116272, valid 7/28/2021 through 5/12/2025, @ approximately 100ppb per compound, with exception of m&p-xylenes @ 200ppb.

Internal standards* are created from:

CASE NARRATIVE

Integrated Analytical Laboratories, LLC | **Randolph, NJ 07869**
Project #: 48-55 36th St | **NJDEP (Primary AB) Certification#: 14751**
SDG #: E24-01487 | **NY ELAP Certification #: 11402**
CT DPH Certification#: PH-0699
Analytical Method: EPA Method TO-15 | **PADEP Certification#: 68-00773**

Date of first sample receipt: 4/26/2024 | **Date of last sample receipt: 4/26/2024**

Client: JS Held-Hoboken
Project/Site: 48-55 36th St / NY

- Airgas Specialty Gases Cylinder #ALM018474, valid 2/24/2022 through 2/24/2025. @ 5ppm per compound. Standard is directly introduced into the instrument to reach the 10ppbv concentrations. 1cc of internal standard is added to every standard, method blank, instrument blank, and sample run.

*Standard may be used past its expiration date provided that concentrations are verified by a current/unexpired second source standard.

03/27/2024
- 100 ppbv internal standard mix (AA6020BFB) - prepared in cylinder #ALM018474
  - 10 ppbv per standard/sample - 50 ml injected
- 100 ppbv calibration standard (aa6025std01) - prepared in cylinder #EB0103704
  - 40 ppbv standard - 200 ml injected
  - 20 ppbv standard - 100 ml injected
  - 10 ppbv standard* - 50 ml injected
    - *Standard also used for CCCVS
  - 2 ppbv standard - 10 ml injected
  - 0.20 ppbv standard* - 1 ml injected
    - *Standard also used for RLLCS
- Method Blank (AA6028BLK) - prepared in canister #1127
  - 500 ml injected

04/03/2024
- 100 ppbv internal standard mix (AA6120BFB) - prepared in cylinder #ALM018474
  - 10 ppbv per standard/sample - 50 ml injected
- 100 ppbv calibration standard (AA6121DCVS) - prepared in cylinder #EB0103704
  - 10 ppbv standard* - 50 ml injected
    - *Standard also used for DCVS & CCCVS
  - 0.20 ppbv standard* - 1 ml injected
    - *Standard also used for RLLCS
- Method Blank (AA6123BLK) - prepared in canister #1127
  - 500 ml injected

04/29/2024
- 100 ppbv internal standard mix (AA6442BFB) - prepared in cylinder #ALM018474
  - 10 ppbv per standard/sample - 50 ml injected
- 100 ppbv calibration standard (AA6443DCVS) - prepared in cylinder #EB0103704
  - 10 ppbv standard* - 50 ml injected
    - *Standard also used for DCVS & CCCVS
  - 0.20 ppbv standard* - 1 ml injected
    - *Standard also used for RLLCS
- Method Blank (AA6445BLK) - prepared in canister #1127
  - 500 ml injected
- Sample E24-01487-01 (AA6447) - sample taken in canister #3041A

CASE NARRATIVE

Integrated Analytical Laboratories, LLC — **Randolph, NJ 07869**
Project #: 48-55 36th St — **NJDEP (Primary AB) Certification#: 14751**
SDG #: E24-01487 — **NY ELAP Certification #: 11402**
CT DPH Certification#: PH-0699
Analytical Method: EPA Method TO-15 — **PADEP Certification#: 68-00773**

Date of first sample receipt: 4/26/2024 — **Date of last sample receipt: 4/26/2024**

Client: JS Held-Hoboken
Project/Site: 48-55 36th St / NY

04/29/2024

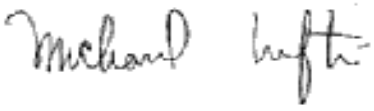
500 ml sample volume injected, 1x dilution
Sample E24-01487-02 (AA6448) - sample taken in canister #3279
500 ml sample volume injected, 1x dilution
Sample E24-01487-03 (AA6449) - sample taken in canister #3012
500 ml sample volume injected, 1x dilution
Sample E24-01487-04 (AA6450) - sample taken in canister #2893
500 ml sample volume injected, 1x dilution

04/30/2024

100 ppbv internal standard mix (AA6457BFB) - prepared in cylinder #ALM018474
10 ppbv per standard/sample - 50 ml injected
100 ppbv calibration standard (AA6458DCVS) - prepared in cylinder #EB0103704
10 ppbv standard* - 50 ml injected
*Standard also used for DCVS & CCCVS
0.20 ppbv standard* - 1 ml injected
*Standard also used for RLLCS
Method Blank (AA6460BLK) - prepared in canister #1127
500 ml injected
Sample E24-01487-01 (AA6462) - sample taken in canister #3041A
100 ml sample volume injected, 5x dilution
Sample E24-01487-02 (AA6463) - sample taken in canister #3279
250 ml sample volume injected, 2x dilution

All work recorded herein has been done in accordance with normal professional standards using accepted testing methodologies, quality assurance and quality control procedures except where otherwise agreed to by the client and testing company in writing. All conversions are based upon a room temperature of 77°F(25°C) and room pressure of 101.325 kPa (1atm).

I certify that this data package is in compliance with the terms and conditions of this contract, both technically and for completeness, for other than the conditions detailed above. Release of data contained in this hardcopy data package and in the computer-readable data submitted on CD/diskette and by electronic mail has been authorized by the laboratory manager or his designee, as verified by the following signature.



Michael H. Leftin, Ph.D.
Laboratory Director

May 21, 2024
Date

Integrated Analytical Laboratories LLC

Airgas
an Air Liquide company

R 362

Received 01/06/2023

Airgas Specialty Gases
Airgas USA LLC
6141 Easton Road
Plumsteadville, PA 18949
Airgas.com

CERTIFICATE OF ANALYSIS

Grade of Product: CERTIFIED HYDROCARBON

Customer:	INTEGRATED ANALYTICAL LABS		
Part Number:	X76NI99C15AC001		
Cylinder Number:	EB0103704	Reference Number:	160-402619255-1
Laboratory:	124 - Plumsteadville - PA	Cylinder Volume:	101.0 CF
Analysis Date:	Dec 30, 2022	Cylinder Pressure:	1400 PSIG
Lot Number:	160-402619255-1	Valve Outlet:	350SS
		Expiration Date:	Dec 30, 2024

Traceability Statement: Hydrocarbon Process standards are NIST traceable either directly by weight or by comparison to Airgas laboratory standards that are directly NIST traceable by weight.

CERTIFIED CONCENTRATIONS

Component	Requested Concentration	Reported Mole %	Accuracy
1,1 DICHLOROETHANE	100.000 PPB	107.000 PPB	+/- 10%
1,1 DICHLOROETHYLENE	100.000 PPB	104.000 PPB	+/- 10%
1,1,1 TRICHLOROETHANE	100.000 PPB	109.000 PPB	+/- 10%
1,1,2 TRICHLORO ETHANE	100.000 PPB	108.000 PPB	+/- 10%
1,1,2,2 TETRACHLOROETHANE	100.000 PPB	114.000 PPB	+/- 10%
1,2 DIBROMO ETHANE	100.000 PPB	108.000 PPB	+/- 10%
1,2 DICHLORO PROPANE	100.000 PPB	110.000 PPB	+/- 10%
1,2 DICHLOROBENZENE	100.000 PPB	107.000 PPB	+/- 10%
1,2 DICHLOROETHANE	100.000 PPB	109.000 PPB	+/- 10%
1,2,4 TRICHLOROBENZENE	100.000 PPB	110.000 PPB	+/- 10%
1,2,4 TRIMETHYLBENZENE	100.000 PPB	108.000 PPB	+/- 10%
1,3 BUTADIENE	100.000 PPB	107.000 PPB	+/- 10%
1,3 DICHLORO BENZENE	100.000 PPB	111.000 PPB	+/- 10%
1,3,5 TRIMETHYL BENZENE	100.000 PPB	109.000 PPB	+/- 10%
1,4 DICHLOROBENZENE	100.000 PPB	107.000 PPB	+/- 10%
1,4 DIOXANE	100.000 PPB	117.000 PPB	+/- 10%
2 CHLOROTOLUENE	100.000 PPB	109.000 PPB	+/- 10%
3 CHLOROPROPYLENE	100.000 PPB	108.000 PPB	+/- 10%
4 ETHYL TOLUENE	100.000 PPB	108.000 PPB	+/- 10%
ACETONE	100.000 PPB	108.000 PPB	+/- 10%
ACROLEIN	100.000 PPB	100.000 PPB	+/- 10%
BENZENE	100.000 PPB	108.000 PPB	+/- 10%
BENZYL CHLORIDE	100.000 PPB	100.000 PPB	+/- 10%
BROMO DICHLORO METHANE	100.000 PPB	115.000 PPB	+/- 10%
BROMOFORM	100.000 PPB	113.000 PPB	+/- 10%
CARBON DISULFIDE	100.000 PPB	107.000 PPB	+/- 10%
CARBON TETRACHLORIDE	100.000 PPB	110.000 PPB	+/- 10%
CHLORO DIBROMO METHANE	100.000 PPB	112.000 PPB	+/- 10%
CHLOROBENZENE	100.000 PPB	111.000 PPB	+/- 10%
CHLOROFORM	100.000 PPB	108.000 PPB	+/- 10%
CIS 1,2 DICHLOROETHYLENE	100.000 PPB	109.000 PPB	+/- 10%
CIS 1,3 DICHLOROPROPENE	100.000 PPB	111.000 PPB	+/- 10%
CUMENE	100.000 PPB	107.000 PPB	+/- 10%
CYCLOHEXANE	100.000 PPB	112.000 PPB	+/- 10%
ETHANOL	100.000 PPB	104.000 PPB	+/- 10%
ETHYL ACETATE	100.000 PPB	108.000 PPB	+/- 10%
ETHYL BENZENE	100.000 PPB	111.000 PPB	+/- 10%
ETHYL CHLORIDE	100.000 PPB	106.000 PPB	+/- 10%
HEXACHLORO 1,3 BUTADIENE	100.000 PPB	111.000 PPB	+/- 10%

Approved for Release

Integrated Analytical Laboratories LLC

Airgas
an Air Liquide company

Airgas Specialty Gases
Airgas USA LLC
6141 Easton Road
Plumsteadville, PA 18949
Airgas.com

HEXANE	100.000 PPB	111.000 PPB	+/- 10%
ISOOCTANE	100.000 PPB	109.000 PPB	+/- 10%
ISOPROPYL ALCOHOL	100.000 PPB	89.000 PPB	+/- 10%
M XYLENE	100.000 PPB	112.000 PPB	+/- 10%
METHYL BROMIDE	100.000 PPB	100.000 PPB	+/- 10%
METHYL BUTYL KETONE	100.000 PPB	113.000 PPB	+/- 10%
METHYL CHLORIDE	100.000 PPB	112.000 PPB	+/- 10%
METHYL ETHYL KETONE	100.000 PPB	110.000 PPB	+/- 10%
METHYL ISOBUTYL KETONE	100.000 PPB	109.000 PPB	+/- 10%
METHYL METHACRYLATE	100.000 PPB	110.000 PPB	+/- 10%
METHYL TERT BUTYL ETHER	100.000 PPB	112.000 PPB	+/- 10%
METHYLENE CHLORIDE	100.000 PPB	108.000 PPB	+/- 10%
N BUTANE	100.000 PPB	109.000 PPB	+/- 10%
N HEPTANE	100.000 PPB	111.000 PPB	+/- 10%
N NONANE	100.000 PPB	110.000 PPB	+/- 10%
N PENTANE	100.000 PPB	108.000 PPB	+/- 10%
N PROPYL BENZENE	100.000 PPB	108.000 PPB	+/- 10%
NAPHTHALENE	100.000 PPB	100.000 PPB	+/- 10%
O XYLENE	100.000 PPB	110.000 PPB	+/- 10%
P XYLENE	100.000 PPB	111.000 PPB	+/- 10%
PERCHLOROETHYLENE	100.000 PPB	112.000 PPB	+/- 10%
PROPYLENE	100.000 PPB	109.000 PPB	+/- 10%
R11 TRICHLOROFLUOROMETHANE	100.000 PPB	110.000 PPB	+/- 10%
R113 TRICHLOROTRIFLUOROETHANE	100.000 PPB	109.000 PPB	+/- 10%
R114 DICHLOROTETRAFLUOROETHANE	100.000 PPB	98.000 PPB	+/- 10%
R12 DICHLORODIFLUOROMETHANE	100.000 PPB	106.000 PPB	+/- 10%
STYRENE	100.000 PPB	113.000 PPB	+/- 10%
TERT BUTANOL	100.000 PPB	115.000 PPB	+/- 10%
TETRAHYDROFURAN	100.000 PPB	110.000 PPB	+/- 10%
TOLUENE	100.000 PPB	108.000 PPB	+/- 10%
TRANS 1,2 DICHLOROETHYLENE	100.000 PPB	111.000 PPB	+/- 10%
TRANS 1,3 DICHLOROPROPENE	100.000 PPB	111.000 PPB	+/- 10%
TRICHLOROETHYLENE	100.000 PPB	100.000 PPB	+/- 10%
VINYL ACETATE	100.000 PPB	110.000 PPB	+/- 10%
VINYL BROMIDE	100.000 PPB	101.000 PPB	+/- 10%
VINYL CHLORIDE	100.000 PPB	108.000 PPB	+/- 10%
NITROGEN	99.99925 %	99.999187 %	+/- 10%

Permanent Notes: CUSTOM TO MIX - TO-15/17 MODIFIED NJ STD + NAPHTHALENE

Notes: PO number: 22578

Approved for Release

Integrated Analytical Laboratories LLC

Airgas
an Air Liquide company

Airgas Specialty Gases
Airgas USA LLC
6141 Easton Road
Plumsteadville, PA 18949
Airgas.com

R366

CERTIFICATE OF ANALYSIS

Grade of Product: CERTIFIED HYDROCARBON

Customer:	INTEGRATED ANALYTICAL LABS		
Part Number:	X76NI99C15AC001		
Cylinder Number:	EB0116272	Reference Number:	160-402744241-1
Laboratory:	124 - Plumsteadville - PA	Cylinder Volume:	146.0 CF
Analysis Date:	May 12, 2023	Cylinder Pressure:	2050 PSIG
Lot Number:	160-402744241-1	Valve Outlet:	350SS
		Expiration Date:	May 12, 2025

Traceability Statement: Hydrocarbon Process standards are NIST traceable either directly by weight or by comparison to Airgas laboratory standards that are directly NIST traceable by weight.

CERTIFIED CONCENTRATIONS

Component	Requested Concentration	Reported Mole %	Accuracy
1,1 DICHLOROETHANE	100.000 PPB	100.000 PPB	+/- 10%
1,1 DICHLOROETHYLENE	100.000 PPB	100.000 PPB	+/- 10%
1,1,1 TRICHLOROETHANE	100.000 PPB	104.000 PPB	+/- 10%
1,1,2 TRICHLORO ETHANE	100.000 PPB	101.000 PPB	+/- 10%
1,1,2,2 TETRACHLOROETHANE	100.000 PPB	104.000 PPB	+/- 10%
1,2 DIBROMO ETHANE	100.000 PPB	103.000 PPB	+/- 10%
1,2 DICHLORO PROPANE	100.000 PPB	103.000 PPB	+/- 10%
1,2 DICHLOROBENZENE	100.000 PPB	101.000 PPB	+/- 10%
1,2 DICHLOROETHANE	100.000 PPB	102.000 PPB	+/- 10%
1,2,4 TRICHLOROBENZENE	100.000 PPB	100.000 PPB	+/- 10%
1,2,4 TRIMETHYLBENZENE	100.000 PPB	102.000 PPB	+/- 10%
1,3 BUTADIENE	100.000 PPB	106.000 PPB	+/- 10%
1,3 DICHLORO BENZENE	100.000 PPB	105.000 PPB	+/- 10%
1,3,5 TRIMETHYL BENZENE	100.000 PPB	103.000 PPB	+/- 10%
1,4 DICHLOROBENZENE	100.000 PPB	100.000 PPB	+/- 10%
1,4 DIOXANE	100.000 PPB	113.000 PPB	+/- 10%
2 CHLOROTOLUENE	100.000 PPB	107.000 PPB	+/- 10%
3 CHLOROPROPYLENE	100.000 PPB	106.000 PPB	+/- 10%
4 ETHYL TOLUENE	100.000 PPB	106.000 PPB	+/- 10%
ACETONE	100.000 PPB	108.000 PPB	+/- 10%
ACROLEIN	100.000 PPB	105.000 PPB	+/- 10%
BENZENE	100.000 PPB	103.000 PPB	+/- 10%
BENZYL CHLORIDE	100.000 PPB	102.000 PPB	+/- 10%
BROMO DICHLORO METHANE	100.000 PPB	112.000 PPB	+/- 10%
BROMOFORM	100.000 PPB	113.000 PPB	+/- 10%
CARBON DISULFIDE	100.000 PPB	95.000 PPB	+/- 10%
CARBON TETRACHLORIDE	100.000 PPB	107.000 PPB	+/- 10%
CHLORO DIBROMO METHANE	100.000 PPB	110.000 PPB	+/- 10%
CHLOROBENZENE	100.000 PPB	104.000 PPB	+/- 10%
CHLOROFORM	100.000 PPB	106.000 PPB	+/- 10%
CIS 1,2 DICHLOROETHYLENE	100.000 PPB	102.000 PPB	+/- 10%
CIS 1,3 DICHLOROPROPENE	100.000 PPB	94.000 PPB	+/- 10%
CUMENE	100.000 PPB	106.000 PPB	+/- 10%
CYCLOHEXANE	100.000 PPB	109.000 PPB	+/- 10%
ETHANOL	100.000 PPB	98.000 PPB	+/- 10%
ETHYL ACETATE	100.000 PPB	104.000 PPB	+/- 10%
ETHYL BENZENE	100.000 PPB	105.000 PPB	+/- 10%
ETHYL CHLORIDE	100.000 PPB	104.000 PPB	+/- 10%
HEXACHLORO 1,3 BUTADIENE	100.000 PPB	101.000 PPB	+/- 10%

Approved for Release

Integrated Analytical Laboratories LLC

Airgas
an Air Liquide company

Airgas Specialty Gases
Airgas USA LLC
6141 Easton Road
Plumsteadville, PA 18949
Airgas.com

HEXANE	100.000 PPB	107.000 PPB	+/- 10%
ISOOCTANE	100.000 PPB	106.000 PPB	+/- 10%
ISOPROPYL ALCOHOL	100.000 PPB	95.000 PPB	+/- 10%
M XYLENE	100.000 PPB	106.000 PPB	+/- 10%
METHYL BROMIDE	100.000 PPB	103.000 PPB	+/- 10%
METHYL BUTYL KETONE	100.000 PPB	109.000 PPB	+/- 10%
METHYL CHLORIDE	100.000 PPB	108.000 PPB	+/- 10%
METHYL ETHYL KETONE	100.000 PPB	105.000 PPB	+/- 10%
METHYL ISOBUTYL KETONE	100.000 PPB	105.000 PPB	+/- 10%
METHYL METHACRYLATE	100.000 PPB	106.000 PPB	+/- 10%
METHYL TERT BUTYL ETHER	100.000 PPB	107.000 PPB	+/- 10%
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N PENTANE	100.000 PPB	105.000 PPB	+/- 10%
N PROPYL BENZENE	100.000 PPB	112.000 PPB	+/- 10%
NAPHTHALENE	100.000 PPB	101.000 PPB	+/- 10%
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R113 TRICHLOROTRIFLUOROETHANE	100.000 PPB	102.000 PPB	+/- 10%
R114 DICHLOROTETRAFLUOROETHANE	100.000 PPB	99.000 PPB	+/- 10%
R12 DICHLORODIFLUOROMETHANE	100.000 PPB	109.000 PPB	+/- 10%
STYRENE	100.000 PPB	106.000 PPB	+/- 10%
TERT BUTANOL	100.000 PPB	111.000 PPB	+/- 10%
TETRAHYDROFURAN	100.000 PPB	106.000 PPB	+/- 10%
TOLUENE	100.000 PPB	101.000 PPB	+/- 10%
TRANS 1,2 DICHLOROETHYLENE	100.000 PPB	108.000 PPB	+/- 10%
TRANS 1,3 DICHLOROPROPENE	100.000 PPB	106.000 PPB	+/- 10%
TRICHLOROETHYLENE	100.000 PPB	102.000 PPB	+/- 10%
VINYL ACETATE	100.000 PPB	105.000 PPB	+/- 10%
VINYL BROMIDE	100.000 PPB	100.000 PPB	+/- 10%
VINYL CHLORIDE	100.000 PPB	107.000 PPB	+/- 10%
NITROGEN	99.99925 %	99.999216 %	

Permanent Notes: CUSTOM TO MIX - TO-15/17 MODIFIED NJ STD + NAPHTHALENE

Notes: PO Number: 22896

Approved for Release

Section IV: Method Detection Limit Summary

INTEGRATED ANALYTICAL LABORATORIES, LLC
REPORTING METHOD DETECTION LIMIT (MDL) REPORT

Integrated Analytical Laboratories - Randolph, NJ

Matrix: Air
MDL Effective Date: 8/16/2023
Column ID: Restek RtX-VMS, 30 meter, 0.32mm ID, 1.8 um DF
Instrument ID: GC - Agilent 7890A / MS - Agilent 5975C (IAL ID: *Instrument AA*)
Analyst: Joe Waluliewicz
Report Prepared by: Joe Waluliewicz

Compound Name	CAS #	Molecular Weight	MDL ppbv	MDL µg/m^3	PQL ppbv	RL ppbv	RL µg/m^3	True value/ MDL
Propene	115-07-1	42.08	0.18	0.31	0.54	0.20	0.34	1
Dichlorodifluoromethane	75-71-8	120.9	0.081	0.40	0.24	0.20	0.99	3
1,2-Dichlorotetrafluoroethane	76-14-2	170.9	0.071	0.50	0.21	0.20	1.4	3
n-Butane	106-97-8	58	0.13	0.32	0.40	0.20	0.47	2
Chloromethane	74-87-3	50.49	0.15	0.30	0.44	0.20	0.41	1
Vinyl chloride	75-01-4	62.5	0.11	0.29	0.34	0.20	0.51	2
1,3-Butadiene	106-99-0	54.09	0.12	0.27	0.37	0.20	0.44	2
Bromomethane	74-83-9	94.94	0.12	0.46	0.36	0.20	0.78	2
Chloroethane	75-00-3	64.52	0.12	0.32	0.36	0.20	0.53	2
Vinyl bromide	593-60-2	106.9	0.080	0.35	0.24	0.20	0.87	3
Trichlorofluoromethane	75-69-4	137.4	0.068	0.38	0.20	0.20	1.1	3
Ethanol	64-17-5	46.07	0.17	0.32	0.51	0.20	0.38	1
1,1-Dichloroethene	75-35-4	96.94	0.086	0.34	0.26	0.20	0.79	3
Carbon disulfide	75-15-0	76.14	0.076	0.24	0.23	0.20	0.62	3
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	187.40	0.087	0.66	0.26	0.20	1.5	3
Acrolein	107-02-8	56.06	0.15	0.34	0.44	0.20	0.46	2
Allyl Chloride	107-05-1	76.53	0.088	0.27	0.26	0.20	0.63	3
Isopropanol	67-63-0	60.1	0.10	0.25	0.30	0.20	0.49	2
Methylene chloride	75-09-2	84.94	0.10	0.36	0.31	0.20	0.69	2
Acetone	67-64-1	58.08	0.12	0.28	0.36	0.20	0.48	2
1,2-Dichloroethene (trans)	156-60-5	96.94	0.080	0.32	0.24	0.20	0.79	3
n-Pentane	109-66-0	72.15	0.16	0.48	0.49	0.20	0.59	1
n-Hexane	110-54-3	86.17	0.087	0.31	0.26	0.20	0.70	3
Methyl tert-butyl ether	1634-04-4	88.15	0.080	0.29	0.24	0.20	0.72	3
Tert-butyl alcohol	75-65-0	74.12	0.14	0.44	0.43	0.20	0.61	2
1,1-Dichloroethane	75-34-3	98.96	0.079	0.32	0.24	0.20	0.81	3
1,2-Dichloroethene (cis)	156-59-2	96.94	0.083	0.33	0.25	0.20	0.79	3
Cyclohexane	110-82-7	84.16	0.078	0.27	0.23	0.20	0.69	3
Chloroform	67-66-3	119.4	0.077	0.38	0.23	0.20	0.98	3
Ethyl acetate	141-78-6	88.11	0.11	0.40	0.33	0.20	0.72	2
Carbon tetrachloride	56-23-5	153.8	0.080	0.50	0.24	0.20	1.3	3
Tetrahydrofuran	109-99-9	72.11	0.11	0.31	0.32	0.20	0.59	2
1,1,1-Trichloroethane	71-55-6	133.4	0.071	0.39	0.21	0.20	1.1	3
Methyl ethyl ketone	78-93-3	72.11	0.11	0.31	0.32	0.20	0.59	2
n-Heptane	142-82-5	100.2	0.090	0.37	0.27	0.20	0.82	2
Benzene	71-43-2	78.11	0.076	0.24	0.23	0.20	0.64	3
1,2-Dichloroethane	107-06-2	98.96	0.079	0.32	0.24	0.20	0.81	3
Trichloroethene	79-01-6	131.4	0.064	0.34	0.19	0.20	1.1	3
2,2,4-Trimethylpentane	540-84-1	114.2	0.085	0.40	0.26	0.20	0.93	3
1,2-Dichloropropane	78-87-5	113	0.085	0.39	0.25	0.20	0.92	3
Bromodichloromethane	75-27-4	163.8	0.066	0.44	0.20	0.20	1.3	3
Methyl methacrylate	80-62-6	100.12	0.079	0.32	0.24	0.20	0.82	3
1,4-Dioxane	123-91-1	88.12	0.092	0.33	0.28	0.20	0.72	2
1,3-Dichloropropene (cis)	10061-01-5	111.0	0.070	0.32	0.21	0.20	0.91	3
Toluene	108-88-3	92.14	0.064	0.24	0.19	0.20	0.75	3
Methyl isobutyl ketone	108-10-1	100.2	0.11	0.43	0.32	0.20	0.82	2
Tetrachloroethene	127-18-4	165.8	0.063	0.43	0.19	0.20	1.4	3
1,3-Dichloropropene (trans)	10061-02-6	111	0.077	0.35	0.23	0.20	0.91	3
1,1,2-Trichloroethane	79-00-5	133.4	0.075	0.41	0.22	0.20	1.1	3
Dibromochloromethane	124-48-1	208.3	0.073	0.62	0.22	0.20	1.7	3
1,2-Dibromoethane	106-93-4	187.9	0.067	0.52	0.20	0.20	1.5	3
Methyl n-butyl ketone	591-78-6	100.16	0.13	0.54	0.40	0.20	0.82	2
n-Nonane	111-84-2	128.2	0.10	0.52	0.30	0.20	1.0	2
Chlorobenzene	108-90-7	112.6	0.073	0.34	0.22	0.20	0.92	3
Ethylbenzene	100-41-4	106.2	0.067	0.29	0.20	0.20	0.9	3
Xylenes (m&p)	179601-23-1	106.2	0.15	0.64	0.44	0.40	1.74	3
Xylene (o)	79-34-5	167.9	0.073	0.50	0.22	0.20	1.4	3
Styrene	100-42-5	104.1	0.072	0.31	0.22	0.20	0.85	3
Bromoform	75-25-2	252.8	0.075	0.77	0.22	0.20	2.1	3
Cumene (Isopropylbenzene)	98-82-8	120.2	0.069	0.34	0.21	0.20	0.98	3
n-Propyl benzene	103-65-1	120.19	0.085	0.42	0.25	0.20	0.98	3
1,1,2,2-Tetrachloroethane	95-47-6	106.2	0.069	0.30	0.21	0.20	0.87	3
4-Ethyltoluene	622-96-8	120.2	0.090	0.44	0.27	0.20	0.98	2
2-Chlorotoluene	95-49-8	126.6	0.077	0.40	0.23	0.20	1.0	3
1,3,5-Trimethylbenzene	108-67-8	120.2	0.076	0.37	0.23	0.20	0.98	3
1,2,4-Trimethylbenzene	95-63-6	120.2	0.080	0.39	0.24	0.20	0.98	3

INTEGRATED ANALYTICAL LABORATORIES, LLC
REPORTING METHOD DETECTION LIMIT (MDL) REPORT

Integrated Analytical Laboratories - Randolph, NJ

Matrix: Air
MDL Effective Date: 8/16/2023
Column ID: Restek RtX-VMS, 30 meter, 0.32mm ID, 1.8 um DF
Instrument ID: GC - Agilent 7890A / MS - Agilent 5975C (IAL ID: *Instrument AA*)
Analyst: Joe Waluliewicz
Report Prepared by: Joe Waluliewicz

Compound Name	CAS #	Molecular Weight	MDL ppbv	MDL µg/m^3	PQL ppbv	RL ppbv	RL µg/m^3	True value/ MDL
1,3-Dichlorobenzene	541-73-1	147	0.086	0.52	0.26	0.20	1.2	3
1,4-Dichlorobenzene	106-46-7	147.0	0.089	0.54	0.27	0.20	1.2	2
Benzyl chloride	100-44-7	126.6	0.064	0.33	0.19	0.20	1.0	3
1,2-Dichlorobenzene	95-50-1	147.0	0.083	0.50	0.25	0.20	1.2	3
1,3-Hexachlorobutadiene	87-68-3	260.8	0.096	1.03	0.29	0.20	2.1	2
1,2,4-Trichlorobenzene	120-82-1	181.5	0.12	0.89	0.36	0.20	1.5	2
Naphthalene	91-20-3	128	0.15	0.79	0.45	0.20	1.0	2

Where:
MDL is defined as the higher of the MDL Spike and MDL Blank
PQL is MDLx3
RL is defined as the lowest point of the calibration curve
ppbv is parts per billion by volume and is how results come off the instrument
µg/m^3 = ppbv x molecular weight / 24.45

Location of this file: P:\PAL Reports\LLTO-15 and TO-15 Common Files\Agilent MDL

Instrument used for Clean Canister Certification Analysis? YES

Michael Leftin, Ph.D.
Laboratory Director

Date: August 16, 2023

INTEGRATED ANALYTICAL LABORATORIES, LLC
METHOD DETECTION LIMIT VERIFICATION (MDLV) REPORT

Integrated Analytical Laboratories - Randolph, NJ

Analysis Level:	0.20 ppbv, 0.40 for m&p-xylenes
Matrix:	Air
Column ID:	RTX-VMS, 30-meter, 0.32 mm ID, 1.8 µm d_f
Instrument Identification:	AA
Date of Verification Study:	8/16/2023
Study Identification File #:	aa3415rllcs
Analyst:	Joe Walukiewicz
Analysis/Processing Method:	C:\MSDCHEM\1\METHODS\230815.M
Cylinder ID:	EB0103704

Michael Leftin, Ph.D.
Laboratory Director

Date: August 16, 2023

Compound Name	CAS #	MDLV (ppbv)	RL (ppbv)	RL/MDLV Ratio
Propene	115-07-1	0.23	0.20	1
Dichlorodifluoromethane	124-48-1	0.24	0.20	1
1,2-Dichlorotetrafluoroethane	76-14-2	0.26	0.20	1
n-Butane	106-97-8	0.23	0.20	1
Chloromethane	74-87-3	0.24	0.20	1
Vinyl chloride	75-01-4	0.26	0.20	1
1,3-Butadiene	106-99-0	0.23	0.20	1
Bromomethane	74-83-9	0.23	0.20	1
Chloroethane	75-00-3	0.22	0.20	1
Vinyl bromide	593-60-2	0.23	0.20	1
Trichlorofluoromethane	75-69-4	0.26	0.20	1
Ethanol	64-17-5	0.30	0.20	2
1,1-Dichloroethene	75-35-4	0.22	0.20	1
Carbon disulfide	75-15-0	0.22	0.20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.27	0.20	1
Acrolein	107-02-8	0.24	0.20	1
Allyl Chloride	107-05-1	0.22	0.20	1
Isopropanol	67-63-0	0.20	0.20	1
Methylene chloride	75-09-2	0.35	0.20	2
Acetone	67-64-1	0.27	0.20	1
1,2-Dichloroethene (trans)	156-60-5	0.22	0.20	1
n-Pentane	109-66-0	0.25	0.20	1
n-Hexane	110-54-3	0.26	0.20	1
Methyl tert-butyl ether	1634-04-4	0.25	0.20	1
Tert-butyl alcohol	75-65-0	0.24	0.20	1
1,1-Dichloroethane	75-34-3	0.24	0.20	1
1,2-Dichloroethene (cis)	156-59-2	0.21	0.20	1
Cyclohexane	110-82-7	0.24	0.20	1
Chloroform	67-66-3	0.23	0.20	1
Ethyl acetate	141-78-6	0.23	0.20	1
Carbon tetrachloride	56-23-5	0.26	0.20	1
Tetrahydrofuran	109-99-9	0.23	0.20	1
1,1,1-Trichloroethane	71-55-6	0.24	0.20	1
Methyl ethyl ketone	78-93-3	0.24	0.20	1
n-Heptane	142-82-5	0.23	0.20	1
Benzene	71-43-2	0.24	0.20	1
1,2-Dichloroethane	106-93-4	0.23	0.20	1
Trichloroethene	79-01-6	0.25	0.20	1
2,2,4-Trimethylpentane	540-84-1	0.29	0.20	1
1,2-Dichloropropane	78-87-5	0.26	0.20	1
Bromodichloromethane	75-27-4	0.28	0.20	1
Methyl methacrylate	80-62-6	0.22	0.20	1
1,4-Dioxane	123-91-1	0.28	0.20	1
1,3-Dichloropropene (cis)	10061-01-5	0.25	0.20	1
Toluene	108-88-3	0.24	0.20	1
Methyl isobutyl ketone	108-10-1	0.22	0.20	1
Tetrachloroethene	127-18-4	0.26	0.20	1
1,3-Dichloropropene (trans)	10061-02-6	0.24	0.20	1
1,1,2-Trichloroethane	79-00-5	0.23	0.20	1
Dibromochloromethane	75-71-8	0.24	0.20	1
1,2-Dibromoethane	107-06-2	0.22	0.20	1
Methyl n-butyl ketone	591-78-6	0.21	0.20	1

INTEGRATED ANALYTICAL LABORATORIES, LLC
METHOD DETECTION LIMIT VERIFICATION (MDLV) REPORT

Integrated Analytical Laboratories - Randolph, NJ

Analysis Level:	0.20 ppbv, 0.40 for m&p-xylenes
Matrix:	Air
Column ID:	RTX-VMS, 30-meter, 0.32 mm ID, 1.8 µm d_f
Instrument Identification:	AA
Date of Verification Study:	8/16/2023
Study Identification File #:	aa3415rllcs
Analyst:	Joe Walukiewicz
Analysis/Processing Method:	C:\MSDCHEM\1\METHODS\230815.M
Cylinder ID:	EB0103704

Michael Leftin, Ph.D.
Laboratory Director

Date: August 16, 2023

Compound Name	CAS #	MDLV (ppbv)	RL (ppbv)	RL/MDLV Ratio
n-Nonane	111-84-2	0.21	0.20	1
Chlorobenzene	108-90-7	0.28	0.20	1
Ethylbenzene	100-41-4	0.26	0.20	1
Xylenes (m&p)	179601-23-1	0.54	0.40	1
Xylene (o)	95-47-6	0.26	0.20	1
Styrene	100-42-5	0.23	0.20	1
Bromoform	75-25-2	0.26	0.20	1
Cumene	98-82-8	0.24	0.20	1
n-Propyl benzene	103-65-1	0.25	0.20	1
1,1,2,2-Tetrachloroethane	79-34-5	0.25	0.20	1
4-Ethyltoluene	622-96-8	0.24	0.20	1
2-Chlorotoluene	95-49-8	0.25	0.20	1
1,3,5-Trimethylbenzene	108-67-8	0.24	0.20	1
1,2,4-Trimethylbenzene	95-63-6	0.22	0.20	1
1,3-Dichlorobenzene	541-73-1	0.27	0.20	1
1,4-Dichlorobenzene	106-46-7	0.24	0.20	1
Benzyl chloride	100-44-7	0.17	0.20	1
1,2-Dichlorobenzene	95-50-1	0.25	0.20	1
1,3-Hexachlorobutadiene	87-68-3	0.31	0.20	2
1,2,4-Trichlorobenzene	120-82-1	0.25	0.20	1
Naphthalene	91-20-3	0.28	0.20	1

Section V: Quality Control Data Summary

BFB Tune Summary

Method Blank

Laboratory Control Sample

Laboratory Sample Duplicate

Internal Standard Area Summary

BFB

Data Path: C:\DATA\2024\03-2024\03-27-2024\
Data File: AA6020BFB.D
Acq On: 3/27/2024 10:03:00AM
Operator: jjw
Sample: BFB
Misc: ALM018474
ALS Vial: 1 **Multiplier:** 1
Integration File: rteint.p
Method: C:\msdchem\1\METHODS\240326.M
Last Update: Mon Feb 12 17:00:56 2024
Spectrum Information:

PassFail	Target Mass	Rel. to Mass	Lower Limit %	Higher Limit %	Raw Abundance	% Relative Abundance
PASS	50	95	8	40	248768	22.4
PASS	75	95	30	66	575680	51.7
PASS	95	95	100	100	1112917	100.0
PASS	96	95	5	9	72451	6.5
PASS	173	174	0.00	2	6828	1.0
PASS	174	95	50	100	671872	60.4
PASS	175	174	4	9	49411	7.4
PASS	176	174	93	101	654677	97.4
PASS	177	176	5	9	43245	6.6

Runs with this BFB:

Lab Sample Number	Date File	Field Sample	Date/Time of Sample/Standard Analysis
BFB	AA6020BFB	NA	3/27/2024 10:03:00 AM
0.2 PPBV STD	AA6021STD05	NA	3/27/2024 10:38:00 AM
2 PPBV STD	AA6022STD04	NA	3/27/2024 11:38:00 AM
10 PPBV STD STD	AA6023STD03	NA	3/27/2024 12:09:00 PM
20 PPBV STD	AA6024STD02	NA	3/27/2024 12:40:00 PM
40 PPBV STD	AA6025STD01	NA	3/27/2024 1:24:00 PM
10 PPBV ICVSS	AA6026ICVSS	NA	3/27/2024 1:54:00 PM
10 PPBV LCS	AA6027LCS	NA	3/27/2024 2:23:00 PM
METHOD BLANK	AA6028BLK	NA	3/27/2024 2:51:00 PM
3285	AA6039	NA	3/27/2024 9:10:00 PM
2036	AA6040	NA	3/27/2024 9:38:00 PM

BFB

Data Path: C:\DATA\2024\04-2024\04-03-2024\
Data File: AA6120BFB.D
Acq On: 4/3/2024 10:39:00AM
Operator: jls
Sample: BFB
Misc: ALM018474
ALS Vial: 1 **Multiplier:** 1
Integration File: rteint.p
Method: C:\msdchem\1\METHODS\240326.M
Last Update: Wed Mar 27 13:46:33 2024
Spectrum Information:

PassFail	Target Mass	Rel. to Mass	Lower Limit %	Higher Limit %	Raw Abundance	% Relative Abundance
PASS	50	95	8	40	256171	20.9
PASS	75	95	30	66	616619	50.2
PASS	95	95	100	100	1227264	100.0
PASS	96	95	5	9	80728	6.6
PASS	173	174	0.00	2	6701	0.9
PASS	174	95	50	100	777045	63.3
PASS	175	174	4	9	55797	7.2
PASS	176	174	93	101	747456	96.2
PASS	177	176	5	9	50061	6.7

Runs with this BFB:

Lab Sample Number	Date File	Field Sample	Date/Time of Sample/Standard Analysis
BFB	AA6120BFB	NA	4/3/2024 10:39:00 AM
10 PPBV DCVS	AA6121DCVS	NA	4/3/2024 11:58:00 AM
10 PPBV LCS	AA6122LCS	NA	4/3/2024 12:29:00 PM
METHOD BLANK	AA6123BLK	NA	4/3/2024 1:28:00 PM
02 PPBV RLLCS	AA6124RLLCS	NA	4/3/2024 2:13:00 PM
2037	AA6125	NA	4/3/2024 4:31:00 PM
5092	AA6133	NA	4/3/2024 8:23:00 PM
10 PPBV CCCVS	AA6134CCCVS	NA	4/3/2024 8:52:00 PM

BFB

Data Path: C:\DATA\2024\04-2024\04-29-2024\
Data File: AA6442BFB.D
Acq On: 4/29/2024 9:47:00AM
Operator: jjw
Sample: BFB
Misc: ALM018474
ALS Vial: 1 **Multiplier:** 1
Integration File: rteint.p
Method: C:\msdchem\1\METHODS\240326.M
Last Update: Wed Mar 27 13:46:33 2024
Spectrum Information:

PassFail	Target Mass	Rel. to Mass	Lower Limit %	Higher Limit %	Raw Abundance	% Relative Abundance
PASS	50	95	8	40	100248	22.9
PASS	75	95	30	66	230464	52.7
PASS	95	95	100	100	436928	100.0
PASS	96	95	5	9	28635	6.6
PASS	173	174	0.00	2	1528	0.6
PASS	174	95	50	100	264704	60.6
PASS	175	174	4	9	20165	7.6
PASS	176	174	93	101	252971	95.6
PASS	177	176	5	9	16837	6.7

Runs with this BFB:

Lab Sample Number	Date File	Field Sample	Date/Time of Sample/Standard Analysis
BFB	AA6442BFB	NA	4/29/2024 9:47:00 AM
10 PPBV DCVS	AA6443DCVS	NA	4/29/2024 11:31:00 AM
10 PPBV LCS	AA6444LCS	NA	4/29/2024 12:05:00 PM
METHOD BLANK	AA6445BLK	NA	4/29/2024 12:35:00 PM
02 PPBV RLLCS	AA6446RLLCS	NA	4/29/2024 1:20:00 PM
E24-01487-01	AA6447	SG-1	4/29/2024 3:57:00 PM
E24-01487-02	AA6448	SG-2	4/29/2024 4:29:00 PM
E24-01487-03	AA6449	SG-3	4/29/2024 5:01:00 PM
E24-01487-04	AA6450	SG-4	4/29/2024 5:33:00 PM
10 PPBV CCCVS	AA6455CCCVS	NA	4/29/2024 8:15:00 PM

BFB

Data Path: C:\DATA\2024\04-2024\04-30-2024\
Data File: AA6457BFB.D
Acq On: 4/30/2024 9:16:00AM
Operator: jjw
Sample: BFB
Misc: ALM018474
ALS Vial: 1 **Multiplier:** 1
Integration File: rteint.p
Method: C:\msdchem\1\METHODS\240326.M
Last Update: Wed Mar 27 13:46:33 2024
Spectrum Information:

PassFail	Target Mass	Rel. to Mass	Lower Limit %	Higher Limit %	Raw Abundance	% Relative Abundance
PASS	50	95	8	40	97723	22.4
PASS	75	95	30	66	229227	52.5
PASS	95	95	100	100	436736	100.0
PASS	96	95	5	9	27589	6.3
PASS	173	174	0.00	2	2692	1.0
PASS	174	95	50	100	264853	60.6
PASS	175	174	4	9	19891	7.5
PASS	176	174	93	101	253525	95.7
PASS	177	176	5	9	16912	6.7

Runs with this BFB:

Lab Sample Number	Date File	Field Sample	Date/Time of Sample/Standard Analysis
BFB	AA6457BFB	NA	4/30/2024 9:16:00 AM
10 PPBV DCVS	AA6458DCVS	NA	4/30/2024 10:49:00 AM
10 PPBV LCS	AA6459LCS	NA	4/30/2024 11:18:00 AM
METHOD BLANK	AA6460BLK	NA	4/30/2024 11:45:00 AM
02 PPBV RLLCS	AA6461RLLCS	NA	4/30/2024 12:13:00 PM
E24-01487-01	AA6462	SG-1	4/30/2024 12:48:00 PM
E24-01487-02	AA6463	SG-2	4/30/2024 1:19:00 PM
10 PPBV CCCVS	AA6472CCCVS	NA	4/30/2024 9:15:00 PM

INTEGRATED ANALYTICAL LABORATORIES, LLC

Method Blank Report

Lab Sample Name:	**METHOD BLANK**	**Data File:**	**AA6123BLK**
Field Sample Name:	**METHOD BLANK**	**Date Analyzed:**	**4/3/2024**
Matrix:	**Air**	**Sample Volume:**	**500ml**
Dilution Factor:	**1**	**GC/MS Column:**	**RTX-1, 0.32 mmID**

Runs with this Method Blank:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6120BFB]	04/03/2024 10:39
10 PPBV DCVS [AA6121DCVS]	04/03/2024 11:58
10 PPBV LCS [AA6122LCS]	04/03/2024 12:29
METHOD BLANK [AA6123BLK]	04/03/2024 13:28
02 PPBV RLLCS [AA6124RLLCS]	04/03/2024 14:13
2037 [AA6125]	04/03/2024 16:31
5092 [AA6133]	04/03/2024 20:23
10 PPBV CCCVS [AA6134CCCVS]	04/03/2024 20:52

Compound	CAS #	Reporting Limit (ppbv)	Concentration (ppbv)
Acetone	67-64-1	0.20	ND
Benzene	71-43-2	0.20	ND
Bromodichloromethane	75-27-4	0.20	ND
Bromoform	75-25-2	0.20	ND
Bromomethane	74-83-9	0.20	ND
1,3-Butadiene	106-99-0	0.20	ND
Chlorobenzene	108-90-7	0.20	ND
Chloroethane	75-00-3	0.20	ND
Chloroform	67-66-3	0.20	ND
Chloromethane	74-87-3	0.20	ND
Carbon disulfide	75-15-0	0.20	ND
Carbon tetrachloride	56-23-5	0.20	ND
Cyclohexane	110-82-7	0.20	ND
Dibromochloromethane	124-48-1	0.20	ND
1,2-Dibromoethane	106-93-4	0.17	ND
1,2-Dichlorobenzene	95-50-1	0.20	ND
1,3-Dichlorobenzene	541-73-1	0.20	ND
1,4-Dichlorobenzene	106-46-7	0.20	ND
Dichlorodifluoromethane	75-71-8	0.20	ND
1,1-Dichloroethane	75-34-3	0.20	ND
1,2-Dichloroethane	107-06-2	0.20	ND
1,1-Dichloroethene	75-35-4	0.20	ND
1,2-Dichloroethene (cis)	156-59-2	0.20	ND
1,2-Dichloroethene (trans)	156-60-5	0.20	ND
1,2-Dichloropropane	78-87-5	0.20	ND
1,3-Dichloropropene (cis)	10061-01-5	0.20	ND
1,3-Dichloropropene (trans)	10061-02-6	0.19	ND
1,2-Dichlorotetrafluoroethane	76-14-2	0.20	ND
1,4-Dioxane	123-91-1	0.20	ND
Ethylbenzene	100-41-4	0.18	ND
n-Heptane	142-82-5	0.20	ND
1,3-Hexachlorobutadiene	87-68-3	0.20	ND
n-Hexane	110-54-3	0.20	ND
Methylene chloride	75-09-2	0.20	ND

Method Blank must be less than the Practical Quantitation Limit (PQL).

INTEGRATED ANALYTICAL LABORATORIES, LLC

Method Blank Report

Lab Sample Name:	**METHOD BLANK**	**Data File:**	**AA6123BLK**
Field Sample Name:	**METHOD BLANK**	**Date Analyzed:**	**4/3/2024**
Matrix:	**Air**	**Sample Volume:**	**500ml**
Dilution Factor:	**1**	**GC/MS Column:**	**RTX-1, 0.32 mmID**

Runs with this Method Blank:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6120BFB]	04/03/2024 10:39
10 PPBV DCVS [AA6121DCVS]	04/03/2024 11:58
10 PPBV LCS [AA6122LCS]	04/03/2024 12:29
METHOD BLANK [AA6123BLK]	04/03/2024 13:28
02 PPBV RLLCS [AA6124RLLCS]	04/03/2024 14:13
2037 [AA6125]	04/03/2024 16:31
5092 [AA6133]	04/03/2024 20:23
10 PPBV CCCVS [AA6134CCCVS]	04/03/2024 20:52

Compound	CAS #	Reporting Limit (ppbv)	Concentration (ppbv)
Methyl ethyl ketone	78-93-3	0.20	ND
Methyl isobutyl ketone	108-10-1	0.20	ND
Methyl tert-butyl ether	1634-04-4	0.20	ND
Styrene	100-42-5	0.20	ND
Tert-butyl alcohol	75-65-0	0.20	ND
1,1,2,2-Tetrachloroethane	79-34-5	0.20	ND
Tetrachloroethene	127-18-4	0.20	ND
Toluene	108-88-3	0.20	ND
1,2,4-Trichlorobenzene	120-82-1	0.20	ND
1,1,1-Trichloroethane	71-55-6	0.17	ND
1,1,2-Trichloroethane	79-00-5	0.20	ND
Trichloroethene	79-01-6	0.17	ND
Trichlorofluoromethane	75-69-4	0.20	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.20	ND
1,2,4-Trimethylbenzene	95-63-6	0.20	ND
1,3,5-Trimethylbenzene	108-67-8	0.20	ND
2,2,4-Trimethylpentane	540-84-1	0.20	ND
Vinyl bromide	593-60-2	0.20	ND
Vinyl chloride	75-01-4	0.20	ND
Xylenes (m&p)	179601-23-1	0.20	ND
Xylenes (o)	95-47-6	0.20	ND

Method Blank must be less than the Practical Quantitation Limit (PQL).

INTEGRATED ANALYTICAL LABORATORIES, LLC

Method Blank Report

Lab Sample Name:	**METHOD BLANK**	**Data File:**	**AA6445BLK**
Field Sample Name:	**METHOD BLANK**	**Date Analyzed:**	**4/29/2024**
Matrix:	**Air**	**Sample Volume:**	**500ml**
Dilution Factor:	**1**	**GC/MS Column:**	**RTX-1, 0.32 mmID**

Runs with this Method Blank:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6442BFB]	04/29/2024 9:47
10 PPBV DCVS [AA6443DCVS]	04/29/2024 11:31
10 PPBV LCS [AA6444LCS]	04/29/2024 12:05
METHOD BLANK [AA6445BLK]	04/29/2024 12:35
02 PPBV RLLCS [AA6446RLLCS]	04/29/2024 13:20
E24-01487-01 [AA6447]	04/29/2024 15:57
E24-01487-02 [AA6448]	04/29/2024 16:29
E24-01487-03 [AA6449]	04/29/2024 17:01
E24-01487-04 [AA6450]	04/29/2024 17:33
10 PPBV CCCVS [AA6455CCCVS]	04/29/2024 20:15

Compound	CAS #	Reporting Limit (ppbv)	Concentration (ppbv)
Acetone	67-64-1	0.20	ND
Benzene	71-43-2	0.20	ND
Bromodichloromethane	75-27-4	0.20	ND
Bromoform	75-25-2	0.20	ND
Bromomethane	74-83-9	0.20	ND
1,3-Butadiene	106-99-0	0.20	ND
Chlorobenzene	108-90-7	0.20	ND
Chloroethane	75-00-3	0.20	ND
Chloroform	67-66-3	0.20	ND
Chloromethane	74-87-3	0.20	ND
Carbon disulfide	75-15-0	0.20	ND
Carbon tetrachloride	56-23-5	0.20	ND
Cyclohexane	110-82-7	0.20	ND
Dibromochloromethane	124-48-1	0.20	ND
1,2-Dibromoethane	106-93-4	0.17	ND
1,2-Dichlorobenzene	95-50-1	0.20	ND
1,3-Dichlorobenzene	541-73-1	0.20	ND
1,4-Dichlorobenzene	106-46-7	0.20	ND
Dichlorodifluoromethane	75-71-8	0.20	ND
1,1-Dichloroethane	75-34-3	0.20	ND
1,2-Dichloroethane	107-06-2	0.20	ND
1,1-Dichloroethene	75-35-4	0.20	ND
1,2-Dichloroethene (cis)	156-59-2	0.20	ND
1,2-Dichloroethene (trans)	156-60-5	0.20	ND
1,2-Dichloropropane	78-87-5	0.20	ND
1,3-Dichloropropene (cis)	10061-01-5	0.20	ND
1,3-Dichloropropene (trans)	10061-02-6	0.19	ND
1,2-Dichlorotetrafluoroethane	76-14-2	0.20	ND
1,4-Dioxane	123-91-1	0.20	ND
Ethylbenzene	100-41-4	0.18	ND
n-Heptane	142-82-5	0.20	ND
1,3-Hexachlorobutadiene	87-68-3	0.20	ND

Method Blank must be less than the Practical Quantitation Limit (PQL).

INTEGRATED ANALYTICAL LABORATORIES, LLC

Method Blank Report

Lab Sample Name:	**METHOD BLANK**	**Data File:**	**AA6445BLK**
Field Sample Name:	**METHOD BLANK**	**Date Analyzed:**	**4/29/2024**
Matrix:	**Air**	**Sample Volume:**	**500ml**
Dilution Factor:	**1**	**GC/MS Column:**	**RTX-1, 0.32 mmID**

Runs with this Method Blank:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6442BFB]	04/29/2024 9:47
10 PPBV DCVS [AA6443DCVS]	04/29/2024 11:31
10 PPBV LCS [AA6444LCS]	04/29/2024 12:05
METHOD BLANK [AA6445BLK]	04/29/2024 12:35
02 PPBV RLLCS [AA6446RLLCS]	04/29/2024 13:20
E24-01487-01 [AA6447]	04/29/2024 15:57
E24-01487-02 [AA6448]	04/29/2024 16:29
E24-01487-03 [AA6449]	04/29/2024 17:01
E24-01487-04 [AA6450]	04/29/2024 17:33
10 PPBV CCCVS [AA6455CCCVS]	04/29/2024 20:15

Compound	CAS #	Reporting Limit (ppbv)	Concentration (ppbv)
n-Hexane	110-54-3	0.20	ND
Methylene chloride	75-09-2	0.20	ND
Methyl ethyl ketone	78-93-3	0.20	ND
Methyl isobutyl ketone	108-10-1	0.20	ND
Methyl tert-butyl ether	1634-04-4	0.20	ND
Styrene	100-42-5	0.20	ND
Tert-butyl alcohol	75-65-0	0.20	ND
1,1,2,2-Tetrachloroethane	79-34-5	0.20	ND
Tetrachloroethene	127-18-4	0.20	ND
Toluene	108-88-3	0.20	ND
1,2,4-Trichlorobenzene	120-82-1	0.20	ND
1,1,1-Trichloroethane	71-55-6	0.17	ND
1,1,2-Trichloroethane	79-00-5	0.20	ND
Trichloroethene	79-01-6	0.17	ND
Trichlorofluoromethane	75-69-4	0.20	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.20	ND
1,2,4-Trimethylbenzene	95-63-6	0.20	ND
1,3,5-Trimethylbenzene	108-67-8	0.20	ND
2,2,4-Trimethylpentane	540-84-1	0.20	ND
Vinyl bromide	593-60-2	0.20	ND
Vinyl chloride	75-01-4	0.20	ND
Xylenes (m&p)	179601-23-1	0.20	ND
Xylenes (o)	95-47-6	0.20	ND

Method Blank must be less than the Practical Quantitation Limit (PQL).

INTEGRATED ANALYTICAL LABORATORIES, LLC

Method Blank Report

Lab Sample Name:	**METHOD BLANK**	**Data File:**	**AA6460BLK**
Field Sample Name:	**METHOD BLANK**	**Date Analyzed:**	**4/30/2024**
Matrix:	**Air**	**Sample Volume:**	**500ml**
Dilution Factor:	**1**	**GC/MS Column:**	**RTX-1, 0.32 mmID**

Runs with this Method Blank:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6457BFB]	04/30/2024 9:16
10 PPBV DCVS [AA6458DCVS]	04/30/2024 10:49
10 PPBV LCS [AA6459LCS]	04/30/2024 11:18
METHOD BLANK [AA6460BLK]	04/30/2024 11:45
02 PPBV RLLCS [AA6461RLLCS]	04/30/2024 12:13
E24-01487-01 [AA6462]	04/30/2024 12:48
E24-01487-02 [AA6463]	04/30/2024 13:19
10 PPBV CCCVS [AA6472CCCVS]	04/30/2024 21:15

Compound	CAS #	Reporting Limit (ppbv)	Concentration (ppbv)
Acetone	67-64-1	0.20	ND
Benzene	71-43-2	0.20	ND
Bromodichloromethane	75-27-4	0.20	ND
Bromoform	75-25-2	0.20	ND
Bromomethane	74-83-9	0.20	ND
1,3-Butadiene	106-99-0	0.20	ND
Chlorobenzene	108-90-7	0.20	ND
Chloroethane	75-00-3	0.20	ND
Chloroform	67-66-3	0.20	ND
Chloromethane	74-87-3	0.20	ND
Carbon disulfide	75-15-0	0.20	ND
Carbon tetrachloride	56-23-5	0.20	ND
Cyclohexane	110-82-7	0.20	ND
Dibromochloromethane	124-48-1	0.20	ND
1,2-Dibromoethane	106-93-4	0.17	ND
1,2-Dichlorobenzene	95-50-1	0.20	ND
1,3-Dichlorobenzene	541-73-1	0.20	ND
1,4-Dichlorobenzene	106-46-7	0.20	ND
Dichlorodifluoromethane	75-71-8	0.20	ND
1,1-Dichloroethane	75-34-3	0.20	ND
1,2-Dichloroethane	107-06-2	0.20	ND
1,1-Dichloroethene	75-35-4	0.20	ND
1,2-Dichloroethene (cis)	156-59-2	0.20	ND
1,2-Dichloroethene (trans)	156-60-5	0.20	ND
1,2-Dichloropropane	78-87-5	0.20	ND
1,3-Dichloropropene (cis)	10061-01-5	0.20	ND
1,3-Dichloropropene (trans)	10061-02-6	0.19	ND
1,2-Dichlorotetrafluoroethane	76-14-2	0.20	ND
1,4-Dioxane	123-91-1	0.20	ND
Ethylbenzene	100-41-4	0.18	ND
n-Heptane	142-82-5	0.20	ND
1,3-Hexachlorobutadiene	87-68-3	0.20	ND
n-Hexane	110-54-3	0.20	ND
Methylene chloride	75-09-2	0.20	ND

Method Blank must be less than the Practical Quantitation Limit (PQL).

INTEGRATED ANALYTICAL LABORATORIES, LLC

Method Blank Report

Lab Sample Name:	**METHOD BLANK**	**Data File:**	**AA6460BLK**
Field Sample Name:	**METHOD BLANK**	**Date Analyzed:**	**4/30/2024**
Matrix:	**Air**	**Sample Volume:**	**500ml**
Dilution Factor:	**1**	**GC/MS Column:**	**RTX-1, 0.32 mmID**

Runs with this Method Blank:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6457BFB]	04/30/2024 9:16
10 PPBV DCVS [AA6458DCVS]	04/30/2024 10:49
10 PPBV LCS [AA6459LCS]	04/30/2024 11:18
METHOD BLANK [AA6460BLK]	04/30/2024 11:45
02 PPBV RLLCS [AA6461RLLCS]	04/30/2024 12:13
E24-01487-01 [AA6462]	04/30/2024 12:48
E24-01487-02 [AA6463]	04/30/2024 13:19
10 PPBV CCCVS [AA6472CCCVS]	04/30/2024 21:15

Compound	CAS #	Reporting Limit (ppbv)	Concentration (ppbv)
Methyl ethyl ketone	78-93-3	0.20	ND
Methyl isobutyl ketone	108-10-1	0.20	ND
Methyl tert-butyl ether	1634-04-4	0.20	ND
Styrene	100-42-5	0.20	ND
Tert-butyl alcohol	75-65-0	0.20	ND
1,1,2,2-Tetrachloroethane	79-34-5	0.20	ND
Tetrachloroethene	127-18-4	0.20	ND
Toluene	108-88-3	0.20	ND
1,2,4-Trichlorobenzene	120-82-1	0.20	ND
1,1,1-Trichloroethane	71-55-6	0.17	ND
1,1,2-Trichloroethane	79-00-5	0.20	ND
Trichloroethene	79-01-6	0.17	ND
Trichlorofluoromethane	75-69-4	0.20	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.20	ND
1,2,4-Trimethylbenzene	95-63-6	0.20	ND
1,3,5-Trimethylbenzene	108-67-8	0.20	ND
2,2,4-Trimethylpentane	540-84-1	0.20	ND
Vinyl bromide	593-60-2	0.20	ND
Vinyl chloride	75-01-4	0.20	ND
Xylenes (m&p)	179601-23-1	0.20	ND
Xylenes (o)	95-47-6	0.20	ND

Method Blank must be less than the Practical Quantitation Limit (PQL).

Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA6122LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 4/3/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6120BFB]	04/03/2024 10:39
10 PPBV DCVS [AA6121DCVS]	04/03/2024 11:58
10 PPBV LCS [AA6122LCS]	04/03/2024 12:29
METHOD BLANK [AA6123BLK]	04/03/2024 13:28
02 PPBV RLLCS [AA6124RLLCS]	04/03/2024 14:13
2037 [AA6125]	04/03/2024 16:31
5092 [AA6133]	04/03/2024 20:23
10 PPBV CCCVS [AA6134CCCVS]	04/03/2024 20:52

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
Acetone	67-64-1	11	100
Benzene	71-43-2	11	110
Bromodichloromethane	75-27-4	12	110
Bromoform	75-25-2	12	110
Bromomethane	74-83-9	12	110
1,3-Butadiene	106-99-0	9.5	95
Chlorobenzene	108-90-7	11	110
Chloroethane	75-00-3	12	120
Chloroform	67-66-3	11	110
Chloromethane	74-87-3	12	100
Carbon disulfide	75-15-0	12	110
Carbon tetrachloride	56-23-5	11	110
Cyclohexane	110-82-7	10	100
Dibromochloromethane	124-48-1	11	100
1,2-Dibromoethane	106-93-4	11	100
1,2-Dichlorobenzene	95-50-1	11	100
1,3-Dichlorobenzene	541-73-1	12	110
1,4-Dichlorobenzene	106-46-7	11	100
Dichlorodifluoromethane	75-71-8	12	110
1,1-Dichloroethane	75-34-3	11	100
1,2-Dichloroethane	107-06-2	11	110
1,1-Dichloroethene	75-35-4	12	110
1,2-Dichloroethene (cis)	156-59-2	12	110
1,2-Dichloroethene (trans)	156-60-5	12	110
1,2-Dichloropropane	78-87-5	11	110
1,3-Dichloropropene (cis)	10061-01-5	11	100
1,3-Dichloropropene (trans)	10061-02-6	11	110
1,2-Dichlorotetrafluoroethane	76-14-2	9.7	88
1,4-Dioxane	123-91-1	12	100
Ethylbenzene	100-41-4	11	110
n-Heptane	142-82-5	9.4	94
1,3-Hexachlorobutadiene	87-68-3	12	110

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.

*** Values outside of QC limits* Values outside of 70-130% QC limits**

Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA6122LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 4/3/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6120BFB]	04/03/2024 10:39
10 PPBV DCVS [AA6121DCVS]	04/03/2024 11:58
10 PPBV LCS [AA6122LCS]	04/03/2024 12:29
METHOD BLANK [AA6123BLK]	04/03/2024 13:28
02 PPBV RLLCS [AA6124RLLCS]	04/03/2024 14:13
2037 [AA6125]	04/03/2024 16:31
5092 [AA6133]	04/03/2024 20:23
10 PPBV CCCVS [AA6134CCCVS]	04/03/2024 20:52

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
n-Hexane	110-54-3	10	100
Methylene chloride	75-09-2	11	100
Methyl ethyl ketone	78-93-3	11	93
Methyl isobutyl ketone	108-10-1	9.5	86
Methyl tert-butyl ether	1634-04-4	10	91
Styrene	100-42-5	12	110
Tert-butyl alcohol	75-65-0	11	93
1,1,2,2-Tetrachloroethane	79-34-5	11	100
Tetrachloroethene	127-18-4	11	110
Toluene	108-88-3	10	100
1,2,4-Trichlorobenzene	120-82-1	12	110
1,1,1-Trichloroethane	71-55-6	10	100
1,1,2-Trichloroethane	79-00-5	11	100
Trichloroethene	79-01-6	11	110
Trichlorofluoromethane	75-69-4	11	100
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	10.0	100
1,2,4-Trimethylbenzene	95-63-6	11	100
1,3,5-Trimethylbenzene	108-67-8	11	100
2,2,4-Trimethylpentane	540-84-1	11	110
Vinyl bromide	593-60-2	12	120
Vinyl chloride	75-01-4	12	120
Xylenes (m&p)	179601-23-1	22	110
Xylenes (o)	95-47-6	11	110

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.

*** Values outside of QC limits* Values outside of 70-130% QC limits**

INTEGRATED ANALYTICAL LABORATORIES, LLC

Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA6444LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 4/29/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6442BFB]	04/29/2024 9:47
10 PPBV DCVS [AA6443DCVS]	04/29/2024 11:31
10 PPBV LCS [AA6444LCS]	04/29/2024 12:05
METHOD BLANK [AA6445BLK]	04/29/2024 12:35
02 PPBV RLLCS [AA6446RLLCS]	04/29/2024 13:20
E24-01487-01 [AA6447]	04/29/2024 15:57
E24-01487-02 [AA6448]	04/29/2024 16:29
E24-01487-03 [AA6449]	04/29/2024 17:01
E24-01487-04 [AA6450]	04/29/2024 17:33
10 PPBV CCCVS [AA6455CCCVS]	04/29/2024 20:15

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
Acetone	67-64-1	11	100
Benzene	71-43-2	10	100
Bromodichloromethane	75-27-4	12	110
Bromoform	75-25-2	12	110
Bromomethane	74-83-9	11	100
1,3-Butadiene	106-99-0	9.8	98
Chlorobenzene	108-90-7	11	110
Chloroethane	75-00-3	12	120
Chloroform	67-66-3	11	110
Chloromethane	74-87-3	12	100
Carbon disulfide	75-15-0	12	110
Carbon tetrachloride	56-23-5	10	100
Cyclohexane	110-82-7	10	100
Dibromochloromethane	124-48-1	11	100
1,2-Dibromoethane	106-93-4	11	100
1,2-Dichlorobenzene	95-50-1	11	100
1,3-Dichlorobenzene	541-73-1	11	100
1,4-Dichlorobenzene	106-46-7	11	100
Dichlorodifluoromethane	75-71-8	11	100
1,1-Dichloroethane	75-34-3	11	100
1,2-Dichloroethane	107-06-2	11	110
1,1-Dichloroethene	75-35-4	12	110
1,2-Dichloroethene (cis)	156-59-2	12	110
1,2-Dichloroethene (trans)	156-60-5	12	110
1,2-Dichloropropane	78-87-5	11	110
1,3-Dichloropropene (cis)	10061-01-5	11	100
1,3-Dichloropropene (trans)	10061-02-6	11	110
1,2-Dichlorotetrafluoroethane	76-14-2	9.4	85
1,4-Dioxane	123-91-1	11	92
Ethylbenzene	100-41-4	11	110

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.

*** Values outside of QC limits* Values outside of 70-130% QC limits**

INTEGRATED ANALYTICAL LABORATORIES, LLC

Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA6444LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 4/29/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6442BFB]	04/29/2024 9:47
10 PPBV DCVS [AA6443DCVS]	04/29/2024 11:31
10 PPBV LCS [AA6444LCS]	04/29/2024 12:05
METHOD BLANK [AA6445BLK]	04/29/2024 12:35
02 PPBV RLLCS [AA6446RLLCS]	04/29/2024 13:20
E24-01487-01 [AA6447]	04/29/2024 15:57
E24-01487-02 [AA6448]	04/29/2024 16:29
E24-01487-03 [AA6449]	04/29/2024 17:01
E24-01487-04 [AA6450]	04/29/2024 17:33
10 PPBV CCCVS [AA6455CCCVS]	04/29/2024 20:15

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
n-Heptane	142-82-5	9.9	99
1,3-Hexachlorobutadiene	87-68-3	12	110
n-Hexane	110-54-3	10	100
Methylene chloride	75-09-2	12	110
Methyl ethyl ketone	78-93-3	11	93
Methyl isobutyl ketone	108-10-1	10	91
Methyl tert-butyl ether	1634-04-4	10	91
Styrene	100-42-5	12	110
Tert-butyl alcohol	75-65-0	11	93
1,1,2,2-Tetrachloroethane	79-34-5	11	100
Tetrachloroethene	127-18-4	11	110
Toluene	108-88-3	10	100
1,2,4-Trichlorobenzene	120-82-1	11	96
1,1,1-Trichloroethane	71-55-6	10	100
1,1,2-Trichloroethane	79-00-5	11	100
Trichloroethene	79-01-6	10	100
Trichlorofluoromethane	75-69-4	11	100
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	9.7	97
1,2,4-Trimethylbenzene	95-63-6	11	100
1,3,5-Trimethylbenzene	108-67-8	11	100
2,2,4-Trimethylpentane	540-84-1	11	110
Vinyl bromide	593-60-2	11	110
Vinyl chloride	75-01-4	12	120
Xylenes (m&p)	179601-23-1	22	110
Xylenes (o)	95-47-6	11	110

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.

*** Values outside of QC limits* Values outside of 70-130% QC limits**

Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA6459LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 4/30/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6457BFB]	04/30/2024 9:16
10 PPBV DCVS [AA6458DCVS]	04/30/2024 10:49
10 PPBV LCS [AA6459LCS]	04/30/2024 11:18
METHOD BLANK [AA6460BLK]	04/30/2024 11:45
02 PPBV RLLCS [AA6461RLLCS]	04/30/2024 12:13
E24-01487-01 [AA6462]	04/30/2024 12:48
E24-01487-02 [AA6463]	04/30/2024 13:19
10 PPBV CCCVS [AA6472CCCVS]	04/30/2024 21:15

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
Acetone	67-64-1	11	100
Benzene	71-43-2	11	110
Bromodichloromethane	75-27-4	12	110
Bromoform	75-25-2	11	100
Bromomethane	74-83-9	11	100
1,3-Butadiene	106-99-0	9.9	99
Chlorobenzene	108-90-7	11	110
Chloroethane	75-00-3	12	120
Chloroform	67-66-3	11	110
Chloromethane	74-87-3	13	110
Carbon disulfide	75-15-0	12	110
Carbon tetrachloride	56-23-5	10	100
Cyclohexane	110-82-7	10	100
Dibromochloromethane	124-48-1	11	100
1,2-Dibromoethane	106-93-4	11	100
1,2-Dichlorobenzene	95-50-1	11	100
1,3-Dichlorobenzene	541-73-1	11	100
1,4-Dichlorobenzene	106-46-7	11	100
Dichlorodifluoromethane	75-71-8	11	100
1,1-Dichloroethane	75-34-3	11	100
1,2-Dichloroethane	107-06-2	11	110
1,1-Dichloroethene	75-35-4	12	110
1,2-Dichloroethene (cis)	156-59-2	12	110
1,2-Dichloroethene (trans)	156-60-5	13	120
1,2-Dichloropropane	78-87-5	11	110
1,3-Dichloropropene (cis)	10061-01-5	11	100
1,3-Dichloropropene (trans)	10061-02-6	11	110
1,2-Dichlorotetrafluoroethane	76-14-2	9.5	86
1,4-Dioxane	123-91-1	11	92
Ethylbenzene	100-41-4	11	110
n-Heptane	142-82-5	10	100
1,3-Hexachlorobutadiene	87-68-3	11	96

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.

*** Values outside of QC limits* Values outside of 70-130% QC limits**

Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA6459LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 4/30/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6457BFB]	04/30/2024 9:16
10 PPBV DCVS [AA6458DCVS]	04/30/2024 10:49
10 PPBV LCS [AA6459LCS]	04/30/2024 11:18
METHOD BLANK [AA6460BLK]	04/30/2024 11:45
02 PPBV RLLCS [AA6461RLLCS]	04/30/2024 12:13
E24-01487-01 [AA6462]	04/30/2024 12:48
E24-01487-02 [AA6463]	04/30/2024 13:19
10 PPBV CCCVS [AA6472CCCVS]	04/30/2024 21:15

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
n-Hexane	110-54-3	10	100
Methylene chloride	75-09-2	12	110
Methyl ethyl ketone	78-93-3	11	93
Methyl isobutyl ketone	108-10-1	10.0	91
Methyl tert-butyl ether	1634-04-4	10	91
Styrene	100-42-5	11	100
Tert-butyl alcohol	75-65-0	11	93
1,1,2,2-Tetrachloroethane	79-34-5	11	100
Tetrachloroethene	127-18-4	11	110
Toluene	108-88-3	10	100
1,2,4-Trichlorobenzene	120-82-1	11	96
1,1,1-Trichloroethane	71-55-6	10	100
1,1,2-Trichloroethane	79-00-5	10	91
Trichloroethene	79-01-6	10	100
Trichlorofluoromethane	75-69-4	11	100
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	9.8	98
1,2,4-Trimethylbenzene	95-63-6	11	100
1,3,5-Trimethylbenzene	108-67-8	10	91
2,2,4-Trimethylpentane	540-84-1	11	110
Vinyl bromide	593-60-2	11	110
Vinyl chloride	75-01-4	12	120
Xylenes (m&p)	179601-23-1	21	110
Xylenes (o)	95-47-6	10	100

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.

*** Values outside of QC limits* Values outside of 70-130% QC limits**

Analysis: Volatile Organic Compounds by EPA Method TO-15
Laboratory Sample Duplicate Report

		Date Received:	3/28/24
SDG Number:	E24-01113	Date Analyzed:	4/2/24,4/2/24
IAL Sample ID:	E24-01113-04	Lab Data File#:	AA6116,AA6117
Matrix:	Air	Dilution Factor:	1
Summa ID:	1774	Injection Volume:	50ml
		GC/MS Column:	RTX-1, 0.32 mmID

		Sample		Sample Dup			
		E24-01113-04		**E24-01113-24**			
		Concentration		**Concentration**		**Reporting**	
		Reported		**Reported**		**Limits**	
Compound	**CAS #**	**ppbv**	**Q**	**ppbv**	**Q**	**ppbv**	**RPD**
Acetone	67-64-1	**5.8**		**5.6**		2.0	**3.51%**
Allyl Chloride	107-05-1	2.0	U	2.0	U	2.0	0.00%
Benzene	71-43-2	2.0	U	2.0	U	2.0	0.00%
Bromodichloromethane	75-27-4	2.0	U	2.0	U	2.0	0.00%
Bromoform	75-25-2	2.0	U	2.0	U	2.0	0.00%
Bromomethane	74-83-9	2.0	U	2.0	U	2.0	0.00%
1,3-Butadiene	106-99-0	2.0	U	2.0	U	2.0	0.00%
Chlorobenzene	108-90-7	2.0	U	2.0	U	2.0	0.00%
Chloroethane	75-00-3	2.0	U	2.0	U	2.0	0.00%
Chloroform	67-66-3	2.0	U	2.0	U	2.0	0.00%
Chloromethane	74-87-3	2.0	U	2.0	U	2.0	0.00%
Carbon disulfide	75-15-0	2.0	U	2.0	U	2.0	0.00%
Carbon tetrachloride	56-23-5	2.0	U	2.0	U	2.0	0.00%
2-Chlorotoluene	95-49-8	2.0	U	2.0	U	2.0	0.00%
Cyclohexane	110-82-7	2.0	U	2.0	U	2.0	0.00%
Dibromochloromethane	124-48-1	2.0	U	2.0	U	2.0	0.00%
1,2-Dibromoethane	106-93-4	2.0	U	2.0	U	2.0	0.00%
1,2-Dichlorobenzene	95-50-1	2.0	U	2.0	U	2.0	0.00%
1,3-Dichlorobenzene	541-73-1	2.0	U	2.0	U	2.0	0.00%
1,4-Dichlorobenzene	106-46-7	2.0	U	2.0	U	2.0	0.00%
Dichlorodifluoromethane	75-71-8	2.0	U	2.0	U	2.0	0.00%
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	0.00%
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	0.00%
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	2.0	0.00%
1,2-Dichloroethene (cis)	156-59-2	2.0	U	2.0	U	2.0	0.00%
1,2-Dichloroethene (trans)	156-60-5	2.0	U	2.0	U	2.0	0.00%
1,2-Dichloropropane	78-87-5	2.0	U	2.0	U	2.0	0.00%
1,3-Dichloropropene (cis)	10061-01-5	2.0	U	2.0	U	2.0	0.00%
1,3-Dichloropropene (trans)	10061-02-6	2.0	U	2.0	U	2.0	0.00%
1,2-Dichlorotetrafluoroethane	76-14-2	2.0	U	2.0	U	2.0	0.00%
1,4-Dioxane	123-91-1	2.0	U	2.0	U	2.0	0.00%
Ethanol	64-17-5	**15**		**14**		2.0	**6.90%**
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	0.00%
4-Ethyltoluene	622-96-8	2.0	U	2.0	U	2.0	0.00%
n-Heptane	142-82-5	2.0	U	2.0	U	2.0	0.00%
1,3-Hexachlorobutadiene	87-68-3	2.0	U	2.0	U	2.0	0.00%
n-Hexane	110-54-3	2.0	U	2.0	U	2.0	0.00%
Isopropanol	67-63-0	**2.6**		2.0	U	2.0	**NC**

Qualifiers:
E=Concentration exceeds upper level of calibration range for instrument.
D=Extra dilution required for this compound. X=Duplicate samples do not met RPD criteria.
U=Compound ND or under reporting limit.

Analysis: Volatile Organic Compounds by EPA Method TO-15
Laboratory Sample Duplicate Report

SDG Number: E24-01113
IAL Sample ID: E24-01113-04
Matrix: Air
Summa ID: 1774

Date Received: 3/28/24
Date Analyzed: 4/2/24,4/2/24
Lab Data File#: AA6116,AA6117
Dilution Factor: 1
Injection Volume: 50ml
GC/MS Column: RTX-1, 0.32 mmID

Compound	CAS #	Sample E24-01113-04 Concentration Reported ppbv	Q	Sample Dup E24-01113-24 Concentration Reported ppbv	Q	Reporting Limits ppbv	RPD
Methylene chloride	75-09-2	2.0	U	2.0	U	2.0	0.00%
Methyl ethyl ketone	78-93-3	2.0	U	2.0	U	2.0	0.00%
Methyl isobutyl ketone	108-10-1	2.0	U	2.0	U	2.0	0.00%
Methyl methacrylate	80-62-6	2.0	U	2.0	U	2.0	0.00%
Methyl tert-butyl ether	1634-04-4	2.0	U	2.0	U	2.0	0.00%
Styrene	100-42-5	2.0	U	2.0	U	2.0	0.00%
Tert-butyl alcohol	75-65-0	2.0	U	2.0	U	2.0	0.00%
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	0.00%
Tetrachloroethene	127-18-4	2.0	U	2.0	U	2.0	0.00%
Tetrahydrofuran	109-99-9	2.0	U	2.0	U	2.0	0.00%
Toluene	108-88-3	2.0	U	2.0	U	2.0	0.00%
1,2,4-Trichlorobenzene	120-82-1	2.0	U	2.0	U	2.0	0.00%
1,1,1-Trichloroethane	71-55-6	2.0	U	2.0	U	2.0	0.00%
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	2.0	0.00%
Trichloroethene	79-01-6	2.0	U	2.0	U	2.0	0.00%
Trichlorofluoromethane	75-69-4	2.0	U	2.0	U	2.0	0.00%
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	2.0	U	2.0	U	2.0	0.00%
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	0.00%
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	0.00%
2,2,4-Trimethylpentane	540-84-1	2.0	U	2.0	U	2.0	0.00%
Vinyl bromide	593-60-2	2.0	U	2.0	U	2.0	0.00%
Vinyl chloride	75-01-4	2.0	U	2.0	U	2.0	0.00%
Xylenes (m&p)	179601-23-1	4.0	U	4.0	U	4.0	0.00%
Xylenes (o)	95-47-6	2.0	U	2.0	U	2.0	0.00%

RPD must be <25% for all laboratory duplicate samples. Laboratory duplicate samples are run once daily.
NC = The RPD could not be calculated since the compound was only detected in either the parent or duplicate sample.

Qualifiers:
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D=Extra dilution required for this compound. X=Duplicate samples do not met RPD criteria.
U=Compound ND or under reporting limit.

Analysis: Volatile Organic Compounds by EPA Method TO-15
Laboratory Sample Duplicate Report

		Date Received:	4/18/24
SDG Number:	E24-01396	Date Analyzed:	4/29/24,4/29/24
IAL Sample ID:	E24-01396-02	Lab Data File#:	AA6452,AA6453
Matrix:	Air	Dilution Factor:	1
Summa ID:	5096	Injection Volume:	500ml
		GC/MS Column:	RTX-1, 0.32 mmID

		Sample		Sample Dup			
		E24-01396-02		**E24-01396-22**			
		Concentration		**Concentration**		**Reporting**	
		Reported		**Reported**		**Limits**	
Compound	**CAS #**	**ppbv**	**Q**	**ppbv**	**Q**	**ppbv**	**RPD**
Acetone	67-64-1	**13**		**13**		0.40	**0.00%**
Allyl Chloride	107-05-1	0.40	U	0.40	U	0.40	0.00%
Benzene	71-43-2	**0.35**		**0.34**		0.20	**2.90%**
Bromodichloromethane	75-27-4	0.40	U	0.40	U	0.40	0.00%
Bromoform	75-25-2	0.40	U	0.40	U	0.40	0.00%
Bromomethane	74-83-9	0.40	U	0.40	U	0.40	0.00%
1,3-Butadiene	106-99-0	0.40	U	0.40	U	0.40	0.00%
Chlorobenzene	108-90-7	0.40	U	0.40	U	0.40	0.00%
Chloroethane	75-00-3	0.40	U	0.40	U	0.40	0.00%
Chloroform	67-66-3	0.40	U	0.40	U	0.40	0.00%
Chloromethane	74-87-3	0.40	U	0.40	U	0.40	0.00%
Carbon disulfide	75-15-0	0.40	U	0.40	U	0.40	0.00%
Carbon tetrachloride	56-23-5	0.20	U	0.20	U	0.20	0.00%
2-Chlorotoluene	95-49-8	0.40	U	0.40	U	0.40	0.00%
Cyclohexane	110-82-7	0.40	U	0.40	U	0.40	0.00%
Dibromochloromethane	124-48-1	0.40	U	0.40	U	0.40	0.00%
1,2-Dibromoethane	106-93-4	0.20	U	0.20	U	0.20	0.00%
1,2-Dichlorobenzene	95-50-1	0.40	U	0.40	U	0.40	0.00%
1,3-Dichlorobenzene	541-73-1	0.40	U	0.40	U	0.40	0.00%
1,4-Dichlorobenzene	106-46-7	0.40	U	0.40	U	0.40	0.00%
Dichlorodifluoromethane	75-71-8	0.40	U	0.40	U	0.40	0.00%
1,1-Dichloroethane	75-34-3	0.40	U	0.40	U	0.40	0.00%
1,2-Dichloroethane	107-06-2	0.40	U	0.40	U	0.40	0.00%
1,1-Dichloroethene	75-35-4	0.40	U	0.40	U	0.40	0.00%
1,2-Dichloroethene (cis)	156-59-2	0.40	U	0.40	U	0.40	0.00%
1,2-Dichloroethene (trans)	156-60-5	**5.5**		**5.1**		0.40	**7.55%**
1,2-Dichloropropane	78-87-5	0.20	U	0.20	U	0.20	0.00%
1,3-Dichloropropene (cis)	10061-01-5	0.20	U	0.20	U	0.20	0.00%
1,3-Dichloropropene (trans)	10061-02-6	0.20	U	0.20	U	0.20	0.00%
1,2-Dichlorotetrafluoroethane	76-14-2	0.40	U	0.40	U	0.40	0.00%
Ethylbenzene	100-41-4	0.20	U	0.20	U	0.20	0.00%
4-Ethyltoluene	622-96-8	0.40	U	0.40	U	0.40	0.00%
n-Heptane	142-82-5	0.40	U	0.40	U	0.40	0.00%
1,3-Hexachlorobutadiene	87-68-3	0.40	U	0.40	U	0.40	0.00%
n-Hexane	110-54-3	0.40	U	0.40	U	0.40	0.00%
Methylene chloride	75-09-2	0.40	U	0.40	U	0.40	0.00%
Methyl ethyl ketone	78-93-3	**0.76**		**0.76**		0.40	**0.00%**
Methyl isobutyl ketone	108-10-1	0.40	U	0.40	U	0.40	0.00%

Qualifiers:
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D=Extra dilution required for this compound. X=Duplicate samples do not met RPD criteria.
U=Compound ND or under reporting limit.

Analysis: Volatile Organic Compounds by EPA Method TO-15
Laboratory Sample Duplicate Report

SDG Number: E24-01396
IAL Sample ID: E24-01396-02
Matrix: Air
Summa ID: 5096

Date Received: 4/18/24
Date Analyzed: 4/29/24,4/29/24
Lab Data File#: AA6452,AA6453
Dilution Factor: 1
Injection Volume: 500ml
GC/MS Column: RTX-1, 0.32 mmID

Compound	CAS #	Sample E24-01396-02 Concentration Reported ppbv	Q	Sample Dup E24-01396-22 Concentration Reported ppbv	Q	Reporting Limits ppbv	RPD
Methyl tert-butyl ether	1634-04-4	0.40	U	0.40	U	0.40	0.00%
Styrene	100-42-5	0.40	U	0.40	U	0.40	0.00%
Tert-butyl alcohol	75-65-0	0.40	U	0.40	U	0.40	0.00%
1,1,2,2-Tetrachloroethane	79-34-5	0.40	U	0.40	U	0.40	0.00%
Tetrachloroethene	127-18-4	**1.8**		**1.7**		0.40	**5.71%**
Toluene	108-88-3	**0.62**		**0.61**		0.40	**1.63%**
1,2,4-Trichlorobenzene	120-82-1	0.40	U	0.40	U	0.40	0.00%
1,1,1-Trichloroethane	71-55-6	0.40	U	0.40	U	0.40	0.00%
1,1,2-Trichloroethane	79-00-5	0.40	U	0.40	U	0.40	0.00%
Trichloroethene	79-01-6	0.20	U	0.20	U	0.20	0.00%
Trichlorofluoromethane	75-69-4	0.40	U	0.40	U	0.40	0.00%
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.40	U	0.40	U	0.40	0.00%
1,2,4-Trimethylbenzene	95-63-6	0.40	U	0.40	U	0.40	0.00%
1,3,5-Trimethylbenzene	108-67-8	0.40	U	0.40	U	0.40	0.00%
2,2,4-Trimethylpentane	540-84-1	0.40	U	0.40	U	0.40	0.00%
Vinyl bromide	593-60-2	0.40	U	0.40	U	0.40	0.00%
Vinyl chloride	75-01-4	0.20	U	0.20	U	0.20	0.00%
Xylenes (m&p)	179601-23-1	0.40	U	0.40	U	0.40	0.00%
Xylenes (o)	95-47-6	0.40	U	0.40	U	0.40	0.00%

RPD must be <25% for all laboratory duplicate samples. Laboratory duplicate samples are run once daily.
NC = The RPD could not be calculated since the compound was only detected in either the parent or duplicate sample.

Qualifiers:
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D=Extra dilution required for this compound. X=Duplicate samples do not met RPD criteria.
U=Compound ND or under reporting limit.

Analysis: Volatile Organic Compounds by EPA Method TO-15
Laboratory Sample Duplicate Report

		Date Received:	4/16/24
SDG Number:	E24-01345	Date Analyzed:	4/30/24,4/30/24
IAL Sample ID:	E24-01345-02	Lab Data File#:	AA6469,AA6470
Matrix:	Air	Dilution Factor:	1
Summa ID:	2886	Injection Volume:	500ml
		GC/MS Column:	RTX-1, 0.32 mmID

Compound	CAS #	Sample E24-01345-02 Concentration Reported ppbv	Q	Sample Dup E24-01345-22 Concentration Reported ppbv	Q	Reporting Limits ppbv	RPD
Acetone	67-64-1	**8.2**		**8.0**		0.40	**2.47%**
Allyl Chloride	107-05-1	0.40	U	0.40	U	0.40	0.00%
Benzene	71-43-2	0.20	U	0.20	U	0.20	0.00%
Bromodichloromethane	75-27-4	0.40	U	0.40	U	0.40	0.00%
Bromoform	75-25-2	0.40	U	0.40	U	0.40	0.00%
Bromomethane	74-83-9	0.40	U	0.40	U	0.40	0.00%
1,3-Butadiene	106-99-0	0.40	U	0.40	U	0.40	0.00%
Chlorobenzene	108-90-7	0.40	U	0.40	U	0.40	0.00%
Chloroethane	75-00-3	0.40	U	0.40	U	0.40	0.00%
Chloroform	67-66-3	0.40	U	0.40	U	0.40	0.00%
Chloromethane	74-87-3	0.40	U	0.40	U	0.40	0.00%
Carbon disulfide	75-15-0	0.40	U	0.40	U	0.40	0.00%
Carbon tetrachloride	56-23-5	0.20	U	0.20	U	0.20	0.00%
2-Chlorotoluene	95-49-8	0.40	U	0.40	U	0.40	0.00%
Cyclohexane	110-82-7	0.40	U	0.40	U	0.40	0.00%
Dibromochloromethane	124-48-1	0.40	U	0.40	U	0.40	0.00%
1,2-Dibromoethane	106-93-4	0.20	U	0.20	U	0.20	0.00%
1,2-Dichlorobenzene	95-50-1	0.40	U	0.40	U	0.40	0.00%
1,3-Dichlorobenzene	541-73-1	0.40	U	0.40	U	0.40	0.00%
1,4-Dichlorobenzene	106-46-7	0.40	U	0.40	U	0.40	0.00%
Dichlorodifluoromethane	75-71-8	0.40	U	0.40	U	0.40	0.00%
1,1-Dichloroethane	75-34-3	0.40	U	0.40	U	0.40	0.00%
1,2-Dichloroethane	107-06-2	0.40	U	0.40	U	0.40	0.00%
1,1-Dichloroethene	75-35-4	0.40	U	0.40	U	0.40	0.00%
1,2-Dichloroethene (cis)	156-59-2	0.40	U	0.40	U	0.40	0.00%
1,2-Dichloroethene (trans)	156-60-5	0.40	U	0.40	U	0.40	0.00%
1,2-Dichloropropane	78-87-5	0.20	U	0.20	U	0.20	0.00%
1,3-Dichloropropene (cis)	10061-01-5	0.20	U	0.20	U	0.20	0.00%
1,3-Dichloropropene (trans)	10061-02-6	0.20	U	0.20	U	0.20	0.00%
1,2-Dichlorotetrafluoroethane	76-14-2	0.40	U	0.40	U	0.40	0.00%
Ethylbenzene	100-41-4	0.20	U	0.20	U	0.20	0.00%
4-Ethyltoluene	622-96-8	0.40	U	0.40	U	0.40	0.00%
n-Heptane	142-82-5	0.40	U	0.40	U	0.40	0.00%
1,3-Hexachlorobutadiene	87-68-3	0.40	U	0.40	U	0.40	0.00%
n-Hexane	110-54-3	0.40	U	0.40	U	0.40	0.00%
Methylene chloride	75-09-2	0.40	U	0.40	U	0.40	0.00%
Methyl ethyl ketone	78-93-3	**14**		**13**		0.40	**7.41%**
Methyl isobutyl ketone	108-10-1	0.40	U	0.40	U	0.40	0.00%

Qualifiers:
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D=Extra dilution required for this compound. X=Duplicate samples do not met RPD criteria.
U=Compound ND or under reporting limit.

Analysis: Volatile Organic Compounds by EPA Method TO-15
Laboratory Sample Duplicate Report

SDG Number: E24-01345
IAL Sample ID: E24-01345-02
Matrix: Air
Summa ID: 2886

Date Received: 4/16/24
Date Analyzed: 4/30/24,4/30/24
Lab Data File#: AA6469,AA6470
Dilution Factor: 1
Injection Volume: 500ml
GC/MS Column: RTX-1, 0.32 mmID

Compound	CAS #	Sample E24-01345-02 Concentration Reported ppbv	Q	Sample Dup E24-01345-22 Concentration Reported ppbv	Q	Reporting Limits ppbv	RPD
Methyl tert-butyl ether	1634-04-4	0.40	U	0.40	U	0.40	0.00%
Styrene	100-42-5	0.40	U	0.40	U	0.40	0.00%
Tert-butyl alcohol	75-65-0	0.40	U	0.40	U	0.40	0.00%
1,1,2,2-Tetrachloroethane	79-34-5	0.40	U	0.40	U	0.40	0.00%
Tetrachloroethene	127-18-4	0.40	U	0.40	U	0.40	0.00%
Toluene	108-88-3	**0.59**		**0.55**		0.40	**7.02%**
1,2,4-Trichlorobenzene	120-82-1	0.40	U	0.40	U	0.40	0.00%
1,1,1-Trichloroethane	71-55-6	0.40	U	0.40	U	0.40	0.00%
1,1,2-Trichloroethane	79-00-5	0.40	U	0.40	U	0.40	0.00%
Trichloroethene	79-01-6	0.20	U	0.20	U	0.20	0.00%
Trichlorofluoromethane	75-69-4	0.40	U	0.40	U	0.40	0.00%
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.40	U	0.40	U	0.40	0.00%
1,2,4-Trimethylbenzene	95-63-6	0.40	U	0.40	U	0.40	0.00%
1,3,5-Trimethylbenzene	108-67-8	0.40	U	0.40	U	0.40	0.00%
2,2,4-Trimethylpentane	540-84-1	0.40	U	0.40	U	0.40	0.00%
Vinyl bromide	593-60-2	0.40	U	0.40	U	0.40	0.00%
Vinyl chloride	75-01-4	0.20	U	0.20	U	0.20	0.00%
Xylenes (m&p)	179601-23-1	0.40	U	0.40	U	0.40	0.00%
Xylenes (o)	95-47-6	0.40	U	0.40	U	0.40	0.00%

RPD must be <25% for all laboratory duplicate samples. Laboratory duplicate samples are run once daily.
NC = The RPD could not be calculated since the compound was only detected in either the parent or duplicate sample.

Qualifiers:
E=Concentration exceeds upper level of calibration range for instrument.
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U=Compound ND or under reporting limit.

Initial Calibration Curve Internal Standard Area and Retention Time Summary

Instrument: AA **ICAL Date:** 3/27/2024

	BROMOCHLOROMETHANE				1,4-DIFLUOROBENZENE				D-5 CHLOROBENZENE			
	Area #		RT		Area #		RT		Area #		RT	
AVERAGE OF CALIBRATION STANDARDS	377399		4.413		1533720		5.479		1408744		8.351	
UPPER LIMIT	528358		4.743		2147208		5.809		1972242		8.681	
LOWER LIMIT	226439		4.083		920232		5.149		845247		8.021	
Lab ID	Area #	%	RT	+/-	Area #	%	RT	+/-	Area #	%	RT	+/-
40 PPBV STD AA 6025 STD01	398803	5.67	4.419	0.01	1758228	14.64	5.480	0.00	1517568	7.72	8.351	0.00
20 PPBV STD AA 6024 STD02	411882	9.14	4.415	0.00	1661943	8.36	5.480	0.00	1464287	3.94	8.351	0.00
10 PPBV STD AA 6023 STD03	405866	7.54	4.412	0.00	1540619	0.45	5.476	0.00	1407079	-0.12	8.351	0.00
2 PPBV STD AA 6022 STD04	309693	-17.94	4.412	0.00	1229116	-19.86	5.479	0.00	1260202	-10.54	8.351	0.00
0.2 PPBV STD AA 6021 STD05	360749	-4.41	4.409	0.00	1478694	-3.59	5.480	0.00	1394585	-1.01	8.351	0.00
ICVSS AA 6026 ICVSS	412561	9.32	4.412	0.00	1549110	1.00	5.480	0.00	1439709	2.20	8.351	0.00

Difference of Internal Area must be within +/- 40%; Retention Times must be within +/- 0.33 minute.

* Values outsite QC limits.

Internal Standard Area and Retention Time Summary

Lab File ID (Standard): AA6121DCVS **Date Analyzed:** 4/3/2024

Instrument: AA **ICAL Date:** 3/27/2024

			BROMOCHLOROMETHANE				1,4-DIFLUOROBENZENE				D-5 CHLOROBENZENE			
			Area #		RT		Area #		RT		Area #		RT	
	CALIBRATION STANDARD		388202		4.409		1570048		5.480		1402375		8.351	
	UPPER LIMIT		543483		4.74		2198067		5.81		1963325		8.68	
	LOWER LIMIT		232921		4.08		942029		5.15		841425		8.02	
Lab ID		DF	Area #	%	RT	+/-	Area #	%	RT	+/-	Area #	%	RT	+/-
Method Blank	AA6123BLK	1.0	362635	-6.59	4.409	0.00	1337665	-14.80	5.480	0.00	1275652	-9.04	8.351	0.00
Reporting Limit Laboratory Control Standard	AA6124RLLCS	1.0	373403	-3.81	4.409	0.00	1475164	-6.04	5.479	0.00	1376540	-1.84	8.351	0.00
2037	AA6125	1.0	388137	-0.02	4.409	0.00	1459789	-7.02	5.476	0.00	1350451	-3.70	8.351	0.00
5092	AA6133	1.0	442998	14.12	4.422	0.01	1896691	20.80	5.483	0.00	2283424	62.83*	8.354	0.00
Closing Calibration	AA6134CCCVS	1.0	417026	7.43	4.422	0.01	1884741	20.04	5.486	0.01	1948638	38.95	8.354	0.00

Difference of Internal Area must be within +/- 40%; Retention Times must be within +/- 0.33 minute.
* Values outsite QC limits.

Internal Standard Area and Retention Time Summary

Lab File ID (Standard): AA6443DCVS **Date Analyzed:** 4/29/2024

Instrument: AA **ICAL Date:** 3/27/2024

			BROMOCHLOROMETHANE				1,4-DIFLUOROBENZENE				D-5 CHLOROBENZENE			
			Area #		RT		Area #		RT		Area #		RT	
	CALIBRATION STANDARD		322072		4.410		1213069		5.481		1095212		8.352	
	UPPER LIMIT		450901		4.74		1698297		5.81		1533297		8.68	
	LOWER LIMIT		193243		4.08		727841		5.15		657127		8.02	
Lab ID		DF	Area #	%	RT	+/-	Area #	%	RT	+/-	Area #	%	RT	+/-
Method Blank	AA6445BLK	1.0	268721	-16.56	4.410	0.00	1009344	-16.79	5.477	0.00	977138	-10.78	8.352	0.00
Reporting Limit Laboratory Control Standard	AA6446RLLCS	1.0	281628	-12.56	4.410	0.00	1100887	-9.25	5.477	0.00	1040330	-5.01	8.352	0.00
E24-01487-01	AA6447	1.0	272105	-15.51	4.432	0.02	1179904	-2.73	5.480	0.00	1047084	-4.39	8.355	0.00
E24-01487-02	AA6448	1.0	246200	-23.56	4.432	0.02	1149245	-5.26	5.484	0.00	1023364	-6.56	8.355	0.00
E24-01487-03	AA6449	1.0	256110	-20.48	4.442	0.03	1344789	10.86	5.493	0.01	1151020	5.10	8.358	0.01
E24-01487-04	AA6450	1.0	242061	-24.84	4.432	0.02	1110949	-8.42	5.484	0.00	996684	-9.00	8.355	0.00
Closing Calibration	AA6455CCCVS	1.0	289235	-10.20	4.410	0.00	1114843	-8.10	5.480	0.00	1014424	-7.38	8.352	0.00

Difference of Internal Area must be within +/- 40%; Retention Times must be within +/- 0.33 minute.
* Values outsite QC limits.

Internal Standard Area and Retention Time Summary

Lab File ID (Standard): AA6458DCVS **Date Analyzed:** 4/30/2024

Instrument: AA **ICAL Date:** 3/27/2024

			BROMOCHLOROMETHANE				1,4-DIFLUOROBENZENE				D-5 CHLOROBENZENE			
			Area #		RT		Area #		RT		Area #		RT	
	CALIBRATION STANDARD		300981		4.410		1178636		5.481		1058502		8.349	
	UPPER LIMIT		421373		4.74		1650090		5.81		1481903		8.68	
	LOWER LIMIT		180589		4.08		707182		5.15		635101		8.02	
Lab ID		DF	Area #	%	RT	+/-	Area #	%	RT	+/-	Area #	%	RT	+/-
Method Blank	AA6460BLK	1.0	276554	-8.12	4.406	0.00	1064655	-9.67	5.477	0.00	1016199	-4.00	8.348	0.00
Reporting Limit Laboratory Control Standard	AA6461RLLCS	1.0	279358	-7.18	4.410	0.00	1119742	-5.00	5.477	0.00	1044304	-1.34	8.352	0.00
E24-01487-01	AA6462	5.0	256349	-14.83	4.423	0.01	1154677	-2.03	5.480	0.00	1065391	0.65	8.352	0.00
E24-01487-02	AA6463	2.0	245922	-18.29	4.429	0.02	1143728	-2.96	5.483	0.00	1023778	-3.28	8.355	0.01
Closing Calibration	AA6472CCCVS	1.0	355475	18.11	4.423	0.01	1575755	33.69	5.487	0.01	1462209	38.14	8.355	0.01

Difference of Internal Area must be within +/- 40%; Retention Times must be within +/- 0.33 minute.
* Values outsite QC limits.

Section VI: Sample Data Summary

Certificate of Analysis

Summary of Results

**Quantitation Reports, Chromatograms,
and Peak Integration Reports**

CERTIFICATE OF ANALYSIS

ANALYTICAL DATA PACKAGE FOR THE
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
ALBANY NEW YORK 12233

Integrated Analytical Laboratories, LLC — **Randolph, NJ 07869**
Project#: 48-55 36th St — **NY ELAP Certification#: 11402**
SDG #: E24-01487 — **NJDEP (Primary AB) Certification#: 14751**
Date of first sample receipt: 4/26/2024 — **Date of last sample receipt: 4/26/2024**

Client: JS Held-Hoboken
5 Marine View Plaza
Hoboken, NJ 07030

Attention: Attention: Leah DeEgidio

Project/Site: 48-55 36th St/NY

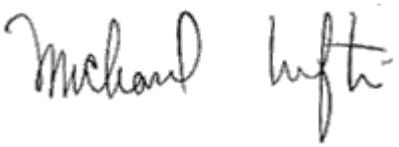
Analysis conducted at: Integrated Analytical Laboratories, LLC
273 Franklin Road
Randolph, NJ 07869

Contact: Michael H. Leftin, Ph.D.

Sample(s):
E24-01487-01
E24-01487-02
E24-01487-03
E24-01487-04

Samples for this analysis were received in good condition with a chain of custody.

All work recorded herein has been done in accordance with normal professional standards using accepted testing methodologies, quality assurance and quality control procedures except where otherwise agreed to by the client and testing company in writing. Once analysis has been performed on canisters that meets regulatory criteria, samples are recycled for future use, unless other provisions have been made by the client.



Michael H. Leftin, Ph.D.
Laboratory Director

Date: May 21, 2024

Volatile Organic Compounds by EPA Method TO-15
Summary of Results

Lab ID:	E24-01487-01	Instrument ID:	AA
Client ID:	SG-1	GC/MS Column:	RTX-1, 0.32 mmID
Date Sampled:	04/27/2024 12:50	Injection Volmue:	500ml, 100ml
Date Received:	04/26/2024	Matrix:	Air-Soil Gas
Date Analyzed:	04/29/2024 15:57, 04/30/2024 12:48	% Moisture:	NA
Data File:	AA6447, AA6462	Dilution Factor:	1, 5
Summa ID:	3041A	Analyst:	J. Walukiewicz

			Concentration Reported		Reporting Limits	
Compound	**CAS #**	**Q**	**ppbv**	**ug/m3**	**ppbv**	**ug/m3**
Acetone	67-64-1		36	87	0.20	0.48
Benzene	71-43-2		0.55	1.7	0.20	0.64
Bromodichloromethane	75-27-4		ND	ND	0.20	1.3
Bromoform	75-25-2		ND	ND	0.20	2.1
Bromomethane	74-83-9		ND	ND	0.20	0.78
1,3-Butadiene	106-99-0		ND	ND	0.20	0.44
Chlorobenzene	108-90-7		ND	ND	0.20	0.92
Chloroethane	75-00-3		ND	ND	0.20	0.53
Chloroform	67-66-3		0.89	4.4	0.20	0.98
Chloromethane	74-87-3		ND	ND	0.20	0.41
Carbon disulfide	75-15-0		0.55	1.7	0.20	0.62
Carbon tetrachloride	56-23-5		ND	ND	0.040	0.25
Cyclohexane	110-82-7		ND	ND	0.20	0.69
Dibromochloromethane	124-48-1		ND	ND	0.20	1.7
1,2-Dibromoethane	106-93-4		ND	ND	0.20	1.5
1,2-Dichlorobenzene	95-50-1		ND	ND	0.20	1.2
1,3-Dichlorobenzene	541-73-1		ND	ND	0.20	1.2
1,4-Dichlorobenzene	106-46-7		ND	ND	0.20	1.2
Dichlorodifluoromethane	75-71-8		ND	ND	0.20	0.99
1,1-Dichloroethane	75-34-3		ND	ND	0.20	0.81
1,2-Dichloroethane	107-06-2		ND	ND	0.20	0.81
1,1-Dichloroethene	75-35-4		ND	ND	0.20	0.79
1,2-Dichloroethene (cis)	156-59-2	D	55	220	1.0	4.0
1,2-Dichloroethene (trans)	156-60-5		1.2	4.6	0.20	0.79
1,2-Dichloropropane	78-87-5		ND	ND	0.20	0.92
1,3-Dichloropropene (cis)	10061-01-5		ND	ND	0.20	0.91
1,3-Dichloropropene (trans)	10061-02-6		ND	ND	0.20	0.91
1,2-Dichlorotetrafluoroethane	76-14-2		ND	ND	0.20	1.4
1,4-Dioxane	123-91-1		ND	ND	0.20	0.72
Ethylbenzene	100-41-4		ND	ND	0.20	0.87
n-Heptane	142-82-5		0.32	1.3	0.20	0.82
1,3-Hexachlorobutadiene	87-68-3		ND	ND	0.20	2.1
n-Hexane	110-54-3		0.30	1.1	0.20	0.70
Methylene chloride	75-09-2		ND	ND	0.20	0.69
Methyl ethyl ketone	78-93-3		1.9	5.5	0.20	0.59
Methyl isobutyl ketone	108-10-1		0.43	1.8	0.20	0.82
Methyl tert-butyl ether	1634-04-4		ND	ND	0.20	0.72
Styrene	100-42-5		ND	ND	0.20	0.85
Tert-butyl alcohol	75-65-0		0.41	1.2	0.20	0.61
1,1,2,2-Tetrachloroethane	79-34-5		ND	ND	0.20	1.4
Tetrachloroethene	127-18-4	D	90	610	1.0	6.8
Toluene	108-88-3		8.9	33	0.20	0.75
1,2,4-Trichlorobenzene	120-82-1		ND	ND	0.20	1.5
1,1,1-Trichloroethane	71-55-6		ND	ND	0.20	1.1
1,1,2-Trichloroethane	79-00-5		ND	ND	0.20	1.1

Qualifiers:
D = Dilution required

Volatile Organic Compounds by EPA Method TO-15
Summary of Results

Lab ID:	E24-01487-01	Instrument ID:	AA
Client ID:	SG-1	GC/MS Column:	RTX-1, 0.32 mmID
Date Sampled:	04/27/2024 12:50	Injection Volmue:	500ml, 100ml
Date Received:	04/26/2024	Matrix:	Air-Soil Gas
Date Analyzed:	04/29/2024 15:57, 04/30/2024 12:48	% Moisture:	NA
Data File:	AA6447, AA6462	Dilution Factor:	1, 5
Summa ID:	3041A	Analyst:	J. Walukiewicz

			Concentration Reported		Reporting Limits	
Compound	**CAS #**	**Q**	**ppbv**	**ug/m3**	**ppbv**	**ug/m3**
Trichloroethene	79-01-6		22	120	0.046	0.25
Trichlorofluoromethane	75-69-4		0.31	1.7	0.20	1.1
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1		ND	ND	0.20	1.5
1,2,4-Trimethylbenzene	95-63-6		ND	ND	0.20	0.98
1,3,5-Trimethylbenzene	108-67-8		ND	ND	0.20	0.98
2,2,4-Trimethylpentane	540-84-1		ND	ND	0.20	0.93
Vinyl bromide	593-60-2		ND	ND	0.20	0.87
Vinyl chloride	75-01-4		ND	ND	0.20	0.51
Xylenes (m&p)	179601-23-1		0.35	1.5	0.20	0.87
Xylenes (o)	95-47-6		ND	ND	0.20	0.87

Qualifiers:
D = Dilution required

Data Path : C:\DATA\2024\04-2024\04-29-2024\
Data File : aa6447.D
Acq On : 29 Apr 2024 3:57 pm
Operator : jjw
Sample : E24-01487-01
Misc : 3041A, 500cc
ALS Vial : 19 Sample Multiplier: 1

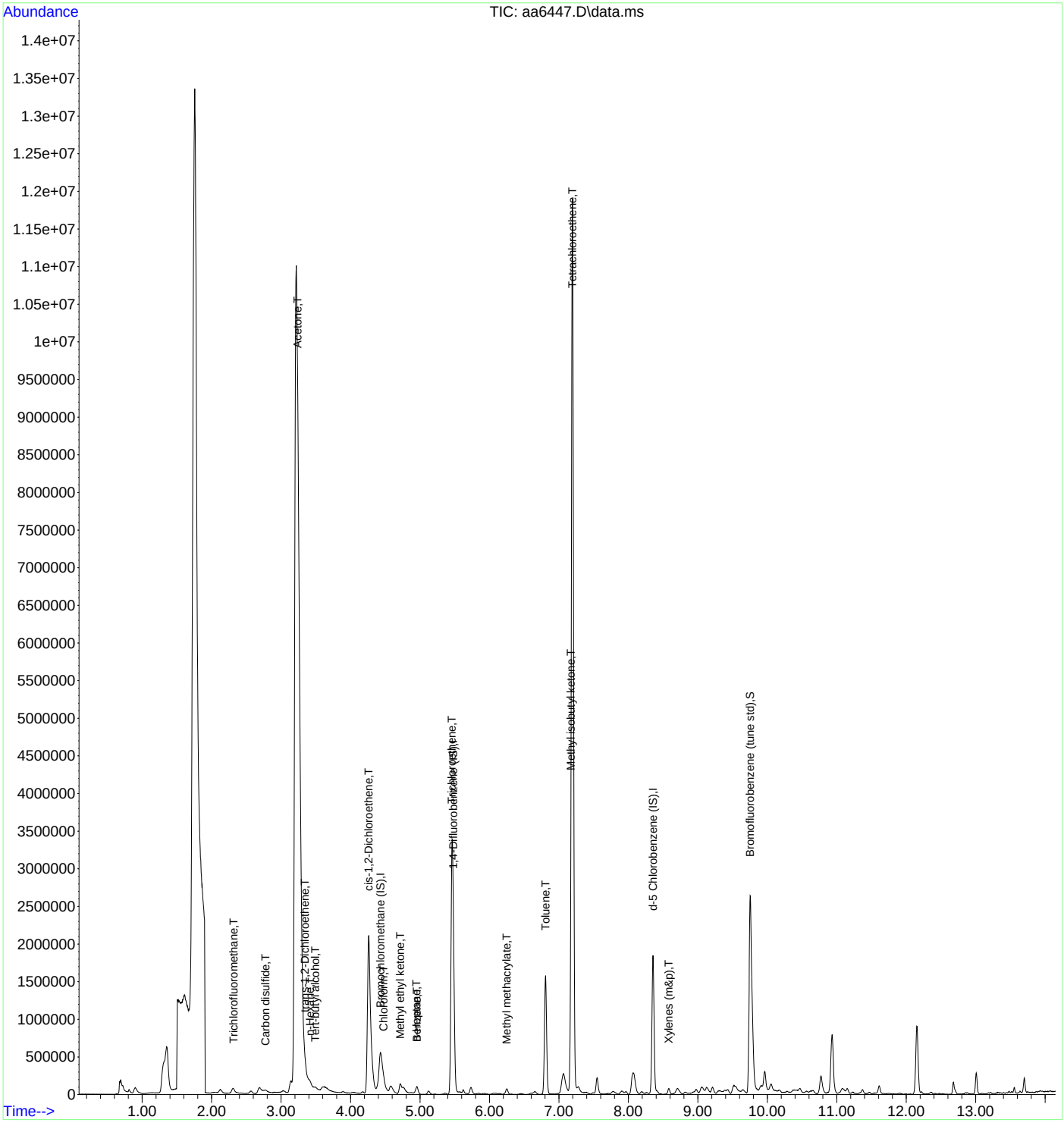
Quant Time: May 02 10:52:34 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

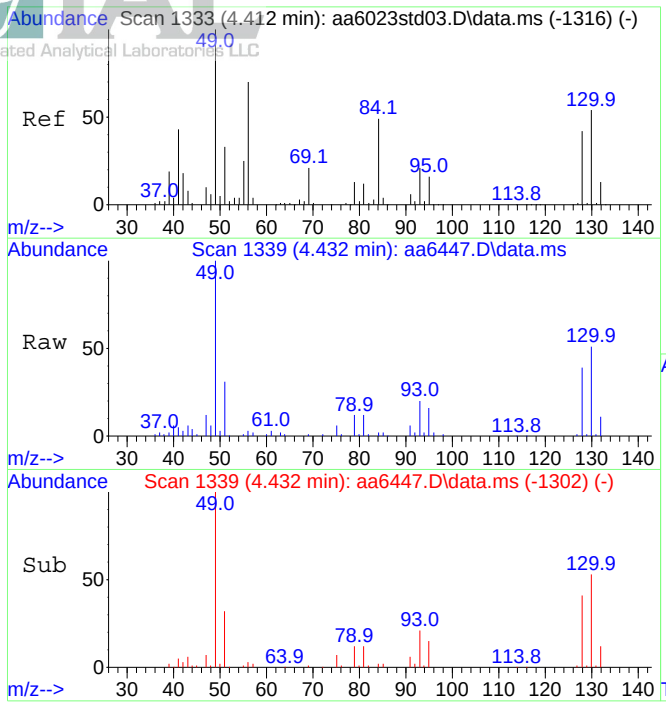
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.432	130	272105	10.00	ppbV		0.020
39) 1,4-Difluorobenzene (IS)	5.480	114	1179904	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.355	117	1047084	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.750	95	927932	9.88	ppbV		0.000
Target Compounds							Qvalue
12) Trichlorofluoromethane	2.317	101	24585	0.31	ppbV		99
15) Carbon disulfide	2.776	76	54071	0.55	ppbV	#	83
21) Acetone	3.239	43	2217248	36.43	ppbV		100
22) trans-1,2-Dichloroethene	3.345	61	62367	1.15	ppbV		99
24) n-Hexane	3.416	57	32691	0.30	ppbV		86
26) Tert-butyl alcohol	3.493	59	35561	0.41	ppbV		100
28) cis-1,2-Dichloroethene	4.262	61	2209910	42.33	ppbV		100
30) Chloroform	4.477	83	67644	0.89	ppbV		96
35) Methyl ethyl ketone	4.715	43	170884	1.88	ppbV		99
36) n-Heptane	4.950	43	30504	0.32	ppbV		86
37) Benzene	4.956	78	62424	0.55	ppbV		95
40) Trichloroethene	5.458	130	1021215	21.69	ppbV		99
44) Methyl methacrylate	6.249	41	20938	0.29	ppbV	#	14
47) Toluene	6.808	91	1346290	8.86	ppbV		100
48) Methyl isobutyl ketone	7.172	43	58579	0.43	ppbV		93
49) Tetrachloroethene	7.194	166	3757739	71.57	ppbV		99
59) Xylenes (m&p)	8.580	91	52526	0.35	ppbV		100

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

Data Path : C:\DATA\2024\04-2024\04-29-2024\
Data File : aa6447.D
Acq On : 29 Apr 2024 3:57 pm
Operator : jjw
Sample : E24-01487-01
Misc : 3041A, 500cc
ALS Vial : 19 Sample Multiplier: 1

Quant Time: May 02 10:52:34 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

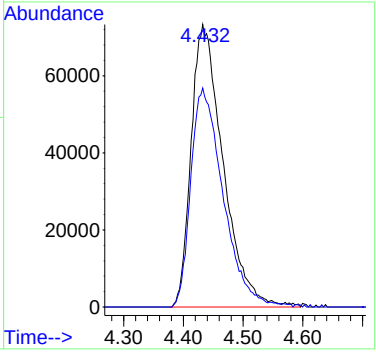


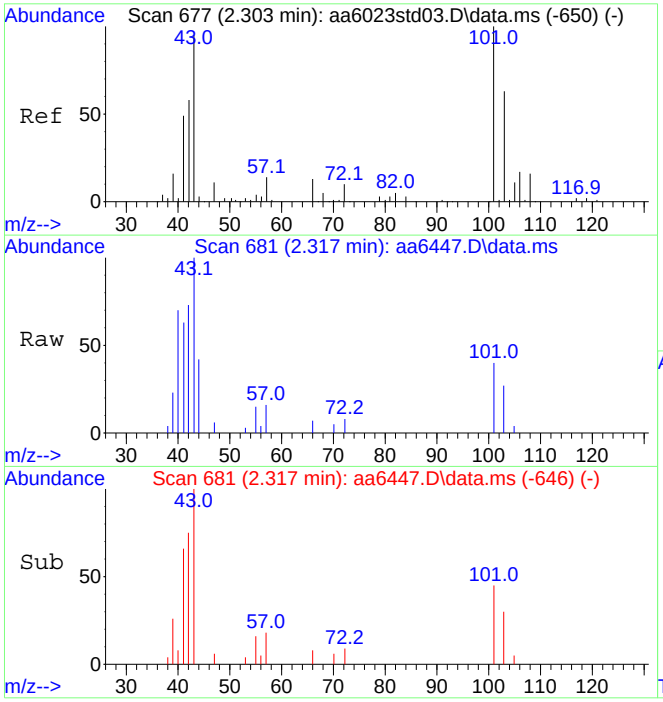


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.432 min Scan# 1339
Delta R.T. 0.020 min
Lab File: aa6447.D
Acq: 29 Apr 2024 3:57 pm

Tgt Ion:130 Resp: 272105

Ion	Ratio	Lower	Upper
130	100		
128	78.4	57.8	97.8

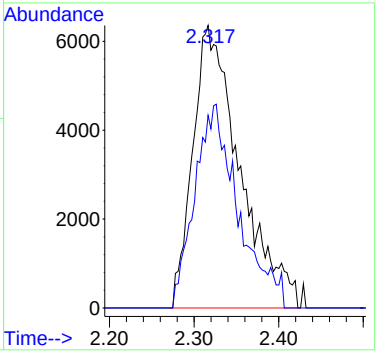


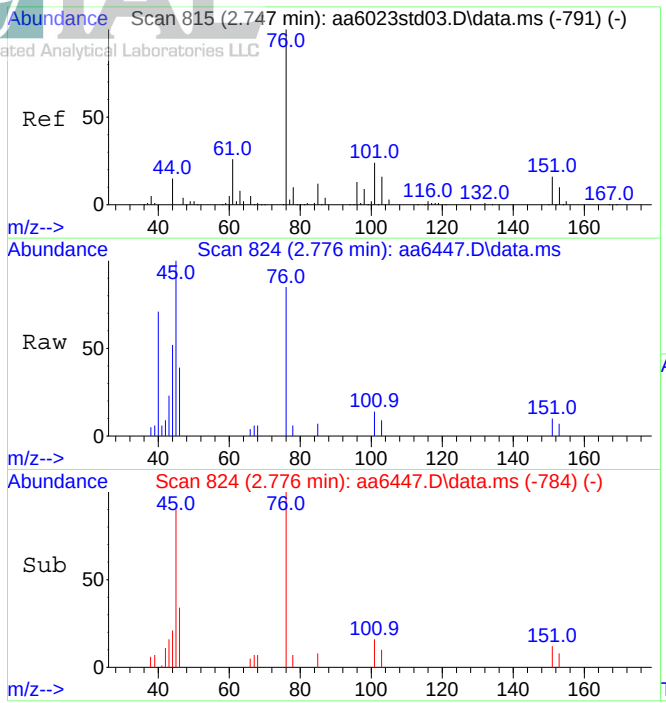


#12
Trichlorofluoromethane
Concen: 0.31 ppbV
RT: 2.317 min Scan# 681
Delta R.T. 0.014 min
Lab File: aa6447.D
Acq: 29 Apr 2024 3:57 pm

Tgt Ion:101 Resp: 24585

Ion	Ratio	Lower	Upper
101	100		
103	66.2	52.1	78.1

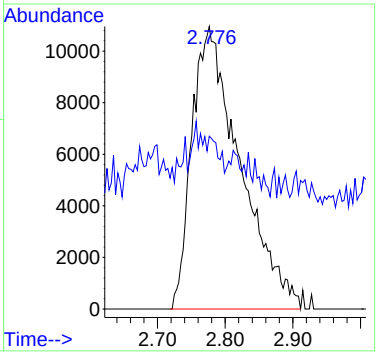


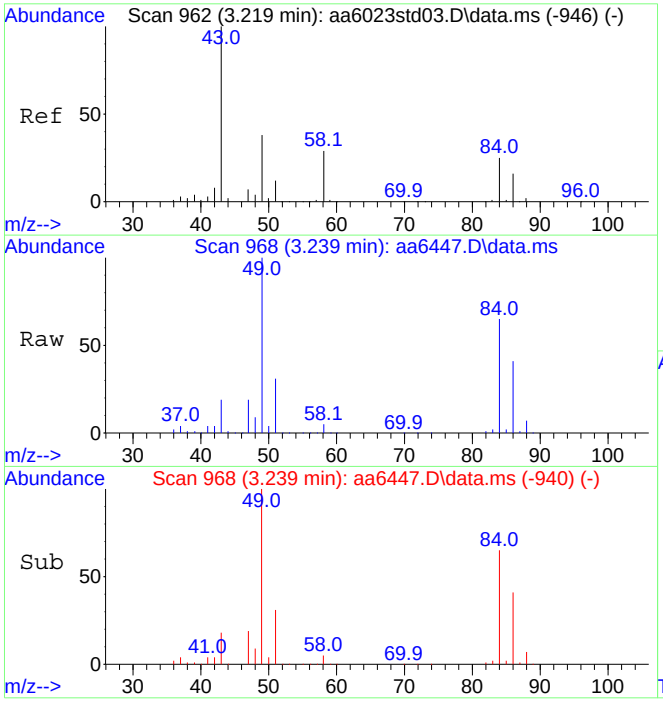


#15
Carbon disulfide
Concen: 0.55 ppbV
RT: 2.776 min Scan# 824
Delta R.T. 0.030 min
Lab File: aa6447.D
Acq: 29 Apr 2024 3:57 pm

Tgt Ion: 76 Resp: 54071

Ion	Ratio	Lower	Upper
76	100		
44	8.3	12.2	18.4#

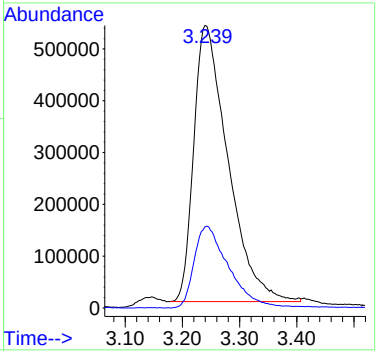


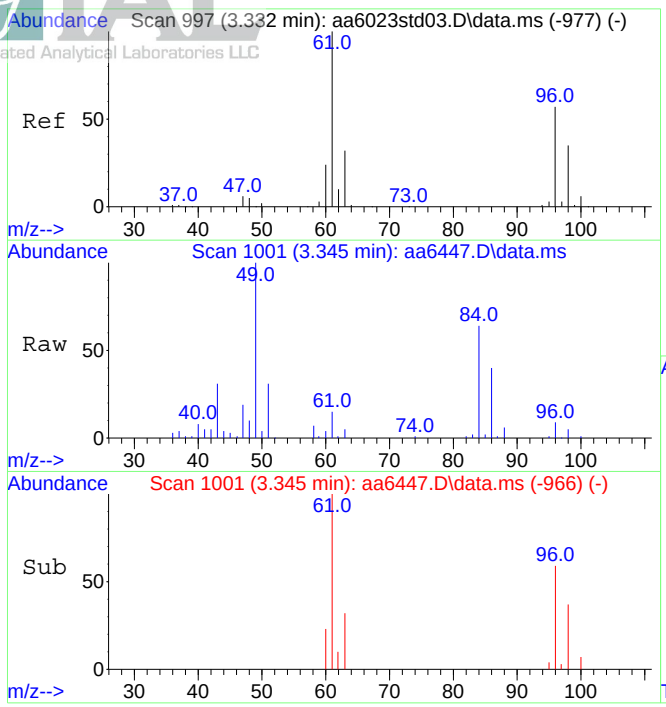


#21
Acetone
Concen: 36.43 ppbV
RT: 3.239 min Scan# 968
Delta R.T. 0.020 min
Lab File: aa6447.D
Acq: 29 Apr 2024 3:57 pm

Tgt Ion: 43 Resp: 2217248

Ion	Ratio	Lower	Upper
43	100		
58	29.9	23.8	35.8

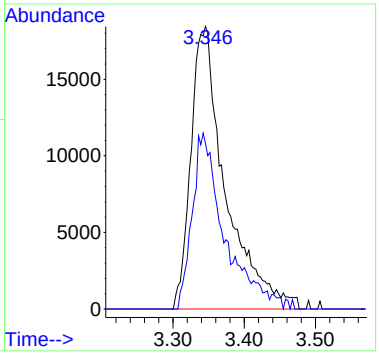


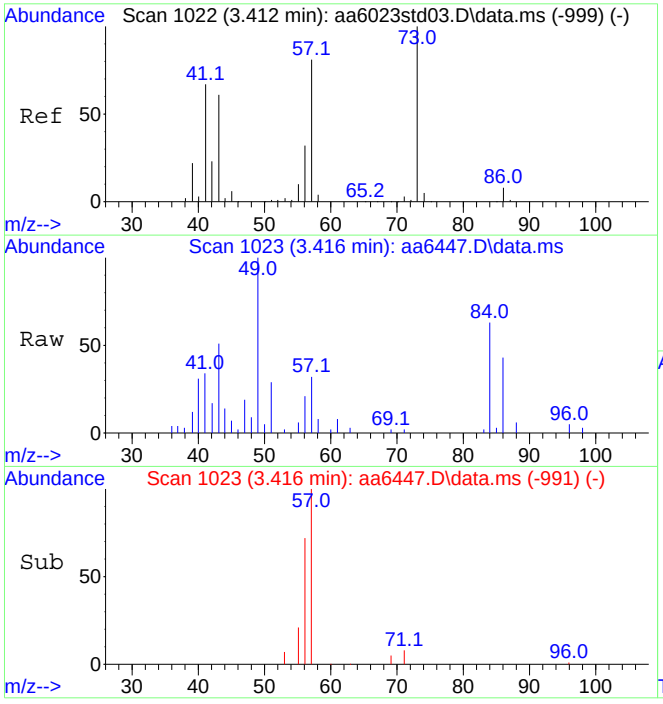


#22
trans-1,2-Dichloroethene
Concen: 1.15 ppbV
RT: 3.345 min Scan# 1001
Delta R.T. 0.014 min
Lab File: aa6447.D
Acq: 29 Apr 2024 3:57 pm

Tgt Ion: 61 Resp: 62367

Ion	Ratio	Lower	Upper
61	100		
96	58.0	46.0	69.0

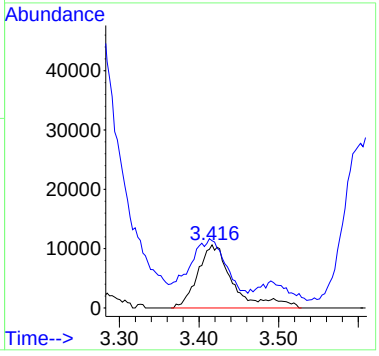


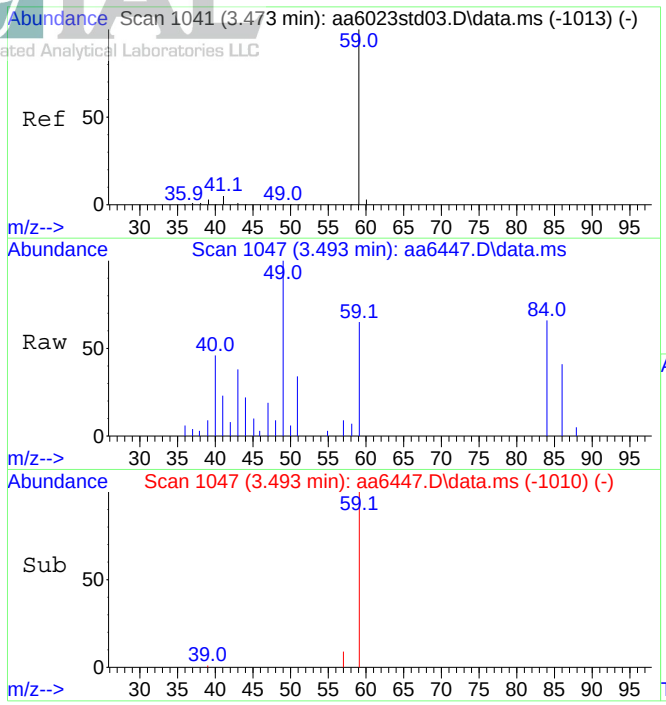


#24
n-Hexane
Concen: 0.30 ppbV
RT: 3.416 min Scan# 1023
Delta R.T. 0.004 min
Lab File: aa6447.D
Acq: 29 Apr 2024 3:57 pm

Tgt Ion: 57 Resp: 32691

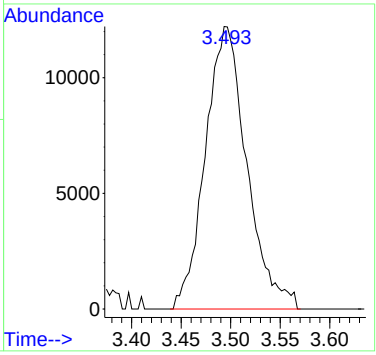
Ion	Ratio	Lower	Upper
57	100		
41	81.9	76.2	114.4

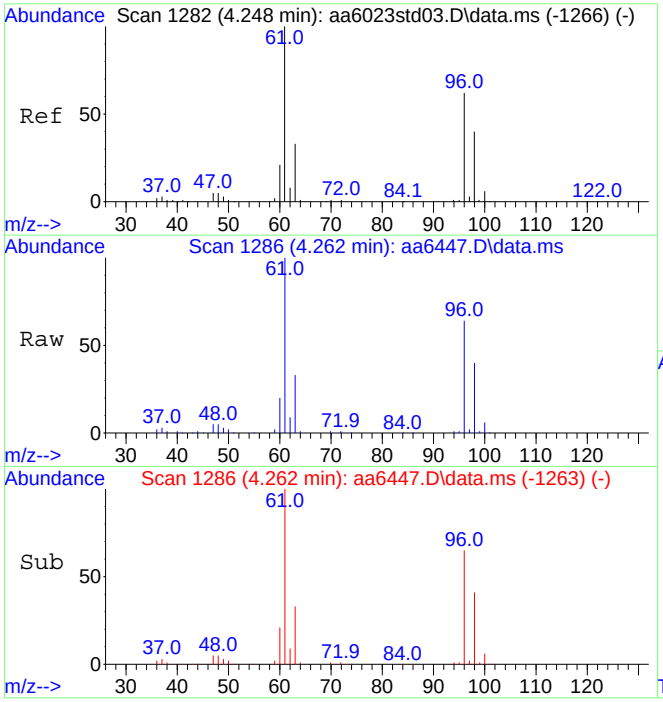




#26
Tert-butyl alcohol
Concen: 0.41 ppbV
RT: 3.493 min Scan# 1047
Delta R.T. 0.020 min
Lab File: aa6447.D
Acq: 29 Apr 2024 3:57 pm

Tgt Ion: 59 Resp: 35561

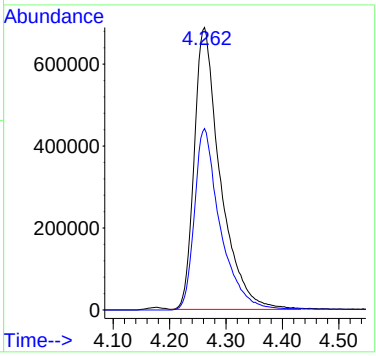


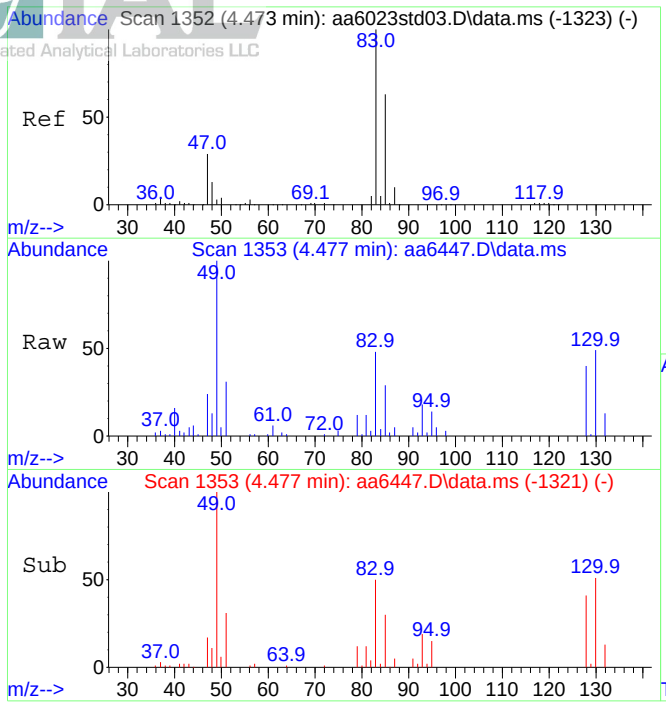


#28
cis-1,2-Dichloroethene
Concen: 42.33 ppbV
RT: 4.262 min Scan# 1286
Delta R.T. 0.014 min
Lab File: aa6447.D
Acq: 29 Apr 2024 3:57 pm

Tgt Ion: 61 Resp: 2209910

Ion	Ratio	Lower	Upper
61	100		
96	63.9	51.0	76.4

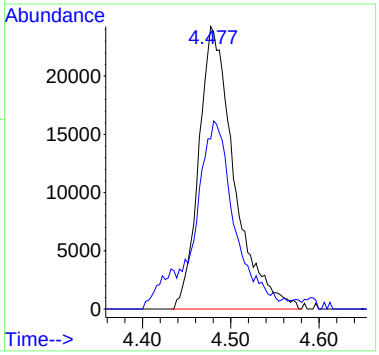


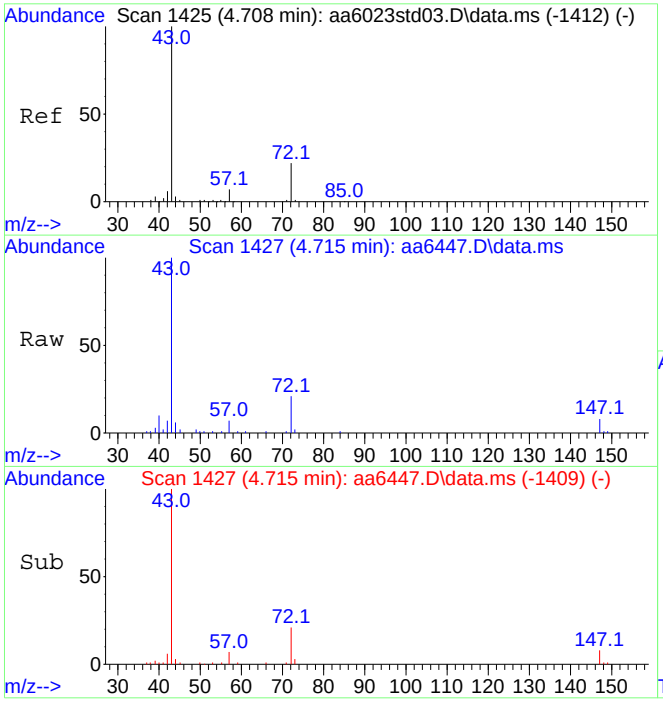


#30
Chloroform
Concen: 0.89 ppbV
RT: 4.477 min Scan# 1353
Delta R.T. 0.004 min
Lab File: aa6447.D
Acq: 29 Apr 2024 3:57 pm

Tgt Ion: 83 Resp: 67644

Ion	Ratio	Lower	Upper
83	100		
85	69.4	52.7	79.1

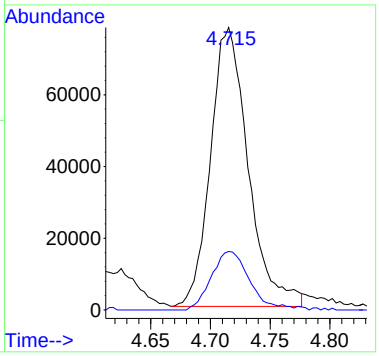


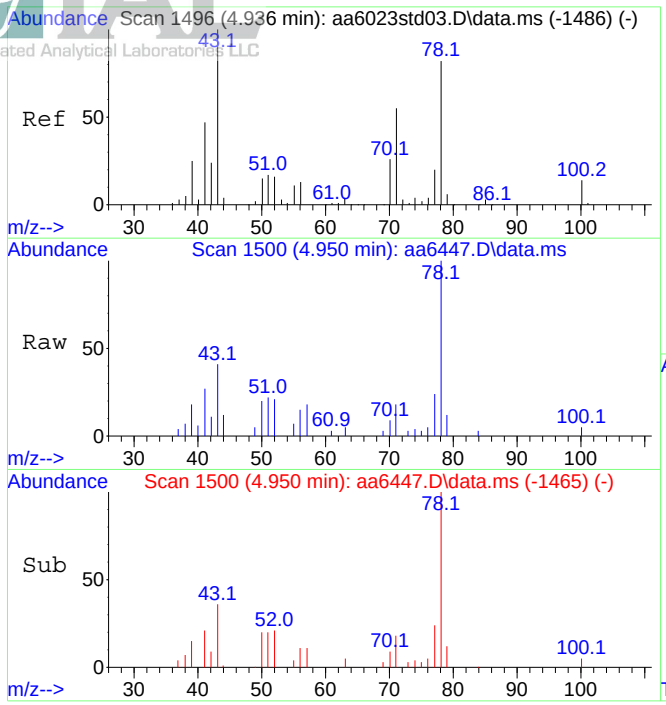


#35
Methyl ethyl ketone
Concen: 1.88 ppbV
RT: 4.715 min Scan# 1427
Delta R.T. 0.007 min
Lab File: aa6447.D
Acq: 29 Apr 2024 3:57 pm

Tgt Ion: 43 Resp: 170884

Ion	Ratio	Lower	Upper
43	100		
72	21.2	17.4	26.0

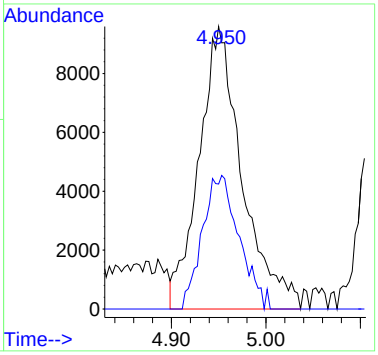


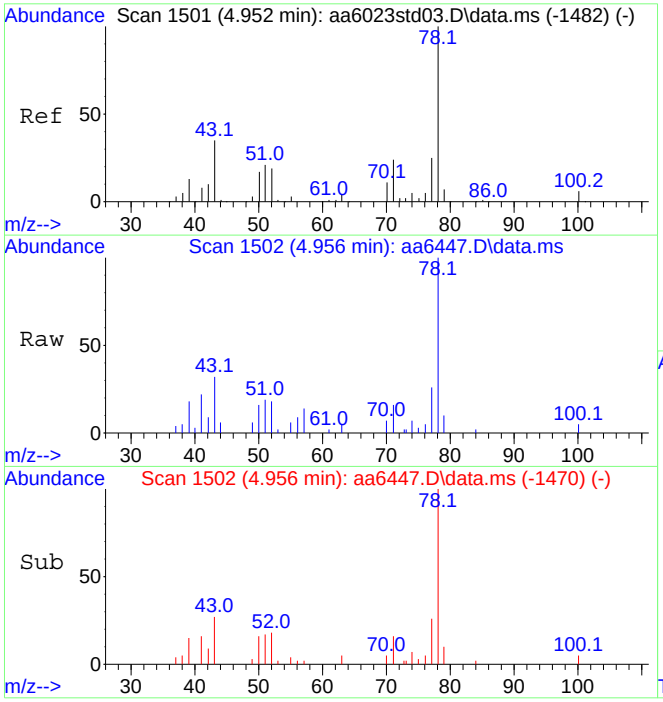


#36
n-Heptane
Concen: 0.32 ppbV
RT: 4.950 min Scan# 1500
Delta R.T. 0.014 min
Lab File: aa6447.D
Acq: 29 Apr 2024 3:57 pm

Tgt Ion: 43 Resp: 30504

Ion	Ratio	Lower	Upper
43	100		
71	40.2	40.1	60.1

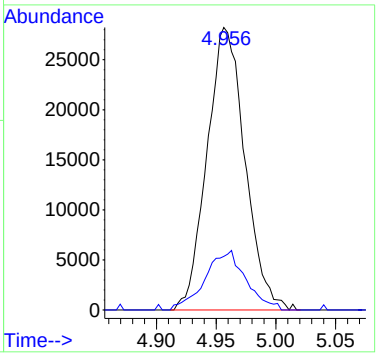


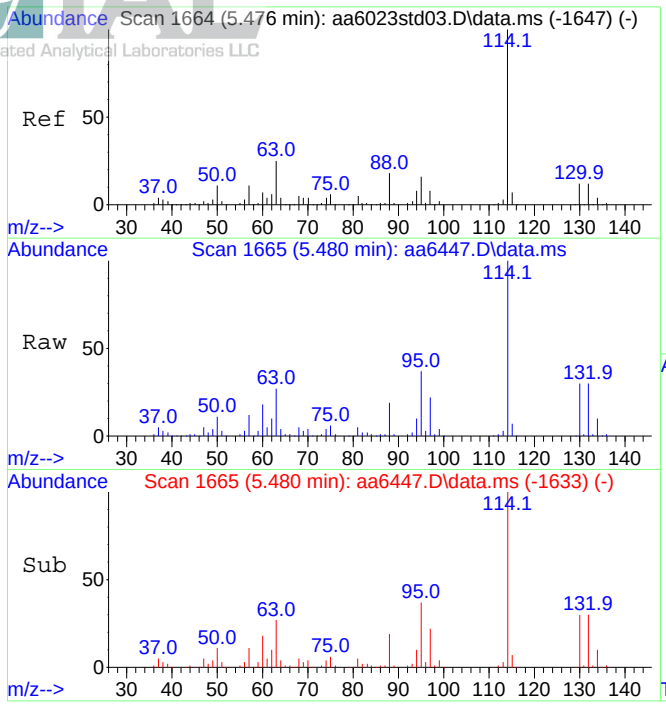


#37
Benzene
Concen: 0.55 ppbV
RT: 4.956 min Scan# 1502
Delta R.T. 0.004 min
Lab File: aa6447.D
Acq: 29 Apr 2024 3:57 pm

Tgt Ion: 78 Resp: 62424

Ion	Ratio	Lower	Upper
78	100		
51	22.4	16.1	24.1

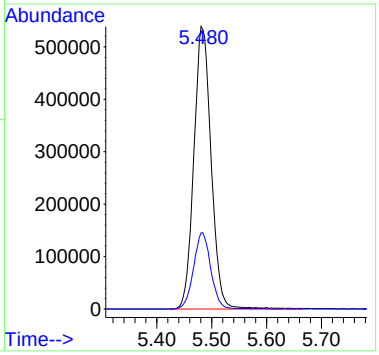


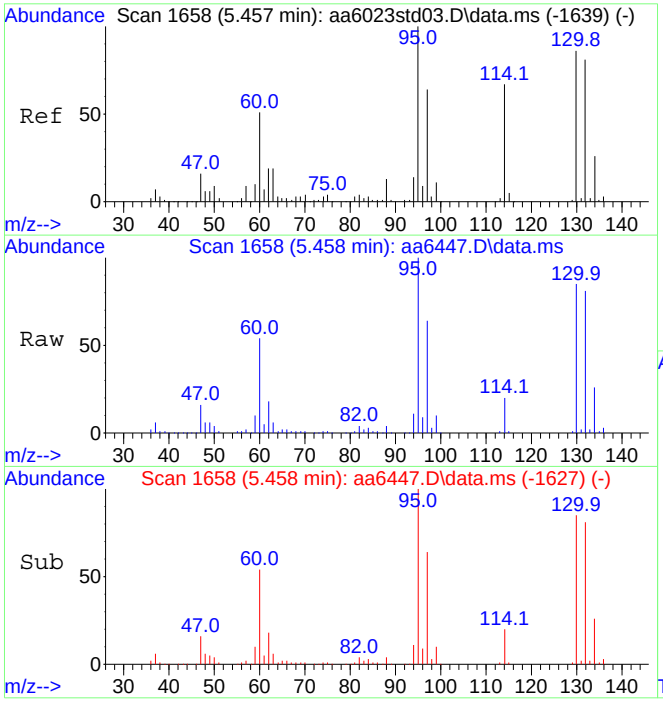


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.480 min Scan# 1665
Delta R.T. 0.004 min
Lab File: aa6447.D
Acq: 29 Apr 2024 3:57 pm

Tgt Ion:114 Resp: 1179904

Ion	Ratio	Lower	Upper
114	100		
63	27.0	6.4	46.4

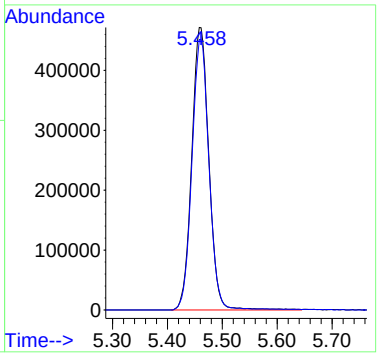


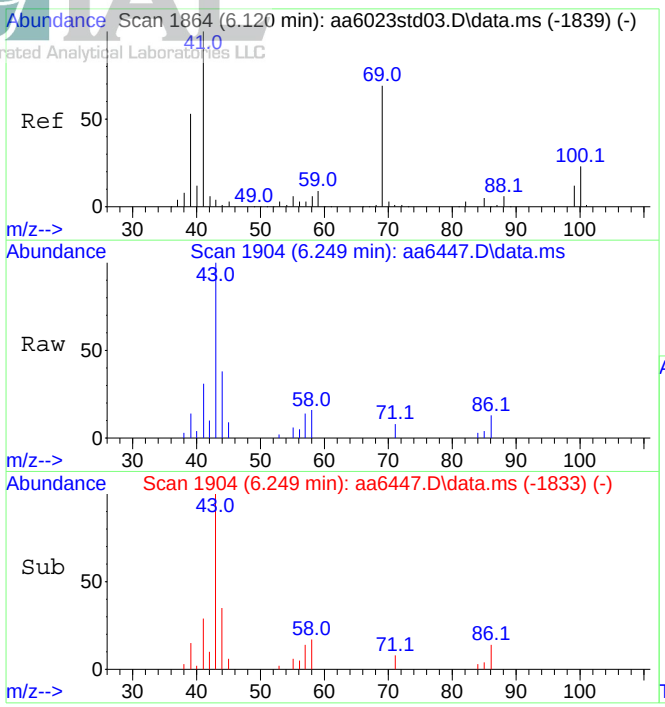


#40
Trichloroethene
Concen: 21.69 ppbV
RT: 5.458 min Scan# 1658
Delta R.T. 0.001 min
Lab File: aa6447.D
Acq: 29 Apr 2024 3:57 pm

Tgt Ion:130 Resp: 1021215

Ion	Ratio	Lower	Upper
130	100		
132	95.7	77.5	116.3

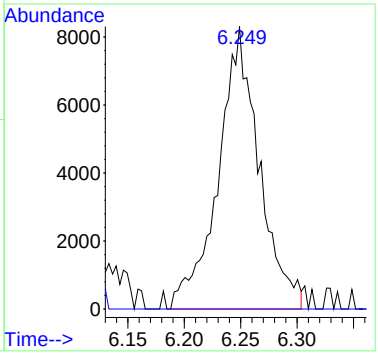


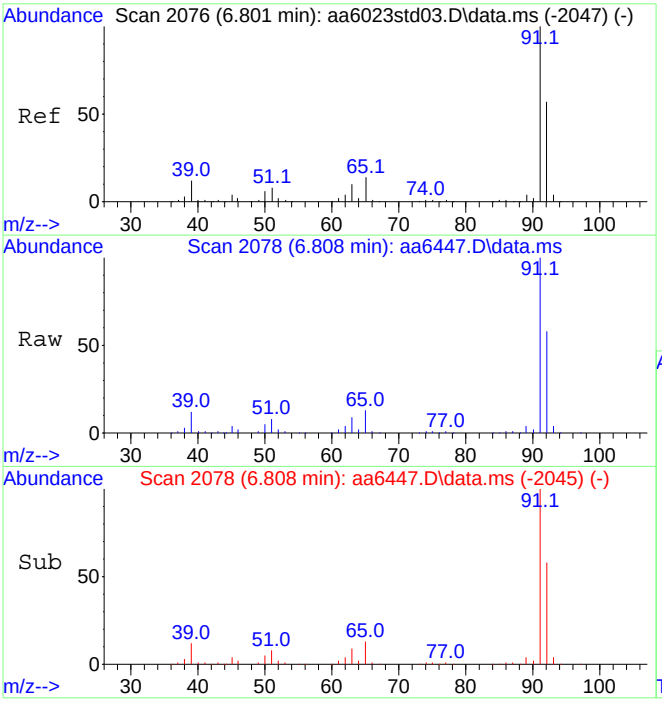


#44
Methyl methacrylate
Concen: 0.29 ppbV
RT: 6.249 min Scan# 1904
Delta R.T. 0.129 min
Lab File: aa6447.D
Acq: 29 Apr 2024 3:57 pm

Tgt Ion: 41 Resp: 20938

Ion	Ratio	Lower	Upper
41	100		
69	0.0	56.5	84.7#

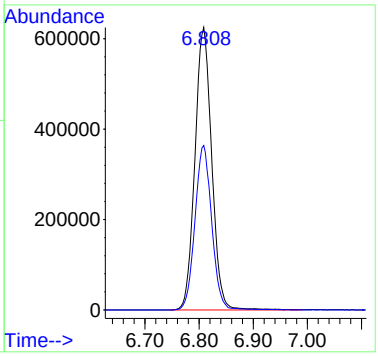


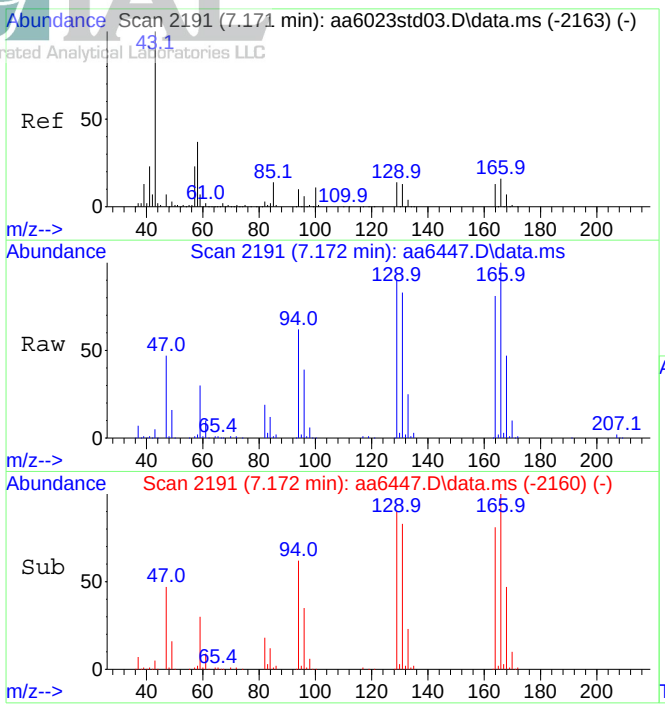


#47
Toluene
Concen: 8.86 ppbV
RT: 6.808 min Scan# 2078
Delta R.T. 0.007 min
Lab File: aa6447.D
Acq: 29 Apr 2024 3:57 pm

Tgt Ion: 91 Resp: 1346290

Ion	Ratio	Lower	Upper
91	100		
92	58.1	46.3	69.5

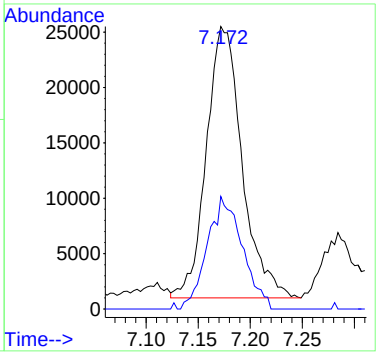


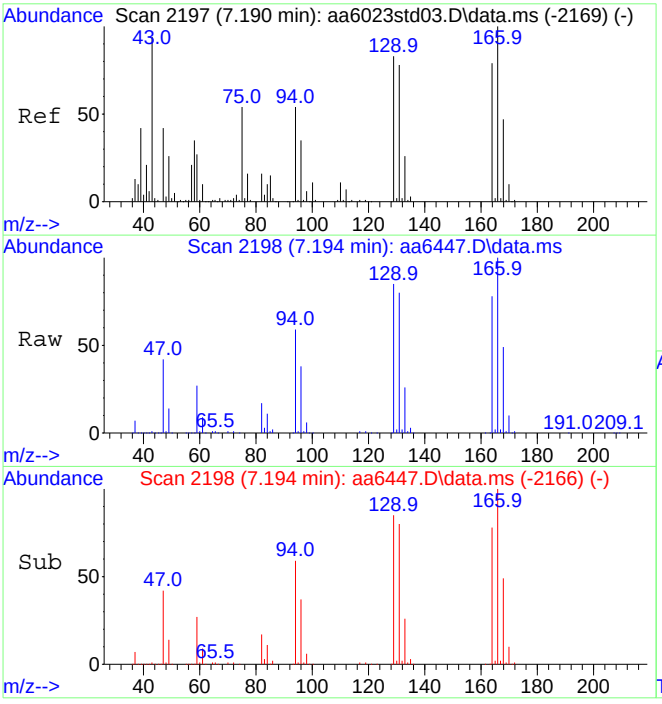


#48
Methyl isobutyl ketone
Concen: 0.43 ppbV
RT: 7.172 min Scan# 2191
Delta R.T. 0.001 min
Lab File: aa6447.D
Acq: 29 Apr 2024 3:57 pm

Tgt Ion: 43 Resp: 58579

Ion	Ratio	Lower	Upper
43	100		
58	40.4	29.0	43.4

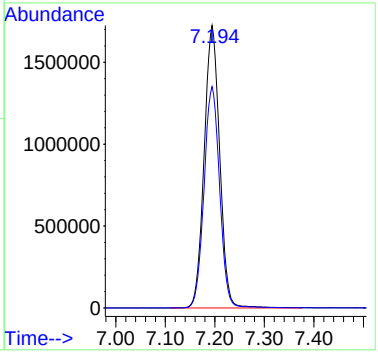


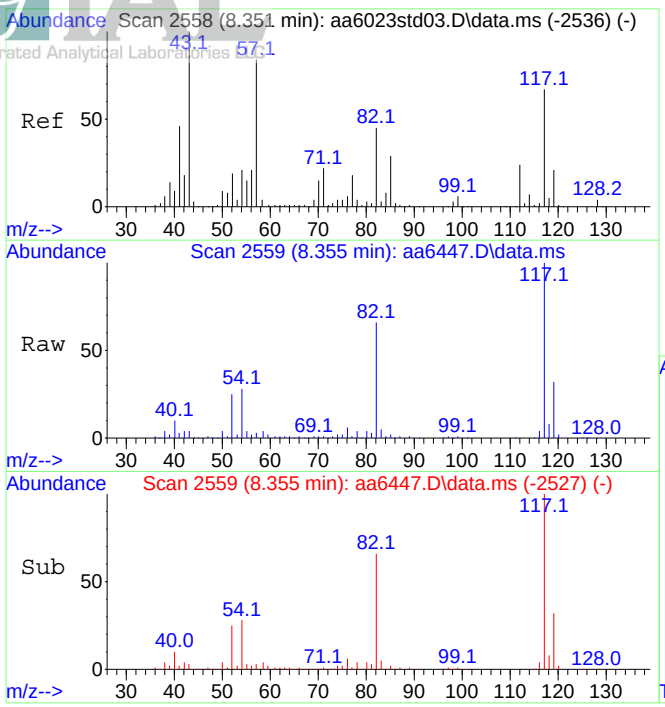


#49
Tetrachloroethene
Concen: 71.57 ppbV
RT: 7.194 min Scan# 2198
Delta R.T. 0.004 min
Lab File: aa6447.D
Acq: 29 Apr 2024 3:57 pm

Tgt Ion:166 Resp: 3757739

Ion	Ratio	Lower	Upper
166	100		
164	78.9	62.3	93.5

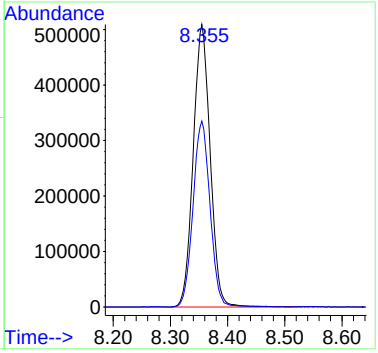


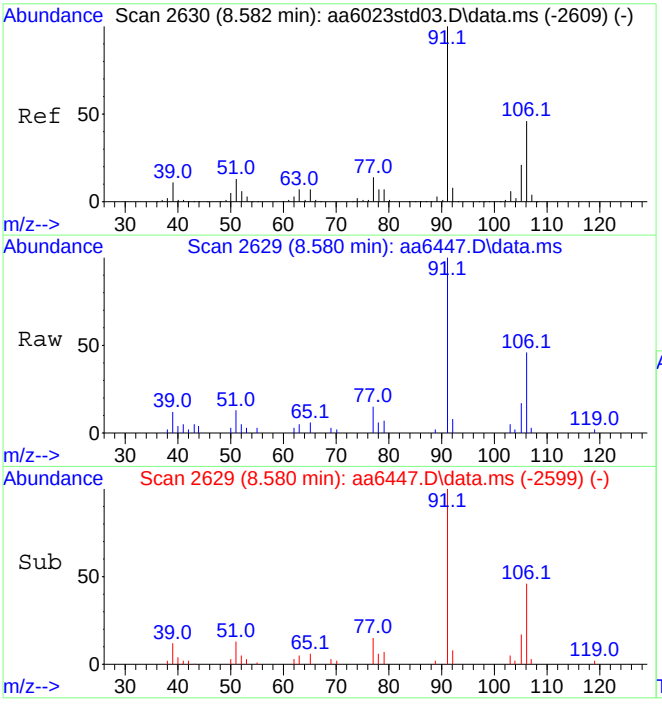


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.355 min Scan# 2559
Delta R.T. 0.004 min
Lab File: aa6447.D
Acq: 29 Apr 2024 3:57 pm

Tgt Ion:117 Resp: 1047084

Ion	Ratio	Lower	Upper
117	100		
82	66.2	46.2	86.2

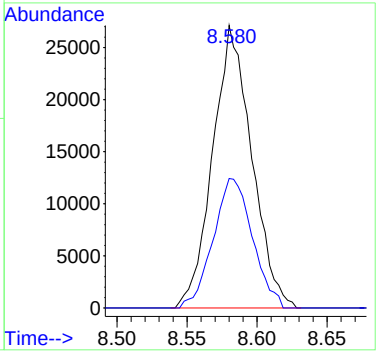


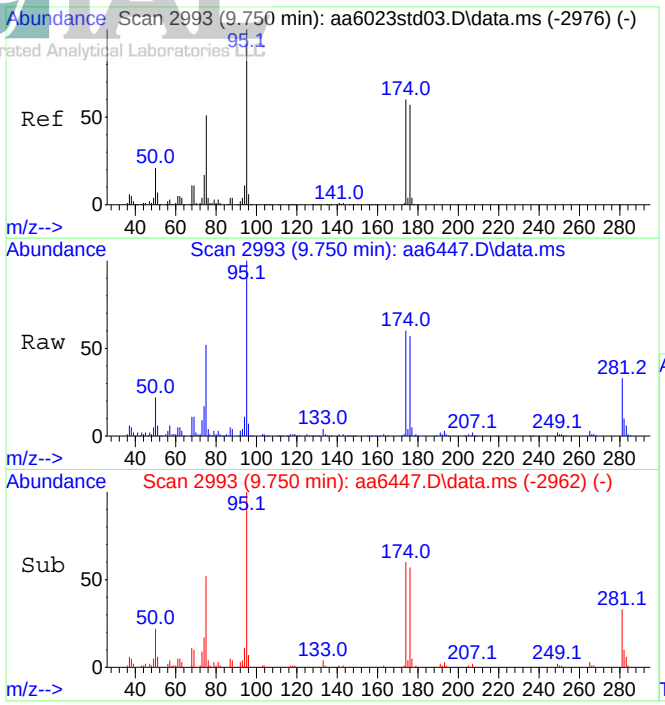


#59
Xylenes (m&p)
Concen: 0.35 ppbV
RT: 8.580 min Scan# 2629
Delta R.T. -0.002 min
Lab File: aa6447.D
Acq: 29 Apr 2024 3:57 pm

Tgt Ion: 91 Resp: 52526

Ion	Ratio	Lower	Upper
91	100		
106	46.1	36.9	55.3

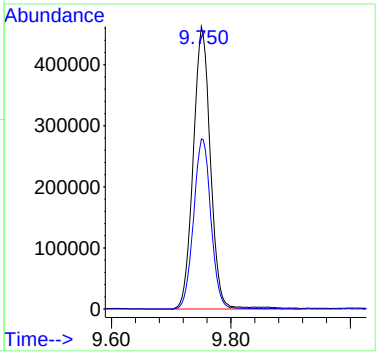




#64
Bromofluorobenzene (tune std)
Concen: 9.88 ppbV
RT: 9.750 min Scan# 2993
Delta R.T. 0.001 min
Lab File: aa6447.D
Acq: 29 Apr 2024 3:57 pm

Tgt Ion: 95 Resp: 927932

Ion	Ratio	Lower	Upper
95	100		
174	60.6	49.4	74.2



Data Path : C:\DATA\2024\04-2024\04-30-2024\
Data File : aa6462.D
Acq On : 30 Apr 2024 12:48 pm
Operator : jjw
Sample : E24-01487-01x5 dil
Misc : 3041A, 100cc
ALS Vial : 19 Sample Multiplier: 1

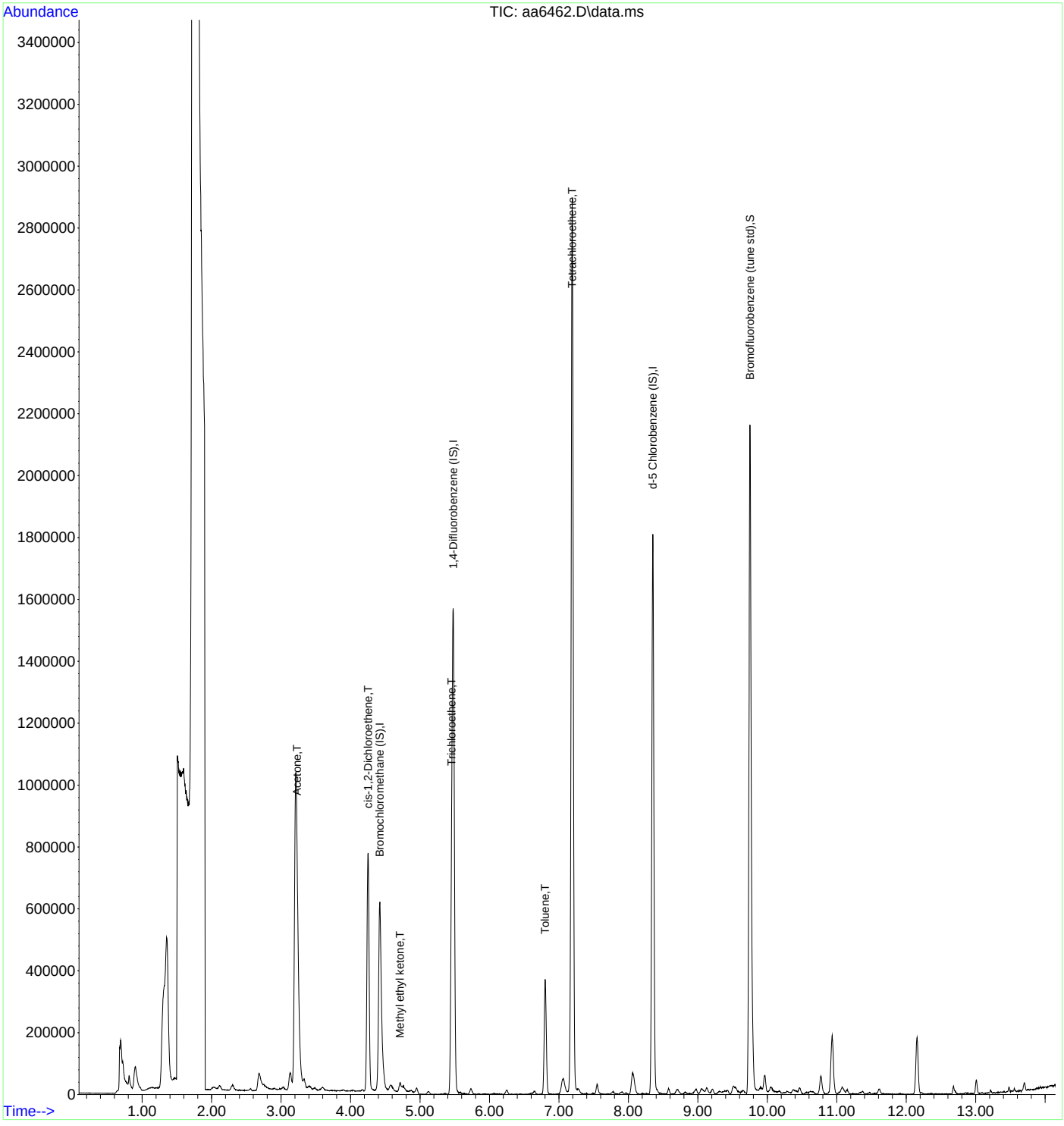
Quant Time: Apr 30 15:55:31 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

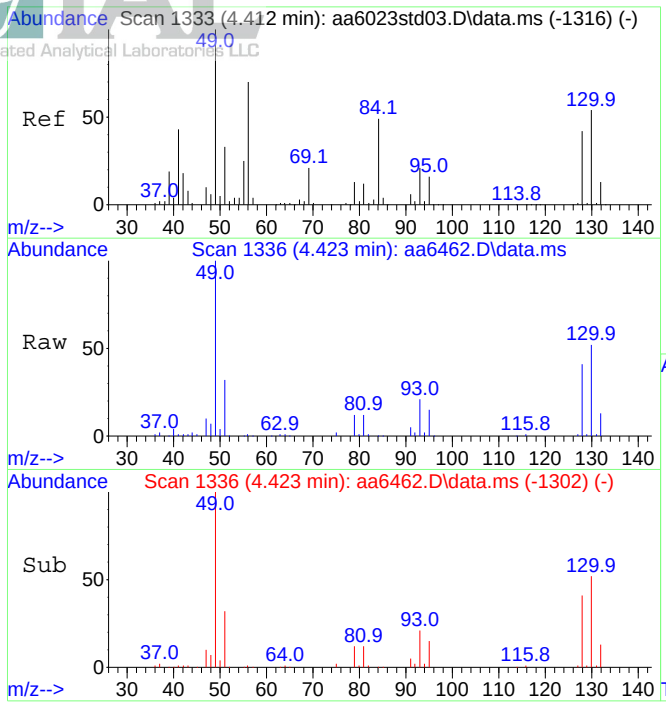
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.423	130	256349	10.00	ppbV	0.011
39) 1,4-Difluorobenzene (IS)	5.480	114	1154677	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.352	117	1065391	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.750	95	900557	9.42	ppbV	0.000
Target Compounds						Qvalue
21) Acetone	3.230	43	517214	9.02	ppbV	99
28) cis-1,2-Dichloroethene	4.252	61	542713	11.04	ppbV	99
35) Methyl ethyl ketone	4.712	43	40750	0.48	ppbV	95
40) Trichloroethene	5.455	130	236241	5.13	ppbV	100
47) Toluene	6.802	91	313301	2.11	ppbV	99
49) Tetrachloroethene	7.191	166	920908	17.92	ppbV	99

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

Data Path : C:\DATA\2024\04-2024\04-30-2024\
Data File : aa6462.D
Acq On : 30 Apr 2024 12:48 pm
Operator : jjw
Sample : E24-01487-01x5 dil
Misc : 3041A, 100cc
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Apr 30 15:55:31 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

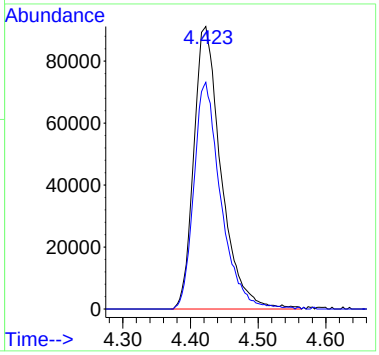


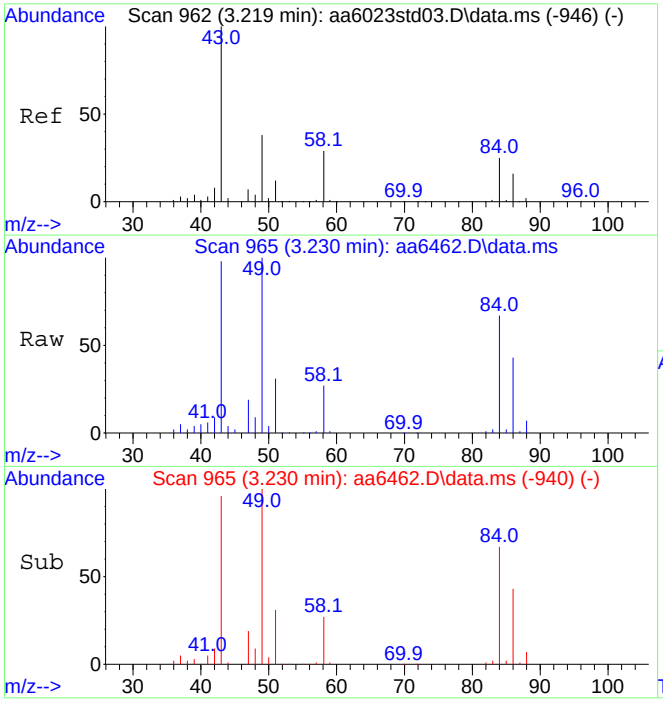


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.423 min Scan# 1336
Delta R.T. 0.011 min
Lab File: aa6462.D
Acq: 30 Apr 2024 12:48 pm

Tgt Ion:130 Resp: 256349

Ion	Ratio	Lower	Upper
130	100		
128	78.9	57.8	97.8

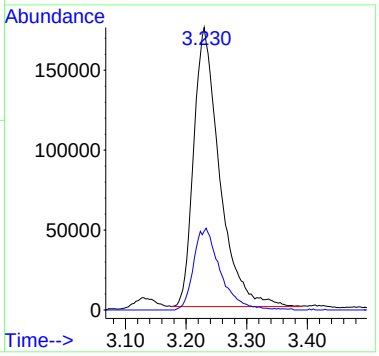


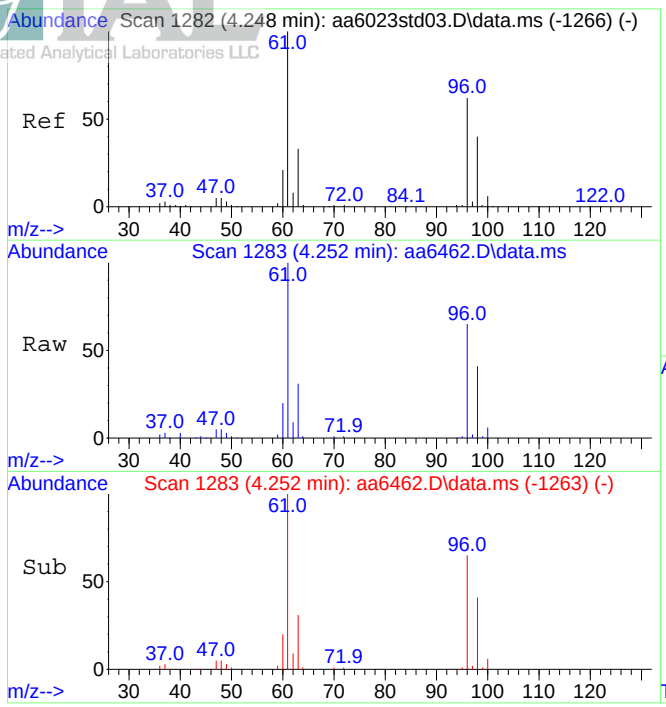


#21
Acetone
Concen: 9.02 ppbV
RT: 3.230 min Scan# 965
Delta R.T. 0.010 min
Lab File: aa6462.D
Acq: 30 Apr 2024 12:48 pm

Tgt Ion: 43 Resp: 517214

Ion	Ratio	Lower	Upper
43	100		
58	30.4	23.8	35.8

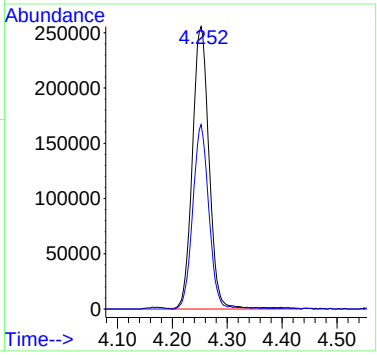


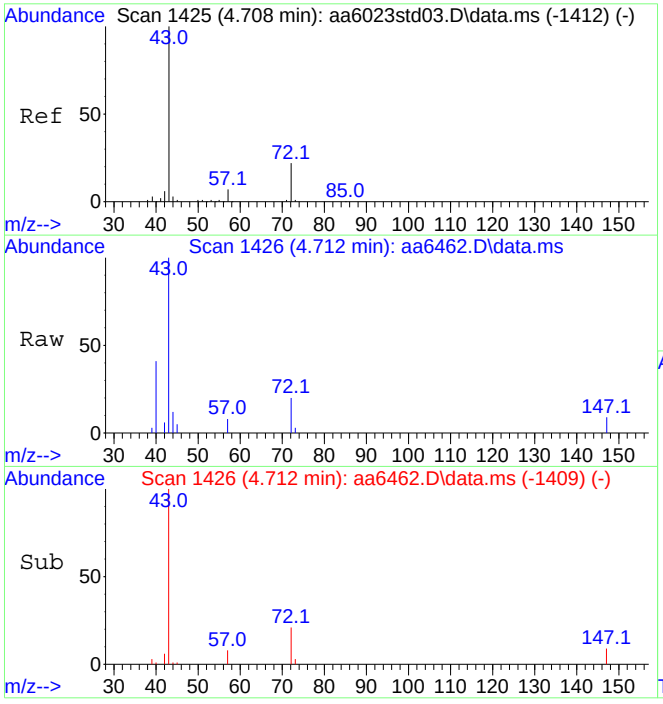


#28
cis-1,2-Dichloroethene
Concen: 11.04 ppbV
RT: 4.252 min Scan# 1283
Delta R.T. 0.004 min
Lab File: aa6462.D
Acq: 30 Apr 2024 12:48 pm

Tgt Ion: 61 Resp: 542713

Ion	Ratio	Lower	Upper
61	100		
96	63.3	51.0	76.4

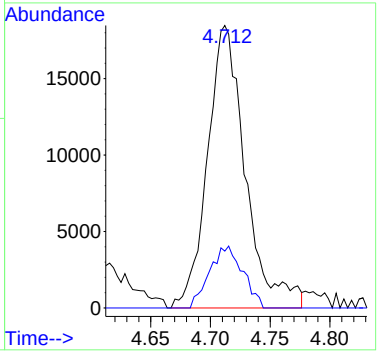


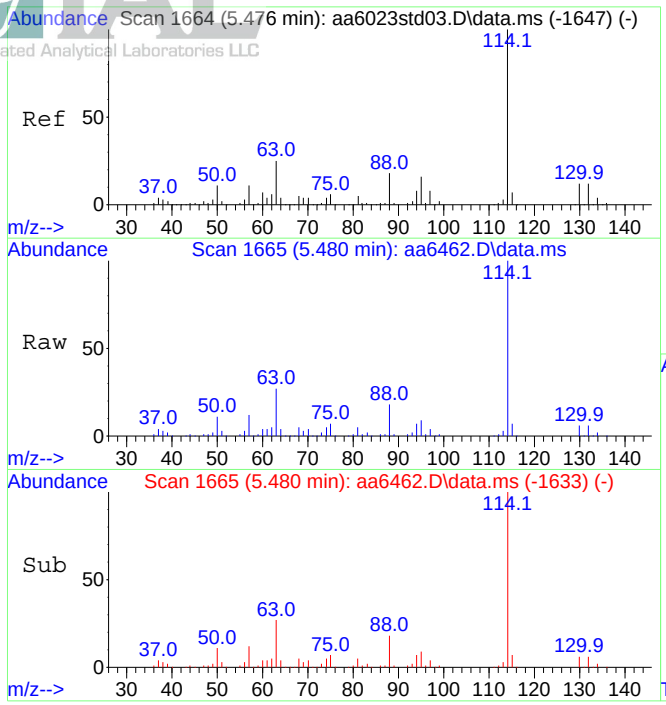


#35
Methyl ethyl ketone
Concen: 0.48 ppbV
RT: 4.712 min Scan# 1426
Delta R.T. 0.004 min
Lab File: aa6462.D
Acq: 30 Apr 2024 12:48 pm

Tgt Ion: 43 Resp: 40750

Ion	Ratio	Lower	Upper
43	100		
72	19.2	17.4	26.0

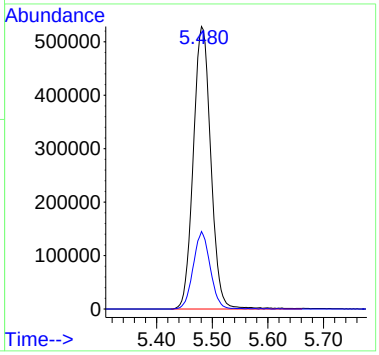


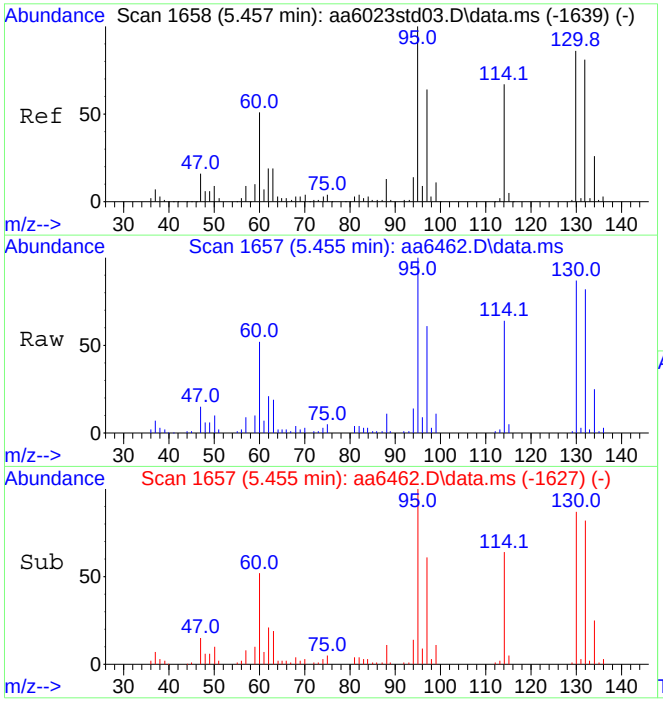


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.480 min Scan# 1665
Delta R.T. 0.004 min
Lab File: aa6462.D
Acq: 30 Apr 2024 12:48 pm

Tgt Ion:114 Resp: 1154677

Ion	Ratio	Lower	Upper
114	100		
63	26.5	6.4	46.4

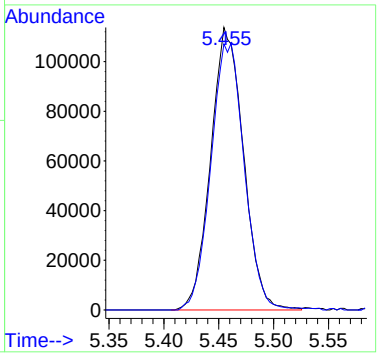


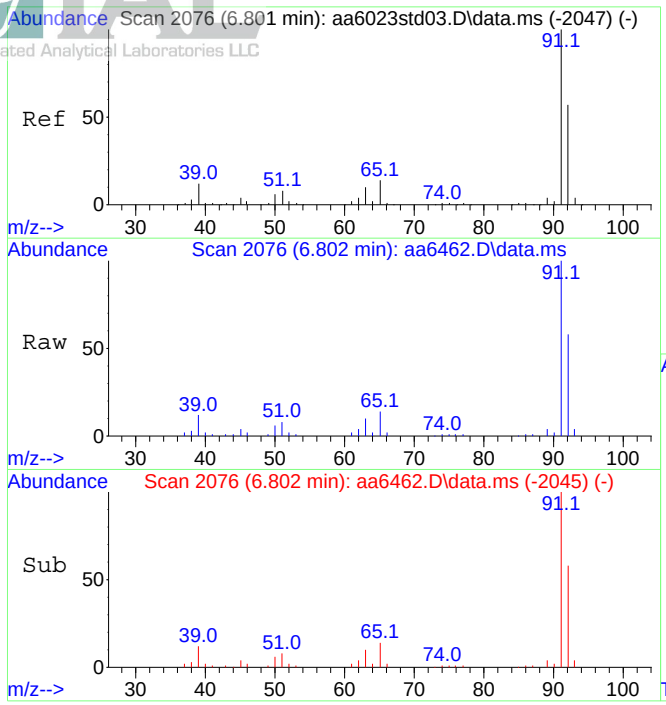


#40
Trichloroethene
Concen: 5.13 ppbV
RT: 5.455 min Scan# 1657
Delta R.T. -0.002 min
Lab File: aa6462.D
Acq: 30 Apr 2024 12:48 pm

Tgt Ion:130 Resp: 236241

Ion	Ratio	Lower	Upper
130	100		
132	96.4	77.5	116.3

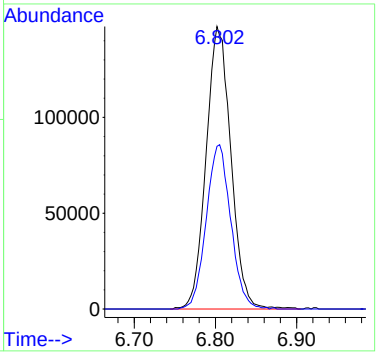


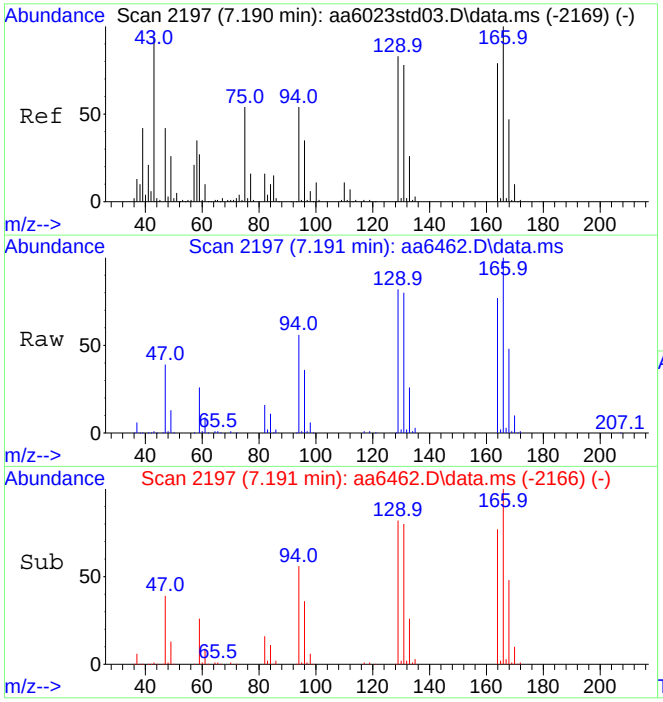


#47
Toluene
Concen: 2.11 ppbV
RT: 6.802 min Scan# 2076
Delta R.T. 0.001 min
Lab File: aa6462.D
Acq: 30 Apr 2024 12:48 pm

Tgt Ion: 91 Resp: 313301

Ion	Ratio	Lower	Upper
91	100		
92	57.4	46.3	69.5

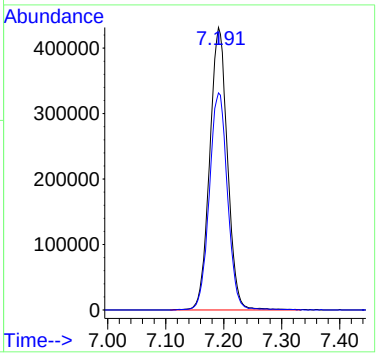


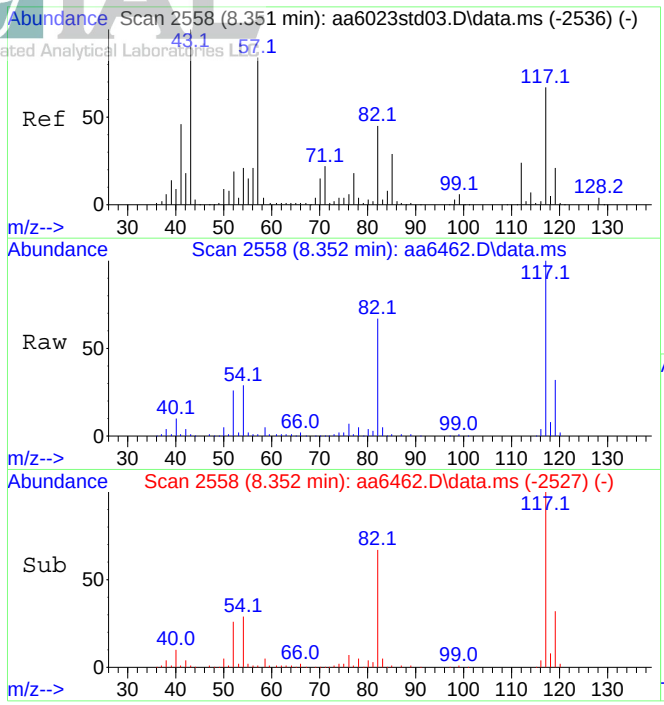


#49
Tetrachloroethene
Concen: 17.92 ppbV
RT: 7.191 min Scan# 2197
Delta R.T. 0.001 min
Lab File: aa6462.D
Acq: 30 Apr 2024 12:48 pm

Tgt Ion:166 Resp: 920908

Ion	Ratio	Lower	Upper
166	100		
164	78.5	62.3	93.5

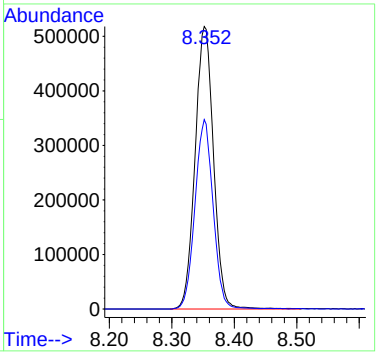


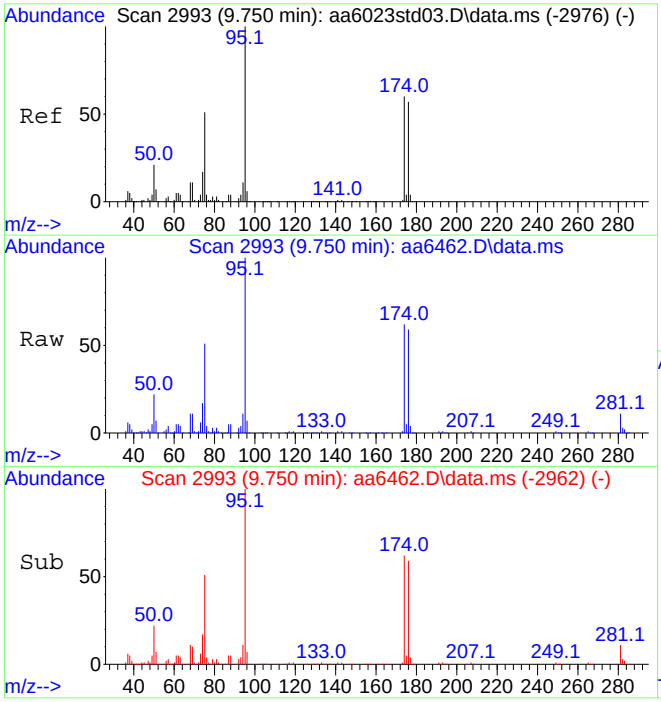


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.352 min Scan# 2558
Delta R.T. 0.001 min
Lab File: aa6462.D
Acq: 30 Apr 2024 12:48 pm

Tgt Ion:117 Resp: 1065391

Ion	Ratio	Lower	Upper
117	100		
82	65.9	46.2	86.2

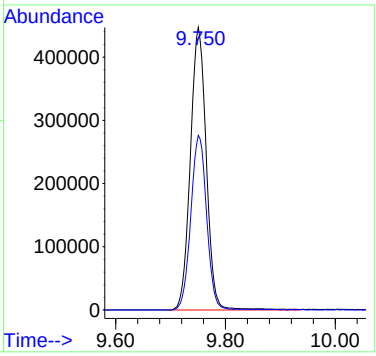




#64
Bromofluorobenzene (tune std)
Concen: 9.42 ppbV
RT: 9.750 min Scan# 2993
Delta R.T. 0.001 min
Lab File: aa6462.D
Acq: 30 Apr 2024 12:48 pm

Tgt Ion: 95 Resp: 900557

Ion	Ratio	Lower	Upper
95	100		
174	61.4	49.4	74.2



Volatile Organic Compounds by EPA Method TO-15
Summary of Results

Lab ID:	E24-01487-02	Instrument ID:	AA
Client ID:	SG-2	GC/MS Column:	RTX-1, 0.32 mmID
Date Sampled:	04/27/2024 14:05	Injection Volmue:	500ml, 250ml
Date Received:	04/26/2024	Matrix:	Air-Soil Gas
Date Analyzed:	04/29/2024 16:29, 04/30/2024 13:19	% Moisture:	NA
Data File:	AA6448, AA6463	Dilution Factor:	1, 2
Summa ID:	3279	Analyst:	J. Walukiewicz

			Concentration Reported		Reporting Limits	
Compound	**CAS #**	**Q**	**ppbv**	**ug/m3**	**ppbv**	**ug/m3**
Acetone	67-64-1		9.1	22	0.20	0.48
Benzene	71-43-2		0.66	2.1	0.20	0.64
Bromodichloromethane	75-27-4		ND	ND	0.20	1.3
Bromoform	75-25-2		ND	ND	0.20	2.1
Bromomethane	74-83-9		ND	ND	0.20	0.78
1,3-Butadiene	106-99-0		ND	ND	0.20	0.44
Chlorobenzene	108-90-7		ND	ND	0.20	0.92
Chloroethane	75-00-3		ND	ND	0.20	0.53
Chloroform	67-66-3		0.90	4.4	0.20	0.98
Chloromethane	74-87-3		ND	ND	0.20	0.41
Carbon disulfide	75-15-0		1.5	4.8	0.20	0.62
Carbon tetrachloride	56-23-5		ND	ND	0.040	0.25
Cyclohexane	110-82-7		0.24	0.81	0.20	0.69
Dibromochloromethane	124-48-1		ND	ND	0.20	1.7
1,2-Dibromoethane	106-93-4		ND	ND	0.20	1.5
1,2-Dichlorobenzene	95-50-1		ND	ND	0.20	1.2
1,3-Dichlorobenzene	541-73-1		ND	ND	0.20	1.2
1,4-Dichlorobenzene	106-46-7		ND	ND	0.20	1.2
Dichlorodifluoromethane	75-71-8		ND	ND	0.20	0.99
1,1-Dichloroethane	75-34-3		ND	ND	0.20	0.81
1,2-Dichloroethane	107-06-2		ND	ND	0.20	0.81
1,1-Dichloroethene	75-35-4		ND	ND	0.20	0.79
1,2-Dichloroethene (cis)	156-59-2		6.7	26	0.20	0.79
1,2-Dichloroethene (trans)	156-60-5		0.38	1.5	0.20	0.79
1,2-Dichloropropane	78-87-5		ND	ND	0.20	0.92
1,3-Dichloropropene (cis)	10061-01-5		ND	ND	0.20	0.91
1,3-Dichloropropene (trans)	10061-02-6		ND	ND	0.20	0.91
1,2-Dichlorotetrafluoroethane	76-14-2		ND	ND	0.20	1.4
1,4-Dioxane	123-91-1		ND	ND	0.20	0.72
Ethylbenzene	100-41-4		ND	ND	0.20	0.87
n-Heptane	142-82-5		ND	ND	0.20	0.82
1,3-Hexachlorobutadiene	87-68-3		ND	ND	0.20	2.1
n-Hexane	110-54-3		ND	ND	0.20	0.70
Methylene chloride	75-09-2		1.3	4.6	0.20	0.69
Methyl ethyl ketone	78-93-3		0.66	1.9	0.20	0.59
Methyl isobutyl ketone	108-10-1		ND	ND	0.20	0.82
Methyl tert-butyl ether	1634-04-4		ND	ND	0.20	0.72
Styrene	100-42-5		ND	ND	0.20	0.85
Tert-butyl alcohol	75-65-0		ND	ND	0.20	0.61
1,1,2,2-Tetrachloroethane	79-34-5		ND	ND	0.20	1.4
Tetrachloroethene	127-18-4	D	52	350	0.40	2.7
Toluene	108-88-3		2.5	9.5	0.20	0.75
1,2,4-Trichlorobenzene	120-82-1		ND	ND	0.20	1.5
1,1,1-Trichloroethane	71-55-6		ND	ND	0.20	1.1
1,1,2-Trichloroethane	79-00-5		ND	ND	0.20	1.1

Qualifiers:
D = Dilution required

INTEGRATED ANALYTICAL LABORATORIES, LLC
Integrated Analytical Laboratories LLC

Volatile Organic Compounds by EPA Method TO-15
Summary of Results

Lab ID:	E24-01487-02	Instrument ID:	AA
Client ID:	SG-2	GC/MS Column:	RTX-1, 0.32 mmID
Date Sampled:	04/27/2024 14:05	Injection Volmue:	500ml, 250ml
Date Received:	04/26/2024	Matrix:	Air-Soil Gas
Date Analyzed:	04/29/2024 16:29, 04/30/2024 13:19	% Moisture:	NA
Data File:	AA6448, AA6463	Dilution Factor:	1, 2
Summa ID:	3279	Analyst:	J. Walukiewicz

			Concentration Reported		Reporting Limits	
Compound	**CAS #**	**Q**	**ppbv**	**ug/m3**	**ppbv**	**ug/m3**
Trichloroethene	79-01-6		13	70	0.046	0.25
Trichlorofluoromethane	75-69-4		0.33	1.8	0.20	1.1
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1		ND	ND	0.20	1.5
1,2,4-Trimethylbenzene	95-63-6		ND	ND	0.20	0.98
1,3,5-Trimethylbenzene	108-67-8		ND	ND	0.20	0.98
2,2,4-Trimethylpentane	540-84-1		ND	ND	0.20	0.93
Vinyl bromide	593-60-2		ND	ND	0.20	0.87
Vinyl chloride	75-01-4		ND	ND	0.20	0.51
Xylenes (m&p)	179601-23-1		0.33	1.4	0.20	0.87
Xylenes (o)	95-47-6		ND	ND	0.20	0.87

Qualifiers:
D = Dilution required

Data Path : C:\DATA\2024\04-2024\04-29-2024\
Data File : aa6448.D
Acq On : 29 Apr 2024 4:29 pm
Operator : jjw
Sample : E24-01487-02
Misc : 3279, 500cc
ALS Vial : 20 Sample Multiplier: 1

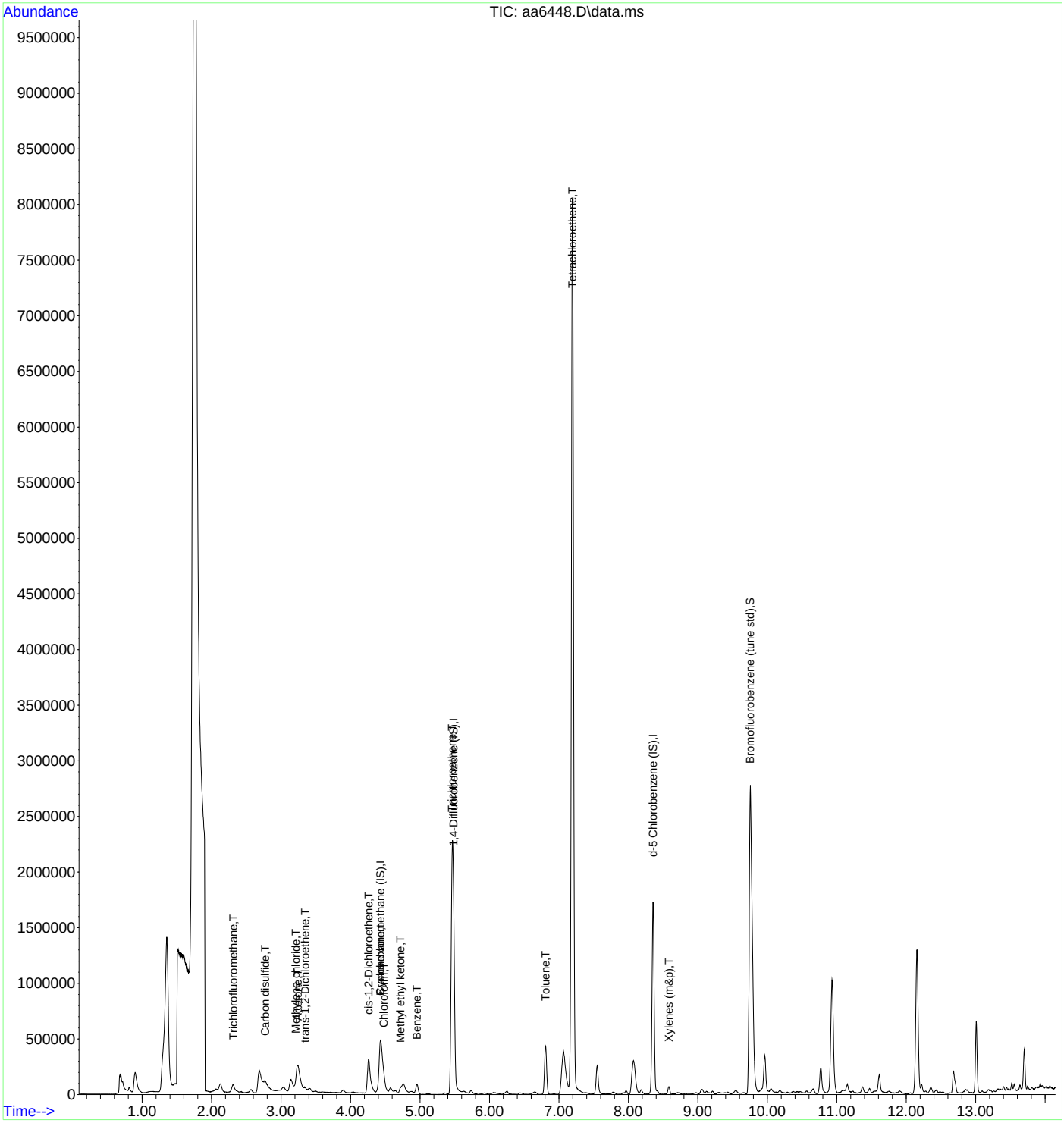
Quant Time: May 02 10:56:25 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

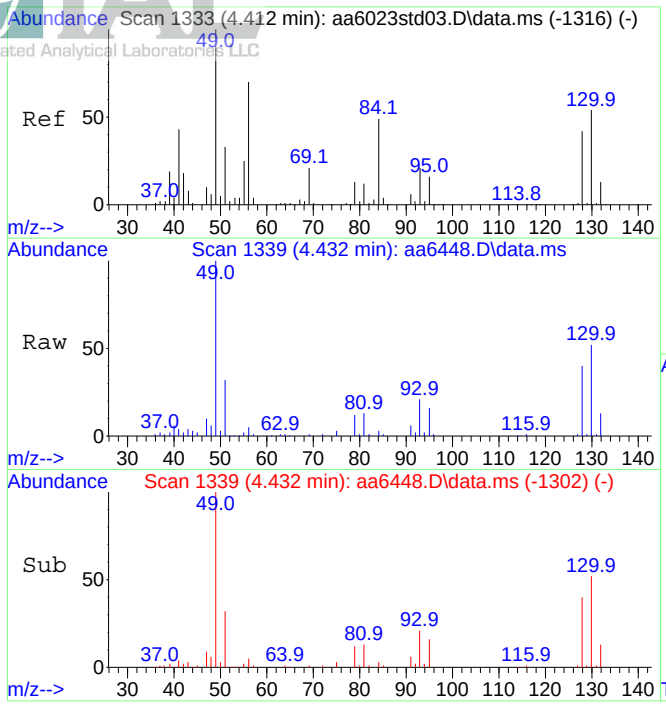
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.432	130	246200	10.00	ppbV	0.020
39) 1,4-Difluorobenzene (IS)	5.484	114	1149245	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.355	117	1023364	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.750	95	911165	9.93	ppbV	0.000
Target Compounds						Qvalue
12) Trichlorofluoromethane	2.313	101	23726	0.33	ppbV	94
15) Carbon disulfide	2.773	76	135806	1.53	ppbV	97
20) Methylene chloride	3.214	49	52621	1.32	ppbV	96
21) Acetone	3.243	43	500523	9.09	ppbV	97
22) trans-1,2-Dichloroethene	3.345	61	18847	0.38	ppbV	94
28) cis-1,2-Dichloroethene	4.262	61	314526	6.66	ppbV	99
29) Cyclohexane	4.432	56	15796	0.24	ppbV	100
30) Chloroform	4.480	83	62058	0.90	ppbV	99
35) Methyl ethyl ketone	4.718	43	54072	0.66	ppbV	95
37) Benzene	4.956	78	68079	0.66	ppbV	100
40) Trichloroethene	5.461	130	597563	13.03	ppbV	98
47) Toluene	6.808	91	372174	2.51	ppbV	99
49) Tetrachloroethene	7.194	166	2581886	50.49	ppbV	99
59) Xylenes (m&p)	8.583	91	49163	0.33	ppbV	99

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

Data Path : C:\DATA\2024\04-2024\04-29-2024\
Data File : aa6448.D
Acq On : 29 Apr 2024 4:29 pm
Operator : jjw
Sample : E24-01487-02
Misc : 3279, 500cc
ALS Vial : 20 Sample Multiplier: 1

Quant Time: May 02 10:56:25 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

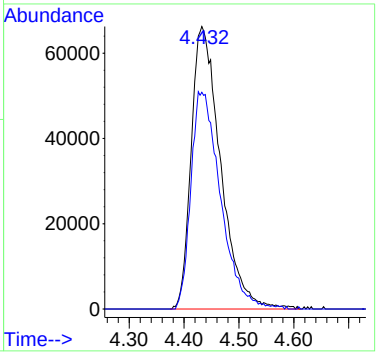


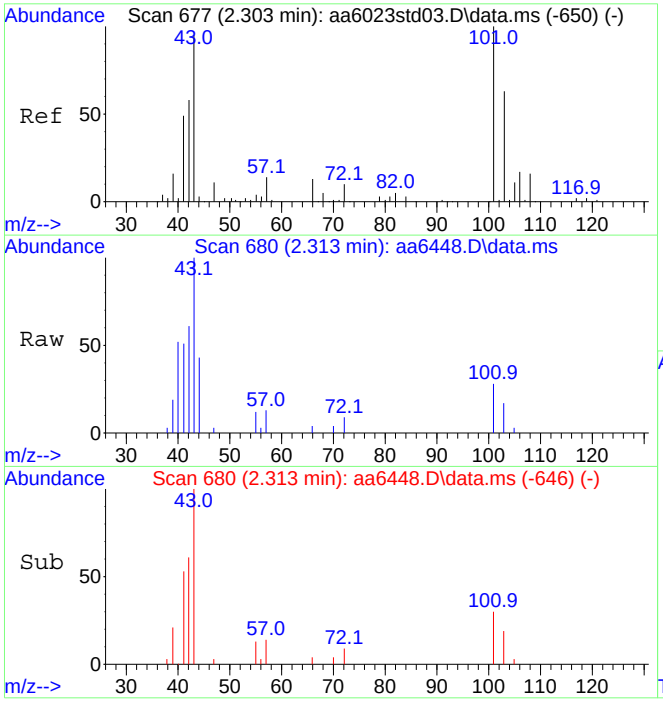


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.432 min Scan# 1339
Delta R.T. 0.020 min
Lab File: aa6448.D
Acq: 29 Apr 2024 4:29 pm

Tgt Ion:130 Resp: 246200

Ion	Ratio	Lower	Upper
130	100		
128	77.7	57.8	97.8

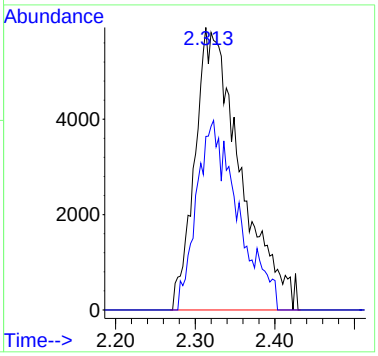


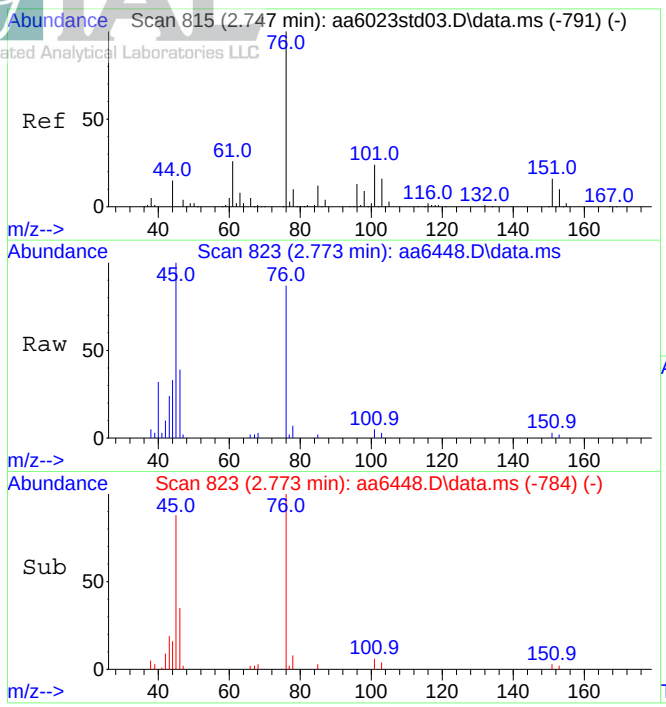


#12
Trichlorofluoromethane
Concen: 0.33 ppbV
RT: 2.313 min Scan# 680
Delta R.T. 0.010 min
Lab File: aa6448.D
Acq: 29 Apr 2024 4:29 pm

Tgt Ion:101 Resp: 23726

Ion	Ratio	Lower	Upper
101	100		
103	60.4	52.1	78.1

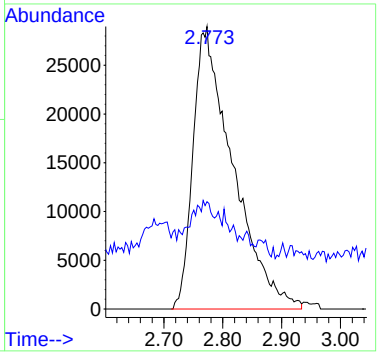


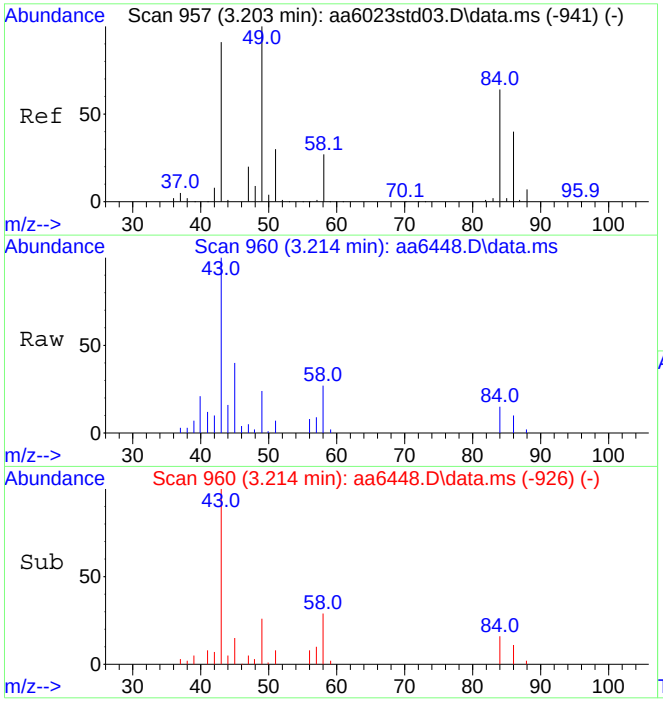


#15
Carbon disulfide
Concen: 1.53 ppbV
RT: 2.773 min Scan# 823
Delta R.T. 0.026 min
Lab File: aa6448.D
Acq: 29 Apr 2024 4:29 pm

Tgt Ion: 76 Resp: 135806

Ion	Ratio	Lower	Upper
76	100		
44	14.0	12.2	18.4

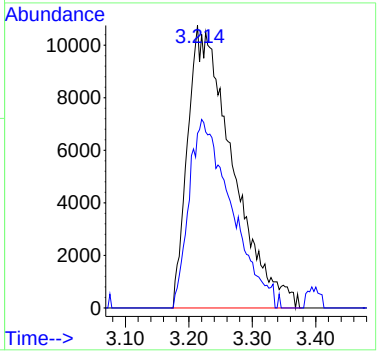


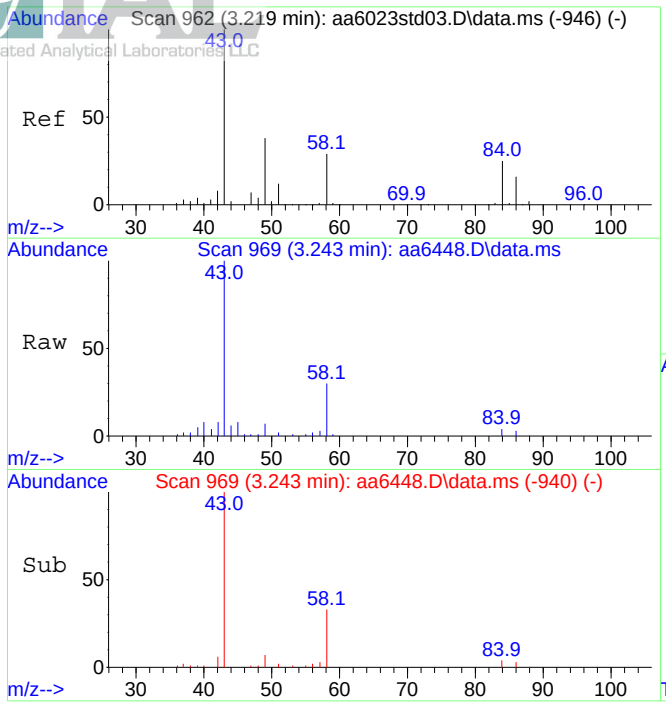


#20
Methylene chloride
Concen: 1.32 ppbV
RT: 3.214 min Scan# 960
Delta R.T. 0.011 min
Lab File: aa6448.D
Acq: 29 Apr 2024 4:29 pm

Tgt Ion: 49 Resp: 52621

Ion	Ratio	Lower	Upper
49	100		
84	63.2	46.7	86.7

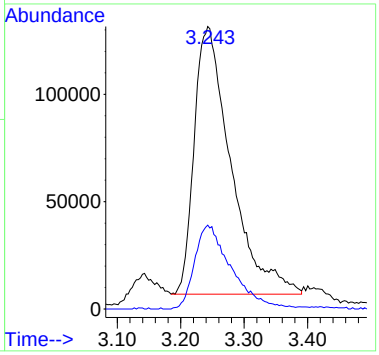


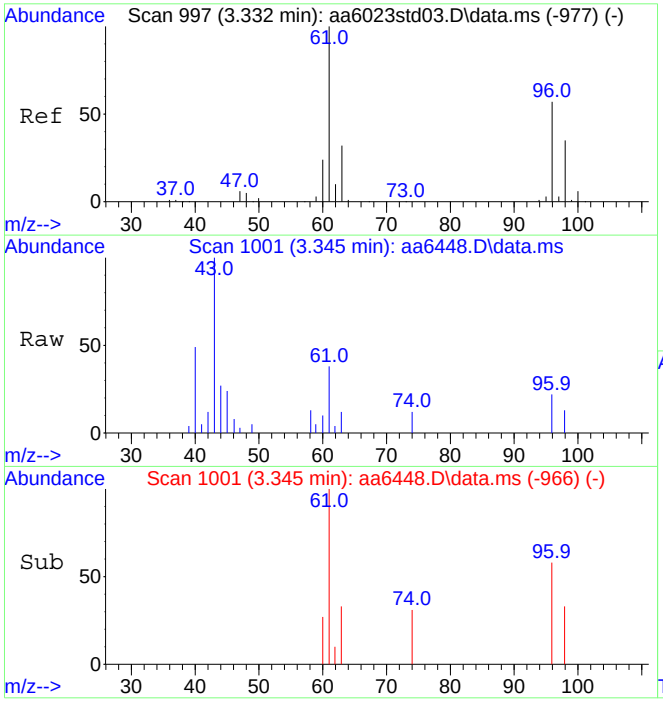


#21
Acetone
Concen: 9.09 ppbV
RT: 3.243 min Scan# 969
Delta R.T. 0.023 min
Lab File: aa6448.D
Acq: 29 Apr 2024 4:29 pm

Tgt Ion: 43 Resp: 500523

Ion	Ratio	Lower	Upper
43	100		
58	31.6	23.8	35.8

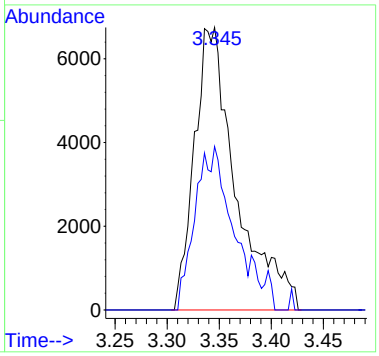


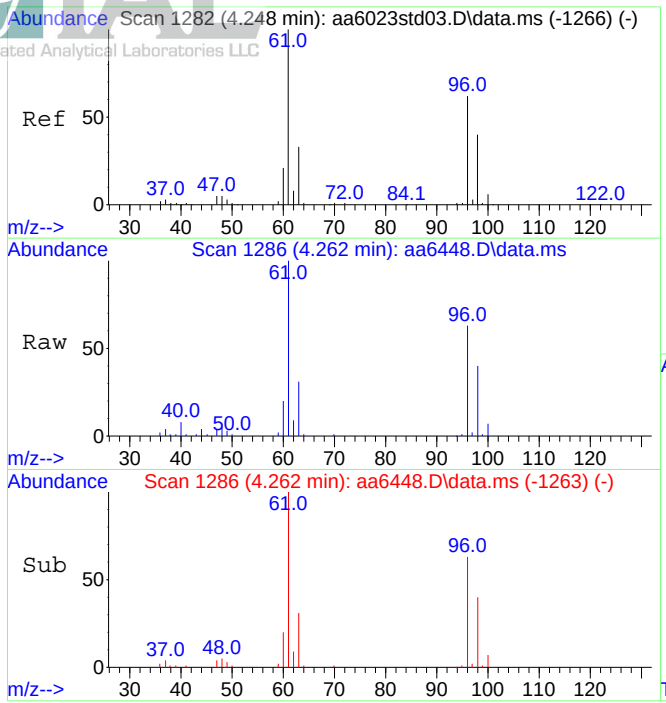


#22
trans-1,2-Dichloroethene
Concen: 0.38 ppbV
RT: 3.345 min Scan# 1001
Delta R.T. 0.014 min
Lab File: aa6448.D
Acq: 29 Apr 2024 4:29 pm

Tgt Ion: 61 Resp: 18847

Ion	Ratio	Lower	Upper
61	100		
96	52.8	46.0	69.0

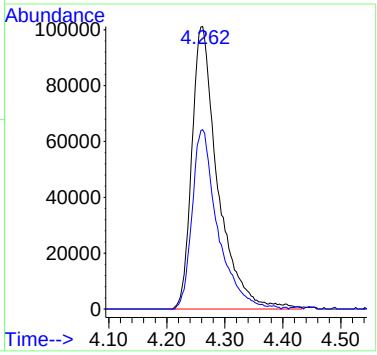


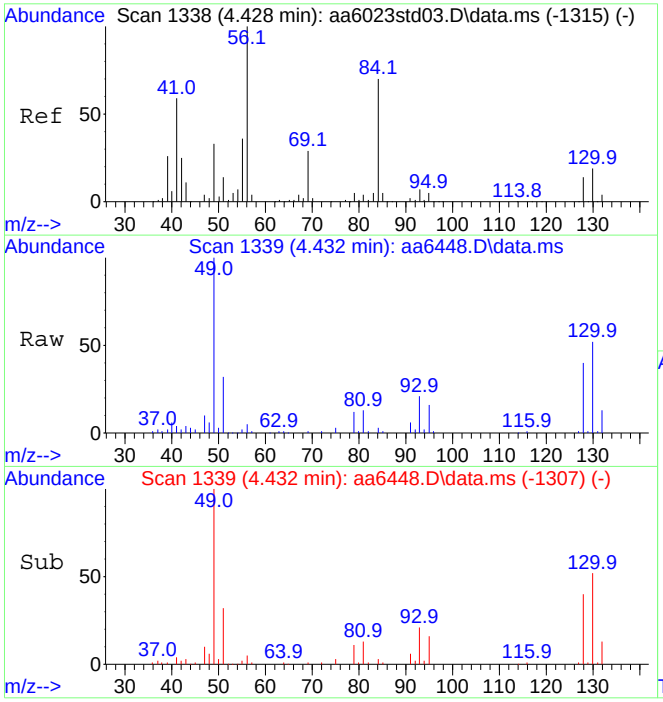


#28
cis-1,2-Dichloroethene
Concen: 6.66 ppbV
RT: 4.262 min Scan# 1286
Delta R.T. 0.014 min
Lab File: aa6448.D
Acq: 29 Apr 2024 4:29 pm

Tgt Ion: 61 Resp: 314526

Ion	Ratio	Lower	Upper
61	100		
96	62.6	51.0	76.4

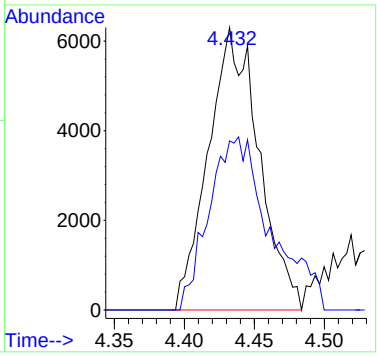


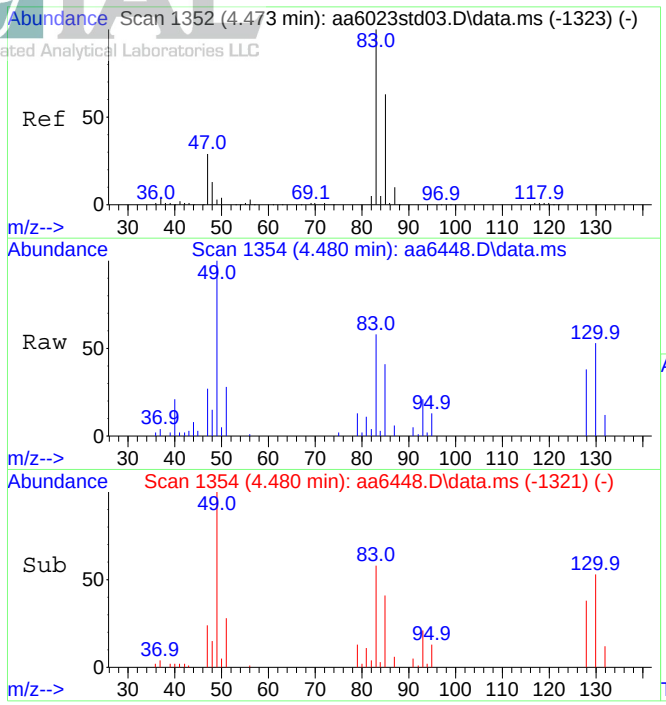


#29
Cyclohexane
Concen: 0.24 ppbV
RT: 4.432 min Scan# 1339
Delta R.T. 0.004 min
Lab File: aa6448.D
Acq: 29 Apr 2024 4:29 pm

Tgt Ion: 56 Resp: 15796

Ion	Ratio	Lower	Upper
56	100		
84	74.5	59.8	89.8

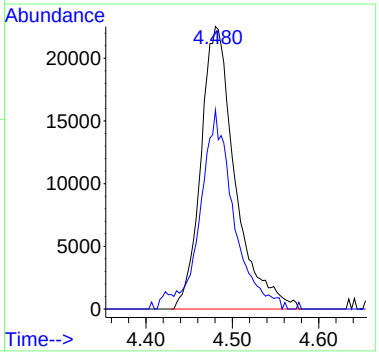


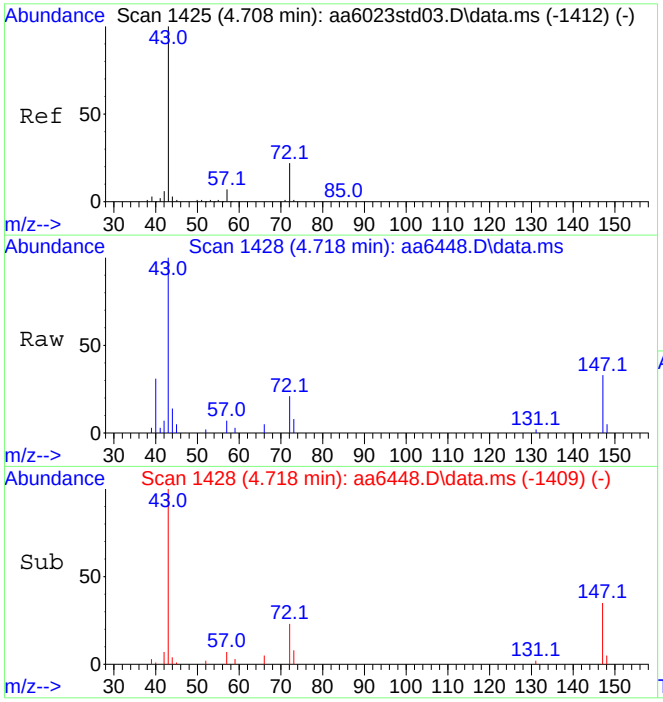


#30
Chloroform
Concen: 0.90 ppbV
RT: 4.480 min Scan# 1354
Delta R.T. 0.007 min
Lab File: aa6448.D
Acq: 29 Apr 2024 4:29 pm

Tgt Ion: 83 Resp: 62058

Ion	Ratio	Lower	Upper
83	100		
85	66.8	52.7	79.1

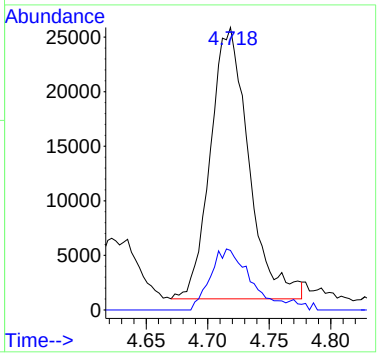


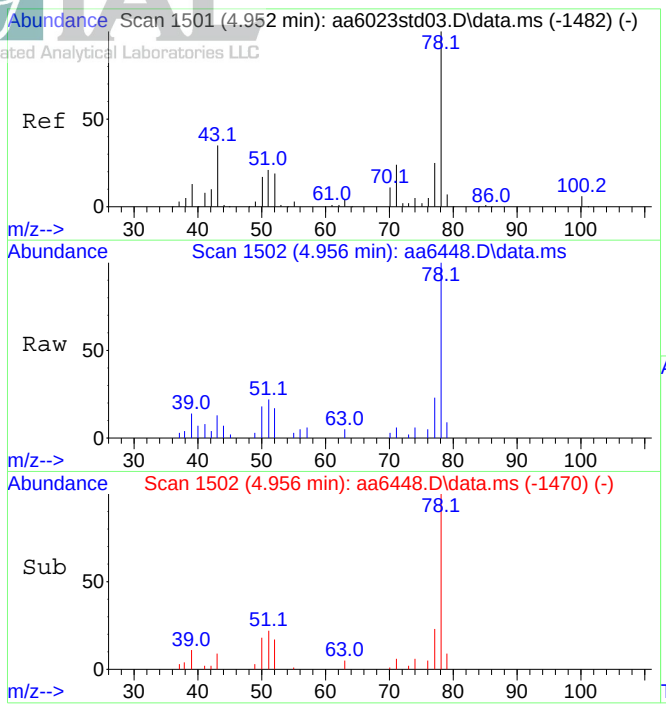


#35
Methyl ethyl ketone
Concen: 0.66 ppbV
RT: 4.718 min Scan# 1428
Delta R.T. 0.010 min
Lab File: aa6448.D
Acq: 29 Apr 2024 4:29 pm

Tgt Ion: 43 Resp: 54072

Ion	Ratio	Lower	Upper
43	100		
72	24.2	17.4	26.0

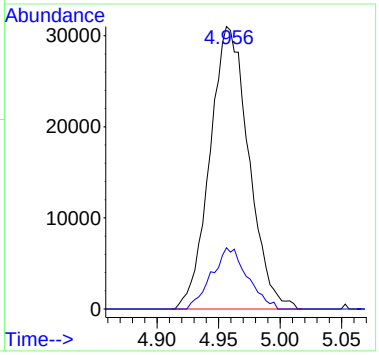


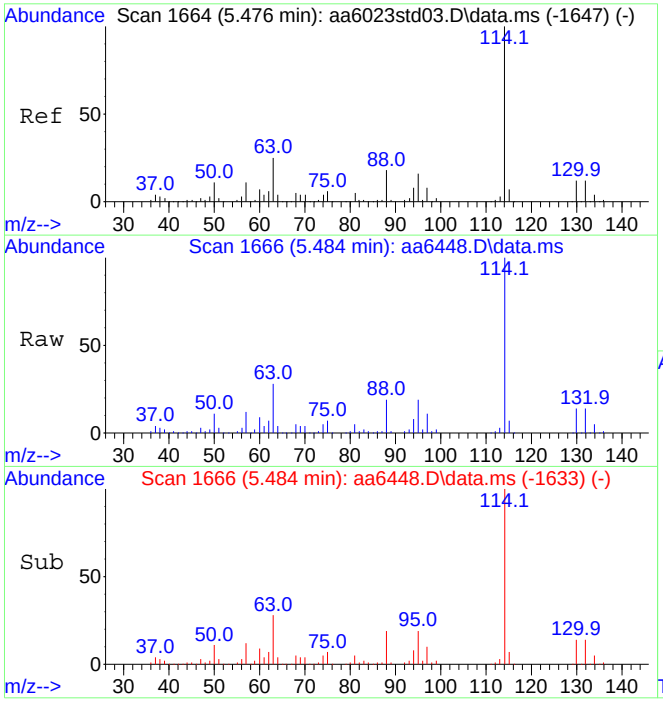


#37
Benzene
Concen: 0.66 ppbV
RT: 4.956 min Scan# 1502
Delta R.T. 0.004 min
Lab File: aa6448.D
Acq: 29 Apr 2024 4:29 pm

Tgt Ion: 78 Resp: 68079

Ion	Ratio	Lower	Upper
78	100		
51	20.0	16.1	24.1

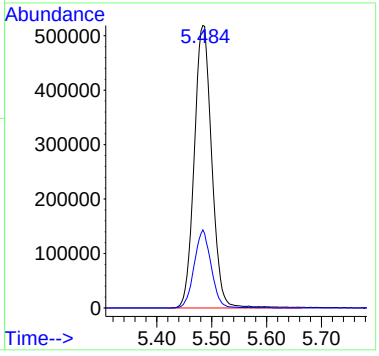


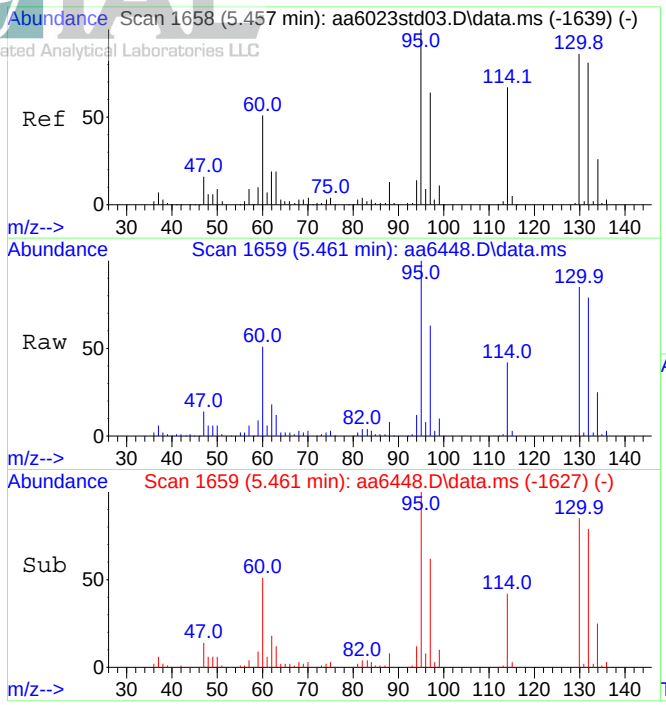


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.484 min Scan# 1666
Delta R.T. 0.008 min
Lab File: aa6448.D
Acq: 29 Apr 2024 4:29 pm

Tgt Ion:114 Resp: 1149245

Ion	Ratio	Lower	Upper
114	100		
63	26.8	6.4	46.4

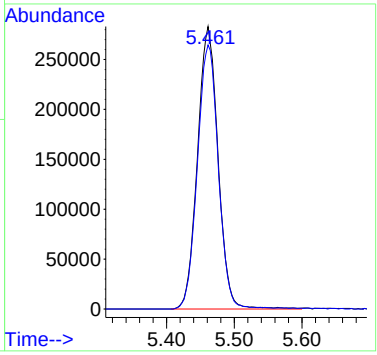


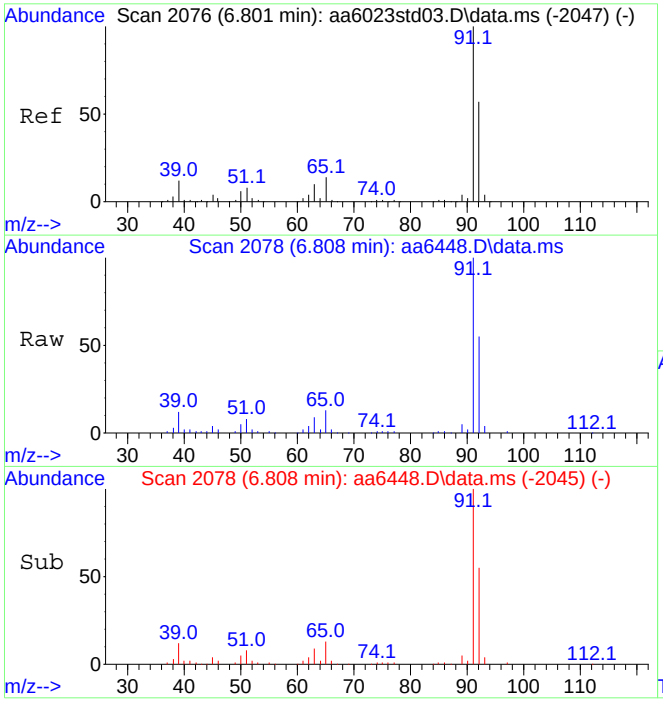


#40
Trichloroethene
Concen: 13.03 ppbV
RT: 5.461 min Scan# 1659
Delta R.T. 0.004 min
Lab File: aa6448.D
Acq: 29 Apr 2024 4:29 pm

Tgt Ion:130 Resp: 597563

Ion	Ratio	Lower	Upper
130	100		
132	95.3	77.5	116.3

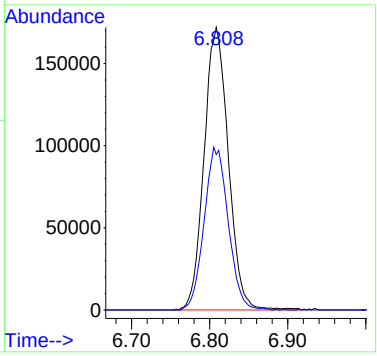


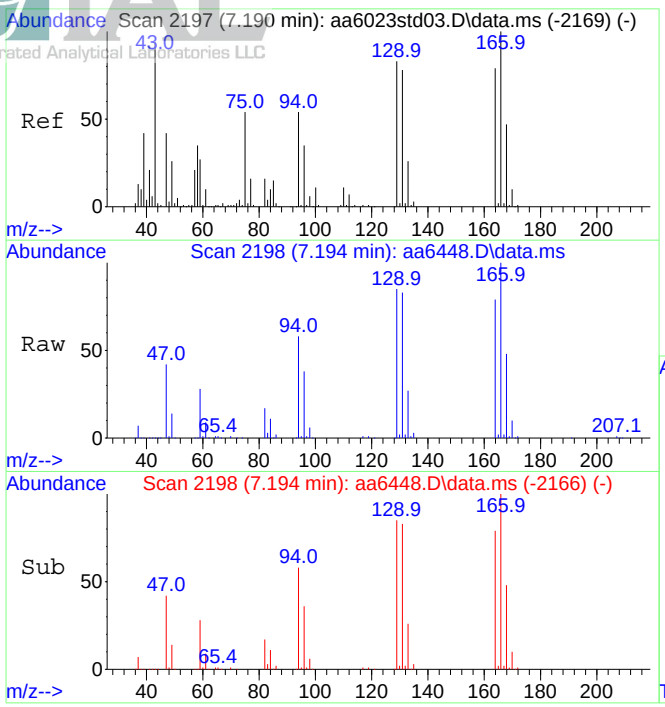


#47
Toluene
Concen: 2.51 ppbV
RT: 6.808 min Scan# 2078
Delta R.T. 0.007 min
Lab File: aa6448.D
Acq: 29 Apr 2024 4:29 pm

Tgt Ion: 91 Resp: 372174

Ion	Ratio	Lower	Upper
91	100		
92	57.1	46.3	69.5

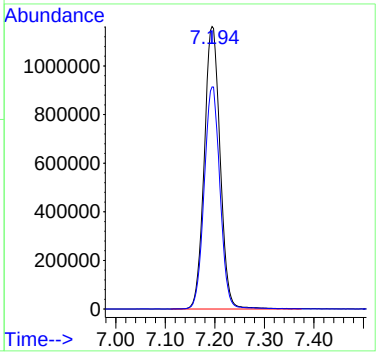


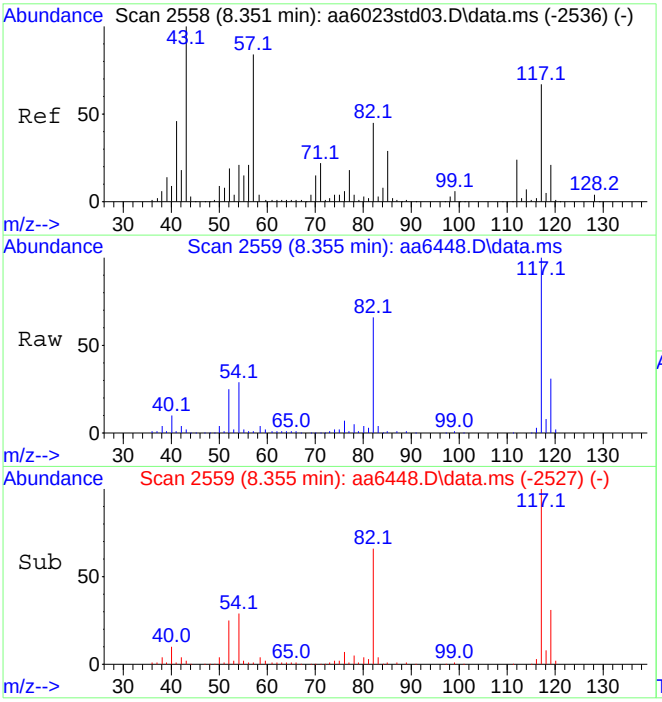


#49
Tetrachloroethene
Concen: 50.49 ppbV
RT: 7.194 min Scan# 2198
Delta R.T. 0.004 min
Lab File: aa6448.D
Acq: 29 Apr 2024 4:29 pm

Tgt Ion:166 Resp: 2581886

Ion	Ratio	Lower	Upper
166	100		
164	78.5	62.3	93.5

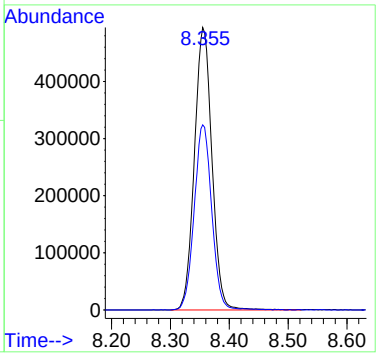


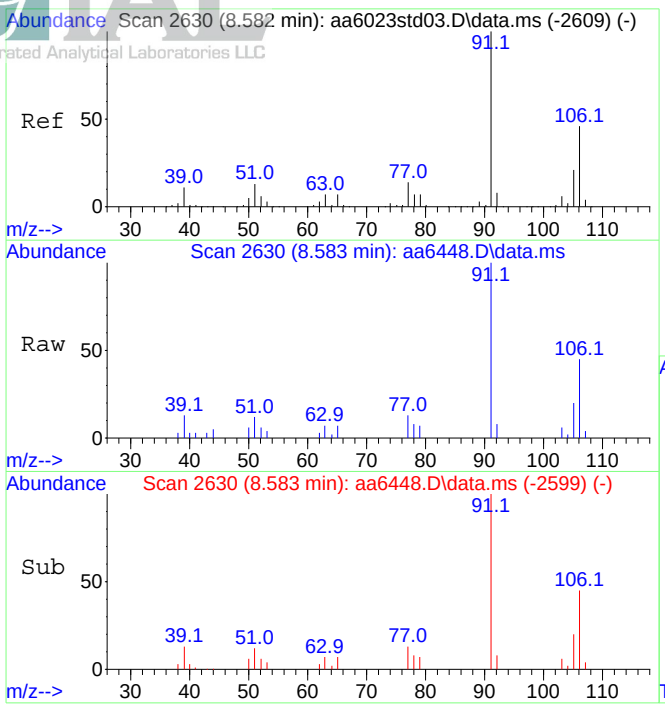


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.355 min Scan# 2559
Delta R.T. 0.004 min
Lab File: aa6448.D
Acq: 29 Apr 2024 4:29 pm

Tgt Ion:117 Resp: 1023364

Ion	Ratio	Lower	Upper
117	100		
82	65.6	46.2	86.2

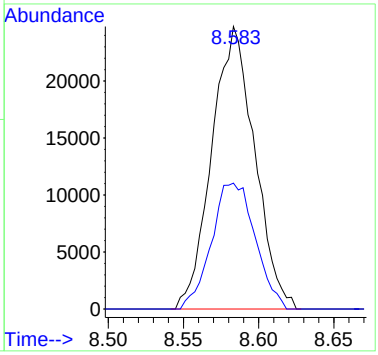


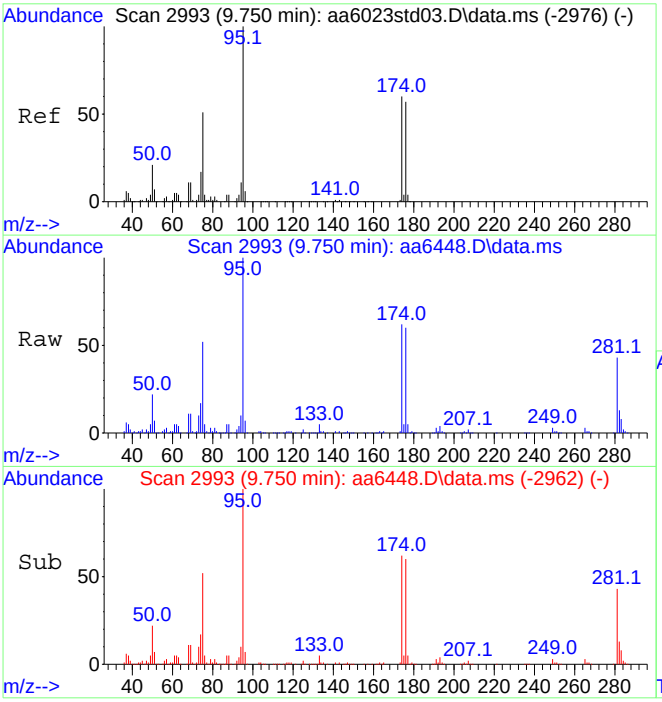


#59
Xylenes (m&p)
Concen: 0.33 ppbV
RT: 8.583 min Scan# 2630
Delta R.T. 0.001 min
Lab File: aa6448.D
Acq: 29 Apr 2024 4:29 pm

Tgt Ion: 91 Resp: 49163

Ion	Ratio	Lower	Upper
91	100		
106	45.4	36.9	55.3

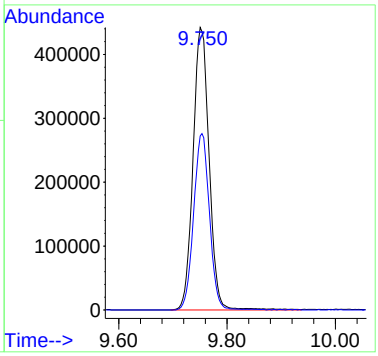




#64
Bromofluorobenzene (tune std)
Concen: 9.93 ppbV
RT: 9.750 min Scan# 2993
Delta R.T. 0.001 min
Lab File: aa6448.D
Acq: 29 Apr 2024 4:29 pm

Tgt Ion: 95 Resp: 911165

Ion	Ratio	Lower	Upper
95	100		
174	61.5	49.4	74.2



Quantitation Report (QT Reviewed)

Data Path : C:\DATA\2024\04-2024\04-30-2024\
Data File : aa6463.D
Acq On : 30 Apr 2024 1:19 pm
Operator : jjw
Sample : E24-01487-02x2 dil
Misc : 3279, 250cc
ALS Vial : 20 Sample Multiplier: 1

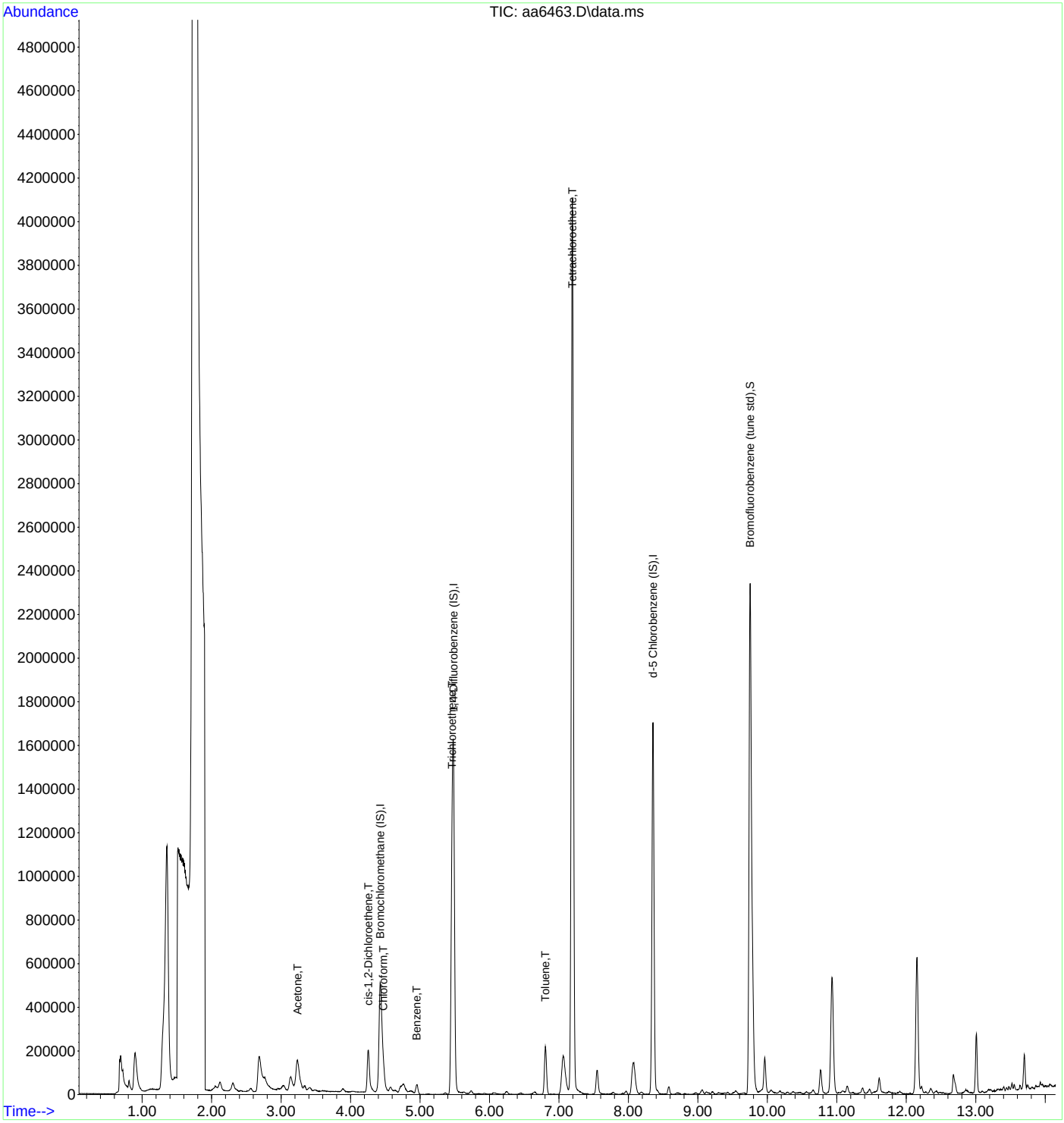
Quant Time: Apr 30 16:02:39 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

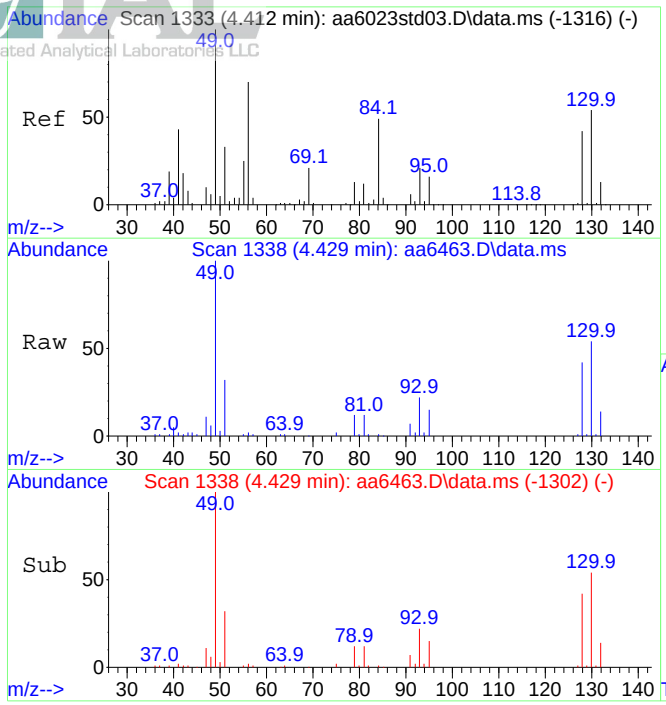
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.429	130	245922	10.00	ppbV	0.017
39) 1,4-Difluorobenzene (IS)	5.483	114	1143728	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.355	117	1023778	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.750	95	892979	9.72	ppbV	0.000
Target Compounds						Qvalue
21) Acetone	3.236	43	246182	4.48	ppbV	94
28) cis-1,2-Dichloroethene	4.255	61	160877	3.41	ppbV	99
30) Chloroform	4.471	83	31775	0.46	ppbV	97
37) Benzene	4.953	78	34269	0.33	ppbV	100
40) Trichloroethene	5.461	130	301717	6.61	ppbV	99
47) Toluene	6.805	91	182937	1.24	ppbV	98
49) Tetrachloroethene	7.194	166	1327053	26.07	ppbV	100

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

Data Path : C:\DATA\2024\04-2024\04-30-2024\
Data File : aa6463.D
Acq On : 30 Apr 2024 1:19 pm
Operator : jjw
Sample : E24-01487-02x2 dil
Misc : 3279, 250cc
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Apr 30 16:02:39 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

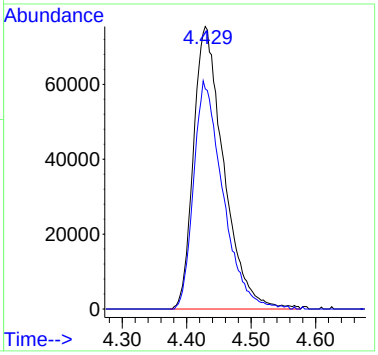


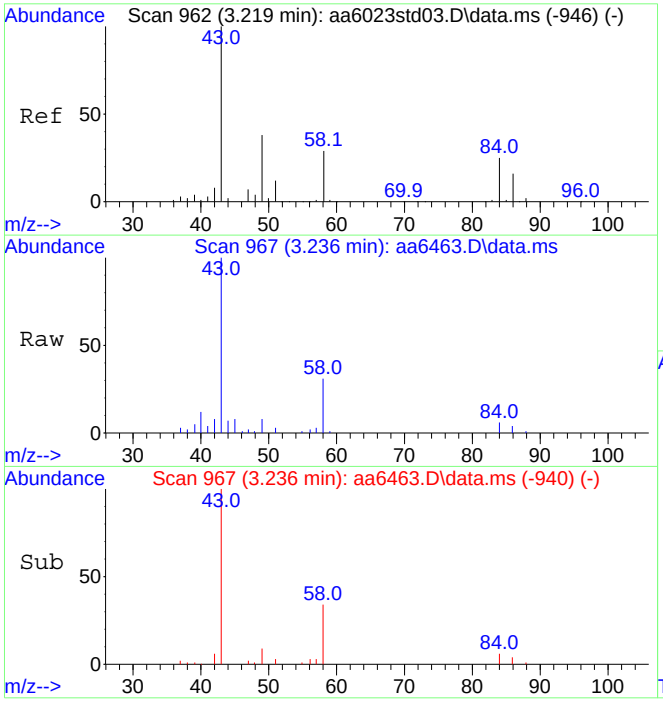


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.429 min Scan# 1338
Delta R.T. 0.017 min
Lab File: aa6463.D
Acq: 30 Apr 2024 1:19 pm

Tgt Ion:130 Resp: 245922

Ion	Ratio	Lower	Upper
130	100		
128	78.2	57.8	97.8

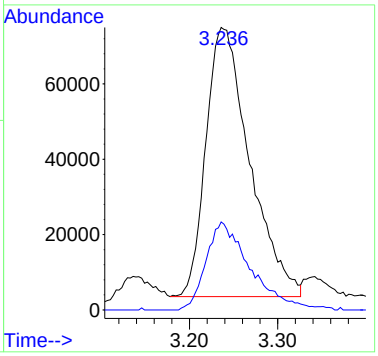


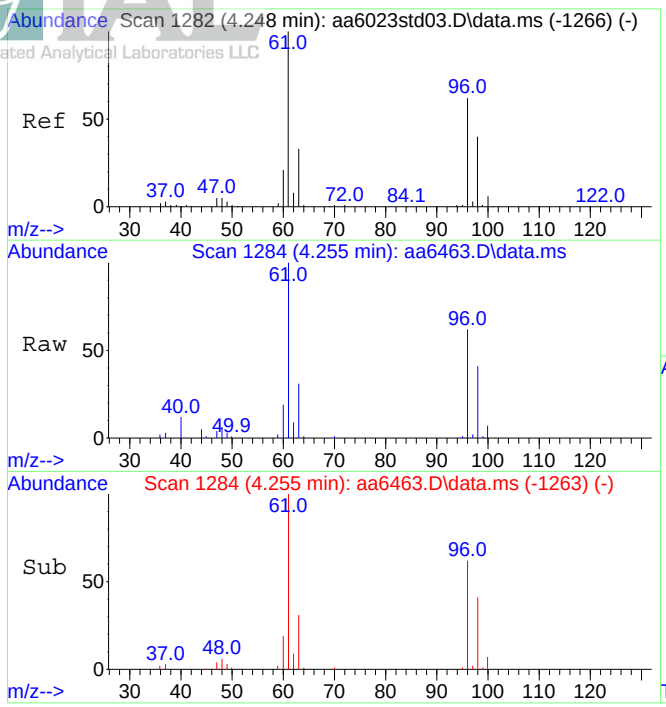


#21
Acetone
Concen: 4.48 ppbV
RT: 3.236 min Scan# 967
Delta R.T. 0.017 min
Lab File: aa6463.D
Acq: 30 Apr 2024 1:19 pm

Tgt Ion: 43 Resp: 246182

Ion	Ratio	Lower	Upper
43	100		
58	33.1	23.8	35.8

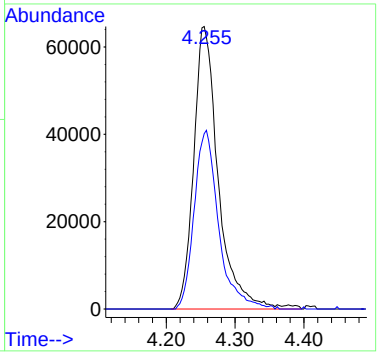


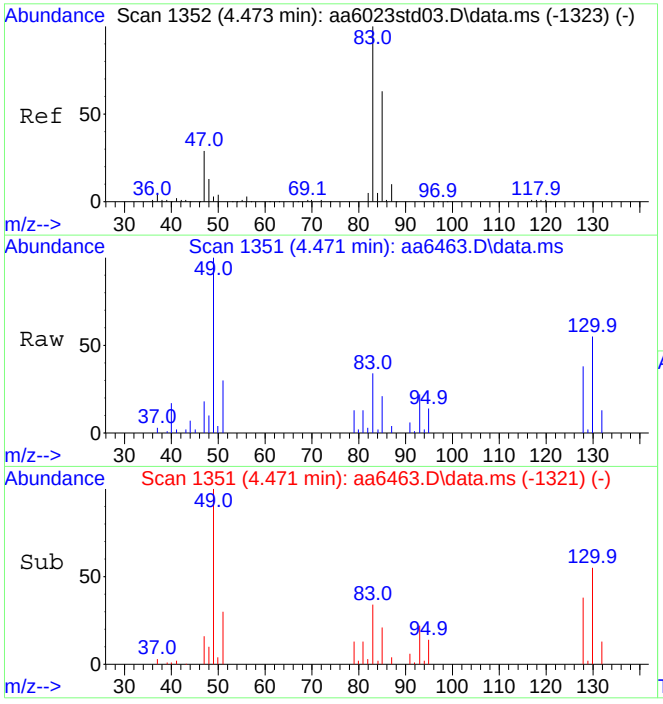


#28
cis-1,2-Dichloroethene
Concen: 3.41 ppbV
RT: 4.255 min Scan# 1284
Delta R.T. 0.007 min
Lab File: aa6463.D
Acq: 30 Apr 2024 1:19 pm

Tgt Ion: 61 Resp: 160877

Ion	Ratio	Lower	Upper
61	100		
96	63.0	51.0	76.4

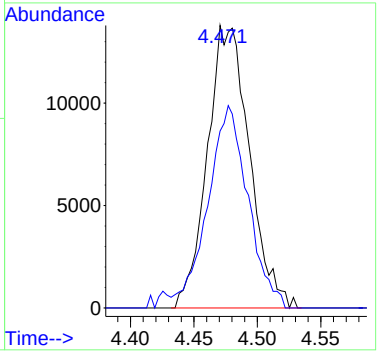


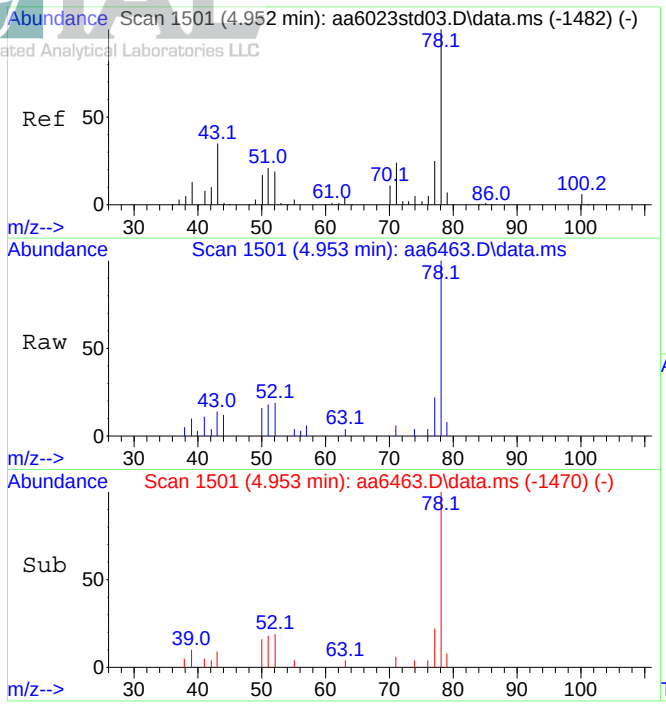


#30
Chloroform
Concen: 0.46 ppbV
RT: 4.471 min Scan# 1351
Delta R.T. -0.003 min
Lab File: aa6463.D
Acq: 30 Apr 2024 1:19 pm

Tgt Ion: 83 Resp: 31775

Ion	Ratio	Lower	Upper
83	100		
85	68.3	52.7	79.1

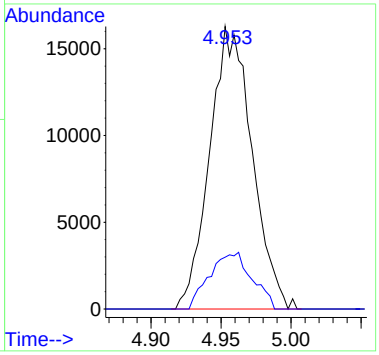


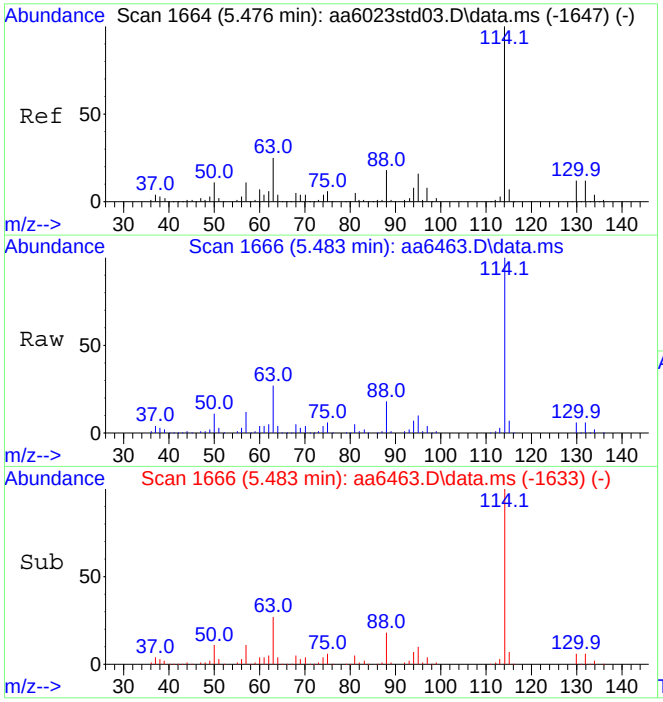


#37
Benzene
Concen: 0.33 ppbV
RT: 4.953 min Scan# 1501
Delta R.T. 0.000 min
Lab File: aa6463.D
Acq: 30 Apr 2024 1:19 pm

Tgt Ion: 78 Resp: 34269

Ion	Ratio	Lower	Upper
78	100		
51	20.0	16.1	24.1

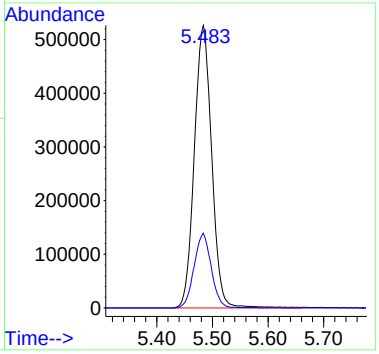


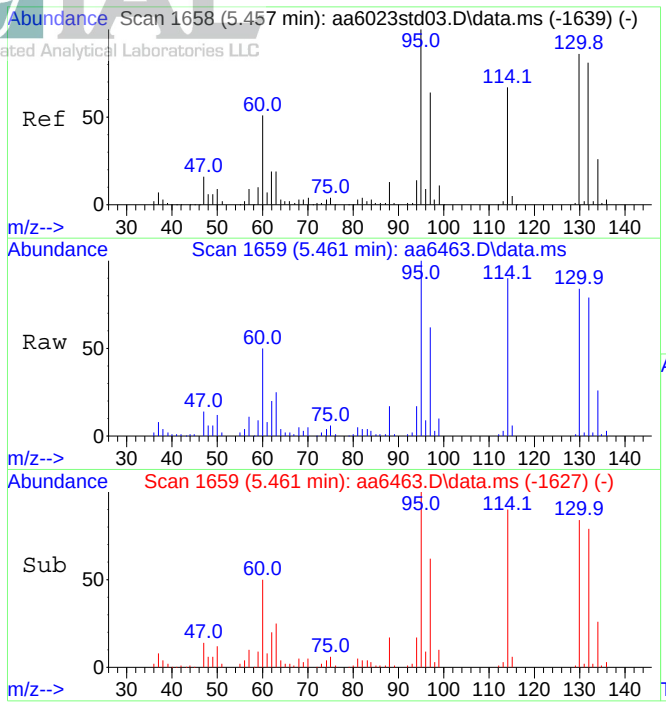


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.483 min Scan# 1666
Delta R.T. 0.007 min
Lab File: aa6463.D
Acq: 30 Apr 2024 1:19 pm

Tgt Ion:114 Resp: 1143728

Ion	Ratio	Lower	Upper
114	100		
63	26.1	6.4	46.4

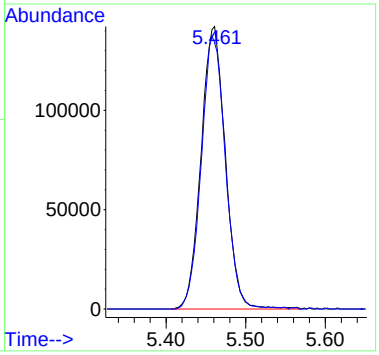


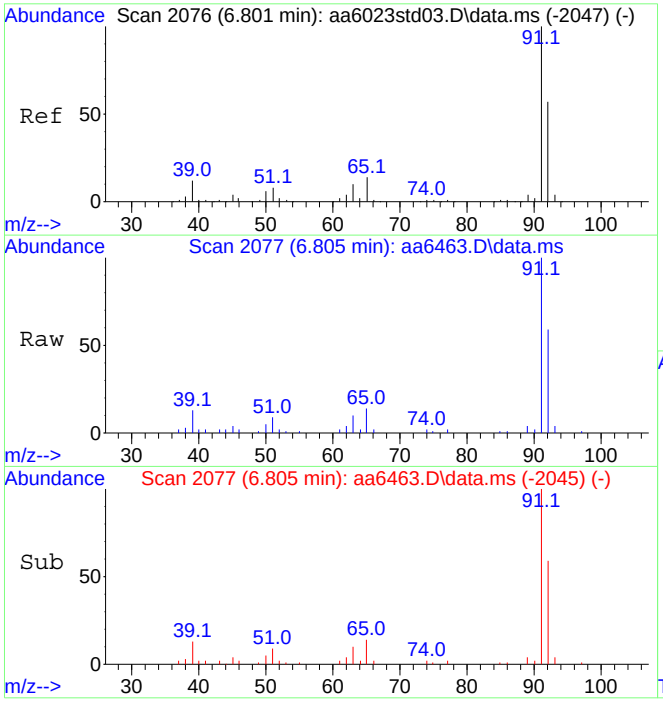


#40
Trichloroethene
Concen: 6.61 ppbV
RT: 5.461 min Scan# 1659
Delta R.T. 0.004 min
Lab File: aa6463.D
Acq: 30 Apr 2024 1:19 pm

Tgt Ion:130 Resp: 301717

Ion	Ratio	Lower	Upper
130	100		
132	95.8	77.5	116.3

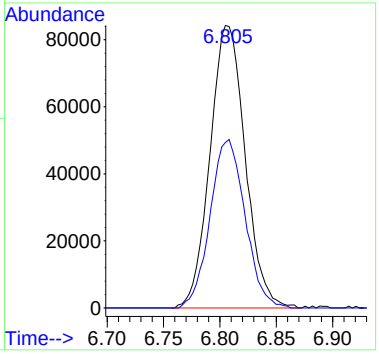


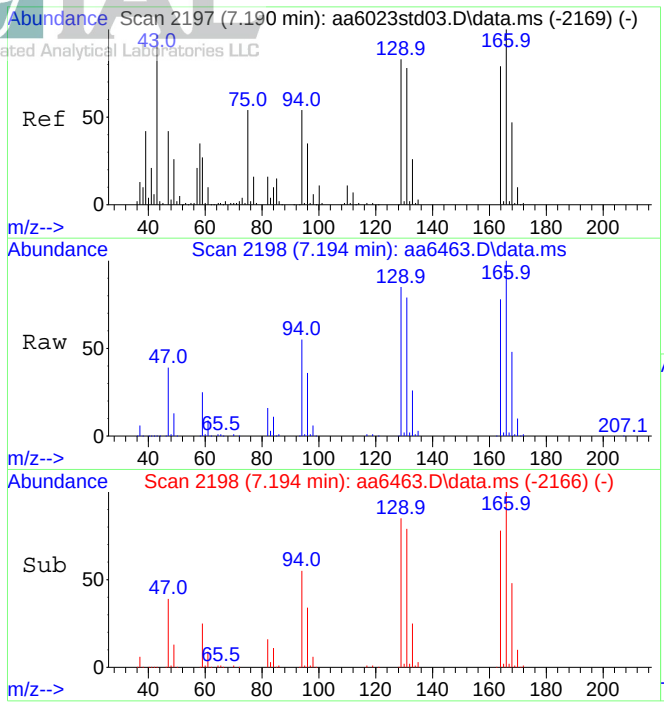


#47
Toluene
Concen: 1.24 ppbV
RT: 6.805 min Scan# 2077
Delta R.T. 0.004 min
Lab File: aa6463.D
Acq: 30 Apr 2024 1:19 pm

Tgt Ion: 91 Resp: 182937

Ion	Ratio	Lower	Upper
91	100		
92	59.2	46.3	69.5

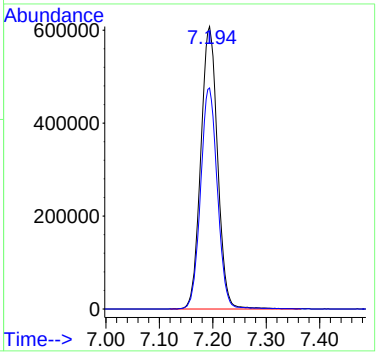


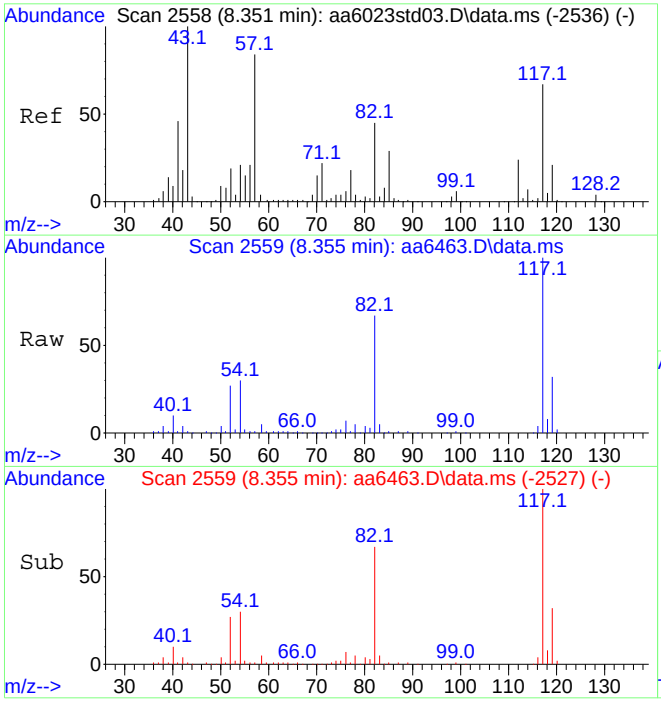


#49
Tetrachloroethene
Concen: 26.07 ppbV
RT: 7.194 min Scan# 2198
Delta R.T. 0.004 min
Lab File: aa6463.D
Acq: 30 Apr 2024 1:19 pm

Tgt Ion:166 Resp: 1327053

Ion	Ratio	Lower	Upper
166	100		
164	78.3	62.3	93.5

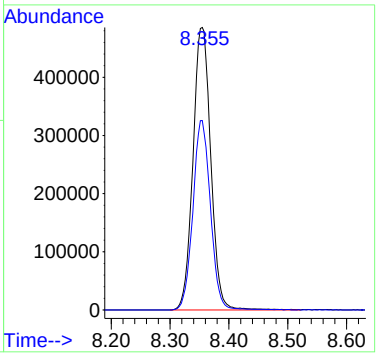


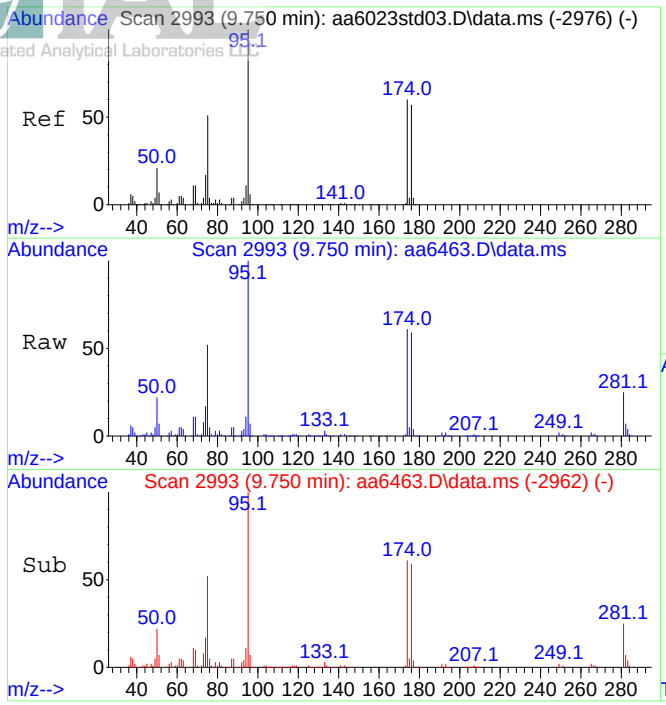


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.355 min Scan# 2559
Delta R.T. 0.004 min
Lab File: aa6463.D
Acq: 30 Apr 2024 1:19 pm

Tgt Ion:117 Resp: 1023778

Ion	Ratio	Lower	Upper
117	100		
82	66.0	46.2	86.2

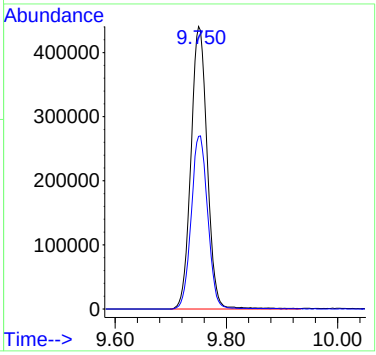




#64
Bromofluorobenzene (tune std)
Concen: 9.72 ppbV
RT: 9.750 min Scan# 2993
Delta R.T. 0.000 min
Lab File: aa6463.D
Acq: 30 Apr 2024 1:19 pm

Tgt Ion: 95 Resp: 892979

Ion	Ratio	Lower	Upper
95	100		
174	62.2	49.4	74.2



INTEGRATED ANALYTICAL LABORATORIES, LLC
Integrated Analytical Laboratories LLC

Volatile Organic Compounds by EPA Method TO-15
Summary of Results

Lab ID:	E24-01487-03	Instrument ID:	AA
Client ID:	SG-3	GC/MS Column:	RTX-1, 0.32 mmID
Date Sampled:	04/27/2024 14:38	Injection Volmue:	500ml
Date Received:	04/26/2024	Matrix:	Air-Soil Gas
Date Analyzed:	04/29/2024 17:01	% Moisture:	NA
Data File:	AA6449	Dilution Factor:	1
Summa ID:	3012	Analyst:	J. Walukiewicz

			Concentration Reported		Reporting Limits	
Compound	**CAS #**	**Q**	**ppbv**	**ug/m3**	**ppbv**	**ug/m3**
Acetone	67-64-1		7.7	18	0.20	0.48
Benzene	71-43-2		0.23	0.72	0.20	0.64
Bromodichloromethane	75-27-4		ND	ND	0.20	1.3
Bromoform	75-25-2		ND	ND	0.20	2.1
Bromomethane	74-83-9		ND	ND	0.20	0.78
1,3-Butadiene	106-99-0		ND	ND	0.20	0.44
Chlorobenzene	108-90-7		ND	ND	0.20	0.92
Chloroethane	75-00-3		ND	ND	0.20	0.53
Chloroform	67-66-3		ND	ND	0.20	0.98
Chloromethane	74-87-3		ND	ND	0.20	0.41
Carbon disulfide	75-15-0		ND	ND	0.20	0.62
Carbon tetrachloride	56-23-5		ND	ND	0.040	0.25
Cyclohexane	110-82-7		ND	ND	0.20	0.69
Dibromochloromethane	124-48-1		ND	ND	0.20	1.7
1,2-Dibromoethane	106-93-4		ND	ND	0.20	1.5
1,2-Dichlorobenzene	95-50-1		ND	ND	0.20	1.2
1,3-Dichlorobenzene	541-73-1		ND	ND	0.20	1.2
1,4-Dichlorobenzene	106-46-7		ND	ND	0.20	1.2
Dichlorodifluoromethane	75-71-8		ND	ND	0.20	0.99
1,1-Dichloroethane	75-34-3		ND	ND	0.20	0.81
1,2-Dichloroethane	107-06-2		ND	ND	0.20	0.81
1,1-Dichloroethene	75-35-4		ND	ND	0.20	0.79
1,2-Dichloroethene (cis)	156-59-2		ND	ND	0.20	0.79
1,2-Dichloroethene (trans)	156-60-5		ND	ND	0.20	0.79
1,2-Dichloropropane	78-87-5		ND	ND	0.20	0.92
1,3-Dichloropropene (cis)	10061-01-5		ND	ND	0.20	0.91
1,3-Dichloropropene (trans)	10061-02-6		ND	ND	0.20	0.91
1,2-Dichlorotetrafluoroethane	76-14-2		ND	ND	0.20	1.4
1,4-Dioxane	123-91-1		ND	ND	0.20	0.72
Ethylbenzene	100-41-4		ND	ND	0.20	0.87
n-Heptane	142-82-5		ND	ND	0.20	0.82
1,3-Hexachlorobutadiene	87-68-3		ND	ND	0.20	2.1
n-Hexane	110-54-3		ND	ND	0.20	0.70
Methylene chloride	75-09-2		ND	ND	0.20	0.69
Methyl ethyl ketone	78-93-3		0.94	2.8	0.20	0.59
Methyl isobutyl ketone	108-10-1		ND	ND	0.20	0.82
Methyl tert-butyl ether	1634-04-4		ND	ND	0.20	0.72
Styrene	100-42-5		ND	ND	0.20	0.85
Tert-butyl alcohol	75-65-0		ND	ND	0.20	0.61
1,1,2,2-Tetrachloroethane	79-34-5		ND	ND	0.20	1.4
Tetrachloroethene	127-18-4		25	170	0.20	1.4
Toluene	108-88-3		ND	ND	0.20	0.75
1,2,4-Trichlorobenzene	120-82-1		ND	ND	0.20	1.5
1,1,1-Trichloroethane	71-55-6		ND	ND	0.20	1.1
1,1,2-Trichloroethane	79-00-5		ND	ND	0.20	1.1

Qualifiers:
D = Dilution required

INTEGRATED ANALYTICAL LABORATORIES, LLC
Integrated Analytical Laboratories LLC

Volatile Organic Compounds by EPA Method TO-15
Summary of Results

Lab ID:	E24-01487-03	Instrument ID:	AA
Client ID:	SG-3	GC/MS Column:	RTX-1, 0.32 mmID
Date Sampled:	04/27/2024 14:38	Injection Volmue:	500ml
Date Received:	04/26/2024	Matrix:	Air-Soil Gas
Date Analyzed:	04/29/2024 17:01	% Moisture:	NA
Data File:	AA6449	Dilution Factor:	1
Summa ID:	3012	Analyst:	J. Walukiewicz

			Concentration Reported		Reporting Limits	
Compound	**CAS #**	**Q**	**ppbv**	**ug/m3**	**ppbv**	**ug/m3**
Trichloroethene	79-01-6		0.85	4.6	0.046	0.25
Trichlorofluoromethane	75-69-4		ND	ND	0.20	1.1
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1		ND	ND	0.20	1.5
1,2,4-Trimethylbenzene	95-63-6		ND	ND	0.20	0.98
1,3,5-Trimethylbenzene	108-67-8		ND	ND	0.20	0.98
2,2,4-Trimethylpentane	540-84-1		ND	ND	0.20	0.93
Vinyl bromide	593-60-2		ND	ND	0.20	0.87
Vinyl chloride	75-01-4		ND	ND	0.20	0.51
Xylenes (m&p)	179601-23-1		ND	ND	0.20	0.87
Xylenes (o)	95-47-6		ND	ND	0.20	0.87

Qualifiers:
D = Dilution required

Data Path : C:\DATA\2024\04-2024\04-29-2024\
Data File : aa6449.D
Acq On : 29 Apr 2024 5:01 pm
Operator : jjw
Sample : E24-01487-03
Misc : 3012, 500cc
ALS Vial : 21 Sample Multiplier: 1

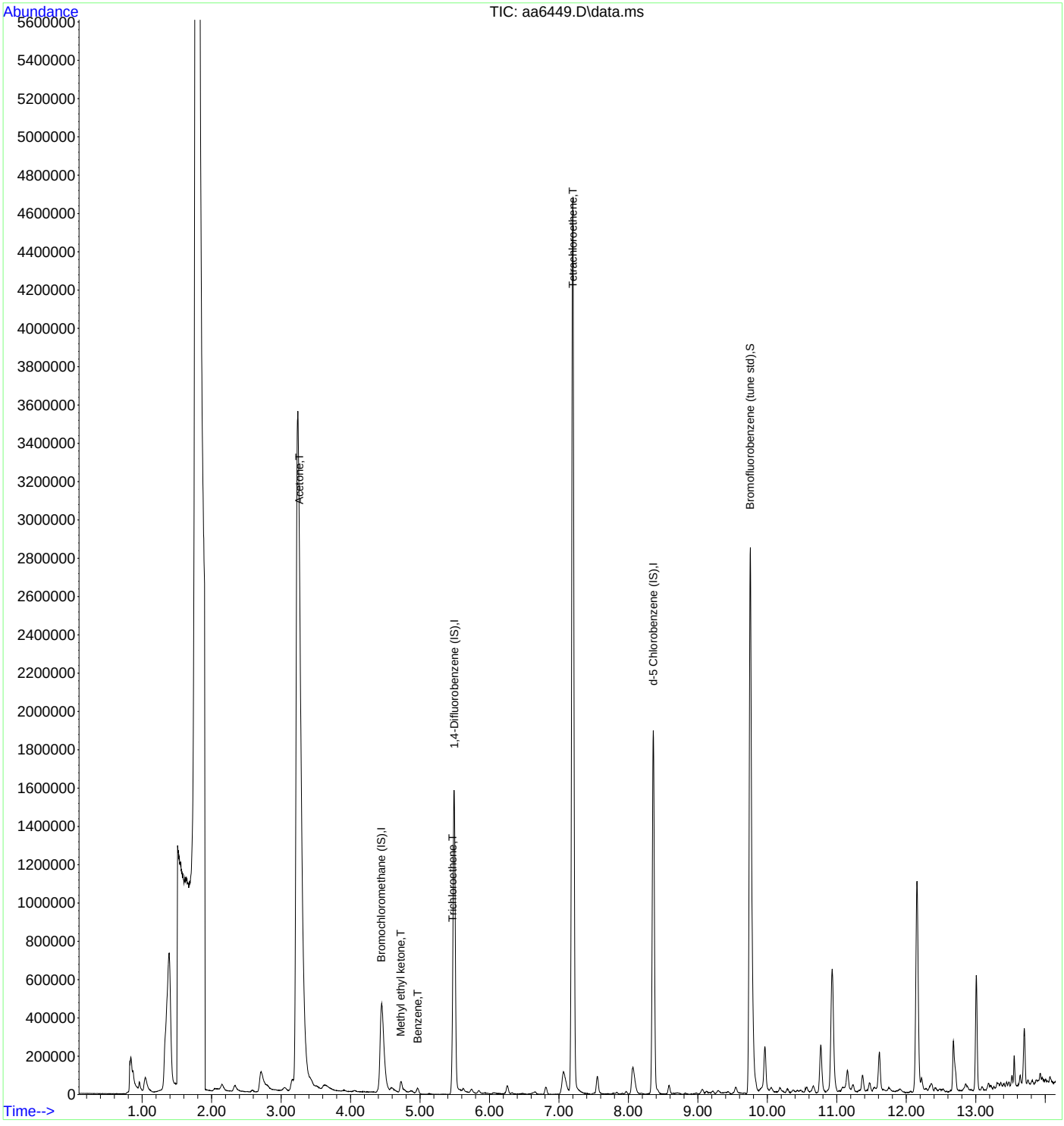
Quant Time: Apr 30 16:05:56 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

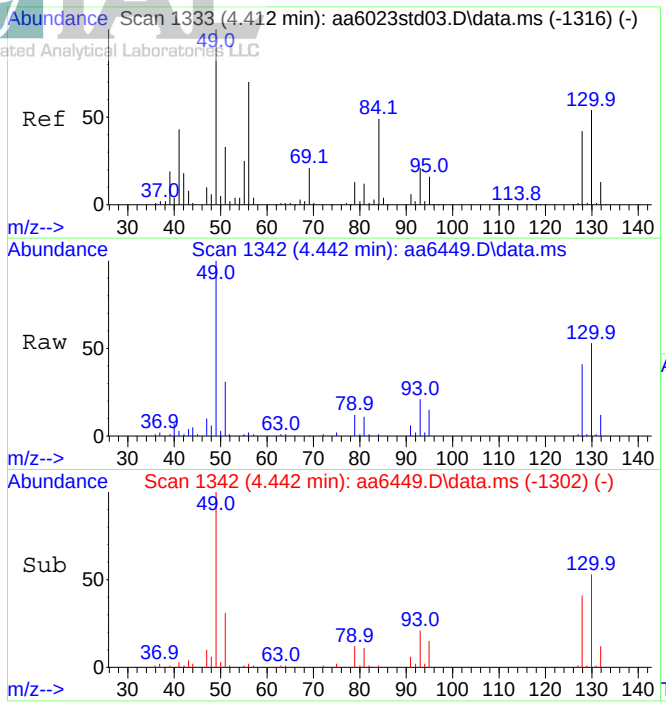
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.442	130	256110	10.00	ppbV	0.030
39) 1,4-Difluorobenzene (IS)	5.493	114	1344789	10.00	ppbV	0.017
55) d-5 Chlorobenzene (IS)	8.358	117	1151020	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.753	95	1136922	11.01	ppbV	0.000
Target Compounds						Qvalue
21) Acetone	3.265	43	440904	7.70	ppbV	99
35) Methyl ethyl ketone	4.725	43	80256	0.94	ppbV	100
37) Benzene	4.966	78	24321	0.23	ppbV	99
40) Trichloroethene	5.470	130	45820	0.85	ppbV	99
49) Tetrachloroethene	7.200	166	1521150	25.42	ppbV	99

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

Data Path : C:\DATA\2024\04-2024\04-29-2024\
Data File : aa6449.D
Acq On : 29 Apr 2024 5:01 pm
Operator : jjw
Sample : E24-01487-03
Misc : 3012, 500cc
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Apr 30 16:05:56 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

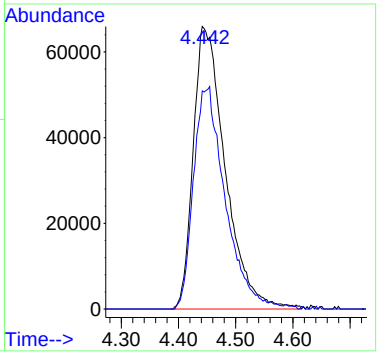


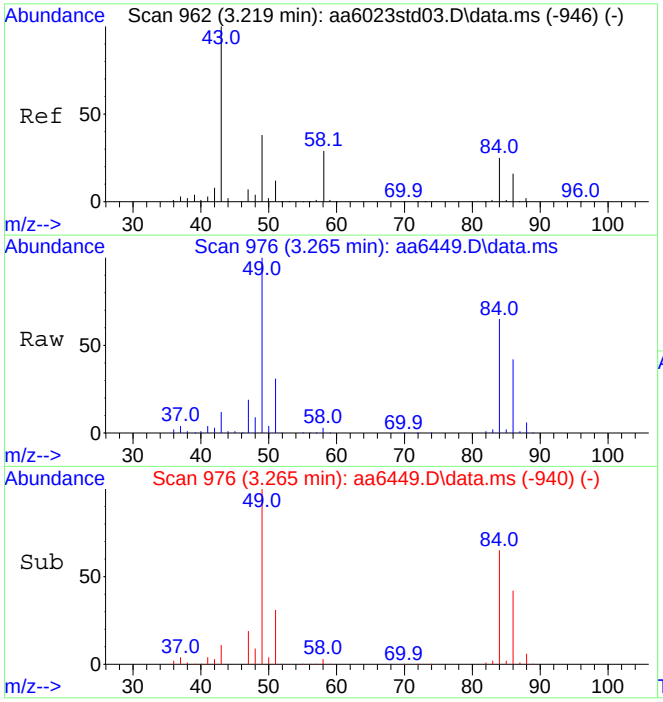


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.442 min Scan# 1342
Delta R.T. 0.030 min
Lab File: aa6449.D
Acq: 29 Apr 2024 5:01 pm

Tgt Ion:130 Resp: 256110

Ion	Ratio	Lower	Upper
130	100		
128	78.3	57.8	97.8

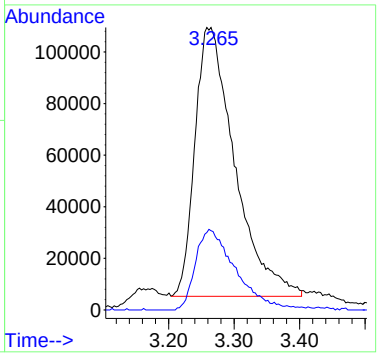


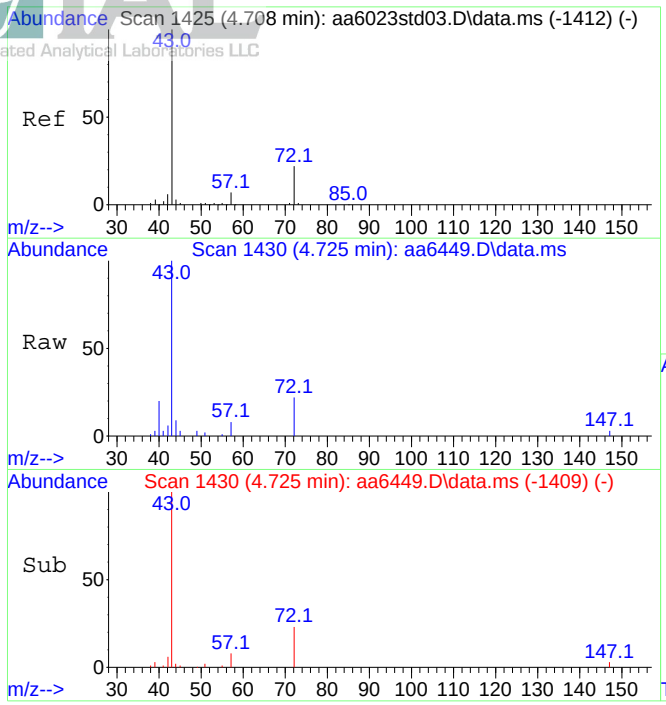


#21
Acetone
Concen: 7.70 ppbV
RT: 3.265 min Scan# 976
Delta R.T. 0.045 min
Lab File: aa6449.D
Acq: 29 Apr 2024 5:01 pm

Tgt Ion: 43 Resp: 440904

Ion	Ratio	Lower	Upper
43	100		
58	30.3	23.8	35.8

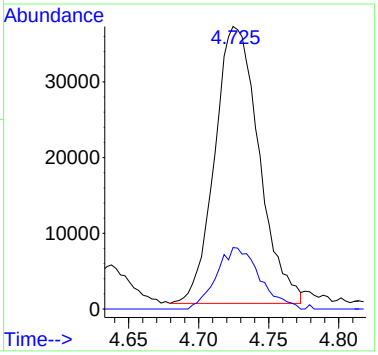


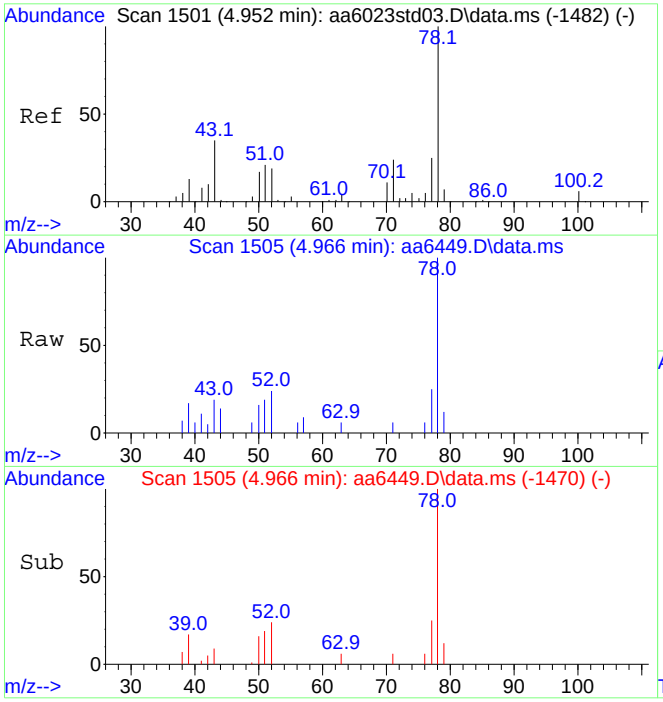


#35
Methyl ethyl ketone
Concen: 0.94 ppbV
RT: 4.725 min Scan# 1430
Delta R.T. 0.016 min
Lab File: aa6449.D
Acq: 29 Apr 2024 5:01 pm

Tgt Ion: 43 Resp: 80256

Ion	Ratio	Lower	Upper
43	100		
72	21.7	17.4	26.0

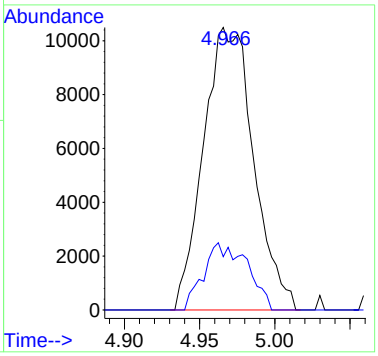


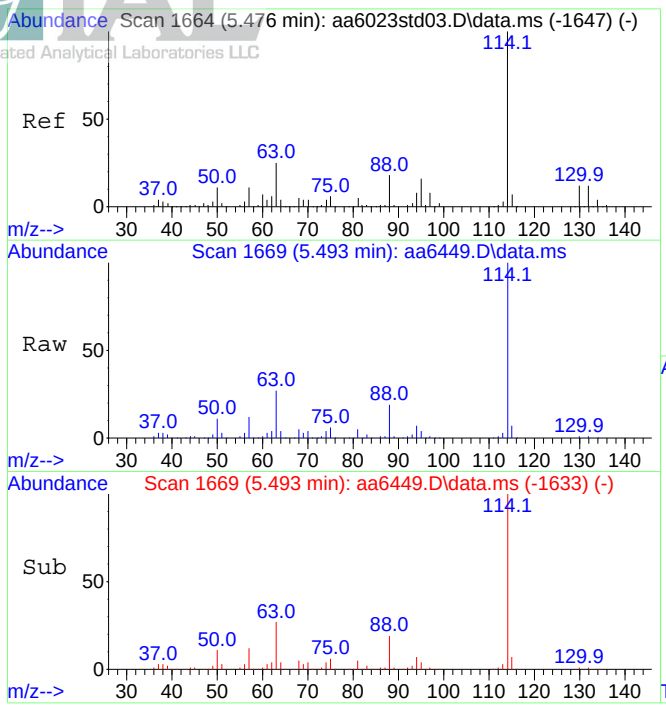


#37
Benzene
Concen: 0.23 ppbV
RT: 4.966 min Scan# 1505
Delta R.T. 0.013 min
Lab File: aa6449.D
Acq: 29 Apr 2024 5:01 pm

Tgt Ion: 78 Resp: 24321

Ion	Ratio	Lower	Upper
78	100		
51	20.6	16.1	24.1

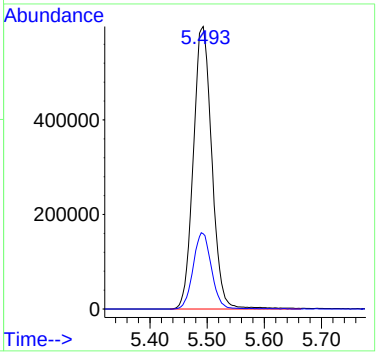


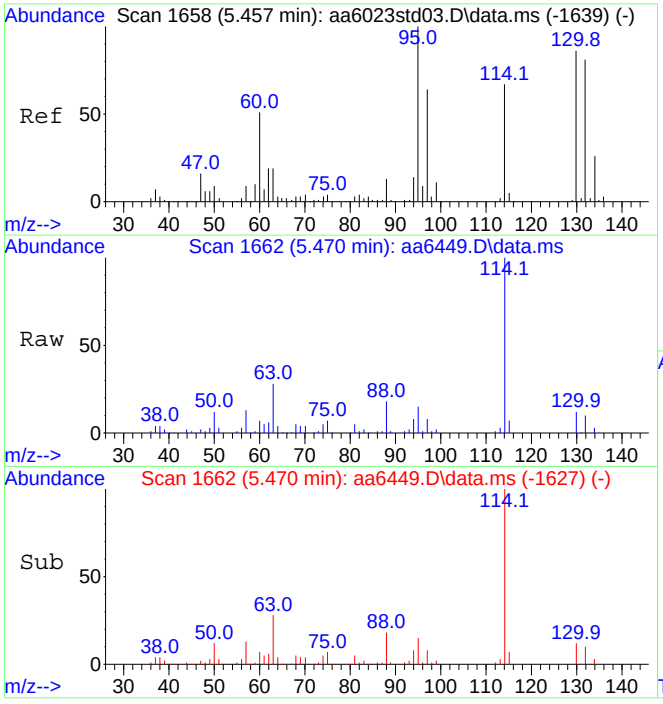


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.493 min Scan# 1669
Delta R.T. 0.017 min
Lab File: aa6449.D
Acq: 29 Apr 2024 5:01 pm

Tgt Ion:114 Resp: 1344789

Ion	Ratio	Lower	Upper
114	100		
63	26.5	6.4	46.4

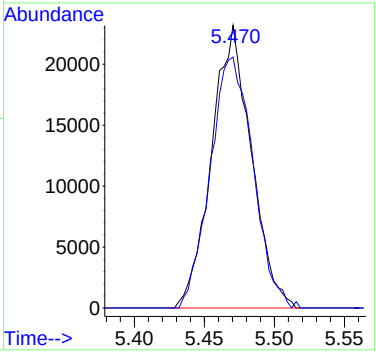


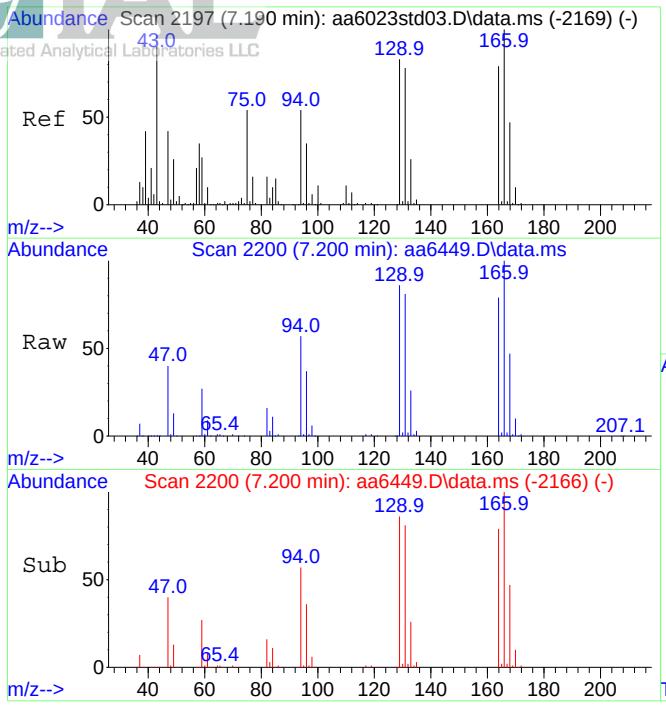


#40
Trichloroethene
Concen: 0.85 ppbV
RT: 5.470 min Scan# 1662
Delta R.T. 0.013 min
Lab File: aa6449.D
Acq: 29 Apr 2024 5:01 pm

Tgt Ion:130 Resp: 45820

Ion	Ratio	Lower	Upper
130	100		
132	95.8	77.5	116.3

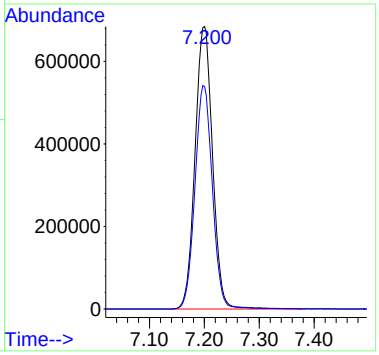


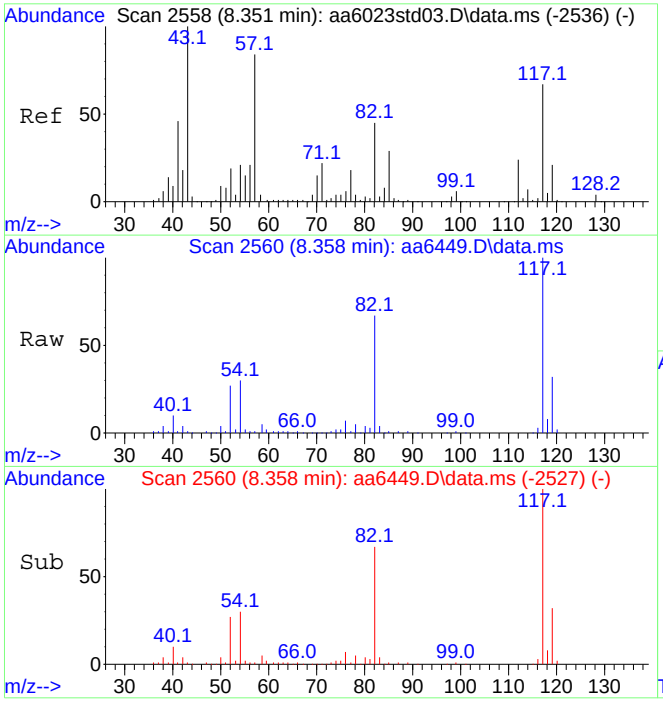


#49
Tetrachloroethene
Concen: 25.42 ppbV
RT: 7.200 min Scan# 2200
Delta R.T. 0.010 min
Lab File: aa6449.D
Acq: 29 Apr 2024 5:01 pm

Tgt Ion:166 Resp: 1521150

Ion	Ratio	Lower	Upper
166	100		
164	78.8	62.3	93.5

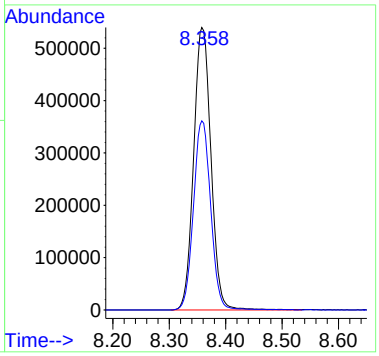


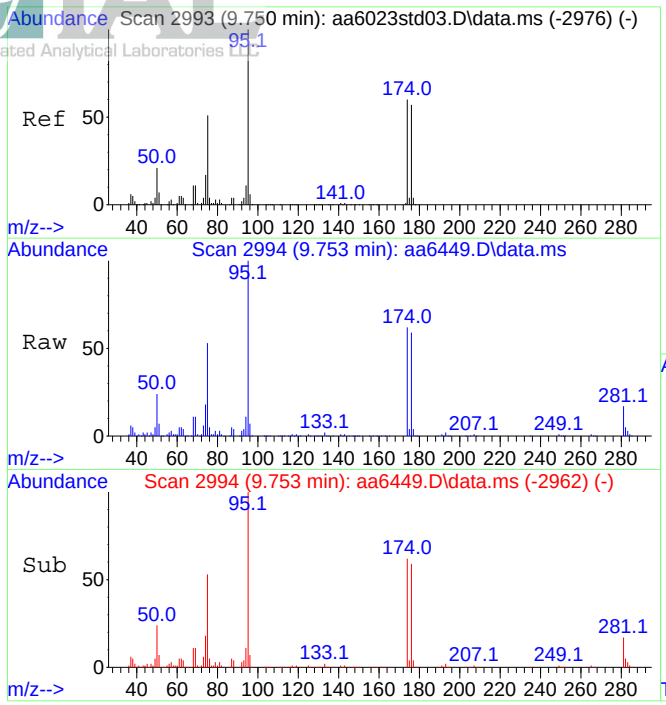


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.358 min Scan# 2560
Delta R.T. 0.007 min
Lab File: aa6449.D
Acq: 29 Apr 2024 5:01 pm

Tgt Ion:117 Resp: 1151020

Ion	Ratio	Lower	Upper
117	100		
82	66.8	46.2	86.2

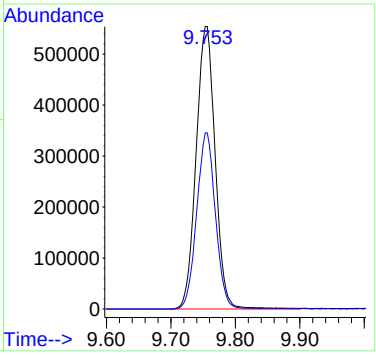




#64
Bromofluorobenzene (tune std)
Concen: 11.01 ppbV
RT: 9.753 min Scan# 2994
Delta R.T. 0.004 min
Lab File: aa6449.D
Acq: 29 Apr 2024 5:01 pm

Tgt Ion: 95 Resp: 1136922

Ion	Ratio	Lower	Upper
95	100		
174	61.5	49.4	74.2



INTEGRATED ANALYTICAL LABORATORIES, LLC
Integrated Analytical Laboratories LLC

Volatile Organic Compounds by EPA Method TO-15
Summary of Results

Lab ID:	E24-01487-04	Instrument ID:	AA
Client ID:	SG-4	GC/MS Column:	RTX-1, 0.32 mmID
Date Sampled:	04/27/2024 13:45	Injection Volmue:	500ml
Date Received:	04/26/2024	Matrix:	Air-Soil Gas
Date Analyzed:	04/29/2024 17:33	% Moisture:	NA
Data File:	AA6450	Dilution Factor:	1
Summa ID:	2893	Analyst:	J. Walukiewicz

			Concentration Reported		Reporting Limits	
Compound	**CAS #**	**Q**	**ppbv**	**ug/m3**	**ppbv**	**ug/m3**
Acetone	67-64-1		26	61	0.20	0.48
Benzene	71-43-2		0.43	1.4	0.20	0.64
Bromodichloromethane	75-27-4		ND	ND	0.20	1.3
Bromoform	75-25-2		ND	ND	0.20	2.1
Bromomethane	74-83-9		ND	ND	0.20	0.78
1,3-Butadiene	106-99-0		ND	ND	0.20	0.44
Chlorobenzene	108-90-7		ND	ND	0.20	0.92
Chloroethane	75-00-3		ND	ND	0.20	0.53
Chloroform	67-66-3		0.40	1.9	0.20	0.98
Chloromethane	74-87-3		ND	ND	0.20	0.41
Carbon disulfide	75-15-0		ND	ND	0.20	0.62
Carbon tetrachloride	56-23-5		ND	ND	0.040	0.25
Cyclohexane	110-82-7		ND	ND	0.20	0.69
Dibromochloromethane	124-48-1		ND	ND	0.20	1.7
1,2-Dibromoethane	106-93-4		ND	ND	0.20	1.5
1,2-Dichlorobenzene	95-50-1		ND	ND	0.20	1.2
1,3-Dichlorobenzene	541-73-1		ND	ND	0.20	1.2
1,4-Dichlorobenzene	106-46-7		ND	ND	0.20	1.2
Dichlorodifluoromethane	75-71-8		ND	ND	0.20	0.99
1,1-Dichloroethane	75-34-3		ND	ND	0.20	0.81
1,2-Dichloroethane	107-06-2		ND	ND	0.20	0.81
1,1-Dichloroethene	75-35-4		ND	ND	0.20	0.79
1,2-Dichloroethene (cis)	156-59-2		ND	ND	0.20	0.79
1,2-Dichloroethene (trans)	156-60-5		ND	ND	0.20	0.79
1,2-Dichloropropane	78-87-5		ND	ND	0.20	0.92
1,3-Dichloropropene (cis)	10061-01-5		ND	ND	0.20	0.91
1,3-Dichloropropene (trans)	10061-02-6		ND	ND	0.20	0.91
1,2-Dichlorotetrafluoroethane	76-14-2		ND	ND	0.20	1.4
1,4-Dioxane	123-91-1		ND	ND	0.20	0.72
Ethylbenzene	100-41-4		ND	ND	0.20	0.87
n-Heptane	142-82-5		ND	ND	0.20	0.82
1,3-Hexachlorobutadiene	87-68-3		ND	ND	0.20	2.1
n-Hexane	110-54-3		ND	ND	0.20	0.70
Methylene chloride	75-09-2		ND	ND	0.20	0.69
Methyl ethyl ketone	78-93-3		1.2	3.6	0.20	0.59
Methyl isobutyl ketone	108-10-1		ND	ND	0.20	0.82
Methyl tert-butyl ether	1634-04-4		ND	ND	0.20	0.72
Styrene	100-42-5		ND	ND	0.20	0.85
Tert-butyl alcohol	75-65-0		ND	ND	0.20	0.61
1,1,2,2-Tetrachloroethane	79-34-5		ND	ND	0.20	1.4
Tetrachloroethene	127-18-4		28	190	0.20	1.4
Toluene	108-88-3		4.8	18	0.20	0.75
1,2,4-Trichlorobenzene	120-82-1		ND	ND	0.20	1.5
1,1,1-Trichloroethane	71-55-6		ND	ND	0.20	1.1
1,1,2-Trichloroethane	79-00-5		ND	ND	0.20	1.1

Qualifiers:
D = Dilution required

INTEGRATED ANALYTICAL LABORATORIES, LLC
Integrated Analytical Laboratories LLC

Volatile Organic Compounds by EPA Method TO-15
Summary of Results

Lab ID:	E24-01487-04	Instrument ID:	AA
Client ID:	SG-4	GC/MS Column:	RTX-1, 0.32 mmID
Date Sampled:	04/27/2024 13:45	Injection Volmue:	500ml
Date Received:	04/26/2024	Matrix:	Air-Soil Gas
Date Analyzed:	04/29/2024 17:33	% Moisture:	NA
Data File:	AA6450	Dilution Factor:	1
Summa ID:	2893	Analyst:	J. Walukiewicz

			Concentration Reported		Reporting Limits	
Compound	**CAS #**	**Q**	**ppbv**	**ug/m3**	**ppbv**	**ug/m3**
Trichloroethene	79-01-6		0.76	4.1	0.046	0.25
Trichlorofluoromethane	75-69-4		ND	ND	0.20	1.1
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1		ND	ND	0.20	1.5
1,2,4-Trimethylbenzene	95-63-6		ND	ND	0.20	0.98
1,3,5-Trimethylbenzene	108-67-8		ND	ND	0.20	0.98
2,2,4-Trimethylpentane	540-84-1		ND	ND	0.20	0.93
Vinyl bromide	593-60-2		ND	ND	0.20	0.87
Vinyl chloride	75-01-4		ND	ND	0.20	0.51
Xylenes (m&p)	179601-23-1		0.46	2.0	0.20	0.87
Xylenes (o)	95-47-6		ND	ND	0.20	0.87

Qualifiers:
D = Dilution required

Data Path : C:\DATA\2024\04-2024\04-29-2024\
Data File : aa6450.D
Acq On : 29 Apr 2024 5:33 pm
Operator : jjw
Sample : E24-01487-04
Misc : 2893, 500cc
ALS Vial : 22 Sample Multiplier: 1

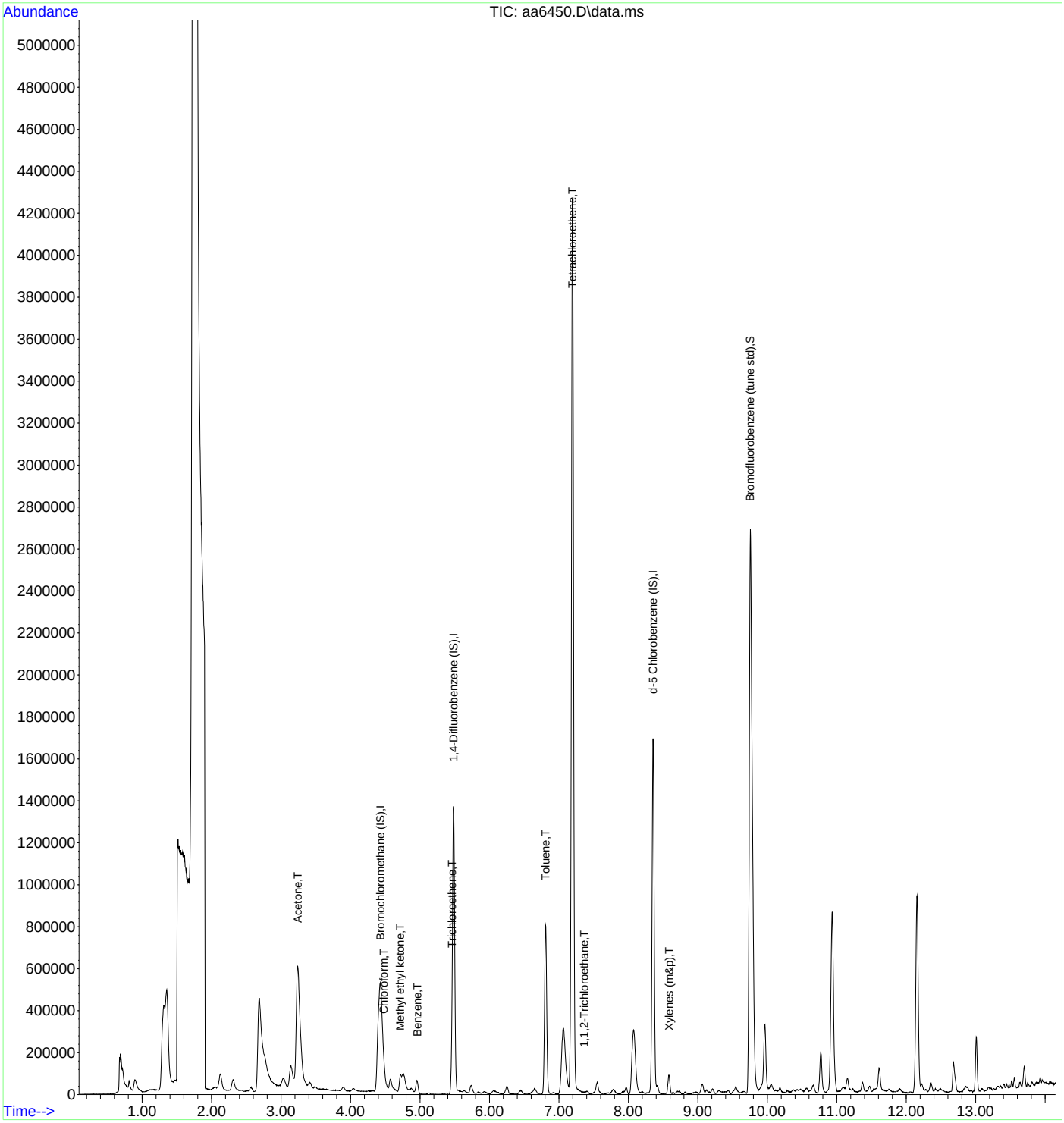
Quant Time: Apr 30 10:07:16 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

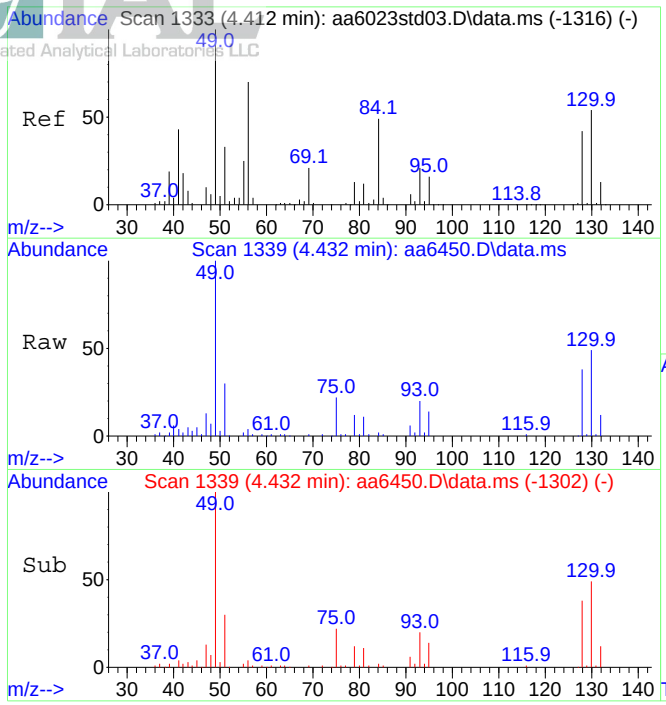
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.432	130	242061	10.00	ppbV	0.020
39) 1,4-Difluorobenzene (IS)	5.484	114	1110949	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.355	117	996684	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.753	95	897450	10.04	ppbV	0.000
Target Compounds						Qvalue
21) Acetone	3.242	43	1397478	25.81	ppbV	99
30) Chloroform	4.480	83	26777	0.40	ppbV	99
35) Methyl ethyl ketone	4.715	43	97477	1.21	ppbV	99
37) Benzene	4.963	78	43379	0.43	ppbV	99
40) Trichloroethene	5.461	130	33600	0.76	ppbV	95
47) Toluene	6.808	91	691618	4.83	ppbV	100
49) Tetrachloroethene	7.194	166	1365884	27.63	ppbV	100
51) 1,1,2-Trichloroethane	7.364	97	228	0.00	ppbV	98
59) Xylenes (m&p)	8.586	91	66212	0.46	ppbV	99

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

Data Path : C:\DATA\2024\04-2024\04-29-2024\
Data File : aa6450.D
Acq On : 29 Apr 2024 5:33 pm
Operator : jjw
Sample : E24-01487-04
Misc : 2893, 500cc
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Apr 30 10:07:16 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

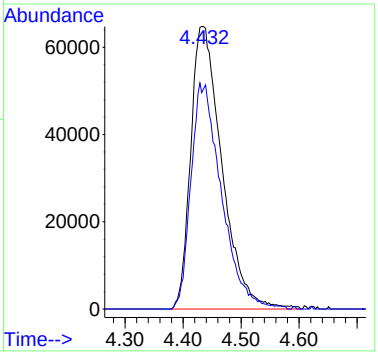


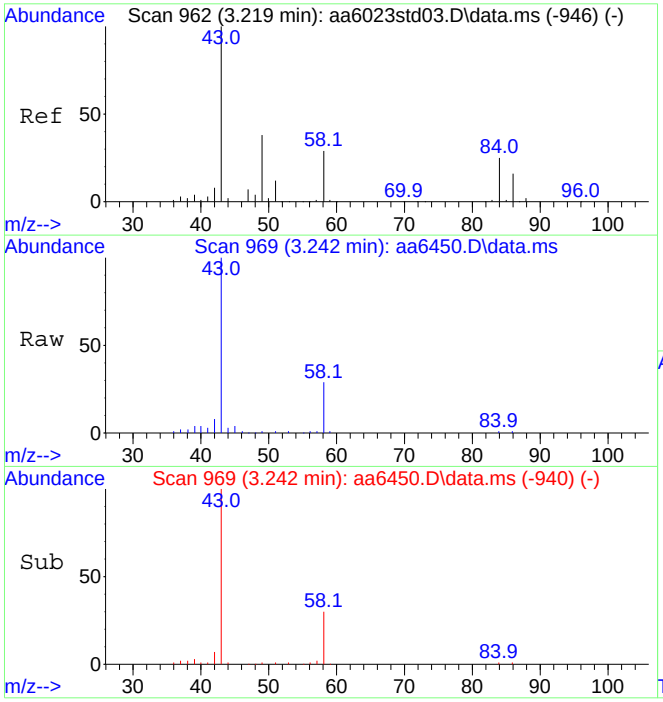


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.432 min Scan# 1339
Delta R.T. 0.020 min
Lab File: aa6450.D
Acq: 29 Apr 2024 5:33 pm

Tgt Ion:130 Resp: 242061

Ion	Ratio	Lower	Upper
130	100		
128	78.0	57.8	97.8

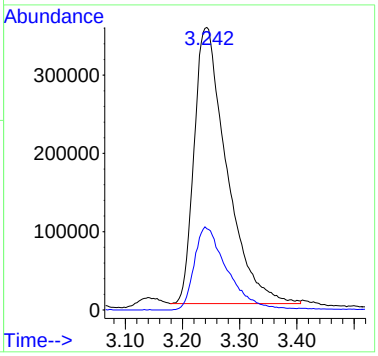


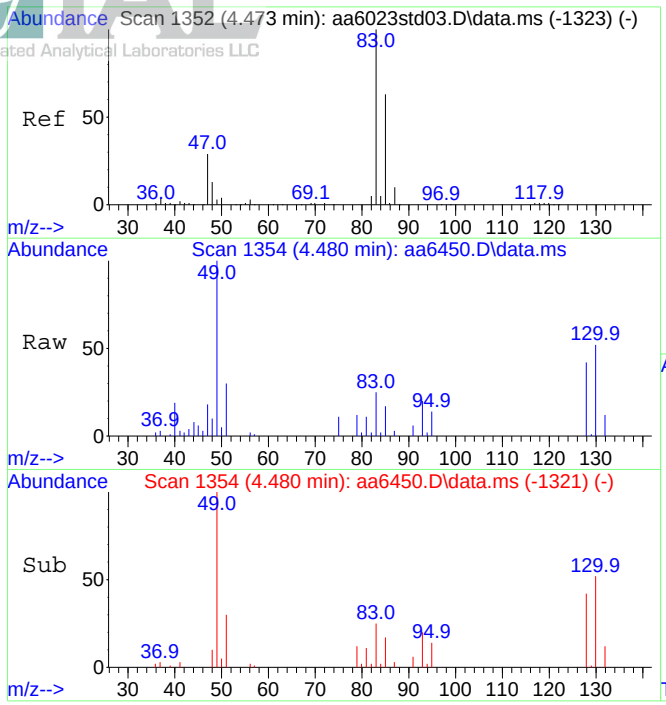


#21
Acetone
Concen: 25.81 ppbV
RT: 3.242 min Scan# 969
Delta R.T. 0.023 min
Lab File: aa6450.D
Acq: 29 Apr 2024 5:33 pm

Tgt Ion: 43 Resp: 1397478

Ion	Ratio	Lower	Upper
43	100		
58	30.4	23.8	35.8

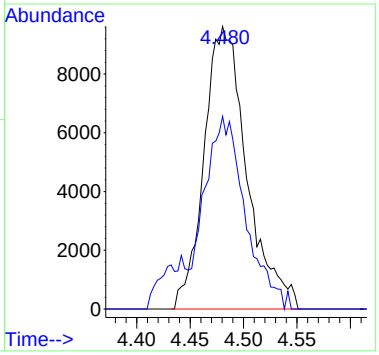


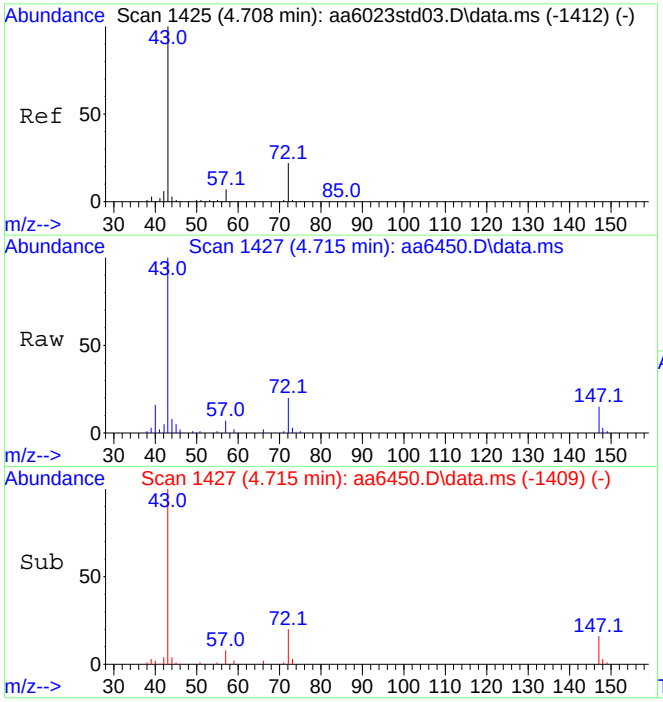


#30
Chloroform
Concen: 0.40 ppbV
RT: 4.480 min Scan# 1354
Delta R.T. 0.007 min
Lab File: aa6450.D
Acq: 29 Apr 2024 5:33 pm

Tgt Ion: 83 Resp: 26777

Ion	Ratio	Lower	Upper
83	100		
85	64.9	52.7	79.1

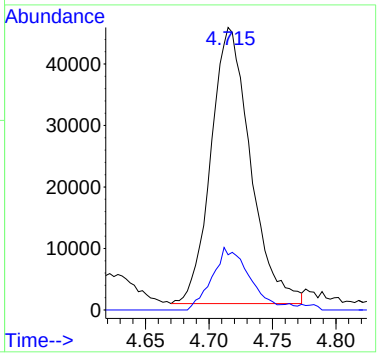


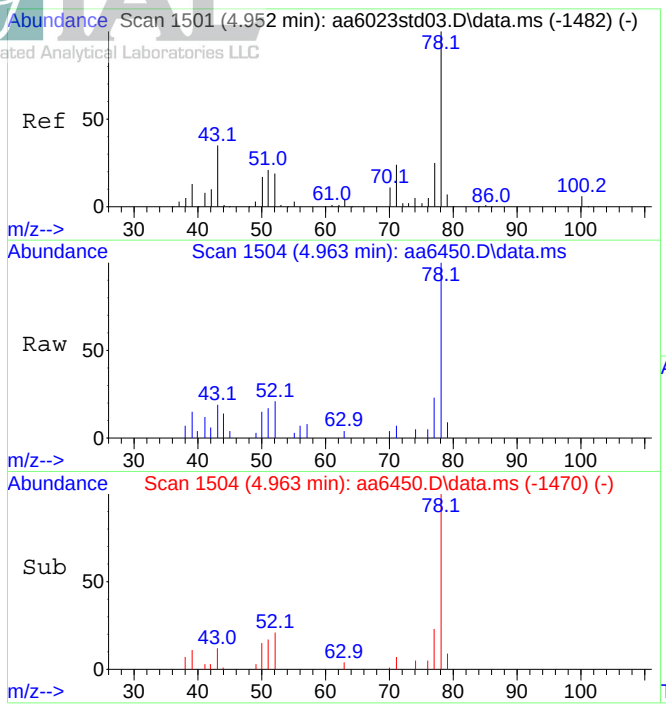


#35
Methyl ethyl ketone
Concen: 1.21 ppbV
RT: 4.715 min Scan# 1427
Delta R.T. 0.007 min
Lab File: aa6450.D
Acq: 29 Apr 2024 5:33 pm

Tgt Ion: 43 Resp: 97477

Ion	Ratio	Lower	Upper
43	100		
72	22.0	17.4	26.0

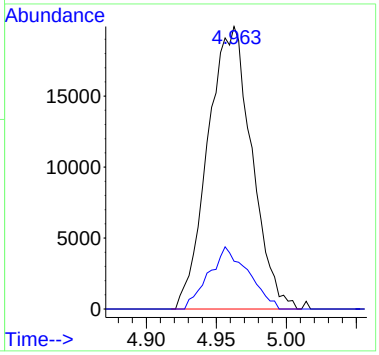


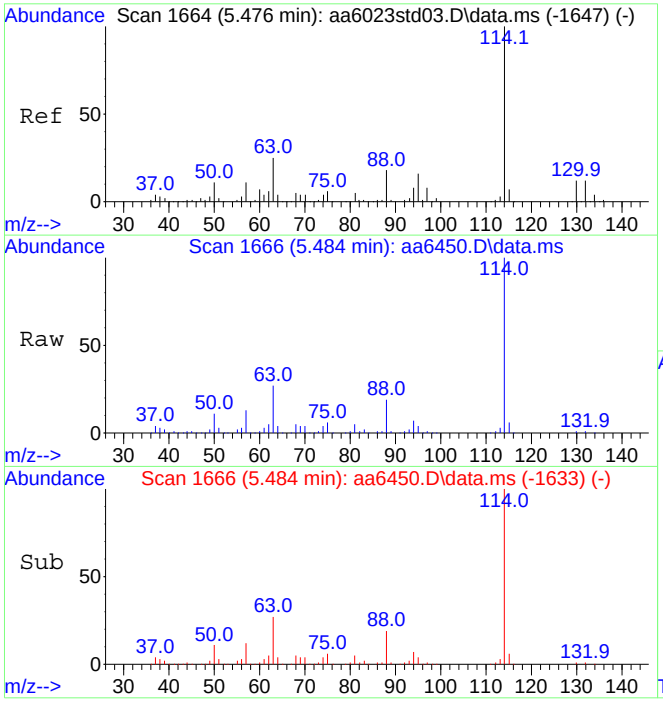


#37
Benzene
Concen: 0.43 ppbV
RT: 4.963 min Scan# 1504
Delta R.T. 0.010 min
Lab File: aa6450.D
Acq: 29 Apr 2024 5:33 pm

Tgt Ion: 78 Resp: 43379

Ion	Ratio	Lower	Upper
78	100		
51	19.8	16.1	24.1

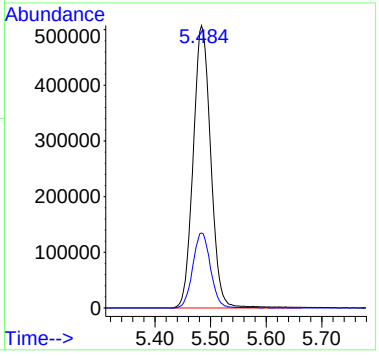


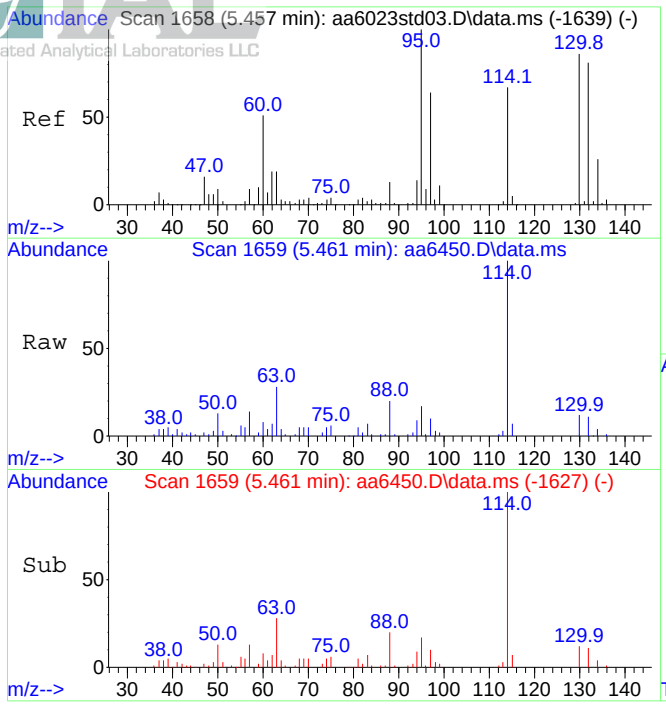


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.484 min Scan# 1666
Delta R.T. 0.008 min
Lab File: aa6450.D
Acq: 29 Apr 2024 5:33 pm

Tgt Ion:114 Resp: 1110949

Ion	Ratio	Lower	Upper
114	100		
63	26.8	6.4	46.4

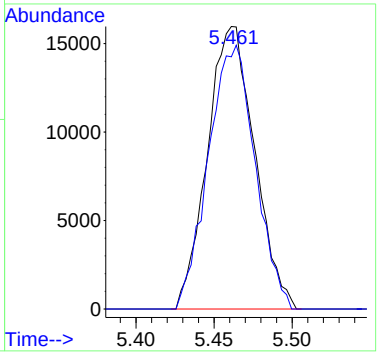


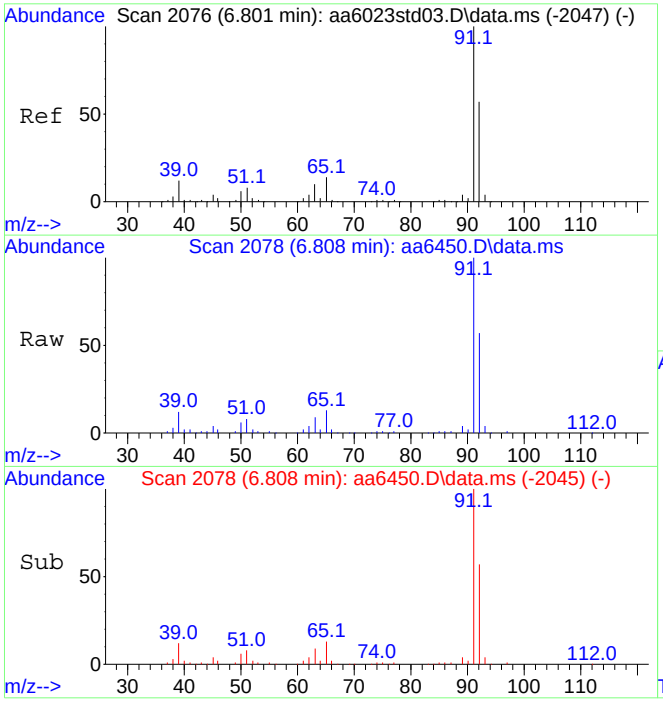


#40
Trichloroethene
Concen: 0.76 ppbV
RT: 5.461 min Scan# 1659
Delta R.T. 0.004 min
Lab File: aa6450.D
Acq: 29 Apr 2024 5:33 pm

Tgt Ion:130 Resp: 33600

Ion	Ratio	Lower	Upper
130	100		
132	92.4	77.5	116.3

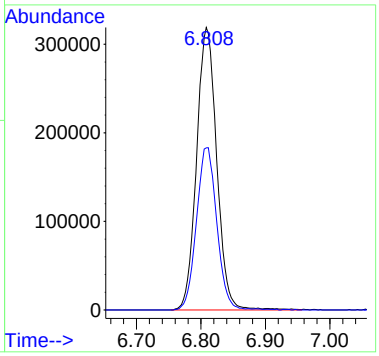


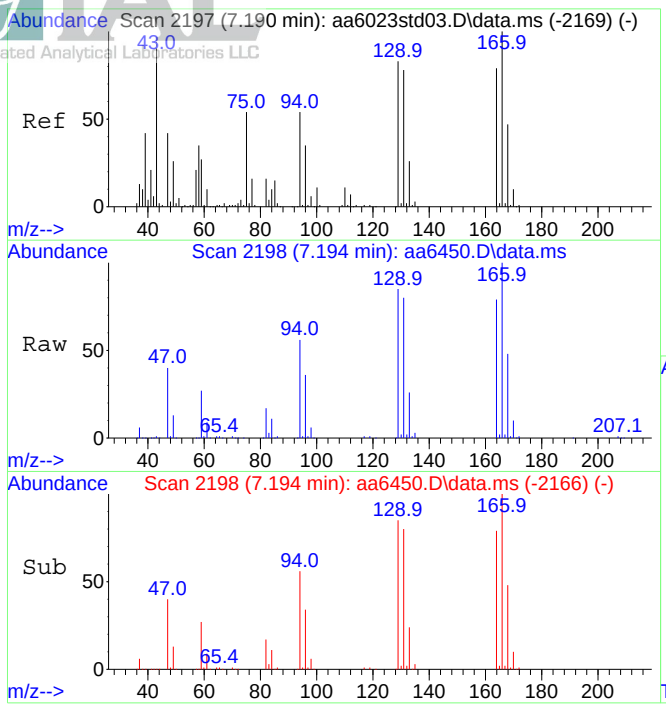


#47
Toluene
Concen: 4.83 ppbV
RT: 6.808 min Scan# 2078
Delta R.T. 0.007 min
Lab File: aa6450.D
Acq: 29 Apr 2024 5:33 pm

Tgt Ion: 91 Resp: 691618

Ion	Ratio	Lower	Upper
91	100		
92	58.1	46.3	69.5

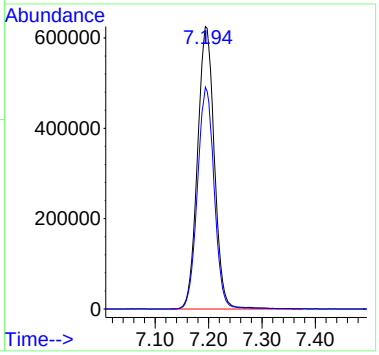


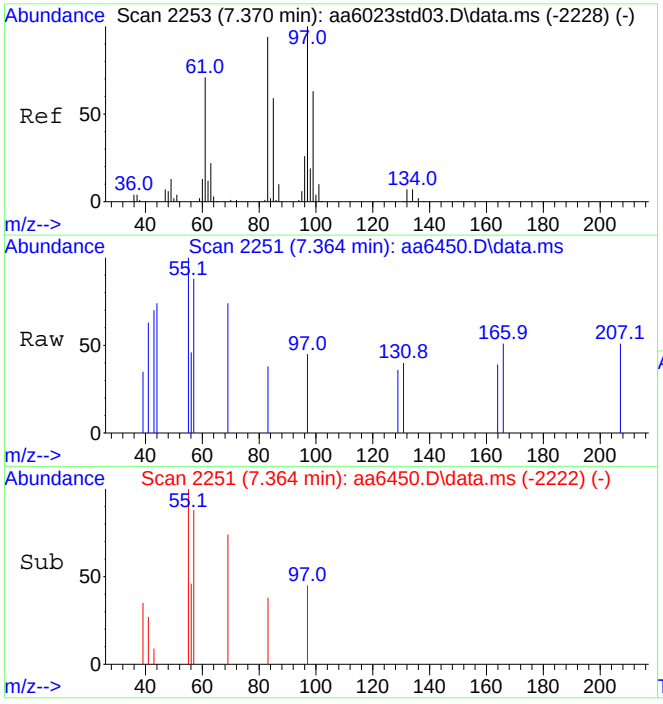


#49
Tetrachloroethene
Concen: 27.63 ppbV
RT: 7.194 min Scan# 2198
Delta R.T. 0.004 min
Lab File: aa6450.D
Acq: 29 Apr 2024 5:33 pm

Tgt Ion:166 Resp: 1365884

Ion	Ratio	Lower	Upper
166	100		
164	78.3	62.3	93.5

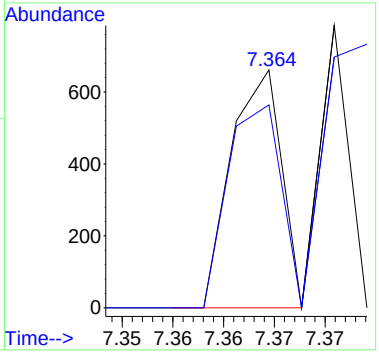


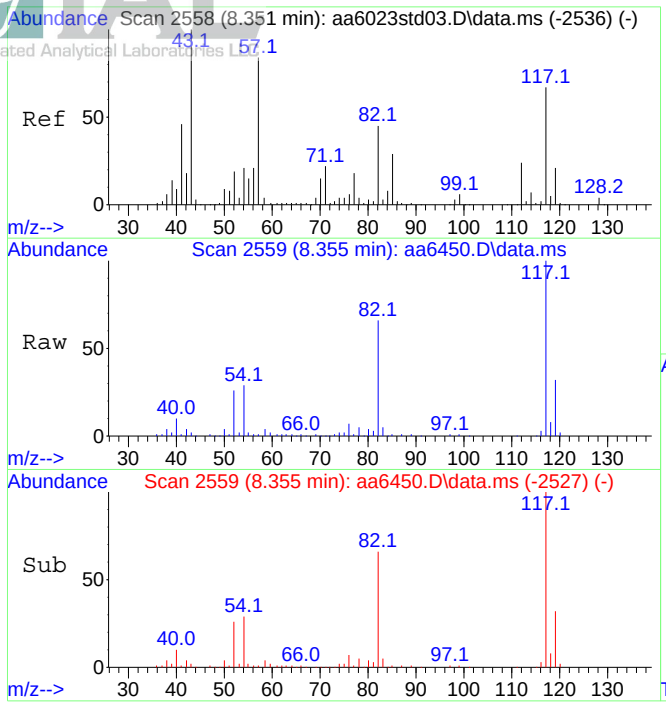


#51
1,1,2-Trichloroethane
Concen: 0.00 ppbV
RT: 7.364 min Scan# 2251
Delta R.T. -0.006 min
Lab File: aa6450.D
Acq: 29 Apr 2024 5:33 pm

Tgt Ion: 97 Resp: 228

Ion	Ratio	Lower	Upper
97	100		
83	90.4	73.9	110.9

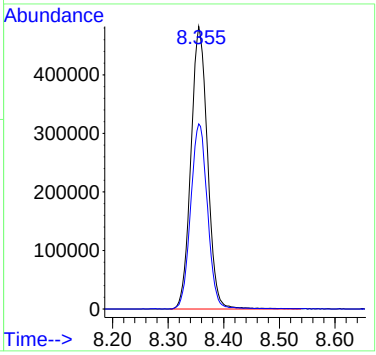


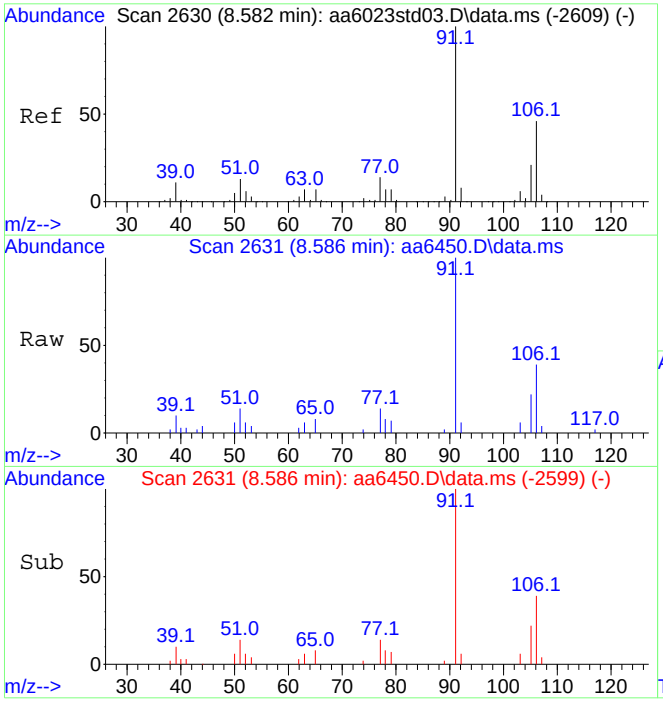


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.355 min Scan# 2559
Delta R.T. 0.004 min
Lab File: aa6450.D
Acq: 29 Apr 2024 5:33 pm

Tgt Ion:117 Resp: 996684

Ion	Ratio	Lower	Upper
117	100		
82	66.7	46.2	86.2

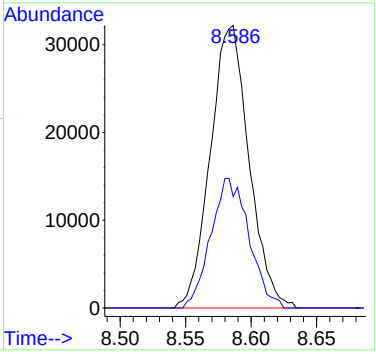


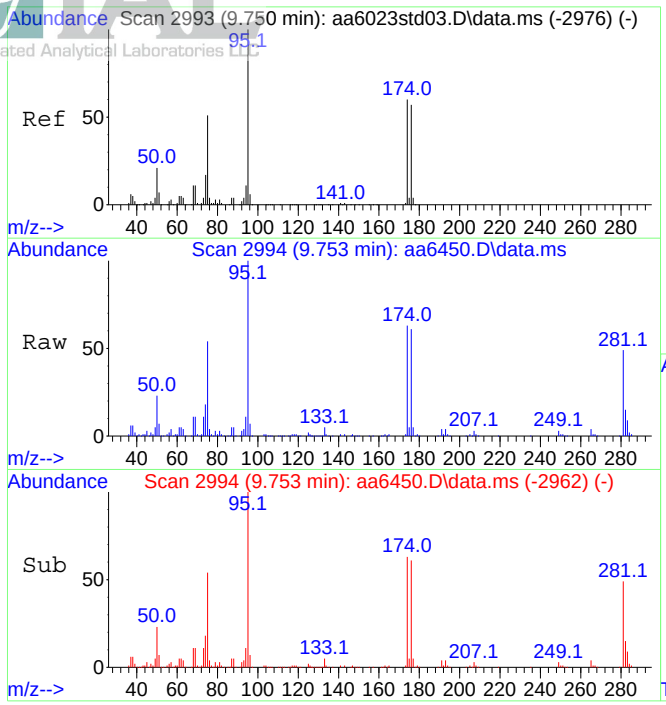


#59
Xylenes (m&p)
Concen: 0.46 ppbV
RT: 8.586 min Scan# 2631
Delta R.T. 0.004 min
Lab File: aa6450.D
Acq: 29 Apr 2024 5:33 pm

Tgt Ion: 91 Resp: 66212

Ion	Ratio	Lower	Upper
91	100		
106	45.2	36.9	55.3

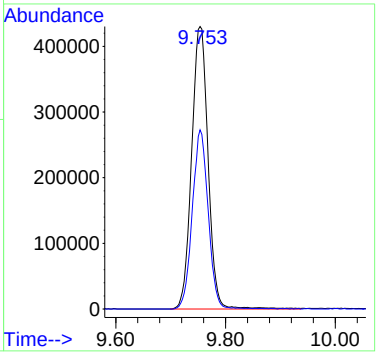




#64
Bromofluorobenzene (tune std)
Concen: 10.04 ppbV
RT: 9.753 min Scan# 2994
Delta R.T. 0.004 min
Lab File: aa6450.D
Acq: 29 Apr 2024 5:33 pm

Tgt Ion: 95 Resp: 897450

Ion	Ratio	Lower	Upper
95	100		
174	61.2	49.4	74.2



Section VII: Standards Data

Initial Calibration Data

Initial Calibration Verification Data

Continuing Calibration Data

INTEGRATED ANALYTICAL LABORATORIES, LLC

Initial Calibration Data Summary Report

Initial Calibration Curve: 3/27/2024 **Method ID:** 240326.M

Instrument: AA

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6020BFB]	03/27/2024 10:03
0.2 PPBV STD [AA6021STD05]	03/27/2024 10:38
2 PPBV STD [AA6022STD04]	03/27/2024 11:38
10 PPBV STD [AA6023STD03]	03/27/2024 12:09
20 PPBV STD [AA6024STD02]	03/27/2024 12:40
40 PPBV STD [AA6025STD01]	03/27/2024 13:24
10 PPBV ICVSS [AA6026ICVSS]	03/27/2024 13:54

	Parameter	RRF 0.2ppbv	RRF 2ppbv	RRF 10ppbv	RRF 20ppbv	RRF 40ppbv	Avg ppbv	% RSD
1)	Bromochloromethane	----------ISTD----------						
2)	Propene	1.3	1.0	1.1	1.1	1.1	1.1	7.7
3)	Dichlorodifluoromethane	2.6	2.0	2.5	2.7	2.7	2.5	12
4)	1,2-Dichlorotetrafluoroethane	4.0	3.7	3.3	3.6	3.6	3.6	7.3
5)	n-Butane	3.2	2.5	2.2	2.3	2.2	2.5	17
6)	Chloromethane	0.15	0.17	0.15	0.19	0.16	0.16	9.6
7)	Vinyl chloride	1.2	0.98	1.3	1.4	1.4	1.2	13
8)	1,3-Butadiene	1.8	1.5	1.3	1.3	1.3	1.4	15
9)	Bromomethane	0.77	0.72	0.97	1.0	1.0	0.90	16
10)	Chloroethane	0.72	0.53	0.70	0.75	0.74	0.69	13
11)	Vinyl bromide	0.91	0.84	1.1	1.2	1.2	1.0	15
12)	Trichlorofluoromethane	3.4	2.8	2.7	2.9	2.9	2.9	9.9
13)	Ethanol	0.50	0.43	0.42	0.45	0.50	0.46	8.1
14)	1,1-Dichloroethene	2.3	1.7	2.3	2.5	2.5	2.3	15
15)	Carbon disulfide	3.5	2.7	3.8	4.1	4.1	3.6	16
16)	1,1,2-Trichloro-1,2,2-trifluoroethane	3.4	3.5	2.5	2.6	2.6	2.9	17
17)	Acrolein	0.67	0.37	0.53	0.57	0.59	0.55	20
18)	Allyl Chloride	0.56	0.42	0.58	0.64	0.64	0.57	15
19)	Isopropanol	3.4	2.2	2.8	3.1	3.1	2.9	15
20)	Methylene chloride	1.9	1.2	1.6	1.7	1.7	1.6	18
21)	Acetone	2.9	1.5	2.2	2.3	2.3	2.2	24
22)	1,2-Dichloroethene (trans)	2.1	1.4	2.0	2.2	2.3	2.0	17
23)	n-Pentane	3.3	2.8	2.5	2.6	2.8	2.8	10
24)	n-Hexane	5.4	3.8	3.5	3.6	3.8	4.0	19
25)	Methyl tert-butyl ether	5.3	5.2	4.0	4.0	4.1	4.5	14
26)	Tert-butyl alcohol	3.7	3.4	2.8	3.0	3.1	3.2	10
27)	1,1-Dichloroethane	3.3	2.1	2.4	2.7	2.8	2.7	17
28)	1,2-Dichloroethene (cis)	2.1	1.5	1.8	2.0	2.1	1.9	14
29)	Cyclohexane	3.2	3.0	2.4	2.5	2.5	2.7	14
30)	Chloroform	3.1	2.3	2.6	2.9	3.0	2.8	12
31)	Ethyl acetate	0.67	0.52	0.52	0.56	0.61	0.58	11
32)	Carbon tetrachloride	3.2	3.1	2.6	2.7	2.8	2.9	9.7
33)	Tetrahydrofuran	2.5	1.8	1.9	2.1	2.2	2.1	12
34)	1,1,1-Trichloroethane	3.0	2.9	2.4	2.5	2.6	2.7	8.9
35)	Methyl ethyl ketone	4.1	2.7	3.0	3.3	3.6	3.3	15
36)	n-Heptane	4.4	3.7	3.0	3.1	3.2	3.5	17
37)	Benzene	4.9	3.8	3.7	4.1	4.4	4.2	12
38)	1,2-Dichloroethane	2.1	1.6	1.8	1.9	2.1	1.9	10

***% RSD (Relative Standard Deviation) must be within 30%**

****An exception is made for 2 compounds that must be within 40%**

RRF - Relative Response Factor

INTEGRATED ANALYTICAL LABORATORIES, LLC

Initial Calibration Data Summary Report

Initial Calibration Curve: 3/27/2024 **Method ID:** 240326.M

Instrument: AA

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6020BFB]	03/27/2024 10:03
0.2 PPBV STD [AA6021STD05]	03/27/2024 10:38
2 PPBV STD [AA6022STD04]	03/27/2024 11:38
10 PPBV STD [AA6023STD03]	03/27/2024 12:09
20 PPBV STD [AA6024STD02]	03/27/2024 12:40
40 PPBV STD [AA6025STD01]	03/27/2024 13:24
10 PPBV ICVSS [AA6026ICVSS]	03/27/2024 13:54

	Parameter	RRF 0.2ppbv	RRF 2ppbv	RRF 10ppbv	RRF 20ppbv	RRF 40ppbv	Avg ppbv	% RSD
39)	1,4-Difluorobenzene	----------ISTD----------						
40)	Trichloroethene	0.45	0.37	0.38	0.40	0.40	0.40	8.0
41)	2,2,4-Trimethylpentane	2.0	2.0	2.0	1.9	1.8	1.9	3.7
42)	1,2-Dichloropropane	0.54	0.43	0.41	0.41	0.40	0.44	13
43)	Bromodichloromethane	0.78	0.66	0.67	0.69	0.69	0.70	6.7
44)	Methyl methacrylate	0.73	0.63	0.58	0.59	0.58	0.62	11
45)	1,4-Dioxane	0.27	0.23	0.22	0.22	0.22	0.23	9.0
46)	1,3-Dichloropropene (cis)	0.72	0.60	0.59	0.61	0.58	0.62	9.0
47)	Toluene	1.5	1.4	1.2	1.2	1.1	1.3	11
48)	Methyl isobutyl ketone	1.3	1.3	1.1	1.0	0.96	1.2	15
49)	Tetrachloroethene	0.51	0.48	0.43	0.42	0.39	0.45	11
50)	1,3-Dichloropropene (trans)	0.62	0.58	0.58	0.59	0.56	0.59	3.8
51)	1,1,2-Trichloroethane	0.48	0.44	0.41	0.41	0.39	0.43	8.7
52)	Dibromochloromethane	0.71	0.67	0.63	0.64	0.61	0.65	5.5
53)	1,2-Dibromoethane	0.65	0.62	0.59	0.60	0.57	0.61	4.9
54)	Methyl n-butyl ketone	1.2	1.1	1.00	0.97	0.91	1.0	10
55)	d-5 Chlorbenzene	----------ISTD----------						
56)	n-Nonane	1.5	1.6	1.4	1.3	1.2	1.4	11
57)	Chlorobenzene	1.0	0.95	0.95	0.97	0.91	0.96	4.9
58)	Ethylbenzene	2.1	2.0	1.9	1.8	1.7	1.9	8.3
59)	Xylenes (m&p)	1.6	1.5	1.4	1.4	1.3	1.4	7.4
60)	Xylenes (o)	1.6	1.7	1.5	1.5	1.4	1.5	6.9
61)	Styrene	0.97	0.99	1.0	1.0	0.96	0.99	2.7
62)	Bromoform	0.61	0.58	0.63	0.64	0.61	0.61	3.9
63)	Cumene	2.0	2.2	1.9	1.9	1.7	1.9	7.9
65)	n-Propyl benzene	2.8	2.8	2.6	2.5	2.4	2.6	7.1
66)	1,1,2,2-Tetrachloroethane	1.2	1.2	1.1	1.1	1.0	1.1	5.9
67)	4-Ethyltoluene	2.2	2.2	2.1	2.0	1.9	2.1	5.5
68)	2-Chlorotoluene	1.9	1.9	1.7	1.7	1.6	1.8	6.3
69)	1,3,5-Trimethylbenzene	1.7	1.9	1.7	1.7	1.6	1.7	6.6
70)	1,2,4-Trimethylbenzene	1.6	1.8	1.7	1.7	1.6	1.7	5.5
71)	1,3-Dichlorobenzene	1.00	0.87	0.93	0.94	0.90	0.93	5.1
72)	1,4-Dichlorobenzene	0.96	0.86	0.96	0.98	0.94	0.94	4.8
73)	Benzyl chloride	1.4	1.4	1.7	1.7	1.7	1.6	9.3
74)	1,2-Dichlorobenzene	0.92	0.92	0.94	0.94	0.89	0.92	2.0
75)	1,3-Hexachlorobutadiene	0.52	0.51	0.52	0.51	0.44	0.50	6.6
76)	1,2,4-Trichlorobenzene	0.74	0.65	0.70	0.70	0.63	0.68	6.4
77)	Naphthalene	2.0	1.8	1.9	2.0	1.9	1.9	5.0

***% RSD (Relative Standard Deviation) must be within 30%**

****An exception is made for 2 compounds that must be within 40%**

RRF - Relative Response Factor

Method Path : C:\msdchem\1\METHODS\
Method File : 240326.M
Title : TO-15 on the Agilent 7890A / 5975C
Last Update : Wed Mar 27 13:46:33 2024
Response Via : Initial Calibration

Calibration Files
0.2 =aa6021std05.D 2 =aa6022std04.D 10 =aa6023std03.D 20 =aa6024std02.D 40 =aa6025std01.D

		Compound	0.2	2	10	20	40	Avg	%RSD
1)	I	Bromochloromethane...	----------ISTD----------						
2)	T	Propene	1.252	1.013	1.080	1.130	1.130	1.121	7.79
3)	T	Dichlorodifluoro...	2.622	1.990	2.547	2.698	2.711	2.514	11.93
4)	T	1,2-Dichlorotetr...	4.015	3.662	3.271	3.551	3.643	3.629	7.35
5)	T	n-Butane	3.184	2.459	2.207	2.309	2.216	2.475	16.53
6)	T	Chloromethane	0.145	0.169	0.154	0.185	0.158	0.162	9.65
7)	T	Vinyl chloride	1.221	0.983	1.293	1.364	1.365	1.245	12.70
8)	T	1,3-Butadiene	1.758	1.459	1.271	1.314	1.275	1.416	14.55
9)	T	Bromomethane	0.772	0.722	0.968	1.013	1.015	0.898	15.62
10)	T	Chloroethane	0.716	0.532	0.699	0.745	0.739	0.686	12.85
11)	T	Vinyl bromide	0.911	0.840	1.079	1.154	1.187	1.034	14.73
12)	T	Trichlorofluorom...	3.433	2.772	2.685	2.887	2.901	2.936	9.93
13)	T	Ethanol	0.498	0.426	0.419	0.453	0.497	0.459	8.18
14)	T	1,1-Dichloroethene	2.291	1.705	2.342	2.533	2.513	2.277	14.78
15)	T	Carbon disulfide	3.518	2.658	3.794	4.050	4.057	3.615	16.02
16)	T	1,1,2-Trichloro-...	3.410	3.459	2.503	2.577	2.569	2.904	16.73
17)	T	Acrolein	0.668	0.372	0.530	0.570	0.589	0.546	20.09
18)	T	Allyl chloride	0.563	0.422	0.582	0.635	0.636	0.567	15.39
19)	T	Isopropanol	3.384	2.202	2.811	3.063	3.061	2.904	15.22
20)	T	Methylene chloride	1.943	1.164	1.584	1.690	1.720	1.620	17.68
21)	T	Acetone	2.946	1.467	2.170	2.286	2.316	2.237	23.54
22)	T	trans-1,2-Dichlo...	2.112	1.393	2.002	2.202	2.251	1.992	17.48
23)	T	n-Pentane	3.273	2.844	2.537	2.629	2.759	2.808	10.16
24)	T	n-Hexane	5.403	3.838	3.475	3.618	3.794	4.026	19.47
25)	T	Methyl tert-buty...	5.264	5.168	4.023	4.047	4.101	4.521	14.08
26)	T	Tert-butyl alcohol	3.653	3.406	2.817	3.001	3.090	3.193	10.45
27)	T	1,1-Dichloroethane	3.349	2.099	2.435	2.689	2.799	2.674	17.33
28)	T	cis-1,2-Dichloro...	2.131	1.474	1.849	2.033	2.106	1.918	14.18
29)	t	Cyclohexane	3.243	2.981	2.404	2.460	2.516	2.721	13.63
30)	T	Chloroform	3.086	2.280	2.624	2.915	3.034	2.788	12.03
31)	T	Ethyl acetate	0.668	0.516	0.524	0.561	0.608	0.576	10.96
32)	T	Carbon tetrachlo...	3.224	3.059	2.574	2.658	2.752	2.853	9.70
33)	T	Tetrahydrofuran	2.460	1.821	1.904	2.086	2.207	2.095	12.11
34)	T	1,1,1-Trichloroe...	2.982	2.910	2.431	2.528	2.610	2.692	8.98
35)	T	Methyl ethyl ketone	4.060	2.736	2.996	3.330	3.586	3.342	15.42
36)	T	n-Heptane	4.419	3.713	2.991	3.106	3.226	3.491	16.82
37)	T	Benzene	4.942	3.840	3.683	4.101	4.411	4.195	11.93
38)	T	1,2-Dichloroethane	2.067	1.630	1.779	1.945	2.096	1.903	10.35
39)	I	1,4-Difluorobenzen...	----------ISTD----------						
40)	T	Trichloroethene	0.451	0.365	0.384	0.399	0.397	0.399	8.05
41)	T	2,2,4-Trimethylp...	1.977	2.012	1.961	1.924	1.822	1.939	3.74
42)	T	1,2-Dichloropropane	0.536	0.430	0.414	0.407	0.399	0.437	12.89
43)	T	Bromodichloromet...	0.776	0.657	0.667	0.694	0.685	0.696	6.78
44)	T	Methyl methacrylate	0.731	0.627	0.577	0.588	0.577	0.620	10.56
45)	T	1,4-Dioxane	0.271	0.233	0.223	0.224	0.220	0.234	9.04
46)	T	cis-1,3-Dichloro...	0.716	0.595	0.590	0.608	0.578	0.617	9.07
47)	T	Toluene	1.489	1.367	1.229	1.211	1.147	1.289	10.71
48)	T	Methyl isobutyl ...	1.334	1.338	1.094	1.036	0.961	1.152	15.08
49)	T	Tetrachloroethene	0.506	0.480	0.427	0.421	0.391	0.445	10.51
50)	T	trans-1,3-Dichlo...	0.623	0.577	0.583	0.592	0.562	0.587	3.88
51)	T	1,1,2-Trichloroe...	0.484	0.442	0.405	0.408	0.391	0.426	8.73
52)	T	Dibromochloromet...	0.705	0.671	0.632	0.643	0.613	0.653	5.51
53)	T	1,2-Dibromoethane	0.647	0.620	0.592	0.597	0.569	0.605	4.91
54)	T	Methyl n-butyl k...	1.172	1.115	0.997	0.967	0.914	1.033	10.37
55)	I	d-5 Chlorobenzene ...	----------ISTD----------						
56)	T	n-Nonane	1.507	1.567	1.359	1.305	1.199	1.387	10.81
57)	T	Chlorobenzene	1.039	0.954	0.950	0.969	0.908	0.964	4.95
58)	T	Ethylbenzene	2.135	2.027	1.859	1.843	1.731	1.919	8.37
59)	T	Xylenes (m&p)	1.559	1.530	1.420	1.402	1.293	1.441	7.43
60)	T	Xylene (o)	1.618	1.654	1.498	1.478	1.396	1.529	6.92

Method Path : C:\msdchem\1\METHODS\
Method File : 240326.M

61)	T	Styrene	0.970	0.987	1.015	1.024	0.962	0.991	2.76
62)	T	Bromoform	0.608	0.579	0.626	0.643	0.612	0.614	3.90
63)	T	Cumene	1.979	2.155	1.891	1.863	1.746	1.927	7.91
64)	S	Bromofluorobenze...	0.867	0.905	0.904	0.903	0.905	0.897	1.85
65)	T	n-Propyl benzene	2.778	2.810	2.573	2.530	2.357	2.610	7.18
66)	T	1,1,2,2-Tetrachl...	1.207	1.197	1.108	1.107	1.048	1.133	5.96
67)	T	4-Ethyltoluene	2.151	2.205	2.069	2.045	1.904	2.075	5.54
68)	T	2-Chlorotoluene	1.874	1.886	1.737	1.715	1.623	1.767	6.32
69)	T	1,3,5-Trimethylb...	1.699	1.891	1.699	1.679	1.576	1.709	6.67
70)	T	1,2,4-Trimethylb...	1.626	1.834	1.716	1.699	1.594	1.694	5.51
71)	T	1,3-Dichlorobenzene	0.999	0.871	0.930	0.940	0.900	0.928	5.19
72)	T	1,4-Dichlorobenzene	0.956	0.863	0.961	0.981	0.944	0.941	4.83
73)	T	Benzyl chloride	1.425	1.403	1.657	1.708	1.678	1.574	9.37
74)	T	1,2-Dichlorobenzene	0.916	0.919	0.940	0.936	0.893	0.921	2.05
75)	T	1,3-Hexachlorobu...	0.524	0.508	0.518	0.508	0.442	0.500	6.62
76)	T	1,2,4-Trichlorob...	0.739	0.652	0.701	0.696	0.626	0.683	6.46
77)	T	Naphthalene	1.996	1.751	1.930	1.950	1.855	1.897	5.05

(#) = Out of Range

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6021std05.D
Acq On : 27 Mar 2024 10:38 am
Operator : jjw
Sample : 0.2 ppbv std
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 27 12:33:10 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 12:31:35 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.409	130	360749	10.00	ppbV		0.000
39) 1,4-Difluorobenzene (IS)	5.480	114	1478694	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.351	117	1394585	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.753	95	1209742	9.59	ppbV		0.000
Target Compounds							Qvalue
2) Propene	1.457	41	9844	0.26	ppbV		93
3) Dichlorodifluoromethane	1.516	85	20056	0.25	ppbV		92
4) 1,2-Dichlorotetrafluor...	1.626	85	28391	0.23	ppbV		96
5) n-Butane	1.708	43	25040	0.30	ppbV	#	81
6) Chloromethane	1.780	52	1170	0.20	ppbV	#	65
7) Vinyl chloride	1.773	62	9514	0.23	ppbV		89
8) 1,3-Butadiene	1.777	39	13569	0.28	ppbV	#	79
9) Bromomethane	2.078	94	5569	0.18	ppbV		95
10) Chloroethane	2.181	64	5479	0.25	ppbV	#	56
11) Vinyl bromide	2.287	106	6641	0.19	ppbV		93
12) Trichlorofluoromethane	2.300	101	27245	0.28	ppbV		95
13) Ethanol	2.692	45	3734	0.24	ppbV		83
14) 1,1-Dichloroethene	2.724	61	17194	0.24	ppbV		96
15) Carbon disulfide	2.753	76	27156	0.23	ppbV		99
16) 1,1,2-Trichloro-1,2,2-...	2.769	101	26818	0.25	ppbV		95
17) Acrolein	2.985	56	4823	0.30	ppbV		93
18) Allyl chloride	3.113	76	4386	0.24	ppbV		100
19) Isopropanol	3.116	45	21727	0.24	ppbV		99
20) Methylene chloride	3.210	49	15138	0.31	ppbV		84
21) Acetone	3.219	43	22954	0.35	ppbV	#	86
22) trans-1,2-Dichloroethene	3.332	61	16914	0.28	ppbV		96
23) n-Pentane	3.422	43	25504	0.26	ppbV		89
24) n-Hexane	3.415	57	43272	0.33	ppbV		96
25) Methyl tert-butyl ether	3.419	73	42540	0.26	ppbV		81
26) Tert-butyl alcohol	3.480	59	30311	0.27	ppbV		100
27) 1,1-Dichloroethane	3.817	63	25858	0.32	ppbV		92
28) cis-1,2-Dichloroethene	4.245	61	16758	0.28	ppbV		97
29) Cyclohexane	4.428	56	26203	0.27	ppbV		95
30) Chloroform	4.473	83	24049	0.27	ppbV		98
31) Ethyl acetate	4.566	45	5204	0.28	ppbV		100
32) Carbon tetrachloride	4.592	117	25818	0.25	ppbV		97
33) Tetrahydrofuran	4.611	42	19701	0.29	ppbV		95
34) 1,1,1-Trichloroethane	4.644	97	23455	0.24	ppbV		97
35) Methyl ethyl ketone	4.708	43	32226	0.31	ppbV		95
36) n-Heptane	4.936	43	35392	0.29	ppbV		93
37) Benzene	4.955	78	38510	0.28	ppbV		97
38) 1,2-Dichloroethane	5.123	62	16254	0.26	ppbV		98
40) Trichloroethene	5.457	130	13335	0.24	ppbV		98
41) 2,2,4-Trimethylpentane	4.862	57	63722	0.22	ppbV		99
42) 1,2-Dichloropropane	5.914	63	17584	0.28	ppbV		97
43) Bromodichloromethane	5.972	83	26403	0.27	ppbV		99
44) Methyl methacrylate	6.116	41	23779	0.27	ppbV		95
45) 1,4-Dioxane	6.152	88	9370	0.28	ppbV		94
46) cis-1,3-Dichloropropene	6.560	75	23497	0.27	ppbV		99
47) Toluene	6.801	91	47573	0.25	ppbV		99
48) Methyl isobutyl ketone	7.168	43	42994	0.24	ppbV		95
49) Tetrachloroethene	7.190	166	16758	0.25	ppbV		98
50) trans-1,3-Dichloropropene	7.206	75	20460	0.24	ppbV		84
51) 1,1,2-Trichloroethane	7.367	97	15444	0.25	ppbV		98

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6021std05.D
Acq On : 27 Mar 2024 10:38 am
Operator : jjw
Sample : 0.2 ppbv std
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

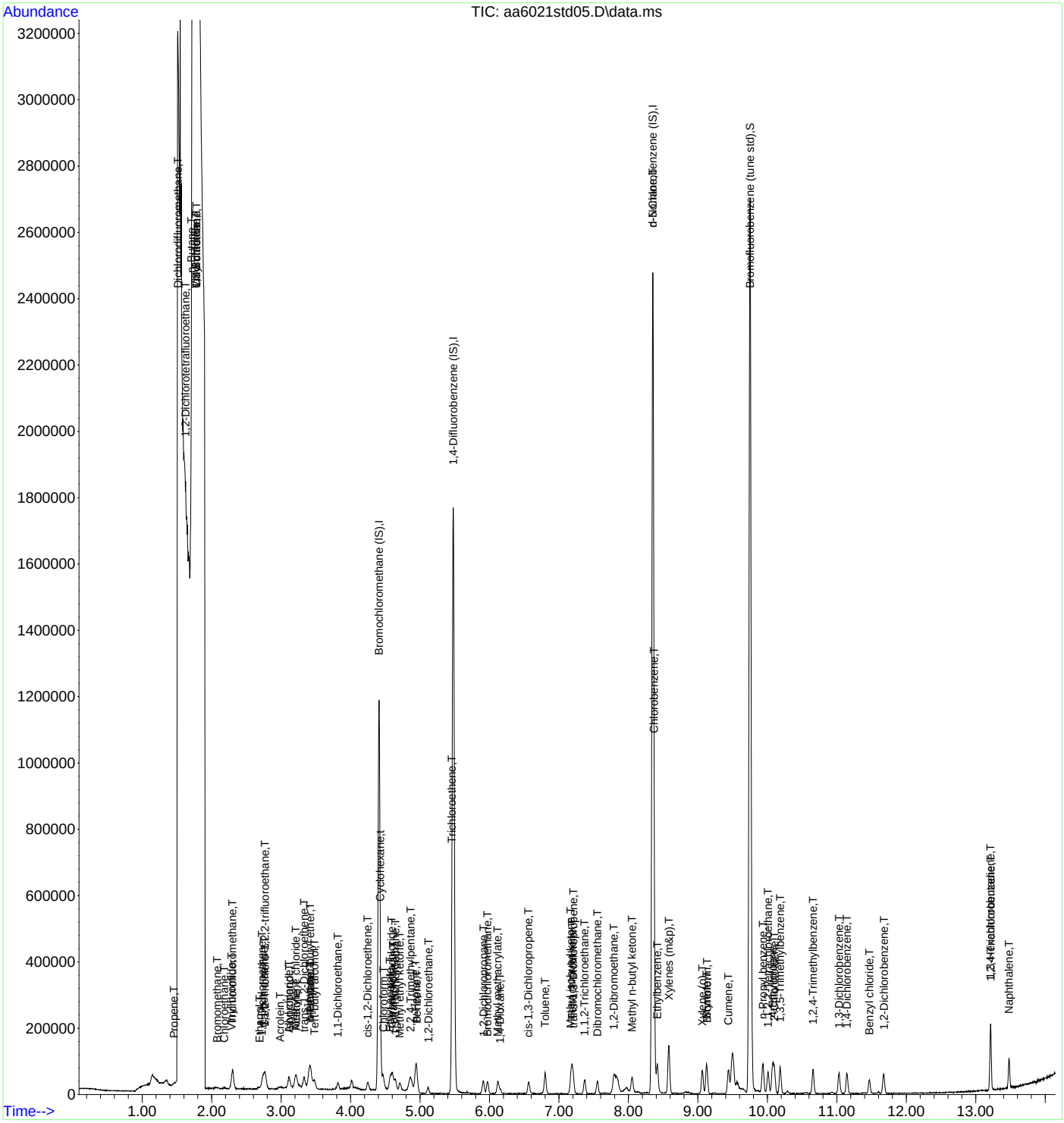
Quant Time: Mar 27 12:33:10 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 12:31:35 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
52) Dibromochloromethane	7.553	129	23345	0.24	ppbV		98
53) 1,2-Dibromoethane	7.788	107	20663	0.23	ppbV		97
54) Methyl n-butyl ketone	8.052	43	39178	0.25	ppbV		90
56) n-Nonane	8.351	43	46667	0.23	ppbV		97
57) Chlorobenzene	8.370	112	32164	0.24	ppbV	#	57
58) Ethylbenzene	8.415	91	66107	0.24	ppbV		99
59) Xylenes (m&p)	8.582	91	96984	0.47	ppbV		99
60) Xylene (o)	9.065	91	49641	0.23	ppbV		100
61) Styrene	9.126	104	30559	0.22	ppbV		100
62) Bromoform	9.132	173	19161	0.23	ppbV		98
63) Cumene	9.438	105	59073	0.21	ppbV		99
65) n-Propyl benzene	9.936	91	83690	0.22	ppbV		98
66) 1,1,2,2-Tetrachloroethane	10.010	83	38390	0.24	ppbV		99
67) 4-Ethyltoluene	10.077	105	64788	0.22	ppbV		99
68) 2-Chlorotoluene	10.100	91	56977	0.23	ppbV		99
69) 1,3,5-Trimethylbenzene	10.184	105	51641	0.21	ppbV		99
70) 1,2,4-Trimethylbenzene	10.656	105	48989	0.20	ppbV		99
71) 1,3-Dichlorobenzene	11.032	146	30940	0.25	ppbV		98
72) 1,4-Dichlorobenzene	11.145	146	28519	0.22	ppbV		97
73) Benzyl chloride	11.470	91	39743	0.19	ppbV		98
74) 1,2-Dichlorobenzene	11.679	146	27332	0.21	ppbV		99
75) 1,3-Hexachlorobutadiene	13.212	225	16221	0.23	ppbV		98
76) 1,2,4-Trichlorobenzene	13.216	180	22681	0.24	ppbV		99
77) Naphthalene	13.479	128	55674	0.22	ppbV		98

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

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6021std05.D
Acq On : 27 Mar 2024 10:38 am
Operator : jjw
Sample : 0.2 ppbv std
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 27 12:33:10 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 12:31:35 2024
Response via : Initial Calibration



Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6022std04.D
Acq On : 27 Mar 2024 11:38 am
Operator : jjw
Sample : 2 ppbv std
Misc : EB0103704
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 27 12:30:51 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 12:30:41 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.412	130	309693	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.476	114	1229116	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.351	117	1260202	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.749	95	1140629	10.01	ppbV	0.000
Target Compounds						Qvalue
2) Propene	1.460	41	68409	2.05	ppbV	99
3) Dichlorodifluoromethane	1.499	85	130668	1.66	ppbV	99
4) 1,2-Dichlorotetrafluor...	1.622	85	222308	2.19	ppbV	98
5) n-Butane	1.705	43	166012	2.43	ppbV	95
6) Chloromethane	1.773	52	11699	2.46	ppbV	86
7) Vinyl chloride	1.763	62	65775	1.64	ppbV	97
8) 1,3-Butadiene	1.773	39	96684	2.46	ppbV	91
9) Bromomethane	2.068	94	44715	1.49	ppbV	97
10) Chloroethane	2.177	64	34925	1.61	ppbV	100
11) Vinyl bromide	2.284	106	52531	1.57	ppbV	100
12) Trichlorofluoromethane	2.300	101	188851	2.27	ppbV	98
13) Ethanol	2.663	45	27472	2.12	ppbV	96
14) 1,1-Dichloroethene	2.724	61	109819	1.51	ppbV	98
15) Carbon disulfide	2.747	76	176154	1.50	ppbV	96
16) 1,1,2-Trichloro-1,2,2-...	2.766	101	233557	3.01	ppbV	98
17) Acrolein	2.981	56	23016	1.40	ppbV	99
18) Allyl chloride	3.113	76	28239	1.57	ppbV	100
19) Isopropanol	3.116	45	121377	1.39	ppbV	100
20) Methylene chloride	3.203	49	77858	1.59	ppbV	98
21) Acetone	3.219	43	98104	1.46	ppbV	100
22) trans-1,2-Dichloroethene	3.325	61	95745	1.54	ppbV	98
23) n-Pentane	3.412	43	190230	2.42	ppbV	100
24) n-Hexane	3.412	57	263847	2.45	ppbV	98
25) Methyl tert-butyl ether	3.422	73	358478	2.88	ppbV	88
26) Tert-butyl alcohol	3.476	59	242573	2.78	ppbV	100
27) 1,1-Dichloroethane	3.814	63	130027	1.72	ppbV	99
28) cis-1,2-Dichloroethene	4.245	61	99510	1.74	ppbV	99
29) Cyclohexane	4.425	56	206806	2.78	ppbV	99
30) Chloroform	4.473	83	152535	1.88	ppbV	95
31) Ethyl acetate	4.563	45	34541	2.13	ppbV	99
32) Carbon tetrachloride	4.592	117	210339	2.64	ppbV	100
33) Tetrahydrofuran	4.599	42	125187	2.12	ppbV	97
34) 1,1,1-Trichloroethane	4.637	97	196486	2.61	ppbV	100
35) Methyl ethyl ketone	4.708	43	186439	2.01	ppbV	99
36) n-Heptane	4.933	43	255248	2.76	ppbV	98
37) Benzene	4.949	78	256885	2.25	ppbV	99
38) 1,2-Dichloroethane	5.113	62	110076	2.00	ppbV	98
40) Trichloroethene	5.457	130	89614	1.90	ppbV	100
41) 2,2,4-Trimethylpentane	4.859	57	539000	2.24	ppbV	99
42) 1,2-Dichloropropane	5.910	63	117244	2.30	ppbV	96
43) Bromodichloromethane	5.972	83	185807	2.27	ppbV	99
44) Methyl methacrylate	6.116	41	169591	2.39	ppbV	97
45) 1,4-Dioxane	6.148	88	67128	2.45	ppbV	98
46) cis-1,3-Dichloropropene	6.563	75	162406	2.24	ppbV	99
47) Toluene	6.801	91	362835	2.40	ppbV	98
48) Methyl isobutyl ketone	7.171	43	358448	2.67	ppbV	99
49) Tetrachloroethene	7.190	166	132136	2.51	ppbV	100
50) trans-1,3-Dichloropropene	7.209	75	157410	2.20	ppbV	90
51) 1,1,2-Trichloroethane	7.367	97	117291	2.36	ppbV	100

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6022std04.D
Acq On : 27 Mar 2024 11:38 am
Operator : jjw
Sample : 2 ppbv std
Misc : EB0103704
ALS Vial : 4 Sample Multiplier: 1

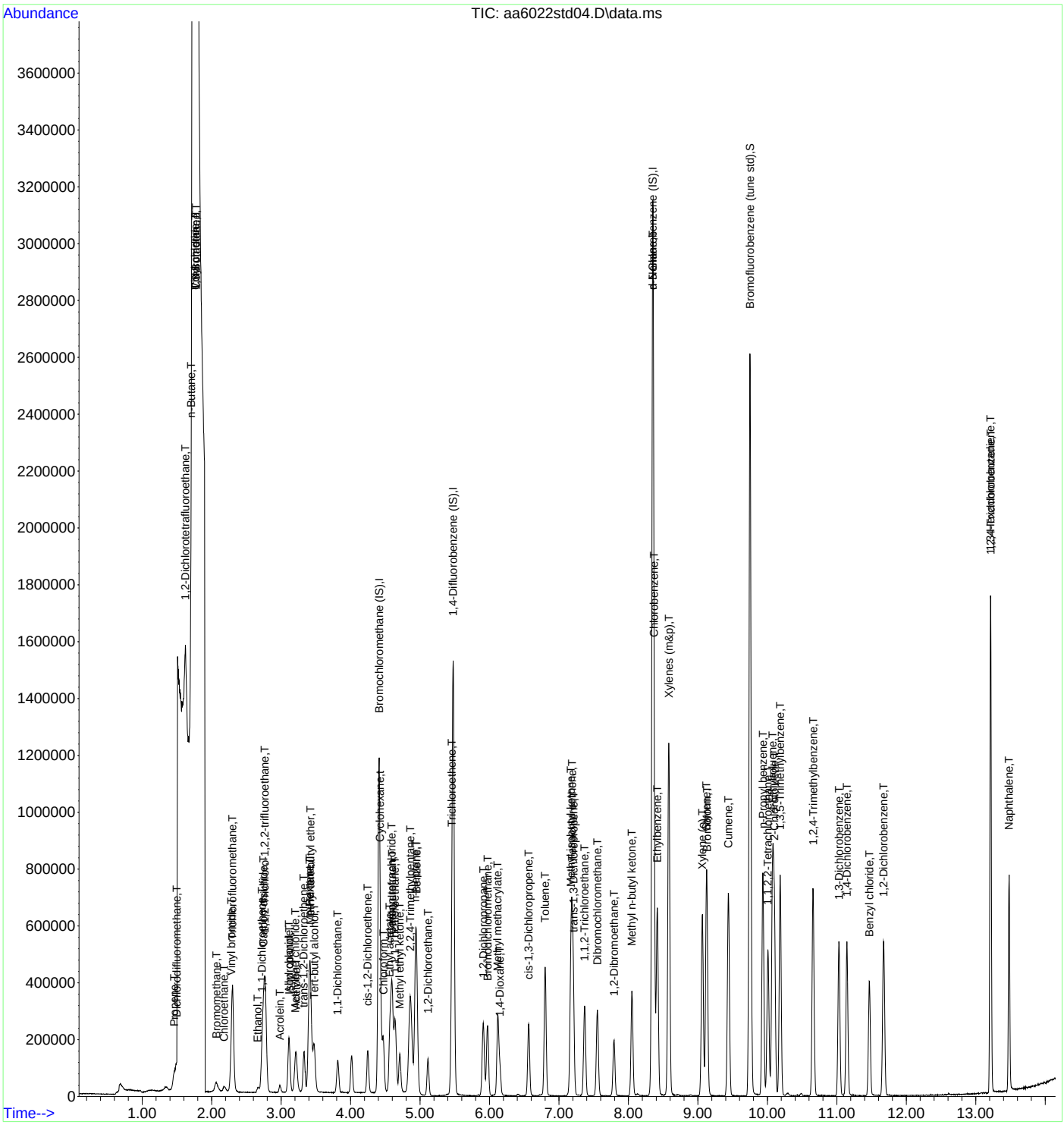
Quant Time: Mar 27 12:30:51 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 12:30:41 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.553	129	184678	2.38	ppbV	99
53) 1,2-Dibromoethane	7.791	107	164713	2.26	ppbV	99
54) Methyl n-butyl ketone	8.049	43	309841	2.53	ppbV	98
56) n-Nonane	8.351	43	438505	2.56	ppbV	99
57) Chlorobenzene	8.370	112	266791	2.23	ppbV	93
58) Ethylbenzene	8.415	91	567169	2.42	ppbV	99
59) Xylenes (m&p)	8.582	91	859845	4.80	ppbV	100
60) Xylene (o)	9.065	91	458642	2.43	ppbV	100
61) Styrene	9.123	104	281004	2.20	ppbV	100
62) Bromoform	9.132	173	164849	2.09	ppbV	99
63) Cumene	9.438	105	581117	2.44	ppbV	99
65) n-Propyl benzene	9.936	91	765019	2.36	ppbV	99
66) 1,1,2,2-Tetrachloroethane	10.007	83	344034	2.46	ppbV	99
67) 4-Ethyltoluene	10.074	105	600236	2.30	ppbV	99
68) 2-Chlorotoluene	10.100	91	518054	2.37	ppbV	99
69) 1,3,5-Trimethylbenzene	10.184	105	519514	2.43	ppbV	99
70) 1,2,4-Trimethylbenzene	10.659	105	499303	2.31	ppbV	99
71) 1,3-Dichlorobenzene	11.032	146	243609	2.08	ppbV	100
72) 1,4-Dichlorobenzene	11.145	146	232819	1.92	ppbV	98
73) Benzyl chloride	11.470	91	353725	1.69	ppbV	99
74) 1,2-Dichlorobenzene	11.672	146	247791	2.09	ppbV	99
75) 1,3-Hexachlorobutadiene	13.212	225	142060	2.17	ppbV	99
76) 1,2,4-Trichlorobenzene	13.216	180	180866	2.05	ppbV	99
77) Naphthalene	13.479	128	441446	1.81	ppbV	100

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

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6022std04.D
Acq On : 27 Mar 2024 11:38 am
Operator : jjw
Sample : 2 ppbv std
Misc : EB0103704
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 27 12:30:51 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 12:30:41 2024
Response via : Initial Calibration



Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6023std03.D
Acq On : 27 Mar 2024 12:09 pm
Operator : jjw
Sample : 10 ppbv std
Misc : EB0103704
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 27 15:06:55 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.412	130	405866	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.476	114	1540619	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.351	117	1407079	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.750	95	1272676	10.08	ppbV	0.000
Target Compounds						Qvalue
2) Propene	1.467	41	480073	10.55	ppbV	100
3) Dichlorodifluoromethane	1.499	85	1092704	10.71	ppbV	100
4) 1,2-Dichlorotetrafluor...	1.626	85	1301166	8.84	ppbV	100
5) n-Butane	1.705	43	976288	9.72	ppbV	100
6) Chloromethane	1.777	52	69870	10.63	ppbV	100
7) Vinyl chloride	1.767	62	566650	11.21	ppbV	100
8) 1,3-Butadiene	1.774	39	552148	9.61	ppbV	100
9) Bromomethane	2.068	94	393056	10.78	ppbV	100
10) Chloroethane	2.184	64	300731	10.80	ppbV	100
11) Vinyl bromide	2.284	106	442310	10.54	ppbV	100
12) Trichlorofluoromethane	2.303	101	1198923	10.06	ppbV	100
13) Ethanol	2.666	45	176842	9.50	ppbV	100
14) 1,1-Dichloroethene	2.727	61	988392	10.70	ppbV	100
15) Carbon disulfide	2.747	76	1647625	11.23	ppbV	100
16) 1,1,2-Trichloro-1,2,2-...	2.769	101	1107436	9.40	ppbV	100
17) Acrolein	2.988	56	215119	9.71	ppbV	100
18) Allyl chloride	3.113	76	255120	11.08	ppbV	100
19) Isopropanol	3.116	45	1014452	8.61	ppbV	100
20) Methylene chloride	3.203	49	694307	10.56	ppbV	100
21) Acetone	3.219	43	951290	10.48	ppbV	100
22) trans-1,2-Dichloroethene	3.332	61	901965	11.16	ppbV	100
23) n-Pentane	3.415	43	1127649	9.89	ppbV	99
24) n-Hexane	3.412	57	1551285	9.49	ppbV	100
25) Methyl tert-butyl ether	3.419	73	1828599	9.97	ppbV	100
26) Tert-butyl alcohol	3.473	59	1314960	10.15	ppbV	100
27) 1,1-Dichloroethane	3.817	63	1057514	9.74	ppbV	100
28) cis-1,2-Dichloroethene	4.248	61	817868	10.50	ppbV	100
29) Cyclohexane	4.428	56	1092809	9.90	ppbV	100
30) Chloroform	4.473	83	1150357	10.17	ppbV	99
31) Ethyl acetate	4.563	45	229902	9.84	ppbV	100
32) Carbon tetrachloride	4.595	117	1149084	9.92	ppbV	100
33) Tetrahydrofuran	4.599	42	849869	9.99	ppbV	100
34) 1,1,1-Trichloroethane	4.647	97	1075300	9.84	ppbV	100
35) Methyl ethyl ketone	4.708	43	1342110	9.90	ppbV	100
36) n-Heptane	4.936	43	1347673	9.51	ppbV	100
37) Benzene	4.952	78	1614175	9.48	ppbV	100
38) 1,2-Dichloroethane	5.116	62	787118	10.19	ppbV	100
40) Trichloroethene	5.457	130	590874	9.61	ppbV	100
41) 2,2,4-Trimethylpentane	4.866	57	3337961	11.17	ppbV	100
42) 1,2-Dichloropropane	5.911	63	701956	10.43	ppbV	100
43) Bromodichloromethane	5.972	83	1181459	11.02	ppbV	100
44) Methyl methacrylate	6.120	41	977110	10.23	ppbV	100
45) 1,4-Dioxane	6.145	88	401981	11.15	ppbV	100
46) cis-1,3-Dichloropropene	6.563	75	1009455	10.61	ppbV	100
47) Toluene	6.801	91	2044302	10.30	ppbV	100
48) Methyl isobutyl ketone	7.171	43	1836936	10.35	ppbV	100
49) Tetrachloroethene	7.190	166	737641	10.76	ppbV	100
50) trans-1,3-Dichloropropene	7.210	75	998052	11.03	ppbV	100
51) 1,1,2-Trichloroethane	7.370	97	674176	10.27	ppbV	100

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6023std03.D
Acq On : 27 Mar 2024 12:09 pm
Operator : jjw
Sample : 10 ppbv std
Misc : EB0103704
ALS Vial : 5 Sample Multiplier: 1

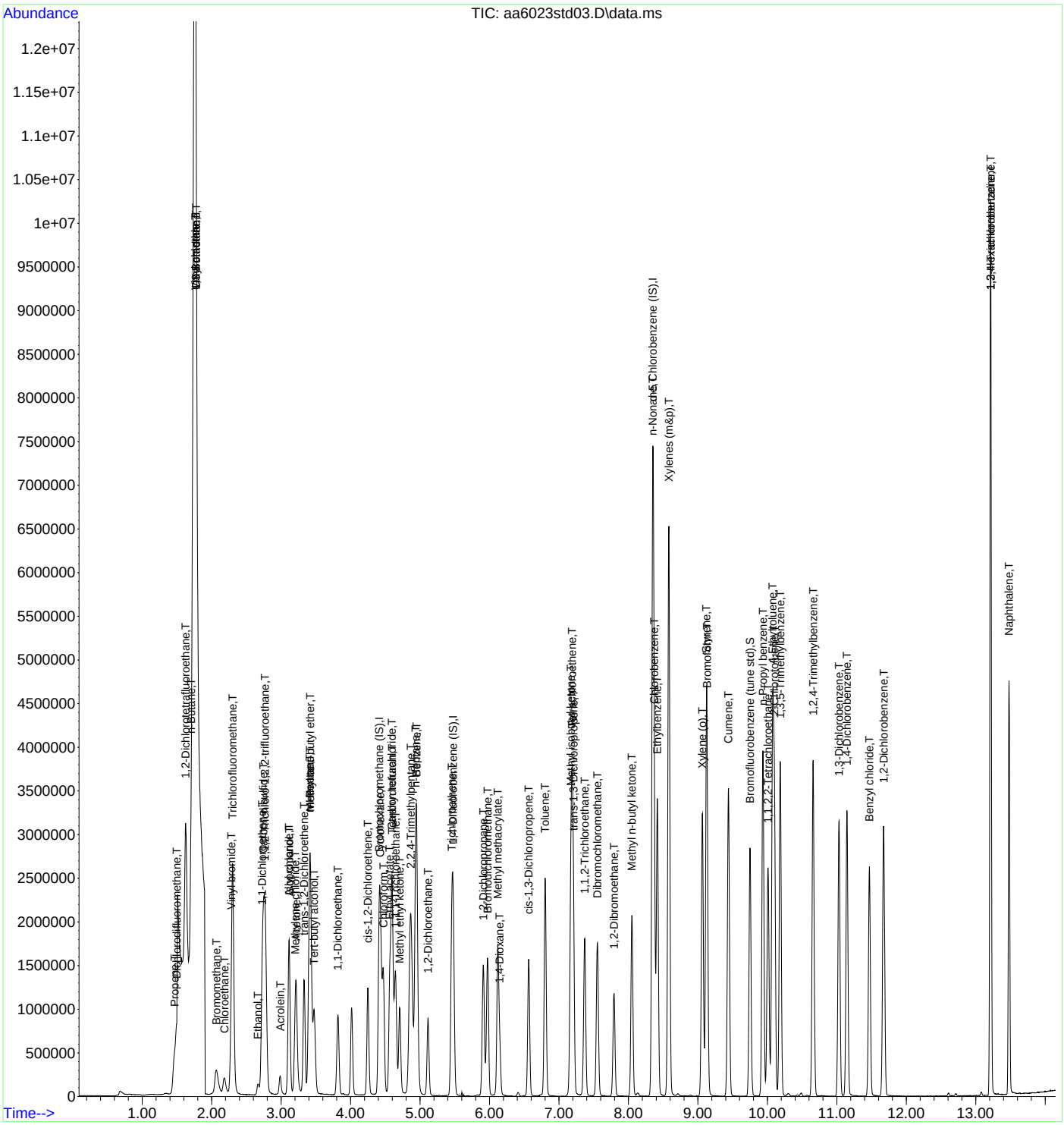
Quant Time: Mar 27 15:06:55 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.554	129	1090274	10.84	ppbV	100
53) 1,2-Dibromoethane	7.795	107	985770	10.58	ppbV	100
54) Methyl n-butyl ketone	8.049	43	1735158	10.90	ppbV	100
56) n-Nonane	8.348	43	2102844	10.77	ppbV	100
57) Chlorobenzene	8.373	112	1483500	10.94	ppbV	100
58) Ethylbenzene	8.415	91	2902762	10.75	ppbV	100
59) Xylenes (m&p)	8.582	91	4457073	21.98	ppbV	100
60) Xylene (o)	9.065	91	2318096	10.78	ppbV	100
61) Styrene	9.123	104	1614514	11.57	ppbV	100
62) Bromoform	9.132	173	995536	11.53	ppbV	100
63) Cumene	9.441	105	2847778	10.50	ppbV	100
65) n-Propyl benzene	9.936	91	3914695	10.66	ppbV	100
66) 1,1,2,2-Tetrachloroethane	10.010	83	1776668	11.14	ppbV	100
67) 4-Ethyltoluene	10.074	105	3144319	10.77	ppbV	100
68) 2-Chlorotoluene	10.100	91	2664458	10.72	ppbV	100
69) 1,3,5-Trimethylbenzene	10.187	105	2606288	10.84	ppbV	100
70) 1,2,4-Trimethylbenzene	10.660	105	2608053	10.94	ppbV	100
71) 1,3-Dichlorobenzene	11.033	146	1452525	11.12	ppbV	100
72) 1,4-Dichlorobenzene	11.145	146	1447428	10.93	ppbV	100
73) Benzyl chloride	11.470	91	2331860	10.53	ppbV	100
74) 1,2-Dichlorobenzene	11.676	146	1415768	10.93	ppbV	100
75) 1,3-Hexachlorobutadiene	13.216	225	809751	11.51	ppbV	100
76) 1,2,4-Trichlorobenzene	13.216	180	1084449	11.29	ppbV	100
77) Naphthalene	13.479	128	2715917	10.18	ppbV	100

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

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6023std03.D
Acq On : 27 Mar 2024 12:09 pm
Operator : jjw
Sample : 10 ppbv std
Misc : EB0103704
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 27 15:06:55 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6024std02.D
Acq On : 27 Mar 2024 12:40 pm
Operator : jjw
Sample : 20 ppbv std
Misc : EB0103704
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 27 15:06:34 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.415	130	411882	10.00	ppbV		0.000
39) 1,4-Difluorobenzene (IS)	5.480	114	1661943	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.351	117	1464287	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.750	95	1321659	10.06	ppbV		0.000
Target Compounds							Qvalue
2) Propene	1.464	41	1014772	21.98	ppbV		100
3) Dichlorodifluoromethane	1.509	85	2356287	22.76	ppbV		100
4) 1,2-Dichlorotetrafluor...	1.629	85	2866435	19.18	ppbV		99
5) n-Butane	1.708	43	2073146	20.34	ppbV		100
6) Chloromethane	1.777	52	171065	25.63	ppbV	#	1
7) Vinyl chloride	1.767	62	1213573	23.66	ppbV		100
8) 1,3-Butadiene	1.777	39	1158440	19.87	ppbV		100
9) Bromomethane	2.072	94	834684	22.57	ppbV		98
10) Chloroethane	2.184	64	650366	23.01	ppbV		100
11) Vinyl bromide	2.284	106	960489	22.55	ppbV		100
12) Trichlorofluoromethane	2.303	101	2616101	21.64	ppbV		100
13) Ethanol	2.670	45	388025	20.54	ppbV		99
14) 1,1-Dichloroethene	2.731	61	2170406	23.14	ppbV		100
15) Carbon disulfide	2.750	76	3569546	23.97	ppbV		98
16) 1,1,2-Trichloro-1,2,2-...	2.772	101	2314090	19.35	ppbV		99
17) Acrolein	2.988	56	469927	20.90	ppbV		100
18) Allyl chloride	3.113	76	564791	24.16	ppbV		100
19) Isopropanol	3.116	45	2245383	18.77	ppbV		100
20) Methylene chloride	3.207	49	1503232	22.53	ppbV		98
21) Acetone	3.219	43	2033750	22.07	ppbV		99
22) trans-1,2-Dichloroethene	3.332	61	2013296	24.54	ppbV		100
23) n-Pentane	3.416	43	2339039	20.22	ppbV		98
24) n-Hexane	3.416	57	3308362	19.95	ppbV		100
25) Methyl tert-butyl ether	3.419	73	3734162	20.06	ppbV		96
26) Tert-butyl alcohol	3.473	59	2843260	21.62	ppbV		100
27) 1,1-Dichloroethane	3.821	63	2369884	21.52	ppbV		99
28) cis-1,2-Dichloroethene	4.248	61	1825598	23.10	ppbV		99
29) Cyclohexane	4.432	56	2269500	20.25	ppbV		99
30) Chloroform	4.473	83	2593106	22.58	ppbV		99
31) Ethyl acetate	4.563	45	499077	21.05	ppbV		100
32) Carbon tetrachloride	4.596	117	2430188	20.68	ppbV		100
33) Tetrahydrofuran	4.596	42	1907140	22.10	ppbV		100
34) 1,1,1-Trichloroethane	4.644	97	2269864	20.47	ppbV		100
35) Methyl ethyl ketone	4.708	43	3017009	21.92	ppbV		100
36) n-Heptane	4.940	43	2840049	19.75	ppbV		99
37) Benzene	4.956	78	3648241	21.11	ppbV		99
38) 1,2-Dichloroethane	5.116	62	1746280	22.28	ppbV		100
40) Trichloroethene	5.457	130	1325979	20.00	ppbV		98
41) 2,2,4-Trimethylpentane	4.866	57	6968945	21.63	ppbV		99
42) 1,2-Dichloropropane	5.914	63	1500636	20.66	ppbV		98
43) Bromodichloromethane	5.972	83	2653561	22.94	ppbV		98
44) Methyl methacrylate	6.116	41	2148743	20.86	ppbV		99
45) 1,4-Dioxane	6.145	88	869258	22.34	ppbV		100
46) cis-1,3-Dichloropropene	6.563	75	2242244	21.85	ppbV		99
47) Toluene	6.804	91	4347639	20.30	ppbV		99
48) Methyl isobutyl ketone	7.171	43	3752572	19.59	ppbV		99
49) Tetrachloroethene	7.190	166	1565659	21.17	ppbV		99
50) trans-1,3-Dichloropropene	7.210	75	2183621	22.36	ppbV		98
51) 1,1,2-Trichloroethane	7.370	97	1463883	20.68	ppbV		100

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6024std02.D
Acq On : 27 Mar 2024 12:40 pm
Operator : jjw
Sample : 20 ppbv std
Misc : EB0103704
ALS Vial : 6 Sample Multiplier: 1

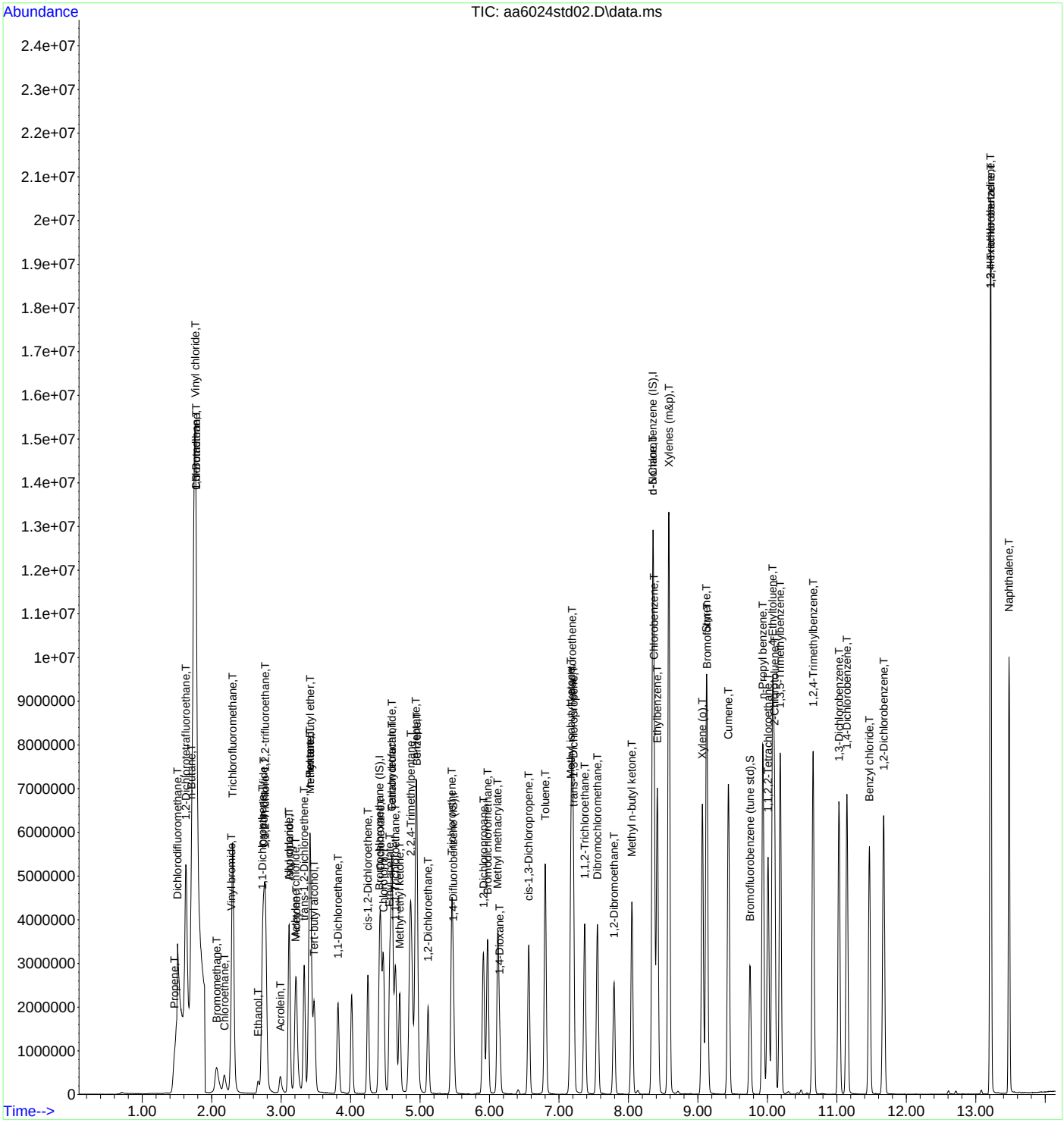
Quant Time: Mar 27 15:06:34 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.554	129	2393076	22.07	ppbV	99
53) 1,2-Dibromoethane	7.795	107	2142143	21.30	ppbV	100
54) Methyl n-butyl ketone	8.049	43	3632915	21.16	ppbV	100
56) n-Nonane	8.351	43	4204992	20.70	ppbV	99
57) Chlorobenzene	8.370	112	3149332	22.32	ppbV	99
58) Ethylbenzene	8.415	91	5992154	21.32	ppbV	100
59) Xylenes (m&p)	8.583	91	9156224	43.40	ppbV	100
60) Xylene (o)	9.065	91	4762319	21.27	ppbV	99
61) Styrene	9.123	104	3388334	23.34	ppbV	100
62) Bromoform	9.132	173	2128868	23.70	ppbV	99
63) Cumene	9.441	105	5836329	20.69	ppbV	100
65) n-Propyl benzene	9.933	91	8003431	20.94	ppbV	100
66) 1,1,2,2-Tetrachloroethane	10.010	83	3695472	22.27	ppbV	99
67) 4-Ethyltoluene	10.074	105	6468364	21.29	ppbV	100
68) 2-Chlorotoluene	10.103	91	5475021	21.16	ppbV	99
69) 1,3,5-Trimethylbenzene	10.184	105	5358696	21.42	ppbV	100
70) 1,2,4-Trimethylbenzene	10.660	105	5373360	21.66	ppbV	100
71) 1,3-Dichlorobenzene	11.033	146	3055936	22.49	ppbV	99
72) 1,4-Dichlorobenzene	11.145	146	3072998	22.30	ppbV	100
73) Benzyl chloride	11.470	91	5002127	21.70	ppbV	99
74) 1,2-Dichlorobenzene	11.676	146	2933960	21.76	ppbV	100
75) 1,3-Hexachlorobutadiene	13.213	225	1650141	22.54	ppbV	100
76) 1,2,4-Trichlorobenzene	13.216	180	2240663	22.41	ppbV	100
77) Naphthalene	13.479	128	5711683	20.57	ppbV	100

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

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6024std02.D
Acq On : 27 Mar 2024 12:40 pm
Operator : jjw
Sample : 20 ppbv std
Misc : EB0103704
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 27 15:06:34 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration



Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6025std01.D
Acq On : 27 Mar 2024 1:24 pm
Operator : jjw
Sample : 40 ppbv std
Misc : EB0103704
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 27 13:39:47 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:03:21 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.419	130	398803	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.480	114	1758228	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.351	117	1517568	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.750	95	1374039	10.12	ppbV	0.000
Target Compounds						Qvalue
2) Propene	1.476	41	1964690	44.03	ppbV	99
3) Dichlorodifluoromethane	1.512	85	4583650	46.63	ppbV	100
4) 1,2-Dichlorotetrafluor...	1.636	85	5695259	39.40	ppbV	99
5) n-Butane	1.718	43	3853678	38.05	ppbV	100
6) Chloromethane	1.770	52	281441	43.26	ppbV	57
7) Vinyl chloride	1.774	62	2352467	48.54	ppbV	99
8) 1,3-Butadiene	1.787	39	2176832	37.63	ppbV	99
9) Bromomethane	2.075	94	1618348	46.70	ppbV	99
10) Chloroethane	2.184	64	1249953	46.57	ppbV	100
11) Vinyl bromide	2.287	106	1912871	48.15	ppbV	100
12) Trichlorofluoromethane	2.306	101	5090504	43.35	ppbV	99
13) Ethanol	2.669	45	824442	46.04	ppbV	98
14) 1,1-Dichloroethene	2.734	61	4169298	47.14	ppbV	100
15) Carbon disulfide	2.760	76	6924568	49.54	ppbV	99
16) 1,1,2-Trichloro-1,2,2-...	2.776	101	4466211	37.49	ppbV	99
17) Acrolein	2.997	56	938960	44.00	ppbV	100
18) Allyl chloride	3.120	76	1094990	49.88	ppbV	100
19) Isopropanol	3.120	45	4345927	38.04	ppbV	99
20) Methylene chloride	3.210	49	2963075	46.58	ppbV	97
21) Acetone	3.229	43	3990092	45.13	ppbV	99
22) trans-1,2-Dichloroethene	3.332	61	3985456	51.86	ppbV	99
23) n-Pentane	3.419	43	4752698	42.25	ppbV	98
24) n-Hexane	3.419	57	6718281	41.25	ppbV	99
25) Methyl tert-butyl ether	3.422	73	7327239	39.72	ppbV	92
26) Tert-butyl alcohol	3.477	59	5668271	44.15	ppbV	100
27) 1,1-Dichloroethane	3.821	63	4777372	45.32	ppbV	100
28) cis-1,2-Dichloroethene	4.251	61	3661456	49.05	ppbV	99
29) Cyclohexane	4.431	56	4495502	40.67	ppbV	99
30) Chloroform	4.473	83	5226839	48.07	ppbV	99
31) Ethyl acetate	4.563	45	1047773	46.30	ppbV	100
32) Carbon tetrachloride	4.595	117	4872674	42.44	ppbV	100
33) Tetrahydrofuran	4.595	42	3908188	47.40	ppbV	100
34) 1,1,1-Trichloroethane	4.650	97	4538040	41.95	ppbV	100
35) Methyl ethyl ketone	4.708	43	6291757	48.09	ppbV	100
36) n-Heptane	4.943	43	5712488	40.27	ppbV	100
37) Benzene	4.959	78	7599303	46.01	ppbV	99
38) 1,2-Dichloroethane	5.116	62	3643642	49.24	ppbV	100
40) Trichloroethene	5.457	130	2793094	39.77	ppbV	98
41) 2,2,4-Trimethylpentane	4.862	57	13968760	40.37	ppbV	99
42) 1,2-Dichloropropane	5.914	63	3112993	39.65	ppbV	97
43) Bromodichloromethane	5.972	83	5543327	45.13	ppbV	100
44) Methyl methacrylate	6.119	41	4465072	40.27	ppbV	98
45) 1,4-Dioxane	6.145	88	1807468	43.25	ppbV	99
46) cis-1,3-Dichloropropene	6.566	75	4512628	40.92	ppbV	100
47) Toluene	6.804	91	8709445	37.41	ppbV	99
48) Methyl isobutyl ketone	7.171	43	7369377	34.92	ppbV	98
49) Tetrachloroethene	7.190	166	3079992	38.21	ppbV	99
50) trans-1,3-Dichloropropene	7.209	75	4387728	42.02	ppbV	98
51) 1,1,2-Trichloroethane	7.370	97	2971932	38.90	ppbV	100

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6025std01.D
Acq On : 27 Mar 2024 1:24 pm
Operator : jjw
Sample : 40 ppbv std
Misc : EB0103704
ALS Vial : 7 Sample Multiplier: 1

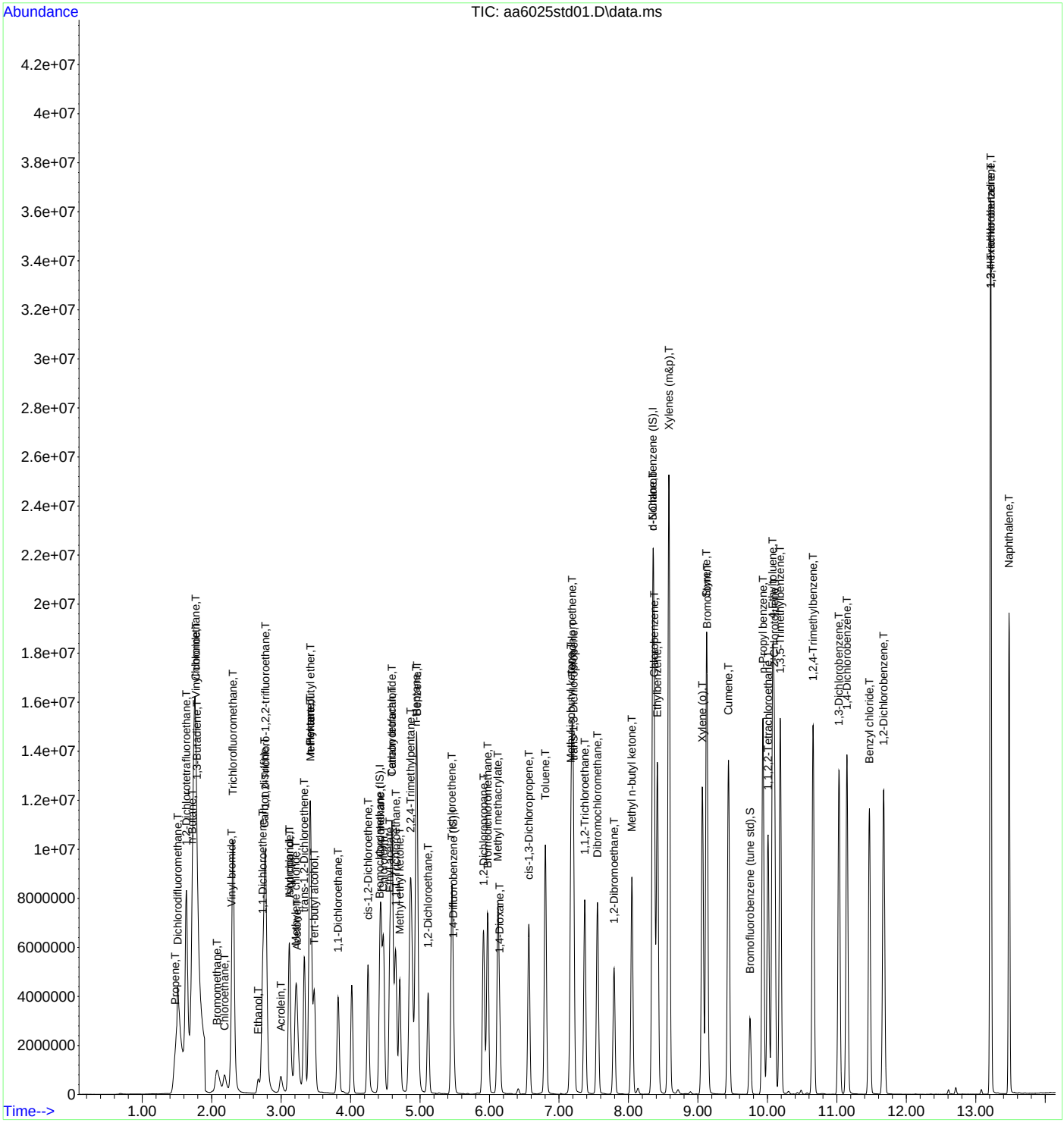
Quant Time: Mar 27 13:39:47 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:03:21 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.554	129	4825763	41.42	ppbV	100
53) 1,2-Dibromoethane	7.795	107	4320065	40.01	ppbV	100
54) Methyl n-butyl ketone	8.049	43	7266143	38.88	ppbV	99
56) n-Nonane	8.351	43	8002894	36.76	ppbV	99
57) Chlorobenzene	8.373	112	6116749	41.22	ppbV	100
58) Ethylbenzene	8.415	91	11665851	39.10	ppbV	99
59) Xylenes (m&p)	8.582	91	17498174	78.02	ppbV	99
60) Xylene (o)	9.065	91	9322325	39.33	ppbV	99
61) Styrene	9.123	104	6597492	43.52	ppbV	100
62) Bromoform	9.132	173	4195209	45.02	ppbV	100
63) Cumene	9.441	105	11340070	37.89	ppbV	99
65) n-Propyl benzene	9.936	91	15449995	38.09	ppbV	99
66) 1,1,2,2-Tetrachloroethane	10.010	83	7251670	41.38	ppbV	100
67) 4-Ethyltoluene	10.074	105	12482413	38.84	ppbV	99
68) 2-Chlorotoluene	10.100	91	10739286	39.25	ppbV	100
69) 1,3,5-Trimethylbenzene	10.184	105	10426890	39.44	ppbV	100
70) 1,2,4-Trimethylbenzene	10.656	105	10449455	40.06	ppbV	99
71) 1,3-Dichlorobenzene	11.029	146	6064751	42.74	ppbV	99
72) 1,4-Dichlorobenzene	11.145	146	6132994	42.98	ppbV	99
73) Benzyl chloride	11.470	91	10185040	43.34	ppbV	99
74) 1,2-Dichlorobenzene	11.672	146	5799661	41.19	ppbV	99
75) 1,3-Hexachlorobutadiene	13.216	225	2978861	38.16	ppbV	99
76) 1,2,4-Trichlorobenzene	13.216	180	4181789	39.54	ppbV	99
77) Naphthalene	13.479	128	11258182	38.90	ppbV	99

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

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6025std01.D
Acq On : 27 Mar 2024 1:24 pm
Operator : jjw
Sample : 40 ppbv std
Misc : EB0103704
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 27 13:39:47 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:03:21 2024
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES, LLC

Initial Calibration Verification Sample Standard

Lab Sample Name: 10 PPBV ICVSS **Data File:** AA6026ICVSS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 3/27/2024

Amount of standard injected (ml): 50

Runs with this ICVSS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6020BFB]	03/27/2024 10:03
0.2 PPBV STD [AA6021STD05]	03/27/2024 10:38
2 PPBV STD [AA6022STD04]	03/27/2024 11:38
10 PPBV STD [AA6023STD03]	03/27/2024 12:09
20 PPBV STD [AA6024STD02]	03/27/2024 12:40
40 PPBV STD [AA6025STD01]	03/27/2024 13:24
10 PPBV ICVSS [AA6026ICVSS]	03/27/2024 13:54
10 PPBV LCS [AA6027LCS]	03/27/2024 14:23
METHOD BLANK [AA6028BLK]	03/27/2024 14:51

Compound	CAS #	Injected Amount (ppbv)	Recovered Amount (ppbv)	% Recovery	QC Limit
Acetone	67-64-1	11	10	95	
Acrolein	107-02-8	9.4	9.8	100	
Allyl Chloride	107-05-1	11	11	99	
Benzene	71-43-2	10	9.7	93	
Benzyl chloride	100-44-7	11	10	93	
Bromodichloromethane	75-27-4	11	11	100	
Bromoform	75-25-2	11	12	110	
Bromomethane	74-83-9	11	11	100	
1,3-Butadiene	106-99-0	11	9.4	86	
n-Butane	106-97-8	11	9.5	90	
Chlorobenzene	108-90-7	10	11	110	
Chloroethane	75-00-3	9.8	11	110	
Chloroform	67-66-3	11	10	92	
Chloromethane	74-87-3	9.9	11	110	
Carbon disulfide	75-15-0	10	11	110	
Carbon tetrachloride	56-23-5	11	10.0	93	
2-Chlorotoluene	95-49-8	11	11	100	
Cumene	98-82-8	10	10	99	
Cyclohexane	110-82-7	11	9.8	90	
Dibromochloromethane	124-48-1	11	11	100	
1,2-Dibromoethane	106-93-4	11	11	100	
1,2-Dichlorobenzene	95-50-1	10	11	110	
1,3-Dichlorobenzene	541-73-1	10	11	110	
1,4-Dichlorobenzene	106-46-7	10	11	110	
Dichlorodifluoromethane	75-71-8	11	11	100	
1,1-Dichloroethane	75-34-3	11	9.6	91	
1,2-Dichloroethane	107-06-2	11	10	95	
1,1-Dichloroethene	75-35-4	11	11	100	
1,2-Dichloroethene (cis)	156-59-2	10	10	97	
1,2-Dichloroethene (trans)	156-60-5	11	11	100	
1,2-Dichloropropane	78-87-5	11	10	95	
1,3-Dichloropropene (cis)	10061-01-5	9.9	11	110	
1,3-Dichloropropene (trans)	10061-02-6	11	11	100	
1,2-Dichlorotetrafluoroethane	76-14-2	11	8.9	79	
1,4-Dioxane	123-91-1	11	11	98	
Ethanol	64-17-5	9.8	11	110	
Ethyl acetate	141-78-6	10	9.8	95	
Ethylbenzene	100-41-4	10	11	110	

ICVSS recovery must be within 70-130% of the spiked value for all compounds.

*** Values outside of QC limits**

INTEGRATED ANALYTICAL LABORATORIES, LLC

Initial Calibration Verification Sample Standard

Lab Sample Name: 10 PPBV ICVSS **Data File:** AA6026ICVSS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 3/27/2024

Amount of standard injected (ml): 50

Runs with this ICVSS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6020BFB]	03/27/2024 10:03
0.2 PPBV STD [AA6021STD05]	03/27/2024 10:38
2 PPBV STD [AA6022STD04]	03/27/2024 11:38
10 PPBV STD [AA6023STD03]	03/27/2024 12:09
20 PPBV STD [AA6024STD02]	03/27/2024 12:40
40 PPBV STD [AA6025STD01]	03/27/2024 13:24
10 PPBV ICVSS [AA6026ICVSS]	03/27/2024 13:54
10 PPBV LCS [AA6027LCS]	03/27/2024 14:23
METHOD BLANK [AA6028BLK]	03/27/2024 14:51

Compound	CAS #	Injected Amount (ppbv)	Recovered Amount (ppbv)	% Recovery	QC Limit
4-Ethyltoluene	622-96-8	11	11	100	
n-Heptane	142-82-5	11	9.2	84	
1,3-Hexachlorobutadiene	87-68-3	9.8	12	120	
n-Hexane	110-54-3	11	9.3	86	
Isopropanol	67-63-0	8.1	8.6	110	
Methylene chloride	75-09-2	11	10	93	
Methyl ethyl ketone	78-93-3	11	9.7	89	
Methyl isobutyl ketone	108-10-1	10	10	97	
Methyl methacrylate	80-62-6	11	10	93	
Methyl n-butyl ketone	591-78-6	11	11	99	
Methyl tert-butyl ether	1634-04-4	11	9.9	91	
Naphthalene	91-20-3	11	10	93	
n-Nonane	111-84-2	11	10	89	
n-Pentane	109-66-0	11	9.5	86	
Propene	115-07-1	11	10	91	
n-Propyl benzene	103-65-1	11	11	100	
Styrene	100-42-5	11	12	110	
Tert-butyl alcohol	75-65-0	12	10	87	
1,1,2,2-Tetrachloroethane	79-34-5	10	11	110	
Tetrachloroethene	127-18-4	12	11	93	
Tetrahydrofuran	109-99-9	11	9.8	92	
Toluene	108-88-3	11	10	95	
1,2,4-Trichlorobenzene	120-82-1	10	11	110	
1,1,1-Trichloroethane	71-55-6	11	10.0	93	
1,1,2-Trichloroethane	79-00-5	11	11	100	
Trichloroethene	79-01-6	10	10	98	
Trichlorofluoromethane	75-69-4	11	10	94	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	11	9.5	87	
1,2,4-Trimethylbenzene	95-63-6	10	11	110	
1,3,5-Trimethylbenzene	108-67-8	10	11	110	
2,2,4-Trimethylpentane	540-84-1	11	11	100	
Vinyl bromide	593-60-2	10	11	110	
Vinyl chloride	75-01-4	11	11	97	
Xylenes (m&p)	179601-23-1	21	22	110	
Xylenes (o)	95-47-6	10	11	110	

ICVSS recovery must be within 70-130% of the spiked value for all compounds.

*** Values outside of QC limits**

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6026icvss.D
Acq On : 27 Mar 2024 1:54 pm
Operator : jjw
Sample : 10 ppbv icvss
Misc : EB0116272
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 27 15:15:48 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.412	130	412561	10.00	ppbV		0.000
39) 1,4-Difluorobenzene (IS)	5.480	114	1549110	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.351	117	1439709	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.753	95	1278623	9.90	ppbV		0.000
Target Compounds							Qvalue
2) Propene	1.464	41	475494	10.28	ppbV		99
3) Dichlorodifluoromethane	1.499	85	1104507	10.65	ppbV		100
4) 1,2-Dichlorotetrafluor...	1.626	85	1330698	8.89	ppbV		100
5) n-Butane	1.708	43	967137	9.47	ppbV		100
6) Chloromethane	1.777	52	72189	10.80	ppbV		98
7) Vinyl chloride	1.763	62	575895	11.21	ppbV		100
8) 1,3-Butadiene	1.777	39	546190	9.35	ppbV		98
9) Bromomethane	2.065	94	393236	10.61	ppbV		99
10) Chloroethane	2.178	64	303187	10.71	ppbV		99
11) Vinyl bromide	2.284	106	452505	10.60	ppbV		100
12) Trichlorofluoromethane	2.300	101	1216885	10.05	ppbV		100
13) Ethanol	2.666	45	207336	10.96	ppbV		99
14) 1,1-Dichloroethene	2.727	61	992472	10.57	ppbV		99
15) Carbon disulfide	2.747	76	1666779	11.18	ppbV		98
16) 1,1,2-Trichloro-1,2,2-...	2.772	101	1132241	9.45	ppbV		100
17) Acrolein	2.985	56	220833	9.81	ppbV		99
18) Allyl chloride	3.110	76	260732	11.14	ppbV		100
19) Isopropanol	3.116	45	1035442	8.64	ppbV		99
20) Methylene chloride	3.206	49	690106	10.33	ppbV		98
21) Acetone	3.219	43	937159	10.15	ppbV		99
22) trans-1,2-Dichloroethene	3.329	61	906530	11.03	ppbV		98
23) n-Pentane	3.419	43	1099645	9.49	ppbV		99
24) n-Hexane	3.415	57	1549072	9.33	ppbV		99
25) Methyl tert-butyl ether	3.419	73	1838970	9.86	ppbV		99
26) Tert-butyl alcohol	3.477	59	1321541	10.03	ppbV		100
27) 1,1-Dichloroethane	3.817	63	1062879	9.63	ppbV		100
28) cis-1,2-Dichloroethene	4.248	61	815216	10.30	ppbV		98
29) Cyclohexane	4.428	56	1096558	9.77	ppbV		99
30) Chloroform	4.473	83	1155306	10.04	ppbV		100
31) Ethyl acetate	4.563	45	232266	9.78	ppbV		100
32) Carbon tetrachloride	4.592	117	1173270	9.97	ppbV		99
33) Tetrahydrofuran	4.599	42	850975	9.84	ppbV		99
34) 1,1,1-Trichloroethane	4.647	97	1105121	9.95	ppbV		100
35) Methyl ethyl ketone	4.705	43	1341717	9.73	ppbV		99
36) n-Heptane	4.940	43	1331974	9.25	ppbV		99
37) Benzene	4.952	78	1670578	9.65	ppbV		99
38) 1,2-Dichloroethane	5.116	62	786513	10.02	ppbV		100
40) Trichloroethene	5.457	130	619937	10.03	ppbV		99
41) 2,2,4-Trimethylpentane	4.866	57	3352145	11.16	ppbV		100
42) 1,2-Dichloropropane	5.911	63	701536	10.36	ppbV		98
43) Bromodichloromethane	5.972	83	1199833	11.13	ppbV		100
44) Methyl methacrylate	6.120	41	992841	10.34	ppbV		98
45) 1,4-Dioxane	6.145	88	413468	11.40	ppbV		99
46) cis-1,3-Dichloropropene	6.563	75	1043355	10.91	ppbV		100
47) Toluene	6.801	91	2073818	10.39	ppbV		99
48) Methyl isobutyl ketone	7.171	43	1818620	10.19	ppbV		99
49) Tetrachloroethene	7.190	166	757501	10.99	ppbV		99
50) trans-1,3-Dichloropropene	7.210	75	1026774	11.28	ppbV	#	74
51) 1,1,2-Trichloroethane	7.370	97	693315	10.51	ppbV		100

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6026icvss.D
Acq On : 27 Mar 2024 1:54 pm
Operator : jjw
Sample : 10 ppbv icvss
Misc : EB0116272
ALS Vial : 9 Sample Multiplier: 1

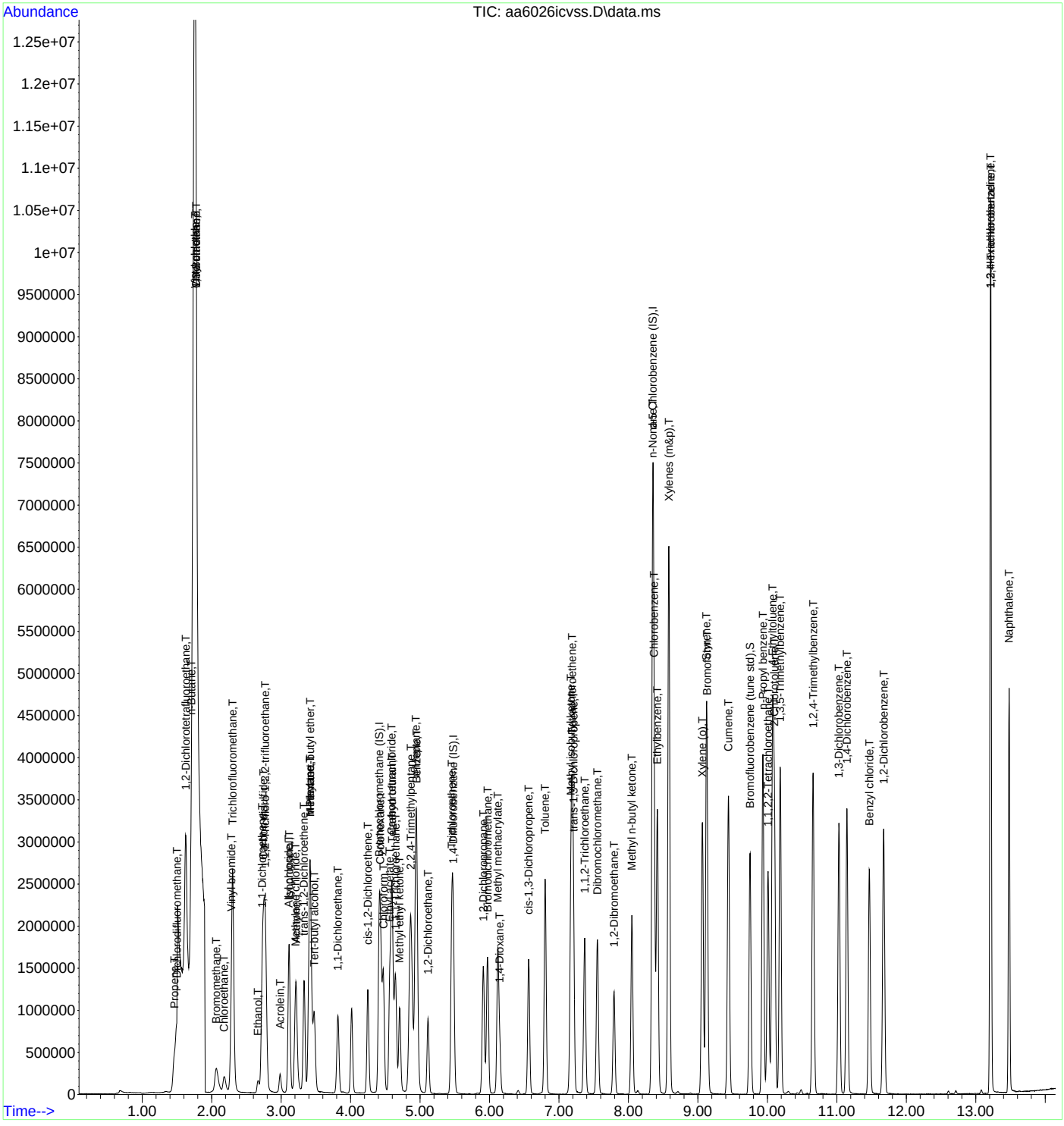
Quant Time: Mar 27 15:15:48 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.554	129	1126782	11.15	ppbV	100
53) 1,2-Dibromoethane	7.795	107	1018722	10.87	ppbV	100
54) Methyl n-butyl ketone	8.049	43	1737007	10.85	ppbV	99
56) n-Nonane	8.348	43	2077560	10.40	ppbV	99
57) Chlorobenzene	8.370	112	1522555	10.97	ppbV	99
58) Ethylbenzene	8.415	91	2944785	10.66	ppbV	100
59) Xylenes (m&p)	8.582	91	4502045	21.70	ppbV	99
60) Xylene (o)	9.065	91	2338527	10.62	ppbV	99
61) Styrene	9.123	104	1642349	11.51	ppbV	100
62) Bromoform	9.132	173	1020022	11.55	ppbV	100
63) Cumene	9.441	105	2894207	10.43	ppbV	100
65) n-Propyl benzene	9.936	91	3971971	10.57	ppbV	100
66) 1,1,2,2-Tetrachloroethane	10.010	83	1799038	11.02	ppbV	100
67) 4-Ethyltoluene	10.074	105	3189380	10.68	ppbV	100
68) 2-Chlorotoluene	10.100	91	2710501	10.65	ppbV	100
69) 1,3,5-Trimethylbenzene	10.184	105	2663260	10.83	ppbV	100
70) 1,2,4-Trimethylbenzene	10.660	105	2637313	10.81	ppbV	100
71) 1,3-Dichlorobenzene	11.029	146	1488697	11.14	ppbV	100
72) 1,4-Dichlorobenzene	11.145	146	1490219	11.00	ppbV	99
73) Benzyl chloride	11.470	91	2375182	10.48	ppbV	100
74) 1,2-Dichlorobenzene	11.676	146	1438933	10.85	ppbV	99
75) 1,3-Hexachlorobutadiene	13.212	225	830103	11.53	ppbV	100
76) 1,2,4-Trichlorobenzene	13.216	180	1123582	11.43	ppbV	99
77) Naphthalene	13.479	128	2825715	10.35	ppbV	100

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

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6026icvss.D
Acq On : 27 Mar 2024 1:54 pm
Operator : jjw
Sample : 10 ppbv icvss
Misc : EB0116272
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 27 15:15:48 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES, LLC

Continuing Calibration Data Summary Report

Initial Calibration Curve: 3/27/2024
Instrument: AA
Amount of standard injected (ml): 50

Date/Time of Calibration: 4/3/2024 11:58
Sample ID: DCS
Laboratory ID: AA6121DCVS

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6120BFB]	04/03/2024 10:39
10 PPBV DCVS [AA6121DCVS]	04/03/2024 11:58
10 PPBV LCS [AA6122LCS]	04/03/2024 12:29
METHOD BLANK [AA6123BLK]	04/03/2024 13:28
02 PPBV RLLCS [AA6124RLLCS]	04/03/2024 14:13
CLEAN CAN CERTIFICATION, BATCH MASTER 2037 [AA6125]	04/03/2024 16:31
CLEAN CAN CERTIFICATION, BATCH MASTER 5092 [AA6133]	04/03/2024 20:23
10 PPBV CCCVS [AA6134CCCVS]	04/03/2024 20:52

Compound Name	Average RRF	Standard RRF	% Difference	PassFail	*
Acetone	2.2	2.3	-2.8	PASS	
Benzene	4.2	4.2	-1.0	PASS	
Bromodichloromethane	0.70	0.69	0.60	PASS	
Bromoform	0.61	0.65	-5.7	PASS	
Bromomethane	0.90	1.1	-19	PASS	
1,3-Butadiene	1.4	1.3	9.1	PASS	
Chlorobenzene	0.96	0.99	-2.2	PASS	
Chloroethane	0.69	0.77	-13	PASS	
Chloroform	2.8	3.0	-8.0	PASS	
Chloromethane	0.16	0.17	-4.3	PASS	
Carbon disulfide	3.6	4.2	-17	PASS	
Carbon tetrachloride	2.9	2.8	0.80	PASS	
Cyclohexane	2.7	2.5	8.1	PASS	
Dibromochloromethane	0.65	0.66	-0.30	PASS	
1,2-Dibromoethane	0.61	0.61	0.00	PASS	
1,2-Dichlorobenzene	0.92	0.96	-4.3	PASS	
1,3-Dichlorobenzene	0.93	0.96	-3.0	PASS	
1,4-Dichlorobenzene	0.94	0.99	-5.2	PASS	
Dichlorodifluoromethane	2.5	2.8	-11	PASS	
1,1-Dichloroethane	2.7	2.8	-4.3	PASS	
1,2-Dichloroethane	1.9	2.0	-3.1	PASS	
1,1-Dichloroethene	2.3	2.6	-14	PASS	
1,2-Dichloroethene (cis)	1.9	2.1	-9.1	PASS	
1,2-Dichloroethene (trans)	2.0	2.2	-12	PASS	
1,2-Dichloropropane	0.44	0.42	4.6	PASS	
1,3-Dichloropropene (cis)	0.62	0.61	1.9	PASS	
1,3-Dichloropropene (trans)	0.59	0.59	-1.2	PASS	
1,2-Dichlorotetrafluoroethane	3.6	3.7	-1.8	PASS	
1,4-Dioxane	0.23	0.23	0.90	PASS	
Ethylbenzene	1.9	1.9	3.5	PASS	
n-Heptane	3.5	3.0	14	PASS	
1,3-Hexachlorobutadiene	0.50	0.54	-8.2	PASS	
n-Hexane	4.0	3.8	6.5	PASS	
Methylene chloride	1.6	1.7	-5.8	PASS	
Methyl ethyl ketone	3.3	3.3	2.4	PASS	
Methyl isobutyl ketone	1.2	1.0	12	PASS	
Methyl tert-butyl ether	4.5	4.2	7.6	PASS	
Styrene	0.99	1.0	-3.5	PASS	
Tert-butyl alcohol	3.2	3.0	5.9	PASS	
1,1,2,2-Tetrachloroethane	1.1	1.1	3.4	PASS	
Tetrachloroethene	0.45	0.44	0.40	PASS	
Toluene	1.3	1.2	4.0	PASS	

***%Difference must be within +/- 30%**
RRF - Relative Response Factor

INTEGRATED ANALYTICAL LABORATORIES, LLC

Continuing Calibration Data Summary Report

Initial Calibration Curve:	**3/27/2024**	**Date/Time of Calibration:**	**4/3/2024 11:58**
Instrument:	**AA**	**Sample ID:**	**DCS**
Amount of standard injected (ml):	**50**	**Laboratory ID:**	**AA6121DCVS**

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6120BFB]	04/03/2024 10:39
10 PPBV DCVS [AA6121DCVS]	04/03/2024 11:58
10 PPBV LCS [AA6122LCS]	04/03/2024 12:29
METHOD BLANK [AA6123BLK]	04/03/2024 13:28
02 PPBV RLLCS [AA6124RLLCS]	04/03/2024 14:13
CLEAN CAN CERTIFICATION, BATCH MASTER 2037 [AA6125]	04/03/2024 16:31
CLEAN CAN CERTIFICATION, BATCH MASTER 5092 [AA6133]	04/03/2024 20:23
10 PPBV CCCVS [AA6134CCCVS]	04/03/2024 20:52

Compound Name	Average RRF	Standard RRF	% Difference	PassFail	*
1,2,4-Trichlorobenzene	0.68	0.74	-8.6	PASS	
1,1,1-Trichloroethane	2.7	2.6	2.4	PASS	
1,1,2-Trichloroethane	0.43	0.42	2.6	PASS	
Trichloroethene	0.40	0.43	-6.8	PASS	
Trichlorofluoromethane	2.9	3.0	-3.2	PASS	
1,1,2-Trichloro-1,2,2-trifluoroethane	2.9	2.7	6.7	PASS	
1,2,4-Trimethylbenzene	1.7	1.7	0.60	PASS	
1,3,5-Trimethylbenzene	1.7	1.7	2.3	PASS	
2,2,4-Trimethylpentane	1.9	2.0	-0.60	PASS	
Vinyl bromide	1.0	1.2	-19	PASS	
Vinyl chloride	1.2	1.4	-15	PASS	
Xylenes (m&p)	1.4	1.4	2.2	PASS	
Xylenes (o)	1.5	1.5	4.6	PASS	

***%Difference must be within +/- 30%**
RRF - Relative Response Factor

Data Path : C:\DATA\2024\04-2024\04-03-2024\
Data File : aa6121dcvs.D
Acq On : 3 Apr 2024 11:58 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 03 12:16:01 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 0% Max. R.T. Dev 0.40min
Max. RRF Dev : 30% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane (IS)	1.000	1.000	0.0	96	0.00
2	T	Propene	1.121	1.118	0.3	99	0.00
3	T	Dichlorodifluoromethane	2.514	2.797	-11.3	105	0.00
4	T	1,2-Dichlorotetrafluoroetha	3.629	3.694	-1.8	108	0.00
5	T	n-Butane	2.475	2.305	6.9	100	0.00
6	T	Chloromethane	0.162	0.169	-4.3	105	0.00
7	T	Vinyl chloride	1.245	1.432	-15.0	106	0.00
8	T	1,3-Butadiene	1.416	1.287	9.1	97	0.00
9	T	Bromomethane	0.898	1.066	-18.7	105	0.00
10	T	Chloroethane	0.686	0.773	-12.7	106	0.00
11	T	Vinyl bromide	1.034	1.229	-18.9	109	0.00
12	T	Trichlorofluoromethane	2.936	3.030	-3.2	108	0.00
13	T	Ethanol	0.459	0.521	-13.5	119	0.00
14	T	1,1-Dichloroethene	2.277	2.601	-14.2	106	0.00
15	T	Carbon disulfide	3.615	4.240	-17.3	107	0.00
16	T	1,1,2-Trichloro-1,2,2-trifl	2.904	2.709	6.7	104	0.00
17	T	Acrolein	0.546	0.583	-6.8	105	0.00
18	T	Allyl chloride	0.567	0.659	-16.2	108	0.00
19	T	Isopropanol	2.904	3.010	-3.7	102	0.00
20	T	Methylene chloride	1.620	1.714	-5.8	104	0.00
21	T	Acetone	2.237	2.300	-2.8	101	0.00
22	T	trans-1,2-Dichloroethene	1.992	2.230	-11.9	107	0.00
23	T	n-Pentane	2.808	2.756	1.9	104	0.00
24	T	n-Hexane	4.026	3.763	6.5	104	0.00
25	T	Methyl tert-butyl ether	4.521	4.177	7.6	99	0.00
26	T	Tert-butyl alcohol	3.193	3.004	5.9	102	0.00
27	T	1,1-Dichloroethane	2.674	2.789	-4.3	110	0.00
28	T	cis-1,2-Dichloroethene	1.918	2.092	-9.1	108	0.00
29	t	Cyclohexane	2.721	2.500	8.1	99	0.00
30	T	Chloroform	2.788	3.012	-8.0	110	0.00
31	T	Ethyl acetate	0.576	0.564	2.1	103	0.00
32	T	Carbon tetrachloride	2.853	2.829	0.8	105	0.00
33	T	Tetrahydrofuran	2.095	2.058	1.8	103	0.00
34	T	1,1,1-Trichloroethane	2.692	2.627	2.4	103	0.00
35	T	Methyl ethyl ketone	3.342	3.263	2.4	104	0.00
36	T	n-Heptane	3.491	2.991	14.3	96	0.00
37	T	Benzene	4.195	4.236	-1.0	110	0.00
38	T	1,2-Dichloroethane	1.903	1.962	-3.1	105	0.00
39	I	1,4-Difluorobenzene (IS)	1.000	1.000	0.0	102	0.00
40	T	Trichloroethene	0.399	0.426	-6.8	113	0.00
41	T	2,2,4-Trimethylpentane	1.939	1.950	-0.6	101	0.00
42	T	1,2-Dichloropropane	0.437	0.417	4.6	103	0.00
43	T	Bromodichloromethane	0.696	0.692	0.6	106	0.00
44	T	Methyl methacrylate	0.620	0.547	11.8	97	0.00
45	T	1,4-Dioxane	0.234	0.232	0.9	106	0.00
46	T	cis-1,3-Dichloropropene	0.617	0.605	1.9	104	0.00
47	T	Toluene	1.289	1.237	4.0	103	0.00
48	T	Methyl isobutyl ketone	1.152	1.011	12.2	94	0.00
49	T	Tetrachloroethene	0.445	0.443	0.4	106	0.00
50	T	trans-1,3-Dichloropropene	0.587	0.594	-1.2	104	0.00
51	T	1,1,2-Trichloroethane	0.426	0.415	2.6	104	0.00
52	T	Dibromochloromethane	0.653	0.655	-0.3	106	0.00
53	T	1,2-Dibromoethane	0.605	0.605	0.0	104	0.00

Data Path : C:\DATA\2024\04-2024\04-03-2024\
Data File : aa6121dcvs.D
Acq On : 3 Apr 2024 11:58 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 03 12:16:01 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 0% Max. R.T. Dev 0.40min
Max. RRF Dev : 30% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
54	T	Methyl n-butyl ketone	1.033	0.877	15.1	90	0.00
55	I	d-5 Chlorobenzene (IS)	1.000	1.000	0.0	100	0.00
56	T	n-Nonane	1.387	1.235	11.0	91	0.00
57	T	Chlorobenzene	0.964	0.985	-2.2	103	0.00
58	T	Ethylbenzene	1.919	1.852	3.5	99	0.00
59	T	Xylenes (m&p)	1.441	1.409	2.2	99	0.00
60	T	Xylene (o)	1.529	1.458	4.6	97	0.00
61	T	Styrene	0.991	1.026	-3.5	101	0.00
62	T	Bromoform	0.614	0.649	-5.7	103	0.00
63	T	Cumene	1.927	1.855	3.7	98	0.00
64	S	Bromofluorobenzene (tune st	0.897	0.864	3.7	95	0.00
65	T	n-Propyl benzene	2.610	2.537	2.8	98	0.00
66	T	1,1,2,2-Tetrachloroethane	1.133	1.095	3.4	99	0.00
67	T	4-Ethyltoluene	2.075	2.053	1.1	99	0.00
68	T	2-Chlorotoluene	1.767	1.718	2.8	99	0.00
69	T	1,3,5-Trimethylbenzene	1.709	1.669	2.3	98	0.00
70	T	1,2,4-Trimethylbenzene	1.694	1.684	0.6	98	0.00
71	T	1,3-Dichlorobenzene	0.928	0.956	-3.0	102	0.00
72	T	1,4-Dichlorobenzene	0.941	0.990	-5.2	103	0.00
73	T	Benzyl chloride	1.574	1.669	-6.0	100	0.00
74	T	1,2-Dichlorobenzene	0.921	0.961	-4.3	102	0.00
75	T	1,3-Hexachlorobutadiene	0.500	0.541	-8.2	104	0.00
76	T	1,2,4-Trichlorobenzene	0.683	0.742	-8.6	105	0.00
77	T	Naphthalene	1.897	2.029	-7.0	105	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data Path : C:\DATA\2024\04-2024\04-03-2024\
Data File : aa6121dcvs.D
Acq On : 3 Apr 2024 11:58 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 03 12:16:01 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.409	130	388202	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.480	114	1570048	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.351	117	1402375	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.750	95	1211647	9.63	ppbV	0.000
Target Compounds						Qvalue
2) Propene	1.463	41	473161	10.87	ppbV	98
3) Dichlorodifluoromethane	1.509	85	1151107	11.80	ppbV	99
4) 1,2-Dichlorotetrafluor...	1.629	85	1405329	9.98	ppbV	99
5) n-Butane	1.708	43	975137	10.15	ppbV	98
6) Chloromethane	1.774	52	73318	11.66	ppbV	93
7) Vinyl chloride	1.767	62	600212	12.42	ppbV	100
8) 1,3-Butadiene	1.774	39	534660	9.73	ppbV	97
9) Bromomethane	2.071	94	413904	11.87	ppbV	100
10) Chloroethane	2.184	64	317932	11.93	ppbV	100
11) Vinyl bromide	2.287	106	482020	12.00	ppbV	100
12) Trichlorofluoromethane	2.300	101	1293891	11.35	ppbV	99
13) Ethanol	2.669	45	210465	11.82	ppbV	96
14) 1,1-Dichloroethene	2.727	61	1049950	11.88	ppbV	99
15) Carbon disulfide	2.750	76	1761089	12.55	ppbV	96
16) 1,1,2-Trichloro-1,2,2-...	2.769	101	1146411	10.17	ppbV	99
17) Acrolein	2.988	56	226138	10.67	ppbV	99
18) Allyl chloride	3.113	76	276480	12.55	ppbV	100
19) Isopropanol	3.116	45	1040020	9.23	ppbV	100
20) Methylene chloride	3.206	49	718688	11.43	ppbV	95
21) Acetone	3.219	43	964438	11.11	ppbV	98
22) trans-1,2-Dichloroethene	3.329	61	960987	12.43	ppbV	96
23) n-Pentane	3.415	43	1155489	10.60	ppbV	99
24) n-Hexane	3.419	57	1607030	10.28	ppbV	96
25) Methyl tert-butyl ether	3.419	73	1816133	10.35	ppbV	96
26) Tert-butyl alcohol	3.477	59	1340863	10.82	ppbV	100
27) 1,1-Dichloroethane	3.817	63	1158414	11.16	ppbV	100
28) cis-1,2-Dichloroethene	4.248	61	885246	11.89	ppbV	97
29) Cyclohexane	4.428	56	1086821	10.29	ppbV	97
30) Chloroform	4.470	83	1262964	11.67	ppbV	99
31) Ethyl acetate	4.563	45	236322	10.58	ppbV	98
32) Carbon tetrachloride	4.592	117	1208124	10.91	ppbV	100
33) Tetrahydrofuran	4.599	42	879025	10.81	ppbV	97
34) 1,1,1-Trichloroethane	4.644	97	1111561	10.64	ppbV	100
35) Methyl ethyl ketone	4.705	43	1393320	10.74	ppbV	98
36) n-Heptane	4.936	43	1288906	9.51	ppbV	96
37) Benzene	4.952	78	1775928	10.90	ppbV	97
38) 1,2-Dichloroethane	5.113	62	830358	11.24	ppbV	100
40) Trichloroethene	5.457	130	669095	10.68	ppbV	96
41) 2,2,4-Trimethylpentane	4.866	57	3336740	10.96	ppbV	99
42) 1,2-Dichloropropane	5.910	63	720548	10.50	ppbV	98
43) Bromodichloromethane	5.972	83	1248748	11.43	ppbV	99
44) Methyl methacrylate	6.116	41	944675	9.71	ppbV	98
45) 1,4-Dioxane	6.145	88	426383	11.60	ppbV	96
46) cis-1,3-Dichloropropene	6.563	75	1054486	10.88	ppbV	100
47) Toluene	6.801	91	2096766	10.36	ppbV	99
48) Methyl isobutyl ketone	7.171	43	1729812	9.56	ppbV	98
49) Tetrachloroethene	7.190	166	779079	11.15	ppbV	100
50) trans-1,3-Dichloropropene	7.206	75	1035046	11.22	ppbV	92
51) 1,1,2-Trichloroethane	7.370	97	704455	10.53	ppbV	99

Data Path : C:\DATA\2024\04-2024\04-03-2024\
Data File : aa6121dcvs.D
Acq On : 3 Apr 2024 11:58 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

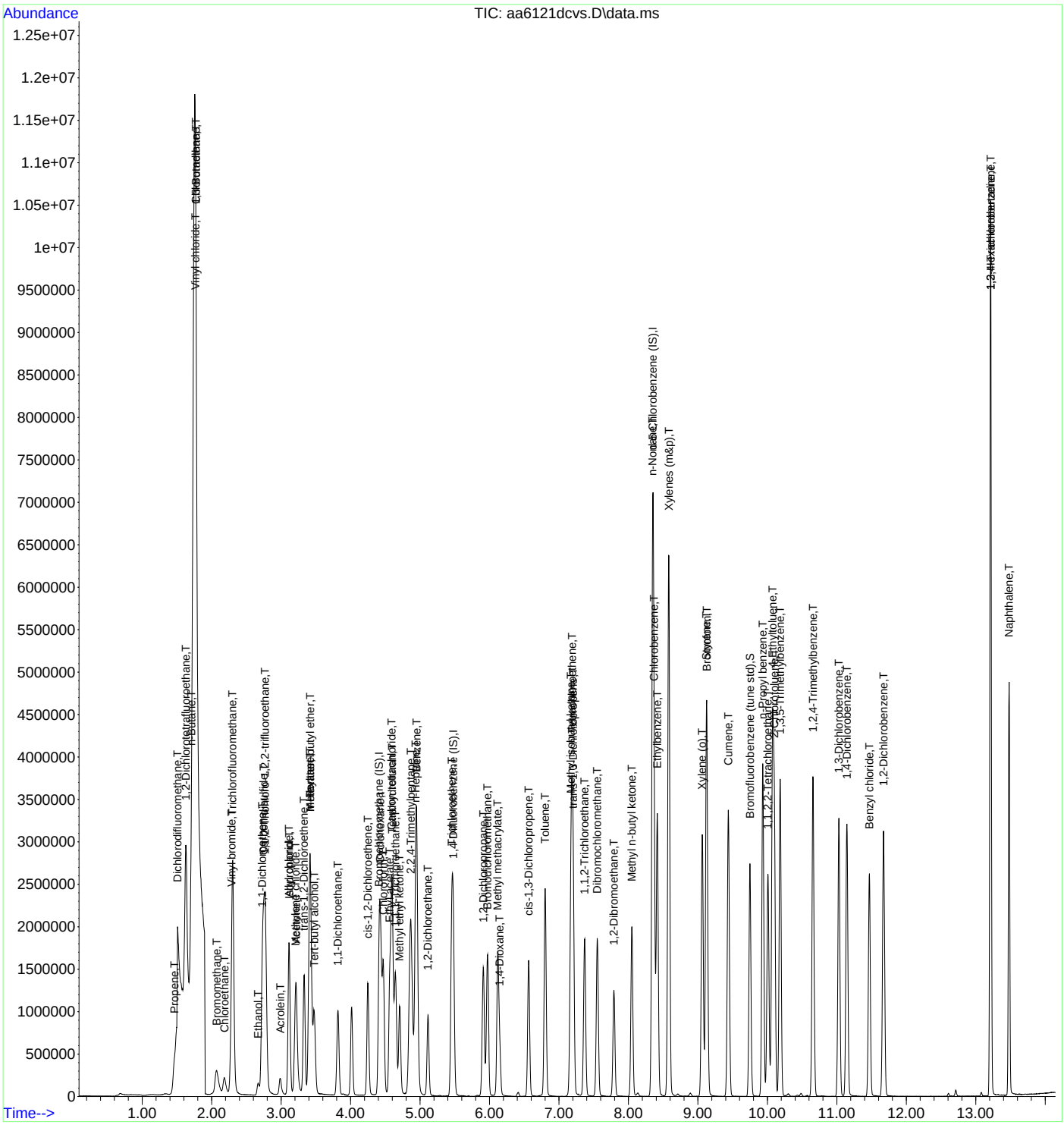
Quant Time: Apr 03 12:16:01 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.550	129	1152294	11.25	ppbV	100
53) 1,2-Dibromoethane	7.791	107	1026715	10.81	ppbV	100
54) Methyl n-butyl ketone	8.049	43	1555606	9.59	ppbV	98
56) n-Nonane	8.348	43	1904534	9.79	ppbV	97
57) Chlorobenzene	8.370	112	1532665	11.34	ppbV	97
58) Ethylbenzene	8.415	91	2883436	10.71	ppbV	100
59) Xylenes (m&p)	8.582	91	4407616	21.81	ppbV	99
60) Xylene (o)	9.061	91	2249404	10.49	ppbV	99
61) Styrene	9.123	104	1626635	11.70	ppbV	99
62) Bromoform	9.129	173	1029156	11.96	ppbV	100
63) Cumene	9.438	105	2783751	10.30	ppbV	99
65) n-Propyl benzene	9.933	91	3843151	10.50	ppbV	100
66) 1,1,2,2-Tetrachloroethane	10.007	83	1750863	11.02	ppbV	100
67) 4-Ethyltoluene	10.074	105	3110083	10.69	ppbV	100
68) 2-Chlorotoluene	10.100	91	2626198	10.60	ppbV	99
69) 1,3,5-Trimethylbenzene	10.184	105	2550632	10.64	ppbV	100
70) 1,2,4-Trimethylbenzene	10.656	105	2550771	10.74	ppbV	100
71) 1,3-Dichlorobenzene	11.029	146	1488054	11.43	ppbV	99
72) 1,4-Dichlorobenzene	11.145	146	1485295	11.25	ppbV	99
73) Benzyl chloride	11.470	91	2341258	10.60	ppbV	99
74) 1,2-Dichlorobenzene	11.672	146	1441627	11.16	ppbV	99
75) 1,3-Hexachlorobutadiene	13.216	225	842034	12.01	ppbV	100
76) 1,2,4-Trichlorobenzene	13.216	180	1143869	11.95	ppbV	99
77) Naphthalene	13.479	128	2846055	10.70	ppbV	100

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

Data Path : C:\DATA\2024\04-2024\04-03-2024\
Data File : aa6121dcvs.D
Acq On : 3 Apr 2024 11:58 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 03 12:16:01 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES, LLC

Continuing Calibration Data Summary Report

Initial Calibration Curve: 3/27/2024
Instrument: AA
Amount of standard injected (ml): 50

Date/Time of Calibration: 4/29/2024 11:31
Sample ID: DCS
Laboratory ID: AA6443DCVS

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6442BFB]	04/29/2024 09:47
10 PPBV DCVS [AA6443DCVS]	04/29/2024 11:31
10 PPBV LCS [AA6444LCS]	04/29/2024 12:05
METHOD BLANK [AA6445BLK]	04/29/2024 12:35
02 PPBV RLLCS [AA6446RLLCS]	04/29/2024 13:20
E24-01487-01 [AA6447]	04/29/2024 15:57
E24-01487-02 [AA6448]	04/29/2024 16:29
E24-01487-03 [AA6449]	04/29/2024 17:01
E24-01487-04 [AA6450]	04/29/2024 17:33
10 PPBV CCCVS [AA6455CCCVS]	04/29/2024 20:15

Compound Name	Average RRF	Standard RRF	% Difference	PassFail	*
Acetone	2.2	2.4	-5.7	PASS	
Benzene	4.2	4.0	3.9	PASS	
Bromodichloromethane	0.70	0.72	-3.0	PASS	
Bromoform	0.61	0.64	-4.2	PASS	
Bromomethane	0.90	0.99	-10	PASS	
1,3-Butadiene	1.4	1.3	8.9	PASS	
Chlorobenzene	0.96	0.99	-2.9	PASS	
Chloroethane	0.69	0.75	-9.8	PASS	
Chloroform	2.8	2.9	-2.6	PASS	
Chloromethane	0.16	0.18	-9.3	PASS	
Carbon disulfide	3.6	4.1	-13	PASS	
Carbon tetrachloride	2.9	2.7	6.3	PASS	
Cyclohexane	2.7	2.5	7.9	PASS	
Dibromochloromethane	0.65	0.67	-2.0	PASS	
1,2-Dibromoethane	0.61	0.62	-2.5	PASS	
1,2-Dichlorobenzene	0.92	0.94	-1.6	PASS	
1,3-Dichlorobenzene	0.93	0.93	-0.40	PASS	
1,4-Dichlorobenzene	0.94	0.97	-2.9	PASS	
Dichlorodifluoromethane	2.5	2.6	-4.1	PASS	
1,1-Dichloroethane	2.7	2.7	-1.5	PASS	
1,2-Dichloroethane	1.9	1.9	-2.1	PASS	
1,1-Dichloroethene	2.3	2.6	-12	PASS	
1,2-Dichloroethene (cis)	1.9	2.0	-5.4	PASS	
1,2-Dichloroethene (trans)	2.0	2.2	-11	PASS	
1,2-Dichloropropane	0.44	0.44	-1.4	PASS	
1,3-Dichloropropene (cis)	0.62	0.64	-3.6	PASS	
1,3-Dichloropropene (trans)	0.59	0.63	-7.5	PASS	
1,2-Dichlorotetrafluoroethane	3.6	3.5	4.3	PASS	
1,4-Dioxane	0.23	0.23	0.90	PASS	
Ethylbenzene	1.9	1.9	0.40	PASS	
n-Heptane	3.5	3.1	11	PASS	
1,3-Hexachlorobutadiene	0.50	0.53	-5.2	PASS	
n-Hexane	4.0	3.7	8.7	PASS	
Methylene chloride	1.6	1.7	-6.7	PASS	
Methyl ethyl ketone	3.3	3.3	1.5	PASS	
Methyl isobutyl ketone	1.2	1.1	3.7	PASS	
Methyl tert-butyl ether	4.5	4.1	9.6	PASS	
Styrene	0.99	1.0	-3.9	PASS	
Tert-butyl alcohol	3.2	2.9	8.5	PASS	
1,1,2,2-Tetrachloroethane	1.1	1.1	0.20	PASS	

***%Difference must be within +/- 30%**
RRF - Relative Response Factor

INTEGRATED ANALYTICAL LABORATORIES, LLC

Continuing Calibration Data Summary Report

Initial Calibration Curve:	**3/27/2024**	**Date/Time of Calibration:**	**4/29/2024 11:31**
Instrument:	**AA**	**Sample ID:**	**DCS**
Amount of standard injected (ml):	**50**	**Laboratory ID:**	**AA6443DCVS**

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6442BFB]	04/29/2024 09:47
10 PPBV DCVS [AA6443DCVS]	04/29/2024 11:31
10 PPBV LCS [AA6444LCS]	04/29/2024 12:05
METHOD BLANK [AA6445BLK]	04/29/2024 12:35
02 PPBV RLLCS [AA6446RLLCS]	04/29/2024 13:20
E24-01487-01 [AA6447]	04/29/2024 15:57
E24-01487-02 [AA6448]	04/29/2024 16:29
E24-01487-03 [AA6449]	04/29/2024 17:01
E24-01487-04 [AA6450]	04/29/2024 17:33
10 PPBV CCCVS [AA6455CCCVS]	04/29/2024 20:15

Compound Name	Average RRF	Standard RRF	% Difference	PassFail	*
Tetrachloroethene	0.45	0.44	1.1	PASS	
Toluene	1.3	1.3	0.40	PASS	
1,2,4-Trichlorobenzene	0.68	0.70	-2.5	PASS	
1,1,1-Trichloroethane	2.7	2.5	6.7	PASS	
1,1,2-Trichloroethane	0.43	0.43	-0.50	PASS	
Trichloroethene	0.40	0.42	-5.3	PASS	
Trichlorofluoromethane	2.9	2.8	4.1	PASS	
1,1,2-Trichloro-1,2,2-trifluoroethane	2.9	2.6	12	PASS	
1,2,4-Trimethylbenzene	1.7	1.7	0.30	PASS	
1,3,5-Trimethylbenzene	1.7	1.7	1.6	PASS	
2,2,4-Trimethylpentane	1.9	2.1	-6.9	PASS	
Vinyl bromide	1.0	1.1	-10	PASS	
Vinyl chloride	1.2	1.3	-6.6	PASS	
Xylenes (m&p)	1.4	1.4	0.00	PASS	
Xylenes (o)	1.5	1.5	1.8	PASS	

***%Difference must be within +/- 30%**
RRF - Relative Response Factor

Data Path : C:\DATA\2024\04-2024\04-29-2024\
Data File : aa6443dcvs.D
Acq On : 29 Apr 2024 11:31 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 09 12:25:33 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 0% Max. R.T. Dev 0.40min
Max. RRF Dev : 30% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane (IS)	1.000	1.000	0.0	79	0.00
2	T	Propene	1.121	1.136	-1.3	83	0.00
3	T	Dichlorodifluoromethane	2.514	2.616	-4.1	82	0.00
4	T	1,2-Dichlorotetrafluoroetha	3.629	3.473	4.3	84	0.00
5	T	n-Butane	2.475	2.313	6.5	83	0.00
6	T	Chloromethane	0.162	0.177	-9.3	91	0.00
7	T	Vinyl chloride	1.245	1.327	-6.6	81	0.00
8	T	1,3-Butadiene	1.416	1.290	8.9	81	0.00
9	T	Bromomethane	0.898	0.988	-10.0	81	0.00
10	T	Chloroethane	0.686	0.753	-9.8	85	0.00
11	T	Vinyl bromide	1.034	1.138	-10.1	84	0.00
12	T	Trichlorofluoromethane	2.936	2.816	4.1	83	0.00
13	T	Ethanol	0.459	0.463	-0.9	88	0.00
14	T	1,1-Dichloroethene	2.277	2.552	-12.1	86	0.00
15	T	Carbon disulfide	3.615	4.090	-13.1	86	0.00
16	T	1,1,2-Trichloro-1,2,2-trifl	2.904	2.565	11.7	81	0.00
17	T	Acrolein	0.546	0.582	-6.6	87	0.00
18	T	Allyl chloride	0.567	0.632	-11.5	86	0.00
19	T	Isopropanol	2.904	3.017	-3.9	85	0.00
20	T	Methylene chloride	1.620	1.728	-6.7	87	0.00
21	T	Acetone	2.237	2.365	-5.7	86	0.00
22	T	trans-1,2-Dichloroethene	1.992	2.216	-11.2	88	0.00
23	T	n-Pentane	2.808	2.654	5.5	83	0.00
24	T	n-Hexane	4.026	3.677	8.7	84	0.00
25	T	Methyl tert-butyl ether	4.521	4.089	9.6	81	0.00
26	T	Tert-butyl alcohol	3.193	2.920	8.5	82	0.00
27	T	1,1-Dichloroethane	2.674	2.713	-1.5	88	0.00
28	T	cis-1,2-Dichloroethene	1.918	2.022	-5.4	87	0.00
29	t	Cyclohexane	2.721	2.507	7.9	83	0.00
30	T	Chloroform	2.788	2.861	-2.6	87	0.00
31	T	Ethyl acetate	0.576	0.574	0.3	87	0.00
32	T	Carbon tetrachloride	2.853	2.673	6.3	82	0.00
33	T	Tetrahydrofuran	2.095	2.082	0.6	87	0.00
34	T	1,1,1-Trichloroethane	2.692	2.512	6.7	82	0.00
35	T	Methyl ethyl ketone	3.342	3.292	1.5	87	0.00
36	T	n-Heptane	3.491	3.099	11.2	82	0.00
37	T	Benzene	4.195	4.033	3.9	87	0.00
38	T	1,2-Dichloroethane	1.903	1.943	-2.1	87	0.00
39	I	1,4-Difluorobenzene (IS)	1.000	1.000	0.0	79	0.00
40	T	Trichloroethene	0.399	0.420	-5.3	86	0.00
41	T	2,2,4-Trimethylpentane	1.939	2.073	-6.9	83	0.00
42	T	1,2-Dichloropropane	0.437	0.443	-1.4	84	0.00
43	T	Bromodichloromethane	0.696	0.717	-3.0	85	0.00
44	T	Methyl methacrylate	0.620	0.612	1.3	84	0.00
45	T	1,4-Dioxane	0.234	0.232	0.9	82	0.00
46	T	cis-1,3-Dichloropropene	0.617	0.639	-3.6	85	0.00
47	T	Toluene	1.289	1.284	0.4	82	0.00
48	T	Methyl isobutyl ketone	1.152	1.109	3.7	80	0.00
49	T	Tetrachloroethene	0.445	0.440	1.1	81	0.00
50	T	trans-1,3-Dichloropropene	0.587	0.631	-7.5	85	0.00
51	T	1,1,2-Trichloroethane	0.426	0.428	-0.5	83	0.00
52	T	Dibromochloromethane	0.653	0.666	-2.0	83	0.00
53	T	1,2-Dibromoethane	0.605	0.620	-2.5	82	0.00

Data Path : C:\DATA\2024\04-2024\04-29-2024\
Data File : aa6443dcvs.D
Acq On : 29 Apr 2024 11:31 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 09 12:25:33 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 0% Max. R.T. Dev 0.40min
Max. RRF Dev : 30% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
54	T	Methyl n-butyl ketone	1.033	1.013	1.9	80	0.00
55	I	d-5 Chlorobenzene (IS)	1.000	1.000	0.0	78	0.00
56	T	n-Nonane	1.387	1.358	2.1	78	0.00
57	T	Chlorobenzene	0.964	0.992	-2.9	81	0.00
58	T	Ethylbenzene	1.919	1.912	0.4	80	0.00
59	T	Xylenes (m&p)	1.441	1.441	0.0	79	0.00
60	T	Xylene (o)	1.529	1.501	1.8	78	0.00
61	T	Styrene	0.991	1.030	-3.9	79	0.00
62	T	Bromoform	0.614	0.640	-4.2	80	0.00
63	T	Cumene	1.927	1.894	1.7	78	0.00
64	S	Bromofluorobenzene (tune st	0.897	0.881	1.8	76	0.00
65	T	n-Propyl benzene	2.610	2.582	1.1	78	0.00
66	T	1,1,2,2-Tetrachloroethane	1.133	1.131	0.2	79	0.00
67	T	4-Ethyltoluene	2.075	2.070	0.2	78	0.00
68	T	2-Chlorotoluene	1.767	1.746	1.2	78	0.00
69	T	1,3,5-Trimethylbenzene	1.709	1.682	1.6	77	0.00
70	T	1,2,4-Trimethylbenzene	1.694	1.689	0.3	77	0.00
71	T	1,3-Dichlorobenzene	0.928	0.932	-0.4	78	0.00
72	T	1,4-Dichlorobenzene	0.941	0.968	-2.9	78	0.00
73	T	Benzyl chloride	1.574	1.658	-5.3	78	0.00
74	T	1,2-Dichlorobenzene	0.921	0.936	-1.6	77	0.00
75	T	1,3-Hexachlorobutadiene	0.500	0.526	-5.2	79	0.00
76	T	1,2,4-Trichlorobenzene	0.683	0.700	-2.5	78	0.00
77	T	Naphthalene	1.897	1.918	-1.1	77	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data Path : C:\DATA\2024\04-2024\04-29-2024\
Data File : aa6443dcvs.D
Acq On : 29 Apr 2024 11:31 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 09 12:25:33 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.410	130	322072	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.481	114	1213069	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.352	117	1095212	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.747	95	965357	9.83	ppbV	0.000
Target Compounds						Qvalue
2) Propene	1.467	41	398958	11.05	ppbV	98
3) Dichlorodifluoromethane	1.506	85	893227	11.03	ppbV	100
4) 1,2-Dichlorotetrafluor...	1.627	85	1096077	9.38	ppbV	97
5) n-Butane	1.709	43	811915	10.19	ppbV	99
6) Chloromethane	1.774	52	63756	12.22	ppbV	98
7) Vinyl chloride	1.764	62	461589	11.51	ppbV	99
8) 1,3-Butadiene	1.774	39	444528	9.75	ppbV	99
9) Bromomethane	2.066	94	318128	11.00	ppbV	97
10) Chloroethane	2.185	64	256971	11.63	ppbV	99
11) Vinyl bromide	2.281	106	370331	11.12	ppbV	100
12) Trichlorofluoromethane	2.301	101	997697	10.55	ppbV	99
13) Ethanol	2.670	45	155154	10.50	ppbV	98
14) 1,1-Dichloroethene	2.728	61	854730	11.66	ppbV	99
15) Carbon disulfide	2.747	76	1409654	12.11	ppbV	99
16) 1,1,2-Trichloro-1,2,2-...	2.770	101	900613	9.63	ppbV	98
17) Acrolein	2.989	56	187507	10.67	ppbV	97
18) Allyl chloride	3.114	76	219774	12.02	ppbV	100
19) Isopropanol	3.117	45	864867	9.25	ppbV	99
20) Methylene chloride	3.207	49	601090	11.52	ppbV	100
21) Acetone	3.220	43	822773	11.42	ppbV	100
22) trans-1,2-Dichloroethene	3.329	61	792362	12.35	ppbV	99
23) n-Pentane	3.416	43	923049	10.21	ppbV	98
24) n-Hexane	3.413	57	1302659	10.05	ppbV	100
25) Methyl tert-butyl ether	3.419	73	1475122	10.13	ppbV	96
26) Tert-butyl alcohol	3.477	59	1081647	10.52	ppbV	100
27) 1,1-Dichloroethane	3.818	63	934978	10.86	ppbV	100
28) cis-1,2-Dichloroethene	4.249	61	709977	11.49	ppbV	100
29) Cyclohexane	4.432	56	904349	10.32	ppbV	99
30) Chloroform	4.471	83	995267	11.08	ppbV	100
31) Ethyl acetate	4.564	45	199618	10.77	ppbV	99
32) Carbon tetrachloride	4.593	117	947100	10.31	ppbV	100
33) Tetrahydrofuran	4.596	42	737783	10.93	ppbV	99
34) 1,1,1-Trichloroethane	4.648	97	881821	10.17	ppbV	99
35) Methyl ethyl ketone	4.706	43	1166335	10.84	ppbV	99
36) n-Heptane	4.940	43	1107866	9.85	ppbV	99
37) Benzene	4.953	78	1402774	10.38	ppbV	100
38) 1,2-Dichloroethane	5.114	62	682188	11.13	ppbV	99
40) Trichloroethene	5.455	130	509356	10.52	ppbV	99
41) 2,2,4-Trimethylpentane	4.860	57	2740449	11.65	ppbV	100
42) 1,2-Dichloropropane	5.911	63	591313	11.15	ppbV	97
43) Bromodichloromethane	5.969	83	1000866	11.85	ppbV	100
44) Methyl methacrylate	6.117	41	816769	10.86	ppbV	99
45) 1,4-Dioxane	6.146	88	329047	11.59	ppbV	97
46) cis-1,3-Dichloropropene	6.564	75	860879	11.49	ppbV	100
47) Toluene	6.802	91	1681588	10.76	ppbV	99
48) Methyl isobutyl ketone	7.169	43	1466728	10.49	ppbV	100
49) Tetrachloroethene	7.188	166	597558	11.07	ppbV	99
50) trans-1,3-Dichloropropene	7.207	75	849735	11.92	ppbV	97
51) 1,1,2-Trichloroethane	7.368	97	560983	10.86	ppbV	99

Data Path : C:\DATA\2024\04-2024\04-29-2024\
Data File : aa6443dcvs.D
Acq On : 29 Apr 2024 11:31 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

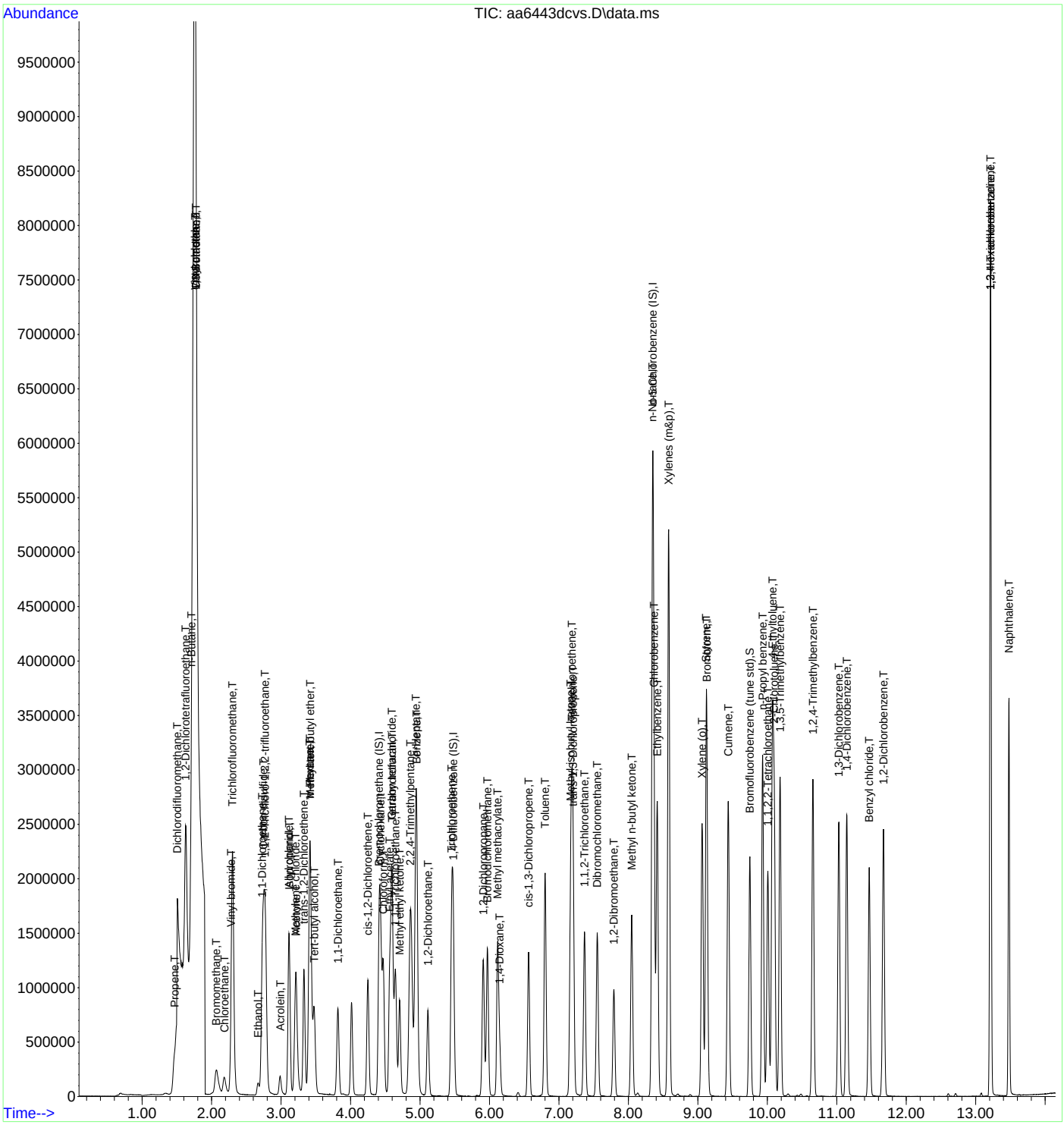
Quant Time: May 09 12:25:33 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.551	129	904854	11.43	ppbV	99
53) 1,2-Dibromoethane	7.792	107	811949	11.06	ppbV	100
54) Methyl n-butyl ketone	8.050	43	1389141	11.08	ppbV	99
56) n-Nonane	8.349	43	1636417	10.77	ppbV	99
57) Chlorobenzene	8.371	112	1205690	11.42	ppbV	100
58) Ethylbenzene	8.416	91	2324044	11.06	ppbV	100
59) Xylenes (m&p)	8.580	91	3518524	22.30	ppbV	100
60) Xylene (o)	9.062	91	1808704	10.80	ppbV	100
61) Styrene	9.120	104	1274821	11.74	ppbV	100
62) Bromoform	9.130	173	792030	11.79	ppbV	100
63) Cumene	9.439	105	2219347	10.52	ppbV	99
65) n-Propyl benzene	9.934	91	3053752	10.68	ppbV	100
66) 1,1,2,2-Tetrachloroethane	10.008	83	1412132	11.38	ppbV	100
67) 4-Ethyltoluene	10.075	105	2448114	10.77	ppbV	100
68) 2-Chlorotoluene	10.098	91	2084446	10.77	ppbV	100
69) 1,3,5-Trimethylbenzene	10.184	105	2007498	10.73	ppbV	99
70) 1,2,4-Trimethylbenzene	10.657	105	1997251	10.77	ppbV	100
71) 1,3-Dichlorobenzene	11.030	146	1132889	11.15	ppbV	99
72) 1,4-Dichlorobenzene	11.146	146	1134926	11.01	ppbV	100
73) Benzyl chloride	11.467	91	1816325	10.53	ppbV	100
74) 1,2-Dichlorobenzene	11.673	146	1097189	10.88	ppbV	100
75) 1,3-Hexachlorobutadiene	13.213	225	639238	11.67	ppbV	100
76) 1,2,4-Trichlorobenzene	13.213	180	843242	11.28	ppbV	100
77) Naphthalene	13.480	128	2100139	10.11	ppbV	100

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

Data Path : C:\DATA\2024\04-2024\04-29-2024\
Data File : aa6443dcvs.D
Acq On : 29 Apr 2024 11:31 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 09 12:25:33 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES, LLC

Continuing Calibration Data Summary Report

Initial Calibration Curve: 3/27/2024
Instrument: AA
Amount of standard injected (ml): 50

Date/Time of Calibration: 4/30/2024 10:49
Sample ID: DCS
Laboratory ID: AA6458DCVS

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6457BFB]	04/30/2024 09:16
10 PPBV DCVS [AA6458DCVS]	04/30/2024 10:49
10 PPBV LCS [AA6459LCS]	04/30/2024 11:18
METHOD BLANK [AA6460BLK]	04/30/2024 11:45
02 PPBV RLLCS [AA6461RLLCS]	04/30/2024 12:13
E24-01487-01 [AA6462]	04/30/2024 12:48
E24-01487-02 [AA6463]	04/30/2024 13:19
10 PPBV CCCVS [AA6472CCCVS]	04/30/2024 21:15

Compound Name	Average RRF	Standard RRF	% Difference	PassFail	*
Acetone	2.2	2.4	-6.0	PASS	
Benzene	4.2	4.1	1.6	PASS	
Bromodichloromethane	0.70	0.71	-1.3	PASS	
Bromoform	0.61	0.62	-1.0	PASS	
Bromomethane	0.90	1.0	-15	PASS	
1,3-Butadiene	1.4	1.3	7.0	PASS	
Chlorobenzene	0.96	0.96	0.00	PASS	
Chloroethane	0.69	0.76	-11	PASS	
Chloroform	2.8	2.9	-4.8	PASS	
Chloromethane	0.16	0.18	-9.9	PASS	
Carbon disulfide	3.6	4.2	-16	PASS	
Carbon tetrachloride	2.9	2.7	5.2	PASS	
Cyclohexane	2.7	2.5	7.0	PASS	
Dibromochloromethane	0.65	0.65	0.90	PASS	
1,2-Dibromoethane	0.61	0.61	0.00	PASS	
1,2-Dichlorobenzene	0.92	0.91	1.1	PASS	
1,3-Dichlorobenzene	0.93	0.91	1.9	PASS	
1,4-Dichlorobenzene	0.94	0.94	-0.30	PASS	
Dichlorodifluoromethane	2.5	2.7	-5.6	PASS	
1,1-Dichloroethane	2.7	2.8	-3.1	PASS	
1,2-Dichloroethane	1.9	2.0	-3.8	PASS	
1,1-Dichloroethene	2.3	2.6	-13	PASS	
1,2-Dichloroethene (cis)	1.9	2.1	-7.2	PASS	
1,2-Dichloroethene (trans)	2.0	2.2	-13	PASS	
1,2-Dichloropropane	0.44	0.44	0.00	PASS	
1,3-Dichloropropene (cis)	0.62	0.62	-0.80	PASS	
1,3-Dichloropropene (trans)	0.59	0.61	-4.4	PASS	
1,2-Dichlorotetrafluoroethane	3.6	3.5	3.1	PASS	
1,4-Dioxane	0.23	0.23	1.3	PASS	
Ethylbenzene	1.9	1.9	3.6	PASS	
n-Heptane	3.5	3.2	9.7	PASS	
1,3-Hexachlorobutadiene	0.50	0.51	-1.2	PASS	
n-Hexane	4.0	3.7	6.9	PASS	
Methylene chloride	1.6	1.8	-8.6	PASS	
Methyl ethyl ketone	3.3	3.4	-0.40	PASS	
Methyl isobutyl ketone	1.2	1.1	6.9	PASS	
Methyl tert-butyl ether	4.5	4.2	7.7	PASS	
Styrene	0.99	0.99	-0.10	PASS	
Tert-butyl alcohol	3.2	3.0	6.5	PASS	
1,1,2,2-Tetrachloroethane	1.1	1.1	3.0	PASS	
Tetrachloroethene	0.45	0.43	2.7	PASS	
Toluene	1.3	1.3	2.6	PASS	

***%Difference must be within +/- 30%**
RRF - Relative Response Factor

INTEGRATED ANALYTICAL LABORATORIES, LLC

Continuing Calibration Data Summary Report

Initial Calibration Curve:	**3/27/2024**	**Date/Time of Calibration:**	**4/30/2024 10:49**
Instrument:	**AA**	**Sample ID:**	**DCS**
Amount of standard injected (ml):	**50**	**Laboratory ID:**	**AA6458DCVS**

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6457BFB]	04/30/2024 09:16
10 PPBV DCVS [AA6458DCVS]	04/30/2024 10:49
10 PPBV LCS [AA6459LCS]	04/30/2024 11:18
METHOD BLANK [AA6460BLK]	04/30/2024 11:45
02 PPBV RLLCS [AA6461RLLCS]	04/30/2024 12:13
E24-01487-01 [AA6462]	04/30/2024 12:48
E24-01487-02 [AA6463]	04/30/2024 13:19
10 PPBV CCCVS [AA6472CCCVS]	04/30/2024 21:15

Compound Name	Average RRF	Standard RRF	% Difference	PassFail	*
1,2,4-Trichlorobenzene	0.68	0.69	-1.3	PASS	
1,1,1-Trichloroethane	2.7	2.6	3.3	PASS	
1,1,2-Trichloroethane	0.43	0.42	1.6	PASS	
Trichloroethene	0.40	0.41	-3.5	PASS	
Trichlorofluoromethane	2.9	2.9	1.6	PASS	
1,1,2-Trichloro-1,2,2-trifluoroethane	2.9	2.6	9.6	PASS	
1,2,4-Trimethylbenzene	1.7	1.7	2.6	PASS	
1,3,5-Trimethylbenzene	1.7	1.7	3.2	PASS	
2,2,4-Trimethylpentane	1.9	2.0	-4.3	PASS	
Vinyl bromide	1.0	1.2	-13	PASS	
Vinyl chloride	1.2	1.4	-12	PASS	
Xylenes (m&p)	1.4	1.4	3.1	PASS	
Xylenes (o)	1.5	1.5	4.6	PASS	

***%Difference must be within +/- 30%**
RRF - Relative Response Factor

Data Path : C:\DATA\2024\04-2024\04-30-2024\
Data File : aa6458dcvs.D
Acq On : 30 Apr 2024 10:49 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 09 14:08:33 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 0% Max. R.T. Dev 0.40min
Max. RRF Dev : 30% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane (IS)	1.000	1.000	0.0	74	0.00
2	T	Propene	1.121	1.136	-1.3	78	0.00
3	T	Dichlorodifluoromethane	2.514	2.655	-5.6	77	0.00
4	T	1,2-Dichlorotetrafluoroetha	3.629	3.517	3.1	80	0.00
5	T	n-Butane	2.475	2.351	5.0	79	0.00
6	T	Chloromethane	0.162	0.178	-9.9	86	0.00
7	T	Vinyl chloride	1.245	1.393	-11.9	80	0.00
8	T	1,3-Butadiene	1.416	1.317	7.0	77	0.00
9	T	Bromomethane	0.898	1.033	-15.0	79	0.00
10	T	Chloroethane	0.686	0.762	-11.1	81	0.00
11	T	Vinyl bromide	1.034	1.165	-12.7	80	0.00
12	T	Trichlorofluoromethane	2.936	2.889	1.6	80	0.00
13	T	Ethanol	0.459	0.588	-28.1	104	0.00
14	T	1,1-Dichloroethene	2.277	2.577	-13.2	82	0.00
15	T	Carbon disulfide	3.615	4.193	-16.0	82	0.00
16	T	1,1,2-Trichloro-1,2,2-trifl	2.904	2.626	9.6	78	0.00
17	T	Acrolein	0.546	0.585	-7.1	82	0.00
18	T	Allyl chloride	0.567	0.639	-12.7	81	0.00
19	T	Isopropanol	2.904	3.057	-5.3	81	0.00
20	T	Methylene chloride	1.620	1.760	-8.6	82	0.00
21	T	Acetone	2.237	2.371	-6.0	81	0.00
22	T	trans-1,2-Dichloroethene	1.992	2.243	-12.6	83	0.00
23	T	n-Pentane	2.808	2.645	5.8	77	0.00
24	T	n-Hexane	4.026	3.747	6.9	80	0.00
25	T	Methyl tert-butyl ether	4.521	4.171	7.7	77	0.00
26	T	Tert-butyl alcohol	3.193	2.985	6.5	79	0.00
27	T	1,1-Dichloroethane	2.674	2.758	-3.1	84	0.00
28	T	cis-1,2-Dichloroethene	1.918	2.056	-7.2	82	0.00
29	t	Cyclohexane	2.721	2.530	7.0	78	0.00
30	T	Chloroform	2.788	2.921	-4.8	83	0.00
31	T	Ethyl acetate	0.576	0.584	-1.4	83	0.00
32	T	Carbon tetrachloride	2.853	2.705	5.2	78	0.00
33	T	Tetrahydrofuran	2.095	2.096	-0.0	82	0.00
34	T	1,1,1-Trichloroethane	2.692	2.602	3.3	79	0.00
35	T	Methyl ethyl ketone	3.342	3.354	-0.4	83	0.00
36	T	n-Heptane	3.491	3.152	9.7	78	0.00
37	T	Benzene	4.195	4.127	1.6	83	0.00
38	T	1,2-Dichloroethane	1.903	1.976	-3.8	82	0.00
39	I	1,4-Difluorobenzene (IS)	1.000	1.000	0.0	77	0.00
40	T	Trichloroethene	0.399	0.413	-3.5	82	0.00
41	T	2,2,4-Trimethylpentane	1.939	2.023	-4.3	79	0.00
42	T	1,2-Dichloropropane	0.437	0.437	0.0	81	0.00
43	T	Bromodichloromethane	0.696	0.705	-1.3	81	0.00
44	T	Methyl methacrylate	0.620	0.594	4.2	79	0.00
45	T	1,4-Dioxane	0.234	0.231	1.3	79	0.00
46	T	cis-1,3-Dichloropropene	0.617	0.622	-0.8	81	0.00
47	T	Toluene	1.289	1.255	2.6	78	0.00
48	T	Methyl isobutyl ketone	1.152	1.073	6.9	75	0.00
49	T	Tetrachloroethene	0.445	0.433	2.7	77	0.00
50	T	trans-1,3-Dichloropropene	0.587	0.613	-4.4	80	0.00
51	T	1,1,2-Trichloroethane	0.426	0.419	1.6	79	0.00
52	T	Dibromochloromethane	0.653	0.647	0.9	78	0.00
53	T	1,2-Dibromoethane	0.605	0.605	0.0	78	0.00

Data Path : C:\DATA\2024\04-2024\04-30-2024\
Data File : aa6458dcvs.D
Acq On : 30 Apr 2024 10:49 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 09 14:08:33 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 0% Max. R.T. Dev 0.40min
Max. RRF Dev : 30% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
54	T	Methyl n-butyl ketone	1.033	0.969	6.2	74	0.00
55	I	d-5 Chlorobenzene (IS)	1.000	1.000	0.0	75	0.00
56	T	n-Nonane	1.387	1.320	4.8	73	0.00
57	T	Chlorobenzene	0.964	0.964	0.0	76	0.00
58	T	Ethylbenzene	1.919	1.850	3.6	75	0.00
59	T	Xylenes (m&p)	1.441	1.397	3.1	74	0.00
60	T	Xylene (o)	1.529	1.459	4.6	73	0.00
61	T	Styrene	0.991	0.992	-0.1	73	0.00
62	T	Bromoform	0.614	0.620	-1.0	74	0.00
63	T	Cumene	1.927	1.835	4.8	73	0.00
64	S	Bromofluorobenzene (tune st	0.897	0.860	4.1	72	0.00
65	T	n-Propyl benzene	2.610	2.509	3.9	73	0.00
66	T	1,1,2,2-Tetrachloroethane	1.133	1.099	3.0	75	0.00
67	T	4-Ethyltoluene	2.075	2.006	3.3	73	0.00
68	T	2-Chlorotoluene	1.767	1.696	4.0	73	0.00
69	T	1,3,5-Trimethylbenzene	1.709	1.655	3.2	73	0.00
70	T	1,2,4-Trimethylbenzene	1.694	1.650	2.6	72	0.00
71	T	1,3-Dichlorobenzene	0.928	0.910	1.9	74	0.00
72	T	1,4-Dichlorobenzene	0.941	0.944	-0.3	74	0.00
73	T	Benzyl chloride	1.574	1.625	-3.2	74	0.00
74	T	1,2-Dichlorobenzene	0.921	0.911	1.1	73	0.00
75	T	1,3-Hexachlorobutadiene	0.500	0.506	-1.2	73	0.00
76	T	1,2,4-Trichlorobenzene	0.683	0.692	-1.3	74	0.00
77	T	Naphthalene	1.897	1.903	-0.3	74	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data Path : C:\DATA\2024\04-2024\04-30-2024\
Data File : aa6458dcvs.D
Acq On : 30 Apr 2024 10:49 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 09 14:19:41 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.410	130	300981	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.481	114	1178636	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.349	117	1058502	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.750	95	910467	9.59	ppbV	0.000
Target Compounds						Qvalue
2) Propene	1.464	41	372731	11.05	ppbV	99
3) Dichlorodifluoromethane	1.506	85	847066	11.20	ppbV	100
4) 1,2-Dichlorotetrafluor...	1.627	85	1037457	9.50	ppbV	98
5) n-Butane	1.709	43	771371	10.35	ppbV	99
6) Chloromethane	1.778	52	59836	12.27	ppbV	96
7) Vinyl chloride	1.771	62	452965	12.09	ppbV	100
8) 1,3-Butadiene	1.774	39	424260	9.96	ppbV	98
9) Bromomethane	2.069	94	310993	11.51	ppbV	98
10) Chloroethane	2.185	64	243032	11.77	ppbV	99
11) Vinyl bromide	2.285	106	354120	11.37	ppbV	99
12) Trichlorofluoromethane	2.301	101	956505	10.83	ppbV	99
13) Ethanol	2.670	45	184193	13.34	ppbV	100
14) 1,1-Dichloroethene	2.728	61	806629	11.77	ppbV	99
15) Carbon disulfide	2.748	76	1350456	12.41	ppbV	99
16) 1,1,2-Trichloro-1,2,2-...	2.770	101	861627	9.86	ppbV	98
17) Acrolein	2.985	56	176091	10.72	ppbV	98
18) Allyl chloride	3.111	76	207835	12.17	ppbV	100
19) Isopropanol	3.117	45	819004	9.37	ppbV	99
20) Methylene chloride	3.204	49	572048	11.73	ppbV	100
21) Acetone	3.217	43	770614	11.45	ppbV	99
22) trans-1,2-Dichloroethene	3.330	61	749425	12.50	ppbV	100
23) n-Pentane	3.416	43	859768	10.17	ppbV	97
24) n-Hexane	3.413	57	1240505	10.24	ppbV	100
25) Methyl tert-butyl ether	3.420	73	1405890	10.33	ppbV	96
26) Tert-butyl alcohol	3.477	59	1033361	10.75	ppbV	100
27) 1,1-Dichloroethane	3.818	63	888136	11.03	ppbV	100
28) cis-1,2-Dichloroethene	4.249	61	674644	11.68	ppbV	99
29) Cyclohexane	4.426	56	852947	10.42	ppbV	99
30) Chloroform	4.471	83	949659	11.32	ppbV	100
31) Ethyl acetate	4.561	45	189883	10.96	ppbV	99
32) Carbon tetrachloride	4.593	117	895713	10.43	ppbV	99
33) Tetrahydrofuran	4.593	42	694049	11.00	ppbV	100
34) 1,1,1-Trichloroethane	4.645	97	853552	10.53	ppbV	100
35) Methyl ethyl ketone	4.706	43	1110576	11.04	ppbV	100
36) n-Heptane	4.937	43	1053164	10.02	ppbV	99
37) Benzene	4.953	78	1341586	10.62	ppbV	100
38) 1,2-Dichloroethane	5.114	62	648339	11.32	ppbV	100
40) Trichloroethene	5.458	130	487284	10.36	ppbV	99
41) 2,2,4-Trimethylpentane	4.866	57	2598378	11.37	ppbV	100
42) 1,2-Dichloropropane	5.911	63	566679	11.00	ppbV	98
43) Bromodichloromethane	5.973	83	955186	11.64	ppbV	100
44) Methyl methacrylate	6.117	41	770252	10.54	ppbV	100
45) 1,4-Dioxane	6.146	88	318919	11.56	ppbV	99
46) cis-1,3-Dichloropropene	6.561	75	814343	11.19	ppbV	99
47) Toluene	6.802	91	1597370	10.52	ppbV	99
48) Methyl isobutyl ketone	7.169	43	1378483	10.15	ppbV	100
49) Tetrachloroethene	7.191	166	571327	10.89	ppbV	100
50) trans-1,3-Dichloropropene	7.204	75	802095	11.58	ppbV	97
51) 1,1,2-Trichloroethane	7.368	97	533259	10.62	ppbV	99

Data Path : C:\DATA\2024\04-2024\04-30-2024\
Data File : aa6458dcvs.D
Acq On : 30 Apr 2024 10:49 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

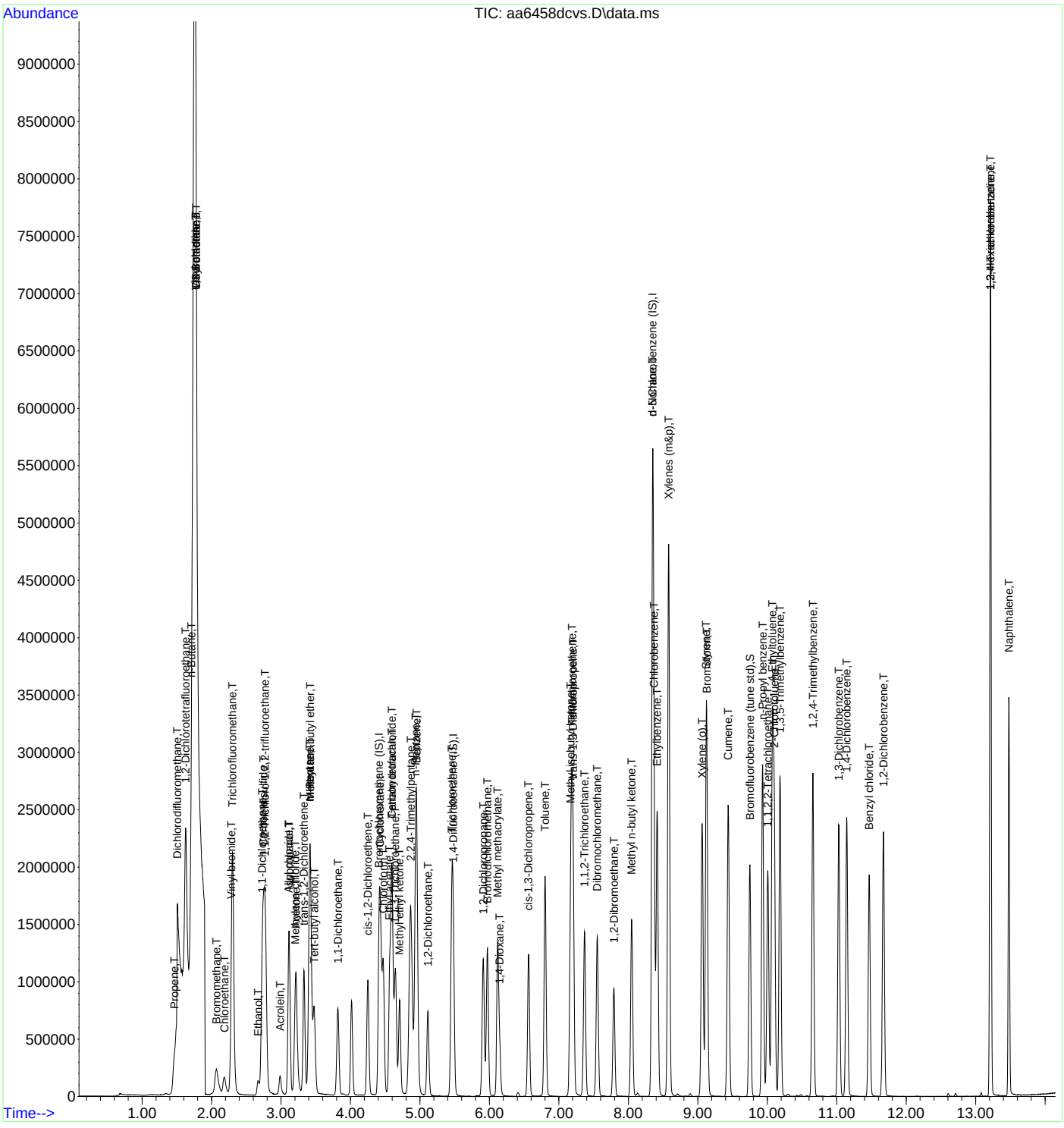
Quant Time: May 09 14:19:41 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.551	129	853830	11.10	ppbV	100
53) 1,2-Dibromoethane	7.792	107	769530	10.79	ppbV	99
54) Methyl n-butyl ketone	8.046	43	1290291	10.60	ppbV	100
56) n-Nonane	8.349	43	1536541	10.46	ppbV	100
57) Chlorobenzene	8.371	112	1132206	11.10	ppbV	100
58) Ethylbenzene	8.413	91	2173920	10.70	ppbV	100
59) Xylenes (m&p)	8.580	91	3298044	21.62	ppbV	100
60) Xylene (o)	9.062	91	1699266	10.50	ppbV	100
61) Styrene	9.120	104	1186482	11.31	ppbV	100
62) Bromoform	9.130	173	741631	11.42	ppbV	100
63) Cumene	9.435	105	2077969	10.19	ppbV	100
65) n-Propyl benzene	9.934	91	2867845	10.38	ppbV	100
66) 1,1,2,2-Tetrachloroethane	10.008	83	1325978	11.05	ppbV	100
67) 4-Ethyltoluene	10.072	105	2293253	10.44	ppbV	100
68) 2-Chlorotoluene	10.101	91	1956411	10.46	ppbV	100
69) 1,3,5-Trimethylbenzene	10.185	105	1909415	10.56	ppbV	98
70) 1,2,4-Trimethylbenzene	10.657	105	1885959	10.52	ppbV	100
71) 1,3-Dichlorobenzene	11.030	146	1069735	10.89	ppbV	99
72) 1,4-Dichlorobenzene	11.143	146	1069005	10.73	ppbV	99
73) Benzyl chloride	11.467	91	1720554	10.33	ppbV	100
74) 1,2-Dichlorobenzene	11.673	146	1031498	10.58	ppbV	100
75) 1,3-Hexachlorobutadiene	13.213	225	594000	11.22	ppbV	100
76) 1,2,4-Trichlorobenzene	13.213	180	805227	11.14	ppbV	99
77) Naphthalene	13.477	128	2014792	10.04	ppbV	100

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

Data Path : C:\DATA\2024\04-2024\04-30-2024\
Data File : aa6458dcvs.D
Acq On : 30 Apr 2024 10:49 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 09 14:19:41 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration



Section VIII: Raw Quality Control Data Package

BFB Tune Spectra

Method Blank

Laboratory Control Sample

Laboratory Sample Duplicate

Instrument Run Logs

Pressure Gauge Readings (initial and final)

Example Calculations

Screening Data

Clean Canister Certification

BFB

Data Path: C:\DATA\2024\03-2024\03-27-2024\
Data File: AA6020BFB.D
Acq On: 3/27/2024 10:03:00AM
Operator: jjw
Sample: BFB
Misc: ALM018474
ALS Vial: 1 **Multiplier:** 1
Integration File: rteint.p
Method: C:\msdchem\1\METHODS\240326.M
Last Update: Mon Feb 12 17:00:56 2024
Spectrum Information:

PassFail	Target Mass	Rel. to Mass	Lower Limit %	Higher Limit %	Raw Abundance	% Relative Abundance
PASS	50	95	8	40	248768	22.4
PASS	75	95	30	66	575680	51.7
PASS	95	95	100	100	1112917	100.0
PASS	96	95	5	9	72451	6.5
PASS	173	174	0.00	2	6828	1.0
PASS	174	95	50	100	671872	60.4
PASS	175	174	4	9	49411	7.4
PASS	176	174	93	101	654677	97.4
PASS	177	176	5	9	43245	6.6

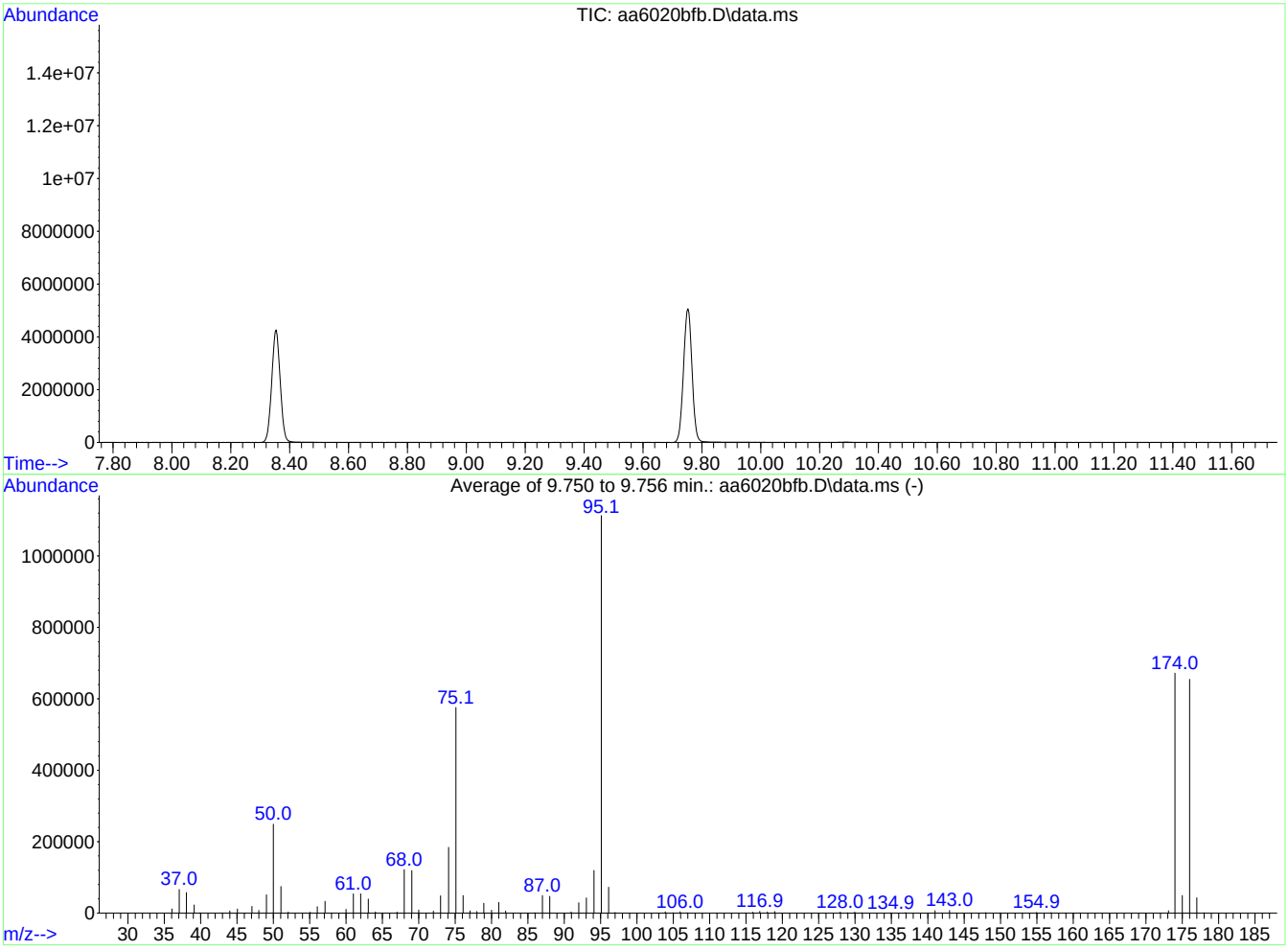
Runs with this BFB:

Lab Sample Number	Date File	Field Sample	Date/Time of Sample/Standard Analysis
BFB	AA6020BFB	NA	3/27/2024 10:03:00 AM
0.2 PPBV STD	AA6021STD05	NA	3/27/2024 10:38:00 AM
2 PPBV STD	AA6022STD04	NA	3/27/2024 11:38:00 AM
10 PPBV STD STD	AA6023STD03	NA	3/27/2024 12:09:00 PM
20 PPBV STD	AA6024STD02	NA	3/27/2024 12:40:00 PM
40 PPBV STD	AA6025STD01	NA	3/27/2024 1:24:00 PM
10 PPBV ICVSS	AA6026ICVSS	NA	3/27/2024 1:54:00 PM
10 PPBV LCS	AA6027LCS	NA	3/27/2024 2:23:00 PM
METHOD BLANK	AA6028BLK	NA	3/27/2024 2:51:00 PM
3285	AA6039	NA	3/27/2024 9:10:00 PM
2036	AA6040	NA	3/27/2024 9:38:00 PM

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6020bfb.D
Acq On : 27 Mar 2024 10:03 am
Operator : jjw
Sample : BFB
Misc : ALM018474
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\240326.M
Title : TO-15 on the Agilent 7890A / 5975C
Last Update : Mon Feb 12 17:00:56 2024



AutoFind: Scans 2993, 2994, 2995; Background Corrected with Scan 2975

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	22.4	248768	PASS
75	95	30	66	51.7	575680	PASS
95	95	100	100	100.0	1112917	PASS
96	95	5	9	6.5	72451	PASS
173	174	0.00	2	1.0	6828	PASS
174	95	50	100	60.4	671872	PASS
175	174	4	9	7.4	49411	PASS
176	174	93	101	97.4	654677	PASS
177	176	5	9	6.6	43245	PASS

BFB

Data Path: C:\DATA\2024\04-2024\04-03-2024\
Data File: AA6120BFB.D
Acq On: 4/3/2024 10:39:00AM
Operator: jls
Sample: BFB
Misc: ALM018474
ALS Vial: 1 **Multiplier:** 1
Integration File: rteint.p
Method: C:\msdchem\1\METHODS\240326.M
Last Update: Wed Mar 27 13:46:33 2024
Spectrum Information:

PassFail	Target Mass	Rel. to Mass	Lower Limit %	Higher Limit %	Raw Abundance	% Relative Abundance
PASS	50	95	8	40	256171	20.9
PASS	75	95	30	66	616619	50.2
PASS	95	95	100	100	1227264	100.0
PASS	96	95	5	9	80728	6.6
PASS	173	174	0.00	2	6701	0.9
PASS	174	95	50	100	777045	63.3
PASS	175	174	4	9	55797	7.2
PASS	176	174	93	101	747456	96.2
PASS	177	176	5	9	50061	6.7

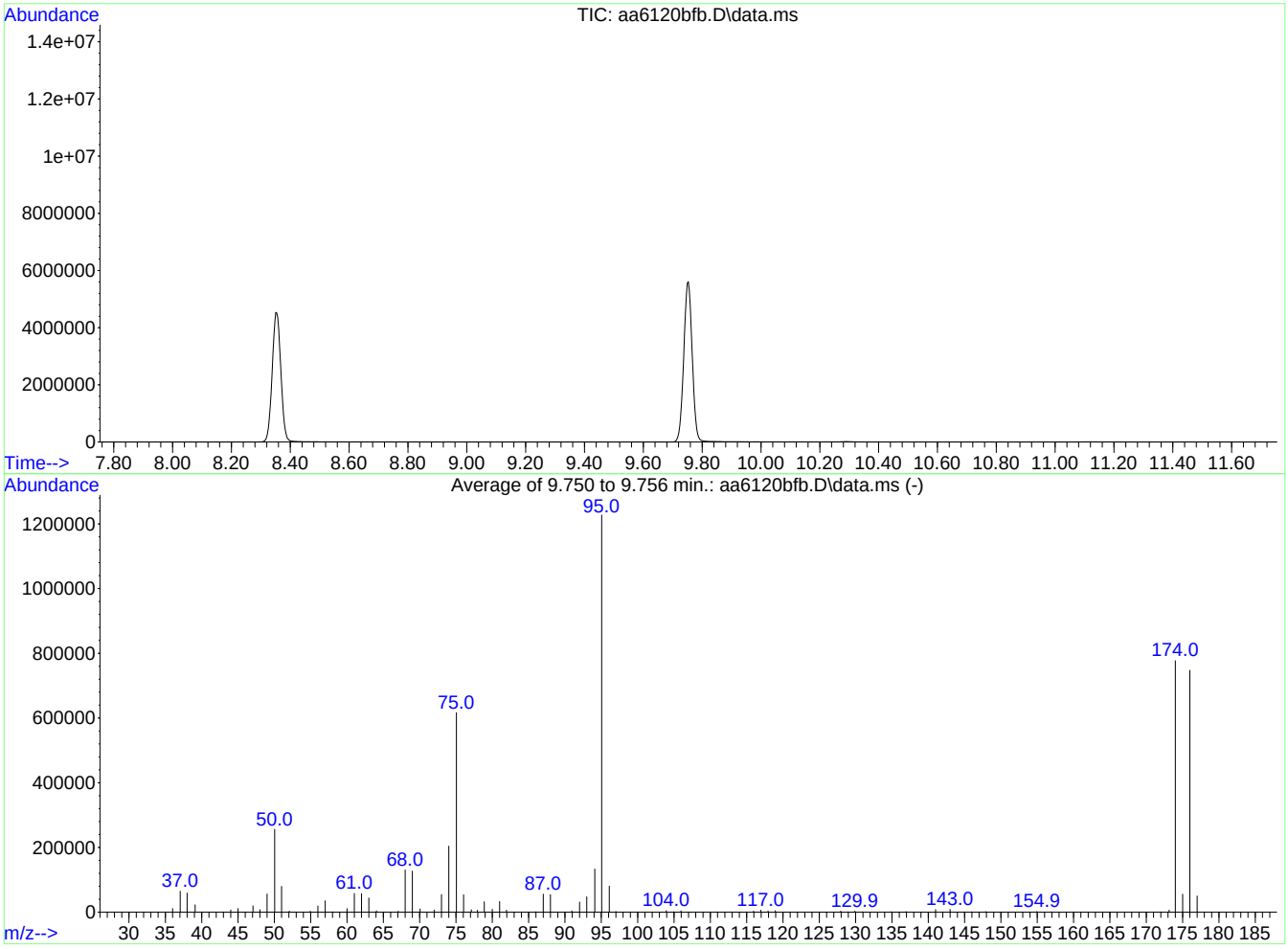
Runs with this BFB:

Lab Sample Number	Date File	Field Sample	Date/Time of Sample/Standard Analysis
BFB	AA6120BFB	NA	4/3/2024 10:39:00 AM
10 PPBV DCVS	AA6121DCVS	NA	4/3/2024 11:58:00 AM
10 PPBV LCS	AA6122LCS	NA	4/3/2024 12:29:00 PM
METHOD BLANK	AA6123BLK	NA	4/3/2024 1:28:00 PM
02 PPBV RLLCS	AA6124RLLCS	NA	4/3/2024 2:13:00 PM
2037	AA6125	NA	4/3/2024 4:31:00 PM
5092	AA6133	NA	4/3/2024 8:23:00 PM
10 PPBV CCCVS	AA6134CCCVS	NA	4/3/2024 8:52:00 PM

Data Path : C:\DATA\2024\04-2024\04-03-2024\
Data File : aa6120bfb.D
Acq On : 3 Apr 2024 10:39 am
Operator : jjw
Sample : BFB
Misc : ALM018474
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\240326.M
Title : TO-15 on the Agilent 7890A / 5975C
Last Update : Wed Mar 27 13:46:33 2024



AutoFind: Scans 2993, 2994, 2995; Background Corrected with Scan 2975

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	20.9	256171	PASS
75	95	30	66	50.2	616619	PASS
95	95	100	100	100.0	1227264	PASS
96	95	5	9	6.6	80728	PASS
173	174	0.00	2	0.9	6701	PASS
174	95	50	100	63.3	777045	PASS
175	174	4	9	7.2	55797	PASS
176	174	93	101	96.2	747456	PASS
177	176	5	9	6.7	50061	PASS

BFB

Data Path: C:\DATA\2024\04-2024\04-29-2024\
Data File: AA6442BFB.D
Acq On: 4/29/2024 9:47:00AM
Operator: jjw
Sample: BFB
Misc: ALM018474
ALS Vial: 1 **Multiplier:** 1
Integration File: rteint.p
Method: C:\msdchem\1\METHODS\240326.M
Last Update: Wed Mar 27 13:46:33 2024
Spectrum Information:

PassFail	Target Mass	Rel. to Mass	Lower Limit %	Higher Limit %	Raw Abundance	% Relative Abundance
PASS	50	95	8	40	100248	22.9
PASS	75	95	30	66	230464	52.7
PASS	95	95	100	100	436928	100.0
PASS	96	95	5	9	28635	6.6
PASS	173	174	0.00	2	1528	0.6
PASS	174	95	50	100	264704	60.6
PASS	175	174	4	9	20165	7.6
PASS	176	174	93	101	252971	95.6
PASS	177	176	5	9	16837	6.7

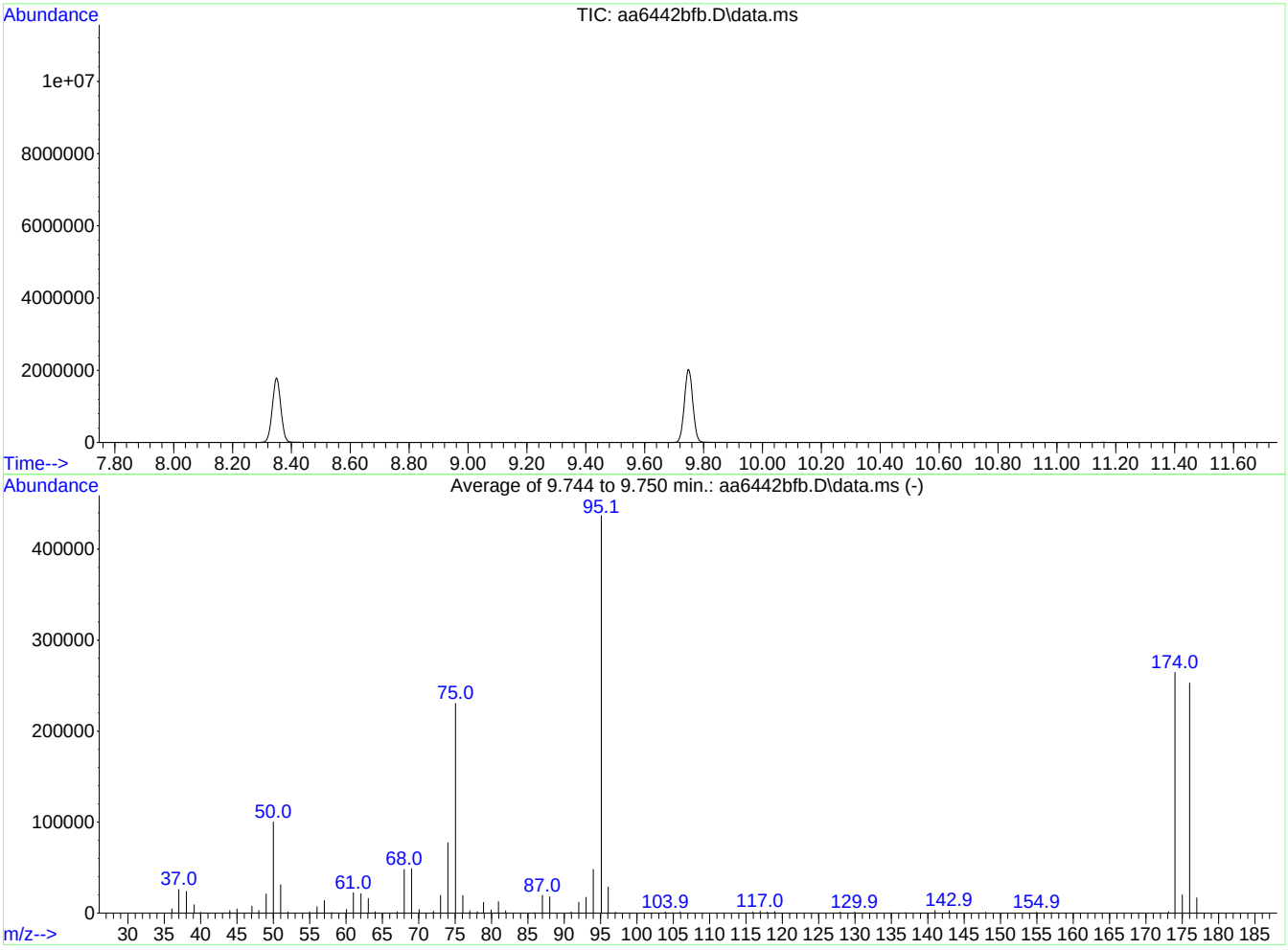
Runs with this BFB:

Lab Sample Number	Date File	Field Sample	Date/Time of Sample/Standard Analysis
BFB	AA6442BFB	NA	4/29/2024 9:47:00 AM
10 PPBV DCVS	AA6443DCVS	NA	4/29/2024 11:31:00 AM
10 PPBV LCS	AA6444LCS	NA	4/29/2024 12:05:00 PM
METHOD BLANK	AA6445BLK	NA	4/29/2024 12:35:00 PM
02 PPBV RLLCS	AA6446RLLCS	NA	4/29/2024 1:20:00 PM
E24-01487-01	AA6447	SG-1	4/29/2024 3:57:00 PM
E24-01487-02	AA6448	SG-2	4/29/2024 4:29:00 PM
E24-01487-03	AA6449	SG-3	4/29/2024 5:01:00 PM
E24-01487-04	AA6450	SG-4	4/29/2024 5:33:00 PM
10 PPBV CCCVS	AA6455CCCVS	NA	4/29/2024 8:15:00 PM

Data Path : C:\DATA\2024\04-2024\04-29-2024\
Data File : aa6442bfb.D
Acq On : 29 Apr 2024 9:47 am
Operator : jjw
Sample : BFB
Misc : ALM018474
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\240326.M
Title : TO-15 on the Agilent 7890A / 5975C
Last Update : Wed Mar 27 13:46:33 2024



AutoFind: Scans 2991, 2992, 2993; Background Corrected with Scan 2975

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	22.9	100248	PASS
75	95	30	66	52.7	230464	PASS
95	95	100	100	100.0	436928	PASS
96	95	5	9	6.6	28635	PASS
173	174	0.00	2	0.6	1528	PASS
174	95	50	100	60.6	264704	PASS
175	174	4	9	7.6	20165	PASS
176	174	93	101	95.6	252971	PASS
177	176	5	9	6.7	16837	PASS

BFB

Data Path: C:\DATA\2024\04-2024\04-30-2024\
Data File: AA6457BFB.D
Acq On: 4/30/2024 9:16:00AM
Operator: jjw
Sample: BFB
Misc: ALM018474
ALS Vial: 1 **Multiplier:** 1
Integration File: rteint.p
Method: C:\msdchem\1\METHODS\240326.M
Last Update: Wed Mar 27 13:46:33 2024
Spectrum Information:

PassFail	Target Mass	Rel. to Mass	Lower Limit %	Higher Limit %	Raw Abundance	% Relative Abundance
PASS	50	95	8	40	97723	22.4
PASS	75	95	30	66	229227	52.5
PASS	95	95	100	100	436736	100.0
PASS	96	95	5	9	27589	6.3
PASS	173	174	0.00	2	2692	1.0
PASS	174	95	50	100	264853	60.6
PASS	175	174	4	9	19891	7.5
PASS	176	174	93	101	253525	95.7
PASS	177	176	5	9	16912	6.7

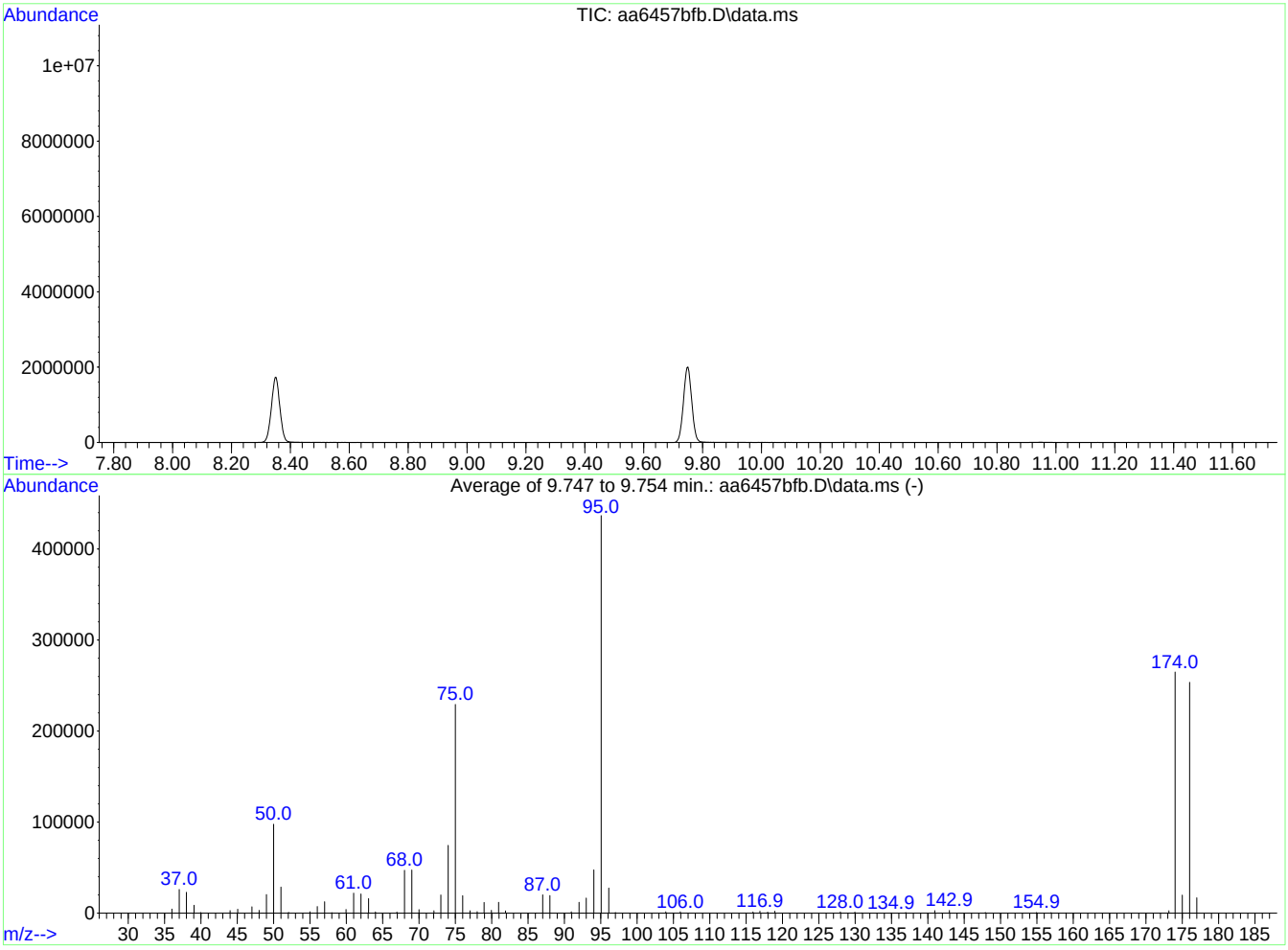
Runs with this BFB:

Lab Sample Number	Date File	Field Sample	Date/Time of Sample/Standard Analysis
BFB	AA6457BFB	NA	4/30/2024 9:16:00 AM
10 PPBV DCVS	AA6458DCVS	NA	4/30/2024 10:49:00 AM
10 PPBV LCS	AA6459LCS	NA	4/30/2024 11:18:00 AM
METHOD BLANK	AA6460BLK	NA	4/30/2024 11:45:00 AM
02 PPBV RLLCS	AA6461RLLCS	NA	4/30/2024 12:13:00 PM
E24-01487-01	AA6462	SG-1	4/30/2024 12:48:00 PM
E24-01487-02	AA6463	SG-2	4/30/2024 1:19:00 PM
10 PPBV CCCVS	AA6472CCCVS	NA	4/30/2024 9:15:00 PM

Data Path : C:\DATA\2024\04-2024\04-30-2024\
Data File : aa6457bfb.D
Acq On : 30 Apr 2024 9:16 am
Operator : jjw
Sample : BFB
Misc : ALM018474
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\240326.M
Title : TO-15 on the Agilent 7890A / 5975C
Last Update : Wed Mar 27 13:46:33 2024



AutoFind: Scans 2992, 2993, 2994; Background Corrected with Scan 2975

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	22.4	97723	PASS
75	95	30	66	52.5	229227	PASS
95	95	100	100	100.0	436736	PASS
96	95	5	9	6.3	27589	PASS
173	174	0.00	2	1.0	2692	PASS
174	95	50	100	60.6	264853	PASS
175	174	4	9	7.5	19891	PASS
176	174	93	101	95.7	253525	PASS
177	176	5	9	6.7	16912	PASS

INTEGRATED ANALYTICAL LABORATORIES, LLC

Method Blank Report

Lab Sample Name:	**METHOD BLANK**	**Data File:**	**AA6123BLK**
Field Sample Name:	**METHOD BLANK**	**Date Analyzed:**	**4/3/2024**
Matrix:	**Air**	**Sample Volume:**	**500ml**
Dilution Factor:	**1**	**GC/MS Column:**	**RTX-1, 0.32 mmID**

Runs with this Method Blank:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6120BFB]	04/03/2024 10:39
10 PPBV DCVS [AA6121DCVS]	04/03/2024 11:58
10 PPBV LCS [AA6122LCS]	04/03/2024 12:29
METHOD BLANK [AA6123BLK]	04/03/2024 13:28
02 PPBV RLLCS [AA6124RLLCS]	04/03/2024 14:13
2037 [AA6125]	04/03/2024 16:31
5092 [AA6133]	04/03/2024 20:23
10 PPBV CCCVS [AA6134CCCVS]	04/03/2024 20:52

Compound	CAS #	Reporting Limit (ppbv)	Concentration (ppbv)
Acetone	67-64-1	0.20	ND
Benzene	71-43-2	0.20	ND
Bromodichloromethane	75-27-4	0.20	ND
Bromoform	75-25-2	0.20	ND
Bromomethane	74-83-9	0.20	ND
1,3-Butadiene	106-99-0	0.20	ND
Chlorobenzene	108-90-7	0.20	ND
Chloroethane	75-00-3	0.20	ND
Chloroform	67-66-3	0.20	ND
Chloromethane	74-87-3	0.20	ND
Carbon disulfide	75-15-0	0.20	ND
Carbon tetrachloride	56-23-5	0.20	ND
Cyclohexane	110-82-7	0.20	ND
Dibromochloromethane	124-48-1	0.20	ND
1,2-Dibromoethane	106-93-4	0.17	ND
1,2-Dichlorobenzene	95-50-1	0.20	ND
1,3-Dichlorobenzene	541-73-1	0.20	ND
1,4-Dichlorobenzene	106-46-7	0.20	ND
Dichlorodifluoromethane	75-71-8	0.20	ND
1,1-Dichloroethane	75-34-3	0.20	ND
1,2-Dichloroethane	107-06-2	0.20	ND
1,1-Dichloroethene	75-35-4	0.20	ND
1,2-Dichloroethene (cis)	156-59-2	0.20	ND
1,2-Dichloroethene (trans)	156-60-5	0.20	ND
1,2-Dichloropropane	78-87-5	0.20	ND
1,3-Dichloropropene (cis)	10061-01-5	0.20	ND
1,3-Dichloropropene (trans)	10061-02-6	0.19	ND
1,2-Dichlorotetrafluoroethane	76-14-2	0.20	ND
1,4-Dioxane	123-91-1	0.20	ND
Ethylbenzene	100-41-4	0.18	ND
n-Heptane	142-82-5	0.20	ND
1,3-Hexachlorobutadiene	87-68-3	0.20	ND
n-Hexane	110-54-3	0.20	ND
Methylene chloride	75-09-2	0.20	ND

Method Blank must be less than the Practical Quantitation Limit (PQL).

INTEGRATED ANALYTICAL LABORATORIES, LLC

Method Blank Report

Lab Sample Name:	**METHOD BLANK**	**Data File:**	**AA6123BLK**
Field Sample Name:	**METHOD BLANK**	**Date Analyzed:**	**4/3/2024**
Matrix:	**Air**	**Sample Volume:**	**500ml**
Dilution Factor:	**1**	**GC/MS Column:**	**RTX-1, 0.32 mmID**

Runs with this Method Blank:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6120BFB]	04/03/2024 10:39
10 PPBV DCVS [AA6121DCVS]	04/03/2024 11:58
10 PPBV LCS [AA6122LCS]	04/03/2024 12:29
METHOD BLANK [AA6123BLK]	04/03/2024 13:28
02 PPBV RLLCS [AA6124RLLCS]	04/03/2024 14:13
2037 [AA6125]	04/03/2024 16:31
5092 [AA6133]	04/03/2024 20:23
10 PPBV CCCVS [AA6134CCCVS]	04/03/2024 20:52

Compound	CAS #	Reporting Limit (ppbv)	Concentration (ppbv)
Methyl ethyl ketone	78-93-3	0.20	ND
Methyl isobutyl ketone	108-10-1	0.20	ND
Methyl tert-butyl ether	1634-04-4	0.20	ND
Styrene	100-42-5	0.20	ND
Tert-butyl alcohol	75-65-0	0.20	ND
1,1,2,2-Tetrachloroethane	79-34-5	0.20	ND
Tetrachloroethene	127-18-4	0.20	ND
Toluene	108-88-3	0.20	ND
1,2,4-Trichlorobenzene	120-82-1	0.20	ND
1,1,1-Trichloroethane	71-55-6	0.17	ND
1,1,2-Trichloroethane	79-00-5	0.20	ND
Trichloroethene	79-01-6	0.17	ND
Trichlorofluoromethane	75-69-4	0.20	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.20	ND
1,2,4-Trimethylbenzene	95-63-6	0.20	ND
1,3,5-Trimethylbenzene	108-67-8	0.20	ND
2,2,4-Trimethylpentane	540-84-1	0.20	ND
Vinyl bromide	593-60-2	0.20	ND
Vinyl chloride	75-01-4	0.20	ND
Xylenes (m&p)	179601-23-1	0.20	ND
Xylenes (o)	95-47-6	0.20	ND

Method Blank must be less than the Practical Quantitation Limit (PQL).

Data Path : C:\DATA\2024\04-2024\04-03-2024\
Data File : aa6123blk.D
Acq On : 3 Apr 2024 1:28 pm
Operator : jjw
Sample : Method Blank
Misc : 1127
ALS Vial : 4 Sample Multiplier: 1

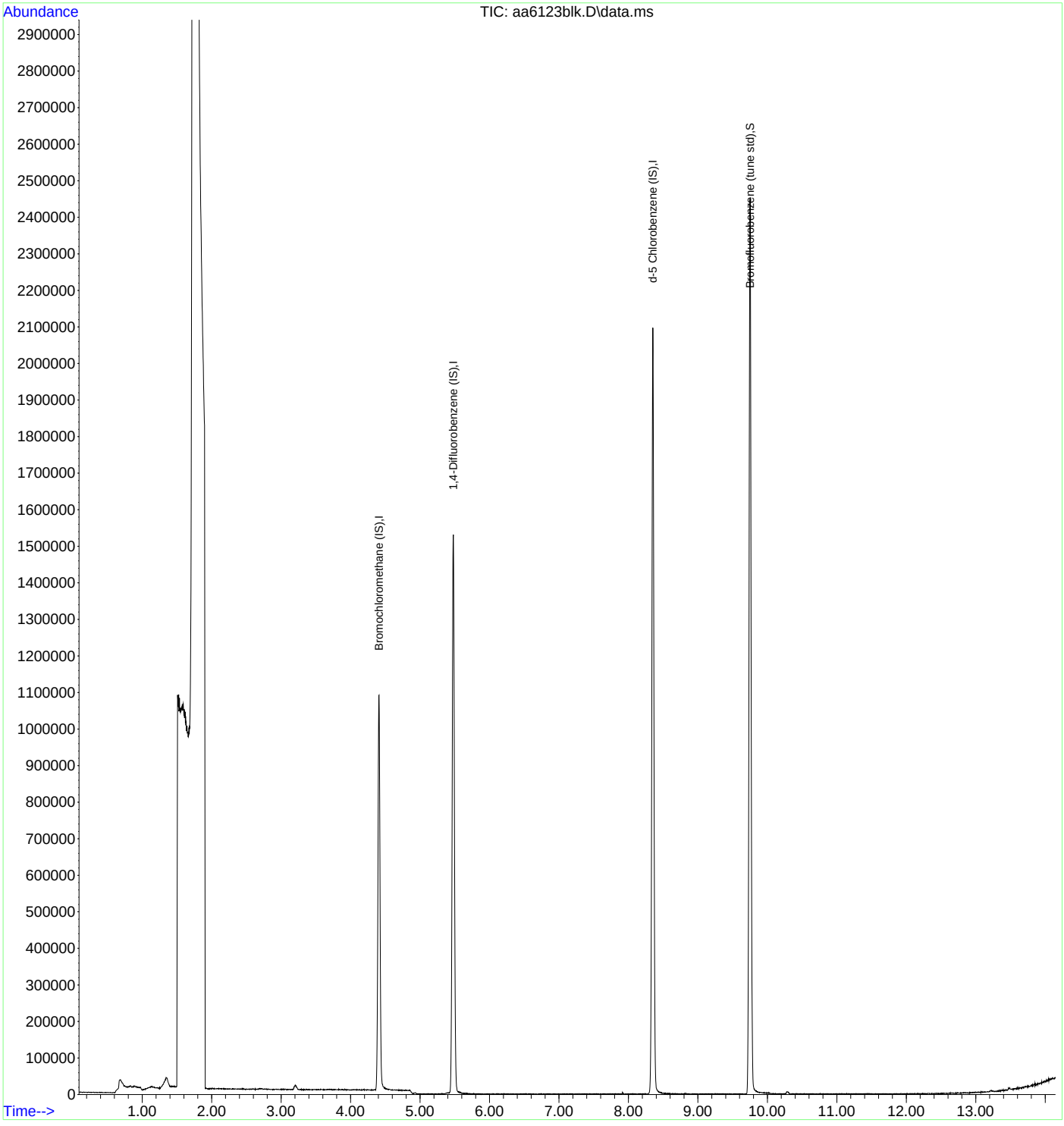
Quant Time: Apr 03 14:02:01 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.409	130	362635	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.480	114	1337665	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.351	117	1275652	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.753	95	1113393	9.73	ppbV	0.000
Target Compounds						Qvalue

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

Data Path : C:\DATA\2024\04-2024\04-03-2024\
Data File : aa6123blk.D
Acq On : 3 Apr 2024 1:28 pm
Operator : jjw
Sample : Method Blank
Misc : 1127
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 03 14:02:01 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration



Data Path : C:\DATA\2024\04-2024\04-03-2024\
Data File : aa6123blk.D
Acq On : 3 Apr 2024 1:28 pm
Operator : jjw
Sample : Method Blank
Misc : 1127
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\240326.M
Title : TO-15 on the Agilent 7890A / 5975C

Signal : TIC: aa6123blk.D\data.ms

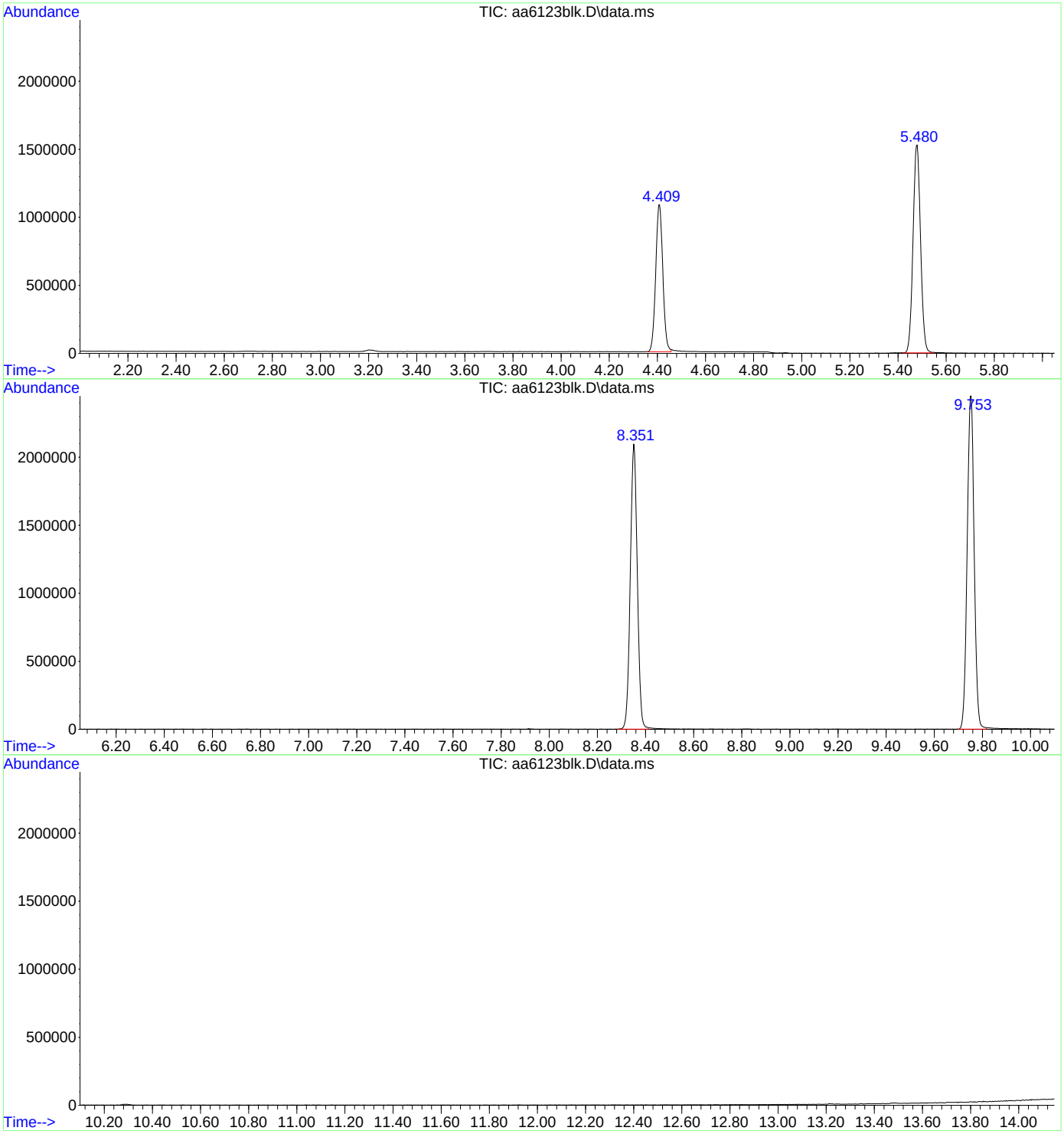
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.409	1317	1332	1347	rBV	1079964	2208190	44.95%	15.080%
2	5.480	1646	1665	1686	rBV	1527446	3306697	67.31%	22.582%
3	8.351	2537	2558	2577	rBV	2096313	4215239	85.80%	28.787%
4	9.753	2977	2994	3014	rBV	2448321	4912770	100.00%	33.551%

Sum of corrected areas: 14642896

Data Path : C:\DATA\2024\04-2024\04-03-2024\
Data File : aa6123blk.D
Acq On : 3 Apr 2024 1:28 pm
Operator : jjw
Sample : Method Blank
Misc : 1127
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C

TIC Library : C:\Database\NIST05a.L
TIC Integration Parameters: LSCINT.P



Data Path : C:\DATA\2024\04-2024\04-03-2024\
Data File : aa6123blk.D
Acq On : 3 Apr 2024 1:28 pm
Operator : jjw
Sample : Method Blank
Misc : 1127
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C

TIC Library : C:\Database\NIST05a.L
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected

****

Data Path : C:\DATA\2024\04-2024\04-03-2024\
Data File : aa6123blk.D
Acq On : 3 Apr 2024 1:28 pm
Operator : jjw
Sample : Method Blank
Misc : 1127
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C

TIC Library : C:\Database\NIST05a.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

INTEGRATED ANALYTICAL LABORATORIES, LLC

Method Blank Report

Lab Sample Name:	**METHOD BLANK**	**Data File:**	**AA6445BLK**
Field Sample Name:	**METHOD BLANK**	**Date Analyzed:**	**4/29/2024**
Matrix:	**Air**	**Sample Volume:**	**500ml**
Dilution Factor:	**1**	**GC/MS Column:**	**RTX-1, 0.32 mmID**

Runs with this Method Blank:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6442BFB]	04/29/2024 9:47
10 PPBV DCVS [AA6443DCVS]	04/29/2024 11:31
10 PPBV LCS [AA6444LCS]	04/29/2024 12:05
METHOD BLANK [AA6445BLK]	04/29/2024 12:35
02 PPBV RLLCS [AA6446RLLCS]	04/29/2024 13:20
E24-01487-01 [AA6447]	04/29/2024 15:57
E24-01487-02 [AA6448]	04/29/2024 16:29
E24-01487-03 [AA6449]	04/29/2024 17:01
E24-01487-04 [AA6450]	04/29/2024 17:33
10 PPBV CCCVS [AA6455CCCVS]	04/29/2024 20:15

Compound	CAS #	Reporting Limit (ppbv)	Concentration (ppbv)
Acetone	67-64-1	0.20	ND
Benzene	71-43-2	0.20	ND
Bromodichloromethane	75-27-4	0.20	ND
Bromoform	75-25-2	0.20	ND
Bromomethane	74-83-9	0.20	ND
1,3-Butadiene	106-99-0	0.20	ND
Chlorobenzene	108-90-7	0.20	ND
Chloroethane	75-00-3	0.20	ND
Chloroform	67-66-3	0.20	ND
Chloromethane	74-87-3	0.20	ND
Carbon disulfide	75-15-0	0.20	ND
Carbon tetrachloride	56-23-5	0.20	ND
Cyclohexane	110-82-7	0.20	ND
Dibromochloromethane	124-48-1	0.20	ND
1,2-Dibromoethane	106-93-4	0.17	ND
1,2-Dichlorobenzene	95-50-1	0.20	ND
1,3-Dichlorobenzene	541-73-1	0.20	ND
1,4-Dichlorobenzene	106-46-7	0.20	ND
Dichlorodifluoromethane	75-71-8	0.20	ND
1,1-Dichloroethane	75-34-3	0.20	ND
1,2-Dichloroethane	107-06-2	0.20	ND
1,1-Dichloroethene	75-35-4	0.20	ND
1,2-Dichloroethene (cis)	156-59-2	0.20	ND
1,2-Dichloroethene (trans)	156-60-5	0.20	ND
1,2-Dichloropropane	78-87-5	0.20	ND
1,3-Dichloropropene (cis)	10061-01-5	0.20	ND
1,3-Dichloropropene (trans)	10061-02-6	0.19	ND
1,2-Dichlorotetrafluoroethane	76-14-2	0.20	ND
1,4-Dioxane	123-91-1	0.20	ND
Ethylbenzene	100-41-4	0.18	ND
n-Heptane	142-82-5	0.20	ND
1,3-Hexachlorobutadiene	87-68-3	0.20	ND

Method Blank must be less than the Practical Quantitation Limit (PQL).

INTEGRATED ANALYTICAL LABORATORIES, LLC

Method Blank Report

Lab Sample Name:	**METHOD BLANK**	**Data File:**	**AA6445BLK**
Field Sample Name:	**METHOD BLANK**	**Date Analyzed:**	**4/29/2024**
Matrix:	**Air**	**Sample Volume:**	**500ml**
Dilution Factor:	**1**	**GC/MS Column:**	**RTX-1, 0.32 mmID**

Runs with this Method Blank:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6442BFB]	04/29/2024 9:47
10 PPBV DCVS [AA6443DCVS]	04/29/2024 11:31
10 PPBV LCS [AA6444LCS]	04/29/2024 12:05
METHOD BLANK [AA6445BLK]	04/29/2024 12:35
02 PPBV RLLCS [AA6446RLLCS]	04/29/2024 13:20
E24-01487-01 [AA6447]	04/29/2024 15:57
E24-01487-02 [AA6448]	04/29/2024 16:29
E24-01487-03 [AA6449]	04/29/2024 17:01
E24-01487-04 [AA6450]	04/29/2024 17:33
10 PPBV CCCVS [AA6455CCCVS]	04/29/2024 20:15

Compound	CAS #	Reporting Limit (ppbv)	Concentration (ppbv)
n-Hexane	110-54-3	0.20	ND
Methylene chloride	75-09-2	0.20	ND
Methyl ethyl ketone	78-93-3	0.20	ND
Methyl isobutyl ketone	108-10-1	0.20	ND
Methyl tert-butyl ether	1634-04-4	0.20	ND
Styrene	100-42-5	0.20	ND
Tert-butyl alcohol	75-65-0	0.20	ND
1,1,2,2-Tetrachloroethane	79-34-5	0.20	ND
Tetrachloroethene	127-18-4	0.20	ND
Toluene	108-88-3	0.20	ND
1,2,4-Trichlorobenzene	120-82-1	0.20	ND
1,1,1-Trichloroethane	71-55-6	0.17	ND
1,1,2-Trichloroethane	79-00-5	0.20	ND
Trichloroethene	79-01-6	0.17	ND
Trichlorofluoromethane	75-69-4	0.20	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.20	ND
1,2,4-Trimethylbenzene	95-63-6	0.20	ND
1,3,5-Trimethylbenzene	108-67-8	0.20	ND
2,2,4-Trimethylpentane	540-84-1	0.20	ND
Vinyl bromide	593-60-2	0.20	ND
Vinyl chloride	75-01-4	0.20	ND
Xylenes (m&p)	179601-23-1	0.20	ND
Xylenes (o)	95-47-6	0.20	ND

Method Blank must be less than the Practical Quantitation Limit (PQL).

Data Path : C:\DATA\2024\04-2024\04-29-2024\
Data File : aa6445blk.D
Acq On : 29 Apr 2024 12:35 pm
Operator : jjw
Sample : Method Blank
Misc : 1127
ALS Vial : 5 Sample Multiplier: 1

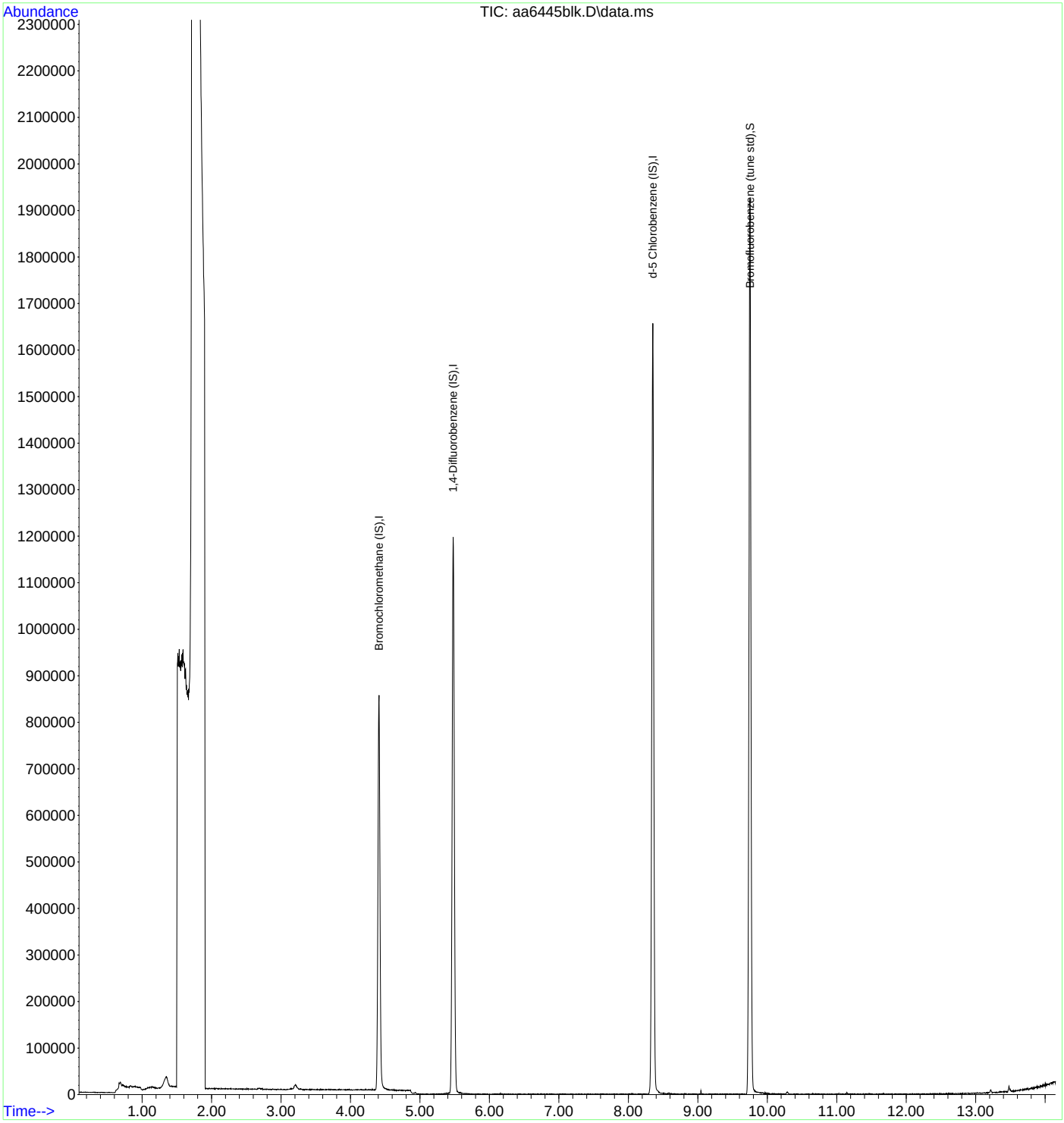
Quant Time: May 09 12:33:42 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.410	130	268721	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.477	114	1009344	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.352	117	977138	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.751	95	855909	9.77	ppbV	0.000
Target Compounds						Qvalue

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

Data Path : C:\DATA\2024\04-2024\04-29-2024\
Data File : aa6445blk.D
Acq On : 29 Apr 2024 12:35 pm
Operator : jjw
Sample : Method Blank
Misc : 1127
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 09 12:33:42 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration



Data Path : C:\DATA\2024\04-2024\04-29-2024\
Data File : aa6445blk.D
Acq On : 29 Apr 2024 12:35 pm
Operator : jjw
Sample : Method Blank
Misc : 1127
ALS Vial : 5 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0.3 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\240326.M
Title : TO-15 on the Agilent 7890A / 5975C

Signal : TIC: aa6445blk.D\data.ms

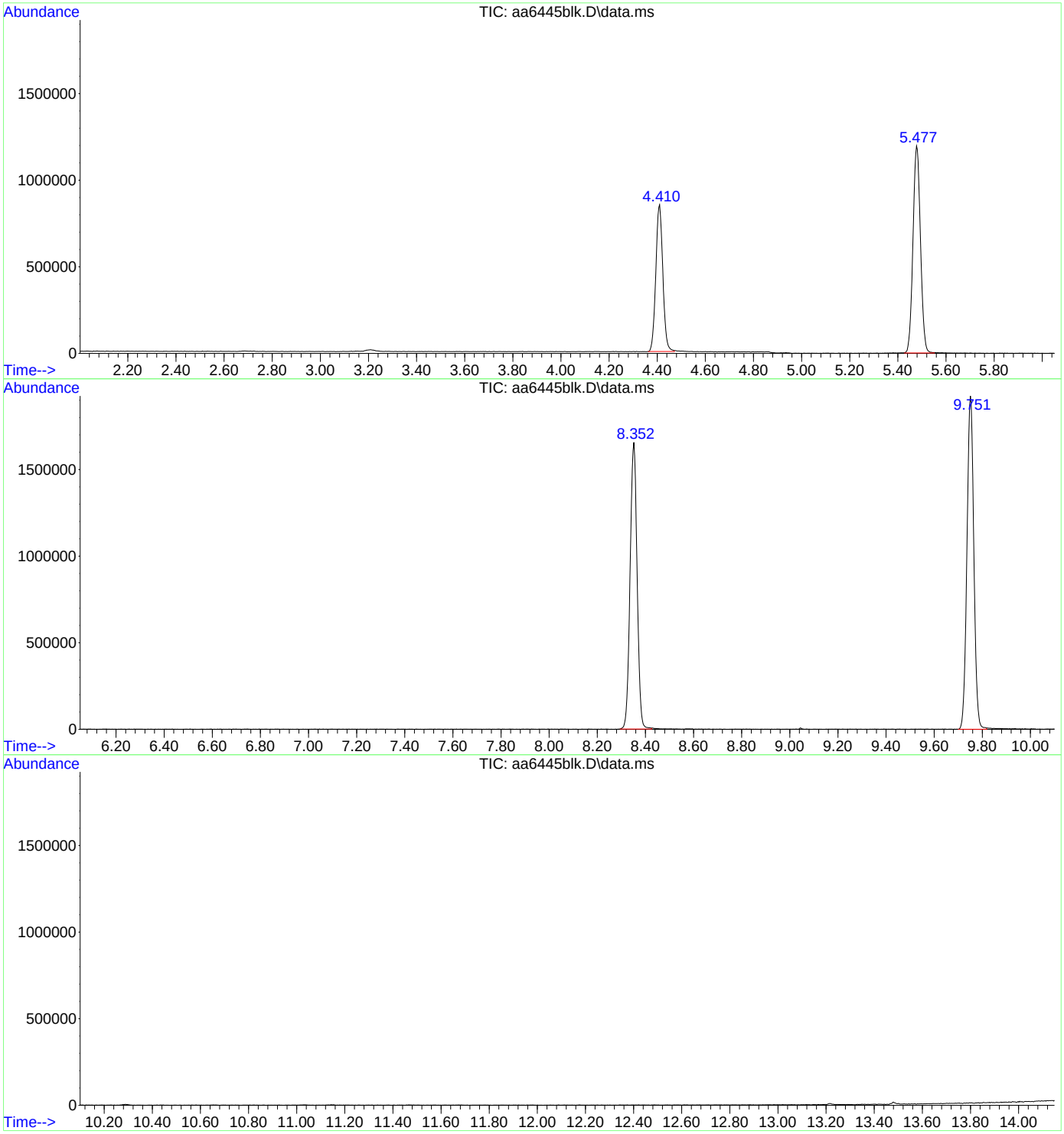
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.410	1317	1332	1351	rBV	847067	1707073	45.03%	14.972%
2	5.477	1648	1664	1687	rBV	1194841	2573996	67.90%	22.575%
3	8.352	2540	2558	2581	rBV	1655478	3330044	87.84%	29.206%
4	9.751	2977	2993	3014	rBV2	1923876	3790835	100.00%	33.247%

Sum of corrected areas: 11401948

Data Path : C:\DATA\2024\04-2024\04-29-2024\
Data File : aa6445blk.D
Acq On : 29 Apr 2024 12:35 pm
Operator : jjw
Sample : Method Blank
Misc : 1127
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C

TIC Library : C:\Database\NIST05a.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : C:\DATA\2024\04-2024\04-29-2024\
Data File : aa6445blk.D
Acq On : 29 Apr 2024 12:35 pm
Operator : jjw
Sample : Method Blank
Misc : 1127
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C

TIC Library : C:\Database\NIST05a.L
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected
****

Data Path : C:\DATA\2024\04-2024\04-29-2024\
Data File : aa6445blk.D
Acq On : 29 Apr 2024 12:35 pm
Operator : jjw
Sample : Method Blank
Misc : 1127
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C

TIC Library : C:\Database\NIST05a.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

INTEGRATED ANALYTICAL LABORATORIES, LLC

Method Blank Report

Lab Sample Name:	**METHOD BLANK**	**Data File:**	**AA6460BLK**
Field Sample Name:	**METHOD BLANK**	**Date Analyzed:**	**4/30/2024**
Matrix:	**Air**	**Sample Volume:**	**500ml**
Dilution Factor:	**1**	**GC/MS Column:**	**RTX-1, 0.32 mmID**

Runs with this Method Blank:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6457BFB]	04/30/2024 9:16
10 PPBV DCVS [AA6458DCVS]	04/30/2024 10:49
10 PPBV LCS [AA6459LCS]	04/30/2024 11:18
METHOD BLANK [AA6460BLK]	04/30/2024 11:45
02 PPBV RLLCS [AA6461RLLCS]	04/30/2024 12:13
E24-01487-01 [AA6462]	04/30/2024 12:48
E24-01487-02 [AA6463]	04/30/2024 13:19
10 PPBV CCCVS [AA6472CCCVS]	04/30/2024 21:15

Compound	CAS #	Reporting Limit (ppbv)	Concentration (ppbv)
Acetone	67-64-1	0.20	ND
Benzene	71-43-2	0.20	ND
Bromodichloromethane	75-27-4	0.20	ND
Bromoform	75-25-2	0.20	ND
Bromomethane	74-83-9	0.20	ND
1,3-Butadiene	106-99-0	0.20	ND
Chlorobenzene	108-90-7	0.20	ND
Chloroethane	75-00-3	0.20	ND
Chloroform	67-66-3	0.20	ND
Chloromethane	74-87-3	0.20	ND
Carbon disulfide	75-15-0	0.20	ND
Carbon tetrachloride	56-23-5	0.20	ND
Cyclohexane	110-82-7	0.20	ND
Dibromochloromethane	124-48-1	0.20	ND
1,2-Dibromoethane	106-93-4	0.17	ND
1,2-Dichlorobenzene	95-50-1	0.20	ND
1,3-Dichlorobenzene	541-73-1	0.20	ND
1,4-Dichlorobenzene	106-46-7	0.20	ND
Dichlorodifluoromethane	75-71-8	0.20	ND
1,1-Dichloroethane	75-34-3	0.20	ND
1,2-Dichloroethane	107-06-2	0.20	ND
1,1-Dichloroethene	75-35-4	0.20	ND
1,2-Dichloroethene (cis)	156-59-2	0.20	ND
1,2-Dichloroethene (trans)	156-60-5	0.20	ND
1,2-Dichloropropane	78-87-5	0.20	ND
1,3-Dichloropropene (cis)	10061-01-5	0.20	ND
1,3-Dichloropropene (trans)	10061-02-6	0.19	ND
1,2-Dichlorotetrafluoroethane	76-14-2	0.20	ND
1,4-Dioxane	123-91-1	0.20	ND
Ethylbenzene	100-41-4	0.18	ND
n-Heptane	142-82-5	0.20	ND
1,3-Hexachlorobutadiene	87-68-3	0.20	ND
n-Hexane	110-54-3	0.20	ND
Methylene chloride	75-09-2	0.20	ND

Method Blank must be less than the Practical Quantitation Limit (PQL).

INTEGRATED ANALYTICAL LABORATORIES, LLC

Method Blank Report

Lab Sample Name:	**METHOD BLANK**	**Data File:**	**AA6460BLK**
Field Sample Name:	**METHOD BLANK**	**Date Analyzed:**	**4/30/2024**
Matrix:	**Air**	**Sample Volume:**	**500ml**
Dilution Factor:	**1**	**GC/MS Column:**	**RTX-1, 0.32 mmID**

Runs with this Method Blank:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6457BFB]	04/30/2024 9:16
10 PPBV DCVS [AA6458DCVS]	04/30/2024 10:49
10 PPBV LCS [AA6459LCS]	04/30/2024 11:18
METHOD BLANK [AA6460BLK]	04/30/2024 11:45
02 PPBV RLLCS [AA6461RLLCS]	04/30/2024 12:13
E24-01487-01 [AA6462]	04/30/2024 12:48
E24-01487-02 [AA6463]	04/30/2024 13:19
10 PPBV CCCVS [AA6472CCCVS]	04/30/2024 21:15

Compound	CAS #	Reporting Limit (ppbv)	Concentration (ppbv)
Methyl ethyl ketone	78-93-3	0.20	ND
Methyl isobutyl ketone	108-10-1	0.20	ND
Methyl tert-butyl ether	1634-04-4	0.20	ND
Styrene	100-42-5	0.20	ND
Tert-butyl alcohol	75-65-0	0.20	ND
1,1,2,2-Tetrachloroethane	79-34-5	0.20	ND
Tetrachloroethene	127-18-4	0.20	ND
Toluene	108-88-3	0.20	ND
1,2,4-Trichlorobenzene	120-82-1	0.20	ND
1,1,1-Trichloroethane	71-55-6	0.17	ND
1,1,2-Trichloroethane	79-00-5	0.20	ND
Trichloroethene	79-01-6	0.17	ND
Trichlorofluoromethane	75-69-4	0.20	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.20	ND
1,2,4-Trimethylbenzene	95-63-6	0.20	ND
1,3,5-Trimethylbenzene	108-67-8	0.20	ND
2,2,4-Trimethylpentane	540-84-1	0.20	ND
Vinyl bromide	593-60-2	0.20	ND
Vinyl chloride	75-01-4	0.20	ND
Xylenes (m&p)	179601-23-1	0.20	ND
Xylenes (o)	95-47-6	0.20	ND

Method Blank must be less than the Practical Quantitation Limit (PQL).

Data Path : C:\DATA\2024\04-2024\04-30-2024\
Data File : aa6460blk.D
Acq On : 30 Apr 2024 11:45 am
Operator : jjw
Sample : Method Blank
Misc : 1127
ALS Vial : 5 Sample Multiplier: 1

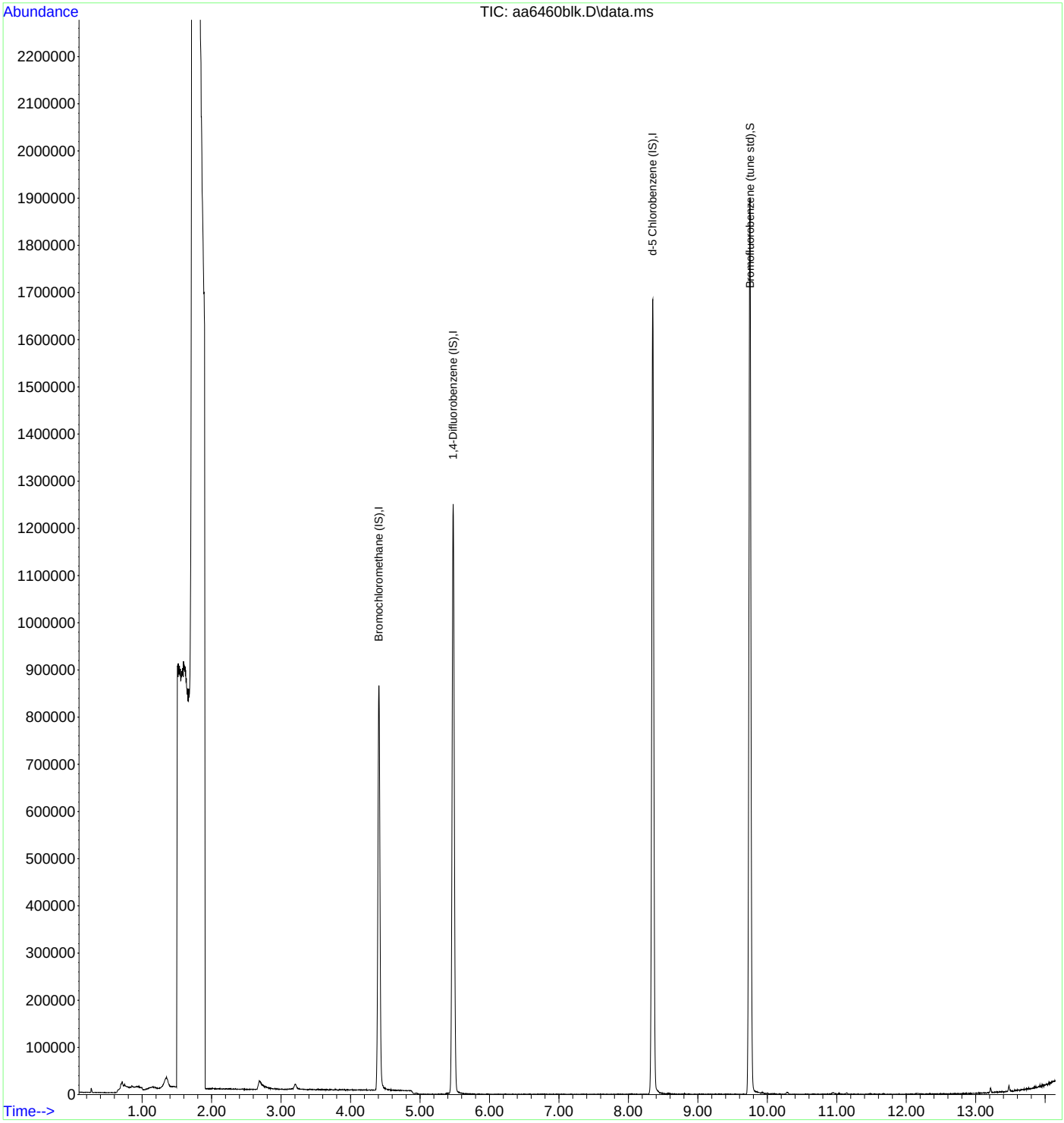
Quant Time: May 09 14:27:14 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.406	130	276554	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.477	114	1064655	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.348	117	1016199	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.750	95	863001	9.47	ppbV	0.000
Target Compounds						Qvalue

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

Data Path : C:\DATA\2024\04-2024\04-30-2024\
Data File : aa6460blk.D
Acq On : 30 Apr 2024 11:45 am
Operator : jjw
Sample : Method Blank
Misc : 1127
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 09 14:27:14 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration



Data Path : C:\DATA\2024\04-2024\04-30-2024\
Data File : aa6460blk.D
Acq On : 30 Apr 2024 11:45 am
Operator : jjw
Sample : Method Blank
Misc : 1127
ALS Vial : 5 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\240326.M
Title : TO-15 on the Agilent 7890A / 5975C

Signal : TIC: aa6460blk.D\data.ms

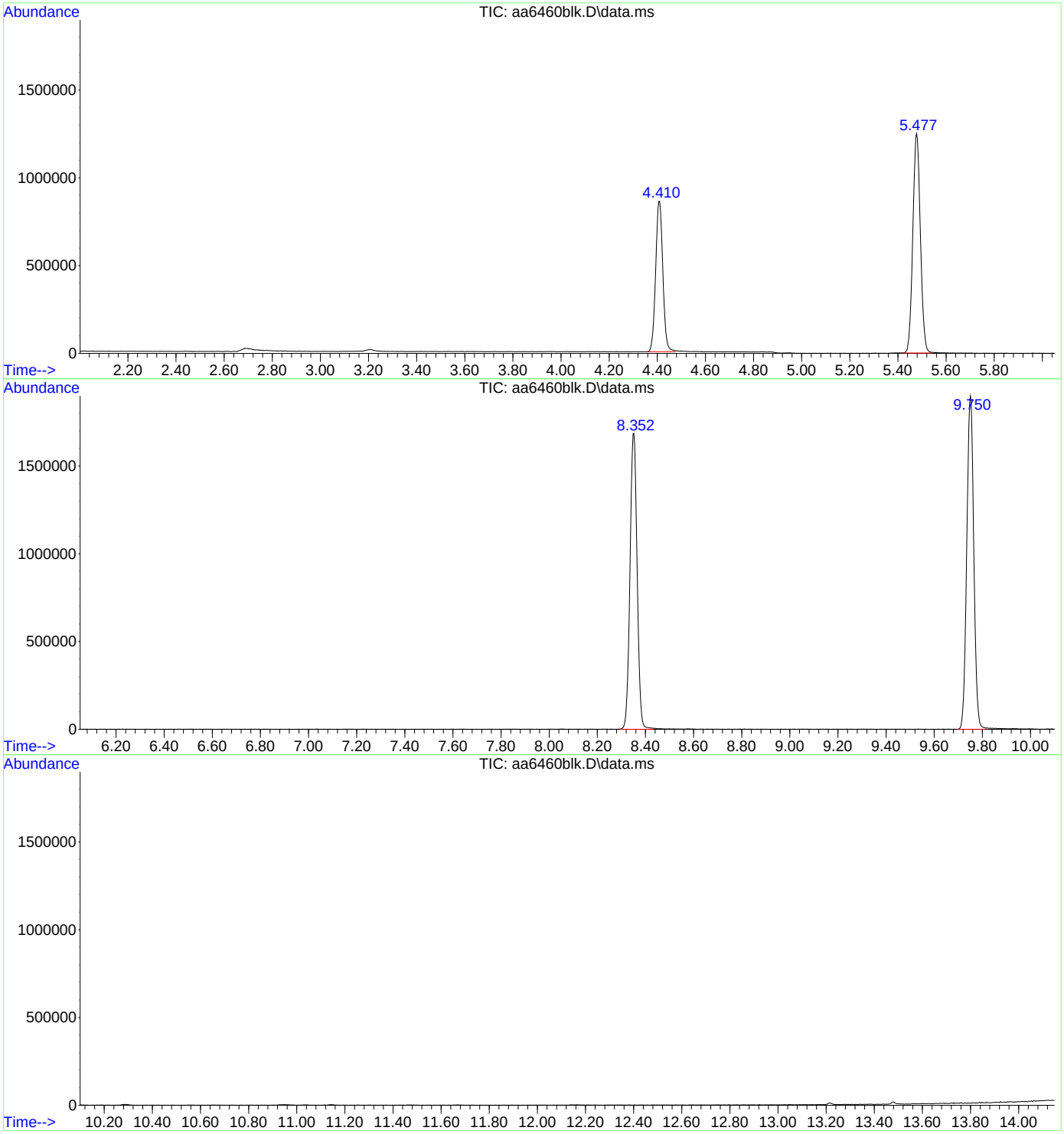
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.410	1316	1332	1352	rBV2	856763	1764608	46.31%	15.035%
2	5.477	1646	1664	1683	rBV	1248991	2717991	71.33%	23.157%
3	8.352	2540	2558	2582	rBV	1684956	3444025	90.38%	29.343%
4	9.750	2976	2993	3013	rBV	1897411	3810432	100.00%	32.465%

Sum of corrected areas: 11737056

Data Path : C:\DATA\2024\04-2024\04-30-2024\
Data File : aa6460blk.D
Acq On : 30 Apr 2024 11:45 am
Operator : jjw
Sample : Method Blank
Misc : 1127
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C

TIC Library : C:\Database\NIST05a.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : C:\DATA\2024\04-2024\04-30-2024\
Data File : aa6460blk.D
Acq On : 30 Apr 2024 11:45 am
Operator : jjw
Sample : Method Blank
Misc : 1127
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C

TIC Library : C:\Database\NIST05a.L
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected
****

Data Path : C:\DATA\2024\04-2024\04-30-2024\
Data File : aa6460blk.D
Acq On : 30 Apr 2024 11:45 am
Operator : jjw
Sample : Method Blank
Misc : 1127
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C

TIC Library : C:\Database\NIST05a.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

INTEGRATED ANALYTICAL LABORATORIES, LLC

Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA6122LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 4/3/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6120BFB]	04/03/2024 10:39
10 PPBV DCVS [AA6121DCVS]	04/03/2024 11:58
10 PPBV LCS [AA6122LCS]	04/03/2024 12:29
METHOD BLANK [AA6123BLK]	04/03/2024 13:28
02 PPBV RLLCS [AA6124RLLCS]	04/03/2024 14:13
2037 [AA6125]	04/03/2024 16:31
5092 [AA6133]	04/03/2024 20:23
10 PPBV CCCVS [AA6134CCCVS]	04/03/2024 20:52

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
Acetone	67-64-1	11	100
Benzene	71-43-2	11	110
Bromodichloromethane	75-27-4	12	110
Bromoform	75-25-2	12	110
Bromomethane	74-83-9	12	110
1,3-Butadiene	106-99-0	9.5	95
Chlorobenzene	108-90-7	11	110
Chloroethane	75-00-3	12	120
Chloroform	67-66-3	11	110
Chloromethane	74-87-3	12	100
Carbon disulfide	75-15-0	12	110
Carbon tetrachloride	56-23-5	11	110
Cyclohexane	110-82-7	10	100
Dibromochloromethane	124-48-1	11	100
1,2-Dibromoethane	106-93-4	11	100
1,2-Dichlorobenzene	95-50-1	11	100
1,3-Dichlorobenzene	541-73-1	12	110
1,4-Dichlorobenzene	106-46-7	11	100
Dichlorodifluoromethane	75-71-8	12	110
1,1-Dichloroethane	75-34-3	11	100
1,2-Dichloroethane	107-06-2	11	110
1,1-Dichloroethene	75-35-4	12	110
1,2-Dichloroethene (cis)	156-59-2	12	110
1,2-Dichloroethene (trans)	156-60-5	12	110
1,2-Dichloropropane	78-87-5	11	110
1,3-Dichloropropene (cis)	10061-01-5	11	100
1,3-Dichloropropene (trans)	10061-02-6	11	110
1,2-Dichlorotetrafluoroethane	76-14-2	9.7	88
1,4-Dioxane	123-91-1	12	100
Ethylbenzene	100-41-4	11	110
n-Heptane	142-82-5	9.4	94
1,3-Hexachlorobutadiene	87-68-3	12	110

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.

*** Values outside of QC limits* Values outside of 70-130% QC limits**

Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA6122LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 4/3/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6120BFB]	04/03/2024 10:39
10 PPBV DCVS [AA6121DCVS]	04/03/2024 11:58
10 PPBV LCS [AA6122LCS]	04/03/2024 12:29
METHOD BLANK [AA6123BLK]	04/03/2024 13:28
02 PPBV RLLCS [AA6124RLLCS]	04/03/2024 14:13
2037 [AA6125]	04/03/2024 16:31
5092 [AA6133]	04/03/2024 20:23
10 PPBV CCCVS [AA6134CCCVS]	04/03/2024 20:52

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
n-Hexane	110-54-3	10	100
Methylene chloride	75-09-2	11	100
Methyl ethyl ketone	78-93-3	11	93
Methyl isobutyl ketone	108-10-1	9.5	86
Methyl tert-butyl ether	1634-04-4	10	91
Styrene	100-42-5	12	110
Tert-butyl alcohol	75-65-0	11	93
1,1,2,2-Tetrachloroethane	79-34-5	11	100
Tetrachloroethene	127-18-4	11	110
Toluene	108-88-3	10	100
1,2,4-Trichlorobenzene	120-82-1	12	110
1,1,1-Trichloroethane	71-55-6	10	100
1,1,2-Trichloroethane	79-00-5	11	100
Trichloroethene	79-01-6	11	110
Trichlorofluoromethane	75-69-4	11	100
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	10.0	100
1,2,4-Trimethylbenzene	95-63-6	11	100
1,3,5-Trimethylbenzene	108-67-8	11	100
2,2,4-Trimethylpentane	540-84-1	11	110
Vinyl bromide	593-60-2	12	120
Vinyl chloride	75-01-4	12	120
Xylenes (m&p)	179601-23-1	22	110
Xylenes (o)	95-47-6	11	110

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.

*** Values outside of QC limits* Values outside of 70-130% QC limits**

Data Path : C:\DATA\2024\04-2024\04-03-2024\
Data File : aa6122lcs.D
Acq On : 3 Apr 2024 12:29 pm
Operator : jjw
Sample : 10 ppbv LCS
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 03 12:48:54 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.412	130	389814	10.00	ppbV		0.000
39) 1,4-Difluorobenzene (IS)	5.480	114	1549628	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.351	117	1394004	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.750	95	1207212	9.65	ppbV		0.000
Target Compounds							Qvalue
2) Propene	1.467	41	467275	10.69	ppbV		98
3) Dichlorodifluoromethane	1.509	85	1139268	11.63	ppbV		99
4) 1,2-Dichlorotetrafluor...	1.629	85	1373910	9.71	ppbV		99
5) n-Butane	1.708	43	952598	9.87	ppbV		99
6) Chloromethane	1.774	52	78516	12.43	ppbV		96
7) Vinyl chloride	1.767	62	587015	12.09	ppbV		99
8) 1,3-Butadiene	1.777	39	522388	9.47	ppbV		96
9) Bromomethane	2.071	94	408974	11.68	ppbV		99
10) Chloroethane	2.184	64	309514	11.57	ppbV		100
11) Vinyl bromide	2.284	106	474074	11.76	ppbV		99
12) Trichlorofluoromethane	2.303	101	1272156	11.12	ppbV		99
13) Ethanol	2.669	45	207901	11.63	ppbV		96
14) 1,1-Dichloroethene	2.731	61	1031595	11.62	ppbV		97
15) Carbon disulfide	2.750	76	1730820	12.28	ppbV		96
16) 1,1,2-Trichloro-1,2,2-...	2.772	101	1126339	9.95	ppbV		100
17) Acrolein	2.985	56	222420	10.45	ppbV		99
18) Allyl chloride	3.116	76	272809	12.33	ppbV		100
19) Isopropanol	3.120	45	1016711	8.98	ppbV		99
20) Methylene chloride	3.206	49	710591	11.25	ppbV		96
21) Acetone	3.219	43	952295	10.92	ppbV		98
22) trans-1,2-Dichloroethene	3.332	61	939896	12.10	ppbV		95
23) n-Pentane	3.415	43	1117312	10.21	ppbV		98
24) n-Hexane	3.415	57	1570029	10.01	ppbV		96
25) Methyl tert-butyl ether	3.422	73	1777154	10.08	ppbV		96
26) Tert-butyl alcohol	3.477	59	1316772	10.58	ppbV		100
27) 1,1-Dichloroethane	3.817	63	1123596	10.78	ppbV		99
28) cis-1,2-Dichloroethene	4.248	61	869194	11.62	ppbV		97
29) Cyclohexane	4.431	56	1069291	10.08	ppbV		97
30) Chloroform	4.473	83	1240723	11.42	ppbV		100
31) Ethyl acetate	4.563	45	232417	10.36	ppbV		96
32) Carbon tetrachloride	4.595	117	1194656	10.74	ppbV		100
33) Tetrahydrofuran	4.599	42	868784	10.64	ppbV		97
34) 1,1,1-Trichloroethane	4.647	97	1098470	10.47	ppbV		99
35) Methyl ethyl ketone	4.708	43	1374882	10.56	ppbV		98
36) n-Heptane	4.939	43	1275154	9.37	ppbV		96
37) Benzene	4.952	78	1760254	10.76	ppbV		97
38) 1,2-Dichloroethane	5.113	62	818529	11.03	ppbV		100
40) Trichloroethene	5.457	130	662084	10.71	ppbV		99
41) 2,2,4-Trimethylpentane	4.866	57	3252825	10.83	ppbV		98
42) 1,2-Dichloropropane	5.911	63	714678	10.55	ppbV		97
43) Bromodichloromethane	5.972	83	1245547	11.55	ppbV		99
44) Methyl methacrylate	6.120	41	956503	9.96	ppbV		98
45) 1,4-Dioxane	6.148	88	426367	11.75	ppbV		96
46) cis-1,3-Dichloropropene	6.566	75	1058495	11.06	ppbV		100
47) Toluene	6.801	91	2091586	10.48	ppbV		100
48) Methyl isobutyl ketone	7.171	43	1704176	9.54	ppbV		98
49) Tetrachloroethene	7.190	166	776866	11.27	ppbV		99
50) trans-1,3-Dichloropropene	7.210	75	1041887	11.44	ppbV	#	71
51) 1,1,2-Trichloroethane	7.370	97	707213	10.72	ppbV		99

Data Path : C:\DATA\2024\04-2024\04-03-2024\
Data File : aa6122lcs.D
Acq On : 3 Apr 2024 12:29 pm
Operator : jjw
Sample : 10 ppbv LCS
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

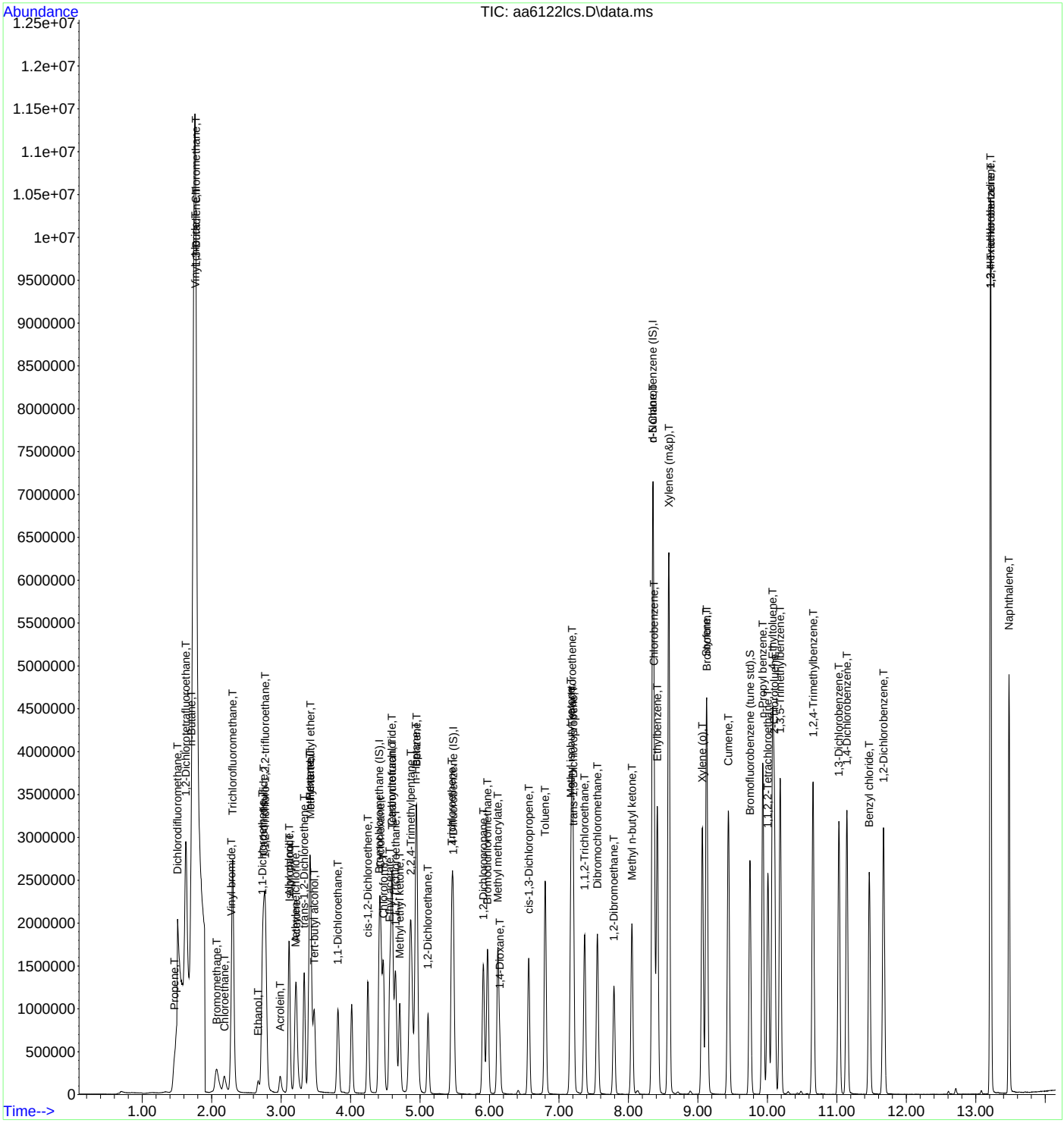
Quant Time: Apr 03 12:48:54 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.554	129	1159662	11.47	ppbV	99
53) 1,2-Dibromoethane	7.791	107	1041275	11.11	ppbV	100
54) Methyl n-butyl ketone	8.052	43	1573973	9.83	ppbV	98
56) n-Nonane	8.351	43	1897019	9.81	ppbV	97
57) Chlorobenzene	8.370	112	1533783	11.42	ppbV	97
58) Ethylbenzene	8.415	91	2866531	10.71	ppbV	100
59) Xylenes (m&p)	8.582	91	4391036	21.86	ppbV	99
60) Xylene (o)	9.065	91	2244433	10.53	ppbV	99
61) Styrene	9.123	104	1614253	11.68	ppbV	99
62) Bromoform	9.129	173	1033908	12.09	ppbV	100
63) Cumene	9.438	105	2770566	10.31	ppbV	99
65) n-Propyl benzene	9.933	91	3832313	10.53	ppbV	99
66) 1,1,2,2-Tetrachloroethane	10.007	83	1753979	11.10	ppbV	100
67) 4-Ethyltoluene	10.074	105	3100889	10.72	ppbV	100
68) 2-Chlorotoluene	10.100	91	2618078	10.63	ppbV	99
69) 1,3,5-Trimethylbenzene	10.184	105	2544553	10.68	ppbV	100
70) 1,2,4-Trimethylbenzene	10.660	105	2535399	10.74	ppbV	99
71) 1,3-Dichlorobenzene	11.029	146	1488392	11.50	ppbV	99
72) 1,4-Dichlorobenzene	11.145	146	1482596	11.30	ppbV	99
73) Benzyl chloride	11.467	91	2333518	10.63	ppbV	99
74) 1,2-Dichlorobenzene	11.672	146	1434249	11.17	ppbV	99
75) 1,3-Hexachlorobutadiene	13.212	225	842368	12.09	ppbV	100
76) 1,2,4-Trichlorobenzene	13.216	180	1143166	12.01	ppbV	100
77) Naphthalene	13.479	128	2836037	10.73	ppbV	100

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

Data Path : C:\DATA\2024\04-2024\04-03-2024\
Data File : aa6122lcs.D
Acq On : 3 Apr 2024 12:29 pm
Operator : jjw
Sample : 10 ppbv LCS
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 03 12:48:54 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES, LLC

Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA6444LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 4/29/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6442BFB]	04/29/2024 9:47
10 PPBV DCVS [AA6443DCVS]	04/29/2024 11:31
10 PPBV LCS [AA6444LCS]	04/29/2024 12:05
METHOD BLANK [AA6445BLK]	04/29/2024 12:35
02 PPBV RLLCS [AA6446RLLCS]	04/29/2024 13:20
E24-01487-01 [AA6447]	04/29/2024 15:57
E24-01487-02 [AA6448]	04/29/2024 16:29
E24-01487-03 [AA6449]	04/29/2024 17:01
E24-01487-04 [AA6450]	04/29/2024 17:33
10 PPBV CCCVS [AA6455CCCVS]	04/29/2024 20:15

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
Acetone	67-64-1	11	100
Benzene	71-43-2	10	100
Bromodichloromethane	75-27-4	12	110
Bromoform	75-25-2	12	110
Bromomethane	74-83-9	11	100
1,3-Butadiene	106-99-0	9.8	98
Chlorobenzene	108-90-7	11	110
Chloroethane	75-00-3	12	120
Chloroform	67-66-3	11	110
Chloromethane	74-87-3	12	100
Carbon disulfide	75-15-0	12	110
Carbon tetrachloride	56-23-5	10	100
Cyclohexane	110-82-7	10	100
Dibromochloromethane	124-48-1	11	100
1,2-Dibromoethane	106-93-4	11	100
1,2-Dichlorobenzene	95-50-1	11	100
1,3-Dichlorobenzene	541-73-1	11	100
1,4-Dichlorobenzene	106-46-7	11	100
Dichlorodifluoromethane	75-71-8	11	100
1,1-Dichloroethane	75-34-3	11	100
1,2-Dichloroethane	107-06-2	11	110
1,1-Dichloroethene	75-35-4	12	110
1,2-Dichloroethene (cis)	156-59-2	12	110
1,2-Dichloroethene (trans)	156-60-5	12	110
1,2-Dichloropropane	78-87-5	11	110
1,3-Dichloropropene (cis)	10061-01-5	11	100
1,3-Dichloropropene (trans)	10061-02-6	11	110
1,2-Dichlorotetrafluoroethane	76-14-2	9.4	85
1,4-Dioxane	123-91-1	11	92
Ethylbenzene	100-41-4	11	110

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.

*** Values outside of QC limits* Values outside of 70-130% QC limits**

INTEGRATED ANALYTICAL LABORATORIES, LLC

Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA6444LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 4/29/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6442BFB]	04/29/2024 9:47
10 PPBV DCVS [AA6443DCVS]	04/29/2024 11:31
10 PPBV LCS [AA6444LCS]	04/29/2024 12:05
METHOD BLANK [AA6445BLK]	04/29/2024 12:35
02 PPBV RLLCS [AA6446RLLCS]	04/29/2024 13:20
E24-01487-01 [AA6447]	04/29/2024 15:57
E24-01487-02 [AA6448]	04/29/2024 16:29
E24-01487-03 [AA6449]	04/29/2024 17:01
E24-01487-04 [AA6450]	04/29/2024 17:33
10 PPBV CCCVS [AA6455CCCVS]	04/29/2024 20:15

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
n-Heptane	142-82-5	9.9	99
1,3-Hexachlorobutadiene	87-68-3	12	110
n-Hexane	110-54-3	10	100
Methylene chloride	75-09-2	12	110
Methyl ethyl ketone	78-93-3	11	93
Methyl isobutyl ketone	108-10-1	10	91
Methyl tert-butyl ether	1634-04-4	10	91
Styrene	100-42-5	12	110
Tert-butyl alcohol	75-65-0	11	93
1,1,2,2-Tetrachloroethane	79-34-5	11	100
Tetrachloroethene	127-18-4	11	110
Toluene	108-88-3	10	100
1,2,4-Trichlorobenzene	120-82-1	11	96
1,1,1-Trichloroethane	71-55-6	10	100
1,1,2-Trichloroethane	79-00-5	11	100
Trichloroethene	79-01-6	10	100
Trichlorofluoromethane	75-69-4	11	100
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	9.7	97
1,2,4-Trimethylbenzene	95-63-6	11	100
1,3,5-Trimethylbenzene	108-67-8	11	100
2,2,4-Trimethylpentane	540-84-1	11	110
Vinyl bromide	593-60-2	11	110
Vinyl chloride	75-01-4	12	120
Xylenes (m&p)	179601-23-1	22	110
Xylenes (o)	95-47-6	11	110

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.

*** Values outside of QC limits* Values outside of 70-130% QC limits**

Data Path : C:\DATA\2024\04-2024\04-29-2024\
Data File : aa6444lcs.D
Acq On : 29 Apr 2024 12:05 pm
Operator : jjw
Sample : 10 ppbv LCS
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 09 12:28:07 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.410	130	299925	10.00	ppbV		0.000
39) 1,4-Difluorobenzene (IS)	5.480	114	1164188	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.352	117	1035334	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.750	95	907879	9.78	ppbV		0.000
Target Compounds							Qvalue
2) Propene	1.470	41	367606	10.93	ppbV		99
3) Dichlorodifluoromethane	1.506	85	831818	11.03	ppbV		100
4) 1,2-Dichlorotetrafluor...	1.630	85	1017788	9.35	ppbV		97
5) n-Butane	1.709	43	764563	10.30	ppbV		99
6) Chloromethane	1.774	52	60408	12.43	ppbV		97
7) Vinyl chloride	1.764	62	444244	11.89	ppbV		100
8) 1,3-Butadiene	1.774	39	417548	9.84	ppbV		97
9) Bromomethane	2.069	94	302767	11.24	ppbV		98
10) Chloroethane	2.185	64	240602	11.69	ppbV		99
11) Vinyl bromide	2.281	106	345485	11.14	ppbV		99
12) Trichlorofluoromethane	2.301	101	943435	10.72	ppbV		98
13) Ethanol	2.667	45	147682	10.74	ppbV		99
14) 1,1-Dichloroethene	2.728	61	799935	11.71	ppbV		99
15) Carbon disulfide	2.747	76	1318871	12.16	ppbV		98
16) 1,1,2-Trichloro-1,2,2-...	2.770	101	842839	9.68	ppbV		98
17) Acrolein	2.985	56	175715	10.73	ppbV		97
18) Allyl chloride	3.114	76	209583	12.31	ppbV		100
19) Isopropanol	3.117	45	809220	9.29	ppbV		99
20) Methylene chloride	3.204	49	560543	11.54	ppbV		100
21) Acetone	3.220	43	762724	11.37	ppbV		99
22) trans-1,2-Dichloroethene	3.333	61	729818	12.22	ppbV		99
23) n-Pentane	3.413	43	859237	10.20	ppbV		98
24) n-Hexane	3.413	57	1218920	10.10	ppbV		99
25) Methyl tert-butyl ether	3.419	73	1385612	10.22	ppbV		97
26) Tert-butyl alcohol	3.477	59	1013869	10.59	ppbV		100
27) 1,1-Dichloroethane	3.818	63	874371	10.90	ppbV		100
28) cis-1,2-Dichloroethene	4.249	61	667605	11.60	ppbV		100
29) Cyclohexane	4.432	56	843242	10.33	ppbV		99
30) Chloroform	4.471	83	928543	11.10	ppbV		100
31) Ethyl acetate	4.564	45	185525	10.75	ppbV		99
32) Carbon tetrachloride	4.596	117	884766	10.34	ppbV		99
33) Tetrahydrofuran	4.596	42	685042	10.90	ppbV		100
34) 1,1,1-Trichloroethane	4.648	97	834888	10.34	ppbV		100
35) Methyl ethyl ketone	4.709	43	1088061	10.86	ppbV		100
36) n-Heptane	4.940	43	1034371	9.88	ppbV		100
37) Benzene	4.953	78	1310914	10.42	ppbV		100
38) 1,2-Dichloroethane	5.114	62	628155	11.00	ppbV		100
40) Trichloroethene	5.458	130	472840	10.18	ppbV		99
41) 2,2,4-Trimethylpentane	4.870	57	2522198	11.17	ppbV		99
42) 1,2-Dichloropropane	5.911	63	549614	10.80	ppbV		97
43) Bromodichloromethane	5.972	83	942319	11.63	ppbV		99
44) Methyl methacrylate	6.120	41	754302	10.45	ppbV		98
45) 1,4-Dioxane	6.143	88	311855	11.44	ppbV		100
46) cis-1,3-Dichloropropene	6.564	75	790494	11.00	ppbV		100
47) Toluene	6.802	91	1563712	10.42	ppbV		100
48) Methyl isobutyl ketone	7.168	43	1358905	10.13	ppbV		100
49) Tetrachloroethene	7.191	166	554715	10.71	ppbV		99
50) trans-1,3-Dichloropropene	7.210	75	780926	11.42	ppbV	#	74
51) 1,1,2-Trichloroethane	7.368	97	520887	10.51	ppbV		100

Data Path : C:\DATA\2024\04-2024\04-29-2024\
Data File : aa6444lcs.D
Acq On : 29 Apr 2024 12:05 pm
Operator : jjw
Sample : 10 ppbv LCS
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

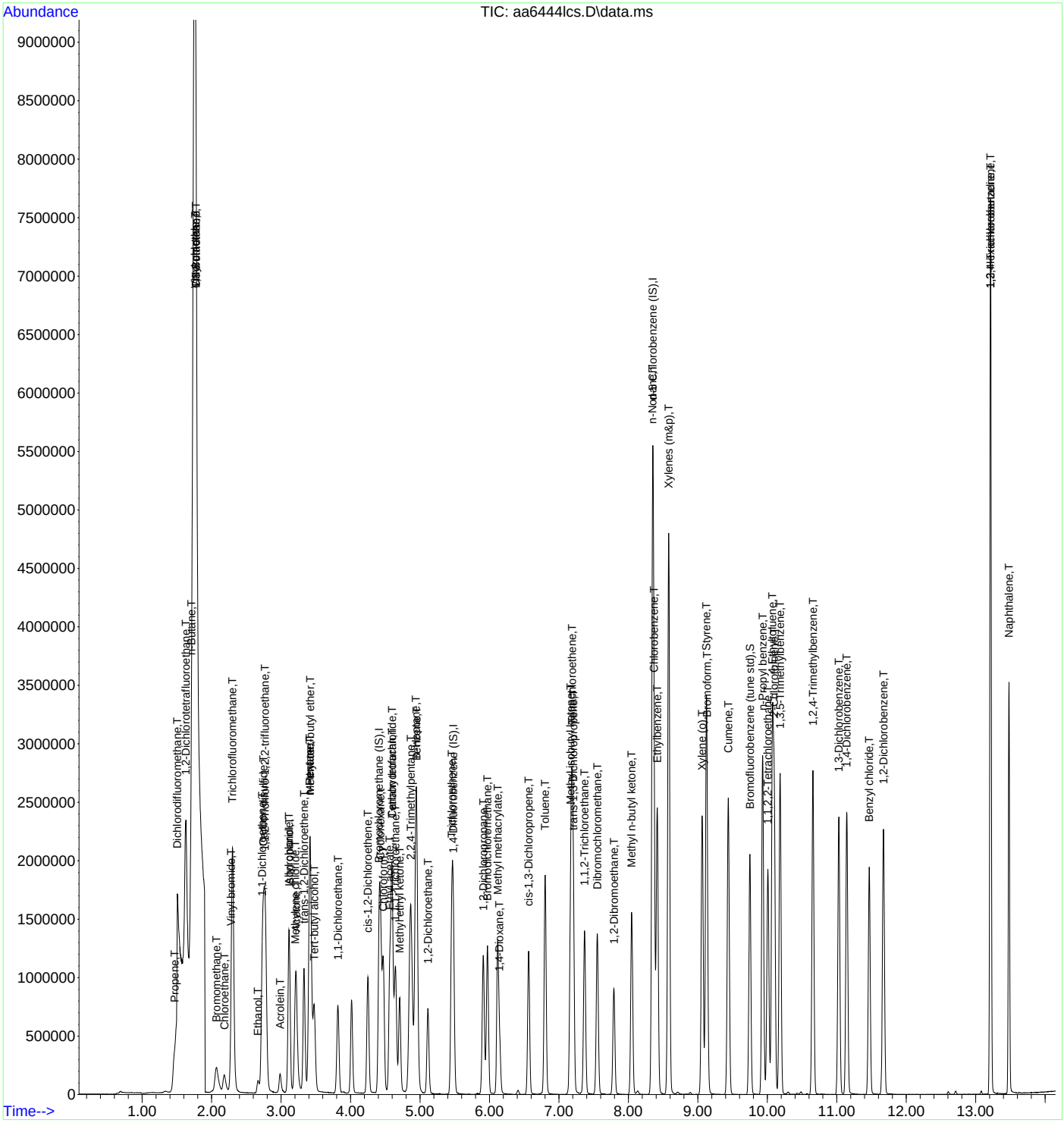
Quant Time: May 09 12:28:07 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.554	129	838241	11.03	ppbV	99
53) 1,2-Dibromoethane	7.792	107	755617	10.73	ppbV	100
54) Methyl n-butyl ketone	8.046	43	1274791	10.60	ppbV	99
56) n-Nonane	8.348	43	1528733	10.64	ppbV	99
57) Chlorobenzene	8.371	112	1120437	11.23	ppbV	99
58) Ethylbenzene	8.416	91	2143328	10.79	ppbV	100
59) Xylenes (m&p)	8.580	91	3262643	21.87	ppbV	100
60) Xylene (o)	9.062	91	1690997	10.68	ppbV	100
61) Styrene	9.123	104	1180511	11.50	ppbV	100
62) Bromoform	9.133	173	734577	11.56	ppbV	100
63) Cumene	9.438	105	2057360	10.31	ppbV	100
65) n-Propyl benzene	9.934	91	2867479	10.61	ppbV	99
66) 1,1,2,2-Tetrachloroethane	10.008	83	1312312	11.18	ppbV	100
67) 4-Ethyltoluene	10.072	105	2290096	10.66	ppbV	100
68) 2-Chlorotoluene	10.098	91	1941639	10.61	ppbV	100
69) 1,3,5-Trimethylbenzene	10.184	105	1876717	10.61	ppbV	99
70) 1,2,4-Trimethylbenzene	10.657	105	1882090	10.73	ppbV	99
71) 1,3-Dichlorobenzene	11.030	146	1061360	11.05	ppbV	99
72) 1,4-Dichlorobenzene	11.143	146	1075459	11.04	ppbV	99
73) Benzyl chloride	11.467	91	1712524	10.51	ppbV	100
74) 1,2-Dichlorobenzene	11.673	146	1028807	10.79	ppbV	99
75) 1,3-Hexachlorobutadiene	13.213	225	599794	11.59	ppbV	100
76) 1,2,4-Trichlorobenzene	13.213	180	801537	11.34	ppbV	100
77) Naphthalene	13.480	128	1995338	10.16	ppbV	100

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

Data Path : C:\DATA\2024\04-2024\04-29-2024\
Data File : aa6444lcs.D
Acq On : 29 Apr 2024 12:05 pm
Operator : jjw
Sample : 10 ppbv LCS
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 09 12:28:07 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration



Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA6459LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 4/30/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6457BFB]	04/30/2024 9:16
10 PPBV DCVS [AA6458DCVS]	04/30/2024 10:49
10 PPBV LCS [AA6459LCS]	04/30/2024 11:18
METHOD BLANK [AA6460BLK]	04/30/2024 11:45
02 PPBV RLLCS [AA6461RLLCS]	04/30/2024 12:13
E24-01487-01 [AA6462]	04/30/2024 12:48
E24-01487-02 [AA6463]	04/30/2024 13:19
10 PPBV CCCVS [AA6472CCCVS]	04/30/2024 21:15

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
Acetone	67-64-1	11	100
Benzene	71-43-2	11	110
Bromodichloromethane	75-27-4	12	110
Bromoform	75-25-2	11	100
Bromomethane	74-83-9	11	100
1,3-Butadiene	106-99-0	9.9	99
Chlorobenzene	108-90-7	11	110
Chloroethane	75-00-3	12	120
Chloroform	67-66-3	11	110
Chloromethane	74-87-3	13	110
Carbon disulfide	75-15-0	12	110
Carbon tetrachloride	56-23-5	10	100
Cyclohexane	110-82-7	10	100
Dibromochloromethane	124-48-1	11	100
1,2-Dibromoethane	106-93-4	11	100
1,2-Dichlorobenzene	95-50-1	11	100
1,3-Dichlorobenzene	541-73-1	11	100
1,4-Dichlorobenzene	106-46-7	11	100
Dichlorodifluoromethane	75-71-8	11	100
1,1-Dichloroethane	75-34-3	11	100
1,2-Dichloroethane	107-06-2	11	110
1,1-Dichloroethene	75-35-4	12	110
1,2-Dichloroethene (cis)	156-59-2	12	110
1,2-Dichloroethene (trans)	156-60-5	13	120
1,2-Dichloropropane	78-87-5	11	110
1,3-Dichloropropene (cis)	10061-01-5	11	100
1,3-Dichloropropene (trans)	10061-02-6	11	110
1,2-Dichlorotetrafluoroethane	76-14-2	9.5	86
1,4-Dioxane	123-91-1	11	92
Ethylbenzene	100-41-4	11	110
n-Heptane	142-82-5	10	100
1,3-Hexachlorobutadiene	87-68-3	11	96

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.

*** Values outside of QC limits* Values outside of 70-130% QC limits**

INTEGRATED ANALYTICAL LABORATORIES, LLC

Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA6459LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 4/30/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6457BFB]	04/30/2024 9:16
10 PPBV DCVS [AA6458DCVS]	04/30/2024 10:49
10 PPBV LCS [AA6459LCS]	04/30/2024 11:18
METHOD BLANK [AA6460BLK]	04/30/2024 11:45
02 PPBV RLLCS [AA6461RLLCS]	04/30/2024 12:13
E24-01487-01 [AA6462]	04/30/2024 12:48
E24-01487-02 [AA6463]	04/30/2024 13:19
10 PPBV CCCVS [AA6472CCCVS]	04/30/2024 21:15

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
n-Hexane	110-54-3	10	100
Methylene chloride	75-09-2	12	110
Methyl ethyl ketone	78-93-3	11	93
Methyl isobutyl ketone	108-10-1	10.0	91
Methyl tert-butyl ether	1634-04-4	10	91
Styrene	100-42-5	11	100
Tert-butyl alcohol	75-65-0	11	93
1,1,2,2-Tetrachloroethane	79-34-5	11	100
Tetrachloroethene	127-18-4	11	110
Toluene	108-88-3	10	100
1,2,4-Trichlorobenzene	120-82-1	11	96
1,1,1-Trichloroethane	71-55-6	10	100
1,1,2-Trichloroethane	79-00-5	10	91
Trichloroethene	79-01-6	10	100
Trichlorofluoromethane	75-69-4	11	100
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	9.8	98
1,2,4-Trimethylbenzene	95-63-6	11	100
1,3,5-Trimethylbenzene	108-67-8	10	91
2,2,4-Trimethylpentane	540-84-1	11	110
Vinyl bromide	593-60-2	11	110
Vinyl chloride	75-01-4	12	120
Xylenes (m&p)	179601-23-1	21	110
Xylenes (o)	95-47-6	10	100

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.

*** Values outside of QC limits* Values outside of 70-130% QC limits**

Data Path : C:\DATA\2024\04-2024\04-30-2024\
Data File : aa6459lcs.D
Acq On : 30 Apr 2024 11:18 am
Operator : jjw
Sample : 10 ppbv LCS
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 09 14:19:54 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.410	130	302532	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.477	114	1189653	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.352	117	1068288	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.750	95	914040	9.54	ppbV	0.000
Target Compounds						Qvalue
2) Propene	1.464	41	376060	11.09	ppbV	98
3) Dichlorodifluoromethane	1.506	85	852604	11.21	ppbV	100
4) 1,2-Dichlorotetrafluor...	1.630	85	1045274	9.52	ppbV	97
5) n-Butane	1.709	43	772481	10.32	ppbV	99
6) Chloromethane	1.778	52	65435	13.35	ppbV	77
7) Vinyl chloride	1.768	62	453787	12.04	ppbV	100
8) 1,3-Butadiene	1.778	39	424374	9.91	ppbV	98
9) Bromomethane	2.069	94	308886	11.37	ppbV	99
10) Chloroethane	2.185	64	242479	11.68	ppbV	100
11) Vinyl bromide	2.281	106	354331	11.32	ppbV	100
12) Trichlorofluoromethane	2.304	101	962640	10.84	ppbV	99
13) Ethanol	2.670	45	175146	12.62	ppbV	99
14) 1,1-Dichloroethene	2.728	61	815219	11.83	ppbV	100
15) Carbon disulfide	2.748	76	1348707	12.33	ppbV	98
16) 1,1,2-Trichloro-1,2,2-...	2.767	101	861291	9.80	ppbV	98
17) Acrolein	2.985	56	177322	10.74	ppbV	97
18) Allyl chloride	3.114	76	211784	12.34	ppbV	100
19) Isopropanol	3.117	45	813151	9.26	ppbV	99
20) Methylene chloride	3.207	49	568047	11.59	ppbV	99
21) Acetone	3.220	43	773166	11.42	ppbV	99
22) trans-1,2-Dichloroethene	3.330	61	754572	12.52	ppbV	100
23) n-Pentane	3.413	43	876571	10.32	ppbV	99
24) n-Hexane	3.413	57	1248387	10.25	ppbV	99
25) Methyl tert-butyl ether	3.420	73	1395740	10.21	ppbV	95
26) Tert-butyl alcohol	3.474	59	1031066	10.67	ppbV	100
27) 1,1-Dichloroethane	3.818	63	889902	11.00	ppbV	100
28) cis-1,2-Dichloroethene	4.249	61	679441	11.71	ppbV	99
29) Cyclohexane	4.429	56	859288	10.44	ppbV	99
30) Chloroform	4.471	83	958087	11.36	ppbV	100
31) Ethyl acetate	4.564	45	185478	10.65	ppbV	99
32) Carbon tetrachloride	4.593	117	901171	10.44	ppbV	100
33) Tetrahydrofuran	4.596	42	696998	10.99	ppbV	100
34) 1,1,1-Trichloroethane	4.648	97	852878	10.47	ppbV	99
35) Methyl ethyl ketone	4.706	43	1108870	10.97	ppbV	100
36) n-Heptane	4.940	43	1059741	10.03	ppbV	100
37) Benzene	4.953	78	1340511	10.56	ppbV	99
38) 1,2-Dichloroethane	5.114	62	647287	11.24	ppbV	100
40) Trichloroethene	5.458	130	489666	10.32	ppbV	98
41) 2,2,4-Trimethylpentane	4.863	57	2579743	11.18	ppbV	100
42) 1,2-Dichloropropane	5.911	63	566507	10.90	ppbV	98
43) Bromodichloromethane	5.973	83	964041	11.64	ppbV	100
44) Methyl methacrylate	6.117	41	771826	10.47	ppbV	99
45) 1,4-Dioxane	6.143	88	317858	11.41	ppbV	100
46) cis-1,3-Dichloropropene	6.564	75	815329	11.10	ppbV	100
47) Toluene	6.802	91	1579243	10.30	ppbV	99
48) Methyl isobutyl ketone	7.169	43	1366112	9.96	ppbV	99
49) Tetrachloroethene	7.191	166	561042	10.60	ppbV	99
50) trans-1,3-Dichloropropene	7.210	75	797283	11.41	ppbV	97
51) 1,1,2-Trichloroethane	7.368	97	531010	10.48	ppbV	99

Data Path : C:\DATA\2024\04-2024\04-30-2024\
Data File : aa6459lcs.D
Acq On : 30 Apr 2024 11:18 am
Operator : jjw
Sample : 10 ppbv LCS
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

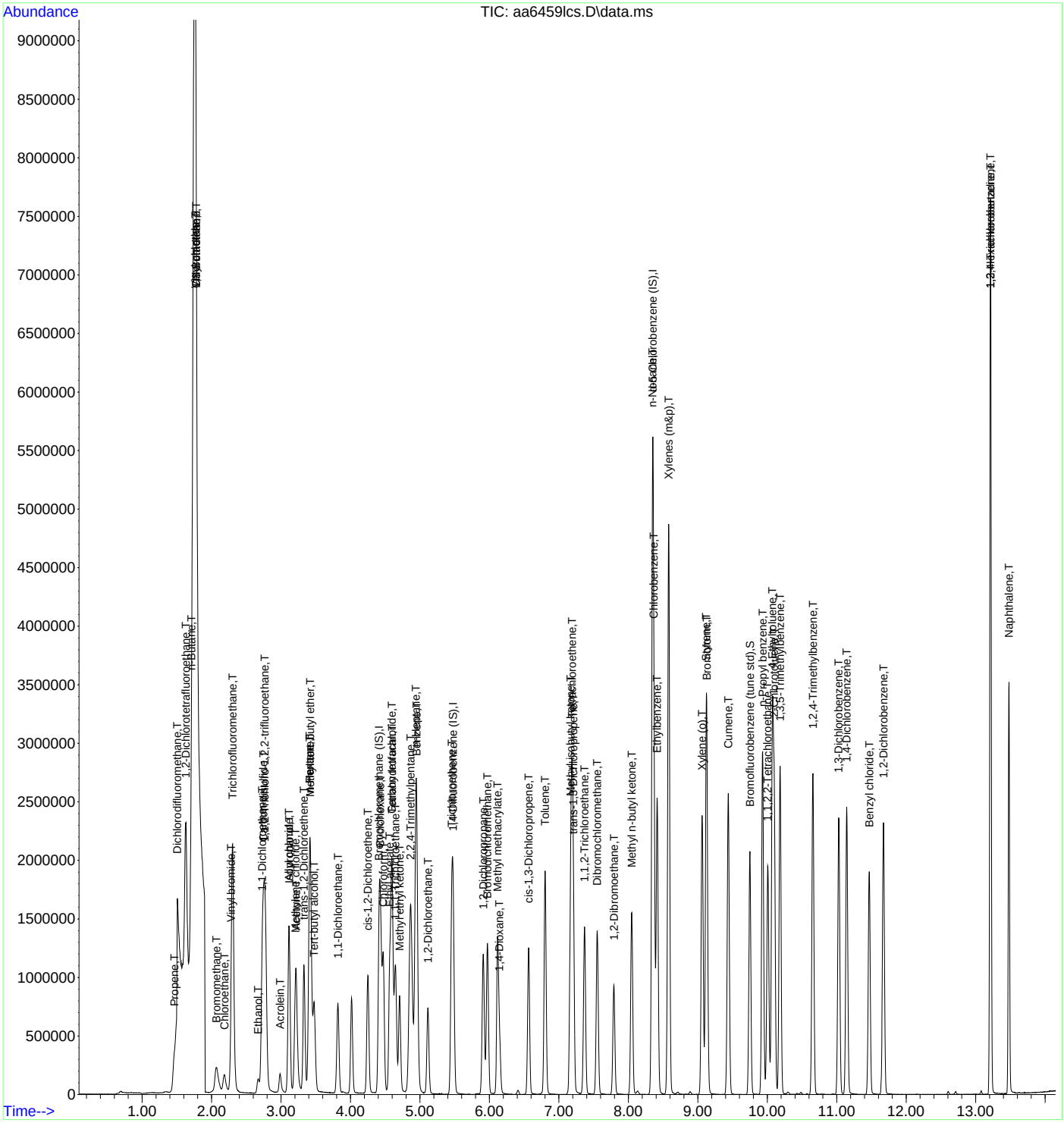
Quant Time: May 09 14:19:54 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.551	129	845750	10.89	ppbV	100
53) 1,2-Dibromoethane	7.792	107	766123	10.64	ppbV	100
54) Methyl n-butyl ketone	8.050	43	1285623	10.46	ppbV	99
56) n-Nonane	8.349	43	1532708	10.34	ppbV	99
57) Chlorobenzene	8.368	112	1126626	10.94	ppbV	100
58) Ethylbenzene	8.413	91	2164742	10.56	ppbV	100
59) Xylenes (m&p)	8.580	91	3302560	21.46	ppbV	100
60) Xylene (o)	9.062	91	1703264	10.43	ppbV	100
61) Styrene	9.120	104	1180291	11.14	ppbV	99
62) Bromoform	9.130	173	741540	11.31	ppbV	100
63) Cumene	9.439	105	2079168	10.10	ppbV	100
65) n-Propyl benzene	9.934	91	2889708	10.36	ppbV	99
66) 1,1,2,2-Tetrachloroethane	10.004	83	1327708	10.97	ppbV	100
67) 4-Ethyltoluene	10.072	105	2297736	10.37	ppbV	100
68) 2-Chlorotoluene	10.098	91	1963097	10.40	ppbV	100
69) 1,3,5-Trimethylbenzene	10.185	105	1896796	10.39	ppbV	99
70) 1,2,4-Trimethylbenzene	10.657	105	1904743	10.53	ppbV	99
71) 1,3-Dichlorobenzene	11.027	146	1075361	10.85	ppbV	100
72) 1,4-Dichlorobenzene	11.143	146	1072645	10.67	ppbV	98
73) Benzyl chloride	11.471	91	1729616	10.28	ppbV	100
74) 1,2-Dichlorobenzene	11.673	146	1046023	10.63	ppbV	99
75) 1,3-Hexachlorobutadiene	13.213	225	595216	11.14	ppbV	99
76) 1,2,4-Trichlorobenzene	13.213	180	814909	11.17	ppbV	100
77) Naphthalene	13.480	128	2034893	10.04	ppbV	100

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

Data Path : C:\DATA\2024\04-2024\04-30-2024\
Data File : aa6459lcs.D
Acq On : 30 Apr 2024 11:18 am
Operator : jjw
Sample : 10 ppbv LCS
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 09 14:19:54 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration



Analysis: Volatile Organic Compounds by EPA Method TO-15
Laboratory Sample Duplicate Report

		Date Received:	3/28/24
SDG Number:	E24-01113	Date Analyzed:	4/2/24,4/2/24
IAL Sample ID:	E24-01113-04	Lab Data File#:	AA6116,AA6117
Matrix:	Air	Dilution Factor:	1
Summa ID:	1774	Injection Volume:	50ml
		GC/MS Column:	RTX-1, 0.32 mmID

		Sample		Sample Dup			
		E24-01113-04		**E24-01113-24**			
		Concentration		**Concentration**		**Reporting**	
		Reported		**Reported**		**Limits**	
Compound	**CAS #**	**ppbv**	**Q**	**ppbv**	**Q**	**ppbv**	**RPD**
Acetone	67-64-1	**5.8**		**5.6**		2.0	**3.51%**
Allyl Chloride	107-05-1	2.0	U	2.0	U	2.0	0.00%
Benzene	71-43-2	2.0	U	2.0	U	2.0	0.00%
Bromodichloromethane	75-27-4	2.0	U	2.0	U	2.0	0.00%
Bromoform	75-25-2	2.0	U	2.0	U	2.0	0.00%
Bromomethane	74-83-9	2.0	U	2.0	U	2.0	0.00%
1,3-Butadiene	106-99-0	2.0	U	2.0	U	2.0	0.00%
Chlorobenzene	108-90-7	2.0	U	2.0	U	2.0	0.00%
Chloroethane	75-00-3	2.0	U	2.0	U	2.0	0.00%
Chloroform	67-66-3	2.0	U	2.0	U	2.0	0.00%
Chloromethane	74-87-3	2.0	U	2.0	U	2.0	0.00%
Carbon disulfide	75-15-0	2.0	U	2.0	U	2.0	0.00%
Carbon tetrachloride	56-23-5	2.0	U	2.0	U	2.0	0.00%
2-Chlorotoluene	95-49-8	2.0	U	2.0	U	2.0	0.00%
Cyclohexane	110-82-7	2.0	U	2.0	U	2.0	0.00%
Dibromochloromethane	124-48-1	2.0	U	2.0	U	2.0	0.00%
1,2-Dibromoethane	106-93-4	2.0	U	2.0	U	2.0	0.00%
1,2-Dichlorobenzene	95-50-1	2.0	U	2.0	U	2.0	0.00%
1,3-Dichlorobenzene	541-73-1	2.0	U	2.0	U	2.0	0.00%
1,4-Dichlorobenzene	106-46-7	2.0	U	2.0	U	2.0	0.00%
Dichlorodifluoromethane	75-71-8	2.0	U	2.0	U	2.0	0.00%
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	0.00%
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	0.00%
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	2.0	0.00%
1,2-Dichloroethene (cis)	156-59-2	2.0	U	2.0	U	2.0	0.00%
1,2-Dichloroethene (trans)	156-60-5	2.0	U	2.0	U	2.0	0.00%
1,2-Dichloropropane	78-87-5	2.0	U	2.0	U	2.0	0.00%
1,3-Dichloropropene (cis)	10061-01-5	2.0	U	2.0	U	2.0	0.00%
1,3-Dichloropropene (trans)	10061-02-6	2.0	U	2.0	U	2.0	0.00%
1,2-Dichlorotetrafluoroethane	76-14-2	2.0	U	2.0	U	2.0	0.00%
1,4-Dioxane	123-91-1	2.0	U	2.0	U	2.0	0.00%
Ethanol	64-17-5	**15**		**14**		2.0	**6.90%**
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	0.00%
4-Ethyltoluene	622-96-8	2.0	U	2.0	U	2.0	0.00%
n-Heptane	142-82-5	2.0	U	2.0	U	2.0	0.00%
1,3-Hexachlorobutadiene	87-68-3	2.0	U	2.0	U	2.0	0.00%
n-Hexane	110-54-3	2.0	U	2.0	U	2.0	0.00%
Isopropanol	67-63-0	**2.6**		2.0	U	2.0	**NC**

Qualifiers:
E=Concentration exceeds upper level of calibration range for instrument.
D=Extra dilution required for this compound. X=Duplicate samples do not met RPD criteria.
U=Compound ND or under reporting limit.

Analysis: Volatile Organic Compounds by EPA Method TO-15
Laboratory Sample Duplicate Report

SDG Number: E24-01113
IAL Sample ID: E24-01113-04
Matrix: Air
Summa ID: 1774

Date Received: 3/28/24
Date Analyzed: 4/2/24,4/2/24
Lab Data File#: AA6116,AA6117
Dilution Factor: 1
Injection Volume: 50ml
GC/MS Column: RTX-1, 0.32 mmID

Compound	CAS #	Sample E24-01113-04 Concentration Reported ppbv	Q	Sample Dup E24-01113-24 Concentration Reported ppbv	Q	Reporting Limits ppbv	RPD
Methylene chloride	75-09-2	2.0	U	2.0	U	2.0	0.00%
Methyl ethyl ketone	78-93-3	2.0	U	2.0	U	2.0	0.00%
Methyl isobutyl ketone	108-10-1	2.0	U	2.0	U	2.0	0.00%
Methyl methacrylate	80-62-6	2.0	U	2.0	U	2.0	0.00%
Methyl tert-butyl ether	1634-04-4	2.0	U	2.0	U	2.0	0.00%
Styrene	100-42-5	2.0	U	2.0	U	2.0	0.00%
Tert-butyl alcohol	75-65-0	2.0	U	2.0	U	2.0	0.00%
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	0.00%
Tetrachloroethene	127-18-4	2.0	U	2.0	U	2.0	0.00%
Tetrahydrofuran	109-99-9	2.0	U	2.0	U	2.0	0.00%
Toluene	108-88-3	2.0	U	2.0	U	2.0	0.00%
1,2,4-Trichlorobenzene	120-82-1	2.0	U	2.0	U	2.0	0.00%
1,1,1-Trichloroethane	71-55-6	2.0	U	2.0	U	2.0	0.00%
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	2.0	0.00%
Trichloroethene	79-01-6	2.0	U	2.0	U	2.0	0.00%
Trichlorofluoromethane	75-69-4	2.0	U	2.0	U	2.0	0.00%
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	2.0	U	2.0	U	2.0	0.00%
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	0.00%
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	0.00%
2,2,4-Trimethylpentane	540-84-1	2.0	U	2.0	U	2.0	0.00%
Vinyl bromide	593-60-2	2.0	U	2.0	U	2.0	0.00%
Vinyl chloride	75-01-4	2.0	U	2.0	U	2.0	0.00%
Xylenes (m&p)	179601-23-1	4.0	U	4.0	U	4.0	0.00%
Xylenes (o)	95-47-6	2.0	U	2.0	U	2.0	0.00%

RPD must be <25% for all laboratory duplicate samples. Laboratory duplicate samples are run once daily.
NC = The RPD could not be calculated since the compound was only detected in either the parent or duplicate sample.

Qualifiers:
E=Concentration exceeds upper level of calibration range for instrument.
D=Extra dilution required for this compound. X=Duplicate samples do not met RPD criteria.
U=Compound ND or under reporting limit.

Quantitation Report (QT Reviewed)

Data Path : C:\DATA\2024\04-2024\04-02-2024\
Data File : aa6116.D
Acq On : 2 Apr 2024 9:08 pm
Operator : jjw
Sample : E24-01113-04x10 dil
Misc : 1774, 50cc
ALS Vial : 15 Sample Multiplier: 1

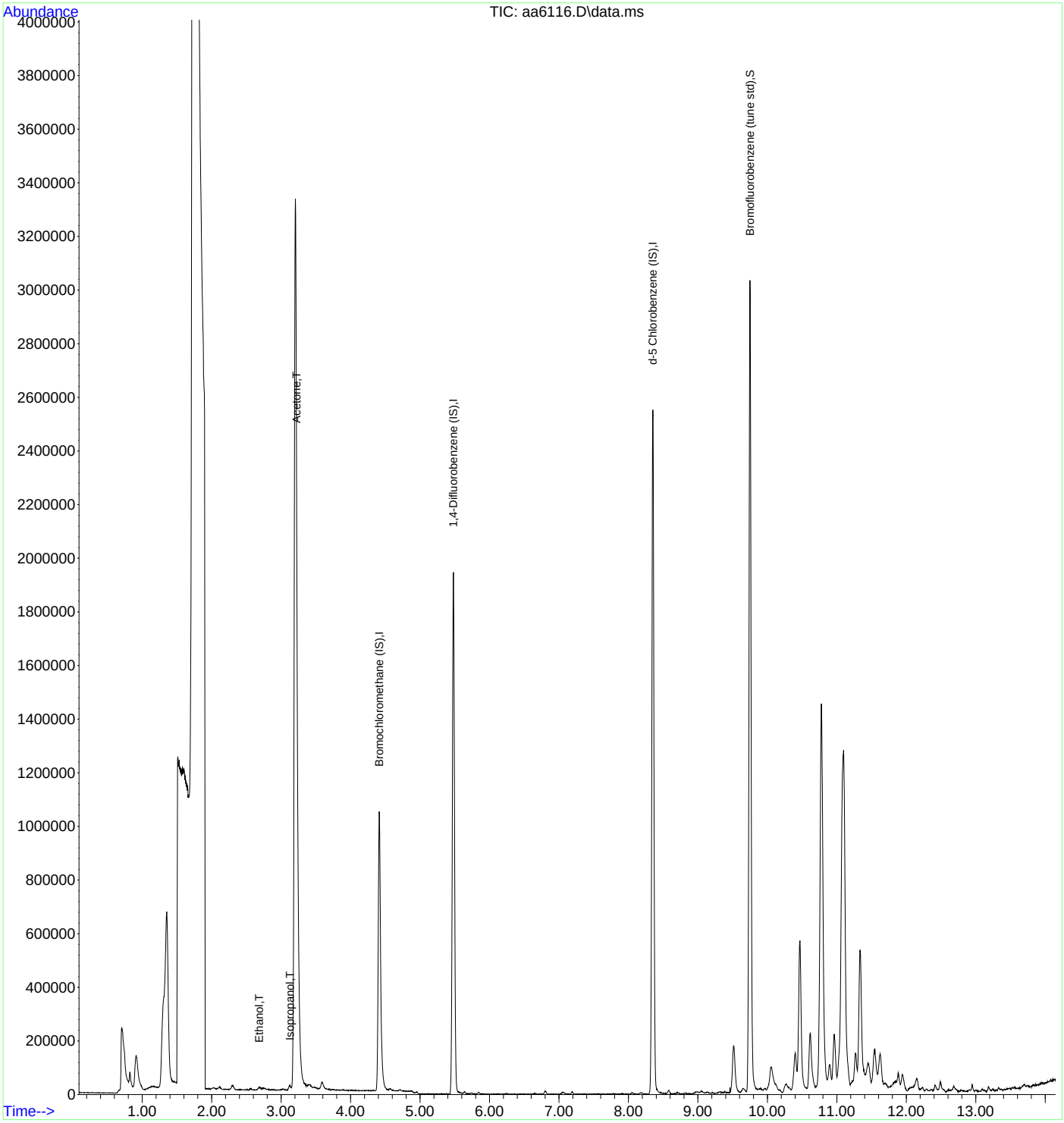
Quant Time: Apr 04 10:30:45 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

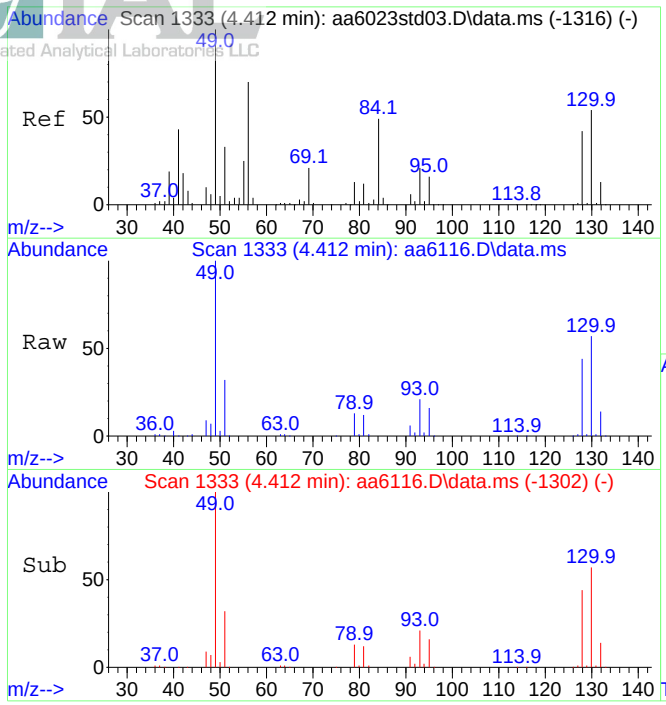
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.412	130	407426	10.00	ppbV		0.000
39) 1,4-Difluorobenzene (IS)	5.480	114	1688288	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.351	117	1556088	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.749	95	1315604	9.43	ppbV		0.000
Target Compounds							Qvalue
13) Ethanol	2.685	45	27218	1.46	ppbV		95
19) Isopropanol	3.126	45	30252	0.26	ppbV		94
21) Acetone	3.222	43	52574	0.58	ppbV	#	82

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

Data Path : C:\DATA\2024\04-2024\04-02-2024\
Data File : aa6116.D
Acq On : 2 Apr 2024 9:08 pm
Operator : jjw
Sample : E24-01113-04x10 dil
Misc : 1774, 50cc
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 04 10:30:45 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

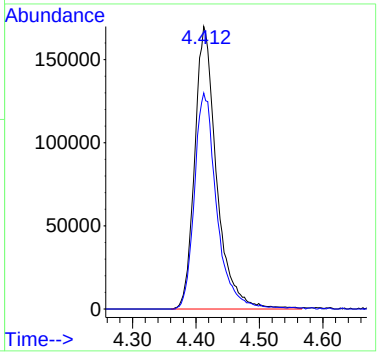


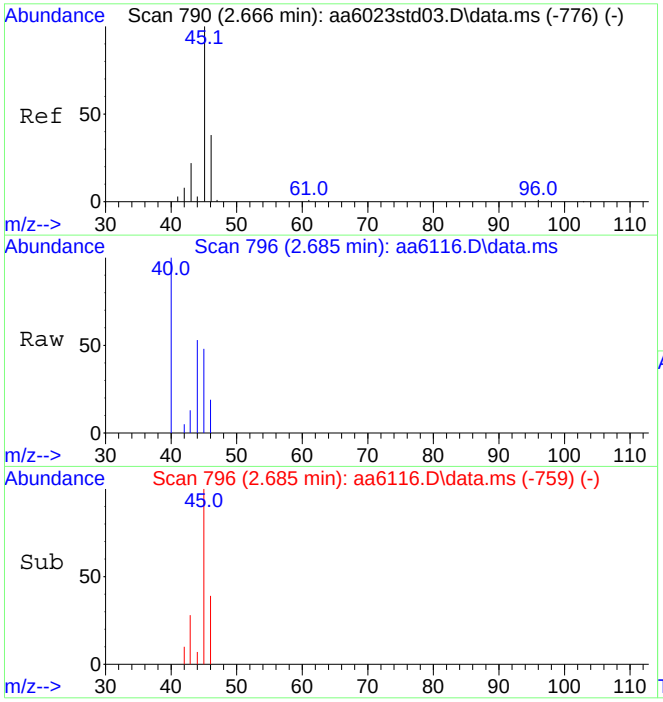


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.412 min Scan# 1333
Delta R.T. 0.000 min
Lab File: aa6116.D
Acq: 2 Apr 2024 9:08 pm

Tgt Ion:130 Resp: 407426

Ion	Ratio	Lower	Upper
130	100		
128	77.7	57.8	97.8

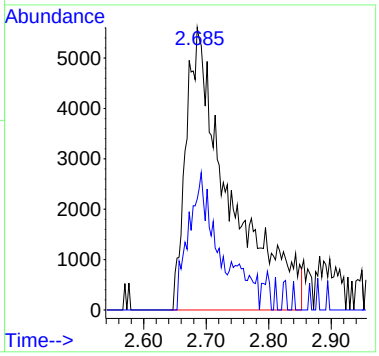


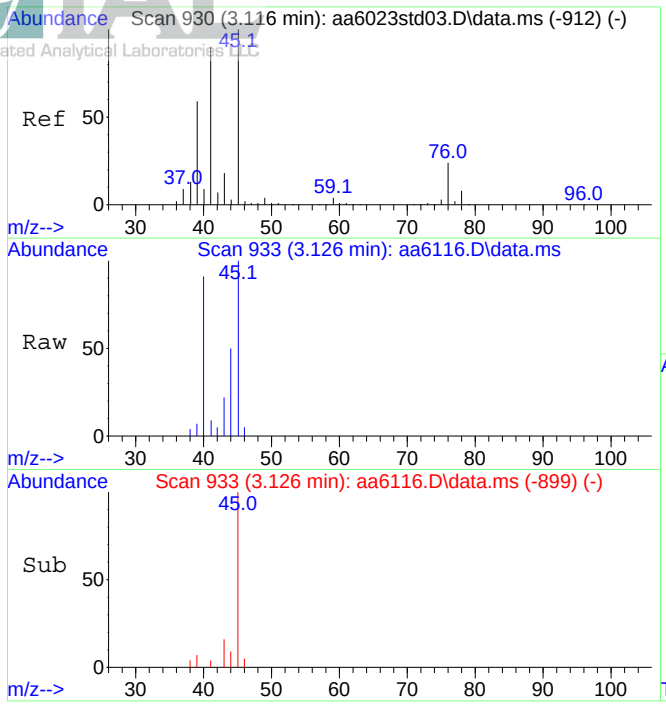


#13
Ethanol
Concen: 1.46 ppbV
RT: 2.685 min Scan# 796
Delta R.T. 0.019 min
Lab File: aa6116.D
Acq: 2 Apr 2024 9:08 pm

Tgt Ion: 45 Resp: 27218

Ion	Ratio	Lower	Upper
45	100		
46	35.3	30.7	46.1

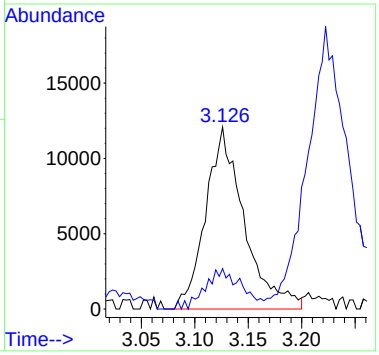


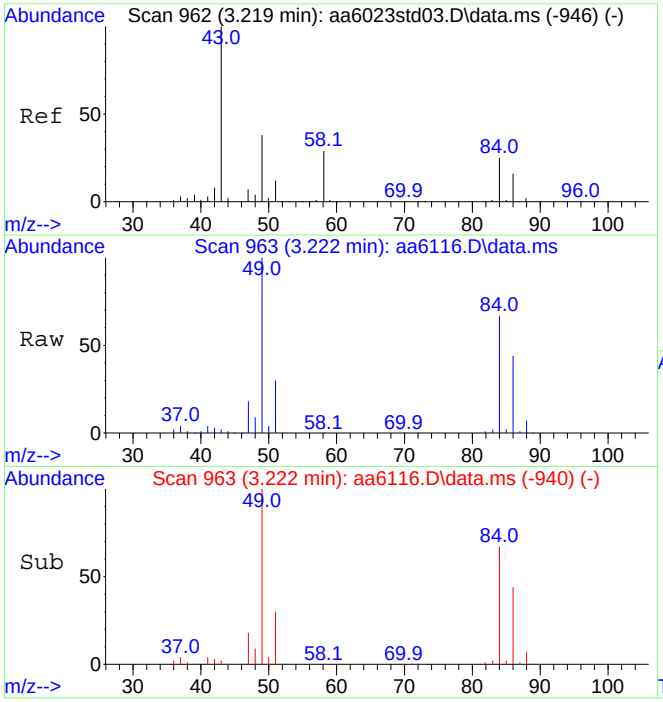


#19
Isopropanol
Concen: 0.26 ppbV
RT: 3.126 min Scan# 933
Delta R.T. 0.010 min
Lab File: aa6116.D
Acq: 2 Apr 2024 9:08 pm

Tgt Ion: 45 Resp: 30252

Ion	Ratio	Lower	Upper
45	100		
43	20.7	14.6	21.8

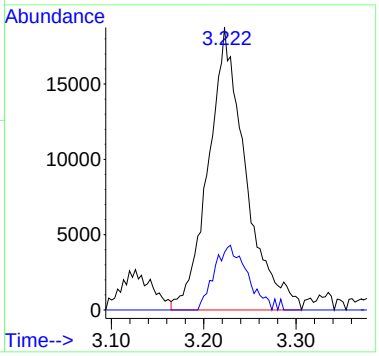


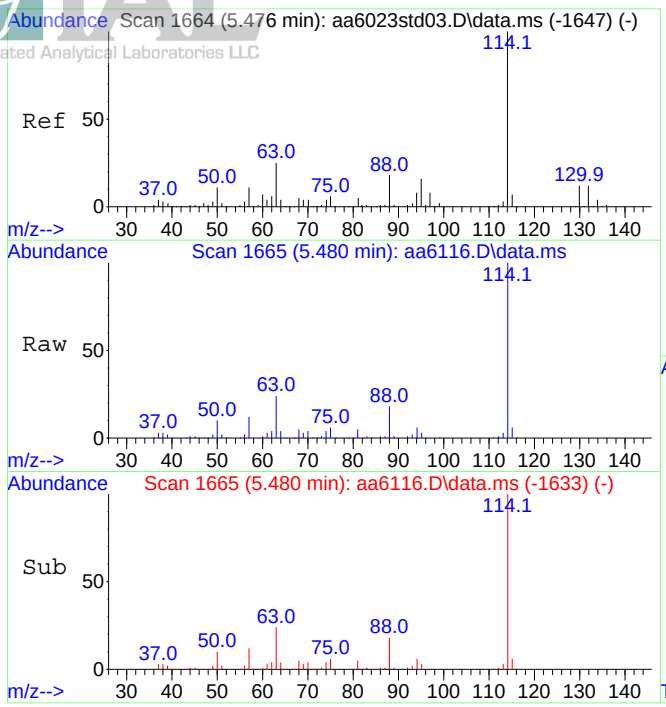


#21
Acetone
Concen: 0.58 ppbV
RT: 3.222 min Scan# 963
Delta R.T. 0.003 min
Lab File: aa6116.D
Acq: 2 Apr 2024 9:08 pm

Tgt Ion: 43 Resp: 52574

Ion	Ratio	Lower	Upper
43	100		
58	20.1	23.8	35.8#

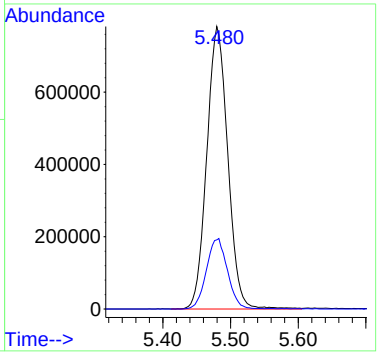


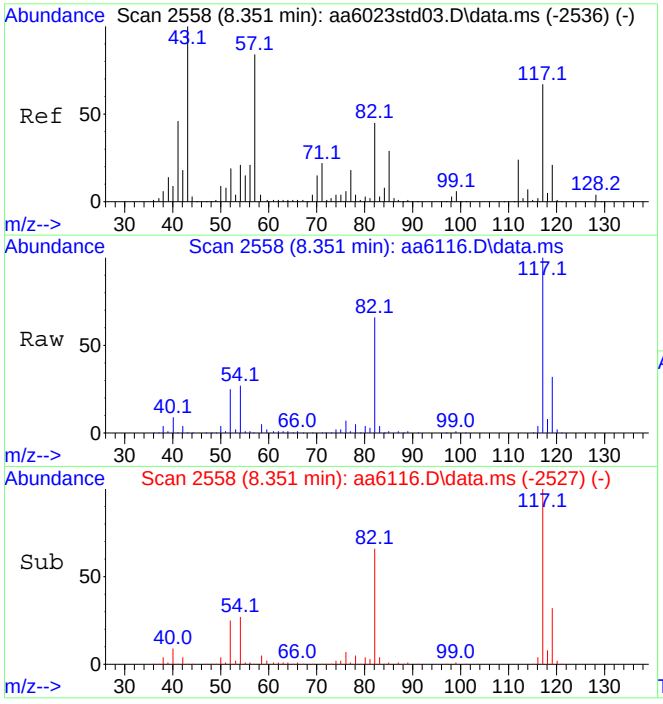


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.480 min Scan# 1665
Delta R.T. 0.004 min
Lab File: aa6116.D
Acq: 2 Apr 2024 9:08 pm

Tgt Ion:114 Resp: 1688288

Ion	Ratio	Lower	Upper
114	100		
63	25.0	6.4	46.4

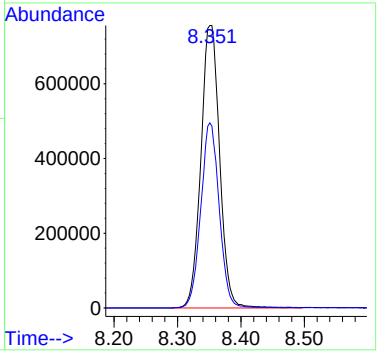


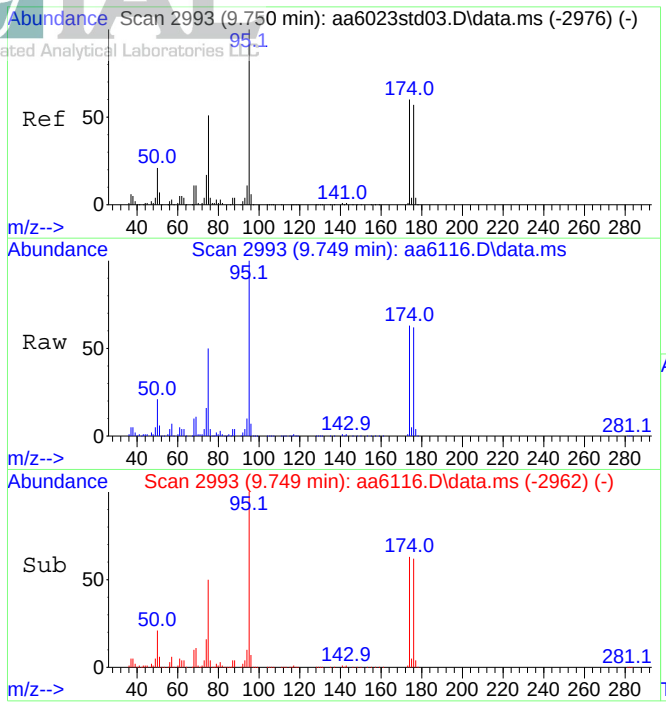


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.351 min Scan# 2558
Delta R.T. -0.000 min
Lab File: aa6116.D
Acq: 2 Apr 2024 9:08 pm

Tgt Ion:117 Resp: 1556088

Ion	Ratio	Lower	Upper
117	100		
82	64.5	46.2	86.2

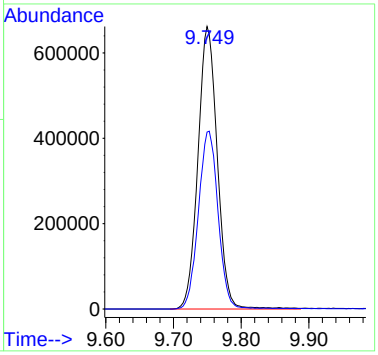




#64
Bromofluorobenzene (tune std)
Concen: 9.43 ppbV
RT: 9.749 min Scan# 2993
Delta R.T. -0.000 min
Lab File: aa6116.D
Acq: 2 Apr 2024 9:08 pm

Tgt Ion: 95 Resp: 1315604

Ion	Ratio	Lower	Upper
95	100		
174	64.2	49.4	74.2



Quantitation Report (QT Reviewed)

Data Path : C:\DATA\2024\04-2024\04-02-2024\
Data File : aa6117.D
Acq On : 2 Apr 2024 9:37 pm
Operator : jjw
Sample : E24-01113-24x10 dil
Misc : Dup of E24-01113-04x10 dil, Can # 1774
ALS Vial : 16 Sample Multiplier: 1

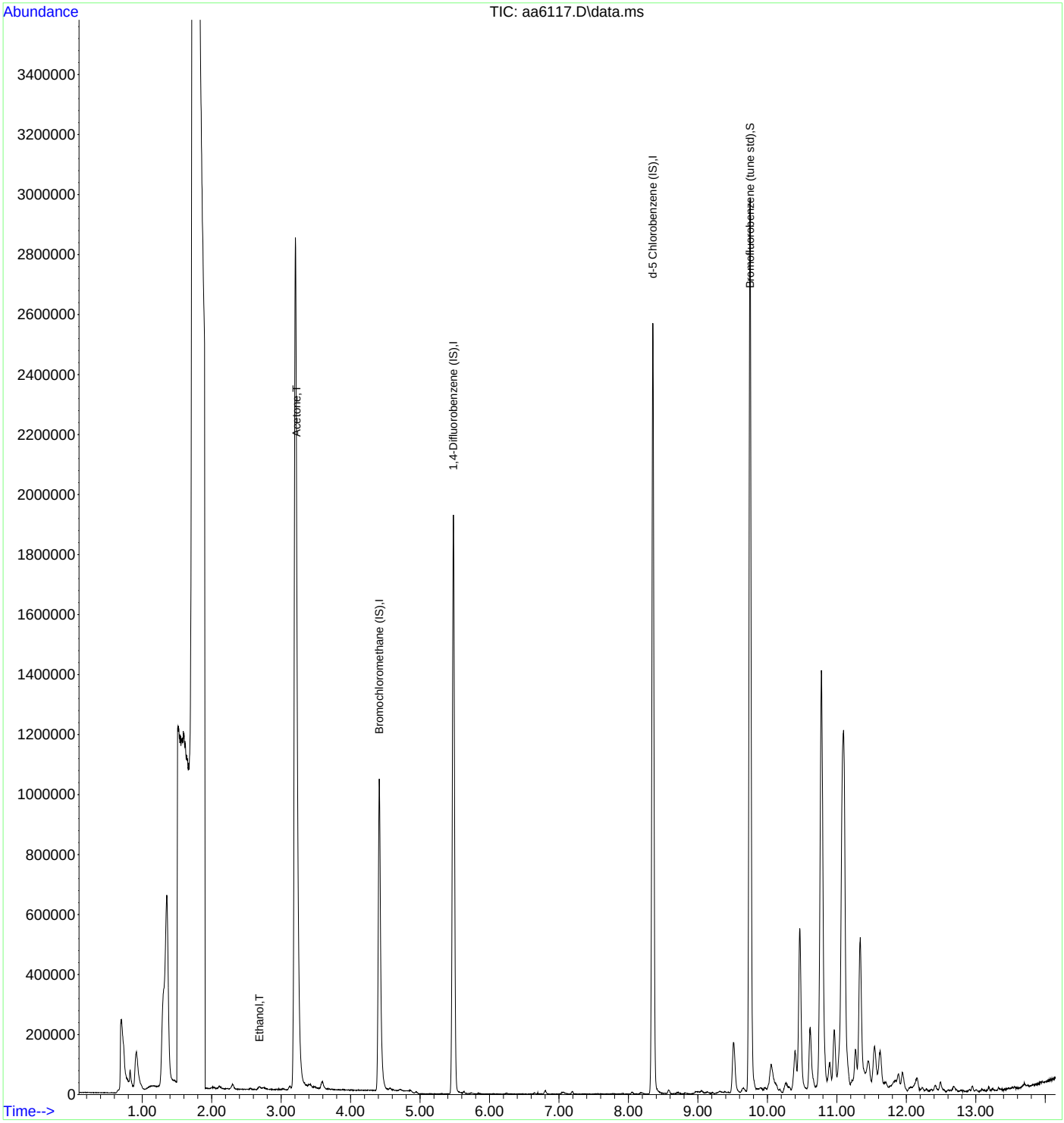
Quant Time: Apr 04 10:35:24 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

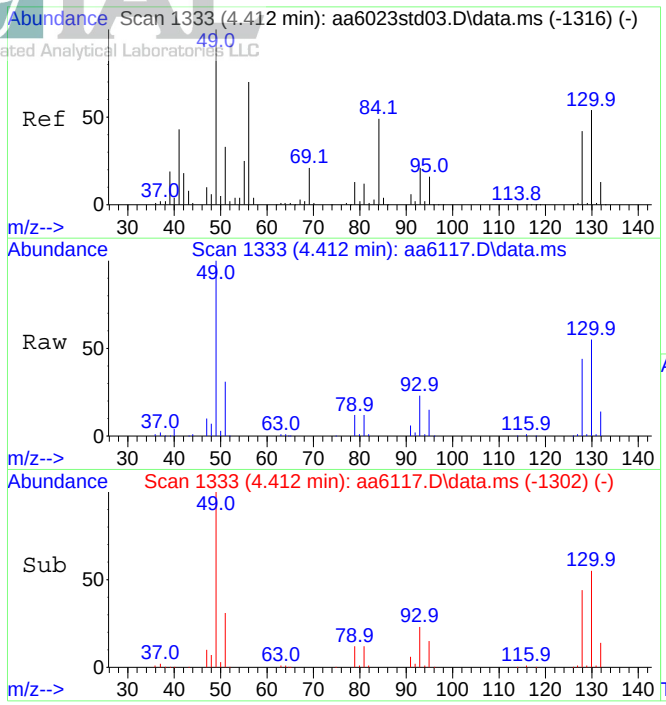
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.412	130	400014	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.480	114	1682933	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.351	117	1544380	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.749	95	1309012	9.45	ppbV	0.000
Target Compounds						Qvalue
13) Ethanol	2.689	45	25224m	1.38	ppbV	
21) Acetone	3.222	43	50082	0.56	ppbV	# 85

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

Data Path : C:\DATA\2024\04-2024\04-02-2024\
Data File : aa6117.D
Acq On : 2 Apr 2024 9:37 pm
Operator : jjw
Sample : E24-01113-24x10 dil
Misc : Dup of E24-01113-04x10 dil, Can # 1774
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Apr 04 10:35:24 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

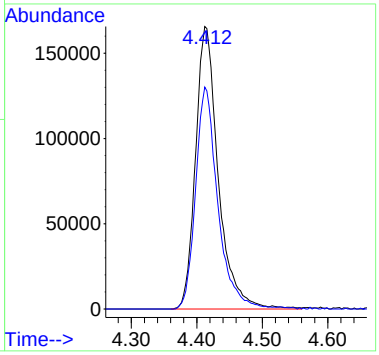


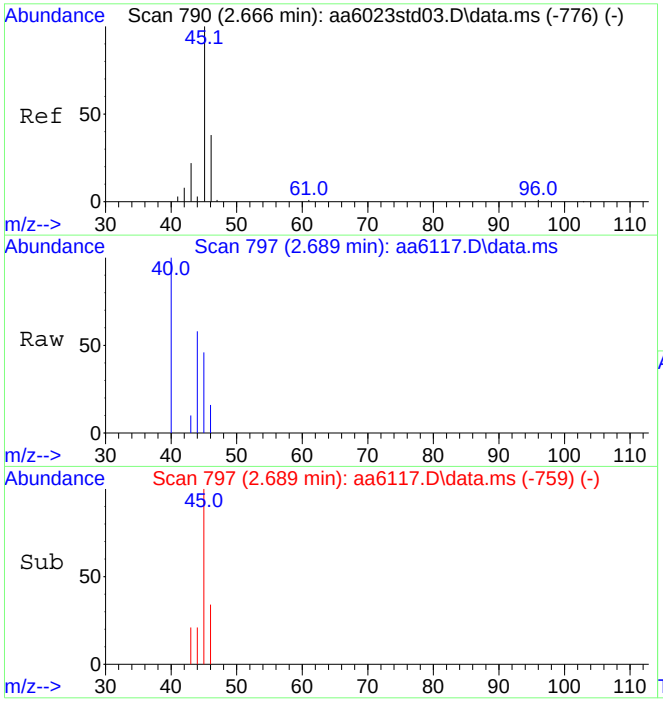


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.412 min Scan# 1333
Delta R.T. 0.000 min
Lab File: aa6117.D
Acq: 2 Apr 2024 9:37 pm

Tgt Ion:130 Resp: 400014

Ion	Ratio	Lower	Upper
130	100		
128	77.2	57.8	97.8

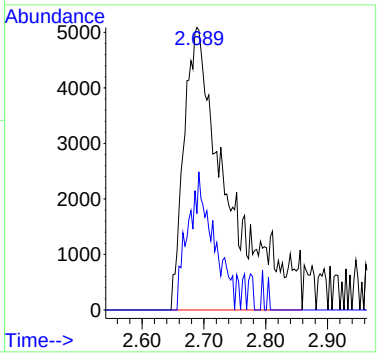


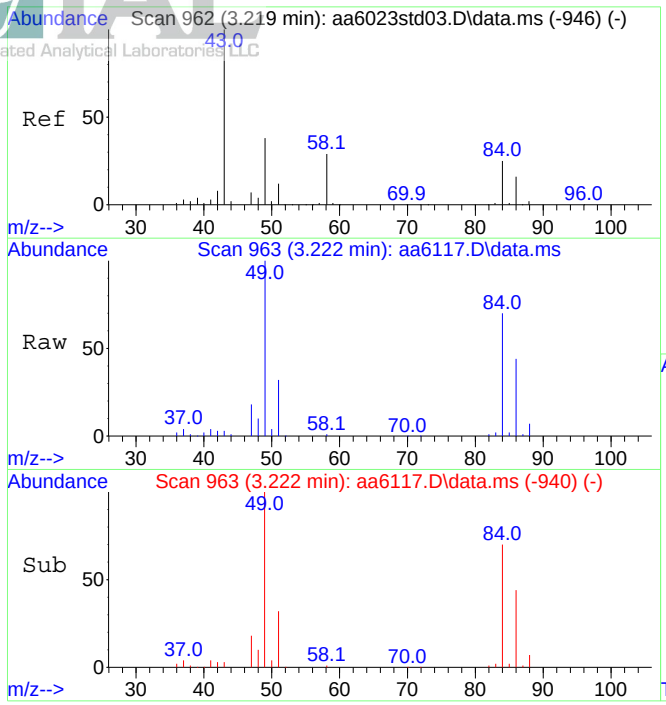


#13
Ethanol
Concen: 1.38 ppbV m
RT: 2.689 min Scan# 797
Delta R.T. 0.023 min
Lab File: aa6117.D
Acq: 2 Apr 2024 9:37 pm

Tgt Ion: 45 Resp: 25224

Ion	Ratio	Lower	Upper
45	100		
46	27.9	30.7	46.1#

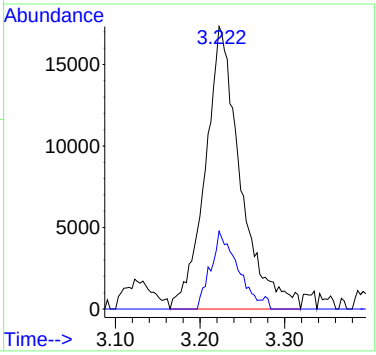


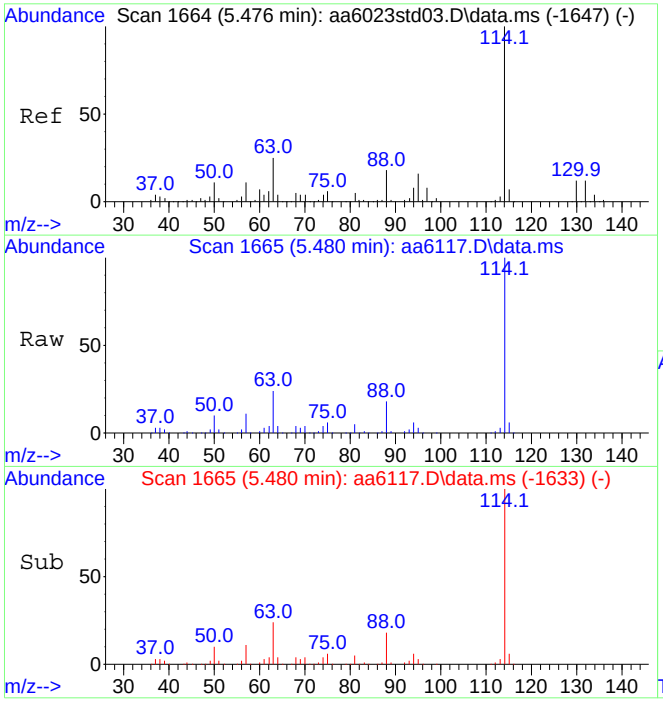


#21
Acetone
Concen: 0.56 ppbV
RT: 3.222 min Scan# 963
Delta R.T. 0.003 min
Lab File: aa6117.D
Acq: 2 Apr 2024 9:37 pm

Tgt Ion: 43 Resp: 50082

Ion	Ratio	Lower	Upper
43	100		
58	21.4	23.8	35.8#

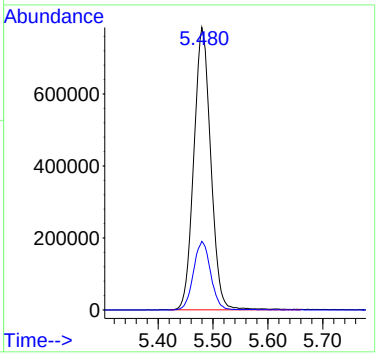


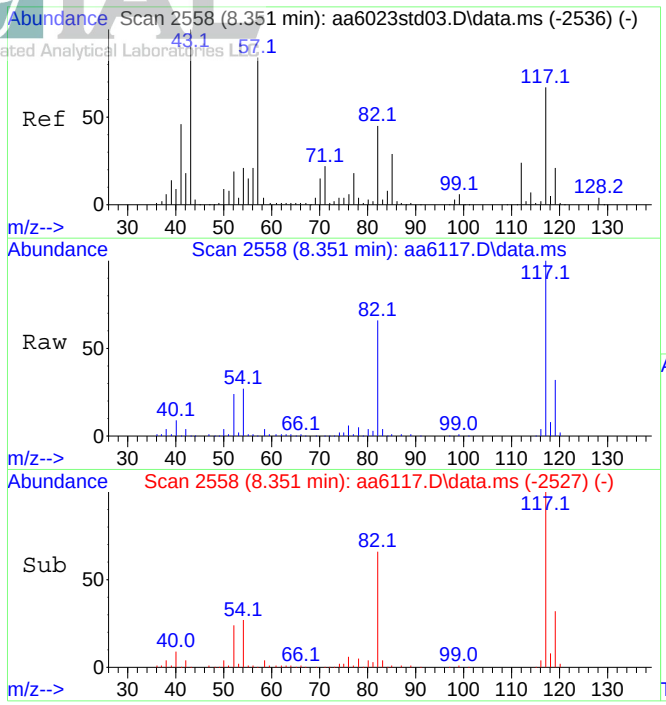


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.480 min Scan# 1665
Delta R.T. 0.004 min
Lab File: aa6117.D
Acq: 2 Apr 2024 9:37 pm

Tgt Ion:114 Resp: 1682933

Ion	Ratio	Lower	Upper
114	100		
63	24.7	6.4	46.4

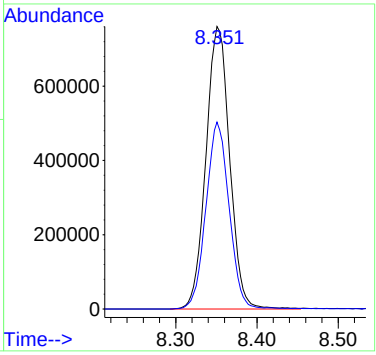


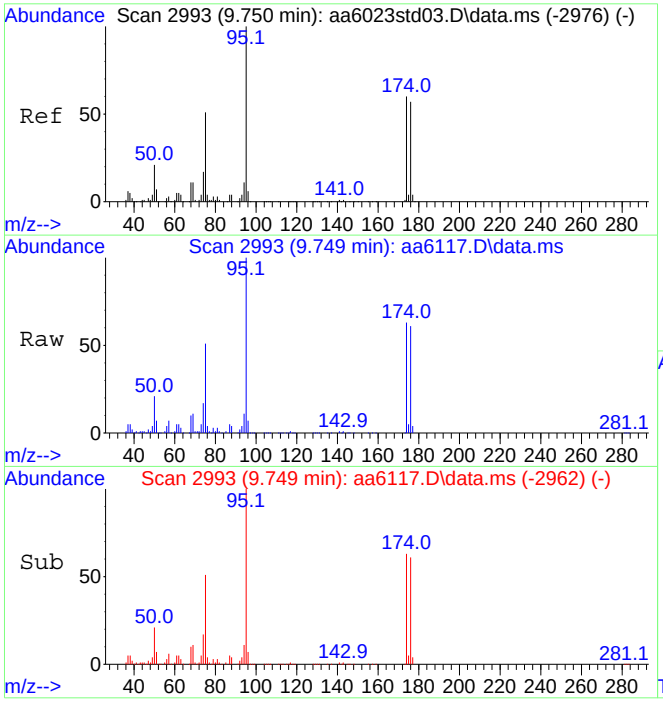


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.351 min Scan# 2558
Delta R.T. -0.000 min
Lab File: aa6117.D
Acq: 2 Apr 2024 9:37 pm

Tgt Ion:117 Resp: 1544380

Ion	Ratio	Lower	Upper
117	100		
82	64.9	46.2	86.2

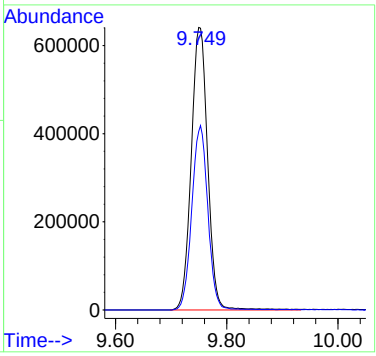


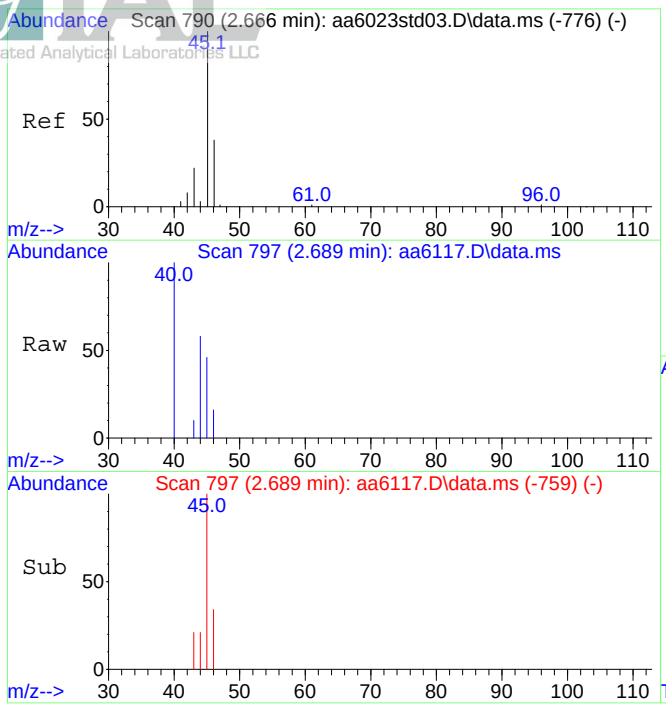


#64
Bromofluorobenzene (tune std)
Concen: 9.45 ppbV
RT: 9.749 min Scan# 2993
Delta R.T. -0.000 min
Lab File: aa6117.D
Acq: 2 Apr 2024 9:37 pm

Tgt Ion: 95 Resp: 1309012

Ion	Ratio	Lower	Upper
95	100		
174	64.0	49.4	74.2

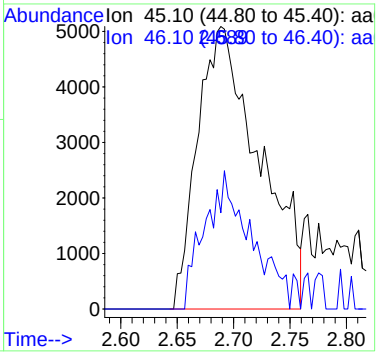




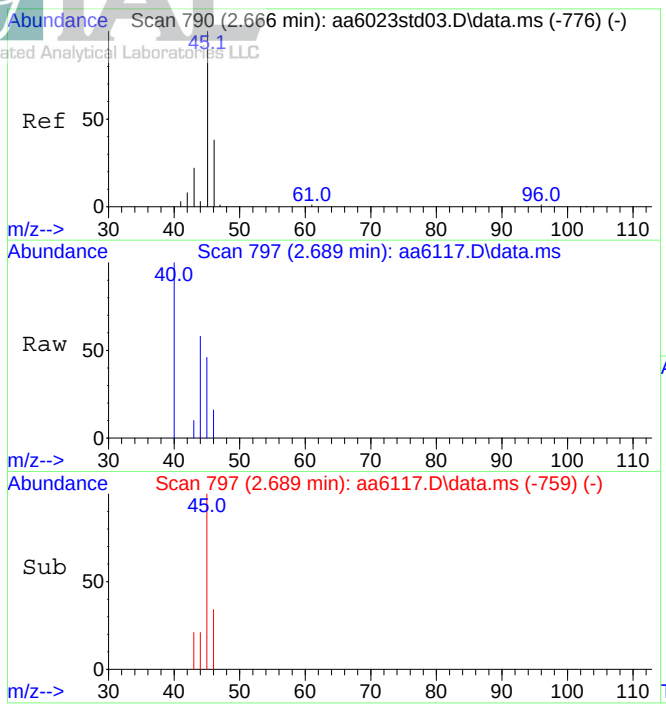
#13
Ethanol
Concen: 1.06 ppbV
RT: 2.689 min Scan# 797
Delta R.T. 0.023 min
Lab File: aa6117.D
Acq: 2 Apr 2024 9:37 pm

Tgt Ion: 45 Resp: 19466

Ion	Ratio	Lower	Upper
45	100		
46	36.1	30.7	46.1

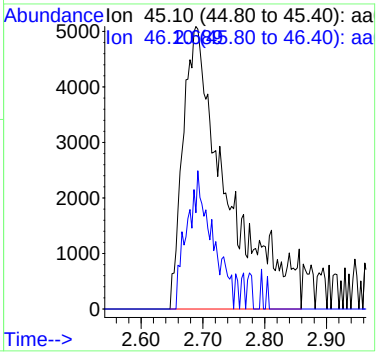


Before Manual Integration




```
#13
Ethanol
Concen:    1.38 ppbV m
RT:   2.689 min  Scan# 797
Delta R.T.  0.023 min
Lab File:   aa6117.D
Acq:  2 Apr 2024   9:37 pm

Tgt Ion: 45 Resp:   25224
Ion  Ratio  Lower  Upper
 45  100
 46   27.9   30.7   46.1#
```



After Manual Integration

Analysis: Volatile Organic Compounds by EPA Method TO-15
Laboratory Sample Duplicate Report

SDG Number: E24-01396
IAL Sample ID: E24-01396-02
Matrix: Air
Summa ID: 5096

Date Received: 4/18/24
Date Analyzed: 4/29/24,4/29/24
Lab Data File#: AA6452,AA6453
Dilution Factor: 1
Injection Volume: 500ml
GC/MS Column: RTX-1, 0.32 mmID

Compound	CAS #	Sample E24-01396-02 Concentration Reported ppbv	Q	Sample Dup E24-01396-22 Concentration Reported ppbv	Q	Reporting Limits ppbv	RPD
Acetone	67-64-1	**13**		**13**		0.40	**0.00%**
Allyl Chloride	107-05-1	0.40	U	0.40	U	0.40	0.00%
Benzene	71-43-2	**0.35**		**0.34**		0.20	**2.90%**
Bromodichloromethane	75-27-4	0.40	U	0.40	U	0.40	0.00%
Bromoform	75-25-2	0.40	U	0.40	U	0.40	0.00%
Bromomethane	74-83-9	0.40	U	0.40	U	0.40	0.00%
1,3-Butadiene	106-99-0	0.40	U	0.40	U	0.40	0.00%
Chlorobenzene	108-90-7	0.40	U	0.40	U	0.40	0.00%
Chloroethane	75-00-3	0.40	U	0.40	U	0.40	0.00%
Chloroform	67-66-3	0.40	U	0.40	U	0.40	0.00%
Chloromethane	74-87-3	0.40	U	0.40	U	0.40	0.00%
Carbon disulfide	75-15-0	0.40	U	0.40	U	0.40	0.00%
Carbon tetrachloride	56-23-5	0.20	U	0.20	U	0.20	0.00%
2-Chlorotoluene	95-49-8	0.40	U	0.40	U	0.40	0.00%
Cyclohexane	110-82-7	0.40	U	0.40	U	0.40	0.00%
Dibromochloromethane	124-48-1	0.40	U	0.40	U	0.40	0.00%
1,2-Dibromoethane	106-93-4	0.20	U	0.20	U	0.20	0.00%
1,2-Dichlorobenzene	95-50-1	0.40	U	0.40	U	0.40	0.00%
1,3-Dichlorobenzene	541-73-1	0.40	U	0.40	U	0.40	0.00%
1,4-Dichlorobenzene	106-46-7	0.40	U	0.40	U	0.40	0.00%
Dichlorodifluoromethane	75-71-8	0.40	U	0.40	U	0.40	0.00%
1,1-Dichloroethane	75-34-3	0.40	U	0.40	U	0.40	0.00%
1,2-Dichloroethane	107-06-2	0.40	U	0.40	U	0.40	0.00%
1,1-Dichloroethene	75-35-4	0.40	U	0.40	U	0.40	0.00%
1,2-Dichloroethene (cis)	156-59-2	0.40	U	0.40	U	0.40	0.00%
1,2-Dichloroethene (trans)	156-60-5	**5.5**		**5.1**		0.40	**7.55%**
1,2-Dichloropropane	78-87-5	0.20	U	0.20	U	0.20	0.00%
1,3-Dichloropropene (cis)	10061-01-5	0.20	U	0.20	U	0.20	0.00%
1,3-Dichloropropene (trans)	10061-02-6	0.20	U	0.20	U	0.20	0.00%
1,2-Dichlorotetrafluoroethane	76-14-2	0.40	U	0.40	U	0.40	0.00%
Ethylbenzene	100-41-4	0.20	U	0.20	U	0.20	0.00%
4-Ethyltoluene	622-96-8	0.40	U	0.40	U	0.40	0.00%
n-Heptane	142-82-5	0.40	U	0.40	U	0.40	0.00%
1,3-Hexachlorobutadiene	87-68-3	0.40	U	0.40	U	0.40	0.00%
n-Hexane	110-54-3	0.40	U	0.40	U	0.40	0.00%
Methylene chloride	75-09-2	0.40	U	0.40	U	0.40	0.00%
Methyl ethyl ketone	78-93-3	**0.76**		**0.76**		0.40	**0.00%**
Methyl isobutyl ketone	108-10-1	0.40	U	0.40	U	0.40	0.00%

Qualifiers:
E=Concentration exceeds upper level of calibration range for instrument.
D=Extra dilution required for this compound. X=Duplicate samples do not met RPD criteria.
U=Compound ND or under reporting limit.

Analysis: Volatile Organic Compounds by EPA Method TO-15
Laboratory Sample Duplicate Report

SDG Number: E24-01396
IAL Sample ID: E24-01396-02
Matrix: Air
Summa ID: 5096

Date Received: 4/18/24
Date Analyzed: 4/29/24,4/29/24
Lab Data File#: AA6452,AA6453
Dilution Factor: 1
Injection Volume: 500ml
GC/MS Column: RTX-1, 0.32 mmID

Compound	CAS #	Sample E24-01396-02 Concentration Reported ppbv	Q	Sample Dup E24-01396-22 Concentration Reported ppbv	Q	Reporting Limits ppbv	RPD
Methyl tert-butyl ether	1634-04-4	0.40	U	0.40	U	0.40	0.00%
Styrene	100-42-5	0.40	U	0.40	U	0.40	0.00%
Tert-butyl alcohol	75-65-0	0.40	U	0.40	U	0.40	0.00%
1,1,2,2-Tetrachloroethane	79-34-5	0.40	U	0.40	U	0.40	0.00%
Tetrachloroethene	127-18-4	**1.8**		**1.7**		0.40	**5.71%**
Toluene	108-88-3	**0.62**		**0.61**		0.40	**1.63%**
1,2,4-Trichlorobenzene	120-82-1	0.40	U	0.40	U	0.40	0.00%
1,1,1-Trichloroethane	71-55-6	0.40	U	0.40	U	0.40	0.00%
1,1,2-Trichloroethane	79-00-5	0.40	U	0.40	U	0.40	0.00%
Trichloroethene	79-01-6	0.20	U	0.20	U	0.20	0.00%
Trichlorofluoromethane	75-69-4	0.40	U	0.40	U	0.40	0.00%
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.40	U	0.40	U	0.40	0.00%
1,2,4-Trimethylbenzene	95-63-6	0.40	U	0.40	U	0.40	0.00%
1,3,5-Trimethylbenzene	108-67-8	0.40	U	0.40	U	0.40	0.00%
2,2,4-Trimethylpentane	540-84-1	0.40	U	0.40	U	0.40	0.00%
Vinyl bromide	593-60-2	0.40	U	0.40	U	0.40	0.00%
Vinyl chloride	75-01-4	0.20	U	0.20	U	0.20	0.00%
Xylenes (m&p)	179601-23-1	0.40	U	0.40	U	0.40	0.00%
Xylenes (o)	95-47-6	0.40	U	0.40	U	0.40	0.00%

RPD must be <25% for all laboratory duplicate samples. Laboratory duplicate samples are run once daily.
NC = The RPD could not be calculated since the compound was only detected in either the parent or duplicate sample.

Qualifiers:
E=Concentration exceeds upper level of calibration range for instrument.
D=Extra dilution required for this compound. X=Duplicate samples do not met RPD criteria.
U=Compound ND or under reporting limit.

Data Path : C:\DATA\2024\04-2024\04-29-2024\
Data File : aa6452.D
Acq On : 29 Apr 2024 6:42 pm
Operator : jjw
Sample : E24-01396-02
Misc : 5096, 500cc
ALS Vial : 24 Sample Multiplier: 1

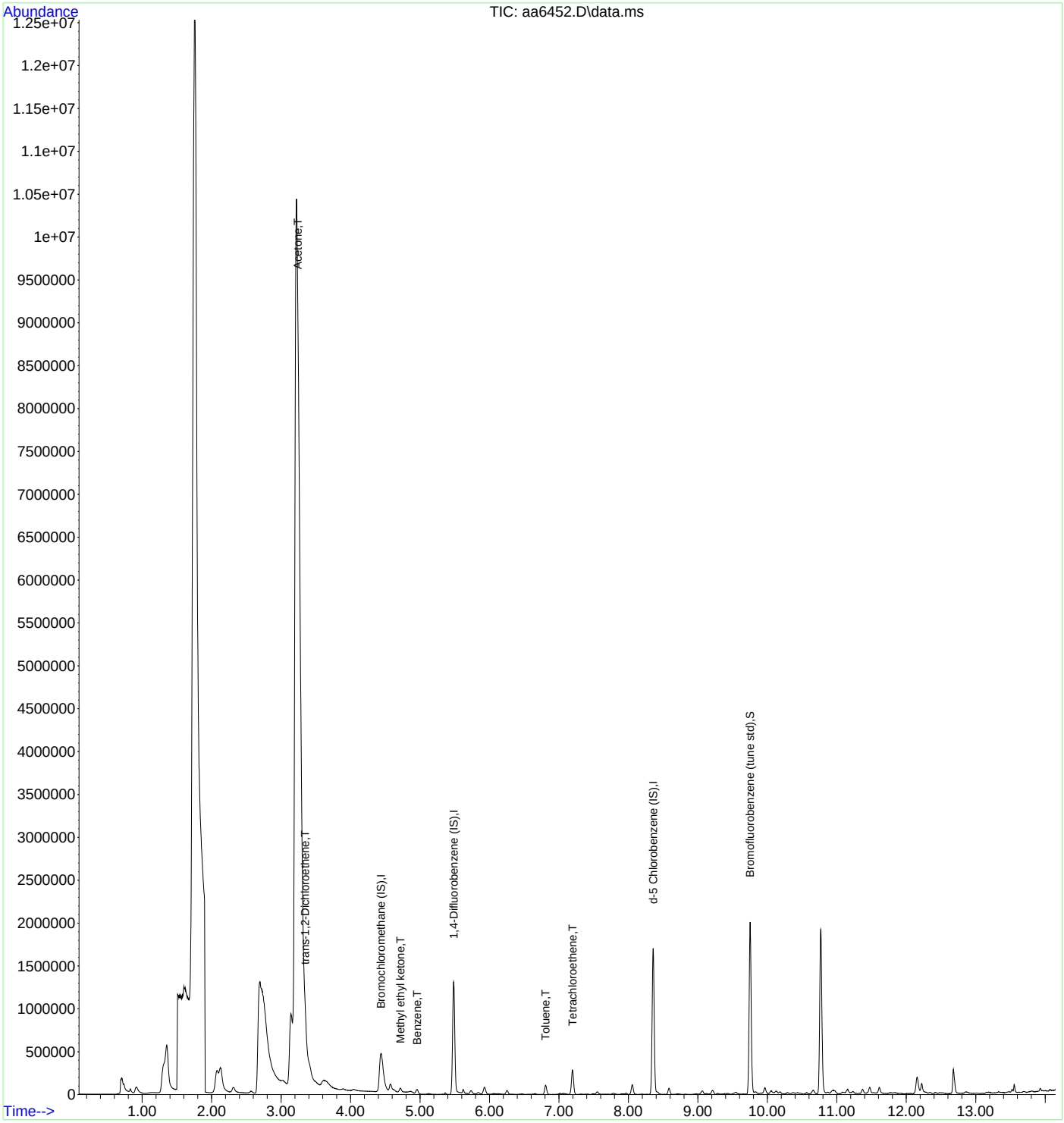
Quant Time: May 02 10:11:30 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

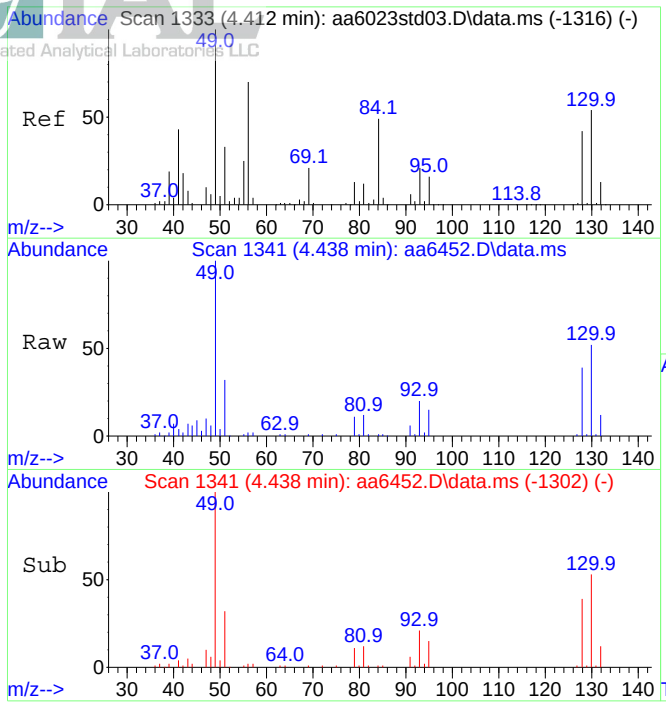
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.438	130	264963	10.00	ppbV	0.026
39) 1,4-Difluorobenzene (IS)	5.487	114	1118665	10.00	ppbV	0.011
55) d-5 Chlorobenzene (IS)	8.358	117	999942	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.753	95	878120	9.79	ppbV	0.000
Target Compounds						Qvalue
21) Acetone	3.242	43	766653	12.93	ppbV	93
22) trans-1,2-Dichloroethene	3.348	61	288497	5.47	ppbV	99
35) Methyl ethyl ketone	4.718	43	67316	0.76	ppbV	99
37) Benzene	4.959	78	39211	0.35	ppbV	92
47) Toluene	6.808	91	89875	0.62	ppbV	100
49) Tetrachloroethene	7.197	166	89252	1.79	ppbV	98

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

Data Path : C:\DATA\2024\04-2024\04-29-2024\
Data File : aa6452.D
Acq On : 29 Apr 2024 6:42 pm
Operator : jjw
Sample : E24-01396-02
Misc : 5096, 500cc
ALS Vial : 24 Sample Multiplier: 1

Quant Time: May 02 10:11:30 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

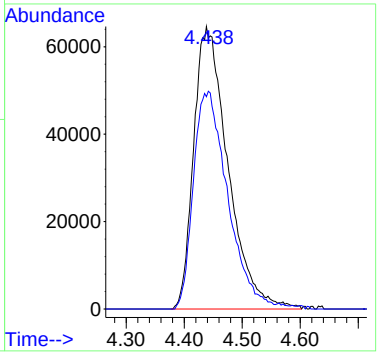


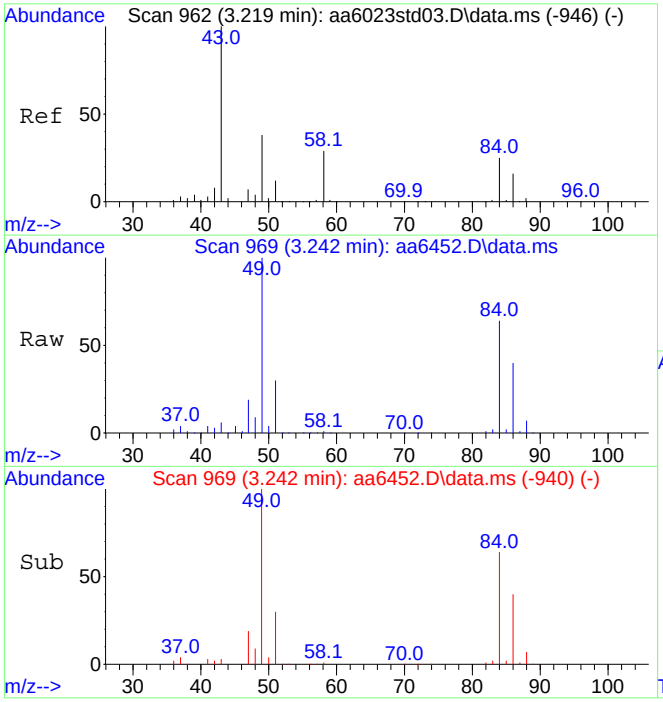


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.438 min Scan# 1341
Delta R.T. 0.026 min
Lab File: aa6452.D
Acq: 29 Apr 2024 6:42 pm

Tgt Ion:130 Resp: 264963

Ion	Ratio	Lower	Upper
130	100		
128	78.0	57.8	97.8

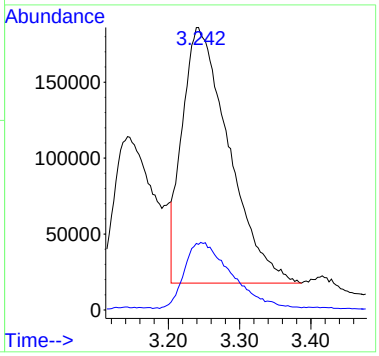


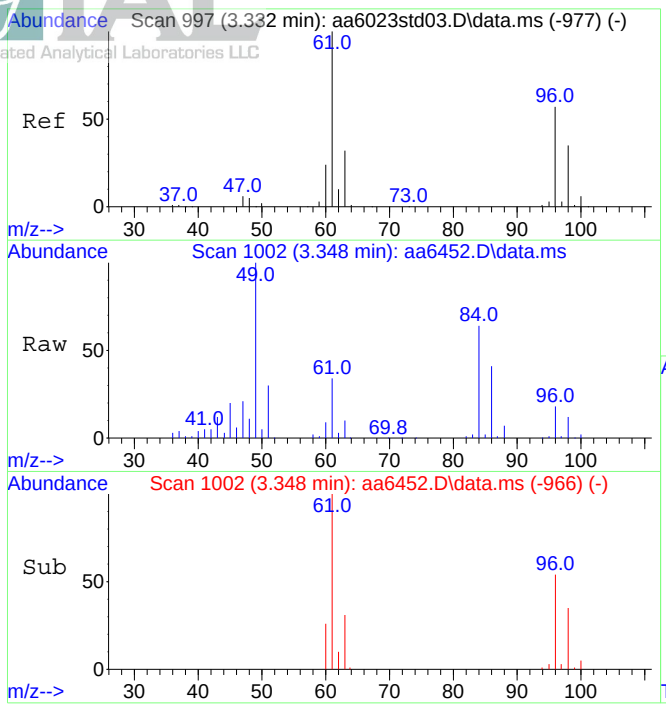


#21
Acetone
Concen: 12.93 ppbV
RT: 3.242 min Scan# 969
Delta R.T. 0.023 min
Lab File: aa6452.D
Acq: 29 Apr 2024 6:42 pm

Tgt Ion: 43 Resp: 766653

Ion	Ratio	Lower	Upper
43	100		
58	26.2	23.8	35.8

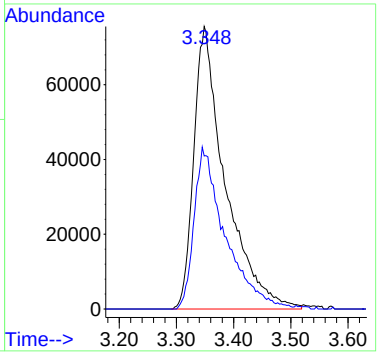


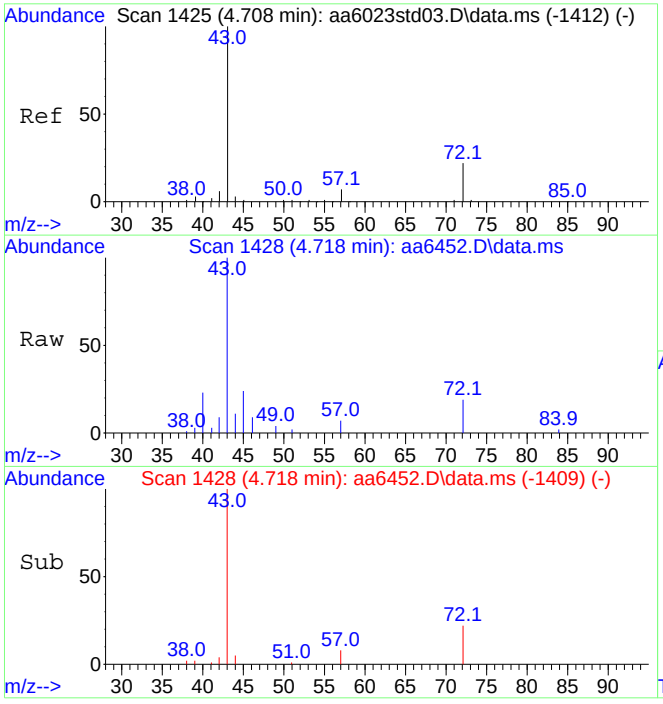


#22
trans-1,2-Dichloroethene
Concen: 5.47 ppbV
RT: 3.348 min Scan# 1002
Delta R.T. 0.017 min
Lab File: aa6452.D
Acq: 29 Apr 2024 6:42 pm

Tgt Ion: 61 Resp: 288497

Ion	Ratio	Lower	Upper
61	100		
96	56.6	46.0	69.0

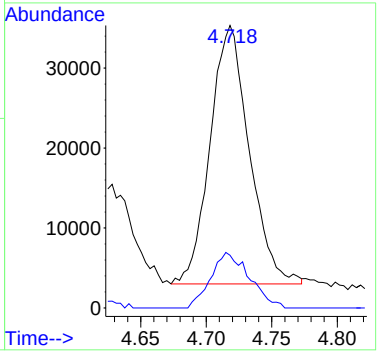


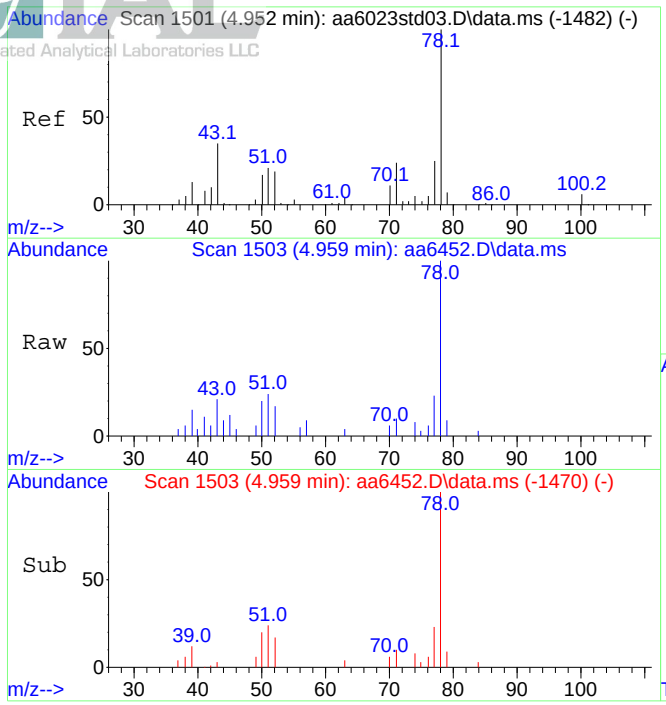


#35
Methyl ethyl ketone
Concen: 0.76 ppbV
RT: 4.718 min Scan# 1428
Delta R.T. 0.010 min
Lab File: aa6452.D
Acq: 29 Apr 2024 6:42 pm

Tgt Ion: 43 Resp: 67316

Ion	Ratio	Lower	Upper
43	100		
72	21.2	17.4	26.0

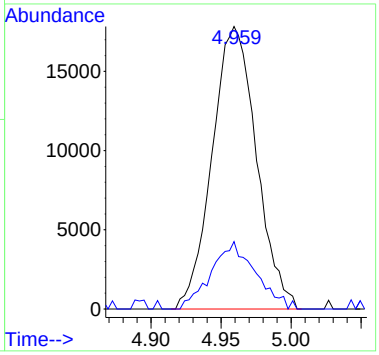


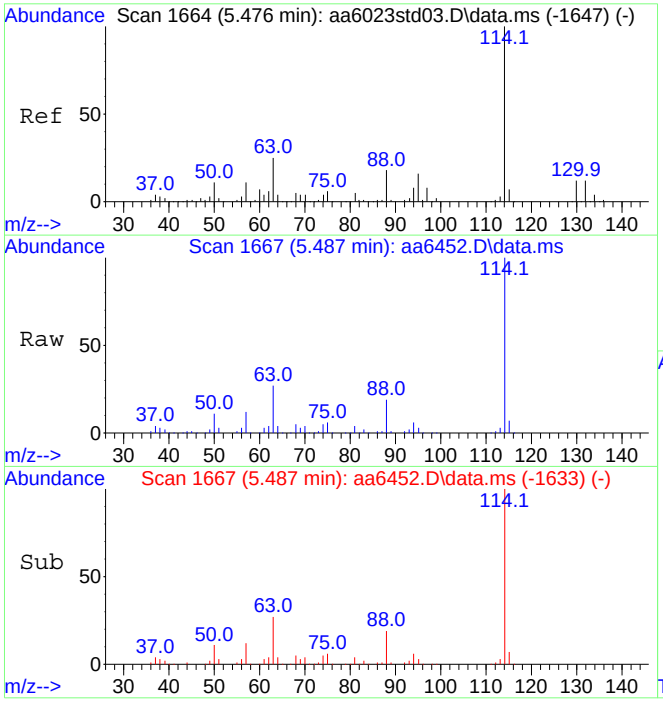


#37
Benzene
Concen: 0.35 ppbV
RT: 4.959 min Scan# 1503
Delta R.T. 0.007 min
Lab File: aa6452.D
Acq: 29 Apr 2024 6:42 pm

Tgt Ion: 78 Resp: 39211

Ion	Ratio	Lower	Upper
78	100		
51	23.8	16.1	24.1

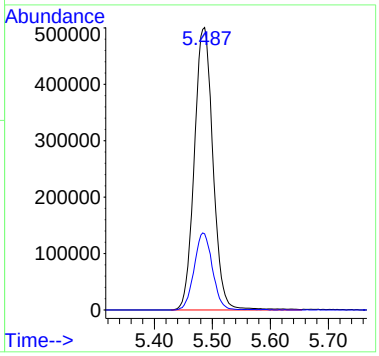


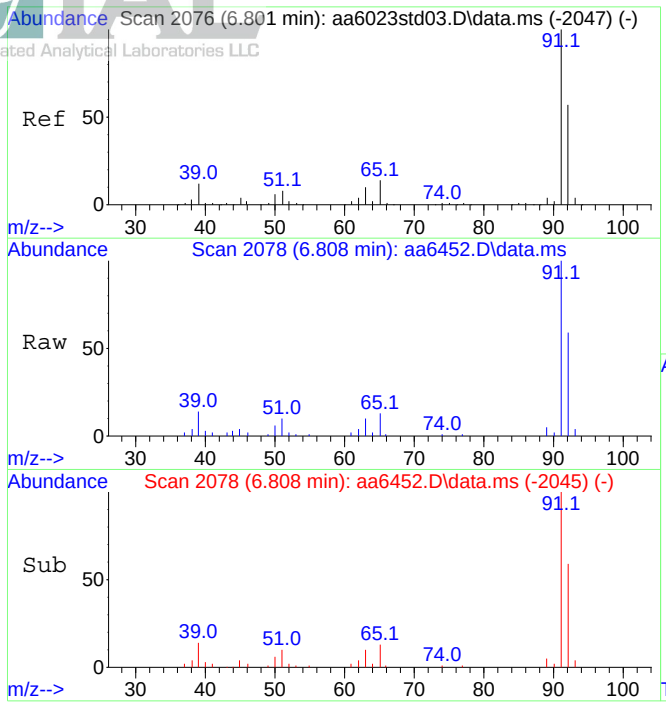


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.487 min Scan# 1667
Delta R.T. 0.011 min
Lab File: aa6452.D
Acq: 29 Apr 2024 6:42 pm

Tgt Ion:114 Resp: 1118665

Ion	Ratio	Lower	Upper
114	100		
63	26.8	6.4	46.4

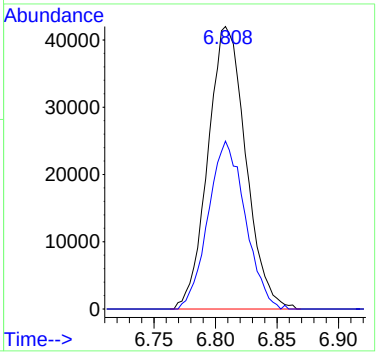


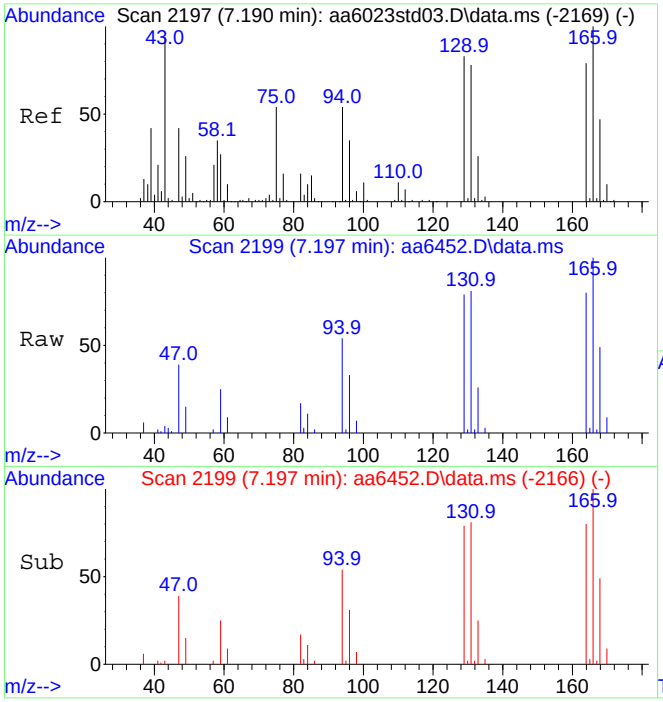


#47
Toluene
Concen: 0.62 ppbV
RT: 6.808 min Scan# 2078
Delta R.T. 0.007 min
Lab File: aa6452.D
Acq: 29 Apr 2024 6:42 pm

Tgt Ion: 91 Resp: 89875

Ion	Ratio	Lower	Upper
91	100		
92	58.3	46.3	69.5

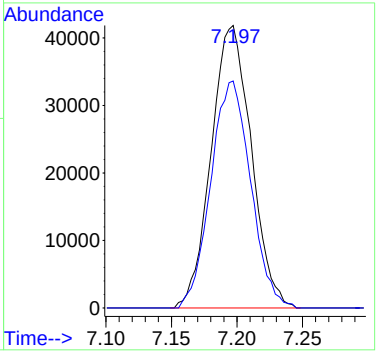


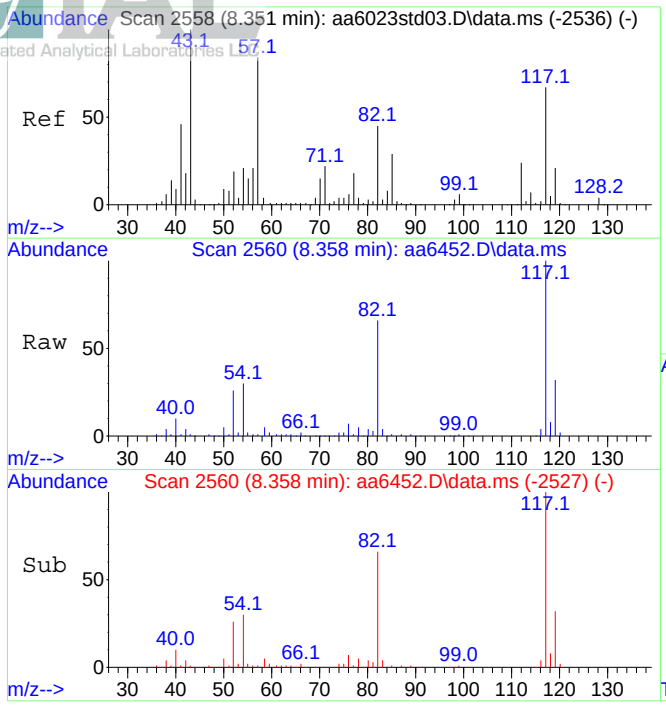


#49
Tetrachloroethene
Concen: 1.79 ppbV
RT: 7.197 min Scan# 2199
Delta R.T. 0.007 min
Lab File: aa6452.D
Acq: 29 Apr 2024 6:42 pm

Tgt Ion:166 Resp: 89252

Ion	Ratio	Lower	Upper
166	100		
164	79.7	62.3	93.5

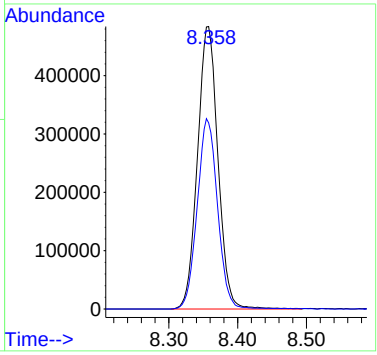


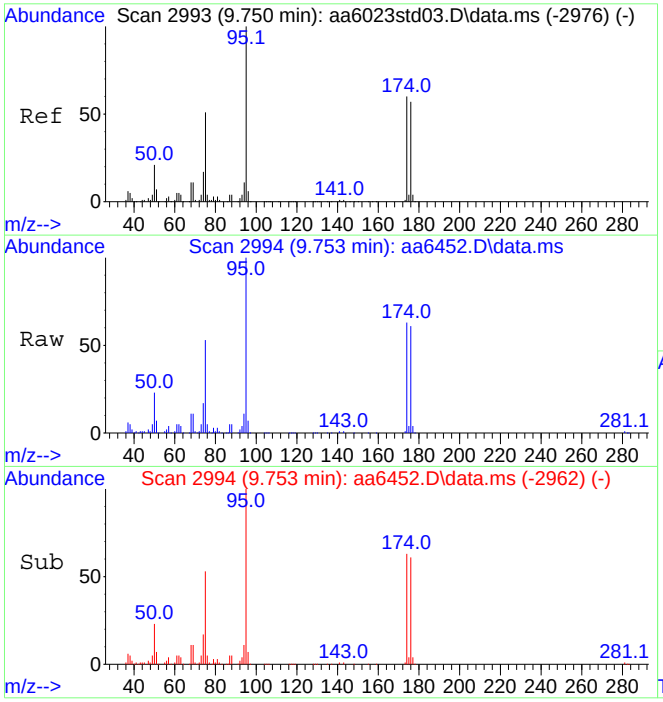


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.358 min Scan# 2560
Delta R.T. 0.007 min
Lab File: aa6452.D
Acq: 29 Apr 2024 6:42 pm

Tgt Ion:117 Resp: 999942

Ion	Ratio	Lower	Upper
117	100		
82	67.1	46.2	86.2

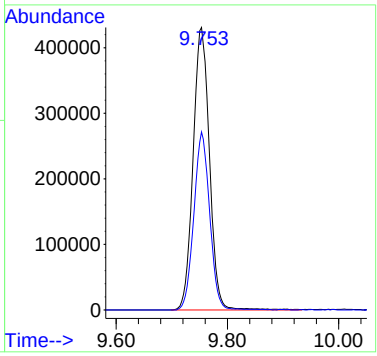




#64
Bromofluorobenzene (tune std)
Concen: 9.79 ppbV
RT: 9.753 min Scan# 2994
Delta R.T. 0.004 min
Lab File: aa6452.D
Acq: 29 Apr 2024 6:42 pm

Tgt Ion: 95 Resp: 878120

Ion	Ratio	Lower	Upper
95	100		
174	61.0	49.4	74.2



Data Path : C:\DATA\2024\04-2024\04-29-2024\
Data File : aa6453.D
Acq On : 29 Apr 2024 7:14 pm
Operator : jjw
Sample : E24-01396-22
Misc : 5096, 500cc
ALS Vial : 25 Sample Multiplier: 1

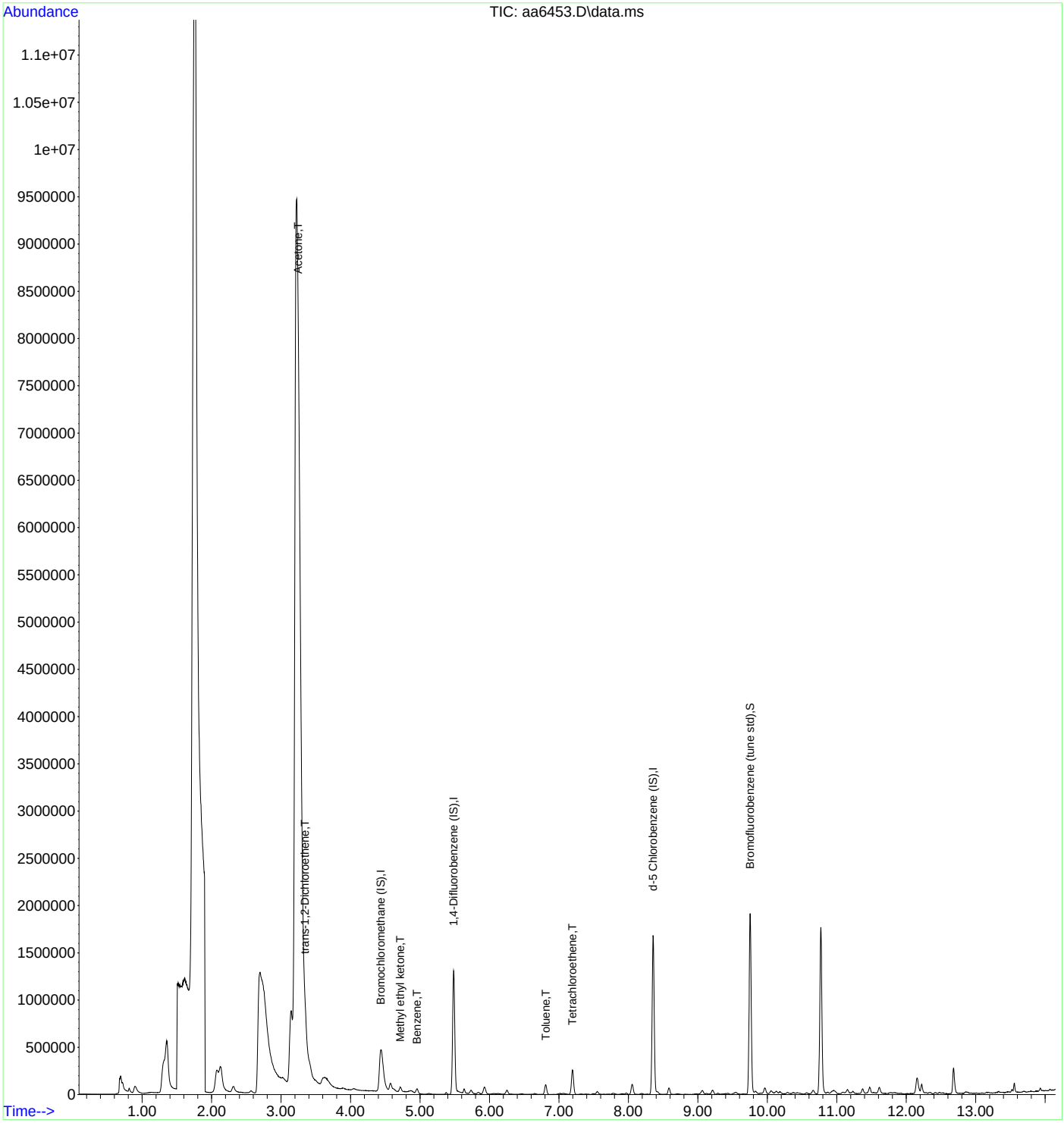
Quant Time: May 10 11:35:28 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

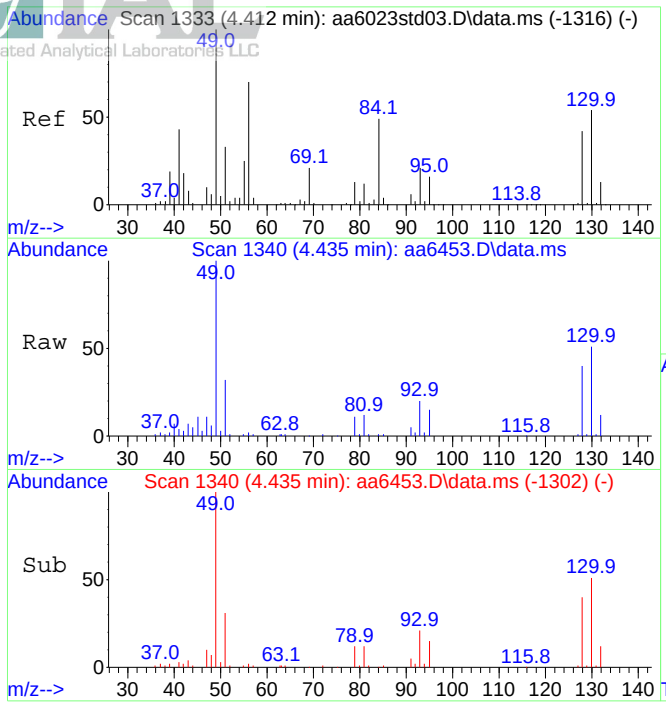
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.435	130	261556	10.00	ppbV	0.023
39) 1,4-Difluorobenzene (IS)	5.484	114	1106810	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.355	117	982688	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.754	95	855748	9.71	ppbV	0.000
Target Compounds						Qvalue
21) Acetone	3.246	43	755289	12.91	ppbV	92
22) trans-1,2-Dichloroethene	3.345	61	266026	5.11	ppbV	99
35) Methyl ethyl ketone	4.715	43	66117	0.76	ppbV	100
37) Benzene	4.956	78	37791	0.34	ppbV	95
47) Toluene	6.812	91	86309	0.61	ppbV	99
49) Tetrachloroethene	7.194	166	81798	1.66	ppbV	98

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

Data Path : C:\DATA\2024\04-2024\04-29-2024\
Data File : aa6453.D
Acq On : 29 Apr 2024 7:14 pm
Operator : jjw
Sample : E24-01396-22
Misc : 5096, 500cc
ALS Vial : 25 Sample Multiplier: 1

Quant Time: May 10 11:35:28 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

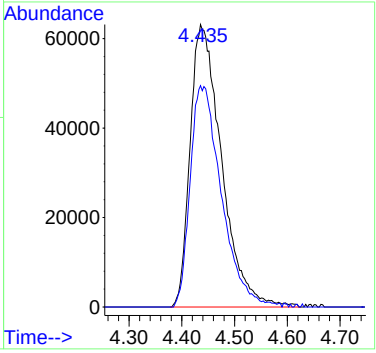


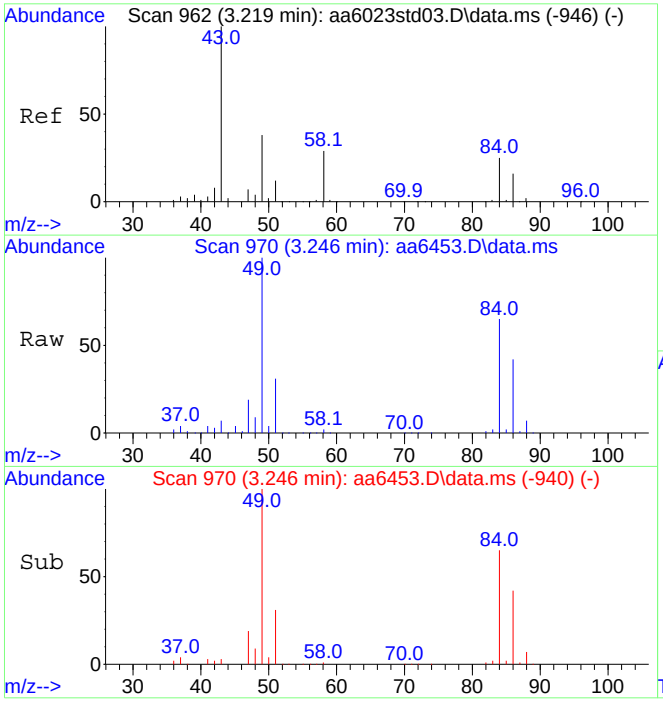


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.435 min Scan# 1340
Delta R.T. 0.023 min
Lab File: aa6453.D
Acq: 29 Apr 2024 7:14 pm

Tgt Ion:130 Resp: 261556

Ion	Ratio	Lower	Upper
130	100		
128	77.9	57.8	97.8

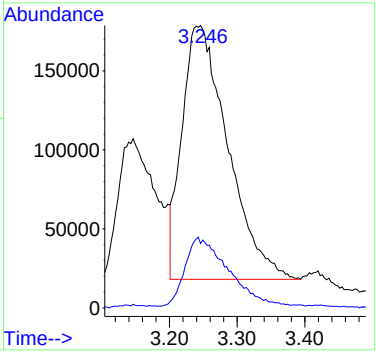


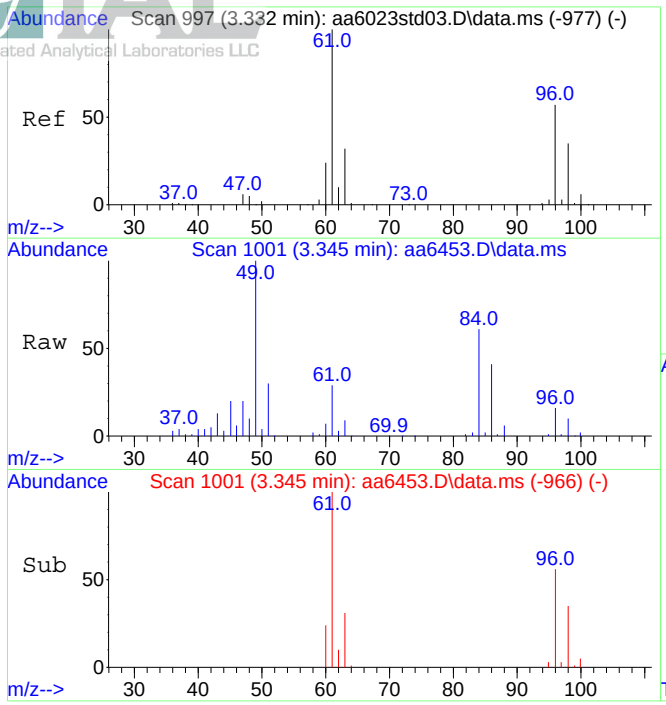


#21
Acetone
Concen: 12.91 ppbV
RT: 3.246 min Scan# 970
Delta R.T. 0.026 min
Lab File: aa6453.D
Acq: 29 Apr 2024 7:14 pm

Tgt Ion: 43 Resp: 755289

Ion	Ratio	Lower	Upper
43	100		
58	25.6	23.8	35.8

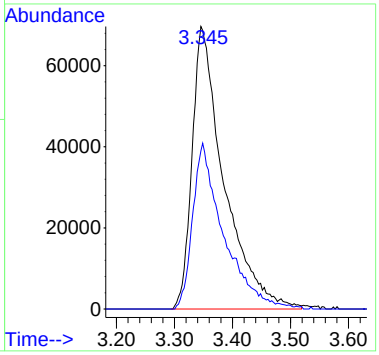


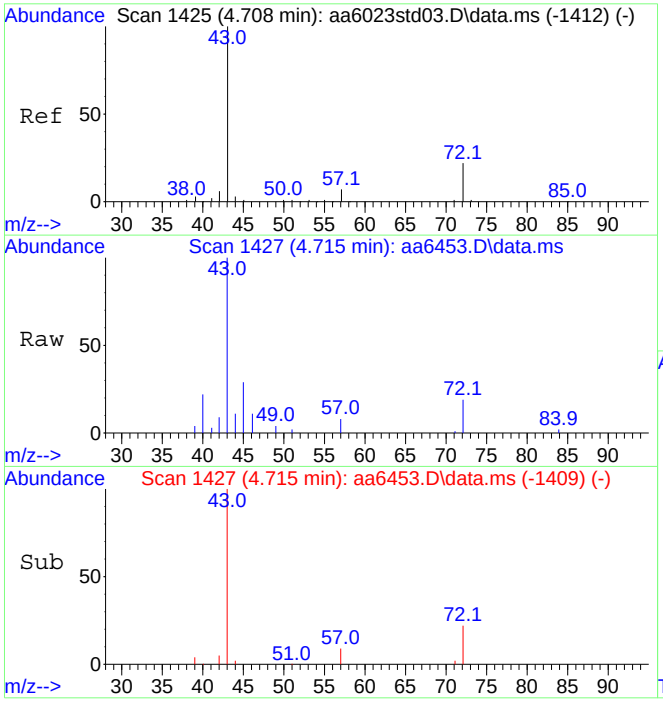


#22
trans-1,2-Dichloroethene
Concen: 5.11 ppbV
RT: 3.345 min Scan# 1001
Delta R.T. 0.014 min
Lab File: aa6453.D
Acq: 29 Apr 2024 7:14 pm

Tgt Ion: 61 Resp: 266026

Ion	Ratio	Lower	Upper
61	100		
96	56.8	46.0	69.0

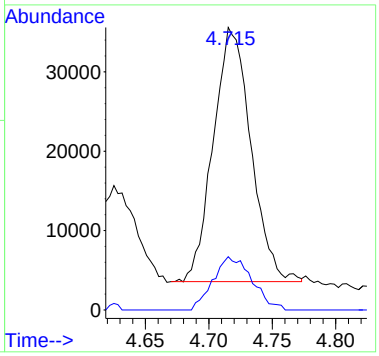


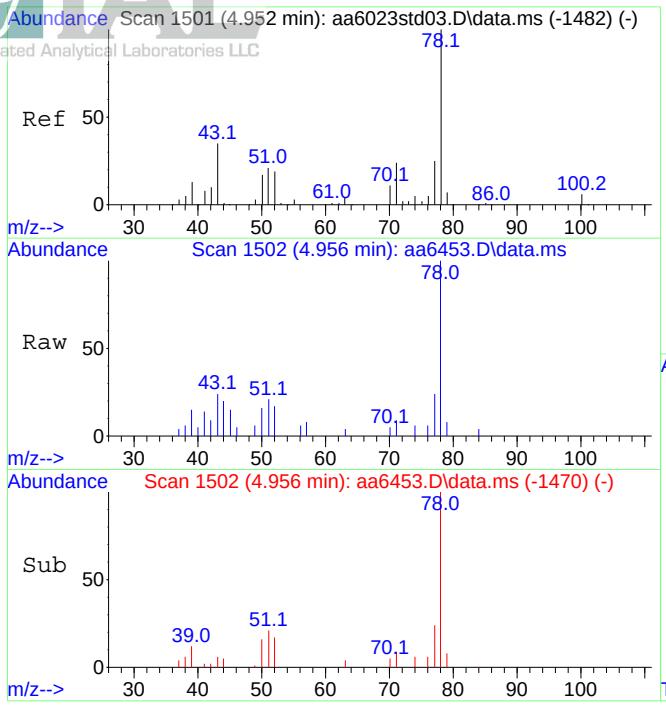


#35
Methyl ethyl ketone
Concen: 0.76 ppbV
RT: 4.715 min Scan# 1427
Delta R.T. 0.007 min
Lab File: aa6453.D
Acq: 29 Apr 2024 7:14 pm

Tgt Ion: 43 Resp: 66117

Ion	Ratio	Lower	Upper
43	100		
72	21.6	17.4	26.0

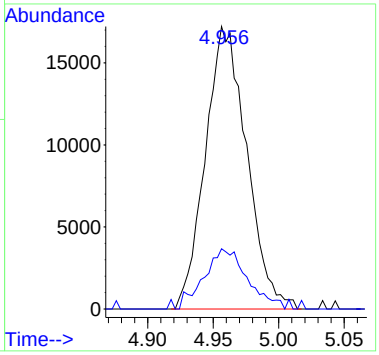


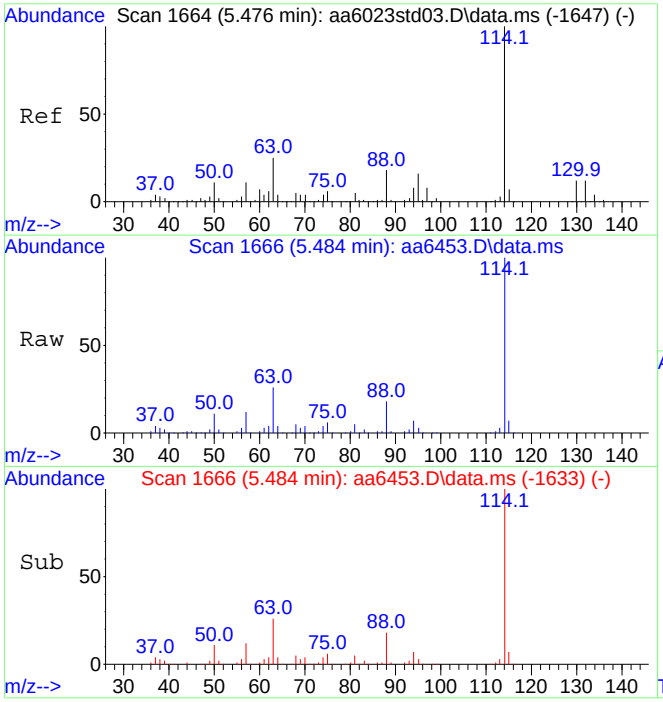


#37
Benzene
Concen: 0.34 ppbV
RT: 4.956 min Scan# 1502
Delta R.T. 0.004 min
Lab File: aa6453.D
Acq: 29 Apr 2024 7:14 pm

Tgt Ion: 78 Resp: 37791

Ion	Ratio	Lower	Upper
78	100		
51	22.6	16.1	24.1

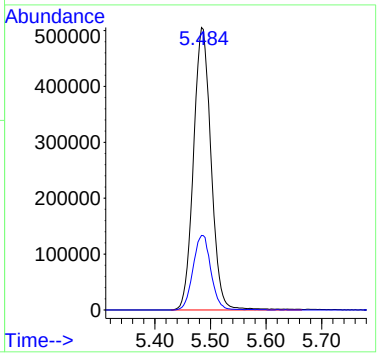


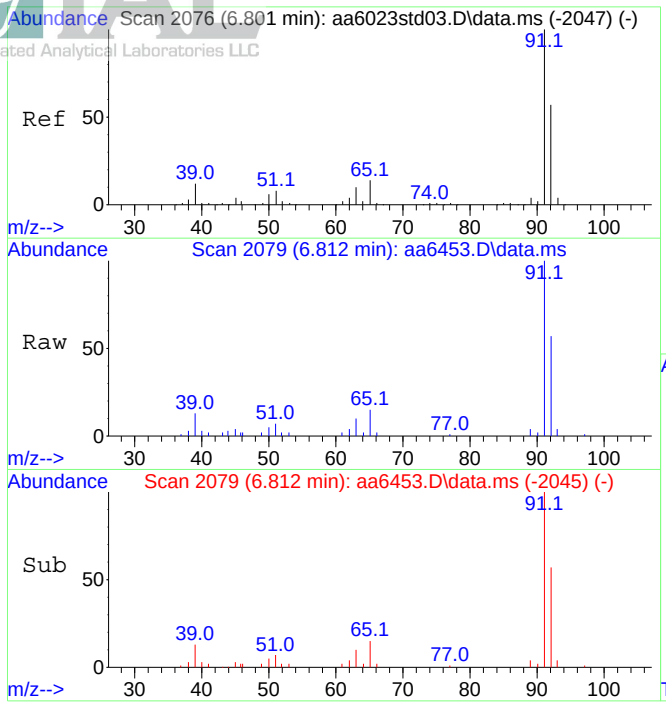


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.484 min Scan# 1666
Delta R.T. 0.008 min
Lab File: aa6453.D
Acq: 29 Apr 2024 7:14 pm

Tgt Ion:114 Resp: 1106810

Ion	Ratio	Lower	Upper
114	100		
63	26.9	6.4	46.4

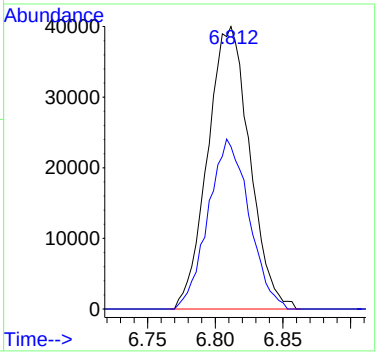


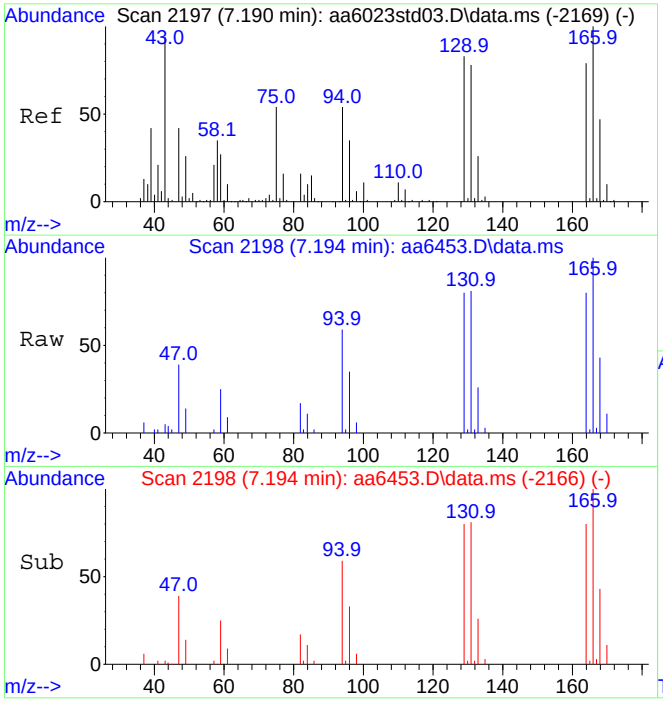


#47
Toluene
Concen: 0.61 ppbV
RT: 6.812 min Scan# 2079
Delta R.T. 0.010 min
Lab File: aa6453.D
Acq: 29 Apr 2024 7:14 pm

Tgt Ion: 91 Resp: 86309

Ion	Ratio	Lower	Upper
91	100		
92	58.6	46.3	69.5

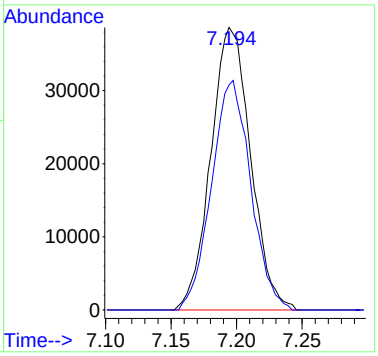


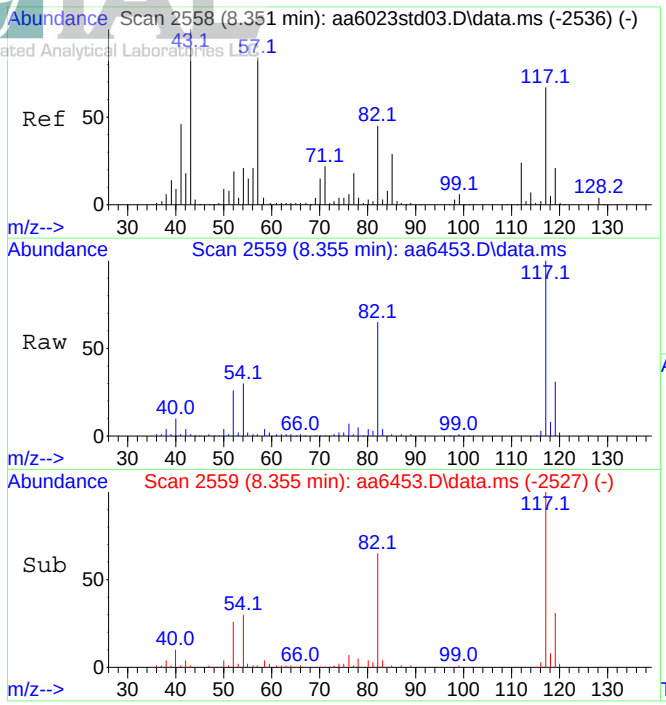


#49
Tetrachloroethene
Concen: 1.66 ppbV
RT: 7.194 min Scan# 2198
Delta R.T. 0.004 min
Lab File: aa6453.D
Acq: 29 Apr 2024 7:14 pm

Tgt Ion:166 Resp: 81798

Ion	Ratio	Lower	Upper
166	100		
164	79.8	62.3	93.5

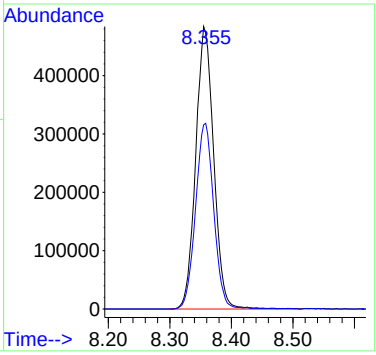


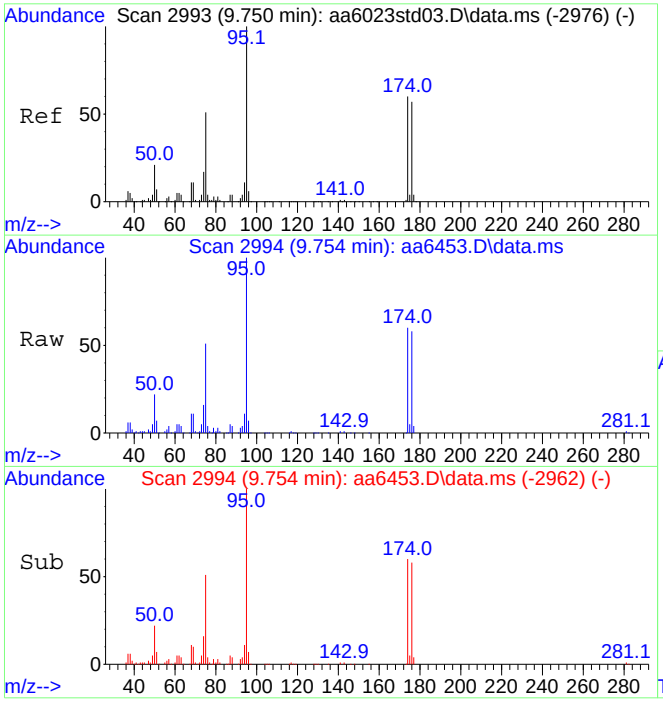


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.355 min Scan# 2559
Delta R.T. 0.004 min
Lab File: aa6453.D
Acq: 29 Apr 2024 7:14 pm

Tgt Ion:117 Resp: 982688

Ion	Ratio	Lower	Upper
117	100		
82	66.5	46.2	86.2

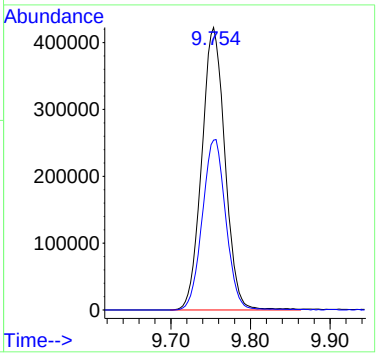




#64
Bromofluorobenzene (tune std)
Concen: 9.71 ppbV
RT: 9.754 min Scan# 2994
Delta R.T. 0.004 min
Lab File: aa6453.D
Acq: 29 Apr 2024 7:14 pm

Tgt Ion: 95 Resp: 855748

Ion	Ratio	Lower	Upper
95	100		
174	61.1	49.4	74.2



Analysis: Volatile Organic Compounds by EPA Method TO-15
Laboratory Sample Duplicate Report

		Date Received:	4/16/24
SDG Number:	E24-01345	Date Analyzed:	4/30/24,4/30/24
IAL Sample ID:	E24-01345-02	Lab Data File#:	AA6469,AA6470
Matrix:	Air	Dilution Factor:	1
Summa ID:	2886	Injection Volume:	500ml
		GC/MS Column:	RTX-1, 0.32 mmID

		Sample		Sample Dup			
		E24-01345-02		**E24-01345-22**			
		Concentration		**Concentration**		**Reporting**	
		Reported		**Reported**		**Limits**	
Compound	**CAS #**	**ppbv**	**Q**	**ppbv**	**Q**	**ppbv**	**RPD**
Acetone	67-64-1	**8.2**		**8.0**		0.40	**2.47%**
Allyl Chloride	107-05-1	0.40	U	0.40	U	0.40	0.00%
Benzene	71-43-2	0.20	U	0.20	U	0.20	0.00%
Bromodichloromethane	75-27-4	0.40	U	0.40	U	0.40	0.00%
Bromoform	75-25-2	0.40	U	0.40	U	0.40	0.00%
Bromomethane	74-83-9	0.40	U	0.40	U	0.40	0.00%
1,3-Butadiene	106-99-0	0.40	U	0.40	U	0.40	0.00%
Chlorobenzene	108-90-7	0.40	U	0.40	U	0.40	0.00%
Chloroethane	75-00-3	0.40	U	0.40	U	0.40	0.00%
Chloroform	67-66-3	0.40	U	0.40	U	0.40	0.00%
Chloromethane	74-87-3	0.40	U	0.40	U	0.40	0.00%
Carbon disulfide	75-15-0	0.40	U	0.40	U	0.40	0.00%
Carbon tetrachloride	56-23-5	0.20	U	0.20	U	0.20	0.00%
2-Chlorotoluene	95-49-8	0.40	U	0.40	U	0.40	0.00%
Cyclohexane	110-82-7	0.40	U	0.40	U	0.40	0.00%
Dibromochloromethane	124-48-1	0.40	U	0.40	U	0.40	0.00%
1,2-Dibromoethane	106-93-4	0.20	U	0.20	U	0.20	0.00%
1,2-Dichlorobenzene	95-50-1	0.40	U	0.40	U	0.40	0.00%
1,3-Dichlorobenzene	541-73-1	0.40	U	0.40	U	0.40	0.00%
1,4-Dichlorobenzene	106-46-7	0.40	U	0.40	U	0.40	0.00%
Dichlorodifluoromethane	75-71-8	0.40	U	0.40	U	0.40	0.00%
1,1-Dichloroethane	75-34-3	0.40	U	0.40	U	0.40	0.00%
1,2-Dichloroethane	107-06-2	0.40	U	0.40	U	0.40	0.00%
1,1-Dichloroethene	75-35-4	0.40	U	0.40	U	0.40	0.00%
1,2-Dichloroethene (cis)	156-59-2	0.40	U	0.40	U	0.40	0.00%
1,2-Dichloroethene (trans)	156-60-5	0.40	U	0.40	U	0.40	0.00%
1,2-Dichloropropane	78-87-5	0.20	U	0.20	U	0.20	0.00%
1,3-Dichloropropene (cis)	10061-01-5	0.20	U	0.20	U	0.20	0.00%
1,3-Dichloropropene (trans)	10061-02-6	0.20	U	0.20	U	0.20	0.00%
1,2-Dichlorotetrafluoroethane	76-14-2	0.40	U	0.40	U	0.40	0.00%
Ethylbenzene	100-41-4	0.20	U	0.20	U	0.20	0.00%
4-Ethyltoluene	622-96-8	0.40	U	0.40	U	0.40	0.00%
n-Heptane	142-82-5	0.40	U	0.40	U	0.40	0.00%
1,3-Hexachlorobutadiene	87-68-3	0.40	U	0.40	U	0.40	0.00%
n-Hexane	110-54-3	0.40	U	0.40	U	0.40	0.00%
Methylene chloride	75-09-2	0.40	U	0.40	U	0.40	0.00%
Methyl ethyl ketone	78-93-3	**14**		**13**		0.40	**7.41%**
Methyl isobutyl ketone	108-10-1	0.40	U	0.40	U	0.40	0.00%

Qualifiers:
E=Concentration exceeds upper level of calibration range for instrument.
D=Extra dilution required for this compound. X=Duplicate samples do not met RPD criteria.
U=Compound ND or under reporting limit.

Analysis: Volatile Organic Compounds by EPA Method TO-15
Laboratory Sample Duplicate Report

SDG Number: E24-01345
IAL Sample ID: E24-01345-02
Matrix: Air
Summa ID: 2886

Date Received: 4/16/24
Date Analyzed: 4/30/24,4/30/24
Lab Data File#: AA6469,AA6470
Dilution Factor: 1
Injection Volume: 500ml
GC/MS Column: RTX-1, 0.32 mmID

Compound	CAS #	Sample E24-01345-02 Concentration Reported ppbv	Q	Sample Dup E24-01345-22 Concentration Reported ppbv	Q	Reporting Limits ppbv	RPD
Methyl tert-butyl ether	1634-04-4	0.40	U	0.40	U	0.40	0.00%
Styrene	100-42-5	0.40	U	0.40	U	0.40	0.00%
Tert-butyl alcohol	75-65-0	0.40	U	0.40	U	0.40	0.00%
1,1,2,2-Tetrachloroethane	79-34-5	0.40	U	0.40	U	0.40	0.00%
Tetrachloroethene	127-18-4	0.40	U	0.40	U	0.40	0.00%
Toluene	108-88-3	**0.59**		**0.55**		0.40	**7.02%**
1,2,4-Trichlorobenzene	120-82-1	0.40	U	0.40	U	0.40	0.00%
1,1,1-Trichloroethane	71-55-6	0.40	U	0.40	U	0.40	0.00%
1,1,2-Trichloroethane	79-00-5	0.40	U	0.40	U	0.40	0.00%
Trichloroethene	79-01-6	0.20	U	0.20	U	0.20	0.00%
Trichlorofluoromethane	75-69-4	0.40	U	0.40	U	0.40	0.00%
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.40	U	0.40	U	0.40	0.00%
1,2,4-Trimethylbenzene	95-63-6	0.40	U	0.40	U	0.40	0.00%
1,3,5-Trimethylbenzene	108-67-8	0.40	U	0.40	U	0.40	0.00%
2,2,4-Trimethylpentane	540-84-1	0.40	U	0.40	U	0.40	0.00%
Vinyl bromide	593-60-2	0.40	U	0.40	U	0.40	0.00%
Vinyl chloride	75-01-4	0.20	U	0.20	U	0.20	0.00%
Xylenes (m&p)	179601-23-1	0.40	U	0.40	U	0.40	0.00%
Xylenes (o)	95-47-6	0.40	U	0.40	U	0.40	0.00%

RPD must be <25% for all laboratory duplicate samples. Laboratory duplicate samples are run once daily.
NC = The RPD could not be calculated since the compound was only detected in either the parent or duplicate sample.

Qualifiers:
E=Concentration exceeds upper level of calibration range for instrument.
D=Extra dilution required for this compound. X=Duplicate samples do not met RPD criteria.
U=Compound ND or under reporting limit.

Quantitation Report (QT Reviewed)

Data Path : C:\DATA\2024\04-2024\04-30-2024\
Data File : aa6469.D
Acq On : 30 Apr 2024 7:44 pm
Operator : jjw
Sample : E24-01345-02
Misc : 2886, 500cc
ALS Vial : 26 Sample Multiplier: 1

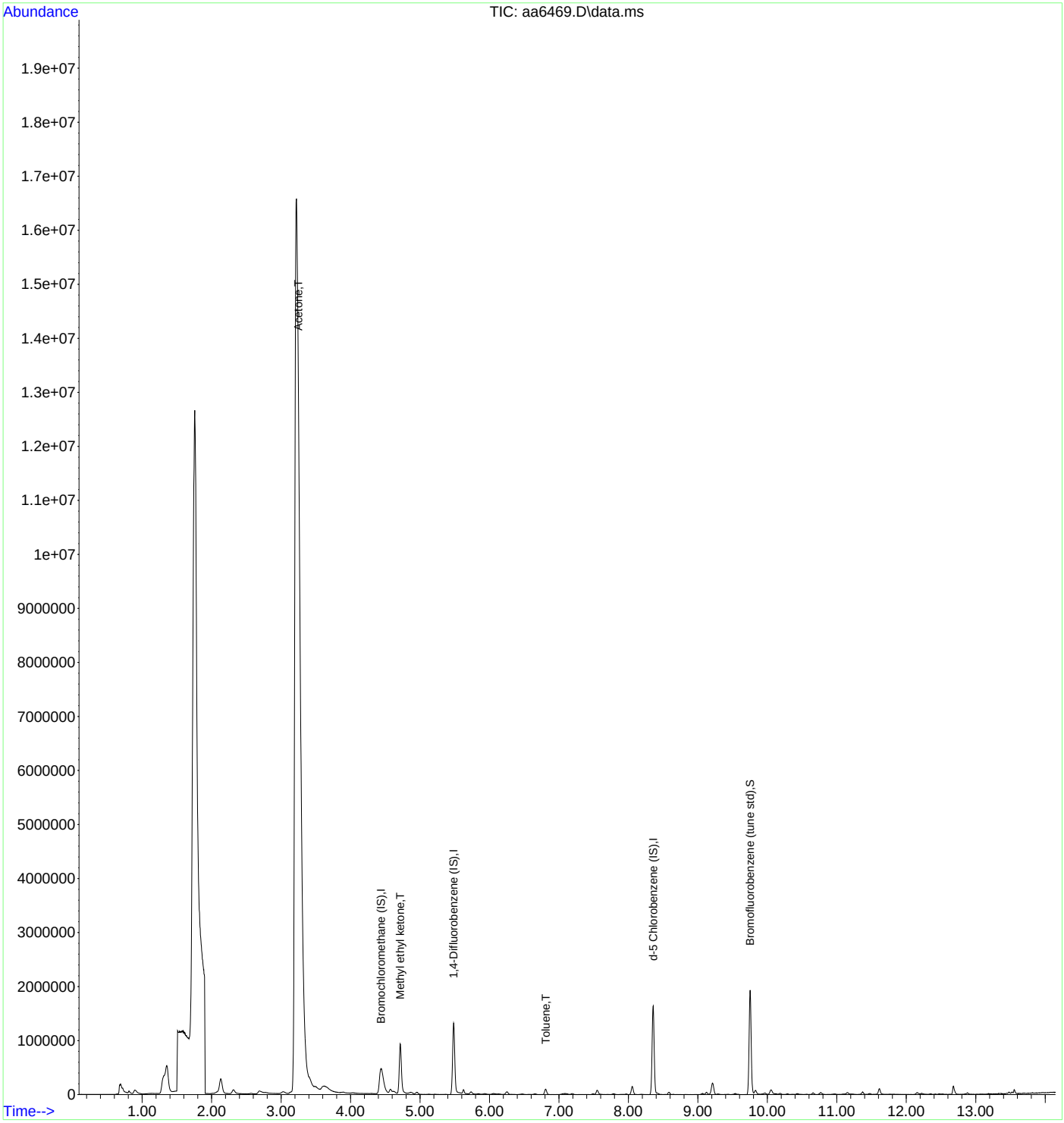
Quant Time: May 01 14:49:53 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

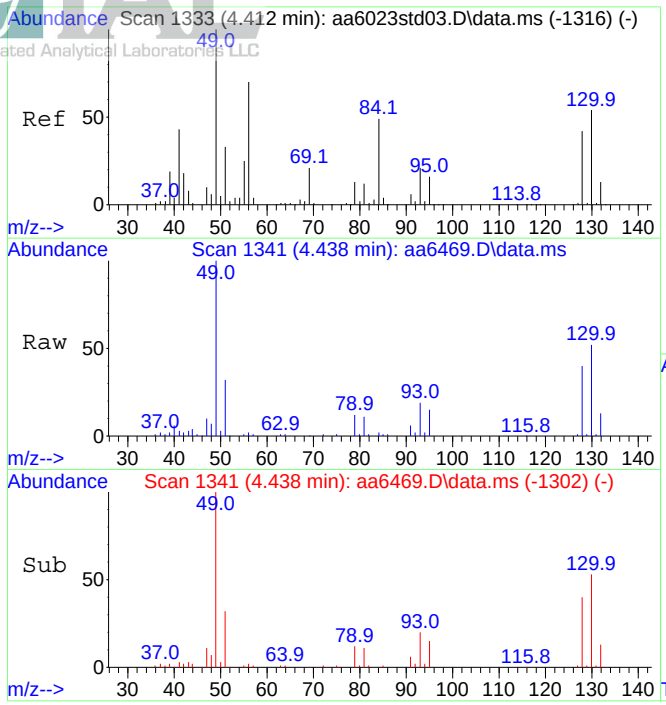
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.438	130	283835	10.00	ppbV	0.026
39) 1,4-Difluorobenzene (IS)	5.483	114	1109621	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.358	117	993427	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.753	95	864280	9.70	ppbV	0.000
Target Compounds						Qvalue
21) Acetone	3.249	43	521151	8.21	ppbV	90
35) Methyl ethyl ketone	4.715	43	1324719	13.97	ppbV	99
47) Toluene	6.811	91	84387	0.59	ppbV	98

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

Data Path : C:\DATA\2024\04-2024\04-30-2024\
Data File : aa6469.D
Acq On : 30 Apr 2024 7:44 pm
Operator : jjw
Sample : E24-01345-02
Misc : 2886, 500cc
ALS Vial : 26 Sample Multiplier: 1

Quant Time: May 01 14:49:53 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

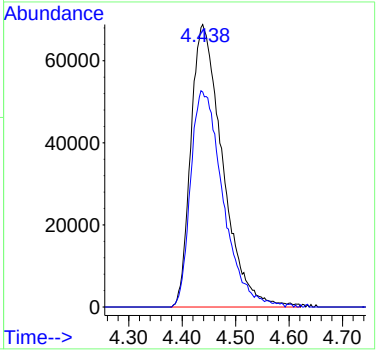


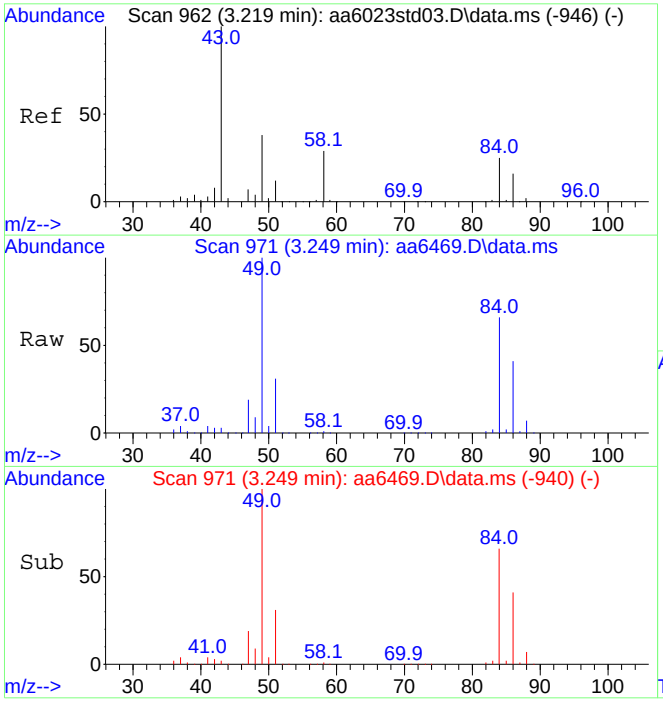


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.438 min Scan# 1341
Delta R.T. 0.026 min
Lab File: aa6469.D
Acq: 30 Apr 2024 7:44 pm

Tgt Ion:130 Resp: 283835

Ion	Ratio	Lower	Upper
130	100		
128	77.9	57.8	97.8

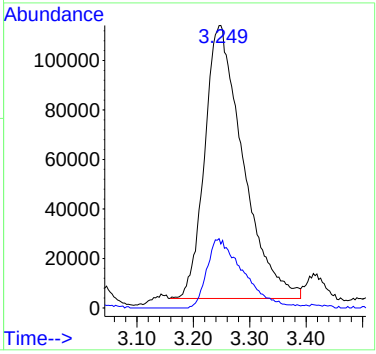


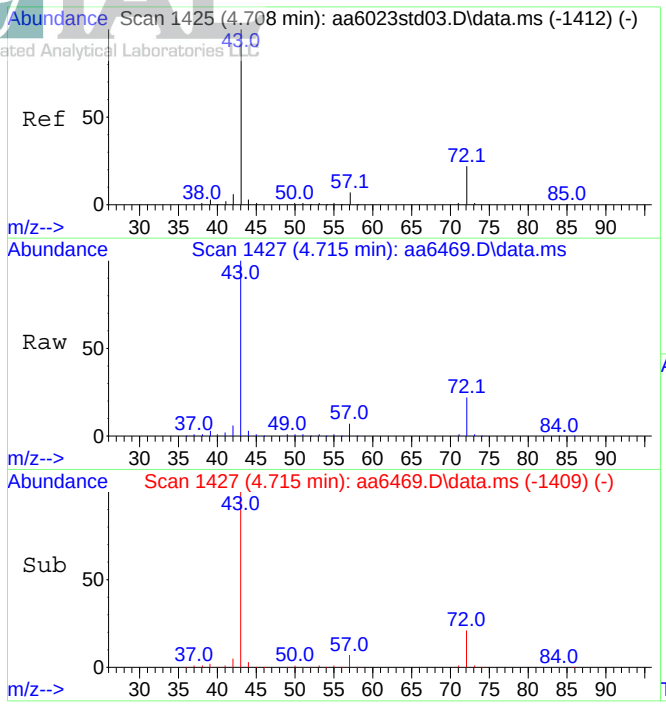


#21
Acetone
Concen: 8.21 ppbV
RT: 3.249 min Scan# 971
Delta R.T. 0.029 min
Lab File: aa6469.D
Acq: 30 Apr 2024 7:44 pm

Tgt Ion: 43 Resp: 521151

Ion	Ratio	Lower	Upper
43	100		
58	24.2	23.8	35.8

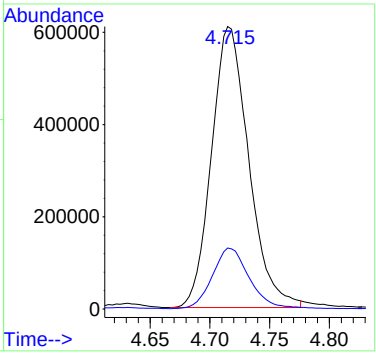


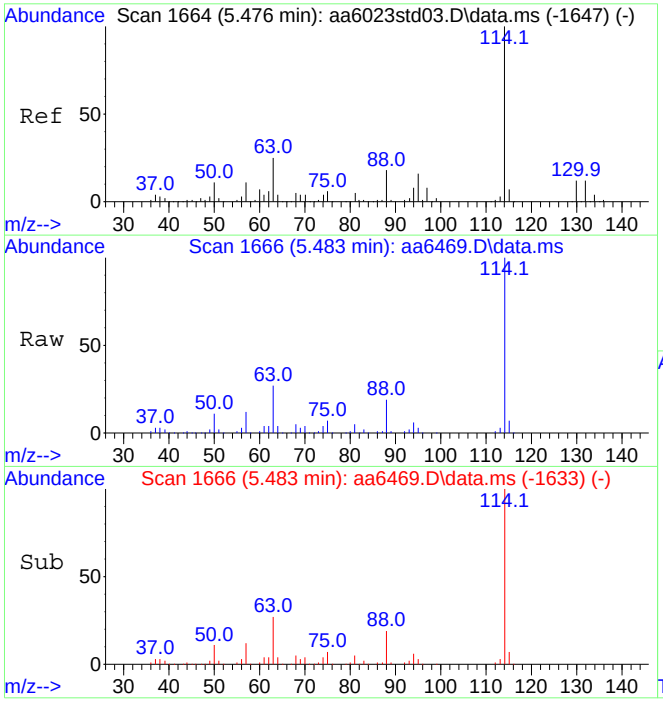


#35
Methyl ethyl ketone
Concen: 13.97 ppbV
RT: 4.715 min Scan# 1427
Delta R.T. 0.007 min
Lab File: aa6469.D
Acq: 30 Apr 2024 7:44 pm

Tgt Ion: 43 Resp: 1324719

Ion	Ratio	Lower	Upper
43	100		
72	21.2	17.4	26.0

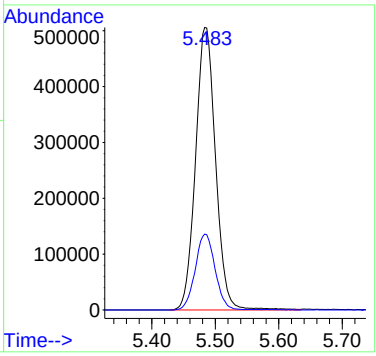


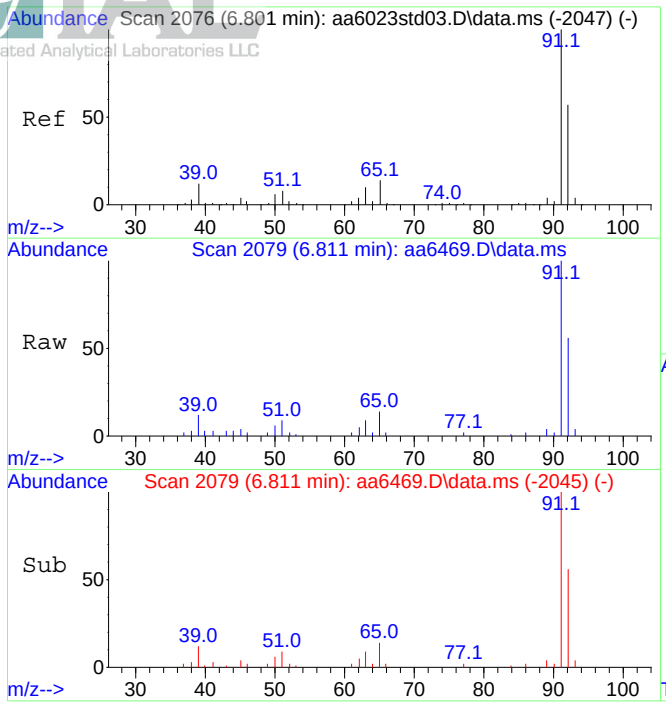


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.483 min Scan# 1666
Delta R.T. 0.007 min
Lab File: aa6469.D
Acq: 30 Apr 2024 7:44 pm

Tgt Ion:114 Resp: 1109621

Ion	Ratio	Lower	Upper
114	100		
63	26.8	6.4	46.4

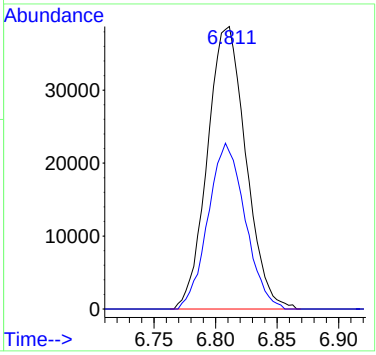


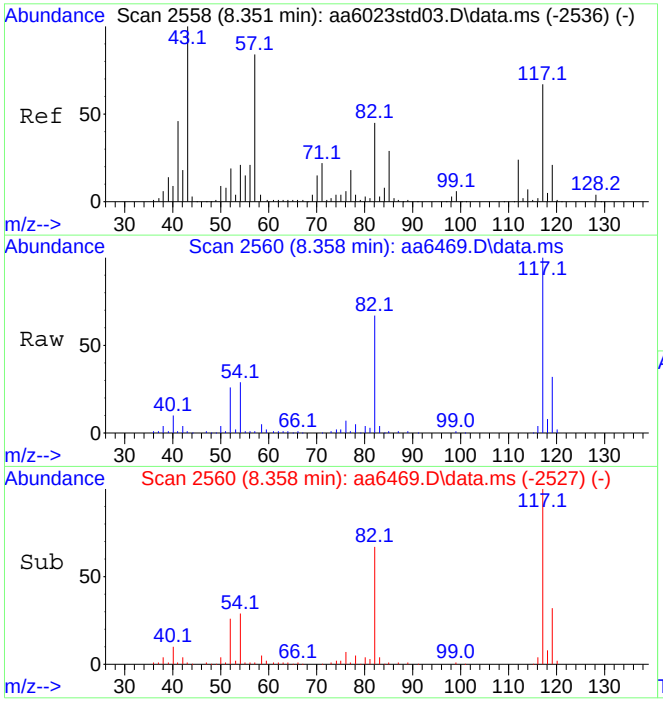


#47
Toluene
Concen: 0.59 ppbV
RT: 6.811 min Scan# 2079
Delta R.T. 0.010 min
Lab File: aa6469.D
Acq: 30 Apr 2024 7:44 pm

Tgt Ion: 91 Resp: 84387

Ion	Ratio	Lower	Upper
91	100		
92	56.5	46.3	69.5

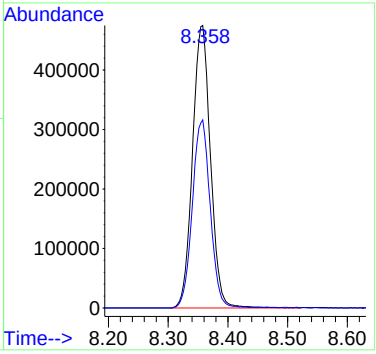


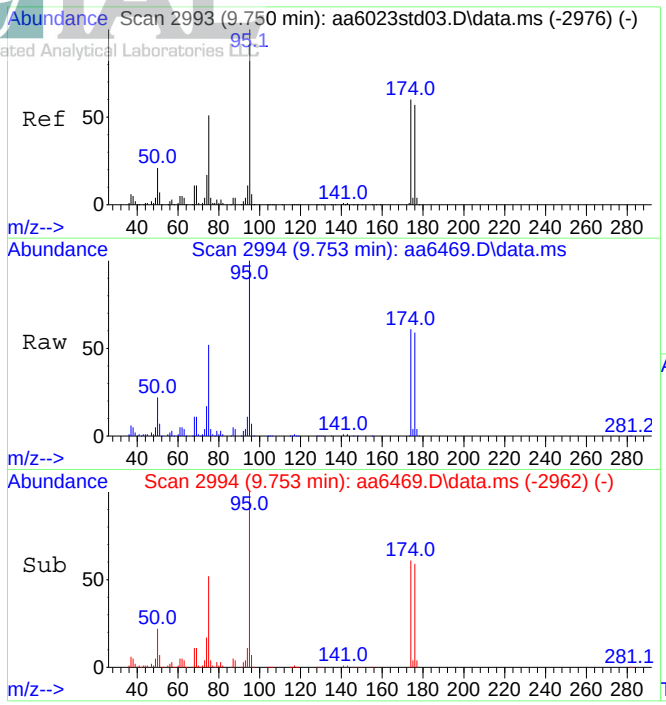


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.358 min Scan# 2560
Delta R.T. 0.007 min
Lab File: aa6469.D
Acq: 30 Apr 2024 7:44 pm

Tgt Ion:117 Resp: 993427

Ion	Ratio	Lower	Upper
117	100		
82	66.3	46.2	86.2

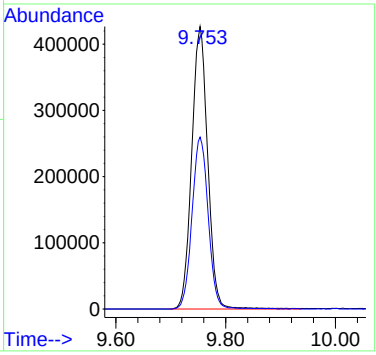




#64
Bromofluorobenzene (tune std)
Concen: 9.70 ppbV
RT: 9.753 min Scan# 2994
Delta R.T. 0.004 min
Lab File: aa6469.D
Acq: 30 Apr 2024 7:44 pm

Tgt Ion: 95 Resp: 864280

Ion	Ratio	Lower	Upper
95	100		
174	61.6	49.4	74.2



Data Path : C:\DATA\2024\04-2024\04-30-2024\
Data File : aa6470.D
Acq On : 30 Apr 2024 8:16 pm
Operator : jjw
Sample : E24-01345-22
Misc : 2886, 500cc
ALS Vial : 27 Sample Multiplier: 1

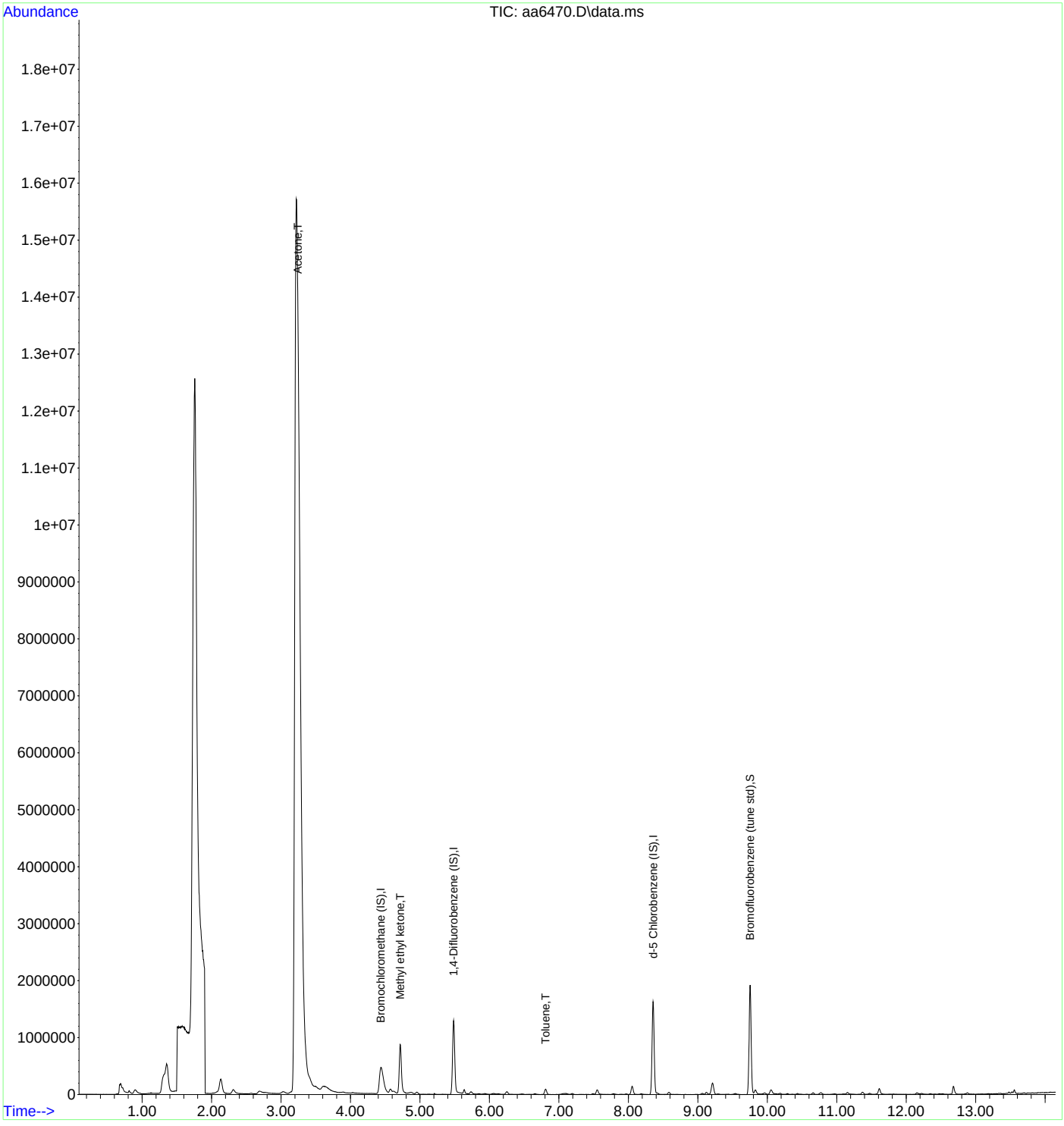
Quant Time: May 10 11:53:46 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

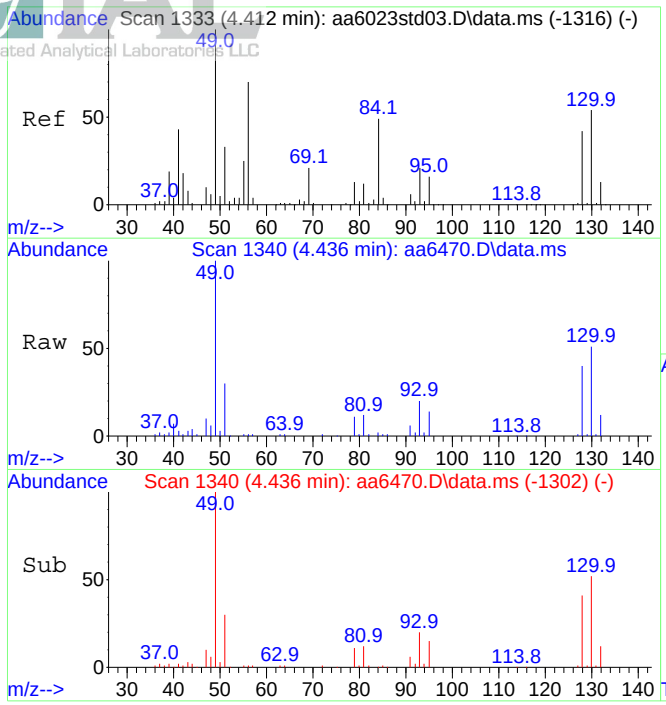
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.436	130	281976	10.00	ppbV	0.024
39) 1,4-Difluorobenzene (IS)	5.484	114	1110039	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.358	117	988855	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.754	95	860725	9.70	ppbV	0.000
Target Compounds						Qvalue
21) Acetone	3.243	43	506654	8.03	ppbV	90
35) Methyl ethyl ketone	4.715	43	1247309	13.24	ppbV	99
47) Toluene	6.808	91	79041	0.55	ppbV	98

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

Data Path : C:\DATA\2024\04-2024\04-30-2024\
Data File : aa6470.D
Acq On : 30 Apr 2024 8:16 pm
Operator : jjw
Sample : E24-01345-22
Misc : 2886, 500cc
ALS Vial : 27 Sample Multiplier: 1

Quant Time: May 10 11:53:46 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

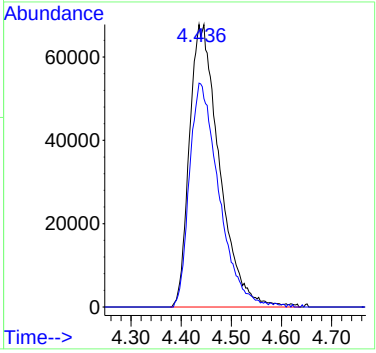


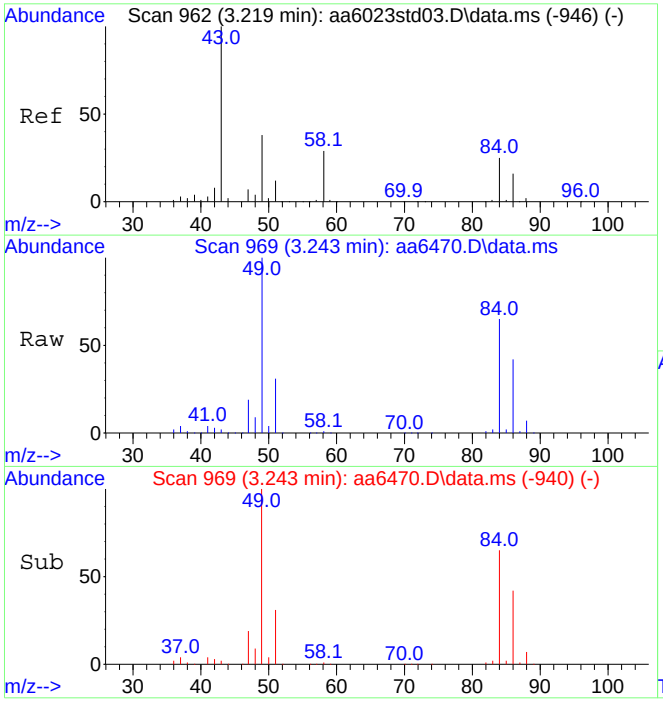


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.436 min Scan# 1340
Delta R.T. 0.024 min
Lab File: aa6470.D
Acq: 30 Apr 2024 8:16 pm

Tgt Ion:130 Resp: 281976

Ion	Ratio	Lower	Upper
130	100		
128	77.9	57.8	97.8

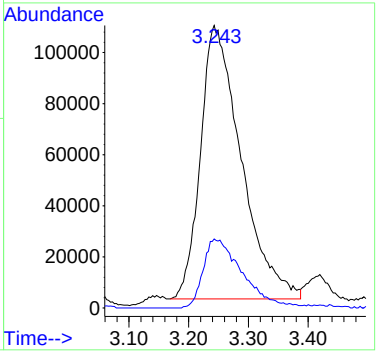


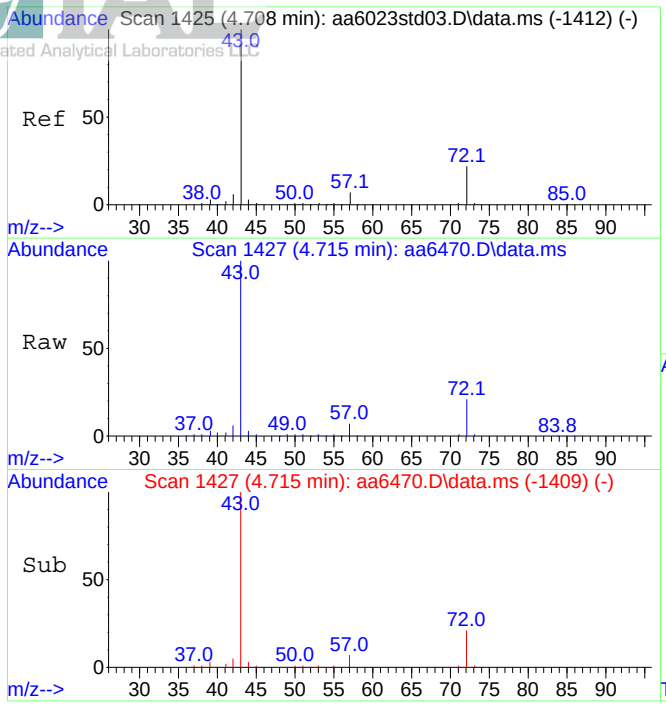


#21
Acetone
Concen: 8.03 ppbV
RT: 3.243 min Scan# 969
Delta R.T. 0.023 min
Lab File: aa6470.D
Acq: 30 Apr 2024 8:16 pm

Tgt Ion: 43 Resp: 506654

Ion	Ratio	Lower	Upper
43	100		
58	24.5	23.8	35.8

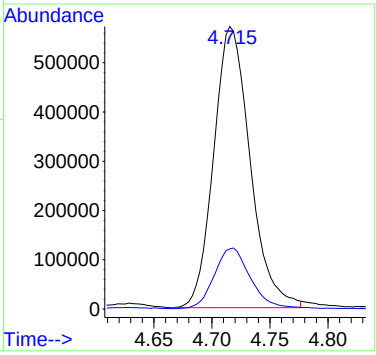


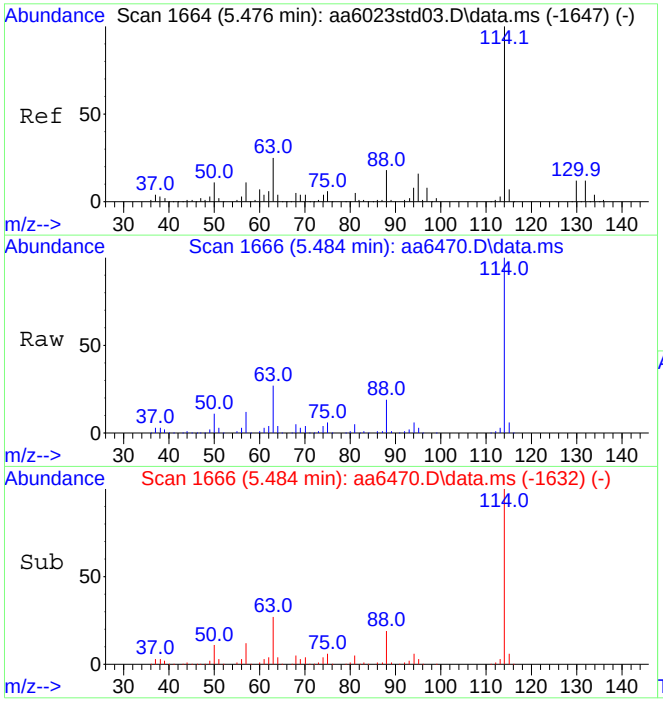


#35
Methyl ethyl ketone
Concen: 13.24 ppbV
RT: 4.715 min Scan# 1427
Delta R.T. 0.007 min
Lab File: aa6470.D
Acq: 30 Apr 2024 8:16 pm

Tgt Ion: 43 Resp: 1247309

Ion	Ratio	Lower	Upper
43	100		
72	21.2	17.4	26.0

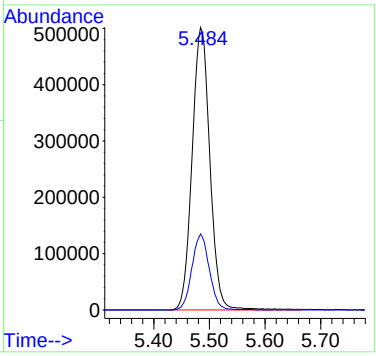


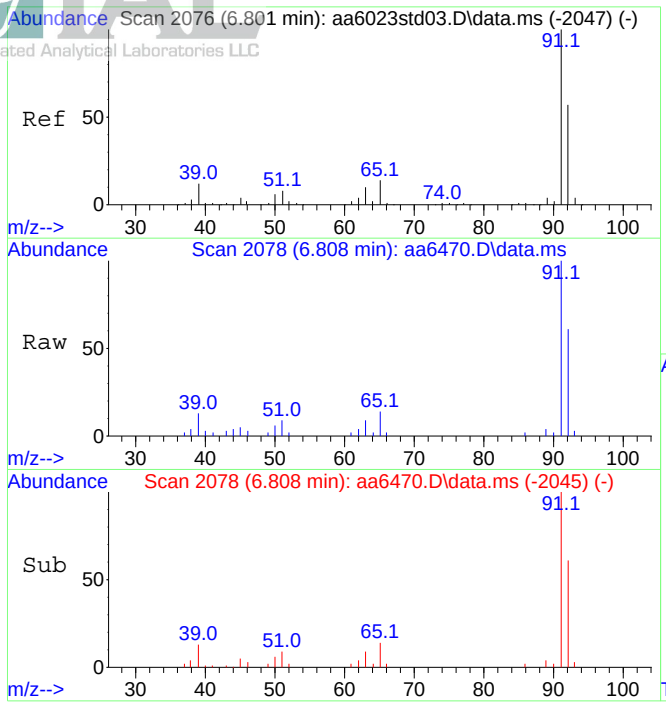


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.484 min Scan# 1666
Delta R.T. 0.008 min
Lab File: aa6470.D
Acq: 30 Apr 2024 8:16 pm

Tgt Ion:114 Resp: 1110039

Ion	Ratio	Lower	Upper
114	100		
63	26.3	6.4	46.4

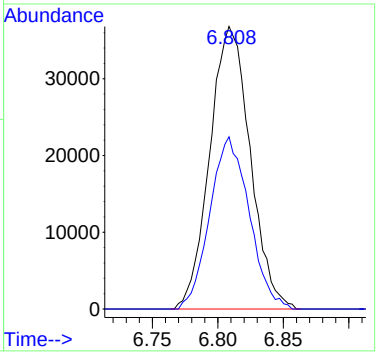


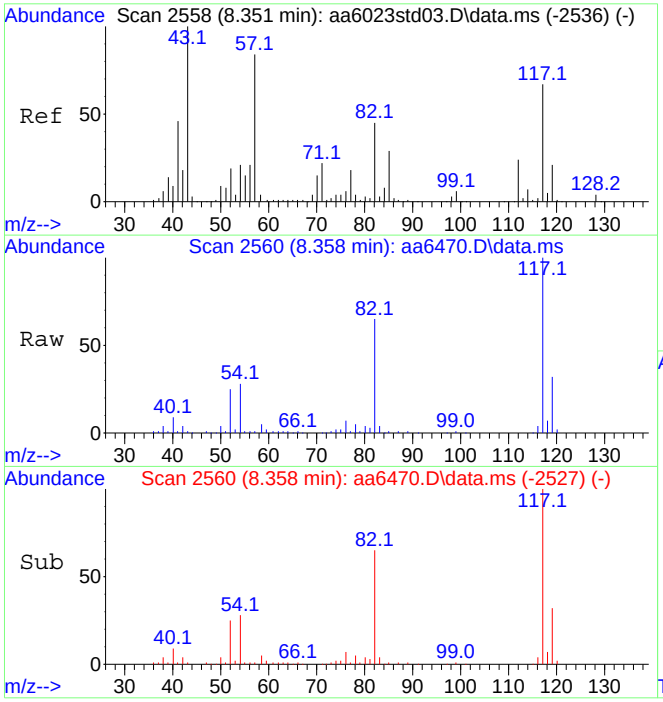


#47
Toluene
Concen: 0.55 ppbV
RT: 6.808 min Scan# 2078
Delta R.T. 0.007 min
Lab File: aa6470.D
Acq: 30 Apr 2024 8:16 pm

Tgt Ion: 91 Resp: 79041

Ion	Ratio	Lower	Upper
91	100		
92	59.2	46.3	69.5

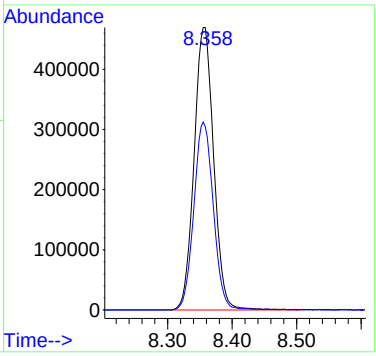


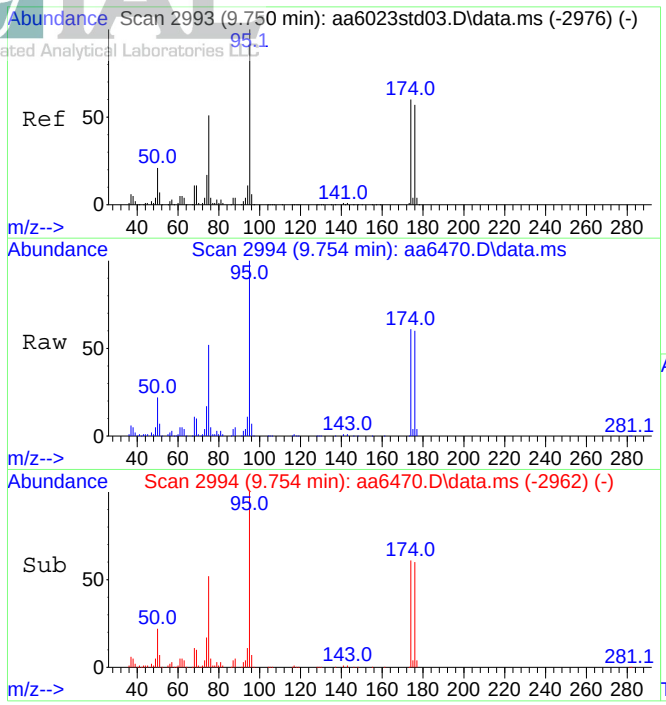


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.358 min Scan# 2560
Delta R.T. 0.007 min
Lab File: aa6470.D
Acq: 30 Apr 2024 8:16 pm

Tgt Ion:117 Resp: 988855

Ion	Ratio	Lower	Upper
117	100		
82	66.1	46.2	86.2

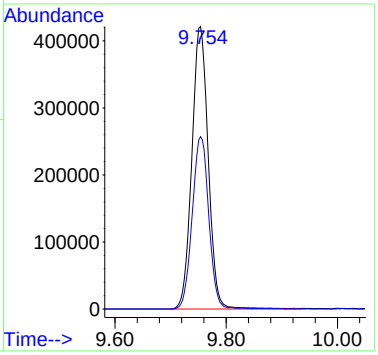




#64
Bromofluorobenzene (tune std)
Concen: 9.70 ppbV
RT: 9.754 min Scan# 2994
Delta R.T. 0.004 min
Lab File: aa6470.D
Acq: 30 Apr 2024 8:16 pm

Tgt Ion: 95 Resp: 860725

Ion	Ratio	Lower	Upper
95	100		
174	61.7	49.4	74.2



INTEGRATED ANALYTICAL LABORATORIES, LLC

Integrated Analytical Laboratories
GC/MS Run Log

Instrument ID: Agilent 7890A / 5975C
Column: Restek RTX-1 SN 992567

Target Directory: D:\Agilent GCMS\

Date of Analysis: 3/27/2024
Date of Initial Calibration: 3/27/2024

File #	Laboratory Sample ID	QC Check	Dilution Factor	Can #	Analyst	Injection Volume (cc)	Comments	*Make-up Air*		*Acquisition*		*Room*		*TO-15 Standard*	
								Added to canister (cc)	Added for dilution	Date	Time	Temp	BP "Hg	Working ID	Vendor ID (Lot#)
aa6020bfb	BFB	✓		ALM018474	JJW	0.5				**3/27/2024**	**10:03**	70	29.63		160-402352677-1
aa6021std05	0.2 ppbv Std	✓		EB0103704	JJW	1								3/27/2024	160-401980152-1
aa6022std04	2 ppbv Std	✓		EB0103704	JJW	10								3/27/2024	160-401980152-1
aa6023std03	10 ppbv Std	✓		EB0103704	JJW	50								3/27/2024	160-401980152-1
aa6024std02	20 ppbv Std	✓		EB0103704	JJW	100								3/27/2024	160-401980152-1
aa6025std01	40 ppbv Std	✓		EB0103704	JJW	200								3/27/2024	160-401980152-1
aa6026icvss	10 ppbv ICVSS	✓		EB0116272	JJW	50								3/27/2024	160-402744241-1
aa6027lcs	10 ppbv LCS	✓		EB0103704	JJW	50								3/27/2024	160-401980152-1
aa6028blk	Method Blank	✓		1127	JJW	500									
aa6229	E24-00947-01x10 dil	✓	10	1526	JJW	50									
aa6230	E24-00947-02x10 dil	✓	10	1545	JJW	50									
aa6231	E24-00947-03x10 dil	✓	10	1588	JJW	50									
aa6232	E24-00947-04x10 dil	✓	10	1554	JJW	50									
aa6233	E24-00948-01	✓		2901	JJW	500									
aa6234	E24-00948-02	✓		3026A	JJW	500									
aa6235	E24-00948-03	✓		2751	JJW	500									
aa6236	E24-00948-04	✓		2033	JJW	500									
aa6237	E24-00948-05	✓		4865	JJW	500									
aa6238	E24-00948-25	✓		4865	JJW	500	dup of 00948-05								
aa6239	3285	✓		x	JJW	500									
aa6240	2036	✓		x	JJW	500				3/27/2024	21:38				

Analyst Name: J Walukiewicz

Signature: Joseph Walukiewicz

INTEGRATED ANALYTICAL LABORATORIES, LLC

Integrated Analytical Laboratories
GC/MS Run Log

Instrument ID: Agilent 7890A / 5975C
Column: Restek RTX-1 SN 992567

Target Directory: D:\Agilent GCMS\

Date of Analysis: 4/3/2024
Date of Initial Calibration: 3/27/2024

File #	Laboratory Sample ID	QC Check	Dilution Factor	Can #	Analyst	Injection Volume (cc)	Comments	*Make-up Air*		*Acquisition*		*Room*		*TO-15 Standard*	
								Added to canister (cc)	Added for dilution	Date	Time	Temp	BP "Hg	Working ID	Vendor ID (Lot#)
aa6120bfb	BFB	✓		ALM018474	JJW	0.5				**4/3/2024**	**10:39**	69	29.41		160-402352677-1
aa6121dcvs	10 ppbv DCVS	✓		EB0103704	JJW	50								3/27/2024	160-401980152-1
aa6122lcs	10 ppbv LCS	✓		EB0103704	JJW	50								3/27/2024	160-401980152-1
aa6123blk	Method Blank	✓		1127	JJW	500									
a6124rllcs	0.2 ppbv RLLCS	✓		EB0103704	JJW	1								3/27/2024	160-401980152-1
aa6125	2037	✓		2037	JJW	500									
aa6126	E24-00886-01x50 dil	✓	50	1776	JJW	10	Internal Stand Fail								
aa6127	E24-01085-05x10 dil	✓	10	1072	JJW	50									
aa6128	E24-01085-25x10 dil	✓	10	1072	JJW	50	Dup of 1085-05x10								
aa6129	E24-01085-06x10 dil	✓	10	1548	JJW	50									
aa6130	E24-01085-07x10 dil	✓	10	1404	JJW	50	Internal Stand Fail								
aa6131	E24-01085-08x10 dil	✓	10	1367	JJW	50	Internal Stand Fail								
aa6132	E24-01085-09x10 dil	✓	10	1557	JJW	50	Internal Stand Fail								
aa6133	5092	✓		5092	JJW	500									
aa6134cccvs	10 ppbv CCCVS	✓		EB0103704	JJW	50				4/3/2024	20:52			3/27/2024	160-401980152-1

Analyst Name: J Walukiewicz

Signature: Joseph Walukiewicz

INTEGRATED ANALYTICAL LABORATORIES, LLC

Integrated Analytical Laboratories
GC/MS Run Log

Instrument ID: Agilent 7890A / 5975C
Column: Restek RTX-1 SN 992567

Target Directory: D:\Agilent GCMS\

Date of Analysis: 4/29/2024
Date of Initial Calibration: 3/27/2024

File #	Laboratory Sample ID	QC Check	Dilution Factor	Can #	Analyst	Injection Volume (cc)	Comments	*Make-up Air*		*Acquisition*		*Room*		*TO-15 Standard*	
								Added to canister (cc)	Added for dilution	Date	Time	Temp	BP "Hg	Working ID	Vendor ID (Lot#)
aa6442bfb	BFB	✓		ALM018474	JJW	0.5				**4/29/2024**	**9:47**	70	29.52		160-402352677-1
aa6443dcvs	10 ppbv DCVS	✓		EB0103704	JJW	50								3/27/2024	160-401980152-1
aa6444lcs	10 ppbv LCS	✓		EB0103704	JJW	50								3/27/2024	160-401980152-1
aa6445blk	Method Blank	✓		1127	JJW	500									
aa6446rllcs	0.2 ppbv RLLCS	✓		EB0103704	JJW	1								3/27/2024	160-401980152-1
aa6447	E24-01487-01	✓		3041A	JJW	500									
aa6448	E24-01487-02	✓		3279	JJW	500									
aa6449	E24-01487-03	✓		3012	JJW	500									
aa6450	E24-01487-04	✓		2893	JJW	500									
aa6451	E24-01369-01	✓		2155	JJW	500									
aa6452	E24-01369-02	✓		5096	JJW	500									
aa6453	E24-01369-22	✓		5096	JJW	500	Dup of 01369-02								
aa6454	blk	✓		x	JJW	500									
aa6455cccvs	10 ppbv CCCVS	✓		EB0103704	JJW	50				4/29/2024	20:15			3/27/2024	160-401980152-1

Analyst Name: J Walukiewicz

Signature: Joseph Walukiewicz

INTEGRATED ANALYTICAL LABORATORIES, LLC

Integrated Analytical Laboratories
GC/MS Run Log

Instrument ID: Agilent 7890A / 5975C
Column: Restek RTX-1 SN 992567

Target Directory: D:\Agilent GCMS\

Date of Analysis: 4/30/2024
Date of Initial Calibration: 3/27/2024

File #	Laboratory Sample ID	QC Check	Dilution Factor	Can #	Analyst	Injection Volume (cc)	Comments	*Make-up Air*		*Acquisition*		*Room*		*TO-15 Standard*	
								Added to canister (cc)	Added for dilution	Date	Time	Temp	BP "Hg	Working ID	Vendor ID (Lot#)
aa6457bfb	BFB	✓		ALM018474	JJW	0.5				**4/30/2024**	**9:16**	70	29.42		160-402352677-1
aa6458dcvs	10 ppbv DCVS	✓		EB0103704	JJW	50								3/27/2024	160-401980152-1
aa6459lcs	10 ppbv LCS	✓		EB0103704	JJW	50								3/27/2024	160-401980152-1
aa6460blk	Method Blank	✓		1127	JJW	500									
aa6461rllcs	0.2 ppbv RLLCS	✓		EB0103704	JJW	1								3/27/2024	160-401980152-1
aa6462	E24-01487-01x5 dil	✓	5	3041A	JJW	100									
aa6463	E2401487-02x2 dil	✓	2	3279	JJW	250									
aa6464	E24-01396-03	✓		2093	JJW	500									
aa6465	E24-01396-04	✓		2066	JJW	500									
aa6466	E24-01396-05	✓		4867	JJW	500									
aa6467	E24-01396-06	✓		5073	JJW	500									
aa6468	E24-01345-01	✓		5092	JJW	500									
aa6469	E24-01345-02	✓		2886	JJW	500									
aa6470	E24-01345-22	✓		2886	JJW	500	Dup of 01345-02								
aa6471	blk	✓		x	JJW	500									
aa6472cccvs	10 ppbv CCCVS	✓		EB0103704	JJW	50				4/30/2024	21:15			3/27/2024	160-401980152-1

Analyst Name: J Walukiewicz

Signature: Joseph Walukiewicz

INTEGRATED ANALYTICAL LABORATORIES, LLC

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

External Chain of Custody Record/
Field Test Data Sheet
USEPA Method TO-15

Contact Us: 973-361-4252
Fax: 973-366-5613
Web: www.ialonline.com

Carrier (check one): X IAL Courier ____ Client Courier ____ FedEx/UPS

pg ____ of ____

Client Contact Information	Project Information	Invoice Information
Company: JS Held LLC	Project Name: 48-55 36th St	Attn:
Address: 5 marine View Plaza	Project Location (State): NY	Address: Same
Suite 401, Hoboken, NJ	Project Manager: Leah DeEgidio	
Phone: (201) 876-9400	PM Signature:	
Fax:	PM E-Mail: ldegidio@jsheld.com	PO #:
Report to: Leah DeEgidio	Sampler: JT/LD	Quote #:

Analysis Turnaround Time - IF NO TAT IS SPECIFIED, 2 WEEK TAT IS ASSUMED

IAL Standard: 2 weeks (10 business days)

Rush (**pre-approved by lab): 24hr** 48hr** 72hr** 96hr** 1wk**

Barometric Pressure: Start ____ Stop ____

	Sample Identification	Start DATE & TIME (24hr Clock)	End DATE & TIME (24hr Clock)	Starting Vacuum ("Hg)	Ending Vacuum ("Hg)	Starting Temp. (°F)	Ending Temp. (°F)	Outgoing Vacuum - Lab ("Hg)	Incoming Vacuum - Lab ("Hg)	Flow Regulator ID	Canister ID	Canister Size (1L or 6L)	Flow Controller Readout (cc/min)	EPA TO - 15	NJDEP LLTO-15 (includes 30 TICs)	Library Search (10, 20, or 30 TICs)	Other (Explain in Comments)	Regulatory/ NY Cat B / Full (NJ Required)	Reduced / NY Cat A Data Package	Results Only	Indoor Air	Ambient / Outdoor Air	Sub Slab / Soil Gas / Near Slab (Circle One)	Stack Emission / SVE System	High Concentrations Expected
①	SG-1	4/27/24 12:50	4/27/24 13:20	-30	-4	65	65	-29.0	-3.5	7342688	040224O1*	6L	200	X				X							
②	SG-2	4/27/24 14:05	4/27/24 14:35	-29	0	70	70	-29.0	0.0	7341819	3279	6L	200	X				X							
③	SG-3	4/27/24 14:38	4/27/24 15:08	-30	-1	58	58	-29.0	-1.0	AC07031-10	040224O1**	6L	200	X				X							
④	SG-4	4/27/24 13:45	4/27/24 14:15	-30	0	70	70	-29.0	0.0	7288555	2893	6L	200	X				X							

Comments/ Special Analysis Instructions / QC Requirements:

* #1: Canister Id = #3041A
** #3: Canister Id = #3012

Note: Hold or contingent samples may be designated by writing an "H" or "C" in the appropriate analysis box.

ALL FIELDS IN RED ARE REQUIRED

Shipping Information / Canister Preparation (for laboratory use only)

Individual Preparing Canisters / Title: ~~Padraic Jenkins, J. Walukiewicz~~ / Air Department Sample Custodians

Lab Affixed Seal Number(s): Desmond Flores

Date/Time Shipping Container Sealed: 3:22 PM 4/25/24

Laboratory Canister Certification

GC/MS Analyst Signature: Joseph J Walukiewicz III (SAL)

IAL SDG#: 01487

External Chain of Custody

Relinquished	Received	Date / Time	Reason for Change of External Custody
Desmond Flores		3:22 PM 4/25/24	shipment from laboratory to client
J. Twill	Joseph J Walukiewicz III (SAL)	4/29/24 1127	Received at ial lab

Name/Title Resealing Shipping Container Name: ____

Date/Time Sample Shipping Container Resealed: ____

Date/Time Sample Shipping Container Opened: 04/29/24 1130

NJDEP Affixed Seal Number: ____

Individual Opening Sample Shipping Container: ~~Padraic Jenkins~~ / Joseph Walukiewicz

Date/Time Internal Chain of Custody Initiated: 04/29/24 1135

White and yellow - lab copies; Pink - client copy

Use appropriate care with IAL sampling equipment when sampling and packing for shipment. The client is responsible for all damage incurred to IAL equipment. Notify IAL if equipment is damaged upon receipt. Holding time before sampling is 15 days, after sampling is 30 days; failure to follow these times may result in data rejection by regulatory agencies. The lab will contact you if your COC is not clear, incomplete, or if discrepancies exist. The use of initials is not permitted on the COC except when correcting errors. 06/2014

Example Calculation (EPA TO-15)

$$\frac{\text{Area of Compound}}{\text{Area of Internal Standard}} \times \frac{\text{Concentration of Internal Standard (10 ppbv)}}{\text{Response Factor}} = \text{Concentration of Compound (ppbv)}$$

Conversion from ppbv to µg/m ^{3}

$$\frac{\text{Concentration of Compound (ppbv)} \times \text{Molecular Weight of Compound}}{24.45} = \text{Concentration of Compound (µg/m3)}$$

INTEGRATED ANALYTICAL LABORATORIES, LLC

Clean Canister Certification Report

Lab Sample Name:	**Clean Canister, Batch Master 2037**	**Data File:**	**AA6125**
Field Sample Name:	**Canister 2037**	**Date Analyzed:**	**4/3/2024**
Sample Volume:	**500ml**	**Matrix:**	**Air**

Canisters associated with this run: 2037, 2889, 2900, 3279 (used for E24-01487-02), 3787, 3041 A (used for E24-01487-01), 3012 (used for E24-01487-03), 2893 (used for E24-01487-04)

Runs with this Clean Canister Certification:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6120BFB]	04/03/2024 10:39
10 PPBV DCVS [AA6121DCVS]	04/03/2024 11:58
10 PPBV LCS [AA6122LCS]	04/03/2024 12:29
METHOD BLANK [AA6123BLK]	04/03/2024 13:28
02 PPBV RLLCS [AA6124RLLCS]	04/03/2024 14:13
CLEAN CAN CERTIFICATION, BATCH MASTER 2037 [AA6125]	04/03/2024 16:31
CLEAN CAN CERTIFICATION, BATCH MASTER 5092 [AA6133]	04/03/2024 20:23
10 PPBV CCCVS [AA6134CCCVS]	04/03/2024 20:52

This canister has been certified clean, all compounds are below 0.2 ppbv.

Compound	CAS #	RL (ppbv)	Calculated Amount (ppbv)
Acetone	67-64-1	0.20	ND
Benzene	71-43-2	0.20	ND
Bromodichloromethane	75-27-4	0.20	ND
Bromoform	75-25-2	0.20	ND
Bromomethane	74-83-9	0.20	ND
1,3-Butadiene	106-99-0	0.20	ND
Chlorobenzene	108-90-7	0.20	ND
Chloroethane	75-00-3	0.20	ND
Chloroform	67-66-3	0.20	ND
Chloromethane	74-87-3	0.20	ND
Carbon disulfide	75-15-0	0.20	ND
Carbon tetrachloride	56-23-5	0.20	ND
Cyclohexane	110-82-7	0.20	ND
Dibromochloromethane	124-48-1	0.20	ND
1,2-Dibromoethane	106-93-4	0.20	ND
1,2-Dichlorobenzene	95-50-1	0.20	ND
1,3-Dichlorobenzene	541-73-1	0.20	ND
1,4-Dichlorobenzene	106-46-7	0.20	ND
Dichlorodifluoromethane	75-71-8	0.20	ND
1,1-Dichloroethane	75-34-3	0.20	ND
1,2-Dichloroethane	107-06-2	0.20	ND
1,1-Dichloroethene	75-35-4	0.20	ND
1,2-Dichloroethene (cis)	156-59-2	0.20	ND
1,2-Dichloroethene (trans)	156-60-5	0.20	ND
1,2-Dichloropropane	78-87-5	0.20	ND
1,3-Dichloropropene (cis)	10061-01-5	0.20	ND
1,3-Dichloropropene (trans)	10061-02-6	0.20	ND
1,2-Dichlorotetrafluoroethane	76-14-2	0.20	ND
1,4-Dioxane	123-91-1	0.20	ND
Ethylbenzene	100-41-4	0.20	ND
n-Heptane	142-82-5	0.20	ND
1,3-Hexachlorobutadiene	87-68-3	0.20	ND
n-Hexane	110-54-3	0.20	ND

Clean Canister Certification Report

Lab Sample Name:	**Clean Canister, Batch Master 2037**	**Data File:**	**AA6125**
Field Sample Name:	**Canister 2037**	**Date Analyzed:**	**4/3/2024**
Sample Volume:	**500ml**	**Matrix:**	**Air**

Canisters associated with this run: 2037, 2889, 2900, 3279 (used for E24-01487-02), 3787, 3041 A (used for E24-01487-01), 3012 (used for E24-01487-03), 2893 (used for E24-01487-04)

Runs with this Clean Canister Certification:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6120BFB]	04/03/2024 10:39
10 PPBV DCVS [AA6121DCVS]	04/03/2024 11:58
10 PPBV LCS [AA6122LCS]	04/03/2024 12:29
METHOD BLANK [AA6123BLK]	04/03/2024 13:28
02 PPBV RLLCS [AA6124RLLCS]	04/03/2024 14:13
CLEAN CAN CERTIFICATION, BATCH MASTER 2037 [AA6125]	04/03/2024 16:31
CLEAN CAN CERTIFICATION, BATCH MASTER 5092 [AA6133]	04/03/2024 20:23
10 PPBV CCCVS [AA6134CCCVS]	04/03/2024 20:52

This canister has been certified clean, all compounds are below 0.2 ppbv.

Compound	CAS #	RL (ppbv)	Calculated Amount (ppbv)
Methylene chloride	75-09-2	0.20	ND
Methyl ethyl ketone	78-93-3	0.20	ND
Methyl isobutyl ketone	108-10-1	0.20	ND
Methyl tert-butyl ether	1634-04-4	0.20	ND
Styrene	100-42-5	0.20	ND
Tert-butyl alcohol	75-65-0	0.20	ND
1,1,2,2-Tetrachloroethane	79-34-5	0.20	ND
Tetrachloroethene	127-18-4	0.20	ND
Toluene	108-88-3	0.20	ND
1,2,4-Trichlorobenzene	120-82-1	0.20	ND
1,1,1-Trichloroethane	71-55-6	0.20	ND
1,1,2-Trichloroethane	79-00-5	0.20	ND
Trichloroethene	79-01-6	0.20	ND
Trichlorofluoromethane	75-69-4	0.20	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.20	ND
1,2,4-Trimethylbenzene	95-63-6	0.20	ND
1,3,5-Trimethylbenzene	108-67-8	0.20	ND
2,2,4-Trimethylpentane	540-84-1	0.20	ND
Vinyl bromide	593-60-2	0.20	ND
Vinyl chloride	75-01-4	0.20	ND
Xylenes (m&p)	179601-23-1	0.40	ND
Xylenes (o)	95-47-6	0.20	ND

Data Path : C:\DATA\2024\04-2024\04-03-2024\
Data File : aa6125.D
Acq On : 3 Apr 2024 4:31 pm
Operator : jjw
Sample : 2037
Misc : 2889, 3787, 2900, 3279, 3041A, 3012, 2893
ALS Vial : 9 Sample Multiplier: 1

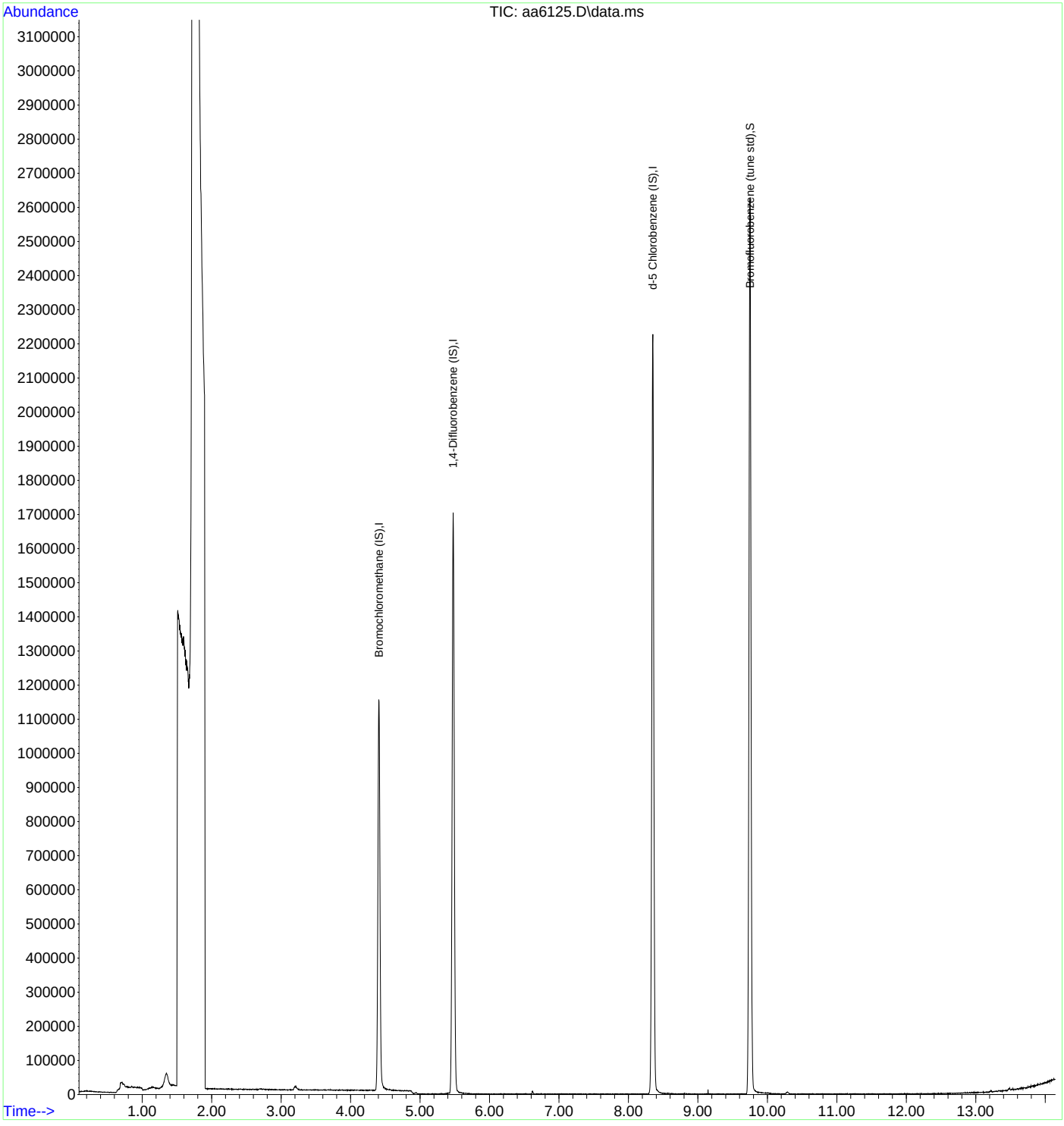
Quant Time: May 21 15:24:14 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.409	130	388137	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.476	114	1459789	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.351	117	1350451	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.749	95	1168976	9.65	ppbV	0.000
Target Compounds						Qvalue

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

Data Path : C:\DATA\2024\04-2024\04-03-2024\
Data File : aa6125.D
Acq On : 3 Apr 2024 4:31 pm
Operator : jjw
Sample : 2037
Misc : 2889, 3787, 2900, 3279, 3041A, 3012, 2893
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 21 15:24:14 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration



LAST PAGE OF DOCUMENT

Integrated Analytical Laboratories LLC

ANALYTICAL DATA REPORT

JS Held - Hoboken
5 Marine View Plaza
Suite 401
Hoboken, NJ 07030

Project Name: **48-55 36TH ST**
IAL Case Number: **E24-01488**

These data have been reviewed and accepted by:

Michael H. Leffin, Ph.D.
Laboratory Director

This report shall not be reproduced, except in its entirety, without the written consent of Integrated Analytical Laboratories, LLC. The test results included in this report relate only to the samples analyzed. The results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252

IAL is a NELAP accredited lab (TNI01284) and maintains certification in Connecticut (PH-0699), New Jersey (14751), New York (11402) and Pennsylvania (68-00773).

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Sample Summary

IAL Case No.
E24-01488

Client JS Held - Hoboken

Project 48-55 36TH ST

Received On 4/29/2024@11:27

Lab ID	*Client Sample ID*	*Depth Top/Bottom*	*Sampling Time*	*Matrix*	*# of Container*
01488-001	SB-1	n/a	4/29/2024	Soil	4
01488-002	SB-2	n/a	4/29/2024	Soil	4
01488-003	SB-3	n/a	4/29/2024	Soil	4

Integrated Analytical Labs ~ 273 Franklin Road, Randolph, NJ 07869 ~ (973) 361-4252

DATA QUALIFIERS AND FLAGS

B	Indicates the analyte found in the associated method blank and in the sample due to potential lab contamination.
C	Indicates analyte is a common laboratory contaminant.
D	Indicates analyte was reported from diluted analysis.
E	Identifies a compound concentration that exceeds the upper level of the calibration range of the instrument
J	Indicates an estimated value either when the concentration in the sample is less than the RL or for qualification of TICs
J1	Indicates an estimated value when ICC or CCV did not meet the criteria.
M	Indicates matrix interference
N	Presumptive evidence of a compound from the use of GC/MS library search.
T	Sample analyzed outside of holding time
X	Indicates samples analyzed for total and dissolved metals differ at ≤20% RPD.
Y	Indicates DO depletion in the BOD blank is >0.20ppm
Z	Indicates internal standard failure. Sample results are either biased high or biased low.
$	Value outside NJDEP DKQP Limits
*	Result outside of QC limits

PROJECT NOTES

- All results for soils, solids, and sludges are reported on a dry-weight basis except where noted
- All test results and QC are compliant with TNI or other applicable state agency requirements/guidance unless otherwise notated in the case narrative and/or project information page.
- The case narrative for this SDG should be consulted to determine any non-conformances.
- Any samples with 15-minute or "analyze immediately" holding times (e.g. pH, Dissolved Oxygen, Sulfite, etc.) which are analyzed in the laboratory are considered out of holding time.
- IAL is a NELAP/TNI certified laboratory (TNI ID# TNI01284). IAL retains certification in Connecticut (PH-0699), New Jersey (14751), New York (11402), and Pennsylvania (68-00773).
- Certification is not required to perform analyses in the following states: AL, CO, DE, GA, HI, ID, IN, KY, MD, MI, MS, MO, MT, NE, NM, SD and TN. IAL can perform all analyses, except Drinking Water, within its scope of capabilities in these states.

ACRONYMS AND ABBREVIATIONS

CFU	Colony Forming Unit	**ND**	Indicates analyte was analyzed for but not detected at MDL or RL (only if MDL is not used)
CCB	Continuing Calibration Blank		
CCV	Continuing Calibration Verification	**NTU**	Nephelometric Turbidity Units
DF	Dilution Factor	**ppb**	Parts per billion. Reported as µg/L or µg/kg
DL	Attached as a suffix to a diluted sample	**ppm**	Parts per million. Reported as mg/L, µg/mL or mg/kg
DUP	Duplicate	**QC**	Quality Control
ICB	Initial Calibration Blank	**% Rec**	Percent Recovery
ICC	Initial Calibration Curve	**RL**	Reporting Limit. The RL is typically determined by the concentration of the lowest standard in the calibration curve
ICV	Initial Calibration Verification		
kg	kilogram		
L	Liter	**RPD**	Relative Percent Difference
LCS	Laboratory Control Sample	**RSD**	Relative Standard Deviation
LCSD	Laboratory Control Sample Duplicate	**RT**	Retention Time
MDL	Method Detection Limit as determined according to 40 CFR Part 136 Appendix B	**SU**	Standard Units
		TIC	Tentatively Identified Compound AKA Library Search Compounds
MF	Membrane Filter		
mg	milligram (1000mg = 1g)	**TNI**	The NELAC (National Environmental Laboratory Accreditation Council) Institute
µg	microgram (1000µg = 1mg)		
ml	milliliter (1000ml = 1L)	**TNTC**	Too numerous to count
µl	microliter (1000µl = 1ml)	*	When attached to a compound name, indicates this analyte was analyzed by Method SW-846 8270 SIM
µmhos	Conductivity units - resistance expressed in ohms		
MPN	Most Probable Number	^	When attached to a compound name, indicates this analyte was analyzed by Method SW-846 8011 or EPA 504.1
MS	Matrix Spike		
MSD	Matrix Spike Duplicate		
NA	Not applicable	<	Less than; In conjunction with a numerical value, indicates a concentration less than the RL or MDL
NC	Not calculated		

SAMPLE DELIVERY GROUP CASE NARRATIVE
(Conformance / Non-Conformance Summary)

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E24-01488

Integrated Analytical Laboratories, LLC. received three (3) samples** from JS Held - Hoboken (IAL SDG# **E24-01488**, Project: 48-55 36TH ST) on April 29, 2024 for the analysis of :

(3) TCL VO + 15

**Number of samples listed above may be greater than what is listed on the chain of custody. Any samples that require in-house filtration or splitting will be counted as separate samples.

Samples were received in good condition with documentation in order.
Cooler temperature was acceptable at 4 ± 2 degree C.

Volatiles By SW 8260D	**Batch: L240502-01**	**Matrix: Soil**

QC

- Calibration curve met QC criteria.
- Internal standards recovery met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- LCS percent recovery met QC criteria.
- MS/MSD RPD met QC criteria.
- MS/MSD percent recovery met QC criteria. NJDEP DKQP criteria not met.

E24-01488

- All samples were received within holding time.
- All samples were analyzed within holding time.
- #001 was flagged with a C qualifier, indicating laboratory contamination for Methylene chloride. Methylene chloride is used as a solvent in the laboratory, resulting in occasional laboratory contamination.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E24-01488-001	1	NA

A review of the QA/QC measures for the analysis of the sample(s) contained in this report has been performed by:

Reviewed by

5/20/2024
Date

RESULTS SUMMARY REPORT

SUMMARY REPORT
Client: JS Held - Hoboken
Project: 48-55 36TH ST
Lab Case No.: E24-01488

	Lab ID:	01488-001			01488-002			01488-003		
	Client ID:	SB-1			SB-2			SB-3		
	Matrix:	Soil			Soil			Soil		
	Sampled Date	4/29/24			4/29/24			4/29/24		
PARAMETER(Units)		Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Volatiles (Units)		*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Methylene chloride		0.00321	CJ	0.00306	0.00484	C	0.00306	0.00358	C	0.00297
Tetrachloroethene		0.00179		0.000322	ND		0.000322	0.000508	J	0.000313
TOTAL VO's:		0.005	CJ		0.00484	C		0.00409	CJ	
TOTAL TIC's:		ND			ND			ND		
TOTAL VO's & TIC's:		0.005	CJ		0.00484	C		0.00409	CJ	

ND = Analyzed for but Not Detected at the MDL
C = Common Laboratory and/or Bottle Contaminant.
All qualifiers on individual Volatiles & Semivolatiles are carried down through summation.
J = Indicates an estimated value either when the concentration in the sample is greater than MDL and less than RL, or for qualification of TICs

ANALYTICAL RESULTS

VOLATILE ORGANICS

Lab ID: E24-01488-001
Client ID: SB-1
Date Received: 04/29/2024
Date Analyzed: 05/02/2024
Data file: F2596.D 05/02/2024 18:30

GC/MS Column: DB-624
Sample wt/vol: 5.16g
Matrix-Units: Soil-mg/Kg
% Moisture: 5.20
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.00102	0.000529
Chloromethane	ND		0.00102	0.000323
Vinyl chloride	ND		0.00102	0.00033
Bromomethane	ND		0.00102	0.000889
Chloroethane	ND		0.00102	0.000303
Trichlorofluoromethane	ND		0.00102	0.000414
1,1-Dichloroethene	ND		0.00102	0.000357
Acetone	ND		0.010	0.0051
Carbon disulfide	ND		0.00102	0.000401
Methylene chloride	0.00321	CJ	0.0051	0.00306
trans-1,2-Dichloroethene	ND		0.00102	0.000361
Methyl tert-butyl ether (MTBE)	ND		0.00102	0.000222
1,1-Dichloroethane	ND		0.00102	0.00026
cis-1,2-Dichloroethene	ND		0.00102	0.000218
2-Butanone (MEK)	ND		0.00408	0.00204
Bromochloromethane	ND		0.00102	0.000259
Chloroform	ND		0.00102	0.00051
1,1,1-Trichloroethane	ND		0.00102	0.000313
Carbon tetrachloride	ND		0.00102	0.000204
1,2-Dichloroethane (EDC)	ND		0.00102	0.000236
Benzene	ND		0.00102	0.000251
Trichloroethene	ND		0.00102	0.000152
1,2-Dichloropropane	ND		0.00102	0.000242
Bromodichloromethane	ND		0.00102	0.000121
cis-1,3-Dichloropropene	ND		0.00102	0.000156
4-Methyl-2-pentanone (MIBK)	ND		0.00204	0.000533

VOLATILE ORGANICS

Lab ID: E24-01488-001
Client ID: SB-1
Date Received: 04/29/2024
Date Analyzed: 05/02/2024
Data file: F2596.D 05/02/2024 18:30

GC/MS Column: DB-624
Sample wt/vol: 5.16g
Matrix-Units: Soil-mg/Kg
% Moisture: 5.20
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.00102	0.00051
trans-1,3-Dichloropropene	ND		0.00102	0.000324
1,1,2-Trichloroethane	ND		0.00102	0.000218
Tetrachloroethene	0.00179		0.00102	0.000322
2-Hexanone	ND		0.00204	0.00156
Dibromochloromethane	ND		0.00102	0.000169
1,2-Dibromoethane (EDB)	ND		0.00102	0.000189
Chlorobenzene	ND		0.00102	0.000176
Ethylbenzene	ND		0.00102	0.000258
Total Xylenes	ND		0.00204	0.000143
Styrene	ND		0.00102	0.000219
Bromoform	ND		0.00102	0.000317
Isopropylbenzene	ND		0.00102	0.000217
1,1,2,2-Tetrachloroethane	ND		0.00102	0.000242
1,3-Dichlorobenzene	ND		0.00102	0.00027
1,4-Dichlorobenzene	ND		0.00102	0.000316
1,2-Dichlorobenzene	ND		0.00102	0.000256
1,2-Dibromo-3-chloropropane	ND		0.00102	0.00084
1,2,4-Trichlorobenzene	ND		0.00102	0.000428
1,2,3-Trichlorobenzene	ND		0.00102	0.000324
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00102	0.000609
Methyl acetate	ND		0.0051	0.000824
Cyclohexane	ND		0.00102	0.000565
Methylcyclohexane	ND		0.00102	0.000375
1,3-Dichloropropene (cis- and trans-)	ND		0.00102	0.000156
Total Target Compounds (51):	0.005	CJ		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: E24-01488-001
Client ID: SB-1
Date Received: 04/29/2024
Date Analyzed: 05/02/2024
Date File: F2596.D

GC/MS Column: DB-624
Sample wt/vol: 5.16g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 5.20

CAS #	Compound	Estimated Concentration	Q	Retention Time

No peaks detected

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

VOLATILE ORGANICS

Lab ID: E24-01488-002
Client ID: SB-2
Date Received: 04/29/2024
Date Analyzed: 05/02/2024
Data file: F2595.D 05/02/2024 17:56

GC/MS Column: DB-624
Sample wt/vol: 5.12g
Matrix-Units: Soil-mg/Kg
% Moisture: 4
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.00102	0.000529
Chloromethane	ND		0.00102	0.000323
Vinyl chloride	ND		0.00102	0.00033
Bromomethane	ND		0.00102	0.000889
Chloroethane	ND		0.00102	0.000303
Trichlorofluoromethane	ND		0.00102	0.000414
1,1-Dichloroethene	ND		0.00102	0.000357
Acetone	ND		0.010	0.0051
Carbon disulfide	ND		0.00102	0.000401
Methylene chloride	0.00484	C	0.0051	0.00306
trans-1,2-Dichloroethene	ND		0.00102	0.000361
Methyl tert-butyl ether (MTBE)	ND		0.00102	0.000222
1,1-Dichloroethane	ND		0.00102	0.00026
cis-1,2-Dichloroethene	ND		0.00102	0.000218
2-Butanone (MEK)	ND		0.00408	0.00204
Bromochloromethane	ND		0.00102	0.000259
Chloroform	ND		0.00102	0.00051
1,1,1-Trichloroethane	ND		0.00102	0.000313
Carbon tetrachloride	ND		0.00102	0.000204
1,2-Dichloroethane (EDC)	ND		0.00102	0.000236
Benzene	ND		0.00102	0.000251
Trichloroethene	ND		0.00102	0.000152
1,2-Dichloropropane	ND		0.00102	0.000242
Bromodichloromethane	ND		0.00102	0.000121
cis-1,3-Dichloropropene	ND		0.00102	0.000156
4-Methyl-2-pentanone (MIBK)	ND		0.00204	0.000533

VOLATILE ORGANICS

Lab ID: E24-01488-002
Client ID: SB-2
Date Received: 04/29/2024
Date Analyzed: 05/02/2024
Data file: F2595.D 05/02/2024 17:56

GC/MS Column: DB-624
Sample wt/vol: 5.12g
Matrix-Units: Soil-mg/Kg
% Moisture: 4
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.00102	0.00051
trans-1,3-Dichloropropene	ND		0.00102	0.000324
1,1,2-Trichloroethane	ND		0.00102	0.000218
Tetrachloroethene	ND		0.00102	0.000322
2-Hexanone	ND		0.00204	0.00156
Dibromochloromethane	ND		0.00102	0.000169
1,2-Dibromoethane (EDB)	ND		0.00102	0.000189
Chlorobenzene	ND		0.00102	0.000176
Ethylbenzene	ND		0.00102	0.000258
Total Xylenes	ND		0.00204	0.000143
Styrene	ND		0.00102	0.000219
Bromoform	ND		0.00102	0.000317
Isopropylbenzene	ND		0.00102	0.000217
1,1,2,2-Tetrachloroethane	ND		0.00102	0.000242
1,3-Dichlorobenzene	ND		0.00102	0.00027
1,4-Dichlorobenzene	ND		0.00102	0.000316
1,2-Dichlorobenzene	ND		0.00102	0.000256
1,2-Dibromo-3-chloropropane	ND		0.00102	0.00084
1,2,4-Trichlorobenzene	ND		0.00102	0.000428
1,2,3-Trichlorobenzene	ND		0.00102	0.000324
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00102	0.000609
Methyl acetate	ND		0.0051	0.000824
Cyclohexane	ND		0.00102	0.000565
Methylcyclohexane	ND		0.00102	0.000375
1,3-Dichloropropene (cis- and trans-)	ND		0.00102	0.000156
Total Target Compounds (51):	0.00484	J		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: E24-01488-002
Client ID: SB-2
Date Received: 04/29/2024
Date Analyzed: 05/02/2024
Date File: F2595.D

GC/MS Column: DB-624
Sample wt/vol: 5.12g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 4

CAS #	Compound	Estimated Concentration	Q	Retention Time

No peaks detected

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

VOLATILE ORGANICS

Lab ID: E24-01488-003
Client ID: SB-3
Date Received: 04/29/2024
Date Analyzed: 05/02/2024
Data file: F2597.D 05/02/2024 19:05

GC/MS Column: DB-624
Sample wt/vol: 5.25g
Matrix-Units: Soil-mg/Kg
% Moisture: 3.5
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.00099	0.000514
Chloromethane	ND		0.00099	0.000314
Vinyl chloride	ND		0.00099	0.000321
Bromomethane	ND		0.00099	0.000863
Chloroethane	ND		0.00099	0.000294
Trichlorofluoromethane	ND		0.00099	0.000402
1,1-Dichloroethene	ND		0.00099	0.000347
Acetone	ND		0.0099	0.00495
Carbon disulfide	ND		0.00099	0.000389
Methylene chloride	0.00358	C	0.00495	0.00297
trans-1,2-Dichloroethene	ND		0.00099	0.00035
Methyl tert-butyl ether (MTBE)	ND		0.00099	0.000216
1,1-Dichloroethane	ND		0.00099	0.000252
cis-1,2-Dichloroethene	ND		0.00099	0.000212
2-Butanone (MEK)	ND		0.00396	0.00198
Bromochloromethane	ND		0.00099	0.000251
Chloroform	ND		0.00099	0.000495
1,1,1-Trichloroethane	ND		0.00099	0.000304
Carbon tetrachloride	ND		0.00099	0.000198
1,2-Dichloroethane (EDC)	ND		0.00099	0.000229
Benzene	ND		0.00099	0.000244
Trichloroethene	ND		0.00099	0.000148
1,2-Dichloropropane	ND		0.00099	0.000235
Bromodichloromethane	ND		0.00099	0.000118
cis-1,3-Dichloropropene	ND		0.00099	0.000151
4-Methyl-2-pentanone (MIBK)	ND		0.00198	0.000518

VOLATILE ORGANICS

Lab ID: E24-01488-003
Client ID: SB-3
Date Received: 04/29/2024
Date Analyzed: 05/02/2024
Data file: F2597.D 05/02/2024 19:05

GC/MS Column: DB-624
Sample wt/vol: 5.25g
Matrix-Units: Soil-mg/Kg
% Moisture: 3.5
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.00099	0.000495
trans-1,3-Dichloropropene	ND		0.00099	0.000315
1,1,2-Trichloroethane	ND		0.00099	0.000212
Tetrachloroethene	0.000508	J	0.00099	0.000313
2-Hexanone	ND		0.00198	0.00152
Dibromochloromethane	ND		0.00099	0.000164
1,2-Dibromoethane (EDB)	ND		0.00099	0.000183
Chlorobenzene	ND		0.00099	0.000171
Ethylbenzene	ND		0.00099	0.00025
Total Xylenes	ND		0.00198	0.000139
Styrene	ND		0.00099	0.000213
Bromoform	ND		0.00099	0.000308
Isopropylbenzene	ND		0.00099	0.000211
1,1,2,2-Tetrachloroethane	ND		0.00099	0.000235
1,3-Dichlorobenzene	ND		0.00099	0.000262
1,4-Dichlorobenzene	ND		0.00099	0.000307
1,2-Dichlorobenzene	ND		0.00099	0.000248
1,2-Dibromo-3-chloropropane	ND		0.00099	0.000816
1,2,4-Trichlorobenzene	ND		0.00099	0.000416
1,2,3-Trichlorobenzene	ND		0.00099	0.000315
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00099	0.000591
Methyl acetate	ND		0.00495	0.0008
Cyclohexane	ND		0.00099	0.000548
Methylcyclohexane	ND		0.00099	0.000364
1,3-Dichloropropene (cis- and trans-)	ND		0.00099	0.000151
Total Target Compounds (51):	0.00409	J		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: E24-01488-003
Client ID: SB-3
Date Received: 04/29/2024
Date Analyzed: 05/02/2024
Date File: F2597.D

GC/MS Column: DB-624
Sample wt/vol: 5.25g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 3.5

CAS #	Compound	Estimated Concentration	Q	Retention Time
	No peaks detected			

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

VOLATILE ORGANICS

Lab ID: BLKS24502-01
Client ID: BLKS24502-01
Date Received:
Date Analyzed: 05/02/2024
Data file: F2593.D 05/02/2024 16:47

GC/MS Column: DB-624
Sample wt/vol: 5.00g
Matrix-Units: Soil-mg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.001	0.000519
Chloromethane	ND		0.001	0.000317
Vinyl chloride	ND		0.001	0.000324
Bromomethane	ND		0.001	0.000872
Chloroethane	ND		0.001	0.000297
Trichlorofluoromethane	ND		0.001	0.000406
1,1-Dichloroethene	ND		0.001	0.00035
Acetone	ND		0.010	0.005
Carbon disulfide	ND		0.001	0.000393
Methylene chloride	ND		0.005	0.003
trans-1,2-Dichloroethene	ND		0.001	0.000354
Methyl tert-butyl ether (MTBE)	ND		0.001	0.000218
1,1-Dichloroethane	ND		0.001	0.000255
cis-1,2-Dichloroethene	ND		0.001	0.000214
2-Butanone (MEK)	ND		0.004	0.002
Bromochloromethane	ND		0.001	0.000254
Chloroform	ND		0.001	0.0005
1,1,1-Trichloroethane	ND		0.001	0.000307
Carbon tetrachloride	ND		0.001	0.0002
1,2-Dichloroethane (EDC)	ND		0.001	0.000231
Benzene	ND		0.001	0.000246
Trichloroethene	ND		0.001	0.000149
1,2-Dichloropropane	ND		0.001	0.000237
Bromodichloromethane	ND		0.001	0.000119
cis-1,3-Dichloropropene	ND		0.001	0.000153
4-Methyl-2-pentanone (MIBK)	ND		0.002	0.000523

VOLATILE ORGANICS

Lab ID: BLKS24502-01
Client ID: BLKS24502-01
Date Received:
Date Analyzed: 05/02/2024
Data file: F2593.D 05/02/2024 16:47

GC/MS Column: DB-624
Sample wt/vol: 5.00g
Matrix-Units: Soil-mg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.001	0.0005
trans-1,3-Dichloropropene	ND		0.001	0.000318
1,1,2-Trichloroethane	ND		0.001	0.000214
Tetrachloroethene	ND		0.001	0.000316
2-Hexanone	ND		0.002	0.00153
Dibromochloromethane	ND		0.001	0.000166
1,2-Dibromoethane (EDB)	ND		0.001	0.000185
Chlorobenzene	ND		0.001	0.000173
Ethylbenzene	ND		0.001	0.000253
Total Xylenes	ND		0.002	0.00014
Styrene	ND		0.001	0.000215
Bromoform	ND		0.001	0.000311
Isopropylbenzene	ND		0.001	0.000213
1,1,2,2-Tetrachloroethane	ND		0.001	0.000237
1,3-Dichlorobenzene	ND		0.001	0.000265
1,4-Dichlorobenzene	ND		0.001	0.00031
1,2-Dichlorobenzene	ND		0.001	0.000251
1,2-Dibromo-3-chloropropane	ND		0.001	0.000824
1,2,4-Trichlorobenzene	ND		0.001	0.00042
1,2,3-Trichlorobenzene	ND		0.001	0.000318
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.001	0.000597
Methyl acetate	ND		0.005	0.000808
Cyclohexane	ND		0.001	0.000554
Methylcyclohexane	ND		0.001	0.000368
1,3-Dichloropropene (cis- and trans-)	ND		0.001	0.000153

Total Target Compounds (51): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: BLKS24502-01
Client ID: BLKS24502-01
Date Received:
Date Analyzed: 05/02/2024
Data file: F2593.D 05/02/2024 16:47

GC/MS Column: DB-624
Sample wt/vol: 5.00g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

CAS #	Compound	Estimated Concentration	Q	Retention Time

No peaks detected

Total TICs = 0

SAMPLE TRACKING

FINALIZED 05/20/2024

IAL Integrated Analytical Laboratories LLC
Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Chain of Custody Record

Contact Us: 973-361-4252
Web: www.ialonline.com

Customer Information	Reporting Information
Company: J.S. Held LLC	☒ Check here if same as "Customer Information"
Address: 5 Marine View Plaza Suite 401 Hoboken NJ	REPORT TO:
Telephone #: 201-876-9400	Address:
Project Manager: Lean DeEgidio	Attn:
Email Address(es): ldegidio@jsheld.com	INVOICE TO:
Project Name: 48-55 36th St	Address:
Project Location (State): NY	Attn:
Bottle Order #:	PO #
☒ "Report to"/"Invoice To" same as above	Quote #
Sampled by: Jake Twill	

COMPLETED BY IAL:

_____ Field Sampling _____ Equipment Rental

Sample Matrix

DW - Drinking Water; WW - Waste Water; GW - Groundwater; SW - Surface Water; LIQ - Liquid (specify); M - Multiphasic; OI - Oil; S - Soil; SED - Sediment; SOL - Solid (specify); SL - Sludge; W - Wipe

****Rush TAT Charge**

24 hr - 100%...
48 hr - 75%....
72 hr - 50%....
96 hr - 35%....
5 day - 25%....
6-9 day - 10%

Deliverables *Surcharge may apply for regulatory

NJ, CT, PA	NY
☐ Results Only (Level I)	☒ ASP Category A
☐ Reduced (Level II/III)	☐ ASP Category B*
☐ Regulatory/ Full* (Level IV)	

EDDs

☐ NJ SRP
☐ NYSDEC EQuIS
☐ lab approved custom EDD
☐ NO EDD REQ'D

Concentrations Expected: Low / Med / High

Known Hazard: ☐ YES ☒ NO

Describe:

Turn-Around Time (TAT)

Standard (10 business days) Verbal

Rush/date needed (only if pre-approved)** Standard 72 hour TAT

Hard Copy: Standard 3 week Other - call for price

Petroleum Hydrocarbons - Selection is REQUIRED

☐ NJ EPH-DRO - Category 1
☐ NJ EPH-C40 - Category 2
☐ NJ EPH-Fractionated - Cat 2
☐ CT ETPH
☐ DRO-8015

TAT for PHC, if other than 2 weeks:

Regulatory Requirement

New Jersey	New York
☐ GWQS	☐ AWQS (TOGS Table 1)
☐ IGW	☐ GWEL (TOGS Table 5)
☐ SRS	☒ Part 375-6.8(a) - Unrestricted
☐ Ecological	☒ Part 375-6.8(b) - Restricted
☐ DW	☒ CP-51 Table 2 or 3 (selection required)
☐ SPLP	

Other States / Criteria

☐ Pennsylvania Act 2
☐ CT RCSA 22a-133k1-k3
☐ TSCA PCBs

OTHER Regulatory Requirements - specify in comments

SAMPLE INFORMATION

ANALYTICAL PARAMETERS (please note if contingent)

VOA + 5IA

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# containers	IAL #	Sample Specific Notes:
SB-1				S	4	1	X
SB-2				↓	4	2	H
SB-3				↓	4	3	H

Samples previously analyzed by IAL? YES / NO

Preservative Code: 1 = None; 2 = HCl; 3 = HNO3; 4 = MeOH; 5 = NaOH; 6 = H2SO4; 7 = Other

Container Code: A = Amber Glass; B = Plastic; C = Vial; D = Glass; E = EnCore; T = Terracore

Preservative (use code)

Container Type (use code)

Special Instructions/QC Requirements & Comments:

H = hold X = analyze

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time (TAT) will not start until any ambiguities have been resolved. TAT starts the following day if samples rec'd at lab ≥ 5PM. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY IAL'S TERMS & CONDITIONS (found on rear of pink copy).

IAL Rev 11/2019

Carrier (check one):

☐ IAL Courier
☐ Client Courier
☐ FedEx/UPS***

***Tracking #:

Relinquished by (Signature and Company)	Date	Time	Received by (Signature and Company)	Date	Time
JSH J. Twill	4/29/24	10:30A		4/29/24	10:30
	4/29/24	1127		4/29/24	1127

FOR LAB USE ONLY

SDG #: 01488

Cooler Temp: 5 °C

PAGE: 1 of 1

LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

Certification IDs: TNI (TNI01284); CT (PH-0699); NJ (14751); NY (11402); PA (68-00773).

INTEGRATED ANALYTICAL LABORATORIES, LLC

May 20, 2024 @ 11:59

PROJECT INFORMATION

RUSH

E24-01488: 48-55 36TH ST

To: Leah DeEgidio
JS Held - Hoboken
Fax: 201-626-8095
EMail: Ldeegidio@jsheld.com

Report To

JS Held - Hoboken
5 Marine View Plaza
Suite 401
Hoboken, NJ 07030
Attn: Leah DeEgidio

Bill To

JS Held - Hoboken
J.S. Held
50 Jericho Quadrangle, Suite 117
Jericho, NY 11753
Attn: Accounts Payable

Report Format	P.O. #	Received At Lab	PHC Due	Verbal Due	Hardcopy Due
Category A	NA	Apr 29, 2024 @ 11:27	NA	May 20, 2024	May 27, 2024 *

* Any ***Conditional or Hold*** status will delay final hardcopy report sent date.

Diskette Req. Not Required

Criteria Requirement: NY Part 375-6.8(UUSCO+RUSCO)

Lab ID	Client Sample ID	Depth	Sampling Time	Matrix	Unit	Field pH/Temp
01488-001	SB-1	NA	04/29/24	Soil	mg/Kg (ppm)	
01488-002	SB-2	NA	04/29/24	Soil	mg/Kg (ppm)	
01488-003	SB-3	NA	04/29/24	Soil	mg/Kg (ppm)	

* No Cert = IAL does not hold certification for this test/method

Sample #	Test	Status	Analytical Method	TAT	Holding Time Expires
001	TCL VO + 15	Analyze	8260D	RUSH 72 HRS	5/13/2024
002	TCL VO + 15	Analyze	8260D	6 Business Days	5/13/2024
003	TCL VO + 15	Analyze	8260D	6 Business Days	5/13/2024

Project Notes:

REV 1 taken by kfalconer on 05/10/2024 02:17

REV 1 - DUE 5/20/24

PER LEAH DeEGIDIO, PLEASE ACTIVATE SAMPLES 002 & 003 FOR TCL VO+15

ORIGINAL DATA SENT 5/3/24

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
www.ialonline.com

IAL is a NELAP accredited lab (TNI01284) and maintains certification in Connecticut (PH-0699), New Jersey (14751), New York (11402), and Pennsylvania (68-00773).

SAMPLE RECEIPT VERIFICATION

CASE NO: **E 24** **01488** CLIENT: JS Held

COOLER TEMPERATURE: 2° - 6°C: ✓ (See Chain of Custody)

COC: (COMPLETE) / INCOMPLETE

Comments

KEY

✓ = YES/NA

✗ = NO

VOA received: ☐ Encore ☐ IGW - Methanol

(check one) ☒ Terra Core ☐ No Preservative

✓	Bottles Intact	
✓	no-Missing Bottles	
✓	no-Extra Bottles	
✓	Sufficient Sample Volume	
✓	no-headspace/bubbles in VOs	
✓	Labels intact/correct	
✗	pH Check[1] (refer to Receipt pH Log)	
✓	Correct bottles/preservative	
✓	Sufficient Holding/Prep Time[1]	
☐	Multiphasic Sample	
☐	Sample to be Subcontracted	
✓	**Chain of Custody is Clear**	

[1] All samples with "Analyze Immediately" holding times will be analyzed by this laboratory past the holding time. This includes but is not limited to the following tests: pH, Temperature, Free Residual Chlorine, Total Residual Chlorine, Dissolved Oxygen, Sulfite.

ADDITIONAL COMMENTS:

SAMPLE(S) VERIFIED BY: INITIAL CR DATE 4/29/24

CORRECTIVE ACTION REQUIRED: **YES** ☐ (SEE BELOW) **NO** ☒

If COC is **NOT** clear, ***STOP*** until you get client to authorize/clarify work.

CLIENT NOTIFIED: YES ☐ Date/ Time: _____ NO ☐

PROJECT CONTACT:

SUBCONTRACTED LAB:

DATE SHIPPED:

ADDITIONAL COMMENTS:

VERIFIED/TAKEN BY: INITIAL KJ DATE 4/29/24

Rev 2 2/11/2021

Laboratory Custody Chronicle

IAL Case No.
E24-01488

Client JS Held - Hoboken

Project 48-55 36TH ST

Received On 4/29/2024@11:27

Department: Volatiles			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
TCL VO + 15	01488-001	Soil	n/a	n/a	5/ 2/24	Mei
"	-002	"	n/a	n/a	5/13/24	Mei
"	-003	"	n/a	n/a	5/13/24	Mei

NOTE: All soil, sediment, sludge, and solid samples are reported on a dry-weight basis.

Integrated Analytical Labs ~ 273 Franklin Road, Randolph, NJ 07869 ~ (973) 361-4252

LAST PAGE OF DOCUMENT

Integrated Analytical Laboratories LLC

ANALYTICAL DATA REPORT

JS Held - Hoboken
5 Marine View Plaza
Suite 401
Hoboken, NJ 07030

Project Name: **48-55 36TH ST.**
IAL Case Number: **E24-01866**

These data have been reviewed and accepted by:

Michael H. Leffin, Ph.D.
Laboratory Director

This report shall not be reproduced, except in its entirety, without the written consent of Integrated Analytical Laboratories, LLC. The test results included in this report relate only to the samples analyzed. The results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252

IAL is a NELAP accredited lab (TNI01284) and maintains certification in Connecticut (PH-0699), New Jersey (14751), New York (11402) and Pennsylvania (68-00773).

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Sample Summary

IAL Case No.

E24-01866

Client JS Held - Hoboken

Project 48-55 36TH ST.

Received On 5/30/2024@17:11

Lab ID	*Client Sample ID*	*Depth Top/Bottom*	*Sampling Time*	*Matrix*	*# of Container*
01866-001	SB-4A	4.5/5	5/29/2024@11:12	Soil	4
01866-002	SB-4B	15/15.5	5/29/2024@11:13	Soil	4
01866-003	SB-5A	2.5/3	5/29/2024@13:15	Soil	4
01866-004	SB-5B	13.5/14	5/29/2024@13:15	Soil	4
01866-005	SB-6A	4/4.5	5/29/2024@14:15	Soil	4
01866-006	SB-6B	15.5/16	5/29/2024@14:15	Soil	4
01866-007	SB-7A	6.5/7	5/29/2024@15:45	Soil	4
01866-008	SB-7B	15.5/16	5/29/2024@15:45	Soil	4
01866-009	SB-8A	6.5/7	5/29/2024@12:00	Soil	4
01866-010	SB-8B	15.5/16	5/29/2024@12:00	Soil	4

Integrated Analytical Labs ~ 273 Franklin Road, Randolph, NJ 07869 ~ (973) 361-4252

DATA QUALIFIERS AND FLAGS

B	Indicates the analyte found in the associated method blank and in the sample due to potential lab contamination.
C	Indicates analyte is a common laboratory contaminant.
D	Indicates analyte was reported from diluted analysis.
E	Identifies a compound concentration that exceeds the upper level of the calibration range of the instrument
J	Indicates an estimated value either when the concentration in the sample is less than the RL or for qualification of TICs
J1	Indicates an estimated value when ICC or CCV did not meet the criteria.
M	Indicates matrix interference
N	Presumptive evidence of a compound from the use of GC/MS library search.
T	Sample analyzed outside of holding time
X	Indicates samples analyzed for total and dissolved metals differ at ≤20% RPD.
Y	Indicates DO depletion in the BOD blank is >0.20ppm
Z	Indicates internal standard failure. Sample results are either biased high or biased low.
$	Value outside NJDEP DKQP Limits
*	Result outside of QC limits

PROJECT NOTES

- All results for soils, solids, and sludges are reported on a dry-weight basis except where noted
- All test results and QC are compliant with TNI or other applicable state agency requirements/guidance unless otherwise notated in the case narrative and/or project information page.
- The case narrative for this SDG should be consulted to determine any non-conformances.
- Any samples with 15-minute or "analyze immediately" holding times (e.g. pH, Dissolved Oxygen, Sulfite, etc.) which are analyzed in the laboratory are considered out of holding time.
- IAL is a NELAP/TNI certified laboratory (TNI ID# TNI01284). IAL retains certification in Connecticut (PH-0699), New Jersey (14751), New York (11402), and Pennsylvania (68-00773).
- Certification is not required to perform analyses in the following states: AL, CO, DE, GA, HI, ID, IN, KY, MD, MI, MS, MO, MT, NE, NM, SD and TN. IAL can perform all analyses, except Drinking Water, within its scope of capabilities in these states.

ACRONYMS AND ABBREVIATIONS

CFU	Colony Forming Unit	**ND**	Indicates analyte was analyzed for but not detected at MDL or RL (only if MDL is not used)
CCB	Continuing Calibration Blank		
CCV	Continuing Calibration Verification	**NTU**	Nephelometric Turbidity Units
DF	Dilution Factor	**ppb**	Parts per billion. Reported as µg/L or µg/kg
DL	Attached as a suffix to a diluted sample	**ppm**	Parts per million. Reported as mg/L, µg/mL or mg/kg
DUP	Duplicate	**QC**	Quality Control
ICB	Initial Calibration Blank	**% Rec**	Percent Recovery
ICC	Initial Calibration Curve	**RL**	Reporting Limit. The RL is typically determined by the concentration of the lowest standard in the calibration curve
ICV	Initial Calibration Verification		
kg	kilogram		
L	Liter	**RPD**	Relative Percent Difference
LCS	Laboratory Control Sample	**RSD**	Relative Standard Deviation
LCSD	Laboratory Control Sample Duplicate	**RT**	Retention Time
MDL	Method Detection Limit as determined according to 40 CFR Part 136 Appendix B	**SU**	Standard Units
		TIC	Tentatively Identified Compound AKA Library Search Compounds
MF	Membrane Filter		
mg	milligram (1000mg = 1g)	**TNI**	The NELAC (National Environmental Laboratory Accreditation Council) Institute
µg	microgram (1000µg = 1mg)		
ml	milliliter (1000ml = 1L)	**TNTC**	Too numerous to count
µl	microliter (1000µl = 1ml)	*	When attached to a compound name, indicates this analyte was analyzed by Method SW-846 8270 SIM
µmhos	Conductivity units - resistance expressed in ohms		
MPN	Most Probable Number	^	When attached to a compound name, indicates this analyte was analyzed by Method SW-846 8011 or EPA 504.1
MS	Matrix Spike		
MSD	Matrix Spike Duplicate		
NA	Not applicable	<	Less than; In conjunction with a numerical value, indicates a concentration less than the RL or MDL
NC	Not calculated		

SAMPLE DELIVERY GROUP CASE NARRATIVE
(Conformance / Non-Conformance Summary)

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E24-01866

Integrated Analytical Laboratories, LLC. received ten (10) samples** from JS Held - Hoboken (IAL SDG# **E24-01866**, Project: 48-55 36TH ST.) on May 30, 2024 for the analysis of :

(10) TCL VO + 15

**Number of samples listed above may be greater than what is listed on the chain of custody. Any samples that require in-house filtration or splitting will be counted as separate samples.

Samples were received in good condition with documentation in order.
Cooler temperature was acceptable at 4 ± 2 degree C.

Volatiles By SW 8260D	**Batch: F240604-01**	**Matrix: MEOH**

QC

- Calibration curve met QC criteria.
- Internal standards recovery met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- LCS percent recovery did not meet QC criteria. Dichlorodifluoromethane failed high, but no positive hits were found in the associated samples. NJDEP DKQP criteria not met.
- MS/MSD RPD did not meet QC criteria due to matrix interference. NJDEP DKQP criteria not met.
- MS/MSD percent recovery did not meet QC criteria due to matrix interference. NJDEP DKQP criteria not met.

E24-01866

- All samples were received within holding time.
- All samples were analyzed within holding time.
- Samples listed below were run using methanol preserved sample, as applicable. This sample preservation technique elevates RLs and MDLs 100x versus water preservation. If subsequent dilutions are performed, the RLs and MDLs will increase by that factor (e.g. a methanol sample run at a 5x dilution would elevate RLs and MDLs by 500x). Initial runs using methanol are considered "straight" runs and have a dilution factor of 1.

Dilution Summary:

Sample ID	DF(s)	Dilution For	MeOH Run For
E24-01866-003	1	NA	High Target Compounds.
E24-01866-007	1	NA	High Target Compounds.

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E24-01866

Volatiles By SW 8260D	Batch: L240603-01	Matrix: Soil

QC

- Calibration curve met QC criteria.
- Internal standards recovery met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- LCS percent recovery met QC criteria. NJDEP DKQP criteria not met.
- MS/MSD RPD did not meet QC criteria due to the differences of Terra cores analyzed. NJDEP DKQP criteria not met.
- MS/MSD percent recovery met QC criteria. NJDEP DKQP criteria not met.

E24-01866

- All samples were received within holding time.
- All samples were analyzed within holding time.
- #001,004,005,006,008,009 were flagged with a C qualifier, indicating laboratory contamination for Methylene chloride. Methylene chloride is used as a solvent in the laboratory, resulting in occasional laboratory contamination.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E24-01866-001	1	NA
E24-01866-002	1	NA
E24-01866-004	1	NA
E24-01866-005	1	NA
E24-01866-006	1	NA
E24-01866-008	1	NA
E24-01866-009	1	NA
E24-01866-010	1	NA

A review of the QA/QC measures for the analysis of the sample(s) contained in this report has been performed by:

Heather Dale
Reviewed by

6/5/2024
Date

RESULTS SUMMARY REPORT

SUMMARY REPORT
Client: JS Held - Hoboken
Project: 48-55 36TH ST.
Lab Case No.: E24-01866

Lab ID:	01866-001			01866-002			01866-003			01866-004		
Client ID:	SB-4A			SB-4B			SB-5A			SB-5B		
Depth:	4.5/5			15/15.5			2.5/3			13.5/14		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date	5/29/24			5/29/24			5/29/24			5/29/24		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Volatiles (Units)	(mg/Kg)			(mg/Kg)			(mg/Kg)			(mg/Kg)		
Acetone	0.037		0.0043	ND		0.0055	ND		0.100	0.227		0.00545
Carbon disulfide	ND		0.000338	ND		0.000432	ND		0.053	0.000736	J	0.000428
Methylene chloride	0.00427	CJ	0.00258	ND		0.0033	ND		0.085	0.00614	C	0.00327
cis-1,2-Dichloroethene	ND		0.000184	ND		0.000235	0.163		0.042	0.010		0.000233
2-Butanone (MEK)	ND		0.00172	ND		0.0022	ND		0.156	0.025		0.00218
Trichloroethene	ND		0.000128	ND		0.000164	0.128		0.051	0.00578		0.000162
Toluene	ND		0.00043	ND		0.00055	0.102		0.042	0.00242		0.000545
Tetrachloroethene	0.000292	J	0.000272	0.000482	J	0.000348	1.30		0.065	0.059		0.000344
Total Xylenes	ND		0.00012	ND		0.000154	ND		0.049	0.000666	J	0.000153
Methyl acetate	ND		0.000695	ND		0.000889	0.866		0.051	ND		0.000881
TOTAL VO's:	0.042	CJ		0.000482	J		2.56			0.337	JC	
TOTAL TIC's:	ND			ND			ND			0.00774	JN	
TOTAL VO's & TIC's:	0.042	CJ		0.000482	J		2.56			0.345	JCN	

Lab ID:	01866-005			01866-006			01866-007			01866-008		
Client ID:	SB-6A			SB-6B			SB-7A			SB-7B		
Depth:	4/4.5			15.5/16			6.5/7			15.5/16		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date	5/29/24			5/29/24			5/29/24			5/29/24		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Volatiles (Units)	(mg/Kg)			(mg/Kg)			(mg/Kg)			(mg/Kg)		
Acetone	0.292		0.0053	0.079		0.00775	ND		0.063	0.010		0.00505
Methylene chloride	0.0073	C	0.00318	0.00955	C	0.00465	ND		0.054	0.00437	CJ	0.00303
cis-1,2-Dichloroethene	0.00233		0.000227	ND		0.000332	ND		0.027	0.0004	J	0.000216
2-Butanone (MEK)	0.00907	J	0.00212	ND		0.0031	ND		0.098	ND		0.00202
Trichloroethene	0.00158		0.000158	ND		0.000231	0.124		0.032	0.000478	J	0.00015
4-Methyl-2-pentanone (MIBK)	0.00229		0.000554	ND		0.000811	ND		0.055	ND		0.000528
Toluene	0.00865		0.00053	ND		0.000775	ND		0.026	ND		0.000505
Tetrachloroethene	0.011		0.000335	ND		0.00049	9.13		0.041	0.00219		0.000319
Ethylbenzene	0.00129		0.000268	ND		0.000392	ND		0.035	ND		0.000256
Total Xylenes	0.011		0.000148	ND		0.000217	ND		0.031	ND		0.000141
Methyl acetate	ND		0.000856	ND		0.00125	0.201		0.032	ND		0.000816
TOTAL VO's:	0.347	CJ		0.089	C		9.46			0.018	CJ	
TOTAL TIC's:	0.00859	J		ND			37.5	JN		ND		
TOTAL VO's & TIC's:	0.356	CJ		0.089	C		47.0	JN		0.018	CJ	

ND = Analyzed for but Not Detected at the MDL
C = Common Laboratory and/or Bottle Contaminant.
N = Presumptive evidence of a compound from the use of GC/MS library search.
All qualifiers on individual Volatiles & Semivolatiles are carried down through summation.
J = Indicates an estimated value either when the concentration in the sample is greater than MDL and less than RL, or for qualification of TICs

SUMMARY REPORT
Client: JS Held - Hoboken
Project: 48-55 36TH ST.
Lab Case No.: E24-01866

Lab ID:	**01866-009**			**01866-010**		
Client ID:	**SB-8A**			**SB-8B**		
Depth:	**6.5/7**			**15.5/16**		
Matrix:	**Soil**			**Soil**		
Sampled Date	**5/29/24**			**5/29/24**		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL
Volatiles (Units)	*(mg/Kg)*			*(mg/Kg)*		
Methylene chloride	0.00593	CJ	0.00384	ND		0.0027
cis-1,2-Dichloroethene	0.000447	J	0.000274	ND		0.000193
Trichloroethene	0.000421	J	0.000191	0.000219	J	0.000134
Tetrachloroethene	0.00159		0.000404	0.000851	J	0.000284
TOTAL VO's:	0.00839	CJ		0.00107	J	
TOTAL TIC's:	ND			ND		
TOTAL VO's & TIC's:	0.00839	CJ		0.00107	J	

ND = Analyzed for but Not Detected at the MDL
C = Common Laboratory and/or Bottle Contaminant.
All qualifiers on individual Volatiles & Semivolatiles are carried down through summation.
J = Indicates an estimated value either when the concentration in the sample is greater than MDL and less than RL, or for qualification of TICs

ANALYTICAL RESULTS

VOLATILE ORGANICS

Lab ID: E24-01866-001
Client ID: SB-4A/4.5-5
Date Received: 05/30/2024
Date Analyzed: 06/03/2024
Data file: L9735.D 06/03/2024 13:37

GC/MS Column: DB-624
Sample wt/vol: 6.32g
Matrix-Units: Soil-mg/Kg
% Moisture: 7.80
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.00086	0.000446
Chloromethane	ND		0.00086	0.000273
Vinyl chloride	ND		0.00086	0.000279
Bromomethane	ND		0.00086	0.00075
Chloroethane	ND		0.00086	0.000255
Trichlorofluoromethane	ND		0.00086	0.000349
1,1-Dichloroethene	ND		0.00086	0.000301
Acetone	0.037		0.0086	0.0043
Carbon disulfide	ND		0.00086	0.000338
Methylene chloride	0.00427	CJ	0.0043	0.00258
trans-1,2-Dichloroethene	ND		0.00086	0.000304
Methyl tert-butyl ether (MTBE)	ND		0.00086	0.000187
1,1-Dichloroethane	ND		0.00086	0.000219
cis-1,2-Dichloroethene	ND		0.00086	0.000184
2-Butanone (MEK)	ND		0.0086	0.00172
Bromochloromethane	ND		0.00086	0.000218
Chloroform	ND		0.00086	0.00043
1,1,1-Trichloroethane	ND		0.00086	0.000264
Carbon tetrachloride	ND		0.00086	0.000172
1,2-Dichloroethane (EDC)	ND		0.00086	0.000199
Benzene	ND		0.00086	0.000212
Trichloroethene	ND		0.00086	0.000128
1,2-Dichloropropane	ND		0.00086	0.000204
Bromodichloromethane	ND		0.00086	0.000102
cis-1,3-Dichloropropene	ND		0.00086	0.000132
4-Methyl-2-pentanone (MIBK)	ND		0.00172	0.00045

VOLATILE ORGANICS

Lab ID: E24-01866-001
Client ID: SB-4A/4.5-5
Date Received: 05/30/2024
Date Analyzed: 06/03/2024
Data file: L9735.D 06/03/2024 13:37

GC/MS Column: DB-624
Sample wt/vol: 6.32g
Matrix-Units: Soil-mg/Kg
% Moisture: 7.80
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.00086	0.00043
trans-1,3-Dichloropropene	ND		0.00086	0.000273
1,1,2-Trichloroethane	ND		0.00086	0.000184
Tetrachloroethene	0.000292	J	0.00086	0.000272
2-Hexanone	ND		0.00172	0.00132
Dibromochloromethane	ND		0.00086	0.000143
1,2-Dibromoethane (EDB)	ND		0.00086	0.000159
Chlorobenzene	ND		0.00086	0.000149
Ethylbenzene	ND		0.00086	0.000218
Total Xylenes	ND		0.00172	0.00012
Styrene	ND		0.00086	0.000185
Bromoform	ND		0.00086	0.000267
Isopropylbenzene	ND		0.00086	0.000183
1,1,2,2-Tetrachloroethane	ND		0.00086	0.000204
1,3-Dichlorobenzene	ND		0.00086	0.000228
1,4-Dichlorobenzene	ND		0.00086	0.000267
1,2-Dichlorobenzene	ND		0.00086	0.000216
1,2-Dibromo-3-chloropropane	ND		0.00086	0.000709
1,2,4-Trichlorobenzene	ND		0.00086	0.000361
1,2,3-Trichlorobenzene	ND		0.00086	0.000273
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00086	0.000513
Methyl acetate	ND		0.00172	0.000695
Cyclohexane	ND		0.0043	0.000476
Methylcyclohexane	ND		0.00086	0.000316
1,3-Dichloropropene (cis- and trans-)	ND		0.00086	0.000132
Total Target Compounds (51):	0.042	CJ		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: E24-01866-001
Client ID: SB-4A/4.5-5
Date Received: 05/30/2024
Date Analyzed: 06/03/2024
Date File: L9735.D

GC/MS Column: DB-624
Sample wt/vol: 6.32g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 7.80

CAS #	Compound	Estimated Concentration	Q	Retention Time

No peaks detected

Total TICs = 0

D --- Dilution Performed
J --- Estimated concentration for TICs
N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

VOLATILE ORGANICS

Lab ID: E24-01866-002
Client ID: SB-4B/15-15.
Date Received: 05/30/2024
Date Analyzed: 06/03/2024
Data file: L9736.D 06/03/2024 14:06

GC/MS Column: DB-624
Sample wt/vol: 4.75g
Matrix-Units: Soil-mg/Kg
% Moisture: 4.20
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.0011	0.000571
Chloromethane	ND		0.0011	0.000349
Vinyl chloride	ND		0.0011	0.000356
Bromomethane	ND		0.0011	0.000959
Chloroethane	ND		0.0011	0.000327
Trichlorofluoromethane	ND		0.0011	0.000447
1,1-Dichloroethene	ND		0.0011	0.000385
Acetone	ND		0.011	0.0055
Carbon disulfide	ND		0.0011	0.000432
Methylene chloride	ND		0.0055	0.0033
trans-1,2-Dichloroethene	ND		0.0011	0.000389
Methyl tert-butyl ether (MTBE)	ND		0.0011	0.00024
1,1-Dichloroethane	ND		0.0011	0.000281
cis-1,2-Dichloroethene	ND		0.0011	0.000235
2-Butanone (MEK)	ND		0.011	0.0022
Bromochloromethane	ND		0.0011	0.000279
Chloroform	ND		0.0011	0.00055
1,1,1-Trichloroethane	ND		0.0011	0.000338
Carbon tetrachloride	ND		0.0011	0.00022
1,2-Dichloroethane (EDC)	ND		0.0011	0.000254
Benzene	ND		0.0011	0.000271
Trichloroethene	ND		0.0011	0.000164
1,2-Dichloropropane	ND		0.0011	0.000261
Bromodichloromethane	ND		0.0011	0.000131
cis-1,3-Dichloropropene	ND		0.0011	0.000168
4-Methyl-2-pentanone (MIBK)	ND		0.0022	0.000575

VOLATILE ORGANICS

Lab ID: E24-01866-002
Client ID: SB-4B/15-15.
Date Received: 05/30/2024
Date Analyzed: 06/03/2024
Data file: L9736.D 06/03/2024 14:06

GC/MS Column: DB-624
Sample wt/vol: 4.75g
Matrix-Units: Soil-mg/Kg
% Moisture: 4.20
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.0011	0.00055
trans-1,3-Dichloropropene	ND		0.0011	0.00035
1,1,2-Trichloroethane	ND		0.0011	0.000235
Tetrachloroethene	0.000482	J	0.0011	0.000348
2-Hexanone	ND		0.0022	0.00169
Dibromochloromethane	ND		0.0011	0.000183
1,2-Dibromoethane (EDB)	ND		0.0011	0.000204
Chlorobenzene	ND		0.0011	0.00019
Ethylbenzene	ND		0.0011	0.000278
Total Xylenes	ND		0.0022	0.000154
Styrene	ND		0.0011	0.000237
Bromoform	ND		0.0011	0.000342
Isopropylbenzene	ND		0.0011	0.000234
1,1,2,2-Tetrachloroethane	ND		0.0011	0.000261
1,3-Dichlorobenzene	ND		0.0011	0.000292
1,4-Dichlorobenzene	ND		0.0011	0.000341
1,2-Dichlorobenzene	ND		0.0011	0.000276
1,2-Dibromo-3-chloropropane	ND		0.0011	0.000906
1,2,4-Trichlorobenzene	ND		0.0011	0.000462
1,2,3-Trichlorobenzene	ND		0.0011	0.00035
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0011	0.000657
Methyl acetate	ND		0.0022	0.000889
Cyclohexane	ND		0.0055	0.000609
Methylcyclohexane	ND		0.0011	0.000405
1,3-Dichloropropene (cis- and trans-)	ND		0.0011	0.000168
Total Target Compounds (51):	0.000482	J		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: E24-01866-002
Client ID: SB-4B/15-15.
Date Received: 05/30/2024
Date Analyzed: 06/03/2024
Date File: L9736.D

GC/MS Column: DB-624
Sample wt/vol: 4.75g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 4.20

CAS #	Compound	Estimated Concentration	Q	Retention Time

No peaks detected

Total TICs = 0

D --- Dilution Performed
J --- Estimated concentration for TICs
N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

VOLATILE ORGANICS

Lab ID: E24-01866-003
Client ID: SB-5A/2.5-3
Date Received: 05/30/2024
Date Analyzed: 06/04/2024
Data file: K6923.D 06/04/2024 15:16

GC/MS Column: DB-624
Sample wt/vol: 0.0313g
Matrix-Units: Soil-mg/Kg
% Moisture: 6.50
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.171	0.101
Chloromethane	ND		0.085	0.061
Vinyl chloride	ND		0.085	0.064
Bromomethane	ND		0.171	0.093
Chloroethane	ND		0.085	0.067
Trichlorofluoromethane	ND		0.171	0.085
1,1-Dichloroethene	ND		0.085	0.072
Acetone	ND		0.342	0.100
Carbon disulfide	ND		0.085	0.053
Methylene chloride	ND		0.171	0.085
trans-1,2-Dichloroethene	ND		0.085	0.051
Methyl tert-butyl ether (MTBE)	ND		0.085	0.051
1,1-Dichloroethane	ND		0.085	0.051
cis-1,2-Dichloroethene	0.163		0.085	0.042
2-Butanone (MEK)	ND		0.171	0.156
Bromochloromethane	ND		0.085	0.057
Chloroform	ND		0.085	0.046
1,1,1-Trichloroethane	ND		0.085	0.051
Carbon tetrachloride	ND		0.085	0.058
1,2-Dichloroethane (EDC)	ND		0.085	0.051
Benzene	ND		0.085	0.040
Trichloroethene	0.128		0.085	0.051
1,2-Dichloropropane	ND		0.085	0.037
Bromodichloromethane	ND		0.085	0.039
cis-1,3-Dichloropropene	ND		0.085	0.036
4-Methyl-2-pentanone (MIBK)	ND		0.171	0.087

VOLATILE ORGANICS

Lab ID: E24-01866-003
Client ID: SB-5A/2.5-3
Date Received: 05/30/2024
Date Analyzed: 06/04/2024
Data file: K6923.D 06/04/2024 15:16

GC/MS Column: DB-624
Sample wt/vol: 0.0313g
Matrix-Units: Soil-mg/Kg
% Moisture: 6.50
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Toluene	0.102		0.085	0.042
trans-1,3-Dichloropropene	ND		0.085	0.043
1,1,2-Trichloroethane	ND		0.085	0.039
Tetrachloroethene	1.30		0.085	0.065
2-Hexanone	ND		0.171	0.138
Dibromochloromethane	ND		0.085	0.053
1,2-Dibromoethane (EDB)	ND		0.085	0.038
Chlorobenzene	ND		0.085	0.056
Ethylbenzene	ND		0.085	0.056
Total Xylenes	ND		0.171	0.049
Styrene	ND		0.085	0.044
Bromoform	ND		0.085	0.043
Isopropylbenzene	ND		0.085	0.067
1,1,2,2-Tetrachloroethane	ND		0.085	0.040
1,3-Dichlorobenzene	ND		0.085	0.064
1,4-Dichlorobenzene	ND		0.085	0.064
1,2-Dichlorobenzene	ND		0.085	0.062
1,2-Dibromo-3-chloropropane	ND		0.171	0.085
1,2,4-Trichlorobenzene	ND		0.085	0.078
1,2,3-Trichlorobenzene	ND		0.085	0.078
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.171	0.085
Methyl acetate	0.866		0.085	0.051
Cyclohexane	ND		0.342	0.108
Methylcyclohexane	ND		0.085	0.084
1,3-Dichloropropene (cis- and trans-)	ND		0.085	0.036
Total Target Compounds (51):	2.56			

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: E24-01866-003
Client ID: SB-5A/2.5-3
Date Received: 05/30/2024
Date Analyzed: 06/04/2024
Date File: K6923.D

GC/MS Column: DB-624
Sample wt/vol: 0.0313g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 6.50

CAS #	Compound	Estimated Concentration	Q	Retention Time

No peaks detected

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

VOLATILE ORGANICS

Lab ID: E24-01866-004
Client ID: SB-5B/13.5-1
Date Received: 05/30/2024
Date Analyzed: 06/03/2024
Data file: L9738.D 06/03/2024 15:03

GC/MS Column: DB-624
Sample wt/vol: 5.09g
Matrix-Units: Soil-mg/Kg
% Moisture: 9.90
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.00109	0.000566
Chloromethane	ND		0.00109	0.000346
Vinyl chloride	ND		0.00109	0.000353
Bromomethane	ND		0.00109	0.00095
Chloroethane	ND		0.00109	0.000324
Trichlorofluoromethane	ND		0.00109	0.000443
1,1-Dichloroethene	ND		0.00109	0.000382
Acetone	0.227		0.011	0.00545
Carbon disulfide	0.000736	J	0.00109	0.000428
Methylene chloride	0.00614	C	0.00545	0.00327
trans-1,2-Dichloroethene	ND		0.00109	0.000386
Methyl tert-butyl ether (MTBE)	ND		0.00109	0.000238
1,1-Dichloroethane	ND		0.00109	0.000278
cis-1,2-Dichloroethene	0.010		0.00109	0.000233
2-Butanone (MEK)	0.025		0.011	0.00218
Bromochloromethane	ND		0.00109	0.000277
Chloroform	ND		0.00109	0.000545
1,1,1-Trichloroethane	ND		0.00109	0.000335
Carbon tetrachloride	ND		0.00109	0.000218
1,2-Dichloroethane (EDC)	ND		0.00109	0.000252
Benzene	ND		0.00109	0.000268
Trichloroethene	0.00578		0.00109	0.000162
1,2-Dichloropropane	ND		0.00109	0.000258
Bromodichloromethane	ND		0.00109	0.00013
cis-1,3-Dichloropropene	ND		0.00109	0.000167
4-Methyl-2-pentanone (MIBK)	ND		0.00218	0.00057

VOLATILE ORGANICS

Lab ID: E24-01866-004
Client ID: SB-5B/13.5-1
Date Received: 05/30/2024
Date Analyzed: 06/03/2024
Data file: L9738.D 06/03/2024 15:03

GC/MS Column: DB-624
Sample wt/vol: 5.09g
Matrix-Units: Soil-mg/Kg
% Moisture: 9.90
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Toluene	0.00242		0.00109	0.000545
trans-1,3-Dichloropropene	ND		0.00109	0.000347
1,1,2-Trichloroethane	ND		0.00109	0.000233
Tetrachloroethene	0.059		0.00109	0.000344
2-Hexanone	ND		0.00218	0.00167
Dibromochloromethane	ND		0.00109	0.000181
1,2-Dibromoethane (EDB)	ND		0.00109	0.000202
Chlorobenzene	ND		0.00109	0.000189
Ethylbenzene	ND		0.00109	0.000276
Total Xylenes	0.000666	J	0.00218	0.000153
Styrene	ND		0.00109	0.000234
Bromoform	ND		0.00109	0.000339
Isopropylbenzene	ND		0.00109	0.000232
1,1,2,2-Tetrachloroethane	ND		0.00109	0.000258
1,3-Dichlorobenzene	ND		0.00109	0.000289
1,4-Dichlorobenzene	ND		0.00109	0.000338
1,2-Dichlorobenzene	ND		0.00109	0.000274
1,2-Dibromo-3-chloropropane	ND		0.00109	0.000898
1,2,4-Trichlorobenzene	ND		0.00109	0.000458
1,2,3-Trichlorobenzene	ND		0.00109	0.000347
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00109	0.000651
Methyl acetate	ND		0.00218	0.000881
Cyclohexane	ND		0.00545	0.000604
Methylcyclohexane	ND		0.00109	0.000401
1,3-Dichloropropene (cis- and trans-)	ND		0.00109	0.000167
Total Target Compounds (51):	0.337	CJ		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve
B --- Compound detected in Blank
C --- Common laboratory contamination

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: E24-01866-004
Client ID: SB-5B/13.5-1
Date Received: 05/30/2024
Date Analyzed: 06/03/2024
Date File: L9738.D

GC/MS Column: DB-624
Sample wt/vol: 5.09g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 9.90

CAS #	Compound	Estimated Concentration	Q	Retention Time
000104-76-7	1-Hexanol, 2-ethyl-	0.00774	JN	13.28

Total TICs = 0.00774 JN

D --- Dilution Performed
J --- Estimated concentration for TICs
N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

VOLATILE ORGANICS

Lab ID: E24-01866-005
Client ID: SB-6A/4-4.5
Date Received: 05/30/2024
Date Analyzed: 06/03/2024
Data file: L9739.D 06/03/2024 15:32

GC/MS Column: DB-624
Sample wt/vol: 4.94g
Matrix-Units: Soil-mg/Kg
% Moisture: 4.90
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.00106	0.00055
Chloromethane	ND		0.00106	0.000336
Vinyl chloride	ND		0.00106	0.000343
Bromomethane	ND		0.00106	0.000924
Chloroethane	ND		0.00106	0.000315
Trichlorofluoromethane	ND		0.00106	0.00043
1,1-Dichloroethene	ND		0.00106	0.000371
Acetone	0.292		0.011	0.0053
Carbon disulfide	ND		0.00106	0.000417
Methylene chloride	0.0073	C	0.0053	0.00318
trans-1,2-Dichloroethene	ND		0.00106	0.000375
Methyl tert-butyl ether (MTBE)	ND		0.00106	0.000231
1,1-Dichloroethane	ND		0.00106	0.00027
cis-1,2-Dichloroethene	0.00233		0.00106	0.000227
2-Butanone (MEK)	0.00907	J	0.011	0.00212
Bromochloromethane	ND		0.00106	0.000269
Chloroform	ND		0.00106	0.00053
1,1,1-Trichloroethane	ND		0.00106	0.000325
Carbon tetrachloride	ND		0.00106	0.000212
1,2-Dichloroethane (EDC)	ND		0.00106	0.000245
Benzene	ND		0.00106	0.000261
Trichloroethene	0.00158		0.00106	0.000158
1,2-Dichloropropane	ND		0.00106	0.000251
Bromodichloromethane	ND		0.00106	0.000126
cis-1,3-Dichloropropene	ND		0.00106	0.000162
4-Methyl-2-pentanone (MIBK)	0.00229		0.00212	0.000554

VOLATILE ORGANICS

Lab ID: E24-01866-005
Client ID: SB-6A/4-4.5
Date Received: 05/30/2024
Date Analyzed: 06/03/2024
Data file: L9739.D 06/03/2024 15:32

GC/MS Column: DB-624
Sample wt/vol: 4.94g
Matrix-Units: Soil-mg/Kg
% Moisture: 4.90
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Toluene	0.00865		0.00106	0.00053
trans-1,3-Dichloropropene	ND		0.00106	0.000337
1,1,2-Trichloroethane	ND		0.00106	0.000227
Tetrachloroethene	0.011		0.00106	0.000335
2-Hexanone	ND		0.00212	0.00162
Dibromochloromethane	ND		0.00106	0.000176
1,2-Dibromoethane (EDB)	ND		0.00106	0.000196
Chlorobenzene	ND		0.00106	0.000183
Ethylbenzene	0.00129		0.00106	0.000268
Total Xylenes	0.011		0.00212	0.000148
Styrene	ND		0.00106	0.000228
Bromoform	ND		0.00106	0.00033
Isopropylbenzene	ND		0.00106	0.000226
1,1,2,2-Tetrachloroethane	ND		0.00106	0.000251
1,3-Dichlorobenzene	ND		0.00106	0.000281
1,4-Dichlorobenzene	ND		0.00106	0.000329
1,2-Dichlorobenzene	ND		0.00106	0.000266
1,2-Dibromo-3-chloropropane	ND		0.00106	0.000873
1,2,4-Trichlorobenzene	ND		0.00106	0.000445
1,2,3-Trichlorobenzene	ND		0.00106	0.000337
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00106	0.000633
Methyl acetate	ND		0.00212	0.000856
Cyclohexane	ND		0.0053	0.000587
Methylcyclohexane	ND		0.00106	0.00039
1,3-Dichloropropene (cis- and trans-)	ND		0.00106	0.000162
Total Target Compounds (51):	0.347	CJ		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: E24-01866-005
Client ID: SB-6A/4-4.5
Date Received: 05/30/2024
Date Analyzed: 06/03/2024
Date File: L9739.D

GC/MS Column: DB-624
Sample wt/vol: 4.94g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 4.90

CAS #	Compound	Estimated Concentration	Q	Retention Time
	Unknown VOA	0.00859	J	3.64

Total TICs = 0.00859 J

D --- Dilution Performed
J --- Estimated concentration for TICs
N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

VOLATILE ORGANICS

Lab ID: E24-01866-006
Client ID: SB-6B/15.5-1
Date Received: 05/30/2024
Date Analyzed: 06/03/2024
Data file: L9740.D 06/03/2024 16:00

GC/MS Column: DB-624
Sample wt/vol: 3.35g
Matrix-Units: Soil-mg/Kg
% Moisture: 3.60
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.00155	0.000804
Chloromethane	ND		0.00155	0.000491
Vinyl chloride	ND		0.00155	0.000502
Bromomethane	ND		0.00155	0.00135
Chloroethane	ND		0.00155	0.00046
Trichlorofluoromethane	ND		0.00155	0.000629
1,1-Dichloroethene	ND		0.00155	0.000543
Acetone	0.079		0.016	0.00775
Carbon disulfide	ND		0.00155	0.000609
Methylene chloride	0.00955	C	0.00775	0.00465
trans-1,2-Dichloroethene	ND		0.00155	0.000549
Methyl tert-butyl ether (MTBE)	ND		0.00155	0.000338
1,1-Dichloroethane	ND		0.00155	0.000395
cis-1,2-Dichloroethene	ND		0.00155	0.000332
2-Butanone (MEK)	ND		0.016	0.0031
Bromochloromethane	ND		0.00155	0.000394
Chloroform	ND		0.00155	0.000775
1,1,1-Trichloroethane	ND		0.00155	0.000476
Carbon tetrachloride	ND		0.00155	0.00031
1,2-Dichloroethane (EDC)	ND		0.00155	0.000358
Benzene	ND		0.00155	0.000381
Trichloroethene	ND		0.00155	0.000231
1,2-Dichloropropane	ND		0.00155	0.000367
Bromodichloromethane	ND		0.00155	0.000184
cis-1,3-Dichloropropene	ND		0.00155	0.000237
4-Methyl-2-pentanone (MIBK)	ND		0.0031	0.000811

VOLATILE ORGANICS

Lab ID: E24-01866-006
Client ID: SB-6B/15.5-1
Date Received: 05/30/2024
Date Analyzed: 06/03/2024
Data file: L9740.D 06/03/2024 16:00

GC/MS Column: DB-624
Sample wt/vol: 3.35g
Matrix-Units: Soil-mg/Kg
% Moisture: 3.60
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.00155	0.000775
trans-1,3-Dichloropropene	ND		0.00155	0.000493
1,1,2-Trichloroethane	ND		0.00155	0.000332
Tetrachloroethene	ND		0.00155	0.00049
2-Hexanone	ND		0.0031	0.00237
Dibromochloromethane	ND		0.00155	0.000257
1,2-Dibromoethane (EDB)	ND		0.00155	0.000287
Chlorobenzene	ND		0.00155	0.000268
Ethylbenzene	ND		0.00155	0.000392
Total Xylenes	ND		0.0031	0.000217
Styrene	ND		0.00155	0.000333
Bromoform	ND		0.00155	0.000482
Isopropylbenzene	ND		0.00155	0.00033
1,1,2,2-Tetrachloroethane	ND		0.00155	0.000367
1,3-Dichlorobenzene	ND		0.00155	0.000411
1,4-Dichlorobenzene	ND		0.00155	0.000481
1,2-Dichlorobenzene	ND		0.00155	0.000389
1,2-Dibromo-3-chloropropane	ND		0.00155	0.00128
1,2,4-Trichlorobenzene	ND		0.00155	0.000651
1,2,3-Trichlorobenzene	ND		0.00155	0.000493
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00155	0.000925
Methyl acetate	ND		0.0031	0.00125
Cyclohexane	ND		0.00775	0.000859
Methylcyclohexane	ND		0.00155	0.00057
1,3-Dichloropropene (cis- and trans-)	ND		0.00155	0.000237
Total Target Compounds (51):	0.089	C		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: E24-01866-006
Client ID: SB-6B/15.5-1
Date Received: 05/30/2024
Date Analyzed: 06/03/2024
Date File: L9740.D

GC/MS Column: DB-624
Sample wt/vol: 3.35g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 3.60

CAS #	Compound	Estimated Concentration	Q	Retention Time
	No peaks detected			

Total TICs = 0

D --- Dilution Performed
J --- Estimated concentration for TICs
N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

VOLATILE ORGANICS

Lab ID: E24-01866-007
Client ID: SB-7A/6.5-7
Date Received: 05/30/2024
Date Analyzed: 06/03/2024
Data file: K6903.D 06/03/2024 21:51

GC/MS Column: DB-624
Sample wt/vol: 0.0496g
Matrix-Units: Soil-mg/Kg
% Moisture: 6.00
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.107	0.063
Chloromethane	ND		0.054	0.038
Vinyl chloride	ND		0.054	0.040
Bromomethane	ND		0.107	0.058
Chloroethane	ND		0.054	0.042
Trichlorofluoromethane	ND		0.107	0.053
1,1-Dichloroethene	ND		0.054	0.045
Acetone	ND		0.214	0.063
Carbon disulfide	ND		0.054	0.033
Methylene chloride	ND		0.107	0.054
trans-1,2-Dichloroethene	ND		0.054	0.032
Methyl tert-butyl ether (MTBE)	ND		0.054	0.032
1,1-Dichloroethane	ND		0.054	0.032
cis-1,2-Dichloroethene	ND		0.054	0.027
2-Butanone (MEK)	ND		0.107	0.098
Bromochloromethane	ND		0.054	0.036
Chloroform	ND		0.054	0.029
1,1,1-Trichloroethane	ND		0.054	0.032
Carbon tetrachloride	ND		0.054	0.037
1,2-Dichloroethane (EDC)	ND		0.054	0.032
Benzene	ND		0.054	0.025
Trichloroethene	0.124		0.054	0.032
1,2-Dichloropropane	ND		0.054	0.024
Bromodichloromethane	ND		0.054	0.025
cis-1,3-Dichloropropene	ND		0.054	0.023
4-Methyl-2-pentanone (MIBK)	ND		0.107	0.055

VOLATILE ORGANICS

Lab ID: E24-01866-007
Client ID: SB-7A/6.5-7
Date Received: 05/30/2024
Date Analyzed: 06/03/2024
Data file: K6903.D 06/03/2024 21:51

GC/MS Column: DB-624
Sample wt/vol: 0.0496g
Matrix-Units: Soil-mg/Kg
% Moisture: 6.00
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.054	0.026
trans-1,3-Dichloropropene	ND		0.054	0.027
1,1,2-Trichloroethane	ND		0.054	0.024
Tetrachloroethene	9.13		0.054	0.041
2-Hexanone	ND		0.107	0.087
Dibromochloromethane	ND		0.054	0.033
1,2-Dibromoethane (EDB)	ND		0.054	0.024
Chlorobenzene	ND		0.054	0.035
Ethylbenzene	ND		0.054	0.035
Total Xylenes	ND		0.107	0.031
Styrene	ND		0.054	0.028
Bromoform	ND		0.054	0.027
Isopropylbenzene	ND		0.054	0.042
1,1,2,2-Tetrachloroethane	ND		0.054	0.025
1,3-Dichlorobenzene	ND		0.054	0.040
1,4-Dichlorobenzene	ND		0.054	0.040
1,2-Dichlorobenzene	ND		0.054	0.039
1,2-Dibromo-3-chloropropane	ND		0.107	0.054
1,2,4-Trichlorobenzene	ND		0.054	0.049
1,2,3-Trichlorobenzene	ND		0.054	0.049
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.107	0.053
Methyl acetate	0.201		0.054	0.032
Cyclohexane	ND		0.214	0.068
Methylcyclohexane	ND		0.054	0.053
1,3-Dichloropropene (cis- and trans-)	ND		0.054	0.023
Total Target Compounds (51):	9.46			

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: E24-01866-007
Client ID: SB-7A/6.5-7
Date Received: 05/30/2024
Date Analyzed: 06/03/2024
Date File: K6903.D

GC/MS Column: DB-624
Sample wt/vol: 0.0496g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 6.00

CAS #	Compound	Estimated Concentration	Q	Retention Time
004057-42-5	2-Octene, 2,6-dimethyl-	1.12	JN	11.69
	Unknown Hydrocarbon	0.922	J	11.98
	Unknown Hydrocarbon	2.05	J	12.46
	Unknown Hydrocarbon	1.52	J	12.68
081983-71-3	Cyclohexane, 1,1-dimethyl-2-propyl	4.20	JN	13.10
	Unknown Hydrocarbon	1.37	J	13.25
	Unknown VOA	5.36	J	13.37
	Unknown VOA	4.31	J	13.58
050876-31-8	Cyclohexane, 1,1,3,5-tetramethyl-,	1.73	JN	13.74
000281-23-2	Adamantane	2.14	JN	13.89
	Unknown VOA	1.02	J	14.00
	Unknown VOA	4.26	J	14.12
	Unknown VOA	3.10	J	14.29
066633-38-3	Cyclodecene, 1-methyl-	2.78	JN	14.39
000700-56-1	2-Methyladamantane	1.61	JN	15.00

Total TICs = 37.5 JN

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

VOLATILE ORGANICS

Lab ID: E24-01866-008
Client ID: SB-7B/15.5-1
Date Received: 05/30/2024
Date Analyzed: 06/03/2024
Data file: L9741.D 06/03/2024 16:29

GC/MS Column: DB-624
Sample wt/vol: 5.17g
Matrix-Units: Soil-mg/Kg
% Moisture: 3.90
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.00101	0.000524
Chloromethane	ND		0.00101	0.00032
Vinyl chloride	ND		0.00101	0.000327
Bromomethane	ND		0.00101	0.000881
Chloroethane	ND		0.00101	0.0003
Trichlorofluoromethane	ND		0.00101	0.00041
1,1-Dichloroethene	ND		0.00101	0.000354
Acetone	0.010		0.010	0.00505
Carbon disulfide	ND		0.00101	0.000397
Methylene chloride	0.00437	CJ	0.00505	0.00303
trans-1,2-Dichloroethene	ND		0.00101	0.000358
Methyl tert-butyl ether (MTBE)	ND		0.00101	0.00022
1,1-Dichloroethane	ND		0.00101	0.000258
cis-1,2-Dichloroethene	0.0004	J	0.00101	0.000216
2-Butanone (MEK)	ND		0.010	0.00202
Bromochloromethane	ND		0.00101	0.000257
Chloroform	ND		0.00101	0.000505
1,1,1-Trichloroethane	ND		0.00101	0.00031
Carbon tetrachloride	ND		0.00101	0.000202
1,2-Dichloroethane (EDC)	ND		0.00101	0.000233
Benzene	ND		0.00101	0.000248
Trichloroethene	0.000478	J	0.00101	0.00015
1,2-Dichloropropane	ND		0.00101	0.000239
Bromodichloromethane	ND		0.00101	0.00012
cis-1,3-Dichloropropene	ND		0.00101	0.000155
4-Methyl-2-pentanone (MIBK)	ND		0.00202	0.000528

VOLATILE ORGANICS

Lab ID: E24-01866-008
Client ID: SB-7B/15.5-1
Date Received: 05/30/2024
Date Analyzed: 06/03/2024
Data file: L9741.D 06/03/2024 16:29

GC/MS Column: DB-624
Sample wt/vol: 5.17g
Matrix-Units: Soil-mg/Kg
% Moisture: 3.90
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.00101	0.000505
trans-1,3-Dichloropropene	ND		0.00101	0.000321
1,1,2-Trichloroethane	ND		0.00101	0.000216
Tetrachloroethene	0.00219		0.00101	0.000319
2-Hexanone	ND		0.00202	0.00155
Dibromochloromethane	ND		0.00101	0.000168
1,2-Dibromoethane (EDB)	ND		0.00101	0.000187
Chlorobenzene	ND		0.00101	0.000175
Ethylbenzene	ND		0.00101	0.000256
Total Xylenes	ND		0.00202	0.000141
Styrene	ND		0.00101	0.000217
Bromoform	ND		0.00101	0.000314
Isopropylbenzene	ND		0.00101	0.000215
1,1,2,2-Tetrachloroethane	ND		0.00101	0.000239
1,3-Dichlorobenzene	ND		0.00101	0.000268
1,4-Dichlorobenzene	ND		0.00101	0.000313
1,2-Dichlorobenzene	ND		0.00101	0.000254
1,2-Dibromo-3-chloropropane	ND		0.00101	0.000832
1,2,4-Trichlorobenzene	ND		0.00101	0.000424
1,2,3-Trichlorobenzene	ND		0.00101	0.000321
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00101	0.000603
Methyl acetate	ND		0.00202	0.000816
Cyclohexane	ND		0.00505	0.00056
Methylcyclohexane	ND		0.00101	0.000372
1,3-Dichloropropene (cis- and trans-)	ND		0.00101	0.000155
Total Target Compounds (51):	0.018	CJ		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve
B --- Compound detected in Blank
C --- Common laboratory contamination

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: E24-01866-008
Client ID: SB-7B/15.5-1
Date Received: 05/30/2024
Date Analyzed: 06/03/2024
Date File: L9741.D

GC/MS Column: DB-624
Sample wt/vol: 5.17g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 3.90

CAS #	Compound	Estimated Concentration	Q	Retention Time
	No peaks detected			

Total TICs = 0

D --- Dilution Performed
J --- Estimated concentration for TICs
N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

VOLATILE ORGANICS

Lab ID: E24-01866-009
Client ID: SB-8A/6.5-7
Date Received: 05/30/2024
Date Analyzed: 06/03/2024
Data file: L9742.D 06/03/2024 16:58

GC/MS Column: DB-624
Sample wt/vol: 4.06g
Matrix-Units: Soil-mg/Kg
% Moisture: 3.80
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.00128	0.000664
Chloromethane	ND		0.00128	0.000406
Vinyl chloride	ND		0.00128	0.000415
Bromomethane	ND		0.00128	0.00112
Chloroethane	ND		0.00128	0.00038
Trichlorofluoromethane	ND		0.00128	0.00052
1,1-Dichloroethene	ND		0.00128	0.000448
Acetone	ND		0.013	0.0064
Carbon disulfide	ND		0.00128	0.000503
Methylene chloride	0.00593	CJ	0.0064	0.00384
trans-1,2-Dichloroethene	ND		0.00128	0.000453
Methyl tert-butyl ether (MTBE)	ND		0.00128	0.000279
1,1-Dichloroethane	ND		0.00128	0.000326
cis-1,2-Dichloroethene	0.000447	J	0.00128	0.000274
2-Butanone (MEK)	ND		0.013	0.00256
Bromochloromethane	ND		0.00128	0.000325
Chloroform	ND		0.00128	0.00064
1,1,1-Trichloroethane	ND		0.00128	0.000393
Carbon tetrachloride	ND		0.00128	0.000256
1,2-Dichloroethane (EDC)	ND		0.00128	0.000296
Benzene	ND		0.00128	0.000315
Trichloroethene	0.000421	J	0.00128	0.000191
1,2-Dichloropropane	ND		0.00128	0.000303
Bromodichloromethane	ND		0.00128	0.000152
cis-1,3-Dichloropropene	ND		0.00128	0.000196
4-Methyl-2-pentanone (MIBK)	ND		0.00256	0.000669

VOLATILE ORGANICS

Lab ID: E24-01866-009
Client ID: SB-8A/6.5-7
Date Received: 05/30/2024
Date Analyzed: 06/03/2024
Data file: L9742.D 06/03/2024 16:58

GC/MS Column: DB-624
Sample wt/vol: 4.06g
Matrix-Units: Soil-mg/Kg
% Moisture: 3.80
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.00128	0.00064
trans-1,3-Dichloropropene	ND		0.00128	0.000407
1,1,2-Trichloroethane	ND		0.00128	0.000274
Tetrachloroethene	0.00159		0.00128	0.000404
2-Hexanone	ND		0.00256	0.00196
Dibromochloromethane	ND		0.00128	0.000212
1,2-Dibromoethane (EDB)	ND		0.00128	0.000237
Chlorobenzene	ND		0.00128	0.000221
Ethylbenzene	ND		0.00128	0.000324
Total Xylenes	ND		0.00256	0.000179
Styrene	ND		0.00128	0.000275
Bromoform	ND		0.00128	0.000398
Isopropylbenzene	ND		0.00128	0.000273
1,1,2,2-Tetrachloroethane	ND		0.00128	0.000303
1,3-Dichlorobenzene	ND		0.00128	0.000339
1,4-Dichlorobenzene	ND		0.00128	0.000397
1,2-Dichlorobenzene	ND		0.00128	0.000321
1,2-Dibromo-3-chloropropane	ND		0.00128	0.00105
1,2,4-Trichlorobenzene	ND		0.00128	0.000538
1,2,3-Trichlorobenzene	ND		0.00128	0.000407
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00128	0.000764
Methyl acetate	ND		0.00256	0.00103
Cyclohexane	ND		0.0064	0.000709
Methylcyclohexane	ND		0.00128	0.000471
1,3-Dichloropropene (cis- and trans-)	ND		0.00128	0.000196
Total Target Compounds (51):	0.00839	CJ		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve
B --- Compound detected in Blank
C --- Common laboratory contamination

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: E24-01866-009
Client ID: SB-8A/6.5-7
Date Received: 05/30/2024
Date Analyzed: 06/03/2024
Date File: L9742.D

GC/MS Column: DB-624
Sample wt/vol: 4.06g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 3.80

CAS #	Compound	Estimated Concentration	Q	Retention Time

No peaks detected

Total TICs = 0

D --- Dilution Performed
J --- Estimated concentration for TICs
N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

VOLATILE ORGANICS

Lab ID: E24-01866-010
Client ID: SB-8B/15.5-1
Date Received: 05/30/2024
Date Analyzed: 06/03/2024
Data file: L9743.D 06/03/2024 17:27

GC/MS Column: DB-624
Sample wt/vol: 5.83g
Matrix-Units: Soil-mg/Kg
% Moisture: 4.40
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.0009	0.000467
Chloromethane	ND		0.0009	0.000285
Vinyl chloride	ND		0.0009	0.000292
Bromomethane	ND		0.0009	0.000785
Chloroethane	ND		0.0009	0.000267
Trichlorofluoromethane	ND		0.0009	0.000365
1,1-Dichloroethene	ND		0.0009	0.000315
Acetone	ND		0.009	0.0045
Carbon disulfide	ND		0.0009	0.000354
Methylene chloride	ND		0.0045	0.0027
trans-1,2-Dichloroethene	ND		0.0009	0.000319
Methyl tert-butyl ether (MTBE)	ND		0.0009	0.000196
1,1-Dichloroethane	ND		0.0009	0.00023
cis-1,2-Dichloroethene	ND		0.0009	0.000193
2-Butanone (MEK)	ND		0.009	0.0018
Bromochloromethane	ND		0.0009	0.000229
Chloroform	ND		0.0009	0.00045
1,1,1-Trichloroethane	ND		0.0009	0.000276
Carbon tetrachloride	ND		0.0009	0.00018
1,2-Dichloroethane (EDC)	ND		0.0009	0.000208
Benzene	ND		0.0009	0.000221
Trichloroethene	0.000219	J	0.0009	0.000134
1,2-Dichloropropane	ND		0.0009	0.000213
Bromodichloromethane	ND		0.0009	0.000107
cis-1,3-Dichloropropene	ND		0.0009	0.000138
4-Methyl-2-pentanone (MIBK)	ND		0.0018	0.000471

VOLATILE ORGANICS

Lab ID: E24-01866-010
Client ID: SB-8B/15.5-1
Date Received: 05/30/2024
Date Analyzed: 06/03/2024
Data file: L9743.D 06/03/2024 17:27

GC/MS Column: DB-624
Sample wt/vol: 5.83g
Matrix-Units: Soil-mg/Kg
% Moisture: 4.40
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.0009	0.00045
trans-1,3-Dichloropropene	ND		0.0009	0.000286
1,1,2-Trichloroethane	ND		0.0009	0.000193
Tetrachloroethene	0.000851	J	0.0009	0.000284
2-Hexanone	ND		0.0018	0.00138
Dibromochloromethane	ND		0.0009	0.000149
1,2-Dibromoethane (EDB)	ND		0.0009	0.000167
Chlorobenzene	ND		0.0009	0.000156
Ethylbenzene	ND		0.0009	0.000228
Total Xylenes	ND		0.0018	0.000126
Styrene	ND		0.0009	0.000194
Bromoform	ND		0.0009	0.00028
Isopropylbenzene	ND		0.0009	0.000192
1,1,2,2-Tetrachloroethane	ND		0.0009	0.000213
1,3-Dichlorobenzene	ND		0.0009	0.000239
1,4-Dichlorobenzene	ND		0.0009	0.000279
1,2-Dichlorobenzene	ND		0.0009	0.000226
1,2-Dibromo-3-chloropropane	ND		0.0009	0.000742
1,2,4-Trichlorobenzene	ND		0.0009	0.000378
1,2,3-Trichlorobenzene	ND		0.0009	0.000286
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0009	0.000537
Methyl acetate	ND		0.0018	0.000727
Cyclohexane	ND		0.0045	0.000499
Methylcyclohexane	ND		0.0009	0.000331
1,3-Dichloropropene (cis- and trans-)	ND		0.0009	0.000138
Total Target Compounds (51):	0.00107	J		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: E24-01866-010
Client ID: SB-8B/15.5-1
Date Received: 05/30/2024
Date Analyzed: 06/03/2024
Date File: L9743.D

GC/MS Column: DB-624
Sample wt/vol: 5.83g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 4.40

CAS #	Compound	Estimated Concentration	Q	Retention Time

No peaks detected

Total TICs = 0

D --- Dilution Performed
J --- Estimated concentration for TICs
N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

VOLATILE ORGANICS

Lab ID: BLKS240603-01
Client ID: BLKS240603-01
Date Received:
Date Analyzed: 06/03/2024
Data file: L9733.D 06/03/2024 12:40

GC/MS Column: DB-624
Sample wt/vol: 5.00g
Matrix-Units: Soil-mg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.001	0.000519
Chloromethane	ND		0.001	0.000317
Vinyl chloride	ND		0.001	0.000324
Bromomethane	ND		0.001	0.000872
Chloroethane	ND		0.001	0.000297
Trichlorofluoromethane	ND		0.001	0.000406
1,1-Dichloroethene	ND		0.001	0.00035
Acetone	ND		0.010	0.005
Carbon disulfide	ND		0.001	0.000393
Methylene chloride	ND		0.005	0.003
trans-1,2-Dichloroethene	ND		0.001	0.000354
Methyl tert-butyl ether (MTBE)	ND		0.001	0.000218
1,1-Dichloroethane	ND		0.001	0.000255
cis-1,2-Dichloroethene	ND		0.001	0.000214
2-Butanone (MEK)	ND		0.010	0.002
Bromochloromethane	ND		0.001	0.000254
Chloroform	ND		0.001	0.0005
1,1,1-Trichloroethane	ND		0.001	0.000307
Carbon tetrachloride	ND		0.001	0.0002
1,2-Dichloroethane (EDC)	ND		0.001	0.000231
Benzene	ND		0.001	0.000246
Trichloroethene	ND		0.001	0.000149
1,2-Dichloropropane	ND		0.001	0.000237
Bromodichloromethane	ND		0.001	0.000119
cis-1,3-Dichloropropene	ND		0.001	0.000153
4-Methyl-2-pentanone (MIBK)	ND		0.002	0.000523

VOLATILE ORGANICS

Lab ID: BLKS240603-01
Client ID: BLKS240603-01
Date Received:
Date Analyzed: 06/03/2024
Data file: L9733.D 06/03/2024 12:40

GC/MS Column: DB-624
Sample wt/vol: 5.00g
Matrix-Units: Soil-mg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.001	0.0005
trans-1,3-Dichloropropene	ND		0.001	0.000318
1,1,2-Trichloroethane	ND		0.001	0.000214
Tetrachloroethene	ND		0.001	0.000316
2-Hexanone	ND		0.002	0.00153
Dibromochloromethane	ND		0.001	0.000166
1,2-Dibromoethane (EDB)	ND		0.001	0.000185
Chlorobenzene	ND		0.001	0.000173
Ethylbenzene	ND		0.001	0.000253
Total Xylenes	ND		0.002	0.00014
Styrene	ND		0.001	0.000215
Bromoform	ND		0.001	0.000311
Isopropylbenzene	ND		0.001	0.000213
1,1,2,2-Tetrachloroethane	ND		0.001	0.000237
1,3-Dichlorobenzene	ND		0.001	0.000265
1,4-Dichlorobenzene	ND		0.001	0.00031
1,2-Dichlorobenzene	ND		0.001	0.000251
1,2-Dibromo-3-chloropropane	ND		0.001	0.000824
1,2,4-Trichlorobenzene	ND		0.001	0.00042
1,2,3-Trichlorobenzene	ND		0.001	0.000318
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.001	0.000597
Methyl acetate	ND		0.002	0.000808
Cyclohexane	ND		0.005	0.000554
Methylcyclohexane	ND		0.001	0.000368
1,3-Dichloropropene (cis- and trans-)	ND		0.001	0.000153

Total Target Compounds (51): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: BLKS240603-01
Client ID: BLKS240603-01
Date Received:
Date Analyzed: 06/03/2024
Data file: L9733.D 06/03/2024 12:40

GC/MS Column: DB-624
Sample wt/vol: 5.00g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

CAS #	Compound	Estimated Concentration	Q	Retention Time

No peaks detected

Total TICs = 0

VOLATILE ORGANICS

Lab ID: BLKM240603-01
Client ID: BLKM240603-01
Date Received:
Date Analyzed: 06/03/2024
Data file: K6896.D 06/03/2024 18:43

GC/MS Column: DB-624
Sample wt/vol: 0.0500g
Matrix-Units: Soil-mg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.100	0.059
Chloromethane	ND		0.050	0.036
Vinyl chloride	ND		0.050	0.037
Bromomethane	ND		0.100	0.054
Chloroethane	ND		0.050	0.039
Trichlorofluoromethane	ND		0.100	0.050
1,1-Dichloroethene	ND		0.050	0.042
Acetone	ND		0.200	0.059
Carbon disulfide	ND		0.050	0.031
Methylene chloride	ND		0.100	0.050
trans-1,2-Dichloroethene	ND		0.050	0.030
Methyl tert-butyl ether (MTBE)	ND		0.050	0.030
1,1-Dichloroethane	ND		0.050	0.030
cis-1,2-Dichloroethene	ND		0.050	0.025
2-Butanone (MEK)	ND		0.100	0.091
Bromochloromethane	ND		0.050	0.033
Chloroform	ND		0.050	0.027
1,1,1-Trichloroethane	ND		0.050	0.030
Carbon tetrachloride	ND		0.050	0.034
1,2-Dichloroethane (EDC)	ND		0.050	0.030
Benzene	ND		0.050	0.024
Trichloroethene	ND		0.050	0.030
1,2-Dichloropropane	ND		0.050	0.022
Bromodichloromethane	ND		0.050	0.023
cis-1,3-Dichloropropene	ND		0.050	0.021
4-Methyl-2-pentanone (MIBK)	ND		0.100	0.051

VOLATILE ORGANICS

Lab ID: BLKM240603-01
Client ID: BLKM240603-01
Date Received:
Date Analyzed: 06/03/2024
Data file: K6896.D 06/03/2024 18:43

GC/MS Column: DB-624
Sample wt/vol: 0.0500g
Matrix-Units: Soil-mg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.050	0.025
trans-1,3-Dichloropropene	ND		0.050	0.025
1,1,2-Trichloroethane	ND		0.050	0.023
Tetrachloroethene	ND		0.050	0.038
2-Hexanone	ND		0.100	0.081
Dibromochloromethane	ND		0.050	0.031
1,2-Dibromoethane (EDB)	ND		0.050	0.022
Chlorobenzene	ND		0.050	0.033
Ethylbenzene	ND		0.050	0.033
Total Xylenes	ND		0.100	0.029
Styrene	ND		0.050	0.026
Bromoform	ND		0.050	0.025
Isopropylbenzene	ND		0.050	0.039
1,1,2,2-Tetrachloroethane	ND		0.050	0.024
1,3-Dichlorobenzene	ND		0.050	0.038
1,4-Dichlorobenzene	ND		0.050	0.037
1,2-Dichlorobenzene	ND		0.050	0.036
1,2-Dibromo-3-chloropropane	ND		0.100	0.050
1,2,4-Trichlorobenzene	ND		0.050	0.046
1,2,3-Trichlorobenzene	ND		0.050	0.046
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.100	0.050
Methyl acetate	ND		0.050	0.030
Cyclohexane	ND		0.200	0.063
Methylcyclohexane	ND		0.050	0.049
1,3-Dichloropropene (cis- and trans-)	ND		0.050	0.021

Total Target Compounds (51): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: BLKM240603-01
Client ID: BLKM240603-01
Date Received:
Date Analyzed: 06/03/2024
Date File: K6896.D

GC/MS Column: DB-624
Sample wt/vol: 0.0500g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

CAS #	Compound	Estimated Concentration	Q	Retention Time
	No peaks detected			

Total TICs = 0

D --- Dilution Performed
J --- Estimated concentration for TICs
N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

VOLATILE ORGANICS

Lab ID: BLKM240604-01
Client ID: BLKM240604-01
Date Received:
Date Analyzed: 06/04/2024
Data file: K6913.D 06/04/2024 10:48

GC/MS Column: DB-624
Sample wt/vol: 0.05g
Matrix-Units: Soil-mg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.100	0.059
Chloromethane	ND		0.050	0.036
Vinyl chloride	ND		0.050	0.037
Bromomethane	ND		0.100	0.054
Chloroethane	ND		0.050	0.039
Trichlorofluoromethane	ND		0.100	0.050
1,1-Dichloroethene	ND		0.050	0.042
Acetone	ND		0.200	0.059
Carbon disulfide	ND		0.050	0.031
Methylene chloride	ND		0.100	0.050
trans-1,2-Dichloroethene	ND		0.050	0.030
Methyl tert-butyl ether (MTBE)	ND		0.050	0.030
1,1-Dichloroethane	ND		0.050	0.030
cis-1,2-Dichloroethene	ND		0.050	0.025
2-Butanone (MEK)	ND		0.100	0.091
Bromochloromethane	ND		0.050	0.033
Chloroform	ND		0.050	0.027
1,1,1-Trichloroethane	ND		0.050	0.030
Carbon tetrachloride	ND		0.050	0.034
1,2-Dichloroethane (EDC)	ND		0.050	0.030
Benzene	ND		0.050	0.024
Trichloroethene	ND		0.050	0.030
1,2-Dichloropropane	ND		0.050	0.022
Bromodichloromethane	ND		0.050	0.023
cis-1,3-Dichloropropene	ND		0.050	0.021
4-Methyl-2-pentanone (MIBK)	ND		0.100	0.051

VOLATILE ORGANICS

Lab ID: BLKM240604-01
Client ID: BLKM240604-01
Date Received:
Date Analyzed: 06/04/2024
Data file: K6913.D 06/04/2024 10:48

GC/MS Column: DB-624
Sample wt/vol: 0.05g
Matrix-Units: Soil-mg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.050	0.025
trans-1,3-Dichloropropene	ND		0.050	0.025
1,1,2-Trichloroethane	ND		0.050	0.023
Tetrachloroethene	ND		0.050	0.038
2-Hexanone	ND		0.100	0.081
Dibromochloromethane	ND		0.050	0.031
1,2-Dibromoethane (EDB)	ND		0.050	0.022
Chlorobenzene	ND		0.050	0.033
Ethylbenzene	ND		0.050	0.033
Total Xylenes	ND		0.100	0.029
Styrene	ND		0.050	0.026
Bromoform	ND		0.050	0.025
Isopropylbenzene	ND		0.050	0.039
1,1,2,2-Tetrachloroethane	ND		0.050	0.024
1,3-Dichlorobenzene	ND		0.050	0.038
1,4-Dichlorobenzene	ND		0.050	0.037
1,2-Dichlorobenzene	ND		0.050	0.036
1,2-Dibromo-3-chloropropane	ND		0.100	0.050
1,2,4-Trichlorobenzene	ND		0.050	0.046
1,2,3-Trichlorobenzene	ND		0.050	0.046
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.100	0.050
Methyl acetate	ND		0.050	0.030
Cyclohexane	ND		0.200	0.063
Methylcyclohexane	ND		0.050	0.049
1,3-Dichloropropene (cis- and trans-)	ND		0.050	0.021

Total Target Compounds (51): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E — Exceeds upper level of Calibration curve

B — Compound detected in Blank
C --- Common laboratory contamination

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: BLKM240604-01
Client ID: BLKM240604-01
Date Received:
Date Analyzed: 06/04/2024
Date File: K6913.D

GC/MS Column: DB-624
Sample wt/vol: 0.05g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

CAS #	Compound	Estimated Concentration	Q	Retention Time
	No peaks detected			

Total TICs = 0

D --- Dilution Performed
J --- Estimated concentration for TICs
N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

SAMPLE TRACKING

FINALIZED 06/06/2024

IAL Integrated Analytical Laboratories LLC
Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Chain of Custody Record

Contact Us: 973-361-4252
Web: www.ialonline.com

Customer Information

Company: J.S. Held, LLC
Address: 5 Marine View Plaza Suite 401, Hoboken, NJ
Telephone #: 201-847-9400
Project Manager: Leah DeEgidio
Email Address(es): LDeEgidio@jsheld.com
Project Name: 48-55 36th St
Project Location (State): NY
Bottle Order #:
☐ "Report to"/"Invoice To" same as above
Sampled by:

COMPLETED BY IAL:
____ Field Sampling ____ Equipment Rental

Reporting Information

☐ Check here if same as "Customer Information"
REPORT TO:
Address:
Attn:
INVOICE TO:
Address:
Attn:
PO # 240302017
Quote #

Sample Matrix

DW - Drinking Water
WW - Waste Water
GW - Groundwater
SW - Surface Water
LIQ - Liquid (specify)
M - Multiphasic
OI - Oil
S - Soil
SED - Sediment
SOL - Solid (specify)
SL - Sludge
W - Wipe

**Rush TAT Charge

24 hr - 100%...
48 hr - 75%....
72 hr - 50%....
96 hr - 35%....
5 day - 25%....
6-9 day - 10%

Deliverables *Surcharge may apply for regulatory

NJ, CT, PA	NY
☐ Results Only (Level I)	☒ ASP Category A
☐ Reduced (Level II/III)	☐ ASP Category B*
☐ Regulatory/ Full* (Level IV)	

EDDs

☐ NJ SRP
☐ NYSDEC EQuIS
☐ lab approved custom EDD
☐ NO EDD REQ'D

Concentrations Expected:

Low Med High
Known Hazard:
☐ YES ☐ NO
Describe:

Turn-Around Time (TAT)

Standard (10 business days) Verbal
Rush/date needed (only if pre-approved)** 6 Day
Hard Copy: Standard 3 week Other - call for price

Petroleum Hydrocarbons - Selection is REQUIRED

☐ NJ EPH-DRO - Category 1
☐ NJ EPH-C40 - Category 2
☐ NJ EPH-Fractionated - Cat 2
☐ CT ETPH
☐ DRO-8015

TAT for PHC, if other than 2 weeks:

Regulatory Requirement

New Jersey	New York
☐ GWQS	☐ AWQS (TOGS Table 1)
☐ IGW	☐ GWEL (TOGS Table 5)
☐ SRS	☒ Part 375-6.8(a) - Unrestricted
☐ Ecological	☒ Part 375-6.8(b) - Restricted
☐ DW	☒ CP-51 Table 2 or 3 (selection required)
☐ SPLP	

Other States / Criteria
☐ Pennsylvania Act 2
☐ CT RCSA 22a-133k1-k3
☐ TSCA PCBs
OTHER Regulatory Requirements - specify in comments

SAMPLE INFORMATION

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# containers	IAL #	ANALYTICAL PARAMETERS (please note if contingent) VOC+15	Sample Specific Notes:
SB-4A	4.5-5	5/29	1112	S	4	1	X	
SB-4B	15-15.5		1113			2	X	
SB-5A	2.5-3		1315			3	X	
SB-5B	13.5-14		1315			4	X	
SB-6A	4-4.5		1415			5	X	
SB-6B	15.5-16		1415			6	X	
SB-7A	6.5-7		1543			7	X	
SB-7B	15.5-16		1545			8	X	

Samples previously analyzed by IAL? YES / NO

Preservative Code: 1 = None, 2 = HCl, 3 = HNO3, 4 = MeOH, 5 = NaOH, 6 = H2SO4, 7 = Other

Container Code: A = Amber Glass, B = Plastic, C = Vial, D = Glass, E = EnCore, T = Terracore

Preservative (use code): 2
Container Type (use code): T

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time (TAT) will not start until any ambiguities have been resolved. TAT starts the following day if samples rec'd at lab ≥ 5PM. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY IAL'S TERMS & CONDITIONS (found on rear of pink copy).

IAL Rev 11/2019

Special Instructions/QC Requirements & Comments:

FOR LAB USE ONLY
SDG #: 1866
Cooler Temp: 4 °C

Carrier (check one):
☐ IAL Courier
☐ Client Courier
☐ FedEx/UPS***
***Tracking #:

Relinquished by (Signature and Company)	Date	Time	Received by (Signature and Company)	Date	Time
	5/29/24	1400		5/30/24	1508
	5/29/24	1711		5/30/24	1711

LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

Certification IDs: TNI (TNI01284); CT (PH-0699); NJ (14751); NY (11402); PA (68-00773).

PAGE: 1 of 2

INTEGRATED ANALYTICAL LABORATORIES, LLC

FINALIZED 06/06/2024

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Chain of Custody Record

Contact Us: 973-361-4252
Web: www.ialonline.com

Customer Information	Reporting Information	**Rush TAT Charge	Deliverables *Surchage may apply for regulatory		EDDs	Concentrations Expected:
Company:	☐ Check here if same as "Customer Information"	24 hr - 100%...	NJ, CT, PA	NY	☐ NJ SRP	Low Med High
Address:	REPORT TO:	48 hr - 75%....	☐ Results Only (Level I)	☑ ASP Category A	☐ NYSDEC EQuIS	Known Hazard:
	Address:	72 hr - 50%....	☐ Reduced (Level II/III)		☐ lab approved custom EDD	☐ YES ☐ NO
Telephone #:		96 hr - 35%....	☐ Regulatory/ Full* (Level IV)	☐ ASP Category B*	☐ NO EDD REQ'D	Describe:
Project Manager:	Attn:	5 day - 25%....				
Email Address(es):	INVOICE TO:	6-9 day - 10%				
	Address:					
Project Name:						
Project Location (State):	Attn:					
Bottle Order #:	PO #					
☐ "Report to"/"Invoice To" same as above	Quote #					
Sampled by:						

Turn-Around Time (TAT)

Standard (10 business days) Verbal

Rush/date needed (only if pre-approved)** 6 Day

Hard Copy: Standard 3 week — Other - call for price

Petroleum Hydrocarbons - Selection is REQUIRED

☐ NJ EPH-DRO - Category 1 — TAT for PHC, if other than 2 weeks:

☐ NJ EPH-C40 - Category 2 ☐ CT ETPH

☐ NJ EPH-Fractionated - Cat 2 ☐ DRO-8015

Regulatory Requirement

New Jersey	New York
☐ GWQS	☐ AWQS (TOGS Table 1)
☐ IGW	☐ GWEL (TOGS Table 5)
☐ SRS	☒ Part 375-6.8(a) - Unrestricted
☐ Ecological	☒ Part 375-6.8(b) - Restricted
☐ DW	☑ CP-51 Table 2 or 3 (selection required)
☐ SPLP	Other States / Criteria
	☐ Pennsylvania Act 2
	☐ CT RCSA 22a-133k1-k3
	☐ TSCA PCBs
	OTHER Regulatory Requirements - specify in comments

Sample Matrix

DW - Drinking Water; WW - Waste Water; GW - Groundwater; SW - Surface Water; LIQ - Liquid (specify); M - Multiphasic; OI - Oil; S - Soil; SED - Sediment; SOL - Solid (specify); SL - Sludge; W - Wipe

COMPLETED BY IAL:

_____ Field Sampling _____ Equipment Rental

SAMPLE INFORMATION

ANALYTICAL PARAMETERS (please note if contingent)

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# containers	IAL #	8260 + 5								Sample Specific Notes:
SB-8A	6.5-7	5/29/24	1700	S	4	9	X								
SB-8B	15.5-16	"	1200	"	"	10	X								

Samples previously analyzed by IAL? YES / NO

Preservative Code: 1 = None; 2 = HCl; 3 = HNO3; 4 = MeOH; 5 = NaOH; 6 = H2SO4; 7 = Other

Container Code: A = Amber Glass; B = Plastic; C = Vial; D = Glass; E = EnCore; T = Terracore

Preservative (use code): 2

Container Type (use code):

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time (TAT) will not start until any ambiguities have been resolved. TAT starts the following day if samples rec'd at lab ≥ 5PM. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY IAL'S TERMS & CONDITIONS (found on rear of pink copy).

IAL Rev 11/2019

Special Instructions/QC Requirements & Comments:

Carrier (check one): ☐ IAL Courier ☐ Client Courier ☐ FedEx/UPS***

***Tracking #:

Relinquished by (Signature and Company)	Date	Time	Received by (Signature and Company)	Date	Time
	5/30/24	1000		5/30/24	1008
	5/30/24	1711		5/30/24	1711

FOR LAB USE ONLY

SDG #: 1866

Cooler Temp: 4 °C

LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

Certification IDs: TNI (TNI01284); CT (PH-0699); NJ (14751); NY (11402); PA (68-00773).

PAGE: 2 of 2

INTEGRATED ANALYTICAL LABORATORIES, LLC

Jun 03, 2024 @ 09:39

RUSH

PROJECT INFORMATION

E24-01866: 48-55 36TH ST.

To: Leah DeEgidio
JS Held - Hoboken
Fax: 201-626-8095
EMail: Ldeegidio@jsheld.com

Report To

JS Held - Hoboken
5 Marine View Plaza
Suite 401
Hoboken, NJ 07030
Attn: Leah DeEgidio

Bill To

JS Held - Hoboken
J.S. Held
50 Jericho Quadrangle, Suite 117
Jericho, NY 11753
Attn: Accounts Payable

Report Format	P.O. #	Received At Lab	PHC Due	Verbal Due	Hardcopy Due
Category A	240302017	May 30, 2024 @ 17:11	NA	Jun 05, 2024	Jun 21, 2024 *

* Any ***Conditional or Hold*** status will delay final hardcopy report sent date.

Diskette Req. Not Required

Criteria Requirement: NY Part 375-6.8(b)/CP-51 Tbl2

Lab ID	Client Sample ID	Depth	Sampling Time	Matrix	Unit	Field pH/Temp
01866-001	SB-4A	4.5/5	05/29/24@11:12	Soil	mg/Kg (ppm)	
01866-002	SB-4B	15/15.5	05/29/24@11:13	Soil	mg/Kg (ppm)	
01866-003	SB-5A	2.5/3	05/29/24@13:15	Soil	mg/Kg (ppm)	
01866-004	SB-5B	13.5/14	05/29/24@13:15	Soil	mg/Kg (ppm)	
01866-005	SB-6A	4/4.5	05/29/24@14:15	Soil	mg/Kg (ppm)	
01866-006	SB-6B	15.5/16	05/29/24@14:15	Soil	mg/Kg (ppm)	
01866-007	SB-7A	6.5/7	05/29/24@15:45	Soil	mg/Kg (ppm)	
01866-008	SB-7B	15.5/16	05/29/24@15:45	Soil	mg/Kg (ppm)	
01866-009	SB-8A	6.5/7	05/29/24@12:00	Soil	mg/Kg (ppm)	
01866-010	SB-8B	15.5/16	05/29/24@12:00	Soil	mg/Kg (ppm)	

* No Cert = IAL does not hold certification for this test/method

Sample #	Test	Status	Analytical Method	TAT	Holding Time Expires
001	TCL VO + 15	Analyze	8260D	RUSH 72 HRS	6/12/2024
002	TCL VO + 15	Analyze	8260D	RUSH 72 HRS	6/12/2024
003	TCL VO + 15	Analyze	8260D	RUSH 72 HRS	6/12/2024
004	TCL VO + 15	Analyze	8260D	RUSH 72 HRS	6/12/2024
005	TCL VO + 15	Analyze	8260D	RUSH 72 HRS	6/12/2024
006	TCL VO + 15	Analyze	8260D	RUSH 72 HRS	6/12/2024
007	TCL VO + 15	Analyze	8260D	RUSH 72 HRS	6/12/2024
008	TCL VO + 15	Analyze	8260D	RUSH 72 HRS	6/12/2024
009	TCL VO + 15	Analyze	8260D	RUSH 72 HRS	6/12/2024
010	TCL VO + 15	Analyze	8260D	RUSH 72 HRS	6/12/2024

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
www.ialonline.com

IAL is a NELAP accredited lab (TNI01284) and maintains certification in Connecticut (PH-0699), New Jersey (14751), New York (11402), and Pennsylvania (68-00773).

Jun 03, 2024 @ 09:39

PROJECT INFORMATION

RUSH

E24-01866: 48-55 36TH ST.

Project Notes:

REV 1 taken by kfalconer on 05/31/2024 03:54
REV 1 DUE 6/5/24

PER LEAH DEEGIDIO, PLEASE CHANGE TAT TO 72 HOURS.

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
www.ialonline.com

IAL is a NELAP accredited lab (TNI01284) and maintains certification in Connecticut (PH-0699), New Jersey (14751), New York (11402), and Pennsylvania (68-00773).

SAMPLE RECEIPT VERIFICATION

CASE NO: **E 24** **01866** CLIENT: JS Held

COOLER TEMPERATURE: 2° - 6°C: ✓ (See Chain of Custody)

Comments

COC: (COMPLETE) / INCOMPLETE

KEY

✓ = YES/NA

✗ = NO

VOA received: (check one) ☐ Encore ☒ Terra Core ☐ IGW - Methanol ☐ No Preservative

✓	Bottles Intact
✓	no-Missing Bottles
✓	no-Extra Bottles
✓	Sufficient Sample Volume
✓	no-headspace/bubbles in VOs
✓	Labels intact/correct
✗	pH Check[1] (refer to Receipt pH Log)
✓	Correct bottles/preservative
✓	Sufficient Holding/Prep Time[1]
☐	Multiphasic Sample
☐	Sample to be Subcontracted
✓	**Chain of Custody is Clear**

[1] All samples with "Analyze Immediately" holding times will be analyzed by this laboratory past the holding time. This includes but is not limited to the following tests: pH, Temperature, Free Residual Chlorine, Total Residual Chlorine, Dissolved Oxygen, Sulfite.

ADDITIONAL COMMENTS:

SAMPLE(S) VERIFIED BY: INITIAL cRonk DATE 5/30/24

CORRECTIVE ACTION REQUIRED: **YES** ☐ (SEE BELOW) **NO** X

If COC is **NOT** clear, ***STOP*** until you get client to authorize/clarify work.

CLIENT NOTIFIED: YES ☐ Date/ Time: _____ NO ☐

PROJECT CONTACT:

SUBCONTRACTED LAB:

DATE SHIPPED:

ADDITIONAL COMMENTS:

VERIFIED/TAKEN BY: INITIAL KJ DATE 5/31/24

Rev 2 2/11/2021

Laboratory Custody Chronicle

IAL Case No.
E24-01866

Client JS Held - Hoboken

Project 48-55 36TH ST.

Received On 5/30/2024@17:11

Department: Volatiles			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
TCL VO + 15	01866-001	Soil	n/a	n/a	6/ 3/24	Mei
"	-002	"	n/a	n/a	6/ 3/24	Mei
"	-003	"	n/a	n/a	6/ 5/24	Mei
"	-004	"	n/a	n/a	6/ 3/24	Mei
"	-005	"	n/a	n/a	6/ 3/24	Mei
"	-006	"	n/a	n/a	6/ 3/24	Mei
"	-007	"	n/a	n/a	6/ 5/24	Mei
"	-008	"	n/a	n/a	6/ 3/24	Mei
"	-009	"	n/a	n/a	6/ 3/24	Mei
"	-010	"	n/a	n/a	6/ 3/24	Mei

NOTE: All soil, sediment, sludge, and solid samples are reported on a dry-weight basis.

Integrated Analytical Labs ~ 273 Franklin Road, Randolph, NJ 07869 ~ (973) 361-4252

LAST PAGE OF DOCUMENT

Integrated Analytical Laboratories LLC

EPA TO-15 DATA PACKAGE

ANALYTICAL DATA PACKAGE FOR THE
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
ALBANY NEW YORK 12233

Integrated Analytical Laboratories, LLC — **Randolph, NJ 07869**
Project#: 48-55 36th St — **NY ELAP Certification#: 11402**
SDG #: E24-01875 — **NJDEP (Primary AB) Certification#: 14751**
Date of first sample receipt: 5/31/2024 — **Date of last sample receipt: 5/31/2024**

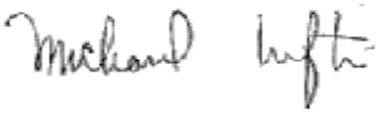
Client: JS Held-Hoboken

Project/Site: 48-55 36th St/NY

Client Sample Number	Laboratory Sample	Sample Location	Date/Time of Collection
SG-1B	E24-01875-01	NA	5/29/2024 16:58
SG-5	E24-01875-02	NA	5/30/2024 10:54
SG-6	E24-01875-03	NA	5/30/2024 19:14
SG-7	E24-01875-04	NA	5/30/2024 19:20
SG-8	E24-01875-05	NA	5/30/2024 19:15
SG-9	E24-01875-06	NA	5/30/2024 19:19

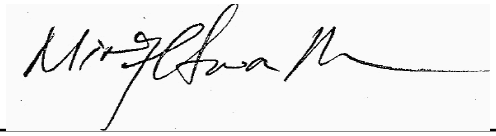
This report shall not be reproduced, except in its entirety, without the written consent of Integrated Analytical Laboratories, LLC. The test results included in this report relate only to the samples analyzed. The results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

I certify that this data package is in compliance with the terms and conditions of this contract, both technically and for completeness, for other than the conditions detailed above. Release of data contained in this hardcopy data package and in the computer-readable data submitted on CD/diskette and by electronic mail has been authorized by the laboratory manager or his designee, as verified by the following signature.



Michael H. Leftin, Ph.D.
Laboratory Director

Date: June 24, 2024



Ming-Hwa Reitan
QA/QC Manager

Date: June 24, 2024

Integrated Analytical Laboratories LLC

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Laboratory Acronyms

The following is a list of laboratory acronyms commonly used in EPA Method TO-15 testing:

Acronym	Definition
BLK	Blank/Method Blank
BFB	4-Bromofluorobenzene (Tuning Standard)
CAS Number	Chemical Abstract Service Registry Number
cc	cubic centimeters
CCCVS	Closing Calibration Check Verification Standard
COC	Chain of Custody
DCVS	Daily Calibration Verification Standard
DF	Dilution Factor
EPA	U. S. Environmental Protection Agency (aka USEPA)
"Hg	Inches of Mercury
IA	Indoor Air
IASL	Indoor Air Screening Level
ICAL	Initial Calibration
ICVSS	Initial Calibration Verification Standard
ISTD	Internal Standard
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LCS	Laboratory Control Sample/Spike
LLTO-15	Low Level TO-15
MDL	Method Detection Limit
MDLV	Method Detection Limit Verification
ml	milliliters
ND	Not Detected (at or above RL)
NJDEP	New Jersey Department of Environmental Protection
PM	Project Manager
ppbv	parts per billion, volume-to-volume ratio
PQL	Practical Quantitation Limit - MDLx3
QA	Quality Assurance
QC	Quality Control
RAL	Rapid Action Limit
RL	Reporting Limit
RLLCS	Reporting Limit Laboratory Control Sample
RPD	Relative Percent Difference
RRF	Relative Response Factor
RSD	Relative Standard Deviation
SDG	Sample Delivery Group
SGSL	Soil Gas Screening Levels
SS	Sub Slab
TAT	Turnaround Time
TIC	Tentatively Identified Compound
µg/m3	micrograms per cubic meter

Section I: Chain of Custody

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

External Chain of Custody Record/ Field Test Data Sheet USEPA Method TO-15

Contact Us: 973-361-4252
Fax: 973-366-5613
Web: www.ialonline.com

Carrier (check one): ____ IAL Courier ____Client Courier _____FedEx/UPS

pg 1 of 1

Client Contact Information	Project Information	Invoice Information
Company: J.S. Held, LLC	Project Name: 48-55 36th St	
Address: 5 Marine View Plaza, Suite 401	Project Location (State): NY	Attn:
Hoboken, NJ 07030	Project Manager: Leah DeFidio	Address:
Phone: 201-876-9400	PM Signature:	
Fax:	PM E-Mail: LDeFidio@jsheld.com	PO #: 2403 02017
Report to:	Sampler: BN	Quote #:

Analysis Turnaround Time - IF NO TAT IS SPECIFIED, 2 WEEK TAT IS ASSUMED

IAL Standard: 2 weeks (10 business days)

Rush (**pre-approved by lab): 24hr** 48hr** 72hr** 96hr** 1wk**

	Sample Identification	Start DATE & TIME (24hr Clock)	End DATE & TIME (24hr Clock)	Starting Vacuum ("Hg)	Ending Vacuum ("Hg)	Starting Temp. (°F)	Ending Temp. (°F)	Outgoing Vacuum - Lab ("Hg)	Barometric Pressure Start: Incoming Vacuum - Lab ("Hg)	Flow Regulator ID	Barometric Pressure Stop: Canister ID	Canister Size (1L or 6L)	Flow Controller Readout (cc/min)
1	SG-1B	5/29/24, 1658	5/29/24, 1728	-30	-5	~~1658~~ 70	~~1728~~ 70	-29.0	-4.5	7341606	3293	6L	200
2	SG-5	5/30/24 1054	5/30/24, 1129	-30	-3	70	70	-29.0	-2.5	7342688	3286	↓	200
3	SG-6	" 1914	" 1944	-29	-2.5	↓	↓	-29.0	-2.5	AOC7631 -10	3814	↓	200
4	SG-7	" 1920	" 1950	-30	0	↓	↓	-29.0	0.0	7288535	2158	↓	200
5	SG-8	" 1915	" 1945	-28.5	0	↓	↓	-29.0	0.0	7341618	3806	↓	200
6	SG-9	" 1919	" 1949	-30	-4	↓	↓	-29.0	-3.5	70 2500 -10	3045A	↓	200

Analysis	Report	Matrix
EPA TO - 15	Regulatory/ NY Cat B / Full (NJ Required)	Indoor Air
NJDEP LLTO-15 (includes 30 TICs)	Reduced / NY Cat A Data Package	Ambient / Outdoor Air
Library Search (10, 20, or 30 TICs)	Results Only	Sub Slab / Soil Gas / Near Slab (Circle One)
Other (Explain in Comments)		Stack Emission / SVE System
		High Concentrations Expected

Comments/ Special Analysis Instructions / QC Requirements:

Note: Hold or contingent samples may be designated by writing an "H" or "C" in the appropriate analysis box.

ALL FIELDS IN RED ARE REQUIRED

Shipping Information / Canister Preparation (for laboratory use only)

Individual Preparing Canisters / Title: ~~P. Jenkins, J. Walukiewicz~~ / Air Department Sample Custodians

Lab Affixed Seal Number(s): Desmond Flores

Date/Time Shipping Container Sealed: 11:43 AM 5/23/24

Laboratory Canister Certification

GC/MS Analyst Signature: Joseph J Walukiewicz III (IAL)

IAL SDG#: 01875

External Chain of Custody

Relinquished	Received	Date / Time	Reason for Change of External Custody
Desmond Flores		5/28/24 11:43 AM	shipment from laboratory to client
	Joseph J Walukiewicz III (IAL)	5/31/24 1429	
Joseph J Walukiewicz III (IAL)		05/31/24 1706	Received at lab

Name/Title Resealing Shipping Container Name:

Date/Time Sample Shipping Container Resealed:

Date/Time Sample Shipping Container Opened: 05/31/24 1706

NJDEP Affixed Seal Number:

Individual Opening Sample Shipping Container: ~~Patrick Jenkins~~ Joseph Walukiewicz

Date/Time Internal Chain of Custody Initiated: 06/03/24 0930

White and yellow - lab copies; Pink - client copy

Use appropriate care with IAL sampling equipment when sampling and packing for shipment. The client is responsible for all damage incurred to IAL equipment. Notify IAL if equipment is damaged upon receipt. Holding time before sampling is 15 days, after sampling is 30 days; failure to follow these times may result in data rejection by regulatory agencies. The lab will contact you if your COC is not clear, incomplete, or if discrepancies exist. The use of initials is not permitted on the COC except when correcting errors. 06/2014

PROJECT INFORMATION

RUSH

E24-01875: 48-55 36TH ST

To: Leah DeEgidio
JS Held - Hoboken
Fax: 201-626-8095
EMail: Ldeegidio@jsheld.com

Report To

JS Held - Hoboken
5 Marine View Plaza
Suite 401
Hoboken, NJ 07030
Attn: Leah DeEgidio

Bill To

JS Held - Hoboken
J.S. Held
50 Jericho Quadrangle, Suite 117
Jericho, NY 11753
Attn: Accounts Payable

Report Format	P.O. #	Received At Lab	PHC Due	Verbal Due	Hardcopy Due	
Air Regulatory	240302017	May 31, 2024 @ 17:06	NA	Jun 06, 2024	Jun 24, 2024	*

* Any ***Conditional or Hold*** status will delay final hardcopy report sent date.

Diskette Req. Not Required

Lab ID	Client Sample ID	Depth	Sampling Time	Matrix	Unit	Field pH/Temp
01875-001	SG-1B	NA	05/29/24@17:28	Air-Other	ppbV	
01875-002	SG-5	NA	05/30/24@11:29	Air-Other	ppbV	
01875-003	SG-6	NA	05/30/24@19:44	Air-Other	ppbV	
01875-004	SG-7	NA	05/30/24@19:50	Air-Other	ppbV	
01875-005	SG-8	NA	05/30/24@19:45	Air-Other	ppbV	
01875-006	SG-9	NA	05/30/24@19:49	Air-Other	ppbV	

* No Cert = IAL does not hold certification for this test/method

Sample #	Test	Status	Analytical Method	TAT	Holding Time Expires
001	EPA TO-15	Analyze	TO-15	RUSH 72 HRS	6/28/2024
002	EPA TO-15	Analyze	TO-15	RUSH 72 HRS	6/29/2024
003	EPA TO-15	Analyze	TO-15	RUSH 72 HRS	6/29/2024
004	EPA TO-15	Analyze	TO-15	RUSH 72 HRS	6/29/2024
005	EPA TO-15	Analyze	TO-15	RUSH 72 HRS	6/29/2024
006	EPA TO-15	Analyze	TO-15	RUSH 72 HRS	6/29/2024

Project Notes:

NOTE 2 taken by kim on 06/03/2024 11:47
CLIENT DID NOT RECORD BAROMETRIC PRESSURE.

REV 1 taken by kim on 06/03/2024 01:43
REV 01 DUE 6/6

PER LEAH DeEGIDIO, CHANGE TURNAROUND TO 72 HOUR RUSH.

IAL is a NELAP accredited lab (TNI01284) and maintains certification in Connecticut (PH-0699), New Jersey (14751), New York (11402), and Pennsylvania (68-00773).

Internal Chain of Custody

Instructions: Use 1 form for each 20 samples of aliquot.

Laboratory Person Accepting Responsibility for Sample(s)			
Laboratory:	Integrated Analytical Laboratories	Location:	273 Franklin Rd Randolph, NJ 07869
Name:	Joseph Walukiewicz	Title:	Air Department Receiving
Case No.:	E24-01875	Analytical Parameter/Fraction: (check one)	____ NJDEP LLTO-15 __x__ EPA TO-15

Sample No.	Aliquot/Extract No.
1B-1B	E24-01875-01
" -5	E24- " -02
" -6	E24- " -03
" -7	E24- " -04
" -8	E24- " -05
" -9	E24 " -06
	E24-
	E24-
	E24-
	E24-

Sample No.	Aliquot/Extract No.
	E24-
	E24-
	E24-
	E24-
	E24-
	E24-
	E24-
	E24-
	E24
	E24

Date	Time	Relinquished By	Received By	Purpose of Change of Custody
06 03 24	0930	SIGNATURE PRINTED NAME	SIGNATURE Joseph Walukiewicz PRINTED NAME JOSEPH WALUKIEWICZ	1. Sample log-in 2. Pressure Check 3. Pre-analysis storage
06 03 24	0940	SIGNATURE Joseph Walukiewicz PRINTED NAME JOSEPH WALUKIEWICZ	SIGNATURE PRINTED NAME	Placement in TO-15 sample storage area until ready for analysis
06 04 24	1440	SIGNATURE PRINTED NAME	SIGNATURE Joseph Walukiewicz PRINTED NAME JOSEPH WALUKIEWICZ	TO-15 analysis on: 01875-01 to -06
		SIGNATURE PRINTED NAME	SIGNATURE Joseph Walukiewicz PRINTED NAME JOSEPH WALUKIEWICZ	TO-15 analysis on:
		SIGNATURE PRINTED NAME	SIGNATURE PRINTED NAME	
		SIGNATURE PRINTED NAME	SIGNATURE PRINTED NAME	
		SIGNATURE PRINTED NAME	SIGNATURE PRINTED NAME	
		SIGNATURE PRINTED NAME	SIGNATURE PRINTED NAME	

Rev. 12/16

Section II: Methodology Review

Methodology Summary for Air Collected from Hazardous Waste Site Contract

Laboratory:	**Integrated Analytical Lab, LLC**	**Project No:**	**48-55 36th St**
Location:	**Randolph, NJ**	**SDG No:**	**E24-01875**

Name	Required Methodology	Indicate Method
Volatile Organics	US EPA TO-15	US EPA Method TO-15

Section III: Case Narrative

CASE NARRATIVE

Integrated Analytical Laboratories, LLC — **Randolph, NJ 07869**
Project #: 48-55 36th St — **NJDEP (Primary AB) Certification#: 14751**
SDG #: E24-01875 — **NY ELAP Certification #: 11402**
CT DPH Certification#: PH-0699
Analytical Method: EPA Method TO-15 — **PADEP Certification#: 68-00773**

Date of first sample receipt: 5/31/2024 — **Date of last sample receipt: 5/31/2024**

Client: JS Held-Hoboken
Project/Site: 48-55 36th St / NY

Client ID	Lab ID	Receipt Date	Analysis Date	DF	Diluted For
SG-1B	E24-01875-01	05/31/2024	06/04/2024	50.0	Tetrachloroethene
SG-1B	E24-01875-01	05/31/2024	06/04/2024	10.0	Screening Data
SG-5	E24-01875-02	05/31/2024	06/04/2024	10.0	Tetrachloroethene
SG-5	E24-01875-02	05/31/2024	06/04/2024	1.0	NA
SG-6	E24-01875-03	05/31/2024	06/04/2024	10.0	Acetone Tetrachloroethene
SG-6	E24-01875-03	05/31/2024	06/04/2024	2.0	Screening Data
SG-7	E24-01875-04	05/31/2024	06/04/2024	50.0	Tetrachloroethene
SG-7	E24-01875-04	05/31/2024	06/04/2024	10.0	Screening Data
SG-8	E24-01875-05	05/31/2024	06/04/2024	10.0	Acetone Tetrachloroethene
SG-8	E24-01875-05	05/31/2024	06/04/2024	2.0	Screening Data
SG-9	E24-01875-06	05/31/2024	06/05/2024	10.0	Acetone Tert-butyl alcohol Tetrachloroethene
SG-9	E24-01875-06	05/31/2024	06/04/2024	1.0	NA

IAL Sample ID	Canister ID	Outgoing Pressure ("Hg)	Incoming Pressure ("Hg)	Flow Controller ID	Outgoing Flow Rate (cc/min)	Incoming Flow Rate (cc/min)	Flow Rate RPD*
E24-01875-01	3293	-29	-4.5	7341606	200.00	198.20	0.90
E24-01875-02	3286	-29	-2.5	7342688	200.00	197.50	1.26
E24-01875-03	3814	-29	-2.5	A0070631-10	200.00	199.20	0.40
E24-01875-04	2159	-29	0.0	7288555	200.00	198.60	0.70
E24-01875-05	3806	-29	0.0	7341818	200.00	197.30	1.36
E24-01875-06	3045A	-29	-3.5	A0280069-10	200.00	198.70	0.65

*Pre-sampling and Post-sampling Flow Controller calibration check RPD ≤ 20%

Flow Controller Note: none

CASE NARRATIVE

Integrated Analytical Laboratories, LLC — **Randolph, NJ 07869**
Project #: 48-55 36th St — **NJDEP (Primary AB) Certification#: 14751**
SDG #: E24-01875 — **NY ELAP Certification #: 11402**
CT DPH Certification#: PH-0699
Analytical Method: EPA Method TO-15 — **PADEP Certification#: 68-00773**

Date of first sample receipt: 5/31/2024 — **Date of last sample receipt: 5/31/2024**

Client: JS Held-Hoboken
Project/Site: 48-55 36th St / NY

Sample Receipt: Samples were received in good condition. Documentation was in order.
Samples were received at IAL by: Joseph Walukiewicz

Sample Preparation: None required.

Sample Analysis:

Hold Time: All within recommended hold times.

Instrument Calibration: Meets method criteria.

Analysis performed by: jjw

SDG Non-Conformances: 06/05: d-5 chlorobenzene failed high for sample -06x10. Compounds referencing this internal standard would be biased low. No compounds were reported that referenced d-5 chlorobenzene.

Tentatively Identified Compounds: Tentatively Identified Compounds (TICs) are determined using a NIST library search. TICs are reported at 10% of the applicable internal standard. Dilution factors are calculated into the final reported result. Since the compounds found are tentatively identified, the conversion from ppbv to ug/m3 may not be made.

Canister-to-Canister dilutions: none

Dilutions: Dilutions, if necessary, will be conducted directly on the instrument up to a 500x dilution. When dilutions of 1000x or higher are necessary, the laboratory must inject a volume of sample into another certified clean canister and add humidified Z-1 zero air to the remainder of the canister volume. Tedlar bags are not used for dilutions.

If a sample is received with historically high levels of analytes, a 100x can-to-can dilution my be used from the start. A 100x canister-to-canister dilution may be also be used at the analyst's discretion.

On-instrument dilutions are conducted as follows:

Dilution Factor	Sample Volume Injected (cc)
1	500
2.5	200
5	100
10	50
20	25
25	20
50	10
100	5
200	2.5
250	2
500	1

CASE NARRATIVE

Integrated Analytical Laboratories, LLC | **Randolph, NJ 07869**
Project #: 48-55 36th St | **NJDEP (Primary AB) Certification#: 14751**
SDG #: E24-01875 | **NY ELAP Certification #: 11402**
CT DPH Certification#: PH-0699
Analytical Method: EPA Method TO-15 | **PADEP Certification#: 68-00773**

Date of first sample receipt: 5/31/2024 | **Date of last sample receipt: 5/31/2024**

Client: JS Held-Hoboken
Project/Site: 48-55 36th St / NY

Canister-to-canister dilutions are conducted as follows:

A certified clean canister is obtained and evacuated to approximately -30"Hg. Both the clean/dilution canister and sample canister are fitted with a ¼" Swagelok® nut fitting equipped with septa. Depending on dilution factor necessary, a sample aliquot is removed from the canister and injected into the clean canister using 30cc Multifit gas-tight syringe. Once the correct sample aliquot has been transferred, the dilution canister should be connected to the humidified Z-1 zero air supply and filled to ambient pressure (0"Hg).

Dilution Factor	Sample Aliquot	Z-1 Make-up Added
100	60ml	5940ml
1000	6ml	5994ml

If further dilutions need to be made from the dilution canister, they may be made on-instrument. Using a 100x dilution canister, the following on-instrument dilutions can be produced:

Dilution Factor	Sample Volume Injected
100	500ml
250	200ml
500	100ml
1000	50ml
2000	25ml
2500	20ml
5000	10ml

Using a 1000x dilution canister, the following on-instrument dilutions can be produced:

Dilution Factor	Sample Volume Injected
1000	500ml
2500	200ml
5000	100ml
10,000	50ml
20,000	25ml
25,000	20ml
50,000	10ml

If further dilutions need to be made from the dilution canister, beyond 50,000x, a subsequent canister-to-canister dilution must be made using the above prescribed protocol.

CASE NARRATIVE

Integrated Analytical Laboratories, LLC — **Randolph, NJ 07869**
Project #: 48-55 36th St — **NJDEP (Primary AB) Certification#: 14751**
SDG #: E24-01875 — **NY ELAP Certification #: 11402**
CT DPH Certification#: PH-0699
Analytical Method: EPA Method TO-15 — **PADEP Certification#: 68-00773**

Date of first sample receipt: 5/31/2024 — **Date of last sample receipt: 5/31/2024**

Client: JS Held-Hoboken
Project/Site: 48-55 36th St / NY

GC Column and ID: RTX-1 SN 1119138, RTX-VMS SN 1586881, or equivalent

Calibration Standards: Only gas phase standards were used. Primary and second-source standards provided by Scott Specialty Gases or Airgas Specialty Gases/ Air Liquide

Working Standards: Primary source standards* are created from:
- Airgas Specialty Gases #EB0103704, valid 1/18/2021 through 12/30/2024, @ approximately 100ppb per compound, with exception of m&p-xylenes @ 200ppb. Standard is directly introduced into the instrument for all calibration standard concentrations. Dilutions are made accordingly, on instrument. The 10ppbv standard is also used for the Daily Calibration Verification Standard (DCVS), the Laboratory Control Sample (LCS) and Closing Calibration Verification Standard (CCCVS).

The second source standard*, used as the Initial Calibration Verification Standard (ICVSS), is introduced into the instrument in the same manner as the primary source standard, using:
- Airgas Specialty Gases Cylinder #EB0116272, valid 7/28/2021 through 5/12/2025, @ approximately 100ppb per compound, with exception of m&p-xylenes @ 200ppb.

Internal standards* are created from:
- Airgas Specialty Gases Cylinder #ALM018474, valid 2/24/2022 through 2/24/2025. @ 5ppm per compound. Standard is directly introduced into the instrument to reach the 10ppbv concentrations. 1cc of internal standard is added to every standard, method blank, instrument blank, and sample run.

*Standard may be used past its expiration date provided that concentrations are verified by a current/unexpired second source standard.

03/27/2024

100 ppbv internal standard mix (AA6020BFB) - prepared in cylinder #ALM018474
10 ppbv per standard/sample - 50 ml injected
100 ppbv calibration standard (aa6025std01) - prepared in cylinder #EB0103704
40 ppbv standard - 200 ml injected
20 ppbv standard - 100 ml injected
10 ppbv standard* - 50 ml injected
*Standard also used for CCCVS
2 ppbv standard - 10 ml injected
0.20 ppbv standard* - 1 ml injected
*Standard also used for RLLCS
Method Blank (AA6028BLK) - prepared in canister #1127
500 ml injected

04/24/2024

100 ppbv internal standard mix (AA6389BFB) - prepared in cylinder #ALM018474
10 ppbv per standard/sample - 50 ml injected

CASE NARRATIVE

Integrated Analytical Laboratories, LLC — **Randolph, NJ 07869**
Project #: 48-55 36th St — **NJDEP (Primary AB) Certification#: 14751**
SDG #: E24-01875 — **NY ELAP Certification #: 11402**
CT DPH Certification#: PH-0699
Analytical Method: EPA Method TO-15 — **PADEP Certification#: 68-00773**

Date of first sample receipt: 5/31/2024 — **Date of last sample receipt: 5/31/2024**

Client: JS Held-Hoboken
Project/Site: 48-55 36th St / NY

04/24/2024
- 100 ppbv calibration standard (AA6390DCVS) - prepared in cylinder #EB0103704
  - 10 ppbv standard* - 50 ml injected
    - *Standard also used for DCVS & CCCVS
  - 0.20 ppbv standard* - 1 ml injected
    - *Standard also used for RLLCS
- Method Blank (AA6392BLK) - prepared in canister #1127
  - 500 ml injected

05/29/2024
- 100 ppbv internal standard mix (AA6554BFB) - prepared in cylinder #ALM018474
  - 10 ppbv per standard/sample - 50 ml injected
- 100 ppbv calibration standard (aa6560std01) - prepared in cylinder #EB0103704
  - 40 ppbv standard - 200 ml injected
  - 20 ppbv standard - 100 ml injected
  - 10 ppbv standard* - 50 ml injected
    - *Standard also used for CCCVS
  - 2 ppbv standard - 10 ml injected
  - 0.20 ppbv standard* - 1 ml injected
    - *Standard also used for RLLCS

06/04/2024
- 100 ppbv internal standard mix (AA6620BFB) - prepared in cylinder #ALM018474
  - 10 ppbv per standard/sample - 50 ml injected
- 100 ppbv calibration standard (AA6621DCVS) - prepared in cylinder #EB0103704
  - 10 ppbv standard* - 50 ml injected
    - *Standard also used for DCVS & CCCVS
  - 0.20 ppbv standard* - 1 ml injected
    - *Standard also used for RLLCS
- Method Blank (AA6623BLK) - prepared in canister #1127
  - 500 ml injected
- Sample E24-01875-01 (AA6625) - sample taken in canister #3293
  - 50 ml sample volume injected, 10x dilution
- Sample E24-01875-01 (AA6631) - sample taken in canister #3293
  - 10 ml sample volume injected, 50x dilution
- Sample E24-01875-02 (AA6628) - sample taken in canister #3286
  - 50 ml sample volume injected, 10x dilution
- Sample E24-01875-02 (AA6636) - sample taken in canister #3286
  - 500 ml sample volume injected, 1x dilution
- Sample E24-01875-03 (AA6626) - sample taken in canister #3814
  - 50 ml sample volume injected, 10x dilution
- Sample E24-01875-03 (AA6634) - sample taken in canister #3814
  - 250 ml sample volume injected, 2x dilution
- Sample E24-01875-04 (AA6629) - sample taken in canister #2159
  - 50 ml sample volume injected, 10x dilution

CASE NARRATIVE

Integrated Analytical Laboratories, LLC — **Randolph, NJ 07869**
Project #: 48-55 36th St — **NJDEP (Primary AB) Certification#: 14751**
SDG #: E24-01875 — **NY ELAP Certification #: 11402**
CT DPH Certification#: PH-0699
Analytical Method: EPA Method TO-15 — **PADEP Certification#: 68-00773**

Date of first sample receipt: 5/31/2024 — **Date of last sample receipt: 5/31/2024**

Client: JS Held-Hoboken
Project/Site: 48-55 36th St / NY

06/04/2024

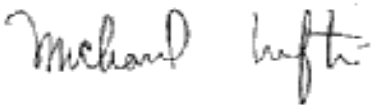
Sample E24-01875-04 (AA6633) - sample taken in canister #2159
10 ml sample volume injected, 50x dilution
Sample E24-01875-05 (AA6627) - sample taken in canister #3806
50 ml sample volume injected, 10x dilution
Sample E24-01875-05 (AA6635) - sample taken in canister #3806
250 ml sample volume injected, 2x dilution
Sample E24-01875-06 (AA6630) - sample taken in canister #3045A
500 ml sample volume injected, 1x dilution

06/05/2024

100 ppbv internal standard mix (AA6639BFB) - prepared in cylinder #ALM018474
10 ppbv per standard/sample - 50 ml injected
100 ppbv calibration standard (AA6640DCVS) - prepared in cylinder #EB0103704
10 ppbv standard* - 50 ml injected
*Standard also used for DCVS & CCCVS
0.20 ppbv standard* - 1 ml injected
*Standard also used for RLLCS
Method Blank (AA6642BLK) - prepared in canister #1127
500 ml injected
Sample E24-01875-06 (AA6648) - sample taken in canister #3045A
50 ml sample volume injected, 10x dilution

All work recorded herein has been done in accordance with normal professional standards using accepted testing methodologies, quality assurance and quality control procedures except where otherwise agreed to by the client and testing company in writing. All conversions are based upon a room temperature of 77°F(25°C) and room pressure of 101.325 kPa (1atm).

I certify that this data package is in compliance with the terms and conditions of this contract, both technically and for completeness, for other than the conditions detailed above. Release of data contained in this hardcopy data package and in the computer-readable data submitted on CD/diskette and by electronic mail has been authorized by the laboratory manager or his designee, as verified by the following signature.



Michael H. Leftin, Ph.D.
Laboratory Director

June 24, 2024
Date

Integrated Analytical Laboratories LLC

Airgas
an Air Liquide company

R 362

Received 01/06/2023

Airgas Specialty Gases
Airgas USA LLC
6141 Easton Road
Plumsteadville, PA 18949
Airgas.com

CERTIFICATE OF ANALYSIS

Grade of Product: CERTIFIED HYDROCARBON

Customer:	INTEGRATED ANALYTICAL LABS		
Part Number:	X76NI99C15AC001		
Cylinder Number:	EB0103704	Reference Number:	160-402619255-1
Laboratory:	124 - Plumsteadville - PA	Cylinder Volume:	101.0 CF
Analysis Date:	Dec 30, 2022	Cylinder Pressure:	1400 PSIG
Lot Number:	160-402619255-1	Valve Outlet:	350SS
		Expiration Date:	Dec 30, 2024

Traceability Statement: Hydrocarbon Process standards are NIST traceable either directly by weight or by comparison to Airgas laboratory standards that are directly NIST traceable by weight.

CERTIFIED CONCENTRATIONS

Component	Requested Concentration	Reported Mole %	Accuracy
1,1 DICHLOROETHANE	100.000 PPB	107.000 PPB	+/- 10%
1,1 DICHLOROETHYLENE	100.000 PPB	104.000 PPB	+/- 10%
1,1,1 TRICHLOROETHANE	100.000 PPB	109.000 PPB	+/- 10%
1,1,2 TRICHLORO ETHANE	100.000 PPB	108.000 PPB	+/- 10%
1,1,2,2 TETRACHLOROETHANE	100.000 PPB	114.000 PPB	+/- 10%
1,2 DIBROMO ETHANE	100.000 PPB	108.000 PPB	+/- 10%
1,2 DICHLORO PROPANE	100.000 PPB	110.000 PPB	+/- 10%
1,2 DICHLOROBENZENE	100.000 PPB	107.000 PPB	+/- 10%
1,2 DICHLOROETHANE	100.000 PPB	109.000 PPB	+/- 10%
1,2,4 TRICHLOROBENZENE	100.000 PPB	110.000 PPB	+/- 10%
1,2,4 TRIMETHYLBENZENE	100.000 PPB	108.000 PPB	+/- 10%
1,3 BUTADIENE	100.000 PPB	107.000 PPB	+/- 10%
1,3 DICHLORO BENZENE	100.000 PPB	111.000 PPB	+/- 10%
1,3,5 TRIMETHYL BENZENE	100.000 PPB	109.000 PPB	+/- 10%
1,4 DICHLOROBENZENE	100.000 PPB	107.000 PPB	+/- 10%
1,4 DIOXANE	100.000 PPB	117.000 PPB	+/- 10%
2 CHLOROTOLUENE	100.000 PPB	109.000 PPB	+/- 10%
3 CHLOROPROPYLENE	100.000 PPB	108.000 PPB	+/- 10%
4 ETHYL TOLUENE	100.000 PPB	108.000 PPB	+/- 10%
ACETONE	100.000 PPB	108.000 PPB	+/- 10%
ACROLEIN	100.000 PPB	100.000 PPB	+/- 10%
BENZENE	100.000 PPB	108.000 PPB	+/- 10%
BENZYL CHLORIDE	100.000 PPB	100.000 PPB	+/- 10%
BROMO DICHLORO METHANE	100.000 PPB	115.000 PPB	+/- 10%
BROMOFORM	100.000 PPB	113.000 PPB	+/- 10%
CARBON DISULFIDE	100.000 PPB	107.000 PPB	+/- 10%
CARBON TETRACHLORIDE	100.000 PPB	110.000 PPB	+/- 10%
CHLORO DIBROMO METHANE	100.000 PPB	112.000 PPB	+/- 10%
CHLOROBENZENE	100.000 PPB	111.000 PPB	+/- 10%
CHLOROFORM	100.000 PPB	108.000 PPB	+/- 10%
CIS 1,2 DICHLOROETHYLENE	100.000 PPB	109.000 PPB	+/- 10%
CIS 1,3 DICHLOROPROPENE	100.000 PPB	111.000 PPB	+/- 10%
CUMENE	100.000 PPB	107.000 PPB	+/- 10%
CYCLOHEXANE	100.000 PPB	112.000 PPB	+/- 10%
ETHANOL	100.000 PPB	104.000 PPB	+/- 10%
ETHYL ACETATE	100.000 PPB	108.000 PPB	+/- 10%
ETHYL BENZENE	100.000 PPB	111.000 PPB	+/- 10%
ETHYL CHLORIDE	100.000 PPB	106.000 PPB	+/- 10%
HEXACHLORO 1,3 BUTADIENE	100.000 PPB	111.000 PPB	+/- 10%

Approved for Release

Integrated Analytical Laboratories LLC

Airgas
an Air Liquide company

Airgas Specialty Gases
Airgas USA LLC
6141 Easton Road
Plumsteadville, PA 18949
Airgas.com

HEXANE	100.000 PPB	111.000 PPB	+/- 10%
ISOOCTANE	100.000 PPB	109.000 PPB	+/- 10%
ISOPROPYL ALCOHOL	100.000 PPB	89.000 PPB	+/- 10%
M XYLENE	100.000 PPB	112.000 PPB	+/- 10%
METHYL BROMIDE	100.000 PPB	100.000 PPB	+/- 10%
METHYL BUTYL KETONE	100.000 PPB	113.000 PPB	+/- 10%
METHYL CHLORIDE	100.000 PPB	112.000 PPB	+/- 10%
METHYL ETHYL KETONE	100.000 PPB	110.000 PPB	+/- 10%
METHYL ISOBUTYL KETONE	100.000 PPB	109.000 PPB	+/- 10%
METHYL METHACRYLATE	100.000 PPB	110.000 PPB	+/- 10%
METHYL TERT BUTYL ETHER	100.000 PPB	112.000 PPB	+/- 10%
METHYLENE CHLORIDE	100.000 PPB	108.000 PPB	+/- 10%
N BUTANE	100.000 PPB	109.000 PPB	+/- 10%
N HEPTANE	100.000 PPB	111.000 PPB	+/- 10%
N NONANE	100.000 PPB	110.000 PPB	+/- 10%
N PENTANE	100.000 PPB	108.000 PPB	+/- 10%
N PROPYL BENZENE	100.000 PPB	108.000 PPB	+/- 10%
NAPHTHALENE	100.000 PPB	100.000 PPB	+/- 10%
O XYLENE	100.000 PPB	110.000 PPB	+/- 10%
P XYLENE	100.000 PPB	111.000 PPB	+/- 10%
PERCHLOROETHYLENE	100.000 PPB	112.000 PPB	+/- 10%
PROPYLENE	100.000 PPB	109.000 PPB	+/- 10%
R11 TRICHLOROFLUOROMETHANE	100.000 PPB	110.000 PPB	+/- 10%
R113 TRICHLOROTRIFLUOROETHANE	100.000 PPB	109.000 PPB	+/- 10%
R114 DICHLOROTETRAFLUOROETHANE	100.000 PPB	98.000 PPB	+/- 10%
R12 DICHLORODIFLUOROMETHANE	100.000 PPB	106.000 PPB	+/- 10%
STYRENE	100.000 PPB	113.000 PPB	+/- 10%
TERT BUTANOL	100.000 PPB	115.000 PPB	+/- 10%
TETRAHYDROFURAN	100.000 PPB	110.000 PPB	+/- 10%
TOLUENE	100.000 PPB	108.000 PPB	+/- 10%
TRANS 1,2 DICHLOROETHYLENE	100.000 PPB	111.000 PPB	+/- 10%
TRANS 1,3 DICHLOROPROPENE	100.000 PPB	111.000 PPB	+/- 10%
TRICHLOROETHYLENE	100.000 PPB	100.000 PPB	+/- 10%
VINYL ACETATE	100.000 PPB	110.000 PPB	+/- 10%
VINYL BROMIDE	100.000 PPB	101.000 PPB	+/- 10%
VINYL CHLORIDE	100.000 PPB	108.000 PPB	+/- 10%
NITROGEN	99.99925 %	99.999187 %	+/- 10%

Permanent Notes: CUSTOM TO MIX - TO-15/17 MODIFIED NJ STD + NAPHTHALENE

Notes: PO number: 22578

Approved for Release

Integrated Analytical Laboratories LLC

Airgas
an Air Liquide company

Airgas Specialty Gases
Airgas USA LLC
6141 Easton Road
Plumsteadville, PA 18949
Airgas.com

R366

CERTIFICATE OF ANALYSIS

Grade of Product: CERTIFIED HYDROCARBON

Customer:	INTEGRATED ANALYTICAL LABS		
Part Number:	X76NI99C15AC001		
Cylinder Number:	EB0116272	Reference Number:	160-402744241-1
Laboratory:	124 - Plumsteadville - PA	Cylinder Volume:	146.0 CF
Analysis Date:	May 12, 2023	Cylinder Pressure:	2050 PSIG
Lot Number:	160-402744241-1	Valve Outlet:	350SS
		Expiration Date:	May 12, 2025

Traceability Statement: Hydrocarbon Process standards are NIST traceable either directly by weight or by comparison to Airgas laboratory standards that are directly NIST traceable by weight.

CERTIFIED CONCENTRATIONS

Component	Requested Concentration	Reported Mole %	Accuracy
1,1 DICHLOROETHANE	100.000 PPB	100.000 PPB	+/- 10%
1,1 DICHLOROETHYLENE	100.000 PPB	100.000 PPB	+/- 10%
1,1,1 TRICHLOROETHANE	100.000 PPB	104.000 PPB	+/- 10%
1,1,2 TRICHLORO ETHANE	100.000 PPB	101.000 PPB	+/- 10%
1,1,2,2 TETRACHLOROETHANE	100.000 PPB	104.000 PPB	+/- 10%
1,2 DIBROMO ETHANE	100.000 PPB	103.000 PPB	+/- 10%
1,2 DICHLORO PROPANE	100.000 PPB	103.000 PPB	+/- 10%
1,2 DICHLOROBENZENE	100.000 PPB	101.000 PPB	+/- 10%
1,2 DICHLOROETHANE	100.000 PPB	102.000 PPB	+/- 10%
1,2,4 TRICHLOROBENZENE	100.000 PPB	100.000 PPB	+/- 10%
1,2,4 TRIMETHYLBENZENE	100.000 PPB	102.000 PPB	+/- 10%
1,3 BUTADIENE	100.000 PPB	106.000 PPB	+/- 10%
1,3 DICHLORO BENZENE	100.000 PPB	105.000 PPB	+/- 10%
1,3,5 TRIMETHYL BENZENE	100.000 PPB	103.000 PPB	+/- 10%
1,4 DICHLOROBENZENE	100.000 PPB	100.000 PPB	+/- 10%
1,4 DIOXANE	100.000 PPB	113.000 PPB	+/- 10%
2 CHLOROTOLUENE	100.000 PPB	107.000 PPB	+/- 10%
3 CHLOROPROPYLENE	100.000 PPB	106.000 PPB	+/- 10%
4 ETHYL TOLUENE	100.000 PPB	106.000 PPB	+/- 10%
ACETONE	100.000 PPB	108.000 PPB	+/- 10%
ACROLEIN	100.000 PPB	105.000 PPB	+/- 10%
BENZENE	100.000 PPB	103.000 PPB	+/- 10%
BENZYL CHLORIDE	100.000 PPB	102.000 PPB	+/- 10%
BROMO DICHLORO METHANE	100.000 PPB	112.000 PPB	+/- 10%
BROMOFORM	100.000 PPB	113.000 PPB	+/- 10%
CARBON DISULFIDE	100.000 PPB	95.000 PPB	+/- 10%
CARBON TETRACHLORIDE	100.000 PPB	107.000 PPB	+/- 10%
CHLORO DIBROMO METHANE	100.000 PPB	110.000 PPB	+/- 10%
CHLOROBENZENE	100.000 PPB	104.000 PPB	+/- 10%
CHLOROFORM	100.000 PPB	106.000 PPB	+/- 10%
CIS 1,2 DICHLOROETHYLENE	100.000 PPB	102.000 PPB	+/- 10%
CIS 1,3 DICHLOROPROPENE	100.000 PPB	94.000 PPB	+/- 10%
CUMENE	100.000 PPB	106.000 PPB	+/- 10%
CYCLOHEXANE	100.000 PPB	109.000 PPB	+/- 10%
ETHANOL	100.000 PPB	98.000 PPB	+/- 10%
ETHYL ACETATE	100.000 PPB	104.000 PPB	+/- 10%
ETHYL BENZENE	100.000 PPB	105.000 PPB	+/- 10%
ETHYL CHLORIDE	100.000 PPB	104.000 PPB	+/- 10%
HEXACHLORO 1,3 BUTADIENE	100.000 PPB	101.000 PPB	+/- 10%

Approved for Release

Integrated Analytical Laboratories LLC

Airgas
an Air Liquide company

Airgas Specialty Gases
Airgas USA LLC
6141 Easton Road
Plumsteadville, PA 18949
Airgas.com

HEXANE	100.000 PPB	107.000 PPB	+/- 10%
ISOOCTANE	100.000 PPB	106.000 PPB	+/- 10%
ISOPROPYL ALCOHOL	100.000 PPB	95.000 PPB	+/- 10%
M XYLENE	100.000 PPB	106.000 PPB	+/- 10%
METHYL BROMIDE	100.000 PPB	103.000 PPB	+/- 10%
METHYL BUTYL KETONE	100.000 PPB	109.000 PPB	+/- 10%
METHYL CHLORIDE	100.000 PPB	108.000 PPB	+/- 10%
METHYL ETHYL KETONE	100.000 PPB	105.000 PPB	+/- 10%
METHYL ISOBUTYL KETONE	100.000 PPB	105.000 PPB	+/- 10%
METHYL METHACRYLATE	100.000 PPB	106.000 PPB	+/- 10%
METHYL TERT BUTYL ETHER	100.000 PPB	107.000 PPB	+/- 10%
METHYLENE CHLORIDE	100.000 PPB	101.000 PPB	+/- 10%
N BUTANE	100.000 PPB	107.000 PPB	+/- 10%
N HEPTANE	100.000 PPB	107.000 PPB	+/- 10%
N NONANE	100.000 PPB	108.000 PPB	+/- 10%
N PENTANE	100.000 PPB	105.000 PPB	+/- 10%
N PROPYL BENZENE	100.000 PPB	112.000 PPB	+/- 10%
NAPHTHALENE	100.000 PPB	101.000 PPB	+/- 10%
O XYLENE	100.000 PPB	102.000 PPB	+/- 10%
P XYLENE	100.000 PPB	106.000 PPB	+/- 10%
PERCHLOROETHYLENE	100.000 PPB	104.000 PPB	+/- 10%
PROPYLENE	100.000 PPB	108.000 PPB	+/- 10%
R11 TRICHLOROFLUOROMETHANE	100.000 PPB	106.000 PPB	+/- 10%
R113 TRICHLOROTRIFLUOROETHANE	100.000 PPB	102.000 PPB	+/- 10%
R114 DICHLOROTETRAFLUOROETHANE	100.000 PPB	99.000 PPB	+/- 10%
R12 DICHLORODIFLUOROMETHANE	100.000 PPB	109.000 PPB	+/- 10%
STYRENE	100.000 PPB	106.000 PPB	+/- 10%
TERT BUTANOL	100.000 PPB	111.000 PPB	+/- 10%
TETRAHYDROFURAN	100.000 PPB	106.000 PPB	+/- 10%
TOLUENE	100.000 PPB	101.000 PPB	+/- 10%
TRANS 1,2 DICHLOROETHYLENE	100.000 PPB	108.000 PPB	+/- 10%
TRANS 1,3 DICHLOROPROPENE	100.000 PPB	106.000 PPB	+/- 10%
TRICHLOROETHYLENE	100.000 PPB	102.000 PPB	+/- 10%
VINYL ACETATE	100.000 PPB	105.000 PPB	+/- 10%
VINYL BROMIDE	100.000 PPB	100.000 PPB	+/- 10%
VINYL CHLORIDE	100.000 PPB	107.000 PPB	+/- 10%
NITROGEN	99.99925 %	99.999216 %	

Permanent Notes: CUSTOM TO MIX - TO-15/17 MODIFIED NJ STD + NAPHTHALENE

Notes: PO Number: 22896

Approved for Release

Section IV: Method Detection Limit Summary

INTEGRATED ANALYTICAL LABORATORIES, LLC
REPORTING METHOD DETECTION LIMIT (MDL) REPORT

Integrated Analytical Laboratories - Randolph, NJ

Matrix: Air
MDL Effective Date: 8/16/2023
Column ID: Restek RtX-VMS, 30 meter, 0.32mm ID, 1.8 um DF
Instrument ID: GC - Agilent 7890A / MS - Agilent 5975C (IAL ID: *Instrument AA*)
Analyst: Joe Waluliewicz
Report Prepared by: Joe Waluliewicz

Compound Name	CAS #	Molecular Weight	MDL ppbv	MDL µg/m^3	PQL ppbv	RL ppbv	RL µg/m^3	True value/ MDL
Propene	115-07-1	42.08	0.18	0.31	0.54	0.20	0.34	1
Dichlorodifluoromethane	75-71-8	120.9	0.081	0.40	0.24	0.20	0.99	3
1,2-Dichlorotetrafluoroethane	76-14-2	170.9	0.071	0.50	0.21	0.20	1.4	3
n-Butane	106-97-8	58	0.13	0.32	0.40	0.20	0.47	2
Chloromethane	74-87-3	50.49	0.15	0.30	0.44	0.20	0.41	1
Vinyl chloride	75-01-4	62.5	0.11	0.29	0.34	0.20	0.51	2
1,3-Butadiene	106-99-0	54.09	0.12	0.27	0.37	0.20	0.44	2
Bromomethane	74-83-9	94.94	0.12	0.46	0.36	0.20	0.78	2
Chloroethane	75-00-3	64.52	0.12	0.32	0.36	0.20	0.53	2
Vinyl bromide	593-60-2	106.9	0.080	0.35	0.24	0.20	0.87	3
Trichlorofluoromethane	75-69-4	137.4	0.068	0.38	0.20	0.20	1.1	3
Ethanol	64-17-5	46.07	0.17	0.32	0.51	0.20	0.38	1
1,1-Dichloroethene	75-35-4	96.94	0.086	0.34	0.26	0.20	0.79	3
Carbon disulfide	75-15-0	76.14	0.076	0.24	0.23	0.20	0.62	3
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	187.40	0.087	0.66	0.26	0.20	1.5	3
Acrolein	107-02-8	56.06	0.15	0.34	0.44	0.20	0.46	2
Allyl Chloride	107-05-1	76.53	0.088	0.27	0.26	0.20	0.63	3
Isopropanol	67-63-0	60.1	0.10	0.25	0.30	0.20	0.49	2
Methylene chloride	75-09-2	84.94	0.10	0.36	0.31	0.20	0.69	2
Acetone	67-64-1	58.08	0.12	0.28	0.36	0.20	0.48	2
1,2-Dichloroethene (trans)	156-60-5	96.94	0.080	0.32	0.24	0.20	0.79	3
n-Pentane	109-66-0	72.15	0.16	0.48	0.49	0.20	0.59	1
n-Hexane	110-54-3	86.17	0.087	0.31	0.26	0.20	0.70	3
Methyl tert-butyl ether	1634-04-4	88.15	0.080	0.29	0.24	0.20	0.72	3
Tert-butyl alcohol	75-65-0	74.12	0.14	0.44	0.43	0.20	0.61	2
1,1-Dichloroethane	75-34-3	98.96	0.079	0.32	0.24	0.20	0.81	3
1,2-Dichloroethene (cis)	156-59-2	96.94	0.083	0.33	0.25	0.20	0.79	3
Cyclohexane	110-82-7	84.16	0.078	0.27	0.23	0.20	0.69	3
Chloroform	67-66-3	119.4	0.077	0.38	0.23	0.20	0.98	3
Ethyl acetate	141-78-6	88.11	0.11	0.40	0.33	0.20	0.72	2
Carbon tetrachloride	56-23-5	153.8	0.080	0.50	0.24	0.20	1.3	3
Tetrahydrofuran	109-99-9	72.11	0.11	0.31	0.32	0.20	0.59	2
1,1,1-Trichloroethane	71-55-6	133.4	0.071	0.39	0.21	0.20	1.1	3
Methyl ethyl ketone	78-93-3	72.11	0.11	0.31	0.32	0.20	0.59	2
n-Heptane	142-82-5	100.2	0.090	0.37	0.27	0.20	0.82	2
Benzene	71-43-2	78.11	0.076	0.24	0.23	0.20	0.64	3
1,2-Dichloroethane	107-06-2	98.96	0.079	0.32	0.24	0.20	0.81	3
Trichloroethene	79-01-6	131.4	0.064	0.34	0.19	0.20	1.1	3
2,2,4-Trimethylpentane	540-84-1	114.2	0.085	0.40	0.26	0.20	0.93	3
1,2-Dichloropropane	78-87-5	113	0.085	0.39	0.25	0.20	0.92	3
Bromodichloromethane	75-27-4	163.8	0.066	0.44	0.20	0.20	1.3	3
Methyl methacrylate	80-62-6	100.12	0.079	0.32	0.24	0.20	0.82	3
1,4-Dioxane	123-91-1	88.12	0.092	0.33	0.28	0.20	0.72	2
1,3-Dichloropropene (cis)	10061-01-5	111.0	0.070	0.32	0.21	0.20	0.91	3
Toluene	108-88-3	92.14	0.064	0.24	0.19	0.20	0.75	3
Methyl isobutyl ketone	108-10-1	100.2	0.11	0.43	0.32	0.20	0.82	2
Tetrachloroethene	127-18-4	165.8	0.063	0.43	0.19	0.20	1.4	3
1,3-Dichloropropene (trans)	10061-02-6	111	0.077	0.35	0.23	0.20	0.91	3
1,1,2-Trichloroethane	79-00-5	133.4	0.075	0.41	0.22	0.20	1.1	3
Dibromochloromethane	124-48-1	208.3	0.073	0.62	0.22	0.20	1.7	3
1,2-Dibromoethane	106-93-4	187.9	0.067	0.52	0.20	0.20	1.5	3
Methyl n-butyl ketone	591-78-6	100.16	0.13	0.54	0.40	0.20	0.82	2
n-Nonane	111-84-2	128.2	0.10	0.52	0.30	0.20	1.0	2
Chlorobenzene	108-90-7	112.6	0.073	0.34	0.22	0.20	0.92	3
Ethylbenzene	100-41-4	106.2	0.067	0.29	0.20	0.20	0.9	3
Xylenes (m&p)	179601-23-1	106.2	0.15	0.64	0.44	0.40	1.74	3
Xylene (o)	79-34-5	167.9	0.073	0.50	0.22	0.20	1.4	3
Styrene	100-42-5	104.1	0.072	0.31	0.22	0.20	0.85	3
Bromoform	75-25-2	252.8	0.075	0.77	0.22	0.20	2.1	3
Cumene (Isopropylbenzene)	98-82-8	120.2	0.069	0.34	0.21	0.20	0.98	3
n-Propyl benzene	103-65-1	120.19	0.085	0.42	0.25	0.20	0.98	3
1,1,2,2-Tetrachloroethane	95-47-6	106.2	0.069	0.30	0.21	0.20	0.87	3
4-Ethyltoluene	622-96-8	120.2	0.090	0.44	0.27	0.20	0.98	2
2-Chlorotoluene	95-49-8	126.6	0.077	0.40	0.23	0.20	1.0	3
1,3,5-Trimethylbenzene	108-67-8	120.2	0.076	0.37	0.23	0.20	0.98	3
1,2,4-Trimethylbenzene	95-63-6	120.2	0.080	0.39	0.24	0.20	0.98	3

INTEGRATED ANALYTICAL LABORATORIES, LLC
REPORTING METHOD DETECTION LIMIT (MDL) REPORT

Integrated Analytical Laboratories - Randolph, NJ

Matrix: Air
Column ID: Restek RtX-VMS, 30 meter, 0.32mm ID, 1.8 um DF
Instrument ID: GC - Agilent 7890A / MS - Agilent 5975C (IAL ID: *Instrument AA*)
Report Prepared by: Joe Waluliewicz

MDL Effective Date: 8/16/2023
Analyst: Joe Waluliewicz

Compound Name	CAS #	Molecular Weight	MDL ppbv	MDL µg/m^3	PQL ppbv	RL ppbv	RL µg/m^3	True value/ MDL
1,3-Dichlorobenzene	541-73-1	147	0.086	0.52	0.26	0.20	1.2	3
1,4-Dichlorobenzene	106-46-7	147.0	0.089	0.54	0.27	0.20	1.2	2
Benzyl chloride	100-44-7	126.6	0.064	0.33	0.19	0.20	1.0	3
1,2-Dichlorobenzene	95-50-1	147.0	0.083	0.50	0.25	0.20	1.2	3
1,3-Hexachlorobutadiene	87-68-3	260.8	0.096	1.03	0.29	0.20	2.1	2
1,2,4-Trichlorobenzene	120-82-1	181.5	0.12	0.89	0.36	0.20	1.5	2
Naphthalene	91-20-3	128	0.15	0.79	0.45	0.20	1.0	2

Where:
MDL is defined as the higher of the MDL Spike and MDL Blank
PQL is MDLx3
RL is defined as the lowest point of the calibration curve
ppbv is parts per billion by volume and is how results come off the instrument
µg/m^3 = ppbv x molecular weight / 24.45

Location of this file: P:\PAL Reports\LLTO-15 and TO-15 Common Files\Agilent MDL

Instrument used for Clean Canister Certification Analysis? YES

Michael Leftin, Ph.D.
Laboratory Director

Date: August 16, 2023

INTEGRATED ANALYTICAL LABORATORIES, LLC
METHOD DETECTION LIMIT VERIFICATION (MDLV) REPORT

Integrated Analytical Laboratories - Randolph, NJ

Analysis Level:	0.20 ppbv, 0.40 for m&p-xylenes
Matrix:	Air
Column ID:	RTX-VMS, 30-meter, 0.32 mm ID, 1.8 µm d_f
Instrument Identification:	AA
Date of Verification Study:	8/16/2023
Study Identification File #:	aa3415rllcs
Analyst:	Joe Walukiewicz
Analysis/Processing Method:	C:\MSDCHEM\1\METHODS\230815.M
Cylinder ID:	EB0103704

Michael Leftin, Ph.D.
Laboratory Director

Date: August 16, 2023

Compound Name	CAS #	MDLV (ppbv)	RL (ppbv)	RL/MDLV Ratio
Propene	115-07-1	0.23	0.20	1
Dichlorodifluoromethane	124-48-1	0.24	0.20	1
1,2-Dichlorotetrafluoroethane	76-14-2	0.26	0.20	1
n-Butane	106-97-8	0.23	0.20	1
Chloromethane	74-87-3	0.24	0.20	1
Vinyl chloride	75-01-4	0.26	0.20	1
1,3-Butadiene	106-99-0	0.23	0.20	1
Bromomethane	74-83-9	0.23	0.20	1
Chloroethane	75-00-3	0.22	0.20	1
Vinyl bromide	593-60-2	0.23	0.20	1
Trichlorofluoromethane	75-69-4	0.26	0.20	1
Ethanol	64-17-5	0.30	0.20	2
1,1-Dichloroethene	75-35-4	0.22	0.20	1
Carbon disulfide	75-15-0	0.22	0.20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.27	0.20	1
Acrolein	107-02-8	0.24	0.20	1
Allyl Chloride	107-05-1	0.22	0.20	1
Isopropanol	67-63-0	0.20	0.20	1
Methylene chloride	75-09-2	0.35	0.20	2
Acetone	67-64-1	0.27	0.20	1
1,2-Dichloroethene (trans)	156-60-5	0.22	0.20	1
n-Pentane	109-66-0	0.25	0.20	1
n-Hexane	110-54-3	0.26	0.20	1
Methyl tert-butyl ether	1634-04-4	0.25	0.20	1
Tert-butyl alcohol	75-65-0	0.24	0.20	1
1,1-Dichloroethane	75-34-3	0.24	0.20	1
1,2-Dichloroethene (cis)	156-59-2	0.21	0.20	1
Cyclohexane	110-82-7	0.24	0.20	1
Chloroform	67-66-3	0.23	0.20	1
Ethyl acetate	141-78-6	0.23	0.20	1
Carbon tetrachloride	56-23-5	0.26	0.20	1
Tetrahydrofuran	109-99-9	0.23	0.20	1
1,1,1-Trichloroethane	71-55-6	0.24	0.20	1
Methyl ethyl ketone	78-93-3	0.24	0.20	1
n-Heptane	142-82-5	0.23	0.20	1
Benzene	71-43-2	0.24	0.20	1
1,2-Dichloroethane	106-93-4	0.23	0.20	1
Trichloroethene	79-01-6	0.25	0.20	1
2,2,4-Trimethylpentane	540-84-1	0.29	0.20	1
1,2-Dichloropropane	78-87-5	0.26	0.20	1
Bromodichloromethane	75-27-4	0.28	0.20	1
Methyl methacrylate	80-62-6	0.22	0.20	1
1,4-Dioxane	123-91-1	0.28	0.20	1
1,3-Dichloropropene (cis)	10061-01-5	0.25	0.20	1
Toluene	108-88-3	0.24	0.20	1
Methyl isobutyl ketone	108-10-1	0.22	0.20	1
Tetrachloroethene	127-18-4	0.26	0.20	1
1,3-Dichloropropene (trans)	10061-02-6	0.24	0.20	1
1,1,2-Trichloroethane	79-00-5	0.23	0.20	1
Dibromochloromethane	75-71-8	0.24	0.20	1
1,2-Dibromoethane	107-06-2	0.22	0.20	1
Methyl n-butyl ketone	591-78-6	0.21	0.20	1

INTEGRATED ANALYTICAL LABORATORIES, LLC
METHOD DETECTION LIMIT VERIFICATION (MDLV) REPORT

Integrated Analytical Laboratories - Randolph, NJ

Analysis Level:	0.20 ppbv, 0.40 for m&p-xylenes
Matrix:	Air
Column ID:	RTX-VMS, 30-meter, 0.32 mm ID, 1.8 µm d_f
Instrument Identification:	AA
Date of Verification Study:	8/16/2023
Study Identification File #:	aa3415rllcs
Analyst:	Joe Walukiewicz
Analysis/Processing Method:	C:\MSDCHEM\1\METHODS\230815.M
Cylinder ID:	EB0103704

Michael Leftin, Ph.D.
Laboratory Director

Date: August 16, 2023

Compound Name	CAS #	MDLV (ppbv)	RL (ppbv)	RL/MDLV Ratio
n-Nonane	111-84-2	0.21	0.20	1
Chlorobenzene	108-90-7	0.28	0.20	1
Ethylbenzene	100-41-4	0.26	0.20	1
Xylenes (m&p)	179601-23-1	0.54	0.40	1
Xylene (o)	95-47-6	0.26	0.20	1
Styrene	100-42-5	0.23	0.20	1
Bromoform	75-25-2	0.26	0.20	1
Cumene	98-82-8	0.24	0.20	1
n-Propyl benzene	103-65-1	0.25	0.20	1
1,1,2,2-Tetrachloroethane	79-34-5	0.25	0.20	1
4-Ethyltoluene	622-96-8	0.24	0.20	1
2-Chlorotoluene	95-49-8	0.25	0.20	1
1,3,5-Trimethylbenzene	108-67-8	0.24	0.20	1
1,2,4-Trimethylbenzene	95-63-6	0.22	0.20	1
1,3-Dichlorobenzene	541-73-1	0.27	0.20	1
1,4-Dichlorobenzene	106-46-7	0.24	0.20	1
Benzyl chloride	100-44-7	0.17	0.20	1
1,2-Dichlorobenzene	95-50-1	0.25	0.20	1
1,3-Hexachlorobutadiene	87-68-3	0.31	0.20	2
1,2,4-Trichlorobenzene	120-82-1	0.25	0.20	1
Naphthalene	91-20-3	0.28	0.20	1

Section V: Quality Control Data Summary

BFB Tune Summary

Method Blank

Laboratory Control Sample

Laboratory Sample Duplicate

Internal Standard Area Summary

BFB

Data Path: C:\DATA\2024\03-2024\03-27-2024\
Data File: AA6020BFB.D
Acq On: 3/27/2024 10:03:00AM
Operator: jjw
Sample: BFB
Misc: ALM018474
ALS Vial: 1 **Multiplier:** 1
Integration File: rteint.p
Method: C:\msdchem\1\METHODS\240326.M
Last Update: Mon Feb 12 17:00:56 2024
Spectrum Information:

PassFail	Target Mass	Rel. to Mass	Lower Limit %	Higher Limit %	Raw Abundance	% Relative Abundance
PASS	50	95	8	40	248768	22.4
PASS	75	95	30	66	575680	51.7
PASS	95	95	100	100	1112917	100.0
PASS	96	95	5	9	72451	6.5
PASS	173	174	0.00	2	6828	1.0
PASS	174	95	50	100	671872	60.4
PASS	175	174	4	9	49411	7.4
PASS	176	174	93	101	654677	97.4
PASS	177	176	5	9	43245	6.6

Runs with this BFB:

Lab Sample Number	Date File	Field Sample	Date/Time of Sample/Standard Analysis
BFB	AA6020BFB	NA	3/27/2024 10:03:00 AM
0.2 PPBV STD	AA6021STD05	NA	3/27/2024 10:38:00 AM
2 PPBV STD	AA6022STD04	NA	3/27/2024 11:38:00 AM
10 PPBV STD STD	AA6023STD03	NA	3/27/2024 12:09:00 PM
20 PPBV STD	AA6024STD02	NA	3/27/2024 12:40:00 PM
40 PPBV STD	AA6025STD01	NA	3/27/2024 1:24:00 PM
10 PPBV ICVSS	AA6026ICVSS	NA	3/27/2024 1:54:00 PM
10 PPBV LCS	AA6027LCS	NA	3/27/2024 2:23:00 PM
METHOD BLANK	AA6028BLK	NA	3/27/2024 2:51:00 PM
3285	AA6039	NA	3/27/2024 9:10:00 PM
2036	AA6040	NA	3/27/2024 9:38:00 PM

BFB

Data Path: C:\DATA\2024\04-2024\04-24-2024\
Data File: AA6389BFB.D
Acq On: 4/24/2024 9:59:00AM
Operator: jjw
Sample: BFB
Misc: ALM018474
ALS Vial: 1 **Multiplier:** 1
Integration File: rteint.p
Method: C:\msdchem\1\METHODS\240326.M
Last Update: Wed Mar 27 13:46:33 2024
Spectrum Information:

PassFail	Target Mass	Rel. to Mass	Lower Limit %	Higher Limit %	Raw Abundance	% Relative Abundance
PASS	50	95	8	40	60136	22.5
PASS	75	95	30	66	140352	52.5
PASS	95	95	100	100	267264	100.0
PASS	96	95	5	9	18056	6.8
PASS	173	174	0.00	2	1255	0.8
PASS	174	95	50	100	163605	61.2
PASS	175	174	4	9	11650	7.1
PASS	176	174	93	101	158123	96.6
PASS	177	176	5	9	10125	6.4

Runs with this BFB:

Lab Sample Number	Date File	Field Sample	Date/Time of Sample/Standard Analysis
BFB	AA6389BFB	NA	4/24/2024 9:59:00 AM
10 PPBV DCVS	AA6390DCVS	NA	4/24/2024 10:32:00 AM
10 PPBV LCS	AA6391LCS	NA	4/24/2024 12:12:00 PM
METHOD BLANK	AA6392BLK	NA	4/24/2024 1:23:00 PM
02 PPBV RLLCS	AA6393RLLCS	NA	4/24/2024 2:00:00 PM
5085	AA6394	NA	4/24/2024 2:58:00 PM
3035A	AA6395	NA	4/24/2024 3:28:00 PM
10 PPBV CCCVS	AA6405CCCVS	NA	4/24/2024 9:01:00 PM

BFB

Data Path: C:\DATA\2024\05-2024\05-29-2024\
Data File: AA6554BFB.D
Acq On: 5/29/2024 9:16:00AM
Operator: jls
Sample: BFB
Misc: ALM018474
ALS Vial: 1 **Multiplier:** 1
Integration File: rteint.p
Method: C:\msdchem\1\METHODS\240326.M
Last Update: Wed Mar 27 13:46:33 2024
Spectrum Information:

PassFail	Target Mass	Rel. to Mass	Lower Limit %	Higher Limit %	Raw Abundance	% Relative Abundance
PASS	50	95	8	40	242304	21.7
PASS	75	95	30	66	578901	51.8
PASS	95	95	100	100	1118037	100.0
PASS	96	95	5	9	75616	6.8
PASS	173	174	0.00	2	6315	0.9
PASS	174	95	50	100	683392	61.1
PASS	175	174	4	9	49440	7.2
PASS	176	174	93	101	651648	95.4
PASS	177	176	5	9	42576	6.5

Runs with this BFB:

Lab Sample Number	Date File	Field Sample	Date/Time of Sample/Standard Analysis
BFB	AA6554BFB	NA	5/29/2024 9:16:00 AM
0.2 PPBV STD	AA6556STD05	NA	5/29/2024 12:40:00 PM
2 PPBV STD	AA6557STD04	NA	5/29/2024 1:11:00 PM
10 PPBV STD STD	AA6558STD03	NA	5/29/2024 1:46:00 PM
20 PPBV STD	AA6559STD02	NA	5/29/2024 2:18:00 PM
40 PPBV STD	AA6560STD01	NA	5/29/2024 2:55:00 PM
10 PPBV ICVSS	AA6561ICVSS	NA	5/29/2024 5:16:00 PM

BFB

Data Path: C:\DATA\2024\06-2024\06-04-2024\

Data File: AA6620BFB.D

Acq On: 6/4/2024 10:07:00AM

Operator: jls

Sample: BFB

Misc: ALM018474

ALS Vial: 1 **Multiplier:** 1

Integration File: rteint.p

Method: C:\msdchem\1\METHODS\240529.M

Last Update: Wed May 29 15:44:50 2024

Spectrum Information:

PassFail	Target Mass	Rel. to Mass	Lower Limit %	Higher Limit %	Raw Abundance	% Relative Abundance
PASS	50	95	8	40	68349	19.8
PASS	75	95	30	66	170624	49.4
PASS	95	95	100	100	345664	100.0
PASS	96	95	5	9	23440	6.8
PASS	173	174	0.00	2	1780	0.8
PASS	174	95	50	100	223552	64.7
PASS	175	174	4	9	16401	7.3
PASS	176	174	93	101	214592	96.0
PASS	177	176	5	9	13796	6.4

Runs with this BFB:

Lab Sample Number	Date File	Field Sample	Date/Time of Sample/Standard Analysis
BFB	AA6620BFB	NA	6/4/2024 10:07:00 AM
10 PPBV DCVS	AA6621DCVS	NA	6/4/2024 10:40:00 AM
10 PPBV LCS	AA6622LCS	NA	6/4/2024 12:49:00 PM
METHOD BLANK	AA6623BLK	NA	6/4/2024 1:18:00 PM
02 PPBV RLLCS	AA6624RLLCS	NA	6/4/2024 2:10:00 PM
E24-01875-01	AA6625	SG-1B	6/4/2024 2:41:00 PM
E24-01875-03	AA6626	SG-6	6/4/2024 3:12:00 PM
E24-01875-05	AA6627	SG-8	6/4/2024 3:44:00 PM
E24-01875-02	AA6628	SG-5	6/4/2024 4:15:00 PM
E24-01875-04	AA6629	SG-7	6/4/2024 4:47:00 PM
E24-01875-06	AA6630	SG-9	6/4/2024 5:28:00 PM
E24-01875-01	AA6631	SG-1B	6/4/2024 6:00:00 PM
E24-01875-21	AA6632	SG-1B	6/4/2024 6:31:00 PM
E24-01875-04	AA6633	SG-7	6/4/2024 7:03:00 PM
E24-01875-03	AA6634	SG-6	6/4/2024 7:35:00 PM
E24-01875-05	AA6635	SG-8	6/4/2024 8:08:00 PM

BFB

Data Path: C:\DATA\2024\06-2024\06-04-2024\
Data File: AA6620BFB.D
Acq On: 6/4/2024 10:07:00AM
Operator: jls
Sample: BFB
Misc: ALM018474
ALS Vial: 1 **Multiplier:** 1
Integration File: rteint.p
Method: C:\msdchem\1\METHODS\240529.M
Last Update: Wed May 29 15:44:50 2024
Spectrum Information:

PassFail	Target Mass	Rel. to Mass	Lower Limit %	Higher Limit %	Raw Abundance	% Relative Abundance
PASS	50	95	8	40	68349	19.8
PASS	75	95	30	66	170624	49.4
PASS	95	95	100	100	345664	100.0
PASS	96	95	5	9	23440	6.8
PASS	173	174	0.00	2	1780	0.8
PASS	174	95	50	100	223552	64.7
PASS	175	174	4	9	16401	7.3
PASS	176	174	93	101	214592	96.0
PASS	177	176	5	9	13796	6.4

Runs with this BFB:

Lab Sample Number	Date File	Field Sample	Date/Time of Sample/Standard Analysis
E24-01875-02	AA6636	SG-5	6/4/2024 8:39:00 PM
10 PPBV CCCVS	AA6638CCCVS	NA	6/4/2024 9:43:00 PM

BFB

Data Path: C:\DATA\2024\06-2024\06-05-2024\
Data File: AA6639BFB.D
Acq On: 6/5/2024 9:50:00AM
Operator: jls
Sample: BFB
Misc: ALM018474
ALS Vial: 1 **Multiplier:** 1
Integration File: rteint.p
Method: C:\msdchem\1\METHODS\240529.M
Last Update: Wed May 29 15:44:50 2024
Spectrum Information:

PassFail	Target Mass	Rel. to Mass	Lower Limit %	Higher Limit %	Raw Abundance	% Relative Abundance
PASS	50	95	8	40	145195	19.5
PASS	75	95	30	66	367765	49.3
PASS	95	95	100	100	745920	100.0
PASS	96	95	5	9	49288	6.6
PASS	173	174	0.00	2	0	0.0
PASS	174	95	50	100	480619	64.4
PASS	175	174	4	9	34043	7.1
PASS	176	174	93	101	463765	96.5
PASS	177	176	5	9	30093	6.5

Runs with this BFB:

Lab Sample Number	Date File	Field Sample	Date/Time of Sample/Standard Analysis
BFB	AA6639BFB	NA	6/5/2024 9:50:00 AM
10 PPBV DCVS	AA6640DCVS	NA	6/5/2024 10:58:00 AM
10 PPBV LCS	AA6641LCS	NA	6/5/2024 11:29:00 AM
METHOD BLANK	AA6642BLK	NA	6/5/2024 12:01:00 PM
02 PPBV RLLCS	AA6643RLLCS	NA	6/5/2024 12:34:00 PM
E24-01875-06	AA6648	SG-9	6/5/2024 4:33:00 PM
10 PPBV CCCVS	AA6656CCCVS	NA	6/5/2024 9:19:00 PM

INTEGRATED ANALYTICAL LABORATORIES, LLC

Method Blank Report

Lab Sample Name:	**METHOD BLANK**	**Data File:**	**AA6392BLK**
Field Sample Name:	**METHOD BLANK**	**Date Analyzed:**	**4/24/2024**
Matrix:	**Air**	**Sample Volume:**	**500ml**
Dilution Factor:	**1**	**GC/MS Column:**	**RTX-1, 0.32 mmID**

Runs with this Method Blank:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6389BFB]	04/24/2024 9:59
10 PPBV DCVS [AA6390DCVS]	04/24/2024 10:32
10 PPBV LCS [AA6391LCS]	04/24/2024 12:12
METHOD BLANK [AA6392BLK]	04/24/2024 13:23
02 PPBV RLLCS [AA6393RLLCS]	04/24/2024 14:00
5085 [AA6394]	04/24/2024 14:58
3035A [AA6395]	04/24/2024 15:28
10 PPBV CCCVS [AA6405CCCVS]	04/24/2024 21:01

Compound	CAS #	Reporting Limit (ppbv)	Concentration (ppbv)
Acetone	67-64-1	0.20	ND
Benzene	71-43-2	0.20	ND
Bromodichloromethane	75-27-4	0.20	ND
Bromoform	75-25-2	0.20	ND
Bromomethane	74-83-9	0.20	ND
1,3-Butadiene	106-99-0	0.20	ND
Chlorobenzene	108-90-7	0.20	ND
Chloroethane	75-00-3	0.20	ND
Chloroform	67-66-3	0.20	ND
Chloromethane	74-87-3	0.20	ND
Carbon disulfide	75-15-0	0.20	ND
Carbon tetrachloride	56-23-5	0.20	ND
Cyclohexane	110-82-7	0.20	ND
Dibromochloromethane	124-48-1	0.20	ND
1,2-Dibromoethane	106-93-4	0.17	ND
1,2-Dichlorobenzene	95-50-1	0.20	ND
1,3-Dichlorobenzene	541-73-1	0.20	ND
1,4-Dichlorobenzene	106-46-7	0.20	ND
Dichlorodifluoromethane	75-71-8	0.20	ND
1,1-Dichloroethane	75-34-3	0.20	ND
1,2-Dichloroethane	107-06-2	0.20	ND
1,1-Dichloroethene	75-35-4	0.20	ND
1,2-Dichloroethene (cis)	156-59-2	0.20	ND
1,2-Dichloroethene (trans)	156-60-5	0.20	ND
1,2-Dichloropropane	78-87-5	0.20	ND
1,3-Dichloropropene (cis)	10061-01-5	0.20	ND
1,3-Dichloropropene (trans)	10061-02-6	0.19	ND
1,2-Dichlorotetrafluoroethane	76-14-2	0.20	ND
1,4-Dioxane	123-91-1	0.20	ND
Ethylbenzene	100-41-4	0.18	ND
n-Heptane	142-82-5	0.20	ND
1,3-Hexachlorobutadiene	87-68-3	0.20	ND
n-Hexane	110-54-3	0.20	ND
Methylene chloride	75-09-2	0.20	ND

Method Blank must be less than the Practical Quantitation Limit (PQL).

INTEGRATED ANALYTICAL LABORATORIES, LLC

Method Blank Report

Lab Sample Name:	**METHOD BLANK**	**Data File:**	**AA6392BLK**
Field Sample Name:	**METHOD BLANK**	**Date Analyzed:**	**4/24/2024**
Matrix:	**Air**	**Sample Volume:**	**500ml**
Dilution Factor:	**1**	**GC/MS Column:**	**RTX-1, 0.32 mmID**

Runs with this Method Blank:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6389BFB]	04/24/2024 9:59
10 PPBV DCVS [AA6390DCVS]	04/24/2024 10:32
10 PPBV LCS [AA6391LCS]	04/24/2024 12:12
METHOD BLANK [AA6392BLK]	04/24/2024 13:23
02 PPBV RLLCS [AA6393RLLCS]	04/24/2024 14:00
5085 [AA6394]	04/24/2024 14:58
3035A [AA6395]	04/24/2024 15:28
10 PPBV CCCVS [AA6405CCCVS]	04/24/2024 21:01

Compound	CAS #	Reporting Limit (ppbv)	Concentration (ppbv)
Methyl ethyl ketone	78-93-3	0.20	ND
Methyl isobutyl ketone	108-10-1	0.20	ND
Methyl tert-butyl ether	1634-04-4	0.20	ND
Styrene	100-42-5	0.20	ND
Tert-butyl alcohol	75-65-0	0.20	ND
1,1,2,2-Tetrachloroethane	79-34-5	0.20	ND
Tetrachloroethene	127-18-4	0.20	ND
Toluene	108-88-3	0.20	ND
1,2,4-Trichlorobenzene	120-82-1	0.20	ND
1,1,1-Trichloroethane	71-55-6	0.17	ND
1,1,2-Trichloroethane	79-00-5	0.20	ND
Trichloroethene	79-01-6	0.17	ND
Trichlorofluoromethane	75-69-4	0.20	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.20	ND
1,2,4-Trimethylbenzene	95-63-6	0.20	ND
1,3,5-Trimethylbenzene	108-67-8	0.20	ND
2,2,4-Trimethylpentane	540-84-1	0.20	ND
Vinyl bromide	593-60-2	0.20	ND
Vinyl chloride	75-01-4	0.20	ND
Xylenes (m&p)	179601-23-1	0.20	ND
Xylenes (o)	95-47-6	0.20	ND

Method Blank must be less than the Practical Quantitation Limit (PQL).

INTEGRATED ANALYTICAL LABORATORIES, LLC

Method Blank Report

Lab Sample Name:	**METHOD BLANK**	**Data File:**	**AA6623BLK**
Field Sample Name:	**METHOD BLANK**	**Date Analyzed:**	**6/4/2024**
Matrix:	**Air**	**Sample Volume:**	**500ml**
Dilution Factor:	**1**	**GC/MS Column:**	**RTX-1, 0.32 mmID**

Runs with this Method Blank:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6620BFB]	06/04/2024 10:07
10 PPBV DCVS [AA6621DCVS]	06/04/2024 10:40
10 PPBV LCS [AA6622LCS]	06/04/2024 12:49
METHOD BLANK [AA6623BLK]	06/04/2024 13:18
02 PPBV RLLCS [AA6624RLLCS]	06/04/2024 14:10
E24-01875-01 [AA6625]	06/04/2024 14:41
E24-01875-03 [AA6626]	06/04/2024 15:12
E24-01875-05 [AA6627]	06/04/2024 15:44
E24-01875-02 [AA6628]	06/04/2024 16:15
E24-01875-04 [AA6629]	06/04/2024 16:47
E24-01875-06 [AA6630]	06/04/2024 17:28
E24-01875-01 [AA6631]	06/04/2024 18:00
E24-01875-21 [AA6632]	06/04/2024 18:31
E24-01875-04 [AA6633]	06/04/2024 19:03
E24-01875-03 [AA6634]	06/04/2024 19:35
E24-01875-05 [AA6635]	06/04/2024 20:08
E24-01875-02 [AA6636]	06/04/2024 20:39
10 PPBV CCCVS [AA6638CCCVS]	06/04/2024 21:43

Compound	CAS #	Reporting Limit (ppbv)	Concentration (ppbv)
Acetone	67-64-1	0.20	ND
Benzene	71-43-2	0.20	ND
Bromodichloromethane	75-27-4	0.20	ND
Bromoform	75-25-2	0.20	ND
Bromomethane	74-83-9	0.20	ND
1,3-Butadiene	106-99-0	0.20	ND
Chlorobenzene	108-90-7	0.20	ND
Chloroethane	75-00-3	0.20	ND
Chloroform	67-66-3	0.20	ND
Chloromethane	74-87-3	0.20	ND
Carbon disulfide	75-15-0	0.20	ND
Carbon tetrachloride	56-23-5	0.20	ND
Cyclohexane	110-82-7	0.20	ND
Dibromochloromethane	124-48-1	0.20	ND
1,2-Dibromoethane	106-93-4	0.17	ND
1,2-Dichlorobenzene	95-50-1	0.20	ND
1,3-Dichlorobenzene	541-73-1	0.20	ND
1,4-Dichlorobenzene	106-46-7	0.20	ND
Dichlorodifluoromethane	75-71-8	0.20	ND
1,1-Dichloroethane	75-34-3	0.20	ND
1,2-Dichloroethane	107-06-2	0.20	ND
1,1-Dichloroethene	75-35-4	0.20	ND
1,2-Dichloroethene (cis)	156-59-2	0.20	ND

Method Blank must be less than the Practical Quantitation Limit (PQL).

INTEGRATED ANALYTICAL LABORATORIES, LLC

Method Blank Report

Lab Sample Name:	**METHOD BLANK**	**Data File:**	**AA6623BLK**
Field Sample Name:	**METHOD BLANK**	**Date Analyzed:**	**6/4/2024**
Matrix:	**Air**	**Sample Volume:**	**500ml**
Dilution Factor:	**1**	**GC/MS Column:**	**RTX-1, 0.32 mmID**

Runs with this Method Blank:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6620BFB]	06/04/2024 10:07
10 PPBV DCVS [AA6621DCVS]	06/04/2024 10:40
10 PPBV LCS [AA6622LCS]	06/04/2024 12:49
METHOD BLANK [AA6623BLK]	06/04/2024 13:18
02 PPBV RLLCS [AA6624RLLCS]	06/04/2024 14:10
E24-01875-01 [AA6625]	06/04/2024 14:41
E24-01875-03 [AA6626]	06/04/2024 15:12
E24-01875-05 [AA6627]	06/04/2024 15:44
E24-01875-02 [AA6628]	06/04/2024 16:15
E24-01875-04 [AA6629]	06/04/2024 16:47
E24-01875-06 [AA6630]	06/04/2024 17:28
E24-01875-01 [AA6631]	06/04/2024 18:00
E24-01875-21 [AA6632]	06/04/2024 18:31
E24-01875-04 [AA6633]	06/04/2024 19:03
E24-01875-03 [AA6634]	06/04/2024 19:35
E24-01875-05 [AA6635]	06/04/2024 20:08
E24-01875-02 [AA6636]	06/04/2024 20:39
10 PPBV CCCVS [AA6638CCCVS]	06/04/2024 21:43

Compound	CAS #	Reporting Limit (ppbv)	Concentration (ppbv)
1,2-Dichloroethene (trans)	156-60-5	0.20	ND
1,2-Dichloropropane	78-87-5	0.20	ND
1,3-Dichloropropene (cis)	10061-01-5	0.20	ND
1,3-Dichloropropene (trans)	10061-02-6	0.19	ND
1,2-Dichlorotetrafluoroethane	76-14-2	0.20	ND
1,4-Dioxane	123-91-1	0.20	ND
Ethylbenzene	100-41-4	0.18	ND
n-Heptane	142-82-5	0.20	ND
1,3-Hexachlorobutadiene	87-68-3	0.20	ND
n-Hexane	110-54-3	0.20	ND
Methylene chloride	75-09-2	0.20	ND
Methyl ethyl ketone	78-93-3	0.20	ND
Methyl isobutyl ketone	108-10-1	0.20	ND
Methyl tert-butyl ether	1634-04-4	0.20	ND
Styrene	100-42-5	0.20	ND
Tert-butyl alcohol	75-65-0	0.20	ND
1,1,2,2-Tetrachloroethane	79-34-5	0.20	ND
Tetrachloroethene	127-18-4	0.20	ND
Toluene	108-88-3	0.20	ND
1,2,4-Trichlorobenzene	120-82-1	0.20	ND
1,1,1-Trichloroethane	71-55-6	0.17	ND
1,1,2-Trichloroethane	79-00-5	0.20	ND
Trichloroethene	79-01-6	0.17	ND

Method Blank must be less than the Practical Quantitation Limit (PQL).

INTEGRATED ANALYTICAL LABORATORIES, LLC

Method Blank Report

Lab Sample Name:	**METHOD BLANK**	**Data File:**	**AA6623BLK**
Field Sample Name:	**METHOD BLANK**	**Date Analyzed:**	**6/4/2024**
Matrix:	**Air**	**Sample Volume:**	**500ml**
Dilution Factor:	**1**	**GC/MS Column:**	**RTX-1, 0.32 mmID**

Runs with this Method Blank:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6620BFB]	06/04/2024 10:07
10 PPBV DCVS [AA6621DCVS]	06/04/2024 10:40
10 PPBV LCS [AA6622LCS]	06/04/2024 12:49
METHOD BLANK [AA6623BLK]	06/04/2024 13:18
02 PPBV RLLCS [AA6624RLLCS]	06/04/2024 14:10
E24-01875-01 [AA6625]	06/04/2024 14:41
E24-01875-03 [AA6626]	06/04/2024 15:12
E24-01875-05 [AA6627]	06/04/2024 15:44
E24-01875-02 [AA6628]	06/04/2024 16:15
E24-01875-04 [AA6629]	06/04/2024 16:47
E24-01875-06 [AA6630]	06/04/2024 17:28
E24-01875-01 [AA6631]	06/04/2024 18:00
E24-01875-21 [AA6632]	06/04/2024 18:31
E24-01875-04 [AA6633]	06/04/2024 19:03
E24-01875-03 [AA6634]	06/04/2024 19:35
E24-01875-05 [AA6635]	06/04/2024 20:08
E24-01875-02 [AA6636]	06/04/2024 20:39
10 PPBV CCCVS [AA6638CCCVS]	06/04/2024 21:43

Compound	CAS #	Reporting Limit (ppbv)	Concentration (ppbv)
Trichlorofluoromethane	75-69-4	0.20	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.20	ND
1,2,4-Trimethylbenzene	95-63-6	0.20	ND
1,3,5-Trimethylbenzene	108-67-8	0.20	ND
2,2,4-Trimethylpentane	540-84-1	0.20	ND
Vinyl bromide	593-60-2	0.20	ND
Vinyl chloride	75-01-4	0.20	ND
Xylenes (m&p)	179601-23-1	0.20	ND
Xylenes (o)	95-47-6	0.20	ND

Method Blank must be less than the Practical Quantitation Limit (PQL).

INTEGRATED ANALYTICAL LABORATORIES, LLC

Method Blank Report

Lab Sample Name:	**METHOD BLANK**	**Data File:**	**AA6642BLK**
Field Sample Name:	**METHOD BLANK**	**Date Analyzed:**	**6/5/2024**
Matrix:	**Air**	**Sample Volume:**	**500ml**
Dilution Factor:	**1**	**GC/MS Column:**	**RTX-1, 0.32 mmID**

Runs with this Method Blank:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6639BFB]	06/05/2024 9:50
10 PPBV DCVS [AA6640DCVS]	06/05/2024 10:58
10 PPBV LCS [AA6641LCS]	06/05/2024 11:29
METHOD BLANK [AA6642BLK]	06/05/2024 12:01
02 PPBV RLLCS [AA6643RLLCS]	06/05/2024 12:34
E24-01875-06 [AA6648]	06/05/2024 16:33
10 PPBV CCCVS [AA6656CCCVS]	06/05/2024 21:19

Compound	CAS #	Reporting Limit (ppbv)	Concentration (ppbv)
Acetone	67-64-1	0.20	ND
Benzene	71-43-2	0.20	ND
Bromodichloromethane	75-27-4	0.20	ND
Bromoform	75-25-2	0.20	ND
Bromomethane	74-83-9	0.20	ND
1,3-Butadiene	106-99-0	0.20	ND
Chlorobenzene	108-90-7	0.20	ND
Chloroethane	75-00-3	0.20	ND
Chloroform	67-66-3	0.20	ND
Chloromethane	74-87-3	0.20	ND
Carbon disulfide	75-15-0	0.20	ND
Carbon tetrachloride	56-23-5	0.20	ND
Cyclohexane	110-82-7	0.20	ND
Dibromochloromethane	124-48-1	0.20	ND
1,2-Dibromoethane	106-93-4	0.17	ND
1,2-Dichlorobenzene	95-50-1	0.20	ND
1,3-Dichlorobenzene	541-73-1	0.20	ND
1,4-Dichlorobenzene	106-46-7	0.20	ND
Dichlorodifluoromethane	75-71-8	0.20	ND
1,1-Dichloroethane	75-34-3	0.20	ND
1,2-Dichloroethane	107-06-2	0.20	ND
1,1-Dichloroethene	75-35-4	0.20	ND
1,2-Dichloroethene (cis)	156-59-2	0.20	ND
1,2-Dichloroethene (trans)	156-60-5	0.20	ND
1,2-Dichloropropane	78-87-5	0.20	ND
1,3-Dichloropropene (cis)	10061-01-5	0.20	ND
1,3-Dichloropropene (trans)	10061-02-6	0.19	ND
1,2-Dichlorotetrafluoroethane	76-14-2	0.20	ND
1,4-Dioxane	123-91-1	0.20	ND
Ethylbenzene	100-41-4	0.18	ND
n-Heptane	142-82-5	0.20	ND
1,3-Hexachlorobutadiene	87-68-3	0.20	ND
n-Hexane	110-54-3	0.20	ND
Methylene chloride	75-09-2	0.20	ND
Methyl ethyl ketone	78-93-3	0.20	ND

Method Blank must be less than the Practical Quantitation Limit (PQL).

INTEGRATED ANALYTICAL LABORATORIES, LLC

Method Blank Report

Lab Sample Name:	**METHOD BLANK**	**Data File:**	**AA6642BLK**
Field Sample Name:	**METHOD BLANK**	**Date Analyzed:**	**6/5/2024**
Matrix:	**Air**	**Sample Volume:**	**500ml**
Dilution Factor:	**1**	**GC/MS Column:**	**RTX-1, 0.32 mmID**

Runs with this Method Blank:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6639BFB]	06/05/2024 9:50
10 PPBV DCVS [AA6640DCVS]	06/05/2024 10:58
10 PPBV LCS [AA6641LCS]	06/05/2024 11:29
METHOD BLANK [AA6642BLK]	06/05/2024 12:01
02 PPBV RLLCS [AA6643RLLCS]	06/05/2024 12:34
E24-01875-06 [AA6648]	06/05/2024 16:33
10 PPBV CCCVS [AA6656CCCVS]	06/05/2024 21:19

Compound	CAS #	Reporting Limit (ppbv)	Concentration (ppbv)
Methyl isobutyl ketone	108-10-1	0.20	ND
Methyl tert-butyl ether	1634-04-4	0.20	ND
Styrene	100-42-5	0.20	ND
Tert-butyl alcohol	75-65-0	0.20	ND
1,1,2,2-Tetrachloroethane	79-34-5	0.20	ND
Tetrachloroethene	127-18-4	0.20	ND
Toluene	108-88-3	0.20	ND
1,2,4-Trichlorobenzene	120-82-1	0.20	ND
1,1,1-Trichloroethane	71-55-6	0.17	ND
1,1,2-Trichloroethane	79-00-5	0.20	ND
Trichloroethene	79-01-6	0.17	ND
Trichlorofluoromethane	75-69-4	0.20	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.20	ND
1,2,4-Trimethylbenzene	95-63-6	0.20	ND
1,3,5-Trimethylbenzene	108-67-8	0.20	ND
2,2,4-Trimethylpentane	540-84-1	0.20	ND
Vinyl bromide	593-60-2	0.20	ND
Vinyl chloride	75-01-4	0.20	ND
Xylenes (m&p)	179601-23-1	0.20	ND
Xylenes (o)	95-47-6	0.20	ND

Method Blank must be less than the Practical Quantitation Limit (PQL).

Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA6391LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 4/24/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6389BFB]	04/24/2024 9:59
10 PPBV DCVS [AA6390DCVS]	04/24/2024 10:32
10 PPBV LCS [AA6391LCS]	04/24/2024 12:12
METHOD BLANK [AA6392BLK]	04/24/2024 13:23
02 PPBV RLLCS [AA6393RLLCS]	04/24/2024 14:00
5085 [AA6394]	04/24/2024 14:58
3035A [AA6395]	04/24/2024 15:28
10 PPBV CCCVS [AA6405CCCVS]	04/24/2024 21:01

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
Acetone	67-64-1	11	100
Benzene	71-43-2	10	100
Bromodichloromethane	75-27-4	12	110
Bromoform	75-25-2	12	110
Bromomethane	74-83-9	11	100
1,3-Butadiene	106-99-0	9.8	98
Chlorobenzene	108-90-7	11	110
Chloroethane	75-00-3	11	110
Chloroform	67-66-3	11	110
Chloromethane	74-87-3	12	100
Carbon disulfide	75-15-0	12	110
Carbon tetrachloride	56-23-5	10	100
Cyclohexane	110-82-7	10	100
Dibromochloromethane	124-48-1	12	110
1,2-Dibromoethane	106-93-4	11	100
1,2-Dichlorobenzene	95-50-1	11	100
1,3-Dichlorobenzene	541-73-1	11	100
1,4-Dichlorobenzene	106-46-7	11	100
Dichlorodifluoromethane	75-71-8	11	100
1,1-Dichloroethane	75-34-3	11	100
1,2-Dichloroethane	107-06-2	11	110
1,1-Dichloroethene	75-35-4	11	100
1,2-Dichloroethene (cis)	156-59-2	11	100
1,2-Dichloroethene (trans)	156-60-5	12	110
1,2-Dichloropropane	78-87-5	11	110
1,3-Dichloropropene (cis)	10061-01-5	11	100
1,3-Dichloropropene (trans)	10061-02-6	12	120
1,2-Dichlorotetrafluoroethane	76-14-2	9.2	84
1,4-Dioxane	123-91-1	12	100
Ethylbenzene	100-41-4	11	110
n-Heptane	142-82-5	9.7	97
1,3-Hexachlorobutadiene	87-68-3	12	110

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.

*** Values outside of QC limits* Values outside of 70-130% QC limits**

Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA6391LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 4/24/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6389BFB]	04/24/2024 9:59
10 PPBV DCVS [AA6390DCVS]	04/24/2024 10:32
10 PPBV LCS [AA6391LCS]	04/24/2024 12:12
METHOD BLANK [AA6392BLK]	04/24/2024 13:23
02 PPBV RLLCS [AA6393RLLCS]	04/24/2024 14:00
5085 [AA6394]	04/24/2024 14:58
3035A [AA6395]	04/24/2024 15:28
10 PPBV CCCVS [AA6405CCCVS]	04/24/2024 21:01

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
n-Hexane	110-54-3	9.9	99
Methylene chloride	75-09-2	11	100
Methyl ethyl ketone	78-93-3	10	85
Methyl isobutyl ketone	108-10-1	11	100
Methyl tert-butyl ether	1634-04-4	10	91
Styrene	100-42-5	12	110
Tert-butyl alcohol	75-65-0	10	85
1,1,2,2-Tetrachloroethane	79-34-5	11	100
Tetrachloroethene	127-18-4	11	110
Toluene	108-88-3	11	110
1,2,4-Trichlorobenzene	120-82-1	11	96
1,1,1-Trichloroethane	71-55-6	10	100
1,1,2-Trichloroethane	79-00-5	11	100
Trichloroethene	79-01-6	11	110
Trichlorofluoromethane	75-69-4	10	91
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	9.7	97
1,2,4-Trimethylbenzene	95-63-6	11	100
1,3,5-Trimethylbenzene	108-67-8	11	100
2,2,4-Trimethylpentane	540-84-1	12	120
Vinyl bromide	593-60-2	11	110
Vinyl chloride	75-01-4	12	120
Xylenes (m&p)	179601-23-1	22	110
Xylenes (o)	95-47-6	11	110

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.

*** Values outside of QC limits* Values outside of 70-130% QC limits**

INTEGRATED ANALYTICAL LABORATORIES, LLC

Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA6622LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 6/4/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6620BFB]	06/04/2024 10:07
10 PPBV DCVS [AA6621DCVS]	06/04/2024 10:40
10 PPBV LCS [AA6622LCS]	06/04/2024 12:49
METHOD BLANK [AA6623BLK]	06/04/2024 13:18
02 PPBV RLLCS [AA6624RLLCS]	06/04/2024 14:10
E24-01875-01 [AA6625]	06/04/2024 14:41
E24-01875-03 [AA6626]	06/04/2024 15:12
E24-01875-05 [AA6627]	06/04/2024 15:44
E24-01875-02 [AA6628]	06/04/2024 16:15
E24-01875-04 [AA6629]	06/04/2024 16:47
E24-01875-06 [AA6630]	06/04/2024 17:28
E24-01875-01 [AA6631]	06/04/2024 18:00
E24-01875-21 [AA6632]	06/04/2024 18:31
E24-01875-04 [AA6633]	06/04/2024 19:03
E24-01875-03 [AA6634]	06/04/2024 19:35
E24-01875-05 [AA6635]	06/04/2024 20:08
E24-01875-02 [AA6636]	06/04/2024 20:39
10 PPBV CCCVS [AA6638CCCVS]	06/04/2024 21:43

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
Acetone	67-64-1	13	120
Benzene	71-43-2	13	130
Bromodichloromethane	75-27-4	13	120
Bromoform	75-25-2	12	110
Bromomethane	74-83-9	11	100
1,3-Butadiene	106-99-0	12	120
Chlorobenzene	108-90-7	12	120
Chloroethane	75-00-3	12	120
Chloroform	67-66-3	14	130
Chloromethane	74-87-3	14	120
Carbon disulfide	75-15-0	12	110
Carbon tetrachloride	56-23-5	13	130
Cyclohexane	110-82-7	14	130
Dibromochloromethane	124-48-1	14	130
1,2-Dibromoethane	106-93-4	14	130
1,2-Dichlorobenzene	95-50-1	11	100
1,3-Dichlorobenzene	541-73-1	12	110
1,4-Dichlorobenzene	106-46-7	12	110
Dichlorodifluoromethane	75-71-8	12	110
1,1-Dichloroethane	75-34-3	13	120
1,2-Dichloroethane	107-06-2	14	130
1,1-Dichloroethene	75-35-4	13	120

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.
*** Values outside of QC limits* Values outside of 70-130% QC limits**

INTEGRATED ANALYTICAL LABORATORIES, LLC

Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA6622LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 6/4/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6620BFB]	06/04/2024 10:07
10 PPBV DCVS [AA6621DCVS]	06/04/2024 10:40
10 PPBV LCS [AA6622LCS]	06/04/2024 12:49
METHOD BLANK [AA6623BLK]	06/04/2024 13:18
02 PPBV RLLCS [AA6624RLLCS]	06/04/2024 14:10
E24-01875-01 [AA6625]	06/04/2024 14:41
E24-01875-03 [AA6626]	06/04/2024 15:12
E24-01875-05 [AA6627]	06/04/2024 15:44
E24-01875-02 [AA6628]	06/04/2024 16:15
E24-01875-04 [AA6629]	06/04/2024 16:47
E24-01875-06 [AA6630]	06/04/2024 17:28
E24-01875-01 [AA6631]	06/04/2024 18:00
E24-01875-21 [AA6632]	06/04/2024 18:31
E24-01875-04 [AA6633]	06/04/2024 19:03
E24-01875-03 [AA6634]	06/04/2024 19:35
E24-01875-05 [AA6635]	06/04/2024 20:08
E24-01875-02 [AA6636]	06/04/2024 20:39
10 PPBV CCCVS [AA6638CCCVS]	06/04/2024 21:43

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
1,2-Dichloroethene (cis)	156-59-2	14	130
1,2-Dichloroethene (trans)	156-60-5	14	130
1,2-Dichloropropane	78-87-5	13	130
1,3-Dichloropropene (cis)	10061-01-5	13	120
1,3-Dichloropropene (trans)	10061-02-6	15	130
1,2-Dichlorotetrafluoroethane	76-14-2	11	100
1,4-Dioxane	123-91-1	15	130
Ethylbenzene	100-41-4	12	120
n-Heptane	142-82-5	14	130
1,3-Hexachlorobutadiene	87-68-3	11	96
n-Hexane	110-54-3	13	130
Methylene chloride	75-09-2	11	100
Methyl ethyl ketone	78-93-3	14	120
Methyl isobutyl ketone	108-10-1	14	130
Methyl tert-butyl ether	1634-04-4	14	130
Styrene	100-42-5	13	120
Tert-butyl alcohol	75-65-0	15	130
1,1,2,2-Tetrachloroethane	79-34-5	12	110
Tetrachloroethene	127-18-4	14	130
Toluene	108-88-3	14	130
1,2,4-Trichlorobenzene	120-82-1	11	96
1,1,1-Trichloroethane	71-55-6	13	130

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.
*** Values outside of QC limits* Values outside of 70-130% QC limits**

INTEGRATED ANALYTICAL LABORATORIES, LLC

Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA6622LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 6/4/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6620BFB]	06/04/2024 10:07
10 PPBV DCVS [AA6621DCVS]	06/04/2024 10:40
10 PPBV LCS [AA6622LCS]	06/04/2024 12:49
METHOD BLANK [AA6623BLK]	06/04/2024 13:18
02 PPBV RLLCS [AA6624RLLCS]	06/04/2024 14:10
E24-01875-01 [AA6625]	06/04/2024 14:41
E24-01875-03 [AA6626]	06/04/2024 15:12
E24-01875-05 [AA6627]	06/04/2024 15:44
E24-01875-02 [AA6628]	06/04/2024 16:15
E24-01875-04 [AA6629]	06/04/2024 16:47
E24-01875-06 [AA6630]	06/04/2024 17:28
E24-01875-01 [AA6631]	06/04/2024 18:00
E24-01875-21 [AA6632]	06/04/2024 18:31
E24-01875-04 [AA6633]	06/04/2024 19:03
E24-01875-03 [AA6634]	06/04/2024 19:35
E24-01875-05 [AA6635]	06/04/2024 20:08
E24-01875-02 [AA6636]	06/04/2024 20:39
10 PPBV CCCVS [AA6638CCCVS]	06/04/2024 21:43

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
1,1,2-Trichloroethane	79-00-5	14	130
Trichloroethene	79-01-6	11	110
Trichlorofluoromethane	75-69-4	14	130
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	13	130
1,2,4-Trimethylbenzene	95-63-6	12	110
1,3,5-Trimethylbenzene	108-67-8	12	110
2,2,4-Trimethylpentane	540-84-1	10	100
Vinyl bromide	593-60-2	11	110
Vinyl chloride	75-01-4	12	120
Xylenes (m&p)	179601-23-1	24	120
Xylenes (o)	95-47-6	12	120

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.

*** Values outside of QC limits* Values outside of 70-130% QC limits**

INTEGRATED ANALYTICAL LABORATORIES, LLC

Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA6641LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 6/5/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6639BFB]	06/05/2024 9:50
10 PPBV DCVS [AA6640DCVS]	06/05/2024 10:58
10 PPBV LCS [AA6641LCS]	06/05/2024 11:29
METHOD BLANK [AA6642BLK]	06/05/2024 12:01
02 PPBV RLLCS [AA6643RLLCS]	06/05/2024 12:34
E24-01875-06 [AA6648]	06/05/2024 16:33
10 PPBV CCCVS [AA6656CCCVS]	06/05/2024 21:19

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
Acetone	67-64-1	11	100
Benzene	71-43-2	11	110
Bromodichloromethane	75-27-4	11	100
Bromoform	75-25-2	10	91
Bromomethane	74-83-9	11	100
1,3-Butadiene	106-99-0	10	100
Chlorobenzene	108-90-7	10	100
Chloroethane	75-00-3	11	110
Chloroform	67-66-3	11	110
Chloromethane	74-87-3	13	110
Carbon disulfide	75-15-0	11	100
Carbon tetrachloride	56-23-5	10	100
Cyclohexane	110-82-7	11	110
Dibromochloromethane	124-48-1	10	91
1,2-Dibromoethane	106-93-4	10.0	91
1,2-Dichlorobenzene	95-50-1	9.3	85
1,3-Dichlorobenzene	541-73-1	9.4	85
1,4-Dichlorobenzene	106-46-7	9.4	85
Dichlorodifluoromethane	75-71-8	11	100
1,1-Dichloroethane	75-34-3	11	100
1,2-Dichloroethane	107-06-2	11	110
1,1-Dichloroethene	75-35-4	11	100
1,2-Dichloroethene (cis)	156-59-2	11	100
1,2-Dichloroethene (trans)	156-60-5	11	100
1,2-Dichloropropane	78-87-5	10	100
1,3-Dichloropropene (cis)	10061-01-5	10	91
1,3-Dichloropropene (trans)	10061-02-6	11	110
1,2-Dichlorotetrafluoroethane	76-14-2	9.4	85
1,4-Dioxane	123-91-1	11	92
Ethylbenzene	100-41-4	9.7	97
n-Heptane	142-82-5	10	100
1,3-Hexachlorobutadiene	87-68-3	9.6	84
n-Hexane	110-54-3	11	110

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.

*** Values outside of QC limits* Values outside of 70-130% QC limits**

Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA6641LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 6/5/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6639BFB]	06/05/2024 9:50
10 PPBV DCVS [AA6640DCVS]	06/05/2024 10:58
10 PPBV LCS [AA6641LCS]	06/05/2024 11:29
METHOD BLANK [AA6642BLK]	06/05/2024 12:01
02 PPBV RLLCS [AA6643RLLCS]	06/05/2024 12:34
E24-01875-06 [AA6648]	06/05/2024 16:33
10 PPBV CCCVS [AA6656CCCVS]	06/05/2024 21:19

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
Methylene chloride	75-09-2	11	100
Methyl ethyl ketone	78-93-3	11	93
Methyl isobutyl ketone	108-10-1	9.8	89
Methyl tert-butyl ether	1634-04-4	10	91
Styrene	100-42-5	10	91
Tert-butyl alcohol	75-65-0	11	93
1,1,2,2-Tetrachloroethane	79-34-5	9.8	89
Tetrachloroethene	127-18-4	10	100
Toluene	108-88-3	10	100
1,2,4-Trichlorobenzene	120-82-1	9.6	84
1,1,1-Trichloroethane	71-55-6	10	100
1,1,2-Trichloroethane	79-00-5	9.9	90
Trichloroethene	79-01-6	9.4	94
Trichlorofluoromethane	75-69-4	11	100
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	10	100
1,2,4-Trimethylbenzene	95-63-6	9.5	86
1,3,5-Trimethylbenzene	108-67-8	9.6	87
2,2,4-Trimethylpentane	540-84-1	11	110
Vinyl bromide	593-60-2	11	110
Vinyl chloride	75-01-4	11	110
Xylenes (m&p)	179601-23-1	20	100
Xylenes (o)	95-47-6	9.7	97

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.

*** Values outside of QC limits* Values outside of 70-130% QC limits**

Analysis: Volatile Organic Compounds by EPA Method TO-15
Laboratory Sample Duplicate Report

SDG Number: E24-01112
IAL Sample ID: E24-01112-12
Matrix: Air
Summa ID: 2155

Date Received: 3/28/24
Date Analyzed: 4/23/24,4/23/24
Lab Data File#: AA6383,AA6384
Dilution Factor: 1
Injection Volume: 500ml
GC/MS Column: RTX-1, 0.32 mmID

Compound	CAS #	Sample E24-01112-12 Concentration Reported ppbv	Q	Sample Dup E24-01112-32 Concentration Reported ppbv	Q	Reporting Limits ppbv	RPD
Acetone	67-64-1	**5.6**		**6.4**		0.40	**-13.33%**
Allyl Chloride	107-05-1	0.40	U	0.40	U	0.40	0.00%
Benzene	71-43-2	0.20	U	0.20	U	0.20	0.00%
Bromodichloromethane	75-27-4	0.40	U	0.40	U	0.40	0.00%
Bromoform	75-25-2	0.40	U	0.40	U	0.40	0.00%
Bromomethane	74-83-9	0.40	U	0.40	U	0.40	0.00%
1,3-Butadiene	106-99-0	0.40	U	0.40	U	0.40	0.00%
Chlorobenzene	108-90-7	0.40	U	0.40	U	0.40	0.00%
Chloroethane	75-00-3	0.40	U	0.40	U	0.40	0.00%
Chloroform	67-66-3	0.40	U	0.40	U	0.40	0.00%
Chloromethane	74-87-3	0.40	U	0.40	U	0.40	0.00%
Carbon disulfide	75-15-0	0.40	U	0.40	U	0.40	0.00%
Carbon tetrachloride	56-23-5	0.20	U	0.20	U	0.20	0.00%
2-Chlorotoluene	95-49-8	0.40	U	0.40	U	0.40	0.00%
Cyclohexane	110-82-7	0.40	U	0.40	U	0.40	0.00%
Dibromochloromethane	124-48-1	0.40	U	0.40	U	0.40	0.00%
1,2-Dibromoethane	106-93-4	0.20	U	0.20	U	0.20	0.00%
1,2-Dichlorobenzene	95-50-1	0.40	U	0.40	U	0.40	0.00%
1,3-Dichlorobenzene	541-73-1	0.40	U	0.40	U	0.40	0.00%
1,4-Dichlorobenzene	106-46-7	0.40	U	0.40	U	0.40	0.00%
Dichlorodifluoromethane	75-71-8	0.40	U	0.40	U	0.40	0.00%
1,1-Dichloroethane	75-34-3	0.40	U	0.40	U	0.40	0.00%
1,2-Dichloroethane	107-06-2	0.40	U	0.40	U	0.40	0.00%
1,1-Dichloroethene	75-35-4	0.40	U	0.40	U	0.40	0.00%
1,2-Dichloroethene (cis)	156-59-2	0.40	U	0.40	U	0.40	0.00%
1,2-Dichloroethene (trans)	156-60-5	0.40	U	0.40	U	0.40	0.00%
1,2-Dichloropropane	78-87-5	0.20	U	0.20	U	0.20	0.00%
1,3-Dichloropropene (cis)	10061-01-5	0.20	U	0.20	U	0.20	0.00%
1,3-Dichloropropene (trans)	10061-02-6	0.20	U	0.20	U	0.20	0.00%
1,2-Dichlorotetrafluoroethane	76-14-2	0.40	U	0.40	U	0.40	0.00%
Ethylbenzene	100-41-4	0.20	U	0.20	U	0.20	0.00%
4-Ethyltoluene	622-96-8	0.40	U	0.40	U	0.40	0.00%
n-Heptane	142-82-5	0.40	U	0.40	U	0.40	0.00%
1,3-Hexachlorobutadiene	87-68-3	0.40	U	0.40	U	0.40	0.00%
n-Hexane	110-54-3	0.40	U	0.40	U	0.40	0.00%
Methylene chloride	75-09-2	0.40	U	0.40	U	0.40	0.00%
Methyl ethyl ketone	78-93-3	0.40	U	0.40	U	0.40	0.00%
Methyl isobutyl ketone	108-10-1	0.40	U	0.40	U	0.40	0.00%

Qualifiers:
E=Concentration exceeds upper level of calibration range for instrument.
D=Extra dilution required for this compound. X=Duplicate samples do not met RPD criteria.
U=Compound ND or under reporting limit.

Analysis: Volatile Organic Compounds by EPA Method TO-15
Laboratory Sample Duplicate Report

SDG Number: E24-01112
IAL Sample ID: E24-01112-12
Matrix: Air
Summa ID: 2155

Date Received: 3/28/24
Date Analyzed: 4/23/24,4/23/24
Lab Data File#: AA6383,AA6384
Dilution Factor: 1
Injection Volume: 500ml
GC/MS Column: RTX-1, 0.32 mmID

Compound	CAS #	Sample E24-01112-12 Concentration Reported ppbv	Q	Sample Dup E24-01112-32 Concentration Reported ppbv	Q	Reporting Limits ppbv	RPD
Methyl tert-butyl ether	1634-04-4	0.40	U	0.40	U	0.40	0.00%
Styrene	100-42-5	0.40	U	0.40	U	0.40	0.00%
Tert-butyl alcohol	75-65-0	0.40	U	0.40	U	0.40	0.00%
1,1,2,2-Tetrachloroethane	79-34-5	0.40	U	0.40	U	0.40	0.00%
Tetrachloroethene	127-18-4	0.40	U	0.40	U	0.40	0.00%
Toluene	108-88-3	0.40	U	0.40	U	0.40	0.00%
1,2,4-Trichlorobenzene	120-82-1	0.40	U	0.40	U	0.40	0.00%
1,1,1-Trichloroethane	71-55-6	0.40	U	0.40	U	0.40	0.00%
1,1,2-Trichloroethane	79-00-5	0.40	U	0.40	U	0.40	0.00%
Trichloroethene	79-01-6	0.20	U	0.20	U	0.20	0.00%
Trichlorofluoromethane	75-69-4	0.40	U	0.40	U	0.40	0.00%
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.40	U	0.40	U	0.40	0.00%
1,2,4-Trimethylbenzene	95-63-6	0.40	U	0.40	U	0.40	0.00%
1,3,5-Trimethylbenzene	108-67-8	0.40	U	0.40	U	0.40	0.00%
2,2,4-Trimethylpentane	540-84-1	0.40	U	0.40	U	0.40	0.00%
Vinyl bromide	593-60-2	0.40	U	0.40	U	0.40	0.00%
Vinyl chloride	75-01-4	0.20	U	0.20	U	0.20	0.00%
Xylenes (m&p)	179601-23-1	0.40	U	0.40	U	0.40	0.00%
Xylenes (o)	95-47-6	0.40	U	0.40	U	0.40	0.00%

RPD must be <25% for all laboratory duplicate samples. Laboratory duplicate samples are run once daily.
NC = The RPD could not be calculated since the compound was only detected in either the parent or duplicate sample.

Qualifiers:
E=Concentration exceeds upper level of calibration range for instrument.
D=Extra dilution required for this compound. X=Duplicate samples do not met RPD criteria.
U=Compound ND or under reporting limit.

Analysis: Volatile Organic Compounds by EPA Method TO-15
Laboratory Sample Duplicate Report

SDG Number: E24-01875
IAL Sample ID: E24-01875-01
Matrix: Air
Summa ID: 3293

Date Received: 5/31/24
Date Analyzed: 6/4/24,6/4/24
Lab Data File#: AA6631,AA6632
Dilution Factor: 50
Injection Volume: 10ml
GC/MS Column: RTX-1, 0.32 mmID

Compound	CAS #	Sample E24-01875-01 Concentration Reported ppbv	Q	Sample Dup E24-01875-21 Concentration Reported ppbv	Q	Reporting Limits ppbv	RPD
Acetone	67-64-1	**87**	D	**83**	D	10	**4.71%**
Benzene	71-43-2	10	U	10	U	10	0.00%
Bromodichloromethane	75-27-4	10	U	10	U	10	0.00%
Bromoform	75-25-2	10	U	10	U	10	0.00%
Bromomethane	74-83-9	10	U	10	U	10	0.00%
1,3-Butadiene	106-99-0	10	U	10	U	10	0.00%
Chlorobenzene	108-90-7	10	U	10	U	10	0.00%
Chloroethane	75-00-3	10	U	10	U	10	0.00%
Chloroform	67-66-3	10	U	10	U	10	0.00%
Chloromethane	74-87-3	10	U	10	U	10	0.00%
Carbon disulfide	75-15-0	10	U	10	U	10	0.00%
Carbon tetrachloride	56-23-5	2.0	U	2.0	U	2.0	0.00%
Cyclohexane	110-82-7	10	U	10	U	10	0.00%
Dibromochloromethane	124-48-1	10	U	10	U	10	0.00%
1,2-Dibromoethane	106-93-4	10	U	10	U	10	0.00%
1,2-Dichlorobenzene	95-50-1	10	U	10	U	10	0.00%
1,3-Dichlorobenzene	541-73-1	10	U	10	U	10	0.00%
1,4-Dichlorobenzene	106-46-7	10	U	10	U	10	0.00%
Dichlorodifluoromethane	75-71-8	10	U	10	U	10	0.00%
1,1-Dichloroethane	75-34-3	10	U	10	U	10	0.00%
1,2-Dichloroethane	107-06-2	10	U	10	U	10	0.00%
1,1-Dichloroethene	75-35-4	10	U	10	U	10	0.00%
1,2-Dichloroethene (cis)	156-59-2	**180**	D	**160**	D	10	**11.76%**
1,2-Dichloroethene (trans)	156-60-5	10	U	10	U	10	0.00%
1,2-Dichloropropane	78-87-5	10	U	10	U	10	0.00%
1,3-Dichloropropene (cis)	10061-01-5	10	U	10	U	10	0.00%
1,3-Dichloropropene (trans)	10061-02-6	10	U	10	U	10	0.00%
1,2-Dichlorotetrafluoroethane	76-14-2	10	U	10	U	10	0.00%
1,4-Dioxane	123-91-1	10	U	10	U	10	0.00%
Ethylbenzene	100-41-4	10	U	10	U	10	0.00%
n-Heptane	142-82-5	10	U	10	U	10	0.00%
1,3-Hexachlorobutadiene	87-68-3	10	U	10	U	10	0.00%
n-Hexane	110-54-3	10	U	10	U	10	0.00%
Methylene chloride	75-09-2	10	U	10	U	10	0.00%
Methyl ethyl ketone	78-93-3	10	U	10	U	10	0.00%
Methyl isobutyl ketone	108-10-1	10	U	10	U	10	0.00%
Methyl tert-butyl ether	1634-04-4	10	U	10	U	10	0.00%
Styrene	100-42-5	10	U	10	U	10	0.00%

Qualifiers:
E=Concentration exceeds upper level of calibration range for instrument.
D=Extra dilution required for this compound. X=Duplicate samples do not met RPD criteria.
U=Compound ND or under reporting limit.

Analysis: Volatile Organic Compounds by EPA Method TO-15
Laboratory Sample Duplicate Report

SDG Number: E24-01875
IAL Sample ID: E24-01875-01
Matrix: Air
Summa ID: 3293

Date Received: 5/31/24
Date Analyzed: 6/4/24,6/4/24
Lab Data File#: AA6631,AA6632
Dilution Factor: 50
Injection Volume: 10ml
GC/MS Column: RTX-1, 0.32 mmID

Compound	CAS #	Sample E24-01875-01 Concentration Reported ppbv	Q	Sample Dup E24-01875-21 Concentration Reported ppbv	Q	Reporting Limits ppbv	RPD
Tert-butyl alcohol	75-65-0	10	U	10	U	10	0.00%
1,1,2,2-Tetrachloroethane	79-34-5	10	U	10	U	10	0.00%
Tetrachloroethene	127-18-4	**890**	D	**820**	D	10	**8.19%**
Toluene	108-88-3	**370**	D	**350**	D	10	**5.56%**
1,2,4-Trichlorobenzene	120-82-1	10	U	10	U	10	0.00%
1,1,1-Trichloroethane	71-55-6	10	U	10	U	10	0.00%
1,1,2-Trichloroethane	79-00-5	10	U	10	U	10	0.00%
Trichloroethene	79-01-6	**150**	D	**130**	D	2.3	**14.29%**
Trichlorofluoromethane	75-69-4	10	U	10	U	10	0.00%
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	10	U	10	U	10	0.00%
1,2,4-Trimethylbenzene	95-63-6	10	U	10	U	10	0.00%
1,3,5-Trimethylbenzene	108-67-8	10	U	10	U	10	0.00%
2,2,4-Trimethylpentane	540-84-1	10	U	10	U	10	0.00%
Vinyl bromide	593-60-2	10	U	10	U	10	0.00%
Vinyl chloride	75-01-4	10	U	10	U	10	0.00%
Xylenes (m&p)	179601-23-1	**26**	D	**24**	D	10	**8.00%**
Xylenes (o)	95-47-6	10	U	10	U	10	0.00%

RPD must be <25% for all laboratory duplicate samples. Laboratory duplicate samples are run once daily.
NC = The RPD could not be calculated since the compound was only detected in either the parent or duplicate sample.

Qualifiers:
E=Concentration exceeds upper level of calibration range for instrument.
D=Extra dilution required for this compound. X=Duplicate samples do not met RPD criteria.
U=Compound ND or under reporting limit.

Analysis: Volatile Organic Compounds by EPA Method TO-15
Laboratory Sample Duplicate Report

SDG Number: E24-01845
IAL Sample ID: E24-01845-03
Matrix: Air
Summa ID: 5085

Date Received: 5/30/24
Date Analyzed: 6/5/24,6/5/24
Lab Data File#: AA6649,AA6650
Dilution Factor: 10
Injection Volume: 50ml
GC/MS Column: RTX-1, 0.32 mmID

Compound	CAS #	Sample E24-01845-03 Concentration Reported ppbv	Q	Sample Dup E24-01845-23 Concentration Reported ppbv	Q	Reporting Limits ppbv	RPD
Acetone	67-64-1	**140**	D	**160**	D	2.0	**-13.33%**
Allyl Chloride	107-05-1	2.0	U	2.0	U	2.0	0.00%
Benzene	71-43-2	2.0	U	2.0	U	2.0	0.00%
Bromodichloromethane	75-27-4	2.0	U	2.0	U	2.0	0.00%
Bromoform	75-25-2	2.0	U	2.0	U	2.0	0.00%
Bromomethane	74-83-9	2.0	U	2.0	U	2.0	0.00%
1,3-Butadiene	106-99-0	2.0	U	2.0	U	2.0	0.00%
Chlorobenzene	108-90-7	2.0	U	2.0	U	2.0	0.00%
Chloroethane	75-00-3	2.0	U	2.0	U	2.0	0.00%
Chloroform	67-66-3	2.0	U	2.0	U	2.0	0.00%
Chloromethane	74-87-3	2.0	U	2.0	U	2.0	0.00%
Carbon disulfide	75-15-0	2.0	U	2.0	U	2.0	0.00%
Carbon tetrachloride	56-23-5	2.0	U	2.0	U	2.0	0.00%
2-Chlorotoluene	95-49-8	2.0	U	2.0	U	2.0	0.00%
Cyclohexane	110-82-7	2.0	U	2.0	U	2.0	0.00%
Dibromochloromethane	124-48-1	2.0	U	2.0	U	2.0	0.00%
1,2-Dibromoethane	106-93-4	2.0	U	2.0	U	2.0	0.00%
1,2-Dichlorobenzene	95-50-1	2.0	U	2.0	U	2.0	0.00%
1,3-Dichlorobenzene	541-73-1	2.0	U	2.0	U	2.0	0.00%
1,4-Dichlorobenzene	106-46-7	2.0	U	2.0	U	2.0	0.00%
Dichlorodifluoromethane	75-71-8	2.0	U	2.0	U	2.0	0.00%
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	0.00%
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	0.00%
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	2.0	0.00%
1,2-Dichloroethene (cis)	156-59-2	2.0	U	2.0	U	2.0	0.00%
1,2-Dichloroethene (trans)	156-60-5	2.0	U	2.0	U	2.0	0.00%
1,2-Dichloropropane	78-87-5	2.0	U	2.0	U	2.0	0.00%
1,3-Dichloropropene (cis)	10061-01-5	2.0	U	2.0	U	2.0	0.00%
1,3-Dichloropropene (trans)	10061-02-6	2.0	U	2.0	U	2.0	0.00%
1,2-Dichlorotetrafluoroethane	76-14-2	2.0	U	2.0	U	2.0	0.00%
1,4-Dioxane	123-91-1	2.0	U	2.0	U	2.0	0.00%
Ethanol	64-17-5	**25**	D	**23**	D	2.0	**8.33%**
Ethylbenzene	100-41-4	2.0	U	**2.2**	D	2.0	**NC**
4-Ethyltoluene	622-96-8	2.0	U	2.0	U	2.0	0.00%
n-Heptane	142-82-5	2.0	U	2.0	U	2.0	0.00%
1,3-Hexachlorobutadiene	87-68-3	2.0	U	2.0	U	2.0	0.00%
n-Hexane	110-54-3	2.0	U	2.0	U	2.0	0.00%
Isopropanol	67-63-0	2.0	U	2.0	U	2.0	0.00%

Qualifiers:
E=Concentration exceeds upper level of calibration range for instrument.
D=Extra dilution required for this compound. X=Duplicate samples do not met RPD criteria.
U=Compound ND or under reporting limit.

Analysis: Volatile Organic Compounds by EPA Method TO-15
Laboratory Sample Duplicate Report

SDG Number: E24-01845
IAL Sample ID: E24-01845-03
Matrix: Air
Summa ID: 5085

Date Received: 5/30/24
Date Analyzed: 6/5/24,6/5/24
Lab Data File#: AA6649,AA6650
Dilution Factor: 10
Injection Volume: 50ml
GC/MS Column: RTX-1, 0.32 mmID

Compound	CAS #	Sample E24-01845-03 Concentration Reported ppbv	Q	Sample Dup E24-01845-23 Concentration Reported ppbv	Q	Reporting Limits ppbv	RPD
Methylene chloride	75-09-2	**18**	D	**19**	D	2.0	**-5.41%**
Methyl ethyl ketone	78-93-3	2.0	U	2.0	U	2.0	0.00%
Methyl isobutyl ketone	108-10-1	2.0	U	2.0	U	2.0	0.00%
Methyl methacrylate	80-62-6	2.0	U	2.0	U	2.0	0.00%
Methyl tert-butyl ether	1634-04-4	2.0	U	2.0	U	2.0	0.00%
Styrene	100-42-5	2.0	U	2.0	U	2.0	0.00%
Tert-butyl alcohol	75-65-0	2.0	U	2.0	U	2.0	0.00%
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	0.00%
Tetrachloroethene	127-18-4	2.0	U	2.0	U	2.0	0.00%
Tetrahydrofuran	109-99-9	2.0	U	2.0	U	2.0	0.00%
Toluene	108-88-3	2.0	U	2.0	U	2.0	0.00%
1,2,4-Trichlorobenzene	120-82-1	2.0	U	2.0	U	2.0	0.00%
1,1,1-Trichloroethane	71-55-6	2.0	U	2.0	U	2.0	0.00%
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	2.0	0.00%
Trichloroethene	79-01-6	2.0	U	2.0	U	2.0	0.00%
Trichlorofluoromethane	75-69-4	2.0	U	2.0	U	2.0	0.00%
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	2.0	U	2.0	U	2.0	0.00%
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	0.00%
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	0.00%
2,2,4-Trimethylpentane	540-84-1	2.0	U	2.0	U	2.0	0.00%
Vinyl bromide	593-60-2	2.0	U	2.0	U	2.0	0.00%
Vinyl chloride	75-01-4	2.0	U	2.0	U	2.0	0.00%
Xylenes (m&p)	179601-23-1	**6.9**	D	**8.1**	D	4.0	**-16.00%**
Xylenes (o)	95-47-6	2.0	U	2.0	U	2.0	0.00%

RPD must be <25% for all laboratory duplicate samples. Laboratory duplicate samples are run once daily.
NC = The RPD could not be calculated since the compound was only detected in either the parent or duplicate sample.

Qualifiers:
E=Concentration exceeds upper level of calibration range for instrument.
D=Extra dilution required for this compound. X=Duplicate samples do not met RPD criteria.
U=Compound ND or under reporting limit.

Initial Calibration Curve Internal Standard Area and Retention Time Summary

Instrument: AA **ICAL Date:** 3/27/2024

		BROMOCHLOROMETHANE				1,4-DIFLUOROBENZENE				D-5 CHLOROBENZENE			
		Area #		RT		Area #		RT		Area #		RT	
AVERAGE OF CALIBRATION STANDARDS		377399		4.413		1533720		5.479		1408744		8.351	
UPPER LIMIT		528358		4.743		2147208		5.809		1972242		8.681	
LOWER LIMIT		226439		4.083		920232		5.149		845247		8.021	
Lab ID		Area #	%	RT	+/-	Area #	%	RT	+/-	Area #	%	RT	+/-
40 PPBV STD	AA 6025 STD01	398803	5.67	4.419	0.01	1758228	14.64	5.480	0.00	1517568	7.72	8.351	0.00
20 PPBV STD	AA 6024 STD02	411882	9.14	4.415	0.00	1661943	8.36	5.480	0.00	1464287	3.94	8.351	0.00
10 PPBV STD	AA 6023 STD03	405866	7.54	4.412	0.00	1540619	0.45	5.476	0.00	1407079	-0.12	8.351	0.00
2 PPBV STD	AA 6022 STD04	309693	-17.94	4.412	0.00	1229116	-19.86	5.479	0.00	1260202	-10.54	8.351	0.00
0.2 PPBV STD	AA 6021 STD05	360749	-4.41	4.409	0.00	1478694	-3.59	5.480	0.00	1394585	-1.01	8.351	0.00
ICVSS	AA 6026 ICVSS	412561	9.32	4.412	0.00	1549110	1.00	5.480	0.00	1439709	2.20	8.351	0.00

Difference of Internal Area must be within +/- 40%; Retention Times must be within +/- 0.33 minute.

* Values outsite QC limits.

Internal Standard Area and Retention Time Summary

Lab File ID (Standard): AA6390DCVS **Date Analyzed:** 4/24/2024

Instrument: AA **ICAL Date:** 3/27/2024

			BROMOCHLOROMETHANE				1,4-DIFLUOROBENZENE				D-5 CHLOROBENZENE			
			Area #		RT		Area #		RT		Area #		RT	
	CALIBRATION STANDARD		233549		4.419		1008755		5.486		1112357		8.351	
	UPPER LIMIT		326969		4.75		1412257		5.82		1557300		8.68	
	LOWER LIMIT		140129		4.09		605253		5.16		667414		8.02	
Lab ID		DF	Area #	%	RT	+/-	Area #	%	RT	+/-	Area #	%	RT	+/-
Method Blank	AA6392BLK	1.0	183868	-21.27	4.407	-0.01	691252	-31.47	5.477	-0.01	670643	-39.71	8.352	0.00
Reporting Limit Laboratory Control Standard	AA6393RLLCS	1.0	185126	-20.73	4.410	-0.01	748530	-25.80	5.477	-0.01	699899	-37.08	8.352	0.00
5085	AA6394	1.0	199545	-14.56	4.410	-0.01	760439	-24.62	5.481	-0.01	689618	-38.00	8.352	0.00
3035A	AA6395	1.0	236867	1.42	4.420	0.00	1002275	-0.64	5.487	0.00	1184616	6.50	8.352	0.00
Closing Calibration	AA6405CCCVS	1.0	245055	4.93	4.419	0.00	1040790	3.18	5.483	0.00	1225225	10.15	8.355	0.00

Difference of Internal Area must be within +/- 40%; Retention Times must be within +/- 0.33 minute.
* Values outsite QC limits.

Initial Calibration Curve Internal Standard Area and Retention Time Summary

Instrument: AA **ICAL Date:** 5/29/2024

		BROMOCHLOROMETHANE				1,4-DIFLUOROBENZENE				D-5 CHLOROBENZENE			
		Area #		RT		Area #		RT		Area #		RT	
AVERAGE OF CALIBRATION STANDARDS		250669		4.419		1087820		5.481		975494		8.352	
UPPER LIMIT		350936		4.749		1522949		5.811		1365692		8.682	
LOWER LIMIT		150401		4.089		652692		5.151		585297		8.022	
Lab ID		Area #	%	RT	+/-	Area #	%	RT	+/-	Area #	%	RT	+/-
40 PPBV STD	AA 6560 STD01	259539	3.54	4.438	0.02	1398154	28.53	5.490	-0.01	1151205	18.01	8.351	0.00
20 PPBV STD	AA 6559 STD02	232784	-7.13	4.425	0.01	1025078	-5.77	5.480	0.00	911734	-6.54	8.354	0.00
10 PPBV STD	AA 5447 STD03	240829	-3.93	4.416	0.00	1010790	-7.08	5.483	0.00	932743	-4.38	8.351	0.00
2 PPBV STD	AA 6557 STD04	243744	-2.76	4.406	-0.01	931187	-14.40	5.477	0.00	883473	-9.43	8.354	0.00
0.2 PPBV STD	AA 6556 STD05	276448	10.28	4.409	-0.01	1073893	-1.28	5.477	0.00	998317	2.34	8.351	0.00
ICVSS	AA 6561 ICVSS	242079	-3.43	4.412	-0.01	1024301	-5.84	5.480	0.00	930904	-4.57	8.354	0.00

Difference of Internal Area must be within +/- 40%; Retention Times must be within +/- 0.33 minute.

* Values outsite QC limits.

Internal Standard Area and Retention Time Summary

Lab File ID (Standard): AA6621DCVS **Date Analyzed:** 6/4/2024

Instrument: AA **ICAL Date:** 5/29/2024

			BROMOCHLOROMETHANE				1,4-DIFLUOROBENZENE				D-5 CHLOROBENZENE			
			Area #		RT		Area #		RT		Area #		RT	
	CALIBRATION STANDARD		245770		4.425		1194987		5.487		1346281		8.351	
	UPPER LIMIT		344078		4.76		1672982		5.82		1884793		8.68	
	LOWER LIMIT		147462		4.10		716992		5.16		807769		8.02	
Lab ID		DF	Area #	%	RT	+/-	Area #	%	RT	+/-	Area #	%	RT	+/-
Method Blank	AA6623BLK	1.0	233316	-5.07	4.409	-0.02	891632	-25.39	5.480	-0.01	873802	-35.10	8.351	0.00
E24-01875-01	AA6625	10.0	282273	14.85	4.428	0.00	1315913	10.12	5.489	0.00	1590756	18.16	8.354	0.00
E24-01875-03	AA6626	10.0	227014	-7.63	4.415	-0.01	990976	-17.07	5.480	-0.01	903992	-32.85	8.354	0.00
E24-01875-05	AA6627	10.0	219607	-10.65	4.415	-0.01	971833	-18.67	5.483	0.00	894706	-33.54	8.351	0.00
E24-01875-02	AA6628	10.0	266240	8.33	4.425	0.00	1239734	3.74	5.486	0.00	1427581	6.04	8.354	0.00
E24-01875-04	AA6629	10.0	229629	-6.57	4.412	-0.01	960698	-19.61	5.483	0.00	877544	-34.82	8.351	0.00
E24-01875-06	AA6630	1.0	296366	20.59	4.444	0.02	1174318	-1.73	5.492	0.01	1025950	-23.79	8.357	0.01
E24-01875-01	AA6631	50.0	242408	-1.37	4.406	-0.02	934618	-21.79	5.476	-0.01	891601	-33.77	8.354	0.00
E24-01875-21	AA6632	50.0	246617	0.34	4.409	-0.02	926041	-22.51	5.480	-0.01	898485	-33.26	8.354	0.00
E24-01875-04	AA6633	50.0	237399	-3.41	4.409	-0.02	879652	-26.39	5.480	-0.01	871291	-35.28	8.354	0.00
E24-01875-03	AA6634	2.0	215539	-12.30	4.431	0.01	997680	-16.51	5.486	0.00	920868	-31.60	8.354	0.00
E24-01875-05	AA6635	2.0	217623	-11.45	4.441	0.02	1166624	-2.37	5.489	0.00	1065939	-20.82	8.357	0.01

Internal Standard Area and Retention Time Summary

Lab File ID (Standard): AA6621DCVS **Date Analyzed:** 6/4/2024

Instrument: AA **ICAL Date:** 5/29/2024

			BROMOCHLOROMETHANE				1,4-DIFLUOROBENZENE				D-5 CHLOROBENZENE			
			Area #		RT		Area #		RT		Area #		RT	
CALIBRATION STANDARD			245770		4.425		1194987		5.487		1346281		8.351	
UPPER LIMIT			344078		4.76		1672982		5.82		1884793		8.68	
LOWER LIMIT			147462		4.10		716992		5.16		807769		8.02	
Lab ID		DF	Area #	%	RT	+/-	Area #	%	RT	+/-	Area #	%	RT	+/-
E24-01875-02	AA6636	1.0	219662	-10.62	4.432	0.01	1037791	-13.15	5.483	0.00	930088	-30.91	8.354	0.00

Difference of Internal Area must be within +/- 40%; Retention Times must be within +/- 0.33 minute.
* Values outsite QC limits.

Internal Standard Area and Retention Time Summary

Lab File ID (Standard): AA6640DCVS **Date Analyzed:** 6/5/2024

Instrument: AA **ICAL Date:** 5/29/2024

			BROMOCHLOROMETHANE				1,4-DIFLUOROBENZENE				D-5 CHLOROBENZENE			
			Area #		RT		Area #		RT		Area #		RT	
	CALIBRATION STANDARD		220624		4.412		952962		5.483		861778		8.351	
	UPPER LIMIT		308874		4.74		1334147		5.81		1206489		8.68	
	LOWER LIMIT		132374		4.08		571777		5.15		517067		8.02	
Lab ID		DF	Area #	%	RT	+/-	Area #	%	RT	+/-	Area #	%	RT	+/-
Method Blank	AA6642BLK	1.0	236347	7.13	4.409	0.00	928150	-2.60	5.480	0.00	873534	1.36	8.351	0.00
Reporting Limit Laboratory Control Standard	AA6643RLLCS	1.0	239596	8.60	4.412	0.00	934906	-1.89	5.480	0.00	882154	2.36	8.351	0.00
E24-01875-06	AA6648	10.0	255739	15.92	4.425	0.01	1221237	28.15	5.489	0.01	1459034	69.31*	8.354	0.00
Closing Calibration	AA6656CCCVS	1.0	225571	2.24	4.418	0.01	900123	-5.54	5.483	0.00	825529	-4.21	8.354	0.00

Difference of Internal Area must be within +/- 40%; Retention Times must be within +/- 0.33 minute.
* Values outsite QC limits.

Section VI: Sample Data Summary

Certificate of Analysis

Summary of Results

**Quantitation Reports, Chromatograms,
and Peak Integration Reports**

CERTIFICATE OF ANALYSIS

ANALYTICAL DATA PACKAGE FOR THE
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
ALBANY NEW YORK 12233

Integrated Analytical Laboratories, LLC — **Randolph, NJ 07869**
Project#: 48-55 36th St — **NY ELAP Certification#: 11402**
SDG #: E24-01875 — **NJDEP (Primary AB) Certification#: 14751**
Date of first sample receipt: 5/31/2024 — **Date of last sample receipt: 5/31/2024**

Client: JS Held-Hoboken
5 Marine View Plaza
Hoboken, NJ 07030
Attention: Attention: Leah DeEgidio

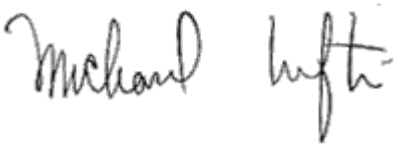
Project/Site: 48-55 36th St/NY

Analysis conducted at: Integrated Analytical Laboratories, LLC
273 Franklin Road
Randolph, NJ 07869
Contact: Michael H. Leftin, Ph.D.

Sample(s):
E24-01875-01
E24-01875-02
E24-01875-03
E24-01875-04
E24-01875-05
E24-01875-06

Samples for this analysis were received in good condition with a chain of custody.

All work recorded herein has been done in accordance with normal professional standards using accepted testing methodologies, quality assurance and quality control procedures except where otherwise agreed to by the client and testing company in writing. Once analysis has been performed on canisters that meets regulatory criteria, samples are recycled for future use, unless other provisions have been made by the client.



Michael H. Leftin, Ph.D.
Laboratory Director

Date: June 24, 2024

Volatile Organic Compounds by EPA Method TO-15
Summary of Results

Lab ID:	E24-01875-01	Instrument ID:	AA
Client ID:	SG-1B	GC/MS Column:	RTX-1, 0.32 mmID
Date Sampled:	05/29/2024 16:58	Injection Volmue:	50ml, 10ml
Date Received:	05/31/2024	Matrix:	Air-Other
Date Analyzed:	06/04/2024 14:41, 06/04/2024 18:00	% Moisture:	NA
Data File:	AA6625, AA6631	Dilution Factor:	10, 50
Summa ID:	3293	Analyst:	J. Walukiewicz

			Concentration Reported		Reporting Limits	
Compound	**CAS #**	**Q**	**ppbv**	**ug/m3**	**ppbv**	**ug/m3**
Acetone	67-64-1	D	82	190	2.0	4.8
Benzene	71-43-2		ND	ND	2.0	6.4
Bromodichloromethane	75-27-4		ND	ND	2.0	13
Bromoform	75-25-2		ND	ND	2.0	21
Bromomethane	74-83-9		ND	ND	2.0	7.8
1,3-Butadiene	106-99-0		ND	ND	2.0	4.4
Chlorobenzene	108-90-7		ND	ND	2.0	9.2
Chloroethane	75-00-3		ND	ND	2.0	5.3
Chloroform	67-66-3	D	4.6	23	2.0	9.8
Chloromethane	74-87-3		ND	ND	2.0	4.1
Carbon disulfide	75-15-0		ND	ND	2.0	6.2
Carbon tetrachloride	56-23-5		ND	ND	0.40	2.5
Cyclohexane	110-82-7		ND	ND	2.0	6.9
Dibromochloromethane	124-48-1		ND	ND	2.0	17
1,2-Dibromoethane	106-93-4		ND	ND	2.0	15
1,2-Dichlorobenzene	95-50-1		ND	ND	2.0	12
1,3-Dichlorobenzene	541-73-1		ND	ND	2.0	12
1,4-Dichlorobenzene	106-46-7		ND	ND	2.0	12
Dichlorodifluoromethane	75-71-8		ND	ND	2.0	9.9
1,1-Dichloroethane	75-34-3		ND	ND	2.0	8.1
1,2-Dichloroethane	107-06-2		ND	ND	2.0	8.1
1,1-Dichloroethene	75-35-4		ND	ND	2.0	7.9
1,2-Dichloroethene (cis)	156-59-2	D	210	820	2.0	7.9
1,2-Dichloroethene (trans)	156-60-5	D	6.8	27	2.0	7.9
1,2-Dichloropropane	78-87-5		ND	ND	2.0	9.2
1,3-Dichloropropene (cis)	10061-01-5		ND	ND	2.0	9.1
1,3-Dichloropropene (trans)	10061-02-6		ND	ND	2.0	9.1
1,2-Dichlorotetrafluoroethane	76-14-2		ND	ND	2.0	14
1,4-Dioxane	123-91-1		ND	ND	2.0	7.2
Ethylbenzene	100-41-4	D	7.9	34	2.0	8.7
n-Heptane	142-82-5		ND	ND	2.0	8.2
1,3-Hexachlorobutadiene	87-68-3		ND	ND	2.0	21
n-Hexane	110-54-3		ND	ND	2.0	7.0
Methylene chloride	75-09-2		ND	ND	2.0	6.9
Methyl ethyl ketone	78-93-3	D	2.3	6.8	2.0	5.9
Methyl isobutyl ketone	108-10-1		ND	ND	2.0	8.2
Methyl tert-butyl ether	1634-04-4		ND	ND	2.0	7.2
Styrene	100-42-5		ND	ND	2.0	8.5
Tert-butyl alcohol	75-65-0		ND	ND	2.0	6.1
1,1,2,2-Tetrachloroethane	79-34-5		ND	ND	2.0	14
Tetrachloroethene	127-18-4	D	890	6000	10	68
Toluene	108-88-3	D	400	1500	2.0	7.5
1,2,4-Trichlorobenzene	120-82-1		ND	ND	2.0	15
1,1,1-Trichloroethane	71-55-6		ND	ND	2.0	11
1,1,2-Trichloroethane	79-00-5		ND	ND	2.0	11

Qualifiers:
D = Dilution required

Volatile Organic Compounds by EPA Method TO-15
Summary of Results

Lab ID:	E24-01875-01	Instrument ID:	AA
Client ID:	SG-1B	GC/MS Column:	RTX-1, 0.32 mmID
Date Sampled:	05/29/2024 16:58	Injection Volmue:	50ml, 10ml
Date Received:	05/31/2024	Matrix:	Air-Other
Date Analyzed:	06/04/2024 14:41, 06/04/2024 18:00	% Moisture:	NA
Data File:	AA6625, AA6631	Dilution Factor:	10, 50
Summa ID:	3293	Analyst:	J. Walukiewicz

			Concentration Reported		Reporting Limits	
Compound	**CAS #**	**Q**	**ppbv**	**ug/m3**	**ppbv**	**ug/m3**
Trichloroethene	79-01-6	D	140	770	0.46	2.5
Trichlorofluoromethane	75-69-4		ND	ND	2.0	11
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1		ND	ND	2.0	15
1,2,4-Trimethylbenzene	95-63-6		ND	ND	2.0	9.8
1,3,5-Trimethylbenzene	108-67-8		ND	ND	2.0	9.8
2,2,4-Trimethylpentane	540-84-1		ND	ND	2.0	9.3
Vinyl bromide	593-60-2		ND	ND	2.0	8.7
Vinyl chloride	75-01-4		ND	ND	2.0	5.1
Xylenes (m&p)	179601-23-1	D	26	110	2.0	8.7
Xylenes (o)	95-47-6	D	8.0	35	2.0	8.7

Qualifiers:
D = Dilution required

Data Path : C:\DATA\2024\06-2024\06-04-2024\
Data File : aa6625.D
Acq On : 4 Jun 2024 2:41 pm
Operator : jjw
Sample : E24-01875-01x10 dil
Misc : 3293, 50cc
ALS Vial : 6 Sample Multiplier: 1

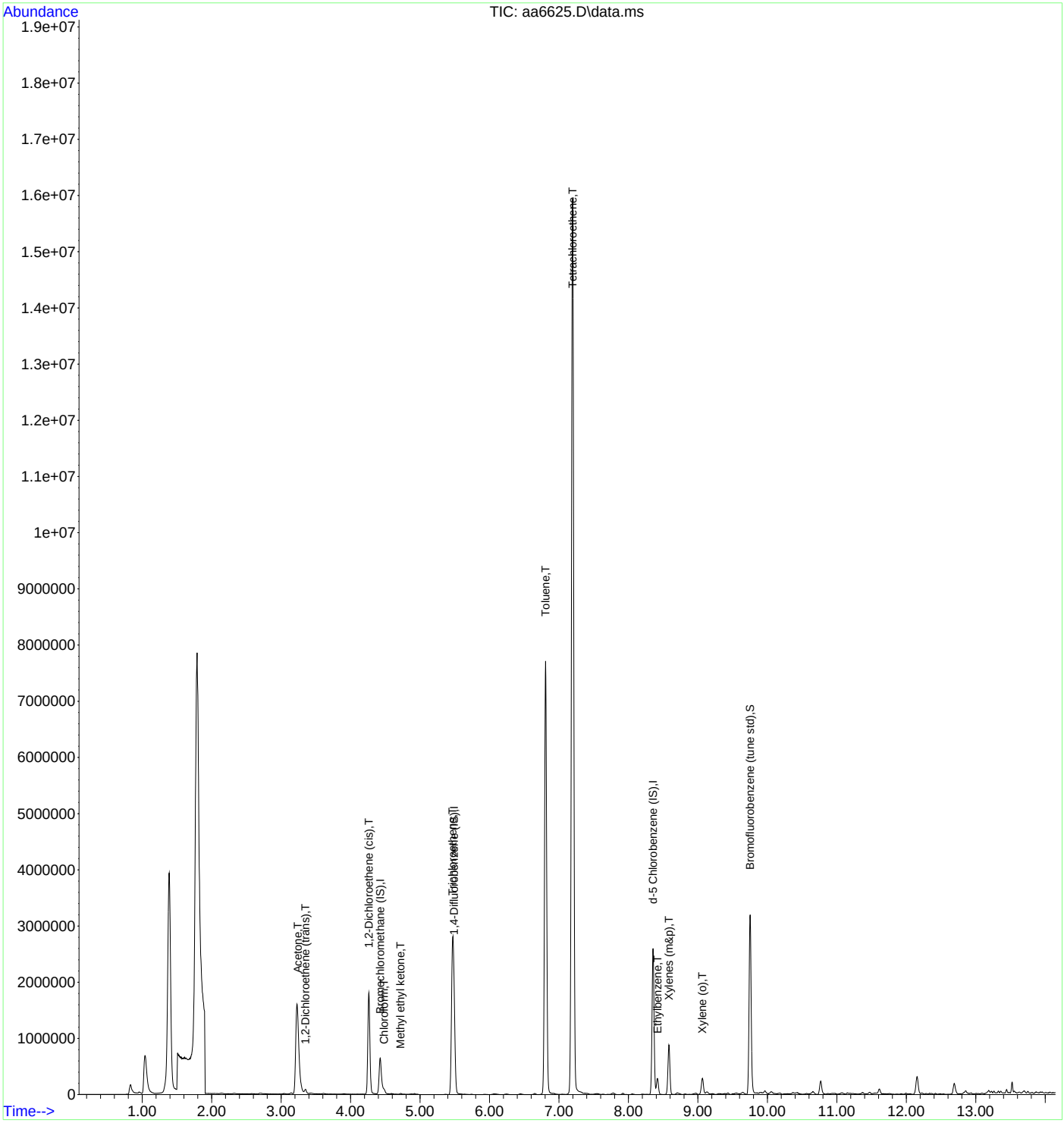
Quant Time: Jun 04 14:56:44 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

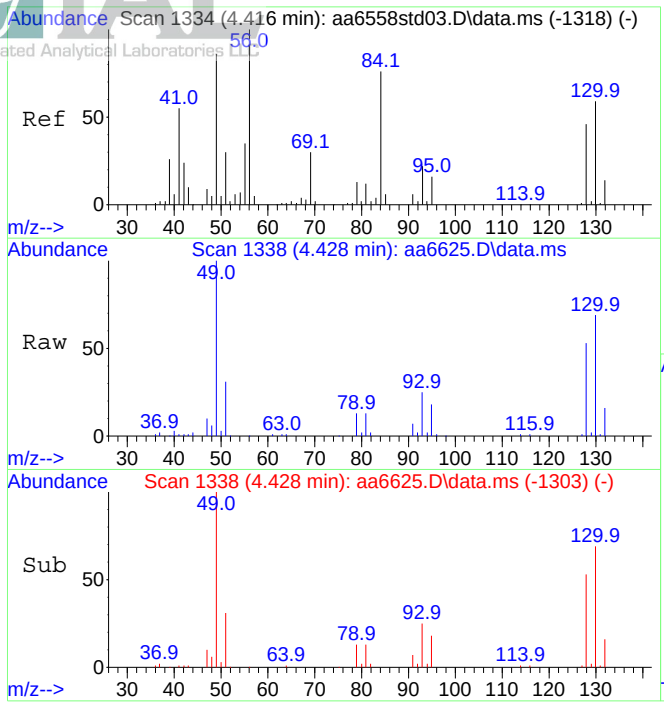
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.428	130	282273	10.00	ppbV	0.012
39) 1,4-Difluorobenzene (IS)	5.489	114	1315913	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.354	117	1590756	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.753	95	1454792	9.67	ppbV	0.000
Target Compounds						Qvalue
21) Acetone	3.242	43	519061	8.19	ppbV	99
22) 1,2-Dichloroethene (tr...	3.351	61	43983	0.68	ppbV	99
28) 1,2-Dichloroethene (cis)	4.264	61	1209738	20.74	ppbV	99
30) Chloroform	4.483	83	41838	0.46	ppbV	98
35) Methyl ethyl ketone	4.721	43	20819	0.23	ppbV	95
40) Trichloroethene	5.467	130	856020	14.39	ppbV	100
47) Toluene	6.808	91	6665132	39.56	ppbV	100
49) Tetrachloroethene	7.197	166	5536118	86.75	ppbV	100
58) Ethylbenzene	8.418	91	247802	0.79	ppbV	100
59) Xylenes (m&p)	8.582	91	616156	2.61	ppbV	100
60) Xylene (o)	9.065	91	197547	0.80	ppbV	98

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

Data Path : C:\DATA\2024\06-2024\06-04-2024\
Data File : aa6625.D
Acq On : 4 Jun 2024 2:41 pm
Operator : jjw
Sample : E24-01875-01x10 dil
Misc : 3293, 50cc
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 04 14:56:44 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

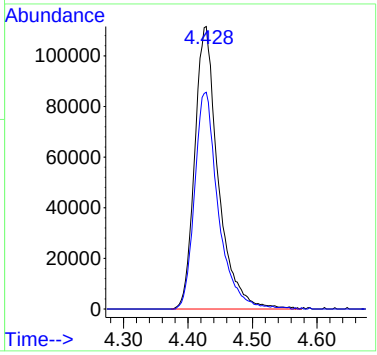


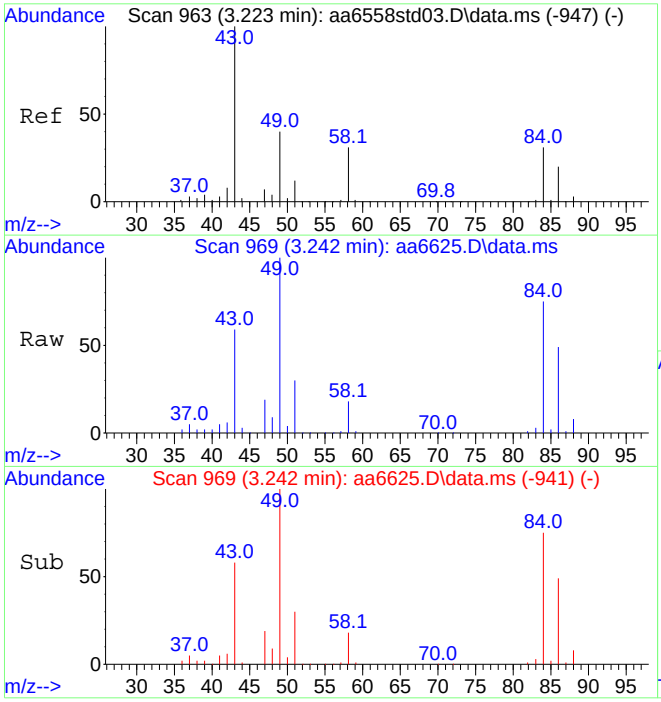


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.428 min Scan# 1338
Delta R.T. 0.012 min
Lab File: aa6625.D
Acq: 4 Jun 2024 2:41 pm

Tgt Ion:130 Resp: 282273

Ion	Ratio	Lower	Upper
130	100		
128	77.3	57.8	97.8

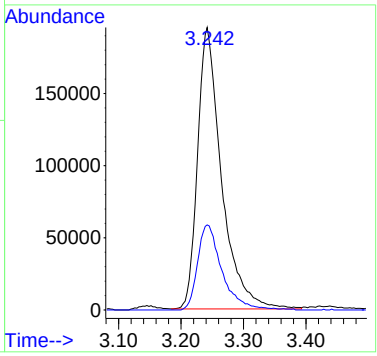


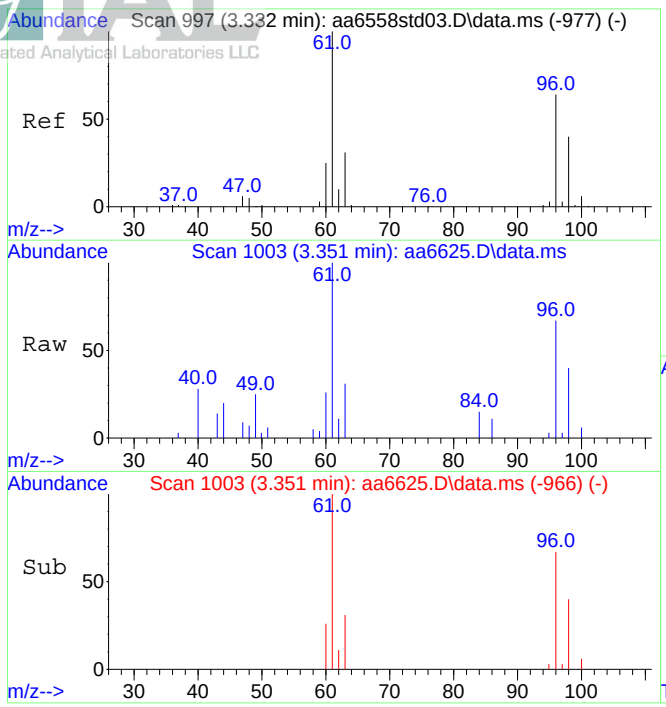


#21
Acetone
Concen: 8.19 ppbV
RT: 3.242 min Scan# 969
Delta R.T. 0.019 min
Lab File: aa6625.D
Acq: 4 Jun 2024 2:41 pm

Tgt Ion: 43 Resp: 519061

Ion	Ratio	Lower	Upper
43	100		
58	30.9	25.4	38.0

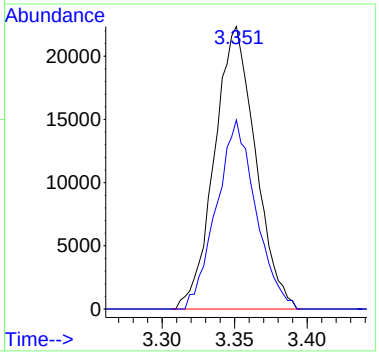


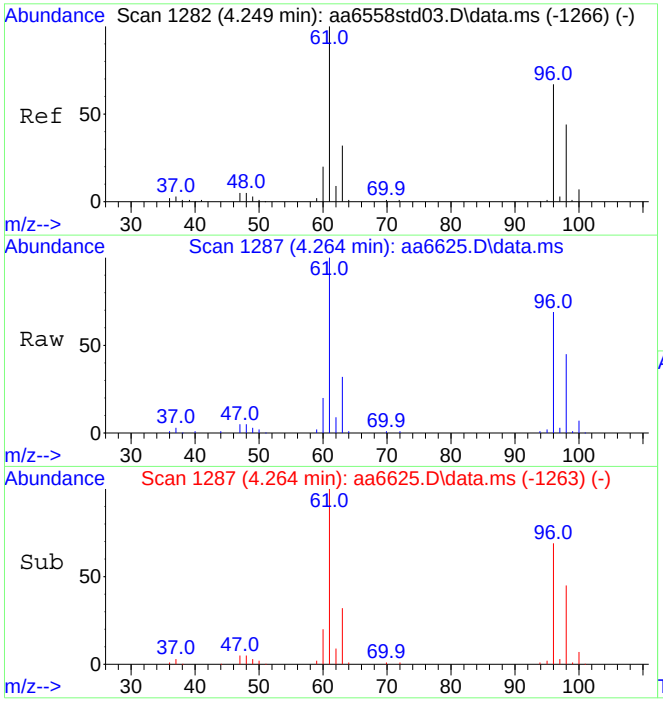


#22
1,2-Dichloroethene (trans)
Concen: 0.68 ppbV
RT: 3.351 min Scan# 1003
Delta R.T. 0.019 min
Lab File: aa6625.D
Acq: 4 Jun 2024 2:41 pm

Tgt Ion: 61 Resp: 43983

Ion	Ratio	Lower	Upper
61	100		
96	64.3	51.0	76.6

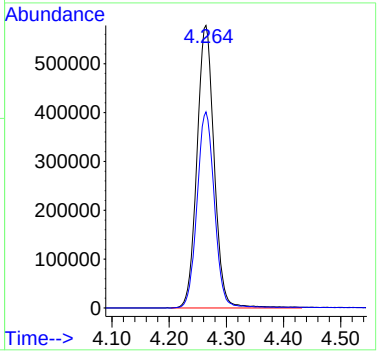


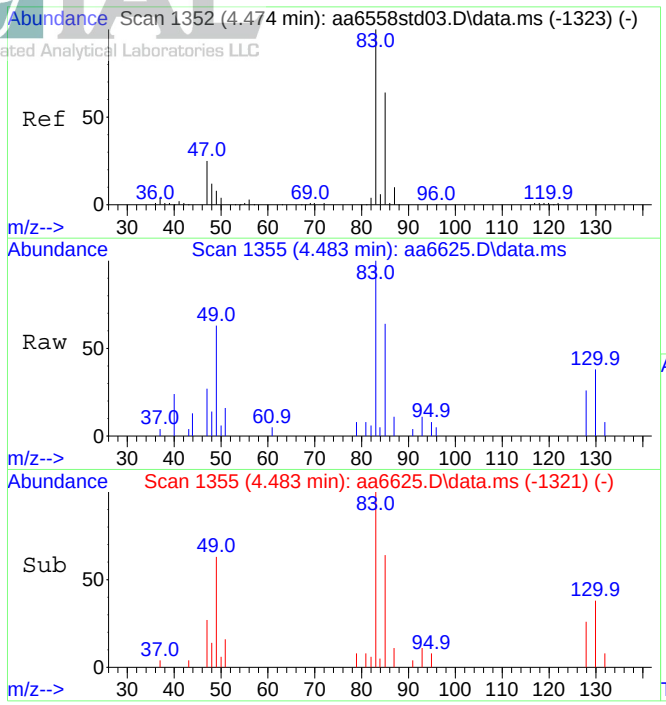


#28
1,2-Dichloroethene (cis)
Concen: 20.74 ppbV
RT: 4.264 min Scan# 1287
Delta R.T. 0.016 min
Lab File: aa6625.D
Acq: 4 Jun 2024 2:41 pm

Tgt Ion: 61 Resp: 1209738

Ion	Ratio	Lower	Upper
61	100		
96	70.4	56.0	84.0

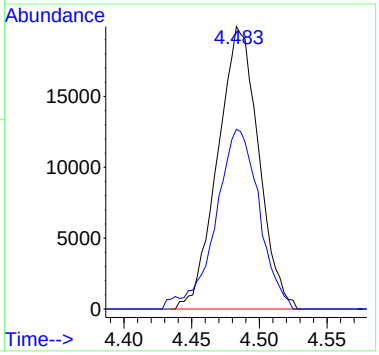


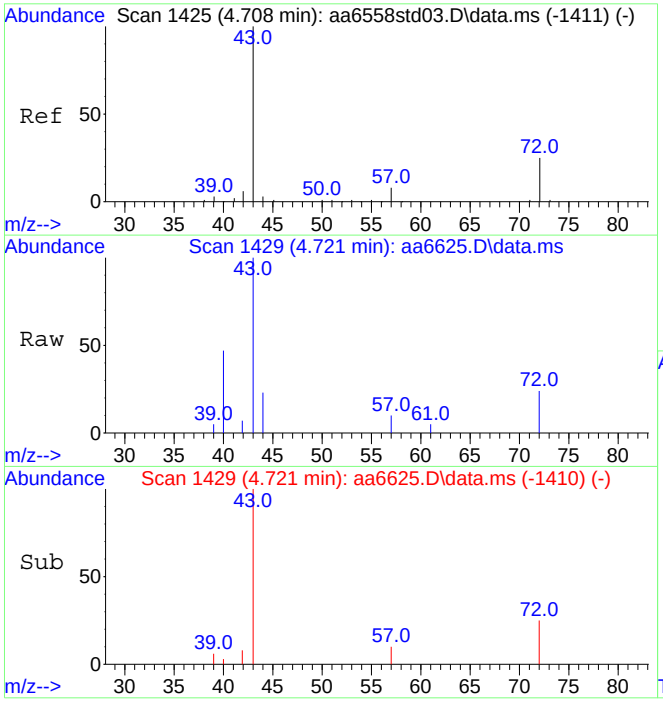


#30
Chloroform
Concen: 0.46 ppbV
RT: 4.483 min Scan# 1355
Delta R.T. 0.009 min
Lab File: aa6625.D
Acq: 4 Jun 2024 2:41 pm

Tgt Ion: 83 Resp: 41838

Ion	Ratio	Lower	Upper
83	100		
85	67.5	52.6	79.0

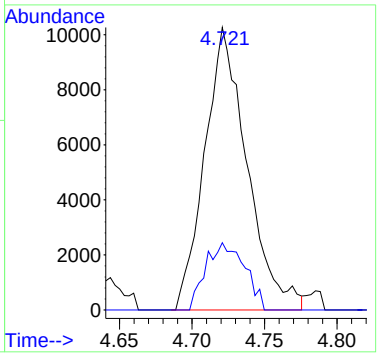


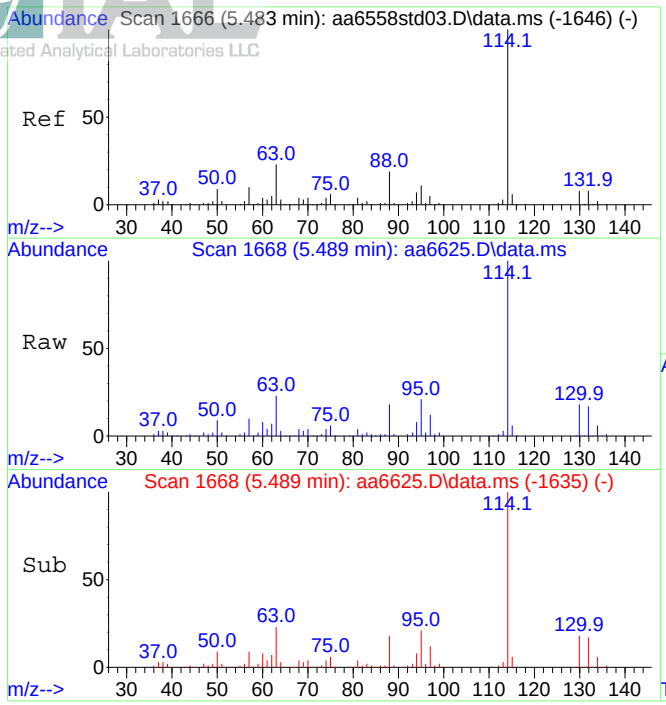


#35
Methyl ethyl ketone
Concen: 0.23 ppbV
RT: 4.721 min Scan# 1429
Delta R.T. 0.013 min
Lab File: aa6625.D
Acq: 4 Jun 2024 2:41 pm

Tgt Ion: 43 Resp: 20819

Ion	Ratio	Lower	Upper
43	100		
72	21.9	19.5	29.3

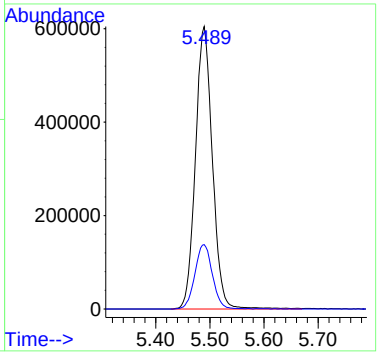


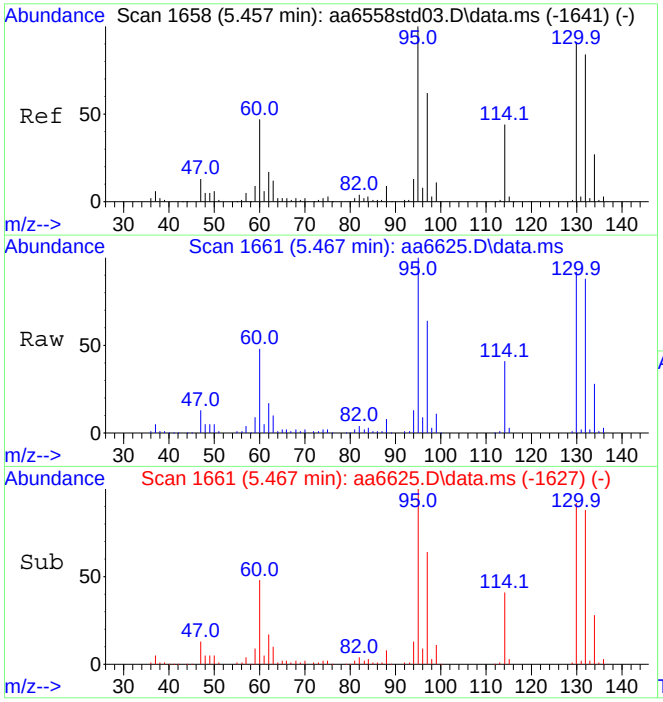


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.489 min Scan# 1668
Delta R.T. 0.006 min
Lab File: aa6625.D
Acq: 4 Jun 2024 2:41 pm

Tgt Ion:114 Resp: 1315913

Ion	Ratio	Lower	Upper
114	100		
63	23.5	3.6	43.6

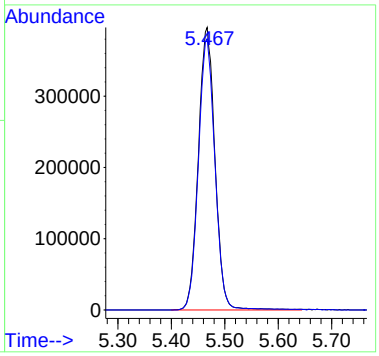


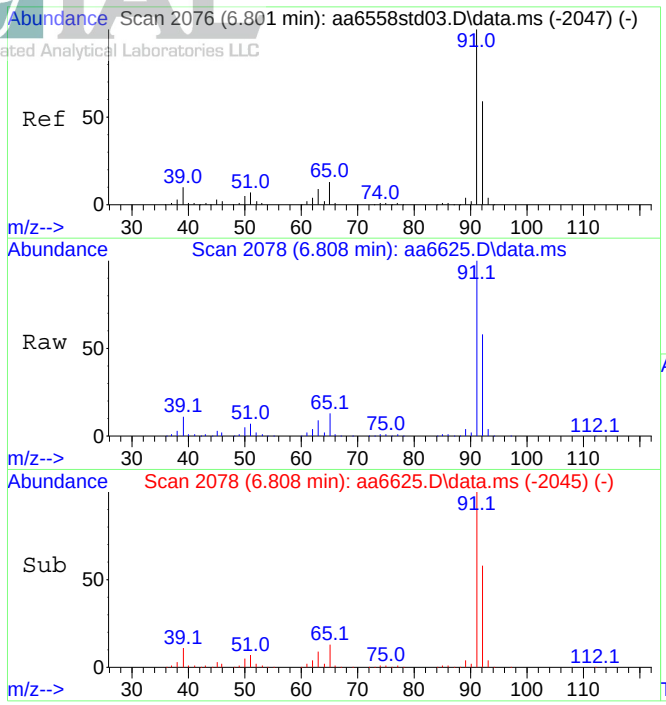


#40
Trichloroethene
Concen: 14.39 ppbV
RT: 5.467 min Scan# 1661
Delta R.T. 0.009 min
Lab File: aa6625.D
Acq: 4 Jun 2024 2:41 pm

Tgt Ion:130 Resp: 856020

Ion	Ratio	Lower	Upper
130	100		
132	95.7	76.6	114.8

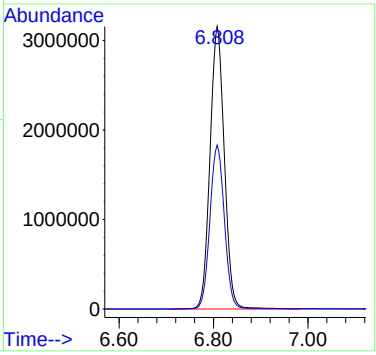


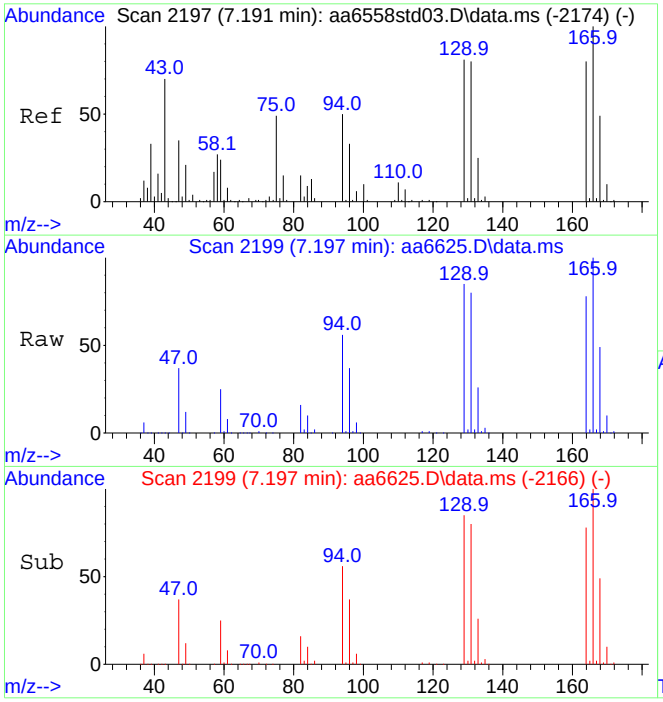


#47
Toluene
Concen: 39.56 ppbV
RT: 6.808 min Scan# 2078
Delta R.T. 0.006 min
Lab File: aa6625.D
Acq: 4 Jun 2024 2:41 pm

Tgt Ion: 91 Resp: 6665132

Ion	Ratio	Lower	Upper
91	100		
92	58.7	47.0	70.6

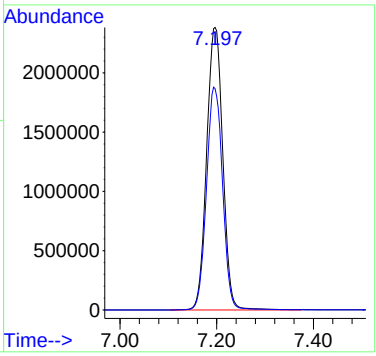


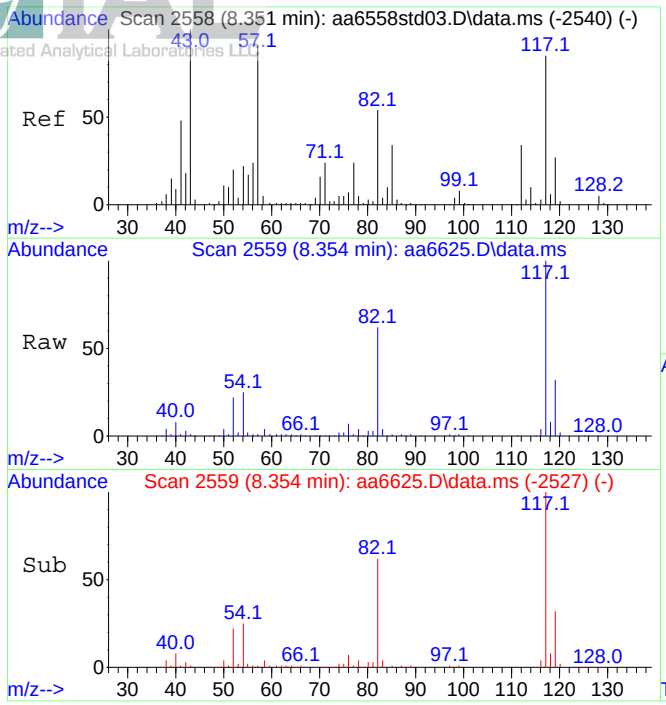


#49
Tetrachloroethene
Concen: 86.75 ppbV
RT: 7.197 min Scan# 2199
Delta R.T. 0.006 min
Lab File: aa6625.D
Acq: 4 Jun 2024 2:41 pm

Tgt Ion:166 Resp: 5536118

Ion	Ratio	Lower	Upper
166	100		
164	78.8	62.8	94.2

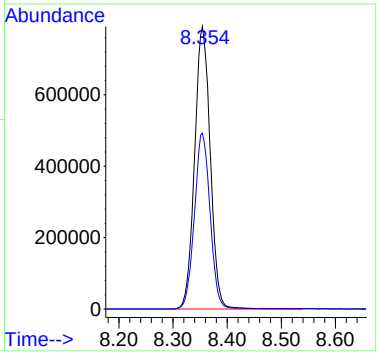


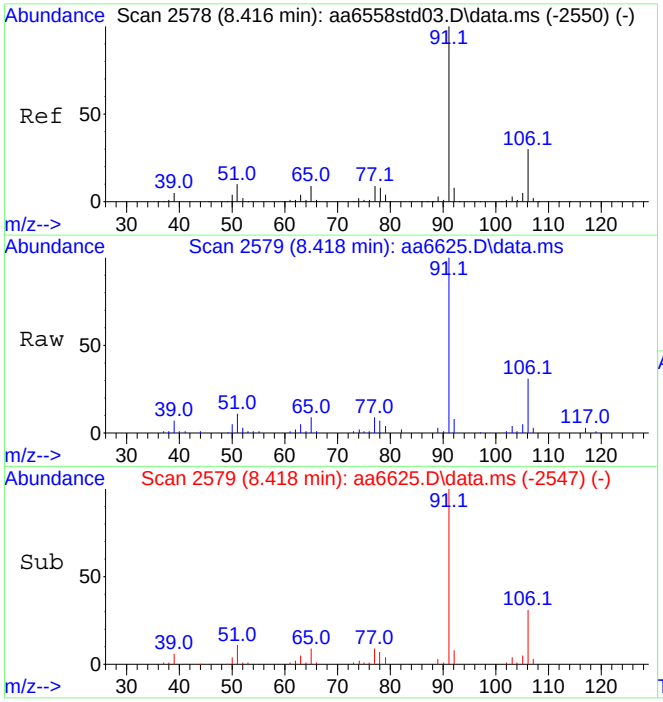


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.354 min Scan# 2559
Delta R.T. 0.003 min
Lab File: aa6625.D
Acq: 4 Jun 2024 2:41 pm

Tgt Ion:117 Resp: 1590756

Ion	Ratio	Lower	Upper
117	100		
82	62.2	42.3	82.3

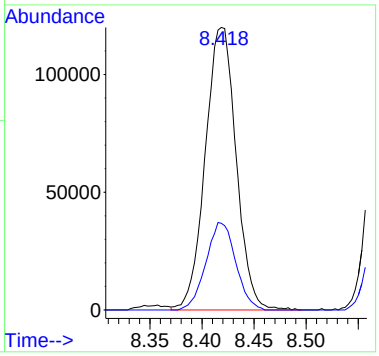


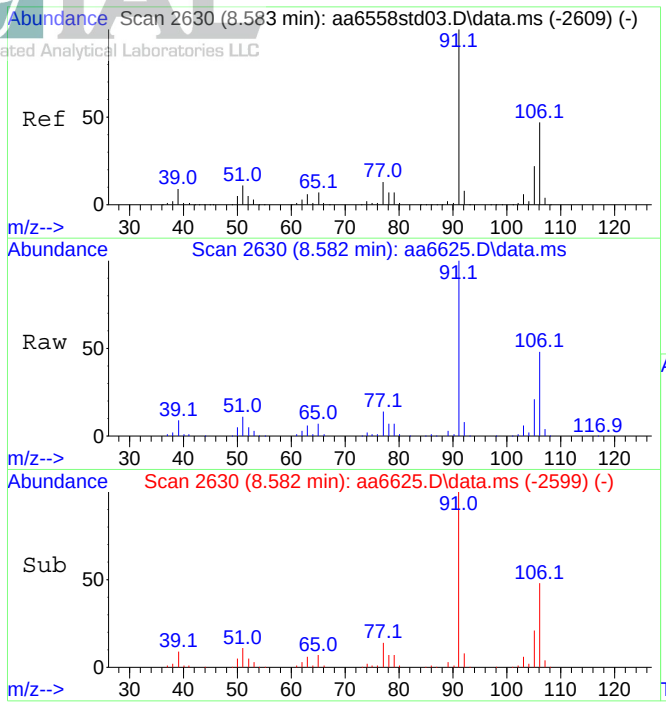


#58
Ethylbenzene
Concen: 0.79 ppbV
RT: 8.418 min Scan# 2579
Delta R.T. 0.003 min
Lab File: aa6625.D
Acq: 4 Jun 2024 2:41 pm

Tgt Ion: 91 Resp: 247802

Ion	Ratio	Lower	Upper
91	100		
106	29.8	23.8	35.8

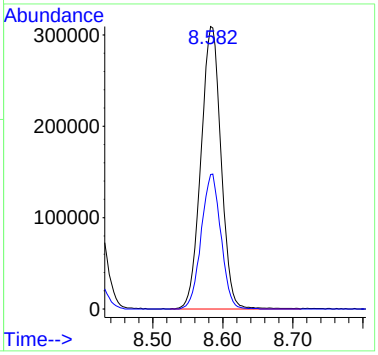


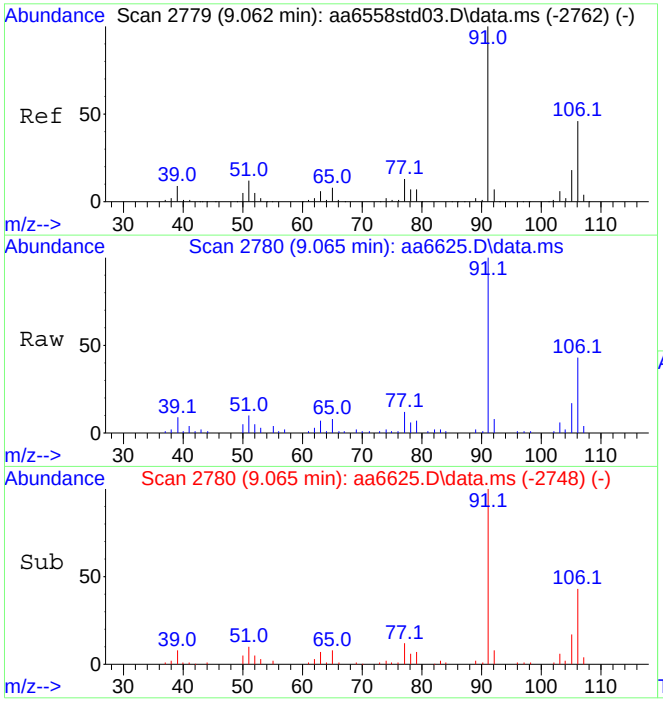


#59
Xylenes (m&p)
Concen: 2.61 ppbV
RT: 8.582 min Scan# 2630
Delta R.T. -0.000 min
Lab File: aa6625.D
Acq: 4 Jun 2024 2:41 pm

Tgt Ion: 91 Resp: 616156

Ion	Ratio	Lower	Upper
91	100		
106	46.8	37.4	56.2

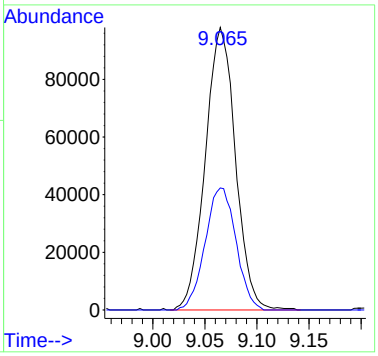


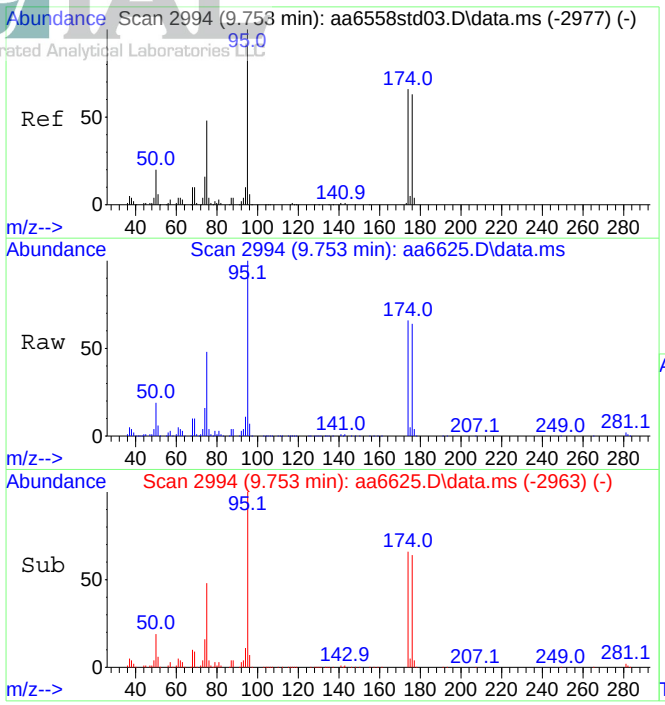


#60
Xylene (o)
Concen: 0.80 ppbV
RT: 9.065 min Scan# 2780
Delta R.T. 0.003 min
Lab File: aa6625.D
Acq: 4 Jun 2024 2:41 pm

Tgt Ion: 91 Resp: 197547

Ion	Ratio	Lower	Upper
91	100		
106	44.1	36.2	54.2

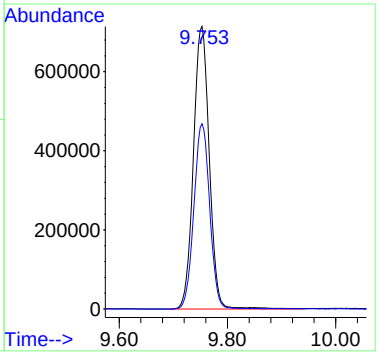




#64
Bromofluorobenzene (tune std)
Concen: 9.67 ppbV
RT: 9.753 min Scan# 2994
Delta R.T. -0.000 min
Lab File: aa6625.D
Acq: 4 Jun 2024 2:41 pm

Tgt Ion: 95 Resp: 1454792

Ion	Ratio	Lower	Upper
95	100		
174	65.5	52.9	79.3



Data Path : C:\DATA\2024\06-2024\06-04-2024\
Data File : aa6631.D
Acq On : 4 Jun 2024 6:00 pm
Operator : jjw
Sample : E24-01875-01x50 dil
Misc : 3293, 10cc
ALS Vial : 12 Sample Multiplier: 1

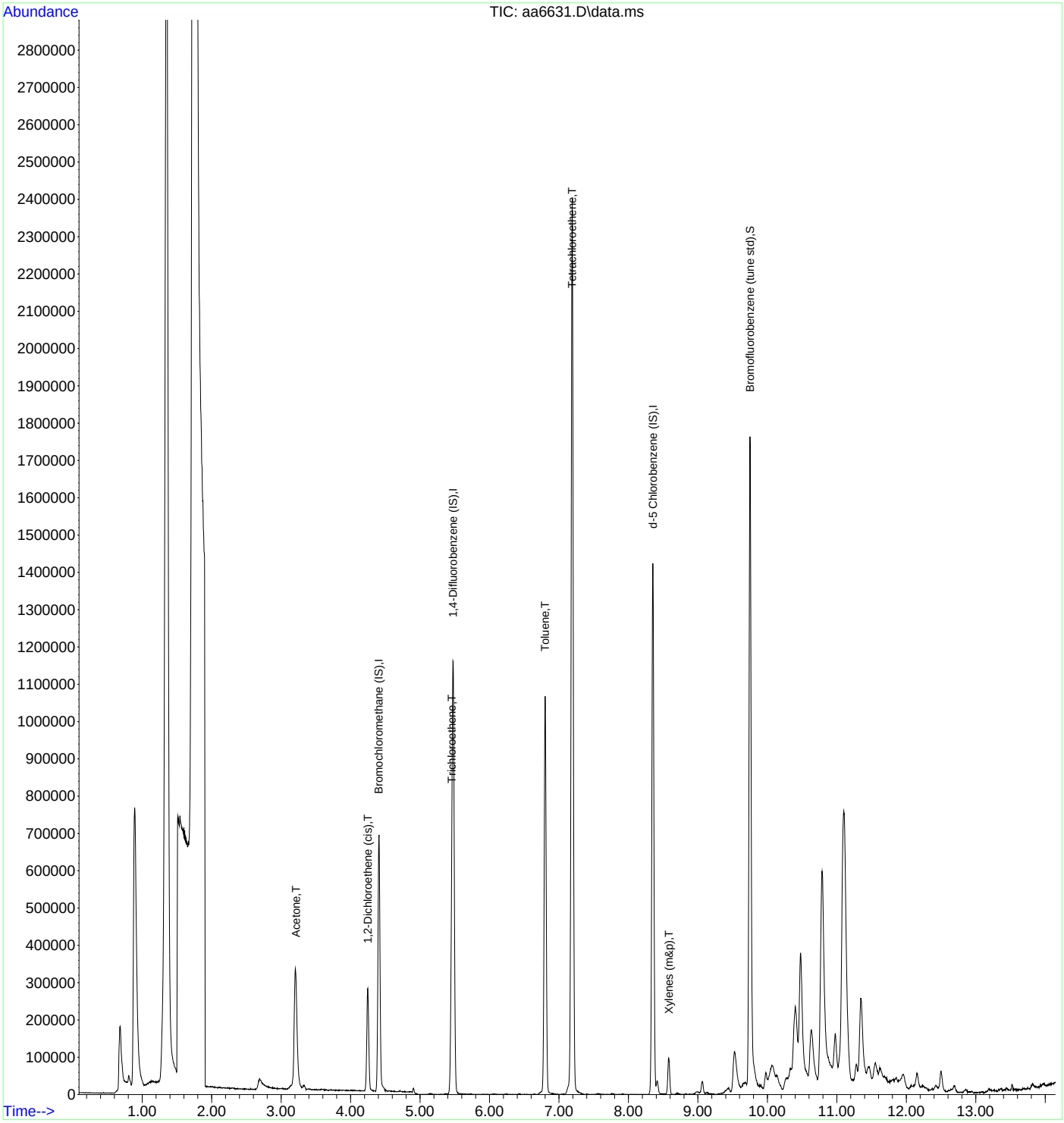
Quant Time: Jun 05 10:04:42 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

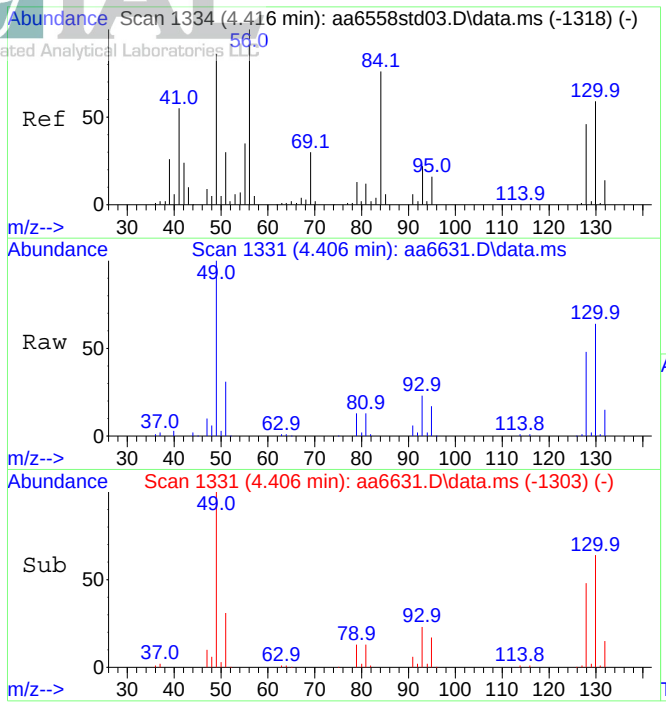
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.406	130	242408	10.00	ppbV	-0.010
39) 1,4-Difluorobenzene (IS)	5.476	114	934618	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.354	117	891601	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.750	95	782285	9.28	ppbV	0.000
Target Compounds						Qvalue
21) Acetone	3.216	43	94791	1.74	ppbV	96
28) 1,2-Dichloroethene (cis)	4.248	61	180907	3.61	ppbV	99
40) Trichloroethene	5.457	130	123220	2.92	ppbV	100
47) Toluene	6.801	91	890955	7.45	ppbV	100
49) Tetrachloroethene	7.190	166	806083	17.78	ppbV	100
59) Xylenes (m&p)	8.582	91	69953	0.53	ppbV	99

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

Data Path : C:\DATA\2024\06-2024\06-04-2024\
Data File : aa6631.D
Acq On : 4 Jun 2024 6:00 pm
Operator : jjw
Sample : E24-01875-01x50 dil
Misc : 3293, 10cc
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 05 10:04:42 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

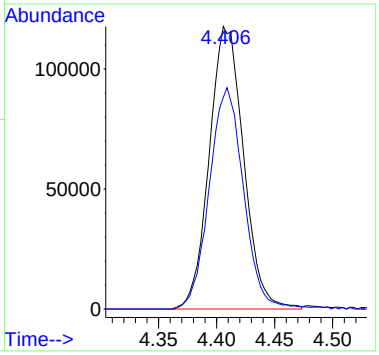


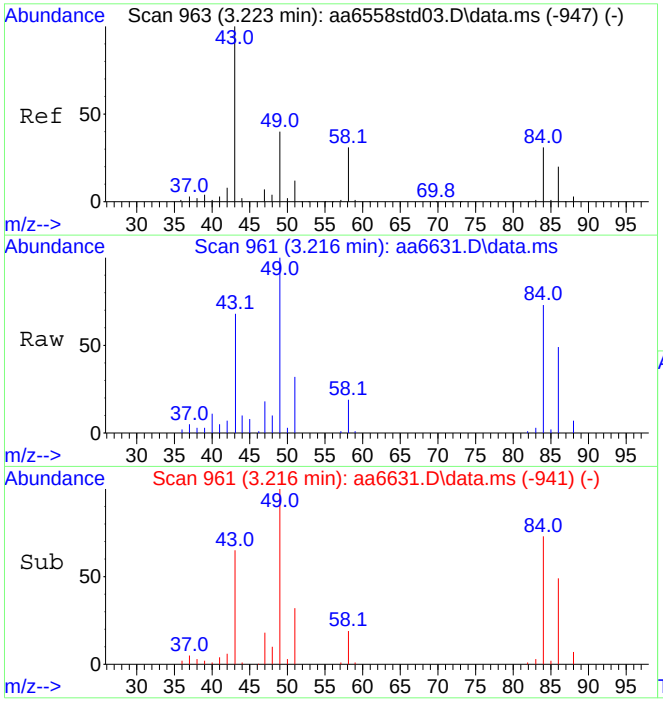


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.406 min Scan# 1331
Delta R.T. -0.010 min
Lab File: aa6631.D
Acq: 4 Jun 2024 6:00 pm

Tgt Ion:130 Resp: 242408

Ion	Ratio	Lower	Upper
130	100		
128	78.3	57.8	97.8

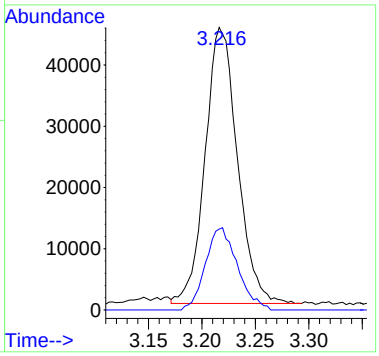


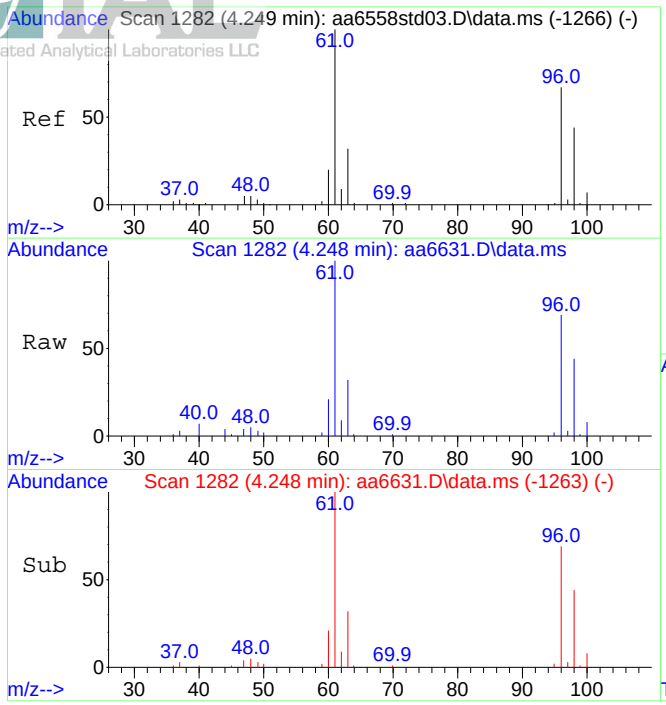


#21
Acetone
Concen: 1.74 ppbV
RT: 3.216 min Scan# 961
Delta R.T. -0.007 min
Lab File: aa6631.D
Acq: 4 Jun 2024 6:00 pm

Tgt Ion: 43 Resp: 94791

Ion	Ratio	Lower	Upper
43	100		
58	29.4	25.4	38.0

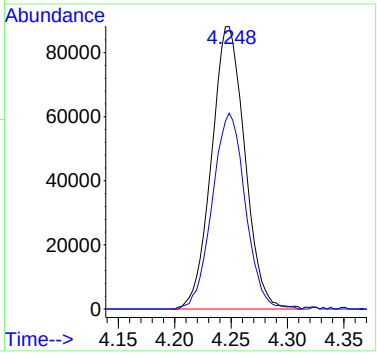


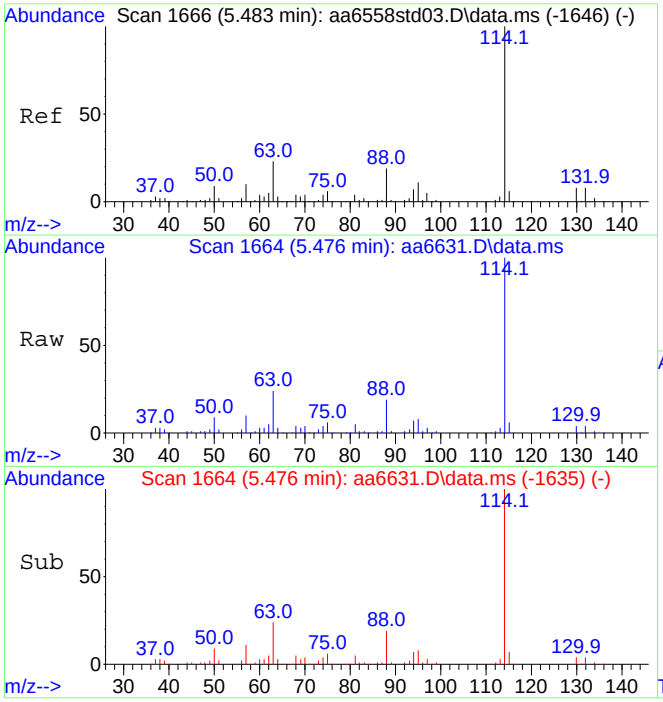


#28
1,2-Dichloroethene (cis)
Concen: 3.61 ppbV
RT: 4.248 min Scan# 1282
Delta R.T. -0.000 min
Lab File: aa6631.D
Acq: 4 Jun 2024 6:00 pm

Tgt Ion: 61 Resp: 180907

Ion	Ratio	Lower	Upper
61	100		
96	68.8	56.0	84.0

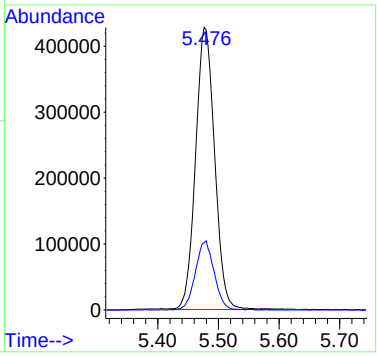


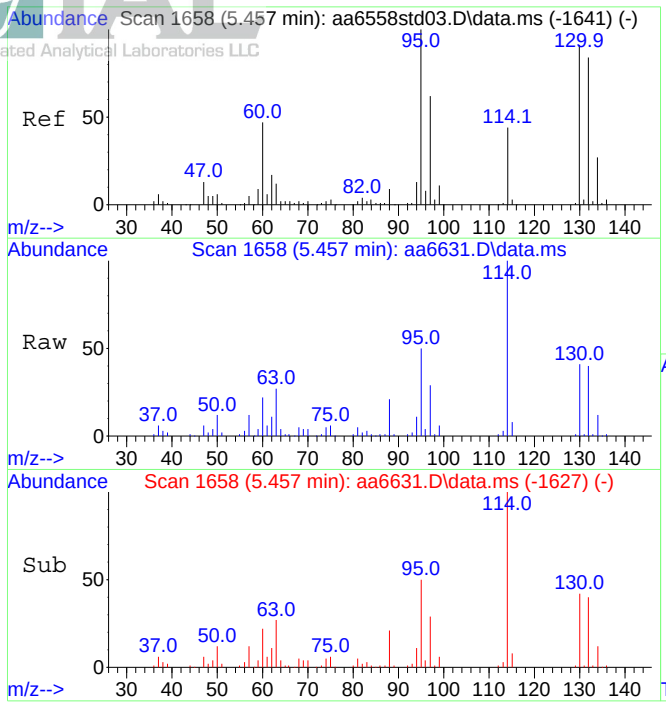


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.476 min Scan# 1664
Delta R.T. -0.007 min
Lab File: aa6631.D
Acq: 4 Jun 2024 6:00 pm

Tgt Ion:114 Resp: 934618

Ion	Ratio	Lower	Upper
114	100		
63	24.1	3.6	43.6

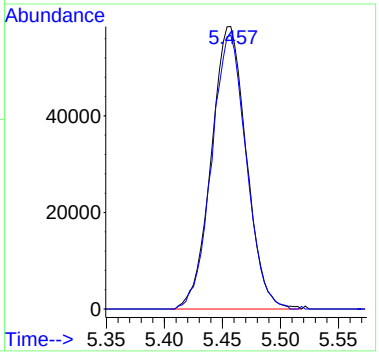


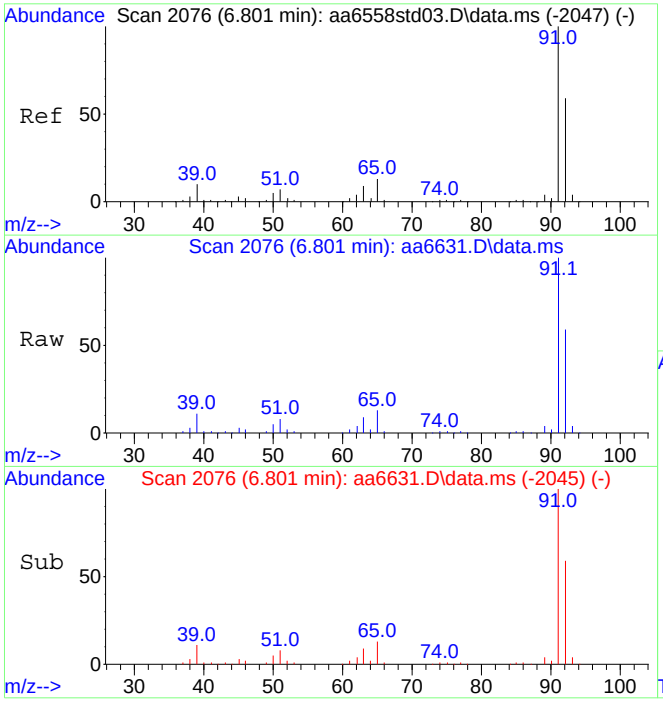


#40
Trichloroethene
Concen: 2.92 ppbV
RT: 5.457 min Scan# 1658
Delta R.T. -0.000 min
Lab File: aa6631.D
Acq: 4 Jun 2024 6:00 pm

Tgt Ion:130 Resp: 123220

Ion	Ratio	Lower	Upper
130	100		
132	95.9	76.6	114.8

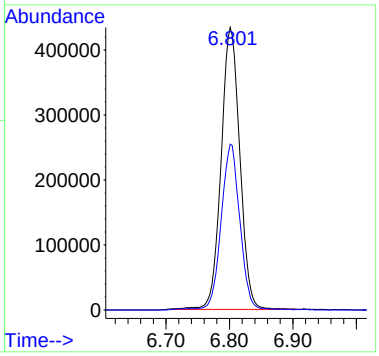


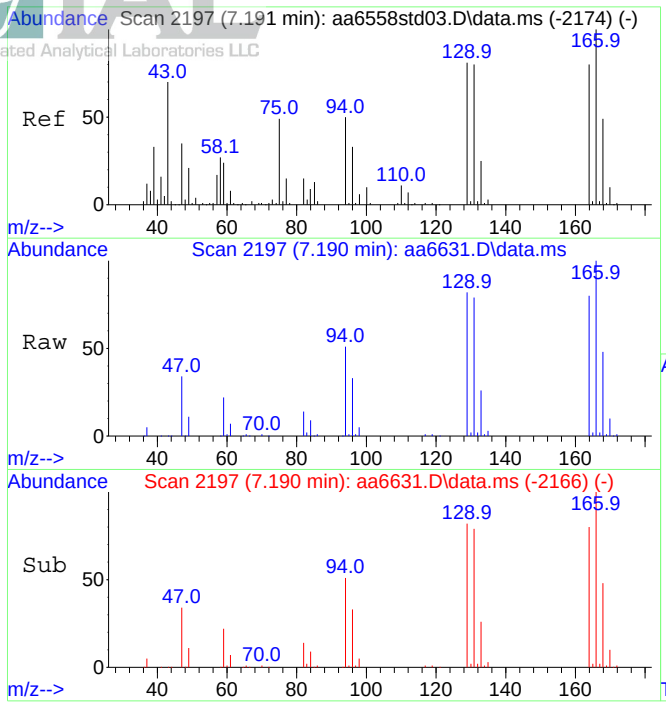


#47
Toluene
Concen: 7.45 ppbV
RT: 6.801 min Scan# 2076
Delta R.T. -0.000 min
Lab File: aa6631.D
Acq: 4 Jun 2024 6:00 pm

Tgt Ion: 91 Resp: 890955

Ion	Ratio	Lower	Upper
91	100		
92	58.6	47.0	70.6

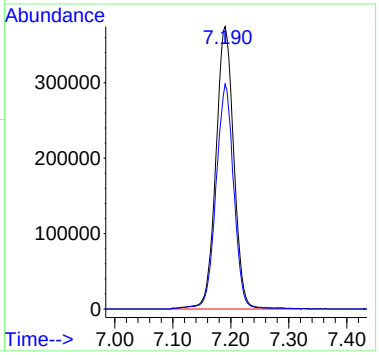


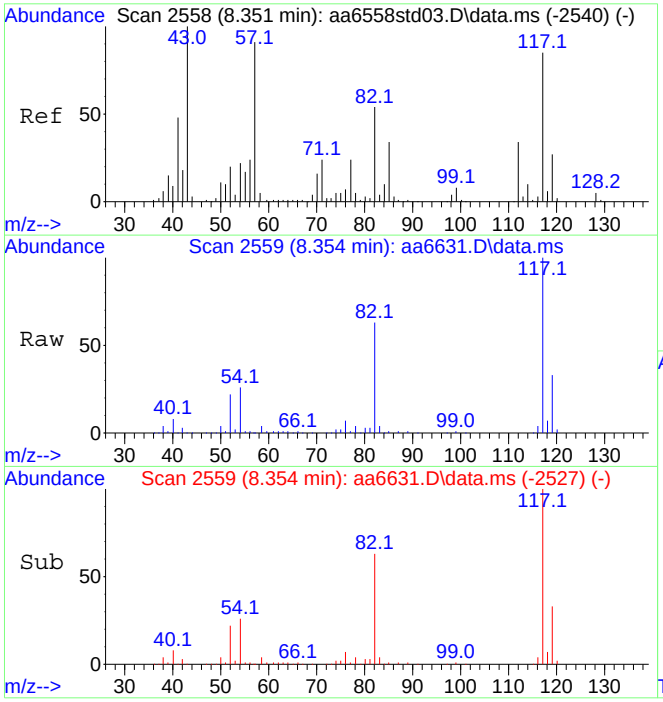


#49
Tetrachloroethene
Concen: 17.78 ppbV
RT: 7.190 min Scan# 2197
Delta R.T. -0.000 min
Lab File: aa6631.D
Acq: 4 Jun 2024 6:00 pm

Tgt Ion:166 Resp: 806083

Ion	Ratio	Lower	Upper
166	100		
164	78.8	62.8	94.2

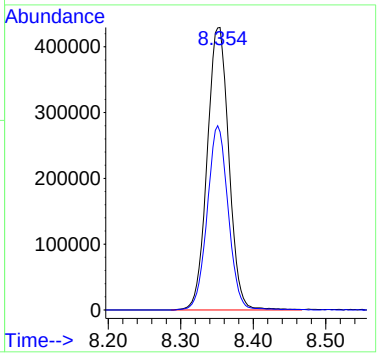


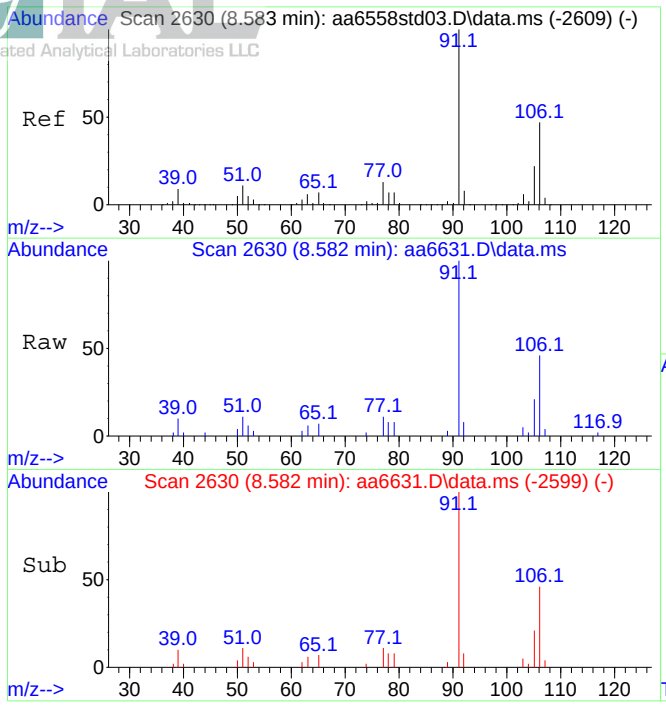


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.354 min Scan# 2559
Delta R.T. 0.003 min
Lab File: aa6631.D
Acq: 4 Jun 2024 6:00 pm

Tgt Ion:117 Resp: 891601

Ion	Ratio	Lower	Upper
117	100		
82	63.3	42.3	82.3

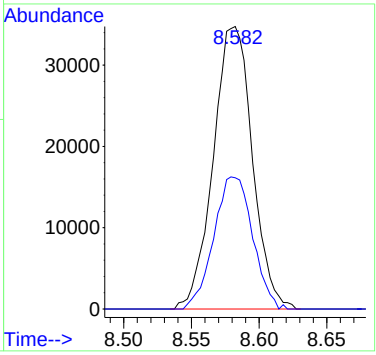


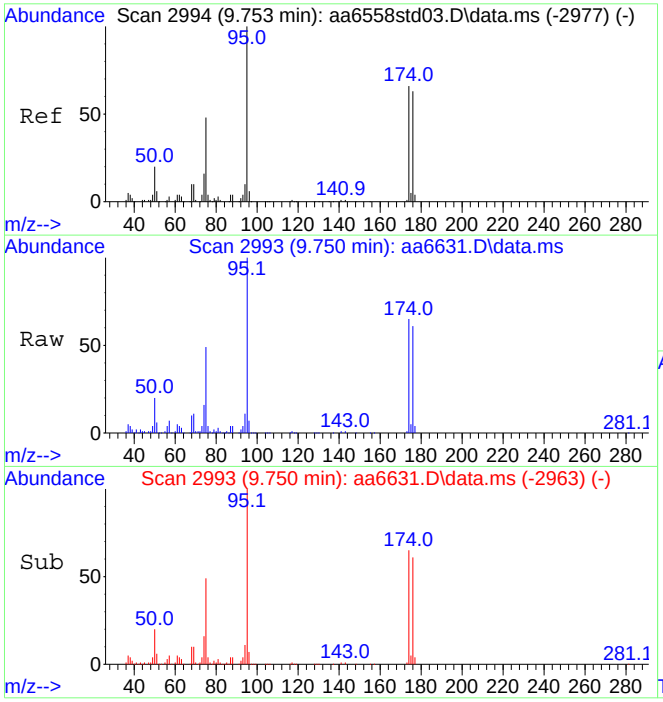


#59
Xylenes (m&p)
Concen: 0.53 ppbV
RT: 8.582 min Scan# 2630
Delta R.T. -0.000 min
Lab File: aa6631.D
Acq: 4 Jun 2024 6:00 pm

Tgt Ion: 91 Resp: 69953

Ion	Ratio	Lower	Upper
91	100		
106	46.3	37.4	56.2

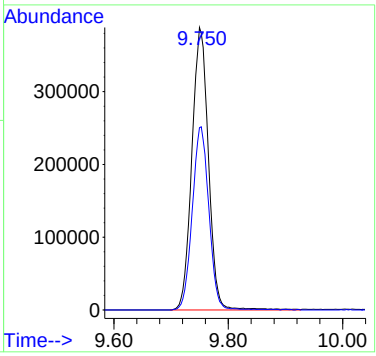




#64
Bromofluorobenzene (tune std)
Concen: 9.28 ppbV
RT: 9.750 min Scan# 2993
Delta R.T. -0.004 min
Lab File: aa6631.D
Acq: 4 Jun 2024 6:00 pm

Tgt Ion: 95 Resp: 782285

Ion	Ratio	Lower	Upper
95	100		
174	64.8	52.9	79.3



Volatile Organic Compounds by EPA Method TO-15
Summary of Results

Lab ID:	E24-01875-02	Instrument ID:	AA
Client ID:	SG-5	GC/MS Column:	RTX-1, 0.32 mmID
Date Sampled:	05/30/2024 10:54	Injection Volmue:	500ml, 50ml
Date Received:	05/31/2024	Matrix:	Air-Other
Date Analyzed:	06/04/2024 20:39, 06/04/2024 16:15	% Moisture:	NA
Data File:	AA6636, AA6628	Dilution Factor:	1, 10
Summa ID:	3286	Analyst:	J. Walukiewicz

			Concentration Reported		Reporting Limits	
Compound	**CAS #**	**Q**	**ppbv**	**ug/m3**	**ppbv**	**ug/m3**
Acetone	67-64-1		18	43	0.20	0.48
Benzene	71-43-2		0.77	2.5	0.20	0.64
Bromodichloromethane	75-27-4		ND	ND	0.20	1.3
Bromoform	75-25-2		ND	ND	0.20	2.1
Bromomethane	74-83-9		ND	ND	0.20	0.78
1,3-Butadiene	106-99-0		ND	ND	0.20	0.44
Chlorobenzene	108-90-7		ND	ND	0.20	0.92
Chloroethane	75-00-3		ND	ND	0.20	0.53
Chloroform	67-66-3		0.47	2.3	0.20	0.98
Chloromethane	74-87-3		ND	ND	0.20	0.41
Carbon disulfide	75-15-0		0.41	1.3	0.20	0.62
Carbon tetrachloride	56-23-5		ND	ND	0.040	0.25
Cyclohexane	110-82-7		ND	ND	0.20	0.69
Dibromochloromethane	124-48-1		ND	ND	0.20	1.7
1,2-Dibromoethane	106-93-4		ND	ND	0.20	1.5
1,2-Dichlorobenzene	95-50-1		ND	ND	0.20	1.2
1,3-Dichlorobenzene	541-73-1		ND	ND	0.20	1.2
1,4-Dichlorobenzene	106-46-7		ND	ND	0.20	1.2
Dichlorodifluoromethane	75-71-8		ND	ND	0.20	0.99
1,1-Dichloroethane	75-34-3		ND	ND	0.20	0.81
1,2-Dichloroethane	107-06-2		ND	ND	0.20	0.81
1,1-Dichloroethene	75-35-4		ND	ND	0.20	0.79
1,2-Dichloroethene (cis)	156-59-2		ND	ND	0.20	0.79
1,2-Dichloroethene (trans)	156-60-5		ND	ND	0.20	0.79
1,2-Dichloropropane	78-87-5		ND	ND	0.20	0.92
1,3-Dichloropropene (cis)	10061-01-5		ND	ND	0.20	0.91
1,3-Dichloropropene (trans)	10061-02-6		ND	ND	0.20	0.91
1,2-Dichlorotetrafluoroethane	76-14-2		ND	ND	0.20	1.4
1,4-Dioxane	123-91-1		ND	ND	0.20	0.72
Ethylbenzene	100-41-4		0.21	0.91	0.20	0.87
n-Heptane	142-82-5		0.20	0.83	0.20	0.82
1,3-Hexachlorobutadiene	87-68-3		ND	ND	0.20	2.1
n-Hexane	110-54-3		ND	ND	0.20	0.70
Methylene chloride	75-09-2		ND	ND	0.20	0.69
Methyl ethyl ketone	78-93-3		1.1	3.3	0.20	0.59
Methyl isobutyl ketone	108-10-1		ND	ND	0.20	0.82
Methyl tert-butyl ether	1634-04-4		ND	ND	0.20	0.72
Styrene	100-42-5		0.24	1.0	0.20	0.85
Tert-butyl alcohol	75-65-0		0.58	1.8	0.20	0.61
1,1,2,2-Tetrachloroethane	79-34-5		ND	ND	0.20	1.4
Tetrachloroethene	127-18-4	D	170	1100	2.0	14
Toluene	108-88-3		0.74	2.8	0.20	0.75
1,2,4-Trichlorobenzene	120-82-1		ND	ND	0.20	1.5
1,1,1-Trichloroethane	71-55-6		0.29	1.6	0.20	1.1
1,1,2-Trichloroethane	79-00-5		ND	ND	0.20	1.1

Qualifiers:
D = Dilution required

Volatile Organic Compounds by EPA Method TO-15
Summary of Results

Lab ID:	E24-01875-02	Instrument ID:	AA
Client ID:	SG-5	GC/MS Column:	RTX-1, 0.32 mmID
Date Sampled:	05/30/2024 10:54	Injection Volmue:	500ml, 50ml
Date Received:	05/31/2024	Matrix:	Air-Other
Date Analyzed:	06/04/2024 20:39, 06/04/2024 16:15	% Moisture:	NA
Data File:	AA6636, AA6628	Dilution Factor:	1, 10
Summa ID:	3286	Analyst:	J. Walukiewicz

			Concentration Reported		Reporting Limits	
Compound	**CAS #**	**Q**	**ppbv**	**ug/m3**	**ppbv**	**ug/m3**
Trichloroethene	79-01-6		13	72	0.046	0.25
Trichlorofluoromethane	75-69-4		0.31	1.7	0.20	1.1
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1		ND	ND	0.20	1.5
1,2,4-Trimethylbenzene	95-63-6		ND	ND	0.20	0.98
1,3,5-Trimethylbenzene	108-67-8		ND	ND	0.20	0.98
2,2,4-Trimethylpentane	540-84-1		ND	ND	0.20	0.93
Vinyl bromide	593-60-2		ND	ND	0.20	0.87
Vinyl chloride	75-01-4		ND	ND	0.20	0.51
Xylenes (m&p)	179601-23-1		0.64	2.8	0.20	0.87
Xylenes (o)	95-47-6		0.22	0.95	0.20	0.87

Qualifiers:
D = Dilution required

Data Path : C:\DATA\2024\06-2024\06-04-2024\
Data File : aa6636.D
Acq On : 4 Jun 2024 8:39 pm
Operator : jjw
Sample : E24-01875-02
Misc : 3286, 500cc
ALS Vial : 17 Sample Multiplier: 1

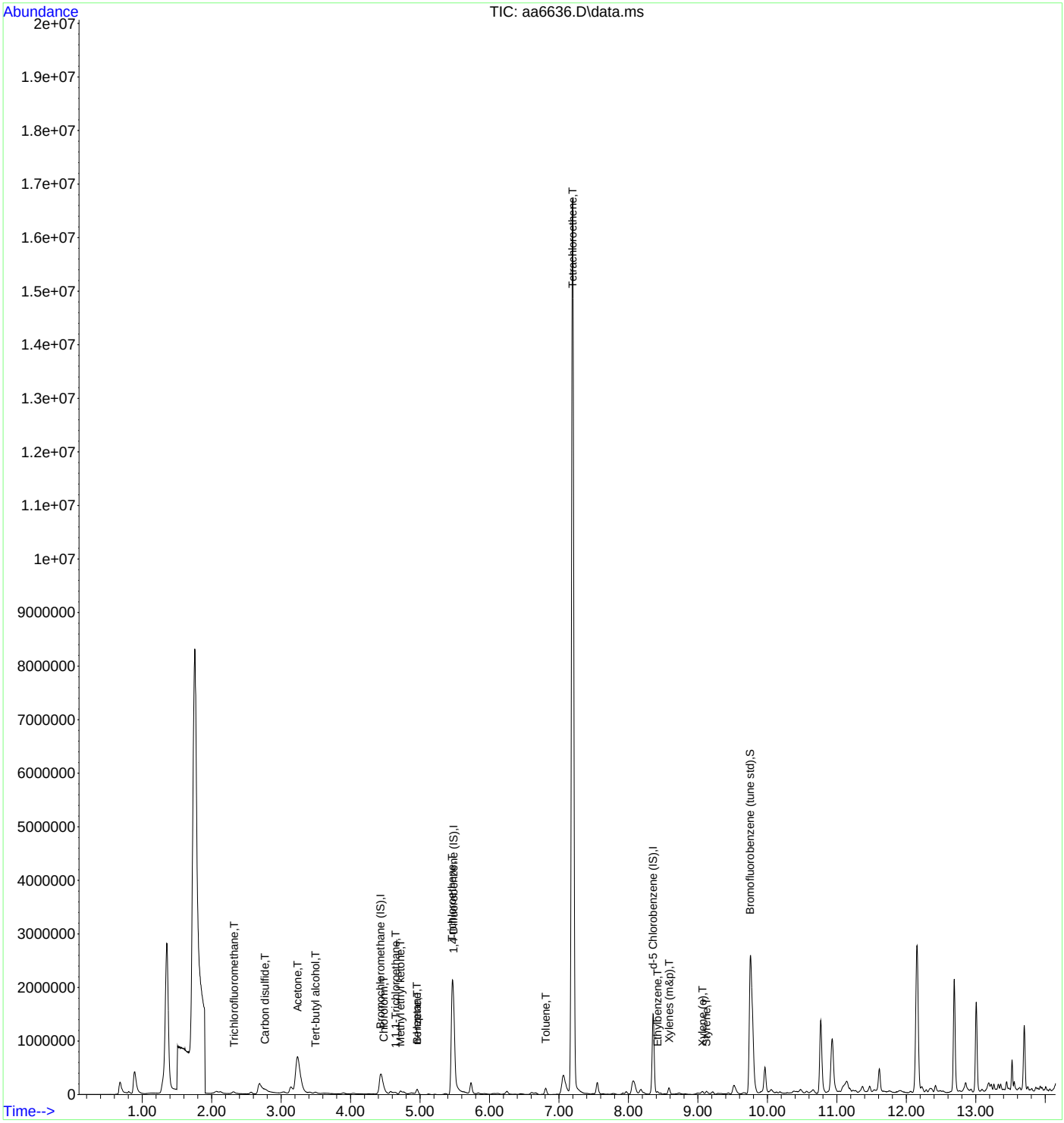
Quant Time: Jun 05 10:17:29 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

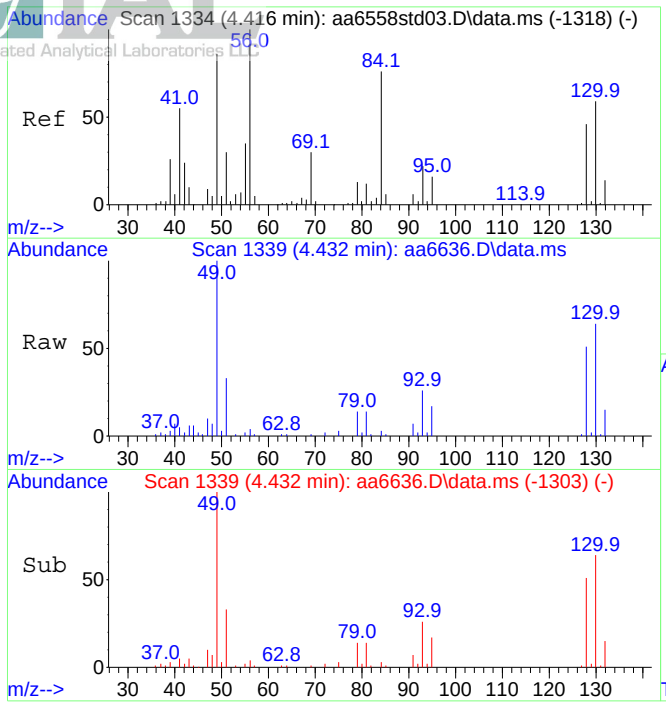
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.432	130	219662	10.00	ppbV		0.016
39) 1,4-Difluorobenzene (IS)	5.483	114	1037791	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.354	117	930088	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.753	95	814236	9.26	ppbV		0.000
Target Compounds							Qvalue
12) Trichlorofluoromethane	2.322	101	22393	0.31	ppbV		97
15) Carbon disulfide	2.769	76	38554	0.42	ppbV	#	78
21) Acetone	3.239	43	893027	18.12	ppbV		99
26) Tert-butyl alcohol	3.496	59	40024	0.58	ppbV		100
30) Chloroform	4.480	83	33263	0.47	ppbV		97
34) 1,1,1-Trichloroethane	4.650	97	18995	0.29	ppbV		96
35) Methyl ethyl ketone	4.718	43	78131	1.12	ppbV		96
36) n-Heptane	4.956	43	13380	0.20	ppbV	#	72
37) Benzene	4.959	78	76760	0.77	ppbV		100
40) Trichloroethene	5.460	130	628485	13.39	ppbV		99
47) Toluene	6.811	91	98543	0.74	ppbV		98
49) Tetrachloroethene	7.197	166	5782379	114.89	ppbV		100
58) Ethylbenzene	8.419	91	38301	0.21	ppbV		99
59) Xylenes (m&p)	8.586	91	88714	0.64	ppbV		99
60) Xylene (o)	9.068	91	31833	0.22	ppbV		95
61) Styrene	9.123	104	22966	0.24	ppbV		98

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

Data Path : C:\DATA\2024\06-2024\06-04-2024\
Data File : aa6636.D
Acq On : 4 Jun 2024 8:39 pm
Operator : jjw
Sample : E24-01875-02
Misc : 3286, 500cc
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 05 10:17:29 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

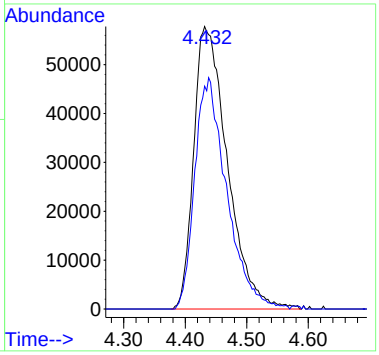


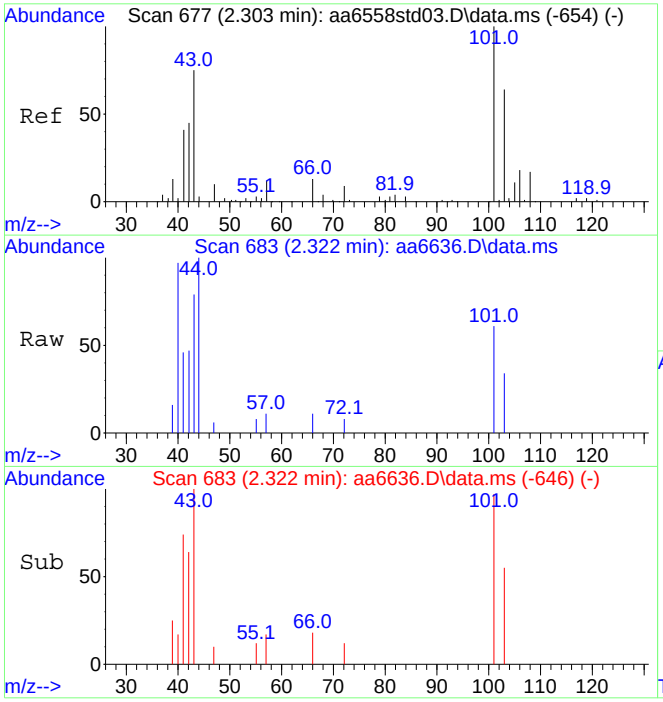


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.432 min Scan# 1339
Delta R.T. 0.016 min
Lab File: aa6636.D
Acq: 4 Jun 2024 8:39 pm

Tgt Ion:130 Resp: 219662

Ion	Ratio	Lower	Upper
130	100		
128	77.7	57.8	97.8

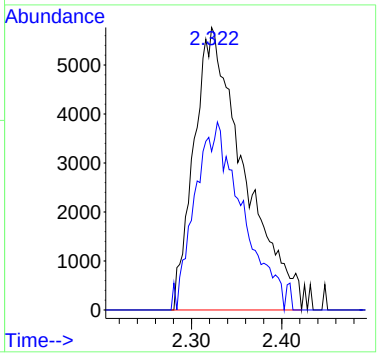


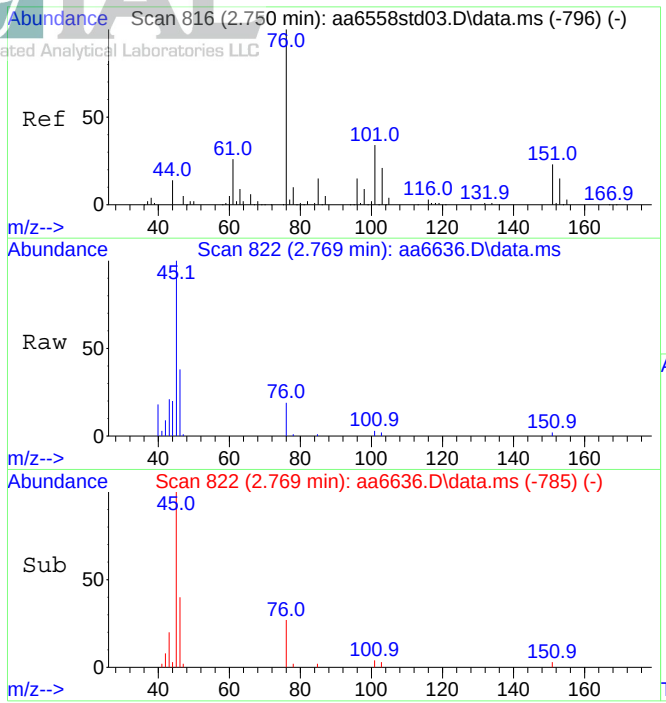


#12
Trichlorofluoromethane
Concen: 0.31 ppbV
RT: 2.322 min Scan# 683
Delta R.T. 0.019 min
Lab File: aa6636.D
Acq: 4 Jun 2024 8:39 pm

Tgt Ion:101 Resp: 22393

Ion	Ratio	Lower	Upper
101	100		
103	62.4	51.9	77.9

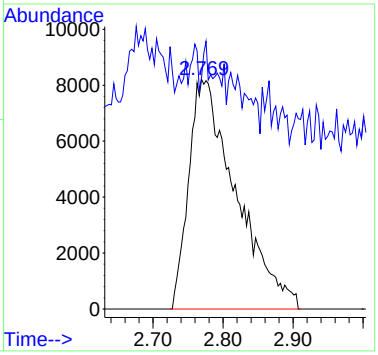


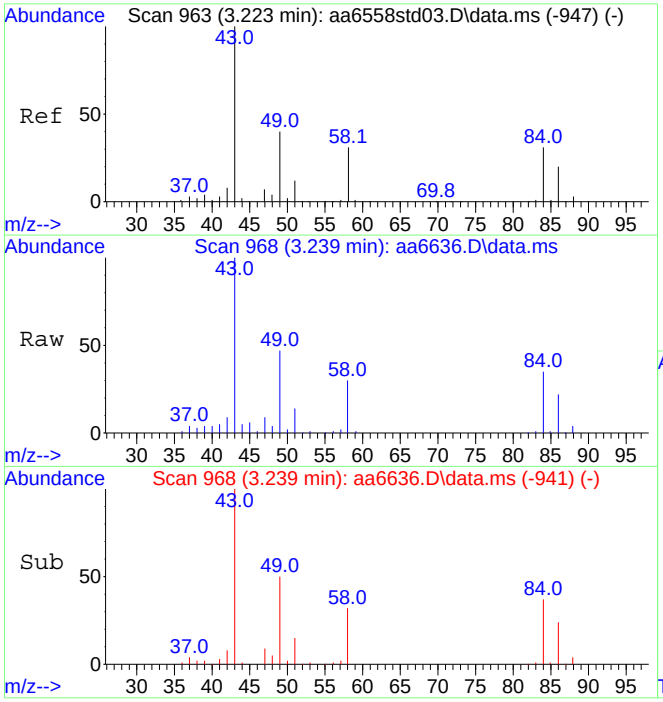


#15
Carbon disulfide
Concen: 0.42 ppbV
RT: 2.769 min Scan# 822
Delta R.T. 0.019 min
Lab File: aa6636.D
Acq: 4 Jun 2024 8:39 pm

Tgt Ion: 76 Resp: 38554

Ion	Ratio	Lower	Upper
76	100		
44	22.2	10.6	16.0#

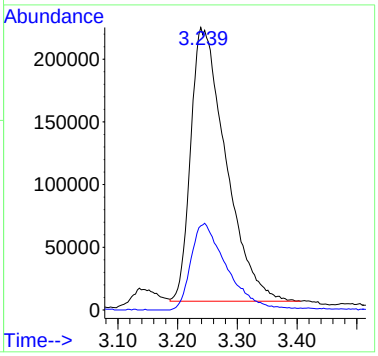


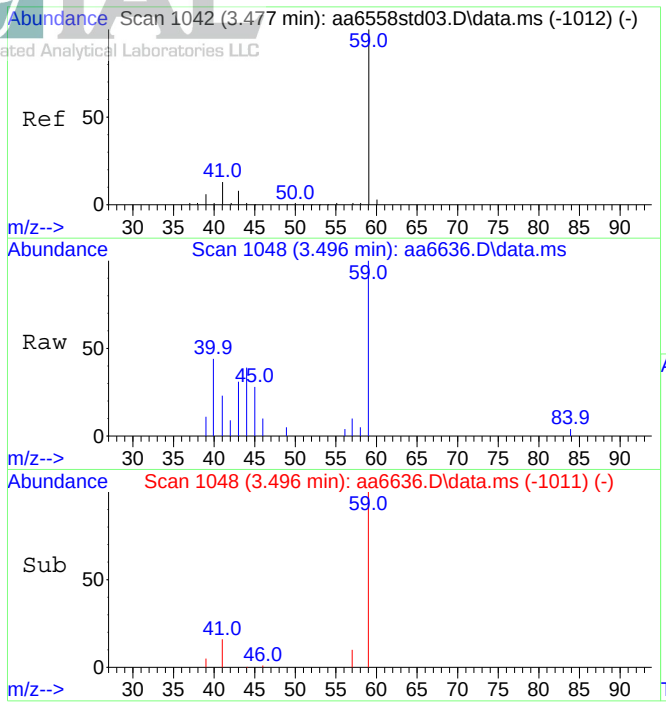


#21
Acetone
Concen: 18.12 ppbV
RT: 3.239 min Scan# 968
Delta R.T. 0.016 min
Lab File: aa6636.D
Acq: 4 Jun 2024 8:39 pm

Tgt Ion: 43 Resp: 893027

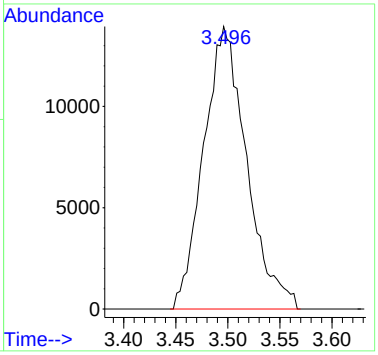
Ion	Ratio	Lower	Upper
43	100		
58	32.4	25.4	38.0

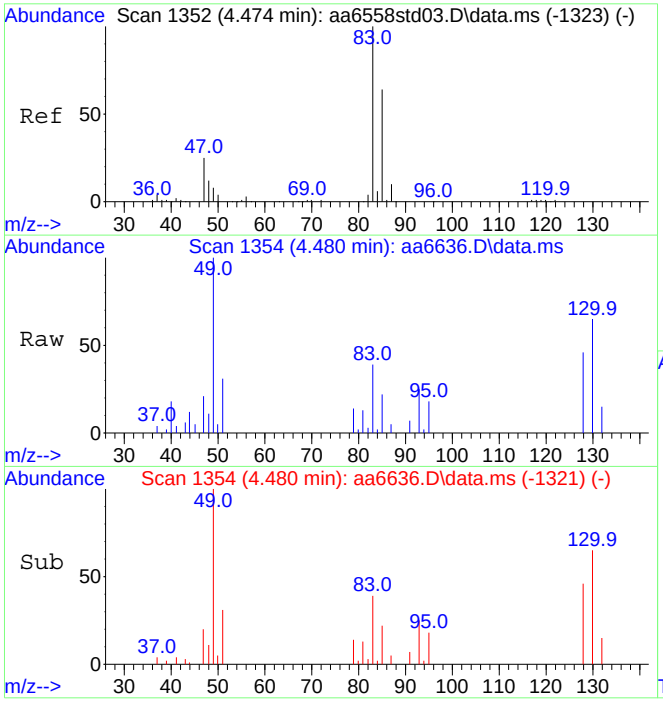




#26
Tert-butyl alcohol
Concen: 0.58 ppbV
RT: 3.496 min Scan# 1048
Delta R.T. 0.019 min
Lab File: aa6636.D
Acq: 4 Jun 2024 8:39 pm

Tgt Ion: 59 Resp: 40024

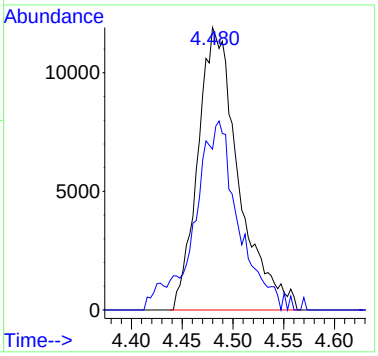


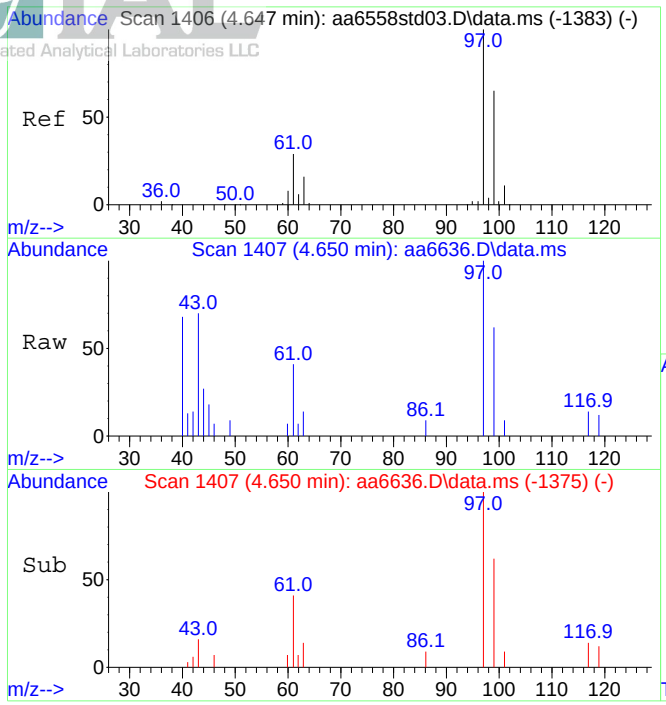


#30
Chloroform
Concen: 0.47 ppbV
RT: 4.480 min Scan# 1354
Delta R.T. 0.006 min
Lab File: aa6636.D
Acq: 4 Jun 2024 8:39 pm

Tgt Ion: 83 Resp: 33263

Ion	Ratio	Lower	Upper
83	100		
85	68.5	52.6	79.0

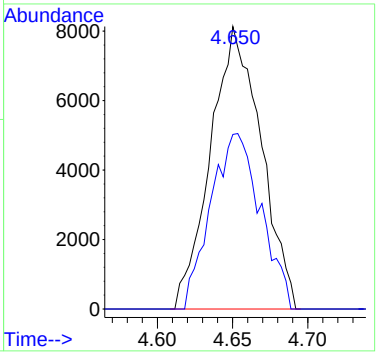


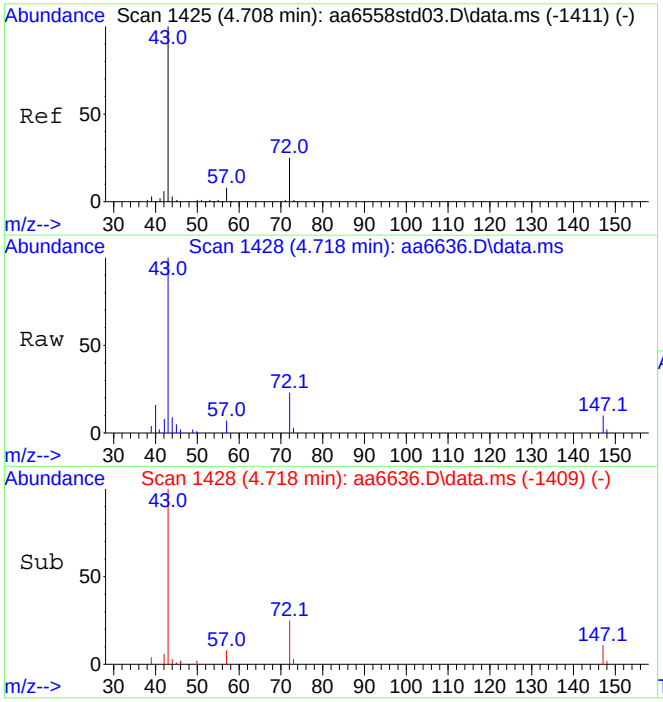


#34
1,1,1-Trichloroethane
Concen: 0.29 ppbV
RT: 4.650 min Scan# 1407
Delta R.T. 0.003 min
Lab File: aa6636.D
Acq: 4 Jun 2024 8:39 pm

Tgt Ion: 97 Resp: 18995

Ion	Ratio	Lower	Upper
97	100		
99	61.4	51.4	77.2

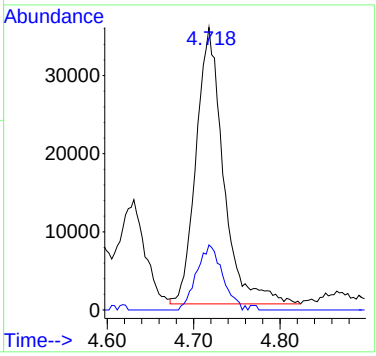


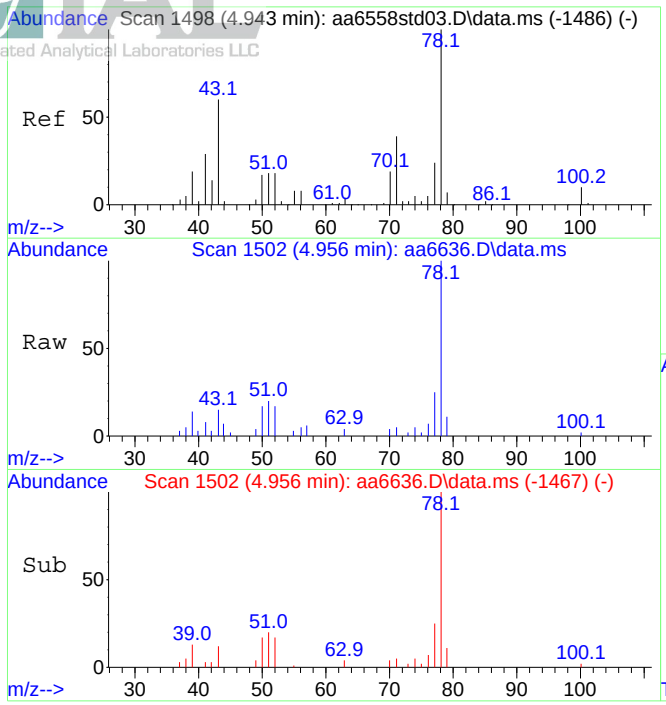


#35
Methyl ethyl ketone
Concen: 1.12 ppbV
RT: 4.718 min Scan# 1428
Delta R.T. 0.010 min
Lab File: aa6636.D
Acq: 4 Jun 2024 8:39 pm

Tgt Ion: 43 Resp: 78131

Ion	Ratio	Lower	Upper
43	100		
72	22.2	19.5	29.3

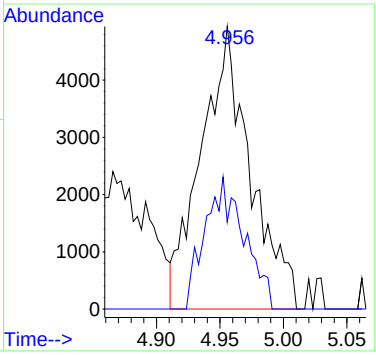


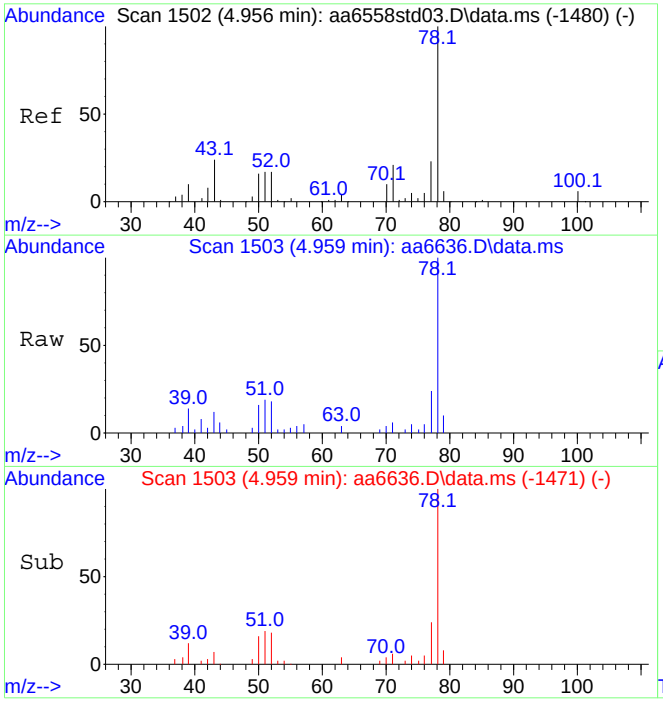


#36
n-Heptane
Concen: 0.20 ppbV
RT: 4.956 min Scan# 1502
Delta R.T. 0.013 min
Lab File: aa6636.D
Acq: 4 Jun 2024 8:39 pm

Tgt Ion: 43 Resp: 13380

Ion	Ratio	Lower	Upper
43	100		
71	36.9	46.2	69.2#

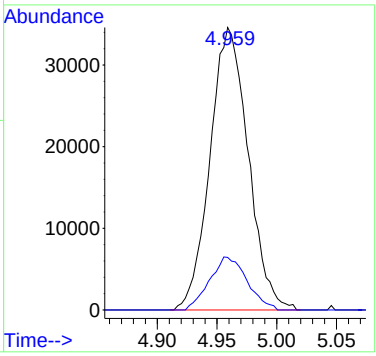


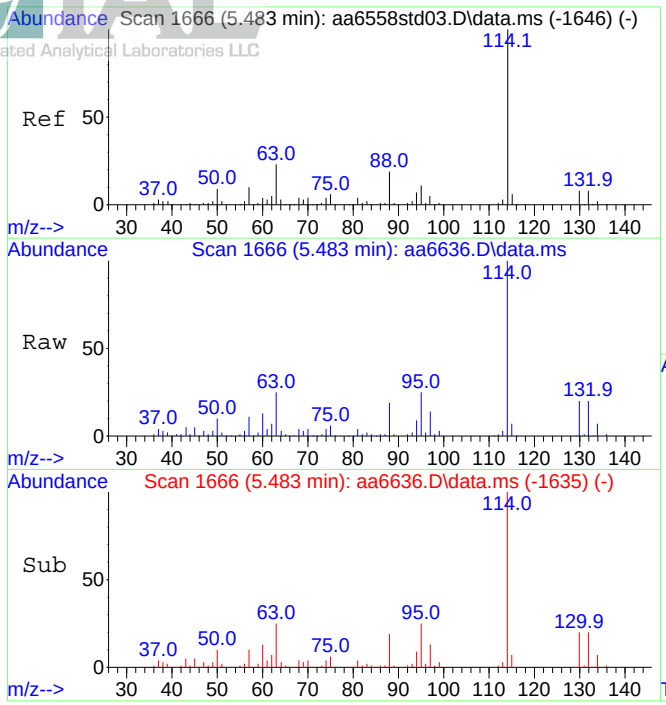


#37
Benzene
Concen: 0.77 ppbV
RT: 4.959 min Scan# 1503
Delta R.T. 0.003 min
Lab File: aa6636.D
Acq: 4 Jun 2024 8:39 pm

Tgt Ion: 78 Resp: 76760

Ion	Ratio	Lower	Upper
78	100		
51	18.4	14.9	22.3

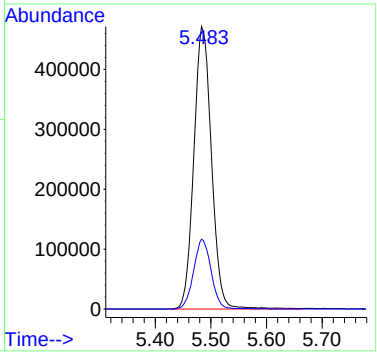


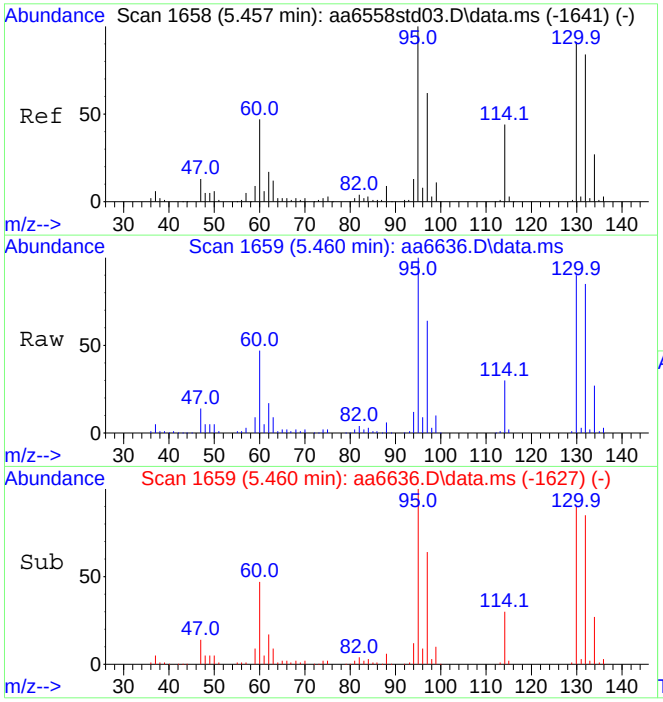


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.483 min Scan# 1666
Delta R.T. -0.000 min
Lab File: aa6636.D
Acq: 4 Jun 2024 8:39 pm

Tgt Ion:114 Resp: 1037791

Ion	Ratio	Lower	Upper
114	100		
63	24.4	3.6	43.6

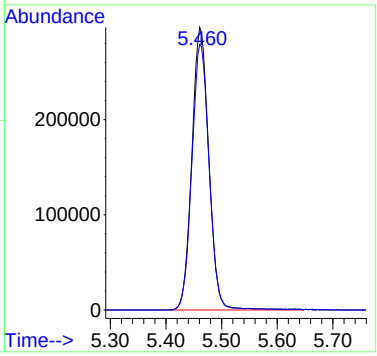


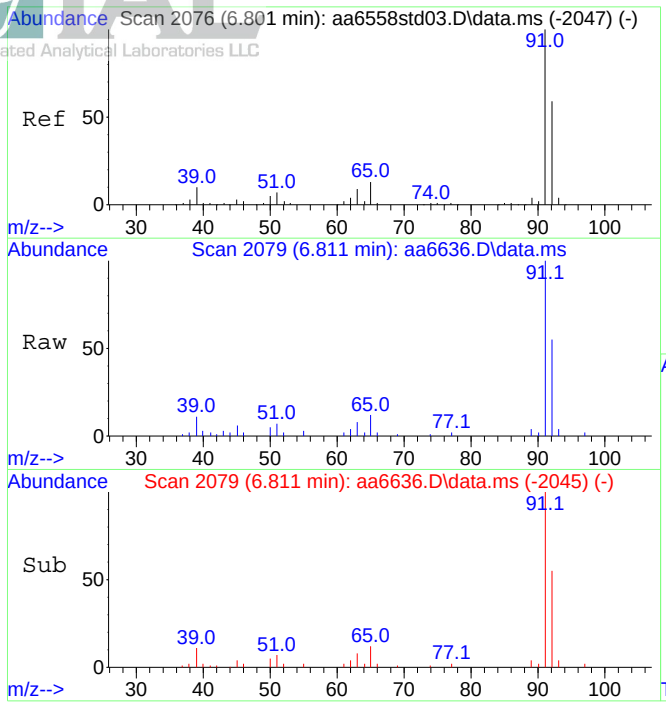


#40
Trichloroethene
Concen: 13.39 ppbV
RT: 5.460 min Scan# 1659
Delta R.T. 0.003 min
Lab File: aa6636.D
Acq: 4 Jun 2024 8:39 pm

Tgt Ion:130 Resp: 628485

Ion	Ratio	Lower	Upper
130	100		
132	94.9	76.6	114.8

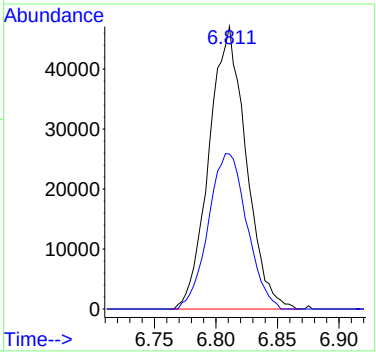


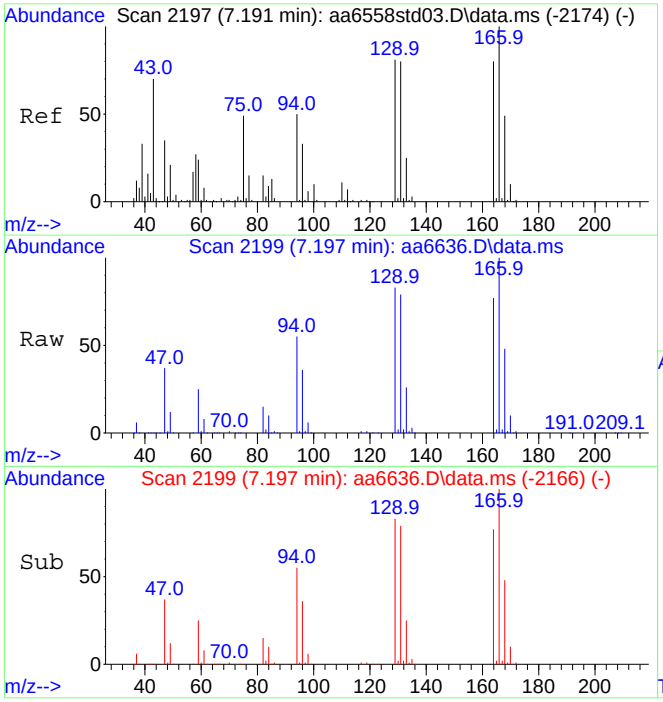


#47
Toluene
Concen: 0.74 ppbV
RT: 6.811 min Scan# 2079
Delta R.T. 0.009 min
Lab File: aa6636.D
Acq: 4 Jun 2024 8:39 pm

Tgt Ion: 91 Resp: 98543

Ion	Ratio	Lower	Upper
91	100		
92	57.3	47.0	70.6

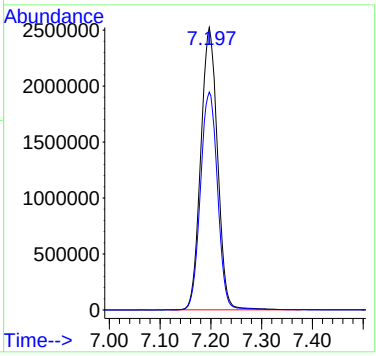


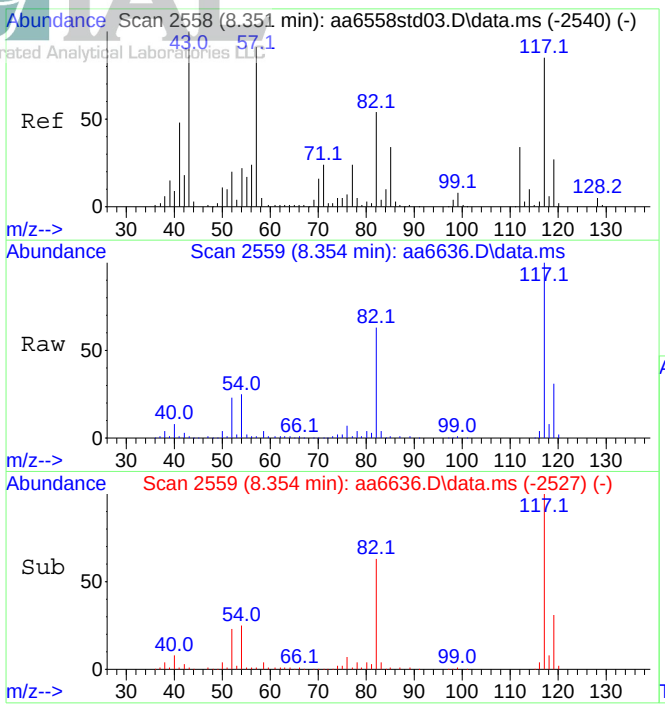


#49
Tetrachloroethene
Concen: 114.89 ppbV
RT: 7.197 min Scan# 2199
Delta R.T. 0.006 min
Lab File: aa6636.D
Acq: 4 Jun 2024 8:39 pm

Tgt Ion:166 Resp: 5782379

Ion	Ratio	Lower	Upper
166	100		
164	78.7	62.8	94.2

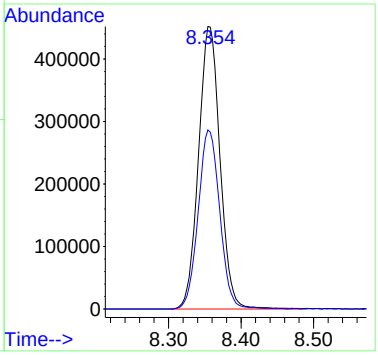


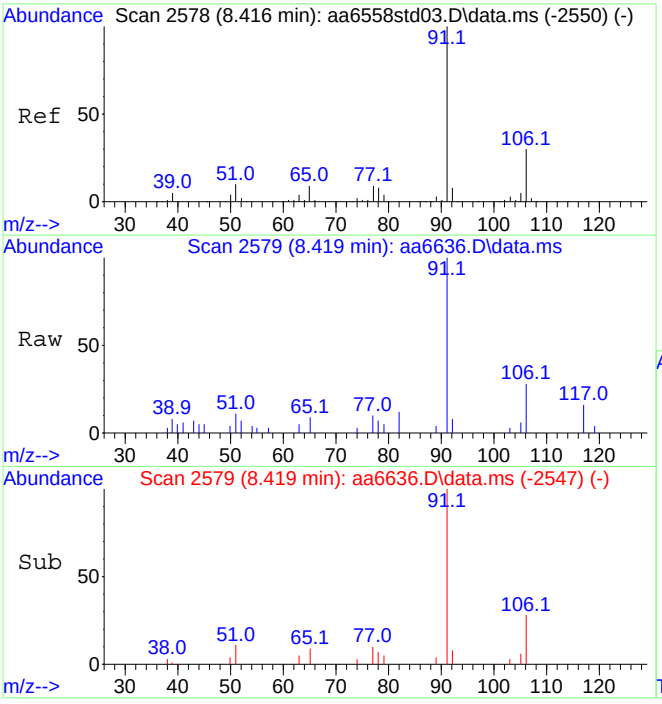


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.354 min Scan# 2559
Delta R.T. 0.003 min
Lab File: aa6636.D
Acq: 4 Jun 2024 8:39 pm

Tgt Ion:117 Resp: 930088

Ion	Ratio	Lower	Upper
117	100		
82	63.6	42.3	82.3

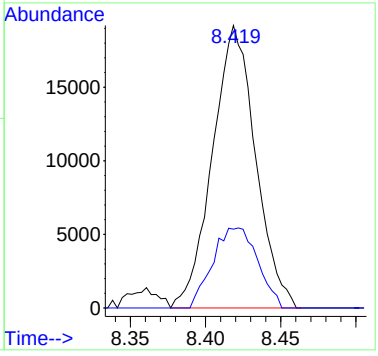


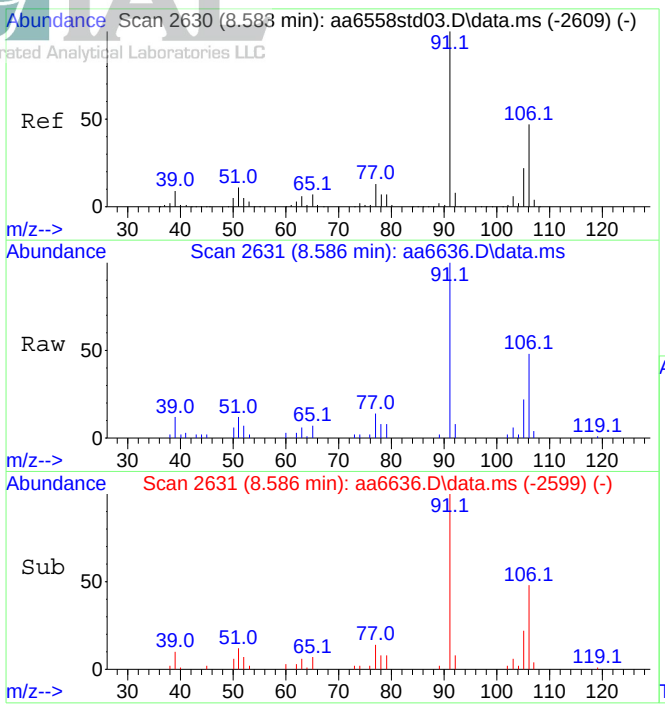


#58
Ethylbenzene
Concen: 0.21 ppbV
RT: 8.419 min Scan# 2579
Delta R.T. 0.003 min
Lab File: aa6636.D
Acq: 4 Jun 2024 8:39 pm

Tgt Ion: 91 Resp: 38301

Ion	Ratio	Lower	Upper
91	100		
106	29.5	23.8	35.8

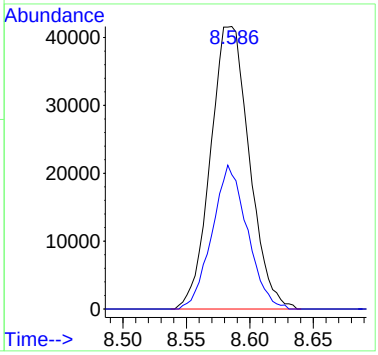


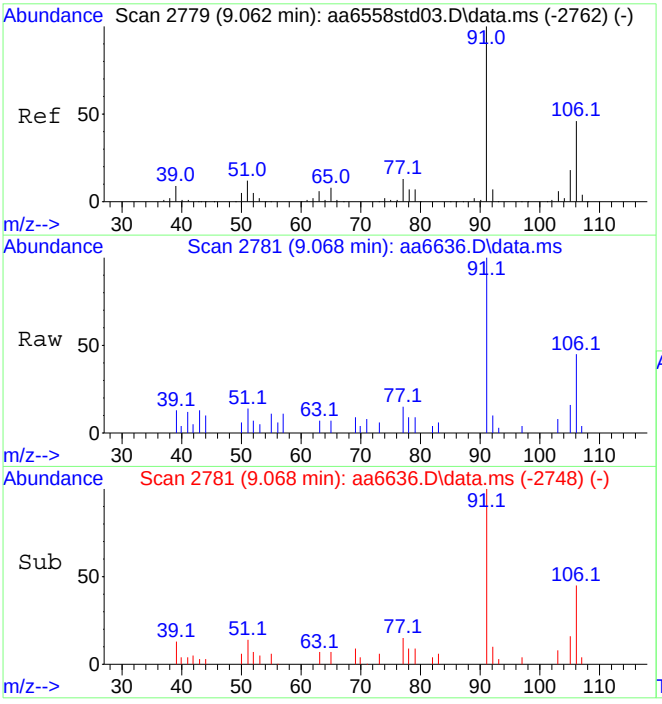


#59
Xylenes (m&p)
Concen: 0.64 ppbV
RT: 8.586 min Scan# 2631
Delta R.T. 0.003 min
Lab File: aa6636.D
Acq: 4 Jun 2024 8:39 pm

Tgt Ion: 91 Resp: 88714

Ion	Ratio	Lower	Upper
91	100		
106	46.1	37.4	56.2

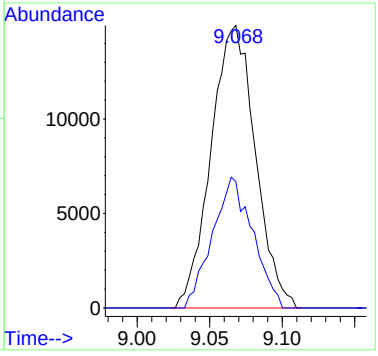


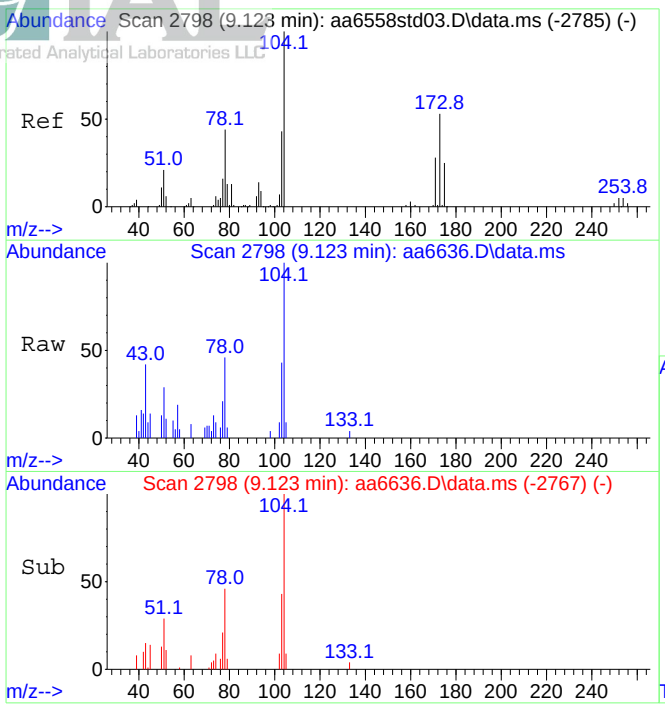


#60
Xylene (o)
Concen: 0.22 ppbV
RT: 9.068 min Scan# 2781
Delta R.T. 0.006 min
Lab File: aa6636.D
Acq: 4 Jun 2024 8:39 pm

Tgt Ion: 91 Resp: 31833

Ion	Ratio	Lower	Upper
91	100		
106	42.0	36.2	54.2

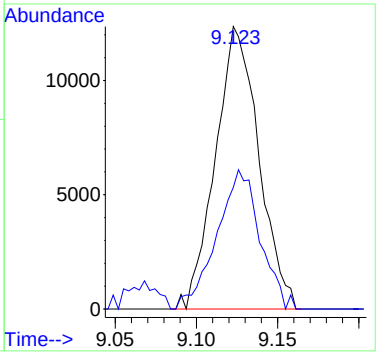


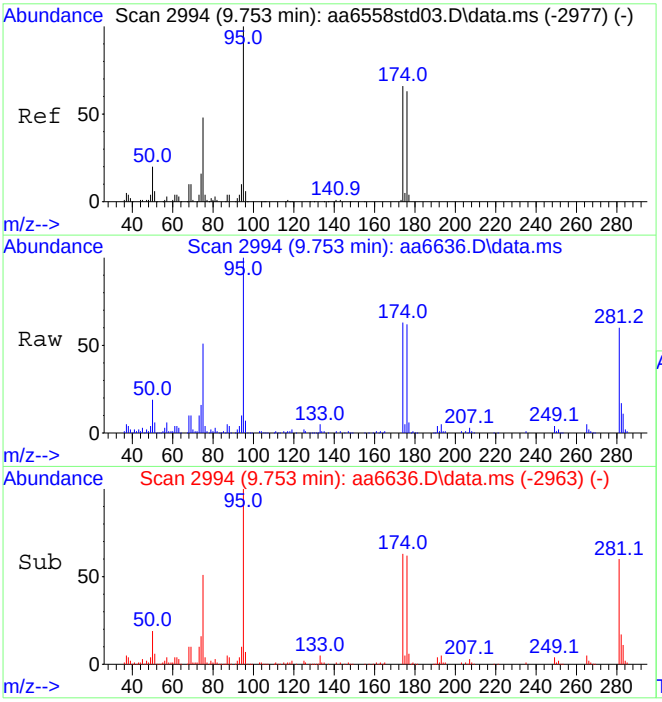


#61
Styrene
Concen: 0.24 ppbV
RT: 9.123 min Scan# 2798
Delta R.T. -0.000 min
Lab File: aa6636.D
Acq: 4 Jun 2024 8:39 pm

Tgt Ion:104 Resp: 22966

Ion	Ratio	Lower	Upper
104	100		
103	49.0	38.3	57.5

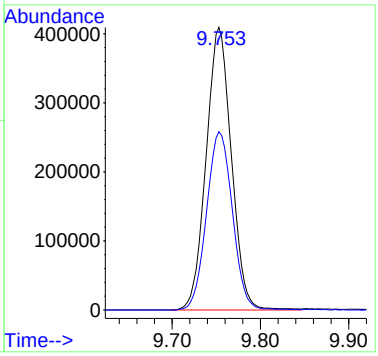




#64
Bromofluorobenzene (tune std)
Concen: 9.26 ppbV
RT: 9.753 min Scan# 2994
Delta R.T. -0.000 min
Lab File: aa6636.D
Acq: 4 Jun 2024 8:39 pm

Tgt Ion: 95 Resp: 814236

Ion	Ratio	Lower	Upper
95	100		
174	64.5	52.9	79.3



Data Path : C:\DATA\2024\06-2024\06-04-2024\
Data File : aa6628.D
Acq On : 4 Jun 2024 4:15 pm
Operator : jjw
Sample : E24-01875-02x10 dil
Misc : 3286, 50cc
ALS Vial : 9 Sample Multiplier: 1

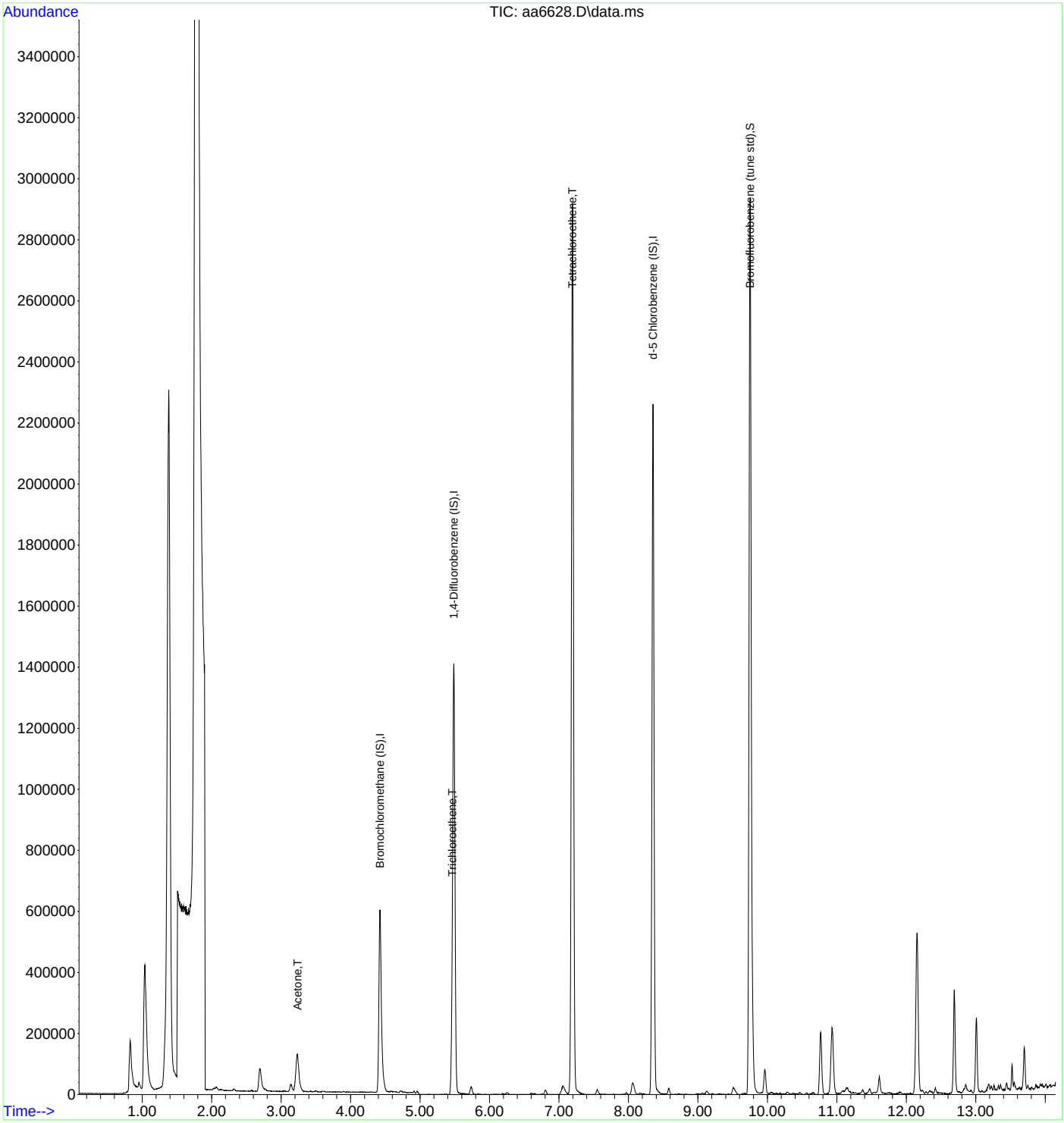
Quant Time: Jun 04 16:33:26 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

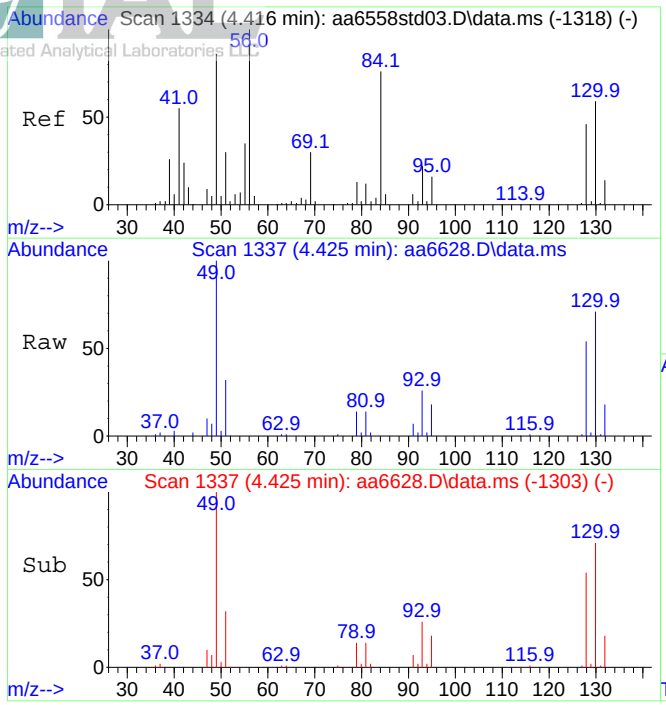
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.425	130	266240	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.486	114	1239734	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.354	117	1427581	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.750	95	1270414	9.41	ppbV	0.000
Target Compounds						Qvalue
21) Acetone	3.239	43	118381	1.98	ppbV	95
40) Trichloroethene	5.464	130	78737	1.40	ppbV	100
49) Tetrachloroethene	7.193	166	999558	16.63	ppbV	100

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

Data Path : C:\DATA\2024\06-2024\06-04-2024\
Data File : aa6628.D
Acq On : 4 Jun 2024 4:15 pm
Operator : jjw
Sample : E24-01875-02x10 dil
Misc : 3286, 50cc
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 04 16:33:26 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

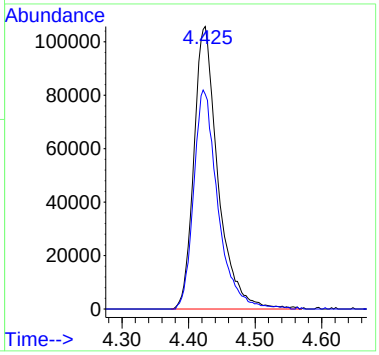


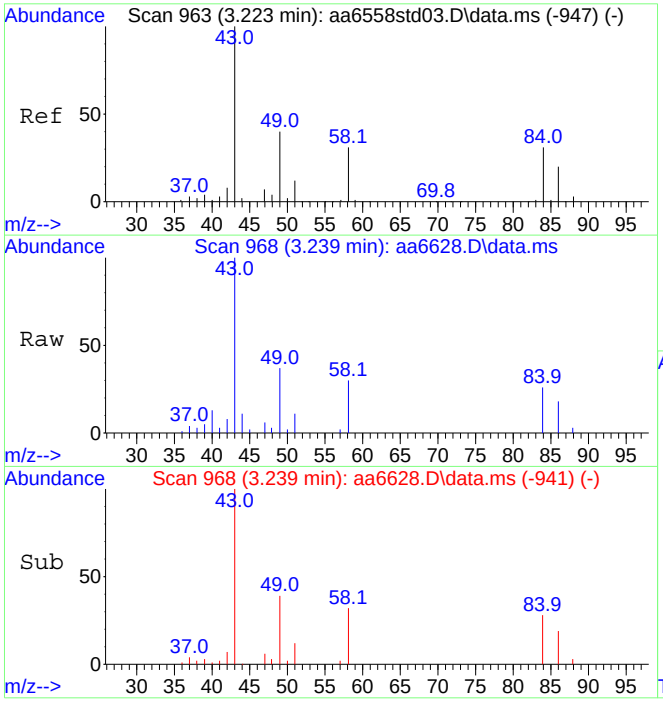


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.425 min Scan# 1337
Delta R.T. 0.009 min
Lab File: aa6628.D
Acq: 4 Jun 2024 4:15 pm

Tgt Ion:130 Resp: 266240

Ion	Ratio	Lower	Upper
130	100		
128	78.0	57.8	97.8

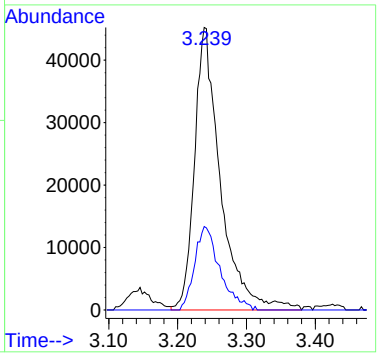


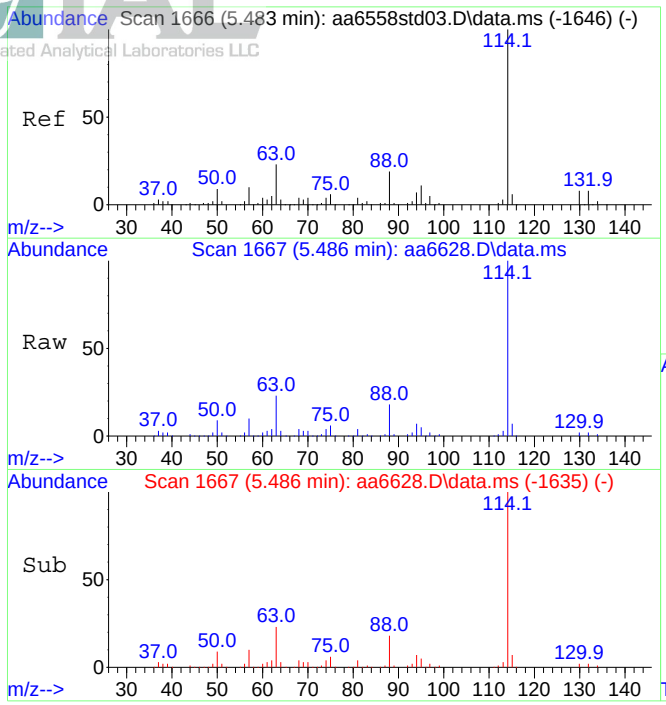


#21
Acetone
Concen: 1.98 ppbV
RT: 3.239 min Scan# 968
Delta R.T. 0.016 min
Lab File: aa6628.D
Acq: 4 Jun 2024 4:15 pm

Tgt Ion: 43 Resp: 118381

Ion	Ratio	Lower	Upper
43	100		
58	28.9	25.4	38.0

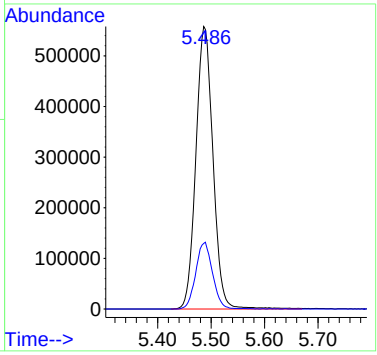


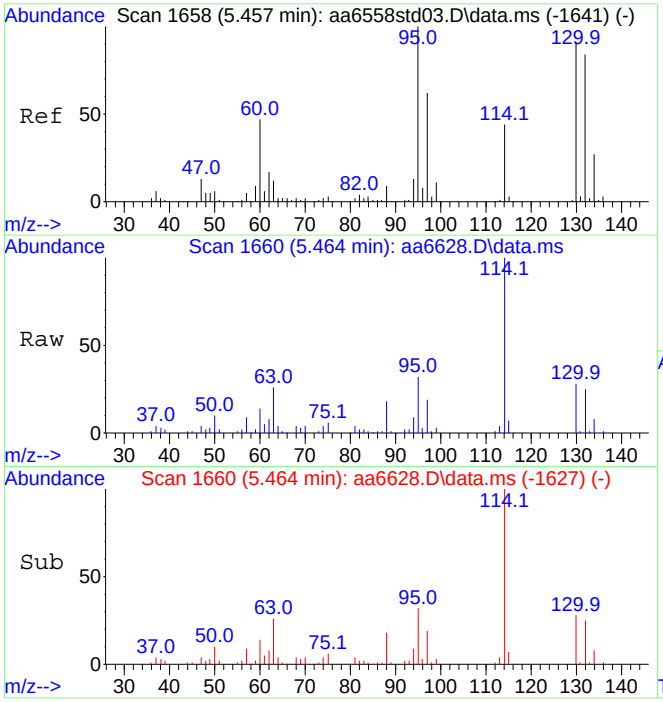


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.486 min Scan# 1667
Delta R.T. 0.003 min
Lab File: aa6628.D
Acq: 4 Jun 2024 4:15 pm

Tgt Ion:114 Resp: 1239734

Ion	Ratio	Lower	Upper
114	100		
63	23.2	3.6	43.6

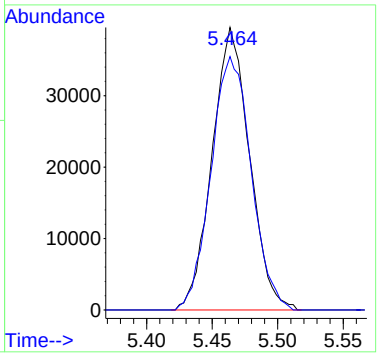


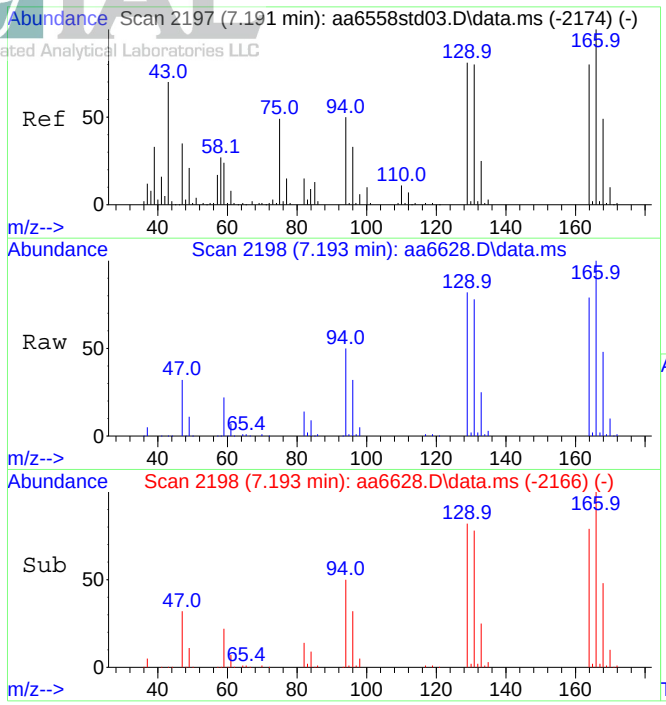


#40
Trichloroethene
Concen: 1.40 ppbV
RT: 5.464 min Scan# 1660
Delta R.T. 0.006 min
Lab File: aa6628.D
Acq: 4 Jun 2024 4:15 pm

Tgt Ion:130 Resp: 78737

Ion	Ratio	Lower	Upper
130	100		
132	96.0	76.6	114.8

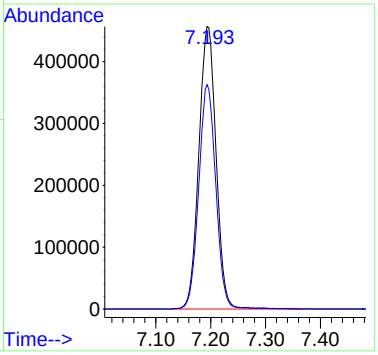


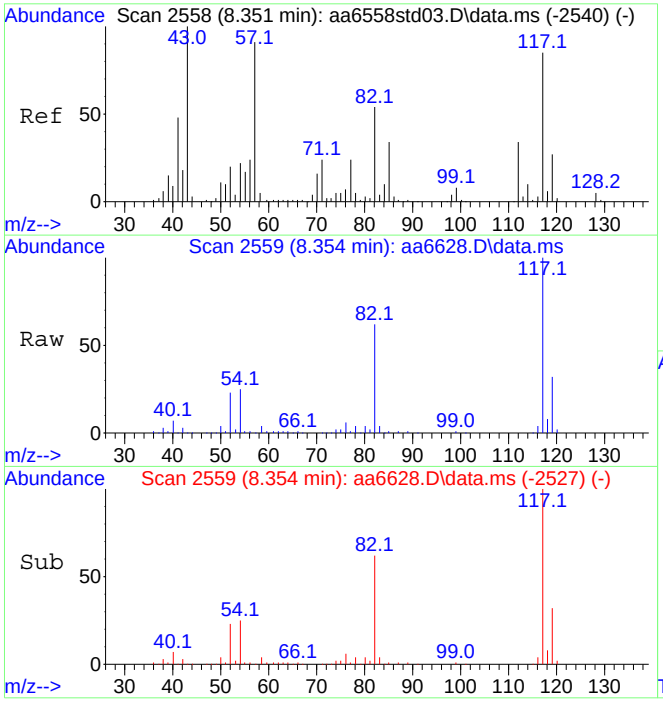


#49
Tetrachloroethene
Concen: 16.63 ppbV
RT: 7.193 min Scan# 2198
Delta R.T. 0.003 min
Lab File: aa6628.D
Acq: 4 Jun 2024 4:15 pm

Tgt Ion:166 Resp: 999558

Ion	Ratio	Lower	Upper
166	100		
164	78.6	62.8	94.2

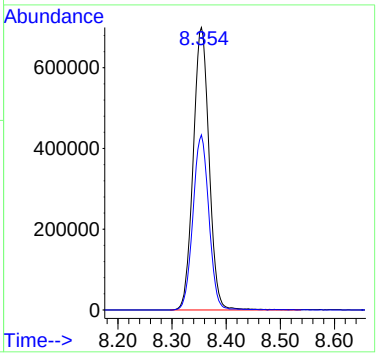


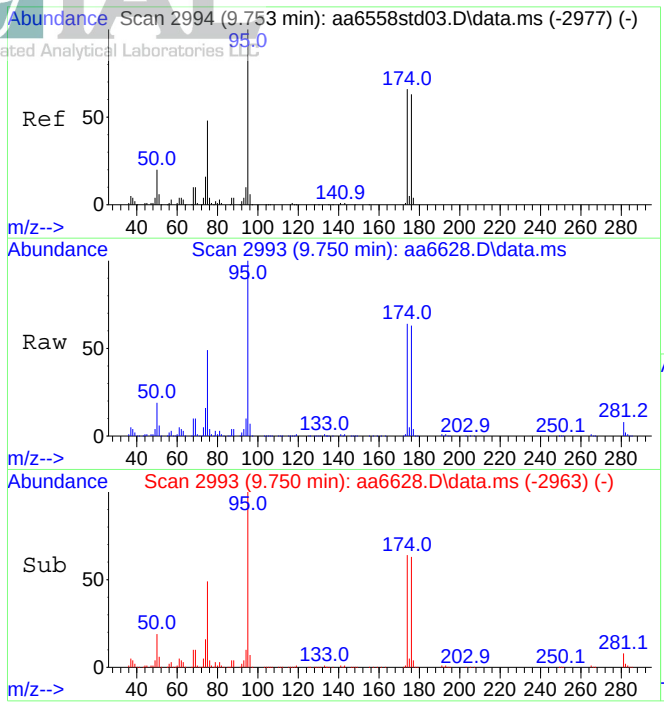


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.354 min Scan# 2559
Delta R.T. 0.003 min
Lab File: aa6628.D
Acq: 4 Jun 2024 4:15 pm

Tgt Ion:117 Resp: 1427581

Ion	Ratio	Lower	Upper
117	100		
82	62.1	42.3	82.3

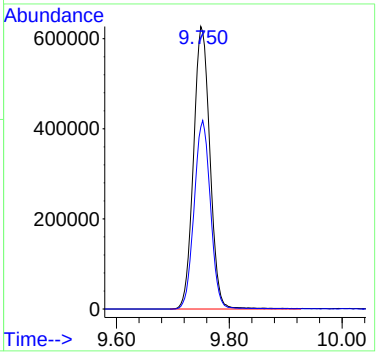




#64
Bromofluorobenzene (tune std)
Concen: 9.41 ppbV
RT: 9.750 min Scan# 2993
Delta R.T. -0.004 min
Lab File: aa6628.D
Acq: 4 Jun 2024 4:15 pm

Tgt Ion: 95 Resp: 1270414

Ion	Ratio	Lower	Upper
95	100		
174	66.3	52.9	79.3



Volatile Organic Compounds by EPA Method TO-15
Summary of Results

Lab ID:	E24-01875-03	Instrument ID:	AA
Client ID:	SG-6	GC/MS Column:	RTX-1, 0.32 mmID
Date Sampled:	05/30/2024 19:14	Injection Volmue:	250ml, 50ml
Date Received:	05/31/2024	Matrix:	Air-Other
Date Analyzed:	06/04/2024 19:35, 06/04/2024 15:12	% Moisture:	NA
Data File:	AA6634, AA6626	Dilution Factor:	2, 10
Summa ID:	3814	Analyst:	J. Walukiewicz

			Concentration Reported		Reporting Limits	
Compound	**CAS #**	**Q**	**ppbv**	**ug/m3**	**ppbv**	**ug/m3**
Acetone	67-64-1	D	340	810	2.0	4.8
Benzene	71-43-2	D	2.5	8.1	0.40	1.3
Bromodichloromethane	75-27-4		ND	ND	0.40	2.7
Bromoform	75-25-2		ND	ND	0.40	4.1
Bromomethane	74-83-9		ND	ND	0.40	1.6
1,3-Butadiene	106-99-0		ND	ND	0.40	0.88
Chlorobenzene	108-90-7		ND	ND	0.40	1.8
Chloroethane	75-00-3		ND	ND	0.40	1.1
Chloroform	67-66-3	D	2.3	11	0.40	2.0
Chloromethane	74-87-3		ND	ND	0.40	0.83
Carbon disulfide	75-15-0	D	0.89	2.8	0.40	1.2
Carbon tetrachloride	56-23-5		ND	ND	0.080	0.50
Cyclohexane	110-82-7	D	0.42	1.4	0.40	1.4
Dibromochloromethane	124-48-1		ND	ND	0.40	3.4
1,2-Dibromoethane	106-93-4		ND	ND	0.40	3.1
1,2-Dichlorobenzene	95-50-1		ND	ND	0.40	2.4
1,3-Dichlorobenzene	541-73-1		ND	ND	0.40	2.4
1,4-Dichlorobenzene	106-46-7		ND	ND	0.40	2.4
Dichlorodifluoromethane	75-71-8		ND	ND	0.40	2.0
1,1-Dichloroethane	75-34-3		ND	ND	0.40	1.6
1,2-Dichloroethane	107-06-2		ND	ND	0.40	1.6
1,1-Dichloroethene	75-35-4		ND	ND	0.40	1.6
1,2-Dichloroethene (cis)	156-59-2	D	0.53	2.1	0.40	1.6
1,2-Dichloroethene (trans)	156-60-5		ND	ND	0.40	1.6
1,2-Dichloropropane	78-87-5		ND	ND	0.40	1.8
1,3-Dichloropropene (cis)	10061-01-5		ND	ND	0.40	1.8
1,3-Dichloropropene (trans)	10061-02-6		ND	ND	0.40	1.8
1,2-Dichlorotetrafluoroethane	76-14-2		ND	ND	0.40	2.8
1,4-Dioxane	123-91-1	D	0.86	3.1	0.40	1.4
Ethylbenzene	100-41-4	D	0.41	1.8	0.40	1.7
n-Heptane	142-82-5	D	0.75	3.1	0.40	1.6
1,3-Hexachlorobutadiene	87-68-3		ND	ND	0.40	4.3
n-Hexane	110-54-3		ND	ND	0.40	1.4
Methylene chloride	75-09-2		ND	ND	0.40	1.4
Methyl ethyl ketone	78-93-3	D	43	130	0.40	1.2
Methyl isobutyl ketone	108-10-1	D	2.2	9.2	0.40	1.6
Methyl tert-butyl ether	1634-04-4		ND	ND	0.40	1.4
Styrene	100-42-5	D	0.64	2.7	0.40	1.7
Tert-butyl alcohol	75-65-0	D	5.8	18	0.40	1.2
1,1,2,2-Tetrachloroethane	79-34-5		ND	ND	0.40	2.7
Tetrachloroethene	127-18-4	D	340	2300	2.0	14
Toluene	108-88-3	D	4.1	15	0.40	1.5
1,2,4-Trichlorobenzene	120-82-1		ND	ND	0.40	3.0
1,1,1-Trichloroethane	71-55-6		ND	ND	0.40	2.2
1,1,2-Trichloroethane	79-00-5		ND	ND	0.40	2.2

Qualifiers:
D = Dilution required

Volatile Organic Compounds by EPA Method TO-15
Summary of Results

Lab ID:	E24-01875-03	Instrument ID:	AA
Client ID:	SG-6	GC/MS Column:	RTX-1, 0.32 mmID
Date Sampled:	05/30/2024 19:14	Injection Volmue:	250ml, 50ml
Date Received:	05/31/2024	Matrix:	Air-Other
Date Analyzed:	06/04/2024 19:35, 06/04/2024 15:12	% Moisture:	NA
Data File:	AA6634, AA6626	Dilution Factor:	2, 10
Summa ID:	3814	Analyst:	J. Walukiewicz

			Concentration Reported		Reporting Limits	
Compound	**CAS #**	**Q**	**ppbv**	**ug/m3**	**ppbv**	**ug/m3**
Trichloroethene	79-01-6	D	16	89	0.092	0.49
Trichlorofluoromethane	75-69-4		ND	ND	0.40	2.2
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1		ND	ND	0.40	3.1
1,2,4-Trimethylbenzene	95-63-6		ND	ND	0.40	2.0
1,3,5-Trimethylbenzene	108-67-8		ND	ND	0.40	2.0
2,2,4-Trimethylpentane	540-84-1		ND	ND	0.40	1.9
Vinyl bromide	593-60-2		ND	ND	0.40	1.7
Vinyl chloride	75-01-4		ND	ND	0.40	1.0
Xylenes (m&p)	179601-23-1	D	1.1	4.8	0.40	1.7
Xylenes (o)	95-47-6	D	0.48	2.1	0.40	1.7

Qualifiers:
D = Dilution required

Quantitation Report (QT Reviewed)

Data Path : C:\DATA\2024\06-2024\06-04-2024\
Data File : aa6634.D
Acq On : 4 Jun 2024 7:35 pm
Operator : jjw
Sample : E24-01875-03x2 dil
Misc : 3814, 250cc
ALS Vial : 15 Sample Multiplier: 1

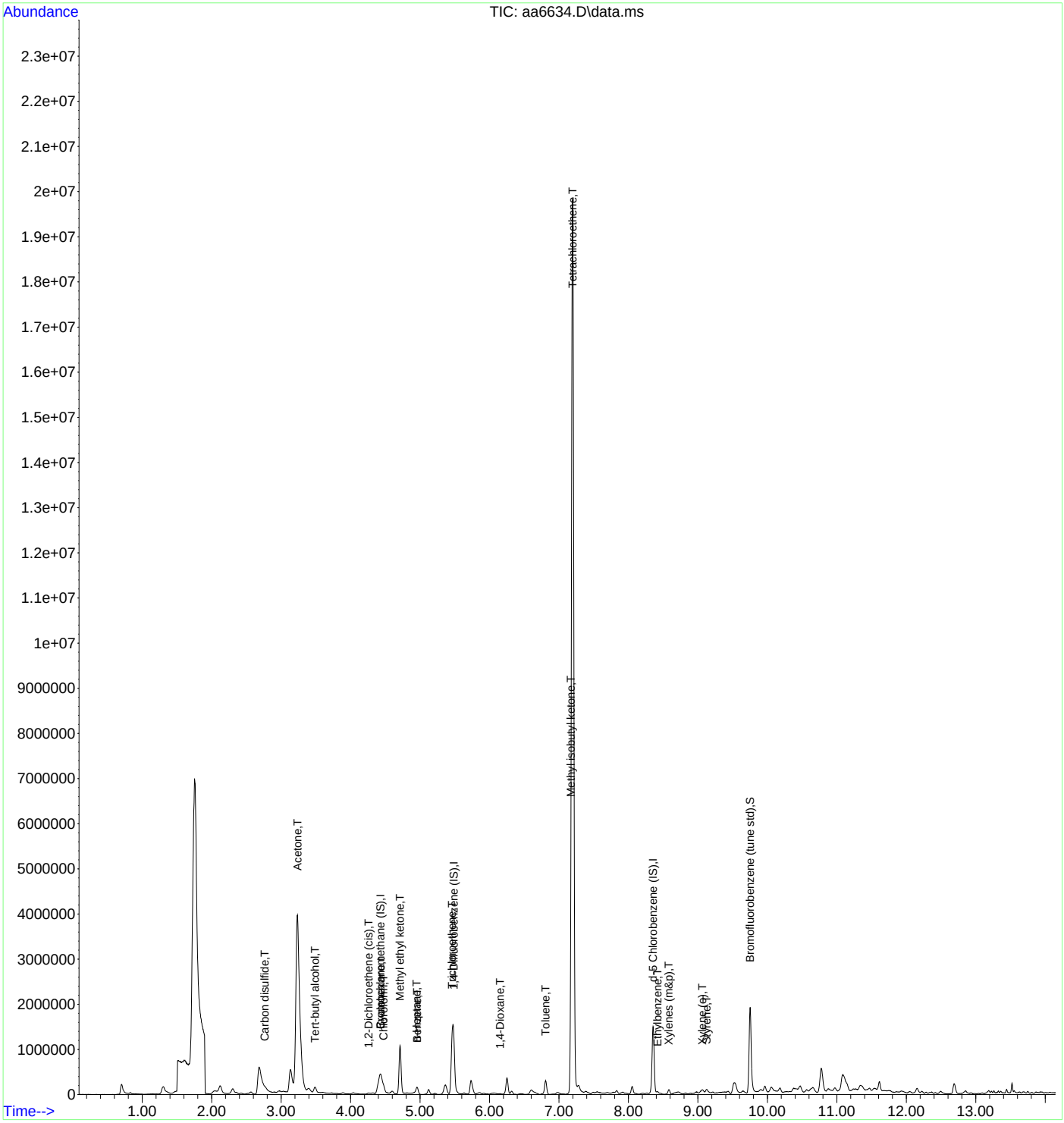
Quant Time: Jun 05 10:12:16 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

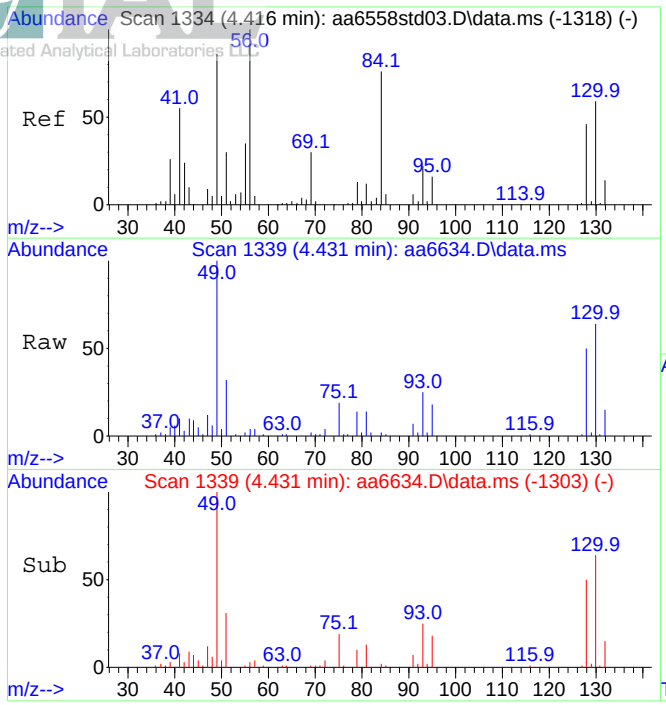
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.431	130	215539	10.00	ppbV		0.015
39) 1,4-Difluorobenzene (IS)	5.486	114	997680	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.354	117	920868	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.753	95	818699	9.40	ppbV		0.000
Target Compounds							Qvalue
15) Carbon disulfide	2.763	76	40666	0.45	ppbV	#	67
21) Acetone	3.235	43	8100719	167.49	ppbV		100
26) Tert-butyl alcohol	3.489	59	195302	2.89	ppbV		100
28) 1,2-Dichloroethene (cis)	4.258	61	11842	0.27	ppbV		97
29) Cyclohexane	4.435	56	11575	0.21	ppbV	#	81
30) Chloroform	4.477	83	80760	1.17	ppbV		99
35) Methyl ethyl ketone	4.711	43	1459545	21.29	ppbV		99
36) n-Heptane	4.952	43	24211	0.37	ppbV	#	73
37) Benzene	4.959	78	124184	1.27	ppbV		99
40) Trichloroethene	5.460	130	371714	8.24	ppbV		99
45) 1,4-Dioxane	6.152	88	10122	0.43	ppbV		92
47) Toluene	6.808	91	261592	2.05	ppbV		99
48) Methyl isobutyl ketone	7.171	43	104346	1.12	ppbV		100
49) Tetrachloroethene	7.197	166	7035867	145.41	ppbV		99
58) Ethylbenzene	8.418	91	37178	0.20	ppbV		99
59) Xylenes (m&p)	8.579	91	74721	0.55	ppbV		99
60) Xylene (o)	9.065	91	34399	0.24	ppbV		94
61) Styrene	9.126	104	30743	0.32	ppbV		98

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

Data Path : C:\DATA\2024\06-2024\06-04-2024\
Data File : aa6634.D
Acq On : 4 Jun 2024 7:35 pm
Operator : jjw
Sample : E24-01875-03x2 dil
Misc : 3814, 250cc
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 05 10:12:16 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

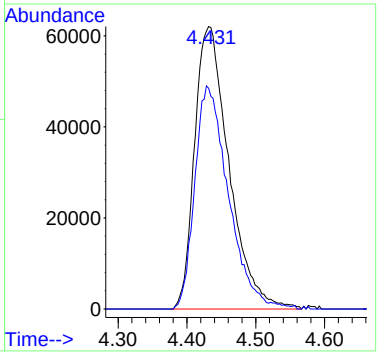


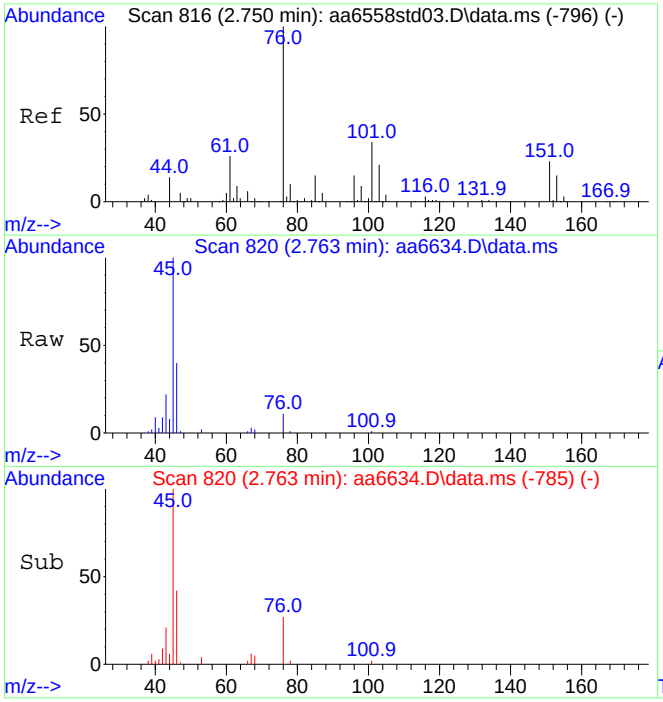


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.431 min Scan# 1339
Delta R.T. 0.015 min
Lab File: aa6634.D
Acq: 4 Jun 2024 7:35 pm

Tgt Ion:130 Resp: 215539

Ion	Ratio	Lower	Upper
130	100		
128	77.3	57.8	97.8

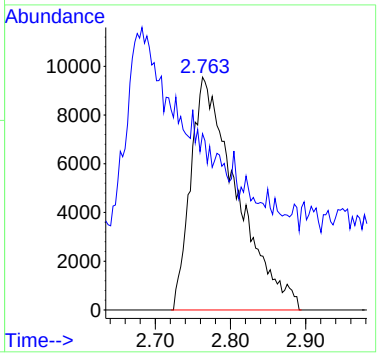


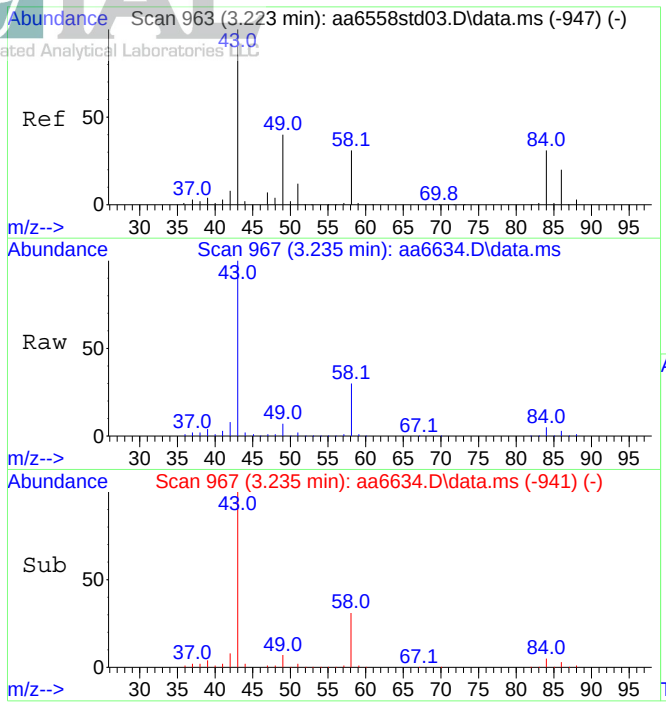


#15
Carbon disulfide
Concen: 0.45 ppbV
RT: 2.763 min Scan# 820
Delta R.T. 0.013 min
Lab File: aa6634.D
Acq: 4 Jun 2024 7:35 pm

Tgt Ion: 76 Resp: 40666

Ion	Ratio	Lower	Upper
76	100		
44	0.0	10.6	16.0#

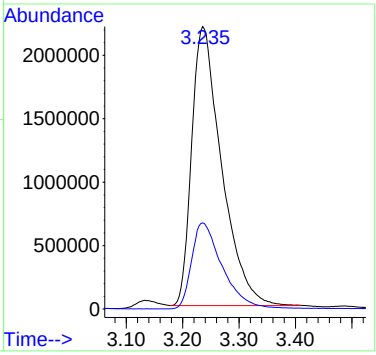


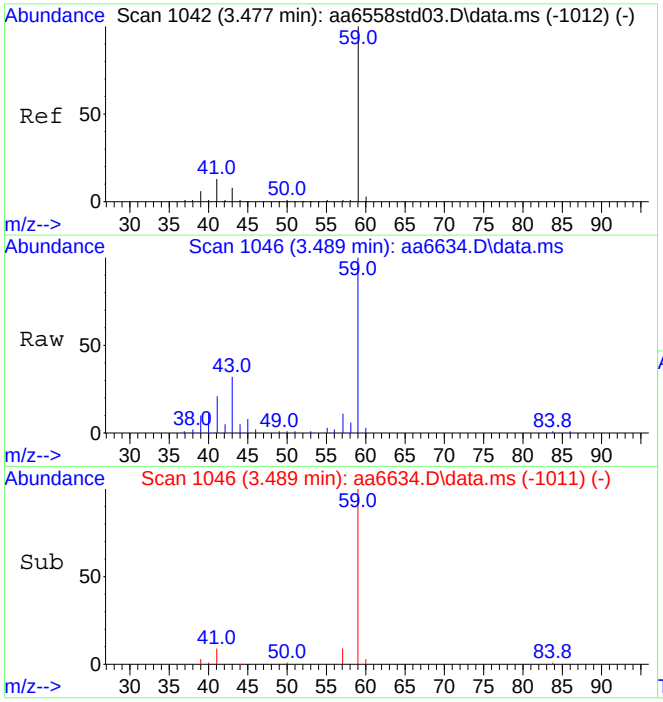


#21
Acetone
Concen: 167.49 ppbV
RT: 3.235 min Scan# 967
Delta R.T. 0.013 min
Lab File: aa6634.D
Acq: 4 Jun 2024 7:35 pm

Tgt Ion: 43 Resp: 8100719

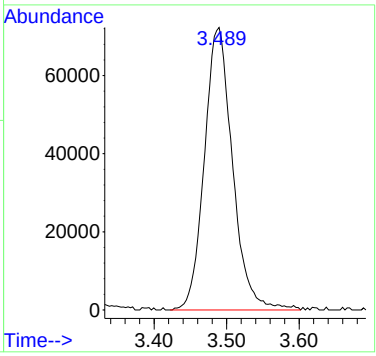
Ion	Ratio	Lower	Upper
43	100		
58	31.7	25.4	38.0

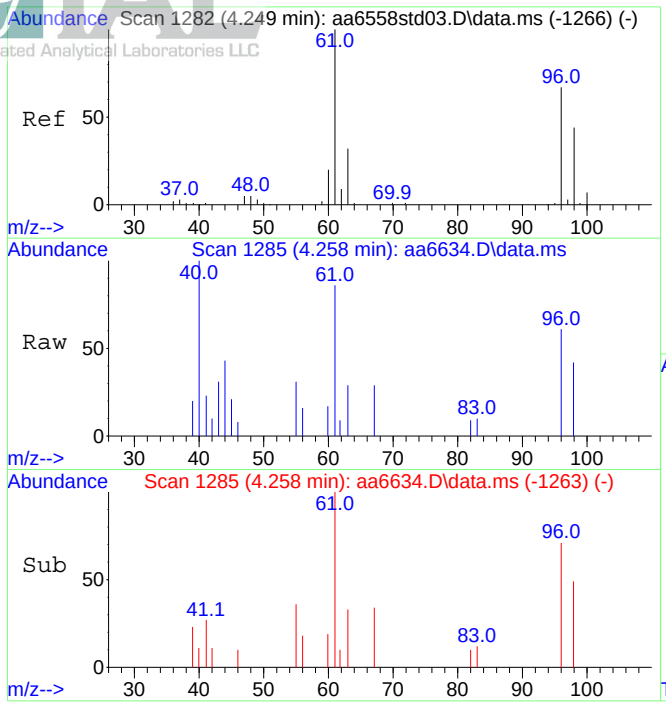




#26
Tert-butyl alcohol
Concen: 2.89 ppbV
RT: 3.489 min Scan# 1046
Delta R.T. 0.013 min
Lab File: aa6634.D
Acq: 4 Jun 2024 7:35 pm

Tgt Ion: 59 Resp: 195302

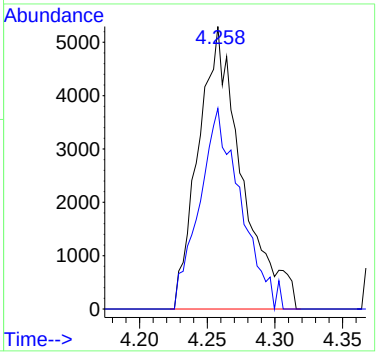


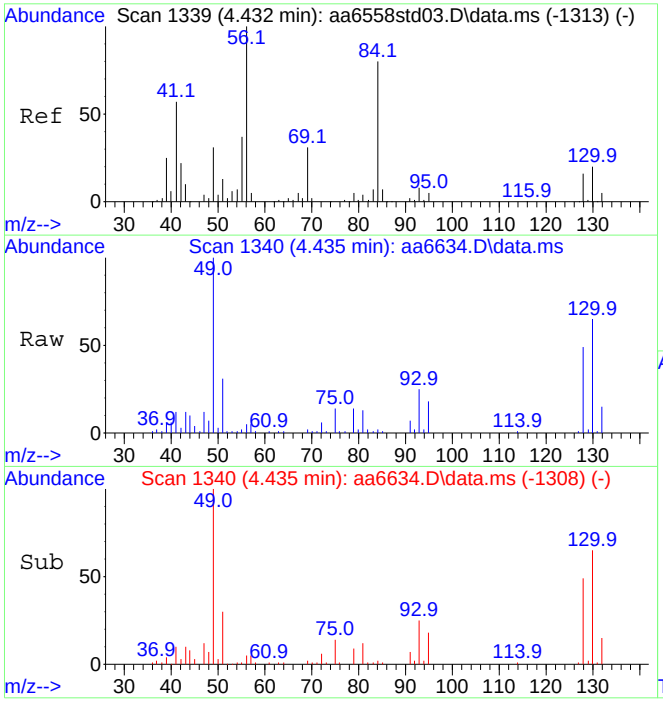


#28
1,2-Dichloroethene (cis)
Concen: 0.27 ppbV
RT: 4.258 min Scan# 1285
Delta R.T. 0.009 min
Lab File: aa6634.D
Acq: 4 Jun 2024 7:35 pm

Tgt Ion: 61 Resp: 11842

Ion	Ratio	Lower	Upper
61	100		
96	67.5	56.0	84.0

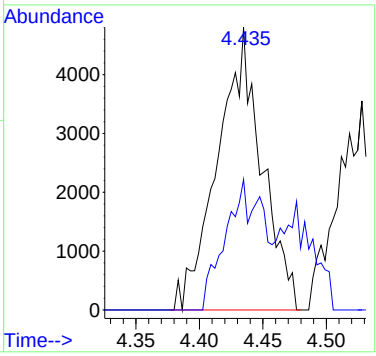


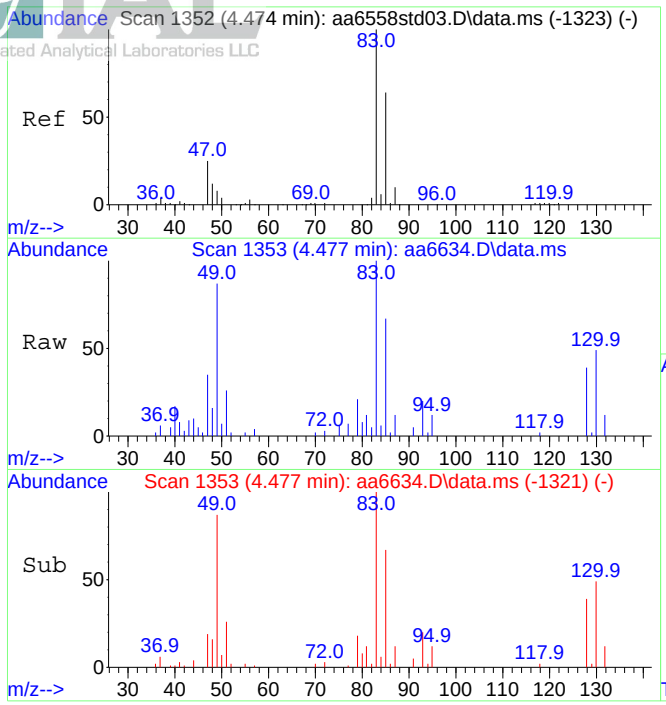


#29
Cyclohexane
Concen: 0.21 ppbV
RT: 4.435 min Scan# 1340
Delta R.T. 0.003 min
Lab File: aa6634.D
Acq: 4 Jun 2024 7:35 pm

Tgt Ion: 56 Resp: 11575

Ion	Ratio	Lower	Upper
56	100		
84	66.3	66.8	100.2#

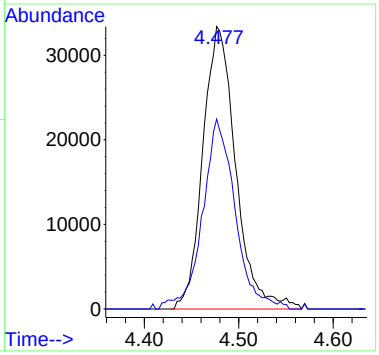


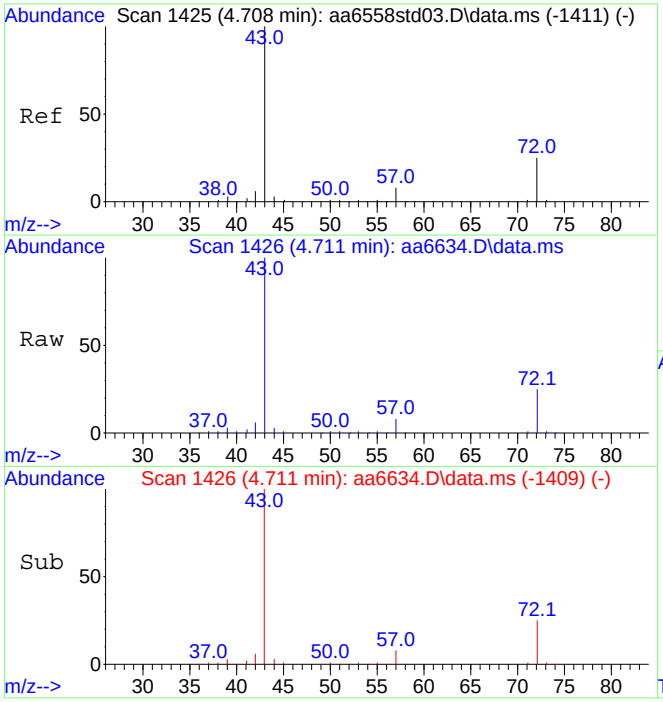


#30
Chloroform
Concen: 1.17 ppbV
RT: 4.477 min Scan# 1353
Delta R.T. 0.003 min
Lab File: aa6634.D
Acq: 4 Jun 2024 7:35 pm

Tgt Ion: 83 Resp: 80760

Ion	Ratio	Lower	Upper
83	100		
85	66.7	52.6	79.0

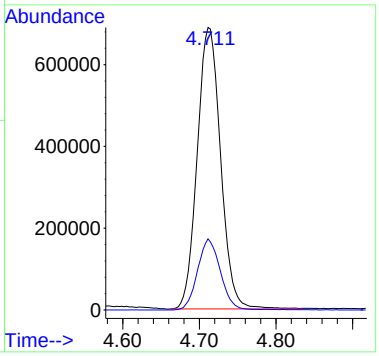


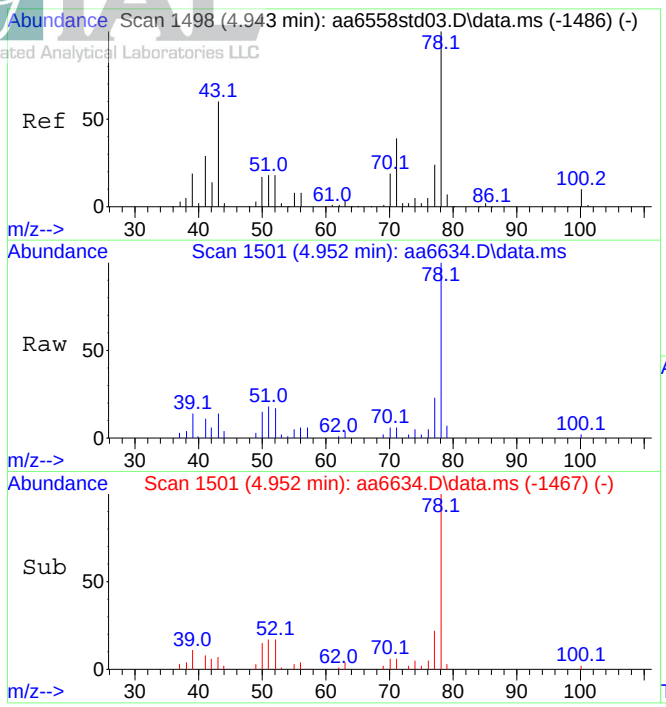


#35
Methyl ethyl ketone
Concen: 21.29 ppbV
RT: 4.711 min Scan# 1426
Delta R.T. 0.003 min
Lab File: aa6634.D
Acq: 4 Jun 2024 7:35 pm

Tgt Ion: 43 Resp: 1459545

Ion	Ratio	Lower	Upper
43	100		
72	24.7	19.5	29.3

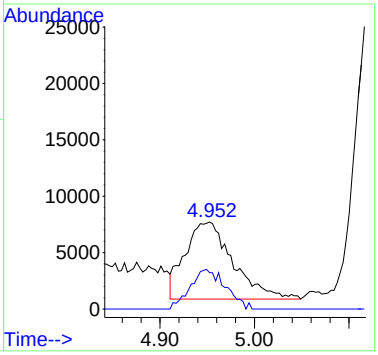


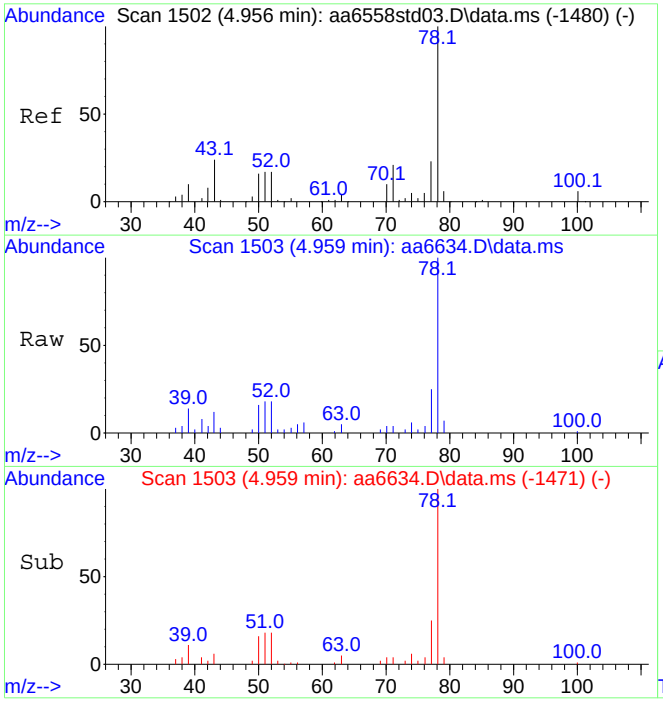


#36
n-Heptane
Concen: 0.37 ppbV
RT: 4.952 min Scan# 1501
Delta R.T. 0.009 min
Lab File: aa6634.D
Acq: 4 Jun 2024 7:35 pm

Tgt Ion: 43 Resp: 24211

Ion	Ratio	Lower	Upper
43	100		
71	37.6	46.2	69.2#

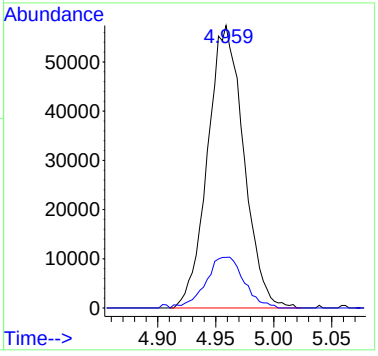


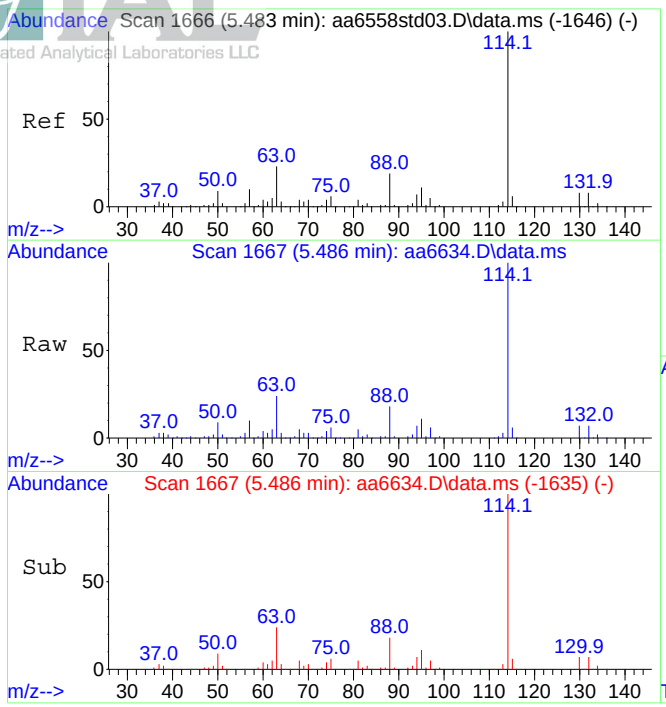


#37
Benzene
Concen: 1.27 ppbV
RT: 4.959 min Scan# 1503
Delta R.T. 0.003 min
Lab File: aa6634.D
Acq: 4 Jun 2024 7:35 pm

Tgt Ion: 78 Resp: 124184

Ion	Ratio	Lower	Upper
78	100		
51	19.0	14.9	22.3

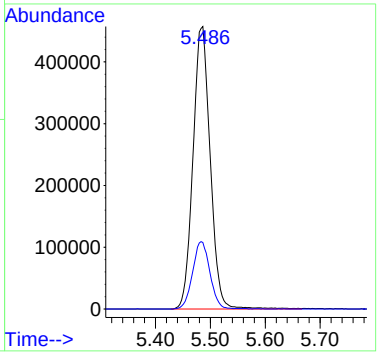


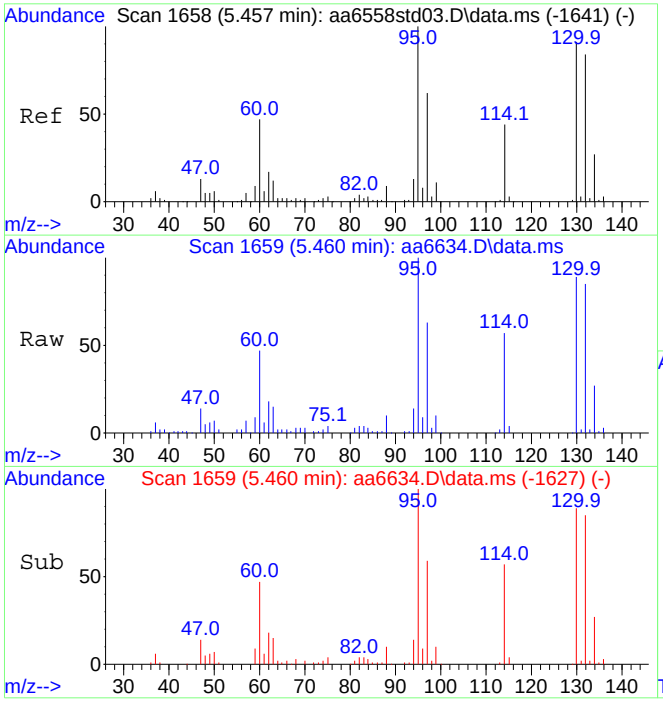


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.486 min Scan# 1667
Delta R.T. 0.003 min
Lab File: aa6634.D
Acq: 4 Jun 2024 7:35 pm

Tgt Ion:114 Resp: 997680

Ion	Ratio	Lower	Upper
114	100		
63	24.0	3.6	43.6

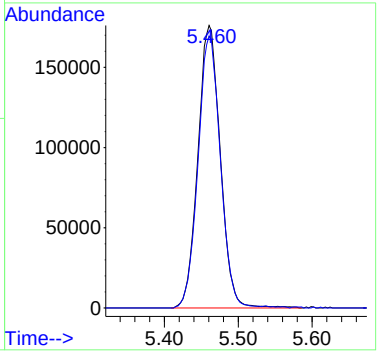


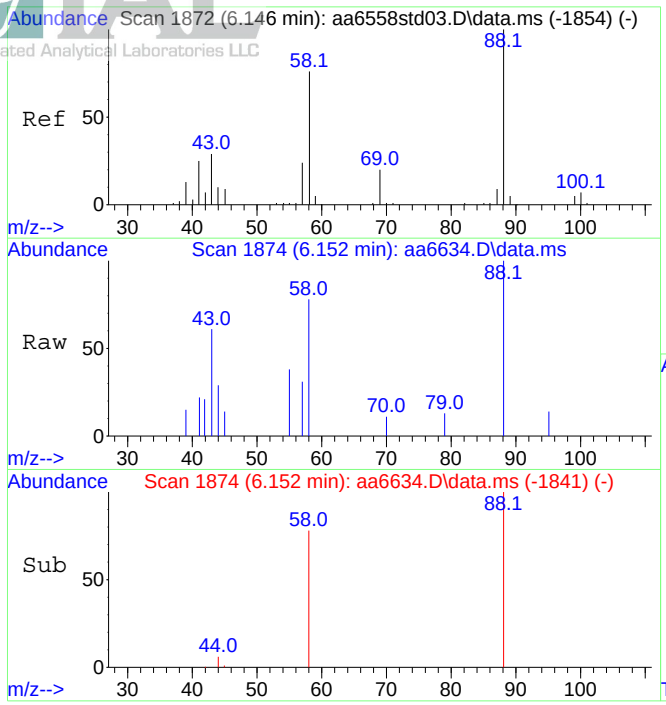


#40
Trichloroethene
Concen: 8.24 ppbV
RT: 5.460 min Scan# 1659
Delta R.T. 0.003 min
Lab File: aa6634.D
Acq: 4 Jun 2024 7:35 pm

Tgt Ion:130 Resp: 371714

Ion	Ratio	Lower	Upper
130	100		
132	96.3	76.6	114.8

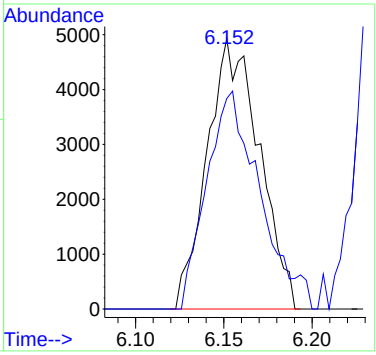


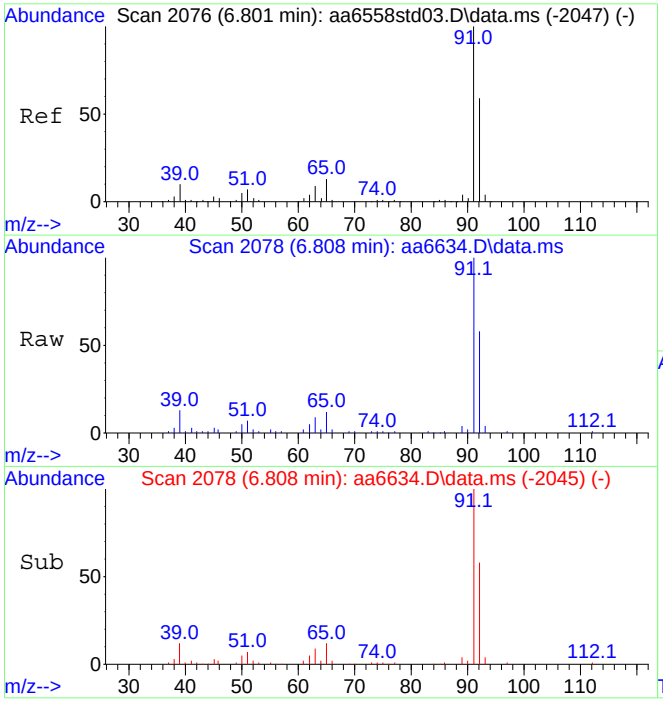


#45
1,4-Dioxane
Concen: 0.43 ppbV
RT: 6.152 min Scan# 1874
Delta R.T. 0.006 min
Lab File: aa6634.D
Acq: 4 Jun 2024 7:35 pm

Tgt Ion: 88 Resp: 10122

Ion	Ratio	Lower	Upper
88	100		
58	82.1	59.9	89.9

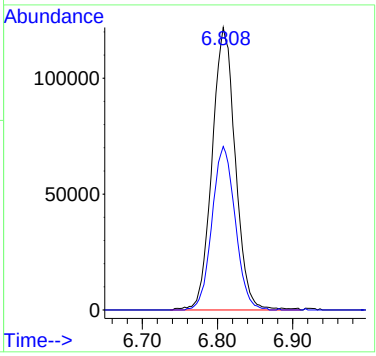


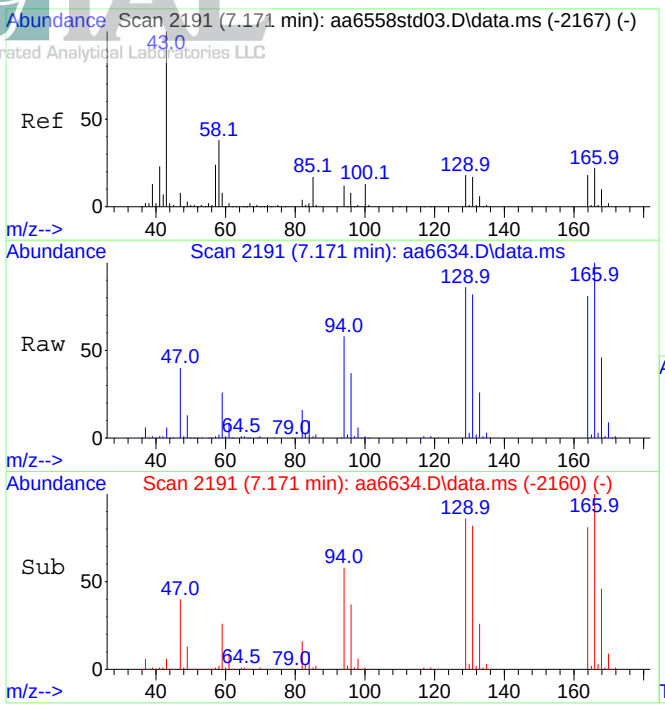


#47
Toluene
Concen: 2.05 ppbV
RT: 6.808 min Scan# 2078
Delta R.T. 0.006 min
Lab File: aa6634.D
Acq: 4 Jun 2024 7:35 pm

Tgt Ion: 91 Resp: 261592

Ion	Ratio	Lower	Upper
91	100		
92	57.8	47.0	70.6

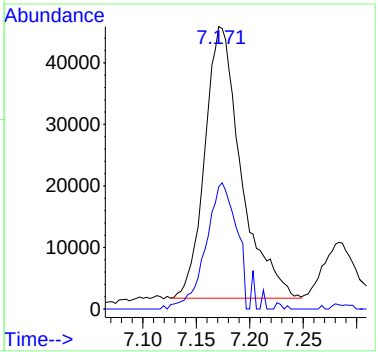


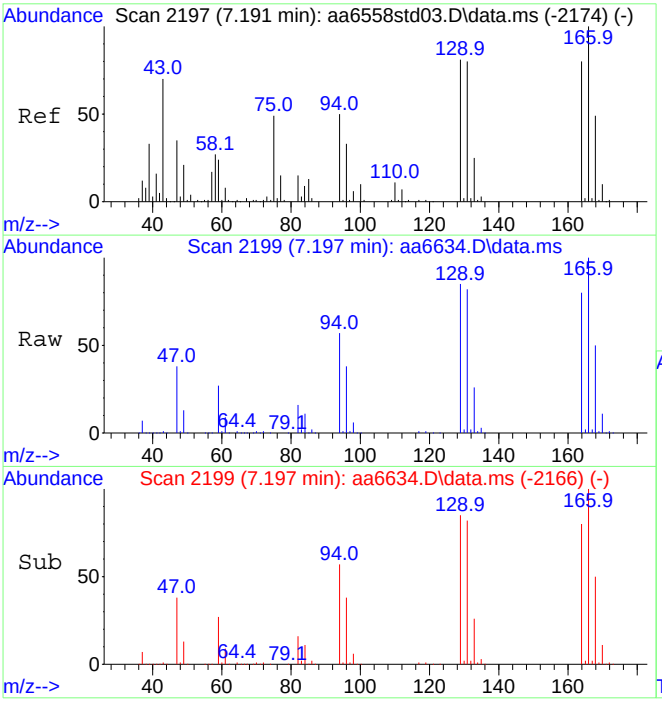


#48
Methyl isobutyl ketone
Concen: 1.12 ppbV
RT: 7.171 min Scan# 2191
Delta R.T. -0.000 min
Lab File: aa6634.D
Acq: 4 Jun 2024 7:35 pm

Tgt Ion: 43 Resp: 104346

Ion	Ratio	Lower	Upper
43	100		
58	38.9	31.0	46.4

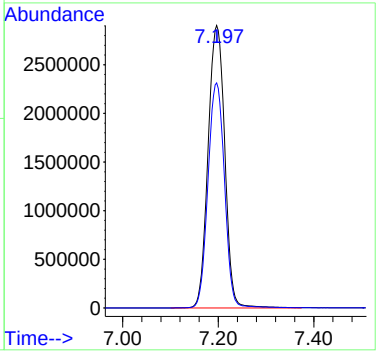


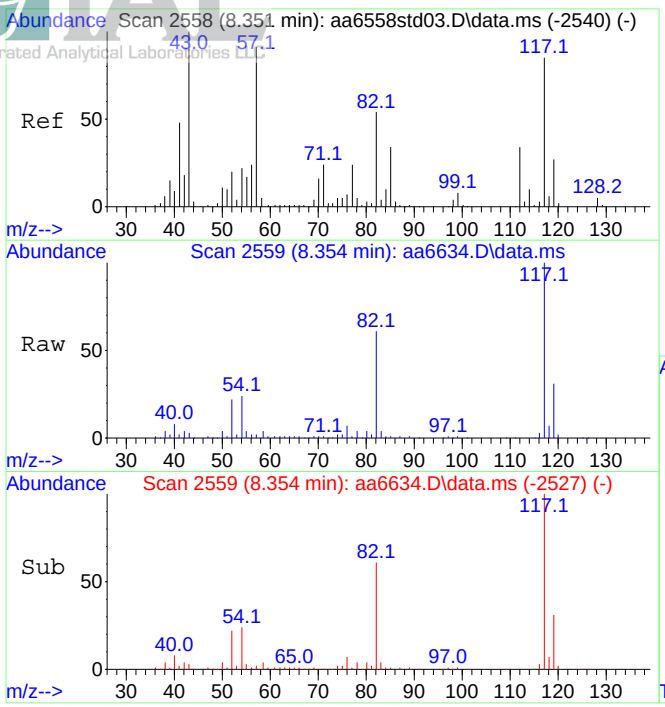


#49
Tetrachloroethene
Concen: 145.41 ppbV
RT: 7.197 min Scan# 2199
Delta R.T. 0.006 min
Lab File: aa6634.D
Acq: 4 Jun 2024 7:35 pm

Tgt Ion:166 Resp: 7035867

Ion	Ratio	Lower	Upper
166	100		
164	79.1	62.8	94.2

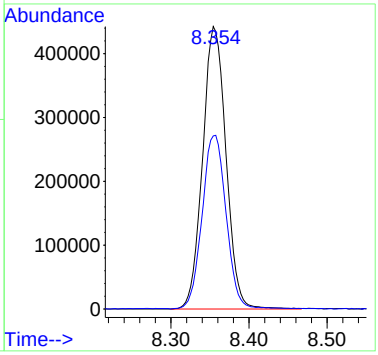


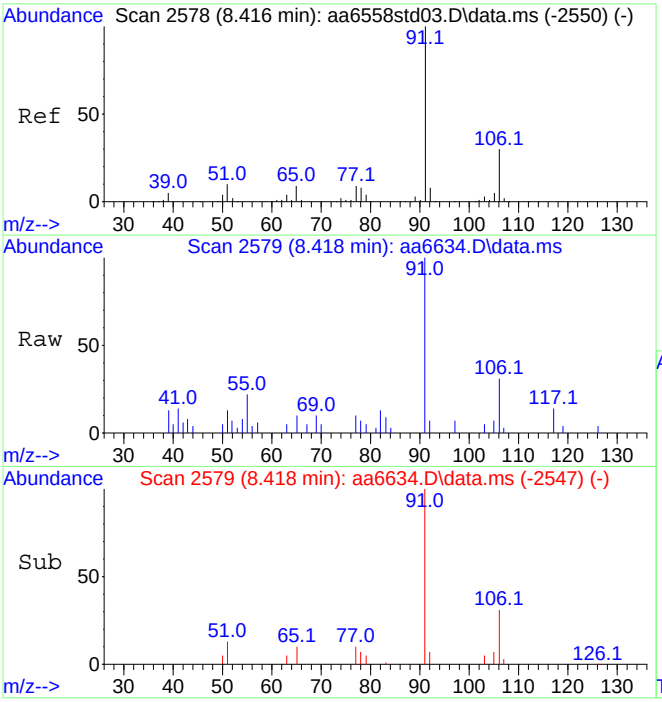


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.354 min Scan# 2559
Delta R.T. 0.003 min
Lab File: aa6634.D
Acq: 4 Jun 2024 7:35 pm

Tgt Ion:117 Resp: 920868

Ion	Ratio	Lower	Upper
117	100		
82	63.5	42.3	82.3

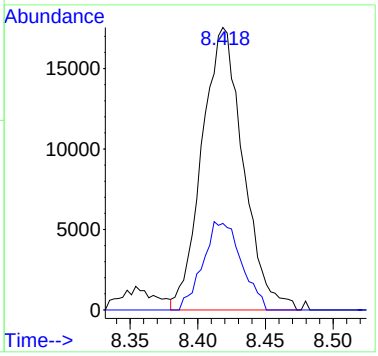


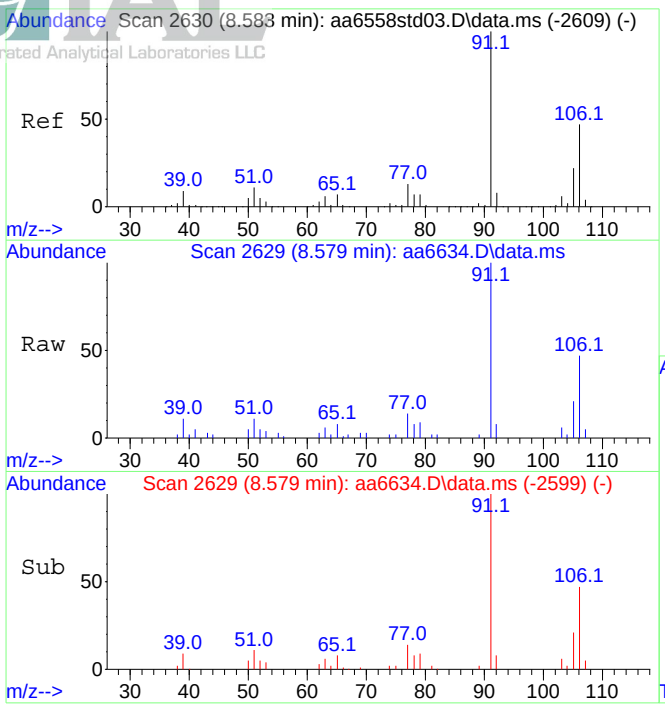


#58
Ethylbenzene
Concen: 0.20 ppbV
RT: 8.418 min Scan# 2579
Delta R.T. 0.003 min
Lab File: aa6634.D
Acq: 4 Jun 2024 7:35 pm

Tgt Ion: 91 Resp: 37178

Ion	Ratio	Lower	Upper
91	100		
106	29.0	23.8	35.8

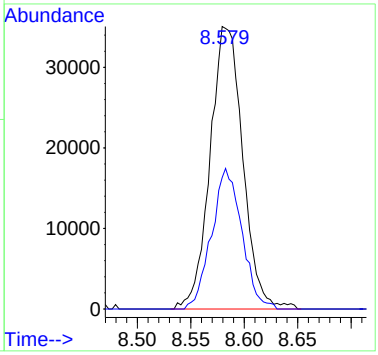


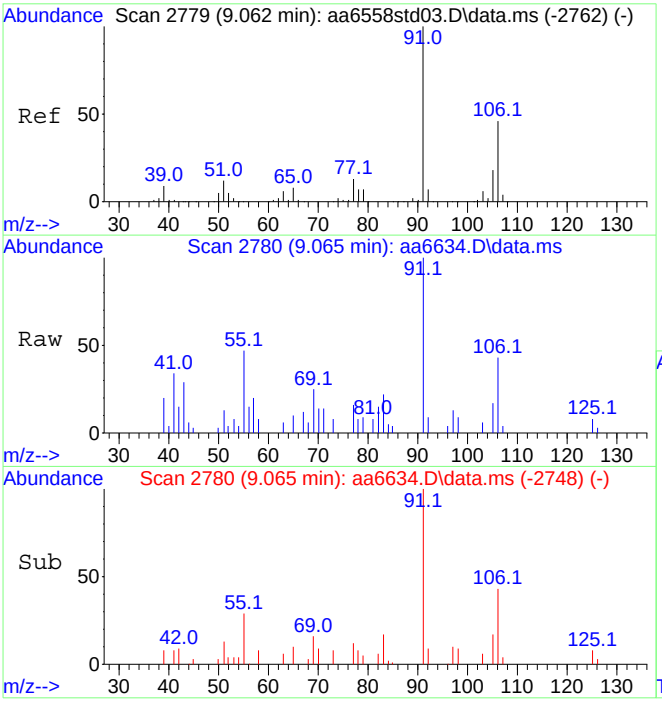


#59
Xylenes (m&p)
Concen: 0.55 ppbV
RT: 8.579 min Scan# 2629
Delta R.T. -0.004 min
Lab File: aa6634.D
Acq: 4 Jun 2024 7:35 pm

Tgt Ion: 91 Resp: 74721

Ion	Ratio	Lower	Upper
91	100		
106	46.1	37.4	56.2

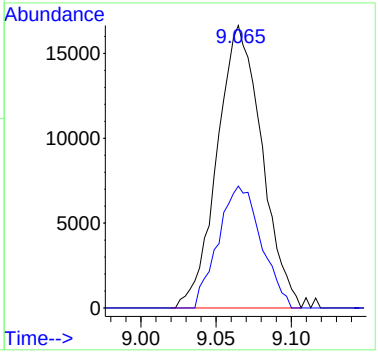


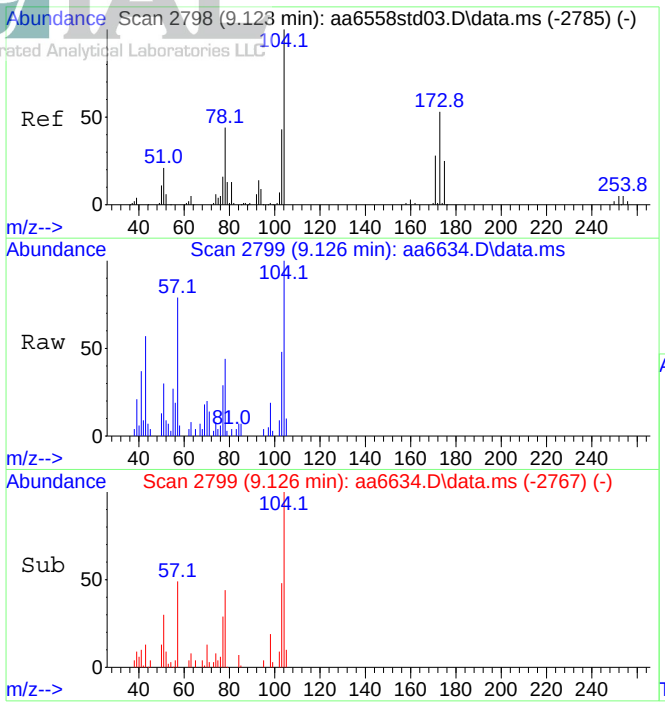


#60
Xylene (o)
Concen: 0.24 ppbV
RT: 9.065 min Scan# 2780
Delta R.T. 0.003 min
Lab File: aa6634.D
Acq: 4 Jun 2024 7:35 pm

Tgt Ion: 91 Resp: 34399

Ion	Ratio	Lower	Upper
91	100		
106	41.5	36.2	54.2

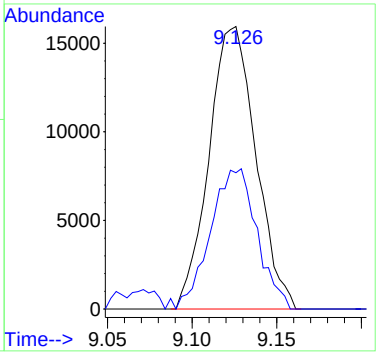


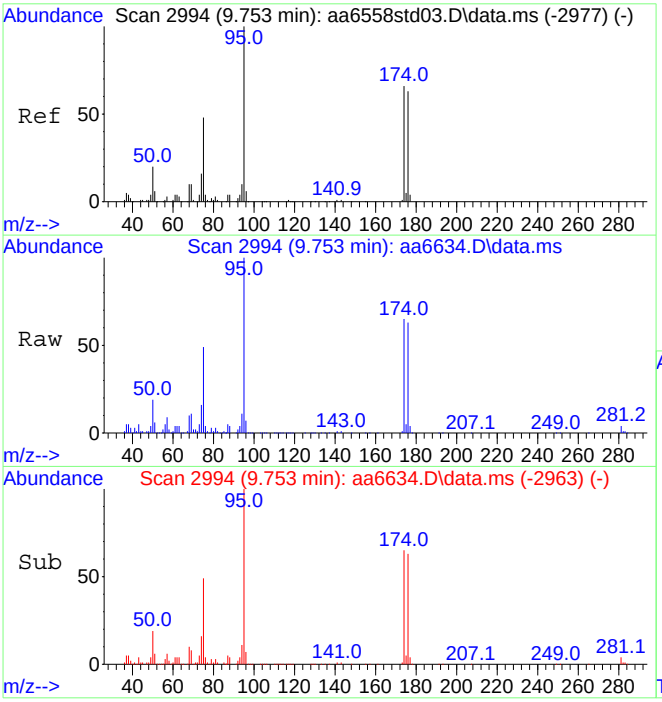


#61
Styrene
Concen: 0.32 ppbV
RT: 9.126 min Scan# 2799
Delta R.T. 0.003 min
Lab File: aa6634.D
Acq: 4 Jun 2024 7:35 pm

Tgt Ion:104 Resp: 30743

Ion	Ratio	Lower	Upper
104	100		
103	49.4	38.3	57.5

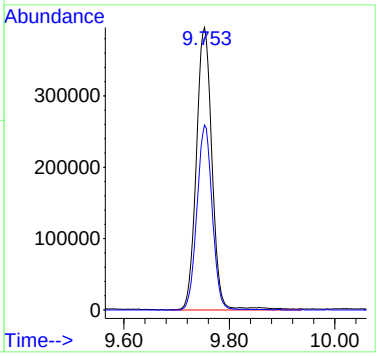




#64
Bromofluorobenzene (tune std)
Concen: 9.40 ppbV
RT: 9.753 min Scan# 2994
Delta R.T. -0.000 min
Lab File: aa6634.D
Acq: 4 Jun 2024 7:35 pm

Tgt Ion: 95 Resp: 818699

Ion	Ratio	Lower	Upper
95	100		
174	63.7	52.9	79.3



Data Path : C:\DATA\2024\06-2024\06-04-2024\
Data File : aa6626.D
Acq On : 4 Jun 2024 3:12 pm
Operator : jjw
Sample : E24-01875-03x10 dil
Misc : 3814, 50cc
ALS Vial : 7 Sample Multiplier: 1

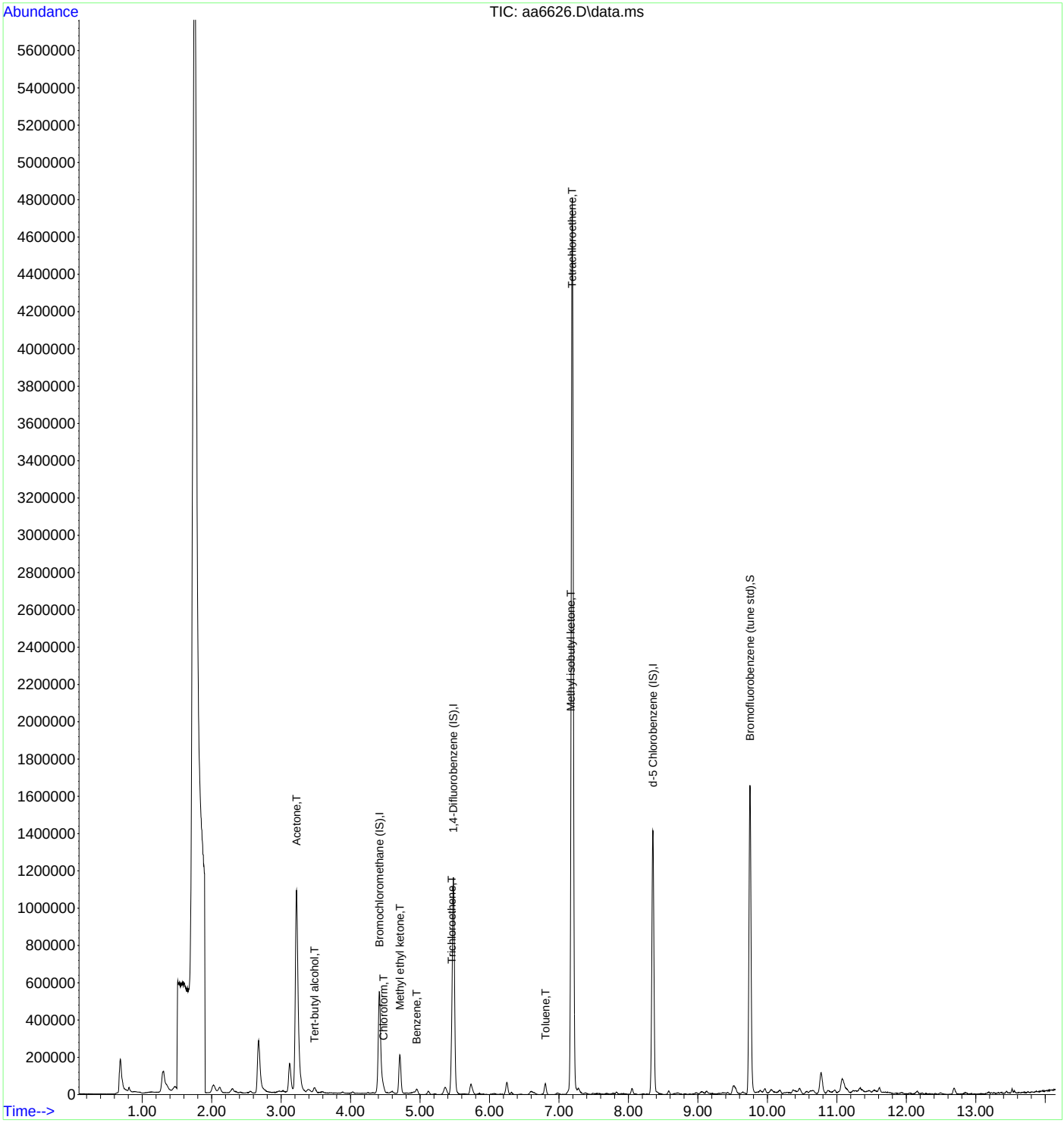
Quant Time: Jun 04 15:27:10 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

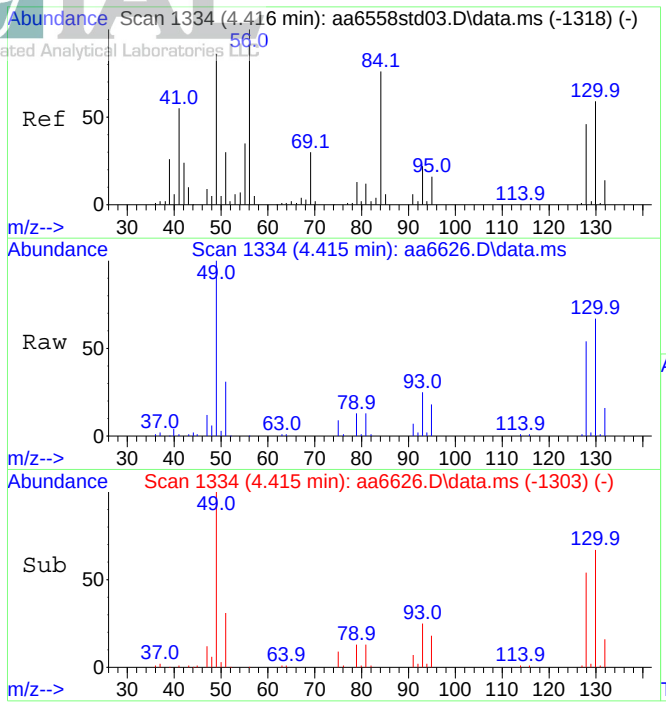
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.415	130	227014	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.480	114	990976	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.354	117	903992	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.750	95	754859	8.83	ppbV	0.000
Target Compounds						Qvalue
21) Acetone	3.223	43	1727959	33.92	ppbV	100
26) Tert-butyl alcohol	3.483	59	37211	0.52	ppbV	100
30) Chloroform	4.473	83	16392	0.23	ppbV	96
35) Methyl ethyl ketone	4.711	43	276033	3.82	ppbV	99
37) Benzene	4.952	78	24189	0.23	ppbV	93
40) Trichloroethene	5.457	130	73706	1.64	ppbV	99
47) Toluene	6.808	91	51364	0.40	ppbV	97
48) Methyl isobutyl ketone	7.171	43	24198	0.26	ppbV	99
49) Tetrachloroethene	7.190	166	1634242	34.00	ppbV	99

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

Data Path : C:\DATA\2024\06-2024\06-04-2024\
Data File : aa6626.D
Acq On : 4 Jun 2024 3:12 pm
Operator : jjw
Sample : E24-01875-03x10 dil
Misc : 3814, 50cc
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 04 15:27:10 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

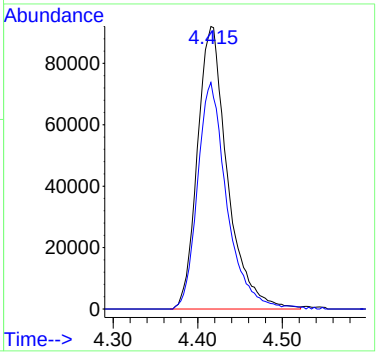


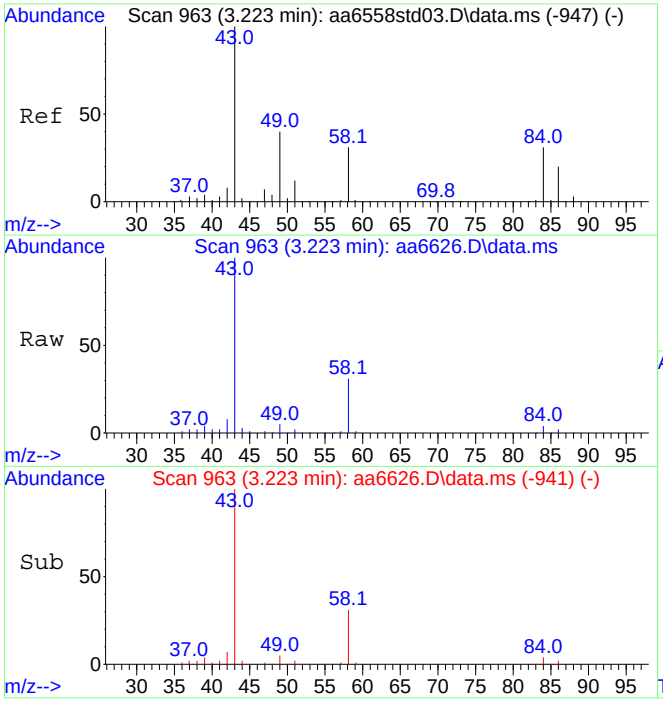


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.415 min Scan# 1334
Delta R.T. -0.001 min
Lab File: aa6626.D
Acq: 4 Jun 2024 3:12 pm

Tgt Ion:130 Resp: 227014

Ion	Ratio	Lower	Upper
130	100		
128	78.3	57.8	97.8

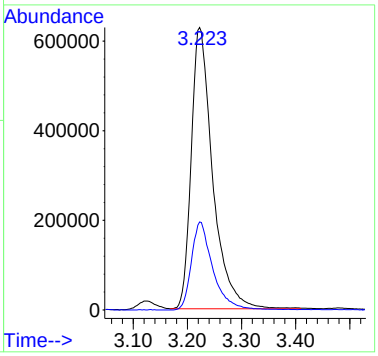


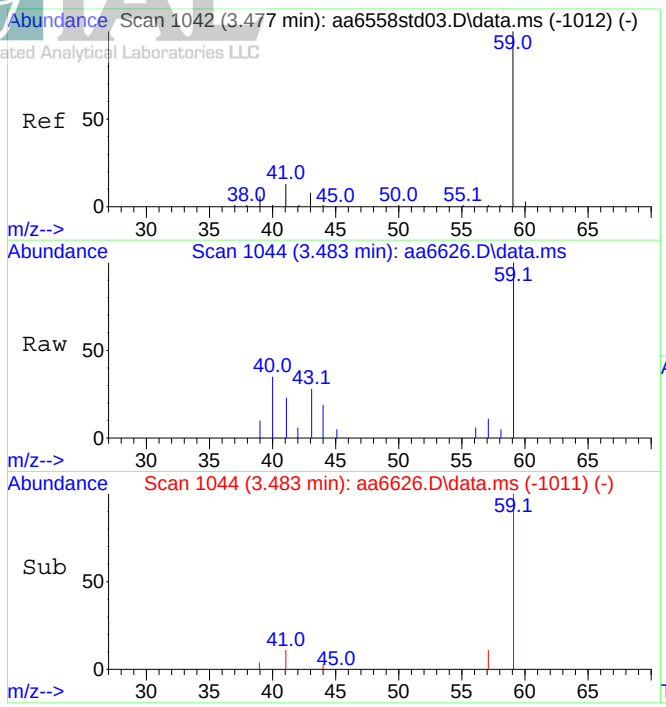


#21
Acetone
Concen: 33.92 ppbV
RT: 3.223 min Scan# 963
Delta R.T. -0.000 min
Lab File: aa6626.D
Acq: 4 Jun 2024 3:12 pm

Tgt Ion: 43 Resp: 1727959

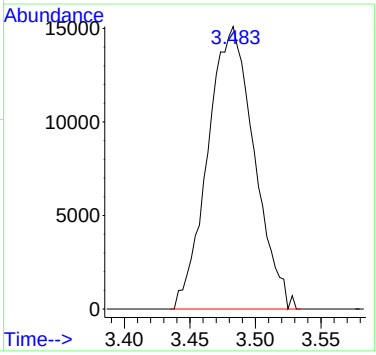
Ion	Ratio	Lower	Upper
43	100		
58	31.4	25.4	38.0

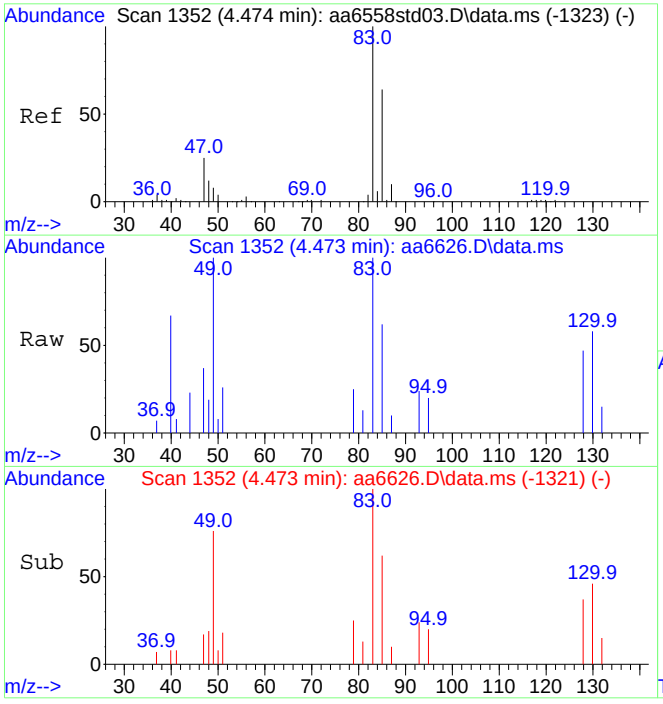




#26
Tert-butyl alcohol
Concen: 0.52 ppbV
RT: 3.483 min Scan# 1044
Delta R.T. 0.006 min
Lab File: aa6626.D
Acq: 4 Jun 2024 3:12 pm

Tgt Ion: 59 Resp: 37211

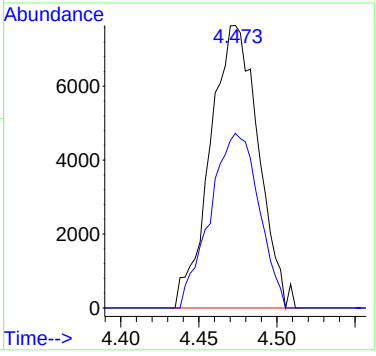


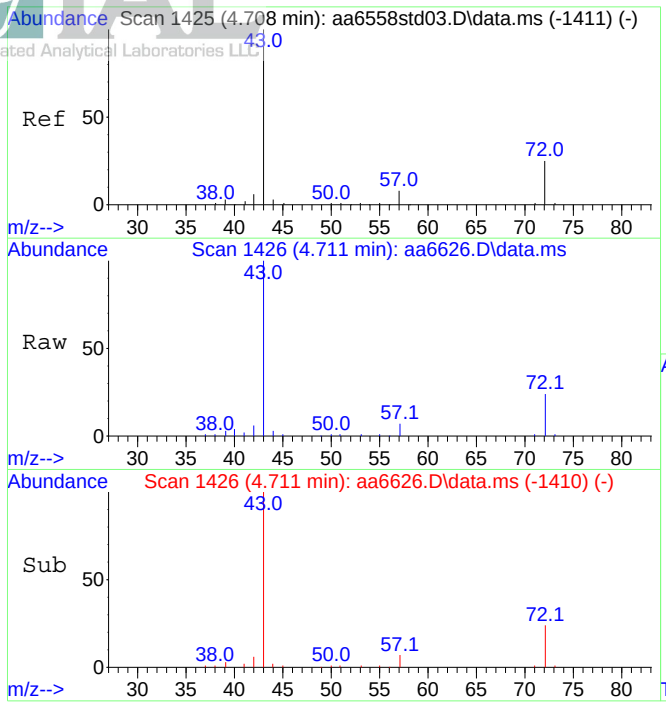


#30
Chloroform
Concen: 0.23 ppbV
RT: 4.473 min Scan# 1352
Delta R.T. -0.000 min
Lab File: aa6626.D
Acq: 4 Jun 2024 3:12 pm

Tgt Ion: 83 Resp: 16392

Ion	Ratio	Lower	Upper
83	100		
85	62.5	52.6	79.0

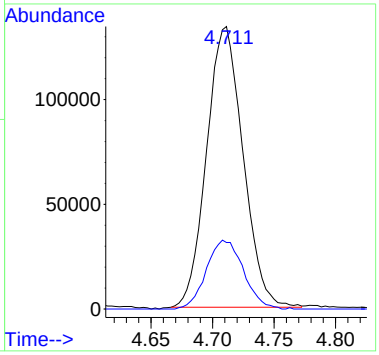


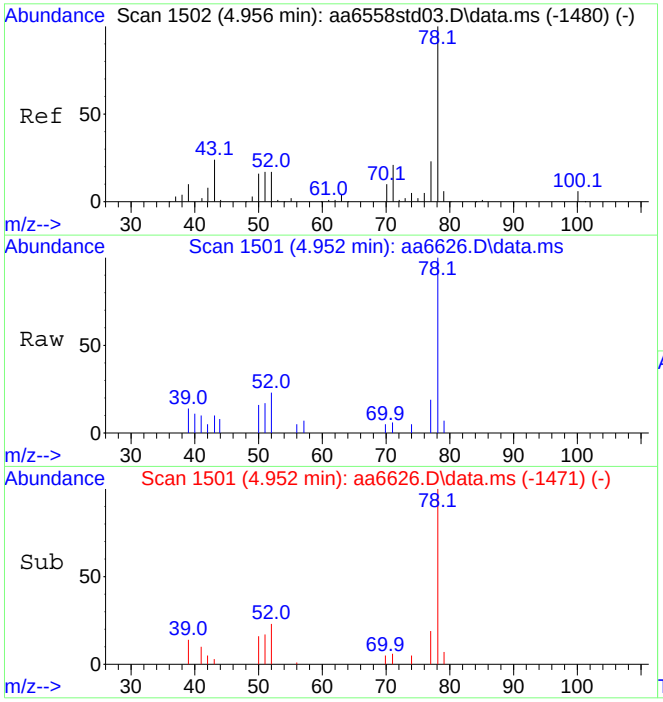


#35
Methyl ethyl ketone
Concen: 3.82 ppbV
RT: 4.711 min Scan# 1426
Delta R.T. 0.003 min
Lab File: aa6626.D
Acq: 4 Jun 2024 3:12 pm

Tgt Ion: 43 Resp: 276033

Ion	Ratio	Lower	Upper
43	100		
72	25.0	19.5	29.3

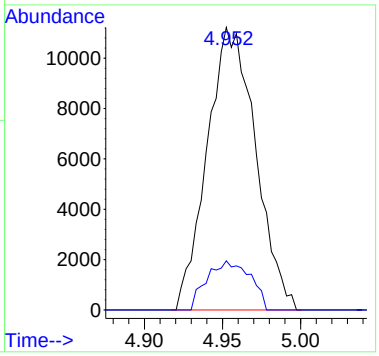


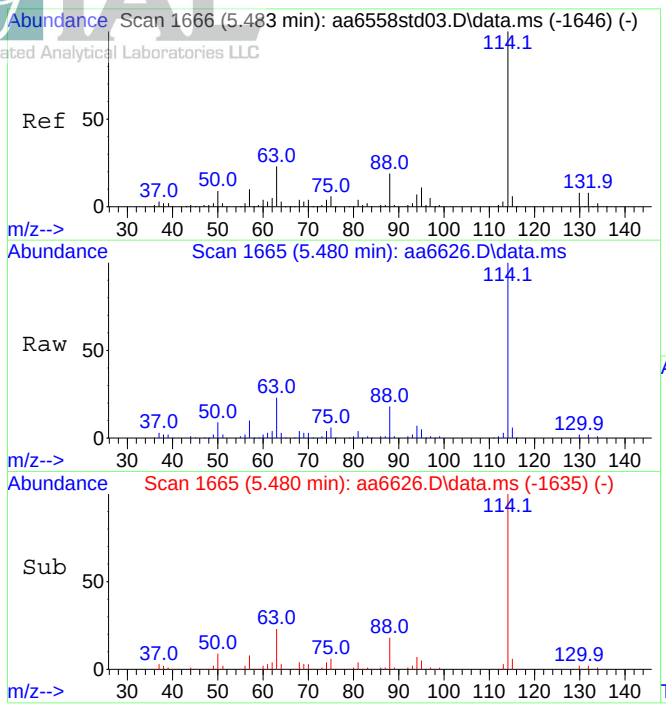


#37
Benzene
Concen: 0.23 ppbV
RT: 4.952 min Scan# 1501
Delta R.T. -0.003 min
Lab File: aa6626.D
Acq: 4 Jun 2024 3:12 pm

Tgt Ion: 78 Resp: 24189

Ion	Ratio	Lower	Upper
78	100		
51	15.4	14.9	22.3

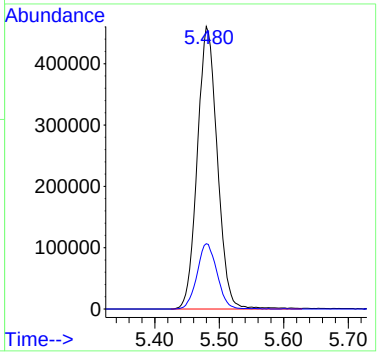


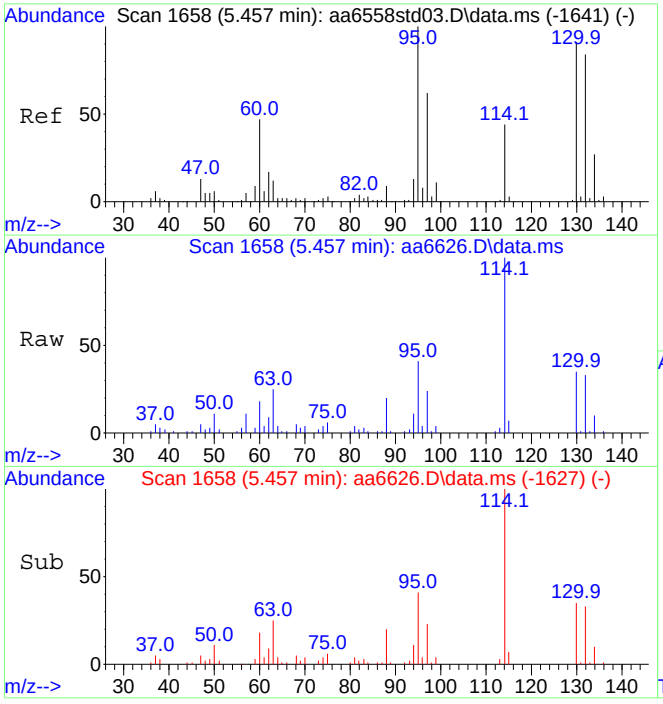


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.480 min Scan# 1665
Delta R.T. -0.003 min
Lab File: aa6626.D
Acq: 4 Jun 2024 3:12 pm

Tgt Ion:114 Resp: 990976

Ion	Ratio	Lower	Upper
114	100		
63	23.1	3.6	43.6

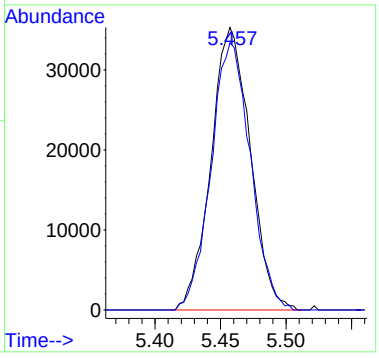


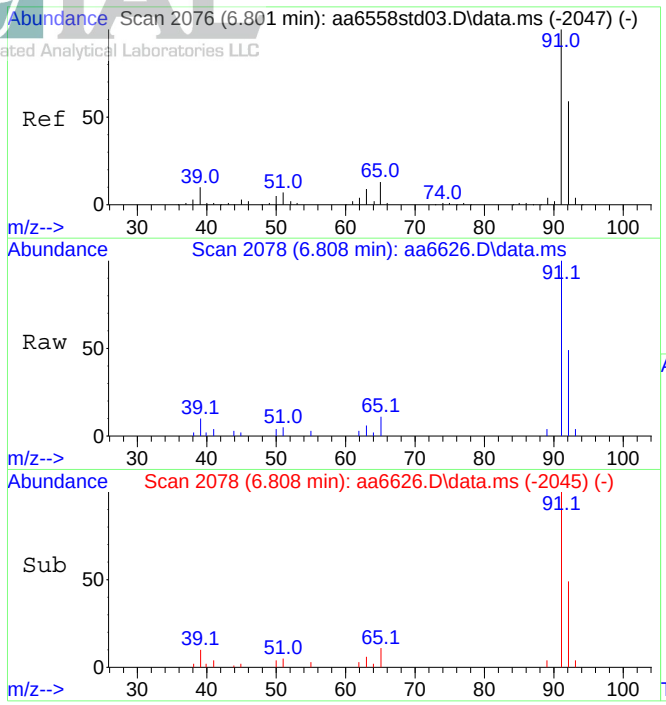


#40
Trichloroethene
Concen: 1.64 ppbV
RT: 5.457 min Scan# 1658
Delta R.T. -0.000 min
Lab File: aa6626.D
Acq: 4 Jun 2024 3:12 pm

Tgt Ion:130 Resp: 73706

Ion	Ratio	Lower	Upper
130	100		
132	94.7	76.6	114.8

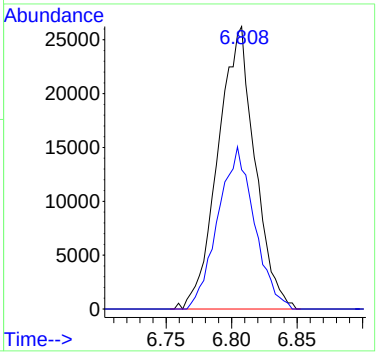


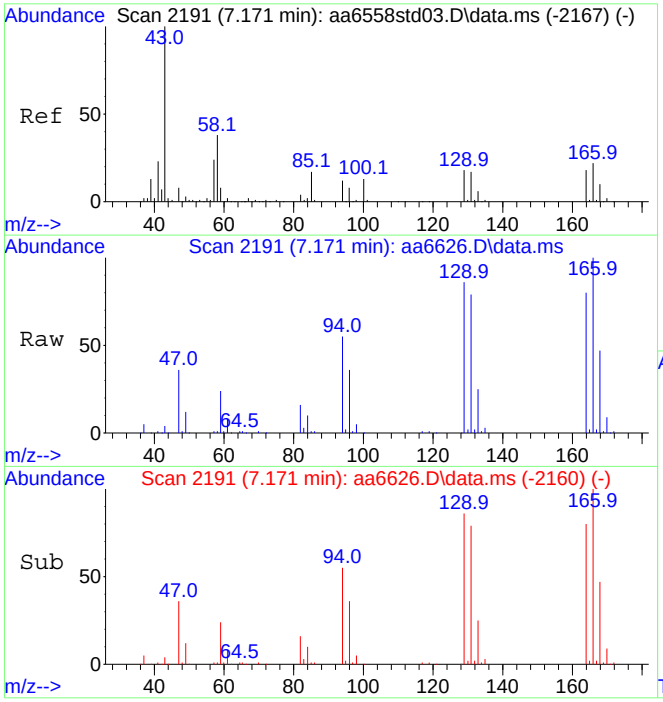


#47
Toluene
Concen: 0.40 ppbV
RT: 6.808 min Scan# 2078
Delta R.T. 0.006 min
Lab File: aa6626.D
Acq: 4 Jun 2024 3:12 pm

Tgt Ion: 91 Resp: 51364

Ion	Ratio	Lower	Upper
91	100		
92	56.7	47.0	70.6

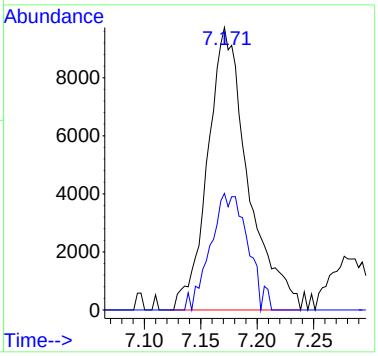


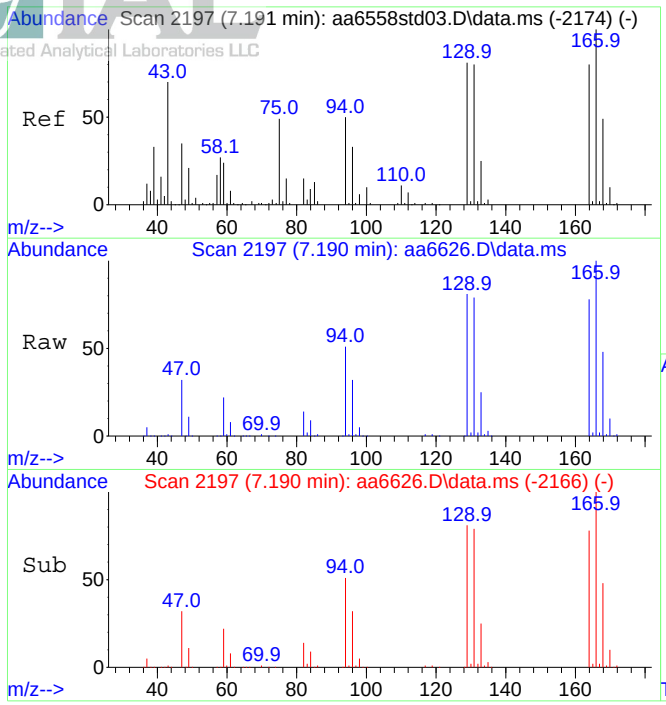


#48
Methyl isobutyl ketone
Concen: 0.26 ppbV
RT: 7.171 min Scan# 2191
Delta R.T. -0.000 min
Lab File: aa6626.D
Acq: 4 Jun 2024 3:12 pm

Tgt Ion: 43 Resp: 24198

Ion	Ratio	Lower	Upper
43	100		
58	38.0	31.0	46.4

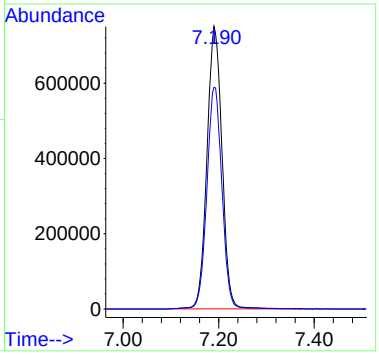


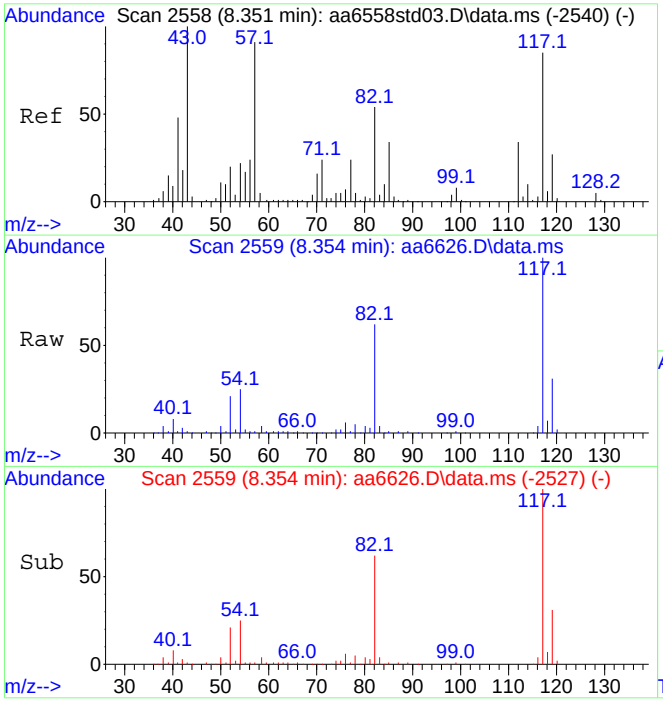


#49
Tetrachloroethene
Concen: 34.00 ppbV
RT: 7.190 min Scan# 2197
Delta R.T. -0.000 min
Lab File: aa6626.D
Acq: 4 Jun 2024 3:12 pm

Tgt Ion:166 Resp: 1634242

Ion	Ratio	Lower	Upper
166	100		
164	79.2	62.8	94.2

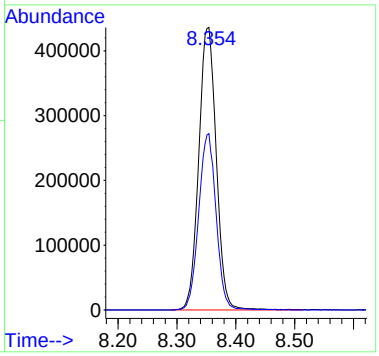


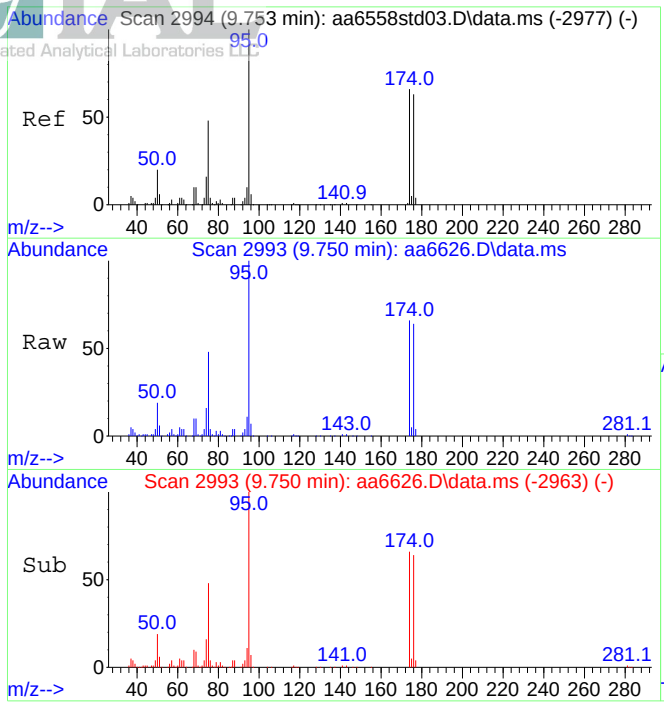


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.354 min Scan# 2559
Delta R.T. 0.003 min
Lab File: aa6626.D
Acq: 4 Jun 2024 3:12 pm

Tgt Ion:117 Resp: 903992

Ion	Ratio	Lower	Upper
117	100		
82	61.9	42.3	82.3

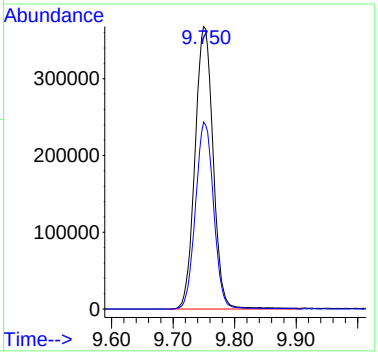




#64
Bromofluorobenzene (tune std)
Concen: 8.83 ppbV
RT: 9.750 min Scan# 2993
Delta R.T. -0.003 min
Lab File: aa6626.D
Acq: 4 Jun 2024 3:12 pm

Tgt Ion: 95 Resp: 754859

Ion	Ratio	Lower	Upper
95	100		
174	66.1	52.9	79.3



Volatile Organic Compounds by EPA Method TO-15
Summary of Results

Lab ID:	E24-01875-04	Instrument ID:	AA
Client ID:	SG-7	GC/MS Column:	RTX-1, 0.32 mmID
Date Sampled:	05/30/2024 19:20	Injection Volmue:	50ml, 10ml
Date Received:	05/31/2024	Matrix:	Air-Other
Date Analyzed:	06/04/2024 16:47, 06/04/2024 19:03	% Moisture:	NA
Data File:	AA6629, AA6633	Dilution Factor:	10, 50
Summa ID:	2159	Analyst:	J. Walukiewicz

			Concentration Reported		Reporting Limits	
Compound	**CAS #**	**Q**	**ppbv**	**ug/m3**	**ppbv**	**ug/m3**
Acetone	67-64-1	D	81	190	2.0	4.8
Benzene	71-43-2	D	2.6	8.3	2.0	6.4
Bromodichloromethane	75-27-4		ND	ND	2.0	13
Bromoform	75-25-2		ND	ND	2.0	21
Bromomethane	74-83-9		ND	ND	2.0	7.8
1,3-Butadiene	106-99-0		ND	ND	2.0	4.4
Chlorobenzene	108-90-7		ND	ND	2.0	9.2
Chloroethane	75-00-3		ND	ND	2.0	5.3
Chloroform	67-66-3		ND	ND	2.0	9.8
Chloromethane	74-87-3		ND	ND	2.0	4.1
Carbon disulfide	75-15-0	D	5.1	16	2.0	6.2
Carbon tetrachloride	56-23-5		ND	ND	0.40	2.5
Cyclohexane	110-82-7		ND	ND	2.0	6.9
Dibromochloromethane	124-48-1		ND	ND	2.0	17
1,2-Dibromoethane	106-93-4		ND	ND	2.0	15
1,2-Dichlorobenzene	95-50-1		ND	ND	2.0	12
1,3-Dichlorobenzene	541-73-1		ND	ND	2.0	12
1,4-Dichlorobenzene	106-46-7		ND	ND	2.0	12
Dichlorodifluoromethane	75-71-8		ND	ND	2.0	9.9
1,1-Dichloroethane	75-34-3		ND	ND	2.0	8.1
1,2-Dichloroethane	107-06-2		ND	ND	2.0	8.1
1,1-Dichloroethene	75-35-4		ND	ND	2.0	7.9
1,2-Dichloroethene (cis)	156-59-2		ND	ND	2.0	7.9
1,2-Dichloroethene (trans)	156-60-5		ND	ND	2.0	7.9
1,2-Dichloropropane	78-87-5		ND	ND	2.0	9.2
1,3-Dichloropropene (cis)	10061-01-5		ND	ND	2.0	9.1
1,3-Dichloropropene (trans)	10061-02-6		ND	ND	2.0	9.1
1,2-Dichlorotetrafluoroethane	76-14-2		ND	ND	2.0	14
1,4-Dioxane	123-91-1	D	3.1	11	2.0	7.2
Ethylbenzene	100-41-4		ND	ND	2.0	8.7
n-Heptane	142-82-5		ND	ND	2.0	8.2
1,3-Hexachlorobutadiene	87-68-3		ND	ND	2.0	21
n-Hexane	110-54-3		ND	ND	2.0	7.0
Methylene chloride	75-09-2		ND	ND	2.0	6.9
Methyl ethyl ketone	78-93-3	D	8.5	25	2.0	5.9
Methyl isobutyl ketone	108-10-1		ND	ND	2.0	8.2
Methyl tert-butyl ether	1634-04-4		ND	ND	2.0	7.2
Styrene	100-42-5		ND	ND	2.0	8.5
Tert-butyl alcohol	75-65-0	D	8.6	26	2.0	6.1
1,1,2,2-Tetrachloroethane	79-34-5		ND	ND	2.0	14
Tetrachloroethene	127-18-4	D	930	6300	10	68
Toluene	108-88-3	D	3.0	11	2.0	7.5
1,2,4-Trichlorobenzene	120-82-1		ND	ND	2.0	15
1,1,1-Trichloroethane	71-55-6		ND	ND	2.0	11
1,1,2-Trichloroethane	79-00-5		ND	ND	2.0	11

Qualifiers:
D = Dilution required

INTEGRATED ANALYTICAL LABORATORIES, LLC
Integrated Analytical Laboratories LLC

Volatile Organic Compounds by EPA Method TO-15
Summary of Results

Lab ID:	E24-01875-04	Instrument ID:	AA
Client ID:	SG-7	GC/MS Column:	RTX-1, 0.32 mmID
Date Sampled:	05/30/2024 19:20	Injection Volmue:	50ml, 10ml
Date Received:	05/31/2024	Matrix:	Air-Other
Date Analyzed:	06/04/2024 16:47, 06/04/2024 19:03	% Moisture:	NA
Data File:	AA6629, AA6633	Dilution Factor:	10, 50
Summa ID:	2159	Analyst:	J. Walukiewicz

			Concentration Reported		Reporting Limits	
Compound	**CAS #**	**Q**	**ppbv**	**ug/m3**	**ppbv**	**ug/m3**
Trichloroethene	79-01-6	D	2.6	14	0.46	2.5
Trichlorofluoromethane	75-69-4		ND	ND	2.0	11
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1		ND	ND	2.0	15
1,2,4-Trimethylbenzene	95-63-6		ND	ND	2.0	9.8
1,3,5-Trimethylbenzene	108-67-8		ND	ND	2.0	9.8
2,2,4-Trimethylpentane	540-84-1		ND	ND	2.0	9.3
Vinyl bromide	593-60-2		ND	ND	2.0	8.7
Vinyl chloride	75-01-4		ND	ND	2.0	5.1
Xylenes (m&p)	179601-23-1		ND	ND	2.0	8.7
Xylenes (o)	95-47-6		ND	ND	2.0	8.7

Qualifiers:
D = Dilution required

Data Path : C:\DATA\2024\06-2024\06-04-2024\
Data File : aa6629.D
Acq On : 4 Jun 2024 4:47 pm
Operator : jjw
Sample : E24-01875-04x10 dil
Misc : 2159, 50cc
ALS Vial : 10 Sample Multiplier: 1

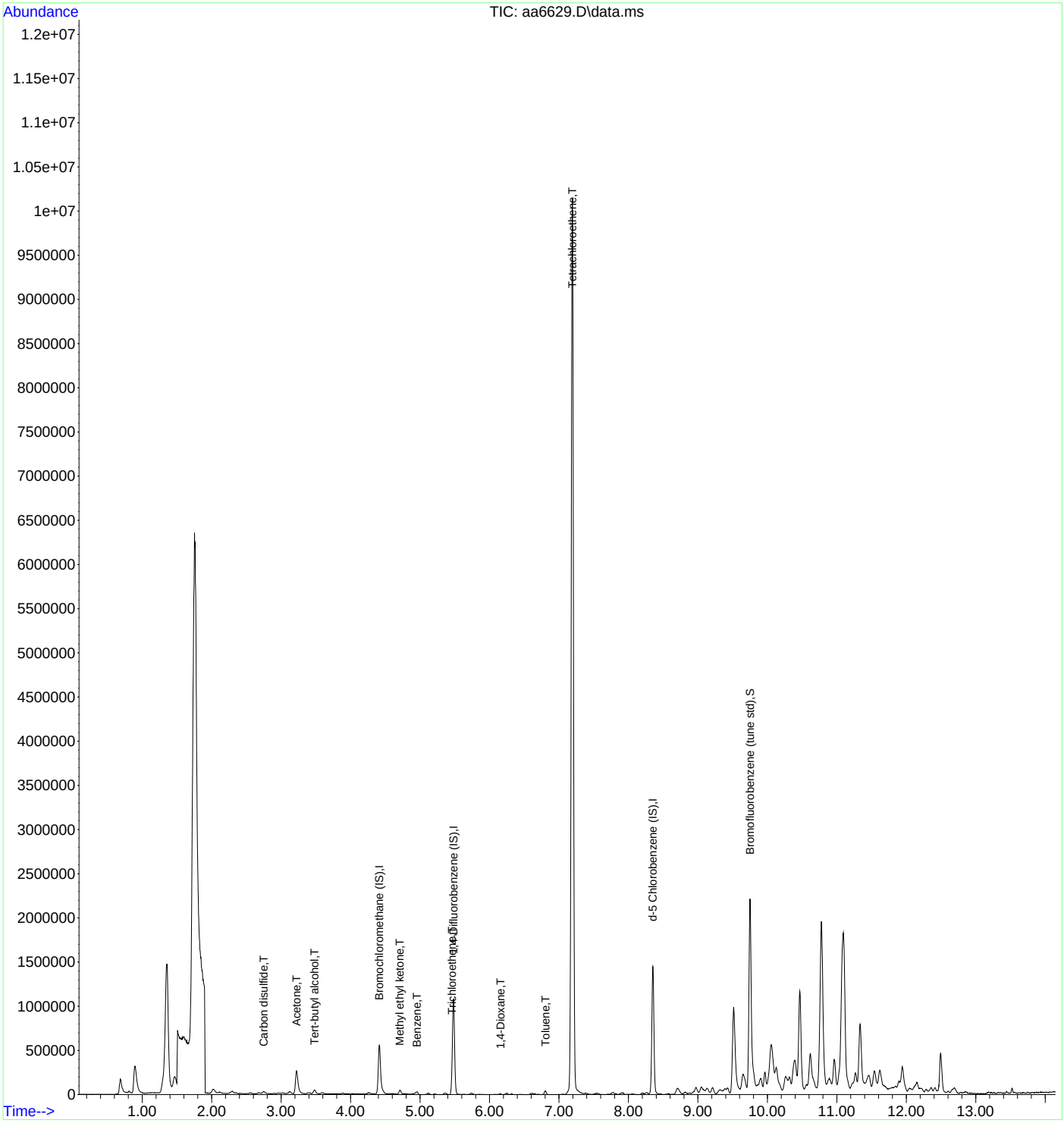
Quant Time: Jun 04 17:02:14 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

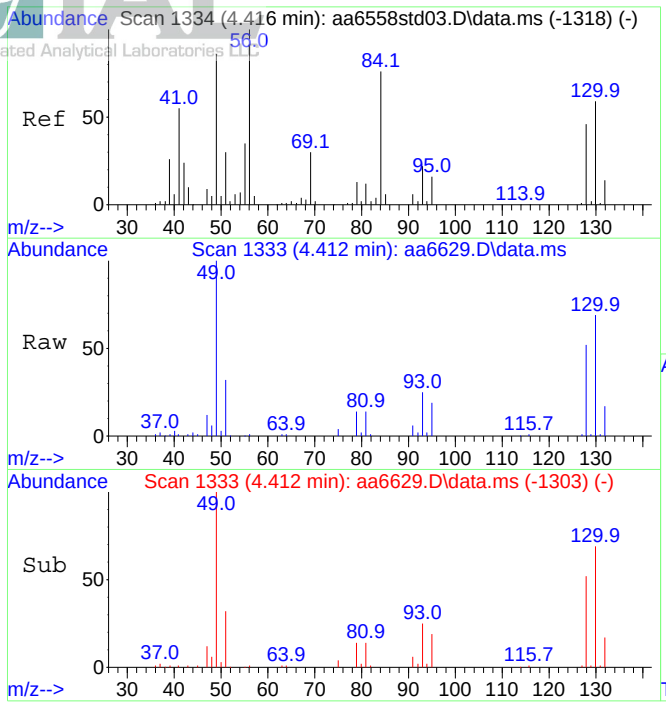
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.412	130	229629	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.483	114	960698	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.351	117	877544	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.753	95	767162	9.24	ppbV	0.000
Target Compounds						Qvalue
15) Carbon disulfide	2.750	76	49104	0.51	ppbV	# 82
21) Acetone	3.222	43	415959	8.07	ppbV	99
26) Tert-butyl alcohol	3.480	59	61756	0.86	ppbV	100
35) Methyl ethyl ketone	4.708	43	61805	0.85	ppbV	98
37) Benzene	4.955	78	27168	0.26	ppbV	98
40) Trichloroethene	5.460	130	11112	0.26	ppbV	97
45) 1,4-Dioxane	6.161	88	7125	0.31	ppbV	96
47) Toluene	6.807	91	36644	0.30	ppbV	98
49) Tetrachloroethene	7.193	166	3486662	74.84	ppbV	100

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

Data Path : C:\DATA\2024\06-2024\06-04-2024\
Data File : aa6629.D
Acq On : 4 Jun 2024 4:47 pm
Operator : jjw
Sample : E24-01875-04x10 dil
Misc : 2159, 50cc
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 04 17:02:14 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

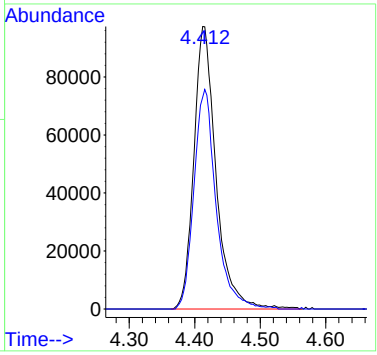


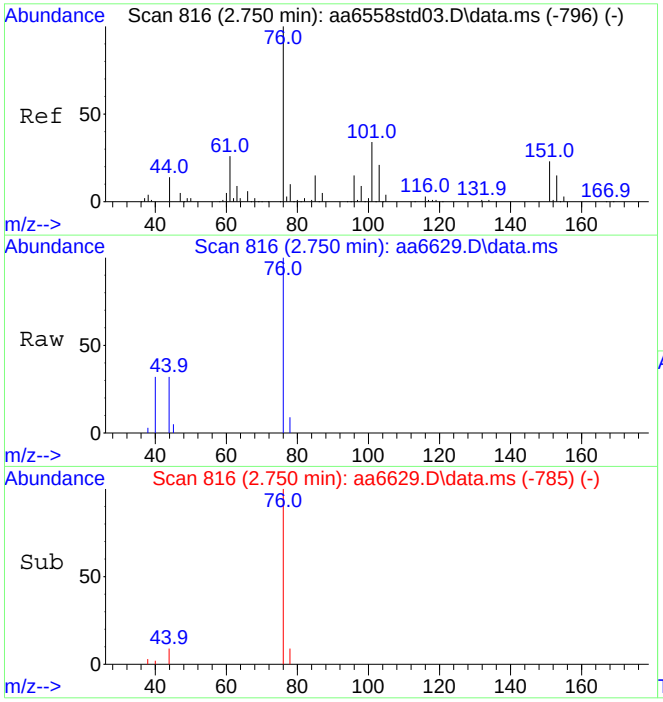


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.412 min Scan# 1333
Delta R.T. -0.004 min
Lab File: aa6629.D
Acq: 4 Jun 2024 4:47 pm

Tgt Ion:130 Resp: 229629

Ion	Ratio	Lower	Upper
130	100		
128	77.8	57.8	97.8

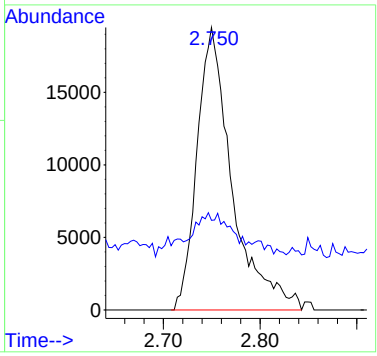


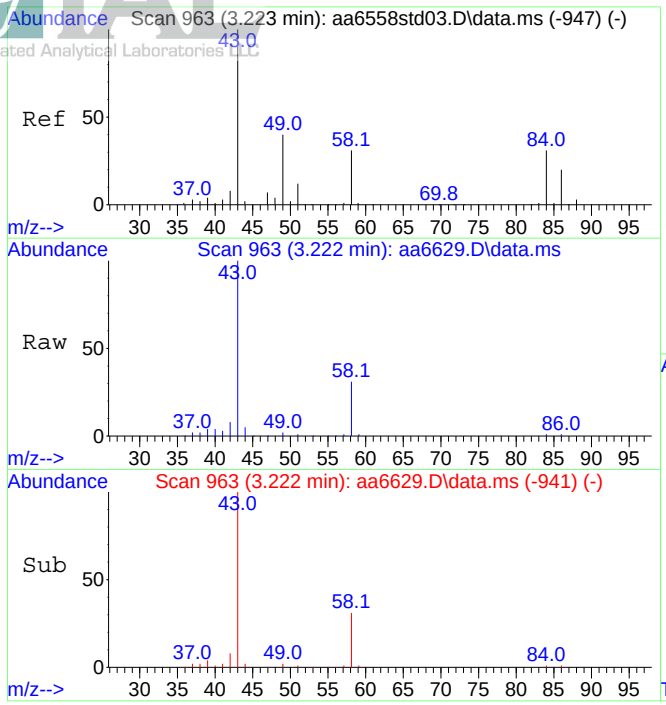


#15
Carbon disulfide
Concen: 0.51 ppbV
RT: 2.750 min Scan# 816
Delta R.T. -0.001 min
Lab File: aa6629.D
Acq: 4 Jun 2024 4:47 pm

Tgt Ion: 76 Resp: 49104

Ion	Ratio	Lower	Upper
76	100		
44	20.5	10.6	16.0#

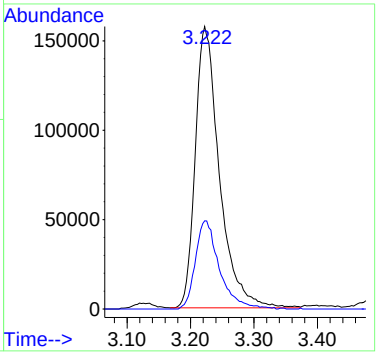


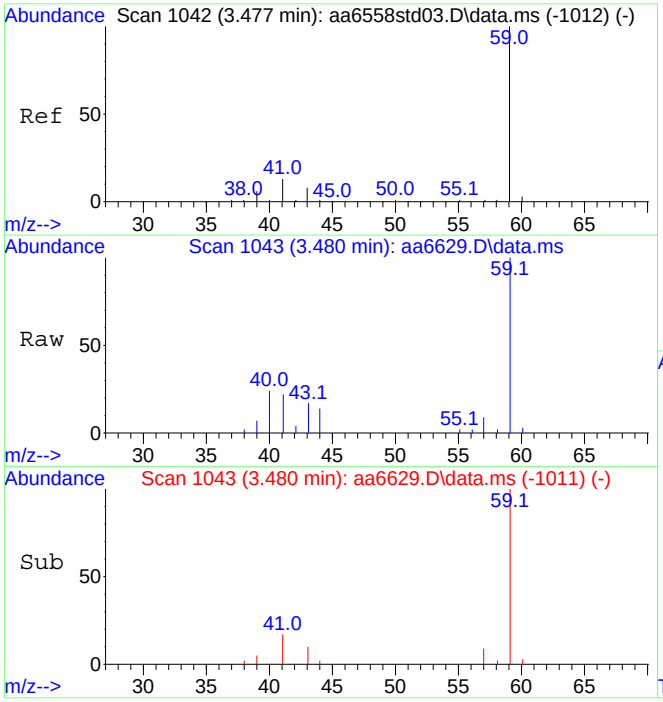


#21
Acetone
Concen: 8.07 ppbV
RT: 3.222 min Scan# 963
Delta R.T. -0.001 min
Lab File: aa6629.D
Acq: 4 Jun 2024 4:47 pm

Tgt Ion: 43 Resp: 415959

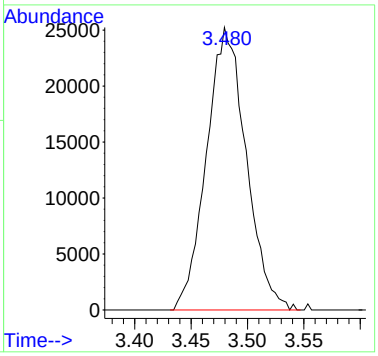
Ion	Ratio	Lower	Upper
43	100		
58	31.3	25.4	38.0

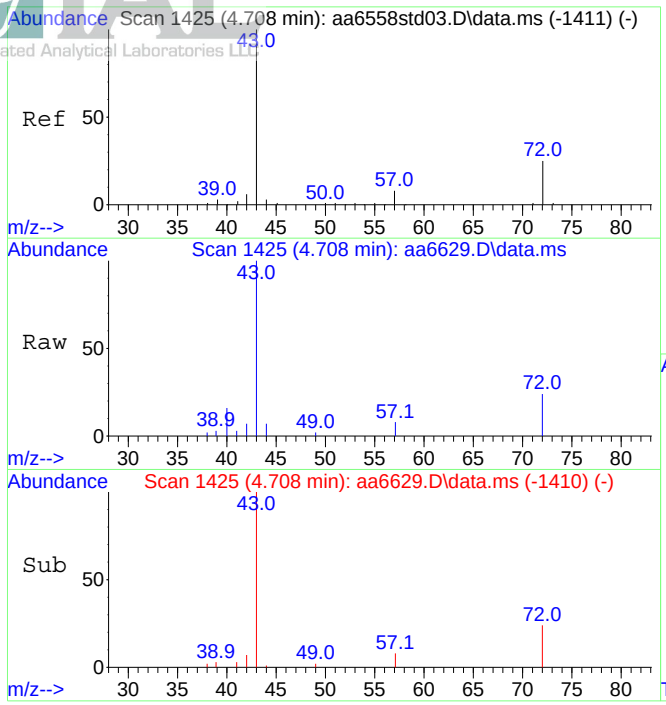




#26
Tert-butyl alcohol
Concen: 0.86 ppbV
RT: 3.480 min Scan# 1043
Delta R.T. 0.003 min
Lab File: aa6629.D
Acq: 4 Jun 2024 4:47 pm

Tgt Ion: 59 Resp: 61756

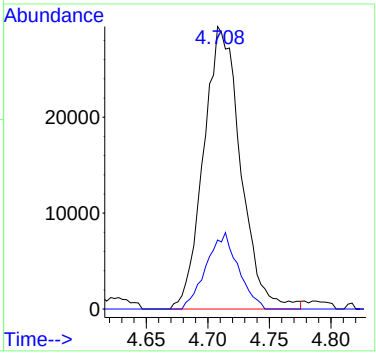


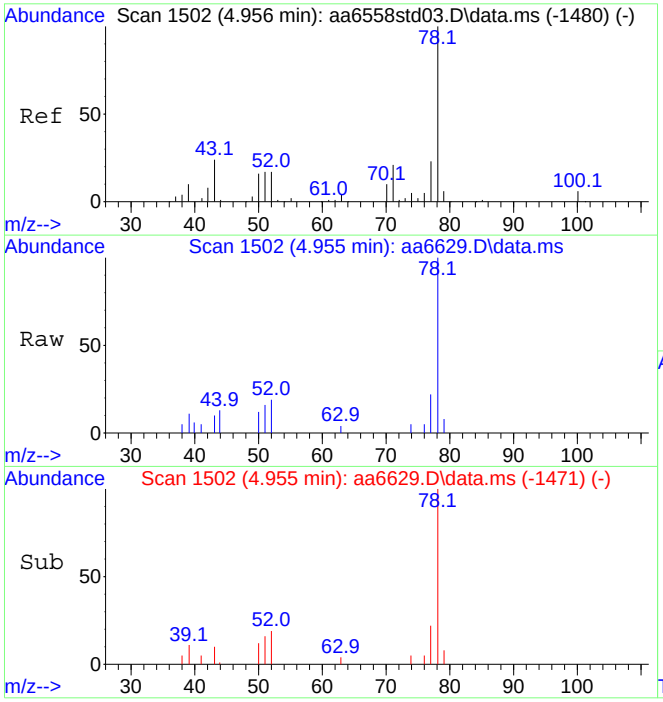


#35
Methyl ethyl ketone
Concen: 0.85 ppbV
RT: 4.708 min Scan# 1425
Delta R.T. -0.000 min
Lab File: aa6629.D
Acq: 4 Jun 2024 4:47 pm

Tgt Ion: 43 Resp: 61805

Ion	Ratio	Lower	Upper
43	100		
72	23.2	19.5	29.3

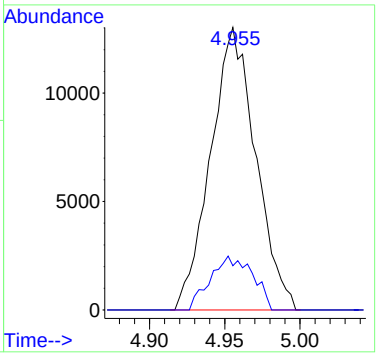


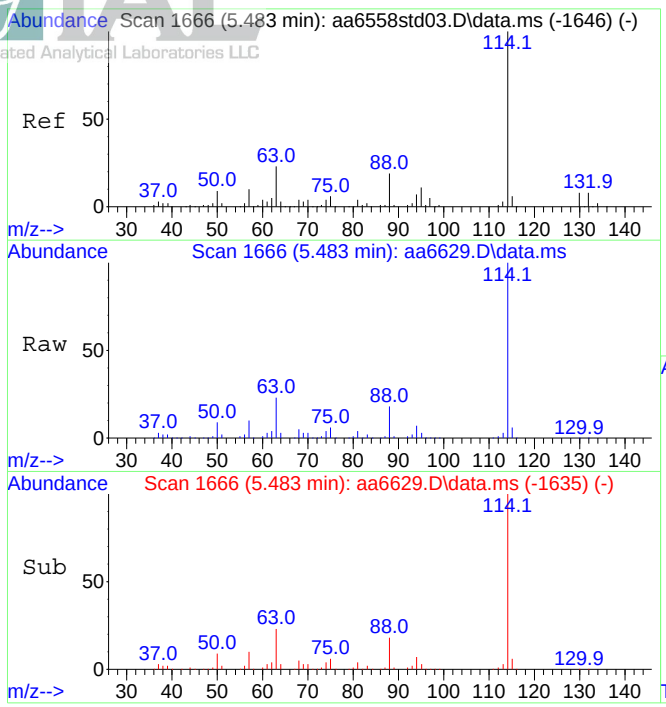


#37
Benzene
Concen: 0.26 ppbV
RT: 4.955 min Scan# 1502
Delta R.T. -0.001 min
Lab File: aa6629.D
Acq: 4 Jun 2024 4:47 pm

Tgt Ion: 78 Resp: 27168

Ion	Ratio	Lower	Upper
78	100		
51	17.8	14.9	22.3

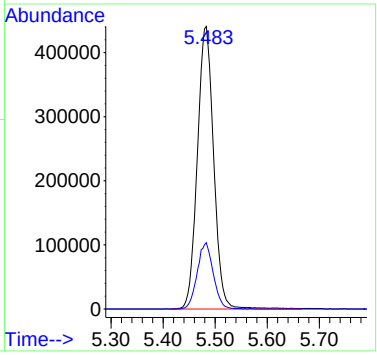


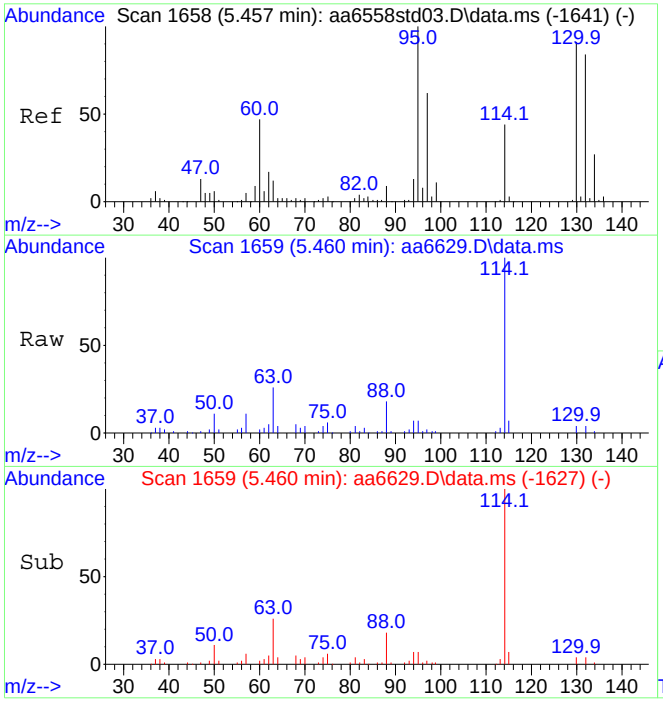


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.483 min Scan# 1666
Delta R.T. -0.000 min
Lab File: aa6629.D
Acq: 4 Jun 2024 4:47 pm

Tgt Ion:114 Resp: 960698

Ion	Ratio	Lower	Upper
114	100		
63	23.0	3.6	43.6

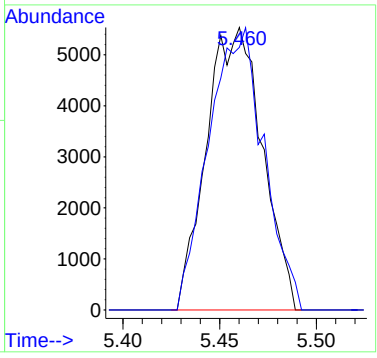


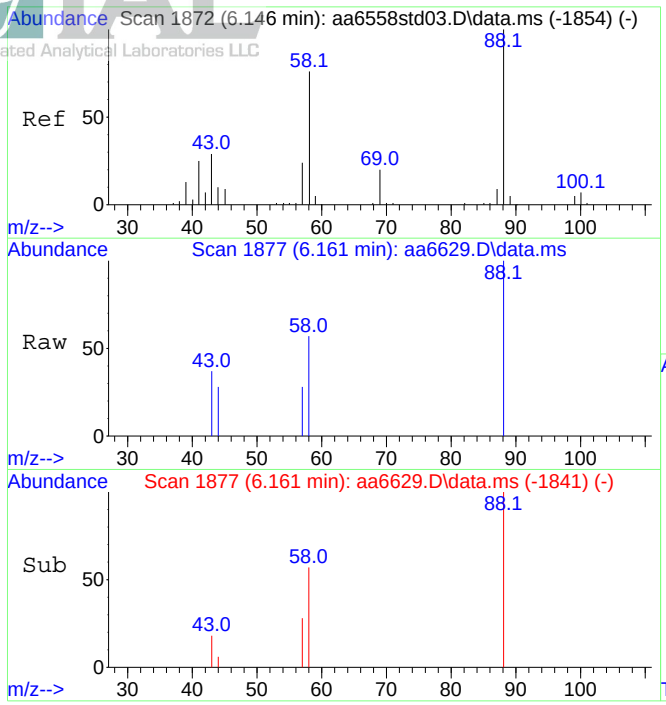


#40
Trichloroethene
Concen: 0.26 ppbV
RT: 5.460 min Scan# 1659
Delta R.T. 0.003 min
Lab File: aa6629.D
Acq: 4 Jun 2024 4:47 pm

Tgt Ion:130 Resp: 11112

Ion	Ratio	Lower	Upper
130	100		
132	98.3	76.6	114.8

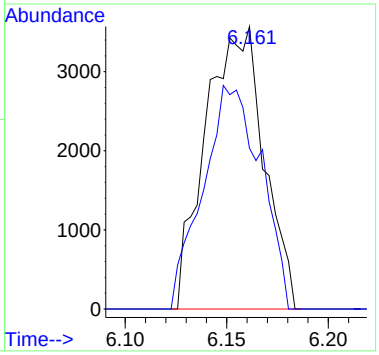


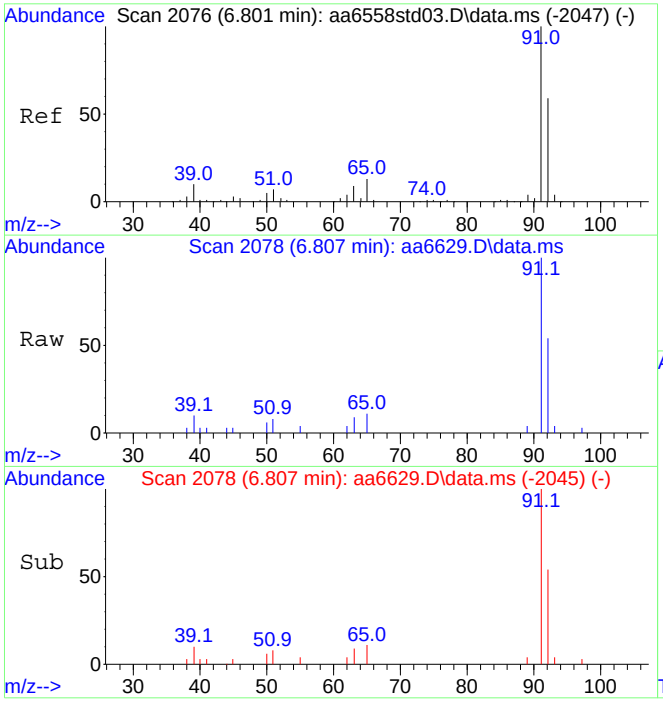


#45
1,4-Dioxane
Concen: 0.31 ppbV
RT: 6.161 min Scan# 1877
Delta R.T. 0.016 min
Lab File: aa6629.D
Acq: 4 Jun 2024 4:47 pm

Tgt Ion: 88 Resp: 7125

Ion	Ratio	Lower	Upper
88	100		
58	78.6	59.9	89.9

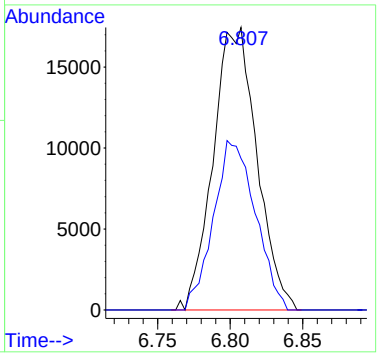


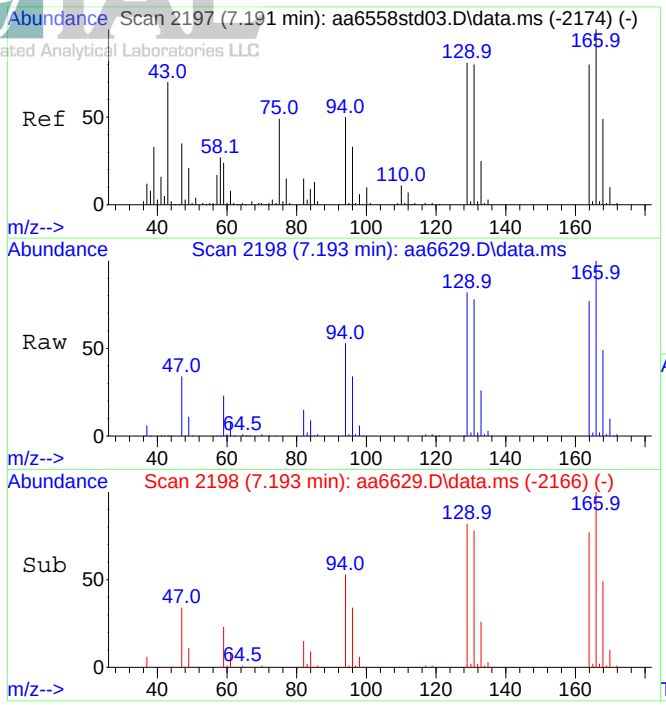


#47
Toluene
Concen: 0.30 ppbV
RT: 6.807 min Scan# 2078
Delta R.T. 0.006 min
Lab File: aa6629.D
Acq: 4 Jun 2024 4:47 pm

Tgt Ion: 91 Resp: 36644

Ion	Ratio	Lower	Upper
91	100		
92	57.4	47.0	70.6

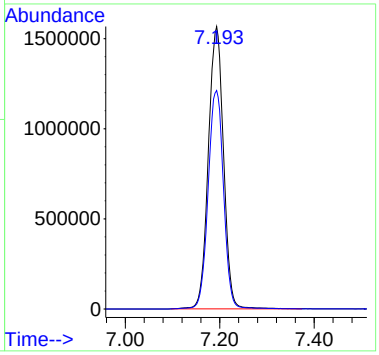


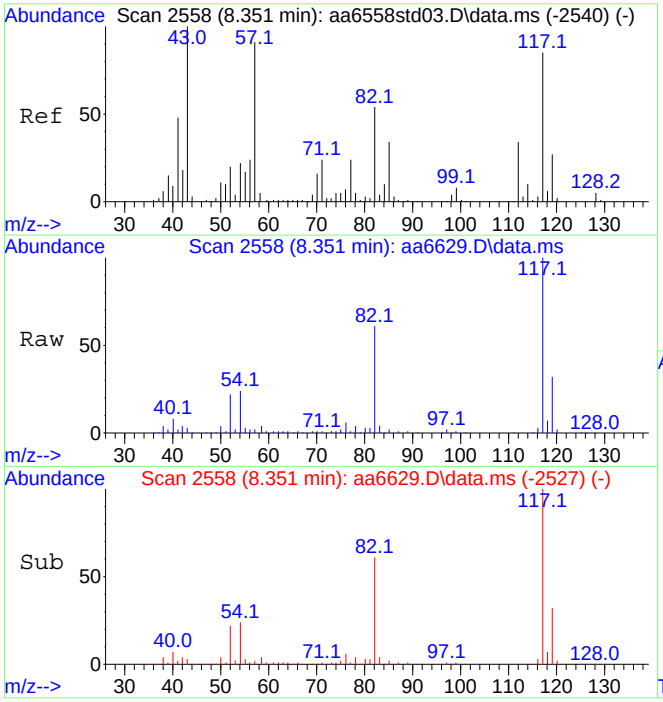


#49
Tetrachloroethene
Concen: 74.84 ppbV
RT: 7.193 min Scan# 2198
Delta R.T. 0.003 min
Lab File: aa6629.D
Acq: 4 Jun 2024 4:47 pm

Tgt Ion:166 Resp: 3486662

Ion	Ratio	Lower	Upper
166	100		
164	78.6	62.8	94.2

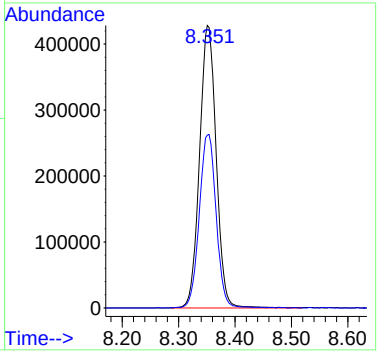


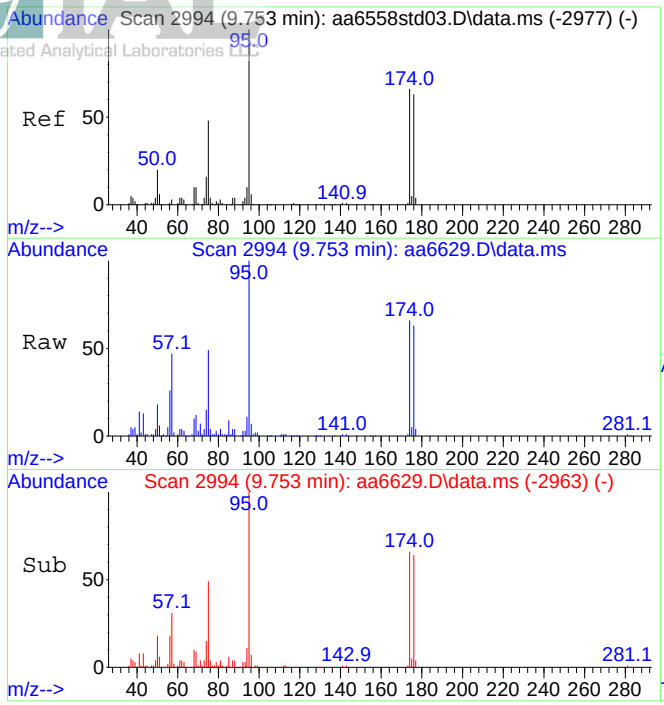


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.351 min Scan# 2558
Delta R.T. -0.001 min
Lab File: aa6629.D
Acq: 4 Jun 2024 4:47 pm

Tgt Ion:117 Resp: 877544

Ion	Ratio	Lower	Upper
117	100		
82	62.2	42.3	82.3

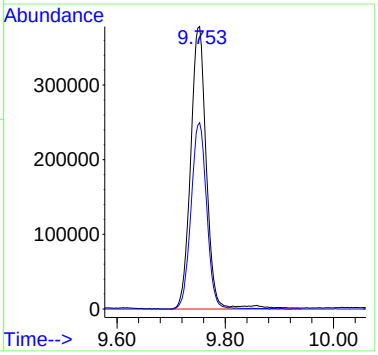




#64
Bromofluorobenzene (tune std)
Concen: 9.24 ppbV
RT: 9.753 min Scan# 2994
Delta R.T. -0.000 min
Lab File: aa6629.D
Acq: 4 Jun 2024 4:47 pm

Tgt Ion: 95 Resp: 767162

Ion	Ratio	Lower	Upper
95	100		
174	65.2	52.9	79.3



Quantitation Report (QT Reviewed)

Data Path : C:\DATA\2024\06-2024\06-04-2024\
Data File : aa6633.D
Acq On : 4 Jun 2024 7:03 pm
Operator : jjw
Sample : E24-01875-04x50 dil
Misc : 2159, 10cc
ALS Vial : 14 Sample Multiplier: 1

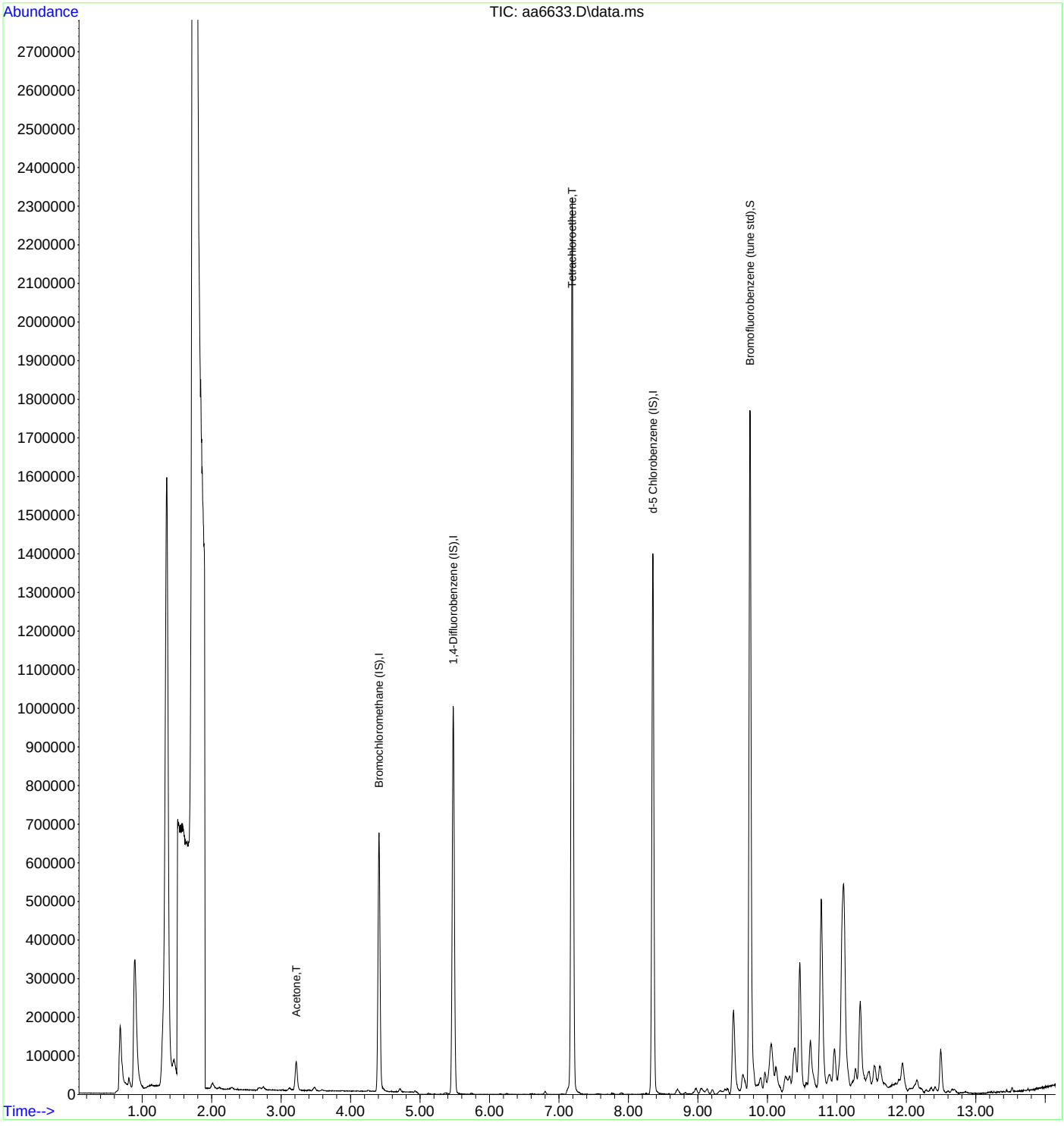
Quant Time: Jun 05 10:08:49 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

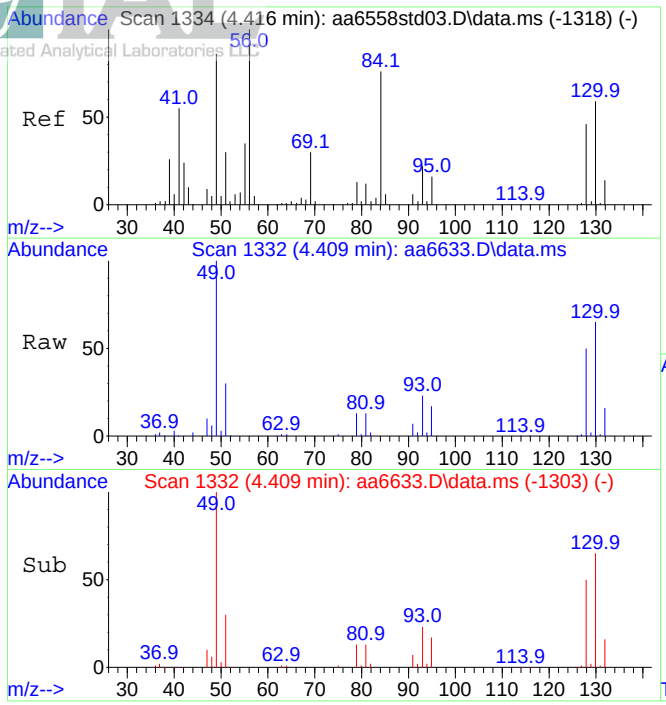
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.409	130	237399	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.480	114	879652	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.354	117	871291	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.750	95	763976	9.27	ppbV	0.000
Target Compounds						Qvalue
21) Acetone	3.219	43	93421	1.75	ppbV	96
49) Tetrachloroethene	7.190	166	792449	18.58	ppbV	100

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

Data Path : C:\DATA\2024\06-2024\06-04-2024\
Data File : aa6633.D
Acq On : 4 Jun 2024 7:03 pm
Operator : jjw
Sample : E24-01875-04x50 dil
Misc : 2159, 10cc
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 05 10:08:49 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

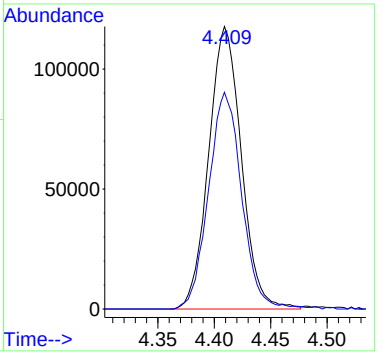


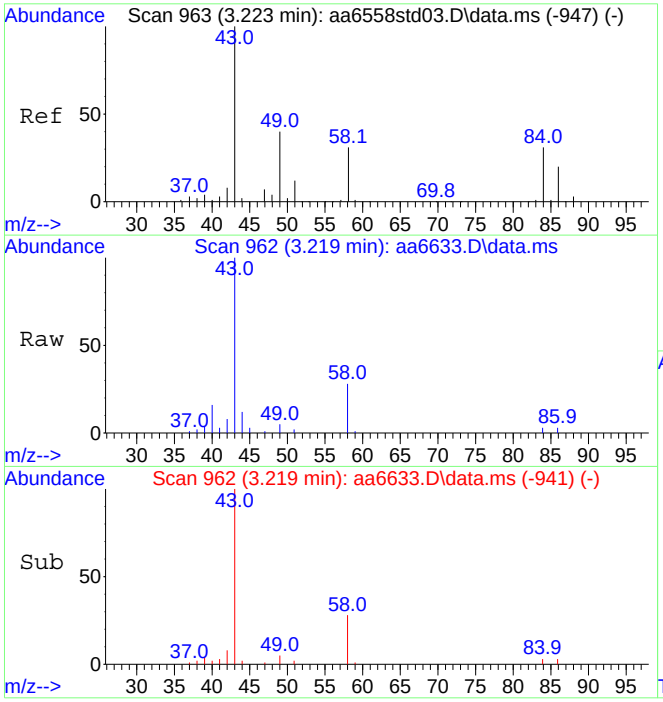


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.409 min Scan# 1332
Delta R.T. -0.007 min
Lab File: aa6633.D
Acq: 4 Jun 2024 7:03 pm

Tgt Ion:130 Resp: 237399

Ion	Ratio	Lower	Upper
130	100		
128	77.8	57.8	97.8

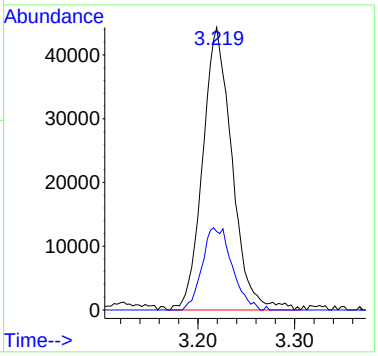


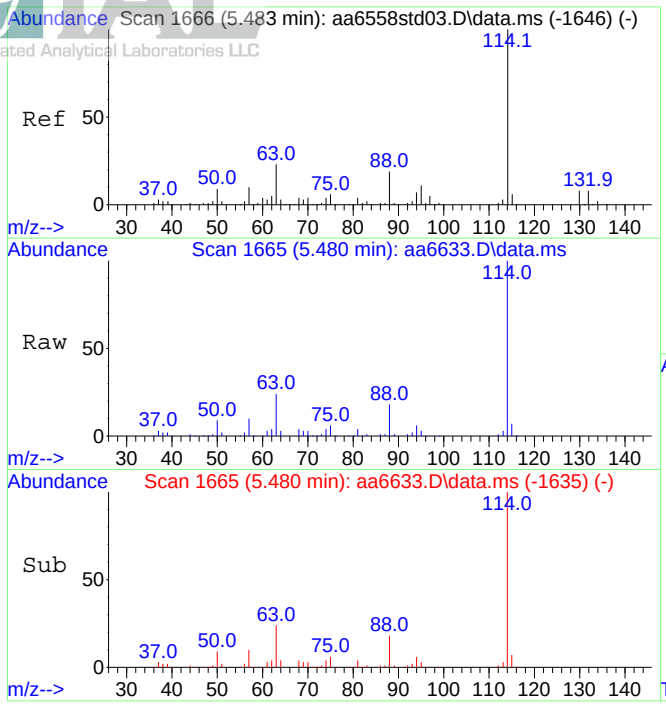


#21
Acetone
Concen: 1.75 ppbV
RT: 3.219 min Scan# 962
Delta R.T. -0.004 min
Lab File: aa6633.D
Acq: 4 Jun 2024 7:03 pm

Tgt Ion: 43 Resp: 93421

Ion	Ratio	Lower	Upper
43	100		
58	29.5	25.4	38.0

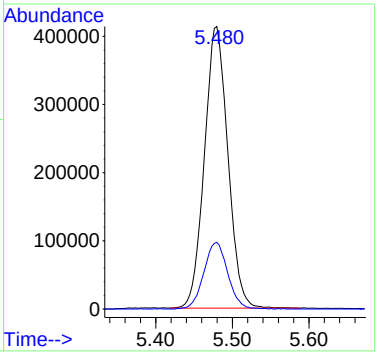


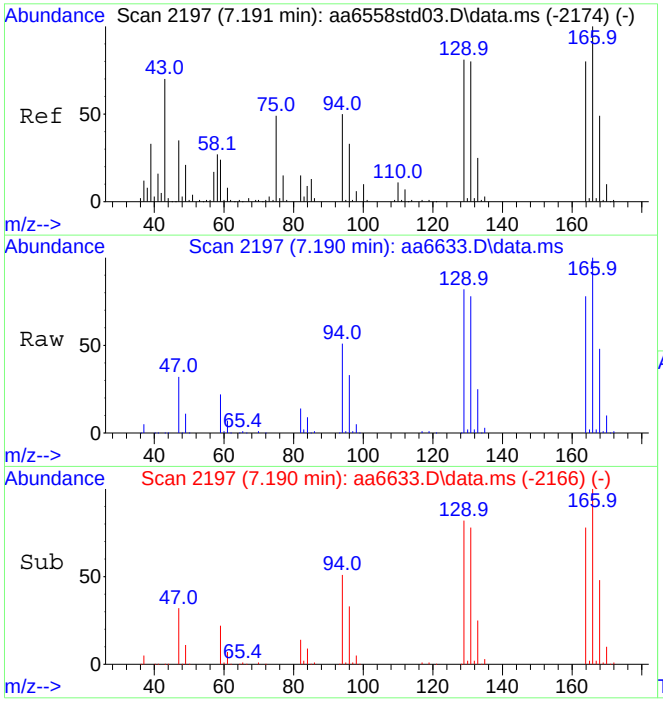


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.480 min Scan# 1665
Delta R.T. -0.003 min
Lab File: aa6633.D
Acq: 4 Jun 2024 7:03 pm

Tgt Ion:114 Resp: 879652

Ion	Ratio	Lower	Upper
114	100		
63	24.1	3.6	43.6

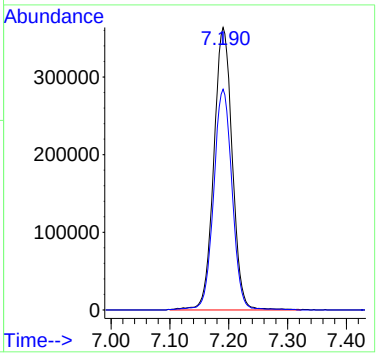


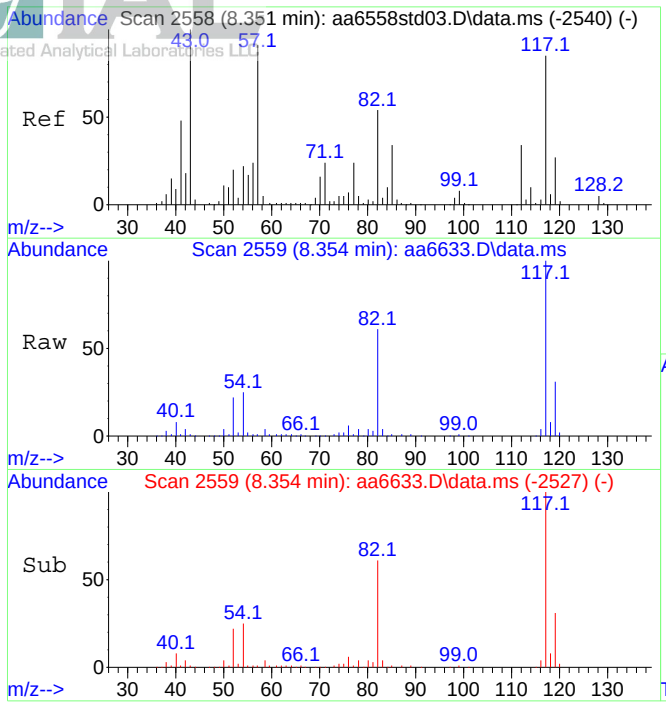


#49
Tetrachloroethene
Concen: 18.58 ppbV
RT: 7.190 min Scan# 2197
Delta R.T. -0.000 min
Lab File: aa6633.D
Acq: 4 Jun 2024 7:03 pm

Tgt Ion:166 Resp: 792449

Ion	Ratio	Lower	Upper
166	100		
164	78.2	62.8	94.2

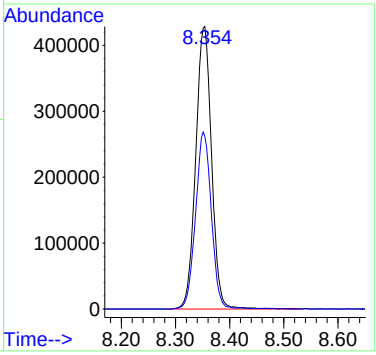


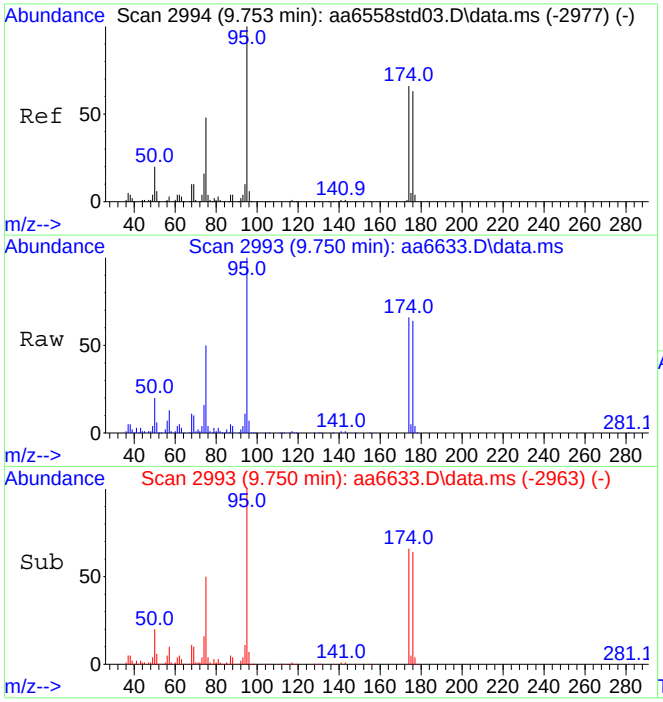


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.354 min Scan# 2559
Delta R.T. 0.003 min
Lab File: aa6633.D
Acq: 4 Jun 2024 7:03 pm

Tgt Ion:117 Resp: 871291

Ion	Ratio	Lower	Upper
117	100		
82	62.5	42.3	82.3

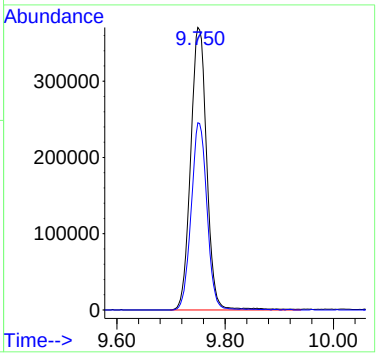




#64
Bromofluorobenzene (tune std)
Concen: 9.27 ppbV
RT: 9.750 min Scan# 2993
Delta R.T. -0.004 min
Lab File: aa6633.D
Acq: 4 Jun 2024 7:03 pm

Tgt Ion: 95 Resp: 763976

Ion	Ratio	Lower	Upper
95	100		
174	64.7	52.9	79.3



Volatile Organic Compounds by EPA Method TO-15
Summary of Results

Lab ID:	E24-01875-05	Instrument ID:	AA
Client ID:	SG-8	GC/MS Column:	RTX-1, 0.32 mmID
Date Sampled:	05/30/2024 19:15	Injection Volmue:	250ml, 50ml
Date Received:	05/31/2024	Matrix:	Air-Other
Date Analyzed:	06/04/2024 20:08, 06/04/2024 15:44	% Moisture:	NA
Data File:	AA6635, AA6627	Dilution Factor:	2, 10
Summa ID:	3806	Analyst:	J. Walukiewicz

			Concentration Reported		Reporting Limits	
Compound	**CAS #**	**Q**	**ppbv**	**ug/m3**	**ppbv**	**ug/m3**
Acetone	67-64-1	D	170	400	2.0	4.8
Benzene	71-43-2	D	1.3	4.2	0.40	1.3
Bromodichloromethane	75-27-4		ND	ND	0.40	2.7
Bromoform	75-25-2		ND	ND	0.40	4.1
Bromomethane	74-83-9		ND	ND	0.40	1.6
1,3-Butadiene	106-99-0		ND	ND	0.40	0.88
Chlorobenzene	108-90-7		ND	ND	0.40	1.8
Chloroethane	75-00-3		ND	ND	0.40	1.1
Chloroform	67-66-3	D	8.0	39	0.40	2.0
Chloromethane	74-87-3		ND	ND	0.40	0.83
Carbon disulfide	75-15-0	D	1.9	5.9	0.40	1.2
Carbon tetrachloride	56-23-5		ND	ND	0.080	0.50
Cyclohexane	110-82-7	D	1.4	4.8	0.40	1.4
Dibromochloromethane	124-48-1		ND	ND	0.40	3.4
1,2-Dibromoethane	106-93-4		ND	ND	0.40	3.1
1,2-Dichlorobenzene	95-50-1		ND	ND	0.40	2.4
1,3-Dichlorobenzene	541-73-1		ND	ND	0.40	2.4
1,4-Dichlorobenzene	106-46-7		ND	ND	0.40	2.4
Dichlorodifluoromethane	75-71-8		ND	ND	0.40	2.0
1,1-Dichloroethane	75-34-3		ND	ND	0.40	1.6
1,2-Dichloroethane	107-06-2		ND	ND	0.40	1.6
1,1-Dichloroethene	75-35-4		ND	ND	0.40	1.6
1,2-Dichloroethene (cis)	156-59-2		ND	ND	0.40	1.6
1,2-Dichloroethene (trans)	156-60-5		ND	ND	0.40	1.6
1,2-Dichloropropane	78-87-5		ND	ND	0.40	1.8
1,3-Dichloropropene (cis)	10061-01-5		ND	ND	0.40	1.8
1,3-Dichloropropene (trans)	10061-02-6		ND	ND	0.40	1.8
1,2-Dichlorotetrafluoroethane	76-14-2		ND	ND	0.40	2.8
1,4-Dioxane	123-91-1		ND	ND	0.40	1.4
Ethylbenzene	100-41-4	D	0.71	3.1	0.40	1.7
n-Heptane	142-82-5	D	1.8	7.6	0.40	1.6
1,3-Hexachlorobutadiene	87-68-3		ND	ND	0.40	4.3
n-Hexane	110-54-3	D	1.7	6.1	0.40	1.4
Methylene chloride	75-09-2		ND	ND	0.40	1.4
Methyl ethyl ketone	78-93-3	D	24	72	0.40	1.2
Methyl isobutyl ketone	108-10-1	D	3.3	13	0.40	1.6
Methyl tert-butyl ether	1634-04-4		ND	ND	0.40	1.4
Styrene	100-42-5	D	0.67	2.9	0.40	1.7
Tert-butyl alcohol	75-65-0	D	8.4	25	0.40	1.2
1,1,2,2-Tetrachloroethane	79-34-5		ND	ND	0.40	2.7
Tetrachloroethene	127-18-4	D	340	2300	2.0	14
Toluene	108-88-3	D	33	120	0.40	1.5
1,2,4-Trichlorobenzene	120-82-1		ND	ND	0.40	3.0
1,1,1-Trichloroethane	71-55-6		ND	ND	0.40	2.2
1,1,2-Trichloroethane	79-00-5		ND	ND	0.40	2.2

Qualifiers:
D = Dilution required

INTEGRATED ANALYTICAL LABORATORIES, LLC
Integrated Analytical Laboratories LLC

Volatile Organic Compounds by EPA Method TO-15
Summary of Results

Lab ID:	E24-01875-05	Instrument ID:	AA
Client ID:	SG-8	GC/MS Column:	RTX-1, 0.32 mmID
Date Sampled:	05/30/2024 19:15	Injection Volmue:	250ml, 50ml
Date Received:	05/31/2024	Matrix:	Air-Other
Date Analyzed:	06/04/2024 20:08, 06/04/2024 15:44	% Moisture:	NA
Data File:	AA6635, AA6627	Dilution Factor:	2, 10
Summa ID:	3806	Analyst:	J. Walukiewicz

			Concentration Reported		Reporting Limits	
Compound	**CAS #**	**Q**	**ppbv**	**ug/m3**	**ppbv**	**ug/m3**
Trichloroethene	79-01-6	D	27	140	0.092	0.49
Trichlorofluoromethane	75-69-4		ND	ND	0.40	2.2
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	D	0.41	3.2	0.40	3.1
1,2,4-Trimethylbenzene	95-63-6	D	1.7	8.2	0.40	2.0
1,3,5-Trimethylbenzene	108-67-8	D	1.0	5.0	0.40	2.0
2,2,4-Trimethylpentane	540-84-1		ND	ND	0.40	1.9
Vinyl bromide	593-60-2		ND	ND	0.40	1.7
Vinyl chloride	75-01-4		ND	ND	0.40	1.0
Xylenes (m&p)	179601-23-1	D	2.4	10	0.40	1.7
Xylenes (o)	95-47-6	D	0.98	4.3	0.40	1.7

Qualifiers:
D = Dilution required

Quantitation Report (QT Reviewed)

Data Path : C:\DATA\2024\06-2024\06-04-2024\
Data File : aa6635.D
Acq On : 4 Jun 2024 8:08 pm
Operator : jjw
Sample : E24-01875-05x2 dil
Misc : 3806, 250cc
ALS Vial : 16 Sample Multiplier: 1

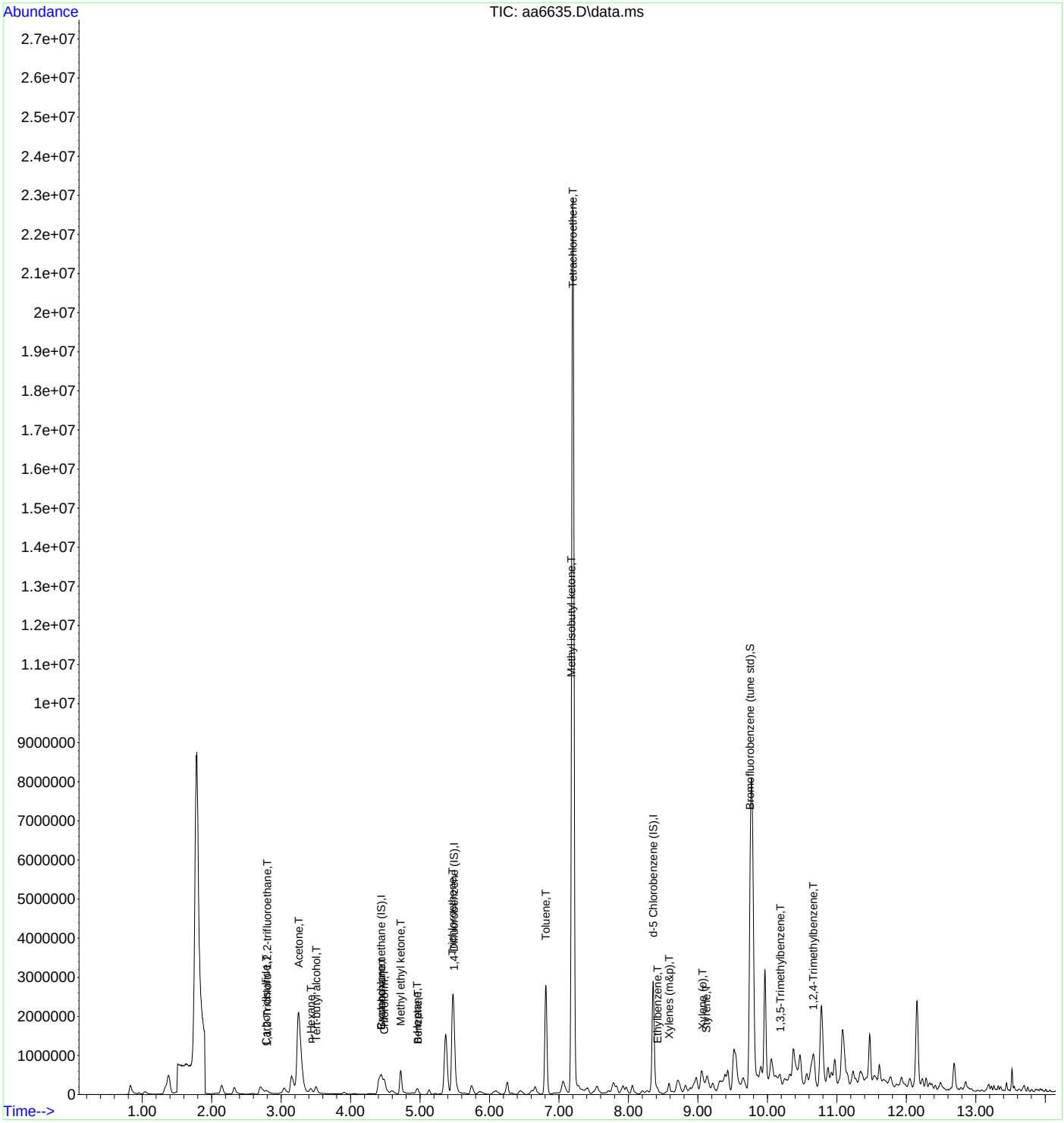
Quant Time: Jun 05 10:15:03 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

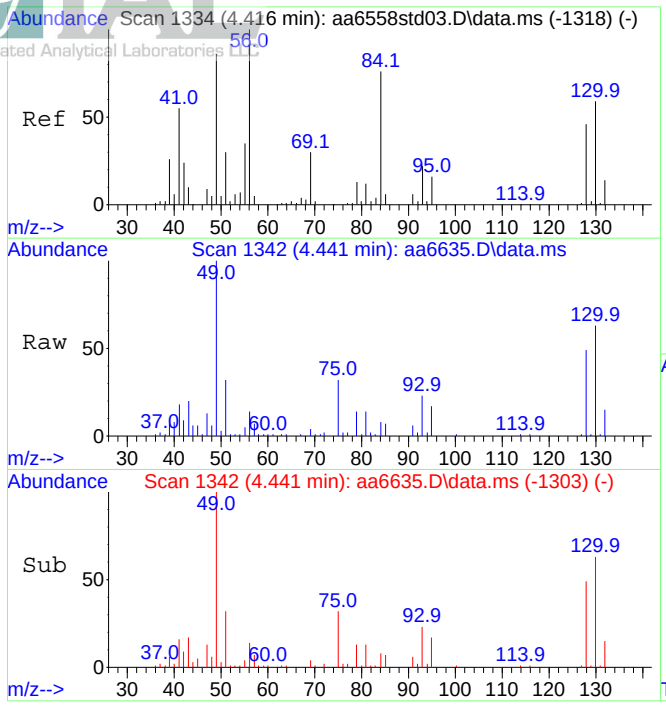
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.441	130	217623	10.00	ppbV	0.025
39) 1,4-Difluorobenzene (IS)	5.489	114	1166624	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.357	117	1065939	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.753	95	1083819	10.75	ppbV	0.000
Target Compounds						Qvalue
15) Carbon disulfide	2.785	76	86754	0.94	ppbV	# 62
16) 1,1,2-Trichloro-1,2,2-...	2.801	101	14055	0.21	ppbV	97
21) Acetone	3.255	43	4399866	90.10	ppbV	99
24) n-Hexane	3.428	57	72555	0.87	ppbV	93
26) Tert-butyl alcohol	3.506	59	284614	4.18	ppbV	100
29) Cyclohexane	4.444	56	38927	0.70	ppbV	97
30) Chloroform	4.486	83	278675	4.01	ppbV	92
35) Methyl ethyl ketone	4.724	43	844063	12.20	ppbV	100
36) n-Heptane	4.959	43	60449	0.92	ppbV	93
37) Benzene	4.968	78	64948	0.66	ppbV	97
40) Trichloroethene	5.467	130	709376	13.45	ppbV	100
47) Toluene	6.811	91	2465254	16.51	ppbV	100
48) Methyl isobutyl ketone	7.177	43	179604	1.64	ppbV	89
49) Tetrachloroethene	7.200	166	8278849	146.33	ppbV	99
58) Ethylbenzene	8.422	91	74723	0.36	ppbV	99
59) Xylenes (m&p)	8.586	91	185889	1.18	ppbV	99
60) Xylene (o)	9.068	91	81896	0.49	ppbV	92
61) Styrene	9.123	104	37187	0.34	ppbV	98
69) 1,3,5-Trimethylbenzene	10.190	105	97457	0.50	ppbV	99
70) 1,2,4-Trimethylbenzene	10.660	105	162875	0.84	ppbV	99

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

Data Path : C:\DATA\2024\06-2024\06-04-2024\
Data File : aa6635.D
Acq On : 4 Jun 2024 8:08 pm
Operator : jjw
Sample : E24-01875-05x2 dil
Misc : 3806, 250cc
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jun 05 10:15:03 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

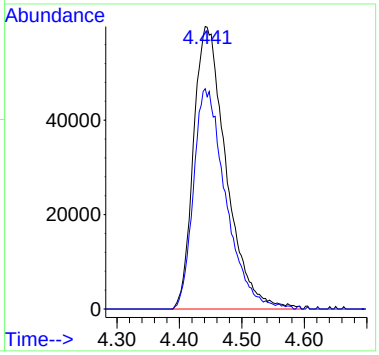


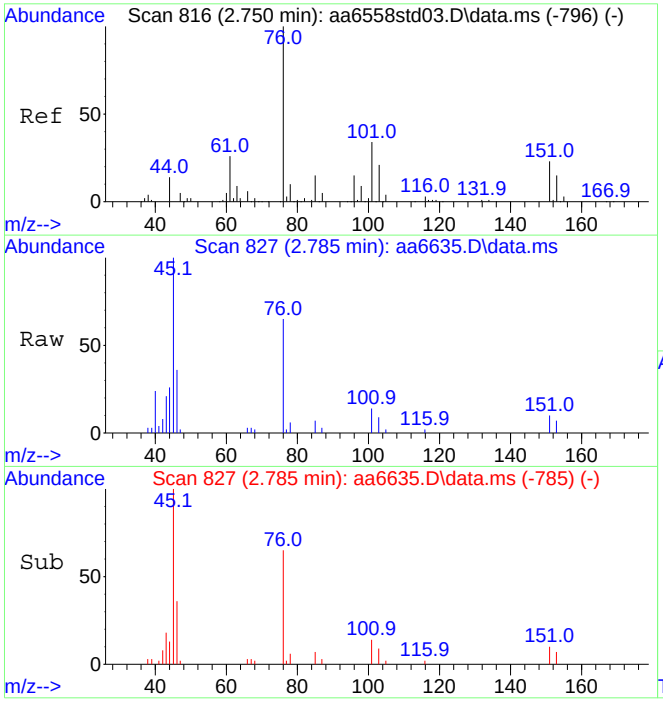


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.441 min Scan# 1342
Delta R.T. 0.025 min
Lab File: aa6635.D
Acq: 4 Jun 2024 8:08 pm

Tgt Ion:130 Resp: 217623

Ion	Ratio	Lower	Upper
130	100		
128	77.1	57.8	97.8

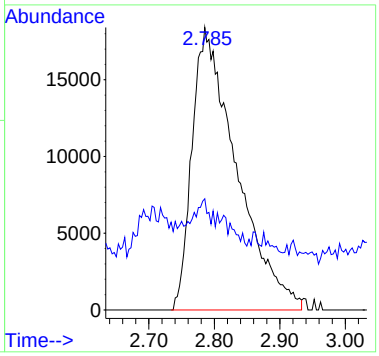


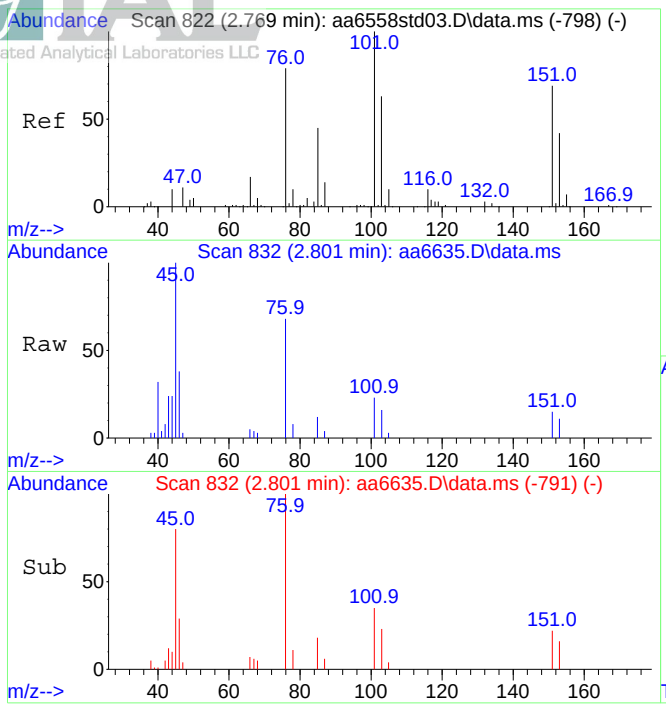


#15
Carbon disulfide
Concen: 0.94 ppbV
RT: 2.785 min Scan# 827
Delta R.T. 0.035 min
Lab File: aa6635.D
Acq: 4 Jun 2024 8:08 pm

Tgt Ion: 76 Resp: 86754

Ion	Ratio	Lower	Upper
76	100		
44	28.7	10.6	16.0#

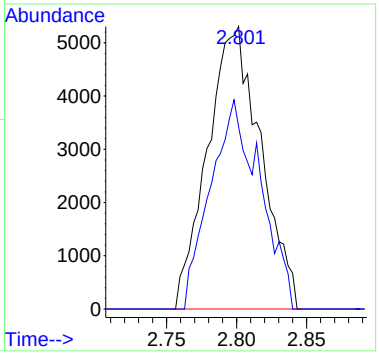


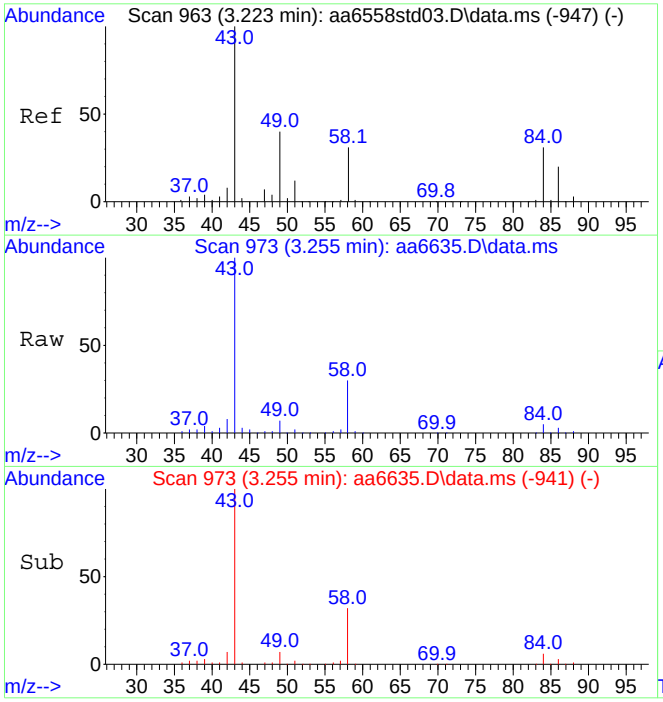


#16
1,1,2-Trichloro-1,2,2-trifluoroethane
Concen: 0.21 ppbV
RT: 2.801 min Scan# 832
Delta R.T. 0.032 min
Lab File: aa6635.D
Acq: 4 Jun 2024 8:08 pm

Tgt Ion:101 Resp: 14055

Ion	Ratio	Lower	Upper
101	100		
151	68.9	57.0	85.6

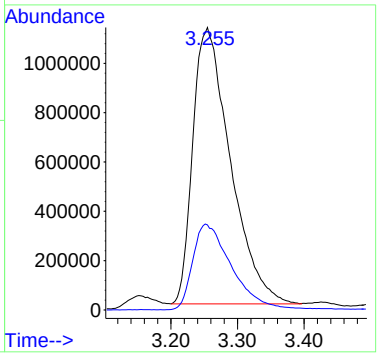


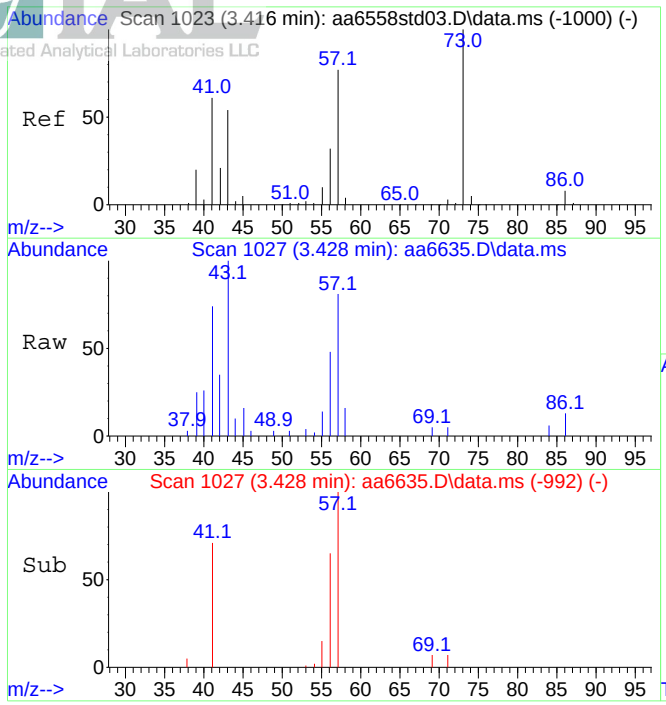


#21
Acetone
Concen: 90.10 ppbV
RT: 3.255 min Scan# 973
Delta R.T. 0.032 min
Lab File: aa6635.D
Acq: 4 Jun 2024 8:08 pm

Tgt Ion: 43 Resp: 4399866

Ion	Ratio	Lower	Upper
43	100		
58	32.0	25.4	38.0

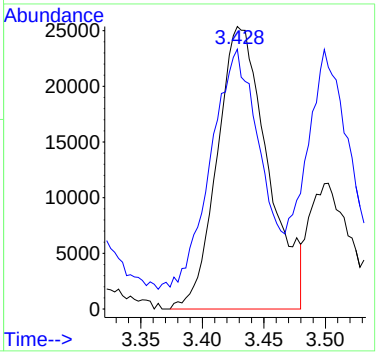


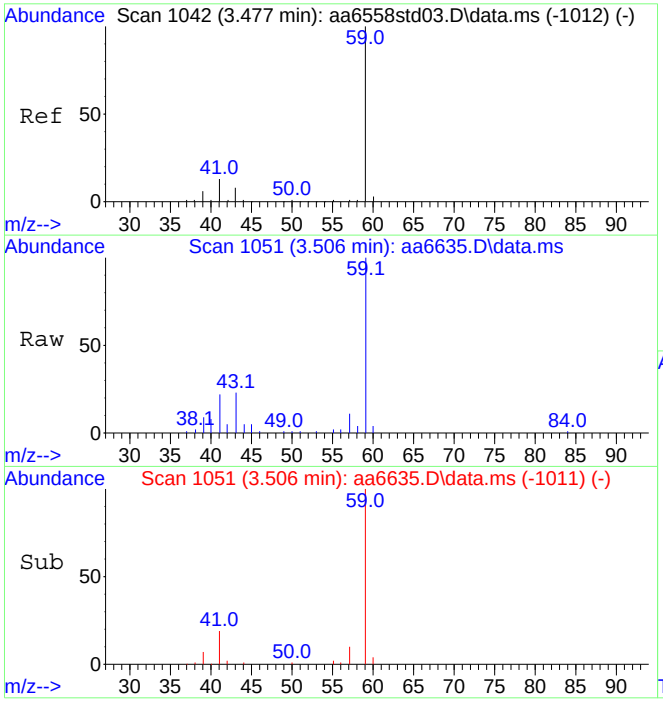


#24
n-Hexane
Concen: 0.87 ppbV
RT: 3.428 min Scan# 1027
Delta R.T. 0.012 min
Lab File: aa6635.D
Acq: 4 Jun 2024 8:08 pm

Tgt Ion: 57 Resp: 72555

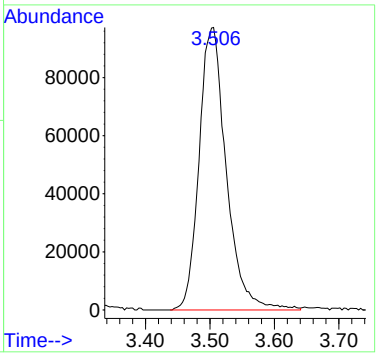
Ion	Ratio	Lower	Upper
57	100		
41	83.2	71.6	107.4

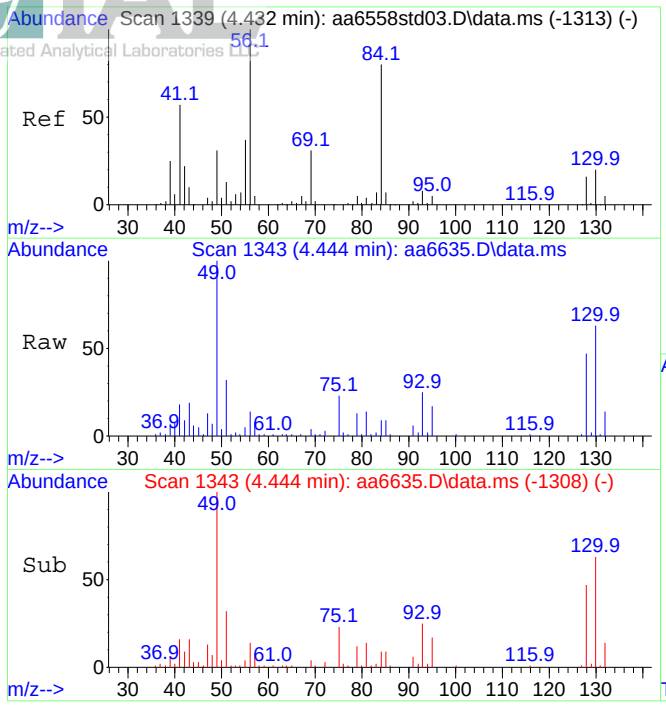




#26
Tert-butyl alcohol
Concen: 4.18 ppbV
RT: 3.506 min Scan# 1051
Delta R.T. 0.029 min
Lab File: aa6635.D
Acq: 4 Jun 2024 8:08 pm

Tgt Ion: 59 Resp: 284614

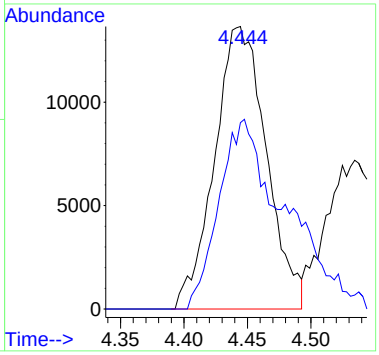


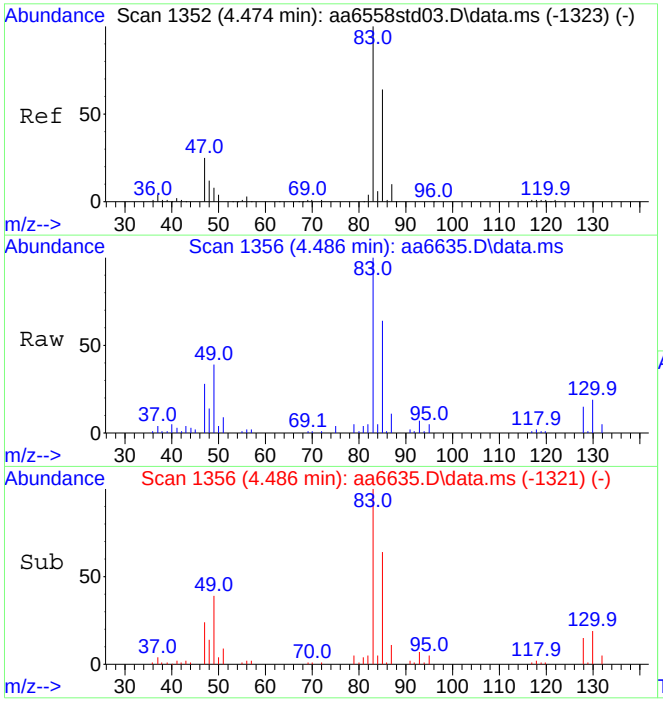


#29
Cyclohexane
Concen: 0.70 ppbV
RT: 4.444 min Scan# 1343
Delta R.T. 0.013 min
Lab File: aa6635.D
Acq: 4 Jun 2024 8:08 pm

Tgt Ion: 56 Resp: 38927

Ion	Ratio	Lower	Upper
56	100		
84	86.4	66.8	100.2

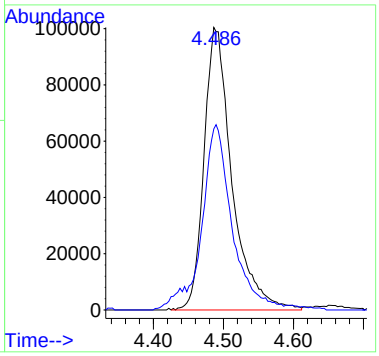


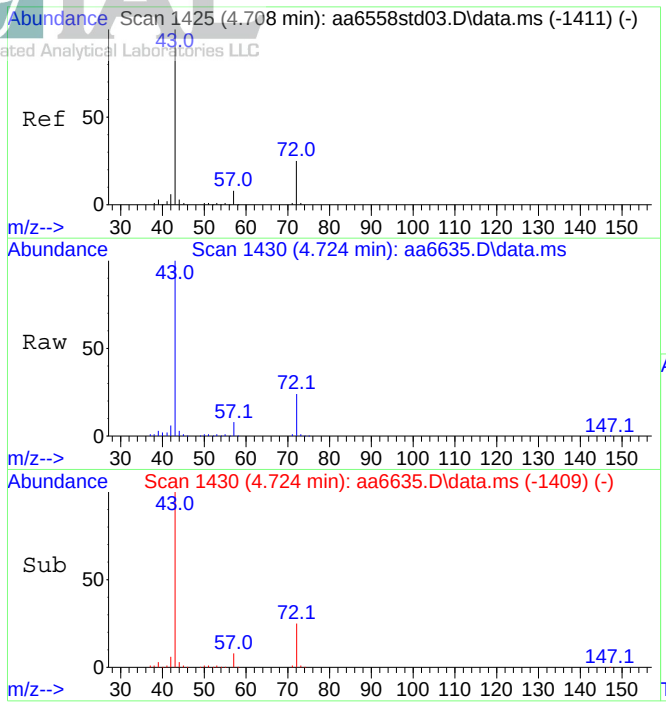


#30
Chloroform
Concen: 4.01 ppbV
RT: 4.486 min Scan# 1356
Delta R.T. 0.013 min
Lab File: aa6635.D
Acq: 4 Jun 2024 8:08 pm

Tgt Ion: 83 Resp: 278675

Ion	Ratio	Lower	Upper
83	100		
85	72.3	52.6	79.0

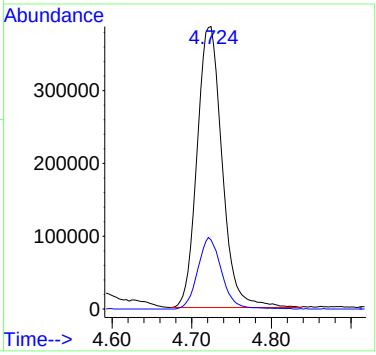


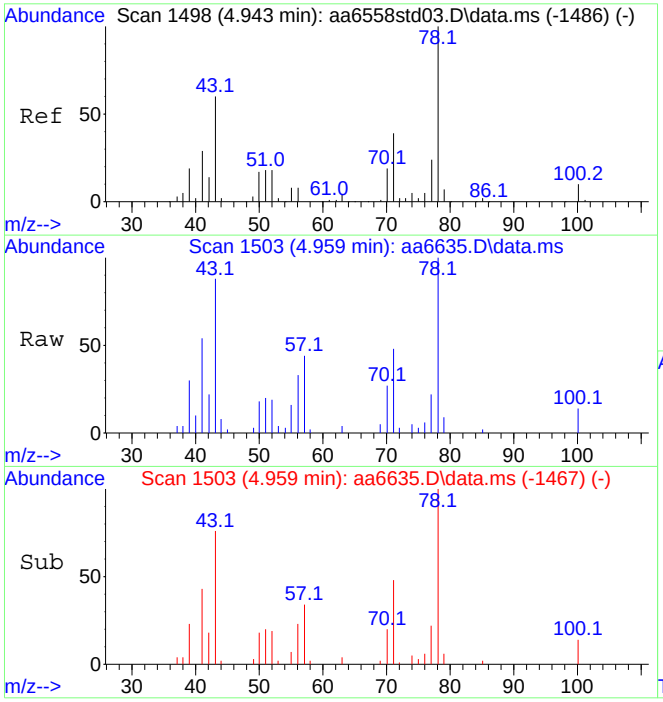


#35
Methyl ethyl ketone
Concen: 12.20 ppbV
RT: 4.724 min Scan# 1430
Delta R.T. 0.016 min
Lab File: aa6635.D
Acq: 4 Jun 2024 8:08 pm

Tgt Ion: 43 Resp: 844063

Ion	Ratio	Lower	Upper
43	100		
72	24.3	19.5	29.3

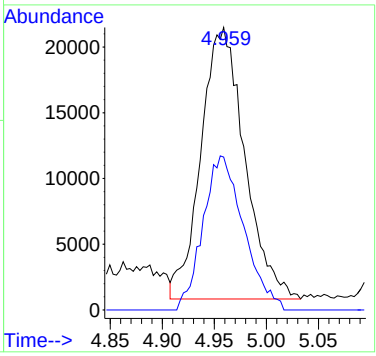


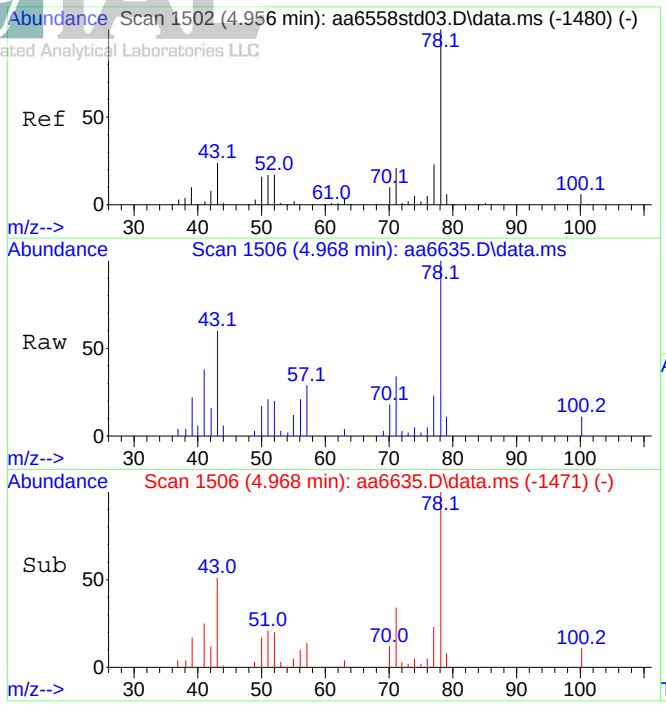


#36
n-Heptane
Concen: 0.92 ppbV
RT: 4.959 min Scan# 1503
Delta R.T. 0.016 min
Lab File: aa6635.D
Acq: 4 Jun 2024 8:08 pm

Tgt Ion: 43 Resp: 60449

Ion	Ratio	Lower	Upper
43	100		
71	52.6	46.2	69.2

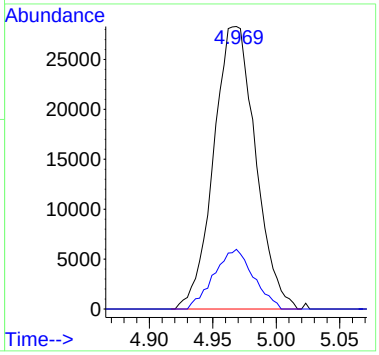


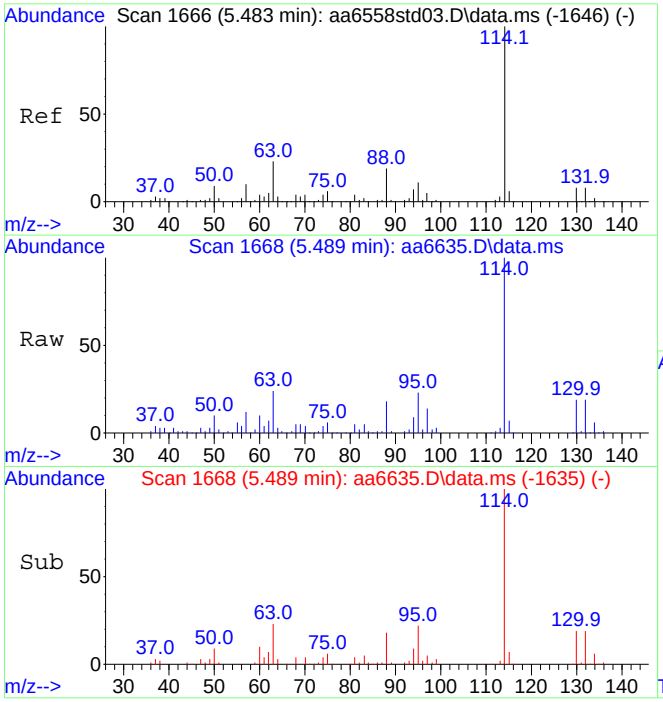


#37
Benzene
Concen: 0.66 ppbV
RT: 4.968 min Scan# 1506
Delta R.T. 0.013 min
Lab File: aa6635.D
Acq: 4 Jun 2024 8:08 pm

Tgt Ion: 78 Resp: 64948

Ion	Ratio	Lower	Upper
78	100		
51	19.9	14.9	22.3

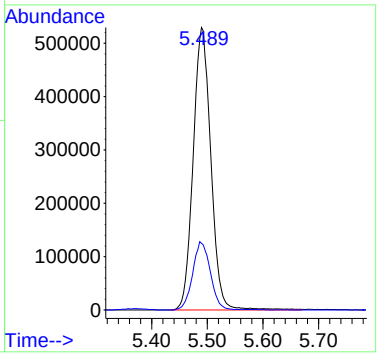


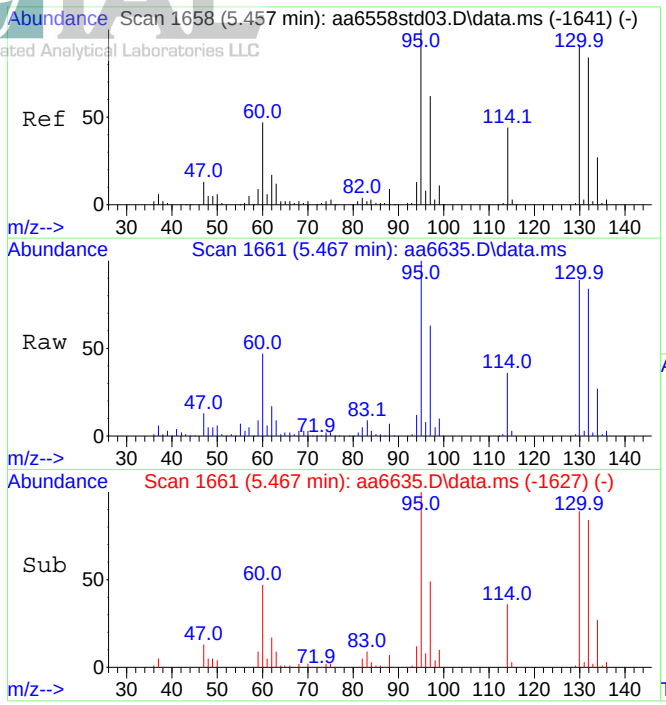


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.489 min Scan# 1668
Delta R.T. 0.006 min
Lab File: aa6635.D
Acq: 4 Jun 2024 8:08 pm

Tgt Ion:114 Resp: 1166624

Ion	Ratio	Lower	Upper
114	100		
63	24.3	3.6	43.6

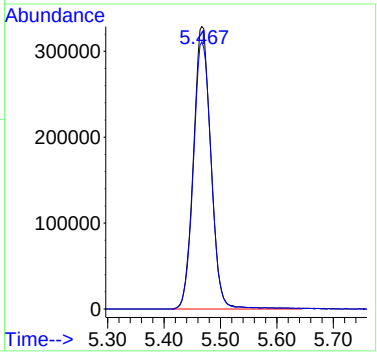


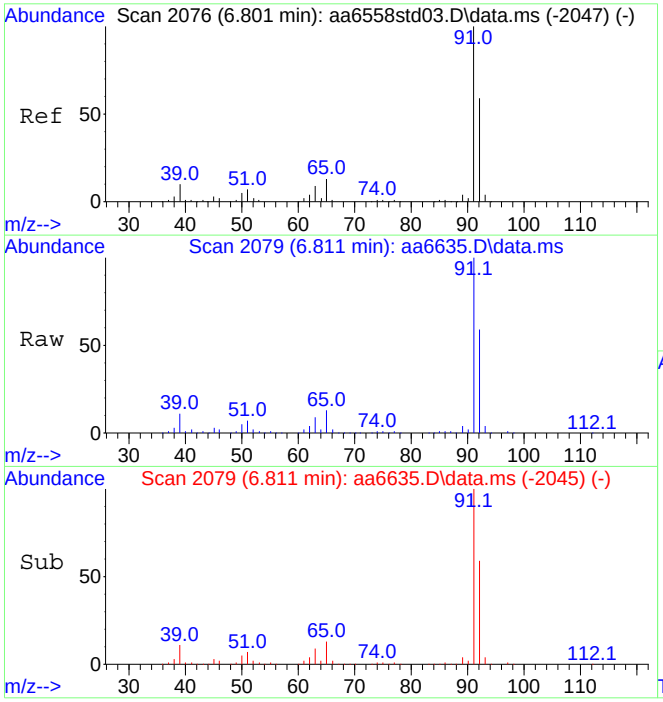


#40
Trichloroethene
Concen: 13.45 ppbV
RT: 5.467 min Scan# 1661
Delta R.T. 0.009 min
Lab File: aa6635.D
Acq: 4 Jun 2024 8:08 pm

Tgt Ion:130 Resp: 709376

Ion	Ratio	Lower	Upper
130	100		
132	95.5	76.6	114.8

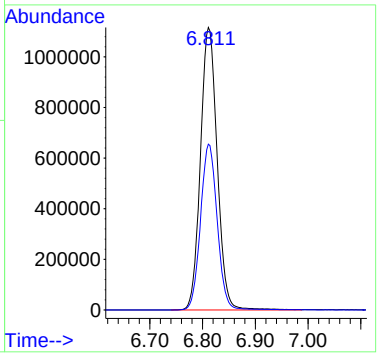


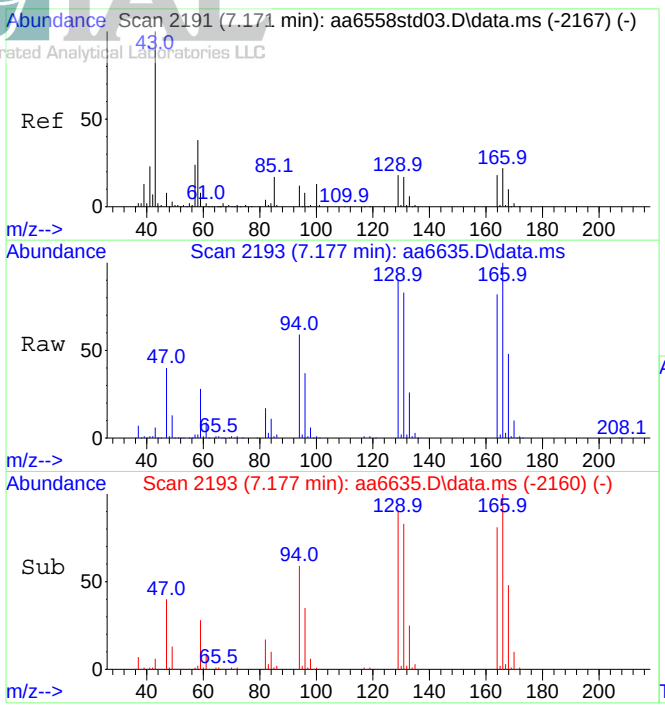


#47
Toluene
Concen: 16.51 ppbV
RT: 6.811 min Scan# 2079
Delta R.T. 0.009 min
Lab File: aa6635.D
Acq: 4 Jun 2024 8:08 pm

Tgt Ion: 91 Resp: 2465254

Ion	Ratio	Lower	Upper
91	100		
92	58.5	47.0	70.6

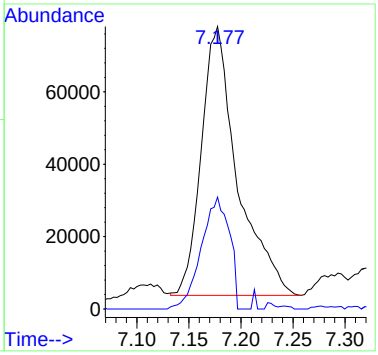


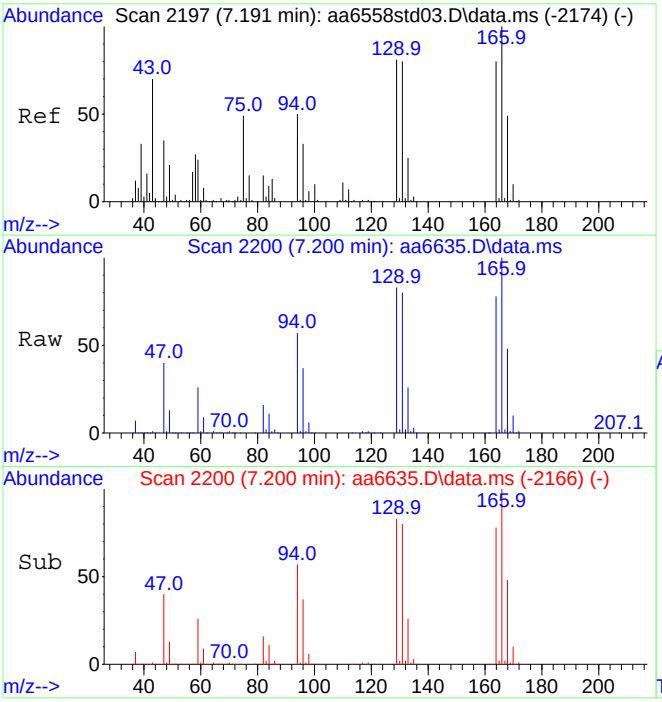


#48
Methyl isobutyl ketone
Concen: 1.64 ppbV
RT: 7.177 min Scan# 2193
Delta R.T. 0.006 min
Lab File: aa6635.D
Acq: 4 Jun 2024 8:08 pm

Tgt Ion: 43 Resp: 179604

Ion	Ratio	Lower	Upper
43	100		
58	32.1	31.0	46.4

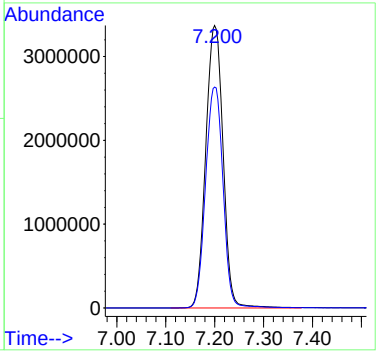


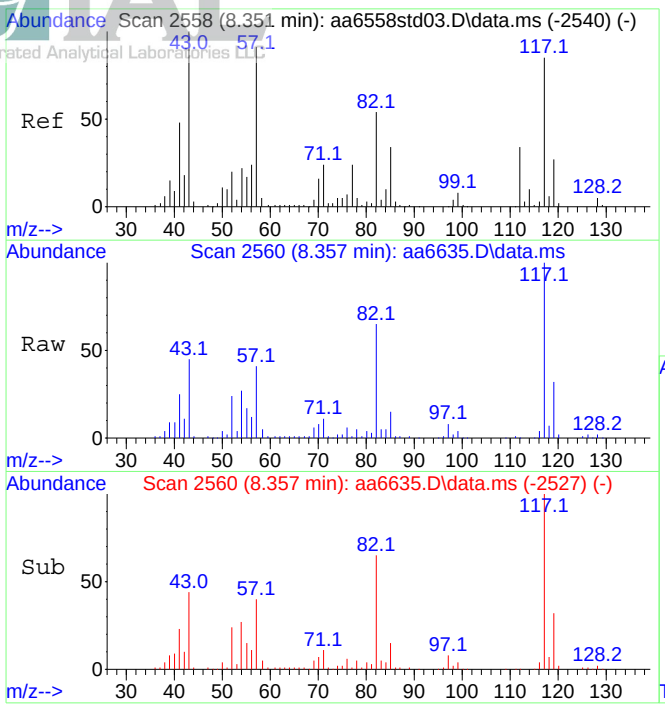


#49
Tetrachloroethene
Concen: 146.33 ppbV
RT: 7.200 min Scan# 2200
Delta R.T. 0.009 min
Lab File: aa6635.D
Acq: 4 Jun 2024 8:08 pm

Tgt Ion:166 Resp: 8278849

Ion	Ratio	Lower	Upper
166	100		
164	79.0	62.8	94.2

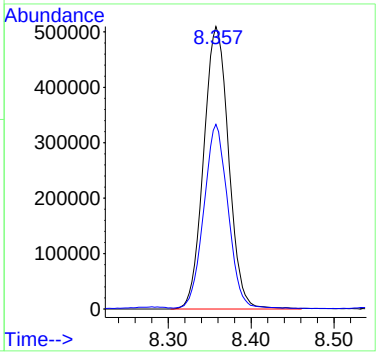


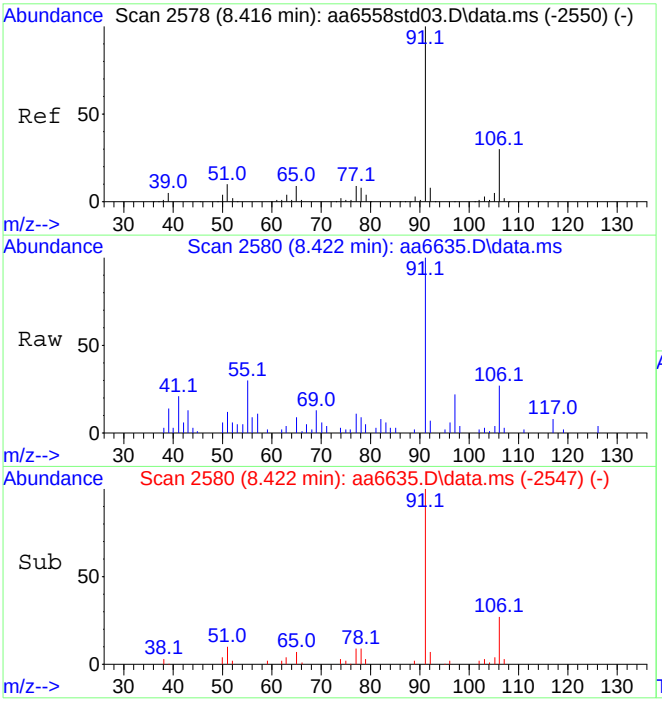


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.357 min Scan# 2560
Delta R.T. 0.006 min
Lab File: aa6635.D
Acq: 4 Jun 2024 8:08 pm

Tgt Ion:117 Resp: 1065939

Ion	Ratio	Lower	Upper
117	100		
82	63.0	42.3	82.3

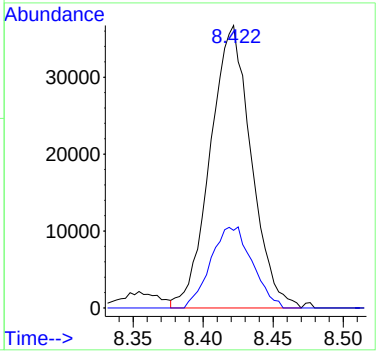


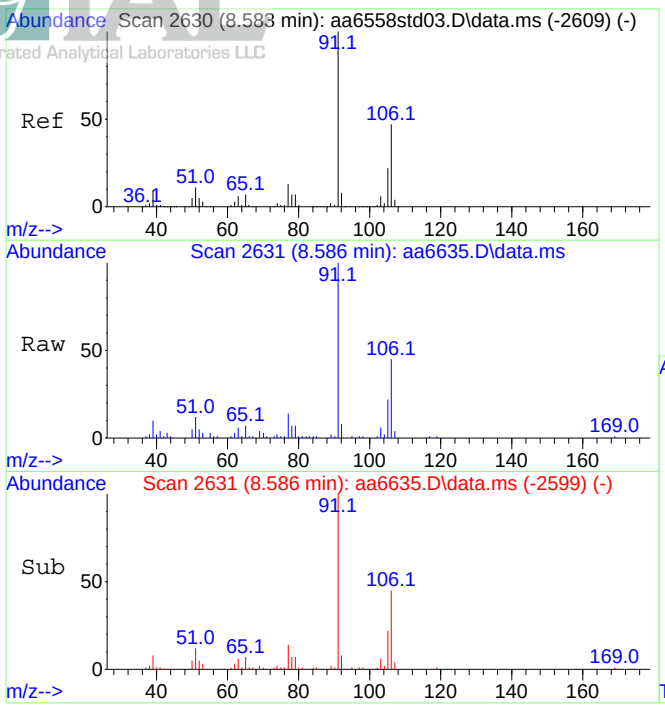


#58
Ethylbenzene
Concen: 0.36 ppbV
RT: 8.422 min Scan# 2580
Delta R.T. 0.006 min
Lab File: aa6635.D
Acq: 4 Jun 2024 8:08 pm

Tgt Ion: 91 Resp: 74723

Ion	Ratio	Lower	Upper
91	100		
106	29.1	23.8	35.8

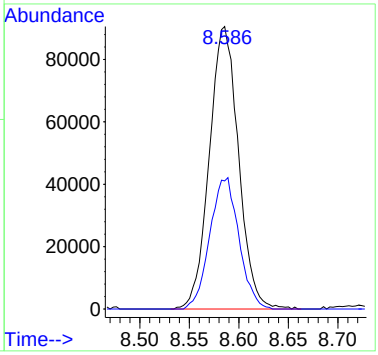


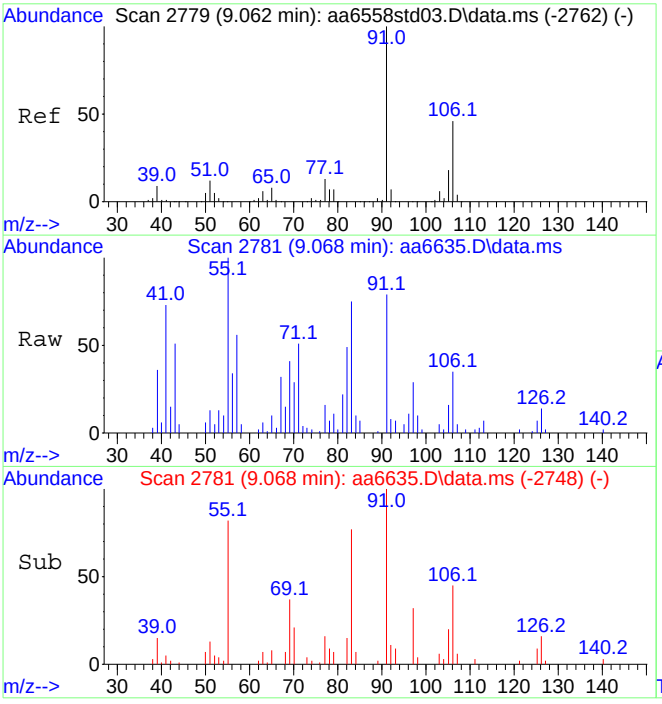


#59
Xylenes (m&p)
Concen: 1.18 ppbV
RT: 8.586 min Scan# 2631
Delta R.T. 0.003 min
Lab File: aa6635.D
Acq: 4 Jun 2024 8:08 pm

Tgt Ion: 91 Resp: 185889

Ion	Ratio	Lower	Upper
91	100		
106	46.2	37.4	56.2

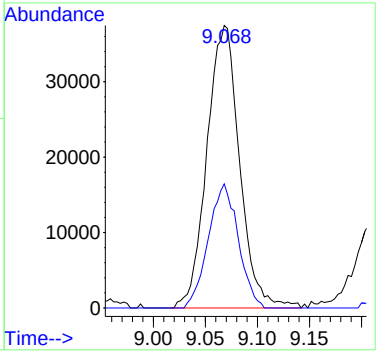


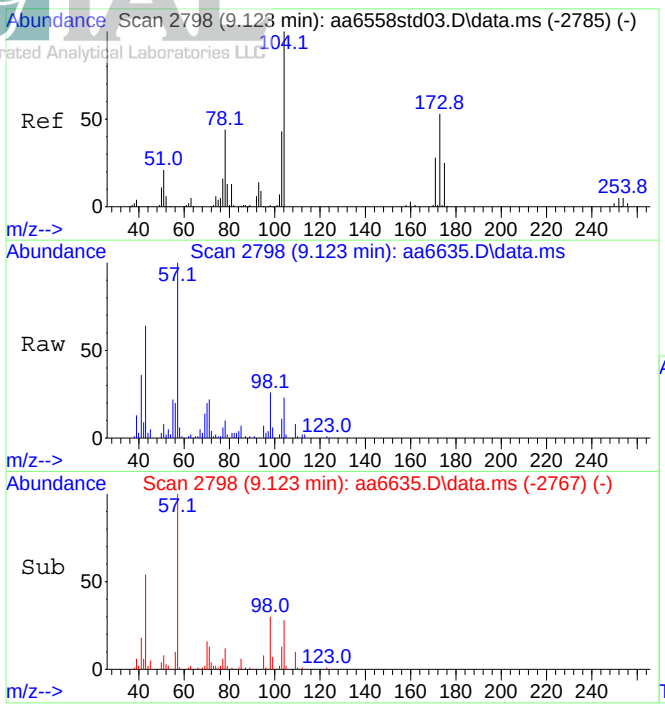


#60
Xylene (o)
Concen: 0.49 ppbV
RT: 9.068 min Scan# 2781
Delta R.T. 0.006 min
Lab File: aa6635.D
Acq: 4 Jun 2024 8:08 pm

Tgt Ion: 91 Resp: 81896

Ion	Ratio	Lower	Upper
91	100		
106	40.1	36.2	54.2

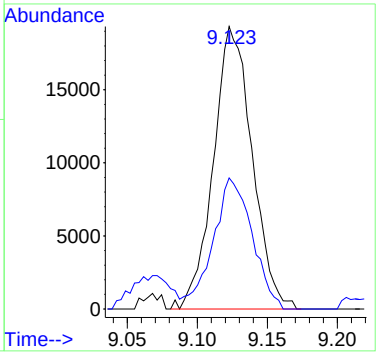


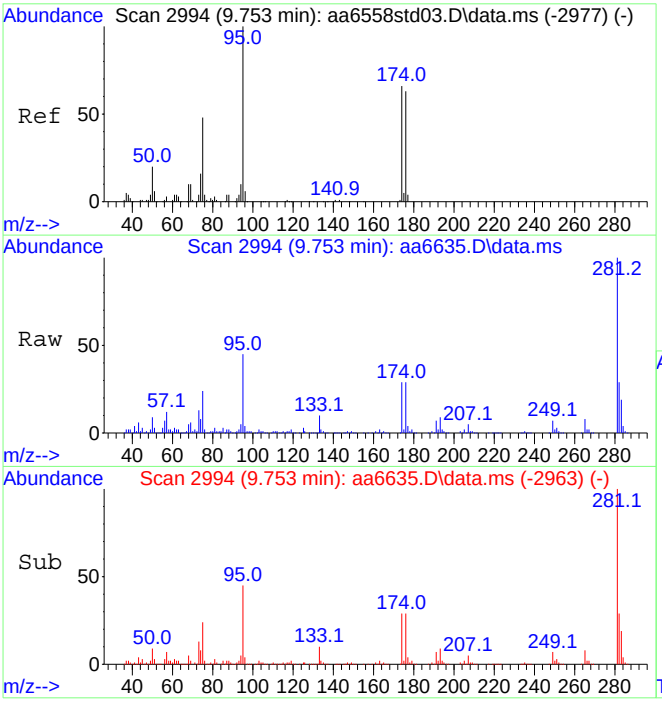


#61
Styrene
Concen: 0.34 ppbV
RT: 9.123 min Scan# 2798
Delta R.T. -0.000 min
Lab File: aa6635.D
Acq: 4 Jun 2024 8:08 pm

Tgt Ion:104 Resp: 37187

Ion	Ratio	Lower	Upper
104	100		
103	46.4	38.3	57.5

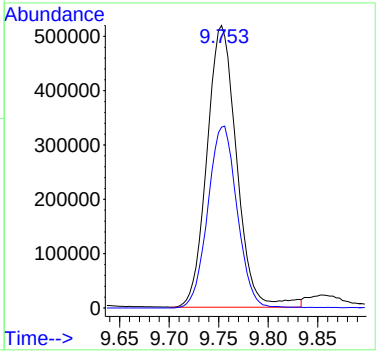


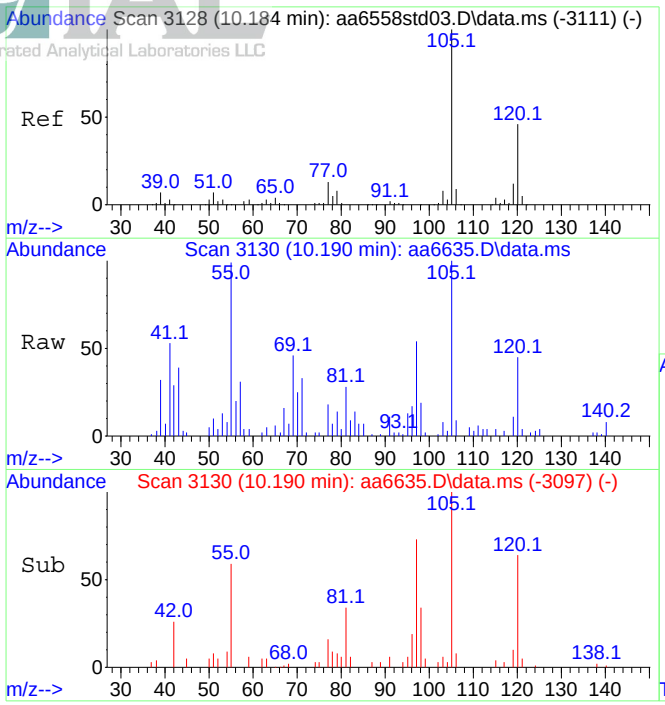


#64
Bromofluorobenzene (tune std)
Concen: 10.75 ppbV
RT: 9.753 min Scan# 2994
Delta R.T. -0.000 min
Lab File: aa6635.D
Acq: 4 Jun 2024 8:08 pm

Tgt Ion: 95 Resp: 1083819

Ion	Ratio	Lower	Upper
95	100		
174	63.9	52.9	79.3

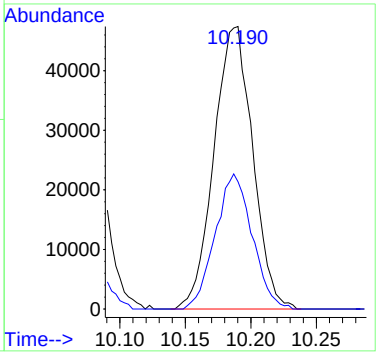


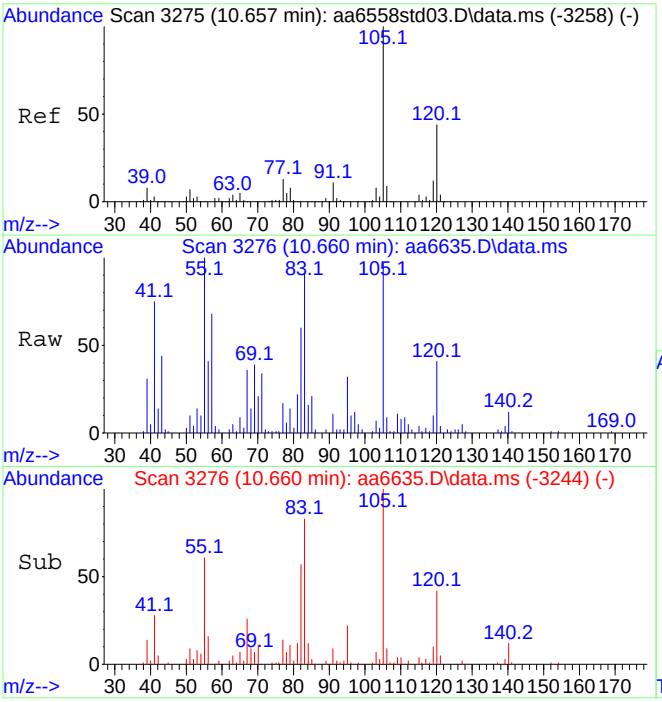


#69
1,3,5-Trimethylbenzene
Concen: 0.50 ppbV
RT: 10.190 min Scan# 3130
Delta R.T. 0.006 min
Lab File: aa6635.D
Acq: 4 Jun 2024 8:08 pm

Tgt Ion:105 Resp: 97457

Ion	Ratio	Lower	Upper
105	100		
120	45.6	37.2	55.8

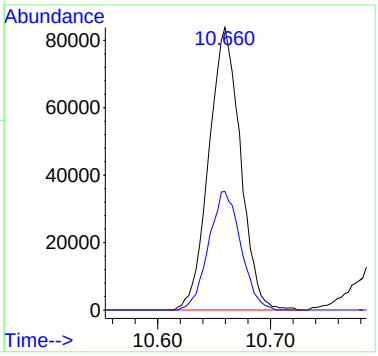




#70
1,2,4-Trimethylbenzene
Concen: 0.84 ppbV
RT: 10.660 min Scan# 3276
Delta R.T. 0.003 min
Lab File: aa6635.D
Acq: 4 Jun 2024 8:08 pm

Tgt Ion:105 Resp: 162875

Ion	Ratio	Lower	Upper
105	100		
120	42.7	34.5	51.7



Quantitation Report (QT Reviewed)

Data Path : C:\DATA\2024\06-2024\06-04-2024\
Data File : aa6627.D
Acq On : 4 Jun 2024 3:44 pm
Operator : jjw
Sample : E24-01875-05x10 dil
Misc : 3806, 50cc
ALS Vial : 8 Sample Multiplier: 1

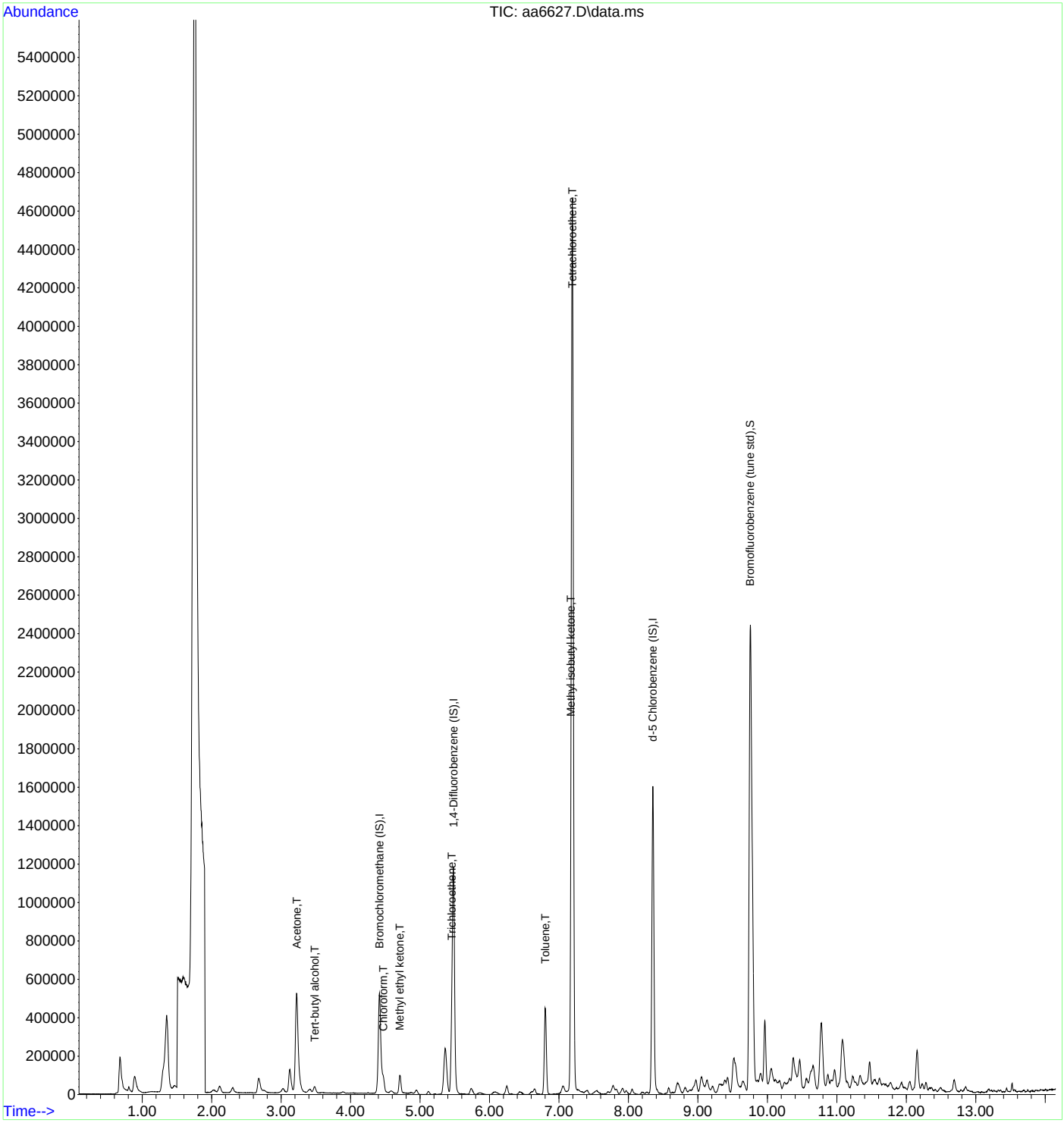
Quant Time: Jun 04 16:00:42 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

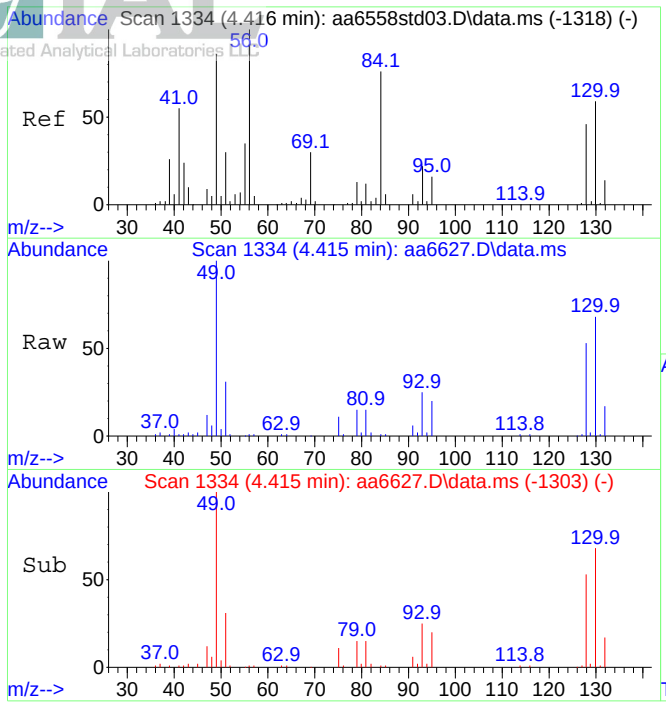
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.415	130	219607	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.483	114	971833	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.351	117	894706	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.753	95	761092	8.99	ppbV	0.000
Target Compounds						Qvalue
21) Acetone	3.226	43	822212	16.69	ppbV	100
26) Tert-butyl alcohol	3.486	59	46012	0.67	ppbV	100
30) Chloroform	4.470	83	48482	0.69	ppbV	94
35) Methyl ethyl ketone	4.708	43	126184	1.81	ppbV	99
40) Trichloroethene	5.457	130	111538	2.54	ppbV	99
47) Toluene	6.804	91	380769	3.06	ppbV	100
48) Methyl isobutyl ketone	7.171	43	32990	0.36	ppbV	91
49) Tetrachloroethene	7.193	166	1595981	33.86	ppbV	100

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

Data Path : C:\DATA\2024\06-2024\06-04-2024\
Data File : aa6627.D
Acq On : 4 Jun 2024 3:44 pm
Operator : jjw
Sample : E24-01875-05x10 dil
Misc : 3806, 50cc
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 04 16:00:42 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

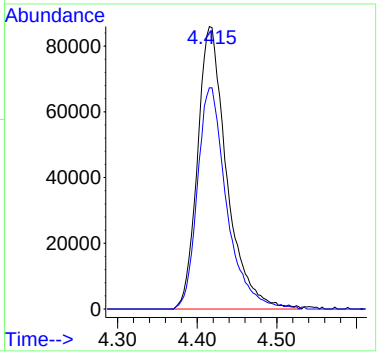


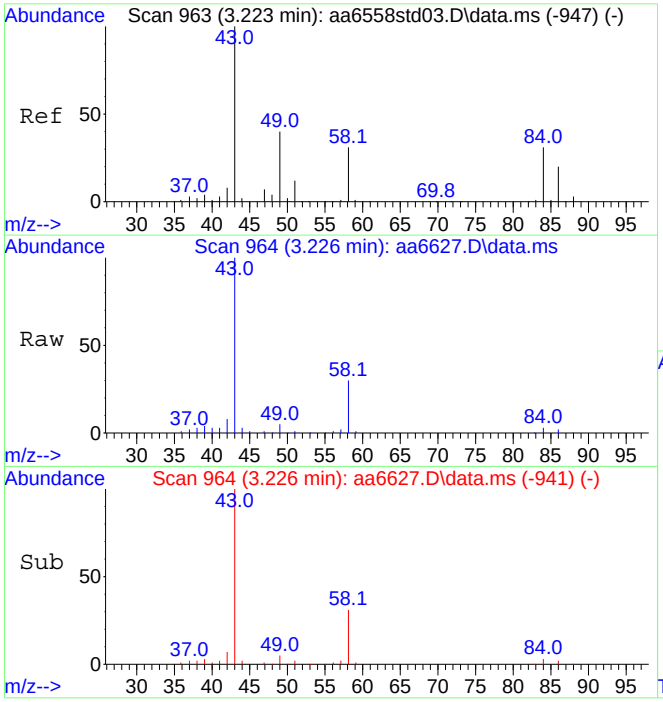


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.415 min Scan# 1334
Delta R.T. -0.001 min
Lab File: aa6627.D
Acq: 4 Jun 2024 3:44 pm

Tgt Ion:130 Resp: 219607

Ion	Ratio	Lower	Upper
130	100		
128	78.4	57.8	97.8

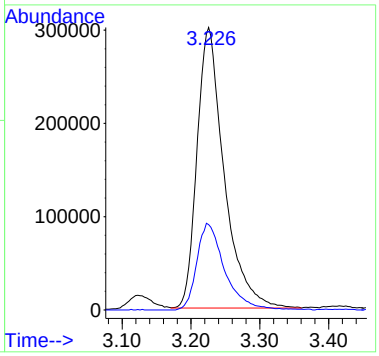


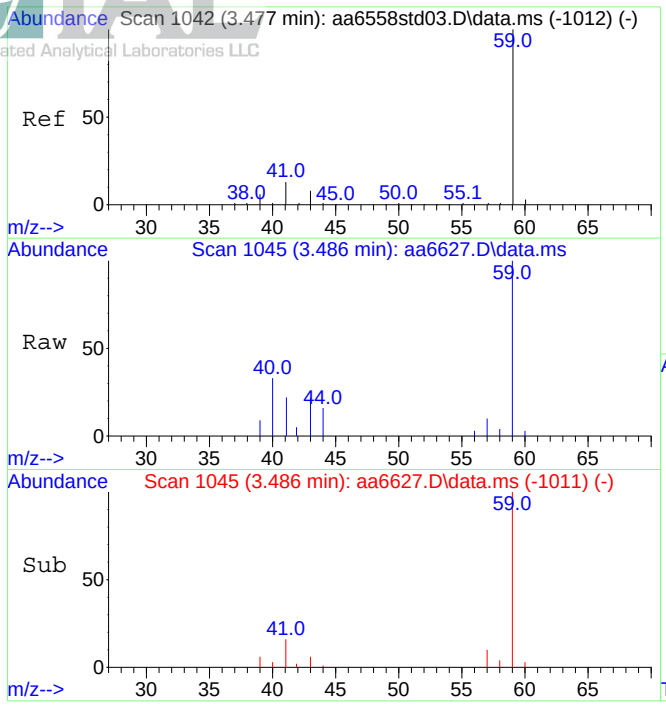


#21
Acetone
Concen: 16.69 ppbV
RT: 3.226 min Scan# 964
Delta R.T. 0.003 min
Lab File: aa6627.D
Acq: 4 Jun 2024 3:44 pm

Tgt Ion: 43 Resp: 822212

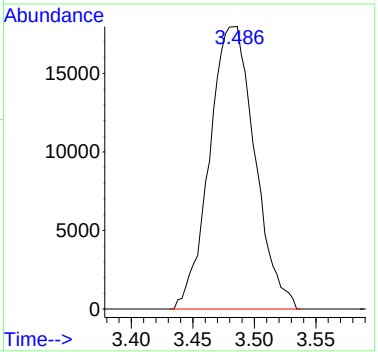
Ion	Ratio	Lower	Upper
43	100		
58	31.8	25.4	38.0

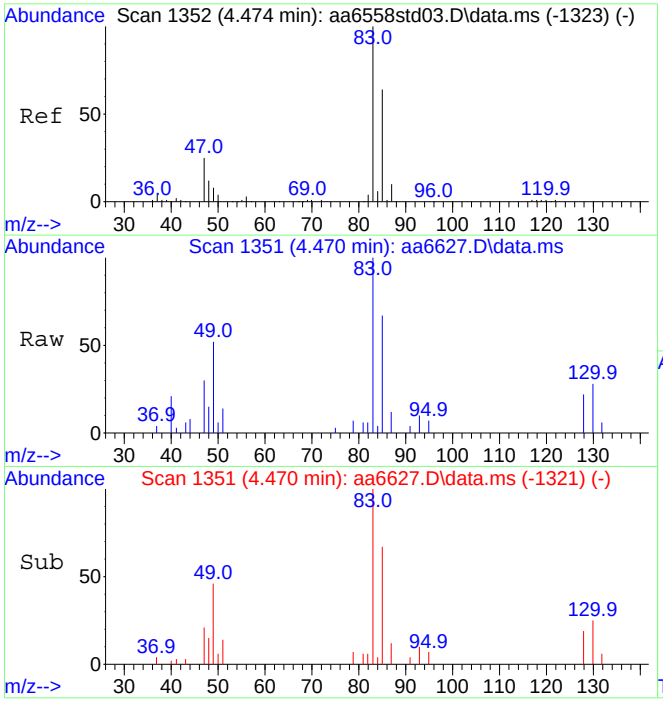




#26
Tert-butyl alcohol
Concen: 0.67 ppbV
RT: 3.486 min Scan# 1045
Delta R.T. 0.009 min
Lab File: aa6627.D
Acq: 4 Jun 2024 3:44 pm

Tgt Ion: 59 Resp: 46012

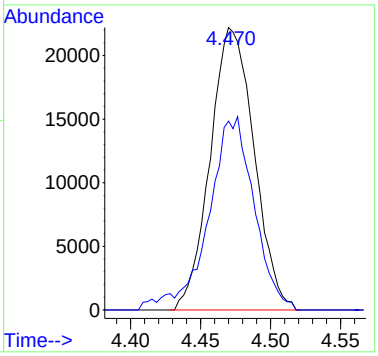


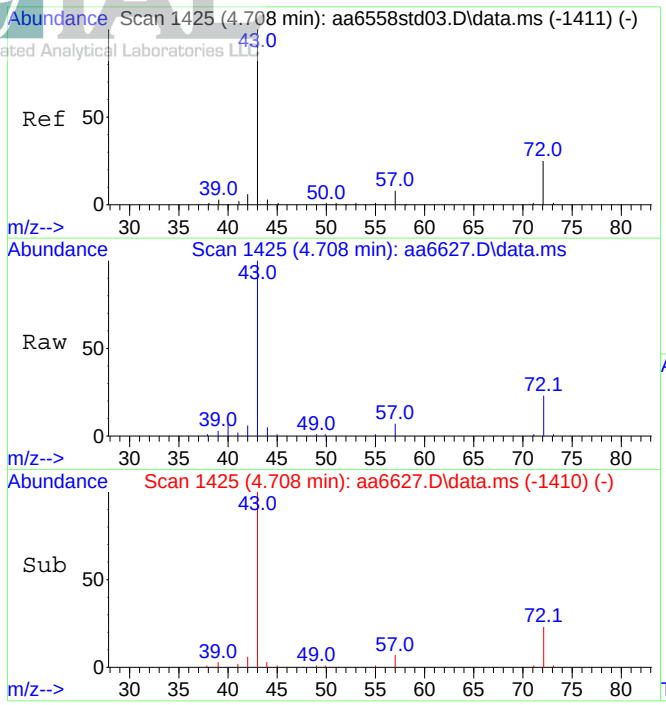


#30
Chloroform
Concen: 0.69 ppbV
RT: 4.470 min Scan# 1351
Delta R.T. -0.004 min
Lab File: aa6627.D
Acq: 4 Jun 2024 3:44 pm

Tgt Ion: 83 Resp: 48482

Ion	Ratio	Lower	Upper
83	100		
85	70.9	52.6	79.0

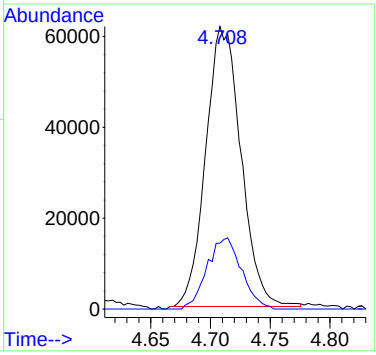


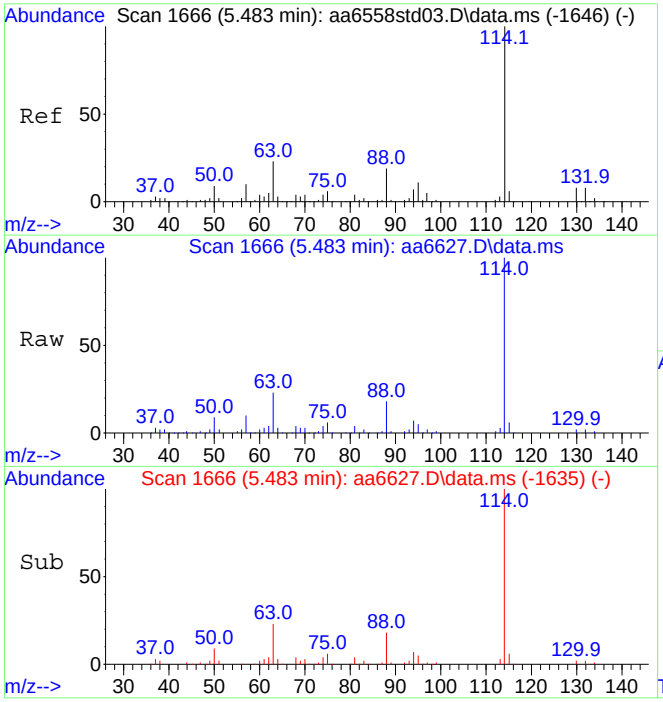


#35
Methyl ethyl ketone
Concen: 1.81 ppbV
RT: 4.708 min Scan# 1425
Delta R.T. -0.000 min
Lab File: aa6627.D
Acq: 4 Jun 2024 3:44 pm

Tgt Ion: 43 Resp: 126184

Ion	Ratio	Lower	Upper
43	100		
72	24.9	19.5	29.3

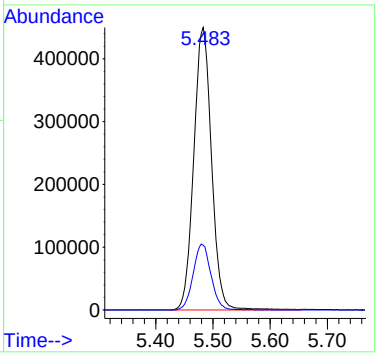


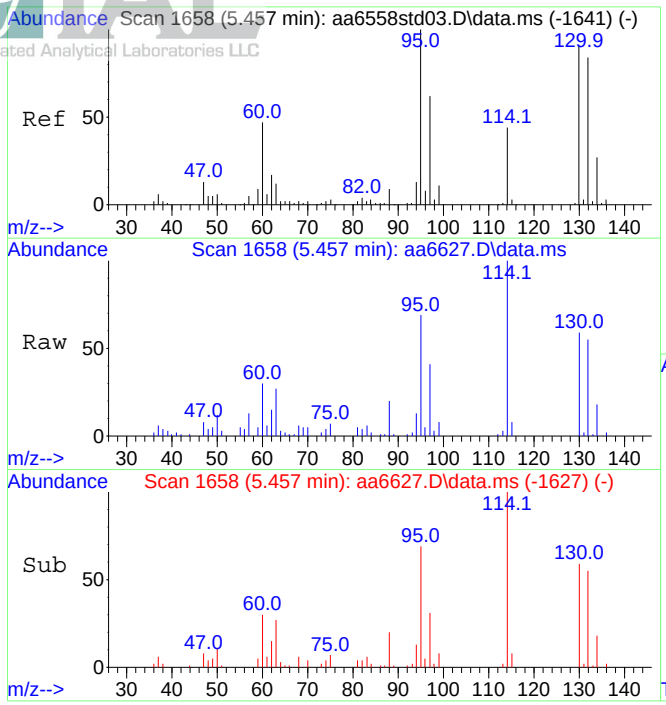


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.483 min Scan# 1666
Delta R.T. -0.000 min
Lab File: aa6627.D
Acq: 4 Jun 2024 3:44 pm

Tgt Ion:114 Resp: 971833

Ion	Ratio	Lower	Upper
114	100		
63	23.2	3.6	43.6

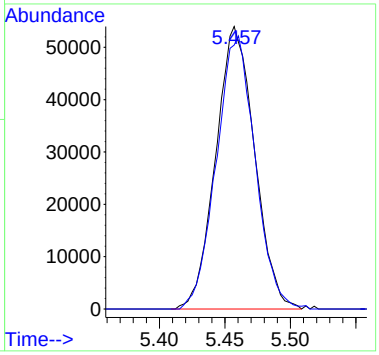


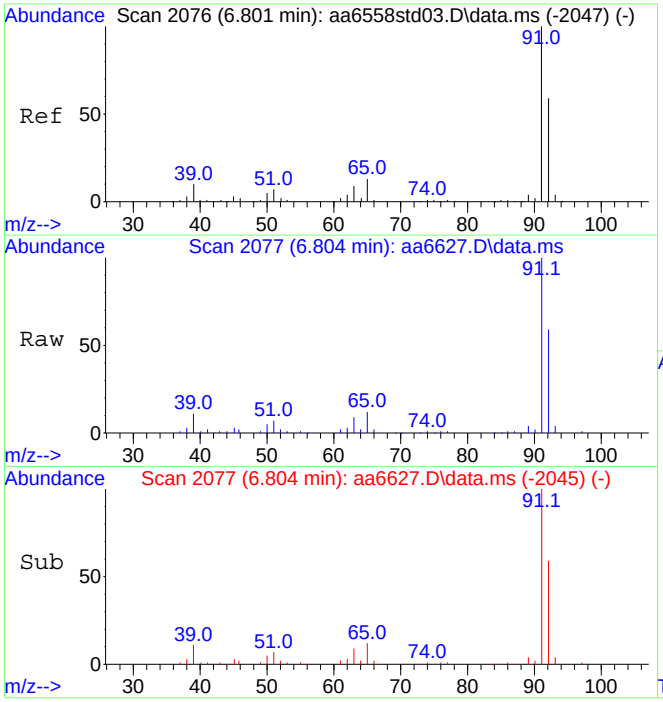


#40
Trichloroethene
Concen: 2.54 ppbV
RT: 5.457 min Scan# 1658
Delta R.T. -0.000 min
Lab File: aa6627.D
Acq: 4 Jun 2024 3:44 pm

Tgt Ion:130 Resp: 111538

Ion	Ratio	Lower	Upper
130	100		
132	96.4	76.6	114.8

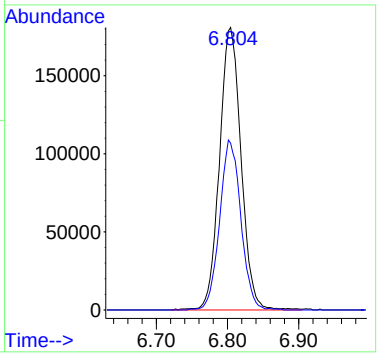


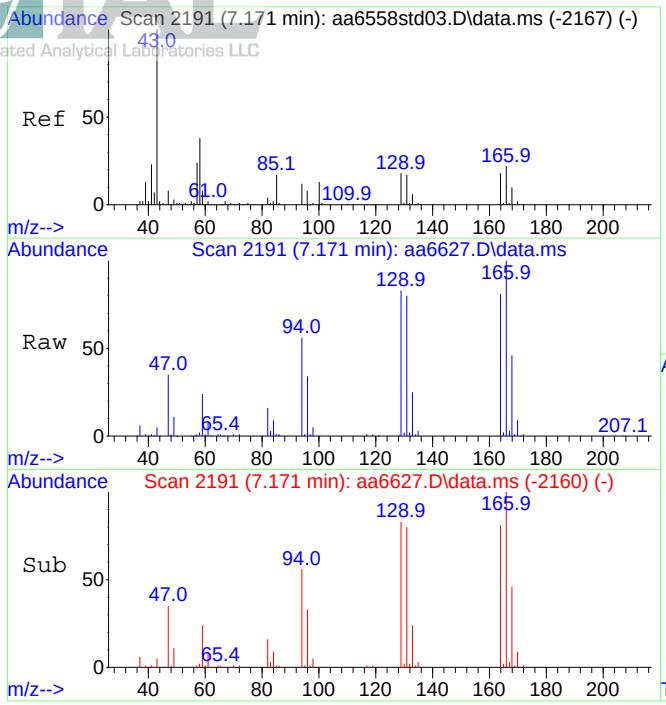


#47
Toluene
Concen: 3.06 ppbV
RT: 6.804 min Scan# 2077
Delta R.T. 0.003 min
Lab File: aa6627.D
Acq: 4 Jun 2024 3:44 pm

Tgt Ion: 91 Resp: 380769

Ion	Ratio	Lower	Upper
91	100		
92	59.1	47.0	70.6

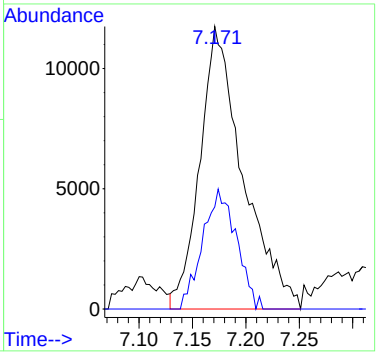


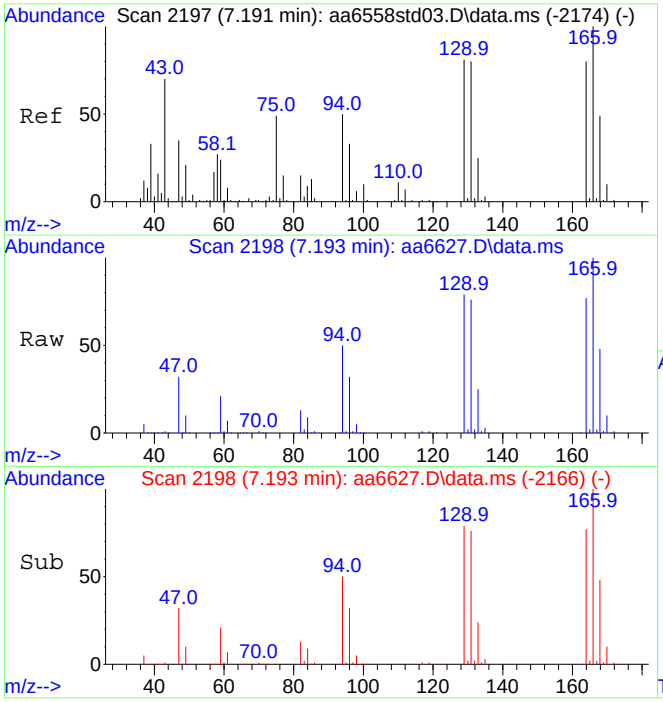


#48
Methyl isobutyl ketone
Concen: 0.36 ppbV
RT: 7.171 min Scan# 2191
Delta R.T. -0.000 min
Lab File: aa6627.D
Acq: 4 Jun 2024 3:44 pm

Tgt Ion: 43 Resp: 32990

Ion	Ratio	Lower	Upper
43	100		
58	33.1	31.0	46.4

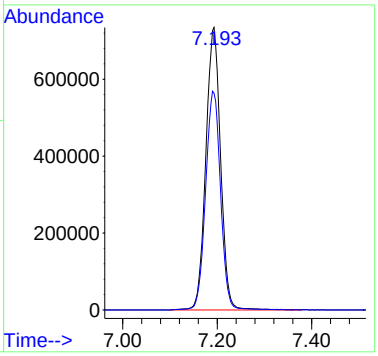


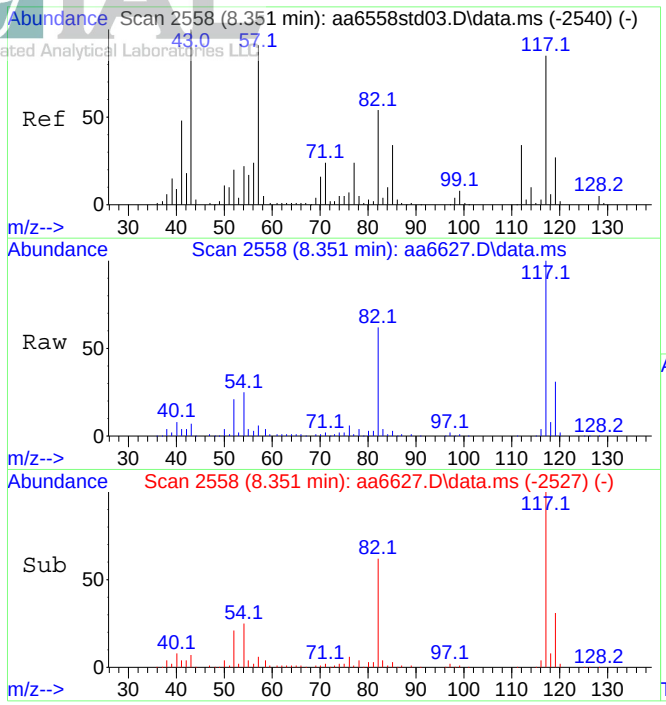


#49
Tetrachloroethene
Concen: 33.86 ppbV
RT: 7.193 min Scan# 2198
Delta R.T. 0.003 min
Lab File: aa6627.D
Acq: 4 Jun 2024 3:44 pm

Tgt Ion:166 Resp: 1595981

Ion	Ratio	Lower	Upper
166	100		
164	78.5	62.8	94.2

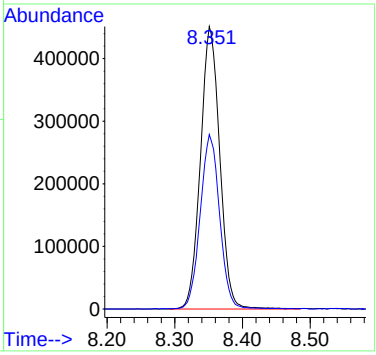


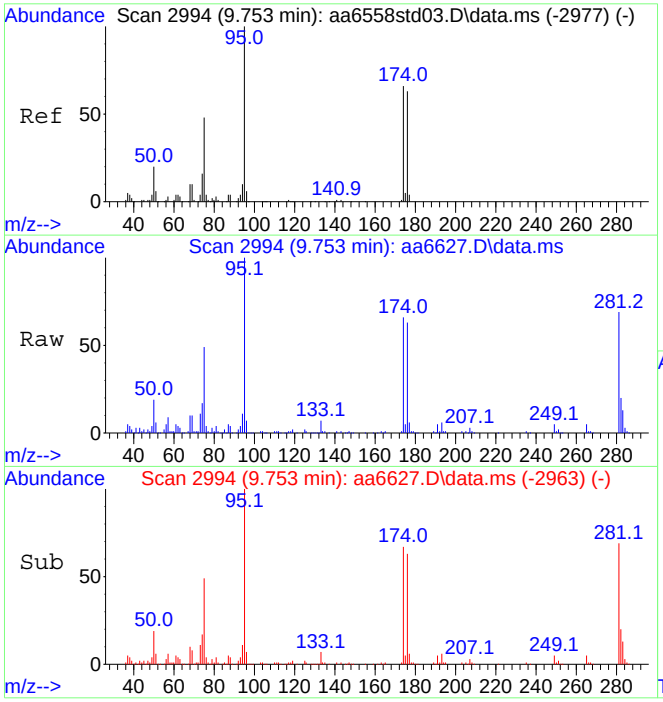


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.351 min Scan# 2558
Delta R.T. -0.000 min
Lab File: aa6627.D
Acq: 4 Jun 2024 3:44 pm

Tgt Ion:117 Resp: 894706

Ion	Ratio	Lower	Upper
117	100		
82	62.1	42.3	82.3

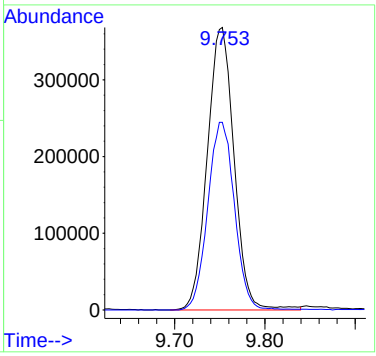




#64
Bromofluorobenzene (tune std)
Concen: 8.99 ppbV
RT: 9.753 min Scan# 2994
Delta R.T. -0.000 min
Lab File: aa6627.D
Acq: 4 Jun 2024 3:44 pm

Tgt Ion: 95 Resp: 761092

Ion	Ratio	Lower	Upper
95	100		
174	66.3	52.9	79.3



INTEGRATED ANALYTICAL LABORATORIES, LLC
Integrated Analytical Laboratories LLC

Volatile Organic Compounds by EPA Method TO-15
Summary of Results

Lab ID:	E24-01875-06	Instrument ID:	AA
Client ID:	SG-9	GC/MS Column:	RTX-1, 0.32 mmID
Date Sampled:	05/30/2024 19:19	Injection Volmue:	500ml, 50ml
Date Received:	05/31/2024	Matrix:	Air-Other
Date Analyzed:	06/04/2024 17:28, 06/05/2024 16:33	% Moisture:	NA
Data File:	AA6630, AA6648	Dilution Factor:	1, 10
Summa ID:	3045A	Analyst:	J. Walukiewicz

			Concentration Reported		Reporting Limits	
Compound	**CAS #**	**Q**	**ppbv**	**ug/m3**	**ppbv**	**ug/m3**
Acetone	67-64-1	D	230	550	2.0	4.8
Benzene	71-43-2		1.3	4.0	0.20	0.64
Bromodichloromethane	75-27-4		ND	ND	0.20	1.3
Bromoform	75-25-2		ND	ND	0.20	2.1
Bromomethane	74-83-9		ND	ND	0.20	0.78
1,3-Butadiene	106-99-0		ND	ND	0.20	0.44
Chlorobenzene	108-90-7		ND	ND	0.20	0.92
Chloroethane	75-00-3		ND	ND	0.20	0.53
Chloroform	67-66-3		0.75	3.7	0.20	0.98
Chloromethane	74-87-3		ND	ND	0.20	0.41
Carbon disulfide	75-15-0		0.50	1.5	0.20	0.62
Carbon tetrachloride	56-23-5		ND	ND	0.040	0.25
Cyclohexane	110-82-7		0.33	1.1	0.20	0.69
Dibromochloromethane	124-48-1		ND	ND	0.20	1.7
1,2-Dibromoethane	106-93-4		ND	ND	0.20	1.5
1,2-Dichlorobenzene	95-50-1		ND	ND	0.20	1.2
1,3-Dichlorobenzene	541-73-1		ND	ND	0.20	1.2
1,4-Dichlorobenzene	106-46-7		ND	ND	0.20	1.2
Dichlorodifluoromethane	75-71-8		ND	ND	0.20	0.99
1,1-Dichloroethane	75-34-3		ND	ND	0.20	0.81
1,2-Dichloroethane	107-06-2		ND	ND	0.20	0.81
1,1-Dichloroethene	75-35-4		ND	ND	0.20	0.79
1,2-Dichloroethene (cis)	156-59-2		ND	ND	0.20	0.79
1,2-Dichloroethene (trans)	156-60-5		ND	ND	0.20	0.79
1,2-Dichloropropane	78-87-5		ND	ND	0.20	0.92
1,3-Dichloropropene (cis)	10061-01-5		ND	ND	0.20	0.91
1,3-Dichloropropene (trans)	10061-02-6		ND	ND	0.20	0.91
1,2-Dichlorotetrafluoroethane	76-14-2		ND	ND	0.20	1.4
1,4-Dioxane	123-91-1		2.7	9.7	0.20	0.72
Ethylbenzene	100-41-4		1.1	4.6	0.20	0.87
n-Heptane	142-82-5		0.65	2.7	0.20	0.82
1,3-Hexachlorobutadiene	87-68-3		ND	ND	0.20	2.1
n-Hexane	110-54-3		ND	ND	0.20	0.70
Methylene chloride	75-09-2		ND	ND	0.20	0.69
Methyl ethyl ketone	78-93-3		14	40	0.20	0.59
Methyl isobutyl ketone	108-10-1		2.1	8.6	0.20	0.82
Methyl tert-butyl ether	1634-04-4		ND	ND	0.20	0.72
Styrene	100-42-5		0.44	1.9	0.20	0.85
Tert-butyl alcohol	75-65-0	D	87	260	2.0	6.1
1,1,2,2-Tetrachloroethane	79-34-5		ND	ND	0.20	1.4
Tetrachloroethene	127-18-4	D	260	1800	2.0	14
Toluene	108-88-3		28	110	0.20	0.75
1,2,4-Trichlorobenzene	120-82-1		ND	ND	0.20	1.5
1,1,1-Trichloroethane	71-55-6		ND	ND	0.20	1.1
1,1,2-Trichloroethane	79-00-5		ND	ND	0.20	1.1

Qualifiers:
D = Dilution required

Volatile Organic Compounds by EPA Method TO-15
Summary of Results

Lab ID:	E24-01875-06	Instrument ID:	AA
Client ID:	SG-9	GC/MS Column:	RTX-1, 0.32 mmID
Date Sampled:	05/30/2024 19:19	Injection Volmue:	500ml, 50ml
Date Received:	05/31/2024	Matrix:	Air-Other
Date Analyzed:	06/04/2024 17:28, 06/05/2024 16:33	% Moisture:	NA
Data File:	AA6630, AA6648	Dilution Factor:	1, 10
Summa ID:	3045A	Analyst:	J. Walukiewicz

			Concentration Reported		Reporting Limits	
Compound	**CAS #**	**Q**	**ppbv**	**ug/m3**	**ppbv**	**ug/m3**
Trichloroethene	79-01-6		1.9	10	0.046	0.25
Trichlorofluoromethane	75-69-4		0.37	2.1	0.20	1.1
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1		ND	ND	0.20	1.5
1,2,4-Trimethylbenzene	95-63-6		5.4	27	0.20	0.98
1,3,5-Trimethylbenzene	108-67-8		3.2	16	0.20	0.98
2,2,4-Trimethylpentane	540-84-1		1.6	7.4	0.20	0.93
Vinyl bromide	593-60-2		ND	ND	0.20	0.87
Vinyl chloride	75-01-4		ND	ND	0.20	0.51
Xylenes (m&p)	179601-23-1		3.5	15	0.20	0.87
Xylenes (o)	95-47-6		1.6	7.2	0.20	0.87

Qualifiers:
D = Dilution required

Data Path : C:\DATA\2024\06-2024\06-04-2024\
Data File : aa6630.D
Acq On : 4 Jun 2024 5:28 pm
Operator : jjw
Sample : E24-01875-06
Misc : 3045A, 500cc
ALS Vial : 11 Sample Multiplier: 1

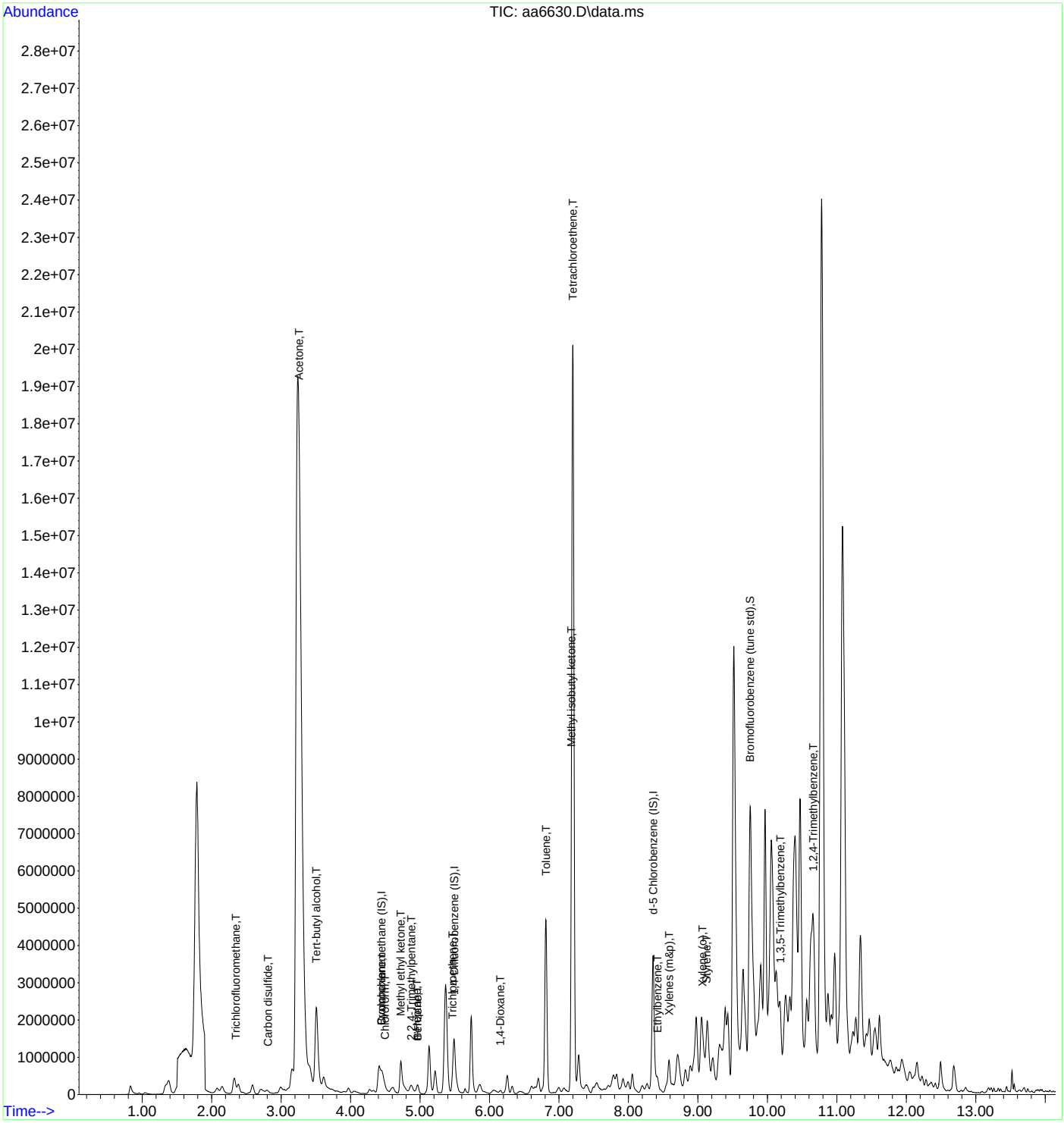
Quant Time: Jun 05 10:02:52 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

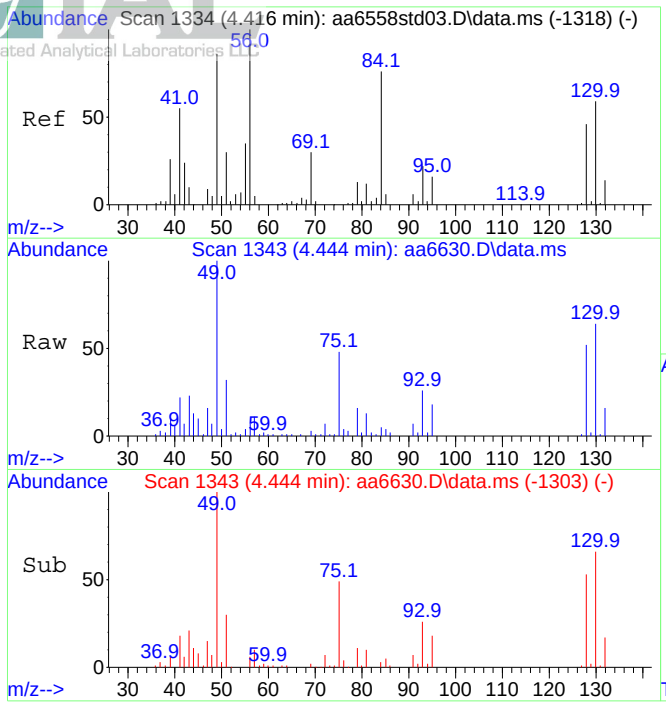
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.444	130	296366	10.00	ppbV		0.028
39) 1,4-Difluorobenzene (IS)	5.492	114	1174318	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.357	117	1025950	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.753	95	1084807	11.18	ppbV		0.000
Target Compounds							Qvalue
12) Trichlorofluoromethane	2.348	101	36311	0.37	ppbV		97
15) Carbon disulfide	2.814	76	62099	0.50	ppbV	#	67
21) Acetone	3.258	43	7334847	110.30	ppbV		99
26) Tert-butyl alcohol	3.505	59	4002370	43.15	ppbV		100
29) Cyclohexane	4.444	56	24786	0.33	ppbV	#	61
30) Chloroform	4.496	83	71002	0.75	ppbV		98
35) Methyl ethyl ketone	4.724	43	1284208	13.63	ppbV		99
36) n-Heptane	4.955	43	57839	0.65	ppbV		90
37) Benzene	4.965	78	169166	1.25	ppbV		98
40) Trichloroethene	5.470	130	99704	1.88	ppbV		100
41) 2,2,4-Trimethylpentane	4.875	57	330503	1.58	ppbV		90
45) 1,4-Dioxane	6.155	88	74518	2.69	ppbV		95
47) Toluene	6.814	91	4216136	28.04	ppbV		100
48) Methyl isobutyl ketone	7.177	43	230038	2.09	ppbV		95
49) Tetrachloroethene	7.200	166	7117110	124.97	ppbV		100
58) Ethylbenzene	8.418	91	212571	1.05	ppbV		99
59) Xylenes (m&p)	8.586	91	526360	3.46	ppbV		100
60) Xylene (o)	9.068	91	264176	1.65	ppbV		97
61) Styrene	9.126	104	46795	0.44	ppbV		97
69) 1,3,5-Trimethylbenzene	10.187	105	589693	3.17	ppbV		100
70) 1,2,4-Trimethylbenzene	10.659	105	1016587	5.44	ppbV		100

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

Data Path : C:\DATA\2024\06-2024\06-04-2024\
Data File : aa6630.D
Acq On : 4 Jun 2024 5:28 pm
Operator : jjw
Sample : E24-01875-06
Misc : 3045A, 500cc
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 05 10:02:52 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

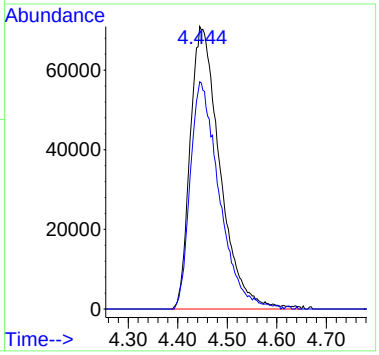


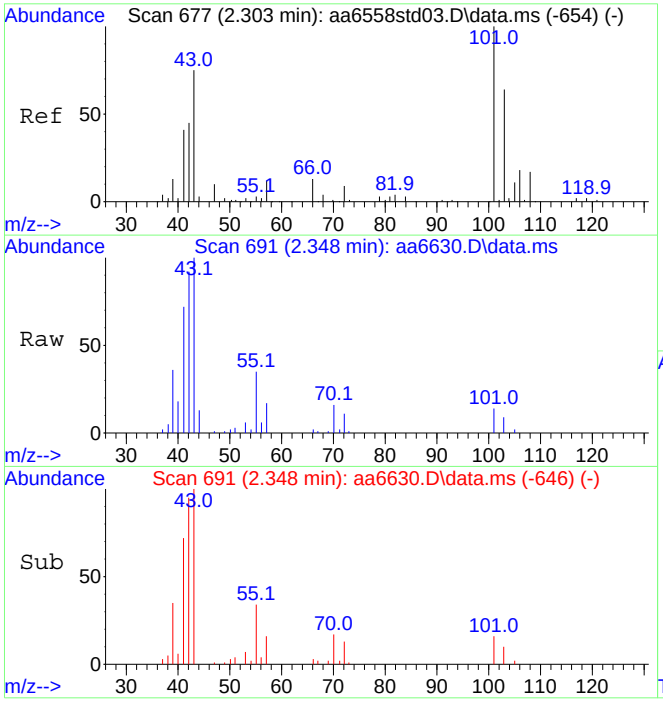


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.444 min Scan# 1343
Delta R.T. 0.028 min
Lab File: aa6630.D
Acq: 4 Jun 2024 5:28 pm

Tgt Ion:130 Resp: 296366

Ion	Ratio	Lower	Upper
130	100		
128	78.4	57.8	97.8

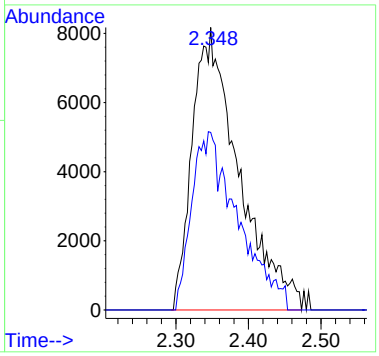


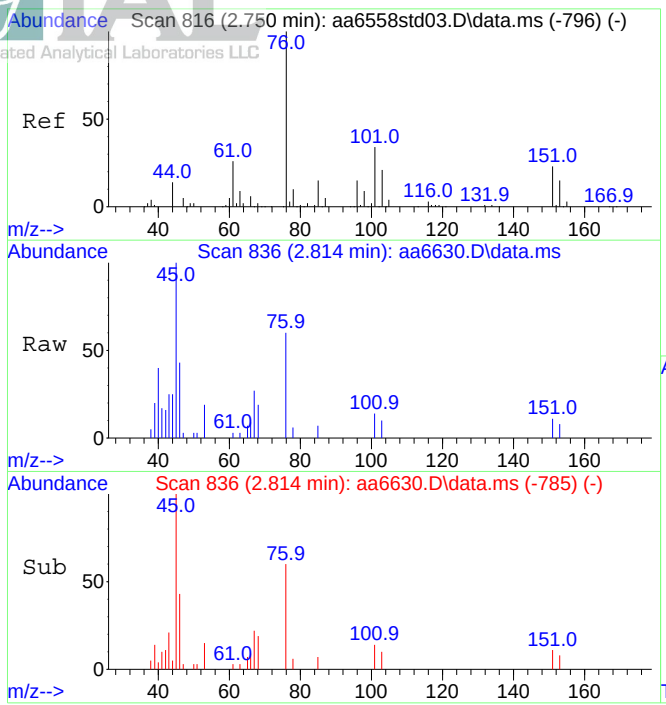


#12
Trichlorofluoromethane
Concen: 0.37 ppbV
RT: 2.348 min Scan# 691
Delta R.T. 0.045 min
Lab File: aa6630.D
Acq: 4 Jun 2024 5:28 pm

Tgt Ion:101 Resp: 36311

Ion	Ratio	Lower	Upper
101	100		
103	62.5	51.9	77.9

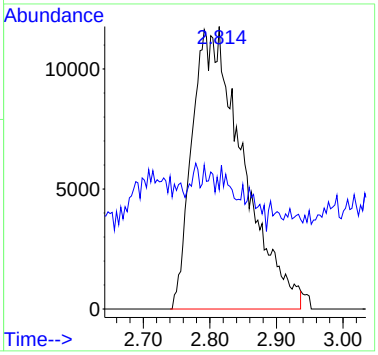


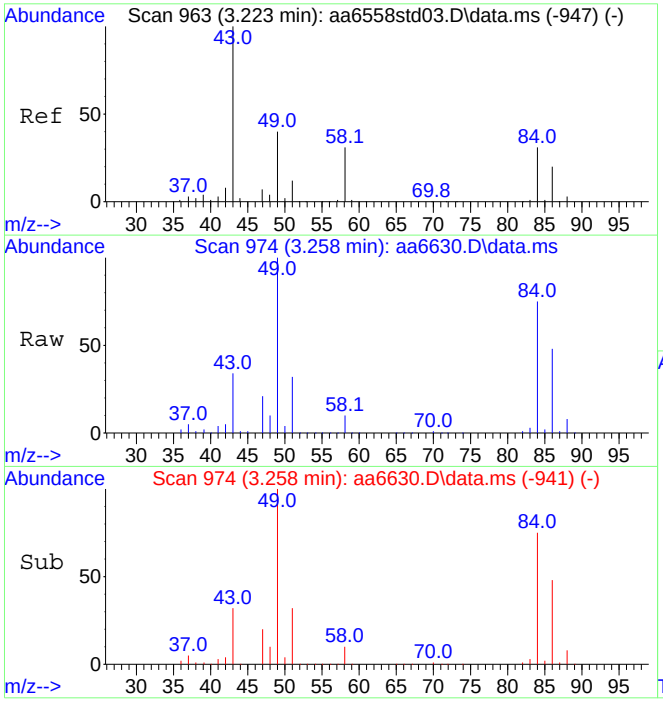


#15
Carbon disulfide
Concen: 0.50 ppbV
RT: 2.814 min Scan# 836
Delta R.T. 0.064 min
Lab File: aa6630.D
Acq: 4 Jun 2024 5:28 pm

Tgt Ion: 76 Resp: 62099

Ion	Ratio	Lower	Upper
76	100		
44	0.0	10.6	16.0#

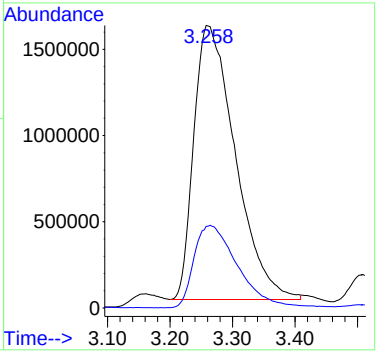


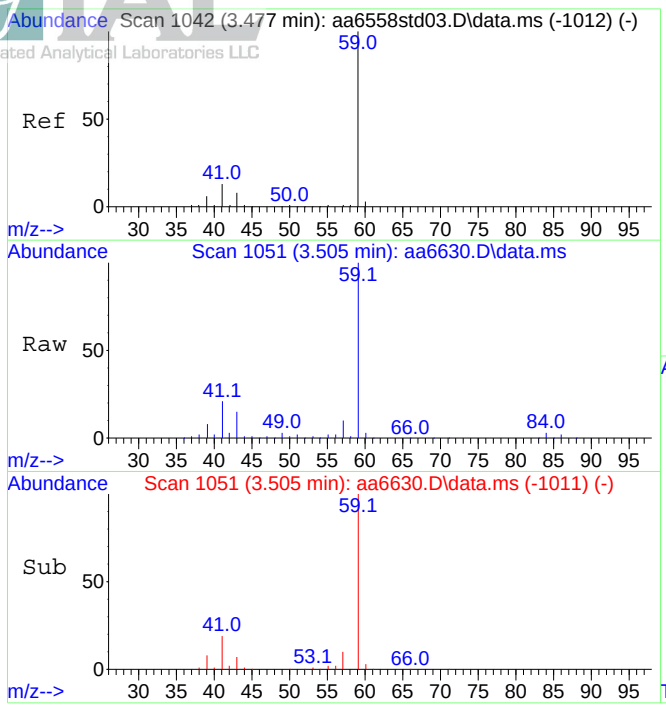


#21
Acetone
Concen: 110.30 ppbV
RT: 3.258 min Scan# 974
Delta R.T. 0.035 min
Lab File: aa6630.D
Acq: 4 Jun 2024 5:28 pm

Tgt Ion: 43 Resp: 7334847

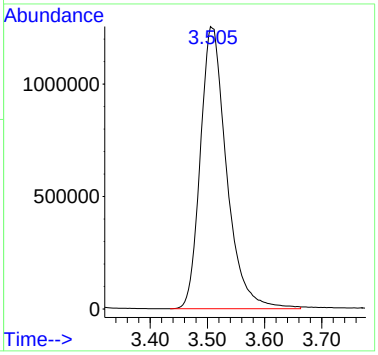
Ion	Ratio	Lower	Upper
43	100		
58	31.3	25.4	38.0

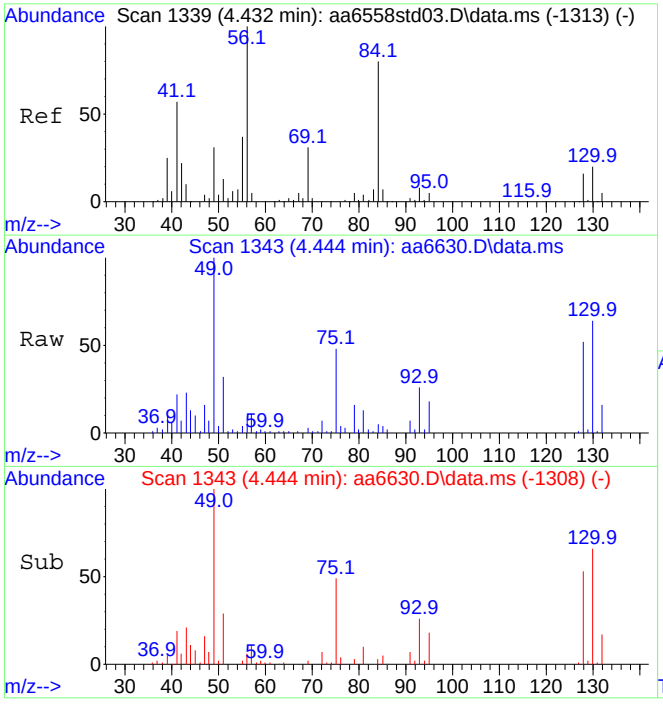




#26
Tert-butyl alcohol
Concen: 43.15 ppbV
RT: 3.505 min Scan# 1051
Delta R.T. 0.029 min
Lab File: aa6630.D
Acq: 4 Jun 2024 5:28 pm

Tgt Ion: 59 Resp: 4002370

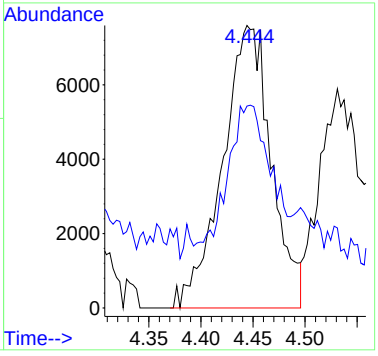


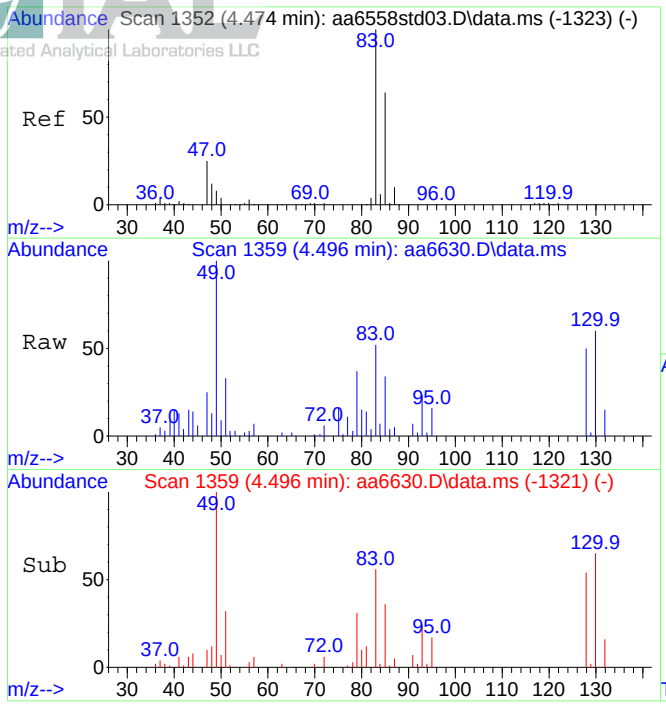


#29
Cyclohexane
Concen: 0.33 ppbV
RT: 4.444 min Scan# 1343
Delta R.T. 0.012 min
Lab File: aa6630.D
Acq: 4 Jun 2024 5:28 pm

Tgt Ion: 56 Resp: 24786

Ion	Ratio	Lower	Upper
56	100		
84	48.5	66.8	100.2#

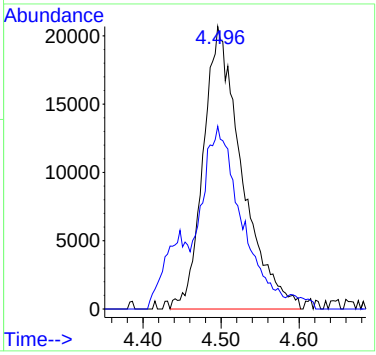


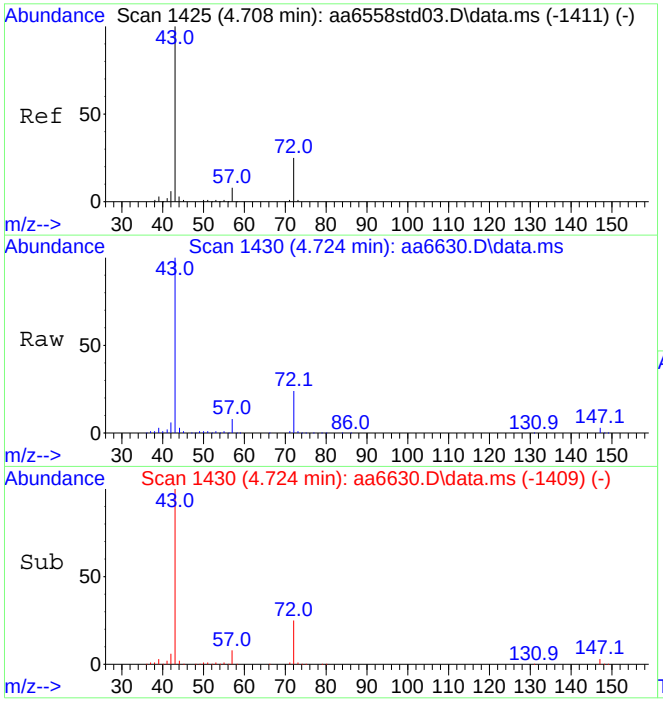


#30
Chloroform
Concen: 0.75 ppbV
RT: 4.496 min Scan# 1359
Delta R.T. 0.022 min
Lab File: aa6630.D
Acq: 4 Jun 2024 5:28 pm

Tgt Ion: 83 Resp: 71002

Ion	Ratio	Lower	Upper
83	100		
85	67.1	52.6	79.0

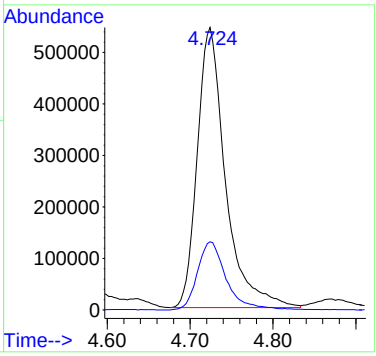


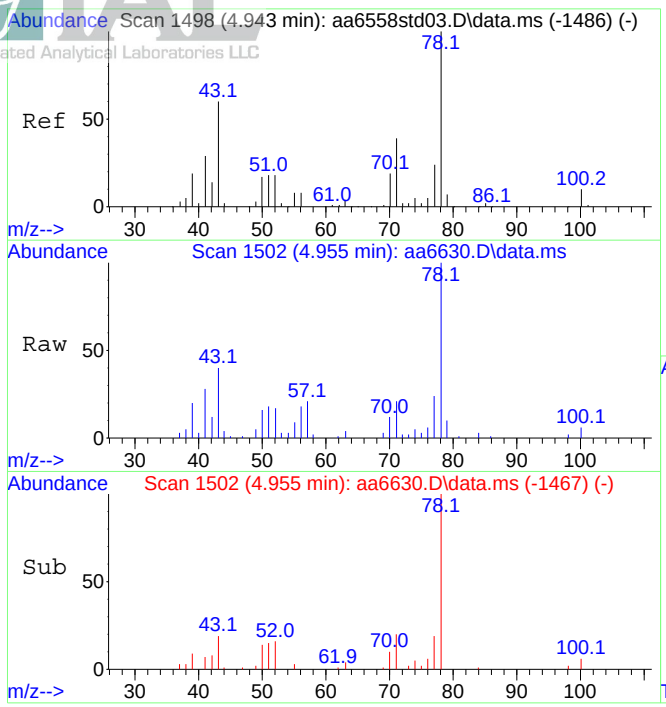


#35
Methyl ethyl ketone
Concen: 13.63 ppbV
RT: 4.724 min Scan# 1430
Delta R.T. 0.016 min
Lab File: aa6630.D
Acq: 4 Jun 2024 5:28 pm

Tgt Ion: 43 Resp: 1284208

Ion	Ratio	Lower	Upper
43	100		
72	25.0	19.5	29.3

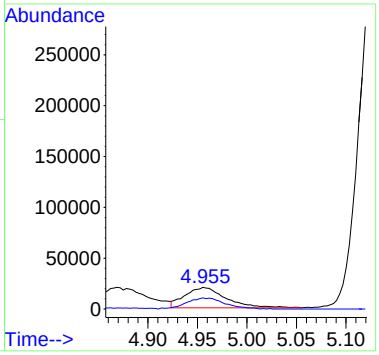


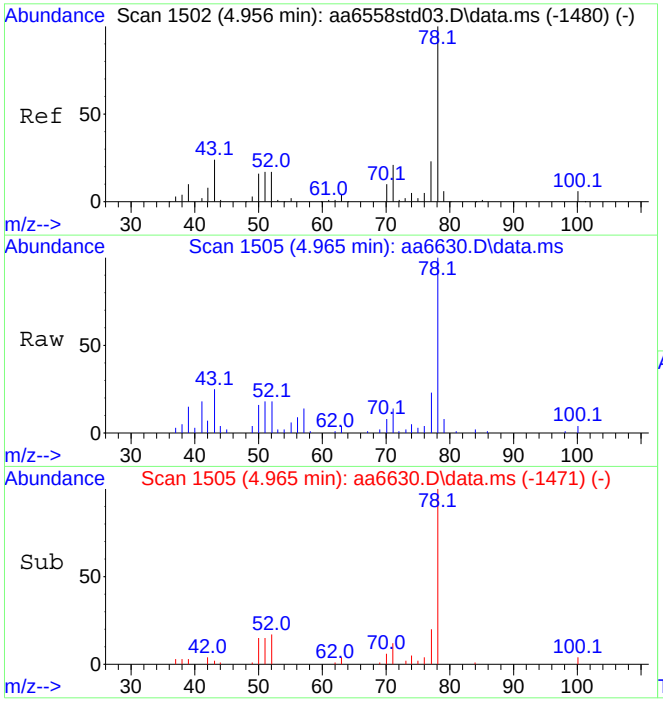


#36
n-Heptane
Concen: 0.65 ppbV
RT: 4.955 min Scan# 1502
Delta R.T. 0.012 min
Lab File: aa6630.D
Acq: 4 Jun 2024 5:28 pm

Tgt Ion: 43 Resp: 57839

Ion	Ratio	Lower	Upper
43	100		
71	50.5	46.2	69.2

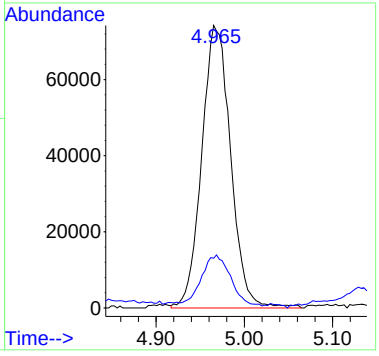


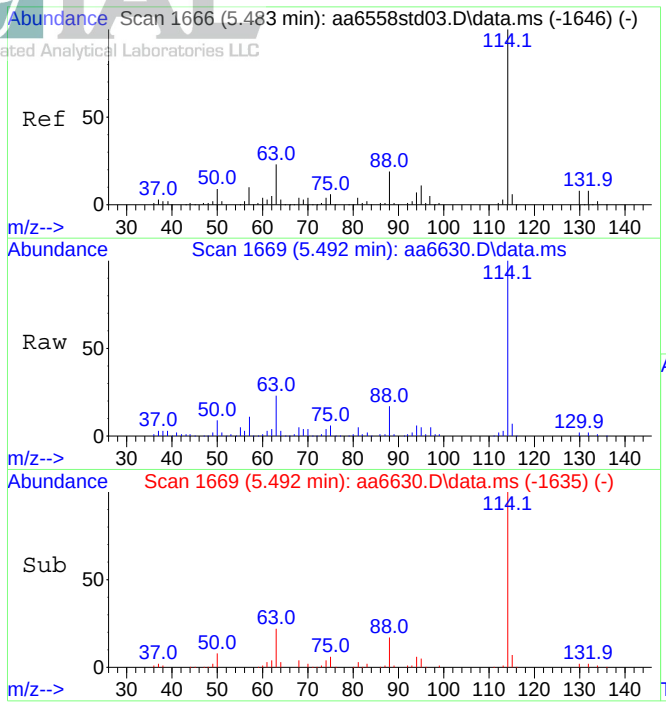


#37
Benzene
Concen: 1.25 ppbV
RT: 4.965 min Scan# 1505
Delta R.T. 0.009 min
Lab File: aa6630.D
Acq: 4 Jun 2024 5:28 pm

Tgt Ion: 78 Resp: 169166

Ion	Ratio	Lower	Upper
78	100		
51	17.8	14.9	22.3

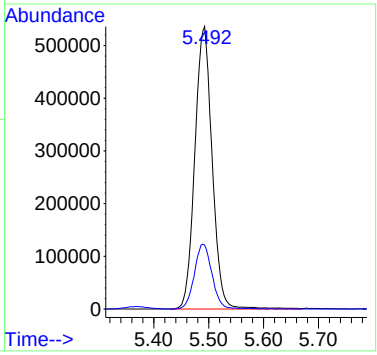


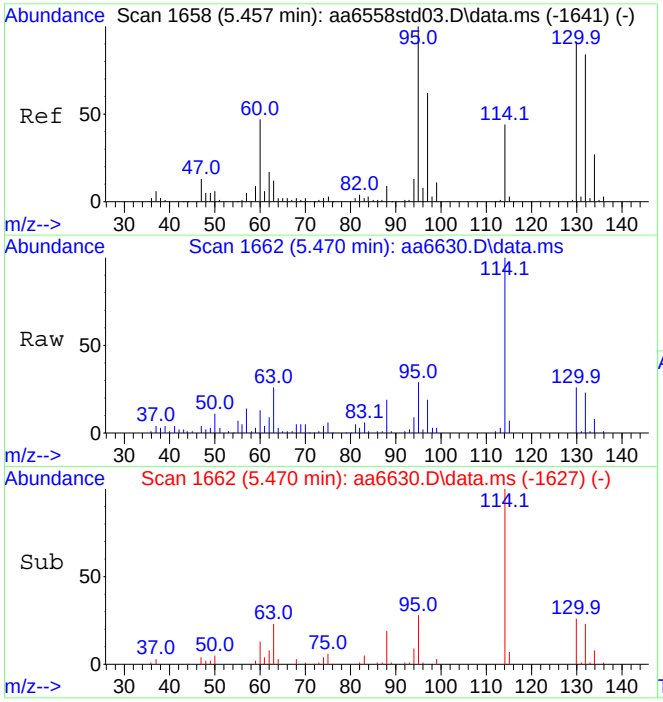


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.492 min Scan# 1669
Delta R.T. 0.009 min
Lab File: aa6630.D
Acq: 4 Jun 2024 5:28 pm

Tgt Ion:114 Resp: 1174318

Ion	Ratio	Lower	Upper
114	100		
63	23.4	3.6	43.6

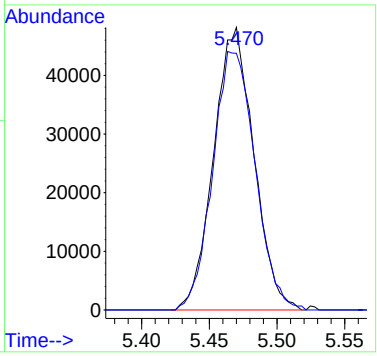


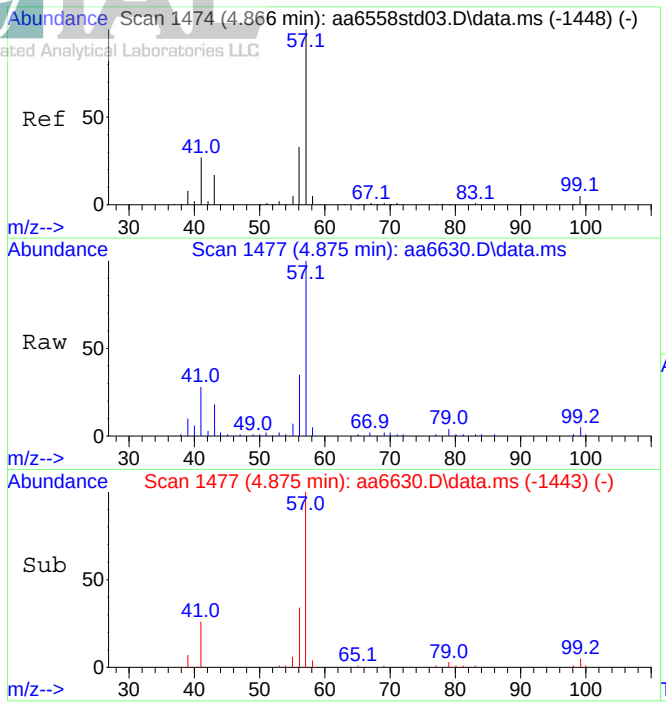


#40
Trichloroethene
Concen: 1.88 ppbV
RT: 5.470 min Scan# 1662
Delta R.T. 0.012 min
Lab File: aa6630.D
Acq: 4 Jun 2024 5:28 pm

Tgt Ion:130 Resp: 99704

Ion	Ratio	Lower	Upper
130	100		
132	96.0	76.6	114.8

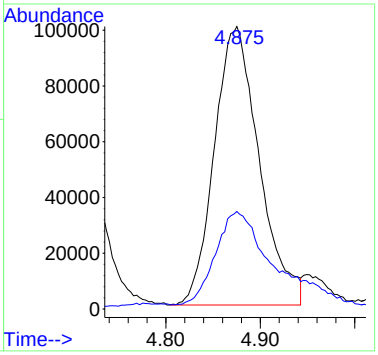


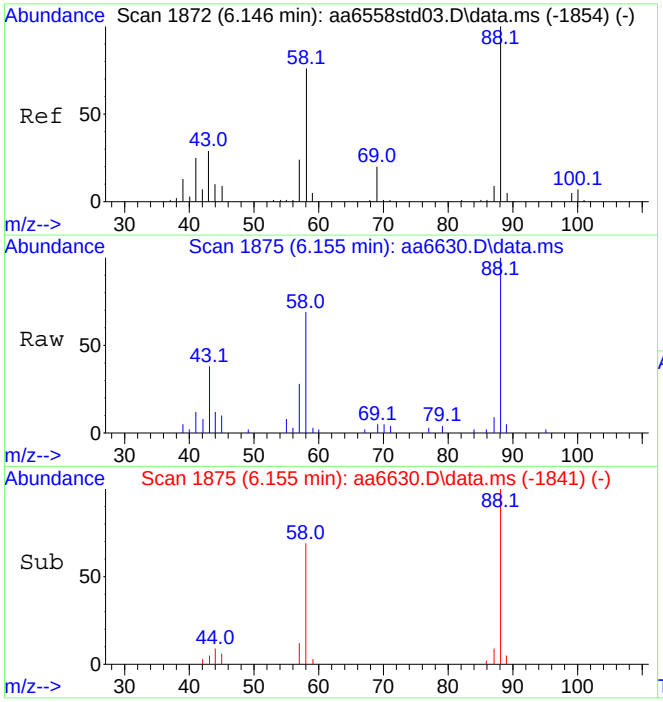


#41
2,2,4-Trimethylpentane
Concen: 1.58 ppbV
RT: 4.875 min Scan# 1477
Delta R.T. 0.009 min
Lab File: aa6630.D
Acq: 4 Jun 2024 5:28 pm

Tgt Ion: 57 Resp: 330503

Ion	Ratio	Lower	Upper
57	100		
56	38.4	26.0	39.0

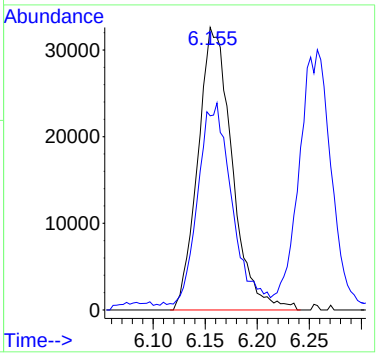


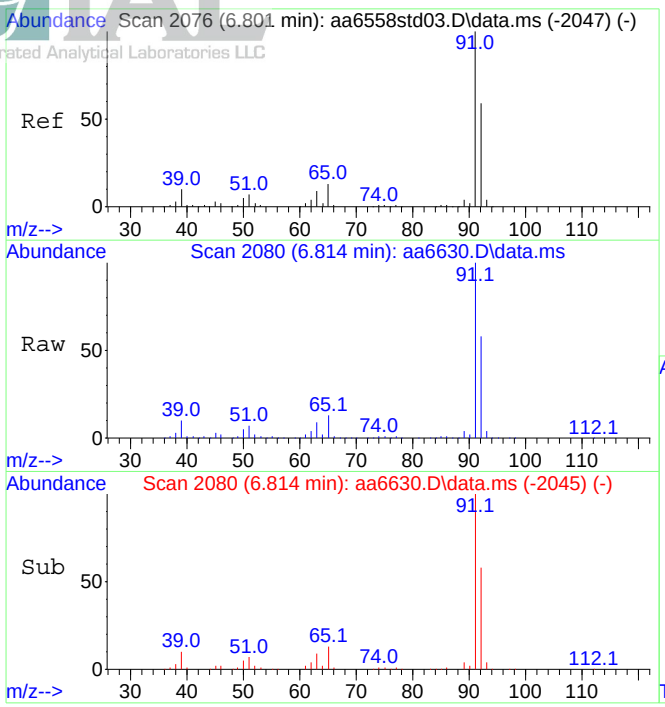


#45
1,4-Dioxane
Concen: 2.69 ppbV
RT: 6.155 min Scan# 1875
Delta R.T. 0.009 min
Lab File: aa6630.D
Acq: 4 Jun 2024 5:28 pm

Tgt Ion: 88 Resp: 74518

Ion	Ratio	Lower	Upper
88	100		
58	70.9	59.9	89.9

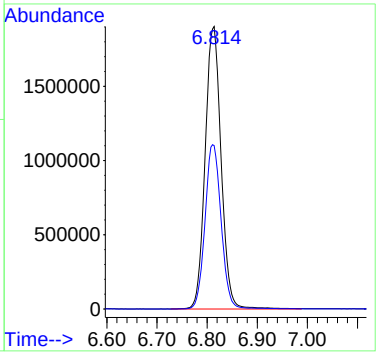


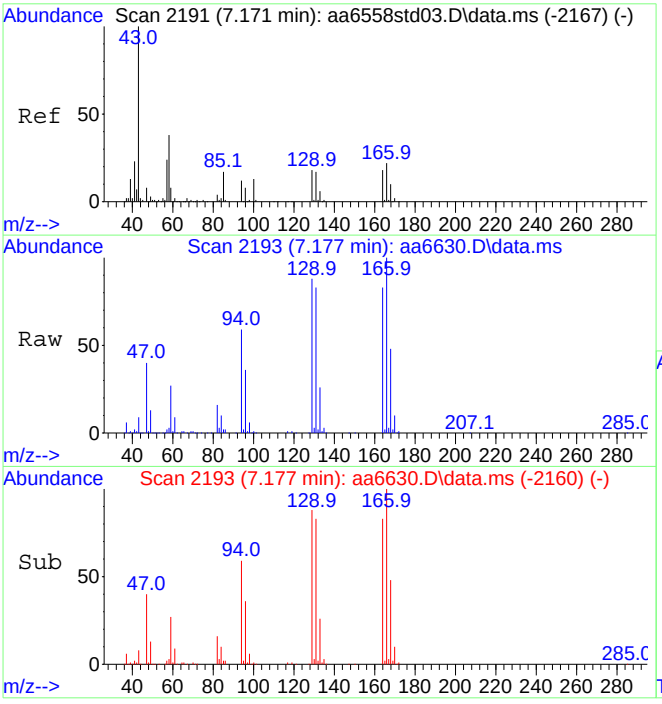


#47
Toluene
Concen: 28.04 ppbV
RT: 6.814 min Scan# 2080
Delta R.T. 0.012 min
Lab File: aa6630.D
Acq: 4 Jun 2024 5:28 pm

Tgt Ion: 91 Resp: 4216136

Ion	Ratio	Lower	Upper
91	100		
92	58.7	47.0	70.6

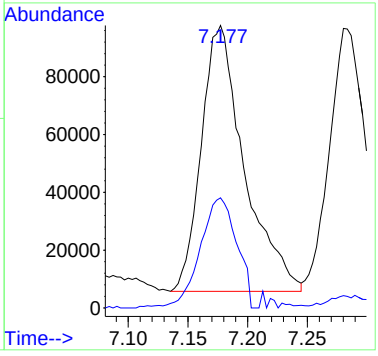


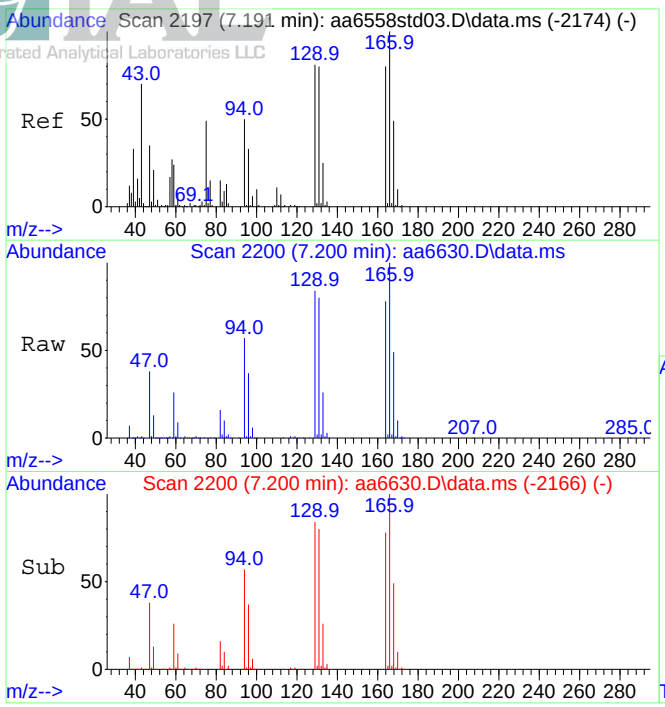


#48
Methyl isobutyl ketone
Concen: 2.09 ppbV
RT: 7.177 min Scan# 2193
Delta R.T. 0.006 min
Lab File: aa6630.D
Acq: 4 Jun 2024 5:28 pm

Tgt Ion: 43 Resp: 230038

Ion	Ratio	Lower	Upper
43	100		
58	35.4	31.0	46.4

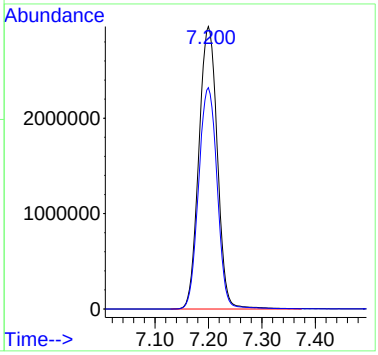


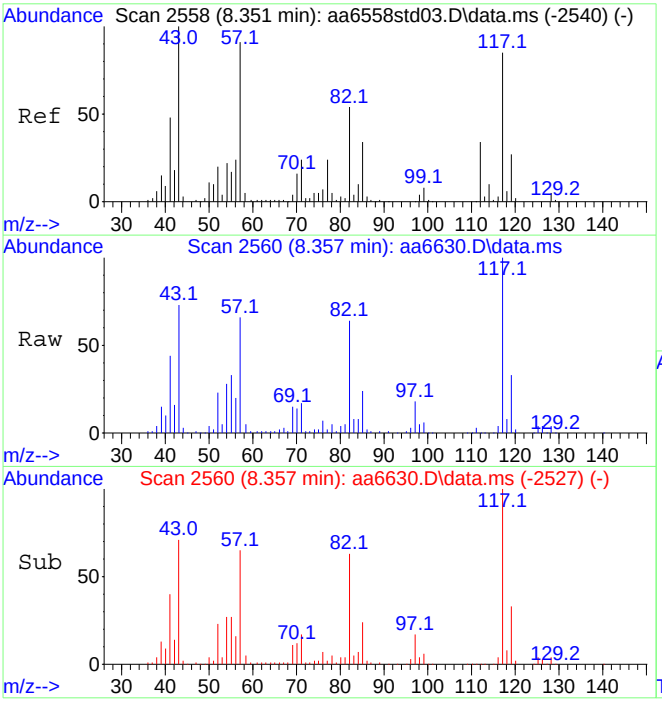


#49
Tetrachloroethene
Concen: 124.97 ppbV
RT: 7.200 min Scan# 2200
Delta R.T. 0.009 min
Lab File: aa6630.D
Acq: 4 Jun 2024 5:28 pm

Tgt Ion:166 Resp: 7117110

Ion	Ratio	Lower	Upper
166	100		
164	78.9	62.8	94.2

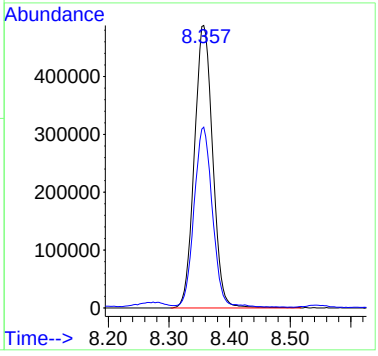


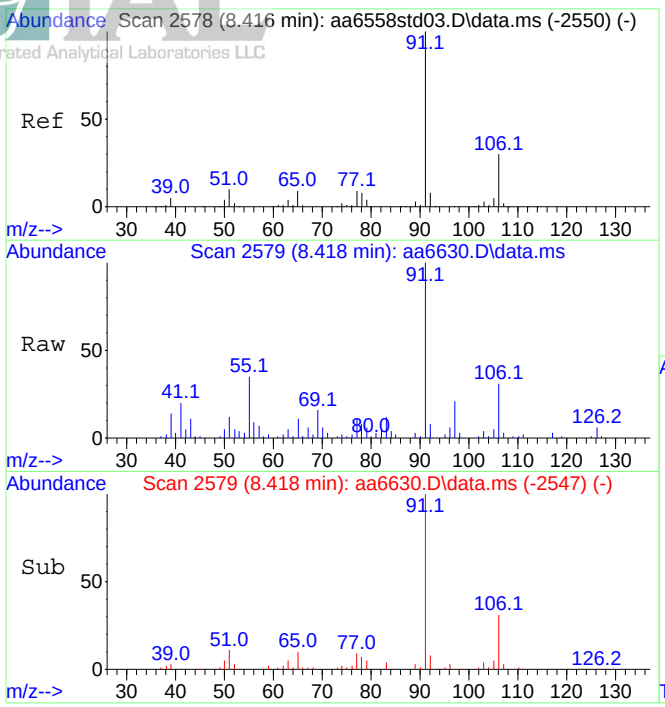


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.357 min Scan# 2560
Delta R.T. 0.006 min
Lab File: aa6630.D
Acq: 4 Jun 2024 5:28 pm

Tgt Ion:117 Resp: 1025950

Ion	Ratio	Lower	Upper
117	100		
82	63.3	42.3	82.3

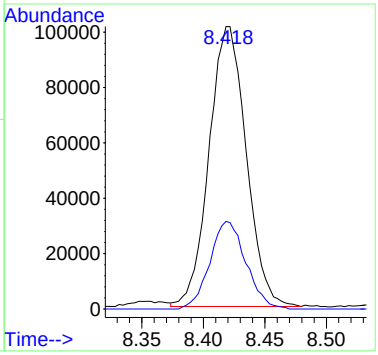


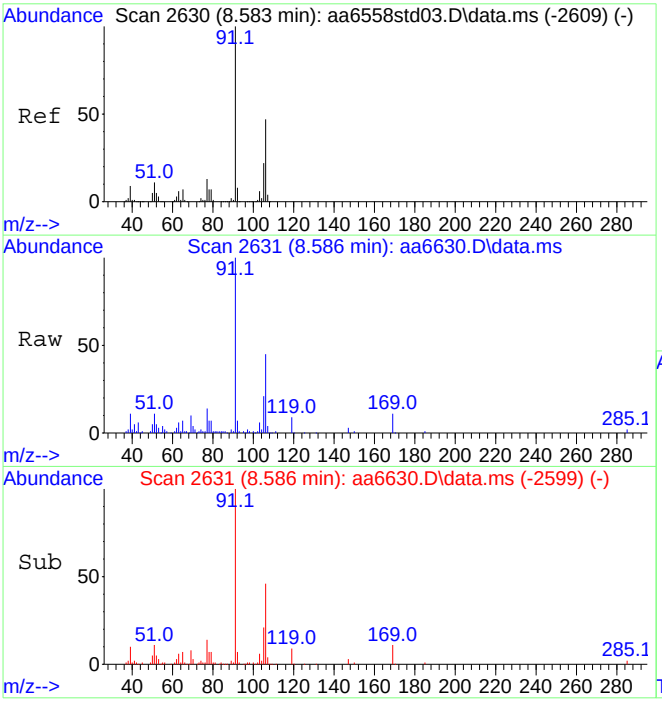


#58
Ethylbenzene
Concen: 1.05 ppbV
RT: 8.418 min Scan# 2579
Delta R.T. 0.003 min
Lab File: aa6630.D
Acq: 4 Jun 2024 5:28 pm

Tgt Ion: 91 Resp: 212571

Ion	Ratio	Lower	Upper
91	100		
106	30.3	23.8	35.8

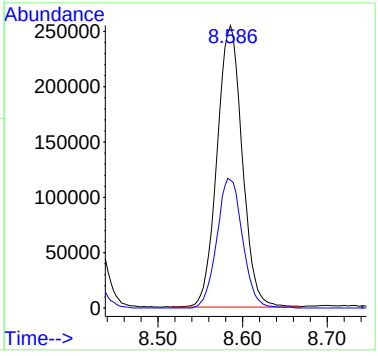


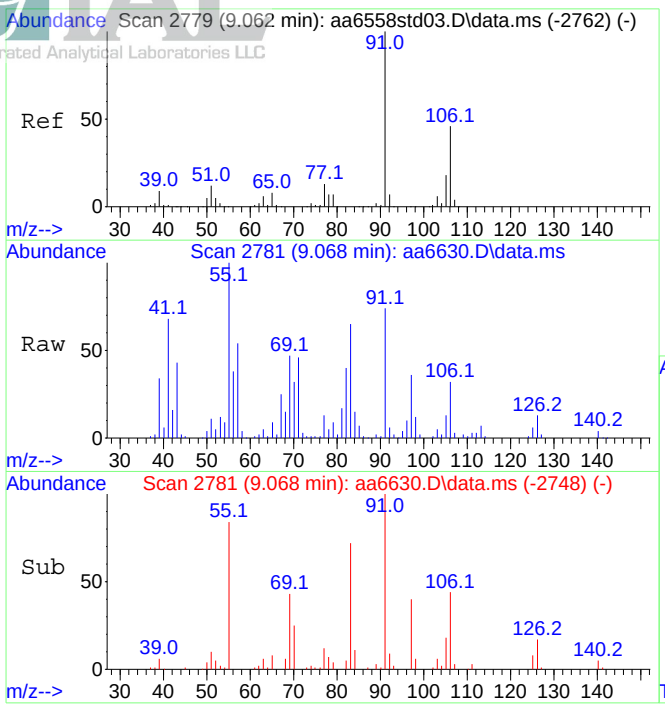


#59
Xylenes (m&p)
Concen: 3.46 ppbV
RT: 8.586 min Scan# 2631
Delta R.T. 0.003 min
Lab File: aa6630.D
Acq: 4 Jun 2024 5:28 pm

Tgt Ion: 91 Resp: 526360

Ion	Ratio	Lower	Upper
91	100		
106	46.9	37.4	56.2

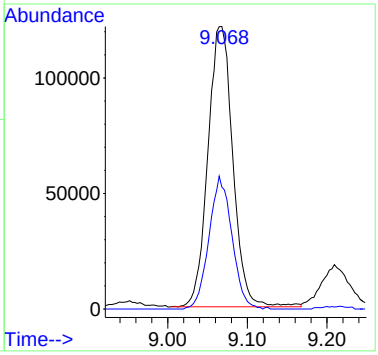


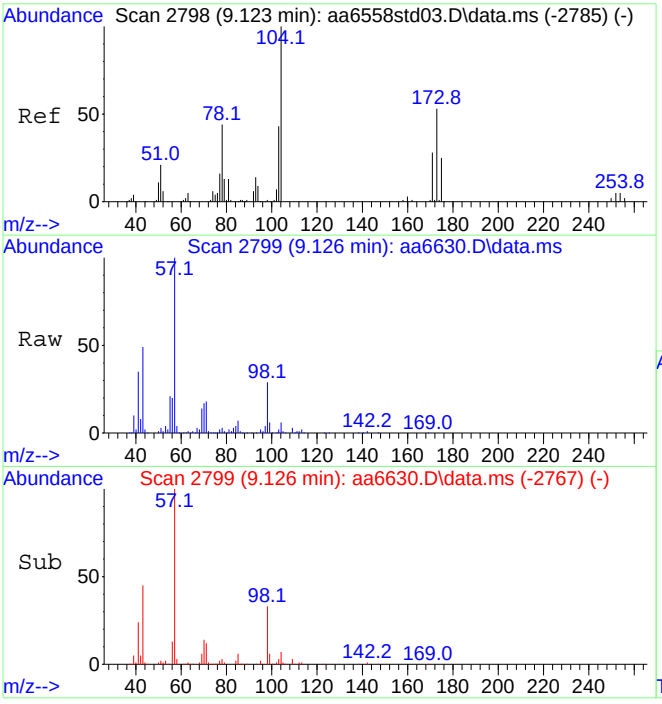


#60
Xylene (o)
Concen: 1.65 ppbV
RT: 9.068 min Scan# 2781
Delta R.T. 0.006 min
Lab File: aa6630.D
Acq: 4 Jun 2024 5:28 pm

Tgt Ion: 91 Resp: 264176

Ion	Ratio	Lower	Upper
91	100		
106	43.4	36.2	54.2

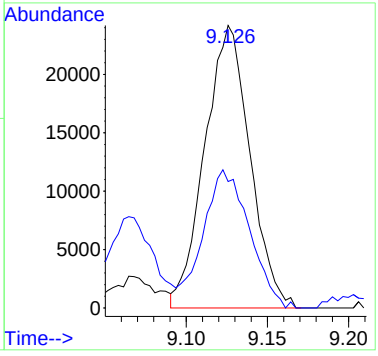


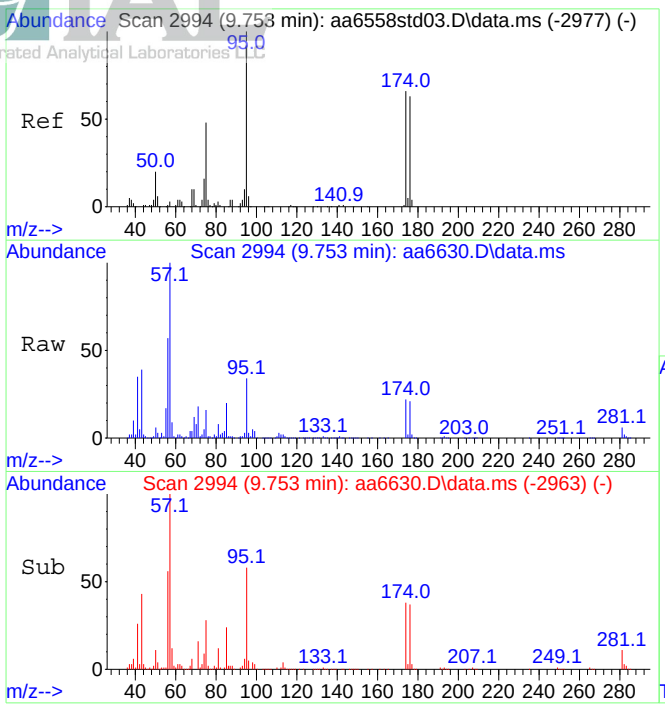


#61
Styrene
Concen: 0.44 ppbV
RT: 9.126 min Scan# 2799
Delta R.T. 0.003 min
Lab File: aa6630.D
Acq: 4 Jun 2024 5:28 pm

Tgt Ion:104 Resp: 46795

Ion	Ratio	Lower	Upper
104	100		
103	50.1	38.3	57.5

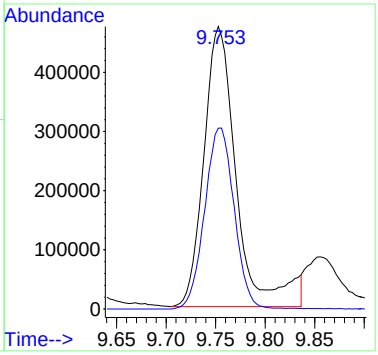


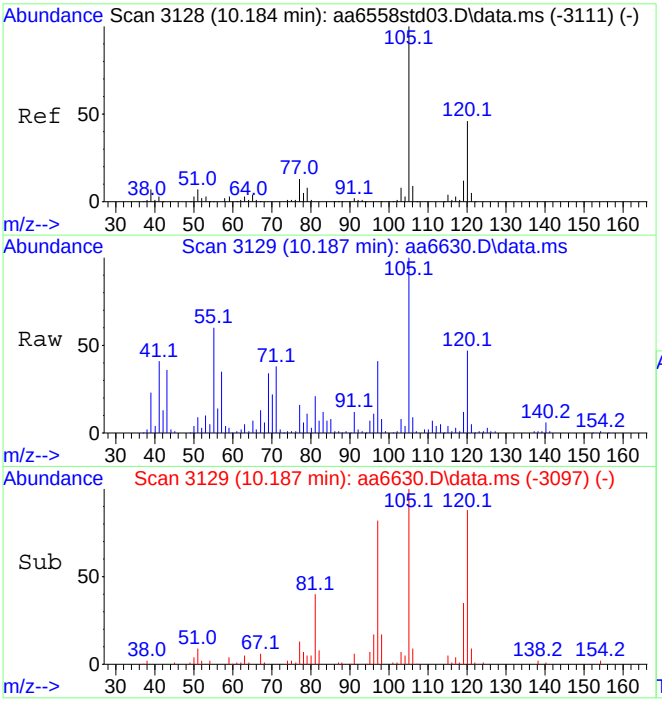


#64
Bromofluorobenzene (tune std)
Concen: 11.18 ppbV
RT: 9.753 min Scan# 2994
Delta R.T. -0.000 min
Lab File: aa6630.D
Acq: 4 Jun 2024 5:28 pm

Tgt Ion: 95 Resp: 1084807

Ion	Ratio	Lower	Upper
95	100		
174	58.5	52.9	79.3

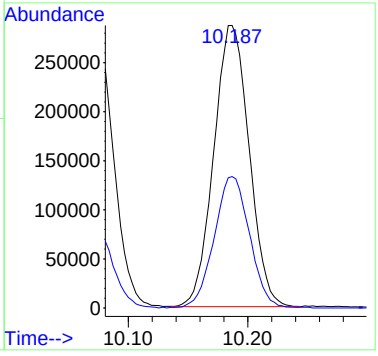


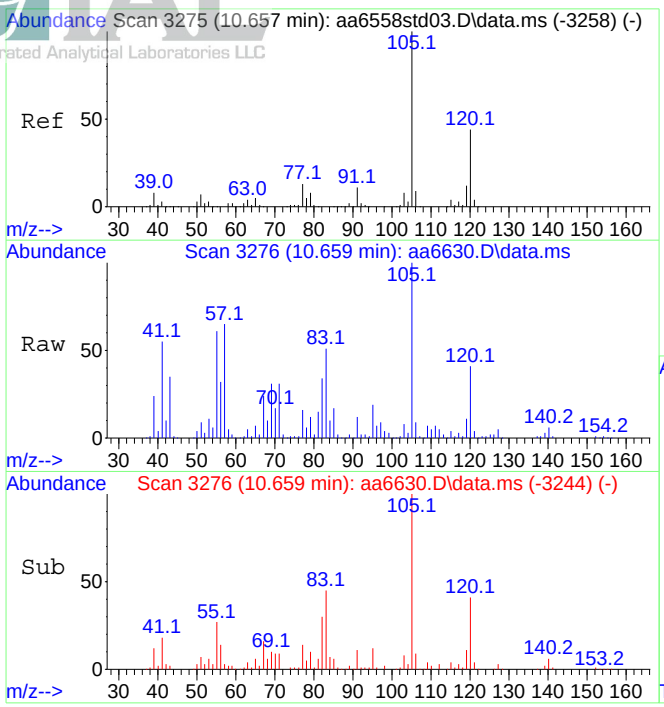


#69
1,3,5-Trimethylbenzene
Concen: 3.17 ppbV
RT: 10.187 min Scan# 3129
Delta R.T. 0.003 min
Lab File: aa6630.D
Acq: 4 Jun 2024 5:28 pm

Tgt Ion:105 Resp: 589693

Ion	Ratio	Lower	Upper
105	100		
120	46.8	37.2	55.8

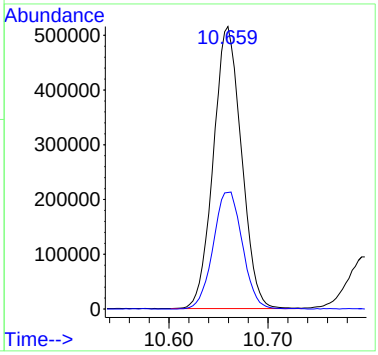




#70
1,2,4-Trimethylbenzene
Concen: 5.44 ppbV
RT: 10.659 min Scan# 3276
Delta R.T. 0.003 min
Lab File: aa6630.D
Acq: 4 Jun 2024 5:28 pm

Tgt Ion:105 Resp: 1016587

Ion	Ratio	Lower	Upper
105	100		
120	43.1	34.5	51.7



Data Path : C:\DATA\2024\06-2024\06-05-2024\
Data File : aa6648.D
Acq On : 5 Jun 2024 4:33 pm
Operator : jjw
Sample : E24-01875-06x10 dil
Misc : 3045A, 50cc
ALS Vial : 10 Sample Multiplier: 1

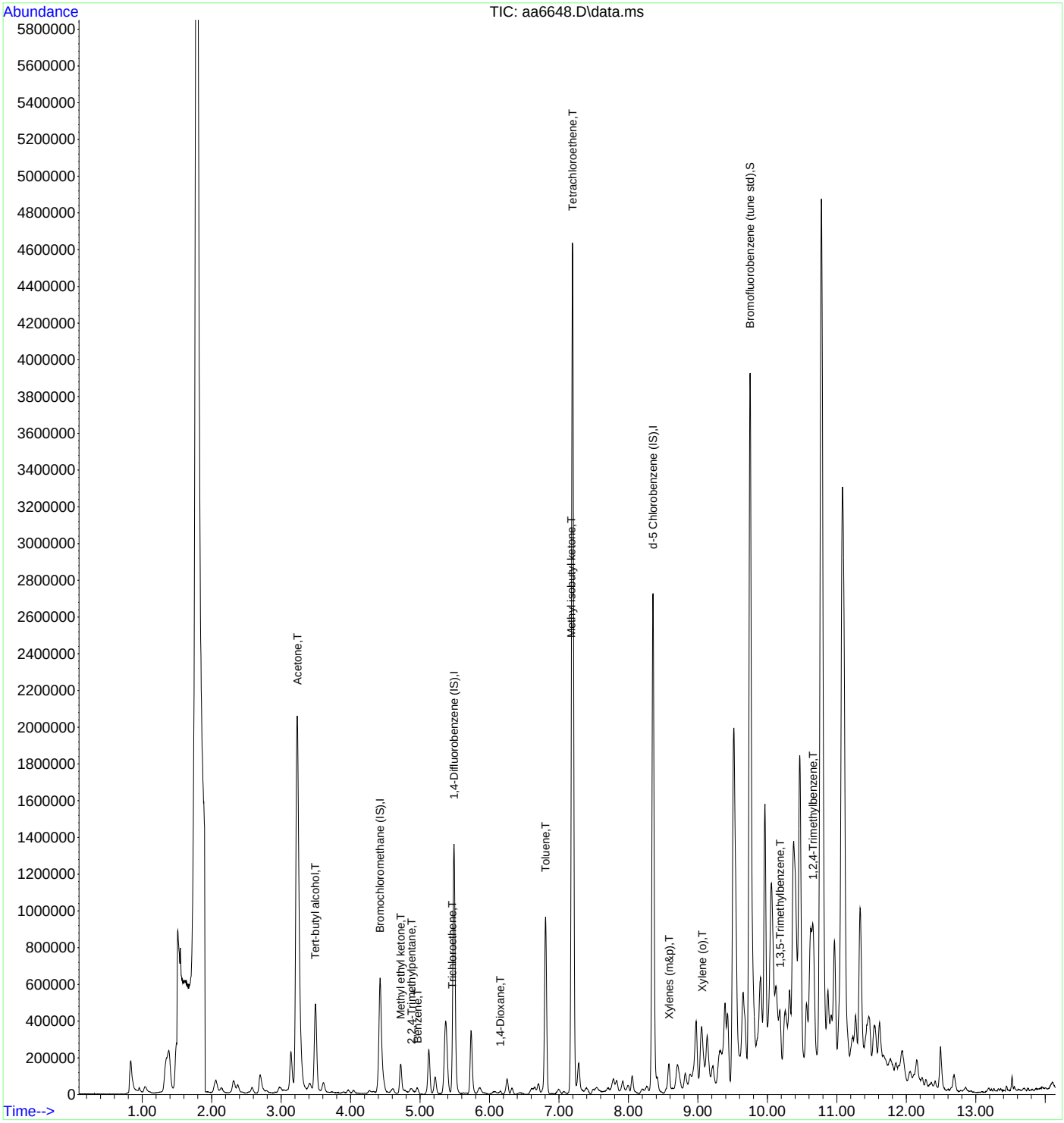
Quant Time: Jun 06 10:02:23 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

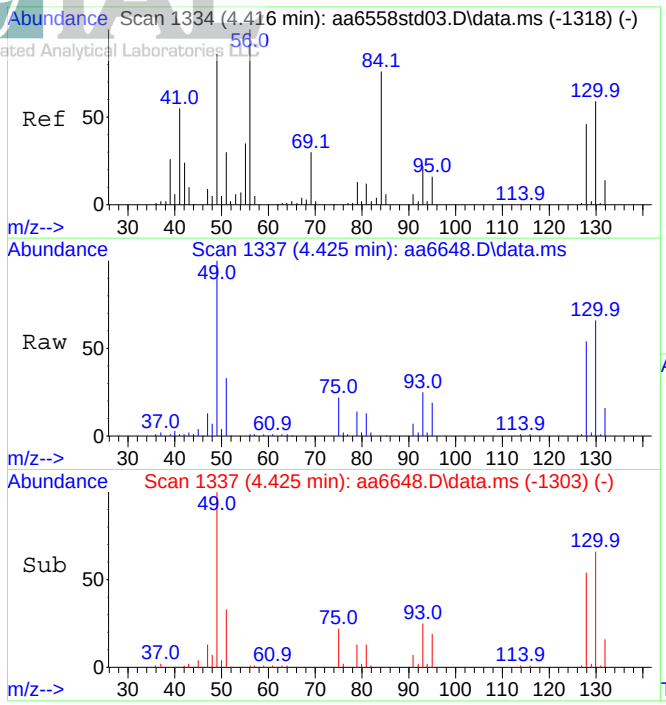
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.425	130	255739	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.489	114	1221237	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.354	117	1459034	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.753	95	1394593	10.10	ppbV	0.000
Target Compounds						Qvalue
21) Acetone	3.238	43	1338073	23.32	ppbV	100
26) Tert-butyl alcohol	3.492	59	699356	8.74	ppbV	100
35) Methyl ethyl ketone	4.724	43	214142	2.63	ppbV	100
37) Benzene	4.965	78	23704	0.20	ppbV	99
40) Trichloroethene	5.463	130	15295	0.28	ppbV	98
41) 2,2,4-Trimethylpentane	4.878	57	44360	0.20	ppbV	90
45) 1,4-Dioxane	6.155	88	12863	0.45	ppbV	98
47) Toluene	6.807	91	822243	5.26	ppbV	100
48) Methyl isobutyl ketone	7.177	43	45532	0.40	ppbV	97
49) Tetrachloroethene	7.197	166	1551453	26.20	ppbV	100
59) Xylenes (m&p)	8.586	91	105298	0.49	ppbV	98
60) Xylene (o)	9.065	91	52287	0.23	ppbV	96
69) 1,3,5-Trimethylbenzene	10.184	105	109843	0.41	ppbV	99
70) 1,2,4-Trimethylbenzene	10.656	105	180958	0.68	ppbV	99

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

Data Path : C:\DATA\2024\06-2024\06-05-2024\
Data File : aa6648.D
Acq On : 5 Jun 2024 4:33 pm
Operator : jjw
Sample : E24-01875-06x10 dil
Misc : 3045A, 50cc
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 06 10:02:23 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

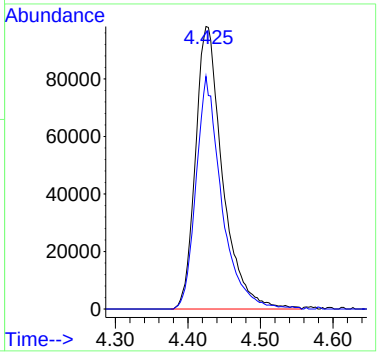


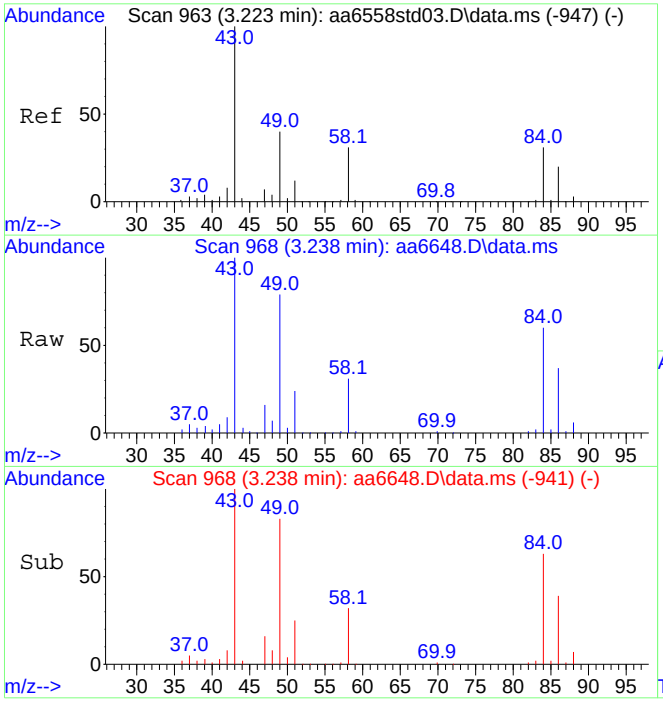


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.425 min Scan# 1337
Delta R.T. 0.009 min
Lab File: aa6648.D
Acq: 5 Jun 2024 4:33 pm

Tgt Ion:130 Resp: 255739

Ion	Ratio	Lower	Upper
130	100		
128	77.5	57.8	97.8

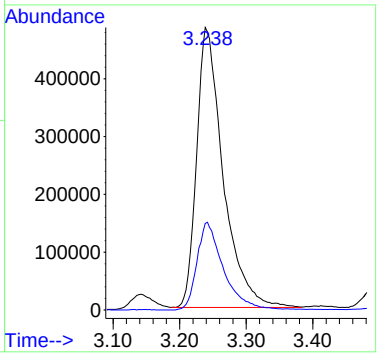


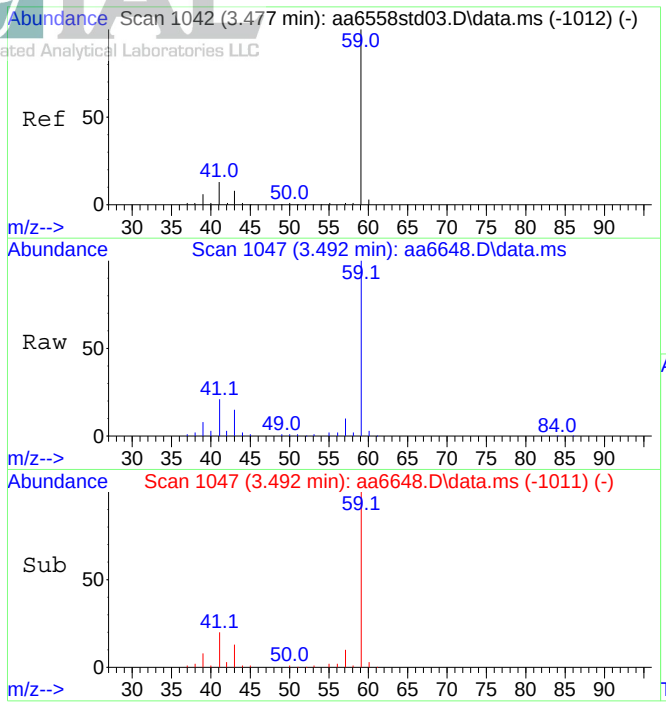


#21
Acetone
Concen: 23.32 ppbV
RT: 3.238 min Scan# 968
Delta R.T. 0.016 min
Lab File: aa6648.D
Acq: 5 Jun 2024 4:33 pm

Tgt Ion: 43 Resp: 1338073

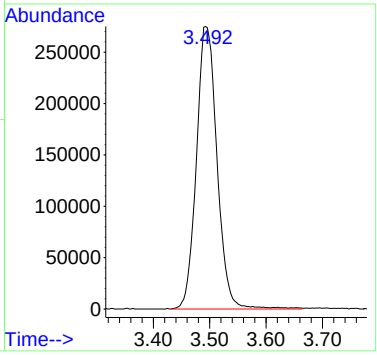
Ion	Ratio	Lower	Upper
43	100		
58	31.5	25.4	38.0

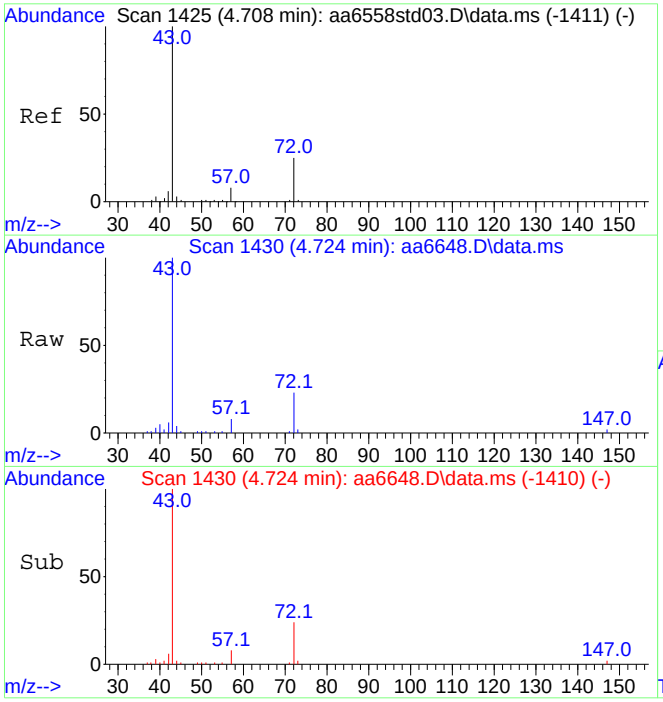




#26
Tert-butyl alcohol
Concen: 8.74 ppbV
RT: 3.492 min Scan# 1047
Delta R.T. 0.016 min
Lab File: aa6648.D
Acq: 5 Jun 2024 4:33 pm

Tgt Ion: 59 Resp: 699356

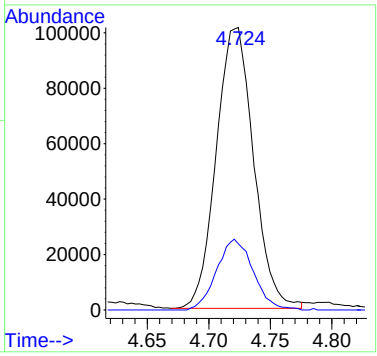


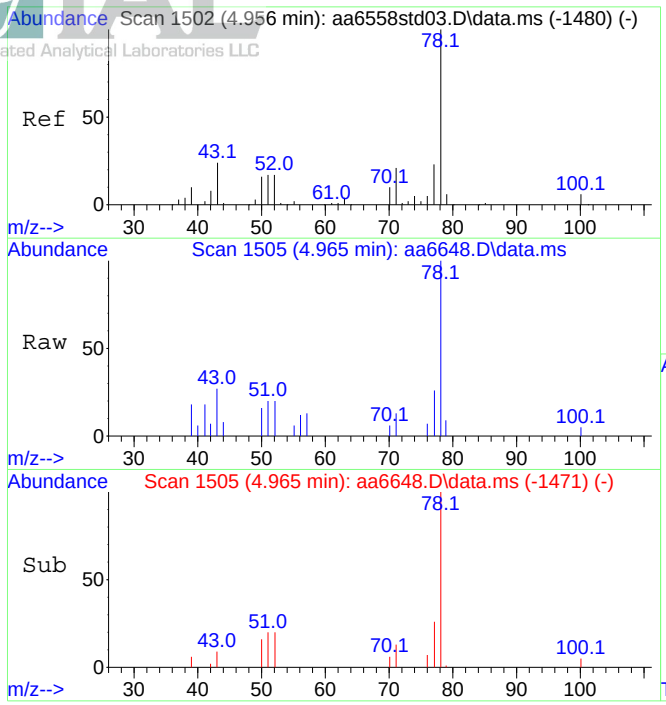


#35
Methyl ethyl ketone
Concen: 2.63 ppbV
RT: 4.724 min Scan# 1430
Delta R.T. 0.016 min
Lab File: aa6648.D
Acq: 5 Jun 2024 4:33 pm

Tgt Ion: 43 Resp: 214142

Ion	Ratio	Lower	Upper
43	100		
72	24.6	19.5	29.3

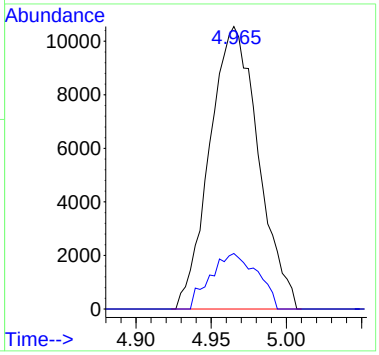


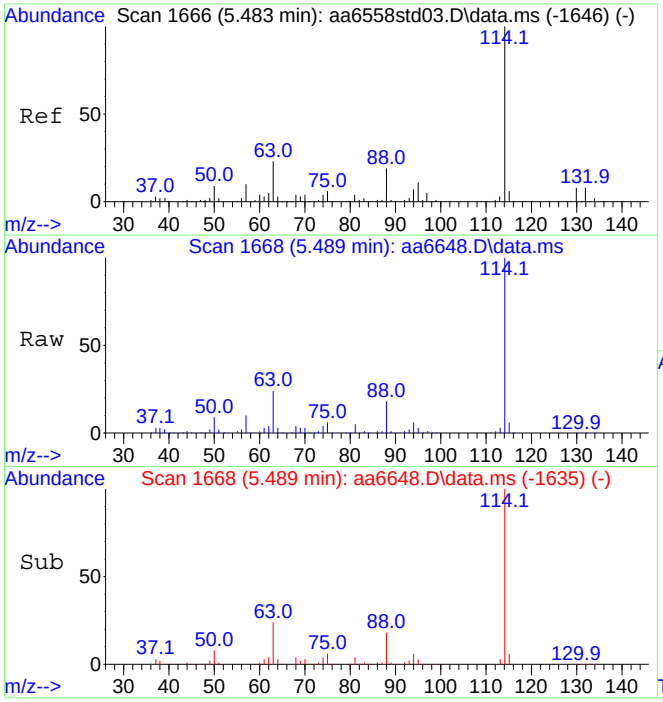


#37
Benzene
Concen: 0.20 ppbV
RT: 4.965 min Scan# 1505
Delta R.T. 0.009 min
Lab File: aa6648.D
Acq: 5 Jun 2024 4:33 pm

Tgt Ion: 78 Resp: 23704

Ion	Ratio	Lower	Upper
78	100		
51	18.9	14.9	22.3

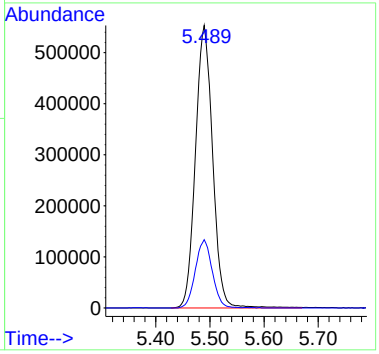


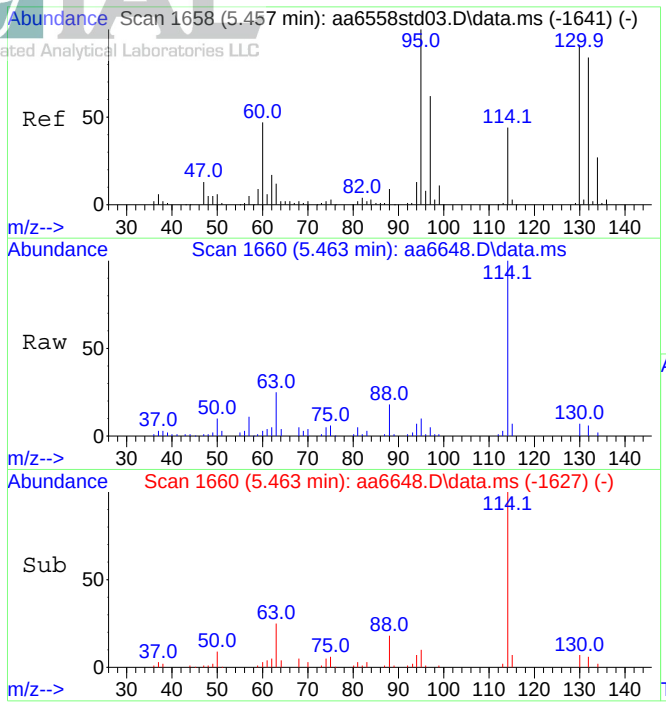


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.489 min Scan# 1668
Delta R.T. 0.006 min
Lab File: aa6648.D
Acq: 5 Jun 2024 4:33 pm

Tgt Ion:114 Resp: 1221237

Ion	Ratio	Lower	Upper
114	100		
63	23.7	3.6	43.6

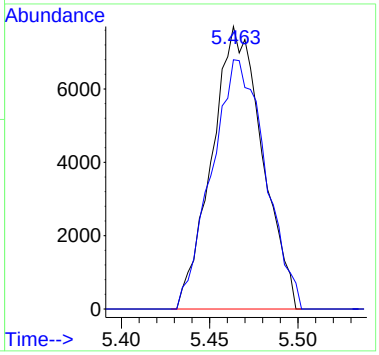


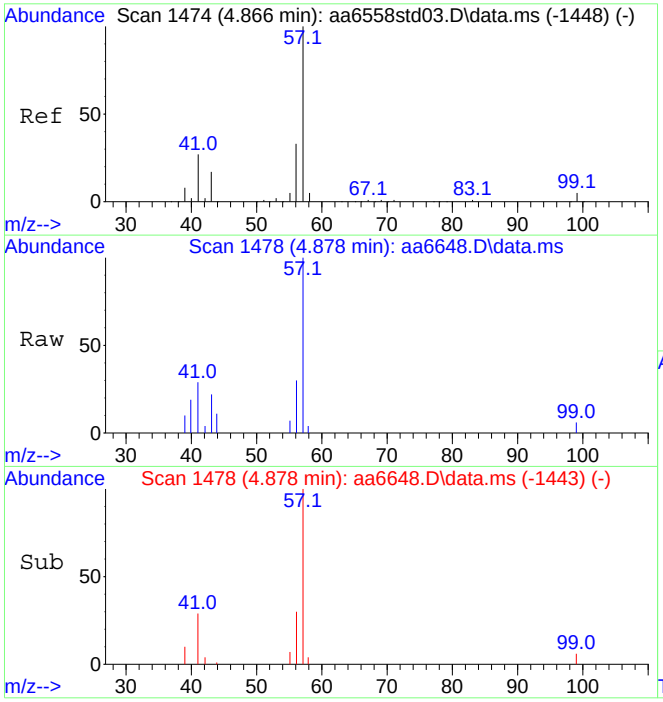


#40
Trichloroethene
Concen: 0.28 ppbV
RT: 5.463 min Scan# 1660
Delta R.T. 0.006 min
Lab File: aa6648.D
Acq: 5 Jun 2024 4:33 pm

Tgt Ion:130 Resp: 15295

Ion	Ratio	Lower	Upper
130	100		
132	93.9	76.6	114.8

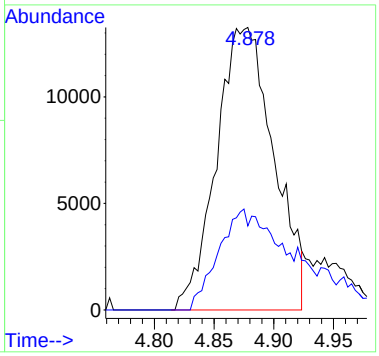


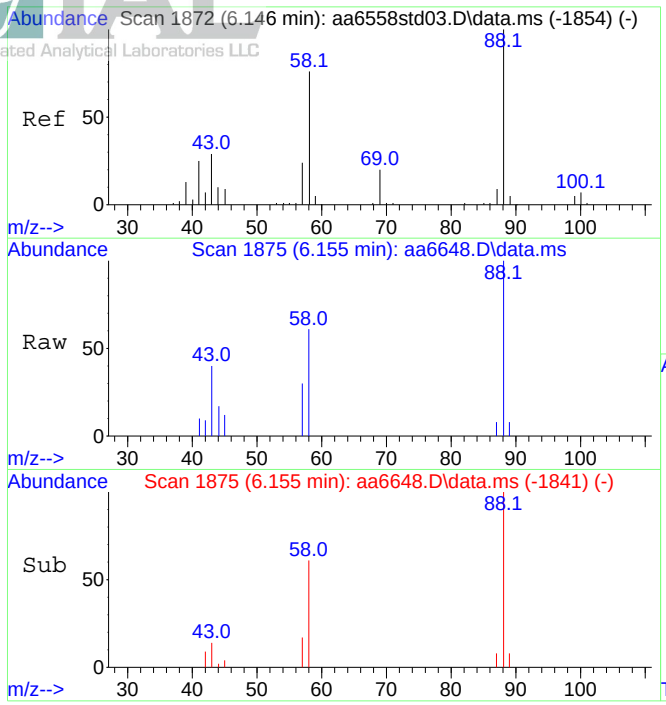


#41
2,2,4-Trimethylpentane
Concen: 0.20 ppbV
RT: 4.878 min Scan# 1478
Delta R.T. 0.012 min
Lab File: aa6648.D
Acq: 5 Jun 2024 4:33 pm

Tgt Ion: 57 Resp: 44360

Ion	Ratio	Lower	Upper
57	100		
56	38.3	26.0	39.0

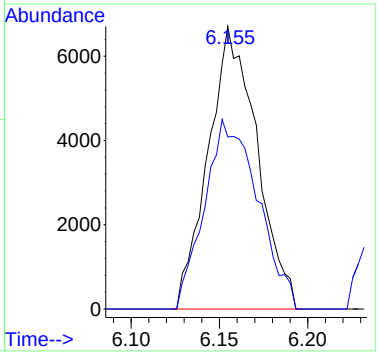


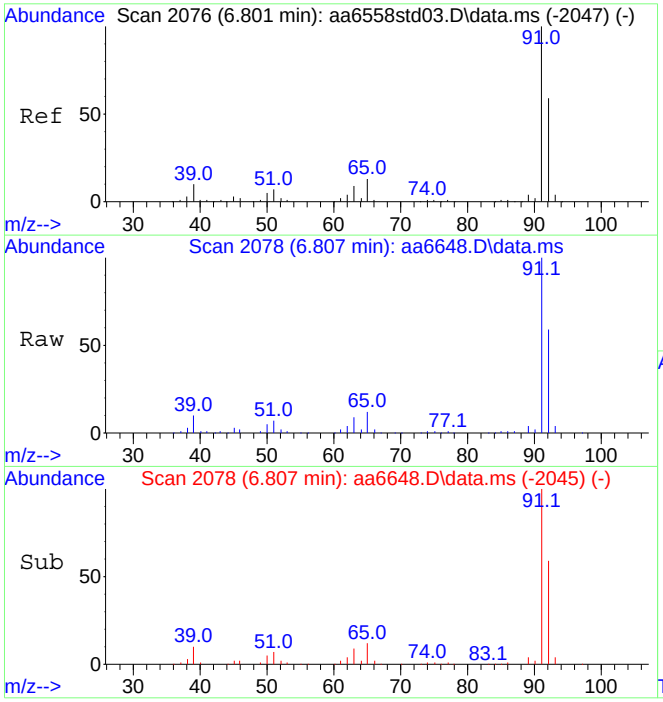


#45
1,4-Dioxane
Concen: 0.45 ppbV
RT: 6.155 min Scan# 1875
Delta R.T. 0.009 min
Lab File: aa6648.D
Acq: 5 Jun 2024 4:33 pm

Tgt Ion: 88 Resp: 12863

Ion	Ratio	Lower	Upper
88	100		
58	73.1	59.9	89.9

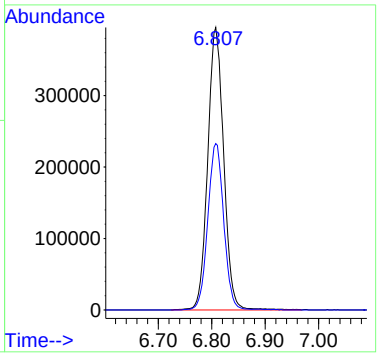


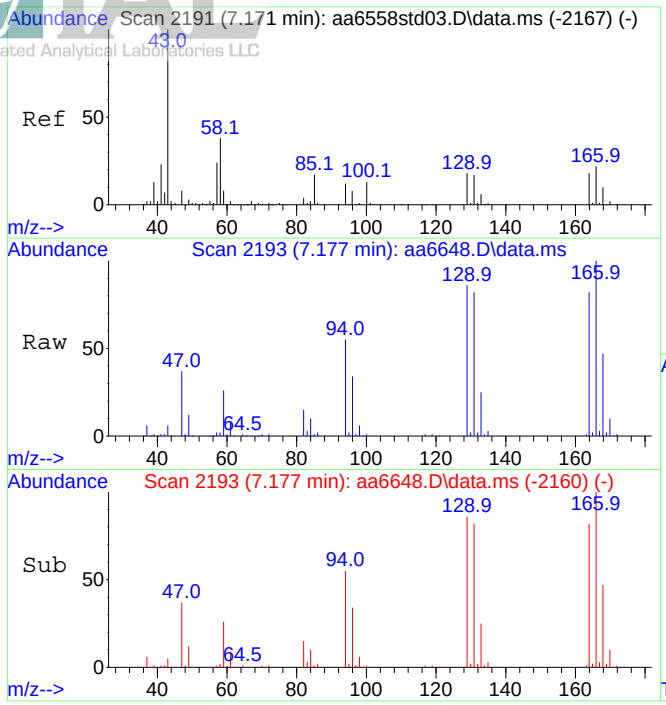


#47
Toluene
Concen: 5.26 ppbV
RT: 6.807 min Scan# 2078
Delta R.T. 0.006 min
Lab File: aa6648.D
Acq: 5 Jun 2024 4:33 pm

Tgt Ion: 91 Resp: 822243

Ion	Ratio	Lower	Upper
91	100		
92	59.0	47.0	70.6

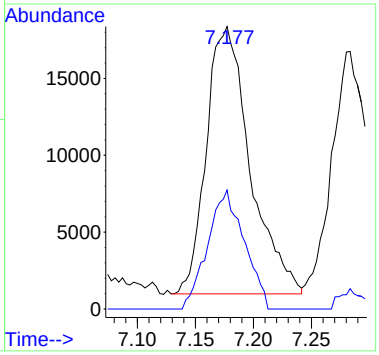


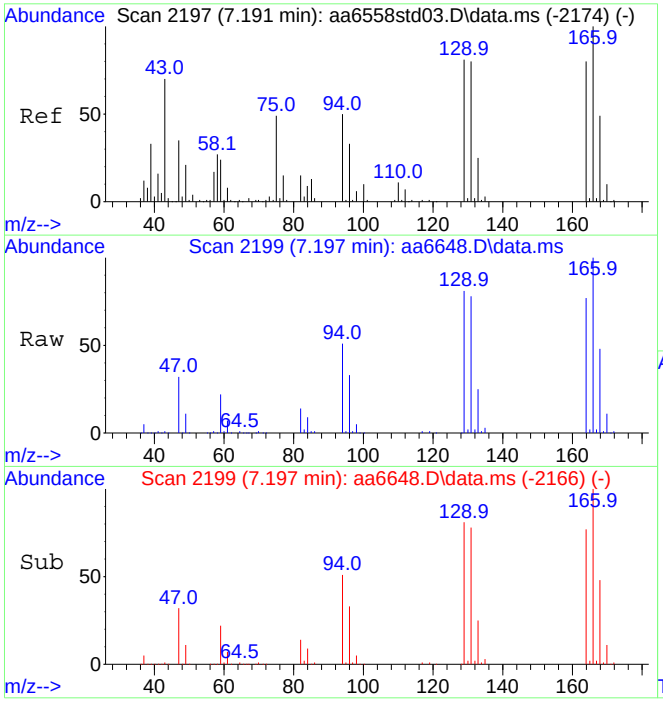


#48
Methyl isobutyl ketone
Concen: 0.40 ppbV
RT: 7.177 min Scan# 2193
Delta R.T. 0.006 min
Lab File: aa6648.D
Acq: 5 Jun 2024 4:33 pm

Tgt Ion: 43 Resp: 45532

Ion	Ratio	Lower	Upper
43	100		
58	37.2	31.0	46.4

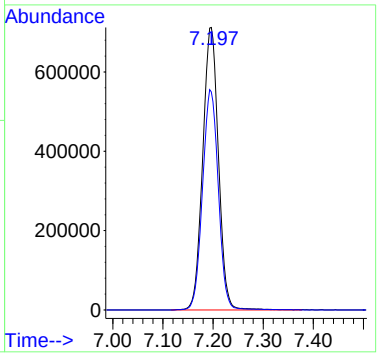


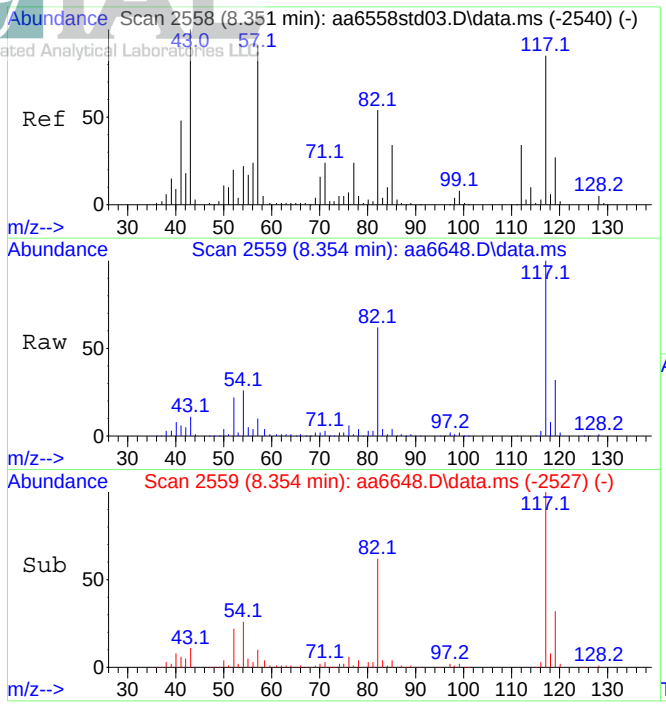


#49
Tetrachloroethene
Concen: 26.20 ppbV
RT: 7.197 min Scan# 2199
Delta R.T. 0.006 min
Lab File: aa6648.D
Acq: 5 Jun 2024 4:33 pm

Tgt Ion:166 Resp: 1551453

Ion	Ratio	Lower	Upper
166	100		
164	78.4	62.8	94.2

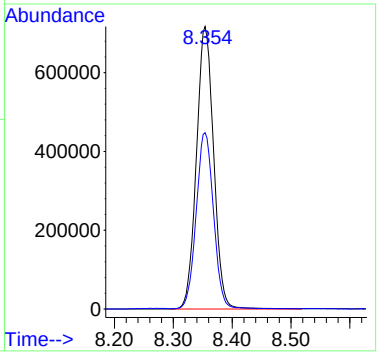


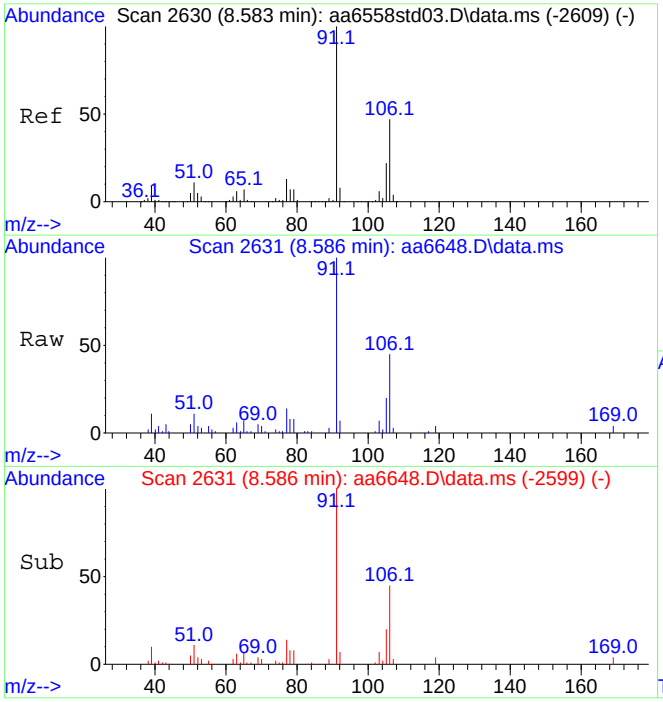


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.354 min Scan# 2559
Delta R.T. 0.003 min
Lab File: aa6648.D
Acq: 5 Jun 2024 4:33 pm

Tgt Ion:117 Resp: 1459034

Ion	Ratio	Lower	Upper
117	100		
82	62.4	42.3	82.3

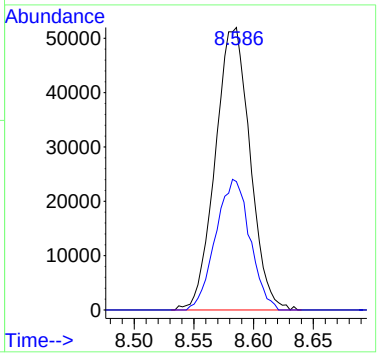


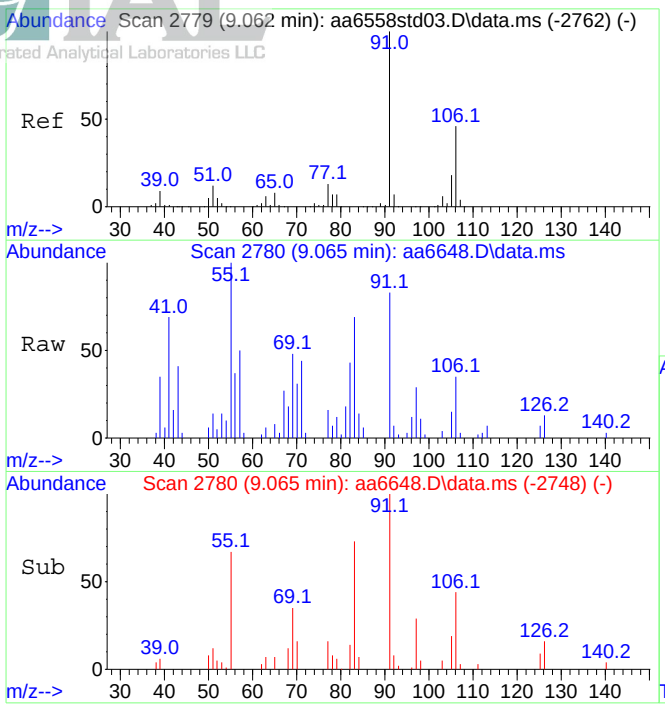


#59
Xylenes (m&p)
Concen: 0.49 ppbV
RT: 8.586 min Scan# 2631
Delta R.T. 0.003 min
Lab File: aa6648.D
Acq: 5 Jun 2024 4:33 pm

Tgt Ion: 91 Resp: 105298

Ion	Ratio	Lower	Upper
91	100		
106	45.6	37.4	56.2

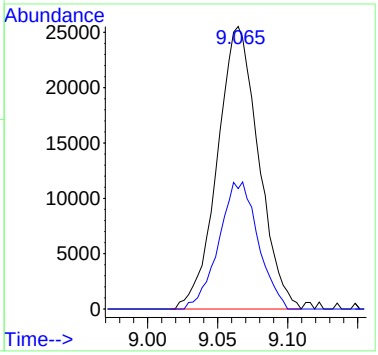


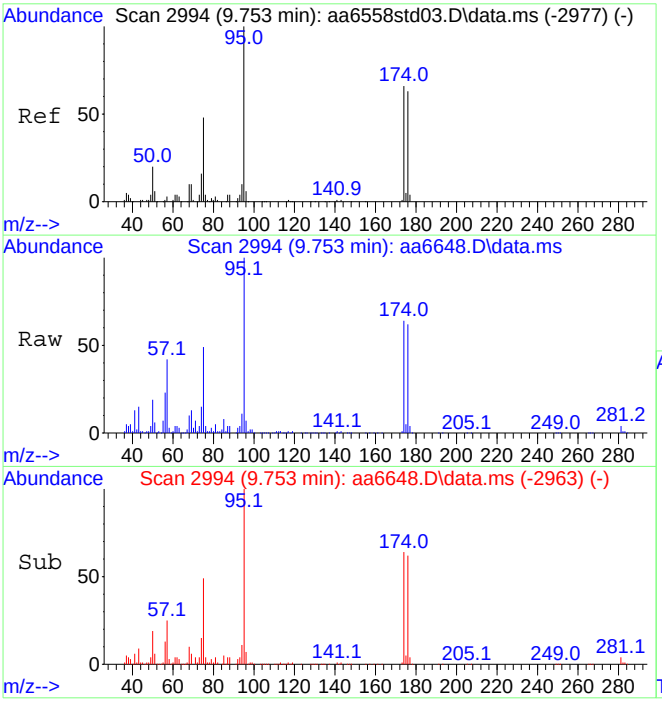


#60
Xylene (o)
Concen: 0.23 ppbV
RT: 9.065 min Scan# 2780
Delta R.T. 0.003 min
Lab File: aa6648.D
Acq: 5 Jun 2024 4:33 pm

Tgt Ion: 91 Resp: 52287

Ion	Ratio	Lower	Upper
91	100		
106	42.7	36.2	54.2

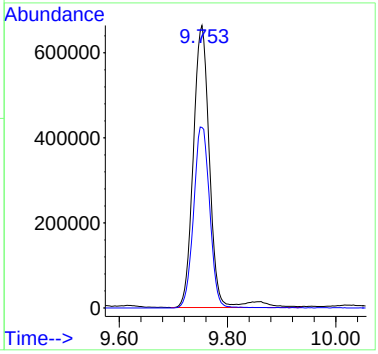


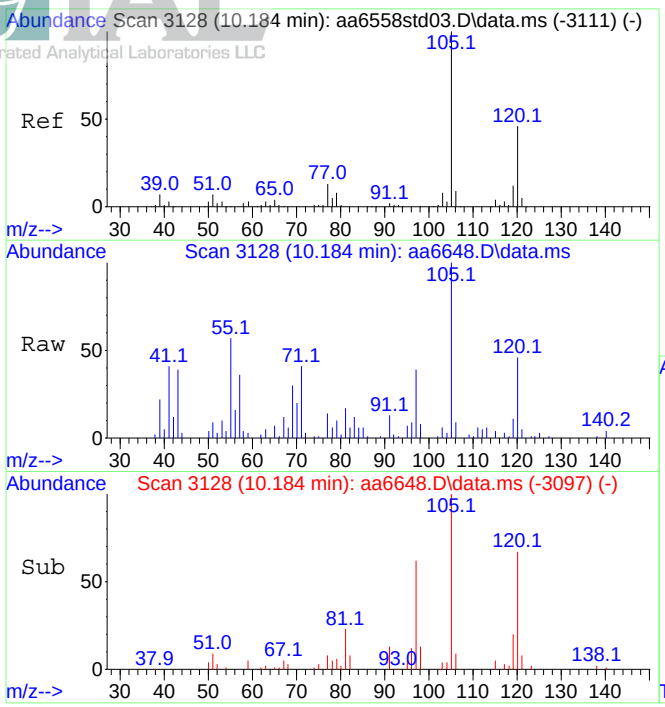


#64
Bromofluorobenzene (tune std)
Concen: 10.10 ppbV
RT: 9.753 min Scan# 2994
Delta R.T. -0.000 min
Lab File: aa6648.D
Acq: 5 Jun 2024 4:33 pm

Tgt Ion: 95 Resp: 1394593

Ion	Ratio	Lower	Upper
95	100		
174	62.9	52.9	79.3

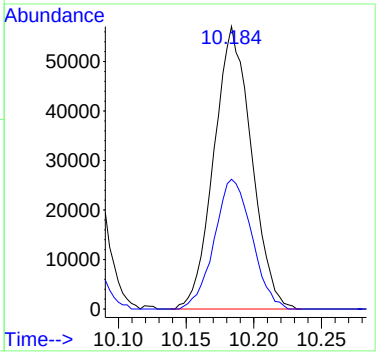


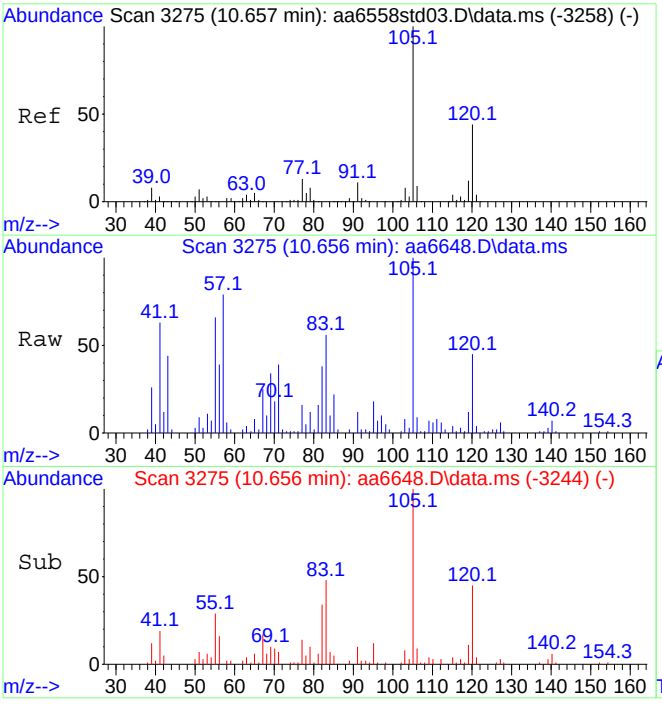


#69
1,3,5-Trimethylbenzene
Concen: 0.41 ppbV
RT: 10.184 min Scan# 3128
Delta R.T. -0.000 min
Lab File: aa6648.D
Acq: 5 Jun 2024 4:33 pm

Tgt Ion:105 Resp: 109843

Ion	Ratio	Lower	Upper
105	100		
120	46.1	37.2	55.8

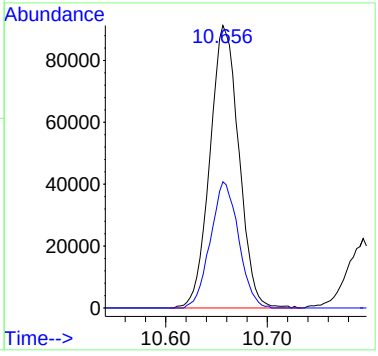




#70
1,2,4-Trimethylbenzene
Concen: 0.68 ppbV
RT: 10.656 min Scan# 3275
Delta R.T. -0.000 min
Lab File: aa6648.D
Acq: 5 Jun 2024 4:33 pm

Tgt Ion:105 Resp: 180958

Ion	Ratio	Lower	Upper
105	100		
120	43.4	34.5	51.7



Section VII: Standards Data

Initial Calibration Data

Initial Calibration Verification Data

Continuing Calibration Data

INTEGRATED ANALYTICAL LABORATORIES, LLC

Initial Calibration Data Summary Report

Initial Calibration Curve: 3/27/2024 **Method ID:** 240326.M

Instrument: AA

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6020BFB]	03/27/2024 10:03
0.2 PPBV STD [AA6021STD05]	03/27/2024 10:38
2 PPBV STD [AA6022STD04]	03/27/2024 11:38
10 PPBV STD [AA6023STD03]	03/27/2024 12:09
20 PPBV STD [AA6024STD02]	03/27/2024 12:40
40 PPBV STD [AA6025STD01]	03/27/2024 13:24
10 PPBV ICVSS [AA6026ICVSS]	03/27/2024 13:54

	Parameter	RRF 0.2ppbv	RRF 2ppbv	RRF 10ppbv	RRF 20ppbv	RRF 40ppbv	Avg ppbv	% RSD
1)	Bromochloromethane	----------ISTD----------						
2)	Propene	1.3	1.0	1.1	1.1	1.1	1.1	7.7
3)	Dichlorodifluoromethane	2.6	2.0	2.5	2.7	2.7	2.5	12
4)	1,2-Dichlorotetrafluoroethane	4.0	3.7	3.3	3.6	3.6	3.6	7.3
5)	n-Butane	3.2	2.5	2.2	2.3	2.2	2.5	17
6)	Chloromethane	0.15	0.17	0.15	0.19	0.16	0.16	9.6
7)	Vinyl chloride	1.2	0.98	1.3	1.4	1.4	1.2	13
8)	1,3-Butadiene	1.8	1.5	1.3	1.3	1.3	1.4	15
9)	Bromomethane	0.77	0.72	0.97	1.0	1.0	0.90	16
10)	Chloroethane	0.72	0.53	0.70	0.75	0.74	0.69	13
11)	Vinyl bromide	0.91	0.84	1.1	1.2	1.2	1.0	15
12)	Trichlorofluoromethane	3.4	2.8	2.7	2.9	2.9	2.9	9.9
13)	Ethanol	0.50	0.43	0.42	0.45	0.50	0.46	8.1
14)	1,1-Dichloroethene	2.3	1.7	2.3	2.5	2.5	2.3	15
15)	Carbon disulfide	3.5	2.7	3.8	4.1	4.1	3.6	16
16)	1,1,2-Trichloro-1,2,2-trifluoroethane	3.4	3.5	2.5	2.6	2.6	2.9	17
17)	Acrolein	0.67	0.37	0.53	0.57	0.59	0.55	20
18)	Allyl Chloride	0.56	0.42	0.58	0.64	0.64	0.57	15
19)	Isopropanol	3.4	2.2	2.8	3.1	3.1	2.9	15
20)	Methylene chloride	1.9	1.2	1.6	1.7	1.7	1.6	18
21)	Acetone	2.9	1.5	2.2	2.3	2.3	2.2	24
22)	1,2-Dichloroethene (trans)	2.1	1.4	2.0	2.2	2.3	2.0	17
23)	n-Pentane	3.3	2.8	2.5	2.6	2.8	2.8	10
24)	n-Hexane	5.4	3.8	3.5	3.6	3.8	4.0	19
25)	Methyl tert-butyl ether	5.3	5.2	4.0	4.0	4.1	4.5	14
26)	Tert-butyl alcohol	3.7	3.4	2.8	3.0	3.1	3.2	10
27)	1,1-Dichloroethane	3.3	2.1	2.4	2.7	2.8	2.7	17
28)	1,2-Dichloroethene (cis)	2.1	1.5	1.8	2.0	2.1	1.9	14
29)	Cyclohexane	3.2	3.0	2.4	2.5	2.5	2.7	14
30)	Chloroform	3.1	2.3	2.6	2.9	3.0	2.8	12
31)	Ethyl acetate	0.67	0.52	0.52	0.56	0.61	0.58	11
32)	Carbon tetrachloride	3.2	3.1	2.6	2.7	2.8	2.9	9.7
33)	Tetrahydrofuran	2.5	1.8	1.9	2.1	2.2	2.1	12
34)	1,1,1-Trichloroethane	3.0	2.9	2.4	2.5	2.6	2.7	8.9
35)	Methyl ethyl ketone	4.1	2.7	3.0	3.3	3.6	3.3	15
36)	n-Heptane	4.4	3.7	3.0	3.1	3.2	3.5	17
37)	Benzene	4.9	3.8	3.7	4.1	4.4	4.2	12
38)	1,2-Dichloroethane	2.1	1.6	1.8	1.9	2.1	1.9	10

***% RSD (Relative Standard Deviation) must be within 30%**

****An exception is made for 2 compounds that must be within 40%**

RRF - Relative Response Factor

INTEGRATED ANALYTICAL LABORATORIES, LLC

Initial Calibration Data Summary Report

Initial Calibration Curve: 3/27/2024 **Method ID:** 240326.M

Instrument: AA

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6020BFB]	03/27/2024 10:03
0.2 PPBV STD [AA6021STD05]	03/27/2024 10:38
2 PPBV STD [AA6022STD04]	03/27/2024 11:38
10 PPBV STD [AA6023STD03]	03/27/2024 12:09
20 PPBV STD [AA6024STD02]	03/27/2024 12:40
40 PPBV STD [AA6025STD01]	03/27/2024 13:24
10 PPBV ICVSS [AA6026ICVSS]	03/27/2024 13:54

	Parameter	RRF 0.2ppbv	RRF 2ppbv	RRF 10ppbv	RRF 20ppbv	RRF 40ppbv	Avg ppbv	% RSD
39)	1,4-Difluorobenzene	----------ISTD----------						
40)	Trichloroethene	0.45	0.37	0.38	0.40	0.40	0.40	8.0
41)	2,2,4-Trimethylpentane	2.0	2.0	2.0	1.9	1.8	1.9	3.7
42)	1,2-Dichloropropane	0.54	0.43	0.41	0.41	0.40	0.44	13
43)	Bromodichloromethane	0.78	0.66	0.67	0.69	0.69	0.70	6.7
44)	Methyl methacrylate	0.73	0.63	0.58	0.59	0.58	0.62	11
45)	1,4-Dioxane	0.27	0.23	0.22	0.22	0.22	0.23	9.0
46)	1,3-Dichloropropene (cis)	0.72	0.60	0.59	0.61	0.58	0.62	9.0
47)	Toluene	1.5	1.4	1.2	1.2	1.1	1.3	11
48)	Methyl isobutyl ketone	1.3	1.3	1.1	1.0	0.96	1.2	15
49)	Tetrachloroethene	0.51	0.48	0.43	0.42	0.39	0.45	11
50)	1,3-Dichloropropene (trans)	0.62	0.58	0.58	0.59	0.56	0.59	3.8
51)	1,1,2-Trichloroethane	0.48	0.44	0.41	0.41	0.39	0.43	8.7
52)	Dibromochloromethane	0.71	0.67	0.63	0.64	0.61	0.65	5.5
53)	1,2-Dibromoethane	0.65	0.62	0.59	0.60	0.57	0.61	4.9
54)	Methyl n-butyl ketone	1.2	1.1	1.00	0.97	0.91	1.0	10
55)	d-5 Chlorbenzene	----------ISTD----------						
56)	n-Nonane	1.5	1.6	1.4	1.3	1.2	1.4	11
57)	Chlorobenzene	1.0	0.95	0.95	0.97	0.91	0.96	4.9
58)	Ethylbenzene	2.1	2.0	1.9	1.8	1.7	1.9	8.3
59)	Xylenes (m&p)	1.6	1.5	1.4	1.4	1.3	1.4	7.4
60)	Xylenes (o)	1.6	1.7	1.5	1.5	1.4	1.5	6.9
61)	Styrene	0.97	0.99	1.0	1.0	0.96	0.99	2.7
62)	Bromoform	0.61	0.58	0.63	0.64	0.61	0.61	3.9
63)	Cumene	2.0	2.2	1.9	1.9	1.7	1.9	7.9
65)	n-Propyl benzene	2.8	2.8	2.6	2.5	2.4	2.6	7.1
66)	1,1,2,2-Tetrachloroethane	1.2	1.2	1.1	1.1	1.0	1.1	5.9
67)	4-Ethyltoluene	2.2	2.2	2.1	2.0	1.9	2.1	5.5
68)	2-Chlorotoluene	1.9	1.9	1.7	1.7	1.6	1.8	6.3
69)	1,3,5-Trimethylbenzene	1.7	1.9	1.7	1.7	1.6	1.7	6.6
70)	1,2,4-Trimethylbenzene	1.6	1.8	1.7	1.7	1.6	1.7	5.5
71)	1,3-Dichlorobenzene	1.00	0.87	0.93	0.94	0.90	0.93	5.1
72)	1,4-Dichlorobenzene	0.96	0.86	0.96	0.98	0.94	0.94	4.8
73)	Benzyl chloride	1.4	1.4	1.7	1.7	1.7	1.6	9.3
74)	1,2-Dichlorobenzene	0.92	0.92	0.94	0.94	0.89	0.92	2.0
75)	1,3-Hexachlorobutadiene	0.52	0.51	0.52	0.51	0.44	0.50	6.6
76)	1,2,4-Trichlorobenzene	0.74	0.65	0.70	0.70	0.63	0.68	6.4
77)	Naphthalene	2.0	1.8	1.9	2.0	1.9	1.9	5.0

***% RSD (Relative Standard Deviation) must be within 30%**

****An exception is made for 2 compounds that must be within 40%**

RRF - Relative Response Factor

Method Path : C:\msdchem\1\METHODS\
Method File : 240326.M
Title : TO-15 on the Agilent 7890A / 5975C
Last Update : Wed Mar 27 13:46:33 2024
Response Via : Initial Calibration

Calibration Files
0.2 =aa6021std05.D 2 =aa6022std04.D 10 =aa6023std03.D 20 =aa6024std02.D 40 =aa6025std01.D

		Compound	0.2	2	10	20	40	Avg	%RSD
1)	I	Bromochloromethane...	ISTD						
2)	T	Propene	1.252	1.013	1.080	1.130	1.130	1.121	7.79
3)	T	Dichlorodifluoro...	2.622	1.990	2.547	2.698	2.711	2.514	11.93
4)	T	1,2-Dichlorotetr...	4.015	3.662	3.271	3.551	3.643	3.629	7.35
5)	T	n-Butane	3.184	2.459	2.207	2.309	2.216	2.475	16.53
6)	T	Chloromethane	0.145	0.169	0.154	0.185	0.158	0.162	9.65
7)	T	Vinyl chloride	1.221	0.983	1.293	1.364	1.365	1.245	12.70
8)	T	1,3-Butadiene	1.758	1.459	1.271	1.314	1.275	1.416	14.55
9)	T	Bromomethane	0.772	0.722	0.968	1.013	1.015	0.898	15.62
10)	T	Chloroethane	0.716	0.532	0.699	0.745	0.739	0.686	12.85
11)	T	Vinyl bromide	0.911	0.840	1.079	1.154	1.187	1.034	14.73
12)	T	Trichlorofluorom...	3.433	2.772	2.685	2.887	2.901	2.936	9.93
13)	T	Ethanol	0.498	0.426	0.419	0.453	0.497	0.459	8.18
14)	T	1,1-Dichloroethene	2.291	1.705	2.342	2.533	2.513	2.277	14.78
15)	T	Carbon disulfide	3.518	2.658	3.794	4.050	4.057	3.615	16.02
16)	T	1,1,2-Trichloro-...	3.410	3.459	2.503	2.577	2.569	2.904	16.73
17)	T	Acrolein	0.668	0.372	0.530	0.570	0.589	0.546	20.09
18)	T	Allyl chloride	0.563	0.422	0.582	0.635	0.636	0.567	15.39
19)	T	Isopropanol	3.384	2.202	2.811	3.063	3.061	2.904	15.22
20)	T	Methylene chloride	1.943	1.164	1.584	1.690	1.720	1.620	17.68
21)	T	Acetone	2.946	1.467	2.170	2.286	2.316	2.237	23.54
22)	T	trans-1,2-Dichlo...	2.112	1.393	2.002	2.202	2.251	1.992	17.48
23)	T	n-Pentane	3.273	2.844	2.537	2.629	2.759	2.808	10.16
24)	T	n-Hexane	5.403	3.838	3.475	3.618	3.794	4.026	19.47
25)	T	Methyl tert-buty...	5.264	5.168	4.023	4.047	4.101	4.521	14.08
26)	T	Tert-butyl alcohol	3.653	3.406	2.817	3.001	3.090	3.193	10.45
27)	T	1,1-Dichloroethane	3.349	2.099	2.435	2.689	2.799	2.674	17.33
28)	T	cis-1,2-Dichloro...	2.131	1.474	1.849	2.033	2.106	1.918	14.18
29)	t	Cyclohexane	3.243	2.981	2.404	2.460	2.516	2.721	13.63
30)	T	Chloroform	3.086	2.280	2.624	2.915	3.034	2.788	12.03
31)	T	Ethyl acetate	0.668	0.516	0.524	0.561	0.608	0.576	10.96
32)	T	Carbon tetrachlo...	3.224	3.059	2.574	2.658	2.752	2.853	9.70
33)	T	Tetrahydrofuran	2.460	1.821	1.904	2.086	2.207	2.095	12.11
34)	T	1,1,1-Trichloroe...	2.982	2.910	2.431	2.528	2.610	2.692	8.98
35)	T	Methyl ethyl ketone	4.060	2.736	2.996	3.330	3.586	3.342	15.42
36)	T	n-Heptane	4.419	3.713	2.991	3.106	3.226	3.491	16.82
37)	T	Benzene	4.942	3.840	3.683	4.101	4.411	4.195	11.93
38)	T	1,2-Dichloroethane	2.067	1.630	1.779	1.945	2.096	1.903	10.35
39)	I	1,4-Difluorobenzen...	ISTD						
40)	T	Trichloroethene	0.451	0.365	0.384	0.399	0.397	0.399	8.05
41)	T	2,2,4-Trimethylp...	1.977	2.012	1.961	1.924	1.822	1.939	3.74
42)	T	1,2-Dichloropropane	0.536	0.430	0.414	0.407	0.399	0.437	12.89
43)	T	Bromodichloromet...	0.776	0.657	0.667	0.694	0.685	0.696	6.78
44)	T	Methyl methacrylate	0.731	0.627	0.577	0.588	0.577	0.620	10.56
45)	T	1,4-Dioxane	0.271	0.233	0.223	0.224	0.220	0.234	9.04
46)	T	cis-1,3-Dichloro...	0.716	0.595	0.590	0.608	0.578	0.617	9.07
47)	T	Toluene	1.489	1.367	1.229	1.211	1.147	1.289	10.71
48)	T	Methyl isobutyl ...	1.334	1.338	1.094	1.036	0.961	1.152	15.08
49)	T	Tetrachloroethene	0.506	0.480	0.427	0.421	0.391	0.445	10.51
50)	T	trans-1,3-Dichlo...	0.623	0.577	0.583	0.592	0.562	0.587	3.88
51)	T	1,1,2-Trichloroe...	0.484	0.442	0.405	0.408	0.391	0.426	8.73
52)	T	Dibromochloromet...	0.705	0.671	0.632	0.643	0.613	0.653	5.51
53)	T	1,2-Dibromoethane	0.647	0.620	0.592	0.597	0.569	0.605	4.91
54)	T	Methyl n-butyl k...	1.172	1.115	0.997	0.967	0.914	1.033	10.37
55)	I	d-5 Chlorobenzene ...	ISTD						
56)	T	n-Nonane	1.507	1.567	1.359	1.305	1.199	1.387	10.81
57)	T	Chlorobenzene	1.039	0.954	0.950	0.969	0.908	0.964	4.95
58)	T	Ethylbenzene	2.135	2.027	1.859	1.843	1.731	1.919	8.37
59)	T	Xylenes (m&p)	1.559	1.530	1.420	1.402	1.293	1.441	7.43
60)	T	Xylene (o)	1.618	1.654	1.498	1.478	1.396	1.529	6.92

Method Path : C:\msdchem\1\METHODS\
Method File : 240326.M

61)	T	Styrene	0.970	0.987	1.015	1.024	0.962	0.991	2.76
62)	T	Bromoform	0.608	0.579	0.626	0.643	0.612	0.614	3.90
63)	T	Cumene	1.979	2.155	1.891	1.863	1.746	1.927	7.91
64)	S	Bromofluorobenze...	0.867	0.905	0.904	0.903	0.905	0.897	1.85
65)	T	n-Propyl benzene	2.778	2.810	2.573	2.530	2.357	2.610	7.18
66)	T	1,1,2,2-Tetrachl...	1.207	1.197	1.108	1.107	1.048	1.133	5.96
67)	T	4-Ethyltoluene	2.151	2.205	2.069	2.045	1.904	2.075	5.54
68)	T	2-Chlorotoluene	1.874	1.886	1.737	1.715	1.623	1.767	6.32
69)	T	1,3,5-Trimethylb...	1.699	1.891	1.699	1.679	1.576	1.709	6.67
70)	T	1,2,4-Trimethylb...	1.626	1.834	1.716	1.699	1.594	1.694	5.51
71)	T	1,3-Dichlorobenzene	0.999	0.871	0.930	0.940	0.900	0.928	5.19
72)	T	1,4-Dichlorobenzene	0.956	0.863	0.961	0.981	0.944	0.941	4.83
73)	T	Benzyl chloride	1.425	1.403	1.657	1.708	1.678	1.574	9.37
74)	T	1,2-Dichlorobenzene	0.916	0.919	0.940	0.936	0.893	0.921	2.05
75)	T	1,3-Hexachlorobu...	0.524	0.508	0.518	0.508	0.442	0.500	6.62
76)	T	1,2,4-Trichlorob...	0.739	0.652	0.701	0.696	0.626	0.683	6.46
77)	T	Naphthalene	1.996	1.751	1.930	1.950	1.855	1.897	5.05

(#) = Out of Range

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6021std05.D
Acq On : 27 Mar 2024 10:38 am
Operator : jjw
Sample : 0.2 ppbv std
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 27 12:33:10 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 12:31:35 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.409	130	360749	10.00	ppbV		0.000
39) 1,4-Difluorobenzene (IS)	5.480	114	1478694	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.351	117	1394585	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.753	95	1209742	9.59	ppbV		0.000
Target Compounds							Qvalue
2) Propene	1.457	41	9844	0.26	ppbV		93
3) Dichlorodifluoromethane	1.516	85	20056	0.25	ppbV		92
4) 1,2-Dichlorotetrafluor...	1.626	85	28391	0.23	ppbV		96
5) n-Butane	1.708	43	25040	0.30	ppbV	#	81
6) Chloromethane	1.780	52	1170	0.20	ppbV	#	65
7) Vinyl chloride	1.773	62	9514	0.23	ppbV		89
8) 1,3-Butadiene	1.777	39	13569	0.28	ppbV	#	79
9) Bromomethane	2.078	94	5569	0.18	ppbV		95
10) Chloroethane	2.181	64	5479	0.25	ppbV	#	56
11) Vinyl bromide	2.287	106	6641	0.19	ppbV		93
12) Trichlorofluoromethane	2.300	101	27245	0.28	ppbV		95
13) Ethanol	2.692	45	3734	0.24	ppbV		83
14) 1,1-Dichloroethene	2.724	61	17194	0.24	ppbV		96
15) Carbon disulfide	2.753	76	27156	0.23	ppbV		99
16) 1,1,2-Trichloro-1,2,2-...	2.769	101	26818	0.25	ppbV		95
17) Acrolein	2.985	56	4823	0.30	ppbV		93
18) Allyl chloride	3.113	76	4386	0.24	ppbV		100
19) Isopropanol	3.116	45	21727	0.24	ppbV		99
20) Methylene chloride	3.210	49	15138	0.31	ppbV		84
21) Acetone	3.219	43	22954	0.35	ppbV	#	86
22) trans-1,2-Dichloroethene	3.332	61	16914	0.28	ppbV		96
23) n-Pentane	3.422	43	25504	0.26	ppbV		89
24) n-Hexane	3.415	57	43272	0.33	ppbV		96
25) Methyl tert-butyl ether	3.419	73	42540	0.26	ppbV		81
26) Tert-butyl alcohol	3.480	59	30311	0.27	ppbV		100
27) 1,1-Dichloroethane	3.817	63	25858	0.32	ppbV		92
28) cis-1,2-Dichloroethene	4.245	61	16758	0.28	ppbV		97
29) Cyclohexane	4.428	56	26203	0.27	ppbV		95
30) Chloroform	4.473	83	24049	0.27	ppbV		98
31) Ethyl acetate	4.566	45	5204	0.28	ppbV		100
32) Carbon tetrachloride	4.592	117	25818	0.25	ppbV		97
33) Tetrahydrofuran	4.611	42	19701	0.29	ppbV		95
34) 1,1,1-Trichloroethane	4.644	97	23455	0.24	ppbV		97
35) Methyl ethyl ketone	4.708	43	32226	0.31	ppbV		95
36) n-Heptane	4.936	43	35392	0.29	ppbV		93
37) Benzene	4.955	78	38510	0.28	ppbV		97
38) 1,2-Dichloroethane	5.123	62	16254	0.26	ppbV		98
40) Trichloroethene	5.457	130	13335	0.24	ppbV		98
41) 2,2,4-Trimethylpentane	4.862	57	63722	0.22	ppbV		99
42) 1,2-Dichloropropane	5.914	63	17584	0.28	ppbV		97
43) Bromodichloromethane	5.972	83	26403	0.27	ppbV		99
44) Methyl methacrylate	6.116	41	23779	0.27	ppbV		95
45) 1,4-Dioxane	6.152	88	9370	0.28	ppbV		94
46) cis-1,3-Dichloropropene	6.560	75	23497	0.27	ppbV		99
47) Toluene	6.801	91	47573	0.25	ppbV		99
48) Methyl isobutyl ketone	7.168	43	42994	0.24	ppbV		95
49) Tetrachloroethene	7.190	166	16758	0.25	ppbV		98
50) trans-1,3-Dichloropropene	7.206	75	20460	0.24	ppbV		84
51) 1,1,2-Trichloroethane	7.367	97	15444	0.25	ppbV		98

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6021std05.D
Acq On : 27 Mar 2024 10:38 am
Operator : jjw
Sample : 0.2 ppbv std
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

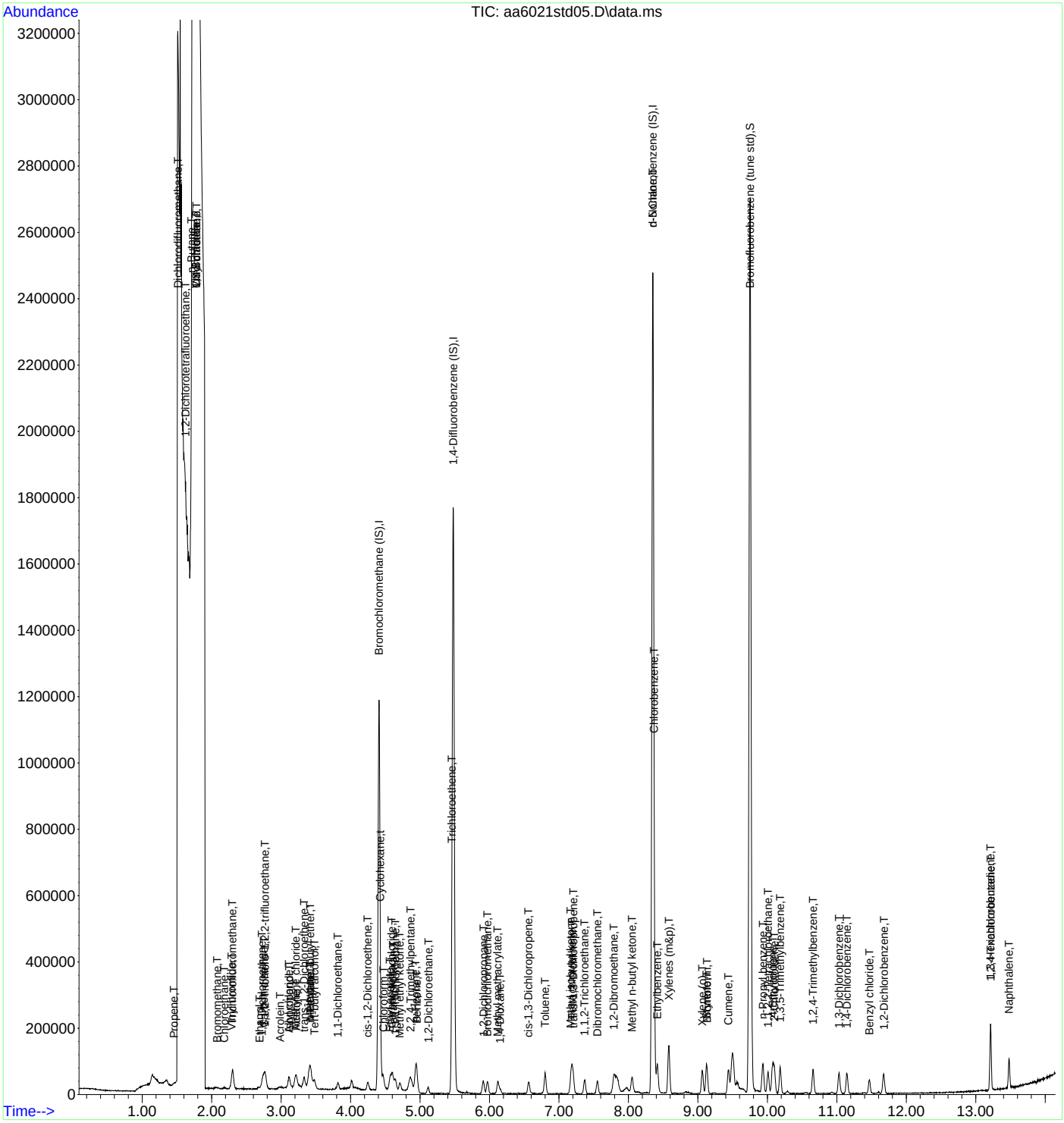
Quant Time: Mar 27 12:33:10 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 12:31:35 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
52) Dibromochloromethane	7.553	129	23345	0.24	ppbV		98
53) 1,2-Dibromoethane	7.788	107	20663	0.23	ppbV		97
54) Methyl n-butyl ketone	8.052	43	39178	0.25	ppbV		90
56) n-Nonane	8.351	43	46667	0.23	ppbV		97
57) Chlorobenzene	8.370	112	32164	0.24	ppbV	#	57
58) Ethylbenzene	8.415	91	66107	0.24	ppbV		99
59) Xylenes (m&p)	8.582	91	96984	0.47	ppbV		99
60) Xylene (o)	9.065	91	49641	0.23	ppbV		100
61) Styrene	9.126	104	30559	0.22	ppbV		100
62) Bromoform	9.132	173	19161	0.23	ppbV		98
63) Cumene	9.438	105	59073	0.21	ppbV		99
65) n-Propyl benzene	9.936	91	83690	0.22	ppbV		98
66) 1,1,2,2-Tetrachloroethane	10.010	83	38390	0.24	ppbV		99
67) 4-Ethyltoluene	10.077	105	64788	0.22	ppbV		99
68) 2-Chlorotoluene	10.100	91	56977	0.23	ppbV		99
69) 1,3,5-Trimethylbenzene	10.184	105	51641	0.21	ppbV		99
70) 1,2,4-Trimethylbenzene	10.656	105	48989	0.20	ppbV		99
71) 1,3-Dichlorobenzene	11.032	146	30940	0.25	ppbV		98
72) 1,4-Dichlorobenzene	11.145	146	28519	0.22	ppbV		97
73) Benzyl chloride	11.470	91	39743	0.19	ppbV		98
74) 1,2-Dichlorobenzene	11.679	146	27332	0.21	ppbV		99
75) 1,3-Hexachlorobutadiene	13.212	225	16221	0.23	ppbV		98
76) 1,2,4-Trichlorobenzene	13.216	180	22681	0.24	ppbV		99
77) Naphthalene	13.479	128	55674	0.22	ppbV		98

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

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6021std05.D
Acq On : 27 Mar 2024 10:38 am
Operator : jjw
Sample : 0.2 ppbv std
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 27 12:33:10 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 12:31:35 2024
Response via : Initial Calibration



Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6022std04.D
Acq On : 27 Mar 2024 11:38 am
Operator : jjw
Sample : 2 ppbv std
Misc : EB0103704
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 27 12:30:51 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 12:30:41 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.412	130	309693	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.476	114	1229116	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.351	117	1260202	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.749	95	1140629	10.01	ppbV	0.000
Target Compounds						Qvalue
2) Propene	1.460	41	68409	2.05	ppbV	99
3) Dichlorodifluoromethane	1.499	85	130668	1.66	ppbV	99
4) 1,2-Dichlorotetrafluor...	1.622	85	222308	2.19	ppbV	98
5) n-Butane	1.705	43	166012	2.43	ppbV	95
6) Chloromethane	1.773	52	11699	2.46	ppbV	86
7) Vinyl chloride	1.763	62	65775	1.64	ppbV	97
8) 1,3-Butadiene	1.773	39	96684	2.46	ppbV	91
9) Bromomethane	2.068	94	44715	1.49	ppbV	97
10) Chloroethane	2.177	64	34925	1.61	ppbV	100
11) Vinyl bromide	2.284	106	52531	1.57	ppbV	100
12) Trichlorofluoromethane	2.300	101	188851	2.27	ppbV	98
13) Ethanol	2.663	45	27472	2.12	ppbV	96
14) 1,1-Dichloroethene	2.724	61	109819	1.51	ppbV	98
15) Carbon disulfide	2.747	76	176154	1.50	ppbV	96
16) 1,1,2-Trichloro-1,2,2-...	2.766	101	233557	3.01	ppbV	98
17) Acrolein	2.981	56	23016	1.40	ppbV	99
18) Allyl chloride	3.113	76	28239	1.57	ppbV	100
19) Isopropanol	3.116	45	121377	1.39	ppbV	100
20) Methylene chloride	3.203	49	77858	1.59	ppbV	98
21) Acetone	3.219	43	98104	1.46	ppbV	100
22) trans-1,2-Dichloroethene	3.325	61	95745	1.54	ppbV	98
23) n-Pentane	3.412	43	190230	2.42	ppbV	100
24) n-Hexane	3.412	57	263847	2.45	ppbV	98
25) Methyl tert-butyl ether	3.422	73	358478	2.88	ppbV	88
26) Tert-butyl alcohol	3.476	59	242573	2.78	ppbV	100
27) 1,1-Dichloroethane	3.814	63	130027	1.72	ppbV	99
28) cis-1,2-Dichloroethene	4.245	61	99510	1.74	ppbV	99
29) Cyclohexane	4.425	56	206806	2.78	ppbV	99
30) Chloroform	4.473	83	152535	1.88	ppbV	95
31) Ethyl acetate	4.563	45	34541	2.13	ppbV	99
32) Carbon tetrachloride	4.592	117	210339	2.64	ppbV	100
33) Tetrahydrofuran	4.599	42	125187	2.12	ppbV	97
34) 1,1,1-Trichloroethane	4.637	97	196486	2.61	ppbV	100
35) Methyl ethyl ketone	4.708	43	186439	2.01	ppbV	99
36) n-Heptane	4.933	43	255248	2.76	ppbV	98
37) Benzene	4.949	78	256885	2.25	ppbV	99
38) 1,2-Dichloroethane	5.113	62	110076	2.00	ppbV	98
40) Trichloroethene	5.457	130	89614	1.90	ppbV	100
41) 2,2,4-Trimethylpentane	4.859	57	539000	2.24	ppbV	99
42) 1,2-Dichloropropane	5.910	63	117244	2.30	ppbV	96
43) Bromodichloromethane	5.972	83	185807	2.27	ppbV	99
44) Methyl methacrylate	6.116	41	169591	2.39	ppbV	97
45) 1,4-Dioxane	6.148	88	67128	2.45	ppbV	98
46) cis-1,3-Dichloropropene	6.563	75	162406	2.24	ppbV	99
47) Toluene	6.801	91	362835	2.40	ppbV	98
48) Methyl isobutyl ketone	7.171	43	358448	2.67	ppbV	99
49) Tetrachloroethene	7.190	166	132136	2.51	ppbV	100
50) trans-1,3-Dichloropropene	7.209	75	157410	2.20	ppbV	90
51) 1,1,2-Trichloroethane	7.367	97	117291	2.36	ppbV	100

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6022std04.D
Acq On : 27 Mar 2024 11:38 am
Operator : jjw
Sample : 2 ppbv std
Misc : EB0103704
ALS Vial : 4 Sample Multiplier: 1

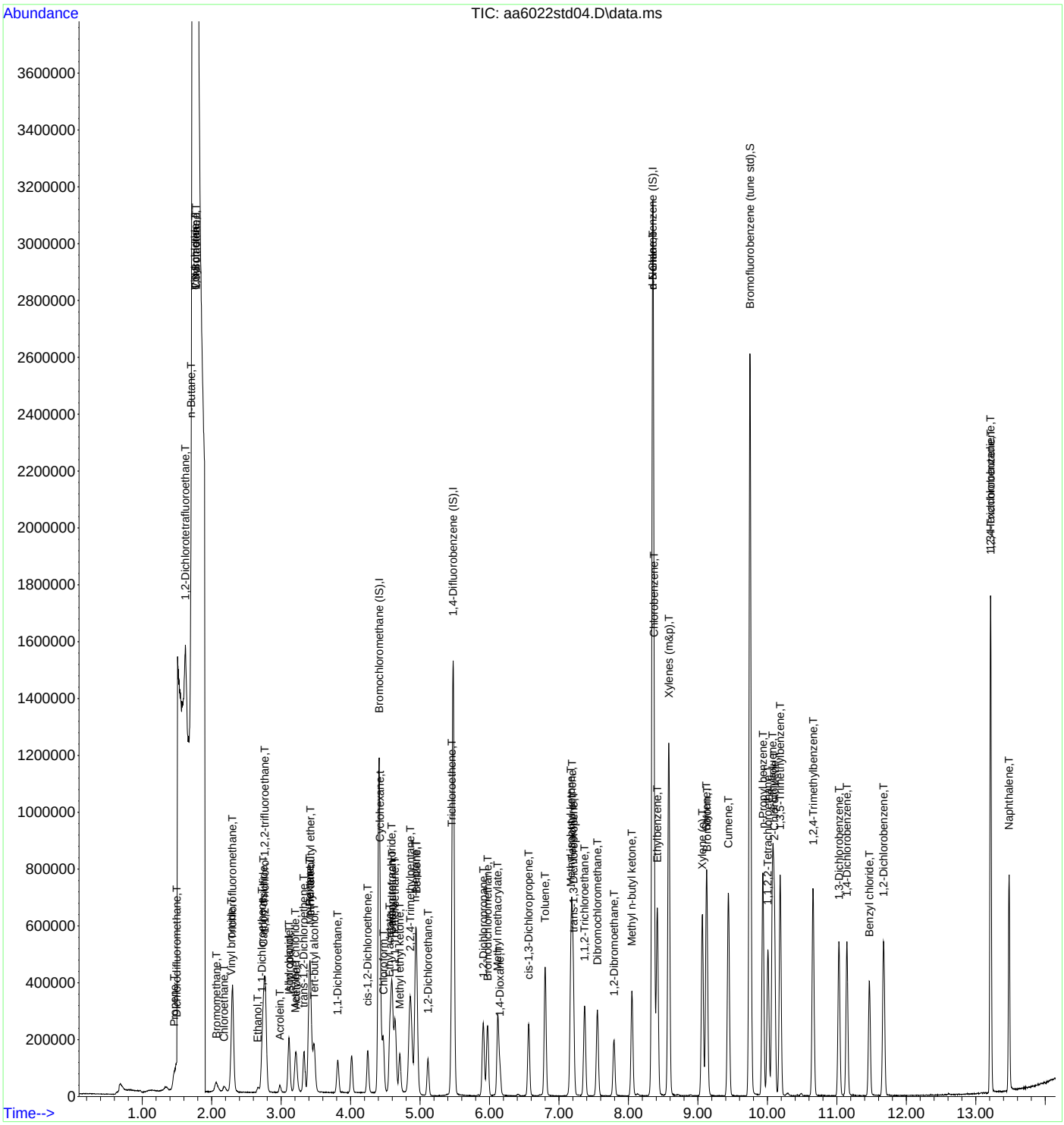
Quant Time: Mar 27 12:30:51 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 12:30:41 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.553	129	184678	2.38	ppbV	99
53) 1,2-Dibromoethane	7.791	107	164713	2.26	ppbV	99
54) Methyl n-butyl ketone	8.049	43	309841	2.53	ppbV	98
56) n-Nonane	8.351	43	438505	2.56	ppbV	99
57) Chlorobenzene	8.370	112	266791	2.23	ppbV	93
58) Ethylbenzene	8.415	91	567169	2.42	ppbV	99
59) Xylenes (m&p)	8.582	91	859845	4.80	ppbV	100
60) Xylene (o)	9.065	91	458642	2.43	ppbV	100
61) Styrene	9.123	104	281004	2.20	ppbV	100
62) Bromoform	9.132	173	164849	2.09	ppbV	99
63) Cumene	9.438	105	581117	2.44	ppbV	99
65) n-Propyl benzene	9.936	91	765019	2.36	ppbV	99
66) 1,1,2,2-Tetrachloroethane	10.007	83	344034	2.46	ppbV	99
67) 4-Ethyltoluene	10.074	105	600236	2.30	ppbV	99
68) 2-Chlorotoluene	10.100	91	518054	2.37	ppbV	99
69) 1,3,5-Trimethylbenzene	10.184	105	519514	2.43	ppbV	99
70) 1,2,4-Trimethylbenzene	10.659	105	499303	2.31	ppbV	99
71) 1,3-Dichlorobenzene	11.032	146	243609	2.08	ppbV	100
72) 1,4-Dichlorobenzene	11.145	146	232819	1.92	ppbV	98
73) Benzyl chloride	11.470	91	353725	1.69	ppbV	99
74) 1,2-Dichlorobenzene	11.672	146	247791	2.09	ppbV	99
75) 1,3-Hexachlorobutadiene	13.212	225	142060	2.17	ppbV	99
76) 1,2,4-Trichlorobenzene	13.216	180	180866	2.05	ppbV	99
77) Naphthalene	13.479	128	441446	1.81	ppbV	100

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

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6022std04.D
Acq On : 27 Mar 2024 11:38 am
Operator : jjw
Sample : 2 ppbv std
Misc : EB0103704
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 27 12:30:51 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 12:30:41 2024
Response via : Initial Calibration



Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6023std03.D
Acq On : 27 Mar 2024 12:09 pm
Operator : jjw
Sample : 10 ppbv std
Misc : EB0103704
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 27 15:06:55 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.412	130	405866	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.476	114	1540619	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.351	117	1407079	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.750	95	1272676	10.08	ppbV	0.000
Target Compounds						Qvalue
2) Propene	1.467	41	480073	10.55	ppbV	100
3) Dichlorodifluoromethane	1.499	85	1092704	10.71	ppbV	100
4) 1,2-Dichlorotetrafluor...	1.626	85	1301166	8.84	ppbV	100
5) n-Butane	1.705	43	976288	9.72	ppbV	100
6) Chloromethane	1.777	52	69870	10.63	ppbV	100
7) Vinyl chloride	1.767	62	566650	11.21	ppbV	100
8) 1,3-Butadiene	1.774	39	552148	9.61	ppbV	100
9) Bromomethane	2.068	94	393056	10.78	ppbV	100
10) Chloroethane	2.184	64	300731	10.80	ppbV	100
11) Vinyl bromide	2.284	106	442310	10.54	ppbV	100
12) Trichlorofluoromethane	2.303	101	1198923	10.06	ppbV	100
13) Ethanol	2.666	45	176842	9.50	ppbV	100
14) 1,1-Dichloroethene	2.727	61	988392	10.70	ppbV	100
15) Carbon disulfide	2.747	76	1647625	11.23	ppbV	100
16) 1,1,2-Trichloro-1,2,2-...	2.769	101	1107436	9.40	ppbV	100
17) Acrolein	2.988	56	215119	9.71	ppbV	100
18) Allyl chloride	3.113	76	255120	11.08	ppbV	100
19) Isopropanol	3.116	45	1014452	8.61	ppbV	100
20) Methylene chloride	3.203	49	694307	10.56	ppbV	100
21) Acetone	3.219	43	951290	10.48	ppbV	100
22) trans-1,2-Dichloroethene	3.332	61	901965	11.16	ppbV	100
23) n-Pentane	3.415	43	1127649	9.89	ppbV	99
24) n-Hexane	3.412	57	1551285	9.49	ppbV	100
25) Methyl tert-butyl ether	3.419	73	1828599	9.97	ppbV	100
26) Tert-butyl alcohol	3.473	59	1314960	10.15	ppbV	100
27) 1,1-Dichloroethane	3.817	63	1057514	9.74	ppbV	100
28) cis-1,2-Dichloroethene	4.248	61	817868	10.50	ppbV	100
29) Cyclohexane	4.428	56	1092809	9.90	ppbV	100
30) Chloroform	4.473	83	1150357	10.17	ppbV	99
31) Ethyl acetate	4.563	45	229902	9.84	ppbV	100
32) Carbon tetrachloride	4.595	117	1149084	9.92	ppbV	100
33) Tetrahydrofuran	4.599	42	849869	9.99	ppbV	100
34) 1,1,1-Trichloroethane	4.647	97	1075300	9.84	ppbV	100
35) Methyl ethyl ketone	4.708	43	1342110	9.90	ppbV	100
36) n-Heptane	4.936	43	1347673	9.51	ppbV	100
37) Benzene	4.952	78	1614175	9.48	ppbV	100
38) 1,2-Dichloroethane	5.116	62	787118	10.19	ppbV	100
40) Trichloroethene	5.457	130	590874	9.61	ppbV	100
41) 2,2,4-Trimethylpentane	4.866	57	3337961	11.17	ppbV	100
42) 1,2-Dichloropropane	5.911	63	701956	10.43	ppbV	100
43) Bromodichloromethane	5.972	83	1181459	11.02	ppbV	100
44) Methyl methacrylate	6.120	41	977110	10.23	ppbV	100
45) 1,4-Dioxane	6.145	88	401981	11.15	ppbV	100
46) cis-1,3-Dichloropropene	6.563	75	1009455	10.61	ppbV	100
47) Toluene	6.801	91	2044302	10.30	ppbV	100
48) Methyl isobutyl ketone	7.171	43	1836936	10.35	ppbV	100
49) Tetrachloroethene	7.190	166	737641	10.76	ppbV	100
50) trans-1,3-Dichloropropene	7.210	75	998052	11.03	ppbV	100
51) 1,1,2-Trichloroethane	7.370	97	674176	10.27	ppbV	100

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6023std03.D
Acq On : 27 Mar 2024 12:09 pm
Operator : jjw
Sample : 10 ppbv std
Misc : EB0103704
ALS Vial : 5 Sample Multiplier: 1

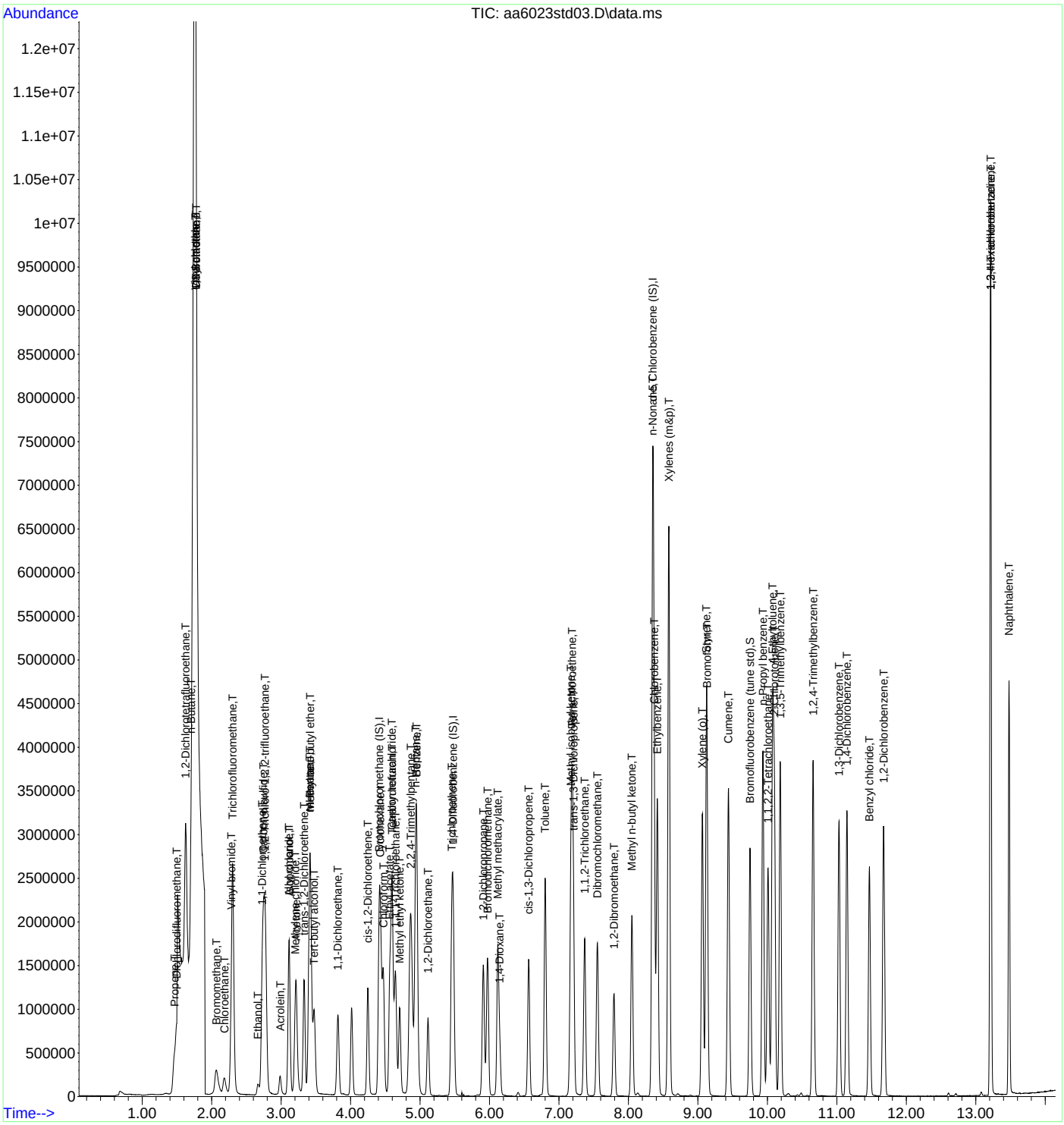
Quant Time: Mar 27 15:06:55 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.554	129	1090274	10.84	ppbV	100
53) 1,2-Dibromoethane	7.795	107	985770	10.58	ppbV	100
54) Methyl n-butyl ketone	8.049	43	1735158	10.90	ppbV	100
56) n-Nonane	8.348	43	2102844	10.77	ppbV	100
57) Chlorobenzene	8.373	112	1483500	10.94	ppbV	100
58) Ethylbenzene	8.415	91	2902762	10.75	ppbV	100
59) Xylenes (m&p)	8.582	91	4457073	21.98	ppbV	100
60) Xylene (o)	9.065	91	2318096	10.78	ppbV	100
61) Styrene	9.123	104	1614514	11.57	ppbV	100
62) Bromoform	9.132	173	995536	11.53	ppbV	100
63) Cumene	9.441	105	2847778	10.50	ppbV	100
65) n-Propyl benzene	9.936	91	3914695	10.66	ppbV	100
66) 1,1,2,2-Tetrachloroethane	10.010	83	1776668	11.14	ppbV	100
67) 4-Ethyltoluene	10.074	105	3144319	10.77	ppbV	100
68) 2-Chlorotoluene	10.100	91	2664458	10.72	ppbV	100
69) 1,3,5-Trimethylbenzene	10.187	105	2606288	10.84	ppbV	100
70) 1,2,4-Trimethylbenzene	10.660	105	2608053	10.94	ppbV	100
71) 1,3-Dichlorobenzene	11.033	146	1452525	11.12	ppbV	100
72) 1,4-Dichlorobenzene	11.145	146	1447428	10.93	ppbV	100
73) Benzyl chloride	11.470	91	2331860	10.53	ppbV	100
74) 1,2-Dichlorobenzene	11.676	146	1415768	10.93	ppbV	100
75) 1,3-Hexachlorobutadiene	13.216	225	809751	11.51	ppbV	100
76) 1,2,4-Trichlorobenzene	13.216	180	1084449	11.29	ppbV	100
77) Naphthalene	13.479	128	2715917	10.18	ppbV	100

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

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6023std03.D
Acq On : 27 Mar 2024 12:09 pm
Operator : jjw
Sample : 10 ppbv std
Misc : EB0103704
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 27 15:06:55 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration



Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6024std02.D
Acq On : 27 Mar 2024 12:40 pm
Operator : jjw
Sample : 20 ppbv std
Misc : EB0103704
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 27 15:06:34 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.415	130	411882	10.00	ppbV		0.000
39) 1,4-Difluorobenzene (IS)	5.480	114	1661943	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.351	117	1464287	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.750	95	1321659	10.06	ppbV		0.000
Target Compounds							Qvalue
2) Propene	1.464	41	1014772	21.98	ppbV		100
3) Dichlorodifluoromethane	1.509	85	2356287	22.76	ppbV		100
4) 1,2-Dichlorotetrafluor...	1.629	85	2866435	19.18	ppbV		99
5) n-Butane	1.708	43	2073146	20.34	ppbV		100
6) Chloromethane	1.777	52	171065	25.63	ppbV	#	1
7) Vinyl chloride	1.767	62	1213573	23.66	ppbV		100
8) 1,3-Butadiene	1.777	39	1158440	19.87	ppbV		100
9) Bromomethane	2.072	94	834684	22.57	ppbV		98
10) Chloroethane	2.184	64	650366	23.01	ppbV		100
11) Vinyl bromide	2.284	106	960489	22.55	ppbV		100
12) Trichlorofluoromethane	2.303	101	2616101	21.64	ppbV		100
13) Ethanol	2.670	45	388025	20.54	ppbV		99
14) 1,1-Dichloroethene	2.731	61	2170406	23.14	ppbV		100
15) Carbon disulfide	2.750	76	3569546	23.97	ppbV		98
16) 1,1,2-Trichloro-1,2,2-...	2.772	101	2314090	19.35	ppbV		99
17) Acrolein	2.988	56	469927	20.90	ppbV		100
18) Allyl chloride	3.113	76	564791	24.16	ppbV		100
19) Isopropanol	3.116	45	2245383	18.77	ppbV		100
20) Methylene chloride	3.207	49	1503232	22.53	ppbV		98
21) Acetone	3.219	43	2033750	22.07	ppbV		99
22) trans-1,2-Dichloroethene	3.332	61	2013296	24.54	ppbV		100
23) n-Pentane	3.416	43	2339039	20.22	ppbV		98
24) n-Hexane	3.416	57	3308362	19.95	ppbV		100
25) Methyl tert-butyl ether	3.419	73	3734162	20.06	ppbV		96
26) Tert-butyl alcohol	3.473	59	2843260	21.62	ppbV		100
27) 1,1-Dichloroethane	3.821	63	2369884	21.52	ppbV		99
28) cis-1,2-Dichloroethene	4.248	61	1825598	23.10	ppbV		99
29) Cyclohexane	4.432	56	2269500	20.25	ppbV		99
30) Chloroform	4.473	83	2593106	22.58	ppbV		99
31) Ethyl acetate	4.563	45	499077	21.05	ppbV		100
32) Carbon tetrachloride	4.596	117	2430188	20.68	ppbV		100
33) Tetrahydrofuran	4.596	42	1907140	22.10	ppbV		100
34) 1,1,1-Trichloroethane	4.644	97	2269864	20.47	ppbV		100
35) Methyl ethyl ketone	4.708	43	3017009	21.92	ppbV		100
36) n-Heptane	4.940	43	2840049	19.75	ppbV		99
37) Benzene	4.956	78	3648241	21.11	ppbV		99
38) 1,2-Dichloroethane	5.116	62	1746280	22.28	ppbV		100
40) Trichloroethene	5.457	130	1325979	20.00	ppbV		98
41) 2,2,4-Trimethylpentane	4.866	57	6968945	21.63	ppbV		99
42) 1,2-Dichloropropane	5.914	63	1500636	20.66	ppbV		98
43) Bromodichloromethane	5.972	83	2653561	22.94	ppbV		98
44) Methyl methacrylate	6.116	41	2148743	20.86	ppbV		99
45) 1,4-Dioxane	6.145	88	869258	22.34	ppbV		100
46) cis-1,3-Dichloropropene	6.563	75	2242244	21.85	ppbV		99
47) Toluene	6.804	91	4347639	20.30	ppbV		99
48) Methyl isobutyl ketone	7.171	43	3752572	19.59	ppbV		99
49) Tetrachloroethene	7.190	166	1565659	21.17	ppbV		99
50) trans-1,3-Dichloropropene	7.210	75	2183621	22.36	ppbV		98
51) 1,1,2-Trichloroethane	7.370	97	1463883	20.68	ppbV		100

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6024std02.D
Acq On : 27 Mar 2024 12:40 pm
Operator : jjw
Sample : 20 ppbv std
Misc : EB0103704
ALS Vial : 6 Sample Multiplier: 1

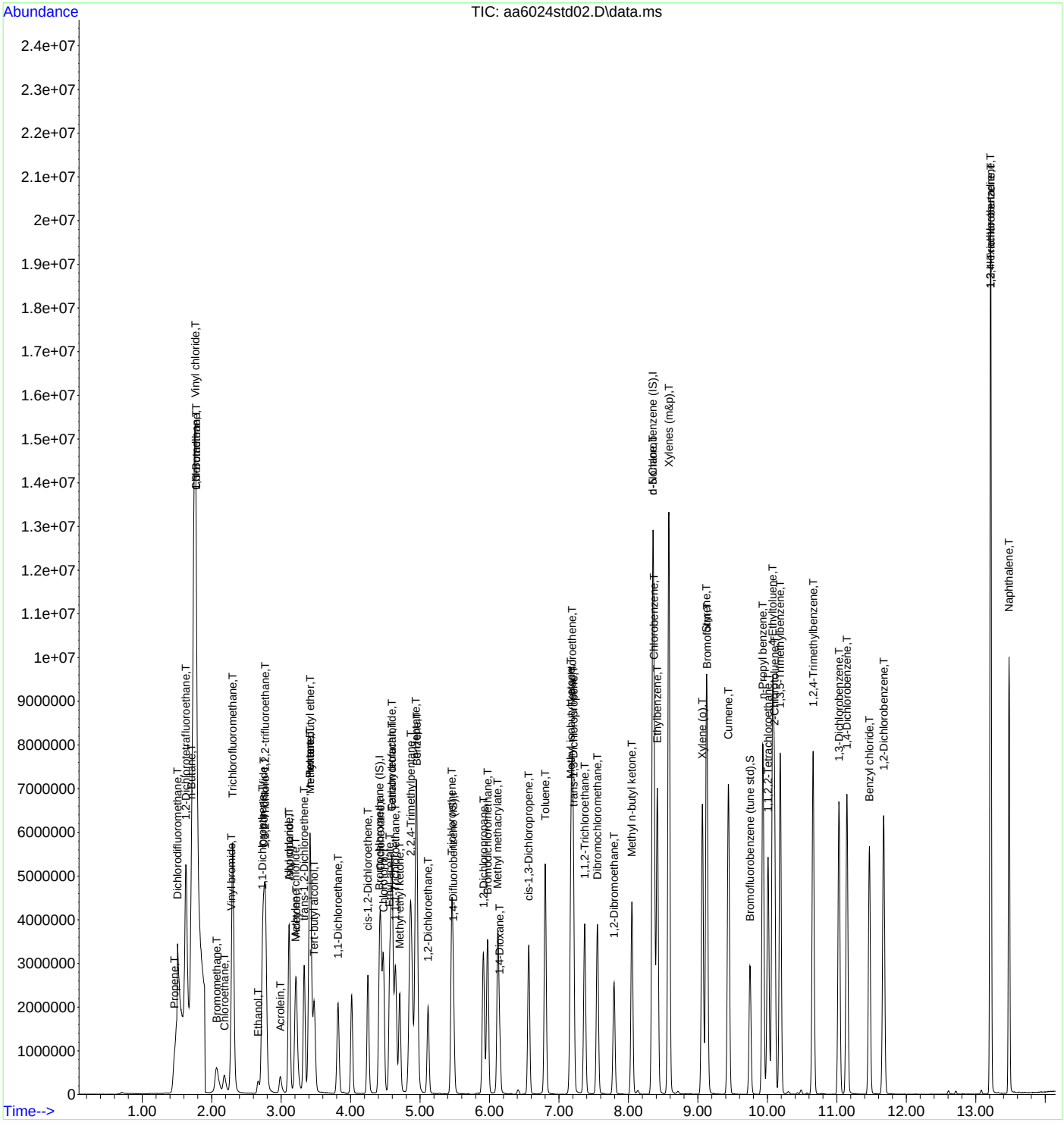
Quant Time: Mar 27 15:06:34 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.554	129	2393076	22.07	ppbV	99
53) 1,2-Dibromoethane	7.795	107	2142143	21.30	ppbV	100
54) Methyl n-butyl ketone	8.049	43	3632915	21.16	ppbV	100
56) n-Nonane	8.351	43	4204992	20.70	ppbV	99
57) Chlorobenzene	8.370	112	3149332	22.32	ppbV	99
58) Ethylbenzene	8.415	91	5992154	21.32	ppbV	100
59) Xylenes (m&p)	8.583	91	9156224	43.40	ppbV	100
60) Xylene (o)	9.065	91	4762319	21.27	ppbV	99
61) Styrene	9.123	104	3388334	23.34	ppbV	100
62) Bromoform	9.132	173	2128868	23.70	ppbV	99
63) Cumene	9.441	105	5836329	20.69	ppbV	100
65) n-Propyl benzene	9.933	91	8003431	20.94	ppbV	100
66) 1,1,2,2-Tetrachloroethane	10.010	83	3695472	22.27	ppbV	99
67) 4-Ethyltoluene	10.074	105	6468364	21.29	ppbV	100
68) 2-Chlorotoluene	10.103	91	5475021	21.16	ppbV	99
69) 1,3,5-Trimethylbenzene	10.184	105	5358696	21.42	ppbV	100
70) 1,2,4-Trimethylbenzene	10.660	105	5373360	21.66	ppbV	100
71) 1,3-Dichlorobenzene	11.033	146	3055936	22.49	ppbV	99
72) 1,4-Dichlorobenzene	11.145	146	3072998	22.30	ppbV	100
73) Benzyl chloride	11.470	91	5002127	21.70	ppbV	99
74) 1,2-Dichlorobenzene	11.676	146	2933960	21.76	ppbV	100
75) 1,3-Hexachlorobutadiene	13.213	225	1650141	22.54	ppbV	100
76) 1,2,4-Trichlorobenzene	13.216	180	2240663	22.41	ppbV	100
77) Naphthalene	13.479	128	5711683	20.57	ppbV	100

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

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6024std02.D
Acq On : 27 Mar 2024 12:40 pm
Operator : jjw
Sample : 20 ppbv std
Misc : EB0103704
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 27 15:06:34 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration



Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6025std01.D
Acq On : 27 Mar 2024 1:24 pm
Operator : jjw
Sample : 40 ppbv std
Misc : EB0103704
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 27 13:39:47 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:03:21 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.419	130	398803	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.480	114	1758228	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.351	117	1517568	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.750	95	1374039	10.12	ppbV	0.000
Target Compounds						Qvalue
2) Propene	1.476	41	1964690	44.03	ppbV	99
3) Dichlorodifluoromethane	1.512	85	4583650	46.63	ppbV	100
4) 1,2-Dichlorotetrafluor...	1.636	85	5695259	39.40	ppbV	99
5) n-Butane	1.718	43	3853678	38.05	ppbV	100
6) Chloromethane	1.770	52	281441	43.26	ppbV	57
7) Vinyl chloride	1.774	62	2352467	48.54	ppbV	99
8) 1,3-Butadiene	1.787	39	2176832	37.63	ppbV	99
9) Bromomethane	2.075	94	1618348	46.70	ppbV	99
10) Chloroethane	2.184	64	1249953	46.57	ppbV	100
11) Vinyl bromide	2.287	106	1912871	48.15	ppbV	100
12) Trichlorofluoromethane	2.306	101	5090504	43.35	ppbV	99
13) Ethanol	2.669	45	824442	46.04	ppbV	98
14) 1,1-Dichloroethene	2.734	61	4169298	47.14	ppbV	100
15) Carbon disulfide	2.760	76	6924568	49.54	ppbV	99
16) 1,1,2-Trichloro-1,2,2-...	2.776	101	4466211	37.49	ppbV	99
17) Acrolein	2.997	56	938960	44.00	ppbV	100
18) Allyl chloride	3.120	76	1094990	49.88	ppbV	100
19) Isopropanol	3.120	45	4345927	38.04	ppbV	99
20) Methylene chloride	3.210	49	2963075	46.58	ppbV	97
21) Acetone	3.229	43	3990092	45.13	ppbV	99
22) trans-1,2-Dichloroethene	3.332	61	3985456	51.86	ppbV	99
23) n-Pentane	3.419	43	4752698	42.25	ppbV	98
24) n-Hexane	3.419	57	6718281	41.25	ppbV	99
25) Methyl tert-butyl ether	3.422	73	7327239	39.72	ppbV	92
26) Tert-butyl alcohol	3.477	59	5668271	44.15	ppbV	100
27) 1,1-Dichloroethane	3.821	63	4777372	45.32	ppbV	100
28) cis-1,2-Dichloroethene	4.251	61	3661456	49.05	ppbV	99
29) Cyclohexane	4.431	56	4495502	40.67	ppbV	99
30) Chloroform	4.473	83	5226839	48.07	ppbV	99
31) Ethyl acetate	4.563	45	1047773	46.30	ppbV	100
32) Carbon tetrachloride	4.595	117	4872674	42.44	ppbV	100
33) Tetrahydrofuran	4.595	42	3908188	47.40	ppbV	100
34) 1,1,1-Trichloroethane	4.650	97	4538040	41.95	ppbV	100
35) Methyl ethyl ketone	4.708	43	6291757	48.09	ppbV	100
36) n-Heptane	4.943	43	5712488	40.27	ppbV	100
37) Benzene	4.959	78	7599303	46.01	ppbV	99
38) 1,2-Dichloroethane	5.116	62	3643642	49.24	ppbV	100
40) Trichloroethene	5.457	130	2793094	39.77	ppbV	98
41) 2,2,4-Trimethylpentane	4.862	57	13968760	40.37	ppbV	99
42) 1,2-Dichloropropane	5.914	63	3112993	39.65	ppbV	97
43) Bromodichloromethane	5.972	83	5543327	45.13	ppbV	100
44) Methyl methacrylate	6.119	41	4465072	40.27	ppbV	98
45) 1,4-Dioxane	6.145	88	1807468	43.25	ppbV	99
46) cis-1,3-Dichloropropene	6.566	75	4512628	40.92	ppbV	100
47) Toluene	6.804	91	8709445	37.41	ppbV	99
48) Methyl isobutyl ketone	7.171	43	7369377	34.92	ppbV	98
49) Tetrachloroethene	7.190	166	3079992	38.21	ppbV	99
50) trans-1,3-Dichloropropene	7.209	75	4387728	42.02	ppbV	98
51) 1,1,2-Trichloroethane	7.370	97	2971932	38.90	ppbV	100

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6025std01.D
Acq On : 27 Mar 2024 1:24 pm
Operator : jjw
Sample : 40 ppbv std
Misc : EB0103704
ALS Vial : 7 Sample Multiplier: 1

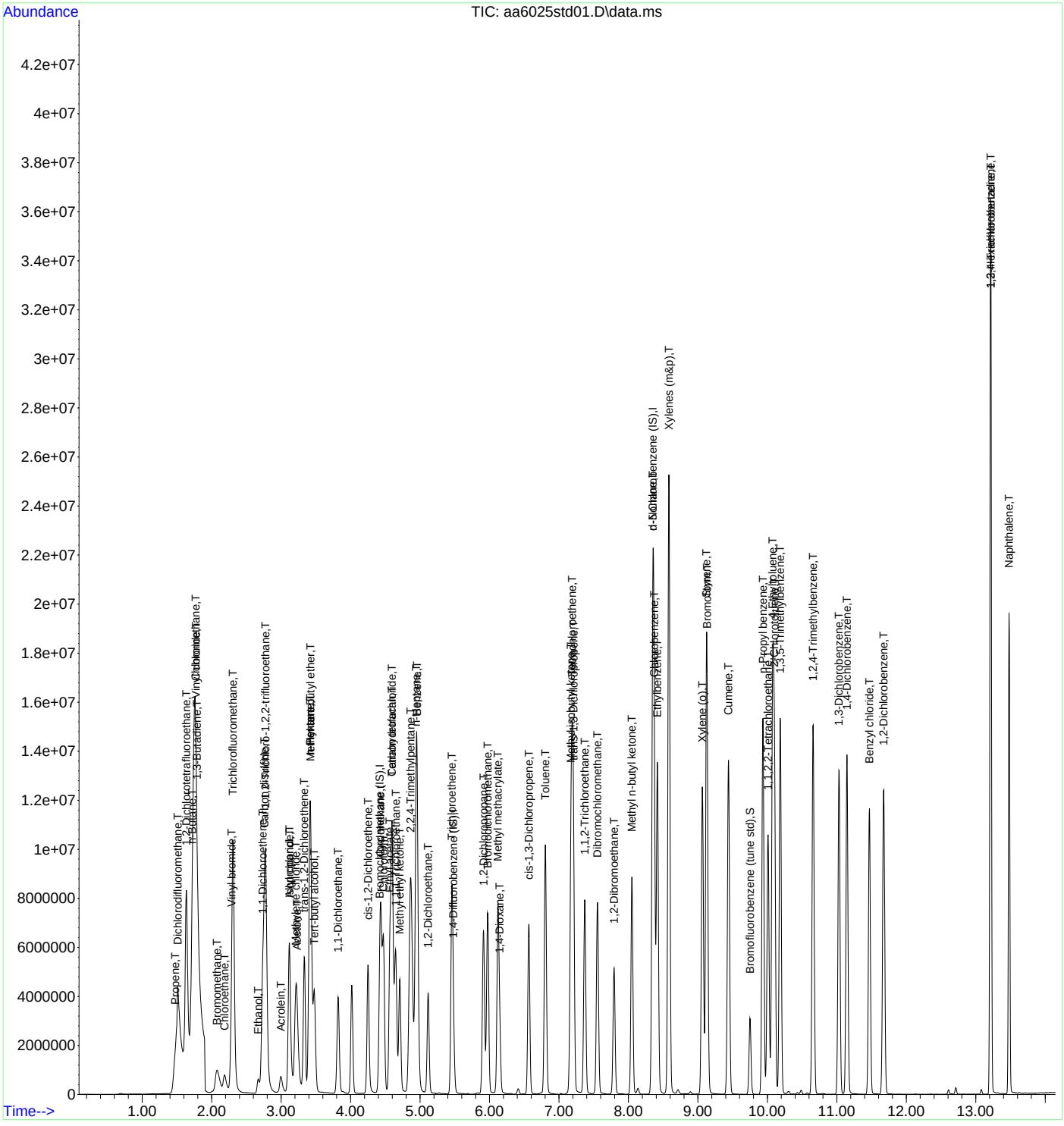
Quant Time: Mar 27 13:39:47 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:03:21 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.554	129	4825763	41.42	ppbV	100
53) 1,2-Dibromoethane	7.795	107	4320065	40.01	ppbV	100
54) Methyl n-butyl ketone	8.049	43	7266143	38.88	ppbV	99
56) n-Nonane	8.351	43	8002894	36.76	ppbV	99
57) Chlorobenzene	8.373	112	6116749	41.22	ppbV	100
58) Ethylbenzene	8.415	91	11665851	39.10	ppbV	99
59) Xylenes (m&p)	8.582	91	17498174	78.02	ppbV	99
60) Xylene (o)	9.065	91	9322325	39.33	ppbV	99
61) Styrene	9.123	104	6597492	43.52	ppbV	100
62) Bromoform	9.132	173	4195209	45.02	ppbV	100
63) Cumene	9.441	105	11340070	37.89	ppbV	99
65) n-Propyl benzene	9.936	91	15449995	38.09	ppbV	99
66) 1,1,2,2-Tetrachloroethane	10.010	83	7251670	41.38	ppbV	100
67) 4-Ethyltoluene	10.074	105	12482413	38.84	ppbV	99
68) 2-Chlorotoluene	10.100	91	10739286	39.25	ppbV	100
69) 1,3,5-Trimethylbenzene	10.184	105	10426890	39.44	ppbV	100
70) 1,2,4-Trimethylbenzene	10.656	105	10449455	40.06	ppbV	99
71) 1,3-Dichlorobenzene	11.029	146	6064751	42.74	ppbV	99
72) 1,4-Dichlorobenzene	11.145	146	6132994	42.98	ppbV	99
73) Benzyl chloride	11.470	91	10185040	43.34	ppbV	99
74) 1,2-Dichlorobenzene	11.672	146	5799661	41.19	ppbV	99
75) 1,3-Hexachlorobutadiene	13.216	225	2978861	38.16	ppbV	99
76) 1,2,4-Trichlorobenzene	13.216	180	4181789	39.54	ppbV	99
77) Naphthalene	13.479	128	11258182	38.90	ppbV	99

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

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6025std01.D
Acq On : 27 Mar 2024 1:24 pm
Operator : jjw
Sample : 40 ppbv std
Misc : EB0103704
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 27 13:39:47 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:03:21 2024
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES, LLC

Initial Calibration Data Summary Report

Initial Calibration Curve: 5/29/2024 **Method ID:** 240529.M

Instrument: AA

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6554BFB]	05/29/2024 09:16
0.2 PPBV STD [AA6556STD05]	05/29/2024 12:40
2 PPBV STD [AA6557STD04]	05/29/2024 13:11
10 PPBV STD [AA6558STD03]	05/29/2024 13:46
20 PPBV STD [AA6559STD02]	05/29/2024 14:18
40 PPBV STD [AA6560STD01]	05/29/2024 14:55
10 PPBV ICVSS [AA6561ICVSS]	05/29/2024 17:16

	Parameter	RRF 0.2ppbv	RRF 2ppbv	RRF 10ppbv	RRF 20ppbv	RRF 40ppbv	Avg ppbv	% RSD
1)	Bromochloromethane	----------ISTD----------						
2)	Propene	1.0	1.1	1.0	1.1	1.0	1.1	3.6
3)	Dichlorodifluoromethane	2.4	2.9	3.0	3.1	3.0	2.9	9.0
4)	1,2-Dichlorotetrafluoroethane	3.2	4.0	4.0	4.2	4.6	4.0	12
5)	n-Butane	1.9	2.3	2.1	2.2	2.3	2.2	6.6
6)	Chloromethane	0.12	0.17	0.20	0.22	0.18	0.18	21
7)	Vinyl chloride	1.0	1.3	1.4	1.5	1.4	1.3	13
8)	1,3-Butadiene	1.1	1.2	1.2	1.3	1.3	1.2	7.5
9)	Bromomethane	0.75	1.1	1.1	1.2	1.00	1.0	16
10)	Chloroethane	0.54	0.76	0.79	0.83	0.82	0.75	16
11)	Vinyl bromide	0.77	1.3	1.4	1.4	1.4	1.2	22
12)	Trichlorofluoromethane	2.7	3.3	3.4	3.5	3.6	3.3	11
13)	Ethanol	0.70	0.42	0.44	0.49	0.53	0.52	21
14)	1,1-Dichloroethene	1.8	2.6	2.7	2.8	2.9	2.5	17
15)	Carbon disulfide	3.2	4.4	4.5	4.6	4.5	4.2	14
16)	1,1,2-Trichloro-1,2,2-trifluoroethane	2.7	3.2	3.0	3.1	3.6	3.1	10
17)	Acrolein	0.47	0.51	0.58	0.61	0.65	0.56	13
18)	Allyl Chloride	0.43	0.70	0.71	0.72	0.69	0.65	19
19)	Isopropanol	2.4	2.5	2.9	3.1	3.2	2.8	12
20)	Methylene chloride	2.0	1.7	1.7	1.8	1.8	1.8	7.5
21)	Acetone	2.0	2.2	2.3	2.3	2.4	2.2	6.1
22)	1,2-Dichloroethene (trans)	1.7	2.2	2.4	2.5	2.8	2.3	18
23)	n-Pentane	2.4	2.6	2.6	2.8	3.3	2.7	12
24)	n-Hexane	3.1	3.7	3.8	3.9	4.7	3.8	15
25)	Methyl tert-butyl ether	3.8	4.7	4.4	4.5	5.5	4.6	13
26)	Tert-butyl alcohol	2.5	2.9	3.0	3.2	3.9	3.1	16
27)	1,1-Dichloroethane	2.2	2.8	2.9	3.0	3.3	2.8	15
28)	1,2-Dichloroethene (trans)	1.4	2.0	2.2	2.3	2.5	2.1	19
29)	Cyclohexane	2.1	2.6	2.5	2.6	3.1	2.6	14
30)	Chloroform	2.3	3.0	3.3	3.5	3.9	3.2	19
31)	Ethyl acetate	0.40	0.48	0.54	0.58	0.72	0.54	22
32)	Carbon tetrachloride	2.6	3.3	3.2	3.3	3.9	3.3	14
33)	Tetrahydrofuran	1.5	1.7	2.0	2.1	2.3	1.9	17
34)	1,1,1-Trichloroethane	2.4	3.0	2.9	3.1	3.7	3.0	16
35)	Methyl ethyl ketone	2.4	2.7	3.1	3.4	4.2	3.2	22
36)	n-Heptane	2.5	2.9	2.8	3.0	3.8	3.0	16
37)	Benzene	3.5	4.2	4.6	4.8	5.7	4.6	17
38)	1,2-Dichloroethane	1.5	1.9	2.1	2.2	2.7	2.1	21

***% RSD (Relative Standard Deviation) must be within 30%**

****An exception is made for 2 compounds that must be within 40%**

RRF - Relative Response Factor

INTEGRATED ANALYTICAL LABORATORIES, LLC

Initial Calibration Data Summary Report

Initial Calibration Curve: 5/29/2024 **Method ID:** 240529.M

Instrument: AA

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6554BFB]	05/29/2024 09:16
0.2 PPBV STD [AA6556STD05]	05/29/2024 12:40
2 PPBV STD [AA6557STD04]	05/29/2024 13:11
10 PPBV STD [AA6558STD03]	05/29/2024 13:46
20 PPBV STD [AA6559STD02]	05/29/2024 14:18
40 PPBV STD [AA6560STD01]	05/29/2024 14:55
10 PPBV ICVSS [AA6561ICVSS]	05/29/2024 17:16

	Parameter	RRF 0.2ppbv	RRF 2ppbv	RRF 10ppbv	RRF 20ppbv	RRF 40ppbv	Avg ppbv	% RSD
39)	1,4-Difluorobenzene	----------ISTD----------						
40)	Trichloroethene	0.38	0.47	0.47	0.47	0.47	0.45	8.6
41)	2,2,4-Trimethylpentane	1.5	2.1	1.8	1.8	1.7	1.8	12
42)	1,2-Dichloropropane	0.37	0.43	0.42	0.42	0.44	0.42	6.2
43)	Bromodichloromethane	0.62	0.75	0.75	0.75	0.75	0.72	7.8
44)	Methyl methacrylate	0.45	0.52	0.51	0.53	0.58	0.52	9.1
45)	1,4-Dioxane	0.20	0.24	0.24	0.24	0.25	0.24	8.2
46)	1,3-Dichloropropene (cis)	0.53	0.63	0.63	0.63	0.65	0.61	7.4
47)	Toluene	1.1	1.4	1.3	1.3	1.3	1.3	7.7
48)	Methyl isobutyl ketone	0.86	1.0	0.91	0.91	1.00	0.94	6.6
49)	Tetrachloroethene	0.44	0.53	0.50	0.48	0.48	0.49	7.2
50)	1,3-Dichloropropene (trans)	0.46	0.62	0.62	0.62	0.62	0.59	12
51)	1,1,2-Trichloroethane	0.38	0.47	0.44	0.45	0.48	0.44	9.1
52)	Dibromochloromethane	0.58	0.75	0.72	0.72	0.77	0.71	11
53)	1,2-Dibromoethane	0.52	0.67	0.64	0.64	0.70	0.63	11
54)	Methyl n-butyl ketone	0.74	0.87	0.83	0.85	1.1	0.88	15
55)	d-5 Chlorbenzene	----------ISTD----------						
56)	n-Nonane	0.98	1.2	1.1	1.1	1.5	1.2	17
57)	Chlorobenzene	0.88	1.1	1.0	1.0	1.2	1.0	11
58)	Ethylbenzene	1.7	2.0	1.8	1.9	2.4	2.0	15
59)	Xylenes (m&p)	1.3	1.6	1.4	1.4	1.7	1.5	13
60)	Xylenes (o)	1.3	1.6	1.4	1.5	1.9	1.6	15
61)	Styrene	0.77	1.1	1.0	1.0	1.3	1.0	19
62)	Bromoform	0.53	0.71	0.69	0.70	0.85	0.70	17
63)	Cumene	1.6	2.1	1.9	1.9	2.5	2.0	17
65)	n-Propyl benzene	2.2	2.9	2.5	2.5	3.5	2.7	19
66)	1,1,2,2-Tetrachloroethane	0.93	1.2	1.1	1.1	1.5	1.1	18
67)	4-Ethyltoluene	1.8	2.3	2.1	2.1	2.9	2.2	20
68)	2-Chlorotoluene	1.5	2.0	1.7	1.7	2.4	1.9	17
69)	1,3,5-Trimethylbenzene	1.4	1.9	1.7	1.7	2.3	1.8	19
70)	1,2,4-Trimethylbenzene	1.3	1.9	1.7	1.7	2.4	1.8	22
71)	1,3-Dichlorobenzene	1.0	1.1	0.99	1.0	1.4	1.1	17
72)	1,4-Dichlorobenzene	0.87	1.1	1.0	1.1	1.5	1.1	21
73)	Benzyl chloride	1.2	1.7	1.7	1.8	2.6	1.8	29
74)	1,2-Dichlorobenzene	0.83	1.1	1.00	1.0	1.4	1.1	19
75)	1,3-Hexachlorobutadiene	0.67	0.67	0.59	0.57	0.57	0.61	8.7
76)	1,2,4-Trichlorobenzene	0.91	0.84	0.79	0.77	0.82	0.82	6.6
77)	Naphthalene	2.5	2.2	2.1	2.2	2.6	2.3	10

***% RSD (Relative Standard Deviation) must be within 30%**

****An exception is made for 2 compounds that must be within 40%**

RRF - Relative Response Factor

Method Path : C:\msdchem\1\METHODS\
Method File : 240529.M
Title : TO-15 on the Agilent 7890A / 5975C
Last Update : Wed May 29 15:44:50 2024
Response Via : Initial Calibration

Calibration Files
0.2 =aa6556std05.D 2 =aa6557std04.D 10 =aa6558std03.D 20 =aa6559std02.D 40 =aa6560std01.D

		Compound	0.2	2	10	20	40	Avg	%RSD
1)	I	Bromochloromethane...	ISTD						
2)	T	Propene	1.030	1.106	1.030	1.072	1.009	1.050	3.69
3)	T	Dichlorodifluoro...	2.414	2.897	2.972	3.065	2.968	2.863	9.00
4)	T	1,2-Dichlorotetr...	3.249	4.044	4.000	4.202	4.570	4.013	12.02
5)	T	n-Butane	1.938	2.276	2.139	2.180	2.305	2.168	6.69
6)	T	Chloromethane	0.123	0.172	0.201	0.220	0.176	0.178	20.53
7)	T	Vinyl chloride	1.021	1.325	1.389	1.454	1.401	1.318	13.07
8)	T	1,3-Butadiene	1.065	1.225	1.242	1.293	1.283	1.222	7.55
9)	T	Bromomethane	0.754	1.123	1.102	1.172	0.999	1.030	16.20
10)	T	Chloroethane	0.540	0.761	0.793	0.829	0.823	0.749	16.00
11)	T	Vinyl bromide	0.768	1.310	1.368	1.405	1.395	1.249	21.75
12)	T	Trichlorofluorom...	2.694	3.337	3.368	3.515	3.570	3.297	10.64
13)	T	Ethanol	0.696	0.422	0.438	0.486	0.531	0.515	21.40
14)	T	1,1-Dichloroethene	1.794	2.565	2.691	2.783	2.851	2.537	16.91
15)	T	Carbon disulfide	3.162	4.388	4.469	4.581	4.532	4.226	14.18
16)	T	1,1,2-Trichloro-...	2.680	3.248	2.992	3.094	3.562	3.115	10.43
17)	T	Acrolein	0.471	0.512	0.577	0.611	0.652	0.564	13.01
18)	T	Allyl chloride	0.433	0.698	0.710	0.716	0.689	0.649	18.66
19)	T	Isopropanol	2.411	2.511	2.890	3.078	3.217	2.821	12.42
20)	T	Methylene chloride	2.040	1.727	1.702	1.761	1.802	1.807	7.52
21)	T	Acetone	2.022	2.235	2.262	2.301	2.399	2.244	6.19
22)	T	1,2-Dichloroethe...	1.672	2.189	2.352	2.464	2.793	2.294	17.97
23)	T	n-Pentane	2.440	2.625	2.578	2.774	3.287	2.741	11.95
24)	T	n-Hexane	3.128	3.671	3.784	3.920	4.700	3.840	14.76
25)	T	Methyl tert-buty...	3.818	4.725	4.394	4.508	5.454	4.580	12.94
26)	T	Tert-butyl alcohol	2.523	2.936	3.031	3.247	3.912	3.130	16.30
27)	T	1,1-Dichloroethane	2.188	2.807	2.875	3.025	3.341	2.847	14.82
28)	T	1,2-Dichloroethe...	1.442	1.970	2.157	2.263	2.500	2.066	19.28
29)	t	Cyclohexane	2.080	2.565	2.489	2.572	3.112	2.564	14.34
30)	T	Chloroform	2.298	3.010	3.288	3.456	3.914	3.193	18.74
31)	T	Ethyl acetate	0.398	0.483	0.538	0.584	0.716	0.544	21.81
32)	T	Carbon tetrachlo...	2.590	3.272	3.241	3.285	3.904	3.258	14.28
33)	T	Tetrahydrofuran	1.472	1.746	1.971	2.067	2.343	1.920	17.16
34)	T	1,1,1-Trichloroe...	2.372	2.970	2.919	3.055	3.721	3.007	15.98
35)	T	Methyl ethyl ketone	2.419	2.733	3.147	3.381	4.221	3.180	21.69
36)	T	n-Heptane	2.487	2.911	2.840	2.989	3.806	3.007	16.17
37)	T	Benzene	3.520	4.218	4.574	4.782	5.671	4.553	17.30
38)	T	1,2-Dichloroethane	1.484	1.923	2.120	2.232	2.656	2.083	20.60
39)	I	1,4-Difluorobenzen...	ISTD						
40)	T	Trichloroethene	0.382	0.472	0.469	0.471	0.466	0.452	8.65
41)	T	2,2,4-Trimethylp...	1.493	2.052	1.847	1.809	1.702	1.781	11.52
42)	T	1,2-Dichloropropane	0.371	0.429	0.419	0.417	0.439	0.415	6.23
43)	T	Bromodichloromet...	0.621	0.749	0.748	0.749	0.747	0.723	7.87
44)	T	Methyl methacrylate	0.447	0.523	0.513	0.528	0.580	0.518	9.15
45)	T	1,4-Dioxane	0.203	0.241	0.239	0.244	0.253	0.236	8.24
46)	T	cis-1,3-Dichloro...	0.533	0.630	0.627	0.632	0.645	0.613	7.42
47)	T	Toluene	1.116	1.383	1.296	1.281	1.326	1.280	7.77
48)	T	Methyl isobutyl ...	0.860	1.004	0.910	0.910	0.997	0.936	6.64
49)	T	Tetrachloroethene	0.436	0.533	0.495	0.482	0.479	0.485	7.22
50)	T	trans-1,3-Dichlo...	0.464	0.619	0.618	0.623	0.623	0.589	11.88
51)	T	1,1,2-Trichloroe...	0.376	0.473	0.440	0.445	0.477	0.442	9.12
52)	T	Dibromochloromet...	0.576	0.747	0.720	0.718	0.765	0.705	10.62
53)	T	1,2-Dibromoethane	0.517	0.669	0.644	0.642	0.698	0.634	10.89
54)	T	Methyl n-butyl k...	0.741	0.866	0.832	0.846	1.098	0.877	15.13
55)	I	d-5 Chlorobenzene ...	ISTD						
56)	T	n-Nonane	0.979	1.227	1.073	1.072	1.492	1.169	17.22
57)	T	Chlorobenzene	0.882	1.089	1.007	1.022	1.178	1.036	10.55
58)	T	Ethylbenzene	1.692	2.041	1.833	1.853	2.438	1.971	14.65
59)	T	Xylenes (m&p)	1.270	1.589	1.403	1.402	1.745	1.482	12.53
60)	T	Xylene (o)	1.295	1.644	1.448	1.486	1.929	1.560	15.41

Method Path : C:\msdchem\1\METHODS\
Method File : 240529.M

61)	T	Styrene	0.770	1.063	1.013	1.024	1.317	1.037	18.75
62)	T	Bromoform	0.527	0.714	0.690	0.698	0.851	0.696	16.54
63)	T	Cumene	1.601	2.128	1.865	1.866	2.491	1.990	16.90
64)	S	Bromofluorobenze...	0.866	0.867	0.859	0.909	1.229	0.946	16.85
65)	T	n-Propyl benzene	2.237	2.873	2.496	2.528	3.549	2.737	18.55
66)	T	1,1,2,2-Tetrachl...	0.927	1.197	1.066	1.082	1.471	1.149	17.77
67)	T	4-Ethyltoluene	1.768	2.289	2.062	2.098	2.944	2.232	19.68
68)	T	2-Chlorotoluene	1.531	1.962	1.703	1.725	2.362	1.857	17.32
69)	T	1,3,5-Trimethylb...	1.390	1.943	1.685	1.724	2.335	1.815	19.33
70)	T	1,2,4-Trimethylb...	1.333	1.887	1.703	1.748	2.433	1.821	21.91
71)	T	1,3-Dichlorobenzene	1.007	1.070	0.993	1.024	1.433	1.105	16.78
72)	T	1,4-Dichlorobenzene	0.869	1.096	1.037	1.075	1.511	1.117	21.24
73)	T	Benzyl chloride	1.218	1.651	1.686	1.796	2.633	1.797	28.75
74)	T	1,2-Dichlorobenzene	0.828	1.076	0.999	1.017	1.395	1.063	19.48
75)	T	1,3-Hexachlorobu...	0.674	0.665	0.586	0.569	0.565	0.612	8.70
76)	T	1,2,4-Trichlorob...	0.908	0.836	0.787	0.767	0.822	0.824	6.61
77)	T	Naphthalene	2.540	2.210	2.118	2.150	2.626	2.329	10.15

(#) = Out of Range

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6556std05.D
Acq On : 29 May 2024 12:40 pm
Operator : jjw
Sample : 0.2 ppbv std
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 29 15:43:04 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:42:31 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.409	130	276448	10.00	ppbV		0.000
39) 1,4-Difluorobenzene (IS)	5.477	114	1073893	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.351	117	998317	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.750	95	864418	8.96	ppbV		0.000
Target Compounds							Qvalue
2) Propene	1.454	41	6210	0.21	ppbV		97
3) Dichlorodifluoromethane	1.496	85	14150	0.17	ppbV	#	88
4) 1,2-Dichlorotetrafluor...	1.626	85	17606	0.15	ppbV		96
5) n-Butane	1.709	43	11682	0.19	ppbV		92
6) Chloromethane	1.774	52	761	0.14	ppbV		42
7) Vinyl chloride	1.757	62	6097	0.16	ppbV	#	49
8) 1,3-Butadiene	1.781	39	6299	0.18	ppbV	#	80
9) Bromomethane	2.072	94	4168	0.14	ppbV		94
10) Chloroethane	2.181	64	3166	0.14	ppbV	#	44
11) Vinyl bromide	2.294	106	4287	0.11	ppbV		89
12) Trichlorofluoromethane	2.303	101	16384	0.17	ppbV		97
13) Ethanol	2.683	45	4002	0.31	ppbV		78
14) 1,1-Dichloroethene	2.728	61	10315	0.14	ppbV		95
15) Carbon disulfide	2.747	76	18707	0.15	ppbV	#	89
16) 1,1,2-Trichloro-1,2,2-...	2.776	101	16151	0.18	ppbV		98
17) Acrolein	2.988	56	2603	0.16	ppbV		94
18) Allyl chloride	3.120	76	2587	0.13	ppbV		100
19) Isopropanol	3.114	45	11866	0.15	ppbV	#	88
20) Methylene chloride	3.204	49	12182	0.25	ppbV		95
21) Acetone	3.223	43	12074	0.19	ppbV	#	86
22) 1,2-Dichloroethene (tr...	3.335	61	10260	0.15	ppbV		97
23) n-Pentane	3.422	43	14571	0.19	ppbV		94
24) n-Hexane	3.416	57	19194	0.17	ppbV		92
25) Methyl tert-butyl ether	3.425	73	23645	0.18	ppbV		96
26) Tert-butyl alcohol	3.480	59	16042	0.18	ppbV		100
27) 1,1-Dichloroethane	3.818	63	12942	0.16	ppbV		92
28) 1,2-Dichloroethene (cis)	4.249	61	8688	0.14	ppbV		97
29) Cyclohexane	4.432	56	12879	0.17	ppbV		100
30) Chloroform	4.474	83	13724	0.15	ppbV		99
31) Ethyl acetate	4.570	45	2379	0.15	ppbV		97
32) Carbon tetrachloride	4.596	117	15894	0.17	ppbV		99
33) Tetrahydrofuran	4.602	42	9035	0.16	ppbV		95
34) 1,1,1-Trichloroethane	4.641	97	14296	0.16	ppbV		98
35) Methyl ethyl ketone	4.708	43	14712	0.16	ppbV		94
36) n-Heptane	4.937	43	15263	0.18	ppbV		91
37) Benzene	4.956	78	21020	0.16	ppbV		98
38) 1,2-Dichloroethane	5.117	62	8943	0.14	ppbV		96
40) Trichloroethene	5.451	130	8210	0.16	ppbV		96
41) 2,2,4-Trimethylpentane	4.859	57	34944	0.18	ppbV		99
42) 1,2-Dichloropropane	5.914	63	8856	0.19	ppbV		97
43) Bromodichloromethane	5.972	83	15337	0.19	ppbV		97
44) Methyl methacrylate	6.117	41	10567	0.18	ppbV		97
45) 1,4-Dioxane	6.152	88	5094	0.19	ppbV		95
46) cis-1,3-Dichloropropene	6.567	75	12702	0.19	ppbV		99
47) Toluene	6.805	91	25897	0.18	ppbV		95
48) Methyl isobutyl ketone	7.178	43	20143	0.20	ppbV		98
49) Tetrachloroethene	7.187	166	10480	0.20	ppbV		97
50) trans-1,3-Dichloropropene	7.207	75	11069	0.17	ppbV	#	82
51) 1,1,2-Trichloroethane	7.374	97	8729	0.18	ppbV	#	77

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6556std05.D
Acq On : 29 May 2024 12:40 pm
Operator : jjw
Sample : 0.2 ppbv std
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

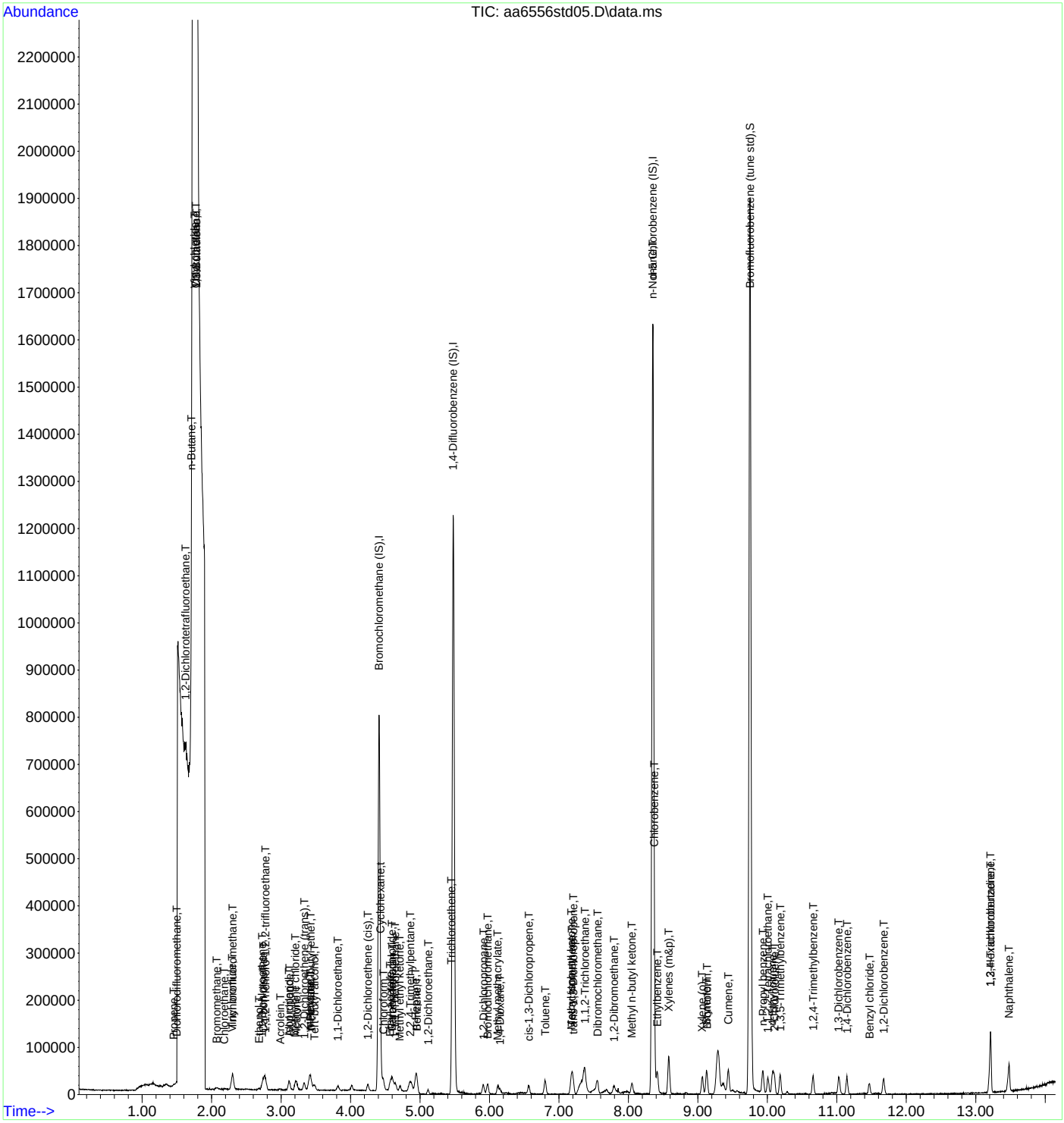
Quant Time: May 29 15:43:04 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:42:31 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
52) Dibromochloromethane	7.557	129	13847	0.17	ppbV		99
53) 1,2-Dibromoethane	7.795	107	11999	0.17	ppbV		98
54) Methyl n-butyl ketone	8.049	43	17996	0.18	ppbV		96
56) n-Nonane	8.348	43	21708	0.18	ppbV		94
57) Chlorobenzene	8.374	112	19540	0.18	ppbV	#	35
58) Ethylbenzene	8.416	91	37490	0.18	ppbV		98
59) Xylenes (m&p)	8.580	91	56561	0.37	ppbV		100
60) Xylene (o)	9.062	91	28443	0.18	ppbV		98
61) Styrene	9.123	104	17364	0.16	ppbV		100
62) Bromoform	9.133	173	11886	0.16	ppbV		99
63) Cumene	9.438	105	34197	0.16	ppbV		97
65) n-Propyl benzene	9.936	91	48235	0.17	ppbV		94
66) 1,1,2,2-Tetrachloroethane	10.007	83	21094	0.18	ppbV		98
67) 4-Ethyltoluene	10.075	105	38115	0.16	ppbV		100
68) 2-Chlorotoluene	10.104	91	33319	0.17	ppbV		97
69) 1,3,5-Trimethylbenzene	10.187	105	30244	0.16	ppbV		99
70) 1,2,4-Trimethylbenzene	10.660	105	28735	0.15	ppbV		98
71) 1,3-Dichlorobenzene	11.026	146	22317	0.20	ppbV		99
72) 1,4-Dichlorobenzene	11.149	146	18557	0.16	ppbV		99
73) Benzyl chloride	11.473	91	24328	0.13	ppbV		96
74) 1,2-Dichlorobenzene	11.676	146	17696	0.16	ppbV		97
75) 1,3-Hexachlorobutadiene	13.213	225	14934	0.25	ppbV		96
76) 1,2,4-Trichlorobenzene	13.213	180	19953	0.25	ppbV		98
77) Naphthalene	13.480	128	50709	0.22	ppbV		97

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

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6556std05.D
Acq On : 29 May 2024 12:40 pm
Operator : jjw
Sample : 0.2 ppbv std
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 29 15:43:04 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:42:31 2024
Response via : Initial Calibration



Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6557std04.D
Acq On : 29 May 2024 1:11 pm
Operator : jjw
Sample : 2.0 ppbv std
Misc : EB0103704
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 29 16:05:04 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.406	130	243744	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.477	114	931187	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.354	117	883473	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.750	95	765844	9.16	ppbV	0.000
Target Compounds						Qvalue
2) Propene	1.470	41	58751	2.30	ppbV	98
3) Dichlorodifluoromethane	1.496	85	149684	2.14	ppbV	100
4) 1,2-Dichlorotetrafluor...	1.626	85	193188	1.98	ppbV	98
5) n-Butane	1.708	43	120953	2.29	ppbV	97
6) Chloromethane	1.777	52	9410	2.16	ppbV	89
7) Vinyl chloride	1.767	62	69778	2.17	ppbV	98
8) 1,3-Butadiene	1.774	39	63876	2.15	ppbV	97
9) Bromomethane	2.062	94	54769	2.18	ppbV	99
10) Chloroethane	2.184	64	39327	2.15	ppbV	99
11) Vinyl bromide	2.281	106	64521	2.12	ppbV	98
12) Trichlorofluoromethane	2.300	101	178965	2.23	ppbV	99
13) Ethanol	2.670	45	21400	1.71	ppbV	99
14) 1,1-Dichloroethene	2.724	61	130045	2.10	ppbV	100
15) Carbon disulfide	2.747	76	228907	2.22	ppbV	98
16) 1,1,2-Trichloro-1,2,2-...	2.773	101	172612	2.27	ppbV	99
17) Acrolein	2.978	56	24941	1.81	ppbV	93
18) Allyl chloride	3.113	76	36750	2.32	ppbV	100
19) Isopropanol	3.120	45	108944	1.58	ppbV	97
20) Methylene chloride	3.204	49	90902	2.06	ppbV	97
21) Acetone	3.220	43	117683	2.15	ppbV	96
22) 1,2-Dichloroethene (tr...	3.329	61	118457	2.12	ppbV	99
23) n-Pentane	3.413	43	144352	2.16	ppbV	96
24) n-Hexane	3.416	57	198634	2.12	ppbV	96
25) Methyl tert-butyl ether	3.419	73	257993	2.31	ppbV	92
26) Tert-butyl alcohol	3.477	59	164606	2.16	ppbV	100
27) 1,1-Dichloroethane	3.821	63	136846	1.97	ppbV	100
28) 1,2-Dichloroethene (cis)	4.248	61	104674	2.08	ppbV	100
29) Cyclohexane	4.425	56	140036	2.24	ppbV	100
30) Chloroform	4.470	83	158461	2.04	ppbV	99
31) Ethyl acetate	4.567	45	25417	1.92	ppbV	99
32) Carbon tetrachloride	4.593	117	177030	2.23	ppbV	99
33) Tetrahydrofuran	4.599	42	94463	2.02	ppbV	98
34) 1,1,1-Trichloroethane	4.641	97	157815	2.15	ppbV	98
35) Methyl ethyl ketone	4.712	43	146553	1.89	ppbV	99
36) n-Heptane	4.937	43	157513	2.15	ppbV	98
37) Benzene	4.953	78	222063	2.00	ppbV	99
38) 1,2-Dichloroethane	5.113	62	102187	2.01	ppbV	99
40) Trichloroethene	5.454	130	87869	2.09	ppbV	99
41) 2,2,4-Trimethylpentane	4.863	57	427145	2.58	ppbV	99
42) 1,2-Dichloropropane	5.911	63	88685	2.29	ppbV	99
43) Bromodichloromethane	5.972	83	160200	2.38	ppbV	98
44) Methyl methacrylate	6.117	41	107105	2.22	ppbV	97
45) 1,4-Dioxane	6.149	88	52568	2.39	ppbV	98
46) cis-1,3-Dichloropropene	6.564	75	130172	2.28	ppbV	99
47) Toluene	6.801	91	277919	2.33	ppbV	100
48) Methyl isobutyl ketone	7.168	43	203627	2.34	ppbV	98
49) Tetrachloroethene	7.191	166	111135	2.46	ppbV	100
50) trans-1,3-Dichloropropene	7.213	75	127958	2.33	ppbV	98
51) 1,1,2-Trichloroethane	7.374	97	95114	2.31	ppbV	100

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6557std04.D
Acq On : 29 May 2024 1:11 pm
Operator : jjw
Sample : 2.0 ppbv std
Misc : EB0103704
ALS Vial : 4 Sample Multiplier: 1

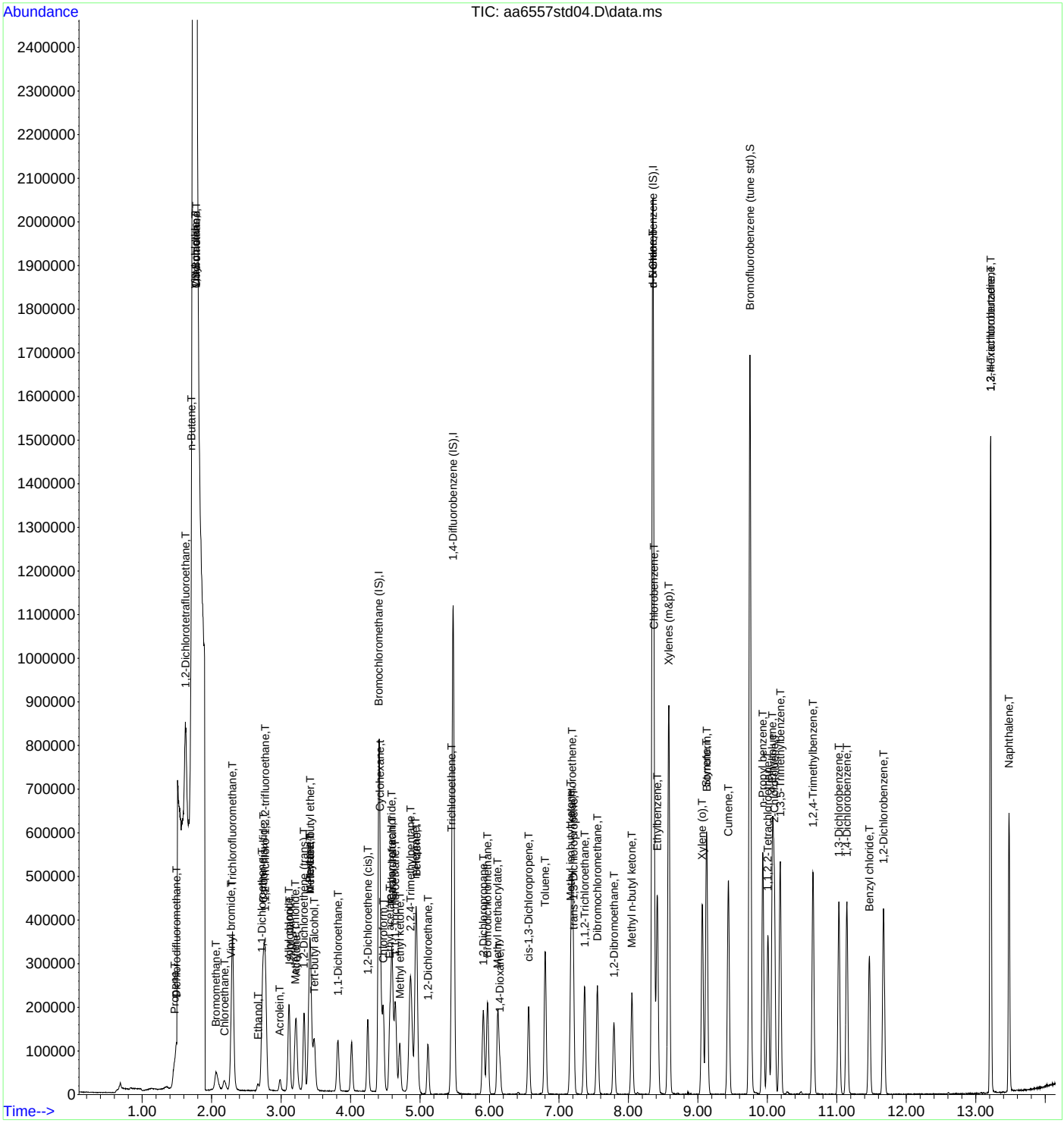
Quant Time: May 29 16:05:04 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.554	129	155622	2.37	ppbV	99
53) 1,2-Dibromoethane	7.792	107	134449	2.28	ppbV	98
54) Methyl n-butyl ketone	8.049	43	182152	2.23	ppbV	99
56) n-Nonane	8.348	43	240746	2.33	ppbV	100
57) Chlorobenzene	8.371	112	213631	2.34	ppbV	96
58) Ethylbenzene	8.416	91	400238	2.30	ppbV	100
59) Xylenes (m&p)	8.580	91	626076	4.78	ppbV	100
60) Xylene (o)	9.062	91	319546	2.32	ppbV	99
61) Styrene	9.123	104	212185	2.32	ppbV	99
62) Bromoform	9.129	173	142572	2.32	ppbV	99
63) Cumene	9.441	105	402361	2.29	ppbV	100
65) n-Propyl benzene	9.933	91	548551	2.27	ppbV	99
66) 1,1,2,2-Tetrachloroethane	10.007	83	241161	2.38	ppbV	98
67) 4-Ethyltoluene	10.071	105	436721	2.21	ppbV	99
68) 2-Chlorotoluene	10.100	91	377903	2.30	ppbV	99
69) 1,3,5-Trimethylbenzene	10.187	105	374308	2.33	ppbV	99
70) 1,2,4-Trimethylbenzene	10.657	105	360088	2.24	ppbV	100
71) 1,3-Dichlorobenzene	11.030	146	209789	2.15	ppbV	98
72) 1,4-Dichlorobenzene	11.145	146	207189	2.10	ppbV	100
73) Benzyl chloride	11.470	91	291655	1.84	ppbV	99
74) 1,2-Dichlorobenzene	11.673	146	203374	2.17	ppbV	98
75) 1,3-Hexachlorobutadiene	13.216	225	130377	2.41	ppbV	99
76) 1,2,4-Trichlorobenzene	13.216	180	162583	2.23	ppbV	100
77) Naphthalene	13.480	128	390557	1.90	ppbV	100

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

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6557std04.D
Acq On : 29 May 2024 1:11 pm
Operator : jjw
Sample : 2.0 ppbv std
Misc : EB0103704
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 29 16:05:04 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration



Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6558std03.D
Acq On : 29 May 2024 1:46 pm
Operator : jjw
Sample : 10 ppbv std
Misc : EB0103704
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 29 16:05:30 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.416	130	240829	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.483	114	1010790	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.351	117	932743	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.753	95	800854	9.08	ppbV	0.000
Target Compounds						Qvalue
2) Propene	1.473	41	274657	10.87	ppbV	97
3) Dichlorodifluoromethane	1.509	85	756375	10.97	ppbV	100
4) 1,2-Dichlorotetrafluor...	1.629	85	938641	9.71	ppbV	99
5) n-Butane	1.709	43	561545	10.76	ppbV	100
6) Chloromethane	1.774	52	54205	12.61	ppbV	100
7) Vinyl chloride	1.770	62	362582	11.42	ppbV	100
8) 1,3-Butadiene	1.777	39	320142	10.88	ppbV	100
9) Bromomethane	2.072	94	281183	11.33	ppbV	98
10) Chloroethane	2.184	64	202415	11.22	ppbV	100
11) Vinyl bromide	2.287	106	333039	11.07	ppbV	100
12) Trichlorofluoromethane	2.303	101	892115	11.24	ppbV	100
13) Ethanol	2.670	45	109612	8.85	ppbV	100
14) 1,1-Dichloroethene	2.728	61	674109	11.03	ppbV	100
15) Carbon disulfide	2.750	76	1151657	11.31	ppbV	100
16) 1,1,2-Trichloro-1,2,2-...	2.769	101	785526	10.47	ppbV	100
17) Acrolein	2.991	56	138932	10.22	ppbV	100
18) Allyl chloride	3.114	76	184693	11.81	ppbV	100
19) Isopropanol	3.117	45	619477	9.12	ppbV	100
20) Methylene chloride	3.204	49	442782	10.18	ppbV	100
21) Acetone	3.223	43	588242	10.89	ppbV	100
22) 1,2-Dichloroethene (tr...	3.332	61	628721	11.38	ppbV	100
23) n-Pentane	3.419	43	690198	10.46	ppbV	99
24) n-Hexane	3.416	57	1002351	10.84	ppbV	100
25) Methyl tert-butyl ether	3.422	73	1185133	10.74	ppbV	100
26) Tert-butyl alcohol	3.477	59	838725	11.13	ppbV	100
27) 1,1-Dichloroethane	3.821	63	740756	10.80	ppbV	100
28) 1,2-Dichloroethene (cis)	4.249	61	566091	11.38	ppbV	100
29) Cyclohexane	4.432	56	671377	10.87	ppbV	100
30) Chloroform	4.474	83	855198	11.12	ppbV	100
31) Ethyl acetate	4.564	45	139805	10.68	ppbV	100
32) Carbon tetrachloride	4.596	117	858451	10.94	ppbV	100
33) Tetrahydrofuran	4.599	42	522056	11.29	ppbV	100
34) 1,1,1-Trichloroethane	4.647	97	766176	10.58	ppbV	100
35) Methyl ethyl ketone	4.708	43	833728	10.89	ppbV	100
36) n-Heptane	4.943	43	759296	10.49	ppbV	100
37) Benzene	4.956	78	1189688	10.85	ppbV	100
38) 1,2-Dichloroethane	5.113	62	556426	11.09	ppbV	100
40) Trichloroethene	5.457	130	474332	10.38	ppbV	100
41) 2,2,4-Trimethylpentane	4.866	57	2034499	11.30	ppbV	100
42) 1,2-Dichloropropane	5.914	63	465873	11.11	ppbV	100
43) Bromodichloromethane	5.972	83	869300	11.90	ppbV	100
44) Methyl methacrylate	6.120	41	570433	10.89	ppbV	100
45) 1,4-Dioxane	6.146	88	282524	11.84	ppbV	100
46) cis-1,3-Dichloropropene	6.567	75	703032	11.34	ppbV	100
47) Toluene	6.801	91	1414424	10.93	ppbV	100
48) Methyl isobutyl ketone	7.171	43	1002006	10.59	ppbV	100
49) Tetrachloroethene	7.191	166	560367	11.43	ppbV	100
50) trans-1,3-Dichloropropene	7.210	75	693708	11.64	ppbV	100
51) 1,1,2-Trichloroethane	7.371	97	480731	10.75	ppbV	100

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6558std03.D
Acq On : 29 May 2024 1:46 pm
Operator : jjw
Sample : 10 ppbv std
Misc : EB0103704
ALS Vial : 5 Sample Multiplier: 1

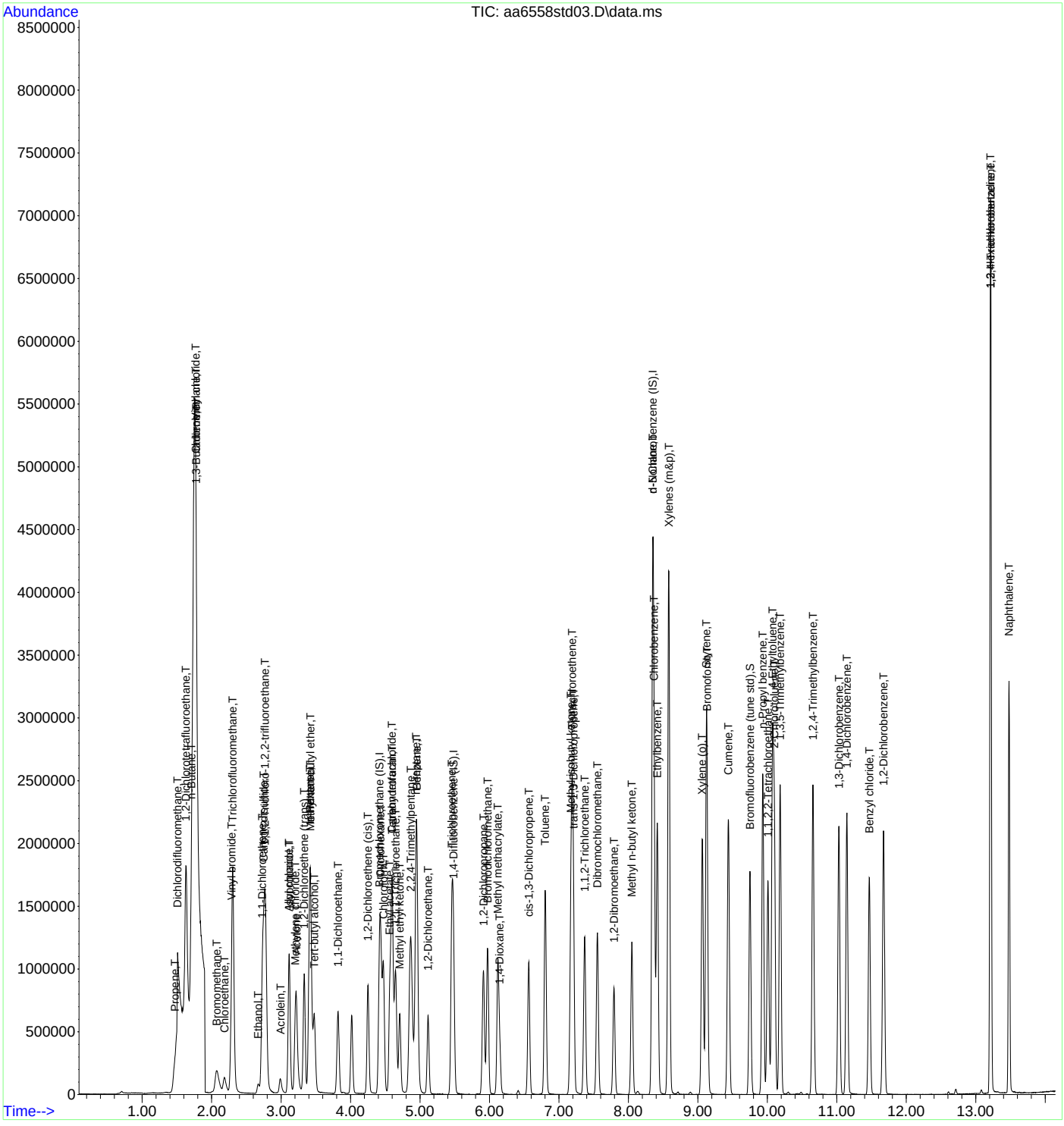
Quant Time: May 29 16:05:30 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.554	129	815306	11.44	ppbV	100
53) 1,2-Dibromoethane	7.792	107	703423	10.98	ppbV	100
54) Methyl n-butyl ketone	8.049	43	950190	10.72	ppbV	100
56) n-Nonane	8.351	43	1100770	10.10	ppbV	100
57) Chlorobenzene	8.371	112	1042681	10.79	ppbV	100
58) Ethylbenzene	8.416	91	1897518	10.32	ppbV	100
59) Xylenes (m&p)	8.583	91	2917626	21.11	ppbV	100
60) Xylene (o)	9.062	91	1486045	10.21	ppbV	100
61) Styrene	9.123	104	1068093	11.04	ppbV	100
62) Bromoform	9.133	173	727324	11.20	ppbV	100
63) Cumene	9.438	105	1861677	10.03	ppbV	100
65) n-Propyl benzene	9.933	91	2515170	9.85	ppbV	100
66) 1,1,2,2-Tetrachloroethane	10.010	83	1133749	10.58	ppbV	100
67) 4-Ethyltoluene	10.075	105	2077120	9.98	ppbV	100
68) 2-Chlorotoluene	10.100	91	1731846	10.00	ppbV	100
69) 1,3,5-Trimethylbenzene	10.184	105	1713250	10.12	ppbV	100
70) 1,2,4-Trimethylbenzene	10.657	105	1715919	10.10	ppbV	100
71) 1,3-Dichlorobenzene	11.033	146	1027727	9.97	ppbV	100
72) 1,4-Dichlorobenzene	11.145	146	1035040	9.93	ppbV	100
73) Benzyl chloride	11.470	91	1572204	9.38	ppbV	100
74) 1,2-Dichlorobenzene	11.673	146	997427	10.06	ppbV	100
75) 1,3-Hexachlorobutadiene	13.213	225	606322	10.63	ppbV	100
76) 1,2,4-Trichlorobenzene	13.216	180	807618	10.51	ppbV	100
77) Naphthalene	13.480	128	1975571	9.09	ppbV	100

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

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6558std03.D
Acq On : 29 May 2024 1:46 pm
Operator : jjw
Sample : 10 ppbv std
Misc : EB0103704
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 29 16:05:30 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration



Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6559std02.D
Acq On : 29 May 2024 2:18 pm
Operator : jjw
Sample : 20 ppbv std
Misc : EB0103704
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 29 16:06:18 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.425	130	232784	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.480	114	1025078	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.354	117	911734	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.750	95	829134	9.61	ppbV	0.000
Target Compounds						Qvalue
2) Propene	1.480	41	544013	22.27	ppbV	97
3) Dichlorodifluoromethane	1.516	85	1512429	22.69	ppbV	100
4) 1,2-Dichlorotetrafluor...	1.636	85	1917229	20.52	ppbV	99
5) n-Butane	1.715	43	1106377	21.93	ppbV	97
6) Chloromethane	1.784	52	114751	27.62	ppbV	97
7) Vinyl chloride	1.777	62	731193	23.83	ppbV	100
8) 1,3-Butadiene	1.781	39	644220	22.65	ppbV	98
9) Bromomethane	2.078	94	545831	22.76	ppbV	99
10) Chloroethane	2.191	64	409088	23.46	ppbV	98
11) Vinyl bromide	2.287	106	660638	22.72	ppbV	99
12) Trichlorofluoromethane	2.310	101	1799897	23.45	ppbV	99
13) Ethanol	2.673	45	235242	19.64	ppbV	99
14) 1,1-Dichloroethene	2.731	61	1347624	22.82	ppbV	99
15) Carbon disulfide	2.756	76	2282103	23.20	ppbV	100
16) 1,1,2-Trichloro-1,2,2-...	2.776	101	1569935	21.65	ppbV	100
17) Acrolein	2.998	56	284325	21.64	ppbV	99
18) Allyl chloride	3.120	76	359809	23.81	ppbV	100
19) Isopropanol	3.123	45	1275369	19.42	ppbV	99
20) Methylene chloride	3.210	49	885621	21.06	ppbV	100
21) Acetone	3.229	43	1157082	22.15	ppbV	100
22) 1,2-Dichloroethene (tr...	3.335	61	1273151	23.84	ppbV	99
23) n-Pentane	3.419	43	1394842	21.86	ppbV	98
24) n-Hexane	3.416	57	2025556	22.66	ppbV	99
25) Methyl tert-butyl ether	3.422	73	2350847	22.05	ppbV	98
26) Tert-butyl alcohol	3.477	59	1738663	23.86	ppbV	100
27) 1,1-Dichloroethane	3.824	63	1506683	22.74	ppbV	100
28) 1,2-Dichloroethene (cis)	4.255	61	1148289	23.87	ppbV	100
29) Cyclohexane	4.435	56	1340930	22.47	ppbV	99
30) Chloroform	4.477	83	1737844	23.38	ppbV	99
31) Ethyl acetate	4.567	45	293619	23.20	ppbV	98
32) Carbon tetrachloride	4.596	117	1697695	22.38	ppbV	99
33) Tetrahydrofuran	4.599	42	1068142	23.90	ppbV	99
34) 1,1,1-Trichloroethane	4.647	97	1550092	22.14	ppbV	100
35) Methyl ethyl ketone	4.708	43	1731666	23.39	ppbV	100
36) n-Heptane	4.943	43	1544562	22.07	ppbV	100
37) Benzene	4.956	78	2404288	22.69	ppbV	99
38) 1,2-Dichloroethane	5.120	62	1132565	23.36	ppbV	99
40) Trichloroethene	5.461	130	964688	20.81	ppbV	99
41) 2,2,4-Trimethylpentane	4.866	57	4042916	22.15	ppbV	100
42) 1,2-Dichloropropane	5.914	63	948199	22.29	ppbV	100
43) Bromodichloromethane	5.975	83	1765068	23.83	ppbV	97
44) Methyl methacrylate	6.123	41	1190229	22.40	ppbV	100
45) 1,4-Dioxane	6.145	88	584840	24.17	ppbV	99
46) cis-1,3-Dichloropropene	6.567	75	1439187	22.89	ppbV	100
47) Toluene	6.805	91	2835950	21.61	ppbV	100
48) Methyl isobutyl ketone	7.174	43	2033609	21.19	ppbV	100
49) Tetrachloroethene	7.190	166	1107096	22.27	ppbV	100
50) trans-1,3-Dichloropropene	7.210	75	1416746	23.45	ppbV	100
51) 1,1,2-Trichloroethane	7.374	97	984279	21.71	ppbV	99

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6559std02.D
Acq On : 29 May 2024 2:18 pm
Operator : jjw
Sample : 20 ppbv std
Misc : EB0103704
ALS Vial : 6 Sample Multiplier: 1

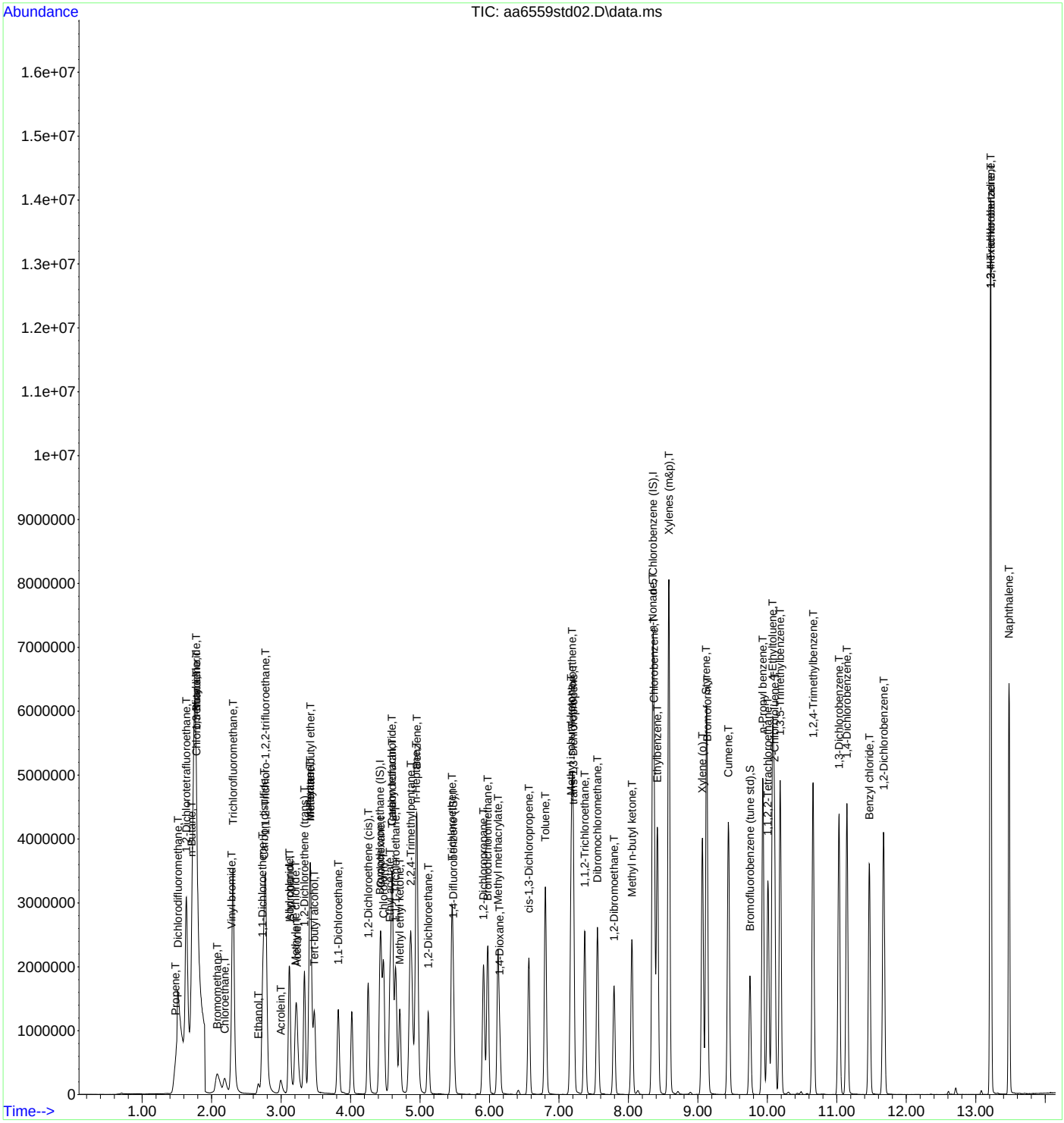
Quant Time: May 29 16:06:18 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.554	129	1649262	22.82	ppbV	100
53) 1,2-Dibromoethane	7.795	107	1420547	21.86	ppbV	100
54) Methyl n-butyl ketone	8.052	43	1958802	21.80	ppbV	100
56) n-Nonane	8.348	43	2150653	20.18	ppbV	99
57) Chlorobenzene	8.370	112	2068748	21.91	ppbV	100
58) Ethylbenzene	8.415	91	3750723	20.87	ppbV	100
59) Xylenes (m&p)	8.583	91	5702458	42.21	ppbV	99
60) Xylene (o)	9.065	91	2980281	20.95	ppbV	99
61) Styrene	9.120	104	2110477	22.31	ppbV	100
62) Bromoform	9.136	173	1438600	22.67	ppbV	100
63) Cumene	9.438	105	3640428	20.06	ppbV	99
65) n-Propyl benzene	9.933	91	4978447	19.95	ppbV	100
66) 1,1,2,2-Tetrachloroethane	10.007	83	2248627	21.47	ppbV	100
67) 4-Ethyltoluene	10.074	105	4132186	20.31	ppbV	99
68) 2-Chlorotoluene	10.103	91	3429519	20.26	ppbV	100
69) 1,3,5-Trimethylbenzene	10.184	105	3426622	20.70	ppbV	99
70) 1,2,4-Trimethylbenzene	10.660	105	3441480	20.73	ppbV	100
71) 1,3-Dichlorobenzene	11.033	146	2073260	20.57	ppbV	100
72) 1,4-Dichlorobenzene	11.145	146	2097540	20.59	ppbV	100
73) Benzyl chloride	11.470	91	3274358	19.99	ppbV	100
74) 1,2-Dichlorobenzene	11.676	146	1984761	20.48	ppbV	99
75) 1,3-Hexachlorobutadiene	13.216	225	1152385	20.66	ppbV	100
76) 1,2,4-Trichlorobenzene	13.216	180	1538918	20.48	ppbV	98
77) Naphthalene	13.479	128	3920601	18.46	ppbV	100

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

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6559std02.D
Acq On : 29 May 2024 2:18 pm
Operator : jjw
Sample : 20 ppbv std
Misc : EB0103704
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 29 16:06:18 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration



Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6560std01.D
Acq On : 29 May 2024 2:55 pm
Operator : jjw
Sample : 40 ppbv std
Misc : EB0103704
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 29 15:33:09 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.438	130	259539	10.00	ppbV		0.026
39) 1,4-Difluorobenzene (IS)	5.490	114	1398154	10.00	ppbV		0.014
55) d-5 Chlorobenzene (IS)	8.351	117	1151205	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.750	95	1414587	13.70	ppbV		0.000
Target Compounds							Qvalue
2) Propene	1.523	41	1142227	39.26	ppbV		100
3) Dichlorodifluoromethane	1.550	85	3265934	50.06	ppbV		100
4) 1,2-Dichlorotetrafluor...	1.664	85	4649559	49.37	ppbV		97
5) n-Butane	1.750	43	2608188	40.60	ppbV		100
6) Chloromethane	1.815	52	204731	48.69	ppbV		88
7) Vinyl chloride	1.815	62	1570322	48.59	ppbV		99
8) 1,3-Butadiene	1.818	39	1425634	38.81	ppbV		98
9) Bromomethane	2.120	94	1037392	44.51	ppbV		98
10) Chloroethane	2.216	64	905256	50.82	ppbV		99
11) Vinyl bromide	2.310	106	1463102	54.50	ppbV		100
12) Trichlorofluoromethane	2.335	101	4076568	53.50	ppbV		99
13) Ethanol	2.692	45	573243	48.16	ppbV		91
14) 1,1-Dichloroethene	2.760	61	3078402	52.09	ppbV		95
15) Carbon disulfide	2.779	76	5033811	53.65	ppbV		96
16) 1,1,2-Trichloro-1,2,2-...	2.798	101	4030555	53.48	ppbV		97
17) Acrolein	3.017	56	677189	47.80	ppbV		100
18) Allyl chloride	3.142	76	772500	52.45	ppbV		100
19) Isopropanol	3.146	45	2972095	39.43	ppbV		98
20) Methylene chloride	3.229	49	2020607	48.06	ppbV		87
21) Acetone	3.245	43	2690258	46.34	ppbV		96
22) 1,2-Dichloroethene (tr...	3.355	61	3218797	62.26	ppbV		93
23) n-Pentane	3.435	43	3685172	50.56	ppbV		100
24) n-Hexane	3.432	57	5415528	51.83	ppbV		95
25) Methyl tert-butyl ether	3.441	73	6341672	54.05	ppbV		99
26) Tert-butyl alcohol	3.496	59	4670327	56.35	ppbV		100
27) 1,1-Dichloroethane	3.843	63	3710731	53.46	ppbV		99
28) 1,2-Dichloroethene (cis)	4.268	61	2829337	56.82	ppbV		93
29) Cyclohexane	4.445	56	3618784	51.25	ppbV		92
30) Chloroform	4.486	83	4388064	60.64	ppbV		100
31) Ethyl acetate	4.580	45	803157	53.77	ppbV		93
32) Carbon tetrachloride	4.605	117	4499351	60.76	ppbV		100
33) Tetrahydrofuran	4.612	42	2700255	49.65	ppbV		94
34) 1,1,1-Trichloroethane	4.660	97	4210588	60.26	ppbV		100
35) Methyl ethyl ketone	4.718	43	4819880	55.58	ppbV		95
36) n-Heptane	4.956	43	4385464	48.40	ppbV		92
37) Benzene	4.969	78	6358079	58.39	ppbV		97
38) 1,2-Dichloroethane	5.126	62	3005422	60.84	ppbV		100
40) Trichloroethene	5.467	130	2608762	46.76	ppbV		99
41) 2,2,4-Trimethylpentane	4.875	57	10374158	38.27	ppbV		99
42) 1,2-Dichloropropane	5.924	63	2722594	44.56	ppbV		99
43) Bromodichloromethane	5.981	83	4805129	49.38	ppbV		100
44) Methyl methacrylate	6.123	41	3568315	41.17	ppbV		92
45) 1,4-Dioxane	6.152	88	1658461	50.67	ppbV		94
46) cis-1,3-Dichloropropene	6.573	75	4001330	46.35	ppbV		100
47) Toluene	6.811	91	8006090	44.44	ppbV		99
48) Methyl isobutyl ketone	7.174	43	6079413	37.73	ppbV		96
49) Tetrachloroethene	7.197	166	2999039	48.20	ppbV		100
50) trans-1,3-Dichloropropene	7.216	75	3865763	47.06	ppbV	#	70
51) 1,1,2-Trichloroethane	7.377	97	2879234	48.35	ppbV		97

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6560std01.D
Acq On : 29 May 2024 2:55 pm
Operator : jjw
Sample : 40 ppbv std
Misc : EB0103704
ALS Vial : 7 Sample Multiplier: 1

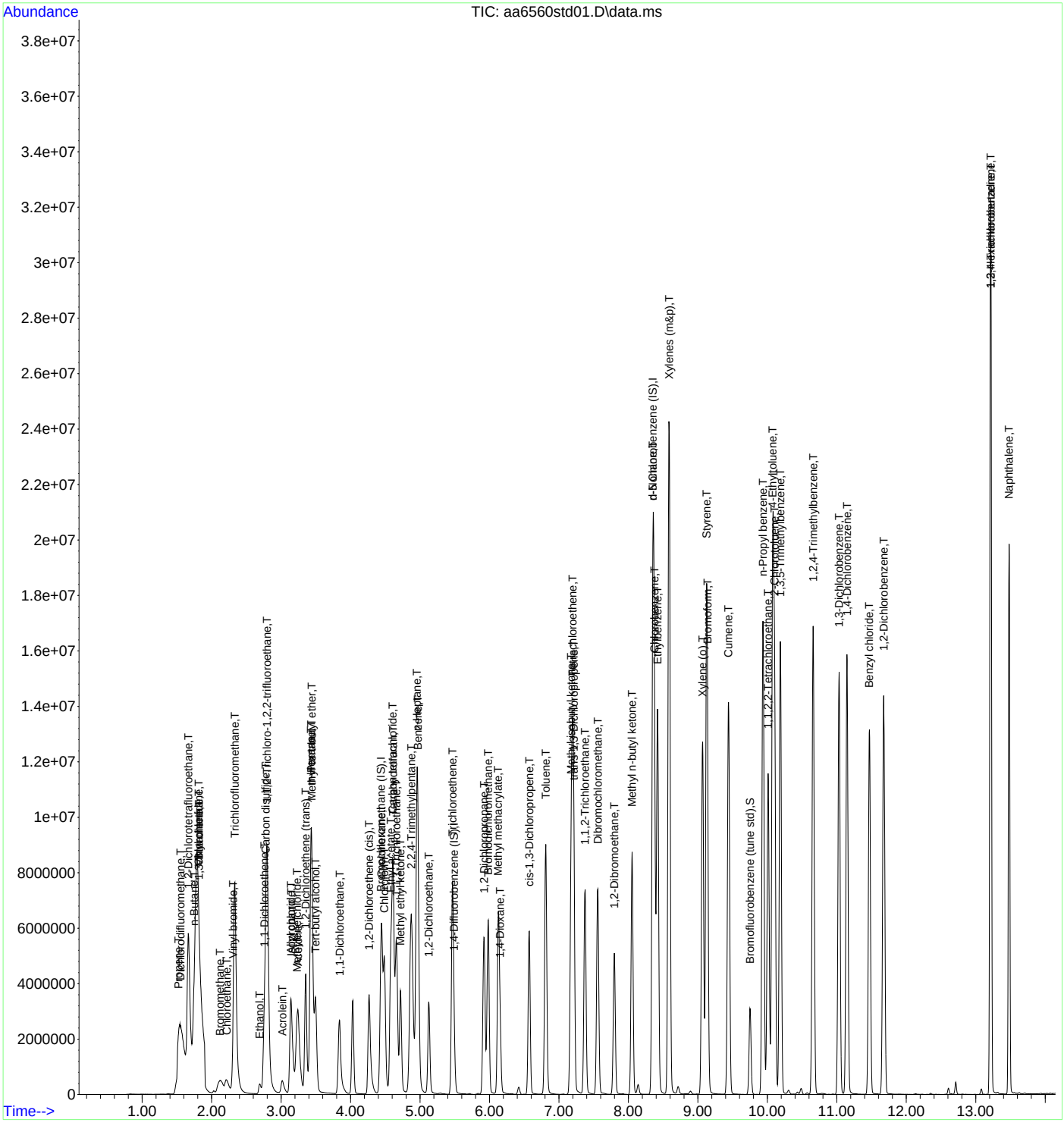
Quant Time: May 29 15:33:09 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.560	129	4789120	52.49	ppbV	100
53) 1,2-Dibromoethane	7.798	107	4214665	49.82	ppbV	100
54) Methyl n-butyl ketone	8.052	43	6940012	48.04	ppbV	96
56) n-Nonane	8.351	43	7555637	47.30	ppbV	91
57) Chlorobenzene	8.377	112	6019868	54.26	ppbV	97
58) Ethylbenzene	8.419	91	12459258	56.39	ppbV	98
59) Xylenes (m&p)	8.586	91	17915958	108.01	ppbV	98
60) Xylene (o)	9.068	91	9769196	55.51	ppbV	98
61) Styrene	9.126	104	6854147	60.05	ppbV	99
62) Bromoform	9.139	173	4428252	62.69	ppbV	99
63) Cumene	9.441	105	12273690	55.33	ppbV	99
65) n-Propyl benzene	9.936	91	17652384	58.75	ppbV	97
66) 1,1,2,2-Tetrachloroethane	10.010	83	7720543	59.17	ppbV	100
67) 4-Ethyltoluene	10.075	105	14639002	61.29	ppbV	98
68) 2-Chlorotoluene	10.103	91	11857804	58.29	ppbV	99
69) 1,3,5-Trimethylbenzene	10.187	105	11719331	59.58	ppbV	100
70) 1,2,4-Trimethylbenzene	10.660	105	12098566	62.04	ppbV	99
71) 1,3-Dichlorobenzene	11.033	146	7325087	68.56	ppbV	99
72) 1,4-Dichlorobenzene	11.148	146	7443078	68.71	ppbV	99
73) Benzyl chloride	11.467	91	12122899	66.89	ppbV	97
74) 1,2-Dichlorobenzene	11.676	146	6872332	64.83	ppbV	99
75) 1,3-Hexachlorobutadiene	13.216	225	2887878	50.17	ppbV	100
76) 1,2,4-Trichlorobenzene	13.216	180	4161678	52.94	ppbV	99
77) Naphthalene	13.480	128	12094453	55.40	ppbV	98

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

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6560std01.D
Acq On : 29 May 2024 2:55 pm
Operator : jjw
Sample : 40 ppbv std
Misc : EB0103704
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 29 15:33:09 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES, LLC

Initial Calibration Verification Sample Standard

Lab Sample Name: 10 PPBV ICVSS **Data File:** AA6026ICVSS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 3/27/2024

Amount of standard injected (ml): 50

Runs with this ICVSS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6020BFB]	03/27/2024 10:03
0.2 PPBV STD [AA6021STD05]	03/27/2024 10:38
2 PPBV STD [AA6022STD04]	03/27/2024 11:38
10 PPBV STD [AA6023STD03]	03/27/2024 12:09
20 PPBV STD [AA6024STD02]	03/27/2024 12:40
40 PPBV STD [AA6025STD01]	03/27/2024 13:24
10 PPBV ICVSS [AA6026ICVSS]	03/27/2024 13:54
10 PPBV LCS [AA6027LCS]	03/27/2024 14:23
METHOD BLANK [AA6028BLK]	03/27/2024 14:51

Compound	CAS #	Injected Amount (ppbv)	Recovered Amount (ppbv)	% Recovery	QC Limit
Acetone	67-64-1	11	10	95	
Acrolein	107-02-8	9.4	9.8	100	
Allyl Chloride	107-05-1	11	11	99	
Benzene	71-43-2	10	9.7	93	
Benzyl chloride	100-44-7	11	10	93	
Bromodichloromethane	75-27-4	11	11	100	
Bromoform	75-25-2	11	12	110	
Bromomethane	74-83-9	11	11	100	
1,3-Butadiene	106-99-0	11	9.4	86	
n-Butane	106-97-8	11	9.5	90	
Chlorobenzene	108-90-7	10	11	110	
Chloroethane	75-00-3	9.8	11	110	
Chloroform	67-66-3	11	10	92	
Chloromethane	74-87-3	9.9	11	110	
Carbon disulfide	75-15-0	10	11	110	
Carbon tetrachloride	56-23-5	11	10.0	93	
2-Chlorotoluene	95-49-8	11	11	100	
Cumene	98-82-8	10	10	99	
Cyclohexane	110-82-7	11	9.8	90	
Dibromochloromethane	124-48-1	11	11	100	
1,2-Dibromoethane	106-93-4	11	11	100	
1,2-Dichlorobenzene	95-50-1	10	11	110	
1,3-Dichlorobenzene	541-73-1	10	11	110	
1,4-Dichlorobenzene	106-46-7	10	11	110	
Dichlorodifluoromethane	75-71-8	11	11	100	
1,1-Dichloroethane	75-34-3	11	9.6	91	
1,2-Dichloroethane	107-06-2	11	10	95	
1,1-Dichloroethene	75-35-4	11	11	100	
1,2-Dichloroethene (cis)	156-59-2	10	10	97	
1,2-Dichloroethene (trans)	156-60-5	11	11	100	
1,2-Dichloropropane	78-87-5	11	10	95	
1,3-Dichloropropene (cis)	10061-01-5	9.9	11	110	
1,3-Dichloropropene (trans)	10061-02-6	11	11	100	
1,2-Dichlorotetrafluoroethane	76-14-2	11	8.9	79	
1,4-Dioxane	123-91-1	11	11	98	
Ethanol	64-17-5	9.8	11	110	
Ethyl acetate	141-78-6	10	9.8	95	
Ethylbenzene	100-41-4	10	11	110	

ICVSS recovery must be within 70-130% of the spiked value for all compounds.

*** Values outside of QC limits**

INTEGRATED ANALYTICAL LABORATORIES, LLC

Initial Calibration Verification Sample Standard

Lab Sample Name: 10 PPBV ICVSS **Data File:** AA6026ICVSS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 3/27/2024

Amount of standard injected (ml): 50

Runs with this ICVSS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6020BFB]	03/27/2024 10:03
0.2 PPBV STD [AA6021STD05]	03/27/2024 10:38
2 PPBV STD [AA6022STD04]	03/27/2024 11:38
10 PPBV STD [AA6023STD03]	03/27/2024 12:09
20 PPBV STD [AA6024STD02]	03/27/2024 12:40
40 PPBV STD [AA6025STD01]	03/27/2024 13:24
10 PPBV ICVSS [AA6026ICVSS]	03/27/2024 13:54
10 PPBV LCS [AA6027LCS]	03/27/2024 14:23
METHOD BLANK [AA6028BLK]	03/27/2024 14:51

Compound	CAS #	Injected Amount (ppbv)	Recovered Amount (ppbv)	% Recovery	QC Limit
4-Ethyltoluene	622-96-8	11	11	100	
n-Heptane	142-82-5	11	9.2	84	
1,3-Hexachlorobutadiene	87-68-3	9.8	12	120	
n-Hexane	110-54-3	11	9.3	86	
Isopropanol	67-63-0	8.1	8.6	110	
Methylene chloride	75-09-2	11	10	93	
Methyl ethyl ketone	78-93-3	11	9.7	89	
Methyl isobutyl ketone	108-10-1	10	10	97	
Methyl methacrylate	80-62-6	11	10	93	
Methyl n-butyl ketone	591-78-6	11	11	99	
Methyl tert-butyl ether	1634-04-4	11	9.9	91	
Naphthalene	91-20-3	11	10	93	
n-Nonane	111-84-2	11	10	89	
n-Pentane	109-66-0	11	9.5	86	
Propene	115-07-1	11	10	91	
n-Propyl benzene	103-65-1	11	11	100	
Styrene	100-42-5	11	12	110	
Tert-butyl alcohol	75-65-0	12	10	87	
1,1,2,2-Tetrachloroethane	79-34-5	10	11	110	
Tetrachloroethene	127-18-4	12	11	93	
Tetrahydrofuran	109-99-9	11	9.8	92	
Toluene	108-88-3	11	10	95	
1,2,4-Trichlorobenzene	120-82-1	10	11	110	
1,1,1-Trichloroethane	71-55-6	11	10.0	93	
1,1,2-Trichloroethane	79-00-5	11	11	100	
Trichloroethene	79-01-6	10	10	98	
Trichlorofluoromethane	75-69-4	11	10	94	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	11	9.5	87	
1,2,4-Trimethylbenzene	95-63-6	10	11	110	
1,3,5-Trimethylbenzene	108-67-8	10	11	110	
2,2,4-Trimethylpentane	540-84-1	11	11	100	
Vinyl bromide	593-60-2	10	11	110	
Vinyl chloride	75-01-4	11	11	97	
Xylenes (m&p)	179601-23-1	21	22	110	
Xylenes (o)	95-47-6	10	11	110	

ICVSS recovery must be within 70-130% of the spiked value for all compounds.

*** Values outside of QC limits**

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6026icvss.D
Acq On : 27 Mar 2024 1:54 pm
Operator : jjw
Sample : 10 ppbv icvss
Misc : EB0116272
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 27 15:15:48 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.412	130	412561	10.00	ppbV		0.000
39) 1,4-Difluorobenzene (IS)	5.480	114	1549110	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.351	117	1439709	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.753	95	1278623	9.90	ppbV		0.000
Target Compounds							Qvalue
2) Propene	1.464	41	475494	10.28	ppbV		99
3) Dichlorodifluoromethane	1.499	85	1104507	10.65	ppbV		100
4) 1,2-Dichlorotetrafluor...	1.626	85	1330698	8.89	ppbV		100
5) n-Butane	1.708	43	967137	9.47	ppbV		100
6) Chloromethane	1.777	52	72189	10.80	ppbV		98
7) Vinyl chloride	1.763	62	575895	11.21	ppbV		100
8) 1,3-Butadiene	1.777	39	546190	9.35	ppbV		98
9) Bromomethane	2.065	94	393236	10.61	ppbV		99
10) Chloroethane	2.178	64	303187	10.71	ppbV		99
11) Vinyl bromide	2.284	106	452505	10.60	ppbV		100
12) Trichlorofluoromethane	2.300	101	1216885	10.05	ppbV		100
13) Ethanol	2.666	45	207336	10.96	ppbV		99
14) 1,1-Dichloroethene	2.727	61	992472	10.57	ppbV		99
15) Carbon disulfide	2.747	76	1666779	11.18	ppbV		98
16) 1,1,2-Trichloro-1,2,2-...	2.772	101	1132241	9.45	ppbV		100
17) Acrolein	2.985	56	220833	9.81	ppbV		99
18) Allyl chloride	3.110	76	260732	11.14	ppbV		100
19) Isopropanol	3.116	45	1035442	8.64	ppbV		99
20) Methylene chloride	3.206	49	690106	10.33	ppbV		98
21) Acetone	3.219	43	937159	10.15	ppbV		99
22) trans-1,2-Dichloroethene	3.329	61	906530	11.03	ppbV		98
23) n-Pentane	3.419	43	1099645	9.49	ppbV		99
24) n-Hexane	3.415	57	1549072	9.33	ppbV		99
25) Methyl tert-butyl ether	3.419	73	1838970	9.86	ppbV		99
26) Tert-butyl alcohol	3.477	59	1321541	10.03	ppbV		100
27) 1,1-Dichloroethane	3.817	63	1062879	9.63	ppbV		100
28) cis-1,2-Dichloroethene	4.248	61	815216	10.30	ppbV		98
29) Cyclohexane	4.428	56	1096558	9.77	ppbV		99
30) Chloroform	4.473	83	1155306	10.04	ppbV		100
31) Ethyl acetate	4.563	45	232266	9.78	ppbV		100
32) Carbon tetrachloride	4.592	117	1173270	9.97	ppbV		99
33) Tetrahydrofuran	4.599	42	850975	9.84	ppbV		99
34) 1,1,1-Trichloroethane	4.647	97	1105121	9.95	ppbV		100
35) Methyl ethyl ketone	4.705	43	1341717	9.73	ppbV		99
36) n-Heptane	4.940	43	1331974	9.25	ppbV		99
37) Benzene	4.952	78	1670578	9.65	ppbV		99
38) 1,2-Dichloroethane	5.116	62	786513	10.02	ppbV		100
40) Trichloroethene	5.457	130	619937	10.03	ppbV		99
41) 2,2,4-Trimethylpentane	4.866	57	3352145	11.16	ppbV		100
42) 1,2-Dichloropropane	5.911	63	701536	10.36	ppbV		98
43) Bromodichloromethane	5.972	83	1199833	11.13	ppbV		100
44) Methyl methacrylate	6.120	41	992841	10.34	ppbV		98
45) 1,4-Dioxane	6.145	88	413468	11.40	ppbV		99
46) cis-1,3-Dichloropropene	6.563	75	1043355	10.91	ppbV		100
47) Toluene	6.801	91	2073818	10.39	ppbV		99
48) Methyl isobutyl ketone	7.171	43	1818620	10.19	ppbV		99
49) Tetrachloroethene	7.190	166	757501	10.99	ppbV		99
50) trans-1,3-Dichloropropene	7.210	75	1026774	11.28	ppbV	#	74
51) 1,1,2-Trichloroethane	7.370	97	693315	10.51	ppbV		100

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6026icvss.D
Acq On : 27 Mar 2024 1:54 pm
Operator : jjw
Sample : 10 ppbv icvss
Misc : EB0116272
ALS Vial : 9 Sample Multiplier: 1

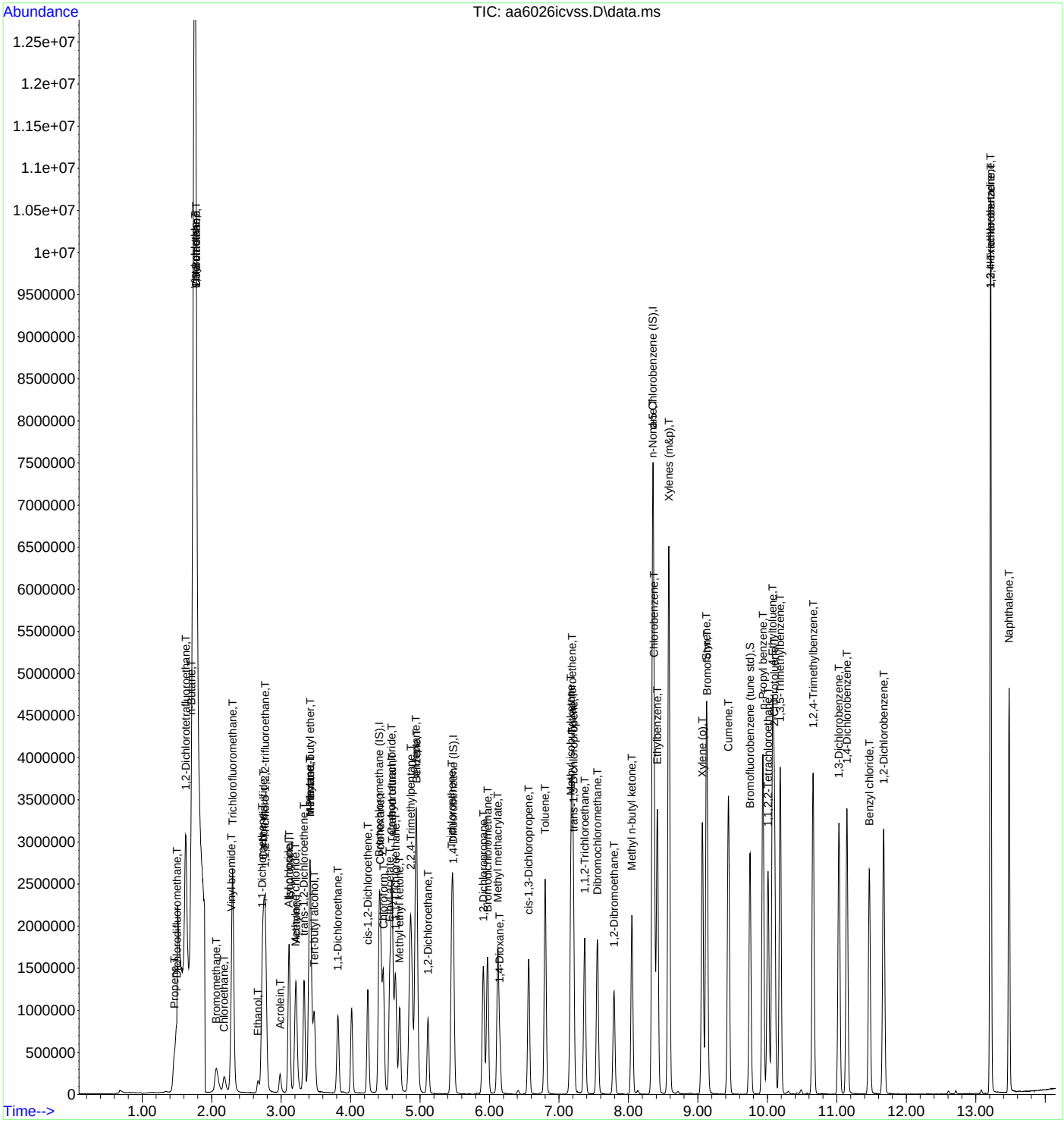
Quant Time: Mar 27 15:15:48 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.554	129	1126782	11.15	ppbV	100
53) 1,2-Dibromoethane	7.795	107	1018722	10.87	ppbV	100
54) Methyl n-butyl ketone	8.049	43	1737007	10.85	ppbV	99
56) n-Nonane	8.348	43	2077560	10.40	ppbV	99
57) Chlorobenzene	8.370	112	1522555	10.97	ppbV	99
58) Ethylbenzene	8.415	91	2944785	10.66	ppbV	100
59) Xylenes (m&p)	8.582	91	4502045	21.70	ppbV	99
60) Xylene (o)	9.065	91	2338527	10.62	ppbV	99
61) Styrene	9.123	104	1642349	11.51	ppbV	100
62) Bromoform	9.132	173	1020022	11.55	ppbV	100
63) Cumene	9.441	105	2894207	10.43	ppbV	100
65) n-Propyl benzene	9.936	91	3971971	10.57	ppbV	100
66) 1,1,2,2-Tetrachloroethane	10.010	83	1799038	11.02	ppbV	100
67) 4-Ethyltoluene	10.074	105	3189380	10.68	ppbV	100
68) 2-Chlorotoluene	10.100	91	2710501	10.65	ppbV	100
69) 1,3,5-Trimethylbenzene	10.184	105	2663260	10.83	ppbV	100
70) 1,2,4-Trimethylbenzene	10.660	105	2637313	10.81	ppbV	100
71) 1,3-Dichlorobenzene	11.029	146	1488697	11.14	ppbV	100
72) 1,4-Dichlorobenzene	11.145	146	1490219	11.00	ppbV	99
73) Benzyl chloride	11.470	91	2375182	10.48	ppbV	100
74) 1,2-Dichlorobenzene	11.676	146	1438933	10.85	ppbV	99
75) 1,3-Hexachlorobutadiene	13.212	225	830103	11.53	ppbV	100
76) 1,2,4-Trichlorobenzene	13.216	180	1123582	11.43	ppbV	99
77) Naphthalene	13.479	128	2825715	10.35	ppbV	100

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

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6026icvss.D
Acq On : 27 Mar 2024 1:54 pm
Operator : jjw
Sample : 10 ppbv icvss
Misc : EB0116272
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 27 15:15:48 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES, LLC

Initial Calibration Verification Sample Standard

Lab Sample Name: 10 PPBV ICVSS **Data File:** AA6561ICVSS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 5/29/2024

Amount of standard injected (ml): 50

Runs with this ICVSS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6554BFB]	05/29/2024 9:16
0.2 PPBV STD [AA6556STD05]	05/29/2024 12:40
2 PPBV STD [AA6557STD04]	05/29/2024 13:11
10 PPBV STD [AA6558STD03]	05/29/2024 13:46
20 PPBV STD [AA6559STD02]	05/29/2024 14:18
40 PPBV STD [AA6560STD01]	05/29/2024 14:55
10 PPBV ICVSS [AA6561ICVSS]	05/29/2024 17:16

Compound	CAS #	Injected Amount (ppbv)	Recovered Amount (ppbv)	% Recovery	QC Limit
Acetone	67-64-1	11	12	110	
Acrolein	107-02-8	9.4	11	120	
Allyl Chloride	107-05-1	11	12	110	
Benzene	71-43-2	10	11	110	
Benzyl chloride	100-44-7	11	9.6	89	
Bromodichloromethane	75-27-4	11	12	110	
Bromoform	75-25-2	11	11	96	
Bromomethane	74-83-9	11	12	110	
1,3-Butadiene	106-99-0	11	12	110	
n-Butane	106-97-8	11	12	110	
Chlorobenzene	108-90-7	10	11	110	
Chloroethane	75-00-3	9.8	12	120	
Chloroform	67-66-3	11	11	100	
Chloromethane	74-87-3	9.9	13	130	
Carbon disulfide	75-15-0	10	12	120	
Carbon tetrachloride	56-23-5	11	11	100	
2-Chlorotoluene	95-49-8	11	10	91	
Cumene	98-82-8	10	10	99	
Cyclohexane	110-82-7	11	12	110	
Dibromochloromethane	124-48-1	11	11	100	
1,2-Dibromoethane	106-93-4	11	11	100	
1,2-Dichlorobenzene	95-50-1	10	10	97	
1,3-Dichlorobenzene	541-73-1	10	10	96	
1,4-Dichlorobenzene	106-46-7	10	10	97	
Dichlorodifluoromethane	75-71-8	11	11	100	
1,1-Dichloroethane	75-34-3	11	12	110	
1,2-Dichloroethane	107-06-2	11	11	100	
1,1-Dichloroethene	75-35-4	11	12	110	
1,2-Dichloroethene (cis)	156-59-2	10	12	120	
1,2-Dichloroethene (trans)	156-60-5	11	12	110	
1,2-Dichloropropane	78-87-5	11	11	100	
1,3-Dichloropropene (cis)	10061-01-5	9.9	12	120	
1,3-Dichloropropene (trans)	10061-02-6	11	12	110	
1,2-Dichlorotetrafluoroethane	76-14-2	11	10	89	
1,4-Dioxane	123-91-1	11	12	110	
Ethanol	64-17-5	9.8	10	100	
Ethyl acetate	141-78-6	10	12	120	
Ethylbenzene	100-41-4	10	11	110	
4-Ethyltoluene	622-96-8	11	10	93	
n-Heptane	142-82-5	11	11	100	

ICVSS recovery must be within 70-130% of the spiked value for all compounds.

*** Values outside of QC limits**

INTEGRATED ANALYTICAL LABORATORIES, LLC

Initial Calibration Verification Sample Standard

Lab Sample Name: 10 PPBV ICVSS **Data File:** AA6561ICVSS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 5/29/2024

Amount of standard injected (ml): 50

Runs with this ICVSS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6554BFB]	05/29/2024 9:16
0.2 PPBV STD [AA6556STD05]	05/29/2024 12:40
2 PPBV STD [AA6557STD04]	05/29/2024 13:11
10 PPBV STD [AA6558STD03]	05/29/2024 13:46
20 PPBV STD [AA6559STD02]	05/29/2024 14:18
40 PPBV STD [AA6560STD01]	05/29/2024 14:55
10 PPBV ICVSS [AA6561ICVSS]	05/29/2024 17:16

Compound	CAS #	Injected Amount (ppbv)	Recovered Amount (ppbv)	% Recovery	QC Limit
1,3-Hexachlorobutadiene	87-68-3	9.8	10	100	
n-Hexane	110-54-3	11	12	110	
Isopropanol	67-63-0	8.1	9.9	120	
Methylene chloride	75-09-2	11	11	100	
Methyl ethyl ketone	78-93-3	11	12	110	
Methyl isobutyl ketone	108-10-1	10	11	110	
Methyl methacrylate	80-62-6	11	12	110	
Methyl n-butyl ketone	591-78-6	11	11	99	
Methyl tert-butyl ether	1634-04-4	11	11	100	
Naphthalene	91-20-3	11	9.1	85	
n-Nonane	111-84-2	11	11	97	
n-Pentane	109-66-0	11	11	99	
Propene	115-07-1	11	12	110	
n-Propyl benzene	103-65-1	11	10.0	91	
Styrene	100-42-5	11	11	100	
Tert-butyl alcohol	75-65-0	12	12	100	
1,1,2,2-Tetrachloroethane	79-34-5	10	11	110	
Tetrachloroethene	127-18-4	12	11	93	
Tetrahydrofuran	109-99-9	11	12	110	
Toluene	108-88-3	11	11	100	
1,2,4-Trichlorobenzene	120-82-1	10	11	110	
1,1,1-Trichloroethane	71-55-6	11	11	100	
1,1,2-Trichloroethane	79-00-5	11	11	100	
Trichloroethene	79-01-6	10	10	98	
Trichlorofluoromethane	75-69-4	11	12	110	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	11	11	100	
1,2,4-Trimethylbenzene	95-63-6	10	10	100	
1,3,5-Trimethylbenzene	108-67-8	10	10	96	
2,2,4-Trimethylpentane	540-84-1	11	12	110	
Vinyl bromide	593-60-2	10	11	110	
Vinyl chloride	75-01-4	11	12	110	
Xylenes (m&p)	179601-23-1	21	22	110	
Xylenes (o)	95-47-6	10	11	110	

ICVSS recovery must be within 70-130% of the spiked value for all compounds.

*** Values outside of QC limits**

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6561icvss.D
Acq On : 29 May 2024 5:16 pm
Operator : jjw
Sample : 10 ppbv icvss
Misc : EB0116272
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 30 10:48:22 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.412	130	242079	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.480	114	1024301	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.354	117	930904	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.750	95	819051	9.30	ppbV	0.000
Target Compounds						Qvalue
2) Propene	1.470	41	295359	11.63	ppbV	98
3) Dichlorodifluoromethane	1.509	85	776026	11.20	ppbV	99
4) 1,2-Dichlorotetrafluor...	1.629	85	976935	10.06	ppbV	99
5) n-Butane	1.712	43	623050	11.87	ppbV	99
6) Chloromethane	1.774	52	56607	13.10	ppbV	94
7) Vinyl chloride	1.770	62	386689	12.12	ppbV	99
8) 1,3-Butadiene	1.777	39	340949	11.53	ppbV	99
9) Bromomethane	2.072	94	294022	11.79	ppbV	99
10) Chloroethane	2.181	64	215495	11.88	ppbV	100
11) Vinyl bromide	2.284	106	340589	11.26	ppbV	99
12) Trichlorofluoromethane	2.300	101	924702	11.59	ppbV	99
13) Ethanol	2.670	45	124849	10.02	ppbV	100
14) 1,1-Dichloroethene	2.731	61	722015	11.76	ppbV	98
15) Carbon disulfide	2.753	76	1220444	11.93	ppbV	100
16) 1,1,2-Trichloro-1,2,2-...	2.773	101	811936	10.77	ppbV	98
17) Acrolein	2.988	56	148588	10.87	ppbV	98
18) Allyl chloride	3.117	76	195404	12.43	ppbV	100
19) Isopropanol	3.117	45	678381	9.93	ppbV	99
20) Methylene chloride	3.207	49	473261	10.82	ppbV	98
21) Acetone	3.220	43	635449	11.70	ppbV	99
22) 1,2-Dichloroethene (tr...	3.332	61	675217	12.16	ppbV	96
23) n-Pentane	3.416	43	749023	11.29	ppbV	98
24) n-Hexane	3.419	57	1075039	11.56	ppbV	100
25) Methyl tert-butyl ether	3.422	73	1227288	11.07	ppbV	97
26) Tert-butyl alcohol	3.477	59	894849	11.81	ppbV	100
27) 1,1-Dichloroethane	3.821	63	793260	11.51	ppbV	99
28) 1,2-Dichloroethene (cis)	4.248	61	602979	12.05	ppbV	97
29) Cyclohexane	4.432	56	720408	11.61	ppbV	98
30) Chloroform	4.473	83	884482	11.44	ppbV	100
31) Ethyl acetate	4.567	45	153476	11.66	ppbV	98
32) Carbon tetrachloride	4.596	117	867346	11.00	ppbV	100
33) Tetrahydrofuran	4.596	42	564904	12.16	ppbV	98
34) 1,1,1-Trichloroethane	4.647	97	786581	10.80	ppbV	100
35) Methyl ethyl ketone	4.705	43	897094	11.65	ppbV	99
36) n-Heptane	4.940	43	823524	11.31	ppbV	98
37) Benzene	4.956	78	1222515	11.09	ppbV	100
38) 1,2-Dichloroethane	5.117	62	576924	11.44	ppbV	100
40) Trichloroethene	5.457	130	480963	10.38	ppbV	99
41) 2,2,4-Trimethylpentane	4.869	57	2127194	11.66	ppbV	99
42) 1,2-Dichloropropane	5.911	63	482710	11.36	ppbV	99
43) Bromodichloromethane	5.972	83	893791	12.07	ppbV	100
44) Methyl methacrylate	6.120	41	623370	11.74	ppbV	96
45) 1,4-Dioxane	6.145	88	295794	12.23	ppbV	99
46) cis-1,3-Dichloropropene	6.567	75	731256	11.64	ppbV	100
47) Toluene	6.805	91	1431765	10.92	ppbV	99
48) Methyl isobutyl ketone	7.171	43	1084912	11.31	ppbV	99
49) Tetrachloroethene	7.190	166	551683	11.11	ppbV	99
50) trans-1,3-Dichloropropene	7.210	75	715458	11.85	ppbV	98
51) 1,1,2-Trichloroethane	7.370	97	491811	10.86	ppbV	99

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6561icvss.D
Acq On : 29 May 2024 5:16 pm
Operator : jjw
Sample : 10 ppbv icvss
Misc : EB0116272
ALS Vial : 8 Sample Multiplier: 1

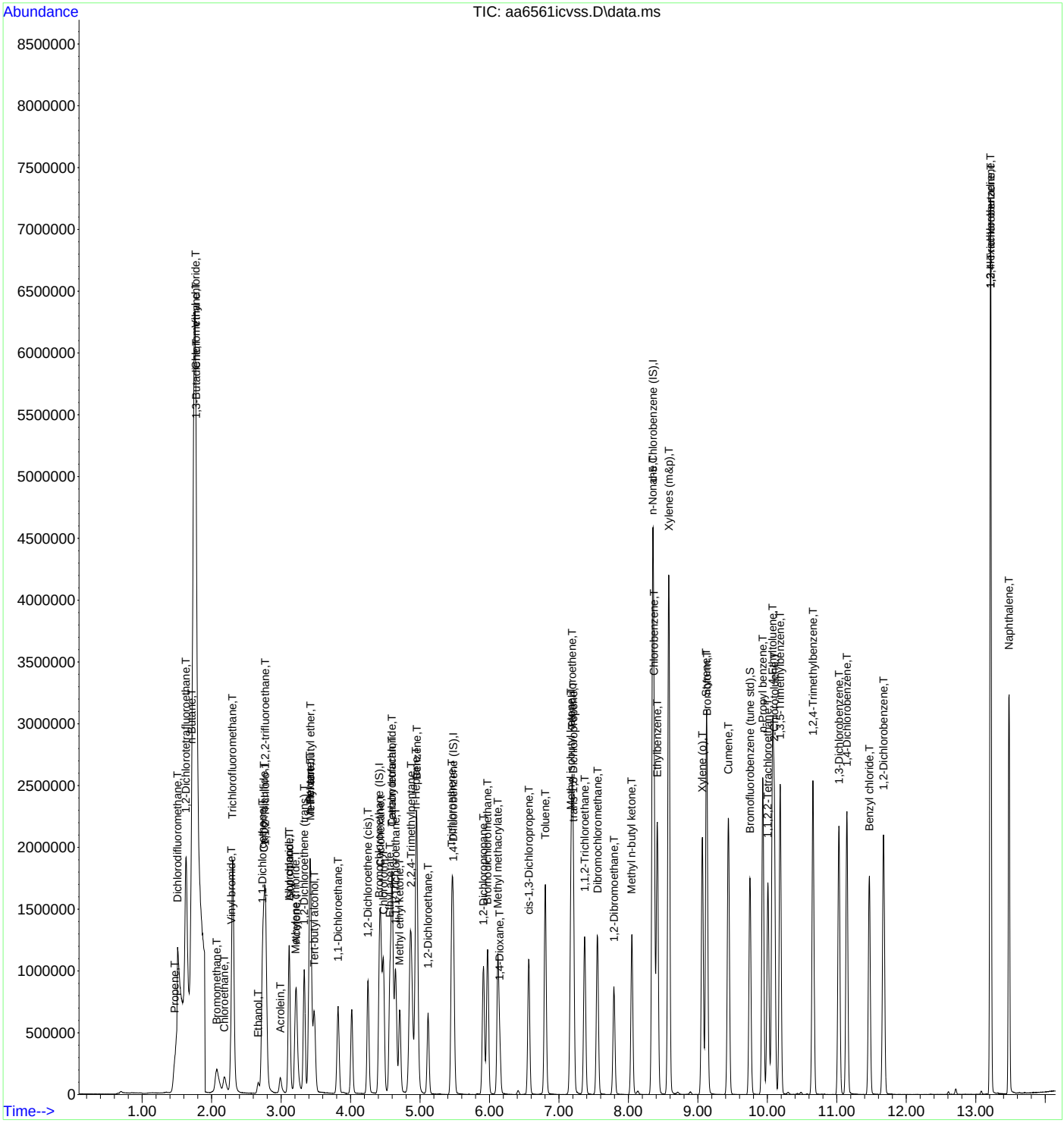
Quant Time: May 30 10:48:22 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.557	129	811619	11.24	ppbV	99
53) 1,2-Dibromoethane	7.792	107	711438	10.96	ppbV	99
54) Methyl n-butyl ketone	8.046	43	1023608	11.40	ppbV	99
56) n-Nonane	8.348	43	1174365	10.79	ppbV	99
57) Chlorobenzene	8.370	112	1046381	10.85	ppbV	98
58) Ethylbenzene	8.415	91	1949323	10.62	ppbV	100
59) Xylenes (m&p)	8.583	91	2965697	21.50	ppbV	100
60) Xylene (o)	9.065	91	1532788	10.55	ppbV	98
61) Styrene	9.120	104	1086762	11.25	ppbV	99
62) Bromoform	9.132	173	716125	11.05	ppbV	99
63) Cumene	9.441	105	1884946	10.17	ppbV	99
65) n-Propyl benzene	9.933	91	2546280	9.99	ppbV	100
66) 1,1,2,2-Tetrachloroethane	10.007	83	1152044	10.78	ppbV	100
67) 4-Ethyltoluene	10.075	105	2119259	10.20	ppbV	100
68) 2-Chlorotoluene	10.100	91	1763579	10.20	ppbV	99
69) 1,3,5-Trimethylbenzene	10.184	105	1734824	10.27	ppbV	100
70) 1,2,4-Trimethylbenzene	10.657	105	1736724	10.25	ppbV	99
71) 1,3-Dichlorobenzene	11.033	146	1033640	10.05	ppbV	100
72) 1,4-Dichlorobenzene	11.145	146	1041591	10.01	ppbV	99
73) Benzyl chloride	11.470	91	1613519	9.65	ppbV	100
74) 1,2-Dichlorobenzene	11.673	146	1002672	10.13	ppbV	100
75) 1,3-Hexachlorobutadiene	13.213	225	596173	10.47	ppbV	100
76) 1,2,4-Trichlorobenzene	13.216	180	806032	10.51	ppbV	100
77) Naphthalene	13.480	128	1971102	9.09	ppbV	100

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

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6561icvss.D
Acq On : 29 May 2024 5:16 pm
Operator : jjw
Sample : 10 ppbv icvss
Misc : EB0116272
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 30 10:48:22 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES, LLC

Continuing Calibration Data Summary Report

Initial Calibration Curve: 3/27/2024
Instrument: AA
Amount of standard injected (ml): 50

Date/Time of Calibration: 4/24/2024 10:32
Sample ID: DCS
Laboratory ID: AA6390DCVS

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6389BFB]	04/24/2024 09:59
10 PPBV DCVS [AA6390DCVS]	04/24/2024 10:32
10 PPBV LCS [AA6391LCS]	04/24/2024 12:12
METHOD BLANK [AA6392BLK]	04/24/2024 13:23
02 PPBV RLLCS [AA6393RLLCS]	04/24/2024 14:00
CLEAN CAN CERTIFICATION, BATCH MASTER 5085 [AA6394]	04/24/2024 14:58
CLEAN CAN CERTIFICATION, BATCH MASTER 3035A [AA6395]	04/24/2024 15:28
10 PPBV CCCVS [AA6405CCCVS]	04/24/2024 21:01

Compound Name	Average RRF	Standard RRF	% Difference	PassFail	*
Acetone	2.2	2.4	-5.6	PASS	
Benzene	4.2	4.5	-6.2	PASS	
Bromodichloromethane	0.70	0.75	-7.5	PASS	
Bromoform	0.61	0.66	-8.0	PASS	
Bromomethane	0.90	0.85	5.6	PASS	
1,3-Butadiene	1.4	1.3	6.8	PASS	
Chlorobenzene	0.96	1.0	-7.9	PASS	
Chloroethane	0.69	0.68	1.5	PASS	
Chloroform	2.8	3.1	-12	PASS	
Chloromethane	0.16	0.16	-1.2	PASS	
Carbon disulfide	3.6	3.9	-8.5	PASS	
Carbon tetrachloride	2.9	3.1	-8.3	PASS	
Cyclohexane	2.7	2.9	-5.1	PASS	
Dibromochloromethane	0.65	0.80	-22	PASS	
1,2-Dibromoethane	0.61	0.75	-24	PASS	
1,2-Dichlorobenzene	0.92	1.00	-8.0	PASS	
1,3-Dichlorobenzene	0.93	1.0	-9.2	PASS	
1,4-Dichlorobenzene	0.94	1.0	-11	PASS	
Dichlorodifluoromethane	2.5	2.6	-3.1	PASS	
1,1-Dichloroethane	2.7	2.9	-7.3	PASS	
1,2-Dichloroethane	1.9	2.2	-13	PASS	
1,1-Dichloroethene	2.3	2.6	-15	PASS	
1,2-Dichloroethene (cis)	1.9	2.2	-13	PASS	
1,2-Dichloroethene (trans)	2.0	2.4	-20	PASS	
1,2-Dichloropropane	0.44	0.49	-13	PASS	
1,3-Dichloropropene (cis)	0.62	0.71	-16	PASS	
1,3-Dichloropropene (trans)	0.59	0.75	-28	PASS	
1,2-Dichlorotetrafluoroethane	3.6	3.3	8.5	PASS	
1,4-Dioxane	0.23	0.27	-15	PASS	
Ethylbenzene	1.9	2.1	-11	PASS	
n-Heptane	3.5	4.4	-26	PASS	
1,3-Hexachlorobutadiene	0.50	0.53	-5.2	PASS	
n-Hexane	4.0	4.0	-0.30	PASS	
Methylene chloride	1.6	1.5	5.1	PASS	
Methyl ethyl ketone	3.3	3.7	-11	PASS	
Methyl isobutyl ketone	1.2	1.5	-27	PASS	
Methyl tert-butyl ether	4.5	4.6	-1.9	PASS	
Styrene	0.99	1.1	-16	PASS	
Tert-butyl alcohol	3.2	3.3	-3.6	PASS	
1,1,2,2-Tetrachloroethane	1.1	1.3	-11	PASS	
Tetrachloroethene	0.45	0.54	-21	PASS	
Toluene	1.3	1.6	-23	PASS	

***%Difference must be within +/- 30%**
RRF - Relative Response Factor

INTEGRATED ANALYTICAL LABORATORIES, LLC

Continuing Calibration Data Summary Report

Initial Calibration Curve:	**3/27/2024**	**Date/Time of Calibration:**	**4/24/2024 10:32**
Instrument:	**AA**	**Sample ID:**	**DCS**
Amount of standard injected (ml):	**50**	**Laboratory ID:**	**AA6390DCVS**

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6389BFB]	04/24/2024 09:59
10 PPBV DCVS [AA6390DCVS]	04/24/2024 10:32
10 PPBV LCS [AA6391LCS]	04/24/2024 12:12
METHOD BLANK [AA6392BLK]	04/24/2024 13:23
02 PPBV RLLCS [AA6393RLLCS]	04/24/2024 14:00
CLEAN CAN CERTIFICATION, BATCH MASTER 5085 [AA6394]	04/24/2024 14:58
CLEAN CAN CERTIFICATION, BATCH MASTER 3035A [AA6395]	04/24/2024 15:28
10 PPBV CCCVS [AA6405CCCVS]	04/24/2024 21:01

Compound Name	Average RRF	Standard RRF	% Difference	PassFail	*
1,2,4-Trichlorobenzene	0.68	0.72	-5.1	PASS	
1,1,1-Trichloroethane	2.7	3.0	-11	PASS	
1,1,2-Trichloroethane	0.43	0.52	-23	PASS	
Trichloroethene	0.40	0.41	-2.8	PASS	
Trichlorofluoromethane	2.9	3.0	-1.7	PASS	
1,1,2-Trichloro-1,2,2-trifluoroethane	2.9	2.8	2.7	PASS	
1,2,4-Trimethylbenzene	1.7	1.9	-13	PASS	
1,3,5-Trimethylbenzene	1.7	1.9	-9.8	PASS	
2,2,4-Trimethylpentane	1.9	1.7	13	PASS	
Vinyl bromide	1.0	1.0	2.4	PASS	
Vinyl chloride	1.2	1.3	-0.40	PASS	
Xylenes (m&p)	1.4	1.6	-12	PASS	
Xylenes (o)	1.5	1.7	-9.4	PASS	

***%Difference must be within +/- 30%**
RRF - Relative Response Factor

Data Path : C:\DATA\2024\04-2024\04-24-2024\
Data File : aa6390dcvs.D
Acq On : 24 Apr 2024 10:32 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 06 12:27:23 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 0% Max. R.T. Dev 0.40min
Max. RRF Dev : 30% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane (IS)	1.000	1.000	0.0	58	0.00
2	T	Propene	1.121	0.952	15.1	51	0.02
3	T	Dichlorodifluoromethane	2.514	2.591	-3.1	59	0.03
4	T	1,2-Dichlorotetrafluoroetha	3.629	3.321	8.5	58	0.03
5	T	n-Butane	2.475	2.330	5.9	61	0.03
6	T	Chloromethane	0.162	0.164	-1.2	61	0.02
7	T	Vinyl chloride	1.245	1.250	-0.4	56	0.02
8	T	1,3-Butadiene	1.416	1.320	6.8	60	0.03
9	T	Bromomethane	0.898	0.848	5.6	50	0.02
10	T	Chloroethane	0.686	0.676	1.5	56	0.02
11	T	Vinyl bromide	1.034	1.009	2.4	54	0.02
12	T	Trichlorofluoromethane	2.936	2.985	-1.7	64	0.02
13	T	Ethanol	0.459	0.486	-5.9	67	0.02
14	T	1,1-Dichloroethene	2.277	2.623	-15.2	64	0.02
15	T	Carbon disulfide	3.615	3.924	-8.5	60	0.02
16	T	1,1,2-Trichloro-1,2,2-trifl	2.904	2.826	2.7	65	0.02
17	T	Acrolein	0.546	0.564	-3.3	61	0.02
18	T	Allyl chloride	0.567	0.640	-12.9	63	0.02
19	T	Isopropanol	2.904	3.122	-7.5	64	0.02
20	T	Methylene chloride	1.620	1.538	5.1	56	0.02
21	T	Acetone	2.237	2.363	-5.6	63	0.02
22	T	trans-1,2-Dichloroethene	1.992	2.383	-19.6	68	0.02
23	T	n-Pentane	2.808	2.708	3.6	61	0.01
24	T	n-Hexane	4.026	4.038	-0.3	67	0.02
25	T	Methyl tert-butyl ether	4.521	4.609	-1.9	66	0.01
26	T	Tert-butyl alcohol	3.193	3.309	-3.6	68	0.02
27	T	1,1-Dichloroethane	2.674	2.868	-7.3	68	0.02
28	T	cis-1,2-Dichloroethene	1.918	2.171	-13.2	68	0.01
29	t	Cyclohexane	2.721	2.860	-5.1	68	0.00
30	T	Chloroform	2.788	3.122	-12.0	68	0.00
31	T	Ethyl acetate	0.576	0.660	-14.6	72	0.00
32	T	Carbon tetrachloride	2.853	3.089	-8.3	69	0.00
33	T	Tetrahydrofuran	2.095	2.321	-10.8	70	0.00
34	T	1,1,1-Trichloroethane	2.692	2.978	-10.6	71	0.00
35	T	Methyl ethyl ketone	3.342	3.694	-10.5	71	0.00
36	T	n-Heptane	3.491	4.406	-26.2	85	0.00
37	T	Benzene	4.195	4.455	-6.2	70	0.00
38	T	1,2-Dichloroethane	1.903	2.153	-13.1	70	0.00
39	I	1,4-Difluorobenzene (IS)	1.000	1.000	0.0	65	0.01
40	T	Trichloroethene	0.399	0.410	-2.8	70	0.00
41	T	2,2,4-Trimethylpentane	1.939	1.695	12.6	57	0.00
42	T	1,2-Dichloropropane	0.437	0.494	-13.0	78	0.00
43	T	Bromodichloromethane	0.696	0.748	-7.5	73	0.00
44	T	Methyl methacrylate	0.620	0.755	-21.8	86	0.00
45	T	1,4-Dioxane	0.234	0.270	-15.4	79	0.00
46	T	cis-1,3-Dichloropropene	0.617	0.714	-15.7	79	0.00
47	T	Toluene	1.289	1.583	-22.8	84	0.00
48	T	Methyl isobutyl ketone	1.152	1.467	-27.3	88	0.00
49	T	Tetrachloroethene	0.445	0.537	-20.7	82	0.00
50	T	trans-1,3-Dichloropropene	0.587	0.749	-27.6	84	0.00
51	T	1,1,2-Trichloroethane	0.426	0.522	-22.5	84	0.00
52	T	Dibromochloromethane	0.653	0.796	-21.9	83	0.00
53	T	1,2-Dibromoethane	0.605	0.751	-24.1	83	0.00

Data Path : C:\DATA\2024\04-2024\04-24-2024\
Data File : aa6390dcvs.D
Acq On : 24 Apr 2024 10:32 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 06 12:27:23 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 0% Max. R.T. Dev 0.40min
Max. RRF Dev : 30% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
54	T	Methyl n-butyl ketone	1.033	1.431	-38.5#	94	0.00
55	I	d-5 Chlorobenzene (IS)	1.000	1.000	0.0	79	0.00
56	T	n-Nonane	1.387	1.678	-21.0	98	0.00
57	T	Chlorobenzene	0.964	1.040	-7.9	87	0.00
58	T	Ethylbenzene	1.919	2.134	-11.2	91	0.00
59	T	Xylenes (m&p)	1.441	1.615	-12.1	90	0.00
60	T	Xylene (o)	1.529	1.673	-9.4	88	0.00
61	T	Styrene	0.991	1.145	-15.5	89	0.00
62	T	Bromoform	0.614	0.663	-8.0	84	0.00
63	T	Cumene	1.927	2.112	-9.6	88	0.00
64	S	Bromofluorobenzene (tune st	0.897	0.983	-9.6	86	0.00
65	T	n-Propyl benzene	2.610	2.988	-14.5	92	0.00
66	T	1,1,2,2-Tetrachloroethane	1.133	1.258	-11.0	90	0.00
67	T	4-Ethyltoluene	2.075	2.375	-14.5	91	0.00
68	T	2-Chlorotoluene	1.767	1.934	-9.5	88	0.00
69	T	1,3,5-Trimethylbenzene	1.709	1.877	-9.8	87	0.00
70	T	1,2,4-Trimethylbenzene	1.694	1.910	-12.8	88	0.00
71	T	1,3-Dichlorobenzene	0.928	1.013	-9.2	86	0.00
72	T	1,4-Dichlorobenzene	0.941	1.044	-10.9	86	0.00
73	T	Benzyl chloride	1.574	1.800	-14.4	86	0.00
74	T	1,2-Dichlorobenzene	0.921	0.995	-8.0	84	0.00
75	T	1,3-Hexachlorobutadiene	0.500	0.526	-5.2	80	0.00
76	T	1,2,4-Trichlorobenzene	0.683	0.718	-5.1	81	0.00
77	T	Naphthalene	1.897	1.913	-0.8	78	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data Path : C:\DATA\2024\04-2024\04-24-2024\
Data File : aa6390dcvs.D
Acq On : 24 Apr 2024 10:32 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 06 12:27:23 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.419	130	233549	10.00	ppbV		0.000
39) 1,4-Difluorobenzene (IS)	5.486	114	1008755	10.00	ppbV		0.010
55) d-5 Chlorobenzene (IS)	8.351	117	1112357	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.750	95	1093055	10.95	ppbV		0.000
Target Compounds							Qvalue
2) Propene	1.490	41	242231	9.25	ppbV		100
3) Dichlorodifluoromethane	1.526	85	641474	10.93	ppbV		100
4) 1,2-Dichlorotetrafluor...	1.654	85	760136	8.97	ppbV		98
5) n-Butane	1.733	43	593251	10.26	ppbV		99
6) Chloromethane	1.798	52	42942	11.35	ppbV		92
7) Vinyl chloride	1.788	62	315344	10.84	ppbV		99
8) 1,3-Butadiene	1.801	39	329833	9.98	ppbV		100
9) Bromomethane	2.091	94	198071	9.44	ppbV		99
10) Chloroethane	2.204	64	167460	10.45	ppbV		100
11) Vinyl bromide	2.303	106	237963	9.85	ppbV		99
12) Trichlorofluoromethane	2.323	101	766795	11.18	ppbV		99
13) Ethanol	2.689	45	118028	11.02	ppbV		90
14) 1,1-Dichloroethene	2.747	61	637212	11.98	ppbV		99
15) Carbon disulfide	2.770	76	980613	11.61	ppbV		99
16) 1,1,2-Trichloro-1,2,2-...	2.792	101	719334	10.61	ppbV		97
17) Acrolein	3.004	56	131812	10.34	ppbV		99
18) Allyl chloride	3.130	76	161365	12.18	ppbV		100
19) Isopropanol	3.133	45	649027	9.57	ppbV		99
20) Methylene chloride	3.223	49	387861	10.25	ppbV		100
21) Acetone	3.236	43	596113	11.41	ppbV		100
22) trans-1,2-Dichloroethene	3.348	61	617690	13.28	ppbV		99
23) n-Pentane	3.429	43	683163	10.42	ppbV		98
24) n-Hexane	3.429	57	1037345	11.03	ppbV		100
25) Methyl tert-butyl ether	3.432	73	1205582	11.42	ppbV		99
26) Tert-butyl alcohol	3.490	59	888769	11.92	ppbV		100
27) 1,1-Dichloroethane	3.834	63	716656	11.47	ppbV		99
28) cis-1,2-Dichloroethene	4.261	61	552607	12.33	ppbV		100
29) Cyclohexane	4.438	56	748004	11.77	ppbV		99
30) Chloroform	4.480	83	787346	12.09	ppbV		100
31) Ethyl acetate	4.573	45	166483	12.38	ppbV		100
32) Carbon tetrachloride	4.602	117	793476	11.91	ppbV		100
33) Tetrahydrofuran	4.605	42	596205	12.18	ppbV		99
34) 1,1,1-Trichloroethane	4.654	97	758137	12.06	ppbV		100
35) Methyl ethyl ketone	4.718	43	949118	12.16	ppbV		98
36) n-Heptane	4.946	43	1142323	14.01	ppbV		100
37) Benzene	4.962	78	1123629	11.47	ppbV		100
38) 1,2-Dichloroethane	5.123	62	548002	12.33	ppbV		99
40) Trichloroethene	5.464	130	413581	10.28	ppbV		99
41) 2,2,4-Trimethylpentane	4.872	57	1864169	9.53	ppbV		99
42) 1,2-Dichloropropane	5.917	63	548635	12.45	ppbV		99
43) Bromodichloromethane	5.975	83	867412	12.35	ppbV		99
44) Methyl methacrylate	6.123	41	837872	13.40	ppbV		98
45) 1,4-Dioxane	6.149	88	319032	13.51	ppbV		99
46) cis-1,3-Dichloropropene	6.567	75	799713	12.84	ppbV		100
47) Toluene	6.805	91	1724696	13.27	ppbV		100
48) Methyl isobutyl ketone	7.171	43	1613498	13.88	ppbV		100
49) Tetrachloroethene	7.194	166	606949	13.52	ppbV		99
50) trans-1,3-Dichloropropene	7.210	75	838387	14.15	ppbV	#	74
51) 1,1,2-Trichloroethane	7.371	97	568510	13.23	ppbV		99

Data Path : C:\DATA\2024\04-2024\04-24-2024\
Data File : aa6390dcvs.D
Acq On : 24 Apr 2024 10:32 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

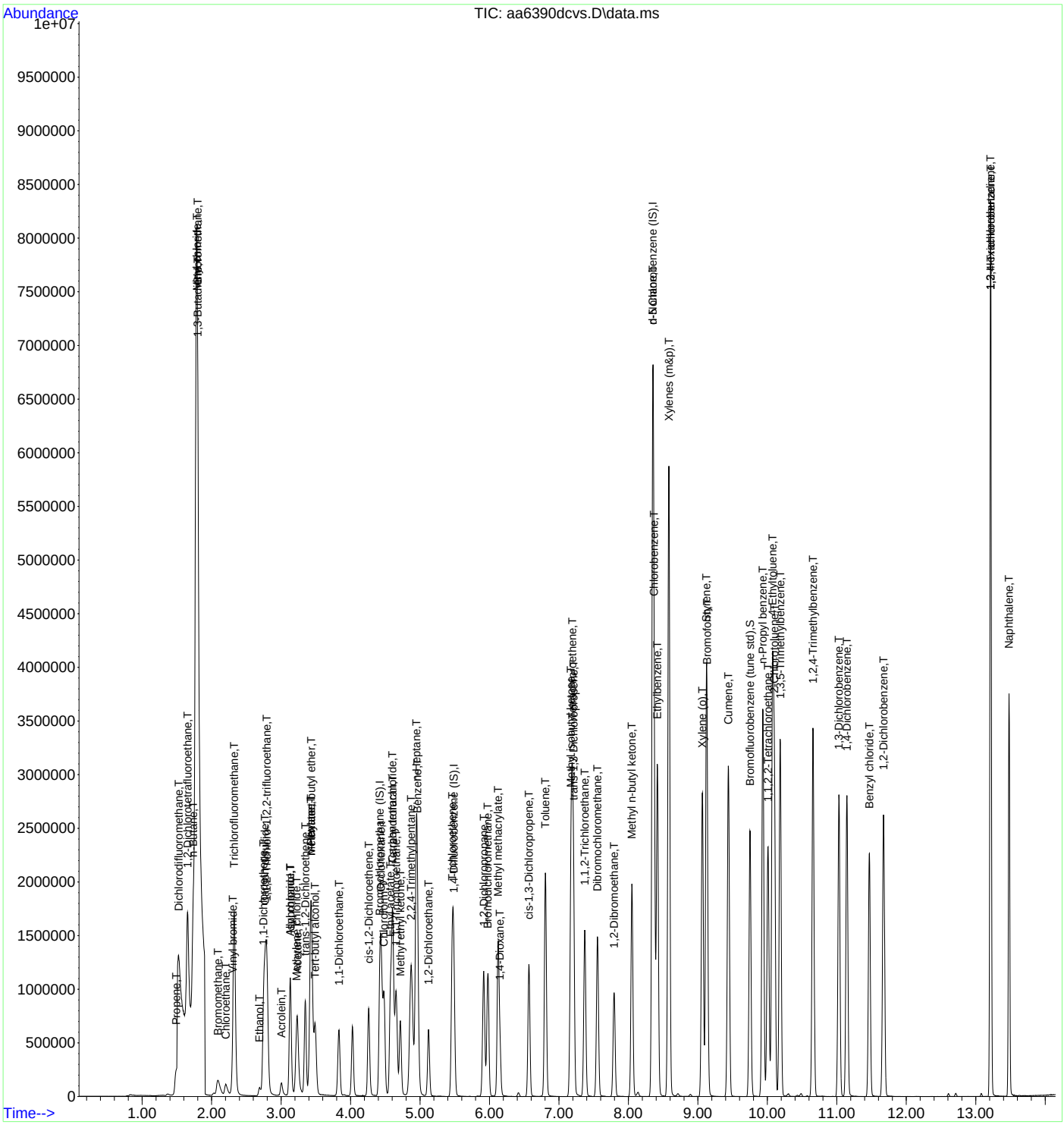
Quant Time: May 06 12:27:23 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.554	129	899825	13.67	ppbV	100
53) 1,2-Dibromoethane	7.795	107	818057	13.40	ppbV	100
54) Methyl n-butyl ketone	8.049	43	1631315	15.65	ppbV	100
56) n-Nonane	8.351	43	2053331	13.30	ppbV	100
57) Chlorobenzene	8.371	112	1284351	11.98	ppbV	98
58) Ethylbenzene	8.416	91	2635038	12.34	ppbV	100
59) Xylenes (m&p)	8.583	91	4004892	24.99	ppbV	100
60) Xylene (o)	9.065	91	2046647	12.03	ppbV	100
61) Styrene	9.123	104	1438597	13.04	ppbV	100
62) Bromoform	9.133	173	833747	12.22	ppbV	100
63) Cumene	9.441	105	2513844	11.73	ppbV	100
65) n-Propyl benzene	9.933	91	3590086	12.37	ppbV	100
66) 1,1,2,2-Tetrachloroethane	10.010	83	1595829	12.66	ppbV	100
67) 4-Ethyltoluene	10.075	105	2853110	12.36	ppbV	100
68) 2-Chlorotoluene	10.100	91	2345153	11.93	ppbV	99
69) 1,3,5-Trimethylbenzene	10.187	105	2276388	11.98	ppbV	100
70) 1,2,4-Trimethylbenzene	10.657	105	2294030	12.17	ppbV	100
71) 1,3-Dichlorobenzene	11.030	146	1251013	12.12	ppbV	99
72) 1,4-Dichlorobenzene	11.145	146	1242799	11.87	ppbV	99
73) Benzyl chloride	11.470	91	2002162	11.43	ppbV	100
74) 1,2-Dichlorobenzene	11.673	146	1184432	11.56	ppbV	99
75) 1,3-Hexachlorobutadiene	13.213	225	649751	11.68	ppbV	100
76) 1,2,4-Trichlorobenzene	13.216	180	879077	11.57	ppbV	99
77) Naphthalene	13.480	128	2127684	10.09	ppbV	100

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

Data Path : C:\DATA\2024\04-2024\04-24-2024\
Data File : aa6390dcvs.D
Acq On : 24 Apr 2024 10:32 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 06 12:27:23 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES, LLC

Continuing Calibration Data Summary Report

Initial Calibration Curve:	**5/29/2024**	**Date/Time of Calibration:**	**6/4/2024 10:40**
Instrument:	**AA**	**Sample ID:**	**DCS**
Amount of standard injected (ml):	**50**	**Laboratory ID:**	**AA6621DCVS**

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6620BFB]	06/04/2024 10:07
10 PPBV DCVS [AA6621DCVS]	06/04/2024 10:40
10 PPBV LCS [AA6622LCS]	06/04/2024 12:49
METHOD BLANK [AA6623BLK]	06/04/2024 13:18
02 PPBV RLLCS [AA6624RLLCS]	06/04/2024 14:10
E24-01875-01 [AA6625]	06/04/2024 14:41
E24-01875-03 [AA6626]	06/04/2024 15:12
E24-01875-05 [AA6627]	06/04/2024 15:44
E24-01875-02 [AA6628]	06/04/2024 16:15
E24-01875-04 [AA6629]	06/04/2024 16:47
E24-01875-06 [AA6630]	06/04/2024 17:28
E24-01875-01 [AA6631]	06/04/2024 18:00
E24-01875-21 [AA6632]	06/04/2024 18:31
E24-01875-04 [AA6633]	06/04/2024 19:03
E24-01875-03 [AA6634]	06/04/2024 19:35
E24-01875-05 [AA6635]	06/04/2024 20:08
E24-01875-02 [AA6636]	06/04/2024 20:39
CLEAN CAN CERTIFICATION, BATCH MASTER 10 PPBV CCCVS [AA6638	06/04/2024 21:43

Compound Name	Average RRF	Standard RRF	% Difference	PassFail	*
Acetone	2.2	2.6	-14	PASS	
Benzene	4.6	5.5	-21	PASS	
Bromodichloromethane	0.72	0.81	-12	PASS	
Bromoform	0.70	0.76	-9.3	PASS	
Bromomethane	1.0	1.1	-7.9	PASS	
1,3-Butadiene	1.2	1.3	-6.4	PASS	
Chlorobenzene	1.0	1.1	-5.8	PASS	
Chloroethane	0.75	0.81	-7.7	PASS	
Chloroform	3.2	4.0	-25	PASS	
Chloromethane	0.18	0.23	-29	PASS	
Carbon disulfide	4.2	4.8	-12	PASS	
Carbon tetrachloride	3.3	3.8	-17	PASS	
Cyclohexane	2.6	3.0	-19	PASS	
Dibromochloromethane	0.71	0.89	-26	PASS	
1,2-Dibromoethane	0.63	0.82	-29	PASS	
1,2-Dichlorobenzene	1.1	1.1	-6.3	PASS	
1,3-Dichlorobenzene	1.1	1.2	-6.1	PASS	
1,4-Dichlorobenzene	1.1	1.2	-8.9	PASS	
Dichlorodifluoromethane	2.9	3.2	-12	PASS	
1,1-Dichloroethane	2.8	3.5	-21	PASS	
1,2-Dichloroethane	2.1	2.6	-24	PASS	
1,1-Dichloroethene	2.5	3.1	-22	PASS	
1,2-Dichloroethene (cis)	2.1	2.6	-26	PASS	
1,2-Dichloroethene (trans)	2.3	2.9	-25	PASS	
1,2-Dichloropropane	0.42	0.48	-15	PASS	
1,3-Dichloropropene (cis)	0.61	0.73	-18	PASS	
1,3-Dichloropropene (trans)	0.59	0.76	-30	PASS	
1,2-Dichlorotetrafluoroethane	4.0	4.2	-5.6	PASS	
1,4-Dioxane	0.24	0.29	-24	PASS	
Ethylbenzene	2.0	2.2	-9.7	PASS	
n-Heptane	3.0	3.9	-29	PASS	
1,3-Hexachlorobutadiene	0.61	0.59	3.9	PASS	

***%Difference must be within +/- 30%**

RRF - Relative Response Factor

INTEGRATED ANALYTICAL LABORATORIES, LLC

Continuing Calibration Data Summary Report

Initial Calibration Curve:	**5/29/2024**	**Date/Time of Calibration:**	**6/4/2024 10:40**
Instrument:	**AA**	**Sample ID:**	**DCS**
Amount of standard injected (ml):	**50**	**Laboratory ID:**	**AA6621DCVS**

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6620BFB]	06/04/2024 10:07
10 PPBV DCVS [AA6621DCVS]	06/04/2024 10:40
10 PPBV LCS [AA6622LCS]	06/04/2024 12:49
METHOD BLANK [AA6623BLK]	06/04/2024 13:18
02 PPBV RLLCS [AA6624RLLCS]	06/04/2024 14:10
E24-01875-01 [AA6625]	06/04/2024 14:41
E24-01875-03 [AA6626]	06/04/2024 15:12
E24-01875-05 [AA6627]	06/04/2024 15:44
E24-01875-02 [AA6628]	06/04/2024 16:15
E24-01875-04 [AA6629]	06/04/2024 16:47
E24-01875-06 [AA6630]	06/04/2024 17:28
E24-01875-01 [AA6631]	06/04/2024 18:00
E24-01875-21 [AA6632]	06/04/2024 18:31
E24-01875-04 [AA6633]	06/04/2024 19:03
E24-01875-03 [AA6634]	06/04/2024 19:35
E24-01875-05 [AA6635]	06/04/2024 20:08
E24-01875-02 [AA6636]	06/04/2024 20:39
CLEAN CAN CERTIFICATION, BATCH MASTER 10 PPBV CCCVS [AA6638	06/04/2024 21:43

Compound Name	Average RRF	Standard RRF	% Difference	PassFail	*
n-Hexane	3.8	4.6	-19	PASS	
Methylene chloride	1.8	1.8	-0.70	PASS	
Methyl ethyl ketone	3.2	4.0	-26	PASS	
Methyl isobutyl ketone	0.94	1.2	-27	PASS	
Methyl tert-butyl ether	4.6	5.3	-17	PASS	
Styrene	1.0	1.2	-17	PASS	
Tert-butyl alcohol	3.1	3.9	-25	PASS	
1,1,2,2-Tetrachloroethane	1.1	1.2	-5.5	PASS	
Tetrachloroethene	0.49	0.61	-26	PASS	
Toluene	1.3	1.6	-28	PASS	
1,2,4-Trichlorobenzene	0.82	0.82	0.60	PASS	
1,1,1-Trichloroethane	3.0	3.6	-20	PASS	
1,1,2-Trichloroethane	0.44	0.56	-26	PASS	
Trichloroethene	0.45	0.49	-9.3	PASS	
Trichlorofluoromethane	3.3	3.9	-19	PASS	
1,1,2-Trichloro-1,2,2-trifluoroethane	3.1	3.6	-16	PASS	
1,2,4-Trimethylbenzene	1.8	2.0	-11	PASS	
1,3,5-Trimethylbenzene	1.8	2.0	-7.5	PASS	
2,2,4-Trimethylpentane	1.8	1.7	6.7	PASS	
Vinyl bromide	1.2	1.4	-9.4	PASS	
Vinyl chloride	1.3	1.4	-6.1	PASS	
Xylenes (m&p)	1.5	1.6	-11	PASS	
Xylenes (o)	1.6	1.7	-6.3	PASS	

***%Difference must be within +/- 30%**
RRF - Relative Response Factor

Data Path : C:\DATA\2024\06-2024\06-04-2024\
Data File : aa6621dcvs.D
Acq On : 4 Jun 2024 10:40 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 04 11:01:26 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 0% Max. R.T. Dev 0.40min
Max. RRF Dev : 30% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane (IS)	1.000	1.000	0.0	102	0.00
2	T	Propene	1.050	0.996	5.1	99	0.03
3	T	Dichlorodifluoromethane	2.863	3.200	-11.8	110	0.02
4	T	1,2-Dichlorotetrafluoroetha	4.013	4.236	-5.6	108	0.03
5	T	n-Butane	2.168	2.369	-9.3	113	0.03
6	T	Chloromethane	0.178	0.229	-28.7	116	0.03
7	T	Vinyl chloride	1.318	1.399	-6.1	103	0.02
8	T	1,3-Butadiene	1.222	1.300	-6.4	107	0.02
9	T	Bromomethane	1.030	1.111	-7.9	103	0.03
10	T	Chloroethane	0.749	0.807	-7.7	104	0.03
11	T	Vinyl bromide	1.249	1.367	-9.4	102	0.02
12	T	Trichlorofluoromethane	3.297	3.917	-18.8	119	0.02
13	T	Ethanol	0.515	0.550	-6.8	128	0.02
14	T	1,1-Dichloroethene	2.537	3.092	-21.9	117	0.02
15	T	Carbon disulfide	4.226	4.752	-12.4	109	0.02
16	T	1,1,2-Trichloro-1,2,2-trifl	3.115	3.618	-16.1	123	0.02
17	T	Acrolein	0.564	0.637	-12.9	113	0.02
18	T	Allyl chloride	0.649	0.803	-23.7	115	0.02
19	T	Isopropanol	2.821	3.552	-25.9	125	0.02
20	T	Methylene chloride	1.807	1.819	-0.7	109	0.02
21	T	Acetone	2.244	2.560	-14.1	115	0.02
22	T	1,2-Dichloroethene (trans)	2.294	2.874	-25.3	125	0.02
23	T	n-Pentane	2.741	2.975	-8.5	118	0.01
24	T	n-Hexane	3.840	4.568	-19.0	123	0.02
25	T	Methyl tert-butyl ether	4.580	5.335	-16.5	124	0.01
26	T	Tert-butyl alcohol	3.130	3.926	-25.4	132	0.01
27	T	1,1-Dichloroethane	2.847	3.453	-21.3	123	0.01
28	T	1,2-Dichloroethene (cis)	2.066	2.598	-25.8	123	0.01
29	t	Cyclohexane	2.564	3.038	-18.5	125	0.00
30	T	Chloroform	3.193	3.990	-25.0	124	0.00
31	T	Ethyl acetate	0.544	0.695	-27.8	132	0.00
32	T	Carbon tetrachloride	3.258	3.824	-17.4	120	0.00
33	T	Tetrahydrofuran	1.920	2.443	-27.2	127	0.00
34	T	1,1,1-Trichloroethane	3.007	3.601	-19.8	126	0.00
35	T	Methyl ethyl ketone	3.180	4.008	-26.0	130	0.01
36	T	n-Heptane	3.007	3.891	-29.4	140	0.00
37	T	Benzene	4.553	5.518	-21.2	123	0.00
38	T	1,2-Dichloroethane	2.083	2.582	-24.0	124	0.01
39	I	1,4-Difluorobenzene (IS)	1.000	1.000	0.0	118	0.00
40	T	Trichloroethene	0.452	0.494	-9.3	124	0.00
41	T	2,2,4-Trimethylpentane	1.781	1.662	6.7	106	0.00
42	T	1,2-Dichloropropane	0.415	0.479	-15.4	135	0.00
43	T	Bromodichloromethane	0.723	0.809	-11.9	128	0.00
44	T	Methyl methacrylate	0.518	0.662	-27.8	153	0.00
45	T	1,4-Dioxane	0.236	0.292	-23.7	144	0.00
46	T	cis-1,3-Dichloropropene	0.613	0.726	-18.4	137	0.00
47	T	Toluene	1.280	1.639	-28.0	150	0.00
48	T	Methyl isobutyl ketone	0.936	1.191	-27.2	155	0.00
49	T	Tetrachloroethene	0.485	0.610	-25.8	146	0.00
50	T	trans-1,3-Dichloropropene	0.589	0.764	-29.7	146	0.00
51	T	1,1,2-Trichloroethane	0.442	0.557	-26.0	150	0.00
52	T	Dibromochloromethane	0.705	0.887	-25.8	146	0.00
53	T	1,2-Dibromoethane	0.634	0.819	-29.2	150	0.00

Data Path : C:\DATA\2024\06-2024\06-04-2024\
Data File : aa6621dcvs.D
Acq On : 4 Jun 2024 10:40 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 04 11:01:26 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 0% Max. R.T. Dev 0.40min
Max. RRF Dev : 30% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
54	T	Methyl n-butyl ketone	0.877	1.279	-45.8#	182	0.00
55	I	d-5 Chlorobenzene (IS)	1.000	1.000	0.0	144	0.00
56	T	n-Nonane	1.169	1.327	-13.5	179	0.00
57	T	Chlorobenzene	1.036	1.096	-5.8	157	0.00
58	T	Ethylbenzene	1.971	2.163	-9.7	170	0.00
59	T	Xylenes (m&p)	1.482	1.640	-10.7	169	0.00
60	T	Xylene (o)	1.560	1.658	-6.3	165	0.00
61	T	Styrene	1.037	1.208	-16.5	172	0.00
62	T	Bromoform	0.696	0.761	-9.3	159	0.00
63	T	Cumene	1.990	2.117	-6.4	164	0.00
64	S	Bromofluorobenzene (tune st	0.946	0.956	-1.1	161	0.00
65	T	n-Propyl benzene	2.737	3.037	-11.0	176	0.00
66	T	1,1,2,2-Tetrachloroethane	1.149	1.212	-5.5	164	0.00
67	T	4-Ethyltoluene	2.232	2.546	-14.1	178	0.00
68	T	2-Chlorotoluene	1.857	1.997	-7.5	169	0.00
69	T	1,3,5-Trimethylbenzene	1.815	1.951	-7.5	167	0.00
70	T	1,2,4-Trimethylbenzene	1.821	2.021	-11.0	171	0.00
71	T	1,3-Dichlorobenzene	1.105	1.172	-6.1	170	0.00
72	T	1,4-Dichlorobenzene	1.117	1.216	-8.9	169	0.00
73	T	Benzyl chloride	1.797	1.994	-11.0	171	0.00
74	T	1,2-Dichlorobenzene	1.063	1.130	-6.3	163	0.00
75	T	1,3-Hexachlorobutadiene	0.612	0.588	3.9	145	0.00
76	T	1,2,4-Trichlorobenzene	0.824	0.819	0.6	150	0.00
77	T	Naphthalene	2.329	2.115	9.2	144	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data Path : C:\DATA\2024\06-2024\06-04-2024\
Data File : aa6621dcvs.D
Acq On : 4 Jun 2024 10:40 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 04 11:01:26 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.425	130	245770	10.00	ppbV		0.000
39) 1,4-Difluorobenzene (IS)	5.487	114	1194987	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.351	117	1346281	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.750	95	1286383	10.10	ppbV		0.000
Target Compounds							Qvalue
2) Propene	1.499	41	266721	10.34	ppbV		98
3) Dichlorodifluoromethane	1.530	85	833616	11.85	ppbV		100
4) 1,2-Dichlorotetrafluor...	1.657	85	1020294	10.34	ppbV		99
5) n-Butane	1.736	43	634623	11.91	ppbV		98
6) Chloromethane	1.801	52	62924	14.35	ppbV	#	1
7) Vinyl chloride	1.795	62	371242	11.46	ppbV		99
8) 1,3-Butadiene	1.801	39	341885	11.39	ppbV		99
9) Bromomethane	2.101	94	272936	10.78	ppbV		100
10) Chloroethane	2.210	64	210286	11.42	ppbV		100
11) Vinyl bromide	2.310	106	339363	11.05	ppbV		98
12) Trichlorofluoromethane	2.326	101	1059070	13.07	ppbV		99
13) Ethanol	2.692	45	140642	11.12	ppbV		100
14) 1,1-Dichloroethene	2.750	61	790397	12.68	ppbV		100
15) Carbon disulfide	2.773	76	1249584	12.03	ppbV		99
16) 1,1,2-Trichloro-1,2,2-...	2.792	101	969208	12.66	ppbV		100
17) Acrolein	3.011	56	156621	11.29	ppbV		98
18) Allyl chloride	3.133	76	213184	13.36	ppbV		100
19) Isopropanol	3.136	45	776965	11.20	ppbV		100
20) Methylene chloride	3.226	49	482835	10.87	ppbV		99
21) Acetone	3.239	43	679389	12.32	ppbV		100
22) 1,2-Dichloroethene (tr...	3.348	61	784141	13.91	ppbV		99
23) n-Pentane	3.432	43	789554	11.72	ppbV		99
24) n-Hexane	3.432	57	1235042	13.09	ppbV		98
25) Methyl tert-butyl ether	3.435	73	1468538	13.05	ppbV		99
26) Tert-butyl alcohol	3.490	59	1109623	14.42	ppbV		100
27) 1,1-Dichloroethane	3.834	63	908103	12.98	ppbV		100
28) 1,2-Dichloroethene (cis)	4.261	61	695853	13.70	ppbV		99
29) Cyclohexane	4.442	56	836147	13.27	ppbV		99
30) Chloroform	4.483	83	1059049	13.49	ppbV		99
31) Ethyl acetate	4.573	45	184517	13.81	ppbV		100
32) Carbon tetrachloride	4.606	117	1033800	12.91	ppbV		100
33) Tetrahydrofuran	4.609	42	660405	14.00	ppbV		99
34) 1,1,1-Trichloroethane	4.654	97	964620	13.05	ppbV		100
35) Methyl ethyl ketone	4.718	43	1083596	13.86	ppbV		99
36) n-Heptane	4.950	43	1061516	14.37	ppbV		100
37) Benzene	4.962	78	1464576	13.09	ppbV		100
38) 1,2-Dichloroethane	5.126	62	691811	13.51	ppbV		99
40) Trichloroethene	5.464	130	590487	10.93	ppbV		99
41) 2,2,4-Trimethylpentane	4.872	57	2165033	10.18	ppbV		99
42) 1,2-Dichloropropane	5.917	63	629507	12.69	ppbV		100
43) Bromodichloromethane	5.978	83	1112155	12.88	ppbV		98
44) Methyl methacrylate	6.123	41	870175	14.05	ppbV		100
45) 1,4-Dioxane	6.149	88	407906	14.46	ppbV		99
46) cis-1,3-Dichloropropene	6.570	75	962467	13.13	ppbV		100
47) Toluene	6.808	91	2115461	13.83	ppbV		100
48) Methyl isobutyl ketone	7.175	43	1551926	13.87	ppbV		99
49) Tetrachloroethene	7.194	166	816044	14.08	ppbV		99
50) trans-1,3-Dichloropropene	7.210	75	1012954	14.38	ppbV		97
51) 1,1,2-Trichloroethane	7.374	97	719044	13.61	ppbV		100

Data Path : C:\DATA\2024\06-2024\06-04-2024\
Data File : aa6621dcvs.D
Acq On : 4 Jun 2024 10:40 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

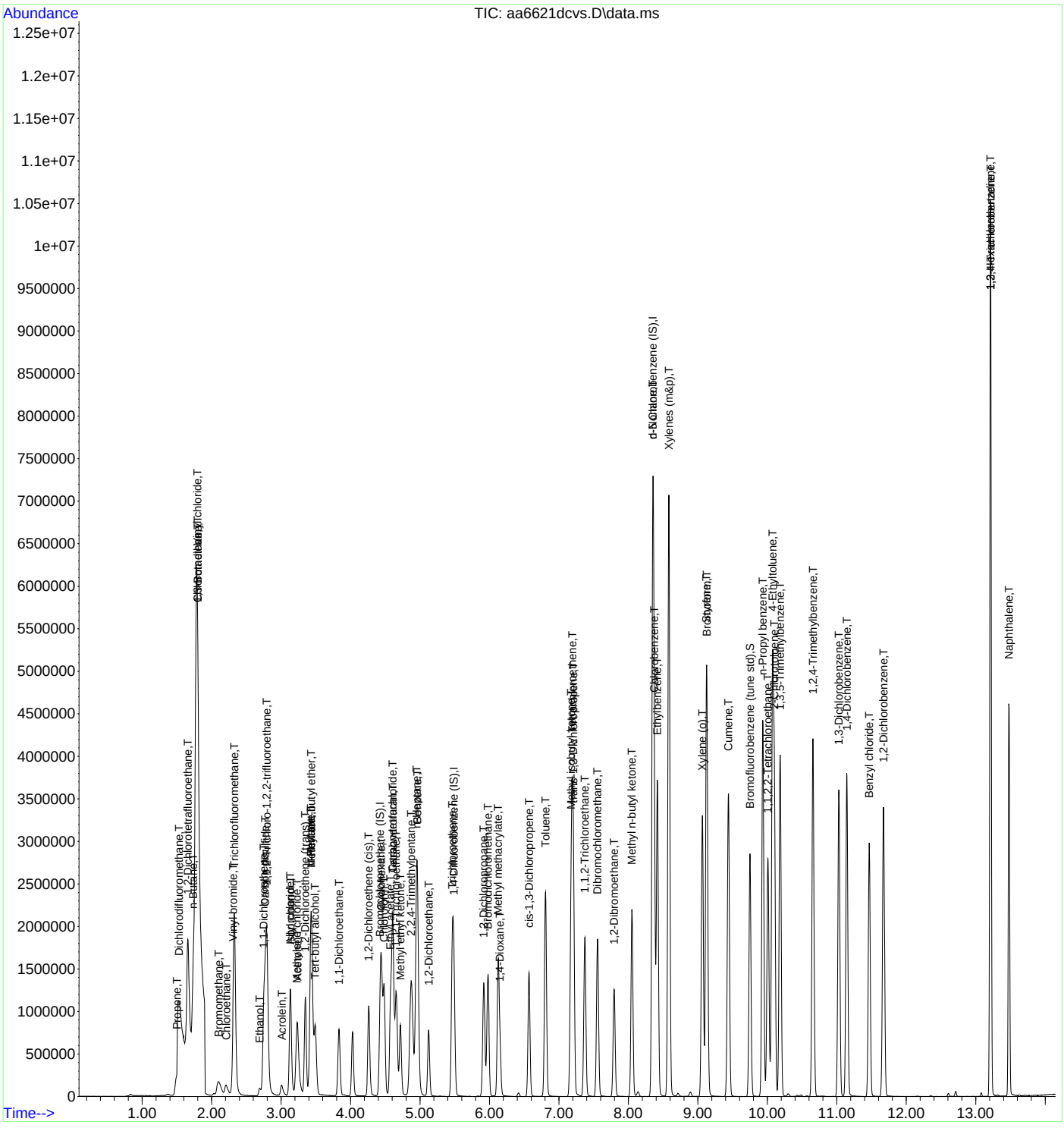
Quant Time: Jun 04 11:01:26 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.554	129	1186704	14.08	ppbV	100
53) 1,2-Dibromoethane	7.795	107	1056873	13.95	ppbV	100
54) Methyl n-butyl ketone	8.049	43	1727028	16.49	ppbV	100
56) n-Nonane	8.351	43	1965090	12.49	ppbV	99
57) Chlorobenzene	8.374	112	1638157	11.75	ppbV	97
58) Ethylbenzene	8.416	91	3232774	12.18	ppbV	100
59) Xylenes (m&p)	8.583	91	4923826	24.68	ppbV	100
60) Xylene (o)	9.065	91	2455693	11.69	ppbV	99
61) Styrene	9.123	104	1837184	13.15	ppbV	100
62) Bromoform	9.129	173	1157448	12.35	ppbV	100
63) Cumene	9.438	105	3049465	11.38	ppbV	100
65) n-Propyl benzene	9.933	91	4415769	11.98	ppbV	99
66) 1,1,2,2-Tetrachloroethane	10.007	83	1860132	12.03	ppbV	100
67) 4-Ethyltoluene	10.075	105	3701252	12.32	ppbV	100
68) 2-Chlorotoluene	10.100	91	2929923	11.72	ppbV	100
69) 1,3,5-Trimethylbenzene	10.184	105	2863641	11.72	ppbV	99
70) 1,2,4-Trimethylbenzene	10.657	105	2939060	11.99	ppbV	100
71) 1,3-Dichlorobenzene	11.030	146	1751089	11.77	ppbV	99
72) 1,4-Dichlorobenzene	11.145	146	1752370	11.65	ppbV	100
73) Benzyl chloride	11.467	91	2684185	11.10	ppbV	100
74) 1,2-Dichlorobenzene	11.673	146	1627853	11.37	ppbV	100
75) 1,3-Hexachlorobutadiene	13.213	225	878468	10.67	ppbV	100
76) 1,2,4-Trichlorobenzene	13.216	180	1213078	10.93	ppbV	100
77) Naphthalene	13.477	128	2847176	9.08	ppbV	100

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

Data Path : C:\DATA\2024\06-2024\06-04-2024\
Data File : aa6621dcvs.D
Acq On : 4 Jun 2024 10:40 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 04 11:01:26 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES, LLC

Continuing Calibration Data Summary Report

Initial Calibration Curve: 5/29/2024
Instrument: AA
Amount of standard injected (ml): 50

Date/Time of Calibration: 6/5/2024 10:58
Sample ID: DCS
Laboratory ID: AA6640DCVS

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6639BFB]	06/05/2024 09:50
10 PPBV DCVS [AA6640DCVS]	06/05/2024 10:58
10 PPBV LCS [AA6641LCS]	06/05/2024 11:29
METHOD BLANK [AA6642BLK]	06/05/2024 12:01
02 PPBV RLLCS [AA6643RLLCS]	06/05/2024 12:34
E24-01875-06 [AA6648]	06/05/2024 16:33
10 PPBV CCCVS [AA6656CCCVS]	06/05/2024 21:19

Compound Name	Average RRF	Standard RRF	% Difference	PassFail	*
Acetone	2.2	2.2	1.0	PASS	
Benzene	4.6	4.4	4.2	PASS	
Bromodichloromethane	0.72	0.69	4.0	PASS	
Bromoform	0.70	0.64	7.6	PASS	
Bromomethane	1.0	1.1	-7.5	PASS	
1,3-Butadiene	1.2	1.2	5.2	PASS	
Chlorobenzene	1.0	0.95	8.7	PASS	
Chloroethane	0.75	0.76	-1.1	PASS	
Chloroform	3.2	3.1	1.4	PASS	
Chloromethane	0.18	0.21	-20	PASS	
Carbon disulfide	4.2	4.3	-0.90	PASS	
Carbon tetrachloride	3.3	3.0	6.7	PASS	
Cyclohexane	2.6	2.4	6.9	PASS	
Dibromochloromethane	0.71	0.66	6.8	PASS	
1,2-Dibromoethane	0.63	0.60	5.7	PASS	
1,2-Dichlorobenzene	1.1	0.93	12	PASS	
1,3-Dichlorobenzene	1.1	0.93	16	PASS	
1,4-Dichlorobenzene	1.1	0.98	13	PASS	
Dichlorodifluoromethane	2.9	2.8	1.2	PASS	
1,1-Dichloroethane	2.8	2.8	2.4	PASS	
1,2-Dichloroethane	2.1	2.0	2.8	PASS	
1,1-Dichloroethene	2.5	2.6	-2.2	PASS	
1,2-Dichloroethene (cis)	2.1	2.1	-0.70	PASS	
1,2-Dichloroethene (trans)	2.3	2.3	1.8	PASS	
1,2-Dichloropropane	0.42	0.38	8.4	PASS	
1,3-Dichloropropene (cis)	0.61	0.58	5.1	PASS	
1,3-Dichloropropene (trans)	0.59	0.57	2.9	PASS	
1,2-Dichlorotetrafluoroethane	4.0	3.9	4.0	PASS	
1,4-Dioxane	0.24	0.23	4.2	PASS	
Ethylbenzene	2.0	1.7	12	PASS	
n-Heptane	3.0	2.7	10	PASS	
1,3-Hexachlorobutadiene	0.61	0.53	14	PASS	
n-Hexane	3.8	3.7	4.9	PASS	
Methylene chloride	1.8	1.7	4.2	PASS	
Methyl ethyl ketone	3.2	3.1	3.9	PASS	
Methyl isobutyl ketone	0.94	0.85	9.3	PASS	
Methyl tert-butyl ether	4.6	4.2	7.8	PASS	
Styrene	1.0	0.95	8.4	PASS	
Tert-butyl alcohol	3.1	3.0	4.5	PASS	
1,1,2,2-Tetrachloroethane	1.1	0.99	14	PASS	
Tetrachloroethene	0.49	0.45	6.4	PASS	
Toluene	1.3	1.2	6.6	PASS	
1,2,4-Trichlorobenzene	0.82	0.71	14	PASS	

***%Difference must be within +/- 30%**
RRF - Relative Response Factor

INTEGRATED ANALYTICAL LABORATORIES, LLC

Continuing Calibration Data Summary Report

Initial Calibration Curve:	**5/29/2024**	**Date/Time of Calibration:**	**6/5/2024 10:58**
Instrument:	**AA**	**Sample ID:**	**DCS**
Amount of standard injected (ml):	**50**	**Laboratory ID:**	**AA6640DCVS**

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6639BFB]	06/05/2024 09:50
10 PPBV DCVS [AA6640DCVS]	06/05/2024 10:58
10 PPBV LCS [AA6641LCS]	06/05/2024 11:29
METHOD BLANK [AA6642BLK]	06/05/2024 12:01
02 PPBV RLLCS [AA6643RLLCS]	06/05/2024 12:34
E24-01875-06 [AA6648]	06/05/2024 16:33
10 PPBV CCCVS [AA6656CCCVS]	06/05/2024 21:19

Compound Name	Average RRF	Standard RRF	% Difference	PassFail	*
1,1,1-Trichloroethane	3.0	2.8	7.1	PASS	
1,1,2-Trichloroethane	0.44	0.41	7.2	PASS	
Trichloroethene	0.45	0.43	4.9	PASS	
Trichlorofluoromethane	3.3	3.2	1.7	PASS	
1,1,2-Trichloro-1,2,2-trifluoroethane	3.1	2.8	8.8	PASS	
1,2,4-Trimethylbenzene	1.8	1.6	12	PASS	
1,3,5-Trimethylbenzene	1.8	1.6	13	PASS	
2,2,4-Trimethylpentane	1.8	1.8	-3.8	PASS	
Vinyl bromide	1.2	1.3	-4.6	PASS	
Vinyl chloride	1.3	1.3	-0.60	PASS	
Xylenes (m&p)	1.5	1.3	11	PASS	
Xylenes (o)	1.6	1.4	12	PASS	

***%Difference must be within +/- 30%**
RRF - Relative Response Factor

Data Path : C:\DATA\2024\06-2024\06-05-2024\
Data File : aa6640dcvs.D
Acq On : 5 Jun 2024 10:58 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 05 11:48:53 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 0% Max. R.T. Dev 0.40min
Max. RRF Dev : 30% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane (IS)	1.000	1.000	0.0	92	0.00
2	T	Propene	1.050	0.996	5.1	89	0.00
3	T	Dichlorodifluoromethane	2.863	2.830	1.2	87	0.00
4	T	1,2-Dichlorotetrafluoroetha	4.013	3.852	4.0	88	0.00
5	T	n-Butane	2.168	2.043	5.8	87	0.00
6	T	Chloromethane	0.178	0.214	-20.2	97	0.00
7	T	Vinyl chloride	1.318	1.326	-0.6	87	0.00
8	T	1,3-Butadiene	1.222	1.158	5.2	85	0.00
9	T	Bromomethane	1.030	1.107	-7.5	92	0.00
10	T	Chloroethane	0.749	0.757	-1.1	87	0.00
11	T	Vinyl bromide	1.249	1.307	-4.6	88	0.00
12	T	Trichlorofluoromethane	3.297	3.240	1.7	88	0.00
13	T	Ethanol	0.515	0.542	-5.2	113	0.00
14	T	1,1-Dichloroethene	2.537	2.592	-2.2	88	0.00
15	T	Carbon disulfide	4.226	4.262	-0.9	87	0.00
16	T	1,1,2-Trichloro-1,2,2-trifl	3.115	2.840	8.8	87	0.00
17	T	Acrolein	0.564	0.552	2.1	88	0.00
18	T	Allyl chloride	0.649	0.708	-9.1	91	0.00
19	T	Isopropanol	2.821	2.921	-3.5	93	0.00
20	T	Methylene chloride	1.807	1.732	4.2	93	0.00
21	T	Acetone	2.244	2.221	1.0	90	0.00
22	T	1,2-Dichloroethene (trans)	2.294	2.253	1.8	88	0.00
23	T	n-Pentane	2.741	2.544	7.2	90	0.00
24	T	n-Hexane	3.840	3.650	4.9	88	0.00
25	T	Methyl tert-butyl ether	4.580	4.223	7.8	88	0.00
26	T	Tert-butyl alcohol	3.130	2.988	4.5	90	0.00
27	T	1,1-Dichloroethane	2.847	2.779	2.4	89	0.00
28	T	1,2-Dichloroethene (cis)	2.066	2.080	-0.7	88	0.00
29	t	Cyclohexane	2.564	2.388	6.9	88	0.00
30	T	Chloroform	3.193	3.149	1.4	88	0.00
31	T	Ethyl acetate	0.544	0.520	4.4	89	0.00
32	T	Carbon tetrachloride	3.258	3.039	6.7	86	0.00
33	T	Tetrahydrofuran	1.920	1.893	1.4	88	0.00
34	T	1,1,1-Trichloroethane	3.007	2.794	7.1	88	0.00
35	T	Methyl ethyl ketone	3.180	3.055	3.9	89	0.00
36	T	n-Heptane	3.007	2.699	10.2	87	0.00
37	T	Benzene	4.553	4.361	4.2	87	0.00
38	T	1,2-Dichloroethane	2.083	2.024	2.8	87	0.00
39	I	1,4-Difluorobenzene (IS)	1.000	1.000	0.0	94	0.00
40	T	Trichloroethene	0.452	0.430	4.9	86	0.00
41	T	2,2,4-Trimethylpentane	1.781	1.849	-3.8	94	0.00
42	T	1,2-Dichloropropane	0.415	0.380	8.4	86	0.00
43	T	Bromodichloromethane	0.723	0.694	4.0	87	0.00
44	T	Methyl methacrylate	0.518	0.483	6.8	89	0.00
45	T	1,4-Dioxane	0.236	0.226	4.2	89	0.00
46	T	cis-1,3-Dichloropropene	0.613	0.582	5.1	88	0.00
47	T	Toluene	1.280	1.196	6.6	87	0.00
48	T	Methyl isobutyl ketone	0.936	0.849	9.3	88	0.00
49	T	Tetrachloroethene	0.485	0.454	6.4	86	0.00
50	T	trans-1,3-Dichloropropene	0.589	0.572	2.9	87	0.00
51	T	1,1,2-Trichloroethane	0.442	0.410	7.2	88	0.00
52	T	Dibromochloromethane	0.705	0.657	6.8	86	0.00
53	T	1,2-Dibromoethane	0.634	0.598	5.7	87	0.00

Data Path : C:\DATA\2024\06-2024\06-05-2024\
Data File : aa6640dcvs.D
Acq On : 5 Jun 2024 10:58 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 05 11:48:53 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 0% Max. R.T. Dev 0.40min
Max. RRF Dev : 30% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
54	T	Methyl n-butyl ketone	0.877	0.789	10.0	89	0.00
55	I	d-5 Chlorobenzene (IS)	1.000	1.000	0.0	92	0.00
56	T	n-Nonane	1.169	1.009	13.7	87	0.00
57	T	Chlorobenzene	1.036	0.946	8.7	87	0.00
58	T	Ethylbenzene	1.971	1.733	12.1	87	0.00
59	T	Xylenes (m&p)	1.482	1.325	10.6	87	0.00
60	T	Xylene (o)	1.560	1.375	11.9	88	0.00
61	T	Styrene	1.037	0.950	8.4	87	0.00
62	T	Bromoform	0.696	0.643	7.6	86	0.00
63	T	Cumene	1.990	1.758	11.7	87	0.00
64	S	Bromofluorobenzene (tune st	0.946	0.843	10.9	91	0.00
65	T	n-Propyl benzene	2.737	2.337	14.6	87	0.00
66	T	1,1,2,2-Tetrachloroethane	1.149	0.993	13.6	86	0.00
67	T	4-Ethyltoluene	2.232	1.944	12.9	87	0.00
68	T	2-Chlorotoluene	1.857	1.610	13.3	87	0.00
69	T	1,3,5-Trimethylbenzene	1.815	1.583	12.8	87	0.00
70	T	1,2,4-Trimethylbenzene	1.821	1.603	12.0	87	0.00
71	T	1,3-Dichlorobenzene	1.105	0.934	15.5	87	0.00
72	T	1,4-Dichlorobenzene	1.117	0.977	12.5	87	0.00
73	T	Benzyl chloride	1.797	1.572	12.5	86	0.00
74	T	1,2-Dichlorobenzene	1.063	0.934	12.1	86	0.00
75	T	1,3-Hexachlorobutadiene	0.612	0.526	14.1	83	0.00
76	T	1,2,4-Trichlorobenzene	0.824	0.713	13.5	84	0.00
77	T	Naphthalene	2.329	1.889	18.9	82	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data Path : C:\DATA\2024\06-2024\06-05-2024\
Data File : aa6640dcvs.D
Acq On : 5 Jun 2024 10:58 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 05 11:48:53 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.412	130	220624	10.00	ppbV		0.000
39) 1,4-Difluorobenzene (IS)	5.483	114	952962	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.351	117	861778	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.750	95	726151	8.91	ppbV		0.000
Target Compounds							Qvalue
2) Propene	1.473	41	239521	10.34	ppbV		96
3) Dichlorodifluoromethane	1.509	85	661711	10.48	ppbV		99
4) 1,2-Dichlorotetrafluor...	1.633	85	832944	9.41	ppbV		99
5) n-Butane	1.708	43	491206	10.27	ppbV		100
6) Chloromethane	1.774	52	52810	13.41	ppbV	#	1
7) Vinyl chloride	1.777	62	315913	10.86	ppbV		98
8) 1,3-Butadiene	1.777	39	273294	10.14	ppbV		98
9) Bromomethane	2.081	94	244337	10.75	ppbV		99
10) Chloroethane	2.187	64	176920	10.70	ppbV		100
11) Vinyl bromide	2.287	106	291273	10.57	ppbV		100
12) Trichlorofluoromethane	2.303	101	786208	10.81	ppbV		99
13) Ethanol	2.673	45	124312	10.95	ppbV		89
14) 1,1-Dichloroethene	2.731	61	594798	10.63	ppbV		100
15) Carbon disulfide	2.750	76	1006058	10.79	ppbV		100
16) 1,1,2-Trichloro-1,2,2-...	2.772	101	683039	9.94	ppbV		100
17) Acrolein	2.988	56	121771	9.78	ppbV		98
18) Allyl chloride	3.116	76	168710	11.78	ppbV		100
19) Isopropanol	3.120	45	573499	9.21	ppbV		100
20) Methylene chloride	3.206	49	412615	10.35	ppbV		100
21) Acetone	3.219	43	529122	10.69	ppbV		99
22) 1,2-Dichloroethene (tr...	3.332	61	551766	10.90	ppbV		99
23) n-Pentane	3.415	43	606284	10.03	ppbV		99
24) n-Hexane	3.415	57	885779	10.45	ppbV		99
25) Methyl tert-butyl ether	3.419	73	1043480	10.33	ppbV		100
26) Tert-butyl alcohol	3.477	59	758194	10.98	ppbV		100
27) 1,1-Dichloroethane	3.821	63	655958	10.44	ppbV		99
28) 1,2-Dichloroethene (cis)	4.248	61	500198	10.97	ppbV		100
29) Cyclohexane	4.432	56	590145	10.43	ppbV		100
30) Chloroform	4.473	83	750309	10.65	ppbV		100
31) Ethyl acetate	4.567	45	123856	10.32	ppbV		99
32) Carbon tetrachloride	4.596	117	737478	10.26	ppbV		99
33) Tetrahydrofuran	4.599	42	459465	10.85	ppbV		100
34) 1,1,1-Trichloroethane	4.650	97	671880	10.13	ppbV		99
35) Methyl ethyl ketone	4.708	43	741411	10.57	ppbV		98
36) n-Heptane	4.943	43	660958	9.96	ppbV		100
37) Benzene	4.956	78	1039133	10.35	ppbV		99
38) 1,2-Dichloroethane	5.116	62	486706	10.59	ppbV		100
40) Trichloroethene	5.457	130	409756	9.51	ppbV		99
41) 2,2,4-Trimethylpentane	4.866	57	1920568	11.32	ppbV		95
42) 1,2-Dichloropropane	5.914	63	398412	10.07	ppbV		98
43) Bromodichloromethane	5.972	83	760452	11.04	ppbV		98
44) Methyl methacrylate	6.120	41	505869	10.24	ppbV		100
45) 1,4-Dioxane	6.148	88	252398	11.22	ppbV		100
46) cis-1,3-Dichloropropene	6.566	75	615479	10.53	ppbV		100
47) Toluene	6.804	91	1231296	10.09	ppbV		100
48) Methyl isobutyl ketone	7.171	43	881845	9.88	ppbV		99
49) Tetrachloroethene	7.190	166	484029	10.47	ppbV		100
50) trans-1,3-Dichloropropene	7.210	75	604889	10.77	ppbV		98
51) 1,1,2-Trichloroethane	7.370	97	421884	10.01	ppbV		99

Data Path : C:\DATA\2024\06-2024\06-05-2024\
Data File : aa6640dcvs.D
Acq On : 5 Jun 2024 10:58 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

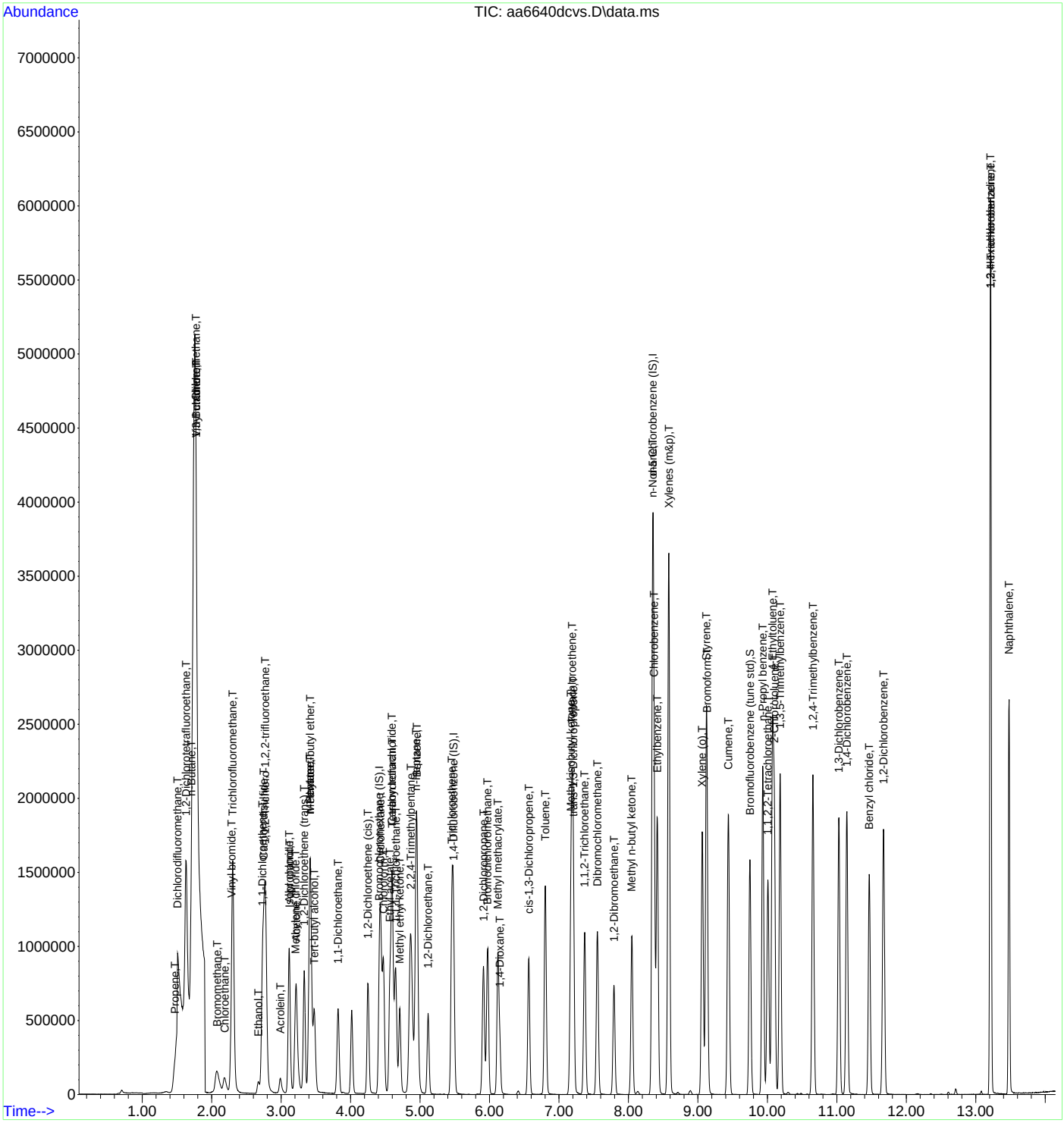
Quant Time: Jun 05 11:48:53 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.554	129	701601	10.44	ppbV	99
53) 1,2-Dibromoethane	7.795	107	614950	10.18	ppbV	100
54) Methyl n-butyl ketone	8.046	43	849408	10.17	ppbV	100
56) n-Nonane	8.348	43	956880	9.50	ppbV	99
57) Chlorobenzene	8.370	112	905342	10.14	ppbV	99
58) Ethylbenzene	8.415	91	1658005	9.76	ppbV	100
59) Xylenes (m&p)	8.582	91	2545694	19.94	ppbV	100
60) Xylene (o)	9.062	91	1303598	9.70	ppbV	99
61) Styrene	9.123	104	924909	10.35	ppbV	100
62) Bromoform	9.132	173	626367	10.44	ppbV	100
63) Cumene	9.438	105	1621066	9.45	ppbV	99
65) n-Propyl benzene	9.933	91	2175555	9.22	ppbV	99
66) 1,1,2,2-Tetrachloroethane	10.007	83	975181	9.85	ppbV	99
67) 4-Ethyltoluene	10.074	105	1809541	9.41	ppbV	100
68) 2-Chlorotoluene	10.100	91	1512116	9.45	ppbV	100
69) 1,3,5-Trimethylbenzene	10.184	105	1486636	9.50	ppbV	100
70) 1,2,4-Trimethylbenzene	10.656	105	1491726	9.51	ppbV	100
71) 1,3-Dichlorobenzene	11.029	146	893063	9.38	ppbV	100
72) 1,4-Dichlorobenzene	11.145	146	901324	9.36	ppbV	99
73) Benzyl chloride	11.467	91	1354641	8.75	ppbV	100
74) 1,2-Dichlorobenzene	11.672	146	861637	9.41	ppbV	99
75) 1,3-Hexachlorobutadiene	13.213	225	502779	9.54	ppbV	99
76) 1,2,4-Trichlorobenzene	13.216	180	675659	9.51	ppbV	99
77) Naphthalene	13.479	128	1628148	8.11	ppbV	100

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

Data Path : C:\DATA\2024\06-2024\06-05-2024\
Data File : aa6640dcvs.D
Acq On : 5 Jun 2024 10:58 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 05 11:48:53 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration



Section VIII: Raw Quality Control Data Package

BFB Tune Spectra

Method Blank

Laboratory Control Sample

Laboratory Sample Duplicate

Instrument Run Logs

Pressure Gauge Readings (initial and final)

Example Calculations

Screening Data

Clean Canister Certification

BFB

Data Path: C:\DATA\2024\03-2024\03-27-2024\
Data File: AA6020BFB.D
Acq On: 3/27/2024 10:03:00AM
Operator: jjw
Sample: BFB
Misc: ALM018474
ALS Vial: 1 **Multiplier:** 1
Integration File: rteint.p
Method: C:\msdchem\1\METHODS\240326.M
Last Update: Mon Feb 12 17:00:56 2024
Spectrum Information:

PassFail	Target Mass	Rel. to Mass	Lower Limit %	Higher Limit %	Raw Abundance	% Relative Abundance
PASS	50	95	8	40	248768	22.4
PASS	75	95	30	66	575680	51.7
PASS	95	95	100	100	1112917	100.0
PASS	96	95	5	9	72451	6.5
PASS	173	174	0.00	2	6828	1.0
PASS	174	95	50	100	671872	60.4
PASS	175	174	4	9	49411	7.4
PASS	176	174	93	101	654677	97.4
PASS	177	176	5	9	43245	6.6

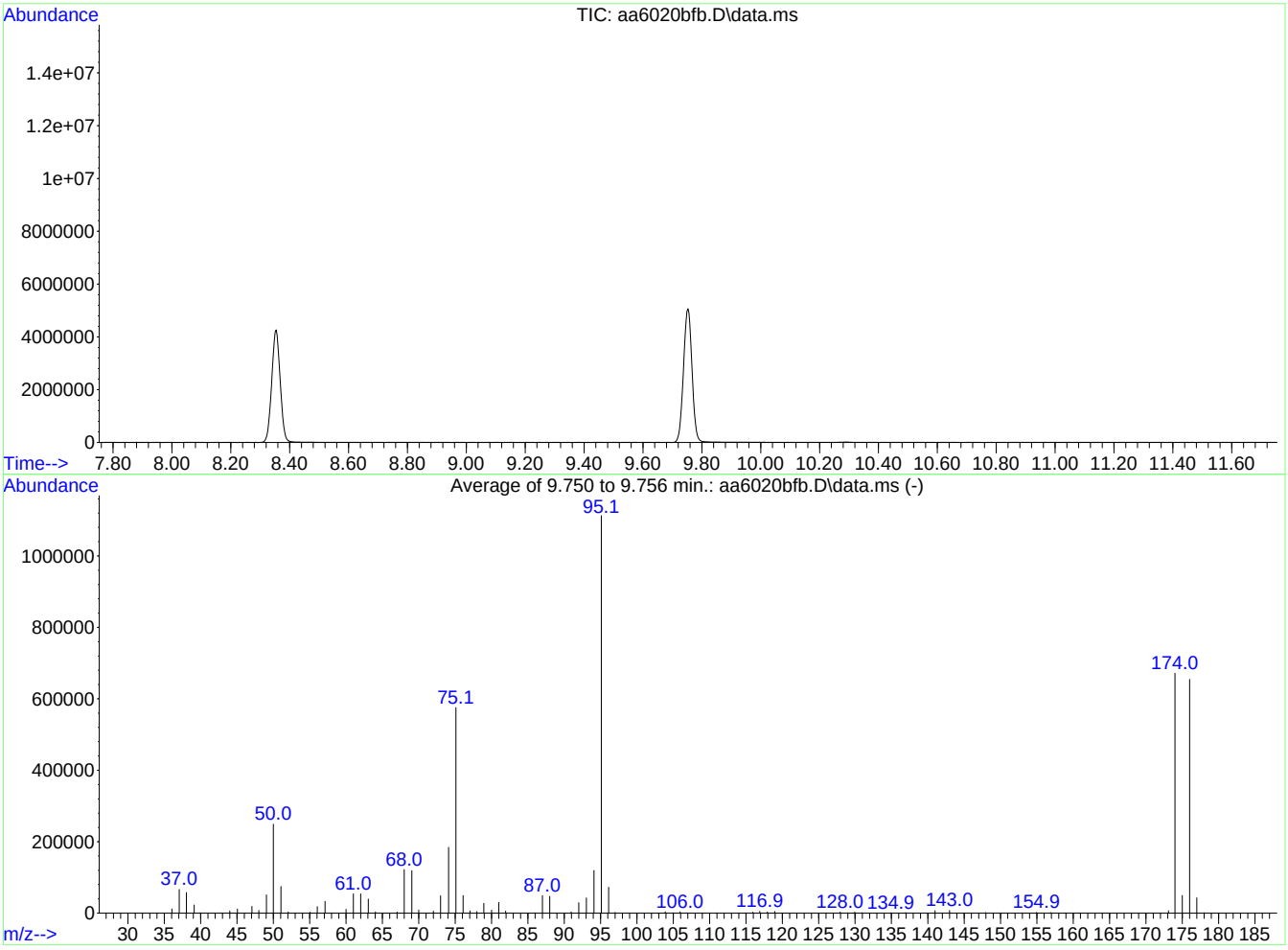
Runs with this BFB:

Lab Sample Number	Date File	Field Sample	Date/Time of Sample/Standard Analysis
BFB	AA6020BFB	NA	3/27/2024 10:03:00 AM
0.2 PPBV STD	AA6021STD05	NA	3/27/2024 10:38:00 AM
2 PPBV STD	AA6022STD04	NA	3/27/2024 11:38:00 AM
10 PPBV STD STD	AA6023STD03	NA	3/27/2024 12:09:00 PM
20 PPBV STD	AA6024STD02	NA	3/27/2024 12:40:00 PM
40 PPBV STD	AA6025STD01	NA	3/27/2024 1:24:00 PM
10 PPBV ICVSS	AA6026ICVSS	NA	3/27/2024 1:54:00 PM
10 PPBV LCS	AA6027LCS	NA	3/27/2024 2:23:00 PM
METHOD BLANK	AA6028BLK	NA	3/27/2024 2:51:00 PM
3285	AA6039	NA	3/27/2024 9:10:00 PM
2036	AA6040	NA	3/27/2024 9:38:00 PM

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6020bfb.D
Acq On : 27 Mar 2024 10:03 am
Operator : jjw
Sample : BFB
Misc : ALM018474
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\240326.M
Title : TO-15 on the Agilent 7890A / 5975C
Last Update : Mon Feb 12 17:00:56 2024



AutoFind: Scans 2993, 2994, 2995; Background Corrected with Scan 2975

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	22.4	248768	PASS
75	95	30	66	51.7	575680	PASS
95	95	100	100	100.0	1112917	PASS
96	95	5	9	6.5	72451	PASS
173	174	0.00	2	1.0	6828	PASS
174	95	50	100	60.4	671872	PASS
175	174	4	9	7.4	49411	PASS
176	174	93	101	97.4	654677	PASS
177	176	5	9	6.6	43245	PASS

BFB

Data Path: C:\DATA\2024\04-2024\04-24-2024\
Data File: AA6389BFB.D
Acq On: 4/24/2024 9:59:00AM
Operator: jjw
Sample: BFB
Misc: ALM018474
ALS Vial: 1 **Multiplier:** 1
Integration File: rteint.p
Method: C:\msdchem\1\METHODS\240326.M
Last Update: Wed Mar 27 13:46:33 2024
Spectrum Information:

PassFail	Target Mass	Rel. to Mass	Lower Limit %	Higher Limit %	Raw Abundance	% Relative Abundance
PASS	50	95	8	40	60136	22.5
PASS	75	95	30	66	140352	52.5
PASS	95	95	100	100	267264	100.0
PASS	96	95	5	9	18056	6.8
PASS	173	174	0.00	2	1255	0.8
PASS	174	95	50	100	163605	61.2
PASS	175	174	4	9	11650	7.1
PASS	176	174	93	101	158123	96.6
PASS	177	176	5	9	10125	6.4

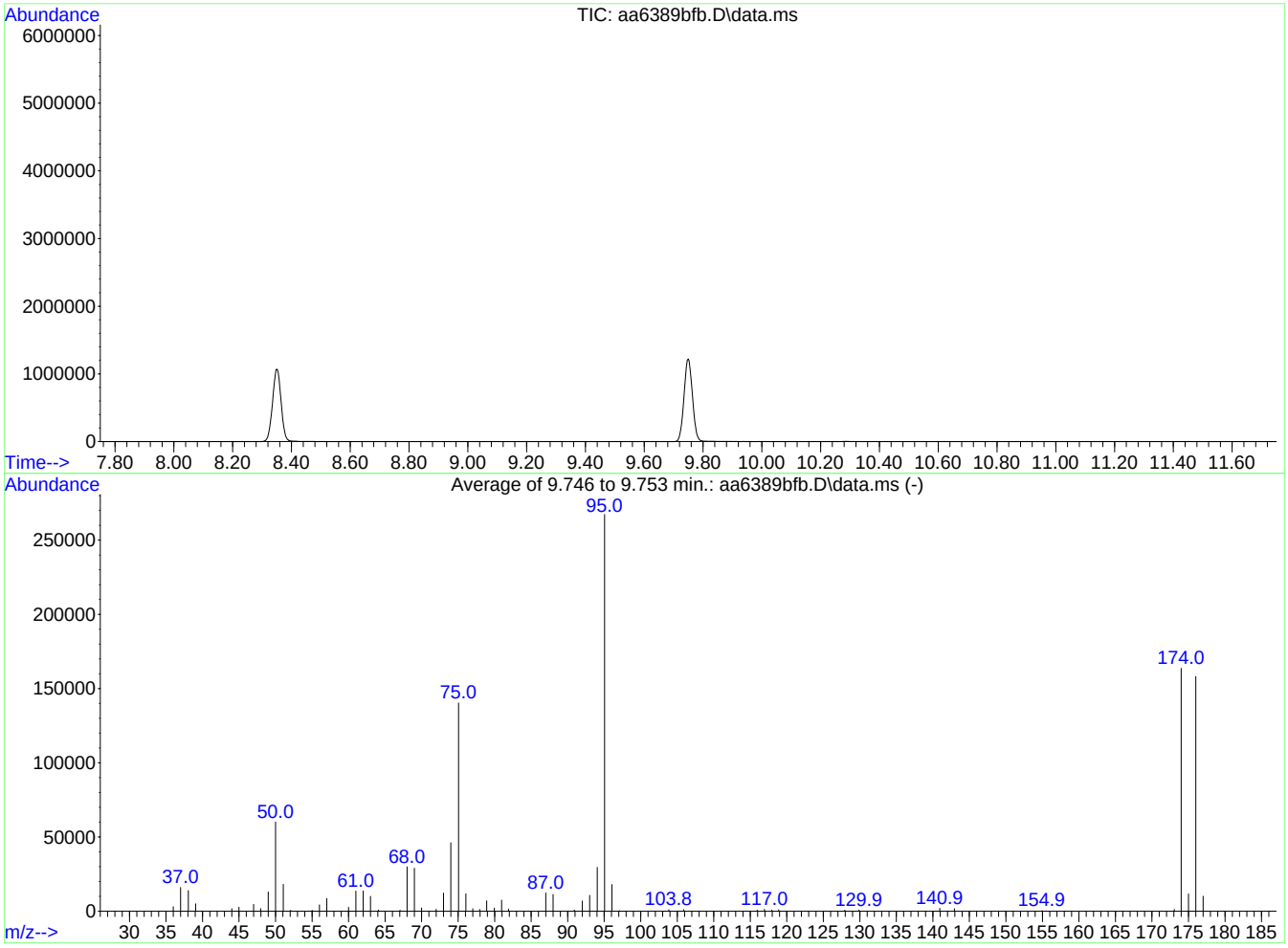
Runs with this BFB:

Lab Sample Number	Date File	Field Sample	Date/Time of Sample/Standard Analysis
BFB	AA6389BFB	NA	4/24/2024 9:59:00 AM
10 PPBV DCVS	AA6390DCVS	NA	4/24/2024 10:32:00 AM
10 PPBV LCS	AA6391LCS	NA	4/24/2024 12:12:00 PM
METHOD BLANK	AA6392BLK	NA	4/24/2024 1:23:00 PM
02 PPBV RLLCS	AA6393RLLCS	NA	4/24/2024 2:00:00 PM
5085	AA6394	NA	4/24/2024 2:58:00 PM
3035A	AA6395	NA	4/24/2024 3:28:00 PM
10 PPBV CCCVS	AA6405CCCVS	NA	4/24/2024 9:01:00 PM

Data Path : C:\DATA\2024\04-2024\04-24-2024\
Data File : aa6389bfb.D
Acq On : 24 Apr 2024 9:59 am
Operator : jjw
Sample : BFB
Misc : ALM018474
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\240326.M
Title : TO-15 on the Agilent 7890A / 5975C
Last Update : Wed Mar 27 13:46:33 2024



AutoFind: Scans 2992, 2993, 2994; Background Corrected with Scan 2976

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	22.5	60136	PASS
75	95	30	66	52.5	140352	PASS
95	95	100	100	100.0	267264	PASS
96	95	5	9	6.8	18056	PASS
173	174	0.00	2	0.8	1255	PASS
174	95	50	100	61.2	163605	PASS
175	174	4	9	7.1	11650	PASS
176	174	93	101	96.6	158123	PASS
177	176	5	9	6.4	10125	PASS

BFB

Data Path: C:\DATA\2024\05-2024\05-29-2024\
Data File: AA6554BFB.D
Acq On: 5/29/2024 9:16:00AM
Operator: jls
Sample: BFB
Misc: ALM018474
ALS Vial: 1 **Multiplier:** 1
Integration File: rteint.p
Method: C:\msdchem\1\METHODS\240326.M
Last Update: Wed Mar 27 13:46:33 2024
Spectrum Information:

PassFail	Target Mass	Rel. to Mass	Lower Limit %	Higher Limit %	Raw Abundance	% Relative Abundance
PASS	50	95	8	40	242304	21.7
PASS	75	95	30	66	578901	51.8
PASS	95	95	100	100	1118037	100.0
PASS	96	95	5	9	75616	6.8
PASS	173	174	0.00	2	6315	0.9
PASS	174	95	50	100	683392	61.1
PASS	175	174	4	9	49440	7.2
PASS	176	174	93	101	651648	95.4
PASS	177	176	5	9	42576	6.5

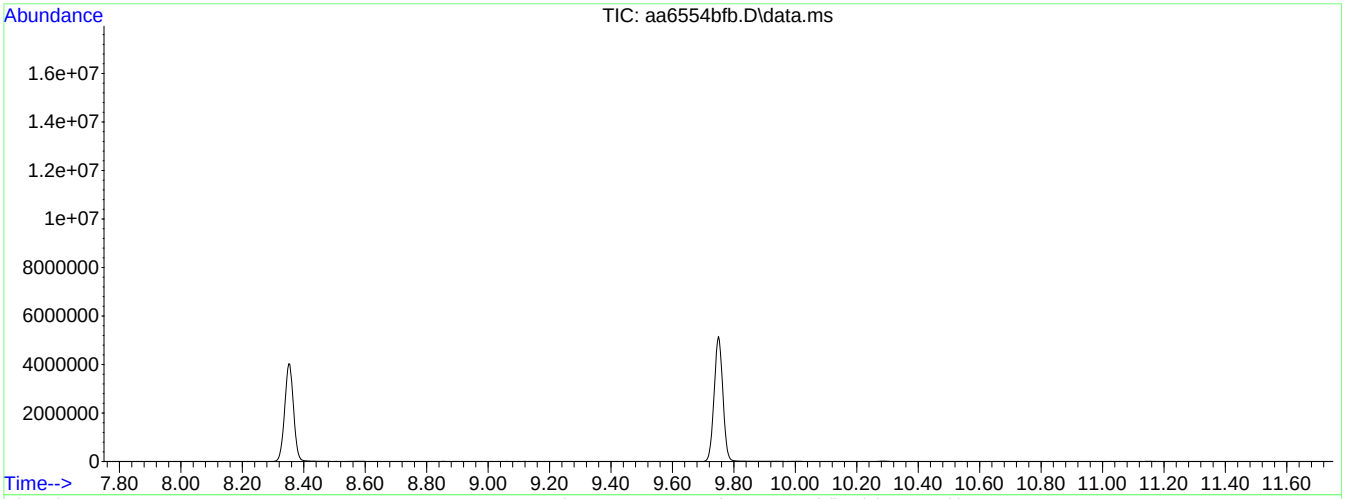
Runs with this BFB:

Lab Sample Number	Date File	Field Sample	Date/Time of Sample/Standard Analysis
BFB	AA6554BFB	NA	5/29/2024 9:16:00 AM
0.2 PPBV STD	AA6556STD05	NA	5/29/2024 12:40:00 PM
2 PPBV STD	AA6557STD04	NA	5/29/2024 1:11:00 PM
10 PPBV STD STD	AA6558STD03	NA	5/29/2024 1:46:00 PM
20 PPBV STD	AA6559STD02	NA	5/29/2024 2:18:00 PM
40 PPBV STD	AA6560STD01	NA	5/29/2024 2:55:00 PM
10 PPBV ICVSS	AA6561ICVSS	NA	5/29/2024 5:16:00 PM

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6554bfb.D
Acq On : 29 May 2024 9:16 am
Operator : jjw
Sample : BFB
Misc : ALM018474
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\240326.M
Title : TO-15 on the Agilent 7890A / 5975C
Last Update : Wed Mar 27 13:46:33 2024



AutoFind: Scans 2992, 2993, 2994; Background Corrected with Scan 2974

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	21.7	242304	PASS
75	95	30	66	51.8	578901	PASS
95	95	100	100	100.0	1118037	PASS
96	95	5	9	6.8	75616	PASS
173	174	0.00	2	0.9	6315	PASS
174	95	50	100	61.1	683392	PASS
175	174	4	9	7.2	49440	PASS
176	174	93	101	95.4	651648	PASS
177	176	5	9	6.5	42576	PASS

BFB

Data Path: C:\DATA\2024\06-2024\06-04-2024\

Data File: AA6620BFB.D

Acq On: 6/4/2024 10:07:00AM

Operator: jls

Sample: BFB

Misc: ALM018474

ALS Vial: 1 **Multiplier:** 1

Integration File: rteint.p

Method: C:\msdchem\1\METHODS\240529.M

Last Update: Wed May 29 15:44:50 2024

Spectrum Information:

PassFail	Target Mass	Rel. to Mass	Lower Limit %	Higher Limit %	Raw Abundance	% Relative Abundance
PASS	50	95	8	40	68349	19.8
PASS	75	95	30	66	170624	49.4
PASS	95	95	100	100	345664	100.0
PASS	96	95	5	9	23440	6.8
PASS	173	174	0.00	2	1780	0.8
PASS	174	95	50	100	223552	64.7
PASS	175	174	4	9	16401	7.3
PASS	176	174	93	101	214592	96.0
PASS	177	176	5	9	13796	6.4

Runs with this BFB:

Lab Sample Number	Date File	Field Sample	Date/Time of Sample/Standard Analysis
BFB	AA6620BFB	NA	6/4/2024 10:07:00 AM
10 PPBV DCVS	AA6621DCVS	NA	6/4/2024 10:40:00 AM
10 PPBV LCS	AA6622LCS	NA	6/4/2024 12:49:00 PM
METHOD BLANK	AA6623BLK	NA	6/4/2024 1:18:00 PM
02 PPBV RLLCS	AA6624RLLCS	NA	6/4/2024 2:10:00 PM
E24-01875-01	AA6625	SG-1B	6/4/2024 2:41:00 PM
E24-01875-03	AA6626	SG-6	6/4/2024 3:12:00 PM
E24-01875-05	AA6627	SG-8	6/4/2024 3:44:00 PM
E24-01875-02	AA6628	SG-5	6/4/2024 4:15:00 PM
E24-01875-04	AA6629	SG-7	6/4/2024 4:47:00 PM
E24-01875-06	AA6630	SG-9	6/4/2024 5:28:00 PM
E24-01875-01	AA6631	SG-1B	6/4/2024 6:00:00 PM
E24-01875-21	AA6632	SG-1B	6/4/2024 6:31:00 PM
E24-01875-04	AA6633	SG-7	6/4/2024 7:03:00 PM
E24-01875-03	AA6634	SG-6	6/4/2024 7:35:00 PM
E24-01875-05	AA6635	SG-8	6/4/2024 8:08:00 PM

BFB

Data Path: C:\DATA\2024\06-2024\06-04-2024\
Data File: AA6620BFB.D
Acq On: 6/4/2024 10:07:00AM
Operator: jls
Sample: BFB
Misc: ALM018474
ALS Vial: 1 **Multiplier:** 1
Integration File: rteint.p
Method: C:\msdchem\1\METHODS\240529.M
Last Update: Wed May 29 15:44:50 2024
Spectrum Information:

PassFail	Target Mass	Rel. to Mass	Lower Limit %	Higher Limit %	Raw Abundance	% Relative Abundance
PASS	50	95	8	40	68349	19.8
PASS	75	95	30	66	170624	49.4
PASS	95	95	100	100	345664	100.0
PASS	96	95	5	9	23440	6.8
PASS	173	174	0.00	2	1780	0.8
PASS	174	95	50	100	223552	64.7
PASS	175	174	4	9	16401	7.3
PASS	176	174	93	101	214592	96.0
PASS	177	176	5	9	13796	6.4

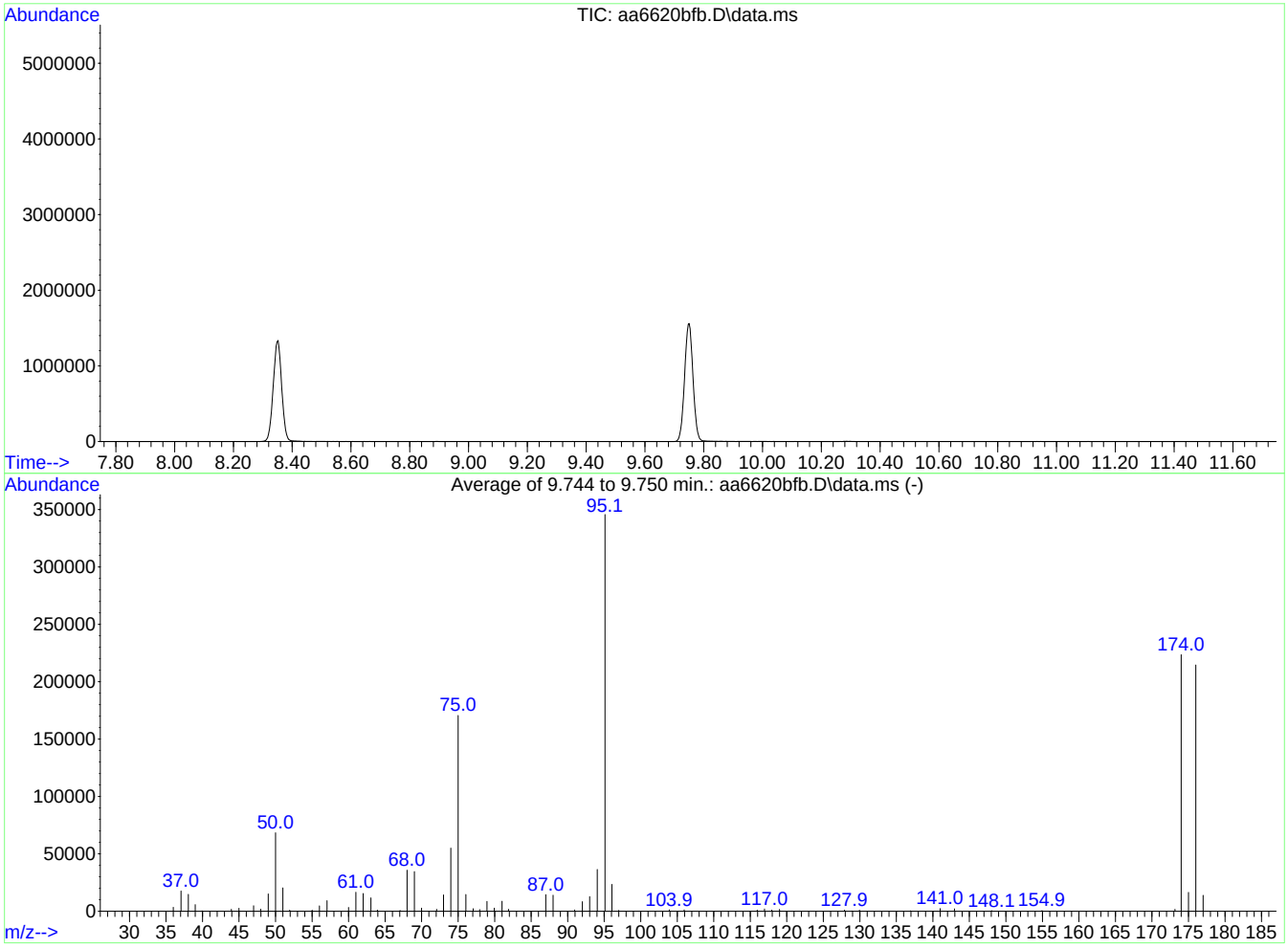
Runs with this BFB:

Lab Sample Number	Date File	Field Sample	Date/Time of Sample/Standard Analysis
E24-01875-02	AA6636	SG-5	6/4/2024 8:39:00 PM
10 PPBV CCCVS	AA6638CCCVS	NA	6/4/2024 9:43:00 PM

Data Path : C:\DATA\2024\06-2024\06-04-2024\
Data File : aa6620bfb.D
Acq On : 4 Jun 2024 10:07 am
Operator : jjw
Sample : BFB
Misc : ALM018474
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\240529.M
Title : TO-15 on the Agilent 7890A / 5975C
Last Update : Wed May 29 15:44:50 2024



AutoFind: Scans 2991, 2992, 2993; Background Corrected with Scan 2975

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	19.8	68349	PASS
75	95	30	66	49.4	170624	PASS
95	95	100	100	100.0	345664	PASS
96	95	5	9	6.8	23440	PASS
173	174	0.00	2	0.8	1780	PASS
174	95	50	100	64.7	223552	PASS
175	174	4	9	7.3	16401	PASS
176	174	93	101	96.0	214592	PASS
177	176	5	9	6.4	13796	PASS

BFB

Data Path: C:\DATA\2024\06-2024\06-05-2024\
Data File: AA6639BFB.D
Acq On: 6/5/2024 9:50:00AM
Operator: jls
Sample: BFB
Misc: ALM018474
ALS Vial: 1 **Multiplier:** 1
Integration File: rteint.p
Method: C:\msdchem\1\METHODS\240529.M
Last Update: Wed May 29 15:44:50 2024
Spectrum Information:

PassFail	Target Mass	Rel. to Mass	Lower Limit %	Higher Limit %	Raw Abundance	% Relative Abundance
PASS	50	95	8	40	145195	19.5
PASS	75	95	30	66	367765	49.3
PASS	95	95	100	100	745920	100.0
PASS	96	95	5	9	49288	6.6
PASS	173	174	0.00	2	0	0.0
PASS	174	95	50	100	480619	64.4
PASS	175	174	4	9	34043	7.1
PASS	176	174	93	101	463765	96.5
PASS	177	176	5	9	30093	6.5

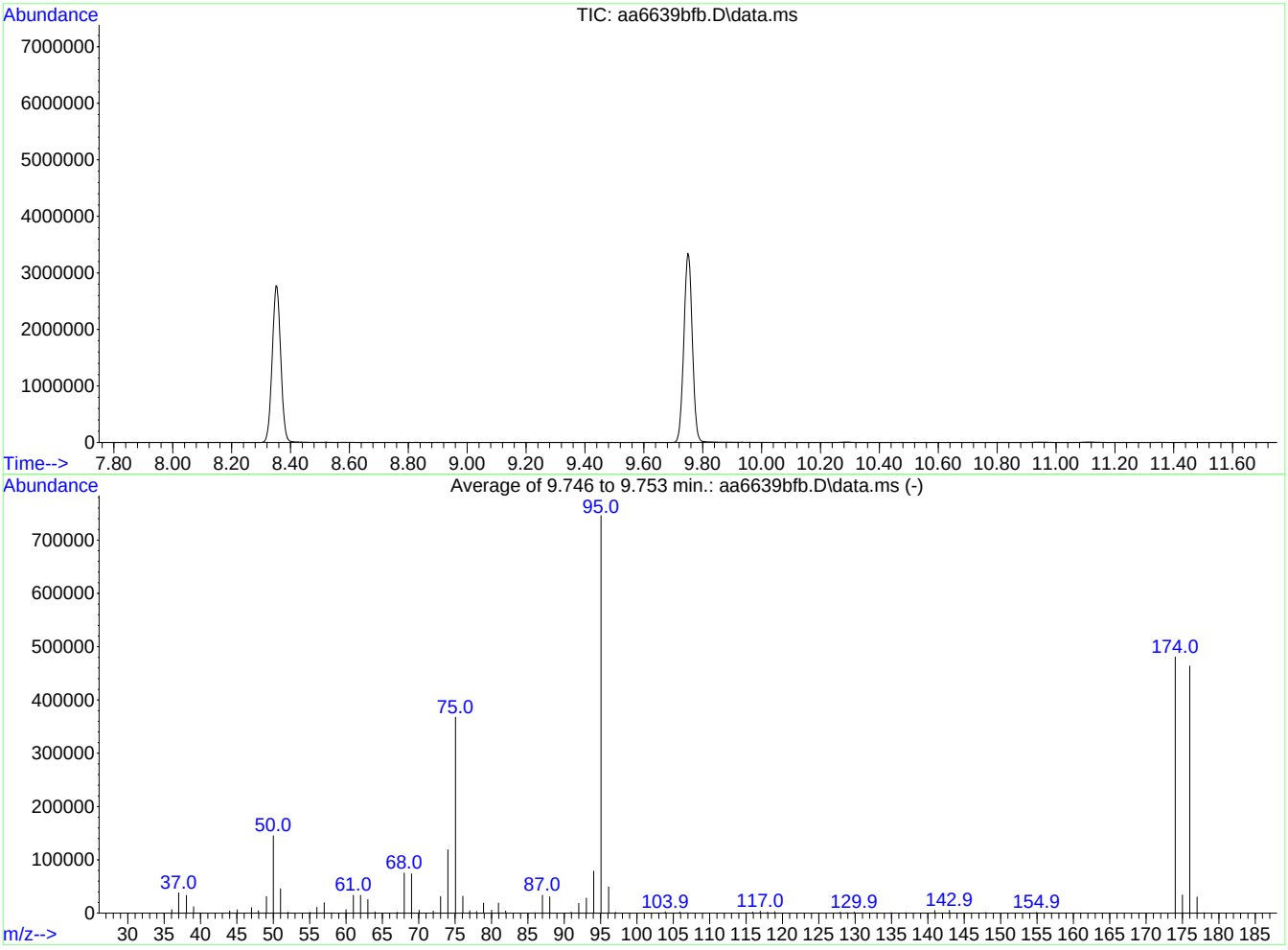
Runs with this BFB:

Lab Sample Number	Date File	Field Sample	Date/Time of Sample/Standard Analysis
BFB	AA6639BFB	NA	6/5/2024 9:50:00 AM
10 PPBV DCVS	AA6640DCVS	NA	6/5/2024 10:58:00 AM
10 PPBV LCS	AA6641LCS	NA	6/5/2024 11:29:00 AM
METHOD BLANK	AA6642BLK	NA	6/5/2024 12:01:00 PM
02 PPBV RLLCS	AA6643RLLCS	NA	6/5/2024 12:34:00 PM
E24-01875-06	AA6648	SG-9	6/5/2024 4:33:00 PM
10 PPBV CCCVS	AA6656CCCVS	NA	6/5/2024 9:19:00 PM

Data Path : C:\DATA\2024\06-2024\06-05-2024\
Data File : aa6639bfb.D
Acq On : 5 Jun 2024 9:50 am
Operator : jjw
Sample : BFB
Misc : ALM018474
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\240529.M
Title : TO-15 on the Agilent 7890A / 5975C
Last Update : Wed May 29 15:44:50 2024



AutoFind: Scans 2992, 2993, 2994; Background Corrected with Scan 2975

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	19.5	145195	PASS
75	95	30	66	49.3	367765	PASS
95	95	100	100	100.0	745920	PASS
96	95	5	9	6.6	49288	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	64.4	480619	PASS
175	174	4	9	7.1	34043	PASS
176	174	93	101	96.5	463765	PASS
177	176	5	9	6.5	30093	PASS

INTEGRATED ANALYTICAL LABORATORIES, LLC

Method Blank Report

Lab Sample Name:	**METHOD BLANK**	**Data File:**	**AA6392BLK**
Field Sample Name:	**METHOD BLANK**	**Date Analyzed:**	**4/24/2024**
Matrix:	**Air**	**Sample Volume:**	**500ml**
Dilution Factor:	**1**	**GC/MS Column:**	**RTX-1, 0.32 mmID**

Runs with this Method Blank:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6389BFB]	04/24/2024 9:59
10 PPBV DCVS [AA6390DCVS]	04/24/2024 10:32
10 PPBV LCS [AA6391LCS]	04/24/2024 12:12
METHOD BLANK [AA6392BLK]	04/24/2024 13:23
02 PPBV RLLCS [AA6393RLLCS]	04/24/2024 14:00
5085 [AA6394]	04/24/2024 14:58
3035A [AA6395]	04/24/2024 15:28
10 PPBV CCCVS [AA6405CCCVS]	04/24/2024 21:01

Compound	CAS #	Reporting Limit (ppbv)	Concentration (ppbv)
Acetone	67-64-1	0.20	ND
Benzene	71-43-2	0.20	ND
Bromodichloromethane	75-27-4	0.20	ND
Bromoform	75-25-2	0.20	ND
Bromomethane	74-83-9	0.20	ND
1,3-Butadiene	106-99-0	0.20	ND
Chlorobenzene	108-90-7	0.20	ND
Chloroethane	75-00-3	0.20	ND
Chloroform	67-66-3	0.20	ND
Chloromethane	74-87-3	0.20	ND
Carbon disulfide	75-15-0	0.20	ND
Carbon tetrachloride	56-23-5	0.20	ND
Cyclohexane	110-82-7	0.20	ND
Dibromochloromethane	124-48-1	0.20	ND
1,2-Dibromoethane	106-93-4	0.17	ND
1,2-Dichlorobenzene	95-50-1	0.20	ND
1,3-Dichlorobenzene	541-73-1	0.20	ND
1,4-Dichlorobenzene	106-46-7	0.20	ND
Dichlorodifluoromethane	75-71-8	0.20	ND
1,1-Dichloroethane	75-34-3	0.20	ND
1,2-Dichloroethane	107-06-2	0.20	ND
1,1-Dichloroethene	75-35-4	0.20	ND
1,2-Dichloroethene (cis)	156-59-2	0.20	ND
1,2-Dichloroethene (trans)	156-60-5	0.20	ND
1,2-Dichloropropane	78-87-5	0.20	ND
1,3-Dichloropropene (cis)	10061-01-5	0.20	ND
1,3-Dichloropropene (trans)	10061-02-6	0.19	ND
1,2-Dichlorotetrafluoroethane	76-14-2	0.20	ND
1,4-Dioxane	123-91-1	0.20	ND
Ethylbenzene	100-41-4	0.18	ND
n-Heptane	142-82-5	0.20	ND
1,3-Hexachlorobutadiene	87-68-3	0.20	ND
n-Hexane	110-54-3	0.20	ND
Methylene chloride	75-09-2	0.20	ND

Method Blank must be less than the Practical Quantitation Limit (PQL).

INTEGRATED ANALYTICAL LABORATORIES, LLC

Method Blank Report

Lab Sample Name:	**METHOD BLANK**	**Data File:**	**AA6392BLK**
Field Sample Name:	**METHOD BLANK**	**Date Analyzed:**	**4/24/2024**
Matrix:	**Air**	**Sample Volume:**	**500ml**
Dilution Factor:	**1**	**GC/MS Column:**	**RTX-1, 0.32 mmID**

Runs with this Method Blank:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6389BFB]	04/24/2024 9:59
10 PPBV DCVS [AA6390DCVS]	04/24/2024 10:32
10 PPBV LCS [AA6391LCS]	04/24/2024 12:12
METHOD BLANK [AA6392BLK]	04/24/2024 13:23
02 PPBV RLLCS [AA6393RLLCS]	04/24/2024 14:00
5085 [AA6394]	04/24/2024 14:58
3035A [AA6395]	04/24/2024 15:28
10 PPBV CCCVS [AA6405CCCVS]	04/24/2024 21:01

Compound	CAS #	Reporting Limit (ppbv)	Concentration (ppbv)
Methyl ethyl ketone	78-93-3	0.20	ND
Methyl isobutyl ketone	108-10-1	0.20	ND
Methyl tert-butyl ether	1634-04-4	0.20	ND
Styrene	100-42-5	0.20	ND
Tert-butyl alcohol	75-65-0	0.20	ND
1,1,2,2-Tetrachloroethane	79-34-5	0.20	ND
Tetrachloroethene	127-18-4	0.20	ND
Toluene	108-88-3	0.20	ND
1,2,4-Trichlorobenzene	120-82-1	0.20	ND
1,1,1-Trichloroethane	71-55-6	0.17	ND
1,1,2-Trichloroethane	79-00-5	0.20	ND
Trichloroethene	79-01-6	0.17	ND
Trichlorofluoromethane	75-69-4	0.20	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.20	ND
1,2,4-Trimethylbenzene	95-63-6	0.20	ND
1,3,5-Trimethylbenzene	108-67-8	0.20	ND
2,2,4-Trimethylpentane	540-84-1	0.20	ND
Vinyl bromide	593-60-2	0.20	ND
Vinyl chloride	75-01-4	0.20	ND
Xylenes (m&p)	179601-23-1	0.20	ND
Xylenes (o)	95-47-6	0.20	ND

Method Blank must be less than the Practical Quantitation Limit (PQL).

Data Path : C:\DATA\2024\04-2024\04-24-2024\
Data File : aa6392blk.D
Acq On : 24 Apr 2024 1:23 pm
Operator : jjw
Sample : Method Blank
Misc : 1127
ALS Vial : 5 Sample Multiplier: 1

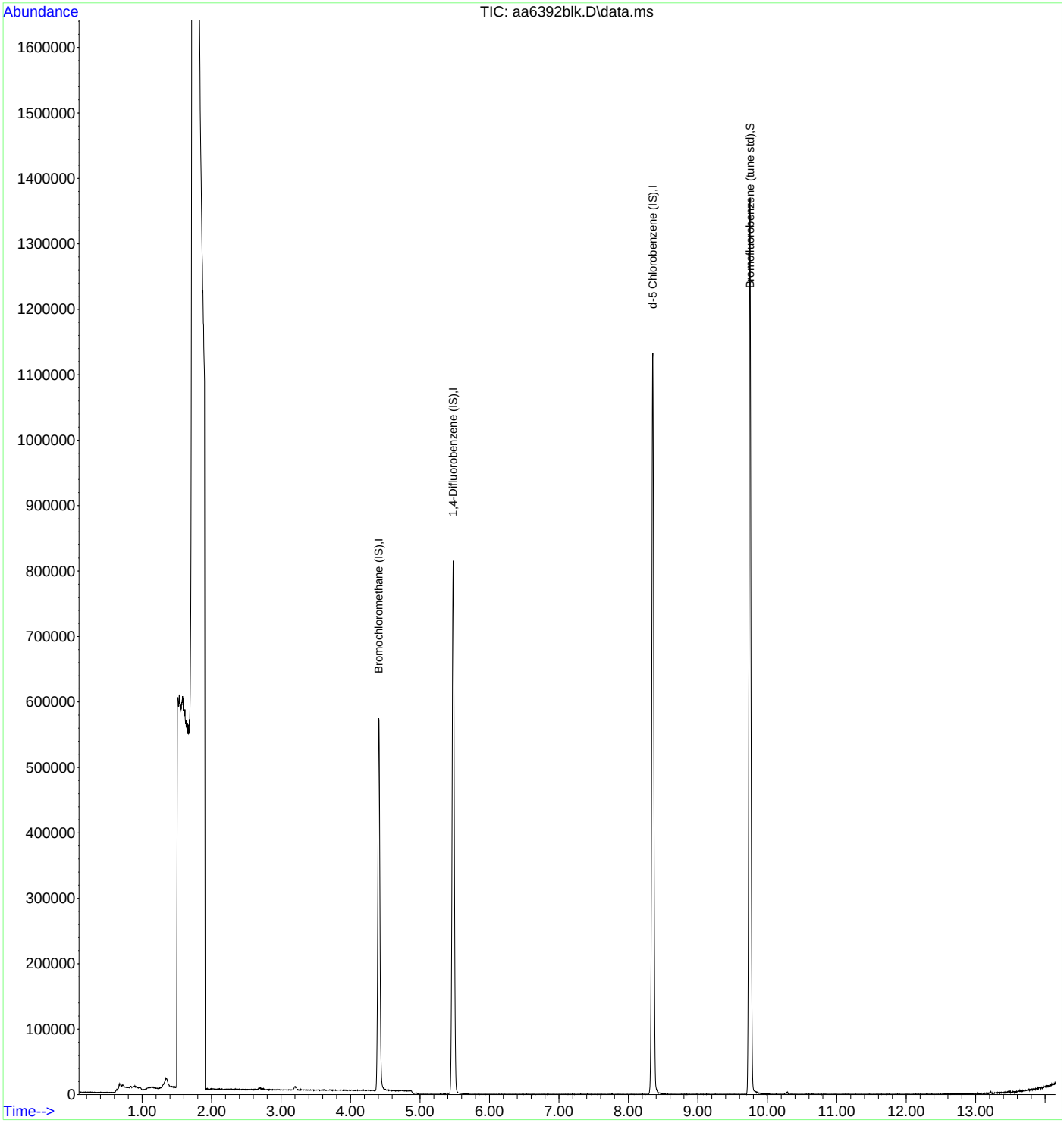
Quant Time: Apr 24 13:45:20 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.407	130	183868	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.477	114	691252	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.352	117	670643	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.750	95	600087	9.98	ppbV	0.000
Target Compounds						Qvalue

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

Data Path : C:\DATA\2024\04-2024\04-24-2024\
Data File : aa6392blk.D
Acq On : 24 Apr 2024 1:23 pm
Operator : jjw
Sample : Method Blank
Misc : 1127
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 24 13:45:20 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES, LLC

Method Blank Report

Lab Sample Name:	**METHOD BLANK**	**Data File:**	**AA6623BLK**
Field Sample Name:	**METHOD BLANK**	**Date Analyzed:**	**6/4/2024**
Matrix:	**Air**	**Sample Volume:**	**500ml**
Dilution Factor:	**1**	**GC/MS Column:**	**RTX-1, 0.32 mmID**

Runs with this Method Blank:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6620BFB]	06/04/2024 10:07
10 PPBV DCVS [AA6621DCVS]	06/04/2024 10:40
10 PPBV LCS [AA6622LCS]	06/04/2024 12:49
METHOD BLANK [AA6623BLK]	06/04/2024 13:18
02 PPBV RLLCS [AA6624RLLCS]	06/04/2024 14:10
E24-01875-01 [AA6625]	06/04/2024 14:41
E24-01875-03 [AA6626]	06/04/2024 15:12
E24-01875-05 [AA6627]	06/04/2024 15:44
E24-01875-02 [AA6628]	06/04/2024 16:15
E24-01875-04 [AA6629]	06/04/2024 16:47
E24-01875-06 [AA6630]	06/04/2024 17:28
E24-01875-01 [AA6631]	06/04/2024 18:00
E24-01875-21 [AA6632]	06/04/2024 18:31
E24-01875-04 [AA6633]	06/04/2024 19:03
E24-01875-03 [AA6634]	06/04/2024 19:35
E24-01875-05 [AA6635]	06/04/2024 20:08
E24-01875-02 [AA6636]	06/04/2024 20:39
10 PPBV CCCVS [AA6638CCCVS]	06/04/2024 21:43

Compound	CAS #	Reporting Limit (ppbv)	Concentration (ppbv)
Acetone	67-64-1	0.20	ND
Benzene	71-43-2	0.20	ND
Bromodichloromethane	75-27-4	0.20	ND
Bromoform	75-25-2	0.20	ND
Bromomethane	74-83-9	0.20	ND
1,3-Butadiene	106-99-0	0.20	ND
Chlorobenzene	108-90-7	0.20	ND
Chloroethane	75-00-3	0.20	ND
Chloroform	67-66-3	0.20	ND
Chloromethane	74-87-3	0.20	ND
Carbon disulfide	75-15-0	0.20	ND
Carbon tetrachloride	56-23-5	0.20	ND
Cyclohexane	110-82-7	0.20	ND
Dibromochloromethane	124-48-1	0.20	ND
1,2-Dibromoethane	106-93-4	0.17	ND
1,2-Dichlorobenzene	95-50-1	0.20	ND
1,3-Dichlorobenzene	541-73-1	0.20	ND
1,4-Dichlorobenzene	106-46-7	0.20	ND
Dichlorodifluoromethane	75-71-8	0.20	ND
1,1-Dichloroethane	75-34-3	0.20	ND
1,2-Dichloroethane	107-06-2	0.20	ND
1,1-Dichloroethene	75-35-4	0.20	ND
1,2-Dichloroethene (cis)	156-59-2	0.20	ND

Method Blank must be less than the Practical Quantitation Limit (PQL).

INTEGRATED ANALYTICAL LABORATORIES, LLC

Method Blank Report

Lab Sample Name:	**METHOD BLANK**	**Data File:**	**AA6623BLK**
Field Sample Name:	**METHOD BLANK**	**Date Analyzed:**	**6/4/2024**
Matrix:	**Air**	**Sample Volume:**	**500ml**
Dilution Factor:	**1**	**GC/MS Column:**	**RTX-1, 0.32 mmID**

Runs with this Method Blank:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6620BFB]	06/04/2024 10:07
10 PPBV DCVS [AA6621DCVS]	06/04/2024 10:40
10 PPBV LCS [AA6622LCS]	06/04/2024 12:49
METHOD BLANK [AA6623BLK]	06/04/2024 13:18
02 PPBV RLLCS [AA6624RLLCS]	06/04/2024 14:10
E24-01875-01 [AA6625]	06/04/2024 14:41
E24-01875-03 [AA6626]	06/04/2024 15:12
E24-01875-05 [AA6627]	06/04/2024 15:44
E24-01875-02 [AA6628]	06/04/2024 16:15
E24-01875-04 [AA6629]	06/04/2024 16:47
E24-01875-06 [AA6630]	06/04/2024 17:28
E24-01875-01 [AA6631]	06/04/2024 18:00
E24-01875-21 [AA6632]	06/04/2024 18:31
E24-01875-04 [AA6633]	06/04/2024 19:03
E24-01875-03 [AA6634]	06/04/2024 19:35
E24-01875-05 [AA6635]	06/04/2024 20:08
E24-01875-02 [AA6636]	06/04/2024 20:39
10 PPBV CCCVS [AA6638CCCVS]	06/04/2024 21:43

Compound	CAS #	Reporting Limit (ppbv)	Concentration (ppbv)
1,2-Dichloroethene (trans)	156-60-5	0.20	ND
1,2-Dichloropropane	78-87-5	0.20	ND
1,3-Dichloropropene (cis)	10061-01-5	0.20	ND
1,3-Dichloropropene (trans)	10061-02-6	0.19	ND
1,2-Dichlorotetrafluoroethane	76-14-2	0.20	ND
1,4-Dioxane	123-91-1	0.20	ND
Ethylbenzene	100-41-4	0.18	ND
n-Heptane	142-82-5	0.20	ND
1,3-Hexachlorobutadiene	87-68-3	0.20	ND
n-Hexane	110-54-3	0.20	ND
Methylene chloride	75-09-2	0.20	ND
Methyl ethyl ketone	78-93-3	0.20	ND
Methyl isobutyl ketone	108-10-1	0.20	ND
Methyl tert-butyl ether	1634-04-4	0.20	ND
Styrene	100-42-5	0.20	ND
Tert-butyl alcohol	75-65-0	0.20	ND
1,1,2,2-Tetrachloroethane	79-34-5	0.20	ND
Tetrachloroethene	127-18-4	0.20	ND
Toluene	108-88-3	0.20	ND
1,2,4-Trichlorobenzene	120-82-1	0.20	ND
1,1,1-Trichloroethane	71-55-6	0.17	ND
1,1,2-Trichloroethane	79-00-5	0.20	ND
Trichloroethene	79-01-6	0.17	ND

Method Blank must be less than the Practical Quantitation Limit (PQL).

INTEGRATED ANALYTICAL LABORATORIES, LLC

Method Blank Report

Lab Sample Name:	**METHOD BLANK**	**Data File:**	**AA6623BLK**
Field Sample Name:	**METHOD BLANK**	**Date Analyzed:**	**6/4/2024**
Matrix:	**Air**	**Sample Volume:**	**500ml**
Dilution Factor:	**1**	**GC/MS Column:**	**RTX-1, 0.32 mmID**

Runs with this Method Blank:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6620BFB]	06/04/2024 10:07
10 PPBV DCVS [AA6621DCVS]	06/04/2024 10:40
10 PPBV LCS [AA6622LCS]	06/04/2024 12:49
METHOD BLANK [AA6623BLK]	06/04/2024 13:18
02 PPBV RLLCS [AA6624RLLCS]	06/04/2024 14:10
E24-01875-01 [AA6625]	06/04/2024 14:41
E24-01875-03 [AA6626]	06/04/2024 15:12
E24-01875-05 [AA6627]	06/04/2024 15:44
E24-01875-02 [AA6628]	06/04/2024 16:15
E24-01875-04 [AA6629]	06/04/2024 16:47
E24-01875-06 [AA6630]	06/04/2024 17:28
E24-01875-01 [AA6631]	06/04/2024 18:00
E24-01875-21 [AA6632]	06/04/2024 18:31
E24-01875-04 [AA6633]	06/04/2024 19:03
E24-01875-03 [AA6634]	06/04/2024 19:35
E24-01875-05 [AA6635]	06/04/2024 20:08
E24-01875-02 [AA6636]	06/04/2024 20:39
10 PPBV CCCVS [AA6638CCCVS]	06/04/2024 21:43

Compound	CAS #	Reporting Limit (ppbv)	Concentration (ppbv)
Trichlorofluoromethane	75-69-4	0.20	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.20	ND
1,2,4-Trimethylbenzene	95-63-6	0.20	ND
1,3,5-Trimethylbenzene	108-67-8	0.20	ND
2,2,4-Trimethylpentane	540-84-1	0.20	ND
Vinyl bromide	593-60-2	0.20	ND
Vinyl chloride	75-01-4	0.20	ND
Xylenes (m&p)	179601-23-1	0.20	ND
Xylenes (o)	95-47-6	0.20	ND

Method Blank must be less than the Practical Quantitation Limit (PQL).

Data Path : C:\DATA\2024\06-2024\06-04-2024\
Data File : aa6623blk.D
Acq On : 4 Jun 2024 1:18 pm
Operator : jjw
Sample : Method Blank
Misc : 1127
ALS Vial : 4 Sample Multiplier: 1

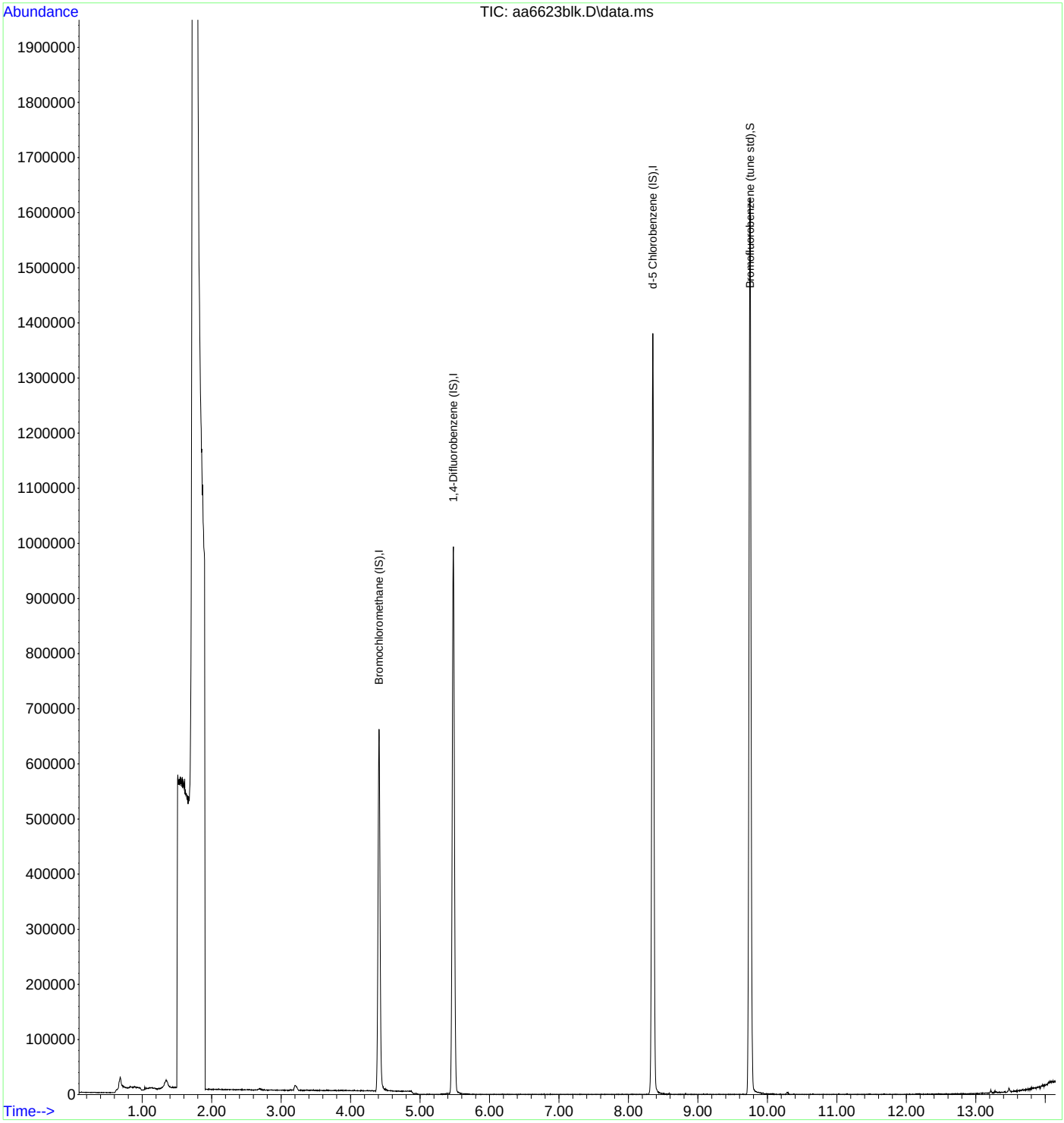
Quant Time: Jun 04 13:54:27 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.409	130	233316	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.480	114	891632	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.351	117	873802	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.750	95	744157	9.00	ppbV	0.000
Target Compounds						Qvalue

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

Data Path : C:\DATA\2024\06-2024\06-04-2024\
Data File : aa6623blk.D
Acq On : 4 Jun 2024 1:18 pm
Operator : jjw
Sample : Method Blank
Misc : 1127
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 04 13:54:27 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES, LLC

Method Blank Report

Lab Sample Name:	**METHOD BLANK**	**Data File:**	**AA6642BLK**
Field Sample Name:	**METHOD BLANK**	**Date Analyzed:**	**6/5/2024**
Matrix:	**Air**	**Sample Volume:**	**500ml**
Dilution Factor:	**1**	**GC/MS Column:**	**RTX-1, 0.32 mmID**

Runs with this Method Blank:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6639BFB]	06/05/2024 9:50
10 PPBV DCVS [AA6640DCVS]	06/05/2024 10:58
10 PPBV LCS [AA6641LCS]	06/05/2024 11:29
METHOD BLANK [AA6642BLK]	06/05/2024 12:01
02 PPBV RLLCS [AA6643RLLCS]	06/05/2024 12:34
E24-01875-06 [AA6648]	06/05/2024 16:33
10 PPBV CCCVS [AA6656CCCVS]	06/05/2024 21:19

Compound	CAS #	Reporting Limit (ppbv)	Concentration (ppbv)
Acetone	67-64-1	0.20	ND
Benzene	71-43-2	0.20	ND
Bromodichloromethane	75-27-4	0.20	ND
Bromoform	75-25-2	0.20	ND
Bromomethane	74-83-9	0.20	ND
1,3-Butadiene	106-99-0	0.20	ND
Chlorobenzene	108-90-7	0.20	ND
Chloroethane	75-00-3	0.20	ND
Chloroform	67-66-3	0.20	ND
Chloromethane	74-87-3	0.20	ND
Carbon disulfide	75-15-0	0.20	ND
Carbon tetrachloride	56-23-5	0.20	ND
Cyclohexane	110-82-7	0.20	ND
Dibromochloromethane	124-48-1	0.20	ND
1,2-Dibromoethane	106-93-4	0.17	ND
1,2-Dichlorobenzene	95-50-1	0.20	ND
1,3-Dichlorobenzene	541-73-1	0.20	ND
1,4-Dichlorobenzene	106-46-7	0.20	ND
Dichlorodifluoromethane	75-71-8	0.20	ND
1,1-Dichloroethane	75-34-3	0.20	ND
1,2-Dichloroethane	107-06-2	0.20	ND
1,1-Dichloroethene	75-35-4	0.20	ND
1,2-Dichloroethene (cis)	156-59-2	0.20	ND
1,2-Dichloroethene (trans)	156-60-5	0.20	ND
1,2-Dichloropropane	78-87-5	0.20	ND
1,3-Dichloropropene (cis)	10061-01-5	0.20	ND
1,3-Dichloropropene (trans)	10061-02-6	0.19	ND
1,2-Dichlorotetrafluoroethane	76-14-2	0.20	ND
1,4-Dioxane	123-91-1	0.20	ND
Ethylbenzene	100-41-4	0.18	ND
n-Heptane	142-82-5	0.20	ND
1,3-Hexachlorobutadiene	87-68-3	0.20	ND
n-Hexane	110-54-3	0.20	ND
Methylene chloride	75-09-2	0.20	ND
Methyl ethyl ketone	78-93-3	0.20	ND

Method Blank must be less than the Practical Quantitation Limit (PQL).

INTEGRATED ANALYTICAL LABORATORIES, LLC

Method Blank Report

Lab Sample Name:	**METHOD BLANK**	**Data File:**	**AA6642BLK**
Field Sample Name:	**METHOD BLANK**	**Date Analyzed:**	**6/5/2024**
Matrix:	**Air**	**Sample Volume:**	**500ml**
Dilution Factor:	**1**	**GC/MS Column:**	**RTX-1, 0.32 mmID**

Runs with this Method Blank:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6639BFB]	06/05/2024 9:50
10 PPBV DCVS [AA6640DCVS]	06/05/2024 10:58
10 PPBV LCS [AA6641LCS]	06/05/2024 11:29
METHOD BLANK [AA6642BLK]	06/05/2024 12:01
02 PPBV RLLCS [AA6643RLLCS]	06/05/2024 12:34
E24-01875-06 [AA6648]	06/05/2024 16:33
10 PPBV CCCVS [AA6656CCCVS]	06/05/2024 21:19

Compound	CAS #	Reporting Limit (ppbv)	Concentration (ppbv)
Methyl isobutyl ketone	108-10-1	0.20	ND
Methyl tert-butyl ether	1634-04-4	0.20	ND
Styrene	100-42-5	0.20	ND
Tert-butyl alcohol	75-65-0	0.20	ND
1,1,2,2-Tetrachloroethane	79-34-5	0.20	ND
Tetrachloroethene	127-18-4	0.20	ND
Toluene	108-88-3	0.20	ND
1,2,4-Trichlorobenzene	120-82-1	0.20	ND
1,1,1-Trichloroethane	71-55-6	0.17	ND
1,1,2-Trichloroethane	79-00-5	0.20	ND
Trichloroethene	79-01-6	0.17	ND
Trichlorofluoromethane	75-69-4	0.20	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.20	ND
1,2,4-Trimethylbenzene	95-63-6	0.20	ND
1,3,5-Trimethylbenzene	108-67-8	0.20	ND
2,2,4-Trimethylpentane	540-84-1	0.20	ND
Vinyl bromide	593-60-2	0.20	ND
Vinyl chloride	75-01-4	0.20	ND
Xylenes (m&p)	179601-23-1	0.20	ND
Xylenes (o)	95-47-6	0.20	ND

Method Blank must be less than the Practical Quantitation Limit (PQL).

Data Path : C:\DATA\2024\06-2024\06-05-2024\
Data File : aa6642blk.D
Acq On : 5 Jun 2024 12:01 pm
Operator : jjw
Sample : Method Blank
Misc : 1127
ALS Vial : 4 Sample Multiplier: 1

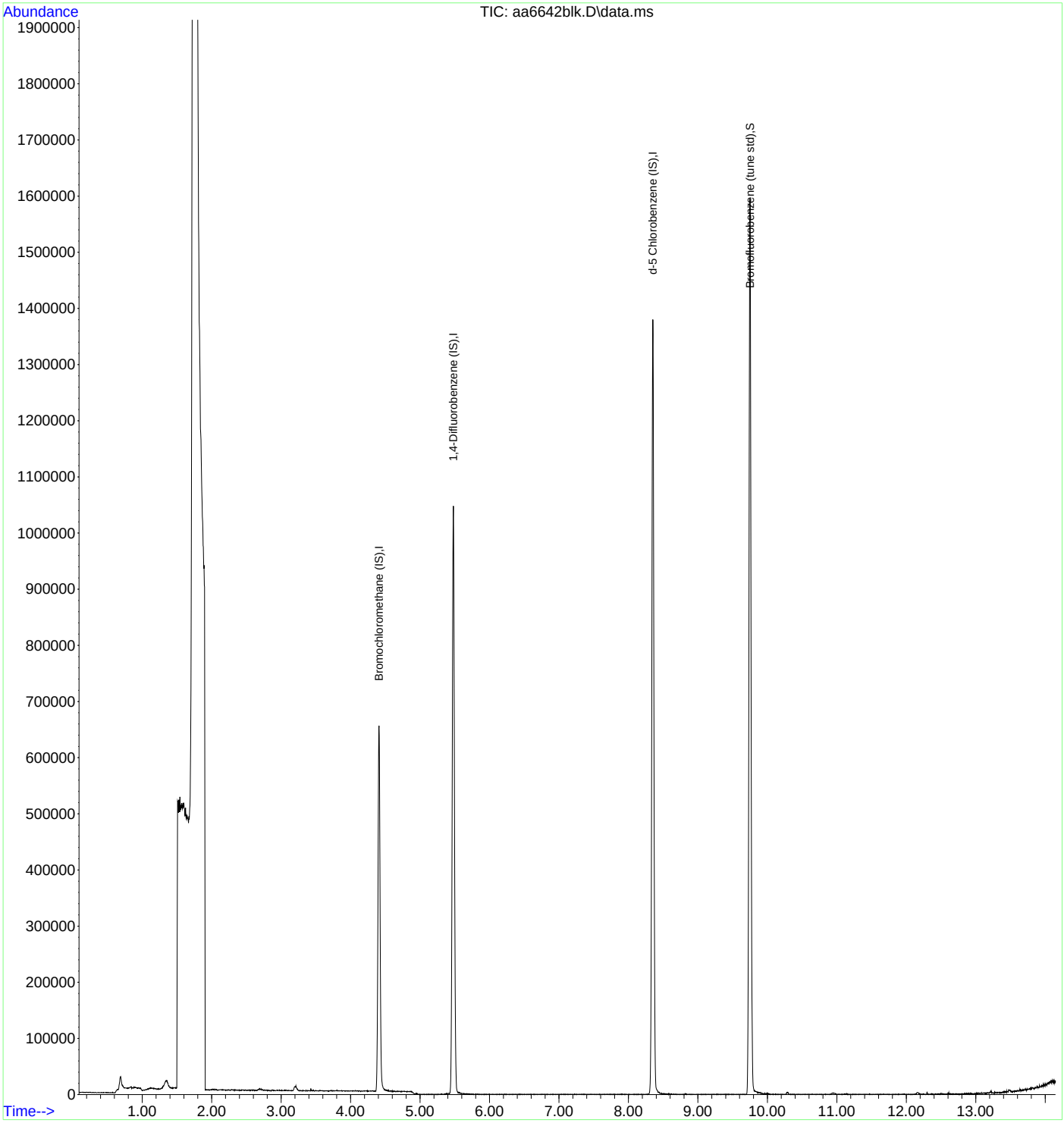
Quant Time: Jun 05 12:18:32 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.409	130	236347	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.480	114	928150	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.351	117	873534	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.749	95	734749	8.89	ppbV	0.000
Target Compounds						Qvalue

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

Data Path : C:\DATA\2024\06-2024\06-05-2024\
Data File : aa6642blk.D
Acq On : 5 Jun 2024 12:01 pm
Operator : jjw
Sample : Method Blank
Misc : 1127
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 05 12:18:32 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration



Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA6391LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 4/24/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6389BFB]	04/24/2024 9:59
10 PPBV DCVS [AA6390DCVS]	04/24/2024 10:32
10 PPBV LCS [AA6391LCS]	04/24/2024 12:12
METHOD BLANK [AA6392BLK]	04/24/2024 13:23
02 PPBV RLLCS [AA6393RLLCS]	04/24/2024 14:00
5085 [AA6394]	04/24/2024 14:58
3035A [AA6395]	04/24/2024 15:28
10 PPBV CCCVS [AA6405CCCVS]	04/24/2024 21:01

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
Acetone	67-64-1	11	100
Benzene	71-43-2	10	100
Bromodichloromethane	75-27-4	12	110
Bromoform	75-25-2	12	110
Bromomethane	74-83-9	11	100
1,3-Butadiene	106-99-0	9.8	98
Chlorobenzene	108-90-7	11	110
Chloroethane	75-00-3	11	110
Chloroform	67-66-3	11	110
Chloromethane	74-87-3	12	100
Carbon disulfide	75-15-0	12	110
Carbon tetrachloride	56-23-5	10	100
Cyclohexane	110-82-7	10	100
Dibromochloromethane	124-48-1	12	110
1,2-Dibromoethane	106-93-4	11	100
1,2-Dichlorobenzene	95-50-1	11	100
1,3-Dichlorobenzene	541-73-1	11	100
1,4-Dichlorobenzene	106-46-7	11	100
Dichlorodifluoromethane	75-71-8	11	100
1,1-Dichloroethane	75-34-3	11	100
1,2-Dichloroethane	107-06-2	11	110
1,1-Dichloroethene	75-35-4	11	100
1,2-Dichloroethene (cis)	156-59-2	11	100
1,2-Dichloroethene (trans)	156-60-5	12	110
1,2-Dichloropropane	78-87-5	11	110
1,3-Dichloropropene (cis)	10061-01-5	11	100
1,3-Dichloropropene (trans)	10061-02-6	12	120
1,2-Dichlorotetrafluoroethane	76-14-2	9.2	84
1,4-Dioxane	123-91-1	12	100
Ethylbenzene	100-41-4	11	110
n-Heptane	142-82-5	9.7	97
1,3-Hexachlorobutadiene	87-68-3	12	110

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.

*** Values outside of QC limits* Values outside of 70-130% QC limits**

INTEGRATED ANALYTICAL LABORATORIES, LLC

Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA6391LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 4/24/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6389BFB]	04/24/2024 9:59
10 PPBV DCVS [AA6390DCVS]	04/24/2024 10:32
10 PPBV LCS [AA6391LCS]	04/24/2024 12:12
METHOD BLANK [AA6392BLK]	04/24/2024 13:23
02 PPBV RLLCS [AA6393RLLCS]	04/24/2024 14:00
5085 [AA6394]	04/24/2024 14:58
3035A [AA6395]	04/24/2024 15:28
10 PPBV CCCVS [AA6405CCCVS]	04/24/2024 21:01

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
n-Hexane	110-54-3	9.9	99
Methylene chloride	75-09-2	11	100
Methyl ethyl ketone	78-93-3	10	85
Methyl isobutyl ketone	108-10-1	11	100
Methyl tert-butyl ether	1634-04-4	10	91
Styrene	100-42-5	12	110
Tert-butyl alcohol	75-65-0	10	85
1,1,2,2-Tetrachloroethane	79-34-5	11	100
Tetrachloroethene	127-18-4	11	110
Toluene	108-88-3	11	110
1,2,4-Trichlorobenzene	120-82-1	11	96
1,1,1-Trichloroethane	71-55-6	10	100
1,1,2-Trichloroethane	79-00-5	11	100
Trichloroethene	79-01-6	11	110
Trichlorofluoromethane	75-69-4	10	91
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	9.7	97
1,2,4-Trimethylbenzene	95-63-6	11	100
1,3,5-Trimethylbenzene	108-67-8	11	100
2,2,4-Trimethylpentane	540-84-1	12	120
Vinyl bromide	593-60-2	11	110
Vinyl chloride	75-01-4	12	120
Xylenes (m&p)	179601-23-1	22	110
Xylenes (o)	95-47-6	11	110

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.

*** Values outside of QC limits* Values outside of 70-130% QC limits**

Data Path : C:\DATA\2024\04-2024\04-24-2024\
Data File : aa6391lcs.D
Acq On : 24 Apr 2024 12:12 pm
Operator : jjw
Sample : 10 ppbv LCS
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 06 10:07:12 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.409	130	214918	10.00	ppbV		0.000
39) 1,4-Difluorobenzene (IS)	5.477	114	797414	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.351	117	743109	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.750	95	660008	9.90	ppbV		0.000
Target Compounds							Qvalue
2) Propene	1.464	41	267576	11.11	ppbV		98
3) Dichlorodifluoromethane	1.499	85	598617	11.08	ppbV		100
4) 1,2-Dichlorotetrafluor...	1.626	85	716334	9.19	ppbV		98
5) n-Butane	1.709	43	530758	9.98	ppbV		98
6) Chloromethane	1.774	52	40164	11.53	ppbV		98
7) Vinyl chloride	1.767	62	318413	11.90	ppbV		98
8) 1,3-Butadiene	1.774	39	299323	9.84	ppbV		98
9) Bromomethane	2.065	94	210994	10.93	ppbV		98
10) Chloroethane	2.184	64	167506	11.36	ppbV		99
11) Vinyl bromide	2.281	106	243780	10.97	ppbV		100
12) Trichlorofluoromethane	2.300	101	661573	10.49	ppbV		99
13) Ethanol	2.670	45	105142	10.67	ppbV		98
14) 1,1-Dichloroethene	2.728	61	559508	11.43	ppbV		100
15) Carbon disulfide	2.747	76	917790	11.81	ppbV		99
16) 1,1,2-Trichloro-1,2,2-...	2.770	101	603488	9.67	ppbV		97
17) Acrolein	2.985	56	119486	10.19	ppbV		99
18) Allyl chloride	3.114	76	143317	11.75	ppbV		100
19) Isopropanol	3.117	45	549244	8.80	ppbV		98
20) Methylene chloride	3.207	49	390552	11.22	ppbV		100
21) Acetone	3.220	43	529805	11.02	ppbV		100
22) trans-1,2-Dichloroethene	3.329	61	514841	12.03	ppbV		99
23) n-Pentane	3.416	43	615542	10.20	ppbV		99
24) n-Hexane	3.413	57	860424	9.95	ppbV		98
25) Methyl tert-butyl ether	3.419	73	990681	10.20	ppbV		98
26) Tert-butyl alcohol	3.477	59	705669	10.28	ppbV		100
27) 1,1-Dichloroethane	3.818	63	603683	10.50	ppbV		100
28) cis-1,2-Dichloroethene	4.249	61	460787	11.18	ppbV		100
29) Cyclohexane	4.432	56	603167	10.32	ppbV		100
30) Chloroform	4.471	83	640223	10.69	ppbV		99
31) Ethyl acetate	4.564	45	127199	10.28	ppbV		99
32) Carbon tetrachloride	4.593	117	636677	10.38	ppbV		100
33) Tetrahydrofuran	4.596	42	472399	10.49	ppbV		100
34) 1,1,1-Trichloroethane	4.644	97	597944	10.33	ppbV		99
35) Methyl ethyl ketone	4.705	43	753506	10.49	ppbV		100
36) n-Heptane	4.937	43	727277	9.69	ppbV		99
37) Benzene	4.953	78	911169	10.11	ppbV		100
38) 1,2-Dichloroethane	5.114	62	443054	10.83	ppbV		100
40) Trichloroethene	5.454	130	334374	10.51	ppbV		98
41) 2,2,4-Trimethylpentane	4.863	57	1830501	11.84	ppbV		99
42) 1,2-Dichloropropane	5.911	63	391224	11.23	ppbV		99
43) Bromodichloromethane	5.969	83	662167	11.93	ppbV		99
44) Methyl methacrylate	6.117	41	536505	10.85	ppbV		99
45) 1,4-Dioxane	6.146	88	218374	11.70	ppbV		99
46) cis-1,3-Dichloropropene	6.564	75	565593	11.49	ppbV		99
47) Toluene	6.802	91	1120701	10.91	ppbV		100
48) Methyl isobutyl ketone	7.168	43	971545	10.57	ppbV		100
49) Tetrachloroethene	7.191	166	400326	11.28	ppbV		99
50) trans-1,3-Dichloropropene	7.207	75	557568	11.90	ppbV	#	75
51) 1,1,2-Trichloroethane	7.371	97	373266	10.99	ppbV		100

Data Path : C:\DATA\2024\04-2024\04-24-2024\
Data File : aa6391lcs.D
Acq On : 24 Apr 2024 12:12 pm
Operator : jjw
Sample : 10 ppbv LCS
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

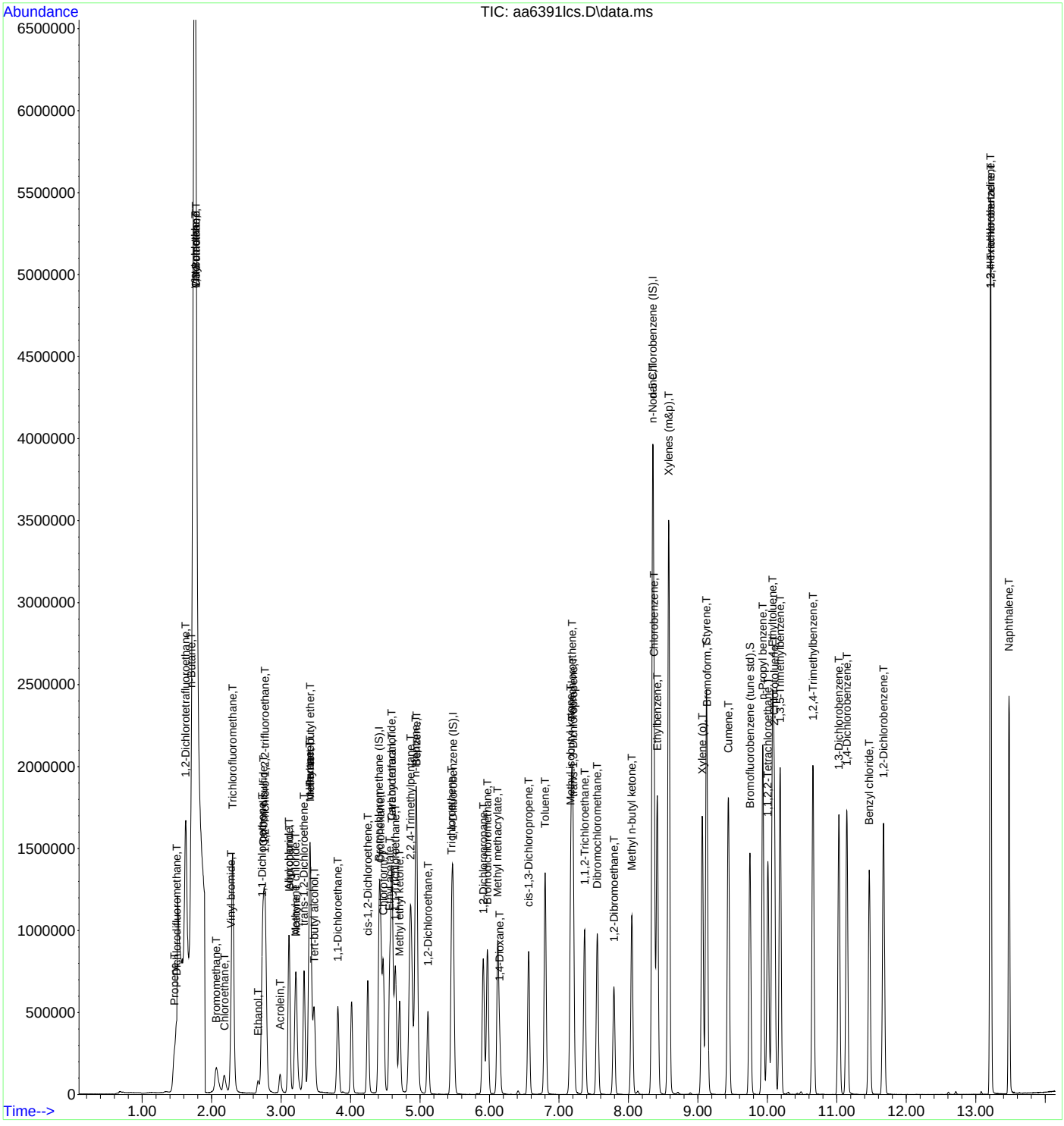
Quant Time: May 06 10:07:12 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.551	129	602738	11.58	ppbV	99
53) 1,2-Dibromoethane	7.792	107	542097	11.24	ppbV	100
54) Methyl n-butyl ketone	8.049	43	925837	11.24	ppbV	99
56) n-Nonane	8.348	43	1115592	10.82	ppbV	100
57) Chlorobenzene	8.371	112	806679	11.26	ppbV	99
58) Ethylbenzene	8.416	91	1555762	10.91	ppbV	100
59) Xylenes (m&p)	8.580	91	2383710	22.26	ppbV	100
60) Xylene (o)	9.065	91	1217997	10.72	ppbV	100
61) Styrene	9.123	104	853061	11.58	ppbV	100
62) Bromoform	9.133	173	524709	11.51	ppbV	100
63) Cumene	9.441	105	1498902	10.47	ppbV	100
65) n-Propyl benzene	9.933	91	2071139	10.68	ppbV	100
66) 1,1,2,2-Tetrachloroethane	10.007	83	954340	11.33	ppbV	100
67) 4-Ethyltoluene	10.075	105	1656821	10.75	ppbV	100
68) 2-Chlorotoluene	10.101	91	1417618	10.80	ppbV	99
69) 1,3,5-Trimethylbenzene	10.184	105	1372087	10.81	ppbV	99
70) 1,2,4-Trimethylbenzene	10.657	105	1365033	10.84	ppbV	100
71) 1,3-Dichlorobenzene	11.030	146	764682	11.09	ppbV	99
72) 1,4-Dichlorobenzene	11.146	146	779699	11.15	ppbV	100
73) Benzyl chloride	11.467	91	1203571	10.29	ppbV	100
74) 1,2-Dichlorobenzene	11.673	146	743275	10.86	ppbV	100
75) 1,3-Hexachlorobutadiene	13.213	225	436106	11.74	ppbV	100
76) 1,2,4-Trichlorobenzene	13.216	180	573072	11.29	ppbV	100
77) Naphthalene	13.480	128	1438380	10.21	ppbV	100

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

Data Path : C:\DATA\2024\04-2024\04-24-2024\
Data File : aa6391lcs.D
Acq On : 24 Apr 2024 12:12 pm
Operator : jjw
Sample : 10 ppbv LCS
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 06 10:07:12 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES, LLC

Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA6622LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 6/4/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6620BFB]	06/04/2024 10:07
10 PPBV DCVS [AA6621DCVS]	06/04/2024 10:40
10 PPBV LCS [AA6622LCS]	06/04/2024 12:49
METHOD BLANK [AA6623BLK]	06/04/2024 13:18
02 PPBV RLLCS [AA6624RLLCS]	06/04/2024 14:10
E24-01875-01 [AA6625]	06/04/2024 14:41
E24-01875-03 [AA6626]	06/04/2024 15:12
E24-01875-05 [AA6627]	06/04/2024 15:44
E24-01875-02 [AA6628]	06/04/2024 16:15
E24-01875-04 [AA6629]	06/04/2024 16:47
E24-01875-06 [AA6630]	06/04/2024 17:28
E24-01875-01 [AA6631]	06/04/2024 18:00
E24-01875-21 [AA6632]	06/04/2024 18:31
E24-01875-04 [AA6633]	06/04/2024 19:03
E24-01875-03 [AA6634]	06/04/2024 19:35
E24-01875-05 [AA6635]	06/04/2024 20:08
E24-01875-02 [AA6636]	06/04/2024 20:39
10 PPBV CCCVS [AA6638CCCVS]	06/04/2024 21:43

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
Acetone	67-64-1	13	120
Benzene	71-43-2	13	130
Bromodichloromethane	75-27-4	13	120
Bromoform	75-25-2	12	110
Bromomethane	74-83-9	11	100
1,3-Butadiene	106-99-0	12	120
Chlorobenzene	108-90-7	12	120
Chloroethane	75-00-3	12	120
Chloroform	67-66-3	14	130
Chloromethane	74-87-3	14	120
Carbon disulfide	75-15-0	12	110
Carbon tetrachloride	56-23-5	13	130
Cyclohexane	110-82-7	14	130
Dibromochloromethane	124-48-1	14	130
1,2-Dibromoethane	106-93-4	14	130
1,2-Dichlorobenzene	95-50-1	11	100
1,3-Dichlorobenzene	541-73-1	12	110
1,4-Dichlorobenzene	106-46-7	12	110
Dichlorodifluoromethane	75-71-8	12	110
1,1-Dichloroethane	75-34-3	13	120
1,2-Dichloroethane	107-06-2	14	130
1,1-Dichloroethene	75-35-4	13	120

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.
*** Values outside of QC limits* Values outside of 70-130% QC limits**

INTEGRATED ANALYTICAL LABORATORIES, LLC

Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA6622LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 6/4/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6620BFB]	06/04/2024 10:07
10 PPBV DCVS [AA6621DCVS]	06/04/2024 10:40
10 PPBV LCS [AA6622LCS]	06/04/2024 12:49
METHOD BLANK [AA6623BLK]	06/04/2024 13:18
02 PPBV RLLCS [AA6624RLLCS]	06/04/2024 14:10
E24-01875-01 [AA6625]	06/04/2024 14:41
E24-01875-03 [AA6626]	06/04/2024 15:12
E24-01875-05 [AA6627]	06/04/2024 15:44
E24-01875-02 [AA6628]	06/04/2024 16:15
E24-01875-04 [AA6629]	06/04/2024 16:47
E24-01875-06 [AA6630]	06/04/2024 17:28
E24-01875-01 [AA6631]	06/04/2024 18:00
E24-01875-21 [AA6632]	06/04/2024 18:31
E24-01875-04 [AA6633]	06/04/2024 19:03
E24-01875-03 [AA6634]	06/04/2024 19:35
E24-01875-05 [AA6635]	06/04/2024 20:08
E24-01875-02 [AA6636]	06/04/2024 20:39
10 PPBV CCCVS [AA6638CCCVS]	06/04/2024 21:43

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
1,2-Dichloroethene (cis)	156-59-2	14	130
1,2-Dichloroethene (trans)	156-60-5	14	130
1,2-Dichloropropane	78-87-5	13	130
1,3-Dichloropropene (cis)	10061-01-5	13	120
1,3-Dichloropropene (trans)	10061-02-6	15	130
1,2-Dichlorotetrafluoroethane	76-14-2	11	100
1,4-Dioxane	123-91-1	15	130
Ethylbenzene	100-41-4	12	120
n-Heptane	142-82-5	14	130
1,3-Hexachlorobutadiene	87-68-3	11	96
n-Hexane	110-54-3	13	130
Methylene chloride	75-09-2	11	100
Methyl ethyl ketone	78-93-3	14	120
Methyl isobutyl ketone	108-10-1	14	130
Methyl tert-butyl ether	1634-04-4	14	130
Styrene	100-42-5	13	120
Tert-butyl alcohol	75-65-0	15	130
1,1,2,2-Tetrachloroethane	79-34-5	12	110
Tetrachloroethene	127-18-4	14	130
Toluene	108-88-3	14	130
1,2,4-Trichlorobenzene	120-82-1	11	96
1,1,1-Trichloroethane	71-55-6	13	130

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.
*** Values outside of QC limits* Values outside of 70-130% QC limits**

INTEGRATED ANALYTICAL LABORATORIES, LLC

Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA6622LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 6/4/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6620BFB]	06/04/2024 10:07
10 PPBV DCVS [AA6621DCVS]	06/04/2024 10:40
10 PPBV LCS [AA6622LCS]	06/04/2024 12:49
METHOD BLANK [AA6623BLK]	06/04/2024 13:18
02 PPBV RLLCS [AA6624RLLCS]	06/04/2024 14:10
E24-01875-01 [AA6625]	06/04/2024 14:41
E24-01875-03 [AA6626]	06/04/2024 15:12
E24-01875-05 [AA6627]	06/04/2024 15:44
E24-01875-02 [AA6628]	06/04/2024 16:15
E24-01875-04 [AA6629]	06/04/2024 16:47
E24-01875-06 [AA6630]	06/04/2024 17:28
E24-01875-01 [AA6631]	06/04/2024 18:00
E24-01875-21 [AA6632]	06/04/2024 18:31
E24-01875-04 [AA6633]	06/04/2024 19:03
E24-01875-03 [AA6634]	06/04/2024 19:35
E24-01875-05 [AA6635]	06/04/2024 20:08
E24-01875-02 [AA6636]	06/04/2024 20:39
10 PPBV CCCVS [AA6638CCCVS]	06/04/2024 21:43

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
1,1,2-Trichloroethane	79-00-5	14	130
Trichloroethene	79-01-6	11	110
Trichlorofluoromethane	75-69-4	14	130
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	13	130
1,2,4-Trimethylbenzene	95-63-6	12	110
1,3,5-Trimethylbenzene	108-67-8	12	110
2,2,4-Trimethylpentane	540-84-1	10	100
Vinyl bromide	593-60-2	11	110
Vinyl chloride	75-01-4	12	120
Xylenes (m&p)	179601-23-1	24	120
Xylenes (o)	95-47-6	12	120

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.

*** Values outside of QC limits* Values outside of 70-130% QC limits**

Data Path : C:\DATA\2024\06-2024\06-04-2024\
Data File : aa6622lcs.D
Acq On : 4 Jun 2024 12:49 pm
Operator : jjw
Sample : 10 ppbv LCS
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 04 13:10:33 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.428	130	261336	10.00	ppbV		0.012
39) 1,4-Difluorobenzene (IS)	5.489	114	1298743	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.354	117	1525234	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.753	95	1471527	10.20	ppbV		0.000
Target Compounds							Qvalue
2) Propene	1.499	41	286185	10.43	ppbV		97
3) Dichlorodifluoromethane	1.543	85	919765	12.29	ppbV		99
4) 1,2-Dichlorotetrafluor...	1.663	85	1119530	10.67	ppbV		100
5) n-Butane	1.739	43	692984	12.23	ppbV		97
6) Chloromethane	1.801	52	64835	13.90	ppbV		4
7) Vinyl chloride	1.794	62	399903	11.61	ppbV		99
8) 1,3-Butadiene	1.804	39	379069	11.87	ppbV		99
9) Bromomethane	2.100	94	293092	10.89	ppbV		99
10) Chloroethane	2.210	64	229677	11.73	ppbV		100
11) Vinyl bromide	2.309	106	368289	11.28	ppbV		98
12) Trichlorofluoromethane	2.332	101	1164564	13.52	ppbV		99
13) Ethanol	2.695	45	152471	11.34	ppbV	#	87
14) 1,1-Dichloroethene	2.753	61	867075	13.08	ppbV		100
15) Carbon disulfide	2.775	76	1354007	12.26	ppbV		100
16) 1,1,2-Trichloro-1,2,2-...	2.798	101	1058704	13.00	ppbV		100
17) Acrolein	3.010	56	174395	11.82	ppbV		100
18) Allyl chloride	3.136	76	225342	13.28	ppbV		100
19) Isopropanol	3.139	45	856389	11.61	ppbV		100
20) Methylene chloride	3.226	49	540862	11.46	ppbV		99
21) Acetone	3.242	43	743293	12.68	ppbV		100
22) 1,2-Dichloroethene (tr...	3.351	61	860175	14.35	ppbV		99
23) n-Pentane	3.431	43	853545	11.92	ppbV		97
24) n-Hexane	3.435	57	1350186	13.45	ppbV		99
25) Methyl tert-butyl ether	3.438	73	1624140	13.57	ppbV		98
26) Tert-butyl alcohol	3.496	59	1206515	14.75	ppbV		100
27) 1,1-Dichloroethane	3.837	63	994475	13.37	ppbV		100
28) 1,2-Dichloroethene (cis)	4.264	61	762320	14.12	ppbV		100
29) Cyclohexane	4.444	56	917487	13.70	ppbV		98
30) Chloroform	4.486	83	1158127	13.88	ppbV		100
31) Ethyl acetate	4.576	45	204713	14.40	ppbV		100
32) Carbon tetrachloride	4.608	117	1115940	13.11	ppbV		99
33) Tetrahydrofuran	4.611	42	726716	14.49	ppbV		99
34) 1,1,1-Trichloroethane	4.660	97	1044819	13.29	ppbV		100
35) Methyl ethyl ketone	4.717	43	1195716	14.39	ppbV		100
36) n-Heptane	4.949	43	1127937	14.36	ppbV		100
37) Benzene	4.965	78	1591660	13.38	ppbV		99
38) 1,2-Dichloroethane	5.126	62	757508	13.92	ppbV		100
40) Trichloroethene	5.467	130	645569	10.99	ppbV		100
41) 2,2,4-Trimethylpentane	4.878	57	2315852	10.01	ppbV		100
42) 1,2-Dichloropropane	5.920	63	692800	12.85	ppbV		100
43) Bromodichloromethane	5.978	83	1215206	12.95	ppbV		98
44) Methyl methacrylate	6.126	41	962325	14.30	ppbV		99
45) 1,4-Dioxane	6.152	88	447482	14.60	ppbV		100
46) cis-1,3-Dichloropropene	6.569	75	1066628	13.39	ppbV		100
47) Toluene	6.807	91	2338566	14.06	ppbV		100
48) Methyl isobutyl ketone	7.174	43	1734866	14.27	ppbV		100
49) Tetrachloroethene	7.193	166	906701	14.40	ppbV		100
50) trans-1,3-Dichloropropene	7.213	75	1123670	14.68	ppbV		98
51) 1,1,2-Trichloroethane	7.373	97	799921	13.93	ppbV		100

Data Path : C:\DATA\2024\06-2024\06-04-2024\
Data File : aa6622lcs.D
Acq On : 4 Jun 2024 12:49 pm
Operator : jjw
Sample : 10 ppbv LCS
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

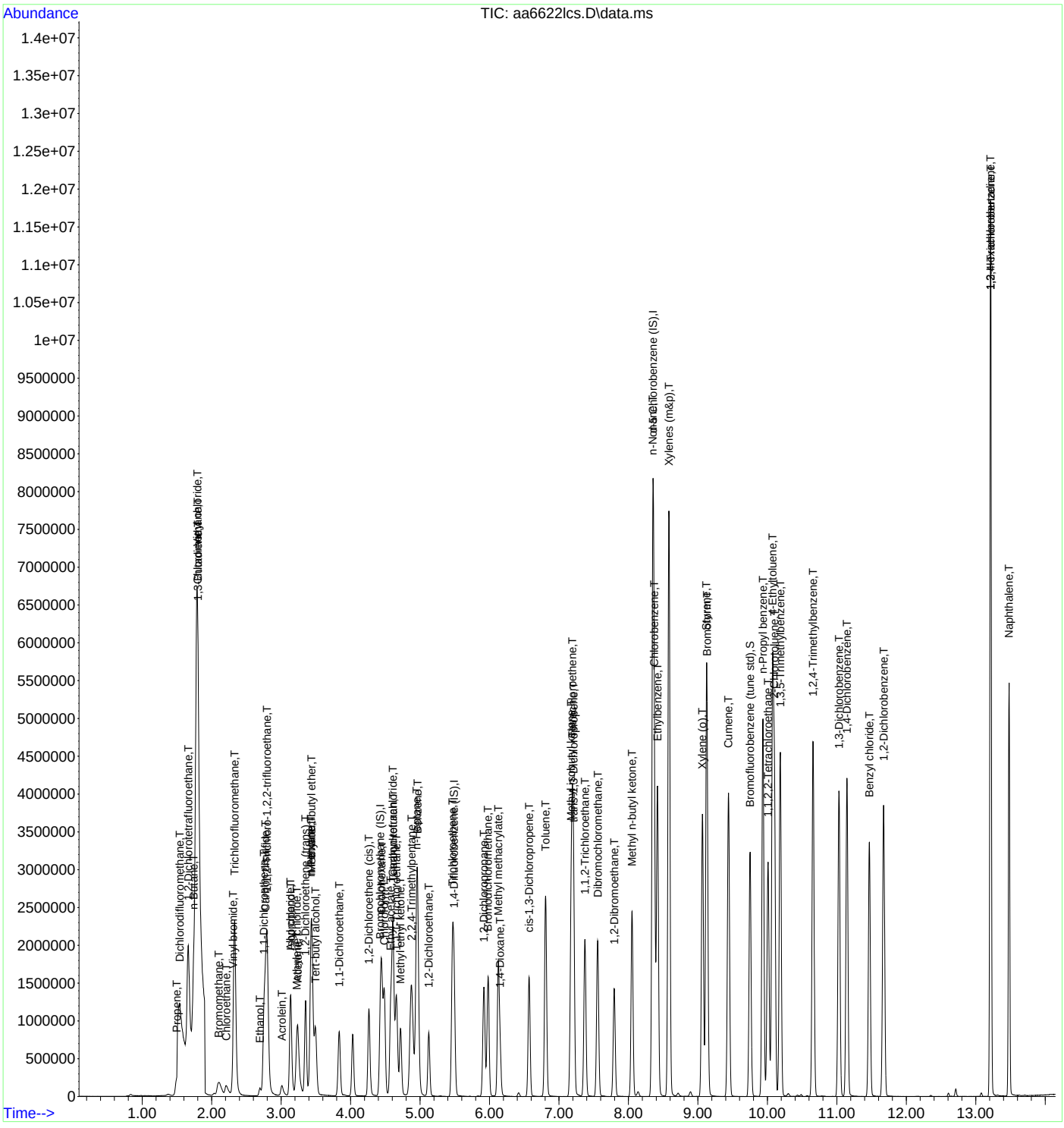
Quant Time: Jun 04 13:10:33 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.560	129	1315698	14.37	ppbV	99
53) 1,2-Dibromoethane	7.798	107	1180839	14.34	ppbV	100
54) Methyl n-butyl ketone	8.052	43	1939046	17.03	ppbV	100
56) n-Nonane	8.351	43	2210254	12.40	ppbV	99
57) Chlorobenzene	8.373	112	1835917	11.62	ppbV	98
58) Ethylbenzene	8.418	91	3622089	12.05	ppbV	100
59) Xylenes (m&p)	8.582	91	5509498	24.38	ppbV	100
60) Xylene (o)	9.065	91	2755219	11.58	ppbV	99
61) Styrene	9.122	104	2055720	12.99	ppbV	100
62) Bromoform	9.132	173	1293549	12.18	ppbV	100
63) Cumene	9.441	105	3430721	11.30	ppbV	100
65) n-Propyl benzene	9.936	91	4984806	11.94	ppbV	99
66) 1,1,2,2-Tetrachloroethane	10.010	83	2088472	11.92	ppbV	100
67) 4-Ethyltoluene	10.074	105	4170141	12.25	ppbV	100
68) 2-Chlorotoluene	10.100	91	3289175	11.61	ppbV	100
69) 1,3,5-Trimethylbenzene	10.187	105	3230139	11.67	ppbV	100
70) 1,2,4-Trimethylbenzene	10.656	105	3308303	11.91	ppbV	99
71) 1,3-Dichlorobenzene	11.032	146	1963977	11.65	ppbV	100
72) 1,4-Dichlorobenzene	11.145	146	1991376	11.68	ppbV	100
73) Benzyl chloride	11.470	91	3035279	11.08	ppbV	100
74) 1,2-Dichlorobenzene	11.675	146	1846461	11.39	ppbV	100
75) 1,3-Hexachlorobutadiene	13.212	225	1001383	10.73	ppbV	100
76) 1,2,4-Trichlorobenzene	13.216	180	1368901	10.89	ppbV	100
77) Naphthalene	13.479	128	3223970	9.08	ppbV	100

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

Data Path : C:\DATA\2024\06-2024\06-04-2024\
Data File : aa6622lcs.D
Acq On : 4 Jun 2024 12:49 pm
Operator : jjw
Sample : 10 ppbv LCS
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 04 13:10:33 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES, LLC

Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA6641LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 6/5/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6639BFB]	06/05/2024 9:50
10 PPBV DCVS [AA6640DCVS]	06/05/2024 10:58
10 PPBV LCS [AA6641LCS]	06/05/2024 11:29
METHOD BLANK [AA6642BLK]	06/05/2024 12:01
02 PPBV RLLCS [AA6643RLLCS]	06/05/2024 12:34
E24-01875-06 [AA6648]	06/05/2024 16:33
10 PPBV CCCVS [AA6656CCCVS]	06/05/2024 21:19

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
Acetone	67-64-1	11	100
Benzene	71-43-2	11	110
Bromodichloromethane	75-27-4	11	100
Bromoform	75-25-2	10	91
Bromomethane	74-83-9	11	100
1,3-Butadiene	106-99-0	10	100
Chlorobenzene	108-90-7	10	100
Chloroethane	75-00-3	11	110
Chloroform	67-66-3	11	110
Chloromethane	74-87-3	13	110
Carbon disulfide	75-15-0	11	100
Carbon tetrachloride	56-23-5	10	100
Cyclohexane	110-82-7	11	110
Dibromochloromethane	124-48-1	10	91
1,2-Dibromoethane	106-93-4	10.0	91
1,2-Dichlorobenzene	95-50-1	9.3	85
1,3-Dichlorobenzene	541-73-1	9.4	85
1,4-Dichlorobenzene	106-46-7	9.4	85
Dichlorodifluoromethane	75-71-8	11	100
1,1-Dichloroethane	75-34-3	11	100
1,2-Dichloroethane	107-06-2	11	110
1,1-Dichloroethene	75-35-4	11	100
1,2-Dichloroethene (cis)	156-59-2	11	100
1,2-Dichloroethene (trans)	156-60-5	11	100
1,2-Dichloropropane	78-87-5	10	100
1,3-Dichloropropene (cis)	10061-01-5	10	91
1,3-Dichloropropene (trans)	10061-02-6	11	110
1,2-Dichlorotetrafluoroethane	76-14-2	9.4	85
1,4-Dioxane	123-91-1	11	92
Ethylbenzene	100-41-4	9.7	97
n-Heptane	142-82-5	10	100
1,3-Hexachlorobutadiene	87-68-3	9.6	84
n-Hexane	110-54-3	11	110

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.

*** Values outside of QC limits* Values outside of 70-130% QC limits**

Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA6641LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 6/5/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6639BFB]	06/05/2024 9:50
10 PPBV DCVS [AA6640DCVS]	06/05/2024 10:58
10 PPBV LCS [AA6641LCS]	06/05/2024 11:29
METHOD BLANK [AA6642BLK]	06/05/2024 12:01
02 PPBV RLLCS [AA6643RLLCS]	06/05/2024 12:34
E24-01875-06 [AA6648]	06/05/2024 16:33
10 PPBV CCCVS [AA6656CCCVS]	06/05/2024 21:19

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
Methylene chloride	75-09-2	11	100
Methyl ethyl ketone	78-93-3	11	93
Methyl isobutyl ketone	108-10-1	9.8	89
Methyl tert-butyl ether	1634-04-4	10	91
Styrene	100-42-5	10	91
Tert-butyl alcohol	75-65-0	11	93
1,1,2,2-Tetrachloroethane	79-34-5	9.8	89
Tetrachloroethene	127-18-4	10	100
Toluene	108-88-3	10	100
1,2,4-Trichlorobenzene	120-82-1	9.6	84
1,1,1-Trichloroethane	71-55-6	10	100
1,1,2-Trichloroethane	79-00-5	9.9	90
Trichloroethene	79-01-6	9.4	94
Trichlorofluoromethane	75-69-4	11	100
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	10	100
1,2,4-Trimethylbenzene	95-63-6	9.5	86
1,3,5-Trimethylbenzene	108-67-8	9.6	87
2,2,4-Trimethylpentane	540-84-1	11	110
Vinyl bromide	593-60-2	11	110
Vinyl chloride	75-01-4	11	110
Xylenes (m&p)	179601-23-1	20	100
Xylenes (o)	95-47-6	9.7	97

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.

*** Values outside of QC limits* Values outside of 70-130% QC limits**

Data Path : C:\DATA\2024\06-2024\06-05-2024\
Data File : aa6641lcs.D
Acq On : 5 Jun 2024 11:29 am
Operator : jjw
Sample : 10 ppbv LCS
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 05 11:53:02 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.415	130	227904	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.483	114	1010013	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.351	117	911700	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.749	95	770927	8.94	ppbV	0.000
Target Compounds						Qvalue
2) Propene	1.470	41	250732	10.48	ppbV	96
3) Dichlorodifluoromethane	1.509	85	693143	10.62	ppbV	100
4) 1,2-Dichlorotetrafluor...	1.632	85	861550	9.42	ppbV	100
5) n-Butane	1.711	43	515077	10.43	ppbV	97
6) Chloromethane	1.770	52	51066	12.55	ppbV	95
7) Vinyl chloride	1.773	62	328631	10.94	ppbV	100
8) 1,3-Butadiene	1.780	39	285398	10.25	ppbV	97
9) Bromomethane	2.078	94	258762	11.02	ppbV	99
10) Chloroethane	2.187	64	183554	10.75	ppbV	99
11) Vinyl bromide	2.287	106	304281	10.69	ppbV	99
12) Trichlorofluoromethane	2.303	101	821687	10.94	ppbV	100
13) Ethanol	2.673	45	127837	10.90	ppbV	88
14) 1,1-Dichloroethene	2.730	61	621704	10.75	ppbV	100
15) Carbon disulfide	2.753	76	1055286	10.96	ppbV	100
16) 1,1,2-Trichloro-1,2,2-...	2.772	101	731001	10.30	ppbV	98
17) Acrolein	2.991	56	127588	9.92	ppbV	100
18) Allyl chloride	3.119	76	172023	11.63	ppbV	100
19) Isopropanol	3.119	45	601381	9.35	ppbV	100
20) Methylene chloride	3.209	49	436959	10.61	ppbV	100
21) Acetone	3.222	43	548967	10.73	ppbV	100
22) 1,2-Dichloroethene (tr...	3.335	61	583057	11.15	ppbV	99
23) n-Pentane	3.415	43	635645	10.18	ppbV	98
24) n-Hexane	3.415	57	930344	10.63	ppbV	99
25) Methyl tert-butyl ether	3.422	73	1094636	10.49	ppbV	100
26) Tert-butyl alcohol	3.476	59	798993	11.20	ppbV	100
27) 1,1-Dichloroethane	3.820	63	687535	10.60	ppbV	100
28) 1,2-Dichloroethene (cis)	4.251	61	523386	11.11	ppbV	99
29) Cyclohexane	4.431	56	623362	10.67	ppbV	99
30) Chloroform	4.473	83	797217	10.95	ppbV	99
31) Ethyl acetate	4.563	45	131239	10.59	ppbV	100
32) Carbon tetrachloride	4.599	117	777582	10.47	ppbV	99
33) Tetrahydrofuran	4.599	42	486080	11.11	ppbV	99
34) 1,1,1-Trichloroethane	4.647	97	706426	10.31	ppbV	99
35) Methyl ethyl ketone	4.708	43	781657	10.78	ppbV	98
36) n-Heptane	4.946	43	701471	10.24	ppbV	100
37) Benzene	4.955	78	1089747	10.50	ppbV	100
38) 1,2-Dichloroethane	5.116	62	513149	10.81	ppbV	100
40) Trichloroethene	5.457	130	431425	9.45	ppbV	99
41) 2,2,4-Trimethylpentane	4.865	57	1971980	10.97	ppbV	97
42) 1,2-Dichloropropane	5.914	63	425905	10.16	ppbV	100
43) Bromodichloromethane	5.975	83	795032	10.89	ppbV	99
44) Methyl methacrylate	6.119	41	539520	10.31	ppbV	98
45) 1,4-Dioxane	6.145	88	263409	11.05	ppbV	98
46) cis-1,3-Dichloropropene	6.566	75	642803	10.38	ppbV	100
47) Toluene	6.804	91	1300673	10.06	ppbV	100
48) Methyl isobutyl ketone	7.171	43	929614	9.83	ppbV	100
49) Tetrachloroethene	7.190	166	512985	10.47	ppbV	99
50) trans-1,3-Dichloropropene	7.209	75	629178	10.57	ppbV	97
51) 1,1,2-Trichloroethane	7.370	97	441361	9.88	ppbV	100

Data Path : C:\DATA\2024\06-2024\06-05-2024\
Data File : aa6641lcs.D
Acq On : 5 Jun 2024 11:29 am
Operator : jjw
Sample : 10 ppbv LCS
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

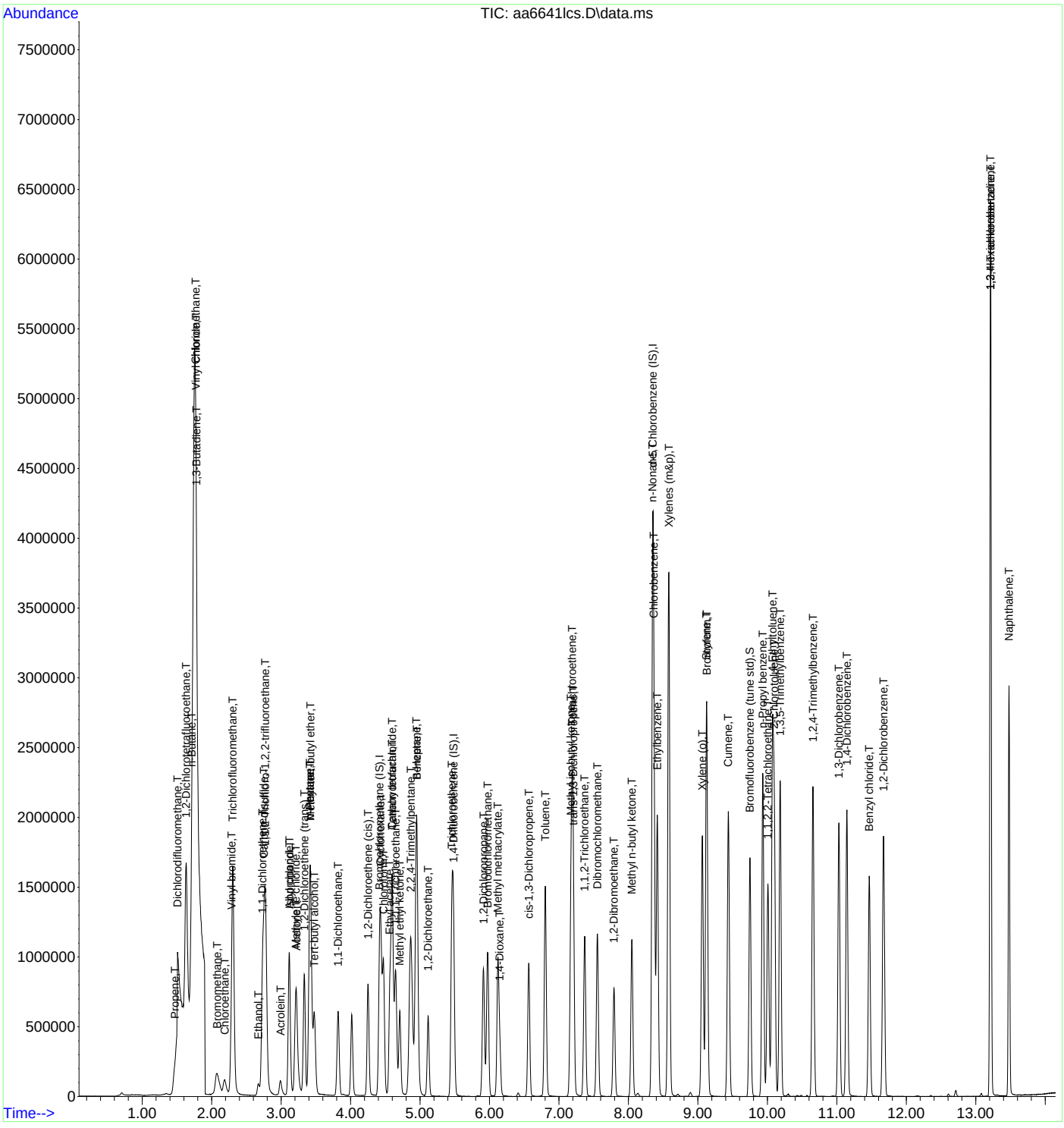
Quant Time: Jun 05 11:53:02 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.553	129	736311	10.34	ppbV	100
53) 1,2-Dibromoethane	7.791	107	640282	10.00	ppbV	99
54) Methyl n-butyl ketone	8.049	43	891288	10.07	ppbV	99
56) n-Nonane	8.348	43	1009425	9.47	ppbV	99
57) Chlorobenzene	8.367	112	953454	10.10	ppbV	99
58) Ethylbenzene	8.415	91	1749432	9.73	ppbV	100
59) Xylenes (m&p)	8.582	91	2695014	19.95	ppbV	100
60) Xylene (o)	9.065	91	1376550	9.68	ppbV	99
61) Styrene	9.122	104	988100	10.45	ppbV	99
62) Bromoform	9.129	173	662807	10.45	ppbV	100
63) Cumene	9.438	105	1710220	9.43	ppbV	100
65) n-Propyl benzene	9.933	91	2303751	9.23	ppbV	100
66) 1,1,2,2-Tetrachloroethane	10.007	83	1028264	9.82	ppbV	99
67) 4-Ethyltoluene	10.074	105	1908136	9.38	ppbV	100
68) 2-Chlorotoluene	10.097	91	1601282	9.46	ppbV	100
69) 1,3,5-Trimethylbenzene	10.184	105	1580588	9.55	ppbV	100
70) 1,2,4-Trimethylbenzene	10.656	105	1580763	9.52	ppbV	100
71) 1,3-Dichlorobenzene	11.029	146	945799	9.39	ppbV	99
72) 1,4-Dichlorobenzene	11.145	146	956380	9.39	ppbV	99
73) Benzyl chloride	11.466	91	1433032	8.75	ppbV	100
74) 1,2-Dichlorobenzene	11.672	146	905383	9.34	ppbV	100
75) 1,3-Hexachlorobutadiene	13.212	225	536081	9.61	ppbV	100
76) 1,2,4-Trichlorobenzene	13.212	180	718816	9.57	ppbV	99
77) Naphthalene	13.479	128	1729456	8.15	ppbV	100

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

Data Path : C:\DATA\2024\06-2024\06-05-2024\
Data File : aa6641lcs.D
Acq On : 5 Jun 2024 11:29 am
Operator : jjw
Sample : 10 ppbv LCS
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 05 11:53:02 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration



Analysis: Volatile Organic Compounds by EPA Method TO-15
Laboratory Sample Duplicate Report

SDG Number: E24-01112
IAL Sample ID: E24-01112-12
Matrix: Air
Summa ID: 2155

Date Received: 3/28/24
Date Analyzed: 4/23/24,4/23/24
Lab Data File#: AA6383,AA6384
Dilution Factor: 1
Injection Volume: 500ml
GC/MS Column: RTX-1, 0.32 mmID

Compound	CAS #	Sample E24-01112-12 Concentration Reported ppbv	Q	Sample Dup E24-01112-32 Concentration Reported ppbv	Q	Reporting Limits ppbv	RPD
Acetone	67-64-1	**5.6**		**6.4**		0.40	**-13.33%**
Allyl Chloride	107-05-1	0.40	U	0.40	U	0.40	0.00%
Benzene	71-43-2	0.20	U	0.20	U	0.20	0.00%
Bromodichloromethane	75-27-4	0.40	U	0.40	U	0.40	0.00%
Bromoform	75-25-2	0.40	U	0.40	U	0.40	0.00%
Bromomethane	74-83-9	0.40	U	0.40	U	0.40	0.00%
1,3-Butadiene	106-99-0	0.40	U	0.40	U	0.40	0.00%
Chlorobenzene	108-90-7	0.40	U	0.40	U	0.40	0.00%
Chloroethane	75-00-3	0.40	U	0.40	U	0.40	0.00%
Chloroform	67-66-3	0.40	U	0.40	U	0.40	0.00%
Chloromethane	74-87-3	0.40	U	0.40	U	0.40	0.00%
Carbon disulfide	75-15-0	0.40	U	0.40	U	0.40	0.00%
Carbon tetrachloride	56-23-5	0.20	U	0.20	U	0.20	0.00%
2-Chlorotoluene	95-49-8	0.40	U	0.40	U	0.40	0.00%
Cyclohexane	110-82-7	0.40	U	0.40	U	0.40	0.00%
Dibromochloromethane	124-48-1	0.40	U	0.40	U	0.40	0.00%
1,2-Dibromoethane	106-93-4	0.20	U	0.20	U	0.20	0.00%
1,2-Dichlorobenzene	95-50-1	0.40	U	0.40	U	0.40	0.00%
1,3-Dichlorobenzene	541-73-1	0.40	U	0.40	U	0.40	0.00%
1,4-Dichlorobenzene	106-46-7	0.40	U	0.40	U	0.40	0.00%
Dichlorodifluoromethane	75-71-8	0.40	U	0.40	U	0.40	0.00%
1,1-Dichloroethane	75-34-3	0.40	U	0.40	U	0.40	0.00%
1,2-Dichloroethane	107-06-2	0.40	U	0.40	U	0.40	0.00%
1,1-Dichloroethene	75-35-4	0.40	U	0.40	U	0.40	0.00%
1,2-Dichloroethene (cis)	156-59-2	0.40	U	0.40	U	0.40	0.00%
1,2-Dichloroethene (trans)	156-60-5	0.40	U	0.40	U	0.40	0.00%
1,2-Dichloropropane	78-87-5	0.20	U	0.20	U	0.20	0.00%
1,3-Dichloropropene (cis)	10061-01-5	0.20	U	0.20	U	0.20	0.00%
1,3-Dichloropropene (trans)	10061-02-6	0.20	U	0.20	U	0.20	0.00%
1,2-Dichlorotetrafluoroethane	76-14-2	0.40	U	0.40	U	0.40	0.00%
Ethylbenzene	100-41-4	0.20	U	0.20	U	0.20	0.00%
4-Ethyltoluene	622-96-8	0.40	U	0.40	U	0.40	0.00%
n-Heptane	142-82-5	0.40	U	0.40	U	0.40	0.00%
1,3-Hexachlorobutadiene	87-68-3	0.40	U	0.40	U	0.40	0.00%
n-Hexane	110-54-3	0.40	U	0.40	U	0.40	0.00%
Methylene chloride	75-09-2	0.40	U	0.40	U	0.40	0.00%
Methyl ethyl ketone	78-93-3	0.40	U	0.40	U	0.40	0.00%
Methyl isobutyl ketone	108-10-1	0.40	U	0.40	U	0.40	0.00%

Qualifiers:
E=Concentration exceeds upper level of calibration range for instrument.
D=Extra dilution required for this compound. X=Duplicate samples do not met RPD criteria.
U=Compound ND or under reporting limit.

Analysis: Volatile Organic Compounds by EPA Method TO-15
Laboratory Sample Duplicate Report

SDG Number: E24-01112
IAL Sample ID: E24-01112-12
Matrix: Air
Summa ID: 2155

Date Received: 3/28/24
Date Analyzed: 4/23/24,4/23/24
Lab Data File#: AA6383,AA6384
Dilution Factor: 1
Injection Volume: 500ml
GC/MS Column: RTX-1, 0.32 mmID

Compound	CAS #	Sample E24-01112-12 Concentration Reported ppbv	Q	Sample Dup E24-01112-32 Concentration Reported ppbv	Q	Reporting Limits ppbv	RPD
Methyl tert-butyl ether	1634-04-4	0.40	U	0.40	U	0.40	0.00%
Styrene	100-42-5	0.40	U	0.40	U	0.40	0.00%
Tert-butyl alcohol	75-65-0	0.40	U	0.40	U	0.40	0.00%
1,1,2,2-Tetrachloroethane	79-34-5	0.40	U	0.40	U	0.40	0.00%
Tetrachloroethene	127-18-4	0.40	U	0.40	U	0.40	0.00%
Toluene	108-88-3	0.40	U	0.40	U	0.40	0.00%
1,2,4-Trichlorobenzene	120-82-1	0.40	U	0.40	U	0.40	0.00%
1,1,1-Trichloroethane	71-55-6	0.40	U	0.40	U	0.40	0.00%
1,1,2-Trichloroethane	79-00-5	0.40	U	0.40	U	0.40	0.00%
Trichloroethene	79-01-6	0.20	U	0.20	U	0.20	0.00%
Trichlorofluoromethane	75-69-4	0.40	U	0.40	U	0.40	0.00%
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.40	U	0.40	U	0.40	0.00%
1,2,4-Trimethylbenzene	95-63-6	0.40	U	0.40	U	0.40	0.00%
1,3,5-Trimethylbenzene	108-67-8	0.40	U	0.40	U	0.40	0.00%
2,2,4-Trimethylpentane	540-84-1	0.40	U	0.40	U	0.40	0.00%
Vinyl bromide	593-60-2	0.40	U	0.40	U	0.40	0.00%
Vinyl chloride	75-01-4	0.20	U	0.20	U	0.20	0.00%
Xylenes (m&p)	179601-23-1	0.40	U	0.40	U	0.40	0.00%
Xylenes (o)	95-47-6	0.40	U	0.40	U	0.40	0.00%

RPD must be <25% for all laboratory duplicate samples. Laboratory duplicate samples are run once daily.
NC = The RPD could not be calculated since the compound was only detected in either the parent or duplicate sample.

Qualifiers:
E=Concentration exceeds upper level of calibration range for instrument.
D=Extra dilution required for this compound. X=Duplicate samples do not met RPD criteria.
U=Compound ND or under reporting limit.

Data Path : C:\DATA\2024\04-2024\04-23-2024\
Data File : aa6383.D
Acq On : 23 Apr 2024 6:29 pm
Operator : jjw
Sample : E24-01112-12
Misc : 2155, 500cc
ALS Vial : 27 Sample Multiplier: 1

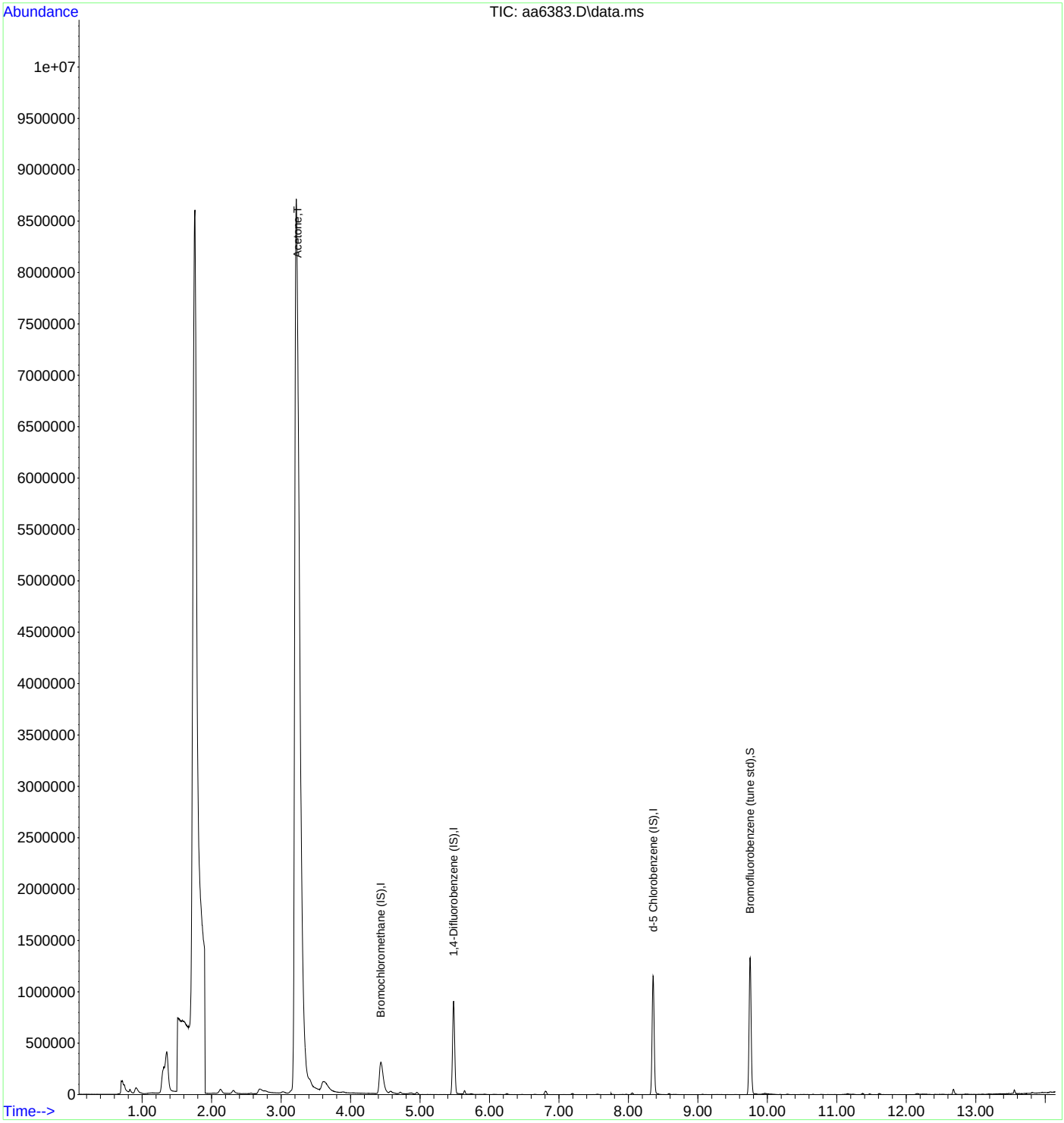
Quant Time: Apr 24 09:45:45 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

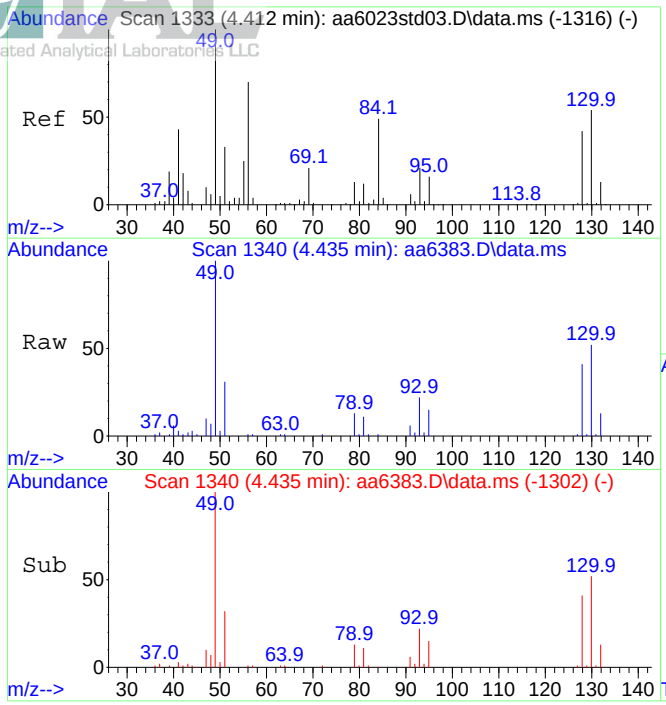
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.435	130	181337	10.00	ppbV	0.023
39) 1,4-Difluorobenzene (IS)	5.483	114	766698	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.358	117	693321	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.750	95	612585	9.85	ppbV	0.000
Target Compounds						Qvalue
21) Acetone	3.236	43	228968	5.64	ppbV	91

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

Data Path : C:\DATA\2024\04-2024\04-23-2024\
Data File : aa6383.D
Acq On : 23 Apr 2024 6:29 pm
Operator : jjw
Sample : E24-01112-12
Misc : 2155, 500cc
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Apr 24 09:45:45 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

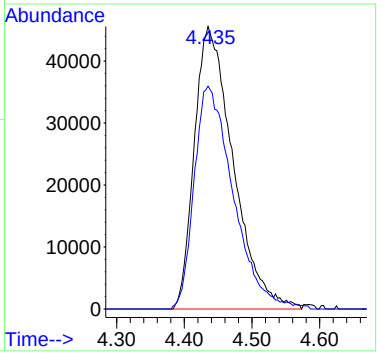


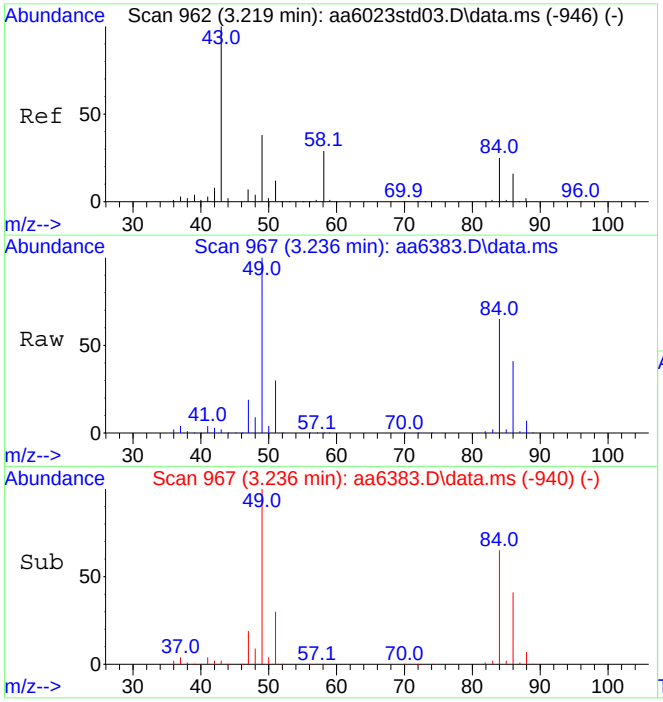


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.435 min Scan# 1340
Delta R.T. 0.023 min
Lab File: aa6383.D
Acq: 23 Apr 2024 6:29 pm

Tgt Ion:130 Resp: 181337

Ion	Ratio	Lower	Upper
130	100		
128	79.4	57.8	97.8

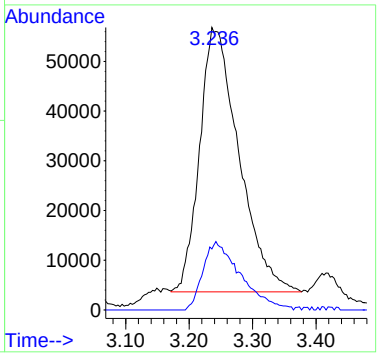


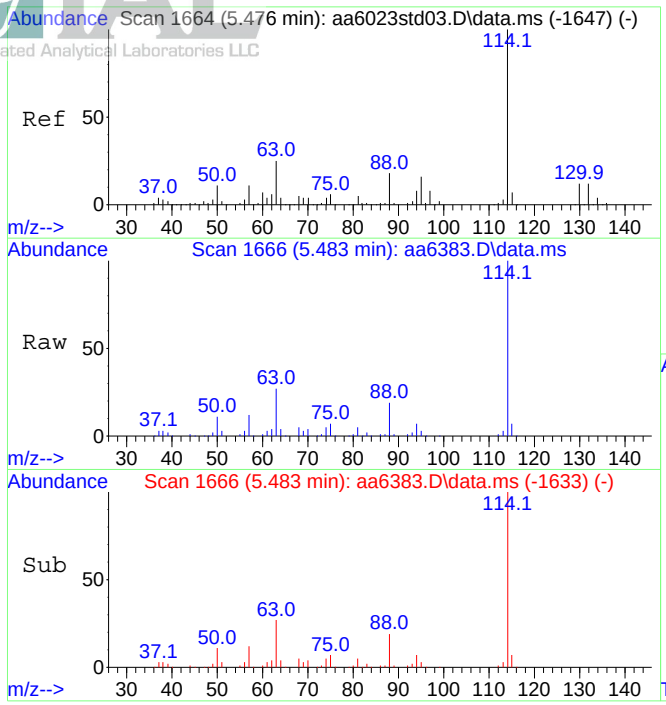


#21
Acetone
Concen: 5.64 ppbV
RT: 3.236 min Scan# 967
Delta R.T. 0.016 min
Lab File: aa6383.D
Acq: 23 Apr 2024 6:29 pm

Tgt Ion: 43 Resp: 228968

Ion	Ratio	Lower	Upper
43	100		
58	24.8	23.8	35.8

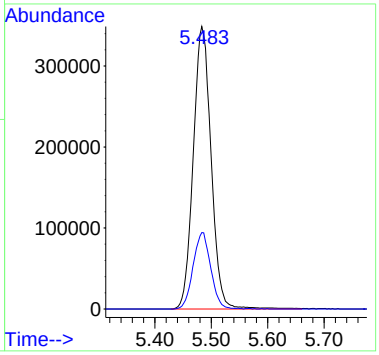


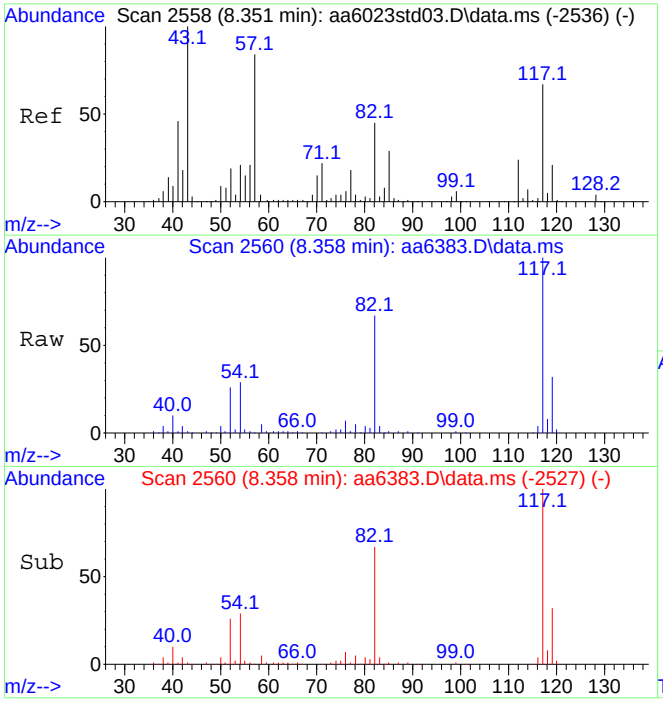


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.483 min Scan# 1666
Delta R.T. 0.007 min
Lab File: aa6383.D
Acq: 23 Apr 2024 6:29 pm

Tgt Ion:114 Resp: 766698

Ion	Ratio	Lower	Upper
114	100		
63	26.6	6.4	46.4

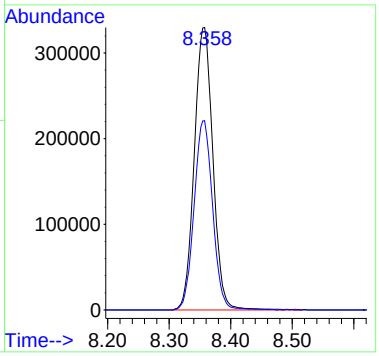


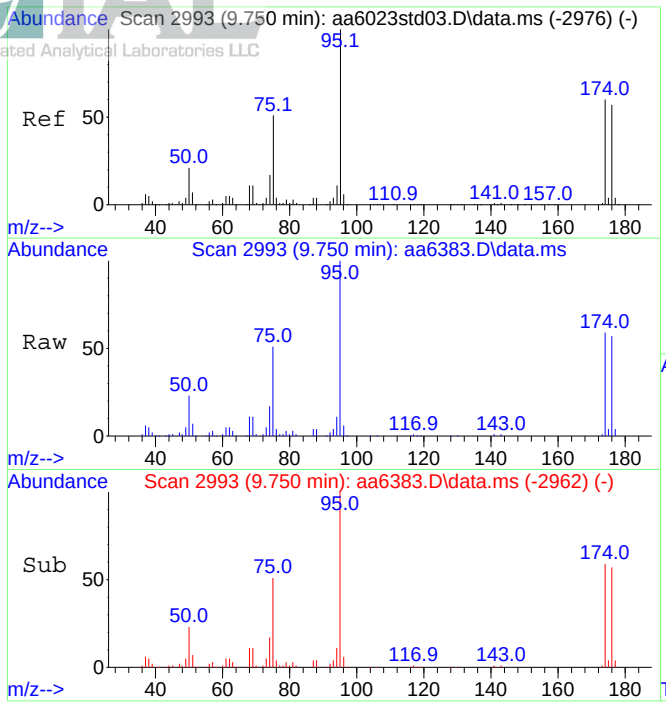


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.358 min Scan# 2560
Delta R.T. 0.007 min
Lab File: aa6383.D
Acq: 23 Apr 2024 6:29 pm

Tgt Ion:117 Resp: 693321

Ion	Ratio	Lower	Upper
117	100		
82	66.7	46.2	86.2

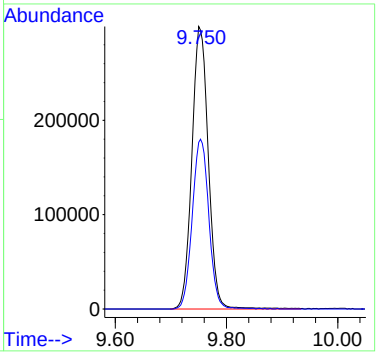




#64
Bromofluorobenzene (tune std)
Concen: 9.85 ppbV
RT: 9.750 min Scan# 2993
Delta R.T. 0.000 min
Lab File: aa6383.D
Acq: 23 Apr 2024 6:29 pm

Tgt Ion: 95 Resp: 612585

Ion	Ratio	Lower	Upper
95	100		
174	60.6	49.4	74.2



Data Path : C:\DATA\2024\04-2024\04-23-2024\
Data File : aa6384.D
Acq On : 23 Apr 2024 7:01 pm
Operator : jjw
Sample : E24-01112-32
Misc : 2155, 500cc
ALS Vial : 28 Sample Multiplier: 1

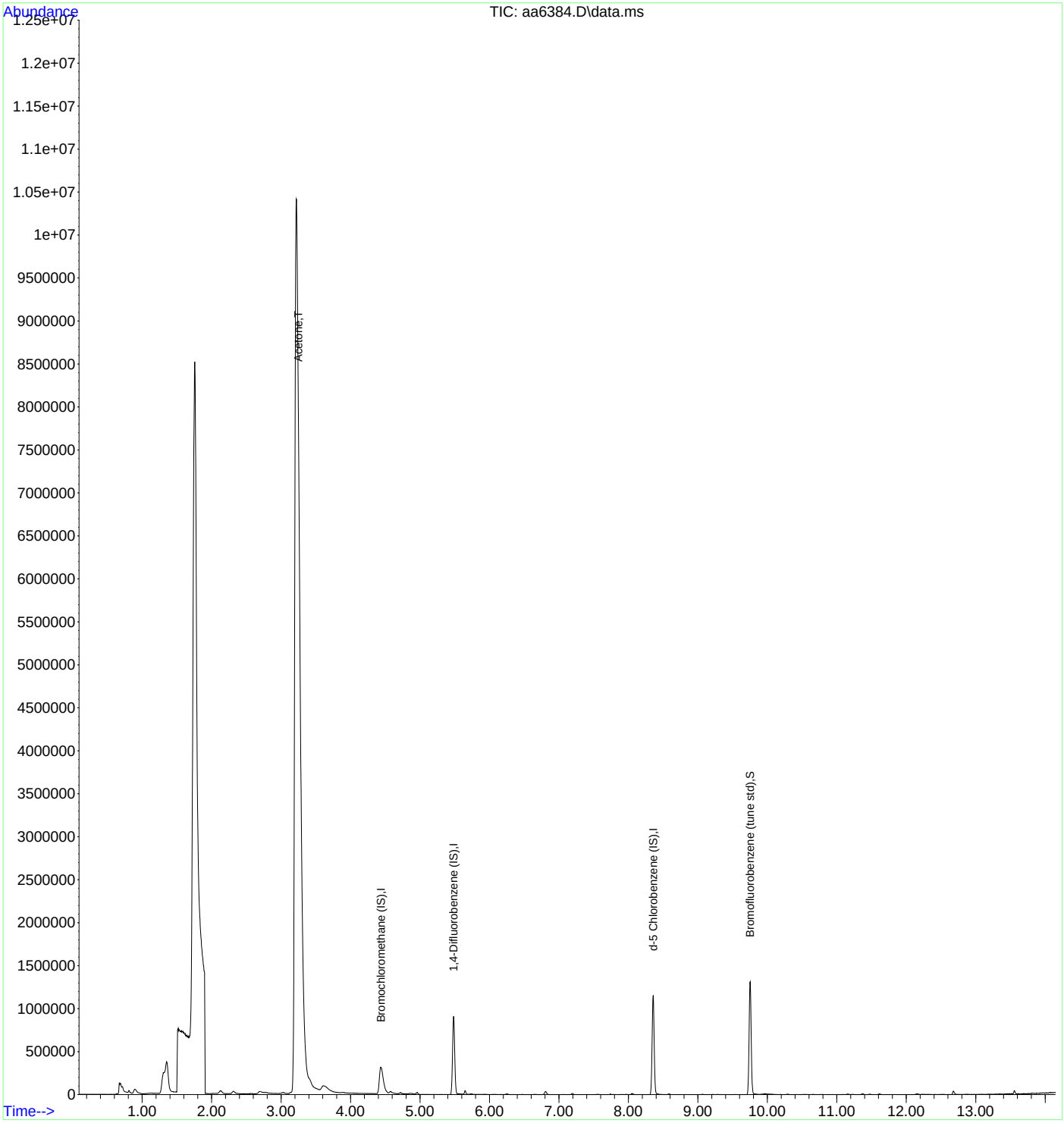
Quant Time: May 06 10:47:11 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

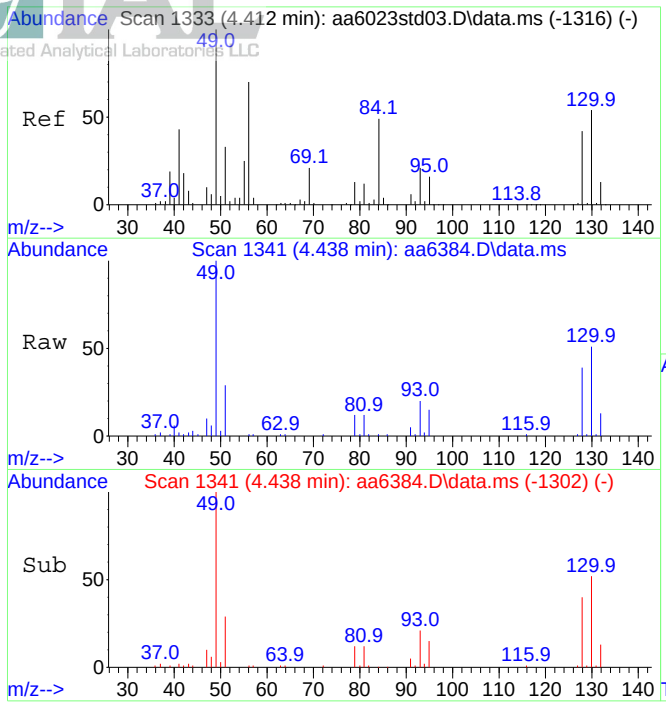
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.438	130	190903	10.00	ppbV	0.026
39) 1,4-Difluorobenzene (IS)	5.483	114	768195	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.358	117	686387	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.753	95	603512	9.80	ppbV	0.000
Target Compounds						Qvalue
21) Acetone	3.249	43	274054	6.42	ppbV	# 87

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

Data Path : C:\DATA\2024\04-2024\04-23-2024\
Data File : aa6384.D
Acq On : 23 Apr 2024 7:01 pm
Operator : jjw
Sample : E24-01112-32
Misc : 2155, 500cc
ALS Vial : 28 Sample Multiplier: 1

Quant Time: May 06 10:47:11 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

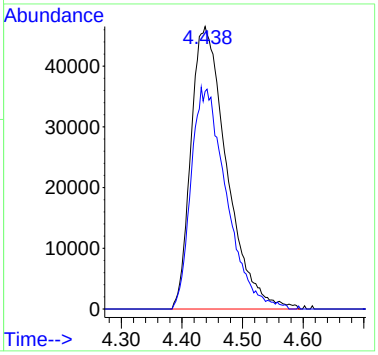


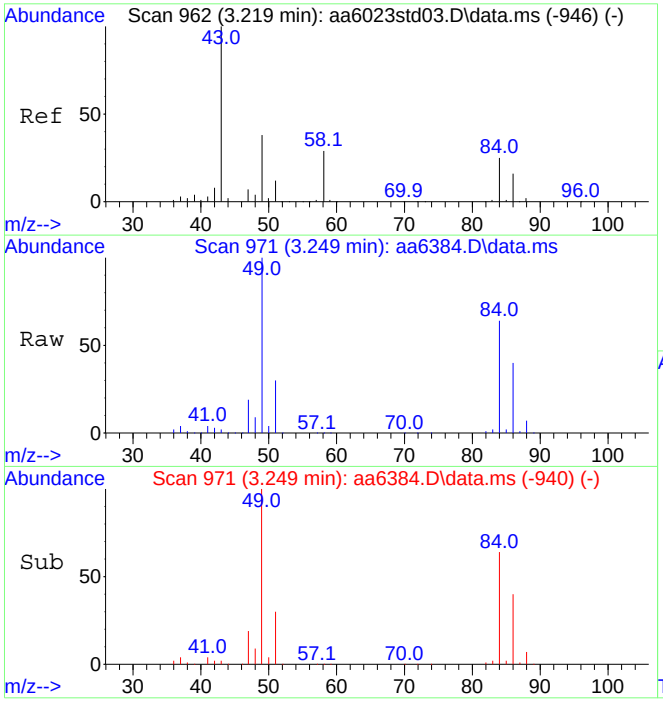


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.438 min Scan# 1341
Delta R.T. 0.026 min
Lab File: aa6384.D
Acq: 23 Apr 2024 7:01 pm

Tgt Ion:130 Resp: 190903

Ion	Ratio	Lower	Upper
130	100		
128	77.4	57.8	97.8

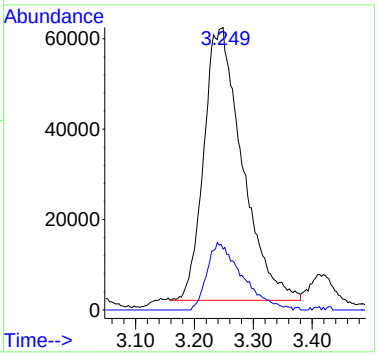


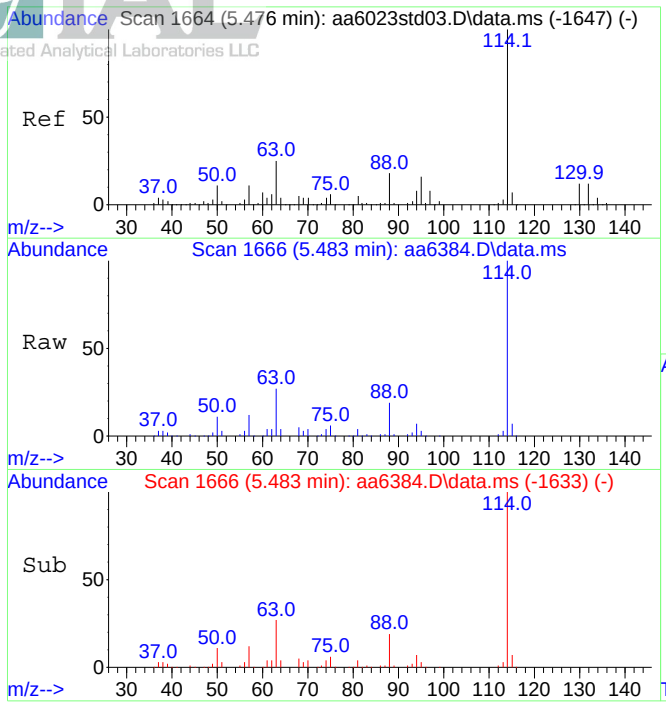


#21
Acetone
Concen: 6.42 ppbV
RT: 3.249 min Scan# 971
Delta R.T. 0.029 min
Lab File: aa6384.D
Acq: 23 Apr 2024 7:01 pm

Tgt Ion: 43 Resp: 274054

Ion	Ratio	Lower	Upper
43	100		
58	22.5	23.8	35.8#

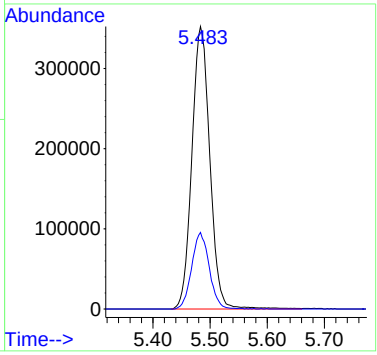


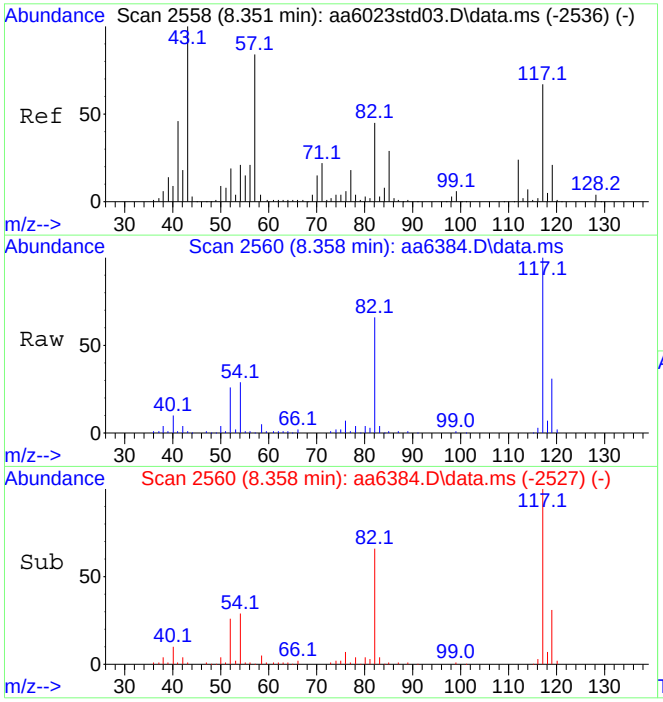


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.483 min Scan# 1666
Delta R.T. 0.007 min
Lab File: aa6384.D
Acq: 23 Apr 2024 7:01 pm

Tgt Ion:114 Resp: 768195

Ion	Ratio	Lower	Upper
114	100		
63	26.4	6.4	46.4

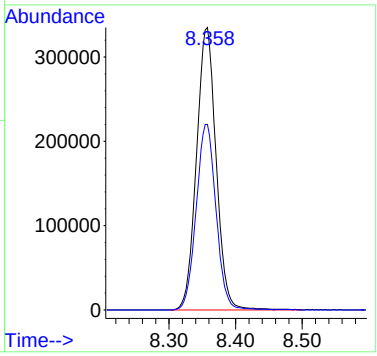


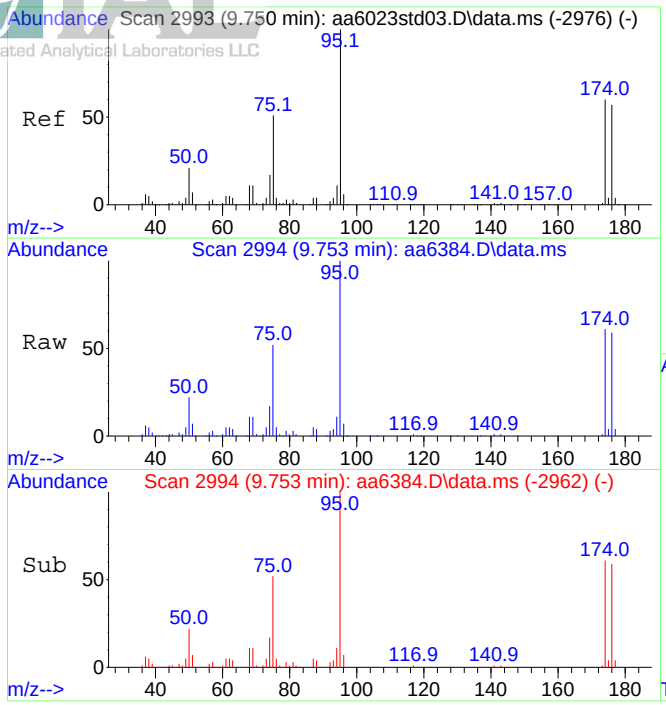


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.358 min Scan# 2560
Delta R.T. 0.007 min
Lab File: aa6384.D
Acq: 23 Apr 2024 7:01 pm

Tgt Ion:117 Resp: 686387

Ion	Ratio	Lower	Upper
117	100		
82	66.4	46.2	86.2

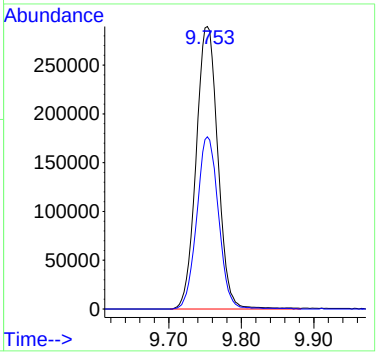




#64
Bromofluorobenzene (tune std)
Concen: 9.80 ppbV
RT: 9.753 min Scan# 2994
Delta R.T. 0.003 min
Lab File: aa6384.D
Acq: 23 Apr 2024 7:01 pm

Tgt Ion: 95 Resp: 603512

Ion	Ratio	Lower	Upper
95	100		
174	60.9	49.4	74.2



INTEGRATED ANALYTICAL LABORATORIES, LLC

Integrated Analytical Laboratories LLC

Analysis: Volatile Organic Compounds by EPA Method TO-15

Laboratory Sample Duplicate Report

		Date Received:	5/31/24
SDG Number:	E24-01875	Date Analyzed:	6/4/24,6/4/24
IAL Sample ID:	E24-01875-01	Lab Data File#:	AA6631,AA6632
Matrix:	Air	Dilution Factor:	50
Summa ID:	3293	Injection Volume:	10ml
		GC/MS Column:	RTX-1, 0.32 mmID

		Sample		Sample Dup			
		E24-01875-01		**E24-01875-21**			
		Concentration Reported		**Concentration Reported**		**Reporting Limits**	
Compound	**CAS #**	**ppbv**	**Q**	**ppbv**	**Q**	**ppbv**	**RPD**
Acetone	67-64-1	**87**	D	**83**	D	10	**4.71%**
Benzene	71-43-2	10	U	10	U	10	0.00%
Bromodichloromethane	75-27-4	10	U	10	U	10	0.00%
Bromoform	75-25-2	10	U	10	U	10	0.00%
Bromomethane	74-83-9	10	U	10	U	10	0.00%
1,3-Butadiene	106-99-0	10	U	10	U	10	0.00%
Chlorobenzene	108-90-7	10	U	10	U	10	0.00%
Chloroethane	75-00-3	10	U	10	U	10	0.00%
Chloroform	67-66-3	10	U	10	U	10	0.00%
Chloromethane	74-87-3	10	U	10	U	10	0.00%
Carbon disulfide	75-15-0	10	U	10	U	10	0.00%
Carbon tetrachloride	56-23-5	2.0	U	2.0	U	2.0	0.00%
Cyclohexane	110-82-7	10	U	10	U	10	0.00%
Dibromochloromethane	124-48-1	10	U	10	U	10	0.00%
1,2-Dibromoethane	106-93-4	10	U	10	U	10	0.00%
1,2-Dichlorobenzene	95-50-1	10	U	10	U	10	0.00%
1,3-Dichlorobenzene	541-73-1	10	U	10	U	10	0.00%
1,4-Dichlorobenzene	106-46-7	10	U	10	U	10	0.00%
Dichlorodifluoromethane	75-71-8	10	U	10	U	10	0.00%
1,1-Dichloroethane	75-34-3	10	U	10	U	10	0.00%
1,2-Dichloroethane	107-06-2	10	U	10	U	10	0.00%
1,1-Dichloroethene	75-35-4	10	U	10	U	10	0.00%
1,2-Dichloroethene (cis)	156-59-2	**180**	D	**160**	D	10	**11.76%**
1,2-Dichloroethene (trans)	156-60-5	10	U	10	U	10	0.00%
1,2-Dichloropropane	78-87-5	10	U	10	U	10	0.00%
1,3-Dichloropropene (cis)	10061-01-5	10	U	10	U	10	0.00%
1,3-Dichloropropene (trans)	10061-02-6	10	U	10	U	10	0.00%
1,2-Dichlorotetrafluoroethane	76-14-2	10	U	10	U	10	0.00%
1,4-Dioxane	123-91-1	10	U	10	U	10	0.00%
Ethylbenzene	100-41-4	10	U	10	U	10	0.00%
n-Heptane	142-82-5	10	U	10	U	10	0.00%
1,3-Hexachlorobutadiene	87-68-3	10	U	10	U	10	0.00%
n-Hexane	110-54-3	10	U	10	U	10	0.00%
Methylene chloride	75-09-2	10	U	10	U	10	0.00%
Methyl ethyl ketone	78-93-3	10	U	10	U	10	0.00%
Methyl isobutyl ketone	108-10-1	10	U	10	U	10	0.00%
Methyl tert-butyl ether	1634-04-4	10	U	10	U	10	0.00%
Styrene	100-42-5	10	U	10	U	10	0.00%

Qualifiers:
E=Concentration exceeds upper level of calibration range for instrument.
D=Extra dilution required for this compound. X=Duplicate samples do not met RPD criteria.
U=Compound ND or under reporting limit.

Analysis: Volatile Organic Compounds by EPA Method TO-15
Laboratory Sample Duplicate Report

SDG Number: E24-01875
IAL Sample ID: E24-01875-01
Matrix: Air
Summa ID: 3293

Date Received: 5/31/24
Date Analyzed: 6/4/24,6/4/24
Lab Data File#: AA6631,AA6632
Dilution Factor: 50
Injection Volume: 10ml
GC/MS Column: RTX-1, 0.32 mmID

Compound	CAS #	Sample E24-01875-01 Concentration Reported ppbv	Q	Sample Dup E24-01875-21 Concentration Reported ppbv	Q	Reporting Limits ppbv	RPD
Tert-butyl alcohol	75-65-0	10	U	10	U	10	0.00%
1,1,2,2-Tetrachloroethane	79-34-5	10	U	10	U	10	0.00%
Tetrachloroethene	127-18-4	**890**	D	**820**	D	10	**8.19%**
Toluene	108-88-3	**370**	D	**350**	D	10	**5.56%**
1,2,4-Trichlorobenzene	120-82-1	10	U	10	U	10	0.00%
1,1,1-Trichloroethane	71-55-6	10	U	10	U	10	0.00%
1,1,2-Trichloroethane	79-00-5	10	U	10	U	10	0.00%
Trichloroethene	79-01-6	**150**	D	**130**	D	2.3	**14.29%**
Trichlorofluoromethane	75-69-4	10	U	10	U	10	0.00%
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	10	U	10	U	10	0.00%
1,2,4-Trimethylbenzene	95-63-6	10	U	10	U	10	0.00%
1,3,5-Trimethylbenzene	108-67-8	10	U	10	U	10	0.00%
2,2,4-Trimethylpentane	540-84-1	10	U	10	U	10	0.00%
Vinyl bromide	593-60-2	10	U	10	U	10	0.00%
Vinyl chloride	75-01-4	10	U	10	U	10	0.00%
Xylenes (m&p)	179601-23-1	**26**	D	**24**	D	10	**8.00%**
Xylenes (o)	95-47-6	10	U	10	U	10	0.00%

RPD must be <25% for all laboratory duplicate samples. Laboratory duplicate samples are run once daily.
NC = The RPD could not be calculated since the compound was only detected in either the parent or duplicate sample.

Qualifiers:
E=Concentration exceeds upper level of calibration range for instrument.
D=Extra dilution required for this compound. X=Duplicate samples do not met RPD criteria.
U=Compound ND or under reporting limit.

Quantitation Report (QT Reviewed)

Data Path : C:\DATA\2024\06-2024\06-04-2024\
Data File : aa6631.D
Acq On : 4 Jun 2024 6:00 pm
Operator : jjw
Sample : E24-01875-01x50 dil
Misc : 3293, 10cc
ALS Vial : 12 Sample Multiplier: 1

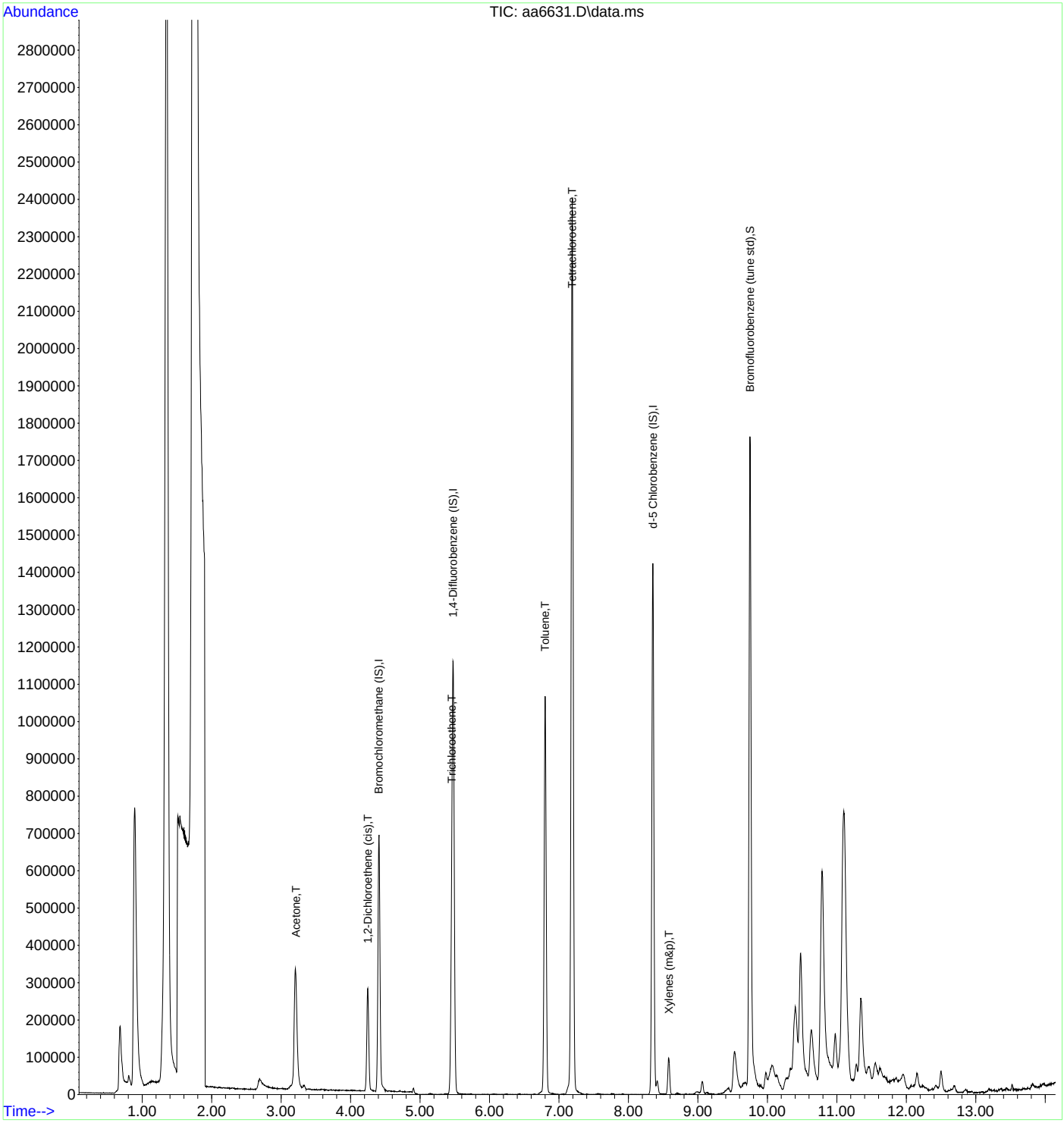
Quant Time: Jun 05 10:04:42 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

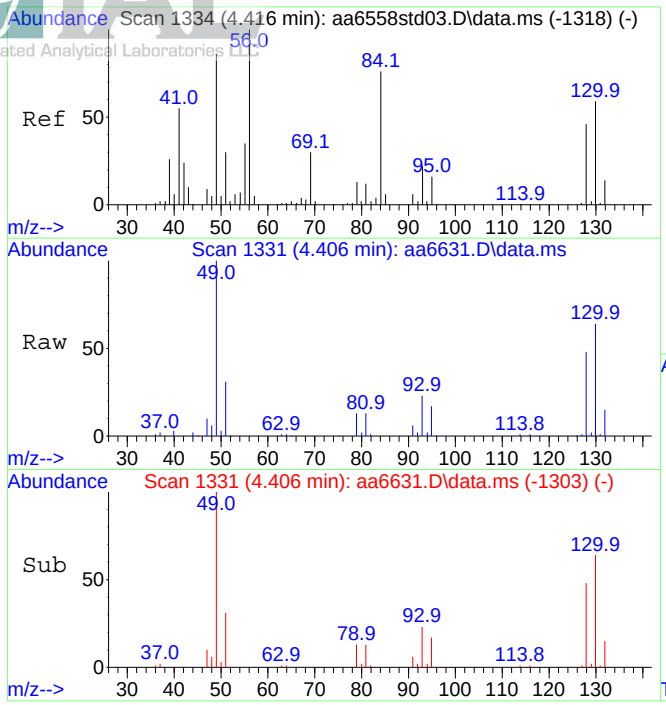
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.406	130	242408	10.00	ppbV	-0.010
39) 1,4-Difluorobenzene (IS)	5.476	114	934618	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.354	117	891601	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.750	95	782285	9.28	ppbV	0.000
Target Compounds						Qvalue
21) Acetone	3.216	43	94791	1.74	ppbV	96
28) 1,2-Dichloroethene (cis)	4.248	61	180907	3.61	ppbV	99
40) Trichloroethene	5.457	130	123220	2.92	ppbV	100
47) Toluene	6.801	91	890955	7.45	ppbV	100
49) Tetrachloroethene	7.190	166	806083	17.78	ppbV	100
59) Xylenes (m&p)	8.582	91	69953	0.53	ppbV	99

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

Data Path : C:\DATA\2024\06-2024\06-04-2024\
Data File : aa6631.D
Acq On : 4 Jun 2024 6:00 pm
Operator : jjw
Sample : E24-01875-01x50 dil
Misc : 3293, 10cc
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 05 10:04:42 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

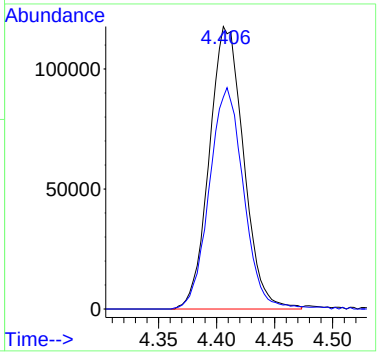


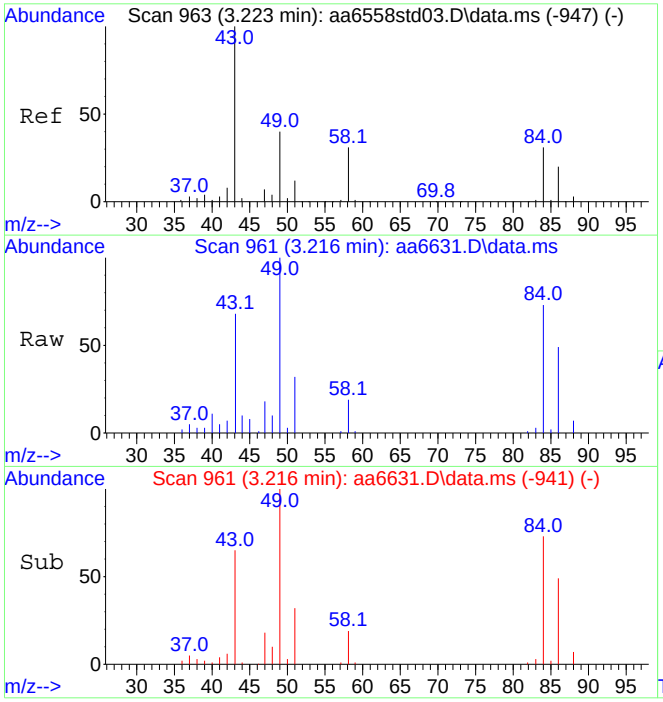


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.406 min Scan# 1331
Delta R.T. -0.010 min
Lab File: aa6631.D
Acq: 4 Jun 2024 6:00 pm

Tgt Ion:130 Resp: 242408

Ion	Ratio	Lower	Upper
130	100		
128	78.3	57.8	97.8

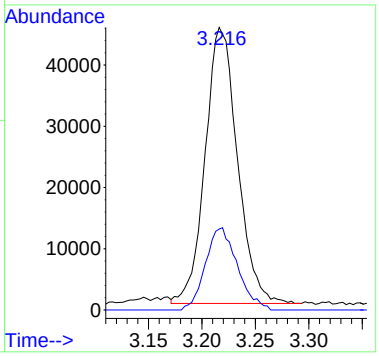


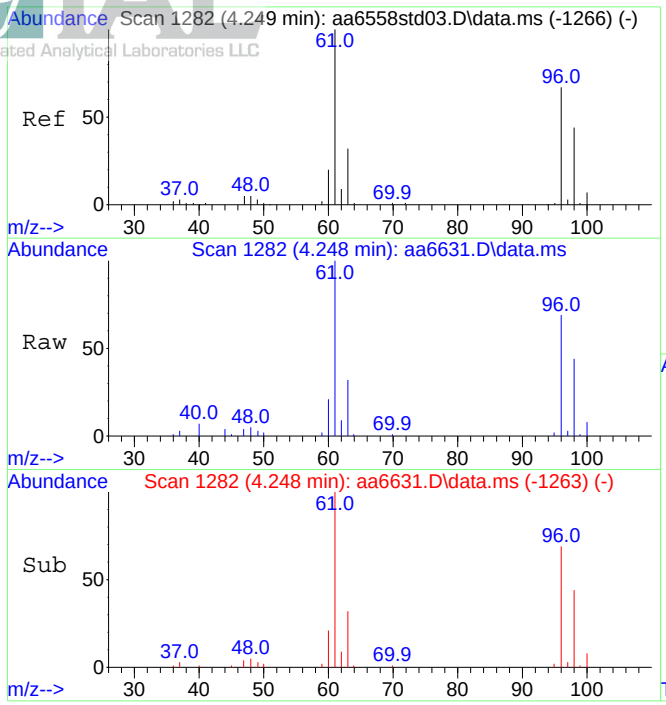


#21
Acetone
Concen: 1.74 ppbV
RT: 3.216 min Scan# 961
Delta R.T. -0.007 min
Lab File: aa6631.D
Acq: 4 Jun 2024 6:00 pm

Tgt Ion: 43 Resp: 94791

Ion	Ratio	Lower	Upper
43	100		
58	29.4	25.4	38.0

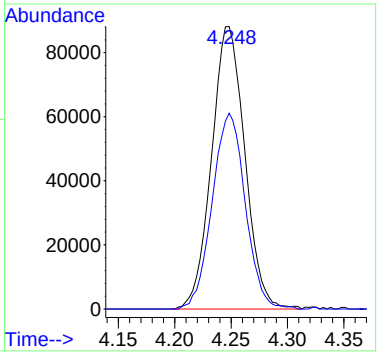


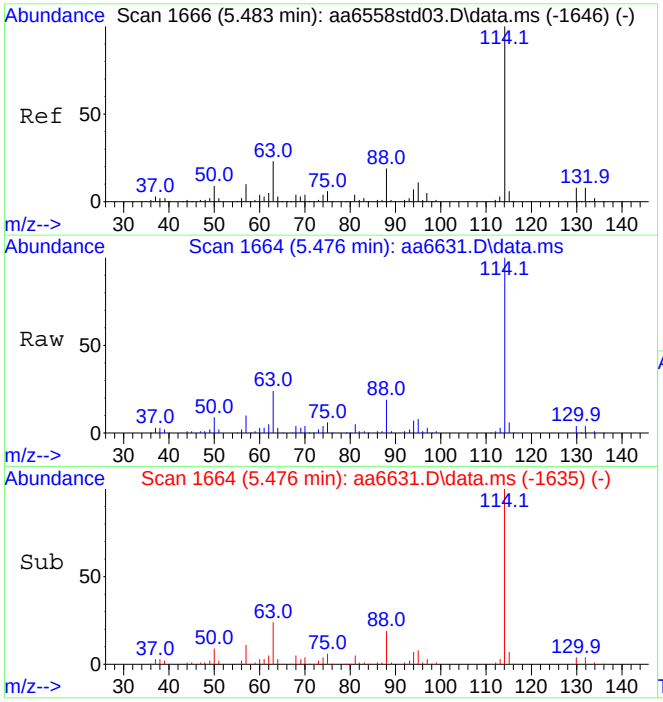


#28
1,2-Dichloroethene (cis)
Concen: 3.61 ppbV
RT: 4.248 min Scan# 1282
Delta R.T. -0.000 min
Lab File: aa6631.D
Acq: 4 Jun 2024 6:00 pm

Tgt Ion: 61 Resp: 180907

Ion	Ratio	Lower	Upper
61	100		
96	68.8	56.0	84.0

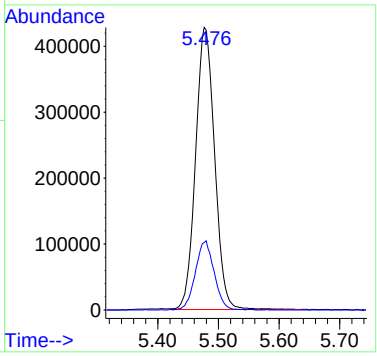


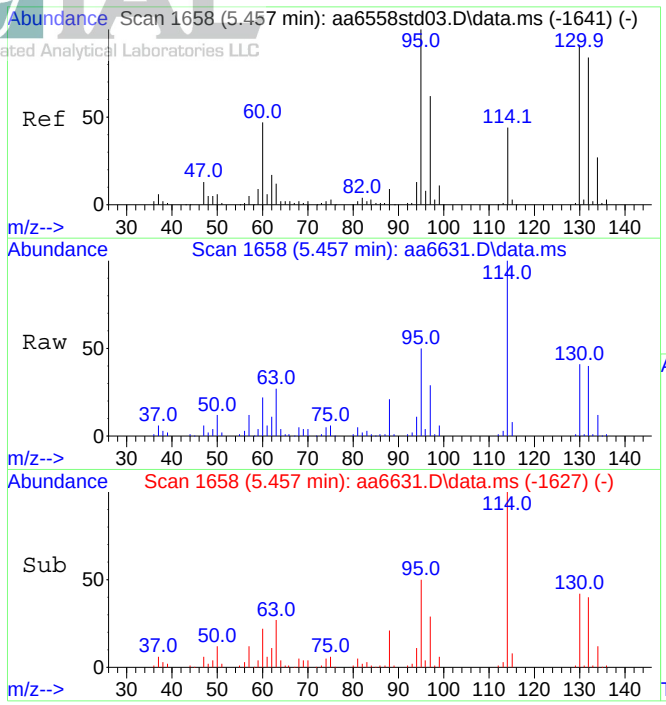


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.476 min Scan# 1664
Delta R.T. -0.007 min
Lab File: aa6631.D
Acq: 4 Jun 2024 6:00 pm

Tgt Ion:114 Resp: 934618

Ion	Ratio	Lower	Upper
114	100		
63	24.1	3.6	43.6

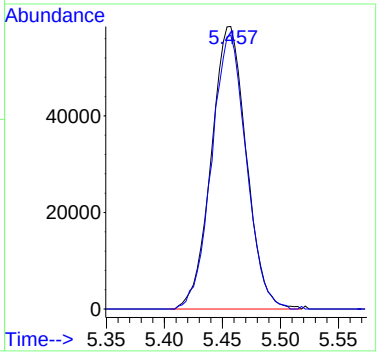


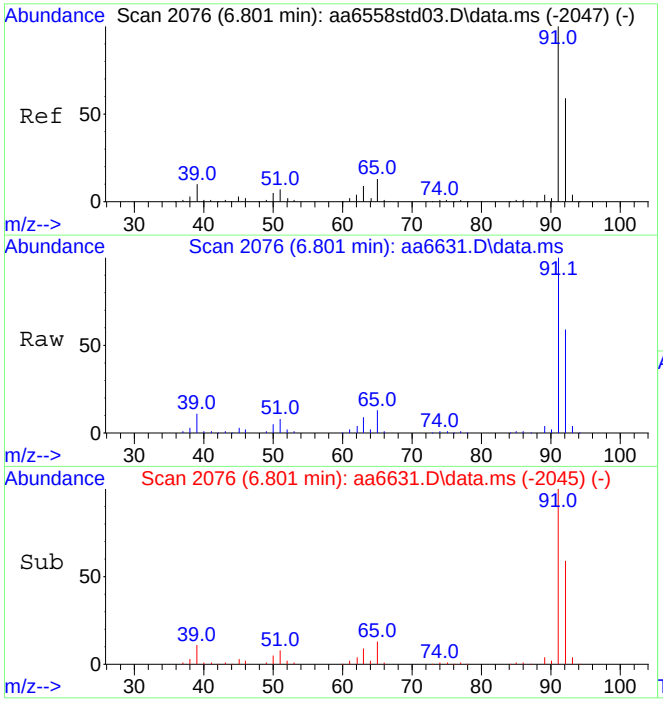


#40
Trichloroethene
Concen: 2.92 ppbV
RT: 5.457 min Scan# 1658
Delta R.T. -0.000 min
Lab File: aa6631.D
Acq: 4 Jun 2024 6:00 pm

Tgt Ion:130 Resp: 123220

Ion	Ratio	Lower	Upper
130	100		
132	95.9	76.6	114.8

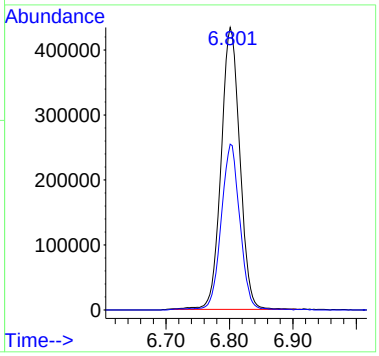


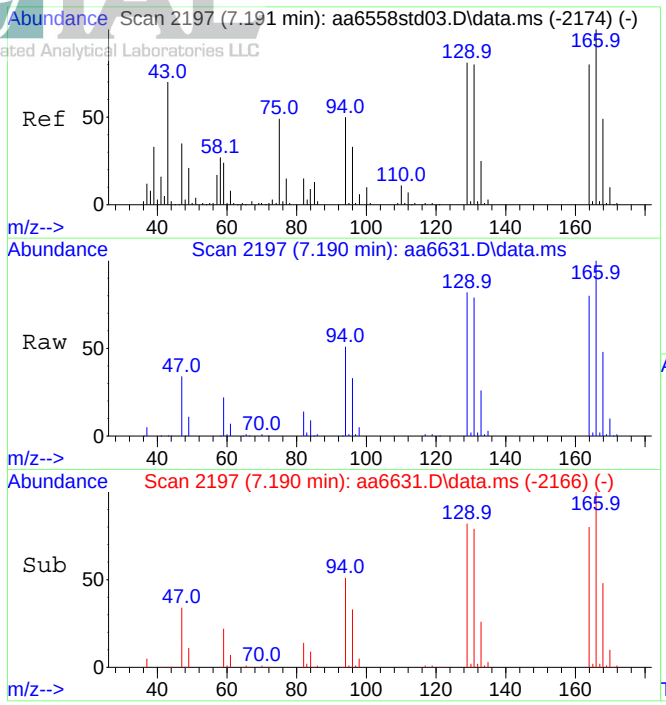


#47
Toluene
Concen: 7.45 ppbV
RT: 6.801 min Scan# 2076
Delta R.T. -0.000 min
Lab File: aa6631.D
Acq: 4 Jun 2024 6:00 pm

Tgt Ion: 91 Resp: 890955

Ion	Ratio	Lower	Upper
91	100		
92	58.6	47.0	70.6

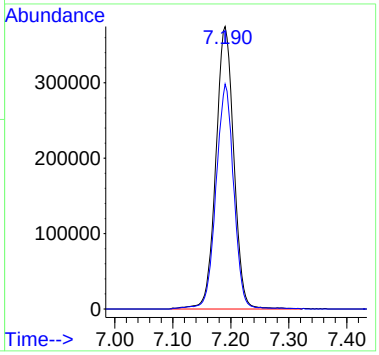


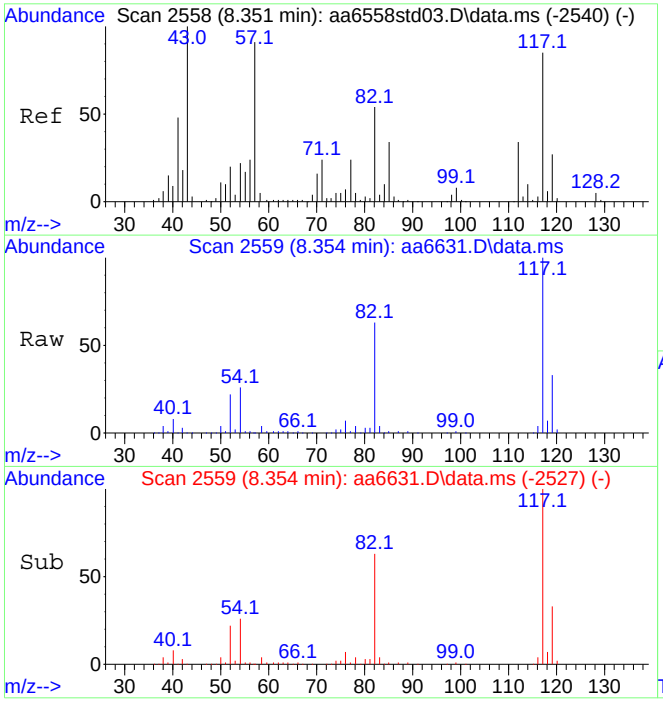


#49
Tetrachloroethene
Concen: 17.78 ppbV
RT: 7.190 min Scan# 2197
Delta R.T. -0.000 min
Lab File: aa6631.D
Acq: 4 Jun 2024 6:00 pm

Tgt Ion:166 Resp: 806083

Ion	Ratio	Lower	Upper
166	100		
164	78.8	62.8	94.2

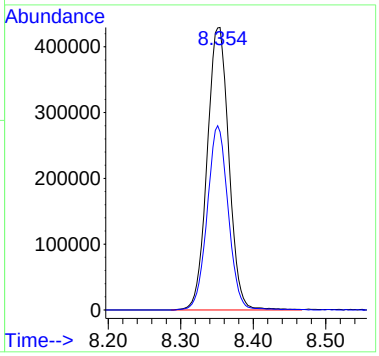


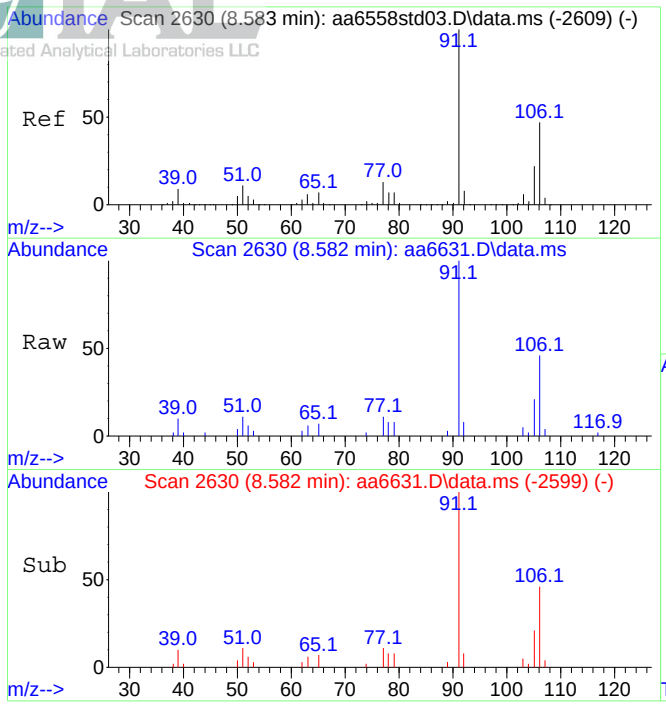


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.354 min Scan# 2559
Delta R.T. 0.003 min
Lab File: aa6631.D
Acq: 4 Jun 2024 6:00 pm

Tgt Ion:117 Resp: 891601

Ion	Ratio	Lower	Upper
117	100		
82	63.3	42.3	82.3

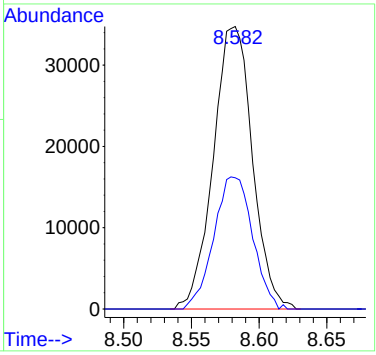


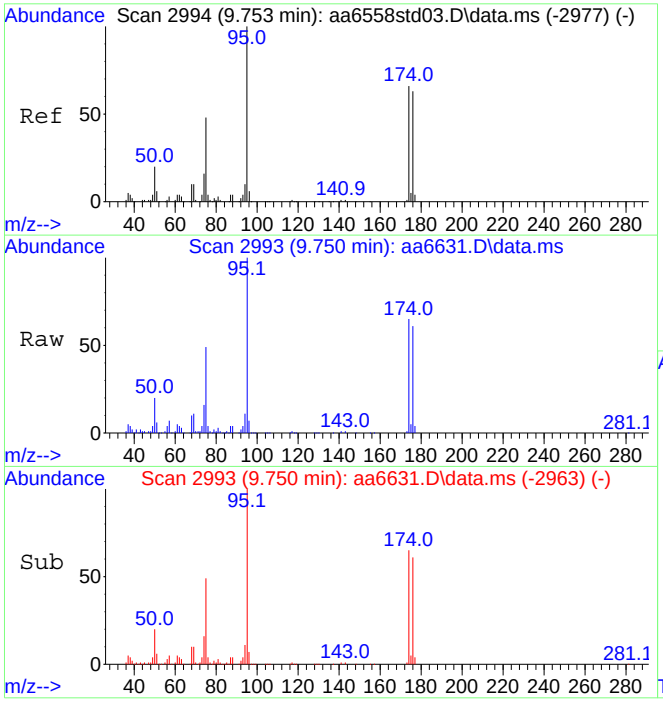


#59
Xylenes (m&p)
Concen: 0.53 ppbV
RT: 8.582 min Scan# 2630
Delta R.T. -0.000 min
Lab File: aa6631.D
Acq: 4 Jun 2024 6:00 pm

Tgt Ion: 91 Resp: 69953

Ion	Ratio	Lower	Upper
91	100		
106	46.3	37.4	56.2

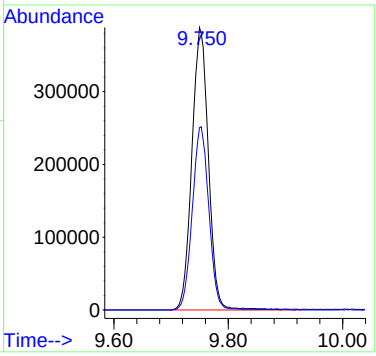




#64
Bromofluorobenzene (tune std)
Concen: 9.28 ppbV
RT: 9.750 min Scan# 2993
Delta R.T. -0.004 min
Lab File: aa6631.D
Acq: 4 Jun 2024 6:00 pm

Tgt Ion: 95 Resp: 782285

Ion	Ratio	Lower	Upper
95	100		
174	64.8	52.9	79.3



Data Path : C:\DATA\2024\06-2024\06-04-2024\
Data File : aa6632.D
Acq On : 4 Jun 2024 6:31 pm
Operator : jjw
Sample : E24-01875-21x50 dil
Misc : Dup of E24-01875-01x50 dil, Can # 3293, 10cc
ALS Vial : 13 Sample Multiplier: 1

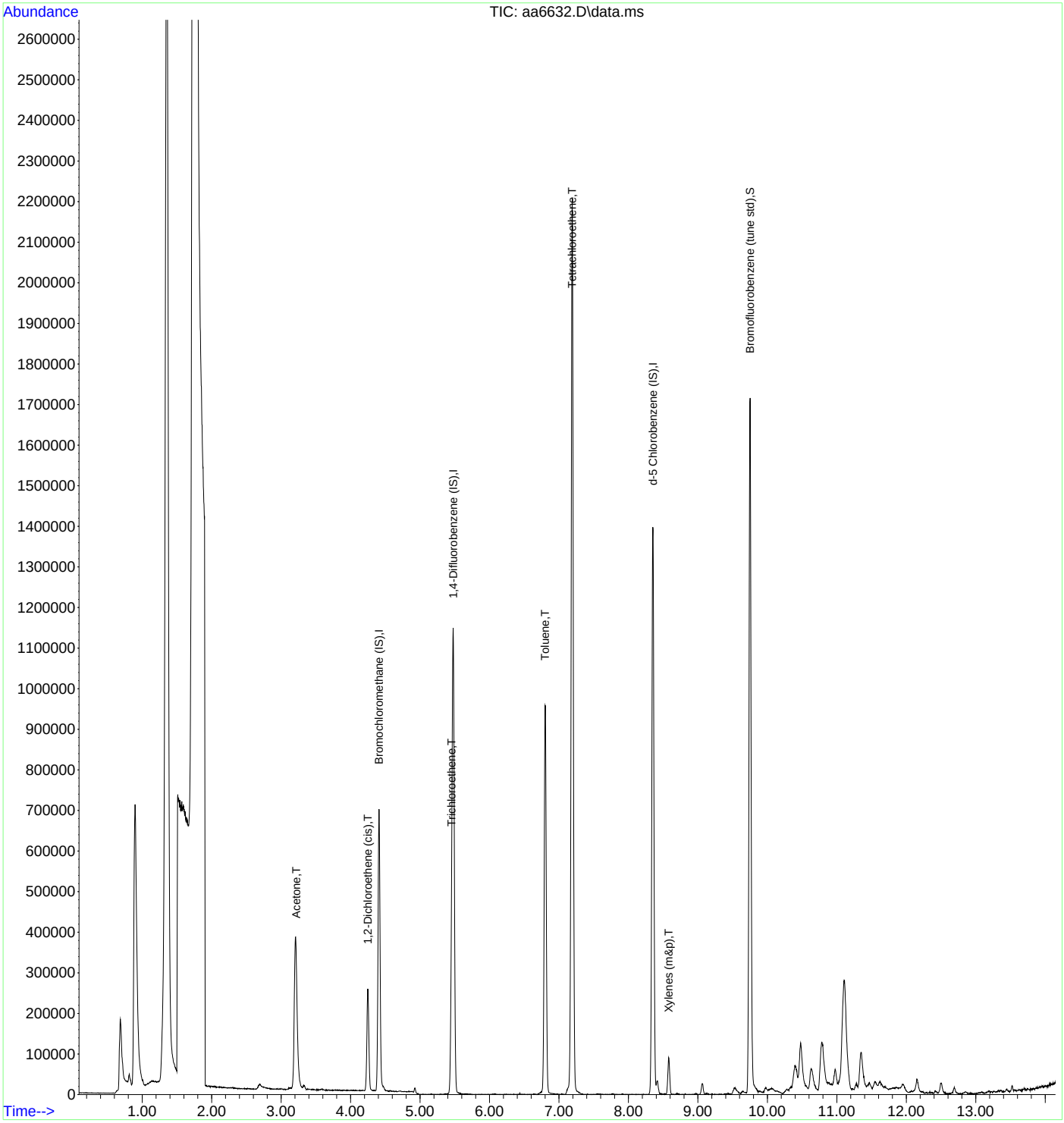
Quant Time: Jun 05 10:07:44 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

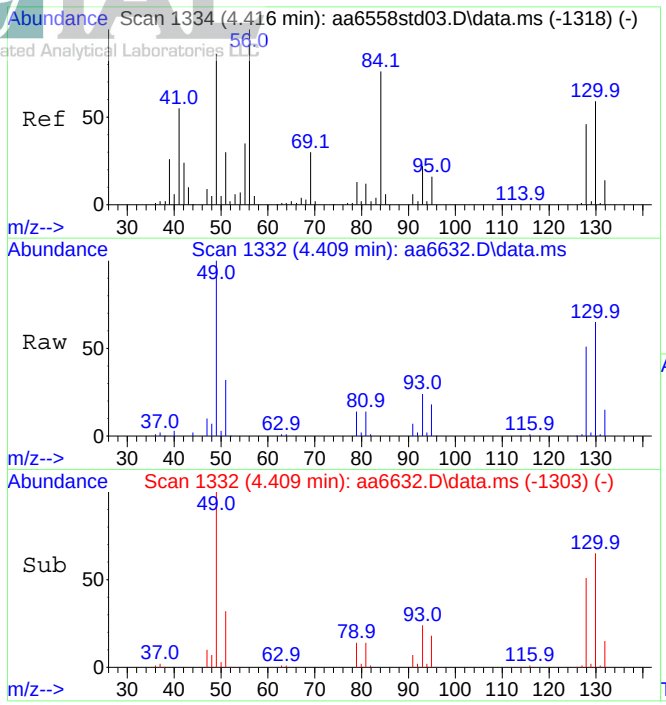
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.409	130	246617	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.480	114	926041	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.354	117	898485	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.753	95	777350	9.15	ppbV	0.000
Target Compounds						Qvalue
21) Acetone	3.219	43	91617	1.66	ppbV	93
28) 1,2-Dichloroethene (cis)	4.248	61	163964	3.22	ppbV	99
40) Trichloroethene	5.454	130	113007	2.70	ppbV	100
47) Toluene	6.801	91	824030	6.95	ppbV	99
49) Tetrachloroethene	7.190	166	736611	16.40	ppbV	99
59) Xylenes (m&p)	8.579	91	63026	0.47	ppbV	100

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

Data Path : C:\DATA\2024\06-2024\06-04-2024\
Data File : aa6632.D
Acq On : 4 Jun 2024 6:31 pm
Operator : jjw
Sample : E24-01875-21x50 dil
Misc : Dup of E24-01875-01x50 dil, Can # 3293, 10cc
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 05 10:07:44 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

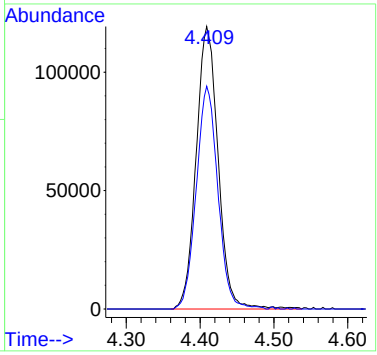


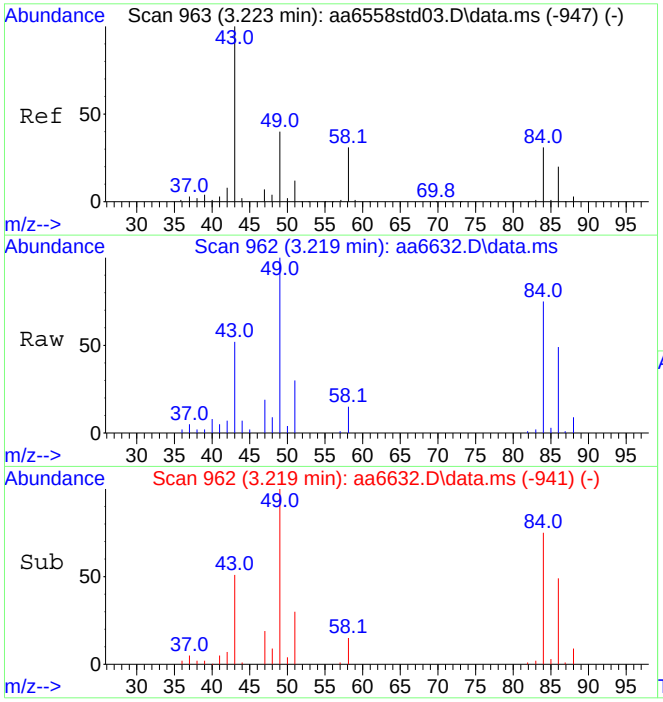


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.409 min Scan# 1332
Delta R.T. -0.007 min
Lab File: aa6632.D
Acq: 4 Jun 2024 6:31 pm

Tgt Ion:130 Resp: 246617

Ion	Ratio	Lower	Upper
130	100		
128	77.7	57.8	97.8

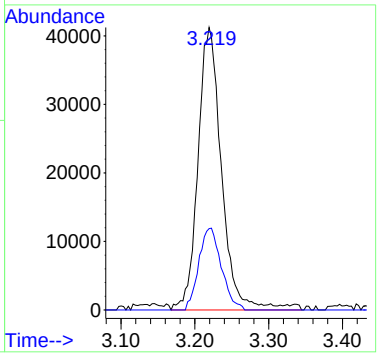


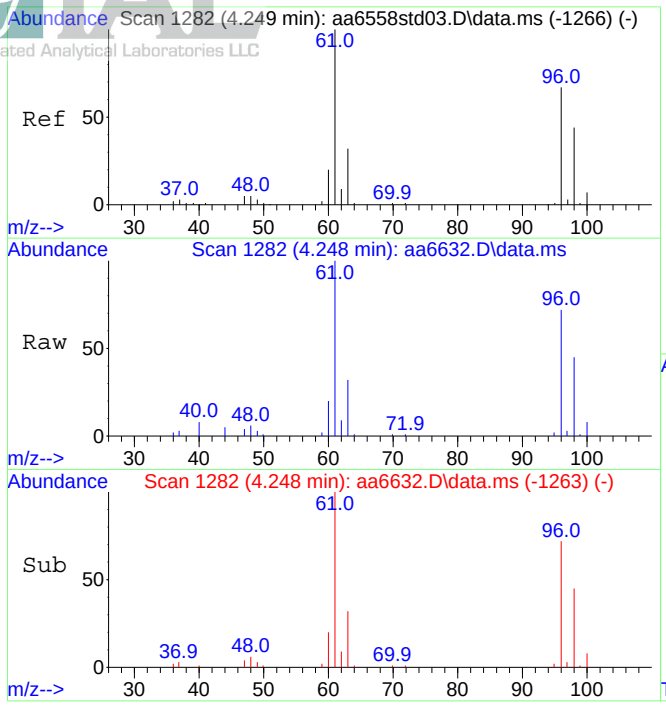


#21
Acetone
Concen: 1.66 ppbV
RT: 3.219 min Scan# 962
Delta R.T. -0.004 min
Lab File: aa6632.D
Acq: 4 Jun 2024 6:31 pm

Tgt Ion: 43 Resp: 91617

Ion	Ratio	Lower	Upper
43	100		
58	27.6	25.4	38.0

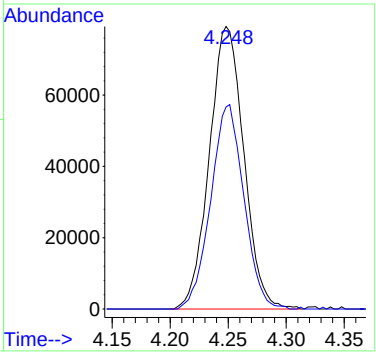


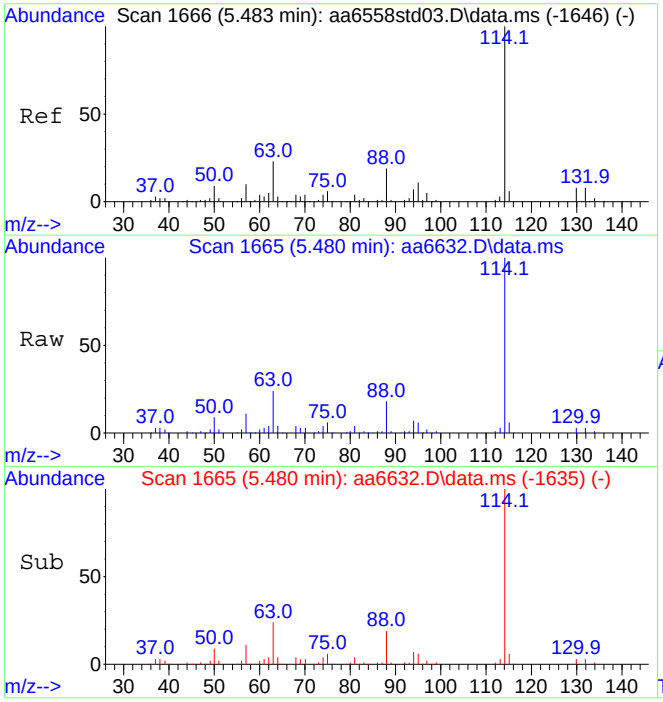


#28
1,2-Dichloroethene (cis)
Concen: 3.22 ppbV
RT: 4.248 min Scan# 1282
Delta R.T. -0.000 min
Lab File: aa6632.D
Acq: 4 Jun 2024 6:31 pm

Tgt Ion: 61 Resp: 163964

Ion	Ratio	Lower	Upper
61	100		
96	69.5	56.0	84.0

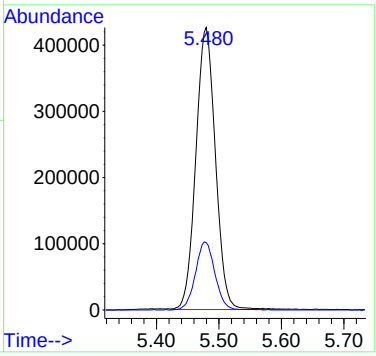


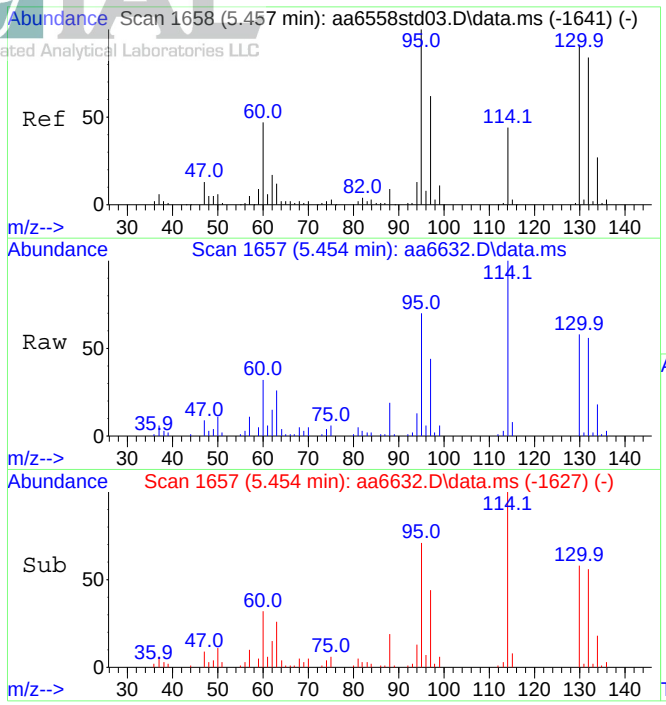


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.480 min Scan# 1665
Delta R.T. -0.003 min
Lab File: aa6632.D
Acq: 4 Jun 2024 6:31 pm

Tgt Ion:114 Resp: 926041

Ion	Ratio	Lower	Upper
114	100		
63	24.1	3.6	43.6

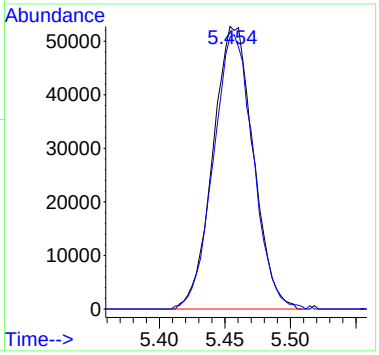


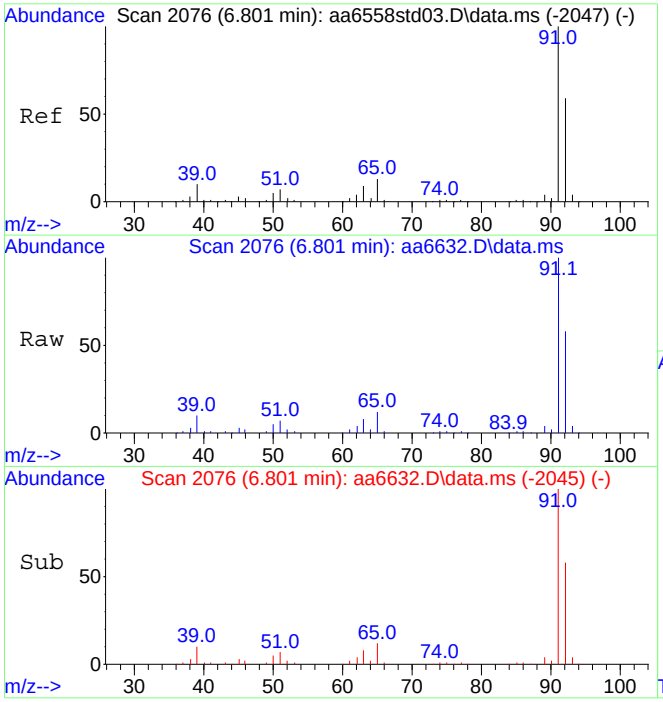


#40
Trichloroethene
Concen: 2.70 ppbV
RT: 5.454 min Scan# 1657
Delta R.T. -0.004 min
Lab File: aa6632.D
Acq: 4 Jun 2024 6:31 pm

Tgt Ion:130 Resp: 113007

Ion	Ratio	Lower	Upper
130	100		
132	96.1	76.6	114.8

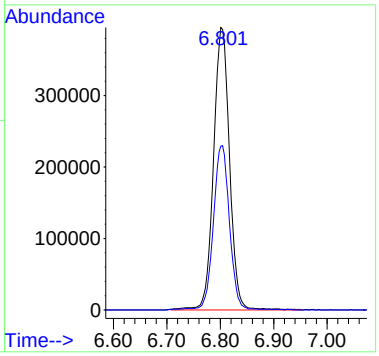


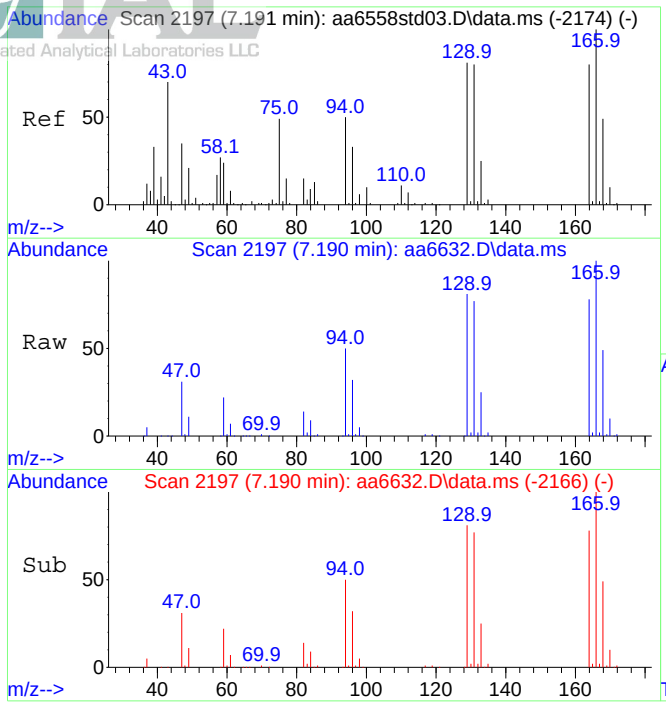


#47
Toluene
Concen: 6.95 ppbV
RT: 6.801 min Scan# 2076
Delta R.T. -0.000 min
Lab File: aa6632.D
Acq: 4 Jun 2024 6:31 pm

Tgt Ion: 91 Resp: 824030

Ion	Ratio	Lower	Upper
91	100		
92	58.2	47.0	70.6

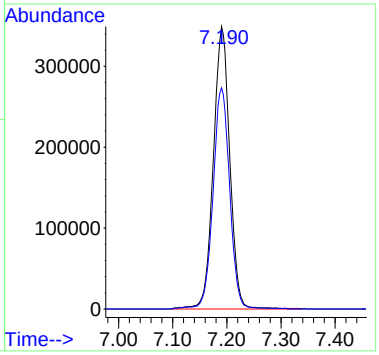


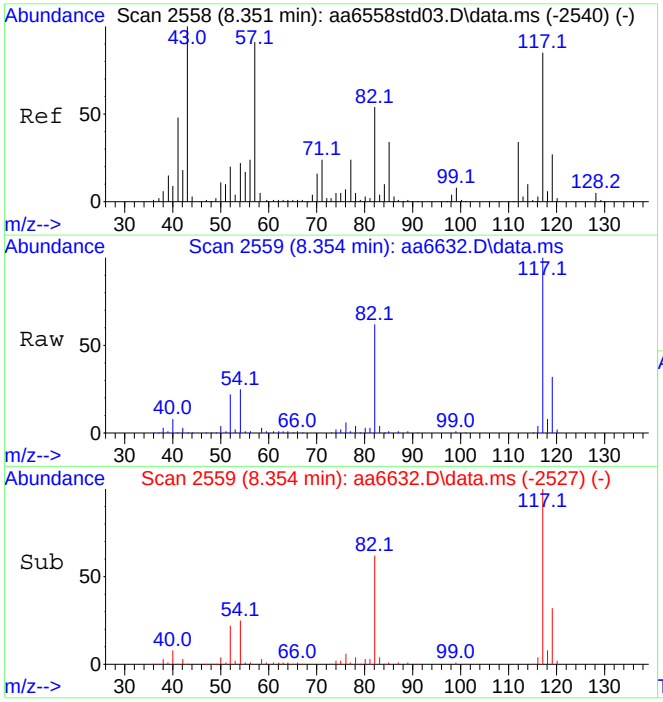


#49
Tetrachloroethene
Concen: 16.40 ppbV
RT: 7.190 min Scan# 2197
Delta R.T. -0.000 min
Lab File: aa6632.D
Acq: 4 Jun 2024 6:31 pm

Tgt Ion:166 Resp: 736611

Ion	Ratio	Lower	Upper
166	100		
164	79.4	62.8	94.2

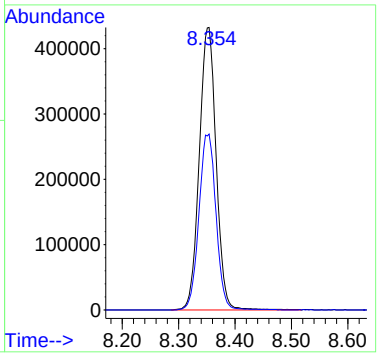


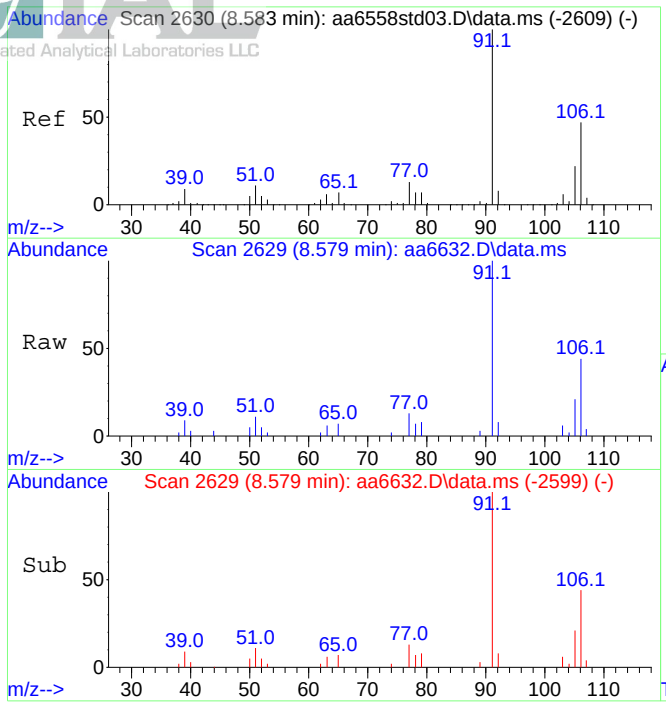


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.354 min Scan# 2559
Delta R.T. 0.003 min
Lab File: aa6632.D
Acq: 4 Jun 2024 6:31 pm

Tgt Ion:117 Resp: 898485

Ion	Ratio	Lower	Upper
117	100		
82	63.1	42.3	82.3

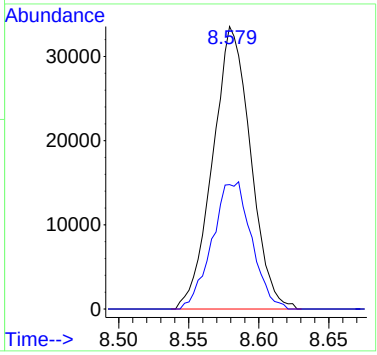


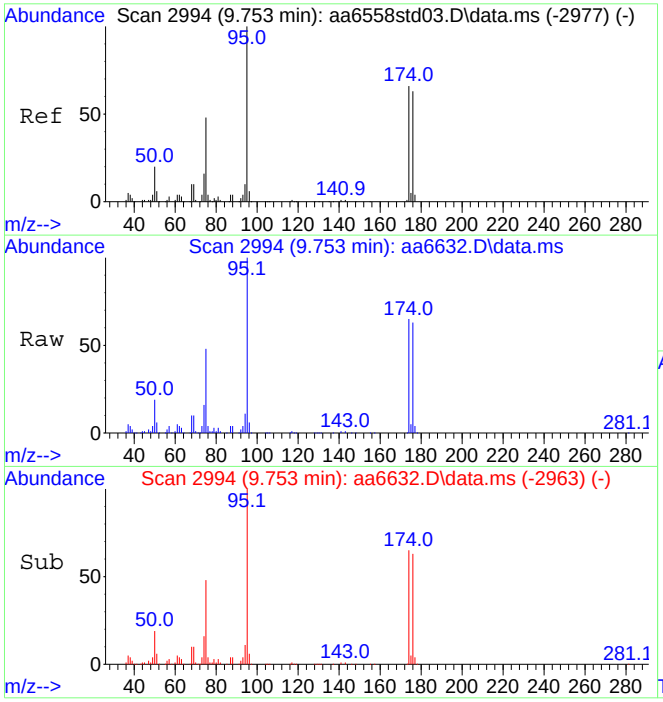


#59
Xylenes (m&p)
Concen: 0.47 ppbV
RT: 8.579 min Scan# 2629
Delta R.T. -0.004 min
Lab File: aa6632.D
Acq: 4 Jun 2024 6:31 pm

Tgt Ion: 91 Resp: 63026

Ion	Ratio	Lower	Upper
91	100		
106	46.7	37.4	56.2

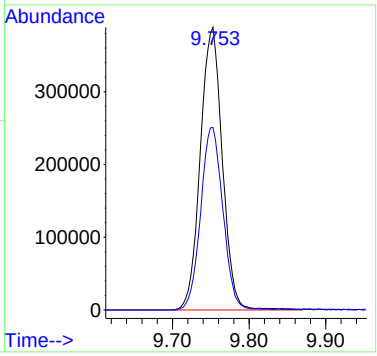




#64
Bromofluorobenzene (tune std)
Concen: 9.15 ppbV
RT: 9.753 min Scan# 2994
Delta R.T. -0.000 min
Lab File: aa6632.D
Acq: 4 Jun 2024 6:31 pm

Tgt Ion: 95 Resp: 777350

Ion	Ratio	Lower	Upper
95	100		
174	65.0	52.9	79.3



Analysis: Volatile Organic Compounds by EPA Method TO-15
Laboratory Sample Duplicate Report

SDG Number: E24-01845
IAL Sample ID: E24-01845-03
Matrix: Air
Summa ID: 5085

Date Received: 5/30/24
Date Analyzed: 6/5/24,6/5/24
Lab Data File#: AA6649,AA6650
Dilution Factor: 10
Injection Volume: 50ml
GC/MS Column: RTX-1, 0.32 mmID

Compound	CAS #	Sample E24-01845-03 Concentration Reported ppbv	Q	Sample Dup E24-01845-23 Concentration Reported ppbv	Q	Reporting Limits ppbv	RPD
Acetone	67-64-1	**140**	D	**160**	D	2.0	**-13.33%**
Allyl Chloride	107-05-1	2.0	U	2.0	U	2.0	0.00%
Benzene	71-43-2	2.0	U	2.0	U	2.0	0.00%
Bromodichloromethane	75-27-4	2.0	U	2.0	U	2.0	0.00%
Bromoform	75-25-2	2.0	U	2.0	U	2.0	0.00%
Bromomethane	74-83-9	2.0	U	2.0	U	2.0	0.00%
1,3-Butadiene	106-99-0	2.0	U	2.0	U	2.0	0.00%
Chlorobenzene	108-90-7	2.0	U	2.0	U	2.0	0.00%
Chloroethane	75-00-3	2.0	U	2.0	U	2.0	0.00%
Chloroform	67-66-3	2.0	U	2.0	U	2.0	0.00%
Chloromethane	74-87-3	2.0	U	2.0	U	2.0	0.00%
Carbon disulfide	75-15-0	2.0	U	2.0	U	2.0	0.00%
Carbon tetrachloride	56-23-5	2.0	U	2.0	U	2.0	0.00%
2-Chlorotoluene	95-49-8	2.0	U	2.0	U	2.0	0.00%
Cyclohexane	110-82-7	2.0	U	2.0	U	2.0	0.00%
Dibromochloromethane	124-48-1	2.0	U	2.0	U	2.0	0.00%
1,2-Dibromoethane	106-93-4	2.0	U	2.0	U	2.0	0.00%
1,2-Dichlorobenzene	95-50-1	2.0	U	2.0	U	2.0	0.00%
1,3-Dichlorobenzene	541-73-1	2.0	U	2.0	U	2.0	0.00%
1,4-Dichlorobenzene	106-46-7	2.0	U	2.0	U	2.0	0.00%
Dichlorodifluoromethane	75-71-8	2.0	U	2.0	U	2.0	0.00%
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	0.00%
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	0.00%
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	2.0	0.00%
1,2-Dichloroethene (cis)	156-59-2	2.0	U	2.0	U	2.0	0.00%
1,2-Dichloroethene (trans)	156-60-5	2.0	U	2.0	U	2.0	0.00%
1,2-Dichloropropane	78-87-5	2.0	U	2.0	U	2.0	0.00%
1,3-Dichloropropene (cis)	10061-01-5	2.0	U	2.0	U	2.0	0.00%
1,3-Dichloropropene (trans)	10061-02-6	2.0	U	2.0	U	2.0	0.00%
1,2-Dichlorotetrafluoroethane	76-14-2	2.0	U	2.0	U	2.0	0.00%
1,4-Dioxane	123-91-1	2.0	U	2.0	U	2.0	0.00%
Ethanol	64-17-5	**25**	D	**23**	D	2.0	**8.33%**
Ethylbenzene	100-41-4	2.0	U	**2.2**	D	2.0	**NC**
4-Ethyltoluene	622-96-8	2.0	U	2.0	U	2.0	0.00%
n-Heptane	142-82-5	2.0	U	2.0	U	2.0	0.00%
1,3-Hexachlorobutadiene	87-68-3	2.0	U	2.0	U	2.0	0.00%
n-Hexane	110-54-3	2.0	U	2.0	U	2.0	0.00%
Isopropanol	67-63-0	2.0	U	2.0	U	2.0	0.00%

Qualifiers:
E=Concentration exceeds upper level of calibration range for instrument.
D=Extra dilution required for this compound. X=Duplicate samples do not met RPD criteria.
U=Compound ND or under reporting limit.

INTEGRATED ANALYTICAL LABORATORIES, LLC

Integrated Analytical Laboratories LLC

Analysis: Volatile Organic Compounds by EPA Method TO-15

Laboratory Sample Duplicate Report

		Date Received:	5/30/24
SDG Number:	E24-01845	Date Analyzed:	6/5/24,6/5/24
IAL Sample ID:	E24-01845-03	Lab Data File#:	AA6649,AA6650
Matrix:	Air	Dilution Factor:	10
Summa ID:	5085	Injection Volume:	50ml
		GC/MS Column:	RTX-1, 0.32 mmID

		Sample		Sample Dup			
		E24-01845-03		**E24-01845-23**			
		Concentration		**Concentration**		**Reporting**	
		Reported		**Reported**		**Limits**	
Compound	**CAS #**	**ppbv**	**Q**	**ppbv**	**Q**	**ppbv**	**RPD**
Methylene chloride	75-09-2	**18**	D	**19**	D	2.0	**-5.41%**
Methyl ethyl ketone	78-93-3	2.0	U	2.0	U	2.0	0.00%
Methyl isobutyl ketone	108-10-1	2.0	U	2.0	U	2.0	0.00%
Methyl methacrylate	80-62-6	2.0	U	2.0	U	2.0	0.00%
Methyl tert-butyl ether	1634-04-4	2.0	U	2.0	U	2.0	0.00%
Styrene	100-42-5	2.0	U	2.0	U	2.0	0.00%
Tert-butyl alcohol	75-65-0	2.0	U	2.0	U	2.0	0.00%
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	0.00%
Tetrachloroethene	127-18-4	2.0	U	2.0	U	2.0	0.00%
Tetrahydrofuran	109-99-9	2.0	U	2.0	U	2.0	0.00%
Toluene	108-88-3	2.0	U	2.0	U	2.0	0.00%
1,2,4-Trichlorobenzene	120-82-1	2.0	U	2.0	U	2.0	0.00%
1,1,1-Trichloroethane	71-55-6	2.0	U	2.0	U	2.0	0.00%
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	2.0	0.00%
Trichloroethene	79-01-6	2.0	U	2.0	U	2.0	0.00%
Trichlorofluoromethane	75-69-4	2.0	U	2.0	U	2.0	0.00%
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	2.0	U	2.0	U	2.0	0.00%
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	0.00%
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	0.00%
2,2,4-Trimethylpentane	540-84-1	2.0	U	2.0	U	2.0	0.00%
Vinyl bromide	593-60-2	2.0	U	2.0	U	2.0	0.00%
Vinyl chloride	75-01-4	2.0	U	2.0	U	2.0	0.00%
Xylenes (m&p)	179601-23-1	**6.9**	D	**8.1**	D	4.0	**-16.00%**
Xylenes (o)	95-47-6	2.0	U	2.0	U	2.0	0.00%

RPD must be <25% for all laboratory duplicate samples. Laboratory duplicate samples are run once daily.

NC = The RPD could not be calculated since the compound was only detected in either the parent or duplicate sample.

Qualifiers:
E=Concentration exceeds upper level of calibration range for instrument.
D=Extra dilution required for this compound. X=Duplicate samples do not met RPD criteria.
U=Compound ND or under reporting limit.

Quantitation Report (QT Reviewed)

Data Path : C:\DATA\2024\06-2024\06-05-2024\
Data File : aa6649.D
Acq On : 5 Jun 2024 5:04 pm
Operator : jjw
Sample : E24-01845-03x10 dil
Misc : 5085, 50cc
ALS Vial : 11 Sample Multiplier: 1

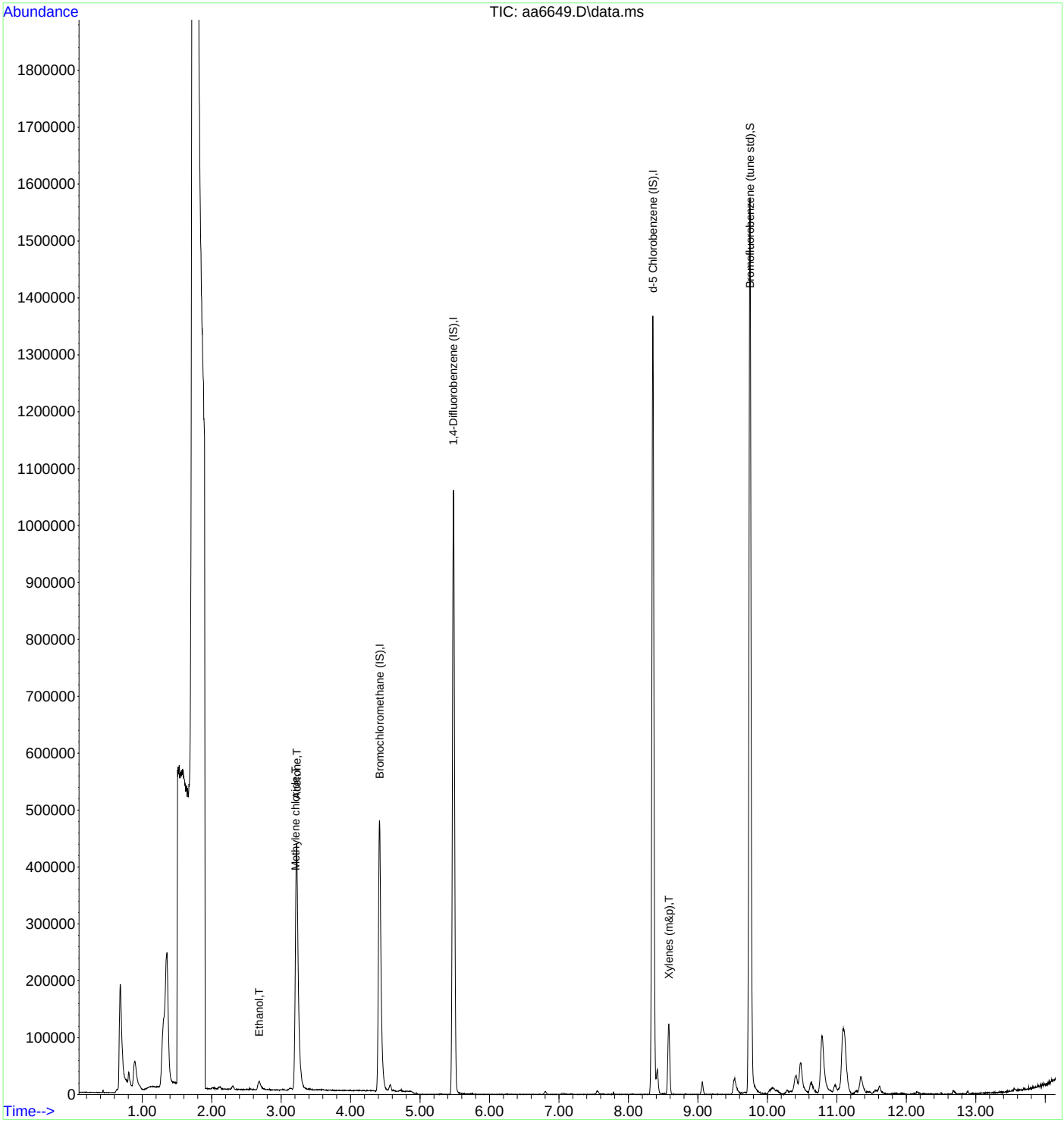
Quant Time: Jun 06 10:06:26 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

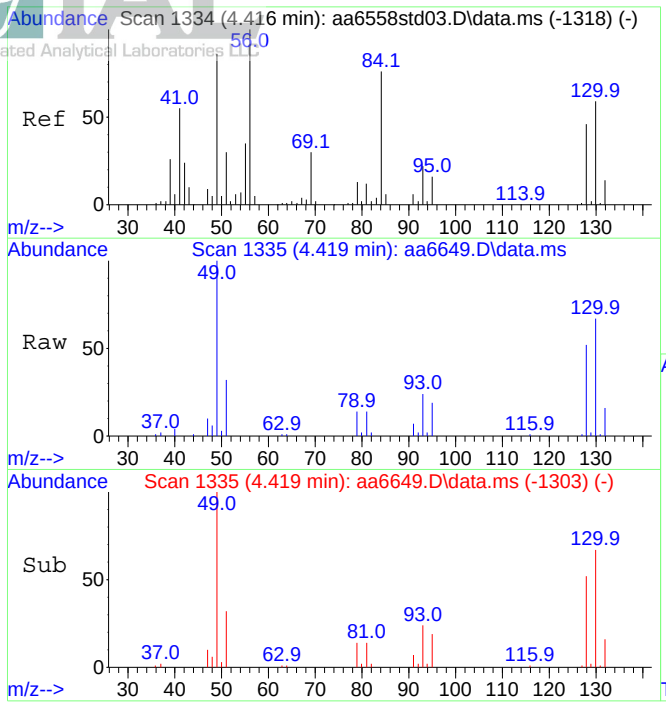
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.419	130	214963	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.480	114	951576	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.354	117	865493	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.750	95	717466	8.76	ppbV	0.000
Target Compounds						Qvalue
13) Ethanol	2.686	45	27776	2.51	ppbV	96
20) Methylene chloride	3.210	49	68258	1.76	ppbV	97
21) Acetone	3.226	43	692308	14.35	ppbV	97
59) Xylenes (m&p)	8.582	91	88343	0.69	ppbV	99

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

Data Path : C:\DATA\2024\06-2024\06-05-2024\
Data File : aa6649.D
Acq On : 5 Jun 2024 5:04 pm
Operator : jjw
Sample : E24-01845-03x10 dil
Misc : 5085, 50cc
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 06 10:06:26 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

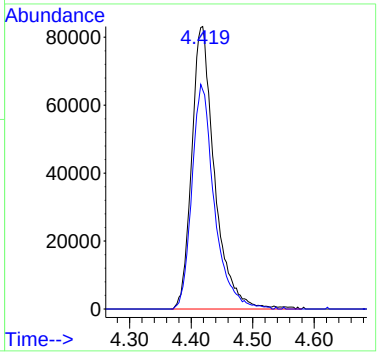


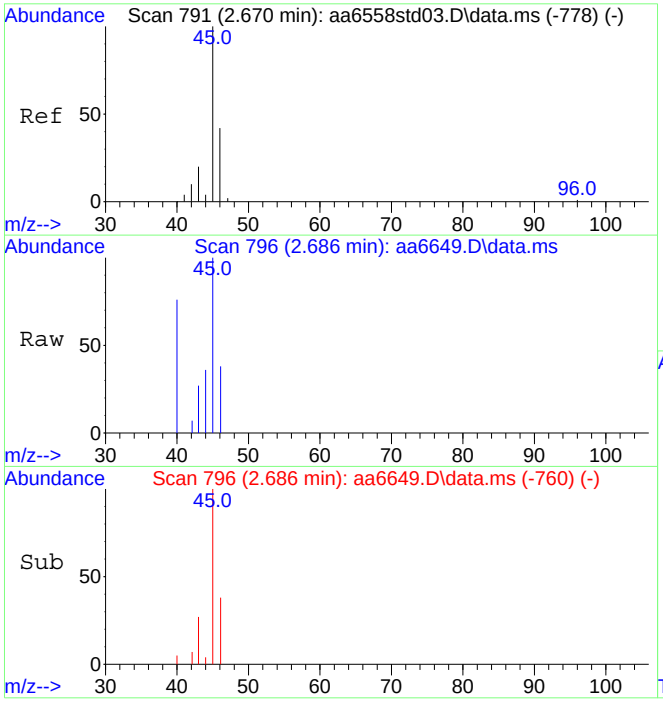


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.419 min Scan# 1335
Delta R.T. 0.003 min
Lab File: aa6649.D
Acq: 5 Jun 2024 5:04 pm

Tgt Ion:130 Resp: 214963

Ion	Ratio	Lower	Upper
130	100		
128	77.8	57.8	97.8

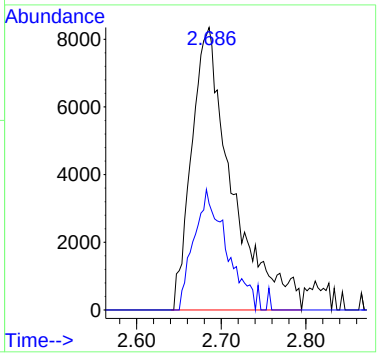


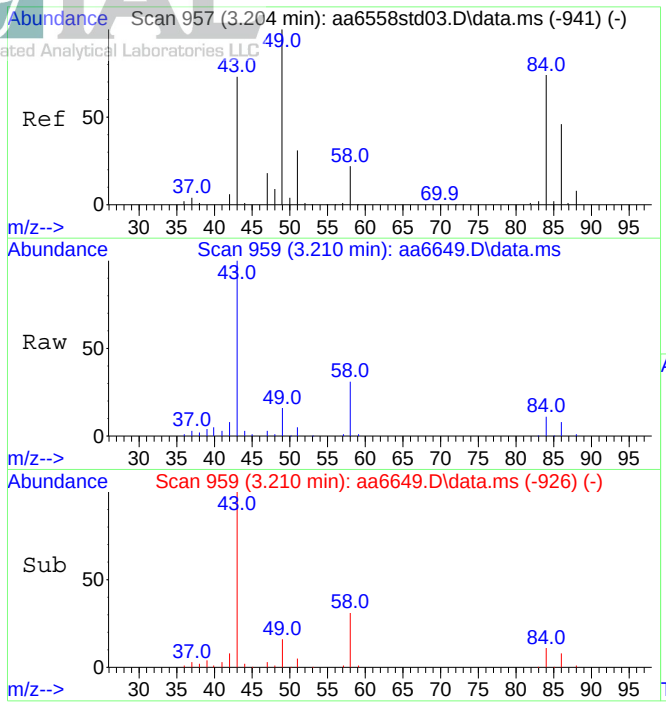


#13
Ethanol
Concen: 2.51 ppbV
RT: 2.686 min Scan# 796
Delta R.T. 0.016 min
Lab File: aa6649.D
Acq: 5 Jun 2024 5:04 pm

Tgt Ion: 45 Resp: 27776

Ion	Ratio	Lower	Upper
45	100		
46	34.2	29.2	43.8

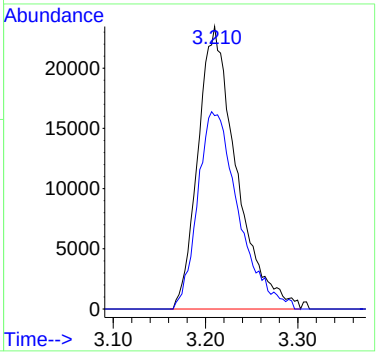


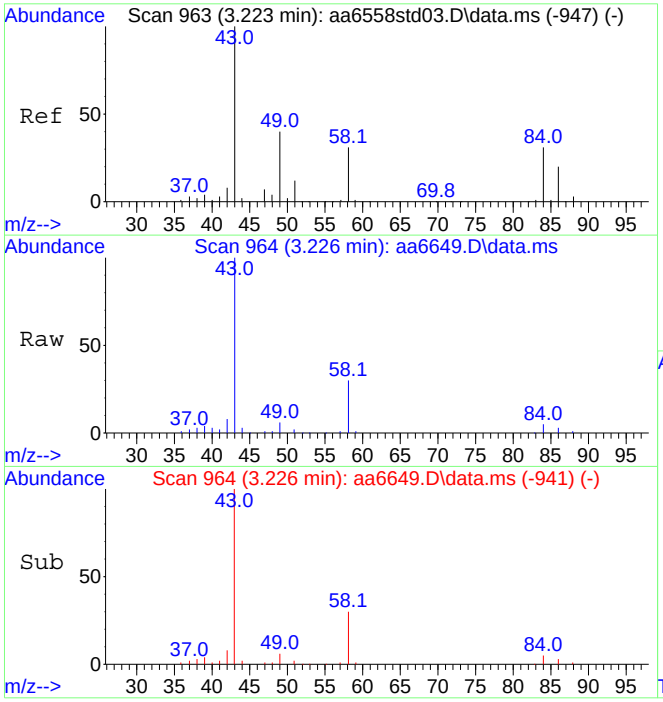


#20
Methylene chloride
Concen: 1.76 ppbV
RT: 3.210 min Scan# 959
Delta R.T. 0.006 min
Lab File: aa6649.D
Acq: 5 Jun 2024 5:04 pm

Tgt Ion: 49 Resp: 68258

Ion	Ratio	Lower	Upper
49	100		
84	73.7	56.2	96.2

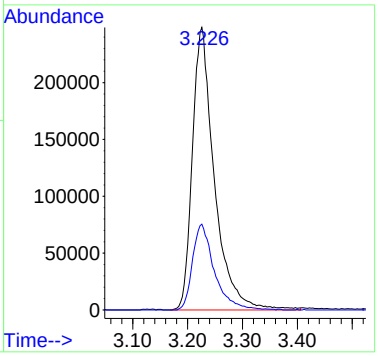


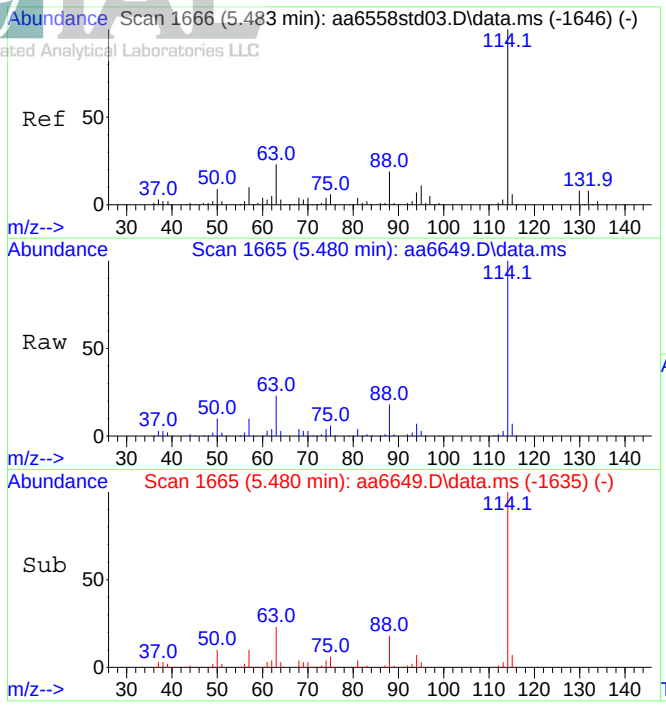


#21
Acetone
Concen: 14.35 ppbV
RT: 3.226 min Scan# 964
Delta R.T. 0.003 min
Lab File: aa6649.D
Acq: 5 Jun 2024 5:04 pm

Tgt Ion: 43 Resp: 692308

Ion	Ratio	Lower	Upper
43	100		
58	30.2	25.4	38.0

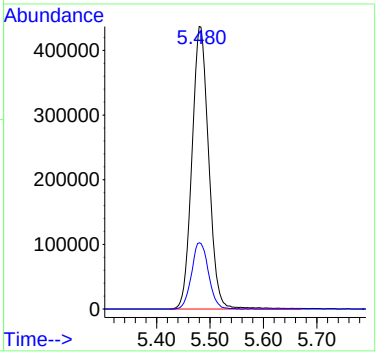


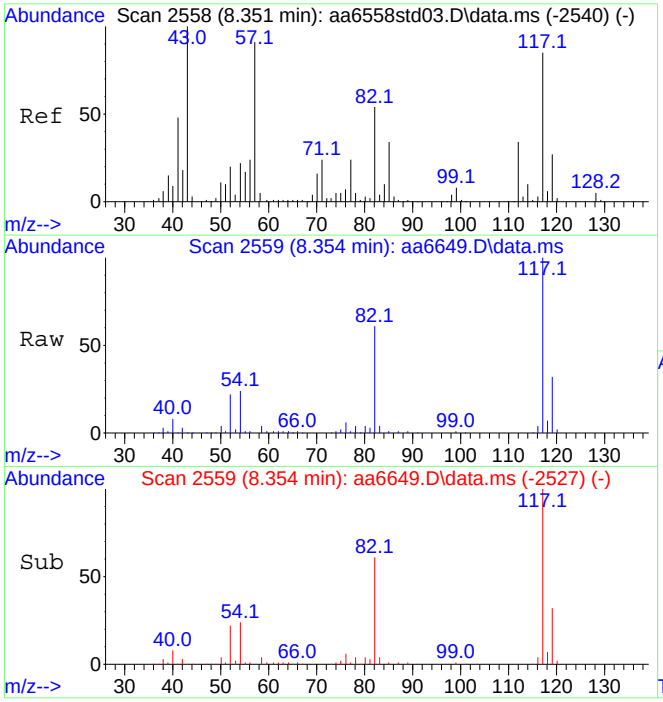


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.480 min Scan# 1665
Delta R.T. -0.003 min
Lab File: aa6649.D
Acq: 5 Jun 2024 5:04 pm

Tgt Ion:114 Resp: 951576

Ion	Ratio	Lower	Upper
114	100		
63	23.7	3.6	43.6

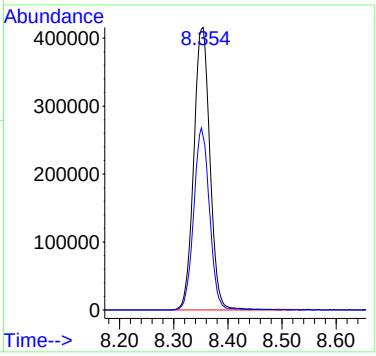


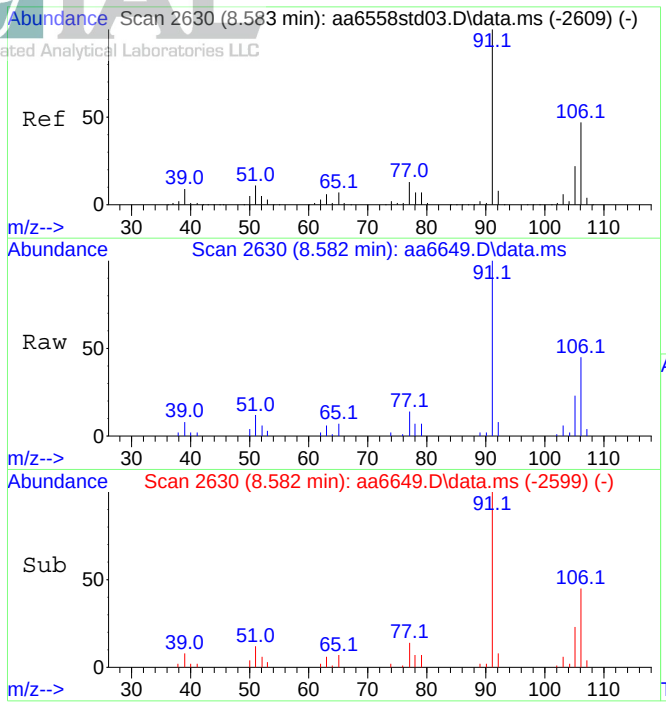


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.354 min Scan# 2559
Delta R.T. 0.003 min
Lab File: aa6649.D
Acq: 5 Jun 2024 5:04 pm

Tgt Ion:117 Resp: 865493

Ion	Ratio	Lower	Upper
117	100		
82	62.9	42.3	82.3

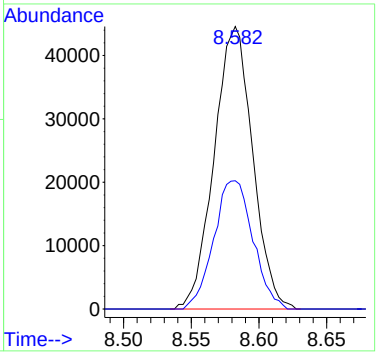


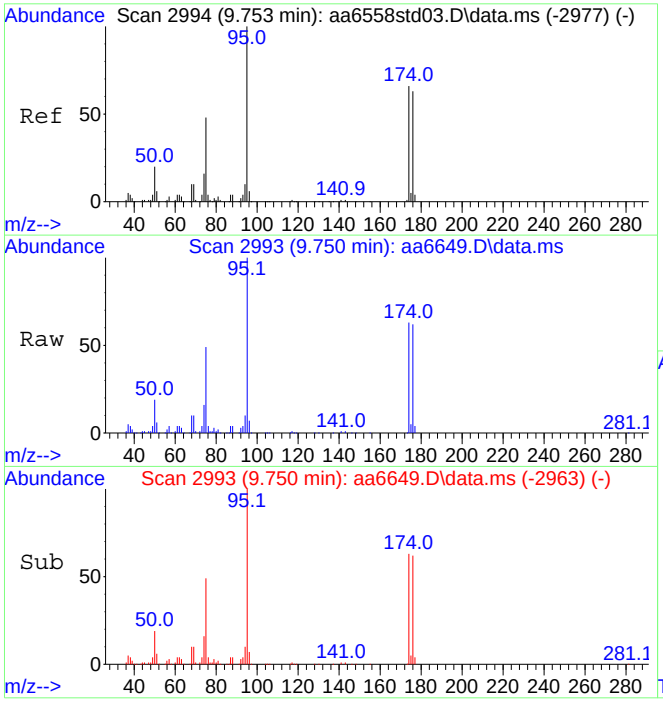


#59
Xylenes (m&p)
Concen: 0.69 ppbV
RT: 8.582 min Scan# 2630
Delta R.T. -0.000 min
Lab File: aa6649.D
Acq: 5 Jun 2024 5:04 pm

Tgt Ion: 91 Resp: 88343

Ion	Ratio	Lower	Upper
91	100		
106	46.2	37.4	56.2

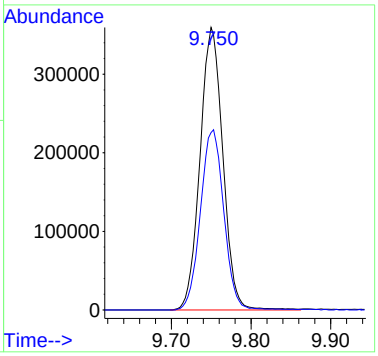




#64
Bromofluorobenzene (tune std)
Concen: 8.76 ppbV
RT: 9.750 min Scan# 2993
Delta R.T. -0.003 min
Lab File: aa6649.D
Acq: 5 Jun 2024 5:04 pm

Tgt Ion: 95 Resp: 717466

Ion	Ratio	Lower	Upper
95	100		
174	65.3	52.9	79.3



Data Path : C:\DATA\2024\06-2024\06-05-2024\
Data File : aa6650.D
Acq On : 5 Jun 2024 5:36 pm
Operator : jjw
Sample : E24-01845-23x10 dil
Misc : Dup of E24-01845-03x10 dil, Can # 5085, 50cc
ALS Vial : 12 Sample Multiplier: 1

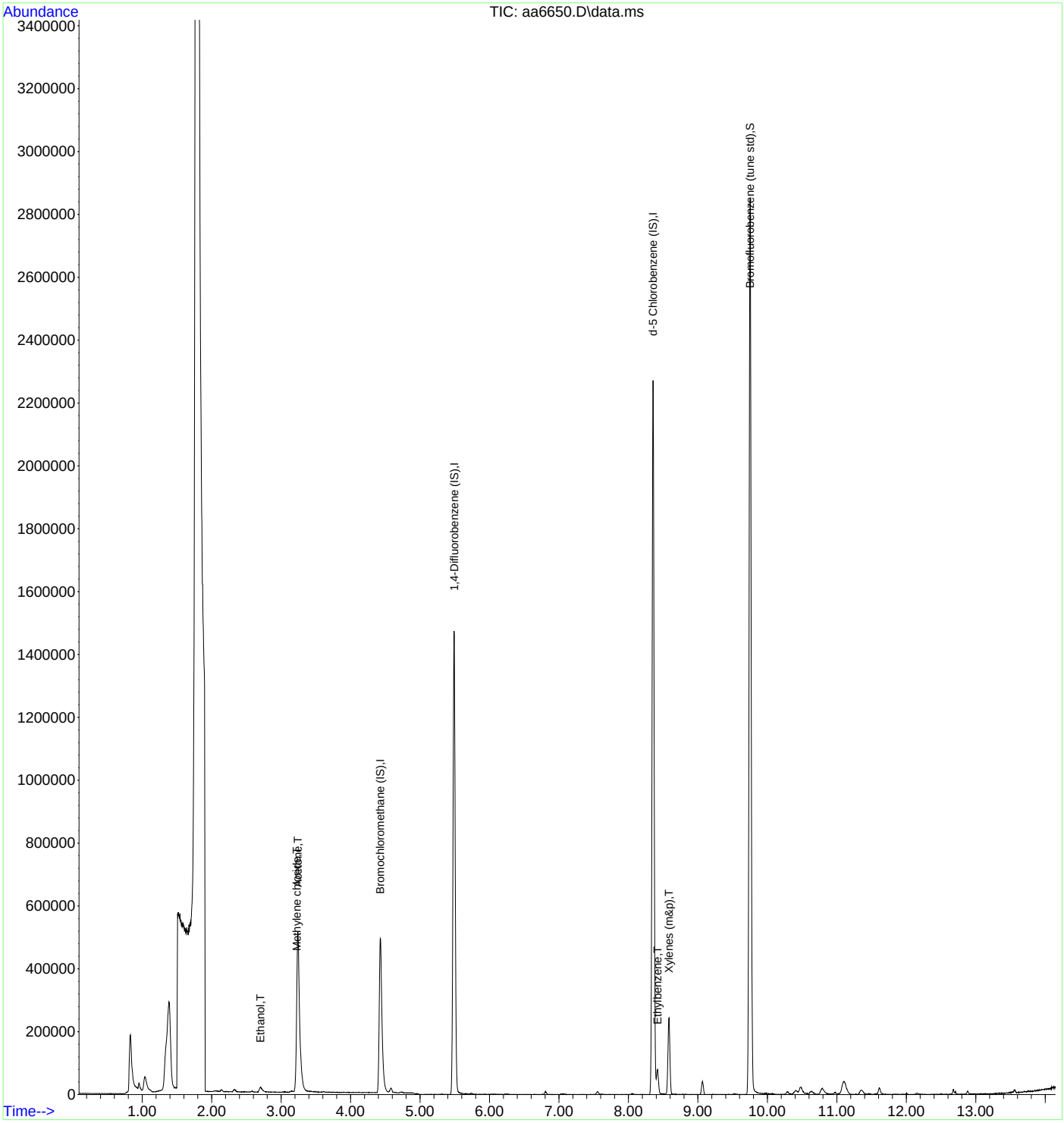
Quant Time: Jun 06 10:09:39 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

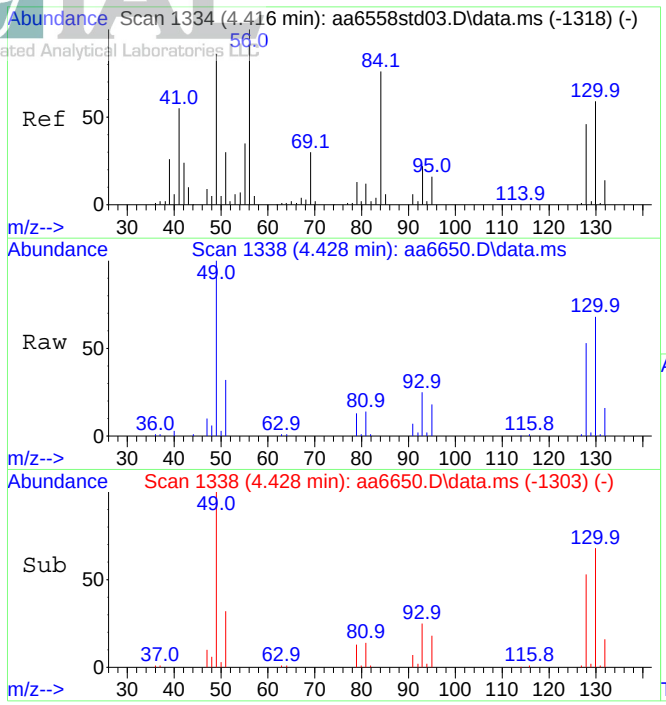
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.428	130	236563	10.00	ppbV	0.012
39) 1,4-Difluorobenzene (IS)	5.493	114	1296407	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.354	117	1417376	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.753	95	1303832	9.72	ppbV	0.000
Target Compounds						Qvalue
13) Ethanol	2.702	45	28144	2.31	ppbV	99
20) Methylene chloride	3.226	49	79437	1.86	ppbV	98
21) Acetone	3.242	43	823599	15.52	ppbV	99
58) Ethylbenzene	8.419	91	62952	0.23	ppbV	100
59) Xylenes (m&p)	8.583	91	170441	0.81	ppbV	100

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

Data Path : C:\DATA\2024\06-2024\06-05-2024\
Data File : aa6650.D
Acq On : 5 Jun 2024 5:36 pm
Operator : jjw
Sample : E24-01845-23x10 dil
Misc : Dup of E24-01845-03x10 dil, Can # 5085, 50cc
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 06 10:09:39 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

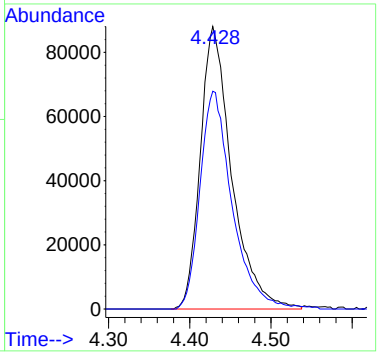


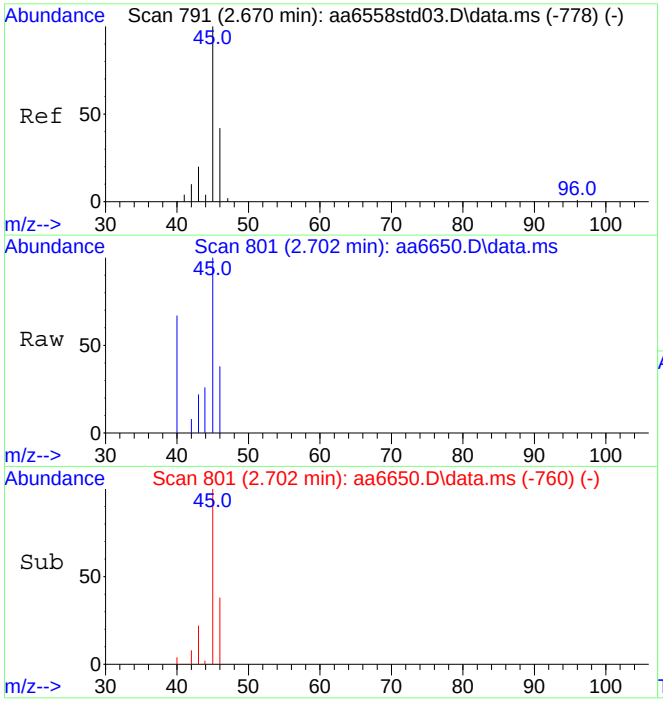


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.428 min Scan# 1338
Delta R.T. 0.012 min
Lab File: aa6650.D
Acq: 5 Jun 2024 5:36 pm

Tgt Ion:130 Resp: 236563

Ion	Ratio	Lower	Upper
130	100		
128	79.0	57.8	97.8

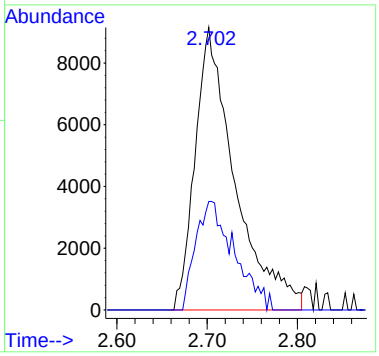


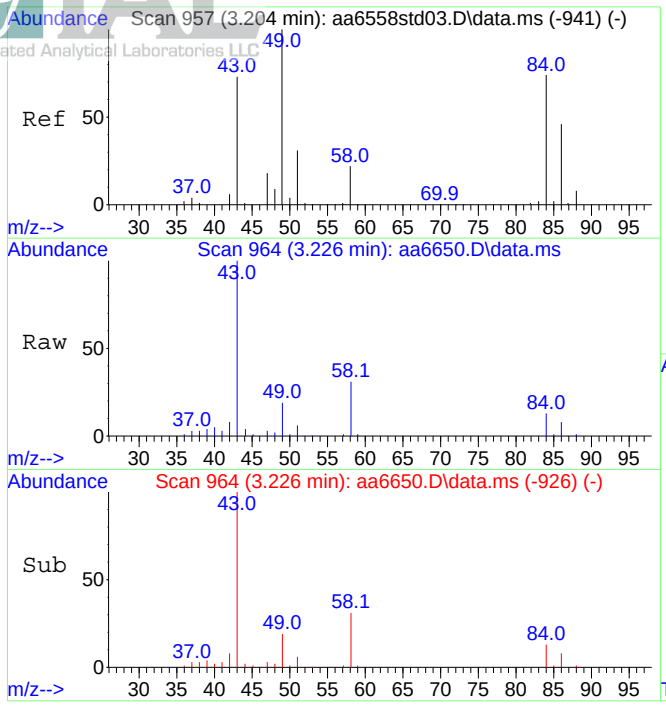


#13
Ethanol
Concen: 2.31 ppbV
RT: 2.702 min Scan# 801
Delta R.T. 0.032 min
Lab File: aa6650.D
Acq: 5 Jun 2024 5:36 pm

Tgt Ion: 45 Resp: 28144

Ion	Ratio	Lower	Upper
45	100		
46	37.0	29.2	43.8

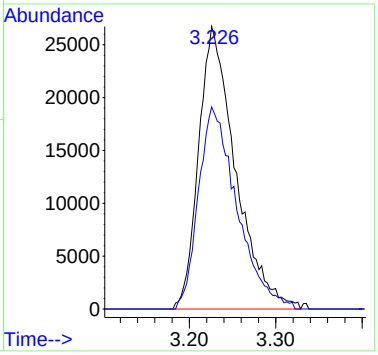


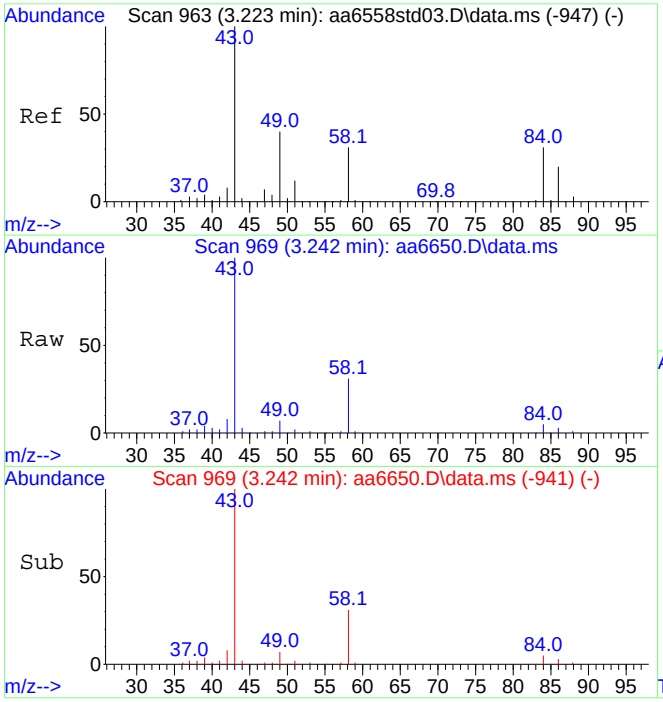


#20
Methylene chloride
Concen: 1.86 ppbV
RT: 3.226 min Scan# 964
Delta R.T. 0.022 min
Lab File: aa6650.D
Acq: 5 Jun 2024 5:36 pm

Tgt Ion: 49 Resp: 79437

Ion	Ratio	Lower	Upper
49	100		
84	74.4	56.2	96.2

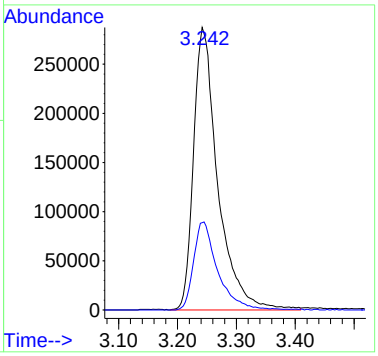


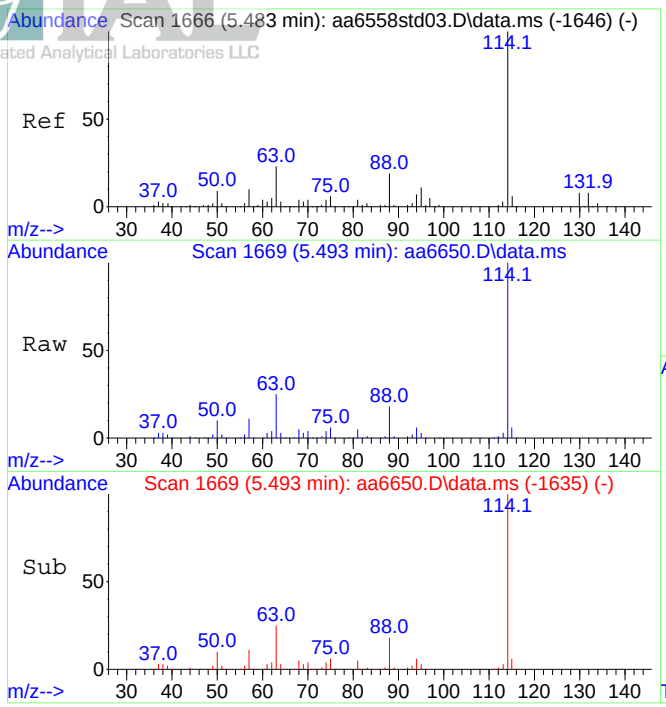


#21
Acetone
Concen: 15.52 ppbV
RT: 3.242 min Scan# 969
Delta R.T. 0.019 min
Lab File: aa6650.D
Acq: 5 Jun 2024 5:36 pm

Tgt Ion: 43 Resp: 823599

Ion	Ratio	Lower	Upper
43	100		
58	31.0	25.4	38.0

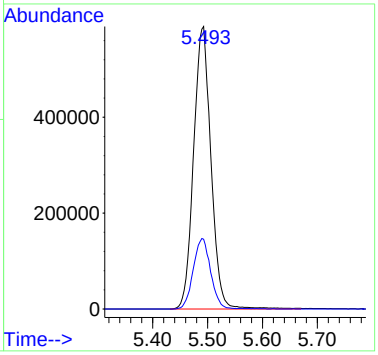


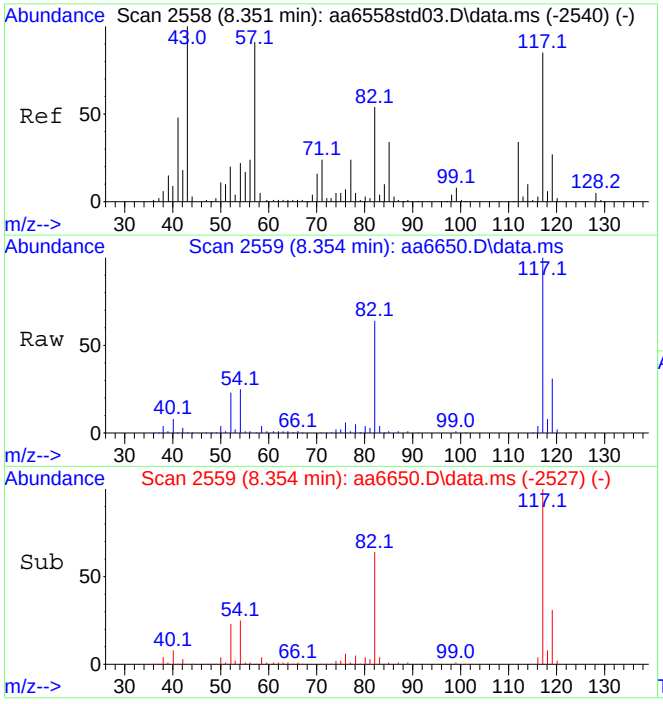


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.493 min Scan# 1669
Delta R.T. 0.009 min
Lab File: aa6650.D
Acq: 5 Jun 2024 5:36 pm

Tgt Ion:114 Resp: 1296407

Ion	Ratio	Lower	Upper
114	100		
63	25.1	3.6	43.6

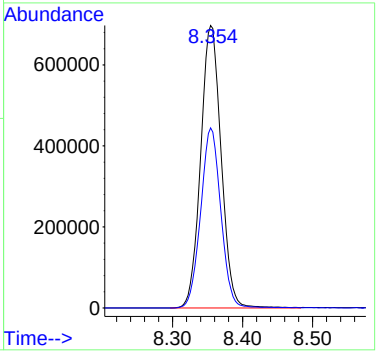


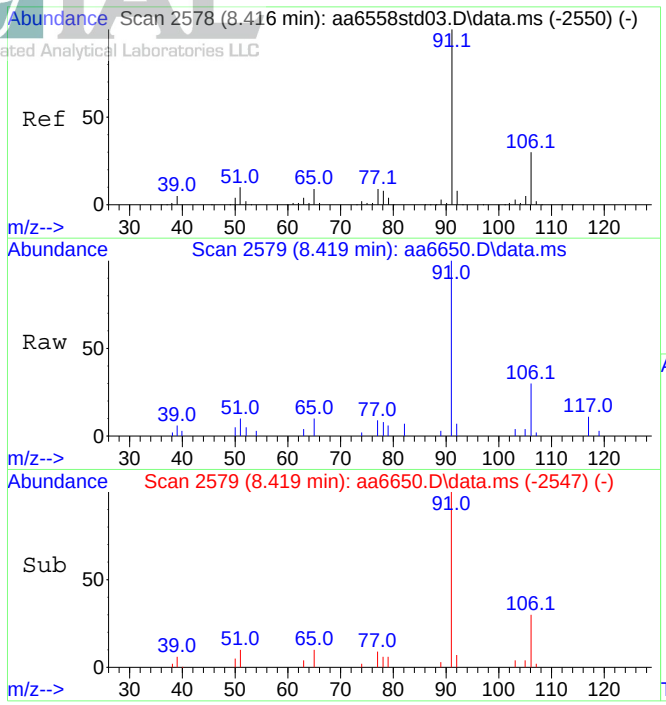


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.354 min Scan# 2559
Delta R.T. 0.003 min
Lab File: aa6650.D
Acq: 5 Jun 2024 5:36 pm

Tgt Ion:117 Resp: 1417376

Ion	Ratio	Lower	Upper
117	100		
82	62.7	42.3	82.3

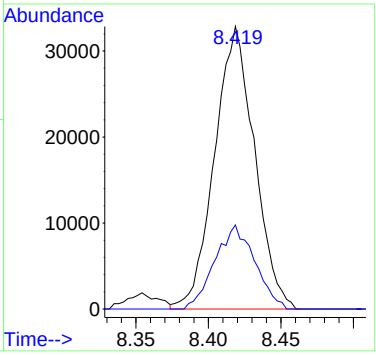


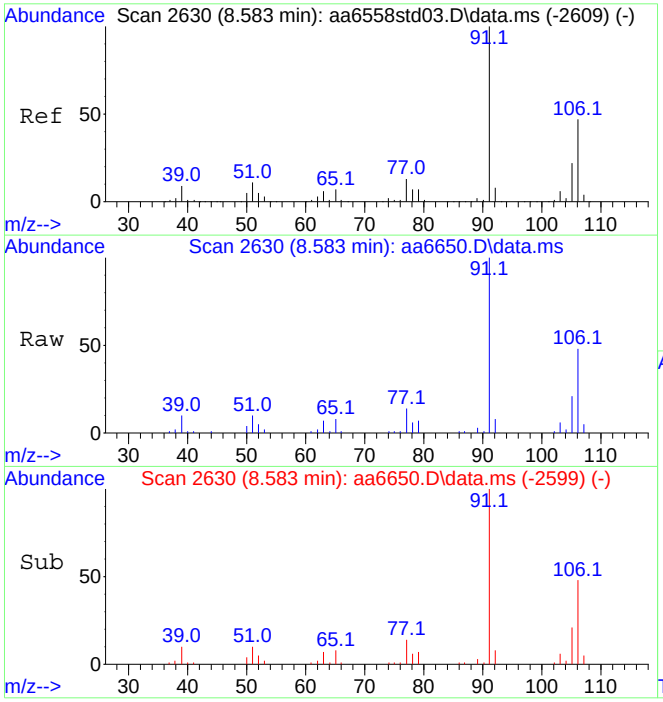


#58
Ethylbenzene
Concen: 0.23 ppbV
RT: 8.419 min Scan# 2579
Delta R.T. 0.003 min
Lab File: aa6650.D
Acq: 5 Jun 2024 5:36 pm

Tgt Ion: 91 Resp: 62952

Ion	Ratio	Lower	Upper
91	100		
106	29.7	23.8	35.8

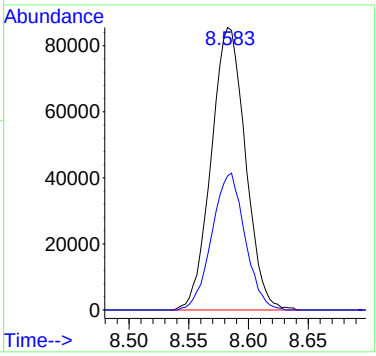


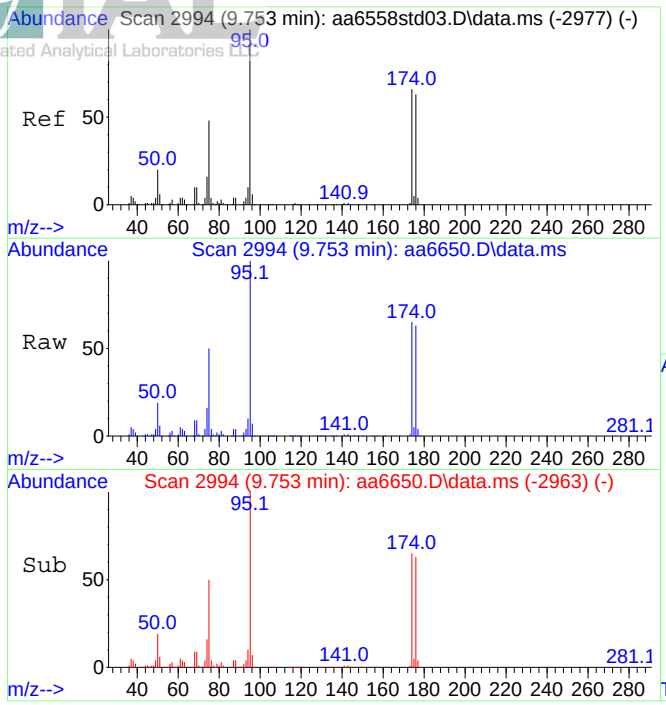


#59
Xylenes (m&p)
Concen: 0.81 ppbV
RT: 8.583 min Scan# 2630
Delta R.T. -0.000 min
Lab File: aa6650.D
Acq: 5 Jun 2024 5:36 pm

Tgt Ion: 91 Resp: 170441

Ion	Ratio	Lower	Upper
91	100		
106	46.8	37.4	56.2

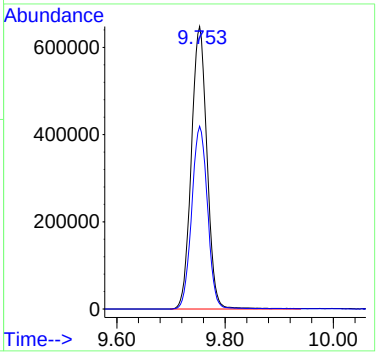




#64
Bromofluorobenzene (tune std)
Concen: 9.72 ppbV
RT: 9.753 min Scan# 2994
Delta R.T. -0.000 min
Lab File: aa6650.D
Acq: 5 Jun 2024 5:36 pm

Tgt Ion: 95 Resp: 1303832

Ion	Ratio	Lower	Upper
95	100		
174	65.5	52.9	79.3



INTEGRATED ANALYTICAL LABORATORIES, LLC

Integrated Analytical Laboratories
GC/MS Run Log

Instrument ID: Agilent 7890A / 5975C
Column: Restek RTX-1 SN 992567

Target Directory: D:\Agilent GCMS\

Date of Analysis: 3/27/2024
Date of Initial Calibration: 3/27/2024

File #	Laboratory Sample ID	QC Check	Dilution Factor	Can #	Analyst	Injection Volume (cc)	Comments	*Make-up Air*		*Acquisition*		*Room*		*TO-15 Standard*	
								Added to canister (cc)	Added for dilution	Date	Time	Temp	BP "Hg	Working ID	Vendor ID (Lot#)
aa6020bfb	BFB	✓		ALM018474	JJW	0.5				**3/27/2024**	**10:03**	70	29.63		160-402352677-1
aa6021std05	0.2 ppbv Std	✓		EB0103704	JJW	1								3/27/2024	160-401980152-1
aa6022std04	2 ppbv Std	✓		EB0103704	JJW	10								3/27/2024	160-401980152-1
aa6023std03	10 ppbv Std	✓		EB0103704	JJW	50								3/27/2024	160-401980152-1
aa6024std02	20 ppbv Std	✓		EB0103704	JJW	100								3/27/2024	160-401980152-1
aa6025std01	40 ppbv Std	✓		EB0103704	JJW	200								3/27/2024	160-401980152-1
aa6026icvss	10 ppbv ICVSS	✓		EB0116272	JJW	50								3/27/2024	160-402744241-1
aa6027lcs	10 ppbv LCS	✓		EB0103704	JJW	50								3/27/2024	160-401980152-1

Analyst Name: J Walukiewicz

Signature: Joseph Walukiewicz

INTEGRATED ANALYTICAL LABORATORIES, LLC

Integrated Analytical Laboratories
GC/MS Run Log

Instrument ID: Agilent 7890A / 5975C
Column: Restek RTX-1 SN 992567

Target Directory: D:\Agilent GCMS\

Date of Analysis: 4/24/2024
Date of Initial Calibration: 3/27/2024

File #	Laboratory Sample ID	QC Check	Dilution Factor	Can #	Analyst	Injection Volume (cc)	Comments	*Make-up Air*		*Acquisition*		*Room*		*TO-15 Standard*	
								Added to canister (cc)	Added for dilution	Date	Time	Temp	BP "Hg	Working ID	Vendor ID (Lot#)
aa6389bfb	BFB	✓		ALM018474	JJW	0.5				**4/24/2024**	**9:59**	70	29.54		160-402352677-1
aa6390dcvs	10 ppbv DCVS	✓		EB0103704	JJW	50								3/27/2024	160-401980152-1
aa6391lcs	10 ppbv LCS	✓		EB0103704	JJW	50								3/27/2024	160-401980152-1
aa6392blk	Method Blank	✓		1127	JJW	500									
aa6393rllcs	0.2 ppbv RLLCS	✓		EB0103704	JJW	1								3/27/2024	160-401980152-1
aa6394	5085	✓		5085	JJW	500									
aa6395	3035A	✓		3035A	JJW	500									
aa6396	E24-01307-01	✓		3008	JJW	500									
aa6397	E24-01307-02	✓		5080	JJW	500									
aa6398	E24-01307-03	✓		3289	JJW	500									
aa6399	E24-01437-01	✓		2902	JJW	500									
aa6400	E24-01437-02	✓		3026A	JJW	500									
aa6401	E24-01437-03	✓		2897	JJW	500	Intern Std Fail								
aa6402	E24-01437-23	✓		2897	JJW	500	Dup of 01437-03								
aa6403	blk	✓		x	JJW	500									
aa6404	blk	✓		x	JJW	500									
aa6405cccvs	10 ppbv CCCVS	✓		EB0103704	JJW	50				4/24/2024	21:01			3/27/2024	160-401980152-1

Analyst Name: J Walukiewicz

Signature: Joseph Walukiewicz

INTEGRATED ANALYTICAL LABORATORIES, LLC

Integrated Analytical Laboratories
GC/MS Run Log

Instrument ID: Agilent 7890A / 5975C
Column: Restek RTX-1 SN 992567

Target Directory: D:\Agilent GCMS\

Date of Analysis: 5/29/2024
Date of Initial Calibration: 5/29/2024

File #	Laboratory Sample ID	QC Check	Dilution Factor	Can #	Analyst	Injection Volume (cc)	Comments	*Make-up Air*		*Acquisition*		*Room*		*TO-15 Standard*	
								Added to canister (cc)	Added for dilution	Date	Time	Temp	BP "Hg	Working ID	Vendor ID (Lot#)
aa6554bfb	BFB	✓		ALM018474	JJW	0.5				**5/29/2024**	**9:16**	70	29.63		160-402352677-1
aa6555dcvs	10 ppbv DCVS	✓		EB0103704	JJW	50	Failed Criteria							3/27/2024	160-401980152-1
aa6556std05	0.2 ppbv Std	✓		EB0103704	JJW	1								5/29/2024	160-401980152-1
aa6557std04	2 ppbv Std	✓		EB0103704	JJW	10								5/29/2024	160-401980152-1
aa6558std03	10 ppbv Std	✓		EB0103704	JJW	50								5/29/2024	160-401980152-1
aa6559std02	20 ppbv Std	✓		EB0103704	JJW	100								5/29/2024	160-401980152-1
aa6560std01	40 ppbv Std	✓		EB0103704	JJW	200								5/29/2024	160-401980152-1
aa6561icvss	10 ppbv ICVSS	✓		EB0116272	JJW	50				5/29/2024	17:16			5/29/2024	160-402744241-1

Analyst Name: J Walukiewicz

Signature: Joseph Walukiewicz

INTEGRATED ANALYTICAL LABORATORIES, LLC

Integrated Analytical Laboratories
GC/MS Run Log

Instrument ID: Agilent 7890A / 5975C
Column: Restek RTX-1 SN 992567

Target Directory: D:\Agilent GCMS\

Date of Analysis: 6/4/2024
Date of Initial Calibration: 5/29/2024

File #	Laboratory Sample ID	QC Check	Dilution Factor	Can #	Analyst	Injection Volume (cc)	Comments	*Make-up Air*		*Acquisition*		*Room*		*TO-15 Standard*	
								Added to canister (cc)	Added for dilution	Date	Time	Temp	BP "Hg	Working ID	Vendor ID (Lot#)
aa6620bfb	BFB	✓		ALM018474	JJW	0.5				**6/4/2024**	**10:07**	70	29.42		160-402352677-1
aa6621dcvs	10 ppbv DCVS	✓		EB0103704	JJW	50								5/29/2024	160-401980152-1
aa6622lcs	10 ppbv LCS	✓		EB0103704	JJW	50								5/29/2024	160-401980152-1
aa6623blk	Method Blank	✓		1127	JJW	500									
aa6624rllcs	0.2 ppbv RLLCS	✓		EB0103704	JJW	1								5/29/2024	160-401980152-1
aa6625	E24-01875-01x10 dil	✓	10	3293	JJW	50									
aa6626	E24-01875-03x10 dil	✓	10	3814	JJW	50									
aa6627	E24-01875-05x10 dil	✓	10	3806	JJW	50									
aa6628	E24-01875-02x10 dil	✓	10	3286	JJW	50									
aa6629	E24-01875-04x10 dil	✓	10	2159	JJW	50									
aa6630	E24-01875-06x10 dil	✓	10	3045A	JJW	50	intern stand failed								
aa6631	E24-01875-01x50 dil	✓	50	3293	JJW	10									
aa6632	E24-01875-21x50 dil	✓	50	3293	JJW	10									
aa6633	E24-01875-04x50 dil	✓	50	2159	JJW	10									
aa6634	E24-01875-03x2 dil	✓	2	3814	JJW	250									
aa6635	E24-01875-05x2 dil	✓	2	3806	JJW	250									
aa6636	E24-01875-02	✓		3286	JJW	500									
aa6637	blank	✓		x	JJW	500									
aa6638cccvs	10 ppbv CCCVS	✓		EB0103704	JJW	50				6/4/2024	21:43			5/29/2024	160-401980152-1

Analyst Name: J Walukiewicz

Signature: Joseph Walukiewicz

INTEGRATED ANALYTICAL LABORATORIES, LLC

Integrated Analytical Laboratories
GC/MS Run Log

Instrument ID: Agilent 7890A / 5975C
Column: Restek RTX-1 SN 992567

Target Directory: D:\Agilent GCMS\

Date of Analysis: 6/5/2024
Date of Initial Calibration: 5/29/2024

File #	Laboratory Sample ID	QC Check	Dilution Factor	Can #	Analyst	Injection Volume (cc)	Comments	*Make-up Air*		*Acquisition*		*Room*		*TO-15 Standard*	
								Added to canister (cc)	Added for dilution	Date	Time	Temp	BP "Hg	Working ID	Vendor ID (Lot#)
aa6639bfb	BFB	✓		ALM018474	JJW	0.5				**6/5/2024**	**9:50**	70	29.42		160-402352677-1
aa6640dcvs	10 ppbv DCVS	✓		EB0103704	JJW	50								5/29/2024	160-401980152-1
aa6641lcs	10 ppbv LCS	✓		EB0103704	JJW	50								5/29/2024	160-401980152-1
aa6642blk	Method Blank	✓		1127	JJW	500									
aa6643rllcs	0.2 ppbv RLLCS	✓		EB0103704	JJW	1								5/29/2024	160-401980152-1
aa6644	E24-01845-03	✓		5085	JJW	500									
aa6645	E24-01845-01	✓		2068	JJW	500									
aa6646	E24-01845-02	✓		5100	JJW	500									
aa6647	E24-01875-06x5 dil	✓	5	3045A	JJW	100	not used								
aa6648	E24-01875-06x10 dil	✓	10	3045A	JJW	50									
aa6649	E24-01845-03x10 dil	✓	10	5085	JJW	50									
aa6650	E24-01845-23x10 dil	✓	10	5085	JJW	50	Dup of 1845-03x10								
aa6651	E24-01845-02x2 dil	✓	2	5100	JJW	250									
aa6652	E24-01876-01	✓		2094	JJW	500	not used-contamin.								
aa6653	E24-01876-02	✓		2064	JJW	500									
aa6654	E24-01876-03	✓		5079	JJW	500									
aa6655	blank	✓		x	JJW	500									
aa6656cccvs	10 ppbv CCCVS	✓		EB0103704	JJW	50				6/5/2024	21:19			5/29/2024	160-401980152-1

Analyst Name: J Walukiewicz

Signature: Joseph Walukiewicz

IAL
Integrated Analytical Laboratories LLC

INTEGRATED ANALYTICAL LABORATORIES, LLC

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

External Chain of Custody Record/
Field Test Data Sheet
USEPA Method TO-15

Contact Us: 973-361-4252
Fax: 973-366-5613
Web: www.ialonline.com

Carrier (check one): ____ IAL Courier ____Client Courier _____FedEx/UPS

pg 1 of 1

Client Contact Information	Project Information	Invoice Information
Company: J.S. Held, LLC	Project Name: 48-55 36th St	
Address: 5 Marine View Plaza, Suite 401	Project Location (State): NY	Attn:
Hoboken, NJ 07030	Project Manager: Leah DeFidio	Address:
Phone: 201-876-9400	PM Signature:	
Fax:	PM E-Mail: LDeFidio@jsheld.com	PO #: 2403 02017
Report to:	Sampler: BN	Quote #:

Analysis Turnaround Time - IF NO TAT IS SPECIFIED, 2 WEEK TAT IS ASSUMED

IAL Standard: 2 weeks (10 business days)

Rush (**pre-approved by lab): 24hr** 48hr** 72hr** 96hr** 1wk**

	Sample Identification	Start DATE & TIME (24hr Clock)	End DATE & TIME (24hr Clock)	Starting Vacuum ("Hg)	Ending Vacuum ("Hg)	Starting Temp. (°F)	Ending Temp. (°F)	Outgoing Vacuum - Lab ("Hg)	Barometric Pressure: Start — Incoming Vacuum - Lab ("Hg)	Flow Regulator ID	Barometric Pressure: Stop — Canister ID	Canister Size (1L or 6L)	Flow Controller Readout (cc/min)	EPA TO - 15	NJDEP LLTO-15 (includes 30 TICs)	Library Search (10, 20, or 30 TICs)	Other (Explain in Comments)	Regulatory/ NY Cat B / Full (NJ Required)	Reduced / NY Cat A Data Package	Results Only	Indoor Air	Ambient / Outdoor Air	Sub Slab / Soil Gas / Near Slab (Circle One)	Stack Emission / SVE System	High Concentrations Expected
1	SG-1B	5/29/24, 1658	5/29/24, 1728	-30	-5	~~1658~~ 30	~~1728~~ 30	-29.0	-4.5	7341606	3293	6L	200	X									X		
2	SG-5	5/30/24 1054	5/30/24, 1129	-30	-3	70	70	-29.0	-2.5	7342688	3286		200	X									X		
3	SG-6	" 1214	" 1944	-29	-2.5			-29.0	-2.5	AOC7631 -10	3814		200	X									X		
4	SG-7	" 1220	" 1950	-30	0			-29.0	0.0	7288555	2158		200	X									X		
5	SG-8	" 1215	" 1945	-28.5	0			-29.0	0.0	7341618	3806		200	X									X		
6	SG-9	" 1219	" 1949	-30	-4			-29.0	-3.5	70 25 AOC -10	3045A		200	X									X		

Comments/ Special Analysis Instructions / QC Requirements:

Note: Hold or contingent samples may be designated by writing an "H" or "C" in the appropriate analysis box.

ALL FIELDS IN RED ARE REQUIRED

Shipping Information / Canister Preparation (for laboratory use only)

Individual Preparing Canisters / Title: ~~P. Jenkins, J. Walukiewicz~~ / Air Department Sample Custodians
Lab Affixed Seal Number(s): Desmond Flores
Date/Time Shipping Container Sealed: 11:43 AM 5/23/24

Laboratory Canister Certification

GC/MS Analyst Signature: Joseph J Walukiewicz III (IAL)

IAL SDG#: 01875

External Chain of Custody

Relinquished	Received	Date / Time	Reason for Change of External Custody
Desmond Flores		5/28/24 11:43 AM	shipment from laboratory to client
	Joseph J Walukiewicz III (IAL)	5/31/24 1429	
Joseph J Walukiewicz III (IAL)		05/31/24 1706	Received at lab

Name/Title Resealing Shipping Container Name:
Date/Time Sample Shipping Container Resealed:
Date/Time Sample Shipping Container Opened: 05/31/24 1706

NJDEP Affixed Seal Number:
Individual Opening Sample Shipping Container: ~~Patrick Jenkins~~ Joseph Walukiewicz
Date/Time Internal Chain of Custody Initiated: 06/03/24 0930

White and yellow - lab copies; Pink - client copy

Use appropriate care with IAL sampling equipment when sampling and packing for shipment. The client is responsible for all damage incurred to IAL equipment. Notify IAL if equipment is damaged upon receipt. Holding time before sampling is 15 days, after sampling is 30 days; failure to follow these times may result in data rejection by regulatory agencies. The lab will contact you if your COC is not clear, incomplete, or if discrepancies exist. The use of initials is not permitted on the COC except when correcting errors. 06/2014

Example Calculation (EPA TO-15)

$$\frac{\text{Area of Compound}}{\text{Area of Internal Standard}} \times \frac{\text{Concentration of Internal Standard (10 ppbv)}}{\text{Response Factor}} = \text{Concentration of Compound (ppbv)}$$

Conversion from ppbv to µg/m ^{3}

$$\frac{\text{Concentration of Compound (ppbv)} \times \text{Molecular Weight of Compound}}{24.45} = \text{Concentration of Compound (µg/m3)}$$

INTEGRATED ANALYTICAL LABORATORIES, LLC

Clean Canister Certification Report

Lab Sample Name:	**Clean Canister, Batch Master 3035A**	**Data File:**	**AA6395**
Field Sample Name:	**Canister 3035A**	**Date Analyzed:**	**4/24/2024**
Sample Volume:	**500ml**	**Matrix:**	**Air**

Canisters associated with this run: 3035A, 3287, 4856, 3814 (used for E24-01875-03), 2064, 2029, 5079, 3045 A (used for E24-01875-06)

Runs with this Clean Canister Certification:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6389BFB]	04/24/2024 09:59
10 PPBV DCVS [AA6390DCVS]	04/24/2024 10:32
10 PPBV LCS [AA6391LCS]	04/24/2024 12:12
METHOD BLANK [AA6392BLK]	04/24/2024 13:23
02 PPBV RLLCS [AA6393RLLCS]	04/24/2024 14:00
CLEAN CAN CERTIFICATION, BATCH MASTER 5085 [AA6394]	04/24/2024 14:58
CLEAN CAN CERTIFICATION, BATCH MASTER 3035A [AA6395]	04/24/2024 15:28
10 PPBV CCCVS [AA6405CCCVS]	04/24/2024 21:01

This canister has been certified clean, all compounds are below 0.2 ppbv.

Compound	CAS #	RL (ppbv)	Calculated Amount (ppbv)
Acetone	67-64-1	0.20	ND
Benzene	71-43-2	0.20	ND
Bromodichloromethane	75-27-4	0.20	ND
Bromoform	75-25-2	0.20	ND
Bromomethane	74-83-9	0.20	ND
1,3-Butadiene	106-99-0	0.20	ND
Chlorobenzene	108-90-7	0.20	ND
Chloroethane	75-00-3	0.20	ND
Chloroform	67-66-3	0.20	ND
Chloromethane	74-87-3	0.20	ND
Carbon disulfide	75-15-0	0.20	ND
Carbon tetrachloride	56-23-5	0.20	ND
Cyclohexane	110-82-7	0.20	ND
Dibromochloromethane	124-48-1	0.20	ND
1,2-Dibromoethane	106-93-4	0.20	ND
1,2-Dichlorobenzene	95-50-1	0.20	ND
1,3-Dichlorobenzene	541-73-1	0.20	ND
1,4-Dichlorobenzene	106-46-7	0.20	ND
Dichlorodifluoromethane	75-71-8	0.20	ND
1,1-Dichloroethane	75-34-3	0.20	ND
1,2-Dichloroethane	107-06-2	0.20	ND
1,1-Dichloroethene	75-35-4	0.20	ND
1,2-Dichloropropane	78-87-5	0.20	ND
1,3-Dichloropropene (cis)	10061-01-5	0.20	ND
1,3-Dichloropropene (trans)	10061-02-6	0.20	ND
1,2-Dichlorotetrafluoroethane	76-14-2	0.20	ND
1,4-Dioxane	123-91-1	0.20	ND
Ethylbenzene	100-41-4	0.20	ND
n-Heptane	142-82-5	0.20	ND
1,3-Hexachlorobutadiene	87-68-3	0.20	ND
n-Hexane	110-54-3	0.20	ND
Methylene chloride	75-09-2	0.20	ND
Methyl ethyl ketone	78-93-3	0.20	ND

Clean Canister Certification Report

Lab Sample Name:	**Clean Canister, Batch Master 3035A**	**Data File:**	**AA6395**
Field Sample Name:	**Canister 3035A**	**Date Analyzed:**	**4/24/2024**
Sample Volume:	**500ml**	**Matrix:**	**Air**

Canisters associated with this run: 3035A, 3287, 4856, 3814 (used for E24-01875-03), 2064, 2029, 5079, 3045 A (used for E24-01875-06)

Runs with this Clean Canister Certification:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6389BFB]	04/24/2024 09:59
10 PPBV DCVS [AA6390DCVS]	04/24/2024 10:32
10 PPBV LCS [AA6391LCS]	04/24/2024 12:12
METHOD BLANK [AA6392BLK]	04/24/2024 13:23
02 PPBV RLLCS [AA6393RLLCS]	04/24/2024 14:00
CLEAN CAN CERTIFICATION, BATCH MASTER 5085 [AA6394]	04/24/2024 14:58
CLEAN CAN CERTIFICATION, BATCH MASTER 3035A [AA6395]	04/24/2024 15:28
10 PPBV CCCVS [AA6405CCCVS]	04/24/2024 21:01

This canister has been certified clean, all compounds are below 0.2 ppbv.

Compound	CAS #	RL (ppbv)	Calculated Amount (ppbv)
Methyl isobutyl ketone	108-10-1	0.20	ND
Methyl tert-butyl ether	1634-04-4	0.20	ND
Styrene	100-42-5	0.20	ND
Tert-butyl alcohol	75-65-0	0.20	ND
1,1,2,2-Tetrachloroethane	79-34-5	0.20	ND
Tetrachloroethene	127-18-4	0.20	ND
Toluene	108-88-3	0.20	ND
1,2,4-Trichlorobenzene	120-82-1	0.20	ND
1,1,1-Trichloroethane	71-55-6	0.20	ND
1,1,2-Trichloroethane	79-00-5	0.20	ND
Trichloroethene	79-01-6	0.20	ND
Trichlorofluoromethane	75-69-4	0.20	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.20	ND
1,2,4-Trimethylbenzene	95-63-6	0.20	ND
1,3,5-Trimethylbenzene	108-67-8	0.20	ND
2,2,4-Trimethylpentane	540-84-1	0.20	ND
Vinyl bromide	593-60-2	0.20	ND
Vinyl chloride	75-01-4	0.20	ND
Xylenes (m&p)	179601-23-1	0.40	ND
Xylenes (o)	95-47-6	0.20	ND

Data Path : C:\DATA\2024\04-2024\04-24-2024\
Data File : aa6395.D
Acq On : 24 Apr 2024 3:28 pm
Operator : jjw
Sample : 3035A
Misc : 3287, 4856, 3814, 2064, 2029, 5079, 3045A
ALS Vial : 20 Sample Multiplier: 1

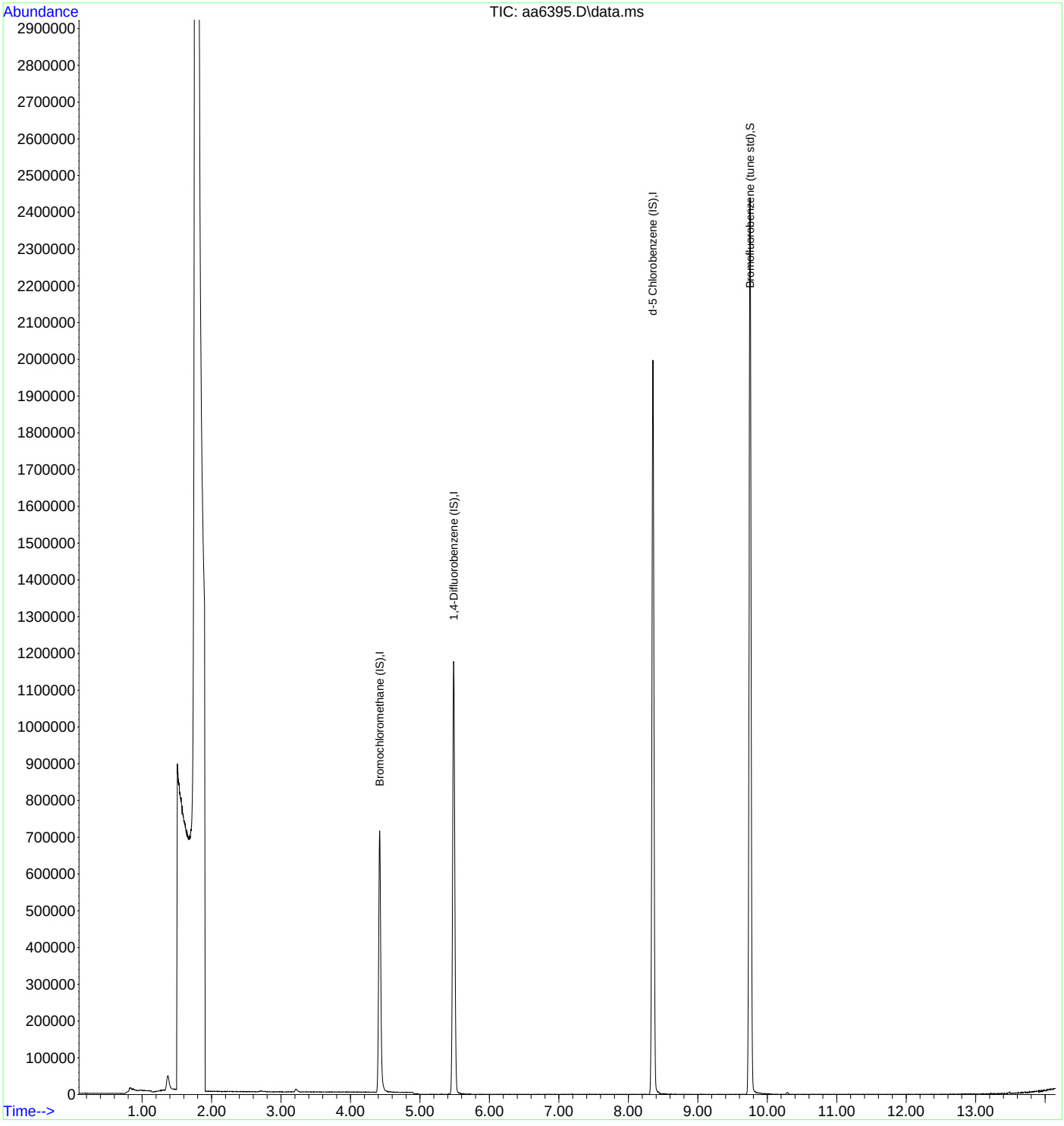
Quant Time: Apr 24 15:45:56 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.420	130	236867	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.487	114	1002275	10.00	ppbV	0.011
55) d-5 Chlorobenzene (IS)	8.352	117	1184616	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.750	95	1097993	10.33	ppbV	0.000
Target Compounds						Qvalue

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

Data Path : C:\DATA\2024\04-2024\04-24-2024\
Data File : aa6395.D
Acq On : 24 Apr 2024 3:28 pm
Operator : jjw
Sample : 3035A
Misc : 3287, 4856, 3814, 2064, 2029, 5079, 3045A
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Apr 24 15:45:56 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES, LLC

Clean Canister Certification Report

Lab Sample Name: Clean Canister, Batch Master 5085 **Data File:** AA6394
Field Sample Name: Canister 5085 **Date Analyzed:** 4/24/2024
Sample Volume: 500ml **Matrix:** Air

Canisters associated with this run: 5085, 2094, 5100, 3286 (used for E24-01875-02), 3806 (used for E24-01875-05), 3293 (used for E24-01875-01), 2159 (used for E24-01875-04), 2068

Runs with this Clean Canister Certification:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6389BFB]	04/24/2024 09:59
10 PPBV DCVS [AA6390DCVS]	04/24/2024 10:32
10 PPBV LCS [AA6391LCS]	04/24/2024 12:12
METHOD BLANK [AA6392BLK]	04/24/2024 13:23
02 PPBV RLLCS [AA6393RLLCS]	04/24/2024 14:00
CLEAN CAN CERTIFICATION, BATCH MASTER 5085 [AA6394]	04/24/2024 14:58
CLEAN CAN CERTIFICATION, BATCH MASTER 3035A [AA6395]	04/24/2024 15:28
10 PPBV CCCVS [AA6405CCCVS]	04/24/2024 21:01

This canister has been certified clean, all compounds are below 0.2 ppbv.

Compound	CAS #	RL (ppbv)	Calculated Amount (ppbv)
Acetone	67-64-1	0.20	ND
Benzene	71-43-2	0.20	ND
Bromodichloromethane	75-27-4	0.20	ND
Bromoform	75-25-2	0.20	ND
Bromomethane	74-83-9	0.20	ND
1,3-Butadiene	106-99-0	0.20	ND
Chlorobenzene	108-90-7	0.20	ND
Chloroethane	75-00-3	0.20	ND
Chloroform	67-66-3	0.20	ND
Chloromethane	74-87-3	0.20	ND
Carbon disulfide	75-15-0	0.20	ND
Carbon tetrachloride	56-23-5	0.20	ND
Cyclohexane	110-82-7	0.20	ND
Dibromochloromethane	124-48-1	0.20	ND
1,2-Dibromoethane	106-93-4	0.20	ND
1,2-Dichlorobenzene	95-50-1	0.20	ND
1,3-Dichlorobenzene	541-73-1	0.20	ND
1,4-Dichlorobenzene	106-46-7	0.20	ND
Dichlorodifluoromethane	75-71-8	0.20	ND
1,1-Dichloroethane	75-34-3	0.20	ND
1,2-Dichloroethane	107-06-2	0.20	ND
1,1-Dichloroethene	75-35-4	0.20	ND
1,2-Dichloropropane	78-87-5	0.20	ND
1,3-Dichloropropene (cis)	10061-01-5	0.20	ND
1,3-Dichloropropene (trans)	10061-02-6	0.20	ND
1,2-Dichlorotetrafluoroethane	76-14-2	0.20	ND
1,4-Dioxane	123-91-1	0.20	ND
Ethylbenzene	100-41-4	0.20	ND
n-Heptane	142-82-5	0.20	ND
1,3-Hexachlorobutadiene	87-68-3	0.20	ND
n-Hexane	110-54-3	0.20	ND
Methylene chloride	75-09-2	0.20	ND
Methyl ethyl ketone	78-93-3	0.20	ND

Clean Canister Certification Report

Lab Sample Name:	**Clean Canister, Batch Master 5085**	**Data File:**	**AA6394**
Field Sample Name:	**Canister 5085**	**Date Analyzed:**	**4/24/2024**
Sample Volume:	**500ml**	**Matrix:**	**Air**

Canisters associated with this run: 5085, 2094, 5100, 3286 (used for E24-01875-02), 3806 (used for E24-01875-05), 3293 (used for E24-01875-01), 2159 (used for E24-01875-04), 2068

Runs with this Clean Canister Certification:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6389BFB]	04/24/2024 09:59
10 PPBV DCVS [AA6390DCVS]	04/24/2024 10:32
10 PPBV LCS [AA6391LCS]	04/24/2024 12:12
METHOD BLANK [AA6392BLK]	04/24/2024 13:23
02 PPBV RLLCS [AA6393RLLCS]	04/24/2024 14:00
CLEAN CAN CERTIFICATION, BATCH MASTER 5085 [AA6394]	04/24/2024 14:58
CLEAN CAN CERTIFICATION, BATCH MASTER 3035A [AA6395]	04/24/2024 15:28
10 PPBV CCCVS [AA6405CCCVS]	04/24/2024 21:01

This canister has been certified clean, all compounds are below 0.2 ppbv.

Compound	CAS #	RL (ppbv)	Calculated Amount (ppbv)
Methyl isobutyl ketone	108-10-1	0.20	ND
Methyl tert-butyl ether	1634-04-4	0.20	ND
Styrene	100-42-5	0.20	ND
Tert-butyl alcohol	75-65-0	0.20	ND
1,1,2,2-Tetrachloroethane	79-34-5	0.20	ND
Tetrachloroethene	127-18-4	0.20	ND
Toluene	108-88-3	0.20	ND
1,2,4-Trichlorobenzene	120-82-1	0.20	ND
1,1,1-Trichloroethane	71-55-6	0.20	ND
1,1,2-Trichloroethane	79-00-5	0.20	ND
Trichloroethene	79-01-6	0.20	ND
Trichlorofluoromethane	75-69-4	0.20	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.20	ND
1,2,4-Trimethylbenzene	95-63-6	0.20	ND
1,3,5-Trimethylbenzene	108-67-8	0.20	ND
2,2,4-Trimethylpentane	540-84-1	0.20	ND
Vinyl bromide	593-60-2	0.20	ND
Vinyl chloride	75-01-4	0.20	ND
Xylenes (m&p)	179601-23-1	0.40	ND
Xylenes (o)	95-47-6	0.20	ND

Data Path : C:\DATA\2024\04-2024\04-24-2024\
Data File : aa6394.D
Acq On : 24 Apr 2024 2:58 pm
Operator : jjw
Sample : 5085
Misc : 2094, 5100, 3286, 3806, 3293, 2159, 2068
ALS Vial : 19 Sample Multiplier: 1

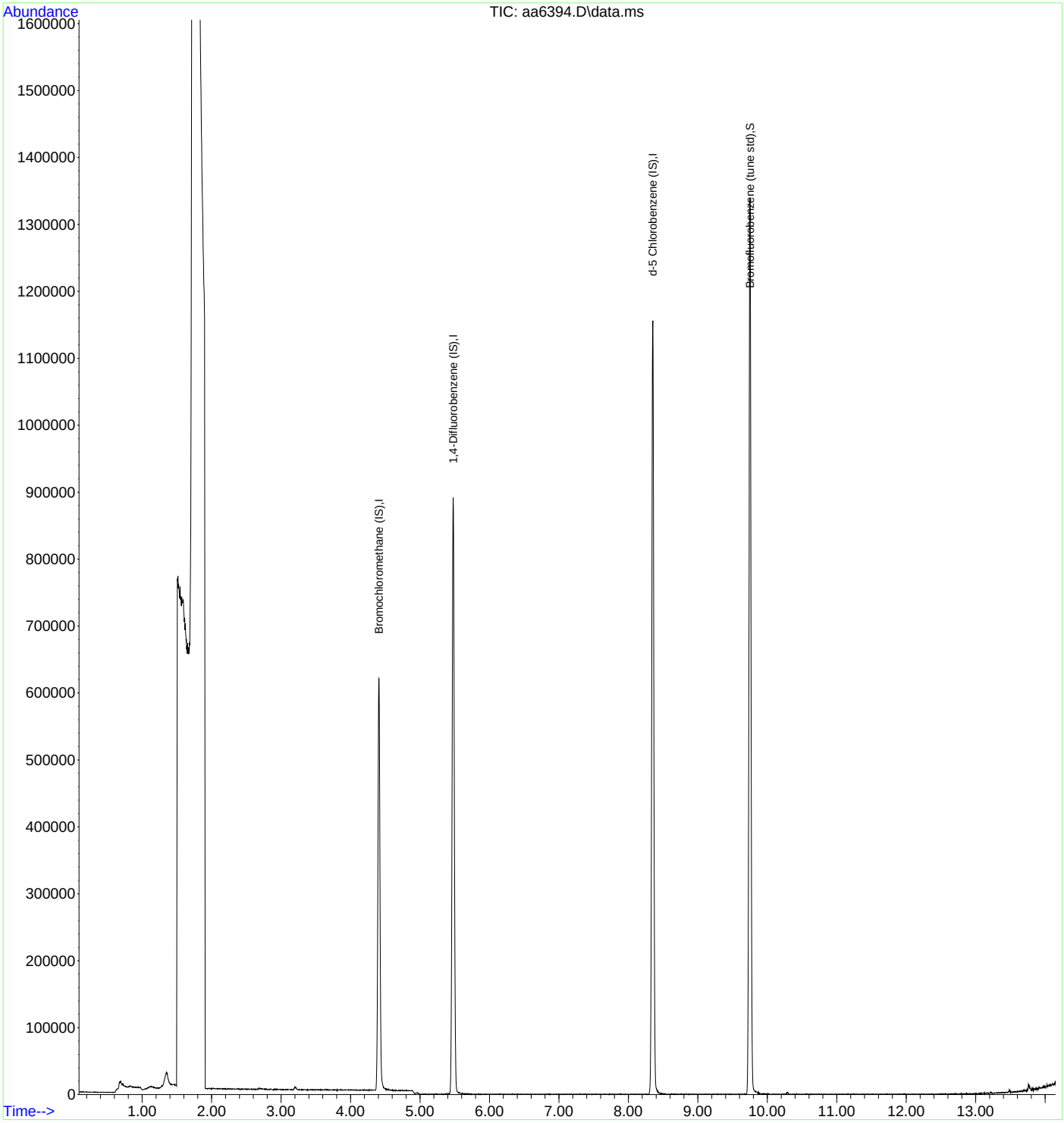
Quant Time: Apr 24 15:23:28 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.410	130	199545	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.481	114	760439	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.352	117	689618	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.750	95	604224	9.77	ppbV	0.000
Target Compounds						Qvalue

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

Data Path : C:\DATA\2024\04-2024\04-24-2024\
Data File : aa6394.D
Acq On : 24 Apr 2024 2:58 pm
Operator : jjw
Sample : 5085
Misc : 2094, 5100, 3286, 3806, 3293, 2159, 2068
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Apr 24 15:23:28 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration



LAST PAGE OF DOCUMENT

Integrated Analytical Laboratories LLC

ANALYTICAL DATA REPORT

JS Held - Hoboken
5 Marine View Plaza
Suite 401
Hoboken, NJ 07030

Project Name: **48-55 36TH ST.**
IAL Case Number: **E24-01873**

These data have been reviewed and accepted by:

Michael H. Leffin, Ph.D.
Laboratory Director

This report shall not be reproduced, except in its entirety, without the written consent of Integrated Analytical Laboratories, LLC. The test results included in this report relate only to the samples analyzed. The results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252

IAL is a NELAP accredited lab (TNI01284) and maintains certification in Connecticut (PH-0699), New Jersey (14751), New York (11402) and Pennsylvania (68-00773).

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Sample Summary

IAL Case No.
E24-01873

Client JS Held - Hoboken

Project 48-55 36TH ST.

Received On 5/31/2024@16:50

Lab ID	*Client Sample ID*	*Depth Top/Bottom*	*Sampling Time*	*Matrix*	*# of Container*
01873-001	SB-9A	2.5/3	5/30/2024@20:30	Soil	4
01873-002	SB-9B	14.5/15	5/30/2024@20:30	Soil	4

Integrated Analytical Labs ~ 273 Franklin Road, Randolph, NJ 07869 ~ (973) 361-4252

DATA QUALIFIERS AND FLAGS

B	Indicates the analyte found in the associated method blank and in the sample due to potential lab contamination.
C	Indicates analyte is a common laboratory contaminant.
D	Indicates analyte was reported from diluted analysis.
E	Identifies a compound concentration that exceeds the upper level of the calibration range of the instrument
J	Indicates an estimated value either when the concentration in the sample is less than the RL or for qualification of TICs
J1	Indicates an estimated value when ICC or CCV did not meet the criteria.
M	Indicates matrix interference
N	Presumptive evidence of a compound from the use of GC/MS library search.
T	Sample analyzed outside of holding time
X	Indicates samples analyzed for total and dissolved metals differ at ≤20% RPD.
Y	Indicates DO depletion in the BOD blank is >0.20ppm
Z	Indicates internal standard failure. Sample results are either biased high or biased low.
$	Value outside NJDEP DKQP Limits
*	Result outside of QC limits

PROJECT NOTES

- All results for soils, solids, and sludges are reported on a dry-weight basis except where noted
- All test results and QC are compliant with TNI or other applicable state agency requirements/guidance unless otherwise notated in the case narrative and/or project information page.
- The case narrative for this SDG should be consulted to determine any non-conformances.
- Any samples with 15-minute or "analyze immediately" holding times (e.g. pH, Dissolved Oxygen, Sulfite, etc.) which are analyzed in the laboratory are considered out of holding time.
- IAL is a NELAP/TNI certified laboratory (TNI ID# TNI01284). IAL retains certification in Connecticut (PH-0699), New Jersey (14751), New York (11402), and Pennsylvania (68-00773).
- Certification is not required to perform analyses in the following states: AL, CO, DE, GA, HI, ID, IN, KY, MD, MI, MS, MO, MT, NE, NM, SD and TN. IAL can perform all analyses, except Drinking Water, within its scope of capabilities in these states.

ACRONYMS AND ABBREVIATIONS

CFU	Colony Forming Unit	**ND**	Indicates analyte was analyzed for but not detected at MDL or RL (only if MDL is not used)
CCB	Continuing Calibration Blank		
CCV	Continuing Calibration Verification	**NTU**	Nephelometric Turbidity Units
DF	Dilution Factor	**ppb**	Parts per billion. Reported as µg/L or µg/kg
DL	Attached as a suffix to a diluted sample	**ppm**	Parts per million. Reported as mg/L, µg/mL or mg/kg
DUP	Duplicate	**QC**	Quality Control
ICB	Initial Calibration Blank	**% Rec**	Percent Recovery
ICC	Initial Calibration Curve	**RL**	Reporting Limit. The RL is typically determined by the concentration of the lowest standard in the calibration curve
ICV	Initial Calibration Verification		
kg	kilogram		
L	Liter	**RPD**	Relative Percent Difference
LCS	Laboratory Control Sample	**RSD**	Relative Standard Deviation
LCSD	Laboratory Control Sample Duplicate	**RT**	Retention Time
MDL	Method Detection Limit as determined according to 40 CFR Part 136 Appendix B	**SU**	Standard Units
		TIC	Tentatively Identified Compound AKA Library Search Compounds
MF	Membrane Filter		
mg	milligram (1000mg = 1g)	**TNI**	The NELAC (National Environmental Laboratory Accreditation Council) Institute
µg	microgram (1000µg = 1mg)		
ml	milliliter (1000ml = 1L)	**TNTC**	Too numerous to count
µl	microliter (1000µl = 1ml)	*	When attached to a compound name, indicates this analyte was analyzed by Method SW-846 8270 SIM
µmhos	Conductivity units - resistance expressed in ohms		
MPN	Most Probable Number	^	When attached to a compound name, indicates this analyte was analyzed by Method SW-846 8011 or EPA 504.1
MS	Matrix Spike		
MSD	Matrix Spike Duplicate		
NA	Not applicable	<	Less than; In conjunction with a numerical value, indicates a concentration less than the RL or MDL
NC	Not calculated		

SAMPLE DELIVERY GROUP CASE NARRATIVE
(Conformance / Non-Conformance Summary)

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E24-01873

Integrated Analytical Laboratories, LLC. received two (2) samples** from JS Held - Hoboken (IAL SDG# **E24-01873**, Project: 48-55 36TH ST.) on May 31, 2024 for the analysis of :

(2) TCL VO + 15

**Number of samples listed above may be greater than what is listed on the chain of custody. Any samples that require in-house filtration or splitting will be counted as separate samples.

Samples were received in good condition with documentation in order.
Cooler temperature was acceptable at 4 ± 2 degree C.

Volatiles By SW 8260D	**Batch: L240604-01**	**Matrix: Soil**

QC

- Calibration curve met QC criteria.
- Internal standards recovery met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- LCS percent recovery met QC criteria.
- MS/MSD RPD did not meet QC criteria due to the differences of Terra cores analyzed.
- MS/MSD percent recovery met QC criteria. NJDEP DKQP criteria not met.

E24-01873

- All samples were received within holding time.
- All samples were analyzed within holding time.
- #001 ,002 were flagged with a C qualifier, indicating laboratory contamination for Methylene chloride. Methylene chloride is used as a solvent in the laboratory, resulting in occasional laboratory contamination.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E24-01873-001	1	NA
E24-01873-002	1	NA

A review of the QA/QC measures for the analysis of the sample(s) contained in this report has been performed by:

Heather Daly
Reviewed by

6/6/2024
Date

RESULTS SUMMARY REPORT

SUMMARY REPORT
Client: JS Held - Hoboken
Project: 48-55 36TH ST.
Lab Case No.: E24-01873

	Lab ID:	01873-001			01873-002		
	Client ID:	SB-9A			SB-9B		
	Depth:	2.5/3			14.5/15		
	Matrix:	Soil			Soil		
	Sampled Date	5/30/24			5/30/24		
PARAMETER(Units)		Conc	Q	MDL	Conc	Q	MDL
Volatiles (Units)		*(mg/Kg)*			*(mg/Kg)*		
Acetone		0.118		0.0047	0.103		0.00645
Methylene chloride		0.00475	C	0.00282	0.00615	CJ	0.00387
2-Butanone (MEK)		0.00302	J	0.00188	ND		0.00258
Tetrachloroethene		ND		0.000297	0.000835	J	0.000408
TOTAL VO's:		0.126	CJ		0.110	CJ	
TOTAL TIC's:		ND			ND		
TOTAL VO's & TIC's:		0.126	CJ		0.110	CJ	

ND = Analyzed for but Not Detected at the MDL
C = Common Laboratory and/or Bottle Contaminant.
All qualifiers on individual Volatiles & Semivolatiles are carried down through summation.
J = Indicates an estimated value either when the concentration in the sample is greater than MDL and less than RL, or for qualification of TICs

ANALYTICAL RESULTS

VOLATILE ORGANICS

Lab ID: E24-01873-001
Client ID: SB-9A/2.5-3
Date Received: 05/31/2024
Date Analyzed: 06/04/2024
Data file: L9765.D 06/04/2024 21:39

GC/MS Column: DB-624
Sample wt/vol: 5.59g
Matrix-Units: Soil-mg/Kg
% Moisture: 5.30
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.00188	0.000488
Chloromethane	ND		0.00094	0.000298
Vinyl chloride	ND		0.00094	0.000305
Bromomethane	ND		0.00188	0.00082
Chloroethane	ND		0.00094	0.000279
Trichlorofluoromethane	ND		0.00094	0.000382
1,1-Dichloroethene	ND		0.00094	0.000329
Acetone	0.118		0.0094	0.0047
Carbon disulfide	ND		0.00188	0.000369
Methylene chloride	0.00475	C	0.0047	0.00282
trans-1,2-Dichloroethene	ND		0.00094	0.000333
Methyl tert-butyl ether (MTBE)	ND		0.00094	0.000205
1,1-Dichloroethane	ND		0.00094	0.00024
cis-1,2-Dichloroethene	ND		0.00094	0.000201
2-Butanone (MEK)	0.00302	J	0.0094	0.00188
Bromochloromethane	ND		0.00094	0.000239
Chloroform	ND		0.00094	0.00047
1,1,1-Trichloroethane	ND		0.00094	0.000289
Carbon tetrachloride	ND		0.00094	0.000188
1,2-Dichloroethane (EDC)	ND		0.00094	0.000217
Benzene	ND		0.00094	0.000231
Trichloroethene	ND		0.00094	0.00014
1,2-Dichloropropane	ND		0.00094	0.000223
Bromodichloromethane	ND		0.00094	0.000112
cis-1,3-Dichloropropene	ND		0.00094	0.000144
4-Methyl-2-pentanone (MIBK)	ND		0.00188	0.000492

VOLATILE ORGANICS

Lab ID: E24-01873-001
Client ID: SB-9A/2.5-3
Date Received: 05/31/2024
Date Analyzed: 06/04/2024
Data file: L9765.D 06/04/2024 21:39

GC/MS Column: DB-624
Sample wt/vol: 5.59g
Matrix-Units: Soil-mg/Kg
% Moisture: 5.30
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.00094	0.00047
trans-1,3-Dichloropropene	ND		0.00094	0.000299
1,1,2-Trichloroethane	ND		0.00094	0.000201
Tetrachloroethene	ND		0.00094	0.000297
2-Hexanone	ND		0.00376	0.00144
Dibromochloromethane	ND		0.00094	0.000156
1,2-Dibromoethane (EDB)	ND		0.00094	0.000174
Chlorobenzene	ND		0.00094	0.000163
Ethylbenzene	ND		0.00094	0.000238
Total Xylenes	ND		0.00188	0.000132
Styrene	ND		0.00094	0.000202
Bromoform	ND		0.00094	0.000292
Isopropylbenzene	ND		0.00094	0.0002
1,1,2,2-Tetrachloroethane	ND		0.00094	0.000223
1,3-Dichlorobenzene	ND		0.00094	0.000249
1,4-Dichlorobenzene	ND		0.00094	0.000291
1,2-Dichlorobenzene	ND		0.00094	0.000236
1,2-Dibromo-3-chloropropane	ND		0.00094	0.000775
1,2,4-Trichlorobenzene	ND		0.00094	0.000395
1,2,3-Trichlorobenzene	ND		0.00094	0.000299
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00188	0.000561
Methyl acetate	ND		0.00188	0.00076
Cyclohexane	ND		0.00188	0.000521
Methylcyclohexane	ND		0.00094	0.000346
1,3-Dichloropropene (cis- and trans-)	ND		0.00094	0.000144
Total Target Compounds (51):	0.126	CJ		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: E24-01873-001
Client ID: SB-9A/2.5-3
Date Received: 05/31/2024
Date Analyzed: 06/04/2024
Date File: L9765.D

GC/MS Column: DB-624
Sample wt/vol: 5.59g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 5.30

CAS #	Compound	Estimated Concentration	Q	Retention Time

No peaks detected

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

VOLATILE ORGANICS

Lab ID: E24-01873-002
Client ID: SB-9B/14.5-1
Date Received: 05/31/2024
Date Analyzed: 06/04/2024
Data file: L9766.D 06/04/2024 22:07

GC/MS Column: DB-624
Sample wt/vol: 4.35g
Matrix-Units: Soil-mg/Kg
% Moisture: 10.6
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.00258	0.00067
Chloromethane	ND		0.00129	0.000409
Vinyl chloride	ND		0.00129	0.000418
Bromomethane	ND		0.00258	0.00112
Chloroethane	ND		0.00129	0.000383
Trichlorofluoromethane	ND		0.00129	0.000524
1,1-Dichloroethene	ND		0.00129	0.000452
Acetone	0.103		0.013	0.00645
Carbon disulfide	ND		0.00258	0.000507
Methylene chloride	0.00615	CJ	0.00645	0.00387
trans-1,2-Dichloroethene	ND		0.00129	0.000457
Methyl tert-butyl ether (MTBE)	ND		0.00129	0.000281
1,1-Dichloroethane	ND		0.00129	0.000329
cis-1,2-Dichloroethene	ND		0.00129	0.000276
2-Butanone (MEK)	ND		0.013	0.00258
Bromochloromethane	ND		0.00129	0.000328
Chloroform	ND		0.00129	0.000645
1,1,1-Trichloroethane	ND		0.00129	0.000396
Carbon tetrachloride	ND		0.00129	0.000258
1,2-Dichloroethane (EDC)	ND		0.00129	0.000298
Benzene	ND		0.00129	0.000317
Trichloroethene	ND		0.00129	0.000192
1,2-Dichloropropane	ND		0.00129	0.000306
Bromodichloromethane	ND		0.00129	0.000154
cis-1,3-Dichloropropene	ND		0.00129	0.000197
4-Methyl-2-pentanone (MIBK)	ND		0.00258	0.000675

VOLATILE ORGANICS

Lab ID: E24-01873-002
Client ID: SB-9B/14.5-1
Date Received: 05/31/2024
Date Analyzed: 06/04/2024
Data file: L9766.D 06/04/2024 22:07

GC/MS Column: DB-624
Sample wt/vol: 4.35g
Matrix-Units: Soil-mg/Kg
% Moisture: 10.6
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.00129	0.000645
trans-1,3-Dichloropropene	ND		0.00129	0.00041
1,1,2-Trichloroethane	ND		0.00129	0.000276
Tetrachloroethene	0.000835	J	0.00129	0.000408
2-Hexanone	ND		0.00516	0.00198
Dibromochloromethane	ND		0.00129	0.000214
1,2-Dibromoethane (EDB)	ND		0.00129	0.000239
Chlorobenzene	ND		0.00129	0.000223
Ethylbenzene	ND		0.00129	0.000326
Total Xylenes	ND		0.00258	0.000181
Styrene	ND		0.00129	0.000277
Bromoform	ND		0.00129	0.000401
Isopropylbenzene	ND		0.00129	0.000275
1,1,2,2-Tetrachloroethane	ND		0.00129	0.000306
1,3-Dichlorobenzene	ND		0.00129	0.000342
1,4-Dichlorobenzene	ND		0.00129	0.0004
1,2-Dichlorobenzene	ND		0.00129	0.000324
1,2-Dibromo-3-chloropropane	ND		0.00129	0.00106
1,2,4-Trichlorobenzene	ND		0.00129	0.000542
1,2,3-Trichlorobenzene	ND		0.00129	0.00041
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00258	0.00077
Methyl acetate	ND		0.00258	0.00104
Cyclohexane	ND		0.00258	0.000715
Methylcyclohexane	ND		0.00129	0.000475
1,3-Dichloropropene (cis- and trans-)	ND		0.00129	0.000197
Total Target Compounds (51):	0.110	CJ		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: E24-01873-002
Client ID: SB-9B/14.5-1
Date Received: 05/31/2024
Date Analyzed: 06/04/2024
Date File: L9766.D

GC/MS Column: DB-624
Sample wt/vol: 4.35g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 10.6

CAS #	Compound	Estimated Concentration	Q	Retention Time
	No peaks detected			

Total TICs = 0

D --- Dilution Performed
J --- Estimated concentration for TICs
N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

VOLATILE ORGANICS

Lab ID: BLKS240604-01
Client ID: BLKS240604-01
Date Received:
Date Analyzed: 06/04/2024
Data file: L9764.D 06/04/2024 21:11

GC/MS Column: DB-624
Sample wt/vol: 5.00g
Matrix-Units: Soil-mg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.002	0.000519
Chloromethane	ND		0.001	0.000317
Vinyl chloride	ND		0.001	0.000324
Bromomethane	ND		0.002	0.000872
Chloroethane	ND		0.001	0.000297
Trichlorofluoromethane	ND		0.001	0.000406
1,1-Dichloroethene	ND		0.001	0.00035
Acetone	ND		0.010	0.005
Carbon disulfide	ND		0.002	0.000393
Methylene chloride	ND		0.005	0.003
trans-1,2-Dichloroethene	ND		0.001	0.000354
Methyl tert-butyl ether (MTBE)	ND		0.001	0.000218
1,1-Dichloroethane	ND		0.001	0.000255
cis-1,2-Dichloroethene	ND		0.001	0.000214
2-Butanone (MEK)	ND		0.010	0.002
Bromochloromethane	ND		0.001	0.000254
Chloroform	ND		0.001	0.0005
1,1,1-Trichloroethane	ND		0.001	0.000307
Carbon tetrachloride	ND		0.001	0.0002
1,2-Dichloroethane (EDC)	ND		0.001	0.000231
Benzene	ND		0.001	0.000246
Trichloroethene	ND		0.001	0.000149
1,2-Dichloropropane	ND		0.001	0.000237
Bromodichloromethane	ND		0.001	0.000119
cis-1,3-Dichloropropene	ND		0.001	0.000153
4-Methyl-2-pentanone (MIBK)	ND		0.002	0.000523

VOLATILE ORGANICS

Lab ID: BLKS240604-01
Client ID: BLKS240604-01
Date Received:
Date Analyzed: 06/04/2024
Data file: L9764.D 06/04/2024 21:11

GC/MS Column: DB-624
Sample wt/vol: 5.00g
Matrix-Units: Soil-mg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.001	0.0005
trans-1,3-Dichloropropene	ND		0.001	0.000318
1,1,2-Trichloroethane	ND		0.001	0.000214
Tetrachloroethene	ND		0.001	0.000316
2-Hexanone	ND		0.004	0.00153
Dibromochloromethane	ND		0.001	0.000166
1,2-Dibromoethane (EDB)	ND		0.001	0.000185
Chlorobenzene	ND		0.001	0.000173
Ethylbenzene	ND		0.001	0.000253
Total Xylenes	ND		0.002	0.00014
Styrene	ND		0.001	0.000215
Bromoform	ND		0.001	0.000311
Isopropylbenzene	ND		0.001	0.000213
1,1,2,2-Tetrachloroethane	ND		0.001	0.000237
1,3-Dichlorobenzene	ND		0.001	0.000265
1,4-Dichlorobenzene	ND		0.001	0.00031
1,2-Dichlorobenzene	ND		0.001	0.000251
1,2-Dibromo-3-chloropropane	ND		0.001	0.000824
1,2,4-Trichlorobenzene	ND		0.001	0.00042
1,2,3-Trichlorobenzene	ND		0.001	0.000318
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.002	0.000597
Methyl acetate	ND		0.002	0.000808
Cyclohexane	ND		0.002	0.000554
Methylcyclohexane	ND		0.001	0.000368
1,3-Dichloropropene (cis- and trans-)	ND		0.001	0.000153

Total Target Compounds (51): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: BLKS240604-01
Client ID: BLKS240604-01
Date Received:
Date Analyzed: 06/04/2024
Data file: L9764.D 06/04/2024 21:11

GC/MS Column: DB-624
Sample wt/vol: 5.00g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

CAS #	Compound	Estimated Concentration	Q	Retention Time

No peaks detected

Total TICs = 0

SAMPLE TRACKING

FINALIZED 06/07/2024

IAL Integrated Analytical Laboratories LLC
Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Chain of Custody Record

Contact Us: 973-361-4252
Web: www.ialonline.com

Customer Information	Reporting Information	**Rush TAT Charge	Deliverables *Surcharge may apply for regulatory	EDDs	Concentrations Expected:
Company: J.S. Held, LLC	☐ Check here if same as "Customer Information"	24 hr - 100%...	NJ, CT, PA: ☐ Results Only (Level I) ☐ Reduced (Level II/III) ☐ Regulatory/ Full* (Level IV)	NY: ☒ ASP Category A ☐ ASP Category B*	☐ NJ SRP ☐ NYSDEC EQuIS ☐ lab approved custom EDD ☐ NO EDD REQ'D	Low Med High
Address: 7 Marine View Plaza, Ste 401 Hoboken, NJ 07030	REPORT TO:	48 hr - 75%....				Known Hazard:
Telephone #: 201-576-9100	Address:	72 hr - 50%....				☐ YES ☐ NO
Project Manager: Leah DeEsidio	Attn:	96 hr - 35%....				Describe:
Email Address(es): LDeEsidio@JSHeld.com	INVOICE TO:	5 day - 25%....				
	Address:	6-9 day - 10%				
Project Name: 48-55 36th St		Turn-Around Time (TAT)			Regulatory Requirement	
Project Location (State): NY	Attn:	Standard (10 business days) Verbal			New Jersey: ☐ GWQS ☐ IGW ☐ SRS ☐ Ecological ☐ DW ☐ SPLP	New York: ☐ AWQS (TOGS Table 1) ☐ GWEL (TOGS Table 5) ☒ Part 375-6.8(a) - Unrestricted ☒ Part 375-6.8(b) - Restricted ☒ CP-51 Table 2 or 3 (selection required)
Bottle Order #:	PO # 240302017	Rush/date needed (only if pre-approved)** 6 Day				
☒ "Report to"/"Invoice To" same as above	Quote #	Hard Copy: Standard 3 week	Other - call for price			
Sampled by: BN	Sample Matrix	Petroleum Hydrocarbons - Selection is REQUIRED				Other States / Criteria: ☐ Pennsylvania Act 2 ☐ CT RCSA 22a-133k1-k3 ☐ TSCA PCBs
COMPLETED BY IAL:	DW - Drinking Water; WW - Waste Water; GW - Groundwater; SW - Surface Water; LIQ - Liquid (specify); M - Multiphasic; OI - Oil; S - Soil; SED - Sediment; SOL - Solid (specify); SL - Sludge; W - Wipe	☐ NJ EPH-DRO - Category 1 ☐ NJ EPH-C40 - Category 2 ☐ NJ EPH-Fractionated - Cat 2 ☐ CT ETPH ☐ DRO-8015	TAT for PHC, if other than 2 weeks:			OTHER Regulatory Requirements - specify in comments
____ Field Sampling ____ Equipment Rental						Sample Specific Notes:

SAMPLE INFORMATION

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# containers	IAL #	ANALYTICAL PARAMETERS (please note if contingent) VOCs+15
SB-9A	2.5-3	5/30/24	2030	S	4	1	X
SB-9B	19.5-15	"	2030	"	"	2	X

Samples previously analyzed by IAL? YES / NO	Preservative Code:	Container Code:	Preservative (use code)	Container Type (use code)
			2	T

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time (TAT) will not start until any ambiguities have been resolved. TAT starts the following day if samples rec'd at lab ≥ 5PM. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY IAL'S TERMS & CONDITIONS (found on rear of pink copy).

Preservative Code: 1 = None; 2 = HCl; 3 = HNO3; 4 = MeOH; 5 = NaOH; 6 = H2SO4; 7 = Other

Container Code: A = Amber Glass; B = Plastic; C = Vial; D = Glass; E = EnCore; T = Terracore

Carrier (check one): ☐ IAL Courier ☐ Client Courier ☐ FedEx/UPS***

***Tracking #:

Special Instructions/QC Requirements & Comments:

FOR LAB USE ONLY
SDG #: 1873

Cooler Temp: 5 °C

Relinquished by (Signature and Company)	Date	Time	Received by (Signature and Company)	Date	Time
	5/30/24	1428		5/31/24	1429
	5/31/24	1650		5/31/24	1650

IAL Rev 11/2019

LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

Certification IDs: TNI (TNI01284); CT (PH-0699); NJ (14751); NY (11402); PA (68-00773).

PAGE: of

INTEGRATED ANALYTICAL LABORATORIES, LLC

Jun 04, 2024 @ 10:37

RUSH

PROJECT INFORMATION

E24-01873: 48-55 36TH ST.

To: Leah DeEgidio
JS Held - Hoboken
Fax: 201-626-8095
EMail: Ldeegidio@jsheld.com

Report To

JS Held - Hoboken
5 Marine View Plaza
Suite 401
Hoboken, NJ 07030
Attn: Leah DeEgidio

Bill To

JS Held - Hoboken
J.S. Held
50 Jericho Quadrangle, Suite 117
Jericho, NY 11753
Attn: Accounts Payable

Report Format	P.O. #	Received At Lab	PHC Due	Verbal Due	Hardcopy Due
Category A	240302017	May 31, 2024 @ 16:50	NA	Jun 06, 2024	Jun 21, 2024 *

* Any ***Conditional or Hold*** status will delay final hardcopy report sent date.

Diskette Req. Not Required

Criteria Requirement: NY Part 375-6.8(b)/CP-51 Tbl2

Lab ID	Client Sample ID	Depth	Sampling Time	Matrix	Unit	Field pH/Temp
01873-001	SB-9A	2.5/3	05/30/24@20:30	Soil	mg/Kg (ppm)	
01873-002	SB-9B	14.5/15	05/30/24@20:30	Soil	mg/Kg (ppm)	

* No Cert = IAL does not hold certification for this test/method

Sample #	Test	Status	Analytical Method	TAT	Holding Time Expires
001	TCL VO + 15	Analyze	8260D	RUSH 96 HRS	6/13/2024
002	TCL VO + 15	Analyze	8260D	RUSH 96 HRS	6/13/2024

Project Notes:

NOTE 2 taken by Mark on 06/03/2024 02:14
PER COC, PLEASE COMPARE RESULTS TO NY Part 375-6.8(b)/CP-51 Tbl2 & NY Part 375-6.8(UUSCO+RUSCO)

REV 1 taken by melissa on 06/04/2024 10:35
REV 1 DUE 6/6

PER LEAH, RUSH SAMPLES ON A 96 HOUR TURN.

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Randolph, NJ 07869
Phone: 973 361 4252
www.ialonline.com

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SAMPLE RECEIPT VERIFICATION

CASE NO: **E 24** **01873** CLIENT: JS Held

COOLER TEMPERATURE: 2° - 6°C: ✓ (See Chain of Custody)

COC: (COMPLETE) / INCOMPLETE

Comments

KEY
✓ = YES/NA
✗ = NO

VOA received: ☐ Encore ☐ IGW - Methanol
(check one) ☒ Terra Core ☐ No Preservative

✓	Bottles Intact	
✓	no-Missing Bottles	
✓	no-Extra Bottles	
✓	Sufficient Sample Volume	
✓	no-headspace/bubbles in VOs	
✓	Labels intact/correct	
✗	pH Check[1] (refer to Receipt pH Log)	
✓	Correct bottles/preservative	
✓	Sufficient Holding/Prep Time[1]	
☐	Multiphasic Sample	
☐	Sample to be Subcontracted	
✓	**Chain of Custody is Clear**	

[1] All samples with "Analyze Immediately" holding times will be analyzed by this laboratory past the holding time. This includes but is not limited to the following tests: pH, Temperature, Free Residual Chlorine, Total Residual Chlorine, Dissolved Oxygen, Sulfite.

ADDITIONAL COMMENTS:

SAMPLE(S) VERIFIED BY: INITIAL CRonk DATE 5/31/24

CORRECTIVE ACTION REQUIRED: **YES** ☐ (SEE BELOW) **NO** ☒

If COC is **NOT** clear, ***STOP*** until you get client to authorize/clarify work.

CLIENT NOTIFIED: YES ☐ Date/ Time: _____ NO ☐
PROJECT CONTACT:
SUBCONTRACTED LAB:
DATE SHIPPED:

ADDITIONAL COMMENTS:

VERIFIED/TAKEN BY: INITIAL MF DATE 6·3·24

Rev 2 2/11/2021

Laboratory Custody Chronicle

IAL Case No.
E24-01873

Client JS Held - Hoboken

Project 48-55 36TH ST.

Received On 5/31/2024@16:50

Department: Volatiles			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
TCL VO + 15	01873-001	Soil	n/a	n/a	6/ 4/24	Xing
"	-002	"	n/a	n/a	6/ 4/24	Xing

NOTE: All soil, sediment, sludge, and solid samples are reported on a dry-weight basis.

Integrated Analytical Labs ~ 273 Franklin Road, Randolph, NJ 07869 ~ (973) 361-4252

LAST PAGE OF DOCUMENT

Integrated Analytical Laboratories LLC

ANALYTICAL DATA REPORT

JS Held - Hoboken
5 Marine View Plaza
Suite 401
Hoboken, NJ 07030

Project Name: **48-55 36TH ST**
IAL Case Number: **E24-02403**

These data have been reviewed and accepted by:

Michael H. Leffin, Ph.D.
Laboratory Director

This report shall not be reproduced, except in its entirety, without the written consent of Integrated Analytical Laboratories, LLC. The test results included in this report relate only to the samples analyzed. The results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252

IAL is a NELAP accredited lab (TNI01284) and maintains certification in Connecticut (PH-0699), New Jersey (14751), New York (11402) and Pennsylvania (68-00773).

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Sample Summary

IAL Case No.
E24-02403

Client JS Held - Hoboken

Project 48-55 36TH ST

Received On 7/12/2024@17:15

Lab ID	*Client Sample ID*	*Depth Top/Bottom*	*Sampling Time*	*Matrix*	*# of Container*
02403-001	SB-13A	2/2.5	7/12/2024@12:30	Soil	1
02403-002	SB-13B	5/5.5	7/12/2024@12:30	Soil	1

Integrated Analytical Labs ~ 273 Franklin Road, Randolph, NJ 07869 ~ (973) 361-4252

DATA QUALIFIERS AND FLAGS

B	Indicates the analyte found in the associated method blank and in the sample due to potential lab contamination.
C	Indicates analyte is a common laboratory contaminant.
D	Indicates analyte was reported from diluted analysis.
E	Identifies a compound concentration that exceeds the upper level of the calibration range of the instrument
J	Indicates an estimated value either when the concentration in the sample is less than the RL or for qualification of TICs
J1	Indicates an estimated value when ICC or CCV did not meet the criteria.
M	Indicates matrix interference
N	Presumptive evidence of a compound from the use of GC/MS library search.
T	Sample analyzed outside of holding time
X	Indicates samples analyzed for total and dissolved metals differ at ≤20% RPD.
Y	Indicates DO depletion in the BOD blank is >0.20ppm
Z	Indicates internal standard failure. Sample results are either biased high or biased low.
$	Value outside NJDEP DKQP Limits
*	Result outside of QC limits

PROJECT NOTES

- All results for soils, solids, and sludges are reported on a dry-weight basis except where noted
- All test results and QC are compliant with TNI or other applicable state agency requirements/guidance unless otherwise notated in the case narrative and/or project information page.
- The case narrative for this SDG should be consulted to determine any non-conformances.
- Any samples with 15-minute or "analyze immediately" holding times (e.g. pH, Dissolved Oxygen, Sulfite, etc.) which are analyzed in the laboratory are considered out of holding time.
- IAL is a NELAP/TNI certified laboratory (TNI ID# TNI01284). IAL retains certification in Connecticut (PH-0699), New Jersey (14751), New York (11402), and Pennsylvania (68-00773).
- Certification is not required to perform analyses in the following states: AL, CO, DE, GA, HI, ID, IN, KY, MD, MI, MS, MO, MT, NE, NM, SD and TN. IAL can perform all analyses, except Drinking Water, within its scope of capabilities in these states.

ACRONYMS AND ABBREVIATIONS

CFU	Colony Forming Unit	**ND**	Indicates analyte was analyzed for but not detected at MDL or RL (only if MDL is not used)
CCB	Continuing Calibration Blank		
CCV	Continuing Calibration Verification	**NTU**	Nephelometric Turbidity Units
DF	Dilution Factor	**ppb**	Parts per billion. Reported as µg/L or µg/kg
DL	Attached as a suffix to a diluted sample	**ppm**	Parts per million. Reported as mg/L, µg/mL or mg/kg
DUP	Duplicate	**QC**	Quality Control
ICB	Initial Calibration Blank	**% Rec**	Percent Recovery
ICC	Initial Calibration Curve	**RL**	Reporting Limit. The RL is typically determined by the concentration of the lowest standard in the calibration curve
ICV	Initial Calibration Verification		
kg	kilogram		
L	Liter	**RPD**	Relative Percent Difference
LCS	Laboratory Control Sample	**RSD**	Relative Standard Deviation
LCSD	Laboratory Control Sample Duplicate	**RT**	Retention Time
MDL	Method Detection Limit as determined according to 40 CFR Part 136 Appendix B	**SU**	Standard Units
		TIC	Tentatively Identified Compound AKA Library Search Compounds
MF	Membrane Filter		
mg	milligram (1000mg = 1g)	**TNI**	The NELAC (National Environmental Laboratory Accreditation Council) Institute
µg	microgram (1000µg = 1mg)		
ml	milliliter (1000ml = 1L)	**TNTC**	Too numerous to count
µl	microliter (1000µl = 1ml)	*	When attached to a compound name, indicates this analyte was analyzed by Method SW-846 8270 SIM
µmhos	Conductivity units - resistance expressed in ohms		
MPN	Most Probable Number	^	When attached to a compound name, indicates this analyte was analyzed by Method SW-846 8011 or EPA 504.1
MS	Matrix Spike		
MSD	Matrix Spike Duplicate		
NA	Not applicable	<	Less than; In conjunction with a numerical value, indicates a concentration less than the RL or MDL
NC	Not calculated		

SAMPLE DELIVERY GROUP CASE NARRATIVE
(Conformance / Non-Conformance Summary)

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E24-02403

Integrated Analytical Laboratories, LLC. received two (2) samples** from JS Held - Hoboken (IAL SDG# **E24-02403**, Project: 48-55 36TH ST) on July 12, 2024 for the analysis of :

(2) NYCP51T3BN

**Number of samples listed above may be greater than what is listed on the chain of custody. Any samples that require in-house filtration or splitting will be counted as separate samples.

Samples were received in good condition with documentation in order.
Cooler temperature was acceptable at 4 ± 2 degree C.

Semivolatiles By SW 8270E	**Batch: 240716-01**	**Matrix: Soil**

QC

- Calibration curve met QC criteria.
- Internal standard recovery met QC criteria.
- Surrogate recovery did not meet QC criteria due to high recovery of terphenyl-d14. NJDEP DKQP criteria not met.
- Method blank met QC criteria.
- LCS percent recovery met QC criteria. NJDEP DKQP criteria not met.
- MS/MSD RPD did not meet QC criteria due to RPD exceeding limits. NJDEP DKQP criteria not met.
- MS/MSD percent recovery did not meet QC criteria due to high recovery of Dibenz[a,h]anthracene. NJDEP DKQP criteria not met.

E24-02403

- All samples were received within holding time.
- All samples were extracted within holding time.
- All samples were analyzed within holding time.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E24-02403-001	100;200	
E24-02403-002	1	NA

The result reported for 1,2-Diphenylhydrazine is also representative of Azobenzene. 1,2-Diphenylhydrazine rapidly decomposes to Azobenzene when exposed to water or heat. Analytical results from analysis of 1,2-Diphenylhydrazine will be directly compared to the applicable criteria for Azobenzene and/or 1,2-Diphenylhydrazine.

A review of the QA/QC measures for the analysis of the sample(s) contained in this report has been performed by:

Reviewed by

7/24/2024
Date

RESULTS SUMMARY REPORT

SUMMARY REPORT
Client: JS Held - Hoboken
Project: 48-55 36TH ST
Lab Case No.: E24-02403

	Lab ID:	02403-001			02403-002		
	Client ID:	SB-13A			SB-13B		
	Depth:	2/2.5			5/5.5		
	Matrix:	Soil			Soil		
	Sampled Date	7/12/24			7/12/24		
PARAMETER(Units)		Conc	Q	MDL	Conc	Q	MDL
Semivolatiles - BN (Units)		*(mg/Kg)*			*(mg/Kg)*		
Acenaphthylene		1.17	DJ	0.768	0.057		0.00765
Acenaphthene		182	D	0.693	0.142		0.0069
Fluorene		121	D	0.945	0.096		0.00941
Phenanthrene		662	D	1.15	0.598		0.00572
Anthracene		223	D	0.357	0.156		0.00356
Fluoranthene		553	D	2.25	0.583		0.011
Pyrene		742	D	1.63	0.581		0.00814
Benzo[a]anthracene		292	D	1.28	0.244		0.013
Chrysene		257	D	0.968	0.246		0.00965
Benzo[b]fluoranthene		189	D	1.73	0.157		0.017
Benzo[k]fluoranthene		223	D	2.42	0.208		0.024
Benzo[a]pyrene		272	D	1.70	0.217		0.017
Indeno[1,2,3-cd]pyrene		134	D	2.25	0.106		0.022
Dibenz[a,h]anthracene		57.7	D	1.40	0.052		0.014
Benzo[g,h,i]perylene		129	D	2.65	0.115		0.026
TOTAL BN'S:		4040	DJ		3.56		

D = The compound was reported from the Diluted analysis
J = Indicates an estimated value either when the concentration in the sample is greater than MDL and less than RL, or for qualification of TICs

ANALYTICAL RESULTS

SEMIVOLATILE ORGANICS

Lab ID: E24-02403-001
Client ID: SB-13A/2
Date Received: 07/12/2024
Date Extracted: 07/16/2024
Date Analyzed: 07/23/2024
Data file: A7076.D 07/23/2024 11:56
Data file: A7085.D 07/23/2024 14:33

GC/MS Column: DB-5
Sample wt/vol: 15.0g
Matrix-Units: Soil-mg/Kg
% Moisture: 5.00
Dilution Factor: 100
Dilution Factor: 200

Compound	Concentration	Q	RL	MDL
Acenaphthylene	1.17	DJ	3.51	0.768
Acenaphthene	182	D	3.51	0.693
Fluorene	121	D	3.51	0.945
Phenanthrene	662	D	7.02	1.15
Anthracene	223	D	3.51	0.357
Fluoranthene	553	D	7.02	2.25
Pyrene	742	D	7.02	1.63
Benzo[a]anthracene	292	D	3.51	1.28
Chrysene	257	D	3.51	0.968
Benzo[b]fluoranthene	189	D	3.51	1.73
Benzo[k]fluoranthene	223	D	3.51	2.42
Benzo[a]pyrene	272	D	3.51	1.70
Indeno[1,2,3-cd]pyrene	134	D	3.51	2.25
Dibenz[a,h]anthracene	57.7	D	3.51	1.40
Benzo[g,h,i]perylene	129	D	3.51	2.65
Total Target Compounds (15):	4040	D		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve
B --- Compound detected in Blank
C --- Common laboratory contamination

SEMIVOLATILE ORGANICS

Lab ID: E24-02403-002
Client ID: SB-13B/5
Date Received: 07/12/2024
Date Extracted: 07/16/2024
Date Analyzed: 07/23/2024
Data file: A7075.D 07/23/2024 11:40

GC/MS Column: DB-5
Sample wt/vol: 15.2g
Matrix-Units: Soil-mg/Kg
% Moisture: 5.90
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Acenaphthylene	0.057		0.035	0.00765
Acenaphthene	0.142		0.035	0.0069
Fluorene	0.096		0.035	0.00941
Phenanthrene	0.598		0.035	0.00572
Anthracene	0.156		0.035	0.00356
Fluoranthene	0.583		0.035	0.011
Pyrene	0.581		0.035	0.00814
Benzo[a]anthracene	0.244		0.035	0.013
Chrysene	0.246		0.035	0.00965
Benzo[b]fluoranthene	0.157		0.035	0.017
Benzo[k]fluoranthene	0.208		0.035	0.024
Benzo[a]pyrene	0.217		0.035	0.017
Indeno[1,2,3-cd]pyrene	0.106		0.035	0.022
Dibenz[a,h]anthracene	0.052		0.035	0.014
Benzo[g,h,i]perylene	0.115		0.035	0.026

Total Target Compounds (15): 3.56

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

SEMIVOLATILE ORGANICS

Lab ID: BLKS240716-01
Client ID: .
Date Received: NA
Date Extracted: 07/16/2024
Date Analyzed: 07/23/2024
Data file: A7071.D 07/23/2024 10:37

GC/MS Column: DB-5
Sample wt/vol: 15.0g
Matrix-Units: Soil-mg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Acenaphthylene	ND		0.033	0.0073
Acenaphthene	ND		0.033	0.00658
Fluorene	ND		0.033	0.00897
Phenanthrene	ND		0.033	0.00545
Anthracene	ND		0.033	0.00339
Fluoranthene	ND		0.033	0.011
Pyrene	ND		0.033	0.00776
Benzo[a]anthracene	ND		0.033	0.012
Chrysene	ND		0.033	0.0092
Benzo[b]fluoranthene	ND		0.033	0.016
Benzo[k]fluoranthene	ND		0.033	0.023
Benzo[a]pyrene	ND		0.033	0.016
Indeno[1,2,3-cd]pyrene	ND		0.033	0.021
Dibenz[a,h]anthracene	ND		0.033	0.013
Benzo[g,h,i]perylene	ND		0.033	0.025

Total Target Compounds (15): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

SAMPLE TRACKING

FINALIZED 07/25/2024

IAL Integrated Analytical Laboratories LLC
Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Chain of Custody Record

Contact Us: 973-361-4252
Web: www.ialonline.com

Customer Information

Company: J.S. Held, LLC
Address: 5 Marine View Plaza, Ste 4
Hoboken, NJ 07030
Telephone #: 201-876-9400
Project Manager: Leah DeGaldo
Email Address(es): LDegaldo@JSheld.com
Project Name: 48-55 36th St
Project Location (State): NY
Bottle Order #:
☒ "Report to"/"Invoice To" same as above
Sampled by: BN

COMPLETED BY IAL:
____ Field Sampling ____ Equipment Rental

Reporting Information

☐ Check here if same as "Customer Information"
REPORT TO:
Address:
Attn:
INVOICE TO:
Address:
Attn:
PO # 240302017
Quote #

Sample Matrix

DW - Drinking Water
WW - Waste Water
GW - Groundwater
SW - Surface Water
LIQ - Liquid (specify)
M - Multiphasic
OI - Oil
S - Soil
SED - Sediment
SOL - Solid (specify)
SL - Sludge
W - Wipe

SAMPLE INFORMATION

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# containers	IAL #	ANALYTICAL PARAMETERS (TCL 5)
SB-13A	2-2.5	7/12/24	1230	S	1	1	X
SB-13B	5-5.5	7/12/24	1230	S	1	2	X

Samples previously analyzed by IAL? YES / NO

Preservative Code: 1 = None, 2 = HCl, 3 = HNO3, 4 = MeOH, 5 = NaOH, 6 = H2SO4, 7 = Other
Container Code: A = Amber Glass, B = Plastic, C = Vial, D = Glass, E = EnCore, T = Terracore

Preservative (use code): 1
Container Type (use code): D

Special Instructions/QC Requirements & Comments:
Hold 'B' Sample

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time (TAT) will not start until any ambiguities have been resolved. TAT starts the following day if samples rec'd at lab ≥ 5PM. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY IAL'S TERMS & CONDITIONS (found on rear of pink copy).

Carrier (check one):
☐ IAL Courier
☐ Client Courier
☐ FedEx/UPS***
***Tracking #:

Relinquished by (Signature and Company)	Date	Time	Received by (Signature and Company)	Date	Time
[signature]	7/12/24	1602	[signature]	7/12/24	1603
Steph Turley	7/12/24	1715	[signature]	7/12/24	1715

**Rush TAT Charge

24 hr - 100%....
48 hr - 75%....
72 hr - 50%....
96 hr - 35%....
5 day - 25%....
6-9 day - 10%

Deliverables
*Surchage may apply for regulatory

NJ, CT, PA:
☐ Results Only (Level I)
☐ Reduced (Level II/III)
☐ Regulatory/ Full* (Level IV)

NY:
☒ ASP Category A
☐ ASP Category B*

EDDs

☐ NJ SRP
☐ NYSDEC EQuIS
☐ lab approved custom EDD
☐ NO EDD REQ'D

Concentrations Expected:

Low Med High
Known Hazard:
☐ YES ☐ NO
Describe:

Turn-Around Time (TAT)

Standard (10 business days) Verbal
Rush/date needed (only if pre-approved)** 72 hr rush
Hard Copy: Standard 3 week Other - call for price

Petroleum Hydrocarbons - Selection is REQUIRED
☐ NJ EPH-DRO - Category 1
☐ NJ EPH-C40 - Category 2
☐ NJ EPH-Fractionated - Cat 2
TAT for PHC, if other than 2 weeks:
☐ CT ETPH
☐ DRO-8015

Regulatory Requirement

New Jersey	New York
☐ GWQS	☐ AWQS (TOGS Table 1)
☐ IGW	☐ GWEL (TOGS Table 5)
☐ SRS	☒ Part 375-6.8(a) - Unrestricted
☐ Ecological	☐ Part 375-6.8(b) - Restricted
☐ DW	☐ CP-51 Table 2 or 3 (selection required)
☐ SPLP	Other States / Criteria
	☐ Pennsylvania Act 2
	☐ CT RCSA 22a-133k1-k3
	☐ TSCA PCBs
	OTHER Regulatory Requirements - specify in comments

Sample Specific Notes:
Hold

FOR LAB USE ONLY
SDG #: 2403
Cooler Temp: 5 °C

IAL Rev 11/2019

LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

Certification IDs: TNI (TNI01284); CT (PH-0699); NJ (14751); NY (11402); PA (68-00773).

PAGE: 1 of 1

INTEGRATED ANALYTICAL LABORATORIES, LLC

Jul 18, 2024 @ 11:38

PROJECT INFORMATION

RUSH

E24-02403: 48-55 36TH ST

To: Leah DeEgidio
JS Held - Hoboken
Fax: 201-626-8095
EMail: Ldeegidio@jsheld.com

Report To

JS Held - Hoboken
5 Marine View Plaza
Suite 401
Hoboken, NJ 07030
Attn: Leah DeEgidio

Bill To

JS Held - Hoboken
J.S. Held
50 Jericho Quadrangle, Suite 117
Jericho, NY 11753
Attn: Accounts Payable

Report Format	P.O. #	Received At Lab	PHC Due	Verbal Due	Hardcopy Due
Category A	240302017	Jul 12, 2024 @ 17:15	NA	Jul 18, 2024	Aug 05, 2024 *

* Any ***Conditional or Hold*** status will delay final hardcopy report sent date.

Diskette Req. Not Required

Criteria Requirement: NY Part 375-6.8(UUSCO+RUSCO)

Lab ID	Client Sample ID	Depth	Sampling Time	Matrix	Unit	Field pH/Temp
02403-001	SB-13A	2/2.5	07/12/24@12:30	Soil	mg/Kg (ppm)	
02403-002	SB-13B	5/5.5	07/12/24@12:30	Soil	mg/Kg (ppm)	

* No Cert = IAL does not hold certification for this test/method

Sample #	Test	Status	Analytical Method	TAT	Holding Time Expires
001	NYCP51T3BN	Analyze	8270E	RUSH 72 HRS	7/26/2024
002	NYCP51T3BN	Analyze	8270E	RUSH 72 HRS	7/26/2024

Project Notes:

NOTE 1 taken by kfalconer on 07/15/2024 02:07
PER LEAH D, ANALYZE FOR NY CP-51T3 BN LIST, WITH NY Part 375-6.8(UUSCO+RUSCO), AND CP-51 TABLE 3 REGULATORY REQUIREMENTS.

REV 1 taken by kim on 07/18/2024 11:17
REV 01 DUE 7/23

PER BEN NEUMANN, ACTIVATE SAMPLE 002 ON A 72 HOUR RUSH.

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
www.ialonline.com

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SAMPLE RECEIPT VERIFICATION

CASE NO: **E 24** **02403** CLIENT: JS Held

COOLER TEMPERATURE: 2° - 6°C: ✓ (See Chain of Custody)

COC: (COMPLETE) / INCOMPLETE **Comments**

KEY
✓ = YES/NA
✗ = NO

VOA received: ☐ Encore ☐ IGW - Methanol
(check one) ☐ Terra Core ☐ No Preservative

✓	Bottles Intact
✓	no-Missing Bottles
✓	no-Extra Bottles
✓	Sufficient Sample Volume
✓	no-headspace/bubbles in VOs
✓	Labels intact/correct
✗	pH Check[1] (refer to Receipt pH Log)
✓	Correct bottles/preservative
✓	Sufficient Holding/Prep Time[1]
☐	Multiphasic Sample
☐	Sample to be Subcontracted
✓	**Chain of Custody is Clear**

[1] All samples with "Analyze Immediately" holding times will be analyzed by this laboratory past the holding time. This includes but is not limited to the following tests: pH, Temperature, Free Residual Chlorine, Total Residual Chlorine, Dissolved Oxygen, Sulfite.

ADDITIONAL COMMENTS:

SAMPLE(S) VERIFIED BY: INITIAL cRonK DATE 7/12/24

CORRECTIVE ACTION REQUIRED: **YES** ☐ (SEE BELOW) **NO** X

If COC is **NOT** clear, ***STOP*** until you get client to authorize/clarify work.

CLIENT NOTIFIED: YES ☐ Date/ Time: _____ NO ☐
PROJECT CONTACT:
SUBCONTRACTED LAB:
DATE SHIPPED:

ADDITIONAL COMMENTS:

VERIFIED/TAKEN BY: INITIAL KJ DATE 7/16/24

Rev 2 2/11/2021

Laboratory Custody Chronicle

IAL Case No.
E24-02403

Client JS Held - Hoboken

Project 48-55 36TH ST

Received On 7/12/2024@17:15

Department: Semivolatiles			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
NYCP51T3BN	02403-001	Soil	7/16/24	Frank L.	7/23/24	Dana Tryon
"	-002	"	7/16/24	Frank L.	7/23/24	Dana Tryon

NOTE: All soil, sediment, sludge, and solid samples are reported on a dry-weight basis.

Integrated Analytical Labs ~ 273 Franklin Road, Randolph, NJ 07869 ~ (973) 361-4252

LAST PAGE OF DOCUMENT

Integrated Analytical Laboratories LLC

ANALYTICAL DATA REPORT

JS Held - Hoboken
5 Marine View Plaza
Suite 401
Hoboken, NJ 07030

Project Name: **48-55 36TH ST**
IAL Case Number: **E24-02404**

These data have been reviewed and accepted by:

Michael H. Leffin, Ph.D.
Laboratory Director

This report shall not be reproduced, except in its entirety, without the written consent of Integrated Analytical Laboratories, LLC. The test results included in this report relate only to the samples analyzed. The results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252

IAL is a NELAP accredited lab (TNI01284) and maintains certification in Connecticut (PH-0699), New Jersey (14751), New York (11402) and Pennsylvania (68-00773).

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Sample Summary

IAL Case No.
E24-02404

Client JS Held - Hoboken

Project 48-55 36TH ST

Received On 7/12/2024@17:15

Lab ID	*Client Sample ID*	*Depth Top/Bottom*	*Sampling Time*	*Matrix*	*# of Container*
02404-001	SB-13A	2/2.5	7/12/2024@12:30	Soil	4
02404-002	SB-13B	5/5.5	7/12/2024@12:30	Soil	4

Integrated Analytical Labs ~ 273 Franklin Road, Randolph, NJ 07869 ~ (973) 361-4252

DATA QUALIFIERS AND FLAGS

B	Indicates the analyte found in the associated method blank and in the sample due to potential lab contamination.
C	Indicates analyte is a common laboratory contaminant.
D	Indicates analyte was reported from diluted analysis.
E	Identifies a compound concentration that exceeds the upper level of the calibration range of the instrument
J	Indicates an estimated value either when the concentration in the sample is less than the RL or for qualification of TICs
J1	Indicates an estimated value when ICC or CCV did not meet the criteria.
M	Indicates matrix interference
N	Presumptive evidence of a compound from the use of GC/MS library search.
T	Sample analyzed outside of holding time
X	Indicates samples analyzed for total and dissolved metals differ at ≤20% RPD.
Y	Indicates DO depletion in the BOD blank is >0.20ppm
Z	Indicates internal standard failure. Sample results are either biased high or biased low.
$	Value outside NJDEP DKQP Limits
*	Result outside of QC limits

PROJECT NOTES

- All results for soils, solids, and sludges are reported on a dry-weight basis except where noted
- All test results and QC are compliant with TNI or other applicable state agency requirements/guidance unless otherwise notated in the case narrative and/or project information page.
- The case narrative for this SDG should be consulted to determine any non-conformances.
- Any samples with 15-minute or "analyze immediately" holding times (e.g. pH, Dissolved Oxygen, Sulfite, etc.) which are analyzed in the laboratory are considered out of holding time.
- IAL is a NELAP/TNI certified laboratory (TNI ID# TNI01284). IAL retains certification in Connecticut (PH-0699), New Jersey (14751), New York (11402), and Pennsylvania (68-00773).
- Certification is not required to perform analyses in the following states: AL, CO, DE, GA, HI, ID, IN, KY, MD, MI, MS, MO, MT, NE, NM, SD and TN. IAL can perform all analyses, except Drinking Water, within its scope of capabilities in these states.

ACRONYMS AND ABBREVIATIONS

CFU	Colony Forming Unit	**ND**	Indicates analyte was analyzed for but not detected at MDL or RL (only if MDL is not used)
CCB	Continuing Calibration Blank		
CCV	Continuing Calibration Verification	**NTU**	Nephelometric Turbidity Units
DF	Dilution Factor	**ppb**	Parts per billion. Reported as µg/L or µg/kg
DL	Attached as a suffix to a diluted sample	**ppm**	Parts per million. Reported as mg/L, µg/mL or mg/kg
DUP	Duplicate	**QC**	Quality Control
ICB	Initial Calibration Blank	**% Rec**	Percent Recovery
ICC	Initial Calibration Curve	**RL**	Reporting Limit. The RL is typically determined by the concentration of the lowest standard in the calibration curve
ICV	Initial Calibration Verification		
kg	kilogram		
L	Liter	**RPD**	Relative Percent Difference
LCS	Laboratory Control Sample	**RSD**	Relative Standard Deviation
LCSD	Laboratory Control Sample Duplicate	**RT**	Retention Time
MDL	Method Detection Limit as determined according to 40 CFR Part 136 Appendix B	**SU**	Standard Units
		TIC	Tentatively Identified Compound AKA Library Search Compounds
MF	Membrane Filter		
mg	milligram (1000mg = 1g)	**TNI**	The NELAC (National Environmental Laboratory Accreditation Council) Institute
µg	microgram (1000µg = 1mg)		
ml	milliliter (1000ml = 1L)	**TNTC**	Too numerous to count
µl	microliter (1000µl = 1ml)	*	When attached to a compound name, indicates this analyte was analyzed by Method SW-846 8270 SIM
µmhos	Conductivity units - resistance expressed in ohms		
MPN	Most Probable Number	^	When attached to a compound name, indicates this analyte was analyzed by Method SW-846 8011 or EPA 504.1
MS	Matrix Spike		
MSD	Matrix Spike Duplicate		
NA	Not applicable	<	Less than; In conjunction with a numerical value, indicates a concentration less than the RL or MDL
NC	Not calculated		

SAMPLE DELIVERY GROUP CASE NARRATIVE
(Conformance / Non-Conformance Summary)

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E24-02404

Integrated Analytical Laboratories, LLC. received two (2) samples** from JS Held - Hoboken (IAL SDG# **E24-02404**, Project: 48-55 36TH ST) on July 12, 2024 for the analysis of :

(2) NY Part 375 VO

**Number of samples listed above may be greater than what is listed on the chain of custody. Any samples that require in-house filtration or splitting will be counted as separate samples.

Samples were received in good condition with documentation in order.
Cooler temperature was acceptable at 4 ± 2 degree C.

Volatiles By SW 8260D | **Batch: F240716-01** | **Matrix: MEOH**

QC
- Calibration curve met QC criteria.
- Internal standards recovery met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- LCS percent recovery met QC criteria. NJDEP DKQP criteria not met.
- MS/MSD RPD did not meet QC criteria due to matrix interference. NJDEP DKQP criteria not met.
- MS/MSD percent recovery did not meet QC criteria due to matrix interference. NJDEP DKQP criteria not met.

E24-02404
- All samples were received within holding time.
- All samples were analyzed within holding time.
- Samples listed below were run using methanol preserved sample, as applicable. This sample preservation technique elevates RLs and MDLs 100x versus water preservation. If subsequent dilutions are performed, the RLs and MDLs will increase by that factor (e.g. a methanol sample run at a 5x dilution would elevate RLs and MDLs by 500x). Initial runs using methanol are considered "straight" runs and have a dilution factor of 1.

Dilution Summary:

Sample ID	DF(s)	Dilution For	MeOH Run For
E24-02404-001	1	NA	High Non-Target Compounds.

Volatiles By SW 8260D | **Batch: L240717-01** | **Matrix: Soil**

QC
- Calibration curve met QC criteria.
- Internal standards recovery met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- LCS percent recovery met QC criteria.
- MS/MSD RPD did not meet QC criteria due to the differences of Terra cores analyzed.
- MS/MSD percent recovery met QC criteria.

E24-02404
- All samples were received within holding time.
- All samples were analyzed within holding time.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E24-02404-002	1	NA

A review of the QA/QC measures for the analysis of the sample(s) contained in this report has been performed by:

Heather Daly
Reviewed by

7/19/2024
Date

RESULTS SUMMARY REPORT

SUMMARY REPORT
Client: JS Held - Hoboken
Project: 48-55 36TH ST
Lab Case No.: E24-02404

Lab ID:	02404-001			02404-002		
Client ID:	SB-13A			SB-13B		
Depth:	2/2.5			5/5.5		
Matrix:	Soil			Soil		
Sampled Date	7/12/24			7/12/24		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL
Volatiles (Units)	*(mg/Kg)*			*(mg/Kg)*		
Vinyl chloride	ND		0.189	ND		0.00034
1,1-Dichloroethene	ND		0.213	ND		0.000368
Acetone	ND		0.299	ND		0.00525
Methylene chloride	ND		0.254	ND		0.00315
trans-1,2-Dichloroethene	ND		0.153	ND		0.000372
Methyl tert-butyl ether (MTBE)	ND		0.151	ND		0.000229
1,1-Dichloroethane	ND		0.153	ND		0.000268
cis-1,2-Dichloroethene	ND		0.125	ND		0.000225
2-Butanone (MEK)	ND		0.463	ND		0.0021
Chloroform	ND		0.138	ND		0.000525
1,1,1-Trichloroethane	ND		0.151	ND		0.000322
Carbon tetrachloride	ND		0.173	ND		0.00021
1,2-Dichloroethane (EDC)	ND		0.152	ND		0.000243
Benzene	ND		0.119	ND		0.000258
Trichloroethene	ND		0.151	ND		0.000156
Toluene	ND		0.125	ND		0.000525
Tetrachloroethene	0.503	D	0.194	0.0012		0.000332
Chlorobenzene	ND		0.168	ND		0.000182
Ethylbenzene	ND		0.165	ND		0.000266
Total Xylenes	ND		0.145	ND		0.000147
n-Propylbenzene	ND		0.185	ND		0.000293
1,3,5-Trimethylbenzene	ND		0.187	ND		0.000223
tert-Butylbenzene	ND		0.218	ND		0.000231
1,2,4-Trimethylbenzene	ND		0.184	ND		0.000285
sec-Butylbenzene	ND		0.231	ND		0.000248
1,3-Dichlorobenzene	ND		0.191	ND		0.000278
1,4-Dichlorobenzene	ND		0.189	ND		0.000326
n-Butylbenzene	ND		0.220	ND		0.000387
1,2-Dichlorobenzene	ND		0.184	ND		0.000264
m,p-Xylene	ND		0.282	ND		0.000275
o-Xylene	ND		0.145	ND		0.000147
TOTAL VO's:	0.503	D		0.0012		

ND = Analyzed for but Not Detected at the MDL
D = The compound was reported from the Diluted analysis

ANALYTICAL RESULTS

VOLATILE ORGANICS

Lab ID: E24-02404-001
Client ID: SB-13A/2-2.5
Date Received: 07/12/2024
Date Analyzed: 07/16/2024
Data file: F3052.D 07/16/2024 18:59

GC/MS Column: DB-624
Sample wt/vol: 0.01044g
Matrix-Units: Soil-mg/Kg
% Moisture: 5.70
Dilution Factor: 5

Compound	Concentration	Q	RL	MDL
Vinyl chloride	ND		0.254	0.189
1,1-Dichloroethene	ND		0.508	0.213
Acetone	ND		1.02	0.299
Methylene chloride	ND		0.508	0.254
trans-1,2-Dichloroethene	ND		0.254	0.153
Methyl tert-butyl ether (MTBE)	ND		0.254	0.151
1,1-Dichloroethane	ND		0.254	0.153
cis-1,2-Dichloroethene	ND		0.254	0.125
2-Butanone (MEK)	ND		0.508	0.463
Chloroform	ND		0.254	0.138
1,1,1-Trichloroethane	ND		0.254	0.151
Carbon tetrachloride	ND		0.254	0.173
1,2-Dichloroethane (EDC)	ND		0.254	0.152
Benzene	ND		0.254	0.119
Trichloroethene	ND		0.254	0.151
Toluene	ND		0.254	0.125
Tetrachloroethene	0.503	D	0.254	0.194
Chlorobenzene	ND		0.254	0.168
Ethylbenzene	ND		0.254	0.165
Total Xylenes	ND		0.508	0.145
n-Propylbenzene	ND		0.254	0.185
1,3,5-Trimethylbenzene	ND		0.254	0.187
tert-Butylbenzene	ND		0.254	0.218
1,2,4-Trimethylbenzene	ND		0.254	0.184
sec-Butylbenzene	ND		0.254	0.231
1,3-Dichlorobenzene	ND		0.254	0.191
1,4-Dichlorobenzene	ND		0.254	0.189
n-Butylbenzene	ND		0.254	0.220
1,2-Dichlorobenzene	ND		0.254	0.184
m,p-Xylene	ND		0.508	0.282
o-Xylene	ND		0.254	0.145
Total Target Compounds (31):	0.503	D		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

VOLATILE ORGANICS

Lab ID: E24-02404-002
Client ID: SB-13B/5-5.5
Date Received: 07/12/2024
Date Analyzed: 07/18/2024
Data file: L0129.D 07/18/2024 01:37

GC/MS Column: DB-624
Sample wt/vol: 4.90g
Matrix-Units: Soil-mg/Kg
% Moisture: 3.20
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Vinyl chloride	ND		0.00105	0.00034
1,1-Dichloroethene	ND		0.00105	0.000368
Acetone	ND		0.011	0.00525
Methylene chloride	ND		0.00525	0.00315
trans-1,2-Dichloroethene	ND		0.00105	0.000372
Methyl tert-butyl ether (MTBE)	ND		0.00105	0.000229
1,1-Dichloroethane	ND		0.00105	0.000268
cis-1,2-Dichloroethene	ND		0.00105	0.000225
2-Butanone (MEK)	ND		0.011	0.0021
Chloroform	ND		0.00105	0.000525
1,1,1-Trichloroethane	ND		0.00105	0.000322
Carbon tetrachloride	ND		0.00105	0.00021
1,2-Dichloroethane (EDC)	ND		0.00105	0.000243
Benzene	ND		0.00105	0.000258
Trichloroethene	ND		0.00105	0.000156
Toluene	ND		0.00105	0.000525
Tetrachloroethene	0.0012		0.00105	0.000332
Chlorobenzene	ND		0.00105	0.000182
Ethylbenzene	ND		0.00105	0.000266
Total Xylenes	ND		0.0021	0.000147
n-Propylbenzene	ND		0.00105	0.000293
1,3,5-Trimethylbenzene	ND		0.00105	0.000223
tert-Butylbenzene	ND		0.00105	0.000231
1,2,4-Trimethylbenzene	ND		0.00105	0.000285
sec-Butylbenzene	ND		0.00105	0.000248
1,3-Dichlorobenzene	ND		0.00105	0.000278
1,4-Dichlorobenzene	ND		0.00105	0.000326
n-Butylbenzene	ND		0.00105	0.000387
1,2-Dichlorobenzene	ND		0.00105	0.000264
m,p-Xylene	ND		0.0021	0.000275
o-Xylene	ND		0.00105	0.000147

Total Target Compounds (31): 0.0012

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

VOLATILE ORGANICS

Lab ID: BLKM240716-01
Client ID: BLKM240716-01
Date Received:
Date Analyzed: 07/16/2024
Data file: F3039.D 07/16/2024 11:50

GC/MS Column: DB-624
Sample wt/vol: 0.05g
Matrix-Units: Soil-mg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Vinyl chloride	ND		0.050	0.037
1,1-Dichloroethene	ND		0.100	0.042
Acetone	ND		0.200	0.059
Methylene chloride	ND		0.100	0.050
trans-1,2-Dichloroethene	ND		0.050	0.030
Methyl tert-butyl ether (MTBE)	ND		0.050	0.030
1,1-Dichloroethane	ND		0.050	0.030
cis-1,2-Dichloroethene	ND		0.050	0.025
2-Butanone (MEK)	ND		0.100	0.091
Chloroform	ND		0.050	0.027
1,1,1-Trichloroethane	ND		0.050	0.030
Carbon tetrachloride	ND		0.050	0.034
1,2-Dichloroethane (EDC)	ND		0.050	0.030
Benzene	ND		0.050	0.024
Trichloroethene	ND		0.050	0.030
Toluene	ND		0.050	0.025
Tetrachloroethene	ND		0.050	0.038
Chlorobenzene	ND		0.050	0.033
Ethylbenzene	ND		0.050	0.033
Total Xylenes	ND		0.100	0.029
n-Propylbenzene	ND		0.050	0.036
1,3,5-Trimethylbenzene	ND		0.050	0.037
tert-Butylbenzene	ND		0.050	0.043
1,2,4-Trimethylbenzene	ND		0.050	0.036
sec-Butylbenzene	ND		0.050	0.046
1,3-Dichlorobenzene	ND		0.050	0.038
1,4-Dichlorobenzene	ND		0.050	0.037
n-Butylbenzene	ND		0.050	0.043
1,2-Dichlorobenzene	ND		0.050	0.036
m,p-Xylene	ND		0.100	0.056
o-Xylene	ND		0.050	0.029

Total Target Compounds (31): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

VOLATILE ORGANICS

Lab ID: BLKS240717-01
Client ID: BLKS240717-01
Date Received:
Date Analyzed: 07/17/2024
Data file: L0109.D 07/17/2024 16:06

GC/MS Column: DB-624
Sample wt/vol: 5.00g
Matrix-Units: Soil-mg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Vinyl chloride	ND		0.001	0.000324
1,1-Dichloroethene	ND		0.001	0.00035
Acetone	ND		0.010	0.005
Methylene chloride	ND		0.005	0.003
trans-1,2-Dichloroethene	ND		0.001	0.000354
Methyl tert-butyl ether (MTBE)	ND		0.001	0.000218
1,1-Dichloroethane	ND		0.001	0.000255
cis-1,2-Dichloroethene	ND		0.001	0.000214
2-Butanone (MEK)	ND		0.010	0.002
Chloroform	ND		0.001	0.0005
1,1,1-Trichloroethane	ND		0.001	0.000307
Carbon tetrachloride	ND		0.001	0.0002
1,2-Dichloroethane (EDC)	ND		0.001	0.000231
Benzene	ND		0.001	0.000246
Trichloroethene	ND		0.001	0.000149
Toluene	ND		0.001	0.0005
Tetrachloroethene	ND		0.001	0.000316
Chlorobenzene	ND		0.001	0.000173
Ethylbenzene	ND		0.001	0.000253
Total Xylenes	ND		0.002	0.00014
n-Propylbenzene	ND		0.001	0.000279
1,3,5-Trimethylbenzene	ND		0.001	0.000212
tert-Butylbenzene	ND		0.001	0.00022
1,2,4-Trimethylbenzene	ND		0.001	0.000271
sec-Butylbenzene	ND		0.001	0.000236
1,3-Dichlorobenzene	ND		0.001	0.000265
1,4-Dichlorobenzene	ND		0.001	0.00031
n-Butylbenzene	ND		0.001	0.000369
1,2-Dichlorobenzene	ND		0.001	0.000251
m,p-Xylene	ND		0.002	0.000262
o-Xylene	ND		0.001	0.00014

Total Target Compounds (31): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

SAMPLE TRACKING

FINALIZED 07/23/2024

E24-02404 Page 13

INTEGRATED ANALYTICAL LABORATORIES, LLC

IAL Integrated Analytical Laboratories LLC

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Chain of Custody Record

Contact Us: 973-361-4252
Web: www.ialonline.com

Customer Information

Company: J.S. Held, LLC
Address: 5 Marine View Plaza
Suite 401, Hoboken, NJ
Telephone #: 201-876-9400
Project Manager: Leah DeEgidio
Email Address(es): LDegidio@jsheld.com
Project Name: 48-55 36th St
Project Location (State): NY
Bottle Order #:
☒ "Report to"/"Invoice To" same as above
Sampled by: BN

COMPLETED BY IAL:
____ Field Sampling ____ Equipment Rental

Reporting Information

☐ Check here if same as "Customer Information"
REPORT TO:
Address:
Attn:
INVOICE TO:
Address:
Attn:
PO # 2403020 17
Quote #

Sample Matrix

DW - Drinking Water
WW - Waste Water
GW - Groundwater
SW - Surface Water
LIQ - Liquid (specify)
M - Multiphasic
OI - Oil
S - Soil
SED - Sediment
SOL - Solid (specify)
SL - Sludge
W - Wipe

**Rush TAT Charge

24 hr - 100%...
48 hr - 75%....
72 hr - 50%....
96 hr - 35%....
5 day - 25%....
6-9 day - 10%

Deliverables

*Surcharge may apply for regulatory

NJ, CT, PA
☐ Results Only (Level I)
☐ Reduced (Level II/III)
☐ Regulatory/ Full* (Level IV)

NY
☒ ASP Category A
☐ ASP Category B*

EDDs

☐ NJ SRP
☐ NYSDEC EQuIS
☐ lab approved custom EDD
☐ NO EDD REQ'D

Concentrations Expected:

Low Med High

Known Hazard:
☐ YES ☐ NO
Describe:

Turn-Around Time (TAT)

Standard (10 business days) Verbal
Rush/date needed (only if pre-approved)** 72 hr rush
Hard Copy: Standard 3 week Other - call for price

Petroleum Hydrocarbons - Selection is REQUIRED
☐ NJ EPH-DRO - Category 1
☐ NJ EPH-C40 - Category 2
☐ NJ EPH-Fractionated - Cat 2
TAT for PHC, if other than 2 weeks:
☐ CT ETPH
☐ DRO-8015

Regulatory Requirement

New Jersey
☐ GWQS
☐ IGW
☐ SRS
☐ Ecological
☐ DW
☐ SPLP

New York
☐ AWQS (TOGS Table 1)
☐ GWEL (TOGS Table 5)
☒ Part 375-6.8(a) - Unrestricted
☒ Part 375-6.8(b) - Restricted
☒ CP-51 Table 2 or 3 (selection required)

Other States / Criteria
☐ Pennsylvania Act 2
☐ CT RCSA 22a-133k1-k3
☐ TSCA PCBs
OTHER Regulatory Requirements - specify in comments

SAMPLE INFORMATION

ANALYTICAL PARAMETERS (please note if contingent)

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# containers	IAL #	VOC+15	Sample Specific Notes:
SB-13A	2-2.5	7/12/24	1230	S	4	1	X	
SB-13B	5-5.5	7/12/24	1230	S	4	2	X	Hold

Samples previously analyzed by IAL? YES / NO

Preservative Code: 1 = None, 2 = HCl, 3 = HNO3, 4 = MeOH, 5 = NaOH, 6 = H2SO4, 7 = Other

Container Code: A = Amber Glass, B = Plastic, C = Vial, D = Glass, E = EnCore, T = Terracore

Preservative (use code): 2
Container Type (use code): T

Special Instructions/QC Requirements & Comments:
Hold 'B' Samp4

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time (TAT) will not start until any ambiguities have been resolved. TAT starts the following day if samples rec'd at lab ≥ 5PM. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY IAL'S TERMS & CONDITIONS (found on rear of pink copy).

IAL Rev 11/2019

Carrier (check one):
☐ IAL Courier
☐ Client Courier
☐ FedEx/UPS***
***Tracking #:

Relinquished by (Signature and Company)	Date	Time	Received by (Signature and Company)	Date	Time
	7/12/24	1602	Steph Tinley	7/12/24	1603
Steph Tinley	7/12/24	1715		7/12/24	1715

FOR LAB USE ONLY
SDG #: 2404
Cooler Temp: 5 °C

LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

Certification IDs: TNI (TNI01284); CT (PH-0699); NJ (14751); NY (11402); PA (68-00773).

PAGE: 1 of 1

Jul 18, 2024 @ 11:26

PROJECT INFORMATION

RUSH

E24-02404: 48-55 36TH ST

To: Leah DeEgidio
JS Held - Hoboken
Fax: 201-626-8095
EMail: Ldeegidio@jsheld.com

Report To

JS Held - Hoboken
5 Marine View Plaza
Suite 401
Hoboken, NJ 07030
Attn: Leah DeEgidio

Bill To

JS Held - Hoboken
J.S. Held
50 Jericho Quadrangle, Suite 117
Jericho, NY 11753
Attn: Accounts Payable

Report Format	P.O. #	Received At Lab	PHC Due	Verbal Due	Hardcopy Due
Category A	240302017	Jul 12, 2024 @ 17:15	NA	Jul 18, 2024	Aug 05, 2024 *

* Any ***Conditional or Hold*** status will delay final hardcopy report sent date.

Diskette Req. Not Required

Criteria Requirement: NY Part 375-6.8(UUSCO+RUSCO)

Lab ID	Client Sample ID	Depth	Sampling Time	Matrix	Unit	Field pH/Temp
02404-001	SB-13A	2/2.5	07/12/24@12:30	Soil	mg/Kg (ppm)	
02404-002	SB-13B	5/5.5	07/12/24@12:30	Soil	mg/Kg (ppm)	

* No Cert = IAL does not hold certification for this test/method

Sample #	Test	Status	Analytical Method	TAT	Holding Time Expires
001	NY Part 375 VO	Analyze	8260D	RUSH 72 HRS	7/26/2024
002	NY Part 375 VO	Analyze	8260D	RUSH 72 HRS	7/26/2024

Project Notes:

NOTE 2 taken by kfalconer on 07/15/2024 02:04
PER LEAH D, ANALYZE FOR NY PART 375 VO LIST ONLY.

REV 1 taken by kim on 07/18/2024 11:24
REV 01 DUE 7/23

PER BEN NEUMANN, ACTIVATE SAMPLE 002 ON A 72 HOUR RUSH.

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
www.ialonline.com

IAL is a NELAP accredited lab (TNI01284) and maintains certification in Connecticut (PH-0699), New Jersey (14751), New York (11402), and Pennsylvania (68-00773).

SAMPLE RECEIPT VERIFICATION

CASE NO: **E 24** **02404** CLIENT: JS Held

COOLER TEMPERATURE: 2° - 6°C: ✓ (See Chain of Custody)

Comments

COC: (COMPLETE) / INCOMPLETE

KEY

✓ = **YES/NA**

✗ = **NO**

VOA received: ☐ Encore ☐ IGW - Methanol

(check one) ☒ Terra Core ☐ No Preservative

✓	Bottles Intact
✓	no-Missing Bottles
✓	no-Extra Bottles
✓	Sufficient Sample Volume
✓	no-headspace/bubbles in VOs
✓	Labels intact/correct
✗	pH Check[1] (refer to Receipt pH Log)
✓	Correct bottles/preservative
✓	Sufficient Holding/Prep Time[1]
☐	Multiphasic Sample
☐	Sample to be Subcontracted
✓	**Chain of Custody is Clear**

[1] All samples with "Analyze Immediately" holding times will be analyzed by this laboratory past the holding time. This includes but is not limited to the following tests: pH, Temperature, Free Residual Chlorine, Total Residual Chlorine, Dissolved Oxygen, Sulfite.

ADDITIONAL COMMENTS:

SAMPLE(S) VERIFIED BY: INITIAL cRonK DATE 7/12/24

CORRECTIVE ACTION REQUIRED: **YES** ☐ (SEE BELOW) **NO** ☒

If COC is **NOT** clear, ***STOP*** until you get client to authorize/clarify work.

CLIENT NOTIFIED: YES ☐ Date/ Time: _____ NO ☐

PROJECT CONTACT:

SUBCONTRACTED LAB:

DATE SHIPPED:

ADDITIONAL COMMENTS:

VERIFIED/TAKEN BY: INITIAL KJ DATE 7/16/24

Rev 2 2/11/2021

Laboratory Custody Chronicle

IAL Case No.
E24-02404

Client JS Held - Hoboken

Project 48-55 36TH ST

Received On 7/12/2024@17:15

Department: Volatiles			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
NY Part 375 VO	02404-001	Soil	n/a	n/a	7/17/24	Mei
"	-002	"	n/a	n/a	7/17/24	Mei

NOTE: All soil, sediment, sludge, and solid samples are reported on a dry-weight basis.

Integrated Analytical Labs ~ 273 Franklin Road, Randolph, NJ 07869 ~ (973) 361-4252

LAST PAGE OF DOCUMENT

EPA TO-15 DATA PACKAGE

ANALYTICAL DATA PACKAGE FOR THE
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
ALBANY NEW YORK 12233

Integrated Analytical Laboratories, LLC — **Randolph, NJ 07869**
Project#: 48-55 36th St — **NY ELAP Certification#: 11402**
SDG #: E24-02398 — **NJDEP (Primary AB) Certification#: 14751**
Date of first sample receipt: 7/15/2024 — **Date of last sample receipt: 7/15/2024**

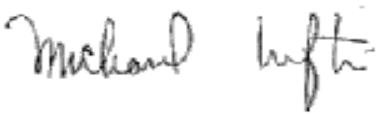
Client: JS Held-Hoboken

Project/Site: 48-55 36th St/NY

Client Sample Number	Laboratory Sample	Sample Location	Date/Time of Collection
SG-10	E24-02398-01	NA	7/12/2024 10:55
SG-11	E24-02398-02	NA	7/12/2024 14:10
SG-12	E24-02398-03	NA	7/12/2024 12:00
SG-13	E24-02398-04	NA	7/12/2024 13:30

This report shall not be reproduced, except in its entirety, without the written consent of Integrated Analytical Laboratories, LLC. The test results included in this report relate only to the samples analyzed. The results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

I certify that this data package is in compliance with the terms and conditions of this contract, both technically and for completeness, for other than the conditions detailed above. Release of data contained in this hardcopy data package and in the computer-readable data submitted on CD/diskette and by electronic mail has been authorized by the laboratory manager or his designee, as verified by the following signature.



Michael H. Leftin, Ph.D.
Laboratory Director

Date: August 1, 2024



Ming-Hwa Reitan
QA/QC Manager

Date: August 1, 2024

Integrated Analytical Laboratories LLC

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Laboratory Acronyms

The following is a list of laboratory acronyms commonly used in EPA Method TO-15 testing:

Acronym	Definition
BLK	Blank/Method Blank
BFB	4-Bromofluorobenzene (Tuning Standard)
CAS Number	Chemical Abstract Service Registry Number
cc	cubic centimeters
CCCVS	Closing Calibration Check Verification Standard
COC	Chain of Custody
DCVS	Daily Calibration Verification Standard
DF	Dilution Factor
EPA	U. S. Environmental Protection Agency (aka USEPA)
"Hg	Inches of Mercury
IA	Indoor Air
IASL	Indoor Air Screening Level
ICAL	Initial Calibration
ICVSS	Initial Calibration Verification Standard
ISTD	Internal Standard
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LCS	Laboratory Control Sample/Spike
LLTO-15	Low Level TO-15
MDL	Method Detection Limit
MDLV	Method Detection Limit Verification
ml	milliliters
ND	Not Detected (at or above RL)
NJDEP	New Jersey Department of Environmental Protection
PM	Project Manager
ppbv	parts per billion, volume-to-volume ratio
PQL	Practical Quantitation Limit - MDLx3
QA	Quality Assurance
QC	Quality Control
RAL	Rapid Action Limit
RL	Reporting Limit
RLLCS	Reporting Limit Laboratory Control Sample
RPD	Relative Percent Difference
RRF	Relative Response Factor
RSD	Relative Standard Deviation
SDG	Sample Delivery Group
SGSL	Soil Gas Screening Levels
SS	Sub Slab
TAT	Turnaround Time
TIC	Tentatively Identified Compound
µg/m3	micrograms per cubic meter

Section I: Chain of Custody

INTEGRATED ANALYTICAL LABORATORIES, LLC

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

External Chain of Custody Record/
Field Test Data Sheet
USEPA Method TO-15

Contact Us: 973-361-4252
Fax: 973-366-5613
Web: www.ialonline.com

Carrier (check one): ____ IAL Courier ____Client Courier _____FedEx/UPS

pg 1 of 1

Client Contact Information	Project Information	Invoice Information
Company: JS Held - Hoboken	Project Name: 48-55 36th St	Attn:
Address: 5 Marine View Plaza	Project Location (State): NJ	Address:
Hoboken, NJ 07030	Project Manager: Leah DeBisdia	
Phone: 201-876-9400	PM Signature: LDeBisdia@jsheld.com	PO #: 24030 2017
Fax:	PM E-Mail:	Quote #:
Report to:	Sampler: B.N	

Analysis Turnaround Time - IF NO TAT IS SPECIFIED, 2 WEEK TAT IS ASSUMED

IAL Standard: 2 weeks (10 business days)

Rush (**pre-approved by lab): 24hr** 48hr** (72hr**) 96hr** 1wk**

	Sample Identification	Start DATE & TIME (24hr Clock)	End DATE & TIME (24hr Clock)	Starting Vacuum ("Hg)	Ending Vacuum ("Hg)	Starting Temp. (°F)	Ending Temp. (°F)	Outgoing Vacuum - Lab ("Hg)	Incoming Vacuum - Lab ("Hg)	Flow Regulator ID	Canister ID	Canister Size (1L or 6L)	Flow Controller Readout (cc/min)	EPA TO - 15	NJDEP LLTO-15 (includes 30 TICs)	Library Search (10, 20, or 30 TICs)	Other (Explain in Comments)	Regulatory/ NY Cat B / Full (NJ Required)	Reduced / NY Cat A Data Package	Results Only	Indoor Air	Ambient / Outdoor Air	Sub Slab / Soil Gas / Near Slab (Circle One)	Stack Emission / SVE System	High Concentrations Expected
1	SG-10	7/12, 1055	7/12, 1126	-30	-1	79	79	-29.0	-1.0	7337195	5096	6L	200	X									X		
2	SG-11	↓, 1410	↓, 1440	-30	-1	79	79	-29.0	-1.0	7288555	2066	6L	200	X									X		
3	SG-12	↓, 1200	↓, 1230	-28	-1	74	74	-29.0	-1.0	7340699	3100	6L	199.6	X									X		
4	SG-13	↓, 1330	↓, 1401	-29	0	79	79	-29.0	0.0	A00 7624	2886	6L	200	X									X		

Barometric Pressure

Start		Stop	

Comments/ Special Analysis Instructions / QC Requirements:

05072401
CS3124 22 file # 226545
#3100

Note: Hold or contingent samples may be designated by writing an "H" or "C" in the appropriate analysis box.

ALL FIELDS IN RED ARE REQUIRED

Shipping Information / Canister Preparation (for laboratory use only)

Individual Preparing Canisters / Title: P. Jenkins, J. Walukiewicz / Air Department Sample Custodians

Lab Affixed Seal Number(s): (Jacob Reitzn)

Date/Time Shipping Container Sealed: 7/10/24

Laboratory Canister Certification

GC/MS Analyst Signature: Joseph J Walukiewicz III (JJW)

IAL SDG#: 02398

External Chain of Custody

Relinquished	Received	Date / Time	Reason for Change of External Custody
Joseph Tinley	Joseph Tinley	7/10/24 1605	shipment from laboratory to client
	Joseph J Walukiewicz III (JJW)	7/10/24 1606	
		07/15/2024 09:30	Received at air lab

Name/Title Resealing Shipping Container Name:

Date/Time Sample Shipping Container Resealed:

Date/Time Sample Shipping Container Opened: 07/15/2024 09:30

NJDEP Affixed Seal Number:

Individual Opening Sample Shipping Container: ~~Padraic Jenkins~~ / Joseph Walukiewicz

Date/Time Internal Chain of Custody Initiated: 07/15/2024 @ 09:35

White and yellow - lab copies; Pink - client copy

Use appropriate care with IAL sampling equipment when sampling and packing for shipment. The client is responsible for all damage incurred to IAL equipment. Notify IAL if equipment is damaged upon receipt. Holding time before sampling is 15 days, after sampling is 30 days; failure to follow these times may result in data rejection by regulatory agencies. The lab will contact you if your COC is not clear, incomplete, or if discrepancies exist. The use of initials is not permitted on the COC except when correcting errors. 06/2014

PROJECT INFORMATION

RUSH

E24-02398: 48-55 36TH ST

To: Leah DeEgidio
JS Held - Hoboken
Fax: 201-626-8095
EMail: Ldeegidio@jsheld.com

Report To

JS Held - Hoboken
5 Marine View Plaza
Suite 401
Hoboken, NJ 07030
Attn: Leah DeEgidio

Bill To

JS Held - Hoboken
J.S. Held
50 Jericho Quadrangle, Suite 117
Jericho, NY 11753
Attn: Accounts Payable

Report Format	P.O. #	Received At Lab	PHC Due	Verbal Due	Hardcopy Due
Air Regulatory	240302017	Jul 15, 2024 @ 09:30	NA	Jul 18, 2024	Aug 05, 2024 *

* Any ***Conditional or Hold*** status will delay final hardcopy report sent date.

Diskette Req. Not Required

Lab ID	Client Sample ID	Depth	Sampling Time	Matrix	Unit	Field pH/Temp
02398-001	SG-10	NA	07/12/24@11:26	Air-Other	ppbV	
02398-002	SG-11	NA	07/12/24@14:40	Air-Other	ppbV	
02398-003	SG-12	NA	07/12/24@12:30	Air-Other	ppbV	
02398-004	SG-13	NA	07/12/24@14:01	Air-Other	ppbV	

* No Cert = IAL does not hold certification for this test/method

Sample #	Test	Status	Analytical Method	TAT	Holding Time Expires
001	EPA TO-15	Analyze	TO-15	RUSH 72 HRS	8/11/2024
002	EPA TO-15	Analyze	TO-15	RUSH 72 HRS	8/11/2024
003	EPA TO-15	Analyze	TO-15	RUSH 72 HRS	8/11/2024
004	EPA TO-15	Analyze	TO-15	RUSH 72 HRS	8/11/2024

Project Notes:

NOTE 1 taken by kim on 07/15/2024 04:33
SAMPLE 004 (SG-13) ENDING VACUUM IS 0.

CLIENT DID NOT RECORD BAROMETRIC PRESSURE.

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
www.ialonline.com

IAL is a NELAP accredited lab (TNI01284) and maintains certification in Connecticut (PH-0699), New Jersey (14751), New York (11402), and Pennsylvania (68-00773).

Internal Chain of Custody

Instructions: Use 1 form for each 20 samples of aliquot.

Laboratory Person Accepting Responsibility for Sample(s)

Laboratory: Integrated Analytical Laboratories
Name: Joseph Walukiewicz
Case No.: E24-02398
Location: 273 Franklin Rd Randolph, NJ 07869
Title: Air Department Receiving
Analytical Parameter/Fraction: (check one) ____ NJDEP LLTO-15 __X__ EPA TO-15

Sample No.	Aliquot/Extract No.
88-10	E24-02398-01
" -11	E24- " " -02
" -12	E24- " " -03
" -13	E24- " " -04
	E24-
	E24
	E24-
	E24-
	E24-
	E24-

Sample No.	Aliquot/Extract No.
	E24-
	E24-
	E24-
	E24-
	E24-
	E24-
	E24-
	E24-
	E24
	E24

Date	Time	Relinquished By	Received By	Purpose of Change of Custody
07 15 24	0935	SIGNATURE PRINTED NAME	SIGNATURE Joseph Walukiewicz PRINTED NAME JOSEPH WALUKIEWICZ	1. Sample log-in 2. Pressure Check 3. Pre-analysis storage
07 15 24	0940	SIGNATURE Joseph Walukiewicz PRINTED NAME JOSEPH WALUKIEWICZ	SIGNATURE PRINTED NAME	Placement in TO-15 sample storage area until ready for analysis
07 15 24	1700	SIGNATURE PRINTED NAME	SIGNATURE Joseph Walukiewicz PRINTED NAME JOSEPH WALUKIEWICZ	TO-15 analysis on: 02398-01 to -04
		SIGNATURE PRINTED NAME	SIGNATURE Joseph Walukiewicz PRINTED NAME JOSEPH WALUKIEWICZ	TO-15 analysis on:
		SIGNATURE PRINTED NAME	SIGNATURE PRINTED NAME	
		SIGNATURE PRINTED NAME	SIGNATURE PRINTED NAME	
		SIGNATURE PRINTED NAME	SIGNATURE PRINTED NAME	
		SIGNATURE PRINTED NAME	SIGNATURE PRINTED NAME	

Rev. 12/16

Page 1 of 1

Section II: Methodology Review

Methodology Summary for Air Collected from Hazardous Waste Site Contract

Laboratory:	**Integrated Analytical Lab, LLC**	**Project No:**	**48-55 36th St**
Location:	**Randolph, NJ**	**SDG No:**	**E24-02398**

Name	Required Methodology	Indicate Method
Volatile Organics	US EPA TO-15	US EPA Method TO-15

Section III: Case Narrative

CASE NARRATIVE

Integrated Analytical Laboratories, LLC — **Randolph, NJ 07869**
Project #: 48-55 36th St — **NJDEP (Primary AB) Certification#: 14751**
SDG #: E24-02398 — **NY ELAP Certification #: 11402**
CT DPH Certification#: PH-0699
Analytical Method: EPA Method TO-15 — **PADEP Certification#: 68-00773**

Date of first sample receipt: 7/15/2024 — **Date of last sample receipt: 7/15/2024**

Client: JS Held-Hoboken
Project/Site: 48-55 36th St / NY

Client ID	Lab ID	Receipt Date	Analysis Date	DF	Diluted For
SG-10	E24-02398-01	07/15/2024	07/15/2024	5.0	NA
SG-10	E24-02398-01	07/15/2024	07/15/2024	1.0	NA
SG-11	E24-02398-02	07/15/2024	07/15/2024	10.0	Tetrachloroethene
SG-11	E24-02398-02	07/15/2024	07/15/2024	1.0	NA
SG-12	E24-02398-03	07/15/2024	07/15/2024	5.0	Acetone
SG-12	E24-02398-03	07/15/2024	07/15/2024	1.0	NA
SG-13	E24-02398-04	07/15/2024	07/15/2024	5.0	Acetone Tetrachloroethene
SG-13	E24-02398-04	07/15/2024	07/15/2024	1.0	NA

IAL Sample ID	Canister ID	Outgoing Pressure ("Hg)	Incoming Pressure ("Hg)	Flow Controller ID	Outgoing Flow Rate (cc/min)	Incoming Flow Rate (cc/min)	Flow Rate RPD*
E24-02398-01	5096	-29	-1.0	7337295	200.00	198.50	0.75
E24-02398-02	2066	-29	-1.0	7288555	200.00	199.00	0.50
E24-02398-03	3100	-29	-1.0	7340609	199.60	197.60	1.01
E24-02398-04	2886	-29	0.0	A0070621-9	200.00	198.60	0.70

*Pre-sampling and Post-sampling Flow Controller calibration check RPD ≤ 20%

Flow Controller Note: none

Sample Receipt: Samples were received in good condition. Documentation was in order.
Samples were received at IAL by: Joseph Walukiewicz

Sample Preparation: None required.

Sample Analysis:

Hold Time: All within recommended hold times.

Instrument Calibration: Meets method criteria.

Analysis performed by: jjw

SDG Non-Conformances: none

Tentatively Identified Compounds: Tentatively Identified Compounds (TICs) are determined using a NIST library search. TICs are reported at 10% of the applicable internal standard. Dilution factors are calculated into the final reported result. Since the compounds found are tentatively identified, the conversion from ppbv to ug/m3 may not be made.

Canister-to-Canister dilutions: none

CASE NARRATIVE

Integrated Analytical Laboratories, LLC — **Randolph, NJ 07869**
Project #: 48-55 36th St — **NJDEP (Primary AB) Certification#: 14751**
SDG #: E24-02398 — **NY ELAP Certification #: 11402**
CT DPH Certification#: PH-0699
Analytical Method: EPA Method TO-15 — **PADEP Certification#: 68-00773**

Date of first sample receipt: 7/15/2024 — **Date of last sample receipt: 7/15/2024**

Client: JS Held-Hoboken
Project/Site: 48-55 36th St / NY

Dilutions: Dilutions, if necessary, will be conducted directly on the instrument up to a 500x dilution. When dilutions of 1000x or higher are necessary, the laboratory must inject a volume of sample into another certified clean canister and add humidified Z-1 zero air to the remainder of the canister volume. Tedlar bags are not used for dilutions.

If a sample is received with historically high levels of analytes, a 100x can-to-can dilution my be used from the start. A 100x canister-to-canister dilution may be also be used at the analyst's discretion.

On-instrument dilutions are conducted as follows:

Dilution Factor	Sample Volume Injected (cc)
1	500
2.5	200
5	100
10	50
20	25
25	20
50	10
100	5
200	2.5
250	2
500	1

Canister-to-canister dilutions are conducted as follows:

A certified clean canister is obtained and evacuated to approximately -30"Hg. Both the clean/dilution canister and sample canister are fitted with a ¼" Swagelok® nut fitting equipped with septa. Depending on dilution factor necessary, a sample aliquot is removed from the canister and injected into the clean canister using 30cc Multifit gas-tight syringe. Once the correct sample aliquot has been transferred, the dilution canister should be connected to the humidified Z-1 zero air supply and filled to ambient pressure (0"Hg).

Dilution Factor	Sample Aliquot	Z-1 Make-up Added
100	60ml	5940ml
1000	6ml	5994ml

If further dilutions need to be made from the dilution canister, they may be made on-instrument. Using a 100x dilution canister, the following on-instrument dilutions can be produced:

CASE NARRATIVE

Integrated Analytical Laboratories, LLC — **Randolph, NJ 07869**
Project #: 48-55 36th St — **NJDEP (Primary AB) Certification#: 14751**
SDG #: E24-02398 — **NY ELAP Certification #: 11402**
CT DPH Certification#: PH-0699
Analytical Method: EPA Method TO-15 — **PADEP Certification#: 68-00773**

Date of first sample receipt: 7/15/2024 — **Date of last sample receipt: 7/15/2024**

Client: JS Held-Hoboken
Project/Site: 48-55 36th St / NY

Dilution Factor	Sample Volume Injected
100	500ml
250	200ml
500	100ml
1000	50ml
2000	25ml
2500	20ml
5000	10ml

Using a 1000x dilution canister, the following on-instrument dilutions can be produced:

Dilution Factor	Sample Volume Injected
1000	500ml
2500	200ml
5000	100ml
10,000	50ml
20,000	25ml
25,000	20ml
50,000	10ml

If further dilutions need to be made from the dilution canister, beyond 50,000x, a subsequent canister-to-canister dilution must be made using the above prescribed protocol.

GC Column and ID: RTX-1 SN 1119138, RTX-VMS SN 1586881, or equivalent

Calibration Standards: Only gas phase standards were used. Primary and second-source standards provided by Scott Specialty Gases or Airgas Specialty Gases/ Air Liquide

Working Standards: Primary source standards* are created from:
- Airgas Specialty Gases #EB0103704, valid 1/18/2021 through 12/30/2024, @ approximately 100ppb per compound, with exception of m&p-xylenes @ 200ppb.

Standard is directly introduced into the instrument for all calibration standard concentrations. Dilutions are made accordingly, on instrument. The 10ppbv standard is also used for the Daily Calibration Verification Standard (DCVS), the Laboratory Control Sample (LCS) and Closing Calibration Verification Standard (CCCVS).

The second source standard*, used as the Initial Calibration Verification Standard (ICVSS), is introduced into the instrument in the same manner as the primary source standard, using:
- Airgas Specialty Gases Cylinder #EB0116272, valid 7/28/2021 through 5/12/2025, @ approximately 100ppb per compound, with exception of m&p-xylenes @ 200ppb.

Internal standards* are created from:

CASE NARRATIVE

Integrated Analytical Laboratories, LLC | **Randolph, NJ 07869**
Project #: 48-55 36th St | **NJDEP (Primary AB) Certification#: 14751**
SDG #: E24-02398 | **NY ELAP Certification #: 11402**
CT DPH Certification#: PH-0699
Analytical Method: EPA Method TO-15 | **PADEP Certification#: 68-00773**

Date of first sample receipt: 7/15/2024 | **Date of last sample receipt: 7/15/2024**

Client: JS Held-Hoboken
Project/Site: 48-55 36th St / NY

- Airgas Specialty Gases Cylinder #ALM018474, valid 2/24/2022 through 2/24/2025. @ 5ppm per compound. Standard is directly introduced into the instrument to reach the 10ppbv concentrations. 1cc of internal standard is added to every standard, method blank, instrument blank, and sample run.

*Standard may be used past its expiration date provided that concentrations are verified by a current/unexpired second source standard.

03/27/2024
- 100 ppbv internal standard mix (AA6020BFB) - prepared in cylinder #ALM018474
  - 10 ppbv per standard/sample - 50 ml injected
- 100 ppbv calibration standard (aa6025std01) - prepared in cylinder #EB0103704
  - 40 ppbv standard - 200 ml injected
  - 20 ppbv standard - 100 ml injected
  - 10 ppbv standard* - 50 ml injected
    - *Standard also used for CCCVS
  - 2 ppbv standard - 10 ml injected
  - 0.20 ppbv standard* - 1 ml injected
    - *Standard also used for RLLCS
- Method Blank (AA6028BLK) - prepared in canister #1127
  - 500 ml injected

05/21/2024
- 100 ppbv internal standard mix (AA6539BFB) - prepared in cylinder #ALM018474
  - 10 ppbv per standard/sample - 50 ml injected
- 100 ppbv calibration standard (AA6540DCVS) - prepared in cylinder #EB0103704
  - 10 ppbv standard* - 50 ml injected
    - *Standard also used for DCVS & CCCVS
  - 0.20 ppbv standard* - 1 ml injected
    - *Standard also used for RLLCS
- Method Blank (AA6542BLK) - prepared in canister #1127
  - 500 ml injected

05/29/2024
- 100 ppbv internal standard mix (AA6554BFB) - prepared in cylinder #ALM018474
  - 10 ppbv per standard/sample - 50 ml injected
- 100 ppbv calibration standard (aa6560std01) - prepared in cylinder #EB0103704
  - 40 ppbv standard - 200 ml injected
  - 20 ppbv standard - 100 ml injected
  - 10 ppbv standard* - 50 ml injected
    - *Standard also used for CCCVS
  - 2 ppbv standard - 10 ml injected
  - 0.20 ppbv standard* - 1 ml injected
    - *Standard also used for RLLCS

CASE NARRATIVE

Integrated Analytical Laboratories, LLC — **Randolph, NJ 07869**
Project #: 48-55 36th St — **NJDEP (Primary AB) Certification#: 14751**
SDG #: E24-02398 — **NY ELAP Certification #: 11402**
CT DPH Certification#: PH-0699
Analytical Method: EPA Method TO-15 — **PADEP Certification#: 68-00773**

Date of first sample receipt: 7/15/2024 — **Date of last sample receipt: 7/15/2024**

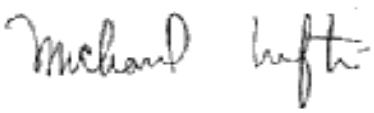
Client: JS Held-Hoboken
Project/Site: 48-55 36th St / NY

07/15/2024

100 ppbv internal standard mix (AA6875BFB) - prepared in cylinder #ALM018474
10 ppbv per standard/sample - 50 ml injected
100 ppbv calibration standard (AA6876DCVS) - prepared in cylinder #EB0103704
10 ppbv standard* - 50 ml injected
*Standard also used for DCVS & CCCVS
Method Blank (AA6878BLK) - prepared in canister #1127
500 ml injected
Sample E24-02398-01 (AA6886) - sample taken in canister #5096
500 ml sample volume injected, 1x dilution
Sample E24-02398-01 (AA6884) - sample taken in canister #5096
100 ml sample volume injected, 5x dilution
Sample E24-02398-02 (AA6881) - sample taken in canister #2066
50 ml sample volume injected, 10x dilution
Sample E24-02398-02 (AA6888) - sample taken in canister #2066
500 ml sample volume injected, 1x dilution
Sample E24-02398-03 (AA6890) - sample taken in canister #3100
100 ml sample volume injected, 5x dilution
Sample E24-02398-03 (AA6891) - sample taken in canister #3100
500 ml sample volume injected, 1x dilution
Sample E24-02398-04 (AA6893) - sample taken in canister #2886
100 ml sample volume injected, 5x dilution
Sample E24-02398-04 (AA6894) - sample taken in canister #2886
500 ml sample volume injected, 1x dilution

All work recorded herein has been done in accordance with normal professional standards using accepted testing methodologies, quality assurance and quality control procedures except where otherwise agreed to by the client and testing company in writing. All conversions are based upon a room temperature of 77°F(25°C) and room pressure of 101.325 kPa (1atm).

I certify that this data package is in compliance with the terms and conditions of this contract, both technically and for completeness, for other than the conditions detailed above. Release of data contained in this hardcopy data package and in the computer-readable data submitted on CD/diskette and by electronic mail has been authorized by the laboratory manager or his designee, as verified by the following signature.



Michael H. Leftin, Ph.D.
Laboratory Director

August 1, 2024
Date

Integrated Analytical Laboratories LLC

Airgas
an Air Liquide company

R 362

Received 01/06/2023

Airgas Specialty Gases
Airgas USA LLC
6141 Easton Road
Plumsteadville, PA 18949
Airgas.com

CERTIFICATE OF ANALYSIS

Grade of Product: CERTIFIED HYDROCARBON

Customer:	INTEGRATED ANALYTICAL LABS		
Part Number:	X76NI99C15AC001		
Cylinder Number:	EB0103704	Reference Number:	160-402619255-1
Laboratory:	124 - Plumsteadville - PA	Cylinder Volume:	101.0 CF
Analysis Date:	Dec 30, 2022	Cylinder Pressure:	1400 PSIG
Lot Number:	160-402619255-1	Valve Outlet:	350SS
		Expiration Date:	Dec 30, 2024

Traceability Statement: Hydrocarbon Process standards are NIST traceable either directly by weight or by comparison to Airgas laboratory standards that are directly NIST traceable by weight.

CERTIFIED CONCENTRATIONS

Component	Requested Concentration	Reported Mole %	Accuracy
1,1 DICHLOROETHANE	100.000 PPB	107.000 PPB	+/- 10%
1,1 DICHLOROETHYLENE	100.000 PPB	104.000 PPB	+/- 10%
1,1,1 TRICHLOROETHANE	100.000 PPB	109.000 PPB	+/- 10%
1,1,2 TRICHLORO ETHANE	100.000 PPB	108.000 PPB	+/- 10%
1,1,2,2 TETRACHLOROETHANE	100.000 PPB	114.000 PPB	+/- 10%
1,2 DIBROMO ETHANE	100.000 PPB	108.000 PPB	+/- 10%
1,2 DICHLORO PROPANE	100.000 PPB	110.000 PPB	+/- 10%
1,2 DICHLOROBENZENE	100.000 PPB	107.000 PPB	+/- 10%
1,2 DICHLOROETHANE	100.000 PPB	109.000 PPB	+/- 10%
1,2,4 TRICHLOROBENZENE	100.000 PPB	110.000 PPB	+/- 10%
1,2,4 TRIMETHYLBENZENE	100.000 PPB	108.000 PPB	+/- 10%
1,3 BUTADIENE	100.000 PPB	107.000 PPB	+/- 10%
1,3 DICHLORO BENZENE	100.000 PPB	111.000 PPB	+/- 10%
1,3,5 TRIMETHYL BENZENE	100.000 PPB	109.000 PPB	+/- 10%
1,4 DICHLOROBENZENE	100.000 PPB	107.000 PPB	+/- 10%
1,4 DIOXANE	100.000 PPB	117.000 PPB	+/- 10%
2 CHLOROTOLUENE	100.000 PPB	109.000 PPB	+/- 10%
3 CHLOROPROPYLENE	100.000 PPB	108.000 PPB	+/- 10%
4 ETHYL TOLUENE	100.000 PPB	108.000 PPB	+/- 10%
ACETONE	100.000 PPB	108.000 PPB	+/- 10%
ACROLEIN	100.000 PPB	100.000 PPB	+/- 10%
BENZENE	100.000 PPB	108.000 PPB	+/- 10%
BENZYL CHLORIDE	100.000 PPB	100.000 PPB	+/- 10%
BROMO DICHLORO METHANE	100.000 PPB	115.000 PPB	+/- 10%
BROMOFORM	100.000 PPB	113.000 PPB	+/- 10%
CARBON DISULFIDE	100.000 PPB	107.000 PPB	+/- 10%
CARBON TETRACHLORIDE	100.000 PPB	110.000 PPB	+/- 10%
CHLORO DIBROMO METHANE	100.000 PPB	112.000 PPB	+/- 10%
CHLOROBENZENE	100.000 PPB	111.000 PPB	+/- 10%
CHLOROFORM	100.000 PPB	108.000 PPB	+/- 10%
CIS 1,2 DICHLOROETHYLENE	100.000 PPB	109.000 PPB	+/- 10%
CIS 1,3 DICHLOROPROPENE	100.000 PPB	111.000 PPB	+/- 10%
CUMENE	100.000 PPB	107.000 PPB	+/- 10%
CYCLOHEXANE	100.000 PPB	112.000 PPB	+/- 10%
ETHANOL	100.000 PPB	104.000 PPB	+/- 10%
ETHYL ACETATE	100.000 PPB	108.000 PPB	+/- 10%
ETHYL BENZENE	100.000 PPB	111.000 PPB	+/- 10%
ETHYL CHLORIDE	100.000 PPB	106.000 PPB	+/- 10%
HEXACHLORO 1,3 BUTADIENE	100.000 PPB	111.000 PPB	+/- 10%

Approved for Release

Integrated Analytical Laboratories LLC

Airgas
an Air Liquide company

Airgas Specialty Gases
Airgas USA LLC
6141 Easton Road
Plumsteadville, PA 18949
Airgas.com

HEXANE	100.000 PPB	111.000 PPB	+/- 10%
ISOOCTANE	100.000 PPB	109.000 PPB	+/- 10%
ISOPROPYL ALCOHOL	100.000 PPB	89.000 PPB	+/- 10%
M XYLENE	100.000 PPB	112.000 PPB	+/- 10%
METHYL BROMIDE	100.000 PPB	100.000 PPB	+/- 10%
METHYL BUTYL KETONE	100.000 PPB	113.000 PPB	+/- 10%
METHYL CHLORIDE	100.000 PPB	112.000 PPB	+/- 10%
METHYL ETHYL KETONE	100.000 PPB	110.000 PPB	+/- 10%
METHYL ISOBUTYL KETONE	100.000 PPB	109.000 PPB	+/- 10%
METHYL METHACRYLATE	100.000 PPB	110.000 PPB	+/- 10%
METHYL TERT BUTYL ETHER	100.000 PPB	112.000 PPB	+/- 10%
METHYLENE CHLORIDE	100.000 PPB	108.000 PPB	+/- 10%
N BUTANE	100.000 PPB	109.000 PPB	+/- 10%
N HEPTANE	100.000 PPB	111.000 PPB	+/- 10%
N NONANE	100.000 PPB	110.000 PPB	+/- 10%
N PENTANE	100.000 PPB	108.000 PPB	+/- 10%
N PROPYL BENZENE	100.000 PPB	108.000 PPB	+/- 10%
NAPHTHALENE	100.000 PPB	100.000 PPB	+/- 10%
O XYLENE	100.000 PPB	110.000 PPB	+/- 10%
P XYLENE	100.000 PPB	111.000 PPB	+/- 10%
PERCHLOROETHYLENE	100.000 PPB	112.000 PPB	+/- 10%
PROPYLENE	100.000 PPB	109.000 PPB	+/- 10%
R11 TRICHLOROFLUOROMETHANE	100.000 PPB	110.000 PPB	+/- 10%
R113 TRICHLOROTRIFLUOROETHANE	100.000 PPB	109.000 PPB	+/- 10%
R114 DICHLOROTETRAFLUOROETHANE	100.000 PPB	98.000 PPB	+/- 10%
R12 DICHLORODIFLUOROMETHANE	100.000 PPB	106.000 PPB	+/- 10%
STYRENE	100.000 PPB	113.000 PPB	+/- 10%
TERT BUTANOL	100.000 PPB	115.000 PPB	+/- 10%
TETRAHYDROFURAN	100.000 PPB	110.000 PPB	+/- 10%
TOLUENE	100.000 PPB	108.000 PPB	+/- 10%
TRANS 1,2 DICHLOROETHYLENE	100.000 PPB	111.000 PPB	+/- 10%
TRANS 1,3 DICHLOROPROPENE	100.000 PPB	111.000 PPB	+/- 10%
TRICHLOROETHYLENE	100.000 PPB	100.000 PPB	+/- 10%
VINYL ACETATE	100.000 PPB	110.000 PPB	+/- 10%
VINYL BROMIDE	100.000 PPB	101.000 PPB	+/- 10%
VINYL CHLORIDE	100.000 PPB	108.000 PPB	+/- 10%
NITROGEN	99.99925 %	99.999187 %	+/- 10%

Permanent Notes: CUSTOM TO MIX - TO-15/17 MODIFIED NJ STD + NAPHTHALENE

Notes: PO number: 22578

Approved for Release

Integrated Analytical Laboratories LLC

Airgas
an Air Liquide company

Airgas Specialty Gases
Airgas USA LLC
6141 Easton Road
Plumsteadville, PA 18949
Airgas.com

R366

CERTIFICATE OF ANALYSIS

Grade of Product: CERTIFIED HYDROCARBON

Customer:	INTEGRATED ANALYTICAL LABS		
Part Number:	X76NI99C15AC001		
Cylinder Number:	EB0116272	Reference Number:	160-402744241-1
Laboratory:	124 - Plumsteadville - PA	Cylinder Volume:	146.0 CF
Analysis Date:	May 12, 2023	Cylinder Pressure:	2050 PSIG
Lot Number:	160-402744241-1	Valve Outlet:	350SS
		Expiration Date:	May 12, 2025

Traceability Statement: Hydrocarbon Process standards are NIST traceable either directly by weight or by comparison to Airgas laboratory standards that are directly NIST traceable by weight.

CERTIFIED CONCENTRATIONS

Component	Requested Concentration	Reported Mole %	Accuracy
1,1 DICHLOROETHANE	100.000 PPB	100.000 PPB	+/- 10%
1,1 DICHLOROETHYLENE	100.000 PPB	100.000 PPB	+/- 10%
1,1,1 TRICHLOROETHANE	100.000 PPB	104.000 PPB	+/- 10%
1,1,2 TRICHLORO ETHANE	100.000 PPB	101.000 PPB	+/- 10%
1,1,2,2 TETRACHLOROETHANE	100.000 PPB	104.000 PPB	+/- 10%
1,2 DIBROMO ETHANE	100.000 PPB	103.000 PPB	+/- 10%
1,2 DICHLORO PROPANE	100.000 PPB	103.000 PPB	+/- 10%
1,2 DICHLOROBENZENE	100.000 PPB	101.000 PPB	+/- 10%
1,2 DICHLOROETHANE	100.000 PPB	102.000 PPB	+/- 10%
1,2,4 TRICHLOROBENZENE	100.000 PPB	100.000 PPB	+/- 10%
1,2,4 TRIMETHYLBENZENE	100.000 PPB	102.000 PPB	+/- 10%
1,3 BUTADIENE	100.000 PPB	106.000 PPB	+/- 10%
1,3 DICHLORO BENZENE	100.000 PPB	105.000 PPB	+/- 10%
1,3,5 TRIMETHYL BENZENE	100.000 PPB	103.000 PPB	+/- 10%
1,4 DICHLOROBENZENE	100.000 PPB	100.000 PPB	+/- 10%
1,4 DIOXANE	100.000 PPB	113.000 PPB	+/- 10%
2 CHLOROTOLUENE	100.000 PPB	107.000 PPB	+/- 10%
3 CHLOROPROPYLENE	100.000 PPB	106.000 PPB	+/- 10%
4 ETHYL TOLUENE	100.000 PPB	106.000 PPB	+/- 10%
ACETONE	100.000 PPB	108.000 PPB	+/- 10%
ACROLEIN	100.000 PPB	105.000 PPB	+/- 10%
BENZENE	100.000 PPB	103.000 PPB	+/- 10%
BENZYL CHLORIDE	100.000 PPB	102.000 PPB	+/- 10%
BROMO DICHLORO METHANE	100.000 PPB	112.000 PPB	+/- 10%
BROMOFORM	100.000 PPB	113.000 PPB	+/- 10%
CARBON DISULFIDE	100.000 PPB	95.000 PPB	+/- 10%
CARBON TETRACHLORIDE	100.000 PPB	107.000 PPB	+/- 10%
CHLORO DIBROMO METHANE	100.000 PPB	110.000 PPB	+/- 10%
CHLOROBENZENE	100.000 PPB	104.000 PPB	+/- 10%
CHLOROFORM	100.000 PPB	106.000 PPB	+/- 10%
CIS 1,2 DICHLOROETHYLENE	100.000 PPB	102.000 PPB	+/- 10%
CIS 1,3 DICHLOROPROPENE	100.000 PPB	94.000 PPB	+/- 10%
CUMENE	100.000 PPB	106.000 PPB	+/- 10%
CYCLOHEXANE	100.000 PPB	109.000 PPB	+/- 10%
ETHANOL	100.000 PPB	98.000 PPB	+/- 10%
ETHYL ACETATE	100.000 PPB	104.000 PPB	+/- 10%
ETHYL BENZENE	100.000 PPB	105.000 PPB	+/- 10%
ETHYL CHLORIDE	100.000 PPB	104.000 PPB	+/- 10%
HEXACHLORO 1,3 BUTADIENE	100.000 PPB	101.000 PPB	+/- 10%

Approved for Release

Integrated Analytical Laboratories LLC

Airgas
an Air Liquide company

Airgas Specialty Gases
Airgas USA LLC
6141 Easton Road
Plumsteadville, PA 18949
Airgas.com

HEXANE	100.000 PPB	107.000 PPB	+/- 10%
ISOOCTANE	100.000 PPB	106.000 PPB	+/- 10%
ISOPROPYL ALCOHOL	100.000 PPB	95.000 PPB	+/- 10%
M XYLENE	100.000 PPB	106.000 PPB	+/- 10%
METHYL BROMIDE	100.000 PPB	103.000 PPB	+/- 10%
METHYL BUTYL KETONE	100.000 PPB	109.000 PPB	+/- 10%
METHYL CHLORIDE	100.000 PPB	108.000 PPB	+/- 10%
METHYL ETHYL KETONE	100.000 PPB	105.000 PPB	+/- 10%
METHYL ISOBUTYL KETONE	100.000 PPB	105.000 PPB	+/- 10%
METHYL METHACRYLATE	100.000 PPB	106.000 PPB	+/- 10%
METHYL TERT BUTYL ETHER	100.000 PPB	107.000 PPB	+/- 10%
METHYLENE CHLORIDE	100.000 PPB	101.000 PPB	+/- 10%
N BUTANE	100.000 PPB	107.000 PPB	+/- 10%
N HEPTANE	100.000 PPB	107.000 PPB	+/- 10%
N NONANE	100.000 PPB	108.000 PPB	+/- 10%
N PENTANE	100.000 PPB	105.000 PPB	+/- 10%
N PROPYL BENZENE	100.000 PPB	112.000 PPB	+/- 10%
NAPHTHALENE	100.000 PPB	101.000 PPB	+/- 10%
O XYLENE	100.000 PPB	102.000 PPB	+/- 10%
P XYLENE	100.000 PPB	106.000 PPB	+/- 10%
PERCHLOROETHYLENE	100.000 PPB	104.000 PPB	+/- 10%
PROPYLENE	100.000 PPB	108.000 PPB	+/- 10%
R11 TRICHLOROFLUOROMETHANE	100.000 PPB	106.000 PPB	+/- 10%
R113 TRICHLOROTRIFLUOROETHANE	100.000 PPB	102.000 PPB	+/- 10%
R114 DICHLOROTETRAFLUOROETHANE	100.000 PPB	99.000 PPB	+/- 10%
R12 DICHLORODIFLUOROMETHANE	100.000 PPB	109.000 PPB	+/- 10%
STYRENE	100.000 PPB	106.000 PPB	+/- 10%
TERT BUTANOL	100.000 PPB	111.000 PPB	+/- 10%
TETRAHYDROFURAN	100.000 PPB	106.000 PPB	+/- 10%
TOLUENE	100.000 PPB	101.000 PPB	+/- 10%
TRANS 1,2 DICHLOROETHYLENE	100.000 PPB	108.000 PPB	+/- 10%
TRANS 1,3 DICHLOROPROPENE	100.000 PPB	106.000 PPB	+/- 10%
TRICHLOROETHYLENE	100.000 PPB	102.000 PPB	+/- 10%
VINYL ACETATE	100.000 PPB	105.000 PPB	+/- 10%
VINYL BROMIDE	100.000 PPB	100.000 PPB	+/- 10%
VINYL CHLORIDE	100.000 PPB	107.000 PPB	+/- 10%
NITROGEN	99.99925 %	99.999216 %	

Permanent Notes: CUSTOM TO MIX - TO-15/17 MODIFIED NJ STD + NAPHTHALENE

Notes: PO Number: 22896

Approved for Release

Section IV: Method Detection Limit Summary

INTEGRATED ANALYTICAL LABORATORIES, LLC
REPORTING METHOD DETECTION LIMIT (MDL) REPORT

Integrated Analytical Laboratories - Randolph, NJ

Matrix: Air
MDL Effective Date: 8/16/2023
Column ID: Restek RtX-VMS, 30 meter, 0.32mm ID, 1.8 um DF
Instrument ID: GC - Agilent 7890A / MS - Agilent 5975C (IAL ID: *Instrument AA*)
Analyst: Joe Waluliewicz
Report Prepared by: Joe Waluliewicz

Compound Name	CAS #	Molecular Weight	MDL ppbv	MDL µg/m^3	PQL ppbv	RL ppbv	RL µg/m^3	True value/ MDL
Propene	115-07-1	42.08	0.18	0.31	0.54	0.20	0.34	1
Dichlorodifluoromethane	75-71-8	120.9	0.081	0.40	0.24	0.20	0.99	3
1,2-Dichlorotetrafluoroethane	76-14-2	170.9	0.071	0.50	0.21	0.20	1.4	3
n-Butane	106-97-8	58	0.13	0.32	0.40	0.20	0.47	2
Chloromethane	74-87-3	50.49	0.15	0.30	0.44	0.20	0.41	1
Vinyl chloride	75-01-4	62.5	0.11	0.29	0.34	0.20	0.51	2
1,3-Butadiene	106-99-0	54.09	0.12	0.27	0.37	0.20	0.44	2
Bromomethane	74-83-9	94.94	0.12	0.46	0.36	0.20	0.78	2
Chloroethane	75-00-3	64.52	0.12	0.32	0.36	0.20	0.53	2
Vinyl bromide	593-60-2	106.9	0.080	0.35	0.24	0.20	0.87	3
Trichlorofluoromethane	75-69-4	137.4	0.068	0.38	0.20	0.20	1.1	3
Ethanol	64-17-5	46.07	0.17	0.32	0.51	0.20	0.38	1
1,1-Dichloroethene	75-35-4	96.94	0.086	0.34	0.26	0.20	0.79	3
Carbon disulfide	75-15-0	76.14	0.076	0.24	0.23	0.20	0.62	3
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	187.40	0.087	0.66	0.26	0.20	1.5	3
Acrolein	107-02-8	56.06	0.15	0.34	0.44	0.20	0.46	2
Allyl Chloride	107-05-1	76.53	0.088	0.27	0.26	0.20	0.63	3
Isopropanol	67-63-0	60.1	0.10	0.25	0.30	0.20	0.49	2
Methylene chloride	75-09-2	84.94	0.10	0.36	0.31	0.20	0.69	2
Acetone	67-64-1	58.08	0.12	0.28	0.36	0.20	0.48	2
1,2-Dichloroethene (trans)	156-60-5	96.94	0.080	0.32	0.24	0.20	0.79	3
n-Pentane	109-66-0	72.15	0.16	0.48	0.49	0.20	0.59	1
n-Hexane	110-54-3	86.17	0.087	0.31	0.26	0.20	0.70	3
Methyl tert-butyl ether	1634-04-4	88.15	0.080	0.29	0.24	0.20	0.72	3
Tert-butyl alcohol	75-65-0	74.12	0.14	0.44	0.43	0.20	0.61	2
1,1-Dichloroethane	75-34-3	98.96	0.079	0.32	0.24	0.20	0.81	3
1,2-Dichloroethene (cis)	156-59-2	96.94	0.083	0.33	0.25	0.20	0.79	3
Cyclohexane	110-82-7	84.16	0.078	0.27	0.23	0.20	0.69	3
Chloroform	67-66-3	119.4	0.077	0.38	0.23	0.20	0.98	3
Ethyl acetate	141-78-6	88.11	0.11	0.40	0.33	0.20	0.72	2
Carbon tetrachloride	56-23-5	153.8	0.080	0.50	0.24	0.20	1.3	3
Tetrahydrofuran	109-99-9	72.11	0.11	0.31	0.32	0.20	0.59	2
1,1,1-Trichloroethane	71-55-6	133.4	0.071	0.39	0.21	0.20	1.1	3
Methyl ethyl ketone	78-93-3	72.11	0.11	0.31	0.32	0.20	0.59	2
n-Heptane	142-82-5	100.2	0.090	0.37	0.27	0.20	0.82	2
Benzene	71-43-2	78.11	0.076	0.24	0.23	0.20	0.64	3
1,2-Dichloroethane	107-06-2	98.96	0.079	0.32	0.24	0.20	0.81	3
Trichloroethene	79-01-6	131.4	0.064	0.34	0.19	0.20	1.1	3
2,2,4-Trimethylpentane	540-84-1	114.2	0.085	0.40	0.26	0.20	0.93	3
1,2-Dichloropropane	78-87-5	113	0.085	0.39	0.25	0.20	0.92	3
Bromodichloromethane	75-27-4	163.8	0.066	0.44	0.20	0.20	1.3	3
Methyl methacrylate	80-62-6	100.12	0.079	0.32	0.24	0.20	0.82	3
1,4-Dioxane	123-91-1	88.12	0.092	0.33	0.28	0.20	0.72	2
1,3-Dichloropropene (cis)	10061-01-5	111.0	0.070	0.32	0.21	0.20	0.91	3
Toluene	108-88-3	92.14	0.064	0.24	0.19	0.20	0.75	3
Methyl isobutyl ketone	108-10-1	100.2	0.11	0.43	0.32	0.20	0.82	2
Tetrachloroethene	127-18-4	165.8	0.063	0.43	0.19	0.20	1.4	3
1,3-Dichloropropene (trans)	10061-02-6	111	0.077	0.35	0.23	0.20	0.91	3
1,1,2-Trichloroethane	79-00-5	133.4	0.075	0.41	0.22	0.20	1.1	3
Dibromochloromethane	124-48-1	208.3	0.073	0.62	0.22	0.20	1.7	3
1,2-Dibromoethane	106-93-4	187.9	0.067	0.52	0.20	0.20	1.5	3
Methyl n-butyl ketone	591-78-6	100.16	0.13	0.54	0.40	0.20	0.82	2
n-Nonane	111-84-2	128.2	0.10	0.52	0.30	0.20	1.0	2
Chlorobenzene	108-90-7	112.6	0.073	0.34	0.22	0.20	0.92	3
Ethylbenzene	100-41-4	106.2	0.067	0.29	0.20	0.20	0.9	3
Xylenes (m&p)	179601-23-1	106.2	0.15	0.64	0.44	0.40	1.74	3
Xylene (o)	79-34-5	167.9	0.073	0.50	0.22	0.20	1.4	3
Styrene	100-42-5	104.1	0.072	0.31	0.22	0.20	0.85	3
Bromoform	75-25-2	252.8	0.075	0.77	0.22	0.20	2.1	3
Cumene (Isopropylbenzene)	98-82-8	120.2	0.069	0.34	0.21	0.20	0.98	3
n-Propyl benzene	103-65-1	120.19	0.085	0.42	0.25	0.20	0.98	3
1,1,2,2-Tetrachloroethane	95-47-6	106.2	0.069	0.30	0.21	0.20	0.87	3
4-Ethyltoluene	622-96-8	120.2	0.090	0.44	0.27	0.20	0.98	2
2-Chlorotoluene	95-49-8	126.6	0.077	0.40	0.23	0.20	1.0	3
1,3,5-Trimethylbenzene	108-67-8	120.2	0.076	0.37	0.23	0.20	0.98	3
1,2,4-Trimethylbenzene	95-63-6	120.2	0.080	0.39	0.24	0.20	0.98	3

INTEGRATED ANALYTICAL LABORATORIES, LLC
REPORTING METHOD DETECTION LIMIT (MDL) REPORT

Integrated Analytical Laboratories - Randolph, NJ

Matrix: Air
Column ID: Restek RtX-VMS, 30 meter, 0.32mm ID, 1.8 um DF
Instrument ID: GC - Agilent 7890A / MS - Agilent 5975C (IAL ID: *Instrument AA*)
Report Prepared by: Joe Waluliewicz

MDL Effective Date: 8/16/2023
Analyst: Joe Waluliewicz

Compound Name	CAS #	Molecular Weight	MDL ppbv	MDL µg/m^3	PQL ppbv	RL ppbv	RL µg/m^3	True value/ MDL
1,3-Dichlorobenzene	541-73-1	147	0.086	0.52	0.26	0.20	1.2	3
1,4-Dichlorobenzene	106-46-7	147.0	0.089	0.54	0.27	0.20	1.2	2
Benzyl chloride	100-44-7	126.6	0.064	0.33	0.19	0.20	1.0	3
1,2-Dichlorobenzene	95-50-1	147.0	0.083	0.50	0.25	0.20	1.2	3
1,3-Hexachlorobutadiene	87-68-3	260.8	0.096	1.03	0.29	0.20	2.1	2
1,2,4-Trichlorobenzene	120-82-1	181.5	0.12	0.89	0.36	0.20	1.5	2
Naphthalene	91-20-3	128	0.15	0.79	0.45	0.20	1.0	2

Where:
MDL is defined as the higher of the MDL Spike and MDL Blank
PQL is MDLx3
RL is defined as the lowest point of the calibration curve
ppbv is parts per billion by volume and is how results come off the instrument
µg/m^3 = ppbv x molecular weight / 24.45

Location of this file: P:\PAL Reports\LLTO-15 and TO-15 Common Files\Agilent MDL

Instrument used for Clean Canister Certification Analysis? YES

Michael Leftin, Ph.D.
Laboratory Director

Date: August 16, 2023

INTEGRATED ANALYTICAL LABORATORIES, LLC
METHOD DETECTION LIMIT VERIFICATION (MDLV) REPORT

Integrated Analytical Laboratories - Randolph, NJ

Analysis Level:	0.20 ppbv, 0.40 for m&p-xylenes
Matrix:	Air
Column ID:	RTX-VMS, 30-meter, 0.32 mm ID, 1.8 µm d_f
Instrument Identification:	AA
Date of Verification Study:	8/16/2023
Study Identification File #:	aa3415rllcs
Analyst:	Joe Walukiewicz
Analysis/Processing Method:	C:\MSDCHEM\1\METHODS\230815.M
Cylinder ID:	EB0103704

Michael Leftin, Ph.D.
Laboratory Director

Date: August 16, 2023

Compound Name	CAS #	MDLV (ppbv)	RL (ppbv)	RL/MDLV Ratio
Propene	115-07-1	0.23	0.20	1
Dichlorodifluoromethane	124-48-1	0.24	0.20	1
1,2-Dichlorotetrafluoroethane	76-14-2	0.26	0.20	1
n-Butane	106-97-8	0.23	0.20	1
Chloromethane	74-87-3	0.24	0.20	1
Vinyl chloride	75-01-4	0.26	0.20	1
1,3-Butadiene	106-99-0	0.23	0.20	1
Bromomethane	74-83-9	0.23	0.20	1
Chloroethane	75-00-3	0.22	0.20	1
Vinyl bromide	593-60-2	0.23	0.20	1
Trichlorofluoromethane	75-69-4	0.26	0.20	1
Ethanol	64-17-5	0.30	0.20	2
1,1-Dichloroethene	75-35-4	0.22	0.20	1
Carbon disulfide	75-15-0	0.22	0.20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.27	0.20	1
Acrolein	107-02-8	0.24	0.20	1
Allyl Chloride	107-05-1	0.22	0.20	1
Isopropanol	67-63-0	0.20	0.20	1
Methylene chloride	75-09-2	0.35	0.20	2
Acetone	67-64-1	0.27	0.20	1
1,2-Dichloroethene (trans)	156-60-5	0.22	0.20	1
n-Pentane	109-66-0	0.25	0.20	1
n-Hexane	110-54-3	0.26	0.20	1
Methyl tert-butyl ether	1634-04-4	0.25	0.20	1
Tert-butyl alcohol	75-65-0	0.24	0.20	1
1,1-Dichloroethane	75-34-3	0.24	0.20	1
1,2-Dichloroethene (cis)	156-59-2	0.21	0.20	1
Cyclohexane	110-82-7	0.24	0.20	1
Chloroform	67-66-3	0.23	0.20	1
Ethyl acetate	141-78-6	0.23	0.20	1
Carbon tetrachloride	56-23-5	0.26	0.20	1
Tetrahydrofuran	109-99-9	0.23	0.20	1
1,1,1-Trichloroethane	71-55-6	0.24	0.20	1
Methyl ethyl ketone	78-93-3	0.24	0.20	1
n-Heptane	142-82-5	0.23	0.20	1
Benzene	71-43-2	0.24	0.20	1
1,2-Dichloroethane	106-93-4	0.23	0.20	1
Trichloroethene	79-01-6	0.25	0.20	1
2,2,4-Trimethylpentane	540-84-1	0.29	0.20	1
1,2-Dichloropropane	78-87-5	0.26	0.20	1
Bromodichloromethane	75-27-4	0.28	0.20	1
Methyl methacrylate	80-62-6	0.22	0.20	1
1,4-Dioxane	123-91-1	0.28	0.20	1
1,3-Dichloropropene (cis)	10061-01-5	0.25	0.20	1
Toluene	108-88-3	0.24	0.20	1
Methyl isobutyl ketone	108-10-1	0.22	0.20	1
Tetrachloroethene	127-18-4	0.26	0.20	1
1,3-Dichloropropene (trans)	10061-02-6	0.24	0.20	1
1,1,2-Trichloroethane	79-00-5	0.23	0.20	1
Dibromochloromethane	75-71-8	0.24	0.20	1
1,2-Dibromoethane	107-06-2	0.22	0.20	1
Methyl n-butyl ketone	591-78-6	0.21	0.20	1

INTEGRATED ANALYTICAL LABORATORIES, LLC
METHOD DETECTION LIMIT VERIFICATION (MDLV) REPORT

Integrated Analytical Laboratories - Randolph, NJ

Analysis Level:	0.20 ppbv, 0.40 for m&p-xylenes
Matrix:	Air
Column ID:	RTX-VMS, 30-meter, 0.32 mm ID, 1.8 µm d_f
Instrument Identification:	AA
Date of Verification Study:	8/16/2023
Study Identification File #:	aa3415rllcs
Analyst:	Joe Walukiewicz
Analysis/Processing Method:	C:\MSDCHEM\1\METHODS\230815.M
Cylinder ID:	EB0103704

Michael Leftin, Ph.D.
Laboratory Director

Date: August 16, 2023

Compound Name	CAS #	MDLV (ppbv)	RL (ppbv)	RL/MDLV Ratio
n-Nonane	111-84-2	0.21	0.20	1
Chlorobenzene	108-90-7	0.28	0.20	1
Ethylbenzene	100-41-4	0.26	0.20	1
Xylenes (m&p)	179601-23-1	0.54	0.40	1
Xylene (o)	95-47-6	0.26	0.20	1
Styrene	100-42-5	0.23	0.20	1
Bromoform	75-25-2	0.26	0.20	1
Cumene	98-82-8	0.24	0.20	1
n-Propyl benzene	103-65-1	0.25	0.20	1
1,1,2,2-Tetrachloroethane	79-34-5	0.25	0.20	1
4-Ethyltoluene	622-96-8	0.24	0.20	1
2-Chlorotoluene	95-49-8	0.25	0.20	1
1,3,5-Trimethylbenzene	108-67-8	0.24	0.20	1
1,2,4-Trimethylbenzene	95-63-6	0.22	0.20	1
1,3-Dichlorobenzene	541-73-1	0.27	0.20	1
1,4-Dichlorobenzene	106-46-7	0.24	0.20	1
Benzyl chloride	100-44-7	0.17	0.20	1
1,2-Dichlorobenzene	95-50-1	0.25	0.20	1
1,3-Hexachlorobutadiene	87-68-3	0.31	0.20	2
1,2,4-Trichlorobenzene	120-82-1	0.25	0.20	1
Naphthalene	91-20-3	0.28	0.20	1

Section V: Quality Control Data Summary

BFB Tune Summary

Method Blank

Laboratory Control Sample

Laboratory Sample Duplicate

Internal Standard Area Summary

BFB

Data Path: C:\DATA\2024\03-2024\03-27-2024\
Data File: AA6020BFB.D
Acq On: 3/27/2024 10:03:00AM
Operator: jjw
Sample: BFB
Misc: ALM018474
ALS Vial: 1 **Multiplier:** 1
Integration File: rteint.p
Method: C:\msdchem\1\METHODS\240326.M
Last Update: Mon Feb 12 17:00:56 2024
Spectrum Information:

PassFail	Target Mass	Rel. to Mass	Lower Limit %	Higher Limit %	Raw Abundance	% Relative Abundance
PASS	50	95	8	40	248768	22.4
PASS	75	95	30	66	575680	51.7
PASS	95	95	100	100	1112917	100.0
PASS	96	95	5	9	72451	6.5
PASS	173	174	0.00	2	6828	1.0
PASS	174	95	50	100	671872	60.4
PASS	175	174	4	9	49411	7.4
PASS	176	174	93	101	654677	97.4
PASS	177	176	5	9	43245	6.6

Runs with this BFB:

Lab Sample Number	Date File	Field Sample	Date/Time of Sample/Standard Analysis
BFB	AA6020BFB	NA	3/27/2024 10:03:00 AM
0.2 PPBV STD	AA6021STD05	NA	3/27/2024 10:38:00 AM
2 PPBV STD	AA6022STD04	NA	3/27/2024 11:38:00 AM
10 PPBV STD STD	AA6023STD03	NA	3/27/2024 12:09:00 PM
20 PPBV STD	AA6024STD02	NA	3/27/2024 12:40:00 PM
40 PPBV STD	AA6025STD01	NA	3/27/2024 1:24:00 PM
10 PPBV ICVSS	AA6026ICVSS	NA	3/27/2024 1:54:00 PM
10 PPBV LCS	AA6027LCS	NA	3/27/2024 2:23:00 PM
METHOD BLANK	AA6028BLK	NA	3/27/2024 2:51:00 PM
3285	AA6039	NA	3/27/2024 9:10:00 PM
2036	AA6040	NA	3/27/2024 9:38:00 PM

BFB

Data Path: C:\DATA\2024\05-2024\05-21-2024\
Data File: AA6539BFB.D
Acq On: 5/21/2024 9:54:00AM
Operator: jjw
Sample: BFB
Misc: ALM018474
ALS Vial: 1 **Multiplier:** 1
Integration File: rteint.p
Method: C:\msdchem\1\METHODS\240326.M
Last Update: Wed Mar 27 13:46:33 2024
Spectrum Information:

PassFail	Target Mass	Rel. to Mass	Lower Limit %	Higher Limit %	Raw Abundance	% Relative Abundance
PASS	50	95	8	40	194539	21.5
PASS	75	95	30	66	465152	51.3
PASS	95	95	100	100	906901	100.0
PASS	96	95	5	9	58715	6.5
PASS	173	174	0.00	2	3482	0.6
PASS	174	95	50	100	559573	61.7
PASS	175	174	4	9	41755	7.5
PASS	176	174	93	101	536704	95.9
PASS	177	176	5	9	34669	6.5

Runs with this BFB:

Lab Sample Number	Date File	Field Sample	Date/Time of Sample/Standard Analysis
BFB	AA6539BFB	NA	5/21/2024 9:54:00 AM
10 PPBV DCVS	AA6540DCVS	NA	5/21/2024 11:12:00 AM
10 PPBV LCS	AA6541LCS	NA	5/21/2024 11:47:00 AM
METHOD BLANK	AA6542BLK	NA	5/21/2024 12:15:00 PM
02 PPBV RLLCS	AA6543RLLCS	NA	5/21/2024 12:50:00 PM
3052	AA6544	NA	5/21/2024 3:02:00 PM
3100	AA6545	NA	5/21/2024 3:33:00 PM
1571	AA6546	NA	5/21/2024 4:03:00 PM
10 PPBV CCCVS	AA6552CCCVS	NA	5/21/2024 7:21:00 PM

BFB

Data Path: C:\DATA\2024\05-2024\05-29-2024\
Data File: AA6554BFB.D
Acq On: 5/29/2024 9:16:00AM
Operator: jls
Sample: BFB
Misc: ALM018474
ALS Vial: 1 **Multiplier:** 1
Integration File: rteint.p
Method: C:\msdchem\1\METHODS\240326.M
Last Update: Wed Mar 27 13:46:33 2024
Spectrum Information:

PassFail	Target Mass	Rel. to Mass	Lower Limit %	Higher Limit %	Raw Abundance	% Relative Abundance
PASS	50	95	8	40	242304	21.7
PASS	75	95	30	66	578901	51.8
PASS	95	95	100	100	1118037	100.0
PASS	96	95	5	9	75616	6.8
PASS	173	174	0.00	2	6315	0.9
PASS	174	95	50	100	683392	61.1
PASS	175	174	4	9	49440	7.2
PASS	176	174	93	101	651648	95.4
PASS	177	176	5	9	42576	6.5

Runs with this BFB:

Lab Sample Number	Date File	Field Sample	Date/Time of Sample/Standard Analysis
BFB	AA6554BFB	NA	5/29/2024 9:16:00 AM
0.2 PPBV STD	AA6556STD05	NA	5/29/2024 12:40:00 PM
2 PPBV STD	AA6557STD04	NA	5/29/2024 1:11:00 PM
10 PPBV STD	AA6558STD03	NA	5/29/2024 1:46:00 PM
20 PPBV STD	AA6559STD02	NA	5/29/2024 2:18:00 PM
40 PPBV STD	AA6560STD01	NA	5/29/2024 2:55:00 PM
10 PPBV ICVSS	AA6561ICVSS	NA	5/29/2024 5:16:00 PM

BFB

Data Path: C:\DATA\2024\07-2024\07-15-2024\
Data File: AA6875BFB.D
Acq On: 7/15/2024 10:11:00AM
Operator: jjw
Sample: BFB
Misc: ALM018474
ALS Vial: 1 **Multiplier:** 1
Integration File: rteint.p
Method: C:\msdchem\1\METHODS\240529.M
Last Update: Wed May 29 15:44:50 2024
Spectrum Information:

PassFail	Target Mass	Rel. to Mass	Lower Limit %	Higher Limit %	Raw Abundance	% Relative Abundance
PASS	50	95	8	40	198379	24.8
PASS	75	95	30	66	437141	54.7
PASS	95	95	100	100	799168	100.0
PASS	96	95	5	9	54309	6.8
PASS	173	174	0.00	2	3858	0.9
PASS	174	95	50	100	452267	56.6
PASS	175	174	4	9	33925	7.5
PASS	176	174	93	101	431317	95.4
PASS	177	176	5	9	29259	6.8

Runs with this BFB:

Lab Sample Number	Date File	Field Sample	Date/Time of Sample/Standard Analysis
BFB	AA6875BFB	NA	7/15/2024 10:11:00 AM
10 PPBV DCVS	AA6876DCVS	NA	7/15/2024 10:42:00 AM
10 PPBV LCS	AA6877LCS	NA	7/15/2024 11:44:00 AM
METHOD BLANK	AA6878BLK	NA	7/15/2024 1:01:00 PM
E24-02398-02	AA6881	SG-11	7/15/2024 3:15:00 PM
E24-02398-01	AA6884	SG-10	7/15/2024 5:02:00 PM
E24-02398-21	AA6885	SG-10	7/15/2024 5:34:00 PM
E24-02398-01	AA6886	SG-10	7/15/2024 6:05:00 PM
E24-02398-02	AA6888	SG-11	7/15/2024 7:05:00 PM
E24-02398-03	AA6890	SG-12	7/15/2024 8:06:00 PM
E24-02398-03	AA6891	SG-12	7/15/2024 8:38:00 PM
E24-02398-04	AA6893	SG-13	7/15/2024 9:39:00 PM
E24-02398-04	AA6894	SG-13	7/15/2024 10:11:00 PM

INTEGRATED ANALYTICAL LABORATORIES, LLC

Method Blank Report

Lab Sample Name:	**METHOD BLANK**	**Data File:**	**AA6542BLK**
Field Sample Name:	**METHOD BLANK**	**Date Analyzed:**	**5/21/2024**
Matrix:	**Air**	**Sample Volume:**	**500ml**
Dilution Factor:	**1**	**GC/MS Column:**	**RTX-1, 0.32 mmID**

Runs with this Method Blank:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6539BFB]	05/21/2024 9:54
10 PPBV DCVS [AA6540DCVS]	05/21/2024 11:12
10 PPBV LCS [AA6541LCS]	05/21/2024 11:47
METHOD BLANK [AA6542BLK]	05/21/2024 12:15
02 PPBV RLLCS [AA6543RLLCS]	05/21/2024 12:50
3052 [AA6544]	05/21/2024 15:02
3100 [AA6545]	05/21/2024 15:33
1571 [AA6546]	05/21/2024 16:03
10 PPBV CCCVS [AA6552CCCVS]	05/21/2024 19:21

Compound	CAS #	Reporting Limit (ppbv)	Concentration (ppbv)
Acetone	67-64-1	0.20	ND
Benzene	71-43-2	0.20	ND
Bromodichloromethane	75-27-4	0.20	ND
Bromoform	75-25-2	0.20	ND
Bromomethane	74-83-9	0.20	ND
1,3-Butadiene	106-99-0	0.20	ND
Chlorobenzene	108-90-7	0.20	ND
Chloroethane	75-00-3	0.20	ND
Chloroform	67-66-3	0.20	ND
Chloromethane	74-87-3	0.20	ND
Carbon disulfide	75-15-0	0.20	ND
Carbon tetrachloride	56-23-5	0.20	ND
Cyclohexane	110-82-7	0.20	ND
Dibromochloromethane	124-48-1	0.20	ND
1,2-Dibromoethane	106-93-4	0.17	ND
1,2-Dichlorobenzene	95-50-1	0.20	ND
1,3-Dichlorobenzene	541-73-1	0.20	ND
1,4-Dichlorobenzene	106-46-7	0.20	ND
Dichlorodifluoromethane	75-71-8	0.20	ND
1,1-Dichloroethane	75-34-3	0.20	ND
1,2-Dichloroethane	107-06-2	0.20	ND
1,1-Dichloroethene	75-35-4	0.20	ND
1,2-Dichloroethene (cis)	156-59-2	0.20	ND
1,2-Dichloroethene (trans)	156-60-5	0.20	ND
1,2-Dichloropropane	78-87-5	0.20	ND
1,3-Dichloropropene (cis)	10061-01-5	0.20	ND
1,3-Dichloropropene (trans)	10061-02-6	0.19	ND
1,2-Dichlorotetrafluoroethane	76-14-2	0.20	ND
1,4-Dioxane	123-91-1	0.20	ND
Ethylbenzene	100-41-4	0.18	ND
n-Heptane	142-82-5	0.20	ND
1,3-Hexachlorobutadiene	87-68-3	0.20	ND
n-Hexane	110-54-3	0.20	ND

Method Blank must be less than the Practical Quantitation Limit (PQL).

INTEGRATED ANALYTICAL LABORATORIES, LLC

Method Blank Report

Lab Sample Name:	**METHOD BLANK**	**Data File:**	**AA6542BLK**
Field Sample Name:	**METHOD BLANK**	**Date Analyzed:**	**5/21/2024**
Matrix:	**Air**	**Sample Volume:**	**500ml**
Dilution Factor:	**1**	**GC/MS Column:**	**RTX-1, 0.32 mmID**

Runs with this Method Blank:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6539BFB]	05/21/2024 9:54
10 PPBV DCVS [AA6540DCVS]	05/21/2024 11:12
10 PPBV LCS [AA6541LCS]	05/21/2024 11:47
METHOD BLANK [AA6542BLK]	05/21/2024 12:15
02 PPBV RLLCS [AA6543RLLCS]	05/21/2024 12:50
3052 [AA6544]	05/21/2024 15:02
3100 [AA6545]	05/21/2024 15:33
1571 [AA6546]	05/21/2024 16:03
10 PPBV CCCVS [AA6552CCCVS]	05/21/2024 19:21

Compound	CAS #	Reporting Limit (ppbv)	Concentration (ppbv)
Methylene chloride	75-09-2	0.20	ND
Methyl ethyl ketone	78-93-3	0.20	ND
Methyl isobutyl ketone	108-10-1	0.20	ND
Methyl tert-butyl ether	1634-04-4	0.20	ND
Styrene	100-42-5	0.20	ND
Tert-butyl alcohol	75-65-0	0.20	ND
1,1,2,2-Tetrachloroethane	79-34-5	0.20	ND
Tetrachloroethene	127-18-4	0.20	ND
Toluene	108-88-3	0.20	ND
1,2,4-Trichlorobenzene	120-82-1	0.20	ND
1,1,1-Trichloroethane	71-55-6	0.17	ND
1,1,2-Trichloroethane	79-00-5	0.20	ND
Trichloroethene	79-01-6	0.17	ND
Trichlorofluoromethane	75-69-4	0.20	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.20	ND
1,2,4-Trimethylbenzene	95-63-6	0.20	ND
1,3,5-Trimethylbenzene	108-67-8	0.20	ND
2,2,4-Trimethylpentane	540-84-1	0.20	ND
Vinyl bromide	593-60-2	0.20	ND
Vinyl chloride	75-01-4	0.20	ND
Xylenes (m&p)	179601-23-1	0.20	ND
Xylenes (o)	95-47-6	0.20	ND

Method Blank must be less than the Practical Quantitation Limit (PQL).

INTEGRATED ANALYTICAL LABORATORIES, LLC

Method Blank Report

Lab Sample Name:	**METHOD BLANK**	**Data File:**	**AA6878BLK**
Field Sample Name:	**METHOD BLANK**	**Date Analyzed:**	**7/15/2024**
Matrix:	**Air**	**Sample Volume:**	**500ml**
Dilution Factor:	**1**	**GC/MS Column:**	**RTX-1, 0.32 mmID**

Runs with this Method Blank:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6875BFB]	07/15/2024 10:11
10 PPBV DCVS [AA6876DCVS]	07/15/2024 10:42
10 PPBV LCS [AA6877LCS]	07/15/2024 11:44
METHOD BLANK [AA6878BLK]	07/15/2024 13:01
E24-02398-02 [AA6881]	07/15/2024 15:15
E24-02398-01 [AA6884]	07/15/2024 17:02
E24-02398-21 [AA6885]	07/15/2024 17:34
E24-02398-01 [AA6886]	07/15/2024 18:05
E24-02398-02 [AA6888]	07/15/2024 19:05
E24-02398-03 [AA6890]	07/15/2024 20:06
E24-02398-03 [AA6891]	07/15/2024 20:38
E24-02398-04 [AA6893]	07/15/2024 21:39
E24-02398-04 [AA6894]	07/15/2024 22:11

Compound	CAS #	Reporting Limit (ppbv)	Concentration (ppbv)
Acetone	67-64-1	0.20	ND
Benzene	71-43-2	0.20	ND
Bromodichloromethane	75-27-4	0.20	ND
Bromoform	75-25-2	0.20	ND
Bromomethane	74-83-9	0.20	ND
1,3-Butadiene	106-99-0	0.20	ND
Chlorobenzene	108-90-7	0.20	ND
Chloroethane	75-00-3	0.20	ND
Chloroform	67-66-3	0.20	ND
Chloromethane	74-87-3	0.20	ND
Carbon disulfide	75-15-0	0.20	ND
Carbon tetrachloride	56-23-5	0.20	ND
Cyclohexane	110-82-7	0.20	ND
Dibromochloromethane	124-48-1	0.20	ND
1,2-Dibromoethane	106-93-4	0.17	ND
1,2-Dichlorobenzene	95-50-1	0.20	ND
1,3-Dichlorobenzene	541-73-1	0.20	ND
1,4-Dichlorobenzene	106-46-7	0.20	ND
Dichlorodifluoromethane	75-71-8	0.20	ND
1,1-Dichloroethane	75-34-3	0.20	ND
1,2-Dichloroethane	107-06-2	0.20	ND
1,1-Dichloroethene	75-35-4	0.20	ND
1,2-Dichloroethene (cis)	156-59-2	0.20	ND
1,2-Dichloroethene (trans)	156-60-5	0.20	ND
1,2-Dichloropropane	78-87-5	0.20	ND
1,3-Dichloropropene (cis)	10061-01-5	0.20	ND
1,3-Dichloropropene (trans)	10061-02-6	0.19	ND
1,2-Dichlorotetrafluoroethane	76-14-2	0.20	ND

Method Blank must be less than the Practical Quantitation Limit (PQL).

INTEGRATED ANALYTICAL LABORATORIES, LLC

Method Blank Report

Lab Sample Name:	**METHOD BLANK**	**Data File:**	**AA6878BLK**
Field Sample Name:	**METHOD BLANK**	**Date Analyzed:**	**7/15/2024**
Matrix:	**Air**	**Sample Volume:**	**500ml**
Dilution Factor:	**1**	**GC/MS Column:**	**RTX-1, 0.32 mmID**

Runs with this Method Blank:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6875BFB]	07/15/2024 10:11
10 PPBV DCVS [AA6876DCVS]	07/15/2024 10:42
10 PPBV LCS [AA6877LCS]	07/15/2024 11:44
METHOD BLANK [AA6878BLK]	07/15/2024 13:01
E24-02398-02 [AA6881]	07/15/2024 15:15
E24-02398-01 [AA6884]	07/15/2024 17:02
E24-02398-21 [AA6885]	07/15/2024 17:34
E24-02398-01 [AA6886]	07/15/2024 18:05
E24-02398-02 [AA6888]	07/15/2024 19:05
E24-02398-03 [AA6890]	07/15/2024 20:06
E24-02398-03 [AA6891]	07/15/2024 20:38
E24-02398-04 [AA6893]	07/15/2024 21:39
E24-02398-04 [AA6894]	07/15/2024 22:11

Compound	CAS #	Reporting Limit (ppbv)	Concentration (ppbv)
1,4-Dioxane	123-91-1	0.20	ND
Ethylbenzene	100-41-4	0.18	ND
n-Heptane	142-82-5	0.20	ND
1,3-Hexachlorobutadiene	87-68-3	0.20	ND
n-Hexane	110-54-3	0.20	ND
Methylene chloride	75-09-2	0.20	ND
Methyl ethyl ketone	78-93-3	0.20	ND
Methyl isobutyl ketone	108-10-1	0.20	ND
Methyl tert-butyl ether	1634-04-4	0.20	ND
Styrene	100-42-5	0.20	ND
Tert-butyl alcohol	75-65-0	0.20	ND
1,1,2,2-Tetrachloroethane	79-34-5	0.20	ND
Tetrachloroethene	127-18-4	0.20	ND
Toluene	108-88-3	0.20	ND
1,2,4-Trichlorobenzene	120-82-1	0.20	ND
1,1,1-Trichloroethane	71-55-6	0.17	ND
1,1,2-Trichloroethane	79-00-5	0.20	ND
Trichloroethene	79-01-6	0.17	ND
Trichlorofluoromethane	75-69-4	0.20	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.20	ND
1,2,4-Trimethylbenzene	95-63-6	0.20	ND
1,3,5-Trimethylbenzene	108-67-8	0.20	ND
2,2,4-Trimethylpentane	540-84-1	0.20	ND
Vinyl bromide	593-60-2	0.20	ND
Vinyl chloride	75-01-4	0.20	ND
Xylenes (m&p)	179601-23-1	0.20	ND
Xylenes (o)	95-47-6	0.20	ND

Method Blank must be less than the Practical Quantitation Limit (PQL).

INTEGRATED ANALYTICAL LABORATORIES, LLC

Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA6541LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 5/21/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6539BFB]	05/21/2024 9:54
10 PPBV DCVS [AA6540DCVS]	05/21/2024 11:12
10 PPBV LCS [AA6541LCS]	05/21/2024 11:47
METHOD BLANK [AA6542BLK]	05/21/2024 12:15
02 PPBV RLLCS [AA6543RLLCS]	05/21/2024 12:50
3052 [AA6544]	05/21/2024 15:02
3100 [AA6545]	05/21/2024 15:33
1571 [AA6546]	05/21/2024 16:03
10 PPBV CCCVS [AA6552CCCVS]	05/21/2024 19:21

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
Acetone	67-64-1	11	100
Benzene	71-43-2	11	110
Bromodichloromethane	75-27-4	12	110
Bromoform	75-25-2	12	110
Bromomethane	74-83-9	13	120
1,3-Butadiene	106-99-0	9.4	94
Chlorobenzene	108-90-7	11	110
Chloroethane	75-00-3	12	120
Chloroform	67-66-3	12	120
Chloromethane	74-87-3	13	110
Carbon disulfide	75-15-0	13	120
Carbon tetrachloride	56-23-5	12	120
Cyclohexane	110-82-7	10	100
Dibromochloromethane	124-48-1	12	110
1,2-Dibromoethane	106-93-4	11	100
1,2-Dichlorobenzene	95-50-1	12	110
1,3-Dichlorobenzene	541-73-1	12	110
1,4-Dichlorobenzene	106-46-7	12	110
Dichlorodifluoromethane	75-71-8	12	110
1,1-Dichloroethane	75-34-3	12	110
1,2-Dichloroethane	107-06-2	12	120
1,1-Dichloroethene	75-35-4	12	110
1,2-Dichloroethene (cis)	156-59-2	12	110
1,2-Dichloroethene (trans)	156-60-5	13	120
1,2-Dichloropropane	78-87-5	11	110
1,3-Dichloropropene (cis)	10061-01-5	11	100
1,3-Dichloropropene (trans)	10061-02-6	11	110
1,2-Dichlorotetrafluoroethane	76-14-2	10	91
1,4-Dioxane	123-91-1	12	100
Ethylbenzene	100-41-4	11	110
n-Heptane	142-82-5	9.2	92

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.

*** Values outside of QC limits* Values outside of 70-130% QC limits**

Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA6541LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 5/21/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6539BFB]	05/21/2024 9:54
10 PPBV DCVS [AA6540DCVS]	05/21/2024 11:12
10 PPBV LCS [AA6541LCS]	05/21/2024 11:47
METHOD BLANK [AA6542BLK]	05/21/2024 12:15
02 PPBV RLLCS [AA6543RLLCS]	05/21/2024 12:50
3052 [AA6544]	05/21/2024 15:02
3100 [AA6545]	05/21/2024 15:33
1571 [AA6546]	05/21/2024 16:03
10 PPBV CCCVS [AA6552CCCVS]	05/21/2024 19:21

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
1,3-Hexachlorobutadiene	87-68-3	13	110
n-Hexane	110-54-3	10	100
Methylene chloride	75-09-2	12	110
Methyl ethyl ketone	78-93-3	10	85
Methyl isobutyl ketone	108-10-1	8.7	79
Methyl tert-butyl ether	1634-04-4	11	100
Styrene	100-42-5	12	110
Tert-butyl alcohol	75-65-0	11	93
1,1,2,2-Tetrachloroethane	79-34-5	11	100
Tetrachloroethene	127-18-4	12	120
Toluene	108-88-3	10	100
1,2,4-Trichlorobenzene	120-82-1	12	110
1,1,1-Trichloroethane	71-55-6	11	110
1,1,2-Trichloroethane	79-00-5	11	100
Trichloroethene	79-01-6	11	110
Trichlorofluoromethane	75-69-4	12	110
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	11	110
1,2,4-Trimethylbenzene	95-63-6	11	100
1,3,5-Trimethylbenzene	108-67-8	11	100
2,2,4-Trimethylpentane	540-84-1	10	100
Vinyl bromide	593-60-2	13	130
Vinyl chloride	75-01-4	12	120
Xylenes (m&p)	179601-23-1	22	110
Xylenes (o)	95-47-6	10	100

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.

*** Values outside of QC limits* Values outside of 70-130% QC limits**

INTEGRATED ANALYTICAL LABORATORIES, LLC

Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA6877LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 7/15/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6875BFB]	07/15/2024 10:11
10 PPBV DCVS [AA6876DCVS]	07/15/2024 10:42
10 PPBV LCS [AA6877LCS]	07/15/2024 11:44
METHOD BLANK [AA6878BLK]	07/15/2024 13:01
E24-02398-02 [AA6881]	07/15/2024 15:15
E24-02398-01 [AA6884]	07/15/2024 17:02
E24-02398-21 [AA6885]	07/15/2024 17:34
E24-02398-01 [AA6886]	07/15/2024 18:05
E24-02398-02 [AA6888]	07/15/2024 19:05
E24-02398-03 [AA6890]	07/15/2024 20:06
E24-02398-03 [AA6891]	07/15/2024 20:38
E24-02398-04 [AA6893]	07/15/2024 21:39
E24-02398-04 [AA6894]	07/15/2024 22:11

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
Acetone	67-64-1	9.1	83
Benzene	71-43-2	13	130
Bromodichloromethane	75-27-4	13	120
Bromoform	75-25-2	11	100
Bromomethane	74-83-9	11	100
1,3-Butadiene	106-99-0	10.0	100
Chlorobenzene	108-90-7	10	100
Chloroethane	75-00-3	12	120
Chloroform	67-66-3	13	130
Chloromethane	74-87-3	14	120
Carbon disulfide	75-15-0	12	110
Carbon tetrachloride	56-23-5	12	120
Cyclohexane	110-82-7	14	130
Dibromochloromethane	124-48-1	13	120
1,2-Dibromoethane	106-93-4	13	120
1,2-Dichlorobenzene	95-50-1	9.4	85
1,3-Dichlorobenzene	541-73-1	9.7	88
1,4-Dichlorobenzene	106-46-7	9.6	87
Dichlorodifluoromethane	75-71-8	12	110
1,1-Dichloroethane	75-34-3	14	130
1,2-Dichloroethane	107-06-2	14	130
1,1-Dichloroethene	75-35-4	13	120
1,2-Dichloroethene (cis)	156-59-2	14	130
1,2-Dichloroethene (trans)	156-60-5	13	120
1,2-Dichloropropane	78-87-5	13	130
1,3-Dichloropropene (cis)	10061-01-5	13	120
1,3-Dichloropropene (trans)	10061-02-6	14	130

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.

*** Values outside of QC limits* Values outside of 70-130% QC limits**

INTEGRATED ANALYTICAL LABORATORIES, LLC

Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA6877LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 7/15/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6875BFB]	07/15/2024 10:11
10 PPBV DCVS [AA6876DCVS]	07/15/2024 10:42
10 PPBV LCS [AA6877LCS]	07/15/2024 11:44
METHOD BLANK [AA6878BLK]	07/15/2024 13:01
E24-02398-02 [AA6881]	07/15/2024 15:15
E24-02398-01 [AA6884]	07/15/2024 17:02
E24-02398-21 [AA6885]	07/15/2024 17:34
E24-02398-01 [AA6886]	07/15/2024 18:05
E24-02398-02 [AA6888]	07/15/2024 19:05
E24-02398-03 [AA6890]	07/15/2024 20:06
E24-02398-03 [AA6891]	07/15/2024 20:38
E24-02398-04 [AA6893]	07/15/2024 21:39
E24-02398-04 [AA6894]	07/15/2024 22:11

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
1,2-Dichlorotetrafluoroethane	76-14-2	10	91
1,4-Dioxane	123-91-1	13	110
Ethylbenzene	100-41-4	11	110
n-Heptane	142-82-5	12	120
1,3-Hexachlorobutadiene	87-68-3	8.2	72
n-Hexane	110-54-3	14	130
Methylene chloride	75-09-2	12	110
Methyl ethyl ketone	78-93-3	14	120
Methyl isobutyl ketone	108-10-1	14	130
Methyl tert-butyl ether	1634-04-4	13	120
Styrene	100-42-5	12	110
Tert-butyl alcohol	75-65-0	14	120
1,1,2,2-Tetrachloroethane	79-34-5	12	110
Tetrachloroethene	127-18-4	12	120
Toluene	108-88-3	13	130
1,2,4-Trichlorobenzene	120-82-1	8.6	75
1,1,1-Trichloroethane	71-55-6	12	120
1,1,2-Trichloroethane	79-00-5	12	110
Trichloroethene	79-01-6	9.3	93
Trichlorofluoromethane	75-69-4	13	120
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	12	120
1,2,4-Trimethylbenzene	95-63-6	11	100
1,3,5-Trimethylbenzene	108-67-8	10	91
2,2,4-Trimethylpentane	540-84-1	11	110
Vinyl bromide	593-60-2	11	110
Vinyl chloride	75-01-4	13	130
Xylenes (m&p)	179601-23-1	23	120

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.

*** Values outside of QC limits* Values outside of 70-130% QC limits**

INTEGRATED ANALYTICAL LABORATORIES, LLC

Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA6877LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 7/15/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6875BFB]	07/15/2024 10:11
10 PPBV DCVS [AA6876DCVS]	07/15/2024 10:42
10 PPBV LCS [AA6877LCS]	07/15/2024 11:44
METHOD BLANK [AA6878BLK]	07/15/2024 13:01
E24-02398-02 [AA6881]	07/15/2024 15:15
E24-02398-01 [AA6884]	07/15/2024 17:02
E24-02398-21 [AA6885]	07/15/2024 17:34
E24-02398-01 [AA6886]	07/15/2024 18:05
E24-02398-02 [AA6888]	07/15/2024 19:05
E24-02398-03 [AA6890]	07/15/2024 20:06
E24-02398-03 [AA6891]	07/15/2024 20:38
E24-02398-04 [AA6893]	07/15/2024 21:39
E24-02398-04 [AA6894]	07/15/2024 22:11

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
Xylenes (o)	95-47-6	11	110

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.

*** Values outside of QC limits* Values outside of 70-130% QC limits**

Analysis: Volatile Organic Compounds by EPA Method TO-15
Laboratory Sample Duplicate Report

SDG Number: E24-01699
IAL Sample ID: E24-01699-03
Matrix: Air
Summa ID: 2900

Date Received: 5/14/24
Date Analyzed: 5/21/24,5/21/24
Lab Data File#: AA6549,AA6550
Dilution Factor: 1
Injection Volume: 500ml
GC/MS Column: RTX-1, 0.32 mmID

Compound	CAS #	Sample E24-01699-03 Concentration Reported ppbv	Q	Sample Dup E24-01699-23 Concentration Reported ppbv	Q	Reporting Limits ppbv	RPD
Acetone	67-64-1	**21**		**20**		0.20	**4.88%**
Allyl Chloride	107-05-1	0.20	U	0.20	U	0.20	0.00%
Benzene	71-43-2	**0.20**		0.20	U	0.20	**NC**
Bromodichloromethane	75-27-4	0.20	U	0.20	U	0.20	0.00%
Bromoform	75-25-2	0.20	U	0.20	U	0.20	0.00%
Bromomethane	74-83-9	0.20	U	0.20	U	0.20	0.00%
1,3-Butadiene	106-99-0	0.20	U	0.20	U	0.20	0.00%
Chlorobenzene	108-90-7	0.20	U	0.20	U	0.20	0.00%
Chloroethane	75-00-3	0.20	U	0.20	U	0.20	0.00%
Chloroform	67-66-3	0.20	U	0.20	U	0.20	0.00%
Chloromethane	74-87-3	0.20	U	0.20	U	0.20	0.00%
Carbon disulfide	75-15-0	0.20	U	0.20	U	0.20	0.00%
Carbon tetrachloride	56-23-5	0.20	U	0.20	U	0.20	0.00%
2-Chlorotoluene	95-49-8	0.20	U	0.20	U	0.20	0.00%
Cyclohexane	110-82-7	0.20	U	0.20	U	0.20	0.00%
Dibromochloromethane	124-48-1	0.20	U	0.20	U	0.20	0.00%
1,2-Dibromoethane	106-93-4	0.20	U	0.20	U	0.20	0.00%
1,2-Dichlorobenzene	95-50-1	0.20	U	0.20	U	0.20	0.00%
1,3-Dichlorobenzene	541-73-1	0.20	U	0.20	U	0.20	0.00%
1,4-Dichlorobenzene	106-46-7	0.20	U	0.20	U	0.20	0.00%
Dichlorodifluoromethane	75-71-8	0.20	U	0.20	U	0.20	0.00%
1,1-Dichloroethane	75-34-3	0.20	U	0.20	U	0.20	0.00%
1,2-Dichloroethane	107-06-2	0.20	U	0.20	U	0.20	0.00%
1,1-Dichloroethene	75-35-4	0.20	U	0.20	U	0.20	0.00%
1,2-Dichloroethene (cis)	156-59-2	0.20	U	0.20	U	0.20	0.00%
1,2-Dichloroethene (trans)	156-60-5	0.20	U	0.20	U	0.20	0.00%
1,2-Dichloropropane	78-87-5	0.20	U	0.20	U	0.20	0.00%
1,3-Dichloropropene (cis)	10061-01-5	0.20	U	0.20	U	0.20	0.00%
1,3-Dichloropropene (trans)	10061-02-6	0.20	U	0.20	U	0.20	0.00%
1,2-Dichlorotetrafluoroethane	76-14-2	0.20	U	0.20	U	0.20	0.00%
1,4-Dioxane	123-91-1	0.20	U	0.20	U	0.20	0.00%
Ethanol	64-17-5	0.20	U	0.20	U	0.20	0.00%
Ethylbenzene	100-41-4	0.20	U	0.20	U	0.20	0.00%
4-Ethyltoluene	622-96-8	0.20	U	0.20	U	0.20	0.00%
n-Heptane	142-82-5	0.20	U	0.20	U	0.20	0.00%
1,3-Hexachlorobutadiene	87-68-3	0.20	U	0.20	U	0.20	0.00%
n-Hexane	110-54-3	**0.24**		**0.21**		0.20	**13.33%**
Isopropanol	67-63-0	0.20	U	**0.51**		0.20	**NC**

Qualifiers:
E=Concentration exceeds upper level of calibration range for instrument.
D=Extra dilution required for this compound. X=Duplicate samples do not met RPD criteria.
U=Compound ND or under reporting limit.

Analysis: Volatile Organic Compounds by EPA Method TO-15
Laboratory Sample Duplicate Report

SDG Number: E24-01699
IAL Sample ID: E24-01699-03
Matrix: Air
Summa ID: 2900

Date Received: 5/14/24
Date Analyzed: 5/21/24,5/21/24
Lab Data File#: AA6549,AA6550
Dilution Factor: 1
Injection Volume: 500ml
GC/MS Column: RTX-1, 0.32 mmID

Compound	CAS #	Sample E24-01699-03 Concentration Reported ppbv	Q	Sample Dup E24-01699-23 Concentration Reported ppbv	Q	Reporting Limits ppbv	RPD
Methylene chloride	75-09-2	0.20	U	0.20	U	0.20	0.00%
Methyl ethyl ketone	78-93-3	**0.32**		**0.29**		0.20	**9.84%**
Methyl isobutyl ketone	108-10-1	0.20	U	0.20	U	0.20	0.00%
Methyl methacrylate	80-62-6	0.20	U	0.20	U	0.20	0.00%
Methyl tert-butyl ether	1634-04-4	0.20	U	0.20	U	0.20	0.00%
Styrene	100-42-5	0.20	U	0.20	U	0.20	0.00%
Tert-butyl alcohol	75-65-0	0.20	U	0.20	U	0.20	0.00%
1,1,2,2-Tetrachloroethane	79-34-5	0.20	U	0.20	U	0.20	0.00%
Tetrachloroethene	127-18-4	0.20	U	0.20	U	0.20	0.00%
Tetrahydrofuran	109-99-9	0.20	U	0.20	U	0.20	0.00%
Toluene	108-88-3	**0.42**		**0.38**		0.20	**10.00%**
1,2,4-Trichlorobenzene	120-82-1	0.20	U	0.20	U	0.20	0.00%
1,1,1-Trichloroethane	71-55-6	0.20	U	0.20	U	0.20	0.00%
1,1,2-Trichloroethane	79-00-5	0.20	U	0.20	U	0.20	0.00%
Trichloroethene	79-01-6	0.20	U	0.20	U	0.20	0.00%
Trichlorofluoromethane	75-69-4	**0.35**		**0.35**		0.20	**0.00%**
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.20	U	0.20	U	0.20	0.00%
1,2,4-Trimethylbenzene	95-63-6	0.20	U	0.20	U	0.20	0.00%
1,3,5-Trimethylbenzene	108-67-8	0.20	U	0.20	U	0.20	0.00%
2,2,4-Trimethylpentane	540-84-1	0.20	U	0.20	U	0.20	0.00%
Vinyl bromide	593-60-2	0.20	U	0.20	U	0.20	0.00%
Vinyl chloride	75-01-4	0.20	U	0.20	U	0.20	0.00%
Xylenes (m&p)	179601-23-1	0.40	U	0.40	U	0.40	0.00%
Xylenes (o)	95-47-6	0.20	U	0.20	U	0.20	0.00%

RPD must be <25% for all laboratory duplicate samples. Laboratory duplicate samples are run once daily.
NC = The RPD could not be calculated since the compound was only detected in either the parent or duplicate sample.

Qualifiers:
E=Concentration exceeds upper level of calibration range for instrument.
D=Extra dilution required for this compound. X=Duplicate samples do not met RPD criteria.
U=Compound ND or under reporting limit.

Analysis: Volatile Organic Compounds by EPA Method TO-15
Laboratory Sample Duplicate Report

SDG Number: E24-02398
IAL Sample ID: E24-02398-01
Matrix: Air
Summa ID: 5096

Date Received: 7/15/24
Date Analyzed: 7/15/24,7/15/24
Lab Data File#: AA6884,AA6885
Dilution Factor: 5
Injection Volume: 100ml
GC/MS Column: RTX-1, 0.32 mmID

Compound	CAS #	Sample E24-02398-01 Concentration Reported ppbv	Q	Sample Dup E24-02398-21 Concentration Reported ppbv	Q	Reporting Limits ppbv	RPD
Acetone	67-64-1	**45**	D	**47**	D	1.0	**-4.35%**
Benzene	71-43-2	**1.6**	D	**1.9**	D	1.0	**-17.14%**
Bromodichloromethane	75-27-4	1.0	U	1.0	U	1.0	0.00%
Bromoform	75-25-2	1.0	U	1.0	U	1.0	0.00%
Bromomethane	74-83-9	1.0	U	1.0	U	1.0	0.00%
1,3-Butadiene	106-99-0	1.0	U	1.0	U	1.0	0.00%
Chlorobenzene	108-90-7	1.0	U	1.0	U	1.0	0.00%
Chloroethane	75-00-3	1.0	U	1.0	U	1.0	0.00%
Chloroform	67-66-3	1.0	U	1.0	U	1.0	0.00%
Chloromethane	74-87-3	1.0	U	1.0	U	1.0	0.00%
Carbon disulfide	75-15-0	1.0	U	1.0	U	1.0	0.00%
Carbon tetrachloride	56-23-5	0.20	U	0.20	U	0.20	0.00%
Cyclohexane	110-82-7	1.0	U	1.0	U	1.0	0.00%
Dibromochloromethane	124-48-1	1.0	U	1.0	U	1.0	0.00%
1,2-Dibromoethane	106-93-4	1.0	U	1.0	U	1.0	0.00%
1,2-Dichlorobenzene	95-50-1	1.0	U	1.0	U	1.0	0.00%
1,3-Dichlorobenzene	541-73-1	1.0	U	1.0	U	1.0	0.00%
1,4-Dichlorobenzene	106-46-7	1.0	U	1.0	U	1.0	0.00%
Dichlorodifluoromethane	75-71-8	1.0	U	1.0	U	1.0	0.00%
1,1-Dichloroethane	75-34-3	1.0	U	1.0	U	1.0	0.00%
1,2-Dichloroethane	107-06-2	1.0	U	1.0	U	1.0	0.00%
1,1-Dichloroethene	75-35-4	1.0	U	1.0	U	1.0	0.00%
1,2-Dichloroethene (cis)	156-59-2	1.0	U	1.0	U	1.0	0.00%
1,2-Dichloroethene (trans)	156-60-5	1.0	U	1.0	U	1.0	0.00%
1,2-Dichloropropane	78-87-5	1.0	U	1.0	U	1.0	0.00%
1,3-Dichloropropene (cis)	10061-01-5	1.0	U	1.0	U	1.0	0.00%
1,3-Dichloropropene (trans)	10061-02-6	1.0	U	1.0	U	1.0	0.00%
1,2-Dichlorotetrafluoroethane	76-14-2	1.0	U	1.0	U	1.0	0.00%
1,4-Dioxane	123-91-1	1.0	U	1.0	U	1.0	0.00%
Ethylbenzene	100-41-4	1.0	U	1.0	U	1.0	0.00%
n-Heptane	142-82-5	1.0	U	**1.2**	D	1.0	**NC**
1,3-Hexachlorobutadiene	87-68-3	1.0	U	1.0	U	1.0	0.00%
n-Hexane	110-54-3	**1.1**	D	**1.2**	D	1.0	**-8.70%**
Methylene chloride	75-09-2	1.0	U	1.0	U	1.0	0.00%
Methyl ethyl ketone	78-93-3	**2.5**	D	**3.0**	D	1.0	**-18.18%**
Methyl isobutyl ketone	108-10-1	1.0	U	1.0	U	1.0	0.00%
Methyl tert-butyl ether	1634-04-4	1.0	U	1.0	U	1.0	0.00%
Styrene	100-42-5	1.0	U	1.0	U	1.0	0.00%

Qualifiers:
E=Concentration exceeds upper level of calibration range for instrument.
D=Extra dilution required for this compound. X=Duplicate samples do not met RPD criteria.
U=Compound ND or under reporting limit.

Analysis: Volatile Organic Compounds by EPA Method TO-15
Laboratory Sample Duplicate Report

SDG Number: E24-02398
IAL Sample ID: E24-02398-01
Matrix: Air
Summa ID: 5096

Date Received: 7/15/24
Date Analyzed: 7/15/24,7/15/24
Lab Data File#: AA6884,AA6885
Dilution Factor: 5
Injection Volume: 100ml
GC/MS Column: RTX-1, 0.32 mmID

Compound	CAS #	Sample E24-02398-01 Concentration Reported ppbv	Q	Sample Dup E24-02398-21 Concentration Reported ppbv	Q	Reporting Limits ppbv	RPD
Tert-butyl alcohol	75-65-0	**6.0**	D	**7.2**	D	1.0	**-18.18%**
1,1,2,2-Tetrachloroethane	79-34-5	1.0	U	1.0	U	1.0	0.00%
Tetrachloroethene	127-18-4	**2.4**	D	**2.8**	D	1.0	**-15.38%**
Toluene	108-88-3	**3.4**	D	**4.2**	D	1.0	**-21.05%**
1,2,4-Trichlorobenzene	120-82-1	1.0	U	1.0	U	1.0	0.00%
1,1,1-Trichloroethane	71-55-6	1.0	U	1.0	U	1.0	0.00%
1,1,2-Trichloroethane	79-00-5	1.0	U	1.0	U	1.0	0.00%
Trichloroethene	79-01-6	0.23	U	0.23	U	0.23	0.00%
Trichlorofluoromethane	75-69-4	1.0	U	1.0	U	1.0	0.00%
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	1.0	U	1.0	U	1.0	0.00%
1,2,4-Trimethylbenzene	95-63-6	1.0	U	1.0	U	1.0	0.00%
1,3,5-Trimethylbenzene	108-67-8	1.0	U	1.0	U	1.0	0.00%
2,2,4-Trimethylpentane	540-84-1	1.0	U	1.0	U	1.0	0.00%
Vinyl bromide	593-60-2	1.0	U	1.0	U	1.0	0.00%
Vinyl chloride	75-01-4	1.0	U	1.0	U	1.0	0.00%
Xylenes (m&p)	179601-23-1	**2.0**	D	**2.2**	D	1.0	**-9.52%**
Xylenes (o)	95-47-6	1.0	U	1.0	U	1.0	0.00%

RPD must be <25% for all laboratory duplicate samples. Laboratory duplicate samples are run once daily.
NC = The RPD could not be calculated since the compound was only detected in either the parent or duplicate sample.

Qualifiers:
E=Concentration exceeds upper level of calibration range for instrument.
D=Extra dilution required for this compound. X=Duplicate samples do not met RPD criteria.
U=Compound ND or under reporting limit.

Initial Calibration Curve Internal Standard Area and Retention Time Summary

Instrument: AA **ICAL Date:** 3/27/2024

		BROMOCHLOROMETHANE				1,4-DIFLUOROBENZENE				D-5 CHLOROBENZENE			
		Area #		RT		Area #		RT		Area #		RT	
AVERAGE OF CALIBRATION STANDARDS		377399		4.413		1533720		5.479		1408744		8.351	
UPPER LIMIT		528358		4.743		2147208		5.809		1972242		8.681	
LOWER LIMIT		226439		4.083		920232		5.149		845247		8.021	
Lab ID		Area #	%	RT	+/-	Area #	%	RT	+/-	Area #	%	RT	+/-
40 PPBV STD	AA 6025 STD01	398803	5.67	4.419	0.01	1758228	14.64	5.480	0.00	1517568	7.72	8.351	0.00
20 PPBV STD	AA 6024 STD02	411882	9.14	4.415	0.00	1661943	8.36	5.480	0.00	1464287	3.94	8.351	0.00
10 PPBV STD	AA 6023 STD03	405866	7.54	4.412	0.00	1540619	0.45	5.476	0.00	1407079	-0.12	8.351	0.00
2 PPBV STD	AA 6022 STD04	309693	-17.94	4.412	0.00	1229116	-19.86	5.479	0.00	1260202	-10.54	8.351	0.00
0.2 PPBV STD	AA 6021 STD05	360749	-4.41	4.409	0.00	1478694	-3.59	5.480	0.00	1394585	-1.01	8.351	0.00
ICVSS	AA 6026 ICVSS	412561	9.32	4.412	0.00	1549110	1.00	5.480	0.00	1439709	2.20	8.351	0.00

Difference of Internal Area must be within +/- 40%; Retention Times must be within +/- 0.33 minute.

* Values outsite QC limits.

Internal Standard Area and Retention Time Summary

Lab File ID (Standard): AA6540DCVS **Date Analyzed:** 5/21/2024

Instrument: AA **ICAL Date:** 3/27/2024

			BROMOCHLOROMETHANE				1,4-DIFLUOROBENZENE				D-5 CHLOROBENZENE			
			Area #		RT		Area #		RT		Area #		RT	
	CALIBRATION STANDARD		273918		4.410		1142431		5.478		1026686		8.349	
	UPPER LIMIT		383485		4.74		1599403		5.81		1437360		8.68	
	LOWER LIMIT		164351		4.08		685459		5.15		616012		8.02	
Lab ID		DF	Area #	%	RT	+/-	Area #	%	RT	+/-	Area #	%	RT	+/-
Method Blank	AA6542BLK	1.0	268604	-1.94	4.410	0.00	1018846	-10.82	5.478	0.00	981819	-4.37	8.352	0.00
Reporting Limit Laboratory Control Standard	AA6543RLLCS	1.0	255869	-6.59	4.410	0.00	1031431	-9.72	5.481	0.00	980159	-4.53	8.352	0.00
3052	AA6544	1.0	378495	38.18	4.417	0.01	1424428	24.68	5.487	0.01	1388430	35.23	8.352	0.00
3100	AA6545	1.0	279835	2.16	4.410	0.00	1055298	-7.63	5.478	0.00	985570	-4.00	8.352	0.00
1571	AA6546	1.0	276550	0.96	4.410	0.00	1062434	-7.00	5.477	0.00	978432	-4.70	8.352	0.00
Closing Calibration	AA6552CCCVS	1.0	262640	-4.12	4.413	0.00	1094343	-4.21	5.481	0.00	997903	-2.80	8.352	0.00

Difference of Internal Area must be within +/- 40%; Retention Times must be within +/- 0.33 minute.
* Values outsite QC limits.

Initial Calibration Curve Internal Standard Area and Retention Time Summary

Instrument: AA **ICAL Date:** 5/29/2024

		BROMOCHLOROMETHANE				1,4-DIFLUOROBENZENE				D-5 CHLOROBENZENE			
		Area #		RT		Area #		RT		Area #		RT	
AVERAGE OF CALIBRATION STANDARDS		250669		4.419		1087820		5.481		975494		8.352	
UPPER LIMIT		350936		4.749		1522949		5.811		1365692		8.682	
LOWER LIMIT		150401		4.089		652692		5.151		585297		8.022	
Lab ID		Area #	%	RT	+/-	Area #	%	RT	+/-	Area #	%	RT	+/-
40 PPBV STD	AA 6560 STD01	259539	3.54	4.438	0.02	1398154	28.53	5.490	-0.01	1151205	18.01	8.351	0.00
20 PPBV STD	AA 6559 STD02	232784	-7.13	4.425	0.01	1025078	-5.77	5.480	0.00	911734	-6.54	8.354	0.00
10 PPBV STD	AA 5447 STD03	240829	-3.93	4.416	0.00	1010790	-7.08	5.483	0.00	932743	-4.38	8.351	0.00
2 PPBV STD	AA 6557 STD04	243744	-2.76	4.406	-0.01	931187	-14.40	5.477	0.00	883473	-9.43	8.354	0.00
0.2 PPBV STD	AA 6556 STD05	276448	10.28	4.409	-0.01	1073893	-1.28	5.477	0.00	998317	2.34	8.351	0.00
ICVSS	AA 6561 ICVSS	242079	-3.43	4.412	-0.01	1024301	-5.84	5.480	0.00	930904	-4.57	8.354	0.00

Difference of Internal Area must be within +/- 40%; Retention Times must be within +/- 0.33 minute.

* Values outsite QC limits.

Internal Standard Area and Retention Time Summary

Lab File ID (Standard): AA6876DCVS **Date Analyzed:** 7/15/2024

Instrument: AA **ICAL Date:** 5/29/2024

			BROMOCHLOROMETHANE				1,4-DIFLUOROBENZENE				D-5 CHLOROBENZENE			
			Area #		RT		Area #		RT		Area #		RT	
	CALIBRATION STANDARD		231182		4.425		1133819		5.490		1270661		8.354	
	UPPER LIMIT		323655		4.76		1587347		5.82		1778925		8.68	
	LOWER LIMIT		138709		4.10		680291		5.16		762397		8.02	
Lab ID		DF	Area #	%	RT	+/-	Area #	%	RT	+/-	Area #	%	RT	+/-
Method Blank	AA6878BLK	1.0	256964	11.15	4.419	-0.01	1159791	2.29	5.483	-0.01	1536593	20.93	8.351	0.00
E24-02398-02	AA6881	10.0	239855	3.75	4.425	0.00	1156827	2.03	5.490	0.00	1364898	7.42	8.355	0.00
E24-02398-01	AA6884	5.0	200977	-13.07	4.422	0.00	872037	-23.09	5.480	-0.01	803451	-36.77	8.351	0.00
E24-02398-21	AA6885	5.0	219701	-4.97	4.435	0.01	1092158	-3.67	5.490	0.00	1291262	1.62	8.351	0.00
E24-02398-01	AA6886	1.0	290864	25.82	4.448	0.02	1080997	-4.66	5.489	0.00	904437	-28.82	8.358	0.00
E24-02398-02	AA6888	1.0	195474	-15.45	4.445	0.02	1064377	-6.12	5.490	0.00	908152	-28.53	8.354	0.00
E24-02398-03	AA6890	5.0	208271	-9.91	4.435	0.01	1089480	-3.91	5.490	0.00	1277459	0.53	8.354	0.00
E24-02398-03	AA6891	1.0	189057	-18.22	4.448	0.02	1048510	-7.52	5.490	0.00	894948	-29.57	8.358	0.00
E24-02398-04	AA6893	5.0	213209	-7.77	4.435	0.01	1110666	-2.04	5.486	0.00	1264766	-0.46	8.351	0.00
E24-02398-04	AA6894	1.0	189416	-18.07	4.435	0.01	903963	-20.27	5.483	-0.01	793914	-37.52	8.358	0.00

Difference of Internal Area must be within +/- 40%; Retention Times must be within +/- 0.33 minute.
* Values outsite QC limits.

Section VI: Sample Data Summary

Certificate of Analysis

Summary of Results

**Quantitation Reports, Chromatograms,
and Peak Integration Reports**

CERTIFICATE OF ANALYSIS

ANALYTICAL DATA PACKAGE FOR THE
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
ALBANY NEW YORK 12233

Integrated Analytical Laboratories, LLC — **Randolph, NJ 07869**
Project#: 48-55 36th St — **NY ELAP Certification#: 11402**
SDG #: E24-02398 — **NJDEP (Primary AB) Certification#: 14751**
Date of first sample receipt: 7/15/2024 — **Date of last sample receipt: 7/15/2024**

Client: JS Held-Hoboken
5 Marine View Plaza
Hoboken, NJ 07030

Attention: Attention: Leah DeEgidio

Project/Site: 48-55 36th St/NY

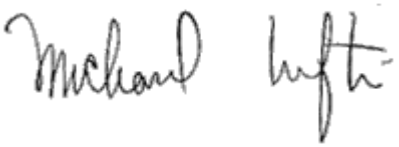
Analysis conducted at: Integrated Analytical Laboratories, LLC
273 Franklin Road
Randolph, NJ 07869

Contact: Michael H. Leftin, Ph.D.

Sample(s):
E24-02398-01
E24-02398-02
E24-02398-03
E24-02398-04

Samples for this analysis were received in good condition with a chain of custody.

All work recorded herein has been done in accordance with normal professional standards using accepted testing methodologies, quality assurance and quality control procedures except where otherwise agreed to by the client and testing company in writing. Once analysis has been performed on canisters that meets regulatory criteria, samples are recycled for future use, unless other provisions have been made by the client.



Michael H. Leftin, Ph.D.
Laboratory Director

Date: August 1, 2024

Volatile Organic Compounds by EPA Method TO-15
Summary of Results

Lab ID:	E24-02398-01	Instrument ID:	AA
Client ID:	SG-10	GC/MS Column:	RTX-1, 0.32 mmID
Date Sampled:	07/12/2024 10:55	Injection Volmue:	500ml
Date Received:	07/15/2024	Matrix:	Air-Other
Date Analyzed:	07/15/2024 18:05	% Moisture:	NA
Data File:	AA6886	Dilution Factor:	1
Summa ID:	5096	Analyst:	J. Walukiewicz

			Concentration Reported		Reporting Limits	
Compound	**CAS #**	**Q**	**ppbv**	**ug/m3**	**ppbv**	**ug/m3**
Acetone	67-64-1		26	61	0.20	0.48
Benzene	71-43-2		1.1	3.4	0.20	0.64
Bromodichloromethane	75-27-4		ND	ND	0.20	1.3
Bromoform	75-25-2		ND	ND	0.20	2.1
Bromomethane	74-83-9		ND	ND	0.20	0.78
1,3-Butadiene	106-99-0		ND	ND	0.20	0.44
Chlorobenzene	108-90-7		ND	ND	0.20	0.92
Chloroethane	75-00-3		ND	ND	0.20	0.53
Chloroform	67-66-3		0.27	1.3	0.20	0.98
Chloromethane	74-87-3		ND	ND	0.20	0.41
Carbon disulfide	75-15-0		0.22	0.69	0.20	0.62
Carbon tetrachloride	56-23-5		ND	ND	0.040	0.25
Cyclohexane	110-82-7		0.51	1.8	0.20	0.69
Dibromochloromethane	124-48-1		ND	ND	0.20	1.7
1,2-Dibromoethane	106-93-4		ND	ND	0.20	1.5
1,2-Dichlorobenzene	95-50-1		ND	ND	0.20	1.2
1,3-Dichlorobenzene	541-73-1		0.40	2.4	0.20	1.2
1,4-Dichlorobenzene	106-46-7		ND	ND	0.20	1.2
Dichlorodifluoromethane	75-71-8		ND	ND	0.20	0.99
1,1-Dichloroethane	75-34-3		ND	ND	0.20	0.81
1,2-Dichloroethane	107-06-2		ND	ND	0.20	0.81
1,1-Dichloroethene	75-35-4		ND	ND	0.20	0.79
1,2-Dichloroethene (cis)	156-59-2		ND	ND	0.20	0.79
1,2-Dichloroethene (trans)	156-60-5		ND	ND	0.20	0.79
1,2-Dichloropropane	78-87-5		ND	ND	0.20	0.92
1,3-Dichloropropene (cis)	10061-01-5		ND	ND	0.20	0.91
1,3-Dichloropropene (trans)	10061-02-6		ND	ND	0.20	0.91
1,2-Dichlorotetrafluoroethane	76-14-2		ND	ND	0.20	1.4
1,4-Dioxane	123-91-1		ND	ND	0.20	0.72
Ethylbenzene	100-41-4		0.50	2.2	0.20	0.87
n-Heptane	142-82-5		0.58	2.4	0.20	0.82
1,3-Hexachlorobutadiene	87-68-3		ND	ND	0.20	2.1
n-Hexane	110-54-3		0.84	3.0	0.20	0.70
Methylene chloride	75-09-2		ND	ND	0.20	0.69
Methyl ethyl ketone	78-93-3		1.6	4.8	0.20	0.59
Methyl isobutyl ketone	108-10-1		0.23	0.93	0.20	0.82
Methyl tert-butyl ether	1634-04-4		ND	ND	0.20	0.72
Styrene	100-42-5		ND	ND	0.20	0.85
Tert-butyl alcohol	75-65-0		3.2	9.7	0.20	0.61
1,1,2,2-Tetrachloroethane	79-34-5		ND	ND	0.20	1.4
Tetrachloroethene	127-18-4		1.6	11	0.20	1.4
Toluene	108-88-3		2.8	11	0.20	0.75
1,2,4-Trichlorobenzene	120-82-1		ND	ND	0.20	1.5
1,1,1-Trichloroethane	71-55-6		ND	ND	0.20	1.1
1,1,2-Trichloroethane	79-00-5		ND	ND	0.20	1.1

Qualifiers:
D = Dilution required

Volatile Organic Compounds by EPA Method TO-15
Summary of Results

Lab ID:	E24-02398-01	Instrument ID:	AA
Client ID:	SG-10	GC/MS Column:	RTX-1, 0.32 mmID
Date Sampled:	07/12/2024 10:55	Injection Volmue:	500ml
Date Received:	07/15/2024	Matrix:	Air-Other
Date Analyzed:	07/15/2024 18:05	% Moisture:	NA
Data File:	AA6886	Dilution Factor:	1
Summa ID:	5096	Analyst:	J. Walukiewicz

			Concentration Reported		Reporting Limits	
Compound	**CAS #**	**Q**	**ppbv**	**ug/m3**	**ppbv**	**ug/m3**
Trichloroethene	79-01-6		0.25	1.3	0.046	0.25
Trichlorofluoromethane	75-69-4		0.42	2.4	0.20	1.1
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1		0.59	4.5	0.20	1.5
1,2,4-Trimethylbenzene	95-63-6		0.64	3.1	0.20	0.98
1,3,5-Trimethylbenzene	108-67-8		ND	ND	0.20	0.98
2,2,4-Trimethylpentane	540-84-1		0.71	3.3	0.20	0.93
Vinyl bromide	593-60-2		ND	ND	0.20	0.87
Vinyl chloride	75-01-4		ND	ND	0.20	0.51
Xylenes (m&p)	179601-23-1		1.9	8.2	0.20	0.87
Xylenes (o)	95-47-6		0.64	2.8	0.20	0.87

Qualifiers:
D = Dilution required

Quantitation Report (QT Reviewed)

Data Path : C:\DATA\2024\07-2024\07-15-2024\
Data File : aa6886.D
Acq On : 15 Jul 2024 6:05 pm
Operator : jjw
Sample : E24-02398-01
Misc : 5096, 500cc
ALS Vial : 12 Sample Multiplier: 1

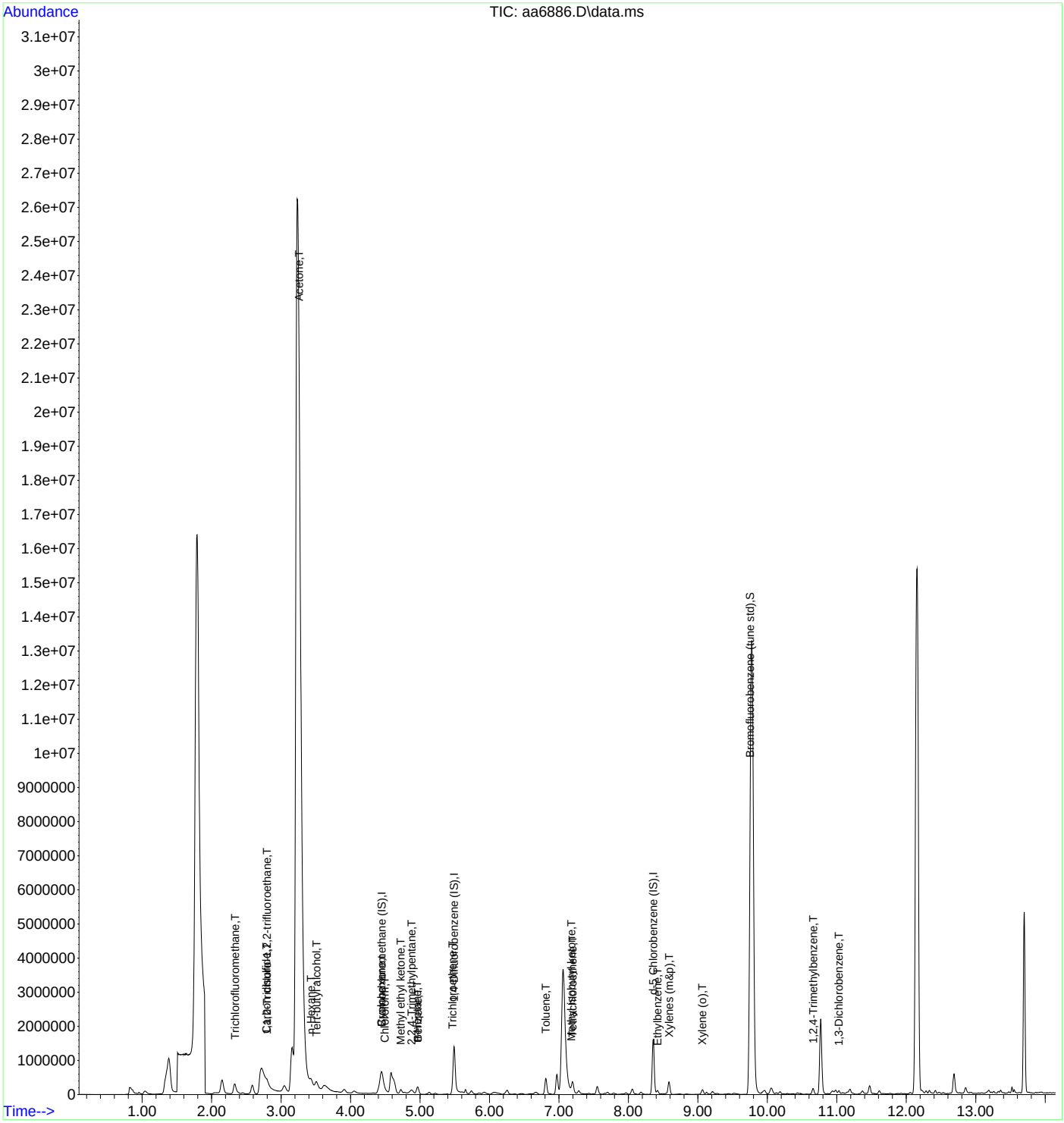
Quant Time: Jul 16 10:12:03 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

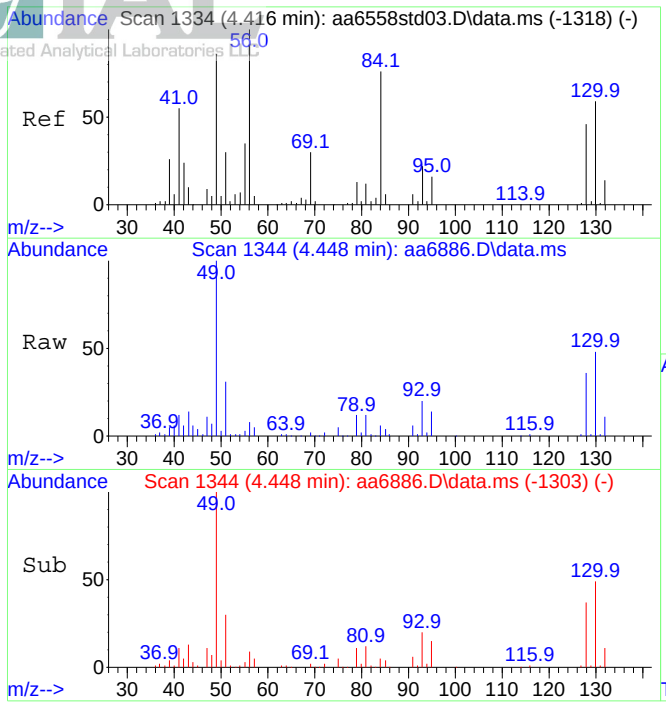
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.448	130	290864	10.00	ppbV		0.032
39) 1,4-Difluorobenzene (IS)	5.489	114	1080997	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.358	117	904437	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.753	95	940036	10.99	ppbV		0.000
Target Compounds							Qvalue
12) Trichlorofluoromethane	2.338	101	40592	0.42	ppbV		97
15) Carbon disulfide	2.789	76	27278	0.22	ppbV	#	67
16) 1,1,2-Trichloro-1,2,2-...	2.798	101	53392	0.59	ppbV		90
21) Acetone	3.258	43	1689482	25.89	ppbV		90
24) n-Hexane	3.432	57	93646	0.84	ppbV	#	75
26) Tert-butyl alcohol	3.509	59	292751	3.22	ppbV		100
29) Cyclohexane	4.445	56	38173	0.51	ppbV	#	80
30) Chloroform	4.493	83	24922	0.27	ppbV	#	17
35) Methyl ethyl ketone	4.724	43	150732	1.63	ppbV		97
36) n-Heptane	4.959	43	51181	0.59	ppbV	#	77
37) Benzene	4.969	78	142015	1.07	ppbV		95
40) Trichloroethene	5.470	130	12163	0.25	ppbV		94
41) 2,2,4-Trimethylpentane	4.879	57	135846	0.71	ppbV		92
47) Toluene	6.811	91	389632	2.82	ppbV		98
48) Methyl isobutyl ketone	7.178	43	22850	0.23	ppbV		99
49) Tetrachloroethene	7.197	166	84767	1.62	ppbV		98
58) Ethylbenzene	8.419	91	89433	0.50	ppbV		97
59) Xylenes (m&p)	8.586	91	253637	1.89	ppbV		98
60) Xylene (o)	9.065	91	89966	0.64	ppbV		96
70) 1,2,4-Trimethylbenzene	10.660	105	105215	0.64	ppbV		97
71) 1,3-Dichlorobenzene	11.029	146	39576	0.40	ppbV		99

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

Data Path : C:\DATA\2024\07-2024\07-15-2024\
Data File : aa6886.D
Acq On : 15 Jul 2024 6:05 pm
Operator : jjw
Sample : E24-02398-01
Misc : 5096, 500cc
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jul 16 10:12:03 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

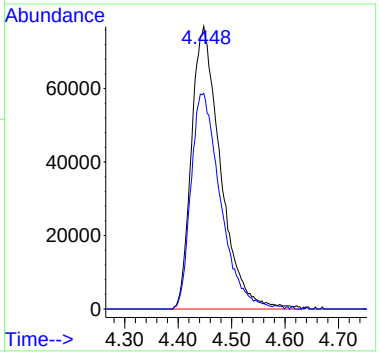


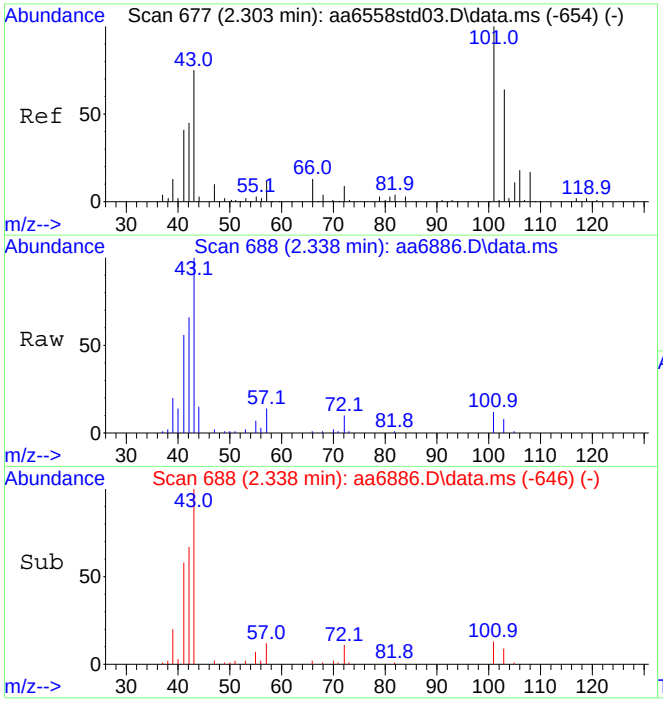


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.448 min Scan# 1344
Delta R.T. 0.032 min
Lab File: aa6886.D
Acq: 15 Jul 2024 6:05 pm

Tgt Ion:130 Resp: 290864

Ion	Ratio	Lower	Upper
130	100		
128	77.3	57.8	97.8

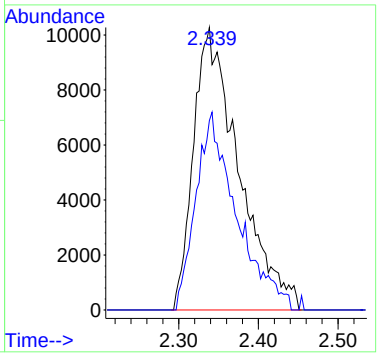


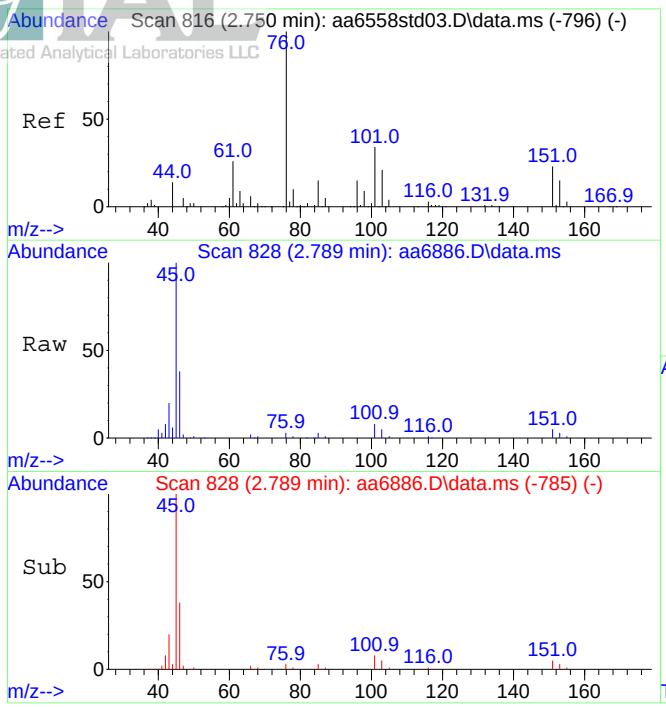


#12
Trichlorofluoromethane
Concen: 0.42 ppbV
RT: 2.338 min Scan# 688
Delta R.T. 0.035 min
Lab File: aa6886.D
Acq: 15 Jul 2024 6:05 pm

Tgt Ion:101 Resp: 40592

Ion	Ratio	Lower	Upper
101	100		
103	62.8	51.9	77.9

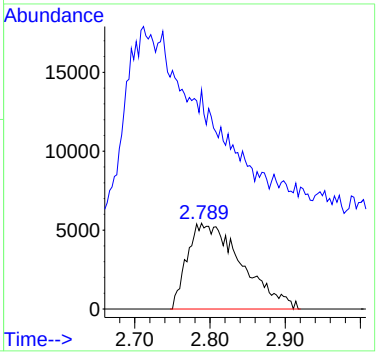


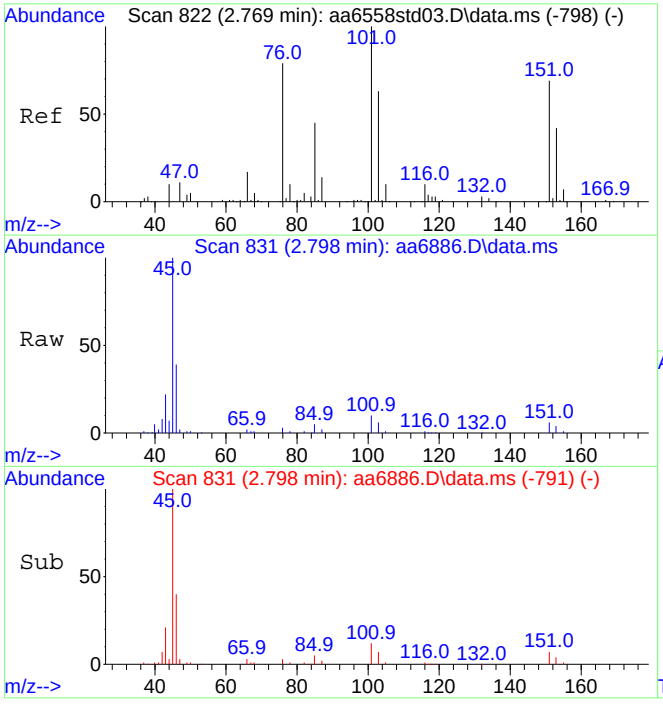


#15
Carbon disulfide
Concen: 0.22 ppbV
RT: 2.789 min Scan# 828
Delta R.T. 0.038 min
Lab File: aa6886.D
Acq: 15 Jul 2024 6:05 pm

Tgt Ion: 76 Resp: 27278

Ion	Ratio	Lower	Upper
76	100		
44	0.0	10.6	16.0#

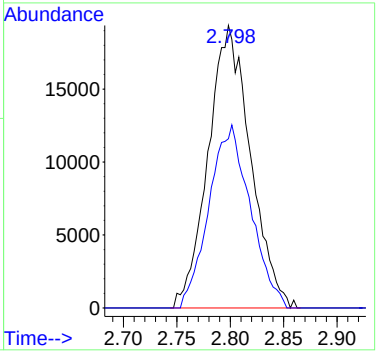


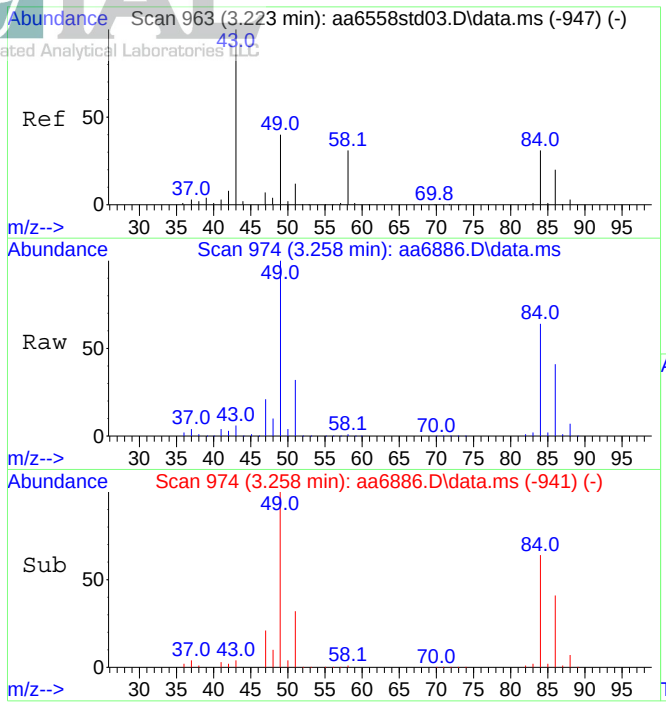


#16
1,1,2-Trichloro-1,2,2-trifluoroethane
Concen: 0.59 ppbV
RT: 2.798 min Scan# 831
Delta R.T. 0.029 min
Lab File: aa6886.D
Acq: 15 Jul 2024 6:05 pm

Tgt Ion:101 Resp: 53392

Ion	Ratio	Lower	Upper
101	100		
151	63.2	57.0	85.6

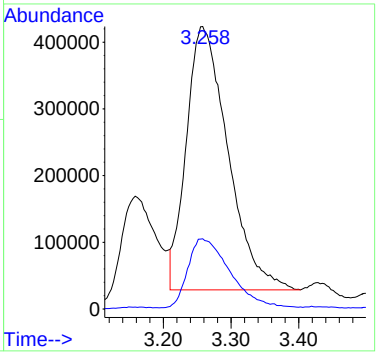


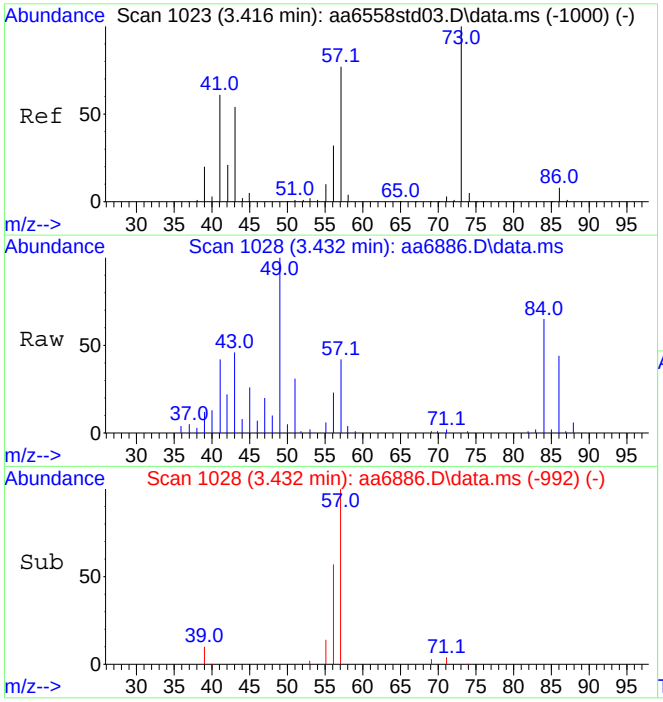


#21
Acetone
Concen: 25.89 ppbV
RT: 3.258 min Scan# 974
Delta R.T. 0.035 min
Lab File: aa6886.D
Acq: 15 Jul 2024 6:05 pm

Tgt Ion: 43 Resp: 1689482

Ion	Ratio	Lower	Upper
43	100		
58	26.4	25.4	38.0

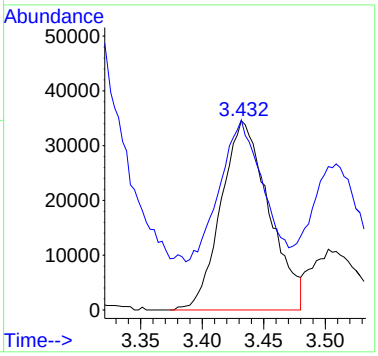


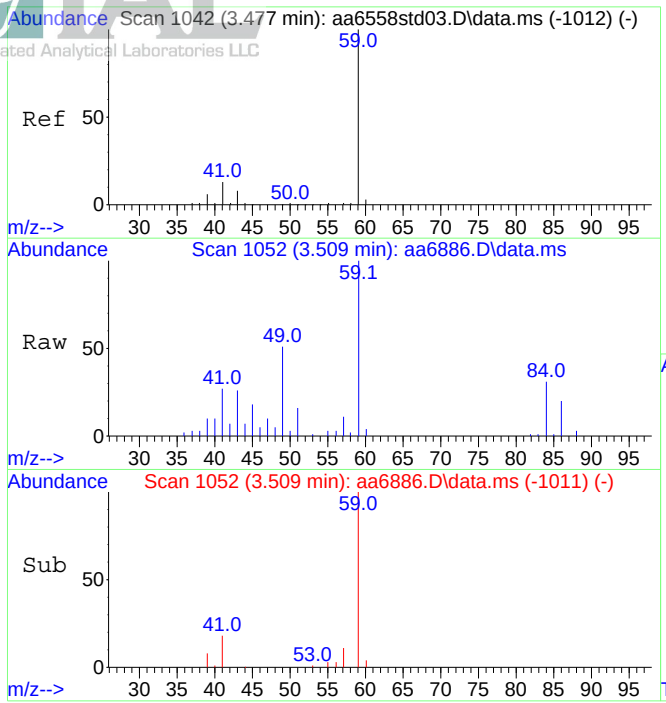


#24
n-Hexane
Concen: 0.84 ppbV
RT: 3.432 min Scan# 1028
Delta R.T. 0.016 min
Lab File: aa6886.D
Acq: 15 Jul 2024 6:05 pm

Tgt Ion: 57 Resp: 93646

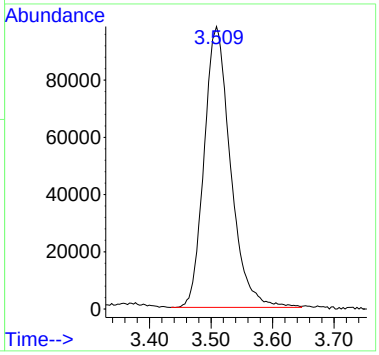
Ion	Ratio	Lower	Upper
57	100		
41	65.6	71.6	107.4#

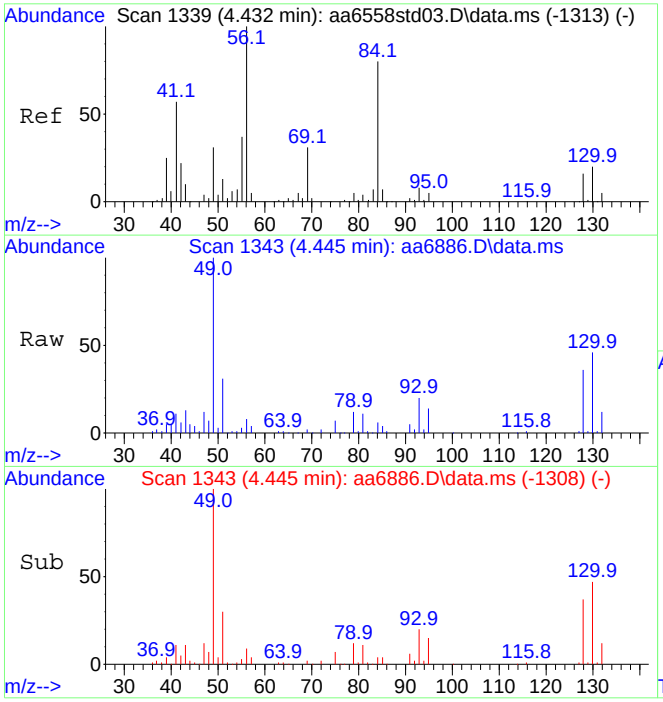




#26
Tert-butyl alcohol
Concen: 3.22 ppbV
RT: 3.509 min Scan# 1052
Delta R.T. 0.032 min
Lab File: aa6886.D
Acq: 15 Jul 2024 6:05 pm

Tgt Ion: 59 Resp: 292751

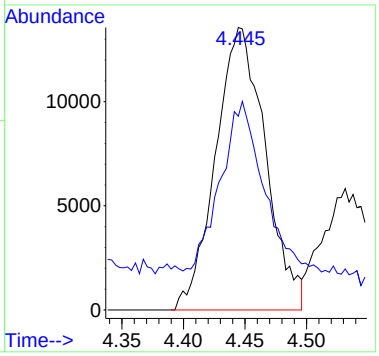


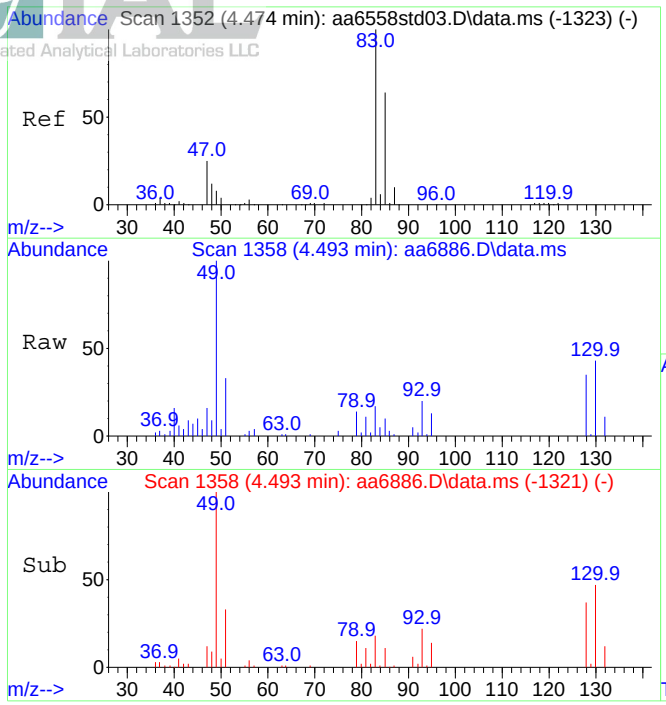


#29
Cyclohexane
Concen: 0.51 ppbV
RT: 4.445 min Scan# 1343
Delta R.T. 0.013 min
Lab File: aa6886.D
Acq: 15 Jul 2024 6:05 pm

Tgt Ion: 56 Resp: 38173

Ion	Ratio	Lower	Upper
56	100		
84	65.8	66.8	100.2#

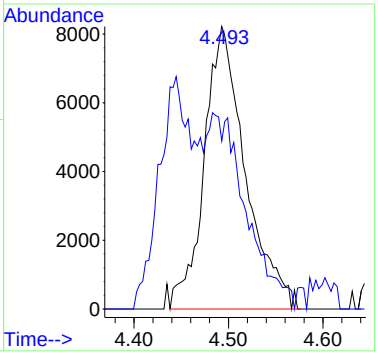


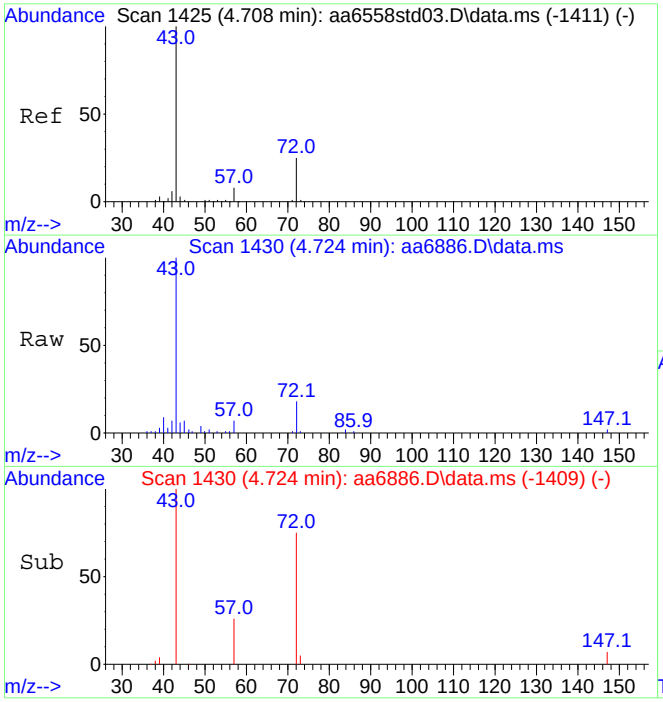


#30
Chloroform
Concen: 0.27 ppbV
RT: 4.493 min Scan# 1358
Delta R.T. 0.019 min
Lab File: aa6886.D
Acq: 15 Jul 2024 6:05 pm

Tgt Ion: 83 Resp: 24922

Ion	Ratio	Lower	Upper
83	100		
85	0.0	52.6	79.0#

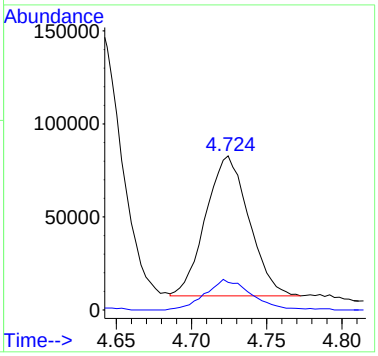


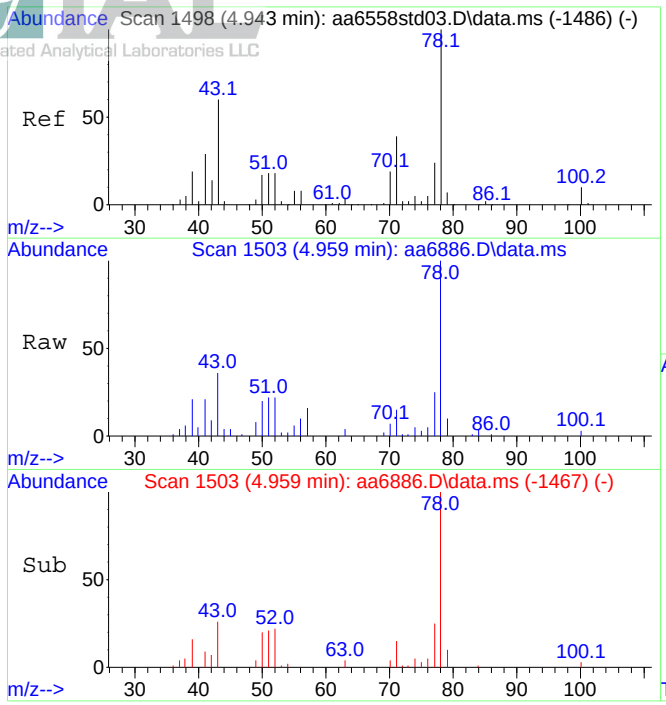


#35
Methyl ethyl ketone
Concen: 1.63 ppbV
RT: 4.724 min Scan# 1430
Delta R.T. 0.016 min
Lab File: aa6886.D
Acq: 15 Jul 2024 6:05 pm

Tgt Ion: 43 Resp: 150732

Ion	Ratio	Lower	Upper
43	100		
72	23.0	19.5	29.3

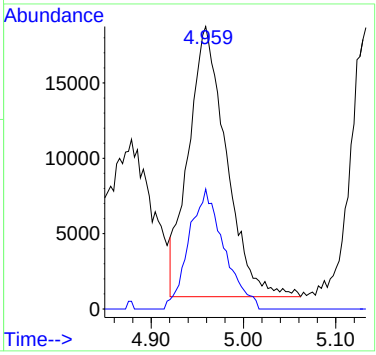


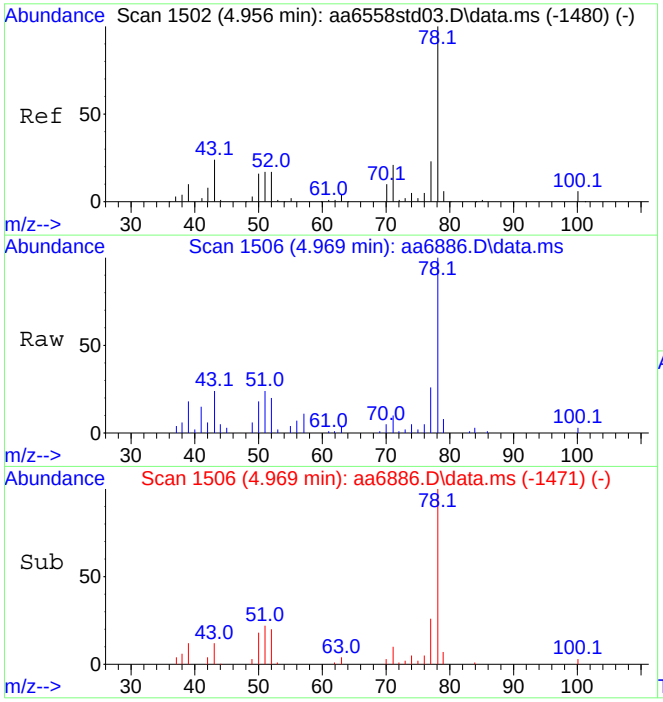


#36
n-Heptane
Concen: 0.59 ppbV
RT: 4.959 min Scan# 1503
Delta R.T. 0.016 min
Lab File: aa6886.D
Acq: 15 Jul 2024 6:05 pm

Tgt Ion: 43 Resp: 51181

Ion	Ratio	Lower	Upper
43	100		
71	41.0	46.2	69.2#

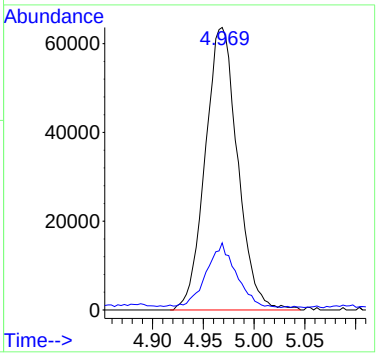


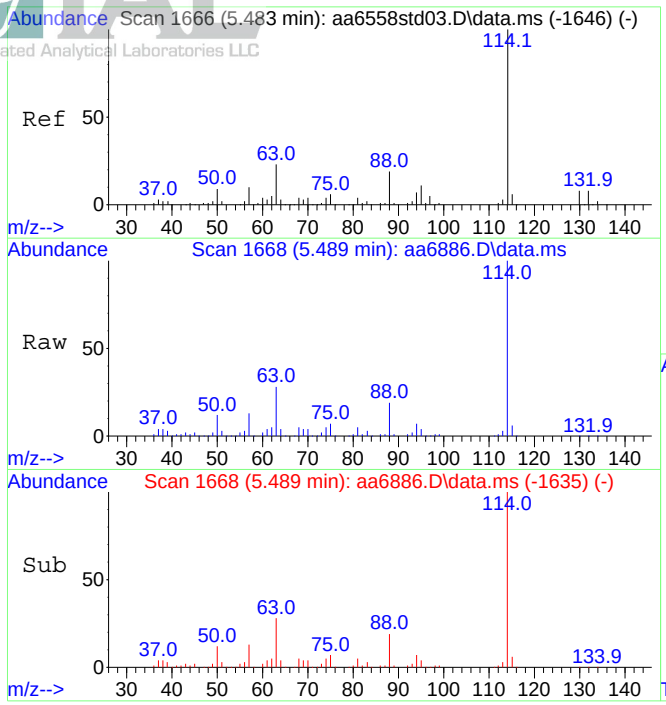


#37
Benzene
Concen: 1.07 ppbV
RT: 4.969 min Scan# 1506
Delta R.T. 0.013 min
Lab File: aa6886.D
Acq: 15 Jul 2024 6:05 pm

Tgt Ion: 78 Resp: 142015

Ion	Ratio	Lower	Upper
78	100		
51	21.0	14.9	22.3

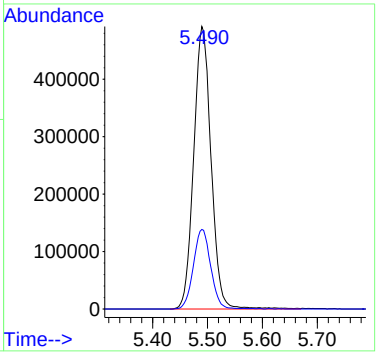


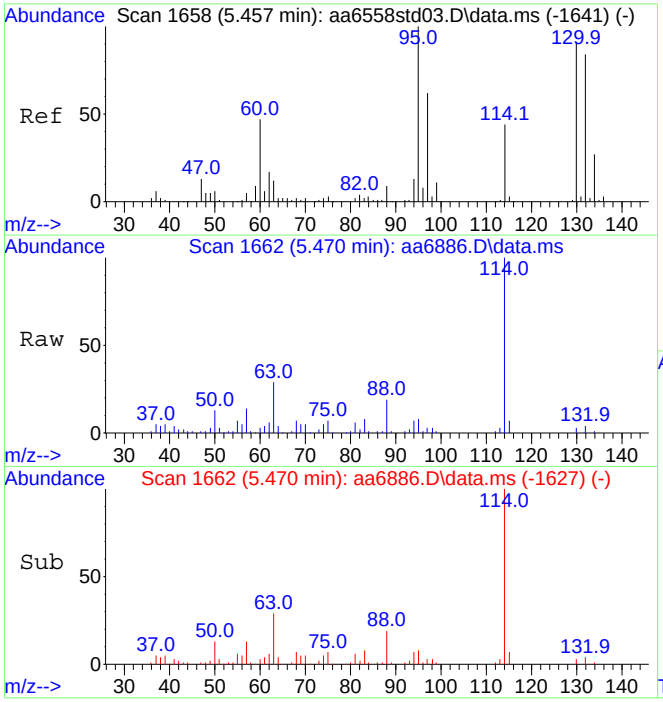


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.489 min Scan# 1668
Delta R.T. 0.006 min
Lab File: aa6886.D
Acq: 15 Jul 2024 6:05 pm

Tgt Ion:114 Resp: 1080997

Ion	Ratio	Lower	Upper
114	100		
63	28.1	3.6	43.6

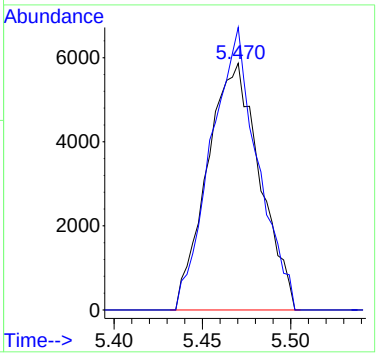


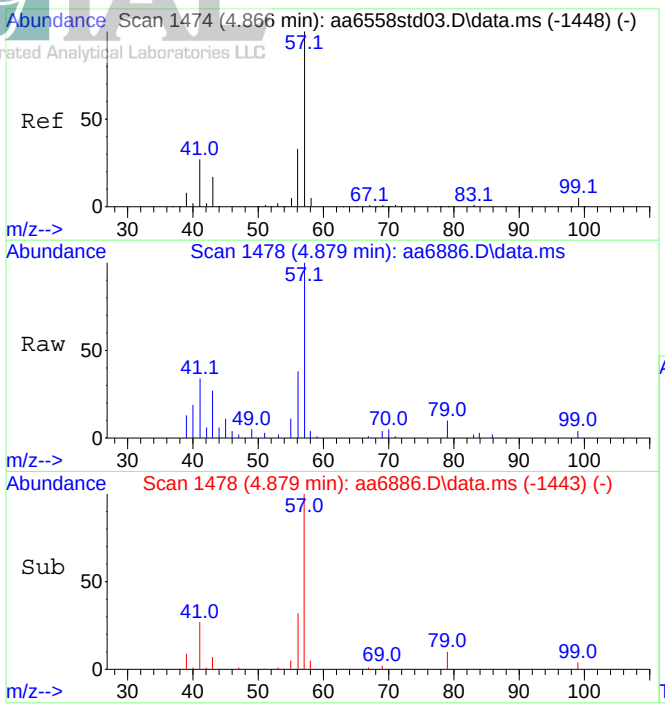


#40
Trichloroethene
Concen: 0.25 ppbV
RT: 5.470 min Scan# 1662
Delta R.T. 0.013 min
Lab File: aa6886.D
Acq: 15 Jul 2024 6:05 pm

Tgt Ion:130 Resp: 12163

Ion	Ratio	Lower	Upper
130	100		
132	101.6	76.6	114.8

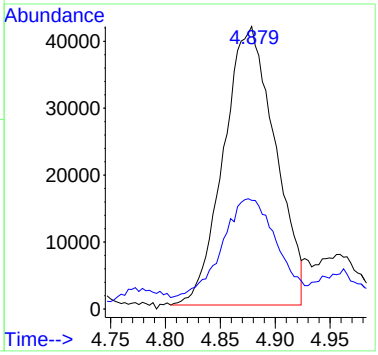


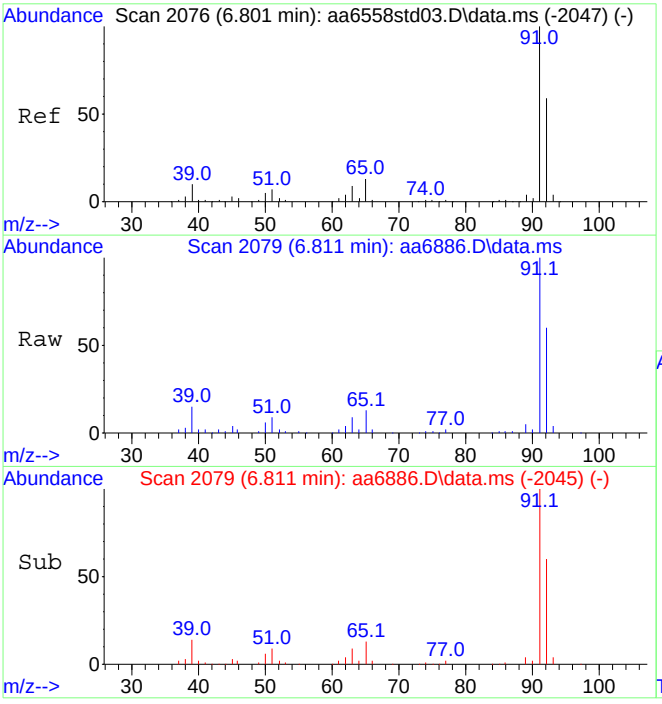


#41
2,2,4-Trimethylpentane
Concen: 0.71 ppbV
RT: 4.879 min Scan# 1478
Delta R.T. 0.013 min
Lab File: aa6886.D
Acq: 15 Jul 2024 6:05 pm

Tgt Ion: 57 Resp: 135846

Ion	Ratio	Lower	Upper
57	100		
56	36.8	26.0	39.0

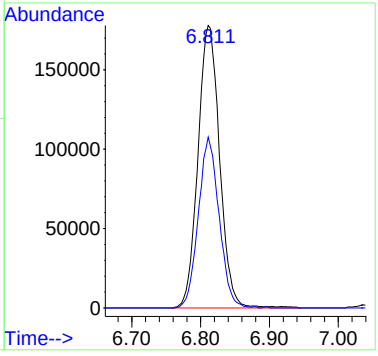


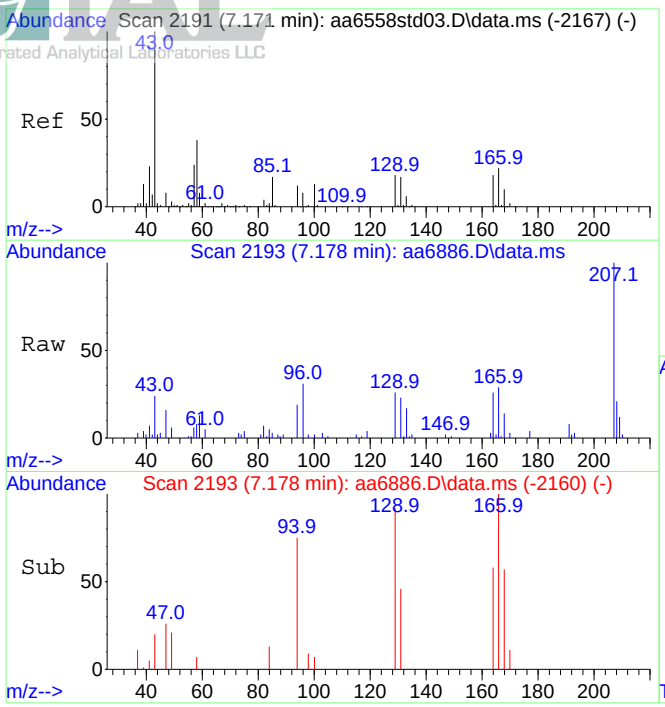


#47
Toluene
Concen: 2.82 ppbV
RT: 6.811 min Scan# 2079
Delta R.T. 0.010 min
Lab File: aa6886.D
Acq: 15 Jul 2024 6:05 pm

Tgt Ion: 91 Resp: 389632

Ion	Ratio	Lower	Upper
91	100		
92	57.6	47.0	70.6

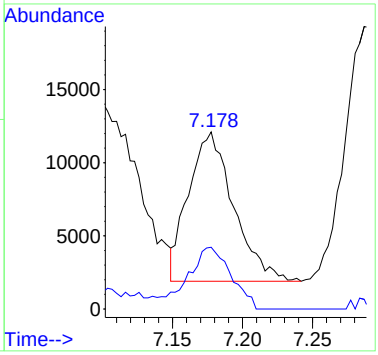


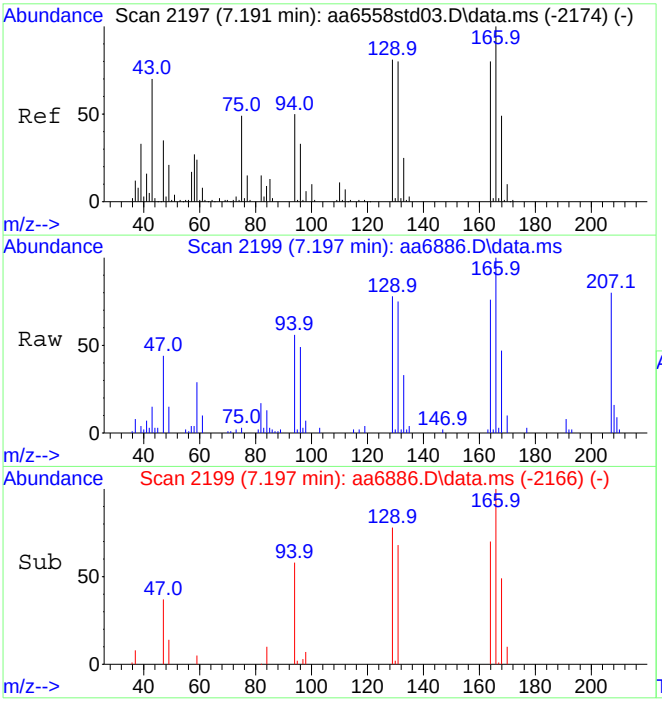


#48
Methyl isobutyl ketone
Concen: 0.23 ppbV
RT: 7.178 min Scan# 2193
Delta R.T. 0.006 min
Lab File: aa6886.D
Acq: 15 Jul 2024 6:05 pm

Tgt Ion: 43 Resp: 22850

Ion	Ratio	Lower	Upper
43	100		
58	38.4	31.0	46.4

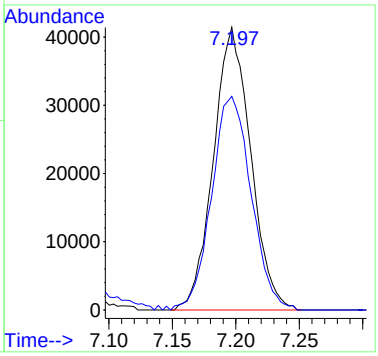


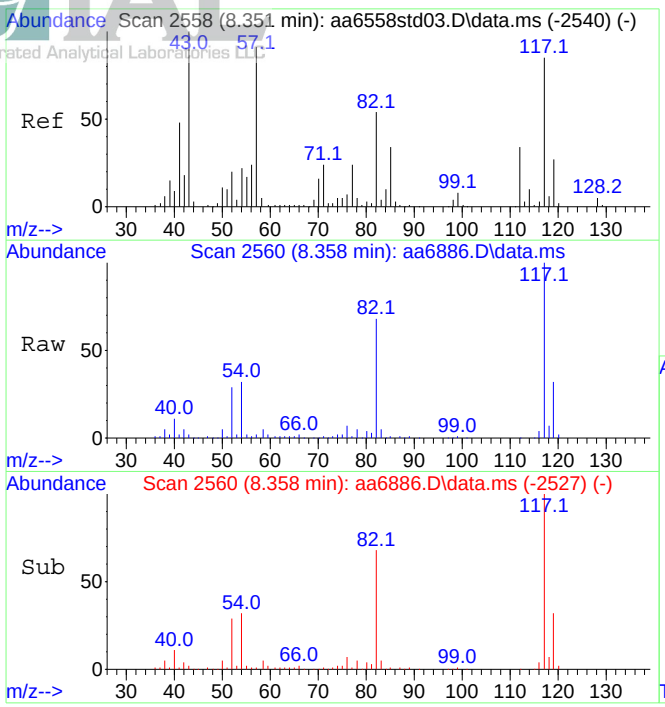


#49
Tetrachloroethene
Concen: 1.62 ppbV
RT: 7.197 min Scan# 2199
Delta R.T. 0.006 min
Lab File: aa6886.D
Acq: 15 Jul 2024 6:05 pm

Tgt Ion:166 Resp: 84767

Ion	Ratio	Lower	Upper
166	100		
164	80.1	62.8	94.2

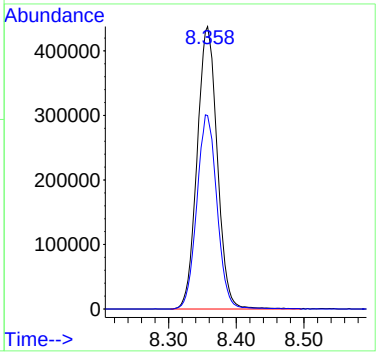


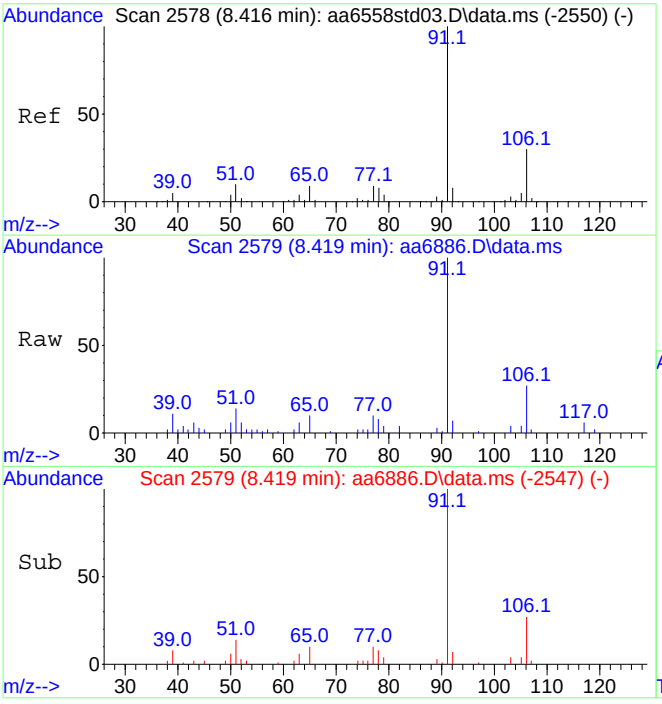


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.358 min Scan# 2560
Delta R.T. 0.006 min
Lab File: aa6886.D
Acq: 15 Jul 2024 6:05 pm

Tgt Ion:117 Resp: 904437

Ion	Ratio	Lower	Upper
117	100		
82	69.0	42.3	82.3

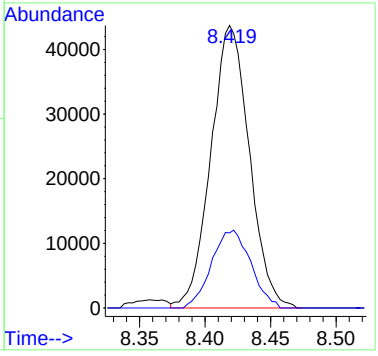


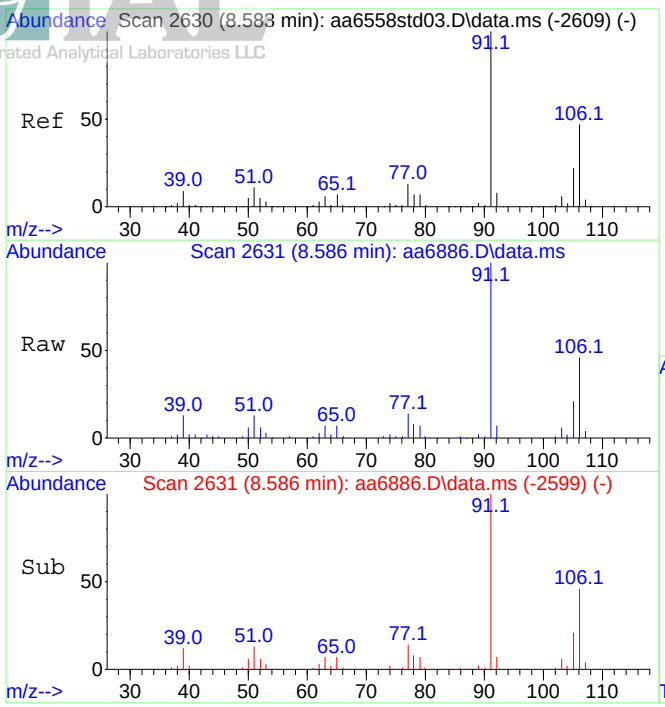


#58
Ethylbenzene
Concen: 0.50 ppbV
RT: 8.419 min Scan# 2579
Delta R.T. 0.003 min
Lab File: aa6886.D
Acq: 15 Jul 2024 6:05 pm

Tgt Ion: 91 Resp: 89433

Ion	Ratio	Lower	Upper
91	100		
106	27.9	23.8	35.8

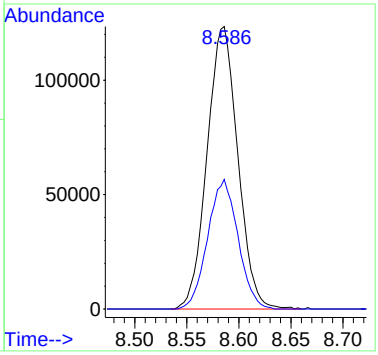


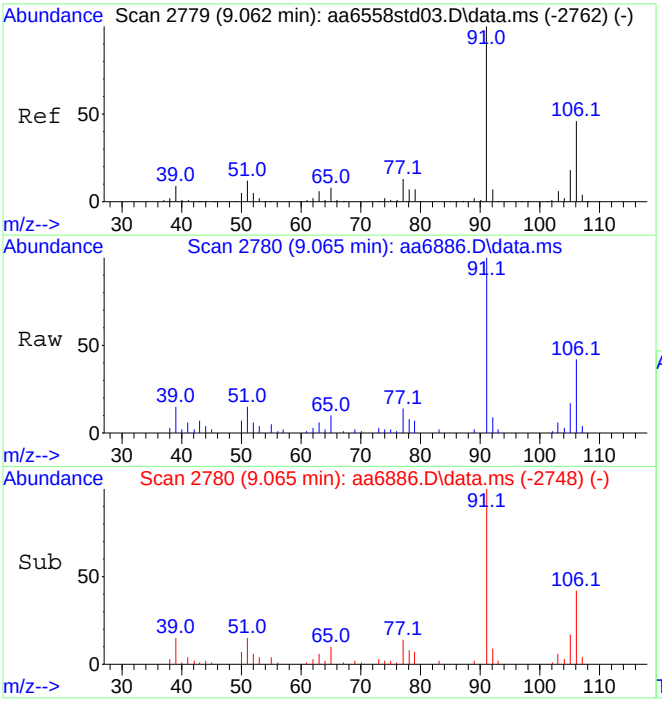


#59
Xylenes (m&p)
Concen: 1.89 ppbV
RT: 8.586 min Scan# 2631
Delta R.T. 0.003 min
Lab File: aa6886.D
Acq: 15 Jul 2024 6:05 pm

Tgt Ion: 91 Resp: 253637

Ion	Ratio	Lower	Upper
91	100		
106	45.1	37.4	56.2

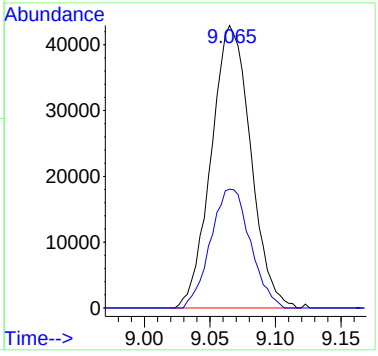


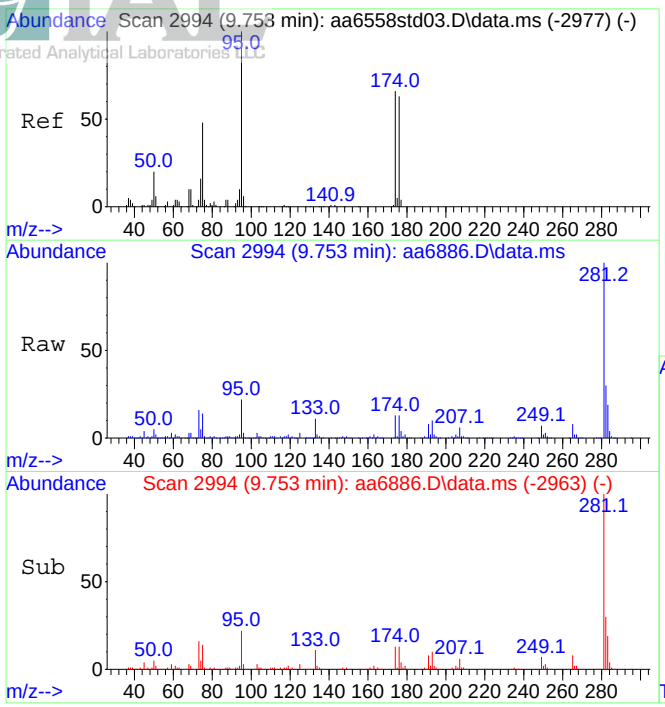


#60
Xylene (o)
Concen: 0.64 ppbV
RT: 9.065 min Scan# 2780
Delta R.T. 0.003 min
Lab File: aa6886.D
Acq: 15 Jul 2024 6:05 pm

Tgt Ion: 91 Resp: 89966

Ion	Ratio	Lower	Upper
91	100		
106	42.3	36.2	54.2

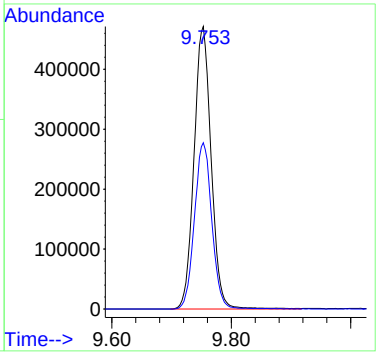


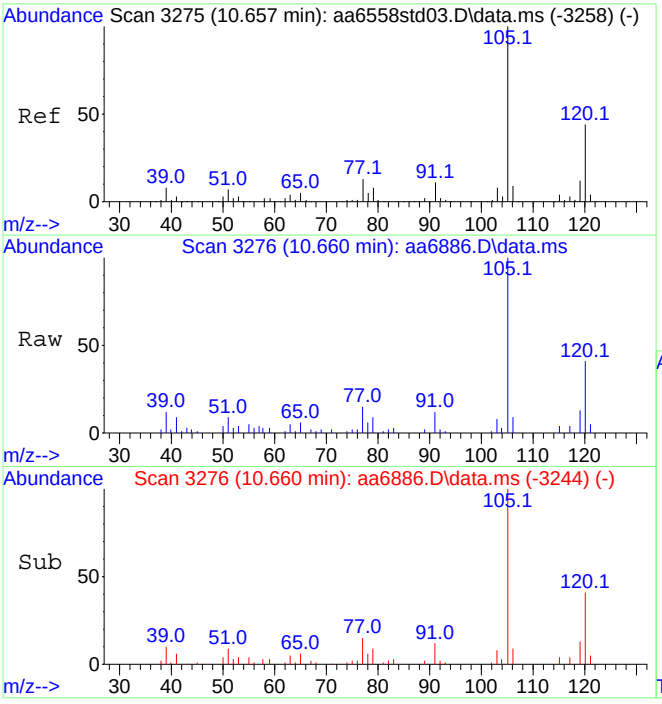


#64
Bromofluorobenzene (tune std)
Concen: 10.99 ppbV
RT: 9.753 min Scan# 2994
Delta R.T. -0.000 min
Lab File: aa6886.D
Acq: 15 Jul 2024 6:05 pm

Tgt Ion: 95 Resp: 940036

Ion	Ratio	Lower	Upper
95	100		
174	59.7	52.9	79.3

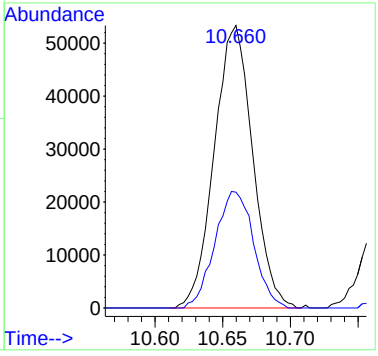


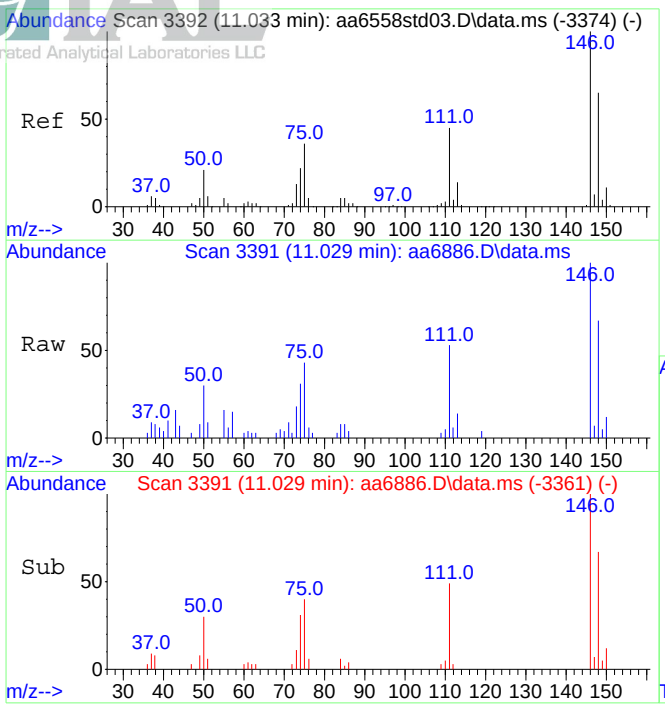


#70
1,2,4-Trimethylbenzene
Concen: 0.64 ppbV
RT: 10.660 min Scan# 3276
Delta R.T. 0.003 min
Lab File: aa6886.D
Acq: 15 Jul 2024 6:05 pm

Tgt Ion:105 Resp: 105215

Ion	Ratio	Lower	Upper
105	100		
120	41.5	34.5	51.7

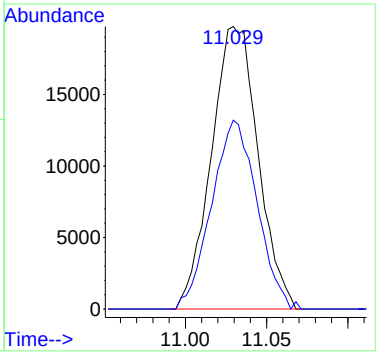




#71
1,3-Dichlorobenzene
Concen: 0.40 ppbV
RT: 11.029 min Scan# 3391
Delta R.T. -0.003 min
Lab File: aa6886.D
Acq: 15 Jul 2024 6:05 pm

Tgt Ion:146 Resp: 39576

Ion	Ratio	Lower	Upper
146	100		
148	64.8	51.2	76.8



Volatile Organic Compounds by EPA Method TO-15
Summary of Results

Lab ID:	E24-02398-02	Instrument ID:	AA
Client ID:	SG-11	GC/MS Column:	RTX-1, 0.32 mmID
Date Sampled:	07/12/2024 14:10	Injection Volmue:	500ml, 50ml
Date Received:	07/15/2024	Matrix:	Air-Other
Date Analyzed:	07/15/2024 19:05, 07/15/2024 15:15	% Moisture:	NA
Data File:	AA6888, AA6881	Dilution Factor:	1, 10
Summa ID:	2066	Analyst:	J. Walukiewicz

			Concentration Reported		Reporting Limits	
Compound	**CAS #**	**Q**	**ppbv**	**ug/m3**	**ppbv**	**ug/m3**
Acetone	67-64-1		34	81	0.20	0.48
Benzene	71-43-2		1.5	4.8	0.20	0.64
Bromodichloromethane	75-27-4		ND	ND	0.20	1.3
Bromoform	75-25-2		ND	ND	0.20	2.1
Bromomethane	74-83-9		ND	ND	0.20	0.78
1,3-Butadiene	106-99-0		ND	ND	0.20	0.44
Chlorobenzene	108-90-7		ND	ND	0.20	0.92
Chloroethane	75-00-3		ND	ND	0.20	0.53
Chloroform	67-66-3		1.0	4.9	0.20	0.98
Chloromethane	74-87-3		ND	ND	0.20	0.41
Carbon disulfide	75-15-0		0.49	1.5	0.20	0.62
Carbon tetrachloride	56-23-5		ND	ND	0.040	0.25
Cyclohexane	110-82-7		0.86	3.0	0.20	0.69
Dibromochloromethane	124-48-1		ND	ND	0.20	1.7
1,2-Dibromoethane	106-93-4		ND	ND	0.20	1.5
1,2-Dichlorobenzene	95-50-1		ND	ND	0.20	1.2
1,3-Dichlorobenzene	541-73-1		0.72	4.3	0.20	1.2
1,4-Dichlorobenzene	106-46-7		ND	ND	0.20	1.2
Dichlorodifluoromethane	75-71-8		ND	ND	0.20	0.99
1,1-Dichloroethane	75-34-3		ND	ND	0.20	0.81
1,2-Dichloroethane	107-06-2		ND	ND	0.20	0.81
1,1-Dichloroethene	75-35-4		ND	ND	0.20	0.79
1,2-Dichloroethene (cis)	156-59-2		ND	ND	0.20	0.79
1,2-Dichloroethene (trans)	156-60-5		ND	ND	0.20	0.79
1,2-Dichloropropane	78-87-5		ND	ND	0.20	0.92
1,3-Dichloropropene (cis)	10061-01-5		ND	ND	0.20	0.91
1,3-Dichloropropene (trans)	10061-02-6		ND	ND	0.20	0.91
1,2-Dichlorotetrafluoroethane	76-14-2		ND	ND	0.20	1.4
1,4-Dioxane	123-91-1		0.63	2.3	0.20	0.72
Ethylbenzene	100-41-4		0.76	3.3	0.20	0.87
n-Heptane	142-82-5		0.70	2.9	0.20	0.82
1,3-Hexachlorobutadiene	87-68-3		ND	ND	0.20	2.1
n-Hexane	110-54-3		0.40	1.4	0.20	0.70
Methylene chloride	75-09-2		2.5	8.5	0.20	0.69
Methyl ethyl ketone	78-93-3		2.8	8.2	0.20	0.59
Methyl isobutyl ketone	108-10-1		0.66	2.7	0.20	0.82
Methyl tert-butyl ether	1634-04-4		ND	ND	0.20	0.72
Styrene	100-42-5		0.64	2.7	0.20	0.85
Tert-butyl alcohol	75-65-0		12	35	0.20	0.61
1,1,2,2-Tetrachloroethane	79-34-5		ND	ND	0.20	1.4
Tetrachloroethene	127-18-4	D	120	790	2.0	14
Toluene	108-88-3		6.0	23	0.20	0.75
1,2,4-Trichlorobenzene	120-82-1		ND	ND	0.20	1.5
1,1,1-Trichloroethane	71-55-6		0.39	2.1	0.20	1.1
1,1,2-Trichloroethane	79-00-5		ND	ND	0.20	1.1

Qualifiers:
D = Dilution required

Volatile Organic Compounds by EPA Method TO-15
Summary of Results

Lab ID:	E24-02398-02	Instrument ID:	AA
Client ID:	SG-11	GC/MS Column:	RTX-1, 0.32 mmID
Date Sampled:	07/12/2024 14:10	Injection Volmue:	500ml, 50ml
Date Received:	07/15/2024	Matrix:	Air-Other
Date Analyzed:	07/15/2024 19:05, 07/15/2024 15:15	% Moisture:	NA
Data File:	AA6888, AA6881	Dilution Factor:	1, 10
Summa ID:	2066	Analyst:	J. Walukiewicz

			Concentration Reported		Reporting Limits	
Compound	**CAS #**	**Q**	**ppbv**	**ug/m3**	**ppbv**	**ug/m3**
Trichloroethene	79-01-6		9.0	48	0.046	0.25
Trichlorofluoromethane	75-69-4		0.30	1.7	0.20	1.1
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1		ND	ND	0.20	1.5
1,2,4-Trimethylbenzene	95-63-6		1.3	6.3	0.20	0.98
1,3,5-Trimethylbenzene	108-67-8		0.33	1.6	0.20	0.98
2,2,4-Trimethylpentane	540-84-1		0.49	2.3	0.20	0.93
Vinyl bromide	593-60-2		ND	ND	0.20	0.87
Vinyl chloride	75-01-4		ND	ND	0.20	0.51
Xylenes (m&p)	179601-23-1		2.9	12	0.20	0.87
Xylenes (o)	95-47-6		1.1	4.7	0.20	0.87

Qualifiers:
D = Dilution required

Data Path : C:\DATA\2024\07-2024\07-15-2024\
Data File : aa6888.D
Acq On : 15 Jul 2024 7:05 pm
Operator : jjw
Sample : E24-02398-02
Misc : 2066, 500cc
ALS Vial : 14 Sample Multiplier: 1

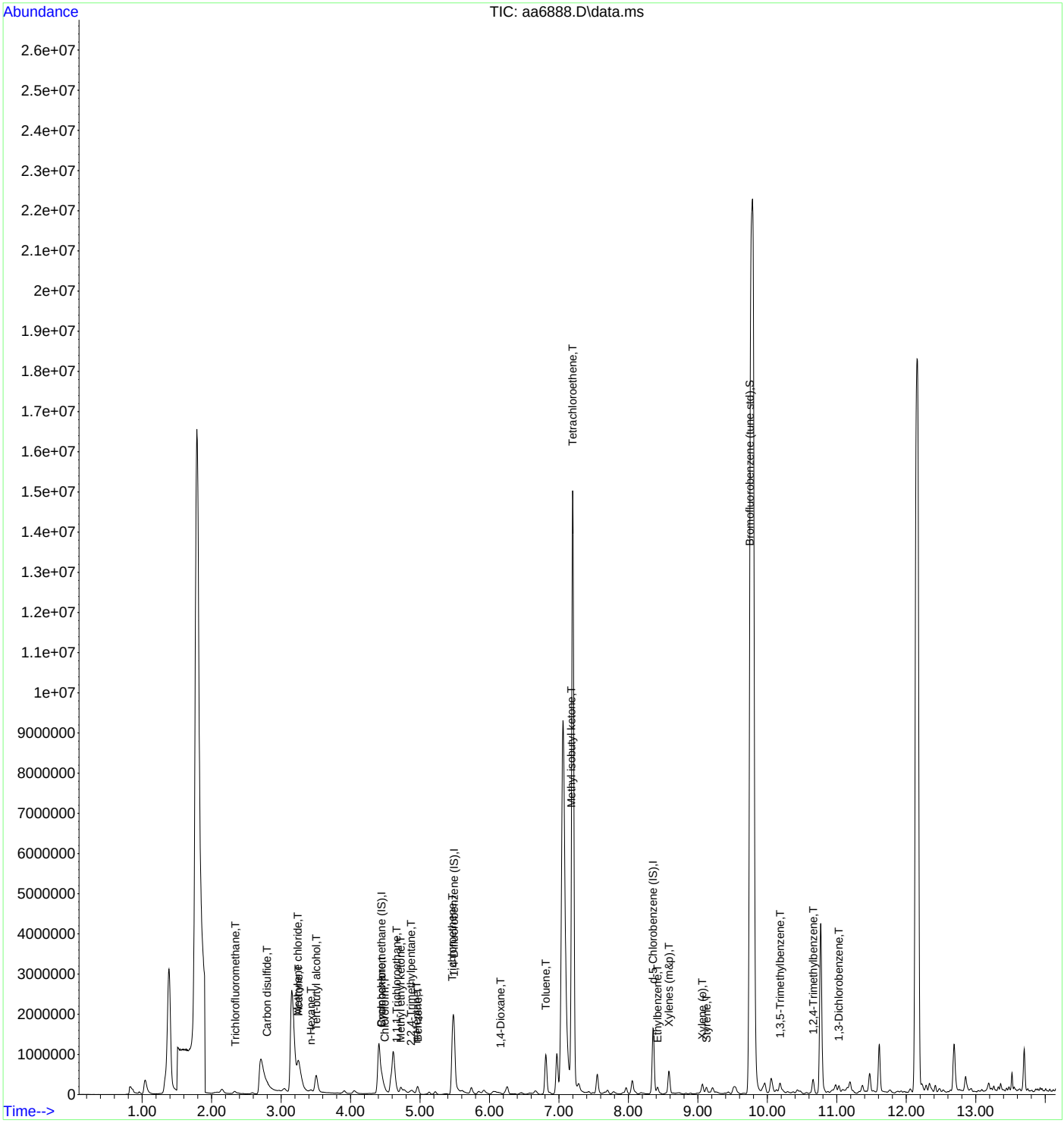
Quant Time: Jul 16 10:14:10 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

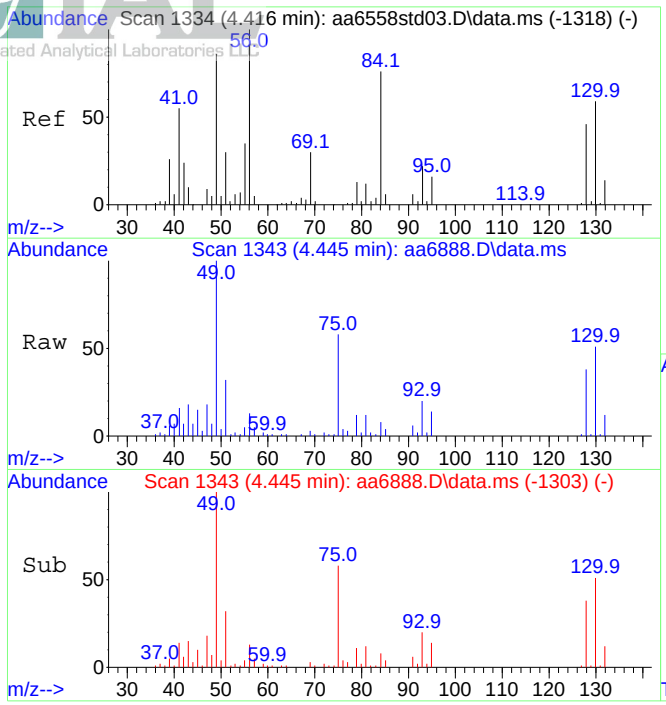
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.445	130	195474	10.00	ppbV		0.029
39) 1,4-Difluorobenzene (IS)	5.490	114	1064377	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.354	117	908152	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.747	95	753779	8.77	ppbV		0.000
Target Compounds							Qvalue
12) Trichlorofluoromethane	2.342	101	19151	0.30	ppbV		100
15) Carbon disulfide	2.798	76	40389	0.49	ppbV	#	67
20) Methylene chloride	3.242	49	86758	2.46	ppbV		82
21) Acetone	3.252	43	1487696	33.92	ppbV		90
24) n-Hexane	3.432	57	30173	0.40	ppbV		92
26) Tert-butyl alcohol	3.506	59	706275	11.54	ppbV		100
29) Cyclohexane	4.448	56	43304	0.86	ppbV	#	69
30) Chloroform	4.493	83	62411	1.00	ppbV		95
34) 1,1,1-Trichloroethane	4.667	97	23018	0.39	ppbV		99
35) Methyl ethyl ketone	4.724	43	172856	2.78	ppbV		97
36) n-Heptane	4.953	43	40970	0.70	ppbV		85
37) Benzene	4.969	78	132384	1.49	ppbV		94
40) Trichloroethene	5.467	130	433344	9.00	ppbV		100
41) 2,2,4-Trimethylpentane	4.872	57	92332	0.49	ppbV	#	82
45) 1,4-Dioxane	6.158	88	15900	0.63	ppbV	#	72
47) Toluene	6.811	91	823265	6.04	ppbV		99
48) Methyl isobutyl ketone	7.178	43	66039	0.66	ppbV		92
49) Tetrachloroethene	7.197	166	4539271	87.94	ppbV		100
58) Ethylbenzene	8.422	91	136081	0.76	ppbV		96
59) Xylenes (m&p)	8.583	91	386940	2.88	ppbV		98
60) Xylene (o)	9.065	91	153398	1.08	ppbV		94
61) Styrene	9.126	104	60070	0.64	ppbV		100
69) 1,3,5-Trimethylbenzene	10.184	105	54556	0.33	ppbV		98
70) 1,2,4-Trimethylbenzene	10.660	105	213159	1.29	ppbV		98
71) 1,3-Dichlorobenzene	11.030	146	72489	0.72	ppbV		99

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

Data Path : C:\DATA\2024\07-2024\07-15-2024\
Data File : aa6888.D
Acq On : 15 Jul 2024 7:05 pm
Operator : jjw
Sample : E24-02398-02
Misc : 2066, 500cc
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jul 16 10:14:10 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

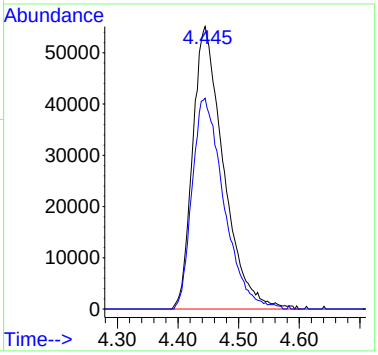


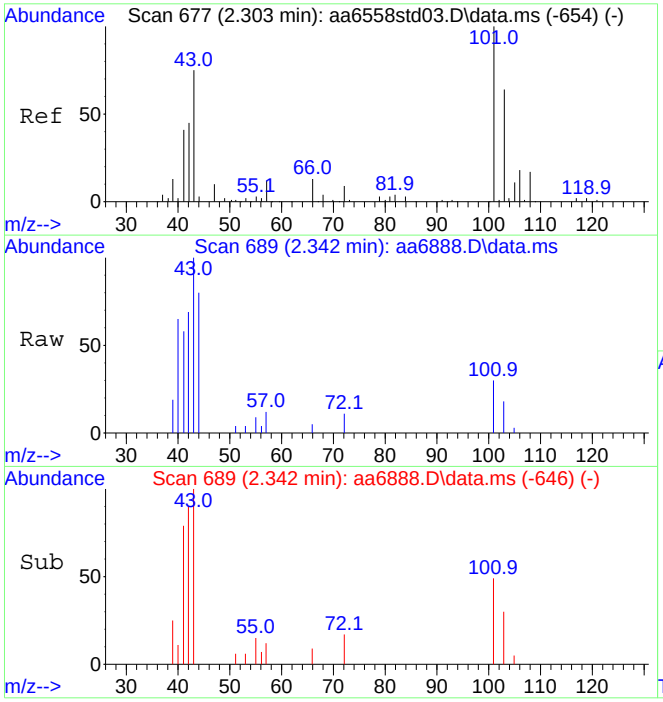


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.445 min Scan# 1343
Delta R.T. 0.029 min
Lab File: aa6888.D
Acq: 15 Jul 2024 7:05 pm

Tgt Ion:130 Resp: 195474

Ion	Ratio	Lower	Upper
130	100		
128	76.5	57.8	97.8

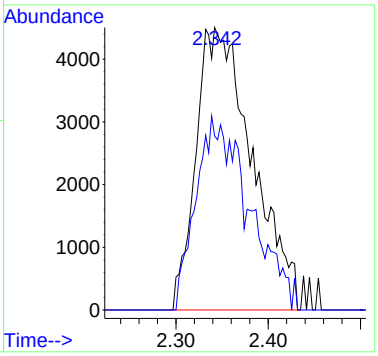


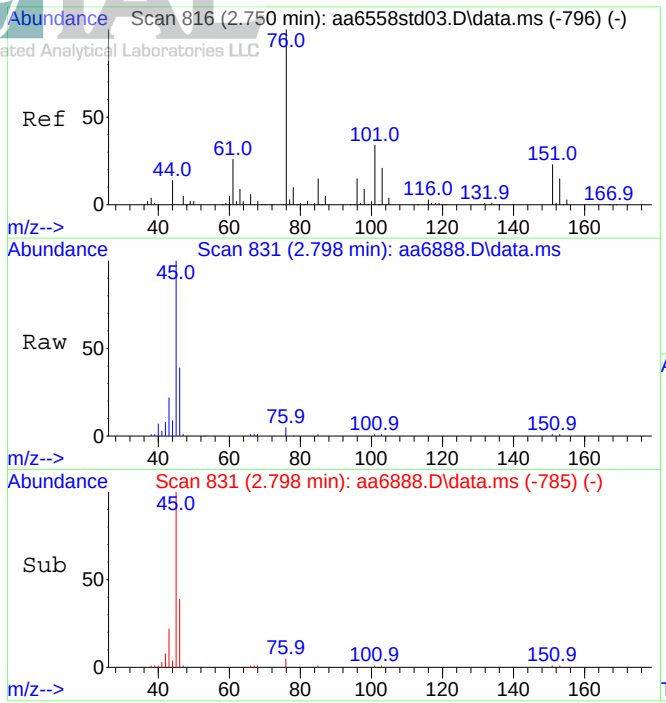


#12
Trichlorofluoromethane
Concen: 0.30 ppbV
RT: 2.342 min Scan# 689
Delta R.T. 0.039 min
Lab File: aa6888.D
Acq: 15 Jul 2024 7:05 pm

Tgt Ion:101 Resp: 19151

Ion	Ratio	Lower	Upper
101	100		
103	64.7	51.9	77.9

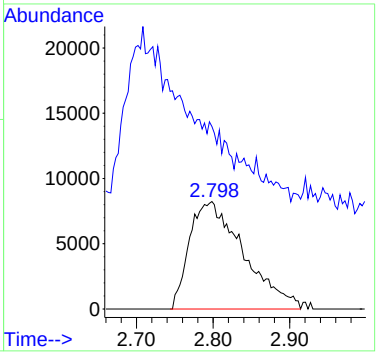


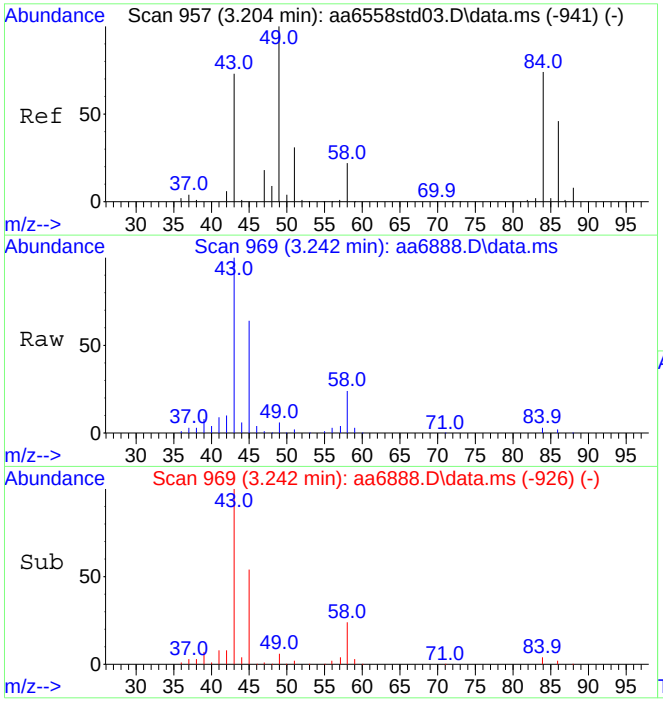


#15
Carbon disulfide
Concen: 0.49 ppbV
RT: 2.798 min Scan# 831
Delta R.T. 0.048 min
Lab File: aa6888.D
Acq: 15 Jul 2024 7:05 pm

Tgt Ion: 76 Resp: 40389

Ion	Ratio	Lower	Upper
76	100		
44	0.0	10.6	16.0#

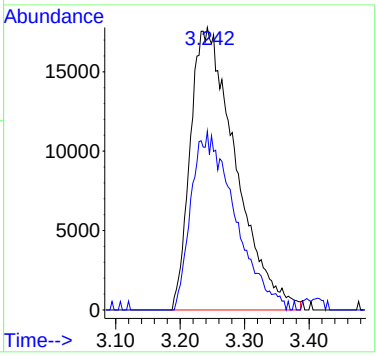


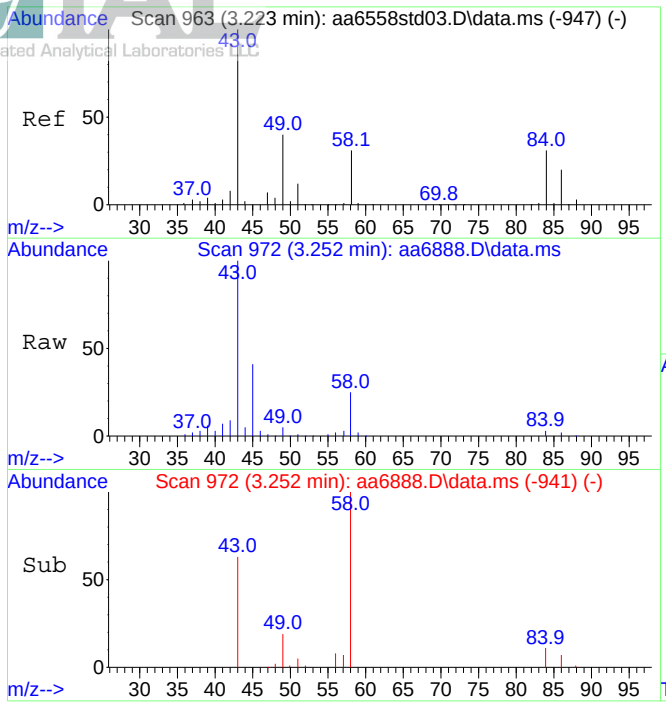


#20
Methylene chloride
Concen: 2.46 ppbV
RT: 3.242 min Scan# 969
Delta R.T. 0.039 min
Lab File: aa6888.D
Acq: 15 Jul 2024 7:05 pm

Tgt Ion: 49 Resp: 86758

Ion	Ratio	Lower	Upper
49	100		
84	61.1	56.2	96.2

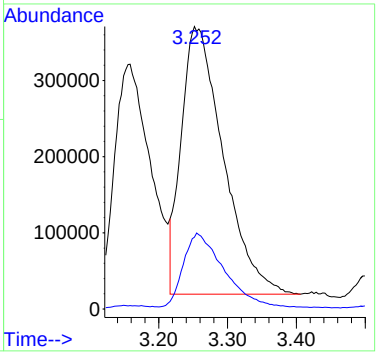


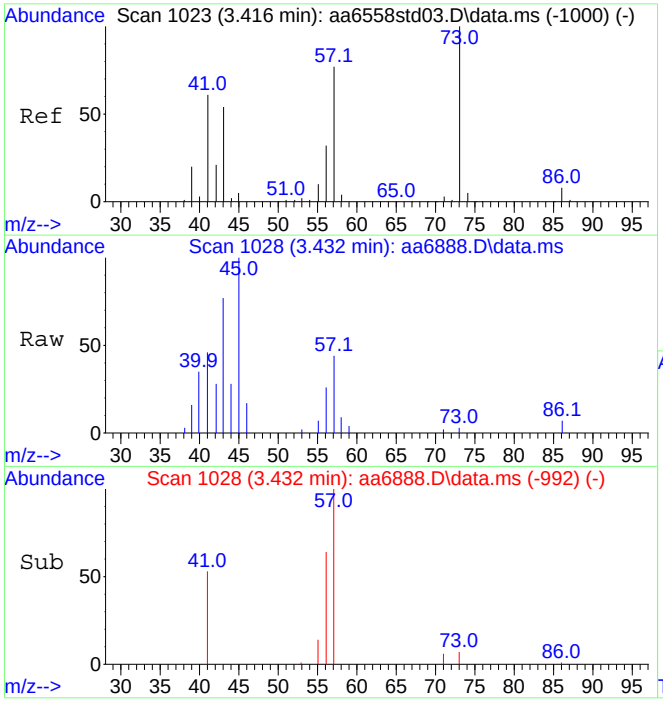


#21
Acetone
Concen: 33.92 ppbV
RT: 3.252 min Scan# 972
Delta R.T. 0.029 min
Lab File: aa6888.D
Acq: 15 Jul 2024 7:05 pm

Tgt Ion: 43 Resp: 1487696

Ion	Ratio	Lower	Upper
43	100		
58	26.4	25.4	38.0

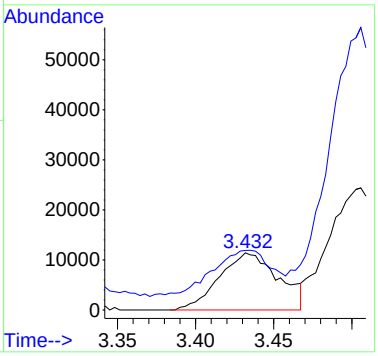


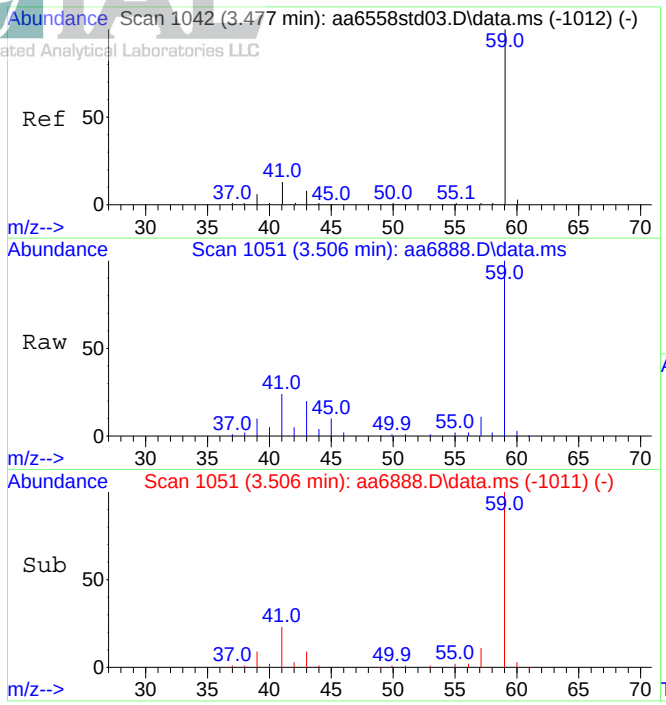


#24
n-Hexane
Concen: 0.40 ppbV
RT: 3.432 min Scan# 1028
Delta R.T. 0.016 min
Lab File: aa6888.D
Acq: 15 Jul 2024 7:05 pm

Tgt Ion: 57 Resp: 30173

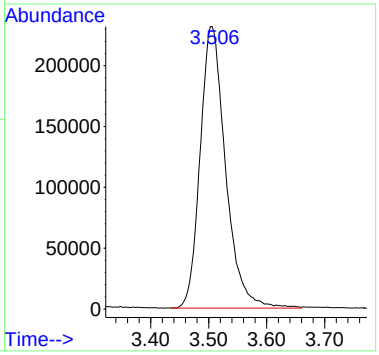
Ion	Ratio	Lower	Upper
57	100		
41	81.8	71.6	107.4

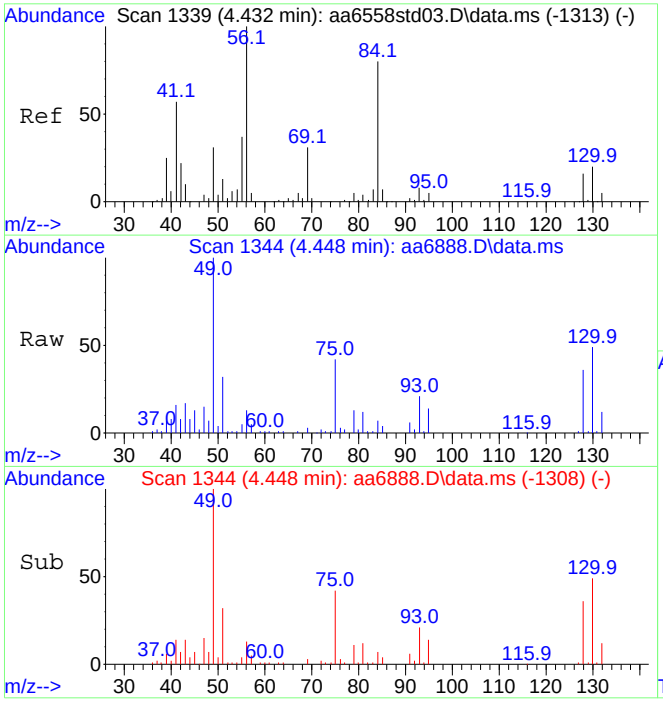




#26
Tert-butyl alcohol
Concen: 11.54 ppbV
RT: 3.506 min Scan# 1051
Delta R.T. 0.029 min
Lab File: aa6888.D
Acq: 15 Jul 2024 7:05 pm

Tgt Ion: 59 Resp: 706275

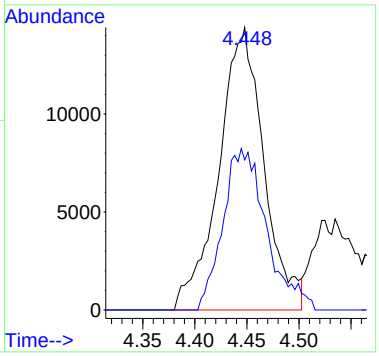


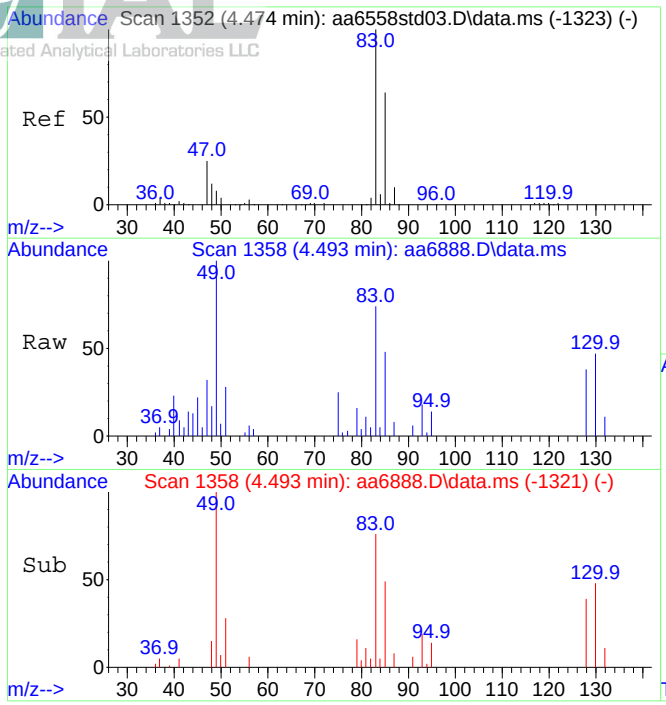


#29
Cyclohexane
Concen: 0.86 ppbV
RT: 4.448 min Scan# 1344
Delta R.T. 0.016 min
Lab File: aa6888.D
Acq: 15 Jul 2024 7:05 pm

Tgt Ion: 56 Resp: 43304

Ion	Ratio	Lower	Upper
56	100		
84	55.1	66.8	100.2#

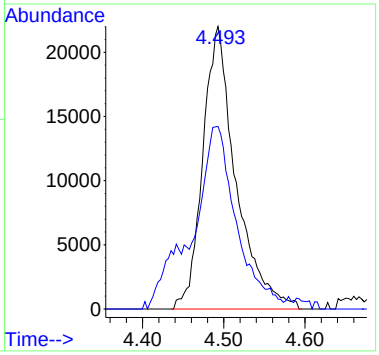


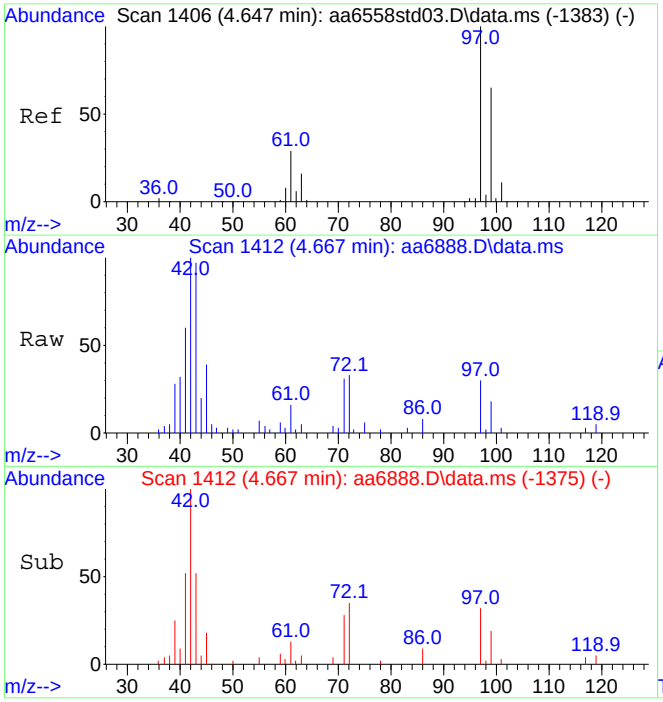


#30
Chloroform
Concen: 1.00 ppbV
RT: 4.493 min Scan# 1358
Delta R.T. 0.019 min
Lab File: aa6888.D
Acq: 15 Jul 2024 7:05 pm

Tgt Ion: 83 Resp: 62411

Ion	Ratio	Lower	Upper
83	100		
85	61.7	52.6	79.0

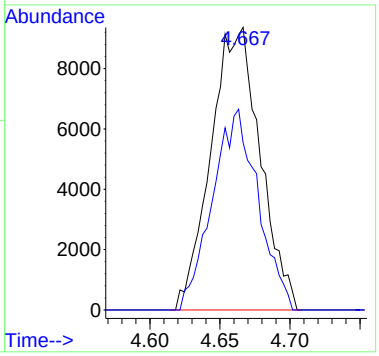


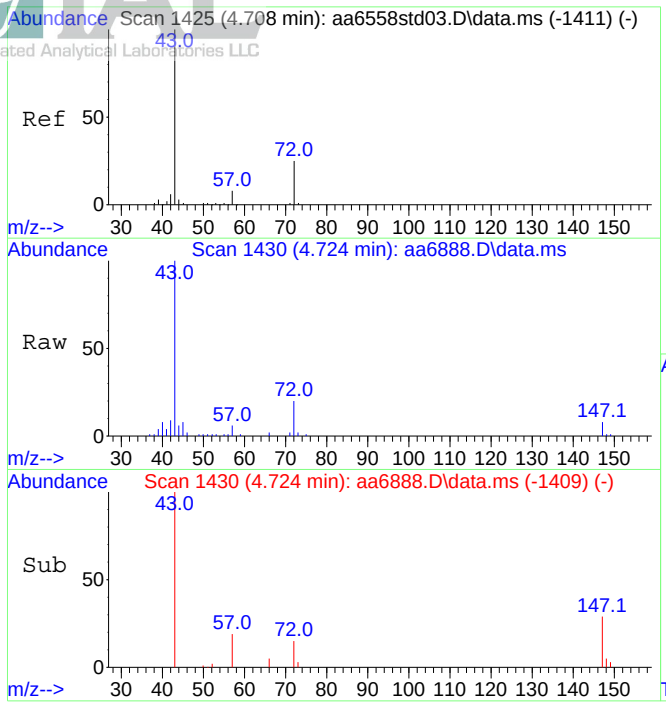


#34
1,1,1-Trichloroethane
Concen: 0.39 ppbV
RT: 4.667 min Scan# 1412
Delta R.T. 0.019 min
Lab File: aa6888.D
Acq: 15 Jul 2024 7:05 pm

Tgt Ion: 97 Resp: 23018

Ion	Ratio	Lower	Upper
97	100		
99	65.3	51.4	77.2

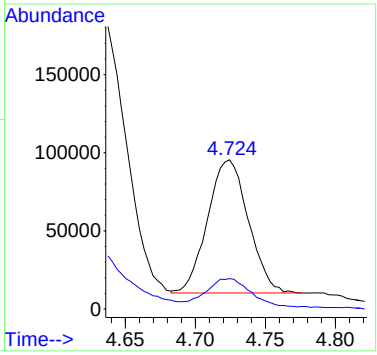


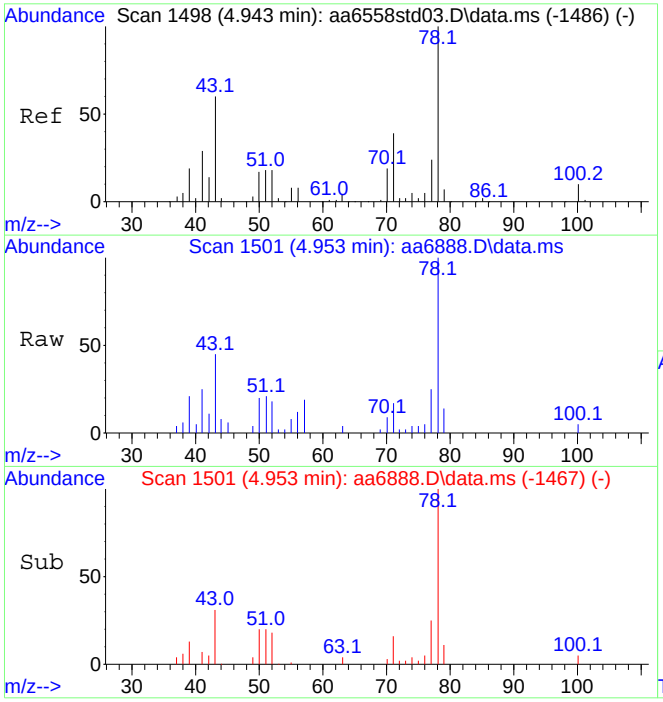


#35
Methyl ethyl ketone
Concen: 2.78 ppbV
RT: 4.724 min Scan# 1430
Delta R.T. 0.016 min
Lab File: aa6888.D
Acq: 15 Jul 2024 7:05 pm

Tgt Ion: 43 Resp: 172856

Ion	Ratio	Lower	Upper
43	100		
72	22.8	19.5	29.3

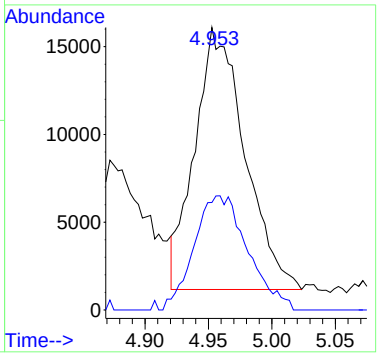


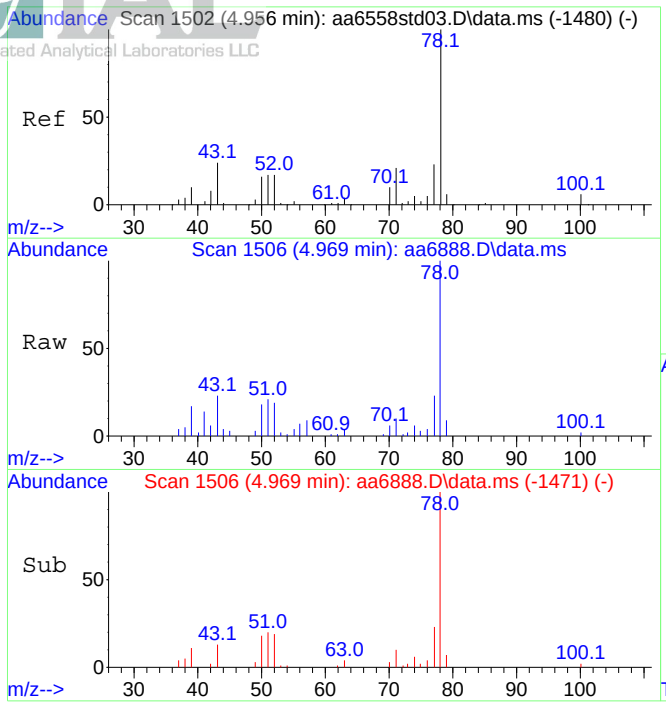


#36
n-Heptane
Concen: 0.70 ppbV
RT: 4.953 min Scan# 1501
Delta R.T. 0.010 min
Lab File: aa6888.D
Acq: 15 Jul 2024 7:05 pm

Tgt Ion: 43 Resp: 40970

Ion	Ratio	Lower	Upper
43	100		
71	46.6	46.2	69.2

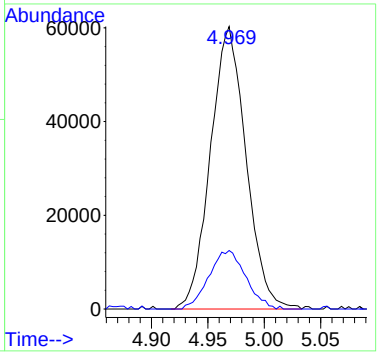


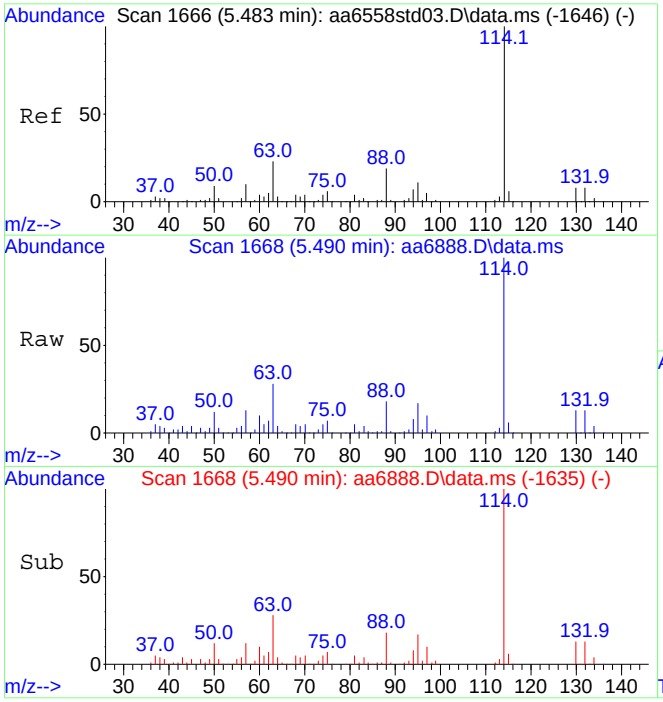


#37
Benzene
Concen: 1.49 ppbV
RT: 4.969 min Scan# 1506
Delta R.T. 0.013 min
Lab File: aa6888.D
Acq: 15 Jul 2024 7:05 pm

Tgt Ion: 78 Resp: 132384

Ion	Ratio	Lower	Upper
78	100		
51	21.4	14.9	22.3

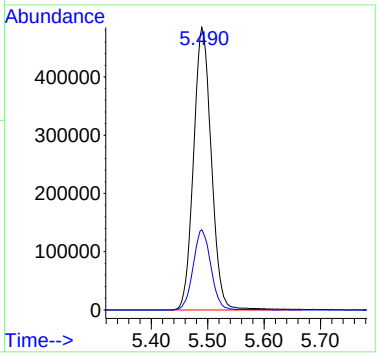


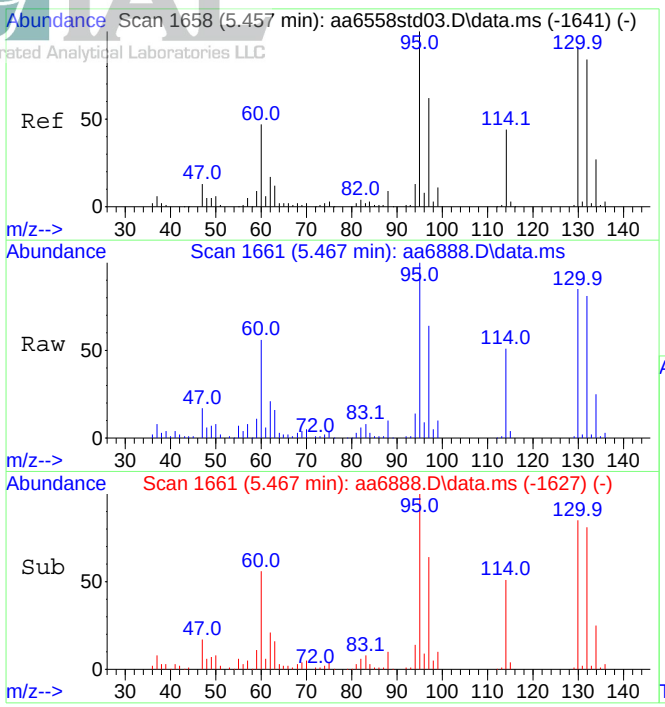


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.490 min Scan# 1668
Delta R.T. 0.006 min
Lab File: aa6888.D
Acq: 15 Jul 2024 7:05 pm

Tgt Ion:114 Resp: 1064377

Ion	Ratio	Lower	Upper
114	100		
63	28.3	3.6	43.6

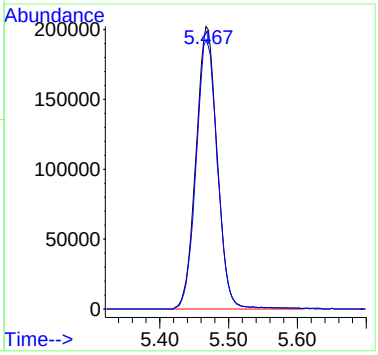


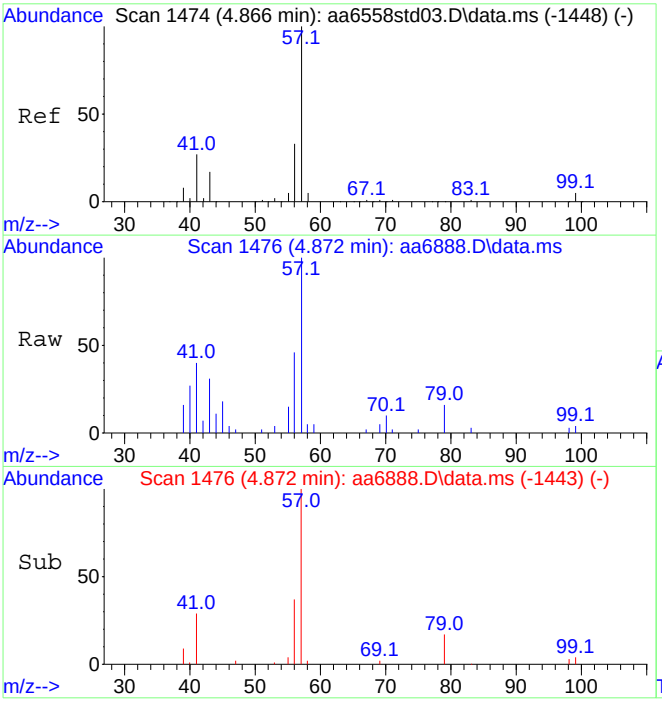


#40
Trichloroethene
Concen: 9.00 ppbV
RT: 5.467 min Scan# 1661
Delta R.T. 0.010 min
Lab File: aa6888.D
Acq: 15 Jul 2024 7:05 pm

Tgt Ion:130 Resp: 433344

Ion	Ratio	Lower	Upper
130	100		
132	95.8	76.6	114.8

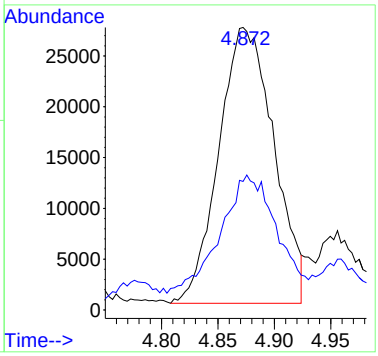


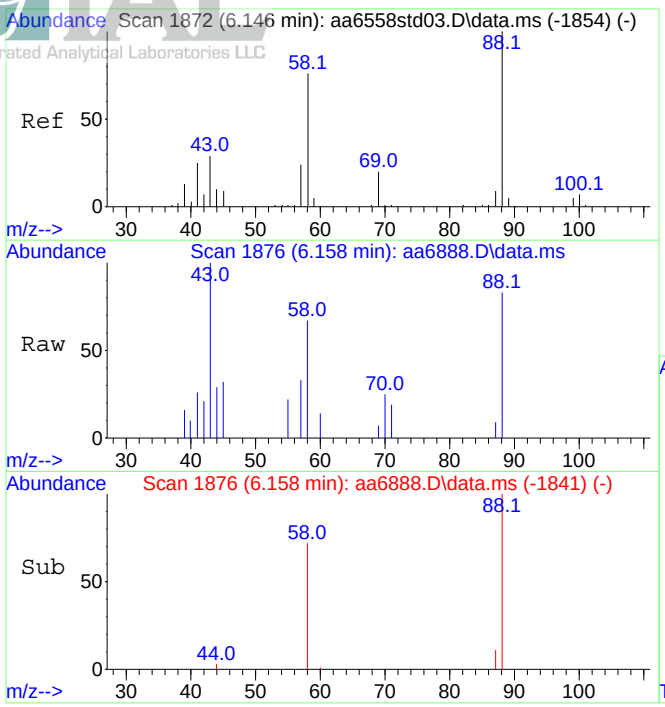


#41
2,2,4-Trimethylpentane
Concen: 0.49 ppbV
RT: 4.872 min Scan# 1476
Delta R.T. 0.006 min
Lab File: aa6888.D
Acq: 15 Jul 2024 7:05 pm

Tgt Ion: 57 Resp: 92332

Ion	Ratio	Lower	Upper
57	100		
56	42.5	26.0	39.0#

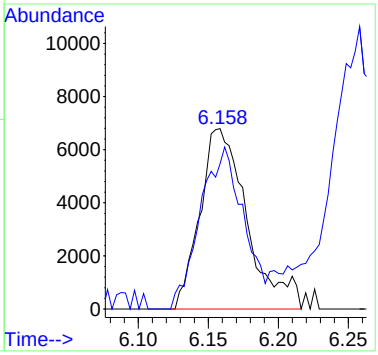


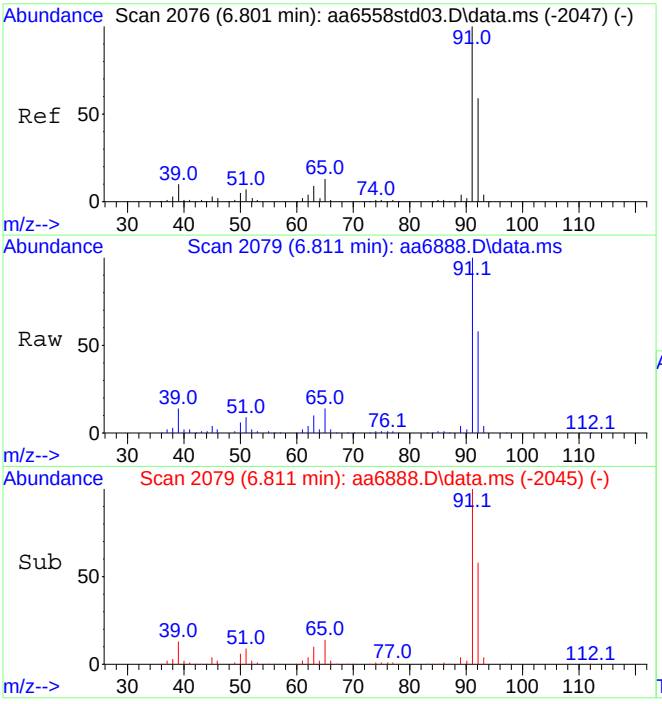


#45
1,4-Dioxane
Concen: 0.63 ppbV
RT: 6.158 min Scan# 1876
Delta R.T. 0.013 min
Lab File: aa6888.D
Acq: 15 Jul 2024 7:05 pm

Tgt Ion: 88 Resp: 15900

Ion	Ratio	Lower	Upper
88	100		
58	98.7	59.9	89.9#

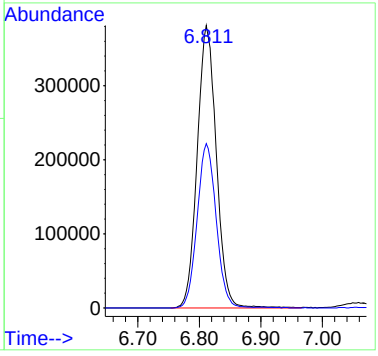


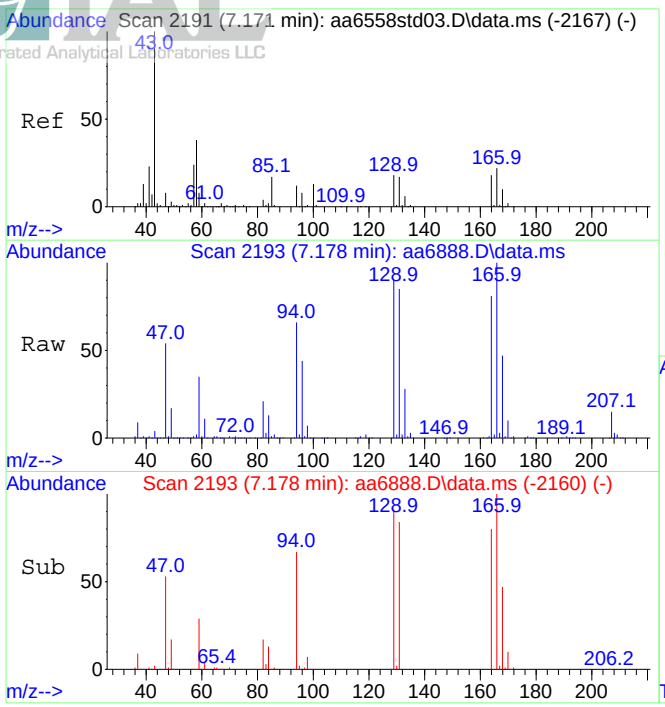


#47
Toluene
Concen: 6.04 ppbV
RT: 6.811 min Scan# 2079
Delta R.T. 0.010 min
Lab File: aa6888.D
Acq: 15 Jul 2024 7:05 pm

Tgt Ion: 91 Resp: 823265

Ion	Ratio	Lower	Upper
91	100		
92	58.0	47.0	70.6

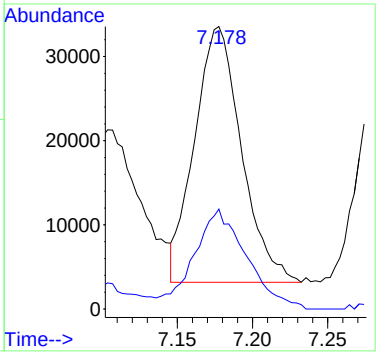


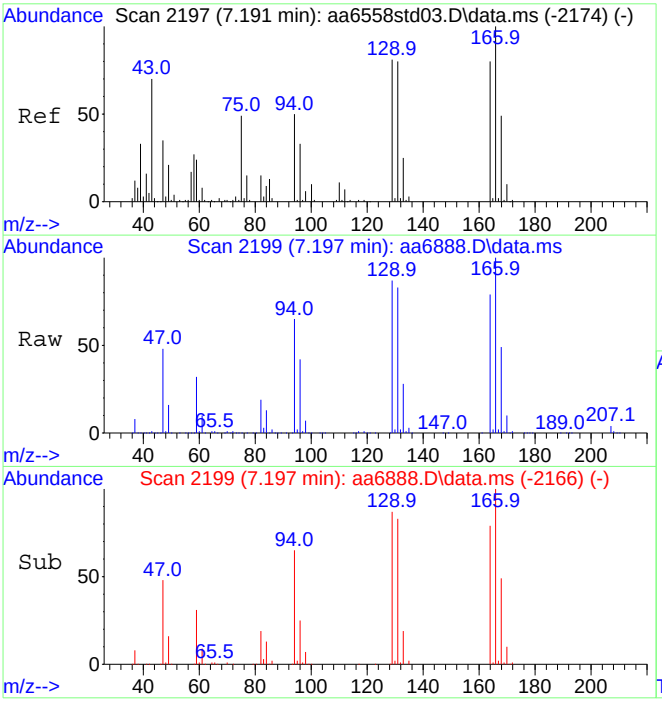


#48
Methyl isobutyl ketone
Concen: 0.66 ppbV
RT: 7.178 min Scan# 2193
Delta R.T. 0.006 min
Lab File: aa6888.D
Acq: 15 Jul 2024 7:05 pm

Tgt Ion: 43 Resp: 66039

Ion	Ratio	Lower	Upper
43	100		
58	43.8	31.0	46.4

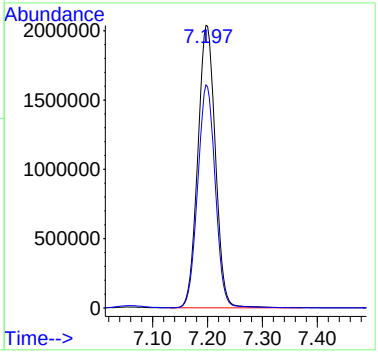


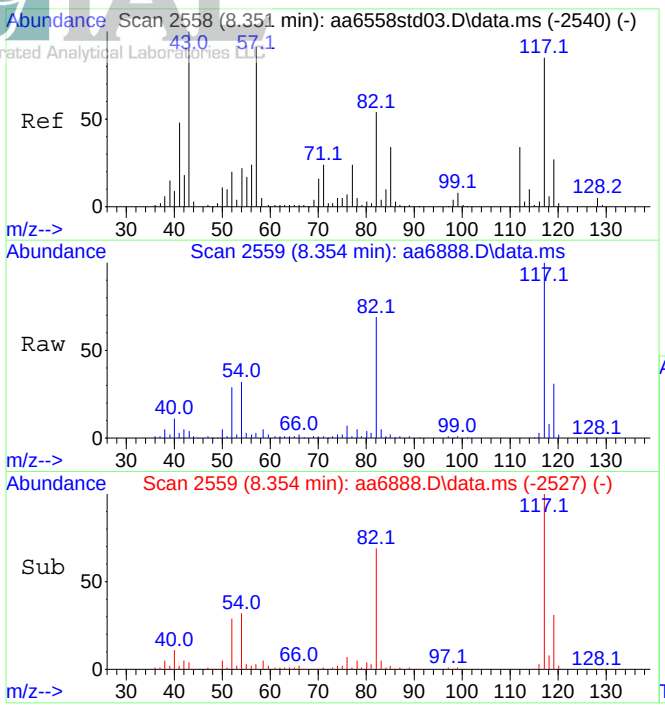


#49
Tetrachloroethene
Concen: 87.94 ppbV
RT: 7.197 min Scan# 2199
Delta R.T. 0.006 min
Lab File: aa6888.D
Acq: 15 Jul 2024 7:05 pm

Tgt Ion:166 Resp: 4539271

Ion	Ratio	Lower	Upper
166	100		
164	78.8	62.8	94.2

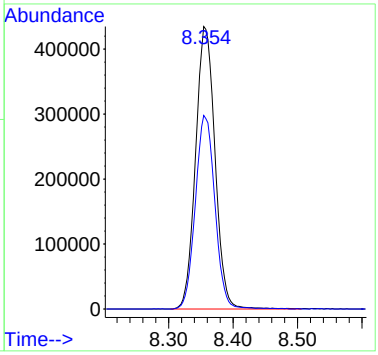


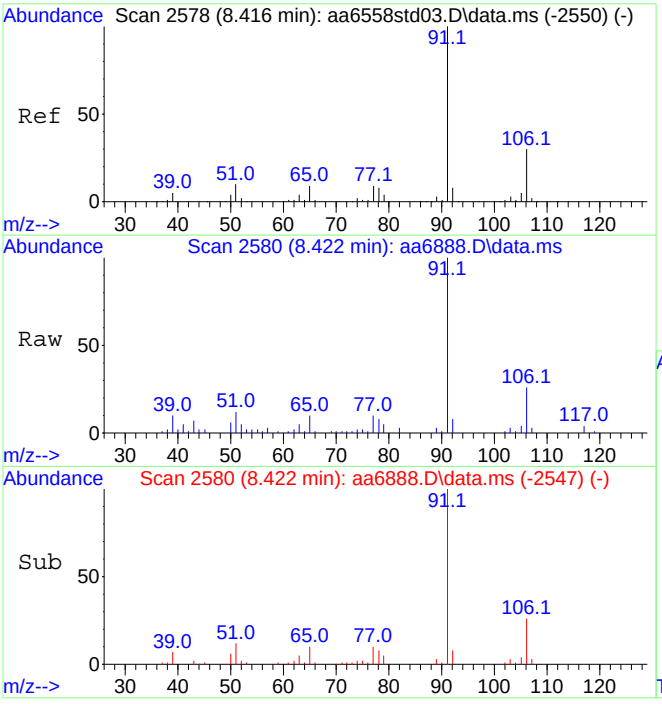


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.354 min Scan# 2559
Delta R.T. 0.003 min
Lab File: aa6888.D
Acq: 15 Jul 2024 7:05 pm

Tgt Ion:117 Resp: 908152

Ion	Ratio	Lower	Upper
117	100		
82	69.1	42.3	82.3

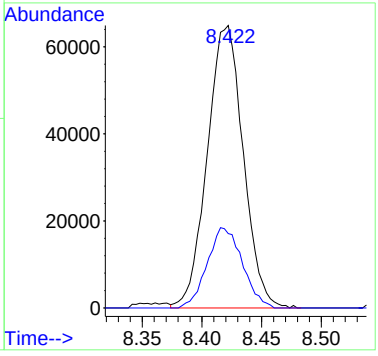


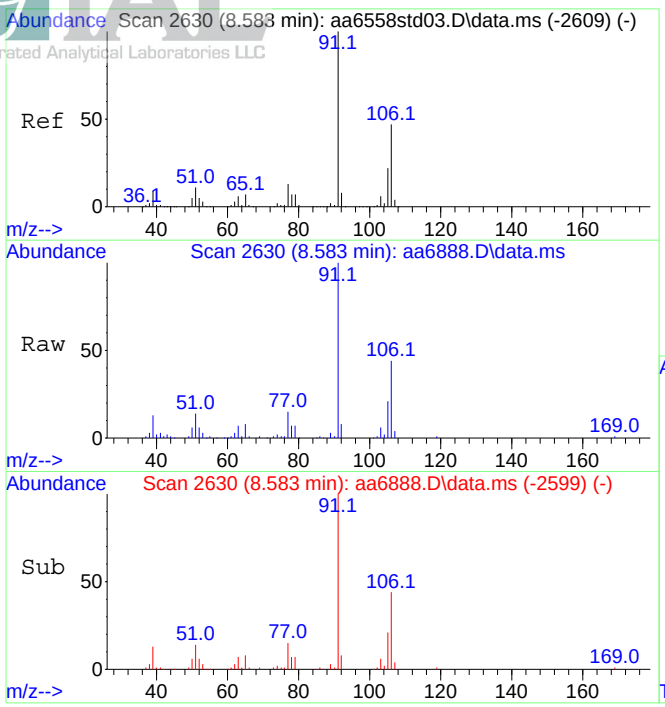


#58
Ethylbenzene
Concen: 0.76 ppbV
RT: 8.422 min Scan# 2580
Delta R.T. 0.006 min
Lab File: aa6888.D
Acq: 15 Jul 2024 7:05 pm

Tgt Ion: 91 Resp: 136081

Ion	Ratio	Lower	Upper
91	100		
106	27.7	23.8	35.8

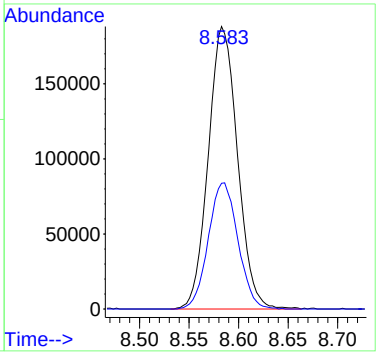


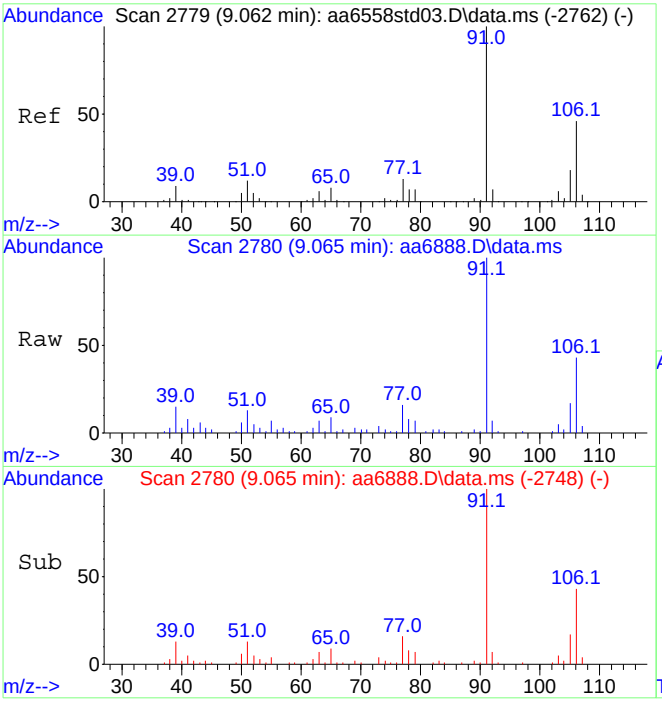


#59
Xylenes (m&p)
Concen: 2.88 ppbV
RT: 8.583 min Scan# 2630
Delta R.T. -0.000 min
Lab File: aa6888.D
Acq: 15 Jul 2024 7:05 pm

Tgt Ion: 91 Resp: 386940

Ion	Ratio	Lower	Upper
91	100		
106	45.2	37.4	56.2

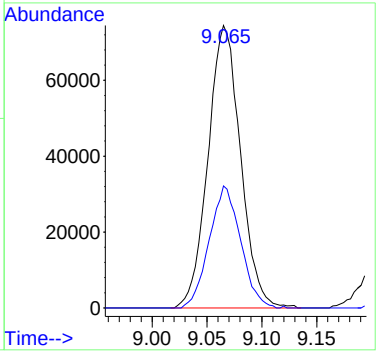


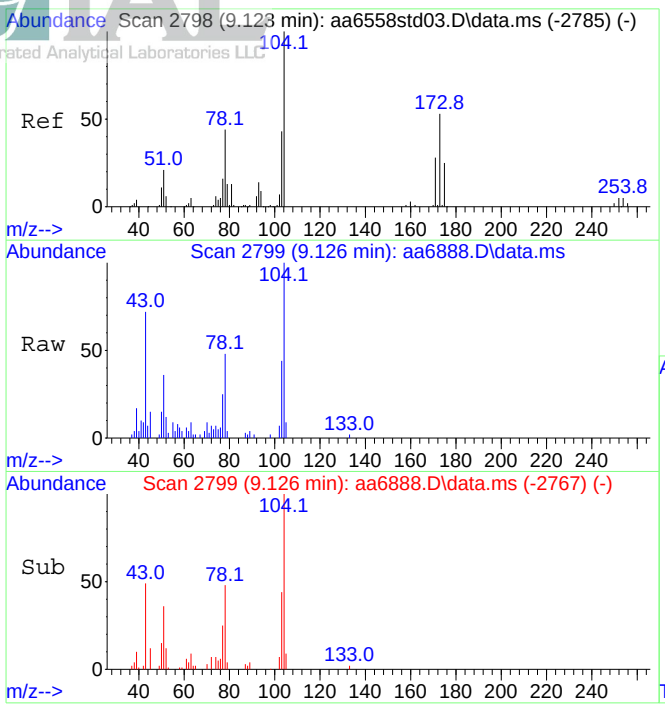


#60
Xylene (o)
Concen: 1.08 ppbV
RT: 9.065 min Scan# 2780
Delta R.T. 0.003 min
Lab File: aa6888.D
Acq: 15 Jul 2024 7:05 pm

Tgt Ion: 91 Resp: 153398

Ion	Ratio	Lower	Upper
91	100		
106	41.6	36.2	54.2

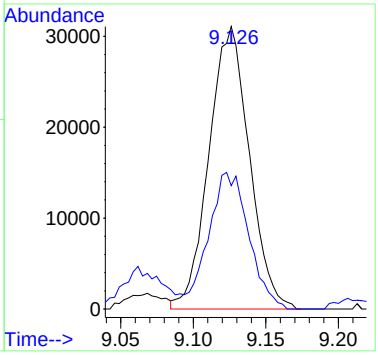


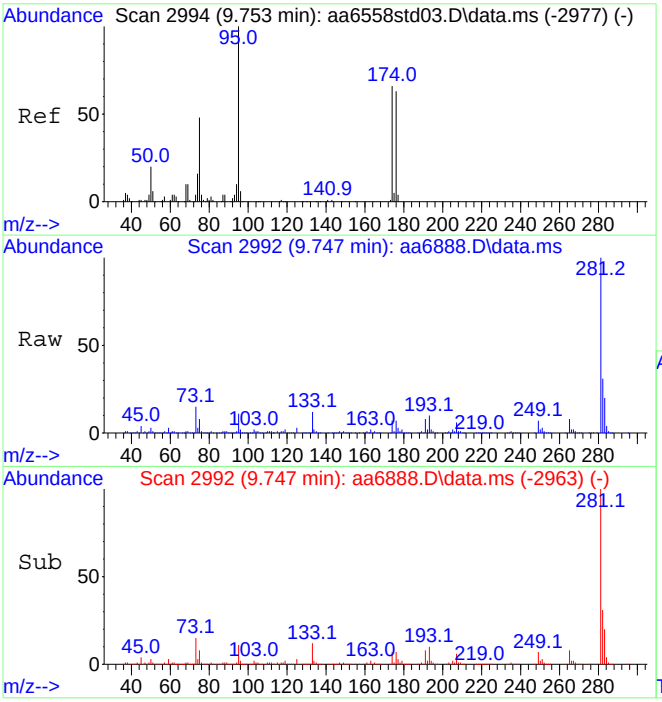


#61
Styrene
Concen: 0.64 ppbV
RT: 9.126 min Scan# 2799
Delta R.T. 0.003 min
Lab File: aa6888.D
Acq: 15 Jul 2024 7:05 pm

Tgt Ion:104 Resp: 60070

Ion	Ratio	Lower	Upper
104	100		
103	47.9	38.3	57.5

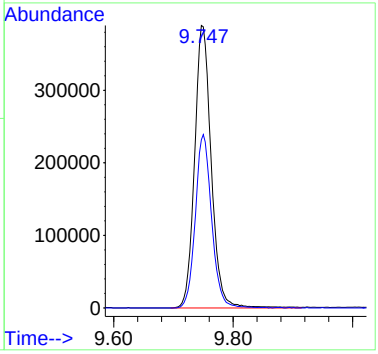


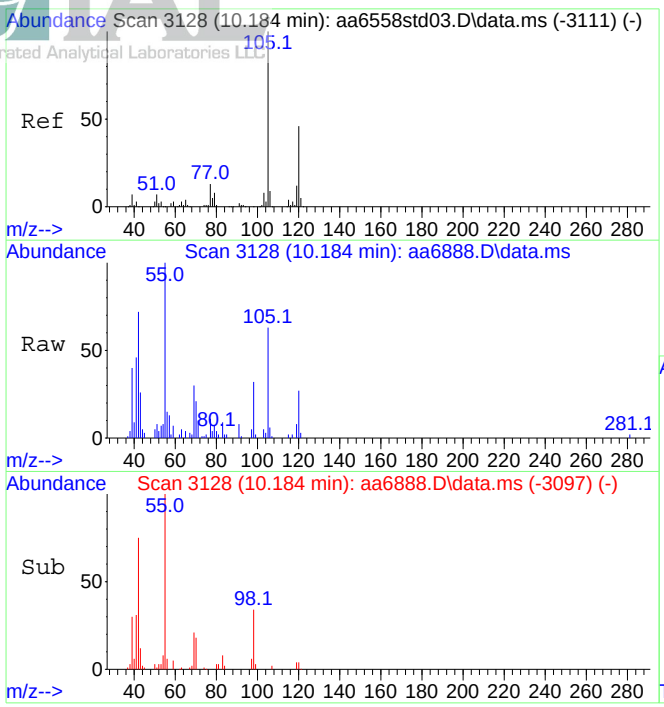


#64
Bromofluorobenzene (tune std)
Concen: 8.77 ppbV
RT: 9.747 min Scan# 2992
Delta R.T. -0.006 min
Lab File: aa6888.D
Acq: 15 Jul 2024 7:05 pm

Tgt Ion: 95 Resp: 753779

Ion	Ratio	Lower	Upper
95	100		
174	60.0	52.9	79.3

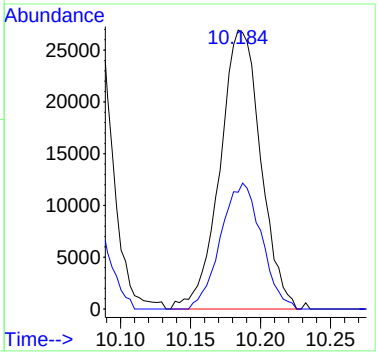


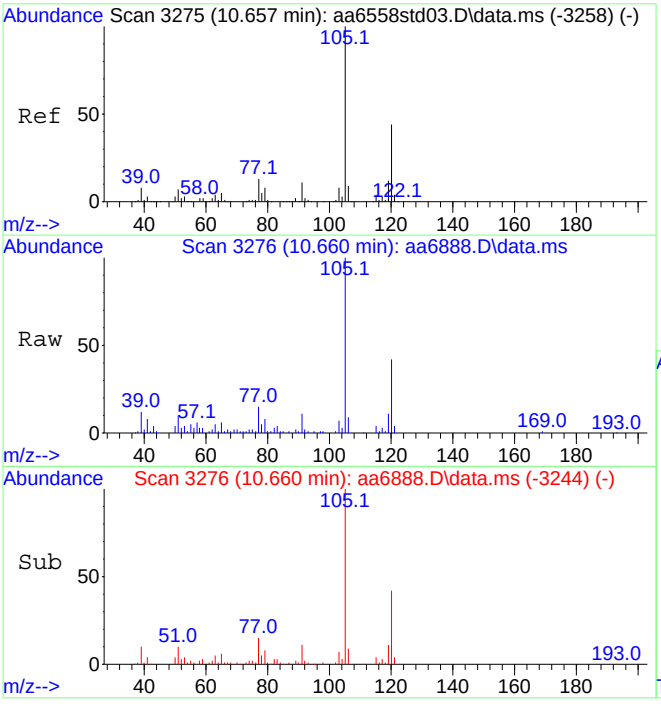


#69
1,3,5-Trimethylbenzene
Concen: 0.33 ppbV
RT: 10.184 min Scan# 3128
Delta R.T. -0.000 min
Lab File: aa6888.D
Acq: 15 Jul 2024 7:05 pm

Tgt Ion:105 Resp: 54556

Ion	Ratio	Lower	Upper
105	100		
120	45.2	37.2	55.8

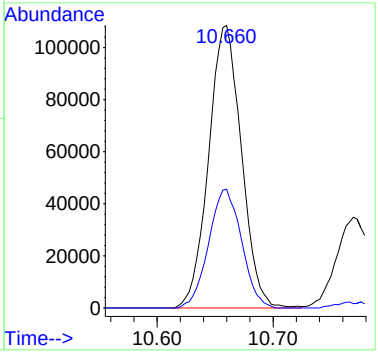


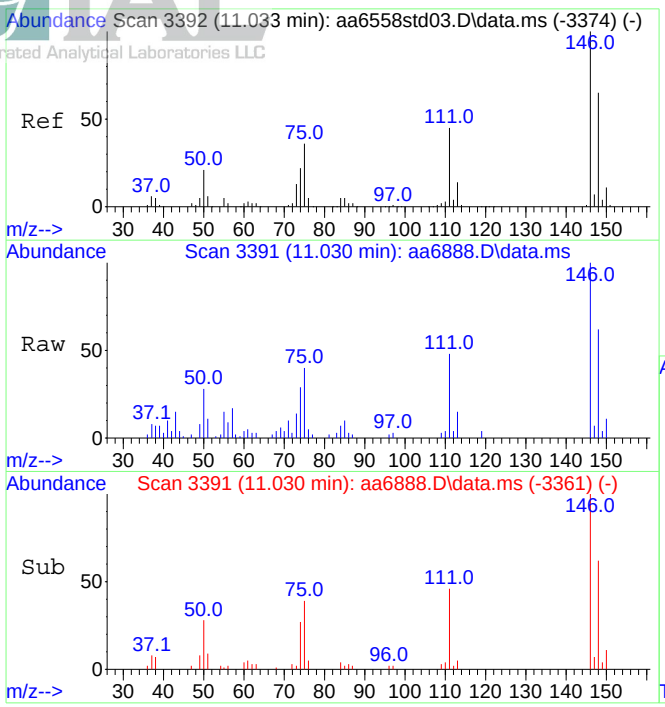


#70
1,2,4-Trimethylbenzene
Concen: 1.29 ppbV
RT: 10.660 min Scan# 3276
Delta R.T. 0.003 min
Lab File: aa6888.D
Acq: 15 Jul 2024 7:05 pm

Tgt Ion:105 Resp: 213159

Ion	Ratio	Lower	Upper
105	100		
120	42.0	34.5	51.7

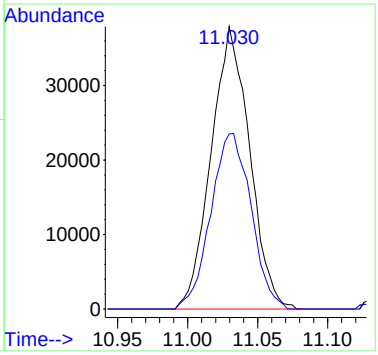




#71
1,3-Dichlorobenzene
Concen: 0.72 ppbV
RT: 11.030 min Scan# 3391
Delta R.T. -0.003 min
Lab File: aa6888.D
Acq: 15 Jul 2024 7:05 pm

Tgt Ion:146 Resp: 72489

Ion	Ratio	Lower	Upper
146	100		
148	64.9	51.2	76.8



Data Path : C:\DATA\2024\07-2024\07-15-2024\
Data File : aa6881.D
Acq On : 15 Jul 2024 3:15 pm
Operator : jjw
Sample : E24-02398-02x10 dil
Misc : 2066, 50cc
ALS Vial : 7 Sample Multiplier: 1

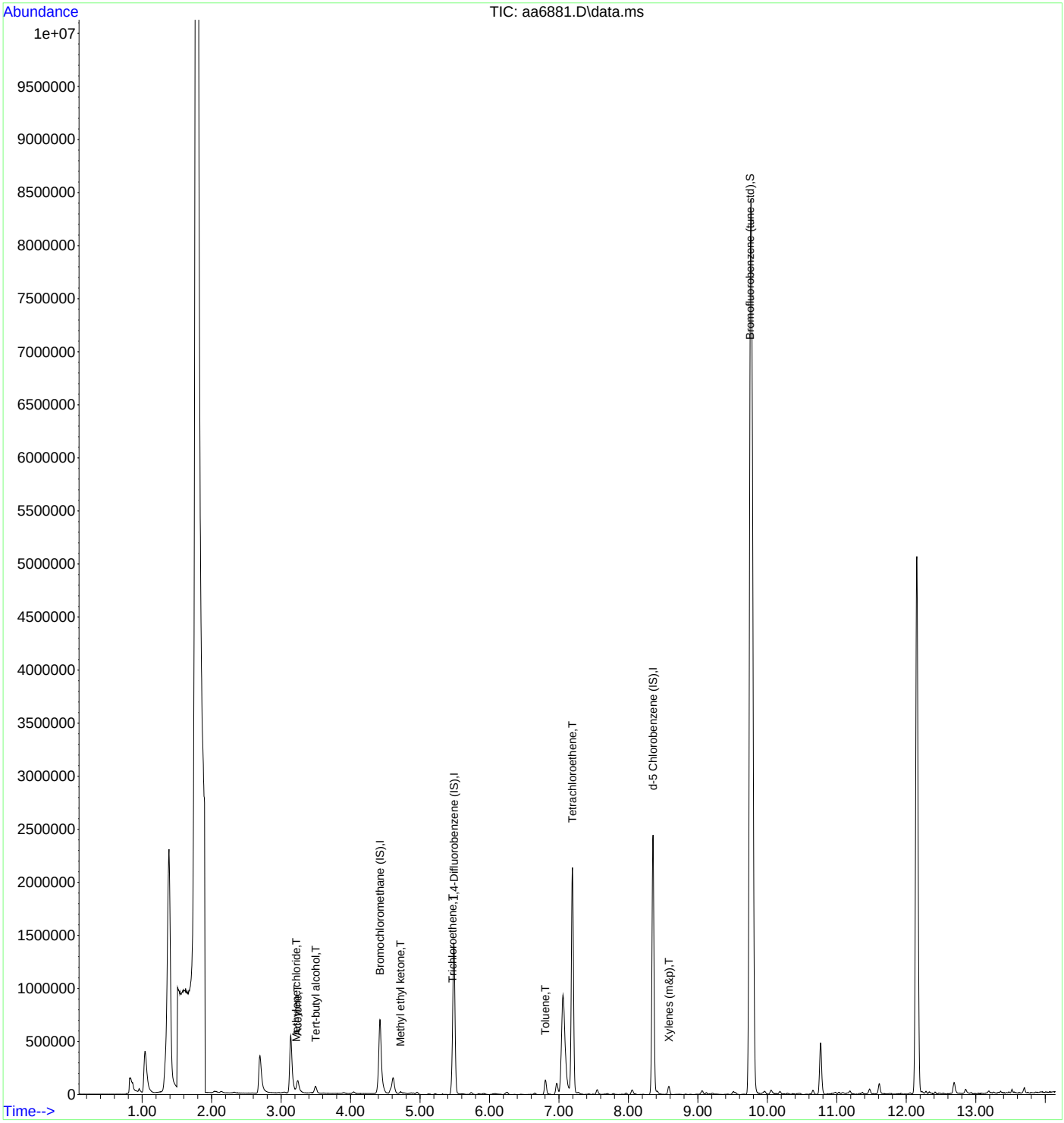
Quant Time: Jul 15 15:39:29 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

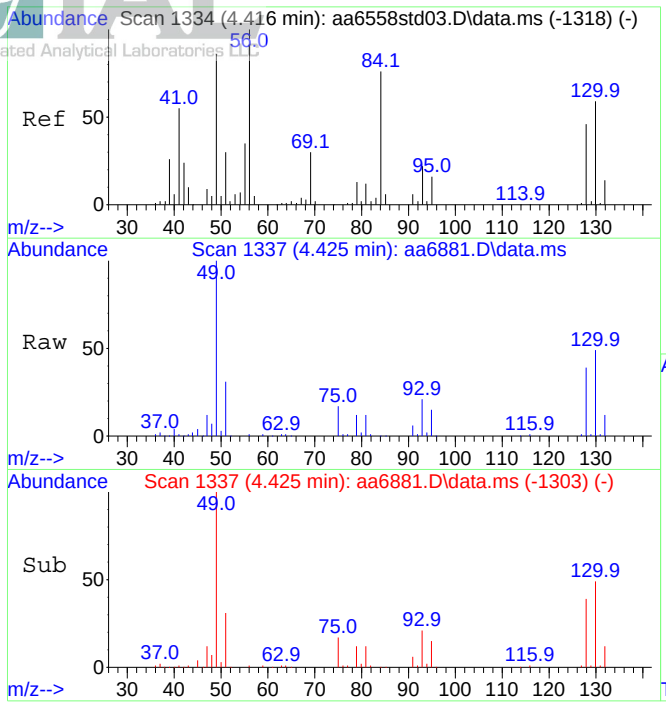
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.425	130	239855	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.490	114	1156827	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.355	117	1364898	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.750	95	1334398	10.34	ppbV	0.000
Target Compounds						Qvalue
20) Methylene chloride	3.220	49	11640	0.27	ppbV	85
21) Acetone	3.239	43	171130	3.18	ppbV	97
26) Tert-butyl alcohol	3.499	59	88135	1.17	ppbV	100
35) Methyl ethyl ketone	4.721	43	22345	0.29	ppbV	94
40) Trichloroethene	5.467	130	49004	0.94	ppbV	100
47) Toluene	6.805	91	111195	0.75	ppbV	99
49) Tetrachloroethene	7.194	166	657079	11.71	ppbV	100
59) Xylenes (m&p)	8.583	91	51930	0.26	ppbV	97

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

Data Path : C:\DATA\2024\07-2024\07-15-2024\
Data File : aa6881.D
Acq On : 15 Jul 2024 3:15 pm
Operator : jjw
Sample : E24-02398-02x10 dil
Misc : 2066, 50cc
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 15 15:39:29 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

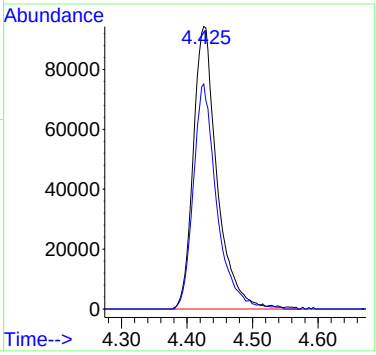


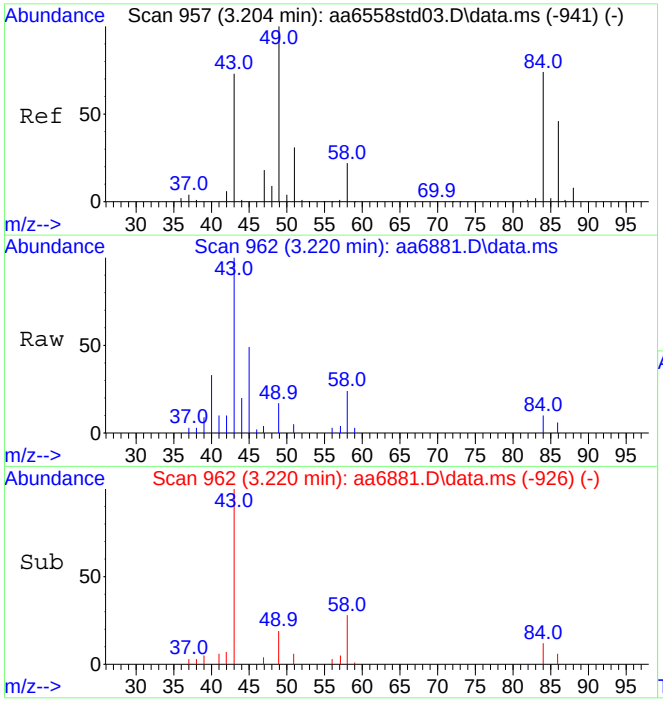


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.425 min Scan# 1337
Delta R.T. 0.009 min
Lab File: aa6881.D
Acq: 15 Jul 2024 3:15 pm

Tgt Ion:130 Resp: 239855

Ion	Ratio	Lower	Upper
130	100		
128	78.1	57.8	97.8

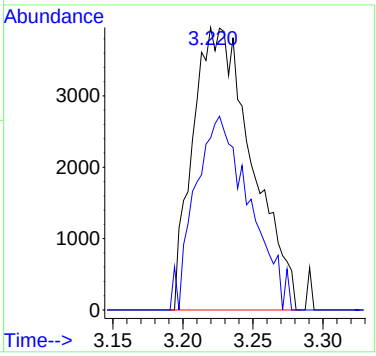


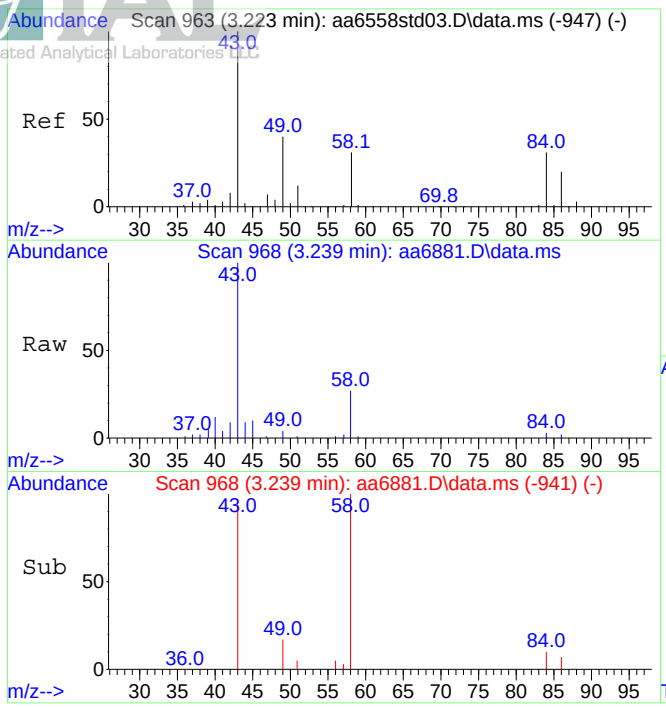


#20
Methylene chloride
Concen: 0.27 ppbV
RT: 3.220 min Scan# 962
Delta R.T. 0.016 min
Lab File: aa6881.D
Acq: 15 Jul 2024 3:15 pm

Tgt Ion: 49 Resp: 11640

Ion	Ratio	Lower	Upper
49	100		
84	63.1	56.2	96.2

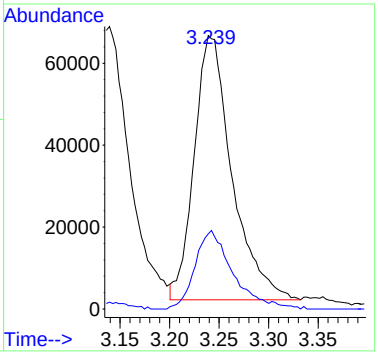


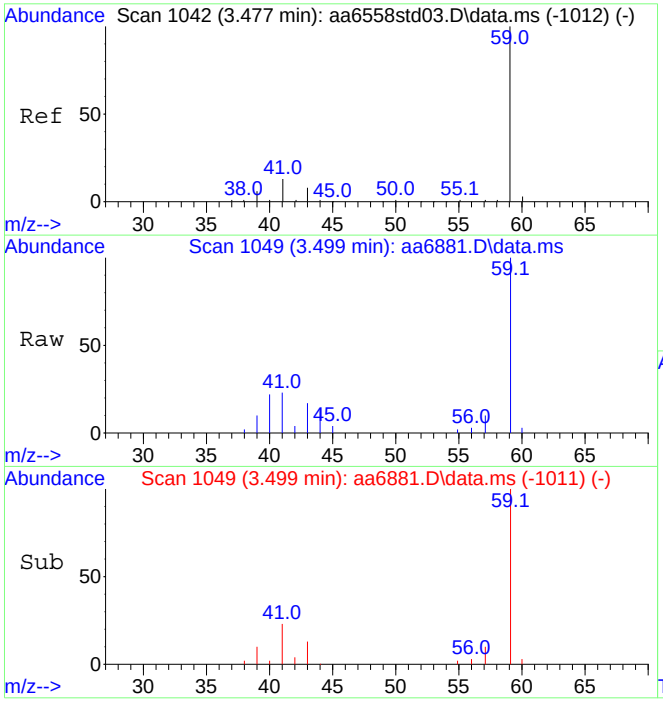


#21
Acetone
Concen: 3.18 ppbV
RT: 3.239 min Scan# 968
Delta R.T. 0.016 min
Lab File: aa6881.D
Acq: 15 Jul 2024 3:15 pm

Tgt Ion: 43 Resp: 171130

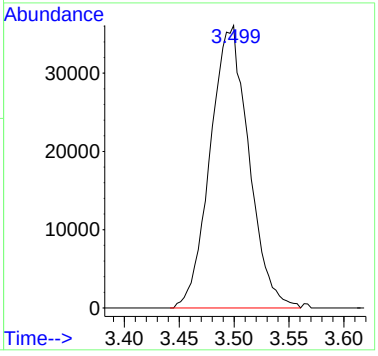
Ion	Ratio	Lower	Upper
43	100		
58	29.8	25.4	38.0

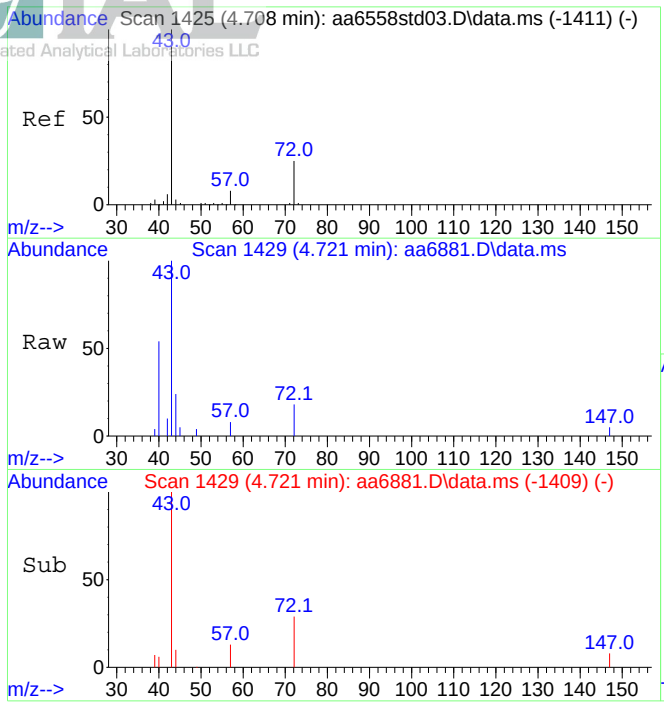




#26
Tert-butyl alcohol
Concen: 1.17 ppbV
RT: 3.499 min Scan# 1049
Delta R.T. 0.023 min
Lab File: aa6881.D
Acq: 15 Jul 2024 3:15 pm

Tgt Ion: 59 Resp: 88135

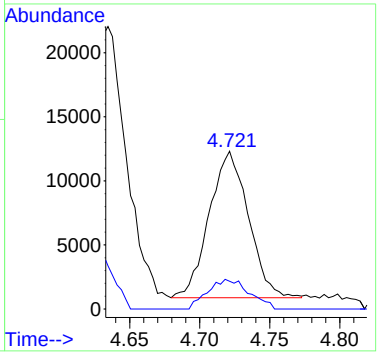


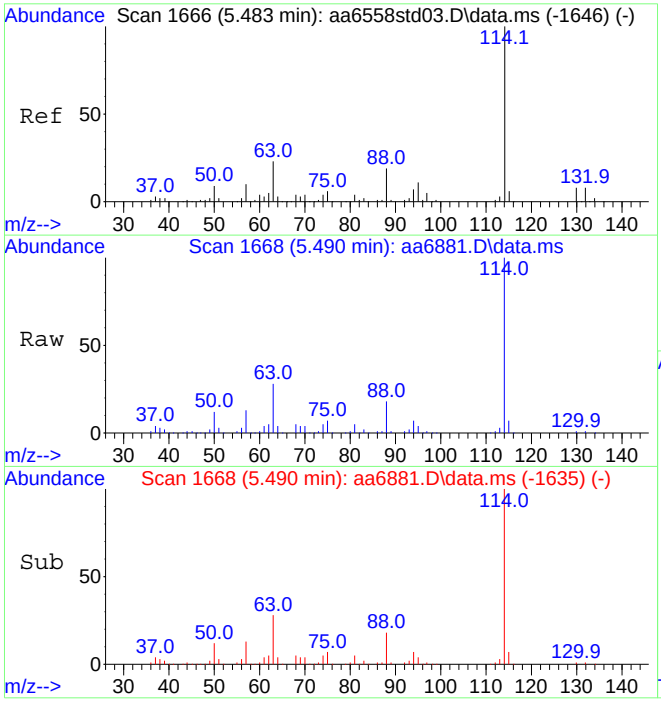


#35
Methyl ethyl ketone
Concen: 0.29 ppbV
RT: 4.721 min Scan# 1429
Delta R.T. 0.013 min
Lab File: aa6881.D
Acq: 15 Jul 2024 3:15 pm

Tgt Ion: 43 Resp: 22345

Ion	Ratio	Lower	Upper
43	100		
72	21.3	19.5	29.3

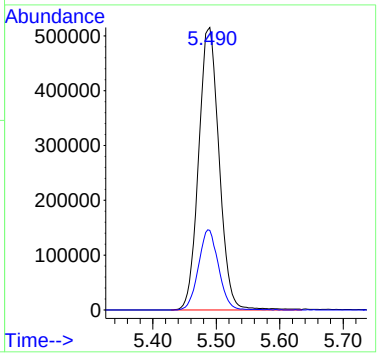


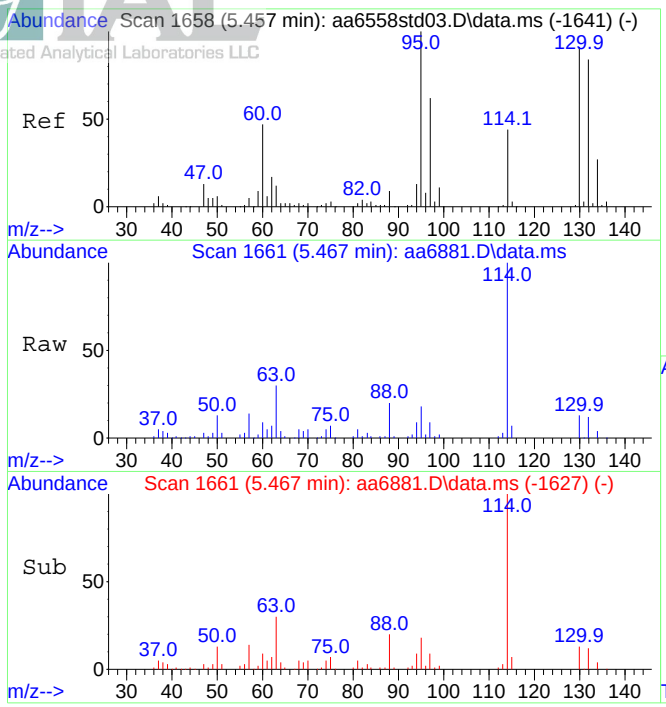


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.490 min Scan# 1668
Delta R.T. 0.007 min
Lab File: aa6881.D
Acq: 15 Jul 2024 3:15 pm

Tgt Ion:114 Resp: 1156827

Ion	Ratio	Lower	Upper
114	100		
63	27.8	3.6	43.6

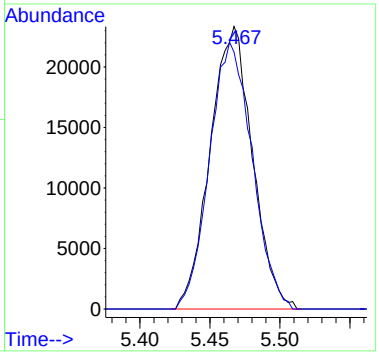


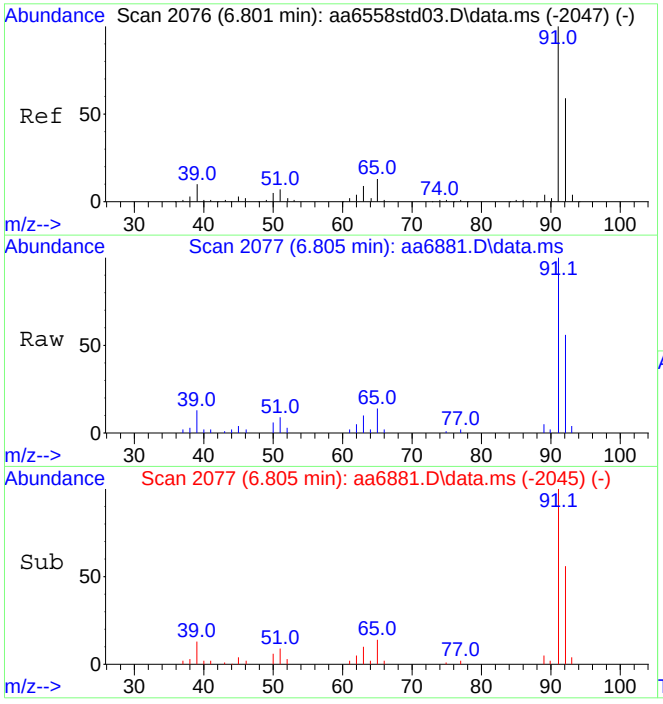


#40
Trichloroethene
Concen: 0.94 ppbV
RT: 5.467 min Scan# 1661
Delta R.T. 0.010 min
Lab File: aa6881.D
Acq: 15 Jul 2024 3:15 pm

Tgt Ion:130 Resp: 49004

Ion	Ratio	Lower	Upper
130	100		
132	95.3	76.6	114.8

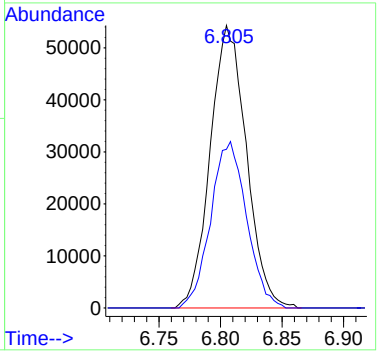


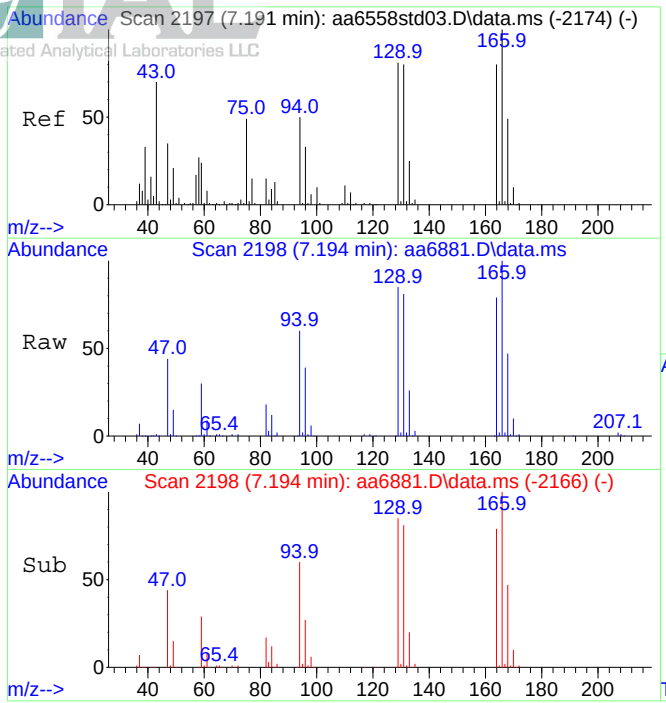


#47
Toluene
Concen: 0.75 ppbV
RT: 6.805 min Scan# 2077
Delta R.T. 0.003 min
Lab File: aa6881.D
Acq: 15 Jul 2024 3:15 pm

Tgt Ion: 91 Resp: 111195

Ion	Ratio	Lower	Upper
91	100		
92	58.4	47.0	70.6

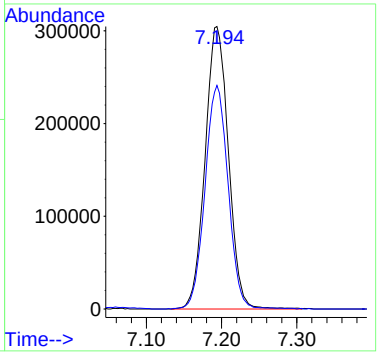


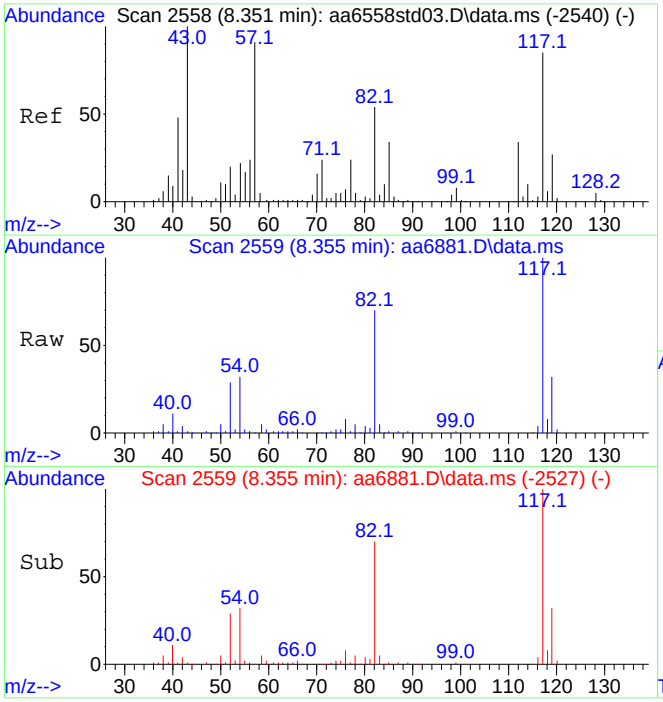


#49
Tetrachloroethene
Concen: 11.71 ppbV
RT: 7.194 min Scan# 2198
Delta R.T. 0.003 min
Lab File: aa6881.D
Acq: 15 Jul 2024 3:15 pm

Tgt Ion:166 Resp: 657079

Ion	Ratio	Lower	Upper
166	100		
164	78.5	62.8	94.2

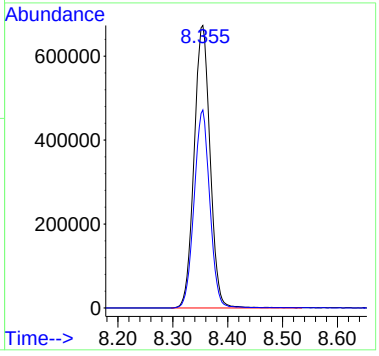


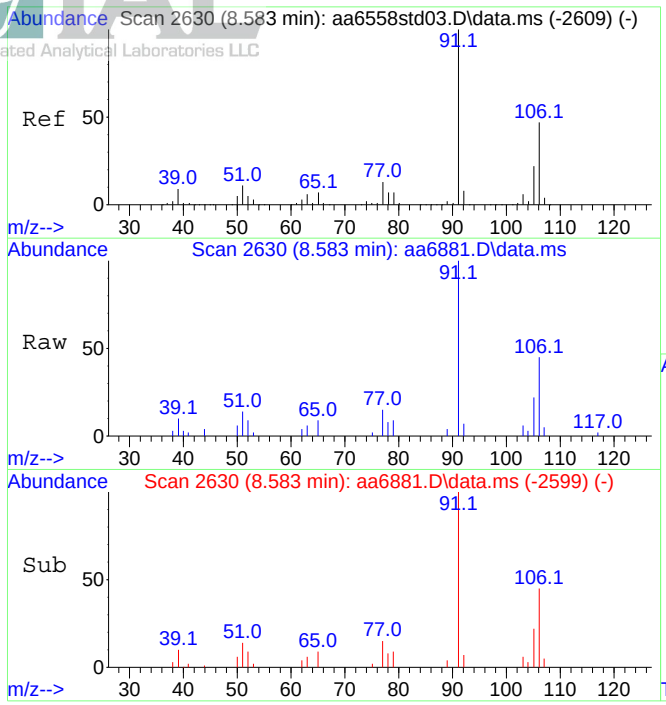


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.355 min Scan# 2559
Delta R.T. 0.003 min
Lab File: aa6881.D
Acq: 15 Jul 2024 3:15 pm

Tgt Ion:117 Resp: 1364898

Ion	Ratio	Lower	Upper
117	100		
82	68.7	42.3	82.3

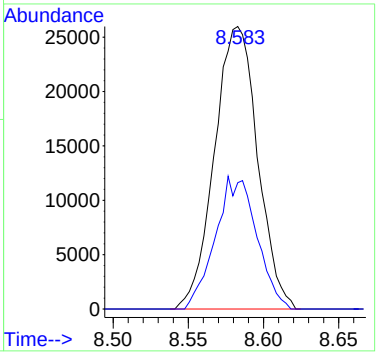


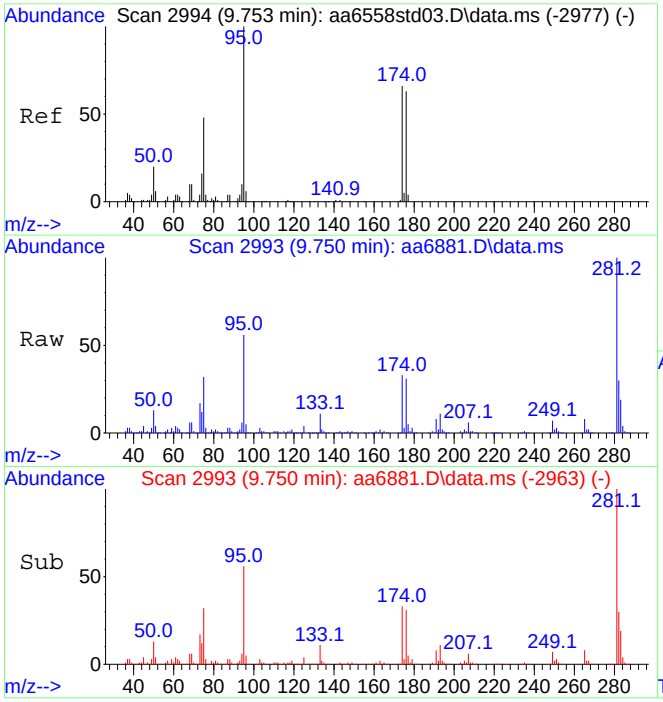


#59
Xylenes (m&p)
Concen: 0.26 ppbV
RT: 8.583 min Scan# 2630
Delta R.T. 0.000 min
Lab File: aa6881.D
Acq: 15 Jul 2024 3:15 pm

Tgt Ion: 91 Resp: 51930

Ion	Ratio	Lower	Upper
91	100		
106	44.7	37.4	56.2

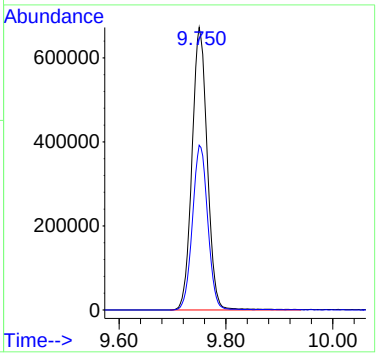




#64
Bromofluorobenzene (tune std)
Concen: 10.34 ppbV
RT: 9.750 min Scan# 2993
Delta R.T. -0.003 min
Lab File: aa6881.D
Acq: 15 Jul 2024 3:15 pm

Tgt Ion: 95 Resp: 1334398

Ion	Ratio	Lower	Upper
95	100		
174	58.5	52.9	79.3



Volatile Organic Compounds by EPA Method TO-15
Summary of Results

Lab ID:	E24-02398-03	Instrument ID:	AA
Client ID:	SG-12	GC/MS Column:	RTX-1, 0.32 mmID
Date Sampled:	07/12/2024 12:00	Injection Volmue:	500ml, 100ml
Date Received:	07/15/2024	Matrix:	Air-Other
Date Analyzed:	07/15/2024 20:38, 07/15/2024 20:06	% Moisture:	NA
Data File:	AA6891, AA6890	Dilution Factor:	1, 5
Summa ID:	3100	Analyst:	J. Walukiewicz

			Concentration Reported		Reporting Limits	
Compound	**CAS #**	**Q**	**ppbv**	**ug/m3**	**ppbv**	**ug/m3**
Acetone	67-64-1	D	84	200	1.0	2.4
Benzene	71-43-2		4.7	15	0.20	0.64
Bromodichloromethane	75-27-4		ND	ND	0.20	1.3
Bromoform	75-25-2		ND	ND	0.20	2.1
Bromomethane	74-83-9		ND	ND	0.20	0.78
1,3-Butadiene	106-99-0		ND	ND	0.20	0.44
Chlorobenzene	108-90-7		ND	ND	0.20	0.92
Chloroethane	75-00-3		ND	ND	0.20	0.53
Chloroform	67-66-3		0.67	3.3	0.20	0.98
Chloromethane	74-87-3		ND	ND	0.20	0.41
Carbon disulfide	75-15-0		0.71	2.2	0.20	0.62
Carbon tetrachloride	56-23-5		ND	ND	0.040	0.25
Cyclohexane	110-82-7		1.7	5.7	0.20	0.69
Dibromochloromethane	124-48-1		ND	ND	0.20	1.7
1,2-Dibromoethane	106-93-4		ND	ND	0.20	1.5
1,2-Dichlorobenzene	95-50-1		ND	ND	0.20	1.2
1,3-Dichlorobenzene	541-73-1		0.87	5.2	0.20	1.2
1,4-Dichlorobenzene	106-46-7		ND	ND	0.20	1.2
Dichlorodifluoromethane	75-71-8		ND	ND	0.20	0.99
1,1-Dichloroethane	75-34-3		ND	ND	0.20	0.81
1,2-Dichloroethane	107-06-2		ND	ND	0.20	0.81
1,1-Dichloroethene	75-35-4		ND	ND	0.20	0.79
1,2-Dichloroethene (cis)	156-59-2		ND	ND	0.20	0.79
1,2-Dichloroethene (trans)	156-60-5		ND	ND	0.20	0.79
1,2-Dichloropropane	78-87-5		ND	ND	0.20	0.92
1,3-Dichloropropene (cis)	10061-01-5		ND	ND	0.20	0.91
1,3-Dichloropropene (trans)	10061-02-6		ND	ND	0.20	0.91
1,2-Dichlorotetrafluoroethane	76-14-2		ND	ND	0.20	1.4
1,4-Dioxane	123-91-1		ND	ND	0.20	0.72
Ethylbenzene	100-41-4		0.93	4.0	0.20	0.87
n-Heptane	142-82-5		1.9	7.6	0.20	0.82
1,3-Hexachlorobutadiene	87-68-3		ND	ND	0.20	2.1
n-Hexane	110-54-3		2.1	7.4	0.20	0.70
Methylene chloride	75-09-2		23	79	0.20	0.69
Methyl ethyl ketone	78-93-3		4.5	13	0.20	0.59
Methyl isobutyl ketone	108-10-1		0.63	2.6	0.20	0.82
Methyl tert-butyl ether	1634-04-4		ND	ND	0.20	0.72
Styrene	100-42-5		0.45	1.9	0.20	0.85
Tert-butyl alcohol	75-65-0		8.1	25	0.20	0.61
1,1,2,2-Tetrachloroethane	79-34-5		ND	ND	0.20	1.4
Tetrachloroethene	127-18-4		5.9	40	0.20	1.4
Toluene	108-88-3		5.2	19	0.20	0.75
1,2,4-Trichlorobenzene	120-82-1		ND	ND	0.20	1.5
1,1,1-Trichloroethane	71-55-6		ND	ND	0.20	1.1
1,1,2-Trichloroethane	79-00-5		ND	ND	0.20	1.1

Qualifiers:
D = Dilution required

Volatile Organic Compounds by EPA Method TO-15
Summary of Results

Lab ID:	E24-02398-03	Instrument ID:	AA
Client ID:	SG-12	GC/MS Column:	RTX-1, 0.32 mmID
Date Sampled:	07/12/2024 12:00	Injection Volmue:	500ml, 100ml
Date Received:	07/15/2024	Matrix:	Air-Other
Date Analyzed:	07/15/2024 20:38, 07/15/2024 20:06	% Moisture:	NA
Data File:	AA6891, AA6890	Dilution Factor:	1, 5
Summa ID:	3100	Analyst:	J. Walukiewicz

			Concentration Reported		Reporting Limits	
Compound	**CAS #**	**Q**	**ppbv**	**ug/m3**	**ppbv**	**ug/m3**
Trichloroethene	79-01-6		0.82	4.4	0.046	0.25
Trichlorofluoromethane	75-69-4		0.31	1.7	0.20	1.1
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1		ND	ND	0.20	1.5
1,2,4-Trimethylbenzene	95-63-6		1.4	6.7	0.20	0.98
1,3,5-Trimethylbenzene	108-67-8		0.34	1.6	0.20	0.98
2,2,4-Trimethylpentane	540-84-1		1.2	5.7	0.20	0.93
Vinyl bromide	593-60-2		ND	ND	0.20	0.87
Vinyl chloride	75-01-4		ND	ND	0.20	0.51
Xylenes (m&p)	179601-23-1		3.5	15	0.20	0.87
Xylenes (o)	95-47-6		1.2	5.4	0.20	0.87

Qualifiers:
D = Dilution required

Data Path : C:\DATA\2024\07-2024\07-15-2024\
Data File : aa6891.D
Acq On : 15 Jul 2024 8:38 pm
Operator : jjw
Sample : E24-02398-03
Misc : 3100, 500cc
ALS Vial : 17 Sample Multiplier: 1

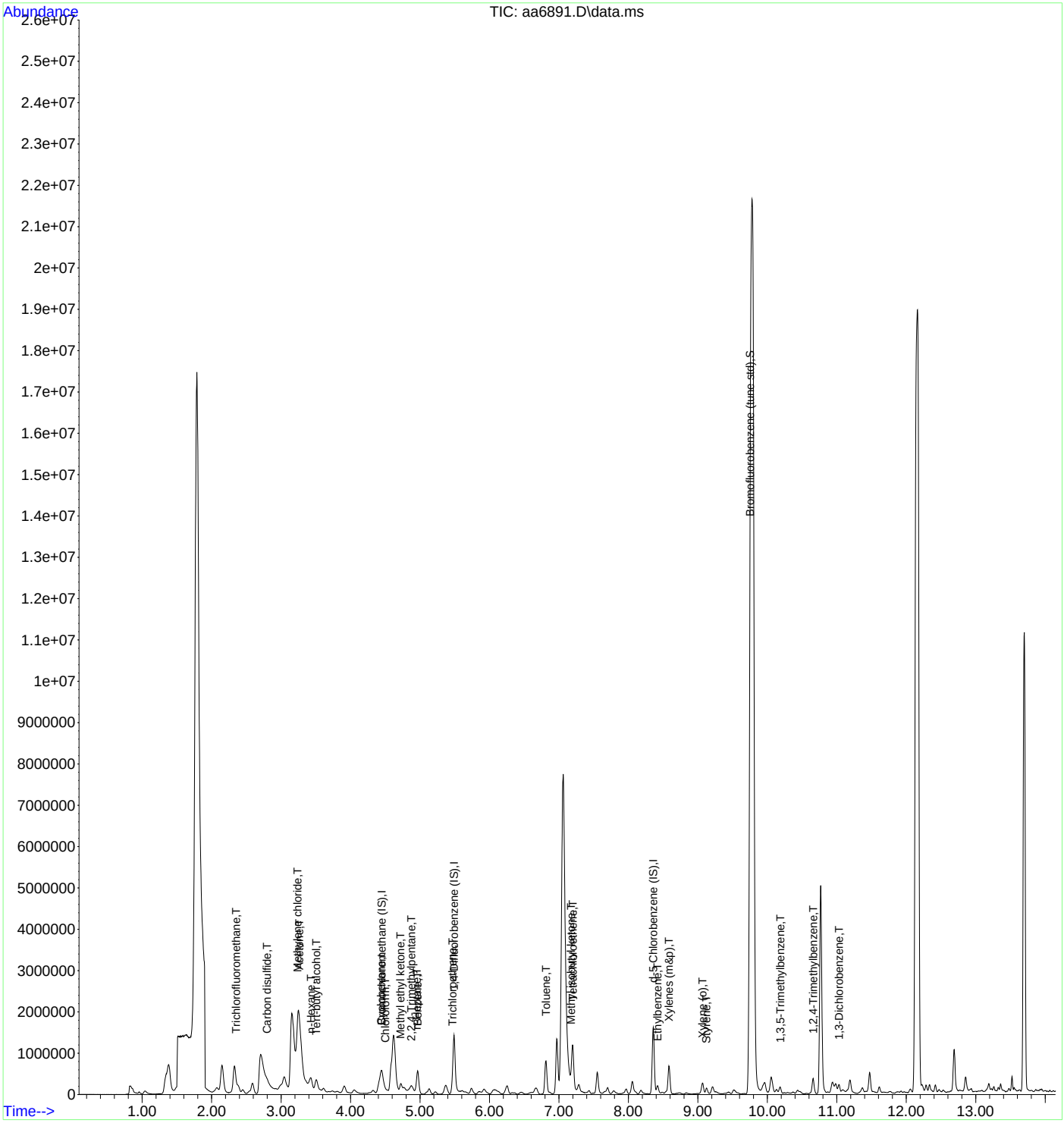
Quant Time: Jul 16 10:18:45 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

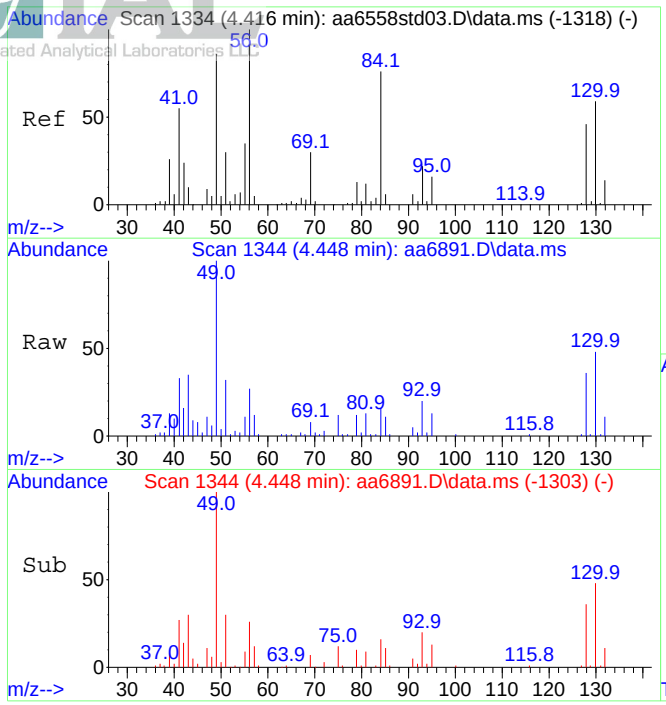
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.448	130	189057	10.00	ppbV		0.032
39) 1,4-Difluorobenzene (IS)	5.490	114	1048510	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.358	117	894948	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.750	95	767752	9.07	ppbV		0.000
Target Compounds							Qvalue
12) Trichlorofluoromethane	2.351	101	19136	0.31	ppbV		95
15) Carbon disulfide	2.798	76	56959	0.71	ppbV	#	67
20) Methylene chloride	3.239	49	778877	22.81	ppbV		83
21) Acetone	3.261	43	3346382	78.88	ppbV		99
24) n-Hexane	3.432	57	151499	2.09	ppbV		83
26) Tert-butyl alcohol	3.506	59	479832	8.11	ppbV		100
29) Cyclohexane	4.441	56	80756	1.67	ppbV	#	69
30) Chloroform	4.499	83	40418	0.67	ppbV	#	17
35) Methyl ethyl ketone	4.721	43	270943	4.51	ppbV		94
36) n-Heptane	4.956	43	105915	1.86	ppbV	#	81
37) Benzene	4.965	78	405424	4.71	ppbV		95
40) Trichloroethene	5.467	130	39014	0.82	ppbV		99
41) 2,2,4-Trimethylpentane	4.875	57	226317	1.21	ppbV	#	87
47) Toluene	6.814	91	691566	5.15	ppbV		99
48) Methyl isobutyl ketone	7.174	43	62038	0.63	ppbV		98
49) Tetrachloroethene	7.200	166	299850	5.90	ppbV		99
58) Ethylbenzene	8.422	91	163846	0.93	ppbV		97
59) Xylenes (m&p)	8.583	91	468792	3.54	ppbV		97
60) Xylene (o)	9.068	91	173799	1.24	ppbV		94
61) Styrene	9.123	104	41885	0.45	ppbV		99
69) 1,3,5-Trimethylbenzene	10.187	105	54479	0.34	ppbV		97
70) 1,2,4-Trimethylbenzene	10.660	105	222613	1.37	ppbV		98
71) 1,3-Dichlorobenzene	11.033	146	85895	0.87	ppbV		99

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

Data Path : C:\DATA\2024\07-2024\07-15-2024\
Data File : aa6891.D
Acq On : 15 Jul 2024 8:38 pm
Operator : jjw
Sample : E24-02398-03
Misc : 3100, 500cc
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jul 16 10:18:45 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

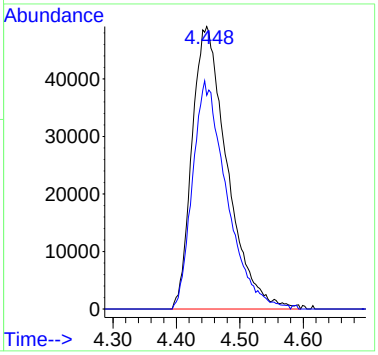


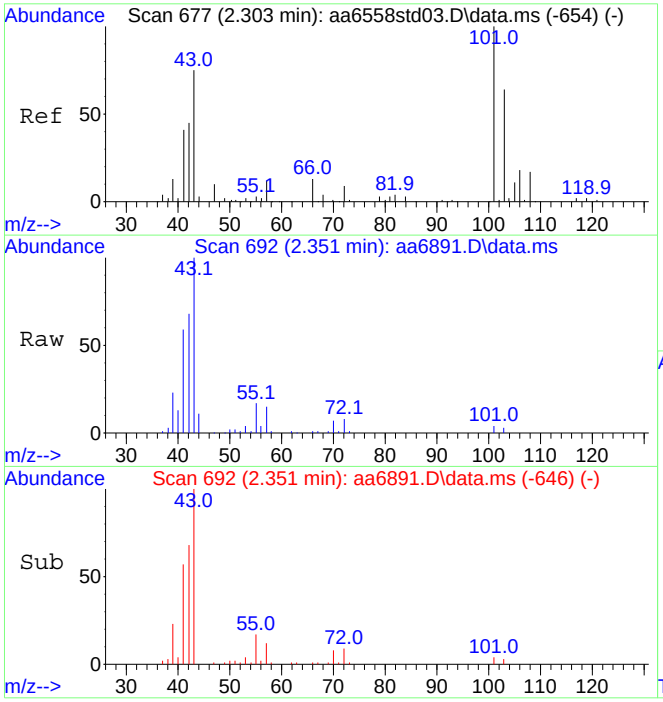


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.448 min Scan# 1344
Delta R.T. 0.032 min
Lab File: aa6891.D
Acq: 15 Jul 2024 8:38 pm

Tgt Ion:130 Resp: 189057

Ion	Ratio	Lower	Upper
130	100		
128	78.4	57.8	97.8

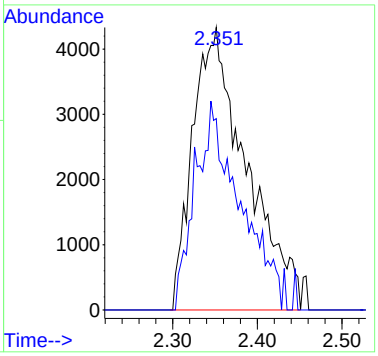


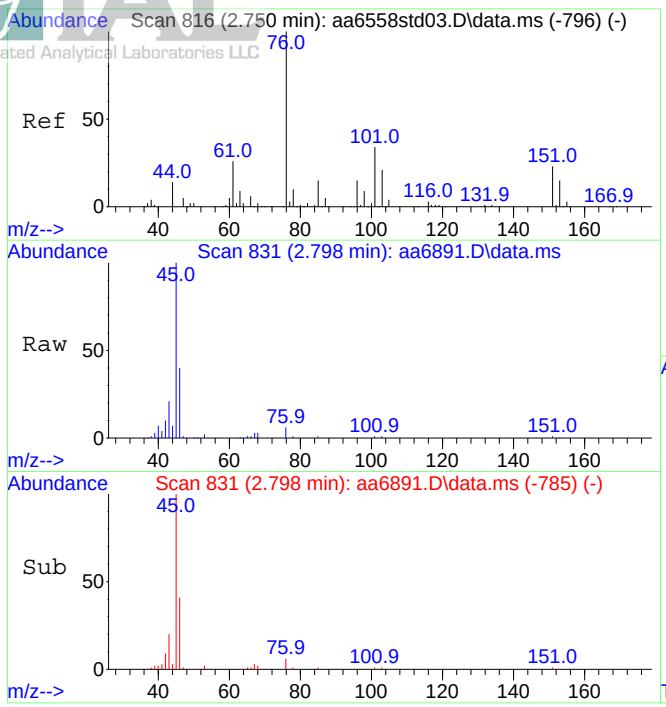


#12
Trichlorofluoromethane
Concen: 0.31 ppbV
RT: 2.351 min Scan# 692
Delta R.T. 0.048 min
Lab File: aa6891.D
Acq: 15 Jul 2024 8:38 pm

Tgt Ion:101 Resp: 19136

Ion	Ratio	Lower	Upper
101	100		
103	61.2	51.9	77.9

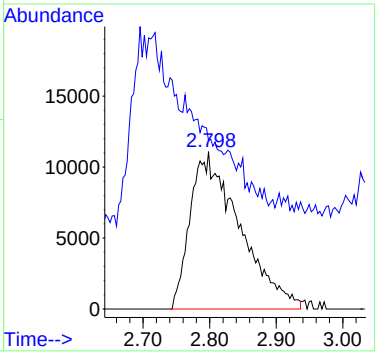


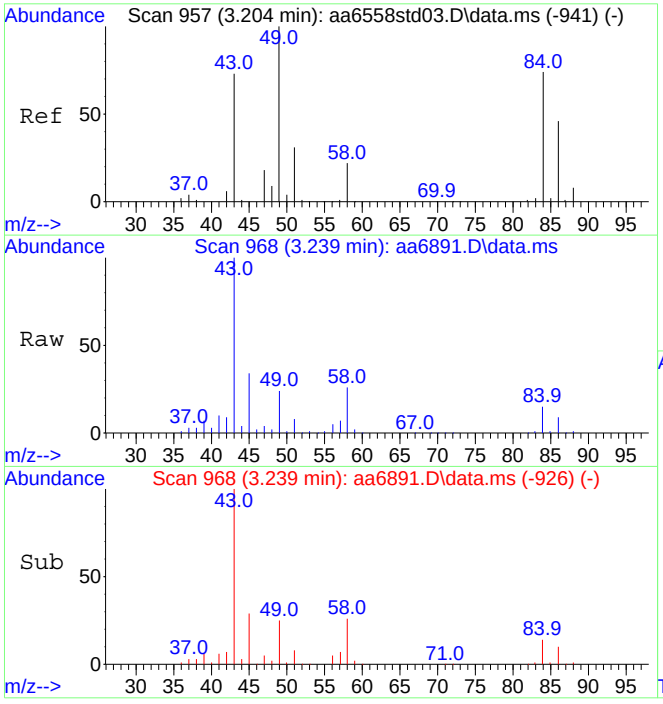


#15
Carbon disulfide
Concen: 0.71 ppbV
RT: 2.798 min Scan# 831
Delta R.T. 0.048 min
Lab File: aa6891.D
Acq: 15 Jul 2024 8:38 pm

Tgt Ion: 76 Resp: 56959

Ion	Ratio	Lower	Upper
76	100		
44	0.0	10.6	16.0#

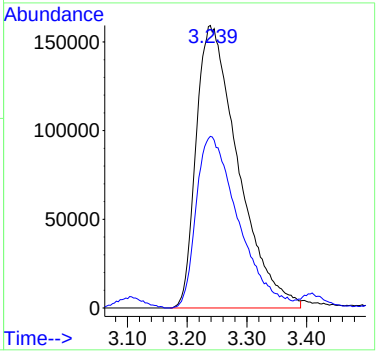


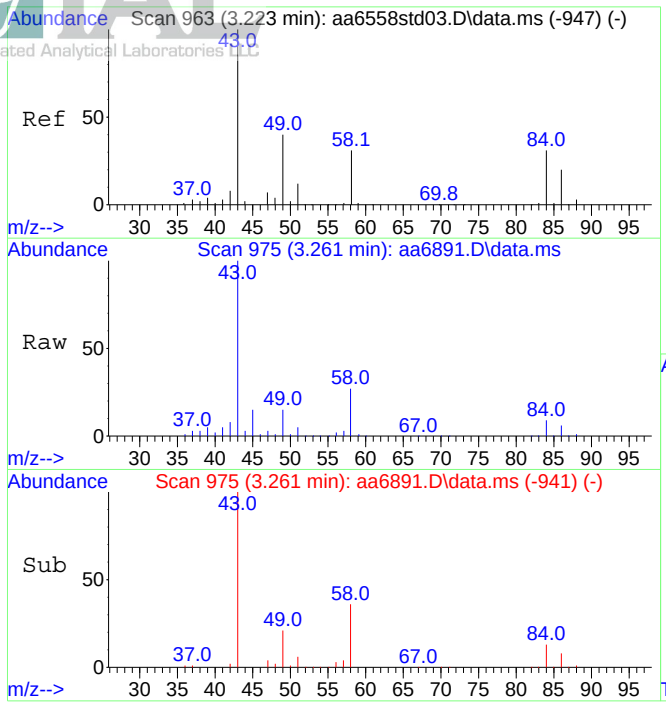


#20
Methylene chloride
Concen: 22.81 ppbV
RT: 3.239 min Scan# 968
Delta R.T. 0.035 min
Lab File: aa6891.D
Acq: 15 Jul 2024 8:38 pm

Tgt Ion: 49 Resp: 778877

Ion	Ratio	Lower	Upper
49	100		
84	61.4	56.2	96.2

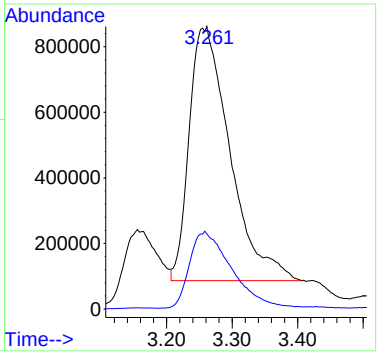


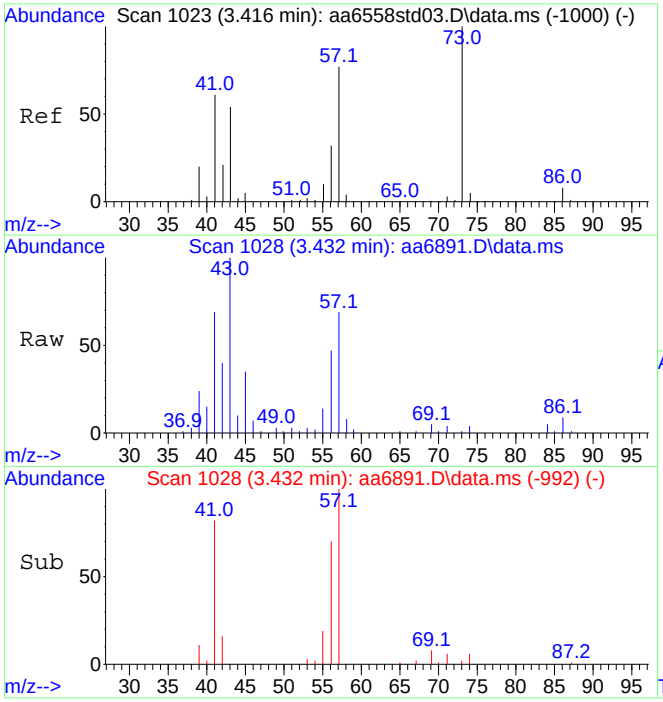


#21
Acetone
Concen: 78.88 ppbV
RT: 3.261 min Scan# 975
Delta R.T. 0.038 min
Lab File: aa6891.D
Acq: 15 Jul 2024 8:38 pm

Tgt Ion: 43 Resp: 3346382

Ion	Ratio	Lower	Upper
43	100		
58	31.2	25.4	38.0

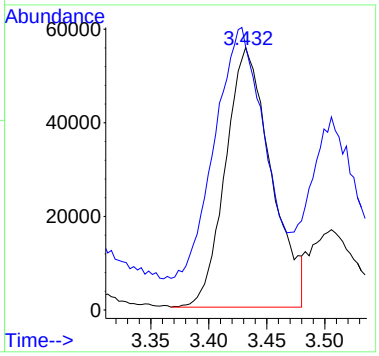


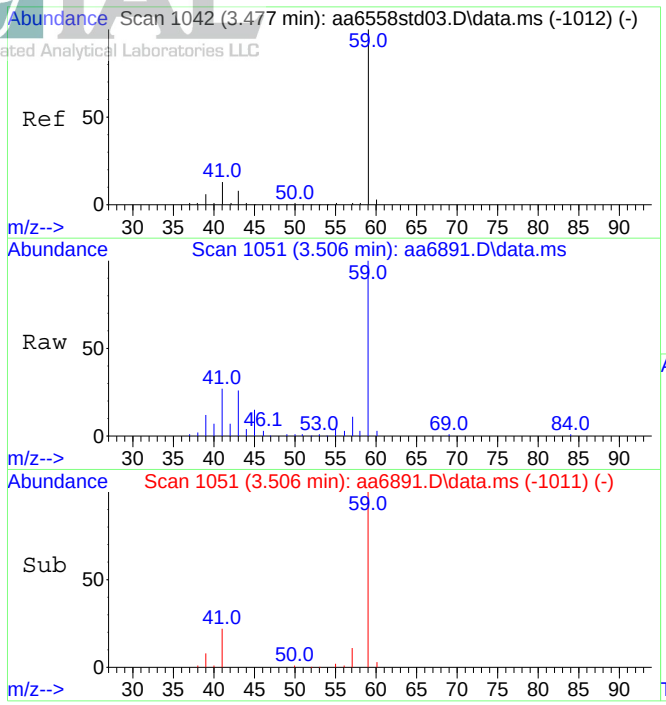


#24
n-Hexane
Concen: 2.09 ppbV
RT: 3.432 min Scan# 1028
Delta R.T. 0.016 min
Lab File: aa6891.D
Acq: 15 Jul 2024 8:38 pm

Tgt Ion: 57 Resp: 151499

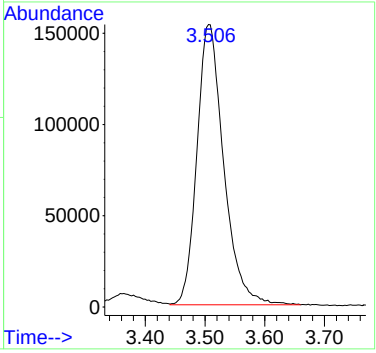
Ion	Ratio	Lower	Upper
57	100		
41	105.7	71.6	107.4

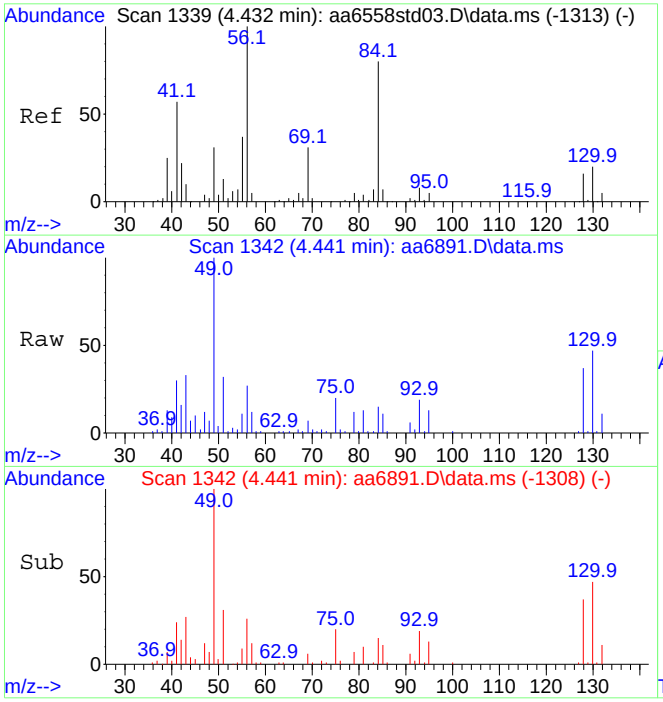




#26
Tert-butyl alcohol
Concen: 8.11 ppbV
RT: 3.506 min Scan# 1051
Delta R.T. 0.029 min
Lab File: aa6891.D
Acq: 15 Jul 2024 8:38 pm

Tgt Ion: 59 Resp: 479832

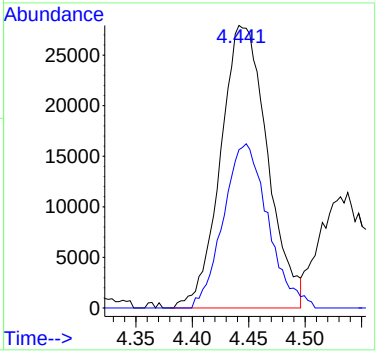


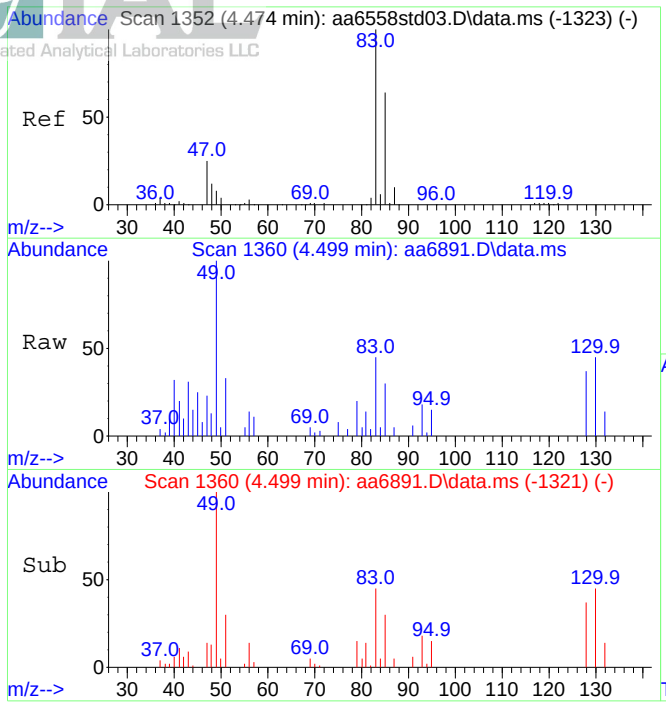


#29
Cyclohexane
Concen: 1.67 ppbV
RT: 4.441 min Scan# 1342
Delta R.T. 0.010 min
Lab File: aa6891.D
Acq: 15 Jul 2024 8:38 pm

Tgt Ion: 56 Resp: 80756

Ion	Ratio	Lower	Upper
56	100		
84	55.3	66.8	100.2#

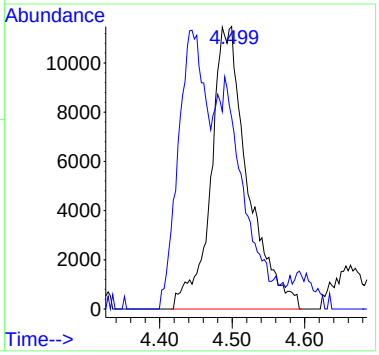


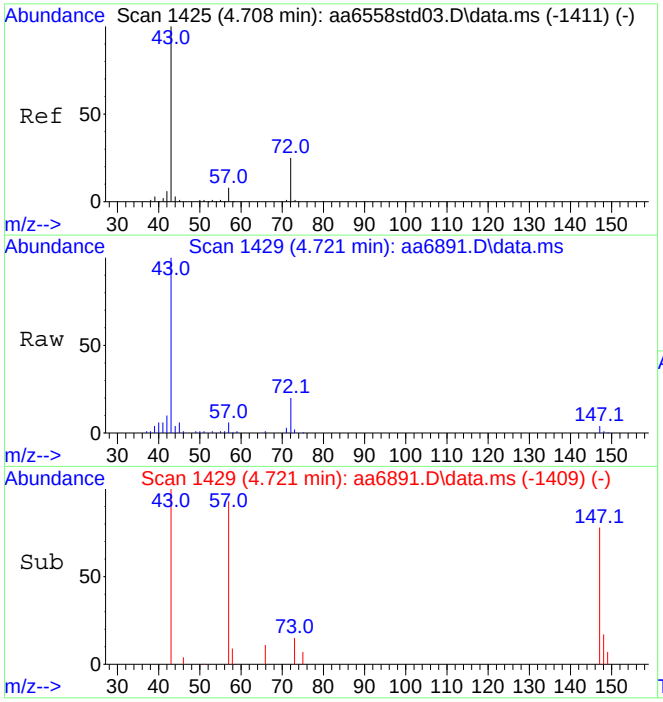


#30
Chloroform
Concen: 0.67 ppbV
RT: 4.499 min Scan# 1360
Delta R.T. 0.026 min
Lab File: aa6891.D
Acq: 15 Jul 2024 8:38 pm

Tgt Ion: 83 Resp: 40418

Ion	Ratio	Lower	Upper
83	100		
85	0.0	52.6	79.0#

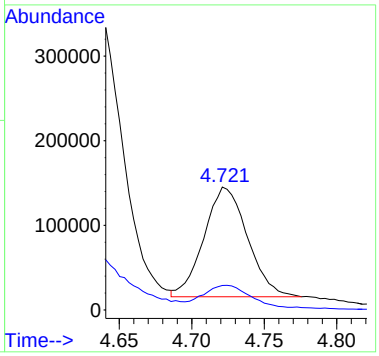


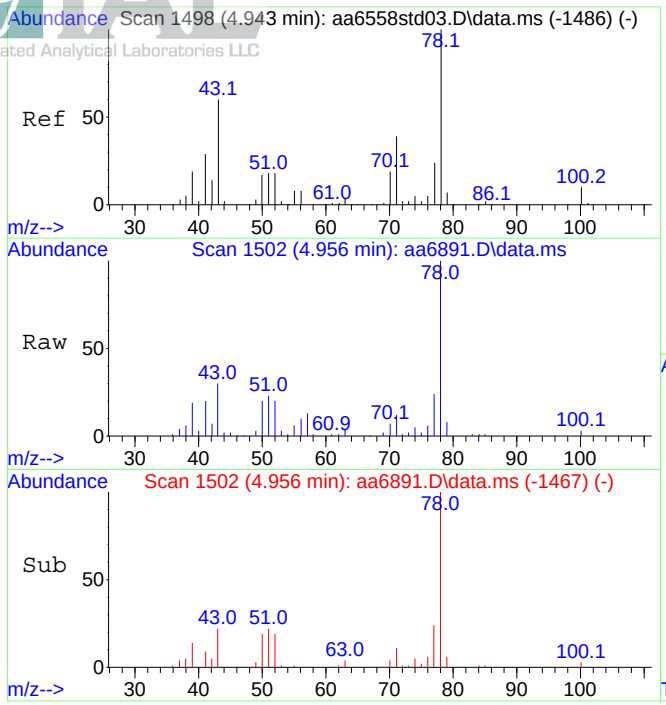


#35
Methyl ethyl ketone
Concen: 4.51 ppbV
RT: 4.721 min Scan# 1429
Delta R.T. 0.013 min
Lab File: aa6891.D
Acq: 15 Jul 2024 8:38 pm

Tgt Ion: 43 Resp: 270943

Ion	Ratio	Lower	Upper
43	100		
72	21.2	19.5	29.3

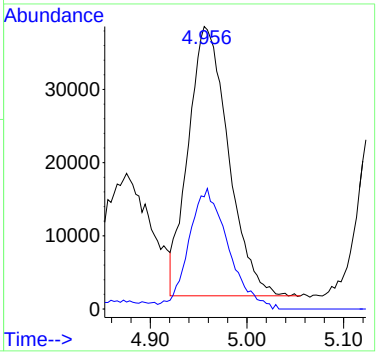


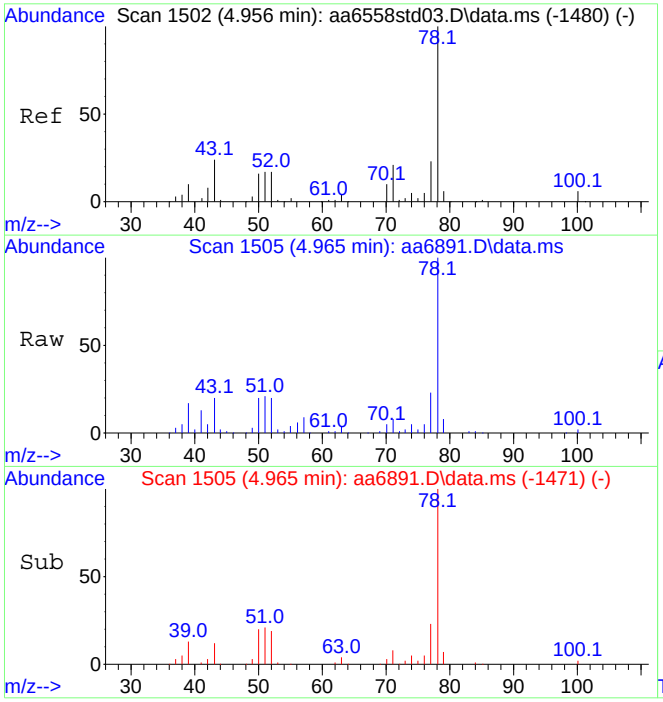


#36
n-Heptane
Concen: 1.86 ppbV
RT: 4.956 min Scan# 1502
Delta R.T. 0.013 min
Lab File: aa6891.D
Acq: 15 Jul 2024 8:38 pm

Tgt Ion: 43 Resp: 105915

Ion	Ratio	Lower	Upper
43	100		
71	43.9	46.2	69.2#

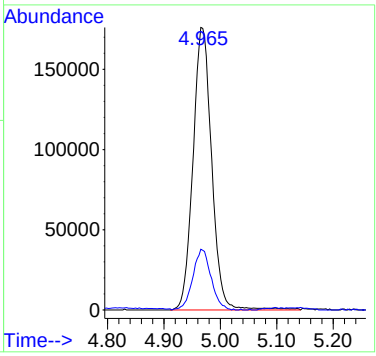


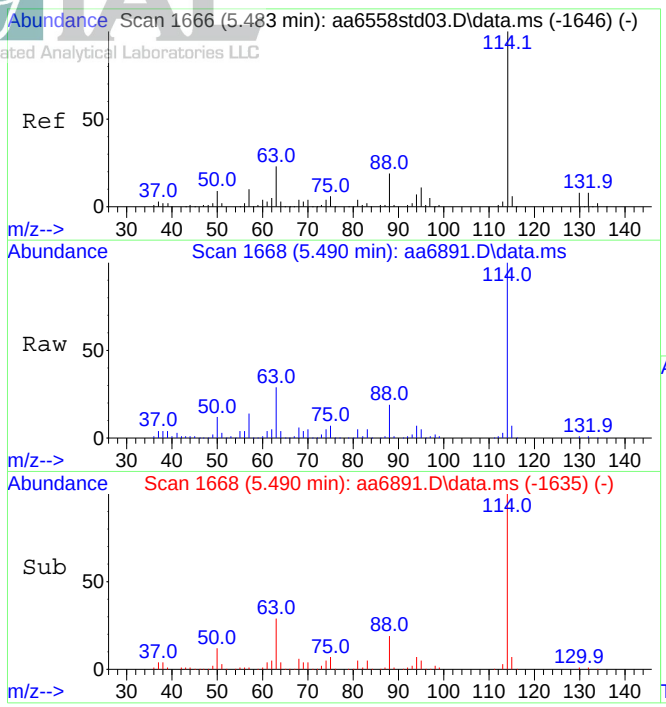


#37
Benzene
Concen: 4.71 ppbV
RT: 4.965 min Scan# 1505
Delta R.T. 0.010 min
Lab File: aa6891.D
Acq: 15 Jul 2024 8:38 pm

Tgt Ion: 78 Resp: 405424

Ion	Ratio	Lower	Upper
78	100		
51	21.0	14.9	22.3

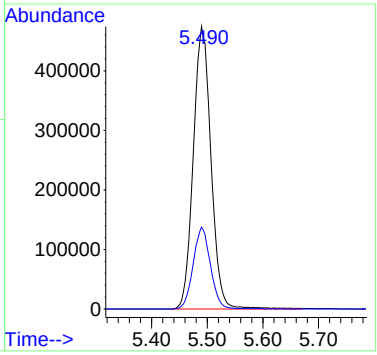


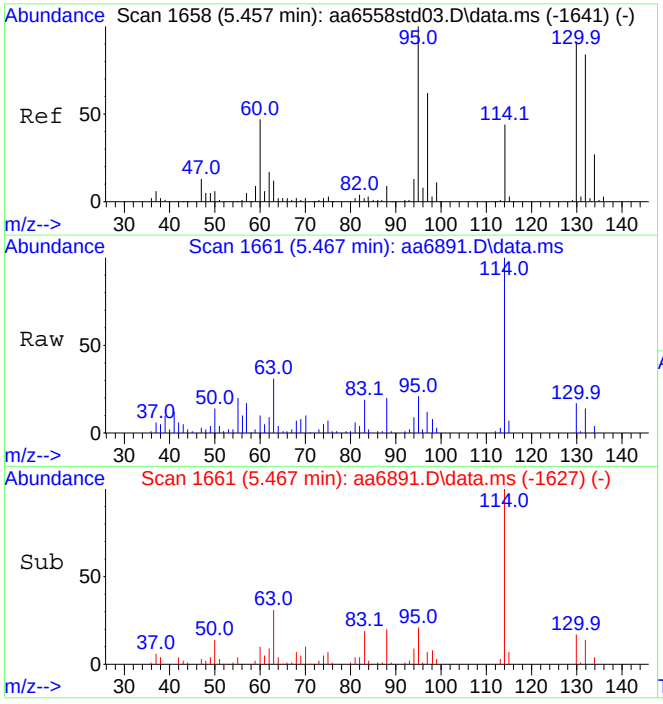


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.490 min Scan# 1668
Delta R.T. 0.006 min
Lab File: aa6891.D
Acq: 15 Jul 2024 8:38 pm

Tgt Ion:114 Resp: 1048510

Ion	Ratio	Lower	Upper
114	100		
63	28.2	3.6	43.6

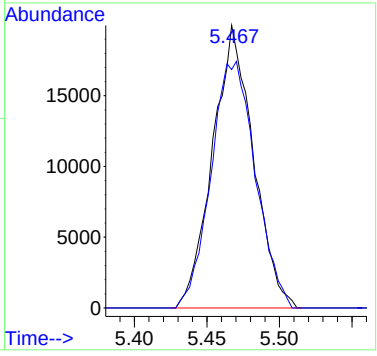


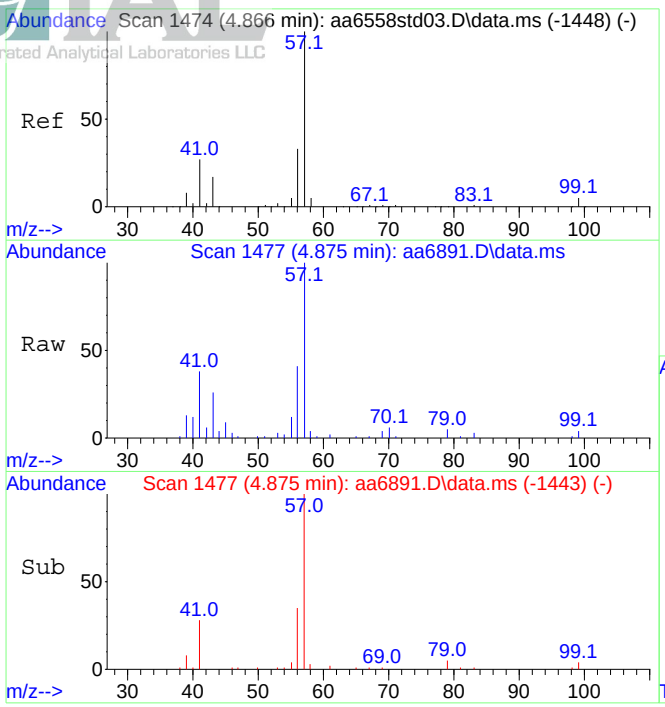


#40
Trichloroethene
Concen: 0.82 ppbV
RT: 5.467 min Scan# 1661
Delta R.T. 0.010 min
Lab File: aa6891.D
Acq: 15 Jul 2024 8:38 pm

Tgt Ion:130 Resp: 39014

Ion	Ratio	Lower	Upper
130	100		
132	95.2	76.6	114.8

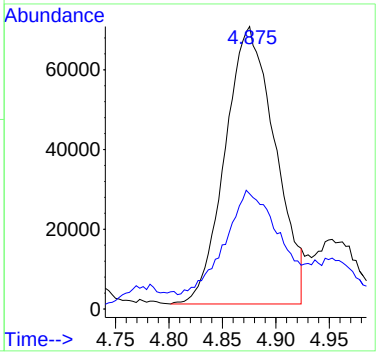


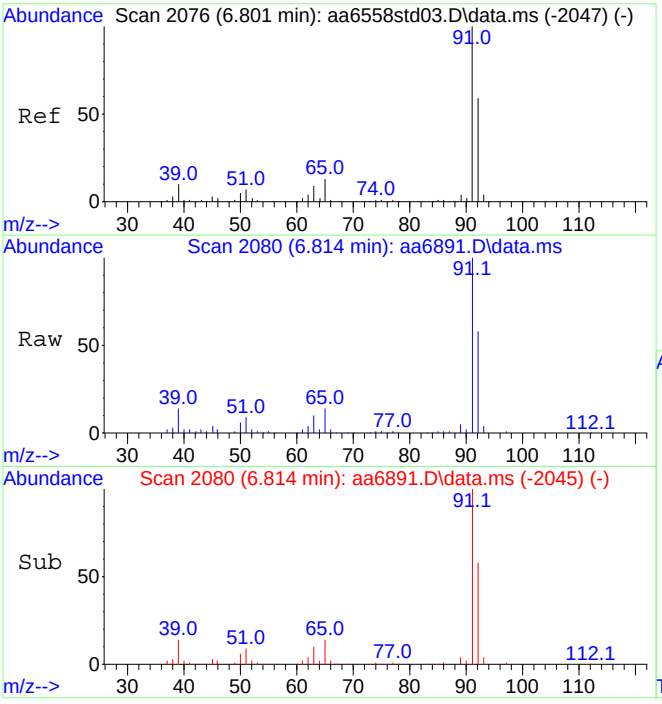


#41
2,2,4-Trimethylpentane
Concen: 1.21 ppbV
RT: 4.875 min Scan# 1477
Delta R.T. 0.010 min
Lab File: aa6891.D
Acq: 15 Jul 2024 8:38 pm

Tgt Ion: 57 Resp: 226317

Ion	Ratio	Lower	Upper
57	100		
56	39.6	26.0	39.0#

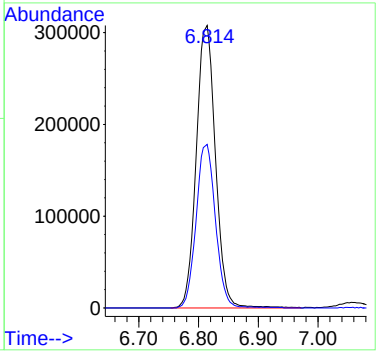


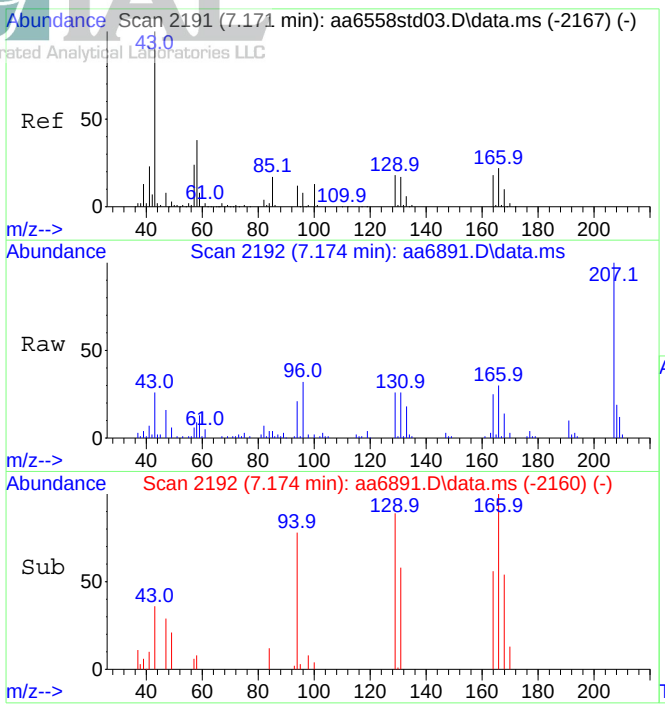


#47
Toluene
Concen: 5.15 ppbV
RT: 6.814 min Scan# 2080
Delta R.T. 0.013 min
Lab File: aa6891.D
Acq: 15 Jul 2024 8:38 pm

Tgt Ion: 91 Resp: 691566

Ion	Ratio	Lower	Upper
91	100		
92	58.3	47.0	70.6

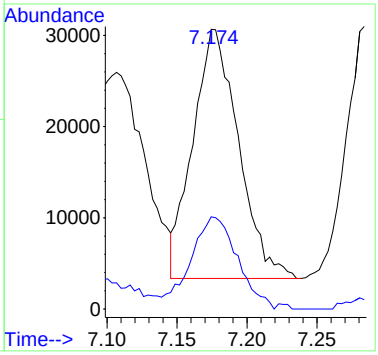


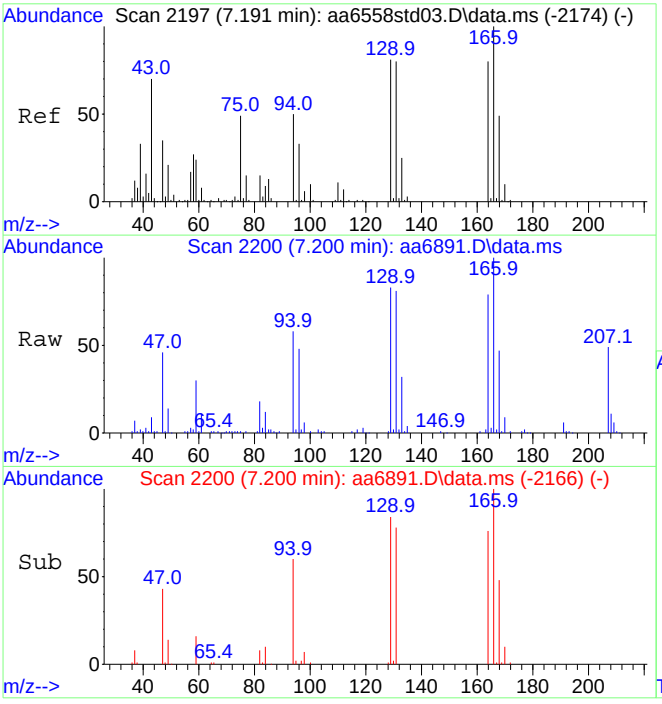


#48
Methyl isobutyl ketone
Concen: 0.63 ppbV
RT: 7.174 min Scan# 2192
Delta R.T. 0.003 min
Lab File: aa6891.D
Acq: 15 Jul 2024 8:38 pm

Tgt Ion: 43 Resp: 62038

Ion	Ratio	Lower	Upper
43	100		
58	37.7	31.0	46.4

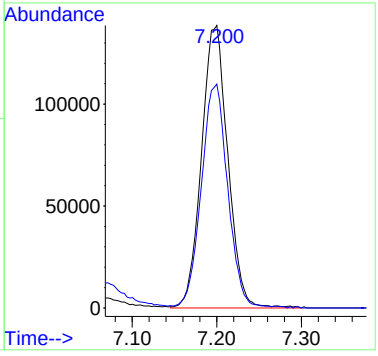


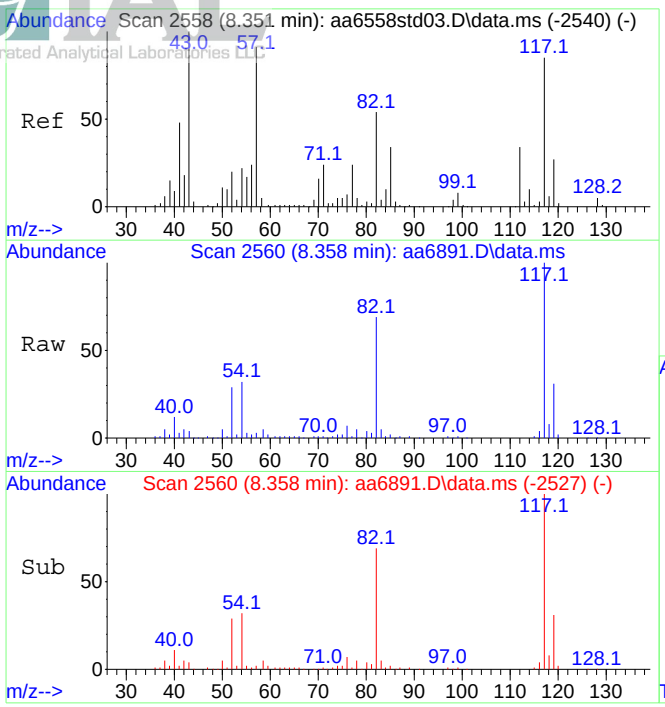


#49
Tetrachloroethene
Concen: 5.90 ppbV
RT: 7.200 min Scan# 2200
Delta R.T. 0.010 min
Lab File: aa6891.D
Acq: 15 Jul 2024 8:38 pm

Tgt Ion:166 Resp: 299850

Ion	Ratio	Lower	Upper
166	100		
164	79.7	62.8	94.2

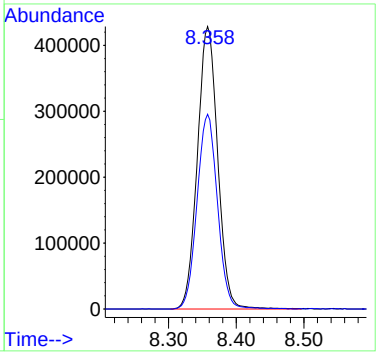


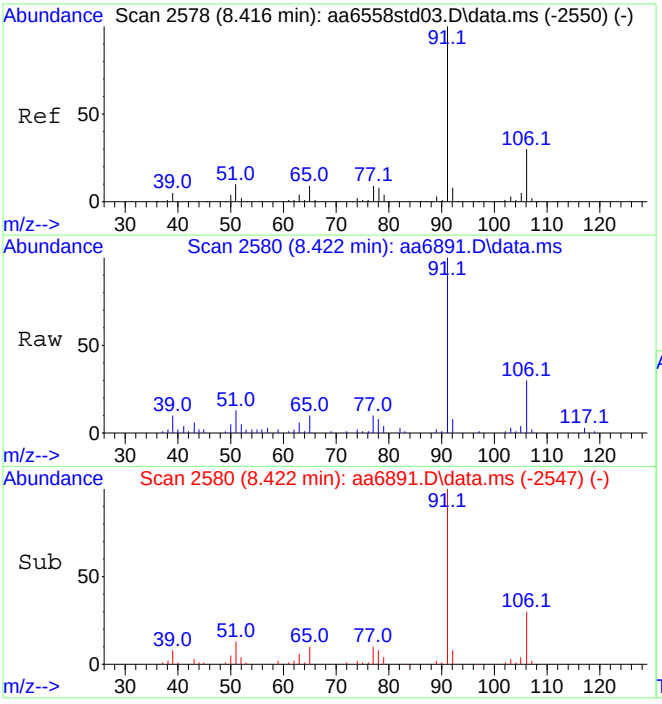


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.358 min Scan# 2560
Delta R.T. 0.006 min
Lab File: aa6891.D
Acq: 15 Jul 2024 8:38 pm

Tgt Ion:117 Resp: 894948

Ion	Ratio	Lower	Upper
117	100		
82	69.1	42.3	82.3

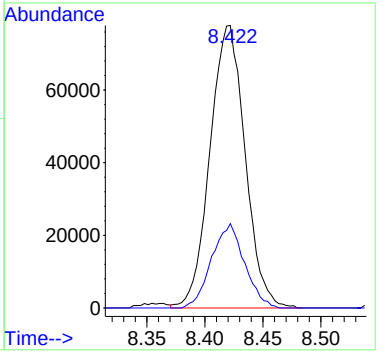


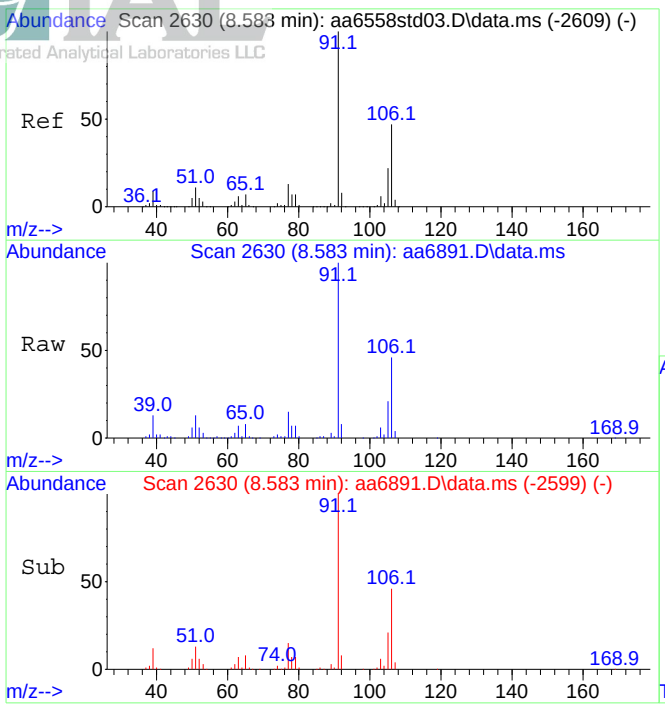


#58
Ethylbenzene
Concen: 0.93 ppbV
RT: 8.422 min Scan# 2580
Delta R.T. 0.006 min
Lab File: aa6891.D
Acq: 15 Jul 2024 8:38 pm

Tgt Ion: 91 Resp: 163846

Ion	Ratio	Lower	Upper
91	100		
106	28.0	23.8	35.8

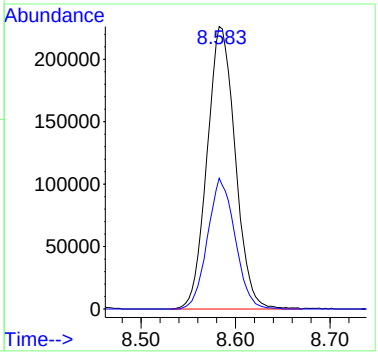


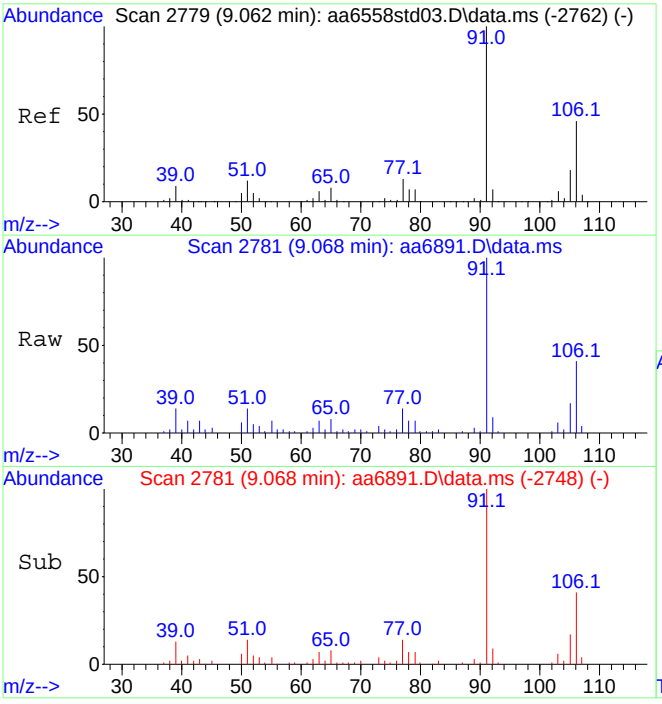


#59
Xylenes (m&p)
Concen: 3.54 ppbV
RT: 8.583 min Scan# 2630
Delta R.T. -0.000 min
Lab File: aa6891.D
Acq: 15 Jul 2024 8:38 pm

Tgt Ion: 91 Resp: 468792

Ion	Ratio	Lower	Upper
91	100		
106	45.1	37.4	56.2

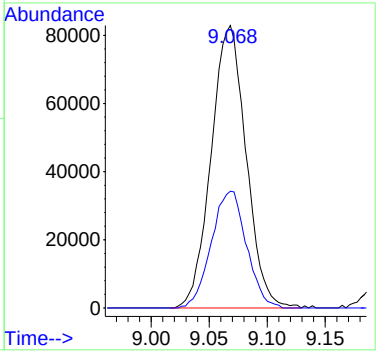


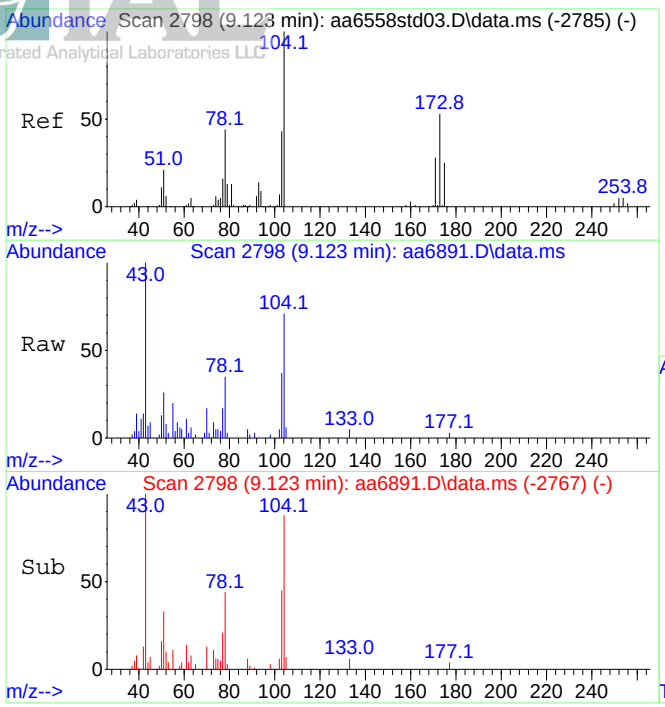


#60
Xylene (o)
Concen: 1.24 ppbV
RT: 9.068 min Scan# 2781
Delta R.T. 0.006 min
Lab File: aa6891.D
Acq: 15 Jul 2024 8:38 pm

Tgt Ion: 91 Resp: 173799

Ion	Ratio	Lower	Upper
91	100		
106	41.5	36.2	54.2

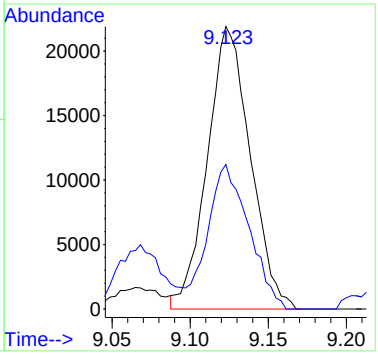


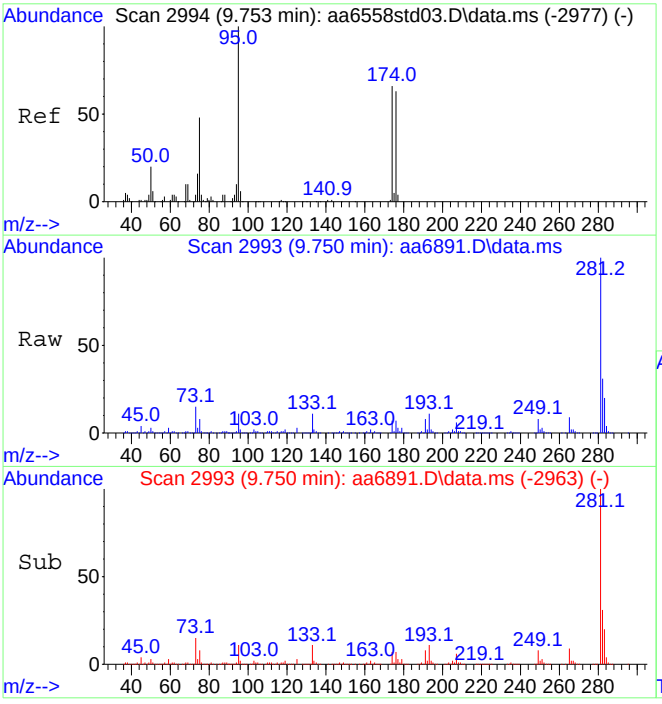


#61
Styrene
Concen: 0.45 ppbV
RT: 9.123 min Scan# 2798
Delta R.T. -0.000 min
Lab File: aa6891.D
Acq: 15 Jul 2024 8:38 pm

Tgt Ion:104 Resp: 41885

Ion	Ratio	Lower	Upper
104	100		
103	48.7	38.3	57.5

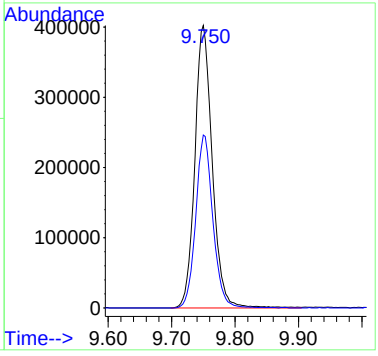


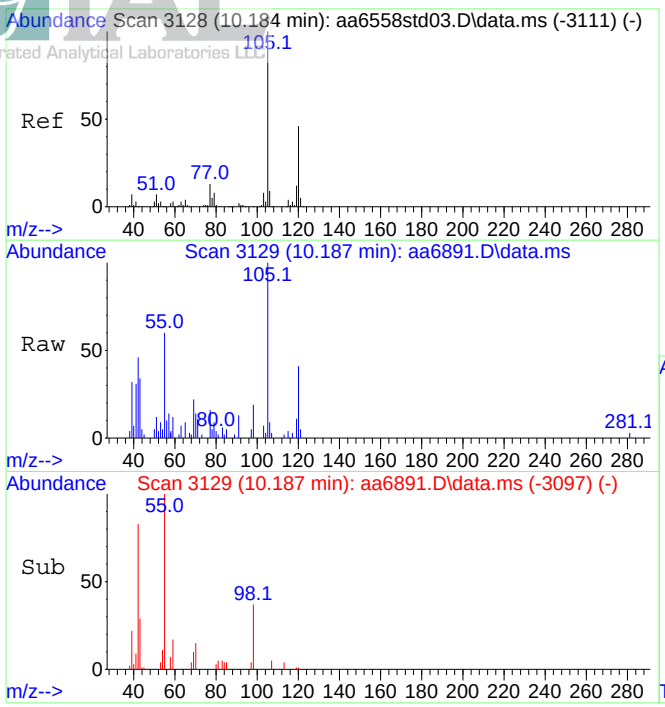


#64
Bromofluorobenzene (tune std)
Concen: 9.07 ppbV
RT: 9.750 min Scan# 2993
Delta R.T. -0.003 min
Lab File: aa6891.D
Acq: 15 Jul 2024 8:38 pm

Tgt Ion: 95 Resp: 767752

Ion	Ratio	Lower	Upper
95	100		
174	60.1	52.9	79.3

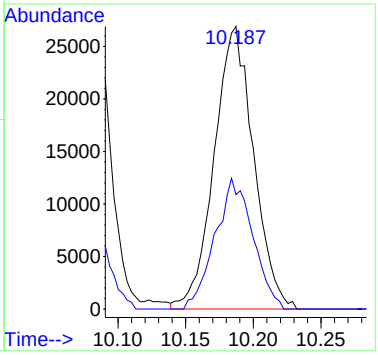


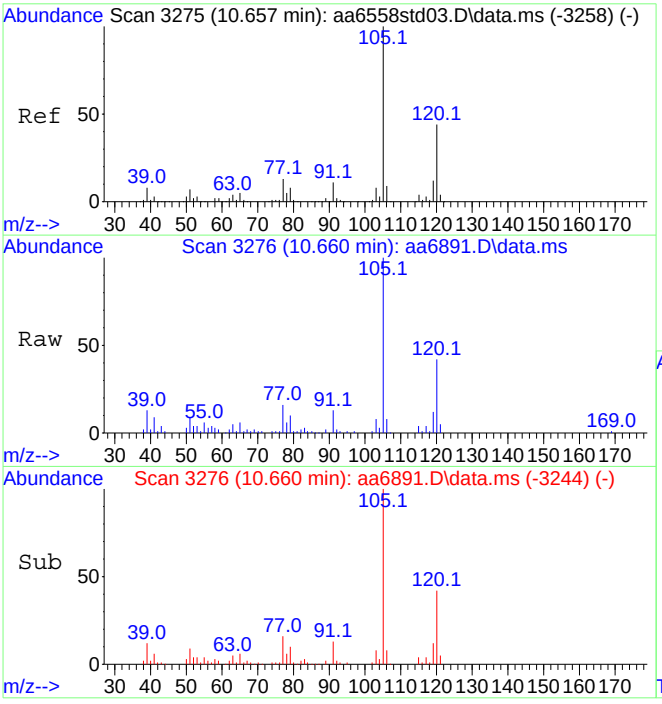


#69
1,3,5-Trimethylbenzene
Concen: 0.34 ppbV
RT: 10.187 min Scan# 3129
Delta R.T. 0.003 min
Lab File: aa6891.D
Acq: 15 Jul 2024 8:38 pm

Tgt Ion:105 Resp: 54479

Ion	Ratio	Lower	Upper
105	100		
120	44.2	37.2	55.8

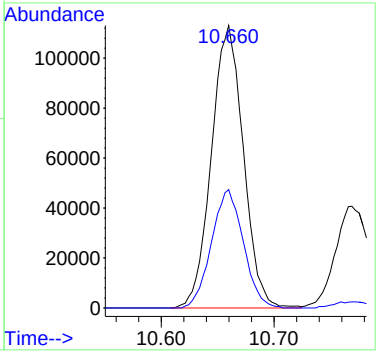


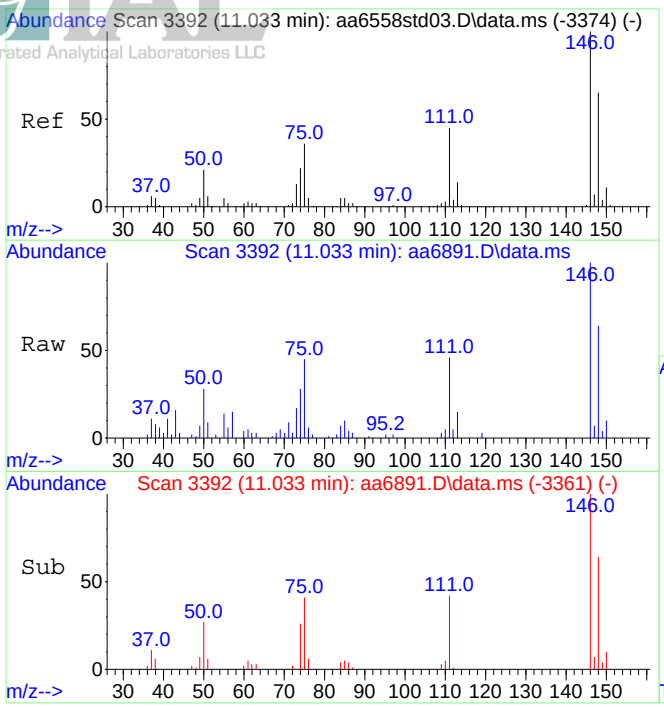


#70
1,2,4-Trimethylbenzene
Concen: 1.37 ppbV
RT: 10.660 min Scan# 3276
Delta R.T. 0.003 min
Lab File: aa6891.D
Acq: 15 Jul 2024 8:38 pm

Tgt Ion:105 Resp: 222613

Ion	Ratio	Lower	Upper
105	100		
120	41.7	34.5	51.7

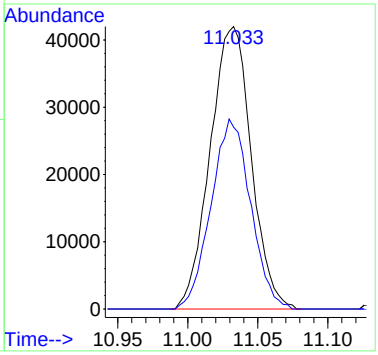




#71
1,3-Dichlorobenzene
Concen: 0.87 ppbV
RT: 11.033 min Scan# 3392
Delta R.T. -0.000 min
Lab File: aa6891.D
Acq: 15 Jul 2024 8:38 pm

Tgt Ion:146 Resp: 85895

Ion	Ratio	Lower	Upper
146	100		
148	64.5	51.2	76.8



Data Path : C:\DATA\2024\07-2024\07-15-2024\
Data File : aa6890.D
Acq On : 15 Jul 2024 8:06 pm
Operator : jjw
Sample : E24-02398-03x5 dil
Misc : 3100, 100cc
ALS Vial : 16 Sample Multiplier: 1

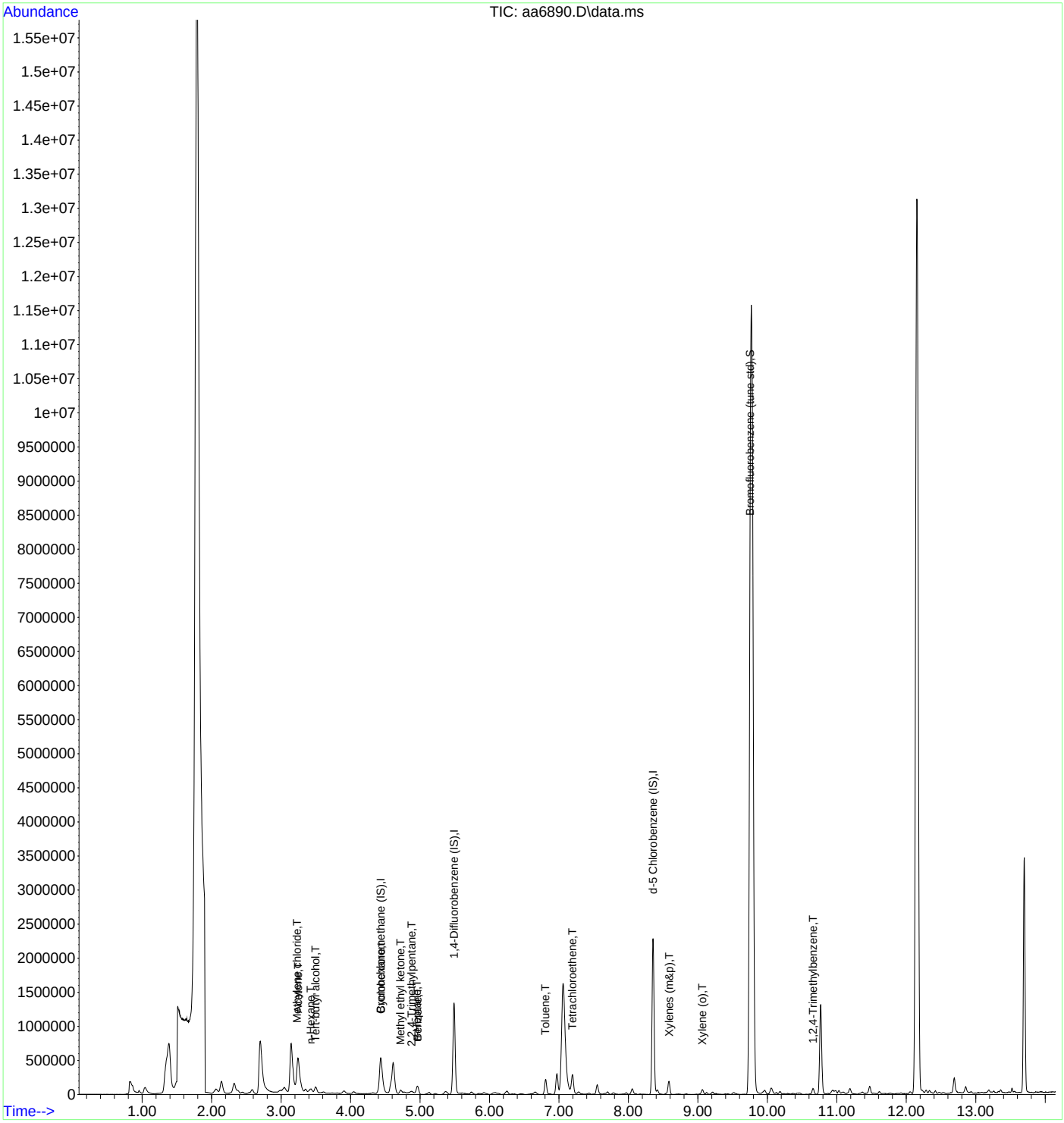
Quant Time: Jul 16 10:17:54 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

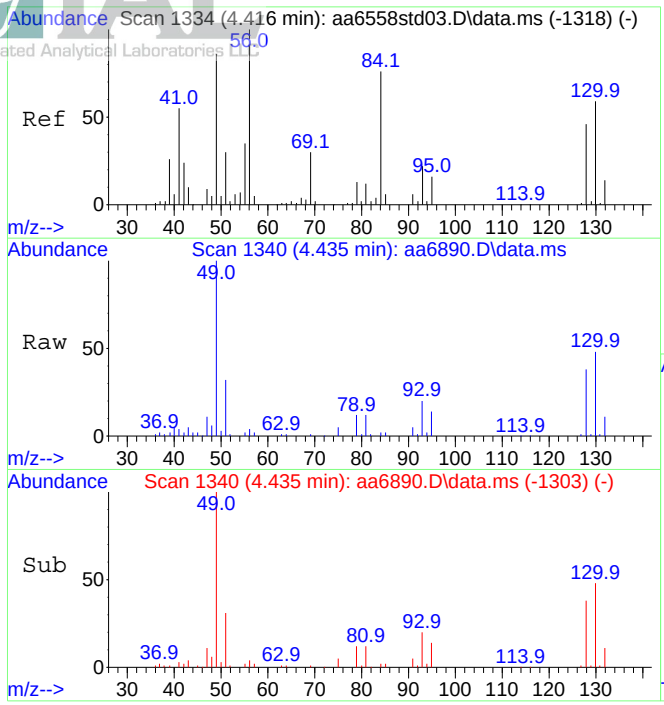
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.435	130	208271	10.00	ppbV		0.019
39) 1,4-Difluorobenzene (IS)	5.490	114	1089480	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.354	117	1277459	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.750	95	1327084	10.98	ppbV		0.000
Target Compounds							Qvalue
20) Methylene chloride	3.229	49	70142	1.86	ppbV		84
21) Acetone	3.245	43	783567	16.77	ppbV		99
24) n-Hexane	3.429	57	32302	0.40	ppbV		83
26) Tert-butyl alcohol	3.496	59	122653	1.88	ppbV		100
29) Cyclohexane	4.438	56	18412	0.34	ppbV	#	63
35) Methyl ethyl ketone	4.721	43	66408	1.00	ppbV		98
36) n-Heptane	4.956	43	26496	0.42	ppbV	#	76
37) Benzene	4.965	78	87948	0.93	ppbV		94
41) 2,2,4-Trimethylpentane	4.879	57	49499	0.26	ppbV	#	87
47) Toluene	6.805	91	180379	1.29	ppbV		99
49) Tetrachloroethene	7.194	166	79104	1.50	ppbV		97
59) Xylenes (m&p)	8.586	91	129987	0.69	ppbV		99
60) Xylene (o)	9.065	91	48094	0.24	ppbV		96
70) 1,2,4-Trimethylbenzene	10.657	105	52825	0.23	ppbV		97

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

Data Path : C:\DATA\2024\07-2024\07-15-2024\
Data File : aa6890.D
Acq On : 15 Jul 2024 8:06 pm
Operator : jjw
Sample : E24-02398-03x5 dil
Misc : 3100, 100cc
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jul 16 10:17:54 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

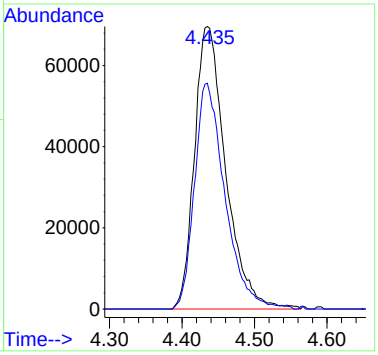


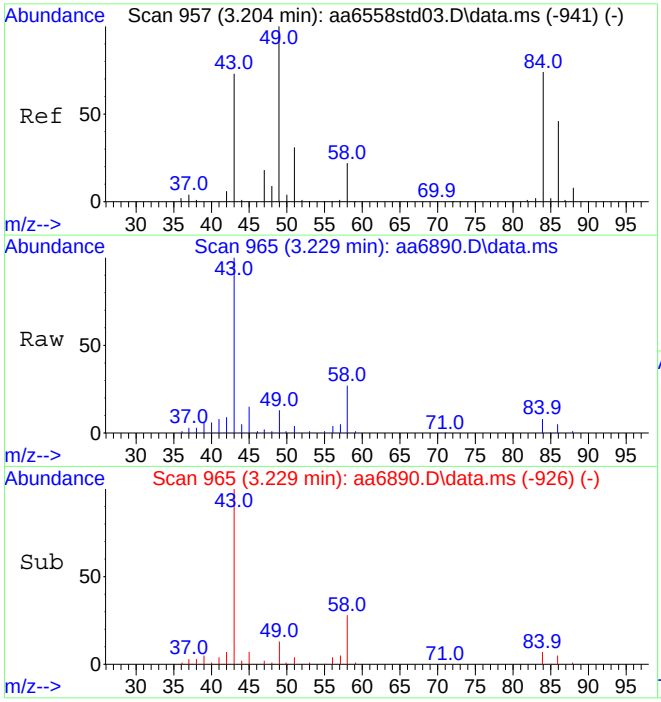


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.435 min Scan# 1340
Delta R.T. 0.019 min
Lab File: aa6890.D
Acq: 15 Jul 2024 8:06 pm

Tgt Ion:130 Resp: 208271

Ion	Ratio	Lower	Upper
130	100		
128	78.0	57.8	97.8

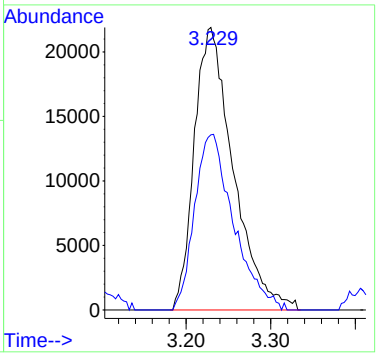


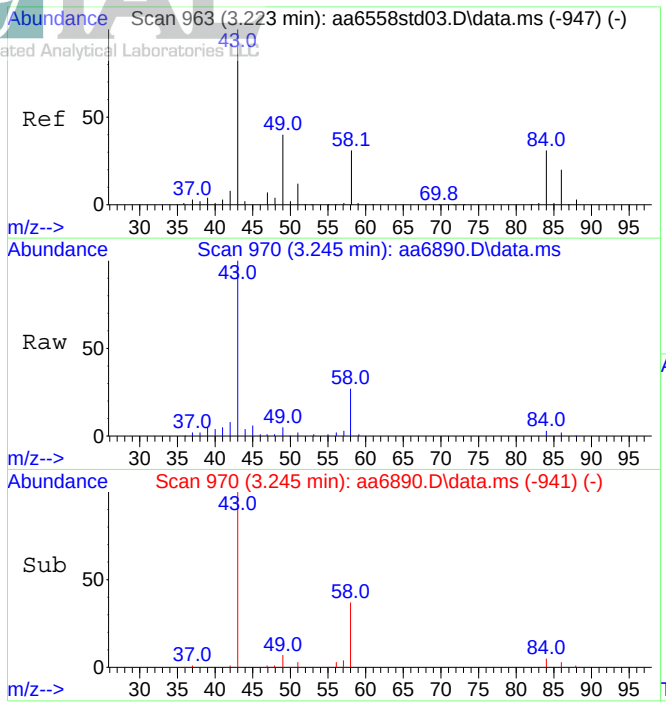


#20
Methylene chloride
Concen: 1.86 ppbV
RT: 3.229 min Scan# 965
Delta R.T. 0.026 min
Lab File: aa6890.D
Acq: 15 Jul 2024 8:06 pm

Tgt Ion: 49 Resp: 70142

Ion	Ratio	Lower	Upper
49	100		
84	62.1	56.2	96.2

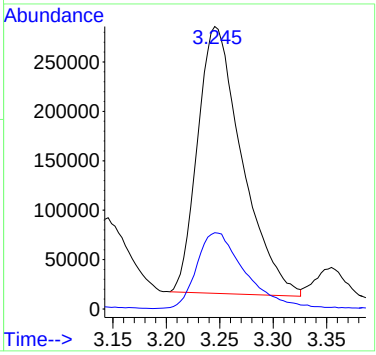


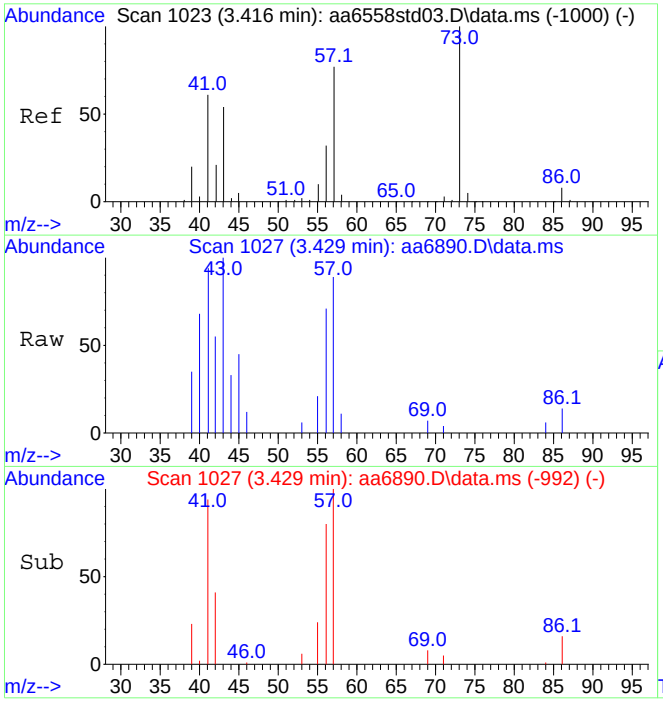


#21
Acetone
Concen: 16.77 ppbV
RT: 3.245 min Scan# 970
Delta R.T. 0.022 min
Lab File: aa6890.D
Acq: 15 Jul 2024 8:06 pm

Tgt Ion: 43 Resp: 783567

Ion	Ratio	Lower	Upper
43	100		
58	31.0	25.4	38.0

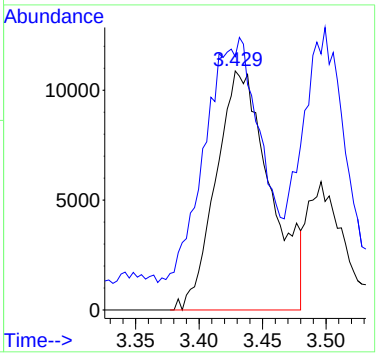


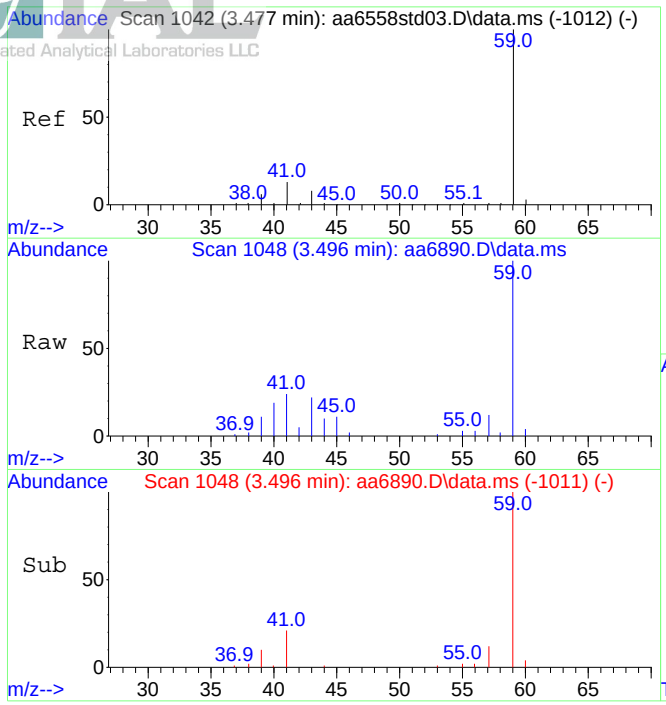


#24
n-Hexane
Concen: 0.40 ppbV
RT: 3.429 min Scan# 1027
Delta R.T. 0.013 min
Lab File: aa6890.D
Acq: 15 Jul 2024 8:06 pm

Tgt Ion: 57 Resp: 32302

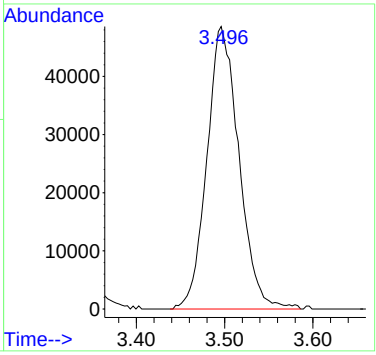
Ion	Ratio	Lower	Upper
57	100		
41	105.5	71.6	107.4

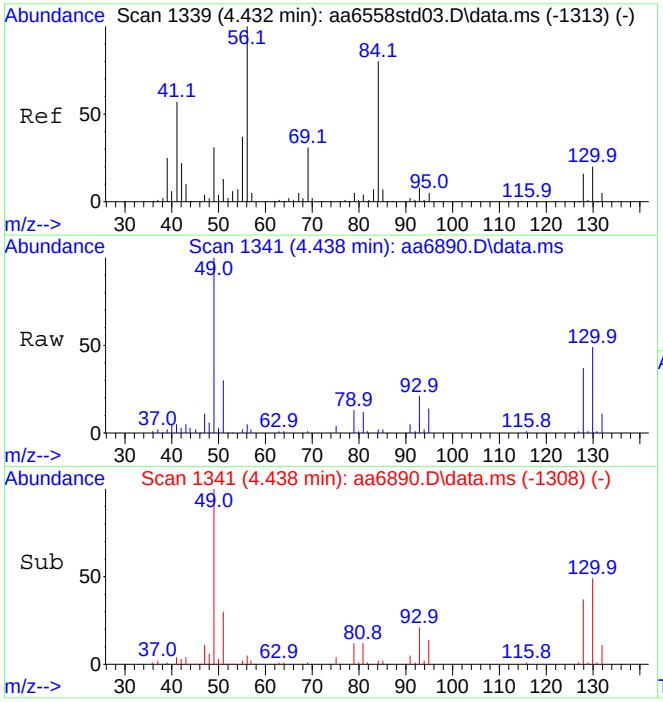




#26
Tert-butyl alcohol
Concen: 1.88 ppbV
RT: 3.496 min Scan# 1048
Delta R.T. 0.019 min
Lab File: aa6890.D
Acq: 15 Jul 2024 8:06 pm

Tgt Ion: 59 Resp: 122653

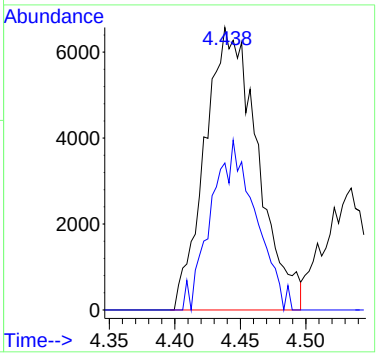


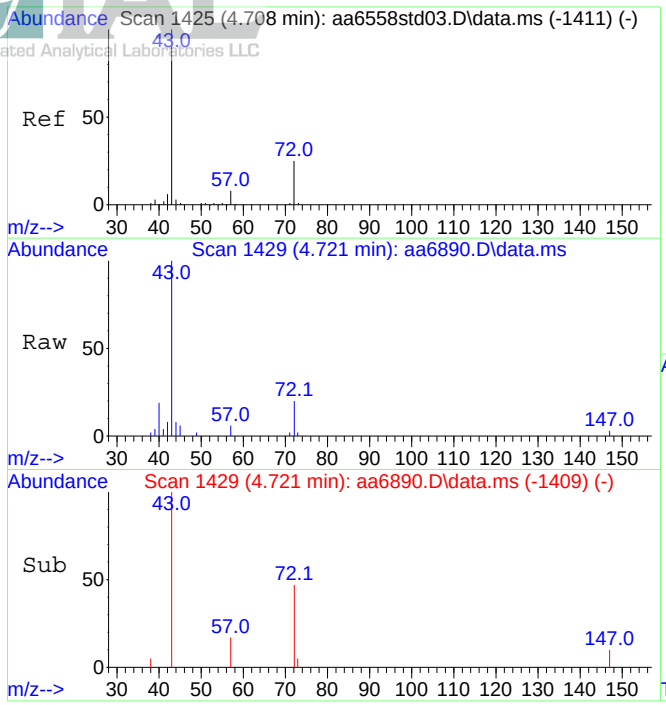


#29
Cyclohexane
Concen: 0.34 ppbV
RT: 4.438 min Scan# 1341
Delta R.T. 0.006 min
Lab File: aa6890.D
Acq: 15 Jul 2024 8:06 pm

Tgt Ion: 56 Resp: 18412

Ion	Ratio	Lower	Upper
56	100		
84	50.3	66.8	100.2#

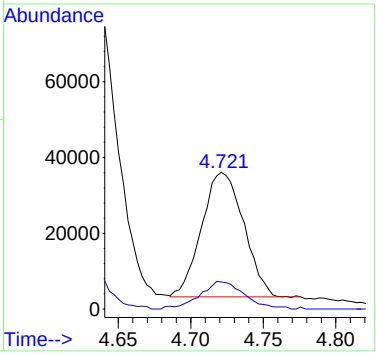


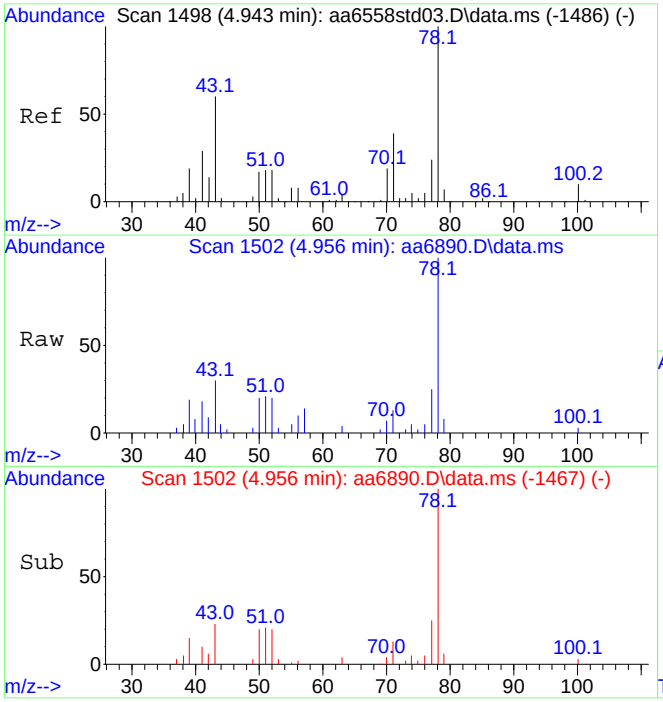


#35
Methyl ethyl ketone
Concen: 1.00 ppbV
RT: 4.721 min Scan# 1429
Delta R.T. 0.013 min
Lab File: aa6890.D
Acq: 15 Jul 2024 8:06 pm

Tgt Ion: 43 Resp: 66408

Ion	Ratio	Lower	Upper
43	100		
72	23.3	19.5	29.3

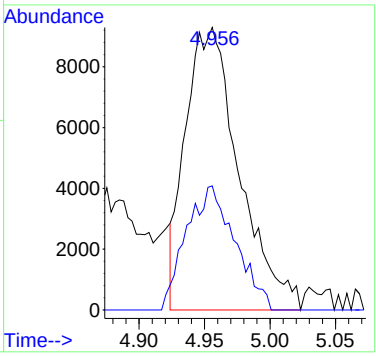


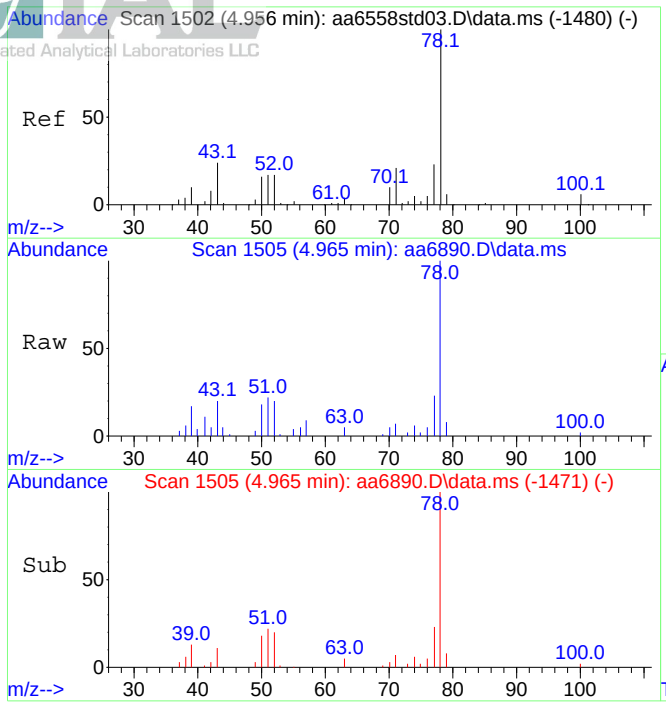


#36
n-Heptane
Concen: 0.42 ppbV
RT: 4.956 min Scan# 1502
Delta R.T. 0.013 min
Lab File: aa6890.D
Acq: 15 Jul 2024 8:06 pm

Tgt Ion: 43 Resp: 26496

Ion	Ratio	Lower	Upper
43	100		
71	39.8	46.2	69.2#

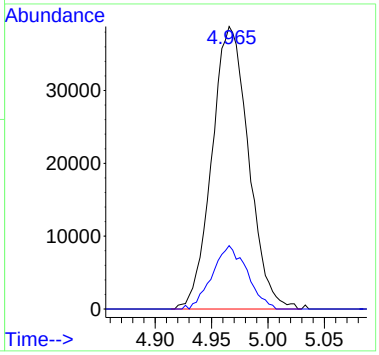


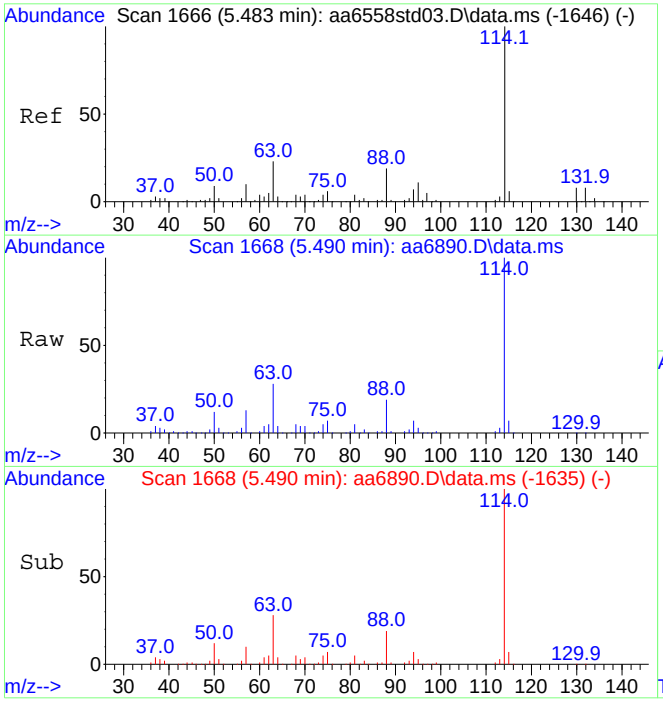


#37
Benzene
Concen: 0.93 ppbV
RT: 4.965 min Scan# 1505
Delta R.T. 0.010 min
Lab File: aa6890.D
Acq: 15 Jul 2024 8:06 pm

Tgt Ion: 78 Resp: 87948

Ion	Ratio	Lower	Upper
78	100		
51	21.2	14.9	22.3

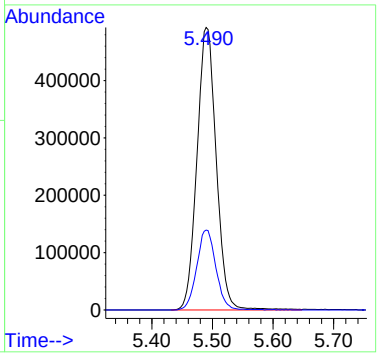


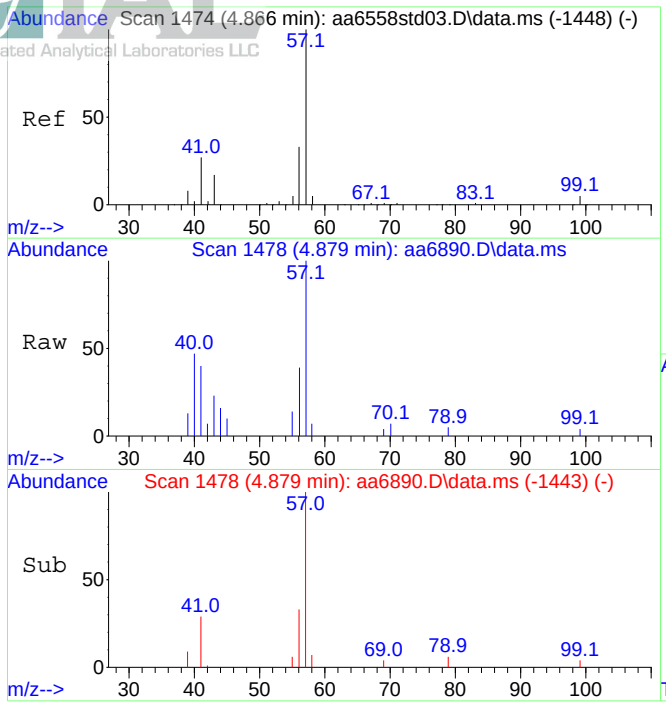


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.490 min Scan# 1668
Delta R.T. 0.006 min
Lab File: aa6890.D
Acq: 15 Jul 2024 8:06 pm

Tgt Ion:114 Resp: 1089480

Ion	Ratio	Lower	Upper
114	100		
63	28.1	3.6	43.6

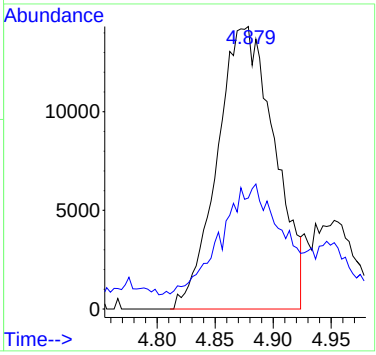


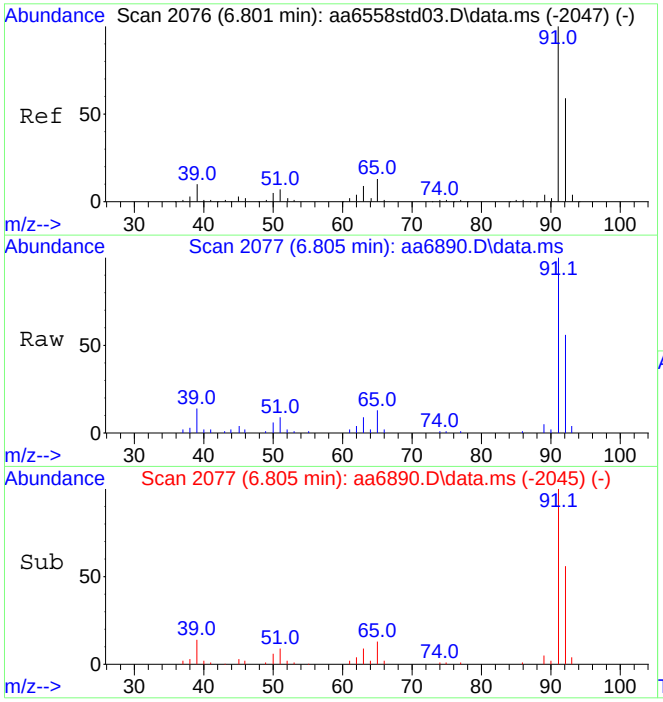


#41
2,2,4-Trimethylpentane
Concen: 0.26 ppbV
RT: 4.879 min Scan# 1478
Delta R.T. 0.013 min
Lab File: aa6890.D
Acq: 15 Jul 2024 8:06 pm

Tgt Ion: 57 Resp: 49499

Ion	Ratio	Lower	Upper
57	100		
56	39.6	26.0	39.0#

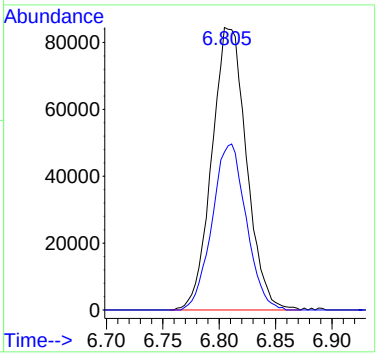


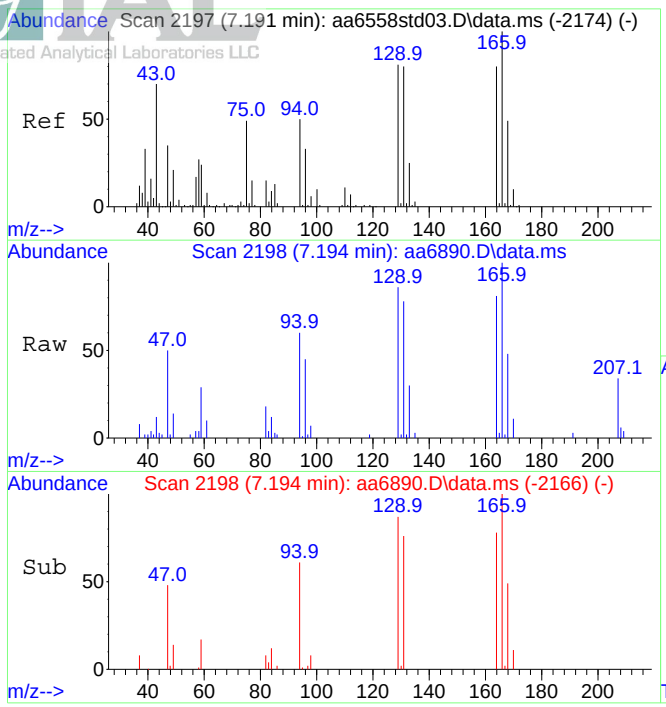


#47
Toluene
Concen: 1.29 ppbV
RT: 6.805 min Scan# 2077
Delta R.T. 0.003 min
Lab File: aa6890.D
Acq: 15 Jul 2024 8:06 pm

Tgt Ion: 91 Resp: 180379

Ion	Ratio	Lower	Upper
91	100		
92	57.7	47.0	70.6

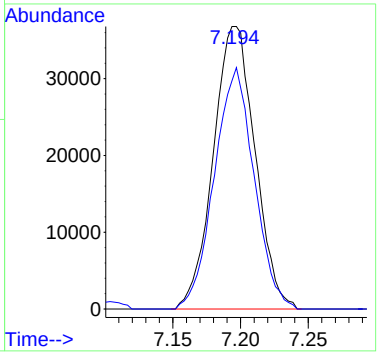


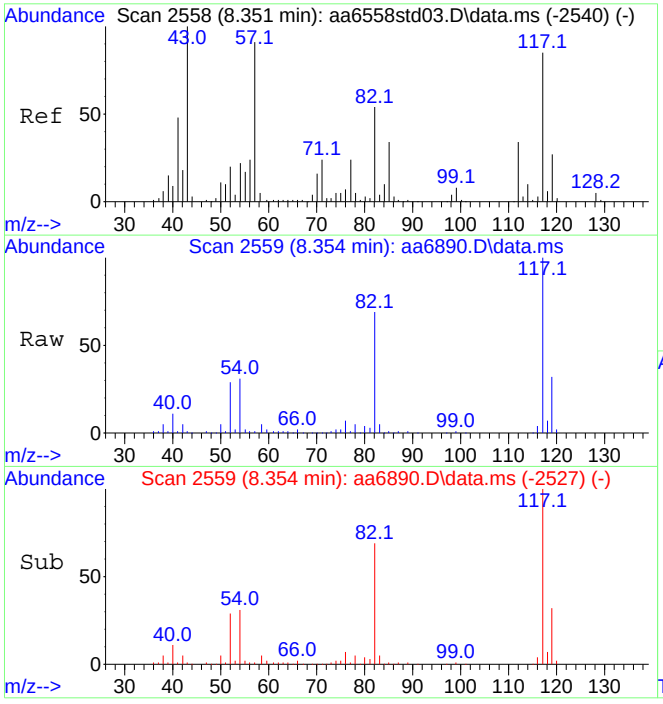


#49
Tetrachloroethene
Concen: 1.50 ppbV
RT: 7.194 min Scan# 2198
Delta R.T. 0.003 min
Lab File: aa6890.D
Acq: 15 Jul 2024 8:06 pm

Tgt Ion:166 Resp: 79104

Ion	Ratio	Lower	Upper
166	100		
164	81.3	62.8	94.2

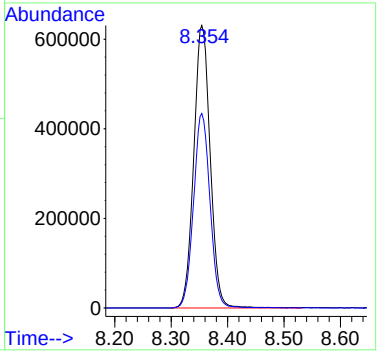


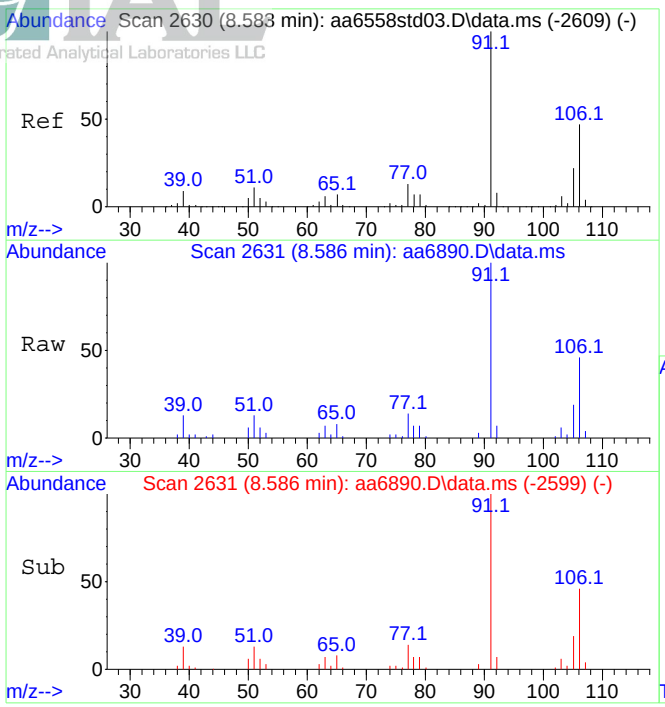


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.354 min Scan# 2559
Delta R.T. 0.003 min
Lab File: aa6890.D
Acq: 15 Jul 2024 8:06 pm

Tgt Ion:117 Resp: 1277459

Ion	Ratio	Lower	Upper
117	100		
82	69.0	42.3	82.3

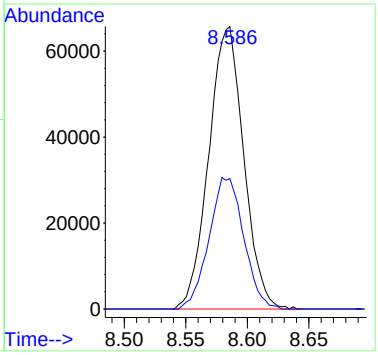


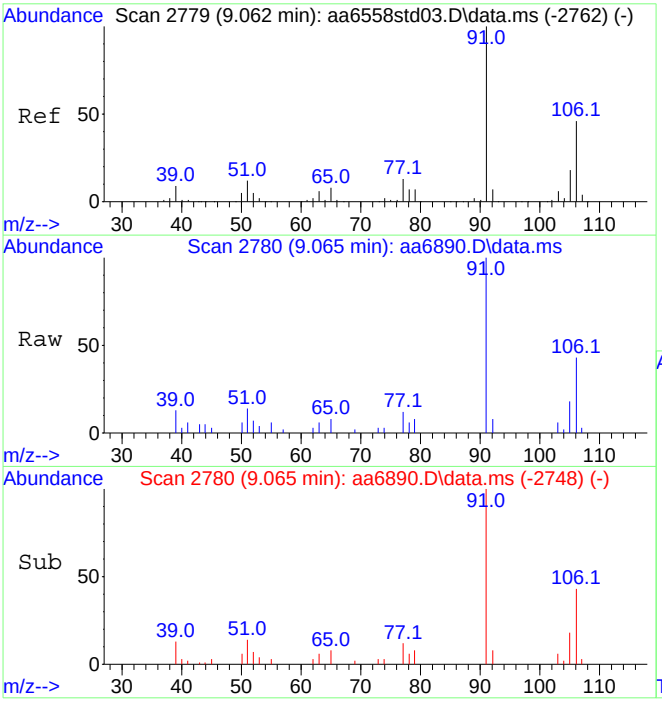


#59
Xylenes (m&p)
Concen: 0.69 ppbV
RT: 8.586 min Scan# 2631
Delta R.T. 0.003 min
Lab File: aa6890.D
Acq: 15 Jul 2024 8:06 pm

Tgt Ion: 91 Resp: 129987

Ion	Ratio	Lower	Upper
91	100		
106	46.2	37.4	56.2

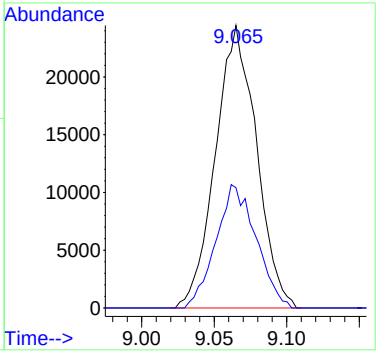


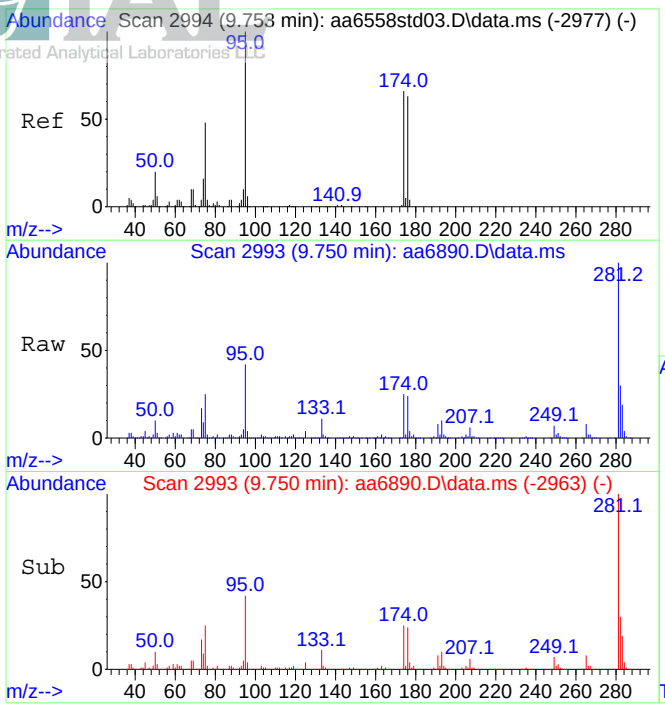


#60
Xylene (o)
Concen: 0.24 ppbV
RT: 9.065 min Scan# 2780
Delta R.T. 0.003 min
Lab File: aa6890.D
Acq: 15 Jul 2024 8:06 pm

Tgt Ion: 91 Resp: 48094

Ion	Ratio	Lower	Upper
91	100		
106	42.6	36.2	54.2

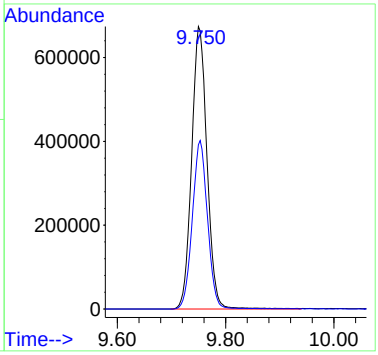


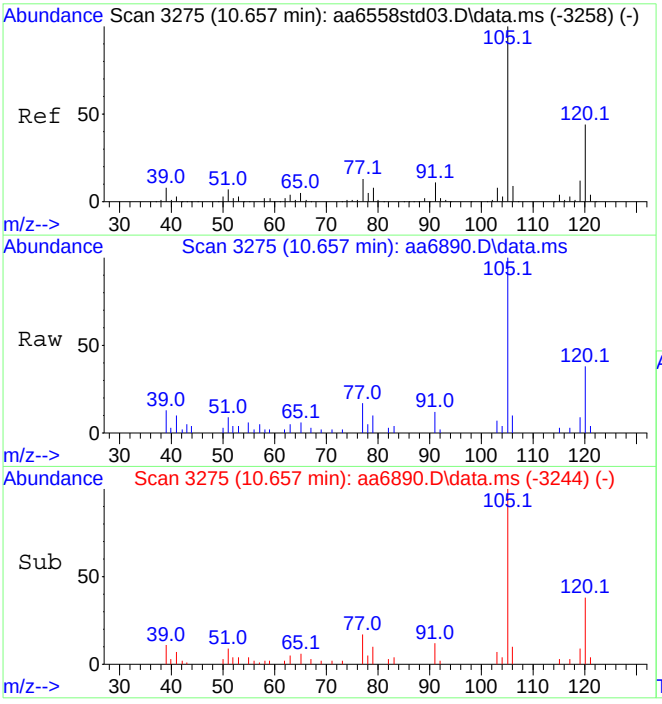


#64
Bromofluorobenzene (tune std)
Concen: 10.98 ppbV
RT: 9.750 min Scan# 2993
Delta R.T. -0.003 min
Lab File: aa6890.D
Acq: 15 Jul 2024 8:06 pm

Tgt Ion: 95 Resp: 1327084

Ion	Ratio	Lower	Upper
95	100		
174	59.1	52.9	79.3

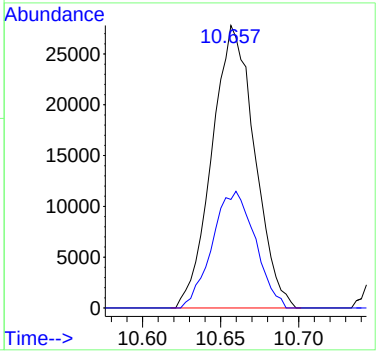




#70
1,2,4-Trimethylbenzene
Concen: 0.23 ppbV
RT: 10.657 min Scan# 3275
Delta R.T. -0.000 min
Lab File: aa6890.D
Acq: 15 Jul 2024 8:06 pm

Tgt Ion:105 Resp: 52825

Ion	Ratio	Lower	Upper
105	100		
120	41.4	34.5	51.7



Volatile Organic Compounds by EPA Method TO-15
Summary of Results

Lab ID:	E24-02398-04	Instrument ID:	AA
Client ID:	SG-13	GC/MS Column:	RTX-1, 0.32 mmID
Date Sampled:	07/12/2024 13:30	Injection Volmue:	500ml, 100ml
Date Received:	07/15/2024	Matrix:	Air-Other
Date Analyzed:	07/15/2024 22:11, 07/15/2024 21:39	% Moisture:	NA
Data File:	AA6894, AA6893	Dilution Factor:	1, 5
Summa ID:	2886	Analyst:	J. Walukiewicz

			Concentration Reported		Reporting Limits	
Compound	**CAS #**	**Q**	**ppbv**	**ug/m3**	**ppbv**	**ug/m3**
Acetone	67-64-1	D	75	180	1.0	2.4
Benzene	71-43-2		1.5	4.7	0.20	0.64
Bromodichloromethane	75-27-4		ND	ND	0.20	1.3
Bromoform	75-25-2		ND	ND	0.20	2.1
Bromomethane	74-83-9		ND	ND	0.20	0.78
1,3-Butadiene	106-99-0		ND	ND	0.20	0.44
Chlorobenzene	108-90-7		ND	ND	0.20	0.92
Chloroethane	75-00-3		ND	ND	0.20	0.53
Chloroform	67-66-3		3.4	16	0.20	0.98
Chloromethane	74-87-3		ND	ND	0.20	0.41
Carbon disulfide	75-15-0		0.75	2.3	0.20	0.62
Carbon tetrachloride	56-23-5		ND	ND	0.040	0.25
Cyclohexane	110-82-7		0.68	2.3	0.20	0.69
Dibromochloromethane	124-48-1		ND	ND	0.20	1.7
1,2-Dibromoethane	106-93-4		ND	ND	0.20	1.5
1,2-Dichlorobenzene	95-50-1		ND	ND	0.20	1.2
1,3-Dichlorobenzene	541-73-1		0.74	4.4	0.20	1.2
1,4-Dichlorobenzene	106-46-7		ND	ND	0.20	1.2
Dichlorodifluoromethane	75-71-8		ND	ND	0.20	0.99
1,1-Dichloroethane	75-34-3		ND	ND	0.20	0.81
1,2-Dichloroethane	107-06-2		ND	ND	0.20	0.81
1,1-Dichloroethene	75-35-4		ND	ND	0.20	0.79
1,2-Dichloroethene (cis)	156-59-2		0.26	1.0	0.20	0.79
1,2-Dichloroethene (trans)	156-60-5		ND	ND	0.20	0.79
1,2-Dichloropropane	78-87-5		ND	ND	0.20	0.92
1,3-Dichloropropene (cis)	10061-01-5		ND	ND	0.20	0.91
1,3-Dichloropropene (trans)	10061-02-6		ND	ND	0.20	0.91
1,2-Dichlorotetrafluoroethane	76-14-2		ND	ND	0.20	1.4
1,4-Dioxane	123-91-1		1.1	4.1	0.20	0.72
Ethylbenzene	100-41-4		0.83	3.6	0.20	0.87
n-Heptane	142-82-5		0.85	3.5	0.20	0.82
1,3-Hexachlorobutadiene	87-68-3		ND	ND	0.20	2.1
n-Hexane	110-54-3		0.38	1.4	0.20	0.70
Methylene chloride	75-09-2		4.4	15	0.20	0.69
Methyl ethyl ketone	78-93-3		3.5	10	0.20	0.59
Methyl isobutyl ketone	108-10-1		0.77	3.2	0.20	0.82
Methyl tert-butyl ether	1634-04-4		ND	ND	0.20	0.72
Styrene	100-42-5		0.61	2.6	0.20	0.85
Tert-butyl alcohol	75-65-0		9.9	30	0.20	0.61
1,1,2,2-Tetrachloroethane	79-34-5		ND	ND	0.20	1.4
Tetrachloroethene	127-18-4	D	140	950	1.0	6.8
Toluene	108-88-3		3.7	14	0.20	0.75
1,2,4-Trichlorobenzene	120-82-1		ND	ND	0.20	1.5
1,1,1-Trichloroethane	71-55-6		0.69	3.8	0.20	1.1
1,1,2-Trichloroethane	79-00-5		ND	ND	0.20	1.1

Qualifiers:
D = Dilution required

INTEGRATED ANALYTICAL LABORATORIES, LLC
Integrated Analytical Laboratories LLC

Volatile Organic Compounds by EPA Method TO-15
Summary of Results

Lab ID:	E24-02398-04	Instrument ID:	AA
Client ID:	SG-13	GC/MS Column:	RTX-1, 0.32 mmID
Date Sampled:	07/12/2024 13:30	Injection Volmue:	500ml, 100ml
Date Received:	07/15/2024	Matrix:	Air-Other
Date Analyzed:	07/15/2024 22:11, 07/15/2024 21:39	% Moisture:	NA
Data File:	AA6894, AA6893	Dilution Factor:	1, 5
Summa ID:	2886	Analyst:	J. Walukiewicz

			Concentration Reported		Reporting Limits	
Compound	**CAS #**	**Q**	**ppbv**	**ug/m3**	**ppbv**	**ug/m3**
Trichloroethene	79-01-6		16	85	0.046	0.25
Trichlorofluoromethane	75-69-4		0.42	2.4	0.20	1.1
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1		ND	ND	0.20	1.5
1,2,4-Trimethylbenzene	95-63-6		1.2	6.0	0.20	0.98
1,3,5-Trimethylbenzene	108-67-8		0.33	1.6	0.20	0.98
2,2,4-Trimethylpentane	540-84-1		0.45	2.1	0.20	0.93
Vinyl bromide	593-60-2		ND	ND	0.20	0.87
Vinyl chloride	75-01-4		ND	ND	0.20	0.51
Xylenes (m&p)	179601-23-1		3.1	14	0.20	0.87
Xylenes (o)	95-47-6		1.2	5.2	0.20	0.87

Qualifiers:
D = Dilution required

Data Path : C:\DATA\2024\07-2024\07-15-2024\
Data File : aa6894.D
Acq On : 15 Jul 2024 10:11 pm
Operator : jjw
Sample : E24-02398-04
Misc : 2886, 500cc
ALS Vial : 20 Sample Multiplier: 1

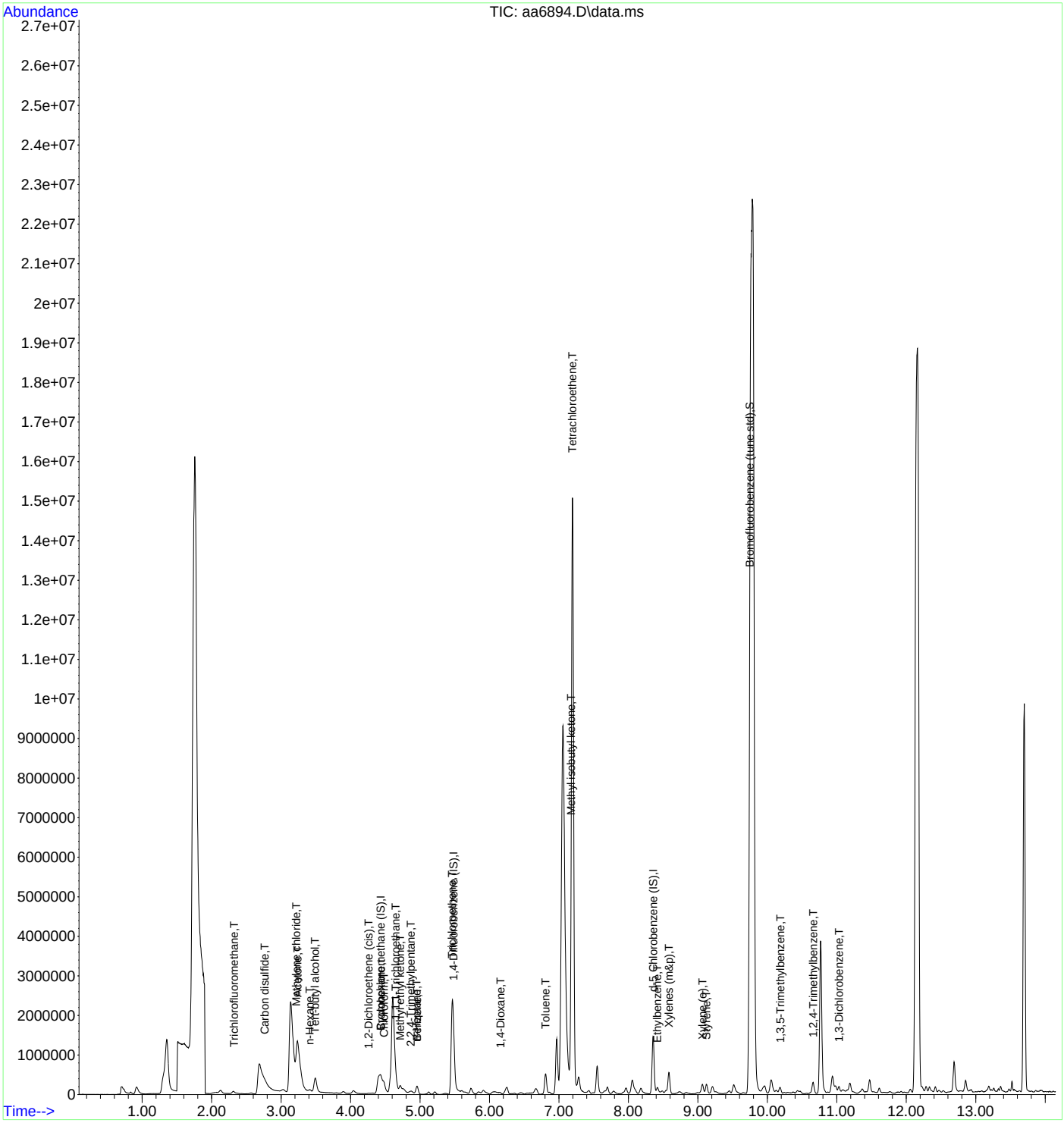
Quant Time: Jul 16 10:27:57 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

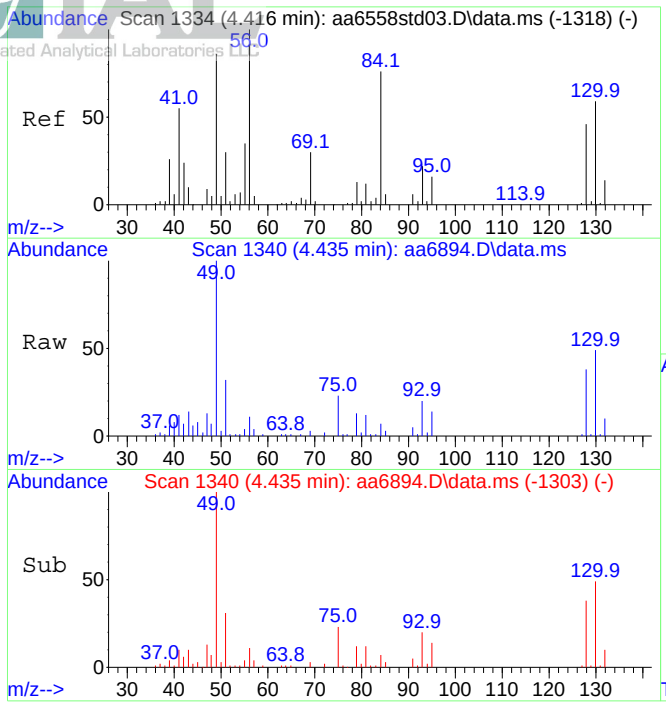
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.435	130	189416	10.00	ppbV		0.019
39) 1,4-Difluorobenzene (IS)	5.483	114	903963	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.358	117	793914	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.747	95	596820	7.95	ppbV		0.000
Target Compounds							Qvalue
12) Trichlorofluoromethane	2.326	101	26143	0.42	ppbV		97
15) Carbon disulfide	2.766	76	60090	0.75	ppbV	#	67
20) Methylene chloride	3.220	49	151051	4.41	ppbV		82
21) Acetone	3.239	43	2790268	65.65	ppbV		93
24) n-Hexane	3.412	57	27993	0.38	ppbV		82
26) Tert-butyl alcohol	3.490	59	587116	9.90	ppbV		100
28) 1,2-Dichloroethene (cis)	4.261	61	10013	0.26	ppbV		90
29) Cyclohexane	4.438	56	33092	0.68	ppbV		94
30) Chloroform	4.483	83	204071	3.37	ppbV		95
34) 1,1,1-Trichloroethane	4.647	97	39415	0.69	ppbV		100
35) Methyl ethyl ketone	4.715	43	213507	3.54	ppbV		98
36) n-Heptane	4.953	43	48654	0.85	ppbV	#	74
37) Benzene	4.959	78	127723	1.48	ppbV		93
40) Trichloroethene	5.461	130	643341	15.74	ppbV		99
41) 2,2,4-Trimethylpentane	4.869	57	72323	0.45	ppbV	#	80
45) 1,4-Dioxane	6.158	88	24221	1.14	ppbV	#	80
47) Toluene	6.808	91	427130	3.69	ppbV		99
48) Methyl isobutyl ketone	7.174	43	65082	0.77	ppbV		94
49) Tetrachloroethene	7.194	166	4566196	104.16	ppbV		100
58) Ethylbenzene	8.419	91	129309	0.83	ppbV		98
59) Xylenes (m&p)	8.583	91	368635	3.13	ppbV		98
60) Xylene (o)	9.068	91	147126	1.19	ppbV		94
61) Styrene	9.123	104	50426	0.61	ppbV		100
69) 1,3,5-Trimethylbenzene	10.187	105	47341	0.33	ppbV		95
70) 1,2,4-Trimethylbenzene	10.660	105	175133	1.21	ppbV		99
71) 1,3-Dichlorobenzene	11.033	146	64711	0.74	ppbV		98

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

Data Path : C:\DATA\2024\07-2024\07-15-2024\
Data File : aa6894.D
Acq On : 15 Jul 2024 10:11 pm
Operator : jjw
Sample : E24-02398-04
Misc : 2886, 500cc
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jul 16 10:27:57 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

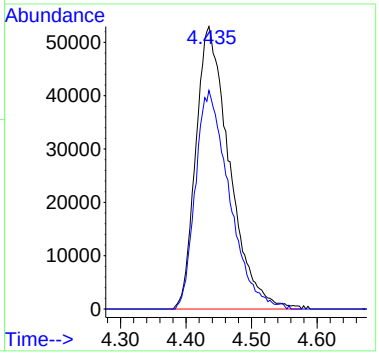


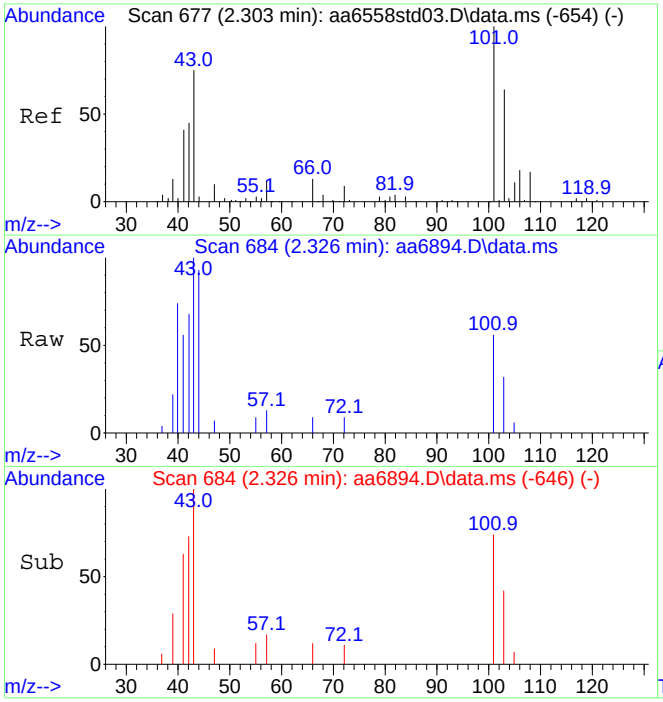


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.435 min Scan# 1340
Delta R.T. 0.019 min
Lab File: aa6894.D
Acq: 15 Jul 2024 10:11 pm

Tgt Ion:130 Resp: 189416

Ion	Ratio	Lower	Upper
130	100		
128	77.8	57.8	97.8

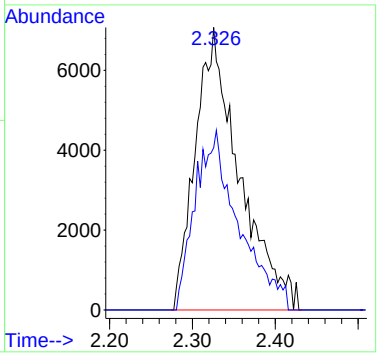


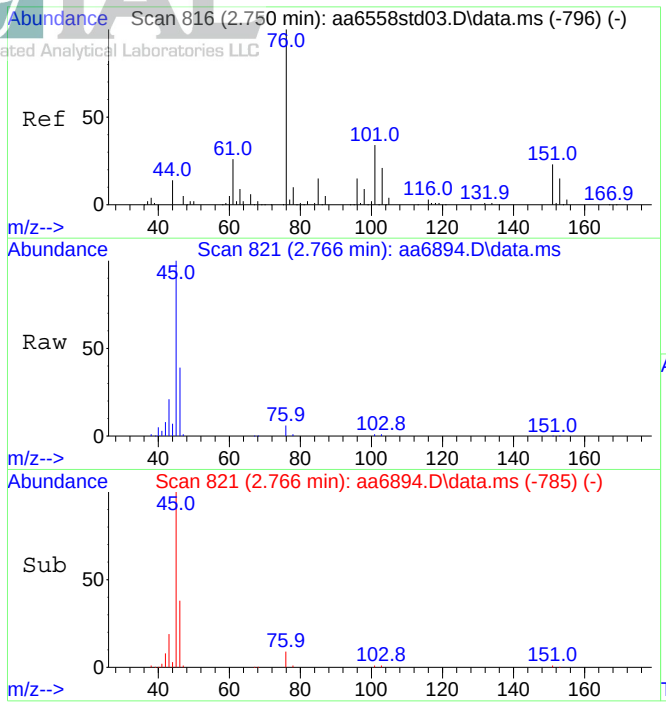


#12
Trichlorofluoromethane
Concen: 0.42 ppbV
RT: 2.326 min Scan# 684
Delta R.T. 0.022 min
Lab File: aa6894.D
Acq: 15 Jul 2024 10:11 pm

Tgt Ion:101 Resp: 26143

Ion	Ratio	Lower	Upper
101	100		
103	62.7	51.9	77.9

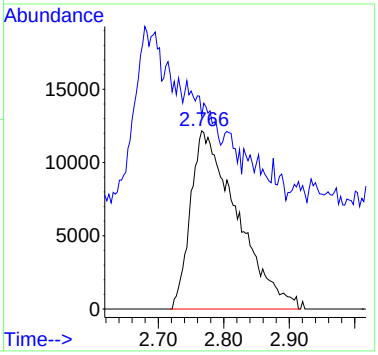


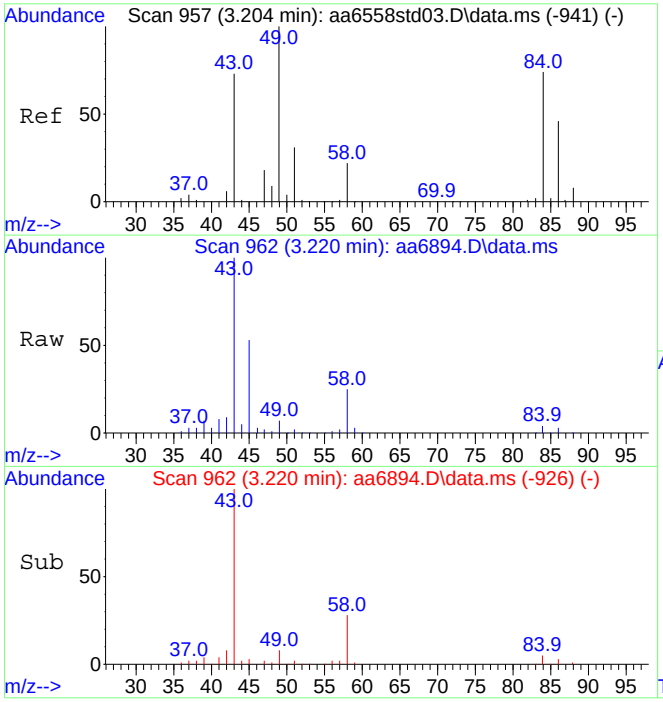


#15
Carbon disulfide
Concen: 0.75 ppbV
RT: 2.766 min Scan# 821
Delta R.T. 0.016 min
Lab File: aa6894.D
Acq: 15 Jul 2024 10:11 pm

Tgt Ion: 76 Resp: 60090

Ion	Ratio	Lower	Upper
76	100		
44	0.0	10.6	16.0#

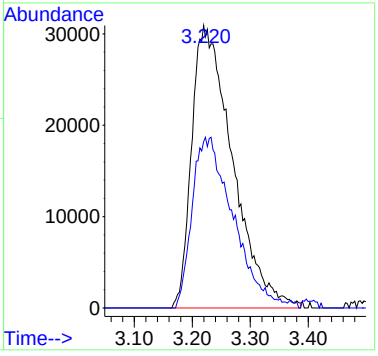


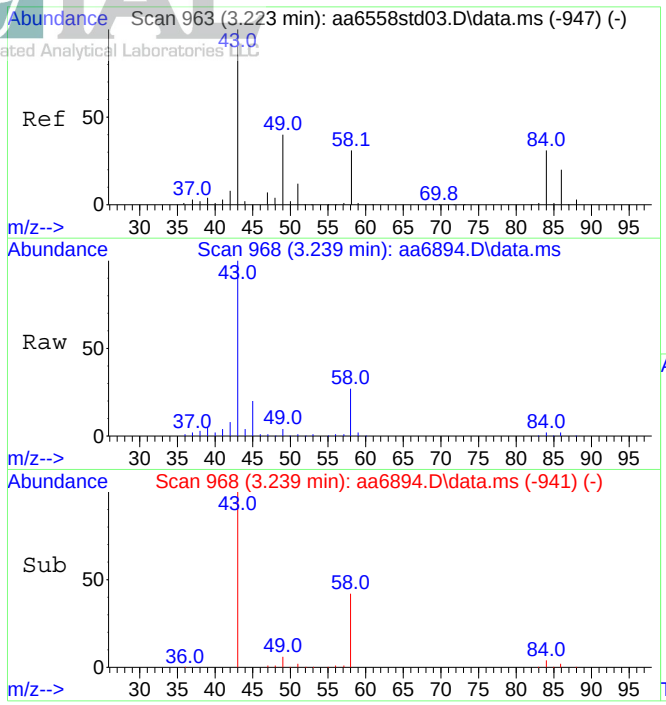


#20
Methylene chloride
Concen: 4.41 ppbV
RT: 3.220 min Scan# 962
Delta R.T. 0.016 min
Lab File: aa6894.D
Acq: 15 Jul 2024 10:11 pm

Tgt Ion: 49 Resp: 151051

Ion	Ratio	Lower	Upper
49	100		
84	60.4	56.2	96.2

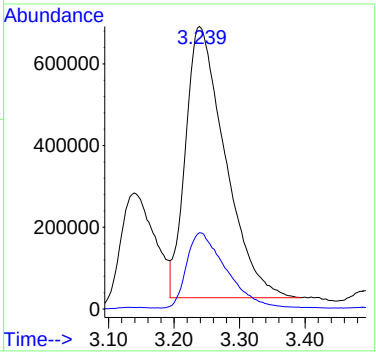


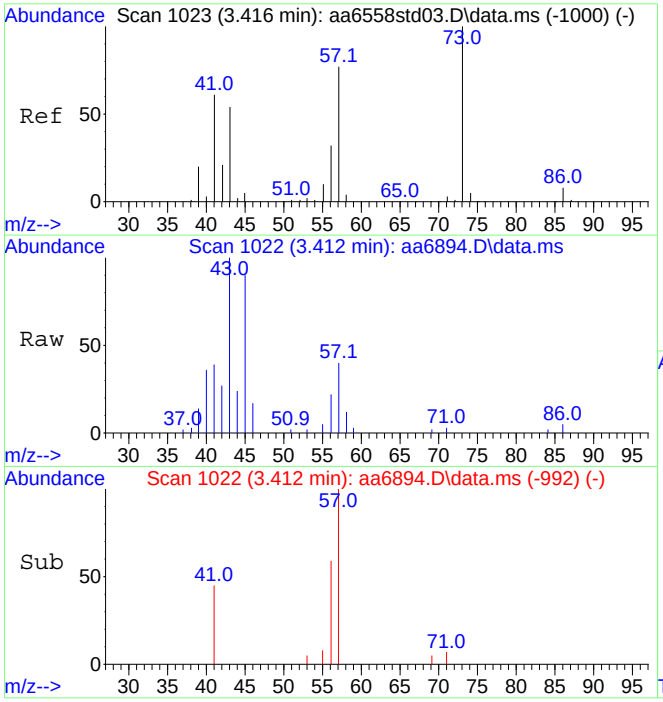


#21
Acetone
Concen: 65.65 ppbV
RT: 3.239 min Scan# 968
Delta R.T. 0.016 min
Lab File: aa6894.D
Acq: 15 Jul 2024 10:11 pm

Tgt Ion: 43 Resp: 2790268

Ion	Ratio	Lower	Upper
43	100		
58	27.7	25.4	38.0

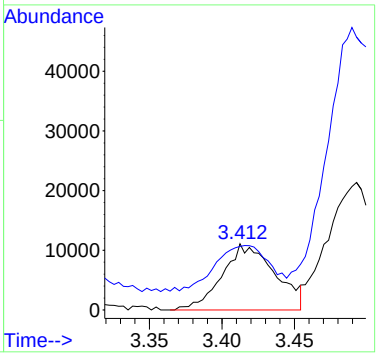


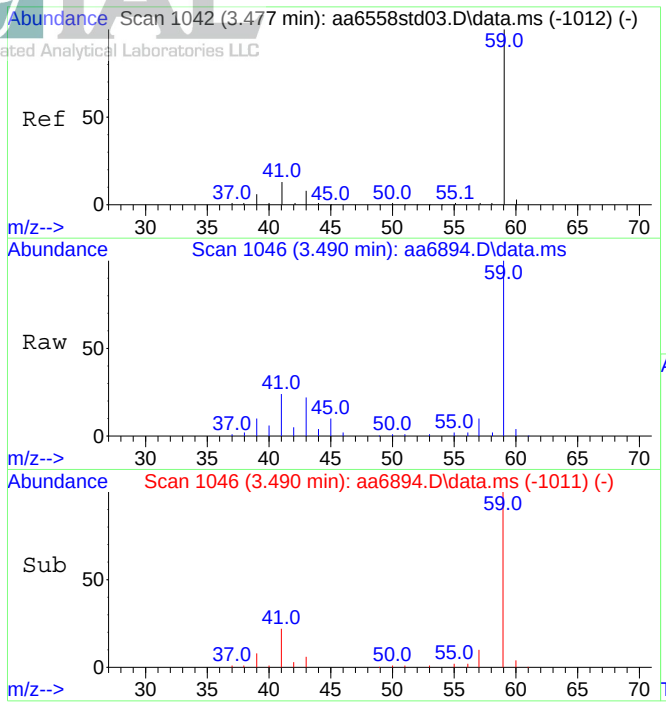


#24
n-Hexane
Concen: 0.38 ppbV
RT: 3.412 min Scan# 1022
Delta R.T. -0.004 min
Lab File: aa6894.D
Acq: 15 Jul 2024 10:11 pm

Tgt Ion: 57 Resp: 27993

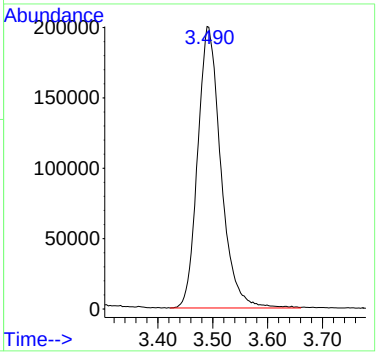
Ion	Ratio	Lower	Upper
57	100		
41	72.9	71.6	107.4

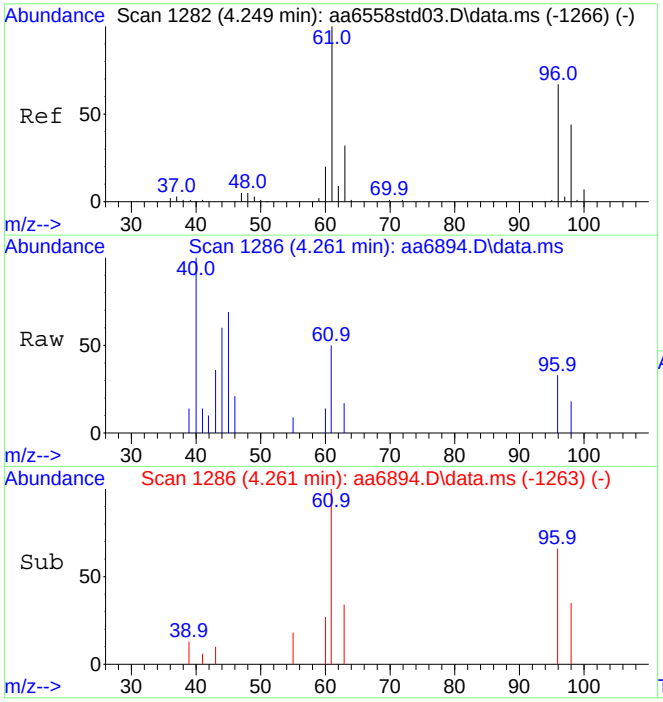




#26
Tert-butyl alcohol
Concen: 9.90 ppbV
RT: 3.490 min Scan# 1046
Delta R.T. 0.013 min
Lab File: aa6894.D
Acq: 15 Jul 2024 10:11 pm

Tgt Ion: 59 Resp: 587116

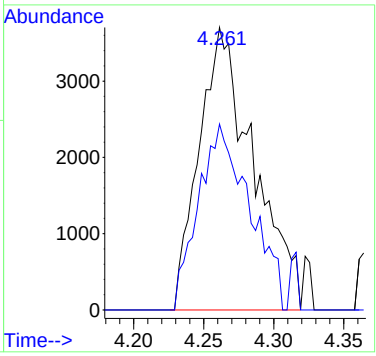


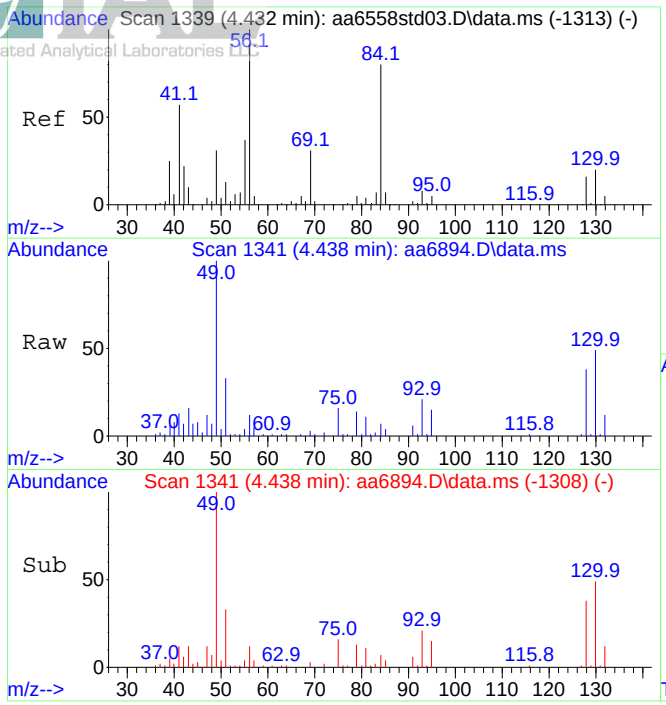


#28
1,2-Dichloroethene (cis)
Concen: 0.26 ppbV
RT: 4.261 min Scan# 1286
Delta R.T. 0.013 min
Lab File: aa6894.D
Acq: 15 Jul 2024 10:11 pm

Tgt Ion: 61 Resp: 10013

Ion	Ratio	Lower	Upper
61	100		
96	61.7	56.0	84.0

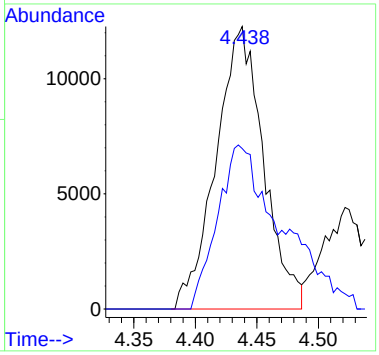


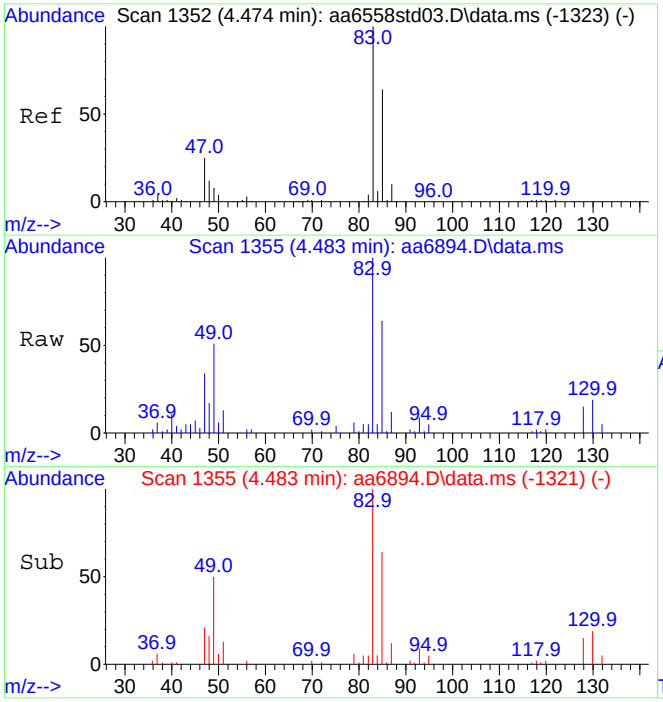


#29
Cyclohexane
Concen: 0.68 ppbV
RT: 4.438 min Scan# 1341
Delta R.T. 0.006 min
Lab File: aa6894.D
Acq: 15 Jul 2024 10:11 pm

Tgt Ion: 56 Resp: 33092

Ion	Ratio	Lower	Upper
56	100		
84	78.5	66.8	100.2

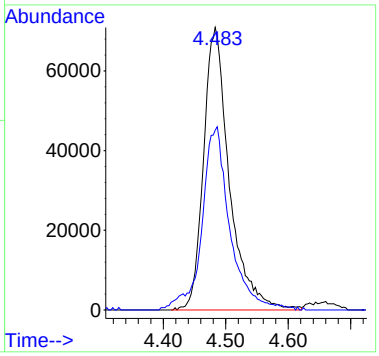


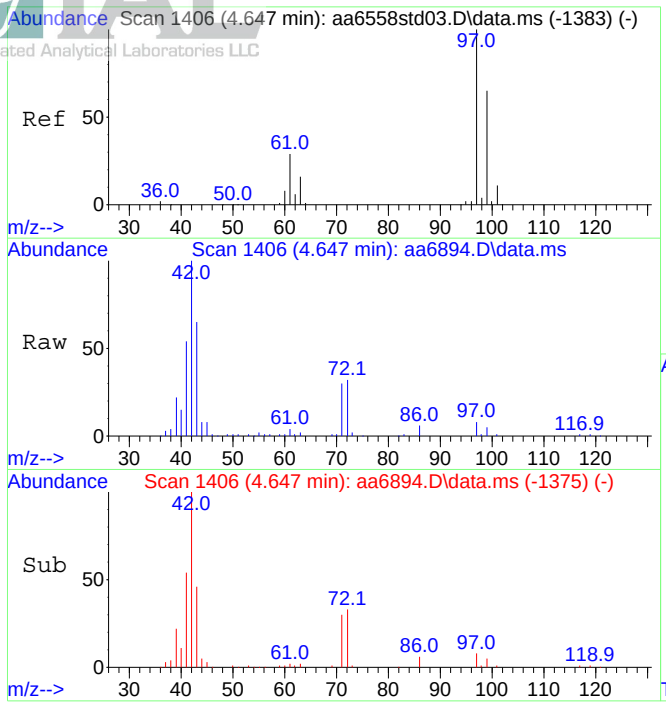


#30
Chloroform
Concen: 3.37 ppbV
RT: 4.483 min Scan# 1355
Delta R.T. 0.010 min
Lab File: aa6894.D
Acq: 15 Jul 2024 10:11 pm

Tgt Ion: 83 Resp: 204071

Ion	Ratio	Lower	Upper
83	100		
85	69.8	52.6	79.0

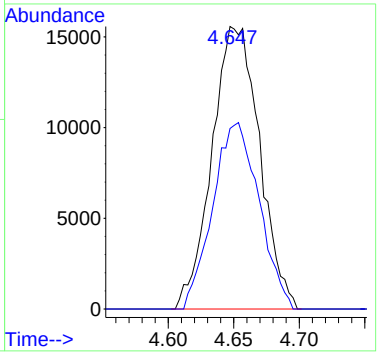


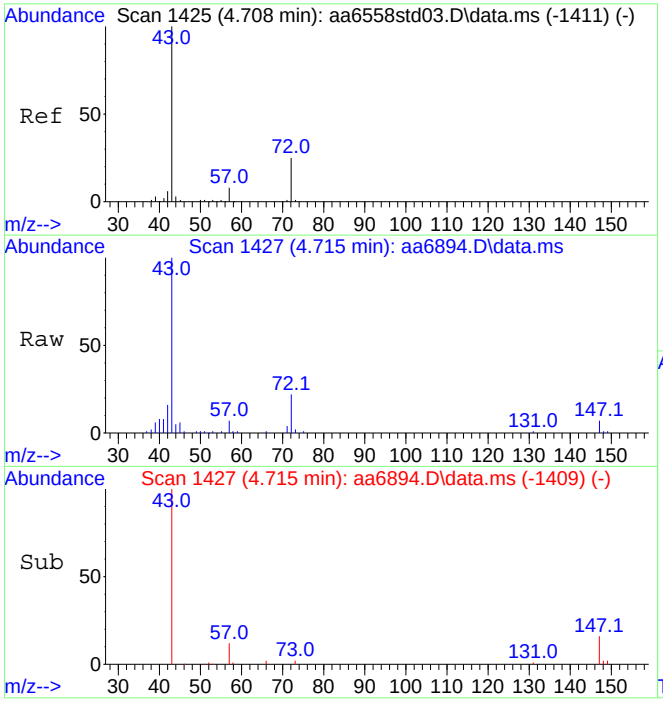


#34
1,1,1-Trichloroethane
Concen: 0.69 ppbV
RT: 4.647 min Scan# 1406
Delta R.T. -0.000 min
Lab File: aa6894.D
Acq: 15 Jul 2024 10:11 pm

Tgt Ion: 97 Resp: 39415

Ion	Ratio	Lower	Upper
97	100		
99	64.0	51.4	77.2

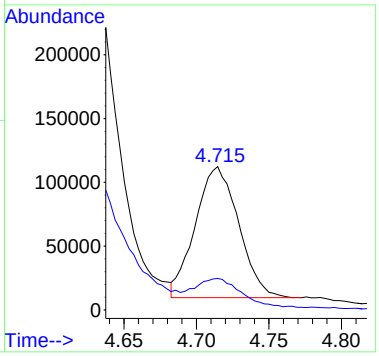


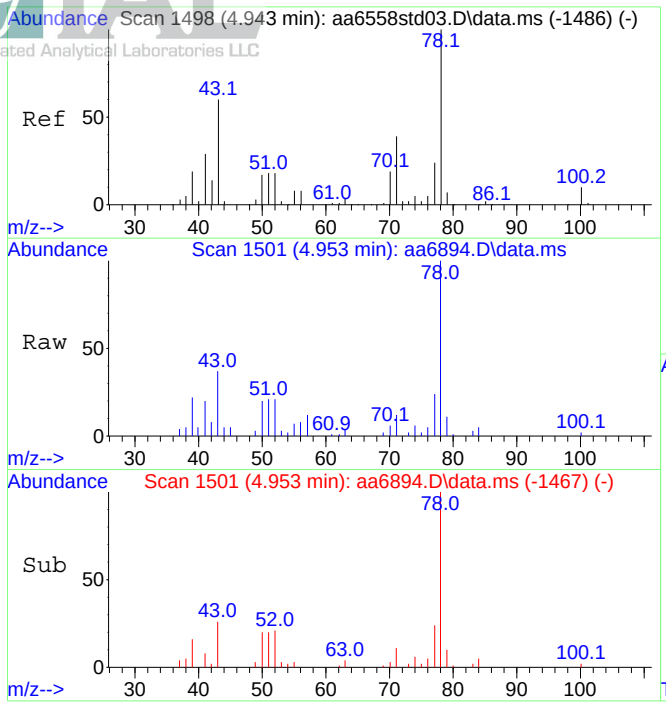


#35
Methyl ethyl ketone
Concen: 3.54 ppbV
RT: 4.715 min Scan# 1427
Delta R.T. 0.006 min
Lab File: aa6894.D
Acq: 15 Jul 2024 10:11 pm

Tgt Ion: 43 Resp: 213507

Ion	Ratio	Lower	Upper
43	100		
72	23.4	19.5	29.3

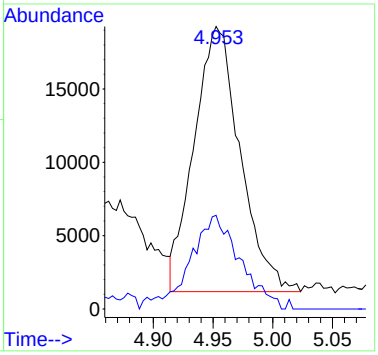


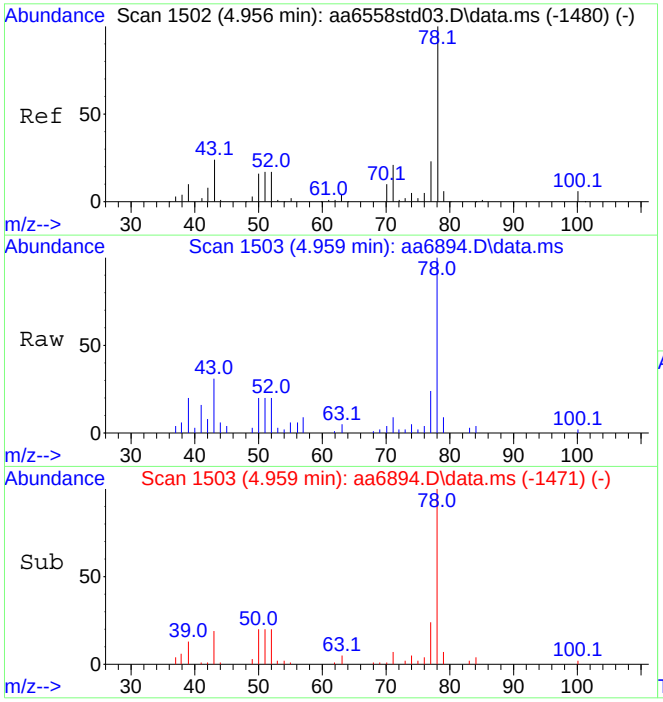


#36
n-Heptane
Concen: 0.85 ppbV
RT: 4.953 min Scan# 1501
Delta R.T. 0.010 min
Lab File: aa6894.D
Acq: 15 Jul 2024 10:11 pm

Tgt Ion: 43 Resp: 48654

Ion	Ratio	Lower	Upper
43	100		
71	38.4	46.2	69.2#

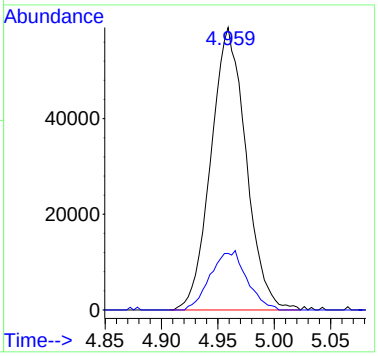


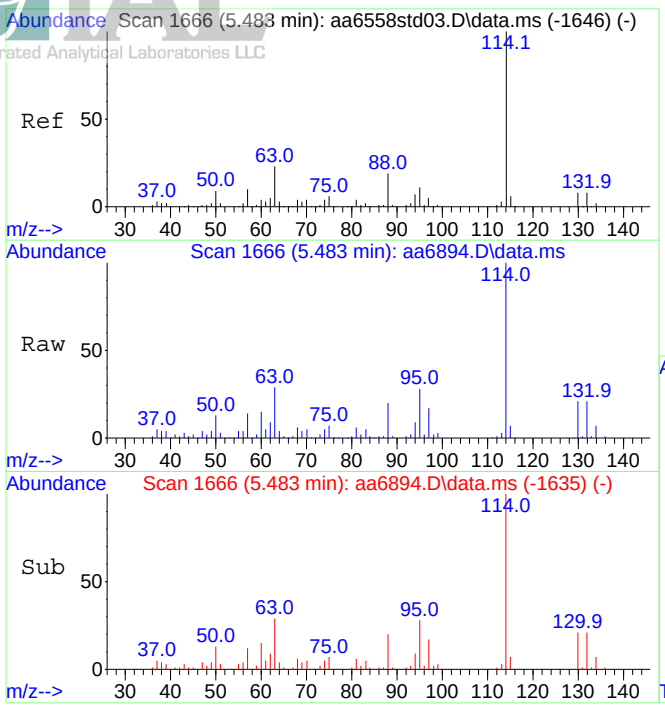


#37
Benzene
Concen: 1.48 ppbV
RT: 4.959 min Scan# 1503
Delta R.T. 0.003 min
Lab File: aa6894.D
Acq: 15 Jul 2024 10:11 pm

Tgt Ion: 78 Resp: 127723

Ion	Ratio	Lower	Upper
78	100		
51	21.6	14.9	22.3

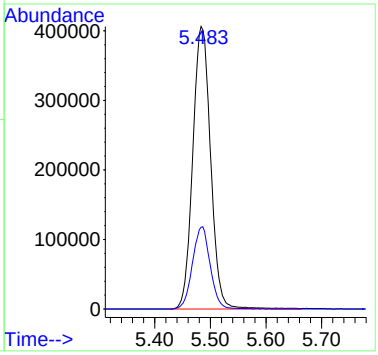


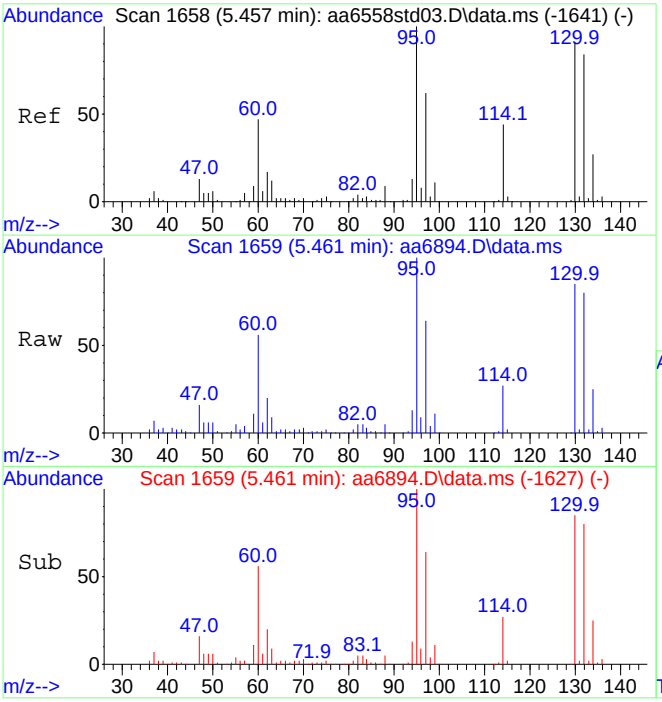


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.483 min Scan# 1666
Delta R.T. -0.000 min
Lab File: aa6894.D
Acq: 15 Jul 2024 10:11 pm

Tgt Ion:114 Resp: 903963

Ion	Ratio	Lower	Upper
114	100		
63	28.9	3.6	43.6

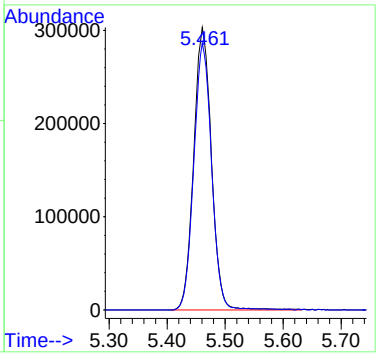


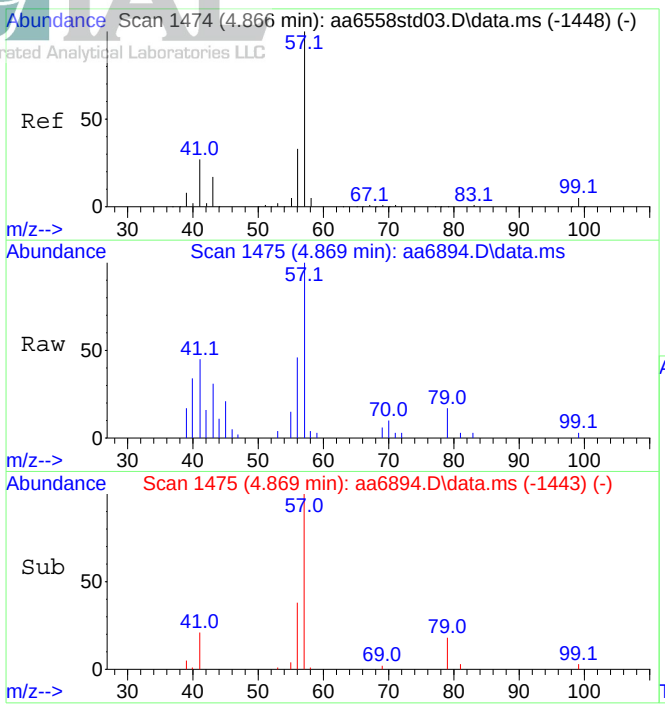


#40
Trichloroethene
Concen: 15.74 ppbV
RT: 5.461 min Scan# 1659
Delta R.T. 0.003 min
Lab File: aa6894.D
Acq: 15 Jul 2024 10:11 pm

Tgt Ion:130 Resp: 643341

Ion	Ratio	Lower	Upper
130	100		
132	94.6	76.6	114.8

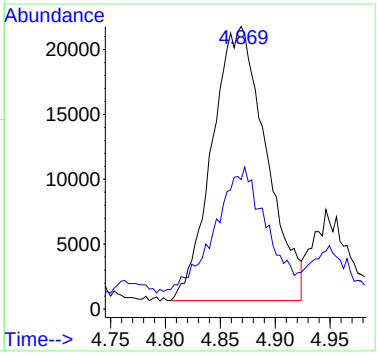


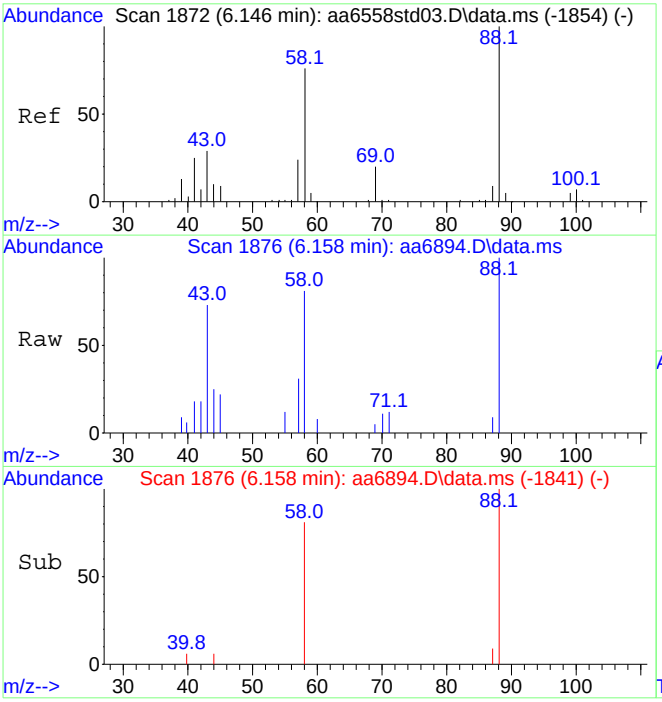


#41
2,2,4-Trimethylpentane
Concen: 0.45 ppbV
RT: 4.869 min Scan# 1475
Delta R.T. 0.003 min
Lab File: aa6894.D
Acq: 15 Jul 2024 10:11 pm

Tgt Ion: 57 Resp: 72323

Ion	Ratio	Lower	Upper
57	100		
56	43.5	26.0	39.0#

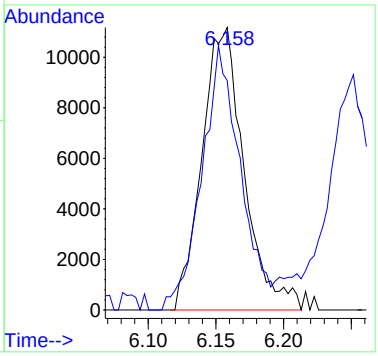


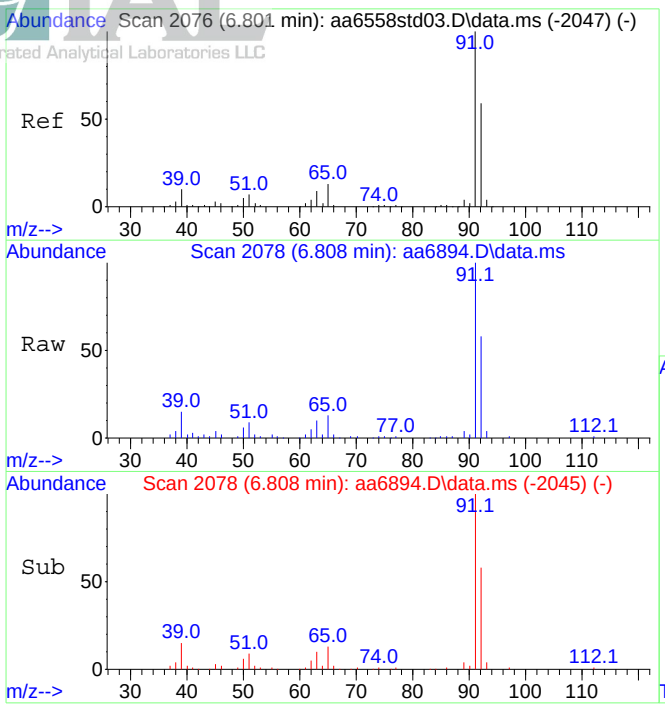


#45
1,4-Dioxane
Concen: 1.14 ppbV
RT: 6.158 min Scan# 1876
Delta R.T. 0.013 min
Lab File: aa6894.D
Acq: 15 Jul 2024 10:11 pm

Tgt Ion: 88 Resp: 24221

Ion	Ratio	Lower	Upper
88	100		
58	92.2	59.9	89.9#

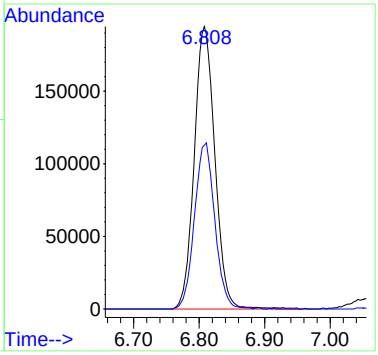


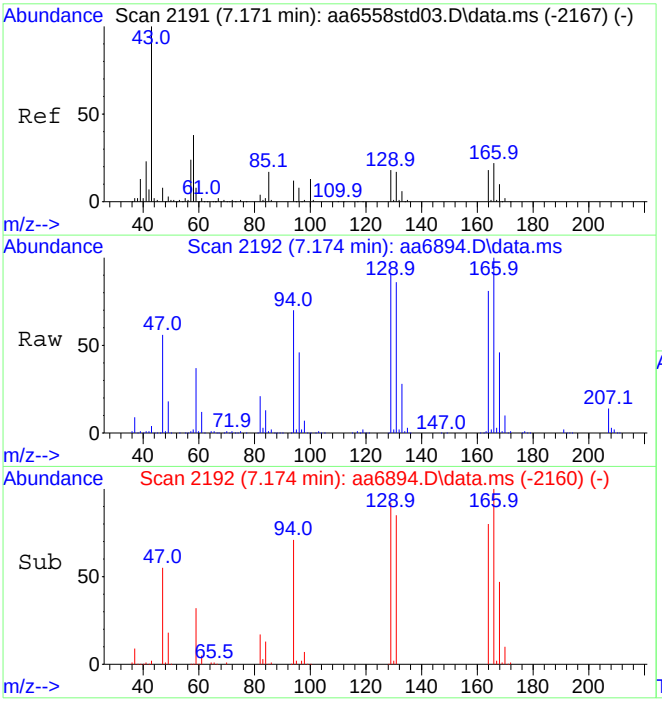


#47
Toluene
Concen: 3.69 ppbV
RT: 6.808 min Scan# 2078
Delta R.T. 0.006 min
Lab File: aa6894.D
Acq: 15 Jul 2024 10:11 pm

Tgt Ion: 91 Resp: 427130

Ion	Ratio	Lower	Upper
91	100		
92	57.7	47.0	70.6

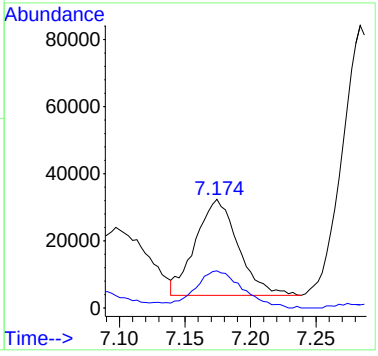


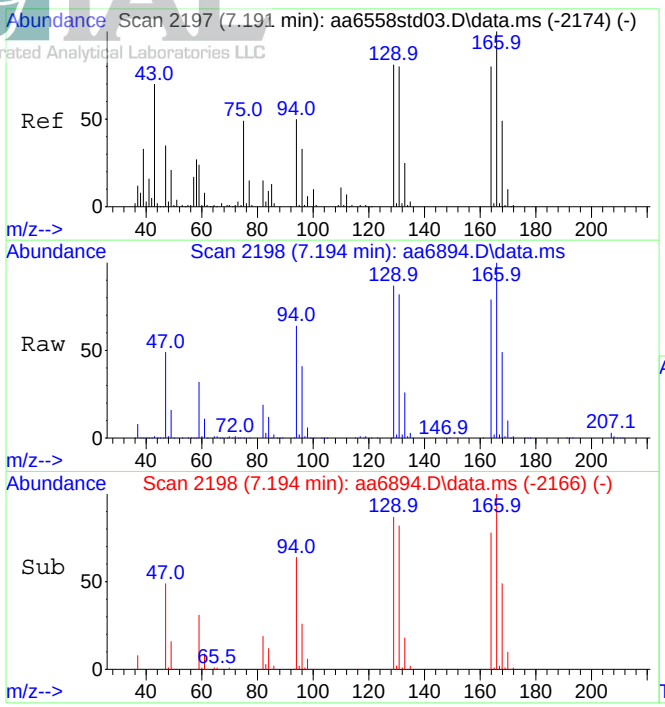


#48
Methyl isobutyl ketone
Concen: 0.77 ppbV
RT: 7.174 min Scan# 2192
Delta R.T. 0.003 min
Lab File: aa6894.D
Acq: 15 Jul 2024 10:11 pm

Tgt Ion: 43 Resp: 65082

Ion	Ratio	Lower	Upper
43	100		
58	42.5	31.0	46.4

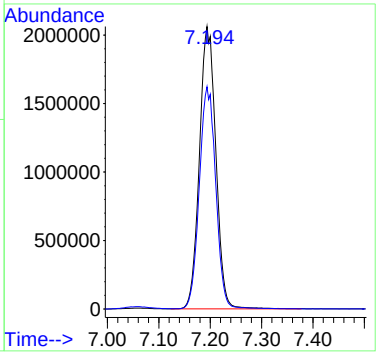


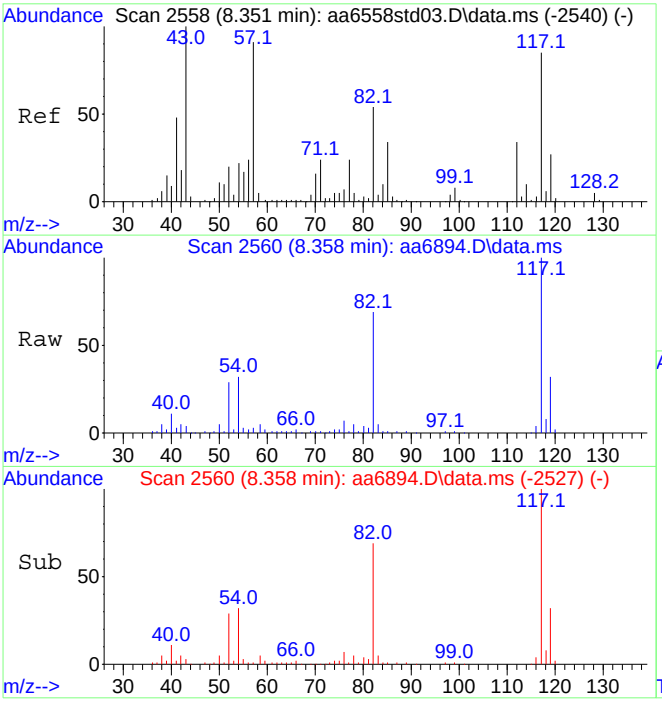


#49
Tetrachloroethene
Concen: 104.16 ppbV
RT: 7.194 min Scan# 2198
Delta R.T. 0.003 min
Lab File: aa6894.D
Acq: 15 Jul 2024 10:11 pm

Tgt Ion:166 Resp: 4566196

Ion	Ratio	Lower	Upper
166	100		
164	78.9	62.8	94.2

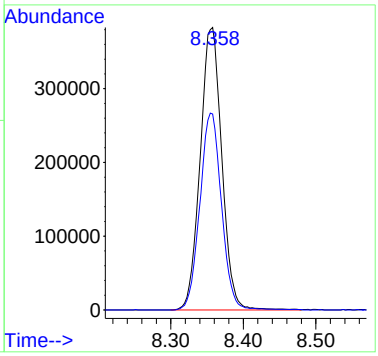


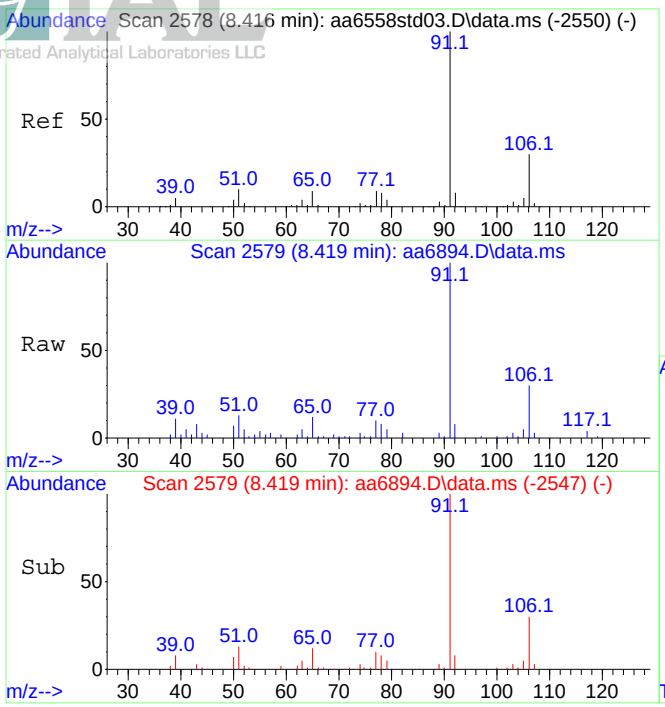


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.358 min Scan# 2560
Delta R.T. 0.006 min
Lab File: aa6894.D
Acq: 15 Jul 2024 10:11 pm

Tgt Ion:117 Resp: 793914

Ion	Ratio	Lower	Upper
117	100		
82	69.6	42.3	82.3

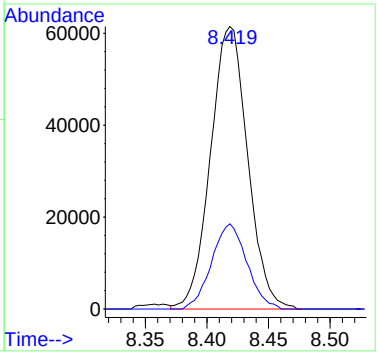


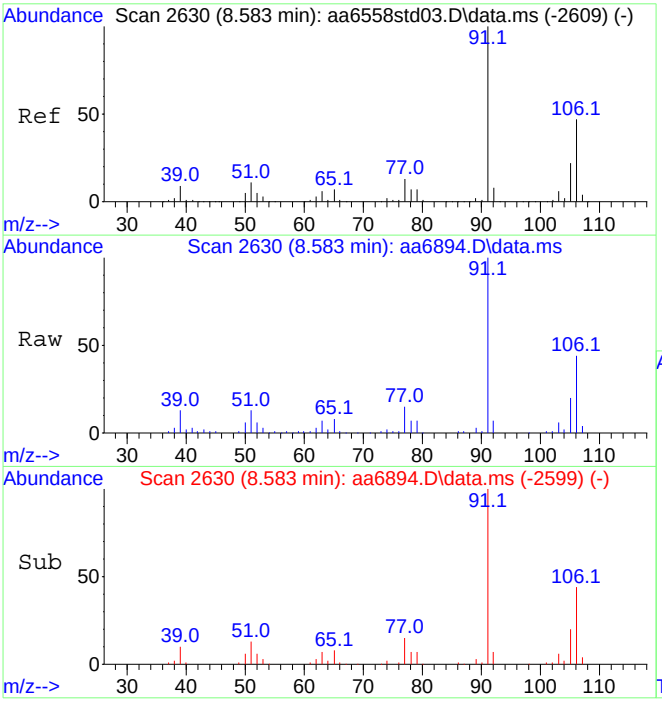


#58
Ethylbenzene
Concen: 0.83 ppbV
RT: 8.419 min Scan# 2579
Delta R.T. 0.003 min
Lab File: aa6894.D
Acq: 15 Jul 2024 10:11 pm

Tgt Ion: 91 Resp: 129309

Ion	Ratio	Lower	Upper
91	100		
106	28.6	23.8	35.8

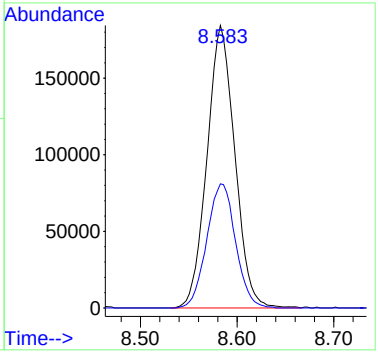


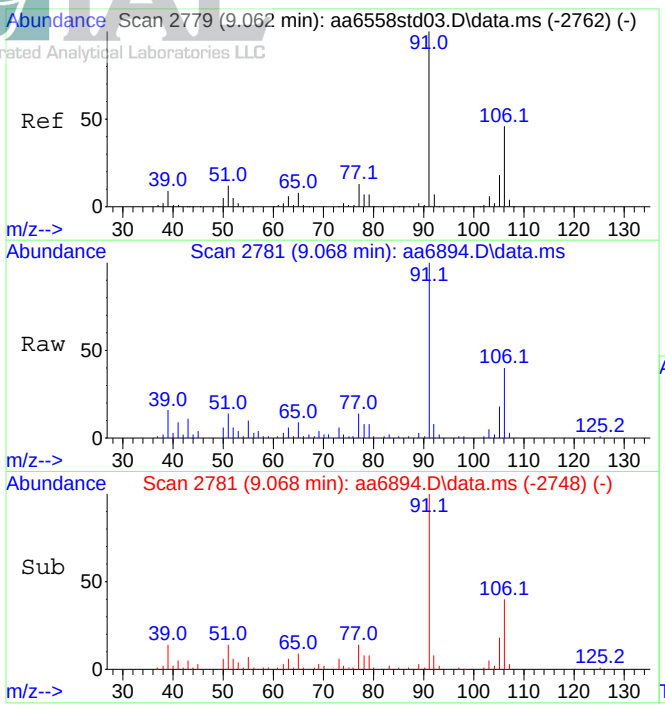


#59
Xylenes (m&p)
Concen: 3.13 ppbV
RT: 8.583 min Scan# 2630
Delta R.T. -0.000 min
Lab File: aa6894.D
Acq: 15 Jul 2024 10:11 pm

Tgt Ion: 91 Resp: 368635

Ion	Ratio	Lower	Upper
91	100		
106	45.3	37.4	56.2

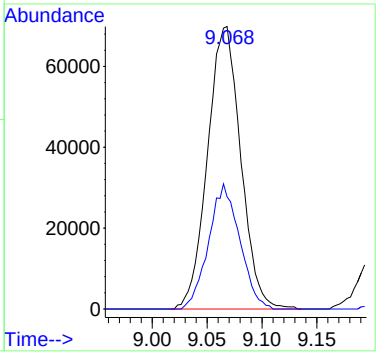


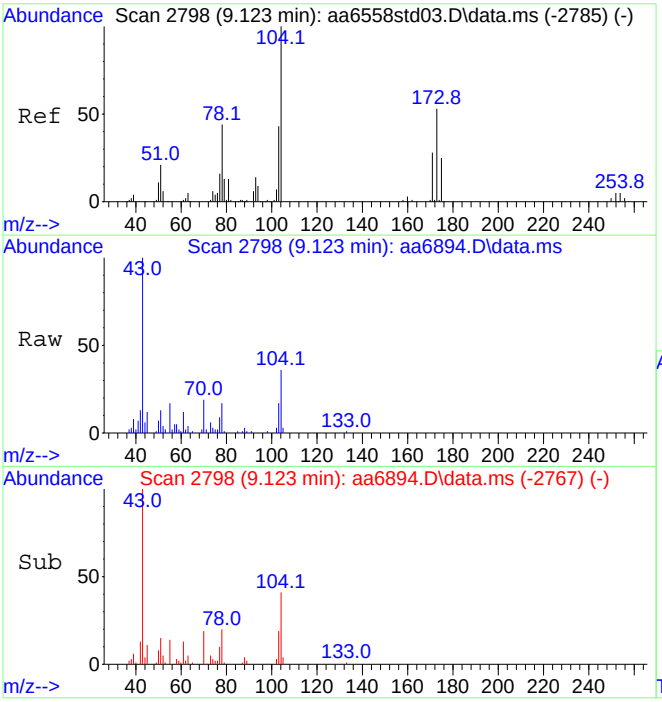


#60
Xylene (o)
Concen: 1.19 ppbV
RT: 9.068 min Scan# 2781
Delta R.T. 0.006 min
Lab File: aa6894.D
Acq: 15 Jul 2024 10:11 pm

Tgt Ion: 91 Resp: 147126

Ion	Ratio	Lower	Upper
91	100		
106	41.3	36.2	54.2

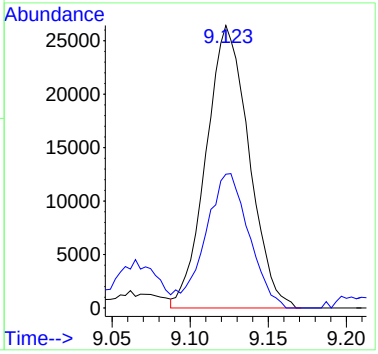


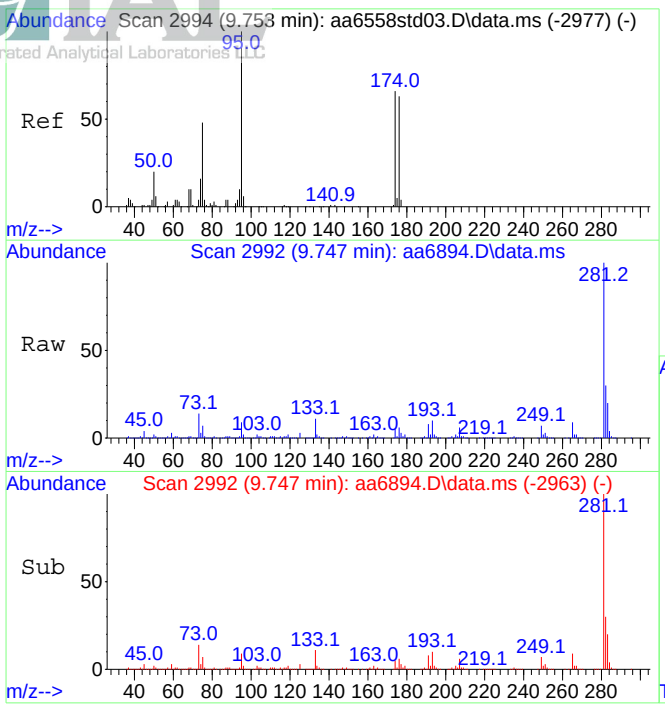


#61
Styrene
Concen: 0.61 ppbV
RT: 9.123 min Scan# 2798
Delta R.T. -0.000 min
Lab File: aa6894.D
Acq: 15 Jul 2024 10:11 pm

Tgt Ion:104 Resp: 50426

Ion	Ratio	Lower	Upper
104	100		
103	47.6	38.3	57.5

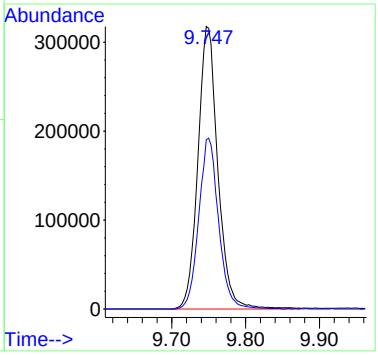


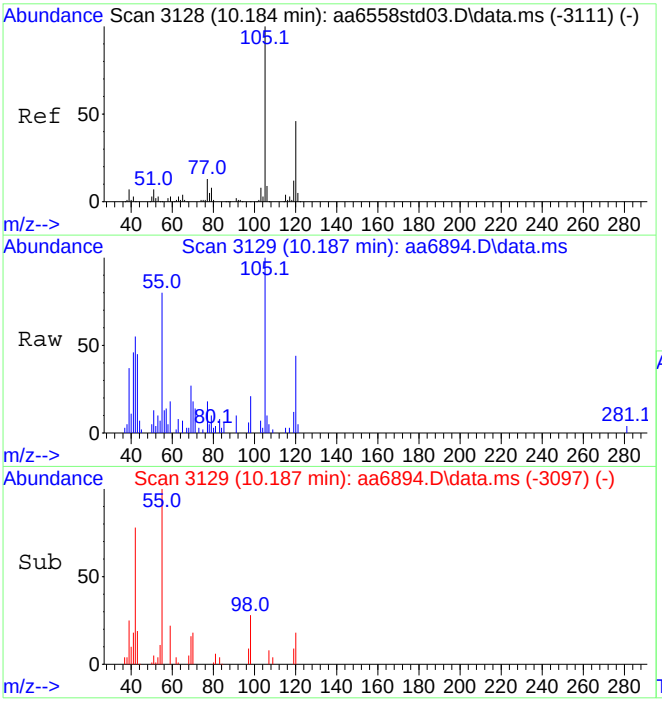


#64
Bromofluorobenzene (tune std)
Concen: 7.95 ppbV
RT: 9.747 min Scan# 2992
Delta R.T. -0.007 min
Lab File: aa6894.D
Acq: 15 Jul 2024 10:11 pm

Tgt Ion: 95 Resp: 596820

Ion	Ratio	Lower	Upper
95	100		
174	59.9	52.9	79.3

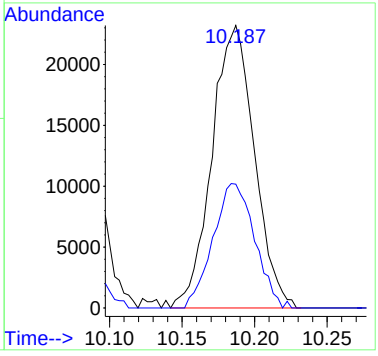


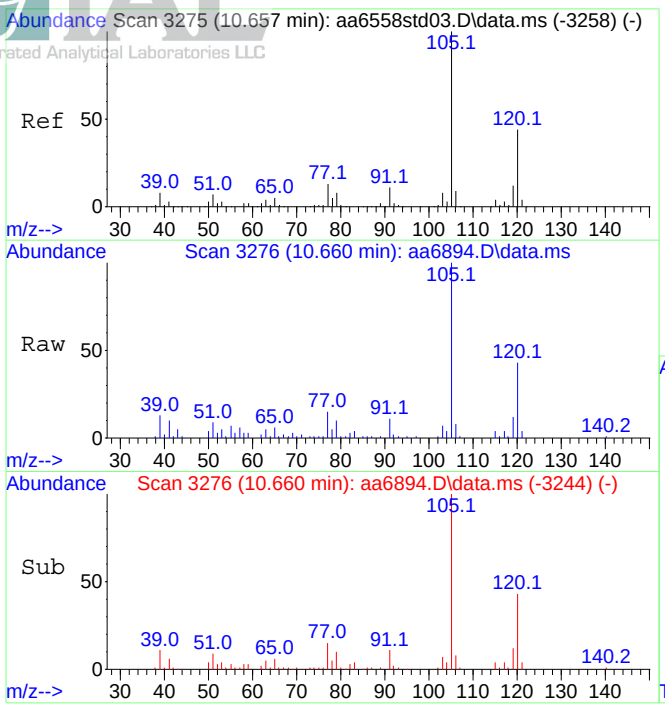


#69
1,3,5-Trimethylbenzene
Concen: 0.33 ppbV
RT: 10.187 min Scan# 3129
Delta R.T. 0.003 min
Lab File: aa6894.D
Acq: 15 Jul 2024 10:11 pm

Tgt Ion:105 Resp: 47341

Ion	Ratio	Lower	Upper
105	100		
120	42.9	37.2	55.8

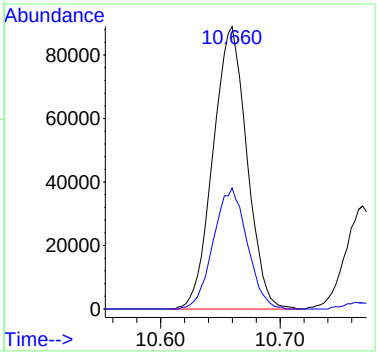


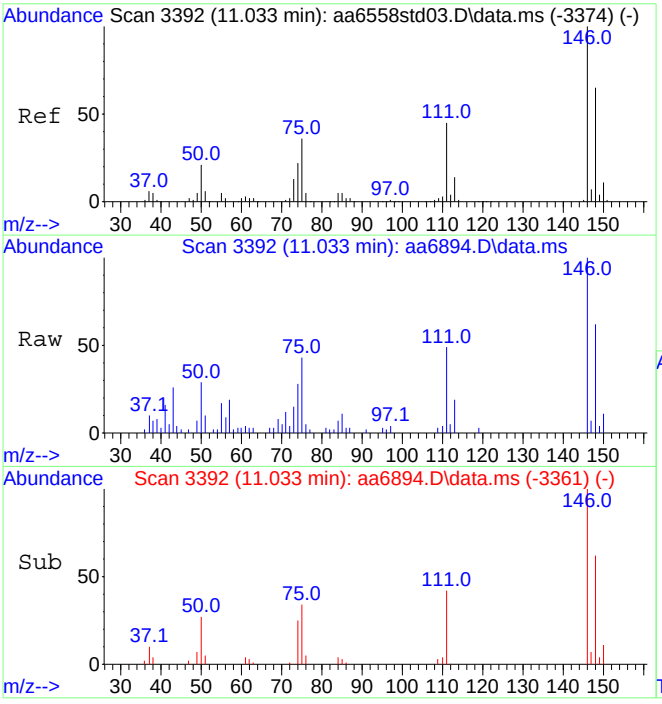


#70
1,2,4-Trimethylbenzene
Concen: 1.21 ppbV
RT: 10.660 min Scan# 3276
Delta R.T. 0.003 min
Lab File: aa6894.D
Acq: 15 Jul 2024 10:11 pm

Tgt Ion:105 Resp: 175133

Ion	Ratio	Lower	Upper
105	100		
120	42.7	34.5	51.7

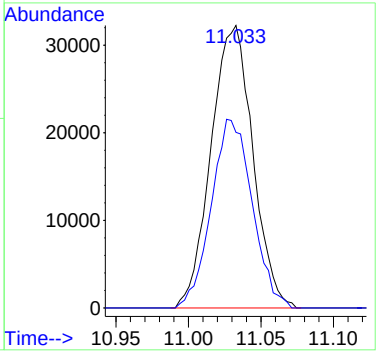




#71
1,3-Dichlorobenzene
Concen: 0.74 ppbV
RT: 11.033 min Scan# 3392
Delta R.T. -0.000 min
Lab File: aa6894.D
Acq: 15 Jul 2024 10:11 pm

Tgt Ion:146 Resp: 64711

Ion	Ratio	Lower	Upper
146	100		
148	65.3	51.2	76.8



Data Path : C:\DATA\2024\07-2024\07-15-2024\
Data File : aa6893.D
Acq On : 15 Jul 2024 9:39 pm
Operator : jjw
Sample : E24-02398-04x5 dil
Misc : 2886, 100cc
ALS Vial : 19 Sample Multiplier: 1

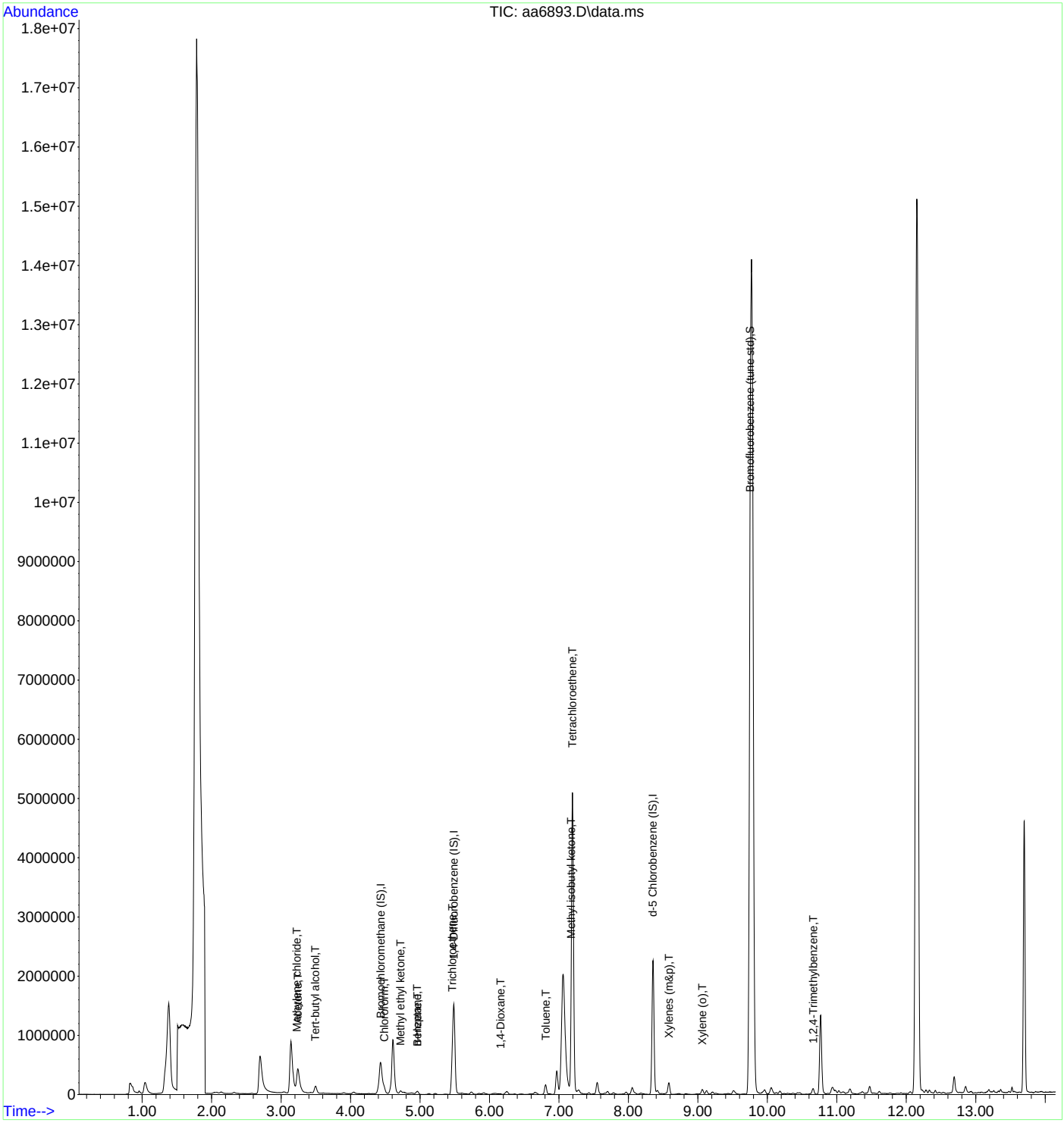
Quant Time: Jul 16 10:27:20 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

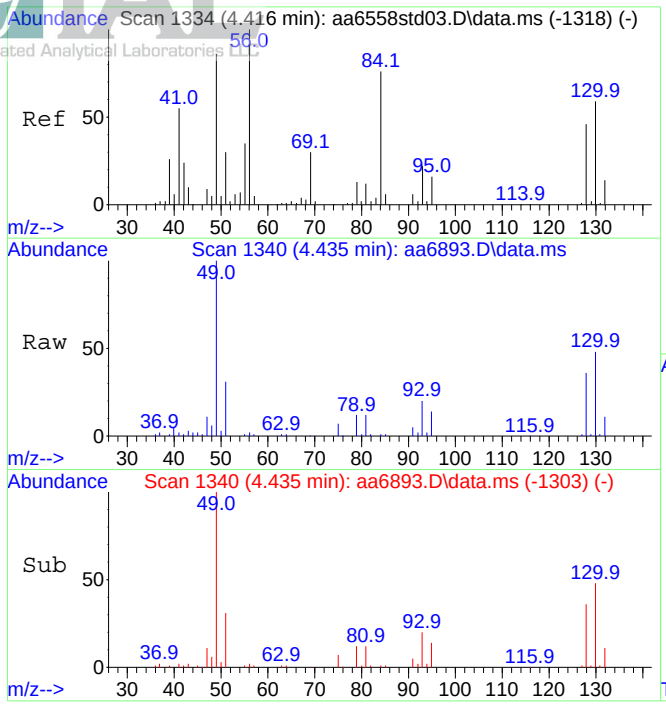
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.435	130	213209	10.00	ppbV		0.019
39) 1,4-Difluorobenzene (IS)	5.486	114	1110666	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.351	117	1264766	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.750	95	1261081	10.54	ppbV		0.000
Target Compounds							Qvalue
20) Methylene chloride	3.226	49	42722	1.11	ppbV		86
21) Acetone	3.242	43	718710	15.02	ppbV		92
26) Tert-butyl alcohol	3.493	59	166099	2.49	ppbV		100
30) Chloroform	4.486	83	57015	0.84	ppbV		95
35) Methyl ethyl ketone	4.721	43	59821	0.88	ppbV		93
36) n-Heptane	4.959	43	16275	0.25	ppbV	#	62
37) Benzene	4.962	78	33436	0.34	ppbV		94
40) Trichloroethene	5.467	130	170393	3.39	ppbV		100
45) 1,4-Dioxane	6.158	88	6434	0.25	ppbV		86
47) Toluene	6.811	91	133112	0.94	ppbV		98
48) Methyl isobutyl ketone	7.174	43	22282	0.21	ppbV		98
49) Tetrachloroethene	7.194	166	1517147	28.17	ppbV		100
59) Xylenes (m&p)	8.583	91	132639	0.71	ppbV		97
60) Xylene (o)	9.065	91	50545	0.26	ppbV		94
70) 1,2,4-Trimethylbenzene	10.660	105	59552	0.26	ppbV		98

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

Data Path : C:\DATA\2024\07-2024\07-15-2024\
Data File : aa6893.D
Acq On : 15 Jul 2024 9:39 pm
Operator : jjw
Sample : E24-02398-04x5 dil
Misc : 2886, 100cc
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jul 16 10:27:20 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

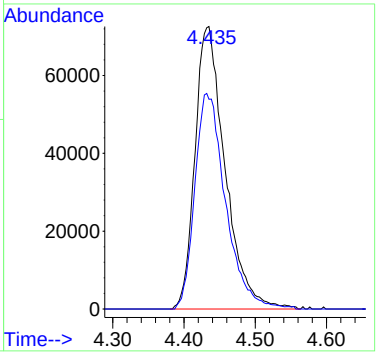


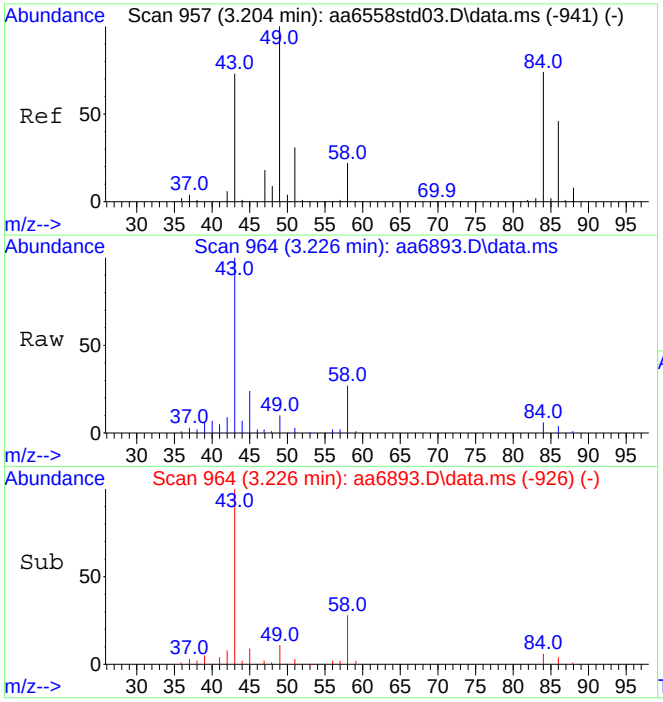


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.435 min Scan# 1340
Delta R.T. 0.019 min
Lab File: aa6893.D
Acq: 15 Jul 2024 9:39 pm

Tgt Ion:130 Resp: 213209

Ion	Ratio	Lower	Upper
130	100		
128	77.9	57.8	97.8

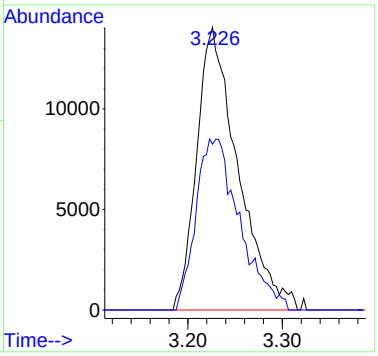


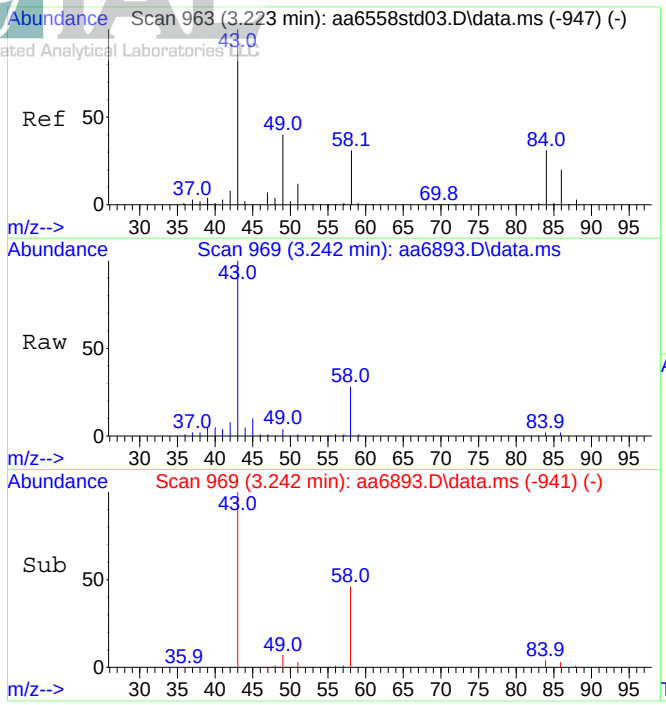


#20
Methylene chloride
Concen: 1.11 ppbV
RT: 3.226 min Scan# 964
Delta R.T. 0.023 min
Lab File: aa6893.D
Acq: 15 Jul 2024 9:39 pm

Tgt Ion: 49 Resp: 42722

Ion	Ratio	Lower	Upper
49	100		
84	63.9	56.2	96.2

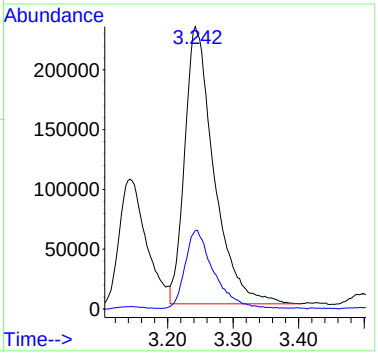


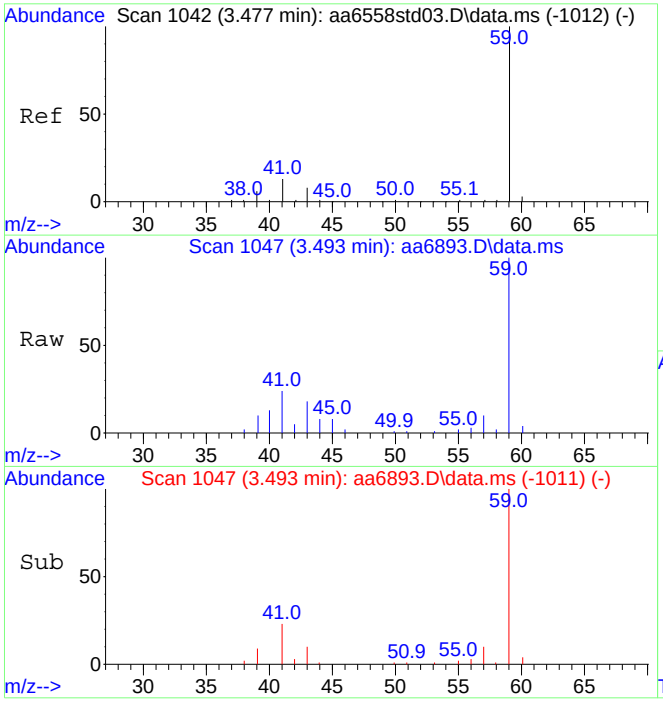


#21
Acetone
Concen: 15.02 ppbV
RT: 3.242 min Scan# 969
Delta R.T. 0.019 min
Lab File: aa6893.D
Acq: 15 Jul 2024 9:39 pm

Tgt Ion: 43 Resp: 718710

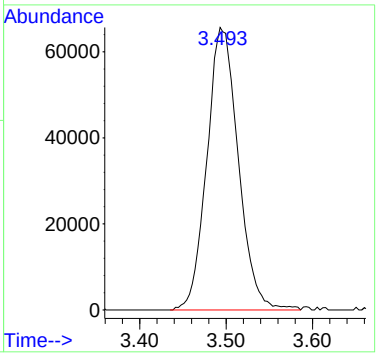
Ion	Ratio	Lower	Upper
43	100		
58	27.5	25.4	38.0

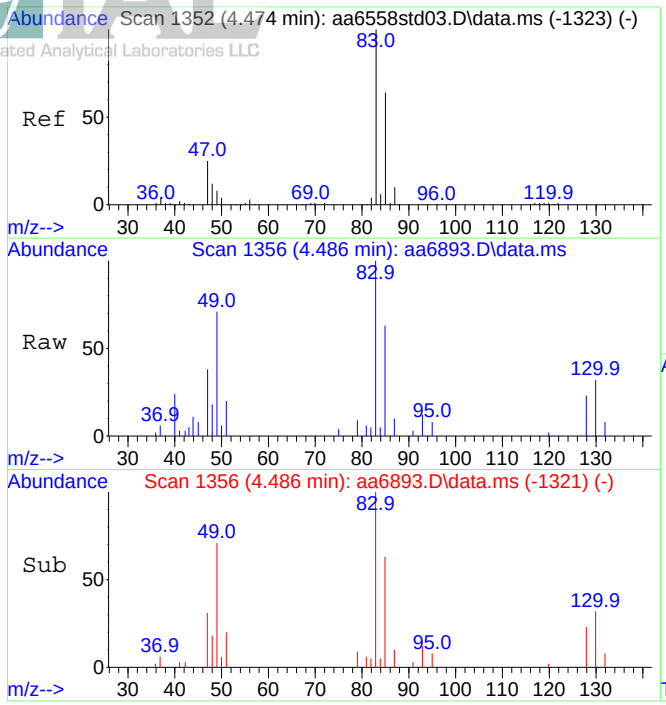




#26
Tert-butyl alcohol
Concen: 2.49 ppbV
RT: 3.493 min Scan# 1047
Delta R.T. 0.016 min
Lab File: aa6893.D
Acq: 15 Jul 2024 9:39 pm

Tgt Ion: 59 Resp: 166099

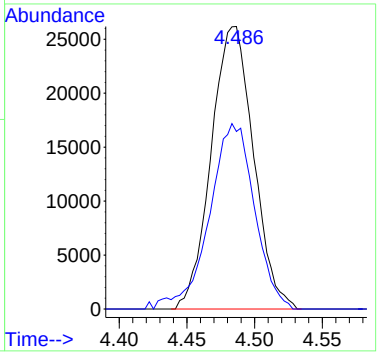


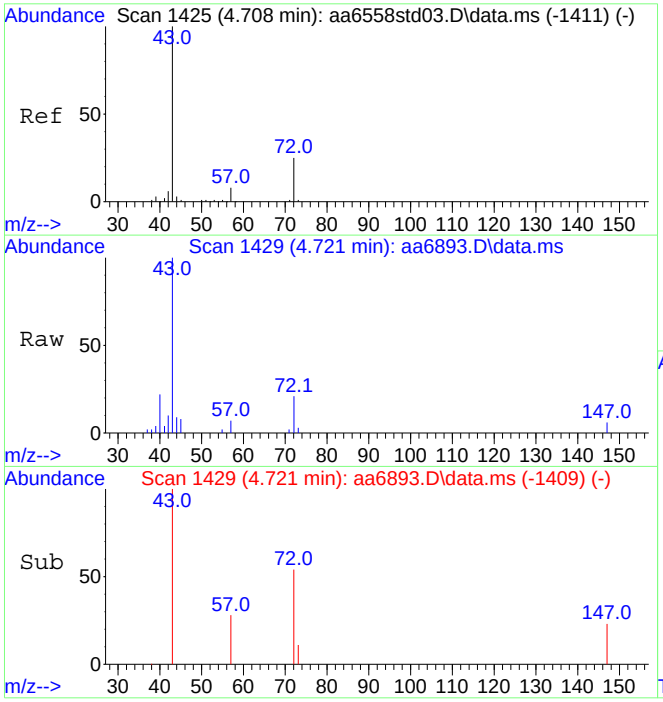


#30
Chloroform
Concen: 0.84 ppbV
RT: 4.486 min Scan# 1356
Delta R.T. 0.013 min
Lab File: aa6893.D
Acq: 15 Jul 2024 9:39 pm

Tgt Ion: 83 Resp: 57015

Ion	Ratio	Lower	Upper
83	100		
85	69.8	52.6	79.0

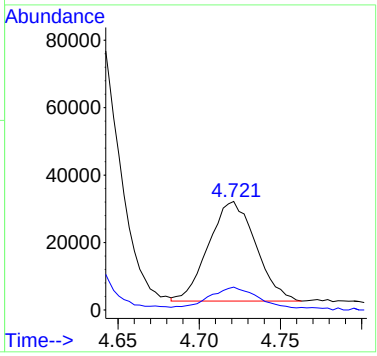


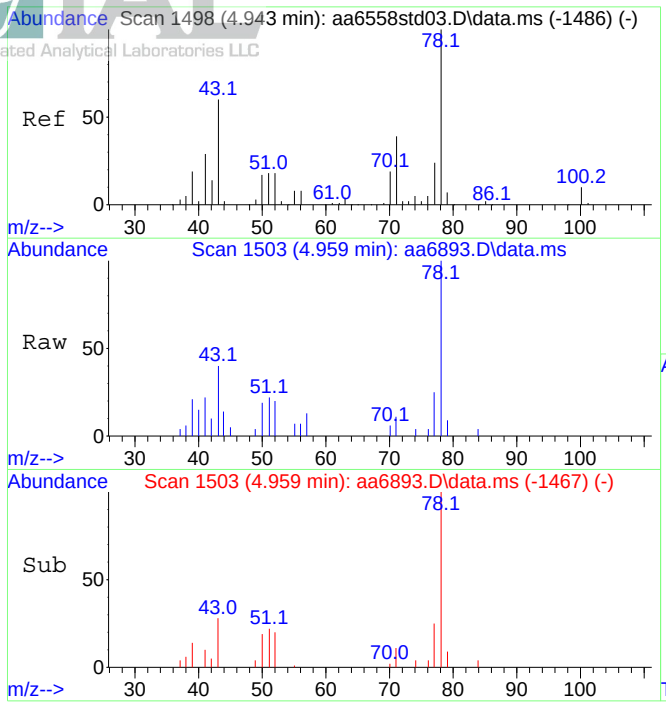


#35
Methyl ethyl ketone
Concen: 0.88 ppbV
RT: 4.721 min Scan# 1429
Delta R.T. 0.013 min
Lab File: aa6893.D
Acq: 15 Jul 2024 9:39 pm

Tgt Ion: 43 Resp: 59821

Ion	Ratio	Lower	Upper
43	100		
72	21.1	19.5	29.3

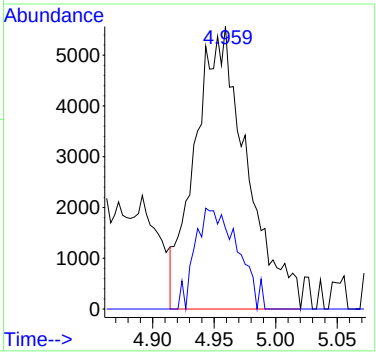


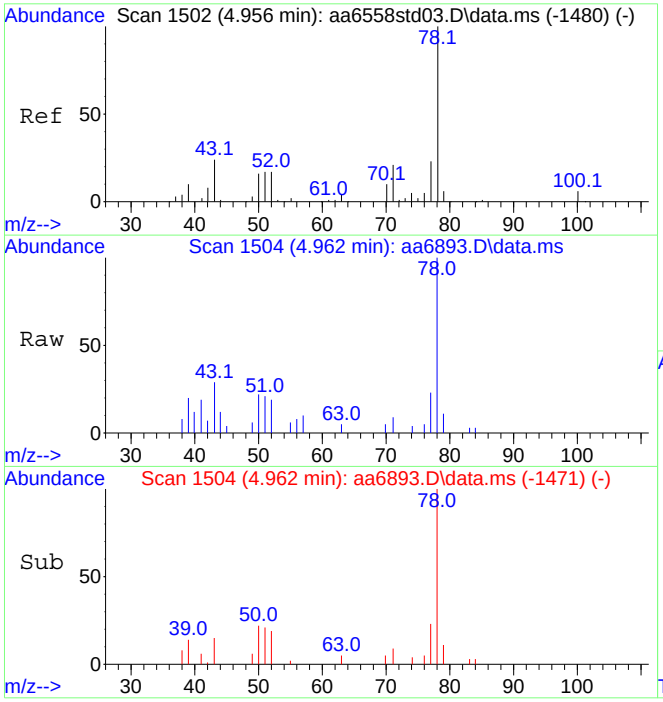


#36
n-Heptane
Concen: 0.25 ppbV
RT: 4.959 min Scan# 1503
Delta R.T. 0.016 min
Lab File: aa6893.D
Acq: 15 Jul 2024 9:39 pm

Tgt Ion: 43 Resp: 16275

Ion	Ratio	Lower	Upper
43	100		
71	29.2	46.2	69.2#

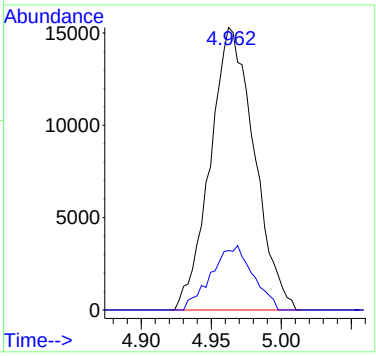


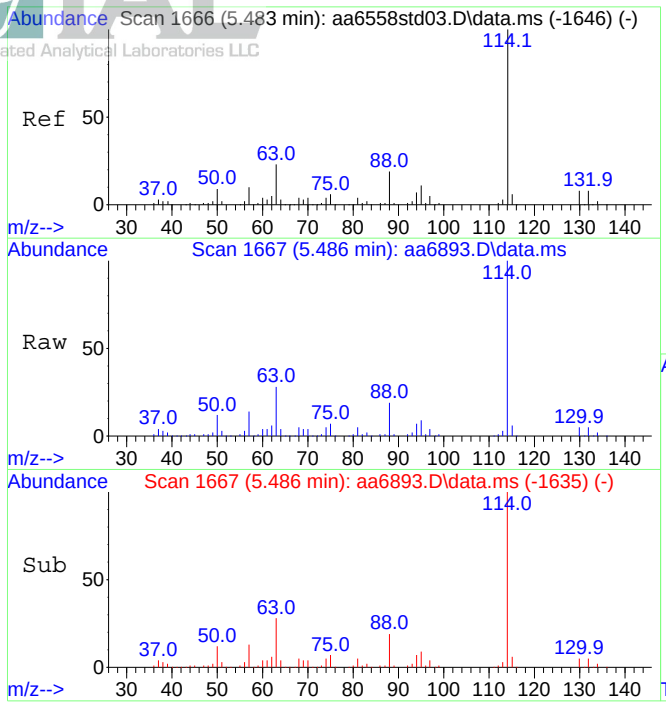


#37
Benzene
Concen: 0.34 ppbV
RT: 4.962 min Scan# 1504
Delta R.T. 0.006 min
Lab File: aa6893.D
Acq: 15 Jul 2024 9:39 pm

Tgt Ion: 78 Resp: 33436

Ion	Ratio	Lower	Upper
78	100		
51	21.4	14.9	22.3

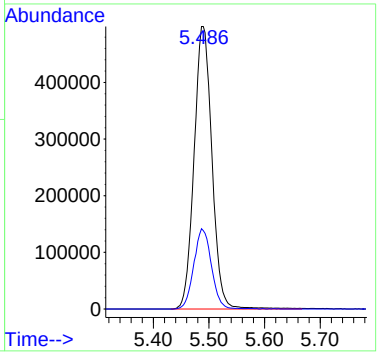


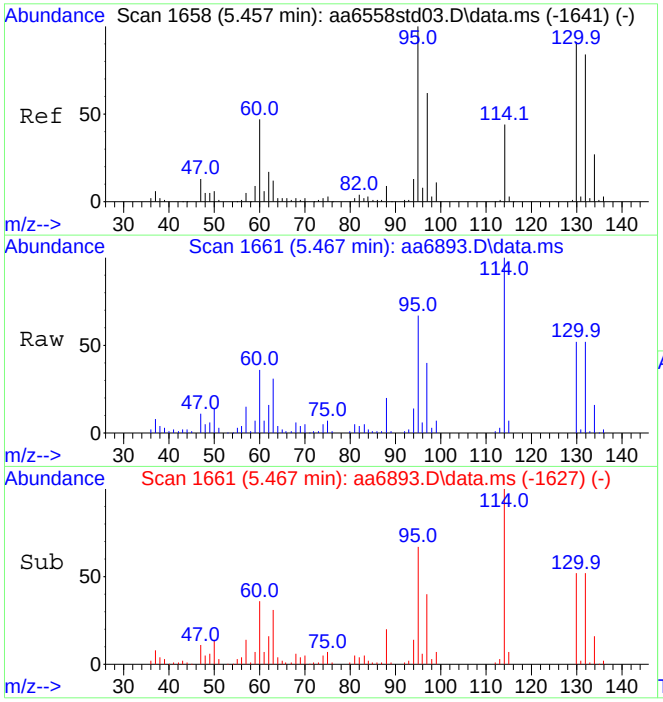


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.486 min Scan# 1667
Delta R.T. 0.003 min
Lab File: aa6893.D
Acq: 15 Jul 2024 9:39 pm

Tgt Ion:114 Resp: 1110666

Ion	Ratio	Lower	Upper
114	100		
63	28.0	3.6	43.6

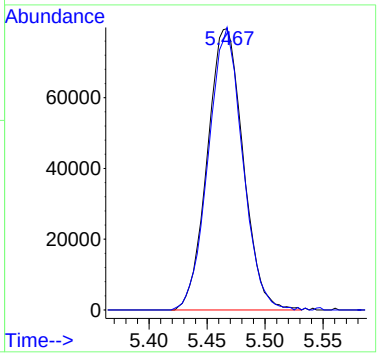


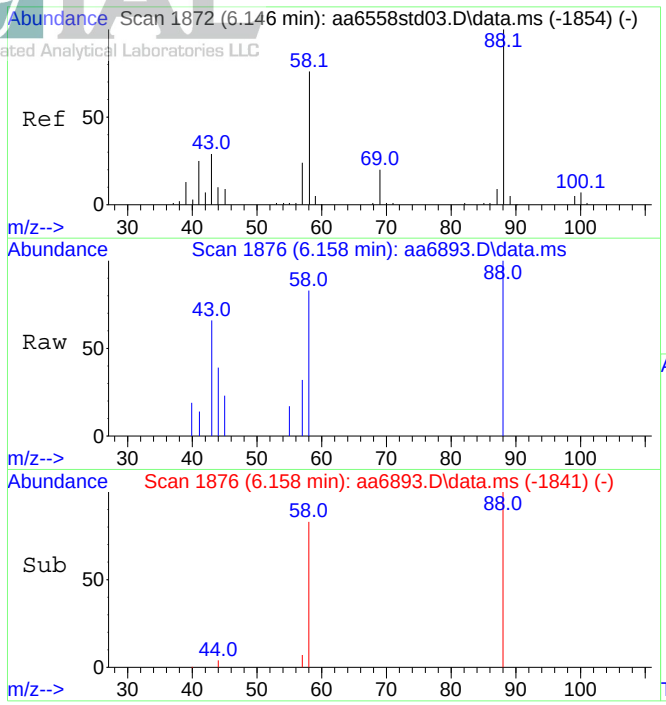


#40
Trichloroethene
Concen: 3.39 ppbV
RT: 5.467 min Scan# 1661
Delta R.T. 0.010 min
Lab File: aa6893.D
Acq: 15 Jul 2024 9:39 pm

Tgt Ion:130 Resp: 170393

Ion	Ratio	Lower	Upper
130	100		
132	96.1	76.6	114.8

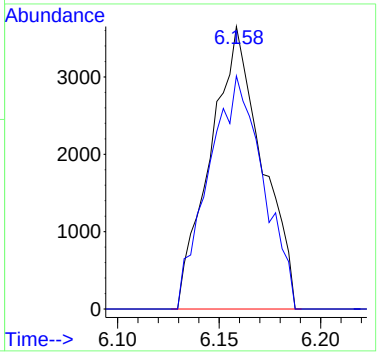


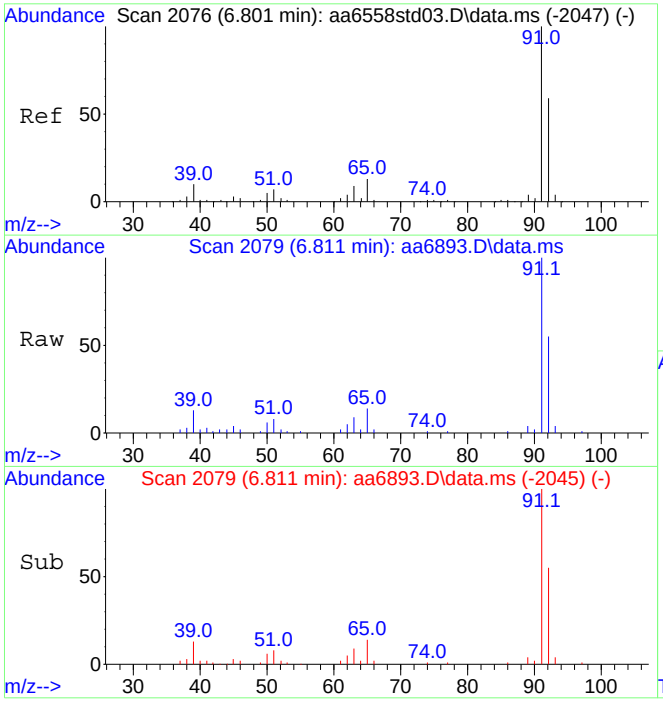


#45
1,4-Dioxane
Concen: 0.25 ppbV
RT: 6.158 min Scan# 1876
Delta R.T. 0.013 min
Lab File: aa6893.D
Acq: 15 Jul 2024 9:39 pm

Tgt Ion: 88 Resp: 6434

Ion	Ratio	Lower	Upper
88	100		
58	87.2	59.9	89.9

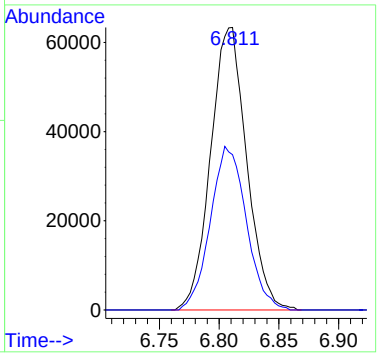


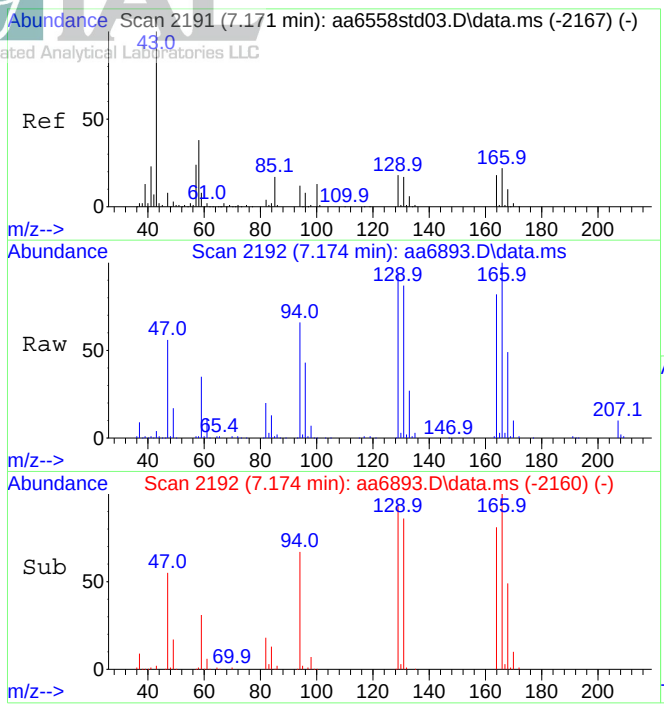


#47
Toluene
Concen: 0.94 ppbV
RT: 6.811 min Scan# 2079
Delta R.T. 0.010 min
Lab File: aa6893.D
Acq: 15 Jul 2024 9:39 pm

Tgt Ion: 91 Resp: 133112

Ion	Ratio	Lower	Upper
91	100		
92	57.6	47.0	70.6

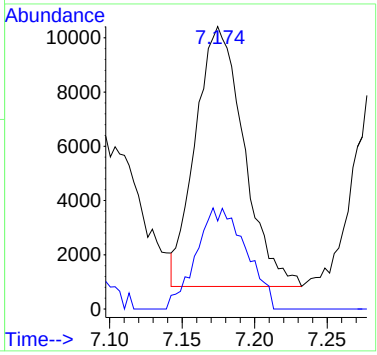


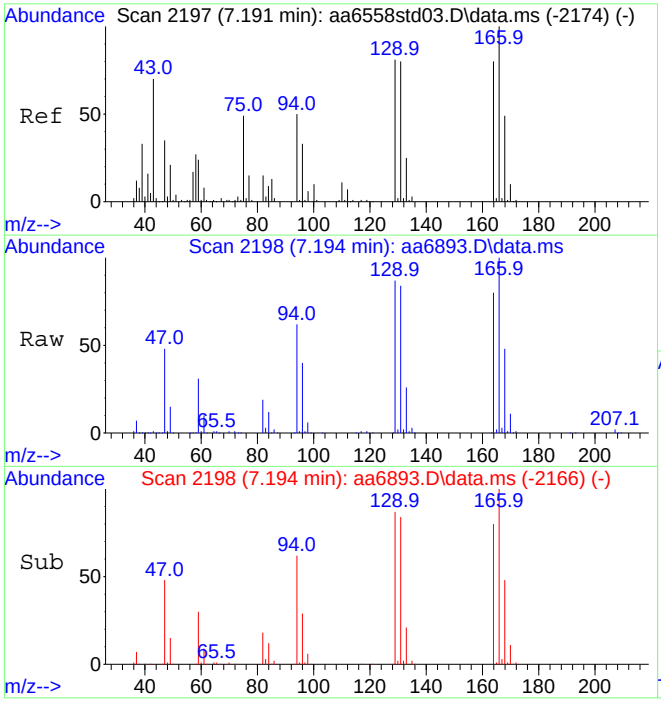


#48
Methyl isobutyl ketone
Concen: 0.21 ppbV
RT: 7.174 min Scan# 2192
Delta R.T. 0.003 min
Lab File: aa6893.D
Acq: 15 Jul 2024 9:39 pm

Tgt Ion: 43 Resp: 22282

Ion	Ratio	Lower	Upper
43	100		
58	39.7	31.0	46.4

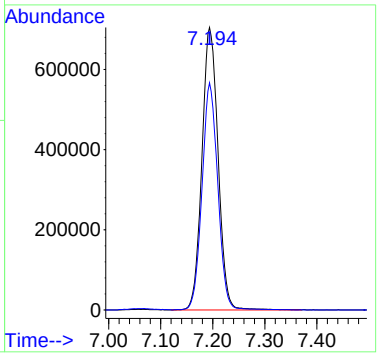


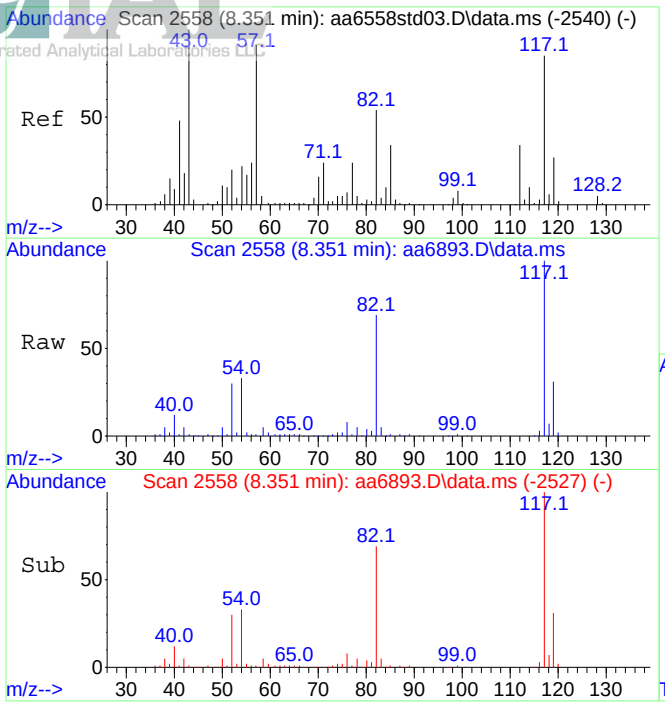


#49
Tetrachloroethene
Concen: 28.17 ppbV
RT: 7.194 min Scan# 2198
Delta R.T. 0.003 min
Lab File: aa6893.D
Acq: 15 Jul 2024 9:39 pm

Tgt Ion:166 Resp: 1517147

Ion	Ratio	Lower	Upper
166	100		
164	78.7	62.8	94.2

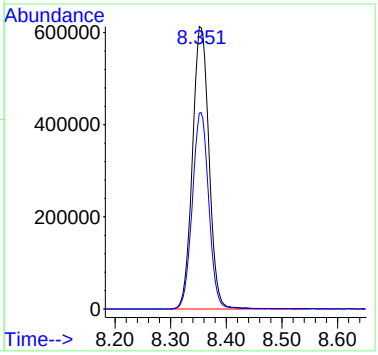


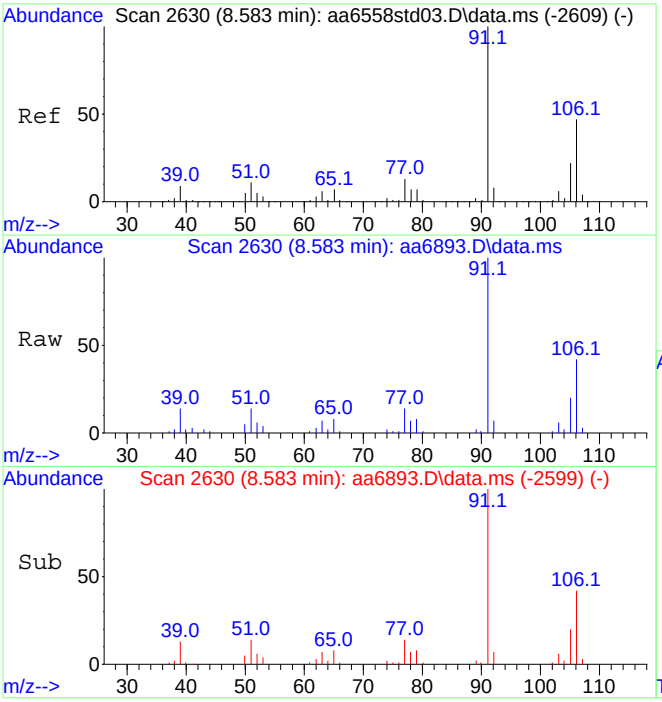


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.351 min Scan# 2558
Delta R.T. 0.000 min
Lab File: aa6893.D
Acq: 15 Jul 2024 9:39 pm

Tgt Ion:117 Resp: 1264766

Ion	Ratio	Lower	Upper
117	100		
82	69.2	42.3	82.3

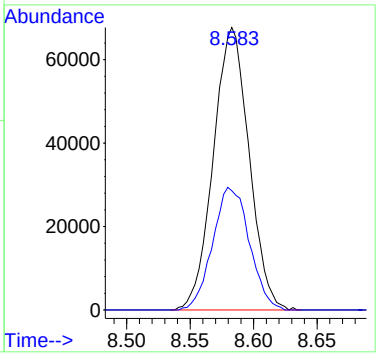


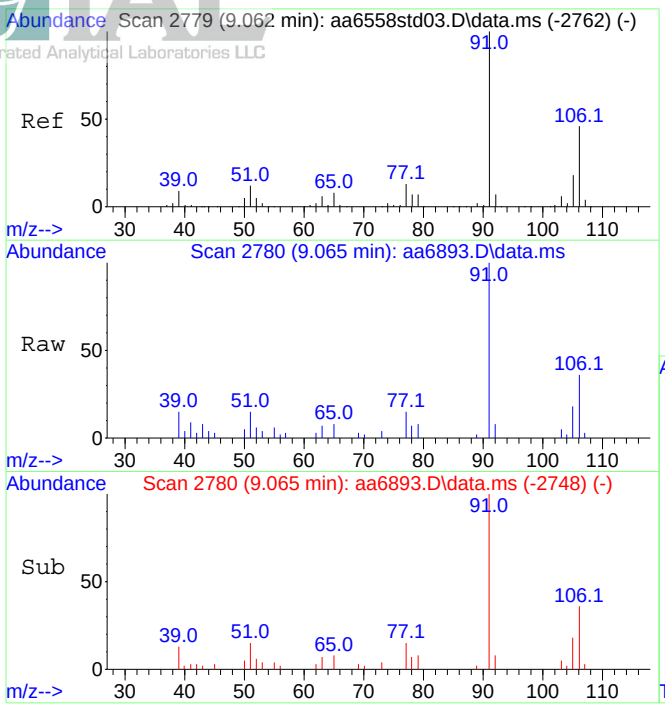


#59
Xylenes (m&p)
Concen: 0.71 ppbV
RT: 8.583 min Scan# 2630
Delta R.T. 0.000 min
Lab File: aa6893.D
Acq: 15 Jul 2024 9:39 pm

Tgt Ion: 91 Resp: 132639

Ion	Ratio	Lower	Upper
91	100		
106	44.6	37.4	56.2

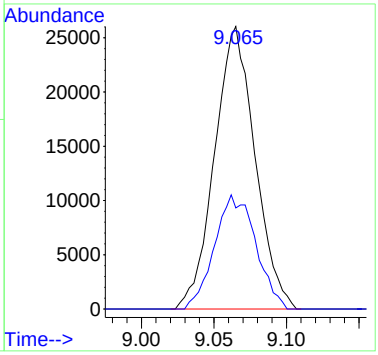


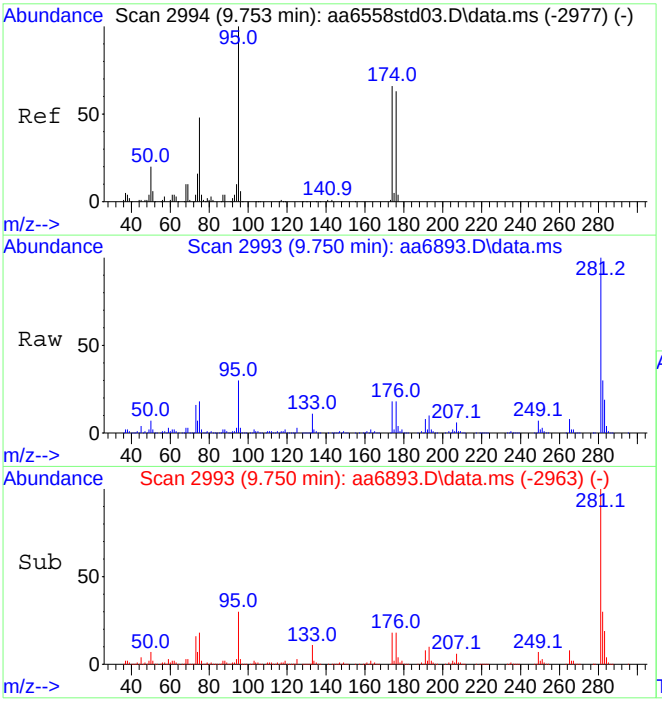


#60
Xylene (o)
Concen: 0.26 ppbV
RT: 9.065 min Scan# 2780
Delta R.T. 0.003 min
Lab File: aa6893.D
Acq: 15 Jul 2024 9:39 pm

Tgt Ion: 91 Resp: 50545

Ion	Ratio	Lower	Upper
91	100		
106	41.0	36.2	54.2

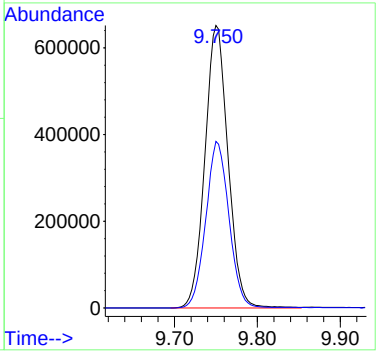


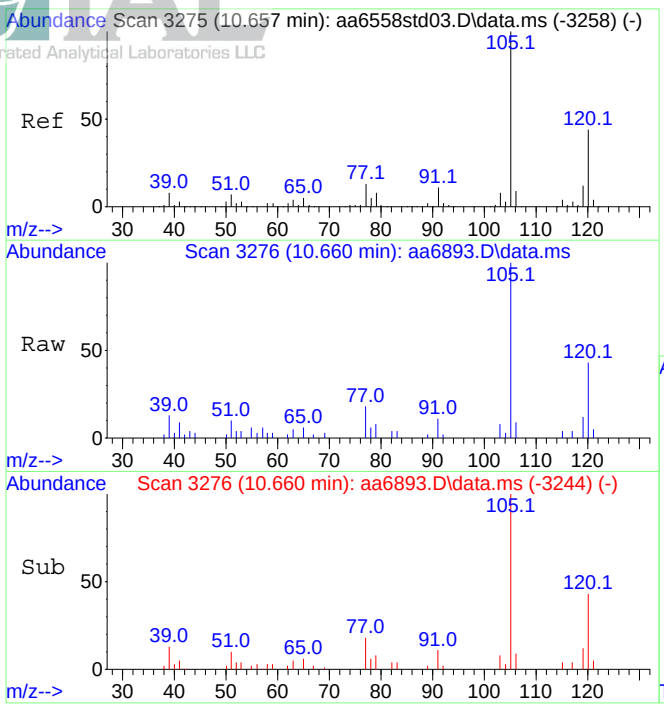


#64
Bromofluorobenzene (tune std)
Concen: 10.54 ppbV
RT: 9.750 min Scan# 2993
Delta R.T. -0.003 min
Lab File: aa6893.D
Acq: 15 Jul 2024 9:39 pm

Tgt Ion: 95 Resp: 1261081

Ion	Ratio	Lower	Upper
95	100		
174	59.2	52.9	79.3

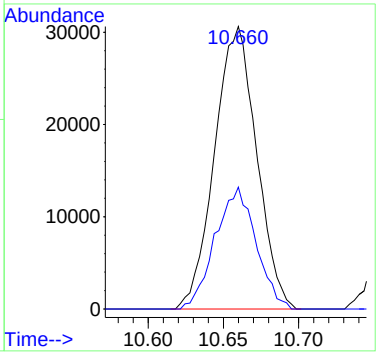




#70
1,2,4-Trimethylbenzene
Concen: 0.26 ppbV
RT: 10.660 min Scan# 3276
Delta R.T. 0.003 min
Lab File: aa6893.D
Acq: 15 Jul 2024 9:39 pm

Tgt Ion:105 Resp: 59552

Ion	Ratio	Lower	Upper
105	100		
120	41.7	34.5	51.7



Section VII: Standards Data

Initial Calibration Data

Initial Calibration Verification Data

Continuing Calibration Data

INTEGRATED ANALYTICAL LABORATORIES, LLC

Initial Calibration Data Summary Report

Initial Calibration Curve: 3/27/2024 **Method ID:** 240326.M

Instrument: AA

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6020BFB]	03/27/2024 10:03
0.2 PPBV STD [AA6021STD05]	03/27/2024 10:38
2 PPBV STD [AA6022STD04]	03/27/2024 11:38
10 PPBV STD [AA6023STD03]	03/27/2024 12:09
20 PPBV STD [AA6024STD02]	03/27/2024 12:40
40 PPBV STD [AA6025STD01]	03/27/2024 13:24
10 PPBV ICVSS [AA6026ICVSS]	03/27/2024 13:54

	Parameter	RRF 0.2ppbv	RRF 2ppbv	RRF 10ppbv	RRF 20ppbv	RRF 40ppbv	Avg ppbv	% RSD
1)	Bromochloromethane	----------ISTD----------						
2)	Propene	1.3	1.0	1.1	1.1	1.1	1.1	7.7
3)	Dichlorodifluoromethane	2.6	2.0	2.5	2.7	2.7	2.5	12
4)	1,2-Dichlorotetrafluoroethane	4.0	3.7	3.3	3.6	3.6	3.6	7.3
5)	n-Butane	3.2	2.5	2.2	2.3	2.2	2.5	17
6)	Chloromethane	0.15	0.17	0.15	0.19	0.16	0.16	9.6
7)	Vinyl chloride	1.2	0.98	1.3	1.4	1.4	1.2	13
8)	1,3-Butadiene	1.8	1.5	1.3	1.3	1.3	1.4	15
9)	Bromomethane	0.77	0.72	0.97	1.0	1.0	0.90	16
10)	Chloroethane	0.72	0.53	0.70	0.75	0.74	0.69	13
11)	Vinyl bromide	0.91	0.84	1.1	1.2	1.2	1.0	15
12)	Trichlorofluoromethane	3.4	2.8	2.7	2.9	2.9	2.9	9.9
13)	Ethanol	0.50	0.43	0.42	0.45	0.50	0.46	8.1
14)	1,1-Dichloroethene	2.3	1.7	2.3	2.5	2.5	2.3	15
15)	Carbon disulfide	3.5	2.7	3.8	4.1	4.1	3.6	16
16)	1,1,2-Trichloro-1,2,2-trifluoroethane	3.4	3.5	2.5	2.6	2.6	2.9	17
17)	Acrolein	0.67	0.37	0.53	0.57	0.59	0.55	20
18)	Allyl Chloride	0.56	0.42	0.58	0.64	0.64	0.57	15
19)	Isopropanol	3.4	2.2	2.8	3.1	3.1	2.9	15
20)	Methylene chloride	1.9	1.2	1.6	1.7	1.7	1.6	18
21)	Acetone	2.9	1.5	2.2	2.3	2.3	2.2	24
22)	1,2-Dichloroethene (trans)	2.1	1.4	2.0	2.2	2.3	2.0	17
23)	n-Pentane	3.3	2.8	2.5	2.6	2.8	2.8	10
24)	n-Hexane	5.4	3.8	3.5	3.6	3.8	4.0	19
25)	Methyl tert-butyl ether	5.3	5.2	4.0	4.0	4.1	4.5	14
26)	Tert-butyl alcohol	3.7	3.4	2.8	3.0	3.1	3.2	10
27)	1,1-Dichloroethane	3.3	2.1	2.4	2.7	2.8	2.7	17
28)	1,2-Dichloroethene (cis)	2.1	1.5	1.8	2.0	2.1	1.9	14
29)	Cyclohexane	3.2	3.0	2.4	2.5	2.5	2.7	14
30)	Chloroform	3.1	2.3	2.6	2.9	3.0	2.8	12
31)	Ethyl acetate	0.67	0.52	0.52	0.56	0.61	0.58	11
32)	Carbon tetrachloride	3.2	3.1	2.6	2.7	2.8	2.9	9.7
33)	Tetrahydrofuran	2.5	1.8	1.9	2.1	2.2	2.1	12
34)	1,1,1-Trichloroethane	3.0	2.9	2.4	2.5	2.6	2.7	8.9
35)	Methyl ethyl ketone	4.1	2.7	3.0	3.3	3.6	3.3	15
36)	n-Heptane	4.4	3.7	3.0	3.1	3.2	3.5	17
37)	Benzene	4.9	3.8	3.7	4.1	4.4	4.2	12
38)	1,2-Dichloroethane	2.1	1.6	1.8	1.9	2.1	1.9	10

***% RSD (Relative Standard Deviation) must be within 30%**

****An exception is made for 2 compounds that must be within 40%**

RRF - Relative Response Factor

INTEGRATED ANALYTICAL LABORATORIES, LLC

Initial Calibration Data Summary Report

Initial Calibration Curve: 3/27/2024 **Method ID:** 240326.M

Instrument: AA

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6020BFB]	03/27/2024 10:03
0.2 PPBV STD [AA6021STD05]	03/27/2024 10:38
2 PPBV STD [AA6022STD04]	03/27/2024 11:38
10 PPBV STD [AA6023STD03]	03/27/2024 12:09
20 PPBV STD [AA6024STD02]	03/27/2024 12:40
40 PPBV STD [AA6025STD01]	03/27/2024 13:24
10 PPBV ICVSS [AA6026ICVSS]	03/27/2024 13:54

	Parameter	RRF 0.2ppbv	RRF 2ppbv	RRF 10ppbv	RRF 20ppbv	RRF 40ppbv	Avg ppbv	% RSD
39)	1,4-Difluorobenzene	----------ISTD----------						
40)	Trichloroethene	0.45	0.37	0.38	0.40	0.40	0.40	8.0
41)	2,2,4-Trimethylpentane	2.0	2.0	2.0	1.9	1.8	1.9	3.7
42)	1,2-Dichloropropane	0.54	0.43	0.41	0.41	0.40	0.44	13
43)	Bromodichloromethane	0.78	0.66	0.67	0.69	0.69	0.70	6.7
44)	Methyl methacrylate	0.73	0.63	0.58	0.59	0.58	0.62	11
45)	1,4-Dioxane	0.27	0.23	0.22	0.22	0.22	0.23	9.0
46)	1,3-Dichloropropene (cis)	0.72	0.60	0.59	0.61	0.58	0.62	9.0
47)	Toluene	1.5	1.4	1.2	1.2	1.1	1.3	11
48)	Methyl isobutyl ketone	1.3	1.3	1.1	1.0	0.96	1.2	15
49)	Tetrachloroethene	0.51	0.48	0.43	0.42	0.39	0.45	11
50)	1,3-Dichloropropene (trans)	0.62	0.58	0.58	0.59	0.56	0.59	3.8
51)	1,1,2-Trichloroethane	0.48	0.44	0.41	0.41	0.39	0.43	8.7
52)	Dibromochloromethane	0.71	0.67	0.63	0.64	0.61	0.65	5.5
53)	1,2-Dibromoethane	0.65	0.62	0.59	0.60	0.57	0.61	4.9
54)	Methyl n-butyl ketone	1.2	1.1	1.00	0.97	0.91	1.0	10
55)	d-5 Chlorbenzene	----------ISTD----------						
56)	n-Nonane	1.5	1.6	1.4	1.3	1.2	1.4	11
57)	Chlorobenzene	1.0	0.95	0.95	0.97	0.91	0.96	4.9
58)	Ethylbenzene	2.1	2.0	1.9	1.8	1.7	1.9	8.3
59)	Xylenes (m&p)	1.6	1.5	1.4	1.4	1.3	1.4	7.4
60)	Xylenes (o)	1.6	1.7	1.5	1.5	1.4	1.5	6.9
61)	Styrene	0.97	0.99	1.0	1.0	0.96	0.99	2.7
62)	Bromoform	0.61	0.58	0.63	0.64	0.61	0.61	3.9
63)	Cumene	2.0	2.2	1.9	1.9	1.7	1.9	7.9
65)	n-Propyl benzene	2.8	2.8	2.6	2.5	2.4	2.6	7.1
66)	1,1,2,2-Tetrachloroethane	1.2	1.2	1.1	1.1	1.0	1.1	5.9
67)	4-Ethyltoluene	2.2	2.2	2.1	2.0	1.9	2.1	5.5
68)	2-Chlorotoluene	1.9	1.9	1.7	1.7	1.6	1.8	6.3
69)	1,3,5-Trimethylbenzene	1.7	1.9	1.7	1.7	1.6	1.7	6.6
70)	1,2,4-Trimethylbenzene	1.6	1.8	1.7	1.7	1.6	1.7	5.5
71)	1,3-Dichlorobenzene	1.00	0.87	0.93	0.94	0.90	0.93	5.1
72)	1,4-Dichlorobenzene	0.96	0.86	0.96	0.98	0.94	0.94	4.8
73)	Benzyl chloride	1.4	1.4	1.7	1.7	1.7	1.6	9.3
74)	1,2-Dichlorobenzene	0.92	0.92	0.94	0.94	0.89	0.92	2.0
75)	1,3-Hexachlorobutadiene	0.52	0.51	0.52	0.51	0.44	0.50	6.6
76)	1,2,4-Trichlorobenzene	0.74	0.65	0.70	0.70	0.63	0.68	6.4
77)	Naphthalene	2.0	1.8	1.9	2.0	1.9	1.9	5.0

***% RSD (Relative Standard Deviation) must be within 30%**

****An exception is made for 2 compounds that must be within 40%**

RRF - Relative Response Factor

Method Path : C:\msdchem\1\METHODS\
Method File : 240326.M
Title : TO-15 on the Agilent 7890A / 5975C
Last Update : Wed Mar 27 13:46:33 2024
Response Via : Initial Calibration

Calibration Files
0.2 =aa6021std05.D 2 =aa6022std04.D 10 =aa6023std03.D 20 =aa6024std02.D 40 =aa6025std01.D

		Compound	0.2	2	10	20	40	Avg	%RSD
1)	I	Bromochloromethane...	----------ISTD----------						
2)	T	Propene	1.252	1.013	1.080	1.130	1.130	1.121	7.79
3)	T	Dichlorodifluoro...	2.622	1.990	2.547	2.698	2.711	2.514	11.93
4)	T	1,2-Dichlorotetr...	4.015	3.662	3.271	3.551	3.643	3.629	7.35
5)	T	n-Butane	3.184	2.459	2.207	2.309	2.216	2.475	16.53
6)	T	Chloromethane	0.145	0.169	0.154	0.185	0.158	0.162	9.65
7)	T	Vinyl chloride	1.221	0.983	1.293	1.364	1.365	1.245	12.70
8)	T	1,3-Butadiene	1.758	1.459	1.271	1.314	1.275	1.416	14.55
9)	T	Bromomethane	0.772	0.722	0.968	1.013	1.015	0.898	15.62
10)	T	Chloroethane	0.716	0.532	0.699	0.745	0.739	0.686	12.85
11)	T	Vinyl bromide	0.911	0.840	1.079	1.154	1.187	1.034	14.73
12)	T	Trichlorofluorom...	3.433	2.772	2.685	2.887	2.901	2.936	9.93
13)	T	Ethanol	0.498	0.426	0.419	0.453	0.497	0.459	8.18
14)	T	1,1-Dichloroethene	2.291	1.705	2.342	2.533	2.513	2.277	14.78
15)	T	Carbon disulfide	3.518	2.658	3.794	4.050	4.057	3.615	16.02
16)	T	1,1,2-Trichloro-...	3.410	3.459	2.503	2.577	2.569	2.904	16.73
17)	T	Acrolein	0.668	0.372	0.530	0.570	0.589	0.546	20.09
18)	T	Allyl chloride	0.563	0.422	0.582	0.635	0.636	0.567	15.39
19)	T	Isopropanol	3.384	2.202	2.811	3.063	3.061	2.904	15.22
20)	T	Methylene chloride	1.943	1.164	1.584	1.690	1.720	1.620	17.68
21)	T	Acetone	2.946	1.467	2.170	2.286	2.316	2.237	23.54
22)	T	trans-1,2-Dichlo...	2.112	1.393	2.002	2.202	2.251	1.992	17.48
23)	T	n-Pentane	3.273	2.844	2.537	2.629	2.759	2.808	10.16
24)	T	n-Hexane	5.403	3.838	3.475	3.618	3.794	4.026	19.47
25)	T	Methyl tert-buty...	5.264	5.168	4.023	4.047	4.101	4.521	14.08
26)	T	Tert-butyl alcohol	3.653	3.406	2.817	3.001	3.090	3.193	10.45
27)	T	1,1-Dichloroethane	3.349	2.099	2.435	2.689	2.799	2.674	17.33
28)	T	cis-1,2-Dichloro...	2.131	1.474	1.849	2.033	2.106	1.918	14.18
29)	t	Cyclohexane	3.243	2.981	2.404	2.460	2.516	2.721	13.63
30)	T	Chloroform	3.086	2.280	2.624	2.915	3.034	2.788	12.03
31)	T	Ethyl acetate	0.668	0.516	0.524	0.561	0.608	0.576	10.96
32)	T	Carbon tetrachlo...	3.224	3.059	2.574	2.658	2.752	2.853	9.70
33)	T	Tetrahydrofuran	2.460	1.821	1.904	2.086	2.207	2.095	12.11
34)	T	1,1,1-Trichloroe...	2.982	2.910	2.431	2.528	2.610	2.692	8.98
35)	T	Methyl ethyl ketone	4.060	2.736	2.996	3.330	3.586	3.342	15.42
36)	T	n-Heptane	4.419	3.713	2.991	3.106	3.226	3.491	16.82
37)	T	Benzene	4.942	3.840	3.683	4.101	4.411	4.195	11.93
38)	T	1,2-Dichloroethane	2.067	1.630	1.779	1.945	2.096	1.903	10.35
39)	I	1,4-Difluorobenzen...	----------ISTD----------						
40)	T	Trichloroethene	0.451	0.365	0.384	0.399	0.397	0.399	8.05
41)	T	2,2,4-Trimethylp...	1.977	2.012	1.961	1.924	1.822	1.939	3.74
42)	T	1,2-Dichloropropane	0.536	0.430	0.414	0.407	0.399	0.437	12.89
43)	T	Bromodichloromet...	0.776	0.657	0.667	0.694	0.685	0.696	6.78
44)	T	Methyl methacrylate	0.731	0.627	0.577	0.588	0.577	0.620	10.56
45)	T	1,4-Dioxane	0.271	0.233	0.223	0.224	0.220	0.234	9.04
46)	T	cis-1,3-Dichloro...	0.716	0.595	0.590	0.608	0.578	0.617	9.07
47)	T	Toluene	1.489	1.367	1.229	1.211	1.147	1.289	10.71
48)	T	Methyl isobutyl ...	1.334	1.338	1.094	1.036	0.961	1.152	15.08
49)	T	Tetrachloroethene	0.506	0.480	0.427	0.421	0.391	0.445	10.51
50)	T	trans-1,3-Dichlo...	0.623	0.577	0.583	0.592	0.562	0.587	3.88
51)	T	1,1,2-Trichloroe...	0.484	0.442	0.405	0.408	0.391	0.426	8.73
52)	T	Dibromochloromet...	0.705	0.671	0.632	0.643	0.613	0.653	5.51
53)	T	1,2-Dibromoethane	0.647	0.620	0.592	0.597	0.569	0.605	4.91
54)	T	Methyl n-butyl k...	1.172	1.115	0.997	0.967	0.914	1.033	10.37
55)	I	d-5 Chlorobenzene ...	----------ISTD----------						
56)	T	n-Nonane	1.507	1.567	1.359	1.305	1.199	1.387	10.81
57)	T	Chlorobenzene	1.039	0.954	0.950	0.969	0.908	0.964	4.95
58)	T	Ethylbenzene	2.135	2.027	1.859	1.843	1.731	1.919	8.37
59)	T	Xylenes (m&p)	1.559	1.530	1.420	1.402	1.293	1.441	7.43
60)	T	Xylene (o)	1.618	1.654	1.498	1.478	1.396	1.529	6.92

Method Path : C:\msdchem\1\METHODS\
Method File : 240326.M

61)	T	Styrene	0.970	0.987	1.015	1.024	0.962	0.991	2.76
62)	T	Bromoform	0.608	0.579	0.626	0.643	0.612	0.614	3.90
63)	T	Cumene	1.979	2.155	1.891	1.863	1.746	1.927	7.91
64)	S	Bromofluorobenze...	0.867	0.905	0.904	0.903	0.905	0.897	1.85
65)	T	n-Propyl benzene	2.778	2.810	2.573	2.530	2.357	2.610	7.18
66)	T	1,1,2,2-Tetrachl...	1.207	1.197	1.108	1.107	1.048	1.133	5.96
67)	T	4-Ethyltoluene	2.151	2.205	2.069	2.045	1.904	2.075	5.54
68)	T	2-Chlorotoluene	1.874	1.886	1.737	1.715	1.623	1.767	6.32
69)	T	1,3,5-Trimethylb...	1.699	1.891	1.699	1.679	1.576	1.709	6.67
70)	T	1,2,4-Trimethylb...	1.626	1.834	1.716	1.699	1.594	1.694	5.51
71)	T	1,3-Dichlorobenzene	0.999	0.871	0.930	0.940	0.900	0.928	5.19
72)	T	1,4-Dichlorobenzene	0.956	0.863	0.961	0.981	0.944	0.941	4.83
73)	T	Benzyl chloride	1.425	1.403	1.657	1.708	1.678	1.574	9.37
74)	T	1,2-Dichlorobenzene	0.916	0.919	0.940	0.936	0.893	0.921	2.05
75)	T	1,3-Hexachlorobu...	0.524	0.508	0.518	0.508	0.442	0.500	6.62
76)	T	1,2,4-Trichlorob...	0.739	0.652	0.701	0.696	0.626	0.683	6.46
77)	T	Naphthalene	1.996	1.751	1.930	1.950	1.855	1.897	5.05

(#) = Out of Range

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6021std05.D
Acq On : 27 Mar 2024 10:38 am
Operator : jjw
Sample : 0.2 ppbv std
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 27 12:33:10 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 12:31:35 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.409	130	360749	10.00	ppbV		0.000
39) 1,4-Difluorobenzene (IS)	5.480	114	1478694	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.351	117	1394585	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.753	95	1209742	9.59	ppbV		0.000
Target Compounds							Qvalue
2) Propene	1.457	41	9844	0.26	ppbV		93
3) Dichlorodifluoromethane	1.516	85	20056	0.25	ppbV		92
4) 1,2-Dichlorotetrafluor...	1.626	85	28391	0.23	ppbV		96
5) n-Butane	1.708	43	25040	0.30	ppbV	#	81
6) Chloromethane	1.780	52	1170	0.20	ppbV	#	65
7) Vinyl chloride	1.773	62	9514	0.23	ppbV		89
8) 1,3-Butadiene	1.777	39	13569	0.28	ppbV	#	79
9) Bromomethane	2.078	94	5569	0.18	ppbV		95
10) Chloroethane	2.181	64	5479	0.25	ppbV	#	56
11) Vinyl bromide	2.287	106	6641	0.19	ppbV		93
12) Trichlorofluoromethane	2.300	101	27245	0.28	ppbV		95
13) Ethanol	2.692	45	3734	0.24	ppbV		83
14) 1,1-Dichloroethene	2.724	61	17194	0.24	ppbV		96
15) Carbon disulfide	2.753	76	27156	0.23	ppbV		99
16) 1,1,2-Trichloro-1,2,2-...	2.769	101	26818	0.25	ppbV		95
17) Acrolein	2.985	56	4823	0.30	ppbV		93
18) Allyl chloride	3.113	76	4386	0.24	ppbV		100
19) Isopropanol	3.116	45	21727	0.24	ppbV		99
20) Methylene chloride	3.210	49	15138	0.31	ppbV		84
21) Acetone	3.219	43	22954	0.35	ppbV	#	86
22) trans-1,2-Dichloroethene	3.332	61	16914	0.28	ppbV		96
23) n-Pentane	3.422	43	25504	0.26	ppbV		89
24) n-Hexane	3.415	57	43272	0.33	ppbV		96
25) Methyl tert-butyl ether	3.419	73	42540	0.26	ppbV		81
26) Tert-butyl alcohol	3.480	59	30311	0.27	ppbV		100
27) 1,1-Dichloroethane	3.817	63	25858	0.32	ppbV		92
28) cis-1,2-Dichloroethene	4.245	61	16758	0.28	ppbV		97
29) Cyclohexane	4.428	56	26203	0.27	ppbV		95
30) Chloroform	4.473	83	24049	0.27	ppbV		98
31) Ethyl acetate	4.566	45	5204	0.28	ppbV		100
32) Carbon tetrachloride	4.592	117	25818	0.25	ppbV		97
33) Tetrahydrofuran	4.611	42	19701	0.29	ppbV		95
34) 1,1,1-Trichloroethane	4.644	97	23455	0.24	ppbV		97
35) Methyl ethyl ketone	4.708	43	32226	0.31	ppbV		95
36) n-Heptane	4.936	43	35392	0.29	ppbV		93
37) Benzene	4.955	78	38510	0.28	ppbV		97
38) 1,2-Dichloroethane	5.123	62	16254	0.26	ppbV		98
40) Trichloroethene	5.457	130	13335	0.24	ppbV		98
41) 2,2,4-Trimethylpentane	4.862	57	63722	0.22	ppbV		99
42) 1,2-Dichloropropane	5.914	63	17584	0.28	ppbV		97
43) Bromodichloromethane	5.972	83	26403	0.27	ppbV		99
44) Methyl methacrylate	6.116	41	23779	0.27	ppbV		95
45) 1,4-Dioxane	6.152	88	9370	0.28	ppbV		94
46) cis-1,3-Dichloropropene	6.560	75	23497	0.27	ppbV		99
47) Toluene	6.801	91	47573	0.25	ppbV		99
48) Methyl isobutyl ketone	7.168	43	42994	0.24	ppbV		95
49) Tetrachloroethene	7.190	166	16758	0.25	ppbV		98
50) trans-1,3-Dichloropropene	7.206	75	20460	0.24	ppbV		84
51) 1,1,2-Trichloroethane	7.367	97	15444	0.25	ppbV		98

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6021std05.D
Acq On : 27 Mar 2024 10:38 am
Operator : jjw
Sample : 0.2 ppbv std
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

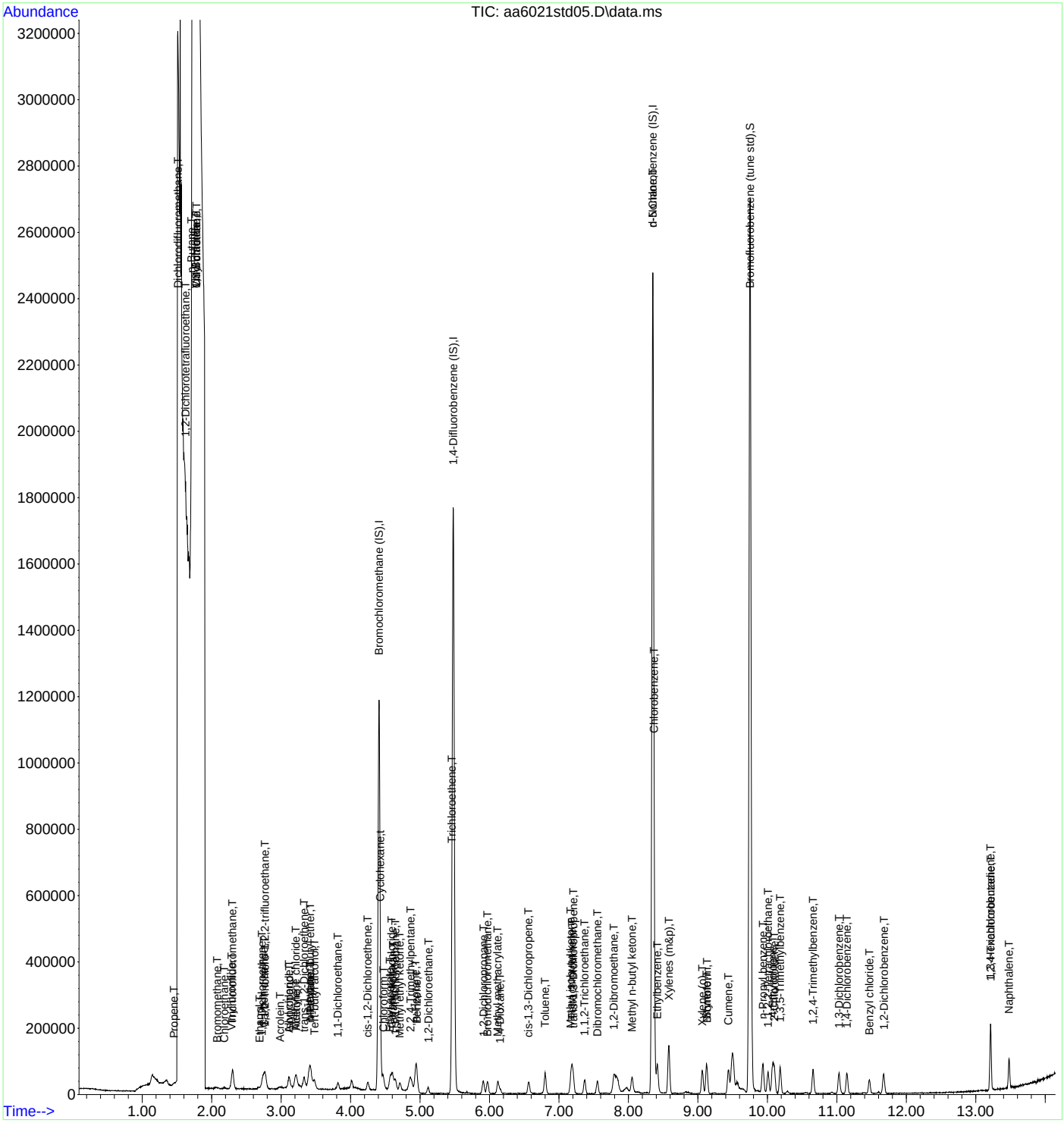
Quant Time: Mar 27 12:33:10 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 12:31:35 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
52) Dibromochloromethane	7.553	129	23345	0.24	ppbV		98
53) 1,2-Dibromoethane	7.788	107	20663	0.23	ppbV		97
54) Methyl n-butyl ketone	8.052	43	39178	0.25	ppbV		90
56) n-Nonane	8.351	43	46667	0.23	ppbV		97
57) Chlorobenzene	8.370	112	32164	0.24	ppbV	#	57
58) Ethylbenzene	8.415	91	66107	0.24	ppbV		99
59) Xylenes (m&p)	8.582	91	96984	0.47	ppbV		99
60) Xylene (o)	9.065	91	49641	0.23	ppbV		100
61) Styrene	9.126	104	30559	0.22	ppbV		100
62) Bromoform	9.132	173	19161	0.23	ppbV		98
63) Cumene	9.438	105	59073	0.21	ppbV		99
65) n-Propyl benzene	9.936	91	83690	0.22	ppbV		98
66) 1,1,2,2-Tetrachloroethane	10.010	83	38390	0.24	ppbV		99
67) 4-Ethyltoluene	10.077	105	64788	0.22	ppbV		99
68) 2-Chlorotoluene	10.100	91	56977	0.23	ppbV		99
69) 1,3,5-Trimethylbenzene	10.184	105	51641	0.21	ppbV		99
70) 1,2,4-Trimethylbenzene	10.656	105	48989	0.20	ppbV		99
71) 1,3-Dichlorobenzene	11.032	146	30940	0.25	ppbV		98
72) 1,4-Dichlorobenzene	11.145	146	28519	0.22	ppbV		97
73) Benzyl chloride	11.470	91	39743	0.19	ppbV		98
74) 1,2-Dichlorobenzene	11.679	146	27332	0.21	ppbV		99
75) 1,3-Hexachlorobutadiene	13.212	225	16221	0.23	ppbV		98
76) 1,2,4-Trichlorobenzene	13.216	180	22681	0.24	ppbV		99
77) Naphthalene	13.479	128	55674	0.22	ppbV		98

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

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6021std05.D
Acq On : 27 Mar 2024 10:38 am
Operator : jjw
Sample : 0.2 ppbv std
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 27 12:33:10 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 12:31:35 2024
Response via : Initial Calibration



Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6022std04.D
Acq On : 27 Mar 2024 11:38 am
Operator : jjw
Sample : 2 ppbv std
Misc : EB0103704
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 27 12:30:51 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 12:30:41 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.412	130	309693	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.476	114	1229116	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.351	117	1260202	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.749	95	1140629	10.01	ppbV	0.000
Target Compounds						Qvalue
2) Propene	1.460	41	68409	2.05	ppbV	99
3) Dichlorodifluoromethane	1.499	85	130668	1.66	ppbV	99
4) 1,2-Dichlorotetrafluor...	1.622	85	222308	2.19	ppbV	98
5) n-Butane	1.705	43	166012	2.43	ppbV	95
6) Chloromethane	1.773	52	11699	2.46	ppbV	86
7) Vinyl chloride	1.763	62	65775	1.64	ppbV	97
8) 1,3-Butadiene	1.773	39	96684	2.46	ppbV	91
9) Bromomethane	2.068	94	44715	1.49	ppbV	97
10) Chloroethane	2.177	64	34925	1.61	ppbV	100
11) Vinyl bromide	2.284	106	52531	1.57	ppbV	100
12) Trichlorofluoromethane	2.300	101	188851	2.27	ppbV	98
13) Ethanol	2.663	45	27472	2.12	ppbV	96
14) 1,1-Dichloroethene	2.724	61	109819	1.51	ppbV	98
15) Carbon disulfide	2.747	76	176154	1.50	ppbV	96
16) 1,1,2-Trichloro-1,2,2-...	2.766	101	233557	3.01	ppbV	98
17) Acrolein	2.981	56	23016	1.40	ppbV	99
18) Allyl chloride	3.113	76	28239	1.57	ppbV	100
19) Isopropanol	3.116	45	121377	1.39	ppbV	100
20) Methylene chloride	3.203	49	77858	1.59	ppbV	98
21) Acetone	3.219	43	98104	1.46	ppbV	100
22) trans-1,2-Dichloroethene	3.325	61	95745	1.54	ppbV	98
23) n-Pentane	3.412	43	190230	2.42	ppbV	100
24) n-Hexane	3.412	57	263847	2.45	ppbV	98
25) Methyl tert-butyl ether	3.422	73	358478	2.88	ppbV	88
26) Tert-butyl alcohol	3.476	59	242573	2.78	ppbV	100
27) 1,1-Dichloroethane	3.814	63	130027	1.72	ppbV	99
28) cis-1,2-Dichloroethene	4.245	61	99510	1.74	ppbV	99
29) Cyclohexane	4.425	56	206806	2.78	ppbV	99
30) Chloroform	4.473	83	152535	1.88	ppbV	95
31) Ethyl acetate	4.563	45	34541	2.13	ppbV	99
32) Carbon tetrachloride	4.592	117	210339	2.64	ppbV	100
33) Tetrahydrofuran	4.599	42	125187	2.12	ppbV	97
34) 1,1,1-Trichloroethane	4.637	97	196486	2.61	ppbV	100
35) Methyl ethyl ketone	4.708	43	186439	2.01	ppbV	99
36) n-Heptane	4.933	43	255248	2.76	ppbV	98
37) Benzene	4.949	78	256885	2.25	ppbV	99
38) 1,2-Dichloroethane	5.113	62	110076	2.00	ppbV	98
40) Trichloroethene	5.457	130	89614	1.90	ppbV	100
41) 2,2,4-Trimethylpentane	4.859	57	539000	2.24	ppbV	99
42) 1,2-Dichloropropane	5.910	63	117244	2.30	ppbV	96
43) Bromodichloromethane	5.972	83	185807	2.27	ppbV	99
44) Methyl methacrylate	6.116	41	169591	2.39	ppbV	97
45) 1,4-Dioxane	6.148	88	67128	2.45	ppbV	98
46) cis-1,3-Dichloropropene	6.563	75	162406	2.24	ppbV	99
47) Toluene	6.801	91	362835	2.40	ppbV	98
48) Methyl isobutyl ketone	7.171	43	358448	2.67	ppbV	99
49) Tetrachloroethene	7.190	166	132136	2.51	ppbV	100
50) trans-1,3-Dichloropropene	7.209	75	157410	2.20	ppbV	90
51) 1,1,2-Trichloroethane	7.367	97	117291	2.36	ppbV	100

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6022std04.D
Acq On : 27 Mar 2024 11:38 am
Operator : jjw
Sample : 2 ppbv std
Misc : EB0103704
ALS Vial : 4 Sample Multiplier: 1

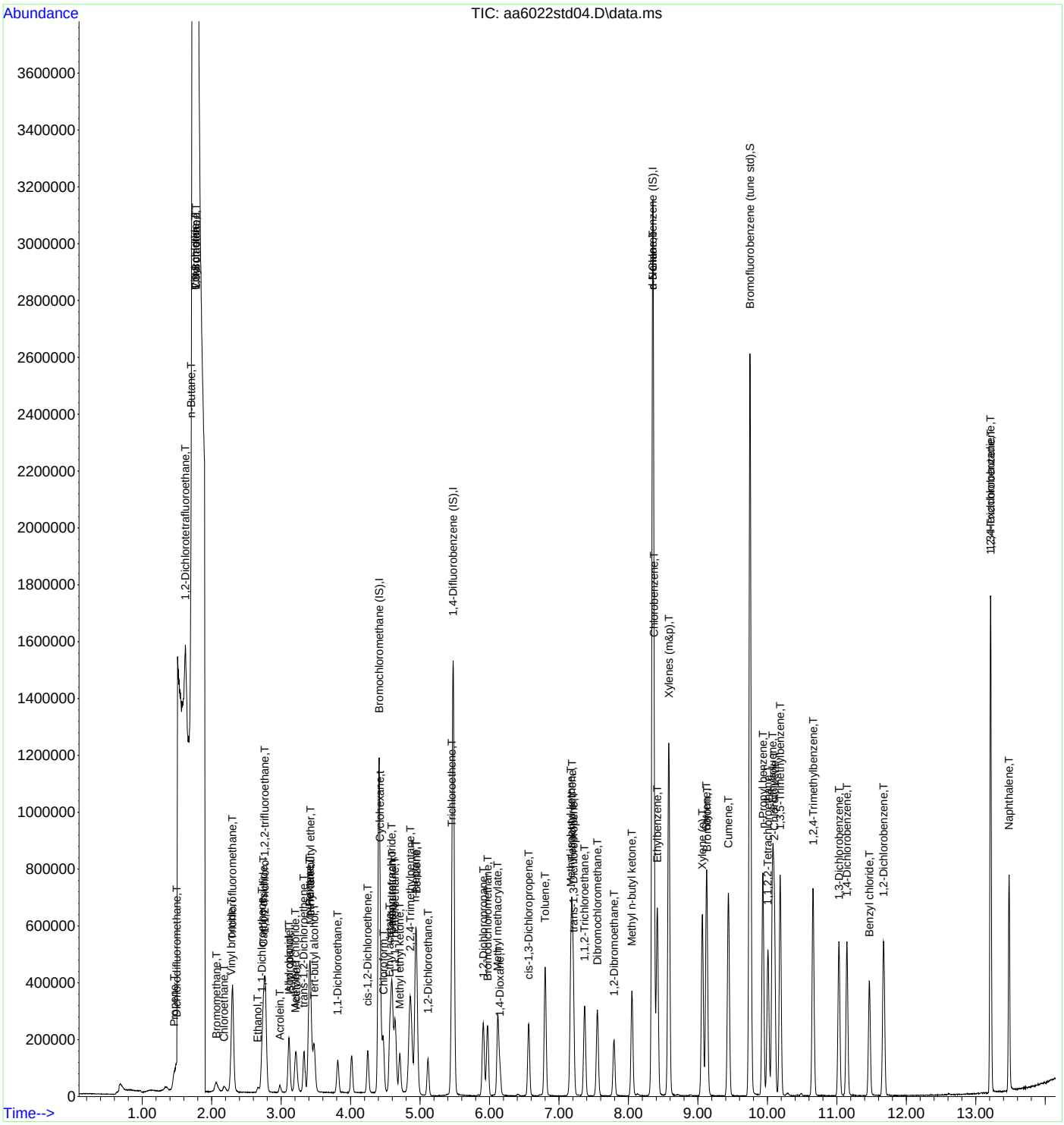
Quant Time: Mar 27 12:30:51 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 12:30:41 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.553	129	184678	2.38	ppbV	99
53) 1,2-Dibromoethane	7.791	107	164713	2.26	ppbV	99
54) Methyl n-butyl ketone	8.049	43	309841	2.53	ppbV	98
56) n-Nonane	8.351	43	438505	2.56	ppbV	99
57) Chlorobenzene	8.370	112	266791	2.23	ppbV	93
58) Ethylbenzene	8.415	91	567169	2.42	ppbV	99
59) Xylenes (m&p)	8.582	91	859845	4.80	ppbV	100
60) Xylene (o)	9.065	91	458642	2.43	ppbV	100
61) Styrene	9.123	104	281004	2.20	ppbV	100
62) Bromoform	9.132	173	164849	2.09	ppbV	99
63) Cumene	9.438	105	581117	2.44	ppbV	99
65) n-Propyl benzene	9.936	91	765019	2.36	ppbV	99
66) 1,1,2,2-Tetrachloroethane	10.007	83	344034	2.46	ppbV	99
67) 4-Ethyltoluene	10.074	105	600236	2.30	ppbV	99
68) 2-Chlorotoluene	10.100	91	518054	2.37	ppbV	99
69) 1,3,5-Trimethylbenzene	10.184	105	519514	2.43	ppbV	99
70) 1,2,4-Trimethylbenzene	10.659	105	499303	2.31	ppbV	99
71) 1,3-Dichlorobenzene	11.032	146	243609	2.08	ppbV	100
72) 1,4-Dichlorobenzene	11.145	146	232819	1.92	ppbV	98
73) Benzyl chloride	11.470	91	353725	1.69	ppbV	99
74) 1,2-Dichlorobenzene	11.672	146	247791	2.09	ppbV	99
75) 1,3-Hexachlorobutadiene	13.212	225	142060	2.17	ppbV	99
76) 1,2,4-Trichlorobenzene	13.216	180	180866	2.05	ppbV	99
77) Naphthalene	13.479	128	441446	1.81	ppbV	100

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

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6022std04.D
Acq On : 27 Mar 2024 11:38 am
Operator : jjw
Sample : 2 ppbv std
Misc : EB0103704
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 27 12:30:51 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 12:30:41 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6023std03.D
Acq On : 27 Mar 2024 12:09 pm
Operator : jjw
Sample : 10 ppbv std
Misc : EB0103704
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 27 15:06:55 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.412	130	405866	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.476	114	1540619	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.351	117	1407079	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.750	95	1272676	10.08	ppbV	0.000
Target Compounds						Qvalue
2) Propene	1.467	41	480073	10.55	ppbV	100
3) Dichlorodifluoromethane	1.499	85	1092704	10.71	ppbV	100
4) 1,2-Dichlorotetrafluor...	1.626	85	1301166	8.84	ppbV	100
5) n-Butane	1.705	43	976288	9.72	ppbV	100
6) Chloromethane	1.777	52	69870	10.63	ppbV	100
7) Vinyl chloride	1.767	62	566650	11.21	ppbV	100
8) 1,3-Butadiene	1.774	39	552148	9.61	ppbV	100
9) Bromomethane	2.068	94	393056	10.78	ppbV	100
10) Chloroethane	2.184	64	300731	10.80	ppbV	100
11) Vinyl bromide	2.284	106	442310	10.54	ppbV	100
12) Trichlorofluoromethane	2.303	101	1198923	10.06	ppbV	100
13) Ethanol	2.666	45	176842	9.50	ppbV	100
14) 1,1-Dichloroethene	2.727	61	988392	10.70	ppbV	100
15) Carbon disulfide	2.747	76	1647625	11.23	ppbV	100
16) 1,1,2-Trichloro-1,2,2-...	2.769	101	1107436	9.40	ppbV	100
17) Acrolein	2.988	56	215119	9.71	ppbV	100
18) Allyl chloride	3.113	76	255120	11.08	ppbV	100
19) Isopropanol	3.116	45	1014452	8.61	ppbV	100
20) Methylene chloride	3.203	49	694307	10.56	ppbV	100
21) Acetone	3.219	43	951290	10.48	ppbV	100
22) trans-1,2-Dichloroethene	3.332	61	901965	11.16	ppbV	100
23) n-Pentane	3.415	43	1127649	9.89	ppbV	99
24) n-Hexane	3.412	57	1551285	9.49	ppbV	100
25) Methyl tert-butyl ether	3.419	73	1828599	9.97	ppbV	100
26) Tert-butyl alcohol	3.473	59	1314960	10.15	ppbV	100
27) 1,1-Dichloroethane	3.817	63	1057514	9.74	ppbV	100
28) cis-1,2-Dichloroethene	4.248	61	817868	10.50	ppbV	100
29) Cyclohexane	4.428	56	1092809	9.90	ppbV	100
30) Chloroform	4.473	83	1150357	10.17	ppbV	99
31) Ethyl acetate	4.563	45	229902	9.84	ppbV	100
32) Carbon tetrachloride	4.595	117	1149084	9.92	ppbV	100
33) Tetrahydrofuran	4.599	42	849869	9.99	ppbV	100
34) 1,1,1-Trichloroethane	4.647	97	1075300	9.84	ppbV	100
35) Methyl ethyl ketone	4.708	43	1342110	9.90	ppbV	100
36) n-Heptane	4.936	43	1347673	9.51	ppbV	100
37) Benzene	4.952	78	1614175	9.48	ppbV	100
38) 1,2-Dichloroethane	5.116	62	787118	10.19	ppbV	100
40) Trichloroethene	5.457	130	590874	9.61	ppbV	100
41) 2,2,4-Trimethylpentane	4.866	57	3337961	11.17	ppbV	100
42) 1,2-Dichloropropane	5.911	63	701956	10.43	ppbV	100
43) Bromodichloromethane	5.972	83	1181459	11.02	ppbV	100
44) Methyl methacrylate	6.120	41	977110	10.23	ppbV	100
45) 1,4-Dioxane	6.145	88	401981	11.15	ppbV	100
46) cis-1,3-Dichloropropene	6.563	75	1009455	10.61	ppbV	100
47) Toluene	6.801	91	2044302	10.30	ppbV	100
48) Methyl isobutyl ketone	7.171	43	1836936	10.35	ppbV	100
49) Tetrachloroethene	7.190	166	737641	10.76	ppbV	100
50) trans-1,3-Dichloropropene	7.210	75	998052	11.03	ppbV	100
51) 1,1,2-Trichloroethane	7.370	97	674176	10.27	ppbV	100

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6023std03.D
Acq On : 27 Mar 2024 12:09 pm
Operator : jjw
Sample : 10 ppbv std
Misc : EB0103704
ALS Vial : 5 Sample Multiplier: 1

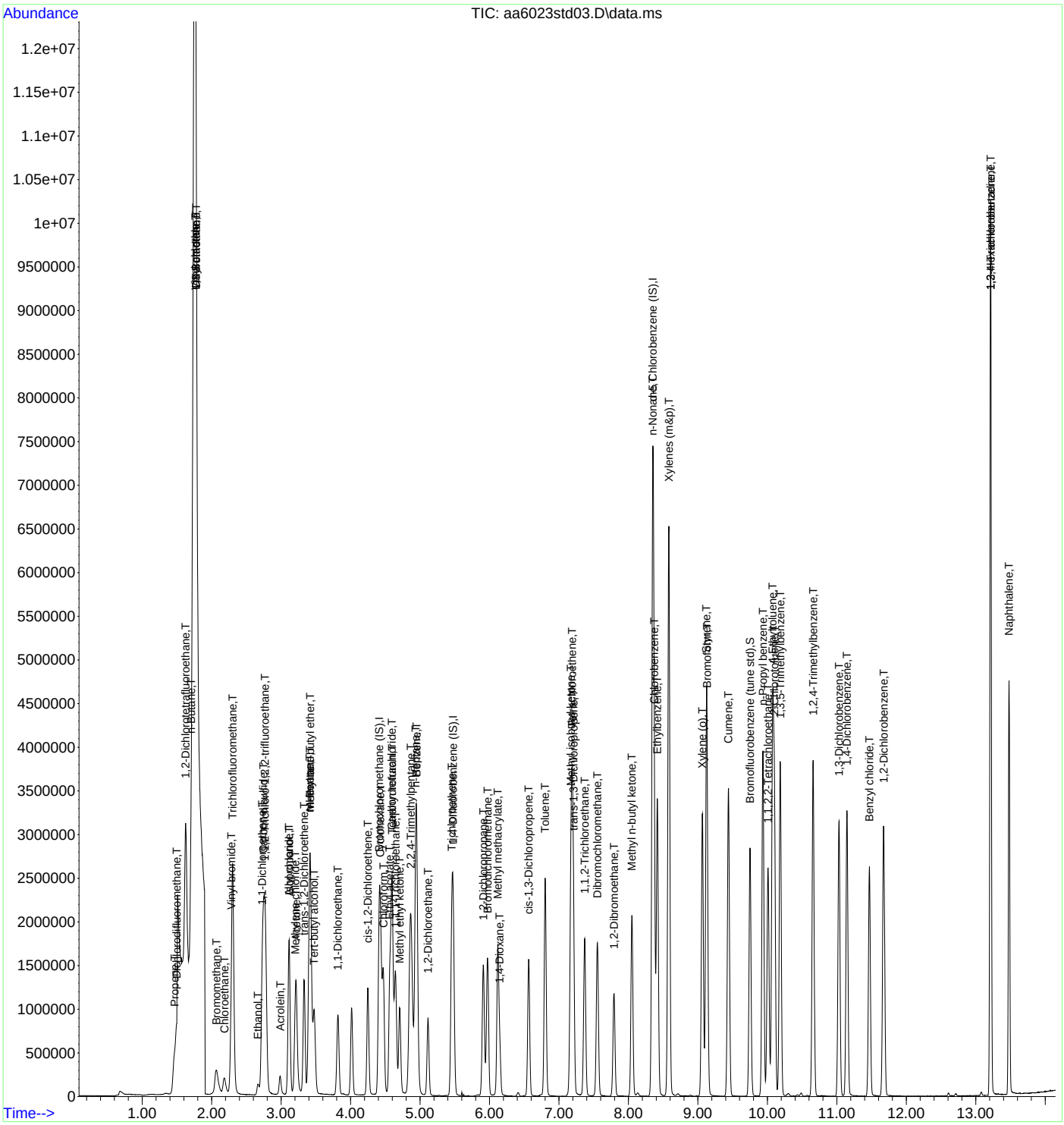
Quant Time: Mar 27 15:06:55 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.554	129	1090274	10.84	ppbV	100
53) 1,2-Dibromoethane	7.795	107	985770	10.58	ppbV	100
54) Methyl n-butyl ketone	8.049	43	1735158	10.90	ppbV	100
56) n-Nonane	8.348	43	2102844	10.77	ppbV	100
57) Chlorobenzene	8.373	112	1483500	10.94	ppbV	100
58) Ethylbenzene	8.415	91	2902762	10.75	ppbV	100
59) Xylenes (m&p)	8.582	91	4457073	21.98	ppbV	100
60) Xylene (o)	9.065	91	2318096	10.78	ppbV	100
61) Styrene	9.123	104	1614514	11.57	ppbV	100
62) Bromoform	9.132	173	995536	11.53	ppbV	100
63) Cumene	9.441	105	2847778	10.50	ppbV	100
65) n-Propyl benzene	9.936	91	3914695	10.66	ppbV	100
66) 1,1,2,2-Tetrachloroethane	10.010	83	1776668	11.14	ppbV	100
67) 4-Ethyltoluene	10.074	105	3144319	10.77	ppbV	100
68) 2-Chlorotoluene	10.100	91	2664458	10.72	ppbV	100
69) 1,3,5-Trimethylbenzene	10.187	105	2606288	10.84	ppbV	100
70) 1,2,4-Trimethylbenzene	10.660	105	2608053	10.94	ppbV	100
71) 1,3-Dichlorobenzene	11.033	146	1452525	11.12	ppbV	100
72) 1,4-Dichlorobenzene	11.145	146	1447428	10.93	ppbV	100
73) Benzyl chloride	11.470	91	2331860	10.53	ppbV	100
74) 1,2-Dichlorobenzene	11.676	146	1415768	10.93	ppbV	100
75) 1,3-Hexachlorobutadiene	13.216	225	809751	11.51	ppbV	100
76) 1,2,4-Trichlorobenzene	13.216	180	1084449	11.29	ppbV	100
77) Naphthalene	13.479	128	2715917	10.18	ppbV	100

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

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6023std03.D
Acq On : 27 Mar 2024 12:09 pm
Operator : jjw
Sample : 10 ppbv std
Misc : EB0103704
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 27 15:06:55 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration



Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6024std02.D
Acq On : 27 Mar 2024 12:40 pm
Operator : jjw
Sample : 20 ppbv std
Misc : EB0103704
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 27 15:06:34 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.415	130	411882	10.00	ppbV		0.000
39) 1,4-Difluorobenzene (IS)	5.480	114	1661943	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.351	117	1464287	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.750	95	1321659	10.06	ppbV		0.000
Target Compounds							Qvalue
2) Propene	1.464	41	1014772	21.98	ppbV		100
3) Dichlorodifluoromethane	1.509	85	2356287	22.76	ppbV		100
4) 1,2-Dichlorotetrafluor...	1.629	85	2866435	19.18	ppbV		99
5) n-Butane	1.708	43	2073146	20.34	ppbV		100
6) Chloromethane	1.777	52	171065	25.63	ppbV	#	1
7) Vinyl chloride	1.767	62	1213573	23.66	ppbV		100
8) 1,3-Butadiene	1.777	39	1158440	19.87	ppbV		100
9) Bromomethane	2.072	94	834684	22.57	ppbV		98
10) Chloroethane	2.184	64	650366	23.01	ppbV		100
11) Vinyl bromide	2.284	106	960489	22.55	ppbV		100
12) Trichlorofluoromethane	2.303	101	2616101	21.64	ppbV		100
13) Ethanol	2.670	45	388025	20.54	ppbV		99
14) 1,1-Dichloroethene	2.731	61	2170406	23.14	ppbV		100
15) Carbon disulfide	2.750	76	3569546	23.97	ppbV		98
16) 1,1,2-Trichloro-1,2,2-...	2.772	101	2314090	19.35	ppbV		99
17) Acrolein	2.988	56	469927	20.90	ppbV		100
18) Allyl chloride	3.113	76	564791	24.16	ppbV		100
19) Isopropanol	3.116	45	2245383	18.77	ppbV		100
20) Methylene chloride	3.207	49	1503232	22.53	ppbV		98
21) Acetone	3.219	43	2033750	22.07	ppbV		99
22) trans-1,2-Dichloroethene	3.332	61	2013296	24.54	ppbV		100
23) n-Pentane	3.416	43	2339039	20.22	ppbV		98
24) n-Hexane	3.416	57	3308362	19.95	ppbV		100
25) Methyl tert-butyl ether	3.419	73	3734162	20.06	ppbV		96
26) Tert-butyl alcohol	3.473	59	2843260	21.62	ppbV		100
27) 1,1-Dichloroethane	3.821	63	2369884	21.52	ppbV		99
28) cis-1,2-Dichloroethene	4.248	61	1825598	23.10	ppbV		99
29) Cyclohexane	4.432	56	2269500	20.25	ppbV		99
30) Chloroform	4.473	83	2593106	22.58	ppbV		99
31) Ethyl acetate	4.563	45	499077	21.05	ppbV		100
32) Carbon tetrachloride	4.596	117	2430188	20.68	ppbV		100
33) Tetrahydrofuran	4.596	42	1907140	22.10	ppbV		100
34) 1,1,1-Trichloroethane	4.644	97	2269864	20.47	ppbV		100
35) Methyl ethyl ketone	4.708	43	3017009	21.92	ppbV		100
36) n-Heptane	4.940	43	2840049	19.75	ppbV		99
37) Benzene	4.956	78	3648241	21.11	ppbV		99
38) 1,2-Dichloroethane	5.116	62	1746280	22.28	ppbV		100
40) Trichloroethene	5.457	130	1325979	20.00	ppbV		98
41) 2,2,4-Trimethylpentane	4.866	57	6968945	21.63	ppbV		99
42) 1,2-Dichloropropane	5.914	63	1500636	20.66	ppbV		98
43) Bromodichloromethane	5.972	83	2653561	22.94	ppbV		98
44) Methyl methacrylate	6.116	41	2148743	20.86	ppbV		99
45) 1,4-Dioxane	6.145	88	869258	22.34	ppbV		100
46) cis-1,3-Dichloropropene	6.563	75	2242244	21.85	ppbV		99
47) Toluene	6.804	91	4347639	20.30	ppbV		99
48) Methyl isobutyl ketone	7.171	43	3752572	19.59	ppbV		99
49) Tetrachloroethene	7.190	166	1565659	21.17	ppbV		99
50) trans-1,3-Dichloropropene	7.210	75	2183621	22.36	ppbV		98
51) 1,1,2-Trichloroethane	7.370	97	1463883	20.68	ppbV		100

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6024std02.D
Acq On : 27 Mar 2024 12:40 pm
Operator : jjw
Sample : 20 ppbv std
Misc : EB0103704
ALS Vial : 6 Sample Multiplier: 1

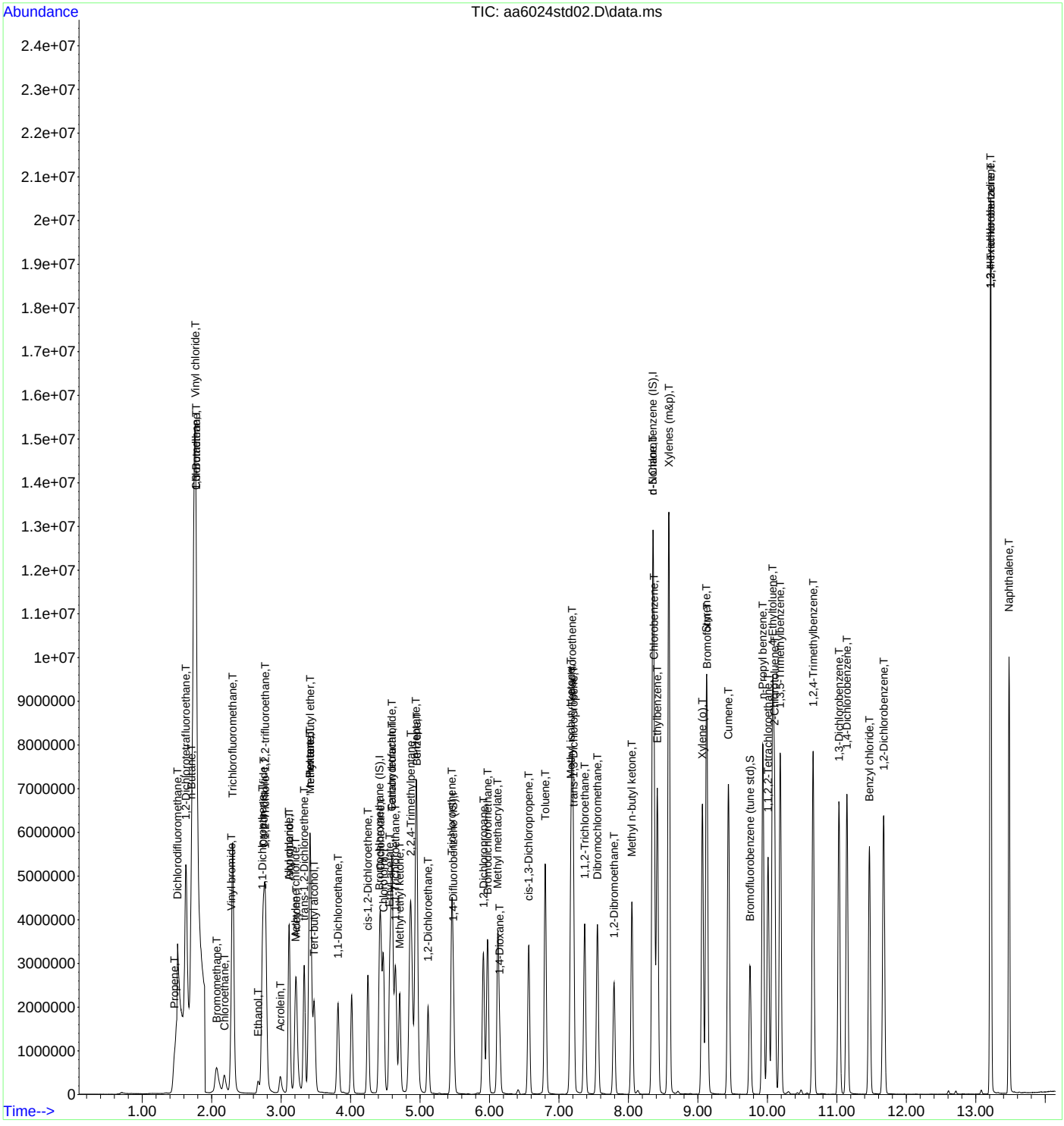
Quant Time: Mar 27 15:06:34 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.554	129	2393076	22.07	ppbV	99
53) 1,2-Dibromoethane	7.795	107	2142143	21.30	ppbV	100
54) Methyl n-butyl ketone	8.049	43	3632915	21.16	ppbV	100
56) n-Nonane	8.351	43	4204992	20.70	ppbV	99
57) Chlorobenzene	8.370	112	3149332	22.32	ppbV	99
58) Ethylbenzene	8.415	91	5992154	21.32	ppbV	100
59) Xylenes (m&p)	8.583	91	9156224	43.40	ppbV	100
60) Xylene (o)	9.065	91	4762319	21.27	ppbV	99
61) Styrene	9.123	104	3388334	23.34	ppbV	100
62) Bromoform	9.132	173	2128868	23.70	ppbV	99
63) Cumene	9.441	105	5836329	20.69	ppbV	100
65) n-Propyl benzene	9.933	91	8003431	20.94	ppbV	100
66) 1,1,2,2-Tetrachloroethane	10.010	83	3695472	22.27	ppbV	99
67) 4-Ethyltoluene	10.074	105	6468364	21.29	ppbV	100
68) 2-Chlorotoluene	10.103	91	5475021	21.16	ppbV	99
69) 1,3,5-Trimethylbenzene	10.184	105	5358696	21.42	ppbV	100
70) 1,2,4-Trimethylbenzene	10.660	105	5373360	21.66	ppbV	100
71) 1,3-Dichlorobenzene	11.033	146	3055936	22.49	ppbV	99
72) 1,4-Dichlorobenzene	11.145	146	3072998	22.30	ppbV	100
73) Benzyl chloride	11.470	91	5002127	21.70	ppbV	99
74) 1,2-Dichlorobenzene	11.676	146	2933960	21.76	ppbV	100
75) 1,3-Hexachlorobutadiene	13.213	225	1650141	22.54	ppbV	100
76) 1,2,4-Trichlorobenzene	13.216	180	2240663	22.41	ppbV	100
77) Naphthalene	13.479	128	5711683	20.57	ppbV	100

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

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6024std02.D
Acq On : 27 Mar 2024 12:40 pm
Operator : jjw
Sample : 20 ppbv std
Misc : EB0103704
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 27 15:06:34 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration



Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6025std01.D
Acq On : 27 Mar 2024 1:24 pm
Operator : jjw
Sample : 40 ppbv std
Misc : EB0103704
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 27 13:39:47 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:03:21 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.419	130	398803	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.480	114	1758228	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.351	117	1517568	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.750	95	1374039	10.12	ppbV	0.000
Target Compounds						Qvalue
2) Propene	1.476	41	1964690	44.03	ppbV	99
3) Dichlorodifluoromethane	1.512	85	4583650	46.63	ppbV	100
4) 1,2-Dichlorotetrafluor...	1.636	85	5695259	39.40	ppbV	99
5) n-Butane	1.718	43	3853678	38.05	ppbV	100
6) Chloromethane	1.770	52	281441	43.26	ppbV	57
7) Vinyl chloride	1.774	62	2352467	48.54	ppbV	99
8) 1,3-Butadiene	1.787	39	2176832	37.63	ppbV	99
9) Bromomethane	2.075	94	1618348	46.70	ppbV	99
10) Chloroethane	2.184	64	1249953	46.57	ppbV	100
11) Vinyl bromide	2.287	106	1912871	48.15	ppbV	100
12) Trichlorofluoromethane	2.306	101	5090504	43.35	ppbV	99
13) Ethanol	2.669	45	824442	46.04	ppbV	98
14) 1,1-Dichloroethene	2.734	61	4169298	47.14	ppbV	100
15) Carbon disulfide	2.760	76	6924568	49.54	ppbV	99
16) 1,1,2-Trichloro-1,2,2-...	2.776	101	4466211	37.49	ppbV	99
17) Acrolein	2.997	56	938960	44.00	ppbV	100
18) Allyl chloride	3.120	76	1094990	49.88	ppbV	100
19) Isopropanol	3.120	45	4345927	38.04	ppbV	99
20) Methylene chloride	3.210	49	2963075	46.58	ppbV	97
21) Acetone	3.229	43	3990092	45.13	ppbV	99
22) trans-1,2-Dichloroethene	3.332	61	3985456	51.86	ppbV	99
23) n-Pentane	3.419	43	4752698	42.25	ppbV	98
24) n-Hexane	3.419	57	6718281	41.25	ppbV	99
25) Methyl tert-butyl ether	3.422	73	7327239	39.72	ppbV	92
26) Tert-butyl alcohol	3.477	59	5668271	44.15	ppbV	100
27) 1,1-Dichloroethane	3.821	63	4777372	45.32	ppbV	100
28) cis-1,2-Dichloroethene	4.251	61	3661456	49.05	ppbV	99
29) Cyclohexane	4.431	56	4495502	40.67	ppbV	99
30) Chloroform	4.473	83	5226839	48.07	ppbV	99
31) Ethyl acetate	4.563	45	1047773	46.30	ppbV	100
32) Carbon tetrachloride	4.595	117	4872674	42.44	ppbV	100
33) Tetrahydrofuran	4.595	42	3908188	47.40	ppbV	100
34) 1,1,1-Trichloroethane	4.650	97	4538040	41.95	ppbV	100
35) Methyl ethyl ketone	4.708	43	6291757	48.09	ppbV	100
36) n-Heptane	4.943	43	5712488	40.27	ppbV	100
37) Benzene	4.959	78	7599303	46.01	ppbV	99
38) 1,2-Dichloroethane	5.116	62	3643642	49.24	ppbV	100
40) Trichloroethene	5.457	130	2793094	39.77	ppbV	98
41) 2,2,4-Trimethylpentane	4.862	57	13968760	40.37	ppbV	99
42) 1,2-Dichloropropane	5.914	63	3112993	39.65	ppbV	97
43) Bromodichloromethane	5.972	83	5543327	45.13	ppbV	100
44) Methyl methacrylate	6.119	41	4465072	40.27	ppbV	98
45) 1,4-Dioxane	6.145	88	1807468	43.25	ppbV	99
46) cis-1,3-Dichloropropene	6.566	75	4512628	40.92	ppbV	100
47) Toluene	6.804	91	8709445	37.41	ppbV	99
48) Methyl isobutyl ketone	7.171	43	7369377	34.92	ppbV	98
49) Tetrachloroethene	7.190	166	3079992	38.21	ppbV	99
50) trans-1,3-Dichloropropene	7.209	75	4387728	42.02	ppbV	98
51) 1,1,2-Trichloroethane	7.370	97	2971932	38.90	ppbV	100

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6025std01.D
Acq On : 27 Mar 2024 1:24 pm
Operator : jjw
Sample : 40 ppbv std
Misc : EB0103704
ALS Vial : 7 Sample Multiplier: 1

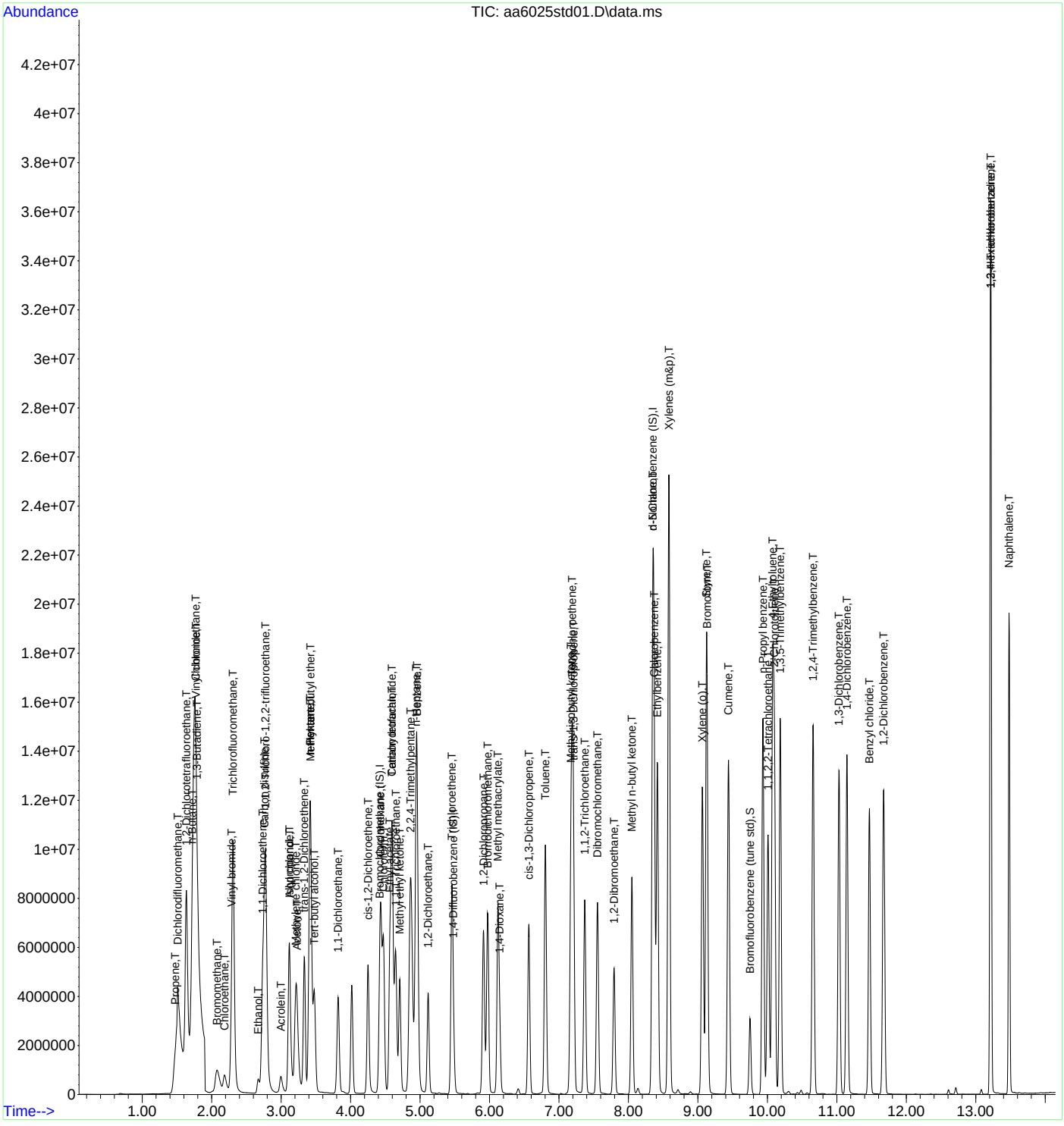
Quant Time: Mar 27 13:39:47 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:03:21 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.554	129	4825763	41.42	ppbV	100
53) 1,2-Dibromoethane	7.795	107	4320065	40.01	ppbV	100
54) Methyl n-butyl ketone	8.049	43	7266143	38.88	ppbV	99
56) n-Nonane	8.351	43	8002894	36.76	ppbV	99
57) Chlorobenzene	8.373	112	6116749	41.22	ppbV	100
58) Ethylbenzene	8.415	91	11665851	39.10	ppbV	99
59) Xylenes (m&p)	8.582	91	17498174	78.02	ppbV	99
60) Xylene (o)	9.065	91	9322325	39.33	ppbV	99
61) Styrene	9.123	104	6597492	43.52	ppbV	100
62) Bromoform	9.132	173	4195209	45.02	ppbV	100
63) Cumene	9.441	105	11340070	37.89	ppbV	99
65) n-Propyl benzene	9.936	91	15449995	38.09	ppbV	99
66) 1,1,2,2-Tetrachloroethane	10.010	83	7251670	41.38	ppbV	100
67) 4-Ethyltoluene	10.074	105	12482413	38.84	ppbV	99
68) 2-Chlorotoluene	10.100	91	10739286	39.25	ppbV	100
69) 1,3,5-Trimethylbenzene	10.184	105	10426890	39.44	ppbV	100
70) 1,2,4-Trimethylbenzene	10.656	105	10449455	40.06	ppbV	99
71) 1,3-Dichlorobenzene	11.029	146	6064751	42.74	ppbV	99
72) 1,4-Dichlorobenzene	11.145	146	6132994	42.98	ppbV	99
73) Benzyl chloride	11.470	91	10185040	43.34	ppbV	99
74) 1,2-Dichlorobenzene	11.672	146	5799661	41.19	ppbV	99
75) 1,3-Hexachlorobutadiene	13.216	225	2978861	38.16	ppbV	99
76) 1,2,4-Trichlorobenzene	13.216	180	4181789	39.54	ppbV	99
77) Naphthalene	13.479	128	11258182	38.90	ppbV	99

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

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6025std01.D
Acq On : 27 Mar 2024 1:24 pm
Operator : jjw
Sample : 40 ppbv std
Misc : EB0103704
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 27 13:39:47 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:03:21 2024
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES, LLC

Initial Calibration Data Summary Report

Initial Calibration Curve: 5/29/2024 **Method ID:** 240529.M

Instrument: AA

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6554BFB]	05/29/2024 09:16
0.2 PPBV STD [AA6556STD05]	05/29/2024 12:40
2 PPBV STD [AA6557STD04]	05/29/2024 13:11
10 PPBV STD [AA6558STD03]	05/29/2024 13:46
20 PPBV STD [AA6559STD02]	05/29/2024 14:18
40 PPBV STD [AA6560STD01]	05/29/2024 14:55
10 PPBV ICVSS [AA6561ICVSS]	05/29/2024 17:16

	Parameter	RRF 0.2ppbv	RRF 2ppbv	RRF 10ppbv	RRF 20ppbv	RRF 40ppbv	Avg ppbv	% RSD
1)	Bromochloromethane	----------ISTD----------						
2)	Propene	1.0	1.1	1.0	1.1	1.0	1.1	3.6
3)	Dichlorodifluoromethane	2.4	2.9	3.0	3.1	3.0	2.9	9.0
4)	1,2-Dichlorotetrafluoroethane	3.2	4.0	4.0	4.2	4.6	4.0	12
5)	n-Butane	1.9	2.3	2.1	2.2	2.3	2.2	6.6
6)	Chloromethane	0.12	0.17	0.20	0.22	0.18	0.18	21
7)	Vinyl chloride	1.0	1.3	1.4	1.5	1.4	1.3	13
8)	1,3-Butadiene	1.1	1.2	1.2	1.3	1.3	1.2	7.5
9)	Bromomethane	0.75	1.1	1.1	1.2	1.00	1.0	16
10)	Chloroethane	0.54	0.76	0.79	0.83	0.82	0.75	16
11)	Vinyl bromide	0.77	1.3	1.4	1.4	1.4	1.2	22
12)	Trichlorofluoromethane	2.7	3.3	3.4	3.5	3.6	3.3	11
13)	Ethanol	0.70	0.42	0.44	0.49	0.53	0.52	21
14)	1,1-Dichloroethene	1.8	2.6	2.7	2.8	2.9	2.5	17
15)	Carbon disulfide	3.2	4.4	4.5	4.6	4.5	4.2	14
16)	1,1,2-Trichloro-1,2,2-trifluoroethane	2.7	3.2	3.0	3.1	3.6	3.1	10
17)	Acrolein	0.47	0.51	0.58	0.61	0.65	0.56	13
18)	Allyl Chloride	0.43	0.70	0.71	0.72	0.69	0.65	19
19)	Isopropanol	2.4	2.5	2.9	3.1	3.2	2.8	12
20)	Methylene chloride	2.0	1.7	1.7	1.8	1.8	1.8	7.5
21)	Acetone	2.0	2.2	2.3	2.3	2.4	2.2	6.1
22)	1,2-Dichloroethene (trans)	1.7	2.2	2.4	2.5	2.8	2.3	18
23)	n-Pentane	2.4	2.6	2.6	2.8	3.3	2.7	12
24)	n-Hexane	3.1	3.7	3.8	3.9	4.7	3.8	15
25)	Methyl tert-butyl ether	3.8	4.7	4.4	4.5	5.5	4.6	13
26)	Tert-butyl alcohol	2.5	2.9	3.0	3.2	3.9	3.1	16
27)	1,1-Dichloroethane	2.2	2.8	2.9	3.0	3.3	2.8	15
28)	1,2-Dichloroethene (trans)	1.4	2.0	2.2	2.3	2.5	2.1	19
29)	Cyclohexane	2.1	2.6	2.5	2.6	3.1	2.6	14
30)	Chloroform	2.3	3.0	3.3	3.5	3.9	3.2	19
31)	Ethyl acetate	0.40	0.48	0.54	0.58	0.72	0.54	22
32)	Carbon tetrachloride	2.6	3.3	3.2	3.3	3.9	3.3	14
33)	Tetrahydrofuran	1.5	1.7	2.0	2.1	2.3	1.9	17
34)	1,1,1-Trichloroethane	2.4	3.0	2.9	3.1	3.7	3.0	16
35)	Methyl ethyl ketone	2.4	2.7	3.1	3.4	4.2	3.2	22
36)	n-Heptane	2.5	2.9	2.8	3.0	3.8	3.0	16
37)	Benzene	3.5	4.2	4.6	4.8	5.7	4.6	17
38)	1,2-Dichloroethane	1.5	1.9	2.1	2.2	2.7	2.1	21

***% RSD (Relative Standard Deviation) must be within 30%**

****An exception is made for 2 compounds that must be within 40%**

RRF - Relative Response Factor

INTEGRATED ANALYTICAL LABORATORIES, LLC

Initial Calibration Data Summary Report

Initial Calibration Curve: 5/29/2024 **Method ID:** 240529.M

Instrument: AA

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6554BFB]	05/29/2024 09:16
0.2 PPBV STD [AA6556STD05]	05/29/2024 12:40
2 PPBV STD [AA6557STD04]	05/29/2024 13:11
10 PPBV STD [AA6558STD03]	05/29/2024 13:46
20 PPBV STD [AA6559STD02]	05/29/2024 14:18
40 PPBV STD [AA6560STD01]	05/29/2024 14:55
10 PPBV ICVSS [AA6561ICVSS]	05/29/2024 17:16

	Parameter	RRF 0.2ppbv	RRF 2ppbv	RRF 10ppbv	RRF 20ppbv	RRF 40ppbv	Avg ppbv	% RSD
39)	1,4-Difluorobenzene	----------ISTD----------						
40)	Trichloroethene	0.38	0.47	0.47	0.47	0.47	0.45	8.6
41)	2,2,4-Trimethylpentane	1.5	2.1	1.8	1.8	1.7	1.8	12
42)	1,2-Dichloropropane	0.37	0.43	0.42	0.42	0.44	0.42	6.2
43)	Bromodichloromethane	0.62	0.75	0.75	0.75	0.75	0.72	7.8
44)	Methyl methacrylate	0.45	0.52	0.51	0.53	0.58	0.52	9.1
45)	1,4-Dioxane	0.20	0.24	0.24	0.24	0.25	0.24	8.2
46)	1,3-Dichloropropene (cis)	0.53	0.63	0.63	0.63	0.65	0.61	7.4
47)	Toluene	1.1	1.4	1.3	1.3	1.3	1.3	7.7
48)	Methyl isobutyl ketone	0.86	1.0	0.91	0.91	1.00	0.94	6.6
49)	Tetrachloroethene	0.44	0.53	0.50	0.48	0.48	0.49	7.2
50)	1,3-Dichloropropene (trans)	0.46	0.62	0.62	0.62	0.62	0.59	12
51)	1,1,2-Trichloroethane	0.38	0.47	0.44	0.45	0.48	0.44	9.1
52)	Dibromochloromethane	0.58	0.75	0.72	0.72	0.77	0.71	11
53)	1,2-Dibromoethane	0.52	0.67	0.64	0.64	0.70	0.63	11
54)	Methyl n-butyl ketone	0.74	0.87	0.83	0.85	1.1	0.88	15
55)	d-5 Chlorbenzene	----------ISTD----------						
56)	n-Nonane	0.98	1.2	1.1	1.1	1.5	1.2	17
57)	Chlorobenzene	0.88	1.1	1.0	1.0	1.2	1.0	11
58)	Ethylbenzene	1.7	2.0	1.8	1.9	2.4	2.0	15
59)	Xylenes (m&p)	1.3	1.6	1.4	1.4	1.7	1.5	13
60)	Xylenes (o)	1.3	1.6	1.4	1.5	1.9	1.6	15
61)	Styrene	0.77	1.1	1.0	1.0	1.3	1.0	19
62)	Bromoform	0.53	0.71	0.69	0.70	0.85	0.70	17
63)	Cumene	1.6	2.1	1.9	1.9	2.5	2.0	17
65)	n-Propyl benzene	2.2	2.9	2.5	2.5	3.5	2.7	19
66)	1,1,2,2-Tetrachloroethane	0.93	1.2	1.1	1.1	1.5	1.1	18
67)	4-Ethyltoluene	1.8	2.3	2.1	2.1	2.9	2.2	20
68)	2-Chlorotoluene	1.5	2.0	1.7	1.7	2.4	1.9	17
69)	1,3,5-Trimethylbenzene	1.4	1.9	1.7	1.7	2.3	1.8	19
70)	1,2,4-Trimethylbenzene	1.3	1.9	1.7	1.7	2.4	1.8	22
71)	1,3-Dichlorobenzene	1.0	1.1	0.99	1.0	1.4	1.1	17
72)	1,4-Dichlorobenzene	0.87	1.1	1.0	1.1	1.5	1.1	21
73)	Benzyl chloride	1.2	1.7	1.7	1.8	2.6	1.8	29
74)	1,2-Dichlorobenzene	0.83	1.1	1.00	1.0	1.4	1.1	19
75)	1,3-Hexachlorobutadiene	0.67	0.67	0.59	0.57	0.57	0.61	8.7
76)	1,2,4-Trichlorobenzene	0.91	0.84	0.79	0.77	0.82	0.82	6.6
77)	Naphthalene	2.5	2.2	2.1	2.2	2.6	2.3	10

***% RSD (Relative Standard Deviation) must be within 30%**

****An exception is made for 2 compounds that must be within 40%**

RRF - Relative Response Factor

Method Path : C:\msdchem\1\METHODS\
Method File : 240529.M
Title : TO-15 on the Agilent 7890A / 5975C
Last Update : Wed May 29 15:44:50 2024
Response Via : Initial Calibration

Calibration Files
0.2 =aa6556std05.D 2 =aa6557std04.D 10 =aa6558std03.D 20 =aa6559std02.D 40 =aa6560std01.D

		Compound	0.2	2	10	20	40	Avg	%RSD
1)	I	Bromochloromethane...	----------ISTD----------						
2)	T	Propene	1.030	1.106	1.030	1.072	1.009	1.050	3.69
3)	T	Dichlorodifluoro...	2.414	2.897	2.972	3.065	2.968	2.863	9.00
4)	T	1,2-Dichlorotetr...	3.249	4.044	4.000	4.202	4.570	4.013	12.02
5)	T	n-Butane	1.938	2.276	2.139	2.180	2.305	2.168	6.69
6)	T	Chloromethane	0.123	0.172	0.201	0.220	0.176	0.178	20.53
7)	T	Vinyl chloride	1.021	1.325	1.389	1.454	1.401	1.318	13.07
8)	T	1,3-Butadiene	1.065	1.225	1.242	1.293	1.283	1.222	7.55
9)	T	Bromomethane	0.754	1.123	1.102	1.172	0.999	1.030	16.20
10)	T	Chloroethane	0.540	0.761	0.793	0.829	0.823	0.749	16.00
11)	T	Vinyl bromide	0.768	1.310	1.368	1.405	1.395	1.249	21.75
12)	T	Trichlorofluorom...	2.694	3.337	3.368	3.515	3.570	3.297	10.64
13)	T	Ethanol	0.696	0.422	0.438	0.486	0.531	0.515	21.40
14)	T	1,1-Dichloroethene	1.794	2.565	2.691	2.783	2.851	2.537	16.91
15)	T	Carbon disulfide	3.162	4.388	4.469	4.581	4.532	4.226	14.18
16)	T	1,1,2-Trichloro-...	2.680	3.248	2.992	3.094	3.562	3.115	10.43
17)	T	Acrolein	0.471	0.512	0.577	0.611	0.652	0.564	13.01
18)	T	Allyl chloride	0.433	0.698	0.710	0.716	0.689	0.649	18.66
19)	T	Isopropanol	2.411	2.511	2.890	3.078	3.217	2.821	12.42
20)	T	Methylene chloride	2.040	1.727	1.702	1.761	1.802	1.807	7.52
21)	T	Acetone	2.022	2.235	2.262	2.301	2.399	2.244	6.19
22)	T	1,2-Dichloroethe...	1.672	2.189	2.352	2.464	2.793	2.294	17.97
23)	T	n-Pentane	2.440	2.625	2.578	2.774	3.287	2.741	11.95
24)	T	n-Hexane	3.128	3.671	3.784	3.920	4.700	3.840	14.76
25)	T	Methyl tert-buty...	3.818	4.725	4.394	4.508	5.454	4.580	12.94
26)	T	Tert-butyl alcohol	2.523	2.936	3.031	3.247	3.912	3.130	16.30
27)	T	1,1-Dichloroethane	2.188	2.807	2.875	3.025	3.341	2.847	14.82
28)	T	1,2-Dichloroethe...	1.442	1.970	2.157	2.263	2.500	2.066	19.28
29)	t	Cyclohexane	2.080	2.565	2.489	2.572	3.112	2.564	14.34
30)	T	Chloroform	2.298	3.010	3.288	3.456	3.914	3.193	18.74
31)	T	Ethyl acetate	0.398	0.483	0.538	0.584	0.716	0.544	21.81
32)	T	Carbon tetrachlo...	2.590	3.272	3.241	3.285	3.904	3.258	14.28
33)	T	Tetrahydrofuran	1.472	1.746	1.971	2.067	2.343	1.920	17.16
34)	T	1,1,1-Trichloroe...	2.372	2.970	2.919	3.055	3.721	3.007	15.98
35)	T	Methyl ethyl ketone	2.419	2.733	3.147	3.381	4.221	3.180	21.69
36)	T	n-Heptane	2.487	2.911	2.840	2.989	3.806	3.007	16.17
37)	T	Benzene	3.520	4.218	4.574	4.782	5.671	4.553	17.30
38)	T	1,2-Dichloroethane	1.484	1.923	2.120	2.232	2.656	2.083	20.60
39)	I	1,4-Difluorobenzen...	----------ISTD----------						
40)	T	Trichloroethene	0.382	0.472	0.469	0.471	0.466	0.452	8.65
41)	T	2,2,4-Trimethylp...	1.493	2.052	1.847	1.809	1.702	1.781	11.52
42)	T	1,2-Dichloropropane	0.371	0.429	0.419	0.417	0.439	0.415	6.23
43)	T	Bromodichloromet...	0.621	0.749	0.748	0.749	0.747	0.723	7.87
44)	T	Methyl methacrylate	0.447	0.523	0.513	0.528	0.580	0.518	9.15
45)	T	1,4-Dioxane	0.203	0.241	0.239	0.244	0.253	0.236	8.24
46)	T	cis-1,3-Dichloro...	0.533	0.630	0.627	0.632	0.645	0.613	7.42
47)	T	Toluene	1.116	1.383	1.296	1.281	1.326	1.280	7.77
48)	T	Methyl isobutyl ...	0.860	1.004	0.910	0.910	0.997	0.936	6.64
49)	T	Tetrachloroethene	0.436	0.533	0.495	0.482	0.479	0.485	7.22
50)	T	trans-1,3-Dichlo...	0.464	0.619	0.618	0.623	0.623	0.589	11.88
51)	T	1,1,2-Trichloroe...	0.376	0.473	0.440	0.445	0.477	0.442	9.12
52)	T	Dibromochloromet...	0.576	0.747	0.720	0.718	0.765	0.705	10.62
53)	T	1,2-Dibromoethane	0.517	0.669	0.644	0.642	0.698	0.634	10.89
54)	T	Methyl n-butyl k...	0.741	0.866	0.832	0.846	1.098	0.877	15.13
55)	I	d-5 Chlorobenzene ...	----------ISTD----------						
56)	T	n-Nonane	0.979	1.227	1.073	1.072	1.492	1.169	17.22
57)	T	Chlorobenzene	0.882	1.089	1.007	1.022	1.178	1.036	10.55
58)	T	Ethylbenzene	1.692	2.041	1.833	1.853	2.438	1.971	14.65
59)	T	Xylenes (m&p)	1.270	1.589	1.403	1.402	1.745	1.482	12.53
60)	T	Xylene (o)	1.295	1.644	1.448	1.486	1.929	1.560	15.41

Method Path : C:\msdchem\1\METHODS\
Method File : 240529.M

61)	T	Styrene	0.770	1.063	1.013	1.024	1.317	1.037	18.75
62)	T	Bromoform	0.527	0.714	0.690	0.698	0.851	0.696	16.54
63)	T	Cumene	1.601	2.128	1.865	1.866	2.491	1.990	16.90
64)	S	Bromofluorobenze...	0.866	0.867	0.859	0.909	1.229	0.946	16.85
65)	T	n-Propyl benzene	2.237	2.873	2.496	2.528	3.549	2.737	18.55
66)	T	1,1,2,2-Tetrachl...	0.927	1.197	1.066	1.082	1.471	1.149	17.77
67)	T	4-Ethyltoluene	1.768	2.289	2.062	2.098	2.944	2.232	19.68
68)	T	2-Chlorotoluene	1.531	1.962	1.703	1.725	2.362	1.857	17.32
69)	T	1,3,5-Trimethylb...	1.390	1.943	1.685	1.724	2.335	1.815	19.33
70)	T	1,2,4-Trimethylb...	1.333	1.887	1.703	1.748	2.433	1.821	21.91
71)	T	1,3-Dichlorobenzene	1.007	1.070	0.993	1.024	1.433	1.105	16.78
72)	T	1,4-Dichlorobenzene	0.869	1.096	1.037	1.075	1.511	1.117	21.24
73)	T	Benzyl chloride	1.218	1.651	1.686	1.796	2.633	1.797	28.75
74)	T	1,2-Dichlorobenzene	0.828	1.076	0.999	1.017	1.395	1.063	19.48
75)	T	1,3-Hexachlorobu...	0.674	0.665	0.586	0.569	0.565	0.612	8.70
76)	T	1,2,4-Trichlorob...	0.908	0.836	0.787	0.767	0.822	0.824	6.61
77)	T	Naphthalene	2.540	2.210	2.118	2.150	2.626	2.329	10.15

(#) = Out of Range

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6556std05.D
Acq On : 29 May 2024 12:40 pm
Operator : jjw
Sample : 0.2 ppbv std
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 29 15:43:04 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:42:31 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.409	130	276448	10.00	ppbV		0.000
39) 1,4-Difluorobenzene (IS)	5.477	114	1073893	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.351	117	998317	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.750	95	864418	8.96	ppbV		0.000
Target Compounds							Qvalue
2) Propene	1.454	41	6210	0.21	ppbV		97
3) Dichlorodifluoromethane	1.496	85	14150	0.17	ppbV	#	88
4) 1,2-Dichlorotetrafluor...	1.626	85	17606	0.15	ppbV		96
5) n-Butane	1.709	43	11682	0.19	ppbV		92
6) Chloromethane	1.774	52	761	0.14	ppbV		42
7) Vinyl chloride	1.757	62	6097	0.16	ppbV	#	49
8) 1,3-Butadiene	1.781	39	6299	0.18	ppbV	#	80
9) Bromomethane	2.072	94	4168	0.14	ppbV		94
10) Chloroethane	2.181	64	3166	0.14	ppbV	#	44
11) Vinyl bromide	2.294	106	4287	0.11	ppbV		89
12) Trichlorofluoromethane	2.303	101	16384	0.17	ppbV		97
13) Ethanol	2.683	45	4002	0.31	ppbV		78
14) 1,1-Dichloroethene	2.728	61	10315	0.14	ppbV		95
15) Carbon disulfide	2.747	76	18707	0.15	ppbV	#	89
16) 1,1,2-Trichloro-1,2,2-...	2.776	101	16151	0.18	ppbV		98
17) Acrolein	2.988	56	2603	0.16	ppbV		94
18) Allyl chloride	3.120	76	2587	0.13	ppbV		100
19) Isopropanol	3.114	45	11866	0.15	ppbV	#	88
20) Methylene chloride	3.204	49	12182	0.25	ppbV		95
21) Acetone	3.223	43	12074	0.19	ppbV	#	86
22) 1,2-Dichloroethene (tr...	3.335	61	10260	0.15	ppbV		97
23) n-Pentane	3.422	43	14571	0.19	ppbV		94
24) n-Hexane	3.416	57	19194	0.17	ppbV		92
25) Methyl tert-butyl ether	3.425	73	23645	0.18	ppbV		96
26) Tert-butyl alcohol	3.480	59	16042	0.18	ppbV		100
27) 1,1-Dichloroethane	3.818	63	12942	0.16	ppbV		92
28) 1,2-Dichloroethene (cis)	4.249	61	8688	0.14	ppbV		97
29) Cyclohexane	4.432	56	12879	0.17	ppbV		100
30) Chloroform	4.474	83	13724	0.15	ppbV		99
31) Ethyl acetate	4.570	45	2379	0.15	ppbV		97
32) Carbon tetrachloride	4.596	117	15894	0.17	ppbV		99
33) Tetrahydrofuran	4.602	42	9035	0.16	ppbV		95
34) 1,1,1-Trichloroethane	4.641	97	14296	0.16	ppbV		98
35) Methyl ethyl ketone	4.708	43	14712	0.16	ppbV		94
36) n-Heptane	4.937	43	15263	0.18	ppbV		91
37) Benzene	4.956	78	21020	0.16	ppbV		98
38) 1,2-Dichloroethane	5.117	62	8943	0.14	ppbV		96
40) Trichloroethene	5.451	130	8210	0.16	ppbV		96
41) 2,2,4-Trimethylpentane	4.859	57	34944	0.18	ppbV		99
42) 1,2-Dichloropropane	5.914	63	8856	0.19	ppbV		97
43) Bromodichloromethane	5.972	83	15337	0.19	ppbV		97
44) Methyl methacrylate	6.117	41	10567	0.18	ppbV		97
45) 1,4-Dioxane	6.152	88	5094	0.19	ppbV		95
46) cis-1,3-Dichloropropene	6.567	75	12702	0.19	ppbV		99
47) Toluene	6.805	91	25897	0.18	ppbV		95
48) Methyl isobutyl ketone	7.178	43	20143	0.20	ppbV		98
49) Tetrachloroethene	7.187	166	10480	0.20	ppbV		97
50) trans-1,3-Dichloropropene	7.207	75	11069	0.17	ppbV	#	82
51) 1,1,2-Trichloroethane	7.374	97	8729	0.18	ppbV	#	77

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6556std05.D
Acq On : 29 May 2024 12:40 pm
Operator : jjw
Sample : 0.2 ppbv std
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

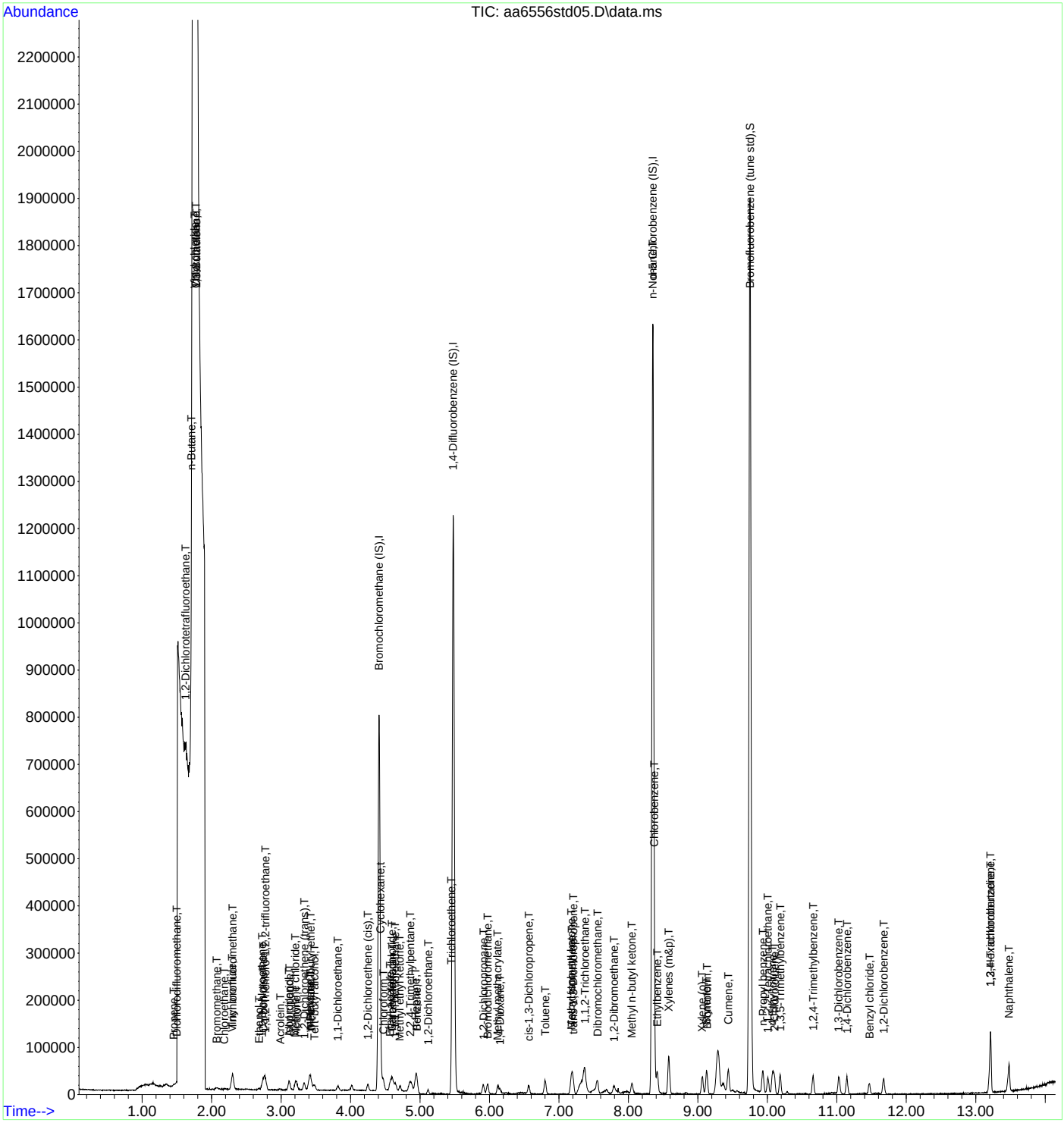
Quant Time: May 29 15:43:04 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:42:31 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
52) Dibromochloromethane	7.557	129	13847	0.17	ppbV		99
53) 1,2-Dibromoethane	7.795	107	11999	0.17	ppbV		98
54) Methyl n-butyl ketone	8.049	43	17996	0.18	ppbV		96
56) n-Nonane	8.348	43	21708	0.18	ppbV		94
57) Chlorobenzene	8.374	112	19540	0.18	ppbV	#	35
58) Ethylbenzene	8.416	91	37490	0.18	ppbV		98
59) Xylenes (m&p)	8.580	91	56561	0.37	ppbV		100
60) Xylene (o)	9.062	91	28443	0.18	ppbV		98
61) Styrene	9.123	104	17364	0.16	ppbV		100
62) Bromoform	9.133	173	11886	0.16	ppbV		99
63) Cumene	9.438	105	34197	0.16	ppbV		97
65) n-Propyl benzene	9.936	91	48235	0.17	ppbV		94
66) 1,1,2,2-Tetrachloroethane	10.007	83	21094	0.18	ppbV		98
67) 4-Ethyltoluene	10.075	105	38115	0.16	ppbV		100
68) 2-Chlorotoluene	10.104	91	33319	0.17	ppbV		97
69) 1,3,5-Trimethylbenzene	10.187	105	30244	0.16	ppbV		99
70) 1,2,4-Trimethylbenzene	10.660	105	28735	0.15	ppbV		98
71) 1,3-Dichlorobenzene	11.026	146	22317	0.20	ppbV		99
72) 1,4-Dichlorobenzene	11.149	146	18557	0.16	ppbV		99
73) Benzyl chloride	11.473	91	24328	0.13	ppbV		96
74) 1,2-Dichlorobenzene	11.676	146	17696	0.16	ppbV		97
75) 1,3-Hexachlorobutadiene	13.213	225	14934	0.25	ppbV		96
76) 1,2,4-Trichlorobenzene	13.213	180	19953	0.25	ppbV		98
77) Naphthalene	13.480	128	50709	0.22	ppbV		97

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

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6556std05.D
Acq On : 29 May 2024 12:40 pm
Operator : jjw
Sample : 0.2 ppbv std
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 29 15:43:04 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:42:31 2024
Response via : Initial Calibration



Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6557std04.D
Acq On : 29 May 2024 1:11 pm
Operator : jjw
Sample : 2.0 ppbv std
Misc : EB0103704
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 29 16:05:04 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.406	130	243744	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.477	114	931187	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.354	117	883473	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.750	95	765844	9.16	ppbV	0.000
Target Compounds						Qvalue
2) Propene	1.470	41	58751	2.30	ppbV	98
3) Dichlorodifluoromethane	1.496	85	149684	2.14	ppbV	100
4) 1,2-Dichlorotetrafluor...	1.626	85	193188	1.98	ppbV	98
5) n-Butane	1.708	43	120953	2.29	ppbV	97
6) Chloromethane	1.777	52	9410	2.16	ppbV	89
7) Vinyl chloride	1.767	62	69778	2.17	ppbV	98
8) 1,3-Butadiene	1.774	39	63876	2.15	ppbV	97
9) Bromomethane	2.062	94	54769	2.18	ppbV	99
10) Chloroethane	2.184	64	39327	2.15	ppbV	99
11) Vinyl bromide	2.281	106	64521	2.12	ppbV	98
12) Trichlorofluoromethane	2.300	101	178965	2.23	ppbV	99
13) Ethanol	2.670	45	21400	1.71	ppbV	99
14) 1,1-Dichloroethene	2.724	61	130045	2.10	ppbV	100
15) Carbon disulfide	2.747	76	228907	2.22	ppbV	98
16) 1,1,2-Trichloro-1,2,2-...	2.773	101	172612	2.27	ppbV	99
17) Acrolein	2.978	56	24941	1.81	ppbV	93
18) Allyl chloride	3.113	76	36750	2.32	ppbV	100
19) Isopropanol	3.120	45	108944	1.58	ppbV	97
20) Methylene chloride	3.204	49	90902	2.06	ppbV	97
21) Acetone	3.220	43	117683	2.15	ppbV	96
22) 1,2-Dichloroethene (tr...	3.329	61	118457	2.12	ppbV	99
23) n-Pentane	3.413	43	144352	2.16	ppbV	96
24) n-Hexane	3.416	57	198634	2.12	ppbV	96
25) Methyl tert-butyl ether	3.419	73	257993	2.31	ppbV	92
26) Tert-butyl alcohol	3.477	59	164606	2.16	ppbV	100
27) 1,1-Dichloroethane	3.821	63	136846	1.97	ppbV	100
28) 1,2-Dichloroethene (cis)	4.248	61	104674	2.08	ppbV	100
29) Cyclohexane	4.425	56	140036	2.24	ppbV	100
30) Chloroform	4.470	83	158461	2.04	ppbV	99
31) Ethyl acetate	4.567	45	25417	1.92	ppbV	99
32) Carbon tetrachloride	4.593	117	177030	2.23	ppbV	99
33) Tetrahydrofuran	4.599	42	94463	2.02	ppbV	98
34) 1,1,1-Trichloroethane	4.641	97	157815	2.15	ppbV	98
35) Methyl ethyl ketone	4.712	43	146553	1.89	ppbV	99
36) n-Heptane	4.937	43	157513	2.15	ppbV	98
37) Benzene	4.953	78	222063	2.00	ppbV	99
38) 1,2-Dichloroethane	5.113	62	102187	2.01	ppbV	99
40) Trichloroethene	5.454	130	87869	2.09	ppbV	99
41) 2,2,4-Trimethylpentane	4.863	57	427145	2.58	ppbV	99
42) 1,2-Dichloropropane	5.911	63	88685	2.29	ppbV	99
43) Bromodichloromethane	5.972	83	160200	2.38	ppbV	98
44) Methyl methacrylate	6.117	41	107105	2.22	ppbV	97
45) 1,4-Dioxane	6.149	88	52568	2.39	ppbV	98
46) cis-1,3-Dichloropropene	6.564	75	130172	2.28	ppbV	99
47) Toluene	6.801	91	277919	2.33	ppbV	100
48) Methyl isobutyl ketone	7.168	43	203627	2.34	ppbV	98
49) Tetrachloroethene	7.191	166	111135	2.46	ppbV	100
50) trans-1,3-Dichloropropene	7.213	75	127958	2.33	ppbV	98
51) 1,1,2-Trichloroethane	7.374	97	95114	2.31	ppbV	100

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6557std04.D
Acq On : 29 May 2024 1:11 pm
Operator : jjw
Sample : 2.0 ppbv std
Misc : EB0103704
ALS Vial : 4 Sample Multiplier: 1

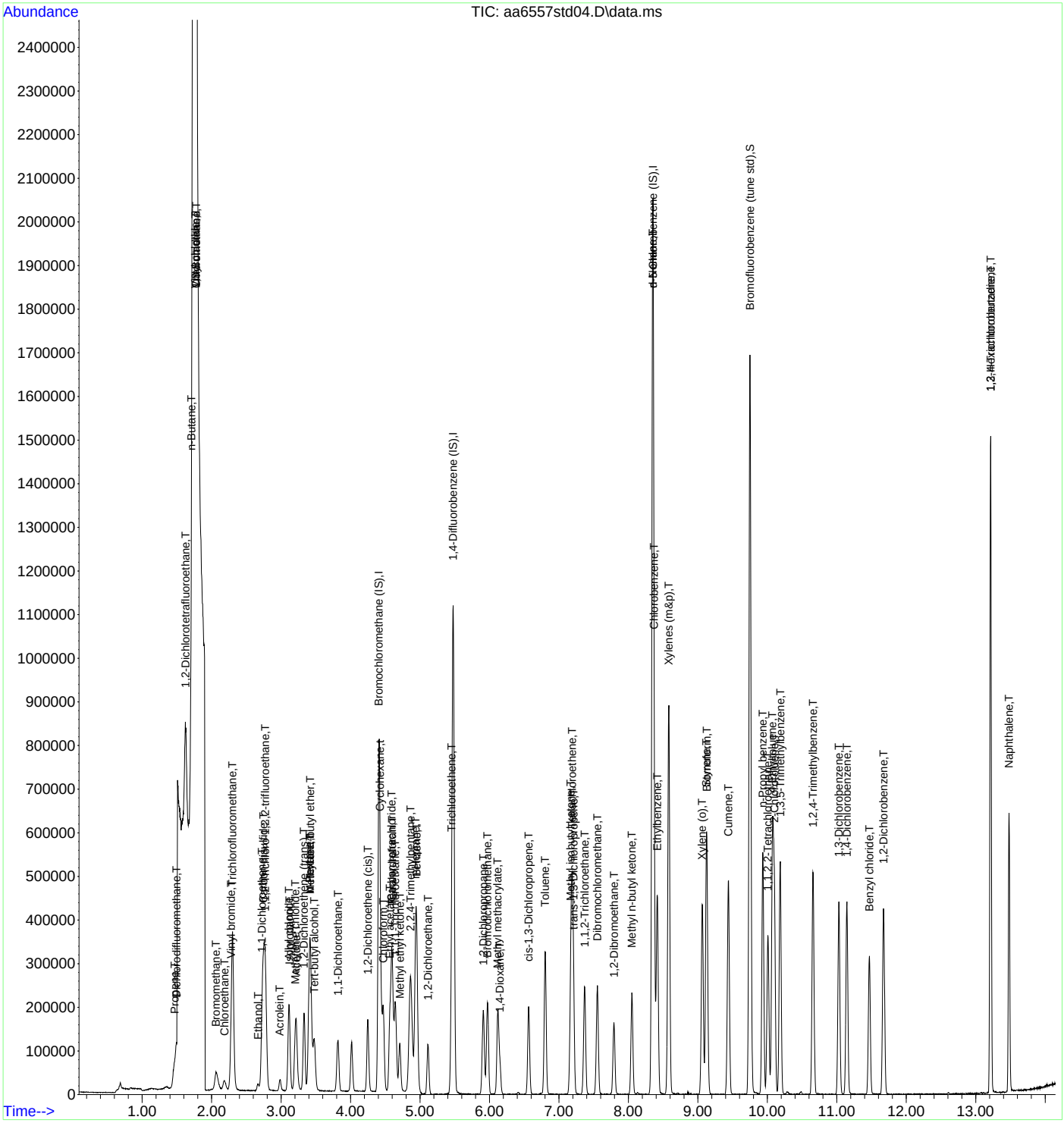
Quant Time: May 29 16:05:04 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.554	129	155622	2.37	ppbV	99
53) 1,2-Dibromoethane	7.792	107	134449	2.28	ppbV	98
54) Methyl n-butyl ketone	8.049	43	182152	2.23	ppbV	99
56) n-Nonane	8.348	43	240746	2.33	ppbV	100
57) Chlorobenzene	8.371	112	213631	2.34	ppbV	96
58) Ethylbenzene	8.416	91	400238	2.30	ppbV	100
59) Xylenes (m&p)	8.580	91	626076	4.78	ppbV	100
60) Xylene (o)	9.062	91	319546	2.32	ppbV	99
61) Styrene	9.123	104	212185	2.32	ppbV	99
62) Bromoform	9.129	173	142572	2.32	ppbV	99
63) Cumene	9.441	105	402361	2.29	ppbV	100
65) n-Propyl benzene	9.933	91	548551	2.27	ppbV	99
66) 1,1,2,2-Tetrachloroethane	10.007	83	241161	2.38	ppbV	98
67) 4-Ethyltoluene	10.071	105	436721	2.21	ppbV	99
68) 2-Chlorotoluene	10.100	91	377903	2.30	ppbV	99
69) 1,3,5-Trimethylbenzene	10.187	105	374308	2.33	ppbV	99
70) 1,2,4-Trimethylbenzene	10.657	105	360088	2.24	ppbV	100
71) 1,3-Dichlorobenzene	11.030	146	209789	2.15	ppbV	98
72) 1,4-Dichlorobenzene	11.145	146	207189	2.10	ppbV	100
73) Benzyl chloride	11.470	91	291655	1.84	ppbV	99
74) 1,2-Dichlorobenzene	11.673	146	203374	2.17	ppbV	98
75) 1,3-Hexachlorobutadiene	13.216	225	130377	2.41	ppbV	99
76) 1,2,4-Trichlorobenzene	13.216	180	162583	2.23	ppbV	100
77) Naphthalene	13.480	128	390557	1.90	ppbV	100

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

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6557std04.D
Acq On : 29 May 2024 1:11 pm
Operator : jjw
Sample : 2.0 ppbv std
Misc : EB0103704
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 29 16:05:04 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration



Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6558std03.D
Acq On : 29 May 2024 1:46 pm
Operator : jjw
Sample : 10 ppbv std
Misc : EB0103704
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 29 16:05:30 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.416	130	240829	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.483	114	1010790	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.351	117	932743	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.753	95	800854	9.08	ppbV	0.000
Target Compounds						Qvalue
2) Propene	1.473	41	274657	10.87	ppbV	97
3) Dichlorodifluoromethane	1.509	85	756375	10.97	ppbV	100
4) 1,2-Dichlorotetrafluor...	1.629	85	938641	9.71	ppbV	99
5) n-Butane	1.709	43	561545	10.76	ppbV	100
6) Chloromethane	1.774	52	54205	12.61	ppbV	100
7) Vinyl chloride	1.770	62	362582	11.42	ppbV	100
8) 1,3-Butadiene	1.777	39	320142	10.88	ppbV	100
9) Bromomethane	2.072	94	281183	11.33	ppbV	98
10) Chloroethane	2.184	64	202415	11.22	ppbV	100
11) Vinyl bromide	2.287	106	333039	11.07	ppbV	100
12) Trichlorofluoromethane	2.303	101	892115	11.24	ppbV	100
13) Ethanol	2.670	45	109612	8.85	ppbV	100
14) 1,1-Dichloroethene	2.728	61	674109	11.03	ppbV	100
15) Carbon disulfide	2.750	76	1151657	11.31	ppbV	100
16) 1,1,2-Trichloro-1,2,2-...	2.769	101	785526	10.47	ppbV	100
17) Acrolein	2.991	56	138932	10.22	ppbV	100
18) Allyl chloride	3.114	76	184693	11.81	ppbV	100
19) Isopropanol	3.117	45	619477	9.12	ppbV	100
20) Methylene chloride	3.204	49	442782	10.18	ppbV	100
21) Acetone	3.223	43	588242	10.89	ppbV	100
22) 1,2-Dichloroethene (tr...	3.332	61	628721	11.38	ppbV	100
23) n-Pentane	3.419	43	690198	10.46	ppbV	99
24) n-Hexane	3.416	57	1002351	10.84	ppbV	100
25) Methyl tert-butyl ether	3.422	73	1185133	10.74	ppbV	100
26) Tert-butyl alcohol	3.477	59	838725	11.13	ppbV	100
27) 1,1-Dichloroethane	3.821	63	740756	10.80	ppbV	100
28) 1,2-Dichloroethene (cis)	4.249	61	566091	11.38	ppbV	100
29) Cyclohexane	4.432	56	671377	10.87	ppbV	100
30) Chloroform	4.474	83	855198	11.12	ppbV	100
31) Ethyl acetate	4.564	45	139805	10.68	ppbV	100
32) Carbon tetrachloride	4.596	117	858451	10.94	ppbV	100
33) Tetrahydrofuran	4.599	42	522056	11.29	ppbV	100
34) 1,1,1-Trichloroethane	4.647	97	766176	10.58	ppbV	100
35) Methyl ethyl ketone	4.708	43	833728	10.89	ppbV	100
36) n-Heptane	4.943	43	759296	10.49	ppbV	100
37) Benzene	4.956	78	1189688	10.85	ppbV	100
38) 1,2-Dichloroethane	5.113	62	556426	11.09	ppbV	100
40) Trichloroethene	5.457	130	474332	10.38	ppbV	100
41) 2,2,4-Trimethylpentane	4.866	57	2034499	11.30	ppbV	100
42) 1,2-Dichloropropane	5.914	63	465873	11.11	ppbV	100
43) Bromodichloromethane	5.972	83	869300	11.90	ppbV	100
44) Methyl methacrylate	6.120	41	570433	10.89	ppbV	100
45) 1,4-Dioxane	6.146	88	282524	11.84	ppbV	100
46) cis-1,3-Dichloropropene	6.567	75	703032	11.34	ppbV	100
47) Toluene	6.801	91	1414424	10.93	ppbV	100
48) Methyl isobutyl ketone	7.171	43	1002006	10.59	ppbV	100
49) Tetrachloroethene	7.191	166	560367	11.43	ppbV	100
50) trans-1,3-Dichloropropene	7.210	75	693708	11.64	ppbV	100
51) 1,1,2-Trichloroethane	7.371	97	480731	10.75	ppbV	100

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6558std03.D
Acq On : 29 May 2024 1:46 pm
Operator : jjw
Sample : 10 ppbv std
Misc : EB0103704
ALS Vial : 5 Sample Multiplier: 1

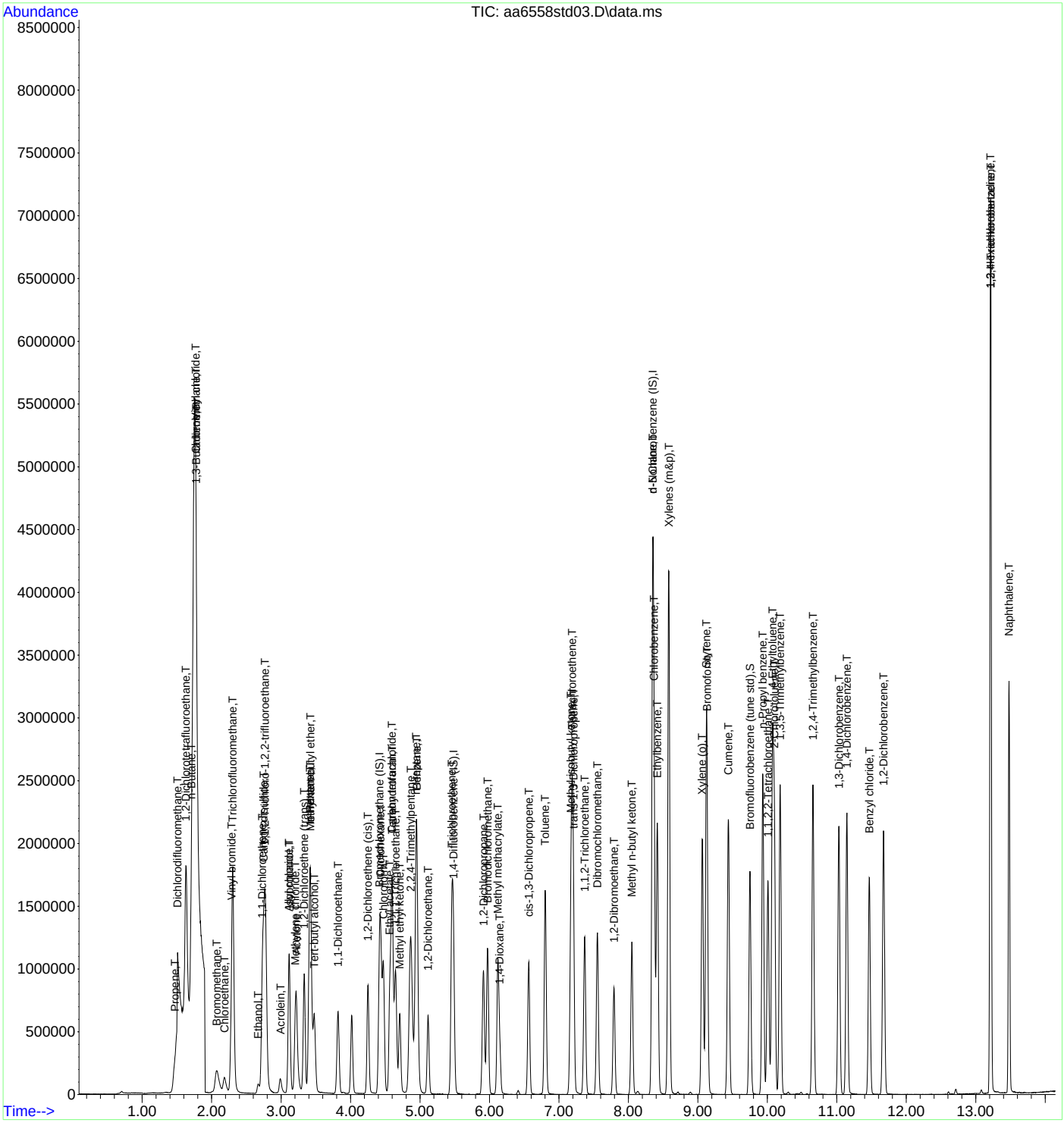
Quant Time: May 29 16:05:30 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.554	129	815306	11.44	ppbV	100
53) 1,2-Dibromoethane	7.792	107	703423	10.98	ppbV	100
54) Methyl n-butyl ketone	8.049	43	950190	10.72	ppbV	100
56) n-Nonane	8.351	43	1100770	10.10	ppbV	100
57) Chlorobenzene	8.371	112	1042681	10.79	ppbV	100
58) Ethylbenzene	8.416	91	1897518	10.32	ppbV	100
59) Xylenes (m&p)	8.583	91	2917626	21.11	ppbV	100
60) Xylene (o)	9.062	91	1486045	10.21	ppbV	100
61) Styrene	9.123	104	1068093	11.04	ppbV	100
62) Bromoform	9.133	173	727324	11.20	ppbV	100
63) Cumene	9.438	105	1861677	10.03	ppbV	100
65) n-Propyl benzene	9.933	91	2515170	9.85	ppbV	100
66) 1,1,2,2-Tetrachloroethane	10.010	83	1133749	10.58	ppbV	100
67) 4-Ethyltoluene	10.075	105	2077120	9.98	ppbV	100
68) 2-Chlorotoluene	10.100	91	1731846	10.00	ppbV	100
69) 1,3,5-Trimethylbenzene	10.184	105	1713250	10.12	ppbV	100
70) 1,2,4-Trimethylbenzene	10.657	105	1715919	10.10	ppbV	100
71) 1,3-Dichlorobenzene	11.033	146	1027727	9.97	ppbV	100
72) 1,4-Dichlorobenzene	11.145	146	1035040	9.93	ppbV	100
73) Benzyl chloride	11.470	91	1572204	9.38	ppbV	100
74) 1,2-Dichlorobenzene	11.673	146	997427	10.06	ppbV	100
75) 1,3-Hexachlorobutadiene	13.213	225	606322	10.63	ppbV	100
76) 1,2,4-Trichlorobenzene	13.216	180	807618	10.51	ppbV	100
77) Naphthalene	13.480	128	1975571	9.09	ppbV	100

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

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6558std03.D
Acq On : 29 May 2024 1:46 pm
Operator : jjw
Sample : 10 ppbv std
Misc : EB0103704
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 29 16:05:30 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6559std02.D
Acq On : 29 May 2024 2:18 pm
Operator : jjw
Sample : 20 ppbv std
Misc : EB0103704
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 29 16:06:18 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.425	130	232784	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.480	114	1025078	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.354	117	911734	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.750	95	829134	9.61	ppbV	0.000
Target Compounds						Qvalue
2) Propene	1.480	41	544013	22.27	ppbV	97
3) Dichlorodifluoromethane	1.516	85	1512429	22.69	ppbV	100
4) 1,2-Dichlorotetrafluor...	1.636	85	1917229	20.52	ppbV	99
5) n-Butane	1.715	43	1106377	21.93	ppbV	97
6) Chloromethane	1.784	52	114751	27.62	ppbV	97
7) Vinyl chloride	1.777	62	731193	23.83	ppbV	100
8) 1,3-Butadiene	1.781	39	644220	22.65	ppbV	98
9) Bromomethane	2.078	94	545831	22.76	ppbV	99
10) Chloroethane	2.191	64	409088	23.46	ppbV	98
11) Vinyl bromide	2.287	106	660638	22.72	ppbV	99
12) Trichlorofluoromethane	2.310	101	1799897	23.45	ppbV	99
13) Ethanol	2.673	45	235242	19.64	ppbV	99
14) 1,1-Dichloroethene	2.731	61	1347624	22.82	ppbV	99
15) Carbon disulfide	2.756	76	2282103	23.20	ppbV	100
16) 1,1,2-Trichloro-1,2,2-...	2.776	101	1569935	21.65	ppbV	100
17) Acrolein	2.998	56	284325	21.64	ppbV	99
18) Allyl chloride	3.120	76	359809	23.81	ppbV	100
19) Isopropanol	3.123	45	1275369	19.42	ppbV	99
20) Methylene chloride	3.210	49	885621	21.06	ppbV	100
21) Acetone	3.229	43	1157082	22.15	ppbV	100
22) 1,2-Dichloroethene (tr...	3.335	61	1273151	23.84	ppbV	99
23) n-Pentane	3.419	43	1394842	21.86	ppbV	98
24) n-Hexane	3.416	57	2025556	22.66	ppbV	99
25) Methyl tert-butyl ether	3.422	73	2350847	22.05	ppbV	98
26) Tert-butyl alcohol	3.477	59	1738663	23.86	ppbV	100
27) 1,1-Dichloroethane	3.824	63	1506683	22.74	ppbV	100
28) 1,2-Dichloroethene (cis)	4.255	61	1148289	23.87	ppbV	100
29) Cyclohexane	4.435	56	1340930	22.47	ppbV	99
30) Chloroform	4.477	83	1737844	23.38	ppbV	99
31) Ethyl acetate	4.567	45	293619	23.20	ppbV	98
32) Carbon tetrachloride	4.596	117	1697695	22.38	ppbV	99
33) Tetrahydrofuran	4.599	42	1068142	23.90	ppbV	99
34) 1,1,1-Trichloroethane	4.647	97	1550092	22.14	ppbV	100
35) Methyl ethyl ketone	4.708	43	1731666	23.39	ppbV	100
36) n-Heptane	4.943	43	1544562	22.07	ppbV	100
37) Benzene	4.956	78	2404288	22.69	ppbV	99
38) 1,2-Dichloroethane	5.120	62	1132565	23.36	ppbV	99
40) Trichloroethene	5.461	130	964688	20.81	ppbV	99
41) 2,2,4-Trimethylpentane	4.866	57	4042916	22.15	ppbV	100
42) 1,2-Dichloropropane	5.914	63	948199	22.29	ppbV	100
43) Bromodichloromethane	5.975	83	1765068	23.83	ppbV	97
44) Methyl methacrylate	6.123	41	1190229	22.40	ppbV	100
45) 1,4-Dioxane	6.145	88	584840	24.17	ppbV	99
46) cis-1,3-Dichloropropene	6.567	75	1439187	22.89	ppbV	100
47) Toluene	6.805	91	2835950	21.61	ppbV	100
48) Methyl isobutyl ketone	7.174	43	2033609	21.19	ppbV	100
49) Tetrachloroethene	7.190	166	1107096	22.27	ppbV	100
50) trans-1,3-Dichloropropene	7.210	75	1416746	23.45	ppbV	100
51) 1,1,2-Trichloroethane	7.374	97	984279	21.71	ppbV	99

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6559std02.D
Acq On : 29 May 2024 2:18 pm
Operator : jjw
Sample : 20 ppbv std
Misc : EB0103704
ALS Vial : 6 Sample Multiplier: 1

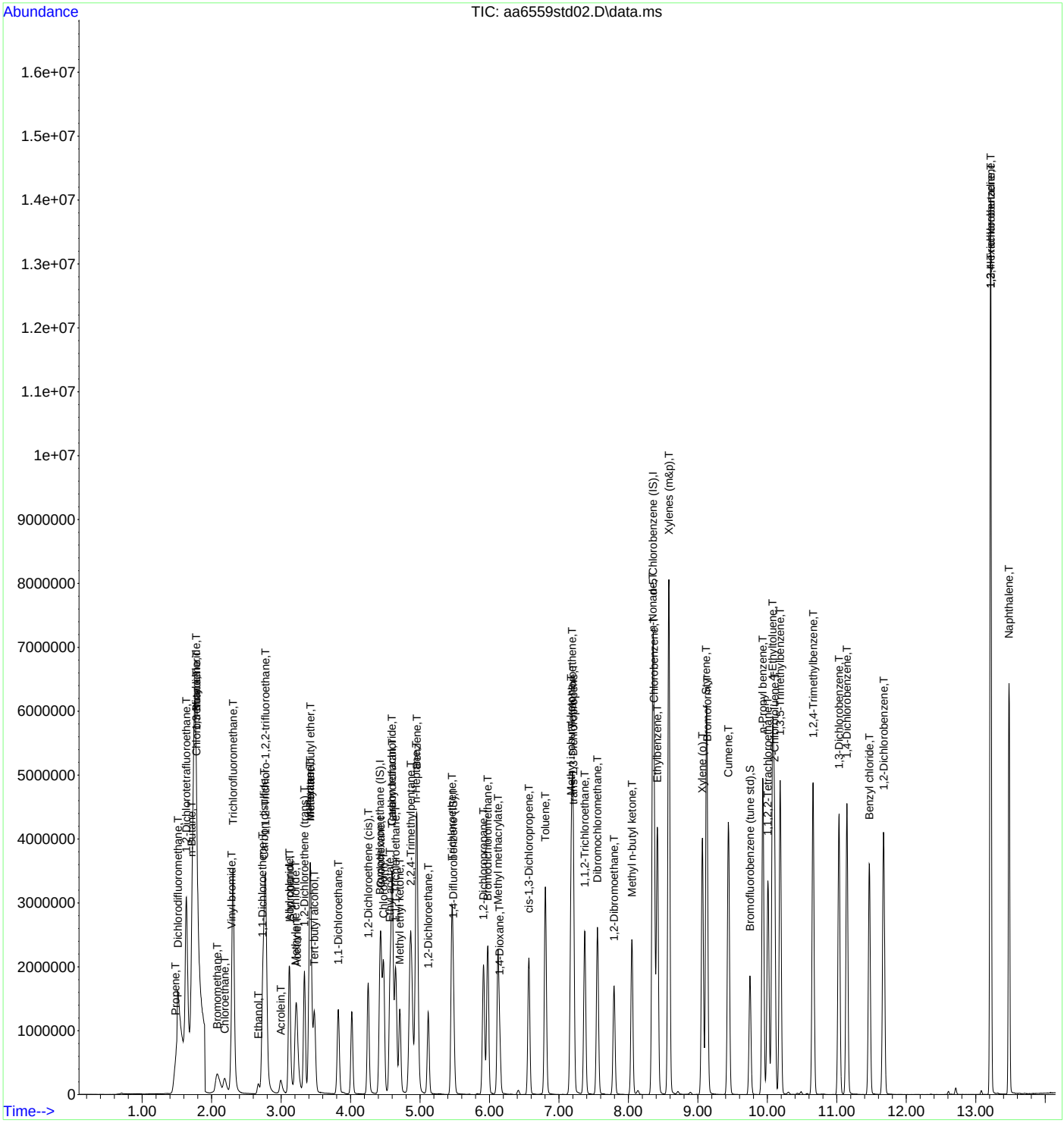
Quant Time: May 29 16:06:18 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.554	129	1649262	22.82	ppbV	100
53) 1,2-Dibromoethane	7.795	107	1420547	21.86	ppbV	100
54) Methyl n-butyl ketone	8.052	43	1958802	21.80	ppbV	100
56) n-Nonane	8.348	43	2150653	20.18	ppbV	99
57) Chlorobenzene	8.370	112	2068748	21.91	ppbV	100
58) Ethylbenzene	8.415	91	3750723	20.87	ppbV	100
59) Xylenes (m&p)	8.583	91	5702458	42.21	ppbV	99
60) Xylene (o)	9.065	91	2980281	20.95	ppbV	99
61) Styrene	9.120	104	2110477	22.31	ppbV	100
62) Bromoform	9.136	173	1438600	22.67	ppbV	100
63) Cumene	9.438	105	3640428	20.06	ppbV	99
65) n-Propyl benzene	9.933	91	4978447	19.95	ppbV	100
66) 1,1,2,2-Tetrachloroethane	10.007	83	2248627	21.47	ppbV	100
67) 4-Ethyltoluene	10.074	105	4132186	20.31	ppbV	99
68) 2-Chlorotoluene	10.103	91	3429519	20.26	ppbV	100
69) 1,3,5-Trimethylbenzene	10.184	105	3426622	20.70	ppbV	99
70) 1,2,4-Trimethylbenzene	10.660	105	3441480	20.73	ppbV	100
71) 1,3-Dichlorobenzene	11.033	146	2073260	20.57	ppbV	100
72) 1,4-Dichlorobenzene	11.145	146	2097540	20.59	ppbV	100
73) Benzyl chloride	11.470	91	3274358	19.99	ppbV	100
74) 1,2-Dichlorobenzene	11.676	146	1984761	20.48	ppbV	99
75) 1,3-Hexachlorobutadiene	13.216	225	1152385	20.66	ppbV	100
76) 1,2,4-Trichlorobenzene	13.216	180	1538918	20.48	ppbV	98
77) Naphthalene	13.479	128	3920601	18.46	ppbV	100

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

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6559std02.D
Acq On : 29 May 2024 2:18 pm
Operator : jjw
Sample : 20 ppbv std
Misc : EB0103704
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 29 16:06:18 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration



Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6560std01.D
Acq On : 29 May 2024 2:55 pm
Operator : jjw
Sample : 40 ppbv std
Misc : EB0103704
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 29 15:33:09 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.438	130	259539	10.00	ppbV		0.026
39) 1,4-Difluorobenzene (IS)	5.490	114	1398154	10.00	ppbV		0.014
55) d-5 Chlorobenzene (IS)	8.351	117	1151205	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.750	95	1414587	13.70	ppbV		0.000
Target Compounds							Qvalue
2) Propene	1.523	41	1142227	39.26	ppbV		100
3) Dichlorodifluoromethane	1.550	85	3265934	50.06	ppbV		100
4) 1,2-Dichlorotetrafluor...	1.664	85	4649559	49.37	ppbV		97
5) n-Butane	1.750	43	2608188	40.60	ppbV		100
6) Chloromethane	1.815	52	204731	48.69	ppbV		88
7) Vinyl chloride	1.815	62	1570322	48.59	ppbV		99
8) 1,3-Butadiene	1.818	39	1425634	38.81	ppbV		98
9) Bromomethane	2.120	94	1037392	44.51	ppbV		98
10) Chloroethane	2.216	64	905256	50.82	ppbV		99
11) Vinyl bromide	2.310	106	1463102	54.50	ppbV		100
12) Trichlorofluoromethane	2.335	101	4076568	53.50	ppbV		99
13) Ethanol	2.692	45	573243	48.16	ppbV		91
14) 1,1-Dichloroethene	2.760	61	3078402	52.09	ppbV		95
15) Carbon disulfide	2.779	76	5033811	53.65	ppbV		96
16) 1,1,2-Trichloro-1,2,2-...	2.798	101	4030555	53.48	ppbV		97
17) Acrolein	3.017	56	677189	47.80	ppbV		100
18) Allyl chloride	3.142	76	772500	52.45	ppbV		100
19) Isopropanol	3.146	45	2972095	39.43	ppbV		98
20) Methylene chloride	3.229	49	2020607	48.06	ppbV		87
21) Acetone	3.245	43	2690258	46.34	ppbV		96
22) 1,2-Dichloroethene (tr...	3.355	61	3218797	62.26	ppbV		93
23) n-Pentane	3.435	43	3685172	50.56	ppbV		100
24) n-Hexane	3.432	57	5415528	51.83	ppbV		95
25) Methyl tert-butyl ether	3.441	73	6341672	54.05	ppbV		99
26) Tert-butyl alcohol	3.496	59	4670327	56.35	ppbV		100
27) 1,1-Dichloroethane	3.843	63	3710731	53.46	ppbV		99
28) 1,2-Dichloroethene (cis)	4.268	61	2829337	56.82	ppbV		93
29) Cyclohexane	4.445	56	3618784	51.25	ppbV		92
30) Chloroform	4.486	83	4388064	60.64	ppbV		100
31) Ethyl acetate	4.580	45	803157	53.77	ppbV		93
32) Carbon tetrachloride	4.605	117	4499351	60.76	ppbV		100
33) Tetrahydrofuran	4.612	42	2700255	49.65	ppbV		94
34) 1,1,1-Trichloroethane	4.660	97	4210588	60.26	ppbV		100
35) Methyl ethyl ketone	4.718	43	4819880	55.58	ppbV		95
36) n-Heptane	4.956	43	4385464	48.40	ppbV		92
37) Benzene	4.969	78	6358079	58.39	ppbV		97
38) 1,2-Dichloroethane	5.126	62	3005422	60.84	ppbV		100
40) Trichloroethene	5.467	130	2608762	46.76	ppbV		99
41) 2,2,4-Trimethylpentane	4.875	57	10374158	38.27	ppbV		99
42) 1,2-Dichloropropane	5.924	63	2722594	44.56	ppbV		99
43) Bromodichloromethane	5.981	83	4805129	49.38	ppbV		100
44) Methyl methacrylate	6.123	41	3568315	41.17	ppbV		92
45) 1,4-Dioxane	6.152	88	1658461	50.67	ppbV		94
46) cis-1,3-Dichloropropene	6.573	75	4001330	46.35	ppbV		100
47) Toluene	6.811	91	8006090	44.44	ppbV		99
48) Methyl isobutyl ketone	7.174	43	6079413	37.73	ppbV		96
49) Tetrachloroethene	7.197	166	2999039	48.20	ppbV		100
50) trans-1,3-Dichloropropene	7.216	75	3865763	47.06	ppbV	#	70
51) 1,1,2-Trichloroethane	7.377	97	2879234	48.35	ppbV		97

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6560std01.D
Acq On : 29 May 2024 2:55 pm
Operator : jjw
Sample : 40 ppbv std
Misc : EB0103704
ALS Vial : 7 Sample Multiplier: 1

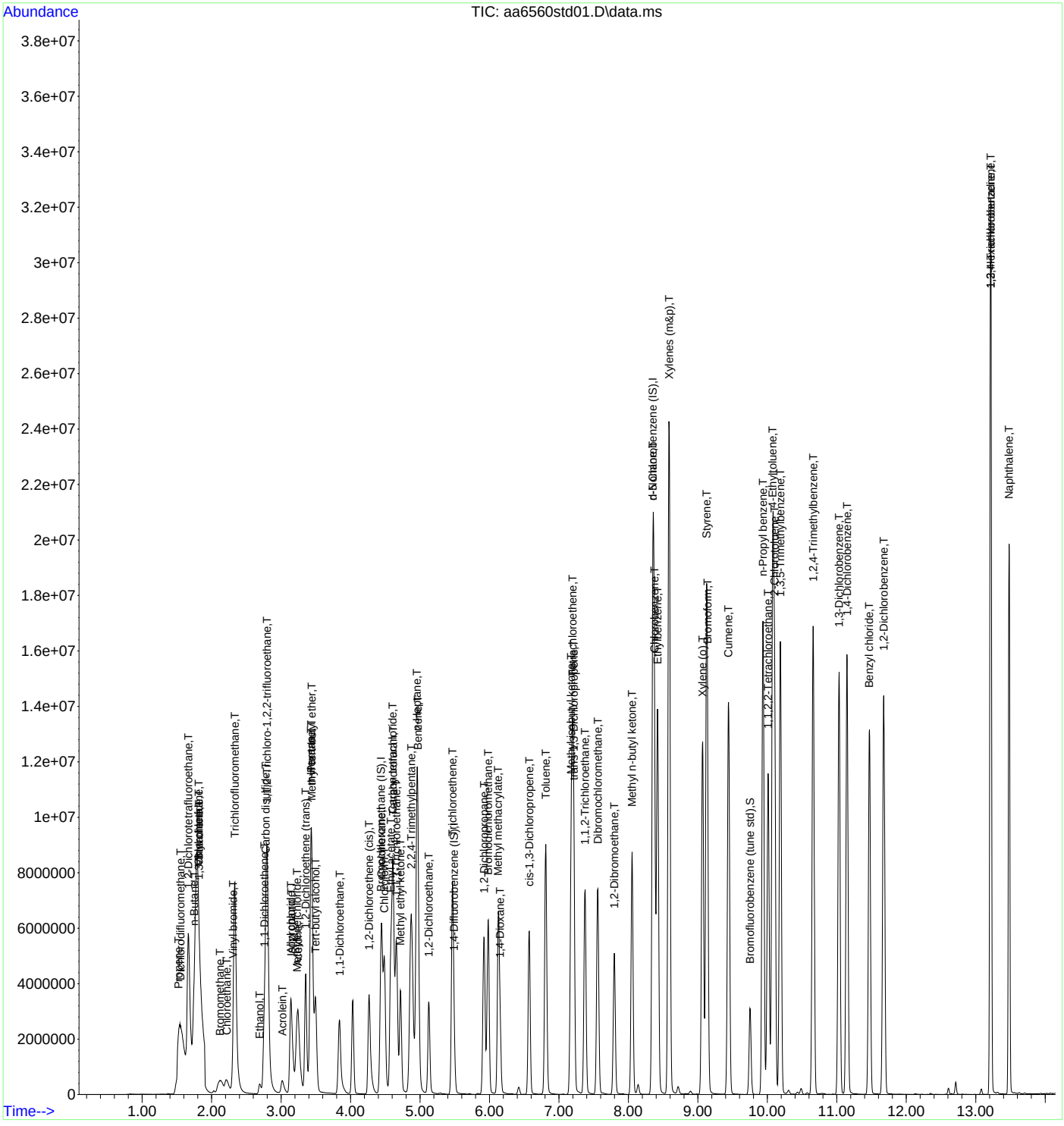
Quant Time: May 29 15:33:09 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.560	129	4789120	52.49	ppbV	100
53) 1,2-Dibromoethane	7.798	107	4214665	49.82	ppbV	100
54) Methyl n-butyl ketone	8.052	43	6940012	48.04	ppbV	96
56) n-Nonane	8.351	43	7555637	47.30	ppbV	91
57) Chlorobenzene	8.377	112	6019868	54.26	ppbV	97
58) Ethylbenzene	8.419	91	12459258	56.39	ppbV	98
59) Xylenes (m&p)	8.586	91	17915958	108.01	ppbV	98
60) Xylene (o)	9.068	91	9769196	55.51	ppbV	98
61) Styrene	9.126	104	6854147	60.05	ppbV	99
62) Bromoform	9.139	173	4428252	62.69	ppbV	99
63) Cumene	9.441	105	12273690	55.33	ppbV	99
65) n-Propyl benzene	9.936	91	17652384	58.75	ppbV	97
66) 1,1,2,2-Tetrachloroethane	10.010	83	7720543	59.17	ppbV	100
67) 4-Ethyltoluene	10.075	105	14639002	61.29	ppbV	98
68) 2-Chlorotoluene	10.103	91	11857804	58.29	ppbV	99
69) 1,3,5-Trimethylbenzene	10.187	105	11719331	59.58	ppbV	100
70) 1,2,4-Trimethylbenzene	10.660	105	12098566	62.04	ppbV	99
71) 1,3-Dichlorobenzene	11.033	146	7325087	68.56	ppbV	99
72) 1,4-Dichlorobenzene	11.148	146	7443078	68.71	ppbV	99
73) Benzyl chloride	11.467	91	12122899	66.89	ppbV	97
74) 1,2-Dichlorobenzene	11.676	146	6872332	64.83	ppbV	99
75) 1,3-Hexachlorobutadiene	13.216	225	2887878	50.17	ppbV	100
76) 1,2,4-Trichlorobenzene	13.216	180	4161678	52.94	ppbV	99
77) Naphthalene	13.480	128	12094453	55.40	ppbV	98

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

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6560std01.D
Acq On : 29 May 2024 2:55 pm
Operator : jjw
Sample : 40 ppbv std
Misc : EB0103704
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 29 15:33:09 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES, LLC

Initial Calibration Verification Sample Standard

Lab Sample Name: 10 PPBV ICVSS **Data File:** AA6026ICVSS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 3/27/2024

Amount of standard injected (ml): 50

Runs with this ICVSS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6020BFB]	03/27/2024 10:03
0.2 PPBV STD [AA6021STD05]	03/27/2024 10:38
2 PPBV STD [AA6022STD04]	03/27/2024 11:38
10 PPBV STD [AA6023STD03]	03/27/2024 12:09
20 PPBV STD [AA6024STD02]	03/27/2024 12:40
40 PPBV STD [AA6025STD01]	03/27/2024 13:24
10 PPBV ICVSS [AA6026ICVSS]	03/27/2024 13:54
10 PPBV LCS [AA6027LCS]	03/27/2024 14:23
METHOD BLANK [AA6028BLK]	03/27/2024 14:51

Compound	CAS #	Injected Amount (ppbv)	Recovered Amount (ppbv)	% Recovery	QC Limit
Acetone	67-64-1	11	10	95	
Acrolein	107-02-8	9.4	9.8	100	
Allyl Chloride	107-05-1	11	11	99	
Benzene	71-43-2	10	9.7	93	
Benzyl chloride	100-44-7	11	10	93	
Bromodichloromethane	75-27-4	11	11	100	
Bromoform	75-25-2	11	12	110	
Bromomethane	74-83-9	11	11	100	
1,3-Butadiene	106-99-0	11	9.4	86	
n-Butane	106-97-8	11	9.5	90	
Chlorobenzene	108-90-7	10	11	110	
Chloroethane	75-00-3	9.8	11	110	
Chloroform	67-66-3	11	10	92	
Chloromethane	74-87-3	9.9	11	110	
Carbon disulfide	75-15-0	10	11	110	
Carbon tetrachloride	56-23-5	11	10.0	93	
2-Chlorotoluene	95-49-8	11	11	100	
Cumene	98-82-8	10	10	99	
Cyclohexane	110-82-7	11	9.8	90	
Dibromochloromethane	124-48-1	11	11	100	
1,2-Dibromoethane	106-93-4	11	11	100	
1,2-Dichlorobenzene	95-50-1	10	11	110	
1,3-Dichlorobenzene	541-73-1	10	11	110	
1,4-Dichlorobenzene	106-46-7	10	11	110	
Dichlorodifluoromethane	75-71-8	11	11	100	
1,1-Dichloroethane	75-34-3	11	9.6	91	
1,2-Dichloroethane	107-06-2	11	10	95	
1,1-Dichloroethene	75-35-4	11	11	100	
1,2-Dichloroethene (cis)	156-59-2	10	10	97	
1,2-Dichloroethene (trans)	156-60-5	11	11	100	
1,2-Dichloropropane	78-87-5	11	10	95	
1,3-Dichloropropene (cis)	10061-01-5	9.9	11	110	
1,3-Dichloropropene (trans)	10061-02-6	11	11	100	
1,2-Dichlorotetrafluoroethane	76-14-2	11	8.9	79	
1,4-Dioxane	123-91-1	11	11	98	
Ethanol	64-17-5	9.8	11	110	
Ethyl acetate	141-78-6	10	9.8	95	
Ethylbenzene	100-41-4	10	11	110	

ICVSS recovery must be within 70-130% of the spiked value for all compounds.

*** Values outside of QC limits**

INTEGRATED ANALYTICAL LABORATORIES, LLC

Initial Calibration Verification Sample Standard

Lab Sample Name: 10 PPBV ICVSS **Data File:** AA6026ICVSS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 3/27/2024

Amount of standard injected (ml): 50

Runs with this ICVSS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6020BFB]	03/27/2024 10:03
0.2 PPBV STD [AA6021STD05]	03/27/2024 10:38
2 PPBV STD [AA6022STD04]	03/27/2024 11:38
10 PPBV STD [AA6023STD03]	03/27/2024 12:09
20 PPBV STD [AA6024STD02]	03/27/2024 12:40
40 PPBV STD [AA6025STD01]	03/27/2024 13:24
10 PPBV ICVSS [AA6026ICVSS]	03/27/2024 13:54
10 PPBV LCS [AA6027LCS]	03/27/2024 14:23
METHOD BLANK [AA6028BLK]	03/27/2024 14:51

Compound	CAS #	Injected Amount (ppbv)	Recovered Amount (ppbv)	% Recovery	QC Limit
4-Ethyltoluene	622-96-8	11	11	100	
n-Heptane	142-82-5	11	9.2	84	
1,3-Hexachlorobutadiene	87-68-3	9.8	12	120	
n-Hexane	110-54-3	11	9.3	86	
Isopropanol	67-63-0	8.1	8.6	110	
Methylene chloride	75-09-2	11	10	93	
Methyl ethyl ketone	78-93-3	11	9.7	89	
Methyl isobutyl ketone	108-10-1	10	10	97	
Methyl methacrylate	80-62-6	11	10	93	
Methyl n-butyl ketone	591-78-6	11	11	99	
Methyl tert-butyl ether	1634-04-4	11	9.9	91	
Naphthalene	91-20-3	11	10	93	
n-Nonane	111-84-2	11	10	89	
n-Pentane	109-66-0	11	9.5	86	
Propene	115-07-1	11	10	91	
n-Propyl benzene	103-65-1	11	11	100	
Styrene	100-42-5	11	12	110	
Tert-butyl alcohol	75-65-0	12	10	87	
1,1,2,2-Tetrachloroethane	79-34-5	10	11	110	
Tetrachloroethene	127-18-4	12	11	93	
Tetrahydrofuran	109-99-9	11	9.8	92	
Toluene	108-88-3	11	10	95	
1,2,4-Trichlorobenzene	120-82-1	10	11	110	
1,1,1-Trichloroethane	71-55-6	11	10.0	93	
1,1,2-Trichloroethane	79-00-5	11	11	100	
Trichloroethene	79-01-6	10	10	98	
Trichlorofluoromethane	75-69-4	11	10	94	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	11	9.5	87	
1,2,4-Trimethylbenzene	95-63-6	10	11	110	
1,3,5-Trimethylbenzene	108-67-8	10	11	110	
2,2,4-Trimethylpentane	540-84-1	11	11	100	
Vinyl bromide	593-60-2	10	11	110	
Vinyl chloride	75-01-4	11	11	97	
Xylenes (m&p)	179601-23-1	21	22	110	
Xylenes (o)	95-47-6	10	11	110	

ICVSS recovery must be within 70-130% of the spiked value for all compounds.

*** Values outside of QC limits**

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6026icvss.D
Acq On : 27 Mar 2024 1:54 pm
Operator : jjw
Sample : 10 ppbv icvss
Misc : EB0116272
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 27 15:15:48 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.412	130	412561	10.00	ppbV		0.000
39) 1,4-Difluorobenzene (IS)	5.480	114	1549110	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.351	117	1439709	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.753	95	1278623	9.90	ppbV		0.000
Target Compounds							Qvalue
2) Propene	1.464	41	475494	10.28	ppbV		99
3) Dichlorodifluoromethane	1.499	85	1104507	10.65	ppbV		100
4) 1,2-Dichlorotetrafluor...	1.626	85	1330698	8.89	ppbV		100
5) n-Butane	1.708	43	967137	9.47	ppbV		100
6) Chloromethane	1.777	52	72189	10.80	ppbV		98
7) Vinyl chloride	1.763	62	575895	11.21	ppbV		100
8) 1,3-Butadiene	1.777	39	546190	9.35	ppbV		98
9) Bromomethane	2.065	94	393236	10.61	ppbV		99
10) Chloroethane	2.178	64	303187	10.71	ppbV		99
11) Vinyl bromide	2.284	106	452505	10.60	ppbV		100
12) Trichlorofluoromethane	2.300	101	1216885	10.05	ppbV		100
13) Ethanol	2.666	45	207336	10.96	ppbV		99
14) 1,1-Dichloroethene	2.727	61	992472	10.57	ppbV		99
15) Carbon disulfide	2.747	76	1666779	11.18	ppbV		98
16) 1,1,2-Trichloro-1,2,2-...	2.772	101	1132241	9.45	ppbV		100
17) Acrolein	2.985	56	220833	9.81	ppbV		99
18) Allyl chloride	3.110	76	260732	11.14	ppbV		100
19) Isopropanol	3.116	45	1035442	8.64	ppbV		99
20) Methylene chloride	3.206	49	690106	10.33	ppbV		98
21) Acetone	3.219	43	937159	10.15	ppbV		99
22) trans-1,2-Dichloroethene	3.329	61	906530	11.03	ppbV		98
23) n-Pentane	3.419	43	1099645	9.49	ppbV		99
24) n-Hexane	3.415	57	1549072	9.33	ppbV		99
25) Methyl tert-butyl ether	3.419	73	1838970	9.86	ppbV		99
26) Tert-butyl alcohol	3.477	59	1321541	10.03	ppbV		100
27) 1,1-Dichloroethane	3.817	63	1062879	9.63	ppbV		100
28) cis-1,2-Dichloroethene	4.248	61	815216	10.30	ppbV		98
29) Cyclohexane	4.428	56	1096558	9.77	ppbV		99
30) Chloroform	4.473	83	1155306	10.04	ppbV		100
31) Ethyl acetate	4.563	45	232266	9.78	ppbV		100
32) Carbon tetrachloride	4.592	117	1173270	9.97	ppbV		99
33) Tetrahydrofuran	4.599	42	850975	9.84	ppbV		99
34) 1,1,1-Trichloroethane	4.647	97	1105121	9.95	ppbV		100
35) Methyl ethyl ketone	4.705	43	1341717	9.73	ppbV		99
36) n-Heptane	4.940	43	1331974	9.25	ppbV		99
37) Benzene	4.952	78	1670578	9.65	ppbV		99
38) 1,2-Dichloroethane	5.116	62	786513	10.02	ppbV		100
40) Trichloroethene	5.457	130	619937	10.03	ppbV		99
41) 2,2,4-Trimethylpentane	4.866	57	3352145	11.16	ppbV		100
42) 1,2-Dichloropropane	5.911	63	701536	10.36	ppbV		98
43) Bromodichloromethane	5.972	83	1199833	11.13	ppbV		100
44) Methyl methacrylate	6.120	41	992841	10.34	ppbV		98
45) 1,4-Dioxane	6.145	88	413468	11.40	ppbV		99
46) cis-1,3-Dichloropropene	6.563	75	1043355	10.91	ppbV		100
47) Toluene	6.801	91	2073818	10.39	ppbV		99
48) Methyl isobutyl ketone	7.171	43	1818620	10.19	ppbV		99
49) Tetrachloroethene	7.190	166	757501	10.99	ppbV		99
50) trans-1,3-Dichloropropene	7.210	75	1026774	11.28	ppbV	#	74
51) 1,1,2-Trichloroethane	7.370	97	693315	10.51	ppbV		100

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6026icvss.D
Acq On : 27 Mar 2024 1:54 pm
Operator : jjw
Sample : 10 ppbv icvss
Misc : EB0116272
ALS Vial : 9 Sample Multiplier: 1

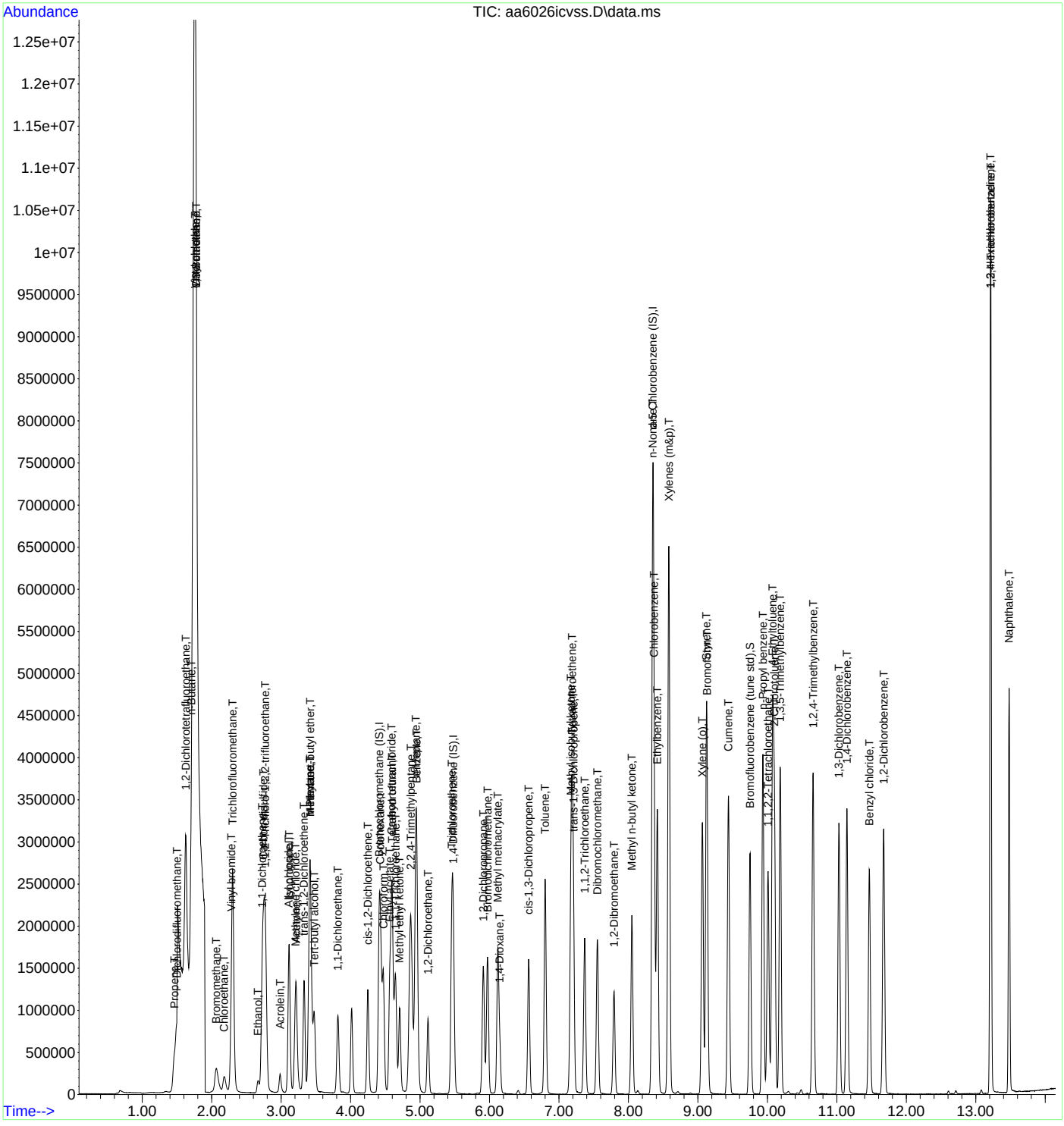
Quant Time: Mar 27 15:15:48 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.554	129	1126782	11.15	ppbV	100
53) 1,2-Dibromoethane	7.795	107	1018722	10.87	ppbV	100
54) Methyl n-butyl ketone	8.049	43	1737007	10.85	ppbV	99
56) n-Nonane	8.348	43	2077560	10.40	ppbV	99
57) Chlorobenzene	8.370	112	1522555	10.97	ppbV	99
58) Ethylbenzene	8.415	91	2944785	10.66	ppbV	100
59) Xylenes (m&p)	8.582	91	4502045	21.70	ppbV	99
60) Xylene (o)	9.065	91	2338527	10.62	ppbV	99
61) Styrene	9.123	104	1642349	11.51	ppbV	100
62) Bromoform	9.132	173	1020022	11.55	ppbV	100
63) Cumene	9.441	105	2894207	10.43	ppbV	100
65) n-Propyl benzene	9.936	91	3971971	10.57	ppbV	100
66) 1,1,2,2-Tetrachloroethane	10.010	83	1799038	11.02	ppbV	100
67) 4-Ethyltoluene	10.074	105	3189380	10.68	ppbV	100
68) 2-Chlorotoluene	10.100	91	2710501	10.65	ppbV	100
69) 1,3,5-Trimethylbenzene	10.184	105	2663260	10.83	ppbV	100
70) 1,2,4-Trimethylbenzene	10.660	105	2637313	10.81	ppbV	100
71) 1,3-Dichlorobenzene	11.029	146	1488697	11.14	ppbV	100
72) 1,4-Dichlorobenzene	11.145	146	1490219	11.00	ppbV	99
73) Benzyl chloride	11.470	91	2375182	10.48	ppbV	100
74) 1,2-Dichlorobenzene	11.676	146	1438933	10.85	ppbV	99
75) 1,3-Hexachlorobutadiene	13.212	225	830103	11.53	ppbV	100
76) 1,2,4-Trichlorobenzene	13.216	180	1123582	11.43	ppbV	99
77) Naphthalene	13.479	128	2825715	10.35	ppbV	100

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

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6026icvss.D
Acq On : 27 Mar 2024 1:54 pm
Operator : jjw
Sample : 10 ppbv icvss
Misc : EB0116272
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 27 15:15:48 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES, LLC

Initial Calibration Verification Sample Standard

Lab Sample Name: 10 PPBV ICVSS **Data File:** AA6561ICVSS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 5/29/2024

Amount of standard injected (ml): 50

Runs with this ICVSS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6554BFB]	05/29/2024 9:16
0.2 PPBV STD [AA6556STD05]	05/29/2024 12:40
2 PPBV STD [AA6557STD04]	05/29/2024 13:11
10 PPBV STD [AA6558STD03]	05/29/2024 13:46
20 PPBV STD [AA6559STD02]	05/29/2024 14:18
40 PPBV STD [AA6560STD01]	05/29/2024 14:55
10 PPBV ICVSS [AA6561ICVSS]	05/29/2024 17:16

Compound	CAS #	Injected Amount (ppbv)	Recovered Amount (ppbv)	% Recovery	QC Limit
Acetone	67-64-1	11	12	110	
Acrolein	107-02-8	9.4	11	120	
Allyl Chloride	107-05-1	11	12	110	
Benzene	71-43-2	10	11	110	
Benzyl chloride	100-44-7	11	9.6	89	
Bromodichloromethane	75-27-4	11	12	110	
Bromoform	75-25-2	11	11	96	
Bromomethane	74-83-9	11	12	110	
1,3-Butadiene	106-99-0	11	12	110	
n-Butane	106-97-8	11	12	110	
Chlorobenzene	108-90-7	10	11	110	
Chloroethane	75-00-3	9.8	12	120	
Chloroform	67-66-3	11	11	100	
Chloromethane	74-87-3	9.9	13	130	
Carbon disulfide	75-15-0	10	12	120	
Carbon tetrachloride	56-23-5	11	11	100	
2-Chlorotoluene	95-49-8	11	10	91	
Cumene	98-82-8	10	10	99	
Cyclohexane	110-82-7	11	12	110	
Dibromochloromethane	124-48-1	11	11	100	
1,2-Dibromoethane	106-93-4	11	11	100	
1,2-Dichlorobenzene	95-50-1	10	10	97	
1,3-Dichlorobenzene	541-73-1	10	10	96	
1,4-Dichlorobenzene	106-46-7	10	10	97	
Dichlorodifluoromethane	75-71-8	11	11	100	
1,1-Dichloroethane	75-34-3	11	12	110	
1,2-Dichloroethane	107-06-2	11	11	100	
1,1-Dichloroethene	75-35-4	11	12	110	
1,2-Dichloroethene (cis)	156-59-2	10	12	120	
1,2-Dichloroethene (trans)	156-60-5	11	12	110	
1,2-Dichloropropane	78-87-5	11	11	100	
1,3-Dichloropropene (cis)	10061-01-5	9.9	12	120	
1,3-Dichloropropene (trans)	10061-02-6	11	12	110	
1,2-Dichlorotetrafluoroethane	76-14-2	11	10	89	
1,4-Dioxane	123-91-1	11	12	110	
Ethanol	64-17-5	9.8	10	100	
Ethyl acetate	141-78-6	10	12	120	
Ethylbenzene	100-41-4	10	11	110	
4-Ethyltoluene	622-96-8	11	10	93	
n-Heptane	142-82-5	11	11	100	

ICVSS recovery must be within 70-130% of the spiked value for all compounds.

*** Values outside of QC limits**

INTEGRATED ANALYTICAL LABORATORIES, LLC

Initial Calibration Verification Sample Standard

Lab Sample Name: 10 PPBV ICVSS **Data File:** AA6561ICVSS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 5/29/2024

Amount of standard injected (ml): 50

Runs with this ICVSS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6554BFB]	05/29/2024 9:16
0.2 PPBV STD [AA6556STD05]	05/29/2024 12:40
2 PPBV STD [AA6557STD04]	05/29/2024 13:11
10 PPBV STD [AA6558STD03]	05/29/2024 13:46
20 PPBV STD [AA6559STD02]	05/29/2024 14:18
40 PPBV STD [AA6560STD01]	05/29/2024 14:55
10 PPBV ICVSS [AA6561ICVSS]	05/29/2024 17:16

Compound	CAS #	Injected Amount (ppbv)	Recovered Amount (ppbv)	% Recovery	QC Limit
1,3-Hexachlorobutadiene	87-68-3	9.8	10	100	
n-Hexane	110-54-3	11	12	110	
Isopropanol	67-63-0	8.1	9.9	120	
Methylene chloride	75-09-2	11	11	100	
Methyl ethyl ketone	78-93-3	11	12	110	
Methyl isobutyl ketone	108-10-1	10	11	110	
Methyl methacrylate	80-62-6	11	12	110	
Methyl n-butyl ketone	591-78-6	11	11	99	
Methyl tert-butyl ether	1634-04-4	11	11	100	
Naphthalene	91-20-3	11	9.1	85	
n-Nonane	111-84-2	11	11	97	
n-Pentane	109-66-0	11	11	99	
Propene	115-07-1	11	12	110	
n-Propyl benzene	103-65-1	11	10.0	91	
Styrene	100-42-5	11	11	100	
Tert-butyl alcohol	75-65-0	12	12	100	
1,1,2,2-Tetrachloroethane	79-34-5	10	11	110	
Tetrachloroethene	127-18-4	12	11	93	
Tetrahydrofuran	109-99-9	11	12	110	
Toluene	108-88-3	11	11	100	
1,2,4-Trichlorobenzene	120-82-1	10	11	110	
1,1,1-Trichloroethane	71-55-6	11	11	100	
1,1,2-Trichloroethane	79-00-5	11	11	100	
Trichloroethene	79-01-6	10	10	98	
Trichlorofluoromethane	75-69-4	11	12	110	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	11	11	100	
1,2,4-Trimethylbenzene	95-63-6	10	10	100	
1,3,5-Trimethylbenzene	108-67-8	10	10	96	
2,2,4-Trimethylpentane	540-84-1	11	12	110	
Vinyl bromide	593-60-2	10	11	110	
Vinyl chloride	75-01-4	11	12	110	
Xylenes (m&p)	179601-23-1	21	22	110	
Xylenes (o)	95-47-6	10	11	110	

ICVSS recovery must be within 70-130% of the spiked value for all compounds.

*** Values outside of QC limits**

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6561icvss.D
Acq On : 29 May 2024 5:16 pm
Operator : jjw
Sample : 10 ppbv icvss
Misc : EB0116272
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 30 10:48:22 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.412	130	242079	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.480	114	1024301	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.354	117	930904	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.750	95	819051	9.30	ppbV	0.000
Target Compounds						Qvalue
2) Propene	1.470	41	295359	11.63	ppbV	98
3) Dichlorodifluoromethane	1.509	85	776026	11.20	ppbV	99
4) 1,2-Dichlorotetrafluor...	1.629	85	976935	10.06	ppbV	99
5) n-Butane	1.712	43	623050	11.87	ppbV	99
6) Chloromethane	1.774	52	56607	13.10	ppbV	94
7) Vinyl chloride	1.770	62	386689	12.12	ppbV	99
8) 1,3-Butadiene	1.777	39	340949	11.53	ppbV	99
9) Bromomethane	2.072	94	294022	11.79	ppbV	99
10) Chloroethane	2.181	64	215495	11.88	ppbV	100
11) Vinyl bromide	2.284	106	340589	11.26	ppbV	99
12) Trichlorofluoromethane	2.300	101	924702	11.59	ppbV	99
13) Ethanol	2.670	45	124849	10.02	ppbV	100
14) 1,1-Dichloroethene	2.731	61	722015	11.76	ppbV	98
15) Carbon disulfide	2.753	76	1220444	11.93	ppbV	100
16) 1,1,2-Trichloro-1,2,2-...	2.773	101	811936	10.77	ppbV	98
17) Acrolein	2.988	56	148588	10.87	ppbV	98
18) Allyl chloride	3.117	76	195404	12.43	ppbV	100
19) Isopropanol	3.117	45	678381	9.93	ppbV	99
20) Methylene chloride	3.207	49	473261	10.82	ppbV	98
21) Acetone	3.220	43	635449	11.70	ppbV	99
22) 1,2-Dichloroethene (tr...	3.332	61	675217	12.16	ppbV	96
23) n-Pentane	3.416	43	749023	11.29	ppbV	98
24) n-Hexane	3.419	57	1075039	11.56	ppbV	100
25) Methyl tert-butyl ether	3.422	73	1227288	11.07	ppbV	97
26) Tert-butyl alcohol	3.477	59	894849	11.81	ppbV	100
27) 1,1-Dichloroethane	3.821	63	793260	11.51	ppbV	99
28) 1,2-Dichloroethene (cis)	4.248	61	602979	12.05	ppbV	97
29) Cyclohexane	4.432	56	720408	11.61	ppbV	98
30) Chloroform	4.473	83	884482	11.44	ppbV	100
31) Ethyl acetate	4.567	45	153476	11.66	ppbV	98
32) Carbon tetrachloride	4.596	117	867346	11.00	ppbV	100
33) Tetrahydrofuran	4.596	42	564904	12.16	ppbV	98
34) 1,1,1-Trichloroethane	4.647	97	786581	10.80	ppbV	100
35) Methyl ethyl ketone	4.705	43	897094	11.65	ppbV	99
36) n-Heptane	4.940	43	823524	11.31	ppbV	98
37) Benzene	4.956	78	1222515	11.09	ppbV	100
38) 1,2-Dichloroethane	5.117	62	576924	11.44	ppbV	100
40) Trichloroethene	5.457	130	480963	10.38	ppbV	99
41) 2,2,4-Trimethylpentane	4.869	57	2127194	11.66	ppbV	99
42) 1,2-Dichloropropane	5.911	63	482710	11.36	ppbV	99
43) Bromodichloromethane	5.972	83	893791	12.07	ppbV	100
44) Methyl methacrylate	6.120	41	623370	11.74	ppbV	96
45) 1,4-Dioxane	6.145	88	295794	12.23	ppbV	99
46) cis-1,3-Dichloropropene	6.567	75	731256	11.64	ppbV	100
47) Toluene	6.805	91	1431765	10.92	ppbV	99
48) Methyl isobutyl ketone	7.171	43	1084912	11.31	ppbV	99
49) Tetrachloroethene	7.190	166	551683	11.11	ppbV	99
50) trans-1,3-Dichloropropene	7.210	75	715458	11.85	ppbV	98
51) 1,1,2-Trichloroethane	7.370	97	491811	10.86	ppbV	99

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6561icvss.D
Acq On : 29 May 2024 5:16 pm
Operator : jjw
Sample : 10 ppbv icvss
Misc : EB0116272
ALS Vial : 8 Sample Multiplier: 1

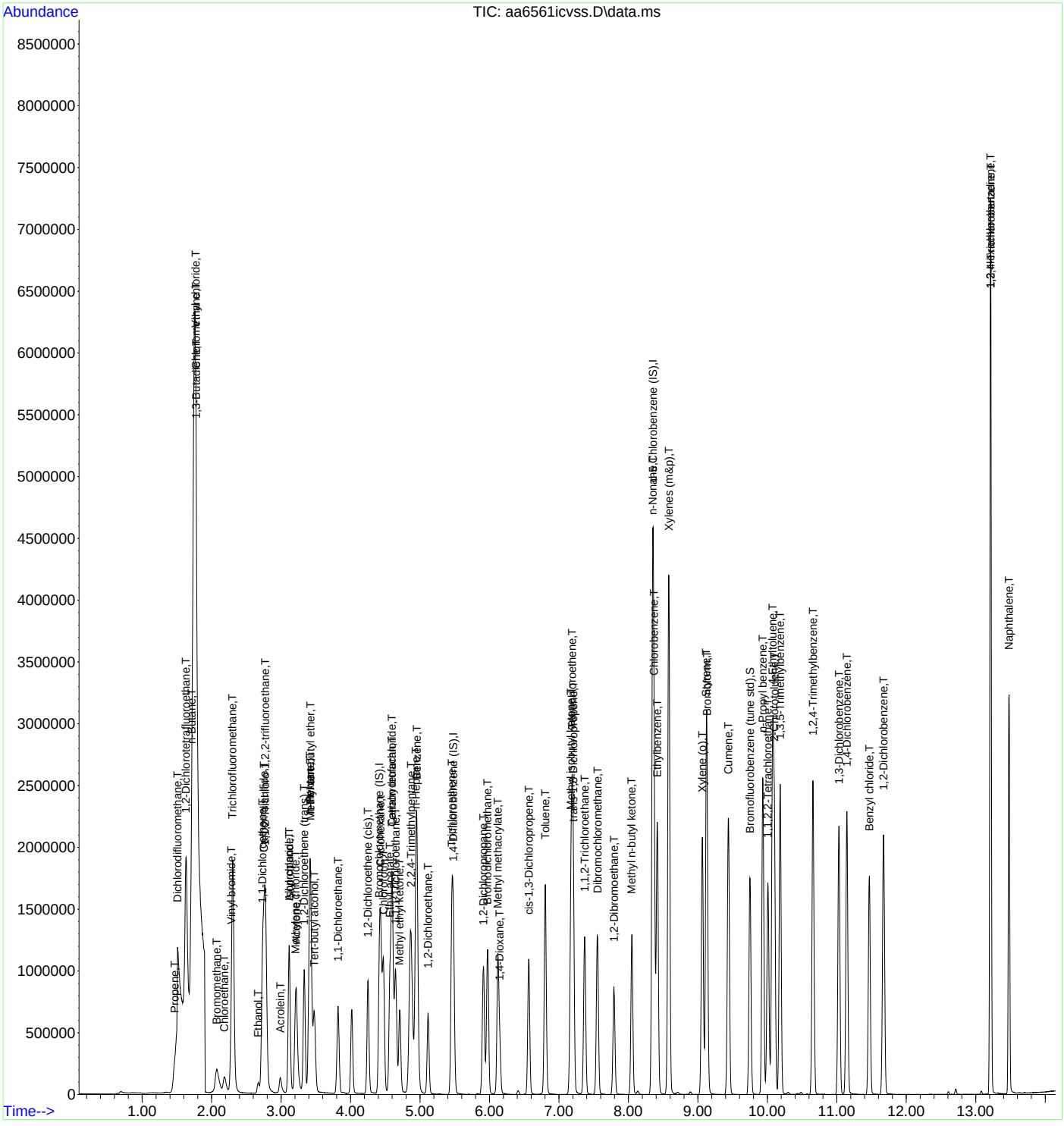
Quant Time: May 30 10:48:22 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.557	129	811619	11.24	ppbV	99
53) 1,2-Dibromoethane	7.792	107	711438	10.96	ppbV	99
54) Methyl n-butyl ketone	8.046	43	1023608	11.40	ppbV	99
56) n-Nonane	8.348	43	1174365	10.79	ppbV	99
57) Chlorobenzene	8.370	112	1046381	10.85	ppbV	98
58) Ethylbenzene	8.415	91	1949323	10.62	ppbV	100
59) Xylenes (m&p)	8.583	91	2965697	21.50	ppbV	100
60) Xylene (o)	9.065	91	1532788	10.55	ppbV	98
61) Styrene	9.120	104	1086762	11.25	ppbV	99
62) Bromoform	9.132	173	716125	11.05	ppbV	99
63) Cumene	9.441	105	1884946	10.17	ppbV	99
65) n-Propyl benzene	9.933	91	2546280	9.99	ppbV	100
66) 1,1,2,2-Tetrachloroethane	10.007	83	1152044	10.78	ppbV	100
67) 4-Ethyltoluene	10.075	105	2119259	10.20	ppbV	100
68) 2-Chlorotoluene	10.100	91	1763579	10.20	ppbV	99
69) 1,3,5-Trimethylbenzene	10.184	105	1734824	10.27	ppbV	100
70) 1,2,4-Trimethylbenzene	10.657	105	1736724	10.25	ppbV	99
71) 1,3-Dichlorobenzene	11.033	146	1033640	10.05	ppbV	100
72) 1,4-Dichlorobenzene	11.145	146	1041591	10.01	ppbV	99
73) Benzyl chloride	11.470	91	1613519	9.65	ppbV	100
74) 1,2-Dichlorobenzene	11.673	146	1002672	10.13	ppbV	100
75) 1,3-Hexachlorobutadiene	13.213	225	596173	10.47	ppbV	100
76) 1,2,4-Trichlorobenzene	13.216	180	806032	10.51	ppbV	100
77) Naphthalene	13.480	128	1971102	9.09	ppbV	100

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

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6561icvss.D
Acq On : 29 May 2024 5:16 pm
Operator : jjw
Sample : 10 ppbv icvss
Misc : EB0116272
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 30 10:48:22 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES, LLC

Continuing Calibration Data Summary Report

Initial Calibration Curve: 3/27/2024
Instrument: AA
Amount of standard injected (ml): 50

Date/Time of Calibration: 5/21/2024 11:12
Sample ID: DCS
Laboratory ID: AA6540DCVS

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6539BFB]	05/21/2024 09:54
10 PPBV DCVS [AA6540DCVS]	05/21/2024 11:12
10 PPBV LCS [AA6541LCS]	05/21/2024 11:47
METHOD BLANK [AA6542BLK]	05/21/2024 12:15
02 PPBV RLLCS [AA6543RLLCS]	05/21/2024 12:50
CLEAN CAN CERTIFICATION, BATCH MASTER 3052 [AA6544]	05/21/2024 15:02
CLEAN CAN CERTIFICATION, BATCH MASTER 3100 [AA6545]	05/21/2024 15:33
CLEAN CAN CERTIFICATION, BATCH MASTER 1571 [AA6546]	05/21/2024 16:03
10 PPBV CCCVS [AA6552CCCVS]	05/21/2024 19:21

Compound Name	Average RRF	Standard RRF	% Difference	PassFail	*
Acetone	2.2	2.4	-5.6	PASS	
Benzene	4.2	4.5	-6.3	PASS	
Bromodichloromethane	0.70	0.73	-4.3	PASS	
Bromoform	0.61	0.67	-9.8	PASS	
Bromomethane	0.90	1.1	-28	PASS	
1,3-Butadiene	1.4	1.3	11	PASS	
Chlorobenzene	0.96	0.99	-2.3	PASS	
Chloroethane	0.69	0.81	-18	PASS	
Chloroform	2.8	3.3	-17	PASS	
Chloromethane	0.16	0.20	-24	PASS	
Carbon disulfide	3.6	4.5	-25	PASS	
Carbon tetrachloride	2.9	3.1	-8.2	PASS	
Cyclohexane	2.7	2.5	6.3	PASS	
Dibromochloromethane	0.65	0.69	-5.4	PASS	
1,2-Dibromoethane	0.61	0.62	-1.8	PASS	
1,2-Dichlorobenzene	0.92	0.97	-5.3	PASS	
1,3-Dichlorobenzene	0.93	0.97	-4.5	PASS	
1,4-Dichlorobenzene	0.94	1.0	-8.3	PASS	
Dichlorodifluoromethane	2.5	2.9	-16	PASS	
1,1-Dichloroethane	2.7	2.9	-8.5	PASS	
1,2-Dichloroethane	1.9	2.1	-10	PASS	
1,1-Dichloroethene	2.3	2.8	-21	PASS	
1,2-Dichloroethene (cis)	1.9	2.2	-13	PASS	
1,2-Dichloroethene (trans)	2.0	2.4	-20	PASS	
1,2-Dichloropropane	0.44	0.42	3.7	PASS	
1,3-Dichloropropene (cis)	0.62	0.62	-0.20	PASS	
1,3-Dichloropropene (trans)	0.59	0.61	-3.7	PASS	
1,2-Dichlorotetrafluoroethane	3.6	3.9	-7.9	PASS	
1,4-Dioxane	0.23	0.24	-0.90	PASS	
Ethylbenzene	1.9	1.8	4.3	PASS	
n-Heptane	3.5	3.0	14	PASS	
1,3-Hexachlorobutadiene	0.50	0.56	-12	PASS	
n-Hexane	4.0	3.9	4.1	PASS	
Methylene chloride	1.6	1.8	-8.2	PASS	
Methyl ethyl ketone	3.3	3.2	2.8	PASS	
Methyl isobutyl ketone	1.2	0.94	19	PASS	
Methyl tert-butyl ether	4.5	4.4	3.6	PASS	
Styrene	0.99	1.00	-0.80	PASS	
Tert-butyl alcohol	3.2	3.1	4.4	PASS	
1,1,2,2-Tetrachloroethane	1.1	1.1	5.6	PASS	
Tetrachloroethene	0.45	0.46	-4.3	PASS	

***%Difference must be within +/- 30%**
RRF - Relative Response Factor

INTEGRATED ANALYTICAL LABORATORIES, LLC

Continuing Calibration Data Summary Report

Initial Calibration Curve:	**3/27/2024**	**Date/Time of Calibration:**	**5/21/2024 11:12**
Instrument:	**AA**	**Sample ID:**	**DCS**
Amount of standard injected (ml):	**50**	**Laboratory ID:**	**AA6540DCVS**

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6539BFB]	05/21/2024 09:54
10 PPBV DCVS [AA6540DCVS]	05/21/2024 11:12
10 PPBV LCS [AA6541LCS]	05/21/2024 11:47
METHOD BLANK [AA6542BLK]	05/21/2024 12:15
02 PPBV RLLCS [AA6543RLLCS]	05/21/2024 12:50
CLEAN CAN CERTIFICATION, BATCH MASTER 3052 [AA6544]	05/21/2024 15:02
CLEAN CAN CERTIFICATION, BATCH MASTER 3100 [AA6545]	05/21/2024 15:33
CLEAN CAN CERTIFICATION, BATCH MASTER 1571 [AA6546]	05/21/2024 16:03
10 PPBV CCCVS [AA6552CCCVS]	05/21/2024 19:21

Compound Name	Average RRF	Standard RRF	% Difference	PassFail	*
Toluene	1.3	1.3	2.3	PASS	
1,2,4-Trichlorobenzene	0.68	0.75	-10	PASS	
1,1,1-Trichloroethane	2.7	2.9	-6.2	PASS	
1,1,2-Trichloroethane	0.43	0.43	-0.50	PASS	
Trichloroethene	0.40	0.45	-12	PASS	
Trichlorofluoromethane	2.9	3.3	-13	PASS	
1,1,2-Trichloro-1,2,2-trifluoroethane	2.9	2.9	-1.3	PASS	
1,2,4-Trimethylbenzene	1.7	1.7	0.50	PASS	
1,3,5-Trimethylbenzene	1.7	1.7	1.4	PASS	
2,2,4-Trimethylpentane	1.9	1.9	4.3	PASS	
Vinyl bromide	1.0	1.3	-28	PASS	
Vinyl chloride	1.2	1.4	-13	PASS	
Xylenes (m&p)	1.4	1.4	3.1	PASS	
Xylenes (o)	1.5	1.5	5.0	PASS	

***%Difference must be within +/- 30%**
RRF - Relative Response Factor

Data Path : C:\DATA\2024\05-2024\05-21-2024\
Data File : aa6540dcvs.D
Acq On : 21 May 2024 11:12 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 21 11:34:22 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 0% Max. R.T. Dev 0.40min
Max. RRF Dev : 30% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane (IS)	1.000	1.000	0.0	67	0.00
2	T	Propene	1.121	1.112	0.8	69	0.00
3	T	Dichlorodifluoromethane	2.514	2.904	-15.5	77	0.00
4	T	1,2-Dichlorotetrafluoroetha	3.629	3.914	-7.9	81	0.00
5	T	n-Butane	2.475	2.251	9.1	69	0.00
6	T	Chloromethane	0.162	0.200	-23.5	88	0.00
7	T	Vinyl chloride	1.245	1.401	-12.5	73	0.00
8	T	1,3-Butadiene	1.416	1.256	11.3	67	0.00
9	T	Bromomethane	0.898	1.145	-27.5	80	0.00
10	T	Chloroethane	0.686	0.809	-17.9	78	0.00
11	T	Vinyl bromide	1.034	1.327	-28.3	83	0.00
12	T	Trichlorofluoromethane	2.936	3.323	-13.2	84	0.00
13	T	Ethanol	0.459	0.418	8.9	67	0.00
14	T	1,1-Dichloroethene	2.277	2.754	-20.9	79	0.00
15	T	Carbon disulfide	3.615	4.527	-25.2	81	0.00
16	T	1,1,2-Trichloro-1,2,2-trifl	2.904	2.941	-1.3	79	0.00
17	T	Acrolein	0.546	0.590	-8.1	75	0.00
18	T	Allyl chloride	0.567	0.696	-22.8	81	0.00
19	T	Isopropanol	2.904	2.949	-1.5	71	0.00
20	T	Methylene chloride	1.620	1.753	-8.2	75	0.00
21	T	Acetone	2.237	2.363	-5.6	73	0.00
22	T	1,2-Dichloroethene (trans)	1.992	2.385	-19.7	80	0.00
23	T	n-Pentane	2.808	2.667	5.0	71	0.00
24	T	n-Hexane	4.026	3.861	4.1	75	0.00
25	T	Methyl tert-butyl ether	4.521	4.359	3.6	73	0.00
26	T	Tert-butyl alcohol	3.193	3.052	4.4	73	0.00
27	T	1,1-Dichloroethane	2.674	2.901	-8.5	80	0.00
28	T	1,2-Dichloroethene (cis)	1.918	2.173	-13.3	79	0.00
29	t	Cyclohexane	2.721	2.549	6.3	72	0.00
30	T	Chloroform	2.788	3.250	-16.6	84	0.00
31	T	Ethyl acetate	0.576	0.561	2.6	72	0.00
32	T	Carbon tetrachloride	2.853	3.088	-8.2	81	0.00
33	T	Tetrahydrofuran	2.095	2.063	1.5	73	0.00
34	T	1,1,1-Trichloroethane	2.692	2.859	-6.2	79	0.00
35	T	Methyl ethyl ketone	3.342	3.249	2.8	73	0.00
36	T	n-Heptane	3.491	3.011	13.7	68	0.00
37	T	Benzene	4.195	4.460	-6.3	82	0.00
38	T	1,2-Dichloroethane	1.903	2.094	-10.0	79	0.00
39	I	1,4-Difluorobenzene (IS)	1.000	1.000	0.0	74	0.00
40	T	Trichloroethene	0.399	0.445	-11.5	86	0.00
41	T	2,2,4-Trimethylpentane	1.939	1.855	4.3	70	0.00
42	T	1,2-Dichloropropane	0.437	0.421	3.7	75	0.00
43	T	Bromodichloromethane	0.696	0.726	-4.3	81	0.00
44	T	Methyl methacrylate	0.620	0.531	14.4	68	0.00
45	T	1,4-Dioxane	0.234	0.236	-0.9	79	0.00
46	T	cis-1,3-Dichloropropene	0.617	0.618	-0.2	78	0.00
47	T	Toluene	1.289	1.259	2.3	76	0.00
48	T	Methyl isobutyl ketone	1.152	0.939	18.5	64	0.00
49	T	Tetrachloroethene	0.445	0.464	-4.3	80	0.00
50	T	trans-1,3-Dichloropropene	0.587	0.609	-3.7	77	0.00
51	T	1,1,2-Trichloroethane	0.426	0.428	-0.5	78	0.00
52	T	Dibromochloromethane	0.653	0.688	-5.4	81	0.00
53	T	1,2-Dibromoethane	0.605	0.616	-1.8	77	0.00

Data Path : C:\DATA\2024\05-2024\05-21-2024\
Data File : aa6540dcvs.D
Acq On : 21 May 2024 11:12 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 21 11:34:22 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 0% Max. R.T. Dev 0.40min
Max. RRF Dev : 30% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
54	T	Methyl n-butyl ketone	1.033	0.855	17.2	64	0.00
55	I	d-5 Chlorobenzene (IS)	1.000	1.000	0.0	73	0.00
56	T	n-Nonane	1.387	1.137	18.0	61	0.00
57	T	Chlorobenzene	0.964	0.986	-2.3	76	0.00
58	T	Ethylbenzene	1.919	1.837	4.3	72	0.00
59	T	Xylenes (m&p)	1.441	1.396	3.1	72	0.00
60	T	Xylene (o)	1.529	1.452	5.0	71	0.00
61	T	Styrene	0.991	0.999	-0.8	72	0.00
62	T	Bromoform	0.614	0.674	-9.8	79	0.00
63	T	Cumene	1.927	1.850	4.0	71	0.00
64	S	Bromofluorobenzene (tune st	0.897	0.856	4.6	69	0.00
65	T	n-Propyl benzene	2.610	2.501	4.2	71	0.00
66	T	1,1,2,2-Tetrachloroethane	1.133	1.070	5.6	71	0.00
67	T	4-Ethyltoluene	2.075	2.039	1.7	72	0.00
68	T	2-Chlorotoluene	1.767	1.707	3.4	72	0.00
69	T	1,3,5-Trimethylbenzene	1.709	1.685	1.4	72	0.00
70	T	1,2,4-Trimethylbenzene	1.694	1.686	0.5	72	0.00
71	T	1,3-Dichlorobenzene	0.928	0.970	-4.5	76	0.00
72	T	1,4-Dichlorobenzene	0.941	1.019	-8.3	77	0.00
73	T	Benzyl chloride	1.574	1.689	-7.3	74	0.00
74	T	1,2-Dichlorobenzene	0.921	0.970	-5.3	75	0.00
75	T	1,3-Hexachlorobutadiene	0.500	0.558	-11.6	78	0.00
76	T	1,2,4-Trichlorobenzene	0.683	0.751	-10.0	78	0.00
77	T	Naphthalene	1.897	2.035	-7.3	77	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data Path : C:\DATA\2024\05-2024\05-21-2024\
Data File : aa6540dcvs.D
Acq On : 21 May 2024 11:12 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 21 11:34:22 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.410	130	273918	10.00	ppbV		0.000
39) 1,4-Difluorobenzene (IS)	5.478	114	1142431	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.349	117	1026686	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.747	95	878703	9.54	ppbV		0.000
Target Compounds							Qvalue
2) Propene	1.468	41	331937	10.81	ppbV		98
3) Dichlorodifluoromethane	1.506	85	843099	12.24	ppbV		100
4) 1,2-Dichlorotetrafluor...	1.630	85	1050667	10.57	ppbV		99
5) n-Butane	1.706	43	672125	9.91	ppbV		99
6) Chloromethane	1.771	52	61326	13.82	ppbV	#	1
7) Vinyl chloride	1.771	62	414393	12.15	ppbV		98
8) 1,3-Butadiene	1.775	39	368161	9.50	ppbV		96
9) Bromomethane	2.073	94	313566	12.75	ppbV		99
10) Chloroethane	2.182	64	234770	12.49	ppbV		100
11) Vinyl bromide	2.288	106	367074	12.96	ppbV		100
12) Trichlorofluoromethane	2.301	101	1001248	12.45	ppbV		99
13) Ethanol	2.667	45	119104	9.48	ppbV		98
14) 1,1-Dichloroethene	2.728	61	784523	12.58	ppbV		96
15) Carbon disulfide	2.748	76	1326851	13.40	ppbV		96
16) 1,1,2-Trichloro-1,2,2-...	2.770	101	878037	11.04	ppbV		99
17) Acrolein	2.986	56	161575	10.81	ppbV		99
18) Allyl chloride	3.114	76	205996	13.25	ppbV		100
19) Isopropanol	3.118	45	718982	9.04	ppbV		99
20) Methylene chloride	3.208	49	518496	11.68	ppbV		92
21) Acetone	3.217	43	698970	11.41	ppbV		98
22) 1,2-Dichloroethene (tr...	3.333	61	725190	13.29	ppbV		95
23) n-Pentane	3.417	43	788949	10.26	ppbV		99
24) n-Hexane	3.413	57	1163339	10.55	ppbV		96
25) Methyl tert-butyl ether	3.417	73	1337385	10.80	ppbV		98
26) Tert-butyl alcohol	3.474	59	961358	10.99	ppbV		100
27) 1,1-Dichloroethane	3.818	63	850187	11.61	ppbV		100
28) 1,2-Dichloroethene (cis)	4.249	61	648812	12.35	ppbV		95
29) Cyclohexane	4.429	56	782126	10.49	ppbV		94
30) Chloroform	4.471	83	961595	12.59	ppbV		98
31) Ethyl acetate	4.564	45	166008	10.53	ppbV		95
32) Carbon tetrachloride	4.593	117	930342	11.90	ppbV		99
33) Tetrahydrofuran	4.597	42	621577	10.83	ppbV		95
34) 1,1,1-Trichloroethane	4.645	97	853538	11.57	ppbV		100
35) Methyl ethyl ketone	4.706	43	978911	10.69	ppbV		96
36) n-Heptane	4.941	43	915642	9.58	ppbV		94
37) Benzene	4.953	78	1319454	11.48	ppbV		97
38) 1,2-Dichloroethane	5.114	62	625225	11.99	ppbV		100
40) Trichloroethene	5.458	130	508680	11.16	ppbV		98
41) 2,2,4-Trimethylpentane	4.867	57	2310261	10.43	ppbV		100
42) 1,2-Dichloropropane	5.912	63	529452	10.60	ppbV		98
43) Bromodichloromethane	5.973	83	953816	12.00	ppbV		100
44) Methyl methacrylate	6.117	41	667588	9.43	ppbV		94
45) 1,4-Dioxane	6.143	88	315925	11.81	ppbV		94
46) cis-1,3-Dichloropropene	6.564	75	784300	11.12	ppbV		100
47) Toluene	6.802	91	1553791	10.56	ppbV		99
48) Methyl isobutyl ketone	7.169	43	1169026	8.88	ppbV		96
49) Tetrachloroethene	7.188	166	593574	11.68	ppbV		99
50) trans-1,3-Dichloropropene	7.207	75	772725	11.51	ppbV		92
51) 1,1,2-Trichloroethane	7.368	97	527612	10.84	ppbV		98

Data Path : C:\DATA\2024\05-2024\05-21-2024\
Data File : aa6540dcvs.D
Acq On : 21 May 2024 11:12 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

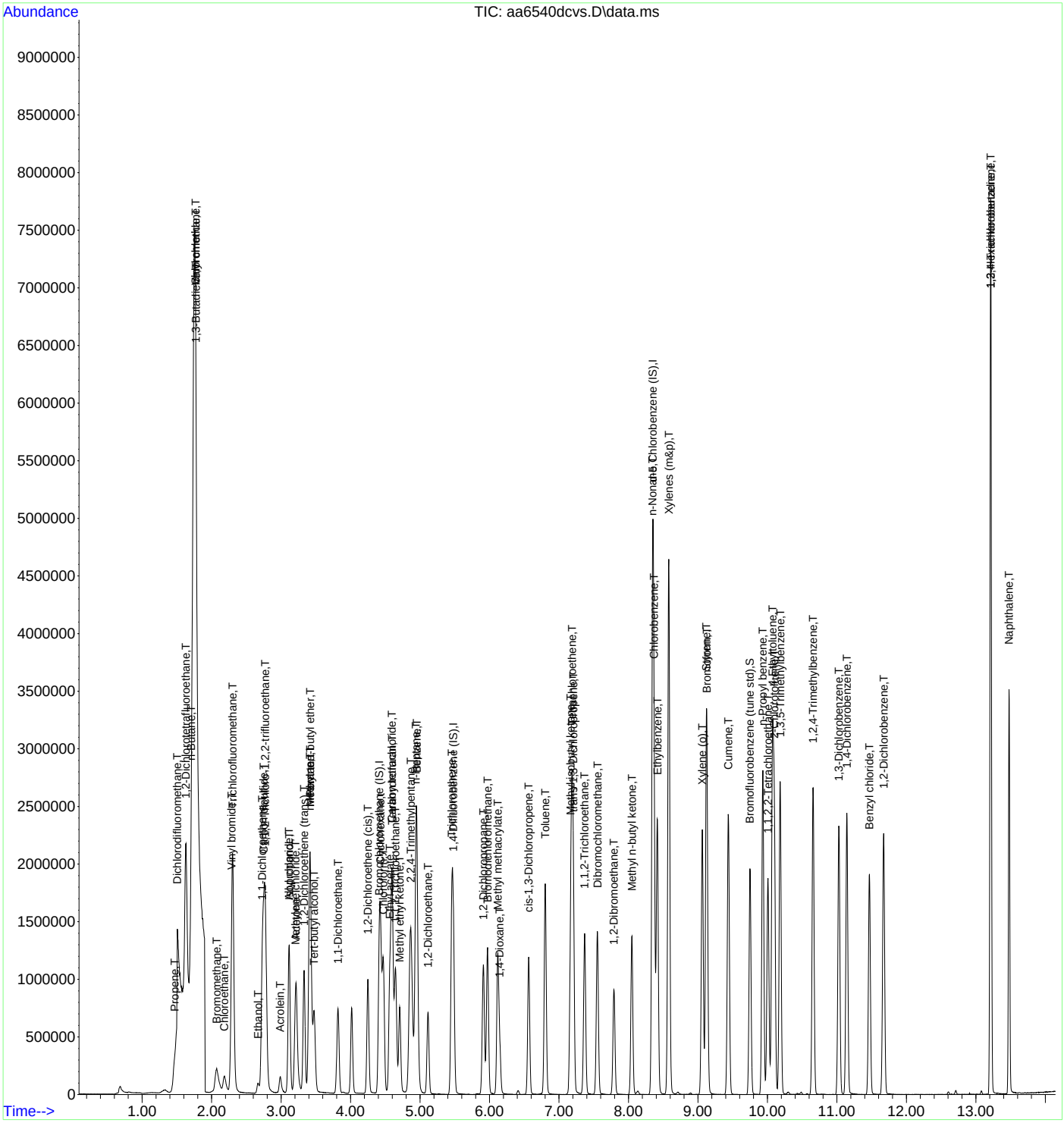
Quant Time: May 21 11:34:22 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.555	129	880308	11.81	ppbV	100
53) 1,2-Dibromoethane	7.789	107	759569	10.99	ppbV	99
54) Methyl n-butyl ketone	8.050	43	1103388	9.35	ppbV	97
56) n-Nonane	8.346	43	1284240	9.02	ppbV	95
57) Chlorobenzene	8.368	112	1123733	11.36	ppbV	96
58) Ethylbenzene	8.416	91	2093713	10.63	ppbV	99
59) Xylenes (m&p)	8.580	91	3195970	21.60	ppbV	99
60) Xylene (o)	9.063	91	1640299	10.45	ppbV	99
61) Styrene	9.120	104	1159045	11.39	ppbV	99
62) Bromoform	9.130	173	782343	12.42	ppbV	100
63) Cumene	9.436	105	2032404	10.27	ppbV	100
65) n-Propyl benzene	9.934	91	2773361	10.35	ppbV	99
66) 1,1,2,2-Tetrachloroethane	10.008	83	1252922	10.77	ppbV	100
67) 4-Ethyltoluene	10.072	105	2261130	10.61	ppbV	99
68) 2-Chlorotoluene	10.098	91	1910503	10.53	ppbV	99
69) 1,3,5-Trimethylbenzene	10.185	105	1885756	10.75	ppbV	100
70) 1,2,4-Trimethylbenzene	10.657	105	1869046	10.75	ppbV	100
71) 1,3-Dichlorobenzene	11.027	146	1105211	11.60	ppbV	99
72) 1,4-Dichlorobenzene	11.143	146	1119628	11.59	ppbV	99
73) Benzyl chloride	11.468	91	1734077	10.73	ppbV	99
74) 1,2-Dichlorobenzene	11.673	146	1066029	11.28	ppbV	100
75) 1,3-Hexachlorobutadiene	13.214	225	635634	12.38	ppbV	100
76) 1,2,4-Trichlorobenzene	13.214	180	847973	12.10	ppbV	99
77) Naphthalene	13.477	128	2089396	10.73	ppbV	100

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

Data Path : C:\DATA\2024\05-2024\05-21-2024\
Data File : aa6540dcvs.D
Acq On : 21 May 2024 11:12 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 21 11:34:22 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES, LLC

Continuing Calibration Data Summary Report

Initial Calibration Curve: 5/29/2024
Instrument: AA
Amount of standard injected (ml): 50

Date/Time of Calibration: 7/15/2024 10:42
Sample ID: DCS
Laboratory ID: AA6876DCVS

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6875BFB]	07/15/2024 10:11
10 PPBV DCVS [AA6876DCVS]	07/15/2024 10:42
10 PPBV LCS [AA6877LCS]	07/15/2024 11:44
METHOD BLANK [AA6878BLK]	07/15/2024 13:01
E24-02398-02 [AA6881]	07/15/2024 15:15
E24-02398-01 [AA6884]	07/15/2024 17:02
E24-02398-21 [AA6885]	07/15/2024 17:34
E24-02398-01 [AA6886]	07/15/2024 18:05
E24-02398-02 [AA6888]	07/15/2024 19:05
E24-02398-03 [AA6890]	07/15/2024 20:06
E24-02398-03 [AA6891]	07/15/2024 20:38
E24-02398-04 [AA6893]	07/15/2024 21:39
E24-02398-04 [AA6894]	07/15/2024 22:11

Compound Name	Average RRF	Standard RRF	% Difference	PassFail	*
Acetone	2.2	2.0	10	PASS	
Benzene	4.6	5.0	-11	PASS	
Bromodichloromethane	0.72	0.77	-6.4	PASS	
Bromoform	0.70	0.65	6.2	PASS	
Bromomethane	1.0	1.1	-3.6	PASS	
1,3-Butadiene	1.2	1.1	7.3	PASS	
Chlorobenzene	1.0	0.95	7.9	PASS	
Chloroethane	0.75	0.81	-7.9	PASS	
Chloroform	3.2	3.7	-15	PASS	
Chloromethane	0.18	0.19	-4.5	PASS	
Carbon disulfide	4.2	4.5	-6.6	PASS	
Carbon tetrachloride	3.3	3.4	-3.2	PASS	
Cyclohexane	2.6	3.1	-22	PASS	
Dibromochloromethane	0.71	0.77	-9.8	PASS	
1,2-Dibromoethane	0.63	0.73	-15	PASS	
1,2-Dichlorobenzene	1.1	0.92	13	PASS	
1,3-Dichlorobenzene	1.1	0.95	15	PASS	
1,4-Dichlorobenzene	1.1	0.97	13	PASS	
Dichlorodifluoromethane	2.9	3.1	-7.4	PASS	
1,1-Dichloroethane	2.8	3.4	-20	PASS	
1,2-Dichloroethane	2.1	2.6	-25	PASS	
1,1-Dichloroethene	2.5	3.1	-20	PASS	
1,2-Dichloroethene (cis)	2.1	2.6	-25	PASS	
1,2-Dichloroethene (trans)	2.3	2.9	-26	PASS	
1,2-Dichloropropane	0.42	0.47	-14	PASS	
1,3-Dichloropropene (cis)	0.61	0.69	-12	PASS	
1,3-Dichloropropene (trans)	0.59	0.73	-24	PASS	
1,2-Dichlorotetrafluoroethane	4.0	4.0	0.00	PASS	
1,4-Dioxane	0.24	0.26	-12	PASS	
Ethylbenzene	2.0	1.9	1.8	PASS	
n-Heptane	3.0	3.1	-1.8	PASS	
1,3-Hexachlorobutadiene	0.61	0.44	29	PASS	
n-Hexane	3.8	4.7	-22	PASS	
Methylene chloride	1.8	2.0	-9.7	PASS	
Methyl ethyl ketone	3.2	3.9	-22	PASS	
Methyl isobutyl ketone	0.94	1.2	-27	PASS	
Methyl tert-butyl ether	4.6	5.2	-14	PASS	

***%Difference must be within +/- 30%**
RRF - Relative Response Factor

INTEGRATED ANALYTICAL LABORATORIES, LLC

Continuing Calibration Data Summary Report

Initial Calibration Curve:	**5/29/2024**	**Date/Time of Calibration:**	**7/15/2024 10:42**
Instrument:	**AA**	**Sample ID:**	**DCS**
Amount of standard injected (ml):	**50**	**Laboratory ID:**	**AA6876DCVS**

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6875BFB]	07/15/2024 10:11
10 PPBV DCVS [AA6876DCVS]	07/15/2024 10:42
10 PPBV LCS [AA6877LCS]	07/15/2024 11:44
METHOD BLANK [AA6878BLK]	07/15/2024 13:01
E24-02398-02 [AA6881]	07/15/2024 15:15
E24-02398-01 [AA6884]	07/15/2024 17:02
E24-02398-21 [AA6885]	07/15/2024 17:34
E24-02398-01 [AA6886]	07/15/2024 18:05
E24-02398-02 [AA6888]	07/15/2024 19:05
E24-02398-03 [AA6890]	07/15/2024 20:06
E24-02398-03 [AA6891]	07/15/2024 20:38
E24-02398-04 [AA6893]	07/15/2024 21:39
E24-02398-04 [AA6894]	07/15/2024 22:11

Compound Name	Average RRF	Standard RRF	% Difference	PassFail	*
Styrene	1.0	1.1	-3.4	PASS	
Tert-butyl alcohol	3.1	4.0	-28	PASS	
1,1,2,2-Tetrachloroethane	1.1	1.2	-0.50	PASS	
Tetrachloroethene	0.49	0.48	1.0	PASS	
Toluene	1.3	1.4	-12	PASS	
1,2,4-Trichlorobenzene	0.82	0.62	25	PASS	
1,1,1-Trichloroethane	3.0	3.2	-7.6	PASS	
1,1,2-Trichloroethane	0.44	0.48	-9.3	PASS	
Trichloroethene	0.45	0.40	11	PASS	
Trichlorofluoromethane	3.3	3.7	-12	PASS	
1,1,2-Trichloro-1,2,2-trifluoroethane	3.1	3.1	-0.20	PASS	
1,2,4-Trimethylbenzene	1.8	1.7	4.1	PASS	
1,3,5-Trimethylbenzene	1.8	1.7	7.0	PASS	
2,2,4-Trimethylpentane	1.8	1.7	3.9	PASS	
Vinyl bromide	1.2	1.2	1.1	PASS	
Vinyl chloride	1.3	1.5	-14	PASS	
Xylenes (m&p)	1.5	1.5	-0.80	PASS	
Xylenes (o)	1.6	1.5	5.0	PASS	

***%Difference must be within +/- 30%**
RRF - Relative Response Factor

Data Path : C:\DATA\2024\07-2024\07-15-2024\
Data File : aa6876dcvs.D
Acq On : 15 Jul 2024 10:42 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 15 12:27:36 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 0% Max. R.T. Dev 0.40min
Max. RRF Dev : 30% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane (IS)	1.000	1.000	0.0	96	0.00
2	T	Propene	1.050	1.121	-6.8	104	0.02
3	T	Dichlorodifluoromethane	2.863	3.074	-7.4	99	0.02
4	T	1,2-Dichlorotetrafluoroetha	4.013	4.014	-0.0	96	0.03
5	T	n-Butane	2.168	2.711	-25.0	122	0.03
6	T	Chloromethane	0.178	0.186	-4.5	89	0.02
7	T	Vinyl chloride	1.318	1.498	-13.7	104	0.02
8	T	1,3-Butadiene	1.222	1.133	7.3	88	0.02
9	T	Bromomethane	1.030	1.067	-3.6	93	0.03
10	T	Chloroethane	0.749	0.808	-7.9	98	0.03
11	T	Vinyl bromide	1.249	1.235	1.1	87	0.02
12	T	Trichlorofluoromethane	3.297	3.692	-12.0	105	0.02
13	T	Ethanol	0.515	0.622	-20.8	136	0.03
14	T	1,1-Dichloroethene	2.537	3.051	-20.3	109	0.02
15	T	Carbon disulfide	4.226	4.503	-6.6	97	0.02
16	T	1,1,2-Trichloro-1,2,2-trifl	3.115	3.120	-0.2	100	0.03
17	T	Acrolein	0.564	0.683	-21.1	114	0.02
18	T	Allyl chloride	0.649	0.784	-20.8	106	0.02
19	T	Isopropanol	2.821	2.710	3.9	90	0.02
20	T	Methylene chloride	1.807	1.982	-9.7	112	0.02
21	T	Acetone	2.244	2.016	10.2	86	0.02
22	T	1,2-Dichloroethene (trans)	2.294	2.889	-25.9	118	0.02
23	T	n-Pentane	2.741	3.276	-19.5	122	0.01
24	T	n-Hexane	3.840	4.687	-22.1	119	0.02
25	T	Methyl tert-butyl ether	4.580	5.220	-14.0	114	0.02
26	T	Tert-butyl alcohol	3.130	4.007	-28.0	127	0.02
27	T	1,1-Dichloroethane	2.847	3.426	-20.3	114	0.02
28	T	1,2-Dichloroethene (cis)	2.066	2.574	-24.6	115	0.02
29	t	Cyclohexane	2.564	3.135	-22.3	121	0.00
30	T	Chloroform	3.193	3.663	-14.7	107	0.00
31	T	Ethyl acetate	0.544	0.706	-29.8	126	0.00
32	T	Carbon tetrachloride	3.258	3.362	-3.2	100	0.00
33	T	Tetrahydrofuran	1.920	2.052	-6.9	100	0.00
34	T	1,1,1-Trichloroethane	3.007	3.237	-7.6	106	0.00
35	T	Methyl ethyl ketone	3.180	3.871	-21.7	118	0.00
36	T	n-Heptane	3.007	3.062	-1.8	103	0.00
37	T	Benzene	4.553	5.041	-10.7	106	0.00
38	T	1,2-Dichloroethane	2.083	2.604	-25.0	118	0.00
39	I	1,4-Difluorobenzene (IS)	1.000	1.000	0.0	112	0.00
40	T	Trichloroethene	0.452	0.403	10.8	96	0.00
41	T	2,2,4-Trimethylpentane	1.781	1.712	3.9	104	0.00
42	T	1,2-Dichloropropane	0.415	0.473	-14.0	127	0.00
43	T	Bromodichloromethane	0.723	0.769	-6.4	115	0.00
44	T	Methyl methacrylate	0.518	0.625	-20.7	137	0.00
45	T	1,4-Dioxane	0.236	0.264	-11.9	124	0.00
46	T	cis-1,3-Dichloropropene	0.613	0.689	-12.4	123	0.00
47	T	Toluene	1.280	1.439	-12.4	125	0.00
48	T	Methyl isobutyl ketone	0.936	1.189	-27.0	147	0.00
49	T	Tetrachloroethene	0.485	0.480	1.0	109	0.00
50	T	trans-1,3-Dichloropropene	0.589	0.732	-24.3	133	0.00
51	T	1,1,2-Trichloroethane	0.442	0.483	-9.3	123	0.00
52	T	Dibromochloromethane	0.705	0.774	-9.8	120	0.00
53	T	1,2-Dibromoethane	0.634	0.729	-15.0	127	0.00

Data Path : C:\DATA\2024\07-2024\07-15-2024\
Data File : aa6876dcvs.D
Acq On : 15 Jul 2024 10:42 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 15 12:27:36 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 0% Max. R.T. Dev 0.40min
Max. RRF Dev : 30% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
54	T	Methyl n-butyl ketone	0.877	0.722	17.7	97	0.00
55	I	d-5 Chlorobenzene (IS)	1.000	1.000	0.0	136	0.00
56	T	n-Nonane	1.169	1.481	-26.7	188	0.00
57	T	Chlorobenzene	1.036	0.954	7.9	129	0.00
58	T	Ethylbenzene	1.971	1.936	1.8	144	0.00
59	T	Xylenes (m&p)	1.482	1.494	-0.8	145	0.00
60	T	Xylene (o)	1.560	1.482	5.0	139	0.00
61	T	Styrene	1.037	1.072	-3.4	144	0.00
62	T	Bromoform	0.696	0.653	6.2	129	0.00
63	T	Cumene	1.990	1.937	2.7	141	0.00
64	S	Bromofluorobenzene (tune st	0.946	1.080	-14.2	171	0.00
65	T	n-Propyl benzene	2.737	2.893	-5.7	158	0.00
66	T	1,1,2,2-Tetrachloroethane	1.149	1.155	-0.5	148	0.00
67	T	4-Ethyltoluene	2.232	2.305	-3.3	152	0.00
68	T	2-Chlorotoluene	1.857	1.895	-2.0	152	0.00
69	T	1,3,5-Trimethylbenzene	1.815	1.688	7.0	136	0.00
70	T	1,2,4-Trimethylbenzene	1.821	1.747	4.1	140	0.00
71	T	1,3-Dichlorobenzene	1.105	0.945	14.5	130	0.00
72	T	1,4-Dichlorobenzene	1.117	0.972	13.0	128	0.00
73	T	Benzyl chloride	1.797	1.991	-10.8	161	0.00
74	T	1,2-Dichlorobenzene	1.063	0.922	13.3	126	0.00
75	T	1,3-Hexachlorobutadiene	0.612	0.437	28.6	102	0.00
76	T	1,2,4-Trichlorobenzene	0.824	0.618	25.0	107	0.00
77	T	Naphthalene	2.329	1.841	21.0	118	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data Path : C:\DATA\2024\07-2024\07-15-2024\
Data File : aa6876dcvs.D
Acq On : 15 Jul 2024 10:42 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 15 12:27:36 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.425	130	231182	10.00	ppbV		0.000
39) 1,4-Difluorobenzene (IS)	5.490	114	1133819	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.354	117	1270661	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.750	95	1372489	11.42	ppbV		0.000
Target Compounds							Qvalue
2) Propene	1.496	41	282454	11.64	ppbV		100
3) Dichlorodifluoromethane	1.533	85	753320	11.38	ppbV		100
4) 1,2-Dichlorotetrafluor...	1.657	85	909422	9.80	ppbV		92
5) n-Butane	1.736	43	683081	13.63	ppbV		98
6) Chloromethane	1.798	52	48161	11.67	ppbV	#	1
7) Vinyl chloride	1.794	62	373913	12.27	ppbV		99
8) 1,3-Butadiene	1.801	39	280350	9.93	ppbV		97
9) Bromomethane	2.097	94	246728	10.36	ppbV		98
10) Chloroethane	2.213	64	198026	11.43	ppbV		99
11) Vinyl bromide	2.310	106	288479	9.99	ppbV		99
12) Trichlorofluoromethane	2.326	101	938971	12.32	ppbV		100
13) Ethanol	2.695	45	149538	12.57	ppbV		100
14) 1,1-Dichloroethene	2.750	61	733485	12.51	ppbV		90
15) Carbon disulfide	2.769	76	1113765	11.40	ppbV		93
16) 1,1,2-Trichloro-1,2,2-...	2.795	101	786196	10.92	ppbV		93
17) Acrolein	3.011	56	157814	12.09	ppbV		98
18) Allyl chloride	3.133	76	195644	13.04	ppbV		100
19) Isopropanol	3.136	45	557619	8.55	ppbV		98
20) Methylene chloride	3.226	49	494854	11.85	ppbV		87
21) Acetone	3.239	43	503373	9.70	ppbV		95
22) 1,2-Dichloroethene (tr...	3.351	61	741461	13.98	ppbV		90
23) n-Pentane	3.432	43	817853	12.91	ppbV		99
24) n-Hexane	3.432	57	1191848	13.42	ppbV		90
25) Methyl tert-butyl ether	3.438	73	1351522	12.76	ppbV		96
26) Tert-butyl alcohol	3.493	59	1065325	14.72	ppbV		100
27) 1,1-Dichloroethane	3.837	63	847420	12.88	ppbV		99
28) 1,2-Dichloroethene (cis)	4.265	61	648603	13.58	ppbV		90
29) Cyclohexane	4.441	56	811669	13.70	ppbV		90
30) Chloroform	4.483	83	914511	12.39	ppbV		99
31) Ethyl acetate	4.573	45	176274	14.02	ppbV		92
32) Carbon tetrachloride	4.605	117	854954	11.35	ppbV		99
33) Tetrahydrofuran	4.609	42	521934	11.76	ppbV	#	86
34) 1,1,1-Trichloroethane	4.657	97	815599	11.73	ppbV		99
35) Methyl ethyl ketone	4.718	43	984288	13.39	ppbV		91
36) n-Heptane	4.949	43	785705	11.30	ppbV		96
37) Benzene	4.965	78	1258680	11.96	ppbV		94
38) 1,2-Dichloroethane	5.123	62	656180	13.63	ppbV		100
40) Trichloroethene	5.464	130	456903	8.91	ppbV		100
41) 2,2,4-Trimethylpentane	4.875	57	2116284	10.48	ppbV		100
42) 1,2-Dichloropropane	5.917	63	590504	12.55	ppbV		100
43) Bromodichloromethane	5.978	83	1003293	12.25	ppbV		100
44) Methyl methacrylate	6.123	41	779319	13.26	ppbV		87
45) 1,4-Dioxane	6.152	88	350858	13.11	ppbV		88
46) cis-1,3-Dichloropropene	6.567	75	866820	12.47	ppbV		99
47) Toluene	6.808	91	1762040	12.14	ppbV		99
48) Methyl isobutyl ketone	7.174	43	1469860	13.85	ppbV		94
49) Tetrachloroethene	7.194	166	610119	11.10	ppbV		100
50) trans-1,3-Dichloropropene	7.210	75	920624	13.77	ppbV		88
51) 1,1,2-Trichloroethane	7.374	97	591818	11.80	ppbV		96

Data Path : C:\DATA\2024\07-2024\07-15-2024\
Data File : aa6876dcvs.D
Acq On : 15 Jul 2024 10:42 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

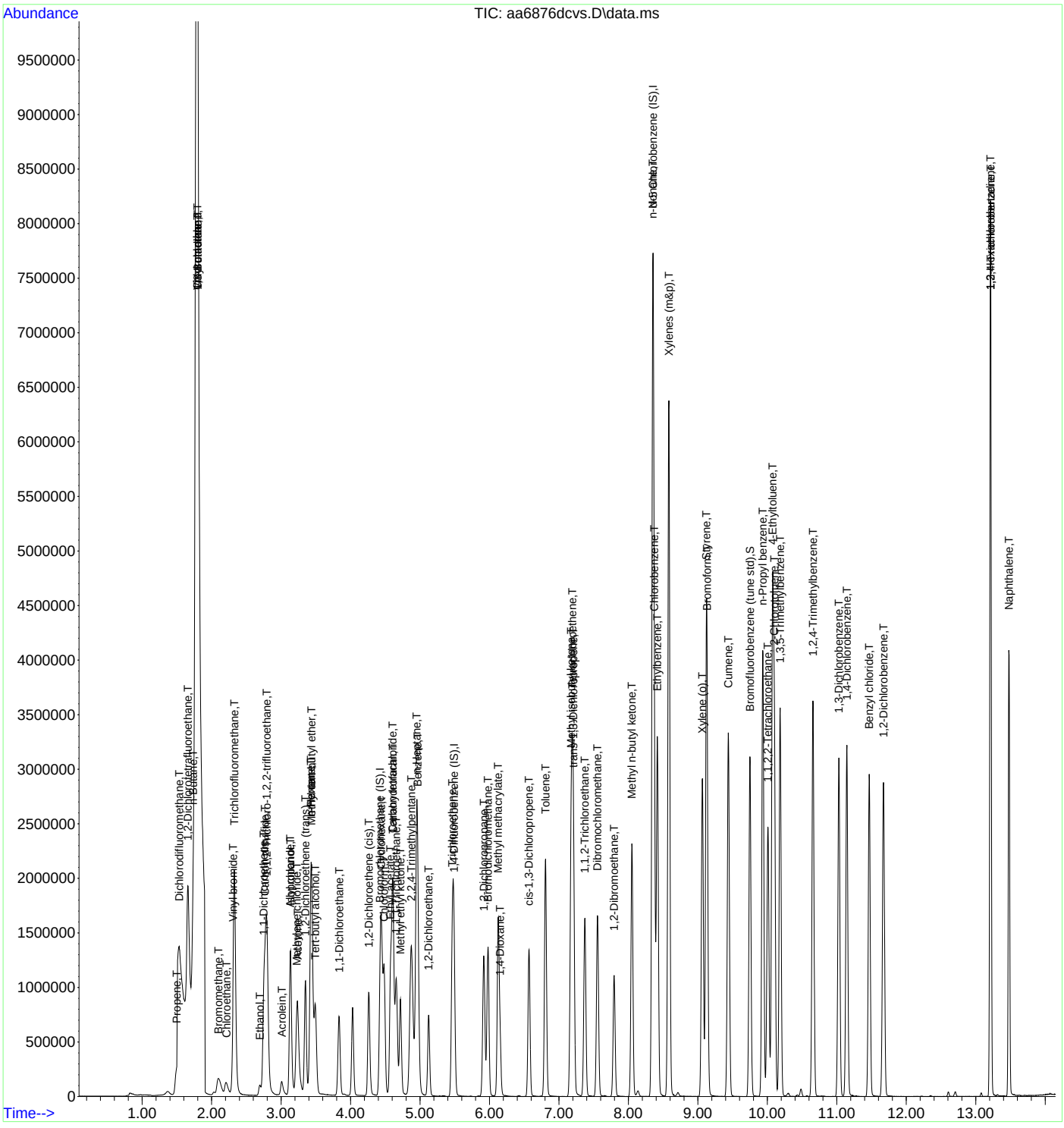
Quant Time: Jul 15 12:27:36 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.554	129	982307	12.29	ppbV	99
53) 1,2-Dibromoethane	7.795	107	893105	12.42	ppbV	100
54) Methyl n-butyl ketone	8.049	43	925340	9.31	ppbV	93
56) n-Nonane	8.351	43	2069636	13.94	ppbV	91
57) Chlorobenzene	8.374	112	1345141	10.22	ppbV	89
58) Ethylbenzene	8.415	91	2730197	10.90	ppbV	98
59) Xylenes (m&p)	8.583	91	4233654	22.49	ppbV	98
60) Xylene (o)	9.065	91	2070887	10.45	ppbV	97
61) Styrene	9.123	104	1539137	11.68	ppbV	100
62) Bromoform	9.133	173	937038	10.60	ppbV	100
63) Cumene	9.438	105	2633751	10.41	ppbV	99
65) n-Propyl benzene	9.933	91	3969808	11.42	ppbV	98
66) 1,1,2,2-Tetrachloroethane	10.007	83	1672678	11.46	ppbV	99
67) 4-Ethyltoluene	10.075	105	3162969	11.15	ppbV	99
68) 2-Chlorotoluene	10.100	91	2625019	11.13	ppbV	95
69) 1,3,5-Trimethylbenzene	10.184	105	2338481	10.14	ppbV	97
70) 1,2,4-Trimethylbenzene	10.657	105	2398076	10.37	ppbV	98
71) 1,3-Dichlorobenzene	11.030	146	1332566	9.49	ppbV	100
72) 1,4-Dichlorobenzene	11.145	146	1322105	9.31	ppbV	99
73) Benzyl chloride	11.467	91	2530076	11.08	ppbV	98
74) 1,2-Dichlorobenzene	11.673	146	1253424	9.28	ppbV	100
75) 1,3-Hexachlorobutadiene	13.213	225	615978	7.92	ppbV	100
76) 1,2,4-Trichlorobenzene	13.216	180	864346	8.25	ppbV	100
77) Naphthalene	13.480	128	2338967	7.90	ppbV	100

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

Data Path : C:\DATA\2024\07-2024\07-15-2024\
Data File : aa6876dcvs.D
Acq On : 15 Jul 2024 10:42 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 15 12:27:36 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration



Section VIII: Raw Quality Control Data Package

BFB Tune Spectra

Method Blank

Laboratory Control Sample

Laboratory Sample Duplicate

Instrument Run Logs

Pressure Gauge Readings (initial and final)

Example Calculations

Screening Data

Clean Canister Certification

BFB

Data Path: C:\DATA\2024\03-2024\03-27-2024\
Data File: AA6020BFB.D
Acq On: 3/27/2024 10:03:00AM
Operator: jjw
Sample: BFB
Misc: ALM018474
ALS Vial: 1 **Multiplier:** 1
Integration File: rteint.p
Method: C:\msdchem\1\METHODS\240326.M
Last Update: Mon Feb 12 17:00:56 2024
Spectrum Information:

PassFail	Target Mass	Rel. to Mass	Lower Limit %	Higher Limit %	Raw Abundance	% Relative Abundance
PASS	50	95	8	40	248768	22.4
PASS	75	95	30	66	575680	51.7
PASS	95	95	100	100	1112917	100.0
PASS	96	95	5	9	72451	6.5
PASS	173	174	0.00	2	6828	1.0
PASS	174	95	50	100	671872	60.4
PASS	175	174	4	9	49411	7.4
PASS	176	174	93	101	654677	97.4
PASS	177	176	5	9	43245	6.6

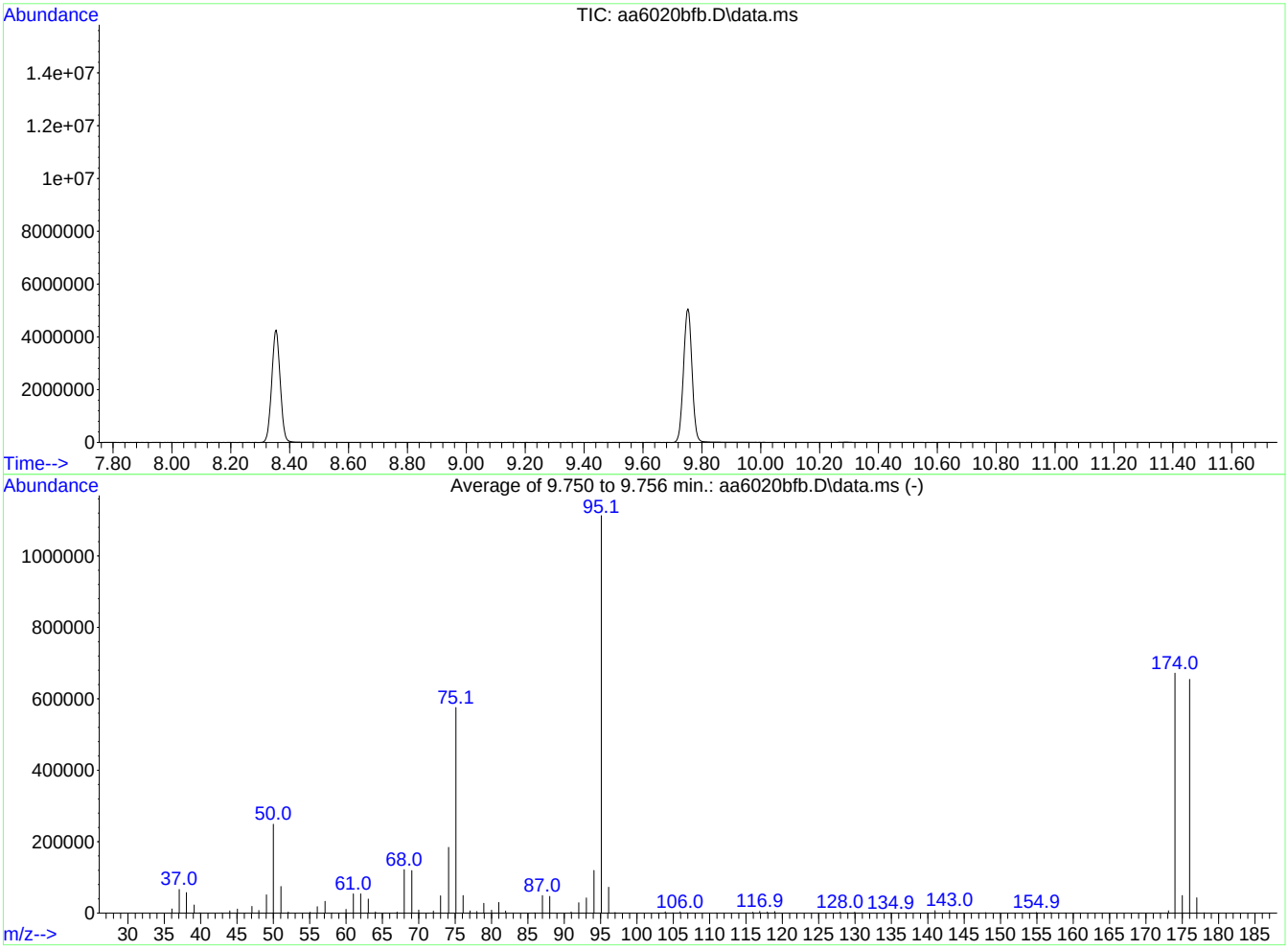
Runs with this BFB:

Lab Sample Number	Date File	Field Sample	Date/Time of Sample/Standard Analysis
BFB	AA6020BFB	NA	3/27/2024 10:03:00 AM
0.2 PPBV STD	AA6021STD05	NA	3/27/2024 10:38:00 AM
2 PPBV STD	AA6022STD04	NA	3/27/2024 11:38:00 AM
10 PPBV STD STD	AA6023STD03	NA	3/27/2024 12:09:00 PM
20 PPBV STD	AA6024STD02	NA	3/27/2024 12:40:00 PM
40 PPBV STD	AA6025STD01	NA	3/27/2024 1:24:00 PM
10 PPBV ICVSS	AA6026ICVSS	NA	3/27/2024 1:54:00 PM
10 PPBV LCS	AA6027LCS	NA	3/27/2024 2:23:00 PM
METHOD BLANK	AA6028BLK	NA	3/27/2024 2:51:00 PM
3285	AA6039	NA	3/27/2024 9:10:00 PM
2036	AA6040	NA	3/27/2024 9:38:00 PM

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6020bfb.D
Acq On : 27 Mar 2024 10:03 am
Operator : jjw
Sample : BFB
Misc : ALM018474
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\240326.M
Title : TO-15 on the Agilent 7890A / 5975C
Last Update : Mon Feb 12 17:00:56 2024



AutoFind: Scans 2993, 2994, 2995; Background Corrected with Scan 2975

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	22.4	248768	PASS
75	95	30	66	51.7	575680	PASS
95	95	100	100	100.0	1112917	PASS
96	95	5	9	6.5	72451	PASS
173	174	0.00	2	1.0	6828	PASS
174	95	50	100	60.4	671872	PASS
175	174	4	9	7.4	49411	PASS
176	174	93	101	97.4	654677	PASS
177	176	5	9	6.6	43245	PASS

BFB

Data Path: C:\DATA\2024\05-2024\05-21-2024\
Data File: AA6539BFB.D
Acq On: 5/21/2024 9:54:00AM
Operator: jjw
Sample: BFB
Misc: ALM018474
ALS Vial: 1 **Multiplier:** 1
Integration File: rteint.p
Method: C:\msdchem\1\METHODS\240326.M
Last Update: Wed Mar 27 13:46:33 2024
Spectrum Information:

PassFail	Target Mass	Rel. to Mass	Lower Limit %	Higher Limit %	Raw Abundance	% Relative Abundance
PASS	50	95	8	40	194539	21.5
PASS	75	95	30	66	465152	51.3
PASS	95	95	100	100	906901	100.0
PASS	96	95	5	9	58715	6.5
PASS	173	174	0.00	2	3482	0.6
PASS	174	95	50	100	559573	61.7
PASS	175	174	4	9	41755	7.5
PASS	176	174	93	101	536704	95.9
PASS	177	176	5	9	34669	6.5

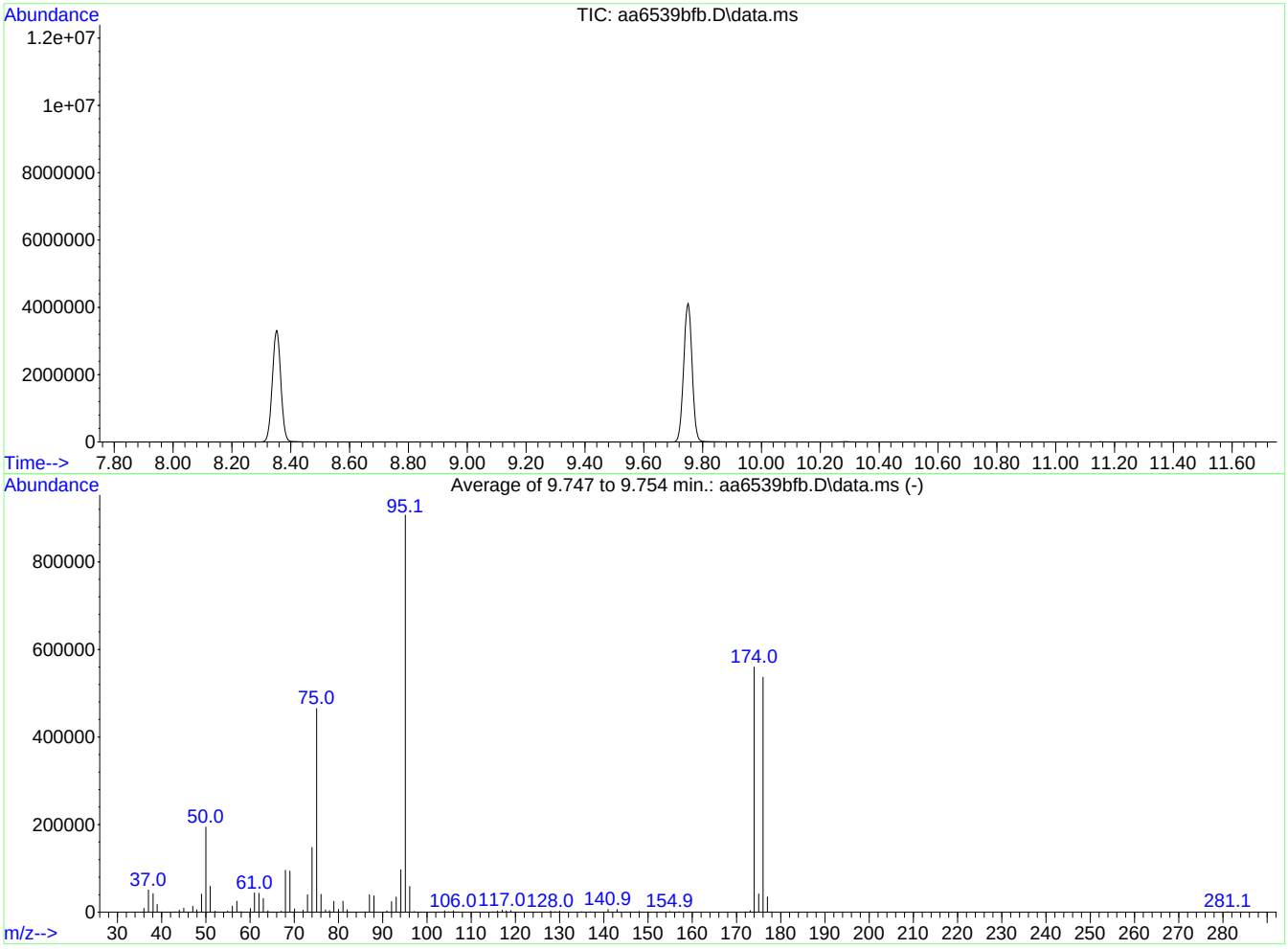
Runs with this BFB:

Lab Sample Number	Date File	Field Sample	Date/Time of Sample/Standard Analysis
BFB	AA6539BFB	NA	5/21/2024 9:54:00 AM
10 PPBV DCVS	AA6540DCVS	NA	5/21/2024 11:12:00 AM
10 PPBV LCS	AA6541LCS	NA	5/21/2024 11:47:00 AM
METHOD BLANK	AA6542BLK	NA	5/21/2024 12:15:00 PM
02 PPBV RLLCS	AA6543RLLCS	NA	5/21/2024 12:50:00 PM
3052	AA6544	NA	5/21/2024 3:02:00 PM
3100	AA6545	NA	5/21/2024 3:33:00 PM
1571	AA6546	NA	5/21/2024 4:03:00 PM
10 PPBV CCCVS	AA6552CCCVS	NA	5/21/2024 7:21:00 PM

Data Path : C:\DATA\2024\05-2024\05-21-2024\
Data File : aa6539bfb.D
Acq On : 21 May 2024 9:54 am
Operator : jjw
Sample : BFB
Misc : ALM018474
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\240326.M
Title : TO-15 on the Agilent 7890A / 5975C
Last Update : Wed Mar 27 13:46:33 2024



AutoFind: Scans 2992, 2993, 2994; Background Corrected with Scan 2974

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	21.5	194539	PASS
75	95	30	66	51.3	465152	PASS
95	95	100	100	100.0	906901	PASS
96	95	5	9	6.5	58715	PASS
173	174	0.00	2	0.6	3482	PASS
174	95	50	100	61.7	559573	PASS
175	174	4	9	7.5	41755	PASS
176	174	93	101	95.9	536704	PASS
177	176	5	9	6.5	34669	PASS

BFB

Data Path: C:\DATA\2024\05-2024\05-29-2024\
Data File: AA6554BFB.D
Acq On: 5/29/2024 9:16:00AM
Operator: jls
Sample: BFB
Misc: ALM018474
ALS Vial: 1 **Multiplier:** 1
Integration File: rteint.p
Method: C:\msdchem\1\METHODS\240326.M
Last Update: Wed Mar 27 13:46:33 2024
Spectrum Information:

PassFail	Target Mass	Rel. to Mass	Lower Limit %	Higher Limit %	Raw Abundance	% Relative Abundance
PASS	50	95	8	40	242304	21.7
PASS	75	95	30	66	578901	51.8
PASS	95	95	100	100	1118037	100.0
PASS	96	95	5	9	75616	6.8
PASS	173	174	0.00	2	6315	0.9
PASS	174	95	50	100	683392	61.1
PASS	175	174	4	9	49440	7.2
PASS	176	174	93	101	651648	95.4
PASS	177	176	5	9	42576	6.5

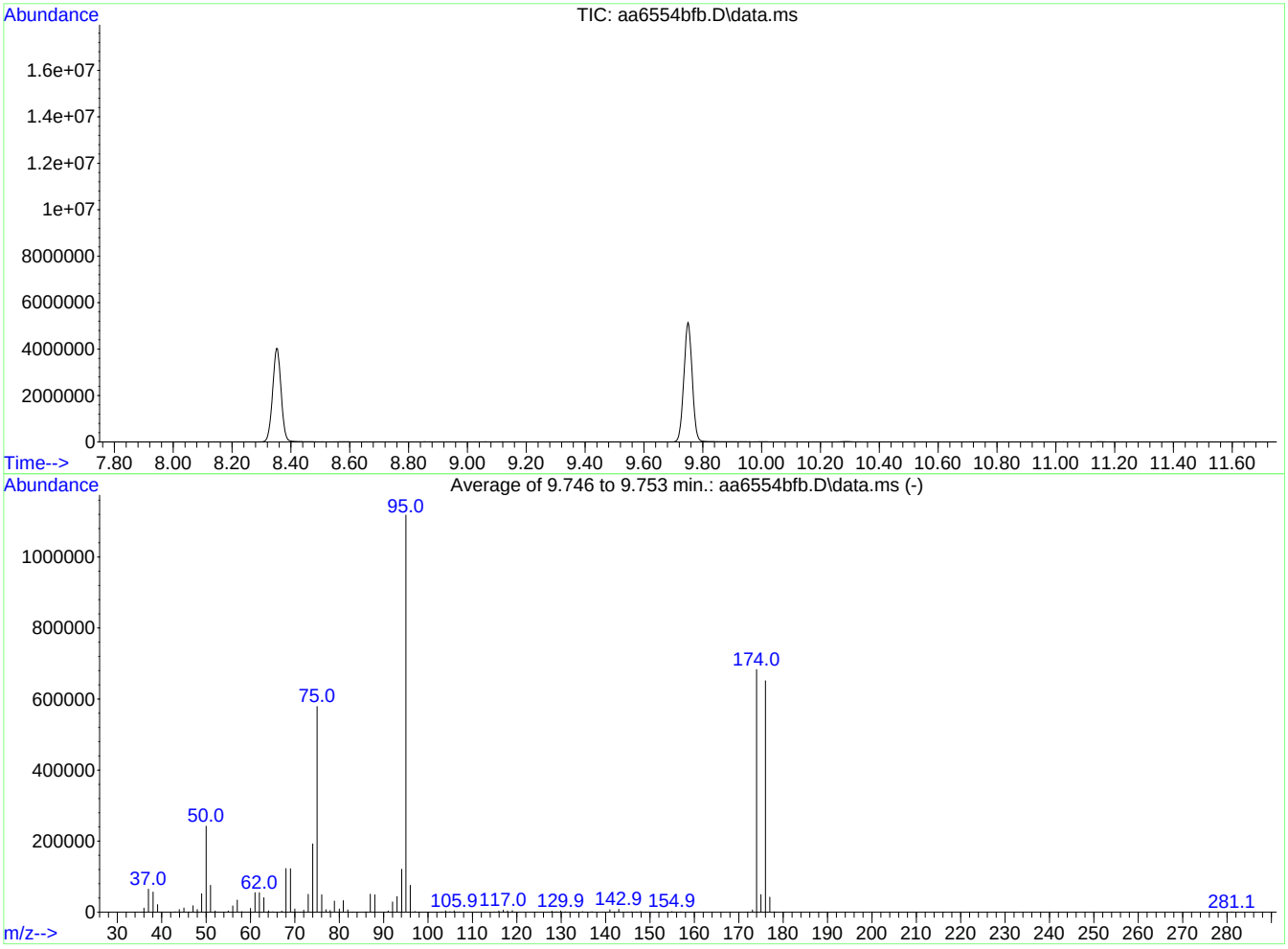
Runs with this BFB:

Lab Sample Number	Date File	Field Sample	Date/Time of Sample/Standard Analysis
BFB	AA6554BFB	NA	5/29/2024 9:16:00 AM
0.2 PPBV STD	AA6556STD05	NA	5/29/2024 12:40:00 PM
2 PPBV STD	AA6557STD04	NA	5/29/2024 1:11:00 PM
10 PPBV STD	AA6558STD03	NA	5/29/2024 1:46:00 PM
20 PPBV STD	AA6559STD02	NA	5/29/2024 2:18:00 PM
40 PPBV STD	AA6560STD01	NA	5/29/2024 2:55:00 PM
10 PPBV ICVSS	AA6561ICVSS	NA	5/29/2024 5:16:00 PM

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6554bfb.D
Acq On : 29 May 2024 9:16 am
Operator : jjw
Sample : BFB
Misc : ALM018474
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\240326.M
Title : TO-15 on the Agilent 7890A / 5975C
Last Update : Wed Mar 27 13:46:33 2024



AutoFind: Scans 2992, 2993, 2994; Background Corrected with Scan 2974

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	21.7	242304	PASS
75	95	30	66	51.8	578901	PASS
95	95	100	100	100.0	1118037	PASS
96	95	5	9	6.8	75616	PASS
173	174	0.00	2	0.9	6315	PASS
174	95	50	100	61.1	683392	PASS
175	174	4	9	7.2	49440	PASS
176	174	93	101	95.4	651648	PASS
177	176	5	9	6.5	42576	PASS

BFB

Data Path: C:\DATA\2024\07-2024\07-15-2024\
Data File: AA6875BFB.D
Acq On: 7/15/2024 10:11:00AM
Operator: jjw
Sample: BFB
Misc: ALM018474
ALS Vial: 1 **Multiplier:** 1
Integration File: rteint.p
Method: C:\msdchem\1\METHODS\240529.M
Last Update: Wed May 29 15:44:50 2024
Spectrum Information:

PassFail	Target Mass	Rel. to Mass	Lower Limit %	Higher Limit %	Raw Abundance	% Relative Abundance
PASS	50	95	8	40	198379	24.8
PASS	75	95	30	66	437141	54.7
PASS	95	95	100	100	799168	100.0
PASS	96	95	5	9	54309	6.8
PASS	173	174	0.00	2	3858	0.9
PASS	174	95	50	100	452267	56.6
PASS	175	174	4	9	33925	7.5
PASS	176	174	93	101	431317	95.4
PASS	177	176	5	9	29259	6.8

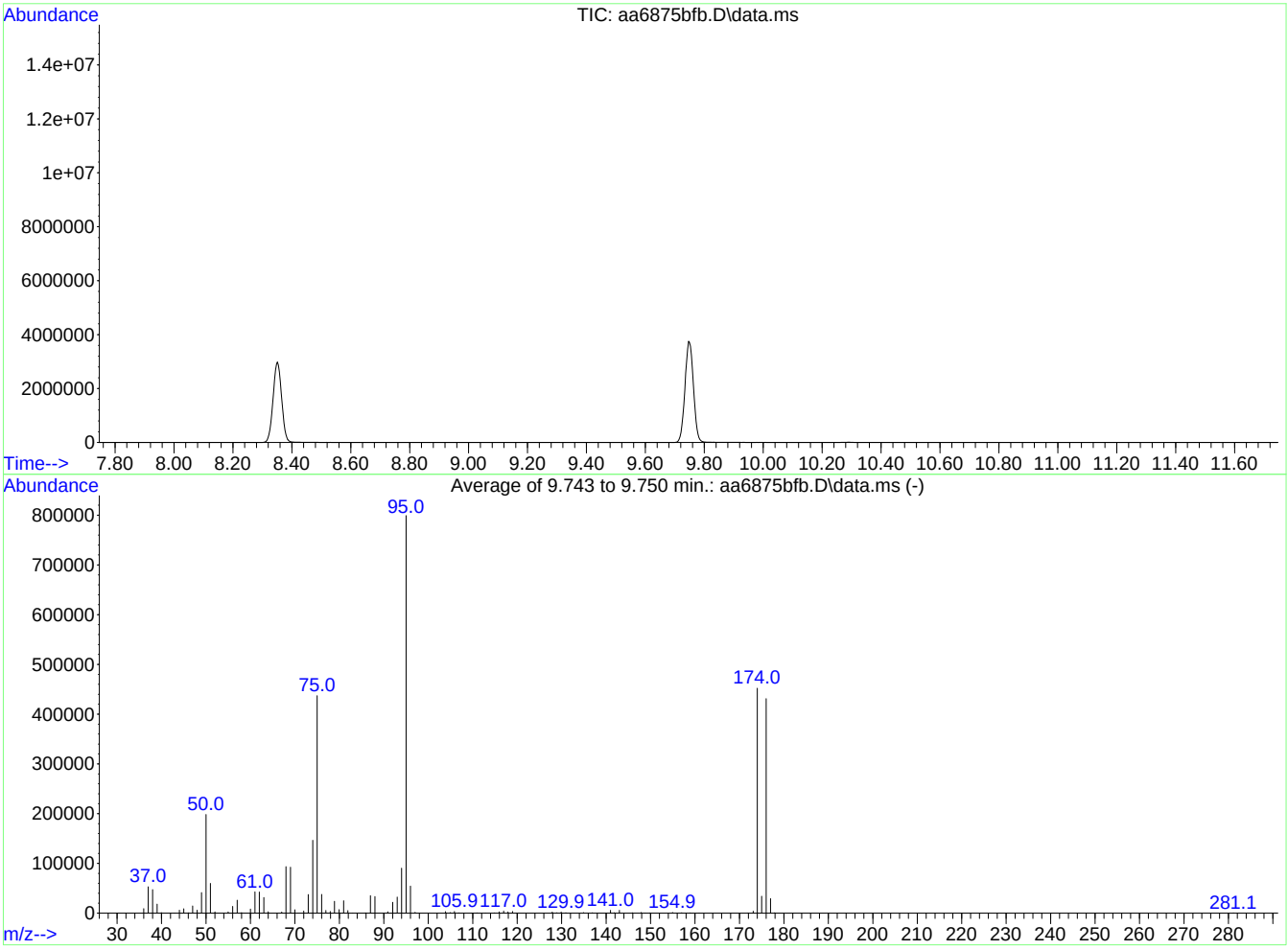
Runs with this BFB:

Lab Sample Number	Date File	Field Sample	Date/Time of Sample/Standard Analysis
BFB	AA6875BFB	NA	7/15/2024 10:11:00 AM
10 PPBV DCVS	AA6876DCVS	NA	7/15/2024 10:42:00 AM
10 PPBV LCS	AA6877LCS	NA	7/15/2024 11:44:00 AM
METHOD BLANK	AA6878BLK	NA	7/15/2024 1:01:00 PM
E24-02398-02	AA6881	SG-11	7/15/2024 3:15:00 PM
E24-02398-01	AA6884	SG-10	7/15/2024 5:02:00 PM
E24-02398-21	AA6885	SG-10	7/15/2024 5:34:00 PM
E24-02398-01	AA6886	SG-10	7/15/2024 6:05:00 PM
E24-02398-02	AA6888	SG-11	7/15/2024 7:05:00 PM
E24-02398-03	AA6890	SG-12	7/15/2024 8:06:00 PM
E24-02398-03	AA6891	SG-12	7/15/2024 8:38:00 PM
E24-02398-04	AA6893	SG-13	7/15/2024 9:39:00 PM
E24-02398-04	AA6894	SG-13	7/15/2024 10:11:00 PM

Data Path : C:\DATA\2024\07-2024\07-15-2024\
Data File : aa6875bfb.D
Acq On : 15 Jul 2024 10:11 am
Operator : jjw
Sample : BFB
Misc : ALM018474
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\240529.M
Title : TO-15 on the Agilent 7890A / 5975C
Last Update : Wed May 29 15:44:50 2024



AutoFind: Scans 2991, 2992, 2993; Background Corrected with Scan 2974

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	24.8	198379	PASS
75	95	30	66	54.7	437141	PASS
95	95	100	100	100.0	799168	PASS
96	95	5	9	6.8	54309	PASS
173	174	0.00	2	0.9	3858	PASS
174	95	50	100	56.6	452267	PASS
175	174	4	9	7.5	33925	PASS
176	174	93	101	95.4	431317	PASS
177	176	5	9	6.8	29259	PASS

INTEGRATED ANALYTICAL LABORATORIES, LLC

Method Blank Report

Lab Sample Name:	**METHOD BLANK**	**Data File:**	**AA6542BLK**
Field Sample Name:	**METHOD BLANK**	**Date Analyzed:**	**5/21/2024**
Matrix:	**Air**	**Sample Volume:**	**500ml**
Dilution Factor:	**1**	**GC/MS Column:**	**RTX-1, 0.32 mmID**

Runs with this Method Blank:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6539BFB]	05/21/2024 9:54
10 PPBV DCVS [AA6540DCVS]	05/21/2024 11:12
10 PPBV LCS [AA6541LCS]	05/21/2024 11:47
METHOD BLANK [AA6542BLK]	05/21/2024 12:15
02 PPBV RLLCS [AA6543RLLCS]	05/21/2024 12:50
3052 [AA6544]	05/21/2024 15:02
3100 [AA6545]	05/21/2024 15:33
1571 [AA6546]	05/21/2024 16:03
10 PPBV CCCVS [AA6552CCCVS]	05/21/2024 19:21

Compound	CAS #	Reporting Limit (ppbv)	Concentration (ppbv)
Acetone	67-64-1	0.20	ND
Benzene	71-43-2	0.20	ND
Bromodichloromethane	75-27-4	0.20	ND
Bromoform	75-25-2	0.20	ND
Bromomethane	74-83-9	0.20	ND
1,3-Butadiene	106-99-0	0.20	ND
Chlorobenzene	108-90-7	0.20	ND
Chloroethane	75-00-3	0.20	ND
Chloroform	67-66-3	0.20	ND
Chloromethane	74-87-3	0.20	ND
Carbon disulfide	75-15-0	0.20	ND
Carbon tetrachloride	56-23-5	0.20	ND
Cyclohexane	110-82-7	0.20	ND
Dibromochloromethane	124-48-1	0.20	ND
1,2-Dibromoethane	106-93-4	0.17	ND
1,2-Dichlorobenzene	95-50-1	0.20	ND
1,3-Dichlorobenzene	541-73-1	0.20	ND
1,4-Dichlorobenzene	106-46-7	0.20	ND
Dichlorodifluoromethane	75-71-8	0.20	ND
1,1-Dichloroethane	75-34-3	0.20	ND
1,2-Dichloroethane	107-06-2	0.20	ND
1,1-Dichloroethene	75-35-4	0.20	ND
1,2-Dichloroethene (cis)	156-59-2	0.20	ND
1,2-Dichloroethene (trans)	156-60-5	0.20	ND
1,2-Dichloropropane	78-87-5	0.20	ND
1,3-Dichloropropene (cis)	10061-01-5	0.20	ND
1,3-Dichloropropene (trans)	10061-02-6	0.19	ND
1,2-Dichlorotetrafluoroethane	76-14-2	0.20	ND
1,4-Dioxane	123-91-1	0.20	ND
Ethylbenzene	100-41-4	0.18	ND
n-Heptane	142-82-5	0.20	ND
1,3-Hexachlorobutadiene	87-68-3	0.20	ND
n-Hexane	110-54-3	0.20	ND

Method Blank must be less than the Practical Quantitation Limit (PQL).

INTEGRATED ANALYTICAL LABORATORIES, LLC

Method Blank Report

Lab Sample Name:	**METHOD BLANK**	**Data File:**	**AA6542BLK**
Field Sample Name:	**METHOD BLANK**	**Date Analyzed:**	**5/21/2024**
Matrix:	**Air**	**Sample Volume:**	**500ml**
Dilution Factor:	**1**	**GC/MS Column:**	**RTX-1, 0.32 mmID**

Runs with this Method Blank:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6539BFB]	05/21/2024 9:54
10 PPBV DCVS [AA6540DCVS]	05/21/2024 11:12
10 PPBV LCS [AA6541LCS]	05/21/2024 11:47
METHOD BLANK [AA6542BLK]	05/21/2024 12:15
02 PPBV RLLCS [AA6543RLLCS]	05/21/2024 12:50
3052 [AA6544]	05/21/2024 15:02
3100 [AA6545]	05/21/2024 15:33
1571 [AA6546]	05/21/2024 16:03
10 PPBV CCCVS [AA6552CCCVS]	05/21/2024 19:21

Compound	CAS #	Reporting Limit (ppbv)	Concentration (ppbv)
Methylene chloride	75-09-2	0.20	ND
Methyl ethyl ketone	78-93-3	0.20	ND
Methyl isobutyl ketone	108-10-1	0.20	ND
Methyl tert-butyl ether	1634-04-4	0.20	ND
Styrene	100-42-5	0.20	ND
Tert-butyl alcohol	75-65-0	0.20	ND
1,1,2,2-Tetrachloroethane	79-34-5	0.20	ND
Tetrachloroethene	127-18-4	0.20	ND
Toluene	108-88-3	0.20	ND
1,2,4-Trichlorobenzene	120-82-1	0.20	ND
1,1,1-Trichloroethane	71-55-6	0.17	ND
1,1,2-Trichloroethane	79-00-5	0.20	ND
Trichloroethene	79-01-6	0.17	ND
Trichlorofluoromethane	75-69-4	0.20	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.20	ND
1,2,4-Trimethylbenzene	95-63-6	0.20	ND
1,3,5-Trimethylbenzene	108-67-8	0.20	ND
2,2,4-Trimethylpentane	540-84-1	0.20	ND
Vinyl bromide	593-60-2	0.20	ND
Vinyl chloride	75-01-4	0.20	ND
Xylenes (m&p)	179601-23-1	0.20	ND
Xylenes (o)	95-47-6	0.20	ND

Method Blank must be less than the Practical Quantitation Limit (PQL).

Data Path : C:\DATA\2024\05-2024\05-21-2024\
Data File : aa6542blk.D
Acq On : 21 May 2024 12:15 pm
Operator : jjw
Sample : Method Blank
Misc : 1127
ALS Vial : 5 Sample Multiplier: 1

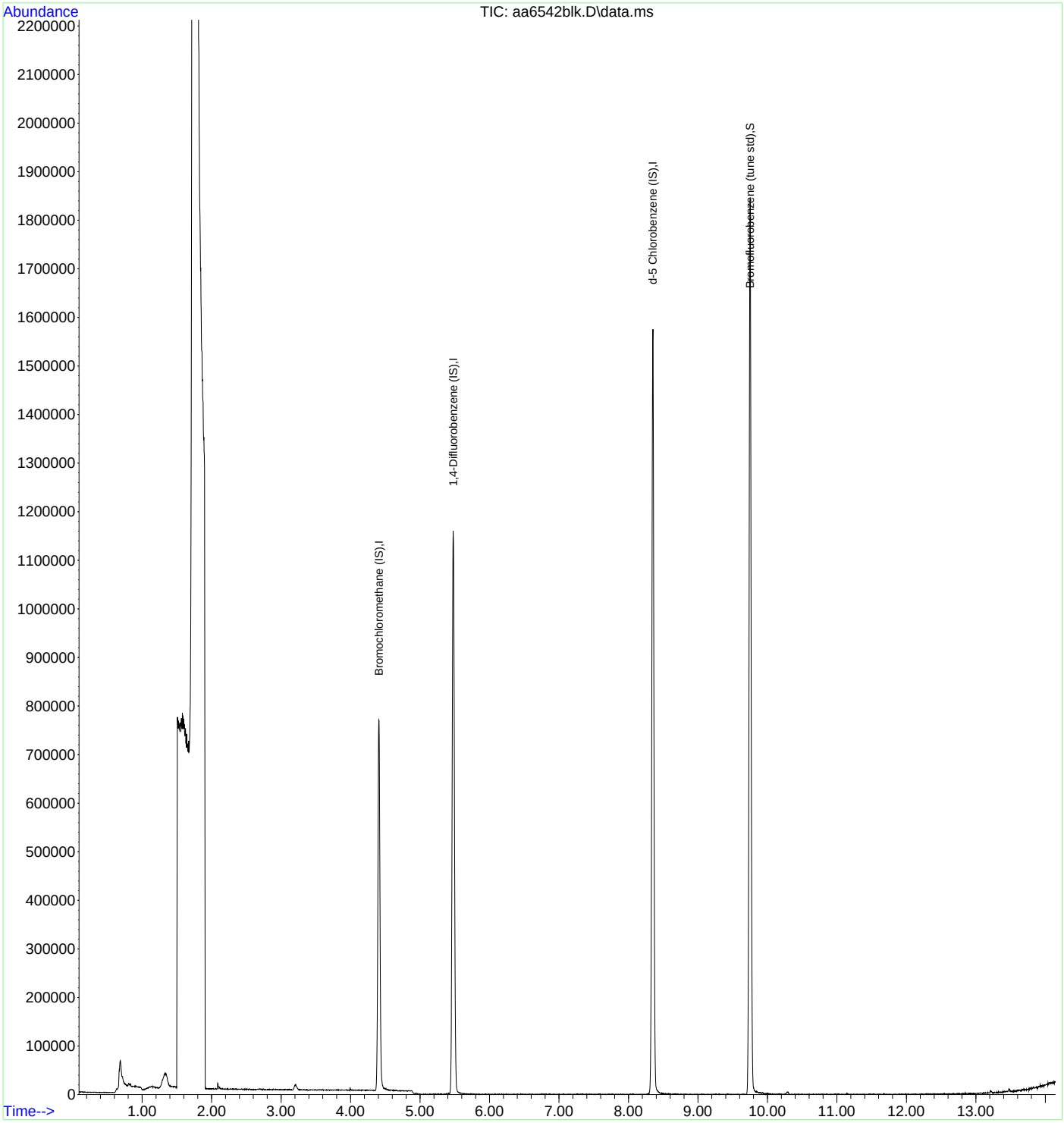
Quant Time: May 21 12:37:47 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.410	130	268604	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.478	114	1018846	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.352	117	981819	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.751	95	834054	9.47	ppbV	0.000
Target Compounds						Qvalue

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

Data Path : C:\DATA\2024\05-2024\05-21-2024\
Data File : aa6542blk.D
Acq On : 21 May 2024 12:15 pm
Operator : jjw
Sample : Method Blank
Misc : 1127
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 21 12:37:47 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES, LLC

Method Blank Report

Lab Sample Name:	**METHOD BLANK**	**Data File:**	**AA6878BLK**
Field Sample Name:	**METHOD BLANK**	**Date Analyzed:**	**7/15/2024**
Matrix:	**Air**	**Sample Volume:**	**500ml**
Dilution Factor:	**1**	**GC/MS Column:**	**RTX-1, 0.32 mmID**

Runs with this Method Blank:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6875BFB]	07/15/2024 10:11
10 PPBV DCVS [AA6876DCVS]	07/15/2024 10:42
10 PPBV LCS [AA6877LCS]	07/15/2024 11:44
METHOD BLANK [AA6878BLK]	07/15/2024 13:01
E24-02398-02 [AA6881]	07/15/2024 15:15
E24-02398-01 [AA6884]	07/15/2024 17:02
E24-02398-21 [AA6885]	07/15/2024 17:34
E24-02398-01 [AA6886]	07/15/2024 18:05
E24-02398-02 [AA6888]	07/15/2024 19:05
E24-02398-03 [AA6890]	07/15/2024 20:06
E24-02398-03 [AA6891]	07/15/2024 20:38
E24-02398-04 [AA6893]	07/15/2024 21:39
E24-02398-04 [AA6894]	07/15/2024 22:11

Compound	CAS #	Reporting Limit (ppbv)	Concentration (ppbv)
Acetone	67-64-1	0.20	ND
Benzene	71-43-2	0.20	ND
Bromodichloromethane	75-27-4	0.20	ND
Bromoform	75-25-2	0.20	ND
Bromomethane	74-83-9	0.20	ND
1,3-Butadiene	106-99-0	0.20	ND
Chlorobenzene	108-90-7	0.20	ND
Chloroethane	75-00-3	0.20	ND
Chloroform	67-66-3	0.20	ND
Chloromethane	74-87-3	0.20	ND
Carbon disulfide	75-15-0	0.20	ND
Carbon tetrachloride	56-23-5	0.20	ND
Cyclohexane	110-82-7	0.20	ND
Dibromochloromethane	124-48-1	0.20	ND
1,2-Dibromoethane	106-93-4	0.17	ND
1,2-Dichlorobenzene	95-50-1	0.20	ND
1,3-Dichlorobenzene	541-73-1	0.20	ND
1,4-Dichlorobenzene	106-46-7	0.20	ND
Dichlorodifluoromethane	75-71-8	0.20	ND
1,1-Dichloroethane	75-34-3	0.20	ND
1,2-Dichloroethane	107-06-2	0.20	ND
1,1-Dichloroethene	75-35-4	0.20	ND
1,2-Dichloroethene (cis)	156-59-2	0.20	ND
1,2-Dichloroethene (trans)	156-60-5	0.20	ND
1,2-Dichloropropane	78-87-5	0.20	ND
1,3-Dichloropropene (cis)	10061-01-5	0.20	ND
1,3-Dichloropropene (trans)	10061-02-6	0.19	ND
1,2-Dichlorotetrafluoroethane	76-14-2	0.20	ND

Method Blank must be less than the Practical Quantitation Limit (PQL).

INTEGRATED ANALYTICAL LABORATORIES, LLC

Method Blank Report

Lab Sample Name:	**METHOD BLANK**	**Data File:**	**AA6878BLK**
Field Sample Name:	**METHOD BLANK**	**Date Analyzed:**	**7/15/2024**
Matrix:	**Air**	**Sample Volume:**	**500ml**
Dilution Factor:	**1**	**GC/MS Column:**	**RTX-1, 0.32 mmID**

Runs with this Method Blank:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6875BFB]	07/15/2024 10:11
10 PPBV DCVS [AA6876DCVS]	07/15/2024 10:42
10 PPBV LCS [AA6877LCS]	07/15/2024 11:44
METHOD BLANK [AA6878BLK]	07/15/2024 13:01
E24-02398-02 [AA6881]	07/15/2024 15:15
E24-02398-01 [AA6884]	07/15/2024 17:02
E24-02398-21 [AA6885]	07/15/2024 17:34
E24-02398-01 [AA6886]	07/15/2024 18:05
E24-02398-02 [AA6888]	07/15/2024 19:05
E24-02398-03 [AA6890]	07/15/2024 20:06
E24-02398-03 [AA6891]	07/15/2024 20:38
E24-02398-04 [AA6893]	07/15/2024 21:39
E24-02398-04 [AA6894]	07/15/2024 22:11

Compound	CAS #	Reporting Limit (ppbv)	Concentration (ppbv)
1,4-Dioxane	123-91-1	0.20	ND
Ethylbenzene	100-41-4	0.18	ND
n-Heptane	142-82-5	0.20	ND
1,3-Hexachlorobutadiene	87-68-3	0.20	ND
n-Hexane	110-54-3	0.20	ND
Methylene chloride	75-09-2	0.20	ND
Methyl ethyl ketone	78-93-3	0.20	ND
Methyl isobutyl ketone	108-10-1	0.20	ND
Methyl tert-butyl ether	1634-04-4	0.20	ND
Styrene	100-42-5	0.20	ND
Tert-butyl alcohol	75-65-0	0.20	ND
1,1,2,2-Tetrachloroethane	79-34-5	0.20	ND
Tetrachloroethene	127-18-4	0.20	ND
Toluene	108-88-3	0.20	ND
1,2,4-Trichlorobenzene	120-82-1	0.20	ND
1,1,1-Trichloroethane	71-55-6	0.17	ND
1,1,2-Trichloroethane	79-00-5	0.20	ND
Trichloroethene	79-01-6	0.17	ND
Trichlorofluoromethane	75-69-4	0.20	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.20	ND
1,2,4-Trimethylbenzene	95-63-6	0.20	ND
1,3,5-Trimethylbenzene	108-67-8	0.20	ND
2,2,4-Trimethylpentane	540-84-1	0.20	ND
Vinyl bromide	593-60-2	0.20	ND
Vinyl chloride	75-01-4	0.20	ND
Xylenes (m&p)	179601-23-1	0.20	ND
Xylenes (o)	95-47-6	0.20	ND

Method Blank must be less than the Practical Quantitation Limit (PQL).

Data Path : C:\DATA\2024\07-2024\07-15-2024\
Data File : aa6877lcs.D
Acq On : 15 Jul 2024 11:44 am
Operator : jjw
Sample : 10 ppbv LCS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 15 12:32:02 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.425	130	217496	10.00	ppbV		0.000
39) 1,4-Difluorobenzene (IS)	5.490	114	1076242	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.354	117	1232831	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.750	95	1207763	10.36	ppbV		0.000
Target Compounds							Qvalue
2) Propene	1.496	41	280296	12.28	ppbV		98
3) Dichlorodifluoromethane	1.533	85	753092	12.09	ppbV		100
4) 1,2-Dichlorotetrafluor...	1.660	85	893107	10.23	ppbV		93
5) n-Butane	1.736	43	676849	14.36	ppbV		98
6) Chloromethane	1.801	52	54869	14.14	ppbV		94
7) Vinyl chloride	1.788	62	371528	12.96	ppbV		99
8) 1,3-Butadiene	1.801	39	264529	9.96	ppbV		93
9) Bromomethane	2.101	94	242214	10.81	ppbV		99
10) Chloroethane	2.207	64	196580	12.06	ppbV		98
11) Vinyl bromide	2.310	106	286858	10.56	ppbV		99
12) Trichlorofluoromethane	2.326	101	933658	13.02	ppbV		100
13) Ethanol	2.692	45	142588	12.74	ppbV	#	85
14) 1,1-Dichloroethene	2.750	61	725687	13.15	ppbV		91
15) Carbon disulfide	2.773	76	1091793	11.88	ppbV	#	93
16) 1,1,2-Trichloro-1,2,2-...	2.795	101	779997	11.51	ppbV		93
17) Acrolein	3.007	56	154194	12.56	ppbV		97
18) Allyl chloride	3.133	76	186670	13.22	ppbV		100
19) Isopropanol	3.136	45	548590	8.94	ppbV		99
20) Methylene chloride	3.226	49	487190	12.40	ppbV		88
21) Acetone	3.239	43	445441	9.13	ppbV		95
22) 1,2-Dichloroethene (tr...	3.348	61	672439	13.48	ppbV		90
23) n-Pentane	3.432	43	802869	13.47	ppbV		99
24) n-Hexane	3.432	57	1180197	14.13	ppbV		91
25) Methyl tert-butyl ether	3.435	73	1328820	13.34	ppbV		95
26) Tert-butyl alcohol	3.493	59	952477	13.99	ppbV		100
27) 1,1-Dichloroethane	3.834	63	835887	13.50	ppbV		99
28) 1,2-Dichloroethene (cis)	4.261	61	637479	14.19	ppbV		90
29) Cyclohexane	4.445	56	799491	14.34	ppbV		90
30) Chloroform	4.483	83	905623	13.04	ppbV		99
31) Ethyl acetate	4.576	45	153985	13.02	ppbV		93
32) Carbon tetrachloride	4.609	117	842957	11.89	ppbV		99
33) Tetrahydrofuran	4.609	42	512171	12.27	ppbV	#	86
34) 1,1,1-Trichloroethane	4.660	97	801794	12.26	ppbV		99
35) Methyl ethyl ketone	4.718	43	968255	14.00	ppbV		91
36) n-Heptane	4.949	43	752582	11.51	ppbV		96
37) Benzene	4.966	78	1238156	12.50	ppbV		94
38) 1,2-Dichloroethane	5.126	62	641652	14.16	ppbV		100
40) Trichloroethene	5.467	130	451005	9.27	ppbV		100
41) 2,2,4-Trimethylpentane	4.872	57	2065571	10.78	ppbV		100
42) 1,2-Dichloropropane	5.917	63	575928	12.89	ppbV		99
43) Bromodichloromethane	5.978	83	987786	12.70	ppbV		98
44) Methyl methacrylate	6.123	41	757527	13.58	ppbV		87
45) 1,4-Dioxane	6.152	88	341747	13.45	ppbV		88
46) cis-1,3-Dichloropropene	6.570	75	853787	12.93	ppbV		99
47) Toluene	6.808	91	1728353	12.54	ppbV		99
48) Methyl isobutyl ketone	7.174	43	1421120	14.10	ppbV		94
49) Tetrachloroethene	7.194	166	600365	11.50	ppbV		99
50) trans-1,3-Dichloropropene	7.213	75	906193	14.28	ppbV		87
51) 1,1,2-Trichloroethane	7.374	97	584390	12.28	ppbV		96

Data Path : C:\DATA\2024\07-2024\07-15-2024\
Data File : aa6877lcs.D
Acq On : 15 Jul 2024 11:44 am
Operator : jjw
Sample : 10 ppbv LCS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

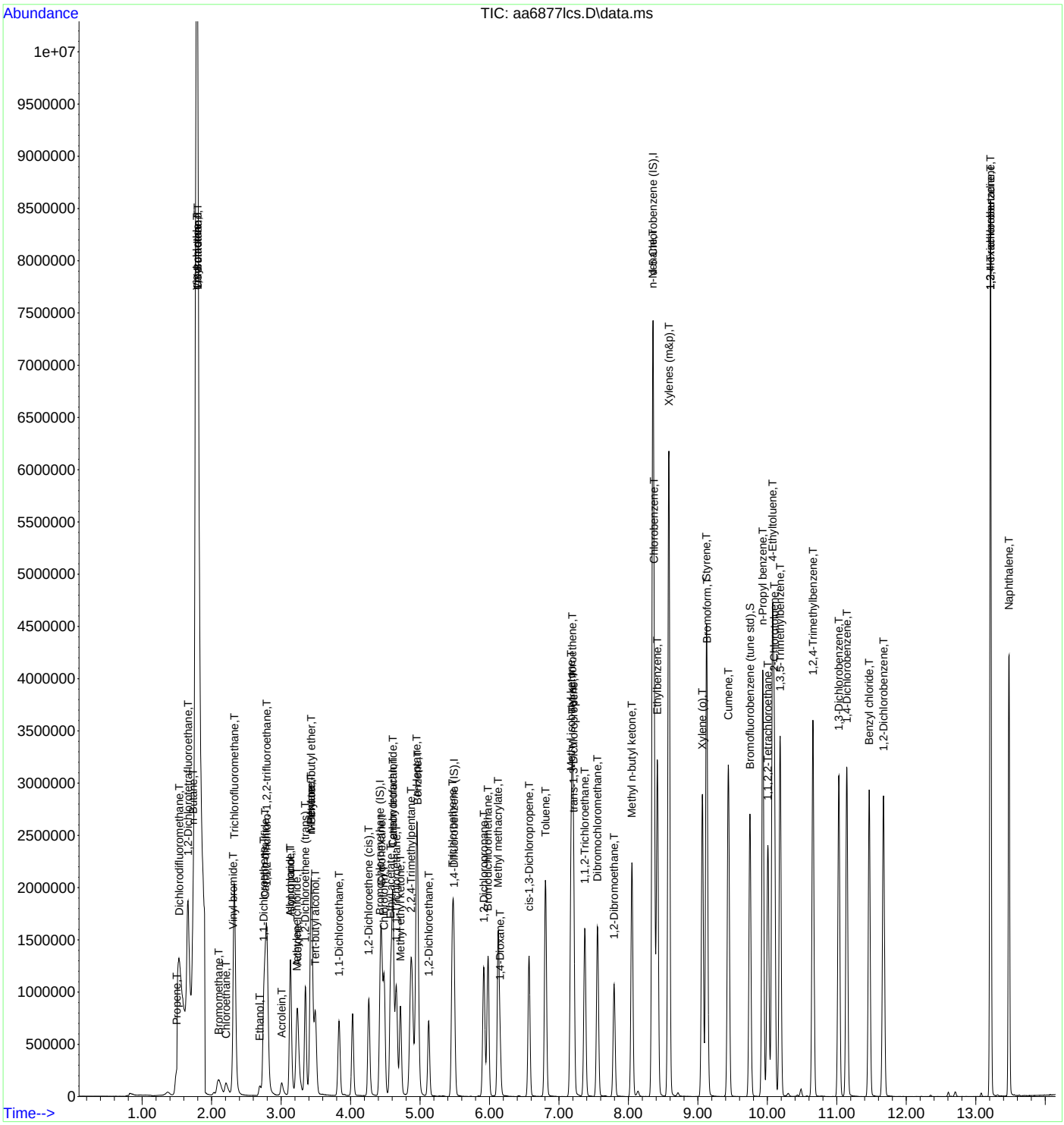
Quant Time: Jul 15 12:32:02 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.554	129	964175	12.71	ppbV	99
53) 1,2-Dibromoethane	7.795	107	879201	12.88	ppbV	100
54) Methyl n-butyl ketone	8.049	43	886463	9.40	ppbV	95
56) n-Nonane	8.351	43	2019672	14.02	ppbV	91
57) Chlorobenzene	8.371	112	1325526	10.38	ppbV	89
58) Ethylbenzene	8.416	91	2697712	11.10	ppbV	98
59) Xylenes (m&p)	8.583	91	4155773	22.75	ppbV	98
60) Xylene (o)	9.065	91	2033963	10.57	ppbV	97
61) Styrene	9.123	104	1508177	11.79	ppbV	100
62) Bromoform	9.133	173	920802	10.73	ppbV	100
63) Cumene	9.438	105	2586634	10.54	ppbV	98
65) n-Propyl benzene	9.933	91	3920088	11.62	ppbV	98
66) 1,1,2,2-Tetrachloroethane	10.007	83	1636418	11.56	ppbV	99
67) 4-Ethyltoluene	10.075	105	3126799	11.36	ppbV	98
68) 2-Chlorotoluene	10.100	91	2584119	11.29	ppbV	96
69) 1,3,5-Trimethylbenzene	10.184	105	2305979	10.30	ppbV	98
70) 1,2,4-Trimethylbenzene	10.657	105	2362263	10.52	ppbV	98
71) 1,3-Dichlorobenzene	11.030	146	1320080	9.69	ppbV	100
72) 1,4-Dichlorobenzene	11.145	146	1323252	9.61	ppbV	100
73) Benzyl chloride	11.467	91	2503839	11.30	ppbV	97
74) 1,2-Dichlorobenzene	11.673	146	1236833	9.44	ppbV	99
75) 1,3-Hexachlorobutadiene	13.213	225	621162	8.24	ppbV	99
76) 1,2,4-Trichlorobenzene	13.213	180	871674	8.58	ppbV	100
77) Naphthalene	13.480	128	2375432	8.27	ppbV	100

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

Data Path : C:\DATA\2024\07-2024\07-15-2024\
Data File : aa6877lcs.D
Acq On : 15 Jul 2024 11:44 am
Operator : jjw
Sample : 10 ppbv LCS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 15 12:32:02 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES, LLC

Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA6541LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 5/21/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6539BFB]	05/21/2024 9:54
10 PPBV DCVS [AA6540DCVS]	05/21/2024 11:12
10 PPBV LCS [AA6541LCS]	05/21/2024 11:47
METHOD BLANK [AA6542BLK]	05/21/2024 12:15
02 PPBV RLLCS [AA6543RLLCS]	05/21/2024 12:50
3052 [AA6544]	05/21/2024 15:02
3100 [AA6545]	05/21/2024 15:33
1571 [AA6546]	05/21/2024 16:03
10 PPBV CCCVS [AA6552CCCVS]	05/21/2024 19:21

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
Acetone	67-64-1	11	100
Benzene	71-43-2	11	110
Bromodichloromethane	75-27-4	12	110
Bromoform	75-25-2	12	110
Bromomethane	74-83-9	13	120
1,3-Butadiene	106-99-0	9.4	94
Chlorobenzene	108-90-7	11	110
Chloroethane	75-00-3	12	120
Chloroform	67-66-3	12	120
Chloromethane	74-87-3	13	110
Carbon disulfide	75-15-0	13	120
Carbon tetrachloride	56-23-5	12	120
Cyclohexane	110-82-7	10	100
Dibromochloromethane	124-48-1	12	110
1,2-Dibromoethane	106-93-4	11	100
1,2-Dichlorobenzene	95-50-1	12	110
1,3-Dichlorobenzene	541-73-1	12	110
1,4-Dichlorobenzene	106-46-7	12	110
Dichlorodifluoromethane	75-71-8	12	110
1,1-Dichloroethane	75-34-3	12	110
1,2-Dichloroethane	107-06-2	12	120
1,1-Dichloroethene	75-35-4	12	110
1,2-Dichloroethene (cis)	156-59-2	12	110
1,2-Dichloroethene (trans)	156-60-5	13	120
1,2-Dichloropropane	78-87-5	11	110
1,3-Dichloropropene (cis)	10061-01-5	11	100
1,3-Dichloropropene (trans)	10061-02-6	11	110
1,2-Dichlorotetrafluoroethane	76-14-2	10	91
1,4-Dioxane	123-91-1	12	100
Ethylbenzene	100-41-4	11	110
n-Heptane	142-82-5	9.2	92

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.

*** Values outside of QC limits* Values outside of 70-130% QC limits**

Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA6541LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 5/21/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6539BFB]	05/21/2024 9:54
10 PPBV DCVS [AA6540DCVS]	05/21/2024 11:12
10 PPBV LCS [AA6541LCS]	05/21/2024 11:47
METHOD BLANK [AA6542BLK]	05/21/2024 12:15
02 PPBV RLLCS [AA6543RLLCS]	05/21/2024 12:50
3052 [AA6544]	05/21/2024 15:02
3100 [AA6545]	05/21/2024 15:33
1571 [AA6546]	05/21/2024 16:03
10 PPBV CCCVS [AA6552CCCVS]	05/21/2024 19:21

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
1,3-Hexachlorobutadiene	87-68-3	13	110
n-Hexane	110-54-3	10	100
Methylene chloride	75-09-2	12	110
Methyl ethyl ketone	78-93-3	10	85
Methyl isobutyl ketone	108-10-1	8.7	79
Methyl tert-butyl ether	1634-04-4	11	100
Styrene	100-42-5	12	110
Tert-butyl alcohol	75-65-0	11	93
1,1,2,2-Tetrachloroethane	79-34-5	11	100
Tetrachloroethene	127-18-4	12	120
Toluene	108-88-3	10	100
1,2,4-Trichlorobenzene	120-82-1	12	110
1,1,1-Trichloroethane	71-55-6	11	110
1,1,2-Trichloroethane	79-00-5	11	100
Trichloroethene	79-01-6	11	110
Trichlorofluoromethane	75-69-4	12	110
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	11	110
1,2,4-Trimethylbenzene	95-63-6	11	100
1,3,5-Trimethylbenzene	108-67-8	11	100
2,2,4-Trimethylpentane	540-84-1	10	100
Vinyl bromide	593-60-2	13	130
Vinyl chloride	75-01-4	12	120
Xylenes (m&p)	179601-23-1	22	110
Xylenes (o)	95-47-6	10	100

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.

*** Values outside of QC limits* Values outside of 70-130% QC limits**

Data Path : C:\DATA\2024\05-2024\05-21-2024\
Data File : aa6541lcs.D
Acq On : 21 May 2024 11:47 am
Operator : jjw
Sample : 10 ppbv LCS
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 21 12:02:41 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.413	130	276155	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.477	114	1155991	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.352	117	1027952	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.747	95	879180	9.53	ppbV	0.000
Target Compounds						Qvalue
2) Propene	1.464	41	324996	10.50	ppbV	99
3) Dichlorodifluoromethane	1.506	85	852262	12.28	ppbV	100
4) 1,2-Dichlorotetrafluor...	1.634	85	1051795	10.50	ppbV	97
5) n-Butane	1.709	43	670022	9.80	ppbV	97
6) Chloromethane	1.778	52	59444	13.29	ppbV	93
7) Vinyl chloride	1.771	62	418993	12.18	ppbV	99
8) 1,3-Butadiene	1.778	39	366480	9.38	ppbV	95
9) Bromomethane	2.072	94	314101	12.67	ppbV	98
10) Chloroethane	2.182	64	234408	12.37	ppbV	99
11) Vinyl bromide	2.288	106	370521	12.97	ppbV	100
12) Trichlorofluoromethane	2.301	101	1000705	12.34	ppbV	99
13) Ethanol	2.670	45	119368	9.43	ppbV	98
14) 1,1-Dichloroethene	2.728	61	783294	12.46	ppbV	94
15) Carbon disulfide	2.751	76	1325613	13.28	ppbV	96
16) 1,1,2-Trichloro-1,2,2-...	2.773	101	883799	11.02	ppbV	99
17) Acrolein	2.986	56	162842	10.80	ppbV	98
18) Allyl chloride	3.114	76	209536	13.37	ppbV	100
19) Isopropanol	3.117	45	722303	9.01	ppbV	99
20) Methylene chloride	3.207	49	519352	11.61	ppbV	90
21) Acetone	3.220	43	697516	11.29	ppbV	98
22) 1,2-Dichloroethene (tr...	3.333	61	724350	13.17	ppbV	95
23) n-Pentane	3.416	43	764584	9.86	ppbV	98
24) n-Hexane	3.416	57	1154442	10.38	ppbV	95
25) Methyl tert-butyl ether	3.420	73	1346739	10.79	ppbV	99
26) Tert-butyl alcohol	3.474	59	964303	10.93	ppbV	100
27) 1,1-Dichloroethane	3.818	63	851936	11.54	ppbV	99
28) 1,2-Dichloroethene (cis)	4.249	61	650466	12.28	ppbV	94
29) Cyclohexane	4.429	56	775983	10.33	ppbV	93
30) Chloroform	4.471	83	953785	12.39	ppbV	100
31) Ethyl acetate	4.564	45	165503	10.41	ppbV	96
32) Carbon tetrachloride	4.596	117	932259	11.83	ppbV	99
33) Tetrahydrofuran	4.596	42	609583	10.53	ppbV	94
34) 1,1,1-Trichloroethane	4.645	97	842920	11.34	ppbV	99
35) Methyl ethyl ketone	4.709	43	964135	10.45	ppbV	95
36) n-Heptane	4.944	43	890681	9.24	ppbV	92
37) Benzene	4.953	78	1317079	11.37	ppbV	98
38) 1,2-Dichloroethane	5.114	62	622914	11.85	ppbV	100
40) Trichloroethene	5.455	130	508930	11.03	ppbV	99
41) 2,2,4-Trimethylpentane	4.870	57	2248143	10.03	ppbV	99
42) 1,2-Dichloropropane	5.912	63	531477	10.52	ppbV	99
43) Bromodichloromethane	5.973	83	942406	11.71	ppbV	99
44) Methyl methacrylate	6.120	41	662108	9.24	ppbV	93
45) 1,4-Dioxane	6.143	88	314809	11.63	ppbV	94
46) cis-1,3-Dichloropropene	6.564	75	782314	10.96	ppbV	100
47) Toluene	6.802	91	1547417	10.39	ppbV	98
48) Methyl isobutyl ketone	7.172	43	1164669	8.74	ppbV	96
49) Tetrachloroethene	7.188	166	600196	11.67	ppbV	99
50) trans-1,3-Dichloropropene	7.210	75	759650	11.19	ppbV	93
51) 1,1,2-Trichloroethane	7.368	97	530837	10.78	ppbV	97

Data Path : C:\DATA\2024\05-2024\05-21-2024\
Data File : aa6541lcs.D
Acq On : 21 May 2024 11:47 am
Operator : jjw
Sample : 10 ppbv LCS
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

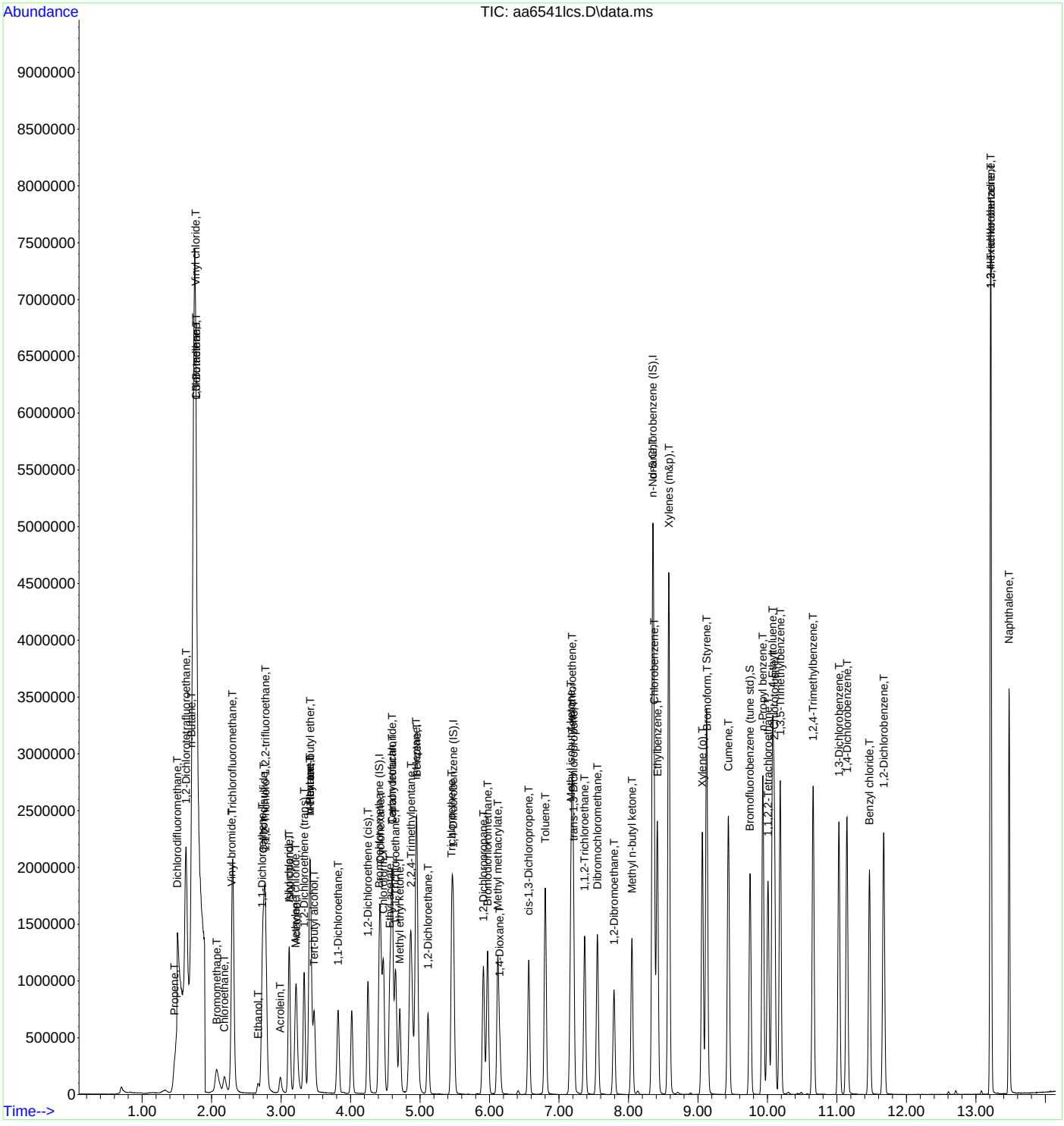
Quant Time: May 21 12:02:41 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.551	129	876543	11.62	ppbV	100
53) 1,2-Dibromoethane	7.792	107	762787	10.91	ppbV	99
54) Methyl n-butyl ketone	8.050	43	1092521	9.15	ppbV	97
56) n-Nonane	8.349	43	1279623	8.97	ppbV	94
57) Chlorobenzene	8.371	112	1135263	11.46	ppbV	94
58) Ethylbenzene	8.416	91	2104769	10.67	ppbV	99
59) Xylenes (m&p)	8.580	91	3203773	21.63	ppbV	98
60) Xylene (o)	9.063	91	1647861	10.49	ppbV	98
61) Styrene	9.124	104	1185008	11.63	ppbV	100
62) Bromoform	9.133	173	787158	12.48	ppbV	100
63) Cumene	9.439	105	2051429	10.36	ppbV	100
65) n-Propyl benzene	9.934	91	2786312	10.39	ppbV	99
66) 1,1,2,2-Tetrachloroethane	10.008	83	1261525	10.83	ppbV	100
67) 4-Ethyltoluene	10.072	105	2281605	10.70	ppbV	99
68) 2-Chlorotoluene	10.098	91	1920520	10.57	ppbV	99
69) 1,3,5-Trimethylbenzene	10.185	105	1893097	10.78	ppbV	100
70) 1,2,4-Trimethylbenzene	10.657	105	1892989	10.87	ppbV	100
71) 1,3-Dichlorobenzene	11.030	146	1118077	11.72	ppbV	99
72) 1,4-Dichlorobenzene	11.146	146	1127283	11.65	ppbV	99
73) Benzyl chloride	11.468	91	1745994	10.79	ppbV	99
74) 1,2-Dichlorobenzene	11.673	146	1088553	11.50	ppbV	100
75) 1,3-Hexachlorobutadiene	13.213	225	646041	12.57	ppbV	99
76) 1,2,4-Trichlorobenzene	13.213	180	859706	12.25	ppbV	99
77) Naphthalene	13.477	128	2114379	10.85	ppbV	100

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

Data Path : C:\DATA\2024\05-2024\05-21-2024\
Data File : aa6541lcs.D
Acq On : 21 May 2024 11:47 am
Operator : jjw
Sample : 10 ppbv LCS
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 21 12:02:41 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES, LLC

Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA6877LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 7/15/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6875BFB]	07/15/2024 10:11
10 PPBV DCVS [AA6876DCVS]	07/15/2024 10:42
10 PPBV LCS [AA6877LCS]	07/15/2024 11:44
METHOD BLANK [AA6878BLK]	07/15/2024 13:01
E24-02398-02 [AA6881]	07/15/2024 15:15
E24-02398-01 [AA6884]	07/15/2024 17:02
E24-02398-21 [AA6885]	07/15/2024 17:34
E24-02398-01 [AA6886]	07/15/2024 18:05
E24-02398-02 [AA6888]	07/15/2024 19:05
E24-02398-03 [AA6890]	07/15/2024 20:06
E24-02398-03 [AA6891]	07/15/2024 20:38
E24-02398-04 [AA6893]	07/15/2024 21:39
E24-02398-04 [AA6894]	07/15/2024 22:11

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
Acetone	67-64-1	9.1	83
Benzene	71-43-2	13	130
Bromodichloromethane	75-27-4	13	120
Bromoform	75-25-2	11	100
Bromomethane	74-83-9	11	100
1,3-Butadiene	106-99-0	10.0	100
Chlorobenzene	108-90-7	10	100
Chloroethane	75-00-3	12	120
Chloroform	67-66-3	13	130
Chloromethane	74-87-3	14	120
Carbon disulfide	75-15-0	12	110
Carbon tetrachloride	56-23-5	12	120
Cyclohexane	110-82-7	14	130
Dibromochloromethane	124-48-1	13	120
1,2-Dibromoethane	106-93-4	13	120
1,2-Dichlorobenzene	95-50-1	9.4	85
1,3-Dichlorobenzene	541-73-1	9.7	88
1,4-Dichlorobenzene	106-46-7	9.6	87
Dichlorodifluoromethane	75-71-8	12	110
1,1-Dichloroethane	75-34-3	14	130
1,2-Dichloroethane	107-06-2	14	130
1,1-Dichloroethene	75-35-4	13	120
1,2-Dichloroethene (cis)	156-59-2	14	130
1,2-Dichloroethene (trans)	156-60-5	13	120
1,2-Dichloropropane	78-87-5	13	130
1,3-Dichloropropene (cis)	10061-01-5	13	120
1,3-Dichloropropene (trans)	10061-02-6	14	130

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.

*** Values outside of QC limits* Values outside of 70-130% QC limits**

INTEGRATED ANALYTICAL LABORATORIES, LLC

Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA6877LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 7/15/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6875BFB]	07/15/2024 10:11
10 PPBV DCVS [AA6876DCVS]	07/15/2024 10:42
10 PPBV LCS [AA6877LCS]	07/15/2024 11:44
METHOD BLANK [AA6878BLK]	07/15/2024 13:01
E24-02398-02 [AA6881]	07/15/2024 15:15
E24-02398-01 [AA6884]	07/15/2024 17:02
E24-02398-21 [AA6885]	07/15/2024 17:34
E24-02398-01 [AA6886]	07/15/2024 18:05
E24-02398-02 [AA6888]	07/15/2024 19:05
E24-02398-03 [AA6890]	07/15/2024 20:06
E24-02398-03 [AA6891]	07/15/2024 20:38
E24-02398-04 [AA6893]	07/15/2024 21:39
E24-02398-04 [AA6894]	07/15/2024 22:11

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
1,2-Dichlorotetrafluoroethane	76-14-2	10	91
1,4-Dioxane	123-91-1	13	110
Ethylbenzene	100-41-4	11	110
n-Heptane	142-82-5	12	120
1,3-Hexachlorobutadiene	87-68-3	8.2	72
n-Hexane	110-54-3	14	130
Methylene chloride	75-09-2	12	110
Methyl ethyl ketone	78-93-3	14	120
Methyl isobutyl ketone	108-10-1	14	130
Methyl tert-butyl ether	1634-04-4	13	120
Styrene	100-42-5	12	110
Tert-butyl alcohol	75-65-0	14	120
1,1,2,2-Tetrachloroethane	79-34-5	12	110
Tetrachloroethene	127-18-4	12	120
Toluene	108-88-3	13	130
1,2,4-Trichlorobenzene	120-82-1	8.6	75
1,1,1-Trichloroethane	71-55-6	12	120
1,1,2-Trichloroethane	79-00-5	12	110
Trichloroethene	79-01-6	9.3	93
Trichlorofluoromethane	75-69-4	13	120
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	12	120
1,2,4-Trimethylbenzene	95-63-6	11	100
1,3,5-Trimethylbenzene	108-67-8	10	91
2,2,4-Trimethylpentane	540-84-1	11	110
Vinyl bromide	593-60-2	11	110
Vinyl chloride	75-01-4	13	130
Xylenes (m&p)	179601-23-1	23	120

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.

*** Values outside of QC limits* Values outside of 70-130% QC limits**

INTEGRATED ANALYTICAL LABORATORIES, LLC

Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA6877LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 7/15/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6875BFB]	07/15/2024 10:11
10 PPBV DCVS [AA6876DCVS]	07/15/2024 10:42
10 PPBV LCS [AA6877LCS]	07/15/2024 11:44
METHOD BLANK [AA6878BLK]	07/15/2024 13:01
E24-02398-02 [AA6881]	07/15/2024 15:15
E24-02398-01 [AA6884]	07/15/2024 17:02
E24-02398-21 [AA6885]	07/15/2024 17:34
E24-02398-01 [AA6886]	07/15/2024 18:05
E24-02398-02 [AA6888]	07/15/2024 19:05
E24-02398-03 [AA6890]	07/15/2024 20:06
E24-02398-03 [AA6891]	07/15/2024 20:38
E24-02398-04 [AA6893]	07/15/2024 21:39
E24-02398-04 [AA6894]	07/15/2024 22:11

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
Xylenes (o)	95-47-6	11	110

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.

*** Values outside of QC limits* Values outside of 70-130% QC limits**

Data Path : C:\DATA\2024\07-2024\07-15-2024\
Data File : aa6877lcs.D
Acq On : 15 Jul 2024 11:44 am
Operator : jjw
Sample : 10 ppbv LCS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 15 12:32:02 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.425	130	217496	10.00	ppbV		0.000
39) 1,4-Difluorobenzene (IS)	5.490	114	1076242	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.354	117	1232831	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.750	95	1207763	10.36	ppbV		0.000
Target Compounds							Qvalue
2) Propene	1.496	41	280296	12.28	ppbV		98
3) Dichlorodifluoromethane	1.533	85	753092	12.09	ppbV		100
4) 1,2-Dichlorotetrafluor...	1.660	85	893107	10.23	ppbV		93
5) n-Butane	1.736	43	676849	14.36	ppbV		98
6) Chloromethane	1.801	52	54869	14.14	ppbV		94
7) Vinyl chloride	1.788	62	371528	12.96	ppbV		99
8) 1,3-Butadiene	1.801	39	264529	9.96	ppbV		93
9) Bromomethane	2.101	94	242214	10.81	ppbV		99
10) Chloroethane	2.207	64	196580	12.06	ppbV		98
11) Vinyl bromide	2.310	106	286858	10.56	ppbV		99
12) Trichlorofluoromethane	2.326	101	933658	13.02	ppbV		100
13) Ethanol	2.692	45	142588	12.74	ppbV	#	85
14) 1,1-Dichloroethene	2.750	61	725687	13.15	ppbV		91
15) Carbon disulfide	2.773	76	1091793	11.88	ppbV	#	93
16) 1,1,2-Trichloro-1,2,2-...	2.795	101	779997	11.51	ppbV		93
17) Acrolein	3.007	56	154194	12.56	ppbV		97
18) Allyl chloride	3.133	76	186670	13.22	ppbV		100
19) Isopropanol	3.136	45	548590	8.94	ppbV		99
20) Methylene chloride	3.226	49	487190	12.40	ppbV		88
21) Acetone	3.239	43	445441	9.13	ppbV		95
22) 1,2-Dichloroethene (tr...	3.348	61	672439	13.48	ppbV		90
23) n-Pentane	3.432	43	802869	13.47	ppbV		99
24) n-Hexane	3.432	57	1180197	14.13	ppbV		91
25) Methyl tert-butyl ether	3.435	73	1328820	13.34	ppbV		95
26) Tert-butyl alcohol	3.493	59	952477	13.99	ppbV		100
27) 1,1-Dichloroethane	3.834	63	835887	13.50	ppbV		99
28) 1,2-Dichloroethene (cis)	4.261	61	637479	14.19	ppbV		90
29) Cyclohexane	4.445	56	799491	14.34	ppbV		90
30) Chloroform	4.483	83	905623	13.04	ppbV		99
31) Ethyl acetate	4.576	45	153985	13.02	ppbV		93
32) Carbon tetrachloride	4.609	117	842957	11.89	ppbV		99
33) Tetrahydrofuran	4.609	42	512171	12.27	ppbV	#	86
34) 1,1,1-Trichloroethane	4.660	97	801794	12.26	ppbV		99
35) Methyl ethyl ketone	4.718	43	968255	14.00	ppbV		91
36) n-Heptane	4.949	43	752582	11.51	ppbV		96
37) Benzene	4.966	78	1238156	12.50	ppbV		94
38) 1,2-Dichloroethane	5.126	62	641652	14.16	ppbV		100
40) Trichloroethene	5.467	130	451005	9.27	ppbV		100
41) 2,2,4-Trimethylpentane	4.872	57	2065571	10.78	ppbV		100
42) 1,2-Dichloropropane	5.917	63	575928	12.89	ppbV		99
43) Bromodichloromethane	5.978	83	987786	12.70	ppbV		98
44) Methyl methacrylate	6.123	41	757527	13.58	ppbV		87
45) 1,4-Dioxane	6.152	88	341747	13.45	ppbV		88
46) cis-1,3-Dichloropropene	6.570	75	853787	12.93	ppbV		99
47) Toluene	6.808	91	1728353	12.54	ppbV		99
48) Methyl isobutyl ketone	7.174	43	1421120	14.10	ppbV		94
49) Tetrachloroethene	7.194	166	600365	11.50	ppbV		99
50) trans-1,3-Dichloropropene	7.213	75	906193	14.28	ppbV		87
51) 1,1,2-Trichloroethane	7.374	97	584390	12.28	ppbV		96

Data Path : C:\DATA\2024\07-2024\07-15-2024\
Data File : aa6877lcs.D
Acq On : 15 Jul 2024 11:44 am
Operator : jjw
Sample : 10 ppbv LCS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

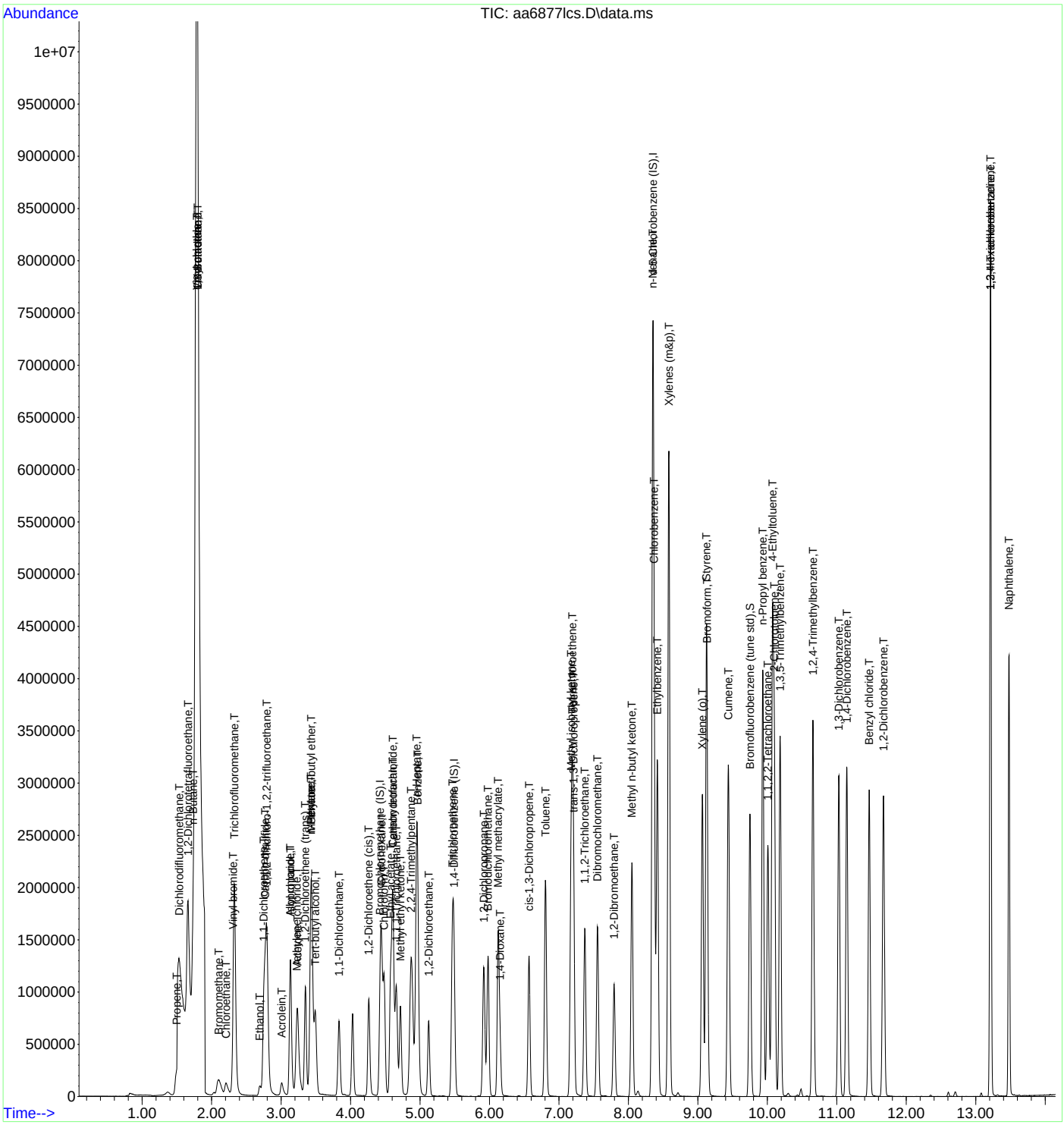
Quant Time: Jul 15 12:32:02 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.554	129	964175	12.71	ppbV	99
53) 1,2-Dibromoethane	7.795	107	879201	12.88	ppbV	100
54) Methyl n-butyl ketone	8.049	43	886463	9.40	ppbV	95
56) n-Nonane	8.351	43	2019672	14.02	ppbV	91
57) Chlorobenzene	8.371	112	1325526	10.38	ppbV	89
58) Ethylbenzene	8.416	91	2697712	11.10	ppbV	98
59) Xylenes (m&p)	8.583	91	4155773	22.75	ppbV	98
60) Xylene (o)	9.065	91	2033963	10.57	ppbV	97
61) Styrene	9.123	104	1508177	11.79	ppbV	100
62) Bromoform	9.133	173	920802	10.73	ppbV	100
63) Cumene	9.438	105	2586634	10.54	ppbV	98
65) n-Propyl benzene	9.933	91	3920088	11.62	ppbV	98
66) 1,1,2,2-Tetrachloroethane	10.007	83	1636418	11.56	ppbV	99
67) 4-Ethyltoluene	10.075	105	3126799	11.36	ppbV	98
68) 2-Chlorotoluene	10.100	91	2584119	11.29	ppbV	96
69) 1,3,5-Trimethylbenzene	10.184	105	2305979	10.30	ppbV	98
70) 1,2,4-Trimethylbenzene	10.657	105	2362263	10.52	ppbV	98
71) 1,3-Dichlorobenzene	11.030	146	1320080	9.69	ppbV	100
72) 1,4-Dichlorobenzene	11.145	146	1323252	9.61	ppbV	100
73) Benzyl chloride	11.467	91	2503839	11.30	ppbV	97
74) 1,2-Dichlorobenzene	11.673	146	1236833	9.44	ppbV	99
75) 1,3-Hexachlorobutadiene	13.213	225	621162	8.24	ppbV	99
76) 1,2,4-Trichlorobenzene	13.213	180	871674	8.58	ppbV	100
77) Naphthalene	13.480	128	2375432	8.27	ppbV	100

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

Data Path : C:\DATA\2024\07-2024\07-15-2024\
Data File : aa6877lcs.D
Acq On : 15 Jul 2024 11:44 am
Operator : jjw
Sample : 10 ppbv LCS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 15 12:32:02 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration



Analysis: Volatile Organic Compounds by EPA Method TO-15
Laboratory Sample Duplicate Report

SDG Number: E24-01699
IAL Sample ID: E24-01699-03
Matrix: Air
Summa ID: 2900

Date Received: 5/14/24
Date Analyzed: 5/21/24,5/21/24
Lab Data File#: AA6549,AA6550
Dilution Factor: 1
Injection Volume: 500ml
GC/MS Column: RTX-1, 0.32 mmID

Compound	CAS #	Sample E24-01699-03 Concentration Reported ppbv	Q	Sample Dup E24-01699-23 Concentration Reported ppbv	Q	Reporting Limits ppbv	RPD
Acetone	67-64-1	**21**		**20**		0.20	**4.88%**
Allyl Chloride	107-05-1	0.20	U	0.20	U	0.20	0.00%
Benzene	71-43-2	**0.20**		0.20	U	0.20	**NC**
Bromodichloromethane	75-27-4	0.20	U	0.20	U	0.20	0.00%
Bromoform	75-25-2	0.20	U	0.20	U	0.20	0.00%
Bromomethane	74-83-9	0.20	U	0.20	U	0.20	0.00%
1,3-Butadiene	106-99-0	0.20	U	0.20	U	0.20	0.00%
Chlorobenzene	108-90-7	0.20	U	0.20	U	0.20	0.00%
Chloroethane	75-00-3	0.20	U	0.20	U	0.20	0.00%
Chloroform	67-66-3	0.20	U	0.20	U	0.20	0.00%
Chloromethane	74-87-3	0.20	U	0.20	U	0.20	0.00%
Carbon disulfide	75-15-0	0.20	U	0.20	U	0.20	0.00%
Carbon tetrachloride	56-23-5	0.20	U	0.20	U	0.20	0.00%
2-Chlorotoluene	95-49-8	0.20	U	0.20	U	0.20	0.00%
Cyclohexane	110-82-7	0.20	U	0.20	U	0.20	0.00%
Dibromochloromethane	124-48-1	0.20	U	0.20	U	0.20	0.00%
1,2-Dibromoethane	106-93-4	0.20	U	0.20	U	0.20	0.00%
1,2-Dichlorobenzene	95-50-1	0.20	U	0.20	U	0.20	0.00%
1,3-Dichlorobenzene	541-73-1	0.20	U	0.20	U	0.20	0.00%
1,4-Dichlorobenzene	106-46-7	0.20	U	0.20	U	0.20	0.00%
Dichlorodifluoromethane	75-71-8	0.20	U	0.20	U	0.20	0.00%
1,1-Dichloroethane	75-34-3	0.20	U	0.20	U	0.20	0.00%
1,2-Dichloroethane	107-06-2	0.20	U	0.20	U	0.20	0.00%
1,1-Dichloroethene	75-35-4	0.20	U	0.20	U	0.20	0.00%
1,2-Dichloroethene (cis)	156-59-2	0.20	U	0.20	U	0.20	0.00%
1,2-Dichloroethene (trans)	156-60-5	0.20	U	0.20	U	0.20	0.00%
1,2-Dichloropropane	78-87-5	0.20	U	0.20	U	0.20	0.00%
1,3-Dichloropropene (cis)	10061-01-5	0.20	U	0.20	U	0.20	0.00%
1,3-Dichloropropene (trans)	10061-02-6	0.20	U	0.20	U	0.20	0.00%
1,2-Dichlorotetrafluoroethane	76-14-2	0.20	U	0.20	U	0.20	0.00%
1,4-Dioxane	123-91-1	0.20	U	0.20	U	0.20	0.00%
Ethanol	64-17-5	0.20	U	0.20	U	0.20	0.00%
Ethylbenzene	100-41-4	0.20	U	0.20	U	0.20	0.00%
4-Ethyltoluene	622-96-8	0.20	U	0.20	U	0.20	0.00%
n-Heptane	142-82-5	0.20	U	0.20	U	0.20	0.00%
1,3-Hexachlorobutadiene	87-68-3	0.20	U	0.20	U	0.20	0.00%
n-Hexane	110-54-3	**0.24**		**0.21**		0.20	**13.33%**
Isopropanol	67-63-0	0.20	U	**0.51**		0.20	**NC**

Qualifiers:
E=Concentration exceeds upper level of calibration range for instrument.
D=Extra dilution required for this compound. X=Duplicate samples do not met RPD criteria.
U=Compound ND or under reporting limit.

Analysis: Volatile Organic Compounds by EPA Method TO-15
Laboratory Sample Duplicate Report

SDG Number: E24-01699
IAL Sample ID: E24-01699-03
Matrix: Air
Summa ID: 2900

Date Received: 5/14/24
Date Analyzed: 5/21/24,5/21/24
Lab Data File#: AA6549,AA6550
Dilution Factor: 1
Injection Volume: 500ml
GC/MS Column: RTX-1, 0.32 mmID

Compound	CAS #	Sample E24-01699-03 Concentration Reported ppbv	Q	Sample Dup E24-01699-23 Concentration Reported ppbv	Q	Reporting Limits ppbv	RPD
Methylene chloride	75-09-2	0.20	U	0.20	U	0.20	0.00%
Methyl ethyl ketone	78-93-3	**0.32**		**0.29**		0.20	**9.84%**
Methyl isobutyl ketone	108-10-1	0.20	U	0.20	U	0.20	0.00%
Methyl methacrylate	80-62-6	0.20	U	0.20	U	0.20	0.00%
Methyl tert-butyl ether	1634-04-4	0.20	U	0.20	U	0.20	0.00%
Styrene	100-42-5	0.20	U	0.20	U	0.20	0.00%
Tert-butyl alcohol	75-65-0	0.20	U	0.20	U	0.20	0.00%
1,1,2,2-Tetrachloroethane	79-34-5	0.20	U	0.20	U	0.20	0.00%
Tetrachloroethene	127-18-4	0.20	U	0.20	U	0.20	0.00%
Tetrahydrofuran	109-99-9	0.20	U	0.20	U	0.20	0.00%
Toluene	108-88-3	**0.42**		**0.38**		0.20	**10.00%**
1,2,4-Trichlorobenzene	120-82-1	0.20	U	0.20	U	0.20	0.00%
1,1,1-Trichloroethane	71-55-6	0.20	U	0.20	U	0.20	0.00%
1,1,2-Trichloroethane	79-00-5	0.20	U	0.20	U	0.20	0.00%
Trichloroethene	79-01-6	0.20	U	0.20	U	0.20	0.00%
Trichlorofluoromethane	75-69-4	**0.35**		**0.35**		0.20	**0.00%**
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.20	U	0.20	U	0.20	0.00%
1,2,4-Trimethylbenzene	95-63-6	0.20	U	0.20	U	0.20	0.00%
1,3,5-Trimethylbenzene	108-67-8	0.20	U	0.20	U	0.20	0.00%
2,2,4-Trimethylpentane	540-84-1	0.20	U	0.20	U	0.20	0.00%
Vinyl bromide	593-60-2	0.20	U	0.20	U	0.20	0.00%
Vinyl chloride	75-01-4	0.20	U	0.20	U	0.20	0.00%
Xylenes (m&p)	179601-23-1	0.40	U	0.40	U	0.40	0.00%
Xylenes (o)	95-47-6	0.20	U	0.20	U	0.20	0.00%

RPD must be <25% for all laboratory duplicate samples. Laboratory duplicate samples are run once daily.
NC = The RPD could not be calculated since the compound was only detected in either the parent or duplicate sample.

Qualifiers:
E=Concentration exceeds upper level of calibration range for instrument.
D=Extra dilution required for this compound. X=Duplicate samples do not met RPD criteria.
U=Compound ND or under reporting limit.

Data Path : C:\DATA\2024\05-2024\05-21-2024\
Data File : aa6549.D
Acq On : 21 May 2024 5:49 pm
Operator : jjw
Sample : E24-01699-03
Misc : 2900, 500cc
ALS Vial : 23 Sample Multiplier: 1

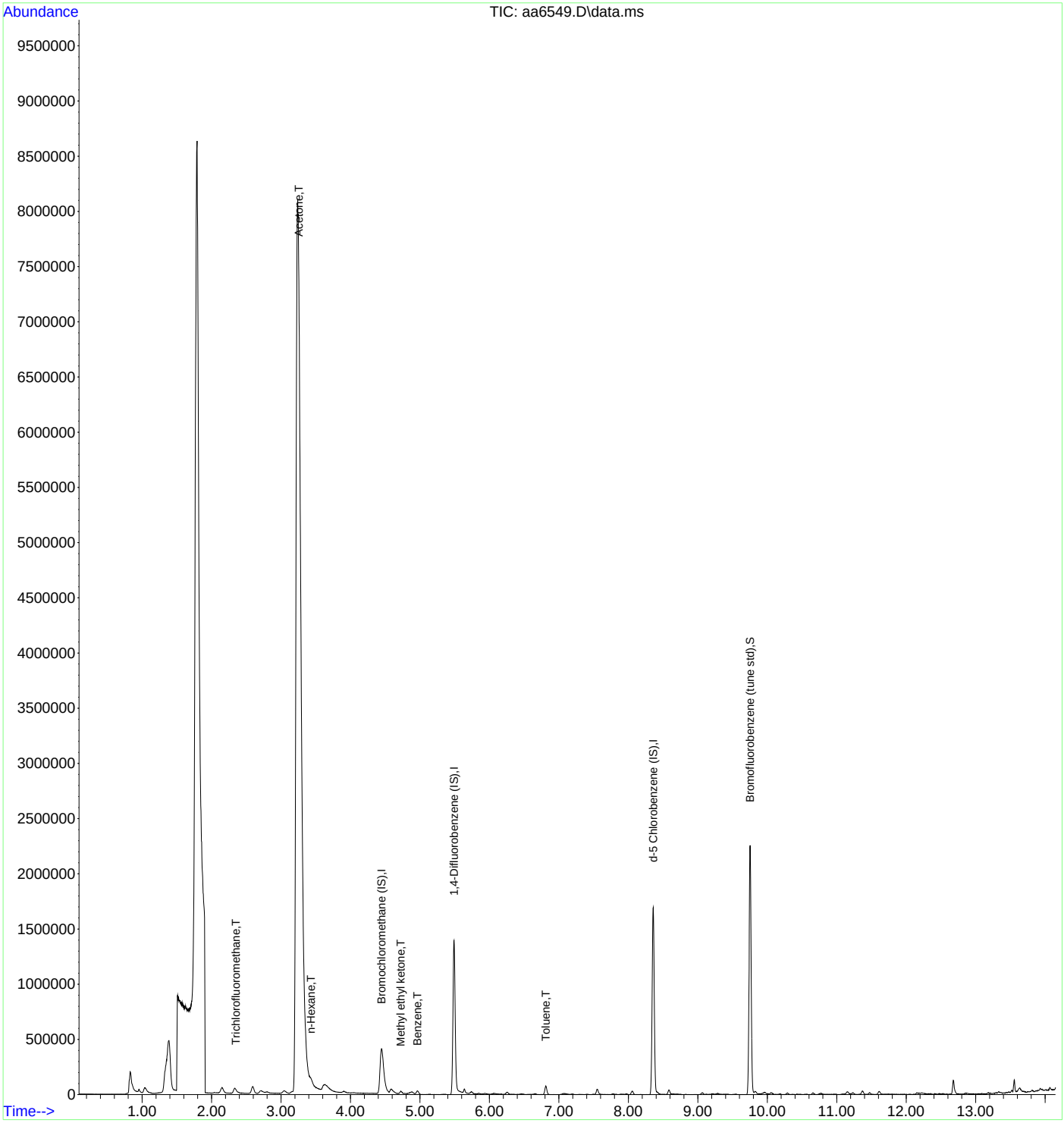
Quant Time: May 22 10:22:42 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

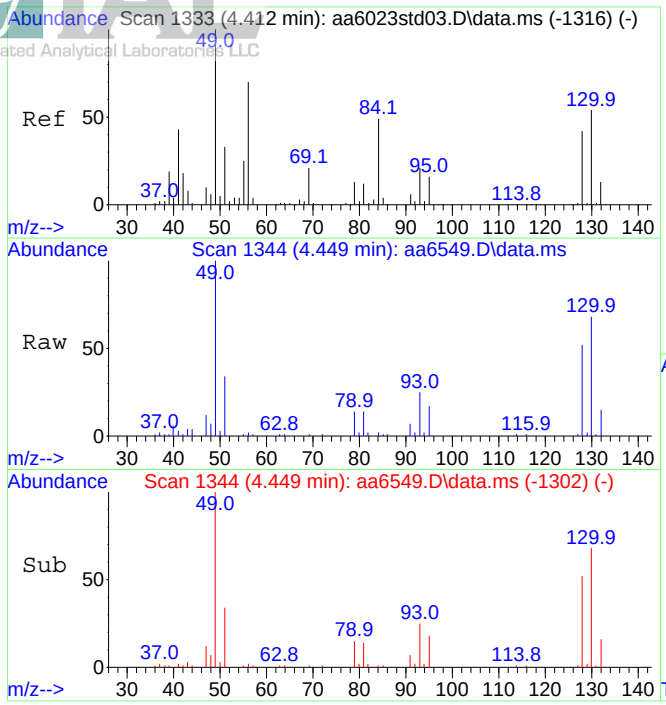
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.449	130	263820	10.00	ppbV		0.037
39) 1,4-Difluorobenzene (IS)	5.490	114	1265717	10.00	ppbV		0.014
55) d-5 Chlorobenzene (IS)	8.358	117	1097786	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.751	95	1013191	10.29	ppbV		0.000
Target Compounds							Qvalue
12) Trichlorofluoromethane	2.349	101	27327	0.35	ppbV		98
21) Acetone	3.256	43	1236983	20.96	ppbV		100
24) n-Hexane	3.433	57	25302	0.24	ppbV		94
35) Methyl ethyl ketone	4.722	43	28532	0.32	ppbV		95
37) Benzene	4.963	78	22696	0.21	ppbV	#	91
47) Toluene	6.812	91	68132	0.42	ppbV		100

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

Data Path : C:\DATA\2024\05-2024\05-21-2024\
Data File : aa6549.D
Acq On : 21 May 2024 5:49 pm
Operator : jjw
Sample : E24-01699-03
Misc : 2900, 500cc
ALS Vial : 23 Sample Multiplier: 1

Quant Time: May 22 10:22:42 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

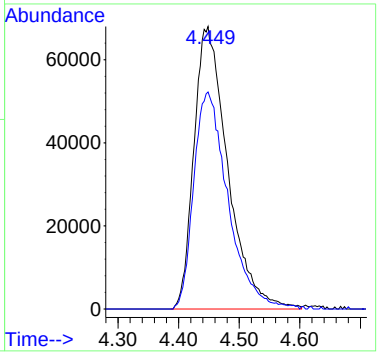


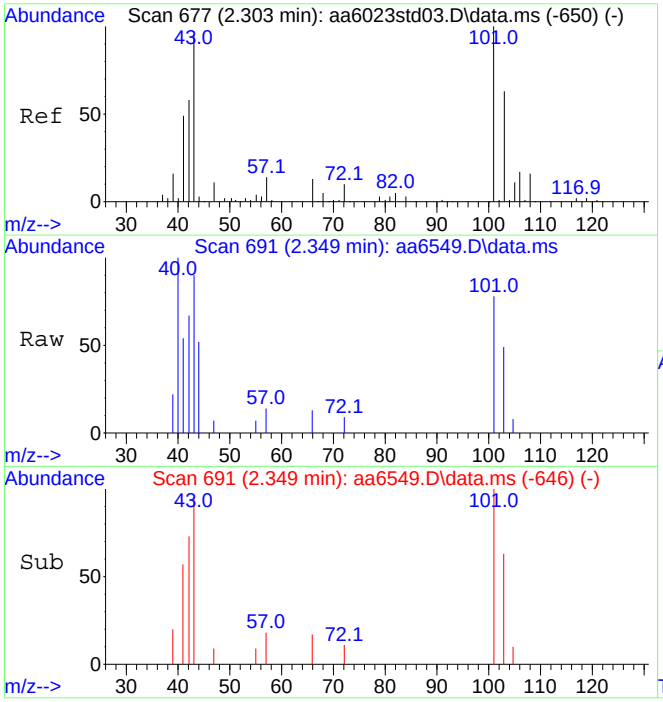


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.449 min Scan# 1344
Delta R.T. 0.037 min
Lab File: aa6549.D
Acq: 21 May 2024 5:49 pm

Tgt Ion:130 Resp: 263820

Ion	Ratio	Lower	Upper
130	100		
128	77.9	57.8	97.8

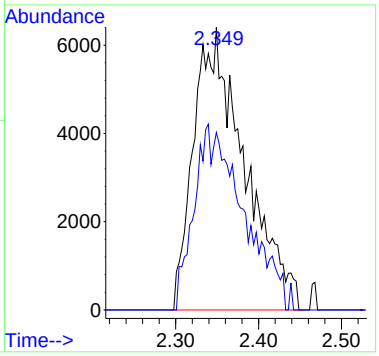


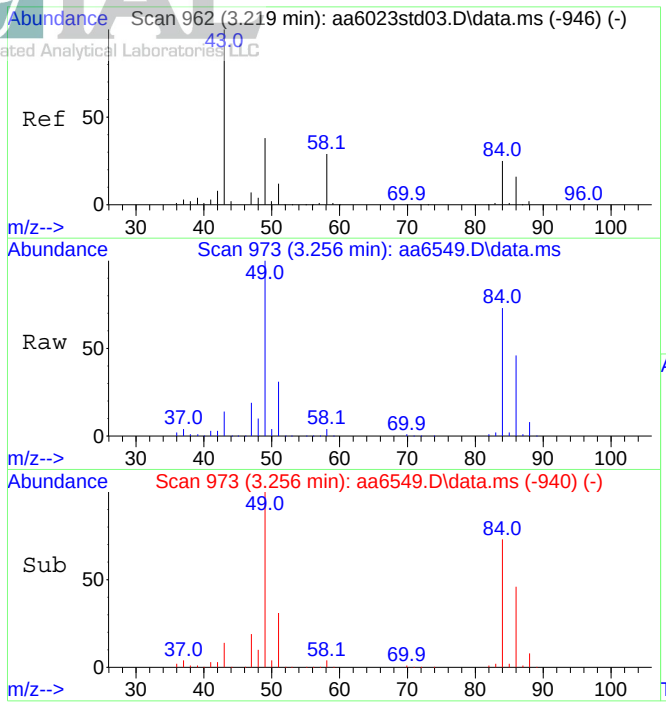


#12
Trichlorofluoromethane
Concen: 0.35 ppbV
RT: 2.349 min Scan# 691
Delta R.T. 0.046 min
Lab File: aa6549.D
Acq: 21 May 2024 5:49 pm

Tgt Ion:101 Resp: 27327

Ion	Ratio	Lower	Upper
101	100		
103	63.3	52.1	78.1

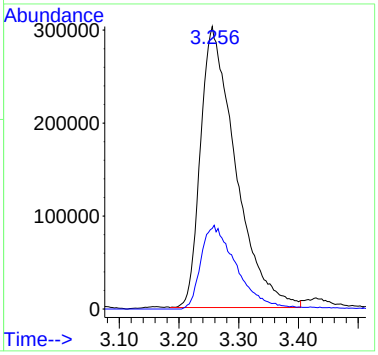


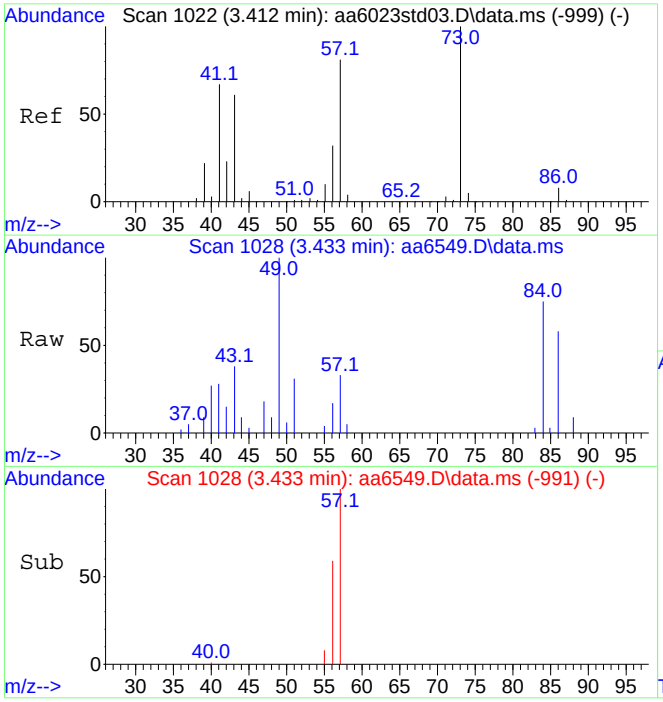


#21
Acetone
Concen: 20.96 ppbV
RT: 3.256 min Scan# 973
Delta R.T. 0.036 min
Lab File: aa6549.D
Acq: 21 May 2024 5:49 pm

Tgt Ion: 43 Resp: 1236983

Ion	Ratio	Lower	Upper
43	100		
58	30.0	23.8	35.8

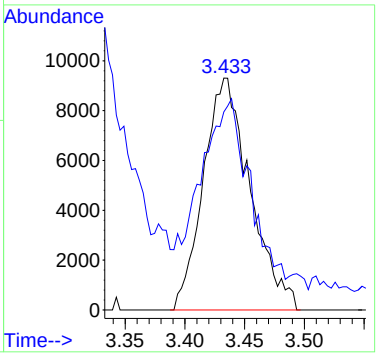


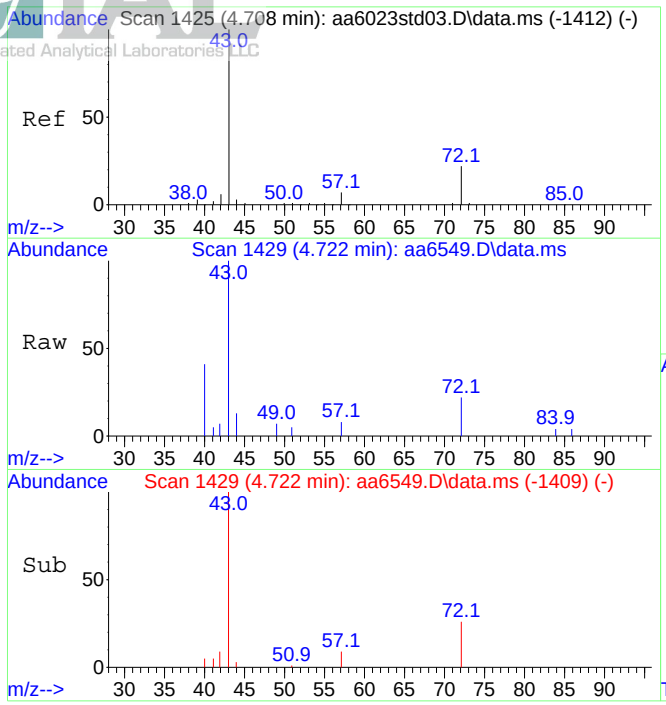


#24
n-Hexane
Concen: 0.24 ppbV
RT: 3.433 min Scan# 1028
Delta R.T. 0.020 min
Lab File: aa6549.D
Acq: 21 May 2024 5:49 pm

Tgt Ion: 57 Resp: 25302

Ion	Ratio	Lower	Upper
57	100		
41	89.3	76.2	114.4

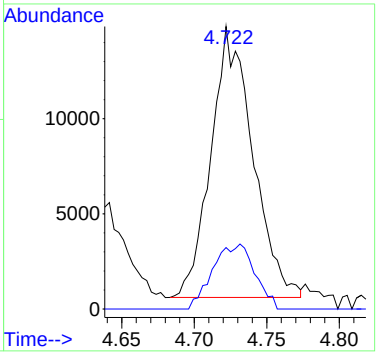


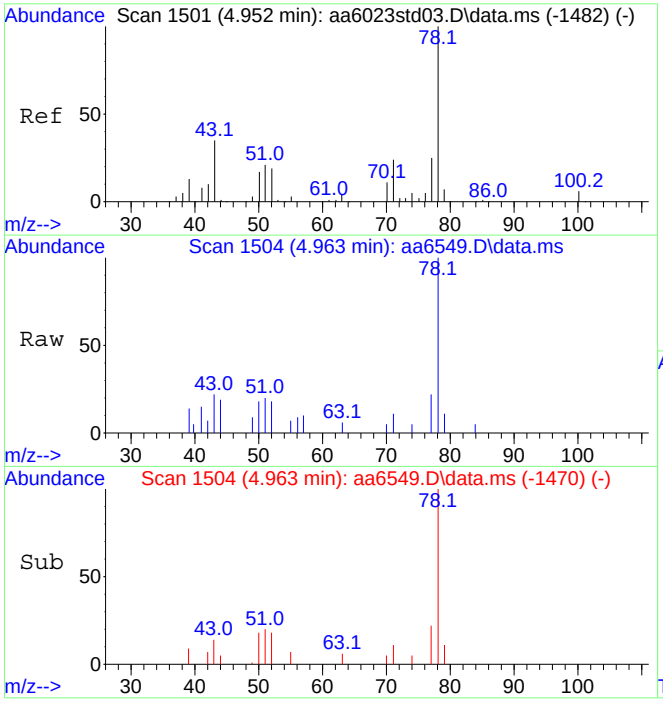


#35
Methyl ethyl ketone
Concen: 0.32 ppbV
RT: 4.722 min Scan# 1429
Delta R.T. 0.014 min
Lab File: aa6549.D
Acq: 21 May 2024 5:49 pm

Tgt Ion: 43 Resp: 28532

Ion	Ratio	Lower	Upper
43	100		
72	24.1	17.4	26.0

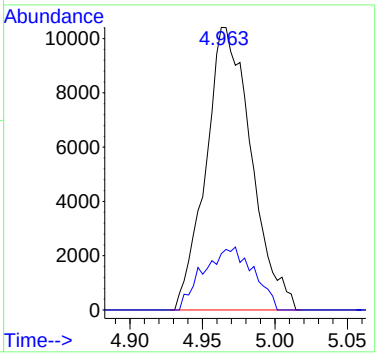


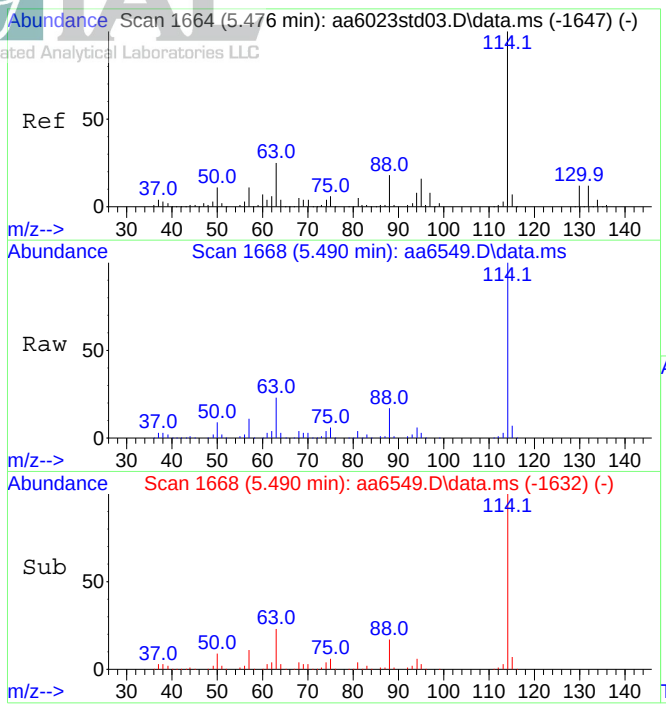


#37
Benzene
Concen: 0.21 ppbV
RT: 4.963 min Scan# 1504
Delta R.T. 0.011 min
Lab File: aa6549.D
Acq: 21 May 2024 5:49 pm

Tgt Ion: 78 Resp: 22696

Ion	Ratio	Lower	Upper
78	100		
51	24.3	16.1	24.1#

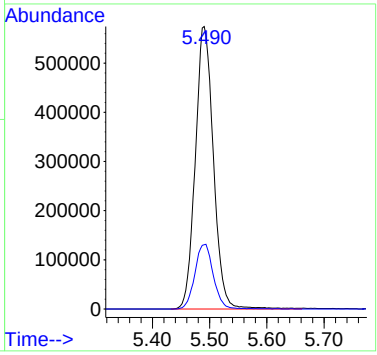


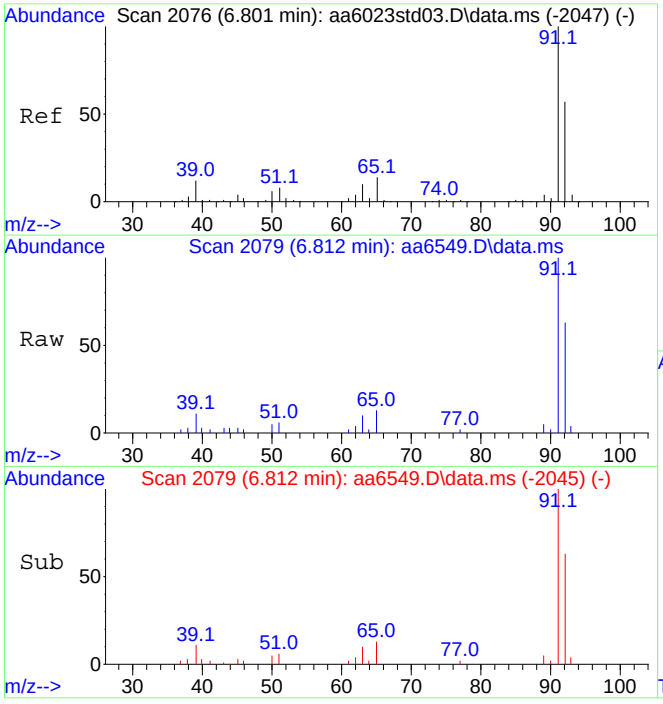


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.490 min Scan# 1668
Delta R.T. 0.014 min
Lab File: aa6549.D
Acq: 21 May 2024 5:49 pm

Tgt Ion:114 Resp: 1265717

Ion	Ratio	Lower	Upper
114	100		
63	23.3	6.4	46.4

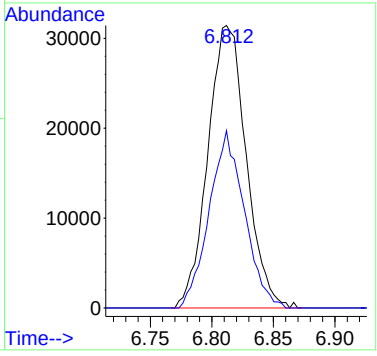


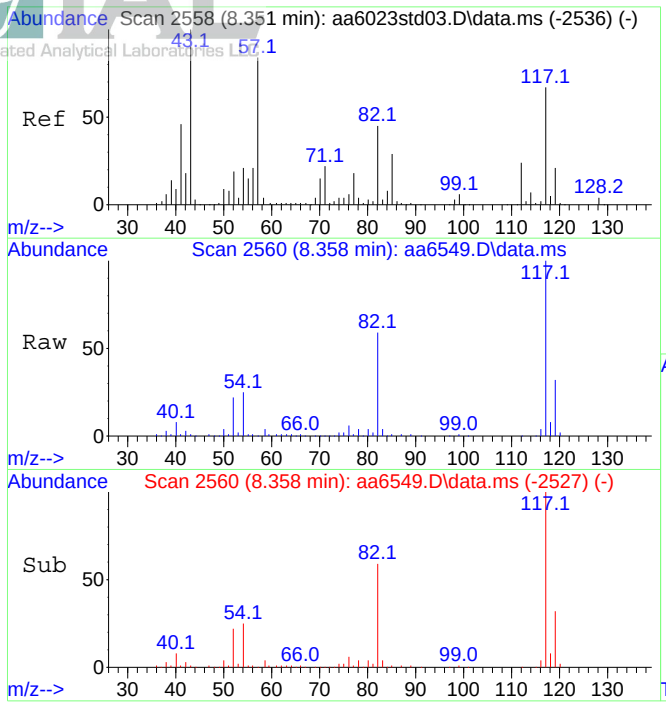


#47
Toluene
Concen: 0.42 ppbV
RT: 6.812 min Scan# 2079
Delta R.T. 0.011 min
Lab File: aa6549.D
Acq: 21 May 2024 5:49 pm

Tgt Ion: 91 Resp: 68132

Ion	Ratio	Lower	Upper
91	100		
92	57.5	46.3	69.5

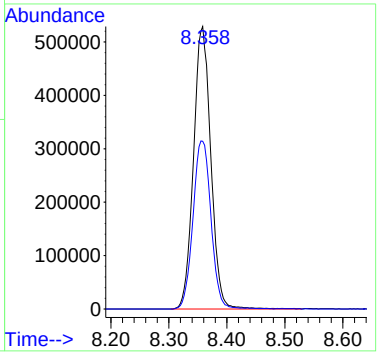


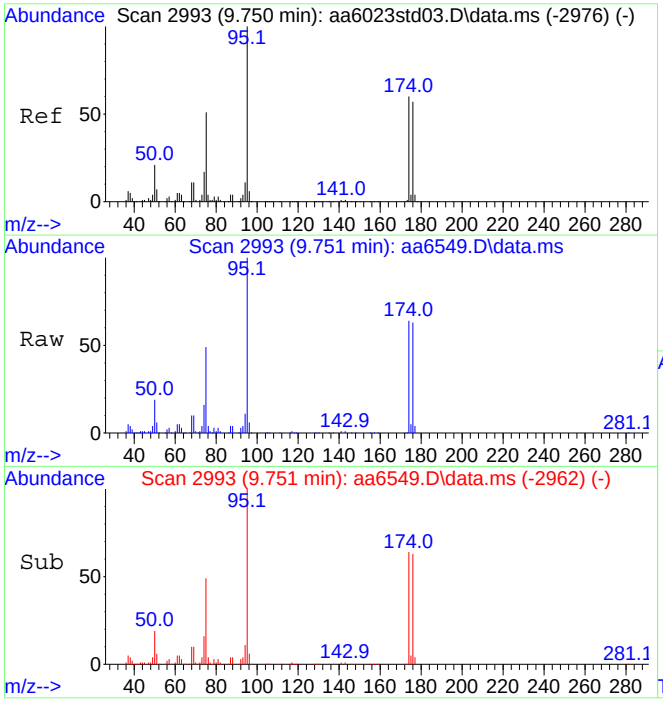


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.358 min Scan# 2560
Delta R.T. 0.007 min
Lab File: aa6549.D
Acq: 21 May 2024 5:49 pm

Tgt Ion:117 Resp: 1097786

Ion	Ratio	Lower	Upper
117	100		
82	61.8	46.2	86.2

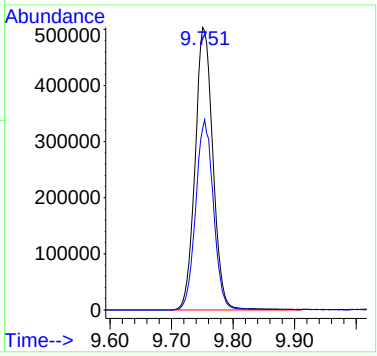




#64
Bromofluorobenzene (tune std)
Concen: 10.29 ppbV
RT: 9.751 min Scan# 2993
Delta R.T. 0.001 min
Lab File: aa6549.D
Acq: 21 May 2024 5:49 pm

Tgt Ion: 95 Resp: 1013191

Ion	Ratio	Lower	Upper
95	100		
174	67.0	49.4	74.2



Data Path : C:\DATA\2024\05-2024\05-21-2024\
Data File : aa6550.D
Acq On : 21 May 2024 6:21 pm
Operator : jjw
Sample : E24-01699-23
Misc : 2900, 500cc
ALS Vial : 24 Sample Multiplier: 1

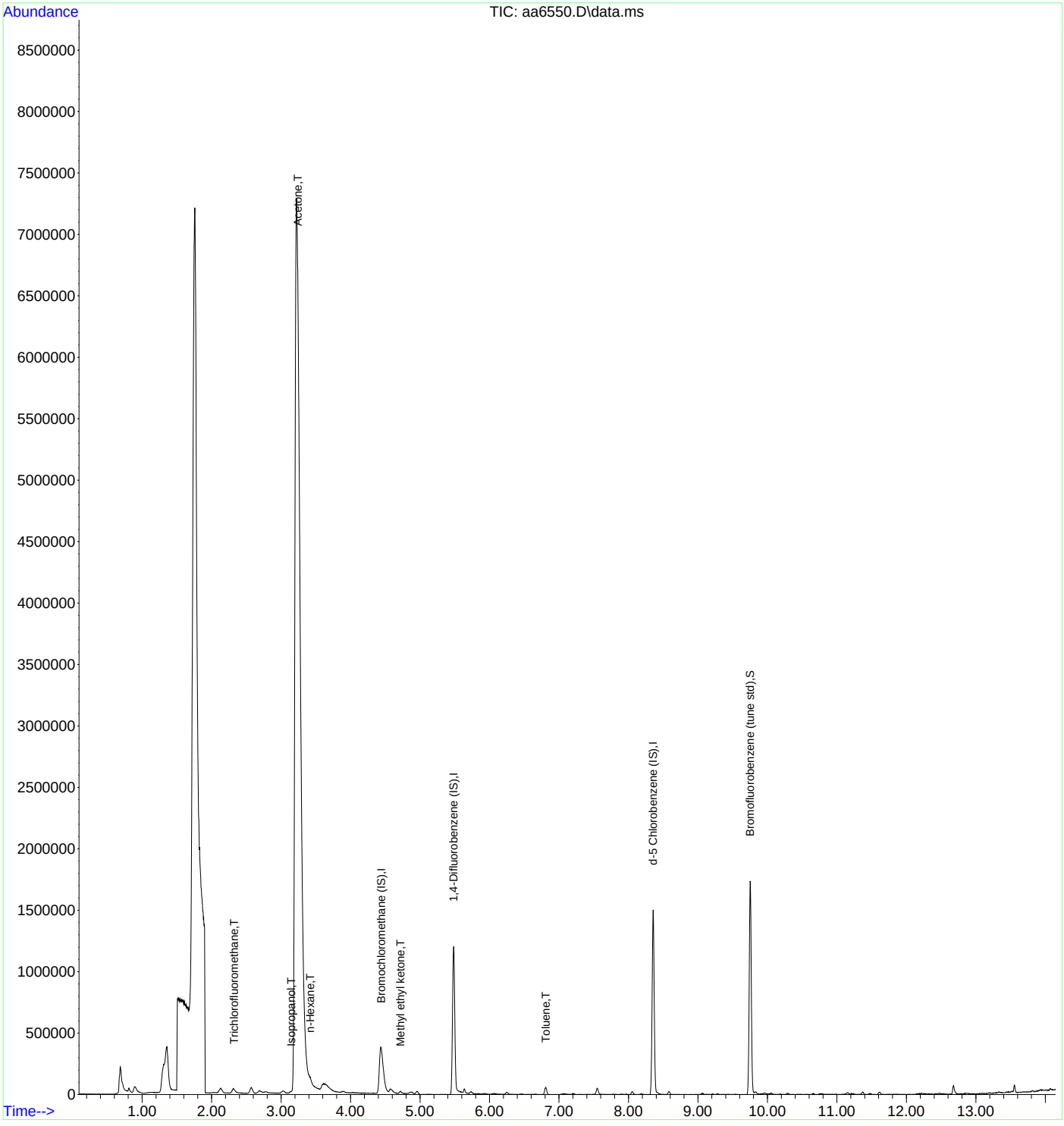
Quant Time: May 22 10:24:28 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

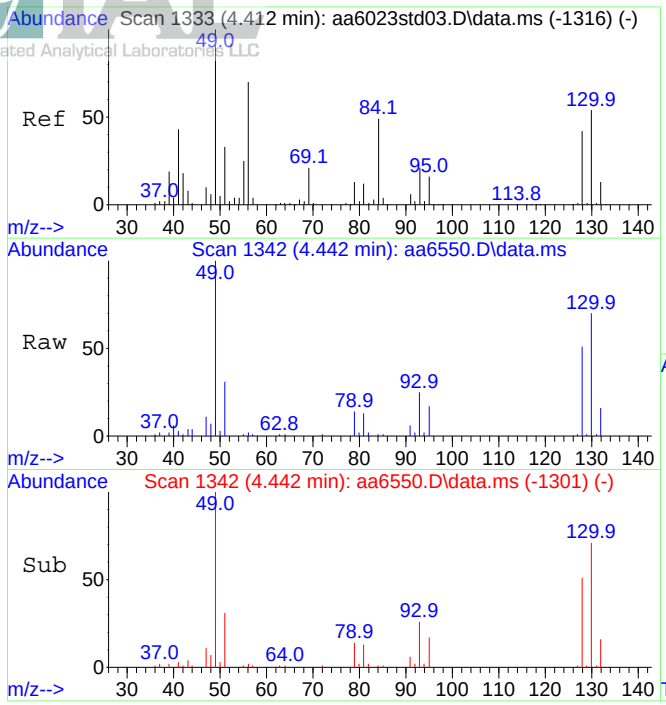
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.442	130	257959	10.00	ppbV	0.030
39) 1,4-Difluorobenzene (IS)	5.484	114	1075642	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.355	117	945740	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.751	95	782852	9.23	ppbV	0.000
Target Compounds						Qvalue
12) Trichlorofluoromethane	2.323	101	26676	0.35	ppbV	96
19) Isopropanol	3.147	45	38218	0.51	ppbV	98
21) Acetone	3.240	43	1154626	20.01	ppbV	100
24) n-Hexane	3.420	57	21568	0.21	ppbV	94
35) Methyl ethyl ketone	4.719	43	25172	0.29	ppbV	96
47) Toluene	6.809	91	52939	0.38	ppbV	98

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

Data Path : C:\DATA\2024\05-2024\05-21-2024\
Data File : aa6550.D
Acq On : 21 May 2024 6:21 pm
Operator : jjw
Sample : E24-01699-23
Misc : 2900, 500cc
ALS Vial : 24 Sample Multiplier: 1

Quant Time: May 22 10:24:28 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

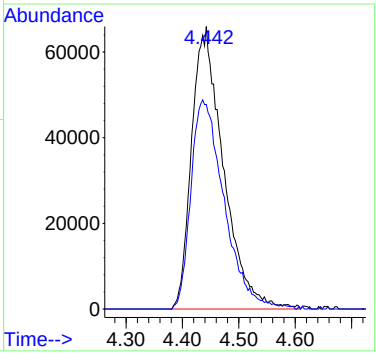


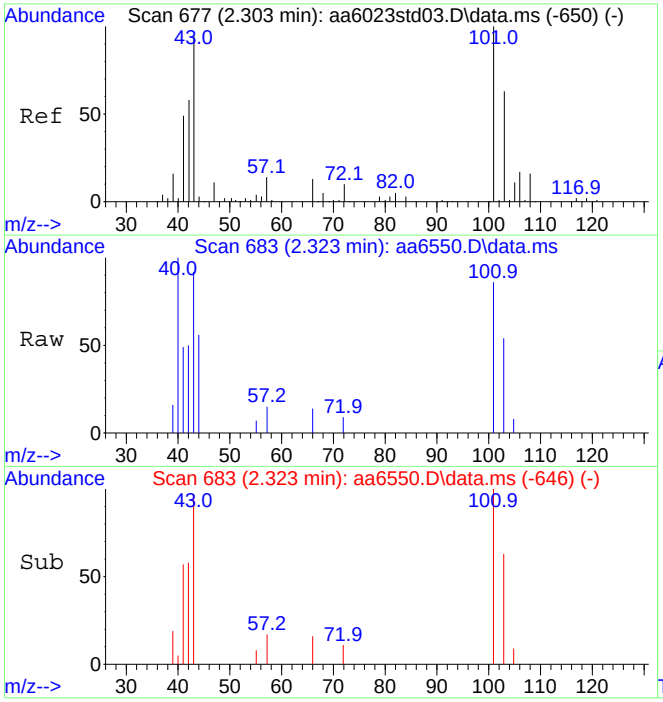


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.442 min Scan# 1342
Delta R.T. 0.030 min
Lab File: aa6550.D
Acq: 21 May 2024 6:21 pm

Tgt Ion:130 Resp: 257959

Ion	Ratio	Lower	Upper
130	100		
128	77.4	57.8	97.8

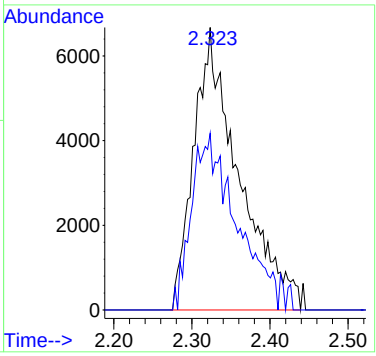


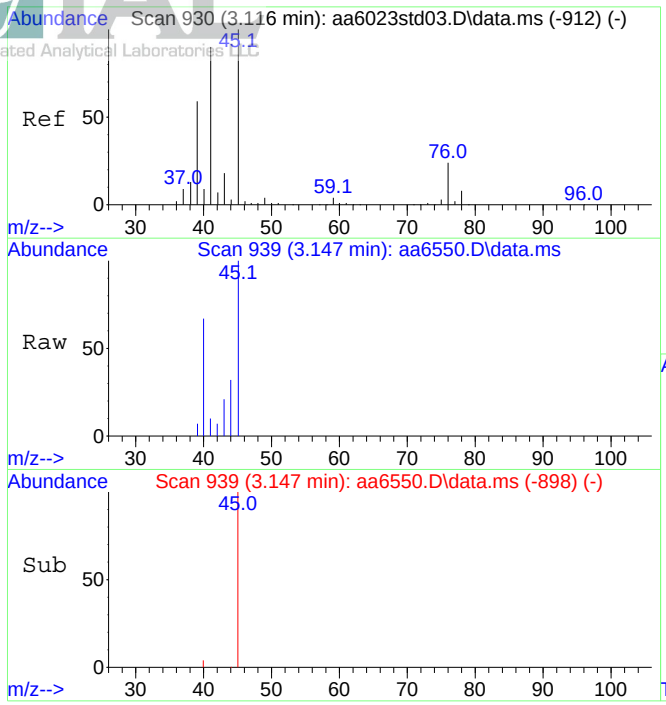


#12
Trichlorofluoromethane
Concen: 0.35 ppbV
RT: 2.323 min Scan# 683
Delta R.T. 0.020 min
Lab File: aa6550.D
Acq: 21 May 2024 6:21 pm

Tgt Ion:101 Resp: 26676

Ion	Ratio	Lower	Upper
101	100		
103	61.9	52.1	78.1

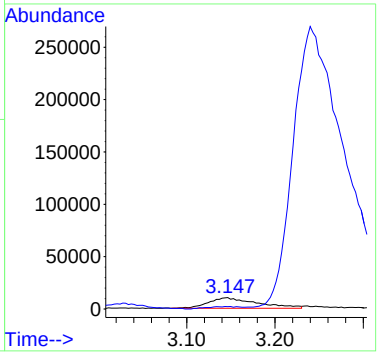


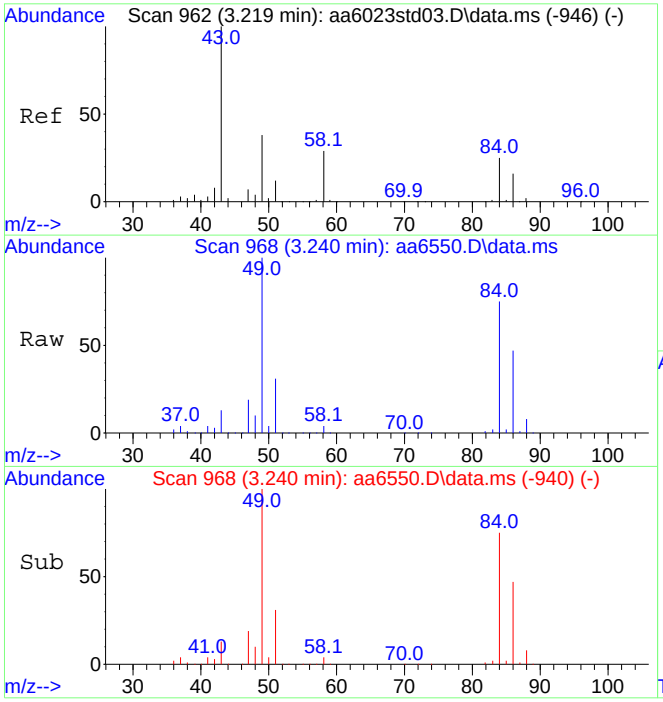


#19
Isopropanol
Concen: 0.51 ppbV
RT: 3.147 min Scan# 939
Delta R.T. 0.031 min
Lab File: aa6550.D
Acq: 21 May 2024 6:21 pm

Tgt Ion: 45 Resp: 38218

Ion	Ratio	Lower	Upper
45	100		
43	19.2	14.6	21.8

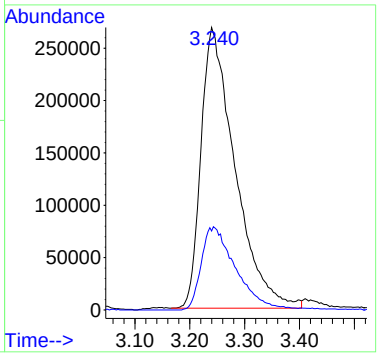


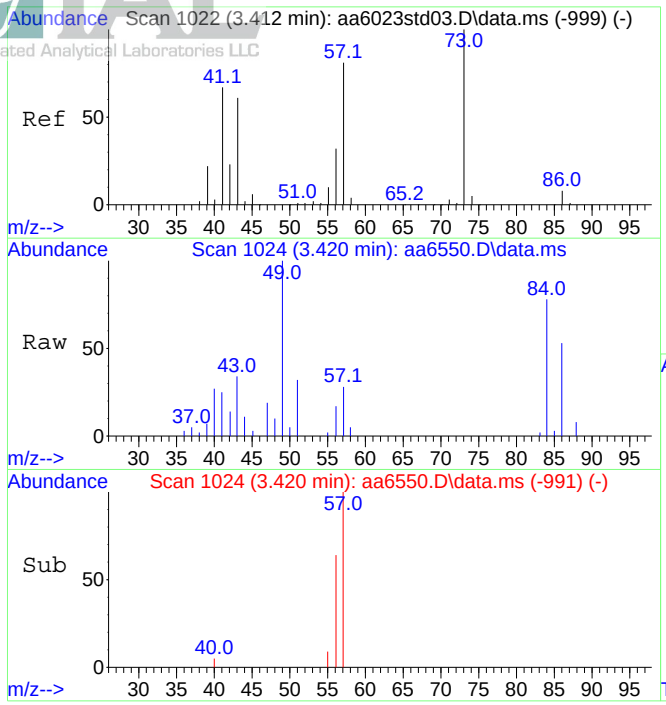


#21
Acetone
Concen: 20.01 ppbV
RT: 3.240 min Scan# 968
Delta R.T. 0.020 min
Lab File: aa6550.D
Acq: 21 May 2024 6:21 pm

Tgt Ion: 43 Resp: 1154626

Ion	Ratio	Lower	Upper
43	100		
58	30.0	23.8	35.8

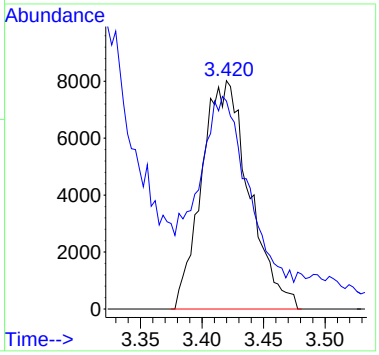


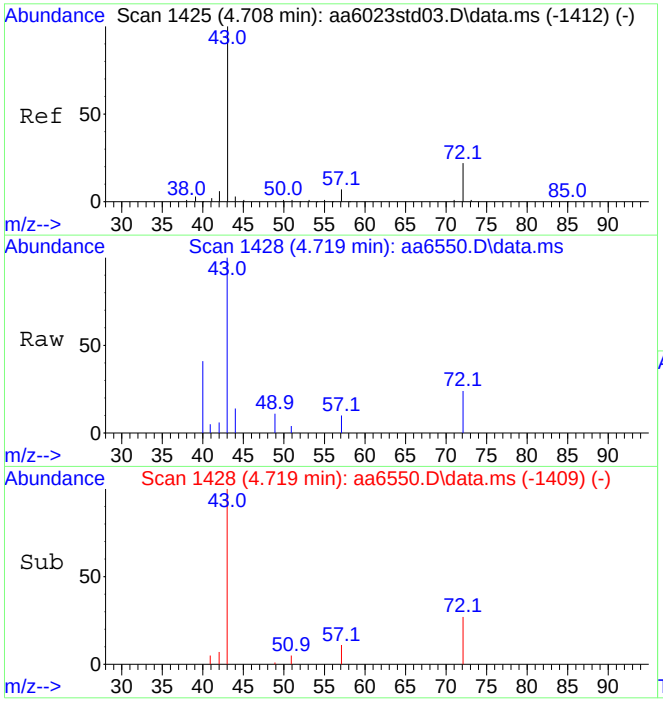


#24
n-Hexane
Concen: 0.21 ppbV
RT: 3.420 min Scan# 1024
Delta R.T. 0.008 min
Lab File: aa6550.D
Acq: 21 May 2024 6:21 pm

Tgt Ion: 57 Resp: 21568

Ion	Ratio	Lower	Upper
57	100		
41	100.7	76.2	114.4

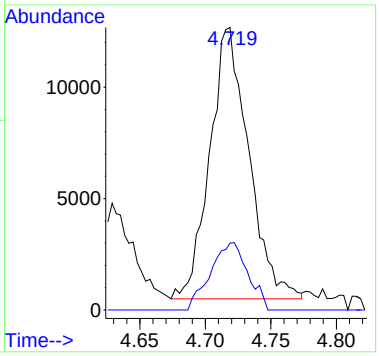


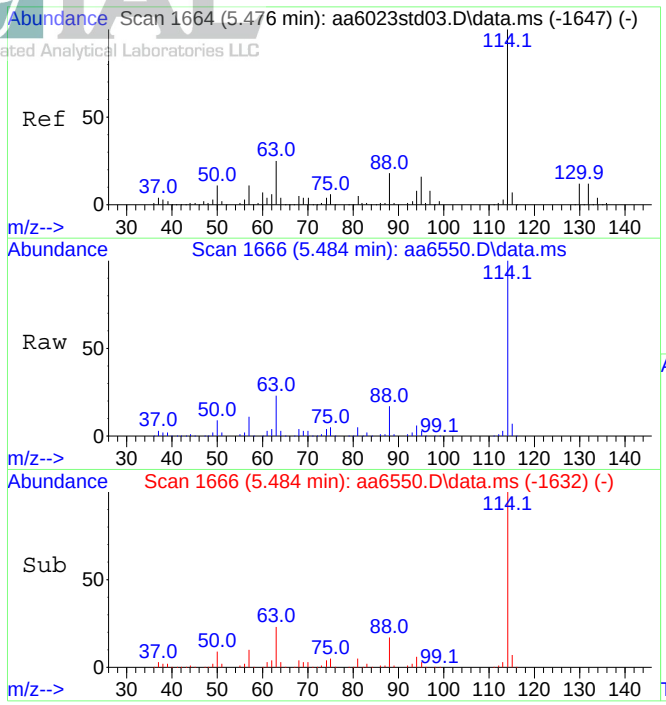


#35
Methyl ethyl ketone
Concen: 0.29 ppbV
RT: 4.719 min Scan# 1428
Delta R.T. 0.011 min
Lab File: aa6550.D
Acq: 21 May 2024 6:21 pm

Tgt Ion: 43 Resp: 25172

Ion	Ratio	Lower	Upper
43	100		
72	23.7	17.4	26.0

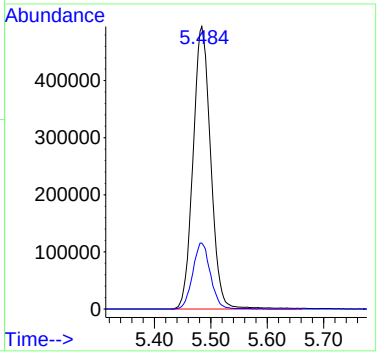


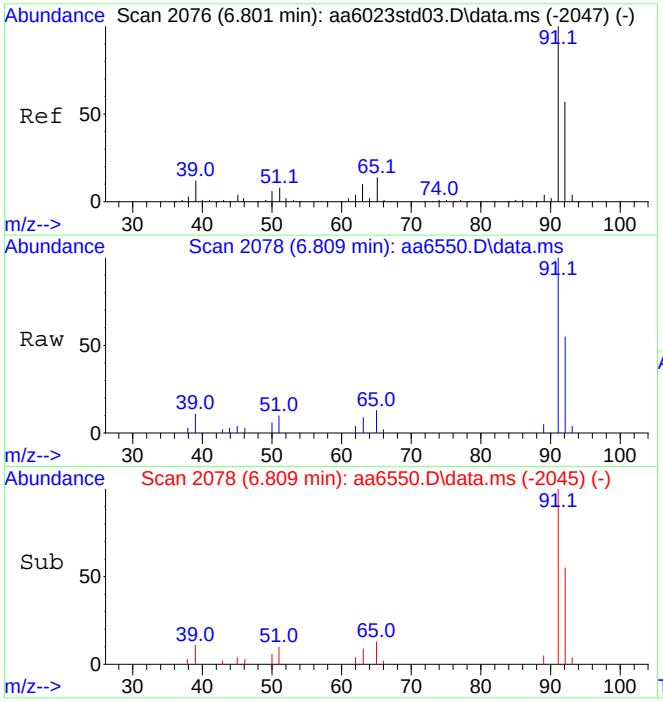


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.484 min Scan# 1666
Delta R.T. 0.008 min
Lab File: aa6550.D
Acq: 21 May 2024 6:21 pm

Tgt Ion:114 Resp: 1075642

Ion	Ratio	Lower	Upper
114	100		
63	23.4	6.4	46.4

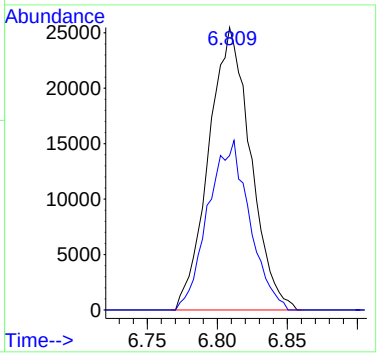


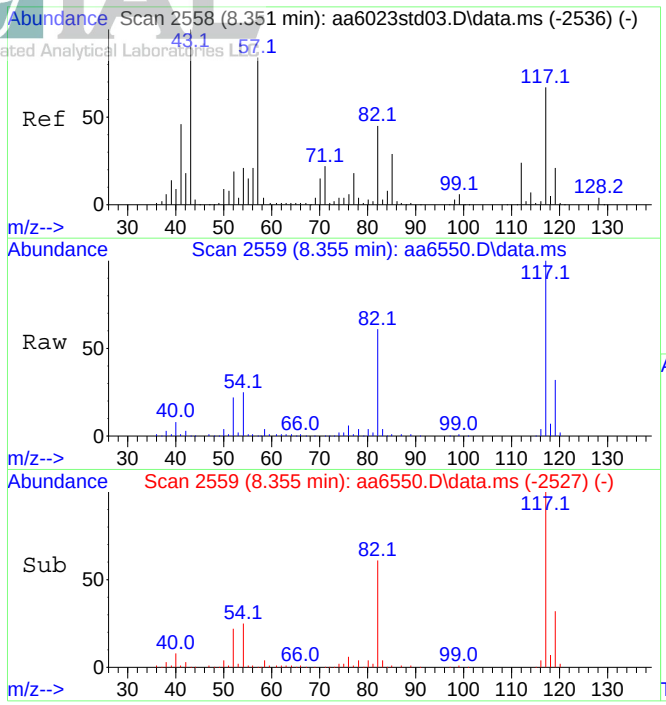


#47
Toluene
Concen: 0.38 ppbV
RT: 6.809 min Scan# 2078
Delta R.T. 0.008 min
Lab File: aa6550.D
Acq: 21 May 2024 6:21 pm

Tgt Ion: 91 Resp: 52939

Ion	Ratio	Lower	Upper
91	100		
92	59.3	46.3	69.5

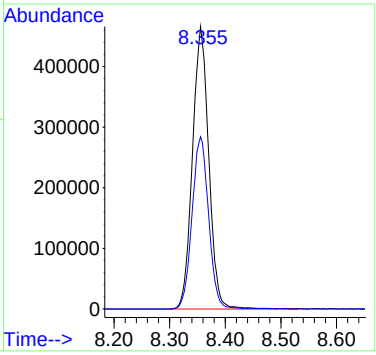


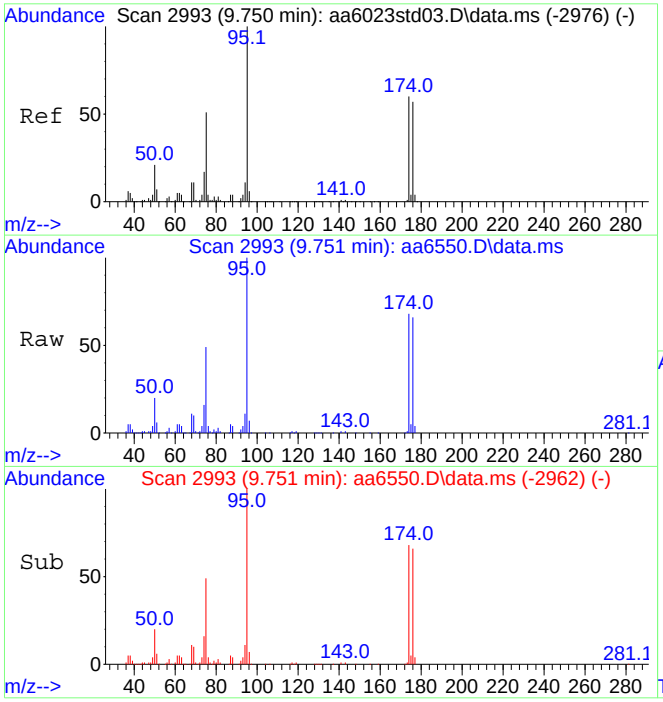


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.355 min Scan# 2559
Delta R.T. 0.004 min
Lab File: aa6550.D
Acq: 21 May 2024 6:21 pm

Tgt Ion:117 Resp: 945740

Ion	Ratio	Lower	Upper
117	100		
82	62.0	46.2	86.2

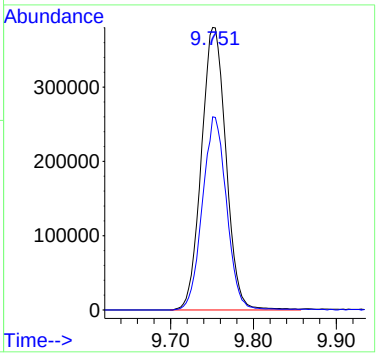




#64
Bromofluorobenzene (tune std)
Concen: 9.23 ppbV
RT: 9.751 min Scan# 2993
Delta R.T. 0.001 min
Lab File: aa6550.D
Acq: 21 May 2024 6:21 pm

Tgt Ion: 95 Resp: 782852

Ion	Ratio	Lower	Upper
95	100		
174	67.4	49.4	74.2



Analysis: Volatile Organic Compounds by EPA Method TO-15
Laboratory Sample Duplicate Report

		Date Received:	7/15/24
SDG Number:	E24-02398	Date Analyzed:	7/15/24,7/15/24
IAL Sample ID:	E24-02398-01	Lab Data File#:	AA6884,AA6885
Matrix:	Air	Dilution Factor:	5
Summa ID:	5096	Injection Volume:	100ml
		GC/MS Column:	RTX-1, 0.32 mmID

		Sample		Sample Dup			
		E24-02398-01		**E24-02398-21**			
		Concentration		**Concentration**		**Reporting**	
		Reported		**Reported**		**Limits**	
Compound	**CAS #**	**ppbv**	**Q**	**ppbv**	**Q**	**ppbv**	**RPD**
Acetone	67-64-1	**45**	D	**47**	D	1.0	**-4.35%**
Benzene	71-43-2	**1.6**	D	**1.9**	D	1.0	**-17.14%**
Bromodichloromethane	75-27-4	1.0	U	1.0	U	1.0	0.00%
Bromoform	75-25-2	1.0	U	1.0	U	1.0	0.00%
Bromomethane	74-83-9	1.0	U	1.0	U	1.0	0.00%
1,3-Butadiene	106-99-0	1.0	U	1.0	U	1.0	0.00%
Chlorobenzene	108-90-7	1.0	U	1.0	U	1.0	0.00%
Chloroethane	75-00-3	1.0	U	1.0	U	1.0	0.00%
Chloroform	67-66-3	1.0	U	1.0	U	1.0	0.00%
Chloromethane	74-87-3	1.0	U	1.0	U	1.0	0.00%
Carbon disulfide	75-15-0	1.0	U	1.0	U	1.0	0.00%
Carbon tetrachloride	56-23-5	0.20	U	0.20	U	0.20	0.00%
Cyclohexane	110-82-7	1.0	U	1.0	U	1.0	0.00%
Dibromochloromethane	124-48-1	1.0	U	1.0	U	1.0	0.00%
1,2-Dibromoethane	106-93-4	1.0	U	1.0	U	1.0	0.00%
1,2-Dichlorobenzene	95-50-1	1.0	U	1.0	U	1.0	0.00%
1,3-Dichlorobenzene	541-73-1	1.0	U	1.0	U	1.0	0.00%
1,4-Dichlorobenzene	106-46-7	1.0	U	1.0	U	1.0	0.00%
Dichlorodifluoromethane	75-71-8	1.0	U	1.0	U	1.0	0.00%
1,1-Dichloroethane	75-34-3	1.0	U	1.0	U	1.0	0.00%
1,2-Dichloroethane	107-06-2	1.0	U	1.0	U	1.0	0.00%
1,1-Dichloroethene	75-35-4	1.0	U	1.0	U	1.0	0.00%
1,2-Dichloroethene (cis)	156-59-2	1.0	U	1.0	U	1.0	0.00%
1,2-Dichloroethene (trans)	156-60-5	1.0	U	1.0	U	1.0	0.00%
1,2-Dichloropropane	78-87-5	1.0	U	1.0	U	1.0	0.00%
1,3-Dichloropropene (cis)	10061-01-5	1.0	U	1.0	U	1.0	0.00%
1,3-Dichloropropene (trans)	10061-02-6	1.0	U	1.0	U	1.0	0.00%
1,2-Dichlorotetrafluoroethane	76-14-2	1.0	U	1.0	U	1.0	0.00%
1,4-Dioxane	123-91-1	1.0	U	1.0	U	1.0	0.00%
Ethylbenzene	100-41-4	1.0	U	1.0	U	1.0	0.00%
n-Heptane	142-82-5	1.0	U	**1.2**	D	1.0	**NC**
1,3-Hexachlorobutadiene	87-68-3	1.0	U	1.0	U	1.0	0.00%
n-Hexane	110-54-3	**1.1**	D	**1.2**	D	1.0	**-8.70%**
Methylene chloride	75-09-2	1.0	U	1.0	U	1.0	0.00%
Methyl ethyl ketone	78-93-3	**2.5**	D	**3.0**	D	1.0	**-18.18%**
Methyl isobutyl ketone	108-10-1	1.0	U	1.0	U	1.0	0.00%
Methyl tert-butyl ether	1634-04-4	1.0	U	1.0	U	1.0	0.00%
Styrene	100-42-5	1.0	U	1.0	U	1.0	0.00%

Qualifiers:
E=Concentration exceeds upper level of calibration range for instrument.
D=Extra dilution required for this compound. X=Duplicate samples do not met RPD criteria.
U=Compound ND or under reporting limit.

Analysis: Volatile Organic Compounds by EPA Method TO-15
Laboratory Sample Duplicate Report

SDG Number: E24-02398
IAL Sample ID: E24-02398-01
Matrix: Air
Summa ID: 5096

Date Received: 7/15/24
Date Analyzed: 7/15/24,7/15/24
Lab Data File#: AA6884,AA6885
Dilution Factor: 5
Injection Volume: 100ml
GC/MS Column: RTX-1, 0.32 mmID

Compound	CAS #	Sample E24-02398-01 Concentration Reported ppbv	Q	Sample Dup E24-02398-21 Concentration Reported ppbv	Q	Reporting Limits ppbv	RPD
Tert-butyl alcohol	75-65-0	**6.0**	D	**7.2**	D	1.0	**-18.18%**
1,1,2,2-Tetrachloroethane	79-34-5	1.0	U	1.0	U	1.0	0.00%
Tetrachloroethene	127-18-4	**2.4**	D	**2.8**	D	1.0	**-15.38%**
Toluene	108-88-3	**3.4**	D	**4.2**	D	1.0	**-21.05%**
1,2,4-Trichlorobenzene	120-82-1	1.0	U	1.0	U	1.0	0.00%
1,1,1-Trichloroethane	71-55-6	1.0	U	1.0	U	1.0	0.00%
1,1,2-Trichloroethane	79-00-5	1.0	U	1.0	U	1.0	0.00%
Trichloroethene	79-01-6	0.23	U	0.23	U	0.23	0.00%
Trichlorofluoromethane	75-69-4	1.0	U	1.0	U	1.0	0.00%
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	1.0	U	1.0	U	1.0	0.00%
1,2,4-Trimethylbenzene	95-63-6	1.0	U	1.0	U	1.0	0.00%
1,3,5-Trimethylbenzene	108-67-8	1.0	U	1.0	U	1.0	0.00%
2,2,4-Trimethylpentane	540-84-1	1.0	U	1.0	U	1.0	0.00%
Vinyl bromide	593-60-2	1.0	U	1.0	U	1.0	0.00%
Vinyl chloride	75-01-4	1.0	U	1.0	U	1.0	0.00%
Xylenes (m&p)	179601-23-1	**2.0**	D	**2.2**	D	1.0	**-9.52%**
Xylenes (o)	95-47-6	1.0	U	1.0	U	1.0	0.00%

RPD must be <25% for all laboratory duplicate samples. Laboratory duplicate samples are run once daily.
NC = The RPD could not be calculated since the compound was only detected in either the parent or duplicate sample.

Qualifiers:
E=Concentration exceeds upper level of calibration range for instrument.
D=Extra dilution required for this compound. X=Duplicate samples do not met RPD criteria.
U=Compound ND or under reporting limit.

Quantitation Report (QT Reviewed)

Data Path : C:\DATA\2024\07-2024\07-15-2024\
Data File : aa6884.D
Acq On : 15 Jul 2024 5:02 pm
Operator : jjw
Sample : E24-02398-01x5 dil
Misc : 5096, 100cc
ALS Vial : 10 Sample Multiplier: 1

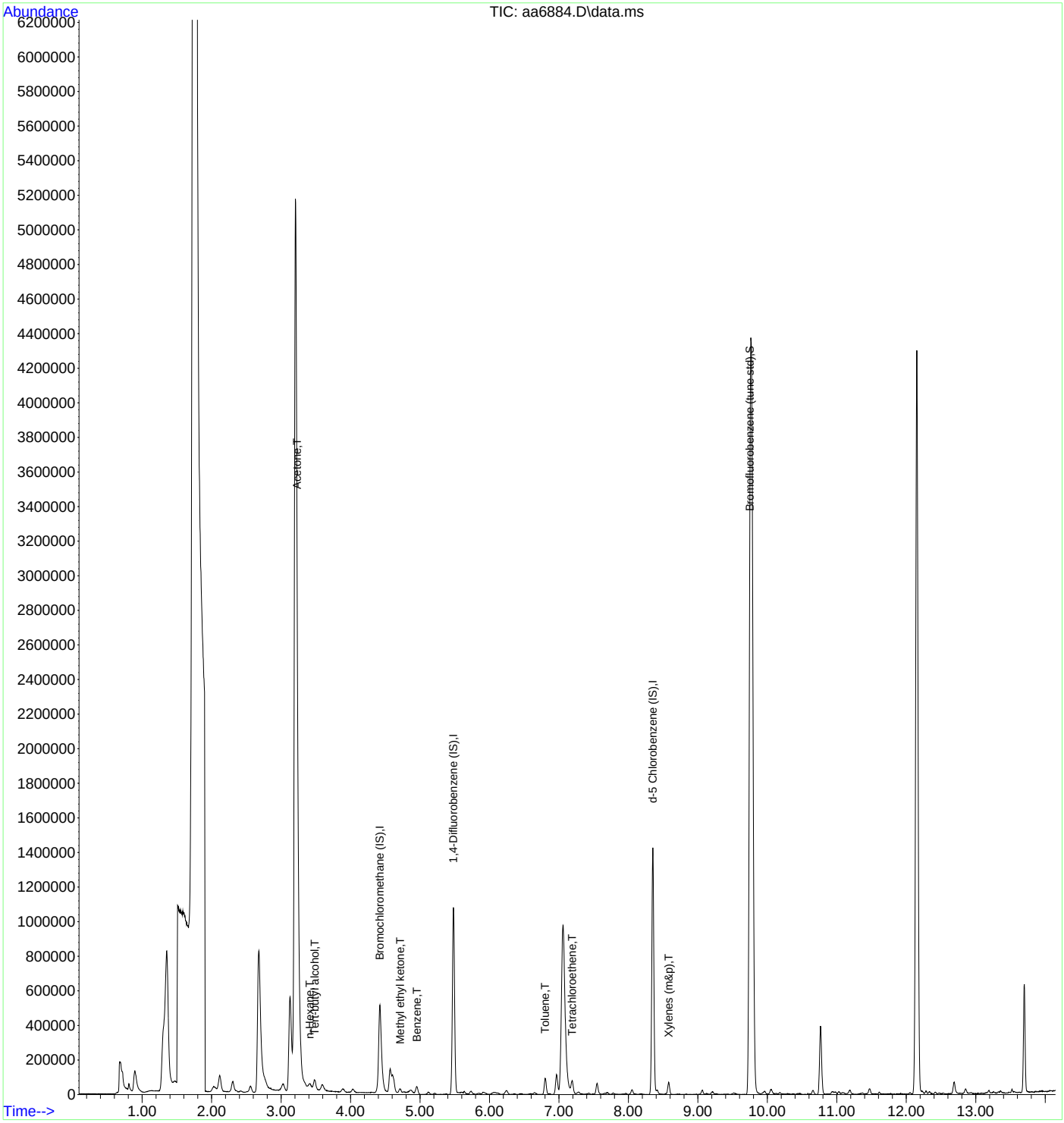
Quant Time: Jul 16 10:04:12 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

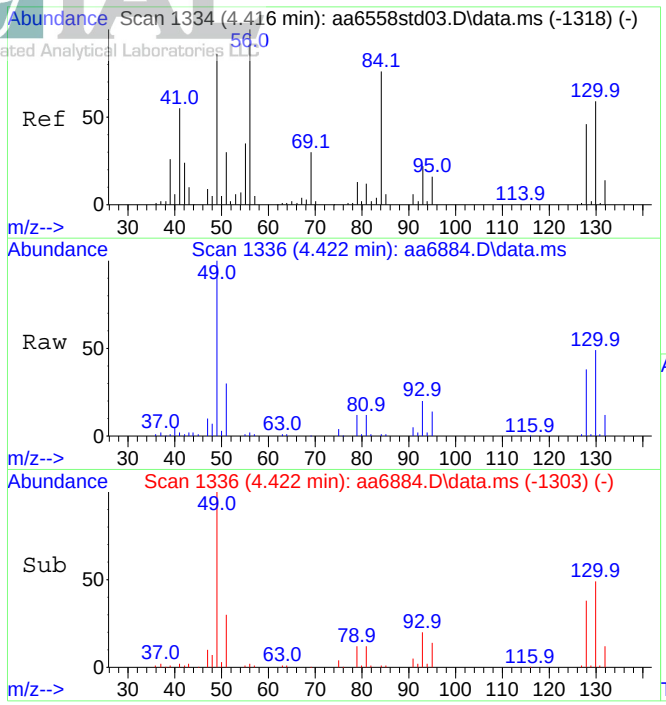
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.422	130	200977	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.480	114	872037	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.351	117	803451	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.747	95	724020	9.53	ppbV	0.000
Target Compounds						Qvalue
21) Acetone	3.229	43	405654	9.00	ppbV	96
24) n-Hexane	3.412	57	16280	0.21	ppbV #	80
26) Tert-butyl alcohol	3.486	59	75540	1.20	ppbV	100
35) Methyl ethyl ketone	4.715	43	32093	0.50	ppbV	92
37) Benzene	4.956	78	29419	0.32	ppbV	92
47) Toluene	6.801	91	76776	0.69	ppbV	98
49) Tetrachloroethene	7.190	166	20614	0.49	ppbV	99
59) Xylenes (m&p)	8.579	91	47192	0.40	ppbV	98

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

Data Path : C:\DATA\2024\07-2024\07-15-2024\
Data File : aa6884.D
Acq On : 15 Jul 2024 5:02 pm
Operator : jjw
Sample : E24-02398-01x5 dil
Misc : 5096, 100cc
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 16 10:04:12 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

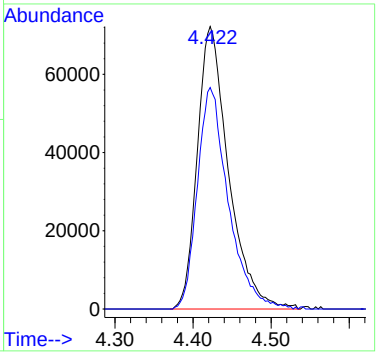


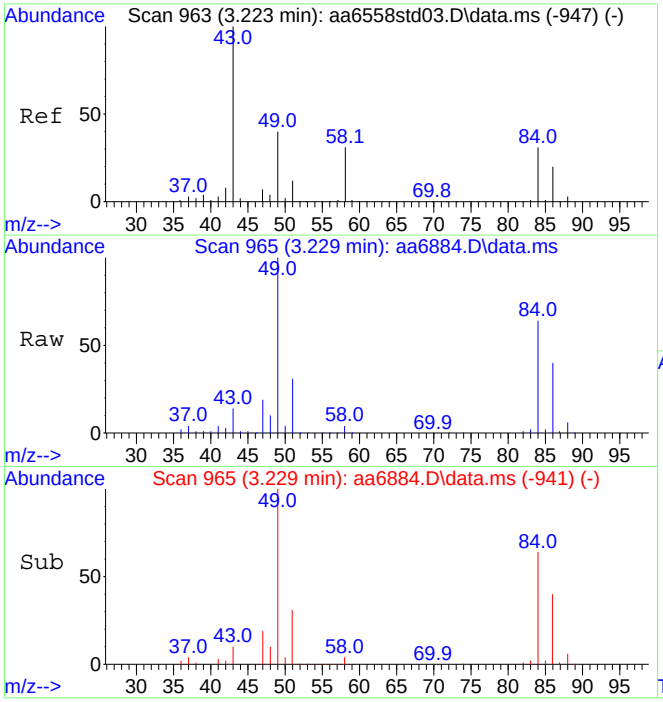


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.422 min Scan# 1336
Delta R.T. 0.006 min
Lab File: aa6884.D
Acq: 15 Jul 2024 5:02 pm

Tgt Ion:130 Resp: 200977

Ion	Ratio	Lower	Upper
130	100		
128	77.5	57.8	97.8

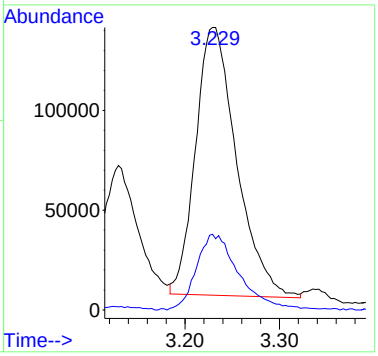


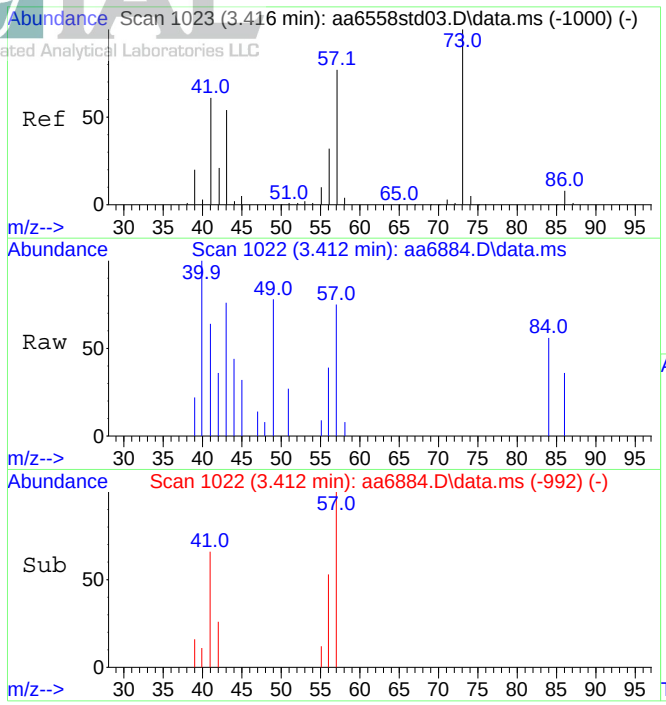


#21
Acetone
Concen: 9.00 ppbV
RT: 3.229 min Scan# 965
Delta R.T. 0.006 min
Lab File: aa6884.D
Acq: 15 Jul 2024 5:02 pm

Tgt Ion: 43 Resp: 405654

Ion	Ratio	Lower	Upper
43	100		
58	29.5	25.4	38.0

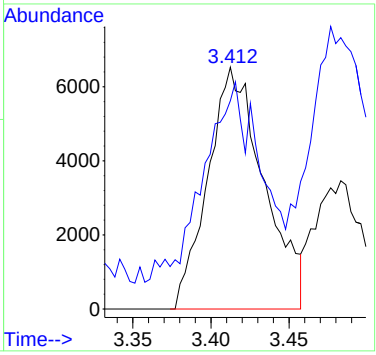


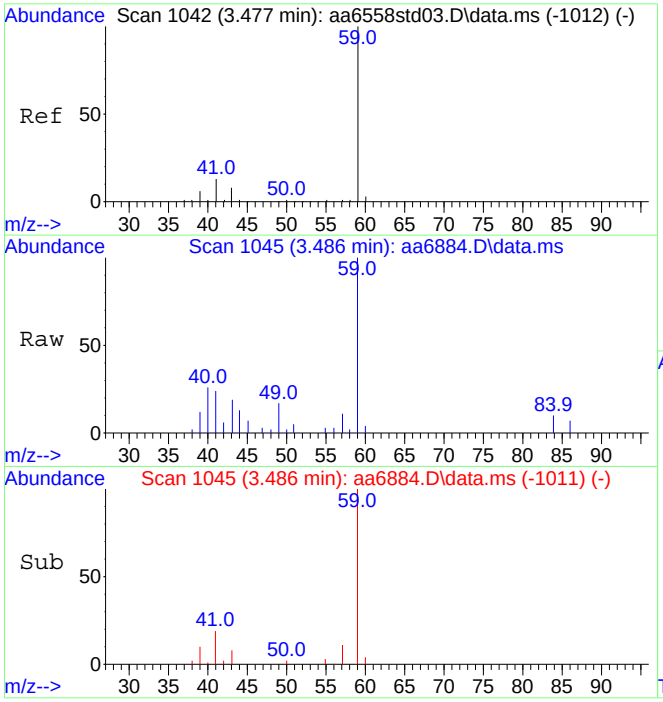


#24
n-Hexane
Concen: 0.21 ppbV
RT: 3.412 min Scan# 1022
Delta R.T. -0.003 min
Lab File: aa6884.D
Acq: 15 Jul 2024 5:02 pm

Tgt Ion: 57 Resp: 16280

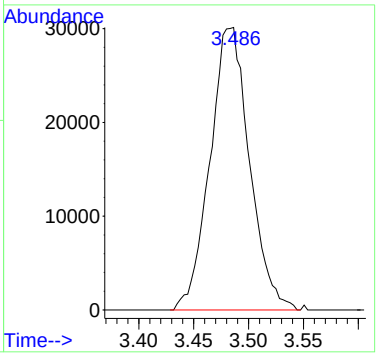
Ion	Ratio	Lower	Upper
57	100		
41	70.3	71.6	107.4#

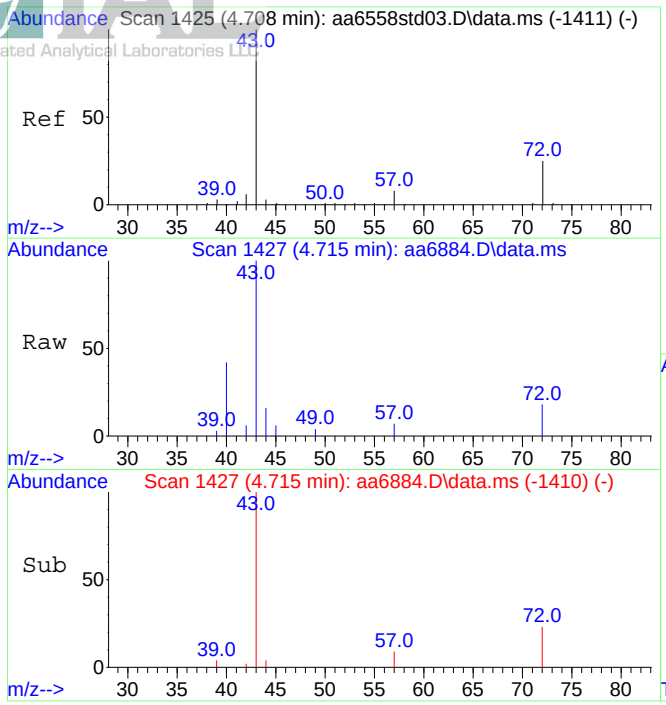




#26
Tert-butyl alcohol
Concen: 1.20 ppbV
RT: 3.486 min Scan# 1045
Delta R.T. 0.009 min
Lab File: aa6884.D
Acq: 15 Jul 2024 5:02 pm

Tgt Ion: 59 Resp: 75540

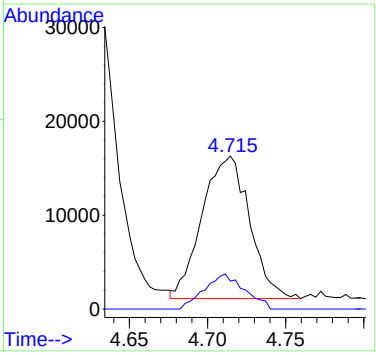


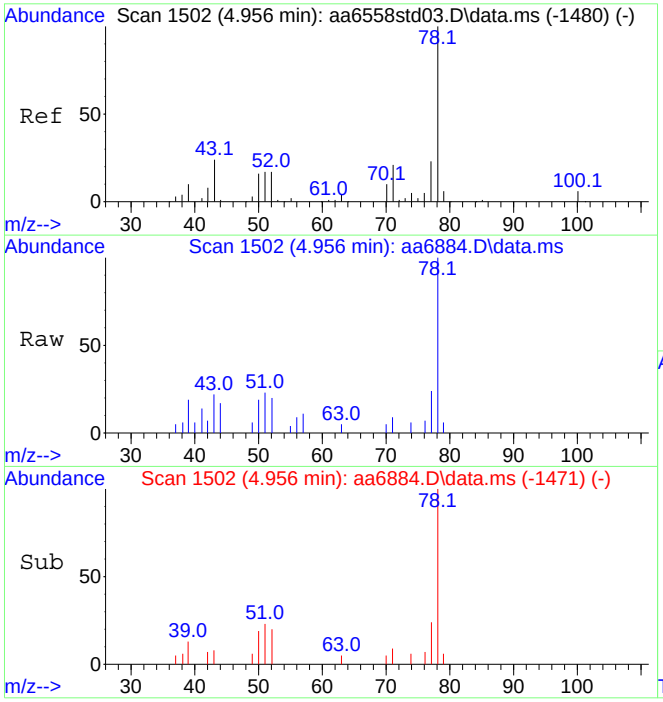


#35
Methyl ethyl ketone
Concen: 0.50 ppbV
RT: 4.715 min Scan# 1427
Delta R.T. 0.006 min
Lab File: aa6884.D
Acq: 15 Jul 2024 5:02 pm

Tgt Ion: 43 Resp: 32093

Ion	Ratio	Lower	Upper
43	100		
72	20.7	19.5	29.3

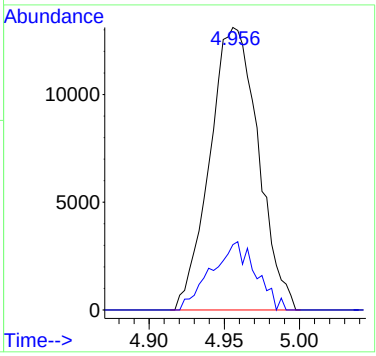


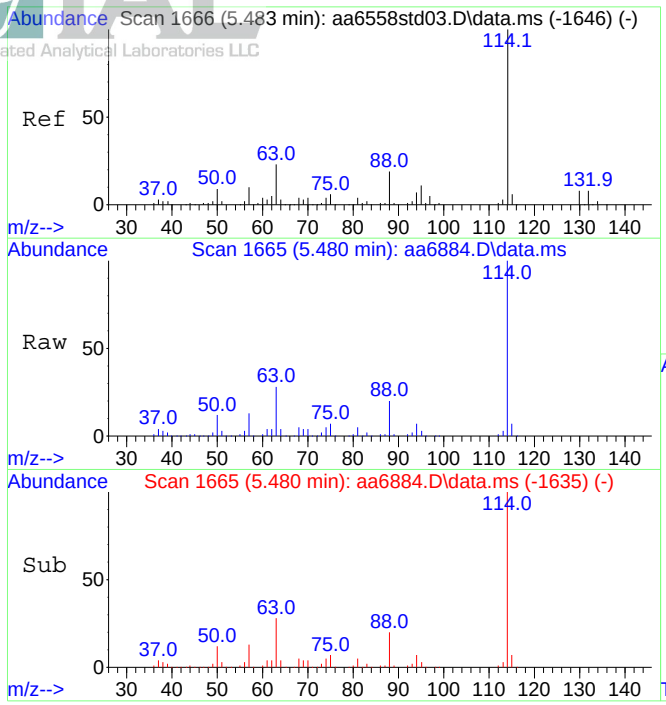


#37
Benzene
Concen: 0.32 ppbV
RT: 4.956 min Scan# 1502
Delta R.T. -0.000 min
Lab File: aa6884.D
Acq: 15 Jul 2024 5:02 pm

Tgt Ion: 78 Resp: 29419

Ion	Ratio	Lower	Upper
78	100		
51	22.0	14.9	22.3

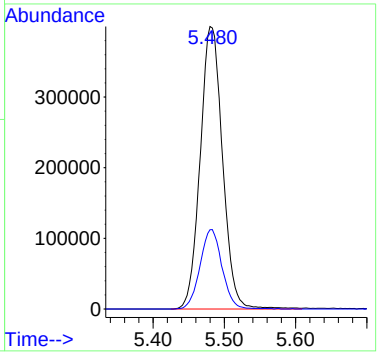


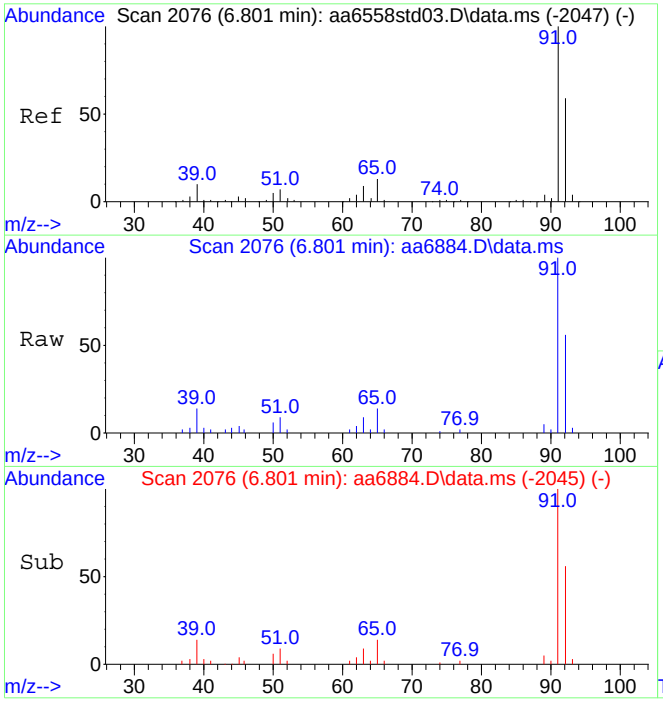


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.480 min Scan# 1665
Delta R.T. -0.003 min
Lab File: aa6884.D
Acq: 15 Jul 2024 5:02 pm

Tgt Ion:114 Resp: 872037

Ion	Ratio	Lower	Upper
114	100		
63	27.7	3.6	43.6

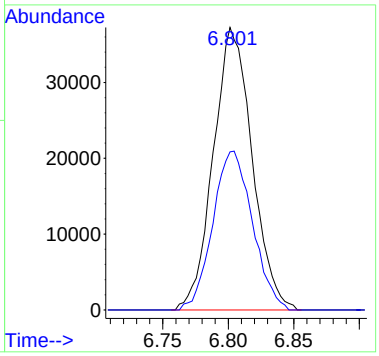


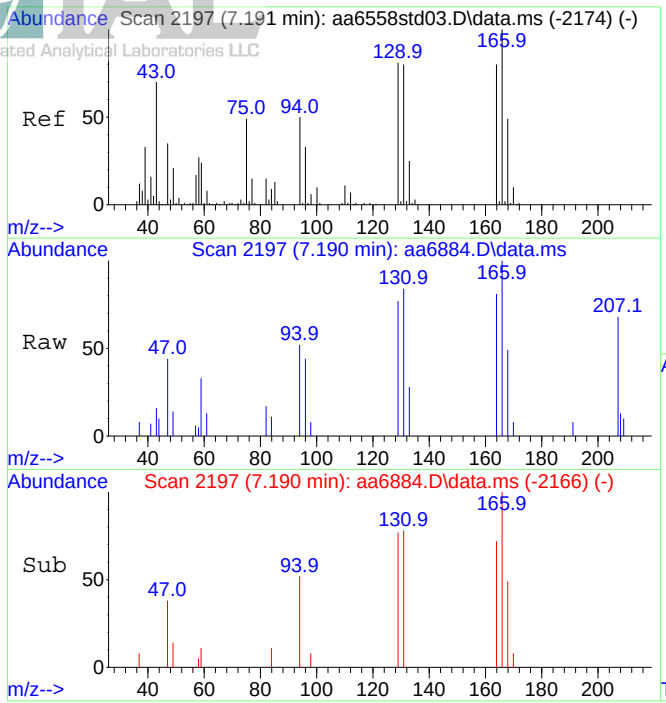


#47
Toluene
Concen: 0.69 ppbV
RT: 6.801 min Scan# 2076
Delta R.T. -0.000 min
Lab File: aa6884.D
Acq: 15 Jul 2024 5:02 pm

Tgt Ion: 91 Resp: 76776

Ion	Ratio	Lower	Upper
91	100		
92	57.3	47.0	70.6

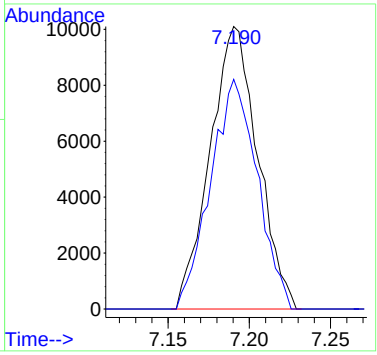


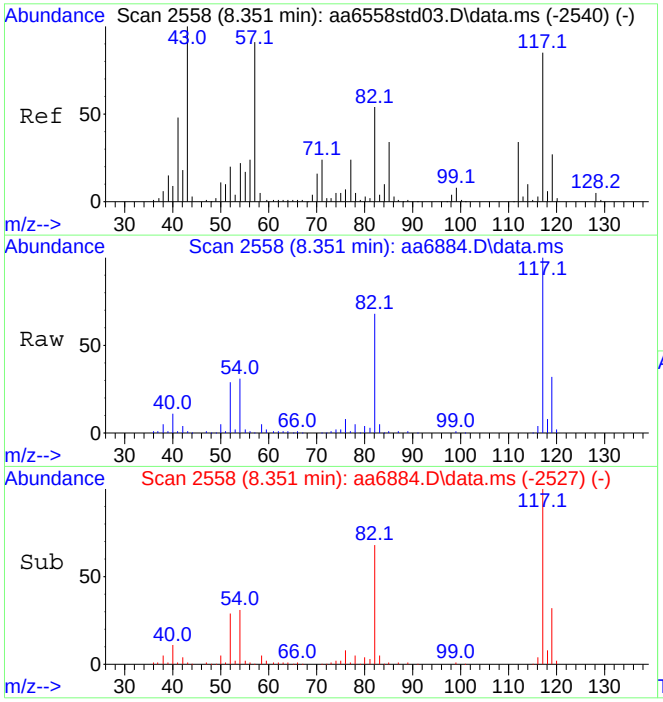


#49
Tetrachloroethene
Concen: 0.49 ppbV
RT: 7.190 min Scan# 2197
Delta R.T. -0.000 min
Lab File: aa6884.D
Acq: 15 Jul 2024 5:02 pm

Tgt Ion:166 Resp: 20614

Ion	Ratio	Lower	Upper
166	100		
164	79.7	62.8	94.2

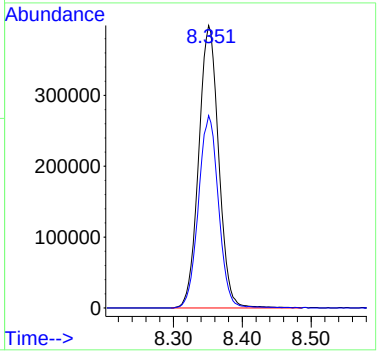


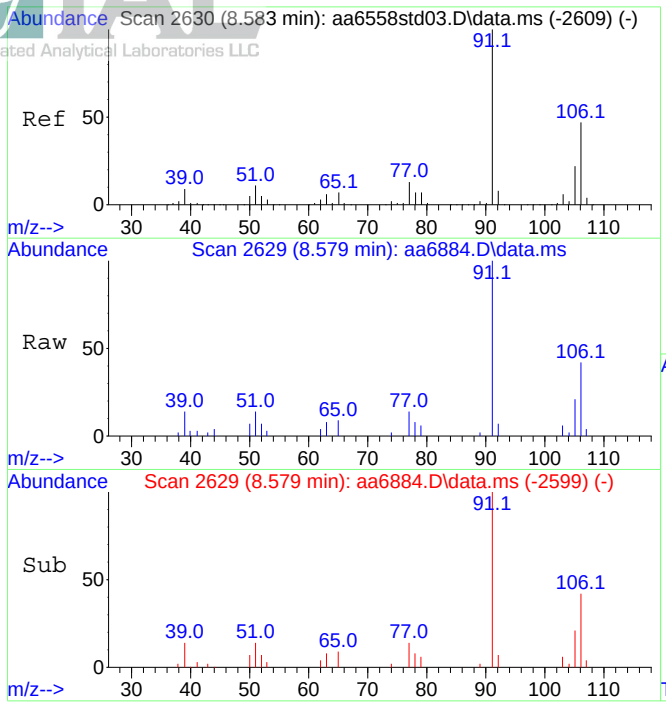


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.351 min Scan# 2558
Delta R.T. -0.000 min
Lab File: aa6884.D
Acq: 15 Jul 2024 5:02 pm

Tgt Ion:117 Resp: 803451

Ion	Ratio	Lower	Upper
117	100		
82	68.4	42.3	82.3

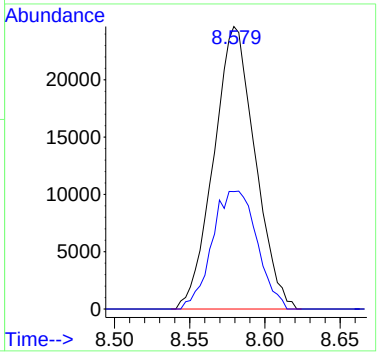


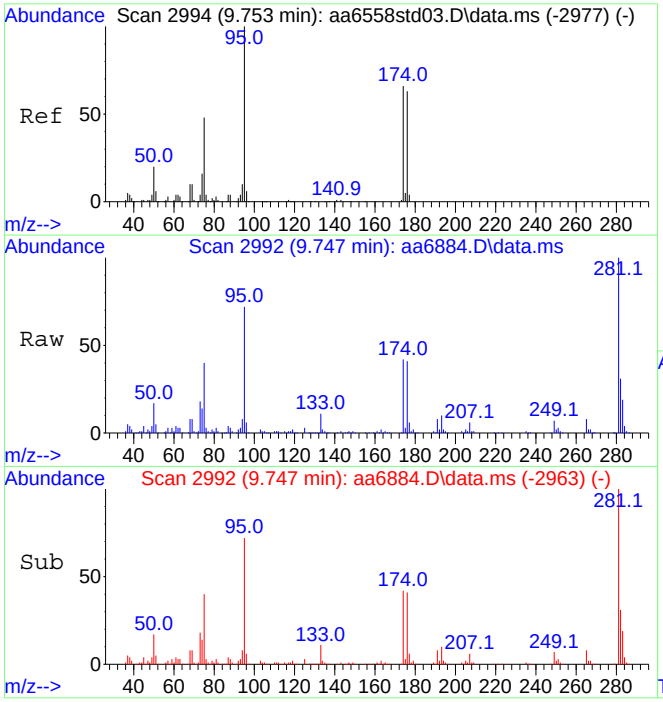


#59
Xylenes (m&p)
Concen: 0.40 ppbV
RT: 8.579 min Scan# 2629
Delta R.T. -0.003 min
Lab File: aa6884.D
Acq: 15 Jul 2024 5:02 pm

Tgt Ion: 91 Resp: 47192

Ion	Ratio	Lower	Upper
91	100		
106	45.2	37.4	56.2

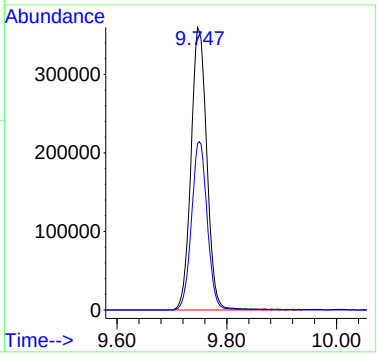




#64
Bromofluorobenzene (tune std)
Concen: 9.53 ppbV
RT: 9.747 min Scan# 2992
Delta R.T. -0.007 min
Lab File: aa6884.D
Acq: 15 Jul 2024 5:02 pm

Tgt Ion: 95 Resp: 724020

Ion	Ratio	Lower	Upper
95	100		
174	59.0	52.9	79.3



Data Path : C:\DATA\2024\07-2024\07-15-2024\
Data File : aa6885.D
Acq On : 15 Jul 2024 5:34 pm
Operator : jjw
Sample : E24-02398-21x5 dil
Misc : Dup of E24-02398-01x5 dil, Can # 5096, 100cc
ALS Vial : 11 Sample Multiplier: 1

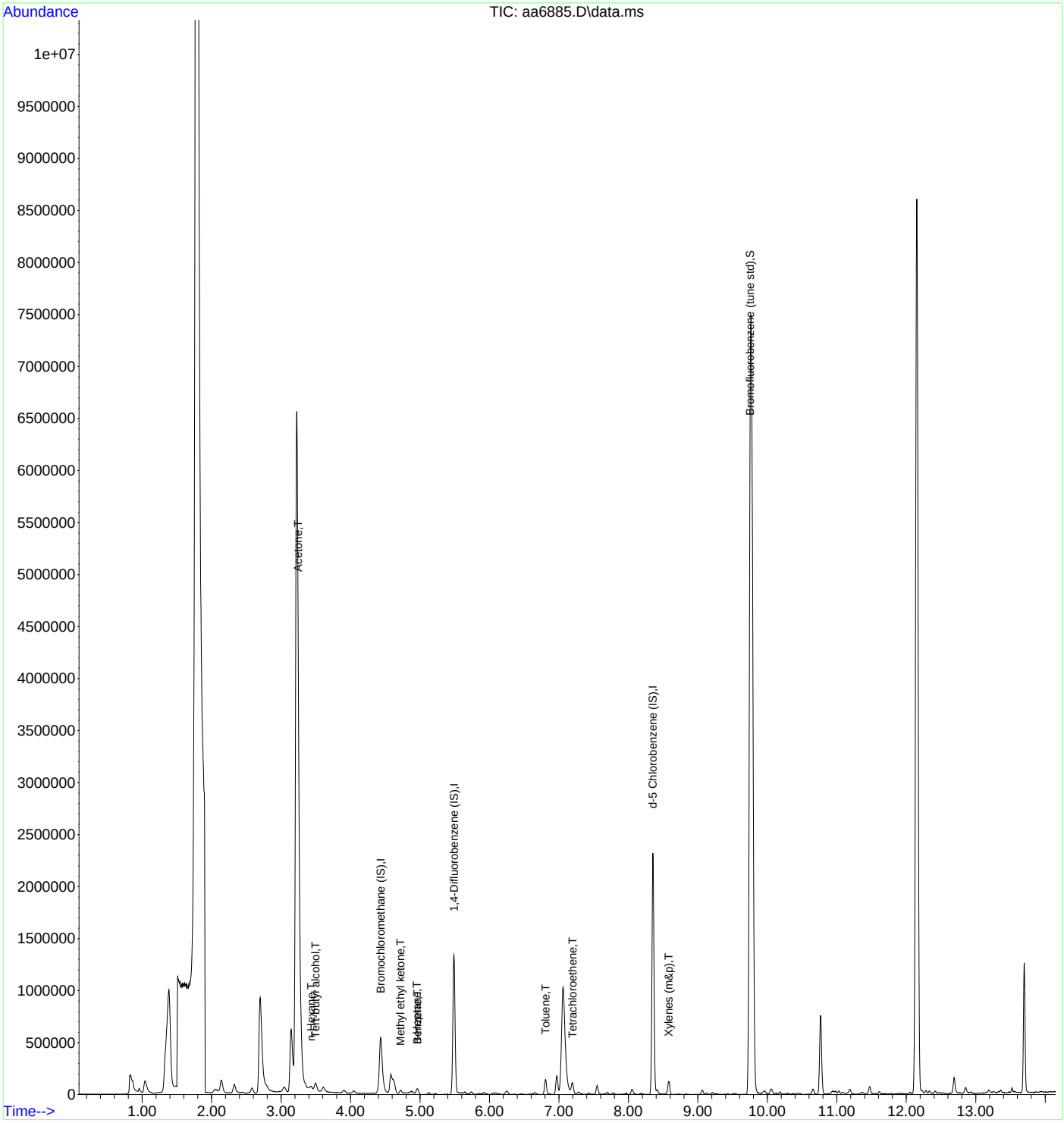
Quant Time: Jul 16 10:07:22 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

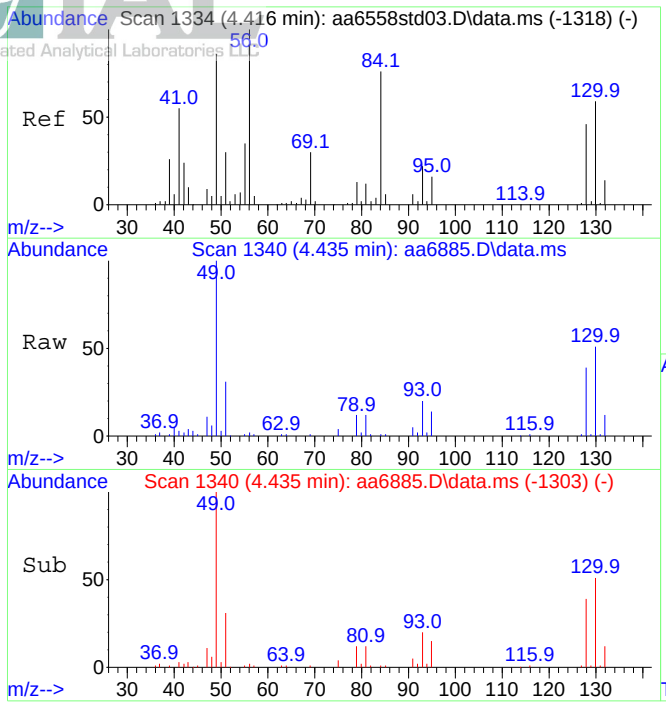
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.435	130	219701	10.00	ppbV		0.019
39) 1,4-Difluorobenzene (IS)	5.490	114	1092158	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.351	117	1291262	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.750	95	1313227	10.75	ppbV		0.000
Target Compounds							Qvalue
21) Acetone	3.245	43	467209	9.48	ppbV		97
24) n-Hexane	3.435	57	20544	0.24	ppbV		96
26) Tert-butyl alcohol	3.496	59	99469	1.45	ppbV		100
35) Methyl ethyl ketone	4.721	43	42109	0.60	ppbV		93
36) n-Heptane	4.956	43	15454	0.23	ppbV	#	68
37) Benzene	4.962	78	37883	0.38	ppbV		94
47) Toluene	6.808	91	117262	0.84	ppbV		98
49) Tetrachloroethene	7.197	166	29915	0.56	ppbV		97
59) Xylenes (m&p)	8.579	91	86127	0.45	ppbV		96

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

Data Path : C:\DATA\2024\07-2024\07-15-2024\
Data File : aa6885.D
Acq On : 15 Jul 2024 5:34 pm
Operator : jjw
Sample : E24-02398-21x5 dil
Misc : Dup of E24-02398-01x5 dil, Can # 5096, 100cc
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 16 10:07:22 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

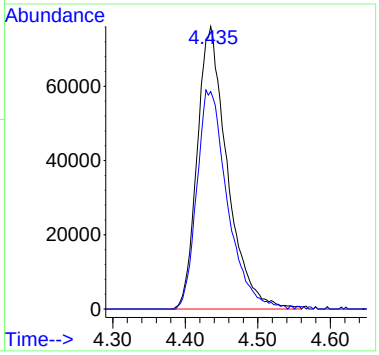


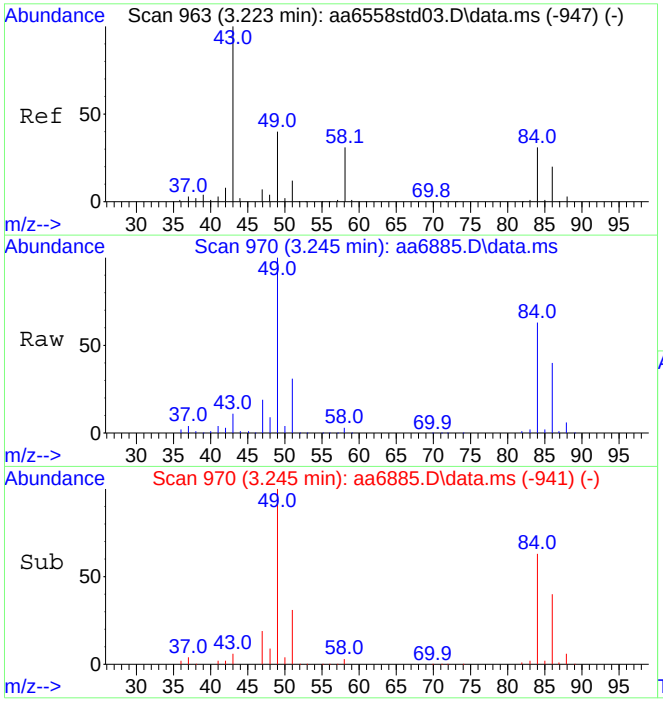


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.435 min Scan# 1340
Delta R.T. 0.019 min
Lab File: aa6885.D
Acq: 15 Jul 2024 5:34 pm

Tgt Ion:130 Resp: 219701

Ion	Ratio	Lower	Upper
130	100		
128	78.8	57.8	97.8

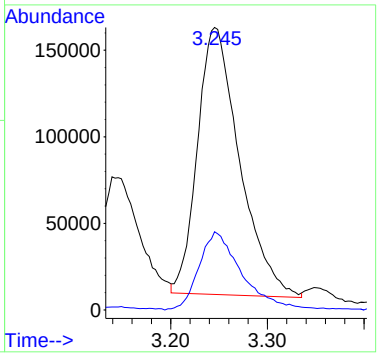


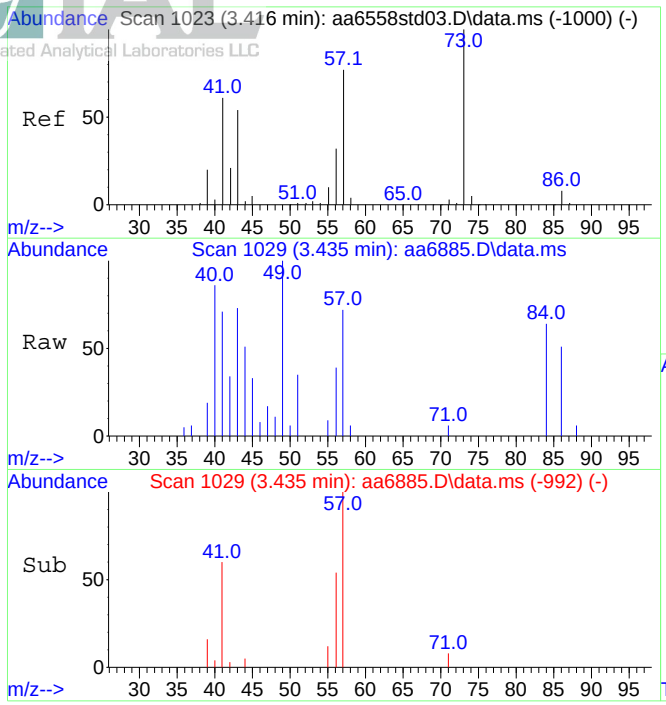


#21
Acetone
Concen: 9.48 ppbV
RT: 3.245 min Scan# 970
Delta R.T. 0.022 min
Lab File: aa6885.D
Acq: 15 Jul 2024 5:34 pm

Tgt Ion: 43 Resp: 467209

Ion	Ratio	Lower	Upper
43	100		
58	30.0	25.4	38.0

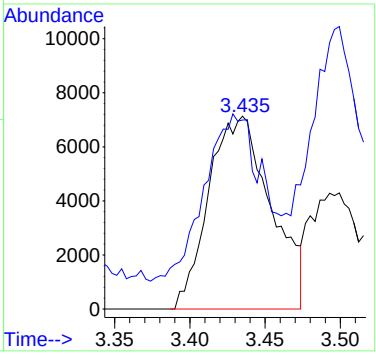


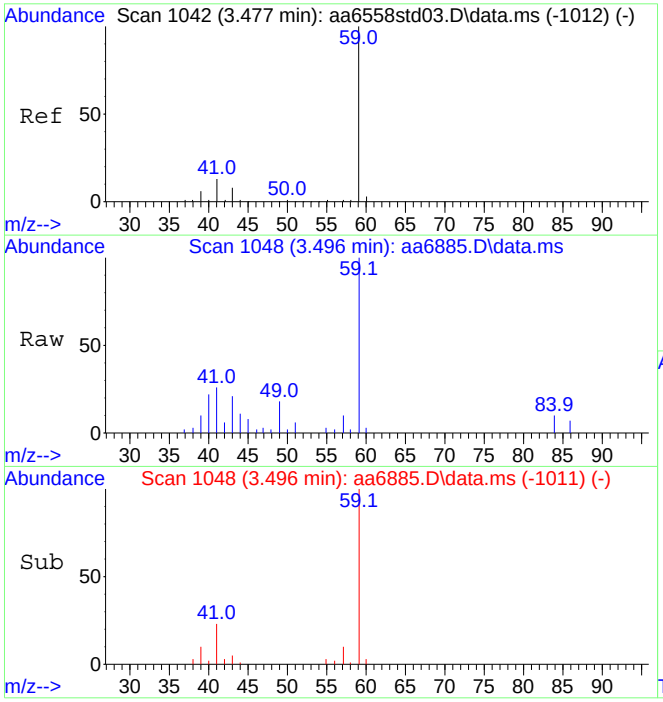


#24
n-Hexane
Concen: 0.24 ppbV
RT: 3.435 min Scan# 1029
Delta R.T. 0.019 min
Lab File: aa6885.D
Acq: 15 Jul 2024 5:34 pm

Tgt Ion: 57 Resp: 20544

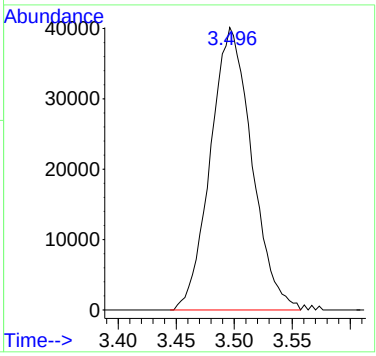
Ion	Ratio	Lower	Upper
57	100		
41	85.9	71.6	107.4

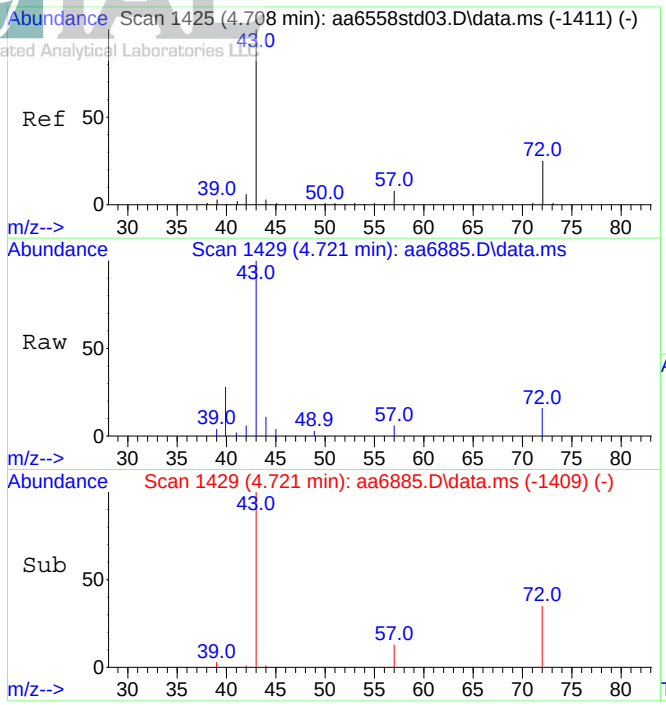




#26
Tert-butyl alcohol
Concen: 1.45 ppbV
RT: 3.496 min Scan# 1048
Delta R.T. 0.019 min
Lab File: aa6885.D
Acq: 15 Jul 2024 5:34 pm

Tgt Ion: 59 Resp: 99469

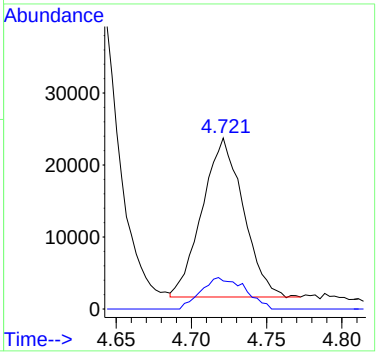


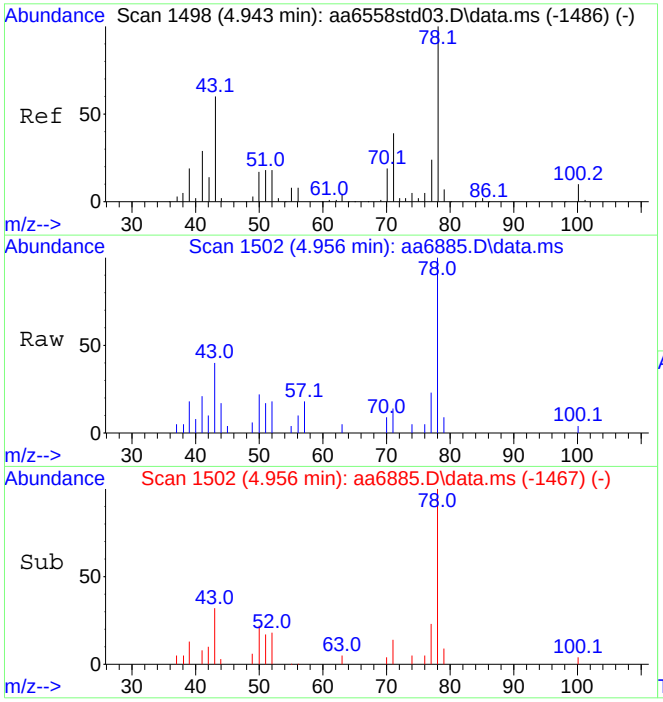


#35
Methyl ethyl ketone
Concen: 0.60 ppbV
RT: 4.721 min Scan# 1429
Delta R.T. 0.013 min
Lab File: aa6885.D
Acq: 15 Jul 2024 5:34 pm

Tgt Ion: 43 Resp: 42109

Ion	Ratio	Lower	Upper
43	100		
72	21.0	19.5	29.3

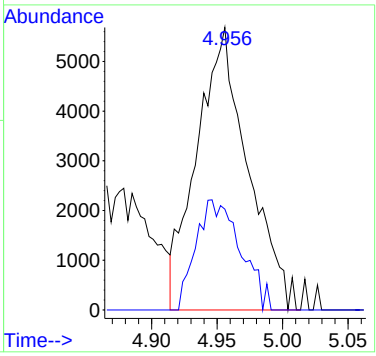


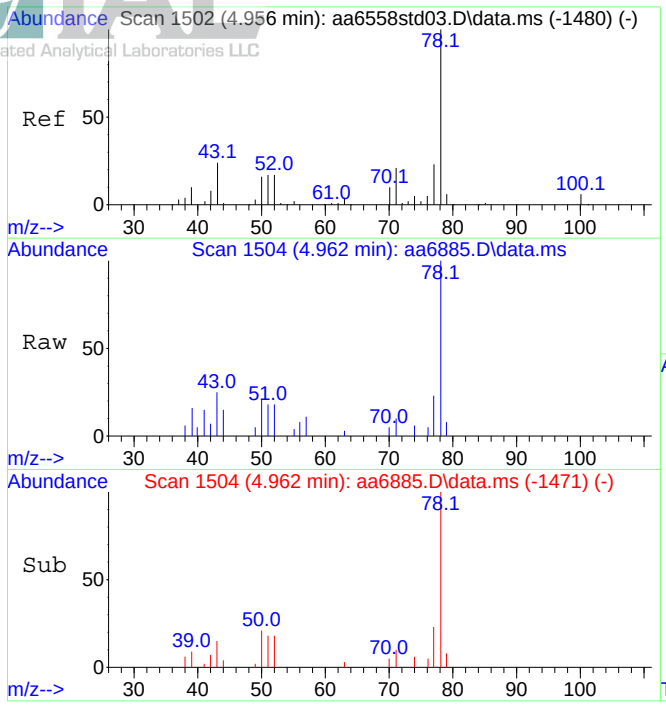


#36
n-Heptane
Concen: 0.23 ppbV
RT: 4.956 min Scan# 1502
Delta R.T. 0.013 min
Lab File: aa6885.D
Acq: 15 Jul 2024 5:34 pm

Tgt Ion: 43 Resp: 15454

Ion	Ratio	Lower	Upper
43	100		
71	34.0	46.2	69.2#

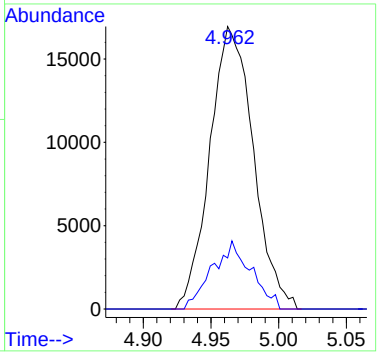


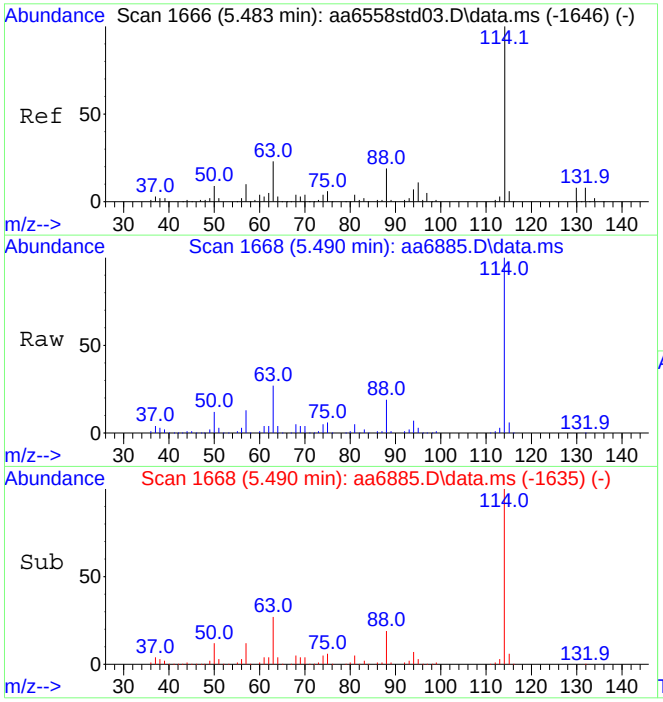


#37
Benzene
Concen: 0.38 ppbV
RT: 4.962 min Scan# 1504
Delta R.T. 0.006 min
Lab File: aa6885.D
Acq: 15 Jul 2024 5:34 pm

Tgt Ion: 78 Resp: 37883

Ion	Ratio	Lower	Upper
78	100		
51	21.5	14.9	22.3

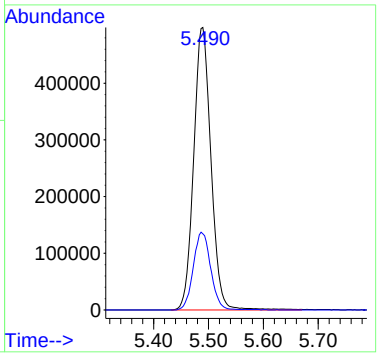


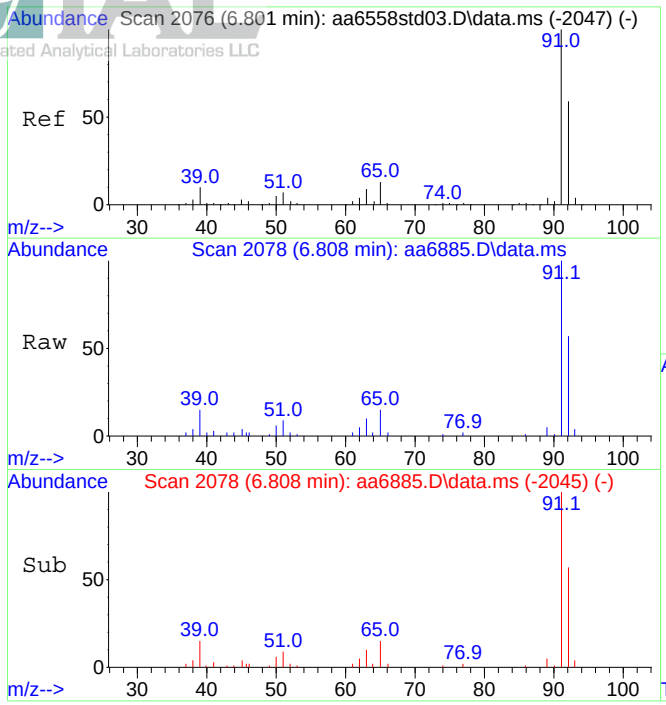


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.490 min Scan# 1668
Delta R.T. 0.006 min
Lab File: aa6885.D
Acq: 15 Jul 2024 5:34 pm

Tgt Ion:114 Resp: 1092158

Ion	Ratio	Lower	Upper
114	100		
63	27.8	3.6	43.6

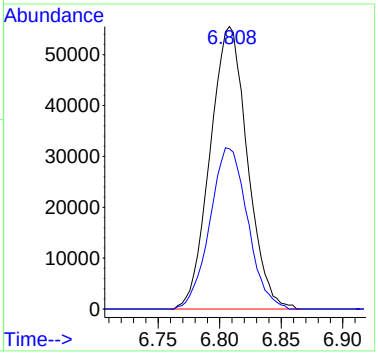


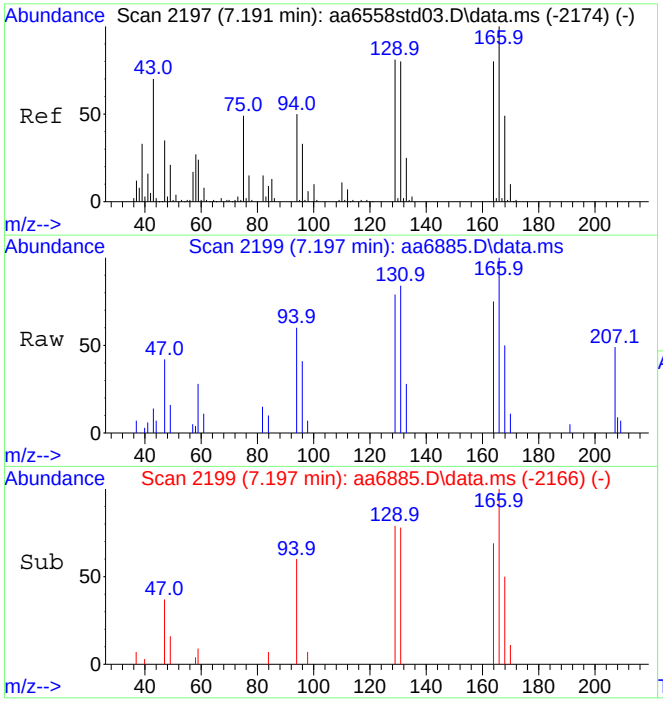


#47
Toluene
Concen: 0.84 ppbV
RT: 6.808 min Scan# 2078
Delta R.T. 0.006 min
Lab File: aa6885.D
Acq: 15 Jul 2024 5:34 pm

Tgt Ion: 91 Resp: 117262

Ion	Ratio	Lower	Upper
91	100		
92	57.6	47.0	70.6

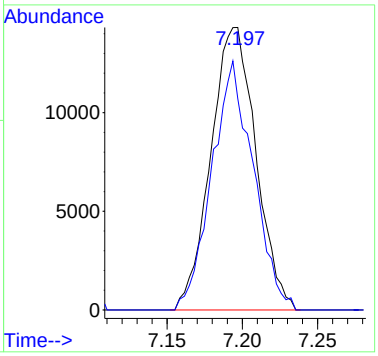


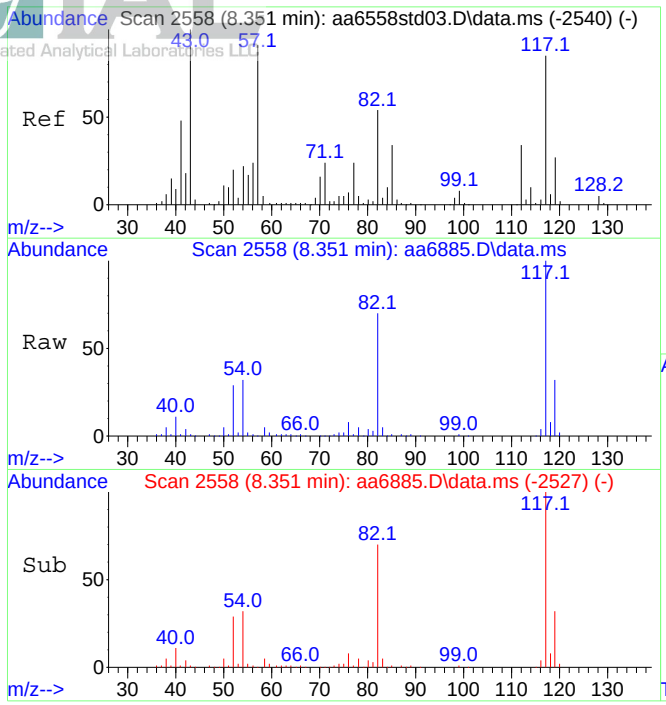


#49
Tetrachloroethene
Concen: 0.56 ppbV
RT: 7.197 min Scan# 2199
Delta R.T. 0.006 min
Lab File: aa6885.D
Acq: 15 Jul 2024 5:34 pm

Tgt Ion:166 Resp: 29915

Ion	Ratio	Lower	Upper
166	100		
164	81.0	62.8	94.2

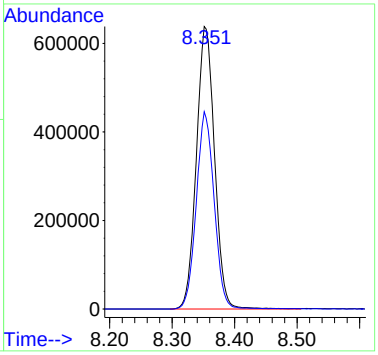


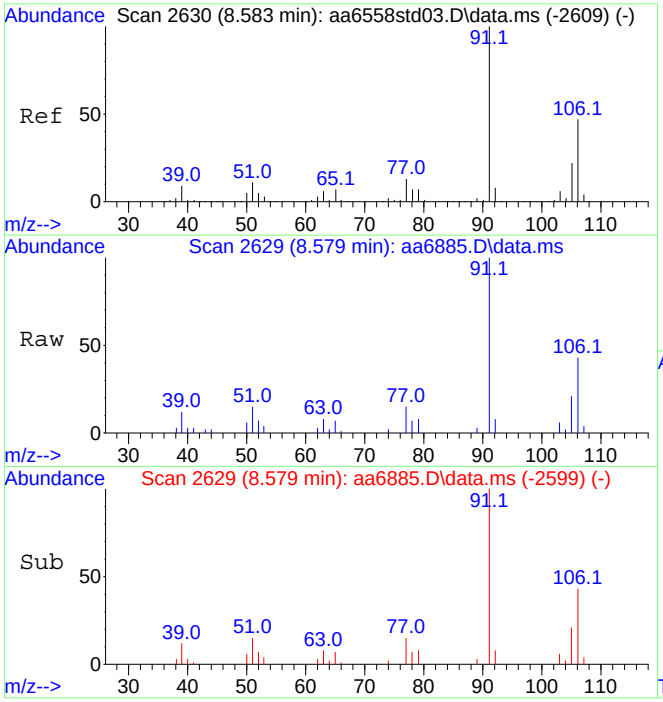


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.351 min Scan# 2558
Delta R.T. -0.000 min
Lab File: aa6885.D
Acq: 15 Jul 2024 5:34 pm

Tgt Ion:117 Resp: 1291262

Ion	Ratio	Lower	Upper
117	100		
82	68.7	42.3	82.3

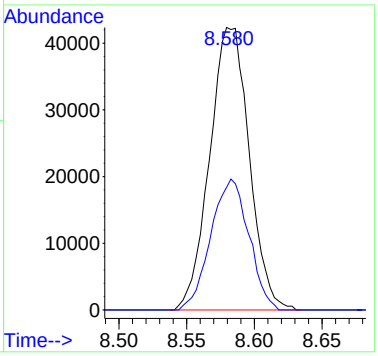


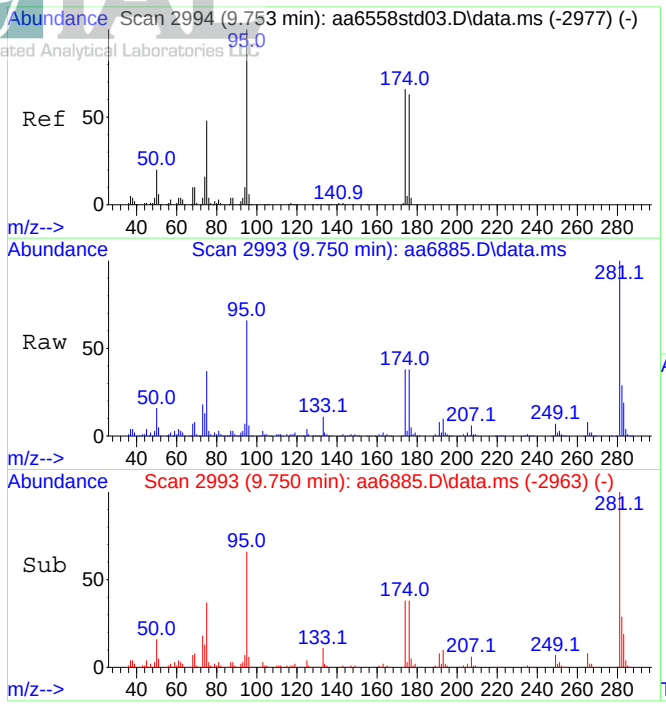


#59
Xylenes (m&p)
Concen: 0.45 ppbV
RT: 8.579 min Scan# 2629
Delta R.T. -0.003 min
Lab File: aa6885.D
Acq: 15 Jul 2024 5:34 pm

Tgt Ion: 91 Resp: 86127

Ion	Ratio	Lower	Upper
91	100		
106	44.4	37.4	56.2

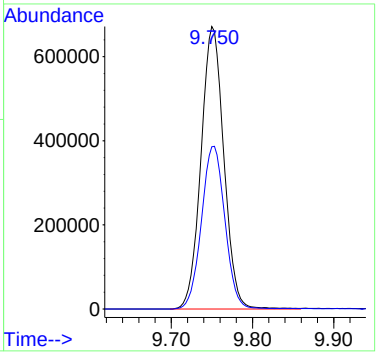




#64
Bromofluorobenzene (tune std)
Concen: 10.75 ppbV
RT: 9.750 min Scan# 2993
Delta R.T. -0.003 min
Lab File: aa6885.D
Acq: 15 Jul 2024 5:34 pm

Tgt Ion: 95 Resp: 1313227

Ion	Ratio	Lower	Upper
95	100		
174	59.5	52.9	79.3



INTEGRATED ANALYTICAL LABORATORIES, LLC

Integrated Analytical Laboratories
GC/MS Run Log

Instrument ID: Agilent 7890A / 5975C
Column: Restek RTX-1 SN 992567

Target Directory: D:\Agilent GCMS\

Date of Analysis: 3/27/2024
Date of Initial Calibration: 3/27/2024

File #	Laboratory Sample ID	QC Check	Dilution Factor	Can #	Analyst	Injection Volume (cc)	Comments	*Make-up Air*		*Acquisition*		*Room*		*TO-15 Standard*	
								Added to canister (cc)	Added for dilution	Date	Time	Temp	BP "Hg	Working ID	Vendor ID (Lot#)
aa6020bfb	BFB	✓		ALM018474	JJW	0.5				**3/27/2024**	**10:03**	70	29.63		160-402352677-1
aa6021std05	0.2 ppbv Std	✓		EB0103704	JJW	1								3/27/2024	160-401980152-1
aa6022std04	2 ppbv Std	✓		EB0103704	JJW	10								3/27/2024	160-401980152-1
aa6023std03	10 ppbv Std	✓		EB0103704	JJW	50								3/27/2024	160-401980152-1
aa6024std02	20 ppbv Std	✓		EB0103704	JJW	100								3/27/2024	160-401980152-1
aa6025std01	40 ppbv Std	✓		EB0103704	JJW	200								3/27/2024	160-401980152-1
aa6026icvss	10 ppbv ICVSS	✓		EB0116272	JJW	50								3/27/2024	160-402744241-1
aa6027lcs	10 ppbv LCS	✓		EB0103704	JJW	50								3/27/2024	160-401980152-1
aa6028blk	Method Blank	✓		1127	JJW	500									
aa6229	E24-00947-01x10 dil	✓	10	1526	JJW	50									
aa6230	E24-00947-02x10 dil	✓	10	1545	JJW	50									
aa6231	E24-00947-03x10 dil	✓	10	1588	JJW	50									
aa6232	E24-00947-04x10 dil	✓	10	1554	JJW	50									
aa6233	E24-00948-01	✓		2901	JJW	500									
aa6234	E24-00948-02	✓		3026A	JJW	500									
aa6235	E24-00948-03	✓		2751	JJW	500									
aa6236	E24-00948-04	✓		2033	JJW	500									
aa6237	E24-00948-05	✓		4865	JJW	500									
aa6238	E24-00948-25	✓		4865	JJW	500	dup of 00948-05								
aa6239	3285	✓		x	JJW	500									
aa6240	2036	✓		x	JJW	500				3/27/2024	21:38				

Analyst Name: J Walukiewicz

Signature: Joseph Walukiewicz

INTEGRATED ANALYTICAL LABORATORIES, LLC

Integrated Analytical Laboratories
GC/MS Run Log

Instrument ID: Agilent 7890A / 5975C
Column: Restek RTX-1 SN 992567

Target Directory: D:\Agilent GCMS\

Date of Analysis: 5/21/2024
Date of Initial Calibration: 3/27/2024

File #	Laboratory Sample ID	QC Check	Dilution Factor	Can #	Analyst	Injection Volume (cc)	Comments	*Make-up Air*		*Acquisition*		*Room*		*TO-15 Standard*	
								Added to canister (cc)	Added for dilution	Date	Time	Temp	BP "Hg	Working ID	Vendor ID (Lot#)
aa6539bfb	BFB	✓		ALM018474	JJW	0.5				**5/21/2024**	**9:54**	71	29.42		160-402352677-1
aa6540dcvs	10 ppbv DCVS	✓		EB0103704	JJW	50								3/27/2024	160-401980152-1
aa6541lcs	10 ppbv LCS	✓		EB0103704	JJW	50								3/27/2024	160-401980152-1
aa6542blk	Method Blank	✓		1127	JJW	500									
aa6543rllcs	0.2 ppbv RLLCS	✓		EB0103704	JJW	1								3/27/2024	160-401980152-1
aa6544	3052	✓		3052	JJW	500									
aa6545	3100	✓		3100	JJW	500									
aa6546	1571	✓		1571	JJW	50									
aa6547	E24-01699-01	✓		3787	JJW	500									
aa6548	E24-01699-02	✓		2889	JJW	500									
aa6549	E24-01699-03	✓		2900	JJW	500									
aa6550	E24-01699-23	✓		2900	JJW	500	Dup of 01699-03								
aa6551	blk	✓		x	JJW	500									
aa6552cccvs	10 ppbv CCCVS	✓		EB0103704	JJW	50				5/21/2024	19:21			3/27/2024	160-401980152-1

Analyst Name: J Walukiewicz

Signature: Joseph Walukiewicz

INTEGRATED ANALYTICAL LABORATORIES, LLC

Integrated Analytical Laboratories
GC/MS Run Log

Instrument ID: Agilent 7890A / 5975C
Column: Restek RTX-1 SN 992567

Target Directory: D:\Agilent GCMS\

Date of Analysis: 5/29/2024
Date of Initial Calibration: 5/29/2024

File #	Laboratory Sample ID	QC Check	Dilution Factor	Can #	Analyst	Injection Volume (cc)	Comments	*Make-up Air*		*Acquisition*		*Room*		*TO-15 Standard*	
								Added to canister (cc)	Added for dilution	Date	Time	Temp	BP "Hg	Working ID	Vendor ID (Lot#)
aa6554bfb	BFB	✓		ALM018474	JJW	0.5				**5/29/2024**	**9:16**	70	29.63		160-402352677-1
aa6555dcvs	10 ppbv DCVS	✓		EB0103704	JJW	50	Failed Criteria							3/27/2024	160-401980152-1
aa6556std05	0.2 ppbv Std	✓		EB0103704	JJW	1								5/29/2024	160-401980152-1
aa6557std04	2 ppbv Std	✓		EB0103704	JJW	10								5/29/2024	160-401980152-1
aa6558std03	10 ppbv Std	✓		EB0103704	JJW	50								5/29/2024	160-401980152-1
aa6559std02	20 ppbv Std	✓		EB0103704	JJW	100								5/29/2024	160-401980152-1
aa6560std01	40 ppbv Std	✓		EB0103704	JJW	200								5/29/2024	160-401980152-1
aa6561icvss	10 ppbv ICVSS	✓		EB0116272	JJW	50				5/29/2024	17:16			5/29/2024	160-402744241-1

Analyst Name: J Walukiewicz

Signature: Joseph Walukiewicz

INTEGRATED ANALYTICAL LABORATORIES, LLC

Integrated Analytical Laboratories
GC/MS Run Log

Instrument ID: Agilent 7890A / 5975C
Column: Restek RTX-1 SN 992567

Target Directory: D:\Agilent GCMS\

Date of Analysis: 7/15/2024
Date of Initial Calibration: 5/29/2024

File #	Laboratory Sample ID	QC Check	Dilution Factor	Can #	Analyst	Injection Volume (cc)	Comments	*Make-up Air*		*Acquisition*		*Room*		*TO-15 Standard*	
								Added to canister (cc)	Added for dilution	Date	Time	Temp	BP "Hg	Working ID	Vendor ID (Lot#)
aa6875bfb	BFB	✓		ALM018474	JJW	0.5				**7/15/2024**	**10:11**	75	29.31		160-402352677-1
aa6876dcvs	10 ppbv DCVS	✓		EB0103704	JJW	50								5/29/2024	160-401980152-1
aa6877lcs	10 ppbv LCS	✓		EB0103704	JJW	50								5/29/2024	160-401980152-1
aa6878blk	Method Blank	✓		1127	JJW	500									
aa6879rllcs	0.2 ppbv RLLCS	✓		EB0103704	JJW	1								5/29/2024	160-401980152-1
aa6880	E24-02398-01x10 dil	✓	10	5096	JJW	50	Screen								
aa6881	E24-02398-02x10 dil	✓	10	2066	JJW	50	Screen								
aa6882	E24-02398-03x10 dil	✓	10	3100	JJW	50	Screen								
aa6883	E24-02398-04x10 dil	✓	10	2886	JJW	50	Screen								
aa6884	E24-02398-01x5 dil	✓	5	5096	JJW	100	Used for Lab Dup								
aa6885	E24-02398-21x5 dil	✓	5	5096	JJW	100	Dup of 02398-01x5								
aa6886	E24-02398-01	✓		5096	JJW	500									
aa6887	blk	✓		x	JJW	500									
aa6888	E24-02398-02	✓		2066	JJW	500									
aa6889	blk	✓		x	JJW	500									
aa6890	E24-02398-03x5 dil	✓	5	3100	JJW	100									
aa6891	E24-02398-03	✓		3100	JJW	500									
aa6892	blk	✓		x	JJW	500									
aa6893	E24-02398-04x5 dil	✓	5	2886	JJW	100									
aa6894	E24-02398-04	✓		2886	JJW	500									
aa6895	blk	✓		x	JJW	500									
aa6896	blk	✓		x	JJW	500									
aa6897cccvs	10 ppbv CCCVS	✓		EB0103704	JJW	50				7/15/2024	23:42			5/29/2024	160-401980152-1

Analyst Name: J Walukiewicz

Signature: Joseph Walukiewicz

IAL
Integrated Analytical Laboratories LLC

INTEGRATED ANALYTICAL LABORATORIES, LLC

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

External Chain of Custody Record/
Field Test Data Sheet
USEPA Method TO-15

Contact Us: 973-361-4252
Fax: 973-366-5613
Web: www.ialonline.com

Carrier (check one): ____ IAL Courier ____Client Courier _____FedEx/UPS

pg 1 of 1

Client Contact Information	Project Information	Invoice Information
Company: JS Held - Hoboken	Project Name: 48-55 36th St	Attn:
Address: 5 Marine View Plaza	Project Location (State): NJ	Address:
Hoboken, NJ 07030	Project Manager: Leah DeBiddio	
Phone: 201-876-9400	PM Signature: LDeBiddio@jsheld.com	PO #: 24030 2017
Fax:	PM E-Mail:	Quote #:
Report to:	Sampler: B.N	

Analysis Turnaround Time - IF NO TAT IS SPECIFIED, 2 WEEK TAT IS ASSUMED

IAL Standard: 2 weeks (10 business days)

Rush (**pre-approved by lab): 24hr** 48hr** (72hr**) 96hr** 1wk**

	Sample Identification	Start DATE & TIME (24hr Clock)	End DATE & TIME (24hr Clock)	Starting Vacuum ("Hg)	Ending Vacuum ("Hg)	Starting Temp. (°F)	Ending Temp. (°F)	Outgoing Vacuum - Lab ("Hg)	Incoming Vacuum - Lab ("Hg)	Flow Regulator ID	Canister ID	Canister Size (1L or 6L)	Flow Controller Readout (cc/min)
1	SG-10	7/12, 1055	7/12, 1126	-30	-1	79	79	-29.0	-1.0	7337195	5096	6L	200
2	SG-11	,1410	,1440	-30	-1	79	79	-29.0	-1.0	7288555	2066	6L	200
3	SG-12	,1200	,1230	-28	-1	74	74	-29.0	-1.0	7340699	3100	6L	199.6
4	SG-13	,1330	,1401	-29	0	79	79	-29.0	0.0	A00 7624	2886	6L	200

Barometric Pressure — Start: | Stop:

	EPA TO - 15	NJDEP LLTO-15 (includes 30 TICs)	Library Search (10, 20, or 30 TICs)	Other (Explain in Comments)	Regulatory/ NY Cat B / Full (NJ Required)	Reduced / NY Cat A Data Package	Results Only	Indoor Air	Ambient / Outdoor Air	Sub Slab / Soil Gas / Near Slab (Circle One)	Stack Emission / SVE System	High Concentrations Expected
Analysis / Report / Matrix												
1	X									X		
2	X									X		
3	X									X		
4	X									X		

Comments/ Special Analysis Instructions / QC Requirements:

05072401
CS3124 22 file # 226545
#3100

Note: Hold or contingent samples may be designated by writing an "H" or "C" in the appropriate analysis box.

ALL FIELDS IN RED ARE REQUIRED

Shipping Information / Canister Preparation (for laboratory use only)

Individual Preparing Canisters / Title: P. Jenkins, J. Walukiewicz / Air Department Sample Custodians
Lab Affixed Seal Number(s): (Jacob Reitzn)
Date/Time Shipping Container Sealed: 7/10/24

Laboratory Canister Certification

GC/MS Analyst Signature: Joseph J Walukiewicz III (JJW)

IAL SDG#: 02398

External Chain of Custody

Relinquished	Received	Date / Time	Reason for Change of External Custody
Joseph Tinley	Joseph Tinley	7/10/24 1605	shipment from laboratory to client
	Joseph J Walukiewicz III (SAL)	7/10/24 1606	
		07/15/2024 09:30	Received at air lab

Name/Title Resealing Shipping Container Name:
Date/Time Sample Shipping Container Resealed:
Date/Time Sample Shipping Container Opened: 07/15/2024 09:30

NJDEP Affixed Seal Number:
Individual Opening Sample Shipping Container: ~~Padraic Jenkins~~ / Joseph Walukiewicz
Date/Time Internal Chain of Custody Initiated: 07/15/2024 @ 09:35

White and yellow - lab copies; Pink - client copy

Use appropriate care with IAL sampling equipment when sampling and packing for shipment. The client is responsible for all damage incurred to IAL equipment. Notify IAL if equipment is damaged upon receipt. Holding time before sampling is 15 days, after sampling is 30 days; failure to follow these times may result in data rejection by regulatory agencies. The lab will contact you if your COC is not clear, incomplete, or if discrepancies exist. The use of initials is not permitted on the COC except when correcting errors. 06/2014

Example Calculation (EPA TO-15)

$$\frac{\text{Area of Compound}}{\text{Area of Internal Standard}} \times \frac{\text{Concentration of Internal Standard (10 ppbv)}}{\text{Response Factor}} = \text{Concentration of Compound (ppbv)}$$

Conversion from ppbv to µg/m ^{3}

$$\frac{\text{Concentration of Compound (ppbv)} \times \text{Molecular Weight of Compound}}{24.45} = \text{Concentration of Compound (µg/m3)}$$

INTEGRATED ANALYTICAL LABORATORIES, LLC

Clean Canister Certification Report

Lab Sample Name:	**Clean Canister, Batch Master 3100**	**Data File:**	**AA6545**
Field Sample Name:	**Canister 3100**	**Date Analyzed:**	**5/21/2024**
Sample Volume:	**500ml**	**Matrix:**	**Air**

Canisters associated with this run: 3100 (used for E24-02398-03), 3012, 5096 (used for E24-02398-01), 5073, 2886 (used for E24-02398-04), 2066 (used for E24-02398-02), 5092, 4867

Runs with this Clean Canister Certification:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6539BFB]	05/21/2024 09:54
10 PPBV DCVS [AA6540DCVS]	05/21/2024 11:12
10 PPBV LCS [AA6541LCS]	05/21/2024 11:47
METHOD BLANK [AA6542BLK]	05/21/2024 12:15
02 PPBV RLLCS [AA6543RLLCS]	05/21/2024 12:50
CLEAN CAN CERTIFICATION, BATCH MASTER 3052 [AA6544]	05/21/2024 15:02
CLEAN CAN CERTIFICATION, BATCH MASTER 3100 [AA6545]	05/21/2024 15:33
CLEAN CAN CERTIFICATION, BATCH MASTER 1571 [AA6546]	05/21/2024 16:03
10 PPBV CCCVS [AA6552CCCVS]	05/21/2024 19:21

This canister has been certified clean, all compounds are below 0.2 ppbv.

Compound	CAS #	RL (ppbv)	Calculated Amount (ppbv)
Acetone	67-64-1	0.20	ND
Benzene	71-43-2	0.20	ND
Bromodichloromethane	75-27-4	0.20	ND
Bromoform	75-25-2	0.20	ND
Bromomethane	74-83-9	0.20	ND
1,3-Butadiene	106-99-0	0.20	ND
Chlorobenzene	108-90-7	0.20	ND
Chloroethane	75-00-3	0.20	ND
Chloroform	67-66-3	0.20	ND
Chloromethane	74-87-3	0.20	ND
Carbon disulfide	75-15-0	0.20	ND
Carbon tetrachloride	56-23-5	0.20	ND
Cyclohexane	110-82-7	0.20	ND
Dibromochloromethane	124-48-1	0.20	ND
1,2-Dibromoethane	106-93-4	0.20	ND
1,2-Dichlorobenzene	95-50-1	0.20	ND
1,3-Dichlorobenzene	541-73-1	0.20	ND
1,4-Dichlorobenzene	106-46-7	0.20	ND
Dichlorodifluoromethane	75-71-8	0.20	ND
1,1-Dichloroethane	75-34-3	0.20	ND
1,2-Dichloroethane	107-06-2	0.20	ND
1,1-Dichloroethene	75-35-4	0.20	ND
1,2-Dichloroethene (cis)	156-59-2	0.20	ND
1,2-Dichloroethene (trans)	156-60-5	0.20	ND
1,2-Dichloropropane	78-87-5	0.20	ND
1,3-Dichloropropene (cis)	10061-01-5	0.20	ND
1,3-Dichloropropene (trans)	10061-02-6	0.20	ND
1,2-Dichlorotetrafluoroethane	76-14-2	0.20	ND
1,4-Dioxane	123-91-1	0.20	ND
Ethylbenzene	100-41-4	0.20	ND
n-Heptane	142-82-5	0.20	ND
1,3-Hexachlorobutadiene	87-68-3	0.20	ND

Clean Canister Certification Report

Lab Sample Name:	**Clean Canister, Batch Master 3100**	**Data File:**	**AA6545**
Field Sample Name:	**Canister 3100**	**Date Analyzed:**	**5/21/2024**
Sample Volume:	**500ml**	**Matrix:**	**Air**

Canisters associated with this run: 3100 (used for E24-02398-03), 3012, 5096 (used for E24-02398-01), 5073, 2886 (used for E24-02398-04), 2066 (used for E24-02398-02), 5092, 4867

Runs with this Clean Canister Certification:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6539BFB]	05/21/2024 09:54
10 PPBV DCVS [AA6540DCVS]	05/21/2024 11:12
10 PPBV LCS [AA6541LCS]	05/21/2024 11:47
METHOD BLANK [AA6542BLK]	05/21/2024 12:15
02 PPBV RLLCS [AA6543RLLCS]	05/21/2024 12:50
CLEAN CAN CERTIFICATION, BATCH MASTER 3052 [AA6544]	05/21/2024 15:02
CLEAN CAN CERTIFICATION, BATCH MASTER 3100 [AA6545]	05/21/2024 15:33
CLEAN CAN CERTIFICATION, BATCH MASTER 1571 [AA6546]	05/21/2024 16:03
10 PPBV CCCVS [AA6552CCCVS]	05/21/2024 19:21

This canister has been certified clean, all compounds are below 0.2 ppbv.

Compound	CAS #	RL (ppbv)	Calculated Amount (ppbv)
n-Hexane	110-54-3	0.20	ND
Methylene chloride	75-09-2	0.20	ND
Methyl ethyl ketone	78-93-3	0.20	ND
Methyl isobutyl ketone	108-10-1	0.20	ND
Methyl tert-butyl ether	1634-04-4	0.20	ND
Styrene	100-42-5	0.20	ND
Tert-butyl alcohol	75-65-0	0.20	ND
1,1,2,2-Tetrachloroethane	79-34-5	0.20	ND
Tetrachloroethene	127-18-4	0.20	ND
Toluene	108-88-3	0.20	ND
1,2,4-Trichlorobenzene	120-82-1	0.20	ND
1,1,1-Trichloroethane	71-55-6	0.20	ND
1,1,2-Trichloroethane	79-00-5	0.20	ND
Trichloroethene	79-01-6	0.20	ND
Trichlorofluoromethane	75-69-4	0.20	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.20	ND
1,2,4-Trimethylbenzene	95-63-6	0.20	ND
1,3,5-Trimethylbenzene	108-67-8	0.20	ND
2,2,4-Trimethylpentane	540-84-1	0.20	ND
Vinyl bromide	593-60-2	0.20	ND
Vinyl chloride	75-01-4	0.20	ND
Xylenes (m&p)	179601-23-1	0.40	ND
Xylenes (o)	95-47-6	0.20	ND

Data Path : C:\DATA\2024\05-2024\05-21-2024\
Data File : aa6545.D
Acq On : 21 May 2024 3:33 pm
Operator : jjw
Sample : 3100
Misc : 3012, 5096, 5073, 2886, 2066, 5092, 4867
ALS Vial : 19 Sample Multiplier: 1

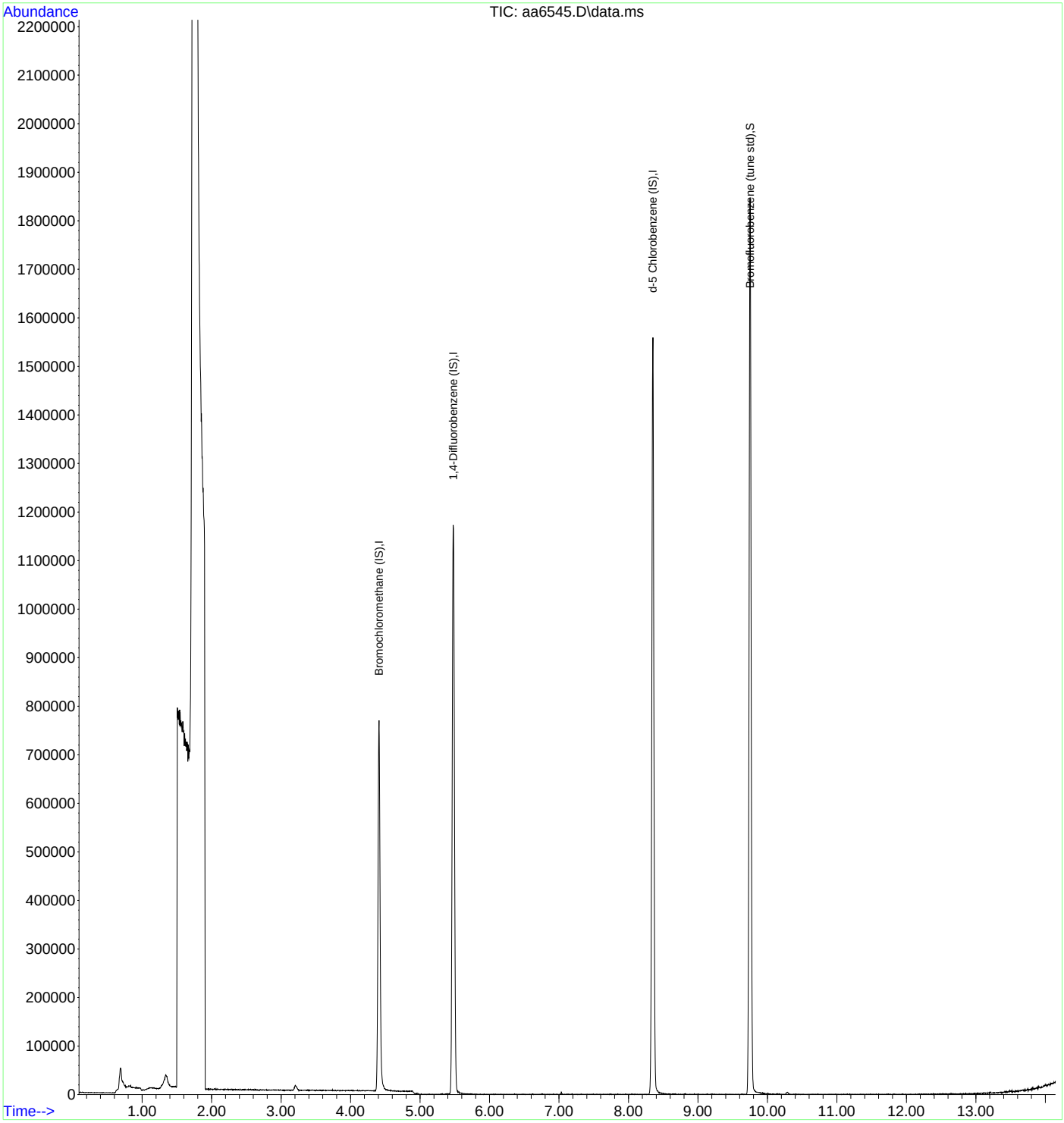
Quant Time: May 22 10:14:46 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.410	130	279835	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.478	114	1055298	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.352	117	985570	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.751	95	833847	9.43	ppbV	0.000
Target Compounds						Qvalue

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

Data Path : C:\DATA\2024\05-2024\05-21-2024\
Data File : aa6545.D
Acq On : 21 May 2024 3:33 pm
Operator : jjw
Sample : 3100
Misc : 3012, 5096, 5073, 2886, 2066, 5092, 4867
ALS Vial : 19 Sample Multiplier: 1

Quant Time: May 22 10:14:46 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration



LAST PAGE OF DOCUMENT

Integrated Analytical Laboratories LLC

ANALYTICAL DATA REPORT

JS Held - Hoboken
5 Marine View Plaza
Suite 401
Hoboken, NJ 07030

Project Name: **48-55 36TH ST**
IAL Case Number: **E24-02428**

These data have been reviewed and accepted by:

Michael H. Leffin, Ph.D.
Laboratory Director

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273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252

IAL is a NELAP accredited lab (TNI01284) and maintains certification in Connecticut (PH-0699), New Jersey (14751), New York (11402) and Pennsylvania (68-00773).

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Sample Summary

IAL Case No.
E24-02428

Client JS Held - Hoboken

Project 48-55 36TH ST

Received On 7/16/2024@15:00

Lab ID	*Client Sample ID*	*Depth Top/Bottom*	*Sampling Time*	*Matrix*	*# of Container*
02428-001	SB-7R	12/12.5	7/15/2024@16:41	Soil	4
02428-002	SB-10A	6.5/7	7/15/2024@19:05	Soil	4
02428-003	SB-10B	10/10.5	7/15/2024@19:10	Soil	4
02428-004	SB-15A	3.5/4	7/15/2024@19:55	Soil	4
02428-005	SB-15B	7/7.5	7/15/2024@20:00	Soil	4
02428-006	SB-11A	2/2.5	7/15/2024@20:20	Soil	4
02428-007	SB-11B	5/5.5	7/15/2024@20:25	Soil	4
02428-008	SB-16A	2/2.5	7/15/2024@20:51	Soil	4
02428-009	SB-16B	4/4.5	7/15/2024@20:55	Soil	4
02428-010	SB-17A	1.5/2	7/15/2024@21:25	Soil	4
02428-011	SB-17B	4/4.5	7/15/2024@21:26	Soil	4
02428-012	SB-18A	2/2.5	7/15/2024@21:52	Soil	4
02428-013	SB-18B	4.5/5	7/15/2024@21:55	Soil	4

Integrated Analytical Labs ~ 273 Franklin Road, Randolph, NJ 07869 ~ (973) 361-4252

DATA QUALIFIERS AND FLAGS

B	Indicates the analyte found in the associated method blank and in the sample due to potential lab contamination.
C	Indicates analyte is a common laboratory contaminant.
D	Indicates analyte was reported from diluted analysis.
E	Identifies a compound concentration that exceeds the upper level of the calibration range of the instrument
J	Indicates an estimated value either when the concentration in the sample is less than the RL or for qualification of TICs
J1	Indicates an estimated value when ICC or CCV did not meet the criteria.
M	Indicates matrix interference
N	Presumptive evidence of a compound from the use of GC/MS library search.
T	Sample analyzed outside of holding time
X	Indicates samples analyzed for total and dissolved metals differ at ≤20% RPD.
Y	Indicates DO depletion in the BOD blank is >0.20ppm
Z	Indicates internal standard failure. Sample results are either biased high or biased low.
$	Value outside NJDEP DKQP Limits
*	Result outside of QC limits

PROJECT NOTES

- All results for soils, solids, and sludges are reported on a dry-weight basis except where noted
- All test results and QC are compliant with TNI or other applicable state agency requirements/guidance unless otherwise notated in the case narrative and/or project information page.
- The case narrative for this SDG should be consulted to determine any non-conformances.
- Any samples with 15-minute or "analyze immediately" holding times (e.g. pH, Dissolved Oxygen, Sulfite, etc.) which are analyzed in the laboratory are considered out of holding time.
- IAL is a NELAP/TNI certified laboratory (TNI ID# TNI01284). IAL retains certification in Connecticut (PH-0699), New Jersey (14751), New York (11402), and Pennsylvania (68-00773).
- Certification is not required to perform analyses in the following states: AL, CO, DE, GA, HI, ID, IN, KY, MD, MI, MS, MO, MT, NE, NM, SD and TN. IAL can perform all analyses, except Drinking Water, within its scope of capabilities in these states.

ACRONYMS AND ABBREVIATIONS

CFU	Colony Forming Unit	ND	Indicates analyte was analyzed for but not detected at MDL or RL (only if MDL is not used)
CCB	Continuing Calibration Blank		
CCV	Continuing Calibration Verification	NTU	Nephelometric Turbidity Units
DF	Dilution Factor	ppb	Parts per billion. Reported as µg/L or µg/kg
DL	Attached as a suffix to a diluted sample	ppm	Parts per million. Reported as mg/L, µg/mL or mg/kg
DUP	Duplicate	QC	Quality Control
ICB	Initial Calibration Blank	% Rec	Percent Recovery
ICC	Initial Calibration Curve	RL	Reporting Limit. The RL is typically determined by the concentration of the lowest standard in the calibration curve
ICV	Initial Calibration Verification		
kg	kilogram		
L	Liter	RPD	Relative Percent Difference
LCS	Laboratory Control Sample	RSD	Relative Standard Deviation
LCSD	Laboratory Control Sample Duplicate	RT	Retention Time
MDL	Method Detection Limit as determined according to 40 CFR Part 136 Appendix B	SU	Standard Units
		TIC	Tentatively Identified Compound AKA Library Search Compounds
MF	Membrane Filter		
mg	milligram (1000mg = 1g)	TNI	The NELAC (National Environmental Laboratory Accreditation Council) Institute
µg	microgram (1000µg = 1mg)		
ml	milliliter (1000ml = 1L)	TNTC	Too numerous to count
µl	microliter (1000µl = 1ml)	*	When attached to a compound name, indicates this analyte was analyzed by Method SW-846 8270 SIM
µmhos	Conductivity units - resistance expressed in ohms		
MPN	Most Probable Number	^	When attached to a compound name, indicates this analyte was analyzed by Method SW-846 8011 or EPA 504.1
MS	Matrix Spike		
MSD	Matrix Spike Duplicate		
NA	Not applicable	<	Less than; In conjunction with a numerical value, indicates a concentration less than the RL or MDL
NC	Not calculated		

SAMPLE DELIVERY GROUP CASE NARRATIVE
(Conformance / Non-Conformance Summary)

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E24-02428

Integrated Analytical Laboratories, LLC. received thirteen (13) samples** from JS Held - Hoboken (IAL SDG# **E24-02428**, Project: 48-55 36TH ST) on July 16, 2024 for the analysis of :

(13) NY Part 375 VO

**Number of samples listed above may be greater than what is listed on the chain of custody. Any samples that require in-house filtration or splitting will be counted as separate samples.

Samples were received in good condition with documentation in order.
Cooler temperature was acceptable at 4 ± 2 degree C.

Volatiles By SW 8260D	**Batch: L240717-01**	**Matrix: Soil**

QC

- Calibration curve met QC criteria.
- Internal standards recovery met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- LCS percent recovery met QC criteria.
- MS/MSD RPD did not meet QC criteria due to the differences of Terra cores analyzed.
- MS/MSD percent recovery met QC criteria.

E24-02428

- All samples were received within holding time.
- All samples were analyzed within holding time.
- #004,007,009,011,012 and 013 were flagged with a C qualifier, indicating laboratory contamination for Methylene chloride. Methylene chloride is used as a solvent in the laboratory, resulting in occasional laboratory contamination.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E24-02428-001	1	NA
E24-02428-002	1	NA
E24-02428-003	1	NA
E24-02428-004	1	NA
E24-02428-005	1	NA
E24-02428-006	1	NA
E24-02428-007	1	NA
E24-02428-008	1	NA
E24-02428-009	1	NA
E24-02428-010	1	NA
E24-02428-011	1	NA
E24-02428-012	1	NA
E24-02428-013	1	NA

A review of the QA/QC measures for the analysis of the sample(s) contained in this report has been performed by:

Reviewed by

7/23/2024
Date

RESULTS SUMMARY REPORT

SUMMARY REPORT
Client: JS Held - Hoboken
Project: 48-55 36TH ST
Lab Case No.: E24-02428

Lab ID:	02428-001			02428-002			02428-003			02428-004		
Client ID:	SB-7R			SB-10A			SB-10B			SB-15A		
Depth:	12/12.5			6.5/7			10/10.5			3.5/4		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date	7/15/24			7/15/24			7/15/24			7/15/24		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Volatiles (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Vinyl chloride	ND		0.000314	ND		0.00033	ND		0.000321	ND		0.00035
1,1-Dichloroethene	ND		0.00034	ND		0.000357	ND		0.000347	ND		0.000378
Acetone	0.010		0.00485	0.012		0.0051	ND		0.00495	0.018		0.0054
Methylene chloride	ND		0.00291	ND		0.00306	ND		0.00297	0.00367	CJ	0.00324
trans-1,2-Dichloroethene	ND		0.000343	ND		0.000361	ND		0.00035	ND		0.000382
Methyl tert-butyl ether (MTBE)	ND		0.000211	ND		0.000222	ND		0.000216	ND		0.000235
1,1-Dichloroethane	ND		0.000247	ND		0.00026	ND		0.000252	ND		0.000275
cis-1,2-Dichloroethene	0.000771	J	0.000208	0.000635	J	0.000218	ND		0.000212	0.000571	J	0.000231
2-Butanone (MEK)	ND		0.00194	ND		0.00204	ND		0.00198	ND		0.00216
Chloroform	ND		0.000485	ND		0.00051	ND		0.000495	ND		0.00054
1,1,1-Trichloroethane	ND		0.000298	ND		0.000313	ND		0.000304	ND		0.000332
Carbon tetrachloride	ND		0.000194	ND		0.000204	ND		0.000198	ND		0.000216
1,2-Dichloroethane (EDC)	ND		0.000224	ND		0.000236	ND		0.000229	ND		0.000249
Benzene	ND		0.000239	ND		0.000251	ND		0.000244	ND		0.000266
Trichloroethene	0.000772	J	0.000145	0.000301	J	0.000152	ND		0.000148	0.00388		0.000161
Toluene	ND		0.000485	ND		0.00051	ND		0.000495	ND		0.00054
Tetrachloroethene	0.00739		0.000307	0.000867	J	0.000322	ND		0.000313	0.043		0.000341
Chlorobenzene	ND		0.000168	ND		0.000176	ND		0.000171	ND		0.000187
Ethylbenzene	ND		0.000245	ND		0.000258	ND		0.00025	ND		0.000273
Total Xylenes	ND		0.000136	ND		0.000143	ND		0.000139	ND		0.000151
n-Propylbenzene	ND		0.000271	ND		0.000285	ND		0.000276	ND		0.000301
1,3,5-Trimethylbenzene	ND		0.000206	ND		0.000216	ND		0.00021	ND		0.000229
tert-Butylbenzene	ND		0.000213	ND		0.000224	ND		0.000218	ND		0.000238
1,2,4-Trimethylbenzene	ND		0.000263	ND		0.000276	ND		0.000268	ND		0.000293
sec-Butylbenzene	ND		0.000229	ND		0.000241	ND		0.000234	ND		0.000255
1,3-Dichlorobenzene	ND		0.000257	ND		0.00027	ND		0.000262	ND		0.000286
1,4-Dichlorobenzene	ND		0.000301	ND		0.000316	ND		0.000307	ND		0.000335
n-Butylbenzene	ND		0.000358	ND		0.000376	ND		0.000365	ND		0.000399
1,2-Dichlorobenzene	ND		0.000243	ND		0.000256	ND		0.000248	ND		0.000271
m,p-Xylene	ND		0.000254	ND		0.000267	ND		0.000259	ND		0.000283
o-Xylene	ND		0.000136	ND		0.000143	ND		0.000139	ND		0.000151
TOTAL VO's:	0.019	J		0.014	J		ND			0.069	CJ	

ND = Analyzed for but Not Detected at the MDL
C = Common Laboratory and/or Bottle Contaminant.
J = Indicates an estimated value either when the concentration in the sample is greater than MDL and less than RL, or for qualification of TICs

SUMMARY REPORT
Client: JS Held - Hoboken
Project: 48-55 36TH ST
Lab Case No.: E24-02428

Lab ID:	02428-005			02428-006			02428-007			02428-008		
Client ID:	SB-15B			SB-11A			SB-11B			SB-16A		
Depth:	7/7.5			2/2.5			5/5.5			2/2.5		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date	7/15/24			7/15/24			7/15/24			7/15/24		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Volatiles (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Vinyl chloride	ND		0.000353	ND		0.000314	ND		0.000311	ND		0.000382
1,1-Dichloroethene	ND		0.000382	ND		0.00034	ND		0.000336	ND		0.000413
Acetone	ND		0.00545	ND		0.00485	0.015		0.0048	0.031		0.0059
Methylene chloride	ND		0.00327	ND		0.00291	0.00423	CJ	0.00288	ND		0.00354
trans-1,2-Dichloroethene	ND		0.000386	ND		0.000343	ND		0.00034	ND		0.000418
Methyl tert-butyl ether (MTBE)	ND		0.000238	ND		0.000211	ND		0.000209	ND		0.000257
1,1-Dichloroethane	ND		0.000278	ND		0.000247	ND		0.000245	ND		0.000301
cis-1,2-Dichloroethene	ND		0.000233	0.000758	J	0.000208	0.000382	J	0.000205	ND		0.000253
2-Butanone (MEK)	ND		0.00218	ND		0.00194	0.003	J	0.00192	ND		0.00236
Chloroform	ND		0.000545	ND		0.000485	ND		0.00048	ND		0.00059
1,1,1-Trichloroethane	ND		0.000335	ND		0.000298	ND		0.000295	ND		0.000362
Carbon tetrachloride	ND		0.000218	ND		0.000194	ND		0.000192	ND		0.000236
1,2-Dichloroethane (EDC)	ND		0.000252	ND		0.000224	ND		0.000222	ND		0.000273
Benzene	ND		0.000268	ND		0.000239	ND		0.000236	ND		0.00029
Trichloroethene	ND		0.000162	0.00291		0.000145	0.00142		0.000143	ND		0.000176
Toluene	ND		0.000545	ND		0.000485	ND		0.00048	ND		0.00059
Tetrachloroethene	0.00141		0.000344	0.023		0.000307	0.011		0.000303	0.017		0.000373
Chlorobenzene	ND		0.000189	ND		0.000168	ND		0.000166	ND		0.000204
Ethylbenzene	ND		0.000276	ND		0.000245	ND		0.000243	ND		0.000299
Total Xylenes	ND		0.000153	ND		0.000136	ND		0.000134	ND		0.000165
n-Propylbenzene	ND		0.000304	ND		0.000271	ND		0.000268	ND		0.000329
1,3,5-Trimethylbenzene	ND		0.000231	ND		0.000206	ND		0.000204	ND		0.00025
tert-Butylbenzene	ND		0.00024	ND		0.000213	ND		0.000211	ND		0.00026
1,2,4-Trimethylbenzene	ND		0.000295	ND		0.000263	ND		0.00026	ND		0.00032
sec-Butylbenzene	ND		0.000257	ND		0.000229	ND		0.000227	ND		0.000278
1,3-Dichlorobenzene	ND		0.000289	ND		0.000257	ND		0.000254	ND		0.000313
1,4-Dichlorobenzene	ND		0.000338	ND		0.000301	ND		0.000298	ND		0.000366
n-Butylbenzene	ND		0.000402	ND		0.000358	ND		0.000354	ND		0.000435
1,2-Dichlorobenzene	ND		0.000274	ND		0.000243	ND		0.000241	ND		0.000296
m,p-Xylene	ND		0.000286	ND		0.000254	ND		0.000252	ND		0.000309
o-Xylene	ND		0.000153	ND		0.000136	ND		0.000134	ND		0.000165
TOTAL VO's:	0.00141			0.027	J		0.035	CJ		0.048		

ND = Analyzed for but Not Detected at the MDL
C = Common Laboratory and/or Bottle Contaminant.
J = Indicates an estimated value either when the concentration in the sample is greater than MDL and less than RL, or for qualification of TICs

SUMMARY REPORT
Client: JS Held - Hoboken
Project: 48-55 36TH ST
Lab Case No.: E24-02428

Lab ID:	02428-009			02428-010			02428-011			02428-012		
Client ID:	SB-16B			SB-17A			SB-17B			SB-18A		
Depth:	4/4.5			1.5/2			4/4.5			2/2.5		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date	7/15/24			7/15/24			7/15/24			7/15/24		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Volatiles (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Vinyl chloride	ND		0.000363	ND		0.000311	ND		0.000347	ND		0.000343
1,1-Dichloroethene	ND		0.000392	ND		0.000336	ND		0.000375	ND		0.000371
Acetone	0.00615	J	0.0056	ND		0.0048	0.00792	J	0.00535	0.00959	J	0.0053
Methylene chloride	0.00364	CJ	0.00336	ND		0.00288	0.00414	CJ	0.00321	0.00439	CJ	0.00318
trans-1,2-Dichloroethene	ND		0.000396	ND		0.00034	ND		0.000379	ND		0.000375
Methyl tert-butyl ether (MTBE)	ND		0.000244	ND		0.000209	ND		0.000233	ND		0.000231
1,1-Dichloroethane	ND		0.000286	ND		0.000245	ND		0.000273	ND		0.00027
cis-1,2-Dichloroethene	ND		0.00024	ND		0.000205	ND		0.000229	ND		0.000227
2-Butanone (MEK)	ND		0.00224	ND		0.00192	ND		0.00214	0.00384	J	0.00212
Chloroform	ND		0.00056	ND		0.00048	ND		0.000535	ND		0.00053
1,1,1-Trichloroethane	ND		0.000344	ND		0.000295	ND		0.000328	ND		0.000325
Carbon tetrachloride	ND		0.000224	ND		0.000192	ND		0.000214	ND		0.000212
1,2-Dichloroethane (EDC)	ND		0.000259	ND		0.000222	ND		0.000247	ND		0.000245
Benzene	ND		0.000276	ND		0.000236	ND		0.000263	ND		0.000261
Trichloroethene	ND		0.000167	ND		0.000143	ND		0.000159	ND		0.000158
Toluene	ND		0.00056	ND		0.00048	ND		0.000535	ND		0.00053
Tetrachloroethene	ND		0.000354	0.00978		0.000303	0.00045	J	0.000338	0.00883		0.000335
Chlorobenzene	ND		0.000194	ND		0.000166	ND		0.000185	ND		0.000183
Ethylbenzene	ND		0.000283	ND		0.000243	ND		0.000271	ND		0.000268
Total Xylenes	ND		0.000157	ND		0.000134	ND		0.00015	ND		0.000148
n-Propylbenzene	ND		0.000312	ND		0.000268	ND		0.000299	ND		0.000296
1,3,5-Trimethylbenzene	ND		0.000237	ND		0.000204	ND		0.000227	ND		0.000225
tert-Butylbenzene	ND		0.000246	ND		0.000211	ND		0.000235	ND		0.000233
1,2,4-Trimethylbenzene	ND		0.000304	ND		0.00026	ND		0.00029	ND		0.000287
sec-Butylbenzene	ND		0.000264	ND		0.000227	ND		0.000253	ND		0.00025
1,3-Dichlorobenzene	ND		0.000297	ND		0.000254	ND		0.000284	ND		0.000281
1,4-Dichlorobenzene	ND		0.000347	ND		0.000298	ND		0.000332	ND		0.000329
n-Butylbenzene	ND		0.000413	ND		0.000354	ND		0.000395	ND		0.000391
1,2-Dichlorobenzene	ND		0.000281	ND		0.000241	ND		0.000269	ND		0.000266
m,p-Xylene	ND		0.000293	ND		0.000252	ND		0.00028	ND		0.000278
o-Xylene	ND		0.000157	ND		0.000134	ND		0.00015	ND		0.000148
TOTAL VO's:	0.00979	JC		0.00978			0.013	JC		0.027	JC	

ND = Analyzed for but Not Detected at the MDL
C = Common Laboratory and/or Bottle Contaminant.
J = Indicates an estimated value either when the concentration in the sample is greater than MDL and less than RL, or for qualification of TICs

SUMMARY REPORT
Client: JS Held - Hoboken
Project: 48-55 36TH ST
Lab Case No.: E24-02428

Lab ID:	**02428-013**		
Client ID:	**SB-18B**		
Depth:	**4.5/5**		
Matrix:	**Soil**		
Sampled Date	**7/15/24**		
PARAMETER(Units)	Conc	Q	MDL
Volatiles (Units)	*(mg/Kg)*		
Vinyl chloride	ND		0.000334
1,1-Dichloroethene	ND		0.000361
Acetone	0.013		0.00515
Methylene chloride	0.00386	CJ	0.00309
trans-1,2-Dichloroethene	ND		0.000365
Methyl tert-butyl ether (MTBE)	ND		0.000225
1,1-Dichloroethane	ND		0.000263
cis-1,2-Dichloroethene	ND		0.00022
2-Butanone (MEK)	ND		0.00206
Chloroform	ND		0.000515
1,1,1-Trichloroethane	ND		0.000316
Carbon tetrachloride	ND		0.000206
1,2-Dichloroethane (EDC)	ND		0.000238
Benzene	ND		0.000253
Trichloroethene	ND		0.000153
Toluene	ND		0.000515
Tetrachloroethene	0.000573	J	0.000325
Chlorobenzene	ND		0.000178
Ethylbenzene	ND		0.000261
Total Xylenes	ND		0.000144
n-Propylbenzene	ND		0.000287
1,3,5-Trimethylbenzene	ND		0.000218
tert-Butylbenzene	ND		0.000227
1,2,4-Trimethylbenzene	ND		0.000279
sec-Butylbenzene	ND		0.000243
1,3-Dichlorobenzene	ND		0.000273
1,4-Dichlorobenzene	ND		0.000319
n-Butylbenzene	ND		0.00038
1,2-Dichlorobenzene	ND		0.000259
m,p-Xylene	ND		0.00027
o-Xylene	ND		0.000144
TOTAL VO's:	0.017	CJ	

ND = Analyzed for but Not Detected at the MDL
C = Common Laboratory and/or Bottle Contaminant.
J = Indicates an estimated value either when the concentration in the sample is greater than MDL and less than RL, or for qualification of TICs

ANALYTICAL RESULTS

VOLATILE ORGANICS

Lab ID: E24-02428-001
Client ID: SB-7R/12-12.
Date Received: 07/16/2024
Date Analyzed: 07/17/2024
Data file: L0111.D 07/17/2024 17:03

GC/MS Column: DB-624
Sample wt/vol: 5.57g
Matrix-Units: Soil-mg/Kg
% Moisture: 7.30
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Vinyl chloride	ND		0.00097	0.000314
1,1-Dichloroethene	ND		0.00097	0.00034
Acetone	0.010		0.0097	0.00485
Methylene chloride	ND		0.00485	0.00291
trans-1,2-Dichloroethene	ND		0.00097	0.000343
Methyl tert-butyl ether (MTBE)	ND		0.00097	0.000211
1,1-Dichloroethane	ND		0.00097	0.000247
cis-1,2-Dichloroethene	0.000771	J	0.00097	0.000208
2-Butanone (MEK)	ND		0.0097	0.00194
Chloroform	ND		0.00097	0.000485
1,1,1-Trichloroethane	ND		0.00097	0.000298
Carbon tetrachloride	ND		0.00097	0.000194
1,2-Dichloroethane (EDC)	ND		0.00097	0.000224
Benzene	ND		0.00097	0.000239
Trichloroethene	0.000772	J	0.00097	0.000145
Toluene	ND		0.00097	0.000485
Tetrachloroethene	0.00739		0.00097	0.000307
Chlorobenzene	ND		0.00097	0.000168
Ethylbenzene	ND		0.00097	0.000245
Total Xylenes	ND		0.00194	0.000136
n-Propylbenzene	ND		0.00097	0.000271
1,3,5-Trimethylbenzene	ND		0.00097	0.000206
tert-Butylbenzene	ND		0.00097	0.000213
1,2,4-Trimethylbenzene	ND		0.00097	0.000263
sec-Butylbenzene	ND		0.00097	0.000229
1,3-Dichlorobenzene	ND		0.00097	0.000257
1,4-Dichlorobenzene	ND		0.00097	0.000301
n-Butylbenzene	ND		0.00097	0.000358
1,2-Dichlorobenzene	ND		0.00097	0.000243
m,p-Xylene	ND		0.00194	0.000254
o-Xylene	ND		0.00097	0.000136
Total Target Compounds (31):	0.019	J		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

VOLATILE ORGANICS

Lab ID: E24-02428-002
Client ID: SB-10A/6.5-7
Date Received: 07/16/2024
Date Analyzed: 07/17/2024
Data file: L0112.D 07/17/2024 17:32

GC/MS Column: DB-624
Sample wt/vol: 5.24g
Matrix-Units: Soil-mg/Kg
% Moisture: 6.60
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Vinyl chloride	ND		0.00102	0.00033
1,1-Dichloroethene	ND		0.00102	0.000357
Acetone	0.012		0.010	0.0051
Methylene chloride	ND		0.0051	0.00306
trans-1,2-Dichloroethene	ND		0.00102	0.000361
Methyl tert-butyl ether (MTBE)	ND		0.00102	0.000222
1,1-Dichloroethane	ND		0.00102	0.00026
cis-1,2-Dichloroethene	0.000635	J	0.00102	0.000218
2-Butanone (MEK)	ND		0.010	0.00204
Chloroform	ND		0.00102	0.00051
1,1,1-Trichloroethane	ND		0.00102	0.000313
Carbon tetrachloride	ND		0.00102	0.000204
1,2-Dichloroethane (EDC)	ND		0.00102	0.000236
Benzene	ND		0.00102	0.000251
Trichloroethene	0.000301	J	0.00102	0.000152
Toluene	ND		0.00102	0.00051
Tetrachloroethene	0.000867	J	0.00102	0.000322
Chlorobenzene	ND		0.00102	0.000176
Ethylbenzene	ND		0.00102	0.000258
Total Xylenes	ND		0.00204	0.000143
n-Propylbenzene	ND		0.00102	0.000285
1,3,5-Trimethylbenzene	ND		0.00102	0.000216
tert-Butylbenzene	ND		0.00102	0.000224
1,2,4-Trimethylbenzene	ND		0.00102	0.000276
sec-Butylbenzene	ND		0.00102	0.000241
1,3-Dichlorobenzene	ND		0.00102	0.00027
1,4-Dichlorobenzene	ND		0.00102	0.000316
n-Butylbenzene	ND		0.00102	0.000376
1,2-Dichlorobenzene	ND		0.00102	0.000256
m,p-Xylene	ND		0.00204	0.000267
o-Xylene	ND		0.00102	0.000143
Total Target Compounds (31):	0.014	J		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

VOLATILE ORGANICS

Lab ID: E24-02428-003
Client ID: SB-10B/10-10
Date Received: 07/16/2024
Date Analyzed: 07/17/2024
Data file: L0118.D 07/17/2024 20:24

GC/MS Column: DB-624
Sample wt/vol: 5.28g
Matrix-Units: Soil-mg/Kg
% Moisture: 4.30
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Vinyl chloride	ND		0.00099	0.000321
1,1-Dichloroethene	ND		0.00099	0.000347
Acetone	ND		0.0099	0.00495
Methylene chloride	ND		0.00495	0.00297
trans-1,2-Dichloroethene	ND		0.00099	0.00035
Methyl tert-butyl ether (MTBE)	ND		0.00099	0.000216
1,1-Dichloroethane	ND		0.00099	0.000252
cis-1,2-Dichloroethene	ND		0.00099	0.000212
2-Butanone (MEK)	ND		0.0099	0.00198
Chloroform	ND		0.00099	0.000495
1,1,1-Trichloroethane	ND		0.00099	0.000304
Carbon tetrachloride	ND		0.00099	0.000198
1,2-Dichloroethane (EDC)	ND		0.00099	0.000229
Benzene	ND		0.00099	0.000244
Trichloroethene	ND		0.00099	0.000148
Toluene	ND		0.00099	0.000495
Tetrachloroethene	ND		0.00099	0.000313
Chlorobenzene	ND		0.00099	0.000171
Ethylbenzene	ND		0.00099	0.00025
Total Xylenes	ND		0.00198	0.000139
n-Propylbenzene	ND		0.00099	0.000276
1,3,5-Trimethylbenzene	ND		0.00099	0.00021
tert-Butylbenzene	ND		0.00099	0.000218
1,2,4-Trimethylbenzene	ND		0.00099	0.000268
sec-Butylbenzene	ND		0.00099	0.000234
1,3-Dichlorobenzene	ND		0.00099	0.000262
1,4-Dichlorobenzene	ND		0.00099	0.000307
n-Butylbenzene	ND		0.00099	0.000365
1,2-Dichlorobenzene	ND		0.00099	0.000248
m,p-Xylene	ND		0.00198	0.000259
o-Xylene	ND		0.00099	0.000139

Total Target Compounds (31): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

VOLATILE ORGANICS

Lab ID: E24-02428-004
Client ID: SB-15A/3.5-4
Date Received: 07/16/2024
Date Analyzed: 07/17/2024
Data file: L0119.D 07/17/2024 20:52

GC/MS Column: DB-624
Sample wt/vol: 4.95g
Matrix-Units: Soil-mg/Kg
% Moisture: 6.50
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Vinyl chloride	ND		0.00108	0.00035
1,1-Dichloroethene	ND		0.00108	0.000378
Acetone	0.018		0.011	0.0054
Methylene chloride	0.00367	CJ	0.0054	0.00324
trans-1,2-Dichloroethene	ND		0.00108	0.000382
Methyl tert-butyl ether (MTBE)	ND		0.00108	0.000235
1,1-Dichloroethane	ND		0.00108	0.000275
cis-1,2-Dichloroethene	0.000571	J	0.00108	0.000231
2-Butanone (MEK)	ND		0.011	0.00216
Chloroform	ND		0.00108	0.00054
1,1,1-Trichloroethane	ND		0.00108	0.000332
Carbon tetrachloride	ND		0.00108	0.000216
1,2-Dichloroethane (EDC)	ND		0.00108	0.000249
Benzene	ND		0.00108	0.000266
Trichloroethene	0.00388		0.00108	0.000161
Toluene	ND		0.00108	0.00054
Tetrachloroethene	0.043		0.00108	0.000341
Chlorobenzene	ND		0.00108	0.000187
Ethylbenzene	ND		0.00108	0.000273
Total Xylenes	ND		0.00216	0.000151
n-Propylbenzene	ND		0.00108	0.000301
1,3,5-Trimethylbenzene	ND		0.00108	0.000229
tert-Butylbenzene	ND		0.00108	0.000238
1,2,4-Trimethylbenzene	ND		0.00108	0.000293
sec-Butylbenzene	ND		0.00108	0.000255
1,3-Dichlorobenzene	ND		0.00108	0.000286
1,4-Dichlorobenzene	ND		0.00108	0.000335
n-Butylbenzene	ND		0.00108	0.000399
1,2-Dichlorobenzene	ND		0.00108	0.000271
m,p-Xylene	ND		0.00216	0.000283
o-Xylene	ND		0.00108	0.000151
Total Target Compounds (31):	0.069	CJ		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

VOLATILE ORGANICS

Lab ID: E24-02428-005
Client ID: SB-15B/7-7.5
Date Received: 07/16/2024
Date Analyzed: 07/17/2024
Data file: L0120.D 07/17/2024 21:21

GC/MS Column: DB-624
Sample wt/vol: 4.81g
Matrix-Units: Soil-mg/Kg
% Moisture: 4.80
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Vinyl chloride	ND		0.00109	0.000353
1,1-Dichloroethene	ND		0.00109	0.000382
Acetone	ND		0.011	0.00545
Methylene chloride	ND		0.00545	0.00327
trans-1,2-Dichloroethene	ND		0.00109	0.000386
Methyl tert-butyl ether (MTBE)	ND		0.00109	0.000238
1,1-Dichloroethane	ND		0.00109	0.000278
cis-1,2-Dichloroethene	ND		0.00109	0.000233
2-Butanone (MEK)	ND		0.011	0.00218
Chloroform	ND		0.00109	0.000545
1,1,1-Trichloroethane	ND		0.00109	0.000335
Carbon tetrachloride	ND		0.00109	0.000218
1,2-Dichloroethane (EDC)	ND		0.00109	0.000252
Benzene	ND		0.00109	0.000268
Trichloroethene	ND		0.00109	0.000162
Toluene	ND		0.00109	0.000545
Tetrachloroethene	0.00141		0.00109	0.000344
Chlorobenzene	ND		0.00109	0.000189
Ethylbenzene	ND		0.00109	0.000276
Total Xylenes	ND		0.00218	0.000153
n-Propylbenzene	ND		0.00109	0.000304
1,3,5-Trimethylbenzene	ND		0.00109	0.000231
tert-Butylbenzene	ND		0.00109	0.00024
1,2,4-Trimethylbenzene	ND		0.00109	0.000295
sec-Butylbenzene	ND		0.00109	0.000257
1,3-Dichlorobenzene	ND		0.00109	0.000289
1,4-Dichlorobenzene	ND		0.00109	0.000338
n-Butylbenzene	ND		0.00109	0.000402
1,2-Dichlorobenzene	ND		0.00109	0.000274
m,p-Xylene	ND		0.00218	0.000286
o-Xylene	ND		0.00109	0.000153

Total Target Compounds (31): 0.00141

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

VOLATILE ORGANICS

Lab ID: E24-02428-006
Client ID: SB-11A/2-2.5
Date Received: 07/16/2024
Date Analyzed: 07/17/2024
Data file: L0121.D 07/17/2024 21:50

GC/MS Column: DB-624
Sample wt/vol: 5.59g
Matrix-Units: Soil-mg/Kg
% Moisture: 7.40
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Vinyl chloride	ND		0.00097	0.000314
1,1-Dichloroethene	ND		0.00097	0.00034
Acetone	ND		0.0097	0.00485
Methylene chloride	ND		0.00485	0.00291
trans-1,2-Dichloroethene	ND		0.00097	0.000343
Methyl tert-butyl ether (MTBE)	ND		0.00097	0.000211
1,1-Dichloroethane	ND		0.00097	0.000247
cis-1,2-Dichloroethene	0.000758	J	0.00097	0.000208
2-Butanone (MEK)	ND		0.0097	0.00194
Chloroform	ND		0.00097	0.000485
1,1,1-Trichloroethane	ND		0.00097	0.000298
Carbon tetrachloride	ND		0.00097	0.000194
1,2-Dichloroethane (EDC)	ND		0.00097	0.000224
Benzene	ND		0.00097	0.000239
Trichloroethene	0.00291		0.00097	0.000145
Toluene	ND		0.00097	0.000485
Tetrachloroethene	0.023		0.00097	0.000307
Chlorobenzene	ND		0.00097	0.000168
Ethylbenzene	ND		0.00097	0.000245
Total Xylenes	ND		0.00194	0.000136
n-Propylbenzene	ND		0.00097	0.000271
1,3,5-Trimethylbenzene	ND		0.00097	0.000206
tert-Butylbenzene	ND		0.00097	0.000213
1,2,4-Trimethylbenzene	ND		0.00097	0.000263
sec-Butylbenzene	ND		0.00097	0.000229
1,3-Dichlorobenzene	ND		0.00097	0.000257
1,4-Dichlorobenzene	ND		0.00097	0.000301
n-Butylbenzene	ND		0.00097	0.000358
1,2-Dichlorobenzene	ND		0.00097	0.000243
m,p-Xylene	ND		0.00194	0.000254
o-Xylene	ND		0.00097	0.000136
Total Target Compounds (31):	0.026	J		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

VOLATILE ORGANICS

Lab ID: E24-02428-007
Client ID: SB-11B/5-5.5
Date Received: 07/16/2024
Date Analyzed: 07/17/2024
Data file: L0122.D 07/17/2024 22:18

GC/MS Column: DB-624
Sample wt/vol: 5.53g
Matrix-Units: Soil-mg/Kg
% Moisture: 5.80
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Vinyl chloride	ND		0.00096	0.000311
1,1-Dichloroethene	ND		0.00096	0.000336
Acetone	0.015		0.0096	0.0048
Methylene chloride	0.00423	CJ	0.0048	0.00288
trans-1,2-Dichloroethene	ND		0.00096	0.00034
Methyl tert-butyl ether (MTBE)	ND		0.00096	0.000209
1,1-Dichloroethane	ND		0.00096	0.000245
cis-1,2-Dichloroethene	0.000382	J	0.00096	0.000205
2-Butanone (MEK)	0.003	J	0.0096	0.00192
Chloroform	ND		0.00096	0.00048
1,1,1-Trichloroethane	ND		0.00096	0.000295
Carbon tetrachloride	ND		0.00096	0.000192
1,2-Dichloroethane (EDC)	ND		0.00096	0.000222
Benzene	ND		0.00096	0.000236
Trichloroethene	0.00142		0.00096	0.000143
Toluene	ND		0.00096	0.00048
Tetrachloroethene	0.011		0.00096	0.000303
Chlorobenzene	ND		0.00096	0.000166
Ethylbenzene	ND		0.00096	0.000243
Total Xylenes	ND		0.00192	0.000134
n-Propylbenzene	ND		0.00096	0.000268
1,3,5-Trimethylbenzene	ND		0.00096	0.000204
tert-Butylbenzene	ND		0.00096	0.000211
1,2,4-Trimethylbenzene	ND		0.00096	0.00026
sec-Butylbenzene	ND		0.00096	0.000227
1,3-Dichlorobenzene	ND		0.00096	0.000254
1,4-Dichlorobenzene	ND		0.00096	0.000298
n-Butylbenzene	ND		0.00096	0.000354
1,2-Dichlorobenzene	ND		0.00096	0.000241
m,p-Xylene	ND		0.00192	0.000252
o-Xylene	ND		0.00096	0.000134
Total Target Compounds (31):	0.035	CJ		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

VOLATILE ORGANICS

Lab ID: E24-02428-008
Client ID: SB-16A/2-2.5
Date Received: 07/16/2024
Date Analyzed: 07/17/2024
Data file: L0123.D 07/17/2024 22:47

GC/MS Column: DB-624
Sample wt/vol: 4.75g
Matrix-Units: Soil-mg/Kg
% Moisture: 10.8
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Vinyl chloride	ND		0.00118	0.000382
1,1-Dichloroethene	ND		0.00118	0.000413
Acetone	0.031		0.012	0.0059
Methylene chloride	ND		0.0059	0.00354
trans-1,2-Dichloroethene	ND		0.00118	0.000418
Methyl tert-butyl ether (MTBE)	ND		0.00118	0.000257
1,1-Dichloroethane	ND		0.00118	0.000301
cis-1,2-Dichloroethene	ND		0.00118	0.000253
2-Butanone (MEK)	ND		0.012	0.00236
Chloroform	ND		0.00118	0.00059
1,1,1-Trichloroethane	ND		0.00118	0.000362
Carbon tetrachloride	ND		0.00118	0.000236
1,2-Dichloroethane (EDC)	ND		0.00118	0.000273
Benzene	ND		0.00118	0.00029
Trichloroethene	ND		0.00118	0.000176
Toluene	ND		0.00118	0.00059
Tetrachloroethene	0.017		0.00118	0.000373
Chlorobenzene	ND		0.00118	0.000204
Ethylbenzene	ND		0.00118	0.000299
Total Xylenes	ND		0.00236	0.000165
n-Propylbenzene	ND		0.00118	0.000329
1,3,5-Trimethylbenzene	ND		0.00118	0.00025
tert-Butylbenzene	ND		0.00118	0.00026
1,2,4-Trimethylbenzene	ND		0.00118	0.00032
sec-Butylbenzene	ND		0.00118	0.000278
1,3-Dichlorobenzene	ND		0.00118	0.000313
1,4-Dichlorobenzene	ND		0.00118	0.000366
n-Butylbenzene	ND		0.00118	0.000435
1,2-Dichlorobenzene	ND		0.00118	0.000296
m,p-Xylene	ND		0.00236	0.000309
o-Xylene	ND		0.00118	0.000165

Total Target Compounds (31): 0.048

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

VOLATILE ORGANICS

Lab ID: E24-02428-009
Client ID: SB-16B/4-4.5
Date Received: 07/16/2024
Date Analyzed: 07/17/2024
Data file: L0124.D 07/17/2024 23:15

GC/MS Column: DB-624
Sample wt/vol: 4.64g
Matrix-Units: Soil-mg/Kg
% Moisture: 4.10
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Vinyl chloride	ND		0.00112	0.000363
1,1-Dichloroethene	ND		0.00112	0.000392
Acetone	0.00615	J	0.011	0.0056
Methylene chloride	0.00364	CJ	0.0056	0.00336
trans-1,2-Dichloroethene	ND		0.00112	0.000396
Methyl tert-butyl ether (MTBE)	ND		0.00112	0.000244
1,1-Dichloroethane	ND		0.00112	0.000286
cis-1,2-Dichloroethene	ND		0.00112	0.00024
2-Butanone (MEK)	ND		0.011	0.00224
Chloroform	ND		0.00112	0.00056
1,1,1-Trichloroethane	ND		0.00112	0.000344
Carbon tetrachloride	ND		0.00112	0.000224
1,2-Dichloroethane (EDC)	ND		0.00112	0.000259
Benzene	ND		0.00112	0.000276
Trichloroethene	ND		0.00112	0.000167
Toluene	ND		0.00112	0.00056
Tetrachloroethene	ND		0.00112	0.000354
Chlorobenzene	ND		0.00112	0.000194
Ethylbenzene	ND		0.00112	0.000283
Total Xylenes	ND		0.00224	0.000157
n-Propylbenzene	ND		0.00112	0.000312
1,3,5-Trimethylbenzene	ND		0.00112	0.000237
tert-Butylbenzene	ND		0.00112	0.000246
1,2,4-Trimethylbenzene	ND		0.00112	0.000304
sec-Butylbenzene	ND		0.00112	0.000264
1,3-Dichlorobenzene	ND		0.00112	0.000297
1,4-Dichlorobenzene	ND		0.00112	0.000347
n-Butylbenzene	ND		0.00112	0.000413
1,2-Dichlorobenzene	ND		0.00112	0.000281
m,p-Xylene	ND		0.00224	0.000293
o-Xylene	ND		0.00112	0.000157
Total Target Compounds (31):	0.00979	CJ		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

VOLATILE ORGANICS

Lab ID: E24-02428-010
Client ID: SB-17A/1.5-2
Date Received: 07/16/2024
Date Analyzed: 07/17/2024
Data file: L0125.D 07/17/2024 23:44

GC/MS Column: DB-624
Sample wt/vol: 5.81g
Matrix-Units: Soil-mg/Kg
% Moisture: 10.8
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Vinyl chloride	ND		0.00096	0.000311
1,1-Dichloroethene	ND		0.00096	0.000336
Acetone	ND		0.0096	0.0048
Methylene chloride	ND		0.0048	0.00288
trans-1,2-Dichloroethene	ND		0.00096	0.00034
Methyl tert-butyl ether (MTBE)	ND		0.00096	0.000209
1,1-Dichloroethane	ND		0.00096	0.000245
cis-1,2-Dichloroethene	ND		0.00096	0.000205
2-Butanone (MEK)	ND		0.0096	0.00192
Chloroform	ND		0.00096	0.00048
1,1,1-Trichloroethane	ND		0.00096	0.000295
Carbon tetrachloride	ND		0.00096	0.000192
1,2-Dichloroethane (EDC)	ND		0.00096	0.000222
Benzene	ND		0.00096	0.000236
Trichloroethene	ND		0.00096	0.000143
Toluene	ND		0.00096	0.00048
Tetrachloroethene	0.00978		0.00096	0.000303
Chlorobenzene	ND		0.00096	0.000166
Ethylbenzene	ND		0.00096	0.000243
Total Xylenes	ND		0.00192	0.000134
n-Propylbenzene	ND		0.00096	0.000268
1,3,5-Trimethylbenzene	ND		0.00096	0.000204
tert-Butylbenzene	ND		0.00096	0.000211
1,2,4-Trimethylbenzene	ND		0.00096	0.00026
sec-Butylbenzene	ND		0.00096	0.000227
1,3-Dichlorobenzene	ND		0.00096	0.000254
1,4-Dichlorobenzene	ND		0.00096	0.000298
n-Butylbenzene	ND		0.00096	0.000354
1,2-Dichlorobenzene	ND		0.00096	0.000241
m,p-Xylene	ND		0.00192	0.000252
o-Xylene	ND		0.00096	0.000134

Total Target Compounds (31): 0.00978

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

VOLATILE ORGANICS

Lab ID: E24-02428-011
Client ID: SB-17B/4-4.5
Date Received: 07/16/2024
Date Analyzed: 07/18/2024
Data file: L0126.D 07/18/2024 00:12

GC/MS Column: DB-624
Sample wt/vol: 4.90g
Matrix-Units: Soil-mg/Kg
% Moisture: 4.20
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Vinyl chloride	ND		0.00107	0.000347
1,1-Dichloroethene	ND		0.00107	0.000375
Acetone	0.00792	J	0.011	0.00535
Methylene chloride	0.00414	CJ	0.00535	0.00321
trans-1,2-Dichloroethene	ND		0.00107	0.000379
Methyl tert-butyl ether (MTBE)	ND		0.00107	0.000233
1,1-Dichloroethane	ND		0.00107	0.000273
cis-1,2-Dichloroethene	ND		0.00107	0.000229
2-Butanone (MEK)	ND		0.011	0.00214
Chloroform	ND		0.00107	0.000535
1,1,1-Trichloroethane	ND		0.00107	0.000328
Carbon tetrachloride	ND		0.00107	0.000214
1,2-Dichloroethane (EDC)	ND		0.00107	0.000247
Benzene	ND		0.00107	0.000263
Trichloroethene	ND		0.00107	0.000159
Toluene	ND		0.00107	0.000535
Tetrachloroethene	0.00045	J	0.00107	0.000338
Chlorobenzene	ND		0.00107	0.000185
Ethylbenzene	ND		0.00107	0.000271
Total Xylenes	ND		0.00214	0.00015
n-Propylbenzene	ND		0.00107	0.000299
1,3,5-Trimethylbenzene	ND		0.00107	0.000227
tert-Butylbenzene	ND		0.00107	0.000235
1,2,4-Trimethylbenzene	ND		0.00107	0.00029
sec-Butylbenzene	ND		0.00107	0.000253
1,3-Dichlorobenzene	ND		0.00107	0.000284
1,4-Dichlorobenzene	ND		0.00107	0.000332
n-Butylbenzene	ND		0.00107	0.000395
1,2-Dichlorobenzene	ND		0.00107	0.000269
m,p-Xylene	ND		0.00214	0.00028
o-Xylene	ND		0.00107	0.00015
Total Target Compounds (31):	0.013	CJ		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

VOLATILE ORGANICS

Lab ID: E24-02428-012
Client ID: SB-18A/2-2.5
Date Received: 07/16/2024
Date Analyzed: 07/18/2024
Data file: L0127.D 07/18/2024 00:40

GC/MS Column: DB-624
Sample wt/vol: 5.17g
Matrix-Units: Soil-mg/Kg
% Moisture: 9.00
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Vinyl chloride	ND		0.00106	0.000343
1,1-Dichloroethene	ND		0.00106	0.000371
Acetone	0.00959	J	0.011	0.0053
Methylene chloride	0.00439	CJ	0.0053	0.00318
trans-1,2-Dichloroethene	ND		0.00106	0.000375
Methyl tert-butyl ether (MTBE)	ND		0.00106	0.000231
1,1-Dichloroethane	ND		0.00106	0.00027
cis-1,2-Dichloroethene	ND		0.00106	0.000227
2-Butanone (MEK)	0.00384	J	0.011	0.00212
Chloroform	ND		0.00106	0.00053
1,1,1-Trichloroethane	ND		0.00106	0.000325
Carbon tetrachloride	ND		0.00106	0.000212
1,2-Dichloroethane (EDC)	ND		0.00106	0.000245
Benzene	ND		0.00106	0.000261
Trichloroethene	ND		0.00106	0.000158
Toluene	ND		0.00106	0.00053
Tetrachloroethene	0.00883		0.00106	0.000335
Chlorobenzene	ND		0.00106	0.000183
Ethylbenzene	ND		0.00106	0.000268
Total Xylenes	ND		0.00212	0.000148
n-Propylbenzene	ND		0.00106	0.000296
1,3,5-Trimethylbenzene	ND		0.00106	0.000225
tert-Butylbenzene	ND		0.00106	0.000233
1,2,4-Trimethylbenzene	ND		0.00106	0.000287
sec-Butylbenzene	ND		0.00106	0.00025
1,3-Dichlorobenzene	ND		0.00106	0.000281
1,4-Dichlorobenzene	ND		0.00106	0.000329
n-Butylbenzene	ND		0.00106	0.000391
1,2-Dichlorobenzene	ND		0.00106	0.000266
m,p-Xylene	ND		0.00212	0.000278
o-Xylene	ND		0.00106	0.000148
Total Target Compounds (31):	0.027	CJ		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

VOLATILE ORGANICS

Lab ID: E24-02428-013
Client ID: SB-18B/4.5-5
Date Received: 07/16/2024
Date Analyzed: 07/18/2024
Data file: L0128.D 07/18/2024 01:09

GC/MS Column: DB-624
Sample wt/vol: 4.97g
Matrix-Units: Soil-mg/Kg
% Moisture: 2.40
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Vinyl chloride	ND		0.00103	0.000334
1,1-Dichloroethene	ND		0.00103	0.000361
Acetone	0.013		0.010	0.00515
Methylene chloride	0.00386	CJ	0.00515	0.00309
trans-1,2-Dichloroethene	ND		0.00103	0.000365
Methyl tert-butyl ether (MTBE)	ND		0.00103	0.000225
1,1-Dichloroethane	ND		0.00103	0.000263
cis-1,2-Dichloroethene	ND		0.00103	0.00022
2-Butanone (MEK)	ND		0.010	0.00206
Chloroform	ND		0.00103	0.000515
1,1,1-Trichloroethane	ND		0.00103	0.000316
Carbon tetrachloride	ND		0.00103	0.000206
1,2-Dichloroethane (EDC)	ND		0.00103	0.000238
Benzene	ND		0.00103	0.000253
Trichloroethene	ND		0.00103	0.000153
Toluene	ND		0.00103	0.000515
Tetrachloroethene	0.000573	J	0.00103	0.000325
Chlorobenzene	ND		0.00103	0.000178
Ethylbenzene	ND		0.00103	0.000261
Total Xylenes	ND		0.00206	0.000144
n-Propylbenzene	ND		0.00103	0.000287
1,3,5-Trimethylbenzene	ND		0.00103	0.000218
tert-Butylbenzene	ND		0.00103	0.000227
1,2,4-Trimethylbenzene	ND		0.00103	0.000279
sec-Butylbenzene	ND		0.00103	0.000243
1,3-Dichlorobenzene	ND		0.00103	0.000273
1,4-Dichlorobenzene	ND		0.00103	0.000319
n-Butylbenzene	ND		0.00103	0.00038
1,2-Dichlorobenzene	ND		0.00103	0.000259
m,p-Xylene	ND		0.00206	0.00027
o-Xylene	ND		0.00103	0.000144
Total Target Compounds (31):	0.017	CJ		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

VOLATILE ORGANICS

Lab ID: BLKS240717-01
Client ID: BLKS240717-01
Date Received:
Date Analyzed: 07/17/2024
Data file: L0109.D 07/17/2024 16:06

GC/MS Column: DB-624
Sample wt/vol: 5.00g
Matrix-Units: Soil-mg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Vinyl chloride	ND		0.001	0.000324
1,1-Dichloroethene	ND		0.001	0.00035
Acetone	ND		0.010	0.005
Methylene chloride	ND		0.005	0.003
trans-1,2-Dichloroethene	ND		0.001	0.000354
Methyl tert-butyl ether (MTBE)	ND		0.001	0.000218
1,1-Dichloroethane	ND		0.001	0.000255
cis-1,2-Dichloroethene	ND		0.001	0.000214
2-Butanone (MEK)	ND		0.010	0.002
Chloroform	ND		0.001	0.0005
1,1,1-Trichloroethane	ND		0.001	0.000307
Carbon tetrachloride	ND		0.001	0.0002
1,2-Dichloroethane (EDC)	ND		0.001	0.000231
Benzene	ND		0.001	0.000246
Trichloroethene	ND		0.001	0.000149
Toluene	ND		0.001	0.0005
Tetrachloroethene	ND		0.001	0.000316
Chlorobenzene	ND		0.001	0.000173
Ethylbenzene	ND		0.001	0.000253
Total Xylenes	ND		0.002	0.00014
n-Propylbenzene	ND		0.001	0.000279
1,3,5-Trimethylbenzene	ND		0.001	0.000212
tert-Butylbenzene	ND		0.001	0.00022
1,2,4-Trimethylbenzene	ND		0.001	0.000271
sec-Butylbenzene	ND		0.001	0.000236
1,3-Dichlorobenzene	ND		0.001	0.000265
1,4-Dichlorobenzene	ND		0.001	0.00031
n-Butylbenzene	ND		0.001	0.000369
1,2-Dichlorobenzene	ND		0.001	0.000251
m,p-Xylene	ND		0.002	0.000262
o-Xylene	ND		0.001	0.00014

Total Target Compounds (31): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

SAMPLE TRACKING

FINALIZED 07/24/2024

E24-02428 Page 26

INTEGRATED ANALYTICAL LABORATORIES, LLC

IAL Integrated Analytical Laboratories LLC
Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Chain of Custody Record

Contact Us: 973-361-4252
Web: www.ialonline.com

Customer Information

Company: J.S. Held, LLC
Address: 5 Marine View Plaza
Suite 401, Hoboken, NJ
Telephone #: 201-876-9400
Project Manager: Lech DeEsch
Email Address(es): LDeEsch@jsheld.com
Project Name: 48-55 30th St
Project Location (State): NY
Bottle Order #:
☒ "Report to"/"Invoice To" same as above
Sampled by: BN
COMPLETED BY IAL:
___ Field Sampling ___ Equipment Rental

Reporting Information

☐ Check here if same as "Customer Information"
REPORT TO:
Address:
Attn:
INVOICE TO:
Address:
Attn:
PO # 240302017
Quote #

Sample Matrix

DW - Drinking Water
WW - Waste Water
GW - Groundwater
SW - Surface Water
LIQ - Liquid (specify)
M - Multiphasic
OI - Oil
S - Soil
SED - Sediment
SOL - Solid (specify)
SL - Sludge
W - Wipe

**Rush TAT Charge

24 hr - 100%...
48 hr - 75%....
72 hr - 50%....
96 hr - 35%....
5 day - 25%....
6-9 day - 10%

Deliverables *Surcharge may apply for regulatory

NJ, CT, PA	NY
☐ Results Only (Level I)	☒ ASP Category A
☐ Reduced (Level II/III)	☐ ASP Category B*
☐ Regulatory/ Full* (Level IV)	

EDDs

☐ NJ SRP
☐ NYSDEC EQuIS
☐ lab approved custom EDD
☐ NO EDD REQ'D

Concentrations Expected:

Low Med High
Known Hazard:
☐ YES ☐ NO
Describe:

Turn-Around Time (TAT)

Standard (10 business days) Verbal
Rush/date needed (only if pre-approved)** 72 hr rush
Hard Copy: Standard 3 week Other - call for price

Petroleum Hydrocarbons - Selection is REQUIRED

☐ NJ EPH-DRO - Category 1
☐ NJ EPH-C40 - Category 2
☐ NJ EPH-Fractionated - Cat 2
TAT for PHC, if other than 2 weeks:
☐ CT ETPH
☐ DRO-8015

Regulatory Requirement

New Jersey	New York
☐ GWQS	☐ AWQS (TOGS Table 1)
☐ IGW	☐ GWEL (TOGS Table 5)
☐ SRS	☒ Part 375-6.8(a) - Unrestricted
☐ Ecological	☒ Part 375-6.8(b) - Restricted
☐ DW	☐ CP-51 Table 2 or 3 (selection required)
☐ SPLP	

Other States / Criteria
☐ Pennsylvania Act 2
☐ CT RCSA 22a-133k1-k3
☐ TSCA PCBs
OTHER Regulatory Requirements - specify in comments

SAMPLE INFORMATION

ANALYTICAL PARAMETERS (please note if contingent)

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# containers	IAL #	VOCs 8260	VOC +15	Sample Specific Notes:
SB-7B	12-12.5	7/15/24	1641	S	4	1	X	X	
SB-10A	6.5-7		1905			2	X	X	
SB-10B	10-10.5		1910			3	H	H	
SB-15A	3.5-4		1955			4	X	X	
SB-15B	7-7.5		2000			5	H	H	
SB-11A	2-2.5		2020			6	X	X	
SB-11B	5-5.5		2025			7	H	H	
SB-16A	2-2.5		2051			8	X	X	

Samples previously analyzed by IAL? YES / NO

Preservative Code: 1 = None, 2 = HCl, 3 = HNO3, 4 = MeOH, 5 = NaOH, 6 = H2SO4, 7 = Other

Container Code: A = Amber Glass, B = Plastic, C = Vial, D = Glass, E = EnCore, T = Terracore

Preservative (use code)
Container Type (use code)

Special Instructions/QC Requirements & Comments:
X = run
H = hold

FOR LAB USE ONLY
SDG #: 2428
Cooler Temp: 3 °C

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time (TAT) will not start until any ambiguities have been resolved. TAT starts the following day if samples rec'd at lab ≥ 5PM. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY IAL'S TERMS & CONDITIONS (found on rear of pink copy).

Carrier (check one):
☐ IAL Courier
☐ Client Courier
☐ FedEx/UPS***
***Tracking #:

Relinquished by (Signature and Company)	Date	Time	Received by (Signature and Company)	Date	Time
	7/16/24	1155		7/16/24	1155
GM	7/16/24	1500		7/16/24	1500

IAL Rev 11/2019

LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

Certification IDs: TNI (TNI01284); CT (PH-0699); NJ (14751); NY (11402); PA (68-00773).

FINALIZED 07/24/2024

IAL Integrated Analytical Laboratories LLC
Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Chain of Custody Record

Contact Us: 973-361-4252
Web: www.ialonline.com

Customer Information	Reporting Information
Company: J.S. Held, LLC	☐ Check here if same as "Customer Information"
Address: 5 Marine View Plaza Hoboken, NJ 07030	REPORT TO:
Telephone #: 201-876-1400	Address:
Project Manager: Leah DeFusdico	Attn:
Email Address(es): LDeFusdico@jsheld.com	INVOICE TO:
Project Name: 48-55 36th St	Address:
Project Location (State): NY	Attn:
Bottle Order #:	PO # 240302017
☒ "Report to"/"Invoice To" same as above	Quote #
Sampled by: BN	

COMPLETED BY IAL:
____ Field Sampling ____ Equipment Rental

Rush TAT Charge
24 hr - 100%....
48 hr - 75%....
72 hr - 50%....
96 hr - 35%....
5 day - 25%....
6-9 day - 10%

Deliverables *Surchage may apply for regulatory

NJ, CT, PA	NY
☐ Results Only (Level I)	☒ ASP Category A
☐ Reduced (Level II/III)	☐ ASP Category B*
☐ Regulatory/ Full* (Level IV)	

EDDs
☐ NJ SRP
☐ NYSDEC EQuIS
☐ lab approved custom EDD
☐ NO EDD REQ'D

Concentrations Expected:
Low Med High
Known Hazard:
☐ YES ☐ NO
Describe:

Turn-Around Time (TAT)
Standard (10 business days) Verbal
Rush/date needed (only if pre-approved)** 72 hr mark
Hard Copy: Standard 3 week Other - call for price

Regulatory Requirement

New Jersey	New York
☐ GWQS	☐ AWQS (TOGS Table 1)
☐ IGW	☐ GWEL (TOGS Table 5)
☐ SRS	☒ Part 375-6.8(a) - Unrestricted
☐ Ecological	☒ Part 375-6.8(b) - Restricted
☐ DW	☐ CP-51 Table 2 or 3 (selection required)
☐ SPLP	Other States / Criteria
	☐ Pennsylvania Act 2
	☐ CT RCSA 22a-133k1-k3
	☐ TSCA PCBs
	OTHER Regulatory Requirements - specify in comments

Petroleum Hydrocarbons - Selection is REQUIRED
☐ NJ EPH-DRO - Category 1
☐ NJ EPH-C40 - Category 2
☐ NJ EPH-Fractionated - Cat 2
☐ CT ETPH
☐ DRO-8015
TAT for PHC, if other than 2 weeks:

Sample Matrix
DW - Drinking Water
WW - Waste Water
GW - Groundwater
SW - Surface Water
LIQ - Liquid (specify)
M - Multiphasic
OI - Oil
S - Soil
SED - Sediment
SOL - Solid (specify)
SL - Sludge
W - Wipe

SAMPLE INFORMATION

ANALYTICAL PARAMETERS (please note if contingent)

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# containers	IAL #	VOC #5									Sample Specific Notes:
SB-16B	4-4.5	7/15/24	2055	S	4	9	H									
SB-17A	1.5-2	"	2125	"	"	10	X									
SB-17B	4-4.5	"	2126	"	"	11	H									

Samples previously analyzed by IAL? YES / NO

Preservative Code: Container Code:
Preservative (use code): 7
Container Type (use code):

Special Instructions/QC Requirements & Comments:
7 = run H = Hold

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time (TAT) will not start until any ambiguities have been resolved. TAT starts the following day if samples rec'd at lab ≥ 5PM. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY IAL'S TERMS & CONDITIONS (found on rear of pink copy).

Preservative Code:	Container Code:
1 = None	A = Amber Glass
2 = HCl	B = Plastic
3 = HNO3	C = Vial
4 = MeOH	D = Glass
5 = NaOH	E = EnCore
6 = H2SO4	T = Terracore
7 = Other	

Carrier (check one):
☐ IAL Courier
☐ Client Courier
☐ FedEx/UPS***
***Tracking #:

Relinquished by (Signature and Company)	Date	Time	Received by (Signature and Company)	Date	Time
	7/16/24	1155		7/16/24	1155
BN	7/16/24	1500		7/16/24	1500

FOR LAB USE ONLY
SDG #: 2428
Cooler Temp: 5 °C

IAL Rev 11/2019

LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

Certification IDs: TNI (TNI01284); CT (PH-0699); NJ (14751); NY (11402); PA (68-00773).

PAGE: 2 of 2

E24-02428 Page 27

INTEGRATED ANALYTICAL LABORATORIES, LLC

Jul 18, 2024 @ 11:29

PROJECT INFORMATION

RUSH

E24-02428: 48-55 36TH ST

To: Leah DeEgidio
JS Held - Hoboken
Fax: 201-626-8095
EMail: Ldeegidio@jsheld.com

Report To

JS Held - Hoboken
5 Marine View Plaza
Suite 401
Hoboken, NJ 07030
Attn: Leah DeEgidio

Bill To

JS Held - Hoboken
J.S. Held
50 Jericho Quadrangle, Suite 117
Jericho, NY 11753
Attn: Accounts Payable

Report Format	P.O. #	Received At Lab	PHC Due	Verbal Due	Hardcopy Due
Category A	240302017	Jul 16, 2024 @ 15:00	NA	Jul 19, 2024	Aug 06, 2024 *

* Any ***Conditional or Hold*** status will delay final hardcopy report sent date.

Diskette Req. Not Required

Criteria Requirement: NY Part 375-6.8(UUSCO+RUSCO)

Lab ID	Client Sample ID	Depth	Sampling Time	Matrix	Unit	Field pH/Temp
02428-001	SB-7R	12/12.5	07/15/24@16:41	Soil	mg/Kg (ppm)	
02428-002	SB-10A	6.5/7	07/15/24@19:05	Soil	mg/Kg (ppm)	
02428-003	SB-10B	10/10.5	07/15/24@19:10	Soil	mg/Kg (ppm)	
02428-004	SB-15A	3.5/4	07/15/24@19:55	Soil	mg/Kg (ppm)	
02428-005	SB-15B	7/7.5	07/15/24@20:00	Soil	mg/Kg (ppm)	
02428-006	SB-11A	2/2.5	07/15/24@20:20	Soil	mg/Kg (ppm)	
02428-007	SB-11B	5/5.5	07/15/24@20:25	Soil	mg/Kg (ppm)	
02428-008	SB-16A	2/2.5	07/15/24@20:51	Soil	mg/Kg (ppm)	
02428-009	SB-16B	4/4.5	07/15/24@20:55	Soil	mg/Kg (ppm)	
02428-010	SB-17A	1.5/2	07/15/24@21:25	Soil	mg/Kg (ppm)	
02428-011	SB-17B	4/4.5	07/15/24@21:26	Soil	mg/Kg (ppm)	
02428-012	SB-18A	2/2.5	07/15/24@21:52	Soil	mg/Kg (ppm)	
02428-013	SB-18B	4.5/5	07/15/24@21:55	Soil	mg/Kg (ppm)	

* No Cert = IAL does not hold certification for this test/method

Sample #	Test	Status	Analytical Method	TAT	Holding Time Expires
001	NY Part 375 VO	Analyze	8260D	RUSH 72 HRS	7/29/2024
002	NY Part 375 VO	Analyze	8260D	RUSH 72 HRS	7/29/2024
003	NY Part 375 VO	Analyze	8260D	RUSH 72 HRS	7/29/2024
004	NY Part 375 VO	Analyze	8260D	RUSH 72 HRS	7/29/2024
005	NY Part 375 VO	Analyze	8260D	RUSH 72 HRS	7/29/2024
006	NY Part 375 VO	Analyze	8260D	RUSH 72 HRS	7/29/2024
007	NY Part 375 VO	Analyze	8260D	RUSH 72 HRS	7/29/2024
008	NY Part 375 VO	Analyze	8260D	RUSH 72 HRS	7/29/2024
009	NY Part 375 VO	Analyze	8260D	RUSH 72 HRS	7/29/2024

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
www.ialonline.com

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Jul 18, 2024 @ 11:29

PROJECT INFORMATION

RUSH

E24-02428: 48-55 36TH ST

Sample #	Test	Status	Analytical Method	TAT	Holding Time Expires
010	NY Part 375 VO	Analyze	8260D	RUSH 72 HRS	7/29/2024
011	NY Part 375 VO	Analyze	8260D	RUSH 72 HRS	7/29/2024
012	NY Part 375 VO	Analyze	8260D	RUSH 72 HRS	7/29/2024
013	NY Part 375 VO	Analyze	8260D	RUSH 72 HRS	7/29/2024

Project Notes:

NOTE 2 taken by kfalconer on 07/17/2024 08:48
PER LEAH D, ANALYZE FOR NY PART 375 VO LIST.

NOTE 3 taken by kfalconer on 07/17/2024 08:48
WE RECEIVED TWO SAMPLES THAT ARE NOT LISTED ON THE CHAIN OF CUSTODY, SB-18A AND SB-18B.

PER BEN NEUMANN, ADD TO CASE AS FOLLOWS:

SB-18A 2-2.5 @ 21:52 7/15/24 ACTIVE
SB-18B 4.5-5 @ 21:55 7/15/24 ON HOLD

REV 1 taken by kim on 07/18/2024 11:28
REV 01 DUE 7/23

PER BEN NEUMANN, ACTIVATE SAMPLES 003, 005, 007, 009, 011, AND 013 ON A 72 HOUR RUSH.

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SAMPLE RECEIPT VERIFICATION

CASE NO: **E 24** 02428 CLIENT: JS Held

COOLER TEMPERATURE: 2° - 6°C: ✓ (See Chain of Custody)

COC: COMPLETE / INCOMPLETE

Comments

KEY
✓ = YES/NA
✗ = NO

VOA received: ☐ Encore ☐ IGW - Methanol
(check one) ☒ Terra Core ☐ No Preservative

✓	Bottles Intact	
✓	no-Missing Bottles	
✓	no-Extra Bottles	
✓	Sufficient Sample Volume	
✓	no-headspace/bubbles in VOs	
✓	Labels intact/correct	
✗	pH Check[1] (refer to Receipt pH Log)	
✓	Correct bottles/preservative	
✓	Sufficient Holding/Prep Time[1]	
☐	Multiphasic Sample	
☐	Sample to be Subcontracted	
✓	**Chain of Custody is Clear**	

[1] All samples with "Analyze Immediately" holding times will be analyzed by this laboratory past the holding time. This includes but is not limited to the following tests: pH, Temperature, Free Residual Chlorine, Total Residual Chlorine, Dissolved Oxygen, Sulfite.

ADDITIONAL COMMENTS: Received 2 Samples not on COC. Sample # 18A, 18B, Entered them as Sample # 12 + 13 CR

SAMPLE(S) VERIFIED BY: INITIAL CMonK DATE 7/16/24

CORRECTIVE ACTION REQUIRED: **YES** XXX (SEE BELOW) **NO** ☒

If COC is **NOT** clear, ***STOP*** until you get client to authorize/clarify work.

CLIENT NOTIFIED: YES ☐ Date/ Time: _____ NO ☐
PROJECT CONTACT:
SUBCONTRACTED LAB:
DATE SHIPPED:

ADDITIONAL COMMENTS:

VERIFIED/TAKEN BY: INITIAL KJ DATE 7/17/24

Rev 2 2/11/2021

Laboratory Custody Chronicle

IAL Case No.
E24-02428

Client JS Held - Hoboken

Project 48-55 36TH ST

Received On 7/16/2024@15:00

Department: Volatiles			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
NY Part 375 VO	02428-001	Soil	n/a	n/a	7/17/24	Mei
"	-002	"	n/a	n/a	7/17/24	Mei
"	-003	"	n/a	n/a	7/17/24	Mei
"	-004	"	n/a	n/a	7/17/24	Mei
"	-005	"	n/a	n/a	7/17/24	Mei
"	-006	"	n/a	n/a	7/17/24	Mei
"	-007	"	n/a	n/a	7/17/24	Mei
"	-008	"	n/a	n/a	7/17/24	Mei
"	-009	"	n/a	n/a	7/17/24	Mei
"	-010	"	n/a	n/a	7/17/24	Mei
"	-011	"	n/a	n/a	7/17/24	Mei
"	-012	"	n/a	n/a	7/17/24	Mei
"	-013	"	n/a	n/a	7/17/24	Mei

NOTE: All soil, sediment, sludge, and solid samples are reported on a dry-weight basis.

Integrated Analytical Labs ~ 273 Franklin Road, Randolph, NJ 07869 ~ (973) 361-4252

LAST PAGE OF DOCUMENT

Integrated Analytical Laboratories LLC

EPA TO-15 DATA PACKAGE

ANALYTICAL DATA PACKAGE FOR THE
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
ALBANY NEW YORK 12233

Integrated Analytical Laboratories, LLC — **Randolph, NJ 07869**
Project#: 48-55 36th St — **NY ELAP Certification#: 11402**
SDG #: E24-02427 — **NJDEP (Primary AB) Certification#: 14751**
Date of first sample receipt: 7/16/2024 — **Date of last sample receipt: 7/16/2024**

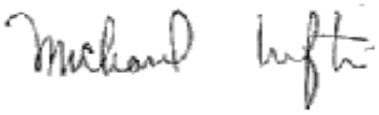
Client: JS Held-Hoboken

Project/Site: 48-55 36th St/NY

Client Sample Number	Laboratory Sample	Sample Location	Date/Time of Collection
SG-14	E24-02427-01	NA	7/15/2024 16:25
SG-15	E24-02427-02	NA	7/15/2024 20:00
SG-16	E24-02427-03	NA	7/15/2024 18:30
SG-17	E24-02427-04	NA	7/15/2024 21:45

This report shall not be reproduced, except in its entirety, without the written consent of Integrated Analytical Laboratories, LLC. The test results included in this report relate only to the samples analyzed. The results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

I certify that this data package is in compliance with the terms and conditions of this contract, both technically and for completeness, for other than the conditions detailed above. Release of data contained in this hardcopy data package and in the computer-readable data submitted on CD/diskette and by electronic mail has been authorized by the laboratory manager or his designee, as verified by the following signature.



Michael H. Leftin, Ph.D.
Laboratory Director

Date: August 1, 2024



Ming-Hwa Reitan
QA/QC Manager

Date: August 1, 2024

Integrated Analytical Laboratories LLC

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Laboratory Acronyms

The following is a list of laboratory acronyms commonly used in EPA Method TO-15 testing:

Acronym	Definition
BLK	Blank/Method Blank
BFB	4-Bromofluorobenzene (Tuning Standard)
CAS Number	Chemical Abstract Service Registry Number
cc	cubic centimeters
CCCVS	Closing Calibration Check Verification Standard
COC	Chain of Custody
DCVS	Daily Calibration Verification Standard
DF	Dilution Factor
EPA	U. S. Environmental Protection Agency (aka USEPA)
"Hg	Inches of Mercury
IA	Indoor Air
IASL	Indoor Air Screening Level
ICAL	Initial Calibration
ICVSS	Initial Calibration Verification Standard
ISTD	Internal Standard
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LCS	Laboratory Control Sample/Spike
LLTO-15	Low Level TO-15
MDL	Method Detection Limit
MDLV	Method Detection Limit Verification
ml	milliliters
ND	Not Detected (at or above RL)
NJDEP	New Jersey Department of Environmental Protection
PM	Project Manager
ppbv	parts per billion, volume-to-volume ratio
PQL	Practical Quantitation Limit - MDLx3
QA	Quality Assurance
QC	Quality Control
RAL	Rapid Action Limit
RL	Reporting Limit
RLLCS	Reporting Limit Laboratory Control Sample
RPD	Relative Percent Difference
RRF	Relative Response Factor
RSD	Relative Standard Deviation
SDG	Sample Delivery Group
SGSL	Soil Gas Screening Levels
SS	Sub Slab
TAT	Turnaround Time
TIC	Tentatively Identified Compound
µg/m3	micrograms per cubic meter

Section I: Chain of Custody

Integrated Analytical Laboratories, LLC

INTEGRATED ANALYTICAL LABORATORIES, LLC

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

External Chain of Custody Record/
Field Test Data Sheet
USEPA Method TO-15

Contact Us: 973-361-4252
Fax: 973-366-5613
Web: www.ialonline.com

Client Contact Information	Project Information	Carrier (check one): ____ IAL Courier ____Client Courier _____FedEx/UPS	pg 1 of 1
Company: JS Held - Hoboken	Project Name: 48-55 30th St	Invoice Information	
Address: 5 Marine View Plaza Suit 401, Hoboken NJ	Project Location (State): NY	Attn:	
	Project Manager: Leah DeEgidio	Address:	
Phone: 201-876-9400	PM Signature:		
Fax:	PM E-Mail: LdeEgidio@jsheld.com	PO #: 240302017	
Report to: Leah DeEgidio	Sampler: JT	Quote #:	

Analysis Turnaround Time - IF NO TAT IS SPECIFIED, 2 WEEK TAT IS ASSUMED

IAL Standard: 2 weeks (10 business days)

Rush (**pre-approved by lab): 24hr** 48hr** 72hr** 96hr** 1wk**

	Sample Identification	Start DATE & TIME (24hr Clock)	End DATE & TIME (24hr Clock)	Starting Vacuum ("Hg)	Ending Vacuum ("Hg)	Starting Temp. (°F)	Ending Temp. (°F)	Outgoing Vacuum - Lab ("Hg)	Barometric Pressure Start: Incoming Vacuum - Lab ("Hg)	Flow Regulator ID	Barometric Pressure Stop: Canister ID	Canister Size (1L or 6L)	Flow Controller Readout (cc/min)	EPA TO - 15	NJDEP LLTO-15 (includes 30 TICs)	Library Search (10, 20, or 30 TICs)	Other (Explain in Comments)	Regulatory/ NY Cat B / Full (NJ Required)	Reduced / NY Cat A Data Package	Results Only	Indoor Air	Ambient / Outdoor Air	Sub Slab / Soil Gas / Near Slab (Circle One)	Stack Emission / SVE System	High Concentrations Expected
①	SG-14	16:25 7/15/24	16:55 7/15/24	-10	0	42	42	-29.0	0.0	7341819	5073	6L	200	X									X		
②	SG-15	20:00 7/15/24	20:30 7/15/24	-28	0	78	78	-29.0	0.0	7339509	3786	6L	200	X									X		
③	SG-16	18:30 7/15/24	19:00 7/15/24	-29	-1	78	78	-29.0	-1.0	AM20631-10	4867	6L	200	X									X		
④	SG-17	21:45 7/15/24	22:15 7/15/24	-28	0	81°	80°	-29.0	0.0	AM02809858	2596B	6L	200	X									X		

Comments/ Special Analysis Instructions / QC Requirements: 052124 22 060624 22a

#3100 - 05012401 1,3 #4869 - 06042401 2,4 22a0595 22a0604

Note: Hold or contingent samples may be designated by writing an "H" or "C" in the appropriate analysis box.

ALL FIELDS IN RED ARE REQUIRED

Shipping Information / Canister Preparation (for laboratory use only)

Individual Preparing Canisters / Title: ~~P. Jenkins, J. Walukiewicz~~ / Air Department Sample Custodians

Lab Affixed Seal Number(s): Izeob Raiten

Date/Time Shipping Container Sealed: 7/10/24

Laboratory Canister Certification

GC/MS Analyst Signature: Joseph J Walukiewicz III (JJW)

IAL SDG#: 02427

External Chain of Custody

Relinquished	Received	Date / Time	Reason for Change of External Custody
		7/10/24	shipment from laboratory to client
	Joseph Walukiewicz III (JJW)	7/16/24 1155	
		7/16/24 1500	Received at air lab

Name/Title Resealing Shipping Container Name:

Date/Time Sample Shipping Container Resealed:

Date/Time Sample Shipping Container Opened: 07/16/2024 1585

NJDEP Affixed Seal Number:

Individual Opening Sample Shipping Container: ~~Padraic Jenkins~~ / Joseph Walukiewicz

Date/Time Internal Chain of Custody Initiated: Joseph Walukiewicz III (JJW) 07/16/2024 1530

White and yellow - lab copies; Pink - client copy

Use appropriate care with IAL sampling equipment when sampling and packing for shipment. The client is responsible for all damage incurred to IAL equipment. Notify IAL if equipment is damaged upon receipt. Holding time before sampling is 15 days, after sampling is 30 days; failure to follow these times may result in data rejection by regulatory agencies. The lab will contact you if your COC is not clear, incomplete, or if discrepancies exist. The use of initials is not permitted on the COC except when correcting errors. 06/2014

PROJECT INFORMATION

RUSH

E24-02427: 48-55 36TH ST

To: Leah DeEgidio
JS Held - Hoboken
Fax: 201-626-8095
EMail: Ldeegidio@jsheld.com

Report To

JS Held - Hoboken
5 Marine View Plaza
Suite 401
Hoboken, NJ 07030
Attn: Leah DeEgidio

Bill To

JS Held - Hoboken
J.S. Held
50 Jericho Quadrangle, Suite 117
Jericho, NY 11753
Attn: Accounts Payable

Report Format	P.O. #	Received At Lab	PHC Due	Verbal Due	Hardcopy Due
Air Regulatory	240302017	Jul 16, 2024 @ 15:00	NA	Jul 19, 2024	Aug 06, 2024 *

* Any ***Conditional or Hold*** status will delay final hardcopy report sent date.

Diskette Req. Not Required

Lab ID	Client Sample ID	Depth	Sampling Time	Matrix	Unit	Field pH/Temp
02427-001	SG-14	NA	07/15/24@16:55	Air-Other	ppbV	
02427-002	SG-15	NA	07/15/24@20:30	Air-Other	ppbV	
02427-003	SG-16	NA	07/15/24@19:00	Air-Other	ppbV	
02427-004	SG-17	NA	07/15/24@22:15	Air-Other	ppbV	

* No Cert = IAL does not hold certification for this test/method

Sample #	Test	Status	Analytical Method	TAT	Holding Time Expires
001	EPA TO-15	Analyze	TO-15	RUSH 72 HRS	8/14/2024
002	EPA TO-15	Analyze	TO-15	RUSH 72 HRS	8/14/2024
003	EPA TO-15	Analyze	TO-15	RUSH 72 HRS	8/14/2024
004	EPA TO-15	Analyze	TO-15	RUSH 72 HRS	8/14/2024

Project Notes:

NOTE 2 taken by kfalconer on 07/16/2024 04:29
SAMPLES 001, 002, 004 ENDING VACUUM 0

CLIENT DID NOT RECORD BAROMETRIC PRESSURE.

IAL is a NELAP accredited lab (TNI01284) and maintains certification in Connecticut (PH-0699), New Jersey (14751), New York (11402), and Pennsylvania (68-00773).

Internal Chain of Custody

Instructions: Use 1 form for each 20 samples of aliquot.

Laboratory Person Accepting Responsibility for Sample(s)

Laboratory: Integrated Analytical Laboratories
Name: Joseph Walukiewicz
Case No.: E24- 02427

Location: 273 Franklin Rd Randolph, NJ 07869
Title: Air Department Receiving
Analytical Parameter/Fraction: (check one) ____ NJDEP LLTO-15 __X__ EPA TO-15

Sample No.	Aliquot/Extract No.
88-14	E24-02427-01
88-15	E24- " " -02
88-16	E24- " " -03
88-17	E24- " " -04
	E24-
	E24
	E24-
	E24-
	E24-
	E24-

Sample No.	Aliquot/Extract No.
	E24-
	E24-
	E24-
	E24-
	E24-
	E24-
	E24-
	E24-
	E24
	E24

Date	Time	Relinquished By	Received By	Purpose of Change of Custody
07 16 24	15 30	SIGNATURE PRINTED NAME	SIGNATURE Joseph Walukiewicz PRINTED NAME JOSEPH WALUKIEWICZ	1. Sample log-in 2. Pressure Check 3. Pre-analysis storage
07 16 24	15 35	SIGNATURE Joseph Walukiewicz PRINTED NAME JOSEPH WALUKIEWICZ	SIGNATURE PRINTED NAME	Placement in TO-15 sample storage area until ready for analysis
		SIGNATURE PRINTED NAME	SIGNATURE Joseph Walukiewicz PRINTED NAME JOSEPH WALUKIEWICZ	TO-15 analysis on: 02427-01 to 04
		SIGNATURE PRINTED NAME	SIGNATURE Joseph Walukiewicz PRINTED NAME JOSEPH WALUKIEWICZ	TO-15 analysis on:
		SIGNATURE PRINTED NAME	SIGNATURE PRINTED NAME	
		SIGNATURE PRINTED NAME	SIGNATURE PRINTED NAME	
		SIGNATURE PRINTED NAME	SIGNATURE PRINTED NAME	
		SIGNATURE PRINTED NAME	SIGNATURE PRINTED NAME	

Rev. 12/16

Page 1 of 1

Section II: Methodology Review

Methodology Summary for Air Collected from Hazardous Waste Site Contract

Laboratory:	**Integrated Analytical Lab, LLC**	**Project No:**	**48-55 36th St**
Location:	**Randolph, NJ**	**SDG No:**	**E24-02427**

Name	Required Methodology	Indicate Method
Volatile Organics	US EPA TO-15	US EPA Method TO-15

Section III: Case Narrative

CASE NARRATIVE

Integrated Analytical Laboratories, LLC — **Randolph, NJ 07869**
Project #: 48-55 36th St — **NJDEP (Primary AB) Certification#: 14751**
SDG #: E24-02427 — **NY ELAP Certification #: 11402**
CT DPH Certification#: PH-0699
Analytical Method: EPA Method TO-15 — **PADEP Certification#: 68-00773**

Date of first sample receipt: 7/16/2024 — **Date of last sample receipt: 7/16/2024**

Client: JS Held-Hoboken
Project/Site: 48-55 36th St / NY

Client ID	Lab ID	Receipt Date	Analysis Date	DF	Diluted For
SG-14	E24-02427-01	07/16/2024	07/16/2024	1.0	NA
SG-15	E24-02427-02	07/16/2024	07/18/2024	10.0	Acetone Tert-butyl alcohol Tetrachloroethene
SG-15	E24-02427-02	07/16/2024	07/16/2024	1.0	NA
SG-16	E24-02427-03	07/16/2024	07/16/2024	5.0	Acetone Tetrachloroethene
SG-16	E24-02427-03	07/16/2024	07/16/2024	1.0	NA
SG-17	E24-02427-04	07/16/2024	07/18/2024	10.0	Acetone Toluene Tetrachloroethene
SG-17	E24-02427-04	07/16/2024	07/16/2024	1.0	NA

IAL Sample ID	Canister ID	Outgoing Pressure ("Hg)	Incoming Pressure ("Hg)	Flow Controller ID	Outgoing Flow Rate (cc/min)	Incoming Flow Rate (cc/min)	Flow Rate RPD*
E24-02427-01	5073	-29	0.0	7341819	200.00	198.50	0.75
E24-02427-02	3786	-29	0.0	7339509	200.00	196.60	1.71
E24-02427-03	4867	-29	-1.0	A0070631-10	200.00	197.40	1.31
E24-02427-04	2896B	-29	0.0	A0280985-8	200.00	199.60	0.20

*Pre-sampling and Post-sampling Flow Controller calibration check RPD ≤ 20%

Flow Controller Note: Flow controller 7341819 used to collect sample E24-02427-01 had malfunctioning gauge upon return.

Sample Receipt: Samples were received in good condition. Documentation was in order.
Samples were received at IAL by: Joseph Walukiewicz

Sample Preparation: None required.

Sample Analysis:
Hold Time: All within recommended hold times.
Instrument Calibration: Meets method criteria.
Analysis performed by: jjw
SDG Non-Conformances: none

CASE NARRATIVE

Integrated Analytical Laboratories, LLC — **Randolph, NJ 07869**
Project #: 48-55 36th St — **NJDEP (Primary AB) Certification#: 14751**
SDG #: E24-02427 — **NY ELAP Certification #: 11402**
CT DPH Certification#: PH-0699
Analytical Method: EPA Method TO-15 — **PADEP Certification#: 68-00773**

Date of first sample receipt: 7/16/2024 — **Date of last sample receipt: 7/16/2024**

Client: JS Held-Hoboken
Project/Site: 48-55 36th St / NY

Tentatively Identified Compounds: Tentatively Identified Compounds (TICs) are determined using a NIST library search. TICs are reported at 10% of the applicable internal standard. Dilution factors are calculated into the final reported result. Since the compounds found are tentatively identified, the conversion from ppbv to ug/m3 may not be made.

Canister-to-Canister dilutions: none

Dilutions: Dilutions, if necessary, will be conducted directly on the instrument up to a 500x dilution. When dilutions of 1000x or higher are necessary, the laboratory must inject a volume of sample into another certified clean canister and add humidified Z-1 zero air to the remainder of the canister volume. Tedlar bags are not used for dilutions.

If a sample is received with historically high levels of analytes, a 100x can-to-can dilution my be used from the start. A 100x canister-to-canister dilution may be also be used at the analyst's discretion.

On-instrument dilutions are conducted as follows:

Dilution Factor	Sample Volume Injected (cc)
1	500
2.5	200
5	100
10	50
20	25
25	20
50	10
100	5
200	2.5
250	2
500	1

Canister-to-canister dilutions are conducted as follows:

A certified clean canister is obtained and evacuated to approximately -30"Hg. Both the clean/dilution canister and sample canister are fitted with a ¼" Swagelok® nut fitting equipped with septa. Depending on dilution factor necessary, a sample aliquot is removed from the canister and injected into the clean canister using 30cc Multifit gas-tight syringe. Once the correct sample aliquot has been transferred, the dilution canister should be connected to the humidified Z-1 zero air supply and filled to ambient pressure (0"Hg).

Dilution Factor	Sample Aliquot	Z-1 Make-up Added
100	60ml	5940ml
1000	6ml	5994ml

CASE NARRATIVE

Integrated Analytical Laboratories, LLC — **Randolph, NJ 07869**
Project #: 48-55 36th St — **NJDEP (Primary AB) Certification#: 14751**
SDG #: E24-02427 — **NY ELAP Certification #: 11402**
CT DPH Certification#: PH-0699
Analytical Method: EPA Method TO-15 — **PADEP Certification#: 68-00773**

Date of first sample receipt: 7/16/2024 — **Date of last sample receipt: 7/16/2024**

Client: JS Held-Hoboken
Project/Site: 48-55 36th St / NY

If further dilutions need to be made from the dilution canister, they may be made on-instrument. Using a 100x dilution canister, the following on-instrument dilutions can be produced:

Dilution Factor	Sample Volume Injected
100	500ml
250	200ml
500	100ml
1000	50ml
2000	25ml
2500	20ml
5000	10ml

Using a 1000x dilution canister, the following on-instrument dilutions can be produced:

Dilution Factor	Sample Volume Injected
1000	500ml
2500	200ml
5000	100ml
10,000	50ml
20,000	25ml
25,000	20ml
50,000	10ml

If further dilutions need to be made from the dilution canister, beyond 50,000x, a subsequent canister-to-canister dilution must be made using the above prescribed protocol.

GC Column and ID: RTX-1 SN 1119138, RTX-VMS SN 1586881, or equivalent

Calibration Standards: Only gas phase standards were used. Primary and second-source standards provided by Scott Specialty Gases or Airgas Specialty Gases/ Air Liquide

Working Standards: Primary source standards* are created from:
- Airgas Specialty Gases #EB0103704, valid 1/18/2021 through 12/30/2024, @ approximately 100ppb per compound, with exception of m&p-xylenes @ 200ppb. Standard is directly introduced into the instrument for all calibration standard concentrations. Dilutions are made accordingly, on instrument. The 10ppbv standard is also used for the Daily Calibration Verification Standard (DCVS), the Laboratory Control Sample (LCS) and Closing Calibration Verification Standard (CCCVS).

The second source standard*, used as the Initial Calibration Verification Standard (ICVSS), is introduced into the instrument in the same manner as the primary source standard, using:

CASE NARRATIVE

Integrated Analytical Laboratories, LLC | **Randolph, NJ 07869**
Project #: 48-55 36th St | **NJDEP (Primary AB) Certification#: 14751**
SDG #: E24-02427 | **NY ELAP Certification #: 11402**
CT DPH Certification#: PH-0699
Analytical Method: EPA Method TO-15 | **PADEP Certification#: 68-00773**

Date of first sample receipt: 7/16/2024 | **Date of last sample receipt: 7/16/2024**

Client: JS Held-Hoboken
Project/Site: 48-55 36th St / NY

- Airgas Specialty Gases Cylinder #EB0116272, valid 7/28/2021 through 5/12/2025, @ approximately 100ppb per compound, with exception of m&p-xylenes @ 200ppb.

Internal standards* are created from:
- Airgas Specialty Gases Cylinder #ALM018474, valid 2/24/2022 through 2/24/2025. @ 5ppm per compound. Standard is directly introduced into the instrument to reach the 10ppbv concentrations. 1cc of internal standard is added to every standard, method blank, instrument blank, and sample run.

*Standard may be used past its expiration date provided that concentrations are verified by a current/unexpired second source standard.

03/27/2024
- 100 ppbv internal standard mix (AA6020BFB) - prepared in cylinder #ALM018474
  - 10 ppbv per standard/sample - 50 ml injected
- 100 ppbv calibration standard (aa6025std01) - prepared in cylinder #EB0103704
  - 40 ppbv standard - 200 ml injected
  - 20 ppbv standard - 100 ml injected
  - 10 ppbv standard* - 50 ml injected
    - *Standard also used for CCCVS
  - 2 ppbv standard - 10 ml injected
  - 0.20 ppbv standard* - 1 ml injected
    - *Standard also used for RLLCS
- Method Blank (AA6028BLK) - prepared in canister #1127
  - 500 ml injected

05/21/2024
- 100 ppbv internal standard mix (AA6539BFB) - prepared in cylinder #ALM018474
  - 10 ppbv per standard/sample - 50 ml injected
- 100 ppbv calibration standard (AA6540DCVS) - prepared in cylinder #EB0103704
  - 10 ppbv standard* - 50 ml injected
    - *Standard also used for DCVS & CCCVS
  - 0.20 ppbv standard* - 1 ml injected
    - *Standard also used for RLLCS
- Method Blank (AA6542BLK) - prepared in canister #1127
  - 500 ml injected

05/29/2024
- 100 ppbv internal standard mix (AA6554BFB) - prepared in cylinder #ALM018474
  - 10 ppbv per standard/sample - 50 ml injected
- 100 ppbv calibration standard (aa6560std01) - prepared in cylinder #EB0103704

CASE NARRATIVE

Integrated Analytical Laboratories, LLC | **Randolph, NJ 07869**
Project #: 48-55 36th St | **NJDEP (Primary AB) Certification#: 14751**
SDG #: E24-02427 | **NY ELAP Certification #: 11402**
CT DPH Certification#: PH-0699
Analytical Method: EPA Method TO-15 | **PADEP Certification#: 68-00773**

Date of first sample receipt: 7/16/2024 | **Date of last sample receipt: 7/16/2024**

Client: JS Held-Hoboken
Project/Site: 48-55 36th St / NY

05/29/2024

40 ppbv standard - 200 ml injected
20 ppbv standard - 100 ml injected
10 ppbv standard* - 50 ml injected
*Standard also used for CCCVS
2 ppbv standard - 10 ml injected
0.20 ppbv standard* - 1 ml injected
*Standard also used for RLLCS

06/06/2024

100 ppbv internal standard mix (AA6657BFB) - prepared in cylinder #ALM018474
10 ppbv per standard/sample - 50 ml injected
100 ppbv calibration standard (AA6658DCVS) - prepared in cylinder #EB0103704
10 ppbv standard* - 50 ml injected
*Standard also used for DCVS & CCCVS
0.20 ppbv standard* - 1 ml injected
*Standard also used for RLLCS
Method Blank (AA6660BLK) - prepared in canister #1127
500 ml injected

07/16/2024

100 ppbv internal standard mix (AA6898BFB) - prepared in cylinder #ALM018474
10 ppbv per standard/sample - 50 ml injected
100 ppbv calibration standard (AA6899DCVS) - prepared in cylinder #EB0103704
10 ppbv standard* - 50 ml injected
*Standard also used for DCVS & CCCVS
Method Blank (AA6901BLK) - prepared in canister #1127
500 ml injected
Sample E24-02427-01 (AA6908) - sample taken in canister #5073
500 ml sample volume injected, 1x dilution
Sample E24-02427-02 (AA6912) - sample taken in canister #3786
500 ml sample volume injected, 1x dilution
Sample E24-02427-03 (AA6914) - sample taken in canister #4867
100 ml sample volume injected, 5x dilution
Sample E24-02427-03 (AA6915) - sample taken in canister #4867
500 ml sample volume injected, 1x dilution
Sample E24-02427-04 (AA6918) - sample taken in canister #2896B
500 ml sample volume injected, 1x dilution

07/18/2024

100 ppbv internal standard mix (AA6921BFB) - prepared in cylinder #ALM018474
10 ppbv per standard/sample - 50 ml injected
100 ppbv calibration standard (AA6922DCVS) - prepared in cylinder #EB0103704
10 ppbv standard* - 50 ml injected
*Standard also used for DCVS & CCCVS
Method Blank (AA6924BLK) - prepared in canister #1127

CASE NARRATIVE

Integrated Analytical Laboratories, LLC — **Randolph, NJ 07869**
Project #: 48-55 36th St — **NJDEP (Primary AB) Certification#: 14751**
SDG #: E24-02427 — **NY ELAP Certification #: 11402**
CT DPH Certification#: PH-0699
Analytical Method: EPA Method TO-15 — **PADEP Certification#: 68-00773**

Date of first sample receipt: 7/16/2024 — **Date of last sample receipt: 7/16/2024**

Client: JS Held-Hoboken
Project/Site: 48-55 36th St / NY

07/18/2024

500 ml injected
Sample E24-02427-02 (AA6926) - sample taken in canister #3786
50 ml sample volume injected, 10x dilution
Sample E24-02427-04 (AA6927) - sample taken in canister #2896B
50 ml sample volume injected, 10x dilution

All work recorded herein has been done in accordance with normal professional standards using accepted testing methodologies, quality assurance and quality control procedures except where otherwise agreed to by the client and testing company in writing. All conversions are based upon a room temperature of 77°F(25°C) and room pressure of 101.325 kPa (1atm).

I certify that this data package is in compliance with the terms and conditions of this contract, both technically and for completeness, for other than the conditions detailed above. Release of data contained in this hardcopy data package and in the computer-readable data submitted on CD/diskette and by electronic mail has been authorized by the laboratory manager or his designee, as verified by the following signature.

Michael H. Leftin, Ph.D.
Laboratory Director

August 1, 2024
Date

Integrated Analytical Laboratories LLC

Airgas
an Air Liquide company

R 362

Received 01/06/2023

Airgas Specialty Gases
Airgas USA LLC
6141 Easton Road
Plumsteadville, PA 18949
Airgas.com

CERTIFICATE OF ANALYSIS

Grade of Product: CERTIFIED HYDROCARBON

Customer:	INTEGRATED ANALYTICAL LABS		
Part Number:	X76NI99C15AC001		
Cylinder Number:	EB0103704	Reference Number:	160-402619255-1
Laboratory:	124 - Plumsteadville - PA	Cylinder Volume:	101.0 CF
Analysis Date:	Dec 30, 2022	Cylinder Pressure:	1400 PSIG
Lot Number:	160-402619255-1	Valve Outlet:	350SS
		Expiration Date:	Dec 30, 2024

Traceability Statement: Hydrocarbon Process standards are NIST traceable either directly by weight or by comparison to Airgas laboratory standards that are directly NIST traceable by weight.

CERTIFIED CONCENTRATIONS

Component	Requested Concentration	Reported Mole %	Accuracy
1,1 DICHLOROETHANE	100.000 PPB	107.000 PPB	+/- 10%
1,1 DICHLOROETHYLENE	100.000 PPB	104.000 PPB	+/- 10%
1,1,1 TRICHLOROETHANE	100.000 PPB	109.000 PPB	+/- 10%
1,1,2 TRICHLORO ETHANE	100.000 PPB	108.000 PPB	+/- 10%
1,1,2,2 TETRACHLOROETHANE	100.000 PPB	114.000 PPB	+/- 10%
1,2 DIBROMO ETHANE	100.000 PPB	108.000 PPB	+/- 10%
1,2 DICHLORO PROPANE	100.000 PPB	110.000 PPB	+/- 10%
1,2 DICHLOROBENZENE	100.000 PPB	107.000 PPB	+/- 10%
1,2 DICHLOROETHANE	100.000 PPB	109.000 PPB	+/- 10%
1,2,4 TRICHLOROBENZENE	100.000 PPB	110.000 PPB	+/- 10%
1,2,4 TRIMETHYLBENZENE	100.000 PPB	108.000 PPB	+/- 10%
1,3 BUTADIENE	100.000 PPB	107.000 PPB	+/- 10%
1,3 DICHLORO BENZENE	100.000 PPB	111.000 PPB	+/- 10%
1,3,5 TRIMETHYL BENZENE	100.000 PPB	109.000 PPB	+/- 10%
1,4 DICHLOROBENZENE	100.000 PPB	107.000 PPB	+/- 10%
1,4 DIOXANE	100.000 PPB	117.000 PPB	+/- 10%
2 CHLOROTOLUENE	100.000 PPB	109.000 PPB	+/- 10%
3 CHLOROPROPYLENE	100.000 PPB	108.000 PPB	+/- 10%
4 ETHYL TOLUENE	100.000 PPB	108.000 PPB	+/- 10%
ACETONE	100.000 PPB	108.000 PPB	+/- 10%
ACROLEIN	100.000 PPB	100.000 PPB	+/- 10%
BENZENE	100.000 PPB	108.000 PPB	+/- 10%
BENZYL CHLORIDE	100.000 PPB	100.000 PPB	+/- 10%
BROMO DICHLORO METHANE	100.000 PPB	115.000 PPB	+/- 10%
BROMOFORM	100.000 PPB	113.000 PPB	+/- 10%
CARBON DISULFIDE	100.000 PPB	107.000 PPB	+/- 10%
CARBON TETRACHLORIDE	100.000 PPB	110.000 PPB	+/- 10%
CHLORO DIBROMO METHANE	100.000 PPB	112.000 PPB	+/- 10%
CHLOROBENZENE	100.000 PPB	111.000 PPB	+/- 10%
CHLOROFORM	100.000 PPB	108.000 PPB	+/- 10%
CIS 1,2 DICHLOROETHYLENE	100.000 PPB	109.000 PPB	+/- 10%
CIS 1,3 DICHLOROPROPENE	100.000 PPB	111.000 PPB	+/- 10%
CUMENE	100.000 PPB	107.000 PPB	+/- 10%
CYCLOHEXANE	100.000 PPB	112.000 PPB	+/- 10%
ETHANOL	100.000 PPB	104.000 PPB	+/- 10%
ETHYL ACETATE	100.000 PPB	108.000 PPB	+/- 10%
ETHYL BENZENE	100.000 PPB	111.000 PPB	+/- 10%
ETHYL CHLORIDE	100.000 PPB	106.000 PPB	+/- 10%
HEXACHLORO 1,3 BUTADIENE	100.000 PPB	111.000 PPB	+/- 10%

Approved for Release

Integrated Analytical Laboratories LLC

Airgas
an Air Liquide company

Airgas Specialty Gases
Airgas USA LLC
6141 Easton Road
Plumsteadville, PA 18949
Airgas.com

HEXANE	100.000 PPB	111.000 PPB	+/- 10%
ISOOCTANE	100.000 PPB	109.000 PPB	+/- 10%
ISOPROPYL ALCOHOL	100.000 PPB	89.000 PPB	+/- 10%
M XYLENE	100.000 PPB	112.000 PPB	+/- 10%
METHYL BROMIDE	100.000 PPB	100.000 PPB	+/- 10%
METHYL BUTYL KETONE	100.000 PPB	113.000 PPB	+/- 10%
METHYL CHLORIDE	100.000 PPB	112.000 PPB	+/- 10%
METHYL ETHYL KETONE	100.000 PPB	110.000 PPB	+/- 10%
METHYL ISOBUTYL KETONE	100.000 PPB	109.000 PPB	+/- 10%
METHYL METHACRYLATE	100.000 PPB	110.000 PPB	+/- 10%
METHYL TERT BUTYL ETHER	100.000 PPB	112.000 PPB	+/- 10%
METHYLENE CHLORIDE	100.000 PPB	108.000 PPB	+/- 10%
N BUTANE	100.000 PPB	109.000 PPB	+/- 10%
N HEPTANE	100.000 PPB	111.000 PPB	+/- 10%
N NONANE	100.000 PPB	110.000 PPB	+/- 10%
N PENTANE	100.000 PPB	108.000 PPB	+/- 10%
N PROPYL BENZENE	100.000 PPB	108.000 PPB	+/- 10%
NAPHTHALENE	100.000 PPB	100.000 PPB	+/- 10%
O XYLENE	100.000 PPB	110.000 PPB	+/- 10%
P XYLENE	100.000 PPB	111.000 PPB	+/- 10%
PERCHLOROETHYLENE	100.000 PPB	112.000 PPB	+/- 10%
PROPYLENE	100.000 PPB	109.000 PPB	+/- 10%
R11 TRICHLOROFLUOROMETHANE	100.000 PPB	110.000 PPB	+/- 10%
R113 TRICHLOROTRIFLUOROETHANE	100.000 PPB	109.000 PPB	+/- 10%
R114 DICHLOROTETRAFLUOROETHANE	100.000 PPB	98.000 PPB	+/- 10%
R12 DICHLORODIFLUOROMETHANE	100.000 PPB	106.000 PPB	+/- 10%
STYRENE	100.000 PPB	113.000 PPB	+/- 10%
TERT BUTANOL	100.000 PPB	115.000 PPB	+/- 10%
TETRAHYDROFURAN	100.000 PPB	110.000 PPB	+/- 10%
TOLUENE	100.000 PPB	108.000 PPB	+/- 10%
TRANS 1,2 DICHLOROETHYLENE	100.000 PPB	111.000 PPB	+/- 10%
TRANS 1,3 DICHLOROPROPENE	100.000 PPB	111.000 PPB	+/- 10%
TRICHLOROETHYLENE	100.000 PPB	100.000 PPB	+/- 10%
VINYL ACETATE	100.000 PPB	110.000 PPB	+/- 10%
VINYL BROMIDE	100.000 PPB	101.000 PPB	+/- 10%
VINYL CHLORIDE	100.000 PPB	108.000 PPB	+/- 10%
NITROGEN	99.99925 %	99.999187 %	+/- 10%

Permanent Notes: CUSTOM TO MIX - TO-15/17 MODIFIED NJ STD + NAPHTHALENE

Notes: PO number: 22578

Approved for Release

Integrated Analytical Laboratories LLC

Airgas
an Air Liquide company

Airgas Specialty Gases
Airgas USA LLC
6141 Easton Road
Plumsteadville, PA 18949
Airgas.com

R366

CERTIFICATE OF ANALYSIS

Grade of Product: CERTIFIED HYDROCARBON

Customer:	INTEGRATED ANALYTICAL LABS		
Part Number:	X76NI99C15AC001	Reference Number:	160-402744241-1
Cylinder Number:	EB0116272	Cylinder Volume:	146.0 CF
Laboratory:	124 - Plumsteadville - PA	Cylinder Pressure:	2050 PSIG
Analysis Date:	May 12, 2023	Valve Outlet:	350SS
Lot Number:	160-402744241-1	Expiration Date:	May 12, 2025

Traceability Statement: Hydrocarbon Process standards are NIST traceable either directly by weight or by comparison to Airgas laboratory standards that are directly NIST traceable by weight.

CERTIFIED CONCENTRATIONS

Component	Requested Concentration	Reported Mole %	Accuracy
1,1 DICHLOROETHANE	100.000 PPB	100.000 PPB	+/- 10%
1,1 DICHLOROETHYLENE	100.000 PPB	100.000 PPB	+/- 10%
1,1,1 TRICHLOROETHANE	100.000 PPB	104.000 PPB	+/- 10%
1,1,2 TRICHLORO ETHANE	100.000 PPB	101.000 PPB	+/- 10%
1,1,2,2 TETRACHLOROETHANE	100.000 PPB	104.000 PPB	+/- 10%
1,2 DIBROMO ETHANE	100.000 PPB	103.000 PPB	+/- 10%
1,2 DICHLORO PROPANE	100.000 PPB	103.000 PPB	+/- 10%
1,2 DICHLOROBENZENE	100.000 PPB	101.000 PPB	+/- 10%
1,2 DICHLOROETHANE	100.000 PPB	102.000 PPB	+/- 10%
1,2,4 TRICHLOROBENZENE	100.000 PPB	100.000 PPB	+/- 10%
1,2,4 TRIMETHYLBENZENE	100.000 PPB	102.000 PPB	+/- 10%
1,3 BUTADIENE	100.000 PPB	106.000 PPB	+/- 10%
1,3 DICHLORO BENZENE	100.000 PPB	105.000 PPB	+/- 10%
1,3,5 TRIMETHYL BENZENE	100.000 PPB	103.000 PPB	+/- 10%
1,4 DICHLOROBENZENE	100.000 PPB	100.000 PPB	+/- 10%
1,4 DIOXANE	100.000 PPB	113.000 PPB	+/- 10%
2 CHLOROTOLUENE	100.000 PPB	107.000 PPB	+/- 10%
3 CHLOROPROPYLENE	100.000 PPB	106.000 PPB	+/- 10%
4 ETHYL TOLUENE	100.000 PPB	106.000 PPB	+/- 10%
ACETONE	100.000 PPB	108.000 PPB	+/- 10%
ACROLEIN	100.000 PPB	105.000 PPB	+/- 10%
BENZENE	100.000 PPB	103.000 PPB	+/- 10%
BENZYL CHLORIDE	100.000 PPB	102.000 PPB	+/- 10%
BROMO DICHLORO METHANE	100.000 PPB	112.000 PPB	+/- 10%
BROMOFORM	100.000 PPB	113.000 PPB	+/- 10%
CARBON DISULFIDE	100.000 PPB	95.000 PPB	+/- 10%
CARBON TETRACHLORIDE	100.000 PPB	107.000 PPB	+/- 10%
CHLORO DIBROMO METHANE	100.000 PPB	110.000 PPB	+/- 10%
CHLOROBENZENE	100.000 PPB	104.000 PPB	+/- 10%
CHLOROFORM	100.000 PPB	106.000 PPB	+/- 10%
CIS 1,2 DICHLOROETHYLENE	100.000 PPB	102.000 PPB	+/- 10%
CIS 1,3 DICHLOROPROPENE	100.000 PPB	94.000 PPB	+/- 10%
CUMENE	100.000 PPB	106.000 PPB	+/- 10%
CYCLOHEXANE	100.000 PPB	109.000 PPB	+/- 10%
ETHANOL	100.000 PPB	98.000 PPB	+/- 10%
ETHYL ACETATE	100.000 PPB	104.000 PPB	+/- 10%
ETHYL BENZENE	100.000 PPB	105.000 PPB	+/- 10%
ETHYL CHLORIDE	100.000 PPB	104.000 PPB	+/- 10%
HEXACHLORO 1,3 BUTADIENE	100.000 PPB	101.000 PPB	+/- 10%

Approved for Release

Integrated Analytical Laboratories LLC

Airgas
an Air Liquide company

Airgas Specialty Gases
Airgas USA LLC
6141 Easton Road
Plumsteadville, PA 18949
Airgas.com

HEXANE	100.000 PPB	107.000 PPB	+/- 10%
ISOOCTANE	100.000 PPB	106.000 PPB	+/- 10%
ISOPROPYL ALCOHOL	100.000 PPB	95.000 PPB	+/- 10%
M XYLENE	100.000 PPB	106.000 PPB	+/- 10%
METHYL BROMIDE	100.000 PPB	103.000 PPB	+/- 10%
METHYL BUTYL KETONE	100.000 PPB	109.000 PPB	+/- 10%
METHYL CHLORIDE	100.000 PPB	108.000 PPB	+/- 10%
METHYL ETHYL KETONE	100.000 PPB	105.000 PPB	+/- 10%
METHYL ISOBUTYL KETONE	100.000 PPB	105.000 PPB	+/- 10%
METHYL METHACRYLATE	100.000 PPB	106.000 PPB	+/- 10%
METHYL TERT BUTYL ETHER	100.000 PPB	107.000 PPB	+/- 10%
METHYLENE CHLORIDE	100.000 PPB	101.000 PPB	+/- 10%
N BUTANE	100.000 PPB	107.000 PPB	+/- 10%
N HEPTANE	100.000 PPB	107.000 PPB	+/- 10%
N NONANE	100.000 PPB	108.000 PPB	+/- 10%
N PENTANE	100.000 PPB	105.000 PPB	+/- 10%
N PROPYL BENZENE	100.000 PPB	112.000 PPB	+/- 10%
NAPHTHALENE	100.000 PPB	101.000 PPB	+/- 10%
O XYLENE	100.000 PPB	102.000 PPB	+/- 10%
P XYLENE	100.000 PPB	106.000 PPB	+/- 10%
PERCHLOROETHYLENE	100.000 PPB	104.000 PPB	+/- 10%
PROPYLENE	100.000 PPB	108.000 PPB	+/- 10%
R11 TRICHLOROFLUOROMETHANE	100.000 PPB	106.000 PPB	+/- 10%
R113 TRICHLOROTRIFLUOROETHANE	100.000 PPB	102.000 PPB	+/- 10%
R114 DICHLOROTETRAFLUOROETHANE	100.000 PPB	99.000 PPB	+/- 10%
R12 DICHLORODIFLUOROMETHANE	100.000 PPB	109.000 PPB	+/- 10%
STYRENE	100.000 PPB	106.000 PPB	+/- 10%
TERT BUTANOL	100.000 PPB	111.000 PPB	+/- 10%
TETRAHYDROFURAN	100.000 PPB	106.000 PPB	+/- 10%
TOLUENE	100.000 PPB	101.000 PPB	+/- 10%
TRANS 1,2 DICHLOROETHYLENE	100.000 PPB	108.000 PPB	+/- 10%
TRANS 1,3 DICHLOROPROPENE	100.000 PPB	106.000 PPB	+/- 10%
TRICHLOROETHYLENE	100.000 PPB	102.000 PPB	+/- 10%
VINYL ACETATE	100.000 PPB	105.000 PPB	+/- 10%
VINYL BROMIDE	100.000 PPB	100.000 PPB	+/- 10%
VINYL CHLORIDE	100.000 PPB	107.000 PPB	+/- 10%
NITROGEN	99.99925 %	99.999216 %	

Permanent Notes: CUSTOM TO MIX - TO-15/17 MODIFIED NJ STD + NAPHTHALENE

Notes: PO Number: 22896

Approved for Release

Section IV: Method Detection Limit Summary

INTEGRATED ANALYTICAL LABORATORIES, LLC
REPORTING METHOD DETECTION LIMIT (MDL) REPORT

Integrated Analytical Laboratories - Randolph, NJ

Matrix: Air
MDL Effective Date: 8/16/2023
Column ID: Restek RtX-VMS, 30 meter, 0.32mm ID, 1.8 um DF
Instrument ID: GC - Agilent 7890A / MS - Agilent 5975C (IAL ID: *Instrument AA*)
Analyst: Joe Waluliewicz
Report Prepared by: Joe Waluliewicz

Compound Name	CAS #	Molecular Weight	MDL ppbv	MDL µg/m^3	PQL ppbv	RL ppbv	RL µg/m^3	True value/ MDL
Propene	115-07-1	42.08	0.18	0.31	0.54	0.20	0.34	1
Dichlorodifluoromethane	75-71-8	120.9	0.081	0.40	0.24	0.20	0.99	3
1,2-Dichlorotetrafluoroethane	76-14-2	170.9	0.071	0.50	0.21	0.20	1.4	3
n-Butane	106-97-8	58	0.13	0.32	0.40	0.20	0.47	2
Chloromethane	74-87-3	50.49	0.15	0.30	0.44	0.20	0.41	1
Vinyl chloride	75-01-4	62.5	0.11	0.29	0.34	0.20	0.51	2
1,3-Butadiene	106-99-0	54.09	0.12	0.27	0.37	0.20	0.44	2
Bromomethane	74-83-9	94.94	0.12	0.46	0.36	0.20	0.78	2
Chloroethane	75-00-3	64.52	0.12	0.32	0.36	0.20	0.53	2
Vinyl bromide	593-60-2	106.9	0.080	0.35	0.24	0.20	0.87	3
Trichlorofluoromethane	75-69-4	137.4	0.068	0.38	0.20	0.20	1.1	3
Ethanol	64-17-5	46.07	0.17	0.32	0.51	0.20	0.38	1
1,1-Dichloroethene	75-35-4	96.94	0.086	0.34	0.26	0.20	0.79	3
Carbon disulfide	75-15-0	76.14	0.076	0.24	0.23	0.20	0.62	3
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	187.40	0.087	0.66	0.26	0.20	1.5	3
Acrolein	107-02-8	56.06	0.15	0.34	0.44	0.20	0.46	2
Allyl Chloride	107-05-1	76.53	0.088	0.27	0.26	0.20	0.63	3
Isopropanol	67-63-0	60.1	0.10	0.25	0.30	0.20	0.49	2
Methylene chloride	75-09-2	84.94	0.10	0.36	0.31	0.20	0.69	2
Acetone	67-64-1	58.08	0.12	0.28	0.36	0.20	0.48	2
1,2-Dichloroethene (trans)	156-60-5	96.94	0.080	0.32	0.24	0.20	0.79	3
n-Pentane	109-66-0	72.15	0.16	0.48	0.49	0.20	0.59	1
n-Hexane	110-54-3	86.17	0.087	0.31	0.26	0.20	0.70	3
Methyl tert-butyl ether	1634-04-4	88.15	0.080	0.29	0.24	0.20	0.72	3
Tert-butyl alcohol	75-65-0	74.12	0.14	0.44	0.43	0.20	0.61	2
1,1-Dichloroethane	75-34-3	98.96	0.079	0.32	0.24	0.20	0.81	3
1,2-Dichloroethene (cis)	156-59-2	96.94	0.083	0.33	0.25	0.20	0.79	3
Cyclohexane	110-82-7	84.16	0.078	0.27	0.23	0.20	0.69	3
Chloroform	67-66-3	119.4	0.077	0.38	0.23	0.20	0.98	3
Ethyl acetate	141-78-6	88.11	0.11	0.40	0.33	0.20	0.72	2
Carbon tetrachloride	56-23-5	153.8	0.080	0.50	0.24	0.20	1.3	3
Tetrahydrofuran	109-99-9	72.11	0.11	0.31	0.32	0.20	0.59	2
1,1,1-Trichloroethane	71-55-6	133.4	0.071	0.39	0.21	0.20	1.1	3
Methyl ethyl ketone	78-93-3	72.11	0.11	0.31	0.32	0.20	0.59	2
n-Heptane	142-82-5	100.2	0.090	0.37	0.27	0.20	0.82	2
Benzene	71-43-2	78.11	0.076	0.24	0.23	0.20	0.64	3
1,2-Dichloroethane	107-06-2	98.96	0.079	0.32	0.24	0.20	0.81	3
Trichloroethene	79-01-6	131.4	0.064	0.34	0.19	0.20	1.1	3
2,2,4-Trimethylpentane	540-84-1	114.2	0.085	0.40	0.26	0.20	0.93	3
1,2-Dichloropropane	78-87-5	113	0.085	0.39	0.25	0.20	0.92	3
Bromodichloromethane	75-27-4	163.8	0.066	0.44	0.20	0.20	1.3	3
Methyl methacrylate	80-62-6	100.12	0.079	0.32	0.24	0.20	0.82	3
1,4-Dioxane	123-91-1	88.12	0.092	0.33	0.28	0.20	0.72	2
1,3-Dichloropropene (cis)	10061-01-5	111.0	0.070	0.32	0.21	0.20	0.91	3
Toluene	108-88-3	92.14	0.064	0.24	0.19	0.20	0.75	3
Methyl isobutyl ketone	108-10-1	100.2	0.11	0.43	0.32	0.20	0.82	2
Tetrachloroethene	127-18-4	165.8	0.063	0.43	0.19	0.20	1.4	3
1,3-Dichloropropene (trans)	10061-02-6	111	0.077	0.35	0.23	0.20	0.91	3
1,1,2-Trichloroethane	79-00-5	133.4	0.075	0.41	0.22	0.20	1.1	3
Dibromochloromethane	124-48-1	208.3	0.073	0.62	0.22	0.20	1.7	3
1,2-Dibromoethane	106-93-4	187.9	0.067	0.52	0.20	0.20	1.5	3
Methyl n-butyl ketone	591-78-6	100.16	0.13	0.54	0.40	0.20	0.82	2
n-Nonane	111-84-2	128.2	0.10	0.52	0.30	0.20	1.0	2
Chlorobenzene	108-90-7	112.6	0.073	0.34	0.22	0.20	0.92	3
Ethylbenzene	100-41-4	106.2	0.067	0.29	0.20	0.20	0.9	3
Xylenes (m&p)	179601-23-1	106.2	0.15	0.64	0.44	0.40	1.74	3
Xylene (o)	79-34-5	167.9	0.073	0.50	0.22	0.20	1.4	3
Styrene	100-42-5	104.1	0.072	0.31	0.22	0.20	0.85	3
Bromoform	75-25-2	252.8	0.075	0.77	0.22	0.20	2.1	3
Cumene (Isopropylbenzene)	98-82-8	120.2	0.069	0.34	0.21	0.20	0.98	3
n-Propyl benzene	103-65-1	120.19	0.085	0.42	0.25	0.20	0.98	3
1,1,2,2-Tetrachloroethane	95-47-6	106.2	0.069	0.30	0.21	0.20	0.87	3
4-Ethyltoluene	622-96-8	120.2	0.090	0.44	0.27	0.20	0.98	2
2-Chlorotoluene	95-49-8	126.6	0.077	0.40	0.23	0.20	1.0	3
1,3,5-Trimethylbenzene	108-67-8	120.2	0.076	0.37	0.23	0.20	0.98	3
1,2,4-Trimethylbenzene	95-63-6	120.2	0.080	0.39	0.24	0.20	0.98	3

INTEGRATED ANALYTICAL LABORATORIES, LLC
REPORTING METHOD DETECTION LIMIT (MDL) REPORT

Integrated Analytical Laboratories - Randolph, NJ

Matrix: Air
Column ID: Restek RtX-VMS, 30 meter, 0.32mm ID, 1.8 um DF
Instrument ID: GC - Agilent 7890A / MS - Agilent 5975C (IAL ID: *Instrument AA*)
Report Prepared by: Joe Waluliewicz

MDL Effective Date: 8/16/2023
Analyst: Joe Waluliewicz

Compound Name	CAS #	Molecular Weight	MDL ppbv	MDL µg/m^3	PQL ppbv	RL ppbv	RL µg/m^3	True value/ MDL
1,3-Dichlorobenzene	541-73-1	147	0.086	0.52	0.26	0.20	1.2	3
1,4-Dichlorobenzene	106-46-7	147.0	0.089	0.54	0.27	0.20	1.2	2
Benzyl chloride	100-44-7	126.6	0.064	0.33	0.19	0.20	1.0	3
1,2-Dichlorobenzene	95-50-1	147.0	0.083	0.50	0.25	0.20	1.2	3
1,3-Hexachlorobutadiene	87-68-3	260.8	0.096	1.03	0.29	0.20	2.1	2
1,2,4-Trichlorobenzene	120-82-1	181.5	0.12	0.89	0.36	0.20	1.5	2
Naphthalene	91-20-3	128	0.15	0.79	0.45	0.20	1.0	2

Where:
MDL is defined as the higher of the MDL Spike and MDL Blank
PQL is MDLx3
RL is defined as the lowest point of the calibration curve
ppbv is parts per billion by volume and is how results come off the instrument
µg/m^3 = ppbv x molecular weight / 24.45

Location of this file: P:\PAL Reports\LLTO-15 and TO-15 Common Files\Agilent MDL

Instrument used for Clean Canister Certification Analysis? YES

Michael Leftin, Ph.D.
Laboratory Director

Date: August 16, 2023

INTEGRATED ANALYTICAL LABORATORIES, LLC
METHOD DETECTION LIMIT VERIFICATION (MDLV) REPORT

Integrated Analytical Laboratories - Randolph, NJ

Analysis Level:	0.20 ppbv, 0.40 for m&p-xylenes
Matrix:	Air
Column ID:	RTX-VMS, 30-meter, 0.32 mm ID, 1.8 µm d_f
Instrument Identification:	AA
Date of Verification Study:	8/16/2023
Study Identification File #:	aa3415rllcs
Analyst:	Joe Walukiewicz
Analysis/Processing Method:	C:\MSDCHEM\1\METHODS\230815.M
Cylinder ID:	EB0103704

Michael Leftin, Ph.D.
Laboratory Director

Date: August 16, 2023

Compound Name	CAS #	MDLV (ppbv)	RL (ppbv)	RL/MDLV Ratio
Propene	115-07-1	0.23	0.20	1
Dichlorodifluoromethane	124-48-1	0.24	0.20	1
1,2-Dichlorotetrafluoroethane	76-14-2	0.26	0.20	1
n-Butane	106-97-8	0.23	0.20	1
Chloromethane	74-87-3	0.24	0.20	1
Vinyl chloride	75-01-4	0.26	0.20	1
1,3-Butadiene	106-99-0	0.23	0.20	1
Bromomethane	74-83-9	0.23	0.20	1
Chloroethane	75-00-3	0.22	0.20	1
Vinyl bromide	593-60-2	0.23	0.20	1
Trichlorofluoromethane	75-69-4	0.26	0.20	1
Ethanol	64-17-5	0.30	0.20	2
1,1-Dichloroethene	75-35-4	0.22	0.20	1
Carbon disulfide	75-15-0	0.22	0.20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.27	0.20	1
Acrolein	107-02-8	0.24	0.20	1
Allyl Chloride	107-05-1	0.22	0.20	1
Isopropanol	67-63-0	0.20	0.20	1
Methylene chloride	75-09-2	0.35	0.20	2
Acetone	67-64-1	0.27	0.20	1
1,2-Dichloroethene (trans)	156-60-5	0.22	0.20	1
n-Pentane	109-66-0	0.25	0.20	1
n-Hexane	110-54-3	0.26	0.20	1
Methyl tert-butyl ether	1634-04-4	0.25	0.20	1
Tert-butyl alcohol	75-65-0	0.24	0.20	1
1,1-Dichloroethane	75-34-3	0.24	0.20	1
1,2-Dichloroethene (cis)	156-59-2	0.21	0.20	1
Cyclohexane	110-82-7	0.24	0.20	1
Chloroform	67-66-3	0.23	0.20	1
Ethyl acetate	141-78-6	0.23	0.20	1
Carbon tetrachloride	56-23-5	0.26	0.20	1
Tetrahydrofuran	109-99-9	0.23	0.20	1
1,1,1-Trichloroethane	71-55-6	0.24	0.20	1
Methyl ethyl ketone	78-93-3	0.24	0.20	1
n-Heptane	142-82-5	0.23	0.20	1
Benzene	71-43-2	0.24	0.20	1
1,2-Dichloroethane	106-93-4	0.23	0.20	1
Trichloroethene	79-01-6	0.25	0.20	1
2,2,4-Trimethylpentane	540-84-1	0.29	0.20	1
1,2-Dichloropropane	78-87-5	0.26	0.20	1
Bromodichloromethane	75-27-4	0.28	0.20	1
Methyl methacrylate	80-62-6	0.22	0.20	1
1,4-Dioxane	123-91-1	0.28	0.20	1
1,3-Dichloropropene (cis)	10061-01-5	0.25	0.20	1
Toluene	108-88-3	0.24	0.20	1
Methyl isobutyl ketone	108-10-1	0.22	0.20	1
Tetrachloroethene	127-18-4	0.26	0.20	1
1,3-Dichloropropene (trans)	10061-02-6	0.24	0.20	1
1,1,2-Trichloroethane	79-00-5	0.23	0.20	1
Dibromochloromethane	75-71-8	0.24	0.20	1
1,2-Dibromoethane	107-06-2	0.22	0.20	1
Methyl n-butyl ketone	591-78-6	0.21	0.20	1

INTEGRATED ANALYTICAL LABORATORIES, LLC
METHOD DETECTION LIMIT VERIFICATION (MDLV) REPORT

Integrated Analytical Laboratories - Randolph, NJ

Analysis Level:	0.20 ppbv, 0.40 for m&p-xylenes
Matrix:	Air
Column ID:	RTX-VMS, 30-meter, 0.32 mm ID, 1.8 µm d_f
Instrument Identification:	AA
Date of Verification Study:	8/16/2023
Study Identification File #:	aa3415rllcs
Analyst:	Joe Walukiewicz
Analysis/Processing Method:	C:\MSDCHEM\1\METHODS\230815.M
Cylinder ID:	EB0103704

Michael Leftin, Ph.D.
Laboratory Director

Date: August 16, 2023

Compound Name	CAS #	MDLV (ppbv)	RL (ppbv)	RL/MDLV Ratio
n-Nonane	111-84-2	0.21	0.20	1
Chlorobenzene	108-90-7	0.28	0.20	1
Ethylbenzene	100-41-4	0.26	0.20	1
Xylenes (m&p)	179601-23-1	0.54	0.40	1
Xylene (o)	95-47-6	0.26	0.20	1
Styrene	100-42-5	0.23	0.20	1
Bromoform	75-25-2	0.26	0.20	1
Cumene	98-82-8	0.24	0.20	1
n-Propyl benzene	103-65-1	0.25	0.20	1
1,1,2,2-Tetrachloroethane	79-34-5	0.25	0.20	1
4-Ethyltoluene	622-96-8	0.24	0.20	1
2-Chlorotoluene	95-49-8	0.25	0.20	1
1,3,5-Trimethylbenzene	108-67-8	0.24	0.20	1
1,2,4-Trimethylbenzene	95-63-6	0.22	0.20	1
1,3-Dichlorobenzene	541-73-1	0.27	0.20	1
1,4-Dichlorobenzene	106-46-7	0.24	0.20	1
Benzyl chloride	100-44-7	0.17	0.20	1
1,2-Dichlorobenzene	95-50-1	0.25	0.20	1
1,3-Hexachlorobutadiene	87-68-3	0.31	0.20	2
1,2,4-Trichlorobenzene	120-82-1	0.25	0.20	1
Naphthalene	91-20-3	0.28	0.20	1

Section V: Quality Control Data Summary

BFB Tune Summary

Method Blank

Laboratory Control Sample

Laboratory Sample Duplicate

Internal Standard Area Summary

BFB

Data Path: C:\DATA\2024\03-2024\03-27-2024\
Data File: AA6020BFB.D
Acq On: 3/27/2024 10:03:00AM
Operator: jjw
Sample: BFB
Misc: ALM018474
ALS Vial: 1 **Multiplier:** 1
Integration File: rteint.p
Method: C:\msdchem\1\METHODS\240326.M
Last Update: Mon Feb 12 17:00:56 2024
Spectrum Information:

PassFail	Target Mass	Rel. to Mass	Lower Limit %	Higher Limit %	Raw Abundance	% Relative Abundance
PASS	50	95	8	40	248768	22.4
PASS	75	95	30	66	575680	51.7
PASS	95	95	100	100	1112917	100.0
PASS	96	95	5	9	72451	6.5
PASS	173	174	0.00	2	6828	1.0
PASS	174	95	50	100	671872	60.4
PASS	175	174	4	9	49411	7.4
PASS	176	174	93	101	654677	97.4
PASS	177	176	5	9	43245	6.6

Runs with this BFB:

Lab Sample Number	Date File	Field Sample	Date/Time of Sample/Standard Analysis
BFB	AA6020BFB	NA	3/27/2024 10:03:00 AM
0.2 PPBV STD	AA6021STD05	NA	3/27/2024 10:38:00 AM
2 PPBV STD	AA6022STD04	NA	3/27/2024 11:38:00 AM
10 PPBV STD	AA6023STD03	NA	3/27/2024 12:09:00 PM
20 PPBV STD	AA6024STD02	NA	3/27/2024 12:40:00 PM
40 PPBV STD	AA6025STD01	NA	3/27/2024 1:24:00 PM
10 PPBV ICVSS	AA6026ICVSS	NA	3/27/2024 1:54:00 PM
10 PPBV LCS	AA6027LCS	NA	3/27/2024 2:23:00 PM
METHOD BLANK	AA6028BLK	NA	3/27/2024 2:51:00 PM
3285	AA6039	NA	3/27/2024 9:10:00 PM
2036	AA6040	NA	3/27/2024 9:38:00 PM

BFB

Data Path: C:\DATA\2024\05-2024\05-21-2024\
Data File: AA6539BFB.D
Acq On: 5/21/2024 9:54:00AM
Operator: jjw
Sample: BFB
Misc: ALM018474
ALS Vial: 1 **Multiplier:** 1
Integration File: rteint.p
Method: C:\msdchem\1\METHODS\240326.M
Last Update: Wed Mar 27 13:46:33 2024
Spectrum Information:

PassFail	Target Mass	Rel. to Mass	Lower Limit %	Higher Limit %	Raw Abundance	% Relative Abundance
PASS	50	95	8	40	194539	21.5
PASS	75	95	30	66	465152	51.3
PASS	95	95	100	100	906901	100.0
PASS	96	95	5	9	58715	6.5
PASS	173	174	0.00	2	3482	0.6
PASS	174	95	50	100	559573	61.7
PASS	175	174	4	9	41755	7.5
PASS	176	174	93	101	536704	95.9
PASS	177	176	5	9	34669	6.5

Runs with this BFB:

Lab Sample Number	Date File	Field Sample	Date/Time of Sample/Standard Analysis
BFB	AA6539BFB	NA	5/21/2024 9:54:00 AM
10 PPBV DCVS	AA6540DCVS	NA	5/21/2024 11:12:00 AM
10 PPBV LCS	AA6541LCS	NA	5/21/2024 11:47:00 AM
METHOD BLANK	AA6542BLK	NA	5/21/2024 12:15:00 PM
02 PPBV RLLCS	AA6543RLLCS	NA	5/21/2024 12:50:00 PM
3052	AA6544	NA	5/21/2024 3:02:00 PM
3100	AA6545	NA	5/21/2024 3:33:00 PM
1571	AA6546	NA	5/21/2024 4:03:00 PM
10 PPBV CCCVS	AA6552CCCVS	NA	5/21/2024 7:21:00 PM

BFB

Data Path: C:\DATA\2024\05-2024\05-29-2024\
Data File: AA6554BFB.D
Acq On: 5/29/2024 9:16:00AM
Operator: jls
Sample: BFB
Misc: ALM018474
ALS Vial: 1 **Multiplier:** 1
Integration File: rteint.p
Method: C:\msdchem\1\METHODS\240326.M
Last Update: Wed Mar 27 13:46:33 2024
Spectrum Information:

PassFail	Target Mass	Rel. to Mass	Lower Limit %	Higher Limit %	Raw Abundance	% Relative Abundance
PASS	50	95	8	40	242304	21.7
PASS	75	95	30	66	578901	51.8
PASS	95	95	100	100	1118037	100.0
PASS	96	95	5	9	75616	6.8
PASS	173	174	0.00	2	6315	0.9
PASS	174	95	50	100	683392	61.1
PASS	175	174	4	9	49440	7.2
PASS	176	174	93	101	651648	95.4
PASS	177	176	5	9	42576	6.5

Runs with this BFB:

Lab Sample Number	Date File	Field Sample	Date/Time of Sample/Standard Analysis
BFB	AA6554BFB	NA	5/29/2024 9:16:00 AM
0.2 PPBV STD	AA6556STD05	NA	5/29/2024 12:40:00 PM
2 PPBV STD	AA6557STD04	NA	5/29/2024 1:11:00 PM
10 PPBV STD	AA6558STD03	NA	5/29/2024 1:46:00 PM
20 PPBV STD	AA6559STD02	NA	5/29/2024 2:18:00 PM
40 PPBV STD	AA6560STD01	NA	5/29/2024 2:55:00 PM
10 PPBV ICVSS	AA6561ICVSS	NA	5/29/2024 5:16:00 PM

BFB

Data Path: C:\DATA\2024\06-2024\06-06-2024\
Data File: AA6657BFB.D
Acq On: 6/6/2024 10:04:00AM
Operator: jjw
Sample: BFB
Misc: ALM018474
ALS Vial: 1 **Multiplier:** 1
Integration File: rteint.p
Method: C:\msdchem\1\METHODS\240529.M
Last Update: Wed May 29 15:44:50 2024
Spectrum Information:

PassFail	Target Mass	Rel. to Mass	Lower Limit %	Higher Limit %	Raw Abundance	% Relative Abundance
PASS	50	95	8	40	81912	21.0
PASS	75	95	30	66	199659	51.3
PASS	95	95	100	100	389376	100.0
PASS	96	95	5	9	25237	6.5
PASS	173	174	0.00	2	1363	0.6
PASS	174	95	50	100	233387	59.9
PASS	175	174	4	9	16601	7.1
PASS	176	174	93	101	228309	97.8
PASS	177	176	5	9	15020	6.6

Runs with this BFB:

Lab Sample Number	Date File	Field Sample	Date/Time of Sample/Standard Analysis
BFB	AA6657BFB	NA	6/6/2024 10:04:00 AM
10 PPBV DCVS	AA6658DCVS	NA	6/6/2024 11:39:00 AM
10 PPBV LCS	AA6659LCS	NA	6/6/2024 12:10:00 PM
METHOD BLANK	AA6660BLK	NA	6/6/2024 12:40:00 PM
02 PPBV RLLCS	AA6661RLLCS	NA	6/6/2024 1:14:00 PM
4869	AA6664	NA	6/6/2024 2:48:00 PM
4856	AA6665	NA	6/6/2024 3:20:00 PM
3804	AA6666	NA	6/6/2024 3:51:00 PM
10 PPBV CCCVS	AA6676CCCVS	NA	6/6/2024 9:26:00 PM

BFB

Data Path: C:\DATA\2024\07-2024\07-16-2024\
Data File: AA6898BFB.D
Acq On: 7/16/2024 10:45:00AM
Operator: jjw
Sample: BFB
Misc: ALM018474
ALS Vial: 1 **Multiplier:** 1
Integration File: rteint.p
Method: C:\msdchem\1\METHODS\240529.M
Last Update: Wed May 29 15:44:50 2024
Spectrum Information:

PassFail	Target Mass	Rel. to Mass	Lower Limit %	Higher Limit %	Raw Abundance	% Relative Abundance
PASS	50	95	8	40	154453	24.6
PASS	75	95	30	66	344875	54.9
PASS	95	95	100	100	628075	100.0
PASS	96	95	5	9	41280	6.6
PASS	173	174	0.00	2	3488	0.9
PASS	174	95	50	100	371669	59.2
PASS	175	174	4	9	27419	7.4
PASS	176	174	93	101	355925	95.8
PASS	177	176	5	9	23797	6.7

Runs with this BFB:

Lab Sample Number	Date File	Field Sample	Date/Time of Sample/Standard Analysis
BFB	AA6898BFB	NA	7/16/2024 10:45:00 AM
10 PPBV DCVS	AA6899DCVS	NA	7/16/2024 11:25:00 AM
10 PPBV LCS	AA6900LCS	NA	7/16/2024 12:31:00 PM
METHOD BLANK	AA6901BLK	NA	7/16/2024 1:32:00 PM
E24-02427-01	AA6908	SG-14	7/16/2024 5:50:00 PM
E24-02427-21	AA6909	SG-14	7/16/2024 6:21:00 PM
E24-02427-02	AA6912	SG-15	7/16/2024 7:54:00 PM
E24-02427-03	AA6914	SG-16	7/16/2024 8:57:00 PM
E24-02427-03	AA6915	SG-16	7/16/2024 9:36:00 PM
E24-02427-04	AA6918	SG-17	7/16/2024 11:10:00 PM

BFB

Data Path: C:\DATA\2024\07-2024\07-18-2024\
Data File: AA6921BFB.D
Acq On: 7/18/2024 10:00:00AM
Operator: jjw
Sample: BFB
Misc: ALM018474
ALS Vial: 1 **Multiplier:** 1
Integration File: rteint.p
Method: C:\msdchem\1\METHODS\240529.M
Last Update: Wed May 29 15:44:50 2024
Spectrum Information:

PassFail	Target Mass	Rel. to Mass	Lower Limit %	Higher Limit %	Raw Abundance	% Relative Abundance
PASS	50	95	8	40	155627	24.6
PASS	75	95	30	66	346880	54.9
PASS	95	95	100	100	631573	100.0
PASS	96	95	5	9	41493	6.6
PASS	173	174	0.00	2	3142	0.9
PASS	174	95	50	100	365355	57.8
PASS	175	174	4	9	26947	7.4
PASS	176	174	93	101	354347	97.0
PASS	177	176	5	9	22899	6.5

Runs with this BFB:

Lab Sample Number	Date File	Field Sample	Date/Time of Sample/Standard Analysis
BFB	AA6921BFB	NA	7/18/2024 10:00:00 AM
10 PPBV DCVS	AA6922DCVS	NA	7/18/2024 10:31:00 AM
10 PPBV LCS	AA6923LCS	NA	7/18/2024 11:41:00 AM
METHOD BLANK	AA6924BLK	NA	7/18/2024 1:17:00 PM
E24-02427-02	AA6926	SG-15	7/18/2024 2:41:00 PM
E24-02427-04	AA6927	SG-17	7/18/2024 3:12:00 PM

INTEGRATED ANALYTICAL LABORATORIES, LLC

Method Blank Report

Lab Sample Name:	**METHOD BLANK**	**Data File:**	**AA6542BLK**
Field Sample Name:	**METHOD BLANK**	**Date Analyzed:**	**5/21/2024**
Matrix:	**Air**	**Sample Volume:**	**500ml**
Dilution Factor:	**1**	**GC/MS Column:**	**RTX-1, 0.32 mmID**

Runs with this Method Blank:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6539BFB]	05/21/2024 9:54
10 PPBV DCVS [AA6540DCVS]	05/21/2024 11:12
10 PPBV LCS [AA6541LCS]	05/21/2024 11:47
METHOD BLANK [AA6542BLK]	05/21/2024 12:15
02 PPBV RLLCS [AA6543RLLCS]	05/21/2024 12:50
3052 [AA6544]	05/21/2024 15:02
3100 [AA6545]	05/21/2024 15:33
1571 [AA6546]	05/21/2024 16:03
10 PPBV CCCVS [AA6552CCCVS]	05/21/2024 19:21

Compound	CAS #	Reporting Limit (ppbv)	Concentration (ppbv)
Acetone	67-64-1	0.20	ND
Benzene	71-43-2	0.20	ND
Bromodichloromethane	75-27-4	0.20	ND
Bromoform	75-25-2	0.20	ND
Bromomethane	74-83-9	0.20	ND
1,3-Butadiene	106-99-0	0.20	ND
Chlorobenzene	108-90-7	0.20	ND
Chloroethane	75-00-3	0.20	ND
Chloroform	67-66-3	0.20	ND
Chloromethane	74-87-3	0.20	ND
Carbon disulfide	75-15-0	0.20	ND
Carbon tetrachloride	56-23-5	0.20	ND
Cyclohexane	110-82-7	0.20	ND
Dibromochloromethane	124-48-1	0.20	ND
1,2-Dibromoethane	106-93-4	0.17	ND
1,2-Dichlorobenzene	95-50-1	0.20	ND
1,3-Dichlorobenzene	541-73-1	0.20	ND
1,4-Dichlorobenzene	106-46-7	0.20	ND
Dichlorodifluoromethane	75-71-8	0.20	ND
1,1-Dichloroethane	75-34-3	0.20	ND
1,2-Dichloroethane	107-06-2	0.20	ND
1,1-Dichloroethene	75-35-4	0.20	ND
1,2-Dichloroethene (cis)	156-59-2	0.20	ND
1,2-Dichloroethene (trans)	156-60-5	0.20	ND
1,2-Dichloropropane	78-87-5	0.20	ND
1,3-Dichloropropene (cis)	10061-01-5	0.20	ND
1,3-Dichloropropene (trans)	10061-02-6	0.19	ND
1,2-Dichlorotetrafluoroethane	76-14-2	0.20	ND
1,4-Dioxane	123-91-1	0.20	ND
Ethylbenzene	100-41-4	0.18	ND
n-Heptane	142-82-5	0.20	ND
1,3-Hexachlorobutadiene	87-68-3	0.20	ND
n-Hexane	110-54-3	0.20	ND

Method Blank must be less than the Practical Quantitation Limit (PQL).

INTEGRATED ANALYTICAL LABORATORIES, LLC

Method Blank Report

Lab Sample Name:	**METHOD BLANK**	**Data File:**	**AA6542BLK**
Field Sample Name:	**METHOD BLANK**	**Date Analyzed:**	**5/21/2024**
Matrix:	**Air**	**Sample Volume:**	**500ml**
Dilution Factor:	**1**	**GC/MS Column:**	**RTX-1, 0.32 mmID**

Runs with this Method Blank:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6539BFB]	05/21/2024 9:54
10 PPBV DCVS [AA6540DCVS]	05/21/2024 11:12
10 PPBV LCS [AA6541LCS]	05/21/2024 11:47
METHOD BLANK [AA6542BLK]	05/21/2024 12:15
02 PPBV RLLCS [AA6543RLLCS]	05/21/2024 12:50
3052 [AA6544]	05/21/2024 15:02
3100 [AA6545]	05/21/2024 15:33
1571 [AA6546]	05/21/2024 16:03
10 PPBV CCCVS [AA6552CCCVS]	05/21/2024 19:21

Compound	CAS #	Reporting Limit (ppbv)	Concentration (ppbv)
Methylene chloride	75-09-2	0.20	ND
Methyl ethyl ketone	78-93-3	0.20	ND
Methyl isobutyl ketone	108-10-1	0.20	ND
Methyl tert-butyl ether	1634-04-4	0.20	ND
Styrene	100-42-5	0.20	ND
Tert-butyl alcohol	75-65-0	0.20	ND
1,1,2,2-Tetrachloroethane	79-34-5	0.20	ND
Tetrachloroethene	127-18-4	0.20	ND
Toluene	108-88-3	0.20	ND
1,2,4-Trichlorobenzene	120-82-1	0.20	ND
1,1,1-Trichloroethane	71-55-6	0.17	ND
1,1,2-Trichloroethane	79-00-5	0.20	ND
Trichloroethene	79-01-6	0.17	ND
Trichlorofluoromethane	75-69-4	0.20	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.20	ND
1,2,4-Trimethylbenzene	95-63-6	0.20	ND
1,3,5-Trimethylbenzene	108-67-8	0.20	ND
2,2,4-Trimethylpentane	540-84-1	0.20	ND
Vinyl bromide	593-60-2	0.20	ND
Vinyl chloride	75-01-4	0.20	ND
Xylenes (m&p)	179601-23-1	0.20	ND
Xylenes (o)	95-47-6	0.20	ND

Method Blank must be less than the Practical Quantitation Limit (PQL).

INTEGRATED ANALYTICAL LABORATORIES, LLC

Method Blank Report

Lab Sample Name:	**METHOD BLANK**	**Data File:**	**AA6660BLK**
Field Sample Name:	**METHOD BLANK**	**Date Analyzed:**	**6/6/2024**
Matrix:	**Air**	**Sample Volume:**	**500ml**
Dilution Factor:	**1**	**GC/MS Column:**	**RTX-1, 0.32 mmID**

Runs with this Method Blank:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6657BFB]	06/06/2024 10:04
10 PPBV DCVS [AA6658DCVS]	06/06/2024 11:39
10 PPBV LCS [AA6659LCS]	06/06/2024 12:10
METHOD BLANK [AA6660BLK]	06/06/2024 12:40
02 PPBV RLLCS [AA6661RLLCS]	06/06/2024 13:14
4869 [AA6664]	06/06/2024 14:48
4856 [AA6665]	06/06/2024 15:20
3804 [AA6666]	06/06/2024 15:51
10 PPBV CCCVS [AA6676CCCVS]	06/06/2024 21:26

Compound	CAS #	Reporting Limit (ppbv)	Concentration (ppbv)
Acetone	67-64-1	0.20	ND
Benzene	71-43-2	0.20	ND
Bromodichloromethane	75-27-4	0.20	ND
Bromoform	75-25-2	0.20	ND
Bromomethane	74-83-9	0.20	ND
1,3-Butadiene	106-99-0	0.20	ND
Chlorobenzene	108-90-7	0.20	ND
Chloroethane	75-00-3	0.20	ND
Chloroform	67-66-3	0.20	ND
Chloromethane	74-87-3	0.20	ND
Carbon disulfide	75-15-0	0.20	ND
Carbon tetrachloride	56-23-5	0.20	ND
Cyclohexane	110-82-7	0.20	ND
Dibromochloromethane	124-48-1	0.20	ND
1,2-Dibromoethane	106-93-4	0.17	ND
1,2-Dichlorobenzene	95-50-1	0.20	ND
1,3-Dichlorobenzene	541-73-1	0.20	ND
1,4-Dichlorobenzene	106-46-7	0.20	ND
Dichlorodifluoromethane	75-71-8	0.20	ND
1,1-Dichloroethane	75-34-3	0.20	ND
1,2-Dichloroethane	107-06-2	0.20	ND
1,1-Dichloroethene	75-35-4	0.20	ND
1,2-Dichloroethene (cis)	156-59-2	0.20	ND
1,2-Dichloroethene (trans)	156-60-5	0.20	ND
1,2-Dichloropropane	78-87-5	0.20	ND
1,3-Dichloropropene (cis)	10061-01-5	0.20	ND
1,3-Dichloropropene (trans)	10061-02-6	0.19	ND
1,2-Dichlorotetrafluoroethane	76-14-2	0.20	ND
1,4-Dioxane	123-91-1	0.20	ND
Ethylbenzene	100-41-4	0.18	ND
n-Heptane	142-82-5	0.20	ND
1,3-Hexachlorobutadiene	87-68-3	0.20	ND
n-Hexane	110-54-3	0.20	ND

Method Blank must be less than the Practical Quantitation Limit (PQL).

INTEGRATED ANALYTICAL LABORATORIES, LLC

Method Blank Report

Lab Sample Name:	**METHOD BLANK**	**Data File:**	**AA6660BLK**
Field Sample Name:	**METHOD BLANK**	**Date Analyzed:**	**6/6/2024**
Matrix:	**Air**	**Sample Volume:**	**500ml**
Dilution Factor:	**1**	**GC/MS Column:**	**RTX-1, 0.32 mmID**

Runs with this Method Blank:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6657BFB]	06/06/2024 10:04
10 PPBV DCVS [AA6658DCVS]	06/06/2024 11:39
10 PPBV LCS [AA6659LCS]	06/06/2024 12:10
METHOD BLANK [AA6660BLK]	06/06/2024 12:40
02 PPBV RLLCS [AA6661RLLCS]	06/06/2024 13:14
4869 [AA6664]	06/06/2024 14:48
4856 [AA6665]	06/06/2024 15:20
3804 [AA6666]	06/06/2024 15:51
10 PPBV CCCVS [AA6676CCCVS]	06/06/2024 21:26

Compound	CAS #	Reporting Limit (ppbv)	Concentration (ppbv)
Methylene chloride	75-09-2	0.20	ND
Methyl ethyl ketone	78-93-3	0.20	ND
Methyl isobutyl ketone	108-10-1	0.20	ND
Methyl tert-butyl ether	1634-04-4	0.20	ND
Styrene	100-42-5	0.20	ND
Tert-butyl alcohol	75-65-0	0.20	ND
1,1,2,2-Tetrachloroethane	79-34-5	0.20	ND
Tetrachloroethene	127-18-4	0.20	ND
Toluene	108-88-3	0.20	ND
1,2,4-Trichlorobenzene	120-82-1	0.20	ND
1,1,1-Trichloroethane	71-55-6	0.17	ND
1,1,2-Trichloroethane	79-00-5	0.20	ND
Trichloroethene	79-01-6	0.17	ND
Trichlorofluoromethane	75-69-4	0.20	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.20	ND
1,2,4-Trimethylbenzene	95-63-6	0.20	ND
1,3,5-Trimethylbenzene	108-67-8	0.20	ND
2,2,4-Trimethylpentane	540-84-1	0.20	ND
Vinyl bromide	593-60-2	0.20	ND
Vinyl chloride	75-01-4	0.20	ND
Xylenes (m&p)	179601-23-1	0.20	ND
Xylenes (o)	95-47-6	0.20	ND

Method Blank must be less than the Practical Quantitation Limit (PQL).

INTEGRATED ANALYTICAL LABORATORIES, LLC

Method Blank Report

Lab Sample Name:	**METHOD BLANK**	**Data File:**	**AA6901BLK**
Field Sample Name:	**METHOD BLANK**	**Date Analyzed:**	**7/16/2024**
Matrix:	**Air**	**Sample Volume:**	**500ml**
Dilution Factor:	**1**	**GC/MS Column:**	**RTX-1, 0.32 mmID**

Runs with this Method Blank:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6898BFB]	07/16/2024 10:45
10 PPBV DCVS [AA6899DCVS]	07/16/2024 11:25
10 PPBV LCS [AA6900LCS]	07/16/2024 12:31
METHOD BLANK [AA6901BLK]	07/16/2024 13:32
E24-02427-01 [AA6908]	07/16/2024 17:50
E24-02427-21 [AA6909]	07/16/2024 18:21
E24-02427-02 [AA6912]	07/16/2024 19:54
E24-02427-03 [AA6914]	07/16/2024 20:57
E24-02427-03 [AA6915]	07/16/2024 21:36
E24-02427-04 [AA6918]	07/16/2024 23:10

Compound	CAS #	Reporting Limit (ppbv)	Concentration (ppbv)
Acetone	67-64-1	0.20	ND
Benzene	71-43-2	0.20	ND
Bromodichloromethane	75-27-4	0.20	ND
Bromoform	75-25-2	0.20	ND
Bromomethane	74-83-9	0.20	ND
1,3-Butadiene	106-99-0	0.20	ND
Chlorobenzene	108-90-7	0.20	ND
Chloroethane	75-00-3	0.20	ND
Chloroform	67-66-3	0.20	ND
Chloromethane	74-87-3	0.20	ND
Carbon disulfide	75-15-0	0.20	ND
Carbon tetrachloride	56-23-5	0.20	ND
Cyclohexane	110-82-7	0.20	ND
Dibromochloromethane	124-48-1	0.20	ND
1,2-Dibromoethane	106-93-4	0.17	ND
1,2-Dichlorobenzene	95-50-1	0.20	ND
1,3-Dichlorobenzene	541-73-1	0.20	ND
1,4-Dichlorobenzene	106-46-7	0.20	ND
Dichlorodifluoromethane	75-71-8	0.20	ND
1,1-Dichloroethane	75-34-3	0.20	ND
1,2-Dichloroethane	107-06-2	0.20	ND
1,1-Dichloroethene	75-35-4	0.20	ND
1,2-Dichloroethene (cis)	156-59-2	0.20	ND
1,2-Dichloroethene (trans)	156-60-5	0.20	ND
1,2-Dichloropropane	78-87-5	0.20	ND
1,3-Dichloropropene (cis)	10061-01-5	0.20	ND
1,3-Dichloropropene (trans)	10061-02-6	0.19	ND
1,2-Dichlorotetrafluoroethane	76-14-2	0.20	ND
1,4-Dioxane	123-91-1	0.20	ND
Ethylbenzene	100-41-4	0.18	ND
n-Heptane	142-82-5	0.20	ND
1,3-Hexachlorobutadiene	87-68-3	0.20	ND

Method Blank must be less than the Practical Quantitation Limit (PQL).

INTEGRATED ANALYTICAL LABORATORIES, LLC

Method Blank Report

Lab Sample Name:	**METHOD BLANK**	**Data File:**	**AA6901BLK**
Field Sample Name:	**METHOD BLANK**	**Date Analyzed:**	**7/16/2024**
Matrix:	**Air**	**Sample Volume:**	**500ml**
Dilution Factor:	**1**	**GC/MS Column:**	**RTX-1, 0.32 mmID**

Runs with this Method Blank:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6898BFB]	07/16/2024 10:45
10 PPBV DCVS [AA6899DCVS]	07/16/2024 11:25
10 PPBV LCS [AA6900LCS]	07/16/2024 12:31
METHOD BLANK [AA6901BLK]	07/16/2024 13:32
E24-02427-01 [AA6908]	07/16/2024 17:50
E24-02427-21 [AA6909]	07/16/2024 18:21
E24-02427-02 [AA6912]	07/16/2024 19:54
E24-02427-03 [AA6914]	07/16/2024 20:57
E24-02427-03 [AA6915]	07/16/2024 21:36
E24-02427-04 [AA6918]	07/16/2024 23:10

Compound	CAS #	Reporting Limit (ppbv)	Concentration (ppbv)
n-Hexane	110-54-3	0.20	ND
Methylene chloride	75-09-2	0.20	ND
Methyl ethyl ketone	78-93-3	0.20	ND
Methyl isobutyl ketone	108-10-1	0.20	ND
Methyl tert-butyl ether	1634-04-4	0.20	ND
Styrene	100-42-5	0.20	ND
Tert-butyl alcohol	75-65-0	0.20	ND
1,1,2,2-Tetrachloroethane	79-34-5	0.20	ND
Tetrachloroethene	127-18-4	0.20	ND
Toluene	108-88-3	0.20	ND
1,2,4-Trichlorobenzene	120-82-1	0.20	ND
1,1,1-Trichloroethane	71-55-6	0.17	ND
1,1,2-Trichloroethane	79-00-5	0.20	ND
Trichloroethene	79-01-6	0.17	ND
Trichlorofluoromethane	75-69-4	0.20	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.20	ND
1,2,4-Trimethylbenzene	95-63-6	0.20	ND
1,3,5-Trimethylbenzene	108-67-8	0.20	ND
2,2,4-Trimethylpentane	540-84-1	0.20	ND
Vinyl bromide	593-60-2	0.20	ND
Vinyl chloride	75-01-4	0.20	ND
Xylenes (m&p)	179601-23-1	0.20	ND
Xylenes (o)	95-47-6	0.20	ND

Method Blank must be less than the Practical Quantitation Limit (PQL).

INTEGRATED ANALYTICAL LABORATORIES, LLC

Method Blank Report

Lab Sample Name:	**METHOD BLANK**	**Data File:**	**AA6924BLK**
Field Sample Name:	**METHOD BLANK**	**Date Analyzed:**	**7/18/2024**
Matrix:	**Air**	**Sample Volume:**	**500ml**
Dilution Factor:	**1**	**GC/MS Column:**	**RTX-1, 0.32 mmID**

Runs with this Method Blank:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6921BFB]	07/18/2024 10:00
10 PPBV DCVS [AA6922DCVS]	07/18/2024 10:31
10 PPBV LCS [AA6923LCS]	07/18/2024 11:41
METHOD BLANK [AA6924BLK]	07/18/2024 13:17
E24-02427-02 [AA6926]	07/18/2024 14:41
E24-02427-04 [AA6927]	07/18/2024 15:12

Compound	CAS #	Reporting Limit (ppbv)	Concentration (ppbv)
Acetone	67-64-1	0.20	ND
Benzene	71-43-2	0.20	ND
Bromodichloromethane	75-27-4	0.20	ND
Bromoform	75-25-2	0.20	ND
Bromomethane	74-83-9	0.20	ND
1,3-Butadiene	106-99-0	0.20	ND
Chlorobenzene	108-90-7	0.20	ND
Chloroethane	75-00-3	0.20	ND
Chloroform	67-66-3	0.20	ND
Chloromethane	74-87-3	0.20	ND
Carbon disulfide	75-15-0	0.20	ND
Carbon tetrachloride	56-23-5	0.20	ND
Cyclohexane	110-82-7	0.20	ND
Dibromochloromethane	124-48-1	0.20	ND
1,2-Dibromoethane	106-93-4	0.17	ND
1,2-Dichlorobenzene	95-50-1	0.20	ND
1,3-Dichlorobenzene	541-73-1	0.20	ND
1,4-Dichlorobenzene	106-46-7	0.20	ND
Dichlorodifluoromethane	75-71-8	0.20	ND
1,1-Dichloroethane	75-34-3	0.20	ND
1,2-Dichloroethane	107-06-2	0.20	ND
1,1-Dichloroethene	75-35-4	0.20	ND
1,2-Dichloroethene (cis)	156-59-2	0.20	ND
1,2-Dichloroethene (trans)	156-60-5	0.20	ND
1,2-Dichloropropane	78-87-5	0.20	ND
1,3-Dichloropropene (cis)	10061-01-5	0.20	ND
1,3-Dichloropropene (trans)	10061-02-6	0.19	ND
1,2-Dichlorotetrafluoroethane	76-14-2	0.20	ND
1,4-Dioxane	123-91-1	0.20	ND
Ethylbenzene	100-41-4	0.18	ND
n-Heptane	142-82-5	0.20	ND
1,3-Hexachlorobutadiene	87-68-3	0.20	ND
n-Hexane	110-54-3	0.20	ND
Methylene chloride	75-09-2	0.20	ND
Methyl ethyl ketone	78-93-3	0.20	ND
Methyl isobutyl ketone	108-10-1	0.20	ND

Method Blank must be less than the Practical Quantitation Limit (PQL).

INTEGRATED ANALYTICAL LABORATORIES, LLC

Method Blank Report

Lab Sample Name:	**METHOD BLANK**	**Data File:**	**AA6924BLK**
Field Sample Name:	**METHOD BLANK**	**Date Analyzed:**	**7/18/2024**
Matrix:	**Air**	**Sample Volume:**	**500ml**
Dilution Factor:	**1**	**GC/MS Column:**	**RTX-1, 0.32 mmID**

Runs with this Method Blank:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6921BFB]	07/18/2024 10:00
10 PPBV DCVS [AA6922DCVS]	07/18/2024 10:31
10 PPBV LCS [AA6923LCS]	07/18/2024 11:41
METHOD BLANK [AA6924BLK]	07/18/2024 13:17
E24-02427-02 [AA6926]	07/18/2024 14:41
E24-02427-04 [AA6927]	07/18/2024 15:12

Compound	CAS #	Reporting Limit (ppbv)	Concentration (ppbv)
Methyl tert-butyl ether	1634-04-4	0.20	ND
Styrene	100-42-5	0.20	ND
Tert-butyl alcohol	75-65-0	0.20	ND
1,1,2,2-Tetrachloroethane	79-34-5	0.20	ND
Tetrachloroethene	127-18-4	0.20	ND
Toluene	108-88-3	0.20	ND
1,2,4-Trichlorobenzene	120-82-1	0.20	ND
1,1,1-Trichloroethane	71-55-6	0.17	ND
1,1,2-Trichloroethane	79-00-5	0.20	ND
Trichloroethene	79-01-6	0.17	ND
Trichlorofluoromethane	75-69-4	0.20	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.20	ND
1,2,4-Trimethylbenzene	95-63-6	0.20	ND
1,3,5-Trimethylbenzene	108-67-8	0.20	ND
2,2,4-Trimethylpentane	540-84-1	0.20	ND
Vinyl bromide	593-60-2	0.20	ND
Vinyl chloride	75-01-4	0.20	ND
Xylenes (m&p)	179601-23-1	0.20	ND
Xylenes (o)	95-47-6	0.20	ND

Method Blank must be less than the Practical Quantitation Limit (PQL).

Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA6541LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 5/21/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6539BFB]	05/21/2024 9:54
10 PPBV DCVS [AA6540DCVS]	05/21/2024 11:12
10 PPBV LCS [AA6541LCS]	05/21/2024 11:47
METHOD BLANK [AA6542BLK]	05/21/2024 12:15
02 PPBV RLLCS [AA6543RLLCS]	05/21/2024 12:50
3052 [AA6544]	05/21/2024 15:02
3100 [AA6545]	05/21/2024 15:33
1571 [AA6546]	05/21/2024 16:03
10 PPBV CCCVS [AA6552CCCVS]	05/21/2024 19:21

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
Acetone	67-64-1	11	100
Benzene	71-43-2	11	110
Bromodichloromethane	75-27-4	12	110
Bromoform	75-25-2	12	110
Bromomethane	74-83-9	13	120
1,3-Butadiene	106-99-0	9.4	94
Chlorobenzene	108-90-7	11	110
Chloroethane	75-00-3	12	120
Chloroform	67-66-3	12	120
Chloromethane	74-87-3	13	110
Carbon disulfide	75-15-0	13	120
Carbon tetrachloride	56-23-5	12	120
Cyclohexane	110-82-7	10	100
Dibromochloromethane	124-48-1	12	110
1,2-Dibromoethane	106-93-4	11	100
1,2-Dichlorobenzene	95-50-1	12	110
1,3-Dichlorobenzene	541-73-1	12	110
1,4-Dichlorobenzene	106-46-7	12	110
Dichlorodifluoromethane	75-71-8	12	110
1,1-Dichloroethane	75-34-3	12	110
1,2-Dichloroethane	107-06-2	12	120
1,1-Dichloroethene	75-35-4	12	110
1,2-Dichloroethene (cis)	156-59-2	12	110
1,2-Dichloroethene (trans)	156-60-5	13	120
1,2-Dichloropropane	78-87-5	11	110
1,3-Dichloropropene (cis)	10061-01-5	11	100
1,3-Dichloropropene (trans)	10061-02-6	11	110
1,2-Dichlorotetrafluoroethane	76-14-2	10	91
1,4-Dioxane	123-91-1	12	100
Ethylbenzene	100-41-4	11	110
n-Heptane	142-82-5	9.2	92

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.

*** Values outside of QC limits* Values outside of 70-130% QC limits**

INTEGRATED ANALYTICAL LABORATORIES, LLC

Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA6541LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 5/21/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6539BFB]	05/21/2024 9:54
10 PPBV DCVS [AA6540DCVS]	05/21/2024 11:12
10 PPBV LCS [AA6541LCS]	05/21/2024 11:47
METHOD BLANK [AA6542BLK]	05/21/2024 12:15
02 PPBV RLLCS [AA6543RLLCS]	05/21/2024 12:50
3052 [AA6544]	05/21/2024 15:02
3100 [AA6545]	05/21/2024 15:33
1571 [AA6546]	05/21/2024 16:03
10 PPBV CCCVS [AA6552CCCVS]	05/21/2024 19:21

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
1,3-Hexachlorobutadiene	87-68-3	13	110
n-Hexane	110-54-3	10	100
Methylene chloride	75-09-2	12	110
Methyl ethyl ketone	78-93-3	10	85
Methyl isobutyl ketone	108-10-1	8.7	79
Methyl tert-butyl ether	1634-04-4	11	100
Styrene	100-42-5	12	110
Tert-butyl alcohol	75-65-0	11	93
1,1,2,2-Tetrachloroethane	79-34-5	11	100
Tetrachloroethene	127-18-4	12	120
Toluene	108-88-3	10	100
1,2,4-Trichlorobenzene	120-82-1	12	110
1,1,1-Trichloroethane	71-55-6	11	110
1,1,2-Trichloroethane	79-00-5	11	100
Trichloroethene	79-01-6	11	110
Trichlorofluoromethane	75-69-4	12	110
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	11	110
1,2,4-Trimethylbenzene	95-63-6	11	100
1,3,5-Trimethylbenzene	108-67-8	11	100
2,2,4-Trimethylpentane	540-84-1	10	100
Vinyl bromide	593-60-2	13	130
Vinyl chloride	75-01-4	12	120
Xylenes (m&p)	179601-23-1	22	110
Xylenes (o)	95-47-6	10	100

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.

*** Values outside of QC limits* Values outside of 70-130% QC limits**

INTEGRATED ANALYTICAL LABORATORIES, LLC

Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA6659LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 6/6/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6657BFB]	06/06/2024 10:04
10 PPBV DCVS [AA6658DCVS]	06/06/2024 11:39
10 PPBV LCS [AA6659LCS]	06/06/2024 12:10
METHOD BLANK [AA6660BLK]	06/06/2024 12:40
02 PPBV RLLCS [AA6661RLLCS]	06/06/2024 13:14
4869 [AA6664]	06/06/2024 14:48
4856 [AA6665]	06/06/2024 15:20
3804 [AA6666]	06/06/2024 15:51
10 PPBV CCCVS [AA6676CCCVS]	06/06/2024 21:26

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
Acetone	67-64-1	11	100
Benzene	71-43-2	11	110
Bromodichloromethane	75-27-4	12	110
Bromoform	75-25-2	11	100
Bromomethane	74-83-9	12	110
1,3-Butadiene	106-99-0	11	110
Chlorobenzene	108-90-7	11	110
Chloroethane	75-00-3	12	120
Chloroform	67-66-3	12	120
Chloromethane	74-87-3	14	120
Carbon disulfide	75-15-0	12	110
Carbon tetrachloride	56-23-5	12	120
Cyclohexane	110-82-7	11	110
Dibromochloromethane	124-48-1	13	120
1,2-Dibromoethane	106-93-4	12	110
1,2-Dichlorobenzene	95-50-1	10	91
1,3-Dichlorobenzene	541-73-1	11	100
1,4-Dichlorobenzene	106-46-7	11	100
Dichlorodifluoromethane	75-71-8	12	110
1,1-Dichloroethane	75-34-3	11	100
1,2-Dichloroethane	107-06-2	12	120
1,1-Dichloroethene	75-35-4	12	110
1,2-Dichloroethene (cis)	156-59-2	12	110
1,2-Dichloroethene (trans)	156-60-5	12	110
1,2-Dichloropropane	78-87-5	11	110
1,3-Dichloropropene (cis)	10061-01-5	11	100
1,3-Dichloropropene (trans)	10061-02-6	12	120
1,2-Dichlorotetrafluoroethane	76-14-2	10	91
1,4-Dioxane	123-91-1	12	100
Ethylbenzene	100-41-4	10	100
n-Heptane	142-82-5	11	110

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.

*** Values outside of QC limits* Values outside of 70-130% QC limits**

Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA6659LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 6/6/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6657BFB]	06/06/2024 10:04
10 PPBV DCVS [AA6658DCVS]	06/06/2024 11:39
10 PPBV LCS [AA6659LCS]	06/06/2024 12:10
METHOD BLANK [AA6660BLK]	06/06/2024 12:40
02 PPBV RLLCS [AA6661RLLCS]	06/06/2024 13:14
4869 [AA6664]	06/06/2024 14:48
4856 [AA6665]	06/06/2024 15:20
3804 [AA6666]	06/06/2024 15:51
10 PPBV CCCVS [AA6676CCCVS]	06/06/2024 21:26

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
1,3-Hexachlorobutadiene	87-68-3	11	96
n-Hexane	110-54-3	11	110
Methylene chloride	75-09-2	12	110
Methyl ethyl ketone	78-93-3	11	93
Methyl isobutyl ketone	108-10-1	11	100
Methyl tert-butyl ether	1634-04-4	11	100
Styrene	100-42-5	11	100
Tert-butyl alcohol	75-65-0	12	100
1,1,2,2-Tetrachloroethane	79-34-5	11	100
Tetrachloroethene	127-18-4	12	120
Toluene	108-88-3	11	110
1,2,4-Trichlorobenzene	120-82-1	11	96
1,1,1-Trichloroethane	71-55-6	11	110
1,1,2-Trichloroethane	79-00-5	12	110
Trichloroethene	79-01-6	11	110
Trichlorofluoromethane	75-69-4	12	110
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	11	110
1,2,4-Trimethylbenzene	95-63-6	11	100
1,3,5-Trimethylbenzene	108-67-8	10	91
2,2,4-Trimethylpentane	540-84-1	11	110
Vinyl bromide	593-60-2	12	120
Vinyl chloride	75-01-4	12	120
Xylenes (m&p)	179601-23-1	21	110
Xylenes (o)	95-47-6	10	100

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.

*** Values outside of QC limits* Values outside of 70-130% QC limits**

Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA6900LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 7/16/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6898BFB]	07/16/2024 10:45
10 PPBV DCVS [AA6899DCVS]	07/16/2024 11:25
10 PPBV LCS [AA6900LCS]	07/16/2024 12:31
METHOD BLANK [AA6901BLK]	07/16/2024 13:32
E24-02427-01 [AA6908]	07/16/2024 17:50
E24-02427-21 [AA6909]	07/16/2024 18:21
E24-02427-02 [AA6912]	07/16/2024 19:54
E24-02427-03 [AA6914]	07/16/2024 20:57
E24-02427-03 [AA6915]	07/16/2024 21:36
E24-02427-04 [AA6918]	07/16/2024 23:10

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
Acetone	67-64-1	14	130
Benzene	71-43-2	11	110
Bromodichloromethane	75-27-4	12	110
Bromoform	75-25-2	10	91
Bromomethane	74-83-9	12	110
1,3-Butadiene	106-99-0	13	130
Chlorobenzene	108-90-7	10	100
Chloroethane	75-00-3	13	130
Chloroform	67-66-3	11	110
Chloromethane	74-87-3	14	120
Carbon disulfide	75-15-0	12	110
Carbon tetrachloride	56-23-5	11	110
Cyclohexane	110-82-7	13	130
Dibromochloromethane	124-48-1	10	91
1,2-Dibromoethane	106-93-4	10	91
1,2-Dichlorobenzene	95-50-1	8.6	78
1,3-Dichlorobenzene	541-73-1	8.6	78
1,4-Dichlorobenzene	106-46-7	8.5	77
Dichlorodifluoromethane	75-71-8	12	110
1,1-Dichloroethane	75-34-3	12	110
1,2-Dichloroethane	107-06-2	12	120
1,1-Dichloroethene	75-35-4	12	110
1,2-Dichloroethene (cis)	156-59-2	13	120
1,2-Dichloroethene (trans)	156-60-5	13	120
1,2-Dichloropropane	78-87-5	12	120
1,3-Dichloropropene (cis)	10061-01-5	11	100
1,3-Dichloropropene (trans)	10061-02-6	12	120
1,2-Dichlorotetrafluoroethane	76-14-2	10	91
1,4-Dioxane	123-91-1	12	100
Ethylbenzene	100-41-4	10	100

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.

*** Values outside of QC limits* Values outside of 70-130% QC limits**

INTEGRATED ANALYTICAL LABORATORIES, LLC

Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA6900LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 7/16/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6898BFB]	07/16/2024 10:45
10 PPBV DCVS [AA6899DCVS]	07/16/2024 11:25
10 PPBV LCS [AA6900LCS]	07/16/2024 12:31
METHOD BLANK [AA6901BLK]	07/16/2024 13:32
E24-02427-01 [AA6908]	07/16/2024 17:50
E24-02427-21 [AA6909]	07/16/2024 18:21
E24-02427-02 [AA6912]	07/16/2024 19:54
E24-02427-03 [AA6914]	07/16/2024 20:57
E24-02427-03 [AA6915]	07/16/2024 21:36
E24-02427-04 [AA6918]	07/16/2024 23:10

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
n-Heptane	142-82-5	14	130
1,3-Hexachlorobutadiene	87-68-3	8.2	72
n-Hexane	110-54-3	13	130
Methylene chloride	75-09-2	14	130
Methyl ethyl ketone	78-93-3	14	120
Methyl isobutyl ketone	108-10-1	14	130
Methyl tert-butyl ether	1634-04-4	12	110
Styrene	100-42-5	10	91
Tert-butyl alcohol	75-65-0	13	110
1,1,2,2-Tetrachloroethane	79-34-5	11	100
Tetrachloroethene	127-18-4	9.4	94
Toluene	108-88-3	10	100
1,2,4-Trichlorobenzene	120-82-1	8.2	72
1,1,1-Trichloroethane	71-55-6	11	110
1,1,2-Trichloroethane	79-00-5	9.9	90
Trichloroethene	79-01-6	9.0	90
Trichlorofluoromethane	75-69-4	12	110
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	10	100
1,2,4-Trimethylbenzene	95-63-6	9.2	84
1,3,5-Trimethylbenzene	108-67-8	9.4	85
2,2,4-Trimethylpentane	540-84-1	13	130
Vinyl bromide	593-60-2	11	110
Vinyl chloride	75-01-4	14	130
Xylenes (m&p)	179601-23-1	20	100
Xylenes (o)	95-47-6	9.8	98

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.

*** Values outside of QC limits* Values outside of 70-130% QC limits**

INTEGRATED ANALYTICAL LABORATORIES, LLC

Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA6923LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 7/18/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6921BFB]	07/18/2024 10:00
10 PPBV DCVS [AA6922DCVS]	07/18/2024 10:31
10 PPBV LCS [AA6923LCS]	07/18/2024 11:41
METHOD BLANK [AA6924BLK]	07/18/2024 13:17
E24-02427-02 [AA6926]	07/18/2024 14:41
E24-02427-04 [AA6927]	07/18/2024 15:12

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
Acetone	67-64-1	13	120
Benzene	71-43-2	13	130
Bromodichloromethane	75-27-4	13	120
Bromoform	75-25-2	11	100
Bromomethane	74-83-9	11	100
1,3-Butadiene	106-99-0	11	110
Chlorobenzene	108-90-7	10	100
Chloroethane	75-00-3	12	120
Chloroform	67-66-3	13	130
Chloromethane	74-87-3	13	110
Carbon disulfide	75-15-0	12	110
Carbon tetrachloride	56-23-5	12	120
Cyclohexane	110-82-7	14	130
Dibromochloromethane	124-48-1	13	120
1,2-Dibromoethane	106-93-4	13	120
1,2-Dichlorobenzene	95-50-1	9.2	84
1,3-Dichlorobenzene	541-73-1	9.5	86
1,4-Dichlorobenzene	106-46-7	9.5	86
Dichlorodifluoromethane	75-71-8	12	110
1,1-Dichloroethane	75-34-3	14	130
1,2-Dichloroethane	107-06-2	12	120
1,1-Dichloroethene	75-35-4	13	120
1,2-Dichloroethene (cis)	156-59-2	13	120
1,2-Dichloroethene (trans)	156-60-5	13	120
1,2-Dichloropropane	78-87-5	13	130
1,3-Dichloropropene (cis)	10061-01-5	13	120
1,3-Dichloropropene (trans)	10061-02-6	13	130
1,2-Dichlorotetrafluoroethane	76-14-2	10	91
1,4-Dioxane	123-91-1	13	110
Ethylbenzene	100-41-4	11	110
n-Heptane	142-82-5	12	120
1,3-Hexachlorobutadiene	87-68-3	7.9	69
n-Hexane	110-54-3	11	110
Methylene chloride	75-09-2	13	120

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.

*** Values outside of QC limits* Values outside of 70-130% QC limits**

INTEGRATED ANALYTICAL LABORATORIES, LLC

Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA6923LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 7/18/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6921BFB]	07/18/2024 10:00
10 PPBV DCVS [AA6922DCVS]	07/18/2024 10:31
10 PPBV LCS [AA6923LCS]	07/18/2024 11:41
METHOD BLANK [AA6924BLK]	07/18/2024 13:17
E24-02427-02 [AA6926]	07/18/2024 14:41
E24-02427-04 [AA6927]	07/18/2024 15:12

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
Methyl ethyl ketone	78-93-3	14	120
Methyl isobutyl ketone	108-10-1	10	91
Methyl tert-butyl ether	1634-04-4	13	120
Styrene	100-42-5	12	110
Tert-butyl alcohol	75-65-0	14	120
1,1,2,2-Tetrachloroethane	79-34-5	11	100
Tetrachloroethene	127-18-4	11	110
Toluene	108-88-3	12	120
1,2,4-Trichlorobenzene	120-82-1	8.5	75
1,1,1-Trichloroethane	71-55-6	12	120
1,1,2-Trichloroethane	79-00-5	12	110
Trichloroethene	79-01-6	9.1	91
Trichlorofluoromethane	75-69-4	13	120
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	11	110
1,2,4-Trimethylbenzene	95-63-6	10	91
1,3,5-Trimethylbenzene	108-67-8	10.0	91
2,2,4-Trimethylpentane	540-84-1	11	110
Vinyl bromide	593-60-2	10	100
Vinyl chloride	75-01-4	13	130
Xylenes (m&p)	179601-23-1	22	110
Xylenes (o)	95-47-6	10	100

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.

*** Values outside of QC limits* Values outside of 70-130% QC limits**

Analysis: Volatile Organic Compounds by EPA Method TO-15
Laboratory Sample Duplicate Report

SDG Number: E24-01699
IAL Sample ID: E24-01699-03
Matrix: Air
Summa ID: 2900

Date Received: 5/14/24
Date Analyzed: 5/21/24,5/21/24
Lab Data File#: AA6549,AA6550
Dilution Factor: 1
Injection Volume: 500ml
GC/MS Column: RTX-1, 0.32 mmID

Compound	CAS #	Sample E24-01699-03 Concentration Reported ppbv	Q	Sample Dup E24-01699-23 Concentration Reported ppbv	Q	Reporting Limits ppbv	RPD
Acetone	67-64-1	**21**		**20**		0.20	**4.88%**
Allyl Chloride	107-05-1	0.20	U	0.20	U	0.20	0.00%
Benzene	71-43-2	**0.20**		0.20	U	0.20	**NC**
Bromodichloromethane	75-27-4	0.20	U	0.20	U	0.20	0.00%
Bromoform	75-25-2	0.20	U	0.20	U	0.20	0.00%
Bromomethane	74-83-9	0.20	U	0.20	U	0.20	0.00%
1,3-Butadiene	106-99-0	0.20	U	0.20	U	0.20	0.00%
Chlorobenzene	108-90-7	0.20	U	0.20	U	0.20	0.00%
Chloroethane	75-00-3	0.20	U	0.20	U	0.20	0.00%
Chloroform	67-66-3	0.20	U	0.20	U	0.20	0.00%
Chloromethane	74-87-3	0.20	U	0.20	U	0.20	0.00%
Carbon disulfide	75-15-0	0.20	U	0.20	U	0.20	0.00%
Carbon tetrachloride	56-23-5	0.20	U	0.20	U	0.20	0.00%
2-Chlorotoluene	95-49-8	0.20	U	0.20	U	0.20	0.00%
Cyclohexane	110-82-7	0.20	U	0.20	U	0.20	0.00%
Dibromochloromethane	124-48-1	0.20	U	0.20	U	0.20	0.00%
1,2-Dibromoethane	106-93-4	0.20	U	0.20	U	0.20	0.00%
1,2-Dichlorobenzene	95-50-1	0.20	U	0.20	U	0.20	0.00%
1,3-Dichlorobenzene	541-73-1	0.20	U	0.20	U	0.20	0.00%
1,4-Dichlorobenzene	106-46-7	0.20	U	0.20	U	0.20	0.00%
Dichlorodifluoromethane	75-71-8	0.20	U	0.20	U	0.20	0.00%
1,1-Dichloroethane	75-34-3	0.20	U	0.20	U	0.20	0.00%
1,2-Dichloroethane	107-06-2	0.20	U	0.20	U	0.20	0.00%
1,1-Dichloroethene	75-35-4	0.20	U	0.20	U	0.20	0.00%
1,2-Dichloroethene (cis)	156-59-2	0.20	U	0.20	U	0.20	0.00%
1,2-Dichloroethene (trans)	156-60-5	0.20	U	0.20	U	0.20	0.00%
1,2-Dichloropropane	78-87-5	0.20	U	0.20	U	0.20	0.00%
1,3-Dichloropropene (cis)	10061-01-5	0.20	U	0.20	U	0.20	0.00%
1,3-Dichloropropene (trans)	10061-02-6	0.20	U	0.20	U	0.20	0.00%
1,2-Dichlorotetrafluoroethane	76-14-2	0.20	U	0.20	U	0.20	0.00%
1,4-Dioxane	123-91-1	0.20	U	0.20	U	0.20	0.00%
Ethanol	64-17-5	0.20	U	0.20	U	0.20	0.00%
Ethylbenzene	100-41-4	0.20	U	0.20	U	0.20	0.00%
4-Ethyltoluene	622-96-8	0.20	U	0.20	U	0.20	0.00%
n-Heptane	142-82-5	0.20	U	0.20	U	0.20	0.00%
1,3-Hexachlorobutadiene	87-68-3	0.20	U	0.20	U	0.20	0.00%
n-Hexane	110-54-3	**0.24**		**0.21**		0.20	**13.33%**
Isopropanol	67-63-0	0.20	U	**0.51**		0.20	**NC**

Qualifiers:
E=Concentration exceeds upper level of calibration range for instrument.
D=Extra dilution required for this compound. X=Duplicate samples do not met RPD criteria.
U=Compound ND or under reporting limit.

Analysis: Volatile Organic Compounds by EPA Method TO-15
Laboratory Sample Duplicate Report

SDG Number: E24-01699
IAL Sample ID: E24-01699-03
Matrix: Air
Summa ID: 2900

Date Received: 5/14/24
Date Analyzed: 5/21/24,5/21/24
Lab Data File#: AA6549,AA6550
Dilution Factor: 1
Injection Volume: 500ml
GC/MS Column: RTX-1, 0.32 mmID

Compound	CAS #	Sample E24-01699-03 Concentration Reported ppbv	Q	Sample Dup E24-01699-23 Concentration Reported ppbv	Q	Reporting Limits ppbv	RPD
Methylene chloride	75-09-2	0.20	U	0.20	U	0.20	0.00%
Methyl ethyl ketone	78-93-3	**0.32**		**0.29**		0.20	**9.84%**
Methyl isobutyl ketone	108-10-1	0.20	U	0.20	U	0.20	0.00%
Methyl methacrylate	80-62-6	0.20	U	0.20	U	0.20	0.00%
Methyl tert-butyl ether	1634-04-4	0.20	U	0.20	U	0.20	0.00%
Styrene	100-42-5	0.20	U	0.20	U	0.20	0.00%
Tert-butyl alcohol	75-65-0	0.20	U	0.20	U	0.20	0.00%
1,1,2,2-Tetrachloroethane	79-34-5	0.20	U	0.20	U	0.20	0.00%
Tetrachloroethene	127-18-4	0.20	U	0.20	U	0.20	0.00%
Tetrahydrofuran	109-99-9	0.20	U	0.20	U	0.20	0.00%
Toluene	108-88-3	**0.42**		**0.38**		0.20	**10.00%**
1,2,4-Trichlorobenzene	120-82-1	0.20	U	0.20	U	0.20	0.00%
1,1,1-Trichloroethane	71-55-6	0.20	U	0.20	U	0.20	0.00%
1,1,2-Trichloroethane	79-00-5	0.20	U	0.20	U	0.20	0.00%
Trichloroethene	79-01-6	0.20	U	0.20	U	0.20	0.00%
Trichlorofluoromethane	75-69-4	**0.35**		**0.35**		0.20	**0.00%**
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.20	U	0.20	U	0.20	0.00%
1,2,4-Trimethylbenzene	95-63-6	0.20	U	0.20	U	0.20	0.00%
1,3,5-Trimethylbenzene	108-67-8	0.20	U	0.20	U	0.20	0.00%
2,2,4-Trimethylpentane	540-84-1	0.20	U	0.20	U	0.20	0.00%
Vinyl bromide	593-60-2	0.20	U	0.20	U	0.20	0.00%
Vinyl chloride	75-01-4	0.20	U	0.20	U	0.20	0.00%
Xylenes (m&p)	179601-23-1	0.40	U	0.40	U	0.40	0.00%
Xylenes (o)	95-47-6	0.20	U	0.20	U	0.20	0.00%

RPD must be <25% for all laboratory duplicate samples. Laboratory duplicate samples are run once daily.
NC = The RPD could not be calculated since the compound was only detected in either the parent or duplicate sample.

Qualifiers:
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Analysis: Volatile Organic Compounds by EPA Method TO-15
Laboratory Sample Duplicate Report

SDG Number: E24-01876
IAL Sample ID: E24-01876-04
Matrix: Air
Summa ID: 3287

Date Received: 5/31/24
Date Analyzed: 6/6/24,6/6/24
Lab Data File#: AA6669,AA6670
Dilution Factor: 1
Injection Volume: 500ml
GC/MS Column: RTX-1, 0.32 mmID

Compound	CAS #	Sample E24-01876-04 Concentration Reported ppbv	Q	Sample Dup E24-01876-24 Concentration Reported ppbv	Q	Reporting Limits ppbv	RPD
Acetone	67-64-1	**1.8**		**2.0**		0.20	**-10.53%**
Allyl Chloride	107-05-1	0.20	U	0.20	U	0.20	0.00%
Benzene	71-43-2	0.20	U	0.20	U	0.20	0.00%
Bromodichloromethane	75-27-4	0.20	U	0.20	U	0.20	0.00%
Bromoform	75-25-2	0.20	U	0.20	U	0.20	0.00%
Bromomethane	74-83-9	0.20	U	0.20	U	0.20	0.00%
1,3-Butadiene	106-99-0	0.20	U	0.20	U	0.20	0.00%
Chlorobenzene	108-90-7	0.20	U	0.20	U	0.20	0.00%
Chloroethane	75-00-3	0.20	U	0.20	U	0.20	0.00%
Chloroform	67-66-3	0.20	U	0.20	U	0.20	0.00%
Chloromethane	74-87-3	0.20	U	0.20	U	0.20	0.00%
Carbon disulfide	75-15-0	0.20	U	0.20	U	0.20	0.00%
Carbon tetrachloride	56-23-5	0.20	U	0.20	U	0.20	0.00%
2-Chlorotoluene	95-49-8	0.20	U	0.20	U	0.20	0.00%
Cyclohexane	110-82-7	0.20	U	0.20	U	0.20	0.00%
Dibromochloromethane	124-48-1	0.20	U	0.20	U	0.20	0.00%
1,2-Dibromoethane	106-93-4	0.20	U	0.20	U	0.20	0.00%
1,2-Dichlorobenzene	95-50-1	0.20	U	0.20	U	0.20	0.00%
1,3-Dichlorobenzene	541-73-1	0.20	U	0.20	U	0.20	0.00%
1,4-Dichlorobenzene	106-46-7	0.20	U	0.20	U	0.20	0.00%
Dichlorodifluoromethane	75-71-8	0.20	U	0.20	U	0.20	0.00%
1,1-Dichloroethane	75-34-3	0.20	U	0.20	U	0.20	0.00%
1,2-Dichloroethane	107-06-2	0.20	U	0.20	U	0.20	0.00%
1,1-Dichloroethene	75-35-4	0.20	U	0.20	U	0.20	0.00%
1,2-Dichloroethene (cis)	156-59-2	0.20	U	0.20	U	0.20	0.00%
1,2-Dichloroethene (trans)	156-60-5	0.20	U	0.20	U	0.20	0.00%
1,2-Dichloropropane	78-87-5	0.20	U	0.20	U	0.20	0.00%
1,3-Dichloropropene (cis)	10061-01-5	0.20	U	0.20	U	0.20	0.00%
1,3-Dichloropropene (trans)	10061-02-6	0.20	U	0.20	U	0.20	0.00%
1,2-Dichlorotetrafluoroethane	76-14-2	0.20	U	0.20	U	0.20	0.00%
1,4-Dioxane	123-91-1	0.20	U	0.20	U	0.20	0.00%
Ethanol	64-17-5	0.20	U	0.20	U	0.20	0.00%
Ethylbenzene	100-41-4	0.20	U	0.20	U	0.20	0.00%
4-Ethyltoluene	622-96-8	0.20	U	0.20	U	0.20	0.00%
n-Heptane	142-82-5	0.20	U	0.20	U	0.20	0.00%
1,3-Hexachlorobutadiene	87-68-3	0.20	U	0.20	U	0.20	0.00%
n-Hexane	110-54-3	0.20	U	0.20	U	0.20	0.00%
Isopropanol	67-63-0	**0.25**		**0.25**		0.20	**0.00%**

Qualifiers:
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D=Extra dilution required for this compound. X=Duplicate samples do not met RPD criteria.
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Analysis: Volatile Organic Compounds by EPA Method TO-15
Laboratory Sample Duplicate Report

SDG Number: E24-01876
IAL Sample ID: E24-01876-04
Matrix: Air
Summa ID: 3287

Date Received: 5/31/24
Date Analyzed: 6/6/24,6/6/24
Lab Data File#: AA6669,AA6670
Dilution Factor: 1
Injection Volume: 500ml
GC/MS Column: RTX-1, 0.32 mmID

Compound	CAS #	Sample E24-01876-04 Concentration Reported ppbv	Q	Sample Dup E24-01876-24 Concentration Reported ppbv	Q	Reporting Limits ppbv	RPD
Methylene chloride	75-09-2	**1.8**	X	**5.9**	X	0.20	**-106.49%**
Methyl ethyl ketone	78-93-3	0.20	U	0.20	U	0.20	0.00%
Methyl isobutyl ketone	108-10-1	0.20	U	0.20	U	0.20	0.00%
Methyl methacrylate	80-62-6	0.20	U	0.20	U	0.20	0.00%
Methyl tert-butyl ether	1634-04-4	0.20	U	0.20	U	0.20	0.00%
Styrene	100-42-5	0.20	U	0.20	U	0.20	0.00%
Tert-butyl alcohol	75-65-0	0.20	U	0.20	U	0.20	0.00%
1,1,2,2-Tetrachloroethane	79-34-5	0.20	U	0.20	U	0.20	0.00%
Tetrachloroethene	127-18-4	0.20	U	0.20	U	0.20	0.00%
Tetrahydrofuran	109-99-9	0.20	U	0.20	U	0.20	0.00%
Toluene	108-88-3	0.20	U	0.20	U	0.20	0.00%
1,2,4-Trichlorobenzene	120-82-1	0.20	U	0.20	U	0.20	0.00%
1,1,1-Trichloroethane	71-55-6	0.20	U	0.20	U	0.20	0.00%
1,1,2-Trichloroethane	79-00-5	0.20	U	0.20	U	0.20	0.00%
Trichloroethene	79-01-6	0.20	U	0.20	U	0.20	0.00%
Trichlorofluoromethane	75-69-4	**0.20**		**0.22**		0.20	**-9.52%**
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.20	U	0.20	U	0.20	0.00%
1,2,4-Trimethylbenzene	95-63-6	0.20	U	0.20	U	0.20	0.00%
1,3,5-Trimethylbenzene	108-67-8	0.20	U	0.20	U	0.20	0.00%
2,2,4-Trimethylpentane	540-84-1	0.20	U	0.20	U	0.20	0.00%
Vinyl bromide	593-60-2	0.20	U	0.20	U	0.20	0.00%
Vinyl chloride	75-01-4	0.20	U	0.20	U	0.20	0.00%
Xylenes (m&p)	179601-23-1	0.40	U	0.40	U	0.40	0.00%
Xylenes (o)	95-47-6	0.20	U	0.20	U	0.20	0.00%

RPD must be <25% for all laboratory duplicate samples. Laboratory duplicate samples are run once daily.
NC = The RPD could not be calculated since the compound was only detected in either the parent or duplicate sample.

Qualifiers:
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Analysis: Volatile Organic Compounds by EPA Method TO-15
Laboratory Sample Duplicate Report

		Date Received:	7/16/24
SDG Number:	E24-02427	Date Analyzed:	7/16/24,7/16/24
IAL Sample ID:	E24-02427-01	Lab Data File#:	AA6908,AA6909
Matrix:	Air	Dilution Factor:	1
Summa ID:	5073	Injection Volume:	500ml
		GC/MS Column:	RTX-1, 0.32 mmID

		Sample		Sample Dup			
		E24-02427-01		**E24-02427-21**			
		Concentration		**Concentration**		**Reporting**	
		Reported		**Reported**		**Limits**	
Compound	**CAS #**	**ppbv**	**Q**	**ppbv**	**Q**	**ppbv**	**RPD**
Acetone	67-64-1	**14**		**14**		0.20	**0.00%**
Benzene	71-43-2	**0.33**		**0.30**		0.20	**9.52%**
Bromodichloromethane	75-27-4	0.20	U	0.20	U	0.20	0.00%
Bromoform	75-25-2	0.20	U	0.20	U	0.20	0.00%
Bromomethane	74-83-9	0.20	U	0.20	U	0.20	0.00%
1,3-Butadiene	106-99-0	0.20	U	0.20	U	0.20	0.00%
Chlorobenzene	108-90-7	0.20	U	0.20	U	0.20	0.00%
Chloroethane	75-00-3	0.20	U	0.20	U	0.20	0.00%
Chloroform	67-66-3	**0.44**		**0.42**		0.20	**4.65%**
Chloromethane	74-87-3	0.20	U	0.20	U	0.20	0.00%
Carbon disulfide	75-15-0	**0.26**		**0.27**		0.20	**-3.77%**
Carbon tetrachloride	56-23-5	0.040	U	0.040	U	0.040	0.00%
Cyclohexane	110-82-7	0.20	U	0.20	U	0.20	0.00%
Dibromochloromethane	124-48-1	0.20	U	0.20	U	0.20	0.00%
1,2-Dibromoethane	106-93-4	0.20	U	0.20	U	0.20	0.00%
1,2-Dichlorobenzene	95-50-1	0.20	U	0.20	U	0.20	0.00%
1,3-Dichlorobenzene	541-73-1	0.20	U	0.20	U	0.20	0.00%
1,4-Dichlorobenzene	106-46-7	0.20	U	0.20	U	0.20	0.00%
Dichlorodifluoromethane	75-71-8	0.20	U	0.20	U	0.20	0.00%
1,1-Dichloroethane	75-34-3	0.20	U	0.20	U	0.20	0.00%
1,2-Dichloroethane	107-06-2	0.20	U	0.20	U	0.20	0.00%
1,1-Dichloroethene	75-35-4	0.20	U	0.20	U	0.20	0.00%
1,2-Dichloroethene (cis)	156-59-2	0.20	U	0.20	U	0.20	0.00%
1,2-Dichloroethene (trans)	156-60-5	0.20	U	0.20	U	0.20	0.00%
1,2-Dichloropropane	78-87-5	0.20	U	0.20	U	0.20	0.00%
1,3-Dichloropropene (cis)	10061-01-5	0.20	U	0.20	U	0.20	0.00%
1,3-Dichloropropene (trans)	10061-02-6	0.20	U	0.20	U	0.20	0.00%
1,2-Dichlorotetrafluoroethane	76-14-2	0.20	U	0.20	U	0.20	0.00%
1,4-Dioxane	123-91-1	0.20	U	0.20	U	0.20	0.00%
Ethylbenzene	100-41-4	0.20	U	0.20	U	0.20	0.00%
n-Heptane	142-82-5	**0.22**		**0.20**		0.20	**9.52%**
1,3-Hexachlorobutadiene	87-68-3	0.20	U	0.20	U	0.20	0.00%
n-Hexane	110-54-3	**0.30**		**0.28**		0.20	**6.90%**
Methylene chloride	75-09-2	0.20	U	0.20	U	0.20	0.00%
Methyl ethyl ketone	78-93-3	**0.91**		**0.82**		0.20	**10.40%**
Methyl isobutyl ketone	108-10-1	0.20	U	0.20	U	0.20	0.00%
Methyl tert-butyl ether	1634-04-4	0.20	U	0.20	U	0.20	0.00%
Styrene	100-42-5	0.20	U	0.20	U	0.20	0.00%

Qualifiers:
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Analysis: Volatile Organic Compounds by EPA Method TO-15
Laboratory Sample Duplicate Report

SDG Number: E24-02427
IAL Sample ID: E24-02427-01
Matrix: Air
Summa ID: 5073

Date Received: 7/16/24
Date Analyzed: 7/16/24,7/16/24
Lab Data File#: AA6908,AA6909
Dilution Factor: 1
Injection Volume: 500ml
GC/MS Column: RTX-1, 0.32 mmID

Compound	CAS #	Sample E24-02427-01 Concentration Reported ppbv	Q	Sample Dup E24-02427-21 Concentration Reported ppbv	Q	Reporting Limits ppbv	RPD
Tert-butyl alcohol	75-65-0	**0.55**		**0.51**		0.20	**7.55%**
1,1,2,2-Tetrachloroethane	79-34-5	0.20	U	0.20	U	0.20	0.00%
Tetrachloroethene	127-18-4	**2.2**		**2.2**		0.20	**0.00%**
Toluene	108-88-3	**2.6**		**2.6**		0.20	**0.00%**
1,2,4-Trichlorobenzene	120-82-1	0.20	U	0.20	U	0.20	0.00%
1,1,1-Trichloroethane	71-55-6	0.20	U	0.20	U	0.20	0.00%
1,1,2-Trichloroethane	79-00-5	0.20	U	0.20	U	0.20	0.00%
Trichloroethene	79-01-6	**0.25**		**0.25**		0.046	**0.00%**
Trichlorofluoromethane	75-69-4	**0.32**		**0.31**		0.20	**3.17%**
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.20	U	0.20	U	0.20	0.00%
1,2,4-Trimethylbenzene	95-63-6	0.20	U	0.20	U	0.20	0.00%
1,3,5-Trimethylbenzene	108-67-8	0.20	U	0.20	U	0.20	0.00%
2,2,4-Trimethylpentane	540-84-1	0.20	U	0.20	U	0.20	0.00%
Vinyl bromide	593-60-2	0.20	U	0.20	U	0.20	0.00%
Vinyl chloride	75-01-4	0.20	U	0.20	U	0.20	0.00%
Xylenes (m&p)	179601-23-1	**0.35**		**0.29**		0.20	**18.75%**
Xylenes (o)	95-47-6	0.20	U	0.20	U	0.20	0.00%

RPD must be <25% for all laboratory duplicate samples. Laboratory duplicate samples are run once daily.
NC = The RPD could not be calculated since the compound was only detected in either the parent or duplicate sample.

Qualifiers:
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U=Compound ND or under reporting limit.

Analysis: Volatile Organic Compounds by EPA Method TO-15
Laboratory Sample Duplicate Report

		Date Received:	7/15/24
SDG Number:	E24-02397	Date Analyzed:	7/18/24,7/18/24
IAL Sample ID:	E24-02397-02	Lab Data File#:	AA6938,AA6939
Matrix:	Air	Dilution Factor:	10
Summa ID:	1776	Injection Volume:	50ml
		GC/MS Column:	RTX-1, 0.32 mmID

		Sample		Sample Dup			
		E24-02397-02		**E24-02397-22**			
		Concentration Reported		**Concentration Reported**		**Reporting Limits**	
Compound	**CAS #**	**ppbv**	**Q**	**ppbv**	**Q**	**ppbv**	**RPD**
Acetone	67-64-1	**120**	D	**120**	D	2.0	**0.00%**
Allyl Chloride	107-05-1	2.0	U	2.0	U	2.0	0.00%
Benzene	71-43-2	2.0	U	2.0	U	2.0	0.00%
Bromodichloromethane	75-27-4	2.0	U	2.0	U	2.0	0.00%
Bromoform	75-25-2	2.0	U	2.0	U	2.0	0.00%
Bromomethane	74-83-9	2.0	U	2.0	U	2.0	0.00%
1,3-Butadiene	106-99-0	2.0	U	2.0	U	2.0	0.00%
Chlorobenzene	108-90-7	2.0	U	2.0	U	2.0	0.00%
Chloroethane	75-00-3	2.0	U	2.0	U	2.0	0.00%
Chloroform	67-66-3	2.0	U	2.0	U	2.0	0.00%
Chloromethane	74-87-3	2.0	U	2.0	U	2.0	0.00%
Carbon disulfide	75-15-0	2.0	U	2.0	U	2.0	0.00%
Carbon tetrachloride	56-23-5	2.0	U	2.0	U	2.0	0.00%
2-Chlorotoluene	95-49-8	2.0	U	2.0	U	2.0	0.00%
Cyclohexane	110-82-7	2.0	U	2.0	U	2.0	0.00%
Dibromochloromethane	124-48-1	2.0	U	2.0	U	2.0	0.00%
1,2-Dibromoethane	106-93-4	2.0	U	2.0	U	2.0	0.00%
1,2-Dichlorobenzene	95-50-1	2.0	U	2.0	U	2.0	0.00%
1,3-Dichlorobenzene	541-73-1	2.0	U	2.0	U	2.0	0.00%
1,4-Dichlorobenzene	106-46-7	2.0	U	2.0	U	2.0	0.00%
Dichlorodifluoromethane	75-71-8	2.0	U	2.0	U	2.0	0.00%
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	0.00%
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	0.00%
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	2.0	0.00%
1,2-Dichloroethene (cis)	156-59-2	2.0	U	2.0	U	2.0	0.00%
1,2-Dichloroethene (trans)	156-60-5	2.0	U	2.0	U	2.0	0.00%
1,2-Dichloropropane	78-87-5	2.0	U	2.0	U	2.0	0.00%
1,3-Dichloropropene (cis)	10061-01-5	2.0	U	2.0	U	2.0	0.00%
1,3-Dichloropropene (trans)	10061-02-6	2.0	U	2.0	U	2.0	0.00%
1,2-Dichlorotetrafluoroethane	76-14-2	2.0	U	2.0	U	2.0	0.00%
1,4-Dioxane	123-91-1	2.0	U	2.0	U	2.0	0.00%
Ethanol	64-17-5	**22**	D	**22**	D	2.0	**0.00%**
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	0.00%
4-Ethyltoluene	622-96-8	2.0	U	2.0	U	2.0	0.00%
n-Heptane	142-82-5	2.0	U	2.0	U	2.0	0.00%
1,3-Hexachlorobutadiene	87-68-3	2.0	U	2.0	U	2.0	0.00%
n-Hexane	110-54-3	2.0	U	2.0	U	2.0	0.00%
Isopropanol	67-63-0	2.0	U	2.0	U	2.0	0.00%

Qualifiers:
E=Concentration exceeds upper level of calibration range for instrument.
D=Extra dilution required for this compound. X=Duplicate samples do not met RPD criteria.
U=Compound ND or under reporting limit.

Analysis: Volatile Organic Compounds by EPA Method TO-15
Laboratory Sample Duplicate Report

		Date Received:	7/15/24
SDG Number:	E24-02397	Date Analyzed:	7/18/24,7/18/24
IAL Sample ID:	E24-02397-02	Lab Data File#:	AA6938,AA6939
Matrix:	Air	Dilution Factor:	10
Summa ID:	1776	Injection Volume:	50ml
		GC/MS Column:	RTX-1, 0.32 mmID

		Sample		Sample Dup			
		E24-02397-02		**E24-02397-22**			
		Concentration Reported		**Concentration Reported**		**Reporting Limits**	
Compound	**CAS #**	**ppbv**	**Q**	**ppbv**	**Q**	**ppbv**	**RPD**
Methylene chloride	75-09-2	2.0	U	2.0	U	2.0	0.00%
Methyl ethyl ketone	78-93-3	**2.1**	D	**2.4**	D	2.0	**-13.33%**
Methyl isobutyl ketone	108-10-1	2.0	U	2.0	U	2.0	0.00%
Methyl methacrylate	80-62-6	2.0	U	2.0	U	2.0	0.00%
Methyl tert-butyl ether	1634-04-4	2.0	U	2.0	U	2.0	0.00%
Styrene	100-42-5	2.0	U	2.0	U	2.0	0.00%
Tert-butyl alcohol	75-65-0	**6.4**	D	**7.6**	D	2.0	**-17.14%**
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	0.00%
Tetrachloroethene	127-18-4	2.0	U	2.0	U	2.0	0.00%
Tetrahydrofuran	109-99-9	2.0	U	2.0	U	2.0	0.00%
Toluene	108-88-3	2.0	U	2.0	U	2.0	0.00%
1,2,4-Trichlorobenzene	120-82-1	2.0	U	2.0	U	2.0	0.00%
1,1,1-Trichloroethane	71-55-6	2.0	U	2.0	U	2.0	0.00%
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	2.0	0.00%
Trichloroethene	79-01-6	2.0	U	2.0	U	2.0	0.00%
Trichlorofluoromethane	75-69-4	2.0	U	2.0	U	2.0	0.00%
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	2.0	U	2.0	U	2.0	0.00%
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	0.00%
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	0.00%
2,2,4-Trimethylpentane	540-84-1	2.0	U	2.0	U	2.0	0.00%
Vinyl bromide	593-60-2	2.0	U	2.0	U	2.0	0.00%
Vinyl chloride	75-01-4	2.0	U	2.0	U	2.0	0.00%
Xylenes (m&p)	179601-23-1	4.0	U	4.0	U	4.0	0.00%
Xylenes (o)	95-47-6	2.0	U	2.0	U	2.0	0.00%

RPD must be <25% for all laboratory duplicate samples. Laboratory duplicate samples are run once daily.
NC = The RPD could not be calculated since the compound was only detected in either the parent or duplicate sample.

Qualifiers:
E=Concentration exceeds upper level of calibration range for instrument.
D=Extra dilution required for this compound. X=Duplicate samples do not met RPD criteria.
U=Compound ND or under reporting limit.

Initial Calibration Curve Internal Standard Area and Retention Time Summary

Instrument: AA **ICAL Date:** 3/27/2024

	BROMOCHLOROMETHANE				1,4-DIFLUOROBENZENE				D-5 CHLOROBENZENE			
	Area #		RT		Area #		RT		Area #		RT	
AVERAGE OF CALIBRATION STANDARDS	377399		4.413		1533720		5.479		1408744		8.351	
UPPER LIMIT	528358		4.743		2147208		5.809		1972242		8.681	
LOWER LIMIT	226439		4.083		920232		5.149		845247		8.021	
Lab ID	Area #	%	RT	+/-	Area #	%	RT	+/-	Area #	%	RT	+/-
40 PPBV STD AA 6025 STD01	398803	5.67	4.419	0.01	1758228	14.64	5.480	0.00	1517568	7.72	8.351	0.00
20 PPBV STD AA 6024 STD02	411882	9.14	4.415	0.00	1661943	8.36	5.480	0.00	1464287	3.94	8.351	0.00
10 PPBV STD AA 6023 STD03	405866	7.54	4.412	0.00	1540619	0.45	5.476	0.00	1407079	-0.12	8.351	0.00
2 PPBV STD AA 6022 STD04	309693	-17.94	4.412	0.00	1229116	-19.86	5.479	0.00	1260202	-10.54	8.351	0.00
0.2 PPBV STD AA 6021 STD05	360749	-4.41	4.409	0.00	1478694	-3.59	5.480	0.00	1394585	-1.01	8.351	0.00
ICVSS AA 6026 ICVSS	412561	9.32	4.412	0.00	1549110	1.00	5.480	0.00	1439709	2.20	8.351	0.00

Difference of Internal Area must be within +/- 40%; Retention Times must be within +/- 0.33 minute.

* Values outsite QC limits.

Internal Standard Area and Retention Time Summary

Lab File ID (Standard): AA6540DCVS **Date Analyzed:** 5/21/2024

Instrument: AA **ICAL Date:** 3/27/2024

			BROMOCHLOROMETHANE				1,4-DIFLUOROBENZENE				D-5 CHLOROBENZENE			
			Area #		RT		Area #		RT		Area #		RT	
	CALIBRATION STANDARD		273918		4.410		1142431		5.478		1026686		8.349	
	UPPER LIMIT		383485		4.74		1599403		5.81		1437360		8.68	
	LOWER LIMIT		164351		4.08		685459		5.15		616012		8.02	
Lab ID		DF	Area #	%	RT	+/-	Area #	%	RT	+/-	Area #	%	RT	+/-
Method Blank	AA6542BLK	1.0	268604	-1.94	4.410	0.00	1018846	-10.82	5.478	0.00	981819	-4.37	8.352	0.00
Reporting Limit Laboratory Control Standard	AA6543RLLCS	1.0	255869	-6.59	4.410	0.00	1031431	-9.72	5.481	0.00	980159	-4.53	8.352	0.00
3052	AA6544	1.0	378495	38.18	4.417	0.01	1424428	24.68	5.487	0.01	1388430	35.23	8.352	0.00
3100	AA6545	1.0	279835	2.16	4.410	0.00	1055298	-7.63	5.478	0.00	985570	-4.00	8.352	0.00
1571	AA6546	1.0	276550	0.96	4.410	0.00	1062434	-7.00	5.477	0.00	978432	-4.70	8.352	0.00
Closing Calibration	AA6552CCCVS	1.0	262640	-4.12	4.413	0.00	1094343	-4.21	5.481	0.00	997903	-2.80	8.352	0.00

Difference of Internal Area must be within +/- 40%; Retention Times must be within +/- 0.33 minute.
* Values outsite QC limits.

Initial Calibration Curve Internal Standard Area and Retention Time Summary

Instrument: AA **ICAL Date:** 5/29/2024

		BROMOCHLOROMETHANE				1,4-DIFLUOROBENZENE				D-5 CHLOROBENZENE			
		Area #		RT		Area #		RT		Area #		RT	
AVERAGE OF CALIBRATION STANDARDS		250669		4.419		1087820		5.481		975494		8.352	
UPPER LIMIT		350936		4.749		1522949		5.811		1365692		8.682	
LOWER LIMIT		150401		4.089		652692		5.151		585297		8.022	
Lab ID		Area #	%	RT	+/-	Area #	%	RT	+/-	Area #	%	RT	+/-
40 PPBV STD	AA 6560 STD01	259539	3.54	4.438	0.02	1398154	28.53	5.490	-0.01	1151205	18.01	8.351	0.00
20 PPBV STD	AA 6559 STD02	232784	-7.13	4.425	0.01	1025078	-5.77	5.480	0.00	911734	-6.54	8.354	0.00
10 PPBV STD	AA 5447 STD03	240829	-3.93	4.416	0.00	1010790	-7.08	5.483	0.00	932743	-4.38	8.351	0.00
2 PPBV STD	AA 6557 STD04	243744	-2.76	4.406	-0.01	931187	-14.40	5.477	0.00	883473	-9.43	8.354	0.00
0.2 PPBV STD	AA 6556 STD05	276448	10.28	4.409	-0.01	1073893	-1.28	5.477	0.00	998317	2.34	8.351	0.00
ICVSS	AA 6561 ICVSS	242079	-3.43	4.412	-0.01	1024301	-5.84	5.480	0.00	930904	-4.57	8.354	0.00

Difference of Internal Area must be within +/- 40%; Retention Times must be within +/- 0.33 minute.

* Values outsite QC limits.

Internal Standard Area and Retention Time Summary

Lab File ID (Standard): AA6658DCVS **Date Analyzed:** 6/6/2024

Instrument: AA **ICAL Date:** 5/29/2024

			BROMOCHLOROMETHANE				1,4-DIFLUOROBENZENE				D-5 CHLOROBENZENE			
			Area #		RT		Area #		RT		Area #		RT	
	CALIBRATION STANDARD		204479		4.419		902634		5.483		948524		8.351	
	UPPER LIMIT		286271		4.75		1263688		5.81		1327934		8.68	
	LOWER LIMIT		122687		4.09		541580		5.15		569114		8.02	
Lab ID		DF	Area #	%	RT	+/-	Area #	%	RT	+/-	Area #	%	RT	+/-
Method Blank	AA6660BLK	1.0	217092	6.17	4.409	-0.01	834690	-7.53	5.479	0.00	865474	-8.76	8.354	0.00
Reporting Limit Laboratory Control Standard	AA6661RLLCS	1.0	227165	11.09	4.412	-0.01	859704	-4.76	5.480	0.00	801804	-15.47	8.351	0.00
4869	AA6664	1.0	213430	4.38	4.412	-0.01	778158	-13.79	5.480	0.00	736788	-22.32	8.351	0.00
4856	AA6665	1.0	207622	1.54	4.412	-0.01	761560	-15.63	5.480	0.00	861290	-9.20	8.351	0.00
3804	AA6666	1.0	273354	33.68	4.422	0.00	1120261	24.11	5.486	0.00	1304299	37.51	8.354	0.00
Closing Calibration	AA6676CCCVS	1.0	209645	2.53	4.431	0.01	1028918	13.99	5.489	0.01	1218685	28.48	8.354	0.00

Difference of Internal Area must be within +/- 40%; Retention Times must be within +/- 0.33 minute.
* Values outsite QC limits.

Internal Standard Area and Retention Time Summary

Lab File ID (Standard): AA6899DCVS **Date Analyzed:** 7/16/2024

Instrument: AA **ICAL Date:** 5/29/2024

			BROMOCHLOROMETHANE				1,4-DIFLUOROBENZENE				D-5 CHLOROBENZENE			
			Area #		RT		Area #		RT		Area #		RT	
	CALIBRATION STANDARD		178142		4.412		778498		5.480		708869		8.351	
	UPPER LIMIT		249399		4.74		1089897		5.81		992417		8.68	
	LOWER LIMIT		106885		4.08		467099		5.15		425321		8.02	
Lab ID		DF	Area #	%	RT	+/-	Area #	%	RT	+/-	Area #	%	RT	+/-
Method Blank	AA6901BLK	1.0	157789	-11.43	4.406	-0.01	643869	-17.29	5.477	0.00	642151	-9.41	8.351	0.00
E24-02427-01	AA6908	1.0	174387	-2.11	4.445	0.03	912213	17.18	5.490	0.01	771555	8.84	8.358	0.01
E24-02427-21	AA6909	1.0	154040	-13.53	4.435	0.02	706945	-9.19	5.483	0.00	627339	-11.50	8.355	0.00
E24-02427-02	AA6912	1.0	150954	-15.26	4.435	0.02	713469	-8.35	5.483	0.00	633928	-10.57	8.354	0.00
E24-02427-03	AA6914	5.0	153549	-13.81	4.422	0.01	696086	-10.59	5.483	0.00	639562	-9.78	8.354	0.00
E24-02427-03	AA6915	1.0	140895	-20.91	4.451	0.04	809561	3.99	5.490	0.01	703181	-0.80	8.358	0.01
E24-02427-04	AA6918	1.0	164519	-7.65	4.445	0.03	845369	8.59	5.490	0.01	732609	3.35	8.358	0.01

Difference of Internal Area must be within +/- 40%; Retention Times must be within +/- 0.33 minute.
* Values outsite QC limits.

Internal Standard Area and Retention Time Summary

Lab File ID (Standard): AA6922DCVS **Date Analyzed:** 7/18/2024

Instrument: AA **ICAL Date:** 5/29/2024

			BROMOCHLOROMETHANE				1,4-DIFLUOROBENZENE				D-5 CHLOROBENZENE			
			Area #		RT		Area #		RT		Area #		RT	
	CALIBRATION STANDARD		209046		4.428		1036258		5.490		1227259		8.351	
	UPPER LIMIT		292664		4.76		1450761		5.82		1718163		8.68	
	LOWER LIMIT		125428		4.10		621755		5.16		736355		8.02	
Lab ID		DF	Area #	%	RT	+/-	Area #	%	RT	+/-	Area #	%	RT	+/-
Method Blank	AA6924BLK	1.0	264805	26.67	4.416	-0.01	1196769	15.49	5.483	-0.01	1460065	18.97	8.354	0.00
E24-02427-02	AA6926	10.0	246716	18.02	4.422	-0.01	1197933	15.60	5.490	0.00	1416061	15.38	8.351	0.00
E24-02427-04	AA6927	10.0	241157	15.36	4.425	0.00	1144756	10.47	5.486	0.00	1360841	10.88	8.351	0.00

Difference of Internal Area must be within +/- 40%; Retention Times must be within +/- 0.33 minute.
* Values outsite QC limits.

Section VI: Sample Data Summary

Certificate of Analysis

Summary of Results

**Quantitation Reports, Chromatograms,
and Peak Integration Reports**

CERTIFICATE OF ANALYSIS

ANALYTICAL DATA PACKAGE FOR THE
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
ALBANY NEW YORK 12233

Integrated Analytical Laboratories, LLC — **Randolph, NJ 07869**
Project#: 48-55 36th St — **NY ELAP Certification#: 11402**
SDG #: E24-02427 — **NJDEP (Primary AB) Certification#: 14751**
Date of first sample receipt: 7/16/2024 — **Date of last sample receipt: 7/16/2024**

Client: JS Held-Hoboken
5 Marine View Plaza
Hoboken, NJ 07030
Attention: Attention: Leah DeEgidio

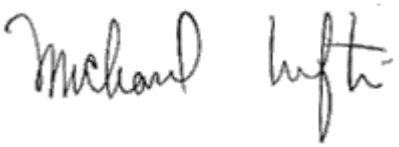
Project/Site: 48-55 36th St/NY

Analysis conducted at: Integrated Analytical Laboratories, LLC
273 Franklin Road
Randolph, NJ 07869
Contact: Michael H. Leftin, Ph.D.

Sample(s):
E24-02427-01
E24-02427-02
E24-02427-03
E24-02427-04

Samples for this analysis were received in good condition with a chain of custody.

All work recorded herein has been done in accordance with normal professional standards using accepted testing methodologies, quality assurance and quality control procedures except where otherwise agreed to by the client and testing company in writing. Once analysis has been performed on canisters that meets regulatory criteria, samples are recycled for future use, unless other provisions have been made by the client.



Michael H. Leftin, Ph.D.
Laboratory Director

Date: August 1, 2024

Volatile Organic Compounds by EPA Method TO-15
Summary of Results

Lab ID:	E24-02427-01	Instrument ID:	AA
Client ID:	SG-14	GC/MS Column:	RTX-1, 0.32 mmID
Date Sampled:	07/15/2024 16:25	Injection Volmue:	500ml
Date Received:	07/16/2024	Matrix:	Air-Other
Date Analyzed:	07/16/2024 17:50	% Moisture:	NA
Data File:	AA6908	Dilution Factor:	1
Summa ID:	5073	Analyst:	J. Walukiewicz

			Concentration Reported		Reporting Limits	
Compound	**CAS #**	**Q**	**ppbv**	**ug/m3**	**ppbv**	**ug/m3**
Acetone	67-64-1		14	33	0.20	0.48
Benzene	71-43-2		0.33	1.1	0.20	0.64
Bromodichloromethane	75-27-4		ND	ND	0.20	1.3
Bromoform	75-25-2		ND	ND	0.20	2.1
Bromomethane	74-83-9		ND	ND	0.20	0.78
1,3-Butadiene	106-99-0		ND	ND	0.20	0.44
Chlorobenzene	108-90-7		ND	ND	0.20	0.92
Chloroethane	75-00-3		ND	ND	0.20	0.53
Chloroform	67-66-3		0.44	2.1	0.20	0.98
Chloromethane	74-87-3		ND	ND	0.20	0.41
Carbon disulfide	75-15-0		0.26	0.81	0.20	0.62
Carbon tetrachloride	56-23-5		ND	ND	0.040	0.25
Cyclohexane	110-82-7		ND	ND	0.20	0.69
Dibromochloromethane	124-48-1		ND	ND	0.20	1.7
1,2-Dibromoethane	106-93-4		ND	ND	0.20	1.5
1,2-Dichlorobenzene	95-50-1		ND	ND	0.20	1.2
1,3-Dichlorobenzene	541-73-1		ND	ND	0.20	1.2
1,4-Dichlorobenzene	106-46-7		ND	ND	0.20	1.2
Dichlorodifluoromethane	75-71-8		ND	ND	0.20	0.99
1,1-Dichloroethane	75-34-3		ND	ND	0.20	0.81
1,2-Dichloroethane	107-06-2		ND	ND	0.20	0.81
1,1-Dichloroethene	75-35-4		ND	ND	0.20	0.79
1,2-Dichloroethene (cis)	156-59-2		ND	ND	0.20	0.79
1,2-Dichloroethene (trans)	156-60-5		ND	ND	0.20	0.79
1,2-Dichloropropane	78-87-5		ND	ND	0.20	0.92
1,3-Dichloropropene (cis)	10061-01-5		ND	ND	0.20	0.91
1,3-Dichloropropene (trans)	10061-02-6		ND	ND	0.20	0.91
1,2-Dichlorotetrafluoroethane	76-14-2		ND	ND	0.20	1.4
1,4-Dioxane	123-91-1		ND	ND	0.20	0.72
Ethylbenzene	100-41-4		ND	ND	0.20	0.87
n-Heptane	142-82-5		0.22	0.91	0.20	0.82
1,3-Hexachlorobutadiene	87-68-3		ND	ND	0.20	2.1
n-Hexane	110-54-3		0.30	1.1	0.20	0.70
Methylene chloride	75-09-2		ND	ND	0.20	0.69
Methyl ethyl ketone	78-93-3		0.91	2.7	0.20	0.59
Methyl isobutyl ketone	108-10-1		ND	ND	0.20	0.82
Methyl tert-butyl ether	1634-04-4		ND	ND	0.20	0.72
Styrene	100-42-5		ND	ND	0.20	0.85
Tert-butyl alcohol	75-65-0		0.55	1.7	0.20	0.61
1,1,2,2-Tetrachloroethane	79-34-5		ND	ND	0.20	1.4
Tetrachloroethene	127-18-4		2.2	15	0.20	1.4
Toluene	108-88-3		2.6	9.7	0.20	0.75
1,2,4-Trichlorobenzene	120-82-1		ND	ND	0.20	1.5
1,1,1-Trichloroethane	71-55-6		ND	ND	0.20	1.1
1,1,2-Trichloroethane	79-00-5		ND	ND	0.20	1.1

Qualifiers:
D = Dilution required

Volatile Organic Compounds by EPA Method TO-15
Summary of Results

Lab ID:	E24-02427-01	Instrument ID:	AA
Client ID:	SG-14	GC/MS Column:	RTX-1, 0.32 mmID
Date Sampled:	07/15/2024 16:25	Injection Volmue:	500ml
Date Received:	07/16/2024	Matrix:	Air-Other
Date Analyzed:	07/16/2024 17:50	% Moisture:	NA
Data File:	AA6908	Dilution Factor:	1
Summa ID:	5073	Analyst:	J. Walukiewicz

			Concentration Reported		Reporting Limits	
Compound	**CAS #**	**Q**	**ppbv**	**ug/m3**	**ppbv**	**ug/m3**
Trichloroethene	79-01-6		0.25	1.4	0.046	0.25
Trichlorofluoromethane	75-69-4		0.32	1.8	0.20	1.1
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1		ND	ND	0.20	1.5
1,2,4-Trimethylbenzene	95-63-6		ND	ND	0.20	0.98
1,3,5-Trimethylbenzene	108-67-8		ND	ND	0.20	0.98
2,2,4-Trimethylpentane	540-84-1		ND	ND	0.20	0.93
Vinyl bromide	593-60-2		ND	ND	0.20	0.87
Vinyl chloride	75-01-4		ND	ND	0.20	0.51
Xylenes (m&p)	179601-23-1		0.35	1.5	0.20	0.87
Xylenes (o)	95-47-6		ND	ND	0.20	0.87

Qualifiers:
D = Dilution required

Data Path : C:\DATA\2024\07-2024\07-16-2024\
Data File : aa6908.D
Acq On : 16 Jul 2024 5:50 pm
Operator : jjw
Sample : E24-02427-01
Misc : 5073, 500cc
ALS Vial : 11 Sample Multiplier: 1

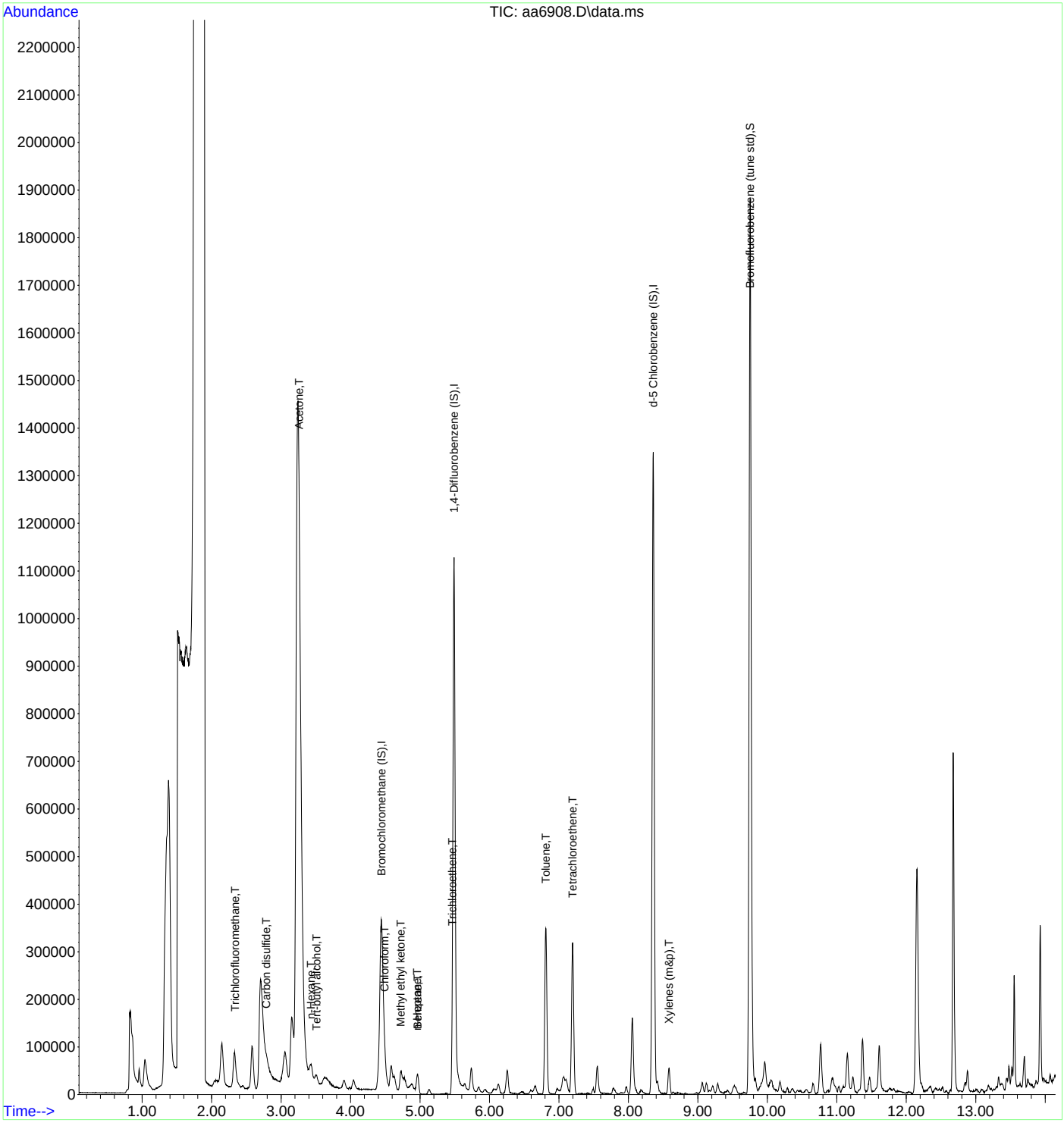
Quant Time: Jul 18 10:08:02 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

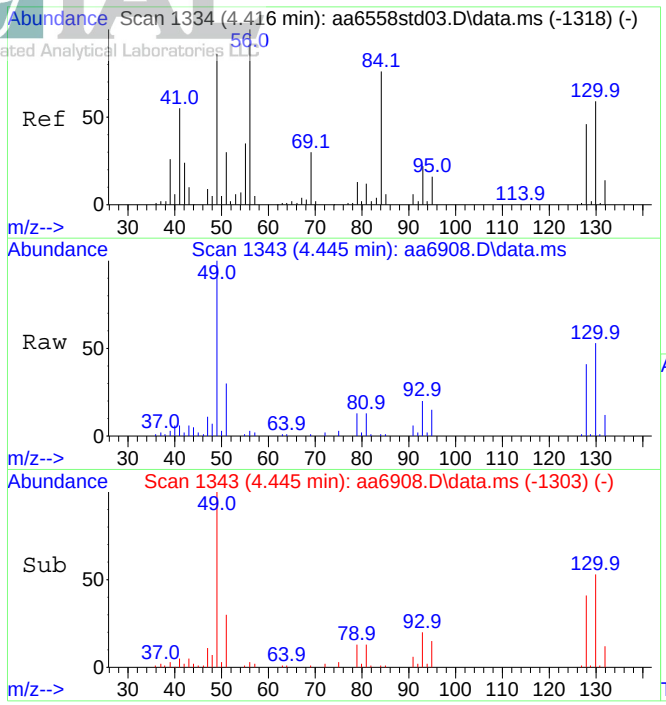
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.445	130	174387	10.00	ppbV		0.029
39) 1,4-Difluorobenzene (IS)	5.490	114	912213	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.358	117	771555	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.753	95	783859	10.74	ppbV		0.000
Target Compounds							Qvalue
12) Trichlorofluoromethane	2.339	101	18255	0.32	ppbV		95
15) Carbon disulfide	2.785	76	19226	0.26	ppbV	#	32
21) Acetone	3.258	43	539667	13.79	ppbV		98
24) n-Hexane	3.432	57	20139	0.30	ppbV		98
26) Tert-butyl alcohol	3.509	59	30159	0.55	ppbV		100
30) Chloroform	4.490	83	24493	0.44	ppbV		96
35) Methyl ethyl ketone	4.724	43	50698	0.91	ppbV		93
36) n-Heptane	4.959	43	11658	0.22	ppbV	#	67
37) Benzene	4.965	78	26441	0.33	ppbV		94
40) Trichloroethene	5.464	130	10401	0.25	ppbV		97
47) Toluene	6.811	91	299188	2.56	ppbV		98
49) Tetrachloroethene	7.197	166	97511	2.20	ppbV		100
59) Xylenes (m&p)	8.583	91	40517	0.35	ppbV		93

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

Data Path : C:\DATA\2024\07-2024\07-16-2024\
Data File : aa6908.D
Acq On : 16 Jul 2024 5:50 pm
Operator : jjw
Sample : E24-02427-01
Misc : 5073, 500cc
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 18 10:08:02 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

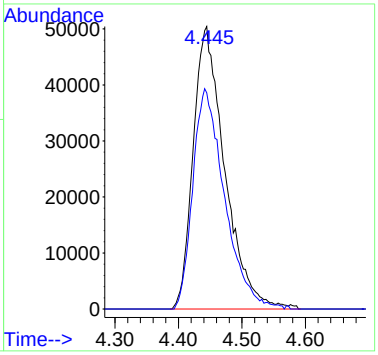


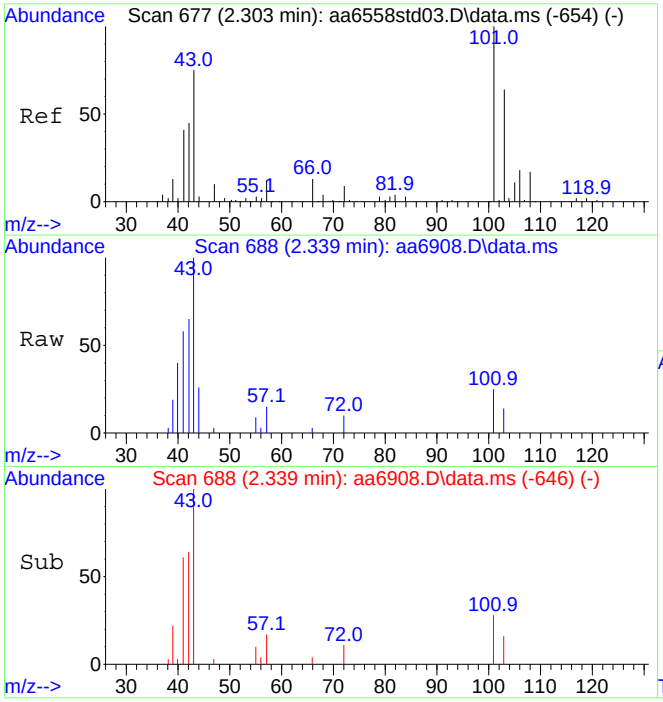


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.445 min Scan# 1343
Delta R.T. 0.029 min
Lab File: aa6908.D
Acq: 16 Jul 2024 5:50 pm

Tgt Ion:130 Resp: 174387

Ion	Ratio	Lower	Upper
130	100		
128	78.4	57.8	97.8

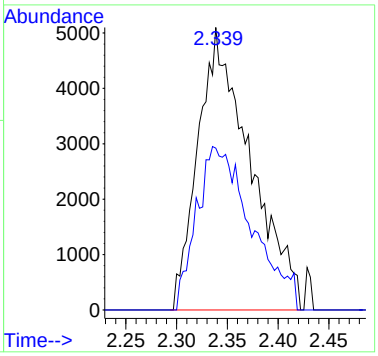


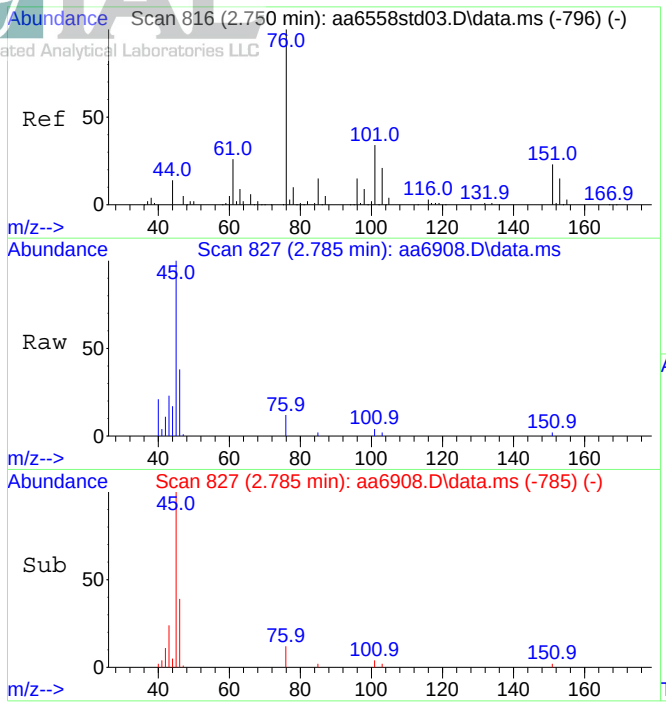


#12
Trichlorofluoromethane
Concen: 0.32 ppbV
RT: 2.339 min Scan# 688
Delta R.T. 0.035 min
Lab File: aa6908.D
Acq: 16 Jul 2024 5:50 pm

Tgt Ion:101 Resp: 18255

Ion	Ratio	Lower	Upper
101	100		
103	60.7	51.9	77.9

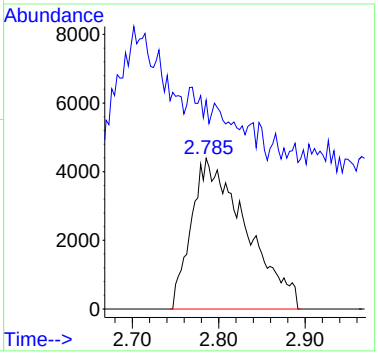


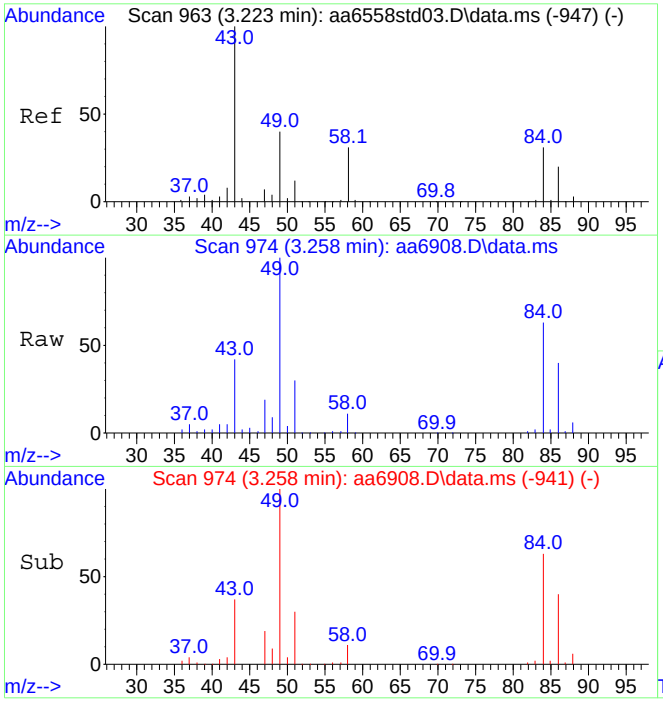


#15
Carbon disulfide
Concen: 0.26 ppbV
RT: 2.785 min Scan# 827
Delta R.T. 0.035 min
Lab File: aa6908.D
Acq: 16 Jul 2024 5:50 pm

Tgt Ion: 76 Resp: 19226

Ion	Ratio	Lower	Upper
76	100		
44	40.4	10.6	16.0#

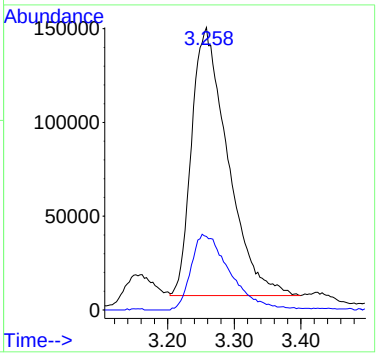


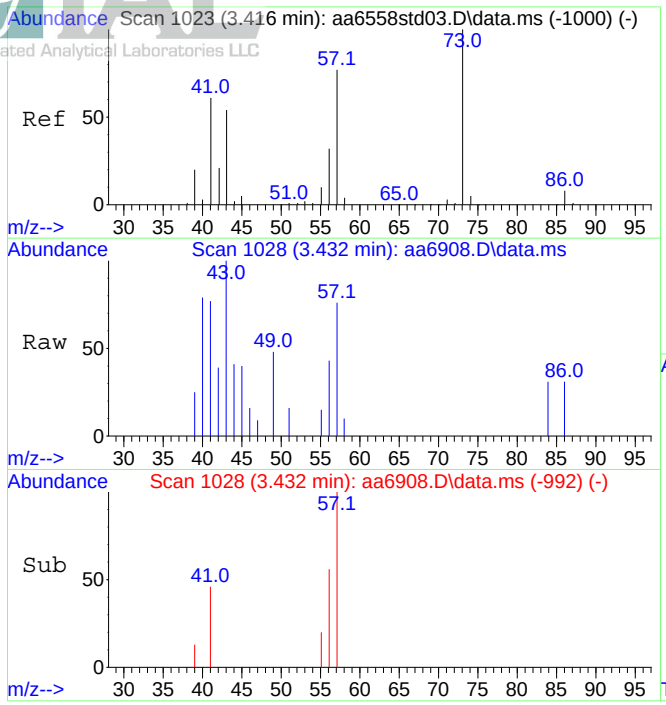


#21
Acetone
Concen: 13.79 ppbV
RT: 3.258 min Scan# 974
Delta R.T. 0.035 min
Lab File: aa6908.D
Acq: 16 Jul 2024 5:50 pm

Tgt Ion: 43 Resp: 539667

Ion	Ratio	Lower	Upper
43	100		
58	30.4	25.4	38.0

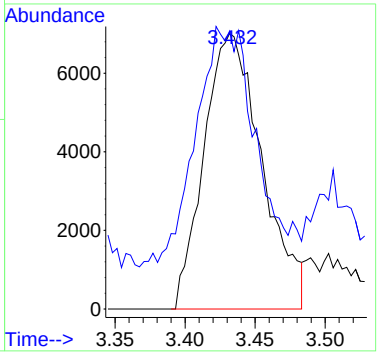


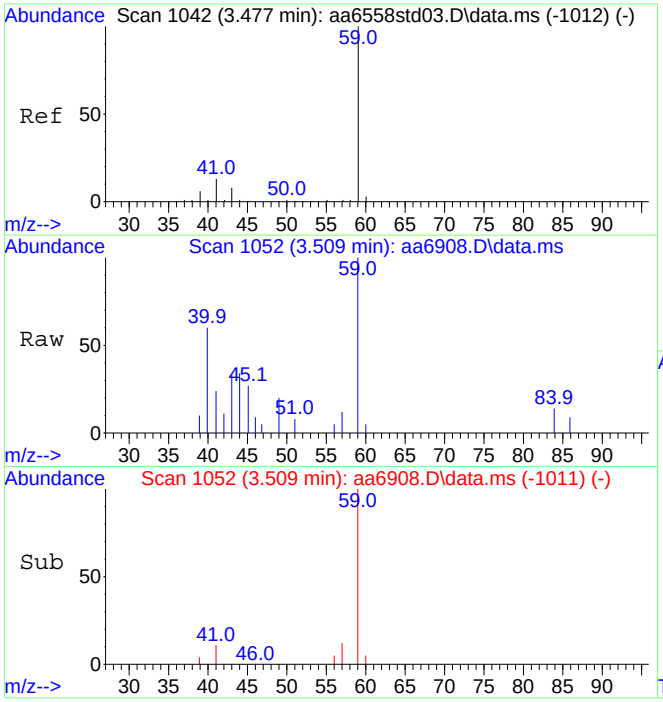


#24
n-Hexane
Concen: 0.30 ppbV
RT: 3.432 min Scan# 1028
Delta R.T. 0.016 min
Lab File: aa6908.D
Acq: 16 Jul 2024 5:50 pm

Tgt Ion: 57 Resp: 20139

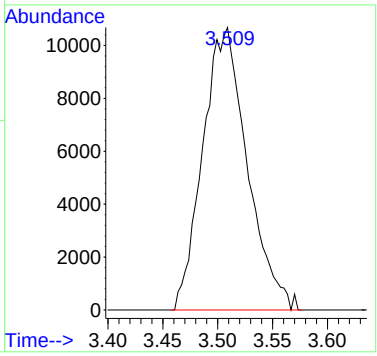
Ion	Ratio	Lower	Upper
57	100		
41	91.2	71.6	107.4

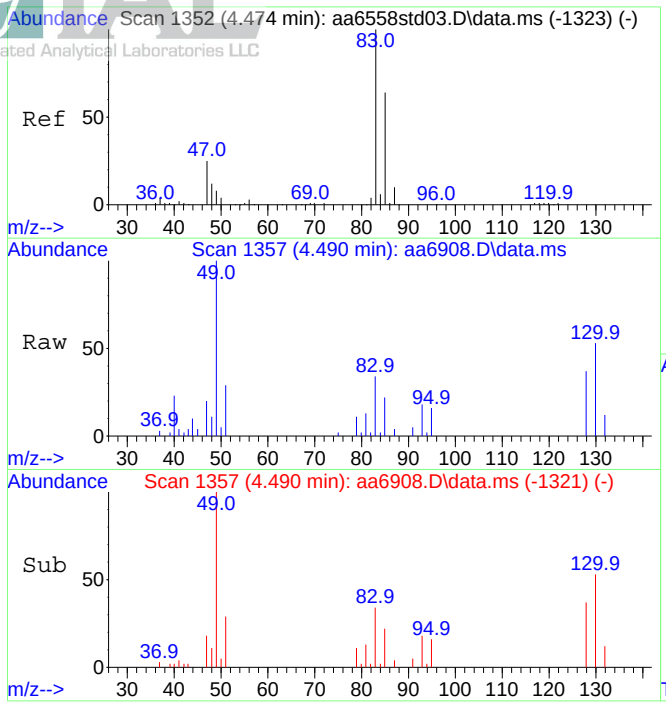




#26
Tert-butyl alcohol
Concen: 0.55 ppbV
RT: 3.509 min Scan# 1052
Delta R.T. 0.032 min
Lab File: aa6908.D
Acq: 16 Jul 2024 5:50 pm

Tgt Ion: 59 Resp: 30159

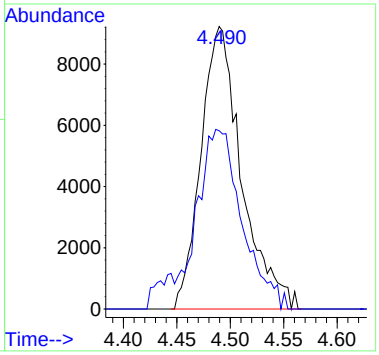


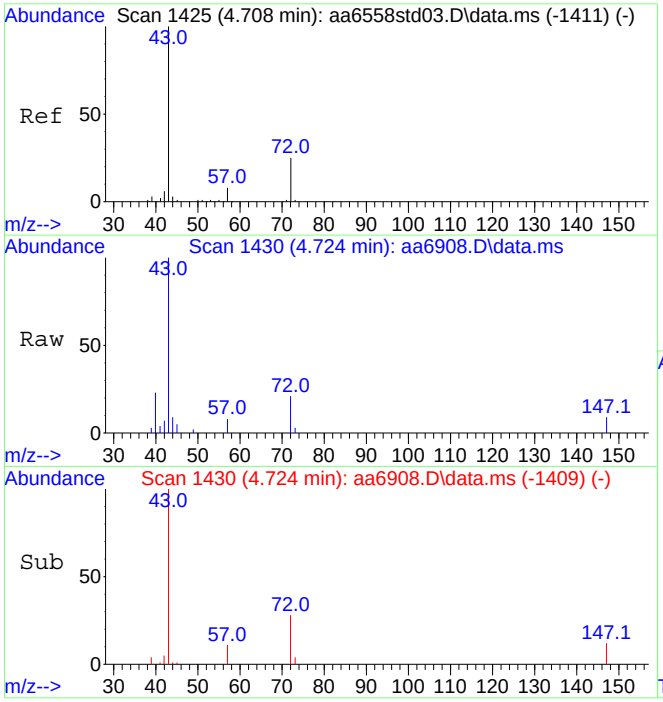


#30
Chloroform
Concen: 0.44 ppbV
RT: 4.490 min Scan# 1357
Delta R.T. 0.016 min
Lab File: aa6908.D
Acq: 16 Jul 2024 5:50 pm

Tgt Ion: 83 Resp: 24493

Ion	Ratio	Lower	Upper
83	100		
85	68.6	52.6	79.0

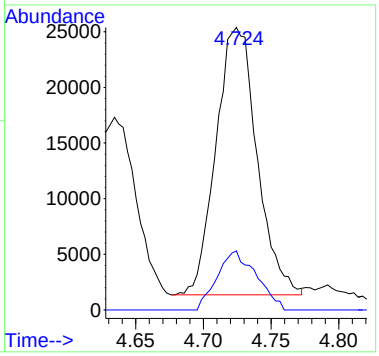


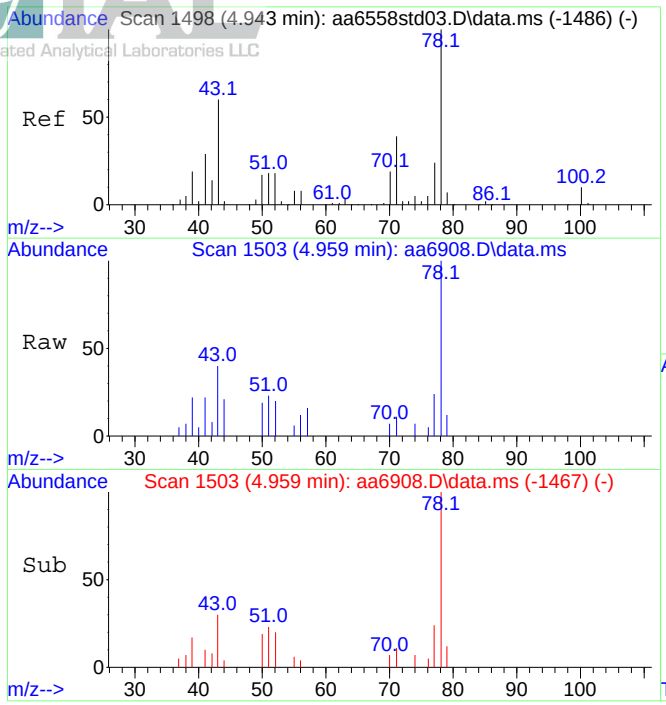


#35
Methyl ethyl ketone
Concen: 0.91 ppbV
RT: 4.724 min Scan# 1430
Delta R.T. 0.016 min
Lab File: aa6908.D
Acq: 16 Jul 2024 5:50 pm

Tgt Ion: 43 Resp: 50698

Ion	Ratio	Lower	Upper
43	100		
72	21.0	19.5	29.3

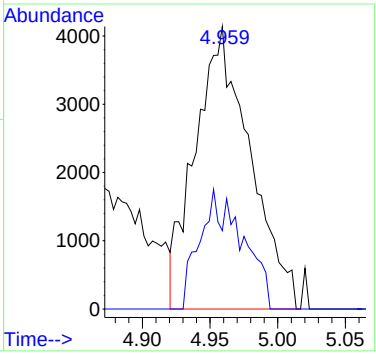


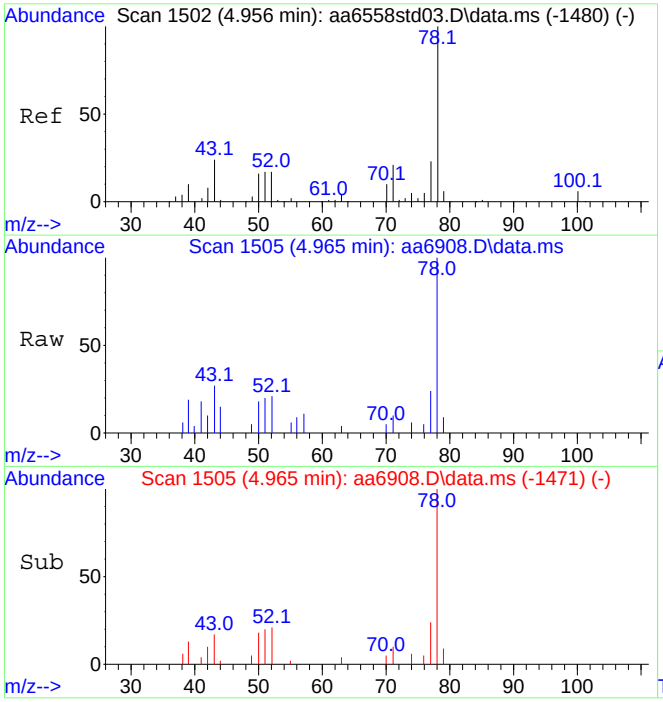


#36
n-Heptane
Concen: 0.22 ppbV
RT: 4.959 min Scan# 1503
Delta R.T. 0.016 min
Lab File: aa6908.D
Acq: 16 Jul 2024 5:50 pm

Tgt Ion: 43 Resp: 11658

Ion	Ratio	Lower	Upper
43	100		
71	32.9	46.2	69.2#

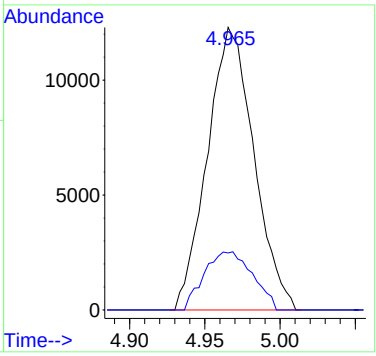


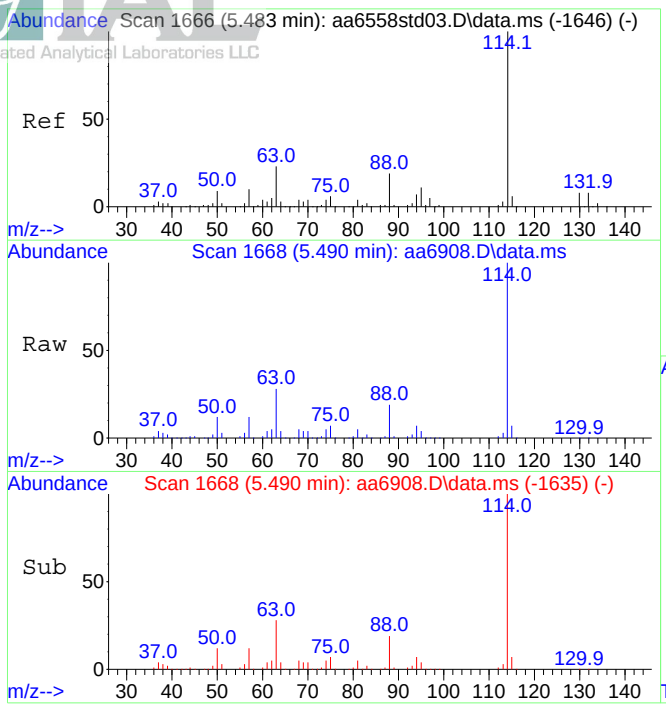


#37
Benzene
Concen: 0.33 ppbV
RT: 4.965 min Scan# 1505
Delta R.T. 0.010 min
Lab File: aa6908.D
Acq: 16 Jul 2024 5:50 pm

Tgt Ion: 78 Resp: 26441

Ion	Ratio	Lower	Upper
78	100		
51	21.4	14.9	22.3

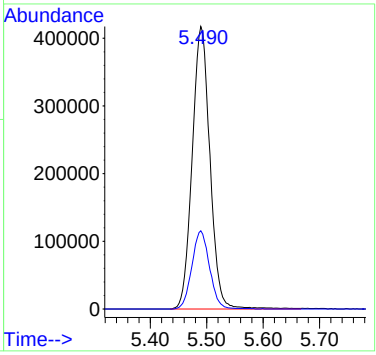


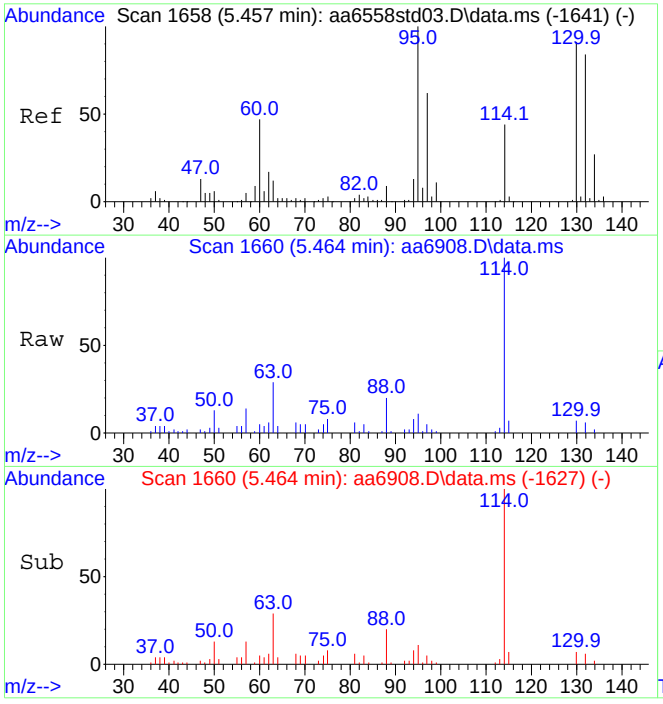


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.490 min Scan# 1668
Delta R.T. 0.006 min
Lab File: aa6908.D
Acq: 16 Jul 2024 5:50 pm

Tgt Ion:114 Resp: 912213

Ion	Ratio	Lower	Upper
114	100		
63	27.6	3.6	43.6

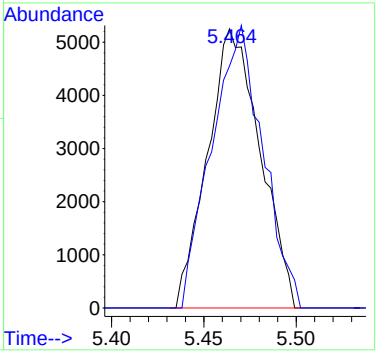


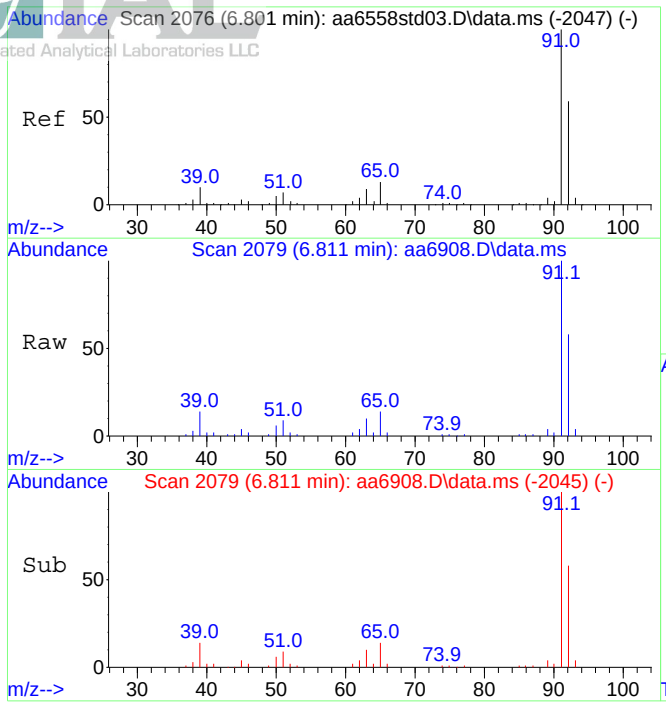


#40
Trichloroethene
Concen: 0.25 ppbV
RT: 5.464 min Scan# 1660
Delta R.T. 0.006 min
Lab File: aa6908.D
Acq: 16 Jul 2024 5:50 pm

Tgt Ion:130 Resp: 10401

Ion	Ratio	Lower	Upper
130	100		
132	98.5	76.6	114.8

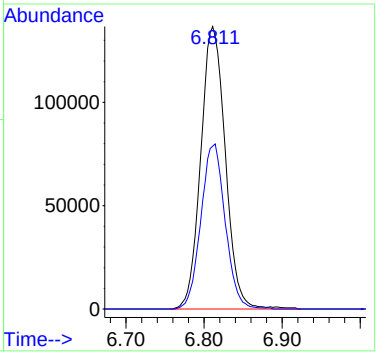


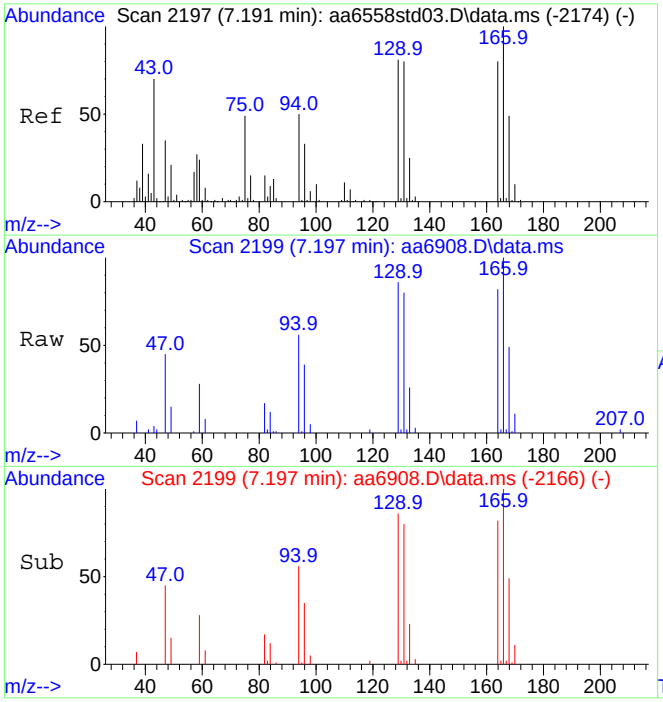


#47
Toluene
Concen: 2.56 ppbV
RT: 6.811 min Scan# 2079
Delta R.T. 0.010 min
Lab File: aa6908.D
Acq: 16 Jul 2024 5:50 pm

Tgt Ion: 91 Resp: 299188

Ion	Ratio	Lower	Upper
91	100		
92	57.7	47.0	70.6

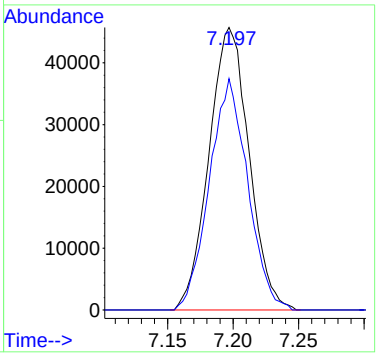


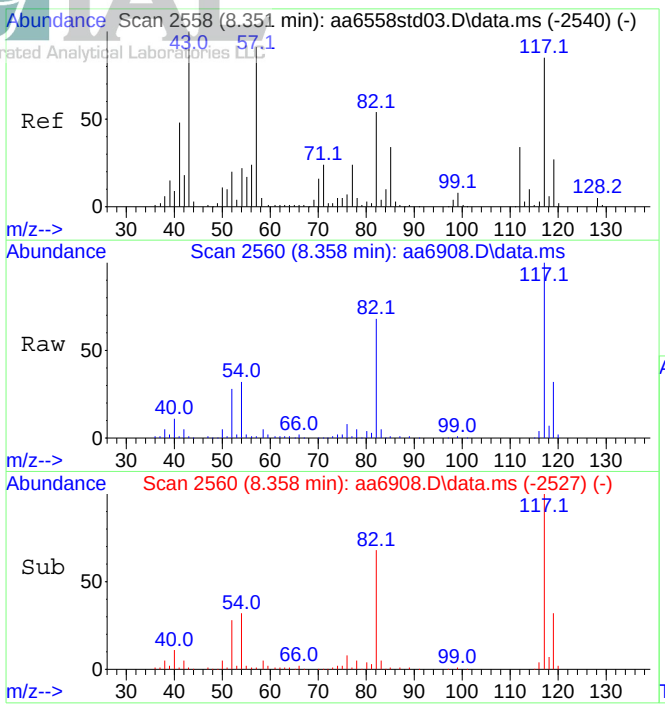


#49
Tetrachloroethene
Concen: 2.20 ppbV
RT: 7.197 min Scan# 2199
Delta R.T. 0.006 min
Lab File: aa6908.D
Acq: 16 Jul 2024 5:50 pm

Tgt Ion:166 Resp: 97511

Ion	Ratio	Lower	Upper
166	100		
164	78.2	62.8	94.2

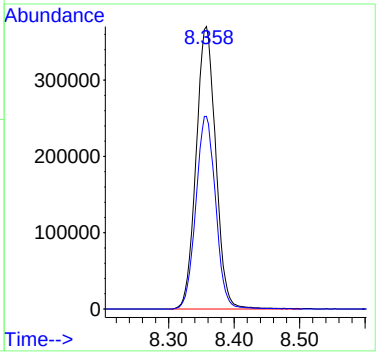


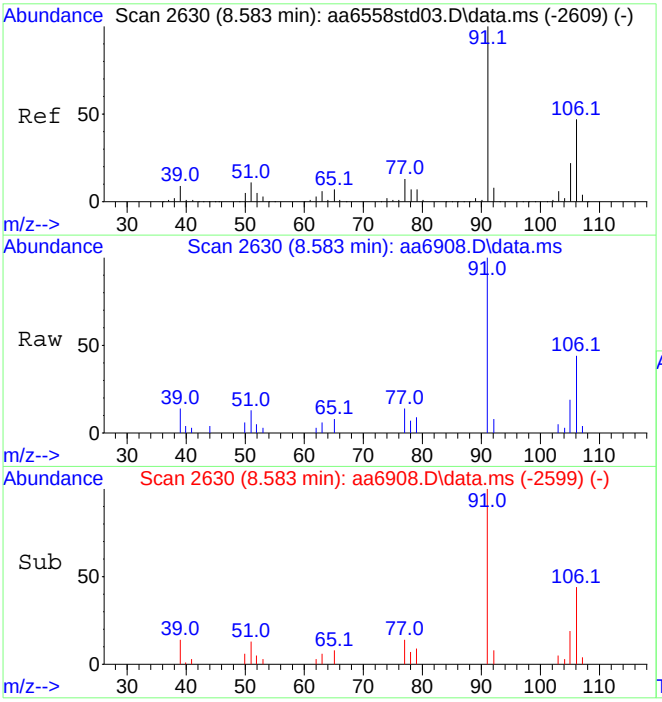


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.358 min Scan# 2560
Delta R.T. 0.006 min
Lab File: aa6908.D
Acq: 16 Jul 2024 5:50 pm

Tgt Ion:117 Resp: 771555

Ion	Ratio	Lower	Upper
117	100		
82	68.6	42.3	82.3

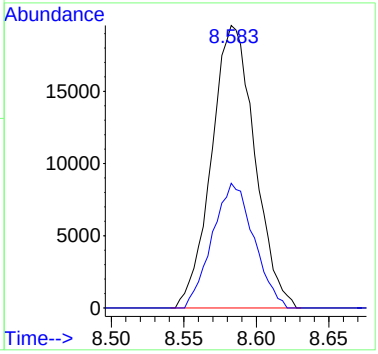


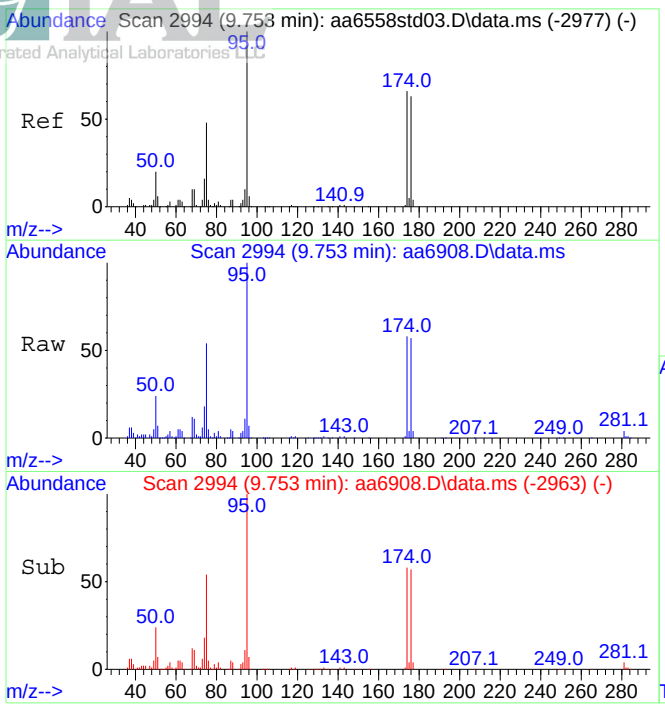


#59
Xylenes (m&p)
Concen: 0.35 ppbV
RT: 8.583 min Scan# 2630
Delta R.T. -0.000 min
Lab File: aa6908.D
Acq: 16 Jul 2024 5:50 pm

Tgt Ion: 91 Resp: 40517

Ion	Ratio	Lower	Upper
91	100		
106	42.3	37.4	56.2

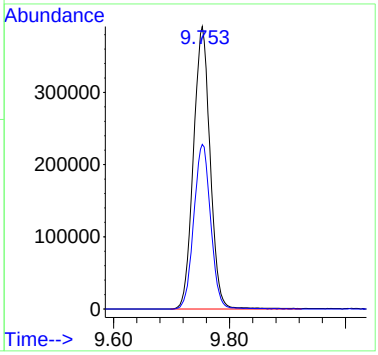




#64
Bromofluorobenzene (tune std)
Concen: 10.74 ppbV
RT: 9.753 min Scan# 2994
Delta R.T. -0.000 min
Lab File: aa6908.D
Acq: 16 Jul 2024 5:50 pm

Tgt Ion: 95 Resp: 783859

Ion	Ratio	Lower	Upper
95	100		
174	58.7	52.9	79.3



Volatile Organic Compounds by EPA Method TO-15
Summary of Results

Lab ID:	E24-02427-02	Instrument ID:	AA
Client ID:	SG-15	GC/MS Column:	RTX-1, 0.32 mmID
Date Sampled:	07/15/2024 20:00	Injection Volmue:	500ml, 50ml
Date Received:	07/16/2024	Matrix:	Air-Other
Date Analyzed:	07/16/2024 19:54, 07/18/2024 14:41	% Moisture:	NA
Data File:	AA6912, AA6926	Dilution Factor:	1, 10
Summa ID:	3786	Analyst:	J. Walukiewicz

			Concentration Reported		Reporting Limits	
Compound	**CAS #**	**Q**	**ppbv**	**ug/m3**	**ppbv**	**ug/m3**
Acetone	67-64-1	D	240	570	2.0	4.8
Benzene	71-43-2		4.3	14	0.20	0.64
Bromodichloromethane	75-27-4		ND	ND	0.20	1.3
Bromoform	75-25-2		ND	ND	0.20	2.1
Bromomethane	74-83-9		ND	ND	0.20	0.78
1,3-Butadiene	106-99-0		ND	ND	0.20	0.44
Chlorobenzene	108-90-7		ND	ND	0.20	0.92
Chloroethane	75-00-3		ND	ND	0.20	0.53
Chloroform	67-66-3		0.83	4.0	0.20	0.98
Chloromethane	74-87-3		ND	ND	0.20	0.41
Carbon disulfide	75-15-0		1.5	4.6	0.20	0.62
Carbon tetrachloride	56-23-5		ND	ND	0.040	0.25
Cyclohexane	110-82-7		1.7	5.9	0.20	0.69
Dibromochloromethane	124-48-1		ND	ND	0.20	1.7
1,2-Dibromoethane	106-93-4		ND	ND	0.20	1.5
1,2-Dichlorobenzene	95-50-1		ND	ND	0.20	1.2
1,3-Dichlorobenzene	541-73-1		0.64	3.9	0.20	1.2
1,4-Dichlorobenzene	106-46-7		ND	ND	0.20	1.2
Dichlorodifluoromethane	75-71-8		ND	ND	0.20	0.99
1,1-Dichloroethane	75-34-3		ND	ND	0.20	0.81
1,2-Dichloroethane	107-06-2		ND	ND	0.20	0.81
1,1-Dichloroethene	75-35-4		ND	ND	0.20	0.79
1,2-Dichloroethene (cis)	156-59-2		ND	ND	0.20	0.79
1,2-Dichloroethene (trans)	156-60-5		ND	ND	0.20	0.79
1,2-Dichloropropane	78-87-5		ND	ND	0.20	0.92
1,3-Dichloropropene (cis)	10061-01-5		ND	ND	0.20	0.91
1,3-Dichloropropene (trans)	10061-02-6		ND	ND	0.20	0.91
1,2-Dichlorotetrafluoroethane	76-14-2		ND	ND	0.20	1.4
1,4-Dioxane	123-91-1		0.69	2.5	0.20	0.72
Ethylbenzene	100-41-4		0.29	1.3	0.20	0.87
n-Heptane	142-82-5		1.8	7.2	0.20	0.82
1,3-Hexachlorobutadiene	87-68-3		ND	ND	0.20	2.1
n-Hexane	110-54-3		ND	ND	0.20	0.70
Methylene chloride	75-09-2		1.6	5.6	0.20	0.69
Methyl ethyl ketone	78-93-3		18	55	0.20	0.59
Methyl isobutyl ketone	108-10-1		0.99	4.1	0.20	0.82
Methyl tert-butyl ether	1634-04-4		ND	ND	0.20	0.72
Styrene	100-42-5		0.50	2.1	0.20	0.85
Tert-butyl alcohol	75-65-0	D	98	300	2.0	6.1
1,1,2,2-Tetrachloroethane	79-34-5		ND	ND	0.20	1.4
Tetrachloroethene	127-18-4	D	220	1500	2.0	14
Toluene	108-88-3		8.5	32	0.20	0.75
1,2,4-Trichlorobenzene	120-82-1		ND	ND	0.20	1.5
1,1,1-Trichloroethane	71-55-6		ND	ND	0.20	1.1
1,1,2-Trichloroethane	79-00-5		ND	ND	0.20	1.1

Qualifiers:
D = Dilution required

INTEGRATED ANALYTICAL LABORATORIES, LLC
Integrated Analytical Laboratories LLC

Volatile Organic Compounds by EPA Method TO-15
Summary of Results

Lab ID:	E24-02427-02	Instrument ID:	AA
Client ID:	SG-15	GC/MS Column:	RTX-1, 0.32 mmID
Date Sampled:	07/15/2024 20:00	Injection Volmue:	500ml, 50ml
Date Received:	07/16/2024	Matrix:	Air-Other
Date Analyzed:	07/16/2024 19:54, 07/18/2024 14:41	% Moisture:	NA
Data File:	AA6912, AA6926	Dilution Factor:	1, 10
Summa ID:	3786	Analyst:	J. Walukiewicz

			Concentration Reported		Reporting Limits	
Compound	**CAS #**	**Q**	**ppbv**	**ug/m3**	**ppbv**	**ug/m3**
Trichloroethene	79-01-6		5.3	28	0.046	0.25
Trichlorofluoromethane	75-69-4		0.28	1.5	0.20	1.1
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1		ND	ND	0.20	1.5
1,2,4-Trimethylbenzene	95-63-6		ND	ND	0.20	0.98
1,3,5-Trimethylbenzene	108-67-8		ND	ND	0.20	0.98
2,2,4-Trimethylpentane	540-84-1		0.63	2.9	0.20	0.93
Vinyl bromide	593-60-2		ND	ND	0.20	0.87
Vinyl chloride	75-01-4		ND	ND	0.20	0.51
Xylenes (m&p)	179601-23-1		0.90	3.9	0.20	0.87
Xylenes (o)	95-47-6		0.31	1.4	0.20	0.87

Qualifiers:
D = Dilution required

Data Path : C:\DATA\2024\07-2024\07-16-2024\
Data File : aa6912.D
Acq On : 16 Jul 2024 7:54 pm
Operator : jjw
Sample : E24-02427-02
Misc : 3786, 500cc
ALS Vial : 15 Sample Multiplier: 1

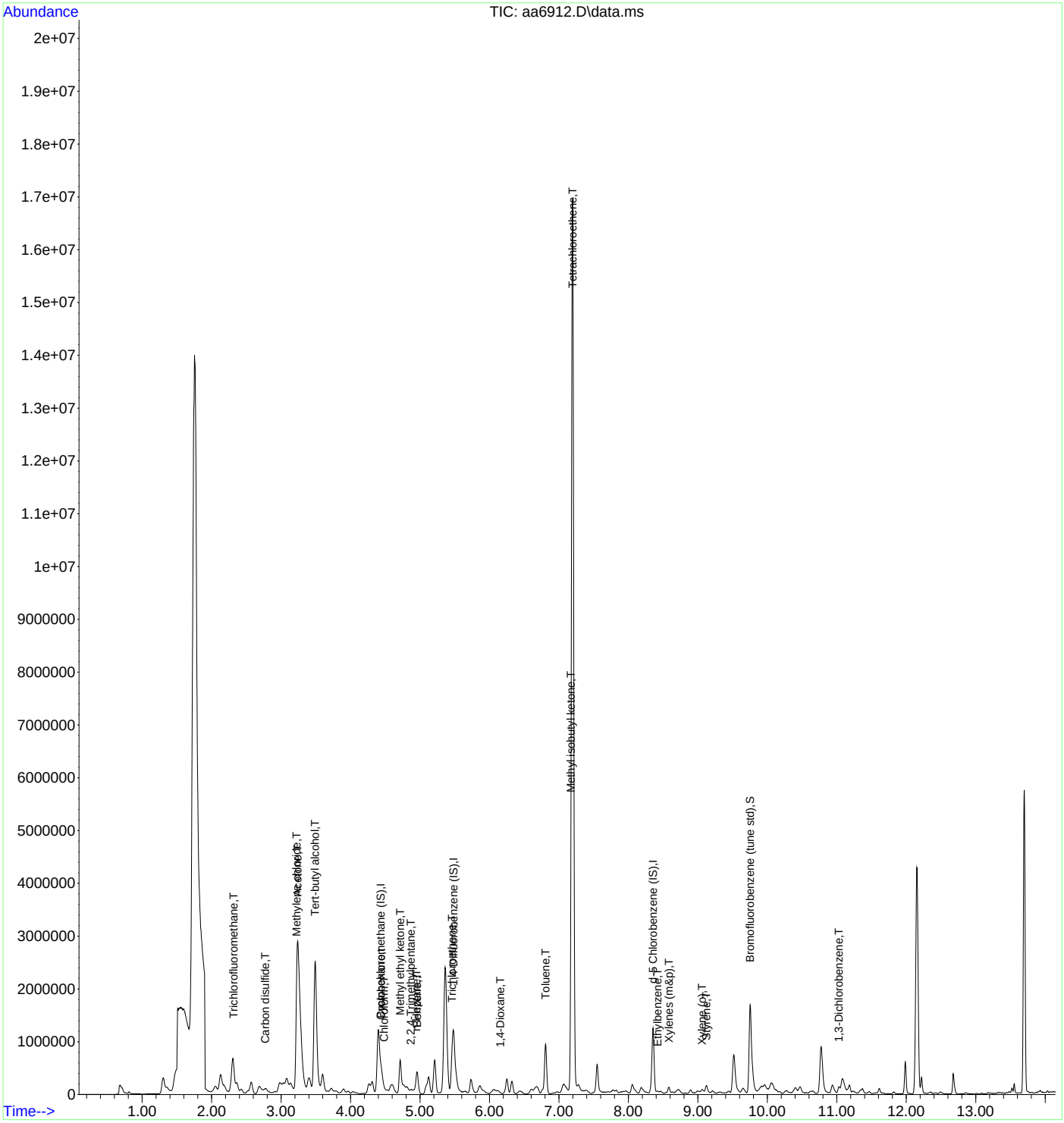
Quant Time: Jul 18 10:14:20 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

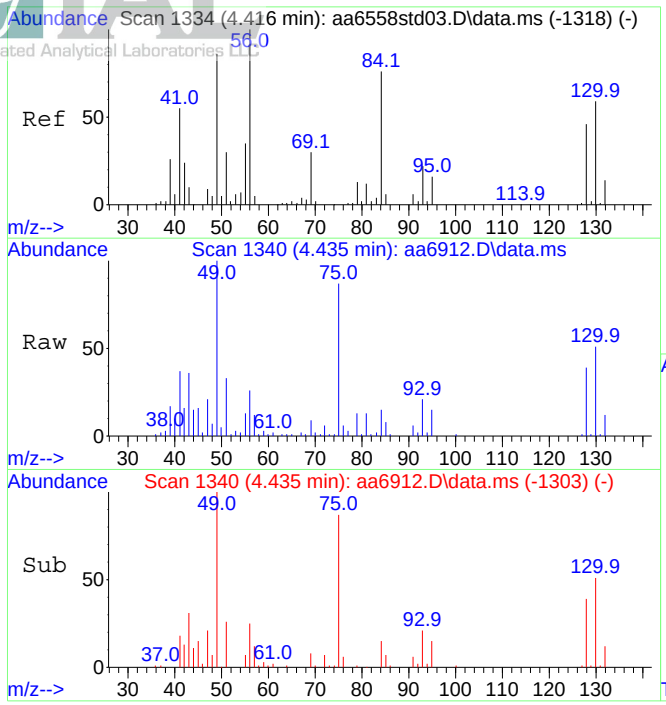
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.435	130	150954	10.00	ppbV		0.019
39) 1,4-Difluorobenzene (IS)	5.483	114	713469	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.354	117	633928	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.750	95	570374	9.51	ppbV		0.000
Target Compounds							Qvalue
12) Trichlorofluoromethane	2.316	101	13668	0.27	ppbV		93
15) Carbon disulfide	2.773	76	94906	1.49	ppbV	#	80
20) Methylene chloride	3.223	49	44134	1.62	ppbV		83
21) Acetone	3.239	43	7690910	227.05	ppbV		94
26) Tert-butyl alcohol	3.490	59	4137348	87.57	ppbV		100
29) Cyclohexane	4.438	56	66409	1.72	ppbV	#	64
30) Chloroform	4.483	83	39923	0.83	ppbV	#	45
35) Methyl ethyl ketone	4.715	43	887641	18.49	ppbV		91
36) n-Heptane	4.946	43	79981	1.76	ppbV	#	78
37) Benzene	4.959	78	293928	4.28	ppbV		93
40) Trichloroethene	5.461	130	170049	5.27	ppbV		100
41) 2,2,4-Trimethylpentane	4.869	57	79555	0.63	ppbV	#	59
45) 1,4-Dioxane	6.155	88	11592	0.69	ppbV	#	70
47) Toluene	6.808	91	773718	8.47	ppbV		99
48) Methyl isobutyl ketone	7.171	43	66075	0.99	ppbV		94
49) Tetrachloroethene	7.197	166	5297466	153.10	ppbV		99
58) Ethylbenzene	8.419	91	36021	0.29	ppbV		96
59) Xylenes (m&p)	8.583	91	84784	0.90	ppbV		97
60) Xylene (o)	9.062	91	30942	0.31	ppbV		92
61) Styrene	9.123	104	32886	0.50	ppbV		99
71) 1,3-Dichlorobenzene	11.030	146	44912	0.64	ppbV		99

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

Data Path : C:\DATA\2024\07-2024\07-16-2024\
Data File : aa6912.D
Acq On : 16 Jul 2024 7:54 pm
Operator : jjw
Sample : E24-02427-02
Misc : 3786, 500cc
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jul 18 10:14:20 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

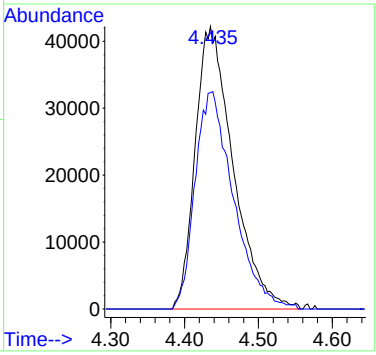


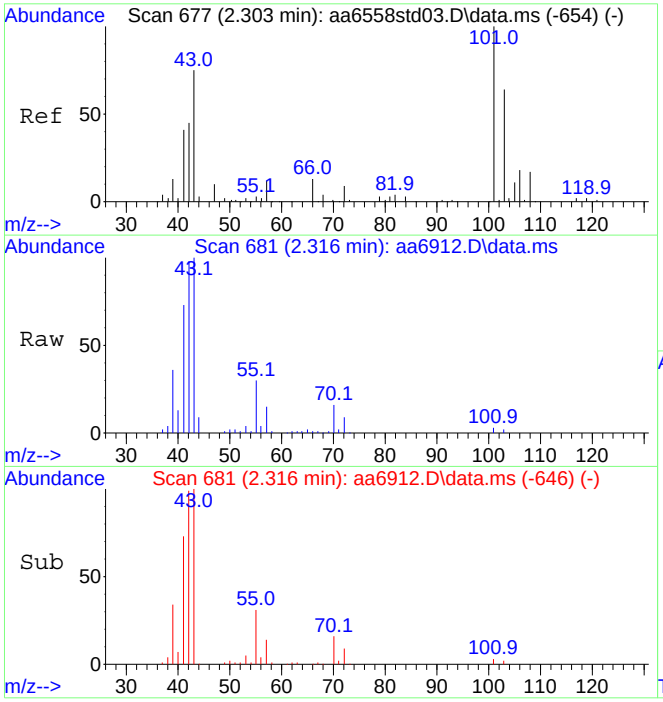


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.435 min Scan# 1340
Delta R.T. 0.019 min
Lab File: aa6912.D
Acq: 16 Jul 2024 7:54 pm

Tgt Ion:130 Resp: 150954

Ion	Ratio	Lower	Upper
130	100		
128	77.9	57.8	97.8

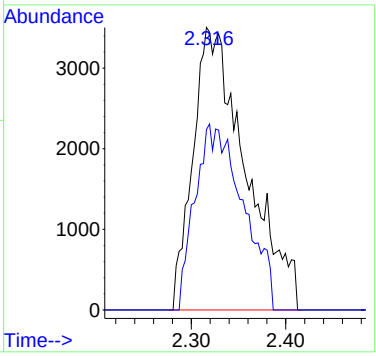


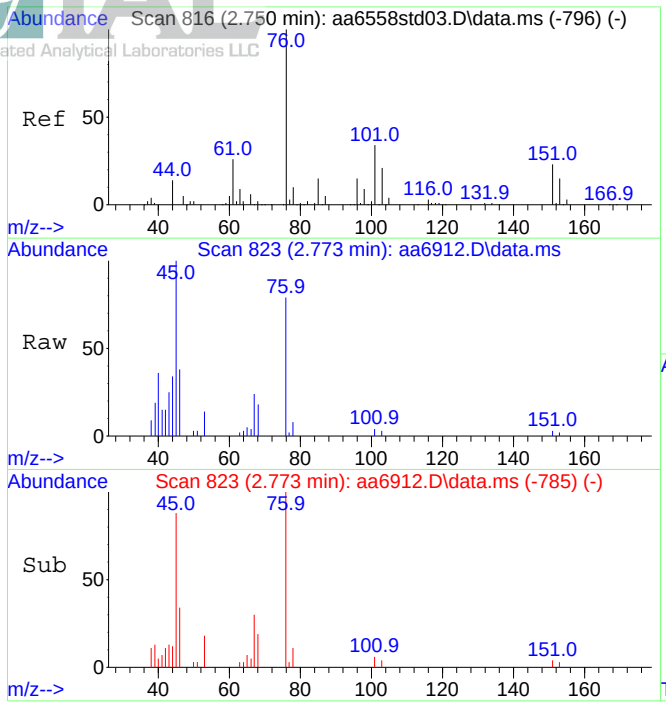


#12
Trichlorofluoromethane
Concen: 0.27 ppbV
RT: 2.316 min Scan# 681
Delta R.T. 0.013 min
Lab File: aa6912.D
Acq: 16 Jul 2024 7:54 pm

Tgt Ion:101 Resp: 13668

Ion	Ratio	Lower	Upper
101	100		
103	59.4	51.9	77.9

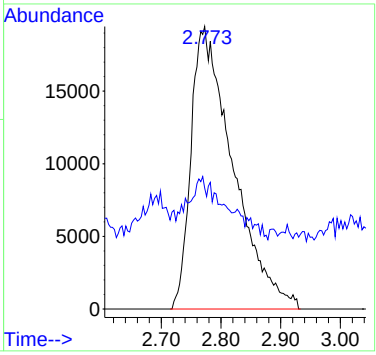


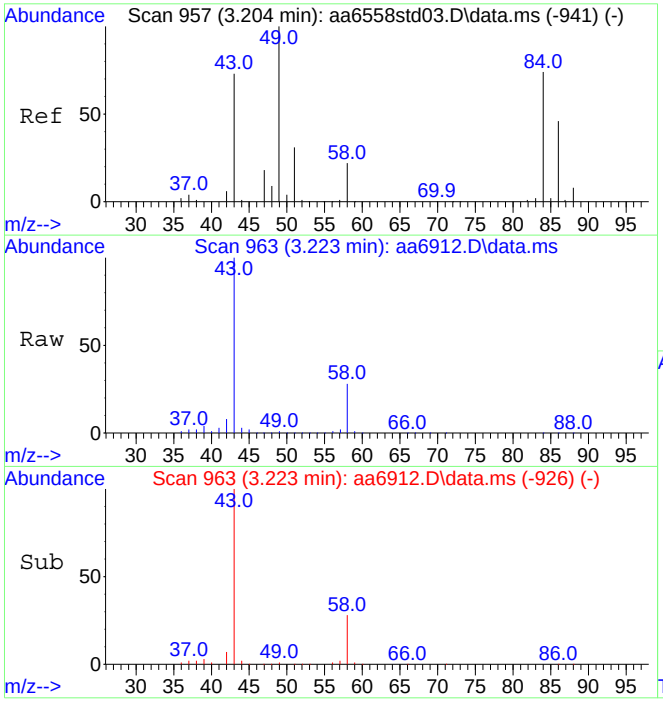


#15
Carbon disulfide
Concen: 1.49 ppbV
RT: 2.773 min Scan# 823
Delta R.T. 0.022 min
Lab File: aa6912.D
Acq: 16 Jul 2024 7:54 pm

Tgt Ion: 76 Resp: 94906

Ion	Ratio	Lower	Upper
76	100		
44	21.2	10.6	16.0#

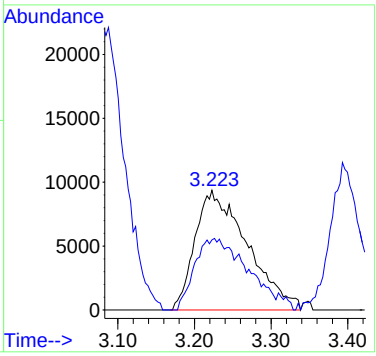


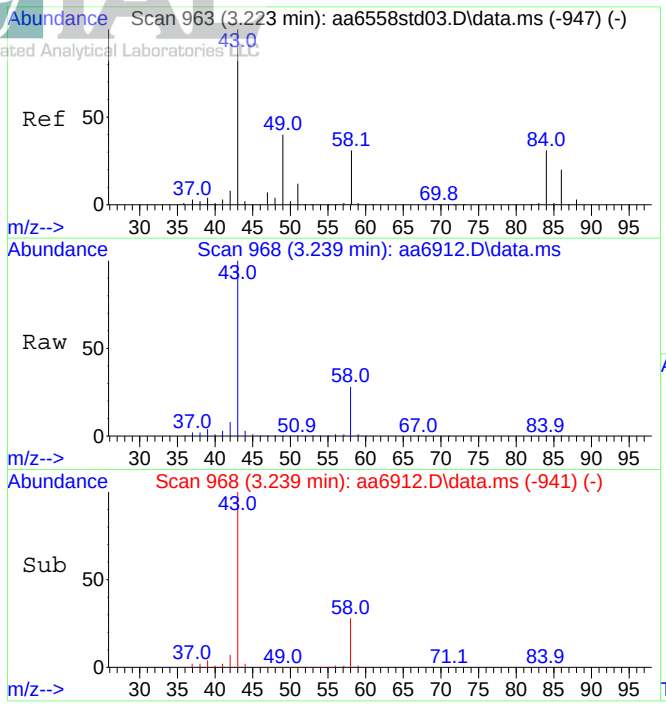


#20
Methylene chloride
Concen: 1.62 ppbV
RT: 3.223 min Scan# 963
Delta R.T. 0.019 min
Lab File: aa6912.D
Acq: 16 Jul 2024 7:54 pm

Tgt Ion: 49 Resp: 44134

Ion	Ratio	Lower	Upper
49	100		
84	61.9	56.2	96.2

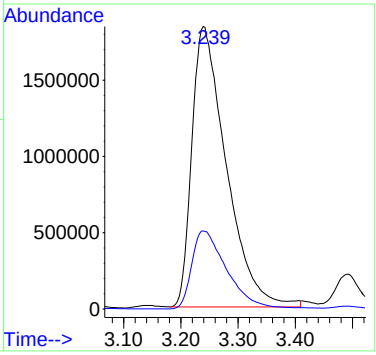


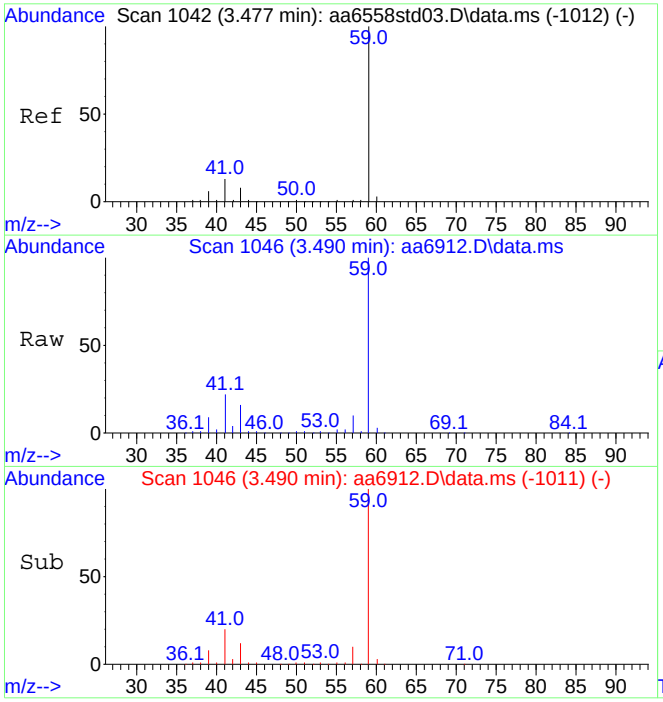


#21
Acetone
Concen: 227.05 ppbV
RT: 3.239 min Scan# 968
Delta R.T. 0.016 min
Lab File: aa6912.D
Acq: 16 Jul 2024 7:54 pm

Tgt Ion: 43 Resp: 7690910

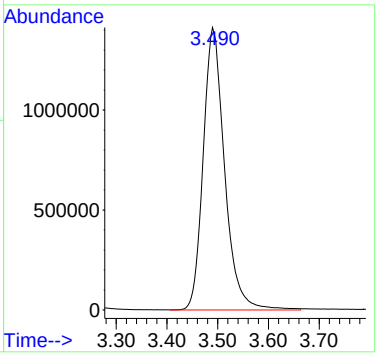
Ion	Ratio	Lower	Upper
43	100		
58	28.3	25.4	38.0

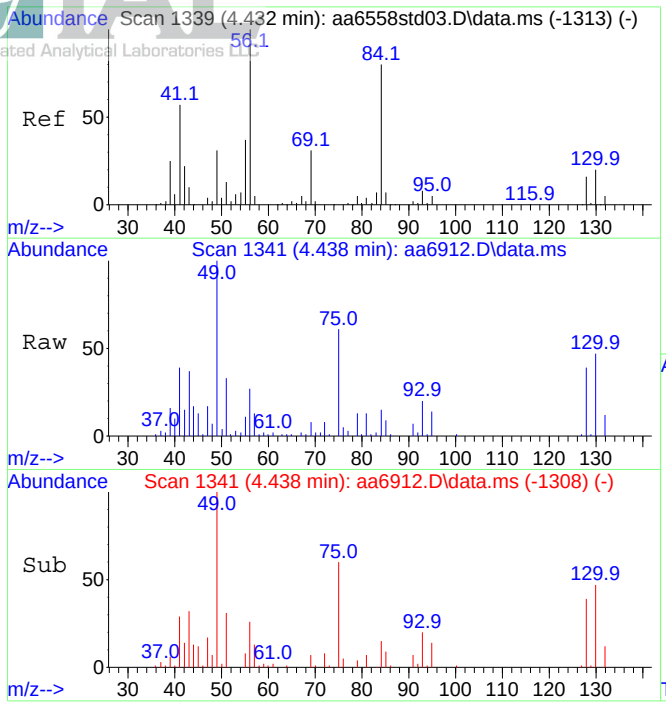




#26
Tert-butyl alcohol
Concen: 87.57 ppbV
RT: 3.490 min Scan# 1046
Delta R.T. 0.013 min
Lab File: aa6912.D
Acq: 16 Jul 2024 7:54 pm

Tgt Ion: 59 Resp: 4137348

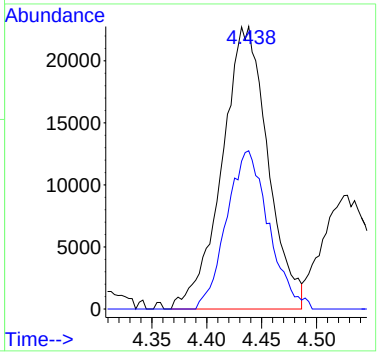


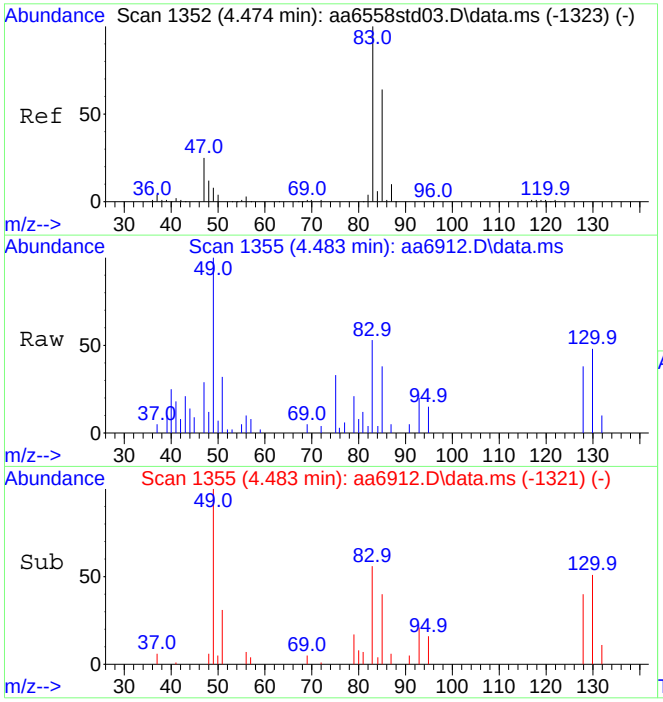


#29
Cyclohexane
Concen: 1.72 ppbV
RT: 4.438 min Scan# 1341
Delta R.T. 0.006 min
Lab File: aa6912.D
Acq: 16 Jul 2024 7:54 pm

Tgt Ion: 56 Resp: 66409

Ion	Ratio	Lower	Upper
56	100		
84	51.3	66.8	100.2#

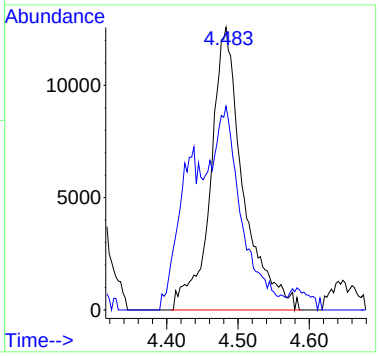


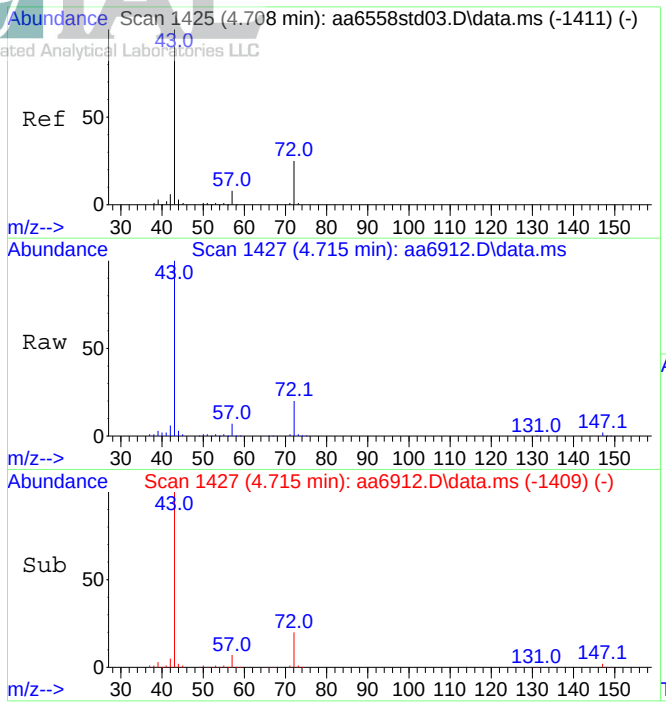


#30
Chloroform
Concen: 0.83 ppbV
RT: 4.483 min Scan# 1355
Delta R.T. 0.010 min
Lab File: aa6912.D
Acq: 16 Jul 2024 7:54 pm

Tgt Ion: 83 Resp: 39923

Ion	Ratio	Lower	Upper
83	100		
85	109.8	52.6	79.0#

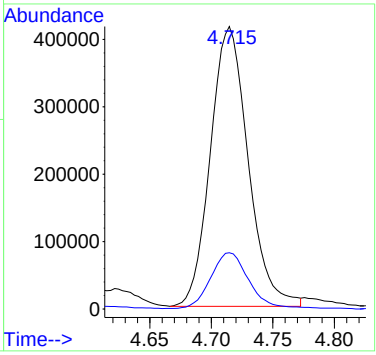


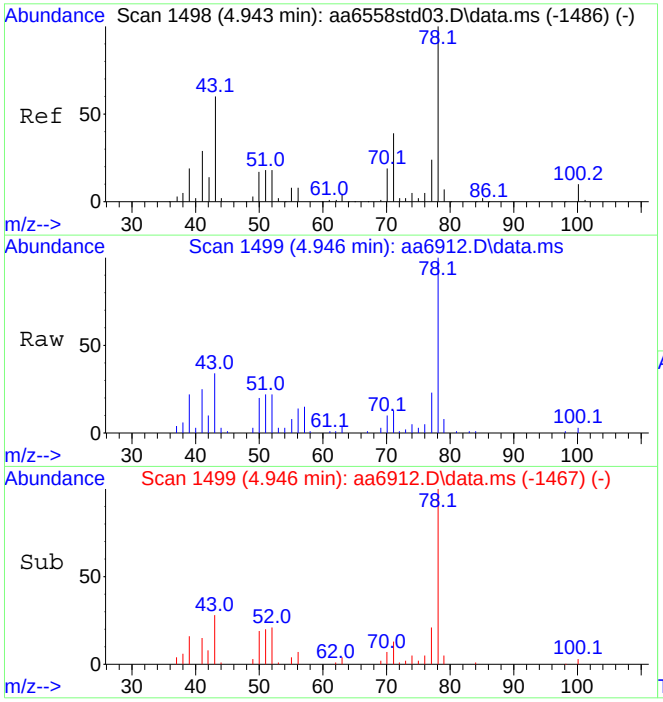


#35
Methyl ethyl ketone
Concen: 18.49 ppbV
RT: 4.715 min Scan# 1427
Delta R.T. 0.006 min
Lab File: aa6912.D
Acq: 16 Jul 2024 7:54 pm

Tgt Ion: 43 Resp: 887641

Ion	Ratio	Lower	Upper
43	100		
72	19.9	19.5	29.3

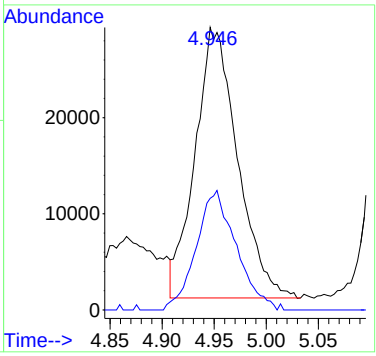


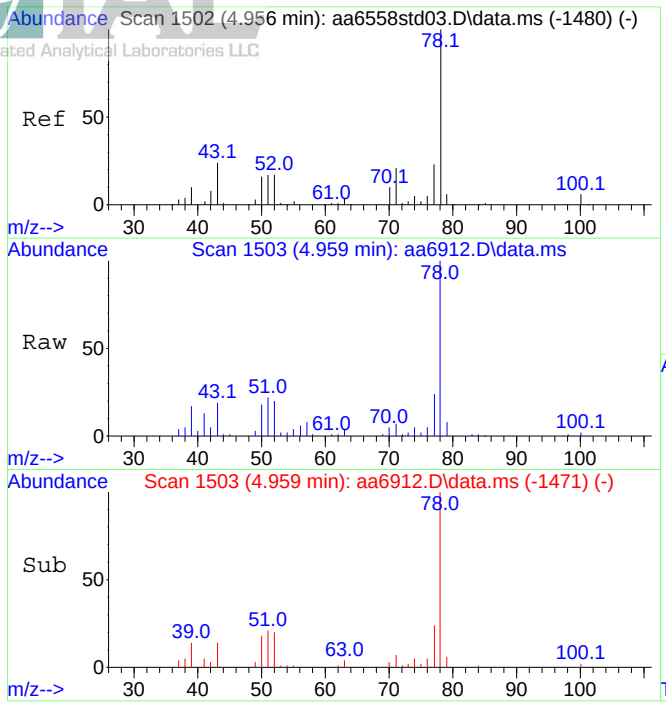


#36
n-Heptane
Concen: 1.76 ppbV
RT: 4.946 min Scan# 1499
Delta R.T. 0.003 min
Lab File: aa6912.D
Acq: 16 Jul 2024 7:54 pm

Tgt Ion: 43 Resp: 79981

Ion	Ratio	Lower	Upper
43	100		
71	41.3	46.2	69.2#

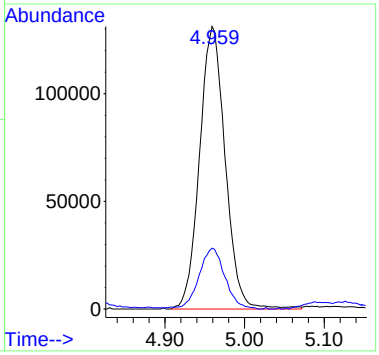


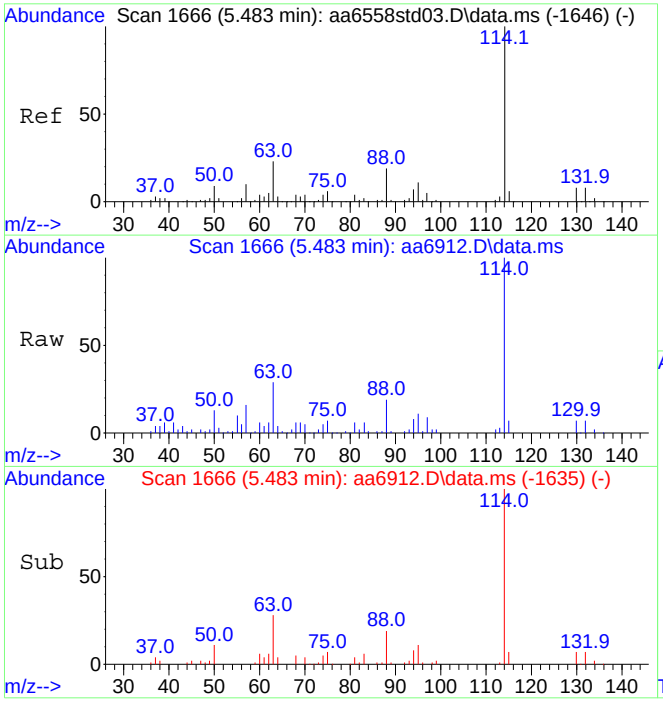


#37
Benzene
Concen: 4.28 ppbV
RT: 4.959 min Scan# 1503
Delta R.T. 0.003 min
Lab File: aa6912.D
Acq: 16 Jul 2024 7:54 pm

Tgt Ion: 78 Resp: 293928

Ion	Ratio	Lower	Upper
78	100		
51	21.9	14.9	22.3

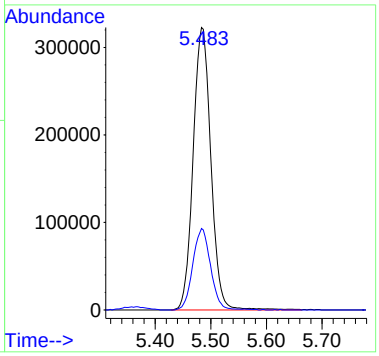


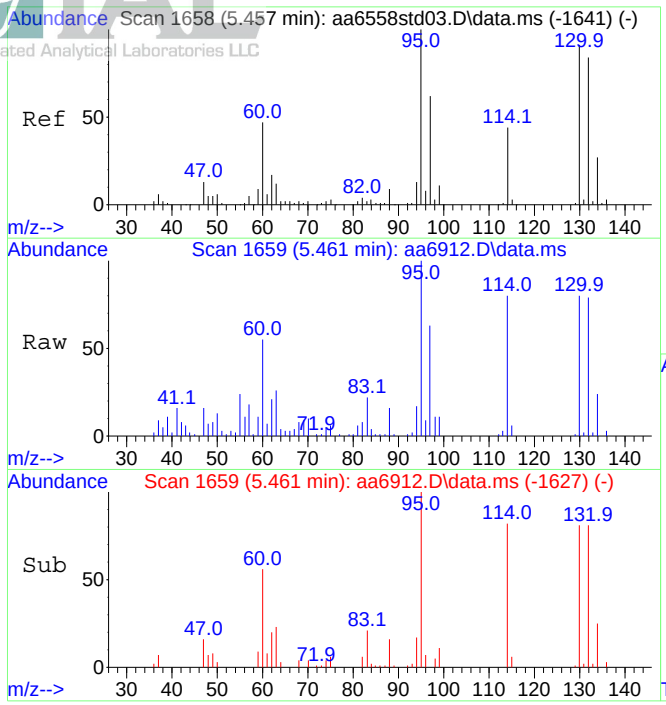


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.483 min Scan# 1666
Delta R.T. -0.000 min
Lab File: aa6912.D
Acq: 16 Jul 2024 7:54 pm

Tgt Ion:114 Resp: 713469

Ion	Ratio	Lower	Upper
114	100		
63	29.0	3.6	43.6

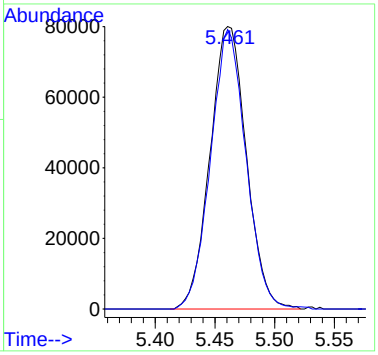


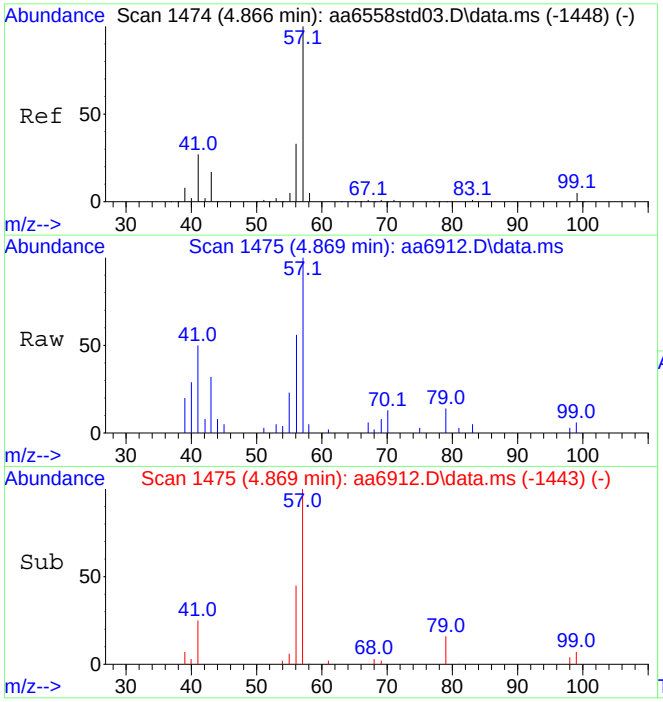


#40
Trichloroethene
Concen: 5.27 ppbV
RT: 5.461 min Scan# 1659
Delta R.T. 0.003 min
Lab File: aa6912.D
Acq: 16 Jul 2024 7:54 pm

Tgt Ion:130 Resp: 170049

Ion	Ratio	Lower	Upper
130	100		
132	96.0	76.6	114.8

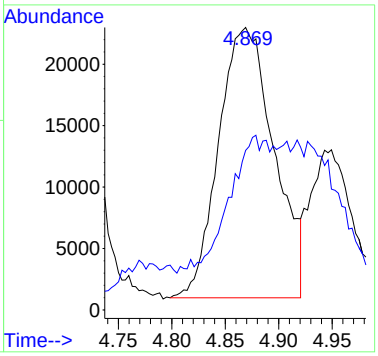


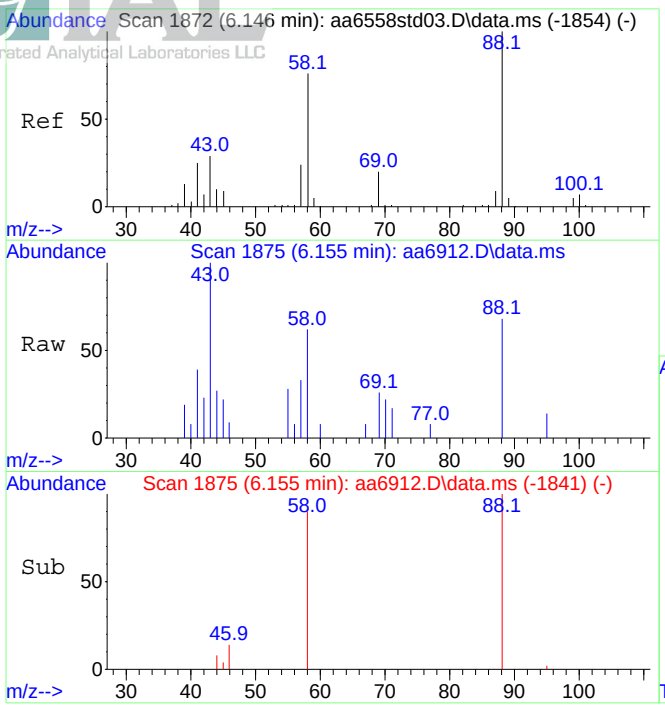


#41
2,2,4-Trimethylpentane
Concen: 0.63 ppbV
RT: 4.869 min Scan# 1475
Delta R.T. 0.003 min
Lab File: aa6912.D
Acq: 16 Jul 2024 7:54 pm

Tgt Ion: 57 Resp: 79555

Ion	Ratio	Lower	Upper
57	100		
56	55.6	26.0	39.0#

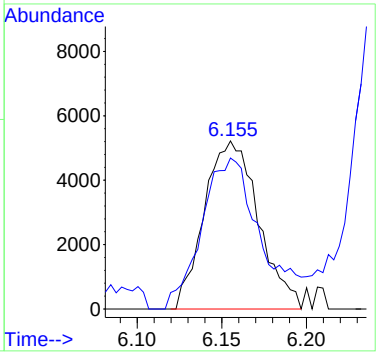


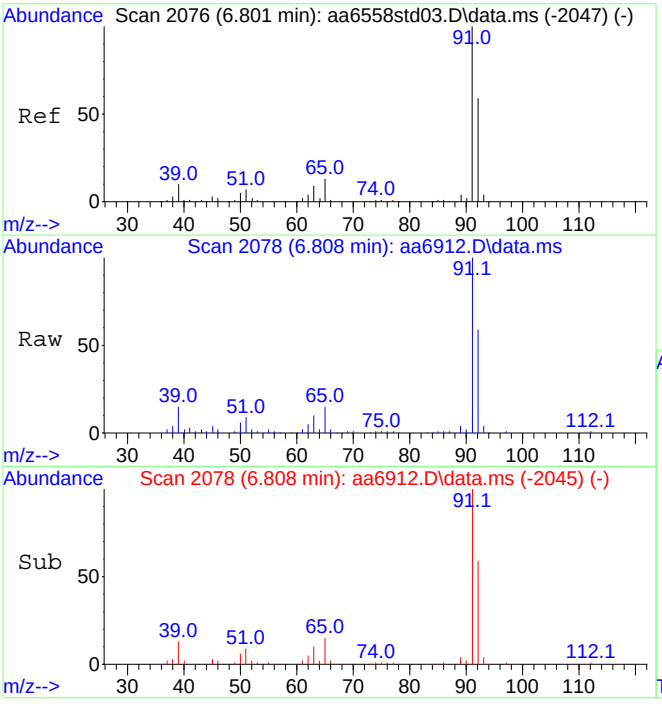


#45
1,4-Dioxane
Concen: 0.69 ppbV
RT: 6.155 min Scan# 1875
Delta R.T. 0.010 min
Lab File: aa6912.D
Acq: 16 Jul 2024 7:54 pm

Tgt Ion: 88 Resp: 11592

Ion	Ratio	Lower	Upper
88	100		
58	100.5	59.9	89.9#

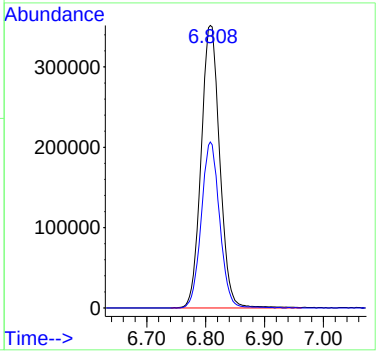


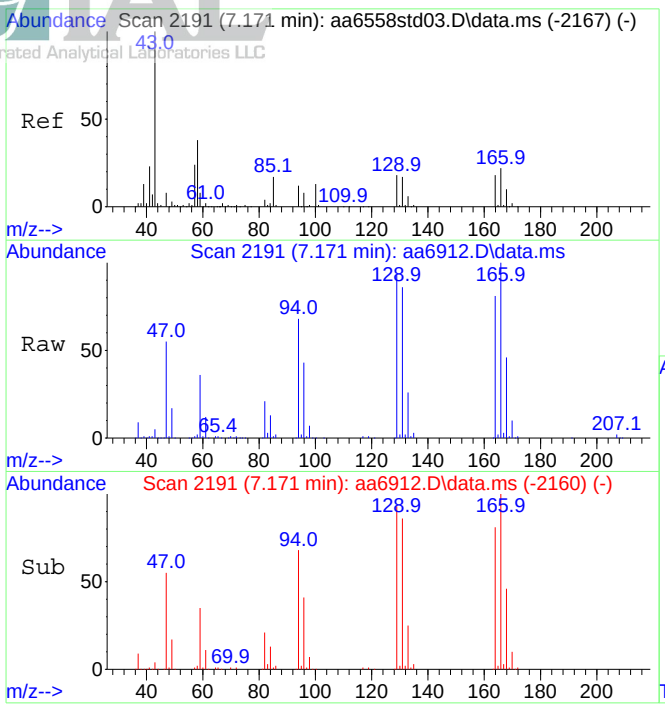


#47
Toluene
Concen: 8.47 ppbV
RT: 6.808 min Scan# 2078
Delta R.T. 0.006 min
Lab File: aa6912.D
Acq: 16 Jul 2024 7:54 pm

Tgt Ion: 91 Resp: 773718

Ion	Ratio	Lower	Upper
91	100		
92	57.8	47.0	70.6

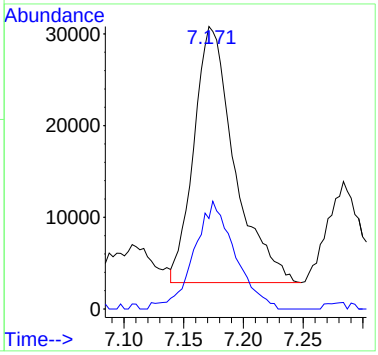


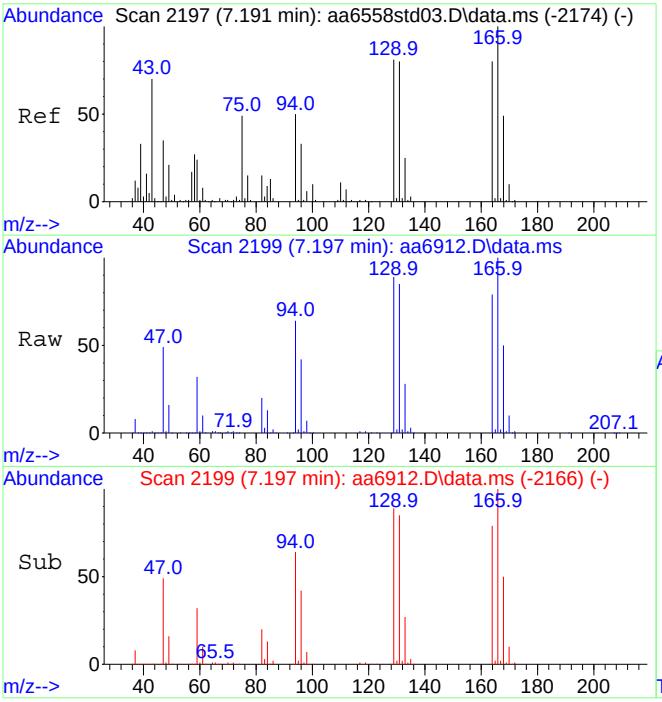


#48
Methyl isobutyl ketone
Concen: 0.99 ppbV
RT: 7.171 min Scan# 2191
Delta R.T. -0.000 min
Lab File: aa6912.D
Acq: 16 Jul 2024 7:54 pm

Tgt Ion: 43 Resp: 66075

Ion	Ratio	Lower	Upper
43	100		
58	42.4	31.0	46.4

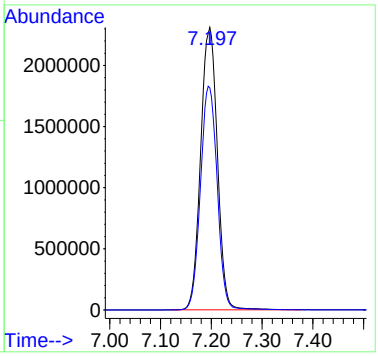


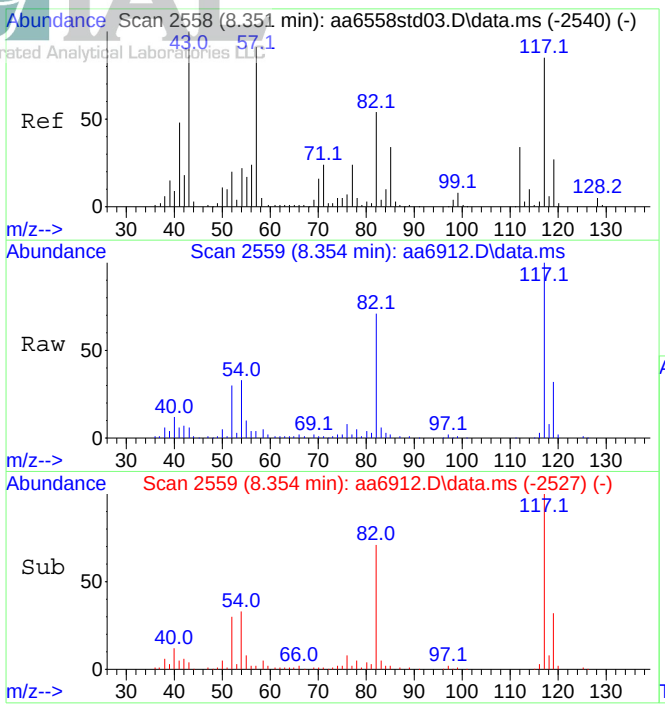


#49
Tetrachloroethene
Concen: 153.10 ppbV
RT: 7.197 min Scan# 2199
Delta R.T. 0.006 min
Lab File: aa6912.D
Acq: 16 Jul 2024 7:54 pm

Tgt Ion:166 Resp: 5297466

Ion	Ratio	Lower	Upper
166	100		
164	79.3	62.8	94.2

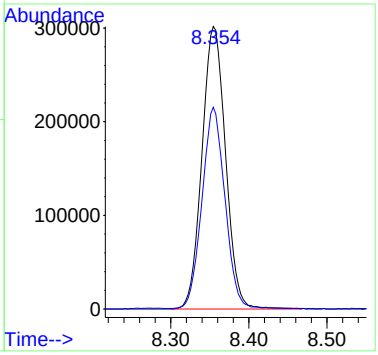


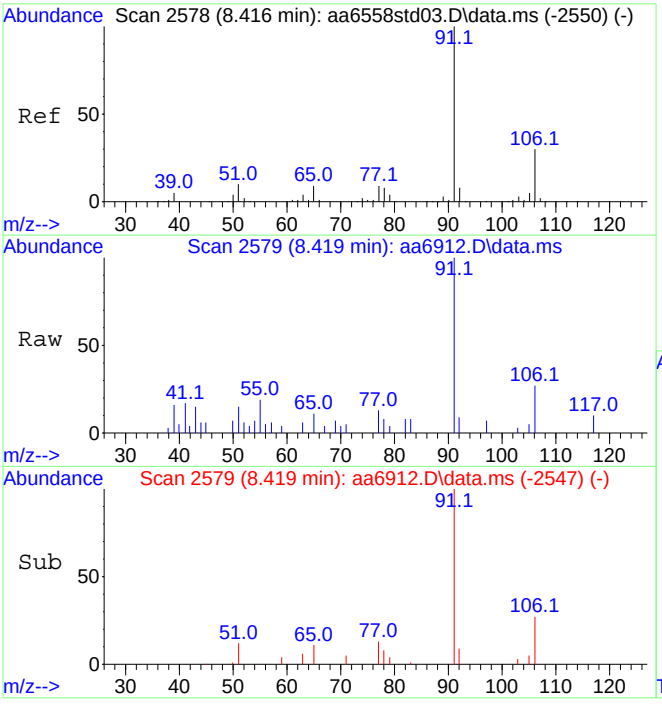


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.354 min Scan# 2559
Delta R.T. 0.003 min
Lab File: aa6912.D
Acq: 16 Jul 2024 7:54 pm

Tgt Ion:117 Resp: 633928

Ion	Ratio	Lower	Upper
117	100		
82	69.8	42.3	82.3

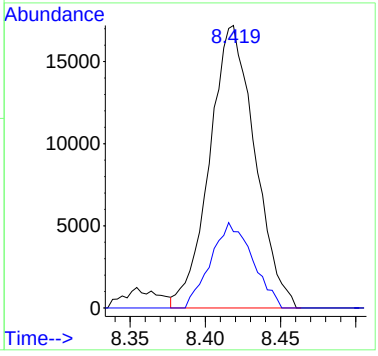


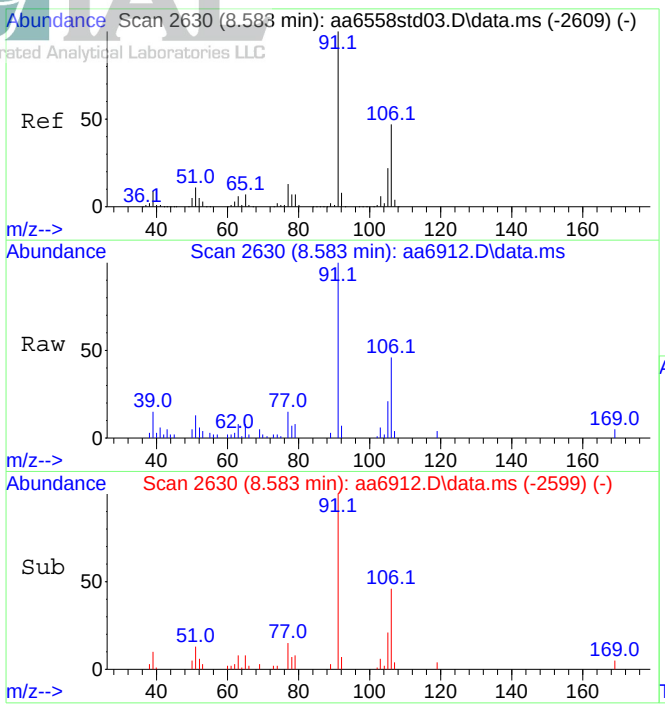


#58
Ethylbenzene
Concen: 0.29 ppbV
RT: 8.419 min Scan# 2579
Delta R.T. 0.003 min
Lab File: aa6912.D
Acq: 16 Jul 2024 7:54 pm

Tgt Ion: 91 Resp: 36021

Ion	Ratio	Lower	Upper
91	100		
106	27.9	23.8	35.8

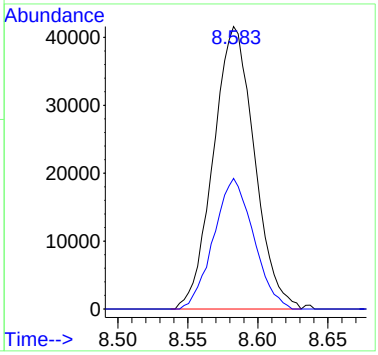


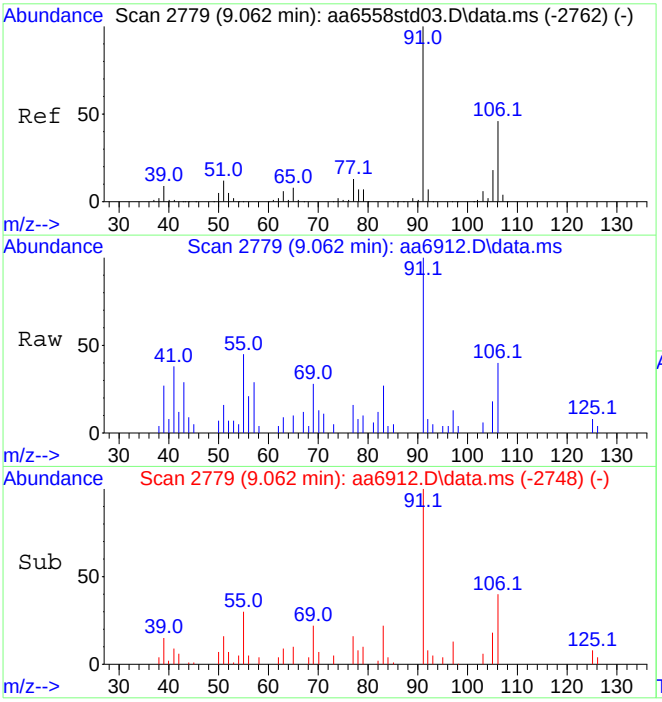


#59
Xylenes (m&p)
Concen: 0.90 ppbV
RT: 8.583 min Scan# 2630
Delta R.T. -0.000 min
Lab File: aa6912.D
Acq: 16 Jul 2024 7:54 pm

Tgt Ion: 91 Resp: 84784

Ion	Ratio	Lower	Upper
91	100		
106	44.9	37.4	56.2

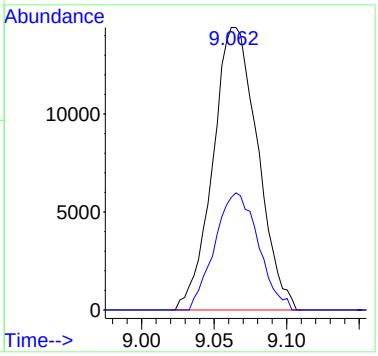


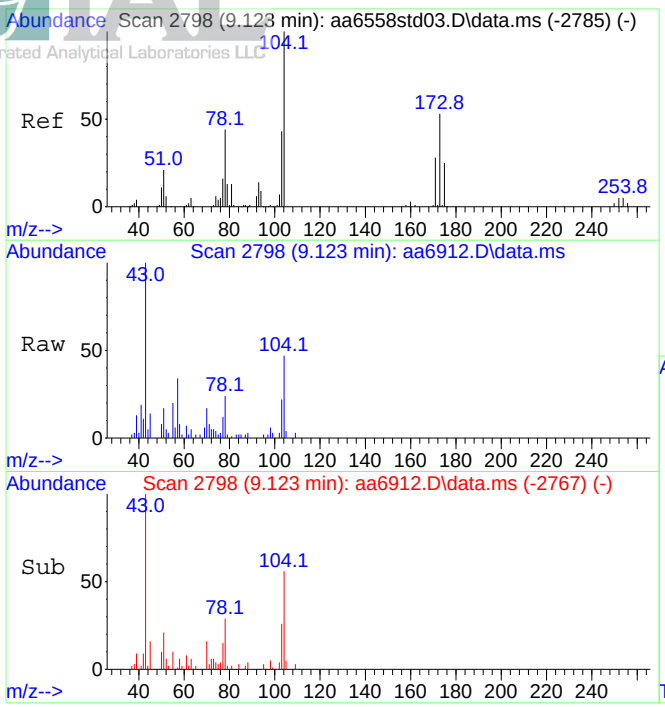


#60
Xylene (o)
Concen: 0.31 ppbV
RT: 9.062 min Scan# 2779
Delta R.T. -0.000 min
Lab File: aa6912.D
Acq: 16 Jul 2024 7:54 pm

Tgt Ion: 91 Resp: 30942

Ion	Ratio	Lower	Upper
91	100		
106	40.3	36.2	54.2

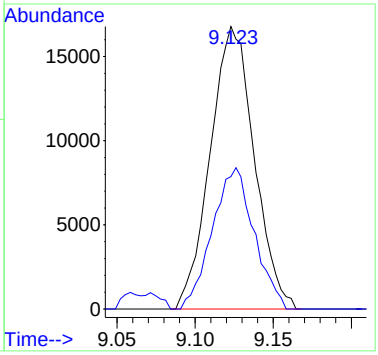


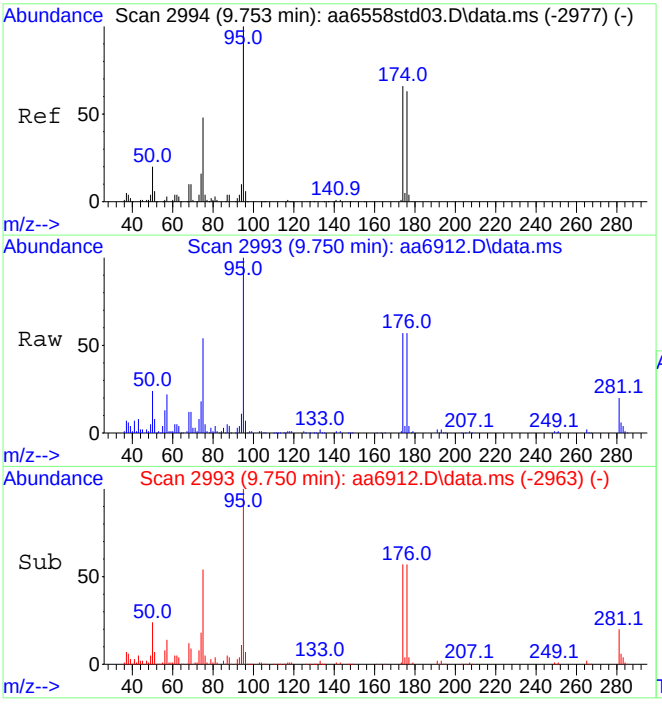


#61
Styrene
Concen: 0.50 ppbV
RT: 9.123 min Scan# 2798
Delta R.T. -0.000 min
Lab File: aa6912.D
Acq: 16 Jul 2024 7:54 pm

Tgt Ion:104 Resp: 32886

Ion	Ratio	Lower	Upper
104	100		
103	47.3	38.3	57.5

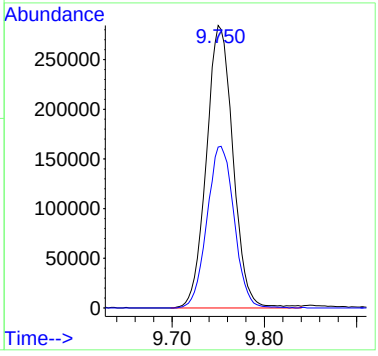


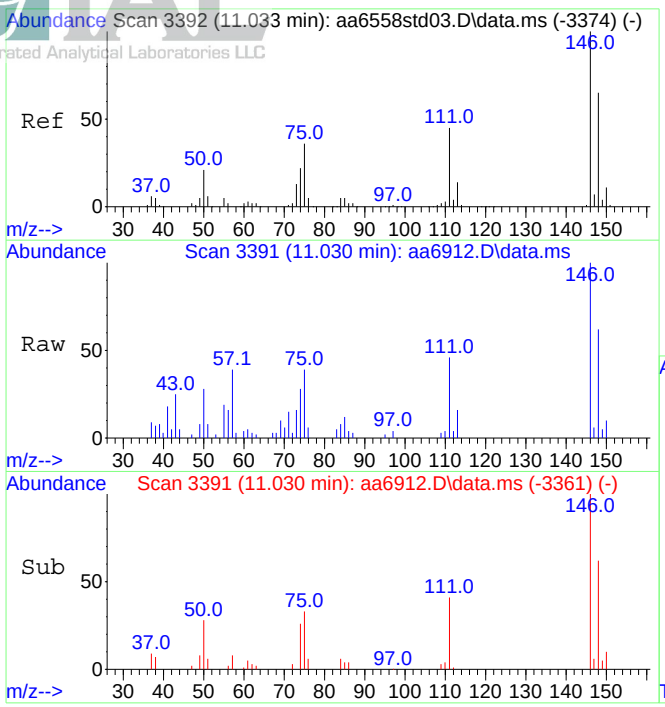


#64
Bromofluorobenzene (tune std)
Concen: 9.51 ppbV
RT: 9.750 min Scan# 2993
Delta R.T. -0.003 min
Lab File: aa6912.D
Acq: 16 Jul 2024 7:54 pm

Tgt Ion: 95 Resp: 570374

Ion	Ratio	Lower	Upper
95	100		
174	58.3	52.9	79.3

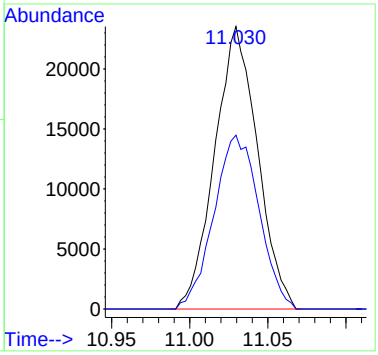




#71
1,3-Dichlorobenzene
Concen: 0.64 ppbV
RT: 11.030 min Scan# 3391
Delta R.T. -0.003 min
Lab File: aa6912.D
Acq: 16 Jul 2024 7:54 pm

Tgt Ion:146 Resp: 44912

Ion	Ratio	Lower	Upper
146	100		
148	64.8	51.2	76.8



Data Path : C:\DATA\2024\07-2024\07-18-2024\
Data File : aa6926.D
Acq On : 18 Jul 2024 2:41 pm
Operator : jjw
Sample : E24-02427-02x10 dil
Misc : 3786, 50cc
ALS Vial : 6 Sample Multiplier: 1

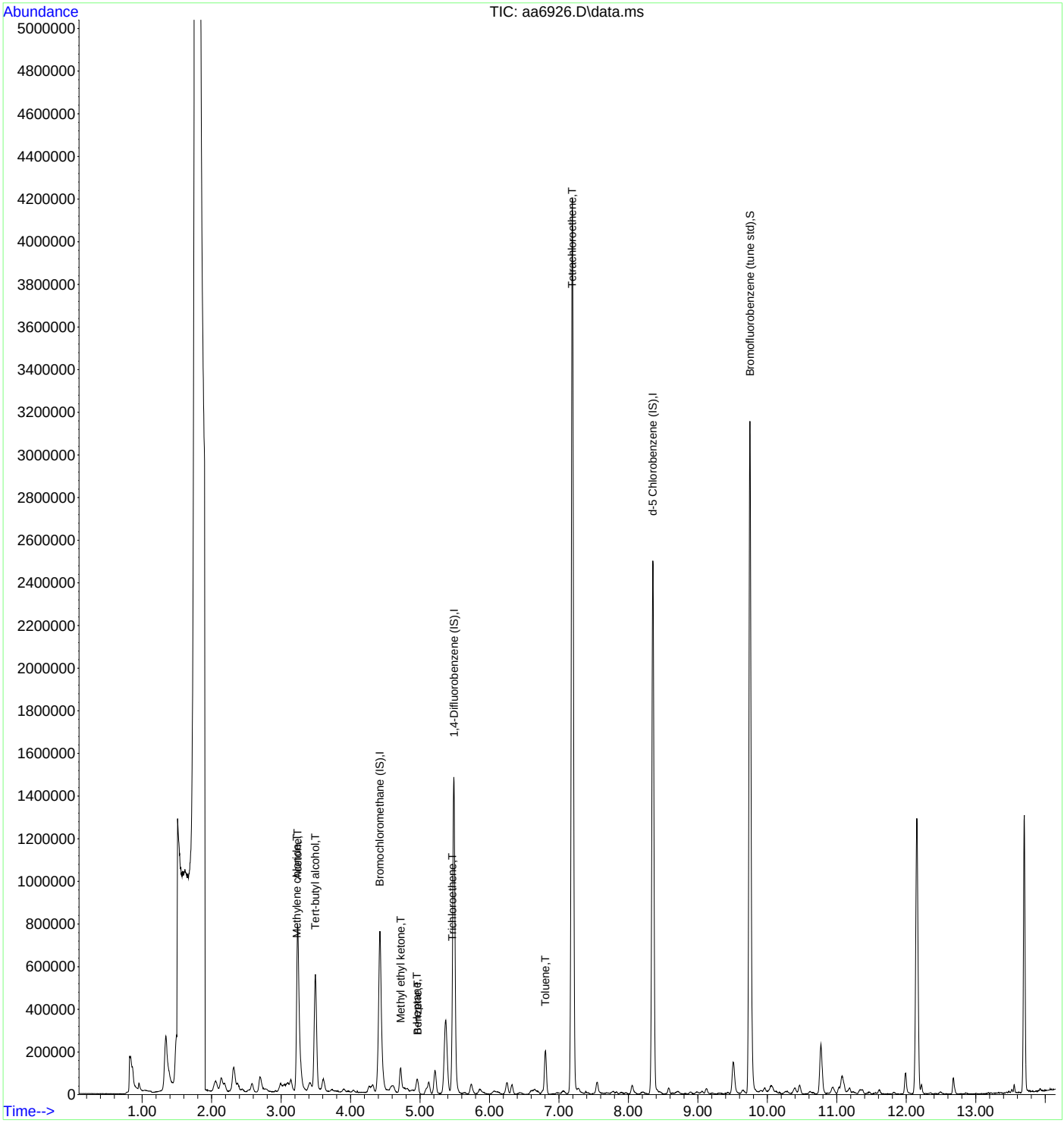
Quant Time: Jul 18 15:13:50 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

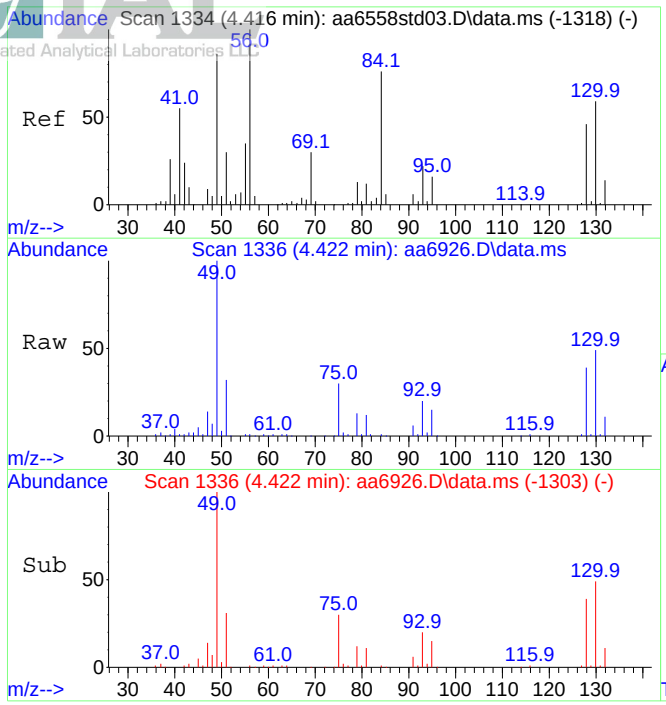
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.422	130	246716	10.00	ppbV		0.000
39) 1,4-Difluorobenzene (IS)	5.490	114	1197933	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.351	117	1416061	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.750	95	1320073	9.86	ppbV		0.000
Target Compounds							Qvalue
20) Methylene chloride	3.226	49	28727	0.64	ppbV		82
21) Acetone	3.239	43	1339905	24.20	ppbV		94
26) Tert-butyl alcohol	3.493	59	755117	9.78	ppbV		100
35) Methyl ethyl ketone	4.721	43	160151	2.04	ppbV		92
36) n-Heptane	4.956	43	17835	0.24	ppbV	#	65
37) Benzene	4.965	78	49220	0.44	ppbV		95
40) Trichloroethene	5.464	130	30254	0.56	ppbV		100
47) Toluene	6.805	91	161688	1.05	ppbV		99
49) Tetrachloroethene	7.190	166	1269105	21.84	ppbV		100

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

Data Path : C:\DATA\2024\07-2024\07-18-2024\
Data File : aa6926.D
Acq On : 18 Jul 2024 2:41 pm
Operator : jjw
Sample : E24-02427-02x10 dil
Misc : 3786, 50cc
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 18 15:13:50 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

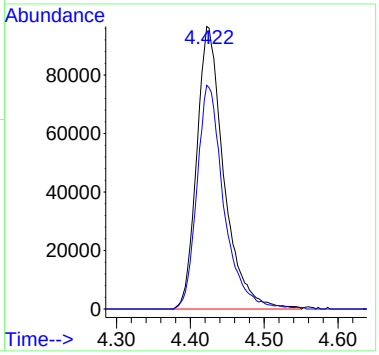


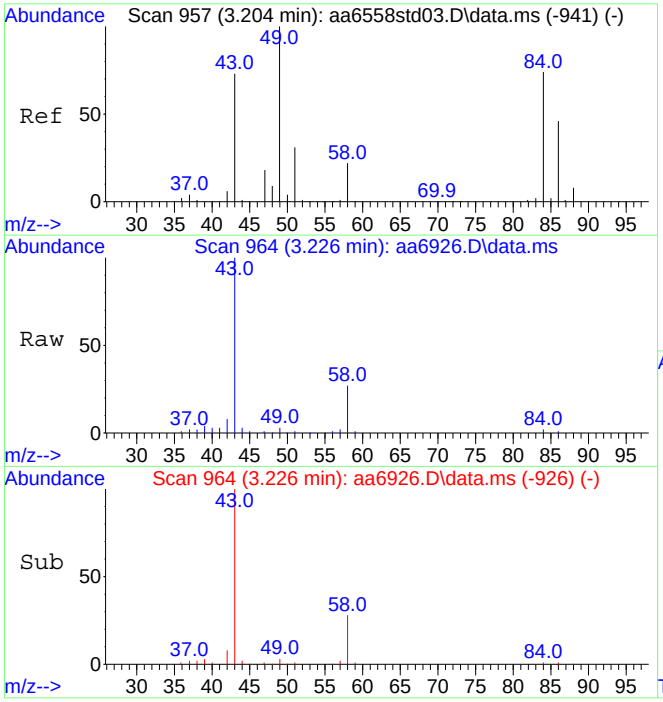


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.422 min Scan# 1336
Delta R.T. 0.006 min
Lab File: aa6926.D
Acq: 18 Jul 2024 2:41 pm

Tgt Ion:130 Resp: 246716

Ion	Ratio	Lower	Upper
130	100		
128	78.8	57.8	97.8

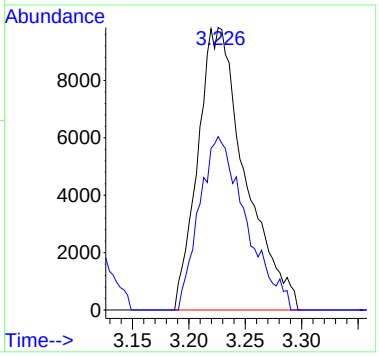


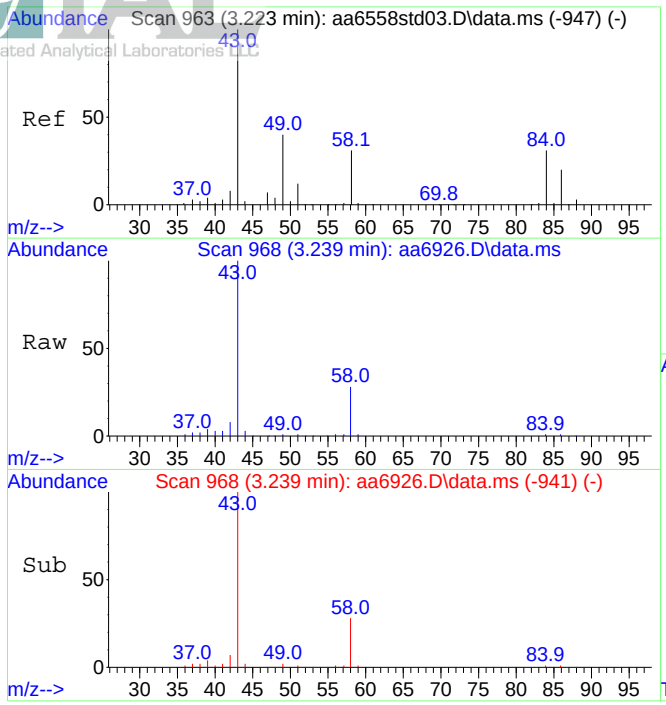


#20
Methylene chloride
Concen: 0.64 ppbV
RT: 3.226 min Scan# 964
Delta R.T. 0.022 min
Lab File: aa6926.D
Acq: 18 Jul 2024 2:41 pm

Tgt Ion: 49 Resp: 28727

Ion	Ratio	Lower	Upper
49	100		
84	60.6	56.2	96.2

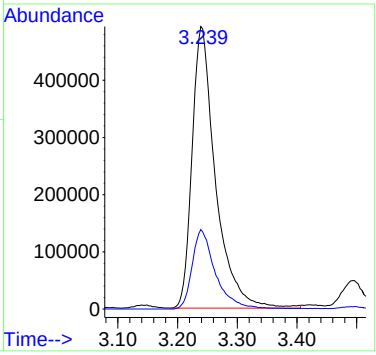


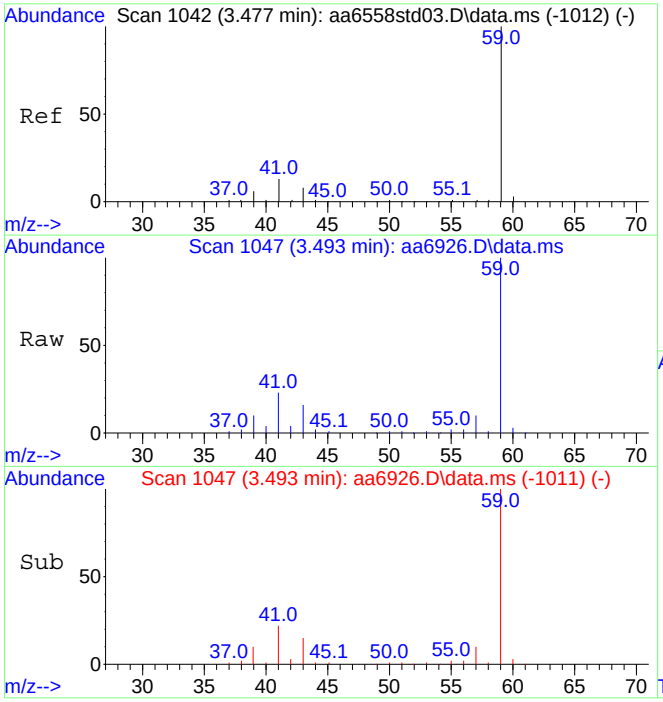


#21
Acetone
Concen: 24.20 ppbV
RT: 3.239 min Scan# 968
Delta R.T. 0.016 min
Lab File: aa6926.D
Acq: 18 Jul 2024 2:41 pm

Tgt Ion: 43 Resp: 1339905

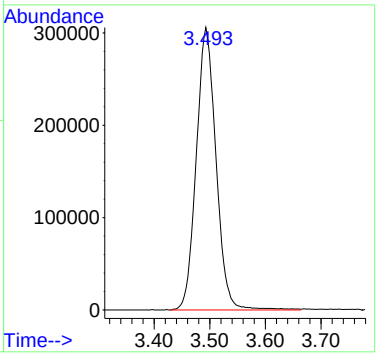
Ion	Ratio	Lower	Upper
43	100		
58	28.2	25.4	38.0

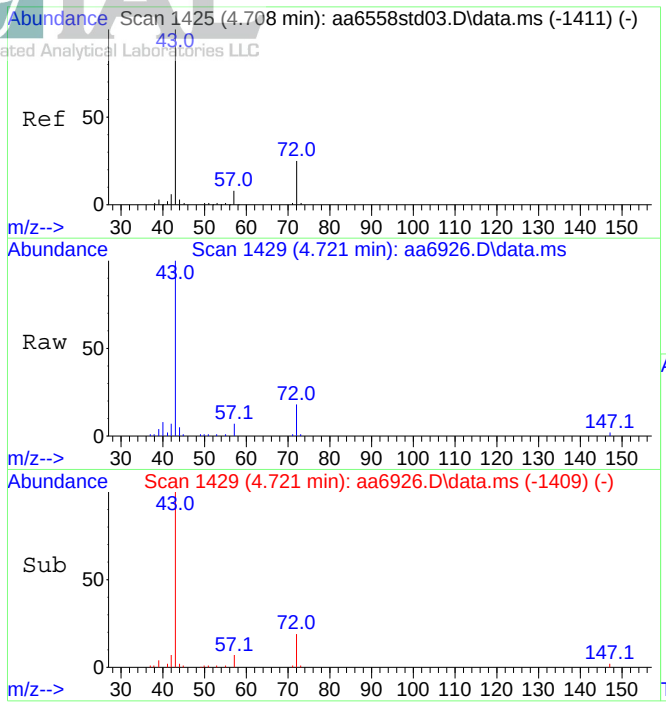




#26
Tert-butyl alcohol
Concen: 9.78 ppbV
RT: 3.493 min Scan# 1047
Delta R.T. 0.016 min
Lab File: aa6926.D
Acq: 18 Jul 2024 2:41 pm

Tgt Ion: 59 Resp: 755117

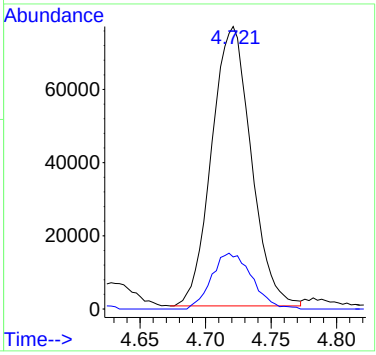


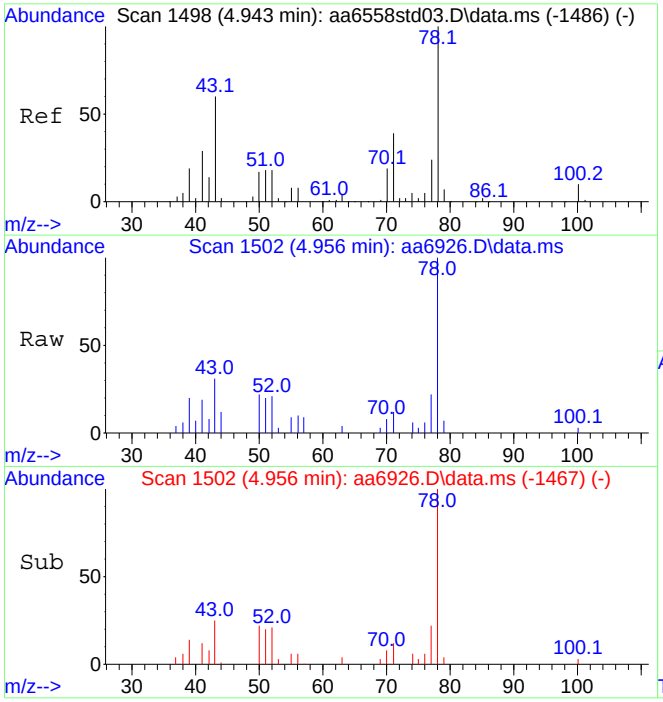


#35
Methyl ethyl ketone
Concen: 2.04 ppbV
RT: 4.721 min Scan# 1429
Delta R.T. 0.013 min
Lab File: aa6926.D
Acq: 18 Jul 2024 2:41 pm

Tgt Ion: 43 Resp: 160151

Ion	Ratio	Lower	Upper
43	100		
72	20.4	19.5	29.3

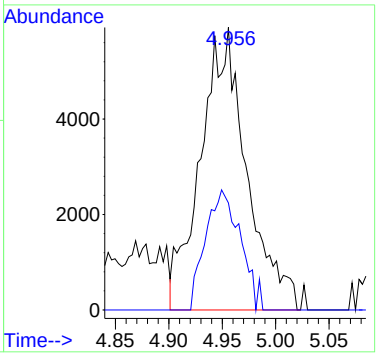


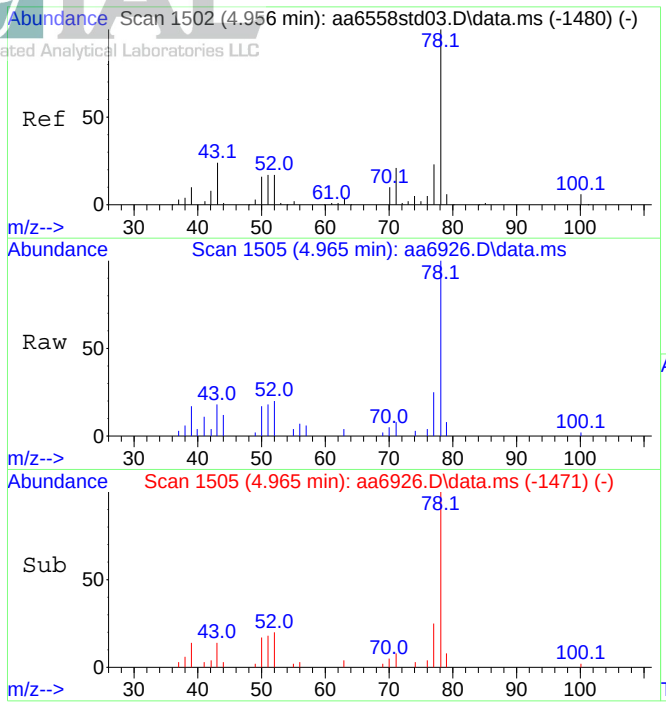


#36
n-Heptane
Concen: 0.24 ppbV
RT: 4.956 min Scan# 1502
Delta R.T. 0.013 min
Lab File: aa6926.D
Acq: 18 Jul 2024 2:41 pm

Tgt Ion: 43 Resp: 17835

Ion	Ratio	Lower	Upper
43	100		
71	32.0	46.2	69.2#

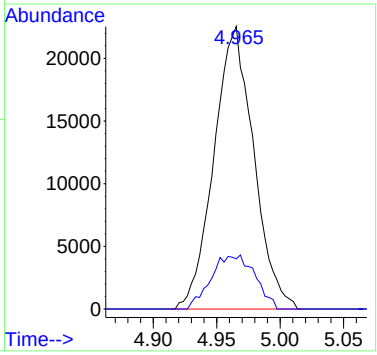


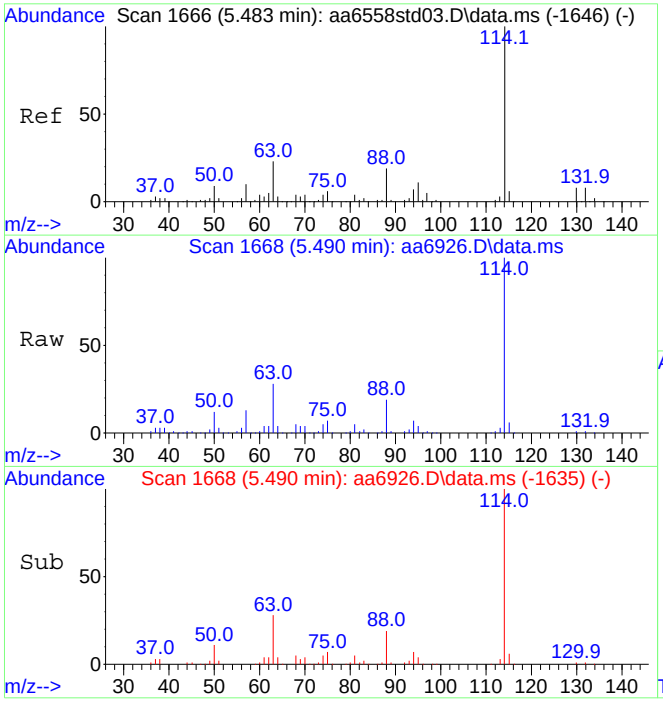


#37
Benzene
Concen: 0.44 ppbV
RT: 4.965 min Scan# 1505
Delta R.T. 0.010 min
Lab File: aa6926.D
Acq: 18 Jul 2024 2:41 pm

Tgt Ion: 78 Resp: 49220

Ion	Ratio	Lower	Upper
78	100		
51	20.9	14.9	22.3

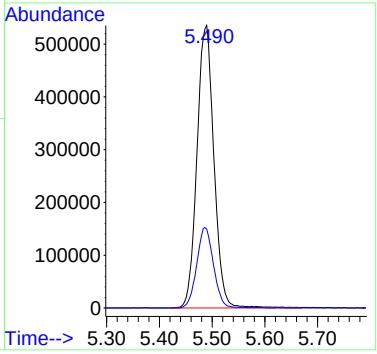


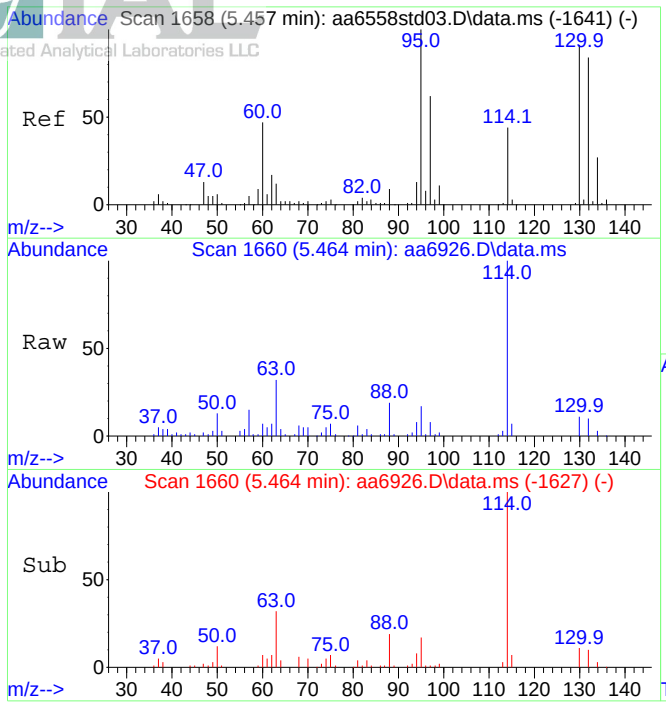


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.490 min Scan# 1668
Delta R.T. 0.006 min
Lab File: aa6926.D
Acq: 18 Jul 2024 2:41 pm

Tgt Ion:114 Resp: 1197933

Ion	Ratio	Lower	Upper
114	100		
63	28.2	3.6	43.6

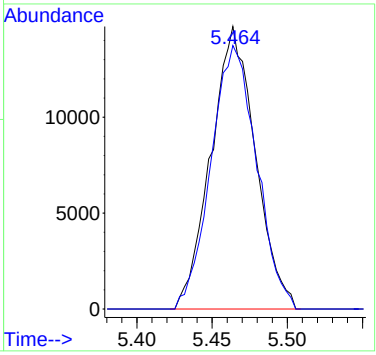


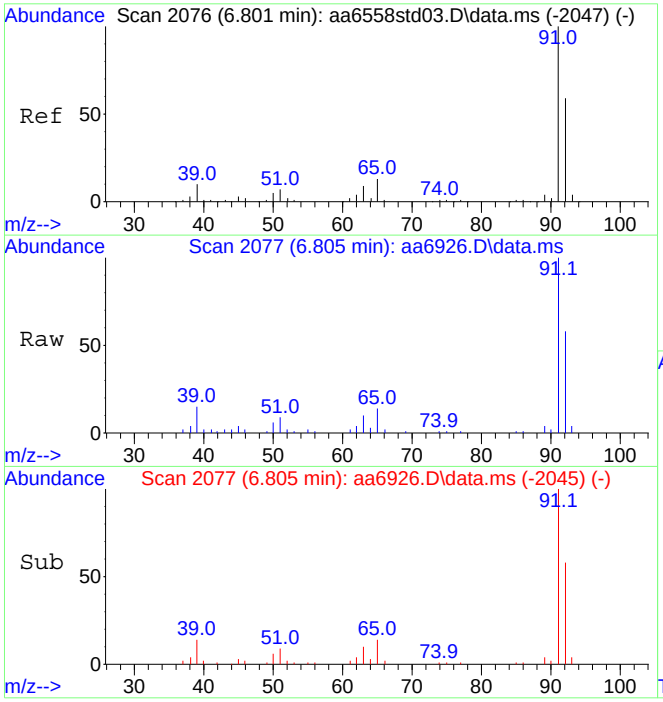


#40
Trichloroethene
Concen: 0.56 ppbV
RT: 5.464 min Scan# 1660
Delta R.T. 0.006 min
Lab File: aa6926.D
Acq: 18 Jul 2024 2:41 pm

Tgt Ion:130 Resp: 30254

Ion	Ratio	Lower	Upper
130	100		
132	95.7	76.6	114.8

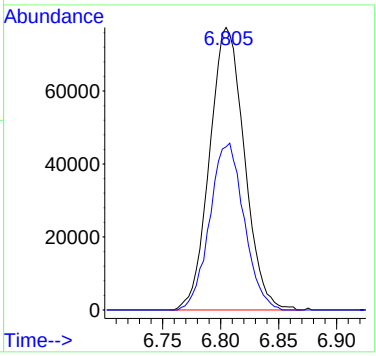


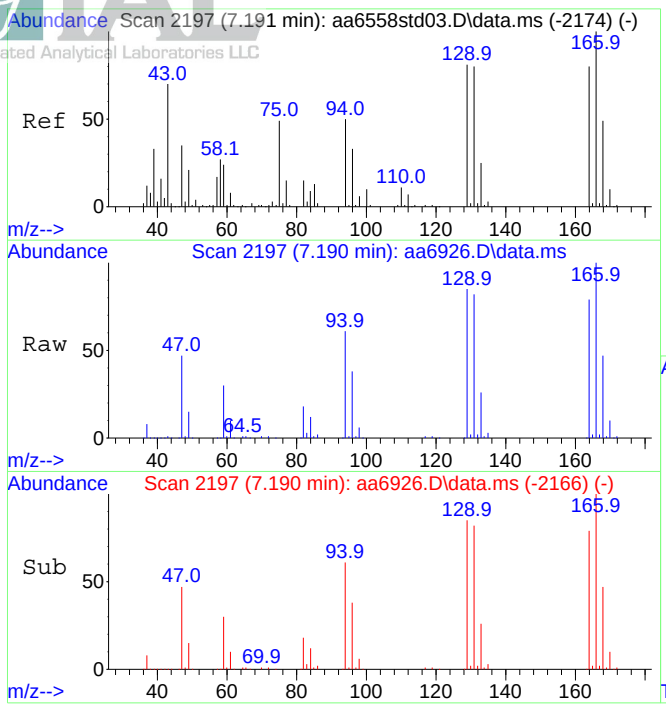


#47
Toluene
Concen: 1.05 ppbV
RT: 6.805 min Scan# 2077
Delta R.T. 0.003 min
Lab File: aa6926.D
Acq: 18 Jul 2024 2:41 pm

Tgt Ion: 91 Resp: 161688

Ion	Ratio	Lower	Upper
91	100		
92	58.1	47.0	70.6

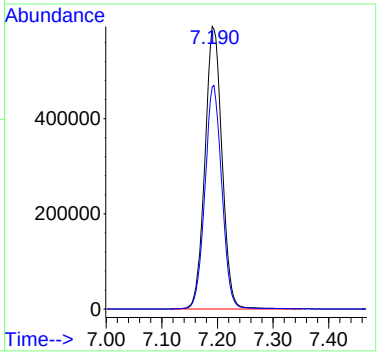


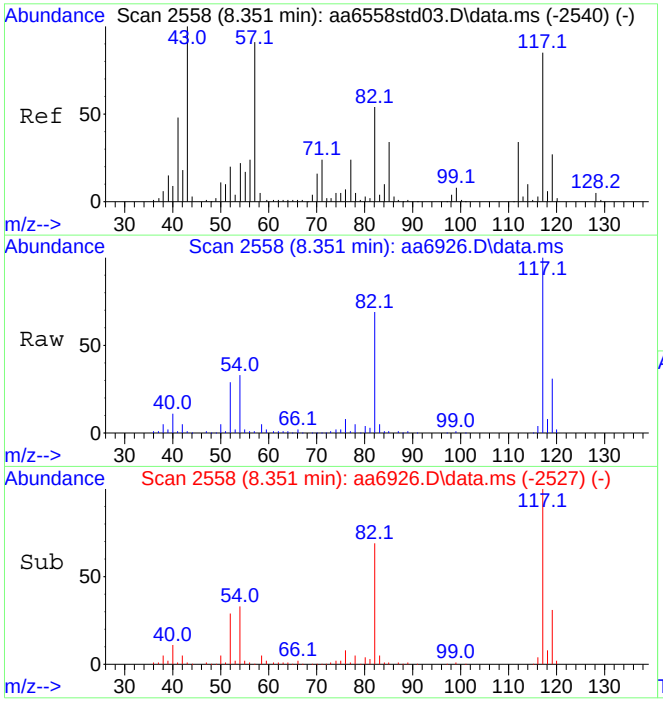


#49
Tetrachloroethene
Concen: 21.84 ppbV
RT: 7.190 min Scan# 2197
Delta R.T. -0.000 min
Lab File: aa6926.D
Acq: 18 Jul 2024 2:41 pm

Tgt Ion:166 Resp: 1269105

Ion	Ratio	Lower	Upper
166	100		
164	78.4	62.8	94.2

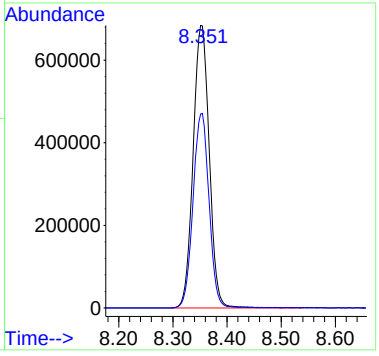


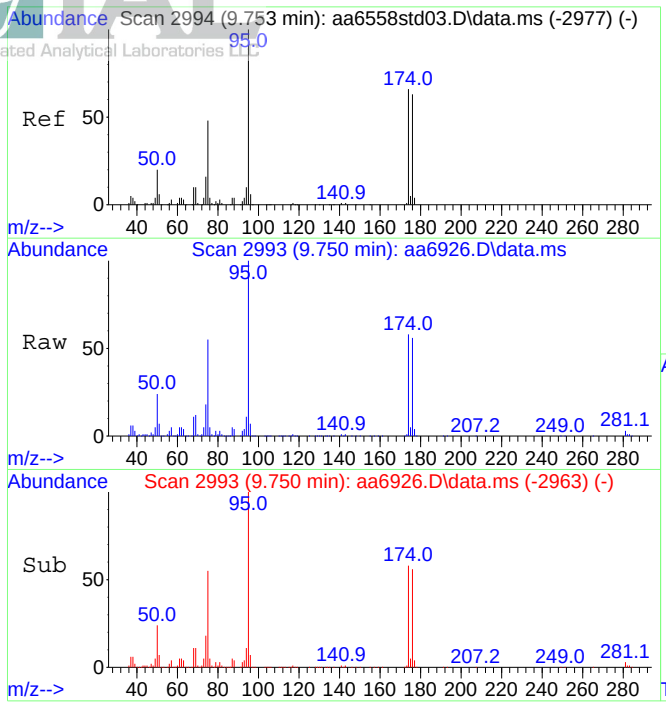


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.351 min Scan# 2558
Delta R.T. -0.000 min
Lab File: aa6926.D
Acq: 18 Jul 2024 2:41 pm

Tgt Ion:117 Resp: 1416061

Ion	Ratio	Lower	Upper
117	100		
82	68.5	42.3	82.3

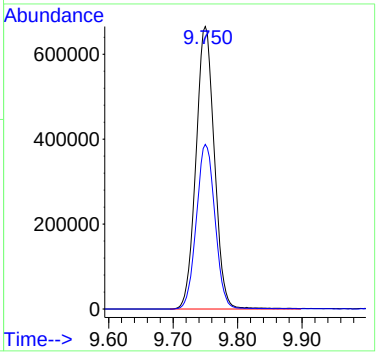




#64
Bromofluorobenzene (tune std)
Concen: 9.86 ppbV
RT: 9.750 min Scan# 2993
Delta R.T. -0.003 min
Lab File: aa6926.D
Acq: 18 Jul 2024 2:41 pm

Tgt Ion: 95 Resp: 1320073

Ion	Ratio	Lower	Upper
95	100		
174	59.3	52.9	79.3



Volatile Organic Compounds by EPA Method TO-15
Summary of Results

Lab ID:	E24-02427-03	Instrument ID:	AA
Client ID:	SG-16	GC/MS Column:	RTX-1, 0.32 mmID
Date Sampled:	07/15/2024 18:30	Injection Volmue:	500ml, 100ml
Date Received:	07/16/2024	Matrix:	Air-Other
Date Analyzed:	07/16/2024 21:36, 07/16/2024 20:57	% Moisture:	NA
Data File:	AA6915, AA6914	Dilution Factor:	1, 5
Summa ID:	4867	Analyst:	J. Walukiewicz

			Concentration Reported		Reporting Limits	
Compound	**CAS #**	**Q**	**ppbv**	**ug/m3**	**ppbv**	**ug/m3**
Acetone	67-64-1	D	76	180	1.0	2.4
Benzene	71-43-2		3.4	11	0.20	0.64
Bromodichloromethane	75-27-4		ND	ND	0.20	1.3
Bromoform	75-25-2		ND	ND	0.20	2.1
Bromomethane	74-83-9		ND	ND	0.20	0.78
1,3-Butadiene	106-99-0		ND	ND	0.20	0.44
Chlorobenzene	108-90-7		ND	ND	0.20	0.92
Chloroethane	75-00-3		ND	ND	0.20	0.53
Chloroform	67-66-3		1.2	6.0	0.20	0.98
Chloromethane	74-87-3		ND	ND	0.20	0.41
Carbon disulfide	75-15-0		6.2	19	0.20	0.62
Carbon tetrachloride	56-23-5		ND	ND	0.040	0.25
Cyclohexane	110-82-7		1.3	4.6	0.20	0.69
Dibromochloromethane	124-48-1		ND	ND	0.20	1.7
1,2-Dibromoethane	106-93-4		ND	ND	0.20	1.5
1,2-Dichlorobenzene	95-50-1		ND	ND	0.20	1.2
1,3-Dichlorobenzene	541-73-1		1.0	6.2	0.20	1.2
1,4-Dichlorobenzene	106-46-7		ND	ND	0.20	1.2
Dichlorodifluoromethane	75-71-8		ND	ND	0.20	0.99
1,1-Dichloroethane	75-34-3		ND	ND	0.20	0.81
1,2-Dichloroethane	107-06-2		ND	ND	0.20	0.81
1,1-Dichloroethene	75-35-4		ND	ND	0.20	0.79
1,2-Dichloroethene (cis)	156-59-2		ND	ND	0.20	0.79
1,2-Dichloroethene (trans)	156-60-5		ND	ND	0.20	0.79
1,2-Dichloropropane	78-87-5		ND	ND	0.20	0.92
1,3-Dichloropropene (cis)	10061-01-5		0.25	1.1	0.20	0.91
1,3-Dichloropropene (trans)	10061-02-6		ND	ND	0.20	0.91
1,2-Dichlorotetrafluoroethane	76-14-2		ND	ND	0.20	1.4
1,4-Dioxane	123-91-1		ND	ND	0.20	0.72
Ethylbenzene	100-41-4		ND	ND	0.20	0.87
n-Heptane	142-82-5		1.8	7.2	0.20	0.82
1,3-Hexachlorobutadiene	87-68-3		ND	ND	0.20	2.1
n-Hexane	110-54-3		ND	ND	0.20	0.70
Methylene chloride	75-09-2		2.3	7.9	0.20	0.69
Methyl ethyl ketone	78-93-3		12	34	0.20	0.59
Methyl isobutyl ketone	108-10-1		0.41	1.7	0.20	0.82
Methyl tert-butyl ether	1634-04-4		ND	ND	0.20	0.72
Styrene	100-42-5		0.34	1.5	0.20	0.85
Tert-butyl alcohol	75-65-0		9.8	30	0.20	0.61
1,1,2,2-Tetrachloroethane	79-34-5		ND	ND	0.20	1.4
Tetrachloroethene	127-18-4	D	110	730	1.0	6.8
Toluene	108-88-3		8.1	31	0.20	0.75
1,2,4-Trichlorobenzene	120-82-1		ND	ND	0.20	1.5
1,1,1-Trichloroethane	71-55-6		0.28	1.5	0.20	1.1
1,1,2-Trichloroethane	79-00-5		ND	ND	0.20	1.1

Qualifiers:
D = Dilution required

Volatile Organic Compounds by EPA Method TO-15
Summary of Results

Lab ID:	E24-02427-03	Instrument ID:	AA
Client ID:	SG-16	GC/MS Column:	RTX-1, 0.32 mmID
Date Sampled:	07/15/2024 18:30	Injection Volmue:	500ml, 100ml
Date Received:	07/16/2024	Matrix:	Air-Other
Date Analyzed:	07/16/2024 21:36, 07/16/2024 20:57	% Moisture:	NA
Data File:	AA6915, AA6914	Dilution Factor:	1, 5
Summa ID:	4867	Analyst:	J. Walukiewicz

			Concentration Reported		Reporting Limits	
Compound	**CAS #**	**Q**	**ppbv**	**ug/m3**	**ppbv**	**ug/m3**
Trichloroethene	79-01-6		1.6	8.7	0.046	0.25
Trichlorofluoromethane	75-69-4		0.39	2.2	0.20	1.1
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1		ND	ND	0.20	1.5
1,2,4-Trimethylbenzene	95-63-6		ND	ND	0.20	0.98
1,3,5-Trimethylbenzene	108-67-8		ND	ND	0.20	0.98
2,2,4-Trimethylpentane	540-84-1		ND	ND	0.20	0.93
Vinyl bromide	593-60-2		ND	ND	0.20	0.87
Vinyl chloride	75-01-4		ND	ND	0.20	0.51
Xylenes (m&p)	179601-23-1		0.61	2.6	0.20	0.87
Xylenes (o)	95-47-6		0.21	0.90	0.20	0.87

Qualifiers:
D = Dilution required

Quantitation Report (QT Reviewed)

Data Path : C:\DATA\2024\07-2024\07-16-2024\
Data File : aa6915.D
Acq On : 16 Jul 2024 9:36 pm
Operator : jjw
Sample : E24-02427-03
Misc : 4867, 500cc
ALS Vial : 18 Sample Multiplier: 1

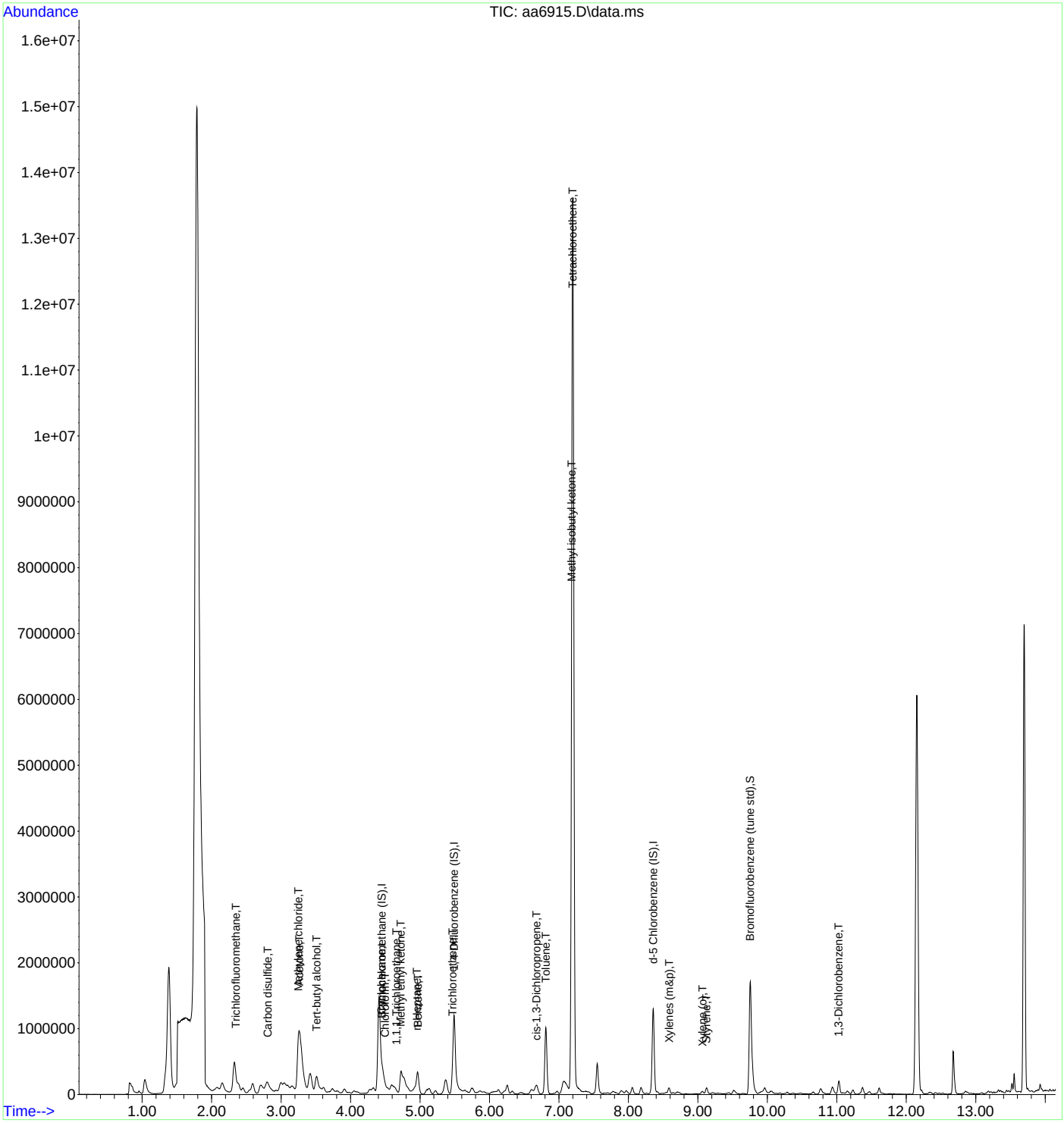
Quant Time: Jul 18 10:26:00 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

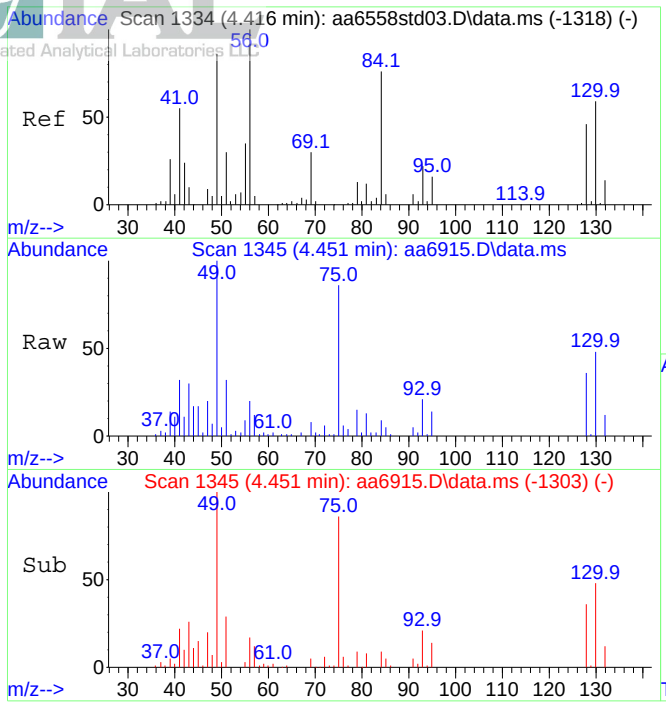
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.451	130	140895	10.00	ppbV		0.035
39) 1,4-Difluorobenzene (IS)	5.490	114	809561	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.358	117	703181	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.750	95	648211	9.75	ppbV		0.000
Target Compounds							Qvalue
12) Trichlorofluoromethane	2.348	101	17973	0.39	ppbV		95
15) Carbon disulfide	2.808	76	371153	6.23	ppbV	#	92
20) Methylene chloride	3.249	49	58232	2.29	ppbV		82
21) Acetone	3.261	43	2718274	85.98	ppbV		94
26) Tert-butyl alcohol	3.509	59	431278	9.78	ppbV		100
29) Cyclohexane	4.445	56	47799	1.32	ppbV	#	55
30) Chloroform	4.496	83	55590	1.24	ppbV		98
34) 1,1,1-Trichloroethane	4.660	97	11992	0.28	ppbV		97
35) Methyl ethyl ketone	4.724	43	519652	11.60	ppbV		92
36) n-Heptane	4.956	43	74560	1.76	ppbV	#	75
37) Benzene	4.969	78	217112	3.38	ppbV		92
40) Trichloroethene	5.467	130	58917	1.61	ppbV		100
46) cis-1,3-Dichloropropene	6.676	75	12245	0.25	ppbV	#	84
47) Toluene	6.811	91	842182	8.13	ppbV		99
48) Methyl isobutyl ketone	7.181	43	31416	0.41	ppbV		96
49) Tetrachloroethene	7.197	166	4189013	106.70	ppbV		100
59) Xylenes (m&p)	8.586	91	63393	0.61	ppbV		98
60) Xylene (o)	9.068	91	22830	0.21	ppbV		93
61) Styrene	9.123	104	25046	0.34	ppbV		97
71) 1,3-Dichlorobenzene	11.026	146	80715	1.04	ppbV		98

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

Data Path : C:\DATA\2024\07-2024\07-16-2024\
Data File : aa6915.D
Acq On : 16 Jul 2024 9:36 pm
Operator : jjw
Sample : E24-02427-03
Misc : 4867, 500cc
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jul 18 10:26:00 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

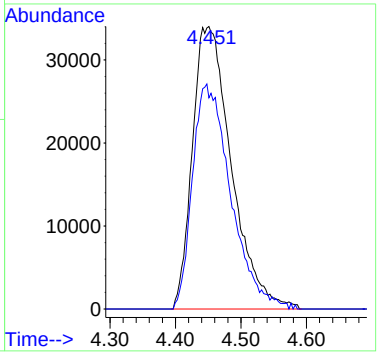


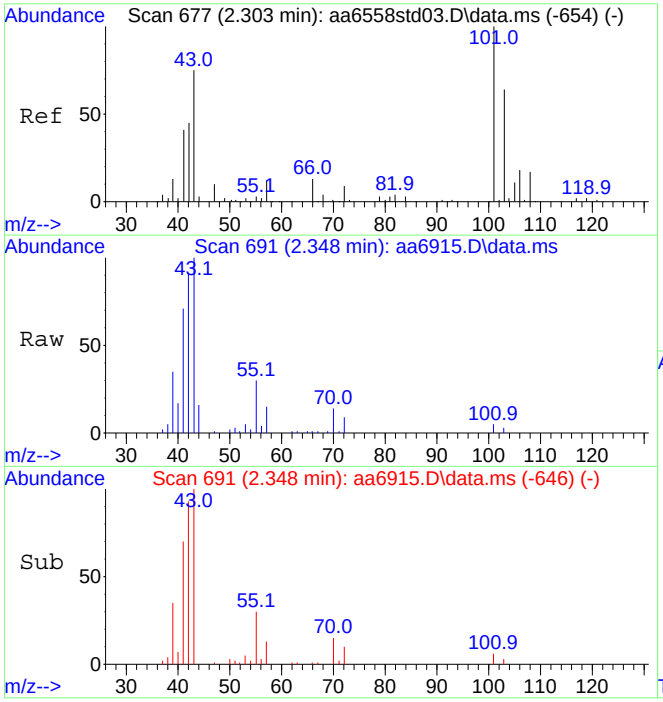


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.451 min Scan# 1345
Delta R.T. 0.035 min
Lab File: aa6915.D
Acq: 16 Jul 2024 9:36 pm

Tgt Ion:130 Resp: 140895

Ion	Ratio	Lower	Upper
130	100		
128	77.9	57.8	97.8

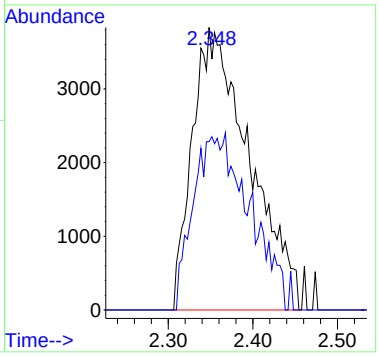


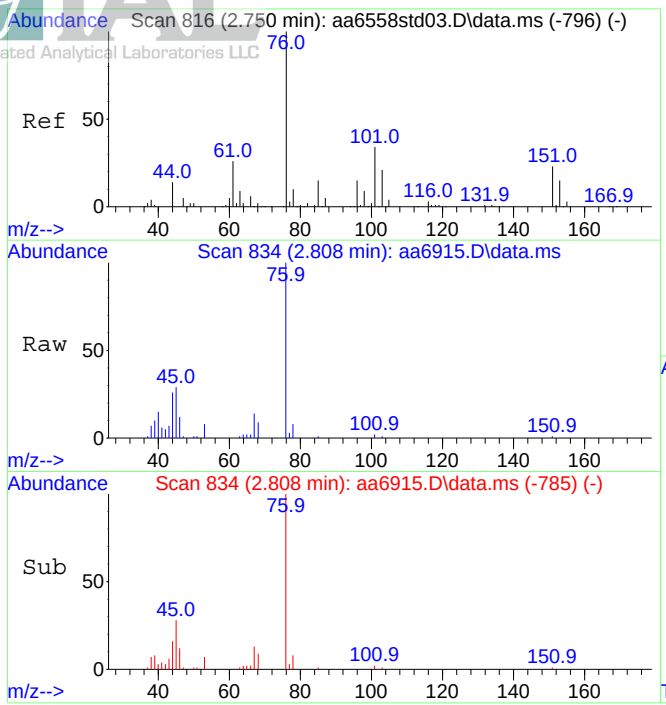


#12
Trichlorofluoromethane
Concen: 0.39 ppbV
RT: 2.348 min Scan# 691
Delta R.T. 0.045 min
Lab File: aa6915.D
Acq: 16 Jul 2024 9:36 pm

Tgt Ion:101 Resp: 17973

Ion	Ratio	Lower	Upper
101	100		
103	61.0	51.9	77.9

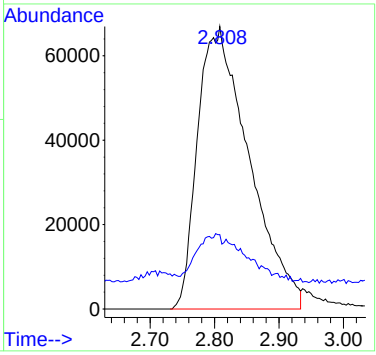


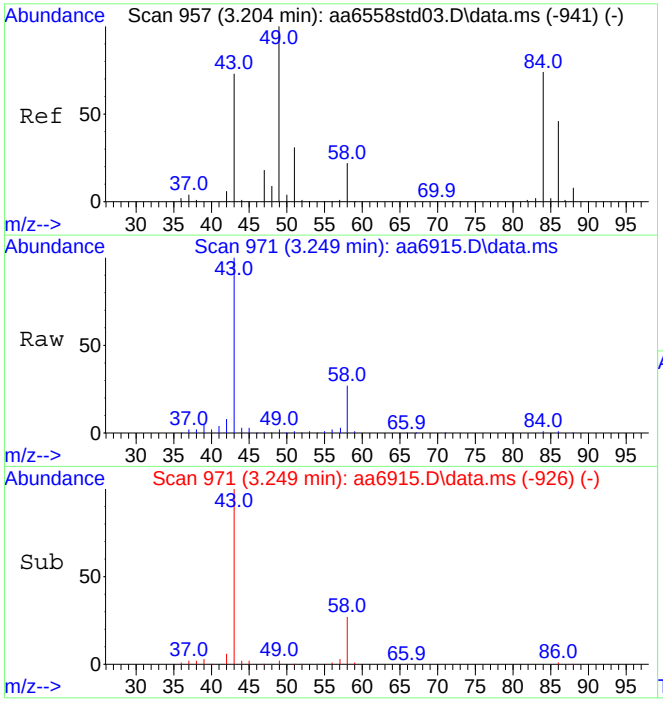


#15
Carbon disulfide
Concen: 6.23 ppbV
RT: 2.808 min Scan# 834
Delta R.T. 0.058 min
Lab File: aa6915.D
Acq: 16 Jul 2024 9:36 pm

Tgt Ion: 76 Resp: 371153

Ion	Ratio	Lower	Upper
76	100		
44	16.4	10.6	16.0#

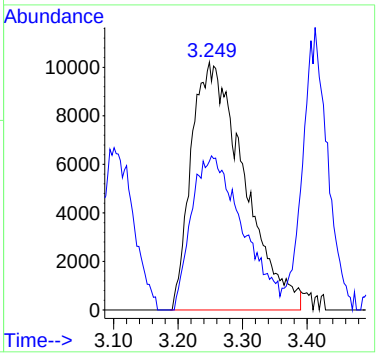


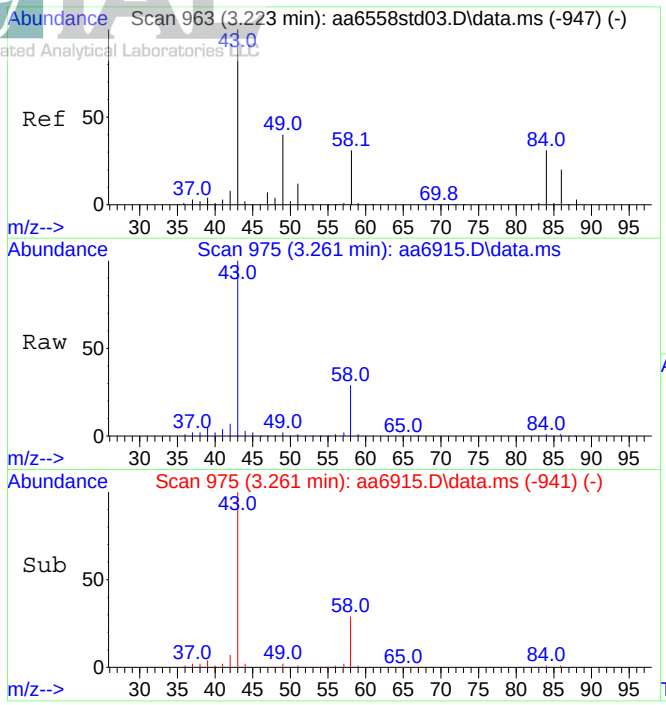


#20
Methylene chloride
Concen: 2.29 ppbV
RT: 3.249 min Scan# 971
Delta R.T. 0.045 min
Lab File: aa6915.D
Acq: 16 Jul 2024 9:36 pm

Tgt Ion: 49 Resp: 58232

Ion	Ratio	Lower	Upper
49	100		
84	60.6	56.2	96.2

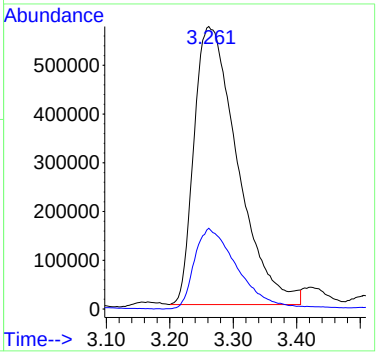


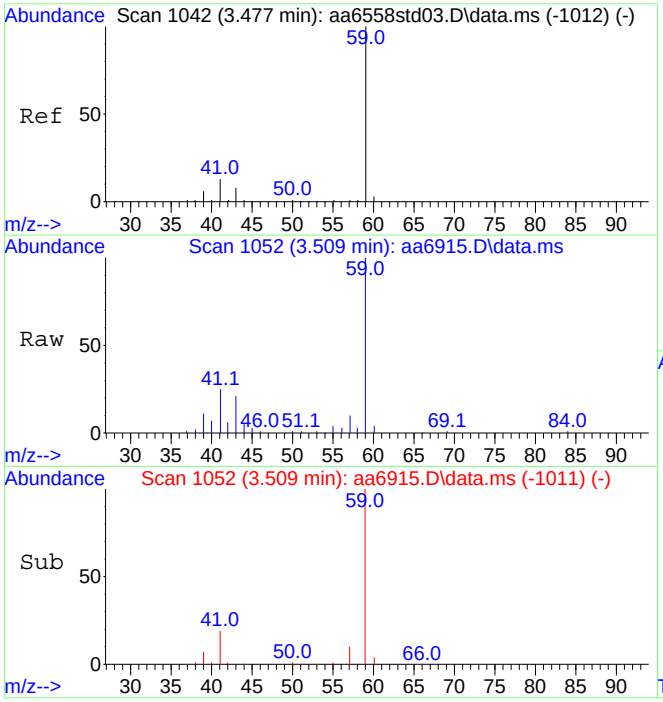


#21
Acetone
Concen: 85.98 ppbV
RT: 3.261 min Scan# 975
Delta R.T. 0.039 min
Lab File: aa6915.D
Acq: 16 Jul 2024 9:36 pm

Tgt Ion: 43 Resp: 2718274

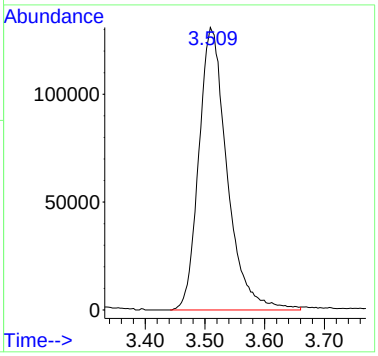
Ion	Ratio	Lower	Upper
43	100		
58	28.6	25.4	38.0

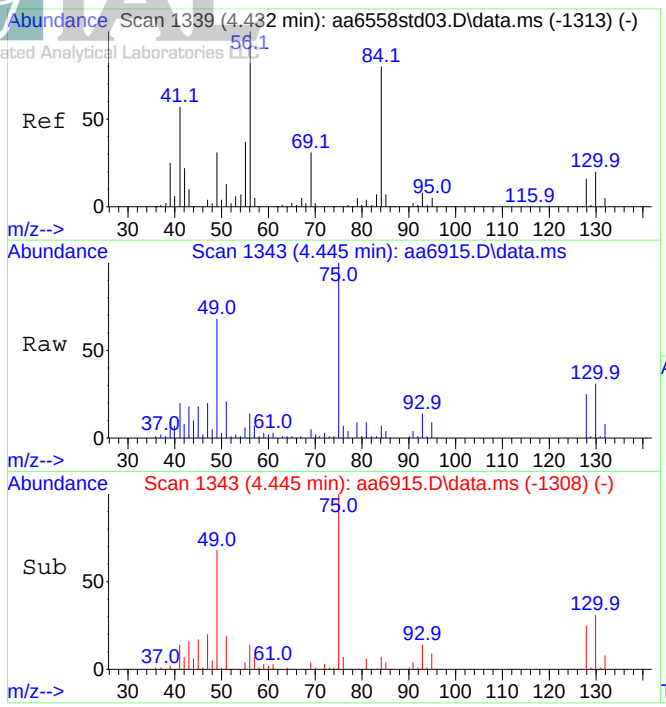




#26
Tert-butyl alcohol
Concen: 9.78 ppbV
RT: 3.509 min Scan# 1052
Delta R.T. 0.032 min
Lab File: aa6915.D
Acq: 16 Jul 2024 9:36 pm

Tgt Ion: 59 Resp: 431278

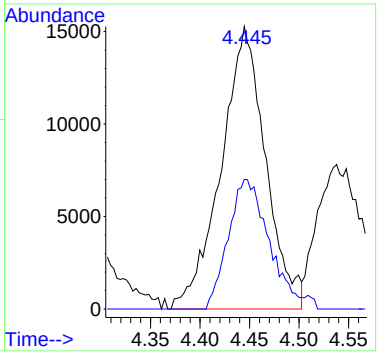


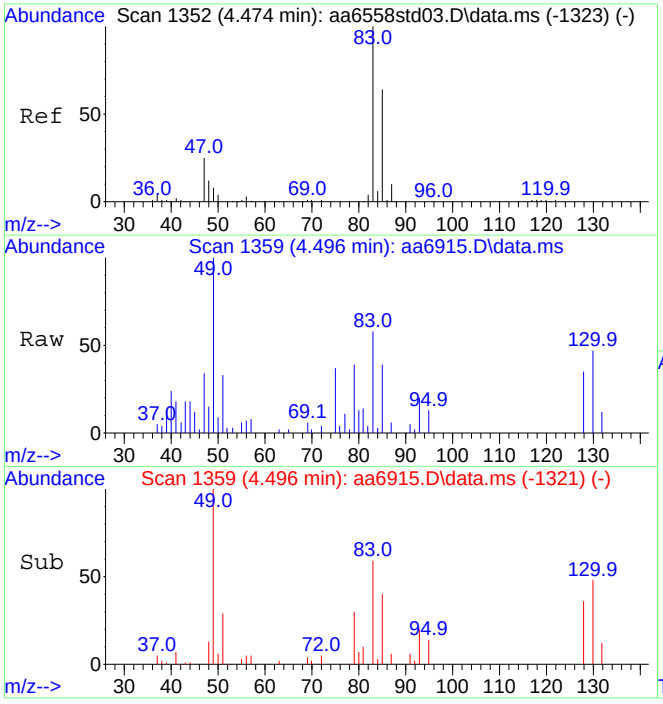


#29
Cyclohexane
Concen: 1.32 ppbV
RT: 4.445 min Scan# 1343
Delta R.T. 0.013 min
Lab File: aa6915.D
Acq: 16 Jul 2024 9:36 pm

Tgt Ion: 56 Resp: 47799

Ion	Ratio	Lower	Upper
56	100		
84	42.6	66.8	100.2#

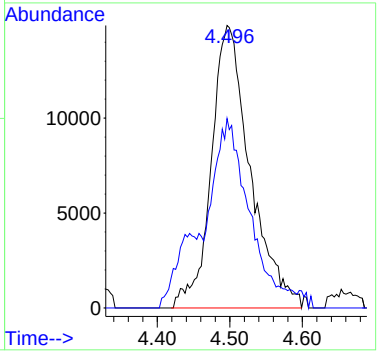


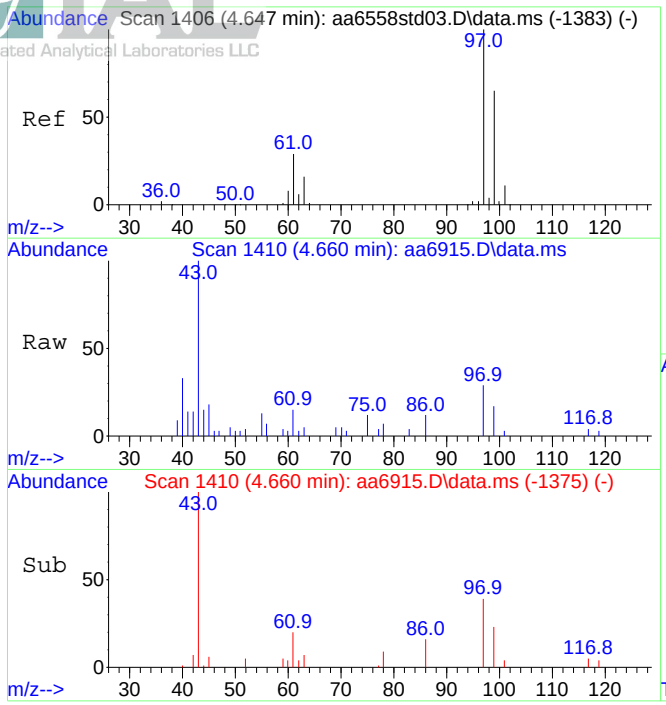


#30
Chloroform
Concen: 1.24 ppbV
RT: 4.496 min Scan# 1359
Delta R.T. 0.022 min
Lab File: aa6915.D
Acq: 16 Jul 2024 9:36 pm

Tgt Ion: 83 Resp: 55590

Ion	Ratio	Lower	Upper
83	100		
85	64.1	52.6	79.0

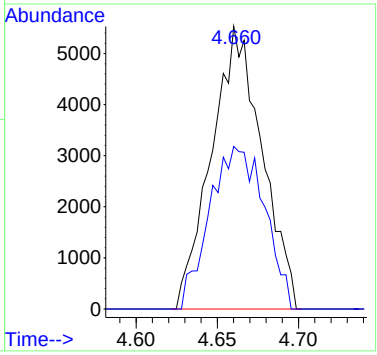


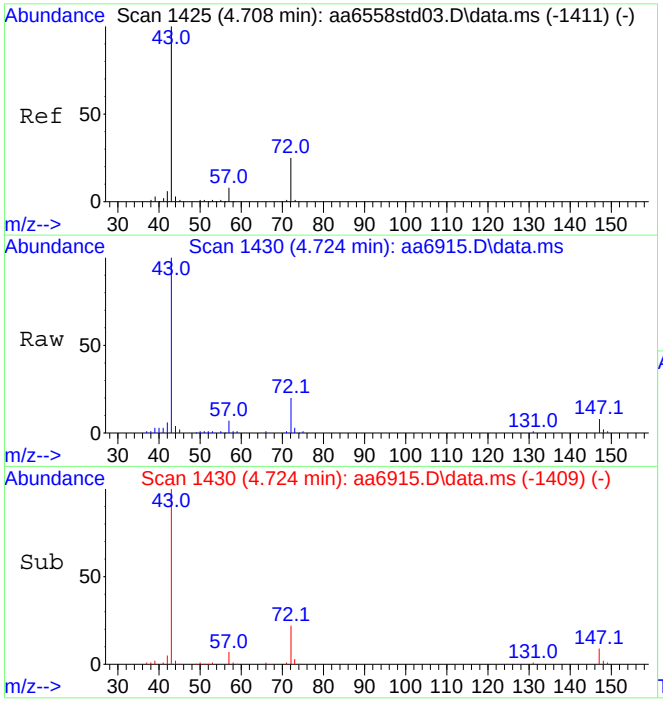


#34
1,1,1-Trichloroethane
Concen: 0.28 ppbV
RT: 4.660 min Scan# 1410
Delta R.T. 0.013 min
Lab File: aa6915.D
Acq: 16 Jul 2024 9:36 pm

Tgt Ion: 97 Resp: 11992

Ion	Ratio	Lower	Upper
97	100		
99	62.2	51.4	77.2

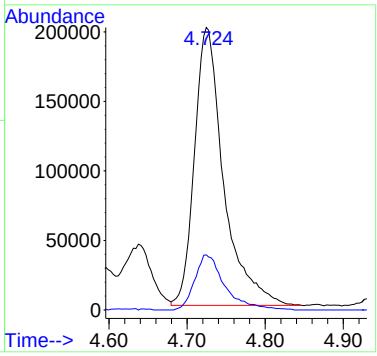


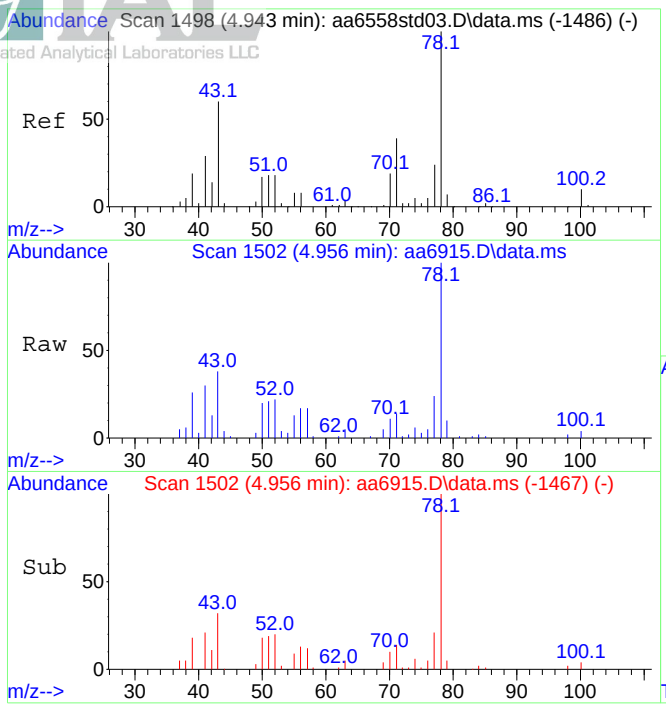


#35
Methyl ethyl ketone
Concen: 11.60 ppbV
RT: 4.724 min Scan# 1430
Delta R.T. 0.016 min
Lab File: aa6915.D
Acq: 16 Jul 2024 9:36 pm

Tgt Ion: 43 Resp: 519652

Ion	Ratio	Lower	Upper
43	100		
72	20.5	19.5	29.3

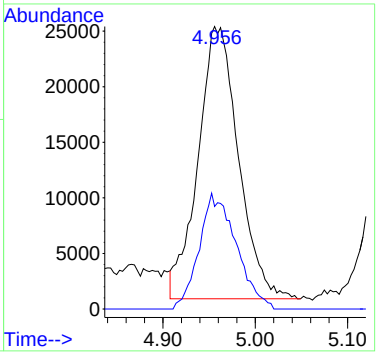


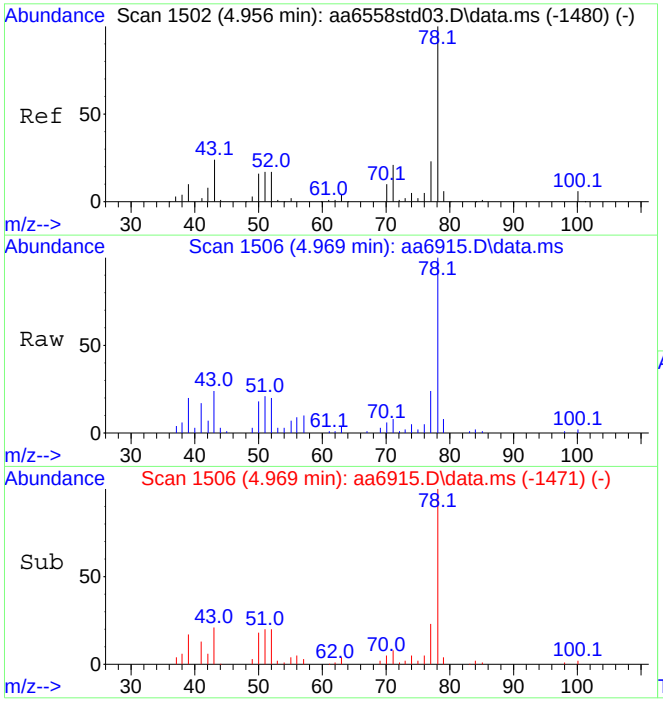


#36
n-Heptane
Concen: 1.76 ppbV
RT: 4.956 min Scan# 1502
Delta R.T. 0.013 min
Lab File: aa6915.D
Acq: 16 Jul 2024 9:36 pm

Tgt Ion: 43 Resp: 74560

Ion	Ratio	Lower	Upper
43	100		
71	38.9	46.2	69.2#

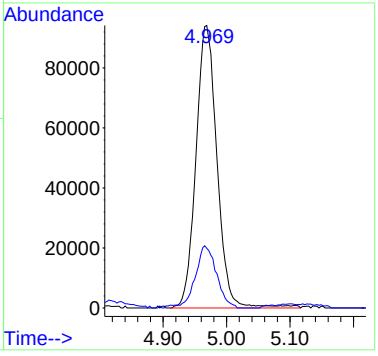


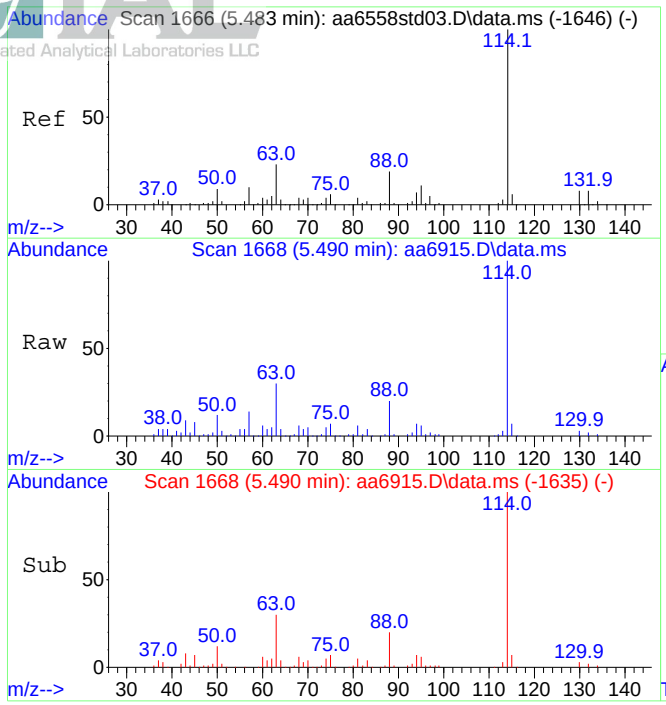


#37
Benzene
Concen: 3.38 ppbV
RT: 4.969 min Scan# 1506
Delta R.T. 0.013 min
Lab File: aa6915.D
Acq: 16 Jul 2024 9:36 pm

Tgt Ion: 78 Resp: 217112

Ion	Ratio	Lower	Upper
78	100		
51	22.3	14.9	22.3

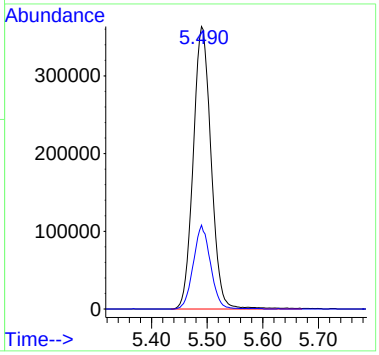


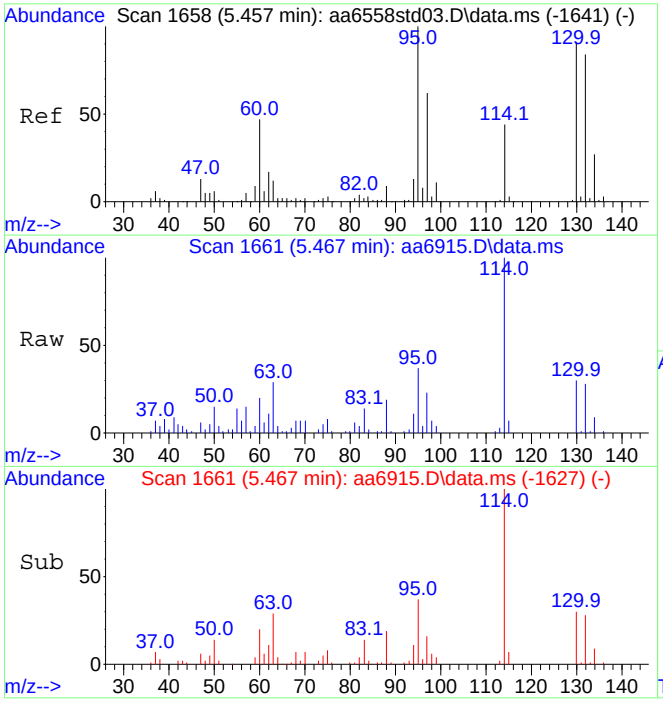


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.490 min Scan# 1668
Delta R.T. 0.006 min
Lab File: aa6915.D
Acq: 16 Jul 2024 9:36 pm

Tgt Ion:114 Resp: 809561

Ion	Ratio	Lower	Upper
114	100		
63	28.5	3.6	43.6

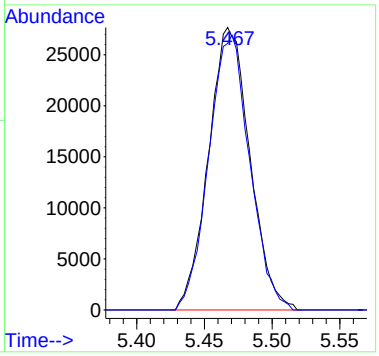


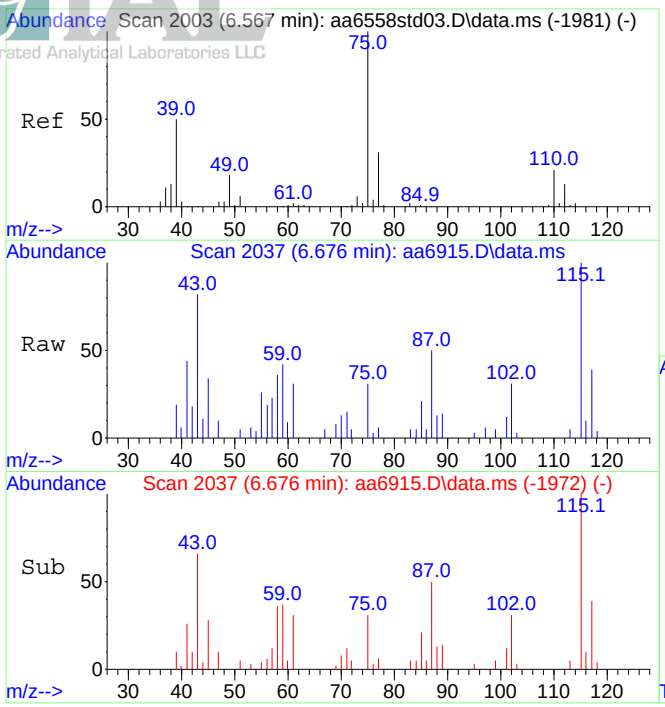


#40
Trichloroethene
Concen: 1.61 ppbV
RT: 5.467 min Scan# 1661
Delta R.T. 0.010 min
Lab File: aa6915.D
Acq: 16 Jul 2024 9:36 pm

Tgt Ion:130 Resp: 58917

Ion	Ratio	Lower	Upper
130	100		
132	95.8	76.6	114.8

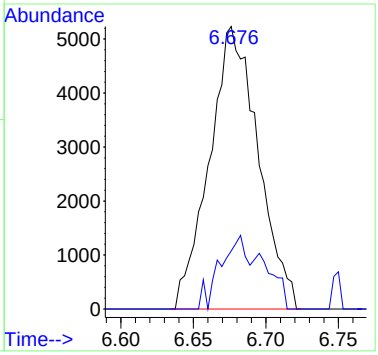


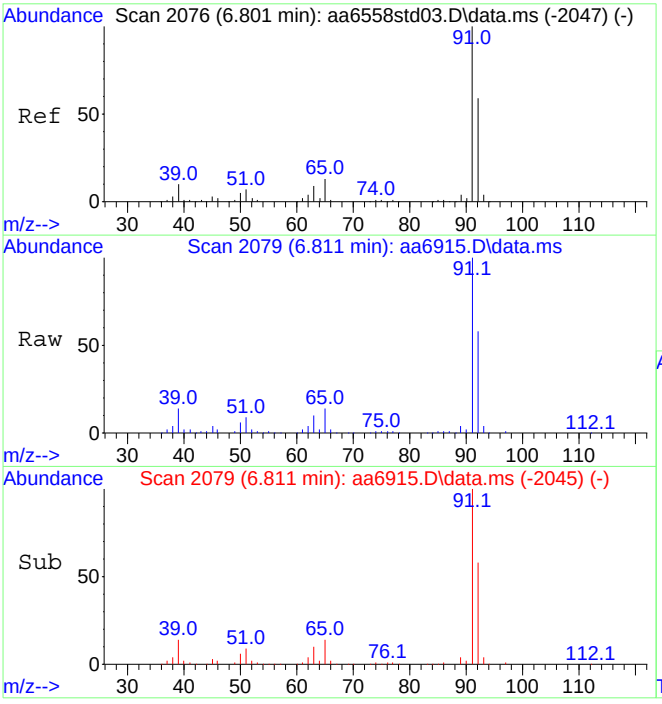


#46
cis-1,3-Dichloropropene
Concen: 0.25 ppbV
RT: 6.676 min Scan# 2037
Delta R.T. 0.109 min
Lab File: aa6915.D
Acq: 16 Jul 2024 9:36 pm

Tgt Ion: 75 Resp: 12245

Ion	Ratio	Lower	Upper
75	100		
77	22.7	25.1	37.7#

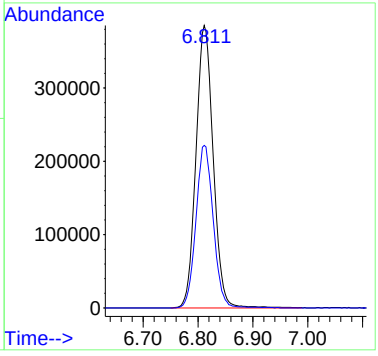


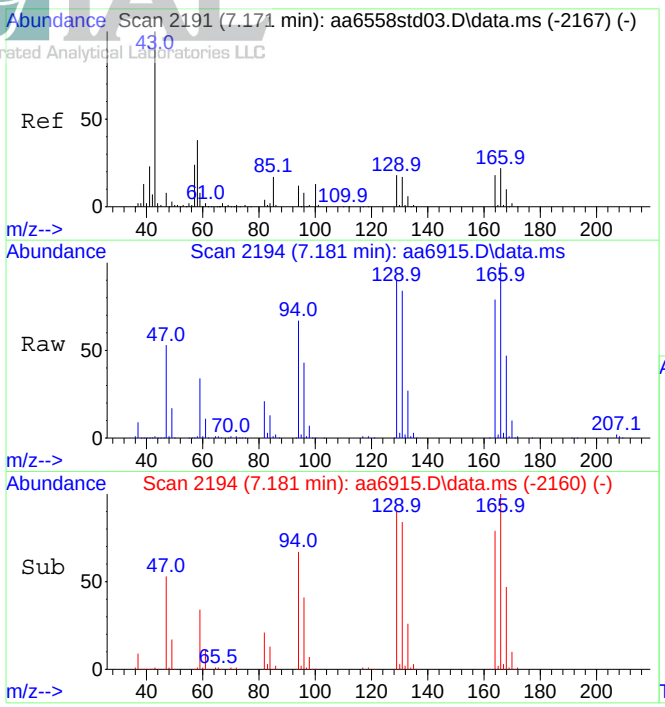


#47
Toluene
Concen: 8.13 ppbV
RT: 6.811 min Scan# 2079
Delta R.T. 0.010 min
Lab File: aa6915.D
Acq: 16 Jul 2024 9:36 pm

Tgt Ion: 91 Resp: 842182

Ion	Ratio	Lower	Upper
91	100		
92	57.7	47.0	70.6

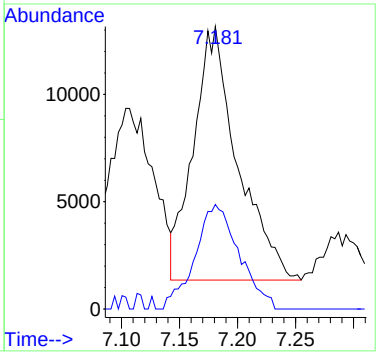


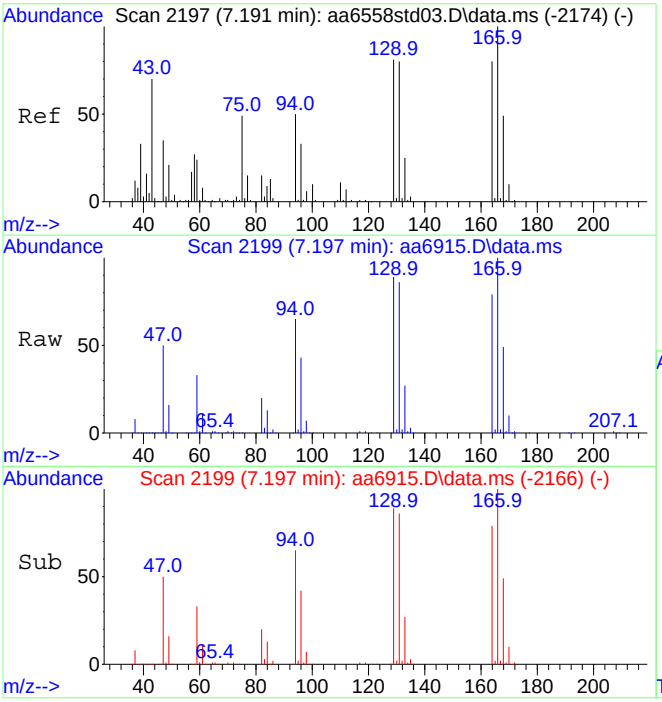


#48
Methyl isobutyl ketone
Concen: 0.41 ppbV
RT: 7.181 min Scan# 2194
Delta R.T. 0.010 min
Lab File: aa6915.D
Acq: 16 Jul 2024 9:36 pm

Tgt Ion: 43 Resp: 31416

Ion	Ratio	Lower	Upper
43	100		
58	40.9	31.0	46.4

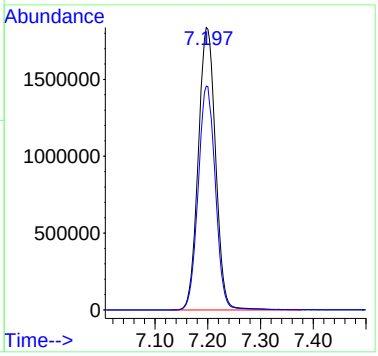


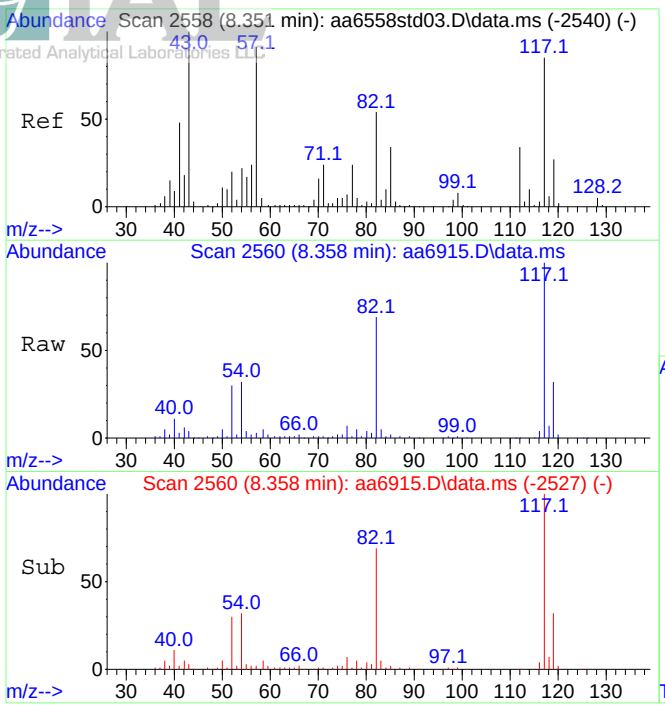


#49
Tetrachloroethene
Concen: 106.70 ppbV
RT: 7.197 min Scan# 2199
Delta R.T. 0.006 min
Lab File: aa6915.D
Acq: 16 Jul 2024 9:36 pm

Tgt Ion:166 Resp: 4189013

Ion	Ratio	Lower	Upper
166	100		
164	78.9	62.8	94.2

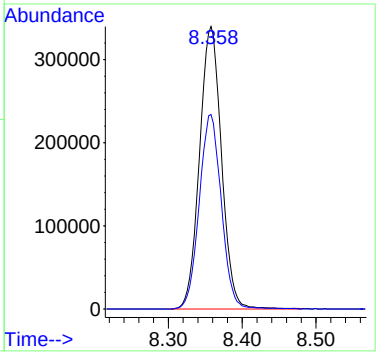


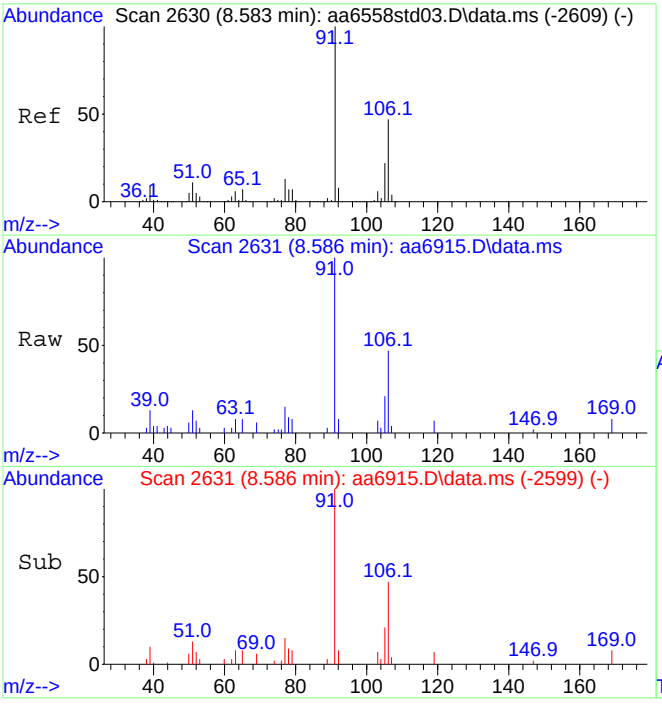


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.358 min Scan# 2560
Delta R.T. 0.006 min
Lab File: aa6915.D
Acq: 16 Jul 2024 9:36 pm

Tgt Ion:117 Resp: 703181

Ion	Ratio	Lower	Upper
117	100		
82	69.1	42.3	82.3

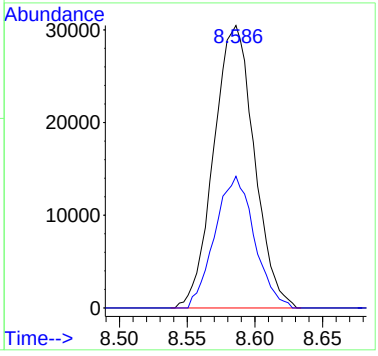


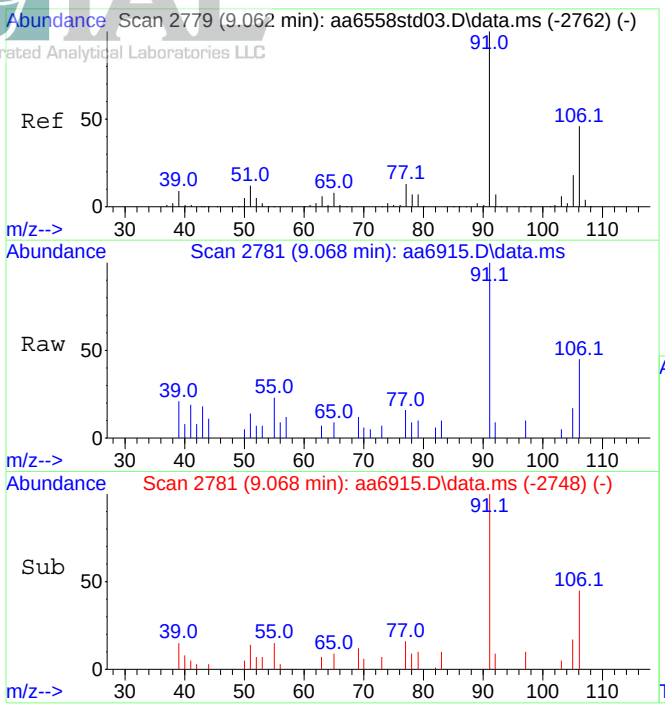


#59
Xylenes (m&p)
Concen: 0.61 ppbV
RT: 8.586 min Scan# 2631
Delta R.T. 0.003 min
Lab File: aa6915.D
Acq: 16 Jul 2024 9:36 pm

Tgt Ion: 91 Resp: 63393

Ion	Ratio	Lower	Upper
91	100		
106	45.4	37.4	56.2

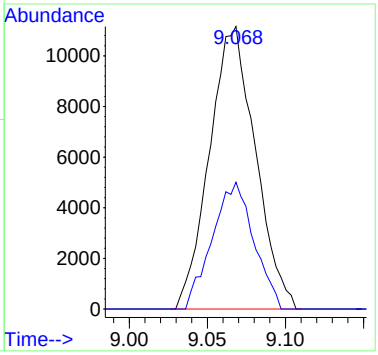


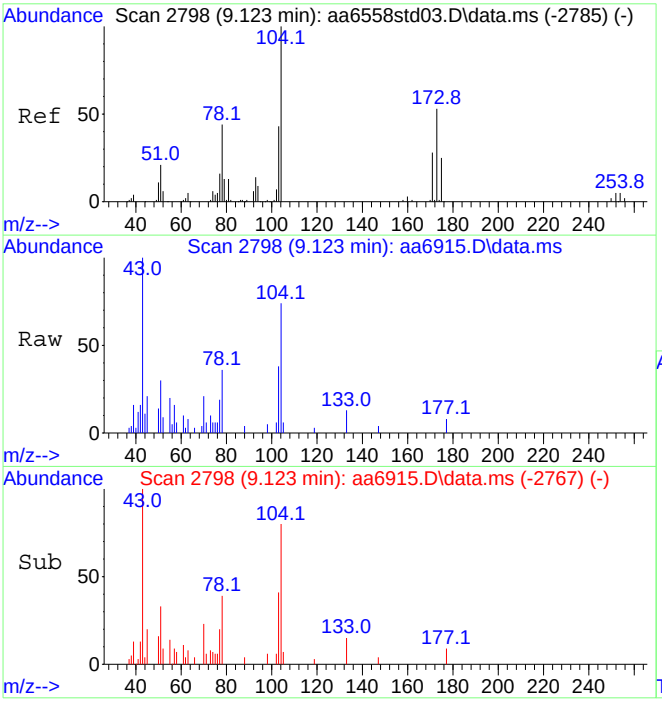


#60
Xylene (o)
Concen: 0.21 ppbV
RT: 9.068 min Scan# 2781
Delta R.T. 0.006 min
Lab File: aa6915.D
Acq: 16 Jul 2024 9:36 pm

Tgt Ion: 91 Resp: 22830

Ion	Ratio	Lower	Upper
91	100		
106	40.5	36.2	54.2

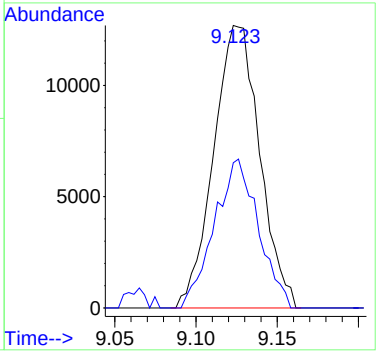


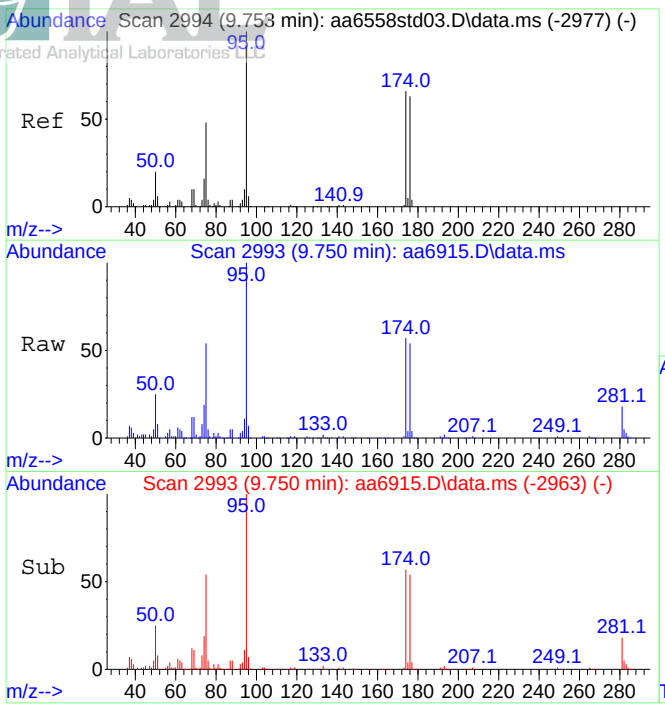


#61
Styrene
Concen: 0.34 ppbV
RT: 9.123 min Scan# 2798
Delta R.T. -0.000 min
Lab File: aa6915.D
Acq: 16 Jul 2024 9:36 pm

Tgt Ion:104 Resp: 25046

Ion	Ratio	Lower	Upper
104	100		
103	50.1	38.3	57.5

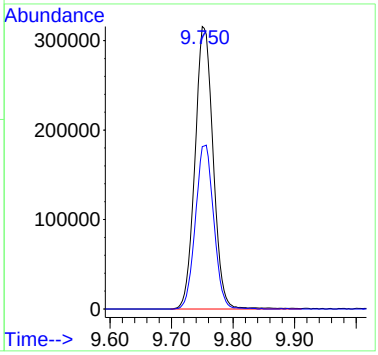


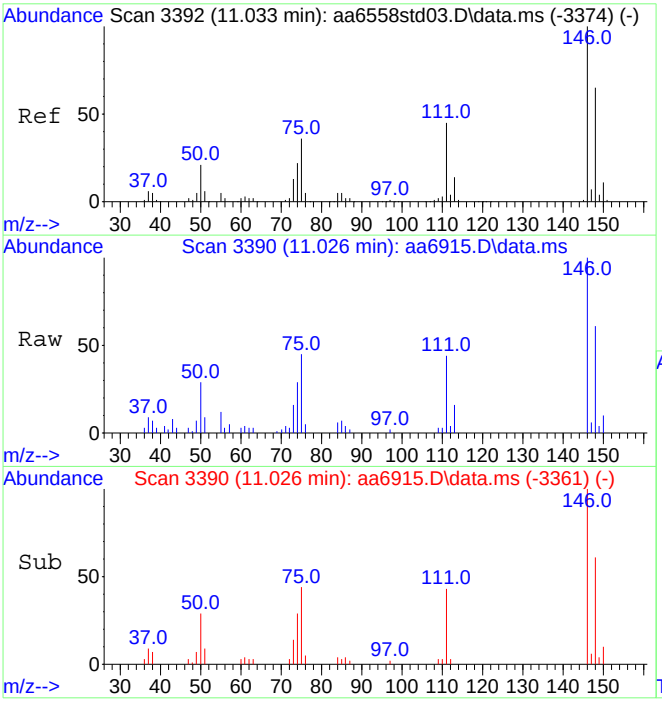


#64
Bromofluorobenzene (tune std)
Concen: 9.75 ppbV
RT: 9.750 min Scan# 2993
Delta R.T. -0.003 min
Lab File: aa6915.D
Acq: 16 Jul 2024 9:36 pm

Tgt Ion: 95 Resp: 648211

Ion	Ratio	Lower	Upper
95	100		
174	58.4	52.9	79.3

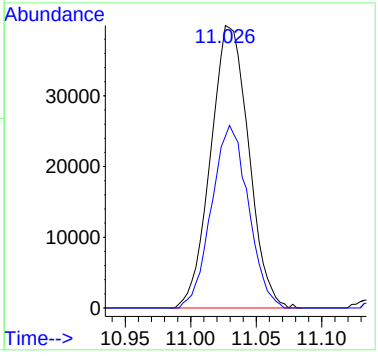




#71
1,3-Dichlorobenzene
Concen: 1.04 ppbV
RT: 11.026 min Scan# 3390
Delta R.T. -0.006 min
Lab File: aa6915.D
Acq: 16 Jul 2024 9:36 pm

Tgt Ion:146 Resp: 80715

Ion	Ratio	Lower	Upper
146	100		
148	62.4	51.2	76.8



Data Path : C:\DATA\2024\07-2024\07-16-2024\
Data File : aa6914.D
Acq On : 16 Jul 2024 8:57 pm
Operator : jjw
Sample : E24-02427-03x5 dil
Misc : 4867, 100cc
ALS Vial : 17 Sample Multiplier: 1

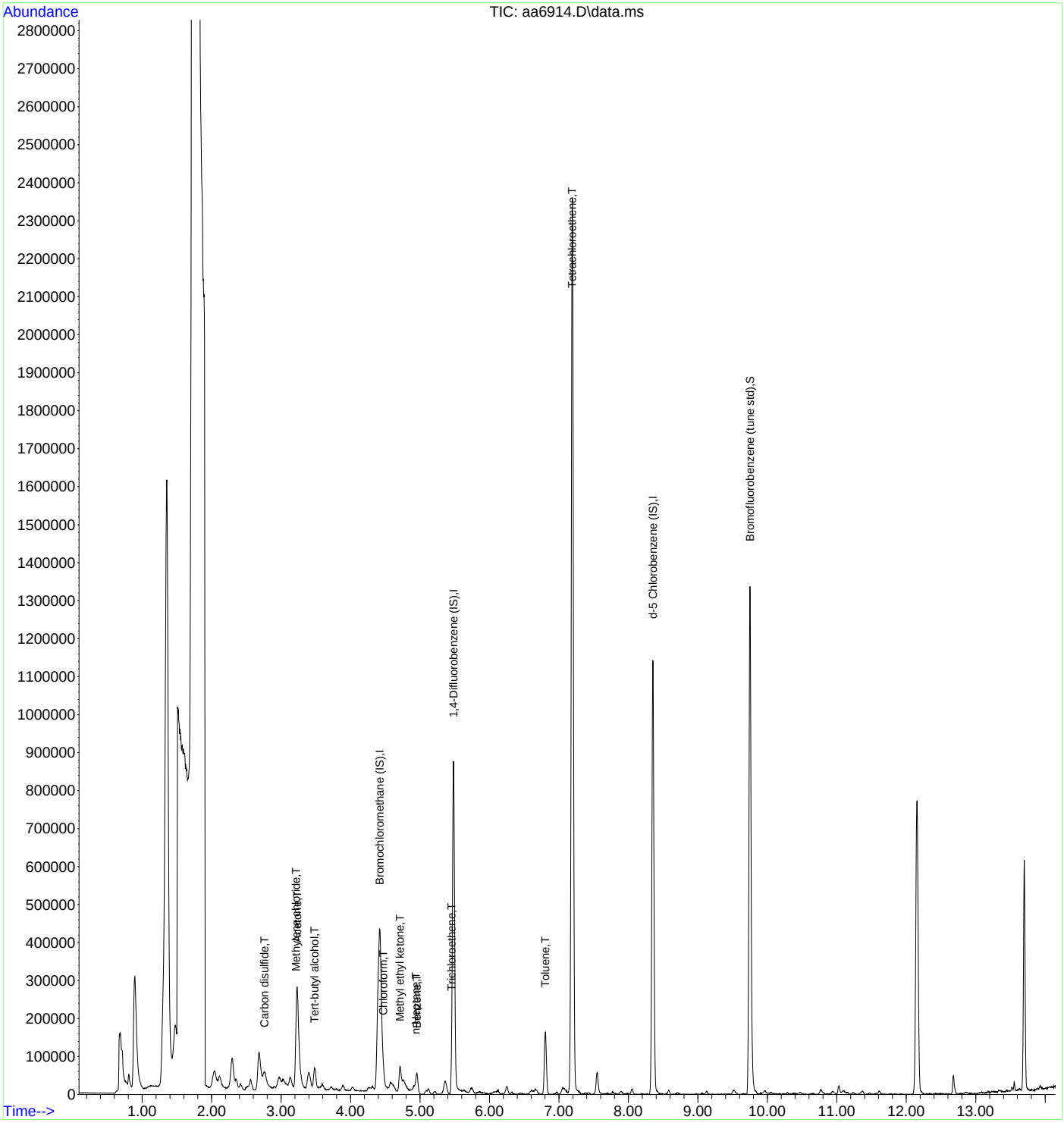
Quant Time: Jul 18 10:22:36 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

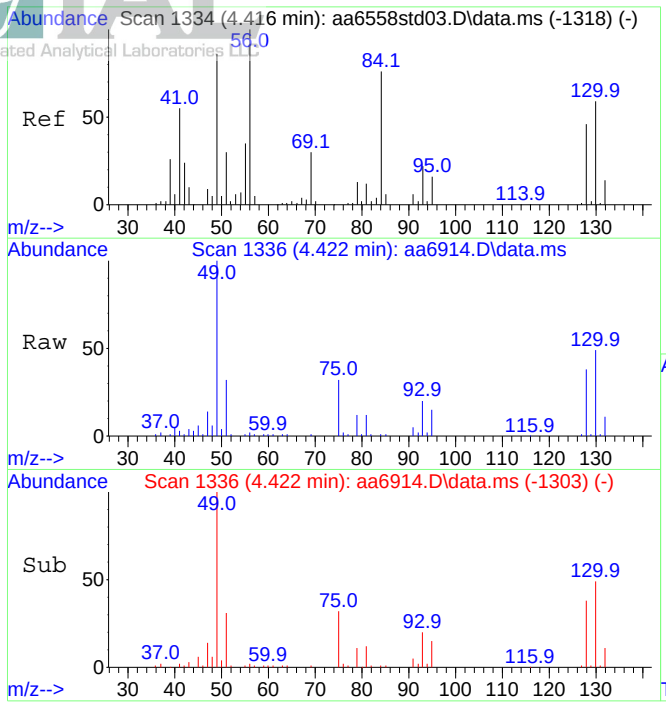
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.422	130	153549	10.00	ppbV		0.000
39) 1,4-Difluorobenzene (IS)	5.483	114	696086	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.354	117	639562	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.750	95	562065	9.29	ppbV		0.000
Target Compounds							Qvalue
15) Carbon disulfide	2.763	76	72803	1.12	ppbV	#	85
20) Methylene chloride	3.216	49	13353	0.48	ppbV		81
21) Acetone	3.232	43	525310	15.25	ppbV		94
26) Tert-butyl alcohol	3.480	59	76812	1.60	ppbV		100
30) Chloroform	4.470	83	10058	0.21	ppbV		97
35) Methyl ethyl ketone	4.712	43	89184	1.83	ppbV		93
36) n-Heptane	4.940	43	12546	0.27	ppbV	#	67
37) Benzene	4.956	78	34778	0.50	ppbV		93
40) Trichloroethene	5.454	130	9804	0.31	ppbV		96
47) Toluene	6.805	91	135951	1.53	ppbV		98
49) Tetrachloroethene	7.191	166	728700	21.59	ppbV		100

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

Data Path : C:\DATA\2024\07-2024\07-16-2024\
Data File : aa6914.D
Acq On : 16 Jul 2024 8:57 pm
Operator : jjw
Sample : E24-02427-03x5 dil
Misc : 4867, 100cc
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jul 18 10:22:36 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

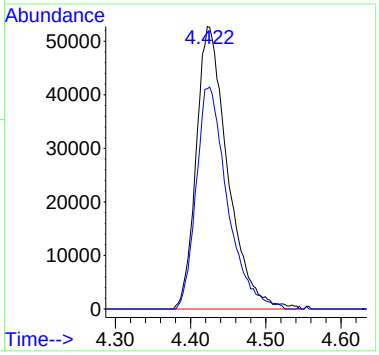


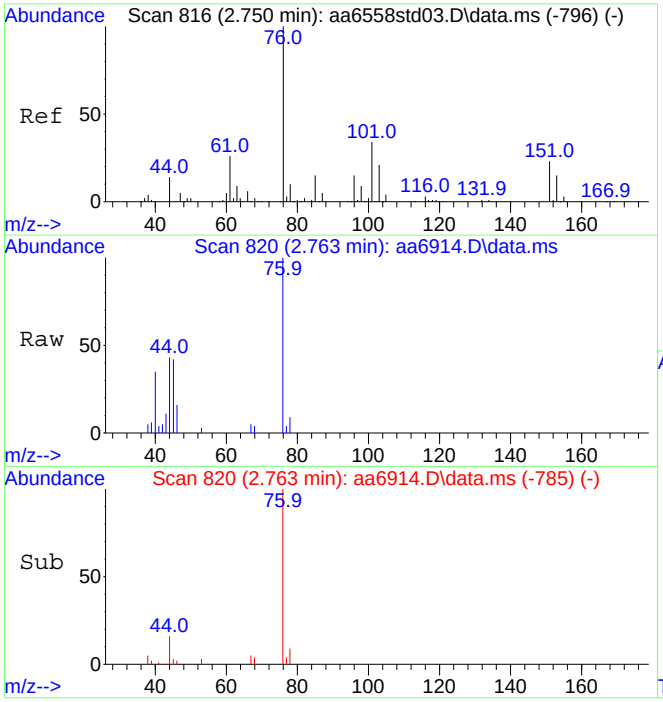


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.422 min Scan# 1336
Delta R.T. 0.006 min
Lab File: aa6914.D
Acq: 16 Jul 2024 8:57 pm

Tgt Ion:130 Resp: 153549

Ion	Ratio	Lower	Upper
130	100		
128	77.9	57.8	97.8

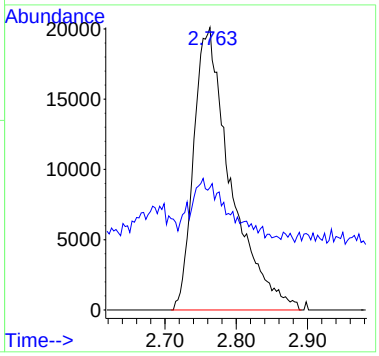


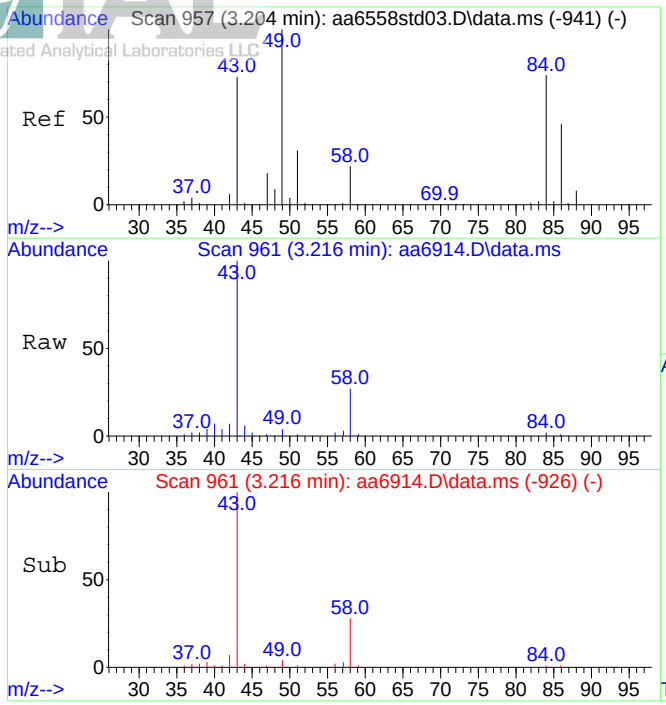


#15
Carbon disulfide
Concen: 1.12 ppbV
RT: 2.763 min Scan# 820
Delta R.T. 0.013 min
Lab File: aa6914.D
Acq: 16 Jul 2024 8:57 pm

Tgt Ion: 76 Resp: 72803

Ion	Ratio	Lower	Upper
76	100		
44	19.3	10.6	16.0#

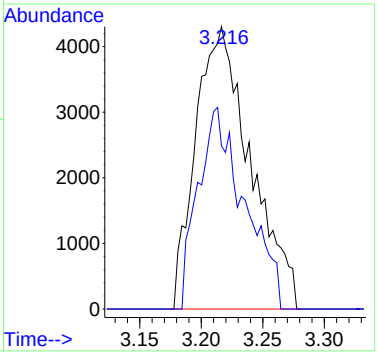


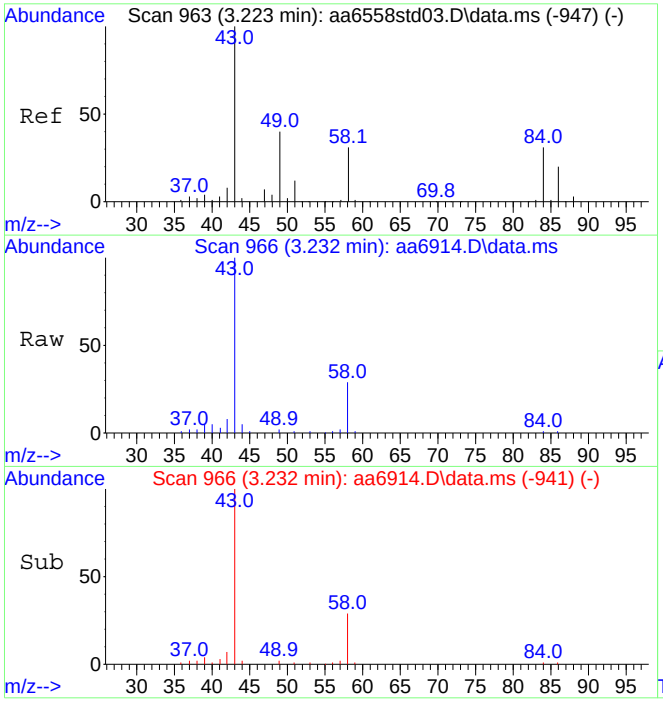


#20
Methylene chloride
Concen: 0.48 ppbV
RT: 3.216 min Scan# 961
Delta R.T. 0.013 min
Lab File: aa6914.D
Acq: 16 Jul 2024 8:57 pm

Tgt Ion: 49 Resp: 13353

Ion	Ratio	Lower	Upper
49	100		
84	60.2	56.2	96.2

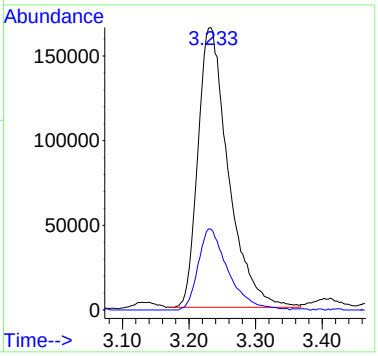


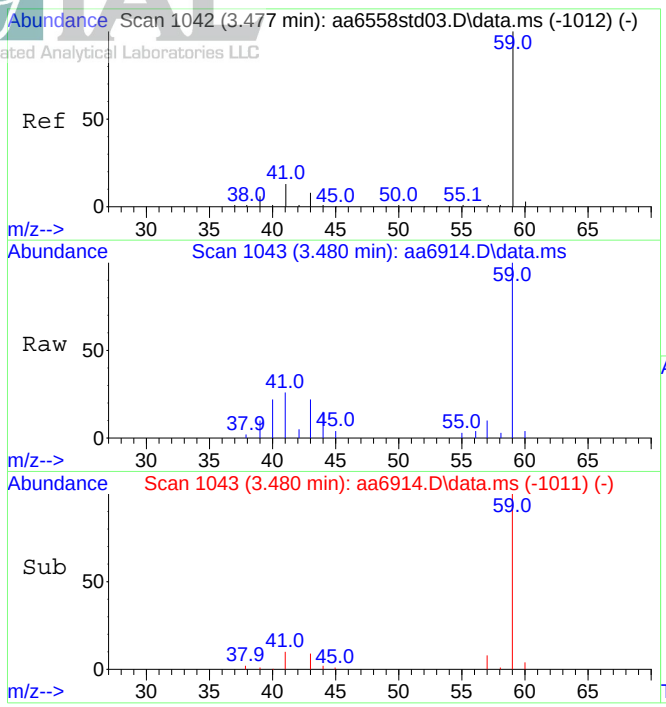


#21
Acetone
Concen: 15.25 ppbV
RT: 3.232 min Scan# 966
Delta R.T. 0.010 min
Lab File: aa6914.D
Acq: 16 Jul 2024 8:57 pm

Tgt Ion: 43 Resp: 525310

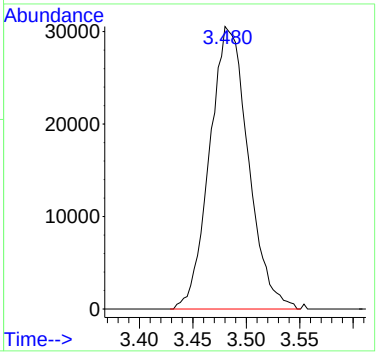
Ion	Ratio	Lower	Upper
43	100		
58	28.5	25.4	38.0

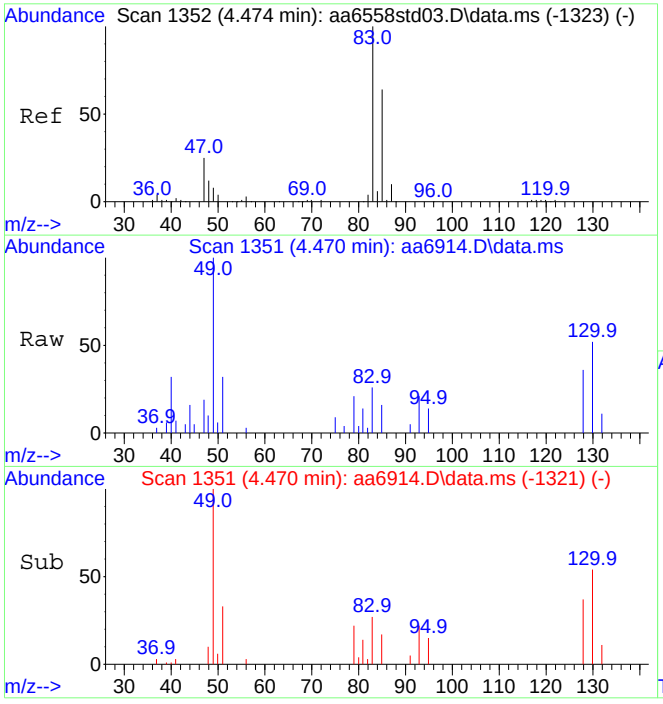




#26
Tert-butyl alcohol
Concen: 1.60 ppbV
RT: 3.480 min Scan# 1043
Delta R.T. 0.003 min
Lab File: aa6914.D
Acq: 16 Jul 2024 8:57 pm

Tgt Ion: 59 Resp: 76812

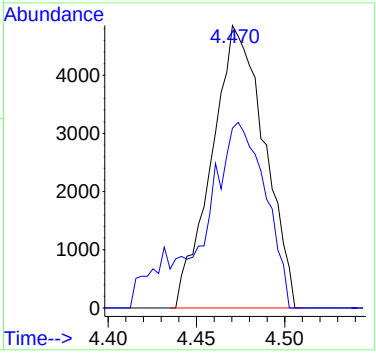


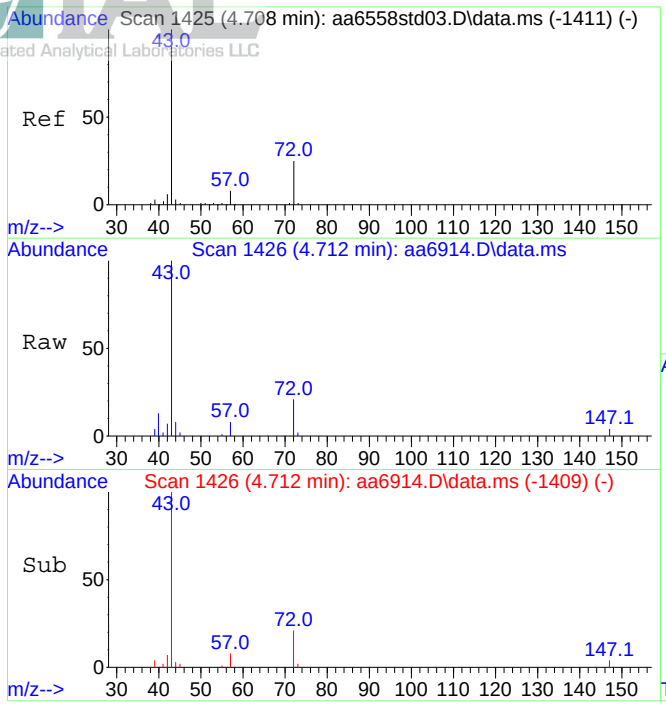


#30
Chloroform
Concen: 0.21 ppbV
RT: 4.470 min Scan# 1351
Delta R.T. -0.003 min
Lab File: aa6914.D
Acq: 16 Jul 2024 8:57 pm

Tgt Ion: 83 Resp: 10058

Ion	Ratio	Lower	Upper
83	100		
85	63.8	52.6	79.0

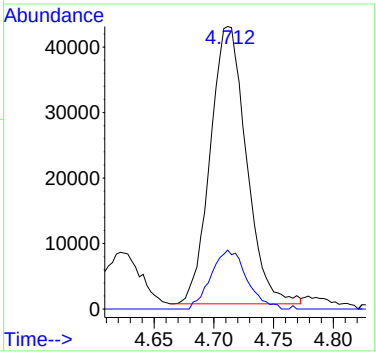


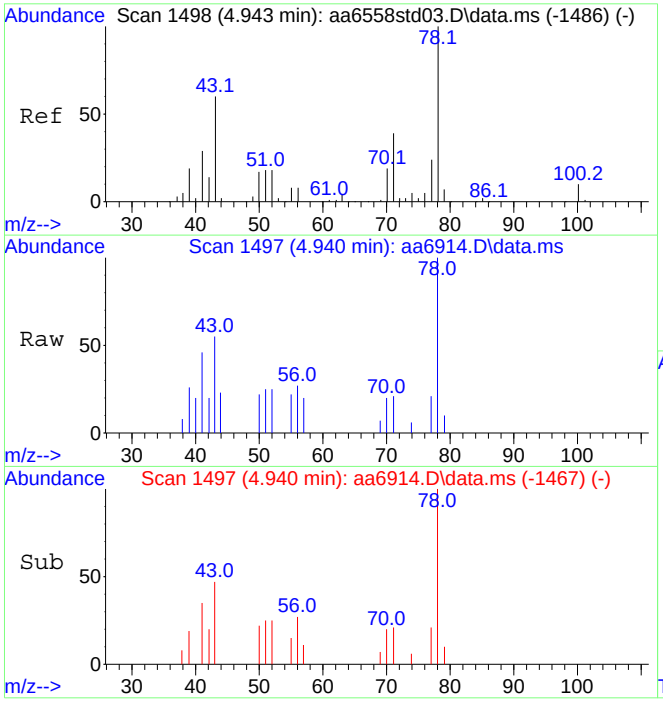


#35
Methyl ethyl ketone
Concen: 1.83 ppbV
RT: 4.712 min Scan# 1426
Delta R.T. 0.003 min
Lab File: aa6914.D
Acq: 16 Jul 2024 8:57 pm

Tgt Ion: 43 Resp: 89184

Ion	Ratio	Lower	Upper
43	100		
72	21.0	19.5	29.3

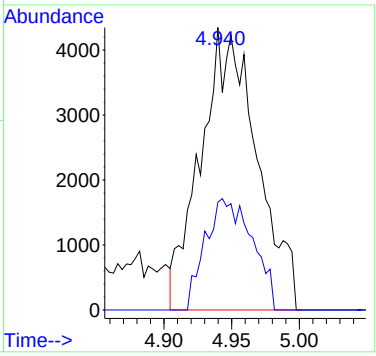


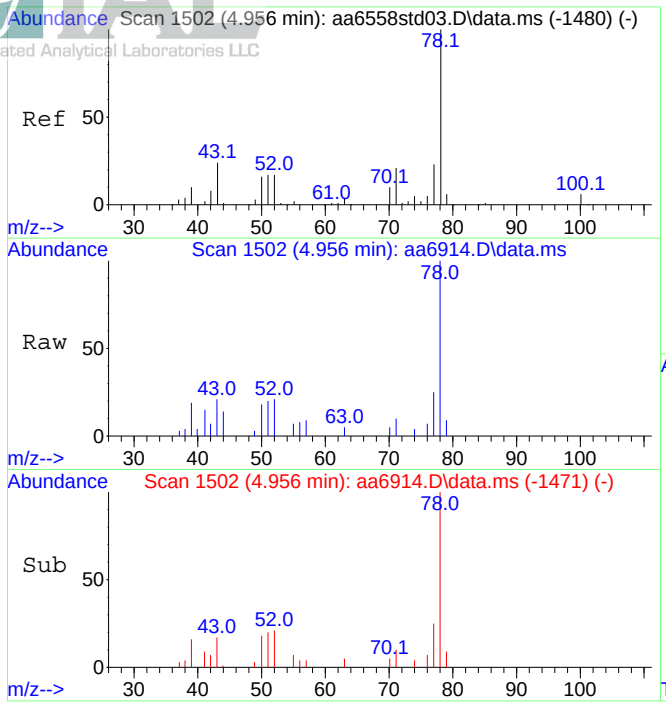


#36
n-Heptane
Concen: 0.27 ppbV
RT: 4.940 min Scan# 1497
Delta R.T. -0.003 min
Lab File: aa6914.D
Acq: 16 Jul 2024 8:57 pm

Tgt Ion: 43 Resp: 12546

Ion	Ratio	Lower	Upper
43	100		
71	32.9	46.2	69.2#

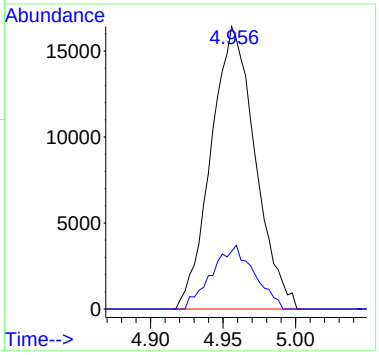


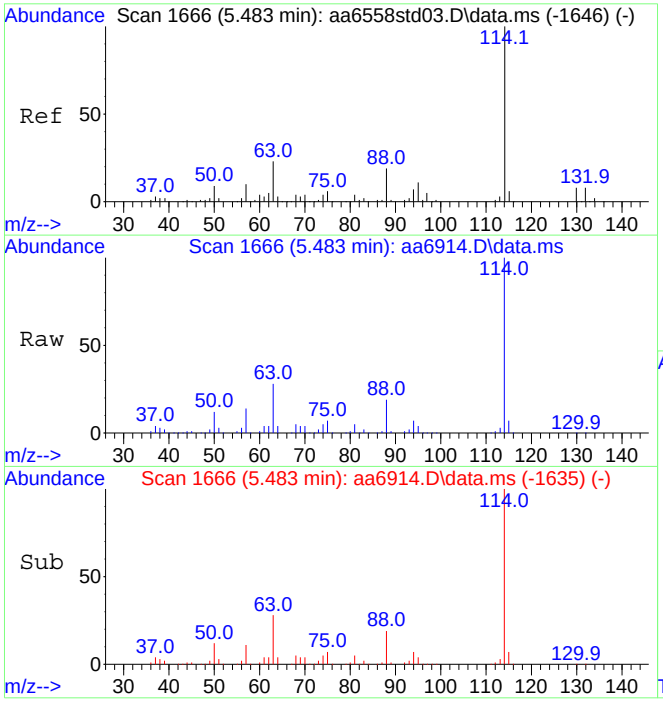


#37
Benzene
Concen: 0.50 ppbV
RT: 4.956 min Scan# 1502
Delta R.T. 0.000 min
Lab File: aa6914.D
Acq: 16 Jul 2024 8:57 pm

Tgt Ion: 78 Resp: 34778

Ion	Ratio	Lower	Upper
78	100		
51	21.6	14.9	22.3

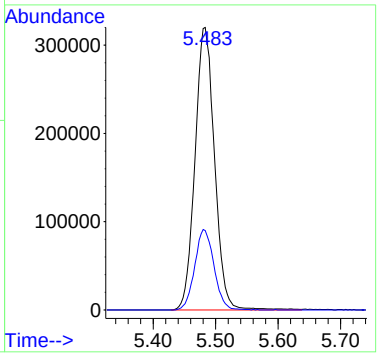


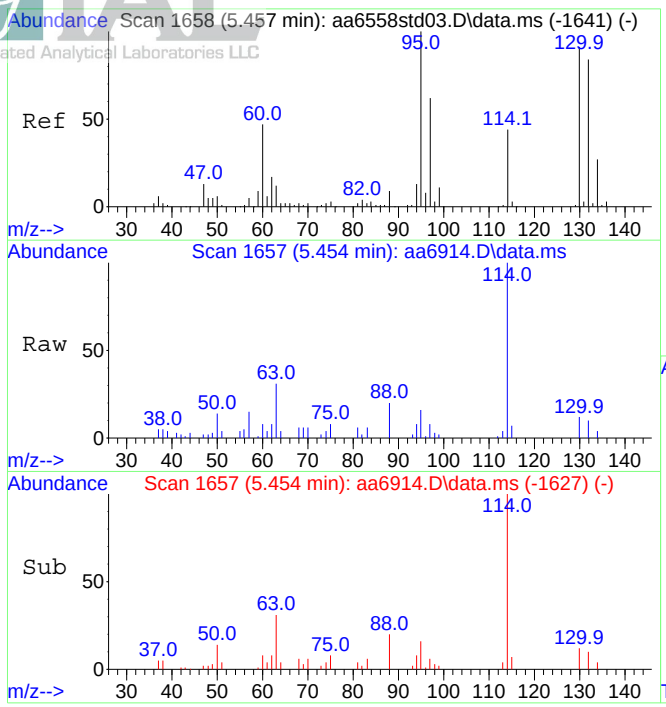


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.483 min Scan# 1666
Delta R.T. 0.000 min
Lab File: aa6914.D
Acq: 16 Jul 2024 8:57 pm

Tgt Ion:114 Resp: 696086

Ion	Ratio	Lower	Upper
114	100		
63	28.1	3.6	43.6

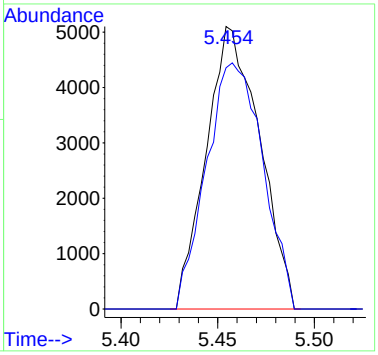


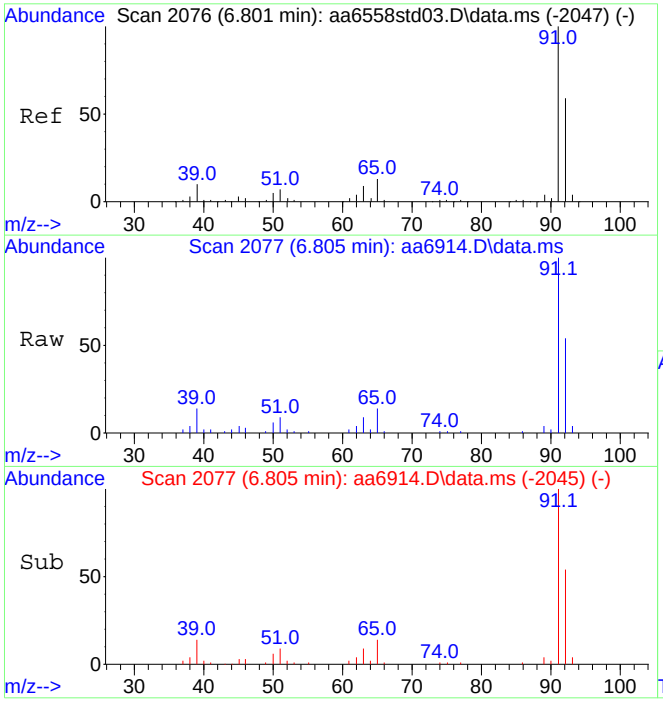


#40
Trichloroethene
Concen: 0.31 ppbV
RT: 5.454 min Scan# 1657
Delta R.T. -0.003 min
Lab File: aa6914.D
Acq: 16 Jul 2024 8:57 pm

Tgt Ion:130 Resp: 9804

Ion	Ratio	Lower	Upper
130	100		
132	92.1	76.6	114.8

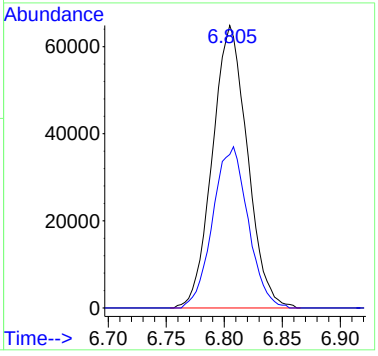


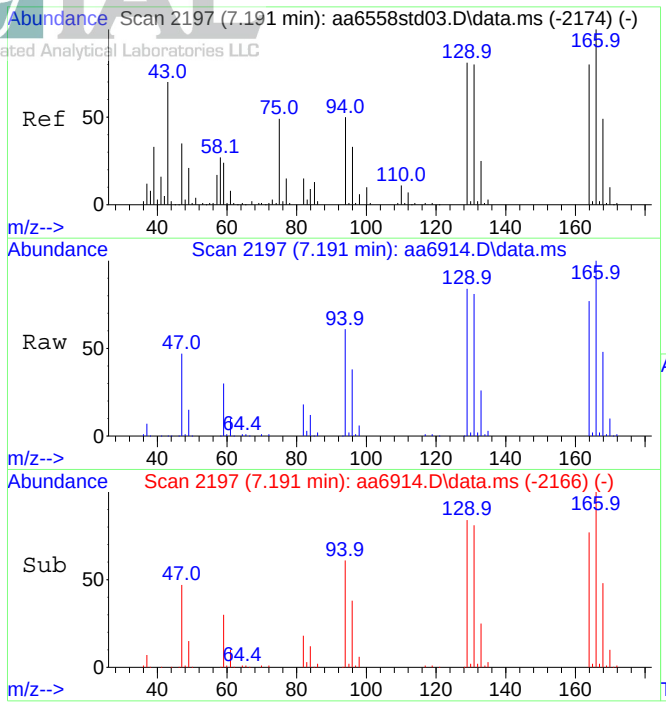


#47
Toluene
Concen: 1.53 ppbV
RT: 6.805 min Scan# 2077
Delta R.T. 0.003 min
Lab File: aa6914.D
Acq: 16 Jul 2024 8:57 pm

Tgt Ion: 91 Resp: 135951

Ion	Ratio	Lower	Upper
91	100		
92	57.5	47.0	70.6

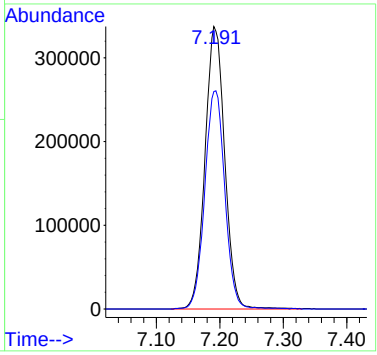


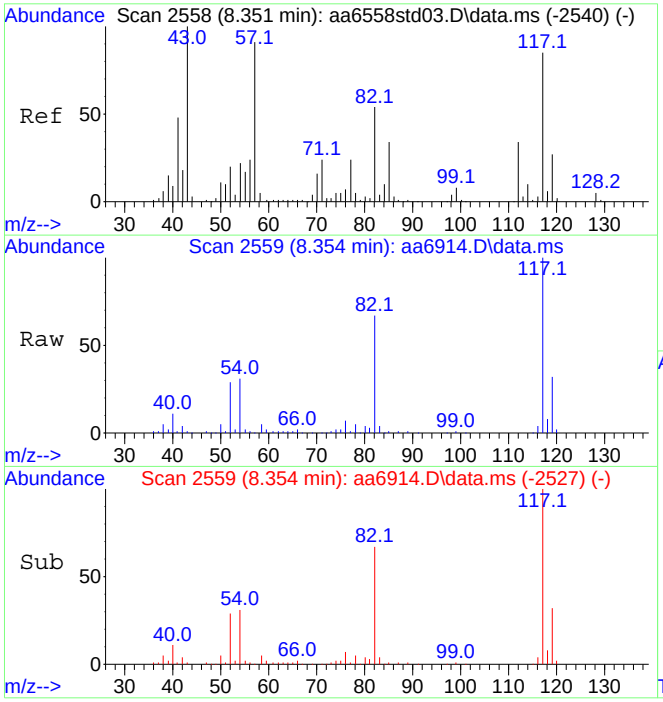


#49
Tetrachloroethene
Concen: 21.59 ppbV
RT: 7.191 min Scan# 2197
Delta R.T. 0.000 min
Lab File: aa6914.D
Acq: 16 Jul 2024 8:57 pm

Tgt Ion:166 Resp: 728700

Ion	Ratio	Lower	Upper
166	100		
164	78.5	62.8	94.2

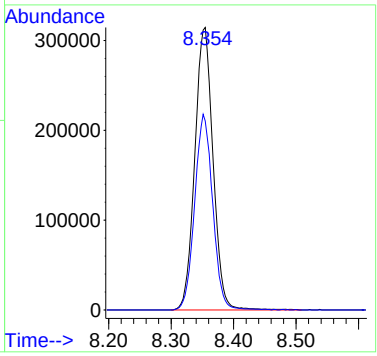


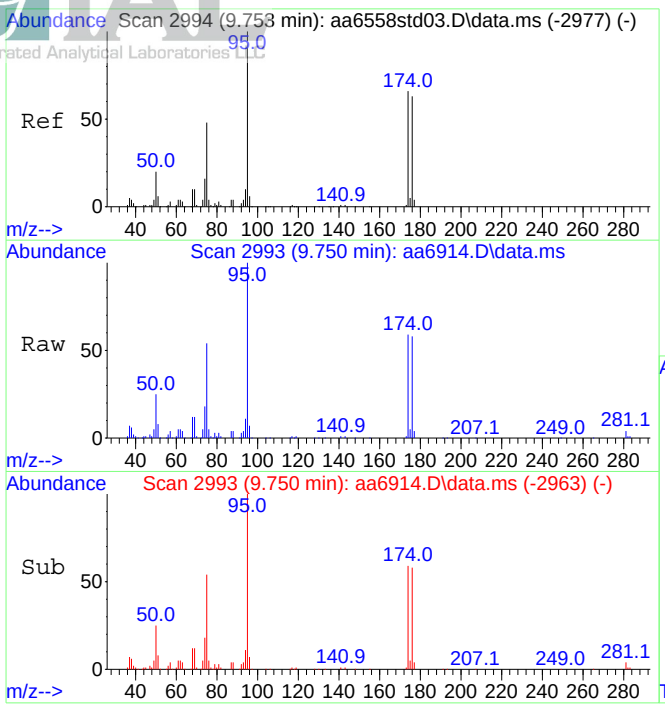


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.354 min Scan# 2559
Delta R.T. 0.003 min
Lab File: aa6914.D
Acq: 16 Jul 2024 8:57 pm

Tgt Ion:117 Resp: 639562

Ion	Ratio	Lower	Upper
117	100		
82	68.4	42.3	82.3

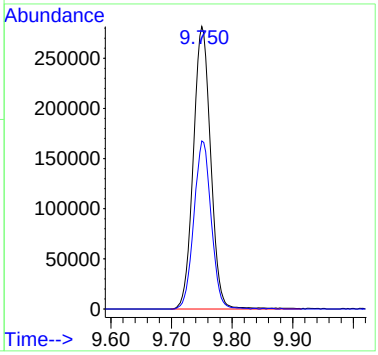




#64
Bromofluorobenzene (tune std)
Concen: 9.29 ppbV
RT: 9.750 min Scan# 2993
Delta R.T. -0.003 min
Lab File: aa6914.D
Acq: 16 Jul 2024 8:57 pm

Tgt Ion: 95 Resp: 562065

Ion	Ratio	Lower	Upper
95	100		
174	59.1	52.9	79.3



INTEGRATED ANALYTICAL LABORATORIES, LLC
Integrated Analytical Laboratories LLC

Volatile Organic Compounds by EPA Method TO-15
Summary of Results

Lab ID:	E24-02427-04	Instrument ID:	AA
Client ID:	SG-17	GC/MS Column:	RTX-1, 0.32 mmID
Date Sampled:	07/15/2024 21:45	Injection Volmue:	500ml, 50ml
Date Received:	07/16/2024	Matrix:	Air-Other
Date Analyzed:	07/16/2024 23:10, 07/18/2024 15:12	% Moisture:	NA
Data File:	AA6918, AA6927	Dilution Factor:	1, 10
Summa ID:	2896B	Analyst:	J. Walukiewicz

			Concentration Reported		Reporting Limits	
Compound	**CAS #**	**Q**	**ppbv**	**ug/m3**	**ppbv**	**ug/m3**
Acetone	67-64-1	D	210	500	2.0	4.8
Benzene	71-43-2		4.5	14	0.20	0.64
Bromodichloromethane	75-27-4		ND	ND	0.20	1.3
Bromoform	75-25-2		ND	ND	0.20	2.1
Bromomethane	74-83-9		ND	ND	0.20	0.78
1,3-Butadiene	106-99-0		ND	ND	0.20	0.44
Chlorobenzene	108-90-7		ND	ND	0.20	0.92
Chloroethane	75-00-3		ND	ND	0.20	0.53
Chloroform	67-66-3		ND	ND	0.20	0.98
Chloromethane	74-87-3		ND	ND	0.20	0.41
Carbon disulfide	75-15-0		0.75	2.3	0.20	0.62
Carbon tetrachloride	56-23-5		ND	ND	0.040	0.25
Cyclohexane	110-82-7		ND	ND	0.20	0.69
Dibromochloromethane	124-48-1		ND	ND	0.20	1.7
1,2-Dibromoethane	106-93-4		ND	ND	0.20	1.5
1,2-Dichlorobenzene	95-50-1		ND	ND	0.20	1.2
1,3-Dichlorobenzene	541-73-1		ND	ND	0.20	1.2
1,4-Dichlorobenzene	106-46-7		ND	ND	0.20	1.2
Dichlorodifluoromethane	75-71-8		ND	ND	0.20	0.99
1,1-Dichloroethane	75-34-3		ND	ND	0.20	0.81
1,2-Dichloroethane	107-06-2		ND	ND	0.20	0.81
1,1-Dichloroethene	75-35-4		ND	ND	0.20	0.79
1,2-Dichloroethene (cis)	156-59-2		ND	ND	0.20	0.79
1,2-Dichloroethene (trans)	156-60-5		ND	ND	0.20	0.79
1,2-Dichloropropane	78-87-5		ND	ND	0.20	0.92
1,3-Dichloropropene (cis)	10061-01-5		ND	ND	0.20	0.91
1,3-Dichloropropene (trans)	10061-02-6		ND	ND	0.20	0.91
1,2-Dichlorotetrafluoroethane	76-14-2		ND	ND	0.20	1.4
1,4-Dioxane	123-91-1		ND	ND	0.20	0.72
Ethylbenzene	100-41-4		0.45	2.0	0.20	0.87
n-Heptane	142-82-5		21	88	0.20	0.82
1,3-Hexachlorobutadiene	87-68-3		ND	ND	0.20	2.1
n-Hexane	110-54-3		4.6	16	0.20	0.70
Methylene chloride	75-09-2		ND	ND	0.20	0.69
Methyl ethyl ketone	78-93-3		7.0	21	0.20	0.59
Methyl isobutyl ketone	108-10-1		ND	ND	0.20	0.82
Methyl tert-butyl ether	1634-04-4		ND	ND	0.20	0.72
Styrene	100-42-5		0.35	1.5	0.20	0.85
Tert-butyl alcohol	75-65-0		5.8	18	0.20	0.61
1,1,2,2-Tetrachloroethane	79-34-5		ND	ND	0.20	1.4
Tetrachloroethene	127-18-4	D	91	620	2.0	14
Toluene	108-88-3	D	89	330	2.0	7.5
1,2,4-Trichlorobenzene	120-82-1		ND	ND	0.20	1.5
1,1,1-Trichloroethane	71-55-6		ND	ND	0.20	1.1
1,1,2-Trichloroethane	79-00-5		ND	ND	0.20	1.1

Qualifiers:
D = Dilution required

Volatile Organic Compounds by EPA Method TO-15
Summary of Results

Lab ID:	E24-02427-04	Instrument ID:	AA
Client ID:	SG-17	GC/MS Column:	RTX-1, 0.32 mmID
Date Sampled:	07/15/2024 21:45	Injection Volmue:	500ml, 50ml
Date Received:	07/16/2024	Matrix:	Air-Other
Date Analyzed:	07/16/2024 23:10, 07/18/2024 15:12	% Moisture:	NA
Data File:	AA6918, AA6927	Dilution Factor:	1, 10
Summa ID:	2896B	Analyst:	J. Walukiewicz

			Concentration Reported		Reporting Limits	
Compound	**CAS #**	**Q**	**ppbv**	**ug/m3**	**ppbv**	**ug/m3**
Trichloroethene	79-01-6		0.29	1.6	0.046	0.25
Trichlorofluoromethane	75-69-4		0.58	3.2	0.20	1.1
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1		ND	ND	0.20	1.5
1,2,4-Trimethylbenzene	95-63-6		0.39	1.9	0.20	0.98
1,3,5-Trimethylbenzene	108-67-8		0.21	1.0	0.20	0.98
2,2,4-Trimethylpentane	540-84-1		ND	ND	0.20	0.93
Vinyl bromide	593-60-2		ND	ND	0.20	0.87
Vinyl chloride	75-01-4		ND	ND	0.20	0.51
Xylenes (m&p)	179601-23-1		1.6	6.8	0.20	0.87
Xylenes (o)	95-47-6		0.56	2.4	0.20	0.87

Qualifiers:
D = Dilution required

Data Path : C:\DATA\2024\07-2024\07-16-2024\
Data File : aa6918.D
Acq On : 16 Jul 2024 11:10 pm
Operator : jjw
Sample : E24-02427-04
Misc : 2896B, 500cc
ALS Vial : 21 Sample Multiplier: 1

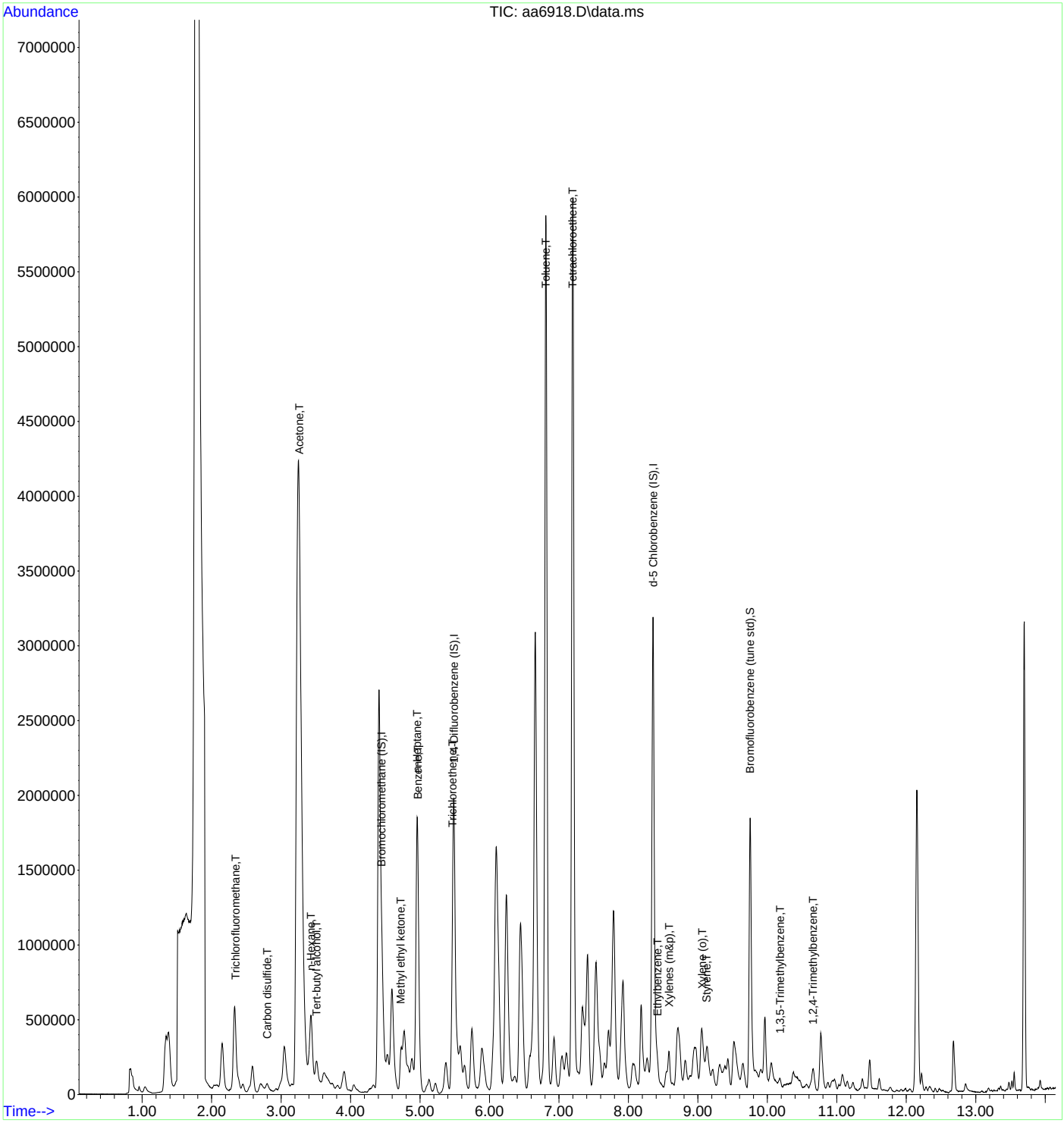
Quant Time: Jul 18 10:36:16 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

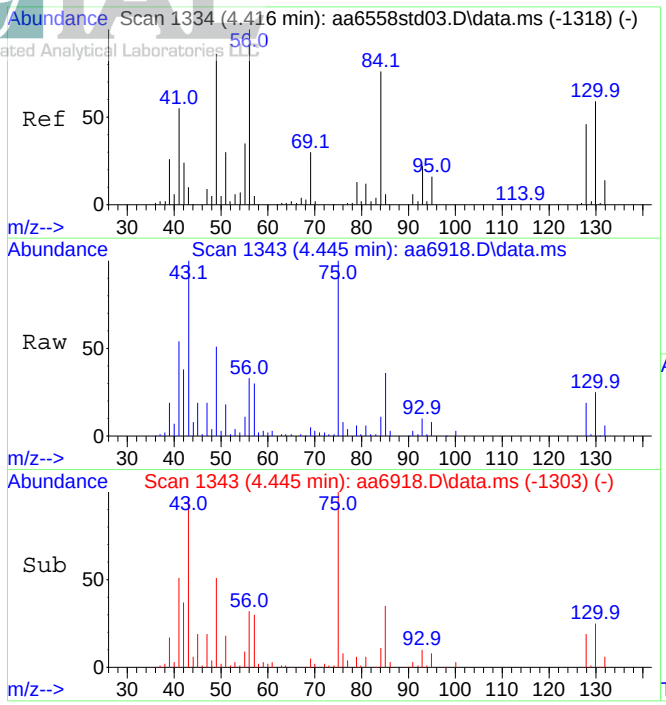
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.445	130	164519	10.00	ppbV		0.029
39) 1,4-Difluorobenzene (IS)	5.490	114	845369	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.358	117	732609	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.753	95	749827	10.82	ppbV		0.000
Target Compounds							Qvalue
12) Trichlorofluoromethane	2.345	101	31242	0.58	ppbV		95
15) Carbon disulfide	2.802	76	52358	0.75	ppbV	#	83
21) Acetone	3.261	43	4457001	120.73	ppbV		93
24) n-Hexane	3.432	57	291413	4.61	ppbV		99
26) Tert-butyl alcohol	3.512	59	299285	5.81	ppbV		100
35) Methyl ethyl ketone	4.724	43	366178	7.00	ppbV		92
36) n-Heptane	4.959	43	1062426	21.48	ppbV		88
37) Benzene	4.969	78	339108	4.53	ppbV	#	85
40) Trichloroethene	5.470	130	11114	0.29	ppbV		97
47) Toluene	6.811	91	4379371	40.46	ppbV		99
49) Tetrachloroethene	7.197	166	1696964	41.39	ppbV		99
58) Ethylbenzene	8.422	91	65547	0.45	ppbV		93
59) Xylenes (m&p)	8.586	91	168877	1.56	ppbV		96
60) Xylene (o)	9.065	91	63681	0.56	ppbV		89
61) Styrene	9.126	104	26830	0.35	ppbV		99
69) 1,3,5-Trimethylbenzene	10.184	105	27692	0.21	ppbV		96
70) 1,2,4-Trimethylbenzene	10.657	105	52047	0.39	ppbV		95

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

Data Path : C:\DATA\2024\07-2024\07-16-2024\
Data File : aa6918.D
Acq On : 16 Jul 2024 11:10 pm
Operator : jjw
Sample : E24-02427-04
Misc : 2896B, 500cc
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jul 18 10:36:16 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

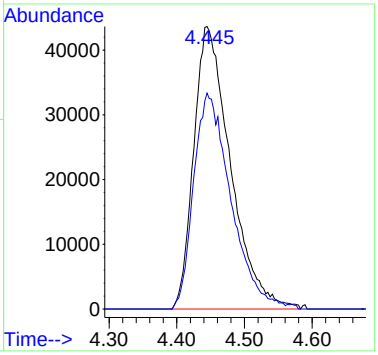


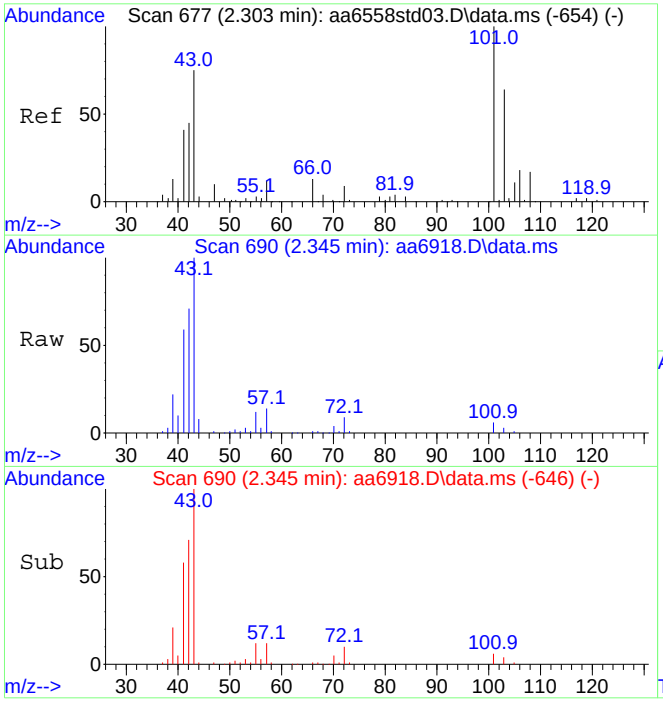


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.445 min Scan# 1343
Delta R.T. 0.029 min
Lab File: aa6918.D
Acq: 16 Jul 2024 11:10 pm

Tgt Ion:130 Resp: 164519

Ion	Ratio	Lower	Upper
130	100		
128	77.5	57.8	97.8

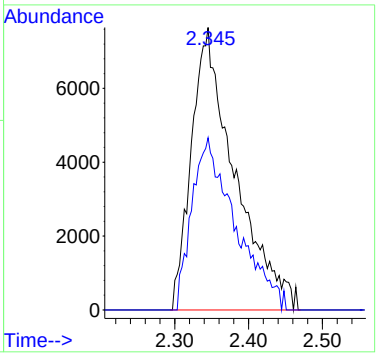


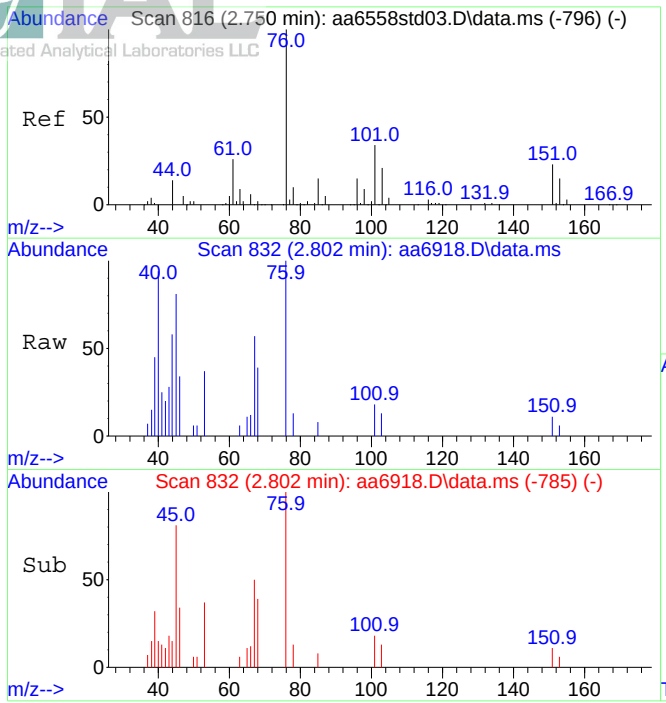


#12
Trichlorofluoromethane
Concen: 0.58 ppbV
RT: 2.345 min Scan# 690
Delta R.T. 0.042 min
Lab File: aa6918.D
Acq: 16 Jul 2024 11:10 pm

Tgt Ion:101 Resp: 31242

Ion	Ratio	Lower	Upper
101	100		
103	61.3	51.9	77.9

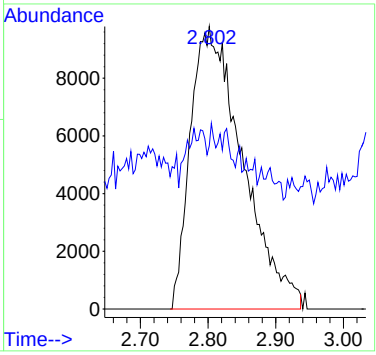


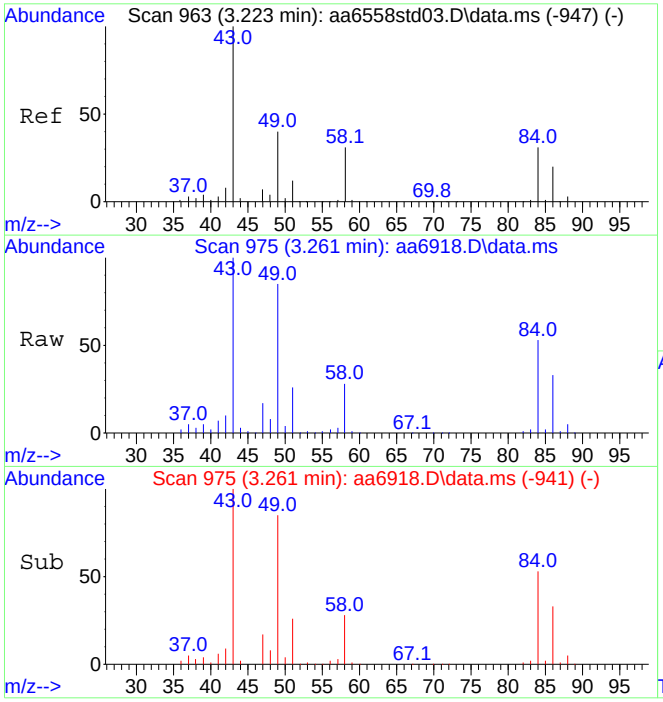


#15
Carbon disulfide
Concen: 0.75 ppbV
RT: 2.802 min Scan# 832
Delta R.T. 0.051 min
Lab File: aa6918.D
Acq: 16 Jul 2024 11:10 pm

Tgt Ion: 76 Resp: 52358

Ion	Ratio	Lower	Upper
76	100		
44	6.3	10.6	16.0#

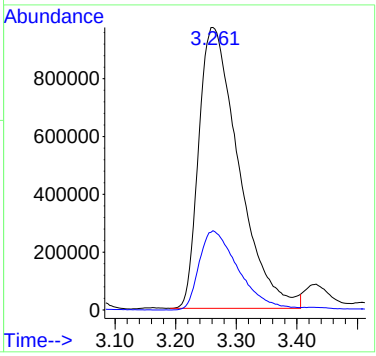


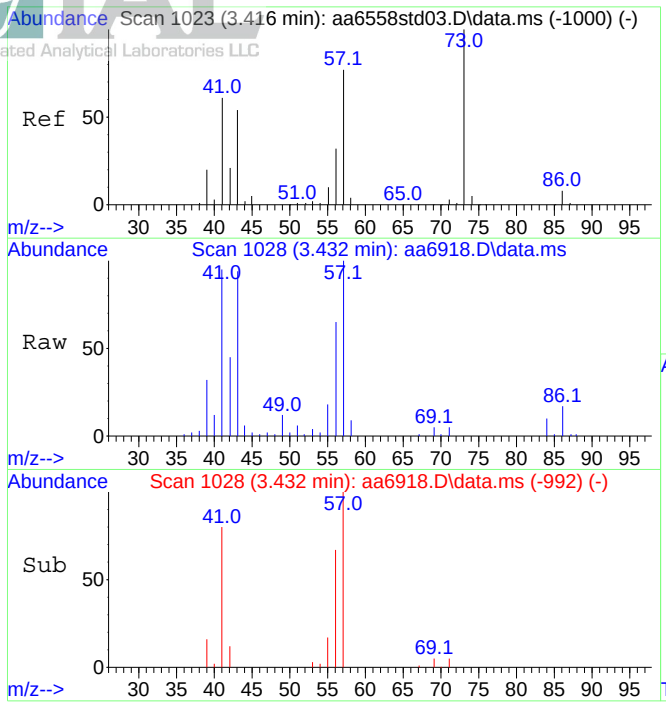


#21
Acetone
Concen: 120.73 ppbV
RT: 3.261 min Scan# 975
Delta R.T. 0.039 min
Lab File: aa6918.D
Acq: 16 Jul 2024 11:10 pm

Tgt Ion: 43 Resp: 4457001

Ion	Ratio	Lower	Upper
43	100		
58	27.8	25.4	38.0

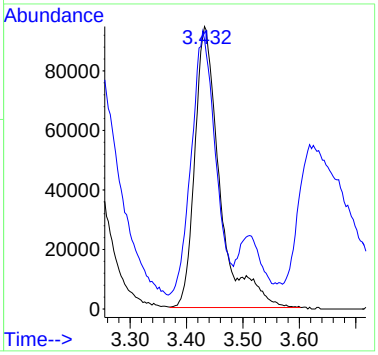


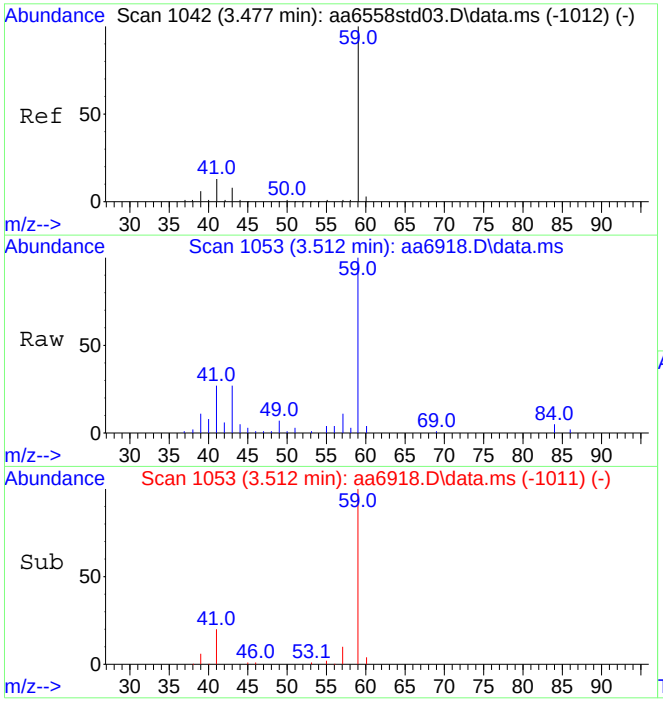


#24
n-Hexane
Concen: 4.61 ppbV
RT: 3.432 min Scan# 1028
Delta R.T. 0.016 min
Lab File: aa6918.D
Acq: 16 Jul 2024 11:10 pm

Tgt Ion: 57 Resp: 291413

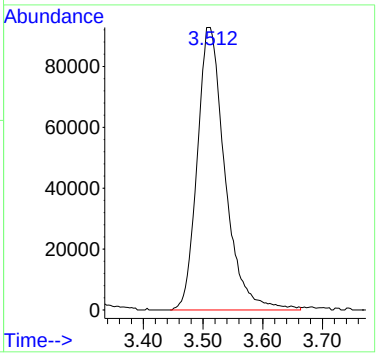
Ion	Ratio	Lower	Upper
57	100		
41	90.1	71.6	107.4

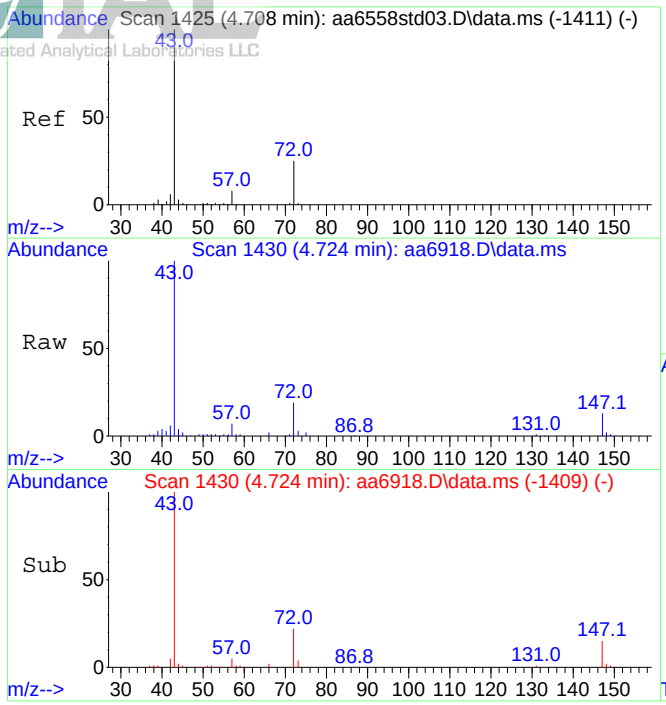




#26
Tert-butyl alcohol
Concen: 5.81 ppbV
RT: 3.512 min Scan# 1053
Delta R.T. 0.035 min
Lab File: aa6918.D
Acq: 16 Jul 2024 11:10 pm

Tgt Ion: 59 Resp: 299285

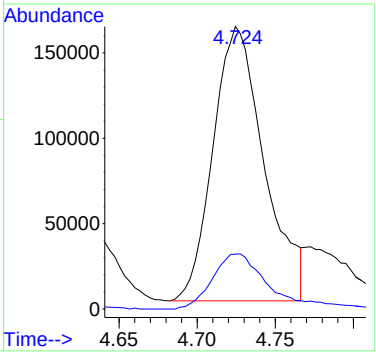


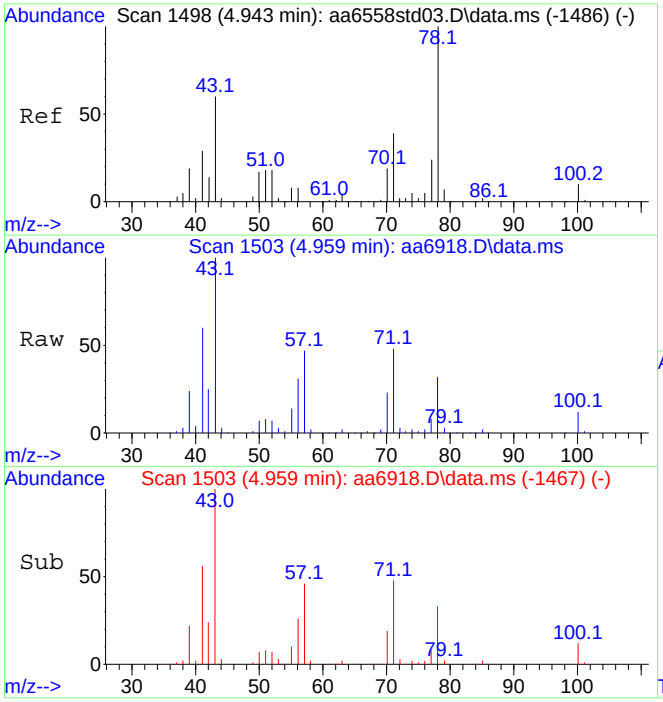


#35
Methyl ethyl ketone
Concen: 7.00 ppbV
RT: 4.724 min Scan# 1430
Delta R.T. 0.016 min
Lab File: aa6918.D
Acq: 16 Jul 2024 11:10 pm

Tgt Ion: 43 Resp: 366178

Ion	Ratio	Lower	Upper
43	100		
72	20.3	19.5	29.3

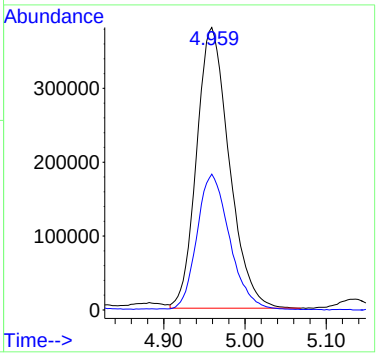


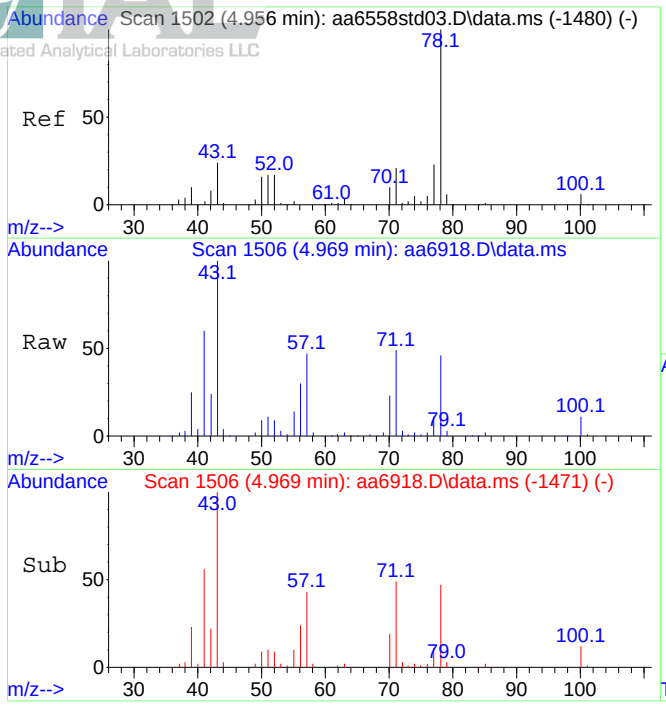


#36
n-Heptane
Concen: 21.48 ppbV
RT: 4.959 min Scan# 1503
Delta R.T. 0.016 min
Lab File: aa6918.D
Acq: 16 Jul 2024 11:10 pm

Tgt Ion: 43 Resp: 1062426

Ion	Ratio	Lower	Upper
43	100		
71	48.8	46.2	69.2

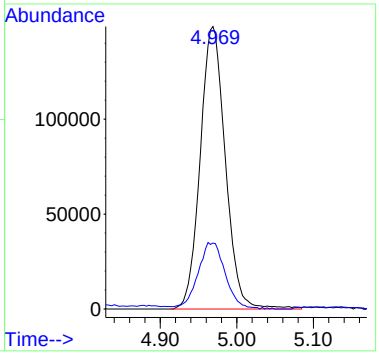


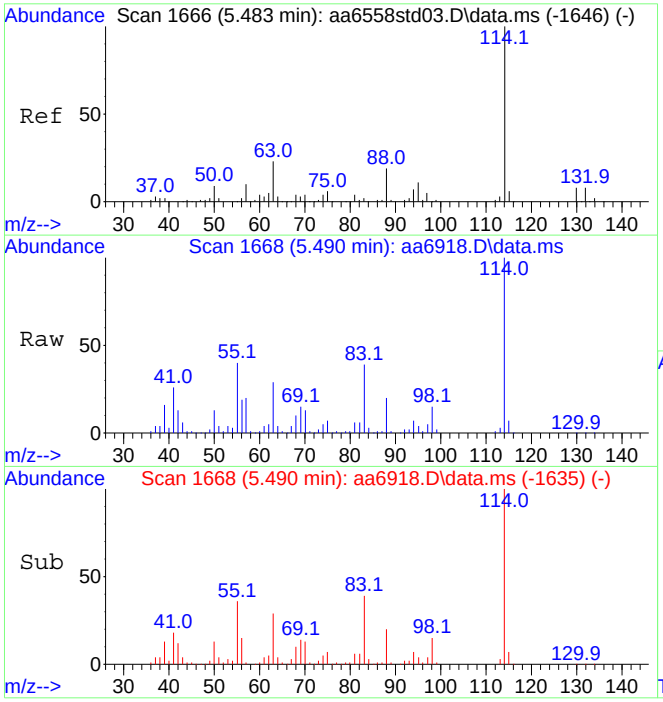


#37
Benzene
Concen: 4.53 ppbV
RT: 4.969 min Scan# 1506
Delta R.T. 0.013 min
Lab File: aa6918.D
Acq: 16 Jul 2024 11:10 pm

Tgt Ion: 78 Resp: 339108

Ion	Ratio	Lower	Upper
78	100		
51	25.5	14.9	22.3#

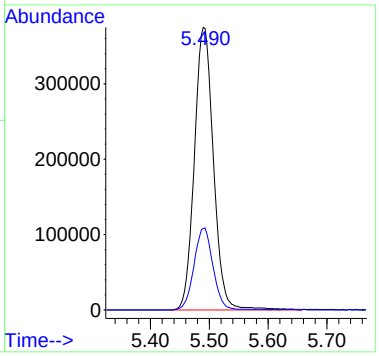


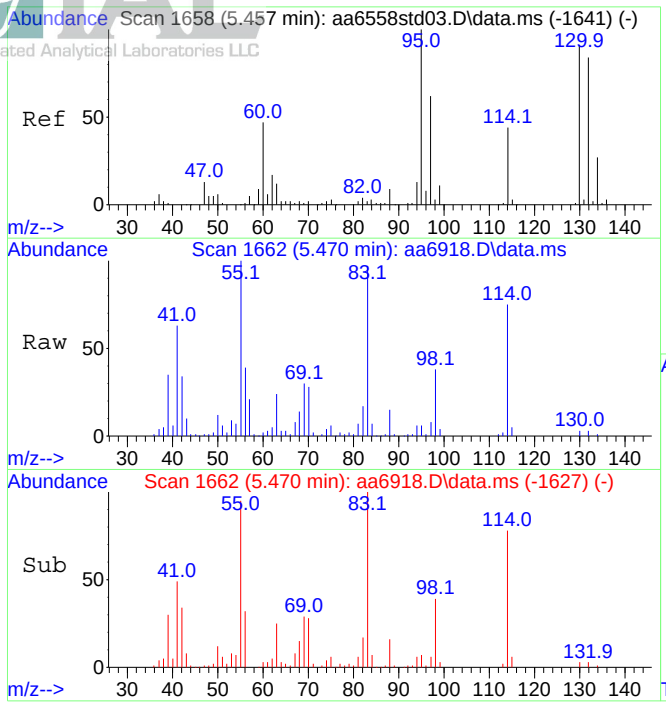


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.490 min Scan# 1668
Delta R.T. 0.006 min
Lab File: aa6918.D
Acq: 16 Jul 2024 11:10 pm

Tgt Ion:114 Resp: 845369

Ion	Ratio	Lower	Upper
114	100		
63	29.0	3.6	43.6

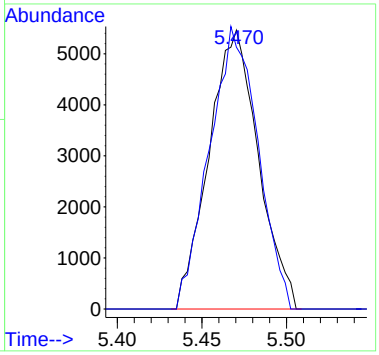


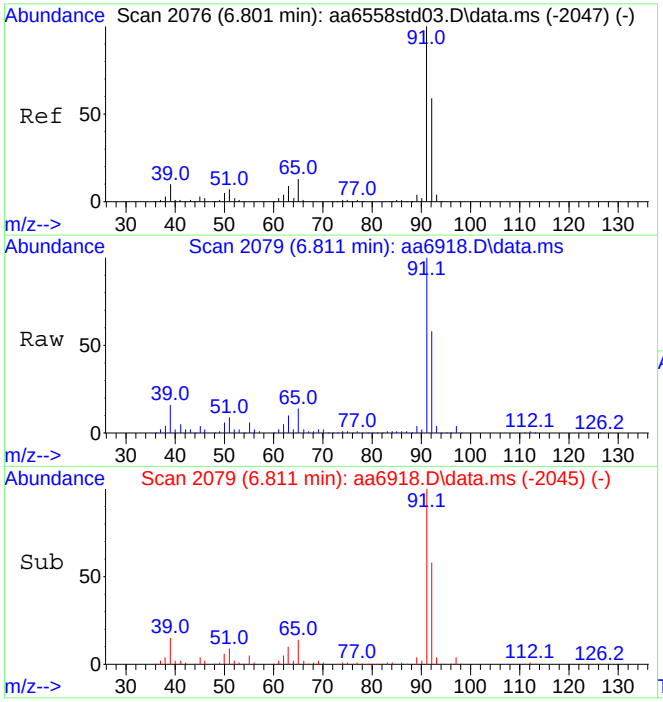


#40
Trichloroethene
Concen: 0.29 ppbV
RT: 5.470 min Scan# 1662
Delta R.T. 0.013 min
Lab File: aa6918.D
Acq: 16 Jul 2024 11:10 pm

Tgt Ion:130 Resp: 11114

Ion	Ratio	Lower	Upper
130	100		
132	99.0	76.6	114.8

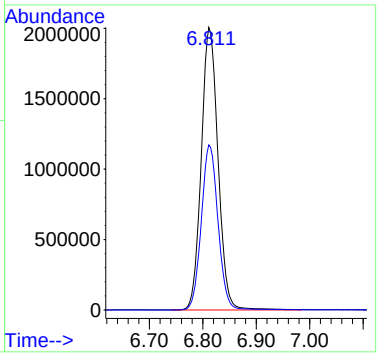


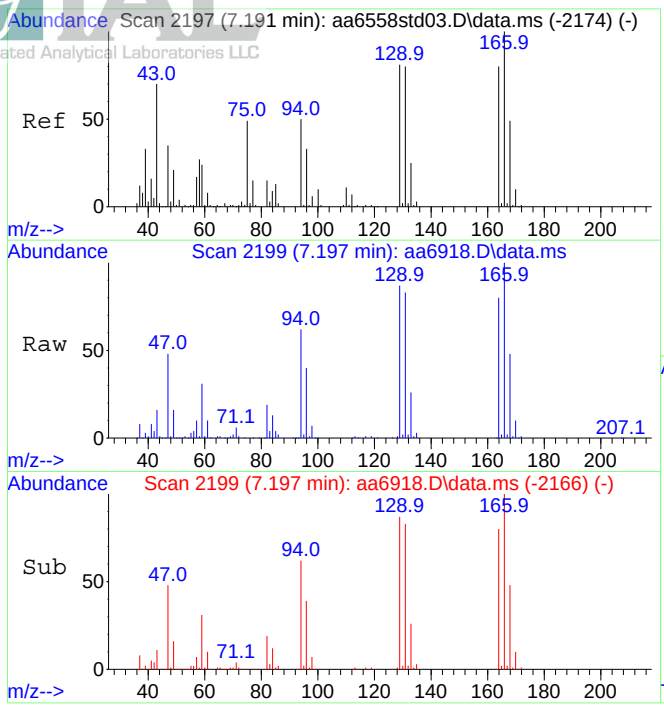


#47
Toluene
Concen: 40.46 ppbV
RT: 6.811 min Scan# 2079
Delta R.T. 0.010 min
Lab File: aa6918.D
Acq: 16 Jul 2024 11:10 pm

Tgt Ion: 91 Resp: 4379371

Ion	Ratio	Lower	Upper
91	100		
92	58.3	47.0	70.6

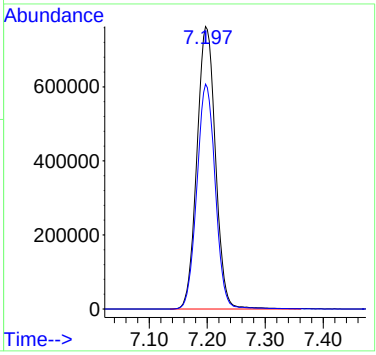


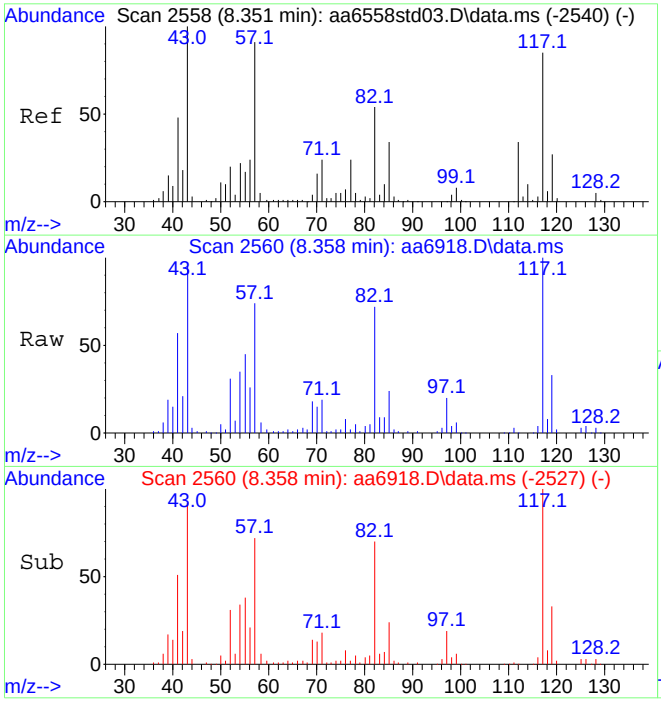


#49
Tetrachloroethene
Concen: 41.39 ppbV
RT: 7.197 min Scan# 2199
Delta R.T. 0.006 min
Lab File: aa6918.D
Acq: 16 Jul 2024 11:10 pm

Tgt Ion:166 Resp: 1696964

Ion	Ratio	Lower	Upper
166	100		
164	79.1	62.8	94.2

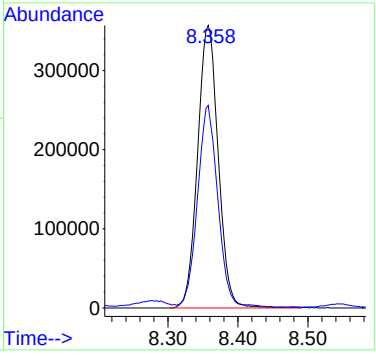


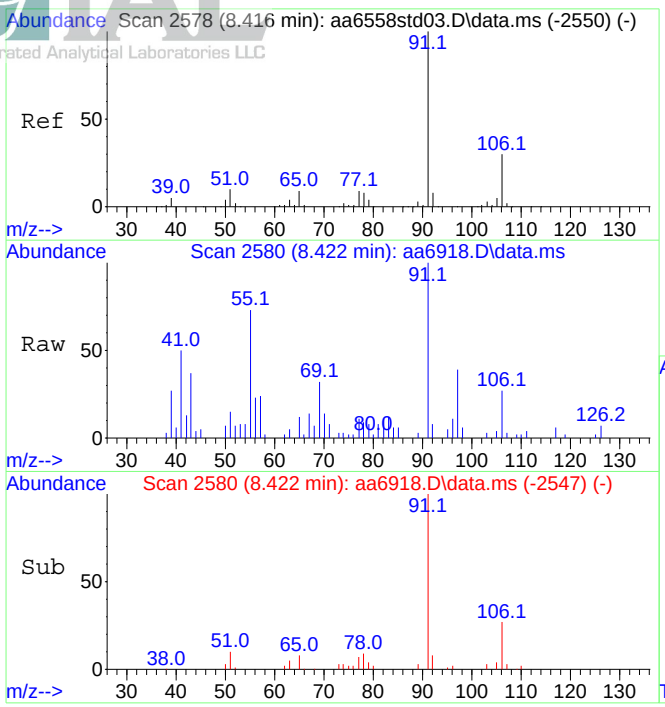


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.358 min Scan# 2560
Delta R.T. 0.006 min
Lab File: aa6918.D
Acq: 16 Jul 2024 11:10 pm

Tgt Ion:117 Resp: 732609

Ion	Ratio	Lower	Upper
117	100		
82	69.9	42.3	82.3

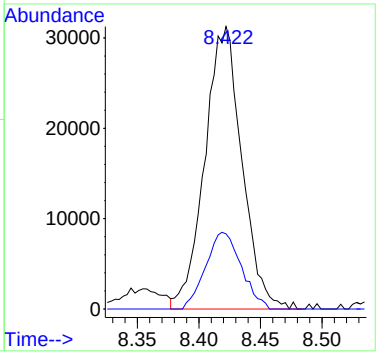


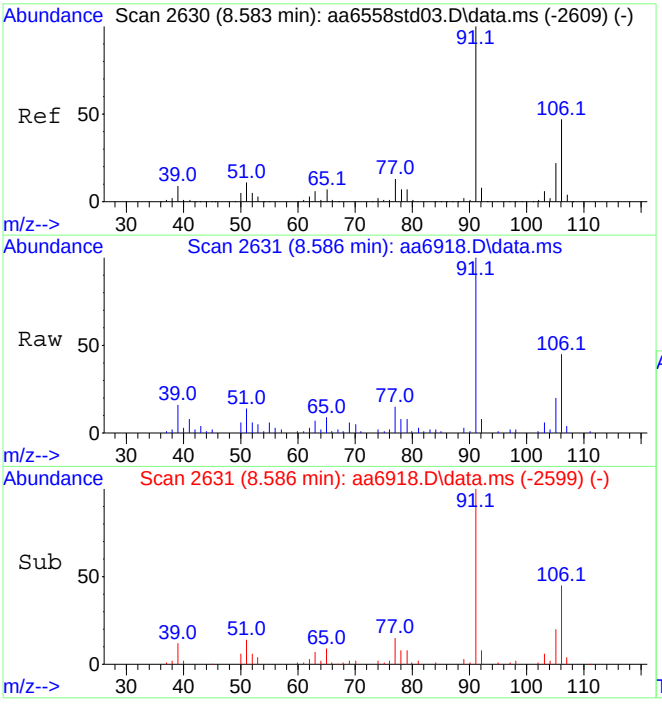


#58
Ethylbenzene
Concen: 0.45 ppbV
RT: 8.422 min Scan# 2580
Delta R.T. 0.006 min
Lab File: aa6918.D
Acq: 16 Jul 2024 11:10 pm

Tgt Ion: 91 Resp: 65547

Ion	Ratio	Lower	Upper
91	100		
106	26.0	23.8	35.8

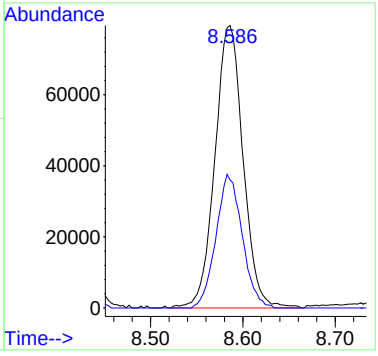


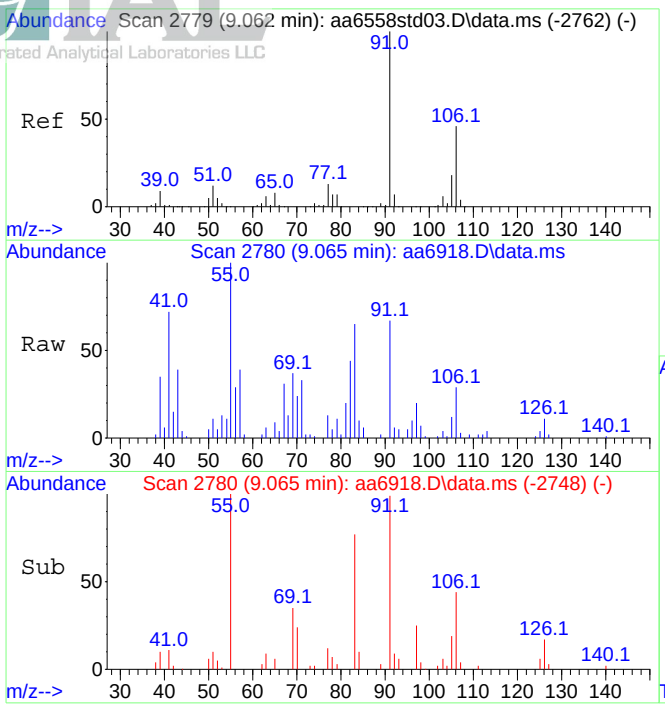


#59
Xylenes (m&p)
Concen: 1.56 ppbV
RT: 8.586 min Scan# 2631
Delta R.T. 0.003 min
Lab File: aa6918.D
Acq: 16 Jul 2024 11:10 pm

Tgt Ion: 91 Resp: 168877

Ion	Ratio	Lower	Upper
91	100		
106	43.9	37.4	56.2

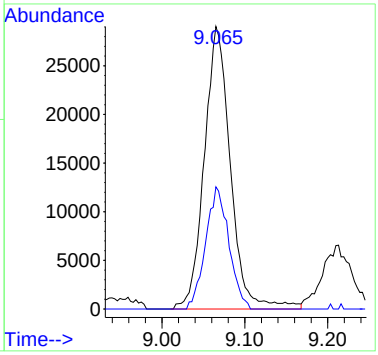


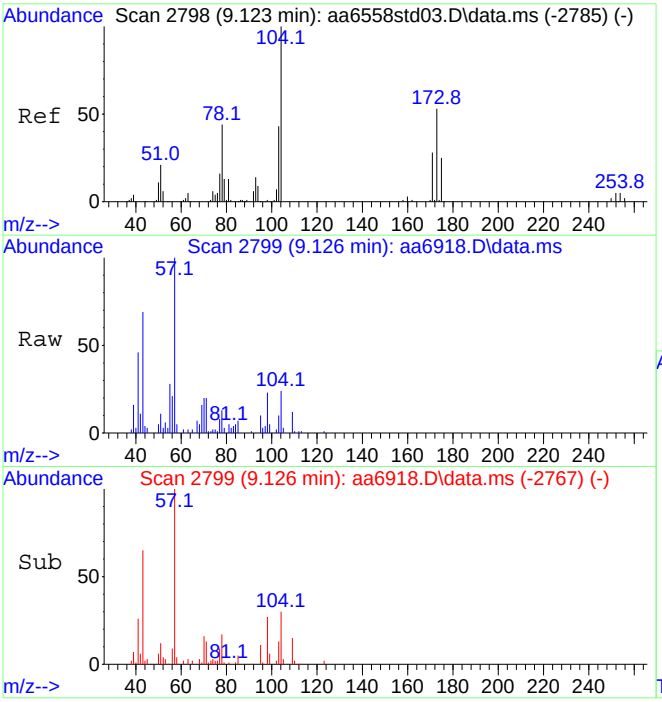


#60
Xylene (o)
Concen: 0.56 ppbV
RT: 9.065 min Scan# 2780
Delta R.T. 0.003 min
Lab File: aa6918.D
Acq: 16 Jul 2024 11:10 pm

Tgt Ion: 91 Resp: 63681

Ion	Ratio	Lower	Upper
91	100		
106	38.2	36.2	54.2

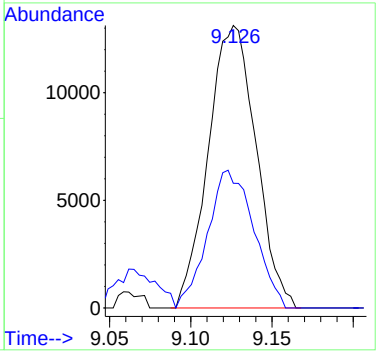


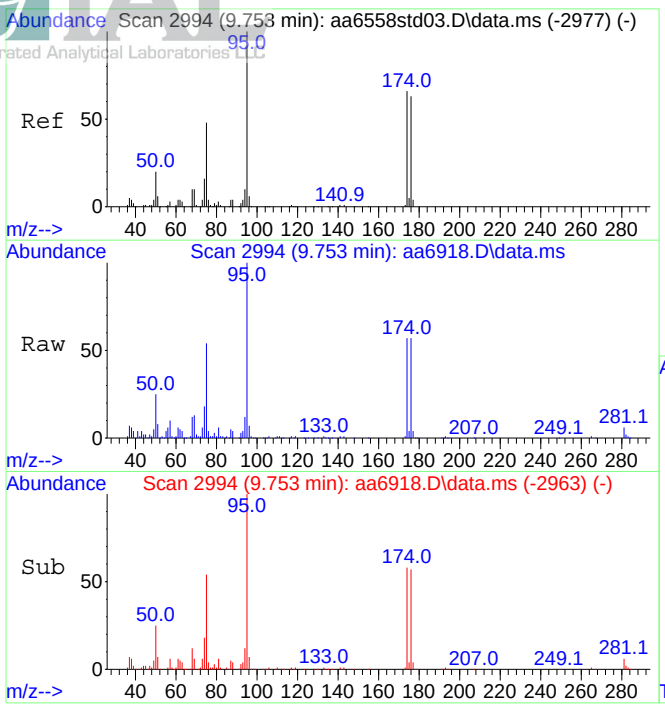


#61
Styrene
Concen: 0.35 ppbV
RT: 9.126 min Scan# 2799
Delta R.T. 0.003 min
Lab File: aa6918.D
Acq: 16 Jul 2024 11:10 pm

Tgt Ion:104 Resp: 26830

Ion	Ratio	Lower	Upper
104	100		
103	47.0	38.3	57.5

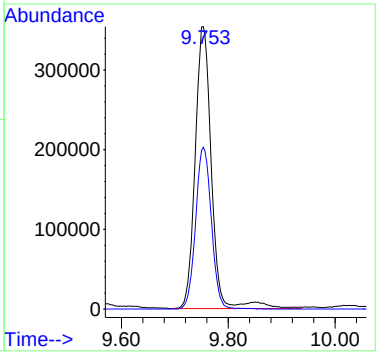


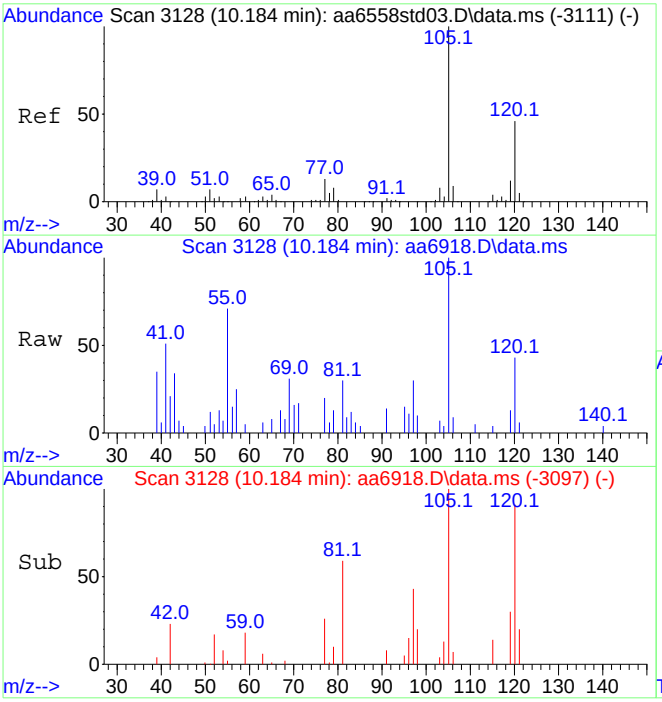


#64
Bromofluorobenzene (tune std)
Concen: 10.82 ppbV
RT: 9.753 min Scan# 2994
Delta R.T. -0.000 min
Lab File: aa6918.D
Acq: 16 Jul 2024 11:10 pm

Tgt Ion: 95 Resp: 749827

Ion	Ratio	Lower	Upper
95	100		
174	55.3	52.9	79.3

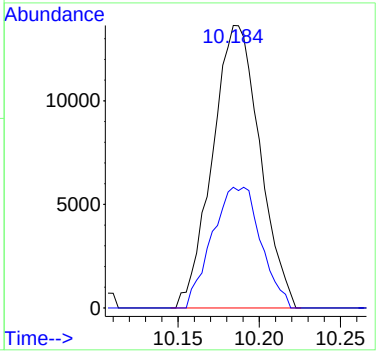


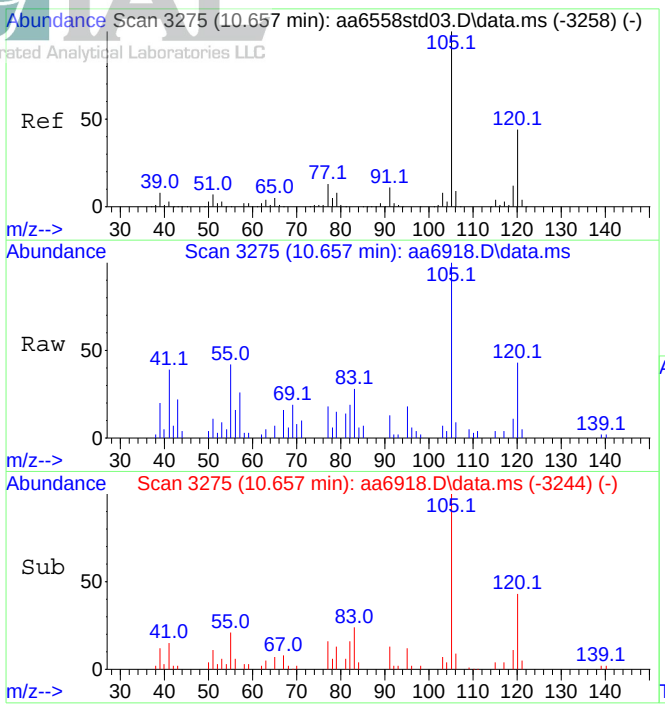


#69
1,3,5-Trimethylbenzene
Concen: 0.21 ppbV
RT: 10.184 min Scan# 3128
Delta R.T. -0.000 min
Lab File: aa6918.D
Acq: 16 Jul 2024 11:10 pm

Tgt Ion:105 Resp: 27692

Ion	Ratio	Lower	Upper
105	100		
120	43.9	37.2	55.8

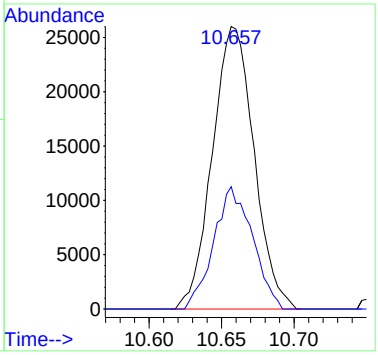




#70
1,2,4-Trimethylbenzene
Concen: 0.39 ppbV
RT: 10.657 min Scan# 3275
Delta R.T. -0.000 min
Lab File: aa6918.D
Acq: 16 Jul 2024 11:10 pm

Tgt Ion:105 Resp: 52047

Ion	Ratio	Lower	Upper
105	100		
120	40.2	34.5	51.7



Data Path : C:\DATA\2024\07-2024\07-18-2024\
Data File : aa6927.D
Acq On : 18 Jul 2024 3:12 pm
Operator : jjw
Sample : E24-02427-04x10 dil
Misc : 2896B, 50cc
ALS Vial : 7 Sample Multiplier: 1

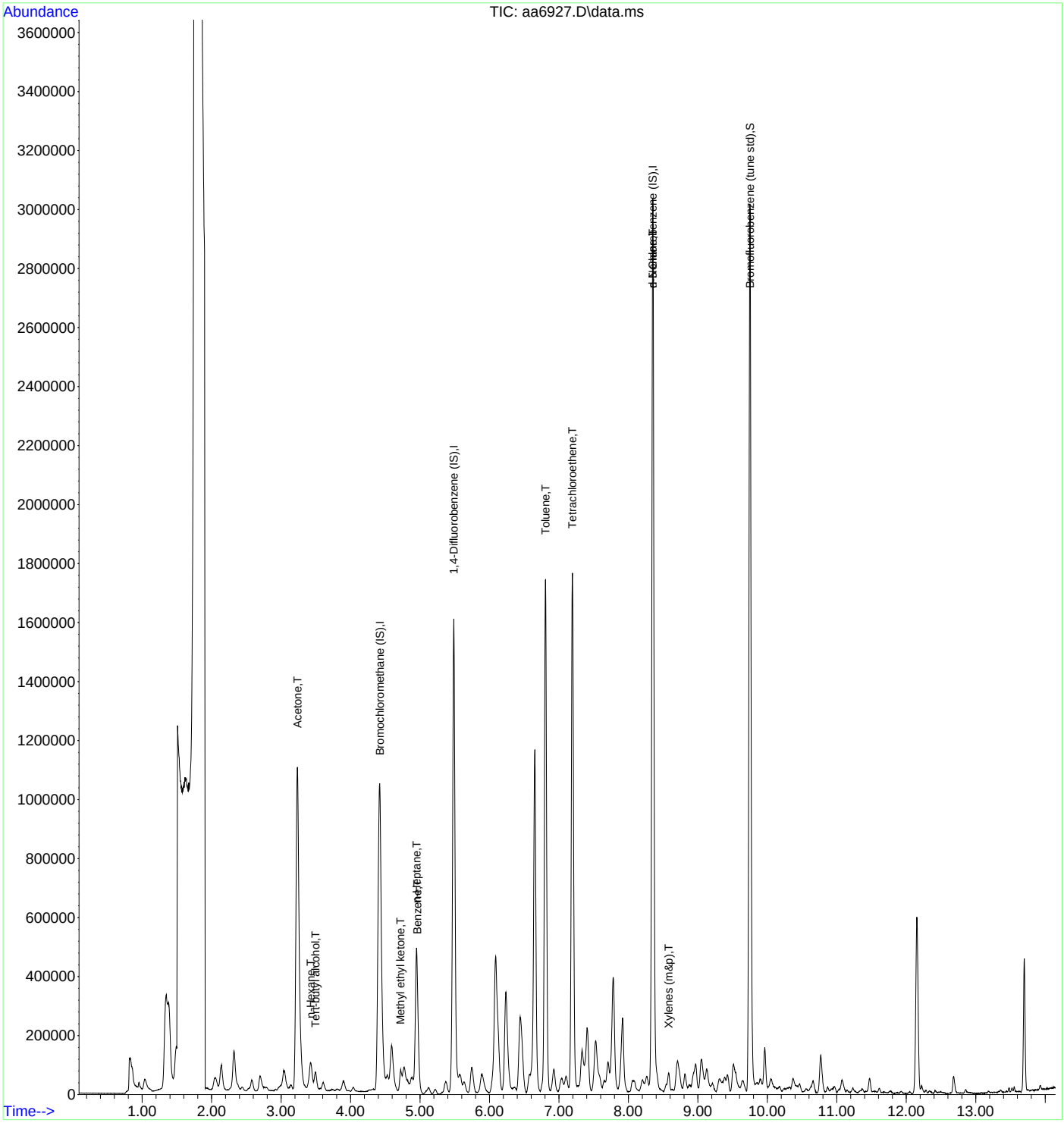
Quant Time: Jul 18 16:17:48 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

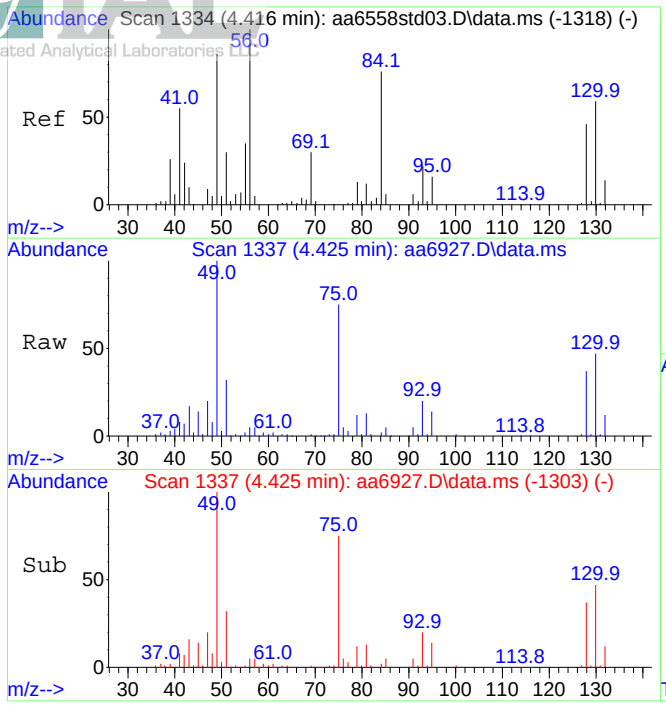
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.425	130	241157	10.00	ppbV		0.000
39) 1,4-Difluorobenzene (IS)	5.486	114	1144756	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.351	117	1360841	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.750	95	1291593	10.03	ppbV		0.000
Target Compounds							Qvalue
21) Acetone	3.239	43	1138666	21.04	ppbV		94
24) n-Hexane	3.429	57	62065	0.67	ppbV	#	67
26) Tert-butyl alcohol	3.496	59	79603	1.05	ppbV		100
35) Methyl ethyl ketone	4.721	43	93085	1.21	ppbV		90
36) n-Heptane	4.949	43	274823	3.79	ppbV		89
37) Benzene	4.962	78	77417	0.71	ppbV	#	84
47) Toluene	6.808	91	1300124	8.87	ppbV		99
49) Tetrachloroethene	7.194	166	503770	9.07	ppbV		99
56) n-Nonane	8.351	43	259519	1.63	ppbV		88
59) Xylenes (m&p)	8.580	91	45842	0.23	ppbV		94

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

Data Path : C:\DATA\2024\07-2024\07-18-2024\
Data File : aa6927.D
Acq On : 18 Jul 2024 3:12 pm
Operator : jjw
Sample : E24-02427-04x10 dil
Misc : 2896B, 50cc
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 18 16:17:48 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

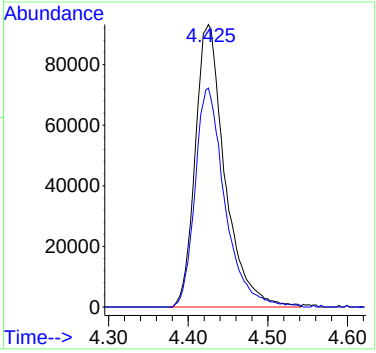


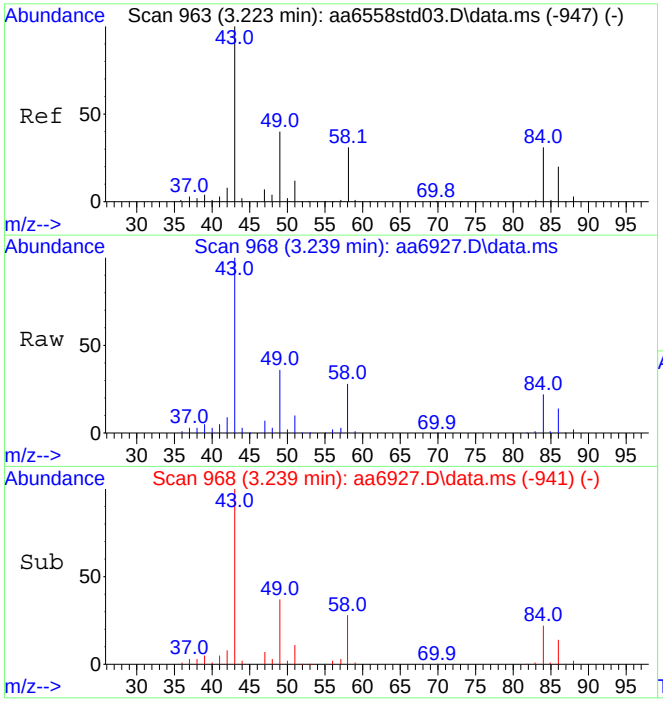


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.425 min Scan# 1337
Delta R.T. 0.009 min
Lab File: aa6927.D
Acq: 18 Jul 2024 3:12 pm

Tgt Ion:130 Resp: 241157

Ion	Ratio	Lower	Upper
130	100		
128	78.1	57.8	97.8

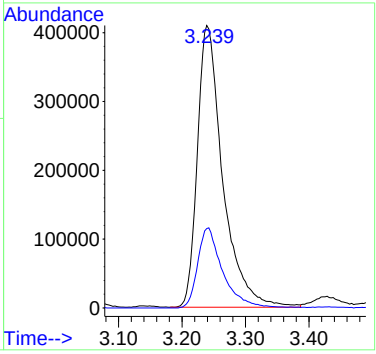


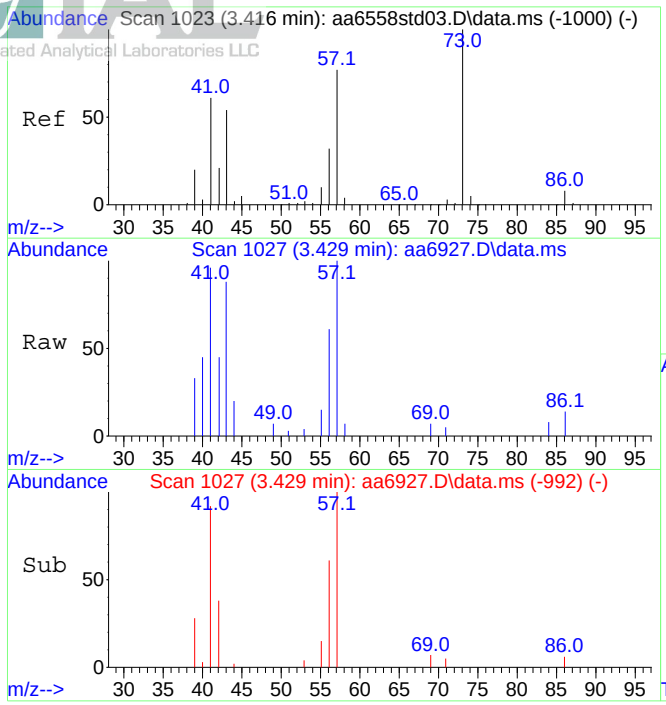


#21
Acetone
Concen: 21.04 ppbV
RT: 3.239 min Scan# 968
Delta R.T. 0.016 min
Lab File: aa6927.D
Acq: 18 Jul 2024 3:12 pm

Tgt Ion: 43 Resp: 1138666

Ion	Ratio	Lower	Upper
43	100		
58	28.2	25.4	38.0

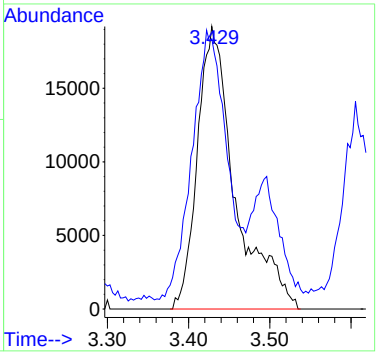


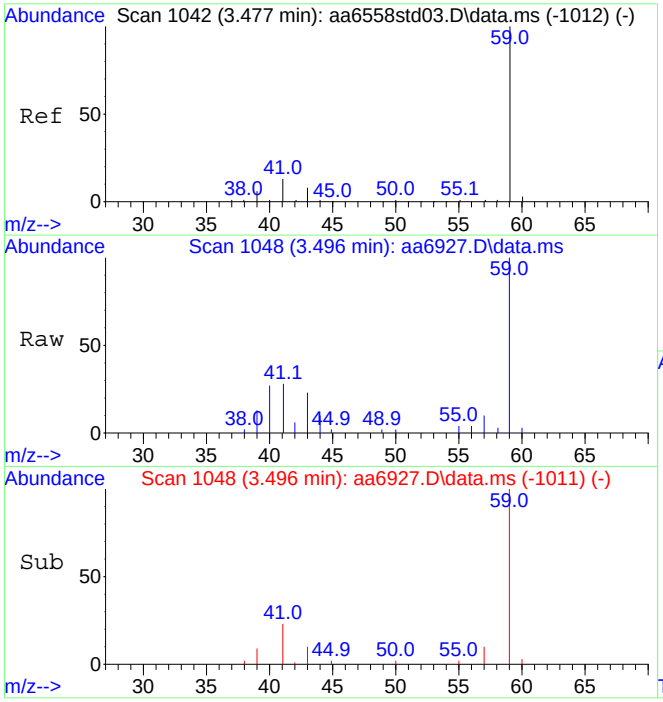


#24
n-Hexane
Concen: 0.67 ppbV
RT: 3.429 min Scan# 1027
Delta R.T. 0.013 min
Lab File: aa6927.D
Acq: 18 Jul 2024 3:12 pm

Tgt Ion: 57 Resp: 62065

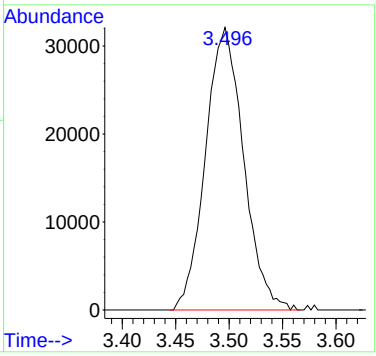
Ion	Ratio	Lower	Upper
57	100		
41	120.7	71.6	107.4#

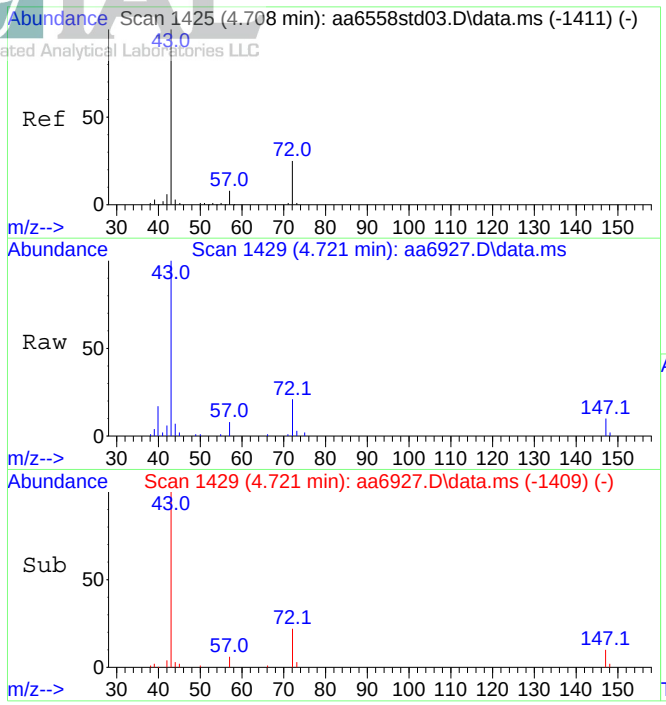




#26
Tert-butyl alcohol
Concen: 1.05 ppbV
RT: 3.496 min Scan# 1048
Delta R.T. 0.019 min
Lab File: aa6927.D
Acq: 18 Jul 2024 3:12 pm

Tgt Ion: 59 Resp: 79603

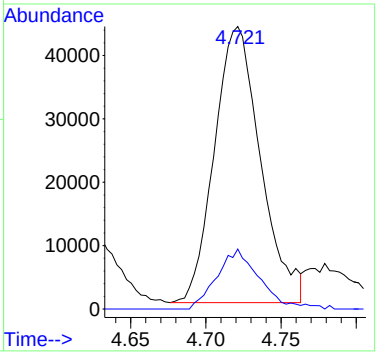


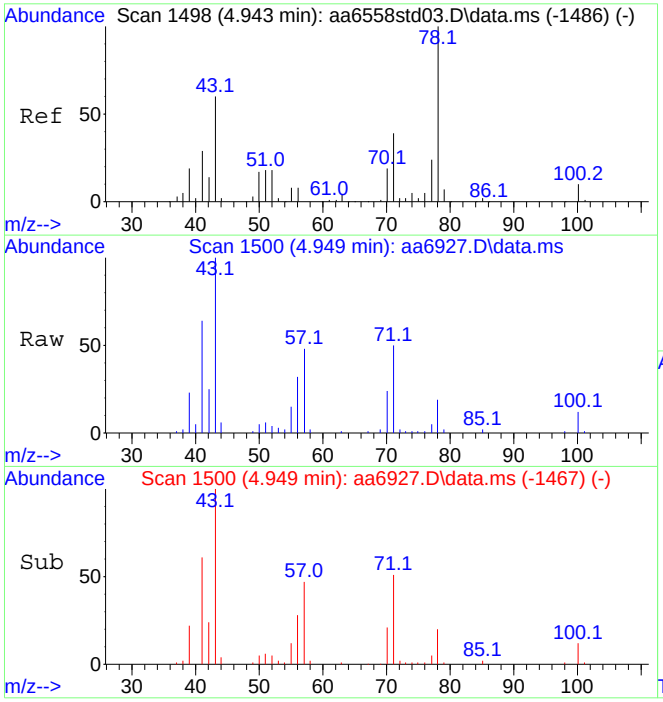


#35
Methyl ethyl ketone
Concen: 1.21 ppbV
RT: 4.721 min Scan# 1429
Delta R.T. 0.013 min
Lab File: aa6927.D
Acq: 18 Jul 2024 3:12 pm

Tgt Ion: 43 Resp: 93085

Ion	Ratio	Lower	Upper
43	100		
72	19.5	19.5	29.3

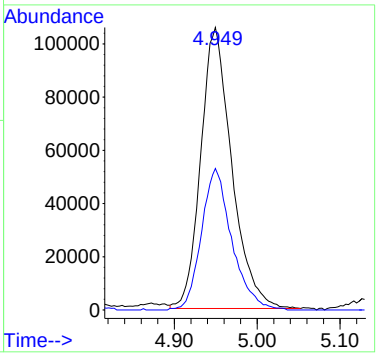


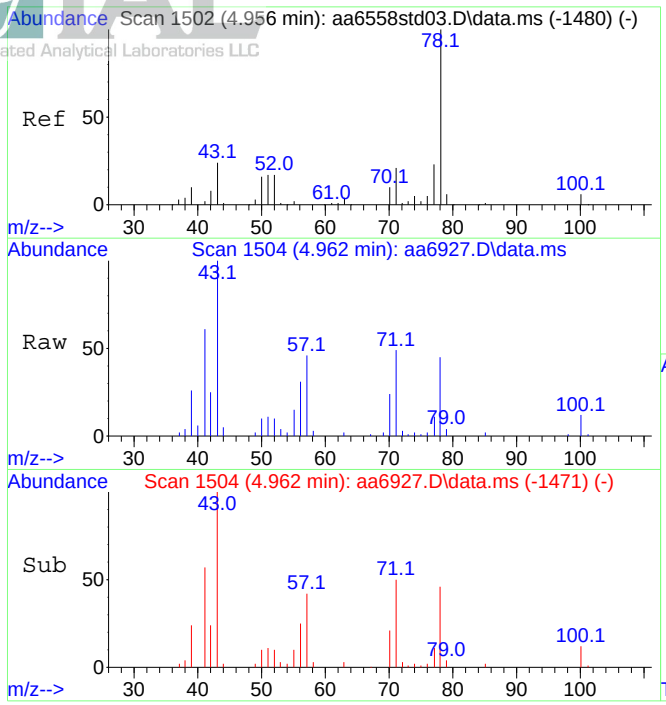


#36
n-Heptane
Concen: 3.79 ppbV
RT: 4.949 min Scan# 1500
Delta R.T. 0.006 min
Lab File: aa6927.D
Acq: 18 Jul 2024 3:12 pm

Tgt Ion: 43 Resp: 274823

Ion	Ratio	Lower	Upper
43	100		
71	49.3	46.2	69.2

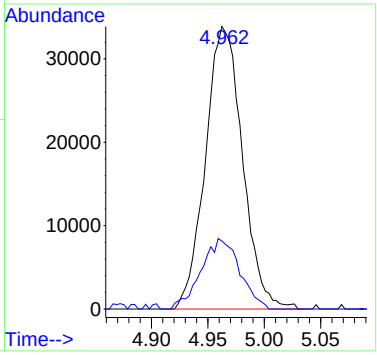


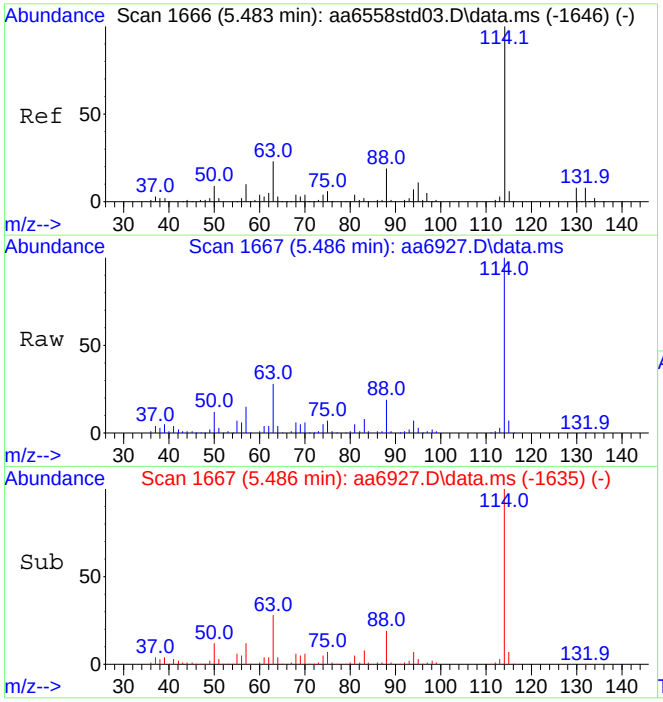


#37
Benzene
Concen: 0.71 ppbV
RT: 4.962 min Scan# 1504
Delta R.T. 0.006 min
Lab File: aa6927.D
Acq: 18 Jul 2024 3:12 pm

Tgt Ion: 78 Resp: 77417

Ion	Ratio	Lower	Upper
78	100		
51	25.9	14.9	22.3#

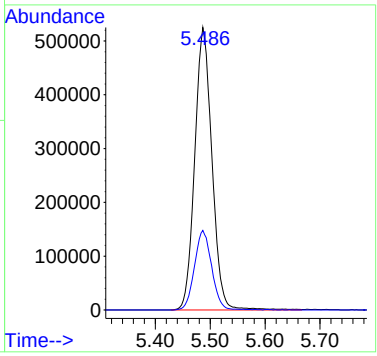


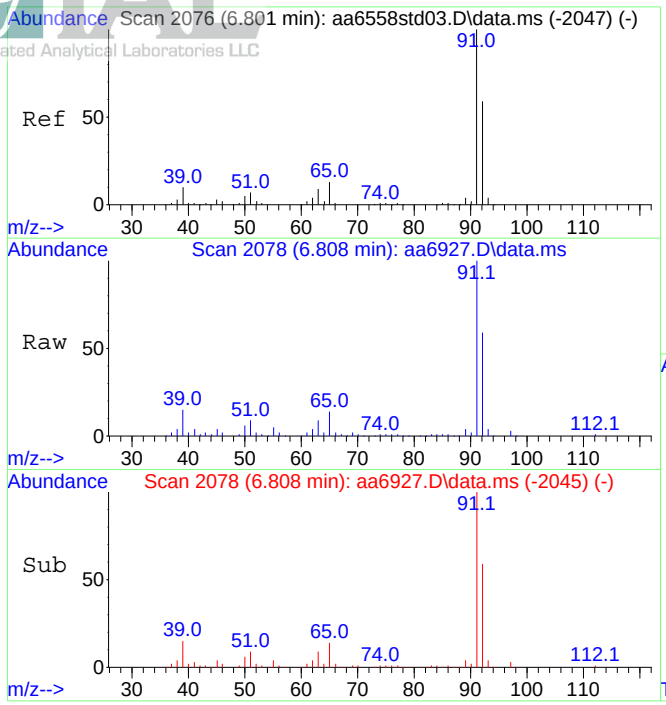


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.486 min Scan# 1667
Delta R.T. 0.003 min
Lab File: aa6927.D
Acq: 18 Jul 2024 3:12 pm

Tgt Ion:114 Resp: 1144756

Ion	Ratio	Lower	Upper
114	100		
63	28.1	3.6	43.6

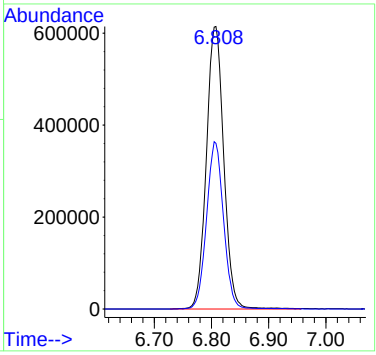


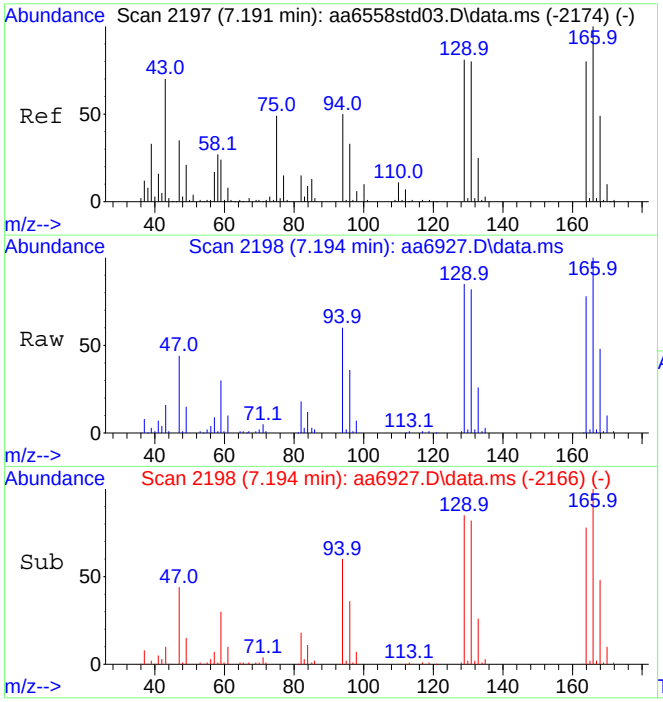


#47
Toluene
Concen: 8.87 ppbV
RT: 6.808 min Scan# 2078
Delta R.T. 0.006 min
Lab File: aa6927.D
Acq: 18 Jul 2024 3:12 pm

Tgt Ion: 91 Resp: 1300124

Ion	Ratio	Lower	Upper
91	100		
92	57.8	47.0	70.6

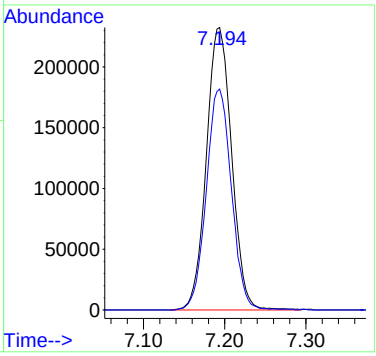


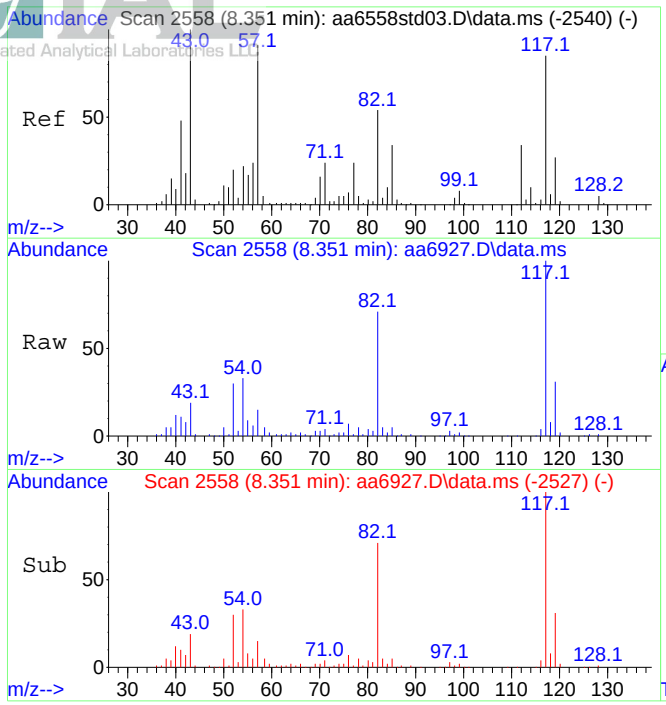


#49
Tetrachloroethene
Concen: 9.07 ppbV
RT: 7.194 min Scan# 2198
Delta R.T. 0.003 min
Lab File: aa6927.D
Acq: 18 Jul 2024 3:12 pm

Tgt Ion:166 Resp: 503770

Ion	Ratio	Lower	Upper
166	100		
164	77.6	62.8	94.2

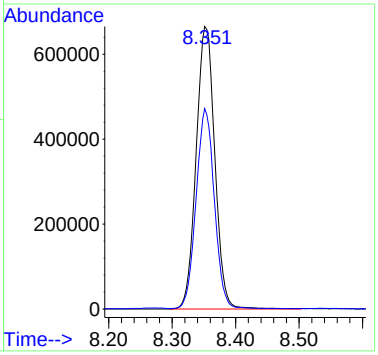


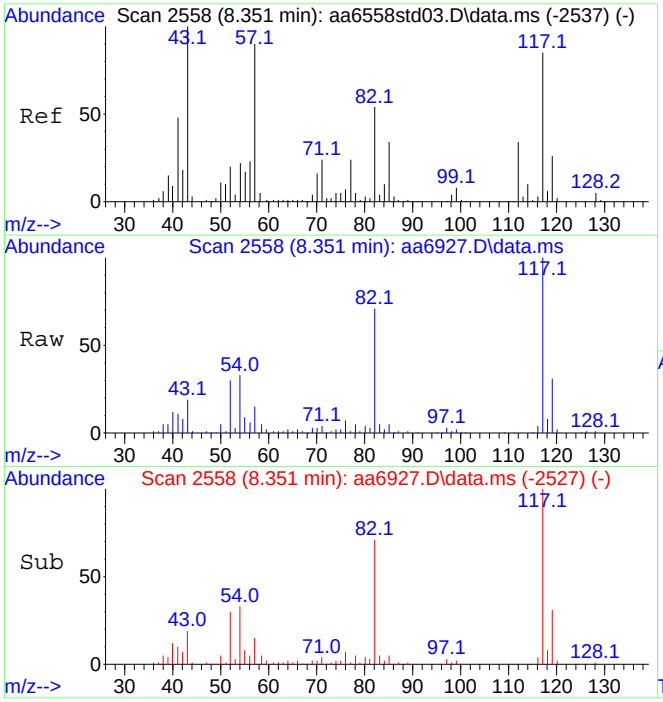


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.351 min Scan# 2558
Delta R.T. -0.000 min
Lab File: aa6927.D
Acq: 18 Jul 2024 3:12 pm

Tgt Ion:117 Resp: 1360841

Ion	Ratio	Lower	Upper
117	100		
82	69.1	42.3	82.3

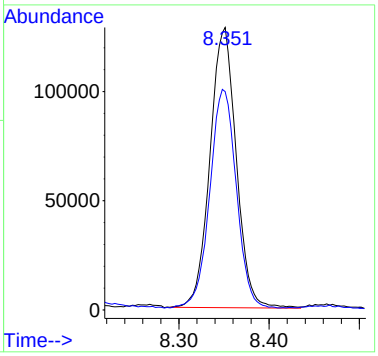


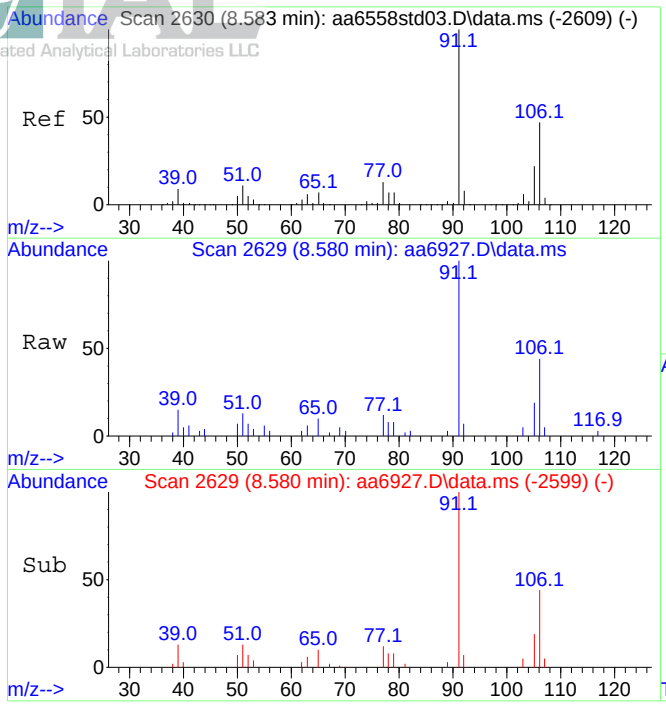


#56
n-Nonane
Concen: 1.63 ppbV
RT: 8.351 min Scan# 2558
Delta R.T. -0.000 min
Lab File: aa6927.D
Acq: 18 Jul 2024 3:12 pm

Tgt Ion: 43 Resp: 259519

Ion	Ratio	Lower	Upper
43	100		
57	79.7	72.9	109.3

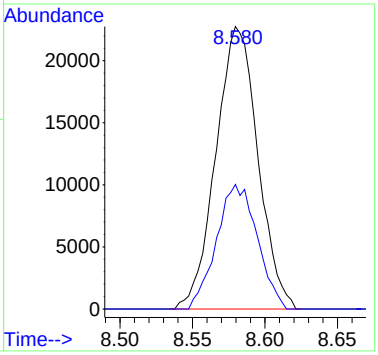


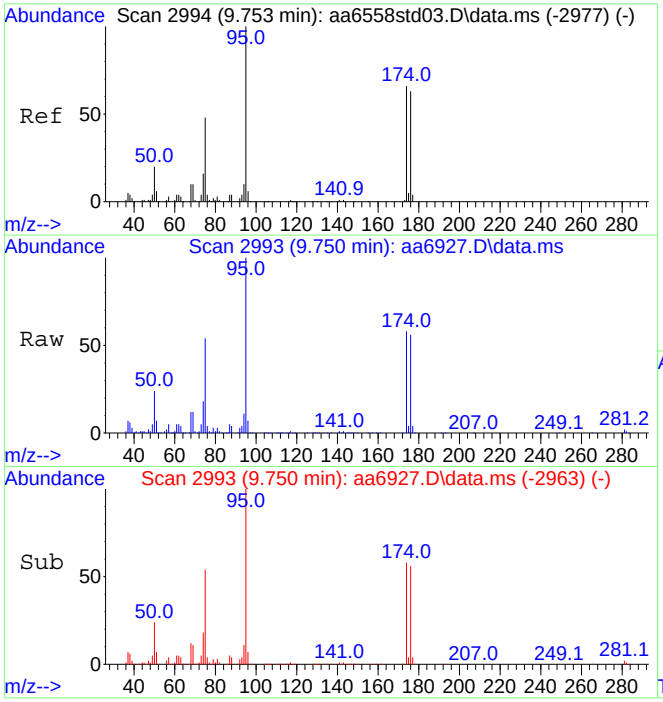


#59
Xylenes (m&p)
Concen: 0.23 ppbV
RT: 8.580 min Scan# 2629
Delta R.T. -0.003 min
Lab File: aa6927.D
Acq: 18 Jul 2024 3:12 pm

Tgt Ion: 91 Resp: 45842

Ion	Ratio	Lower	Upper
91	100		
106	42.6	37.4	56.2

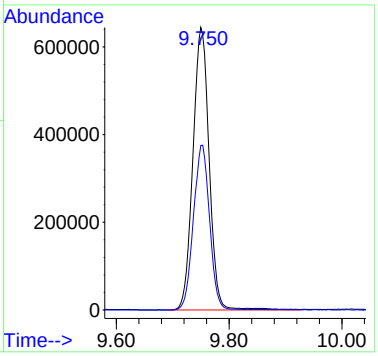




#64
Bromofluorobenzene (tune std)
Concen: 10.03 ppbV
RT: 9.750 min Scan# 2993
Delta R.T. -0.003 min
Lab File: aa6927.D
Acq: 18 Jul 2024 3:12 pm

Tgt Ion: 95 Resp: 1291593

Ion	Ratio	Lower	Upper
95	100		
174	58.2	52.9	79.3



Section VII: Standards Data

Initial Calibration Data

Initial Calibration Verification Data

Continuing Calibration Data

INTEGRATED ANALYTICAL LABORATORIES, LLC

Initial Calibration Data Summary Report

Initial Calibration Curve: 3/27/2024 **Method ID:** 240326.M
Instrument: AA

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6020BFB]	03/27/2024 10:03
0.2 PPBV STD [AA6021STD05]	03/27/2024 10:38
2 PPBV STD [AA6022STD04]	03/27/2024 11:38
10 PPBV STD [AA6023STD03]	03/27/2024 12:09
20 PPBV STD [AA6024STD02]	03/27/2024 12:40
40 PPBV STD [AA6025STD01]	03/27/2024 13:24
10 PPBV ICVSS [AA6026ICVSS]	03/27/2024 13:54

	Parameter	RRF 0.2ppbv	RRF 2ppbv	RRF 10ppbv	RRF 20ppbv	RRF 40ppbv	Avg ppbv	% RSD
1)	Bromochloromethane	----------ISTD----------						
2)	Propene	1.3	1.0	1.1	1.1	1.1	1.1	7.7
3)	Dichlorodifluoromethane	2.6	2.0	2.5	2.7	2.7	2.5	12
4)	1,2-Dichlorotetrafluoroethane	4.0	3.7	3.3	3.6	3.6	3.6	7.3
5)	n-Butane	3.2	2.5	2.2	2.3	2.2	2.5	17
6)	Chloromethane	0.15	0.17	0.15	0.19	0.16	0.16	9.6
7)	Vinyl chloride	1.2	0.98	1.3	1.4	1.4	1.2	13
8)	1,3-Butadiene	1.8	1.5	1.3	1.3	1.3	1.4	15
9)	Bromomethane	0.77	0.72	0.97	1.0	1.0	0.90	16
10)	Chloroethane	0.72	0.53	0.70	0.75	0.74	0.69	13
11)	Vinyl bromide	0.91	0.84	1.1	1.2	1.2	1.0	15
12)	Trichlorofluoromethane	3.4	2.8	2.7	2.9	2.9	2.9	9.9
13)	Ethanol	0.50	0.43	0.42	0.45	0.50	0.46	8.1
14)	1,1-Dichloroethene	2.3	1.7	2.3	2.5	2.5	2.3	15
15)	Carbon disulfide	3.5	2.7	3.8	4.1	4.1	3.6	16
16)	1,1,2-Trichloro-1,2,2-trifluoroethane	3.4	3.5	2.5	2.6	2.6	2.9	17
17)	Acrolein	0.67	0.37	0.53	0.57	0.59	0.55	20
18)	Allyl Chloride	0.56	0.42	0.58	0.64	0.64	0.57	15
19)	Isopropanol	3.4	2.2	2.8	3.1	3.1	2.9	15
20)	Methylene chloride	1.9	1.2	1.6	1.7	1.7	1.6	18
21)	Acetone	2.9	1.5	2.2	2.3	2.3	2.2	24
22)	1,2-Dichloroethene (trans)	2.1	1.4	2.0	2.2	2.3	2.0	17
23)	n-Pentane	3.3	2.8	2.5	2.6	2.8	2.8	10
24)	n-Hexane	5.4	3.8	3.5	3.6	3.8	4.0	19
25)	Methyl tert-butyl ether	5.3	5.2	4.0	4.0	4.1	4.5	14
26)	Tert-butyl alcohol	3.7	3.4	2.8	3.0	3.1	3.2	10
27)	1,1-Dichloroethane	3.3	2.1	2.4	2.7	2.8	2.7	17
28)	1,2-Dichloroethene (cis)	2.1	1.5	1.8	2.0	2.1	1.9	14
29)	Cyclohexane	3.2	3.0	2.4	2.5	2.5	2.7	14
30)	Chloroform	3.1	2.3	2.6	2.9	3.0	2.8	12
31)	Ethyl acetate	0.67	0.52	0.52	0.56	0.61	0.58	11
32)	Carbon tetrachloride	3.2	3.1	2.6	2.7	2.8	2.9	9.7
33)	Tetrahydrofuran	2.5	1.8	1.9	2.1	2.2	2.1	12
34)	1,1,1-Trichloroethane	3.0	2.9	2.4	2.5	2.6	2.7	8.9
35)	Methyl ethyl ketone	4.1	2.7	3.0	3.3	3.6	3.3	15
36)	n-Heptane	4.4	3.7	3.0	3.1	3.2	3.5	17
37)	Benzene	4.9	3.8	3.7	4.1	4.4	4.2	12
38)	1,2-Dichloroethane	2.1	1.6	1.8	1.9	2.1	1.9	10

***% RSD (Relative Standard Deviation) must be within 30%**
****An exception is made for 2 compounds that must be within 40%**
RRF - Relative Response Factor

INTEGRATED ANALYTICAL LABORATORIES, LLC

Initial Calibration Data Summary Report

Initial Calibration Curve: 3/27/2024 **Method ID:** 240326.M

Instrument: AA

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6020BFB]	03/27/2024 10:03
0.2 PPBV STD [AA6021STD05]	03/27/2024 10:38
2 PPBV STD [AA6022STD04]	03/27/2024 11:38
10 PPBV STD [AA6023STD03]	03/27/2024 12:09
20 PPBV STD [AA6024STD02]	03/27/2024 12:40
40 PPBV STD [AA6025STD01]	03/27/2024 13:24
10 PPBV ICVSS [AA6026ICVSS]	03/27/2024 13:54

	Parameter	RRF 0.2ppbv	RRF 2ppbv	RRF 10ppbv	RRF 20ppbv	RRF 40ppbv	Avg ppbv	% RSD
39)	1,4-Difluorobenzene	----------ISTD----------						
40)	Trichloroethene	0.45	0.37	0.38	0.40	0.40	0.40	8.0
41)	2,2,4-Trimethylpentane	2.0	2.0	2.0	1.9	1.8	1.9	3.7
42)	1,2-Dichloropropane	0.54	0.43	0.41	0.41	0.40	0.44	13
43)	Bromodichloromethane	0.78	0.66	0.67	0.69	0.69	0.70	6.7
44)	Methyl methacrylate	0.73	0.63	0.58	0.59	0.58	0.62	11
45)	1,4-Dioxane	0.27	0.23	0.22	0.22	0.22	0.23	9.0
46)	1,3-Dichloropropene (cis)	0.72	0.60	0.59	0.61	0.58	0.62	9.0
47)	Toluene	1.5	1.4	1.2	1.2	1.1	1.3	11
48)	Methyl isobutyl ketone	1.3	1.3	1.1	1.0	0.96	1.2	15
49)	Tetrachloroethene	0.51	0.48	0.43	0.42	0.39	0.45	11
50)	1,3-Dichloropropene (trans)	0.62	0.58	0.58	0.59	0.56	0.59	3.8
51)	1,1,2-Trichloroethane	0.48	0.44	0.41	0.41	0.39	0.43	8.7
52)	Dibromochloromethane	0.71	0.67	0.63	0.64	0.61	0.65	5.5
53)	1,2-Dibromoethane	0.65	0.62	0.59	0.60	0.57	0.61	4.9
54)	Methyl n-butyl ketone	1.2	1.1	1.00	0.97	0.91	1.0	10
55)	d-5 Chlorbenzene	----------ISTD----------						
56)	n-Nonane	1.5	1.6	1.4	1.3	1.2	1.4	11
57)	Chlorobenzene	1.0	0.95	0.95	0.97	0.91	0.96	4.9
58)	Ethylbenzene	2.1	2.0	1.9	1.8	1.7	1.9	8.3
59)	Xylenes (m&p)	1.6	1.5	1.4	1.4	1.3	1.4	7.4
60)	Xylenes (o)	1.6	1.7	1.5	1.5	1.4	1.5	6.9
61)	Styrene	0.97	0.99	1.0	1.0	0.96	0.99	2.7
62)	Bromoform	0.61	0.58	0.63	0.64	0.61	0.61	3.9
63)	Cumene	2.0	2.2	1.9	1.9	1.7	1.9	7.9
65)	n-Propyl benzene	2.8	2.8	2.6	2.5	2.4	2.6	7.1
66)	1,1,2,2-Tetrachloroethane	1.2	1.2	1.1	1.1	1.0	1.1	5.9
67)	4-Ethyltoluene	2.2	2.2	2.1	2.0	1.9	2.1	5.5
68)	2-Chlorotoluene	1.9	1.9	1.7	1.7	1.6	1.8	6.3
69)	1,3,5-Trimethylbenzene	1.7	1.9	1.7	1.7	1.6	1.7	6.6
70)	1,2,4-Trimethylbenzene	1.6	1.8	1.7	1.7	1.6	1.7	5.5
71)	1,3-Dichlorobenzene	1.00	0.87	0.93	0.94	0.90	0.93	5.1
72)	1,4-Dichlorobenzene	0.96	0.86	0.96	0.98	0.94	0.94	4.8
73)	Benzyl chloride	1.4	1.4	1.7	1.7	1.7	1.6	9.3
74)	1,2-Dichlorobenzene	0.92	0.92	0.94	0.94	0.89	0.92	2.0
75)	1,3-Hexachlorobutadiene	0.52	0.51	0.52	0.51	0.44	0.50	6.6
76)	1,2,4-Trichlorobenzene	0.74	0.65	0.70	0.70	0.63	0.68	6.4
77)	Naphthalene	2.0	1.8	1.9	2.0	1.9	1.9	5.0

***% RSD (Relative Standard Deviation) must be within 30%**

****An exception is made for 2 compounds that must be within 40%**

RRF - Relative Response Factor

Method Path : C:\msdchem\1\METHODS\
Method File : 240326.M
Title : TO-15 on the Agilent 7890A / 5975C
Last Update : Wed Mar 27 13:46:33 2024
Response Via : Initial Calibration

Calibration Files
0.2 =aa6021std05.D 2 =aa6022std04.D 10 =aa6023std03.D 20 =aa6024std02.D 40 =aa6025std01.D

		Compound	0.2	2	10	20	40	Avg	%RSD
1)	I	Bromochloromethane...	----------ISTD----------						
2)	T	Propene	1.252	1.013	1.080	1.130	1.130	1.121	7.79
3)	T	Dichlorodifluoro...	2.622	1.990	2.547	2.698	2.711	2.514	11.93
4)	T	1,2-Dichlorotetr...	4.015	3.662	3.271	3.551	3.643	3.629	7.35
5)	T	n-Butane	3.184	2.459	2.207	2.309	2.216	2.475	16.53
6)	T	Chloromethane	0.145	0.169	0.154	0.185	0.158	0.162	9.65
7)	T	Vinyl chloride	1.221	0.983	1.293	1.364	1.365	1.245	12.70
8)	T	1,3-Butadiene	1.758	1.459	1.271	1.314	1.275	1.416	14.55
9)	T	Bromomethane	0.772	0.722	0.968	1.013	1.015	0.898	15.62
10)	T	Chloroethane	0.716	0.532	0.699	0.745	0.739	0.686	12.85
11)	T	Vinyl bromide	0.911	0.840	1.079	1.154	1.187	1.034	14.73
12)	T	Trichlorofluorom...	3.433	2.772	2.685	2.887	2.901	2.936	9.93
13)	T	Ethanol	0.498	0.426	0.419	0.453	0.497	0.459	8.18
14)	T	1,1-Dichloroethene	2.291	1.705	2.342	2.533	2.513	2.277	14.78
15)	T	Carbon disulfide	3.518	2.658	3.794	4.050	4.057	3.615	16.02
16)	T	1,1,2-Trichloro-...	3.410	3.459	2.503	2.577	2.569	2.904	16.73
17)	T	Acrolein	0.668	0.372	0.530	0.570	0.589	0.546	20.09
18)	T	Allyl chloride	0.563	0.422	0.582	0.635	0.636	0.567	15.39
19)	T	Isopropanol	3.384	2.202	2.811	3.063	3.061	2.904	15.22
20)	T	Methylene chloride	1.943	1.164	1.584	1.690	1.720	1.620	17.68
21)	T	Acetone	2.946	1.467	2.170	2.286	2.316	2.237	23.54
22)	T	trans-1,2-Dichlo...	2.112	1.393	2.002	2.202	2.251	1.992	17.48
23)	T	n-Pentane	3.273	2.844	2.537	2.629	2.759	2.808	10.16
24)	T	n-Hexane	5.403	3.838	3.475	3.618	3.794	4.026	19.47
25)	T	Methyl tert-buty...	5.264	5.168	4.023	4.047	4.101	4.521	14.08
26)	T	Tert-butyl alcohol	3.653	3.406	2.817	3.001	3.090	3.193	10.45
27)	T	1,1-Dichloroethane	3.349	2.099	2.435	2.689	2.799	2.674	17.33
28)	T	cis-1,2-Dichloro...	2.131	1.474	1.849	2.033	2.106	1.918	14.18
29)	t	Cyclohexane	3.243	2.981	2.404	2.460	2.516	2.721	13.63
30)	T	Chloroform	3.086	2.280	2.624	2.915	3.034	2.788	12.03
31)	T	Ethyl acetate	0.668	0.516	0.524	0.561	0.608	0.576	10.96
32)	T	Carbon tetrachlo...	3.224	3.059	2.574	2.658	2.752	2.853	9.70
33)	T	Tetrahydrofuran	2.460	1.821	1.904	2.086	2.207	2.095	12.11
34)	T	1,1,1-Trichloroe...	2.982	2.910	2.431	2.528	2.610	2.692	8.98
35)	T	Methyl ethyl ketone	4.060	2.736	2.996	3.330	3.586	3.342	15.42
36)	T	n-Heptane	4.419	3.713	2.991	3.106	3.226	3.491	16.82
37)	T	Benzene	4.942	3.840	3.683	4.101	4.411	4.195	11.93
38)	T	1,2-Dichloroethane	2.067	1.630	1.779	1.945	2.096	1.903	10.35
39)	I	1,4-Difluorobenzen...	----------ISTD----------						
40)	T	Trichloroethene	0.451	0.365	0.384	0.399	0.397	0.399	8.05
41)	T	2,2,4-Trimethylp...	1.977	2.012	1.961	1.924	1.822	1.939	3.74
42)	T	1,2-Dichloropropane	0.536	0.430	0.414	0.407	0.399	0.437	12.89
43)	T	Bromodichloromet...	0.776	0.657	0.667	0.694	0.685	0.696	6.78
44)	T	Methyl methacrylate	0.731	0.627	0.577	0.588	0.577	0.620	10.56
45)	T	1,4-Dioxane	0.271	0.233	0.223	0.224	0.220	0.234	9.04
46)	T	cis-1,3-Dichloro...	0.716	0.595	0.590	0.608	0.578	0.617	9.07
47)	T	Toluene	1.489	1.367	1.229	1.211	1.147	1.289	10.71
48)	T	Methyl isobutyl ...	1.334	1.338	1.094	1.036	0.961	1.152	15.08
49)	T	Tetrachloroethene	0.506	0.480	0.427	0.421	0.391	0.445	10.51
50)	T	trans-1,3-Dichlo...	0.623	0.577	0.583	0.592	0.562	0.587	3.88
51)	T	1,1,2-Trichloroe...	0.484	0.442	0.405	0.408	0.391	0.426	8.73
52)	T	Dibromochloromet...	0.705	0.671	0.632	0.643	0.613	0.653	5.51
53)	T	1,2-Dibromoethane	0.647	0.620	0.592	0.597	0.569	0.605	4.91
54)	T	Methyl n-butyl k...	1.172	1.115	0.997	0.967	0.914	1.033	10.37
55)	I	d-5 Chlorobenzene ...	----------ISTD----------						
56)	T	n-Nonane	1.507	1.567	1.359	1.305	1.199	1.387	10.81
57)	T	Chlorobenzene	1.039	0.954	0.950	0.969	0.908	0.964	4.95
58)	T	Ethylbenzene	2.135	2.027	1.859	1.843	1.731	1.919	8.37
59)	T	Xylenes (m&p)	1.559	1.530	1.420	1.402	1.293	1.441	7.43
60)	T	Xylene (o)	1.618	1.654	1.498	1.478	1.396	1.529	6.92

Method Path : C:\msdchem\1\METHODS\
Method File : 240326.M

61)	T	Styrene	0.970	0.987	1.015	1.024	0.962	0.991	2.76
62)	T	Bromoform	0.608	0.579	0.626	0.643	0.612	0.614	3.90
63)	T	Cumene	1.979	2.155	1.891	1.863	1.746	1.927	7.91
64)	S	Bromofluorobenze...	0.867	0.905	0.904	0.903	0.905	0.897	1.85
65)	T	n-Propyl benzene	2.778	2.810	2.573	2.530	2.357	2.610	7.18
66)	T	1,1,2,2-Tetrachl...	1.207	1.197	1.108	1.107	1.048	1.133	5.96
67)	T	4-Ethyltoluene	2.151	2.205	2.069	2.045	1.904	2.075	5.54
68)	T	2-Chlorotoluene	1.874	1.886	1.737	1.715	1.623	1.767	6.32
69)	T	1,3,5-Trimethylb...	1.699	1.891	1.699	1.679	1.576	1.709	6.67
70)	T	1,2,4-Trimethylb...	1.626	1.834	1.716	1.699	1.594	1.694	5.51
71)	T	1,3-Dichlorobenzene	0.999	0.871	0.930	0.940	0.900	0.928	5.19
72)	T	1,4-Dichlorobenzene	0.956	0.863	0.961	0.981	0.944	0.941	4.83
73)	T	Benzyl chloride	1.425	1.403	1.657	1.708	1.678	1.574	9.37
74)	T	1,2-Dichlorobenzene	0.916	0.919	0.940	0.936	0.893	0.921	2.05
75)	T	1,3-Hexachlorobu...	0.524	0.508	0.518	0.508	0.442	0.500	6.62
76)	T	1,2,4-Trichlorob...	0.739	0.652	0.701	0.696	0.626	0.683	6.46
77)	T	Naphthalene	1.996	1.751	1.930	1.950	1.855	1.897	5.05

(#) = Out of Range

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6021std05.D
Acq On : 27 Mar 2024 10:38 am
Operator : jjw
Sample : 0.2 ppbv std
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 27 12:33:10 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 12:31:35 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.409	130	360749	10.00	ppbV		0.000
39) 1,4-Difluorobenzene (IS)	5.480	114	1478694	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.351	117	1394585	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.753	95	1209742	9.59	ppbV		0.000
Target Compounds							Qvalue
2) Propene	1.457	41	9844	0.26	ppbV		93
3) Dichlorodifluoromethane	1.516	85	20056	0.25	ppbV		92
4) 1,2-Dichlorotetrafluor...	1.626	85	28391	0.23	ppbV		96
5) n-Butane	1.708	43	25040	0.30	ppbV	#	81
6) Chloromethane	1.780	52	1170	0.20	ppbV	#	65
7) Vinyl chloride	1.773	62	9514	0.23	ppbV		89
8) 1,3-Butadiene	1.777	39	13569	0.28	ppbV	#	79
9) Bromomethane	2.078	94	5569	0.18	ppbV		95
10) Chloroethane	2.181	64	5479	0.25	ppbV	#	56
11) Vinyl bromide	2.287	106	6641	0.19	ppbV		93
12) Trichlorofluoromethane	2.300	101	27245	0.28	ppbV		95
13) Ethanol	2.692	45	3734	0.24	ppbV		83
14) 1,1-Dichloroethene	2.724	61	17194	0.24	ppbV		96
15) Carbon disulfide	2.753	76	27156	0.23	ppbV		99
16) 1,1,2-Trichloro-1,2,2-...	2.769	101	26818	0.25	ppbV		95
17) Acrolein	2.985	56	4823	0.30	ppbV		93
18) Allyl chloride	3.113	76	4386	0.24	ppbV		100
19) Isopropanol	3.116	45	21727	0.24	ppbV		99
20) Methylene chloride	3.210	49	15138	0.31	ppbV		84
21) Acetone	3.219	43	22954	0.35	ppbV	#	86
22) trans-1,2-Dichloroethene	3.332	61	16914	0.28	ppbV		96
23) n-Pentane	3.422	43	25504	0.26	ppbV		89
24) n-Hexane	3.415	57	43272	0.33	ppbV		96
25) Methyl tert-butyl ether	3.419	73	42540	0.26	ppbV		81
26) Tert-butyl alcohol	3.480	59	30311	0.27	ppbV		100
27) 1,1-Dichloroethane	3.817	63	25858	0.32	ppbV		92
28) cis-1,2-Dichloroethene	4.245	61	16758	0.28	ppbV		97
29) Cyclohexane	4.428	56	26203	0.27	ppbV		95
30) Chloroform	4.473	83	24049	0.27	ppbV		98
31) Ethyl acetate	4.566	45	5204	0.28	ppbV		100
32) Carbon tetrachloride	4.592	117	25818	0.25	ppbV		97
33) Tetrahydrofuran	4.611	42	19701	0.29	ppbV		95
34) 1,1,1-Trichloroethane	4.644	97	23455	0.24	ppbV		97
35) Methyl ethyl ketone	4.708	43	32226	0.31	ppbV		95
36) n-Heptane	4.936	43	35392	0.29	ppbV		93
37) Benzene	4.955	78	38510	0.28	ppbV		97
38) 1,2-Dichloroethane	5.123	62	16254	0.26	ppbV		98
40) Trichloroethene	5.457	130	13335	0.24	ppbV		98
41) 2,2,4-Trimethylpentane	4.862	57	63722	0.22	ppbV		99
42) 1,2-Dichloropropane	5.914	63	17584	0.28	ppbV		97
43) Bromodichloromethane	5.972	83	26403	0.27	ppbV		99
44) Methyl methacrylate	6.116	41	23779	0.27	ppbV		95
45) 1,4-Dioxane	6.152	88	9370	0.28	ppbV		94
46) cis-1,3-Dichloropropene	6.560	75	23497	0.27	ppbV		99
47) Toluene	6.801	91	47573	0.25	ppbV		99
48) Methyl isobutyl ketone	7.168	43	42994	0.24	ppbV		95
49) Tetrachloroethene	7.190	166	16758	0.25	ppbV		98
50) trans-1,3-Dichloropropene	7.206	75	20460	0.24	ppbV		84
51) 1,1,2-Trichloroethane	7.367	97	15444	0.25	ppbV		98

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6021std05.D
Acq On : 27 Mar 2024 10:38 am
Operator : jjw
Sample : 0.2 ppbv std
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

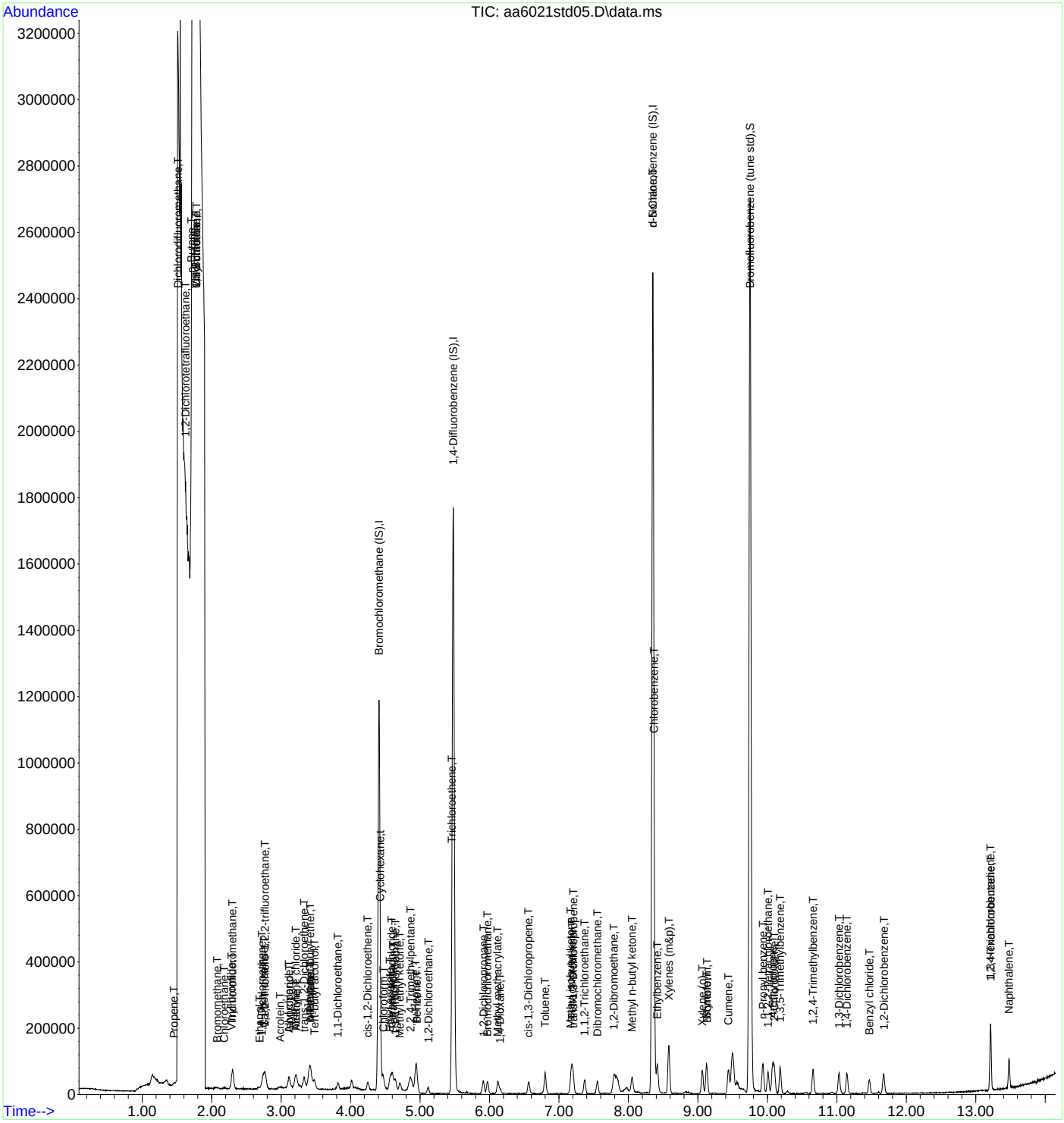
Quant Time: Mar 27 12:33:10 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 12:31:35 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
52) Dibromochloromethane	7.553	129	23345	0.24	ppbV		98
53) 1,2-Dibromoethane	7.788	107	20663	0.23	ppbV		97
54) Methyl n-butyl ketone	8.052	43	39178	0.25	ppbV		90
56) n-Nonane	8.351	43	46667	0.23	ppbV		97
57) Chlorobenzene	8.370	112	32164	0.24	ppbV	#	57
58) Ethylbenzene	8.415	91	66107	0.24	ppbV		99
59) Xylenes (m&p)	8.582	91	96984	0.47	ppbV		99
60) Xylene (o)	9.065	91	49641	0.23	ppbV		100
61) Styrene	9.126	104	30559	0.22	ppbV		100
62) Bromoform	9.132	173	19161	0.23	ppbV		98
63) Cumene	9.438	105	59073	0.21	ppbV		99
65) n-Propyl benzene	9.936	91	83690	0.22	ppbV		98
66) 1,1,2,2-Tetrachloroethane	10.010	83	38390	0.24	ppbV		99
67) 4-Ethyltoluene	10.077	105	64788	0.22	ppbV		99
68) 2-Chlorotoluene	10.100	91	56977	0.23	ppbV		99
69) 1,3,5-Trimethylbenzene	10.184	105	51641	0.21	ppbV		99
70) 1,2,4-Trimethylbenzene	10.656	105	48989	0.20	ppbV		99
71) 1,3-Dichlorobenzene	11.032	146	30940	0.25	ppbV		98
72) 1,4-Dichlorobenzene	11.145	146	28519	0.22	ppbV		97
73) Benzyl chloride	11.470	91	39743	0.19	ppbV		98
74) 1,2-Dichlorobenzene	11.679	146	27332	0.21	ppbV		99
75) 1,3-Hexachlorobutadiene	13.212	225	16221	0.23	ppbV		98
76) 1,2,4-Trichlorobenzene	13.216	180	22681	0.24	ppbV		99
77) Naphthalene	13.479	128	55674	0.22	ppbV		98

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

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6021std05.D
Acq On : 27 Mar 2024 10:38 am
Operator : jjw
Sample : 0.2 ppbv std
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 27 12:33:10 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 12:31:35 2024
Response via : Initial Calibration



Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6022std04.D
Acq On : 27 Mar 2024 11:38 am
Operator : jjw
Sample : 2 ppbv std
Misc : EB0103704
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 27 12:30:51 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 12:30:41 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.412	130	309693	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.476	114	1229116	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.351	117	1260202	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.749	95	1140629	10.01	ppbV	0.000
Target Compounds						Qvalue
2) Propene	1.460	41	68409	2.05	ppbV	99
3) Dichlorodifluoromethane	1.499	85	130668	1.66	ppbV	99
4) 1,2-Dichlorotetrafluor...	1.622	85	222308	2.19	ppbV	98
5) n-Butane	1.705	43	166012	2.43	ppbV	95
6) Chloromethane	1.773	52	11699	2.46	ppbV	86
7) Vinyl chloride	1.763	62	65775	1.64	ppbV	97
8) 1,3-Butadiene	1.773	39	96684	2.46	ppbV	91
9) Bromomethane	2.068	94	44715	1.49	ppbV	97
10) Chloroethane	2.177	64	34925	1.61	ppbV	100
11) Vinyl bromide	2.284	106	52531	1.57	ppbV	100
12) Trichlorofluoromethane	2.300	101	188851	2.27	ppbV	98
13) Ethanol	2.663	45	27472	2.12	ppbV	96
14) 1,1-Dichloroethene	2.724	61	109819	1.51	ppbV	98
15) Carbon disulfide	2.747	76	176154	1.50	ppbV	96
16) 1,1,2-Trichloro-1,2,2-...	2.766	101	233557	3.01	ppbV	98
17) Acrolein	2.981	56	23016	1.40	ppbV	99
18) Allyl chloride	3.113	76	28239	1.57	ppbV	100
19) Isopropanol	3.116	45	121377	1.39	ppbV	100
20) Methylene chloride	3.203	49	77858	1.59	ppbV	98
21) Acetone	3.219	43	98104	1.46	ppbV	100
22) trans-1,2-Dichloroethene	3.325	61	95745	1.54	ppbV	98
23) n-Pentane	3.412	43	190230	2.42	ppbV	100
24) n-Hexane	3.412	57	263847	2.45	ppbV	98
25) Methyl tert-butyl ether	3.422	73	358478	2.88	ppbV	88
26) Tert-butyl alcohol	3.476	59	242573	2.78	ppbV	100
27) 1,1-Dichloroethane	3.814	63	130027	1.72	ppbV	99
28) cis-1,2-Dichloroethene	4.245	61	99510	1.74	ppbV	99
29) Cyclohexane	4.425	56	206806	2.78	ppbV	99
30) Chloroform	4.473	83	152535	1.88	ppbV	95
31) Ethyl acetate	4.563	45	34541	2.13	ppbV	99
32) Carbon tetrachloride	4.592	117	210339	2.64	ppbV	100
33) Tetrahydrofuran	4.599	42	125187	2.12	ppbV	97
34) 1,1,1-Trichloroethane	4.637	97	196486	2.61	ppbV	100
35) Methyl ethyl ketone	4.708	43	186439	2.01	ppbV	99
36) n-Heptane	4.933	43	255248	2.76	ppbV	98
37) Benzene	4.949	78	256885	2.25	ppbV	99
38) 1,2-Dichloroethane	5.113	62	110076	2.00	ppbV	98
40) Trichloroethene	5.457	130	89614	1.90	ppbV	100
41) 2,2,4-Trimethylpentane	4.859	57	539000	2.24	ppbV	99
42) 1,2-Dichloropropane	5.910	63	117244	2.30	ppbV	96
43) Bromodichloromethane	5.972	83	185807	2.27	ppbV	99
44) Methyl methacrylate	6.116	41	169591	2.39	ppbV	97
45) 1,4-Dioxane	6.148	88	67128	2.45	ppbV	98
46) cis-1,3-Dichloropropene	6.563	75	162406	2.24	ppbV	99
47) Toluene	6.801	91	362835	2.40	ppbV	98
48) Methyl isobutyl ketone	7.171	43	358448	2.67	ppbV	99
49) Tetrachloroethene	7.190	166	132136	2.51	ppbV	100
50) trans-1,3-Dichloropropene	7.209	75	157410	2.20	ppbV	90
51) 1,1,2-Trichloroethane	7.367	97	117291	2.36	ppbV	100

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6022std04.D
Acq On : 27 Mar 2024 11:38 am
Operator : jjw
Sample : 2 ppbv std
Misc : EB0103704
ALS Vial : 4 Sample Multiplier: 1

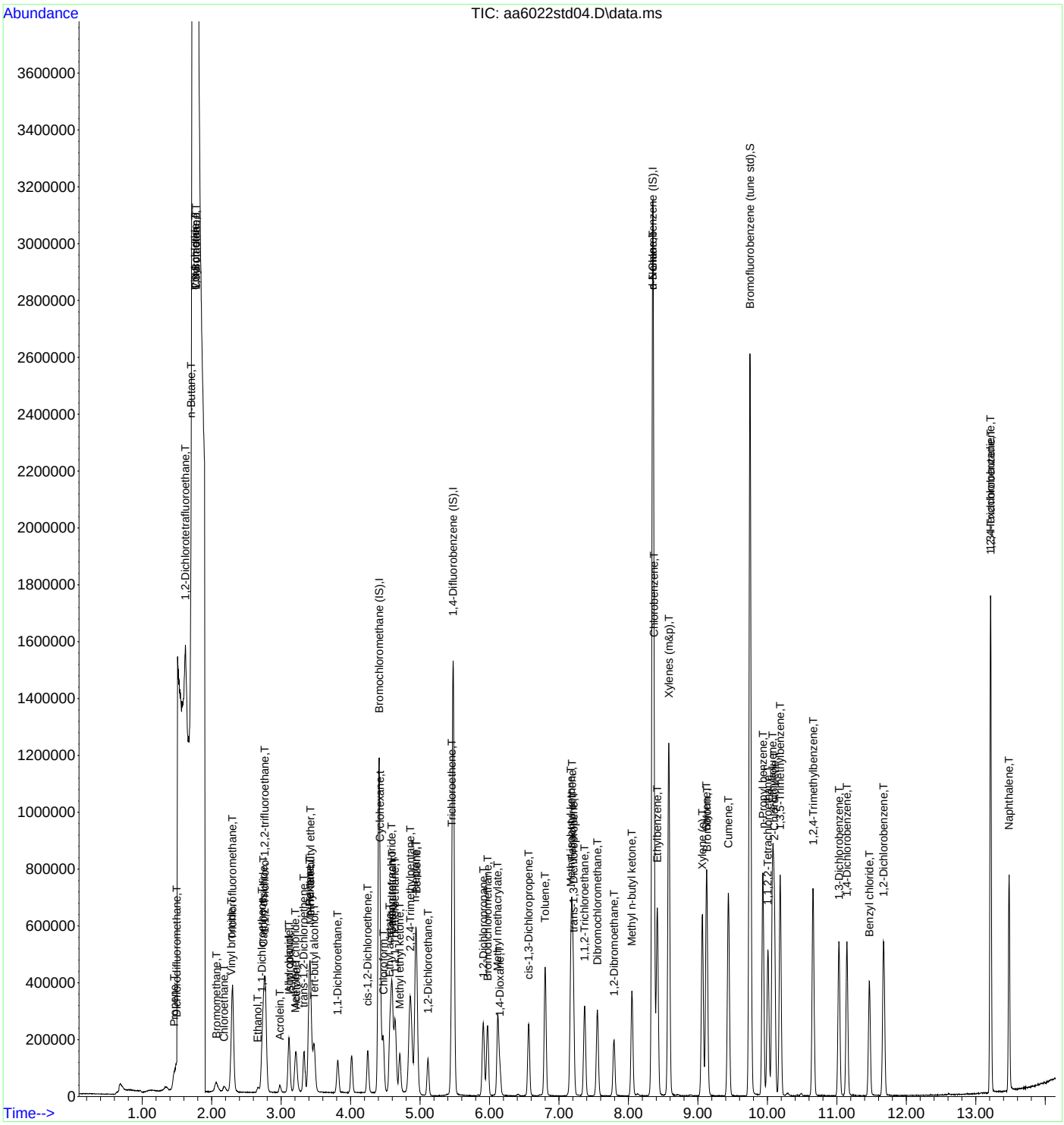
Quant Time: Mar 27 12:30:51 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 12:30:41 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.553	129	184678	2.38	ppbV	99
53) 1,2-Dibromoethane	7.791	107	164713	2.26	ppbV	99
54) Methyl n-butyl ketone	8.049	43	309841	2.53	ppbV	98
56) n-Nonane	8.351	43	438505	2.56	ppbV	99
57) Chlorobenzene	8.370	112	266791	2.23	ppbV	93
58) Ethylbenzene	8.415	91	567169	2.42	ppbV	99
59) Xylenes (m&p)	8.582	91	859845	4.80	ppbV	100
60) Xylene (o)	9.065	91	458642	2.43	ppbV	100
61) Styrene	9.123	104	281004	2.20	ppbV	100
62) Bromoform	9.132	173	164849	2.09	ppbV	99
63) Cumene	9.438	105	581117	2.44	ppbV	99
65) n-Propyl benzene	9.936	91	765019	2.36	ppbV	99
66) 1,1,2,2-Tetrachloroethane	10.007	83	344034	2.46	ppbV	99
67) 4-Ethyltoluene	10.074	105	600236	2.30	ppbV	99
68) 2-Chlorotoluene	10.100	91	518054	2.37	ppbV	99
69) 1,3,5-Trimethylbenzene	10.184	105	519514	2.43	ppbV	99
70) 1,2,4-Trimethylbenzene	10.659	105	499303	2.31	ppbV	99
71) 1,3-Dichlorobenzene	11.032	146	243609	2.08	ppbV	100
72) 1,4-Dichlorobenzene	11.145	146	232819	1.92	ppbV	98
73) Benzyl chloride	11.470	91	353725	1.69	ppbV	99
74) 1,2-Dichlorobenzene	11.672	146	247791	2.09	ppbV	99
75) 1,3-Hexachlorobutadiene	13.212	225	142060	2.17	ppbV	99
76) 1,2,4-Trichlorobenzene	13.216	180	180866	2.05	ppbV	99
77) Naphthalene	13.479	128	441446	1.81	ppbV	100

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

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6022std04.D
Acq On : 27 Mar 2024 11:38 am
Operator : jjw
Sample : 2 ppbv std
Misc : EB0103704
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 27 12:30:51 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 12:30:41 2024
Response via : Initial Calibration



Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6023std03.D
Acq On : 27 Mar 2024 12:09 pm
Operator : jjw
Sample : 10 ppbv std
Misc : EB0103704
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 27 15:06:55 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.412	130	405866	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.476	114	1540619	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.351	117	1407079	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.750	95	1272676	10.08	ppbV	0.000
Target Compounds						Qvalue
2) Propene	1.467	41	480073	10.55	ppbV	100
3) Dichlorodifluoromethane	1.499	85	1092704	10.71	ppbV	100
4) 1,2-Dichlorotetrafluor...	1.626	85	1301166	8.84	ppbV	100
5) n-Butane	1.705	43	976288	9.72	ppbV	100
6) Chloromethane	1.777	52	69870	10.63	ppbV	100
7) Vinyl chloride	1.767	62	566650	11.21	ppbV	100
8) 1,3-Butadiene	1.774	39	552148	9.61	ppbV	100
9) Bromomethane	2.068	94	393056	10.78	ppbV	100
10) Chloroethane	2.184	64	300731	10.80	ppbV	100
11) Vinyl bromide	2.284	106	442310	10.54	ppbV	100
12) Trichlorofluoromethane	2.303	101	1198923	10.06	ppbV	100
13) Ethanol	2.666	45	176842	9.50	ppbV	100
14) 1,1-Dichloroethene	2.727	61	988392	10.70	ppbV	100
15) Carbon disulfide	2.747	76	1647625	11.23	ppbV	100
16) 1,1,2-Trichloro-1,2,2-...	2.769	101	1107436	9.40	ppbV	100
17) Acrolein	2.988	56	215119	9.71	ppbV	100
18) Allyl chloride	3.113	76	255120	11.08	ppbV	100
19) Isopropanol	3.116	45	1014452	8.61	ppbV	100
20) Methylene chloride	3.203	49	694307	10.56	ppbV	100
21) Acetone	3.219	43	951290	10.48	ppbV	100
22) trans-1,2-Dichloroethene	3.332	61	901965	11.16	ppbV	100
23) n-Pentane	3.415	43	1127649	9.89	ppbV	99
24) n-Hexane	3.412	57	1551285	9.49	ppbV	100
25) Methyl tert-butyl ether	3.419	73	1828599	9.97	ppbV	100
26) Tert-butyl alcohol	3.473	59	1314960	10.15	ppbV	100
27) 1,1-Dichloroethane	3.817	63	1057514	9.74	ppbV	100
28) cis-1,2-Dichloroethene	4.248	61	817868	10.50	ppbV	100
29) Cyclohexane	4.428	56	1092809	9.90	ppbV	100
30) Chloroform	4.473	83	1150357	10.17	ppbV	99
31) Ethyl acetate	4.563	45	229902	9.84	ppbV	100
32) Carbon tetrachloride	4.595	117	1149084	9.92	ppbV	100
33) Tetrahydrofuran	4.599	42	849869	9.99	ppbV	100
34) 1,1,1-Trichloroethane	4.647	97	1075300	9.84	ppbV	100
35) Methyl ethyl ketone	4.708	43	1342110	9.90	ppbV	100
36) n-Heptane	4.936	43	1347673	9.51	ppbV	100
37) Benzene	4.952	78	1614175	9.48	ppbV	100
38) 1,2-Dichloroethane	5.116	62	787118	10.19	ppbV	100
40) Trichloroethene	5.457	130	590874	9.61	ppbV	100
41) 2,2,4-Trimethylpentane	4.866	57	3337961	11.17	ppbV	100
42) 1,2-Dichloropropane	5.911	63	701956	10.43	ppbV	100
43) Bromodichloromethane	5.972	83	1181459	11.02	ppbV	100
44) Methyl methacrylate	6.120	41	977110	10.23	ppbV	100
45) 1,4-Dioxane	6.145	88	401981	11.15	ppbV	100
46) cis-1,3-Dichloropropene	6.563	75	1009455	10.61	ppbV	100
47) Toluene	6.801	91	2044302	10.30	ppbV	100
48) Methyl isobutyl ketone	7.171	43	1836936	10.35	ppbV	100
49) Tetrachloroethene	7.190	166	737641	10.76	ppbV	100
50) trans-1,3-Dichloropropene	7.210	75	998052	11.03	ppbV	100
51) 1,1,2-Trichloroethane	7.370	97	674176	10.27	ppbV	100

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6023std03.D
Acq On : 27 Mar 2024 12:09 pm
Operator : jjw
Sample : 10 ppbv std
Misc : EB0103704
ALS Vial : 5 Sample Multiplier: 1

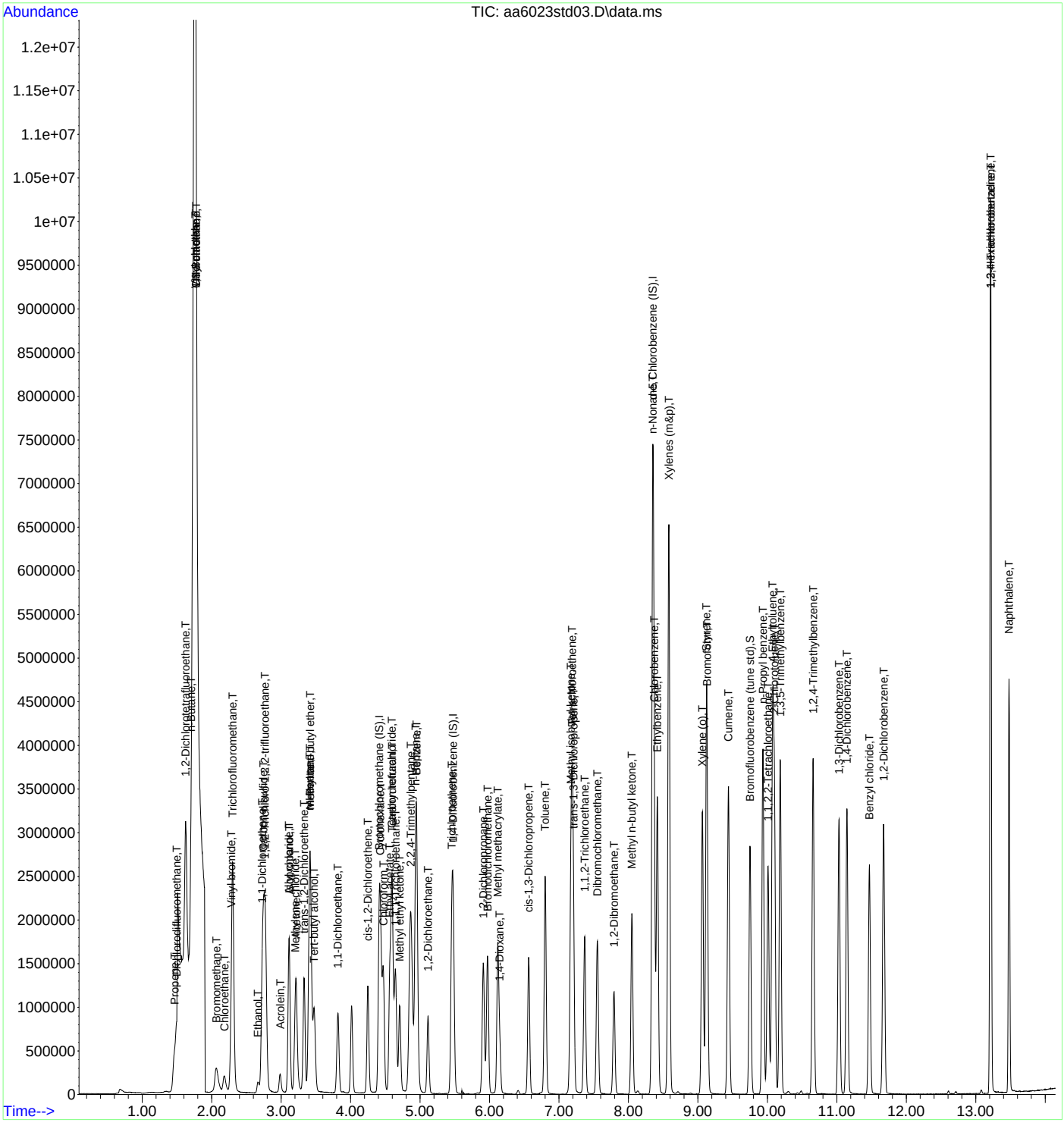
Quant Time: Mar 27 15:06:55 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.554	129	1090274	10.84	ppbV	100
53) 1,2-Dibromoethane	7.795	107	985770	10.58	ppbV	100
54) Methyl n-butyl ketone	8.049	43	1735158	10.90	ppbV	100
56) n-Nonane	8.348	43	2102844	10.77	ppbV	100
57) Chlorobenzene	8.373	112	1483500	10.94	ppbV	100
58) Ethylbenzene	8.415	91	2902762	10.75	ppbV	100
59) Xylenes (m&p)	8.582	91	4457073	21.98	ppbV	100
60) Xylene (o)	9.065	91	2318096	10.78	ppbV	100
61) Styrene	9.123	104	1614514	11.57	ppbV	100
62) Bromoform	9.132	173	995536	11.53	ppbV	100
63) Cumene	9.441	105	2847778	10.50	ppbV	100
65) n-Propyl benzene	9.936	91	3914695	10.66	ppbV	100
66) 1,1,2,2-Tetrachloroethane	10.010	83	1776668	11.14	ppbV	100
67) 4-Ethyltoluene	10.074	105	3144319	10.77	ppbV	100
68) 2-Chlorotoluene	10.100	91	2664458	10.72	ppbV	100
69) 1,3,5-Trimethylbenzene	10.187	105	2606288	10.84	ppbV	100
70) 1,2,4-Trimethylbenzene	10.660	105	2608053	10.94	ppbV	100
71) 1,3-Dichlorobenzene	11.033	146	1452525	11.12	ppbV	100
72) 1,4-Dichlorobenzene	11.145	146	1447428	10.93	ppbV	100
73) Benzyl chloride	11.470	91	2331860	10.53	ppbV	100
74) 1,2-Dichlorobenzene	11.676	146	1415768	10.93	ppbV	100
75) 1,3-Hexachlorobutadiene	13.216	225	809751	11.51	ppbV	100
76) 1,2,4-Trichlorobenzene	13.216	180	1084449	11.29	ppbV	100
77) Naphthalene	13.479	128	2715917	10.18	ppbV	100

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

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6023std03.D
Acq On : 27 Mar 2024 12:09 pm
Operator : jjw
Sample : 10 ppbv std
Misc : EB0103704
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 27 15:06:55 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration



Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6024std02.D
Acq On : 27 Mar 2024 12:40 pm
Operator : jjw
Sample : 20 ppbv std
Misc : EB0103704
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 27 15:06:34 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.415	130	411882	10.00	ppbV		0.000
39) 1,4-Difluorobenzene (IS)	5.480	114	1661943	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.351	117	1464287	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.750	95	1321659	10.06	ppbV		0.000
Target Compounds							Qvalue
2) Propene	1.464	41	1014772	21.98	ppbV		100
3) Dichlorodifluoromethane	1.509	85	2356287	22.76	ppbV		100
4) 1,2-Dichlorotetrafluor...	1.629	85	2866435	19.18	ppbV		99
5) n-Butane	1.708	43	2073146	20.34	ppbV		100
6) Chloromethane	1.777	52	171065	25.63	ppbV	#	1
7) Vinyl chloride	1.767	62	1213573	23.66	ppbV		100
8) 1,3-Butadiene	1.777	39	1158440	19.87	ppbV		100
9) Bromomethane	2.072	94	834684	22.57	ppbV		98
10) Chloroethane	2.184	64	650366	23.01	ppbV		100
11) Vinyl bromide	2.284	106	960489	22.55	ppbV		100
12) Trichlorofluoromethane	2.303	101	2616101	21.64	ppbV		100
13) Ethanol	2.670	45	388025	20.54	ppbV		99
14) 1,1-Dichloroethene	2.731	61	2170406	23.14	ppbV		100
15) Carbon disulfide	2.750	76	3569546	23.97	ppbV		98
16) 1,1,2-Trichloro-1,2,2-...	2.772	101	2314090	19.35	ppbV		99
17) Acrolein	2.988	56	469927	20.90	ppbV		100
18) Allyl chloride	3.113	76	564791	24.16	ppbV		100
19) Isopropanol	3.116	45	2245383	18.77	ppbV		100
20) Methylene chloride	3.207	49	1503232	22.53	ppbV		98
21) Acetone	3.219	43	2033750	22.07	ppbV		99
22) trans-1,2-Dichloroethene	3.332	61	2013296	24.54	ppbV		100
23) n-Pentane	3.416	43	2339039	20.22	ppbV		98
24) n-Hexane	3.416	57	3308362	19.95	ppbV		100
25) Methyl tert-butyl ether	3.419	73	3734162	20.06	ppbV		96
26) Tert-butyl alcohol	3.473	59	2843260	21.62	ppbV		100
27) 1,1-Dichloroethane	3.821	63	2369884	21.52	ppbV		99
28) cis-1,2-Dichloroethene	4.248	61	1825598	23.10	ppbV		99
29) Cyclohexane	4.432	56	2269500	20.25	ppbV		99
30) Chloroform	4.473	83	2593106	22.58	ppbV		99
31) Ethyl acetate	4.563	45	499077	21.05	ppbV		100
32) Carbon tetrachloride	4.596	117	2430188	20.68	ppbV		100
33) Tetrahydrofuran	4.596	42	1907140	22.10	ppbV		100
34) 1,1,1-Trichloroethane	4.644	97	2269864	20.47	ppbV		100
35) Methyl ethyl ketone	4.708	43	3017009	21.92	ppbV		100
36) n-Heptane	4.940	43	2840049	19.75	ppbV		99
37) Benzene	4.956	78	3648241	21.11	ppbV		99
38) 1,2-Dichloroethane	5.116	62	1746280	22.28	ppbV		100
40) Trichloroethene	5.457	130	1325979	20.00	ppbV		98
41) 2,2,4-Trimethylpentane	4.866	57	6968945	21.63	ppbV		99
42) 1,2-Dichloropropane	5.914	63	1500636	20.66	ppbV		98
43) Bromodichloromethane	5.972	83	2653561	22.94	ppbV		98
44) Methyl methacrylate	6.116	41	2148743	20.86	ppbV		99
45) 1,4-Dioxane	6.145	88	869258	22.34	ppbV		100
46) cis-1,3-Dichloropropene	6.563	75	2242244	21.85	ppbV		99
47) Toluene	6.804	91	4347639	20.30	ppbV		99
48) Methyl isobutyl ketone	7.171	43	3752572	19.59	ppbV		99
49) Tetrachloroethene	7.190	166	1565659	21.17	ppbV		99
50) trans-1,3-Dichloropropene	7.210	75	2183621	22.36	ppbV		98
51) 1,1,2-Trichloroethane	7.370	97	1463883	20.68	ppbV		100

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6024std02.D
Acq On : 27 Mar 2024 12:40 pm
Operator : jjw
Sample : 20 ppbv std
Misc : EB0103704
ALS Vial : 6 Sample Multiplier: 1

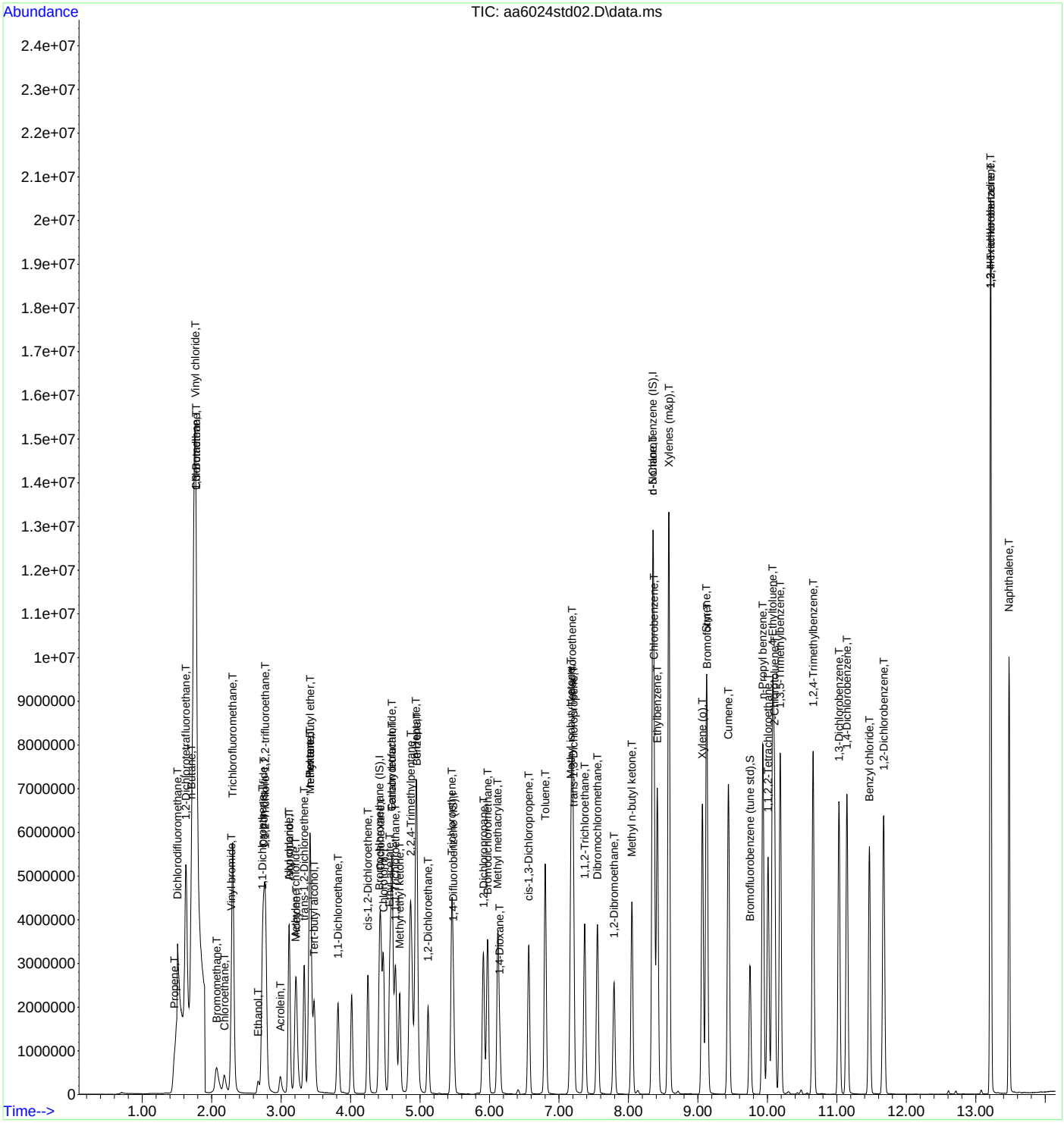
Quant Time: Mar 27 15:06:34 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.554	129	2393076	22.07	ppbV	99
53) 1,2-Dibromoethane	7.795	107	2142143	21.30	ppbV	100
54) Methyl n-butyl ketone	8.049	43	3632915	21.16	ppbV	100
56) n-Nonane	8.351	43	4204992	20.70	ppbV	99
57) Chlorobenzene	8.370	112	3149332	22.32	ppbV	99
58) Ethylbenzene	8.415	91	5992154	21.32	ppbV	100
59) Xylenes (m&p)	8.583	91	9156224	43.40	ppbV	100
60) Xylene (o)	9.065	91	4762319	21.27	ppbV	99
61) Styrene	9.123	104	3388334	23.34	ppbV	100
62) Bromoform	9.132	173	2128868	23.70	ppbV	99
63) Cumene	9.441	105	5836329	20.69	ppbV	100
65) n-Propyl benzene	9.933	91	8003431	20.94	ppbV	100
66) 1,1,2,2-Tetrachloroethane	10.010	83	3695472	22.27	ppbV	99
67) 4-Ethyltoluene	10.074	105	6468364	21.29	ppbV	100
68) 2-Chlorotoluene	10.103	91	5475021	21.16	ppbV	99
69) 1,3,5-Trimethylbenzene	10.184	105	5358696	21.42	ppbV	100
70) 1,2,4-Trimethylbenzene	10.660	105	5373360	21.66	ppbV	100
71) 1,3-Dichlorobenzene	11.033	146	3055936	22.49	ppbV	99
72) 1,4-Dichlorobenzene	11.145	146	3072998	22.30	ppbV	100
73) Benzyl chloride	11.470	91	5002127	21.70	ppbV	99
74) 1,2-Dichlorobenzene	11.676	146	2933960	21.76	ppbV	100
75) 1,3-Hexachlorobutadiene	13.213	225	1650141	22.54	ppbV	100
76) 1,2,4-Trichlorobenzene	13.216	180	2240663	22.41	ppbV	100
77) Naphthalene	13.479	128	5711683	20.57	ppbV	100

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

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6024std02.D
Acq On : 27 Mar 2024 12:40 pm
Operator : jjw
Sample : 20 ppbv std
Misc : EB0103704
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 27 15:06:34 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration



Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6025std01.D
Acq On : 27 Mar 2024 1:24 pm
Operator : jjw
Sample : 40 ppbv std
Misc : EB0103704
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 27 13:39:47 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:03:21 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.419	130	398803	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.480	114	1758228	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.351	117	1517568	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.750	95	1374039	10.12	ppbV	0.000
Target Compounds						Qvalue
2) Propene	1.476	41	1964690	44.03	ppbV	99
3) Dichlorodifluoromethane	1.512	85	4583650	46.63	ppbV	100
4) 1,2-Dichlorotetrafluor...	1.636	85	5695259	39.40	ppbV	99
5) n-Butane	1.718	43	3853678	38.05	ppbV	100
6) Chloromethane	1.770	52	281441	43.26	ppbV	57
7) Vinyl chloride	1.774	62	2352467	48.54	ppbV	99
8) 1,3-Butadiene	1.787	39	2176832	37.63	ppbV	99
9) Bromomethane	2.075	94	1618348	46.70	ppbV	99
10) Chloroethane	2.184	64	1249953	46.57	ppbV	100
11) Vinyl bromide	2.287	106	1912871	48.15	ppbV	100
12) Trichlorofluoromethane	2.306	101	5090504	43.35	ppbV	99
13) Ethanol	2.669	45	824442	46.04	ppbV	98
14) 1,1-Dichloroethene	2.734	61	4169298	47.14	ppbV	100
15) Carbon disulfide	2.760	76	6924568	49.54	ppbV	99
16) 1,1,2-Trichloro-1,2,2-...	2.776	101	4466211	37.49	ppbV	99
17) Acrolein	2.997	56	938960	44.00	ppbV	100
18) Allyl chloride	3.120	76	1094990	49.88	ppbV	100
19) Isopropanol	3.120	45	4345927	38.04	ppbV	99
20) Methylene chloride	3.210	49	2963075	46.58	ppbV	97
21) Acetone	3.229	43	3990092	45.13	ppbV	99
22) trans-1,2-Dichloroethene	3.332	61	3985456	51.86	ppbV	99
23) n-Pentane	3.419	43	4752698	42.25	ppbV	98
24) n-Hexane	3.419	57	6718281	41.25	ppbV	99
25) Methyl tert-butyl ether	3.422	73	7327239	39.72	ppbV	92
26) Tert-butyl alcohol	3.477	59	5668271	44.15	ppbV	100
27) 1,1-Dichloroethane	3.821	63	4777372	45.32	ppbV	100
28) cis-1,2-Dichloroethene	4.251	61	3661456	49.05	ppbV	99
29) Cyclohexane	4.431	56	4495502	40.67	ppbV	99
30) Chloroform	4.473	83	5226839	48.07	ppbV	99
31) Ethyl acetate	4.563	45	1047773	46.30	ppbV	100
32) Carbon tetrachloride	4.595	117	4872674	42.44	ppbV	100
33) Tetrahydrofuran	4.595	42	3908188	47.40	ppbV	100
34) 1,1,1-Trichloroethane	4.650	97	4538040	41.95	ppbV	100
35) Methyl ethyl ketone	4.708	43	6291757	48.09	ppbV	100
36) n-Heptane	4.943	43	5712488	40.27	ppbV	100
37) Benzene	4.959	78	7599303	46.01	ppbV	99
38) 1,2-Dichloroethane	5.116	62	3643642	49.24	ppbV	100
40) Trichloroethene	5.457	130	2793094	39.77	ppbV	98
41) 2,2,4-Trimethylpentane	4.862	57	13968760	40.37	ppbV	99
42) 1,2-Dichloropropane	5.914	63	3112993	39.65	ppbV	97
43) Bromodichloromethane	5.972	83	5543327	45.13	ppbV	100
44) Methyl methacrylate	6.119	41	4465072	40.27	ppbV	98
45) 1,4-Dioxane	6.145	88	1807468	43.25	ppbV	99
46) cis-1,3-Dichloropropene	6.566	75	4512628	40.92	ppbV	100
47) Toluene	6.804	91	8709445	37.41	ppbV	99
48) Methyl isobutyl ketone	7.171	43	7369377	34.92	ppbV	98
49) Tetrachloroethene	7.190	166	3079992	38.21	ppbV	99
50) trans-1,3-Dichloropropene	7.209	75	4387728	42.02	ppbV	98
51) 1,1,2-Trichloroethane	7.370	97	2971932	38.90	ppbV	100

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6025std01.D
Acq On : 27 Mar 2024 1:24 pm
Operator : jjw
Sample : 40 ppbv std
Misc : EB0103704
ALS Vial : 7 Sample Multiplier: 1

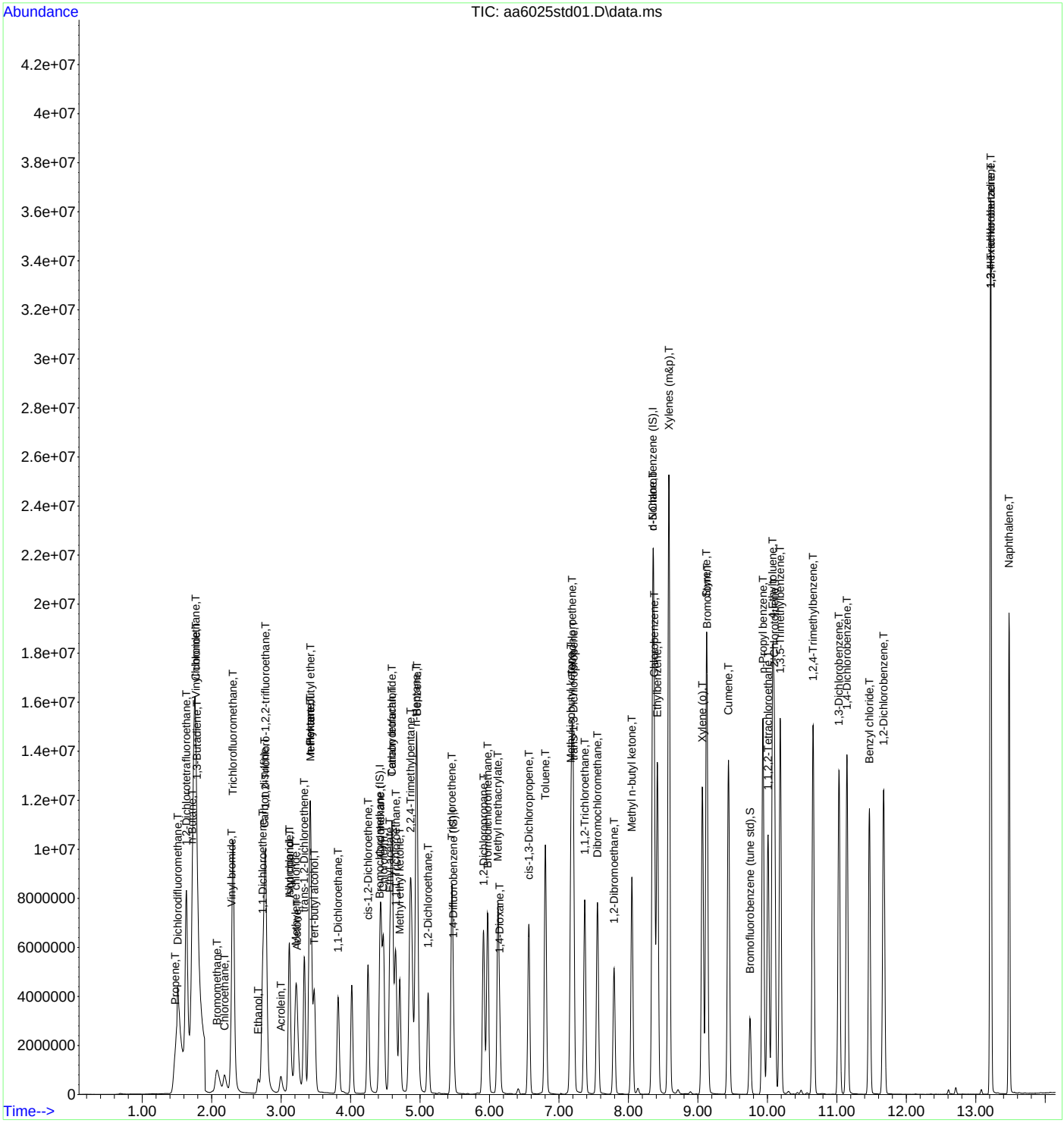
Quant Time: Mar 27 13:39:47 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:03:21 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.554	129	4825763	41.42	ppbV	100
53) 1,2-Dibromoethane	7.795	107	4320065	40.01	ppbV	100
54) Methyl n-butyl ketone	8.049	43	7266143	38.88	ppbV	99
56) n-Nonane	8.351	43	8002894	36.76	ppbV	99
57) Chlorobenzene	8.373	112	6116749	41.22	ppbV	100
58) Ethylbenzene	8.415	91	11665851	39.10	ppbV	99
59) Xylenes (m&p)	8.582	91	17498174	78.02	ppbV	99
60) Xylene (o)	9.065	91	9322325	39.33	ppbV	99
61) Styrene	9.123	104	6597492	43.52	ppbV	100
62) Bromoform	9.132	173	4195209	45.02	ppbV	100
63) Cumene	9.441	105	11340070	37.89	ppbV	99
65) n-Propyl benzene	9.936	91	15449995	38.09	ppbV	99
66) 1,1,2,2-Tetrachloroethane	10.010	83	7251670	41.38	ppbV	100
67) 4-Ethyltoluene	10.074	105	12482413	38.84	ppbV	99
68) 2-Chlorotoluene	10.100	91	10739286	39.25	ppbV	100
69) 1,3,5-Trimethylbenzene	10.184	105	10426890	39.44	ppbV	100
70) 1,2,4-Trimethylbenzene	10.656	105	10449455	40.06	ppbV	99
71) 1,3-Dichlorobenzene	11.029	146	6064751	42.74	ppbV	99
72) 1,4-Dichlorobenzene	11.145	146	6132994	42.98	ppbV	99
73) Benzyl chloride	11.470	91	10185040	43.34	ppbV	99
74) 1,2-Dichlorobenzene	11.672	146	5799661	41.19	ppbV	99
75) 1,3-Hexachlorobutadiene	13.216	225	2978861	38.16	ppbV	99
76) 1,2,4-Trichlorobenzene	13.216	180	4181789	39.54	ppbV	99
77) Naphthalene	13.479	128	11258182	38.90	ppbV	99

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

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6025std01.D
Acq On : 27 Mar 2024 1:24 pm
Operator : jjw
Sample : 40 ppbv std
Misc : EB0103704
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 27 13:39:47 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:03:21 2024
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES, LLC

Initial Calibration Data Summary Report

Initial Calibration Curve: 5/29/2024 **Method ID:** 240529.M
Instrument: AA

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6554BFB]	05/29/2024 09:16
0.2 PPBV STD [AA6556STD05]	05/29/2024 12:40
2 PPBV STD [AA6557STD04]	05/29/2024 13:11
10 PPBV STD [AA6558STD03]	05/29/2024 13:46
20 PPBV STD [AA6559STD02]	05/29/2024 14:18
40 PPBV STD [AA6560STD01]	05/29/2024 14:55
10 PPBV ICVSS [AA6561ICVSS]	05/29/2024 17:16

	Parameter	RRF 0.2ppbv	RRF 2ppbv	RRF 10ppbv	RRF 20ppbv	RRF 40ppbv	Avg ppbv	% RSD
1)	Bromochloromethane	----------ISTD----------						
2)	Propene	1.0	1.1	1.0	1.1	1.0	1.1	3.6
3)	Dichlorodifluoromethane	2.4	2.9	3.0	3.1	3.0	2.9	9.0
4)	1,2-Dichlorotetrafluoroethane	3.2	4.0	4.0	4.2	4.6	4.0	12
5)	n-Butane	1.9	2.3	2.1	2.2	2.3	2.2	6.6
6)	Chloromethane	0.12	0.17	0.20	0.22	0.18	0.18	21
7)	Vinyl chloride	1.0	1.3	1.4	1.5	1.4	1.3	13
8)	1,3-Butadiene	1.1	1.2	1.2	1.3	1.3	1.2	7.5
9)	Bromomethane	0.75	1.1	1.1	1.2	1.00	1.0	16
10)	Chloroethane	0.54	0.76	0.79	0.83	0.82	0.75	16
11)	Vinyl bromide	0.77	1.3	1.4	1.4	1.4	1.2	22
12)	Trichlorofluoromethane	2.7	3.3	3.4	3.5	3.6	3.3	11
13)	Ethanol	0.70	0.42	0.44	0.49	0.53	0.52	21
14)	1,1-Dichloroethene	1.8	2.6	2.7	2.8	2.9	2.5	17
15)	Carbon disulfide	3.2	4.4	4.5	4.6	4.5	4.2	14
16)	1,1,2-Trichloro-1,2,2-trifluoroethane	2.7	3.2	3.0	3.1	3.6	3.1	10
17)	Acrolein	0.47	0.51	0.58	0.61	0.65	0.56	13
18)	Allyl Chloride	0.43	0.70	0.71	0.72	0.69	0.65	19
19)	Isopropanol	2.4	2.5	2.9	3.1	3.2	2.8	12
20)	Methylene chloride	2.0	1.7	1.7	1.8	1.8	1.8	7.5
21)	Acetone	2.0	2.2	2.3	2.3	2.4	2.2	6.1
22)	1,2-Dichloroethene (trans)	1.7	2.2	2.4	2.5	2.8	2.3	18
23)	n-Pentane	2.4	2.6	2.6	2.8	3.3	2.7	12
24)	n-Hexane	3.1	3.7	3.8	3.9	4.7	3.8	15
25)	Methyl tert-butyl ether	3.8	4.7	4.4	4.5	5.5	4.6	13
26)	Tert-butyl alcohol	2.5	2.9	3.0	3.2	3.9	3.1	16
27)	1,1-Dichloroethane	2.2	2.8	2.9	3.0	3.3	2.8	15
28)	1,2-Dichloroethene (trans)	1.4	2.0	2.2	2.3	2.5	2.1	19
29)	Cyclohexane	2.1	2.6	2.5	2.6	3.1	2.6	14
30)	Chloroform	2.3	3.0	3.3	3.5	3.9	3.2	19
31)	Ethyl acetate	0.40	0.48	0.54	0.58	0.72	0.54	22
32)	Carbon tetrachloride	2.6	3.3	3.2	3.3	3.9	3.3	14
33)	Tetrahydrofuran	1.5	1.7	2.0	2.1	2.3	1.9	17
34)	1,1,1-Trichloroethane	2.4	3.0	2.9	3.1	3.7	3.0	16
35)	Methyl ethyl ketone	2.4	2.7	3.1	3.4	4.2	3.2	22
36)	n-Heptane	2.5	2.9	2.8	3.0	3.8	3.0	16
37)	Benzene	3.5	4.2	4.6	4.8	5.7	4.6	17
38)	1,2-Dichloroethane	1.5	1.9	2.1	2.2	2.7	2.1	21

***% RSD (Relative Standard Deviation) must be within 30%**
****An exception is made for 2 compounds that must be within 40%**
RRF - Relative Response Factor

INTEGRATED ANALYTICAL LABORATORIES, LLC

Initial Calibration Data Summary Report

Initial Calibration Curve: 5/29/2024 **Method ID:** 240529.M

Instrument: AA

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6554BFB]	05/29/2024 09:16
0.2 PPBV STD [AA6556STD05]	05/29/2024 12:40
2 PPBV STD [AA6557STD04]	05/29/2024 13:11
10 PPBV STD [AA6558STD03]	05/29/2024 13:46
20 PPBV STD [AA6559STD02]	05/29/2024 14:18
40 PPBV STD [AA6560STD01]	05/29/2024 14:55
10 PPBV ICVSS [AA6561ICVSS]	05/29/2024 17:16

	Parameter	RRF 0.2ppbv	RRF 2ppbv	RRF 10ppbv	RRF 20ppbv	RRF 40ppbv	Avg ppbv	% RSD
39)	1,4-Difluorobenzene	----------ISTD----------						
40)	Trichloroethene	0.38	0.47	0.47	0.47	0.47	0.45	8.6
41)	2,2,4-Trimethylpentane	1.5	2.1	1.8	1.8	1.7	1.8	12
42)	1,2-Dichloropropane	0.37	0.43	0.42	0.42	0.44	0.42	6.2
43)	Bromodichloromethane	0.62	0.75	0.75	0.75	0.75	0.72	7.8
44)	Methyl methacrylate	0.45	0.52	0.51	0.53	0.58	0.52	9.1
45)	1,4-Dioxane	0.20	0.24	0.24	0.24	0.25	0.24	8.2
46)	1,3-Dichloropropene (cis)	0.53	0.63	0.63	0.63	0.65	0.61	7.4
47)	Toluene	1.1	1.4	1.3	1.3	1.3	1.3	7.7
48)	Methyl isobutyl ketone	0.86	1.0	0.91	0.91	1.00	0.94	6.6
49)	Tetrachloroethene	0.44	0.53	0.50	0.48	0.48	0.49	7.2
50)	1,3-Dichloropropene (trans)	0.46	0.62	0.62	0.62	0.62	0.59	12
51)	1,1,2-Trichloroethane	0.38	0.47	0.44	0.45	0.48	0.44	9.1
52)	Dibromochloromethane	0.58	0.75	0.72	0.72	0.77	0.71	11
53)	1,2-Dibromoethane	0.52	0.67	0.64	0.64	0.70	0.63	11
54)	Methyl n-butyl ketone	0.74	0.87	0.83	0.85	1.1	0.88	15
55)	d-5 Chlorbenzene	----------ISTD----------						
56)	n-Nonane	0.98	1.2	1.1	1.1	1.5	1.2	17
57)	Chlorobenzene	0.88	1.1	1.0	1.0	1.2	1.0	11
58)	Ethylbenzene	1.7	2.0	1.8	1.9	2.4	2.0	15
59)	Xylenes (m&p)	1.3	1.6	1.4	1.4	1.7	1.5	13
60)	Xylenes (o)	1.3	1.6	1.4	1.5	1.9	1.6	15
61)	Styrene	0.77	1.1	1.0	1.0	1.3	1.0	19
62)	Bromoform	0.53	0.71	0.69	0.70	0.85	0.70	17
63)	Cumene	1.6	2.1	1.9	1.9	2.5	2.0	17
65)	n-Propyl benzene	2.2	2.9	2.5	2.5	3.5	2.7	19
66)	1,1,2,2-Tetrachloroethane	0.93	1.2	1.1	1.1	1.5	1.1	18
67)	4-Ethyltoluene	1.8	2.3	2.1	2.1	2.9	2.2	20
68)	2-Chlorotoluene	1.5	2.0	1.7	1.7	2.4	1.9	17
69)	1,3,5-Trimethylbenzene	1.4	1.9	1.7	1.7	2.3	1.8	19
70)	1,2,4-Trimethylbenzene	1.3	1.9	1.7	1.7	2.4	1.8	22
71)	1,3-Dichlorobenzene	1.0	1.1	0.99	1.0	1.4	1.1	17
72)	1,4-Dichlorobenzene	0.87	1.1	1.0	1.1	1.5	1.1	21
73)	Benzyl chloride	1.2	1.7	1.7	1.8	2.6	1.8	29
74)	1,2-Dichlorobenzene	0.83	1.1	1.00	1.0	1.4	1.1	19
75)	1,3-Hexachlorobutadiene	0.67	0.67	0.59	0.57	0.57	0.61	8.7
76)	1,2,4-Trichlorobenzene	0.91	0.84	0.79	0.77	0.82	0.82	6.6
77)	Naphthalene	2.5	2.2	2.1	2.2	2.6	2.3	10

***% RSD (Relative Standard Deviation) must be within 30%**

****An exception is made for 2 compounds that must be within 40%**

RRF - Relative Response Factor

Method Path : C:\msdchem\1\METHODS\
Method File : 240529.M
Title : TO-15 on the Agilent 7890A / 5975C
Last Update : Wed May 29 15:44:50 2024
Response Via : Initial Calibration

Calibration Files
0.2 =aa6556std05.D 2 =aa6557std04.D 10 =aa6558std03.D 20 =aa6559std02.D 40 =aa6560std01.D

		Compound	0.2	2	10	20	40	Avg	%RSD
1)	I	Bromochloromethane...	----------ISTD----------						
2)	T	Propene	1.030	1.106	1.030	1.072	1.009	1.050	3.69
3)	T	Dichlorodifluoro...	2.414	2.897	2.972	3.065	2.968	2.863	9.00
4)	T	1,2-Dichlorotetr...	3.249	4.044	4.000	4.202	4.570	4.013	12.02
5)	T	n-Butane	1.938	2.276	2.139	2.180	2.305	2.168	6.69
6)	T	Chloromethane	0.123	0.172	0.201	0.220	0.176	0.178	20.53
7)	T	Vinyl chloride	1.021	1.325	1.389	1.454	1.401	1.318	13.07
8)	T	1,3-Butadiene	1.065	1.225	1.242	1.293	1.283	1.222	7.55
9)	T	Bromomethane	0.754	1.123	1.102	1.172	0.999	1.030	16.20
10)	T	Chloroethane	0.540	0.761	0.793	0.829	0.823	0.749	16.00
11)	T	Vinyl bromide	0.768	1.310	1.368	1.405	1.395	1.249	21.75
12)	T	Trichlorofluorom...	2.694	3.337	3.368	3.515	3.570	3.297	10.64
13)	T	Ethanol	0.696	0.422	0.438	0.486	0.531	0.515	21.40
14)	T	1,1-Dichloroethene	1.794	2.565	2.691	2.783	2.851	2.537	16.91
15)	T	Carbon disulfide	3.162	4.388	4.469	4.581	4.532	4.226	14.18
16)	T	1,1,2-Trichloro-...	2.680	3.248	2.992	3.094	3.562	3.115	10.43
17)	T	Acrolein	0.471	0.512	0.577	0.611	0.652	0.564	13.01
18)	T	Allyl chloride	0.433	0.698	0.710	0.716	0.689	0.649	18.66
19)	T	Isopropanol	2.411	2.511	2.890	3.078	3.217	2.821	12.42
20)	T	Methylene chloride	2.040	1.727	1.702	1.761	1.802	1.807	7.52
21)	T	Acetone	2.022	2.235	2.262	2.301	2.399	2.244	6.19
22)	T	1,2-Dichloroethe...	1.672	2.189	2.352	2.464	2.793	2.294	17.97
23)	T	n-Pentane	2.440	2.625	2.578	2.774	3.287	2.741	11.95
24)	T	n-Hexane	3.128	3.671	3.784	3.920	4.700	3.840	14.76
25)	T	Methyl tert-buty...	3.818	4.725	4.394	4.508	5.454	4.580	12.94
26)	T	Tert-butyl alcohol	2.523	2.936	3.031	3.247	3.912	3.130	16.30
27)	T	1,1-Dichloroethane	2.188	2.807	2.875	3.025	3.341	2.847	14.82
28)	T	1,2-Dichloroethe...	1.442	1.970	2.157	2.263	2.500	2.066	19.28
29)	t	Cyclohexane	2.080	2.565	2.489	2.572	3.112	2.564	14.34
30)	T	Chloroform	2.298	3.010	3.288	3.456	3.914	3.193	18.74
31)	T	Ethyl acetate	0.398	0.483	0.538	0.584	0.716	0.544	21.81
32)	T	Carbon tetrachlo...	2.590	3.272	3.241	3.285	3.904	3.258	14.28
33)	T	Tetrahydrofuran	1.472	1.746	1.971	2.067	2.343	1.920	17.16
34)	T	1,1,1-Trichloroe...	2.372	2.970	2.919	3.055	3.721	3.007	15.98
35)	T	Methyl ethyl ketone	2.419	2.733	3.147	3.381	4.221	3.180	21.69
36)	T	n-Heptane	2.487	2.911	2.840	2.989	3.806	3.007	16.17
37)	T	Benzene	3.520	4.218	4.574	4.782	5.671	4.553	17.30
38)	T	1,2-Dichloroethane	1.484	1.923	2.120	2.232	2.656	2.083	20.60
39)	I	1,4-Difluorobenzen...	----------ISTD----------						
40)	T	Trichloroethene	0.382	0.472	0.469	0.471	0.466	0.452	8.65
41)	T	2,2,4-Trimethylp...	1.493	2.052	1.847	1.809	1.702	1.781	11.52
42)	T	1,2-Dichloropropane	0.371	0.429	0.419	0.417	0.439	0.415	6.23
43)	T	Bromodichloromet...	0.621	0.749	0.748	0.749	0.747	0.723	7.87
44)	T	Methyl methacrylate	0.447	0.523	0.513	0.528	0.580	0.518	9.15
45)	T	1,4-Dioxane	0.203	0.241	0.239	0.244	0.253	0.236	8.24
46)	T	cis-1,3-Dichloro...	0.533	0.630	0.627	0.632	0.645	0.613	7.42
47)	T	Toluene	1.116	1.383	1.296	1.281	1.326	1.280	7.77
48)	T	Methyl isobutyl ...	0.860	1.004	0.910	0.910	0.997	0.936	6.64
49)	T	Tetrachloroethene	0.436	0.533	0.495	0.482	0.479	0.485	7.22
50)	T	trans-1,3-Dichlo...	0.464	0.619	0.618	0.623	0.623	0.589	11.88
51)	T	1,1,2-Trichloroe...	0.376	0.473	0.440	0.445	0.477	0.442	9.12
52)	T	Dibromochloromet...	0.576	0.747	0.720	0.718	0.765	0.705	10.62
53)	T	1,2-Dibromoethane	0.517	0.669	0.644	0.642	0.698	0.634	10.89
54)	T	Methyl n-butyl k...	0.741	0.866	0.832	0.846	1.098	0.877	15.13
55)	I	d-5 Chlorobenzene ...	----------ISTD----------						
56)	T	n-Nonane	0.979	1.227	1.073	1.072	1.492	1.169	17.22
57)	T	Chlorobenzene	0.882	1.089	1.007	1.022	1.178	1.036	10.55
58)	T	Ethylbenzene	1.692	2.041	1.833	1.853	2.438	1.971	14.65
59)	T	Xylenes (m&p)	1.270	1.589	1.403	1.402	1.745	1.482	12.53
60)	T	Xylene (o)	1.295	1.644	1.448	1.486	1.929	1.560	15.41

Method Path : C:\msdchem\1\METHODS\
Method File : 240529.M

61)	T	Styrene	0.770	1.063	1.013	1.024	1.317	1.037	18.75
62)	T	Bromoform	0.527	0.714	0.690	0.698	0.851	0.696	16.54
63)	T	Cumene	1.601	2.128	1.865	1.866	2.491	1.990	16.90
64)	S	Bromofluorobenze...	0.866	0.867	0.859	0.909	1.229	0.946	16.85
65)	T	n-Propyl benzene	2.237	2.873	2.496	2.528	3.549	2.737	18.55
66)	T	1,1,2,2-Tetrachl...	0.927	1.197	1.066	1.082	1.471	1.149	17.77
67)	T	4-Ethyltoluene	1.768	2.289	2.062	2.098	2.944	2.232	19.68
68)	T	2-Chlorotoluene	1.531	1.962	1.703	1.725	2.362	1.857	17.32
69)	T	1,3,5-Trimethylb...	1.390	1.943	1.685	1.724	2.335	1.815	19.33
70)	T	1,2,4-Trimethylb...	1.333	1.887	1.703	1.748	2.433	1.821	21.91
71)	T	1,3-Dichlorobenzene	1.007	1.070	0.993	1.024	1.433	1.105	16.78
72)	T	1,4-Dichlorobenzene	0.869	1.096	1.037	1.075	1.511	1.117	21.24
73)	T	Benzyl chloride	1.218	1.651	1.686	1.796	2.633	1.797	28.75
74)	T	1,2-Dichlorobenzene	0.828	1.076	0.999	1.017	1.395	1.063	19.48
75)	T	1,3-Hexachlorobu...	0.674	0.665	0.586	0.569	0.565	0.612	8.70
76)	T	1,2,4-Trichlorob...	0.908	0.836	0.787	0.767	0.822	0.824	6.61
77)	T	Naphthalene	2.540	2.210	2.118	2.150	2.626	2.329	10.15

(#) = Out of Range

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6556std05.D
Acq On : 29 May 2024 12:40 pm
Operator : jjw
Sample : 0.2 ppbv std
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 29 15:43:04 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:42:31 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.409	130	276448	10.00	ppbV		0.000
39) 1,4-Difluorobenzene (IS)	5.477	114	1073893	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.351	117	998317	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.750	95	864418	8.96	ppbV		0.000
Target Compounds							Qvalue
2) Propene	1.454	41	6210	0.21	ppbV		97
3) Dichlorodifluoromethane	1.496	85	14150	0.17	ppbV	#	88
4) 1,2-Dichlorotetrafluor...	1.626	85	17606	0.15	ppbV		96
5) n-Butane	1.709	43	11682	0.19	ppbV		92
6) Chloromethane	1.774	52	761	0.14	ppbV		42
7) Vinyl chloride	1.757	62	6097	0.16	ppbV	#	49
8) 1,3-Butadiene	1.781	39	6299	0.18	ppbV	#	80
9) Bromomethane	2.072	94	4168	0.14	ppbV		94
10) Chloroethane	2.181	64	3166	0.14	ppbV	#	44
11) Vinyl bromide	2.294	106	4287	0.11	ppbV		89
12) Trichlorofluoromethane	2.303	101	16384	0.17	ppbV		97
13) Ethanol	2.683	45	4002	0.31	ppbV		78
14) 1,1-Dichloroethene	2.728	61	10315	0.14	ppbV		95
15) Carbon disulfide	2.747	76	18707	0.15	ppbV	#	89
16) 1,1,2-Trichloro-1,2,2-...	2.776	101	16151	0.18	ppbV		98
17) Acrolein	2.988	56	2603	0.16	ppbV		94
18) Allyl chloride	3.120	76	2587	0.13	ppbV		100
19) Isopropanol	3.114	45	11866	0.15	ppbV	#	88
20) Methylene chloride	3.204	49	12182	0.25	ppbV		95
21) Acetone	3.223	43	12074	0.19	ppbV	#	86
22) 1,2-Dichloroethene (tr...	3.335	61	10260	0.15	ppbV		97
23) n-Pentane	3.422	43	14571	0.19	ppbV		94
24) n-Hexane	3.416	57	19194	0.17	ppbV		92
25) Methyl tert-butyl ether	3.425	73	23645	0.18	ppbV		96
26) Tert-butyl alcohol	3.480	59	16042	0.18	ppbV		100
27) 1,1-Dichloroethane	3.818	63	12942	0.16	ppbV		92
28) 1,2-Dichloroethene (cis)	4.249	61	8688	0.14	ppbV		97
29) Cyclohexane	4.432	56	12879	0.17	ppbV		100
30) Chloroform	4.474	83	13724	0.15	ppbV		99
31) Ethyl acetate	4.570	45	2379	0.15	ppbV		97
32) Carbon tetrachloride	4.596	117	15894	0.17	ppbV		99
33) Tetrahydrofuran	4.602	42	9035	0.16	ppbV		95
34) 1,1,1-Trichloroethane	4.641	97	14296	0.16	ppbV		98
35) Methyl ethyl ketone	4.708	43	14712	0.16	ppbV		94
36) n-Heptane	4.937	43	15263	0.18	ppbV		91
37) Benzene	4.956	78	21020	0.16	ppbV		98
38) 1,2-Dichloroethane	5.117	62	8943	0.14	ppbV		96
40) Trichloroethene	5.451	130	8210	0.16	ppbV		96
41) 2,2,4-Trimethylpentane	4.859	57	34944	0.18	ppbV		99
42) 1,2-Dichloropropane	5.914	63	8856	0.19	ppbV		97
43) Bromodichloromethane	5.972	83	15337	0.19	ppbV		97
44) Methyl methacrylate	6.117	41	10567	0.18	ppbV		97
45) 1,4-Dioxane	6.152	88	5094	0.19	ppbV		95
46) cis-1,3-Dichloropropene	6.567	75	12702	0.19	ppbV		99
47) Toluene	6.805	91	25897	0.18	ppbV		95
48) Methyl isobutyl ketone	7.178	43	20143	0.20	ppbV		98
49) Tetrachloroethene	7.187	166	10480	0.20	ppbV		97
50) trans-1,3-Dichloropropene	7.207	75	11069	0.17	ppbV	#	82
51) 1,1,2-Trichloroethane	7.374	97	8729	0.18	ppbV	#	77

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6556std05.D
Acq On : 29 May 2024 12:40 pm
Operator : jjw
Sample : 0.2 ppbv std
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

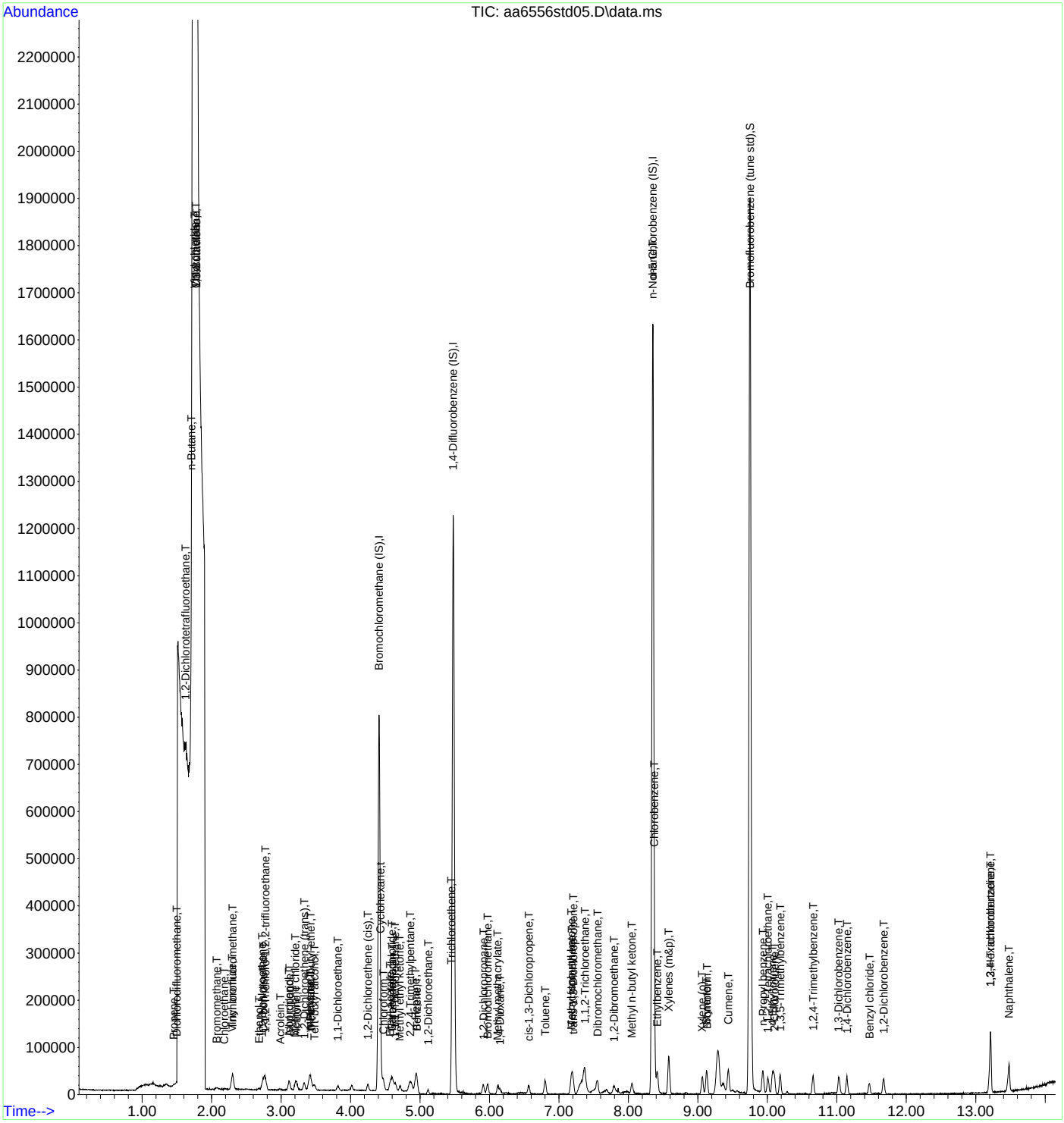
Quant Time: May 29 15:43:04 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:42:31 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
52) Dibromochloromethane	7.557	129	13847	0.17	ppbV		99
53) 1,2-Dibromoethane	7.795	107	11999	0.17	ppbV		98
54) Methyl n-butyl ketone	8.049	43	17996	0.18	ppbV		96
56) n-Nonane	8.348	43	21708	0.18	ppbV		94
57) Chlorobenzene	8.374	112	19540	0.18	ppbV	#	35
58) Ethylbenzene	8.416	91	37490	0.18	ppbV		98
59) Xylenes (m&p)	8.580	91	56561	0.37	ppbV		100
60) Xylene (o)	9.062	91	28443	0.18	ppbV		98
61) Styrene	9.123	104	17364	0.16	ppbV		100
62) Bromoform	9.133	173	11886	0.16	ppbV		99
63) Cumene	9.438	105	34197	0.16	ppbV		97
65) n-Propyl benzene	9.936	91	48235	0.17	ppbV		94
66) 1,1,2,2-Tetrachloroethane	10.007	83	21094	0.18	ppbV		98
67) 4-Ethyltoluene	10.075	105	38115	0.16	ppbV		100
68) 2-Chlorotoluene	10.104	91	33319	0.17	ppbV		97
69) 1,3,5-Trimethylbenzene	10.187	105	30244	0.16	ppbV		99
70) 1,2,4-Trimethylbenzene	10.660	105	28735	0.15	ppbV		98
71) 1,3-Dichlorobenzene	11.026	146	22317	0.20	ppbV		99
72) 1,4-Dichlorobenzene	11.149	146	18557	0.16	ppbV		99
73) Benzyl chloride	11.473	91	24328	0.13	ppbV		96
74) 1,2-Dichlorobenzene	11.676	146	17696	0.16	ppbV		97
75) 1,3-Hexachlorobutadiene	13.213	225	14934	0.25	ppbV		96
76) 1,2,4-Trichlorobenzene	13.213	180	19953	0.25	ppbV		98
77) Naphthalene	13.480	128	50709	0.22	ppbV		97

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

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6556std05.D
Acq On : 29 May 2024 12:40 pm
Operator : jjw
Sample : 0.2 ppbv std
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 29 15:43:04 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:42:31 2024
Response via : Initial Calibration



Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6557std04.D
Acq On : 29 May 2024 1:11 pm
Operator : jjw
Sample : 2.0 ppbv std
Misc : EB0103704
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 29 16:05:04 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.406	130	243744	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.477	114	931187	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.354	117	883473	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.750	95	765844	9.16	ppbV	0.000
Target Compounds						Qvalue
2) Propene	1.470	41	58751	2.30	ppbV	98
3) Dichlorodifluoromethane	1.496	85	149684	2.14	ppbV	100
4) 1,2-Dichlorotetrafluor...	1.626	85	193188	1.98	ppbV	98
5) n-Butane	1.708	43	120953	2.29	ppbV	97
6) Chloromethane	1.777	52	9410	2.16	ppbV	89
7) Vinyl chloride	1.767	62	69778	2.17	ppbV	98
8) 1,3-Butadiene	1.774	39	63876	2.15	ppbV	97
9) Bromomethane	2.062	94	54769	2.18	ppbV	99
10) Chloroethane	2.184	64	39327	2.15	ppbV	99
11) Vinyl bromide	2.281	106	64521	2.12	ppbV	98
12) Trichlorofluoromethane	2.300	101	178965	2.23	ppbV	99
13) Ethanol	2.670	45	21400	1.71	ppbV	99
14) 1,1-Dichloroethene	2.724	61	130045	2.10	ppbV	100
15) Carbon disulfide	2.747	76	228907	2.22	ppbV	98
16) 1,1,2-Trichloro-1,2,2-...	2.773	101	172612	2.27	ppbV	99
17) Acrolein	2.978	56	24941	1.81	ppbV	93
18) Allyl chloride	3.113	76	36750	2.32	ppbV	100
19) Isopropanol	3.120	45	108944	1.58	ppbV	97
20) Methylene chloride	3.204	49	90902	2.06	ppbV	97
21) Acetone	3.220	43	117683	2.15	ppbV	96
22) 1,2-Dichloroethene (tr...	3.329	61	118457	2.12	ppbV	99
23) n-Pentane	3.413	43	144352	2.16	ppbV	96
24) n-Hexane	3.416	57	198634	2.12	ppbV	96
25) Methyl tert-butyl ether	3.419	73	257993	2.31	ppbV	92
26) Tert-butyl alcohol	3.477	59	164606	2.16	ppbV	100
27) 1,1-Dichloroethane	3.821	63	136846	1.97	ppbV	100
28) 1,2-Dichloroethene (cis)	4.248	61	104674	2.08	ppbV	100
29) Cyclohexane	4.425	56	140036	2.24	ppbV	100
30) Chloroform	4.470	83	158461	2.04	ppbV	99
31) Ethyl acetate	4.567	45	25417	1.92	ppbV	99
32) Carbon tetrachloride	4.593	117	177030	2.23	ppbV	99
33) Tetrahydrofuran	4.599	42	94463	2.02	ppbV	98
34) 1,1,1-Trichloroethane	4.641	97	157815	2.15	ppbV	98
35) Methyl ethyl ketone	4.712	43	146553	1.89	ppbV	99
36) n-Heptane	4.937	43	157513	2.15	ppbV	98
37) Benzene	4.953	78	222063	2.00	ppbV	99
38) 1,2-Dichloroethane	5.113	62	102187	2.01	ppbV	99
40) Trichloroethene	5.454	130	87869	2.09	ppbV	99
41) 2,2,4-Trimethylpentane	4.863	57	427145	2.58	ppbV	99
42) 1,2-Dichloropropane	5.911	63	88685	2.29	ppbV	99
43) Bromodichloromethane	5.972	83	160200	2.38	ppbV	98
44) Methyl methacrylate	6.117	41	107105	2.22	ppbV	97
45) 1,4-Dioxane	6.149	88	52568	2.39	ppbV	98
46) cis-1,3-Dichloropropene	6.564	75	130172	2.28	ppbV	99
47) Toluene	6.801	91	277919	2.33	ppbV	100
48) Methyl isobutyl ketone	7.168	43	203627	2.34	ppbV	98
49) Tetrachloroethene	7.191	166	111135	2.46	ppbV	100
50) trans-1,3-Dichloropropene	7.213	75	127958	2.33	ppbV	98
51) 1,1,2-Trichloroethane	7.374	97	95114	2.31	ppbV	100

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6557std04.D
Acq On : 29 May 2024 1:11 pm
Operator : jjw
Sample : 2.0 ppbv std
Misc : EB0103704
ALS Vial : 4 Sample Multiplier: 1

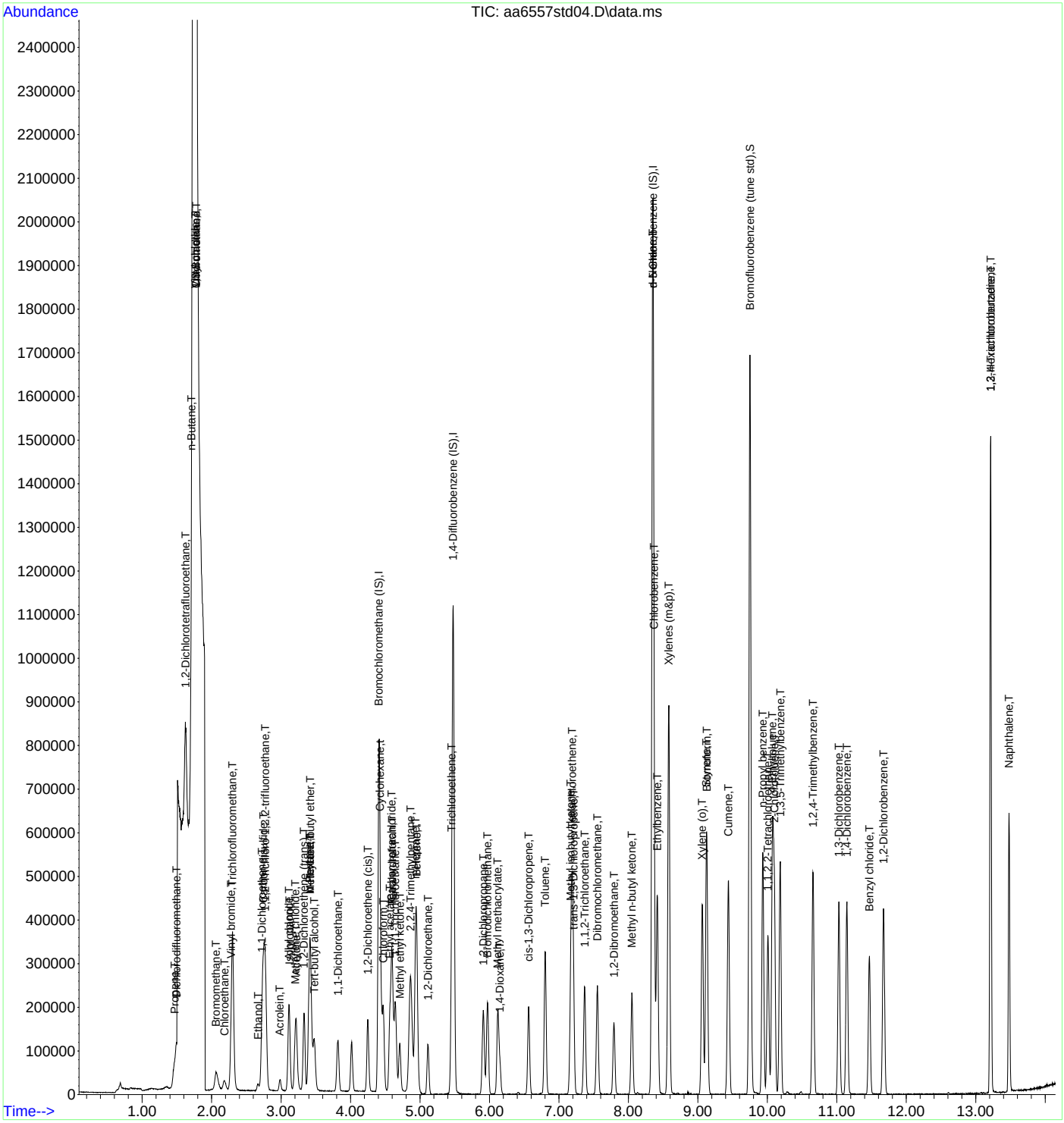
Quant Time: May 29 16:05:04 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.554	129	155622	2.37	ppbV	99
53) 1,2-Dibromoethane	7.792	107	134449	2.28	ppbV	98
54) Methyl n-butyl ketone	8.049	43	182152	2.23	ppbV	99
56) n-Nonane	8.348	43	240746	2.33	ppbV	100
57) Chlorobenzene	8.371	112	213631	2.34	ppbV	96
58) Ethylbenzene	8.416	91	400238	2.30	ppbV	100
59) Xylenes (m&p)	8.580	91	626076	4.78	ppbV	100
60) Xylene (o)	9.062	91	319546	2.32	ppbV	99
61) Styrene	9.123	104	212185	2.32	ppbV	99
62) Bromoform	9.129	173	142572	2.32	ppbV	99
63) Cumene	9.441	105	402361	2.29	ppbV	100
65) n-Propyl benzene	9.933	91	548551	2.27	ppbV	99
66) 1,1,2,2-Tetrachloroethane	10.007	83	241161	2.38	ppbV	98
67) 4-Ethyltoluene	10.071	105	436721	2.21	ppbV	99
68) 2-Chlorotoluene	10.100	91	377903	2.30	ppbV	99
69) 1,3,5-Trimethylbenzene	10.187	105	374308	2.33	ppbV	99
70) 1,2,4-Trimethylbenzene	10.657	105	360088	2.24	ppbV	100
71) 1,3-Dichlorobenzene	11.030	146	209789	2.15	ppbV	98
72) 1,4-Dichlorobenzene	11.145	146	207189	2.10	ppbV	100
73) Benzyl chloride	11.470	91	291655	1.84	ppbV	99
74) 1,2-Dichlorobenzene	11.673	146	203374	2.17	ppbV	98
75) 1,3-Hexachlorobutadiene	13.216	225	130377	2.41	ppbV	99
76) 1,2,4-Trichlorobenzene	13.216	180	162583	2.23	ppbV	100
77) Naphthalene	13.480	128	390557	1.90	ppbV	100

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

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6557std04.D
Acq On : 29 May 2024 1:11 pm
Operator : jjw
Sample : 2.0 ppbv std
Misc : EB0103704
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 29 16:05:04 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration



Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6558std03.D
Acq On : 29 May 2024 1:46 pm
Operator : jjw
Sample : 10 ppbv std
Misc : EB0103704
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 29 16:05:30 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.416	130	240829	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.483	114	1010790	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.351	117	932743	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.753	95	800854	9.08	ppbV	0.000
Target Compounds						Qvalue
2) Propene	1.473	41	274657	10.87	ppbV	97
3) Dichlorodifluoromethane	1.509	85	756375	10.97	ppbV	100
4) 1,2-Dichlorotetrafluor...	1.629	85	938641	9.71	ppbV	99
5) n-Butane	1.709	43	561545	10.76	ppbV	100
6) Chloromethane	1.774	52	54205	12.61	ppbV	100
7) Vinyl chloride	1.770	62	362582	11.42	ppbV	100
8) 1,3-Butadiene	1.777	39	320142	10.88	ppbV	100
9) Bromomethane	2.072	94	281183	11.33	ppbV	98
10) Chloroethane	2.184	64	202415	11.22	ppbV	100
11) Vinyl bromide	2.287	106	333039	11.07	ppbV	100
12) Trichlorofluoromethane	2.303	101	892115	11.24	ppbV	100
13) Ethanol	2.670	45	109612	8.85	ppbV	100
14) 1,1-Dichloroethene	2.728	61	674109	11.03	ppbV	100
15) Carbon disulfide	2.750	76	1151657	11.31	ppbV	100
16) 1,1,2-Trichloro-1,2,2-...	2.769	101	785526	10.47	ppbV	100
17) Acrolein	2.991	56	138932	10.22	ppbV	100
18) Allyl chloride	3.114	76	184693	11.81	ppbV	100
19) Isopropanol	3.117	45	619477	9.12	ppbV	100
20) Methylene chloride	3.204	49	442782	10.18	ppbV	100
21) Acetone	3.223	43	588242	10.89	ppbV	100
22) 1,2-Dichloroethene (tr...	3.332	61	628721	11.38	ppbV	100
23) n-Pentane	3.419	43	690198	10.46	ppbV	99
24) n-Hexane	3.416	57	1002351	10.84	ppbV	100
25) Methyl tert-butyl ether	3.422	73	1185133	10.74	ppbV	100
26) Tert-butyl alcohol	3.477	59	838725	11.13	ppbV	100
27) 1,1-Dichloroethane	3.821	63	740756	10.80	ppbV	100
28) 1,2-Dichloroethene (cis)	4.249	61	566091	11.38	ppbV	100
29) Cyclohexane	4.432	56	671377	10.87	ppbV	100
30) Chloroform	4.474	83	855198	11.12	ppbV	100
31) Ethyl acetate	4.564	45	139805	10.68	ppbV	100
32) Carbon tetrachloride	4.596	117	858451	10.94	ppbV	100
33) Tetrahydrofuran	4.599	42	522056	11.29	ppbV	100
34) 1,1,1-Trichloroethane	4.647	97	766176	10.58	ppbV	100
35) Methyl ethyl ketone	4.708	43	833728	10.89	ppbV	100
36) n-Heptane	4.943	43	759296	10.49	ppbV	100
37) Benzene	4.956	78	1189688	10.85	ppbV	100
38) 1,2-Dichloroethane	5.113	62	556426	11.09	ppbV	100
40) Trichloroethene	5.457	130	474332	10.38	ppbV	100
41) 2,2,4-Trimethylpentane	4.866	57	2034499	11.30	ppbV	100
42) 1,2-Dichloropropane	5.914	63	465873	11.11	ppbV	100
43) Bromodichloromethane	5.972	83	869300	11.90	ppbV	100
44) Methyl methacrylate	6.120	41	570433	10.89	ppbV	100
45) 1,4-Dioxane	6.146	88	282524	11.84	ppbV	100
46) cis-1,3-Dichloropropene	6.567	75	703032	11.34	ppbV	100
47) Toluene	6.801	91	1414424	10.93	ppbV	100
48) Methyl isobutyl ketone	7.171	43	1002006	10.59	ppbV	100
49) Tetrachloroethene	7.191	166	560367	11.43	ppbV	100
50) trans-1,3-Dichloropropene	7.210	75	693708	11.64	ppbV	100
51) 1,1,2-Trichloroethane	7.371	97	480731	10.75	ppbV	100

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6558std03.D
Acq On : 29 May 2024 1:46 pm
Operator : jjw
Sample : 10 ppbv std
Misc : EB0103704
ALS Vial : 5 Sample Multiplier: 1

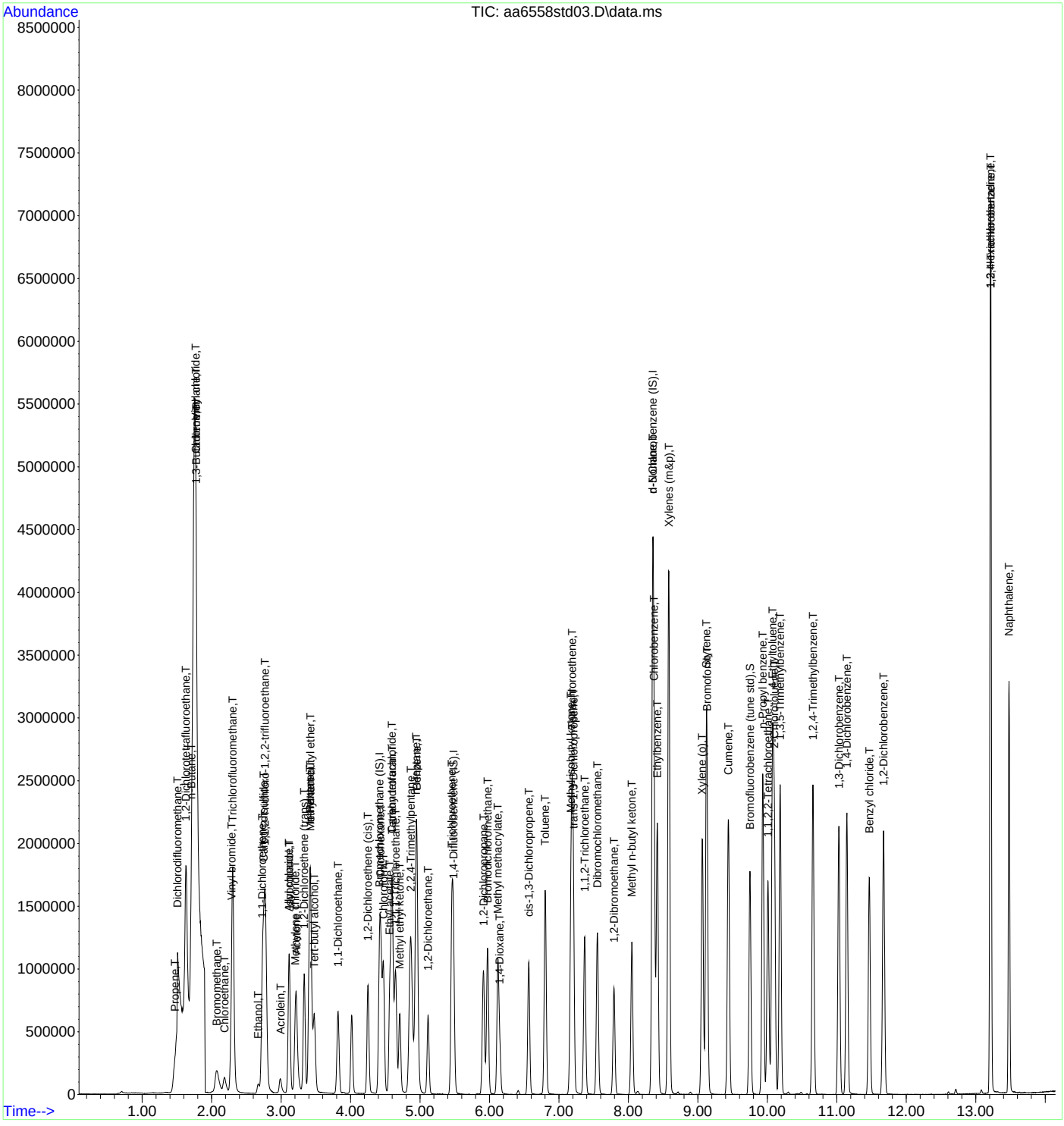
Quant Time: May 29 16:05:30 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.554	129	815306	11.44	ppbV	100
53) 1,2-Dibromoethane	7.792	107	703423	10.98	ppbV	100
54) Methyl n-butyl ketone	8.049	43	950190	10.72	ppbV	100
56) n-Nonane	8.351	43	1100770	10.10	ppbV	100
57) Chlorobenzene	8.371	112	1042681	10.79	ppbV	100
58) Ethylbenzene	8.416	91	1897518	10.32	ppbV	100
59) Xylenes (m&p)	8.583	91	2917626	21.11	ppbV	100
60) Xylene (o)	9.062	91	1486045	10.21	ppbV	100
61) Styrene	9.123	104	1068093	11.04	ppbV	100
62) Bromoform	9.133	173	727324	11.20	ppbV	100
63) Cumene	9.438	105	1861677	10.03	ppbV	100
65) n-Propyl benzene	9.933	91	2515170	9.85	ppbV	100
66) 1,1,2,2-Tetrachloroethane	10.010	83	1133749	10.58	ppbV	100
67) 4-Ethyltoluene	10.075	105	2077120	9.98	ppbV	100
68) 2-Chlorotoluene	10.100	91	1731846	10.00	ppbV	100
69) 1,3,5-Trimethylbenzene	10.184	105	1713250	10.12	ppbV	100
70) 1,2,4-Trimethylbenzene	10.657	105	1715919	10.10	ppbV	100
71) 1,3-Dichlorobenzene	11.033	146	1027727	9.97	ppbV	100
72) 1,4-Dichlorobenzene	11.145	146	1035040	9.93	ppbV	100
73) Benzyl chloride	11.470	91	1572204	9.38	ppbV	100
74) 1,2-Dichlorobenzene	11.673	146	997427	10.06	ppbV	100
75) 1,3-Hexachlorobutadiene	13.213	225	606322	10.63	ppbV	100
76) 1,2,4-Trichlorobenzene	13.216	180	807618	10.51	ppbV	100
77) Naphthalene	13.480	128	1975571	9.09	ppbV	100

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

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6558std03.D
Acq On : 29 May 2024 1:46 pm
Operator : jjw
Sample : 10 ppbv std
Misc : EB0103704
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 29 16:05:30 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration



Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6559std02.D
Acq On : 29 May 2024 2:18 pm
Operator : jjw
Sample : 20 ppbv std
Misc : EB0103704
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 29 16:06:18 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.425	130	232784	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.480	114	1025078	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.354	117	911734	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.750	95	829134	9.61	ppbV	0.000
Target Compounds						Qvalue
2) Propene	1.480	41	544013	22.27	ppbV	97
3) Dichlorodifluoromethane	1.516	85	1512429	22.69	ppbV	100
4) 1,2-Dichlorotetrafluor...	1.636	85	1917229	20.52	ppbV	99
5) n-Butane	1.715	43	1106377	21.93	ppbV	97
6) Chloromethane	1.784	52	114751	27.62	ppbV	97
7) Vinyl chloride	1.777	62	731193	23.83	ppbV	100
8) 1,3-Butadiene	1.781	39	644220	22.65	ppbV	98
9) Bromomethane	2.078	94	545831	22.76	ppbV	99
10) Chloroethane	2.191	64	409088	23.46	ppbV	98
11) Vinyl bromide	2.287	106	660638	22.72	ppbV	99
12) Trichlorofluoromethane	2.310	101	1799897	23.45	ppbV	99
13) Ethanol	2.673	45	235242	19.64	ppbV	99
14) 1,1-Dichloroethene	2.731	61	1347624	22.82	ppbV	99
15) Carbon disulfide	2.756	76	2282103	23.20	ppbV	100
16) 1,1,2-Trichloro-1,2,2-...	2.776	101	1569935	21.65	ppbV	100
17) Acrolein	2.998	56	284325	21.64	ppbV	99
18) Allyl chloride	3.120	76	359809	23.81	ppbV	100
19) Isopropanol	3.123	45	1275369	19.42	ppbV	99
20) Methylene chloride	3.210	49	885621	21.06	ppbV	100
21) Acetone	3.229	43	1157082	22.15	ppbV	100
22) 1,2-Dichloroethene (tr...	3.335	61	1273151	23.84	ppbV	99
23) n-Pentane	3.419	43	1394842	21.86	ppbV	98
24) n-Hexane	3.416	57	2025556	22.66	ppbV	99
25) Methyl tert-butyl ether	3.422	73	2350847	22.05	ppbV	98
26) Tert-butyl alcohol	3.477	59	1738663	23.86	ppbV	100
27) 1,1-Dichloroethane	3.824	63	1506683	22.74	ppbV	100
28) 1,2-Dichloroethene (cis)	4.255	61	1148289	23.87	ppbV	100
29) Cyclohexane	4.435	56	1340930	22.47	ppbV	99
30) Chloroform	4.477	83	1737844	23.38	ppbV	99
31) Ethyl acetate	4.567	45	293619	23.20	ppbV	98
32) Carbon tetrachloride	4.596	117	1697695	22.38	ppbV	99
33) Tetrahydrofuran	4.599	42	1068142	23.90	ppbV	99
34) 1,1,1-Trichloroethane	4.647	97	1550092	22.14	ppbV	100
35) Methyl ethyl ketone	4.708	43	1731666	23.39	ppbV	100
36) n-Heptane	4.943	43	1544562	22.07	ppbV	100
37) Benzene	4.956	78	2404288	22.69	ppbV	99
38) 1,2-Dichloroethane	5.120	62	1132565	23.36	ppbV	99
40) Trichloroethene	5.461	130	964688	20.81	ppbV	99
41) 2,2,4-Trimethylpentane	4.866	57	4042916	22.15	ppbV	100
42) 1,2-Dichloropropane	5.914	63	948199	22.29	ppbV	100
43) Bromodichloromethane	5.975	83	1765068	23.83	ppbV	97
44) Methyl methacrylate	6.123	41	1190229	22.40	ppbV	100
45) 1,4-Dioxane	6.145	88	584840	24.17	ppbV	99
46) cis-1,3-Dichloropropene	6.567	75	1439187	22.89	ppbV	100
47) Toluene	6.805	91	2835950	21.61	ppbV	100
48) Methyl isobutyl ketone	7.174	43	2033609	21.19	ppbV	100
49) Tetrachloroethene	7.190	166	1107096	22.27	ppbV	100
50) trans-1,3-Dichloropropene	7.210	75	1416746	23.45	ppbV	100
51) 1,1,2-Trichloroethane	7.374	97	984279	21.71	ppbV	99

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6559std02.D
Acq On : 29 May 2024 2:18 pm
Operator : jjw
Sample : 20 ppbv std
Misc : EB0103704
ALS Vial : 6 Sample Multiplier: 1

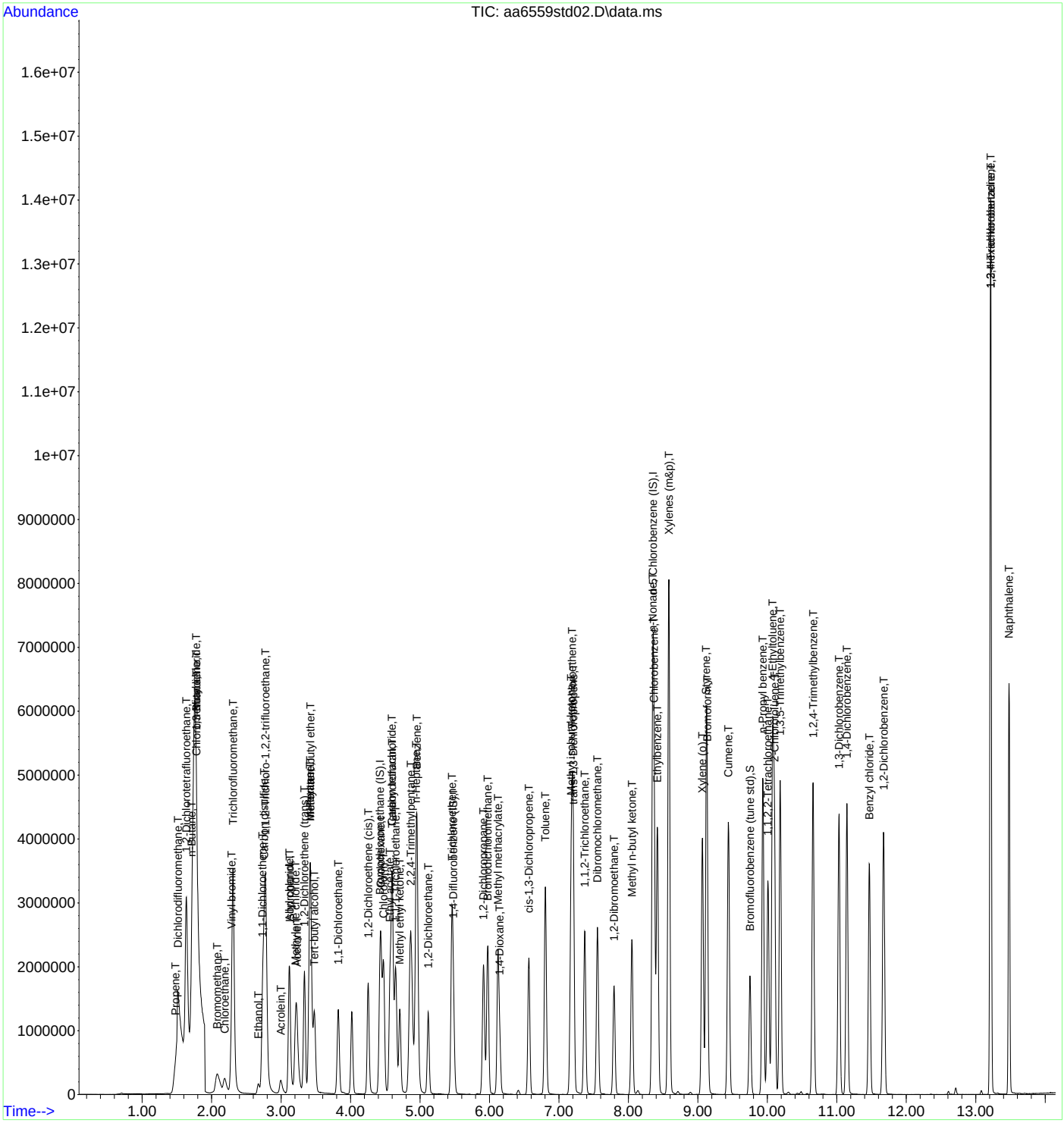
Quant Time: May 29 16:06:18 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.554	129	1649262	22.82	ppbV	100
53) 1,2-Dibromoethane	7.795	107	1420547	21.86	ppbV	100
54) Methyl n-butyl ketone	8.052	43	1958802	21.80	ppbV	100
56) n-Nonane	8.348	43	2150653	20.18	ppbV	99
57) Chlorobenzene	8.370	112	2068748	21.91	ppbV	100
58) Ethylbenzene	8.415	91	3750723	20.87	ppbV	100
59) Xylenes (m&p)	8.583	91	5702458	42.21	ppbV	99
60) Xylene (o)	9.065	91	2980281	20.95	ppbV	99
61) Styrene	9.120	104	2110477	22.31	ppbV	100
62) Bromoform	9.136	173	1438600	22.67	ppbV	100
63) Cumene	9.438	105	3640428	20.06	ppbV	99
65) n-Propyl benzene	9.933	91	4978447	19.95	ppbV	100
66) 1,1,2,2-Tetrachloroethane	10.007	83	2248627	21.47	ppbV	100
67) 4-Ethyltoluene	10.074	105	4132186	20.31	ppbV	99
68) 2-Chlorotoluene	10.103	91	3429519	20.26	ppbV	100
69) 1,3,5-Trimethylbenzene	10.184	105	3426622	20.70	ppbV	99
70) 1,2,4-Trimethylbenzene	10.660	105	3441480	20.73	ppbV	100
71) 1,3-Dichlorobenzene	11.033	146	2073260	20.57	ppbV	100
72) 1,4-Dichlorobenzene	11.145	146	2097540	20.59	ppbV	100
73) Benzyl chloride	11.470	91	3274358	19.99	ppbV	100
74) 1,2-Dichlorobenzene	11.676	146	1984761	20.48	ppbV	99
75) 1,3-Hexachlorobutadiene	13.216	225	1152385	20.66	ppbV	100
76) 1,2,4-Trichlorobenzene	13.216	180	1538918	20.48	ppbV	98
77) Naphthalene	13.479	128	3920601	18.46	ppbV	100

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

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6559std02.D
Acq On : 29 May 2024 2:18 pm
Operator : jjw
Sample : 20 ppbv std
Misc : EB0103704
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 29 16:06:18 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration



Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6560std01.D
Acq On : 29 May 2024 2:55 pm
Operator : jjw
Sample : 40 ppbv std
Misc : EB0103704
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 29 15:33:09 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.438	130	259539	10.00	ppbV		0.026
39) 1,4-Difluorobenzene (IS)	5.490	114	1398154	10.00	ppbV		0.014
55) d-5 Chlorobenzene (IS)	8.351	117	1151205	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.750	95	1414587	13.70	ppbV		0.000
Target Compounds							Qvalue
2) Propene	1.523	41	1142227	39.26	ppbV		100
3) Dichlorodifluoromethane	1.550	85	3265934	50.06	ppbV		100
4) 1,2-Dichlorotetrafluor...	1.664	85	4649559	49.37	ppbV		97
5) n-Butane	1.750	43	2608188	40.60	ppbV		100
6) Chloromethane	1.815	52	204731	48.69	ppbV		88
7) Vinyl chloride	1.815	62	1570322	48.59	ppbV		99
8) 1,3-Butadiene	1.818	39	1425634	38.81	ppbV		98
9) Bromomethane	2.120	94	1037392	44.51	ppbV		98
10) Chloroethane	2.216	64	905256	50.82	ppbV		99
11) Vinyl bromide	2.310	106	1463102	54.50	ppbV		100
12) Trichlorofluoromethane	2.335	101	4076568	53.50	ppbV		99
13) Ethanol	2.692	45	573243	48.16	ppbV		91
14) 1,1-Dichloroethene	2.760	61	3078402	52.09	ppbV		95
15) Carbon disulfide	2.779	76	5033811	53.65	ppbV		96
16) 1,1,2-Trichloro-1,2,2-...	2.798	101	4030555	53.48	ppbV		97
17) Acrolein	3.017	56	677189	47.80	ppbV		100
18) Allyl chloride	3.142	76	772500	52.45	ppbV		100
19) Isopropanol	3.146	45	2972095	39.43	ppbV		98
20) Methylene chloride	3.229	49	2020607	48.06	ppbV		87
21) Acetone	3.245	43	2690258	46.34	ppbV		96
22) 1,2-Dichloroethene (tr...	3.355	61	3218797	62.26	ppbV		93
23) n-Pentane	3.435	43	3685172	50.56	ppbV		100
24) n-Hexane	3.432	57	5415528	51.83	ppbV		95
25) Methyl tert-butyl ether	3.441	73	6341672	54.05	ppbV		99
26) Tert-butyl alcohol	3.496	59	4670327	56.35	ppbV		100
27) 1,1-Dichloroethane	3.843	63	3710731	53.46	ppbV		99
28) 1,2-Dichloroethene (cis)	4.268	61	2829337	56.82	ppbV		93
29) Cyclohexane	4.445	56	3618784	51.25	ppbV		92
30) Chloroform	4.486	83	4388064	60.64	ppbV		100
31) Ethyl acetate	4.580	45	803157	53.77	ppbV		93
32) Carbon tetrachloride	4.605	117	4499351	60.76	ppbV		100
33) Tetrahydrofuran	4.612	42	2700255	49.65	ppbV		94
34) 1,1,1-Trichloroethane	4.660	97	4210588	60.26	ppbV		100
35) Methyl ethyl ketone	4.718	43	4819880	55.58	ppbV		95
36) n-Heptane	4.956	43	4385464	48.40	ppbV		92
37) Benzene	4.969	78	6358079	58.39	ppbV		97
38) 1,2-Dichloroethane	5.126	62	3005422	60.84	ppbV		100
40) Trichloroethene	5.467	130	2608762	46.76	ppbV		99
41) 2,2,4-Trimethylpentane	4.875	57	10374158	38.27	ppbV		99
42) 1,2-Dichloropropane	5.924	63	2722594	44.56	ppbV		99
43) Bromodichloromethane	5.981	83	4805129	49.38	ppbV		100
44) Methyl methacrylate	6.123	41	3568315	41.17	ppbV		92
45) 1,4-Dioxane	6.152	88	1658461	50.67	ppbV		94
46) cis-1,3-Dichloropropene	6.573	75	4001330	46.35	ppbV		100
47) Toluene	6.811	91	8006090	44.44	ppbV		99
48) Methyl isobutyl ketone	7.174	43	6079413	37.73	ppbV		96
49) Tetrachloroethene	7.197	166	2999039	48.20	ppbV		100
50) trans-1,3-Dichloropropene	7.216	75	3865763	47.06	ppbV	#	70
51) 1,1,2-Trichloroethane	7.377	97	2879234	48.35	ppbV		97

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6560std01.D
Acq On : 29 May 2024 2:55 pm
Operator : jjw
Sample : 40 ppbv std
Misc : EB0103704
ALS Vial : 7 Sample Multiplier: 1

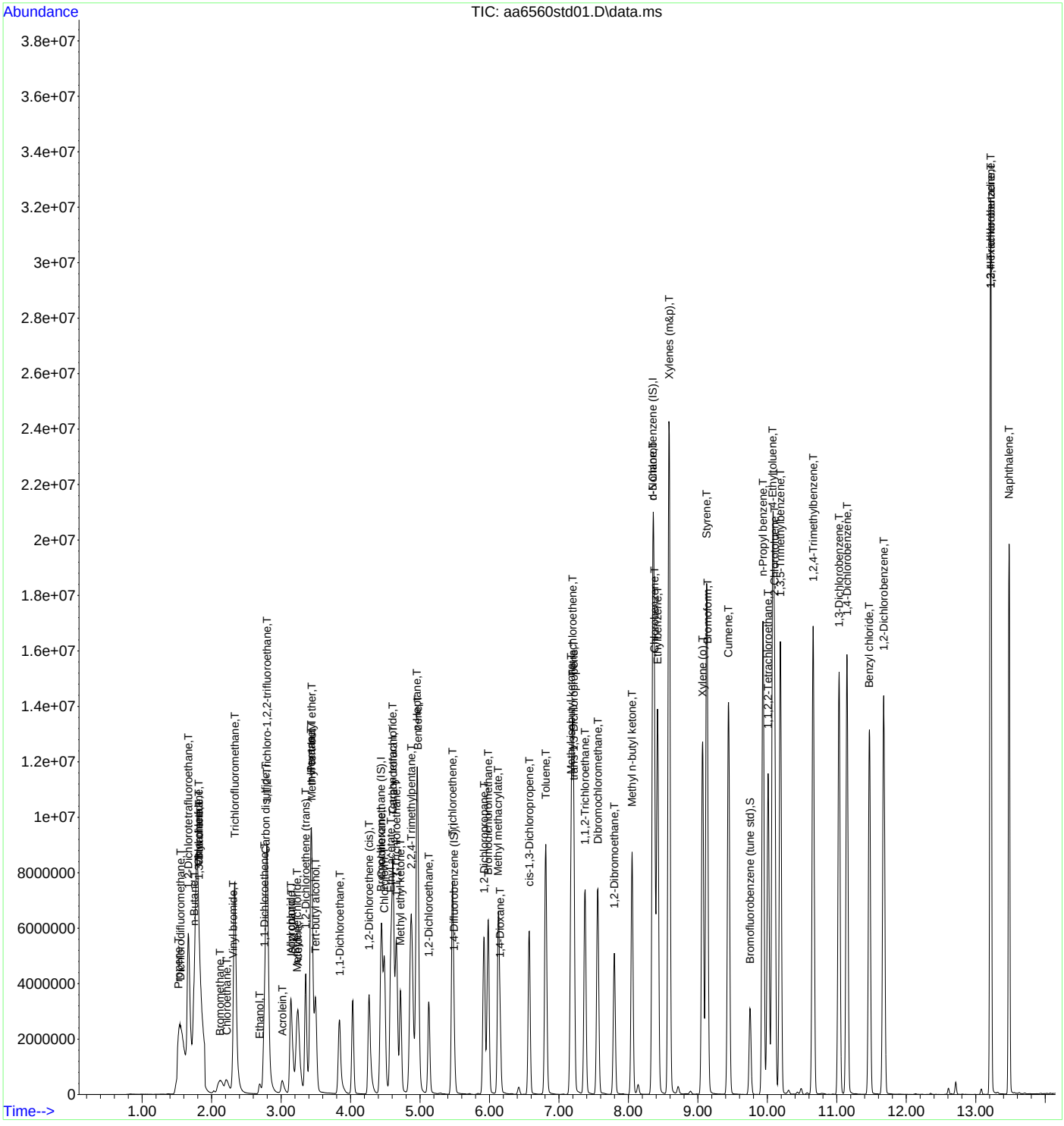
Quant Time: May 29 15:33:09 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.560	129	4789120	52.49	ppbV	100
53) 1,2-Dibromoethane	7.798	107	4214665	49.82	ppbV	100
54) Methyl n-butyl ketone	8.052	43	6940012	48.04	ppbV	96
56) n-Nonane	8.351	43	7555637	47.30	ppbV	91
57) Chlorobenzene	8.377	112	6019868	54.26	ppbV	97
58) Ethylbenzene	8.419	91	12459258	56.39	ppbV	98
59) Xylenes (m&p)	8.586	91	17915958	108.01	ppbV	98
60) Xylene (o)	9.068	91	9769196	55.51	ppbV	98
61) Styrene	9.126	104	6854147	60.05	ppbV	99
62) Bromoform	9.139	173	4428252	62.69	ppbV	99
63) Cumene	9.441	105	12273690	55.33	ppbV	99
65) n-Propyl benzene	9.936	91	17652384	58.75	ppbV	97
66) 1,1,2,2-Tetrachloroethane	10.010	83	7720543	59.17	ppbV	100
67) 4-Ethyltoluene	10.075	105	14639002	61.29	ppbV	98
68) 2-Chlorotoluene	10.103	91	11857804	58.29	ppbV	99
69) 1,3,5-Trimethylbenzene	10.187	105	11719331	59.58	ppbV	100
70) 1,2,4-Trimethylbenzene	10.660	105	12098566	62.04	ppbV	99
71) 1,3-Dichlorobenzene	11.033	146	7325087	68.56	ppbV	99
72) 1,4-Dichlorobenzene	11.148	146	7443078	68.71	ppbV	99
73) Benzyl chloride	11.467	91	12122899	66.89	ppbV	97
74) 1,2-Dichlorobenzene	11.676	146	6872332	64.83	ppbV	99
75) 1,3-Hexachlorobutadiene	13.216	225	2887878	50.17	ppbV	100
76) 1,2,4-Trichlorobenzene	13.216	180	4161678	52.94	ppbV	99
77) Naphthalene	13.480	128	12094453	55.40	ppbV	98

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

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6560std01.D
Acq On : 29 May 2024 2:55 pm
Operator : jjw
Sample : 40 ppbv std
Misc : EB0103704
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 29 15:33:09 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES, LLC

Initial Calibration Verification Sample Standard

Lab Sample Name: 10 PPBV ICVSS **Data File:** AA6026ICVSS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 3/27/2024

Amount of standard injected (ml): 50

Runs with this ICVSS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6020BFB]	03/27/2024 10:03
0.2 PPBV STD [AA6021STD05]	03/27/2024 10:38
2 PPBV STD [AA6022STD04]	03/27/2024 11:38
10 PPBV STD [AA6023STD03]	03/27/2024 12:09
20 PPBV STD [AA6024STD02]	03/27/2024 12:40
40 PPBV STD [AA6025STD01]	03/27/2024 13:24
10 PPBV ICVSS [AA6026ICVSS]	03/27/2024 13:54
10 PPBV LCS [AA6027LCS]	03/27/2024 14:23
METHOD BLANK [AA6028BLK]	03/27/2024 14:51

Compound	CAS #	Injected Amount (ppbv)	Recovered Amount (ppbv)	% Recovery	QC Limit
Acetone	67-64-1	11	10	95	
Acrolein	107-02-8	9.4	9.8	100	
Allyl Chloride	107-05-1	11	11	99	
Benzene	71-43-2	10	9.7	93	
Benzyl chloride	100-44-7	11	10	93	
Bromodichloromethane	75-27-4	11	11	100	
Bromoform	75-25-2	11	12	110	
Bromomethane	74-83-9	11	11	100	
1,3-Butadiene	106-99-0	11	9.4	86	
n-Butane	106-97-8	11	9.5	90	
Chlorobenzene	108-90-7	10	11	110	
Chloroethane	75-00-3	9.8	11	110	
Chloroform	67-66-3	11	10	92	
Chloromethane	74-87-3	9.9	11	110	
Carbon disulfide	75-15-0	10	11	110	
Carbon tetrachloride	56-23-5	11	10.0	93	
2-Chlorotoluene	95-49-8	11	11	100	
Cumene	98-82-8	10	10	99	
Cyclohexane	110-82-7	11	9.8	90	
Dibromochloromethane	124-48-1	11	11	100	
1,2-Dibromoethane	106-93-4	11	11	100	
1,2-Dichlorobenzene	95-50-1	10	11	110	
1,3-Dichlorobenzene	541-73-1	10	11	110	
1,4-Dichlorobenzene	106-46-7	10	11	110	
Dichlorodifluoromethane	75-71-8	11	11	100	
1,1-Dichloroethane	75-34-3	11	9.6	91	
1,2-Dichloroethane	107-06-2	11	10	95	
1,1-Dichloroethene	75-35-4	11	11	100	
1,2-Dichloroethene (cis)	156-59-2	10	10	97	
1,2-Dichloroethene (trans)	156-60-5	11	11	100	
1,2-Dichloropropane	78-87-5	11	10	95	
1,3-Dichloropropene (cis)	10061-01-5	9.9	11	110	
1,3-Dichloropropene (trans)	10061-02-6	11	11	100	
1,2-Dichlorotetrafluoroethane	76-14-2	11	8.9	79	
1,4-Dioxane	123-91-1	11	11	98	
Ethanol	64-17-5	9.8	11	110	
Ethyl acetate	141-78-6	10	9.8	95	
Ethylbenzene	100-41-4	10	11	110	

ICVSS recovery must be within 70-130% of the spiked value for all compounds.

*** Values outside of QC limits**

INTEGRATED ANALYTICAL LABORATORIES, LLC

Initial Calibration Verification Sample Standard

Lab Sample Name: 10 PPBV ICVSS **Data File:** AA6026ICVSS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 3/27/2024

Amount of standard injected (ml): 50

Runs with this ICVSS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6020BFB]	03/27/2024 10:03
0.2 PPBV STD [AA6021STD05]	03/27/2024 10:38
2 PPBV STD [AA6022STD04]	03/27/2024 11:38
10 PPBV STD [AA6023STD03]	03/27/2024 12:09
20 PPBV STD [AA6024STD02]	03/27/2024 12:40
40 PPBV STD [AA6025STD01]	03/27/2024 13:24
10 PPBV ICVSS [AA6026ICVSS]	03/27/2024 13:54
10 PPBV LCS [AA6027LCS]	03/27/2024 14:23
METHOD BLANK [AA6028BLK]	03/27/2024 14:51

Compound	CAS #	Injected Amount (ppbv)	Recovered Amount (ppbv)	% Recovery	QC Limit
4-Ethyltoluene	622-96-8	11	11	100	
n-Heptane	142-82-5	11	9.2	84	
1,3-Hexachlorobutadiene	87-68-3	9.8	12	120	
n-Hexane	110-54-3	11	9.3	86	
Isopropanol	67-63-0	8.1	8.6	110	
Methylene chloride	75-09-2	11	10	93	
Methyl ethyl ketone	78-93-3	11	9.7	89	
Methyl isobutyl ketone	108-10-1	10	10	97	
Methyl methacrylate	80-62-6	11	10	93	
Methyl n-butyl ketone	591-78-6	11	11	99	
Methyl tert-butyl ether	1634-04-4	11	9.9	91	
Naphthalene	91-20-3	11	10	93	
n-Nonane	111-84-2	11	10	89	
n-Pentane	109-66-0	11	9.5	86	
Propene	115-07-1	11	10	91	
n-Propyl benzene	103-65-1	11	11	100	
Styrene	100-42-5	11	12	110	
Tert-butyl alcohol	75-65-0	12	10	87	
1,1,2,2-Tetrachloroethane	79-34-5	10	11	110	
Tetrachloroethene	127-18-4	12	11	93	
Tetrahydrofuran	109-99-9	11	9.8	92	
Toluene	108-88-3	11	10	95	
1,2,4-Trichlorobenzene	120-82-1	10	11	110	
1,1,1-Trichloroethane	71-55-6	11	10.0	93	
1,1,2-Trichloroethane	79-00-5	11	11	100	
Trichloroethene	79-01-6	10	10	98	
Trichlorofluoromethane	75-69-4	11	10	94	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	11	9.5	87	
1,2,4-Trimethylbenzene	95-63-6	10	11	110	
1,3,5-Trimethylbenzene	108-67-8	10	11	110	
2,2,4-Trimethylpentane	540-84-1	11	11	100	
Vinyl bromide	593-60-2	10	11	110	
Vinyl chloride	75-01-4	11	11	97	
Xylenes (m&p)	179601-23-1	21	22	110	
Xylenes (o)	95-47-6	10	11	110	

ICVSS recovery must be within 70-130% of the spiked value for all compounds.

*** Values outside of QC limits**

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6026icvss.D
Acq On : 27 Mar 2024 1:54 pm
Operator : jjw
Sample : 10 ppbv icvss
Misc : EB0116272
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 27 15:15:48 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.412	130	412561	10.00	ppbV		0.000
39) 1,4-Difluorobenzene (IS)	5.480	114	1549110	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.351	117	1439709	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.753	95	1278623	9.90	ppbV		0.000
Target Compounds							Qvalue
2) Propene	1.464	41	475494	10.28	ppbV		99
3) Dichlorodifluoromethane	1.499	85	1104507	10.65	ppbV		100
4) 1,2-Dichlorotetrafluor...	1.626	85	1330698	8.89	ppbV		100
5) n-Butane	1.708	43	967137	9.47	ppbV		100
6) Chloromethane	1.777	52	72189	10.80	ppbV		98
7) Vinyl chloride	1.763	62	575895	11.21	ppbV		100
8) 1,3-Butadiene	1.777	39	546190	9.35	ppbV		98
9) Bromomethane	2.065	94	393236	10.61	ppbV		99
10) Chloroethane	2.178	64	303187	10.71	ppbV		99
11) Vinyl bromide	2.284	106	452505	10.60	ppbV		100
12) Trichlorofluoromethane	2.300	101	1216885	10.05	ppbV		100
13) Ethanol	2.666	45	207336	10.96	ppbV		99
14) 1,1-Dichloroethene	2.727	61	992472	10.57	ppbV		99
15) Carbon disulfide	2.747	76	1666779	11.18	ppbV		98
16) 1,1,2-Trichloro-1,2,2-...	2.772	101	1132241	9.45	ppbV		100
17) Acrolein	2.985	56	220833	9.81	ppbV		99
18) Allyl chloride	3.110	76	260732	11.14	ppbV		100
19) Isopropanol	3.116	45	1035442	8.64	ppbV		99
20) Methylene chloride	3.206	49	690106	10.33	ppbV		98
21) Acetone	3.219	43	937159	10.15	ppbV		99
22) trans-1,2-Dichloroethene	3.329	61	906530	11.03	ppbV		98
23) n-Pentane	3.419	43	1099645	9.49	ppbV		99
24) n-Hexane	3.415	57	1549072	9.33	ppbV		99
25) Methyl tert-butyl ether	3.419	73	1838970	9.86	ppbV		99
26) Tert-butyl alcohol	3.477	59	1321541	10.03	ppbV		100
27) 1,1-Dichloroethane	3.817	63	1062879	9.63	ppbV		100
28) cis-1,2-Dichloroethene	4.248	61	815216	10.30	ppbV		98
29) Cyclohexane	4.428	56	1096558	9.77	ppbV		99
30) Chloroform	4.473	83	1155306	10.04	ppbV		100
31) Ethyl acetate	4.563	45	232266	9.78	ppbV		100
32) Carbon tetrachloride	4.592	117	1173270	9.97	ppbV		99
33) Tetrahydrofuran	4.599	42	850975	9.84	ppbV		99
34) 1,1,1-Trichloroethane	4.647	97	1105121	9.95	ppbV		100
35) Methyl ethyl ketone	4.705	43	1341717	9.73	ppbV		99
36) n-Heptane	4.940	43	1331974	9.25	ppbV		99
37) Benzene	4.952	78	1670578	9.65	ppbV		99
38) 1,2-Dichloroethane	5.116	62	786513	10.02	ppbV		100
40) Trichloroethene	5.457	130	619937	10.03	ppbV		99
41) 2,2,4-Trimethylpentane	4.866	57	3352145	11.16	ppbV		100
42) 1,2-Dichloropropane	5.911	63	701536	10.36	ppbV		98
43) Bromodichloromethane	5.972	83	1199833	11.13	ppbV		100
44) Methyl methacrylate	6.120	41	992841	10.34	ppbV		98
45) 1,4-Dioxane	6.145	88	413468	11.40	ppbV		99
46) cis-1,3-Dichloropropene	6.563	75	1043355	10.91	ppbV		100
47) Toluene	6.801	91	2073818	10.39	ppbV		99
48) Methyl isobutyl ketone	7.171	43	1818620	10.19	ppbV		99
49) Tetrachloroethene	7.190	166	757501	10.99	ppbV		99
50) trans-1,3-Dichloropropene	7.210	75	1026774	11.28	ppbV	#	74
51) 1,1,2-Trichloroethane	7.370	97	693315	10.51	ppbV		100

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6026icvss.D
Acq On : 27 Mar 2024 1:54 pm
Operator : jjw
Sample : 10 ppbv icvss
Misc : EB0116272
ALS Vial : 9 Sample Multiplier: 1

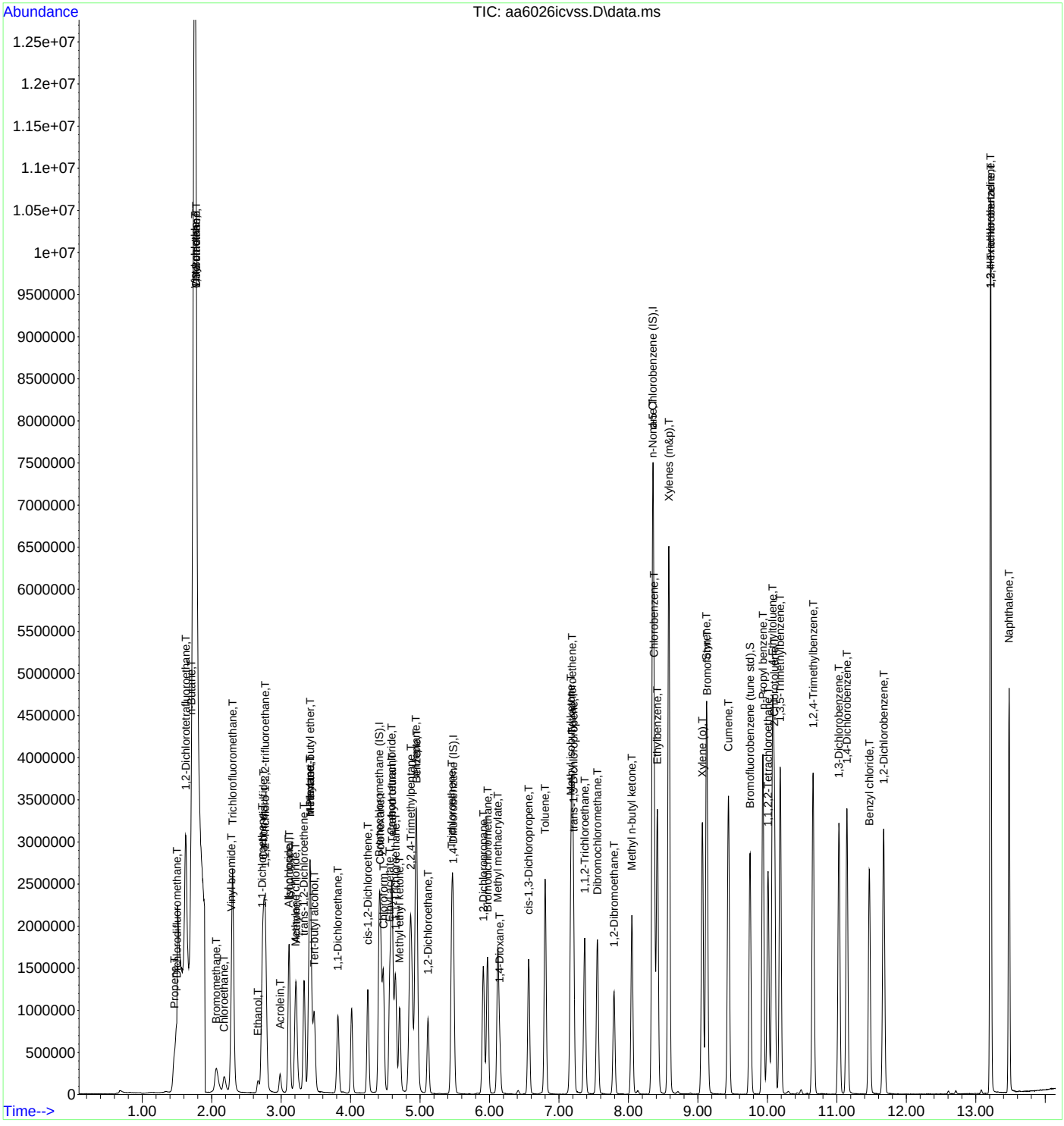
Quant Time: Mar 27 15:15:48 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.554	129	1126782	11.15	ppbV	100
53) 1,2-Dibromoethane	7.795	107	1018722	10.87	ppbV	100
54) Methyl n-butyl ketone	8.049	43	1737007	10.85	ppbV	99
56) n-Nonane	8.348	43	2077560	10.40	ppbV	99
57) Chlorobenzene	8.370	112	1522555	10.97	ppbV	99
58) Ethylbenzene	8.415	91	2944785	10.66	ppbV	100
59) Xylenes (m&p)	8.582	91	4502045	21.70	ppbV	99
60) Xylene (o)	9.065	91	2338527	10.62	ppbV	99
61) Styrene	9.123	104	1642349	11.51	ppbV	100
62) Bromoform	9.132	173	1020022	11.55	ppbV	100
63) Cumene	9.441	105	2894207	10.43	ppbV	100
65) n-Propyl benzene	9.936	91	3971971	10.57	ppbV	100
66) 1,1,2,2-Tetrachloroethane	10.010	83	1799038	11.02	ppbV	100
67) 4-Ethyltoluene	10.074	105	3189380	10.68	ppbV	100
68) 2-Chlorotoluene	10.100	91	2710501	10.65	ppbV	100
69) 1,3,5-Trimethylbenzene	10.184	105	2663260	10.83	ppbV	100
70) 1,2,4-Trimethylbenzene	10.660	105	2637313	10.81	ppbV	100
71) 1,3-Dichlorobenzene	11.029	146	1488697	11.14	ppbV	100
72) 1,4-Dichlorobenzene	11.145	146	1490219	11.00	ppbV	99
73) Benzyl chloride	11.470	91	2375182	10.48	ppbV	100
74) 1,2-Dichlorobenzene	11.676	146	1438933	10.85	ppbV	99
75) 1,3-Hexachlorobutadiene	13.212	225	830103	11.53	ppbV	100
76) 1,2,4-Trichlorobenzene	13.216	180	1123582	11.43	ppbV	99
77) Naphthalene	13.479	128	2825715	10.35	ppbV	100

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

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6026icvss.D
Acq On : 27 Mar 2024 1:54 pm
Operator : jjw
Sample : 10 ppbv icvss
Misc : EB0116272
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 27 15:15:48 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES, LLC

Initial Calibration Verification Sample Standard

Lab Sample Name: 10 PPBV ICVSS **Data File:** AA6561ICVSS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 5/29/2024

Amount of standard injected (ml): 50

Runs with this ICVSS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6554BFB]	05/29/2024 9:16
0.2 PPBV STD [AA6556STD05]	05/29/2024 12:40
2 PPBV STD [AA6557STD04]	05/29/2024 13:11
10 PPBV STD [AA6558STD03]	05/29/2024 13:46
20 PPBV STD [AA6559STD02]	05/29/2024 14:18
40 PPBV STD [AA6560STD01]	05/29/2024 14:55
10 PPBV ICVSS [AA6561ICVSS]	05/29/2024 17:16

Compound	CAS #	Injected Amount (ppbv)	Recovered Amount (ppbv)	% Recovery	QC Limit
Acetone	67-64-1	11	12	110	
Acrolein	107-02-8	9.4	11	120	
Allyl Chloride	107-05-1	11	12	110	
Benzene	71-43-2	10	11	110	
Benzyl chloride	100-44-7	11	9.6	89	
Bromodichloromethane	75-27-4	11	12	110	
Bromoform	75-25-2	11	11	96	
Bromomethane	74-83-9	11	12	110	
1,3-Butadiene	106-99-0	11	12	110	
n-Butane	106-97-8	11	12	110	
Chlorobenzene	108-90-7	10	11	110	
Chloroethane	75-00-3	9.8	12	120	
Chloroform	67-66-3	11	11	100	
Chloromethane	74-87-3	9.9	13	130	
Carbon disulfide	75-15-0	10	12	120	
Carbon tetrachloride	56-23-5	11	11	100	
2-Chlorotoluene	95-49-8	11	10	91	
Cumene	98-82-8	10	10	99	
Cyclohexane	110-82-7	11	12	110	
Dibromochloromethane	124-48-1	11	11	100	
1,2-Dibromoethane	106-93-4	11	11	100	
1,2-Dichlorobenzene	95-50-1	10	10	97	
1,3-Dichlorobenzene	541-73-1	10	10	96	
1,4-Dichlorobenzene	106-46-7	10	10	97	
Dichlorodifluoromethane	75-71-8	11	11	100	
1,1-Dichloroethane	75-34-3	11	12	110	
1,2-Dichloroethane	107-06-2	11	11	100	
1,1-Dichloroethene	75-35-4	11	12	110	
1,2-Dichloroethene (cis)	156-59-2	10	12	120	
1,2-Dichloroethene (trans)	156-60-5	11	12	110	
1,2-Dichloropropane	78-87-5	11	11	100	
1,3-Dichloropropene (cis)	10061-01-5	9.9	12	120	
1,3-Dichloropropene (trans)	10061-02-6	11	12	110	
1,2-Dichlorotetrafluoroethane	76-14-2	11	10	89	
1,4-Dioxane	123-91-1	11	12	110	
Ethanol	64-17-5	9.8	10	100	
Ethyl acetate	141-78-6	10	12	120	
Ethylbenzene	100-41-4	10	11	110	
4-Ethyltoluene	622-96-8	11	10	93	
n-Heptane	142-82-5	11	11	100	

ICVSS recovery must be within 70-130% of the spiked value for all compounds.

*** Values outside of QC limits**

INTEGRATED ANALYTICAL LABORATORIES, LLC

Initial Calibration Verification Sample Standard

Lab Sample Name: 10 PPBV ICVSS **Data File:** AA6561ICVSS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 5/29/2024

Amount of standard injected (ml): 50

Runs with this ICVSS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6554BFB]	05/29/2024 9:16
0.2 PPBV STD [AA6556STD05]	05/29/2024 12:40
2 PPBV STD [AA6557STD04]	05/29/2024 13:11
10 PPBV STD [AA6558STD03]	05/29/2024 13:46
20 PPBV STD [AA6559STD02]	05/29/2024 14:18
40 PPBV STD [AA6560STD01]	05/29/2024 14:55
10 PPBV ICVSS [AA6561ICVSS]	05/29/2024 17:16

Compound	CAS #	Injected Amount (ppbv)	Recovered Amount (ppbv)	% Recovery	QC Limit
1,3-Hexachlorobutadiene	87-68-3	9.8	10	100	
n-Hexane	110-54-3	11	12	110	
Isopropanol	67-63-0	8.1	9.9	120	
Methylene chloride	75-09-2	11	11	100	
Methyl ethyl ketone	78-93-3	11	12	110	
Methyl isobutyl ketone	108-10-1	10	11	110	
Methyl methacrylate	80-62-6	11	12	110	
Methyl n-butyl ketone	591-78-6	11	11	99	
Methyl tert-butyl ether	1634-04-4	11	11	100	
Naphthalene	91-20-3	11	9.1	85	
n-Nonane	111-84-2	11	11	97	
n-Pentane	109-66-0	11	11	99	
Propene	115-07-1	11	12	110	
n-Propyl benzene	103-65-1	11	10.0	91	
Styrene	100-42-5	11	11	100	
Tert-butyl alcohol	75-65-0	12	12	100	
1,1,2,2-Tetrachloroethane	79-34-5	10	11	110	
Tetrachloroethene	127-18-4	12	11	93	
Tetrahydrofuran	109-99-9	11	12	110	
Toluene	108-88-3	11	11	100	
1,2,4-Trichlorobenzene	120-82-1	10	11	110	
1,1,1-Trichloroethane	71-55-6	11	11	100	
1,1,2-Trichloroethane	79-00-5	11	11	100	
Trichloroethene	79-01-6	10	10	98	
Trichlorofluoromethane	75-69-4	11	12	110	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	11	11	100	
1,2,4-Trimethylbenzene	95-63-6	10	10	100	
1,3,5-Trimethylbenzene	108-67-8	10	10	96	
2,2,4-Trimethylpentane	540-84-1	11	12	110	
Vinyl bromide	593-60-2	10	11	110	
Vinyl chloride	75-01-4	11	12	110	
Xylenes (m&p)	179601-23-1	21	22	110	
Xylenes (o)	95-47-6	10	11	110	

ICVSS recovery must be within 70-130% of the spiked value for all compounds.

*** Values outside of QC limits**

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6561icvss.D
Acq On : 29 May 2024 5:16 pm
Operator : jjw
Sample : 10 ppbv icvss
Misc : EB0116272
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 30 10:48:22 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.412	130	242079	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.480	114	1024301	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.354	117	930904	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.750	95	819051	9.30	ppbV	0.000
Target Compounds						Qvalue
2) Propene	1.470	41	295359	11.63	ppbV	98
3) Dichlorodifluoromethane	1.509	85	776026	11.20	ppbV	99
4) 1,2-Dichlorotetrafluor...	1.629	85	976935	10.06	ppbV	99
5) n-Butane	1.712	43	623050	11.87	ppbV	99
6) Chloromethane	1.774	52	56607	13.10	ppbV	94
7) Vinyl chloride	1.770	62	386689	12.12	ppbV	99
8) 1,3-Butadiene	1.777	39	340949	11.53	ppbV	99
9) Bromomethane	2.072	94	294022	11.79	ppbV	99
10) Chloroethane	2.181	64	215495	11.88	ppbV	100
11) Vinyl bromide	2.284	106	340589	11.26	ppbV	99
12) Trichlorofluoromethane	2.300	101	924702	11.59	ppbV	99
13) Ethanol	2.670	45	124849	10.02	ppbV	100
14) 1,1-Dichloroethene	2.731	61	722015	11.76	ppbV	98
15) Carbon disulfide	2.753	76	1220444	11.93	ppbV	100
16) 1,1,2-Trichloro-1,2,2-...	2.773	101	811936	10.77	ppbV	98
17) Acrolein	2.988	56	148588	10.87	ppbV	98
18) Allyl chloride	3.117	76	195404	12.43	ppbV	100
19) Isopropanol	3.117	45	678381	9.93	ppbV	99
20) Methylene chloride	3.207	49	473261	10.82	ppbV	98
21) Acetone	3.220	43	635449	11.70	ppbV	99
22) 1,2-Dichloroethene (tr...	3.332	61	675217	12.16	ppbV	96
23) n-Pentane	3.416	43	749023	11.29	ppbV	98
24) n-Hexane	3.419	57	1075039	11.56	ppbV	100
25) Methyl tert-butyl ether	3.422	73	1227288	11.07	ppbV	97
26) Tert-butyl alcohol	3.477	59	894849	11.81	ppbV	100
27) 1,1-Dichloroethane	3.821	63	793260	11.51	ppbV	99
28) 1,2-Dichloroethene (cis)	4.248	61	602979	12.05	ppbV	97
29) Cyclohexane	4.432	56	720408	11.61	ppbV	98
30) Chloroform	4.473	83	884482	11.44	ppbV	100
31) Ethyl acetate	4.567	45	153476	11.66	ppbV	98
32) Carbon tetrachloride	4.596	117	867346	11.00	ppbV	100
33) Tetrahydrofuran	4.596	42	564904	12.16	ppbV	98
34) 1,1,1-Trichloroethane	4.647	97	786581	10.80	ppbV	100
35) Methyl ethyl ketone	4.705	43	897094	11.65	ppbV	99
36) n-Heptane	4.940	43	823524	11.31	ppbV	98
37) Benzene	4.956	78	1222515	11.09	ppbV	100
38) 1,2-Dichloroethane	5.117	62	576924	11.44	ppbV	100
40) Trichloroethene	5.457	130	480963	10.38	ppbV	99
41) 2,2,4-Trimethylpentane	4.869	57	2127194	11.66	ppbV	99
42) 1,2-Dichloropropane	5.911	63	482710	11.36	ppbV	99
43) Bromodichloromethane	5.972	83	893791	12.07	ppbV	100
44) Methyl methacrylate	6.120	41	623370	11.74	ppbV	96
45) 1,4-Dioxane	6.145	88	295794	12.23	ppbV	99
46) cis-1,3-Dichloropropene	6.567	75	731256	11.64	ppbV	100
47) Toluene	6.805	91	1431765	10.92	ppbV	99
48) Methyl isobutyl ketone	7.171	43	1084912	11.31	ppbV	99
49) Tetrachloroethene	7.190	166	551683	11.11	ppbV	99
50) trans-1,3-Dichloropropene	7.210	75	715458	11.85	ppbV	98
51) 1,1,2-Trichloroethane	7.370	97	491811	10.86	ppbV	99

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6561icvss.D
Acq On : 29 May 2024 5:16 pm
Operator : jjw
Sample : 10 ppbv icvss
Misc : EB0116272
ALS Vial : 8 Sample Multiplier: 1

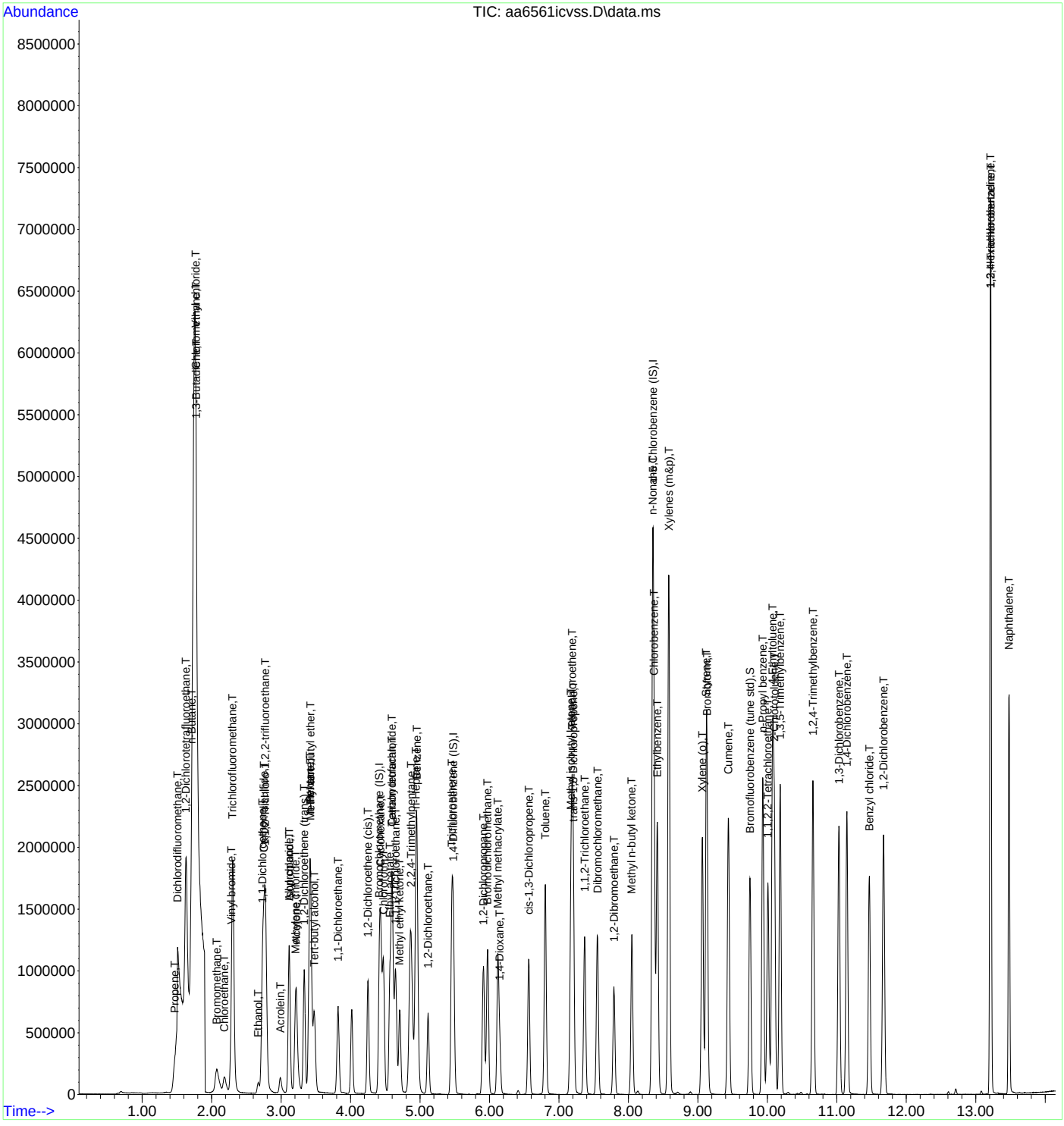
Quant Time: May 30 10:48:22 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.557	129	811619	11.24	ppbV	99
53) 1,2-Dibromoethane	7.792	107	711438	10.96	ppbV	99
54) Methyl n-butyl ketone	8.046	43	1023608	11.40	ppbV	99
56) n-Nonane	8.348	43	1174365	10.79	ppbV	99
57) Chlorobenzene	8.370	112	1046381	10.85	ppbV	98
58) Ethylbenzene	8.415	91	1949323	10.62	ppbV	100
59) Xylenes (m&p)	8.583	91	2965697	21.50	ppbV	100
60) Xylene (o)	9.065	91	1532788	10.55	ppbV	98
61) Styrene	9.120	104	1086762	11.25	ppbV	99
62) Bromoform	9.132	173	716125	11.05	ppbV	99
63) Cumene	9.441	105	1884946	10.17	ppbV	99
65) n-Propyl benzene	9.933	91	2546280	9.99	ppbV	100
66) 1,1,2,2-Tetrachloroethane	10.007	83	1152044	10.78	ppbV	100
67) 4-Ethyltoluene	10.075	105	2119259	10.20	ppbV	100
68) 2-Chlorotoluene	10.100	91	1763579	10.20	ppbV	99
69) 1,3,5-Trimethylbenzene	10.184	105	1734824	10.27	ppbV	100
70) 1,2,4-Trimethylbenzene	10.657	105	1736724	10.25	ppbV	99
71) 1,3-Dichlorobenzene	11.033	146	1033640	10.05	ppbV	100
72) 1,4-Dichlorobenzene	11.145	146	1041591	10.01	ppbV	99
73) Benzyl chloride	11.470	91	1613519	9.65	ppbV	100
74) 1,2-Dichlorobenzene	11.673	146	1002672	10.13	ppbV	100
75) 1,3-Hexachlorobutadiene	13.213	225	596173	10.47	ppbV	100
76) 1,2,4-Trichlorobenzene	13.216	180	806032	10.51	ppbV	100
77) Naphthalene	13.480	128	1971102	9.09	ppbV	100

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

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6561icvss.D
Acq On : 29 May 2024 5:16 pm
Operator : jjw
Sample : 10 ppbv icvss
Misc : EB0116272
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 30 10:48:22 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES, LLC

Continuing Calibration Data Summary Report

Initial Calibration Curve: 3/27/2024
Instrument: AA
Amount of standard injected (ml): 50

Date/Time of Calibration: 5/21/2024 11:12
Sample ID: DCS
Laboratory ID: AA6540DCVS

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6539BFB]	05/21/2024 09:54
10 PPBV DCVS [AA6540DCVS]	05/21/2024 11:12
10 PPBV LCS [AA6541LCS]	05/21/2024 11:47
METHOD BLANK [AA6542BLK]	05/21/2024 12:15
02 PPBV RLLCS [AA6543RLLCS]	05/21/2024 12:50
CLEAN CAN CERTIFICATION, BATCH MASTER 3052 [AA6544]	05/21/2024 15:02
CLEAN CAN CERTIFICATION, BATCH MASTER 3100 [AA6545]	05/21/2024 15:33
CLEAN CAN CERTIFICATION, BATCH MASTER 1571 [AA6546]	05/21/2024 16:03
10 PPBV CCCVS [AA6552CCCVS]	05/21/2024 19:21

Compound Name	Average RRF	Standard RRF	% Difference	PassFail	*
Acetone	2.2	2.4	-5.6	PASS	
Benzene	4.2	4.5	-6.3	PASS	
Bromodichloromethane	0.70	0.73	-4.3	PASS	
Bromoform	0.61	0.67	-9.8	PASS	
Bromomethane	0.90	1.1	-28	PASS	
1,3-Butadiene	1.4	1.3	11	PASS	
Chlorobenzene	0.96	0.99	-2.3	PASS	
Chloroethane	0.69	0.81	-18	PASS	
Chloroform	2.8	3.3	-17	PASS	
Chloromethane	0.16	0.20	-24	PASS	
Carbon disulfide	3.6	4.5	-25	PASS	
Carbon tetrachloride	2.9	3.1	-8.2	PASS	
Cyclohexane	2.7	2.5	6.3	PASS	
Dibromochloromethane	0.65	0.69	-5.4	PASS	
1,2-Dibromoethane	0.61	0.62	-1.8	PASS	
1,2-Dichlorobenzene	0.92	0.97	-5.3	PASS	
1,3-Dichlorobenzene	0.93	0.97	-4.5	PASS	
1,4-Dichlorobenzene	0.94	1.0	-8.3	PASS	
Dichlorodifluoromethane	2.5	2.9	-16	PASS	
1,1-Dichloroethane	2.7	2.9	-8.5	PASS	
1,2-Dichloroethane	1.9	2.1	-10	PASS	
1,1-Dichloroethene	2.3	2.8	-21	PASS	
1,2-Dichloroethene (cis)	1.9	2.2	-13	PASS	
1,2-Dichloroethene (trans)	2.0	2.4	-20	PASS	
1,2-Dichloropropane	0.44	0.42	3.7	PASS	
1,3-Dichloropropene (cis)	0.62	0.62	-0.20	PASS	
1,3-Dichloropropene (trans)	0.59	0.61	-3.7	PASS	
1,2-Dichlorotetrafluoroethane	3.6	3.9	-7.9	PASS	
1,4-Dioxane	0.23	0.24	-0.90	PASS	
Ethylbenzene	1.9	1.8	4.3	PASS	
n-Heptane	3.5	3.0	14	PASS	
1,3-Hexachlorobutadiene	0.50	0.56	-12	PASS	
n-Hexane	4.0	3.9	4.1	PASS	
Methylene chloride	1.6	1.8	-8.2	PASS	
Methyl ethyl ketone	3.3	3.2	2.8	PASS	
Methyl isobutyl ketone	1.2	0.94	19	PASS	
Methyl tert-butyl ether	4.5	4.4	3.6	PASS	
Styrene	0.99	1.00	-0.80	PASS	
Tert-butyl alcohol	3.2	3.1	4.4	PASS	
1,1,2,2-Tetrachloroethane	1.1	1.1	5.6	PASS	
Tetrachloroethene	0.45	0.46	-4.3	PASS	

***%Difference must be within +/- 30%**
RRF - Relative Response Factor

INTEGRATED ANALYTICAL LABORATORIES, LLC

Continuing Calibration Data Summary Report

Initial Calibration Curve:	**3/27/2024**	**Date/Time of Calibration:**	**5/21/2024 11:12**
Instrument:	**AA**	**Sample ID:**	**DCS**
Amount of standard injected (ml):	**50**	**Laboratory ID:**	**AA6540DCVS**

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6539BFB]	05/21/2024 09:54
10 PPBV DCVS [AA6540DCVS]	05/21/2024 11:12
10 PPBV LCS [AA6541LCS]	05/21/2024 11:47
METHOD BLANK [AA6542BLK]	05/21/2024 12:15
02 PPBV RLLCS [AA6543RLLCS]	05/21/2024 12:50
CLEAN CAN CERTIFICATION, BATCH MASTER 3052 [AA6544]	05/21/2024 15:02
CLEAN CAN CERTIFICATION, BATCH MASTER 3100 [AA6545]	05/21/2024 15:33
CLEAN CAN CERTIFICATION, BATCH MASTER 1571 [AA6546]	05/21/2024 16:03
10 PPBV CCCVS [AA6552CCCVS]	05/21/2024 19:21

Compound Name	Average RRF	Standard RRF	% Difference	PassFail	*
Toluene	1.3	1.3	2.3	PASS	
1,2,4-Trichlorobenzene	0.68	0.75	-10	PASS	
1,1,1-Trichloroethane	2.7	2.9	-6.2	PASS	
1,1,2-Trichloroethane	0.43	0.43	-0.50	PASS	
Trichloroethene	0.40	0.45	-12	PASS	
Trichlorofluoromethane	2.9	3.3	-13	PASS	
1,1,2-Trichloro-1,2,2-trifluoroethane	2.9	2.9	-1.3	PASS	
1,2,4-Trimethylbenzene	1.7	1.7	0.50	PASS	
1,3,5-Trimethylbenzene	1.7	1.7	1.4	PASS	
2,2,4-Trimethylpentane	1.9	1.9	4.3	PASS	
Vinyl bromide	1.0	1.3	-28	PASS	
Vinyl chloride	1.2	1.4	-13	PASS	
Xylenes (m&p)	1.4	1.4	3.1	PASS	
Xylenes (o)	1.5	1.5	5.0	PASS	

***%Difference must be within +/- 30%**
RRF - Relative Response Factor

Data Path : C:\DATA\2024\05-2024\05-21-2024\
Data File : aa6540dcvs.D
Acq On : 21 May 2024 11:12 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 21 11:34:22 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 0% Max. R.T. Dev 0.40min
Max. RRF Dev : 30% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane (IS)	1.000	1.000	0.0	67	0.00
2	T	Propene	1.121	1.112	0.8	69	0.00
3	T	Dichlorodifluoromethane	2.514	2.904	-15.5	77	0.00
4	T	1,2-Dichlorotetrafluoroetha	3.629	3.914	-7.9	81	0.00
5	T	n-Butane	2.475	2.251	9.1	69	0.00
6	T	Chloromethane	0.162	0.200	-23.5	88	0.00
7	T	Vinyl chloride	1.245	1.401	-12.5	73	0.00
8	T	1,3-Butadiene	1.416	1.256	11.3	67	0.00
9	T	Bromomethane	0.898	1.145	-27.5	80	0.00
10	T	Chloroethane	0.686	0.809	-17.9	78	0.00
11	T	Vinyl bromide	1.034	1.327	-28.3	83	0.00
12	T	Trichlorofluoromethane	2.936	3.323	-13.2	84	0.00
13	T	Ethanol	0.459	0.418	8.9	67	0.00
14	T	1,1-Dichloroethene	2.277	2.754	-20.9	79	0.00
15	T	Carbon disulfide	3.615	4.527	-25.2	81	0.00
16	T	1,1,2-Trichloro-1,2,2-trifl	2.904	2.941	-1.3	79	0.00
17	T	Acrolein	0.546	0.590	-8.1	75	0.00
18	T	Allyl chloride	0.567	0.696	-22.8	81	0.00
19	T	Isopropanol	2.904	2.949	-1.5	71	0.00
20	T	Methylene chloride	1.620	1.753	-8.2	75	0.00
21	T	Acetone	2.237	2.363	-5.6	73	0.00
22	T	1,2-Dichloroethene (trans)	1.992	2.385	-19.7	80	0.00
23	T	n-Pentane	2.808	2.667	5.0	71	0.00
24	T	n-Hexane	4.026	3.861	4.1	75	0.00
25	T	Methyl tert-butyl ether	4.521	4.359	3.6	73	0.00
26	T	Tert-butyl alcohol	3.193	3.052	4.4	73	0.00
27	T	1,1-Dichloroethane	2.674	2.901	-8.5	80	0.00
28	T	1,2-Dichloroethene (cis)	1.918	2.173	-13.3	79	0.00
29	t	Cyclohexane	2.721	2.549	6.3	72	0.00
30	T	Chloroform	2.788	3.250	-16.6	84	0.00
31	T	Ethyl acetate	0.576	0.561	2.6	72	0.00
32	T	Carbon tetrachloride	2.853	3.088	-8.2	81	0.00
33	T	Tetrahydrofuran	2.095	2.063	1.5	73	0.00
34	T	1,1,1-Trichloroethane	2.692	2.859	-6.2	79	0.00
35	T	Methyl ethyl ketone	3.342	3.249	2.8	73	0.00
36	T	n-Heptane	3.491	3.011	13.7	68	0.00
37	T	Benzene	4.195	4.460	-6.3	82	0.00
38	T	1,2-Dichloroethane	1.903	2.094	-10.0	79	0.00
39	I	1,4-Difluorobenzene (IS)	1.000	1.000	0.0	74	0.00
40	T	Trichloroethene	0.399	0.445	-11.5	86	0.00
41	T	2,2,4-Trimethylpentane	1.939	1.855	4.3	70	0.00
42	T	1,2-Dichloropropane	0.437	0.421	3.7	75	0.00
43	T	Bromodichloromethane	0.696	0.726	-4.3	81	0.00
44	T	Methyl methacrylate	0.620	0.531	14.4	68	0.00
45	T	1,4-Dioxane	0.234	0.236	-0.9	79	0.00
46	T	cis-1,3-Dichloropropene	0.617	0.618	-0.2	78	0.00
47	T	Toluene	1.289	1.259	2.3	76	0.00
48	T	Methyl isobutyl ketone	1.152	0.939	18.5	64	0.00
49	T	Tetrachloroethene	0.445	0.464	-4.3	80	0.00
50	T	trans-1,3-Dichloropropene	0.587	0.609	-3.7	77	0.00
51	T	1,1,2-Trichloroethane	0.426	0.428	-0.5	78	0.00
52	T	Dibromochloromethane	0.653	0.688	-5.4	81	0.00
53	T	1,2-Dibromoethane	0.605	0.616	-1.8	77	0.00

Data Path : C:\DATA\2024\05-2024\05-21-2024\
Data File : aa6540dcvs.D
Acq On : 21 May 2024 11:12 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 21 11:34:22 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 0% Max. R.T. Dev 0.40min
Max. RRF Dev : 30% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
54	T	Methyl n-butyl ketone	1.033	0.855	17.2	64	0.00
55	I	d-5 Chlorobenzene (IS)	1.000	1.000	0.0	73	0.00
56	T	n-Nonane	1.387	1.137	18.0	61	0.00
57	T	Chlorobenzene	0.964	0.986	-2.3	76	0.00
58	T	Ethylbenzene	1.919	1.837	4.3	72	0.00
59	T	Xylenes (m&p)	1.441	1.396	3.1	72	0.00
60	T	Xylene (o)	1.529	1.452	5.0	71	0.00
61	T	Styrene	0.991	0.999	-0.8	72	0.00
62	T	Bromoform	0.614	0.674	-9.8	79	0.00
63	T	Cumene	1.927	1.850	4.0	71	0.00
64	S	Bromofluorobenzene (tune st	0.897	0.856	4.6	69	0.00
65	T	n-Propyl benzene	2.610	2.501	4.2	71	0.00
66	T	1,1,2,2-Tetrachloroethane	1.133	1.070	5.6	71	0.00
67	T	4-Ethyltoluene	2.075	2.039	1.7	72	0.00
68	T	2-Chlorotoluene	1.767	1.707	3.4	72	0.00
69	T	1,3,5-Trimethylbenzene	1.709	1.685	1.4	72	0.00
70	T	1,2,4-Trimethylbenzene	1.694	1.686	0.5	72	0.00
71	T	1,3-Dichlorobenzene	0.928	0.970	-4.5	76	0.00
72	T	1,4-Dichlorobenzene	0.941	1.019	-8.3	77	0.00
73	T	Benzyl chloride	1.574	1.689	-7.3	74	0.00
74	T	1,2-Dichlorobenzene	0.921	0.970	-5.3	75	0.00
75	T	1,3-Hexachlorobutadiene	0.500	0.558	-11.6	78	0.00
76	T	1,2,4-Trichlorobenzene	0.683	0.751	-10.0	78	0.00
77	T	Naphthalene	1.897	2.035	-7.3	77	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data Path : C:\DATA\2024\05-2024\05-21-2024\
Data File : aa6540dcvs.D
Acq On : 21 May 2024 11:12 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 21 11:34:22 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.410	130	273918	10.00	ppbV		0.000
39) 1,4-Difluorobenzene (IS)	5.478	114	1142431	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.349	117	1026686	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.747	95	878703	9.54	ppbV		0.000
Target Compounds							Qvalue
2) Propene	1.468	41	331937	10.81	ppbV		98
3) Dichlorodifluoromethane	1.506	85	843099	12.24	ppbV		100
4) 1,2-Dichlorotetrafluor...	1.630	85	1050667	10.57	ppbV		99
5) n-Butane	1.706	43	672125	9.91	ppbV		99
6) Chloromethane	1.771	52	61326	13.82	ppbV	#	1
7) Vinyl chloride	1.771	62	414393	12.15	ppbV		98
8) 1,3-Butadiene	1.775	39	368161	9.50	ppbV		96
9) Bromomethane	2.073	94	313566	12.75	ppbV		99
10) Chloroethane	2.182	64	234770	12.49	ppbV		100
11) Vinyl bromide	2.288	106	367074	12.96	ppbV		100
12) Trichlorofluoromethane	2.301	101	1001248	12.45	ppbV		99
13) Ethanol	2.667	45	119104	9.48	ppbV		98
14) 1,1-Dichloroethene	2.728	61	784523	12.58	ppbV		96
15) Carbon disulfide	2.748	76	1326851	13.40	ppbV		96
16) 1,1,2-Trichloro-1,2,2-...	2.770	101	878037	11.04	ppbV		99
17) Acrolein	2.986	56	161575	10.81	ppbV		99
18) Allyl chloride	3.114	76	205996	13.25	ppbV		100
19) Isopropanol	3.118	45	718982	9.04	ppbV		99
20) Methylene chloride	3.208	49	518496	11.68	ppbV		92
21) Acetone	3.217	43	698970	11.41	ppbV		98
22) 1,2-Dichloroethene (tr...	3.333	61	725190	13.29	ppbV		95
23) n-Pentane	3.417	43	788949	10.26	ppbV		99
24) n-Hexane	3.413	57	1163339	10.55	ppbV		96
25) Methyl tert-butyl ether	3.417	73	1337385	10.80	ppbV		98
26) Tert-butyl alcohol	3.474	59	961358	10.99	ppbV		100
27) 1,1-Dichloroethane	3.818	63	850187	11.61	ppbV		100
28) 1,2-Dichloroethene (cis)	4.249	61	648812	12.35	ppbV		95
29) Cyclohexane	4.429	56	782126	10.49	ppbV		94
30) Chloroform	4.471	83	961595	12.59	ppbV		98
31) Ethyl acetate	4.564	45	166008	10.53	ppbV		95
32) Carbon tetrachloride	4.593	117	930342	11.90	ppbV		99
33) Tetrahydrofuran	4.597	42	621577	10.83	ppbV		95
34) 1,1,1-Trichloroethane	4.645	97	853538	11.57	ppbV		100
35) Methyl ethyl ketone	4.706	43	978911	10.69	ppbV		96
36) n-Heptane	4.941	43	915642	9.58	ppbV		94
37) Benzene	4.953	78	1319454	11.48	ppbV		97
38) 1,2-Dichloroethane	5.114	62	625225	11.99	ppbV		100
40) Trichloroethene	5.458	130	508680	11.16	ppbV		98
41) 2,2,4-Trimethylpentane	4.867	57	2310261	10.43	ppbV		100
42) 1,2-Dichloropropane	5.912	63	529452	10.60	ppbV		98
43) Bromodichloromethane	5.973	83	953816	12.00	ppbV		100
44) Methyl methacrylate	6.117	41	667588	9.43	ppbV		94
45) 1,4-Dioxane	6.143	88	315925	11.81	ppbV		94
46) cis-1,3-Dichloropropene	6.564	75	784300	11.12	ppbV		100
47) Toluene	6.802	91	1553791	10.56	ppbV		99
48) Methyl isobutyl ketone	7.169	43	1169026	8.88	ppbV		96
49) Tetrachloroethene	7.188	166	593574	11.68	ppbV		99
50) trans-1,3-Dichloropropene	7.207	75	772725	11.51	ppbV		92
51) 1,1,2-Trichloroethane	7.368	97	527612	10.84	ppbV		98

Data Path : C:\DATA\2024\05-2024\05-21-2024\
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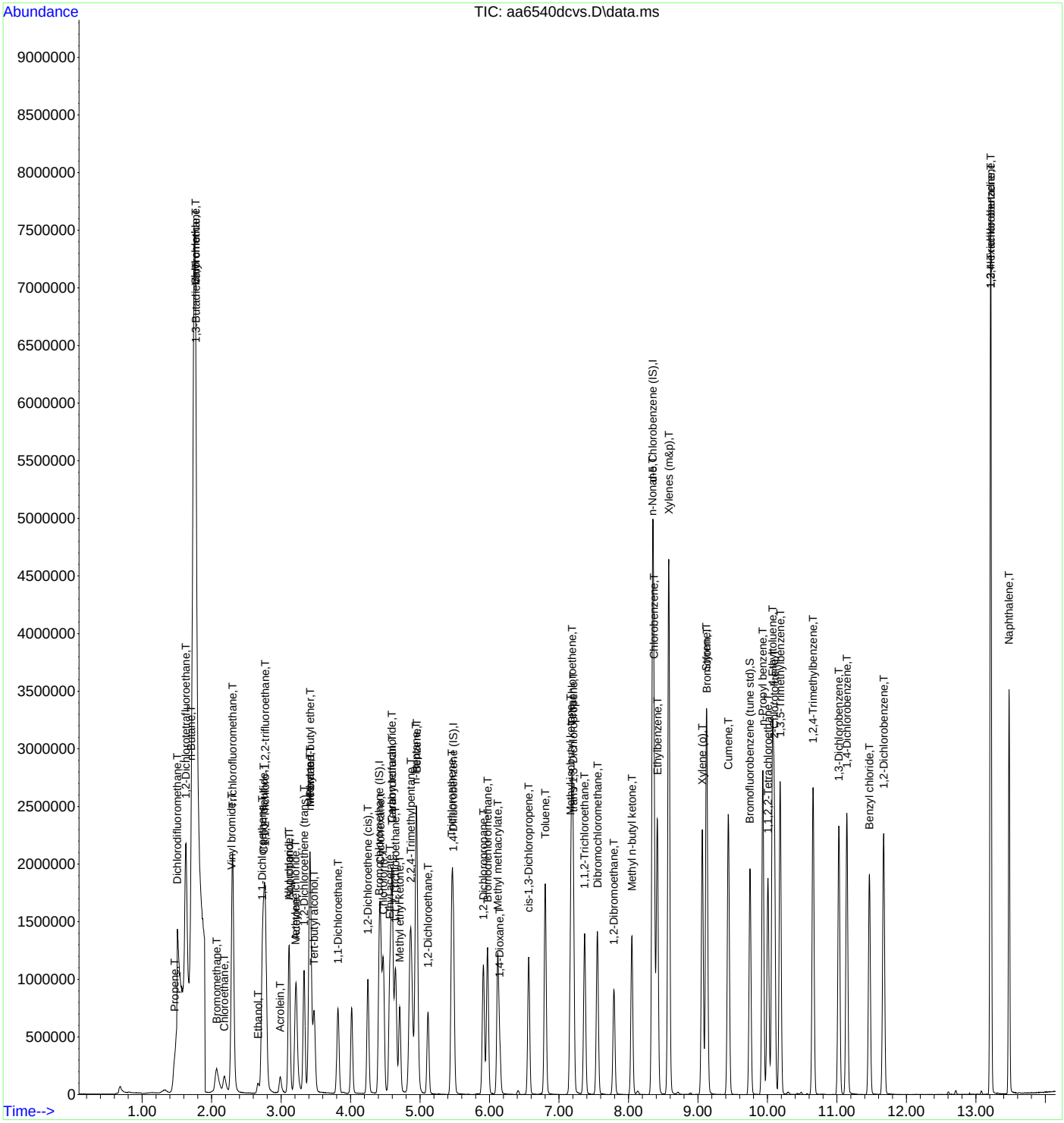
Quant Time: May 21 11:34:22 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.555	129	880308	11.81	ppbV	100
53) 1,2-Dibromoethane	7.789	107	759569	10.99	ppbV	99
54) Methyl n-butyl ketone	8.050	43	1103388	9.35	ppbV	97
56) n-Nonane	8.346	43	1284240	9.02	ppbV	95
57) Chlorobenzene	8.368	112	1123733	11.36	ppbV	96
58) Ethylbenzene	8.416	91	2093713	10.63	ppbV	99
59) Xylenes (m&p)	8.580	91	3195970	21.60	ppbV	99
60) Xylene (o)	9.063	91	1640299	10.45	ppbV	99
61) Styrene	9.120	104	1159045	11.39	ppbV	99
62) Bromoform	9.130	173	782343	12.42	ppbV	100
63) Cumene	9.436	105	2032404	10.27	ppbV	100
65) n-Propyl benzene	9.934	91	2773361	10.35	ppbV	99
66) 1,1,2,2-Tetrachloroethane	10.008	83	1252922	10.77	ppbV	100
67) 4-Ethyltoluene	10.072	105	2261130	10.61	ppbV	99
68) 2-Chlorotoluene	10.098	91	1910503	10.53	ppbV	99
69) 1,3,5-Trimethylbenzene	10.185	105	1885756	10.75	ppbV	100
70) 1,2,4-Trimethylbenzene	10.657	105	1869046	10.75	ppbV	100
71) 1,3-Dichlorobenzene	11.027	146	1105211	11.60	ppbV	99
72) 1,4-Dichlorobenzene	11.143	146	1119628	11.59	ppbV	99
73) Benzyl chloride	11.468	91	1734077	10.73	ppbV	99
74) 1,2-Dichlorobenzene	11.673	146	1066029	11.28	ppbV	100
75) 1,3-Hexachlorobutadiene	13.214	225	635634	12.38	ppbV	100
76) 1,2,4-Trichlorobenzene	13.214	180	847973	12.10	ppbV	99
77) Naphthalene	13.477	128	2089396	10.73	ppbV	100

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

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Data File : aa6540dcvs.D
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Quant Time: May 21 11:34:22 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES, LLC

Continuing Calibration Data Summary Report

Initial Calibration Curve: 5/29/2024
Instrument: AA
Amount of standard injected (ml): 50

Date/Time of Calibration: 6/6/2024 11:39
Sample ID: DCS
Laboratory ID: AA6658DCVS

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6657BFB]	06/06/2024 10:04
10 PPBV DCVS [AA6658DCVS]	06/06/2024 11:39
10 PPBV LCS [AA6659LCS]	06/06/2024 12:10
METHOD BLANK [AA6660BLK]	06/06/2024 12:40
02 PPBV RLLCS [AA6661RLLCS]	06/06/2024 13:14
CLEAN CAN CERTIFICATION, BATCH MASTER 4869 [AA6664]	06/06/2024 14:48
CLEAN CAN CERTIFICATION, BATCH MASTER 4856 [AA6665]	06/06/2024 15:20
CLEAN CAN CERTIFICATION, BATCH MASTER 3804 [AA6666]	06/06/2024 15:51
10 PPBV CCCVS [AA6676CCCVS]	06/06/2024 21:26

Compound Name	Average RRF	Standard RRF	% Difference	PassFail	*
Acetone	2.2	2.2	3.8	PASS	
Benzene	4.6	4.4	4.4	PASS	
Bromodichloromethane	0.72	0.67	6.8	PASS	
Bromoform	0.70	0.57	18	PASS	
Bromomethane	1.0	1.1	-7.9	PASS	
1,3-Butadiene	1.2	1.1	8.9	PASS	
Chlorobenzene	1.0	0.96	7.4	PASS	
Chloroethane	0.75	0.74	1.1	PASS	
Chloroform	3.2	3.2	0.10	PASS	
Chloromethane	0.18	0.23	-26	PASS	
Carbon disulfide	4.2	4.2	-0.10	PASS	
Carbon tetrachloride	3.3	3.1	4.0	PASS	
Cyclohexane	2.6	2.4	8.0	PASS	
Dibromochloromethane	0.71	0.74	-5.1	PASS	
1,2-Dibromoethane	0.63	0.69	-8.2	PASS	
1,2-Dichlorobenzene	1.1	0.81	23	PASS	
1,3-Dichlorobenzene	1.1	0.82	26	PASS	
1,4-Dichlorobenzene	1.1	0.86	23	PASS	
Dichlorodifluoromethane	2.9	2.8	1.5	PASS	
1,1-Dichloroethane	2.8	2.7	4.2	PASS	
1,2-Dichloroethane	2.1	2.0	3.1	PASS	
1,1-Dichloroethene	2.5	2.6	-0.90	PASS	
1,2-Dichloroethene (cis)	2.1	2.1	0.10	PASS	
1,2-Dichloroethene (trans)	2.3	2.2	2.3	PASS	
1,2-Dichloropropane	0.42	0.38	8.7	PASS	
1,3-Dichloropropene (cis)	0.61	0.57	6.9	PASS	
1,3-Dichloropropene (trans)	0.59	0.70	-19	PASS	
1,2-Dichlorotetrafluoroethane	4.0	3.8	4.5	PASS	
1,4-Dioxane	0.24	0.22	5.5	PASS	
Ethylbenzene	2.0	1.8	9.4	PASS	
n-Heptane	3.0	2.7	11	PASS	
1,3-Hexachlorobutadiene	0.61	0.47	23	PASS	
n-Hexane	3.8	3.6	6.6	PASS	
Methylene chloride	1.8	1.8	3.0	PASS	
Methyl ethyl ketone	3.2	3.0	6.8	PASS	
Methyl isobutyl ketone	0.94	1.1	-15	PASS	
Methyl tert-butyl ether	4.6	4.2	7.9	PASS	
Styrene	1.0	0.83	20	PASS	
Tert-butyl alcohol	3.1	3.0	4.0	PASS	
1,1,2,2-Tetrachloroethane	1.1	0.85	26	PASS	
Tetrachloroethene	0.49	0.50	-2.7	PASS	

***%Difference must be within +/- 30%**
RRF - Relative Response Factor

INTEGRATED ANALYTICAL LABORATORIES, LLC

Continuing Calibration Data Summary Report

Initial Calibration Curve:	**5/29/2024**	**Date/Time of Calibration:**	**6/6/2024 11:39**
Instrument:	**AA**	**Sample ID:**	**DCS**
Amount of standard injected (ml):	**50**	**Laboratory ID:**	**AA6658DCVS**

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6657BFB]	06/06/2024 10:04
10 PPBV DCVS [AA6658DCVS]	06/06/2024 11:39
10 PPBV LCS [AA6659LCS]	06/06/2024 12:10
METHOD BLANK [AA6660BLK]	06/06/2024 12:40
02 PPBV RLLCS [AA6661RLLCS]	06/06/2024 13:14
CLEAN CAN CERTIFICATION, BATCH MASTER 4869 [AA6664]	06/06/2024 14:48
CLEAN CAN CERTIFICATION, BATCH MASTER 4856 [AA6665]	06/06/2024 15:20
CLEAN CAN CERTIFICATION, BATCH MASTER 3804 [AA6666]	06/06/2024 15:51
10 PPBV CCCVS [AA6676CCCVS]	06/06/2024 21:26

Compound Name	Average RRF	Standard RRF	% Difference	PassFail	*
Toluene	1.3	1.2	6.5	PASS	
1,2,4-Trichlorobenzene	0.82	0.63	24	PASS	
1,1,1-Trichloroethane	3.0	2.8	5.9	PASS	
1,1,2-Trichloroethane	0.44	0.47	-5.4	PASS	
Trichloroethene	0.45	0.44	3.8	PASS	
Trichlorofluoromethane	3.3	3.3	0.60	PASS	
1,1,2-Trichloro-1,2,2-trifluoroethane	3.1	2.9	6.6	PASS	
1,2,4-Trimethylbenzene	1.8	1.4	23	PASS	
1,3,5-Trimethylbenzene	1.8	1.4	24	PASS	
2,2,4-Trimethylpentane	1.8	1.6	9.8	PASS	
Vinyl bromide	1.2	1.3	-4.6	PASS	
Vinyl chloride	1.3	1.3	1.8	PASS	
Xylenes (m&p)	1.5	1.4	8.8	PASS	
Xylenes (o)	1.6	1.2	24	PASS	

***%Difference must be within +/- 30%**
RRF - Relative Response Factor

Data Path : C:\DATA\2024\06-2024\06-06-2024\
Data File : aa6658dcvs.D
Acq On : 6 Jun 2024 11:39 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 06 11:57:24 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 0% Max. R.T. Dev 0.40min
Max. RRF Dev : 30% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane (IS)	1.000	1.000	0.0	85	0.00
2	T	Propene	1.050	0.946	9.9	78	0.00
3	T	Dichlorodifluoromethane	2.863	2.821	1.5	81	0.00
4	T	1,2-Dichlorotetrafluoroetha	4.013	3.834	4.5	81	0.00
5	T	n-Butane	2.168	1.980	8.7	79	0.00
6	T	Chloromethane	0.178	0.225	-26.4	95	0.00
7	T	Vinyl chloride	1.318	1.294	1.8	79	0.00
8	T	1,3-Butadiene	1.222	1.113	8.9	76	0.00
9	T	Bromomethane	1.030	1.111	-7.9	86	0.00
10	T	Chloroethane	0.749	0.741	1.1	79	0.00
11	T	Vinyl bromide	1.249	1.307	-4.6	81	0.00
12	T	Trichlorofluoromethane	3.297	3.276	0.6	83	0.00
13	T	Ethanol	0.515	0.579	-12.4	112	0.00
14	T	1,1-Dichloroethene	2.537	2.559	-0.9	81	0.00
15	T	Carbon disulfide	4.226	4.232	-0.1	80	0.00
16	T	1,1,2-Trichloro-1,2,2-trifl	3.115	2.909	6.6	83	0.00
17	T	Acrolein	0.564	0.541	4.1	80	0.00
18	T	Allyl chloride	0.649	0.701	-8.0	84	0.00
19	T	Isopropanol	2.821	2.858	-1.3	84	0.00
20	T	Methylene chloride	1.807	1.752	3.0	87	0.00
21	T	Acetone	2.244	2.159	3.8	81	0.00
22	T	1,2-Dichloroethene (trans)	2.294	2.241	2.3	81	0.00
23	T	n-Pentane	2.741	2.508	8.5	83	0.00
24	T	n-Hexane	3.840	3.588	6.6	81	0.00
25	T	Methyl tert-butyl ether	4.580	4.219	7.9	82	0.00
26	T	Tert-butyl alcohol	3.130	3.004	4.0	84	0.00
27	T	1,1-Dichloroethane	2.847	2.727	4.2	81	0.00
28	T	1,2-Dichloroethene (cis)	2.066	2.064	0.1	81	0.00
29	t	Cyclohexane	2.564	2.359	8.0	80	0.00
30	T	Chloroform	3.193	3.191	0.1	82	0.00
31	T	Ethyl acetate	0.544	0.508	6.6	80	0.00
32	T	Carbon tetrachloride	3.258	3.128	4.0	82	0.00
33	T	Tetrahydrofuran	1.920	1.874	2.4	81	0.00
34	T	1,1,1-Trichloroethane	3.007	2.830	5.9	82	0.00
35	T	Methyl ethyl ketone	3.180	2.963	6.8	80	0.00
36	T	n-Heptane	3.007	2.663	11.4	80	0.00
37	T	Benzene	4.553	4.352	4.4	81	0.00
38	T	1,2-Dichloroethane	2.083	2.018	3.1	81	0.00
39	I	1,4-Difluorobenzene (IS)	1.000	1.000	0.0	89	0.00
40	T	Trichloroethene	0.452	0.435	3.8	83	0.00
41	T	2,2,4-Trimethylpentane	1.781	1.607	9.8	78	0.00
42	T	1,2-Dichloropropane	0.415	0.379	8.7	81	0.00
43	T	Bromodichloromethane	0.723	0.674	6.8	80	0.00
44	T	Methyl methacrylate	0.518	0.472	8.9	82	0.00
45	T	1,4-Dioxane	0.236	0.223	5.5	83	0.00
46	T	cis-1,3-Dichloropropene	0.613	0.571	6.9	81	0.00
47	T	Toluene	1.280	1.197	6.5	82	0.00
48	T	Methyl isobutyl ketone	0.936	1.079	-15.3	106	0.00
49	T	Tetrachloroethene	0.485	0.498	-2.7	90	0.00
50	T	trans-1,3-Dichloropropene	0.589	0.699	-18.7	101	0.00
51	T	1,1,2-Trichloroethane	0.442	0.466	-5.4	95	0.00
52	T	Dibromochloromethane	0.705	0.741	-5.1	92	0.00
53	T	1,2-Dibromoethane	0.634	0.686	-8.2	95	0.00

Data Path : C:\DATA\2024\06-2024\06-06-2024\
Data File : aa6658dcvs.D
Acq On : 6 Jun 2024 11:39 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 06 11:57:24 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 0% Max. R.T. Dev 0.40min
Max. RRF Dev : 30% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
54	T	Methyl n-butyl ketone	0.877	1.117	-27.4	120	0.00
55	I	d-5 Chlorobenzene (IS)	1.000	1.000	0.0	102	0.00
56	T	n-Nonane	1.169	1.211	-3.6	115	0.00
57	T	Chlorobenzene	1.036	0.959	7.4	97	0.00
58	T	Ethylbenzene	1.971	1.786	9.4	99	0.00
59	T	Xylenes (m&p)	1.482	1.352	8.8	98	0.00
60	T	Xylene (o)	1.560	1.191	23.7	84	0.00
61	T	Styrene	1.037	0.831	19.9	83	0.00
62	T	Bromoform	0.696	0.570	18.1	84	0.00
63	T	Cumene	1.990	1.522	23.5	83	0.00
64	S	Bromofluorobenzene (tune st	0.946	0.736	22.2	87	0.00
65	T	n-Propyl benzene	2.737	2.028	25.9	83	0.00
66	T	1,1,2,2-Tetrachloroethane	1.149	0.850	26.0	81	0.00
67	T	4-Ethyltoluene	2.232	1.692	24.2	83	0.00
68	T	2-Chlorotoluene	1.857	1.394	24.9	83	0.00
69	T	1,3,5-Trimethylbenzene	1.815	1.388	23.5	84	0.00
70	T	1,2,4-Trimethylbenzene	1.821	1.394	23.4	83	0.00
71	T	1,3-Dichlorobenzene	1.105	0.819	25.9	84	0.00
72	T	1,4-Dichlorobenzene	1.117	0.863	22.7	85	0.00
73	T	Benzyl chloride	1.797	1.364	24.1	82	0.00
74	T	1,2-Dichlorobenzene	1.063	0.814	23.4	83	0.00
75	T	1,3-Hexachlorobutadiene	0.612	0.471	23.0	82	0.00
76	T	1,2,4-Trichlorobenzene	0.824	0.630	23.5	81	0.00
77	T	Naphthalene	2.329	1.648	29.2	79	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data Path : C:\DATA\2024\06-2024\06-06-2024\
Data File : aa6658dcvs.D
Acq On : 6 Jun 2024 11:39 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 06 11:57:24 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.419	130	204479	10.00	ppbV		0.000
39) 1,4-Difluorobenzene (IS)	5.483	114	902634	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.351	117	948524	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.753	95	698419	7.78	ppbV		0.000
Target Compounds							Qvalue
2) Propene	1.476	41	210797	9.82	ppbV		98
3) Dichlorodifluoromethane	1.512	85	611540	10.45	ppbV		100
4) 1,2-Dichlorotetrafluor...	1.633	85	768245	9.36	ppbV		98
5) n-Butane	1.712	43	441394	9.96	ppbV		100
6) Chloromethane	1.780	52	51592	14.14	ppbV	#	1
7) Vinyl chloride	1.774	62	285722	10.60	ppbV		100
8) 1,3-Butadiene	1.777	39	243499	9.75	ppbV		96
9) Bromomethane	2.075	94	227085	10.78	ppbV		99
10) Chloroethane	2.184	64	160527	10.48	ppbV		100
11) Vinyl bromide	2.287	106	269970	10.57	ppbV		98
12) Trichlorofluoromethane	2.306	101	736958	10.93	ppbV		100
13) Ethanol	2.673	45	123211	11.71	ppbV		96
14) 1,1-Dichloroethene	2.731	61	544246	10.49	ppbV		98
15) Carbon disulfide	2.750	76	925987	10.71	ppbV		100
16) 1,1,2-Trichloro-1,2,2-...	2.776	101	648306	10.18	ppbV		99
17) Acrolein	2.994	56	110608	9.58	ppbV		100
18) Allyl chloride	3.113	76	154878	11.67	ppbV		100
19) Isopropanol	3.120	45	520159	9.02	ppbV		99
20) Methylene chloride	3.210	49	386811	10.47	ppbV		97
21) Acetone	3.223	43	476832	10.39	ppbV		100
22) 1,2-Dichloroethene (tr...	3.335	61	508568	10.84	ppbV		99
23) n-Pentane	3.419	43	553858	9.88	ppbV		97
24) n-Hexane	3.422	57	807079	10.28	ppbV		99
25) Methyl tert-butyl ether	3.422	73	966277	10.32	ppbV		99
26) Tert-butyl alcohol	3.480	59	706302	11.04	ppbV		100
27) 1,1-Dichloroethane	3.821	63	596630	10.25	ppbV		99
28) 1,2-Dichloroethene (cis)	4.251	61	459985	10.89	ppbV		99
29) Cyclohexane	4.431	56	540300	10.31	ppbV		99
30) Chloroform	4.473	83	704642	10.79	ppbV		100
31) Ethyl acetate	4.566	45	112213	10.09	ppbV		100
32) Carbon tetrachloride	4.599	117	703523	10.56	ppbV		99
33) Tetrahydrofuran	4.599	42	421526	10.74	ppbV		100
34) 1,1,1-Trichloroethane	4.647	97	630786	10.26	ppbV		100
35) Methyl ethyl ketone	4.711	43	666363	10.25	ppbV		99
36) n-Heptane	4.946	43	604317	9.83	ppbV		99
37) Benzene	4.956	78	961088	10.32	ppbV		100
38) 1,2-Dichloroethane	5.116	62	449835	10.56	ppbV		99
40) Trichloroethene	5.460	130	392501	9.62	ppbV		100
41) 2,2,4-Trimethylpentane	4.866	57	1581213	9.84	ppbV		100
42) 1,2-Dichloropropane	5.914	63	375956	10.04	ppbV		100
43) Bromodichloromethane	5.975	83	699288	10.72	ppbV		98
44) Methyl methacrylate	6.120	41	469099	10.03	ppbV		100
45) 1,4-Dioxane	6.145	88	235165	11.04	ppbV		100
46) cis-1,3-Dichloropropene	6.566	75	572267	10.34	ppbV		100
47) Toluene	6.804	91	1166557	10.09	ppbV		100
48) Methyl isobutyl ketone	7.177	43	1061197	12.56	ppbV		98
49) Tetrachloroethene	7.193	166	503399	11.50	ppbV		100
50) trans-1,3-Dichloropropene	7.209	75	700805	13.17	ppbV		95
51) 1,1,2-Trichloroethane	7.373	97	454682	11.39	ppbV		98

Data Path : C:\DATA\2024\06-2024\06-06-2024\
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Acq On : 6 Jun 2024 11:39 am
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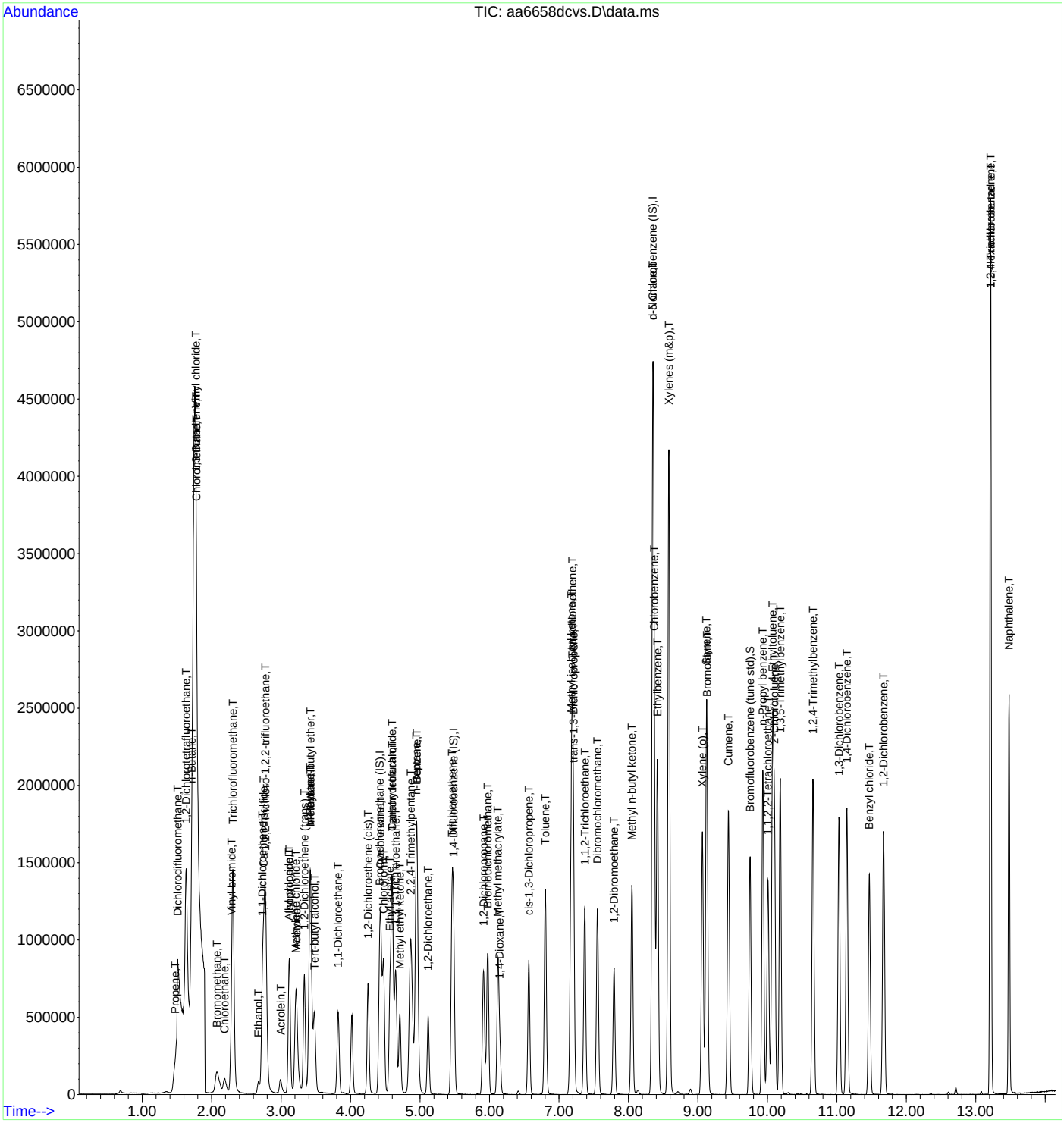
Quant Time: Jun 06 11:57:24 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.554	129	748830	11.77	ppbV	100
53) 1,2-Dibromoethane	7.795	107	668794	11.69	ppbV	100
54) Methyl n-butyl ketone	8.049	43	1138885	14.39	ppbV	96
56) n-Nonane	8.351	43	1263879	11.40	ppbV	94
57) Chlorobenzene	8.373	112	1009266	10.27	ppbV	95
58) Ethylbenzene	8.418	91	1880280	10.06	ppbV	99
59) Xylenes (m&p)	8.582	91	2860811	20.35	ppbV	99
60) Xylene (o)	9.065	91	1243163	8.40	ppbV	99
61) Styrene	9.123	104	890944	9.05	ppbV	100
62) Bromoform	9.132	173	611039	9.26	ppbV	100
63) Cumene	9.438	105	1545175	8.19	ppbV	100
65) n-Propyl benzene	9.933	91	2077492	8.00	ppbV	99
66) 1,1,2,2-Tetrachloroethane	10.007	83	918697	8.43	ppbV	99
67) 4-Ethyltoluene	10.074	105	1732834	8.19	ppbV	100
68) 2-Chlorotoluene	10.100	91	1441185	8.18	ppbV	100
69) 1,3,5-Trimethylbenzene	10.187	105	1434548	8.33	ppbV	99
70) 1,2,4-Trimethylbenzene	10.656	105	1427710	8.27	ppbV	100
71) 1,3-Dichlorobenzene	11.032	146	862609	8.23	ppbV	100
72) 1,4-Dichlorobenzene	11.145	146	875995	8.26	ppbV	99
73) Benzyl chloride	11.467	91	1293855	7.59	ppbV	100
74) 1,2-Dichlorobenzene	11.672	146	826634	8.20	ppbV	100
75) 1,3-Hexachlorobutadiene	13.216	225	495818	8.55	ppbV	100
76) 1,2,4-Trichlorobenzene	13.216	180	656836	8.40	ppbV	99
77) Naphthalene	13.479	128	1563002	7.08	ppbV	100

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

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Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES, LLC

Continuing Calibration Data Summary Report

Initial Calibration Curve: 5/29/2024
Instrument: AA
Amount of standard injected (ml): 50

Date/Time of Calibration: 7/16/2024 11:25
Sample ID: DCS
Laboratory ID: AA6899DCVS

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6898BFB]	07/16/2024 10:45
10 PPBV DCVS [AA6899DCVS]	07/16/2024 11:25
10 PPBV LCS [AA6900LCS]	07/16/2024 12:31
METHOD BLANK [AA6901BLK]	07/16/2024 13:32
E24-02427-01 [AA6908]	07/16/2024 17:50
E24-02427-21 [AA6909]	07/16/2024 18:21
E24-02427-02 [AA6912]	07/16/2024 19:54
E24-02427-03 [AA6914]	07/16/2024 20:57
E24-02427-03 [AA6915]	07/16/2024 21:36
E24-02427-04 [AA6918]	07/16/2024 23:10

Compound Name	Average RRF	Standard RRF	% Difference	PassFail	*
Acetone	2.2	2.9	-29	PASS	
Benzene	4.6	4.7	-3.1	PASS	
Bromodichloromethane	0.72	0.75	-3.7	PASS	
Bromoform	0.70	0.62	11	PASS	
Bromomethane	1.0	1.2	-20	PASS	
1,3-Butadiene	1.2	1.4	-15	PASS	
Chlorobenzene	1.0	0.93	10	PASS	
Chloroethane	0.75	0.88	-18	PASS	
Chloroform	3.2	3.4	-6.0	PASS	
Chloromethane	0.18	0.23	-27	PASS	
Carbon disulfide	4.2	4.7	-12	PASS	
Carbon tetrachloride	3.3	3.1	4.4	PASS	
Cyclohexane	2.6	2.9	-13	PASS	
Dibromochloromethane	0.71	0.66	6.7	PASS	
1,2-Dibromoethane	0.63	0.60	5.0	PASS	
1,2-Dichlorobenzene	1.1	0.85	21	PASS	
1,3-Dichlorobenzene	1.1	0.85	23	PASS	
1,4-Dichlorobenzene	1.1	0.88	21	PASS	
Dichlorodifluoromethane	2.9	3.1	-7.6	PASS	
1,1-Dichloroethane	2.8	3.2	-12	PASS	
1,2-Dichloroethane	2.1	2.3	-12	PASS	
1,1-Dichloroethene	2.5	2.9	-15	PASS	
1,2-Dichloroethene (cis)	2.1	2.4	-15	PASS	
1,2-Dichloroethene (trans)	2.3	2.7	-16	PASS	
1,2-Dichloropropane	0.42	0.45	-8.0	PASS	
1,3-Dichloropropene (cis)	0.61	0.63	-2.1	PASS	
1,3-Dichloropropene (trans)	0.59	0.63	-6.3	PASS	
1,2-Dichlorotetrafluoroethane	4.0	4.2	-3.4	PASS	
1,4-Dioxane	0.24	0.24	0.40	PASS	
Ethylbenzene	2.0	1.8	11	PASS	
n-Heptane	3.0	3.6	-21	PASS	
1,3-Hexachlorobutadiene	0.61	0.44	28	PASS	
n-Hexane	3.8	4.4	-14	PASS	
Methylene chloride	1.8	2.3	-26	PASS	
Methyl ethyl ketone	3.2	4.1	-29	PASS	
Methyl isobutyl ketone	0.94	1.2	-23	PASS	
Methyl tert-butyl ether	4.6	4.7	-2.3	PASS	
Styrene	1.0	0.94	9.5	PASS	
Tert-butyl alcohol	3.1	3.6	-14	PASS	
1,1,2,2-Tetrachloroethane	1.1	1.1	7.5	PASS	

***%Difference must be within +/- 30%**
RRF - Relative Response Factor

INTEGRATED ANALYTICAL LABORATORIES, LLC

Continuing Calibration Data Summary Report

Initial Calibration Curve:	**5/29/2024**	**Date/Time of Calibration:**	**7/16/2024 11:25**
Instrument:	**AA**	**Sample ID:**	**DCS**
Amount of standard injected (ml):	**50**	**Laboratory ID:**	**AA6899DCVS**

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6898BFB]	07/16/2024 10:45
10 PPBV DCVS [AA6899DCVS]	07/16/2024 11:25
10 PPBV LCS [AA6900LCS]	07/16/2024 12:31
METHOD BLANK [AA6901BLK]	07/16/2024 13:32
E24-02427-01 [AA6908]	07/16/2024 17:50
E24-02427-21 [AA6909]	07/16/2024 18:21
E24-02427-02 [AA6912]	07/16/2024 19:54
E24-02427-03 [AA6914]	07/16/2024 20:57
E24-02427-03 [AA6915]	07/16/2024 21:36
E24-02427-04 [AA6918]	07/16/2024 23:10

Compound Name	Average RRF	Standard RRF	% Difference	PassFail	*
Tetrachloroethene	0.49	0.41	15	PASS	
Toluene	1.3	1.2	5.6	PASS	
1,2,4-Trichlorobenzene	0.82	0.59	28	PASS	
1,1,1-Trichloroethane	3.0	2.9	4.2	PASS	
1,1,2-Trichloroethane	0.44	0.41	7.5	PASS	
Trichloroethene	0.45	0.41	9.3	PASS	
Trichlorofluoromethane	3.3	3.5	-5.5	PASS	
1,1,2-Trichloro-1,2,2-trifluoroethane	3.1	2.9	8.5	PASS	
1,2,4-Trimethylbenzene	1.8	1.5	16	PASS	
1,3,5-Trimethylbenzene	1.8	1.5	15	PASS	
2,2,4-Trimethylpentane	1.8	2.1	-15	PASS	
Vinyl bromide	1.2	1.3	-6.0	PASS	
Vinyl chloride	1.3	1.6	-25	PASS	
Xylenes (m&p)	1.5	1.3	9.6	PASS	
Xylenes (o)	1.6	1.4	13	PASS	

***%Difference must be within +/- 30%**
RRF - Relative Response Factor

Data Path : C:\DATA\2024\07-2024\07-16-2024\
Data File : aa6899dcvs.D
Acq On : 16 Jul 2024 11:25 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 16 13:28:39 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 0% Max. R.T. Dev 0.40min
Max. RRF Dev : 30% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane (IS)	1.000	1.000	0.0	74	0.00
2	T	Propene	1.050	1.319	-25.6	95	0.00
3	T	Dichlorodifluoromethane	2.863	3.082	-7.6	77	0.00
4	T	1,2-Dichlorotetrafluoroetha	4.013	4.151	-3.4	77	0.00
5	T	n-Butane	2.168	2.696	-24.4	93	0.00
6	T	Chloromethane	0.178	0.226	-27.0	83	0.00
7	T	Vinyl chloride	1.318	1.647	-25.0	88	0.00
8	T	1,3-Butadiene	1.222	1.401	-14.6	83	0.00
9	T	Bromomethane	1.030	1.233	-19.7	83	0.00
10	T	Chloroethane	0.749	0.880	-17.5	82	0.00
11	T	Vinyl bromide	1.249	1.324	-6.0	72	0.00
12	T	Trichlorofluoromethane	3.297	3.477	-5.5	76	0.00
13	T	Ethanol	0.515	0.628	-21.9	106	0.00
14	T	1,1-Dichloroethene	2.537	2.923	-15.2	80	0.00
15	T	Carbon disulfide	4.226	4.714	-11.5	78	0.00
16	T	1,1,2-Trichloro-1,2,2-trifl	3.115	2.851	8.5	70	0.00
17	T	Acrolein	0.564	0.691	-22.5	89	0.00
18	T	Allyl chloride	0.649	0.808	-24.5	84	0.00
19	T	Isopropanol	2.821	3.598	-27.5	92	0.00
20	T	Methylene chloride	1.807	2.278	-26.1	99	0.00
21	T	Acetone	2.244	2.896	-29.1	95	0.00
22	T	1,2-Dichloroethene (trans)	2.294	2.660	-16.0	84	0.00
23	T	n-Pentane	2.741	3.280	-19.7	94	0.00
24	T	n-Hexane	3.840	4.381	-14.1	86	0.00
25	T	Methyl tert-butyl ether	4.580	4.686	-2.3	79	0.00
26	T	Tert-butyl alcohol	3.130	3.559	-13.7	87	0.00
27	T	1,1-Dichloroethane	2.847	3.198	-12.3	82	0.00
28	T	1,2-Dichloroethene (cis)	2.066	2.381	-15.2	82	0.00
29	t	Cyclohexane	2.564	2.895	-12.9	86	0.00
30	T	Chloroform	3.193	3.383	-6.0	76	0.00
31	T	Ethyl acetate	0.544	0.699	-28.5	96	0.00
32	T	Carbon tetrachloride	3.258	3.116	4.4	71	0.00
33	T	Tetrahydrofuran	1.920	2.465	-28.4	93	0.00
34	T	1,1,1-Trichloroethane	3.007	2.881	4.2	73	0.00
35	T	Methyl ethyl ketone	3.180	4.109	-29.2	97	0.00
36	T	n-Heptane	3.007	3.644	-21.2	95	0.00
37	T	Benzene	4.553	4.692	-3.1	76	0.00
38	T	1,2-Dichloroethane	2.083	2.336	-12.1	82	0.00
39	I	1,4-Difluorobenzene (IS)	1.000	1.000	0.0	77	0.00
40	T	Trichloroethene	0.452	0.410	9.3	67	0.00
41	T	2,2,4-Trimethylpentane	1.781	2.050	-15.1	85	0.00
42	T	1,2-Dichloropropane	0.415	0.448	-8.0	82	0.00
43	T	Bromodichloromethane	0.723	0.750	-3.7	77	0.00
44	T	Methyl methacrylate	0.518	0.642	-23.9	96	0.00
45	T	1,4-Dioxane	0.236	0.235	0.4	76	0.00
46	T	cis-1,3-Dichloropropene	0.613	0.626	-2.1	77	0.00
47	T	Toluene	1.280	1.208	5.6	72	0.00
48	T	Methyl isobutyl ketone	0.936	1.152	-23.1	98	0.00
49	T	Tetrachloroethene	0.485	0.412	15.1	64	0.00
50	T	trans-1,3-Dichloropropene	0.589	0.626	-6.3	78	0.00
51	T	1,1,2-Trichloroethane	0.442	0.409	7.5	72	0.00
52	T	Dibromochloromethane	0.705	0.658	6.7	70	0.00
53	T	1,2-Dibromoethane	0.634	0.602	5.0	72	0.00

Data Path : C:\DATA\2024\07-2024\07-16-2024\
Data File : aa6899dcvs.D
Acq On : 16 Jul 2024 11:25 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 16 13:28:39 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 0% Max. R.T. Dev 0.40min
Max. RRF Dev : 30% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
54	T	Methyl n-butyl ketone	0.877	1.073	-22.3	99	0.00
55	I	d-5 Chlorobenzene (IS)	1.000	1.000	0.0	76	0.00
56	T	n-Nonane	1.169	1.375	-17.6	97	0.00
57	T	Chlorobenzene	1.036	0.928	10.4	70	0.00
58	T	Ethylbenzene	1.971	1.753	11.1	73	0.00
59	T	Xylenes (m&p)	1.482	1.339	9.6	73	0.00
60	T	Xylene (o)	1.560	1.365	12.5	72	0.00
61	T	Styrene	1.037	0.938	9.5	70	0.00
62	T	Bromoform	0.696	0.620	10.9	68	0.00
63	T	Cumene	1.990	1.781	10.5	73	0.00
64	S	Bromofluorobenzene (tune st	0.946	0.860	9.1	76	0.00
65	T	n-Propyl benzene	2.737	2.482	9.3	76	0.00
66	T	1,1,2,2-Tetrachloroethane	1.149	1.063	7.5	76	0.00
67	T	4-Ethyltoluene	2.232	1.958	12.3	72	0.00
68	T	2-Chlorotoluene	1.857	1.705	8.2	76	0.00
69	T	1,3,5-Trimethylbenzene	1.815	1.541	15.1	69	0.00
70	T	1,2,4-Trimethylbenzene	1.821	1.533	15.8	68	0.00
71	T	1,3-Dichlorobenzene	1.105	0.848	23.3	65	0.00
72	T	1,4-Dichlorobenzene	1.117	0.881	21.1	65	0.00
73	T	Benzyl chloride	1.797	1.749	2.7	79	0.00
74	T	1,2-Dichlorobenzene	1.063	0.845	20.5	64	0.00
75	T	1,3-Hexachlorobutadiene	0.612	0.438	28.4	57	0.00
76	T	1,2,4-Trichlorobenzene	0.824	0.594	27.9	57	0.00
77	T	Naphthalene	2.329	1.814	22.1	65	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data Path : C:\DATA\2024\07-2024\07-16-2024\
Data File : aa6899dcvs.D
Acq On : 16 Jul 2024 11:25 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 16 13:28:39 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.412	130	178142	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.480	114	778498	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.351	117	708869	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.750	95	609856	9.10	ppbV	0.000
Target Compounds						Qvalue
2) Propene	1.473	41	256139	13.70	ppbV	99
3) Dichlorodifluoromethane	1.512	85	581998	11.41	ppbV	100
4) 1,2-Dichlorotetrafluor...	1.633	85	724712	10.14	ppbV	91
5) n-Butane	1.712	43	523431	13.55	ppbV	98
6) Chloromethane	1.770	52	45049	14.17	ppbV	80
7) Vinyl chloride	1.770	62	316871	13.50	ppbV	99
8) 1,3-Butadiene	1.777	39	266976	12.27	ppbV	96
9) Bromomethane	2.072	94	219680	11.97	ppbV	98
10) Chloroethane	2.181	64	166162	12.45	ppbV	99
11) Vinyl bromide	2.287	106	238171	10.70	ppbV	99
12) Trichlorofluoromethane	2.303	101	681412	11.60	ppbV	99
13) Ethanol	2.673	45	116321	12.69	ppbV	97
14) 1,1-Dichloroethene	2.731	61	541557	11.98	ppbV	89
15) Carbon disulfide	2.753	76	898501	11.93	ppbV	94
16) 1,1,2-Trichloro-1,2,2-...	2.773	101	553503	9.97	ppbV	92
17) Acrolein	2.991	56	123036	12.24	ppbV	99
18) Allyl chloride	3.117	76	155383	13.44	ppbV	100
19) Isopropanol	3.120	45	570491	11.35	ppbV	98
20) Methylene chloride	3.207	49	438218	13.62	ppbV	86
21) Acetone	3.223	43	557075	13.94	ppbV	95
22) 1,2-Dichloroethene (tr...	3.332	61	526059	12.87	ppbV	88
23) n-Pentane	3.416	43	631050	12.92	ppbV	99
24) n-Hexane	3.416	57	858499	12.55	ppbV	91
25) Methyl tert-butyl ether	3.419	73	934875	11.46	ppbV	92
26) Tert-butyl alcohol	3.477	59	729204	13.08	ppbV	100
27) 1,1-Dichloroethane	3.821	63	609639	12.02	ppbV	99
28) 1,2-Dichloroethene (cis)	4.248	61	462269	12.56	ppbV	89
29) Cyclohexane	4.432	56	577665	12.65	ppbV	89
30) Chloroform	4.470	83	650922	11.44	ppbV	100
31) Ethyl acetate	4.564	45	134463	13.88	ppbV	89
32) Carbon tetrachloride	4.596	117	610678	10.52	ppbV	100
33) Tetrahydrofuran	4.596	42	483084	14.13	ppbV	88
34) 1,1,1-Trichloroethane	4.647	97	559453	10.44	ppbV	99
35) Methyl ethyl ketone	4.705	43	805186	14.21	ppbV	91
36) n-Heptane	4.943	43	720606	13.45	ppbV	88
37) Benzene	4.956	78	902690	11.13	ppbV	94
38) 1,2-Dichloroethane	5.113	62	453588	12.22	ppbV	99
40) Trichloroethene	5.457	130	319431	9.07	ppbV	99
41) 2,2,4-Trimethylpentane	4.866	57	1739189	12.55	ppbV	98
42) 1,2-Dichloropropane	5.911	63	383316	11.86	ppbV	100
43) Bromodichloromethane	5.972	83	671725	11.94	ppbV	99
44) Methyl methacrylate	6.117	41	550108	13.63	ppbV	87
45) 1,4-Dioxane	6.146	88	214041	11.65	ppbV	87
46) cis-1,3-Dichloropropene	6.564	75	541068	11.33	ppbV	99
47) Toluene	6.801	91	1015357	10.19	ppbV	99
48) Methyl isobutyl ketone	7.168	43	977505	13.41	ppbV	94
49) Tetrachloroethene	7.191	166	358921	9.51	ppbV	100
50) trans-1,3-Dichloropropene	7.207	75	540765	11.78	ppbV	85
51) 1,1,2-Trichloroethane	7.367	97	343784	9.99	ppbV	96

Data Path : C:\DATA\2024\07-2024\07-16-2024\
Data File : aa6899dcvs.D
Acq On : 16 Jul 2024 11:25 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

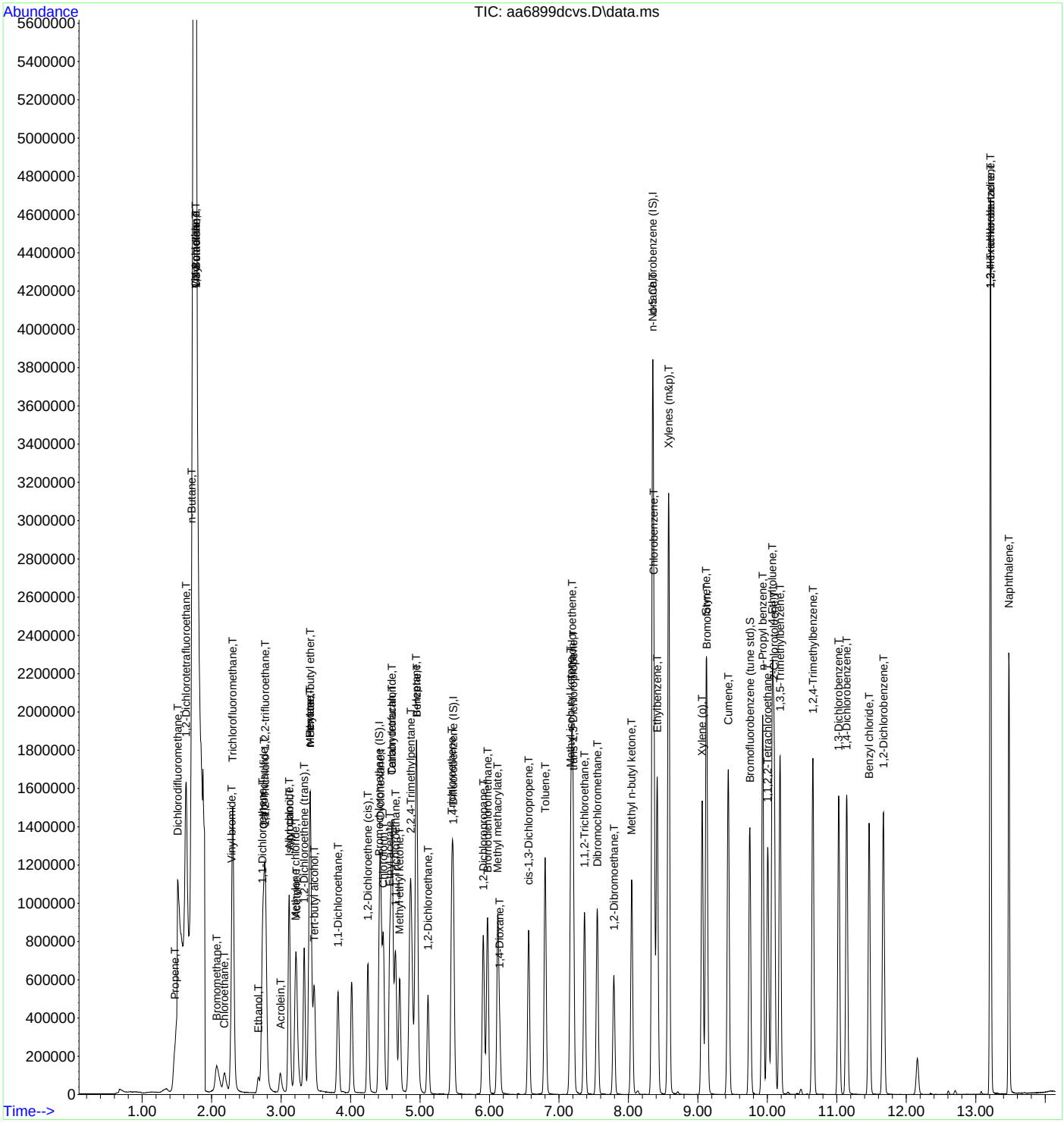
Quant Time: Jul 16 13:28:39 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.554	129	574060	10.46	ppbV	99
53) 1,2-Dibromoethane	7.792	107	505904	10.25	ppbV	100
54) Methyl n-butyl ketone	8.046	43	944261	13.84	ppbV	92
56) n-Nonane	8.348	43	1071780	12.94	ppbV	91
57) Chlorobenzene	8.367	112	730519	9.95	ppbV	91
58) Ethylbenzene	8.416	91	1379263	9.87	ppbV	98
59) Xylenes (m&p)	8.579	91	2116384	20.15	ppbV	98
60) Xylene (o)	9.062	91	1064497	9.62	ppbV	97
61) Styrene	9.120	104	751740	10.22	ppbV	100
62) Bromoform	9.129	173	497026	10.07	ppbV	100
63) Cumene	9.438	105	1351091	9.58	ppbV	98
65) n-Propyl benzene	9.933	91	1899920	9.79	ppbV	97
66) 1,1,2,2-Tetrachloroethane	10.004	83	859326	10.55	ppbV	100
67) 4-Ethyltoluene	10.071	105	1499217	9.48	ppbV	99
68) 2-Chlorotoluene	10.097	91	1317691	10.01	ppbV	96
69) 1,3,5-Trimethylbenzene	10.184	105	1190486	9.25	ppbV	98
70) 1,2,4-Trimethylbenzene	10.657	105	1173632	9.09	ppbV	98
71) 1,3-Dichlorobenzene	11.026	146	667401	8.52	ppbV	99
72) 1,4-Dichlorobenzene	11.142	146	668261	8.44	ppbV	100
73) Benzyl chloride	11.464	91	1239569	9.73	ppbV	97
74) 1,2-Dichlorobenzene	11.673	146	640976	8.51	ppbV	100
75) 1,3-Hexachlorobutadiene	13.213	225	344526	7.95	ppbV	100
76) 1,2,4-Trichlorobenzene	13.213	180	462802	7.92	ppbV	100
77) Naphthalene	13.476	128	1285927	7.79	ppbV	100

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

Data Path : C:\DATA\2024\07-2024\07-16-2024\
Data File : aa6899dcvs.D
Acq On : 16 Jul 2024 11:25 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 16 13:28:39 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES, LLC

Continuing Calibration Data Summary Report

Initial Calibration Curve: 5/29/2024
Instrument: AA
Amount of standard injected (ml): 50

Date/Time of Calibration: 7/18/2024 10:31
Sample ID: DCS
Laboratory ID: AA6922DCVS

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6921BFB]	07/18/2024 10:00
10 PPBV DCVS [AA6922DCVS]	07/18/2024 10:31
10 PPBV LCS [AA6923LCS]	07/18/2024 11:41
METHOD BLANK [AA6924BLK]	07/18/2024 13:17
E24-02427-02 [AA6926]	07/18/2024 14:41
E24-02427-04 [AA6927]	07/18/2024 15:12

Compound Name	Average RRF	Standard RRF	% Difference	PassFail	*
Acetone	2.2	2.7	-18	PASS	
Benzene	4.6	5.4	-18	PASS	
Bromodichloromethane	0.72	0.81	-12	PASS	
Bromoform	0.70	0.65	7.0	PASS	
Bromomethane	1.0	1.1	-4.9	PASS	
1,3-Butadiene	1.2	1.2	5.7	PASS	
Chlorobenzene	1.0	0.96	7.5	PASS	
Chloroethane	0.75	0.85	-13	PASS	
Chloroform	3.2	3.9	-22	PASS	
Chloromethane	0.18	0.17	5.1	PASS	
Carbon disulfide	4.2	4.7	-11	PASS	
Carbon tetrachloride	3.3	3.5	-7.5	PASS	
Cyclohexane	2.6	3.1	-21	PASS	
Dibromochloromethane	0.71	0.81	-14	PASS	
1,2-Dibromoethane	0.63	0.77	-21	PASS	
1,2-Dichlorobenzene	1.1	0.91	15	PASS	
1,3-Dichlorobenzene	1.1	0.93	16	PASS	
1,4-Dichlorobenzene	1.1	0.96	14	PASS	
Dichlorodifluoromethane	2.9	3.2	-11	PASS	
1,1-Dichloroethane	2.8	3.7	-29	PASS	
1,2-Dichloroethane	2.1	2.2	-6.3	PASS	
1,1-Dichloroethene	2.5	3.2	-27	PASS	
1,2-Dichloroethene (cis)	2.1	2.4	-17	PASS	
1,2-Dichloroethene (trans)	2.3	2.8	-21	PASS	
1,2-Dichloropropane	0.42	0.50	-21	PASS	
1,3-Dichloropropene (cis)	0.61	0.72	-18	PASS	
1,3-Dichloropropene (trans)	0.59	0.69	-17	PASS	
1,2-Dichlorotetrafluoroethane	4.0	4.2	-3.6	PASS	
1,4-Dioxane	0.24	0.28	-17	PASS	
Ethylbenzene	2.0	1.9	1.3	PASS	
n-Heptane	3.0	3.4	-12	PASS	
1,3-Hexachlorobutadiene	0.61	0.43	30	PASS	
n-Hexane	3.8	3.8	2.3	PASS	
Methylene chloride	1.8	2.2	-24	PASS	
Methyl ethyl ketone	3.2	4.1	-28	PASS	
Methyl isobutyl ketone	0.94	0.92	2.2	PASS	
Methyl tert-butyl ether	4.6	5.5	-20	PASS	
Styrene	1.0	1.1	-3.8	PASS	
Tert-butyl alcohol	3.1	3.8	-22	PASS	
1,1,2,2-Tetrachloroethane	1.1	1.2	-0.40	PASS	
Tetrachloroethene	0.49	0.50	-2.9	PASS	
Toluene	1.3	1.5	-18	PASS	
1,2,4-Trichlorobenzene	0.82	0.61	26	PASS	
1,1,1-Trichloroethane	3.0	3.4	-13	PASS	

***%Difference must be within +/- 30%**
RRF - Relative Response Factor

INTEGRATED ANALYTICAL LABORATORIES, LLC

Continuing Calibration Data Summary Report

Initial Calibration Curve:	**5/29/2024**	**Date/Time of Calibration:**	**7/18/2024 10:31**
Instrument:	**AA**	**Sample ID:**	**DCS**
Amount of standard injected (ml):	**50**	**Laboratory ID:**	**AA6922DCVS**

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6921BFB]	07/18/2024 10:00
10 PPBV DCVS [AA6922DCVS]	07/18/2024 10:31
10 PPBV LCS [AA6923LCS]	07/18/2024 11:41
METHOD BLANK [AA6924BLK]	07/18/2024 13:17
E24-02427-02 [AA6926]	07/18/2024 14:41
E24-02427-04 [AA6927]	07/18/2024 15:12

Compound Name	Average RRF	Standard RRF	% Difference	PassFail	*
1,1,2-Trichloroethane	0.44	0.51	-16	PASS	
Trichloroethene	0.45	0.42	7.1	PASS	
Trichlorofluoromethane	3.3	3.9	-17	PASS	
1,1,2-Trichloro-1,2,2-trifluoroethane	3.1	3.3	-5.2	PASS	
1,2,4-Trimethylbenzene	1.8	1.7	4.9	PASS	
1,3,5-Trimethylbenzene	1.8	1.7	7.8	PASS	
2,2,4-Trimethylpentane	1.8	1.8	0.30	PASS	
Vinyl bromide	1.2	1.3	-0.80	PASS	
Vinyl chloride	1.3	1.6	-20	PASS	
Xylenes (m&p)	1.5	1.5	-0.70	PASS	
Xylenes (o)	1.6	1.5	5.8	PASS	

***%Difference must be within +/- 30%**
RRF - Relative Response Factor

Data Path : C:\DATA\2024\07-2024\07-18-2024\
Data File : aa6922dcvs.D
Acq On : 18 Jul 2024 10:31 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 18 15:04:47 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 0% Max. R.T. Dev 0.40min
Max. RRF Dev : 30% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane (IS)	1.000	1.000	0.0	87	0.01
2	T	Propene	1.050	1.191	-13.4	100	0.04
3	T	Dichlorodifluoromethane	2.863	3.183	-11.2	93	0.03
4	T	1,2-Dichlorotetrafluoroetha	4.013	4.156	-3.6	90	0.03
5	T	n-Butane	2.168	2.118	2.3	86	0.03
6	T	Chloromethane	0.178	0.169	5.1	73	0.03
7	T	Vinyl chloride	1.318	1.576	-19.6	98	0.02
8	T	1,3-Butadiene	1.222	1.152	5.7	81	0.03
9	T	Bromomethane	1.030	1.080	-4.9	85	0.03
10	T	Chloroethane	0.749	0.849	-13.4	93	0.03
11	T	Vinyl bromide	1.249	1.259	-0.8	80	0.02
12	T	Trichlorofluoromethane	3.297	3.859	-17.0	99	0.03
13	T	Ethanol	0.515	0.666	-29.3	132	0.03
14	T	1,1-Dichloroethene	2.537	3.224	-27.1	104	0.03
15	T	Carbon disulfide	4.226	4.683	-10.8	91	0.03
16	T	1,1,2-Trichloro-1,2,2-trifl	3.115	3.276	-5.2	95	0.03
17	T	Acrolein	0.564	0.724	-28.4	109	0.02
18	T	Allyl chloride	0.649	0.812	-25.1	99	0.02
19	T	Isopropanol	2.821	3.375	-19.6	101	0.02
20	T	Methylene chloride	1.807	2.244	-24.2	114	0.03
21	T	Acetone	2.244	2.658	-18.4	102	0.02
22	T	1,2-Dichloroethene (trans)	2.294	2.779	-21.1	103	0.02
23	T	n-Pentane	2.741	3.475	-26.8	117	0.02
24	T	n-Hexane	3.840	3.753	2.3	86	0.02
25	T	Methyl tert-butyl ether	4.580	5.492	-19.9	108	0.02
26	T	Tert-butyl alcohol	3.130	3.820	-22.0	109	0.02
27	T	1,1-Dichloroethane	2.847	3.657	-28.5	110	0.02
28	T	1,2-Dichloroethene (cis)	2.066	2.415	-16.9	97	0.02
29	t	Cyclohexane	2.564	3.103	-21.0	108	0.01
30	T	Chloroform	3.193	3.899	-22.1	103	0.00
31	T	Ethyl acetate	0.544	0.532	2.2	86	0.01
32	T	Carbon tetrachloride	3.258	3.502	-7.5	94	0.01
33	T	Tetrahydrofuran	1.920	1.948	-1.5	86	0.00
34	T	1,1,1-Trichloroethane	3.007	3.384	-12.5	101	0.00
35	T	Methyl ethyl ketone	3.180	4.065	-27.8	112	0.00
36	T	n-Heptane	3.007	3.368	-12.0	103	0.00
37	T	Benzene	4.553	5.374	-18.0	102	0.00
38	T	1,2-Dichloroethane	2.083	2.214	-6.3	91	0.00
39	I	1,4-Difluorobenzene (IS)	1.000	1.000	0.0	103	0.00
40	T	Trichloroethene	0.452	0.420	7.1	92	0.00
41	T	2,2,4-Trimethylpentane	1.781	1.775	0.3	99	0.00
42	T	1,2-Dichloropropane	0.415	0.504	-21.4	123	0.00
43	T	Bromodichloromethane	0.723	0.807	-11.6	111	0.00
44	T	Methyl methacrylate	0.518	0.591	-14.1	118	0.00
45	T	1,4-Dioxane	0.236	0.276	-16.9	119	0.00
46	T	cis-1,3-Dichloropropene	0.613	0.723	-17.9	118	0.00
47	T	Toluene	1.280	1.508	-17.8	119	0.00
48	T	Methyl isobutyl ketone	0.936	0.915	2.2	103	0.00
49	T	Tetrachloroethene	0.485	0.499	-2.9	103	0.00
50	T	trans-1,3-Dichloropropene	0.589	0.688	-16.8	114	0.00
51	T	1,1,2-Trichloroethane	0.442	0.511	-15.6	119	0.00
52	T	Dibromochloromethane	0.705	0.806	-14.3	115	0.00
53	T	1,2-Dibromoethane	0.634	0.765	-20.7	122	0.00

Data Path : C:\DATA\2024\07-2024\07-18-2024\
Data File : aa6922dcvs.D
Acq On : 18 Jul 2024 10:31 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 18 15:04:47 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 0% Max. R.T. Dev 0.40min
Max. RRF Dev : 30% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
54	T	Methyl n-butyl ketone	0.877	1.026	-17.0	126	0.00
55	I	d-5 Chlorobenzene (IS)	1.000	1.000	0.0	132	0.00
56	T	n-Nonane	1.169	1.302	-11.4	160	0.00
57	T	Chlorobenzene	1.036	0.958	7.5	125	0.00
58	T	Ethylbenzene	1.971	1.945	1.3	140	0.00
59	T	Xylenes (m&p)	1.482	1.493	-0.7	140	0.00
60	T	Xylene (o)	1.560	1.469	5.8	134	0.00
61	T	Styrene	1.037	1.076	-3.8	140	0.00
62	T	Bromoform	0.696	0.647	7.0	123	0.00
63	T	Cumene	1.990	1.916	3.7	135	0.00
64	S	Bromofluorobenzene (tune st	0.946	0.969	-2.4	148	0.00
65	T	n-Propyl benzene	2.737	2.887	-5.5	152	0.00
66	T	1,1,2,2-Tetrachloroethane	1.149	1.154	-0.4	142	0.00
67	T	4-Ethyltoluene	2.232	2.284	-2.3	146	0.00
68	T	2-Chlorotoluene	1.857	1.885	-1.5	146	0.00
69	T	1,3,5-Trimethylbenzene	1.815	1.673	7.8	131	0.00
70	T	1,2,4-Trimethylbenzene	1.821	1.731	4.9	134	0.00
71	T	1,3-Dichlorobenzene	1.105	0.934	15.5	124	0.00
72	T	1,4-Dichlorobenzene	1.117	0.964	13.7	122	0.00
73	T	Benzyl chloride	1.797	1.967	-9.5	154	0.00
74	T	1,2-Dichlorobenzene	1.063	0.905	14.9	119	0.00
75	T	1,3-Hexachlorobutadiene	0.612	0.431	29.6	97	0.00
76	T	1,2,4-Trichlorobenzene	0.824	0.608	26.2	102	0.00
77	T	Naphthalene	2.329	1.789	23.2	111	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data Path : C:\DATA\2024\07-2024\07-18-2024\
Data File : aa6922dcvs.D
Acq On : 18 Jul 2024 10:31 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 18 15:04:47 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.428	130	209046	10.00	ppbV		0.012
39) 1,4-Difluorobenzene (IS)	5.490	114	1036258	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.351	117	1227259	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.750	95	1188857	10.24	ppbV		0.000
Target Compounds							Qvalue
2) Propene	1.512	41	271322	12.37	ppbV		98
3) Dichlorodifluoromethane	1.540	85	705358	11.79	ppbV		100
4) 1,2-Dichlorotetrafluor...	1.660	85	851378	10.15	ppbV		92
5) n-Butane	1.739	43	482498	10.65	ppbV		97
6) Chloromethane	1.801	52	39577	10.61	ppbV	#	1
7) Vinyl chloride	1.794	62	355776	12.91	ppbV		98
8) 1,3-Butadiene	1.805	39	257786	10.09	ppbV		96
9) Bromomethane	2.104	94	225765	10.48	ppbV		99
10) Chloroethane	2.213	64	188185	12.02	ppbV		99
11) Vinyl bromide	2.310	106	265739	10.17	ppbV		99
12) Trichlorofluoromethane	2.332	101	887442	12.88	ppbV		100
13) Ethanol	2.695	45	144701	13.45	ppbV		99
14) 1,1-Dichloroethene	2.753	61	700893	13.22	ppbV		89
15) Carbon disulfide	2.776	76	1047506	11.86	ppbV	#	92
16) 1,1,2-Trichloro-1,2,2-...	2.795	101	746540	11.46	ppbV		91
17) Acrolein	3.014	56	151285	12.82	ppbV		98
18) Allyl chloride	3.136	76	183330	13.51	ppbV		100
19) Isopropanol	3.139	45	627913	10.65	ppbV		98
20) Methylene chloride	3.229	49	506573	13.41	ppbV		85
21) Acetone	3.242	43	600193	12.80	ppbV		94
22) 1,2-Dichloroethene (tr...	3.351	61	644777	13.45	ppbV		89
23) n-Pentane	3.435	43	784559	13.69	ppbV		99
24) n-Hexane	3.435	57	863043	10.75	ppbV		98
25) Methyl tert-butyl ether	3.438	73	1285804	13.43	ppbV		94
26) Tert-butyl alcohol	3.493	59	918273	14.03	ppbV		100
27) 1,1-Dichloroethane	3.837	63	818043	13.75	ppbV		99
28) 1,2-Dichloroethene (cis)	4.265	61	550300	12.74	ppbV		88
29) Cyclohexane	4.445	56	726522	13.56	ppbV		86
30) Chloroform	4.483	83	880353	13.19	ppbV		100
31) Ethyl acetate	4.576	45	120031	10.56	ppbV		94
32) Carbon tetrachloride	4.609	117	805348	11.82	ppbV		99
33) Tetrahydrofuran	4.609	42	447844	11.16	ppbV		100
34) 1,1,1-Trichloroethane	4.657	97	771047	12.26	ppbV		99
35) Methyl ethyl ketone	4.718	43	934728	14.06	ppbV		91
36) n-Heptane	4.949	43	781561	12.44	ppbV		97
37) Benzene	4.965	78	1213365	12.75	ppbV		93
38) 1,2-Dichloroethane	5.123	62	504499	11.59	ppbV		99
40) Trichloroethene	5.467	130	435034	9.28	ppbV		99
41) 2,2,4-Trimethylpentane	4.875	57	2004562	10.86	ppbV		100
42) 1,2-Dichloropropane	5.920	63	574352	13.35	ppbV		100
43) Bromodichloromethane	5.978	83	961180	12.84	ppbV		98
44) Methyl methacrylate	6.123	41	673747	12.54	ppbV		86
45) 1,4-Dioxane	6.152	88	334795	13.69	ppbV		87
46) cis-1,3-Dichloropropene	6.570	75	831523	13.08	ppbV		100
47) Toluene	6.808	91	1687385	12.72	ppbV		99
48) Methyl isobutyl ketone	7.174	43	1034011	10.66	ppbV		94
49) Tetrachloroethene	7.194	166	578988	11.52	ppbV		99
50) trans-1,3-Dichloropropene	7.213	75	791539	12.96	ppbV	#	66
51) 1,1,2-Trichloroethane	7.374	97	571679	12.47	ppbV		96

Data Path : C:\DATA\2024\07-2024\07-18-2024\
Data File : aa6922dcvs.D
Acq On : 18 Jul 2024 10:31 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

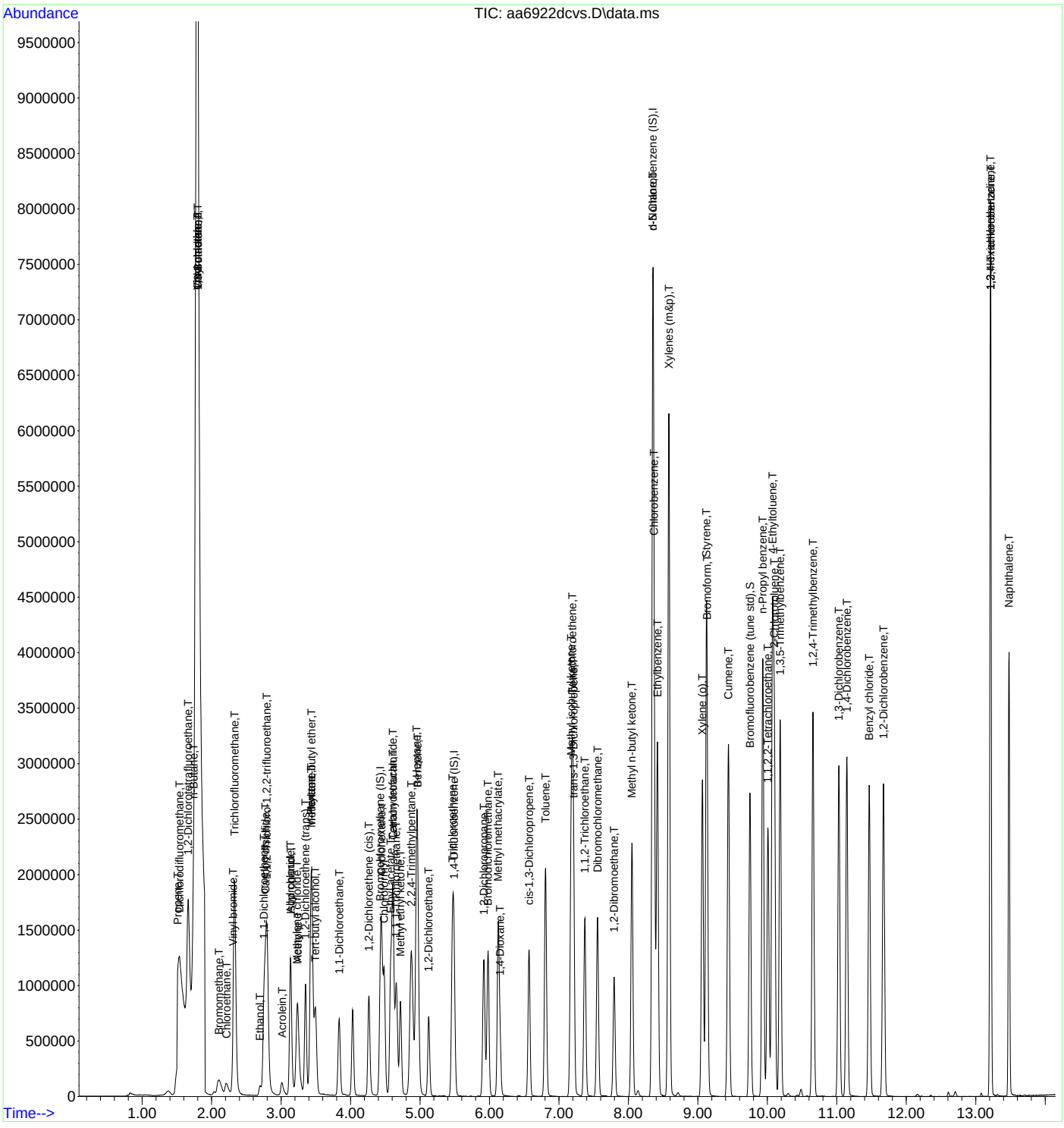
Quant Time: Jul 18 15:04:47 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.557	129	935833	12.81	ppbV	100
53) 1,2-Dibromoethane	7.795	107	856062	13.03	ppbV	100
54) Methyl n-butyl ketone	8.049	43	1201368	13.22	ppbV	93
56) n-Nonane	8.351	43	1757637	12.25	ppbV	90
57) Chlorobenzene	8.370	112	1305500	10.27	ppbV	89
58) Ethylbenzene	8.419	91	2649319	10.95	ppbV	98
59) Xylenes (m&p)	8.583	91	4086025	22.47	ppbV	98
60) Xylene (o)	9.065	91	1983659	10.36	ppbV	97
61) Styrene	9.123	104	1491821	11.72	ppbV	100
62) Bromoform	9.132	173	897372	10.51	ppbV	100
63) Cumene	9.441	105	2516492	10.30	ppbV	98
65) n-Propyl benzene	9.933	91	3825905	11.39	ppbV	97
66) 1,1,2,2-Tetrachloroethane	10.007	83	1615142	11.46	ppbV	99
67) 4-Ethyltoluene	10.075	105	3027286	11.05	ppbV	99
68) 2-Chlorotoluene	10.100	91	2521960	11.07	ppbV	95
69) 1,3,5-Trimethylbenzene	10.184	105	2238149	10.05	ppbV	98
70) 1,2,4-Trimethylbenzene	10.657	105	2294432	10.27	ppbV	98
71) 1,3-Dichlorobenzene	11.030	146	1272216	9.38	ppbV	99
72) 1,4-Dichlorobenzene	11.145	146	1266174	9.23	ppbV	99
73) Benzyl chloride	11.467	91	2414238	10.95	ppbV	97
74) 1,2-Dichlorobenzene	11.673	146	1188877	9.11	ppbV	100
75) 1,3-Hexachlorobutadiene	13.213	225	586508	7.81	ppbV	100
76) 1,2,4-Trichlorobenzene	13.216	180	820756	8.11	ppbV	100
77) Naphthalene	13.480	128	2195105	7.68	ppbV	100

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

Data Path : C:\DATA\2024\07-2024\07-18-2024\
Data File : aa6922dcvs.D
Acq On : 18 Jul 2024 10:31 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 18 15:04:47 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration



Section VIII: Raw Quality Control Data Package

BFB Tune Spectra

Method Blank

Laboratory Control Sample

Laboratory Sample Duplicate

Instrument Run Logs

Pressure Gauge Readings (initial and final)

Example Calculations

Screening Data

Clean Canister Certification

BFB

Data Path: C:\DATA\2024\03-2024\03-27-2024\
Data File: AA6020BFB.D
Acq On: 3/27/2024 10:03:00AM
Operator: jjw
Sample: BFB
Misc: ALM018474
ALS Vial: 1 **Multiplier:** 1
Integration File: rteint.p
Method: C:\msdchem\1\METHODS\240326.M
Last Update: Mon Feb 12 17:00:56 2024
Spectrum Information:

PassFail	Target Mass	Rel. to Mass	Lower Limit %	Higher Limit %	Raw Abundance	% Relative Abundance
PASS	50	95	8	40	248768	22.4
PASS	75	95	30	66	575680	51.7
PASS	95	95	100	100	1112917	100.0
PASS	96	95	5	9	72451	6.5
PASS	173	174	0.00	2	6828	1.0
PASS	174	95	50	100	671872	60.4
PASS	175	174	4	9	49411	7.4
PASS	176	174	93	101	654677	97.4
PASS	177	176	5	9	43245	6.6

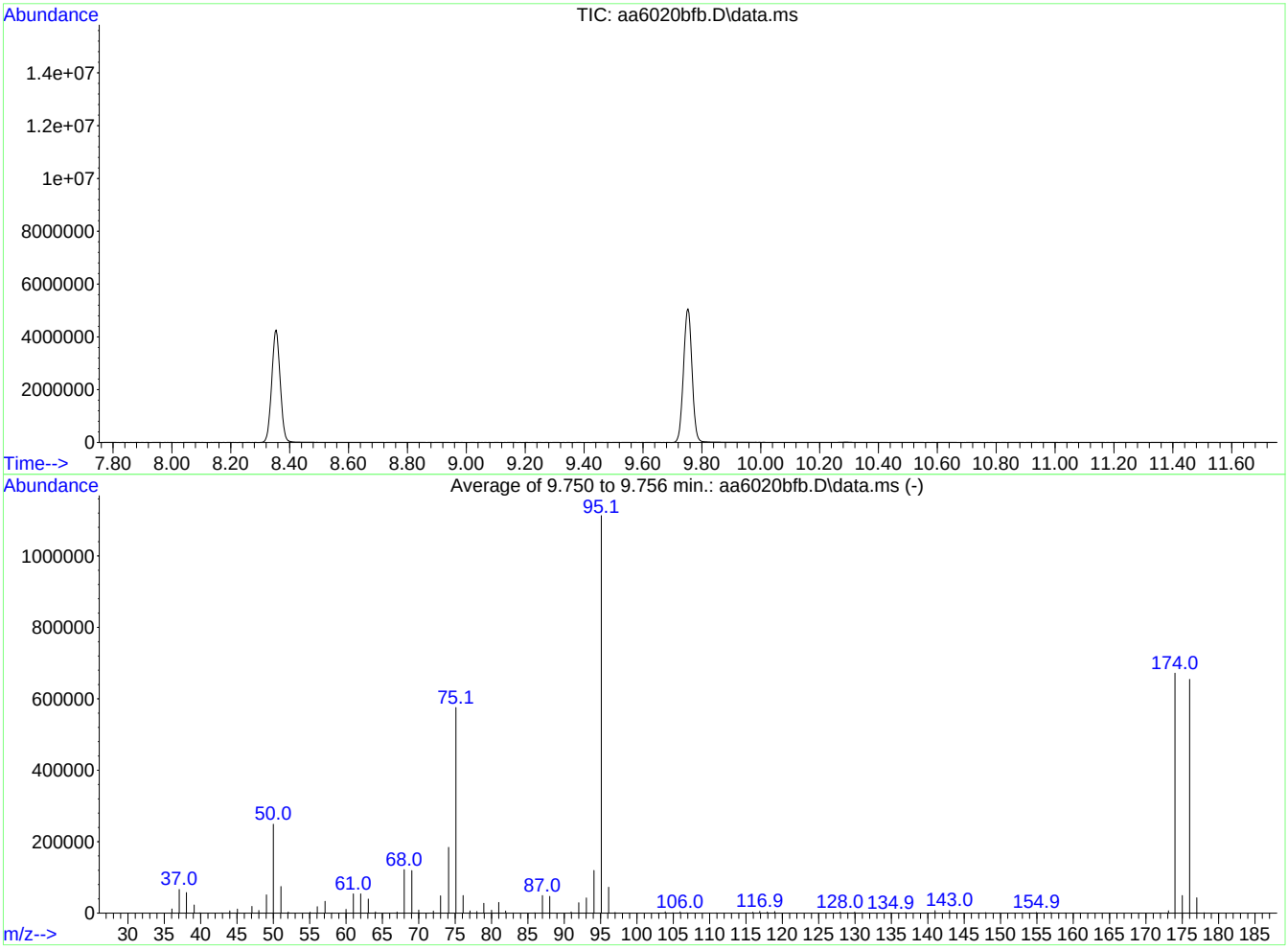
Runs with this BFB:

Lab Sample Number	Date File	Field Sample	Date/Time of Sample/Standard Analysis
BFB	AA6020BFB	NA	3/27/2024 10:03:00 AM
0.2 PPBV STD	AA6021STD05	NA	3/27/2024 10:38:00 AM
2 PPBV STD	AA6022STD04	NA	3/27/2024 11:38:00 AM
10 PPBV STD	AA6023STD03	NA	3/27/2024 12:09:00 PM
20 PPBV STD	AA6024STD02	NA	3/27/2024 12:40:00 PM
40 PPBV STD	AA6025STD01	NA	3/27/2024 1:24:00 PM
10 PPBV ICVSS	AA6026ICVSS	NA	3/27/2024 1:54:00 PM
10 PPBV LCS	AA6027LCS	NA	3/27/2024 2:23:00 PM
METHOD BLANK	AA6028BLK	NA	3/27/2024 2:51:00 PM
3285	AA6039	NA	3/27/2024 9:10:00 PM
2036	AA6040	NA	3/27/2024 9:38:00 PM

Data Path : C:\DATA\2024\03-2024\03-27-2024\
Data File : aa6020bfb.D
Acq On : 27 Mar 2024 10:03 am
Operator : jjw
Sample : BFB
Misc : ALM018474
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\240326.M
Title : TO-15 on the Agilent 7890A / 5975C
Last Update : Mon Feb 12 17:00:56 2024



AutoFind: Scans 2993, 2994, 2995; Background Corrected with Scan 2975

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	22.4	248768	PASS
75	95	30	66	51.7	575680	PASS
95	95	100	100	100.0	1112917	PASS
96	95	5	9	6.5	72451	PASS
173	174	0.00	2	1.0	6828	PASS
174	95	50	100	60.4	671872	PASS
175	174	4	9	7.4	49411	PASS
176	174	93	101	97.4	654677	PASS
177	176	5	9	6.6	43245	PASS

BFB

Data Path: C:\DATA\2024\05-2024\05-21-2024\
Data File: AA6539BFB.D
Acq On: 5/21/2024 9:54:00AM
Operator: jjw
Sample: BFB
Misc: ALM018474
ALS Vial: 1 **Multiplier:** 1
Integration File: rteint.p
Method: C:\msdchem\1\METHODS\240326.M
Last Update: Wed Mar 27 13:46:33 2024
Spectrum Information:

PassFail	Target Mass	Rel. to Mass	Lower Limit %	Higher Limit %	Raw Abundance	% Relative Abundance
PASS	50	95	8	40	194539	21.5
PASS	75	95	30	66	465152	51.3
PASS	95	95	100	100	906901	100.0
PASS	96	95	5	9	58715	6.5
PASS	173	174	0.00	2	3482	0.6
PASS	174	95	50	100	559573	61.7
PASS	175	174	4	9	41755	7.5
PASS	176	174	93	101	536704	95.9
PASS	177	176	5	9	34669	6.5

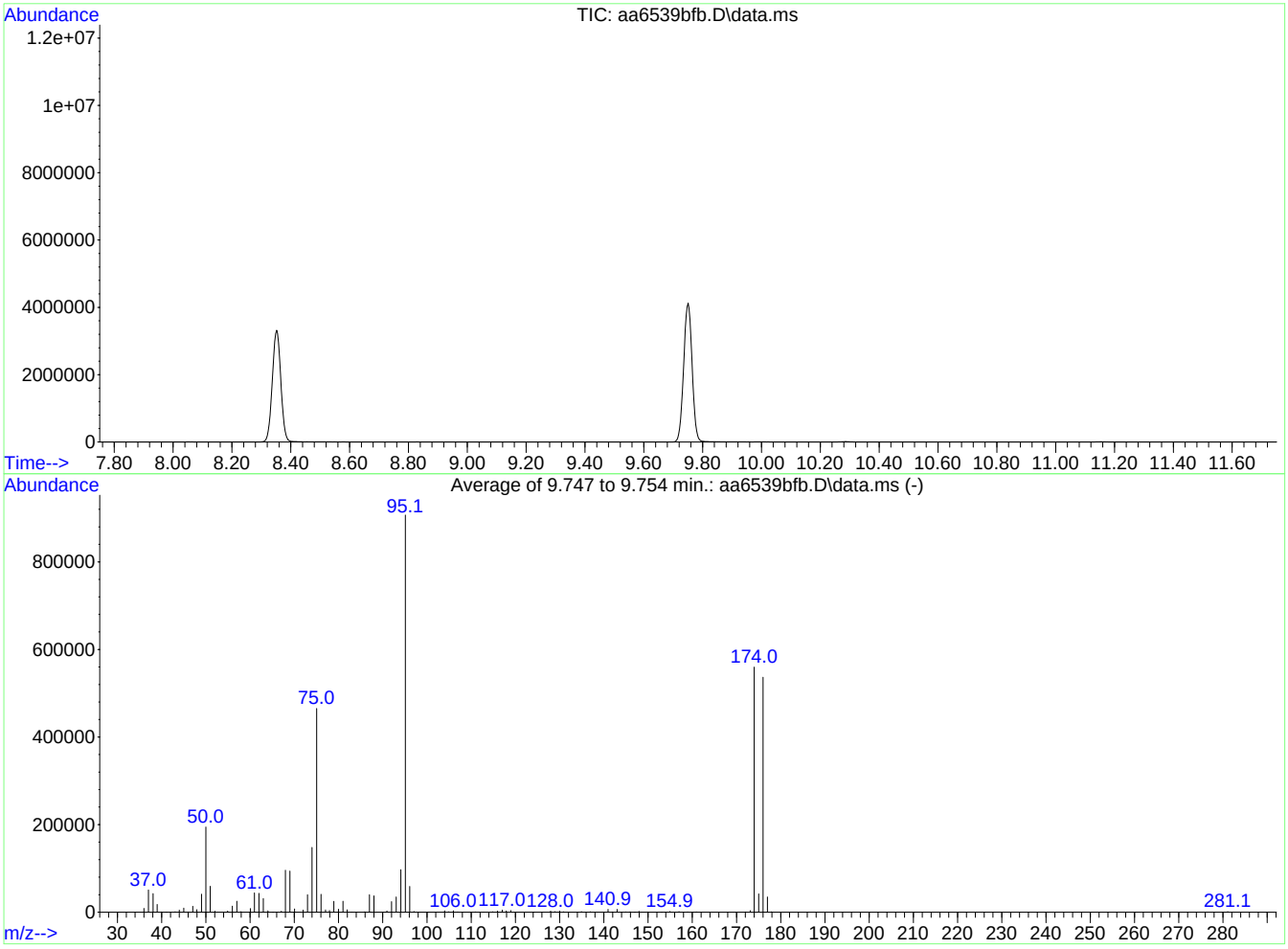
Runs with this BFB:

Lab Sample Number	Date File	Field Sample	Date/Time of Sample/Standard Analysis
BFB	AA6539BFB	NA	5/21/2024 9:54:00 AM
10 PPBV DCVS	AA6540DCVS	NA	5/21/2024 11:12:00 AM
10 PPBV LCS	AA6541LCS	NA	5/21/2024 11:47:00 AM
METHOD BLANK	AA6542BLK	NA	5/21/2024 12:15:00 PM
02 PPBV RLLCS	AA6543RLLCS	NA	5/21/2024 12:50:00 PM
3052	AA6544	NA	5/21/2024 3:02:00 PM
3100	AA6545	NA	5/21/2024 3:33:00 PM
1571	AA6546	NA	5/21/2024 4:03:00 PM
10 PPBV CCCVS	AA6552CCCVS	NA	5/21/2024 7:21:00 PM

Data Path : C:\DATA\2024\05-2024\05-21-2024\
Data File : aa6539bfb.D
Acq On : 21 May 2024 9:54 am
Operator : jjw
Sample : BFB
Misc : ALM018474
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\240326.M
Title : TO-15 on the Agilent 7890A / 5975C
Last Update : Wed Mar 27 13:46:33 2024



AutoFind: Scans 2992, 2993, 2994; Background Corrected with Scan 2974

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	21.5	194539	PASS
75	95	30	66	51.3	465152	PASS
95	95	100	100	100.0	906901	PASS
96	95	5	9	6.5	58715	PASS
173	174	0.00	2	0.6	3482	PASS
174	95	50	100	61.7	559573	PASS
175	174	4	9	7.5	41755	PASS
176	174	93	101	95.9	536704	PASS
177	176	5	9	6.5	34669	PASS

BFB

Data Path: C:\DATA\2024\05-2024\05-29-2024\
Data File: AA6554BFB.D
Acq On: 5/29/2024 9:16:00AM
Operator: jls
Sample: BFB
Misc: ALM018474
ALS Vial: 1 **Multiplier:** 1
Integration File: rteint.p
Method: C:\msdchem\1\METHODS\240326.M
Last Update: Wed Mar 27 13:46:33 2024
Spectrum Information:

PassFail	Target Mass	Rel. to Mass	Lower Limit %	Higher Limit %	Raw Abundance	% Relative Abundance
PASS	50	95	8	40	242304	21.7
PASS	75	95	30	66	578901	51.8
PASS	95	95	100	100	1118037	100.0
PASS	96	95	5	9	75616	6.8
PASS	173	174	0.00	2	6315	0.9
PASS	174	95	50	100	683392	61.1
PASS	175	174	4	9	49440	7.2
PASS	176	174	93	101	651648	95.4
PASS	177	176	5	9	42576	6.5

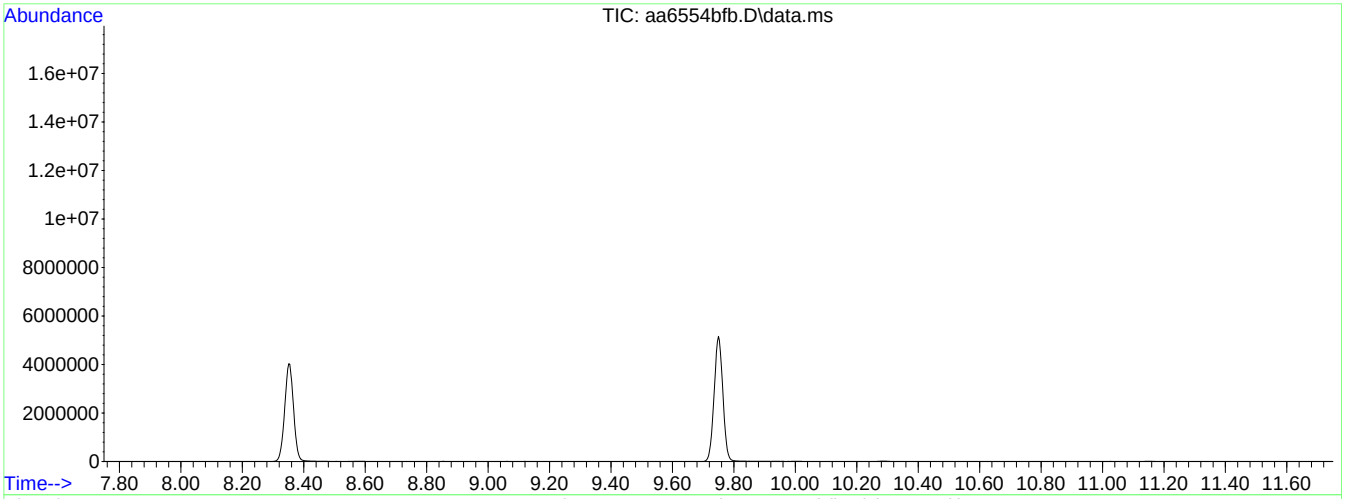
Runs with this BFB:

Lab Sample Number	Date File	Field Sample	Date/Time of Sample/Standard Analysis
BFB	AA6554BFB	NA	5/29/2024 9:16:00 AM
0.2 PPBV STD	AA6556STD05	NA	5/29/2024 12:40:00 PM
2 PPBV STD	AA6557STD04	NA	5/29/2024 1:11:00 PM
10 PPBV STD	AA6558STD03	NA	5/29/2024 1:46:00 PM
20 PPBV STD	AA6559STD02	NA	5/29/2024 2:18:00 PM
40 PPBV STD	AA6560STD01	NA	5/29/2024 2:55:00 PM
10 PPBV ICVSS	AA6561ICVSS	NA	5/29/2024 5:16:00 PM

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6554bfb.D
Acq On : 29 May 2024 9:16 am
Operator : jjw
Sample : BFB
Misc : ALM018474
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\240326.M
Title : TO-15 on the Agilent 7890A / 5975C
Last Update : Wed Mar 27 13:46:33 2024



AutoFind: Scans 2992, 2993, 2994; Background Corrected with Scan 2974

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	21.7	242304	PASS
75	95	30	66	51.8	578901	PASS
95	95	100	100	100.0	1118037	PASS
96	95	5	9	6.8	75616	PASS
173	174	0.00	2	0.9	6315	PASS
174	95	50	100	61.1	683392	PASS
175	174	4	9	7.2	49440	PASS
176	174	93	101	95.4	651648	PASS
177	176	5	9	6.5	42576	PASS

BFB

Data Path: C:\DATA\2024\06-2024\06-06-2024\
Data File: AA6657BFB.D
Acq On: 6/6/2024 10:04:00AM
Operator: jjw
Sample: BFB
Misc: ALM018474
ALS Vial: 1 **Multiplier:** 1
Integration File: rteint.p
Method: C:\msdchem\1\METHODS\240529.M
Last Update: Wed May 29 15:44:50 2024
Spectrum Information:

PassFail	Target Mass	Rel. to Mass	Lower Limit %	Higher Limit %	Raw Abundance	% Relative Abundance
PASS	50	95	8	40	81912	21.0
PASS	75	95	30	66	199659	51.3
PASS	95	95	100	100	389376	100.0
PASS	96	95	5	9	25237	6.5
PASS	173	174	0.00	2	1363	0.6
PASS	174	95	50	100	233387	59.9
PASS	175	174	4	9	16601	7.1
PASS	176	174	93	101	228309	97.8
PASS	177	176	5	9	15020	6.6

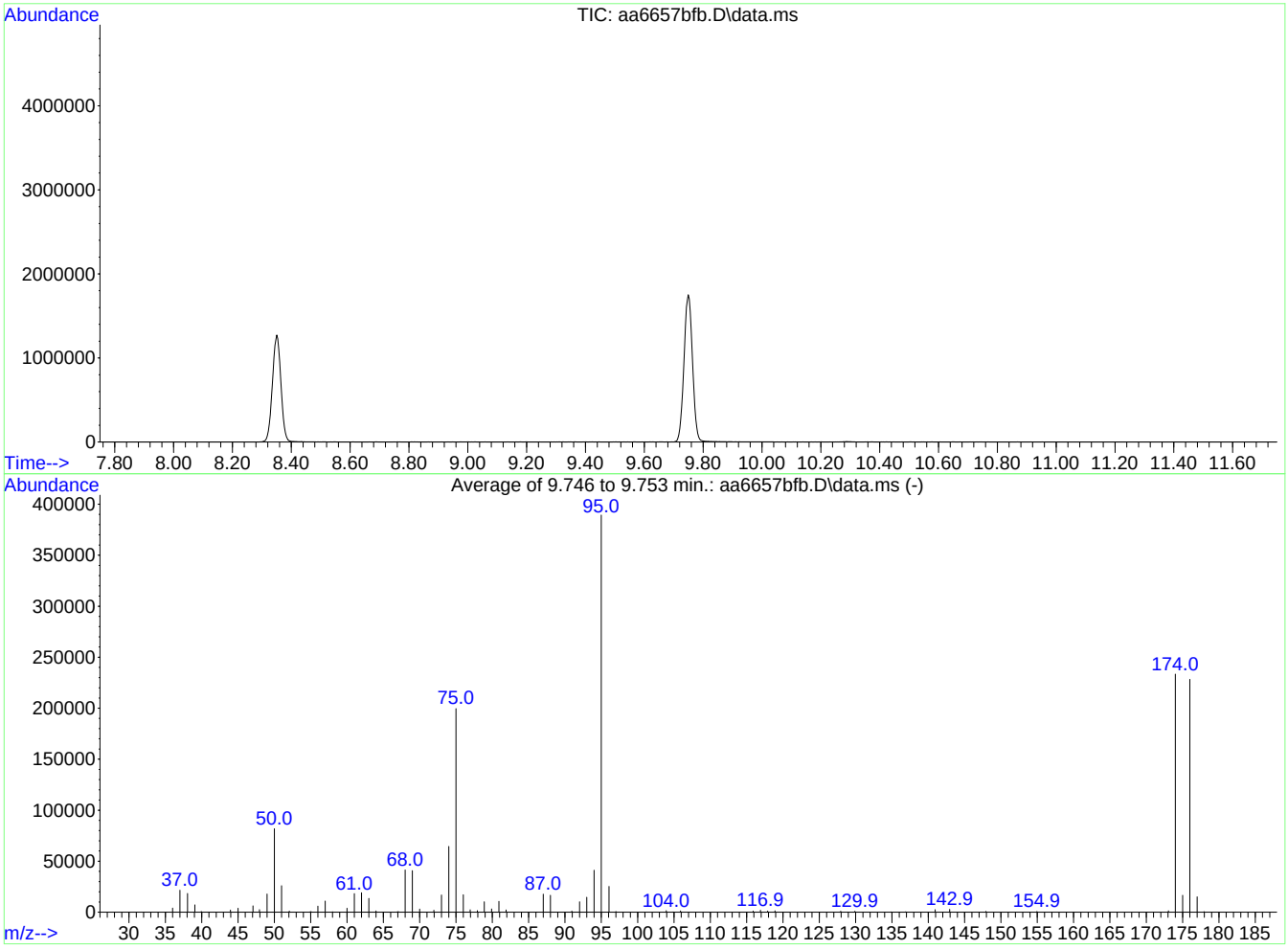
Runs with this BFB:

Lab Sample Number	Date File	Field Sample	Date/Time of Sample/Standard Analysis
BFB	AA6657BFB	NA	6/6/2024 10:04:00 AM
10 PPBV DCVS	AA6658DCVS	NA	6/6/2024 11:39:00 AM
10 PPBV LCS	AA6659LCS	NA	6/6/2024 12:10:00 PM
METHOD BLANK	AA6660BLK	NA	6/6/2024 12:40:00 PM
02 PPBV RLLCS	AA6661RLLCS	NA	6/6/2024 1:14:00 PM
4869	AA6664	NA	6/6/2024 2:48:00 PM
4856	AA6665	NA	6/6/2024 3:20:00 PM
3804	AA6666	NA	6/6/2024 3:51:00 PM
10 PPBV CCCVS	AA6676CCCVS	NA	6/6/2024 9:26:00 PM

Data Path : C:\DATA\2024\06-2024\06-06-2024\
Data File : aa6657bfb.D
Acq On : 6 Jun 2024 10:04 am
Operator : jjw
Sample : BFB
Misc : ALM018474
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\240529.M
Title : TO-15 on the Agilent 7890A / 5975C
Last Update : Wed May 29 15:44:50 2024



AutoFind: Scans 2992, 2993, 2994; Background Corrected with Scan 2975

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	21.0	81912	PASS
75	95	30	66	51.3	199659	PASS
95	95	100	100	100.0	389376	PASS
96	95	5	9	6.5	25237	PASS
173	174	0.00	2	0.6	1363	PASS
174	95	50	100	59.9	233387	PASS
175	174	4	9	7.1	16601	PASS
176	174	93	101	97.8	228309	PASS
177	176	5	9	6.6	15020	PASS

BFB

Data Path: C:\DATA\2024\07-2024\07-16-2024\
Data File: AA6898BFB.D
Acq On: 7/16/2024 10:45:00AM
Operator: jjw
Sample: BFB
Misc: ALM018474
ALS Vial: 1 **Multiplier:** 1
Integration File: rteint.p
Method: C:\msdchem\1\METHODS\240529.M
Last Update: Wed May 29 15:44:50 2024
Spectrum Information:

PassFail	Target Mass	Rel. to Mass	Lower Limit %	Higher Limit %	Raw Abundance	% Relative Abundance
PASS	50	95	8	40	154453	24.6
PASS	75	95	30	66	344875	54.9
PASS	95	95	100	100	628075	100.0
PASS	96	95	5	9	41280	6.6
PASS	173	174	0.00	2	3488	0.9
PASS	174	95	50	100	371669	59.2
PASS	175	174	4	9	27419	7.4
PASS	176	174	93	101	355925	95.8
PASS	177	176	5	9	23797	6.7

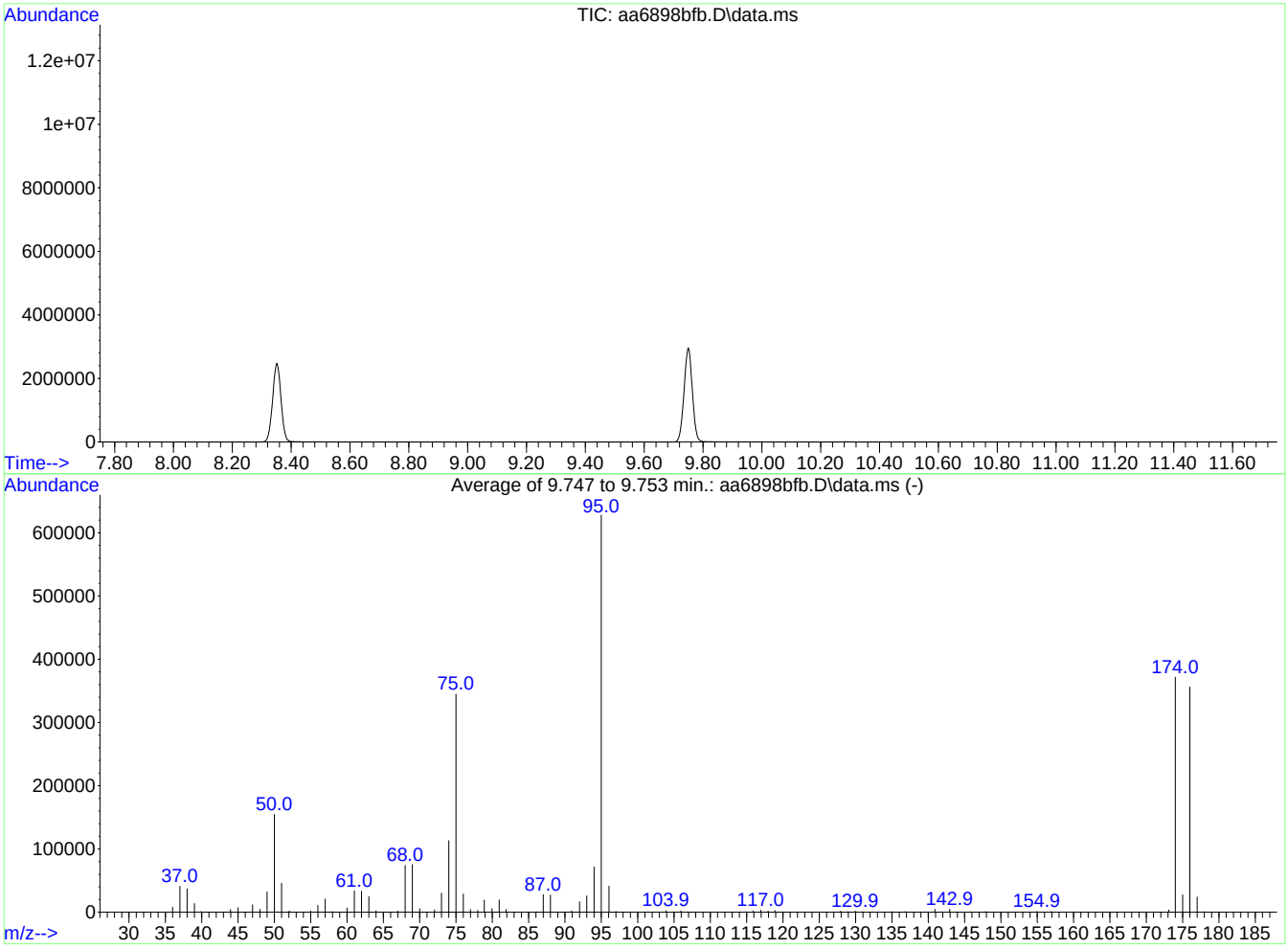
Runs with this BFB:

Lab Sample Number	Date File	Field Sample	Date/Time of Sample/Standard Analysis
BFB	AA6898BFB	NA	7/16/2024 10:45:00 AM
10 PPBV DCVS	AA6899DCVS	NA	7/16/2024 11:25:00 AM
10 PPBV LCS	AA6900LCS	NA	7/16/2024 12:31:00 PM
METHOD BLANK	AA6901BLK	NA	7/16/2024 1:32:00 PM
E24-02427-01	AA6908	SG-14	7/16/2024 5:50:00 PM
E24-02427-21	AA6909	SG-14	7/16/2024 6:21:00 PM
E24-02427-02	AA6912	SG-15	7/16/2024 7:54:00 PM
E24-02427-03	AA6914	SG-16	7/16/2024 8:57:00 PM
E24-02427-03	AA6915	SG-16	7/16/2024 9:36:00 PM
E24-02427-04	AA6918	SG-17	7/16/2024 11:10:00 PM

Data Path : C:\DATA\2024\07-2024\07-16-2024\
Data File : aa6898bfb.D
Acq On : 16 Jul 2024 10:45 am
Operator : jjw
Sample : BFB
Misc : ALM018474
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\240529.M
Title : TO-15 on the Agilent 7890A / 5975C
Last Update : Wed May 29 15:44:50 2024



AutoFind: Scans 2992, 2993, 2994; Background Corrected with Scan 2975

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	24.6	154453	PASS
75	95	30	66	54.9	344875	PASS
95	95	100	100	100.0	628075	PASS
96	95	5	9	6.6	41280	PASS
173	174	0.00	2	0.9	3488	PASS
174	95	50	100	59.2	371669	PASS
175	174	4	9	7.4	27419	PASS
176	174	93	101	95.8	355925	PASS
177	176	5	9	6.7	23797	PASS

BFB

Data Path: C:\DATA\2024\07-2024\07-18-2024\
Data File: AA6921BFB.D
Acq On: 7/18/2024 10:00:00AM
Operator: jjw
Sample: BFB
Misc: ALM018474
ALS Vial: 1 **Multiplier:** 1
Integration File: rteint.p
Method: C:\msdchem\1\METHODS\240529.M
Last Update: Wed May 29 15:44:50 2024
Spectrum Information:

PassFail	Target Mass	Rel. to Mass	Lower Limit %	Higher Limit %	Raw Abundance	% Relative Abundance
PASS	50	95	8	40	155627	24.6
PASS	75	95	30	66	346880	54.9
PASS	95	95	100	100	631573	100.0
PASS	96	95	5	9	41493	6.6
PASS	173	174	0.00	2	3142	0.9
PASS	174	95	50	100	365355	57.8
PASS	175	174	4	9	26947	7.4
PASS	176	174	93	101	354347	97.0
PASS	177	176	5	9	22899	6.5

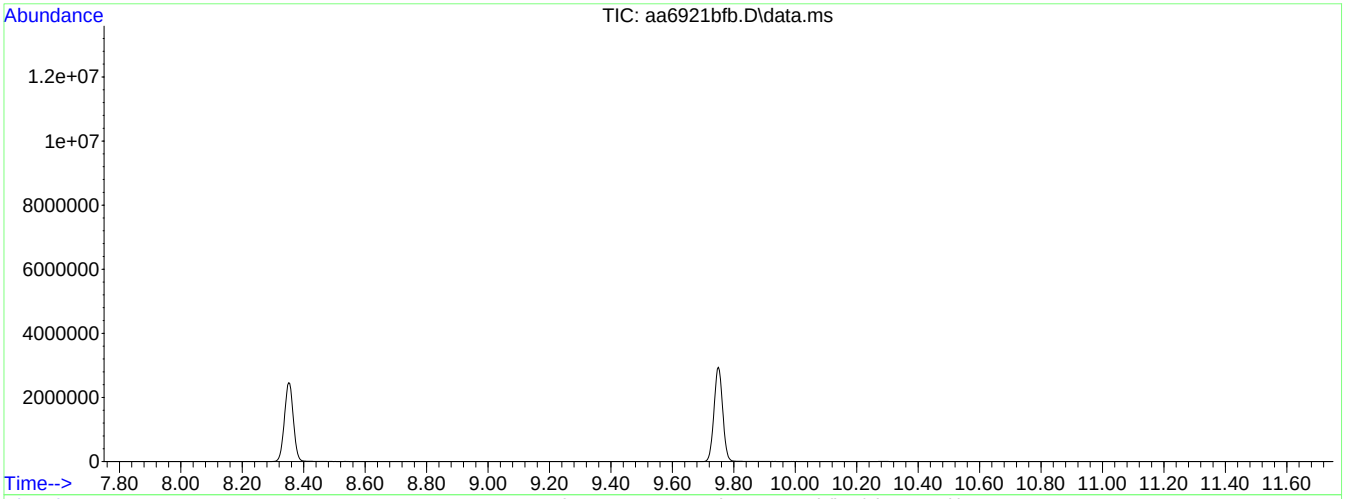
Runs with this BFB:

Lab Sample Number	Date File	Field Sample	Date/Time of Sample/Standard Analysis
BFB	AA6921BFB	NA	7/18/2024 10:00:00 AM
10 PPBV DCVS	AA6922DCVS	NA	7/18/2024 10:31:00 AM
10 PPBV LCS	AA6923LCS	NA	7/18/2024 11:41:00 AM
METHOD BLANK	AA6924BLK	NA	7/18/2024 1:17:00 PM
E24-02427-02	AA6926	SG-15	7/18/2024 2:41:00 PM
E24-02427-04	AA6927	SG-17	7/18/2024 3:12:00 PM

Data Path : C:\DATA\2024\07-2024\07-18-2024\
Data File : aa6921bfb.D
Acq On : 18 Jul 2024 10:00 am
Operator : jjw
Sample : BFB
Misc : ALM018474
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\240529.M
Title : TO-15 on the Agilent 7890A / 5975C
Last Update : Wed May 29 15:44:50 2024



AutoFind: Scans 2992, 2993, 2994; Background Corrected with Scan 2975

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	24.6	155627	PASS
75	95	30	66	54.9	346880	PASS
95	95	100	100	100.0	631573	PASS
96	95	5	9	6.6	41493	PASS
173	174	0.00	2	0.9	3142	PASS
174	95	50	100	57.8	365355	PASS
175	174	4	9	7.4	26947	PASS
176	174	93	101	97.0	354347	PASS
177	176	5	9	6.5	22899	PASS

INTEGRATED ANALYTICAL LABORATORIES, LLC

Method Blank Report

Lab Sample Name:	**METHOD BLANK**	**Data File:**	**AA6542BLK**
Field Sample Name:	**METHOD BLANK**	**Date Analyzed:**	**5/21/2024**
Matrix:	**Air**	**Sample Volume:**	**500ml**
Dilution Factor:	**1**	**GC/MS Column:**	**RTX-1, 0.32 mmID**

Runs with this Method Blank:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6539BFB]	05/21/2024 9:54
10 PPBV DCVS [AA6540DCVS]	05/21/2024 11:12
10 PPBV LCS [AA6541LCS]	05/21/2024 11:47
METHOD BLANK [AA6542BLK]	05/21/2024 12:15
02 PPBV RLLCS [AA6543RLLCS]	05/21/2024 12:50
3052 [AA6544]	05/21/2024 15:02
3100 [AA6545]	05/21/2024 15:33
1571 [AA6546]	05/21/2024 16:03
10 PPBV CCCVS [AA6552CCCVS]	05/21/2024 19:21

Compound	CAS #	Reporting Limit (ppbv)	Concentration (ppbv)
Acetone	67-64-1	0.20	ND
Benzene	71-43-2	0.20	ND
Bromodichloromethane	75-27-4	0.20	ND
Bromoform	75-25-2	0.20	ND
Bromomethane	74-83-9	0.20	ND
1,3-Butadiene	106-99-0	0.20	ND
Chlorobenzene	108-90-7	0.20	ND
Chloroethane	75-00-3	0.20	ND
Chloroform	67-66-3	0.20	ND
Chloromethane	74-87-3	0.20	ND
Carbon disulfide	75-15-0	0.20	ND
Carbon tetrachloride	56-23-5	0.20	ND
Cyclohexane	110-82-7	0.20	ND
Dibromochloromethane	124-48-1	0.20	ND
1,2-Dibromoethane	106-93-4	0.17	ND
1,2-Dichlorobenzene	95-50-1	0.20	ND
1,3-Dichlorobenzene	541-73-1	0.20	ND
1,4-Dichlorobenzene	106-46-7	0.20	ND
Dichlorodifluoromethane	75-71-8	0.20	ND
1,1-Dichloroethane	75-34-3	0.20	ND
1,2-Dichloroethane	107-06-2	0.20	ND
1,1-Dichloroethene	75-35-4	0.20	ND
1,2-Dichloroethene (cis)	156-59-2	0.20	ND
1,2-Dichloroethene (trans)	156-60-5	0.20	ND
1,2-Dichloropropane	78-87-5	0.20	ND
1,3-Dichloropropene (cis)	10061-01-5	0.20	ND
1,3-Dichloropropene (trans)	10061-02-6	0.19	ND
1,2-Dichlorotetrafluoroethane	76-14-2	0.20	ND
1,4-Dioxane	123-91-1	0.20	ND
Ethylbenzene	100-41-4	0.18	ND
n-Heptane	142-82-5	0.20	ND
1,3-Hexachlorobutadiene	87-68-3	0.20	ND
n-Hexane	110-54-3	0.20	ND

Method Blank must be less than the Practical Quantitation Limit (PQL).

INTEGRATED ANALYTICAL LABORATORIES, LLC

Method Blank Report

Lab Sample Name:	**METHOD BLANK**	**Data File:**	**AA6542BLK**
Field Sample Name:	**METHOD BLANK**	**Date Analyzed:**	**5/21/2024**
Matrix:	**Air**	**Sample Volume:**	**500ml**
Dilution Factor:	**1**	**GC/MS Column:**	**RTX-1, 0.32 mmID**

Runs with this Method Blank:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6539BFB]	05/21/2024 9:54
10 PPBV DCVS [AA6540DCVS]	05/21/2024 11:12
10 PPBV LCS [AA6541LCS]	05/21/2024 11:47
METHOD BLANK [AA6542BLK]	05/21/2024 12:15
02 PPBV RLLCS [AA6543RLLCS]	05/21/2024 12:50
3052 [AA6544]	05/21/2024 15:02
3100 [AA6545]	05/21/2024 15:33
1571 [AA6546]	05/21/2024 16:03
10 PPBV CCCVS [AA6552CCCVS]	05/21/2024 19:21

Compound	CAS #	Reporting Limit (ppbv)	Concentration (ppbv)
Methylene chloride	75-09-2	0.20	ND
Methyl ethyl ketone	78-93-3	0.20	ND
Methyl isobutyl ketone	108-10-1	0.20	ND
Methyl tert-butyl ether	1634-04-4	0.20	ND
Styrene	100-42-5	0.20	ND
Tert-butyl alcohol	75-65-0	0.20	ND
1,1,2,2-Tetrachloroethane	79-34-5	0.20	ND
Tetrachloroethene	127-18-4	0.20	ND
Toluene	108-88-3	0.20	ND
1,2,4-Trichlorobenzene	120-82-1	0.20	ND
1,1,1-Trichloroethane	71-55-6	0.17	ND
1,1,2-Trichloroethane	79-00-5	0.20	ND
Trichloroethene	79-01-6	0.17	ND
Trichlorofluoromethane	75-69-4	0.20	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.20	ND
1,2,4-Trimethylbenzene	95-63-6	0.20	ND
1,3,5-Trimethylbenzene	108-67-8	0.20	ND
2,2,4-Trimethylpentane	540-84-1	0.20	ND
Vinyl bromide	593-60-2	0.20	ND
Vinyl chloride	75-01-4	0.20	ND
Xylenes (m&p)	179601-23-1	0.20	ND
Xylenes (o)	95-47-6	0.20	ND

Method Blank must be less than the Practical Quantitation Limit (PQL).

Data Path : C:\DATA\2024\05-2024\05-21-2024\
Data File : aa6542blk.D
Acq On : 21 May 2024 12:15 pm
Operator : jjw
Sample : Method Blank
Misc : 1127
ALS Vial : 5 Sample Multiplier: 1

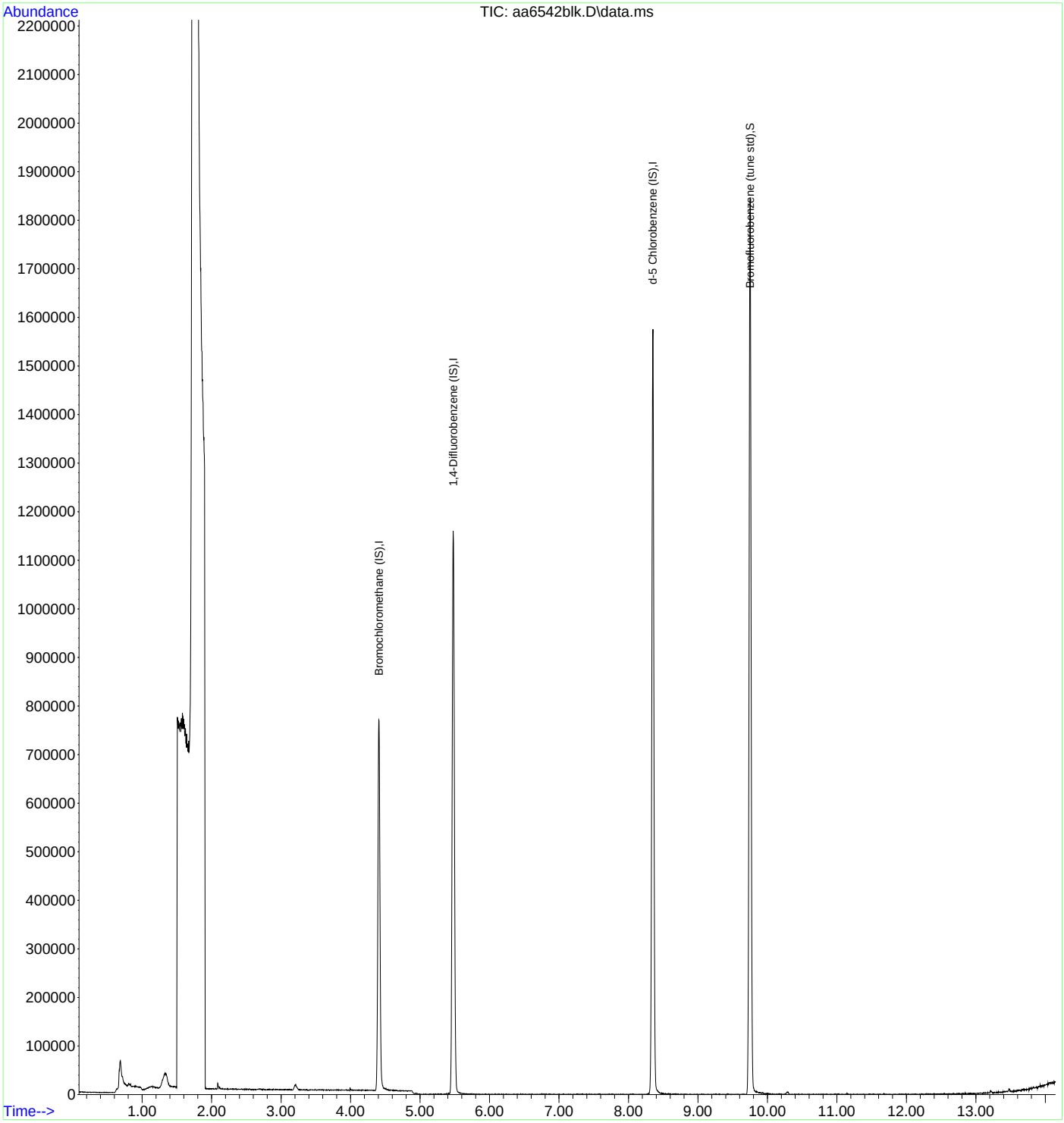
Quant Time: May 21 12:37:47 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.410	130	268604	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.478	114	1018846	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.352	117	981819	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.751	95	834054	9.47	ppbV	0.000
Target Compounds						Qvalue

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

Data Path : C:\DATA\2024\05-2024\05-21-2024\
Data File : aa6542blk.D
Acq On : 21 May 2024 12:15 pm
Operator : jjw
Sample : Method Blank
Misc : 1127
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 21 12:37:47 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES, LLC

Method Blank Report

Lab Sample Name:	**METHOD BLANK**	**Data File:**	**AA6660BLK**
Field Sample Name:	**METHOD BLANK**	**Date Analyzed:**	**6/6/2024**
Matrix:	**Air**	**Sample Volume:**	**500ml**
Dilution Factor:	**1**	**GC/MS Column:**	**RTX-1, 0.32 mmID**

Runs with this Method Blank:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6657BFB]	06/06/2024 10:04
10 PPBV DCVS [AA6658DCVS]	06/06/2024 11:39
10 PPBV LCS [AA6659LCS]	06/06/2024 12:10
METHOD BLANK [AA6660BLK]	06/06/2024 12:40
02 PPBV RLLCS [AA6661RLLCS]	06/06/2024 13:14
4869 [AA6664]	06/06/2024 14:48
4856 [AA6665]	06/06/2024 15:20
3804 [AA6666]	06/06/2024 15:51
10 PPBV CCCVS [AA6676CCCVS]	06/06/2024 21:26

Compound	CAS #	Reporting Limit (ppbv)	Concentration (ppbv)
Acetone	67-64-1	0.20	ND
Benzene	71-43-2	0.20	ND
Bromodichloromethane	75-27-4	0.20	ND
Bromoform	75-25-2	0.20	ND
Bromomethane	74-83-9	0.20	ND
1,3-Butadiene	106-99-0	0.20	ND
Chlorobenzene	108-90-7	0.20	ND
Chloroethane	75-00-3	0.20	ND
Chloroform	67-66-3	0.20	ND
Chloromethane	74-87-3	0.20	ND
Carbon disulfide	75-15-0	0.20	ND
Carbon tetrachloride	56-23-5	0.20	ND
Cyclohexane	110-82-7	0.20	ND
Dibromochloromethane	124-48-1	0.20	ND
1,2-Dibromoethane	106-93-4	0.17	ND
1,2-Dichlorobenzene	95-50-1	0.20	ND
1,3-Dichlorobenzene	541-73-1	0.20	ND
1,4-Dichlorobenzene	106-46-7	0.20	ND
Dichlorodifluoromethane	75-71-8	0.20	ND
1,1-Dichloroethane	75-34-3	0.20	ND
1,2-Dichloroethane	107-06-2	0.20	ND
1,1-Dichloroethene	75-35-4	0.20	ND
1,2-Dichloroethene (cis)	156-59-2	0.20	ND
1,2-Dichloroethene (trans)	156-60-5	0.20	ND
1,2-Dichloropropane	78-87-5	0.20	ND
1,3-Dichloropropene (cis)	10061-01-5	0.20	ND
1,3-Dichloropropene (trans)	10061-02-6	0.19	ND
1,2-Dichlorotetrafluoroethane	76-14-2	0.20	ND
1,4-Dioxane	123-91-1	0.20	ND
Ethylbenzene	100-41-4	0.18	ND
n-Heptane	142-82-5	0.20	ND
1,3-Hexachlorobutadiene	87-68-3	0.20	ND
n-Hexane	110-54-3	0.20	ND

Method Blank must be less than the Practical Quantitation Limit (PQL).

INTEGRATED ANALYTICAL LABORATORIES, LLC

Method Blank Report

Lab Sample Name:	**METHOD BLANK**	**Data File:**	**AA6660BLK**
Field Sample Name:	**METHOD BLANK**	**Date Analyzed:**	**6/6/2024**
Matrix:	**Air**	**Sample Volume:**	**500ml**
Dilution Factor:	**1**	**GC/MS Column:**	**RTX-1, 0.32 mmID**

Runs with this Method Blank:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6657BFB]	06/06/2024 10:04
10 PPBV DCVS [AA6658DCVS]	06/06/2024 11:39
10 PPBV LCS [AA6659LCS]	06/06/2024 12:10
METHOD BLANK [AA6660BLK]	06/06/2024 12:40
02 PPBV RLLCS [AA6661RLLCS]	06/06/2024 13:14
4869 [AA6664]	06/06/2024 14:48
4856 [AA6665]	06/06/2024 15:20
3804 [AA6666]	06/06/2024 15:51
10 PPBV CCCVS [AA6676CCCVS]	06/06/2024 21:26

Compound	CAS #	Reporting Limit (ppbv)	Concentration (ppbv)
Methylene chloride	75-09-2	0.20	ND
Methyl ethyl ketone	78-93-3	0.20	ND
Methyl isobutyl ketone	108-10-1	0.20	ND
Methyl tert-butyl ether	1634-04-4	0.20	ND
Styrene	100-42-5	0.20	ND
Tert-butyl alcohol	75-65-0	0.20	ND
1,1,2,2-Tetrachloroethane	79-34-5	0.20	ND
Tetrachloroethene	127-18-4	0.20	ND
Toluene	108-88-3	0.20	ND
1,2,4-Trichlorobenzene	120-82-1	0.20	ND
1,1,1-Trichloroethane	71-55-6	0.17	ND
1,1,2-Trichloroethane	79-00-5	0.20	ND
Trichloroethene	79-01-6	0.17	ND
Trichlorofluoromethane	75-69-4	0.20	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.20	ND
1,2,4-Trimethylbenzene	95-63-6	0.20	ND
1,3,5-Trimethylbenzene	108-67-8	0.20	ND
2,2,4-Trimethylpentane	540-84-1	0.20	ND
Vinyl bromide	593-60-2	0.20	ND
Vinyl chloride	75-01-4	0.20	ND
Xylenes (m&p)	179601-23-1	0.20	ND
Xylenes (o)	95-47-6	0.20	ND

Method Blank must be less than the Practical Quantitation Limit (PQL).

Data Path : C:\DATA\2024\06-2024\06-06-2024\
Data File : aa6660blk.D
Acq On : 6 Jun 2024 12:40 pm
Operator : jjw
Sample : Method Blank
Misc : 1127
ALS Vial : 4 Sample Multiplier: 1

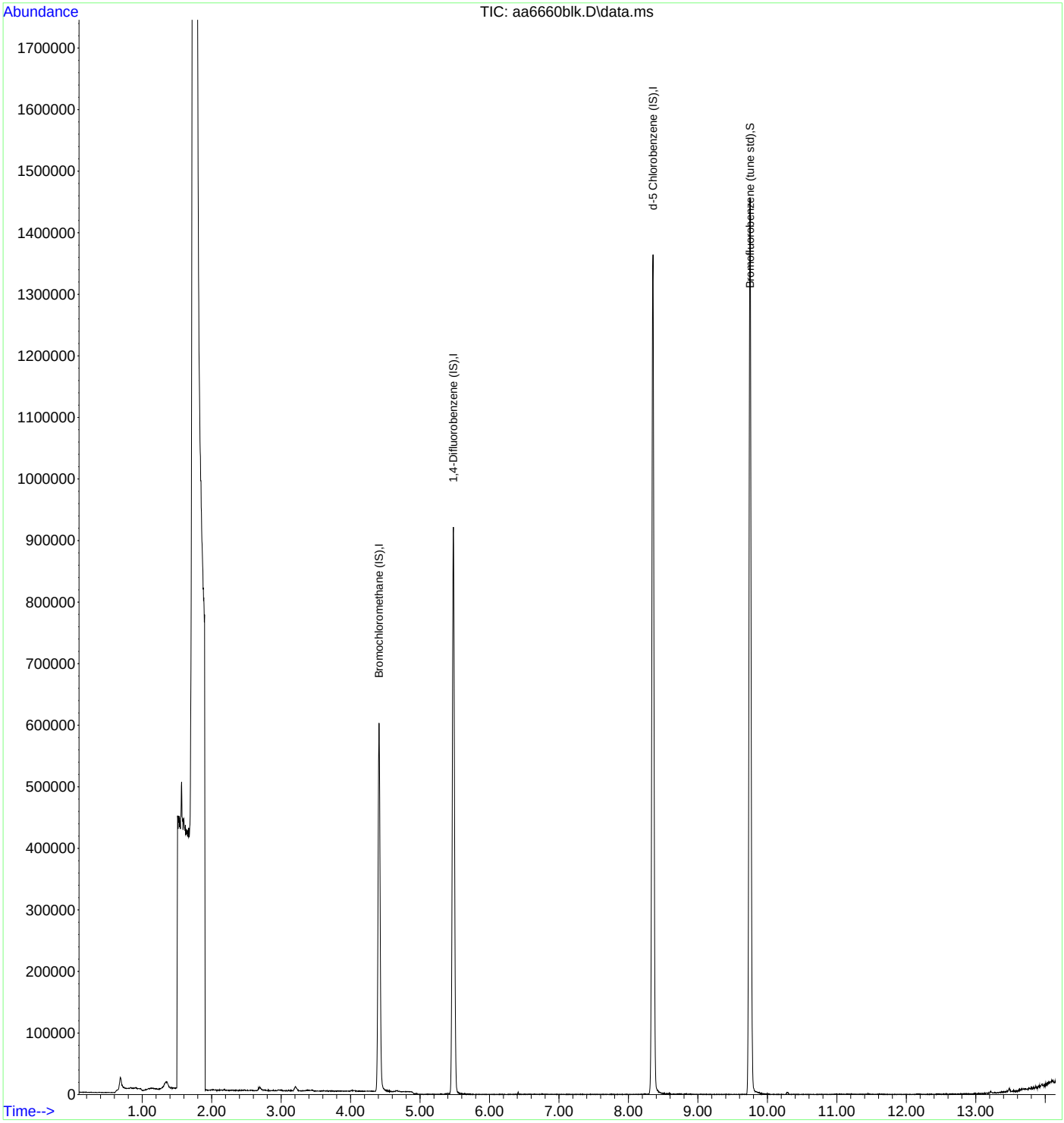
Quant Time: Jun 06 12:56:13 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.409	130	217092	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.479	114	834690	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.354	117	865474	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.749	95	672172	8.21	ppbV	0.000
Target Compounds						Qvalue

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

Data Path : C:\DATA\2024\06-2024\06-06-2024\
Data File : aa6660blk.D
Acq On : 6 Jun 2024 12:40 pm
Operator : jjw
Sample : Method Blank
Misc : 1127
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 06 12:56:13 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES, LLC

Method Blank Report

Lab Sample Name:	**METHOD BLANK**	**Data File:**	**AA6901BLK**
Field Sample Name:	**METHOD BLANK**	**Date Analyzed:**	**7/16/2024**
Matrix:	**Air**	**Sample Volume:**	**500ml**
Dilution Factor:	**1**	**GC/MS Column:**	**RTX-1, 0.32 mmID**

Runs with this Method Blank:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6898BFB]	07/16/2024 10:45
10 PPBV DCVS [AA6899DCVS]	07/16/2024 11:25
10 PPBV LCS [AA6900LCS]	07/16/2024 12:31
METHOD BLANK [AA6901BLK]	07/16/2024 13:32
E24-02427-01 [AA6908]	07/16/2024 17:50
E24-02427-21 [AA6909]	07/16/2024 18:21
E24-02427-02 [AA6912]	07/16/2024 19:54
E24-02427-03 [AA6914]	07/16/2024 20:57
E24-02427-03 [AA6915]	07/16/2024 21:36
E24-02427-04 [AA6918]	07/16/2024 23:10

Compound	CAS #	Reporting Limit (ppbv)	Concentration (ppbv)
Acetone	67-64-1	0.20	ND
Benzene	71-43-2	0.20	ND
Bromodichloromethane	75-27-4	0.20	ND
Bromoform	75-25-2	0.20	ND
Bromomethane	74-83-9	0.20	ND
1,3-Butadiene	106-99-0	0.20	ND
Chlorobenzene	108-90-7	0.20	ND
Chloroethane	75-00-3	0.20	ND
Chloroform	67-66-3	0.20	ND
Chloromethane	74-87-3	0.20	ND
Carbon disulfide	75-15-0	0.20	ND
Carbon tetrachloride	56-23-5	0.20	ND
Cyclohexane	110-82-7	0.20	ND
Dibromochloromethane	124-48-1	0.20	ND
1,2-Dibromoethane	106-93-4	0.17	ND
1,2-Dichlorobenzene	95-50-1	0.20	ND
1,3-Dichlorobenzene	541-73-1	0.20	ND
1,4-Dichlorobenzene	106-46-7	0.20	ND
Dichlorodifluoromethane	75-71-8	0.20	ND
1,1-Dichloroethane	75-34-3	0.20	ND
1,2-Dichloroethane	107-06-2	0.20	ND
1,1-Dichloroethene	75-35-4	0.20	ND
1,2-Dichloroethene (cis)	156-59-2	0.20	ND
1,2-Dichloroethene (trans)	156-60-5	0.20	ND
1,2-Dichloropropane	78-87-5	0.20	ND
1,3-Dichloropropene (cis)	10061-01-5	0.20	ND
1,3-Dichloropropene (trans)	10061-02-6	0.19	ND
1,2-Dichlorotetrafluoroethane	76-14-2	0.20	ND
1,4-Dioxane	123-91-1	0.20	ND
Ethylbenzene	100-41-4	0.18	ND
n-Heptane	142-82-5	0.20	ND
1,3-Hexachlorobutadiene	87-68-3	0.20	ND

Method Blank must be less than the Practical Quantitation Limit (PQL).

INTEGRATED ANALYTICAL LABORATORIES, LLC

Method Blank Report

Lab Sample Name:	**METHOD BLANK**	**Data File:**	**AA6901BLK**
Field Sample Name:	**METHOD BLANK**	**Date Analyzed:**	**7/16/2024**
Matrix:	**Air**	**Sample Volume:**	**500ml**
Dilution Factor:	**1**	**GC/MS Column:**	**RTX-1, 0.32 mmID**

Runs with this Method Blank:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6898BFB]	07/16/2024 10:45
10 PPBV DCVS [AA6899DCVS]	07/16/2024 11:25
10 PPBV LCS [AA6900LCS]	07/16/2024 12:31
METHOD BLANK [AA6901BLK]	07/16/2024 13:32
E24-02427-01 [AA6908]	07/16/2024 17:50
E24-02427-21 [AA6909]	07/16/2024 18:21
E24-02427-02 [AA6912]	07/16/2024 19:54
E24-02427-03 [AA6914]	07/16/2024 20:57
E24-02427-03 [AA6915]	07/16/2024 21:36
E24-02427-04 [AA6918]	07/16/2024 23:10

Compound	CAS #	Reporting Limit (ppbv)	Concentration (ppbv)
n-Hexane	110-54-3	0.20	ND
Methylene chloride	75-09-2	0.20	ND
Methyl ethyl ketone	78-93-3	0.20	ND
Methyl isobutyl ketone	108-10-1	0.20	ND
Methyl tert-butyl ether	1634-04-4	0.20	ND
Styrene	100-42-5	0.20	ND
Tert-butyl alcohol	75-65-0	0.20	ND
1,1,2,2-Tetrachloroethane	79-34-5	0.20	ND
Tetrachloroethene	127-18-4	0.20	ND
Toluene	108-88-3	0.20	ND
1,2,4-Trichlorobenzene	120-82-1	0.20	ND
1,1,1-Trichloroethane	71-55-6	0.17	ND
1,1,2-Trichloroethane	79-00-5	0.20	ND
Trichloroethene	79-01-6	0.17	ND
Trichlorofluoromethane	75-69-4	0.20	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.20	ND
1,2,4-Trimethylbenzene	95-63-6	0.20	ND
1,3,5-Trimethylbenzene	108-67-8	0.20	ND
2,2,4-Trimethylpentane	540-84-1	0.20	ND
Vinyl bromide	593-60-2	0.20	ND
Vinyl chloride	75-01-4	0.20	ND
Xylenes (m&p)	179601-23-1	0.20	ND
Xylenes (o)	95-47-6	0.20	ND

Method Blank must be less than the Practical Quantitation Limit (PQL).

Quantitation Report (QT Reviewed)

Data Path : C:\DATA\2024\07-2024\07-16-2024\
Data File : aa6901blk.D
Acq On : 16 Jul 2024 1:32 pm
Operator : jjw
Sample : Method Blank
Misc : 1127
ALS Vial : 4 Sample Multiplier: 1

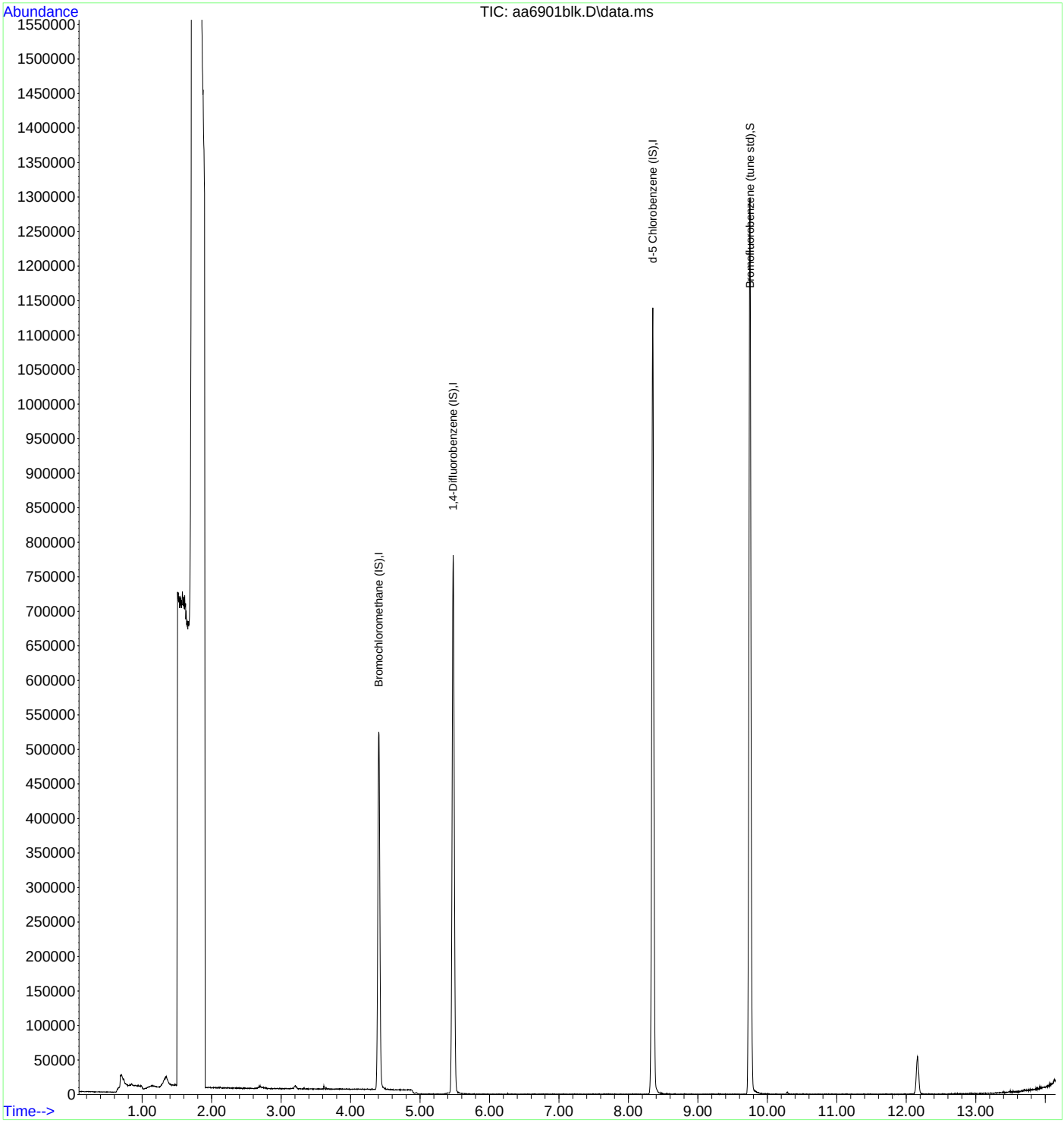
Quant Time: Jul 16 13:53:36 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.406	130	157789	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.477	114	643869	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.351	117	642151	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.750	95	565096	9.30	ppbV	0.000
Target Compounds						Qvalue

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

Data Path : C:\DATA\2024\07-2024\07-16-2024\
Data File : aa6901blk.D
Acq On : 16 Jul 2024 1:32 pm
Operator : jjw
Sample : Method Blank
Misc : 1127
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 16 13:53:36 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES, LLC

Method Blank Report

Lab Sample Name:	**METHOD BLANK**	**Data File:**	**AA6924BLK**
Field Sample Name:	**METHOD BLANK**	**Date Analyzed:**	**7/18/2024**
Matrix:	**Air**	**Sample Volume:**	**500ml**
Dilution Factor:	**1**	**GC/MS Column:**	**RTX-1, 0.32 mmID**

Runs with this Method Blank:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6921BFB]	07/18/2024 10:00
10 PPBV DCVS [AA6922DCVS]	07/18/2024 10:31
10 PPBV LCS [AA6923LCS]	07/18/2024 11:41
METHOD BLANK [AA6924BLK]	07/18/2024 13:17
E24-02427-02 [AA6926]	07/18/2024 14:41
E24-02427-04 [AA6927]	07/18/2024 15:12

Compound	CAS #	Reporting Limit (ppbv)	Concentration (ppbv)
Acetone	67-64-1	0.20	ND
Benzene	71-43-2	0.20	ND
Bromodichloromethane	75-27-4	0.20	ND
Bromoform	75-25-2	0.20	ND
Bromomethane	74-83-9	0.20	ND
1,3-Butadiene	106-99-0	0.20	ND
Chlorobenzene	108-90-7	0.20	ND
Chloroethane	75-00-3	0.20	ND
Chloroform	67-66-3	0.20	ND
Chloromethane	74-87-3	0.20	ND
Carbon disulfide	75-15-0	0.20	ND
Carbon tetrachloride	56-23-5	0.20	ND
Cyclohexane	110-82-7	0.20	ND
Dibromochloromethane	124-48-1	0.20	ND
1,2-Dibromoethane	106-93-4	0.17	ND
1,2-Dichlorobenzene	95-50-1	0.20	ND
1,3-Dichlorobenzene	541-73-1	0.20	ND
1,4-Dichlorobenzene	106-46-7	0.20	ND
Dichlorodifluoromethane	75-71-8	0.20	ND
1,1-Dichloroethane	75-34-3	0.20	ND
1,2-Dichloroethane	107-06-2	0.20	ND
1,1-Dichloroethene	75-35-4	0.20	ND
1,2-Dichloroethene (cis)	156-59-2	0.20	ND
1,2-Dichloroethene (trans)	156-60-5	0.20	ND
1,2-Dichloropropane	78-87-5	0.20	ND
1,3-Dichloropropene (cis)	10061-01-5	0.20	ND
1,3-Dichloropropene (trans)	10061-02-6	0.19	ND
1,2-Dichlorotetrafluoroethane	76-14-2	0.20	ND
1,4-Dioxane	123-91-1	0.20	ND
Ethylbenzene	100-41-4	0.18	ND
n-Heptane	142-82-5	0.20	ND
1,3-Hexachlorobutadiene	87-68-3	0.20	ND
n-Hexane	110-54-3	0.20	ND
Methylene chloride	75-09-2	0.20	ND
Methyl ethyl ketone	78-93-3	0.20	ND
Methyl isobutyl ketone	108-10-1	0.20	ND

Method Blank must be less than the Practical Quantitation Limit (PQL).

INTEGRATED ANALYTICAL LABORATORIES, LLC

Method Blank Report

Lab Sample Name:	**METHOD BLANK**	**Data File:**	**AA6924BLK**
Field Sample Name:	**METHOD BLANK**	**Date Analyzed:**	**7/18/2024**
Matrix:	**Air**	**Sample Volume:**	**500ml**
Dilution Factor:	**1**	**GC/MS Column:**	**RTX-1, 0.32 mmID**

Runs with this Method Blank:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6921BFB]	07/18/2024 10:00
10 PPBV DCVS [AA6922DCVS]	07/18/2024 10:31
10 PPBV LCS [AA6923LCS]	07/18/2024 11:41
METHOD BLANK [AA6924BLK]	07/18/2024 13:17
E24-02427-02 [AA6926]	07/18/2024 14:41
E24-02427-04 [AA6927]	07/18/2024 15:12

Compound	CAS #	Reporting Limit (ppbv)	Concentration (ppbv)
Methyl tert-butyl ether	1634-04-4	0.20	ND
Styrene	100-42-5	0.20	ND
Tert-butyl alcohol	75-65-0	0.20	ND
1,1,2,2-Tetrachloroethane	79-34-5	0.20	ND
Tetrachloroethene	127-18-4	0.20	ND
Toluene	108-88-3	0.20	ND
1,2,4-Trichlorobenzene	120-82-1	0.20	ND
1,1,1-Trichloroethane	71-55-6	0.17	ND
1,1,2-Trichloroethane	79-00-5	0.20	ND
Trichloroethene	79-01-6	0.17	ND
Trichlorofluoromethane	75-69-4	0.20	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.20	ND
1,2,4-Trimethylbenzene	95-63-6	0.20	ND
1,3,5-Trimethylbenzene	108-67-8	0.20	ND
2,2,4-Trimethylpentane	540-84-1	0.20	ND
Vinyl bromide	593-60-2	0.20	ND
Vinyl chloride	75-01-4	0.20	ND
Xylenes (m&p)	179601-23-1	0.20	ND
Xylenes (o)	95-47-6	0.20	ND

Method Blank must be less than the Practical Quantitation Limit (PQL).

Data Path : C:\DATA\2024\07-2024\07-18-2024\
Data File : aa6924blk.D
Acq On : 18 Jul 2024 1:17 pm
Operator : jjw
Sample : Method Blank
Misc : 1127
ALS Vial : 4 Sample Multiplier: 1

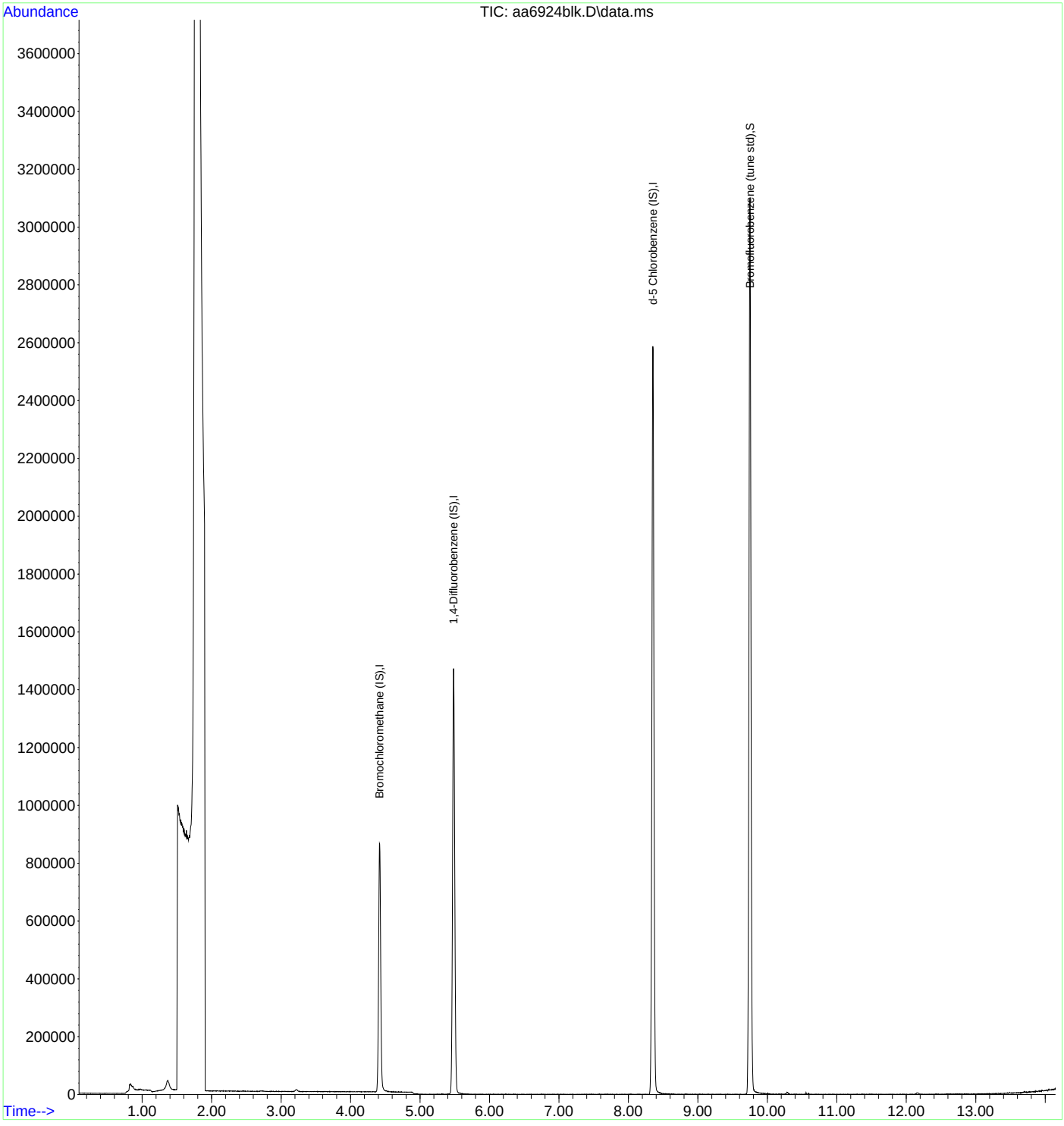
Quant Time: Jul 18 15:08:07 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.416	130	264805	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.483	114	1196769	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.354	117	1460065	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.750	95	1325598	9.60	ppbV	0.000
Target Compounds						Qvalue

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

Data Path : C:\DATA\2024\07-2024\07-18-2024\
Data File : aa6924blk.D
Acq On : 18 Jul 2024 1:17 pm
Operator : jjw
Sample : Method Blank
Misc : 1127
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 18 15:08:07 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES, LLC

Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA6541LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 5/21/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6539BFB]	05/21/2024 9:54
10 PPBV DCVS [AA6540DCVS]	05/21/2024 11:12
10 PPBV LCS [AA6541LCS]	05/21/2024 11:47
METHOD BLANK [AA6542BLK]	05/21/2024 12:15
02 PPBV RLLCS [AA6543RLLCS]	05/21/2024 12:50
3052 [AA6544]	05/21/2024 15:02
3100 [AA6545]	05/21/2024 15:33
1571 [AA6546]	05/21/2024 16:03
10 PPBV CCCVS [AA6552CCCVS]	05/21/2024 19:21

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
Acetone	67-64-1	11	100
Benzene	71-43-2	11	110
Bromodichloromethane	75-27-4	12	110
Bromoform	75-25-2	12	110
Bromomethane	74-83-9	13	120
1,3-Butadiene	106-99-0	9.4	94
Chlorobenzene	108-90-7	11	110
Chloroethane	75-00-3	12	120
Chloroform	67-66-3	12	120
Chloromethane	74-87-3	13	110
Carbon disulfide	75-15-0	13	120
Carbon tetrachloride	56-23-5	12	120
Cyclohexane	110-82-7	10	100
Dibromochloromethane	124-48-1	12	110
1,2-Dibromoethane	106-93-4	11	100
1,2-Dichlorobenzene	95-50-1	12	110
1,3-Dichlorobenzene	541-73-1	12	110
1,4-Dichlorobenzene	106-46-7	12	110
Dichlorodifluoromethane	75-71-8	12	110
1,1-Dichloroethane	75-34-3	12	110
1,2-Dichloroethane	107-06-2	12	120
1,1-Dichloroethene	75-35-4	12	110
1,2-Dichloroethene (cis)	156-59-2	12	110
1,2-Dichloroethene (trans)	156-60-5	13	120
1,2-Dichloropropane	78-87-5	11	110
1,3-Dichloropropene (cis)	10061-01-5	11	100
1,3-Dichloropropene (trans)	10061-02-6	11	110
1,2-Dichlorotetrafluoroethane	76-14-2	10	91
1,4-Dioxane	123-91-1	12	100
Ethylbenzene	100-41-4	11	110
n-Heptane	142-82-5	9.2	92

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.

*** Values outside of QC limits* Values outside of 70-130% QC limits**

Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA6541LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 5/21/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6539BFB]	05/21/2024 9:54
10 PPBV DCVS [AA6540DCVS]	05/21/2024 11:12
10 PPBV LCS [AA6541LCS]	05/21/2024 11:47
METHOD BLANK [AA6542BLK]	05/21/2024 12:15
02 PPBV RLLCS [AA6543RLLCS]	05/21/2024 12:50
3052 [AA6544]	05/21/2024 15:02
3100 [AA6545]	05/21/2024 15:33
1571 [AA6546]	05/21/2024 16:03
10 PPBV CCCVS [AA6552CCCVS]	05/21/2024 19:21

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
1,3-Hexachlorobutadiene	87-68-3	13	110
n-Hexane	110-54-3	10	100
Methylene chloride	75-09-2	12	110
Methyl ethyl ketone	78-93-3	10	85
Methyl isobutyl ketone	108-10-1	8.7	79
Methyl tert-butyl ether	1634-04-4	11	100
Styrene	100-42-5	12	110
Tert-butyl alcohol	75-65-0	11	93
1,1,2,2-Tetrachloroethane	79-34-5	11	100
Tetrachloroethene	127-18-4	12	120
Toluene	108-88-3	10	100
1,2,4-Trichlorobenzene	120-82-1	12	110
1,1,1-Trichloroethane	71-55-6	11	110
1,1,2-Trichloroethane	79-00-5	11	100
Trichloroethene	79-01-6	11	110
Trichlorofluoromethane	75-69-4	12	110
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	11	110
1,2,4-Trimethylbenzene	95-63-6	11	100
1,3,5-Trimethylbenzene	108-67-8	11	100
2,2,4-Trimethylpentane	540-84-1	10	100
Vinyl bromide	593-60-2	13	130
Vinyl chloride	75-01-4	12	120
Xylenes (m&p)	179601-23-1	22	110
Xylenes (o)	95-47-6	10	100

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.

*** Values outside of QC limits* Values outside of 70-130% QC limits**

Data Path : C:\DATA\2024\05-2024\05-21-2024\
Data File : aa6541lcs.D
Acq On : 21 May 2024 11:47 am
Operator : jjw
Sample : 10 ppbv LCS
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 21 12:02:41 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.413	130	276155	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.477	114	1155991	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.352	117	1027952	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.747	95	879180	9.53	ppbV	0.000
Target Compounds						Qvalue
2) Propene	1.464	41	324996	10.50	ppbV	99
3) Dichlorodifluoromethane	1.506	85	852262	12.28	ppbV	100
4) 1,2-Dichlorotetrafluor...	1.634	85	1051795	10.50	ppbV	97
5) n-Butane	1.709	43	670022	9.80	ppbV	97
6) Chloromethane	1.778	52	59444	13.29	ppbV	93
7) Vinyl chloride	1.771	62	418993	12.18	ppbV	99
8) 1,3-Butadiene	1.778	39	366480	9.38	ppbV	95
9) Bromomethane	2.072	94	314101	12.67	ppbV	98
10) Chloroethane	2.182	64	234408	12.37	ppbV	99
11) Vinyl bromide	2.288	106	370521	12.97	ppbV	100
12) Trichlorofluoromethane	2.301	101	1000705	12.34	ppbV	99
13) Ethanol	2.670	45	119368	9.43	ppbV	98
14) 1,1-Dichloroethene	2.728	61	783294	12.46	ppbV	94
15) Carbon disulfide	2.751	76	1325613	13.28	ppbV	96
16) 1,1,2-Trichloro-1,2,2-...	2.773	101	883799	11.02	ppbV	99
17) Acrolein	2.986	56	162842	10.80	ppbV	98
18) Allyl chloride	3.114	76	209536	13.37	ppbV	100
19) Isopropanol	3.117	45	722303	9.01	ppbV	99
20) Methylene chloride	3.207	49	519352	11.61	ppbV	90
21) Acetone	3.220	43	697516	11.29	ppbV	98
22) 1,2-Dichloroethene (tr...	3.333	61	724350	13.17	ppbV	95
23) n-Pentane	3.416	43	764584	9.86	ppbV	98
24) n-Hexane	3.416	57	1154442	10.38	ppbV	95
25) Methyl tert-butyl ether	3.420	73	1346739	10.79	ppbV	99
26) Tert-butyl alcohol	3.474	59	964303	10.93	ppbV	100
27) 1,1-Dichloroethane	3.818	63	851936	11.54	ppbV	99
28) 1,2-Dichloroethene (cis)	4.249	61	650466	12.28	ppbV	94
29) Cyclohexane	4.429	56	775983	10.33	ppbV	93
30) Chloroform	4.471	83	953785	12.39	ppbV	100
31) Ethyl acetate	4.564	45	165503	10.41	ppbV	96
32) Carbon tetrachloride	4.596	117	932259	11.83	ppbV	99
33) Tetrahydrofuran	4.596	42	609583	10.53	ppbV	94
34) 1,1,1-Trichloroethane	4.645	97	842920	11.34	ppbV	99
35) Methyl ethyl ketone	4.709	43	964135	10.45	ppbV	95
36) n-Heptane	4.944	43	890681	9.24	ppbV	92
37) Benzene	4.953	78	1317079	11.37	ppbV	98
38) 1,2-Dichloroethane	5.114	62	622914	11.85	ppbV	100
40) Trichloroethene	5.455	130	508930	11.03	ppbV	99
41) 2,2,4-Trimethylpentane	4.870	57	2248143	10.03	ppbV	99
42) 1,2-Dichloropropane	5.912	63	531477	10.52	ppbV	99
43) Bromodichloromethane	5.973	83	942406	11.71	ppbV	99
44) Methyl methacrylate	6.120	41	662108	9.24	ppbV	93
45) 1,4-Dioxane	6.143	88	314809	11.63	ppbV	94
46) cis-1,3-Dichloropropene	6.564	75	782314	10.96	ppbV	100
47) Toluene	6.802	91	1547417	10.39	ppbV	98
48) Methyl isobutyl ketone	7.172	43	1164669	8.74	ppbV	96
49) Tetrachloroethene	7.188	166	600196	11.67	ppbV	99
50) trans-1,3-Dichloropropene	7.210	75	759650	11.19	ppbV	93
51) 1,1,2-Trichloroethane	7.368	97	530837	10.78	ppbV	97

Data Path : C:\DATA\2024\05-2024\05-21-2024\
Data File : aa6541lcs.D
Acq On : 21 May 2024 11:47 am
Operator : jjw
Sample : 10 ppbv LCS
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

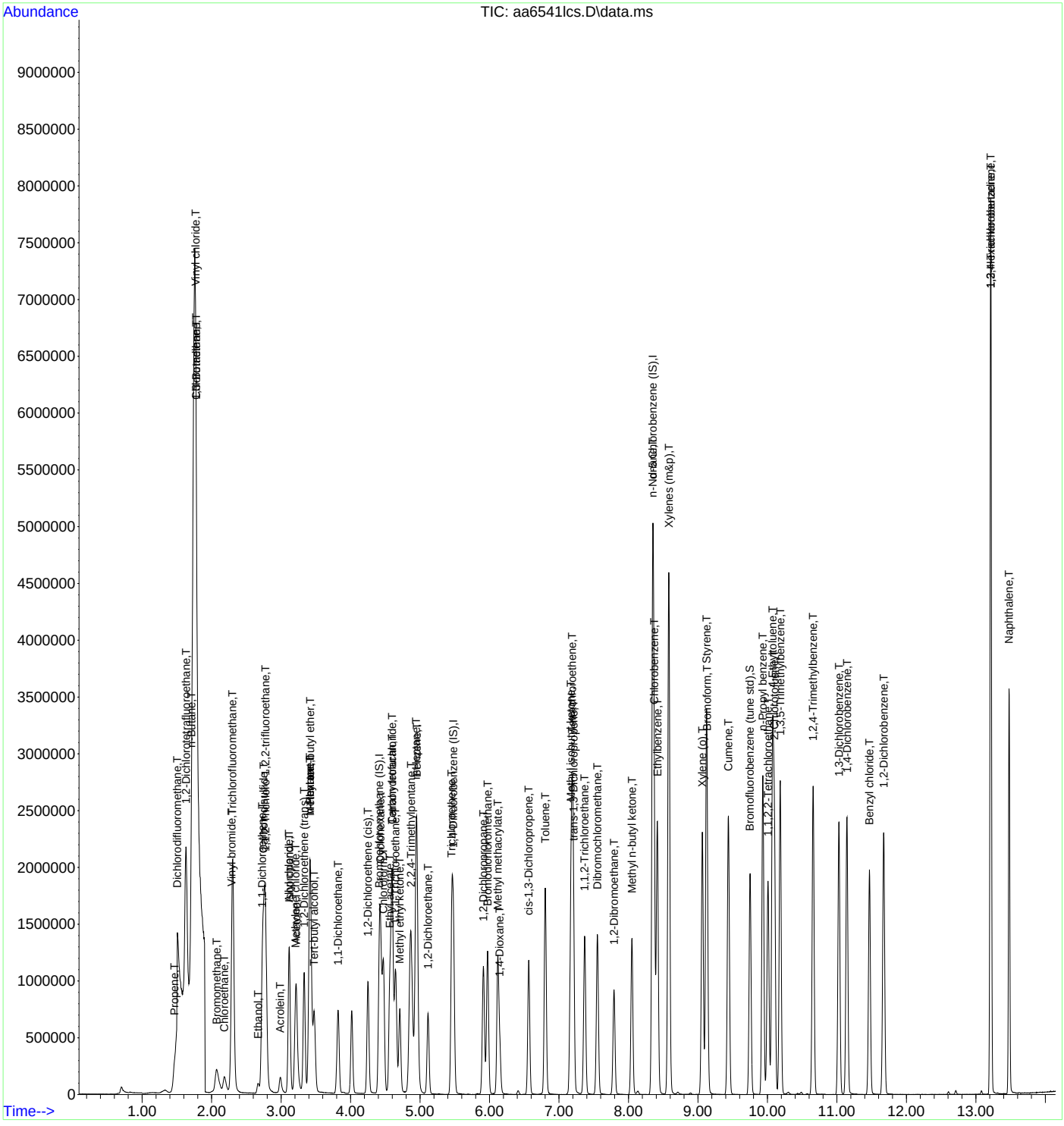
Quant Time: May 21 12:02:41 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.551	129	876543	11.62	ppbV	100
53) 1,2-Dibromoethane	7.792	107	762787	10.91	ppbV	99
54) Methyl n-butyl ketone	8.050	43	1092521	9.15	ppbV	97
56) n-Nonane	8.349	43	1279623	8.97	ppbV	94
57) Chlorobenzene	8.371	112	1135263	11.46	ppbV	94
58) Ethylbenzene	8.416	91	2104769	10.67	ppbV	99
59) Xylenes (m&p)	8.580	91	3203773	21.63	ppbV	98
60) Xylene (o)	9.063	91	1647861	10.49	ppbV	98
61) Styrene	9.124	104	1185008	11.63	ppbV	100
62) Bromoform	9.133	173	787158	12.48	ppbV	100
63) Cumene	9.439	105	2051429	10.36	ppbV	100
65) n-Propyl benzene	9.934	91	2786312	10.39	ppbV	99
66) 1,1,2,2-Tetrachloroethane	10.008	83	1261525	10.83	ppbV	100
67) 4-Ethyltoluene	10.072	105	2281605	10.70	ppbV	99
68) 2-Chlorotoluene	10.098	91	1920520	10.57	ppbV	99
69) 1,3,5-Trimethylbenzene	10.185	105	1893097	10.78	ppbV	100
70) 1,2,4-Trimethylbenzene	10.657	105	1892989	10.87	ppbV	100
71) 1,3-Dichlorobenzene	11.030	146	1118077	11.72	ppbV	99
72) 1,4-Dichlorobenzene	11.146	146	1127283	11.65	ppbV	99
73) Benzyl chloride	11.468	91	1745994	10.79	ppbV	99
74) 1,2-Dichlorobenzene	11.673	146	1088553	11.50	ppbV	100
75) 1,3-Hexachlorobutadiene	13.213	225	646041	12.57	ppbV	99
76) 1,2,4-Trichlorobenzene	13.213	180	859706	12.25	ppbV	99
77) Naphthalene	13.477	128	2114379	10.85	ppbV	100

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

Data Path : C:\DATA\2024\05-2024\05-21-2024\
Data File : aa6541lcs.D
Acq On : 21 May 2024 11:47 am
Operator : jjw
Sample : 10 ppbv LCS
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 21 12:02:41 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES, LLC

Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA6659LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 6/6/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6657BFB]	06/06/2024 10:04
10 PPBV DCVS [AA6658DCVS]	06/06/2024 11:39
10 PPBV LCS [AA6659LCS]	06/06/2024 12:10
METHOD BLANK [AA6660BLK]	06/06/2024 12:40
02 PPBV RLLCS [AA6661RLLCS]	06/06/2024 13:14
4869 [AA6664]	06/06/2024 14:48
4856 [AA6665]	06/06/2024 15:20
3804 [AA6666]	06/06/2024 15:51
10 PPBV CCCVS [AA6676CCCVS]	06/06/2024 21:26

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
Acetone	67-64-1	11	100
Benzene	71-43-2	11	110
Bromodichloromethane	75-27-4	12	110
Bromoform	75-25-2	11	100
Bromomethane	74-83-9	12	110
1,3-Butadiene	106-99-0	11	110
Chlorobenzene	108-90-7	11	110
Chloroethane	75-00-3	12	120
Chloroform	67-66-3	12	120
Chloromethane	74-87-3	14	120
Carbon disulfide	75-15-0	12	110
Carbon tetrachloride	56-23-5	12	120
Cyclohexane	110-82-7	11	110
Dibromochloromethane	124-48-1	13	120
1,2-Dibromoethane	106-93-4	12	110
1,2-Dichlorobenzene	95-50-1	10	91
1,3-Dichlorobenzene	541-73-1	11	100
1,4-Dichlorobenzene	106-46-7	11	100
Dichlorodifluoromethane	75-71-8	12	110
1,1-Dichloroethane	75-34-3	11	100
1,2-Dichloroethane	107-06-2	12	120
1,1-Dichloroethene	75-35-4	12	110
1,2-Dichloroethene (cis)	156-59-2	12	110
1,2-Dichloroethene (trans)	156-60-5	12	110
1,2-Dichloropropane	78-87-5	11	110
1,3-Dichloropropene (cis)	10061-01-5	11	100
1,3-Dichloropropene (trans)	10061-02-6	12	120
1,2-Dichlorotetrafluoroethane	76-14-2	10	91
1,4-Dioxane	123-91-1	12	100
Ethylbenzene	100-41-4	10	100
n-Heptane	142-82-5	11	110

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.

*** Values outside of QC limits* Values outside of 70-130% QC limits**

Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA6659LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 6/6/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6657BFB]	06/06/2024 10:04
10 PPBV DCVS [AA6658DCVS]	06/06/2024 11:39
10 PPBV LCS [AA6659LCS]	06/06/2024 12:10
METHOD BLANK [AA6660BLK]	06/06/2024 12:40
02 PPBV RLLCS [AA6661RLLCS]	06/06/2024 13:14
4869 [AA6664]	06/06/2024 14:48
4856 [AA6665]	06/06/2024 15:20
3804 [AA6666]	06/06/2024 15:51
10 PPBV CCCVS [AA6676CCCVS]	06/06/2024 21:26

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
1,3-Hexachlorobutadiene	87-68-3	11	96
n-Hexane	110-54-3	11	110
Methylene chloride	75-09-2	12	110
Methyl ethyl ketone	78-93-3	11	93
Methyl isobutyl ketone	108-10-1	11	100
Methyl tert-butyl ether	1634-04-4	11	100
Styrene	100-42-5	11	100
Tert-butyl alcohol	75-65-0	12	100
1,1,2,2-Tetrachloroethane	79-34-5	11	100
Tetrachloroethene	127-18-4	12	120
Toluene	108-88-3	11	110
1,2,4-Trichlorobenzene	120-82-1	11	96
1,1,1-Trichloroethane	71-55-6	11	110
1,1,2-Trichloroethane	79-00-5	12	110
Trichloroethene	79-01-6	11	110
Trichlorofluoromethane	75-69-4	12	110
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	11	110
1,2,4-Trimethylbenzene	95-63-6	11	100
1,3,5-Trimethylbenzene	108-67-8	10	91
2,2,4-Trimethylpentane	540-84-1	11	110
Vinyl bromide	593-60-2	12	120
Vinyl chloride	75-01-4	12	120
Xylenes (m&p)	179601-23-1	21	110
Xylenes (o)	95-47-6	10	100

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.

*** Values outside of QC limits* Values outside of 70-130% QC limits**

Data Path : C:\DATA\2024\06-2024\06-06-2024\
Data File : aa6659lcs.D
Acq On : 6 Jun 2024 12:10 pm
Operator : jjw
Sample : 10 ppbv LCS
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 06 12:28:50 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.415	130	202252	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.483	114	894098	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.354	117	830621	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.750	95	697819	8.88	ppbV	0.000
Target Compounds						Qvalue
2) Propene	1.473	41	233121	10.98	ppbV	99
3) Dichlorodifluoromethane	1.512	85	672307	11.61	ppbV	99
4) 1,2-Dichlorotetrafluor...	1.636	85	839098	10.34	ppbV	99
5) n-Butane	1.712	43	476703	10.87	ppbV	100
6) Chloromethane	1.777	52	48774	13.51	ppbV	87
7) Vinyl chloride	1.770	62	313166	11.75	ppbV	99
8) 1,3-Butadiene	1.784	39	269581	10.91	ppbV	97
9) Bromomethane	2.078	94	247524	11.88	ppbV	99
10) Chloroethane	2.187	64	176277	11.63	ppbV	99
11) Vinyl bromide	2.287	106	293772	11.63	ppbV	98
12) Trichlorofluoromethane	2.306	101	804990	12.07	ppbV	100
13) Ethanol	2.673	45	125382	12.05	ppbV	99
14) 1,1-Dichloroethene	2.731	61	596241	11.62	ppbV	99
15) Carbon disulfide	2.753	76	1006112	11.77	ppbV	99
16) 1,1,2-Trichloro-1,2,2-...	2.772	101	699111	11.10	ppbV	98
17) Acrolein	2.988	56	120765	10.58	ppbV	100
18) Allyl chloride	3.120	76	164509	12.53	ppbV	100
19) Isopropanol	3.120	45	567621	9.95	ppbV	99
20) Methylene chloride	3.210	49	422182	11.55	ppbV	97
21) Acetone	3.226	43	521566	11.49	ppbV	100
22) 1,2-Dichloroethene (tr...	3.332	61	558966	12.05	ppbV	100
23) n-Pentane	3.419	43	597195	10.77	ppbV	98
24) n-Hexane	3.419	57	882482	11.36	ppbV	100
25) Methyl tert-butyl ether	3.422	73	1049717	11.33	ppbV	99
26) Tert-butyl alcohol	3.476	59	762013	12.04	ppbV	100
27) 1,1-Dichloroethane	3.821	63	657929	11.43	ppbV	99
28) 1,2-Dichloroethene (cis)	4.255	61	501424	12.00	ppbV	99
29) Cyclohexane	4.435	56	587862	11.34	ppbV	100
30) Chloroform	4.476	83	761792	11.80	ppbV	100
31) Ethyl acetate	4.566	45	124467	11.32	ppbV	99
32) Carbon tetrachloride	4.595	117	759721	11.53	ppbV	98
33) Tetrahydrofuran	4.599	42	451820	11.64	ppbV	98
34) 1,1,1-Trichloroethane	4.647	97	688190	11.31	ppbV	99
35) Methyl ethyl ketone	4.708	43	725016	11.27	ppbV	100
36) n-Heptane	4.946	43	659696	10.85	ppbV	99
37) Benzene	4.959	78	1049629	11.40	ppbV	99
38) 1,2-Dichloroethane	5.116	62	490927	11.65	ppbV	99
40) Trichloroethene	5.457	130	425669	10.53	ppbV	100
41) 2,2,4-Trimethylpentane	4.865	57	1731923	10.88	ppbV	100
42) 1,2-Dichloropropane	5.914	63	406506	10.96	ppbV	100
43) Bromodichloromethane	5.972	83	763186	11.81	ppbV	98
44) Methyl methacrylate	6.119	41	502719	10.85	ppbV	100
45) 1,4-Dioxane	6.145	88	256576	12.16	ppbV	99
46) cis-1,3-Dichloropropene	6.570	75	619315	11.29	ppbV	100
47) Toluene	6.804	91	1262922	11.03	ppbV	100
48) Methyl isobutyl ketone	7.174	43	882961	10.55	ppbV	100
49) Tetrachloroethene	7.190	166	503449	11.61	ppbV	100
50) trans-1,3-Dichloropropene	7.209	75	615354	11.68	ppbV	99
51) 1,1,2-Trichloroethane	7.367	97	476591	12.05	ppbV	99

Data Path : C:\DATA\2024\06-2024\06-06-2024\
Data File : aa6659lcs.D
Acq On : 6 Jun 2024 12:10 pm
Operator : jjw
Sample : 10 ppbv LCS
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

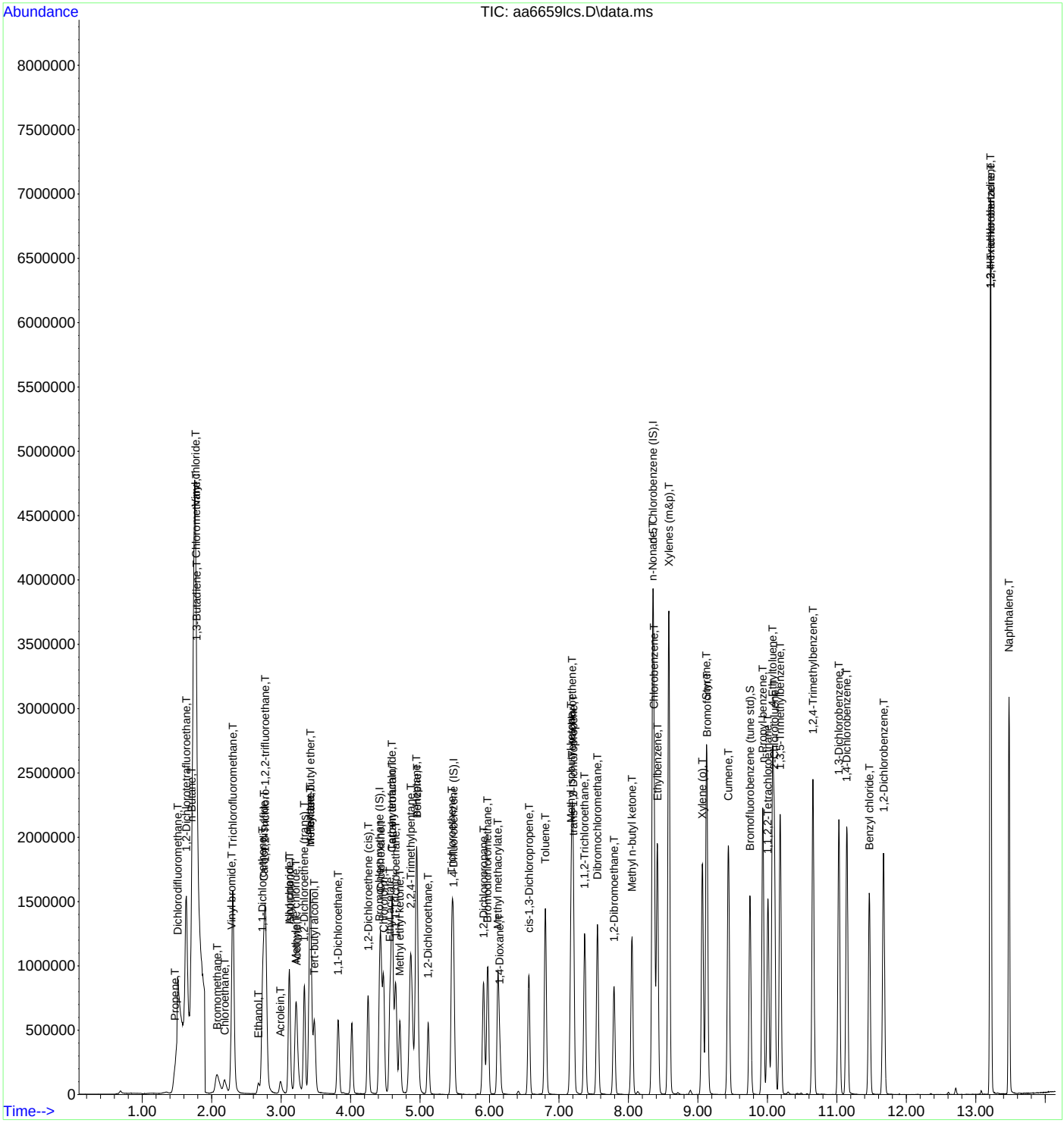
Quant Time: Jun 06 12:28:50 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.553	129	811287	12.87	ppbV	99
53) 1,2-Dibromoethane	7.791	107	702058	12.38	ppbV	100
54) Methyl n-butyl ketone	8.052	43	1012712	12.92	ppbV	99
56) n-Nonane	8.348	43	960935	9.90	ppbV	99
57) Chlorobenzene	8.370	112	937278	10.90	ppbV	100
58) Ethylbenzene	8.418	91	1708356	10.43	ppbV	100
59) Xylenes (m&p)	8.582	91	2629072	21.36	ppbV	100
60) Xylene (o)	9.065	91	1341687	10.35	ppbV	99
61) Styrene	9.123	104	964337	11.19	ppbV	100
62) Bromoform	9.132	173	657904	11.38	ppbV	100
63) Cumene	9.438	105	1662696	10.06	ppbV	100
65) n-Propyl benzene	9.933	91	2233476	9.83	ppbV	99
66) 1,1,2,2-Tetrachloroethane	10.007	83	1006043	10.55	ppbV	100
67) 4-Ethyltoluene	10.074	105	1868336	10.08	ppbV	100
68) 2-Chlorotoluene	10.100	91	1569202	10.17	ppbV	100
69) 1,3,5-Trimethylbenzene	10.184	105	1549195	10.27	ppbV	100
70) 1,2,4-Trimethylbenzene	10.656	105	1695393	11.21	ppbV	100
71) 1,3-Dichlorobenzene	11.029	146	1001841	10.91	ppbV	99
72) 1,4-Dichlorobenzene	11.142	146	1004429	10.82	ppbV	99
73) Benzyl chloride	11.470	91	1408558	9.44	ppbV	100
74) 1,2-Dichlorobenzene	11.676	146	896612	10.15	ppbV	100
75) 1,3-Hexachlorobutadiene	13.212	225	560099	11.02	ppbV	99
76) 1,2,4-Trichlorobenzene	13.216	180	758364	11.08	ppbV	100
77) Naphthalene	13.479	128	1829929	9.46	ppbV	100

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

Data Path : C:\DATA\2024\06-2024\06-06-2024\
Data File : aa6659lcs.D
Acq On : 6 Jun 2024 12:10 pm
Operator : jjw
Sample : 10 ppbv LCS
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 06 12:28:50 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES, LLC

Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA6900LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 7/16/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6898BFB]	07/16/2024 10:45
10 PPBV DCVS [AA6899DCVS]	07/16/2024 11:25
10 PPBV LCS [AA6900LCS]	07/16/2024 12:31
METHOD BLANK [AA6901BLK]	07/16/2024 13:32
E24-02427-01 [AA6908]	07/16/2024 17:50
E24-02427-21 [AA6909]	07/16/2024 18:21
E24-02427-02 [AA6912]	07/16/2024 19:54
E24-02427-03 [AA6914]	07/16/2024 20:57
E24-02427-03 [AA6915]	07/16/2024 21:36
E24-02427-04 [AA6918]	07/16/2024 23:10

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
Acetone	67-64-1	14	130
Benzene	71-43-2	11	110
Bromodichloromethane	75-27-4	12	110
Bromoform	75-25-2	10	91
Bromomethane	74-83-9	12	110
1,3-Butadiene	106-99-0	13	130
Chlorobenzene	108-90-7	10	100
Chloroethane	75-00-3	13	130
Chloroform	67-66-3	11	110
Chloromethane	74-87-3	14	120
Carbon disulfide	75-15-0	12	110
Carbon tetrachloride	56-23-5	11	110
Cyclohexane	110-82-7	13	130
Dibromochloromethane	124-48-1	10	91
1,2-Dibromoethane	106-93-4	10	91
1,2-Dichlorobenzene	95-50-1	8.6	78
1,3-Dichlorobenzene	541-73-1	8.6	78
1,4-Dichlorobenzene	106-46-7	8.5	77
Dichlorodifluoromethane	75-71-8	12	110
1,1-Dichloroethane	75-34-3	12	110
1,2-Dichloroethane	107-06-2	12	120
1,1-Dichloroethene	75-35-4	12	110
1,2-Dichloroethene (cis)	156-59-2	13	120
1,2-Dichloroethene (trans)	156-60-5	13	120
1,2-Dichloropropane	78-87-5	12	120
1,3-Dichloropropene (cis)	10061-01-5	11	100
1,3-Dichloropropene (trans)	10061-02-6	12	120
1,2-Dichlorotetrafluoroethane	76-14-2	10	91
1,4-Dioxane	123-91-1	12	100
Ethylbenzene	100-41-4	10	100

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.

*** Values outside of QC limits* Values outside of 70-130% QC limits**

Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA6900LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 7/16/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6898BFB]	07/16/2024 10:45
10 PPBV DCVS [AA6899DCVS]	07/16/2024 11:25
10 PPBV LCS [AA6900LCS]	07/16/2024 12:31
METHOD BLANK [AA6901BLK]	07/16/2024 13:32
E24-02427-01 [AA6908]	07/16/2024 17:50
E24-02427-21 [AA6909]	07/16/2024 18:21
E24-02427-02 [AA6912]	07/16/2024 19:54
E24-02427-03 [AA6914]	07/16/2024 20:57
E24-02427-03 [AA6915]	07/16/2024 21:36
E24-02427-04 [AA6918]	07/16/2024 23:10

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
n-Heptane	142-82-5	14	130
1,3-Hexachlorobutadiene	87-68-3	8.2	72
n-Hexane	110-54-3	13	130
Methylene chloride	75-09-2	14	130
Methyl ethyl ketone	78-93-3	14	120
Methyl isobutyl ketone	108-10-1	14	130
Methyl tert-butyl ether	1634-04-4	12	110
Styrene	100-42-5	10	91
Tert-butyl alcohol	75-65-0	13	110
1,1,2,2-Tetrachloroethane	79-34-5	11	100
Tetrachloroethene	127-18-4	9.4	94
Toluene	108-88-3	10	100
1,2,4-Trichlorobenzene	120-82-1	8.2	72
1,1,1-Trichloroethane	71-55-6	11	110
1,1,2-Trichloroethane	79-00-5	9.9	90
Trichloroethene	79-01-6	9.0	90
Trichlorofluoromethane	75-69-4	12	110
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	10	100
1,2,4-Trimethylbenzene	95-63-6	9.2	84
1,3,5-Trimethylbenzene	108-67-8	9.4	85
2,2,4-Trimethylpentane	540-84-1	13	130
Vinyl bromide	593-60-2	11	110
Vinyl chloride	75-01-4	14	130
Xylenes (m&p)	179601-23-1	20	100
Xylenes (o)	95-47-6	9.8	98

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.

*** Values outside of QC limits* Values outside of 70-130% QC limits**

Data Path : C:\DATA\2024\07-2024\07-16-2024\
Data File : aa6900lcs.D
Acq On : 16 Jul 2024 12:31 pm
Operator : jjw
Sample : 10 ppbv LCS
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 16 13:34:07 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.413	130	188389	10.00	ppbV		0.000
39) 1,4-Difluorobenzene (IS)	5.477	114	830619	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.348	117	748062	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.750	95	651399	9.21	ppbV		0.000
Target Compounds							Qvalue
2) Propene	1.467	41	283884	14.36	ppbV		99
3) Dichlorodifluoromethane	1.499	85	642504	11.91	ppbV		99
4) 1,2-Dichlorotetrafluor...	1.626	85	788209	10.43	ppbV		91
5) n-Butane	1.705	43	572610	14.02	ppbV		97
6) Chloromethane	1.771	52	48235	14.35	ppbV		45
7) Vinyl chloride	1.767	62	343061	13.82	ppbV		97
8) 1,3-Butadiene	1.771	39	297061	12.91	ppbV		97
9) Bromomethane	2.065	94	236922	12.21	ppbV		99
10) Chloroethane	2.181	64	180433	12.78	ppbV		99
11) Vinyl bromide	2.281	106	259625	11.03	ppbV		100
12) Trichlorofluoromethane	2.297	101	737838	11.88	ppbV		99
13) Ethanol	2.667	45	126644	13.07	ppbV		95
14) 1,1-Dichloroethene	2.725	61	588901	12.32	ppbV		89
15) Carbon disulfide	2.747	76	960048	12.06	ppbV	#	93
16) 1,1,2-Trichloro-1,2,2-...	2.766	101	593903	10.12	ppbV		91
17) Acrolein	2.988	56	132800	12.49	ppbV		97
18) Allyl chloride	3.110	76	159500	13.04	ppbV		100
19) Isopropanol	3.114	45	627966	11.81	ppbV		98
20) Methylene chloride	3.204	49	460351	13.53	ppbV		84
21) Acetone	3.216	43	590155	13.96	ppbV		95
22) 1,2-Dichloroethene (tr...	3.326	61	565196	13.08	ppbV		89
23) n-Pentane	3.413	43	703990	13.63	ppbV		99
24) n-Hexane	3.413	57	921398	12.74	ppbV		91
25) Methyl tert-butyl ether	3.416	73	1008357	11.69	ppbV		93
26) Tert-butyl alcohol	3.474	59	790601	13.41	ppbV		100
27) 1,1-Dichloroethane	3.815	63	654737	12.21	ppbV		99
28) 1,2-Dichloroethene (cis)	4.249	61	497434	12.78	ppbV		89
29) Cyclohexane	4.429	56	615325	12.74	ppbV		90
30) Chloroform	4.470	83	689082	11.45	ppbV		100
31) Ethyl acetate	4.560	45	143258	13.98	ppbV		91
32) Carbon tetrachloride	4.596	117	650828	10.60	ppbV		99
33) Tetrahydrofuran	4.593	42	524447	14.50	ppbV		88
34) 1,1,1-Trichloroethane	4.641	97	600167	10.59	ppbV		99
35) Methyl ethyl ketone	4.705	43	848758	14.17	ppbV		91
36) n-Heptane	4.940	43	771628	13.62	ppbV		88
37) Benzene	4.953	78	957304	11.16	ppbV		94
38) 1,2-Dichloroethane	5.114	62	489472	12.47	ppbV		100
40) Trichloroethene	5.454	130	339246	9.03	ppbV		99
41) 2,2,4-Trimethylpentane	4.866	57	1887158	12.76	ppbV		99
42) 1,2-Dichloropropane	5.911	63	410228	11.90	ppbV		100
43) Bromodichloromethane	5.972	83	709774	11.82	ppbV		99
44) Methyl methacrylate	6.117	41	583790	13.56	ppbV		87
45) 1,4-Dioxane	6.142	88	228446	11.65	ppbV		88
46) cis-1,3-Dichloropropene	6.564	75	584677	11.48	ppbV		99
47) Toluene	6.802	91	1083650	10.19	ppbV		99
48) Methyl isobutyl ketone	7.168	43	1050543	13.51	ppbV		93
49) Tetrachloroethene	7.187	166	380406	9.44	ppbV		100
50) trans-1,3-Dichloropropene	7.207	75	578742	11.82	ppbV		90
51) 1,1,2-Trichloroethane	7.367	97	364188	9.91	ppbV		95

Data Path : C:\DATA\2024\07-2024\07-16-2024\
Data File : aa6900lcs.D
Acq On : 16 Jul 2024 12:31 pm
Operator : jjw
Sample : 10 ppbv LCS
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

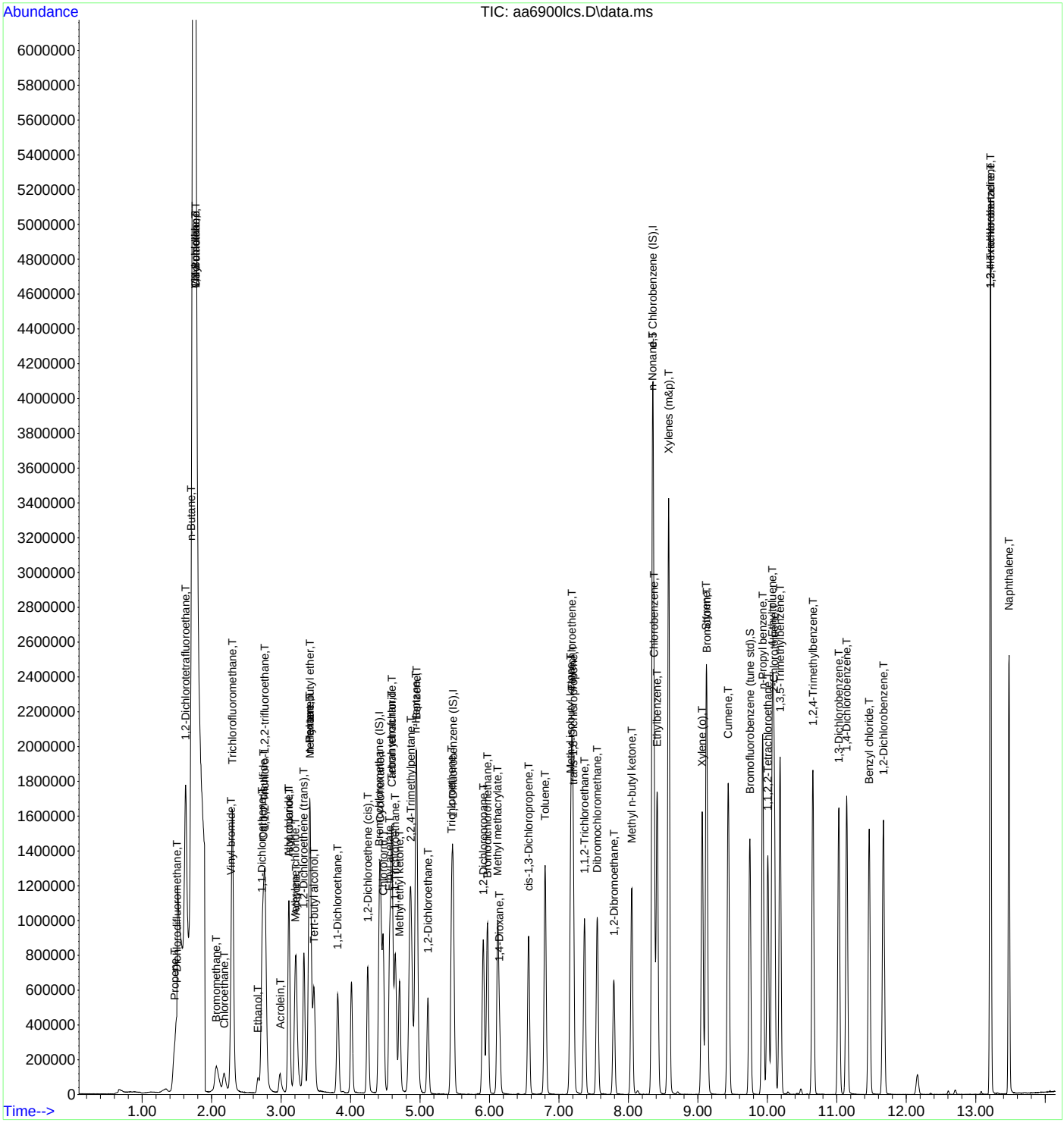
Quant Time: Jul 16 13:34:07 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.551	129	608311	10.39	ppbV	99
53) 1,2-Dibromoethane	7.792	107	537670	10.21	ppbV	100
54) Methyl n-butyl ketone	8.049	43	1015468	13.95	ppbV	92
56) n-Nonane	8.345	43	1146766	13.12	ppbV	91
57) Chlorobenzene	8.371	112	774934	10.00	ppbV	91
58) Ethylbenzene	8.412	91	1476343	10.01	ppbV	98
59) Xylenes (m&p)	8.580	91	2258788	20.38	ppbV	98
60) Xylene (o)	9.062	91	1142540	9.79	ppbV	97
61) Styrene	9.120	104	804849	10.37	ppbV	100
62) Bromoform	9.129	173	529651	10.17	ppbV	100
63) Cumene	9.435	105	1445337	9.71	ppbV	98
65) n-Propyl benzene	9.933	91	2021938	9.88	ppbV	98
66) 1,1,2,2-Tetrachloroethane	10.007	83	912248	10.62	ppbV	100
67) 4-Ethyltoluene	10.072	105	1611660	9.65	ppbV	99
68) 2-Chlorotoluene	10.097	91	1404405	10.11	ppbV	96
69) 1,3,5-Trimethylbenzene	10.184	105	1271776	9.36	ppbV	98
70) 1,2,4-Trimethylbenzene	10.657	105	1247166	9.16	ppbV	99
71) 1,3-Dichlorobenzene	11.030	146	712247	8.61	ppbV	100
72) 1,4-Dichlorobenzene	11.142	146	712937	8.53	ppbV	100
73) Benzyl chloride	11.467	91	1334458	9.93	ppbV	97
74) 1,2-Dichlorobenzene	11.673	146	686134	8.63	ppbV	100
75) 1,3-Hexachlorobutadiene	13.213	225	373667	8.17	ppbV	100
76) 1,2,4-Trichlorobenzene	13.213	180	504884	8.19	ppbV	100
77) Naphthalene	13.480	128	1408891	8.09	ppbV	100

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

Data Path : C:\DATA\2024\07-2024\07-16-2024\
Data File : aa6900lcs.D
Acq On : 16 Jul 2024 12:31 pm
Operator : jjw
Sample : 10 ppbv LCS
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 16 13:34:07 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES, LLC

Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA6923LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 7/18/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6921BFB]	07/18/2024 10:00
10 PPBV DCVS [AA6922DCVS]	07/18/2024 10:31
10 PPBV LCS [AA6923LCS]	07/18/2024 11:41
METHOD BLANK [AA6924BLK]	07/18/2024 13:17
E24-02427-02 [AA6926]	07/18/2024 14:41
E24-02427-04 [AA6927]	07/18/2024 15:12

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
Acetone	67-64-1	13	120
Benzene	71-43-2	13	130
Bromodichloromethane	75-27-4	13	120
Bromoform	75-25-2	11	100
Bromomethane	74-83-9	11	100
1,3-Butadiene	106-99-0	11	110
Chlorobenzene	108-90-7	10	100
Chloroethane	75-00-3	12	120
Chloroform	67-66-3	13	130
Chloromethane	74-87-3	13	110
Carbon disulfide	75-15-0	12	110
Carbon tetrachloride	56-23-5	12	120
Cyclohexane	110-82-7	14	130
Dibromochloromethane	124-48-1	13	120
1,2-Dibromoethane	106-93-4	13	120
1,2-Dichlorobenzene	95-50-1	9.2	84
1,3-Dichlorobenzene	541-73-1	9.5	86
1,4-Dichlorobenzene	106-46-7	9.5	86
Dichlorodifluoromethane	75-71-8	12	110
1,1-Dichloroethane	75-34-3	14	130
1,2-Dichloroethane	107-06-2	12	120
1,1-Dichloroethene	75-35-4	13	120
1,2-Dichloroethene (cis)	156-59-2	13	120
1,2-Dichloroethene (trans)	156-60-5	13	120
1,2-Dichloropropane	78-87-5	13	130
1,3-Dichloropropene (cis)	10061-01-5	13	120
1,3-Dichloropropene (trans)	10061-02-6	13	130
1,2-Dichlorotetrafluoroethane	76-14-2	10	91
1,4-Dioxane	123-91-1	13	110
Ethylbenzene	100-41-4	11	110
n-Heptane	142-82-5	12	120
1,3-Hexachlorobutadiene	87-68-3	7.9	69
n-Hexane	110-54-3	11	110
Methylene chloride	75-09-2	13	120

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.

*** Values outside of QC limits* Values outside of 70-130% QC limits**

INTEGRATED ANALYTICAL LABORATORIES, LLC

Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA6923LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 7/18/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6921BFB]	07/18/2024 10:00
10 PPBV DCVS [AA6922DCVS]	07/18/2024 10:31
10 PPBV LCS [AA6923LCS]	07/18/2024 11:41
METHOD BLANK [AA6924BLK]	07/18/2024 13:17
E24-02427-02 [AA6926]	07/18/2024 14:41
E24-02427-04 [AA6927]	07/18/2024 15:12

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
Methyl ethyl ketone	78-93-3	14	120
Methyl isobutyl ketone	108-10-1	10	91
Methyl tert-butyl ether	1634-04-4	13	120
Styrene	100-42-5	12	110
Tert-butyl alcohol	75-65-0	14	120
1,1,2,2-Tetrachloroethane	79-34-5	11	100
Tetrachloroethene	127-18-4	11	110
Toluene	108-88-3	12	120
1,2,4-Trichlorobenzene	120-82-1	8.5	75
1,1,1-Trichloroethane	71-55-6	12	120
1,1,2-Trichloroethane	79-00-5	12	110
Trichloroethene	79-01-6	9.1	91
Trichlorofluoromethane	75-69-4	13	120
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	11	110
1,2,4-Trimethylbenzene	95-63-6	10	91
1,3,5-Trimethylbenzene	108-67-8	10.0	91
2,2,4-Trimethylpentane	540-84-1	11	110
Vinyl bromide	593-60-2	10	100
Vinyl chloride	75-01-4	13	130
Xylenes (m&p)	179601-23-1	22	110
Xylenes (o)	95-47-6	10	100

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.

*** Values outside of QC limits* Values outside of 70-130% QC limits**

Data Path : C:\DATA\2024\07-2024\07-18-2024\
Data File : aa6923lcs.D
Acq On : 18 Jul 2024 11:41 am
Operator : jjw
Sample : 10 ppbv LCS
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 18 15:07:28 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.425	130	194637	10.00	ppbV		0.000
39) 1,4-Difluorobenzene (IS)	5.486	114	957174	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.355	117	1101475	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.750	95	1053755	10.11	ppbV		0.000
Target Compounds							Qvalue
2) Propene	1.496	41	258480	12.65	ppbV		98
3) Dichlorodifluoromethane	1.537	85	662540	11.89	ppbV		99
4) 1,2-Dichlorotetrafluor...	1.657	85	809526	10.36	ppbV		91
5) n-Butane	1.736	43	479917	11.37	ppbV		98
6) Chloromethane	1.801	52	44809	12.90	ppbV		96
7) Vinyl chloride	1.791	62	338511	13.20	ppbV		98
8) 1,3-Butadiene	1.801	39	252282	10.61	ppbV		96
9) Bromomethane	2.098	94	218287	10.89	ppbV		98
10) Chloroethane	2.210	64	178319	12.23	ppbV		99
11) Vinyl bromide	2.310	106	252387	10.38	ppbV		99
12) Trichlorofluoromethane	2.326	101	827231	12.89	ppbV		100
13) Ethanol	2.692	45	136156	13.60	ppbV		88
14) 1,1-Dichloroethene	2.750	61	650248	13.17	ppbV		90
15) Carbon disulfide	2.773	76	978622	11.90	ppbV	#	92
16) 1,1,2-Trichloro-1,2,2-...	2.792	101	690084	11.38	ppbV		91
17) Acrolein	3.011	56	140848	12.82	ppbV		99
18) Allyl chloride	3.133	76	179278	14.19	ppbV		100
19) Isopropanol	3.136	45	607913	11.07	ppbV		99
20) Methylene chloride	3.226	49	470542	13.38	ppbV		86
21) Acetone	3.239	43	573173	13.12	ppbV		94
22) 1,2-Dichloroethene (tr...	3.348	61	589547	13.20	ppbV		89
23) n-Pentane	3.432	43	734095	13.76	ppbV		100
24) n-Hexane	3.432	57	819035	10.96	ppbV		98
25) Methyl tert-butyl ether	3.435	73	1178209	13.22	ppbV		94
26) Tert-butyl alcohol	3.493	59	862519	14.16	ppbV		100
27) 1,1-Dichloroethane	3.834	63	754357	13.61	ppbV		99
28) 1,2-Dichloroethene (cis)	4.261	61	515350	12.81	ppbV		88
29) Cyclohexane	4.445	56	674167	13.51	ppbV		86
30) Chloroform	4.483	83	804040	12.94	ppbV		100
31) Ethyl acetate	4.573	45	116006	10.96	ppbV		92
32) Carbon tetrachloride	4.605	117	749708	11.82	ppbV		100
33) Tetrahydrofuran	4.605	42	405119	10.84	ppbV		98
34) 1,1,1-Trichloroethane	4.657	97	707384	12.09	ppbV		99
35) Methyl ethyl ketone	4.718	43	872101	14.09	ppbV		90
36) n-Heptane	4.949	43	714194	12.20	ppbV		96
37) Benzene	4.966	78	1110214	12.53	ppbV		93
38) 1,2-Dichloroethane	5.123	62	469964	11.59	ppbV		100
40) Trichloroethene	5.464	130	395548	9.14	ppbV		100
41) 2,2,4-Trimethylpentane	4.876	57	1874248	11.00	ppbV		100
42) 1,2-Dichloropropane	5.917	63	524329	13.20	ppbV		100
43) Bromodichloromethane	5.978	83	880774	12.73	ppbV		99
44) Methyl methacrylate	6.123	41	605720	12.21	ppbV		86
45) 1,4-Dioxane	6.152	88	303145	13.42	ppbV		86
46) cis-1,3-Dichloropropene	6.570	75	760429	12.95	ppbV		99
47) Toluene	6.808	91	1531004	12.49	ppbV		99
48) Methyl isobutyl ketone	7.171	43	917062	10.23	ppbV		93
49) Tetrachloroethene	7.194	166	528227	11.38	ppbV		100
50) trans-1,3-Dichloropropene	7.213	75	712740	12.63	ppbV	#	65
51) 1,1,2-Trichloroethane	7.374	97	510722	12.07	ppbV		94

Data Path : C:\DATA\2024\07-2024\07-18-2024\
Data File : aa6923lcs.D
Acq On : 18 Jul 2024 11:41 am
Operator : jjw
Sample : 10 ppbv LCS
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

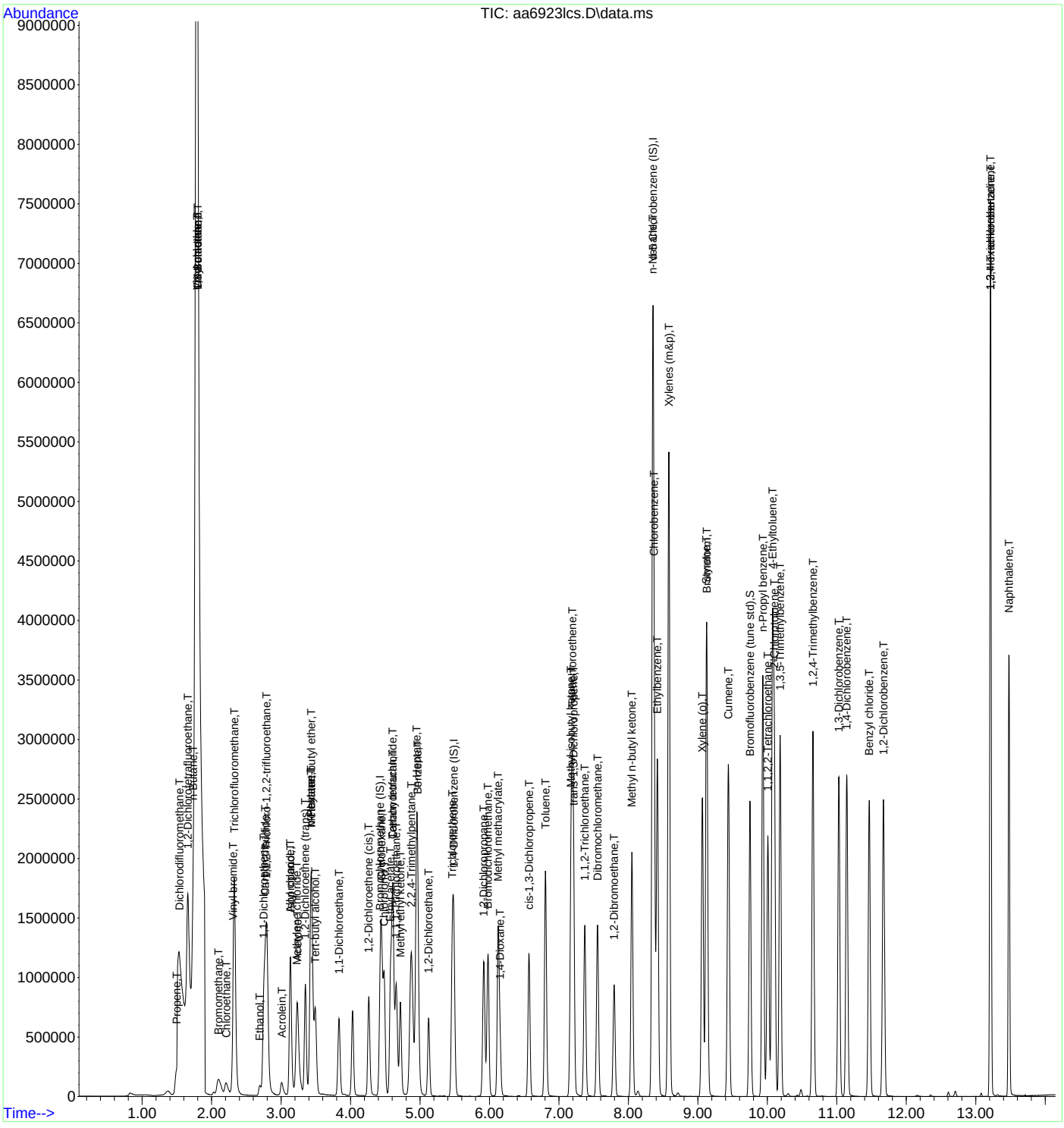
Quant Time: Jul 18 15:07:28 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.557	129	844478	12.51	ppbV	99
53) 1,2-Dibromoethane	7.795	107	772864	12.74	ppbV	100
54) Methyl n-butyl ketone	8.049	43	1051380	12.53	ppbV	94
56) n-Nonane	8.351	43	1559282	12.11	ppbV	91
57) Chlorobenzene	8.371	112	1173030	10.28	ppbV	89
58) Ethylbenzene	8.416	91	2363643	10.89	ppbV	98
59) Xylenes (m&p)	8.583	91	3658677	22.42	ppbV	98
60) Xylene (o)	9.065	91	1776151	10.34	ppbV	97
61) Styrene	9.123	104	1326308	11.61	ppbV	100
62) Bromoform	9.129	173	806512	10.52	ppbV	99
63) Cumene	9.438	105	2240793	10.22	ppbV	98
65) n-Propyl benzene	9.936	91	3415484	11.33	ppbV	97
66) 1,1,2,2-Tetrachloroethane	10.007	83	1442618	11.40	ppbV	99
67) 4-Ethyltoluene	10.075	105	2719577	11.06	ppbV	99
68) 2-Chlorotoluene	10.100	91	2251049	11.01	ppbV	96
69) 1,3,5-Trimethylbenzene	10.184	105	1994635	9.97	ppbV	98
70) 1,2,4-Trimethylbenzene	10.657	105	2047133	10.21	ppbV	98
71) 1,3-Dichlorobenzene	11.030	146	1152674	9.47	ppbV	99
72) 1,4-Dichlorobenzene	11.142	146	1166121	9.47	ppbV	98
73) Benzyl chloride	11.467	91	2187468	11.05	ppbV	97
74) 1,2-Dichlorobenzene	11.673	146	1074975	9.18	ppbV	100
75) 1,3-Hexachlorobutadiene	13.213	225	535390	7.95	ppbV	99
76) 1,2,4-Trichlorobenzene	13.213	180	768785	8.47	ppbV	100
77) Naphthalene	13.480	128	2068965	8.07	ppbV	100

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

Data Path : C:\DATA\2024\07-2024\07-18-2024\
Data File : aa6923lcs.D
Acq On : 18 Jul 2024 11:41 am
Operator : jjw
Sample : 10 ppbv LCS
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 18 15:07:28 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration



Analysis: Volatile Organic Compounds by EPA Method TO-15
Laboratory Sample Duplicate Report

SDG Number: E24-01699
IAL Sample ID: E24-01699-03
Matrix: Air
Summa ID: 2900

Date Received: 5/14/24
Date Analyzed: 5/21/24,5/21/24
Lab Data File#: AA6549,AA6550
Dilution Factor: 1
Injection Volume: 500ml
GC/MS Column: RTX-1, 0.32 mmID

Compound	CAS #	Sample E24-01699-03 Concentration Reported ppbv	Q	Sample Dup E24-01699-23 Concentration Reported ppbv	Q	Reporting Limits ppbv	RPD
Acetone	67-64-1	**21**		**20**		0.20	**4.88%**
Allyl Chloride	107-05-1	0.20	U	0.20	U	0.20	0.00%
Benzene	71-43-2	**0.20**		0.20	U	0.20	**NC**
Bromodichloromethane	75-27-4	0.20	U	0.20	U	0.20	0.00%
Bromoform	75-25-2	0.20	U	0.20	U	0.20	0.00%
Bromomethane	74-83-9	0.20	U	0.20	U	0.20	0.00%
1,3-Butadiene	106-99-0	0.20	U	0.20	U	0.20	0.00%
Chlorobenzene	108-90-7	0.20	U	0.20	U	0.20	0.00%
Chloroethane	75-00-3	0.20	U	0.20	U	0.20	0.00%
Chloroform	67-66-3	0.20	U	0.20	U	0.20	0.00%
Chloromethane	74-87-3	0.20	U	0.20	U	0.20	0.00%
Carbon disulfide	75-15-0	0.20	U	0.20	U	0.20	0.00%
Carbon tetrachloride	56-23-5	0.20	U	0.20	U	0.20	0.00%
2-Chlorotoluene	95-49-8	0.20	U	0.20	U	0.20	0.00%
Cyclohexane	110-82-7	0.20	U	0.20	U	0.20	0.00%
Dibromochloromethane	124-48-1	0.20	U	0.20	U	0.20	0.00%
1,2-Dibromoethane	106-93-4	0.20	U	0.20	U	0.20	0.00%
1,2-Dichlorobenzene	95-50-1	0.20	U	0.20	U	0.20	0.00%
1,3-Dichlorobenzene	541-73-1	0.20	U	0.20	U	0.20	0.00%
1,4-Dichlorobenzene	106-46-7	0.20	U	0.20	U	0.20	0.00%
Dichlorodifluoromethane	75-71-8	0.20	U	0.20	U	0.20	0.00%
1,1-Dichloroethane	75-34-3	0.20	U	0.20	U	0.20	0.00%
1,2-Dichloroethane	107-06-2	0.20	U	0.20	U	0.20	0.00%
1,1-Dichloroethene	75-35-4	0.20	U	0.20	U	0.20	0.00%
1,2-Dichloroethene (cis)	156-59-2	0.20	U	0.20	U	0.20	0.00%
1,2-Dichloroethene (trans)	156-60-5	0.20	U	0.20	U	0.20	0.00%
1,2-Dichloropropane	78-87-5	0.20	U	0.20	U	0.20	0.00%
1,3-Dichloropropene (cis)	10061-01-5	0.20	U	0.20	U	0.20	0.00%
1,3-Dichloropropene (trans)	10061-02-6	0.20	U	0.20	U	0.20	0.00%
1,2-Dichlorotetrafluoroethane	76-14-2	0.20	U	0.20	U	0.20	0.00%
1,4-Dioxane	123-91-1	0.20	U	0.20	U	0.20	0.00%
Ethanol	64-17-5	0.20	U	0.20	U	0.20	0.00%
Ethylbenzene	100-41-4	0.20	U	0.20	U	0.20	0.00%
4-Ethyltoluene	622-96-8	0.20	U	0.20	U	0.20	0.00%
n-Heptane	142-82-5	0.20	U	0.20	U	0.20	0.00%
1,3-Hexachlorobutadiene	87-68-3	0.20	U	0.20	U	0.20	0.00%
n-Hexane	110-54-3	**0.24**		**0.21**		0.20	**13.33%**
Isopropanol	67-63-0	0.20	U	**0.51**		0.20	**NC**

Qualifiers:
E=Concentration exceeds upper level of calibration range for instrument.
D=Extra dilution required for this compound. X=Duplicate samples do not met RPD criteria.
U=Compound ND or under reporting limit.

Analysis: Volatile Organic Compounds by EPA Method TO-15
Laboratory Sample Duplicate Report

		Date Received:	5/14/24
SDG Number:	E24-01699	Date Analyzed:	5/21/24,5/21/24
IAL Sample ID:	E24-01699-03	Lab Data File#:	AA6549,AA6550
Matrix:	Air	Dilution Factor:	1
Summa ID:	2900	Injection Volume:	500ml
		GC/MS Column:	RTX-1, 0.32 mmID

Compound	CAS #	Sample E24-01699-03 Concentration Reported ppbv	Q	Sample Dup E24-01699-23 Concentration Reported ppbv	Q	Reporting Limits ppbv	RPD
Methylene chloride	75-09-2	0.20	U	0.20	U	0.20	0.00%
Methyl ethyl ketone	78-93-3	**0.32**		**0.29**		0.20	**9.84%**
Methyl isobutyl ketone	108-10-1	0.20	U	0.20	U	0.20	0.00%
Methyl methacrylate	80-62-6	0.20	U	0.20	U	0.20	0.00%
Methyl tert-butyl ether	1634-04-4	0.20	U	0.20	U	0.20	0.00%
Styrene	100-42-5	0.20	U	0.20	U	0.20	0.00%
Tert-butyl alcohol	75-65-0	0.20	U	0.20	U	0.20	0.00%
1,1,2,2-Tetrachloroethane	79-34-5	0.20	U	0.20	U	0.20	0.00%
Tetrachloroethene	127-18-4	0.20	U	0.20	U	0.20	0.00%
Tetrahydrofuran	109-99-9	0.20	U	0.20	U	0.20	0.00%
Toluene	108-88-3	**0.42**		**0.38**		0.20	**10.00%**
1,2,4-Trichlorobenzene	120-82-1	0.20	U	0.20	U	0.20	0.00%
1,1,1-Trichloroethane	71-55-6	0.20	U	0.20	U	0.20	0.00%
1,1,2-Trichloroethane	79-00-5	0.20	U	0.20	U	0.20	0.00%
Trichloroethene	79-01-6	0.20	U	0.20	U	0.20	0.00%
Trichlorofluoromethane	75-69-4	**0.35**		**0.35**		0.20	**0.00%**
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.20	U	0.20	U	0.20	0.00%
1,2,4-Trimethylbenzene	95-63-6	0.20	U	0.20	U	0.20	0.00%
1,3,5-Trimethylbenzene	108-67-8	0.20	U	0.20	U	0.20	0.00%
2,2,4-Trimethylpentane	540-84-1	0.20	U	0.20	U	0.20	0.00%
Vinyl bromide	593-60-2	0.20	U	0.20	U	0.20	0.00%
Vinyl chloride	75-01-4	0.20	U	0.20	U	0.20	0.00%
Xylenes (m&p)	179601-23-1	0.40	U	0.40	U	0.40	0.00%
Xylenes (o)	95-47-6	0.20	U	0.20	U	0.20	0.00%

RPD must be <25% for all laboratory duplicate samples. Laboratory duplicate samples are run once daily.
NC = The RPD could not be calculated since the compound was only detected in either the parent or duplicate sample.

Qualifiers:
E=Concentration exceeds upper level of calibration range for instrument.
D=Extra dilution required for this compound. X=Duplicate samples do not met RPD criteria.
U=Compound ND or under reporting limit.

Data Path : C:\DATA\2024\05-2024\05-21-2024\
Data File : aa6549.D
Acq On : 21 May 2024 5:49 pm
Operator : jjw
Sample : E24-01699-03
Misc : 2900, 500cc
ALS Vial : 23 Sample Multiplier: 1

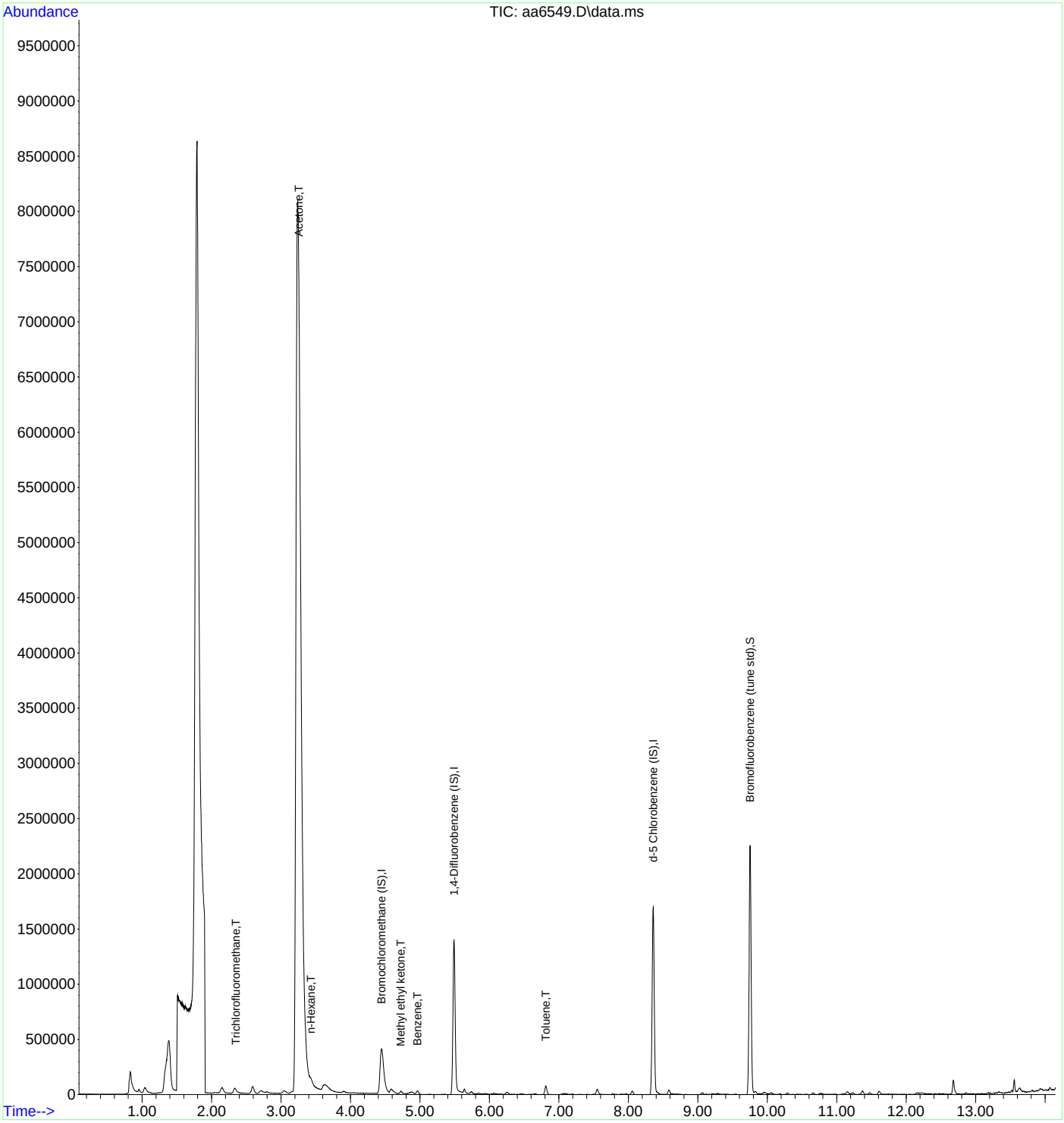
Quant Time: May 22 10:22:42 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

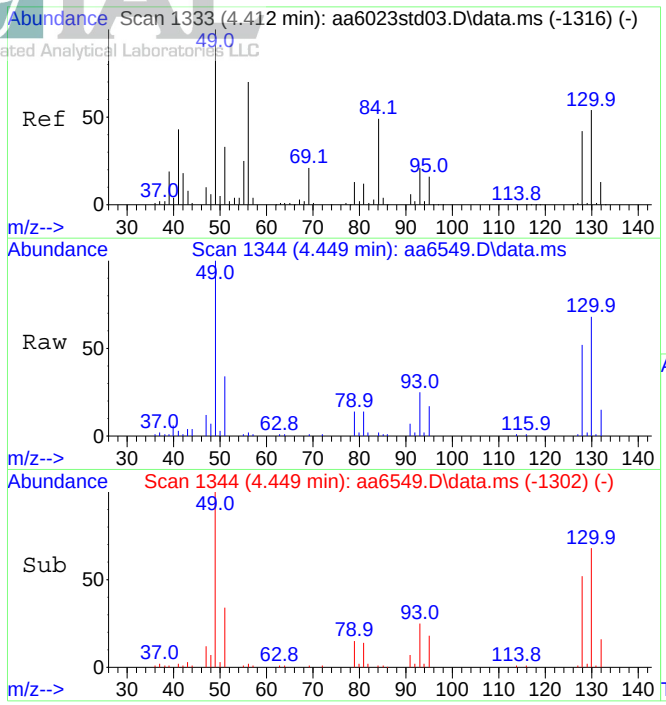
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.449	130	263820	10.00	ppbV		0.037
39) 1,4-Difluorobenzene (IS)	5.490	114	1265717	10.00	ppbV		0.014
55) d-5 Chlorobenzene (IS)	8.358	117	1097786	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.751	95	1013191	10.29	ppbV		0.000
Target Compounds							Qvalue
12) Trichlorofluoromethane	2.349	101	27327	0.35	ppbV		98
21) Acetone	3.256	43	1236983	20.96	ppbV		100
24) n-Hexane	3.433	57	25302	0.24	ppbV		94
35) Methyl ethyl ketone	4.722	43	28532	0.32	ppbV		95
37) Benzene	4.963	78	22696	0.21	ppbV	#	91
47) Toluene	6.812	91	68132	0.42	ppbV		100

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

Data Path : C:\DATA\2024\05-2024\05-21-2024\
Data File : aa6549.D
Acq On : 21 May 2024 5:49 pm
Operator : jjw
Sample : E24-01699-03
Misc : 2900, 500cc
ALS Vial : 23 Sample Multiplier: 1

Quant Time: May 22 10:22:42 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

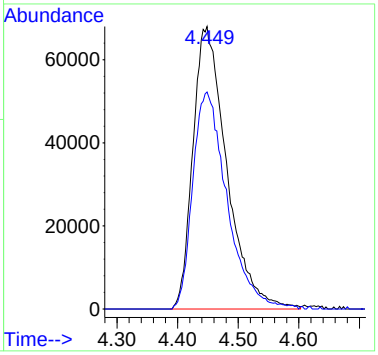


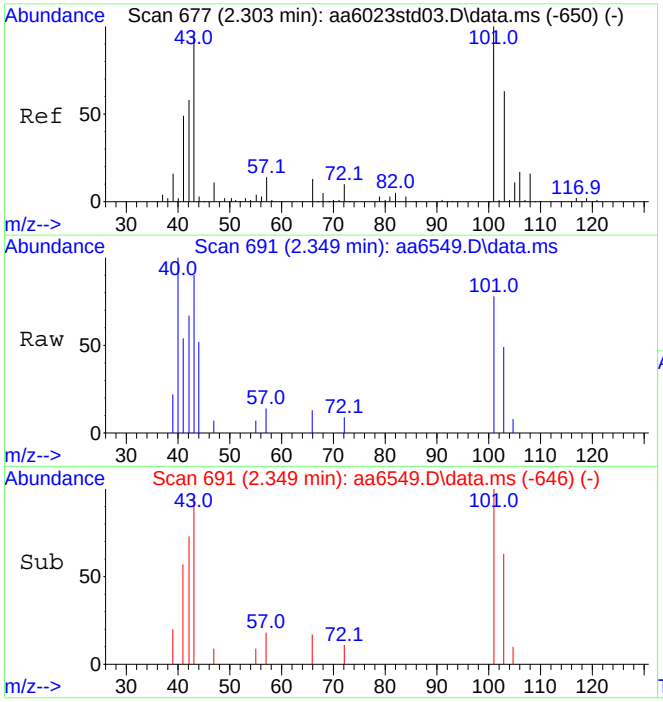


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.449 min Scan# 1344
Delta R.T. 0.037 min
Lab File: aa6549.D
Acq: 21 May 2024 5:49 pm

Tgt Ion:130 Resp: 263820

Ion	Ratio	Lower	Upper
130	100		
128	77.9	57.8	97.8

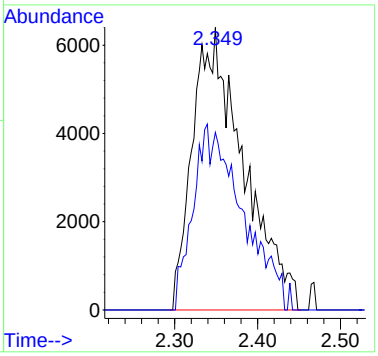


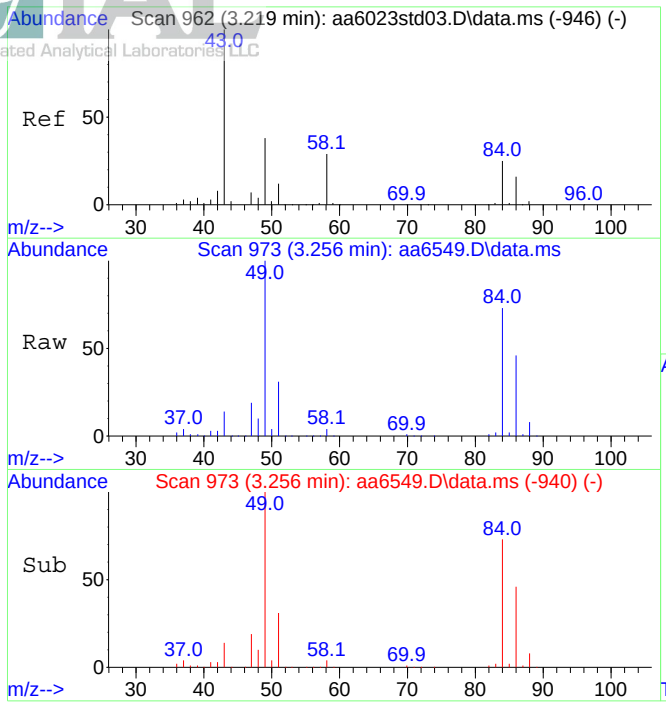


#12
Trichlorofluoromethane
Concen: 0.35 ppbV
RT: 2.349 min Scan# 691
Delta R.T. 0.046 min
Lab File: aa6549.D
Acq: 21 May 2024 5:49 pm

Tgt Ion:101 Resp: 27327

Ion	Ratio	Lower	Upper
101	100		
103	63.3	52.1	78.1

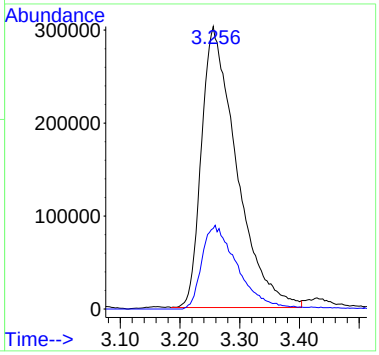


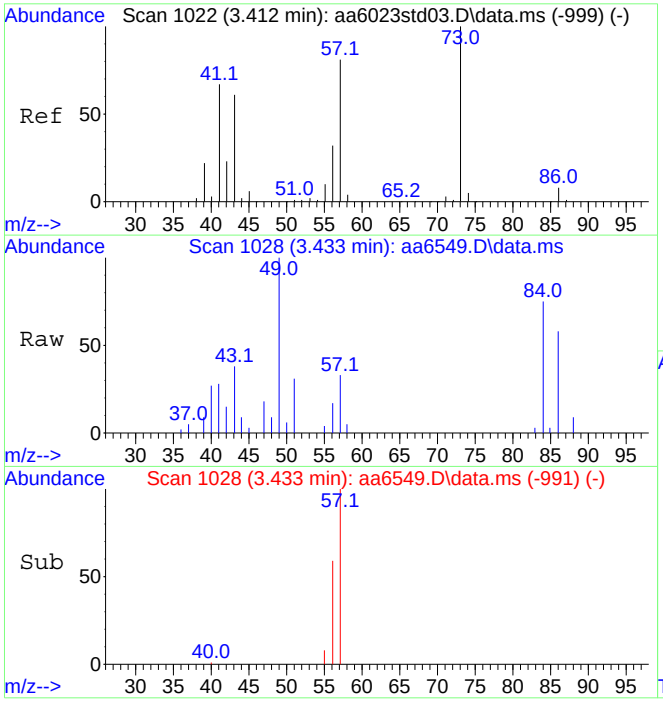


#21
Acetone
Concen: 20.96 ppbV
RT: 3.256 min Scan# 973
Delta R.T. 0.036 min
Lab File: aa6549.D
Acq: 21 May 2024 5:49 pm

Tgt Ion: 43 Resp: 1236983

Ion	Ratio	Lower	Upper
43	100		
58	30.0	23.8	35.8

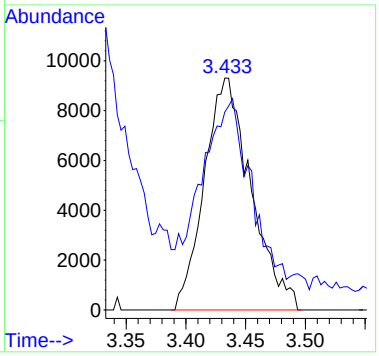


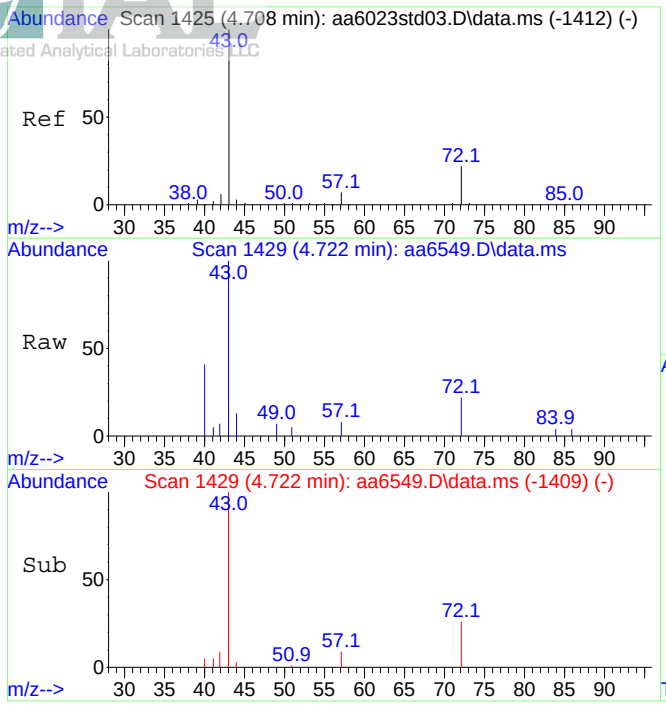


#24
n-Hexane
Concen: 0.24 ppbV
RT: 3.433 min Scan# 1028
Delta R.T. 0.020 min
Lab File: aa6549.D
Acq: 21 May 2024 5:49 pm

Tgt Ion: 57 Resp: 25302

Ion	Ratio	Lower	Upper
57	100		
41	89.3	76.2	114.4

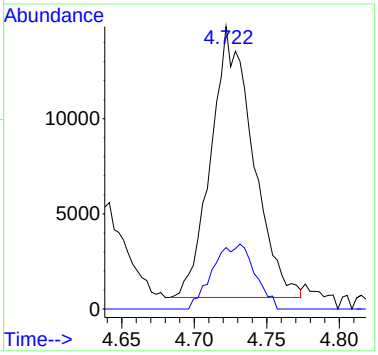


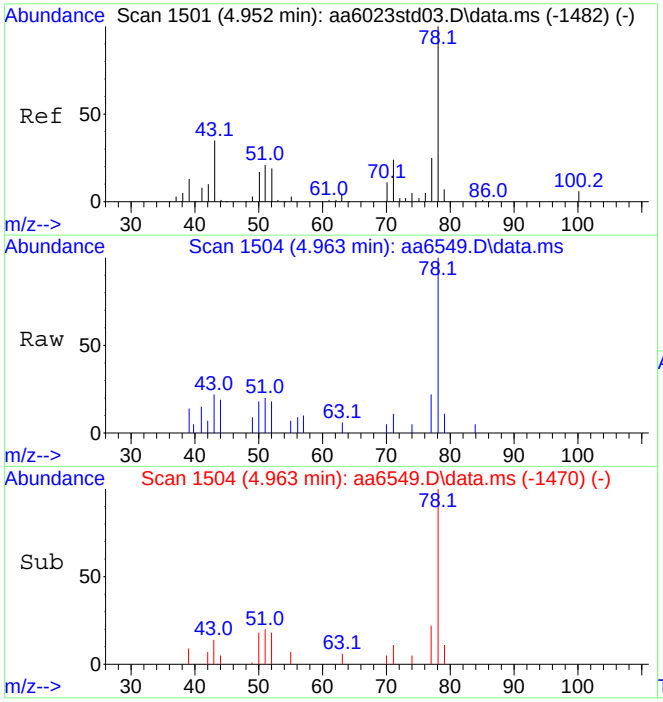


#35
Methyl ethyl ketone
Concen: 0.32 ppbV
RT: 4.722 min Scan# 1429
Delta R.T. 0.014 min
Lab File: aa6549.D
Acq: 21 May 2024 5:49 pm

Tgt Ion: 43 Resp: 28532

Ion	Ratio	Lower	Upper
43	100		
72	24.1	17.4	26.0

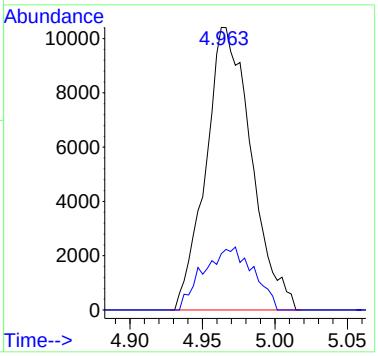


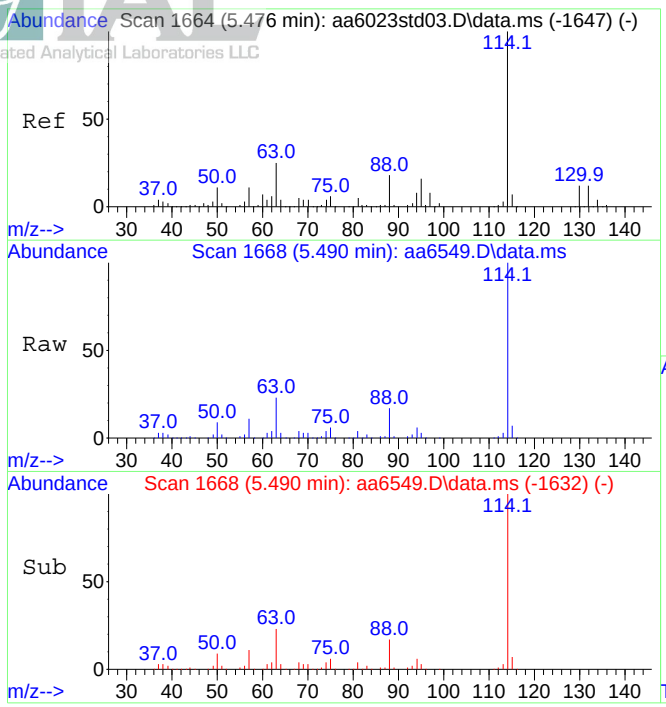


#37
Benzene
Concen: 0.21 ppbV
RT: 4.963 min Scan# 1504
Delta R.T. 0.011 min
Lab File: aa6549.D
Acq: 21 May 2024 5:49 pm

Tgt Ion: 78 Resp: 22696

Ion	Ratio	Lower	Upper
78	100		
51	24.3	16.1	24.1#

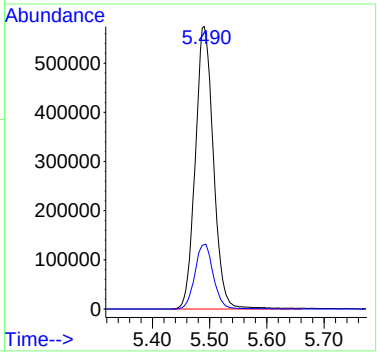


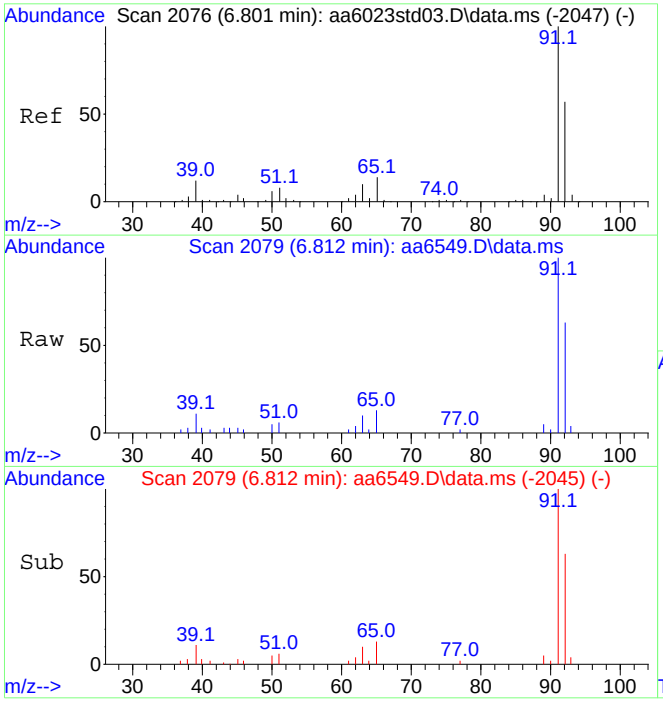


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.490 min Scan# 1668
Delta R.T. 0.014 min
Lab File: aa6549.D
Acq: 21 May 2024 5:49 pm

Tgt Ion:114 Resp: 1265717

Ion	Ratio	Lower	Upper
114	100		
63	23.3	6.4	46.4

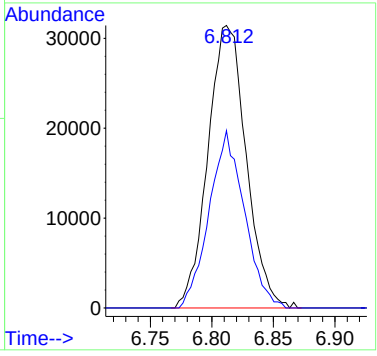


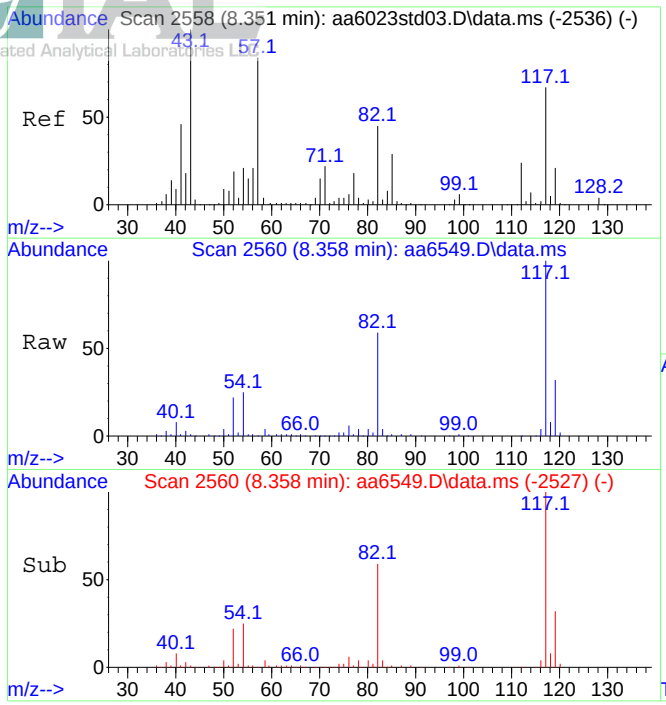


#47
Toluene
Concen: 0.42 ppbV
RT: 6.812 min Scan# 2079
Delta R.T. 0.011 min
Lab File: aa6549.D
Acq: 21 May 2024 5:49 pm

Tgt Ion: 91 Resp: 68132

Ion	Ratio	Lower	Upper
91	100		
92	57.5	46.3	69.5

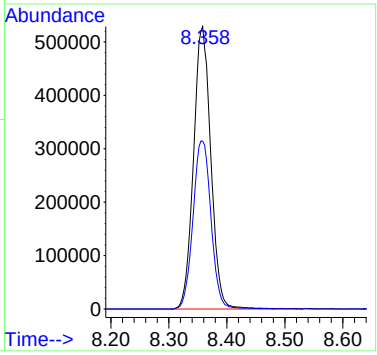


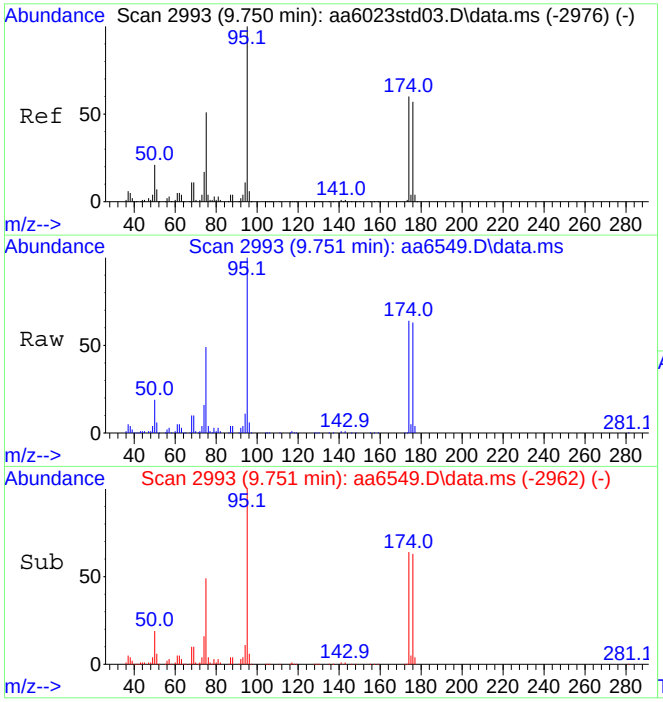


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.358 min Scan# 2560
Delta R.T. 0.007 min
Lab File: aa6549.D
Acq: 21 May 2024 5:49 pm

Tgt Ion:117 Resp: 1097786

Ion	Ratio	Lower	Upper
117	100		
82	61.8	46.2	86.2

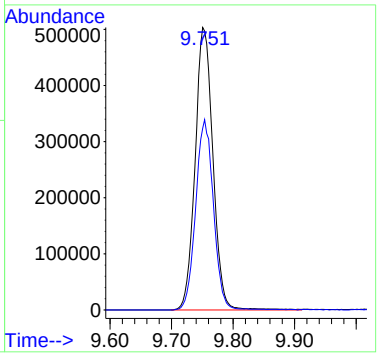




#64
Bromofluorobenzene (tune std)
Concen: 10.29 ppbV
RT: 9.751 min Scan# 2993
Delta R.T. 0.001 min
Lab File: aa6549.D
Acq: 21 May 2024 5:49 pm

Tgt Ion: 95 Resp: 1013191

Ion	Ratio	Lower	Upper
95	100		
174	67.0	49.4	74.2



Data Path : C:\DATA\2024\05-2024\05-21-2024\
Data File : aa6550.D
Acq On : 21 May 2024 6:21 pm
Operator : jjw
Sample : E24-01699-23
Misc : 2900, 500cc
ALS Vial : 24 Sample Multiplier: 1

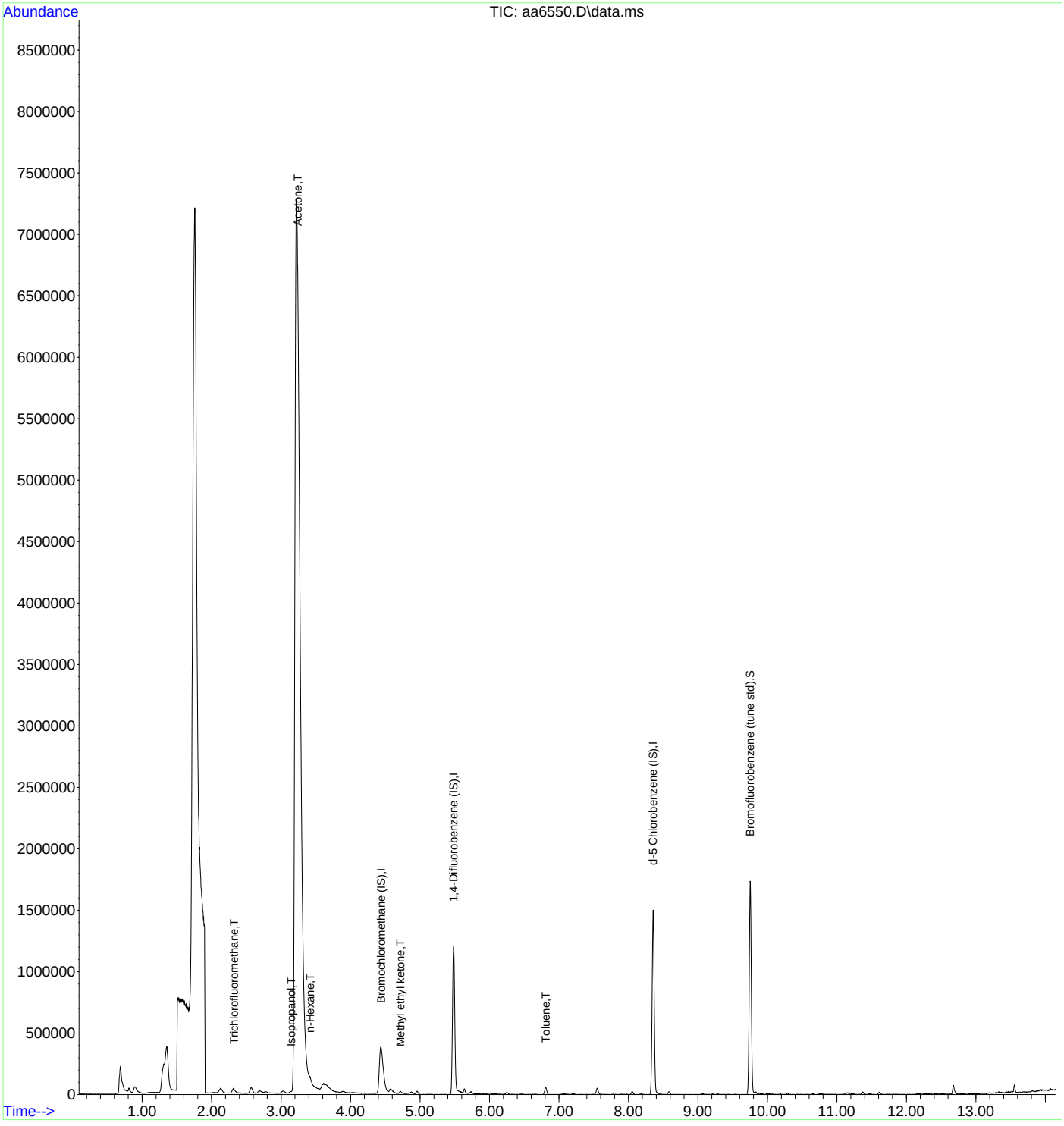
Quant Time: May 22 10:24:28 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

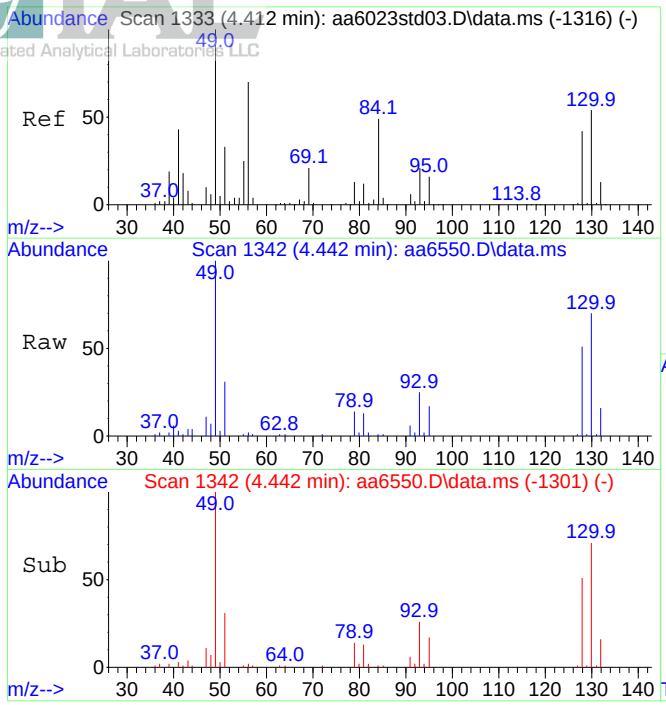
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.442	130	257959	10.00	ppbV	0.030
39) 1,4-Difluorobenzene (IS)	5.484	114	1075642	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.355	117	945740	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.751	95	782852	9.23	ppbV	0.000
Target Compounds						Qvalue
12) Trichlorofluoromethane	2.323	101	26676	0.35	ppbV	96
19) Isopropanol	3.147	45	38218	0.51	ppbV	98
21) Acetone	3.240	43	1154626	20.01	ppbV	100
24) n-Hexane	3.420	57	21568	0.21	ppbV	94
35) Methyl ethyl ketone	4.719	43	25172	0.29	ppbV	96
47) Toluene	6.809	91	52939	0.38	ppbV	98

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

Data Path : C:\DATA\2024\05-2024\05-21-2024\
Data File : aa6550.D
Acq On : 21 May 2024 6:21 pm
Operator : jjw
Sample : E24-01699-23
Misc : 2900, 500cc
ALS Vial : 24 Sample Multiplier: 1

Quant Time: May 22 10:24:28 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

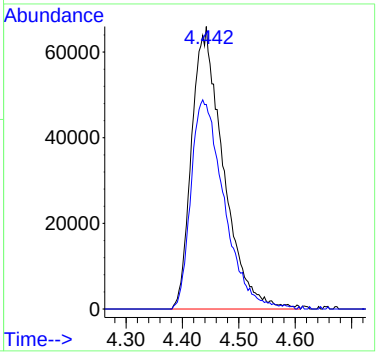


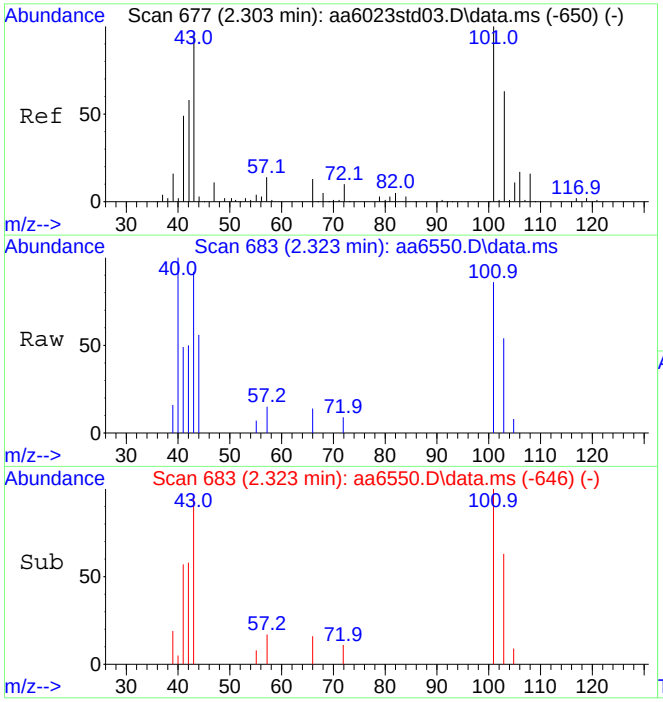


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.442 min Scan# 1342
Delta R.T. 0.030 min
Lab File: aa6550.D
Acq: 21 May 2024 6:21 pm

Tgt Ion:130 Resp: 257959

Ion	Ratio	Lower	Upper
130	100		
128	77.4	57.8	97.8

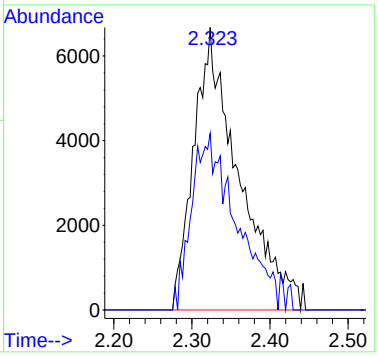


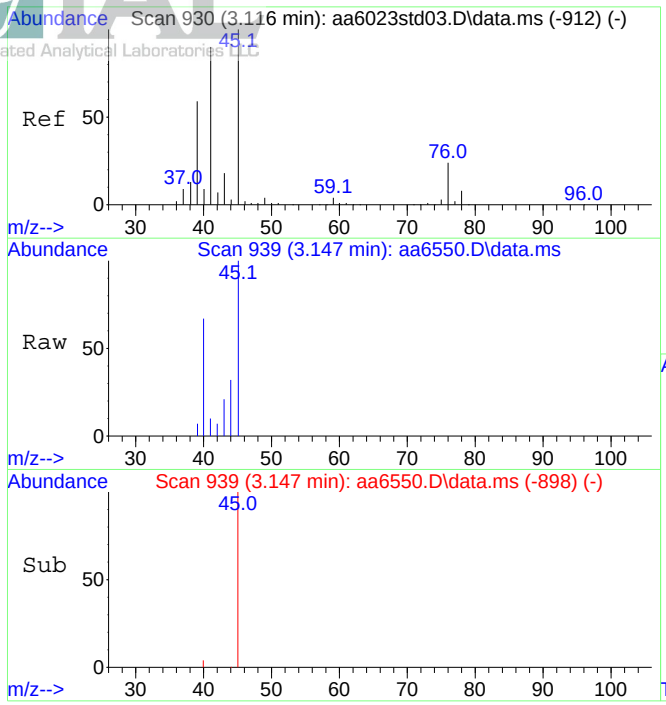


#12
Trichlorofluoromethane
Concen: 0.35 ppbV
RT: 2.323 min Scan# 683
Delta R.T. 0.020 min
Lab File: aa6550.D
Acq: 21 May 2024 6:21 pm

Tgt Ion:101 Resp: 26676

Ion	Ratio	Lower	Upper
101	100		
103	61.9	52.1	78.1

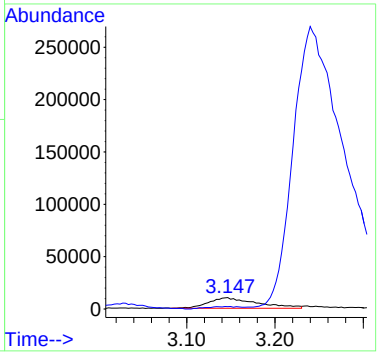


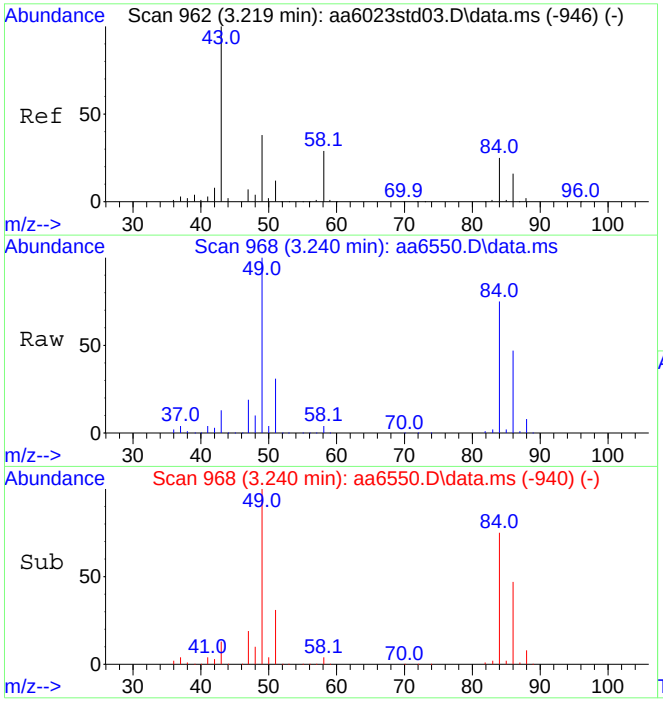


#19
Isopropanol
Concen: 0.51 ppbV
RT: 3.147 min Scan# 939
Delta R.T. 0.031 min
Lab File: aa6550.D
Acq: 21 May 2024 6:21 pm

Tgt Ion: 45 Resp: 38218

Ion	Ratio	Lower	Upper
45	100		
43	19.2	14.6	21.8

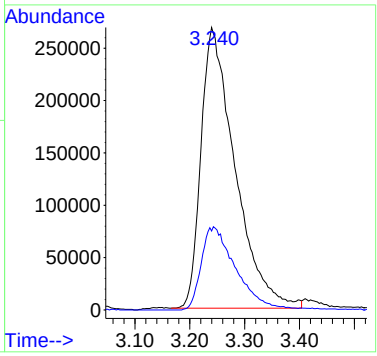


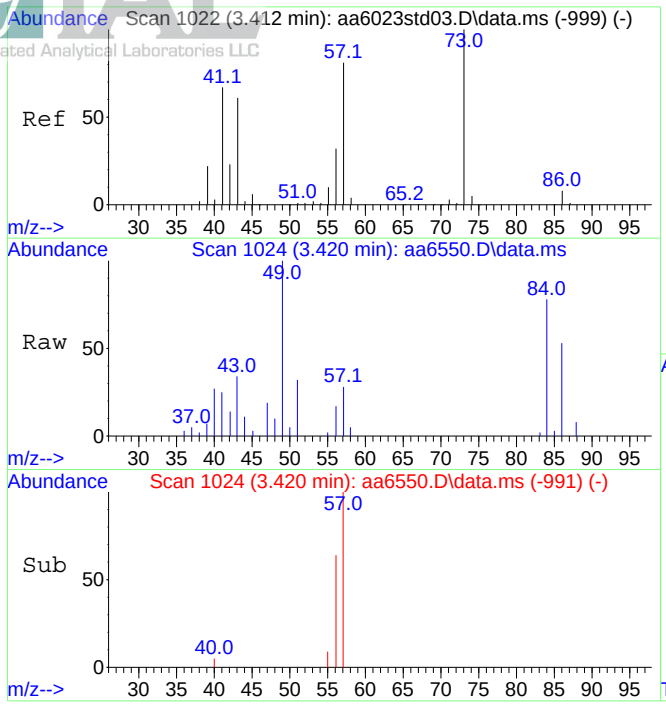


#21
Acetone
Concen: 20.01 ppbV
RT: 3.240 min Scan# 968
Delta R.T. 0.020 min
Lab File: aa6550.D
Acq: 21 May 2024 6:21 pm

Tgt Ion: 43 Resp: 1154626

Ion	Ratio	Lower	Upper
43	100		
58	30.0	23.8	35.8

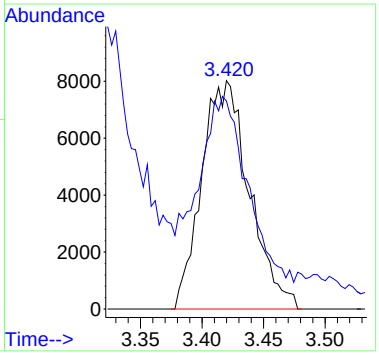


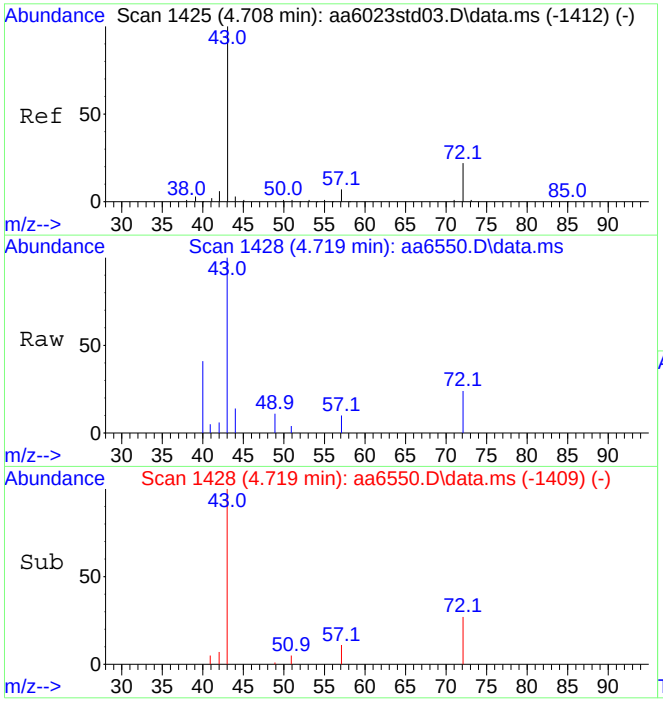


#24
n-Hexane
Concen: 0.21 ppbV
RT: 3.420 min Scan# 1024
Delta R.T. 0.008 min
Lab File: aa6550.D
Acq: 21 May 2024 6:21 pm

Tgt Ion: 57 Resp: 21568

Ion	Ratio	Lower	Upper
57	100		
41	100.7	76.2	114.4

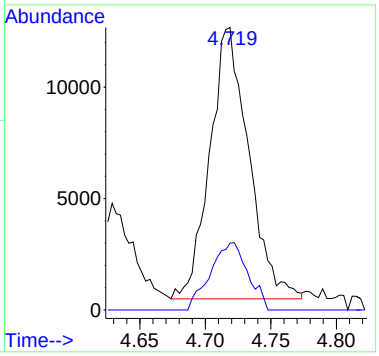


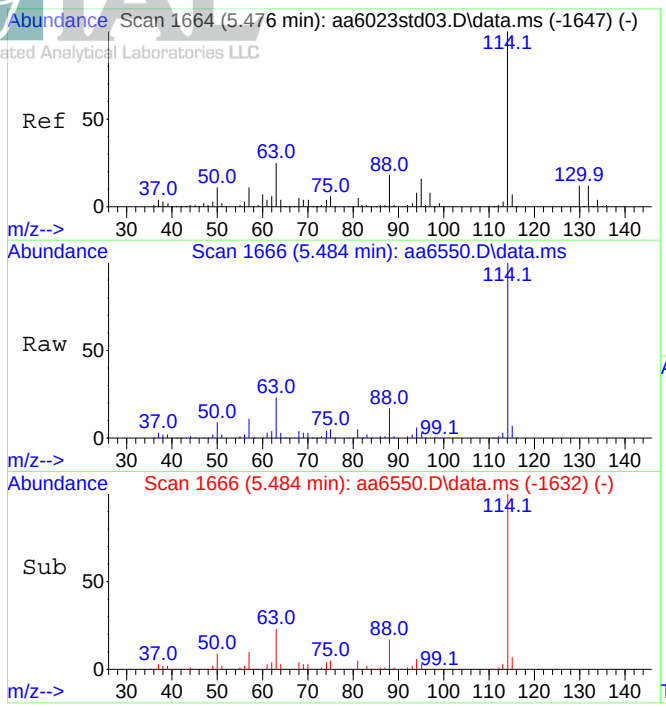


#35
Methyl ethyl ketone
Concen: 0.29 ppbV
RT: 4.719 min Scan# 1428
Delta R.T. 0.011 min
Lab File: aa6550.D
Acq: 21 May 2024 6:21 pm

Tgt Ion: 43 Resp: 25172

Ion	Ratio	Lower	Upper
43	100		
72	23.7	17.4	26.0

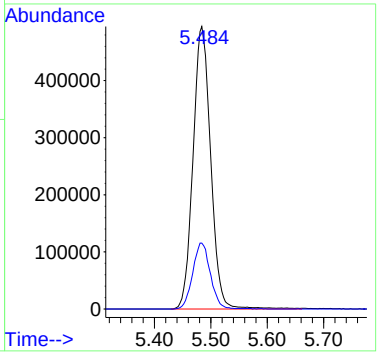


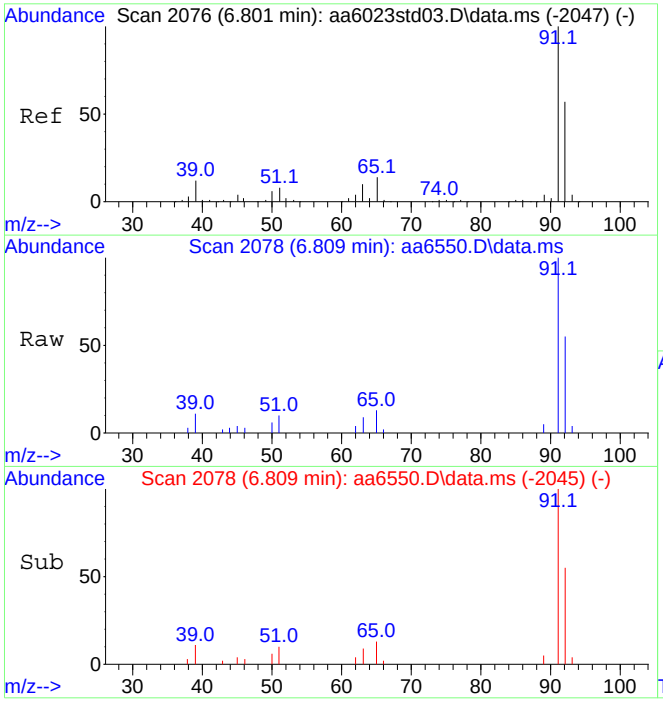


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.484 min Scan# 1666
Delta R.T. 0.008 min
Lab File: aa6550.D
Acq: 21 May 2024 6:21 pm

Tgt Ion:114 Resp: 1075642

Ion	Ratio	Lower	Upper
114	100		
63	23.4	6.4	46.4

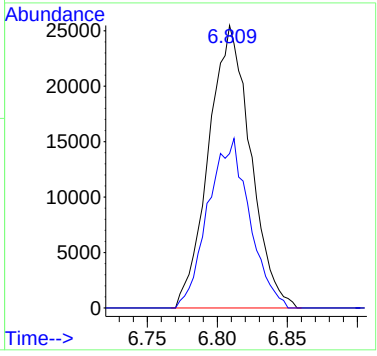


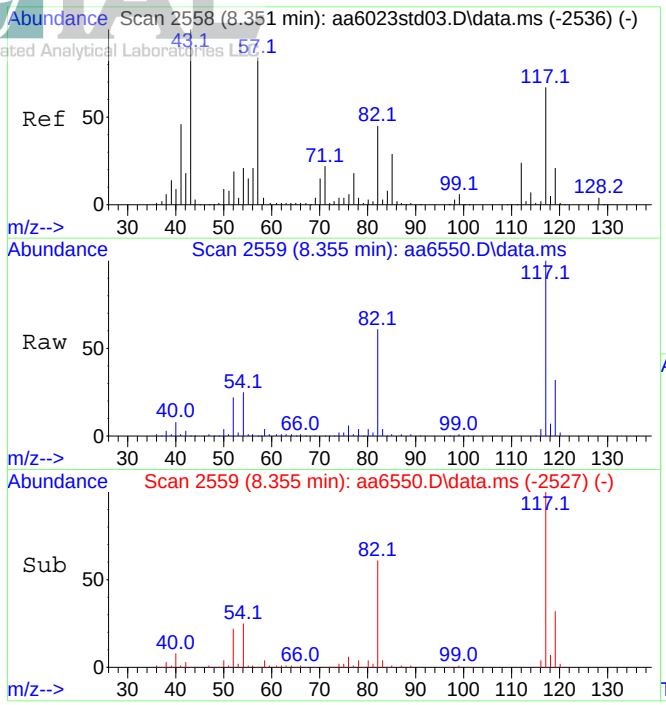


#47
Toluene
Concen: 0.38 ppbV
RT: 6.809 min Scan# 2078
Delta R.T. 0.008 min
Lab File: aa6550.D
Acq: 21 May 2024 6:21 pm

Tgt Ion: 91 Resp: 52939

Ion	Ratio	Lower	Upper
91	100		
92	59.3	46.3	69.5

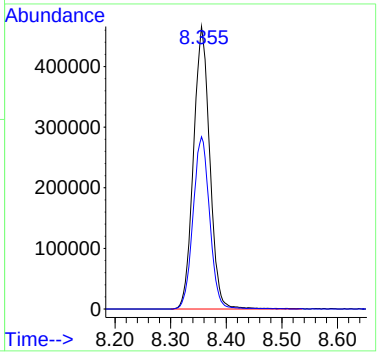


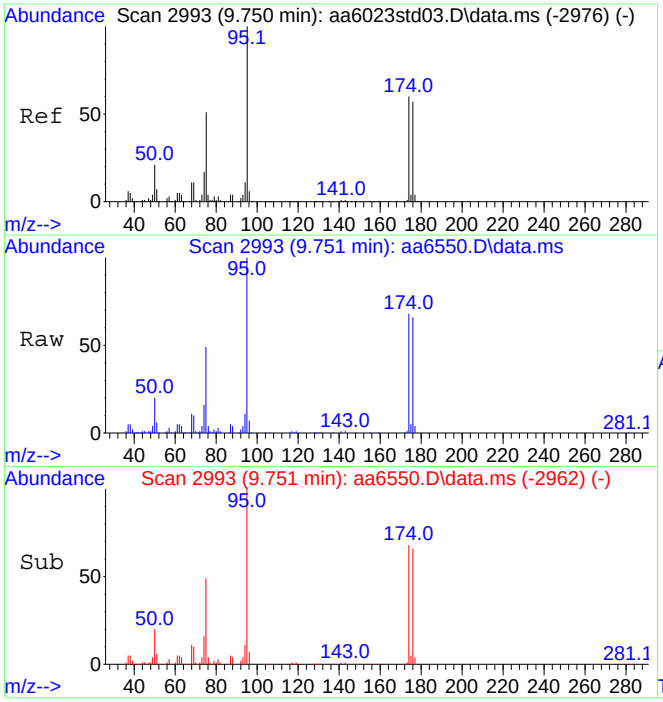


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.355 min Scan# 2559
Delta R.T. 0.004 min
Lab File: aa6550.D
Acq: 21 May 2024 6:21 pm

Tgt Ion:117 Resp: 945740

Ion	Ratio	Lower	Upper
117	100		
82	62.0	46.2	86.2

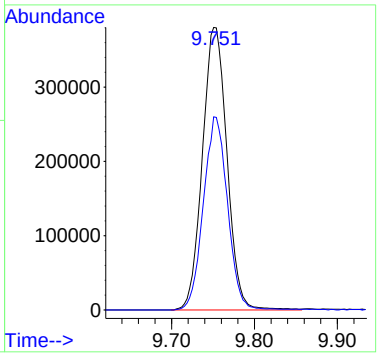




#64
Bromofluorobenzene (tune std)
Concen: 9.23 ppbV
RT: 9.751 min Scan# 2993
Delta R.T. 0.001 min
Lab File: aa6550.D
Acq: 21 May 2024 6:21 pm

Tgt Ion: 95 Resp: 782852

Ion	Ratio	Lower	Upper
95	100		
174	67.4	49.4	74.2



Analysis: Volatile Organic Compounds by EPA Method TO-15
Laboratory Sample Duplicate Report

SDG Number: E24-01876
IAL Sample ID: E24-01876-04
Matrix: Air
Summa ID: 3287

Date Received: 5/31/24
Date Analyzed: 6/6/24,6/6/24
Lab Data File#: AA6669,AA6670
Dilution Factor: 1
Injection Volume: 500ml
GC/MS Column: RTX-1, 0.32 mmID

Compound	CAS #	Sample E24-01876-04 Concentration Reported ppbv	Q	Sample Dup E24-01876-24 Concentration Reported ppbv	Q	Reporting Limits ppbv	RPD
Acetone	67-64-1	**1.8**		**2.0**		0.20	**-10.53%**
Allyl Chloride	107-05-1	0.20	U	0.20	U	0.20	0.00%
Benzene	71-43-2	0.20	U	0.20	U	0.20	0.00%
Bromodichloromethane	75-27-4	0.20	U	0.20	U	0.20	0.00%
Bromoform	75-25-2	0.20	U	0.20	U	0.20	0.00%
Bromomethane	74-83-9	0.20	U	0.20	U	0.20	0.00%
1,3-Butadiene	106-99-0	0.20	U	0.20	U	0.20	0.00%
Chlorobenzene	108-90-7	0.20	U	0.20	U	0.20	0.00%
Chloroethane	75-00-3	0.20	U	0.20	U	0.20	0.00%
Chloroform	67-66-3	0.20	U	0.20	U	0.20	0.00%
Chloromethane	74-87-3	0.20	U	0.20	U	0.20	0.00%
Carbon disulfide	75-15-0	0.20	U	0.20	U	0.20	0.00%
Carbon tetrachloride	56-23-5	0.20	U	0.20	U	0.20	0.00%
2-Chlorotoluene	95-49-8	0.20	U	0.20	U	0.20	0.00%
Cyclohexane	110-82-7	0.20	U	0.20	U	0.20	0.00%
Dibromochloromethane	124-48-1	0.20	U	0.20	U	0.20	0.00%
1,2-Dibromoethane	106-93-4	0.20	U	0.20	U	0.20	0.00%
1,2-Dichlorobenzene	95-50-1	0.20	U	0.20	U	0.20	0.00%
1,3-Dichlorobenzene	541-73-1	0.20	U	0.20	U	0.20	0.00%
1,4-Dichlorobenzene	106-46-7	0.20	U	0.20	U	0.20	0.00%
Dichlorodifluoromethane	75-71-8	0.20	U	0.20	U	0.20	0.00%
1,1-Dichloroethane	75-34-3	0.20	U	0.20	U	0.20	0.00%
1,2-Dichloroethane	107-06-2	0.20	U	0.20	U	0.20	0.00%
1,1-Dichloroethene	75-35-4	0.20	U	0.20	U	0.20	0.00%
1,2-Dichloroethene (cis)	156-59-2	0.20	U	0.20	U	0.20	0.00%
1,2-Dichloroethene (trans)	156-60-5	0.20	U	0.20	U	0.20	0.00%
1,2-Dichloropropane	78-87-5	0.20	U	0.20	U	0.20	0.00%
1,3-Dichloropropene (cis)	10061-01-5	0.20	U	0.20	U	0.20	0.00%
1,3-Dichloropropene (trans)	10061-02-6	0.20	U	0.20	U	0.20	0.00%
1,2-Dichlorotetrafluoroethane	76-14-2	0.20	U	0.20	U	0.20	0.00%
1,4-Dioxane	123-91-1	0.20	U	0.20	U	0.20	0.00%
Ethanol	64-17-5	0.20	U	0.20	U	0.20	0.00%
Ethylbenzene	100-41-4	0.20	U	0.20	U	0.20	0.00%
4-Ethyltoluene	622-96-8	0.20	U	0.20	U	0.20	0.00%
n-Heptane	142-82-5	0.20	U	0.20	U	0.20	0.00%
1,3-Hexachlorobutadiene	87-68-3	0.20	U	0.20	U	0.20	0.00%
n-Hexane	110-54-3	0.20	U	0.20	U	0.20	0.00%
Isopropanol	67-63-0	**0.25**		**0.25**		0.20	**0.00%**

Qualifiers:
E=Concentration exceeds upper level of calibration range for instrument.
D=Extra dilution required for this compound. X=Duplicate samples do not met RPD criteria.
U=Compound ND or under reporting limit.

Analysis: Volatile Organic Compounds by EPA Method TO-15
Laboratory Sample Duplicate Report

		Date Received:	5/31/24
SDG Number:	E24-01876	Date Analyzed:	6/6/24,6/6/24
IAL Sample ID:	E24-01876-04	Lab Data File#:	AA6669,AA6670
Matrix:	Air	Dilution Factor:	1
Summa ID:	3287	Injection Volume:	500ml
		GC/MS Column:	RTX-1, 0.32 mmID

Compound	CAS #	Sample E24-01876-04 Concentration Reported ppbv	Q	Sample Dup E24-01876-24 Concentration Reported ppbv	Q	Reporting Limits ppbv	RPD
Methylene chloride	75-09-2	**1.8**	X	**5.9**	X	0.20	**-106.49%**
Methyl ethyl ketone	78-93-3	0.20	U	0.20	U	0.20	0.00%
Methyl isobutyl ketone	108-10-1	0.20	U	0.20	U	0.20	0.00%
Methyl methacrylate	80-62-6	0.20	U	0.20	U	0.20	0.00%
Methyl tert-butyl ether	1634-04-4	0.20	U	0.20	U	0.20	0.00%
Styrene	100-42-5	0.20	U	0.20	U	0.20	0.00%
Tert-butyl alcohol	75-65-0	0.20	U	0.20	U	0.20	0.00%
1,1,2,2-Tetrachloroethane	79-34-5	0.20	U	0.20	U	0.20	0.00%
Tetrachloroethene	127-18-4	0.20	U	0.20	U	0.20	0.00%
Tetrahydrofuran	109-99-9	0.20	U	0.20	U	0.20	0.00%
Toluene	108-88-3	0.20	U	0.20	U	0.20	0.00%
1,2,4-Trichlorobenzene	120-82-1	0.20	U	0.20	U	0.20	0.00%
1,1,1-Trichloroethane	71-55-6	0.20	U	0.20	U	0.20	0.00%
1,1,2-Trichloroethane	79-00-5	0.20	U	0.20	U	0.20	0.00%
Trichloroethene	79-01-6	0.20	U	0.20	U	0.20	0.00%
Trichlorofluoromethane	75-69-4	**0.20**		**0.22**		0.20	**-9.52%**
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.20	U	0.20	U	0.20	0.00%
1,2,4-Trimethylbenzene	95-63-6	0.20	U	0.20	U	0.20	0.00%
1,3,5-Trimethylbenzene	108-67-8	0.20	U	0.20	U	0.20	0.00%
2,2,4-Trimethylpentane	540-84-1	0.20	U	0.20	U	0.20	0.00%
Vinyl bromide	593-60-2	0.20	U	0.20	U	0.20	0.00%
Vinyl chloride	75-01-4	0.20	U	0.20	U	0.20	0.00%
Xylenes (m&p)	179601-23-1	0.40	U	0.40	U	0.40	0.00%
Xylenes (o)	95-47-6	0.20	U	0.20	U	0.20	0.00%

RPD must be <25% for all laboratory duplicate samples. Laboratory duplicate samples are run once daily.
NC = The RPD could not be calculated since the compound was only detected in either the parent or duplicate sample.

Qualifiers:
E=Concentration exceeds upper level of calibration range for instrument.
D=Extra dilution required for this compound. X=Duplicate samples do not met RPD criteria.
U=Compound ND or under reporting limit.

Quantitation Report (QT Reviewed)

Data Path : C:\DATA\2024\06-2024\06-06-2024\
Data File : aa6669.D
Acq On : 6 Jun 2024 5:36 pm
Operator : jjw
Sample : E24-01876-04
Misc : 3287, 500cc
ALS Vial : 13 Sample Multiplier: 1

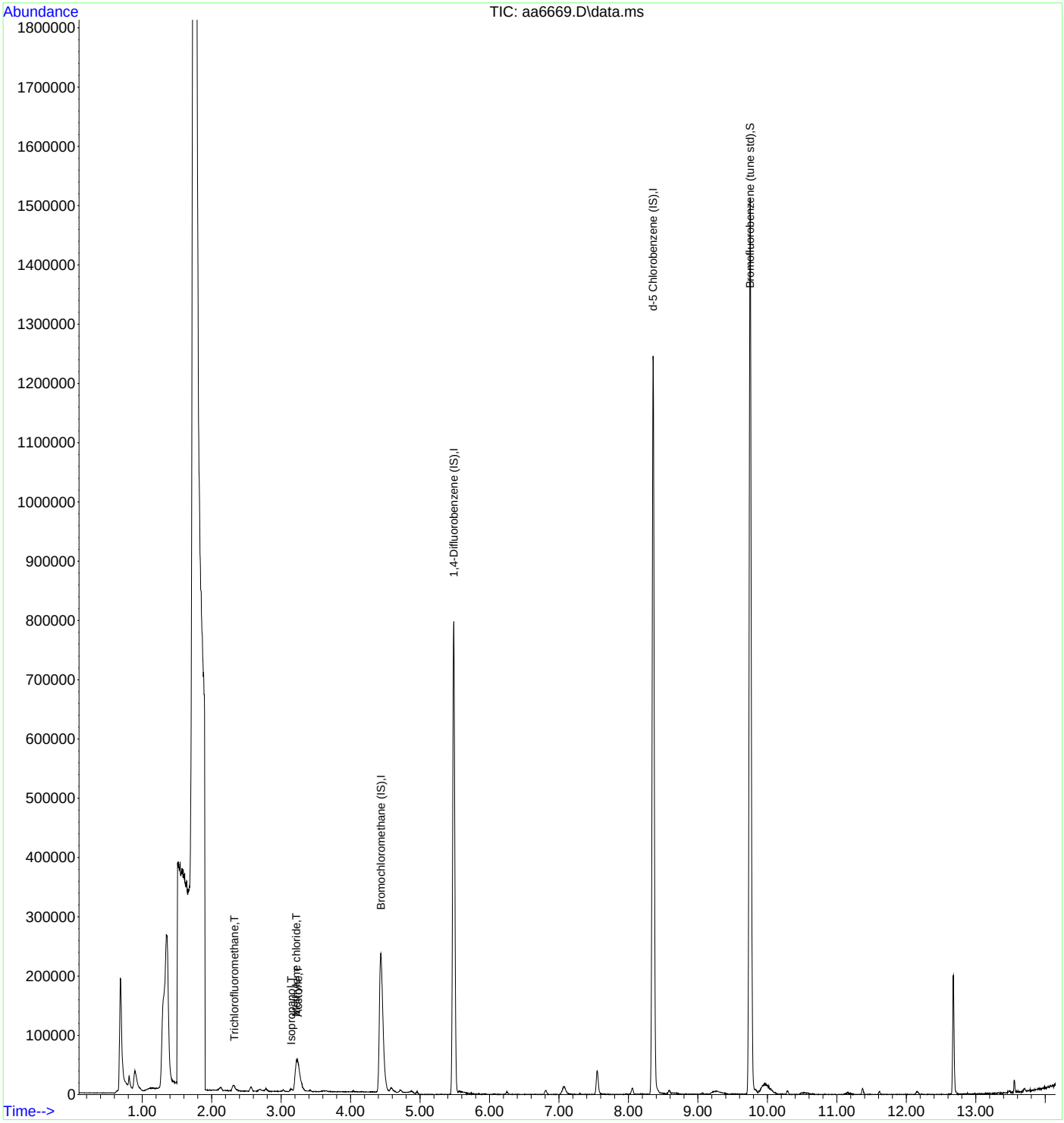
Quant Time: Jun 07 09:53:43 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

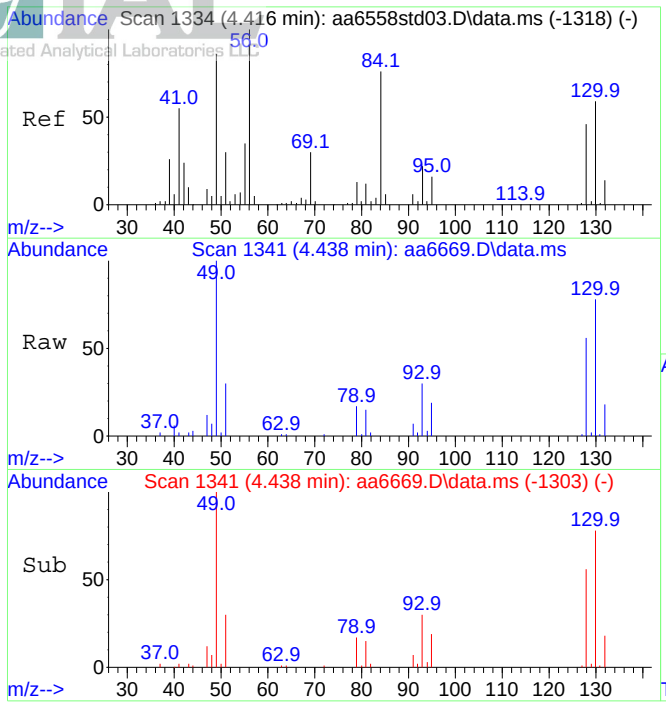
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.438	130	158344	10.00	ppbV		0.022
39) 1,4-Difluorobenzene (IS)	5.486	114	722441	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.354	117	778831	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.753	95	682944	9.27	ppbV		0.000
Target Compounds							Qvalue
12) Trichlorofluoromethane	2.325	101	10689	0.20	ppbV		96
19) Isopropanol	3.145	45	11181	0.25	ppbV	#	90
20) Methylene chloride	3.219	49	51897	1.81	ppbV		95
21) Acetone	3.245	43	64671	1.82	ppbV		94

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

Data Path : C:\DATA\2024\06-2024\06-06-2024\
Data File : aa6669.D
Acq On : 6 Jun 2024 5:36 pm
Operator : jjw
Sample : E24-01876-04
Misc : 3287, 500cc
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 07 09:53:43 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

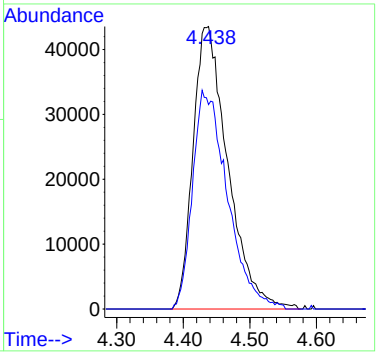


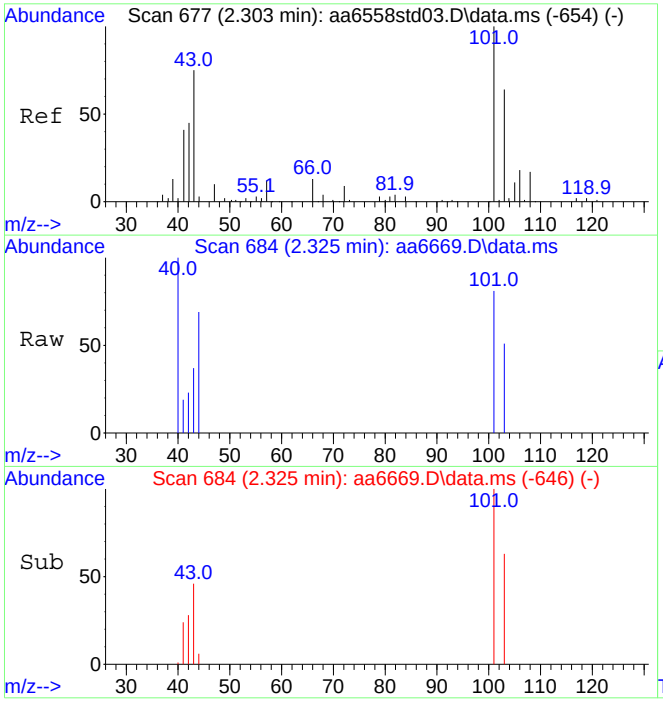


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.438 min Scan# 1341
Delta R.T. 0.022 min
Lab File: aa6669.D
Acq: 6 Jun 2024 5:36 pm

Tgt Ion:130 Resp: 158344

Ion	Ratio	Lower	Upper
130	100		
128	77.4	57.8	97.8

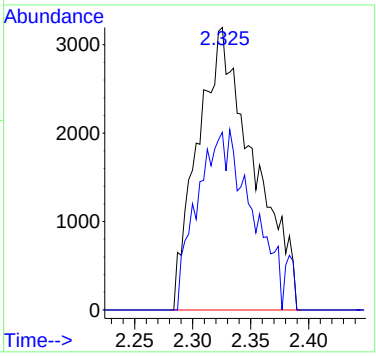


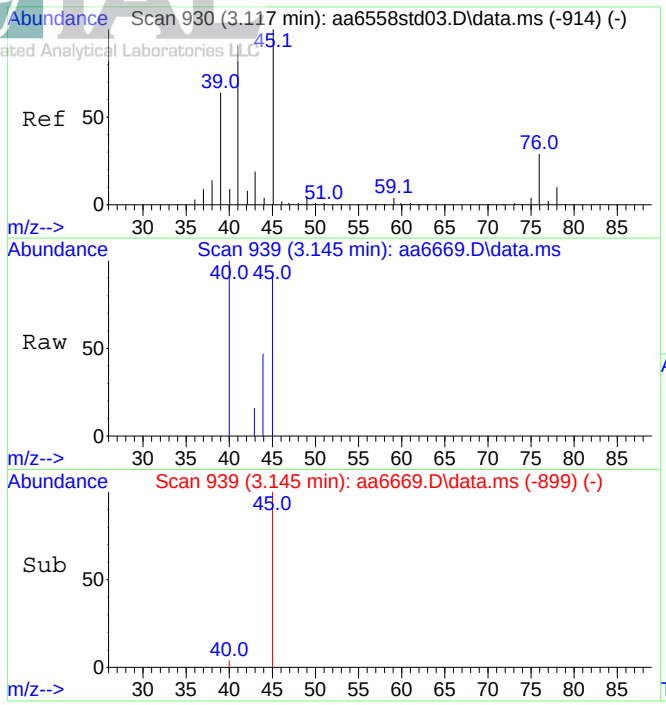


#12
Trichlorofluoromethane
Concen: 0.20 ppbV
RT: 2.325 min Scan# 684
Delta R.T. 0.022 min
Lab File: aa6669.D
Acq: 6 Jun 2024 5:36 pm

Tgt Ion:101 Resp: 10689

Ion	Ratio	Lower	Upper
101	100		
103	61.7	51.9	77.9

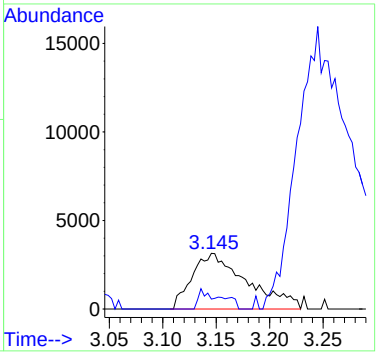


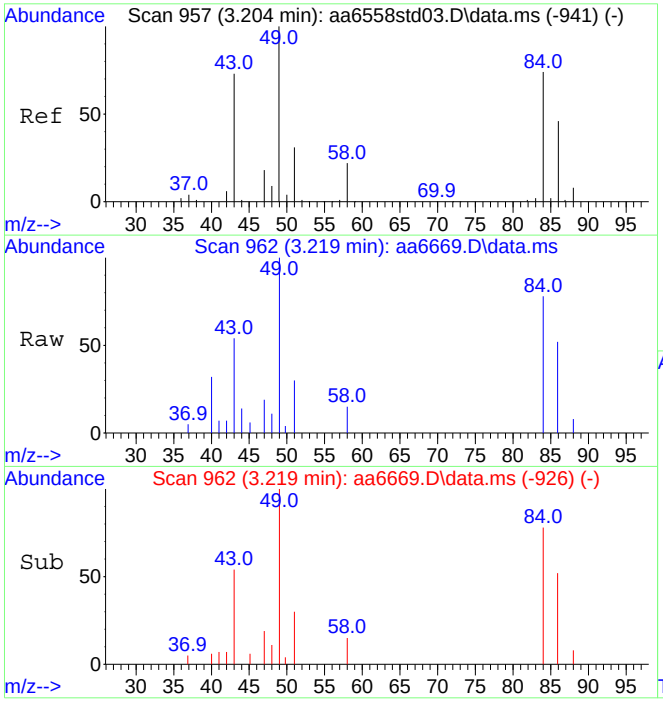


#19
Isopropanol
Concen: 0.25 ppbV
RT: 3.145 min Scan# 939
Delta R.T. 0.029 min
Lab File: aa6669.D
Acq: 6 Jun 2024 5:36 pm

Tgt Ion: 45 Resp: 11181

Ion	Ratio	Lower	Upper
45	100		
43	14.1	15.0	22.4#

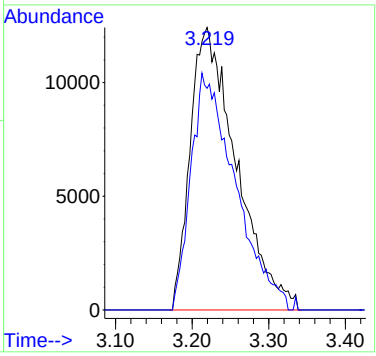


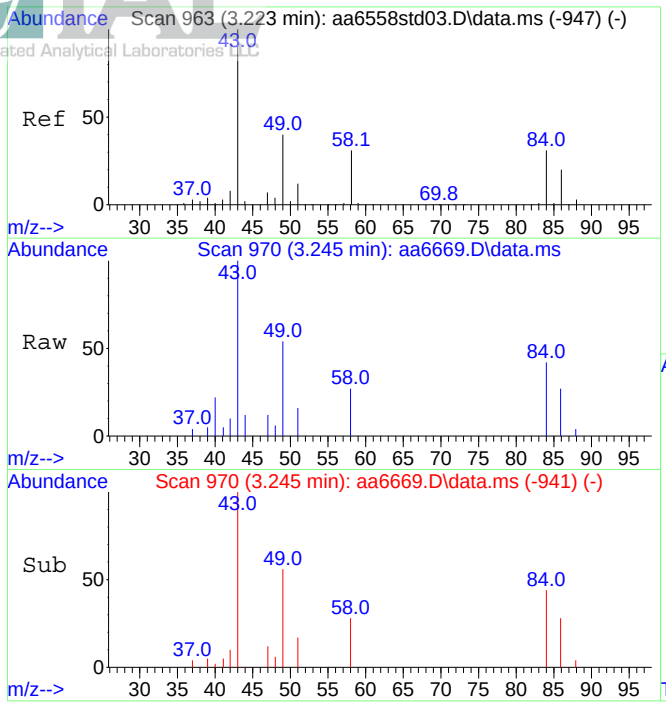


#20
Methylene chloride
Concen: 1.81 ppbV
RT: 3.219 min Scan# 962
Delta R.T. 0.016 min
Lab File: aa6669.D
Acq: 6 Jun 2024 5:36 pm

Tgt Ion: 49 Resp: 51897

Ion	Ratio	Lower	Upper
49	100		
84	80.6	56.2	96.2

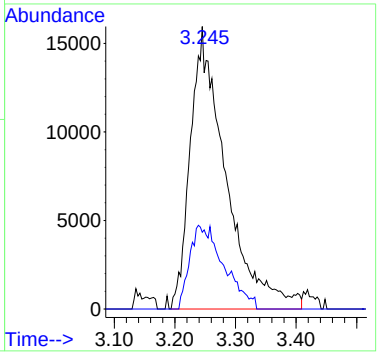


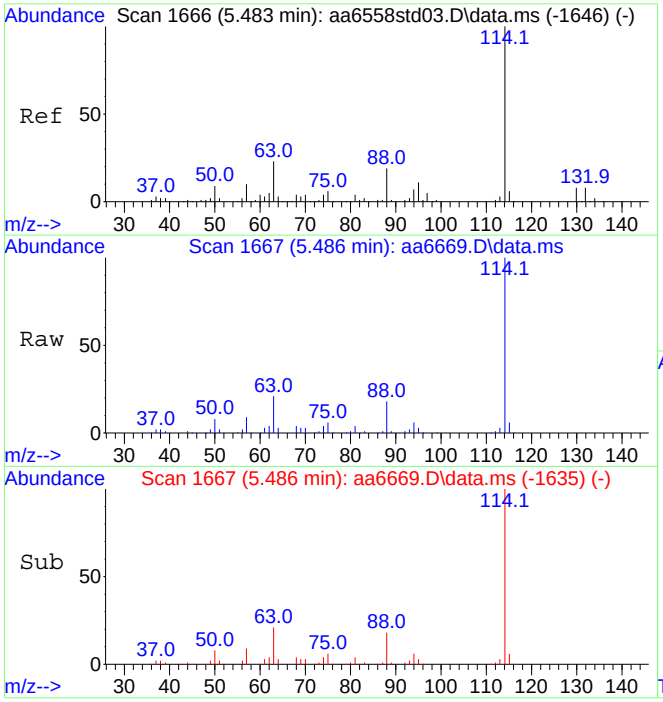


#21
Acetone
Concen: 1.82 ppbV
RT: 3.245 min Scan# 970
Delta R.T. 0.022 min
Lab File: aa6669.D
Acq: 6 Jun 2024 5:36 pm

Tgt Ion: 43 Resp: 64671

Ion	Ratio	Lower	Upper
43	100		
58	28.5	25.4	38.0

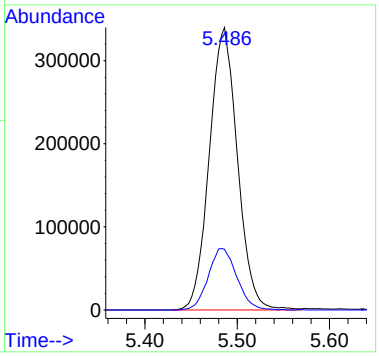


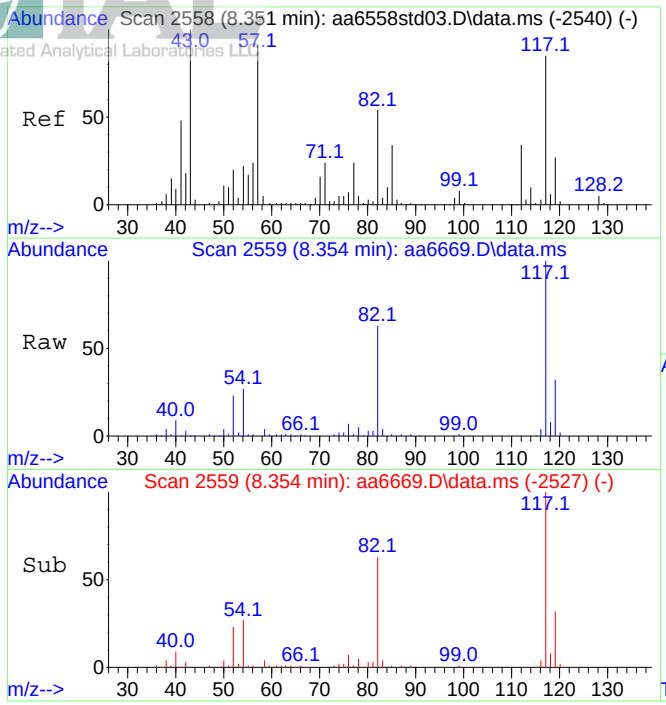


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.486 min Scan# 1667
Delta R.T. 0.003 min
Lab File: aa6669.D
Acq: 6 Jun 2024 5:36 pm

Tgt Ion:114 Resp: 722441

Ion	Ratio	Lower	Upper
114	100		
63	22.0	3.6	43.6

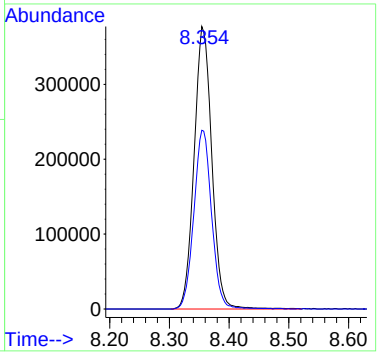


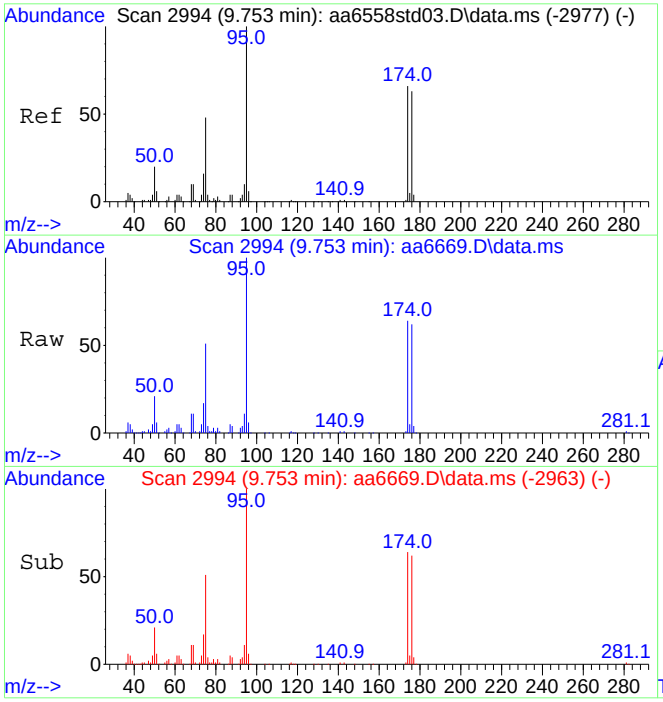


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.354 min Scan# 2559
Delta R.T. 0.003 min
Lab File: aa6669.D
Acq: 6 Jun 2024 5:36 pm

Tgt Ion:117 Resp: 778831

Ion	Ratio	Lower	Upper
117	100		
82	63.2	42.3	82.3

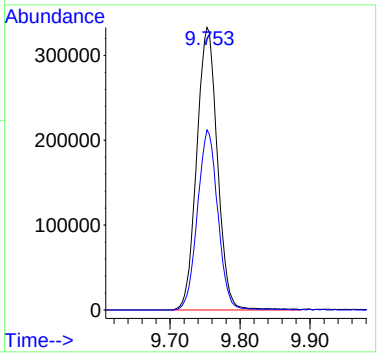




#64
Bromofluorobenzene (tune std)
Concen: 9.27 ppbV
RT: 9.753 min Scan# 2994
Delta R.T. -0.000 min
Lab File: aa6669.D
Acq: 6 Jun 2024 5:36 pm

Tgt Ion: 95 Resp: 682944

Ion	Ratio	Lower	Upper
95	100		
174	62.9	52.9	79.3



Quantitation Report (QT Reviewed)

Data Path : C:\DATA\2024\06-2024\06-06-2024\
Data File : aa6670.D
Acq On : 6 Jun 2024 6:08 pm
Operator : jjw
Sample : E24-01876-24
Misc : Dup of E24-01876-04, Can # 3287, 500cc
ALS Vial : 14 Sample Multiplier: 1

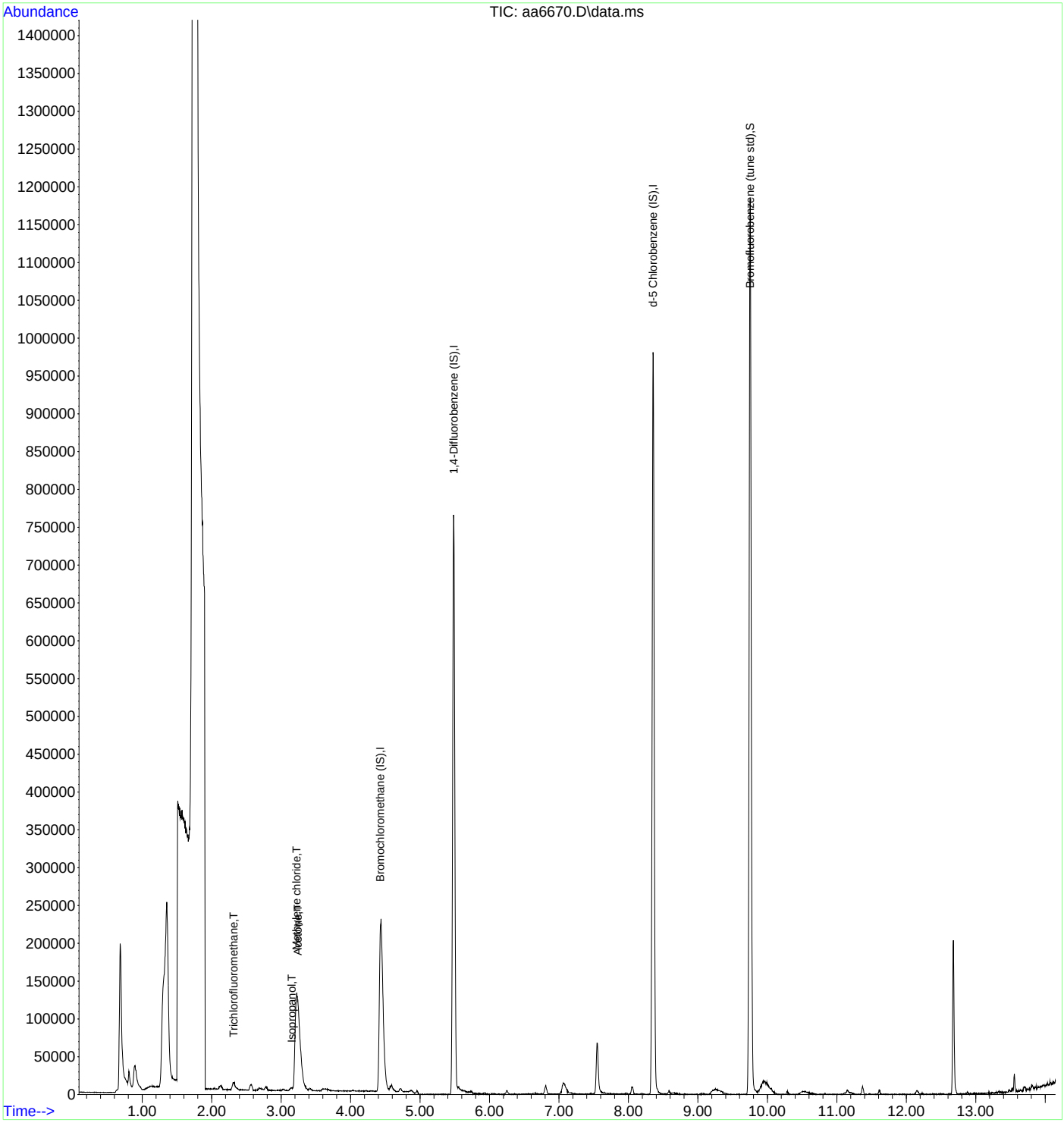
Quant Time: Jun 07 09:59:03 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

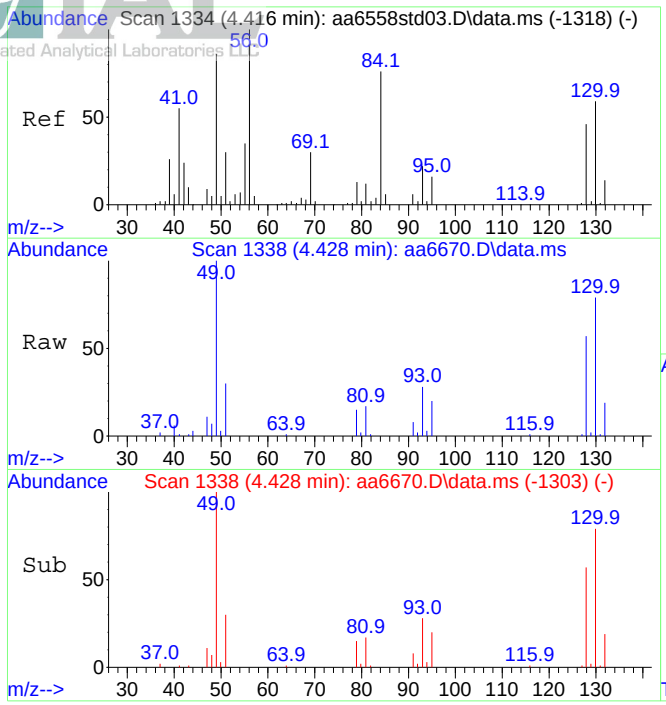
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.428	130	156758	10.00	ppbV	0.012
39) 1,4-Difluorobenzene (IS)	5.486	114	705538	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.354	117	642638	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.753	95	537000	8.83	ppbV	0.000
Target Compounds						Qvalue
12) Trichlorofluoromethane	2.316	101	11413	0.22	ppbV	# 83
19) Isopropanol	3.152	45	11078	0.25	ppbV	# 82
20) Methylene chloride	3.223	49	167352	5.91	ppbV	95
21) Acetone	3.242	43	69179	1.97	ppbV	94

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

Data Path : C:\DATA\2024\06-2024\06-06-2024\
Data File : aa6670.D
Acq On : 6 Jun 2024 6:08 pm
Operator : jjw
Sample : E24-01876-24
Misc : Dup of E24-01876-04, Can # 3287, 500cc
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 07 09:59:03 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

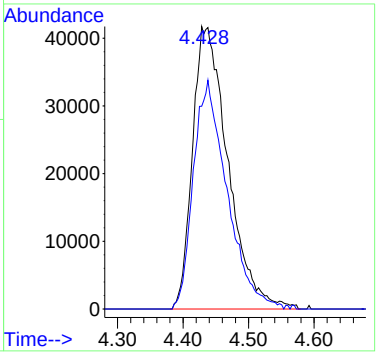


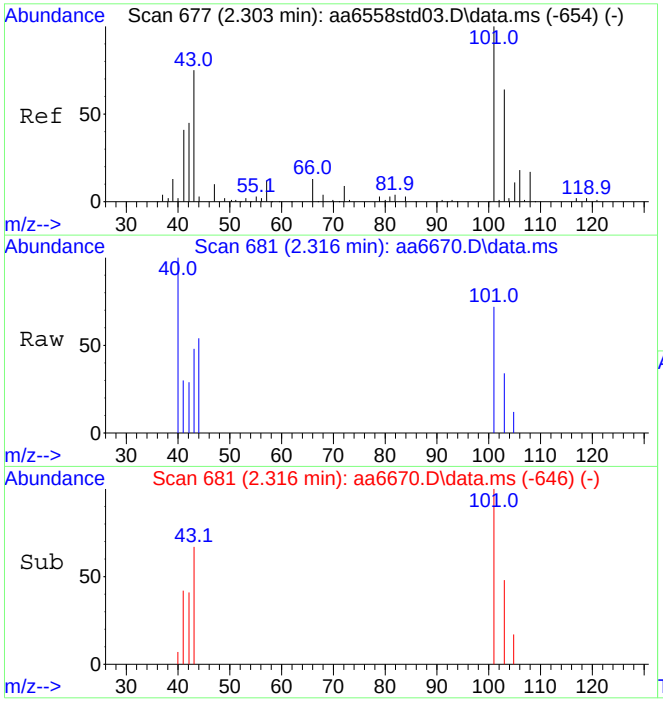


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.428 min Scan# 1338
Delta R.T. 0.012 min
Lab File: aa6670.D
Acq: 6 Jun 2024 6:08 pm

Tgt Ion:130 Resp: 156758

Ion	Ratio	Lower	Upper
130	100		
128	76.9	57.8	97.8

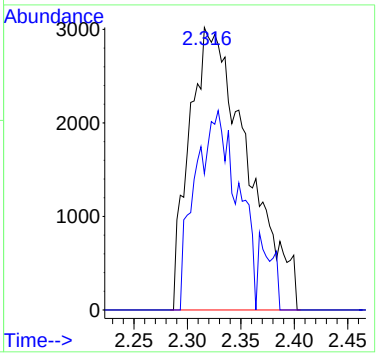


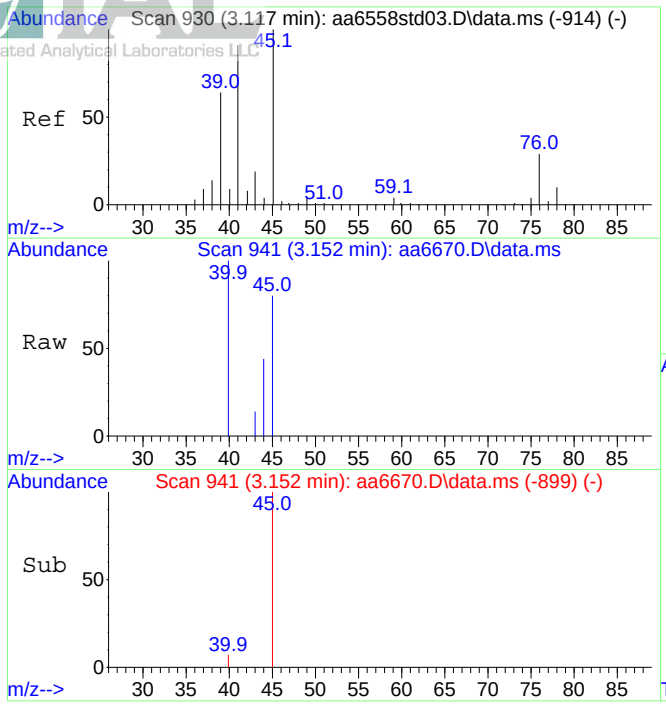


#12
Trichlorofluoromethane
Concen: 0.22 ppbV
RT: 2.316 min Scan# 681
Delta R.T. 0.013 min
Lab File: aa6670.D
Acq: 6 Jun 2024 6:08 pm

Tgt Ion:101 Resp: 11413

Ion	Ratio	Lower	Upper
101	100		
103	51.6	51.9	77.9#

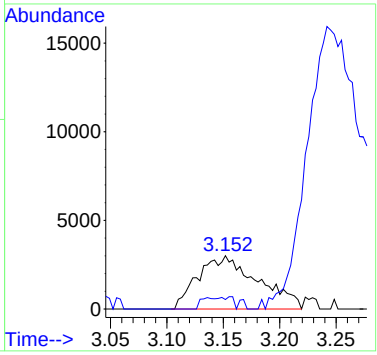


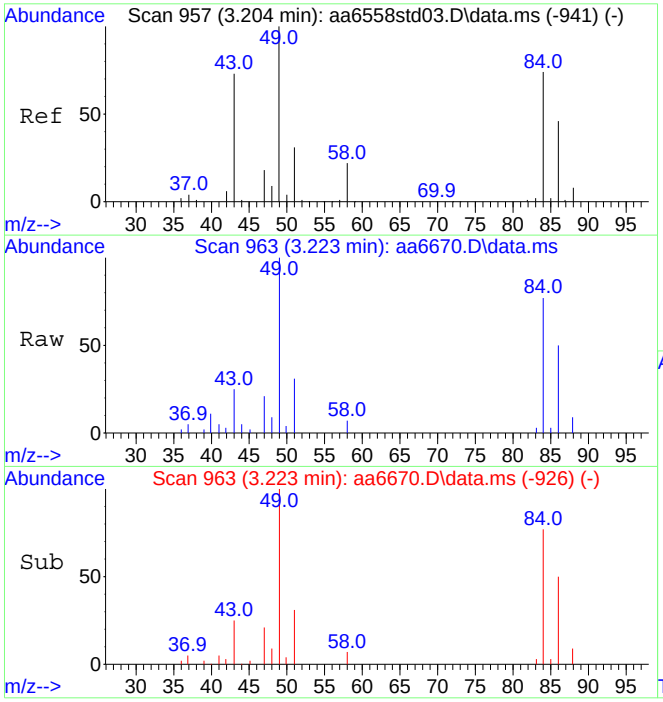


#19
Isopropanol
Concen: 0.25 ppbV
RT: 3.152 min Scan# 941
Delta R.T. 0.035 min
Lab File: aa6670.D
Acq: 6 Jun 2024 6:08 pm

Tgt Ion: 45 Resp: 11078

Ion	Ratio	Lower	Upper
45	100		
43	10.6	15.0	22.4#

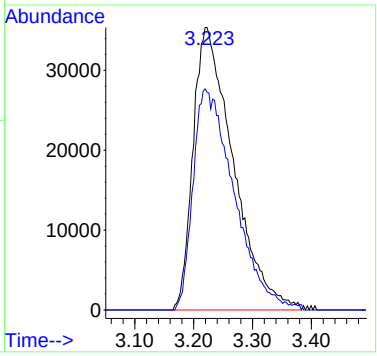


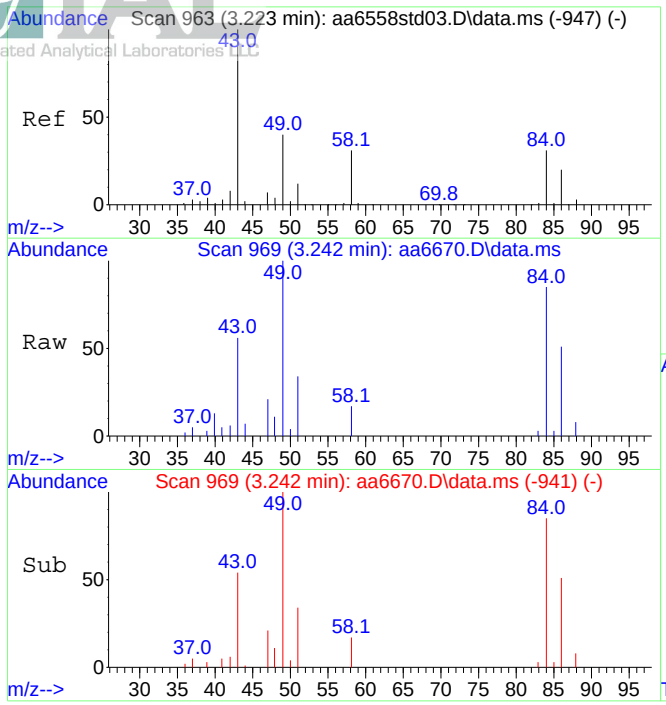


#20
Methylene chloride
Concen: 5.91 ppbV
RT: 3.223 min Scan# 963
Delta R.T. 0.019 min
Lab File: aa6670.D
Acq: 6 Jun 2024 6:08 pm

Tgt Ion: 49 Resp: 167352

Ion	Ratio	Lower	Upper
49	100		
84	80.1	56.2	96.2

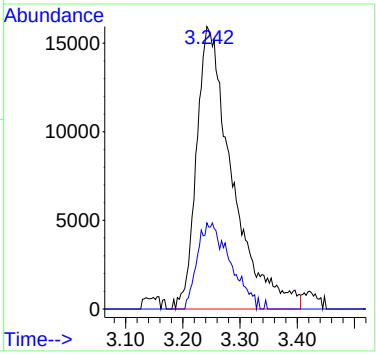


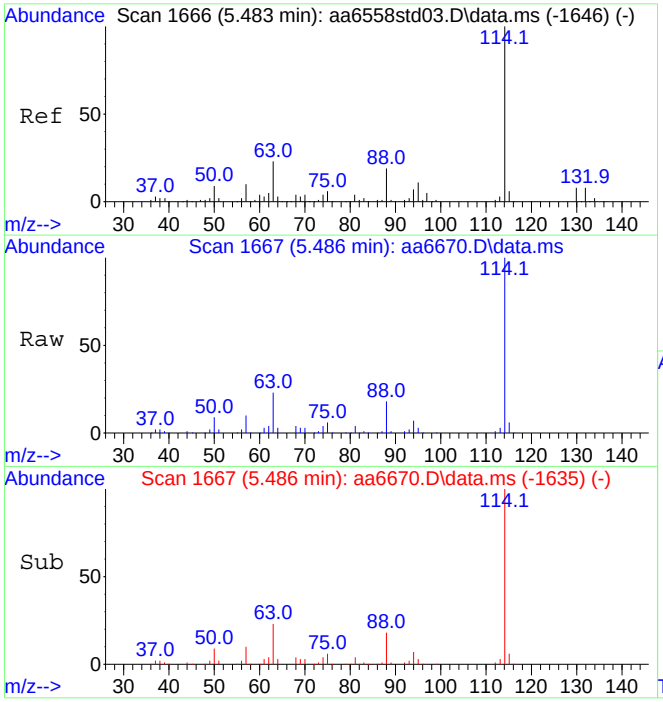


#21
Acetone
Concen: 1.97 ppbV
RT: 3.242 min Scan# 969
Delta R.T. 0.019 min
Lab File: aa6670.D
Acq: 6 Jun 2024 6:08 pm

Tgt Ion: 43 Resp: 69179

Ion	Ratio	Lower	Upper
43	100		
58	28.2	25.4	38.0

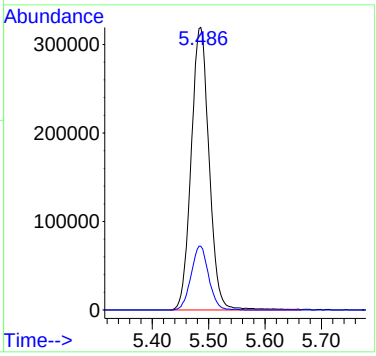


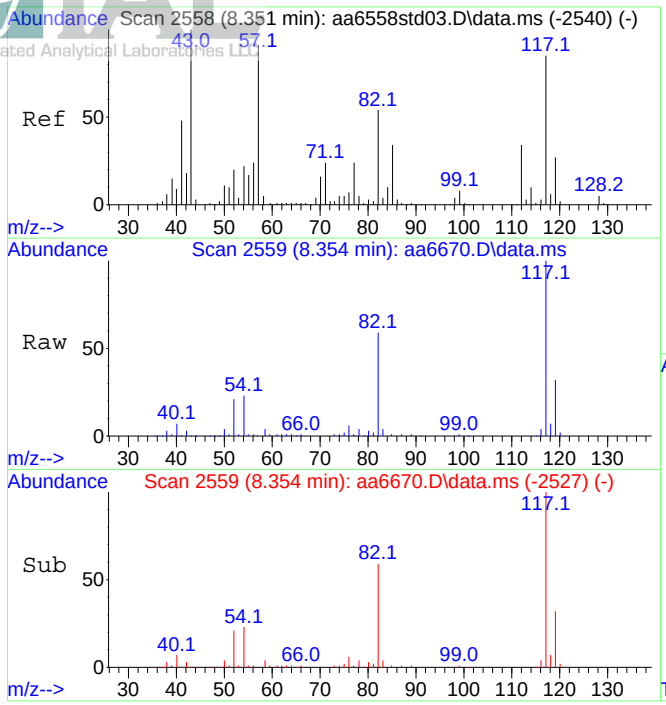


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.486 min Scan# 1667
Delta R.T. 0.003 min
Lab File: aa6670.D
Acq: 6 Jun 2024 6:08 pm

Tgt Ion:114 Resp: 705538

Ion	Ratio	Lower	Upper
114	100		
63	22.1	3.6	43.6

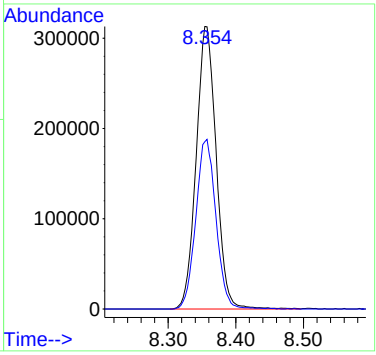


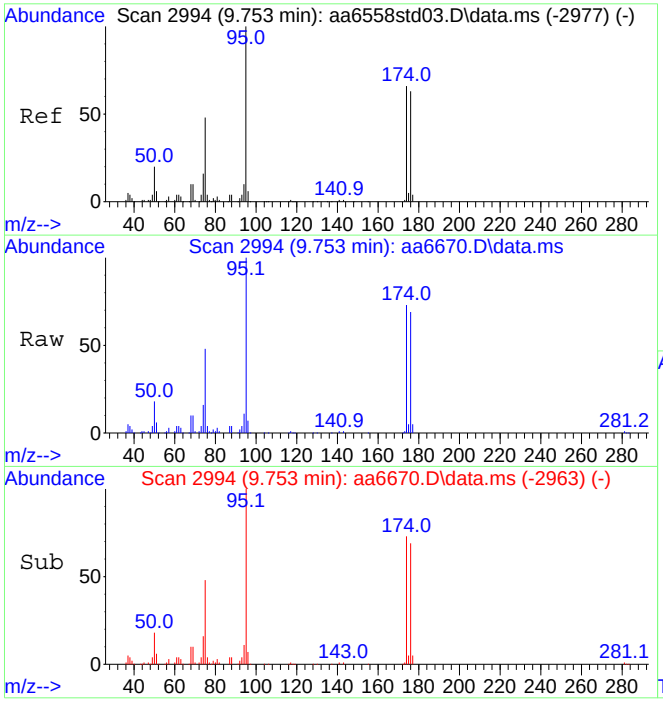


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.354 min Scan# 2559
Delta R.T. 0.003 min
Lab File: aa6670.D
Acq: 6 Jun 2024 6:08 pm

Tgt Ion:117 Resp: 642638

Ion	Ratio	Lower	Upper
117	100		
82	60.4	42.3	82.3

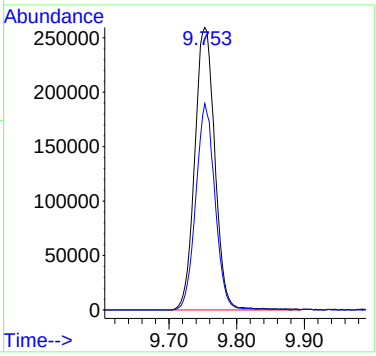




#64
Bromofluorobenzene (tune std)
Concen: 8.83 ppbV
RT: 9.753 min Scan# 2994
Delta R.T. -0.000 min
Lab File: aa6670.D
Acq: 6 Jun 2024 6:08 pm

Tgt Ion: 95 Resp: 537000

Ion	Ratio	Lower	Upper
95	100		
174	69.8	52.9	79.3



Analysis: Volatile Organic Compounds by EPA Method TO-15
Laboratory Sample Duplicate Report

		Date Received:	7/16/24
SDG Number:	E24-02427	Date Analyzed:	7/16/24,7/16/24
IAL Sample ID:	E24-02427-01	Lab Data File#:	AA6908,AA6909
Matrix:	Air	Dilution Factor:	1
Summa ID:	5073	Injection Volume:	500ml
		GC/MS Column:	RTX-1, 0.32 mmID

		Sample		Sample Dup			
		E24-02427-01		**E24-02427-21**			
		Concentration		**Concentration**		**Reporting**	
		Reported		**Reported**		**Limits**	
Compound	**CAS #**	**ppbv**	**Q**	**ppbv**	**Q**	**ppbv**	**RPD**
Acetone	67-64-1	**14**		**14**		0.20	**0.00%**
Benzene	71-43-2	**0.33**		**0.30**		0.20	**9.52%**
Bromodichloromethane	75-27-4	0.20	U	0.20	U	0.20	0.00%
Bromoform	75-25-2	0.20	U	0.20	U	0.20	0.00%
Bromomethane	74-83-9	0.20	U	0.20	U	0.20	0.00%
1,3-Butadiene	106-99-0	0.20	U	0.20	U	0.20	0.00%
Chlorobenzene	108-90-7	0.20	U	0.20	U	0.20	0.00%
Chloroethane	75-00-3	0.20	U	0.20	U	0.20	0.00%
Chloroform	67-66-3	**0.44**		**0.42**		0.20	**4.65%**
Chloromethane	74-87-3	0.20	U	0.20	U	0.20	0.00%
Carbon disulfide	75-15-0	**0.26**		**0.27**		0.20	**-3.77%**
Carbon tetrachloride	56-23-5	0.040	U	0.040	U	0.040	0.00%
Cyclohexane	110-82-7	0.20	U	0.20	U	0.20	0.00%
Dibromochloromethane	124-48-1	0.20	U	0.20	U	0.20	0.00%
1,2-Dibromoethane	106-93-4	0.20	U	0.20	U	0.20	0.00%
1,2-Dichlorobenzene	95-50-1	0.20	U	0.20	U	0.20	0.00%
1,3-Dichlorobenzene	541-73-1	0.20	U	0.20	U	0.20	0.00%
1,4-Dichlorobenzene	106-46-7	0.20	U	0.20	U	0.20	0.00%
Dichlorodifluoromethane	75-71-8	0.20	U	0.20	U	0.20	0.00%
1,1-Dichloroethane	75-34-3	0.20	U	0.20	U	0.20	0.00%
1,2-Dichloroethane	107-06-2	0.20	U	0.20	U	0.20	0.00%
1,1-Dichloroethene	75-35-4	0.20	U	0.20	U	0.20	0.00%
1,2-Dichloroethene (cis)	156-59-2	0.20	U	0.20	U	0.20	0.00%
1,2-Dichloroethene (trans)	156-60-5	0.20	U	0.20	U	0.20	0.00%
1,2-Dichloropropane	78-87-5	0.20	U	0.20	U	0.20	0.00%
1,3-Dichloropropene (cis)	10061-01-5	0.20	U	0.20	U	0.20	0.00%
1,3-Dichloropropene (trans)	10061-02-6	0.20	U	0.20	U	0.20	0.00%
1,2-Dichlorotetrafluoroethane	76-14-2	0.20	U	0.20	U	0.20	0.00%
1,4-Dioxane	123-91-1	0.20	U	0.20	U	0.20	0.00%
Ethylbenzene	100-41-4	0.20	U	0.20	U	0.20	0.00%
n-Heptane	142-82-5	**0.22**		**0.20**		0.20	**9.52%**
1,3-Hexachlorobutadiene	87-68-3	0.20	U	0.20	U	0.20	0.00%
n-Hexane	110-54-3	**0.30**		**0.28**		0.20	**6.90%**
Methylene chloride	75-09-2	0.20	U	0.20	U	0.20	0.00%
Methyl ethyl ketone	78-93-3	**0.91**		**0.82**		0.20	**10.40%**
Methyl isobutyl ketone	108-10-1	0.20	U	0.20	U	0.20	0.00%
Methyl tert-butyl ether	1634-04-4	0.20	U	0.20	U	0.20	0.00%
Styrene	100-42-5	0.20	U	0.20	U	0.20	0.00%

Qualifiers:
E=Concentration exceeds upper level of calibration range for instrument.
D=Extra dilution required for this compound. X=Duplicate samples do not met RPD criteria.
U=Compound ND or under reporting limit.

Analysis: Volatile Organic Compounds by EPA Method TO-15
Laboratory Sample Duplicate Report

SDG Number: E24-02427
IAL Sample ID: E24-02427-01
Matrix: Air
Summa ID: 5073

Date Received: 7/16/24
Date Analyzed: 7/16/24,7/16/24
Lab Data File#: AA6908,AA6909
Dilution Factor: 1
Injection Volume: 500ml
GC/MS Column: RTX-1, 0.32 mmID

Compound	CAS #	Sample E24-02427-01 Concentration Reported ppbv	Q	Sample Dup E24-02427-21 Concentration Reported ppbv	Q	Reporting Limits ppbv	RPD
Tert-butyl alcohol	75-65-0	**0.55**		**0.51**		0.20	**7.55%**
1,1,2,2-Tetrachloroethane	79-34-5	0.20	U	0.20	U	0.20	0.00%
Tetrachloroethene	127-18-4	**2.2**		**2.2**		0.20	**0.00%**
Toluene	108-88-3	**2.6**		**2.6**		0.20	**0.00%**
1,2,4-Trichlorobenzene	120-82-1	0.20	U	0.20	U	0.20	0.00%
1,1,1-Trichloroethane	71-55-6	0.20	U	0.20	U	0.20	0.00%
1,1,2-Trichloroethane	79-00-5	0.20	U	0.20	U	0.20	0.00%
Trichloroethene	79-01-6	**0.25**		**0.25**		0.046	**0.00%**
Trichlorofluoromethane	75-69-4	**0.32**		**0.31**		0.20	**3.17%**
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.20	U	0.20	U	0.20	0.00%
1,2,4-Trimethylbenzene	95-63-6	0.20	U	0.20	U	0.20	0.00%
1,3,5-Trimethylbenzene	108-67-8	0.20	U	0.20	U	0.20	0.00%
2,2,4-Trimethylpentane	540-84-1	0.20	U	0.20	U	0.20	0.00%
Vinyl bromide	593-60-2	0.20	U	0.20	U	0.20	0.00%
Vinyl chloride	75-01-4	0.20	U	0.20	U	0.20	0.00%
Xylenes (m&p)	179601-23-1	**0.35**		**0.29**		0.20	**18.75%**
Xylenes (o)	95-47-6	0.20	U	0.20	U	0.20	0.00%

RPD must be <25% for all laboratory duplicate samples. Laboratory duplicate samples are run once daily.
NC = The RPD could not be calculated since the compound was only detected in either the parent or duplicate sample.

Qualifiers:
E=Concentration exceeds upper level of calibration range for instrument.
D=Extra dilution required for this compound. X=Duplicate samples do not met RPD criteria.
U=Compound ND or under reporting limit.

Data Path : C:\DATA\2024\07-2024\07-16-2024\
Data File : aa6908.D
Acq On : 16 Jul 2024 5:50 pm
Operator : jjw
Sample : E24-02427-01
Misc : 5073, 500cc
ALS Vial : 11 Sample Multiplier: 1

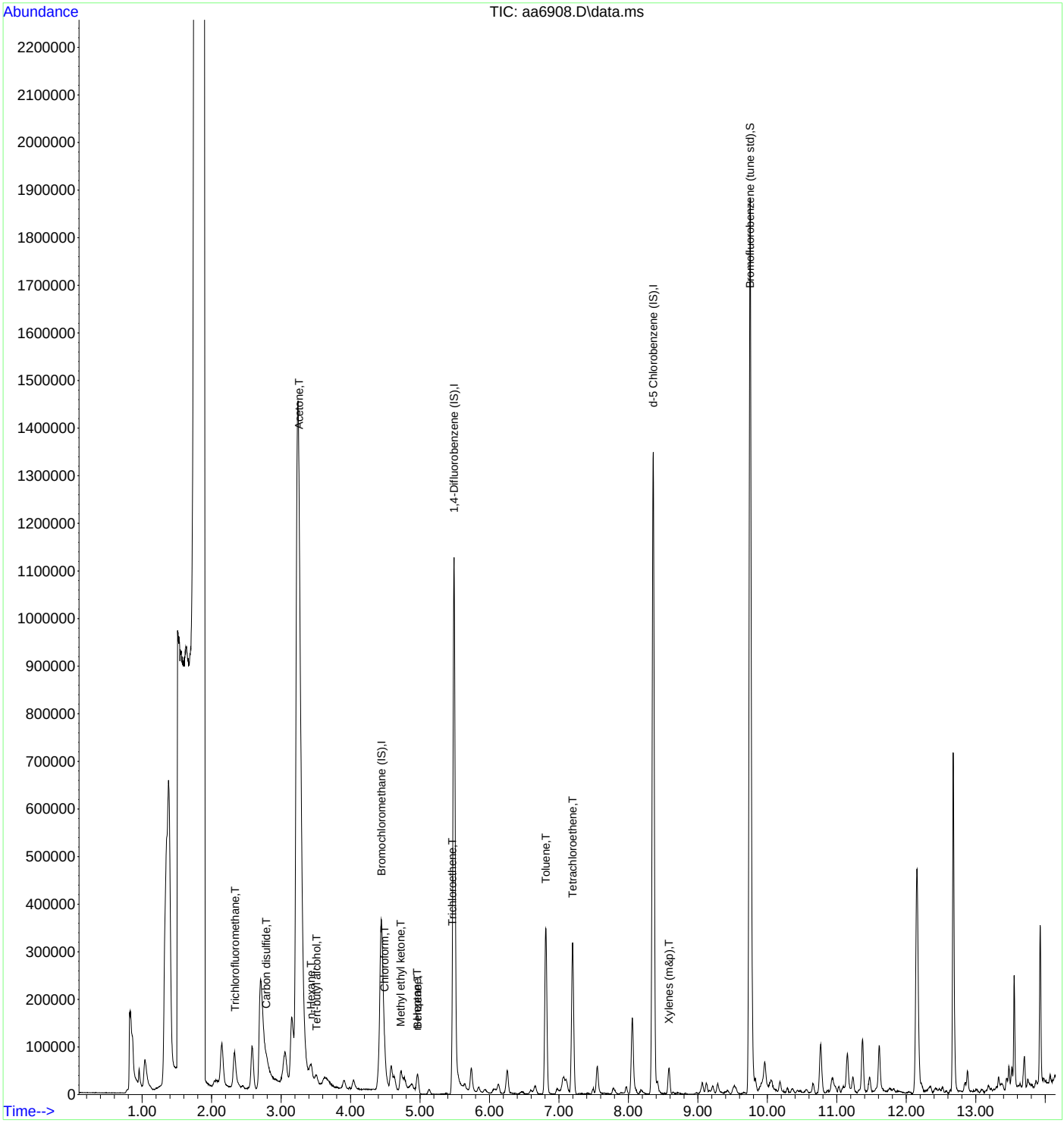
Quant Time: Jul 18 10:08:02 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

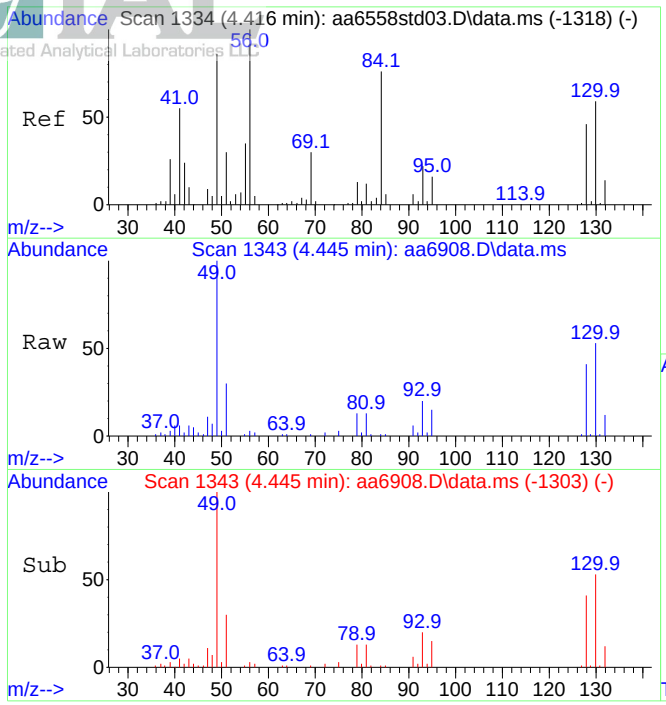
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.445	130	174387	10.00	ppbV		0.029
39) 1,4-Difluorobenzene (IS)	5.490	114	912213	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.358	117	771555	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.753	95	783859	10.74	ppbV		0.000
Target Compounds							Qvalue
12) Trichlorofluoromethane	2.339	101	18255	0.32	ppbV		95
15) Carbon disulfide	2.785	76	19226	0.26	ppbV	#	32
21) Acetone	3.258	43	539667	13.79	ppbV		98
24) n-Hexane	3.432	57	20139	0.30	ppbV		98
26) Tert-butyl alcohol	3.509	59	30159	0.55	ppbV		100
30) Chloroform	4.490	83	24493	0.44	ppbV		96
35) Methyl ethyl ketone	4.724	43	50698	0.91	ppbV		93
36) n-Heptane	4.959	43	11658	0.22	ppbV	#	67
37) Benzene	4.965	78	26441	0.33	ppbV		94
40) Trichloroethene	5.464	130	10401	0.25	ppbV		97
47) Toluene	6.811	91	299188	2.56	ppbV		98
49) Tetrachloroethene	7.197	166	97511	2.20	ppbV		100
59) Xylenes (m&p)	8.583	91	40517	0.35	ppbV		93

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

Data Path : C:\DATA\2024\07-2024\07-16-2024\
Data File : aa6908.D
Acq On : 16 Jul 2024 5:50 pm
Operator : jjw
Sample : E24-02427-01
Misc : 5073, 500cc
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 18 10:08:02 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

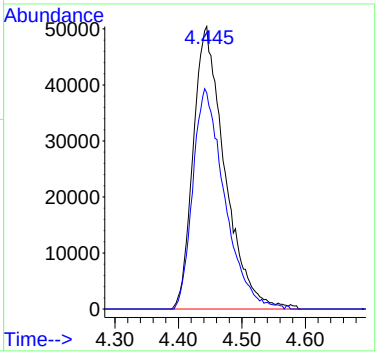


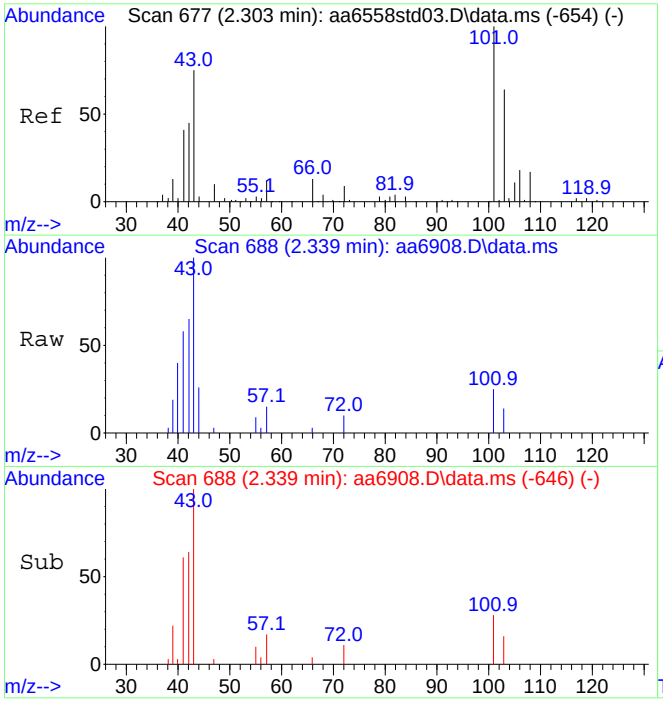


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.445 min Scan# 1343
Delta R.T. 0.029 min
Lab File: aa6908.D
Acq: 16 Jul 2024 5:50 pm

Tgt Ion:130 Resp: 174387

Ion	Ratio	Lower	Upper
130	100		
128	78.4	57.8	97.8

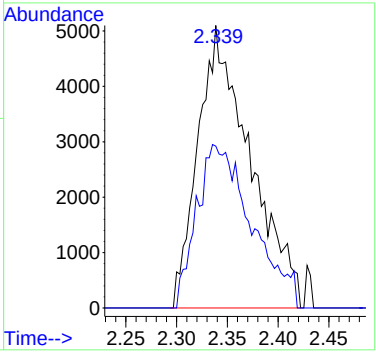


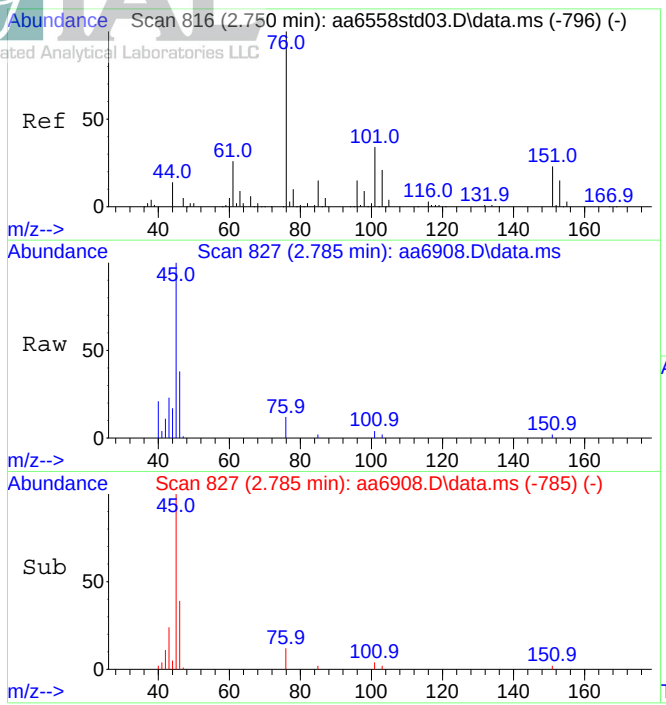


#12
Trichlorofluoromethane
Concen: 0.32 ppbV
RT: 2.339 min Scan# 688
Delta R.T. 0.035 min
Lab File: aa6908.D
Acq: 16 Jul 2024 5:50 pm

Tgt Ion:101 Resp: 18255

Ion	Ratio	Lower	Upper
101	100		
103	60.7	51.9	77.9

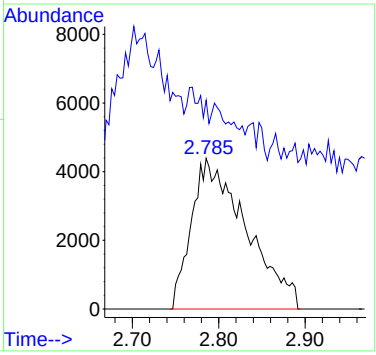


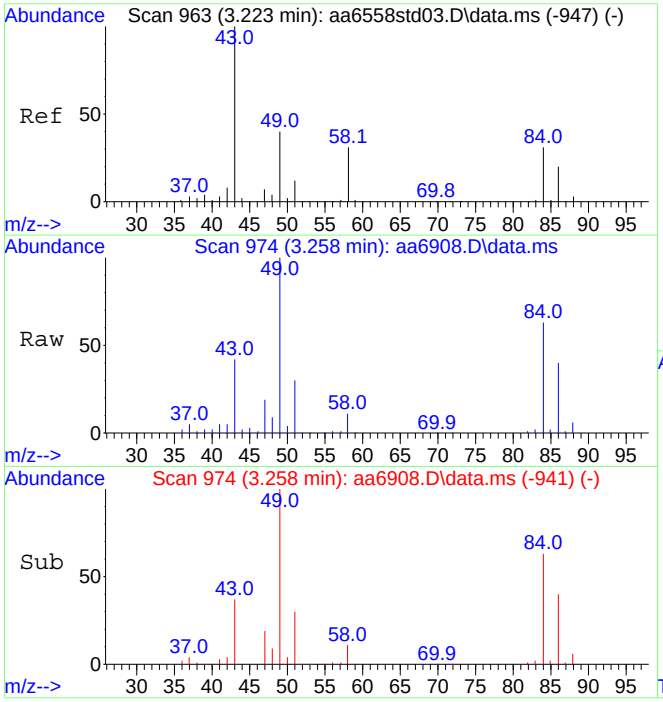


#15
Carbon disulfide
Concen: 0.26 ppbV
RT: 2.785 min Scan# 827
Delta R.T. 0.035 min
Lab File: aa6908.D
Acq: 16 Jul 2024 5:50 pm

Tgt Ion: 76 Resp: 19226

Ion	Ratio	Lower	Upper
76	100		
44	40.4	10.6	16.0#

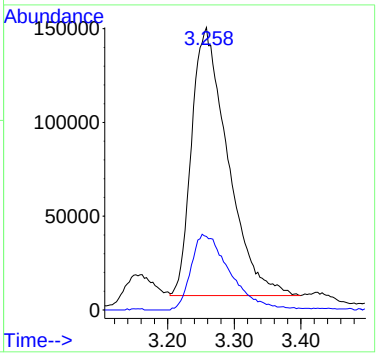


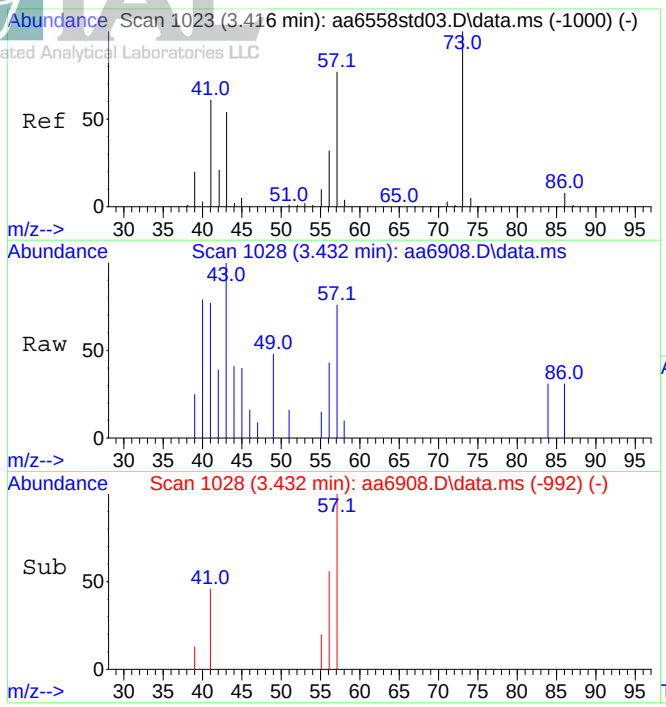


#21
Acetone
Concen: 13.79 ppbV
RT: 3.258 min Scan# 974
Delta R.T. 0.035 min
Lab File: aa6908.D
Acq: 16 Jul 2024 5:50 pm

Tgt Ion: 43 Resp: 539667

Ion	Ratio	Lower	Upper
43	100		
58	30.4	25.4	38.0

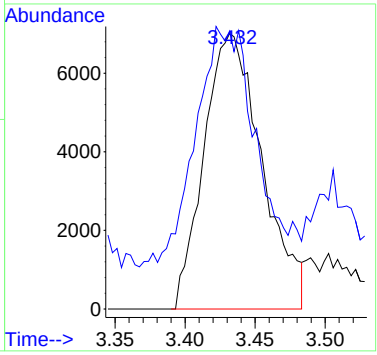


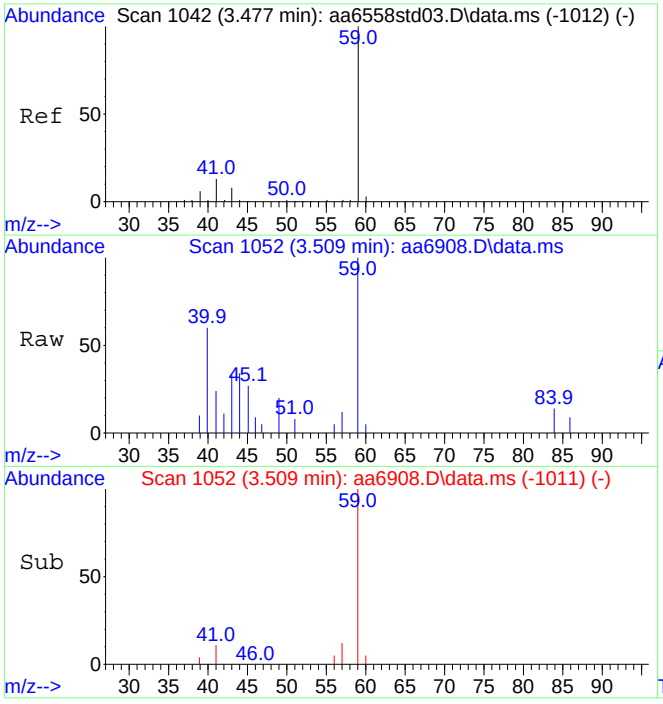


#24
n-Hexane
Concen: 0.30 ppbV
RT: 3.432 min Scan# 1028
Delta R.T. 0.016 min
Lab File: aa6908.D
Acq: 16 Jul 2024 5:50 pm

Tgt Ion: 57 Resp: 20139

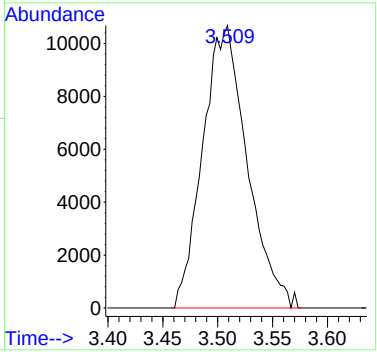
Ion	Ratio	Lower	Upper
57	100		
41	91.2	71.6	107.4

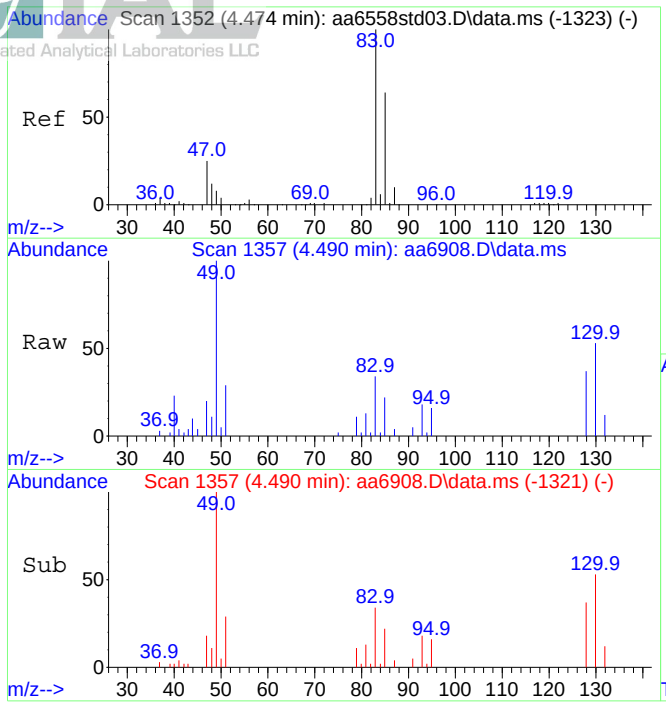




#26
Tert-butyl alcohol
Concen: 0.55 ppbV
RT: 3.509 min Scan# 1052
Delta R.T. 0.032 min
Lab File: aa6908.D
Acq: 16 Jul 2024 5:50 pm

Tgt Ion: 59 Resp: 30159

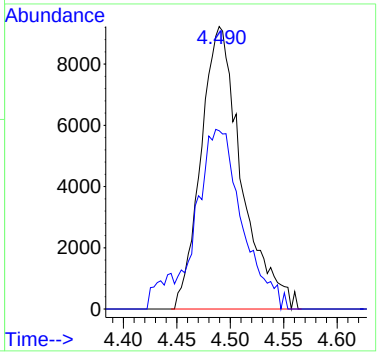


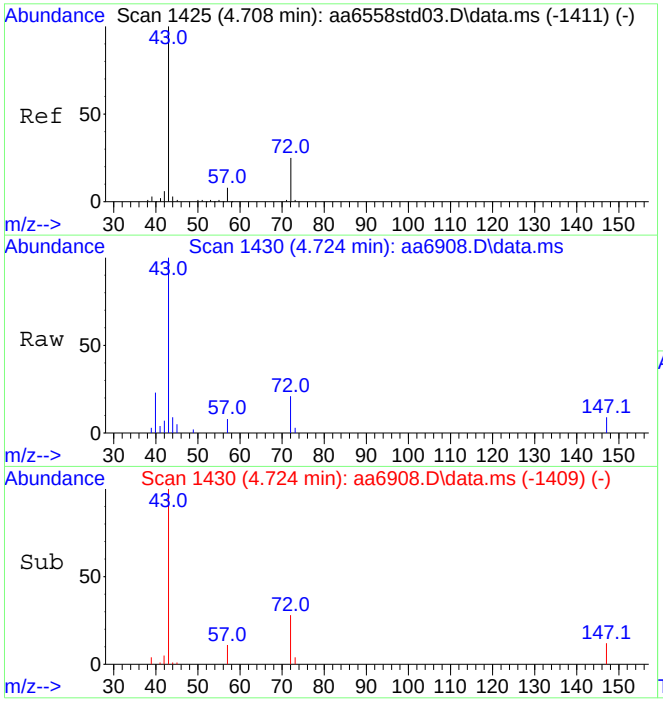


#30
Chloroform
Concen: 0.44 ppbV
RT: 4.490 min Scan# 1357
Delta R.T. 0.016 min
Lab File: aa6908.D
Acq: 16 Jul 2024 5:50 pm

Tgt Ion: 83 Resp: 24493

Ion	Ratio	Lower	Upper
83	100		
85	68.6	52.6	79.0

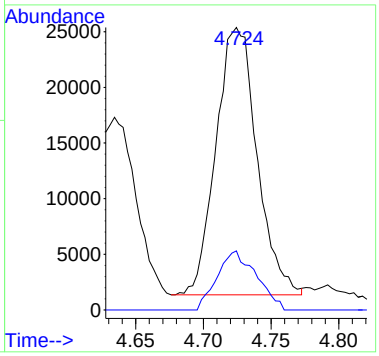


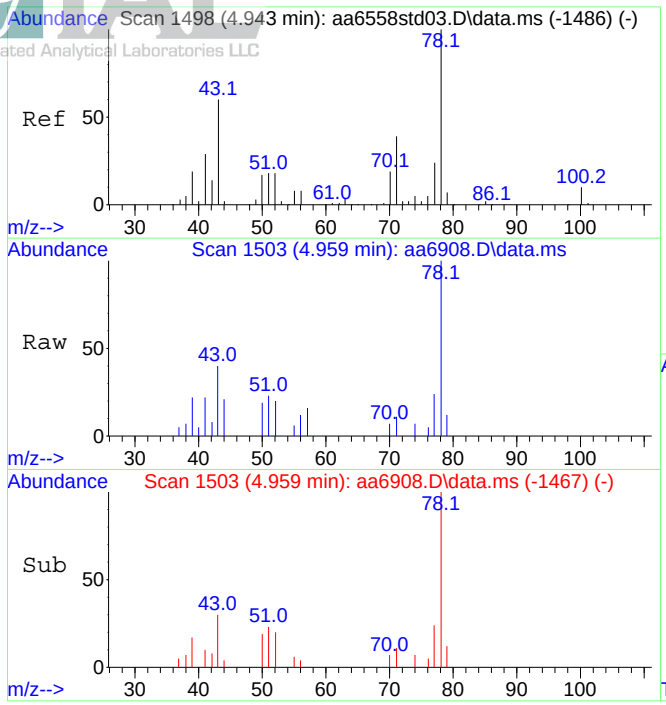


#35
Methyl ethyl ketone
Concen: 0.91 ppbV
RT: 4.724 min Scan# 1430
Delta R.T. 0.016 min
Lab File: aa6908.D
Acq: 16 Jul 2024 5:50 pm

Tgt Ion: 43 Resp: 50698

Ion	Ratio	Lower	Upper
43	100		
72	21.0	19.5	29.3

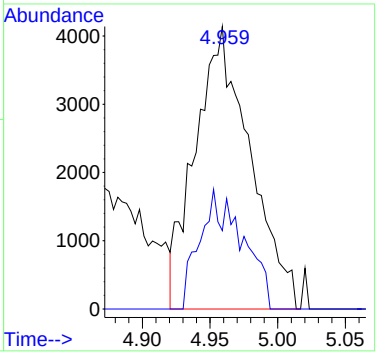


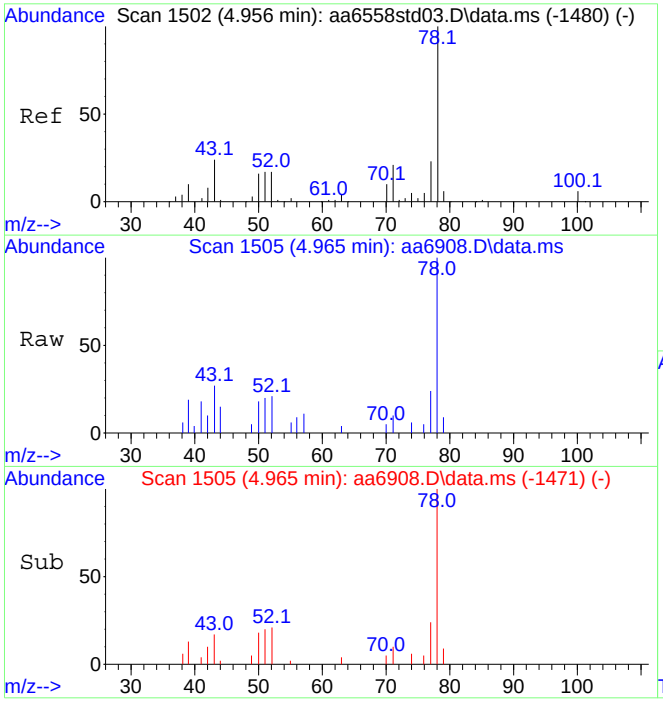


#36
n-Heptane
Concen: 0.22 ppbV
RT: 4.959 min Scan# 1503
Delta R.T. 0.016 min
Lab File: aa6908.D
Acq: 16 Jul 2024 5:50 pm

Tgt Ion: 43 Resp: 11658

Ion	Ratio	Lower	Upper
43	100		
71	32.9	46.2	69.2#

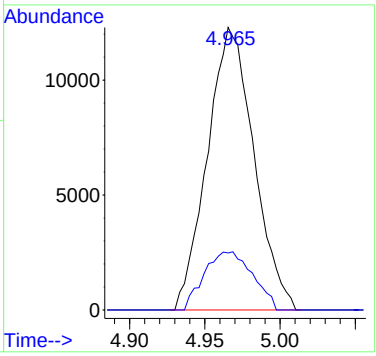


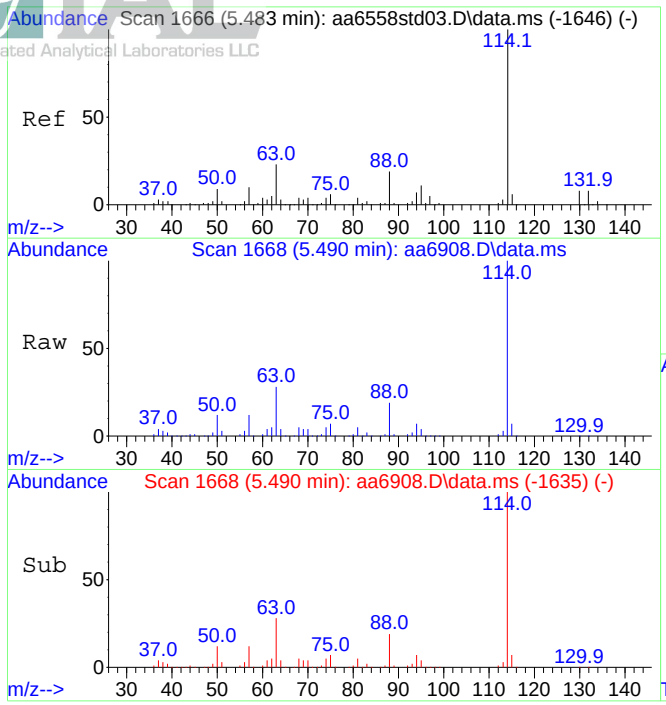


#37
Benzene
Concen: 0.33 ppbV
RT: 4.965 min Scan# 1505
Delta R.T. 0.010 min
Lab File: aa6908.D
Acq: 16 Jul 2024 5:50 pm

Tgt Ion: 78 Resp: 26441

Ion	Ratio	Lower	Upper
78	100		
51	21.4	14.9	22.3

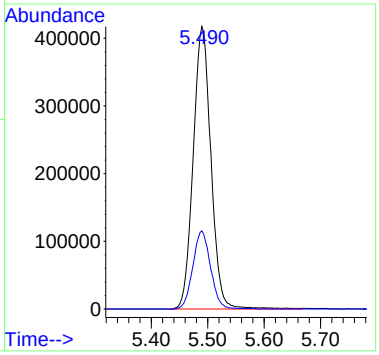


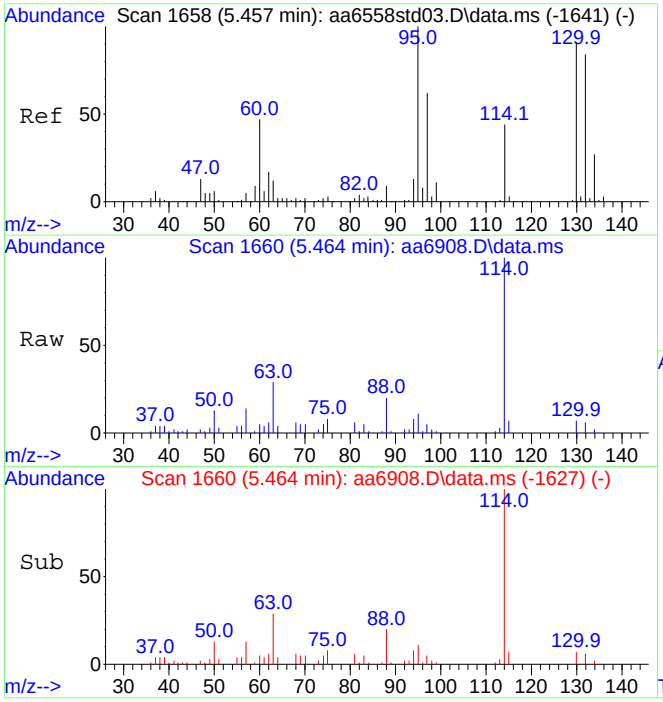


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.490 min Scan# 1668
Delta R.T. 0.006 min
Lab File: aa6908.D
Acq: 16 Jul 2024 5:50 pm

Tgt Ion:114 Resp: 912213

Ion	Ratio	Lower	Upper
114	100		
63	27.6	3.6	43.6

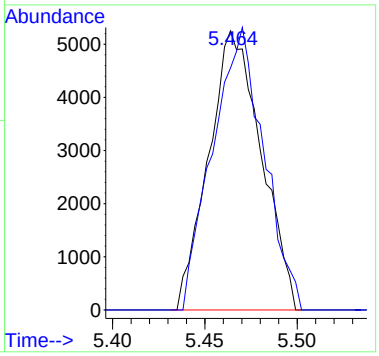


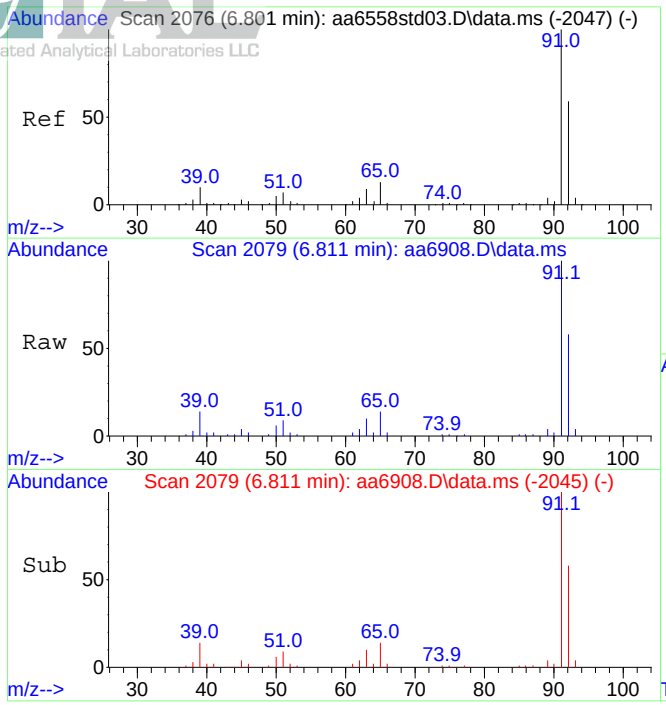


#40
Trichloroethene
Concen: 0.25 ppbV
RT: 5.464 min Scan# 1660
Delta R.T. 0.006 min
Lab File: aa6908.D
Acq: 16 Jul 2024 5:50 pm

Tgt Ion:130 Resp: 10401

Ion	Ratio	Lower	Upper
130	100		
132	98.5	76.6	114.8

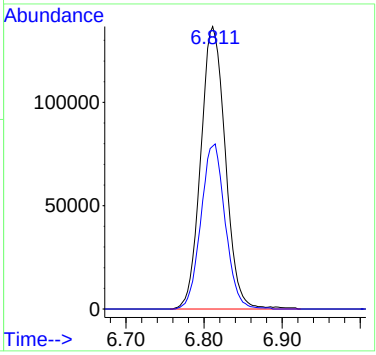


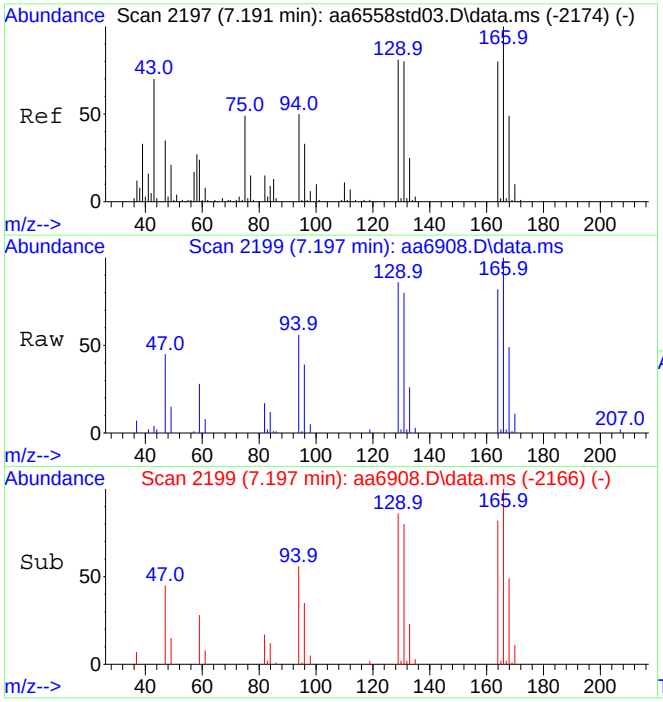


#47
Toluene
Concen: 2.56 ppbV
RT: 6.811 min Scan# 2079
Delta R.T. 0.010 min
Lab File: aa6908.D
Acq: 16 Jul 2024 5:50 pm

Tgt Ion: 91 Resp: 299188

Ion	Ratio	Lower	Upper
91	100		
92	57.7	47.0	70.6

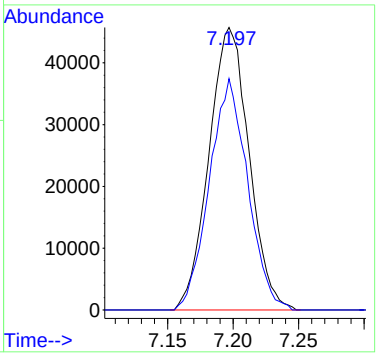


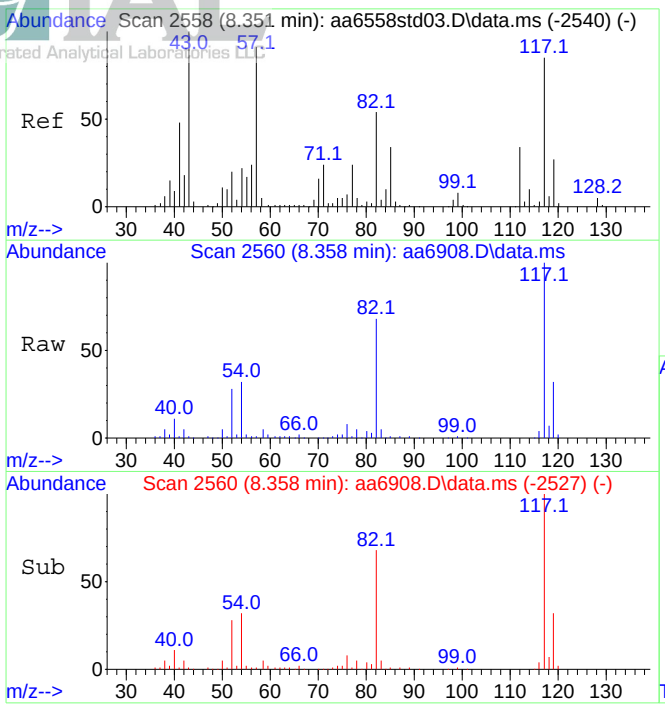


#49
Tetrachloroethene
Concen: 2.20 ppbV
RT: 7.197 min Scan# 2199
Delta R.T. 0.006 min
Lab File: aa6908.D
Acq: 16 Jul 2024 5:50 pm

Tgt Ion:166 Resp: 97511

Ion	Ratio	Lower	Upper
166	100		
164	78.2	62.8	94.2

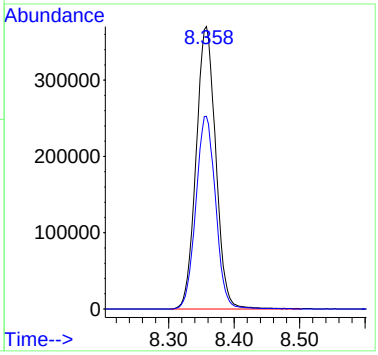


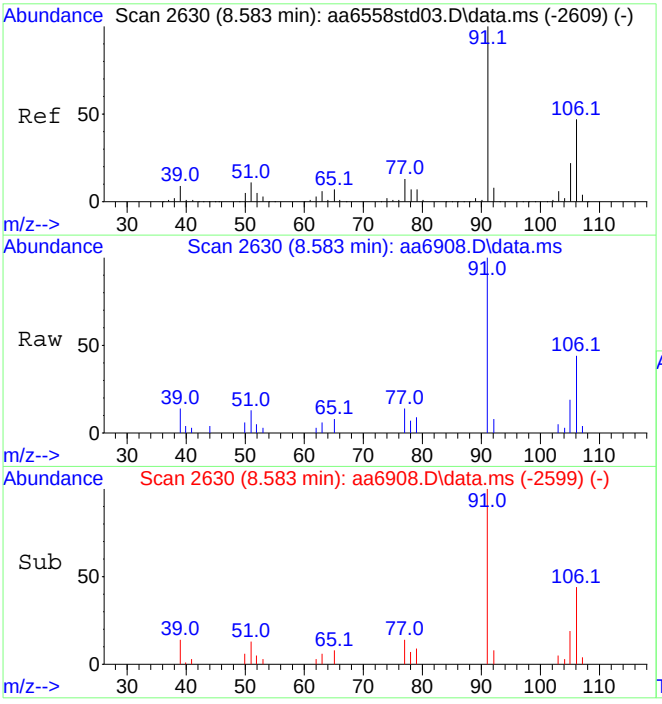


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.358 min Scan# 2560
Delta R.T. 0.006 min
Lab File: aa6908.D
Acq: 16 Jul 2024 5:50 pm

Tgt Ion:117 Resp: 771555

Ion	Ratio	Lower	Upper
117	100		
82	68.6	42.3	82.3

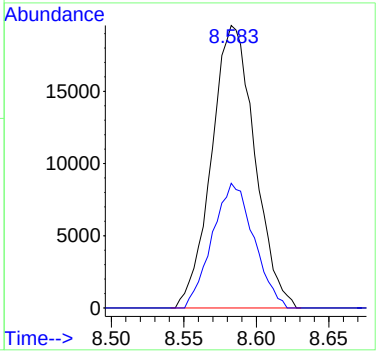


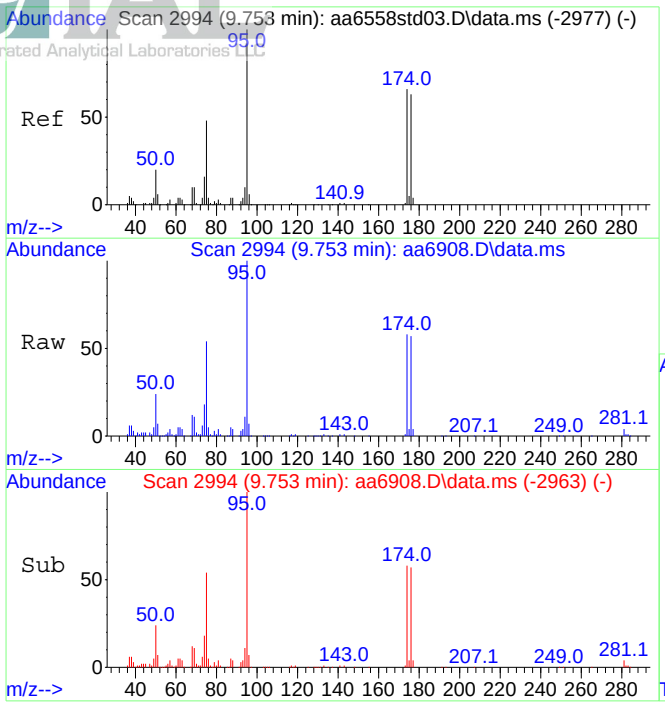


#59
Xylenes (m&p)
Concen: 0.35 ppbV
RT: 8.583 min Scan# 2630
Delta R.T. -0.000 min
Lab File: aa6908.D
Acq: 16 Jul 2024 5:50 pm

Tgt Ion: 91 Resp: 40517

Ion	Ratio	Lower	Upper
91	100		
106	42.3	37.4	56.2

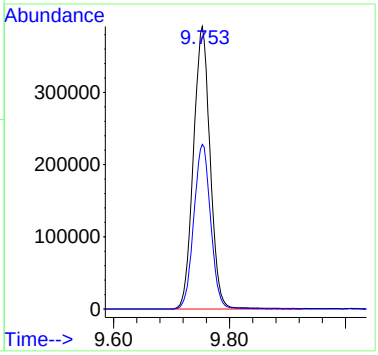




#64
Bromofluorobenzene (tune std)
Concen: 10.74 ppbV
RT: 9.753 min Scan# 2994
Delta R.T. -0.000 min
Lab File: aa6908.D
Acq: 16 Jul 2024 5:50 pm

Tgt Ion: 95 Resp: 783859

Ion	Ratio	Lower	Upper
95	100		
174	58.7	52.9	79.3



Data Path : C:\DATA\2024\07-2024\07-16-2024\
Data File : aa6909.D
Acq On : 16 Jul 2024 6:21 pm
Operator : jjw
Sample : E24-02427-21
Misc : Dup of E24-02427-01, Can # 5073, 500cc
ALS Vial : 12 Sample Multiplier: 1

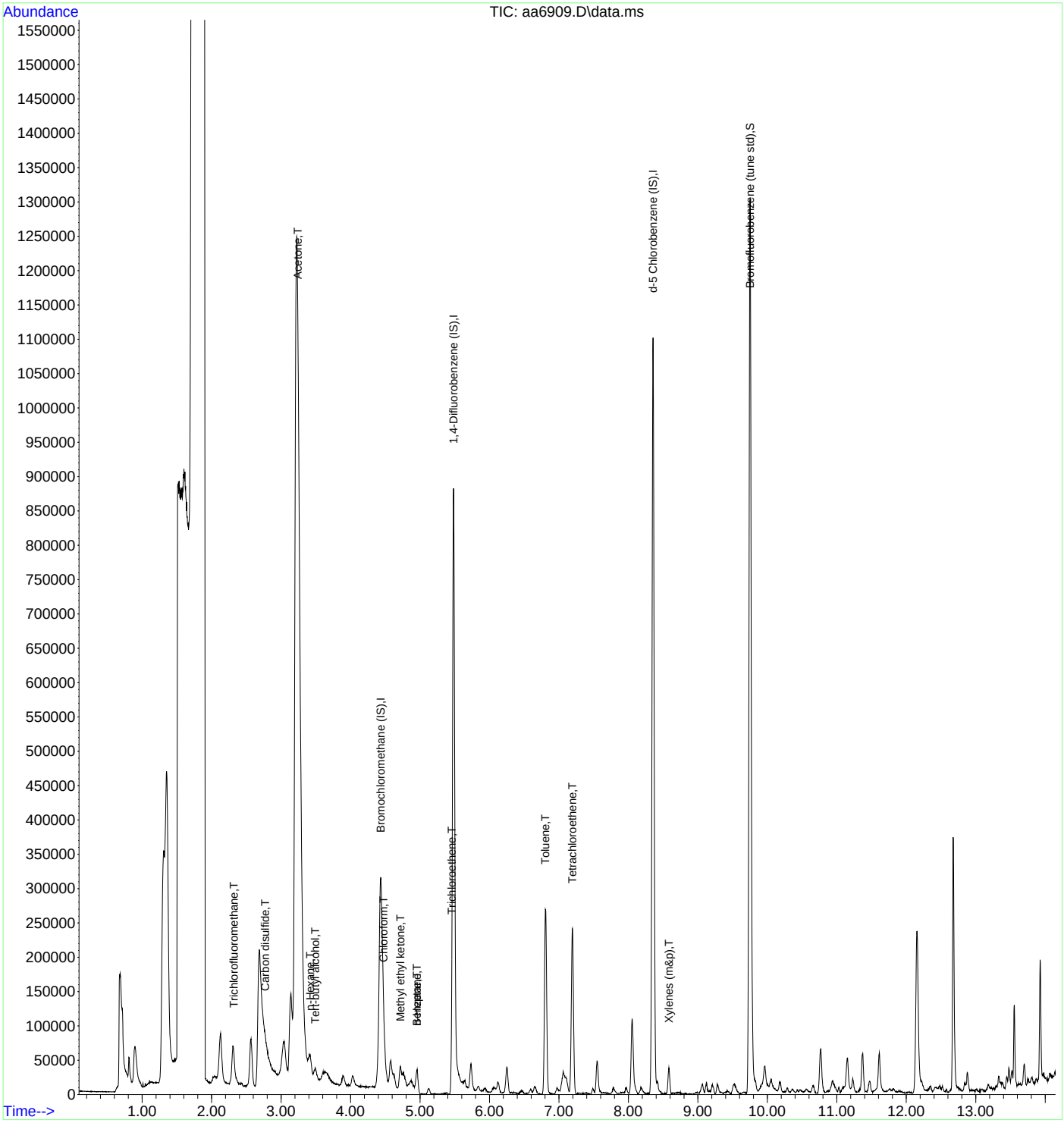
Quant Time: Jul 18 10:09:56 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

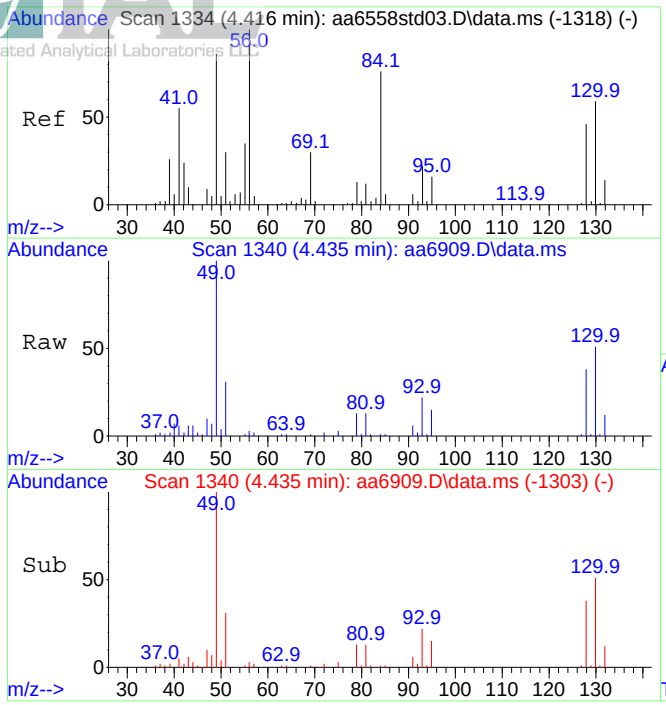
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.435	130	154040	10.00	ppbV		0.019
39) 1,4-Difluorobenzene (IS)	5.483	114	706945	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.355	117	627339	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.753	95	563788	9.50	ppbV		0.000
Target Compounds							Qvalue
12) Trichlorofluoromethane	2.319	101	15789	0.31	ppbV		92
15) Carbon disulfide	2.773	76	17395	0.27	ppbV	#	67
21) Acetone	3.242	43	487014	14.09	ppbV		96
24) n-Hexane	3.419	57	16503	0.28	ppbV		100
26) Tert-butyl alcohol	3.493	59	24664	0.51	ppbV		100
30) Chloroform	4.477	83	20809	0.42	ppbV		98
35) Methyl ethyl ketone	4.718	43	40146	0.82	ppbV		92
36) n-Heptane	4.956	43	9370	0.20	ppbV	#	62
37) Benzene	4.956	78	21353	0.30	ppbV		96
40) Trichloroethene	5.458	130	8024	0.25	ppbV		100
47) Toluene	6.805	91	231255	2.56	ppbV		99
49) Tetrachloroethene	7.194	166	74649	2.18	ppbV		99
59) Xylenes (m&p)	8.583	91	26848	0.29	ppbV		94

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

Data Path : C:\DATA\2024\07-2024\07-16-2024\
Data File : aa6909.D
Acq On : 16 Jul 2024 6:21 pm
Operator : jjw
Sample : E24-02427-21
Misc : Dup of E24-02427-01, Can # 5073, 500cc
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jul 18 10:09:56 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

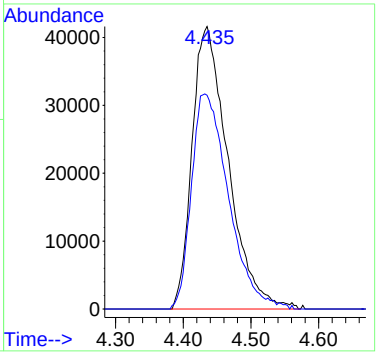


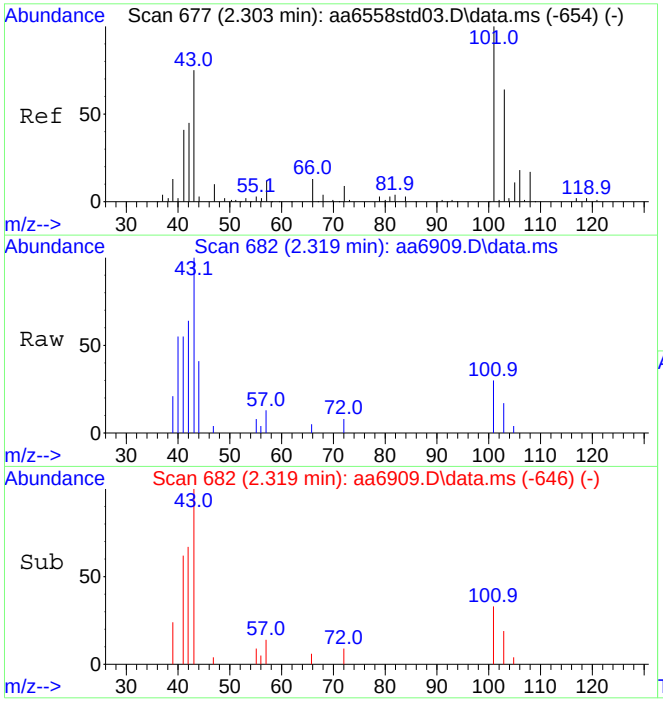


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.435 min Scan# 1340
Delta R.T. 0.019 min
Lab File: aa6909.D
Acq: 16 Jul 2024 6:21 pm

Tgt Ion:130 Resp: 154040

Ion	Ratio	Lower	Upper
130	100		
128	78.4	57.8	97.8

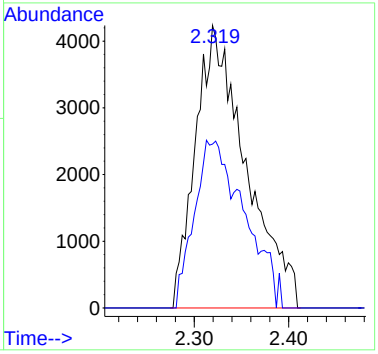


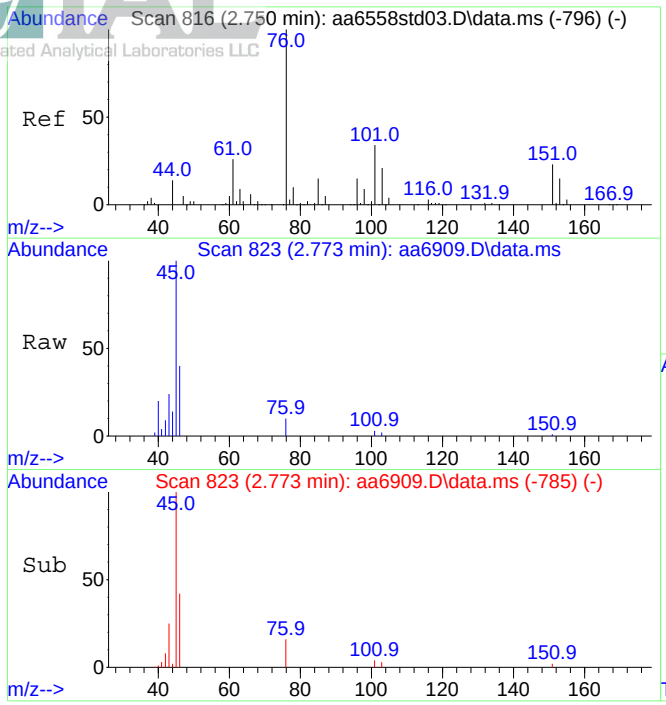


#12
Trichlorofluoromethane
Concen: 0.31 ppbV
RT: 2.319 min Scan# 682
Delta R.T. 0.016 min
Lab File: aa6909.D
Acq: 16 Jul 2024 6:21 pm

Tgt Ion:101 Resp: 15789

Ion	Ratio	Lower	Upper
101	100		
103	58.7	51.9	77.9

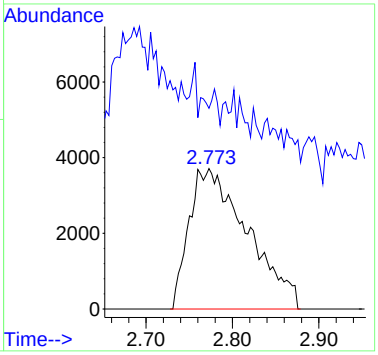


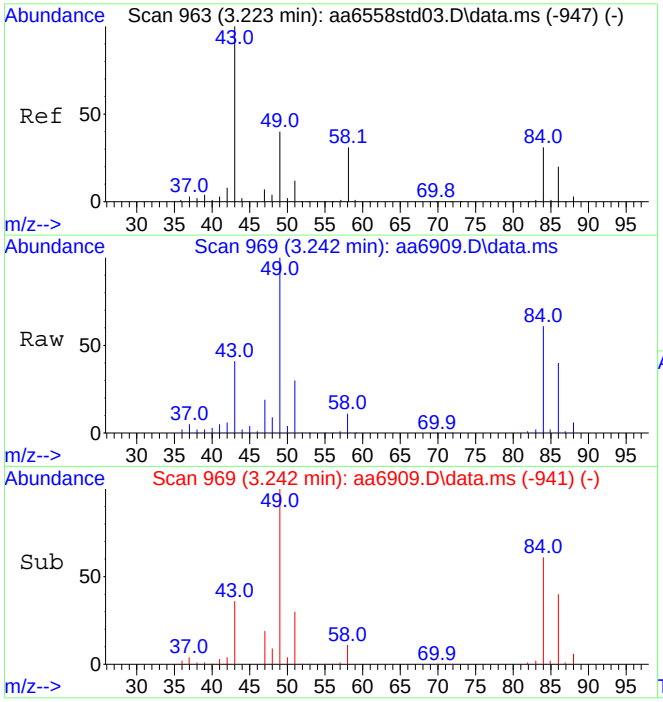


#15
Carbon disulfide
Concen: 0.27 ppbV
RT: 2.773 min Scan# 823
Delta R.T. 0.023 min
Lab File: aa6909.D
Acq: 16 Jul 2024 6:21 pm

Tgt Ion: 76 Resp: 17395

Ion	Ratio	Lower	Upper
76	100		
44	0.0	10.6	16.0#

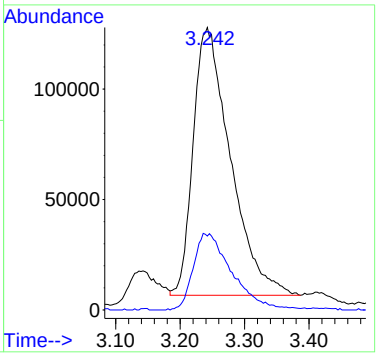


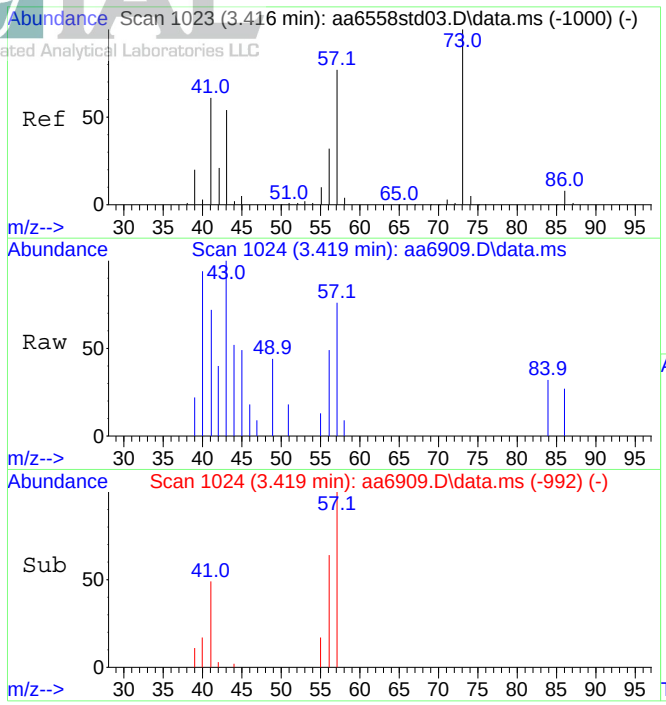


#21
Acetone
Concen: 14.09 ppbV
RT: 3.242 min Scan# 969
Delta R.T. 0.019 min
Lab File: aa6909.D
Acq: 16 Jul 2024 6:21 pm

Tgt Ion: 43 Resp: 487014

Ion	Ratio	Lower	Upper
43	100		
58	29.7	25.4	38.0

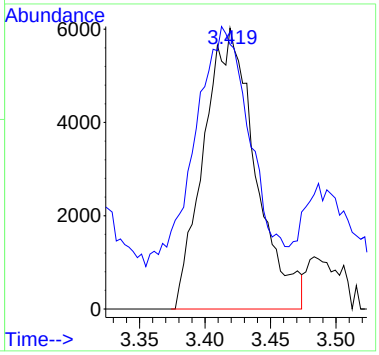


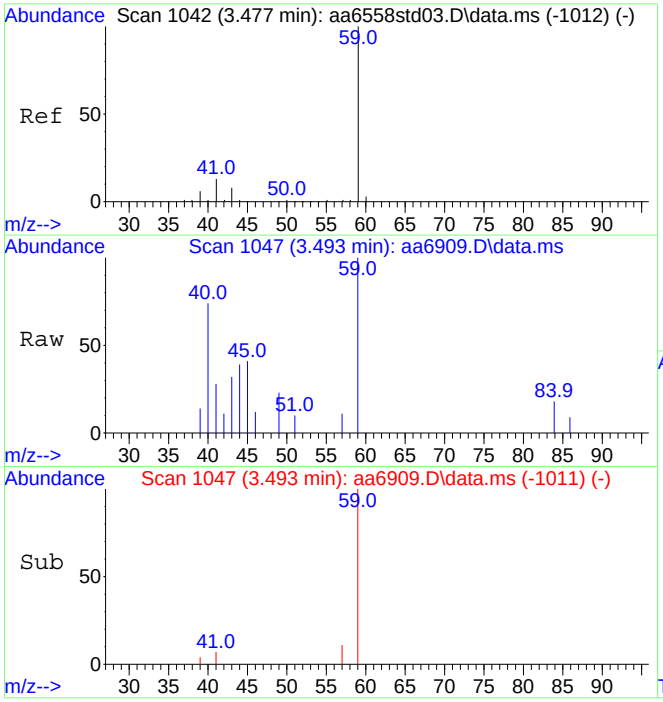


#24
n-Hexane
Concen: 0.28 ppbV
RT: 3.419 min Scan# 1024
Delta R.T. 0.003 min
Lab File: aa6909.D
Acq: 16 Jul 2024 6:21 pm

Tgt Ion: 57 Resp: 16503

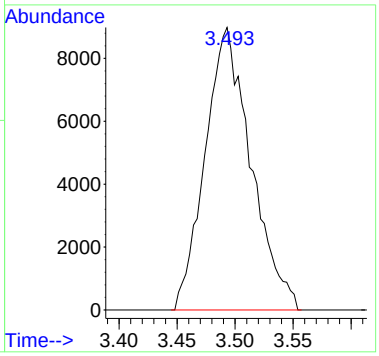
Ion	Ratio	Lower	Upper
57	100		
41	89.8	71.6	107.4

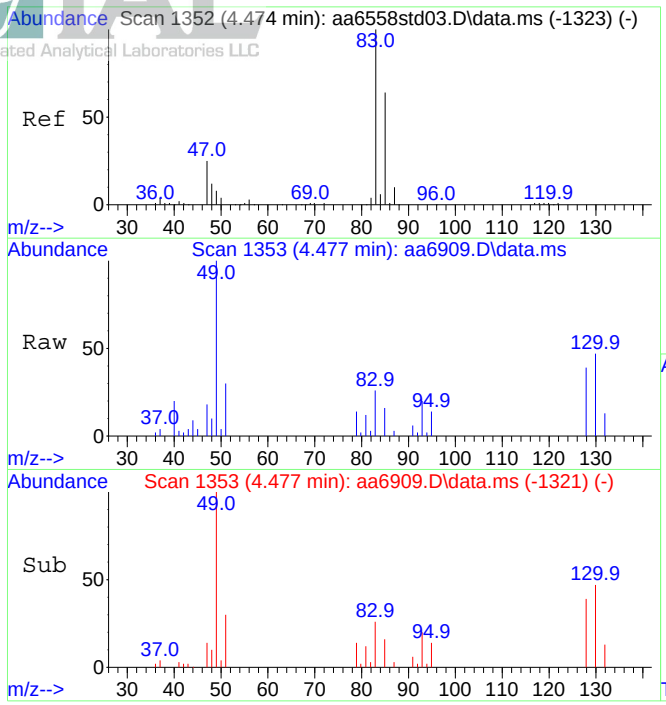




#26
Tert-butyl alcohol
Concen: 0.51 ppbV
RT: 3.493 min Scan# 1047
Delta R.T. 0.016 min
Lab File: aa6909.D
Acq: 16 Jul 2024 6:21 pm

Tgt Ion: 59 Resp: 24664

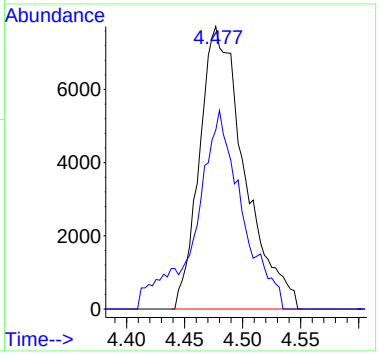


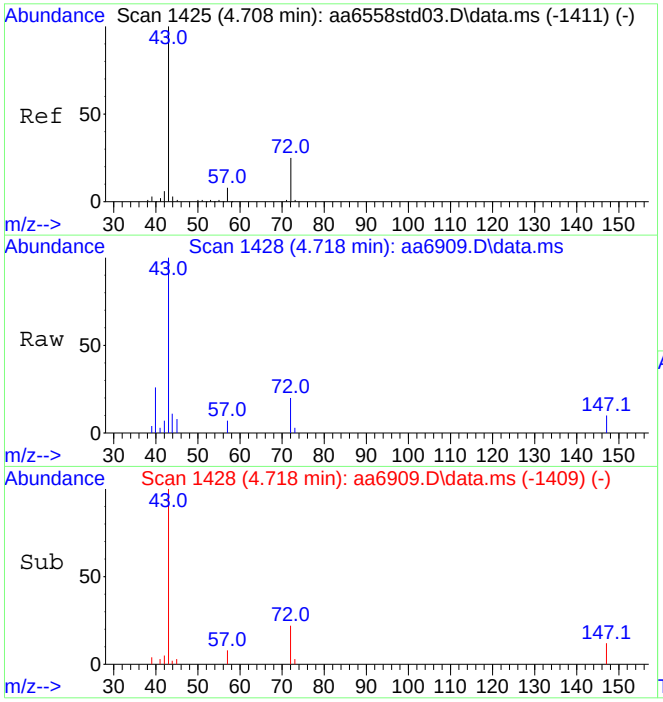


#30
Chloroform
Concen: 0.42 ppbV
RT: 4.477 min Scan# 1353
Delta R.T. 0.003 min
Lab File: aa6909.D
Acq: 16 Jul 2024 6:21 pm

Tgt Ion: 83 Resp: 20809

Ion	Ratio	Lower	Upper
83	100		
85	64.2	52.6	79.0

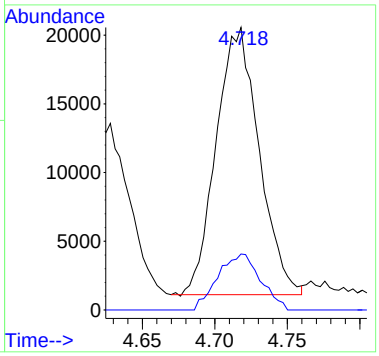


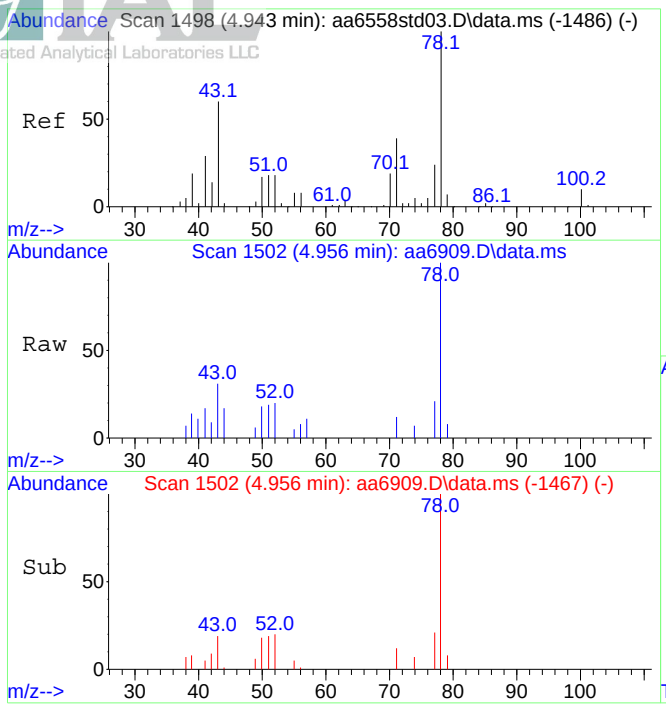


#35
Methyl ethyl ketone
Concen: 0.82 ppbV
RT: 4.718 min Scan# 1428
Delta R.T. 0.010 min
Lab File: aa6909.D
Acq: 16 Jul 2024 6:21 pm

Tgt Ion: 43 Resp: 40146

Ion	Ratio	Lower	Upper
43	100		
72	20.6	19.5	29.3

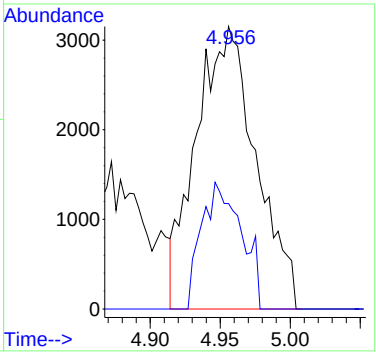


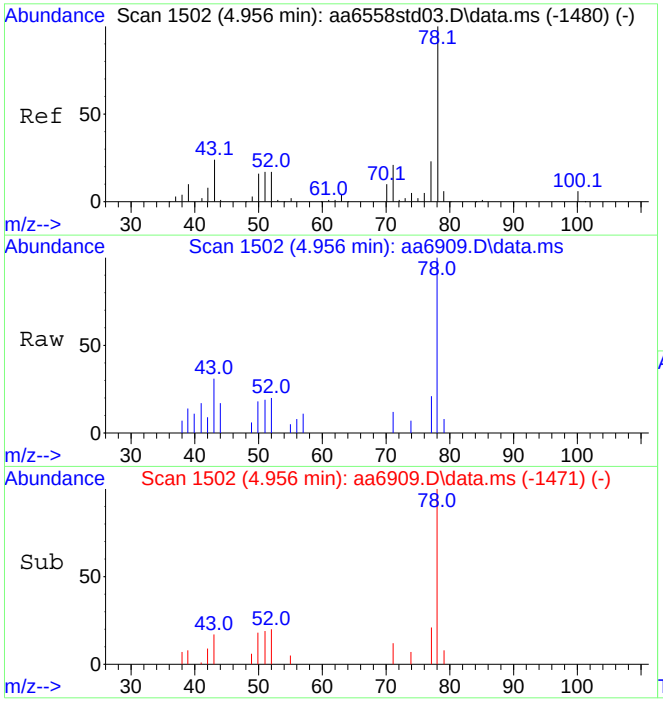


#36
n-Heptane
Concen: 0.20 ppbV
RT: 4.956 min Scan# 1502
Delta R.T. 0.013 min
Lab File: aa6909.D
Acq: 16 Jul 2024 6:21 pm

Tgt Ion: 43 Resp: 9370

Ion	Ratio	Lower	Upper
43	100		
71	29.9	46.2	69.2#

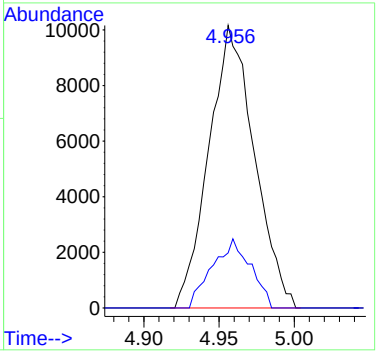


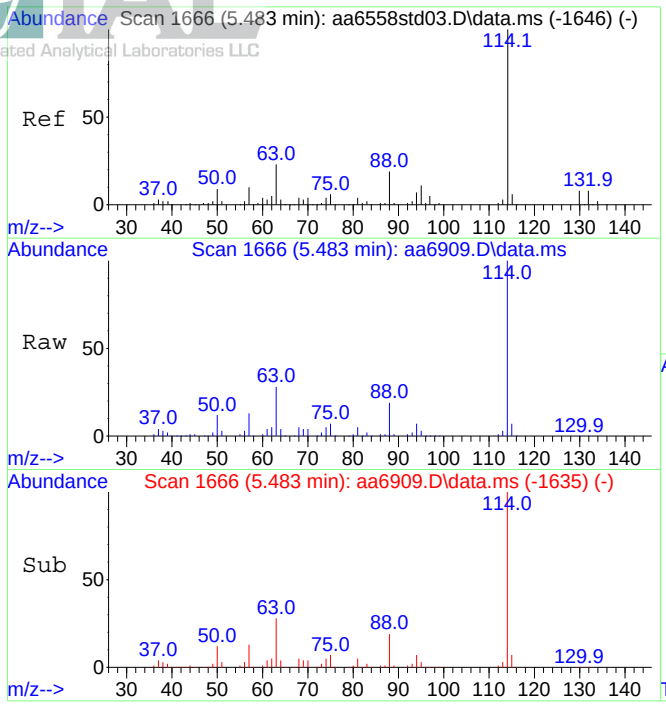


#37
Benzene
Concen: 0.30 ppbV
RT: 4.956 min Scan# 1502
Delta R.T. 0.000 min
Lab File: aa6909.D
Acq: 16 Jul 2024 6:21 pm

Tgt Ion: 78 Resp: 21353

Ion	Ratio	Lower	Upper
78	100		
51	20.6	14.9	22.3

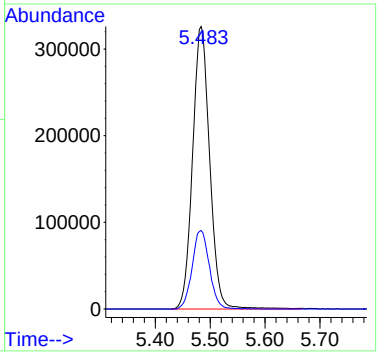


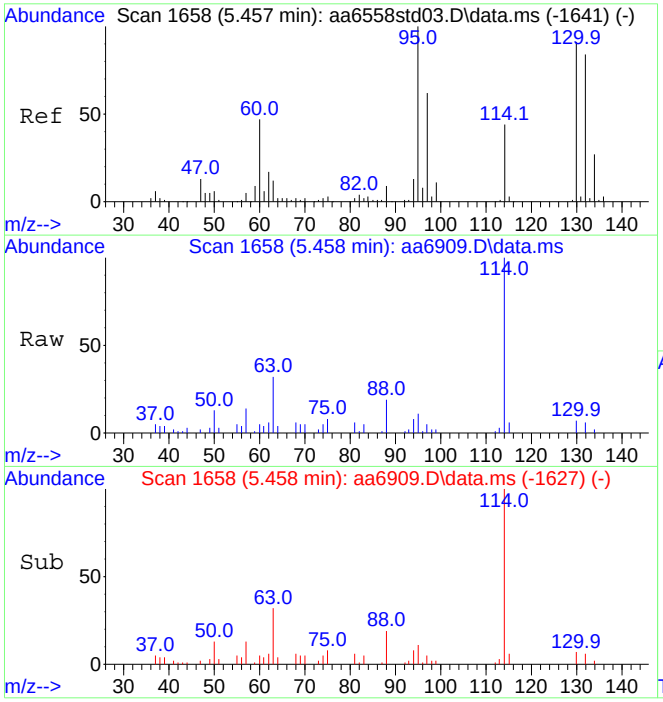


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.483 min Scan# 1666
Delta R.T. 0.000 min
Lab File: aa6909.D
Acq: 16 Jul 2024 6:21 pm

Tgt Ion:114 Resp: 706945

Ion	Ratio	Lower	Upper
114	100		
63	27.9	3.6	43.6

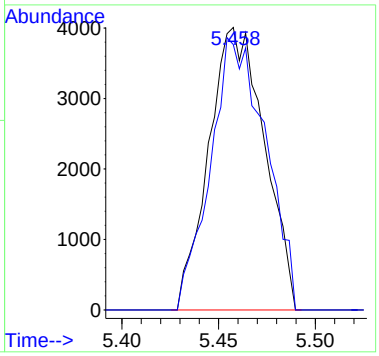


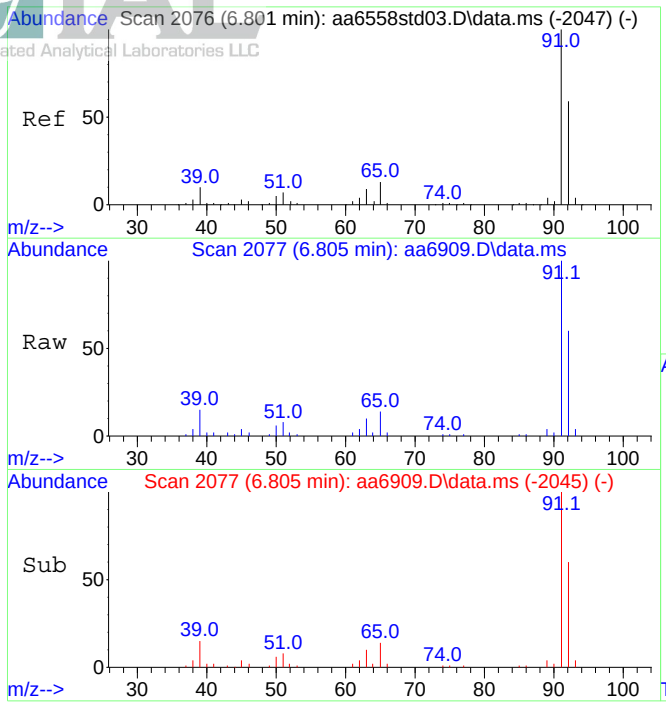


#40
Trichloroethene
Concen: 0.25 ppbV
RT: 5.458 min Scan# 1658
Delta R.T. 0.000 min
Lab File: aa6909.D
Acq: 16 Jul 2024 6:21 pm

Tgt Ion:130 Resp: 8024

Ion	Ratio	Lower	Upper
130	100		
132	95.5	76.6	114.8

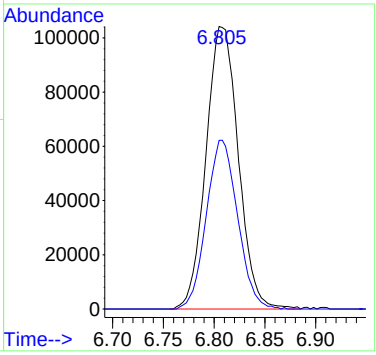


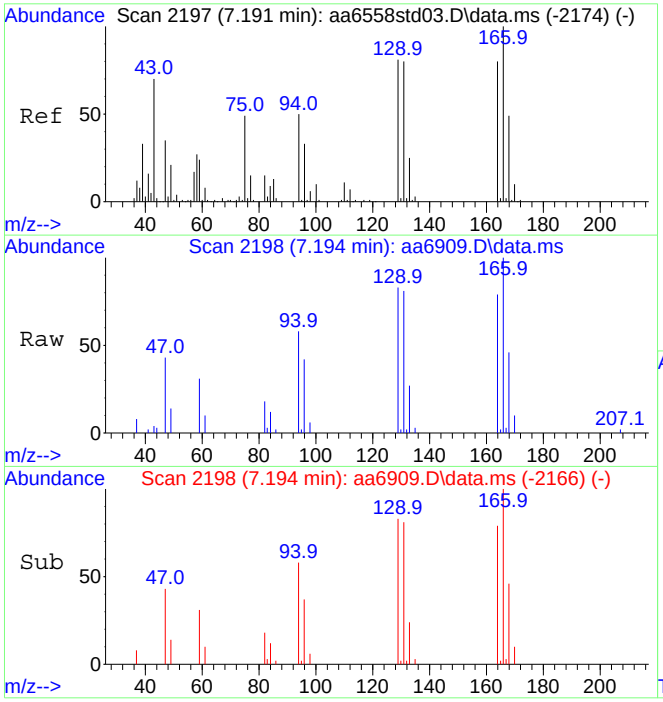


#47
Toluene
Concen: 2.56 ppbV
RT: 6.805 min Scan# 2077
Delta R.T. 0.003 min
Lab File: aa6909.D
Acq: 16 Jul 2024 6:21 pm

Tgt Ion: 91 Resp: 231255

Ion	Ratio	Lower	Upper
91	100		
92	57.8	47.0	70.6

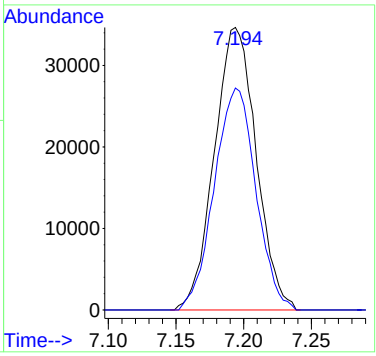


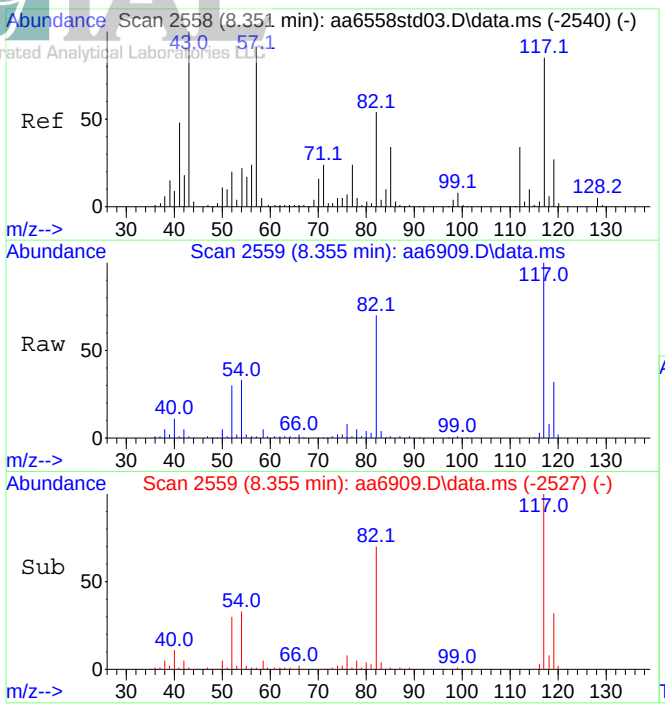


#49
Tetrachloroethene
Concen: 2.18 ppbV
RT: 7.194 min Scan# 2198
Delta R.T. 0.003 min
Lab File: aa6909.D
Acq: 16 Jul 2024 6:21 pm

Tgt Ion:166 Resp: 74649

Ion	Ratio	Lower	Upper
166	100		
164	77.9	62.8	94.2

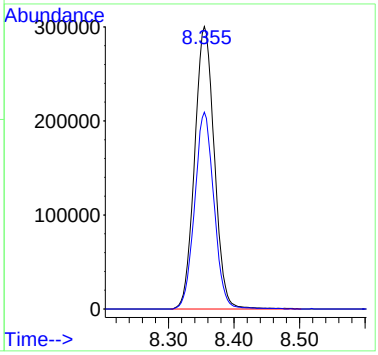


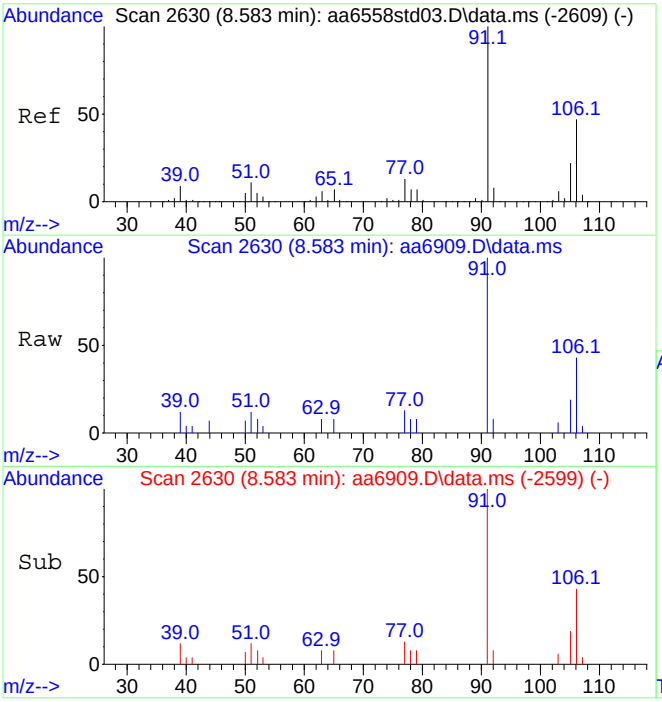


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.355 min Scan# 2559
Delta R.T. 0.003 min
Lab File: aa6909.D
Acq: 16 Jul 2024 6:21 pm

Tgt Ion:117 Resp: 627339

Ion	Ratio	Lower	Upper
117	100		
82	68.4	42.3	82.3

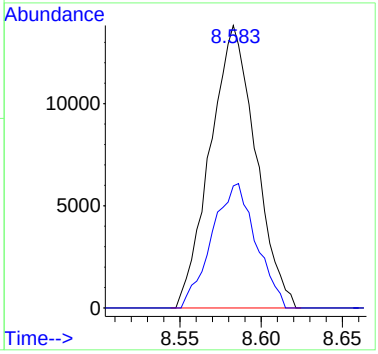


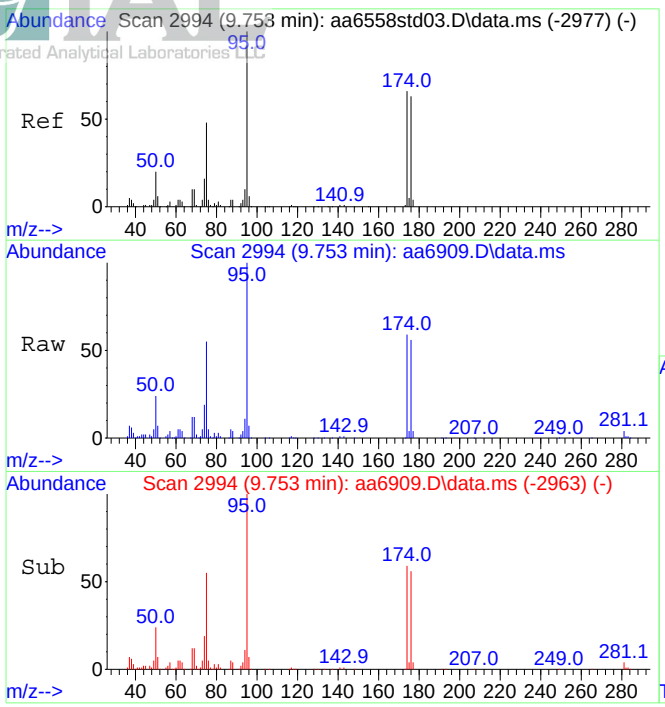


#59
Xylenes (m&p)
Concen: 0.29 ppbV
RT: 8.583 min Scan# 2630
Delta R.T. 0.000 min
Lab File: aa6909.D
Acq: 16 Jul 2024 6:21 pm

Tgt Ion: 91 Resp: 26848

Ion	Ratio	Lower	Upper
91	100		
106	42.7	37.4	56.2

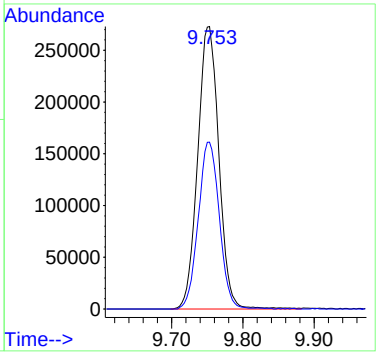




#64
Bromofluorobenzene (tune std)
Concen: 9.50 ppbV
RT: 9.753 min Scan# 2994
Delta R.T. 0.000 min
Lab File: aa6909.D
Acq: 16 Jul 2024 6:21 pm

Tgt Ion: 95 Resp: 563788

Ion	Ratio	Lower	Upper
95	100		
174	58.8	52.9	79.3



Analysis: Volatile Organic Compounds by EPA Method TO-15
Laboratory Sample Duplicate Report

		Date Received:	7/15/24
SDG Number:	E24-02397	Date Analyzed:	7/18/24,7/18/24
IAL Sample ID:	E24-02397-02	Lab Data File#:	AA6938,AA6939
Matrix:	Air	Dilution Factor:	10
Summa ID:	1776	Injection Volume:	50ml
		GC/MS Column:	RTX-1, 0.32 mmID

		Sample		Sample Dup			
		E24-02397-02		**E24-02397-22**			
		Concentration Reported		**Concentration Reported**		**Reporting Limits**	
Compound	**CAS #**	**ppbv**	**Q**	**ppbv**	**Q**	**ppbv**	**RPD**
Acetone	67-64-1	**120**	D	**120**	D	2.0	**0.00%**
Allyl Chloride	107-05-1	2.0	U	2.0	U	2.0	0.00%
Benzene	71-43-2	2.0	U	2.0	U	2.0	0.00%
Bromodichloromethane	75-27-4	2.0	U	2.0	U	2.0	0.00%
Bromoform	75-25-2	2.0	U	2.0	U	2.0	0.00%
Bromomethane	74-83-9	2.0	U	2.0	U	2.0	0.00%
1,3-Butadiene	106-99-0	2.0	U	2.0	U	2.0	0.00%
Chlorobenzene	108-90-7	2.0	U	2.0	U	2.0	0.00%
Chloroethane	75-00-3	2.0	U	2.0	U	2.0	0.00%
Chloroform	67-66-3	2.0	U	2.0	U	2.0	0.00%
Chloromethane	74-87-3	2.0	U	2.0	U	2.0	0.00%
Carbon disulfide	75-15-0	2.0	U	2.0	U	2.0	0.00%
Carbon tetrachloride	56-23-5	2.0	U	2.0	U	2.0	0.00%
2-Chlorotoluene	95-49-8	2.0	U	2.0	U	2.0	0.00%
Cyclohexane	110-82-7	2.0	U	2.0	U	2.0	0.00%
Dibromochloromethane	124-48-1	2.0	U	2.0	U	2.0	0.00%
1,2-Dibromoethane	106-93-4	2.0	U	2.0	U	2.0	0.00%
1,2-Dichlorobenzene	95-50-1	2.0	U	2.0	U	2.0	0.00%
1,3-Dichlorobenzene	541-73-1	2.0	U	2.0	U	2.0	0.00%
1,4-Dichlorobenzene	106-46-7	2.0	U	2.0	U	2.0	0.00%
Dichlorodifluoromethane	75-71-8	2.0	U	2.0	U	2.0	0.00%
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	0.00%
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	0.00%
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	2.0	0.00%
1,2-Dichloroethene (cis)	156-59-2	2.0	U	2.0	U	2.0	0.00%
1,2-Dichloroethene (trans)	156-60-5	2.0	U	2.0	U	2.0	0.00%
1,2-Dichloropropane	78-87-5	2.0	U	2.0	U	2.0	0.00%
1,3-Dichloropropene (cis)	10061-01-5	2.0	U	2.0	U	2.0	0.00%
1,3-Dichloropropene (trans)	10061-02-6	2.0	U	2.0	U	2.0	0.00%
1,2-Dichlorotetrafluoroethane	76-14-2	2.0	U	2.0	U	2.0	0.00%
1,4-Dioxane	123-91-1	2.0	U	2.0	U	2.0	0.00%
Ethanol	64-17-5	**22**	D	**22**	D	2.0	**0.00%**
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	0.00%
4-Ethyltoluene	622-96-8	2.0	U	2.0	U	2.0	0.00%
n-Heptane	142-82-5	2.0	U	2.0	U	2.0	0.00%
1,3-Hexachlorobutadiene	87-68-3	2.0	U	2.0	U	2.0	0.00%
n-Hexane	110-54-3	2.0	U	2.0	U	2.0	0.00%
Isopropanol	67-63-0	2.0	U	2.0	U	2.0	0.00%

Qualifiers:
E=Concentration exceeds upper level of calibration range for instrument.
D=Extra dilution required for this compound. X=Duplicate samples do not met RPD criteria.
U=Compound ND or under reporting limit.

Analysis: Volatile Organic Compounds by EPA Method TO-15
Laboratory Sample Duplicate Report

SDG Number: E24-02397
IAL Sample ID: E24-02397-02
Matrix: Air
Summa ID: 1776

Date Received: 7/15/24
Date Analyzed: 7/18/24,7/18/24
Lab Data File#: AA6938,AA6939
Dilution Factor: 10
Injection Volume: 50ml
GC/MS Column: RTX-1, 0.32 mmID

Compound	CAS #	Sample E24-02397-02 Concentration Reported ppbv	Q	Sample Dup E24-02397-22 Concentration Reported ppbv	Q	Reporting Limits ppbv	RPD
Methylene chloride	75-09-2	2.0	U	2.0	U	2.0	0.00%
Methyl ethyl ketone	78-93-3	**2.1**	D	**2.4**	D	2.0	**-13.33%**
Methyl isobutyl ketone	108-10-1	2.0	U	2.0	U	2.0	0.00%
Methyl methacrylate	80-62-6	2.0	U	2.0	U	2.0	0.00%
Methyl tert-butyl ether	1634-04-4	2.0	U	2.0	U	2.0	0.00%
Styrene	100-42-5	2.0	U	2.0	U	2.0	0.00%
Tert-butyl alcohol	75-65-0	**6.4**	D	**7.6**	D	2.0	**-17.14%**
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	0.00%
Tetrachloroethene	127-18-4	2.0	U	2.0	U	2.0	0.00%
Tetrahydrofuran	109-99-9	2.0	U	2.0	U	2.0	0.00%
Toluene	108-88-3	2.0	U	2.0	U	2.0	0.00%
1,2,4-Trichlorobenzene	120-82-1	2.0	U	2.0	U	2.0	0.00%
1,1,1-Trichloroethane	71-55-6	2.0	U	2.0	U	2.0	0.00%
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	2.0	0.00%
Trichloroethene	79-01-6	2.0	U	2.0	U	2.0	0.00%
Trichlorofluoromethane	75-69-4	2.0	U	2.0	U	2.0	0.00%
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	2.0	U	2.0	U	2.0	0.00%
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	0.00%
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	0.00%
2,2,4-Trimethylpentane	540-84-1	2.0	U	2.0	U	2.0	0.00%
Vinyl bromide	593-60-2	2.0	U	2.0	U	2.0	0.00%
Vinyl chloride	75-01-4	2.0	U	2.0	U	2.0	0.00%
Xylenes (m&p)	179601-23-1	4.0	U	4.0	U	4.0	0.00%
Xylenes (o)	95-47-6	2.0	U	2.0	U	2.0	0.00%

RPD must be <25% for all laboratory duplicate samples. Laboratory duplicate samples are run once daily.
NC = The RPD could not be calculated since the compound was only detected in either the parent or duplicate sample.

Qualifiers:
E=Concentration exceeds upper level of calibration range for instrument.
D=Extra dilution required for this compound. X=Duplicate samples do not met RPD criteria.
U=Compound ND or under reporting limit.

Data Path : C:\DATA\2024\07-2024\07-18-2024\
Data File : aa6938.D
Acq On : 18 Jul 2024 8:55 pm
Operator : jjw
Sample : E24-02397-02x10 dil
Misc : 1776, 50cc
ALS Vial : 18 Sample Multiplier: 1

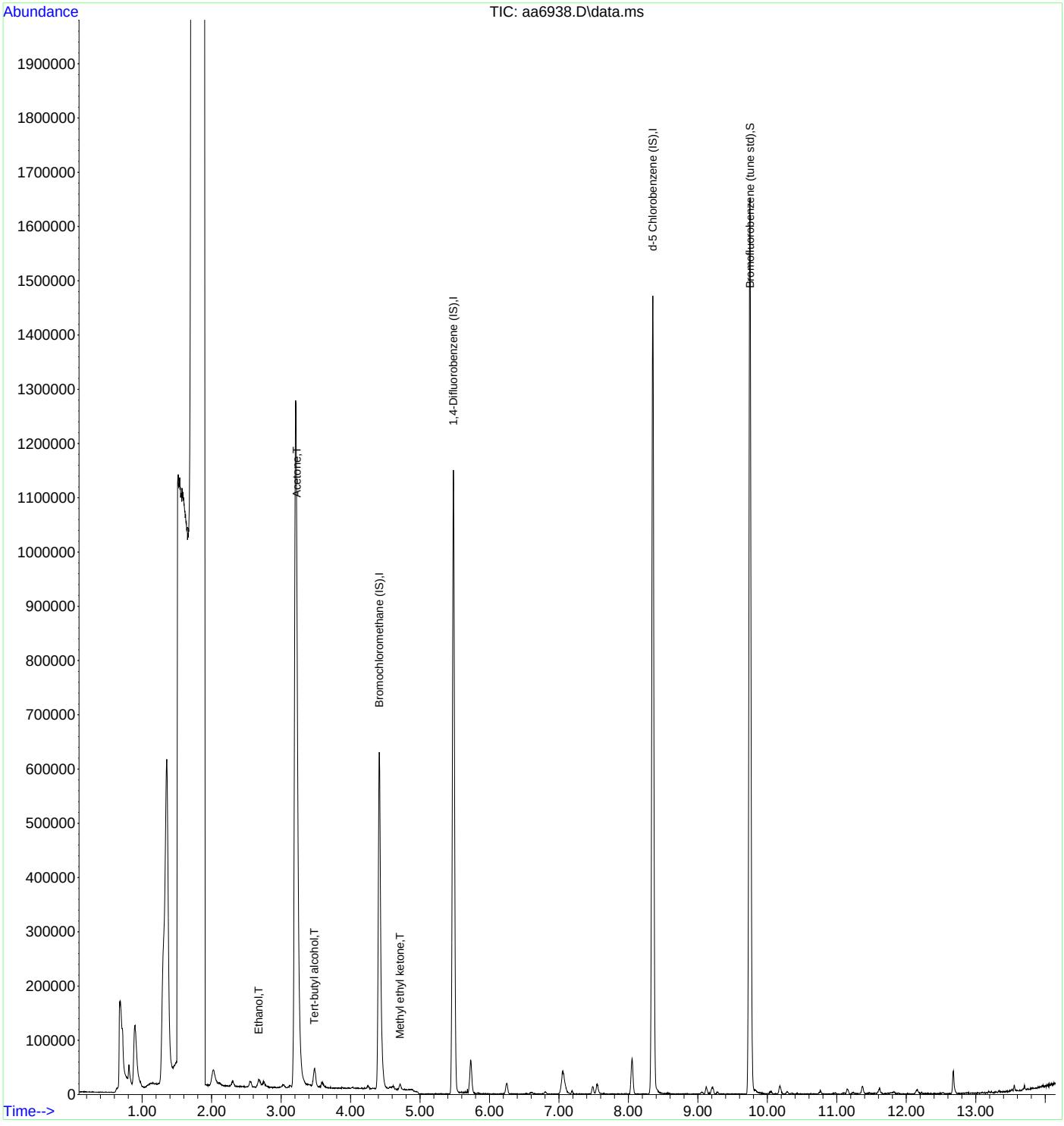
Quant Time: Jul 23 10:17:52 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

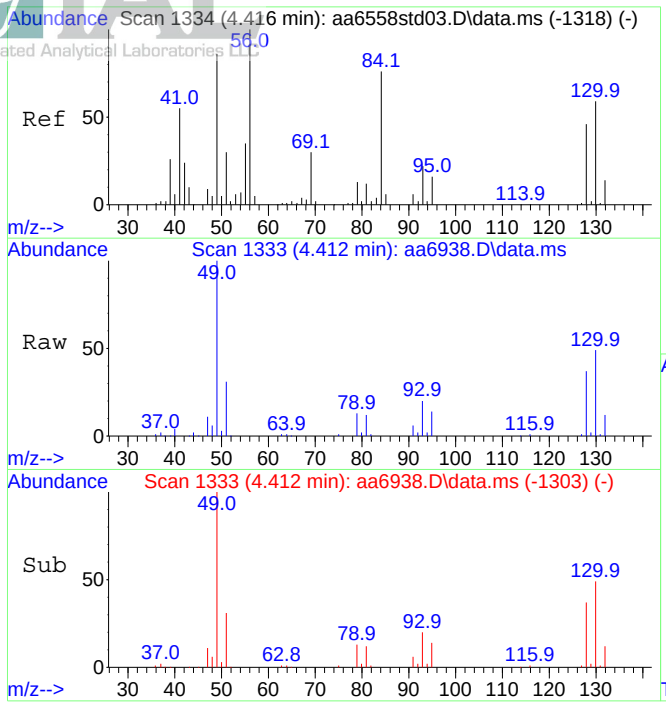
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.412	130	218074	10.00	ppbV		0.000
39) 1,4-Difluorobenzene (IS)	5.480	114	917260	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.351	117	820484	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.750	95	723250	9.32	ppbV		0.000
Target Compounds							Qvalue
13) Ethanol	2.676	45	24930	2.22	ppbV		96
21) Acetone	3.226	43	585927	11.97	ppbV		92
26) Tert-butyl alcohol	3.477	59	43882	0.64	ppbV		100
35) Methyl ethyl ketone	4.711	43	14760	0.21	ppbV	#	83

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

Data Path : C:\DATA\2024\07-2024\07-18-2024\
Data File : aa6938.D
Acq On : 18 Jul 2024 8:55 pm
Operator : jjw
Sample : E24-02397-02x10 dil
Misc : 1776, 50cc
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jul 23 10:17:52 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

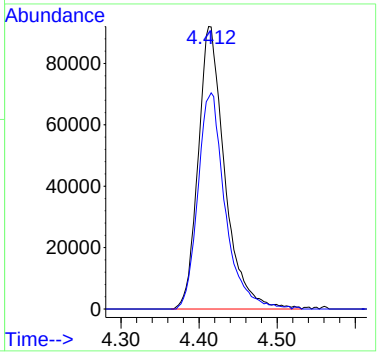


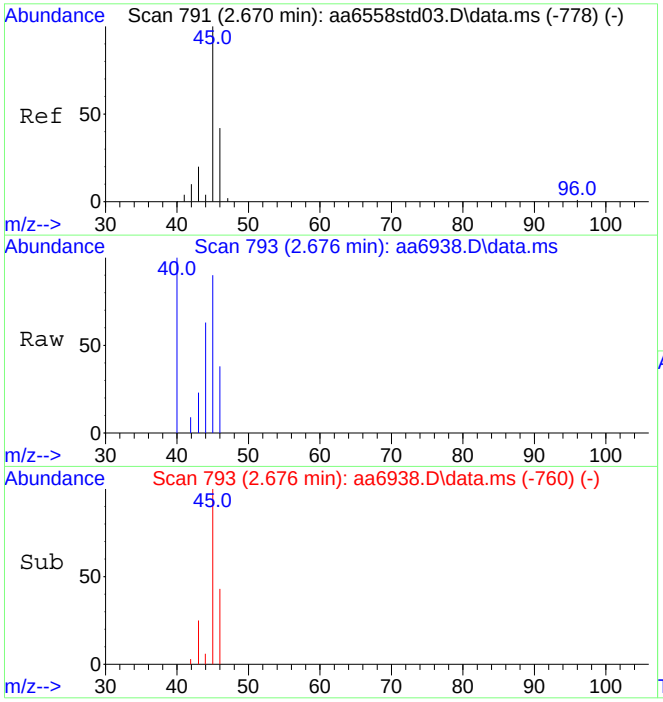


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.412 min Scan# 1333
Delta R.T. -0.004 min
Lab File: aa6938.D
Acq: 18 Jul 2024 8:55 pm

Tgt Ion:130 Resp: 218074

Ion	Ratio	Lower	Upper
130	100		
128	78.3	57.8	97.8

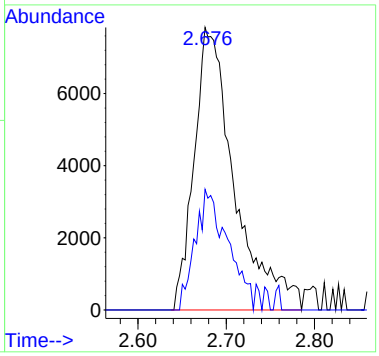


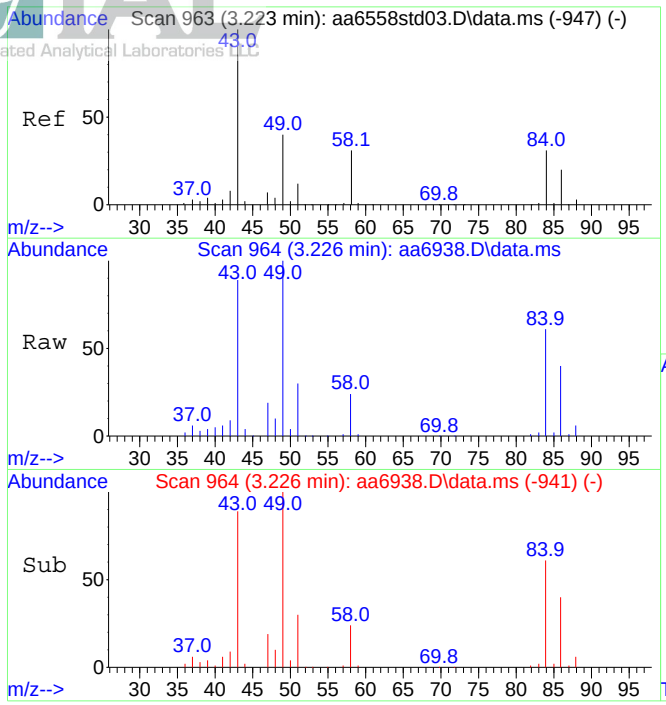


#13
Ethanol
Concen: 2.22 ppbV
RT: 2.676 min Scan# 793
Delta R.T. 0.006 min
Lab File: aa6938.D
Acq: 18 Jul 2024 8:55 pm

Tgt Ion: 45 Resp: 24930

Ion	Ratio	Lower	Upper
45	100		
46	34.3	29.2	43.8

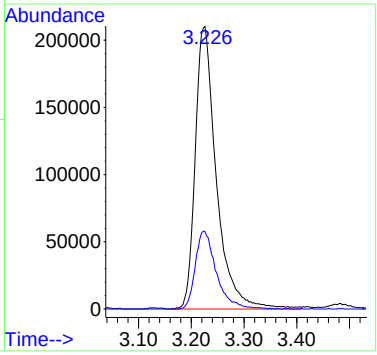


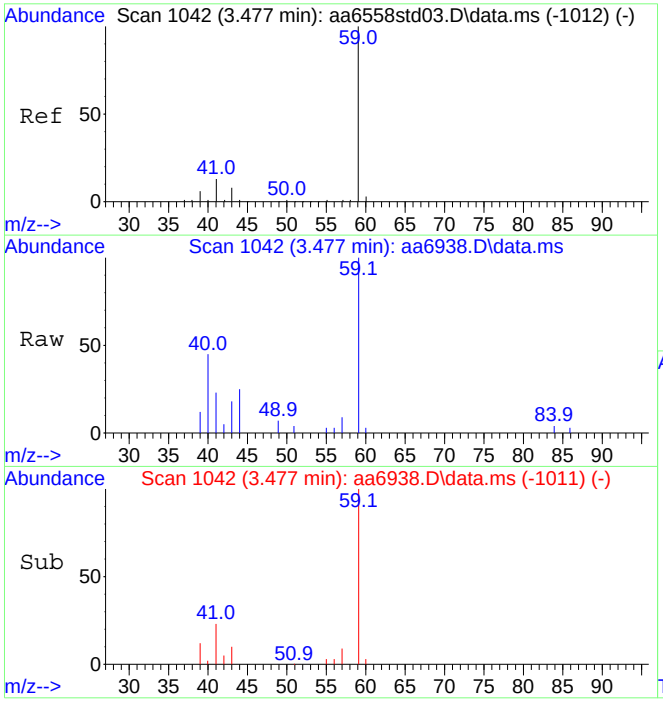


#21
Acetone
Concen: 11.97 ppbV
RT: 3.226 min Scan# 964
Delta R.T. 0.003 min
Lab File: aa6938.D
Acq: 18 Jul 2024 8:55 pm

Tgt Ion: 43 Resp: 585927

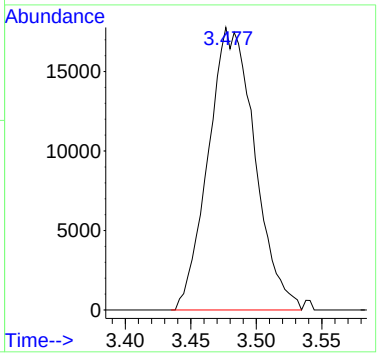
Ion	Ratio	Lower	Upper
43	100		
58	27.4	25.4	38.0

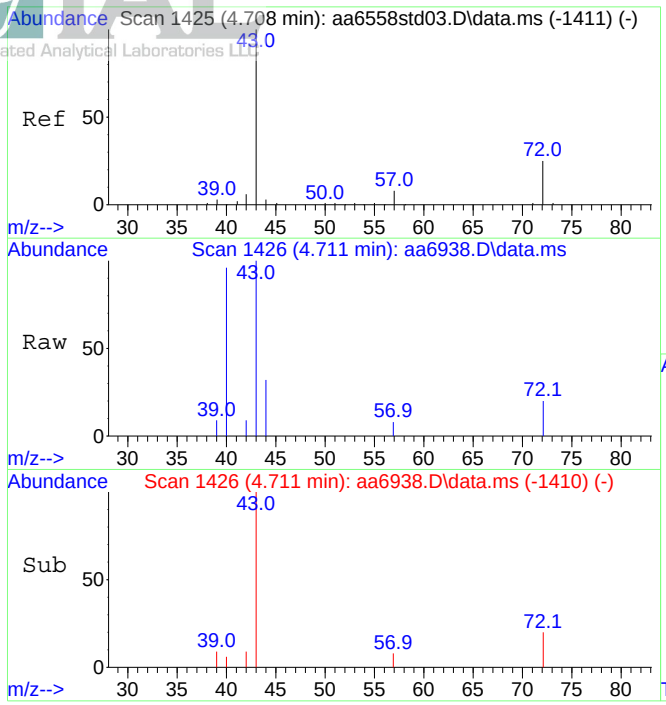




#26
Tert-butyl alcohol
Concen: 0.64 ppbV
RT: 3.477 min Scan# 1042
Delta R.T. -0.000 min
Lab File: aa6938.D
Acq: 18 Jul 2024 8:55 pm

Tgt Ion: 59 Resp: 43882

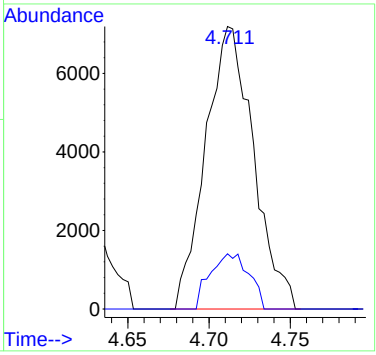


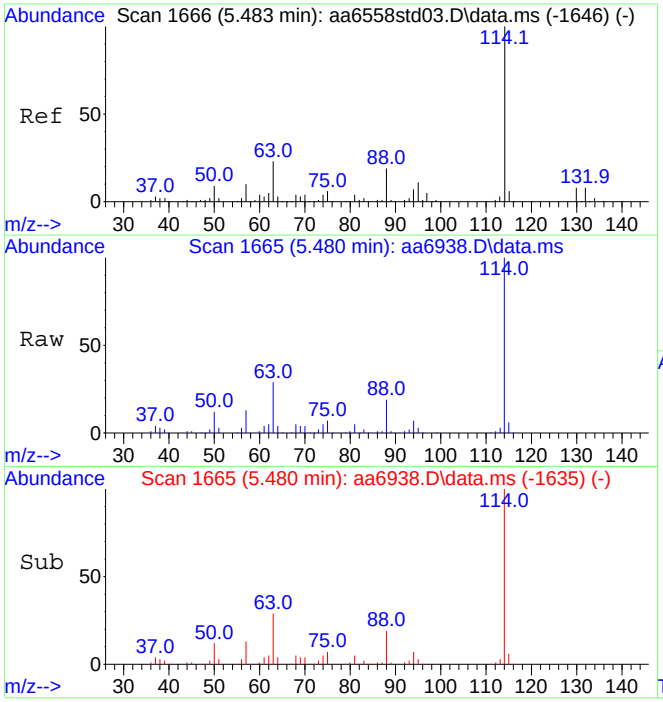


#35
Methyl ethyl ketone
Concen: 0.21 ppbV
RT: 4.711 min Scan# 1426
Delta R.T. 0.003 min
Lab File: aa6938.D
Acq: 18 Jul 2024 8:55 pm

Tgt Ion: 43 Resp: 14760

Ion	Ratio	Lower	Upper
43	100		
72	15.9	19.5	29.3#

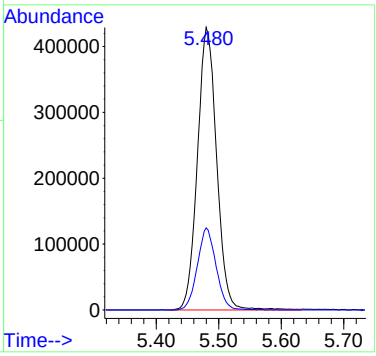


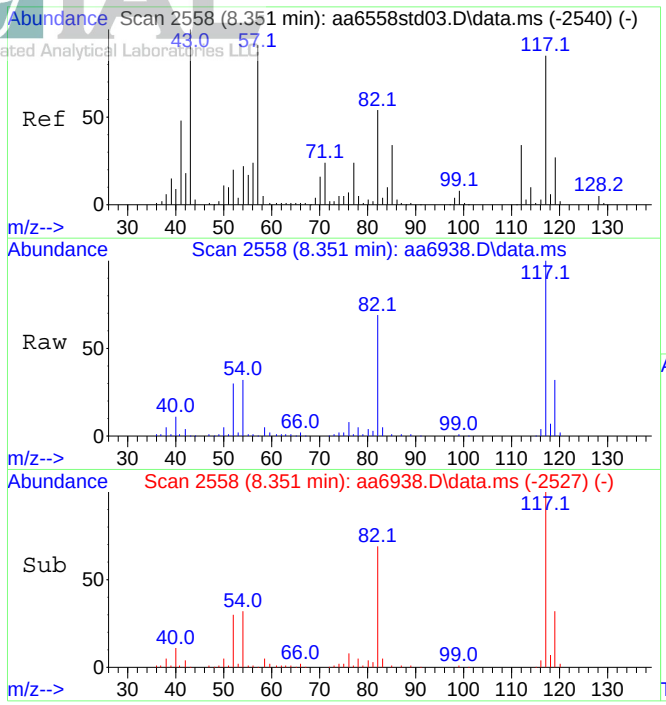


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.480 min Scan# 1665
Delta R.T. -0.003 min
Lab File: aa6938.D
Acq: 18 Jul 2024 8:55 pm

Tgt Ion:114 Resp: 917260

Ion	Ratio	Lower	Upper
114	100		
63	28.2	3.6	43.6

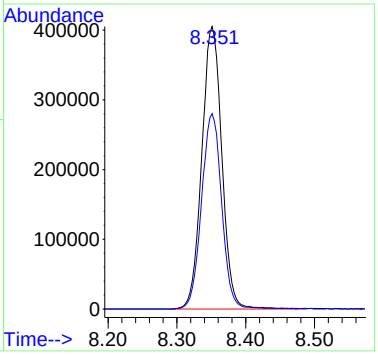


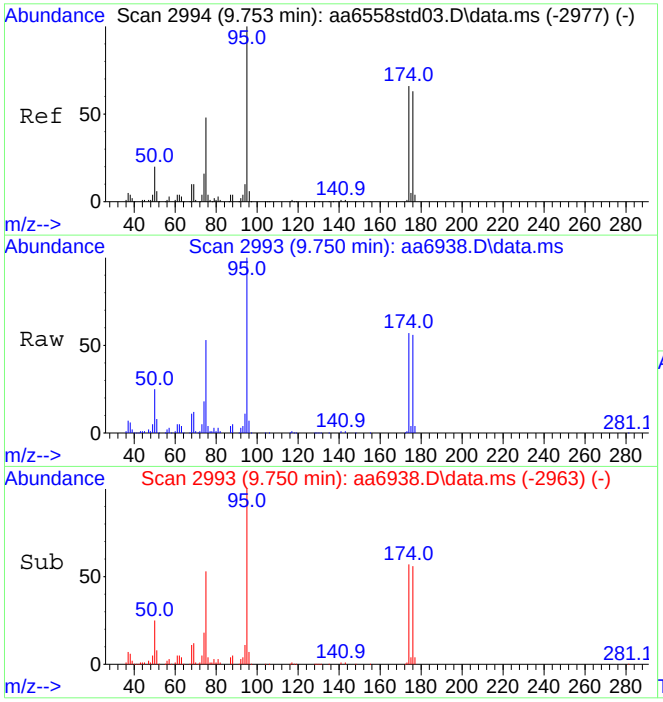


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.351 min Scan# 2558
Delta R.T. -0.000 min
Lab File: aa6938.D
Acq: 18 Jul 2024 8:55 pm

Tgt Ion:117 Resp: 820484

Ion	Ratio	Lower	Upper
117	100		
82	69.4	42.3	82.3

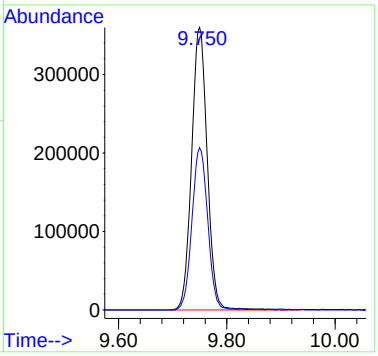




#64
Bromofluorobenzene (tune std)
Concen: 9.32 ppbV
RT: 9.750 min Scan# 2993
Delta R.T. -0.003 min
Lab File: aa6938.D
Acq: 18 Jul 2024 8:55 pm

Tgt Ion: 95 Resp: 723250

Ion	Ratio	Lower	Upper
95	100		
174	58.0	52.9	79.3



Quantitation Report (QT Reviewed)

Data Path : C:\DATA\2024\07-2024\07-18-2024\
Data File : aa6939.D
Acq On : 18 Jul 2024 9:27 pm
Operator : jjw
Sample : E24-02397-22x10 dil
Misc : Dup of E24-02397-02x10 dil, Can #1776, 50cc
ALS Vial : 19 Sample Multiplier: 1

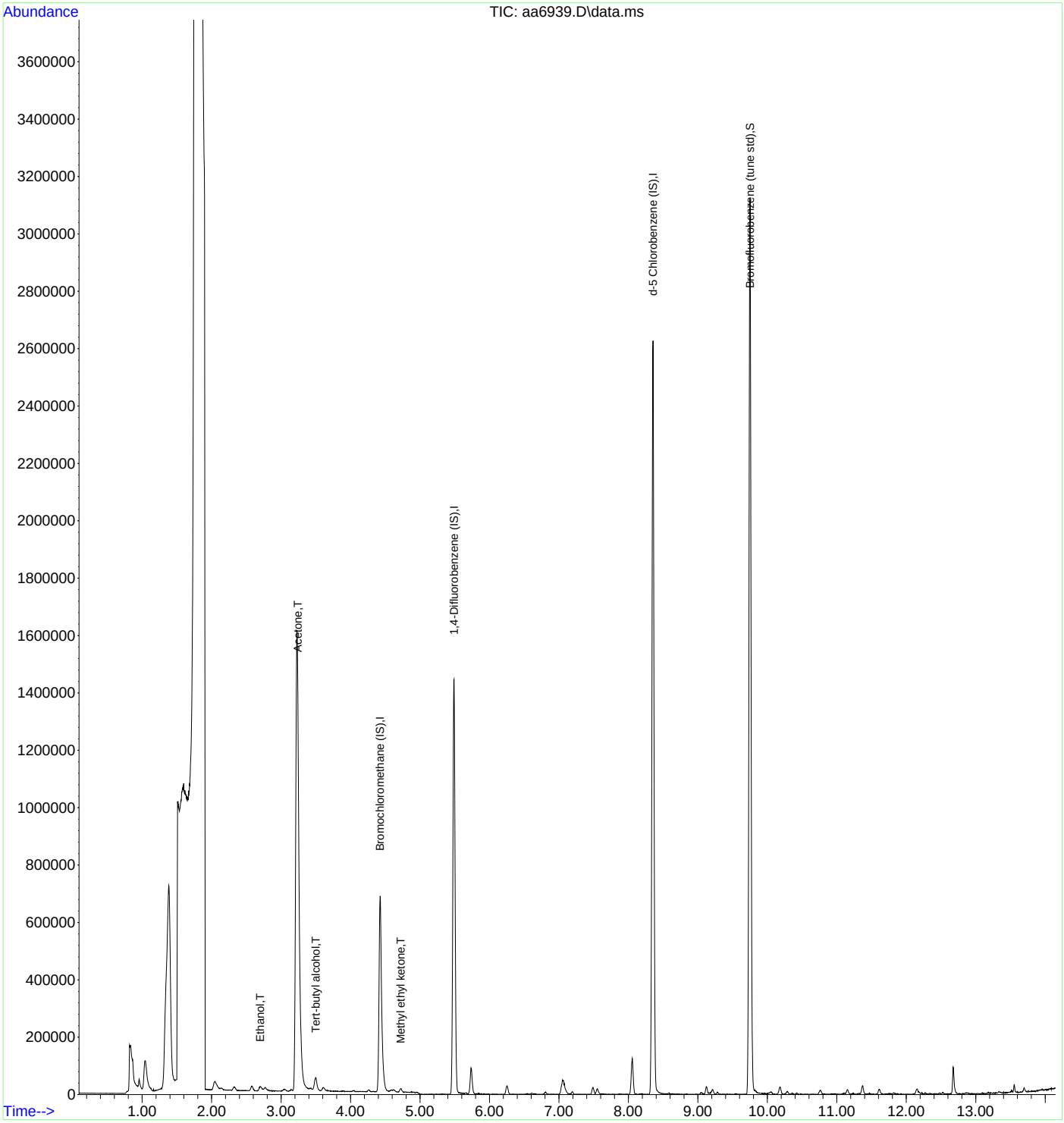
Quant Time: Jul 23 10:21:27 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

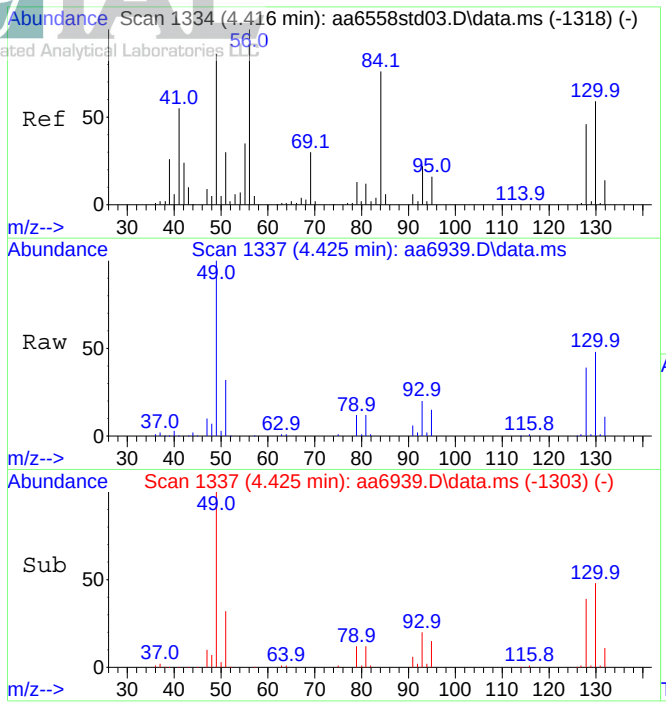
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.425	130	252693	10.00	ppbV		0.000
39) 1,4-Difluorobenzene (IS)	5.489	114	1187991	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.354	117	1442671	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.750	95	1353012	9.91	ppbV		0.000
Target Compounds							Qvalue
13) Ethanol	2.699	45	28423	2.19	ppbV		97
21) Acetone	3.242	43	700603	12.36	ppbV		92
26) Tert-butyl alcohol	3.499	59	60043	0.76	ppbV		100
35) Methyl ethyl ketone	4.724	43	19543	0.24	ppbV	#	85

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

Data Path : C:\DATA\2024\07-2024\07-18-2024\
Data File : aa6939.D
Acq On : 18 Jul 2024 9:27 pm
Operator : jjw
Sample : E24-02397-22x10 dil
Misc : Dup of E24-02397-02x10 dil, Can #1776, 50cc
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jul 23 10:21:27 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

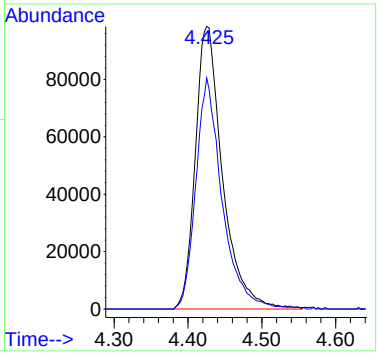


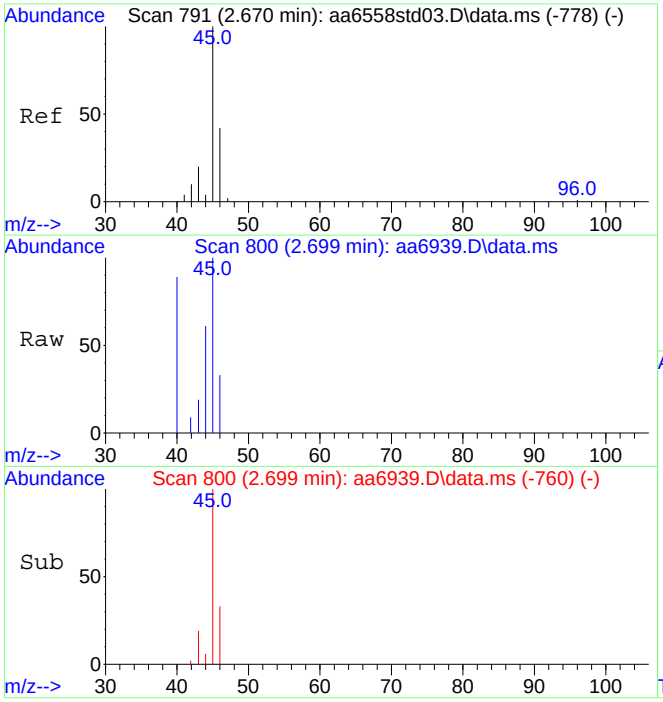


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.425 min Scan# 1337
Delta R.T. 0.009 min
Lab File: aa6939.D
Acq: 18 Jul 2024 9:27 pm

Tgt Ion:130 Resp: 252693

Ion	Ratio	Lower	Upper
130	100		
128	78.9	57.8	97.8

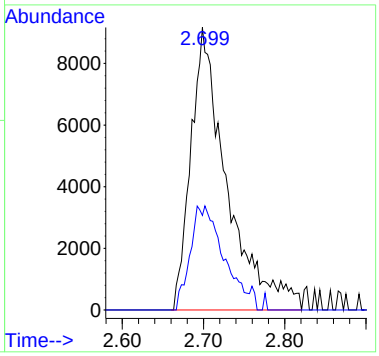


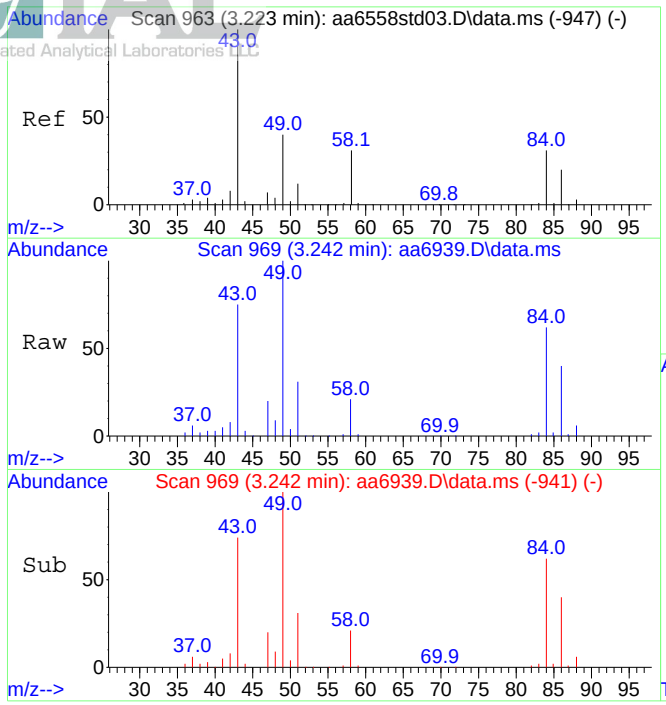


#13
Ethanol
Concen: 2.19 ppbV
RT: 2.699 min Scan# 800
Delta R.T. 0.029 min
Lab File: aa6939.D
Acq: 18 Jul 2024 9:27 pm

Tgt Ion: 45 Resp: 28423

Ion	Ratio	Lower	Upper
45	100		
46	34.9	29.2	43.8

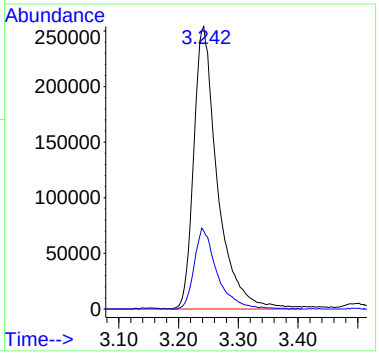


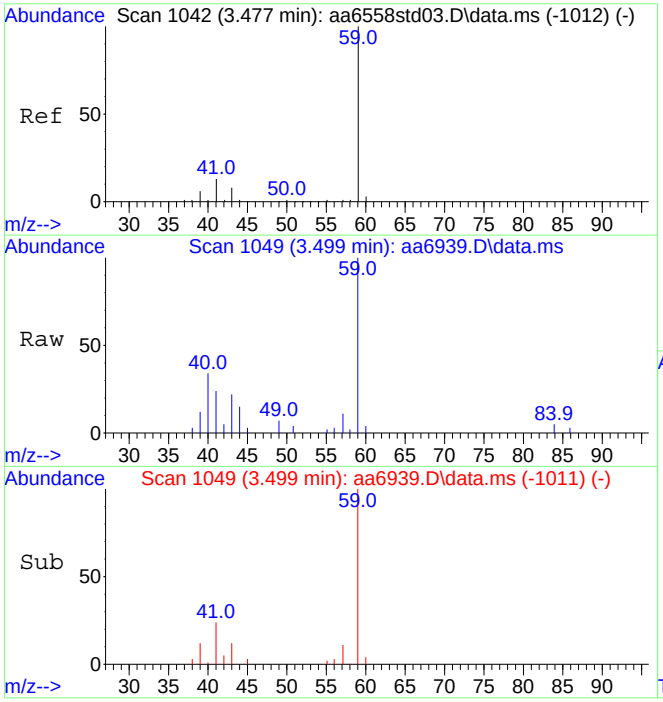


#21
Acetone
Concen: 12.36 ppbV
RT: 3.242 min Scan# 969
Delta R.T. 0.019 min
Lab File: aa6939.D
Acq: 18 Jul 2024 9:27 pm

Tgt Ion: 43 Resp: 700603

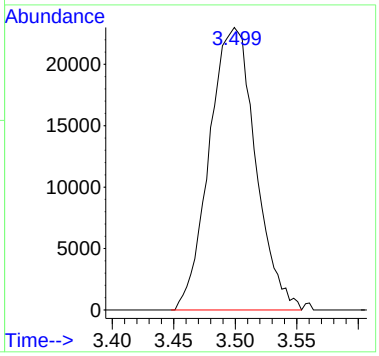
Ion	Ratio	Lower	Upper
43	100		
58	27.5	25.4	38.0

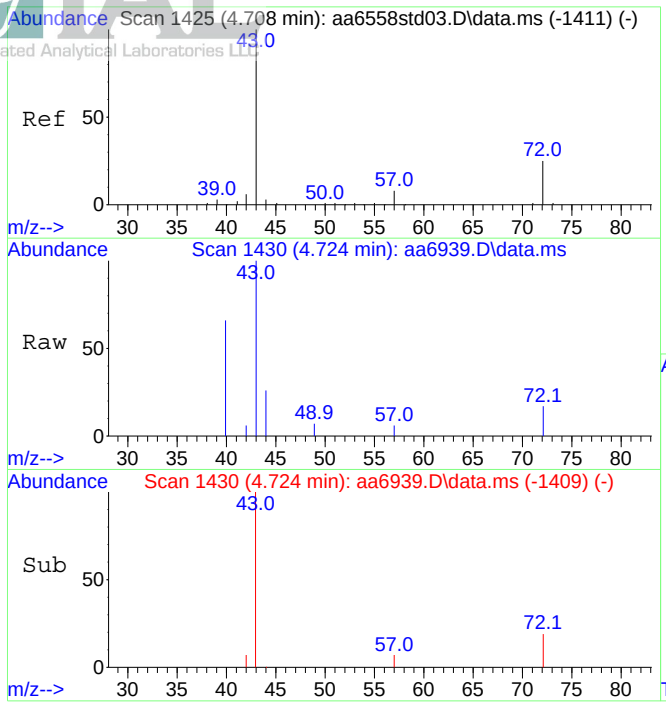




#26
Tert-butyl alcohol
Concen: 0.76 ppbV
RT: 3.499 min Scan# 1049
Delta R.T. 0.022 min
Lab File: aa6939.D
Acq: 18 Jul 2024 9:27 pm

Tgt Ion: 59 Resp: 60043

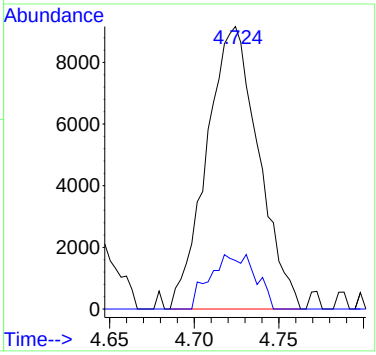


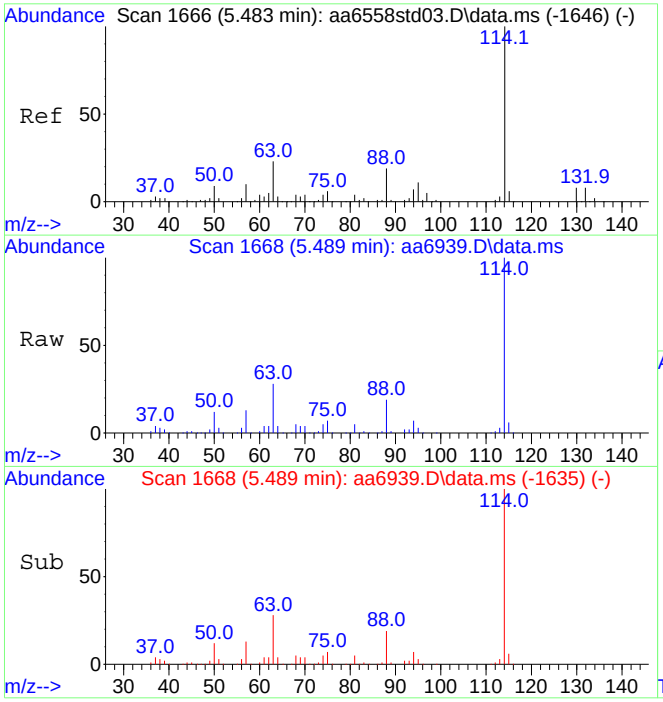


#35
Methyl ethyl ketone
Concen: 0.24 ppbV
RT: 4.724 min Scan# 1430
Delta R.T. 0.016 min
Lab File: aa6939.D
Acq: 18 Jul 2024 9:27 pm

Tgt Ion: 43 Resp: 19543

Ion	Ratio	Lower	Upper
43	100		
72	16.8	19.5	29.3#

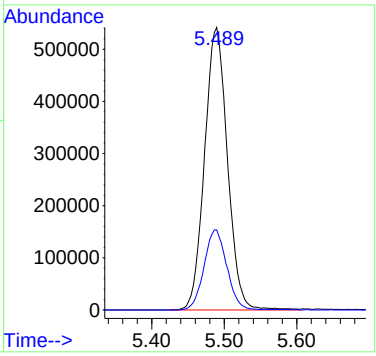


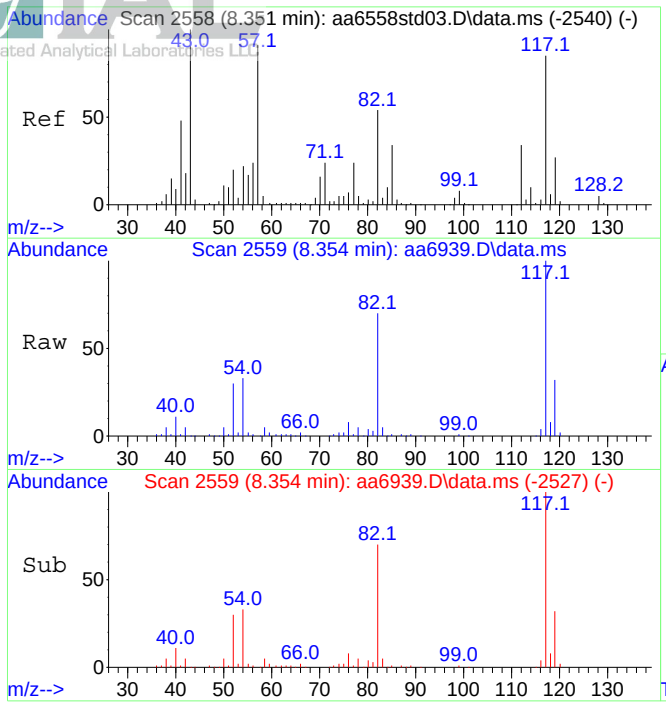


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.489 min Scan# 1668
Delta R.T. 0.006 min
Lab File: aa6939.D
Acq: 18 Jul 2024 9:27 pm

Tgt Ion:114 Resp: 1187991

Ion	Ratio	Lower	Upper
114	100		
63	28.1	3.6	43.6

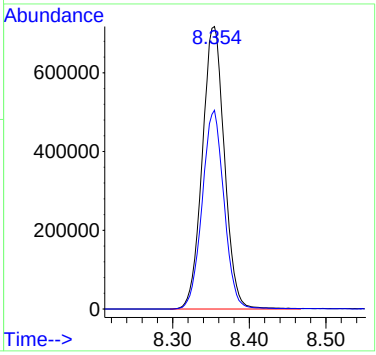


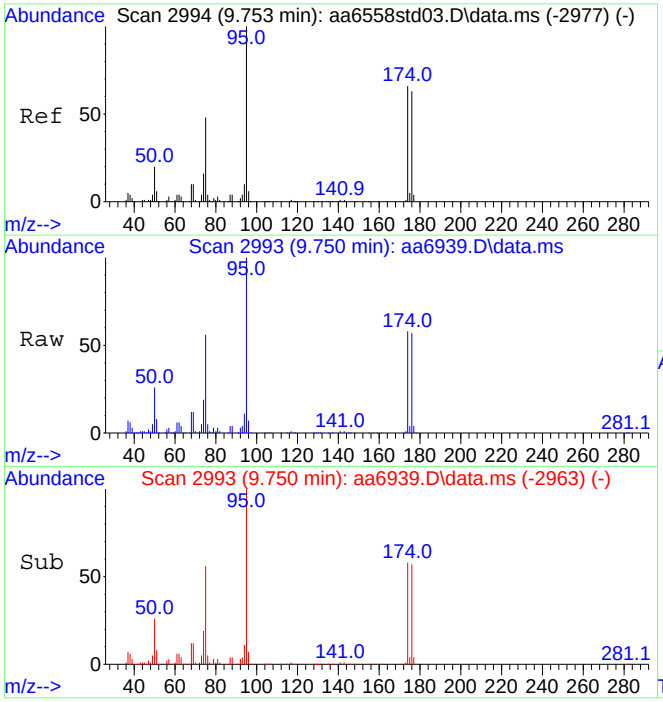


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.354 min Scan# 2559
Delta R.T. 0.003 min
Lab File: aa6939.D
Acq: 18 Jul 2024 9:27 pm

Tgt Ion:117 Resp: 1442671

Ion	Ratio	Lower	Upper
117	100		
82	69.3	42.3	82.3

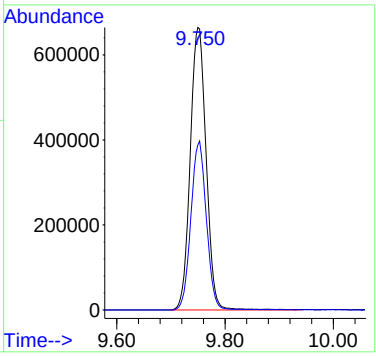




#64
Bromofluorobenzene (tune std)
Concen: 9.91 ppbV
RT: 9.750 min Scan# 2993
Delta R.T. -0.003 min
Lab File: aa6939.D
Acq: 18 Jul 2024 9:27 pm

Tgt Ion: 95 Resp: 1353012

Ion	Ratio	Lower	Upper
95	100		
174	58.3	52.9	79.3



INTEGRATED ANALYTICAL LABORATORIES, LLC

Integrated Analytical Laboratories
GC/MS Run Log

Instrument ID: Agilent 7890A / 5975C
Column: Restek RTX-1 SN 992567

Target Directory: D:\Agilent GCMS\

Date of Analysis: 3/27/2024
Date of Initial Calibration: 3/27/2024

File #	Laboratory Sample ID	QC Check	Dilution Factor	Can #	Analyst	Injection Volume (cc)	Comments	*Make-up Air*		*Acquisition*		*Room*		*TO-15 Standard*	
								Added to canister (cc)	Added for dilution	Date	Time	Temp	BP "Hg	Working ID	Vendor ID (Lot#)
aa6020bfb	BFB	✓		ALM018474	JJW	0.5				**3/27/2024**	**10:03**	70	29.63		160-402352677-1
aa6021std05	0.2 ppbv Std	✓		EB0103704	JJW	1								3/27/2024	160-401980152-1
aa6022std04	2 ppbv Std	✓		EB0103704	JJW	10								3/27/2024	160-401980152-1
aa6023std03	10 ppbv Std	✓		EB0103704	JJW	50								3/27/2024	160-401980152-1
aa6024std02	20 ppbv Std	✓		EB0103704	JJW	100								3/27/2024	160-401980152-1
aa6025std01	40 ppbv Std	✓		EB0103704	JJW	200								3/27/2024	160-401980152-1
aa6026icvss	10 ppbv ICVSS	✓		EB0116272	JJW	50								3/27/2024	160-402744241-1
aa6027lcs	10 ppbv LCS	✓		EB0103704	JJW	50								3/27/2024	160-401980152-1
aa6028blk	Method Blank	✓		1127	JJW	500									
aa6229	E24-00947-01x10 dil	✓	10	1526	JJW	50									
aa6230	E24-00947-02x10 dil	✓	10	1545	JJW	50									
aa6231	E24-00947-03x10 dil	✓	10	1588	JJW	50									
aa6232	E24-00947-04x10 dil	✓	10	1554	JJW	50									
aa6233	E24-00948-01	✓		2901	JJW	500									
aa6234	E24-00948-02	✓		3026A	JJW	500									
aa6235	E24-00948-03	✓		2751	JJW	500									
aa6236	E24-00948-04	✓		2033	JJW	500									
aa6237	E24-00948-05	✓		4865	JJW	500									
aa6238	E24-00948-25	✓		4865	JJW	500	dup of 00948-05								
aa6239	3285	✓		x	JJW	500									
aa6240	2036	✓		x	JJW	500				3/27/2024	21:38				

Analyst Name: J Walukiewicz

Signature: Joseph Walukiewicz

INTEGRATED ANALYTICAL LABORATORIES, LLC

Integrated Analytical Laboratories
GC/MS Run Log

Instrument ID: Agilent 7890A / 5975C
Column: Restek RTX-1 SN 992567

Target Directory: D:\Agilent GCMS\

Date of Analysis: 5/21/2024
Date of Initial Calibration: 3/27/2024

File #	Laboratory Sample ID	QC Check	Dilution Factor	Can #	Analyst	Injection Volume (cc)	Comments	*Make-up Air*		*Acquisition*		*Room*		*TO-15 Standard*	
								Added to canister (cc)	Added for dilution	Date	Time	Temp	BP "Hg	Working ID	Vendor ID (Lot#)
aa6539bfb	BFB	✓		ALM018474	JJW	0.5				**5/21/2024**	**9:54**	71	29.42		160-402352677-1
aa6540dcvs	10 ppbv DCVS	✓		EB0103704	JJW	50								3/27/2024	160-401980152-1
aa6541lcs	10 ppbv LCS	✓		EB0103704	JJW	50								3/27/2024	160-401980152-1
aa6542blk	Method Blank	✓		1127	JJW	500									
aa6543rllcs	0.2 ppbv RLLCS	✓		EB0103704	JJW	1								3/27/2024	160-401980152-1
aa6544	3052	✓		3052	JJW	500									
aa6545	3100	✓		3100	JJW	500									
aa6546	1571	✓		1571	JJW	50									
aa6547	E24-01699-01	✓		3787	JJW	500									
aa6548	E24-01699-02	✓		2889	JJW	500									
aa6549	E24-01699-03	✓		2900	JJW	500									
aa6550	E24-01699-23	✓		2900	JJW	500	Dup of 01699-03								
aa6551	blk	✓		x	JJW	500									
aa6552cccvs	10 ppbv CCCVS	✓		EB0103704	JJW	50				5/21/2024	19:21			3/27/2024	160-401980152-1

Analyst Name: J Walukiewicz

Signature: Joseph Walukiewicz

INTEGRATED ANALYTICAL LABORATORIES, LLC

Integrated Analytical Laboratories
GC/MS Run Log

Instrument ID: Agilent 7890A / 5975C
Column: Restek RTX-1 SN 992567

Target Directory: D:\Agilent GCMS\

Date of Analysis: 5/29/2024
Date of Initial Calibration: 5/29/2024

File #	Laboratory Sample ID	QC Check	Dilution Factor	Can #	Analyst	Injection Volume (cc)	Comments	*Make-up Air*		*Acquisition*		*Room*		*TO-15 Standard*	
								Added to canister (cc)	Added for dilution	Date	Time	Temp	BP "Hg	Working ID	Vendor ID (Lot#)
aa6554bfb	BFB	✓		ALM018474	JJW	0.5				**5/29/2024**	**9:16**	70	29.63		160-402352677-1
aa6555dcvs	10 ppbv DCVS	✓		EB0103704	JJW	50	Failed Criteria							3/27/2024	160-401980152-1
aa6556std05	0.2 ppbv Std	✓		EB0103704	JJW	1								5/29/2024	160-401980152-1
aa6557std04	2 ppbv Std	✓		EB0103704	JJW	10								5/29/2024	160-401980152-1
aa6558std03	10 ppbv Std	✓		EB0103704	JJW	50								5/29/2024	160-401980152-1
aa6559std02	20 ppbv Std	✓		EB0103704	JJW	100								5/29/2024	160-401980152-1
aa6560std01	40 ppbv Std	✓		EB0103704	JJW	200								5/29/2024	160-401980152-1
aa6561icvss	10 ppbv ICVSS	✓		EB0116272	JJW	50				5/29/2024	17:16			5/29/2024	160-402744241-1

Analyst Name: J Walukiewicz

Signature: Joseph Walukiewicz

INTEGRATED ANALYTICAL LABORATORIES, LLC

Integrated Analytical Laboratories
GC/MS Run Log

Instrument ID: Agilent 7890A / 5975C
Column: Restek RTX-1 SN 992567

Target Directory: D:\Agilent GCMS\

Date of Analysis: 6/6/2024
Date of Initial Calibration: 5/29/2024

File #	Laboratory Sample ID	QC Check	Dilution Factor	Can #	Analyst	Injection Volume (cc)	Comments	*Make-up Air*		*Acquisition*		*Room*		*TO-15 Standard*	
								Added to canister (cc)	Added for dilution	Date	Time	Temp	BP "Hg	Working ID	Vendor ID (Lot#)
aa6657bfb	BFB	✓		ALM018474	JJW	0.5				**6/6/2024**	**10:04**	70	29.54		160-402352677-1
aa6658dcvs	10 ppbv DCVS	✓		EB0103704	JJW	50								5/29/2024	160-401980152-1
aa6659lcs	10 ppbv LCS	✓		EB0103704	JJW	50								5/29/2024	160-401980152-1
aa6660blk	Method Blank	✓		1127	JJW	500									
aa6661rllcs	0.2 ppbv RLLCS	✓		EB0103704	JJW	1								5/29/2024	160-401980152-1
aa6662	3813	✓		3813	JJW	500									
aa6663	3810	✓		3810	JJW	500									
aa6664	4869	✓		4869	JJW	500									
aa6665	4856	✓		4856	JJW	500									
aa6666	3804	✓		3804	JJW	500									
aa6667	2751	✓		2751	JJW	500									
aa6668	3293	✓		3293	JJW	500									
aa6669	E24-01876-04	✓		3287	JJW	500									
aa6670	E24-01876-24	✓		3287	JJW	500	Dup of 1876-04								
aa6671	E24-01876-01x5 dil	✓	5	2094	JJW	100	not used								
aa6672	E24-01789-02	✓		2901	JJW	500									
aa6673	E24-01843-01x100 dil	✓	100	1770	JJW	5									
aa6674	E24-01843-02x100 dil	✓	100	1774	JJW	5									
aa6675	blank	✓		x	JJW	500									
aa6676cccvs	10 ppbv CCCVS	✓		EB0103704	JJW	50				6/6/2024	21:26			5/29/2024	160-401980152-1

Analyst Name: J Walukiewicz

Signature: Joseph Walukiewicz

INTEGRATED ANALYTICAL LABORATORIES, LLC

Integrated Analytical Laboratories
GC/MS Run Log

Instrument ID: Agilent 7890A / 5975C
Column: Restek RTX-1 SN 992567

Target Directory: D:\Agilent GCMS\

Date of Analysis: 7/16/2024
Date of Initial Calibration: 5/29/2024

File #	Laboratory Sample ID	QC Check	Dilution Factor	Can #	Analyst	Injection Volume (cc)	Comments	*Make-up Air*		*Acquisition*		*Room*		*TO-15 Standard*	
								Added to canister (cc)	Added for dilution	Date	Time	Temp	BP "Hg	Working ID	Vendor ID (Lot#)
aa6898bfb	BFB	✓		ALM018474	JJW	0.5				**7/16/2024**	**10:45**	75	29.22		160-402352677-1
aa6899dcvs	10 ppbv DCVS	✓		EB0103704	JJW	50								5/29/2024	160-401980152-1
aa6900lcs	10 ppbv LCS	✓		EB0103704	JJW	50								5/29/2024	160-401980152-1
aa6901blk	Method Blank	✓		1127	JJW	500									
aa6902rllcs	0.2 ppbv RLLCS	✓		EB0103704	JJW	1								5/29/2024	160-401980152-1
aa6903	E24-02368-01x10 dil	✓	10	3025A	JJW		Screen								
aa6904	E24-02368-02x10 dil	✓	10	2155	JJW		Screen								
aa6905	E24-02368-03x10 dil	✓	10	2902	JJW		Screen								
aa6906	blk	✓		x	JJW										
aa6907	E24-02427-01x5 dil	✓	5	5073	JJW		Not Needed								
aa6908	E24-02427-01	✓		5073	JJW										
aa6909	E24-02427-01	✓		5073	JJW										
aa6910	blk	✓		x	JJW										
aa6911	E24-02427-02x5 dil	✓	5	3786	JJW		Not Used: Underdil.								
aa6912	E24-02427-02	✓		3786	JJW										
aa6913	blk	✓		x	JJW										
aa6914	E24-02427-03x5 dil	✓	5	4867	JJW										
aa6915	E24-02427-03	✓		4867	JJW										
aa6916	blk	✓		x	JJW										
aa6917	E24-02427-04x5 dil	✓	5	2896B	JJW		Not Used: Underdil.								
aa6918	E24-02427-04	✓		2896B	JJW										
aa6919	blk	✓		x	JJW										
aa6920cccvs	10 ppbv CCCVS	✓		EB0103704	JJW	50				7/17/2024	0:43			5/29/2024	160-401980152-1

Analyst Name: J Walukiewicz

Signature: Joseph Walukiewicz

INTEGRATED ANALYTICAL LABORATORIES, LLC

Integrated Analytical Laboratories
GC/MS Run Log

Instrument ID: Agilent 7890A / 5975C
Column: Restek RTX-1 SN 992567

Target Directory: D:\Agilent GCMS\

Date of Analysis: 7/18/2024
Date of Initial Calibration: 5/29/2024

File #	Laboratory Sample ID	QC Check	Dilution Factor	Can #	Analyst	Injection Volume (cc)	Comments	*Make-up Air*		*Acquisition*		*Room*		*TO-15 Standard*	
								Added to canister (cc)	Added for dilution	Date	Time	Temp	BP "Hg	Working ID	Vendor ID (Lot#)
aa6921bfb	BFB	✓		ALM018474	JJW	0.5				**7/18/2024**	**10:00**	74	29.35		160-402352677-1
aa6922dcvs	10 ppbv DCVS	✓		EB0103704	JJW	50								5/29/2024	160-401980152-1
aa6923lcs	10 ppbv LCS	✓		EB0103704	JJW	50								5/29/2024	160-401980152-1
aa6924blk	Method Blank	✓		1127	JJW	500									
aa6925rllcs	0.2 ppbv RLLCS	✓		EB0103704	JJW	1								5/29/2024	160-401980152-1
aa6926	E24-02427-02x10 dil	✓	10	3786	JJW	50									
aa6927	E24-02427-04x10 dil	✓	10	2896B	JJW	50									
aa6928	E24-02368-01x100 dil	✓	100	3025A	JJW	5									
aa6929	E24-02368-02x100 dil	✓	100	2155	JJW	5									
aa6930	E24-02368-03x100 dil	✓	100	2902	JJW	5									
aa6931	E24-02368-01x10 dil	✓	10	30325A	JJW	50									
aa6932	blk	✓		x	JJW	500									
aa6933	E24-02368-02x10 dil	✓	10	2155	JJW	50									
aa6934	blk	✓		x	JJW	500									
aa6935	E24-02368-03x10 dil	✓	10	2902	JJW	50									
aa6936	blk	✓		x	JJW	500									
aa6937	E24-02397-01x10 dil	✓	10	1525	JJW	50									
aa6938	E24-02397-02x10 dil	✓	10	1776	JJW	50									
aa6939	E24-02397-22x10 dil	✓	10	1776	JJW	50	Dup of 2397-02x10								
aa6940	E24-02397-03x10 dil	✓	10	1768	JJW	50									
aa6941	blk	✓		x	JJW	500									
aa6942cccvs	10 ppbv CCCVS	✓		EB0103704	JJW	50				7/18/2024	23:31			5/29/2024	160-401980152-1

Analyst Name: J Walukiewicz

Signature: Joseph Walukiewicz

Integrated Analytical Laboratories, LLC

INTEGRATED ANALYTICAL LABORATORIES, LLC

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

External Chain of Custody Record/
Field Test Data Sheet
USEPA Method TO-15

Contact Us: 973-361-4252
Fax: 973-366-5613
Web: www.ialonline.com

Carrier (check one): ____ IAL Courier ____ Client Courier ____ FedEx/UPS | pg 1 of 1

Client Contact Information	Project Information	Invoice Information
Company: JS Held - Hoboken	Project Name: 48-55 30th St	Attn:
Address: 5 Marine View Plaza Suit 401, Hoboken NJ	Project Location (State): NY	Address:
Phone: 201-876-9400	Project Manager: Leah DeEgidio	
Fax:	PM Signature:	
Report to: Leah DeEgidio	PM E-Mail: LdeEgidio@jsheld.com	PO #: 240302017
	Sampler: JT	Quote #:

Analysis Turnaround Time - IF NO TAT IS SPECIFIED, 2 WEEK TAT IS ASSUMED

IAL Standard: 2 weeks (10 business days)

Rush (**pre-approved by lab): 24hr** 48hr** 72hr** 96hr** 1wk**

	Sample Identification	Start DATE & TIME (24hr Clock)	End DATE & TIME (24hr Clock)	Starting Vacuum ("Hg)	Ending Vacuum ("Hg)	Starting Temp. (°F)	Ending Temp. (°F)	Outgoing Vacuum - Lab ("Hg)	Barometric Pressure Start: Incoming Vacuum - Lab ("Hg)	Flow Regulator ID	Barometric Pressure Stop: Canister ID	Canister Size (1L or 6L)	Flow Controller Readout (cc/min)	EPA TO - 15	NJDEP LLTO-15 (includes 30 TICs)	Library Search (10, 20, or 30 TICs)	Other (Explain in Comments)	Regulatory/ NY Cat B / Full (NJ Required)	Reduced / NY Cat A Data Package	Results Only	Indoor Air	Ambient / Outdoor Air	Sub Slab / Soil Gas / Near Slab (Circle One)	Stack Emission / SVE System	High Concentrations Expected
①	SG-14	16:25 7/15/24	16:55 7/15/24	-10	0	42	42	-29.0	0.0	734819	5073	6L	200	X									X		
②	SG-15	20:00 7/15/24	20:30 7/15/24	-28	0	78	78	-29.0	0.0	733509	3786	6L	200	X									X		
③	SG-16	18:30 7/15/24	19:00 7/15/24	-29	-1	78	78	-29.0	-1.0	AM20631-10	4867	6L	200	X									X		
④	SG-17	21:45 7/15/24	22:15 7/15/24	-28	0	81°	80°	-29.0	0.0	AR0230985-8	2896B	6L	200	X									X		

Comments/ Special Analysis Instructions / QC Requirements: 052124 22 060624 22a

#3100 - 052124 01 #4869 - 060424 01
22a0595 1,3 2,4
22a0604

Note: Hold or contingent samples may be designated by writing an "H" or "C" in the appropriate analysis box.

ALL FIELDS IN RED ARE REQUIRED

IAL SDG#: 02427

Shipping Information / Canister Preparation (for laboratory use only)

Individual Preparing Canisters / Title: ~~P. Jenkins, J. Walukiewicz~~ / Air Department Sample Custodians

Lab Affixed Seal Number(s): Yzeeb Raiten

Date/Time Shipping Container Sealed: 7/10/24

Laboratory Canister Certification

GC/MS Analyst Signature: Joseph J Walukiewicz III (dLL)

External Chain of Custody

Relinquished	Received	Date / Time	Reason for Change of External Custody
		7/10/24	shipment from laboratory to client
	Joseph Walukiewicz III (dLL)	7/16/24 1155	
		7/16/24 1500	Received at air lab

Name/Title Resealing Shipping Container Name:

Date/Time Sample Shipping Container Resealed:

Date/Time Sample Shipping Container Opened: 07/16/2024 1585

NJDEP Affixed Seal Number:

Individual Opening Sample Shipping Container: ~~Padraic Jenkins~~ / Joseph Walukiewicz

Date/Time Internal Chain of Custody Initiated: Joseph Walukiewicz III (dLL) 07/16/2024 1530

White and yellow - lab copies; Pink - client copy

Use appropriate care with IAL sampling equipment when sampling and packing for shipment. The client is responsible for all damage incurred to IAL equipment. Notify IAL if equipment is damaged upon receipt. Holding time before sampling is 15 days, after sampling is 30 days; failure to follow these times may result in data rejection by regulatory agencies. The lab will contact you if your COC is not clear, incomplete, or if discrepancies exist. The use of initials is not permitted on the COC except when correcting errors. 06/2014

Example Calculation (EPA TO-15)

$$\frac{\text{Area of Compound}}{\text{Area of Internal Standard}} \times \frac{\text{Concentration of Internal Standard (10 ppbv)}}{\text{Response Factor}} = \text{Concentration of Compound (ppbv)}$$

Conversion from ppbv to µg/m ^{3}

$$\frac{\text{Concentration of Compound (ppbv)} \times \text{Molecular Weight of Compound}}{24.45} = \text{Concentration of Compound (µg/m3)}$$

INTEGRATED ANALYTICAL LABORATORIES, LLC

Clean Canister Certification Report

Lab Sample Name:	**Clean Canister, Batch Master 3100**	**Data File:**	**AA6545**
Field Sample Name:	**Canister 3100**	**Date Analyzed:**	**5/21/2024**
Sample Volume:	**500ml**	**Matrix:**	**Air**

Canisters associated with this run: 3100, 3012, 5096, 5073 (used for E24-02427-01), 2886, 2066, 5092, 4867 (used for E24-02427-03)

Runs with this Clean Canister Certification:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6539BFB]	05/21/2024 09:54
10 PPBV DCVS [AA6540DCVS]	05/21/2024 11:12
10 PPBV LCS [AA6541LCS]	05/21/2024 11:47
METHOD BLANK [AA6542BLK]	05/21/2024 12:15
02 PPBV RLLCS [AA6543RLLCS]	05/21/2024 12:50
CLEAN CAN CERTIFICATION, BATCH MASTER 3052 [AA6544]	05/21/2024 15:02
CLEAN CAN CERTIFICATION, BATCH MASTER 3100 [AA6545]	05/21/2024 15:33
CLEAN CAN CERTIFICATION, BATCH MASTER 1571 [AA6546]	05/21/2024 16:03
10 PPBV CCCVS [AA6552CCCVS]	05/21/2024 19:21

This canister has been certified clean, all compounds are below 0.2 ppbv.

Compound	CAS #	RL (ppbv)	Calculated Amount (ppbv)
Acetone	67-64-1	0.20	ND
Benzene	71-43-2	0.20	ND
Bromodichloromethane	75-27-4	0.20	ND
Bromoform	75-25-2	0.20	ND
Bromomethane	74-83-9	0.20	ND
1,3-Butadiene	106-99-0	0.20	ND
Chlorobenzene	108-90-7	0.20	ND
Chloroethane	75-00-3	0.20	ND
Chloroform	67-66-3	0.20	ND
Chloromethane	74-87-3	0.20	ND
Carbon disulfide	75-15-0	0.20	ND
Carbon tetrachloride	56-23-5	0.20	ND
Cyclohexane	110-82-7	0.20	ND
Dibromochloromethane	124-48-1	0.20	ND
1,2-Dibromoethane	106-93-4	0.20	ND
1,2-Dichlorobenzene	95-50-1	0.20	ND
1,3-Dichlorobenzene	541-73-1	0.20	ND
1,4-Dichlorobenzene	106-46-7	0.20	ND
Dichlorodifluoromethane	75-71-8	0.20	ND
1,1-Dichloroethane	75-34-3	0.20	ND
1,2-Dichloroethane	107-06-2	0.20	ND
1,1-Dichloroethene	75-35-4	0.20	ND
1,2-Dichloroethene (cis)	156-59-2	0.20	ND
1,2-Dichloroethene (trans)	156-60-5	0.20	ND
1,2-Dichloropropane	78-87-5	0.20	ND
1,3-Dichloropropene (cis)	10061-01-5	0.20	ND
1,3-Dichloropropene (trans)	10061-02-6	0.20	ND
1,2-Dichlorotetrafluoroethane	76-14-2	0.20	ND
1,4-Dioxane	123-91-1	0.20	ND
Ethylbenzene	100-41-4	0.20	ND
n-Heptane	142-82-5	0.20	ND
1,3-Hexachlorobutadiene	87-68-3	0.20	ND

Clean Canister Certification Report

Lab Sample Name:	**Clean Canister, Batch Master 3100**	**Data File:**	**AA6545**
Field Sample Name:	**Canister 3100**	**Date Analyzed:**	**5/21/2024**
Sample Volume:	**500ml**	**Matrix:**	**Air**

Canisters associated with this run: 3100, 3012, 5096, 5073 (used for E24-02427-01), 2886, 2066, 5092, 4867 (used for E24-02427-03)

Runs with this Clean Canister Certification:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6539BFB]	05/21/2024 09:54
10 PPBV DCVS [AA6540DCVS]	05/21/2024 11:12
10 PPBV LCS [AA6541LCS]	05/21/2024 11:47
METHOD BLANK [AA6542BLK]	05/21/2024 12:15
02 PPBV RLLCS [AA6543RLLCS]	05/21/2024 12:50
CLEAN CAN CERTIFICATION, BATCH MASTER 3052 [AA6544]	05/21/2024 15:02
CLEAN CAN CERTIFICATION, BATCH MASTER 3100 [AA6545]	05/21/2024 15:33
CLEAN CAN CERTIFICATION, BATCH MASTER 1571 [AA6546]	05/21/2024 16:03
10 PPBV CCCVS [AA6552CCCVS]	05/21/2024 19:21

This canister has been certified clean, all compounds are below 0.2 ppbv.

Compound	CAS #	RL (ppbv)	Calculated Amount (ppbv)
n-Hexane	110-54-3	0.20	ND
Methylene chloride	75-09-2	0.20	ND
Methyl ethyl ketone	78-93-3	0.20	ND
Methyl isobutyl ketone	108-10-1	0.20	ND
Methyl tert-butyl ether	1634-04-4	0.20	ND
Styrene	100-42-5	0.20	ND
Tert-butyl alcohol	75-65-0	0.20	ND
1,1,2,2-Tetrachloroethane	79-34-5	0.20	ND
Tetrachloroethene	127-18-4	0.20	ND
Toluene	108-88-3	0.20	ND
1,2,4-Trichlorobenzene	120-82-1	0.20	ND
1,1,1-Trichloroethane	71-55-6	0.20	ND
1,1,2-Trichloroethane	79-00-5	0.20	ND
Trichloroethene	79-01-6	0.20	ND
Trichlorofluoromethane	75-69-4	0.20	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.20	ND
1,2,4-Trimethylbenzene	95-63-6	0.20	ND
1,3,5-Trimethylbenzene	108-67-8	0.20	ND
2,2,4-Trimethylpentane	540-84-1	0.20	ND
Vinyl bromide	593-60-2	0.20	ND
Vinyl chloride	75-01-4	0.20	ND
Xylenes (m&p)	179601-23-1	0.40	ND
Xylenes (o)	95-47-6	0.20	ND

Data Path : C:\DATA\2024\05-2024\05-21-2024\
Data File : aa6545.D
Acq On : 21 May 2024 3:33 pm
Operator : jjw
Sample : 3100
Misc : 3012, 5096, 5073, 2886, 2066, 5092, 4867
ALS Vial : 19 Sample Multiplier: 1

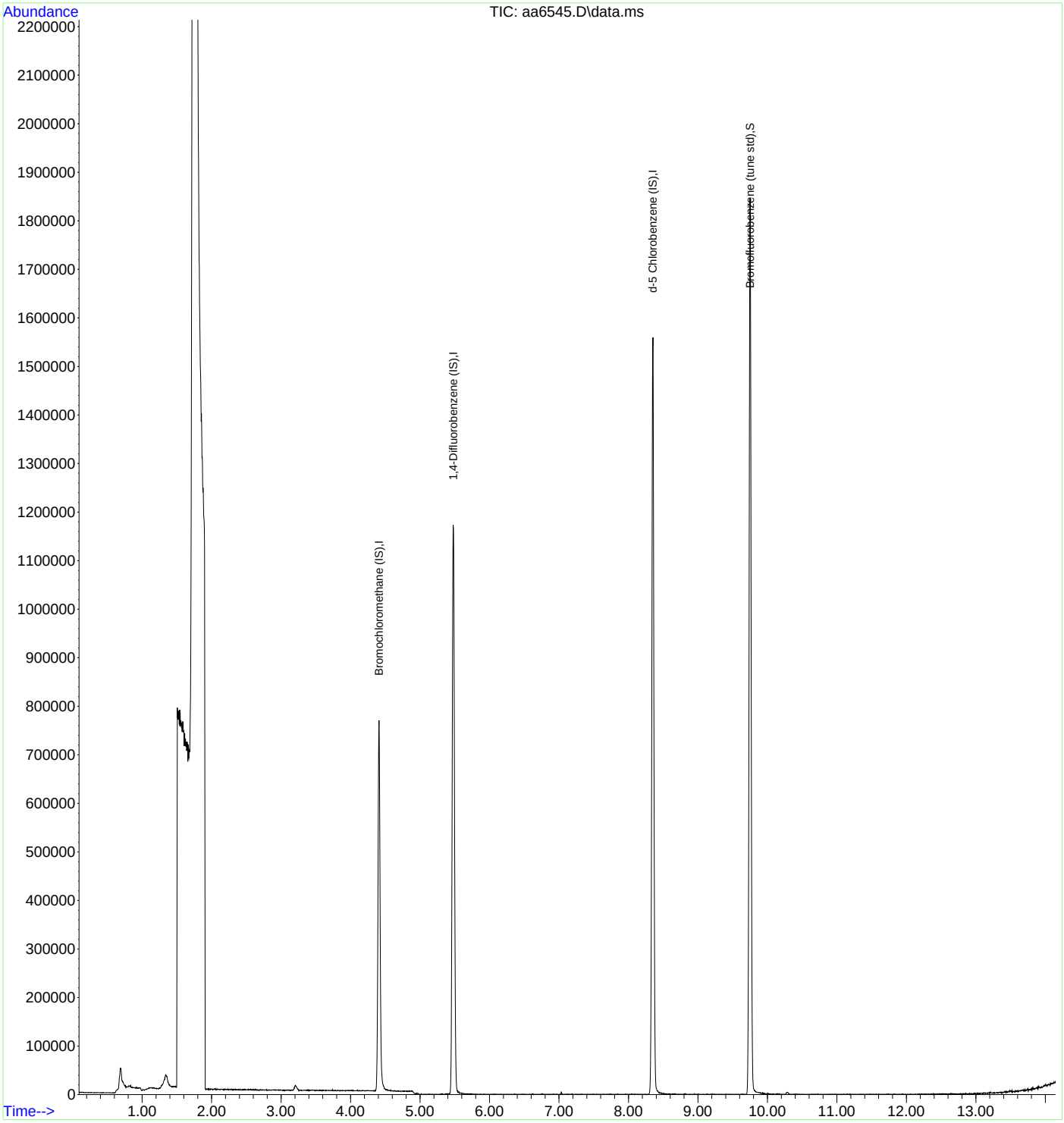
Quant Time: May 22 10:14:46 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.410	130	279835	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.478	114	1055298	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.352	117	985570	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.751	95	833847	9.43	ppbV	0.000
Target Compounds						Qvalue

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

Data Path : C:\DATA\2024\05-2024\05-21-2024\
Data File : aa6545.D
Acq On : 21 May 2024 3:33 pm
Operator : jjw
Sample : 3100
Misc : 3012, 5096, 5073, 2886, 2066, 5092, 4867
ALS Vial : 19 Sample Multiplier: 1

Quant Time: May 22 10:14:46 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES, LLC

Clean Canister Certification Report

Lab Sample Name:	**Clean Canister, Batch Master 4869**	**Data File:**	**AA6664**
Field Sample Name:	**Canister 4869**	**Date Analyzed:**	**6/6/2024**
Sample Volume:	**500ml**	**Matrix:**	**Air**

Canisters associated with this run: 4869, 2896B (used for E24-02427-04), 3786 (used for E24-02427-02), 4866, 5086, 3277, 3016, 3282

Runs with this Clean Canister Certification:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6657BFB]	06/06/2024 10:04
10 PPBV DCVS [AA6658DCVS]	06/06/2024 11:39
10 PPBV LCS [AA6659LCS]	06/06/2024 12:10
METHOD BLANK [AA6660BLK]	06/06/2024 12:40
02 PPBV RLLCS [AA6661RLLCS]	06/06/2024 13:14
CLEAN CAN CERTIFICATION, BATCH MASTER 4869 [AA6664]	06/06/2024 14:48
CLEAN CAN CERTIFICATION, BATCH MASTER 4856 [AA6665]	06/06/2024 15:20
CLEAN CAN CERTIFICATION, BATCH MASTER 3804 [AA6666]	06/06/2024 15:51
10 PPBV CCCVS [AA6676CCCVS]	06/06/2024 21:26

This canister has been certified clean, all compounds are below 0.2 ppbv.

Compound	CAS #	RL (ppbv)	Calculated Amount (ppbv)
Acetone	67-64-1	0.20	ND
Benzene	71-43-2	0.20	ND
Bromodichloromethane	75-27-4	0.20	ND
Bromoform	75-25-2	0.20	ND
Bromomethane	74-83-9	0.20	ND
1,3-Butadiene	106-99-0	0.20	ND
Chlorobenzene	108-90-7	0.20	ND
Chloroethane	75-00-3	0.20	ND
Chloroform	67-66-3	0.20	ND
Chloromethane	74-87-3	0.20	ND
Carbon disulfide	75-15-0	0.20	ND
Carbon tetrachloride	56-23-5	0.20	ND
Cyclohexane	110-82-7	0.20	ND
Dibromochloromethane	124-48-1	0.20	ND
1,2-Dibromoethane	106-93-4	0.20	ND
1,2-Dichlorobenzene	95-50-1	0.20	ND
1,3-Dichlorobenzene	541-73-1	0.20	ND
1,4-Dichlorobenzene	106-46-7	0.20	ND
Dichlorodifluoromethane	75-71-8	0.20	ND
1,1-Dichloroethane	75-34-3	0.20	ND
1,2-Dichloroethane	107-06-2	0.20	ND
1,1-Dichloroethene	75-35-4	0.20	ND
1,2-Dichloroethene (cis)	156-59-2	0.20	ND
1,2-Dichloroethene (trans)	156-60-5	0.20	ND
1,2-Dichloropropane	78-87-5	0.20	ND
1,3-Dichloropropene (cis)	10061-01-5	0.20	ND
1,3-Dichloropropene (trans)	10061-02-6	0.20	ND
1,2-Dichlorotetrafluoroethane	76-14-2	0.20	ND
1,4-Dioxane	123-91-1	0.20	ND
Ethylbenzene	100-41-4	0.20	ND
n-Heptane	142-82-5	0.20	ND
1,3-Hexachlorobutadiene	87-68-3	0.20	ND

Clean Canister Certification Report

Lab Sample Name:	**Clean Canister, Batch Master 4869**	**Data File:**	**AA6664**
Field Sample Name:	**Canister 4869**	**Date Analyzed:**	**6/6/2024**
Sample Volume:	**500ml**	**Matrix:**	**Air**

Canisters associated with this run: 4869, 2896B (used for E24-02427-04), 3786 (used for E24-02427-02), 4866, 5086, 3277, 3016, 3282

Runs with this Clean Canister Certification:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6657BFB]	06/06/2024 10:04
10 PPBV DCVS [AA6658DCVS]	06/06/2024 11:39
10 PPBV LCS [AA6659LCS]	06/06/2024 12:10
METHOD BLANK [AA6660BLK]	06/06/2024 12:40
02 PPBV RLLCS [AA6661RLLCS]	06/06/2024 13:14
CLEAN CAN CERTIFICATION, BATCH MASTER 4869 [AA6664]	06/06/2024 14:48
CLEAN CAN CERTIFICATION, BATCH MASTER 4856 [AA6665]	06/06/2024 15:20
CLEAN CAN CERTIFICATION, BATCH MASTER 3804 [AA6666]	06/06/2024 15:51
10 PPBV CCCVS [AA6676CCCVS]	06/06/2024 21:26

This canister has been certified clean, all compounds are below 0.2 ppbv.

Compound	CAS #	RL (ppbv)	Calculated Amount (ppbv)
n-Hexane	110-54-3	0.20	ND
Methylene chloride	75-09-2	0.20	ND
Methyl ethyl ketone	78-93-3	0.20	ND
Methyl isobutyl ketone	108-10-1	0.20	ND
Methyl tert-butyl ether	1634-04-4	0.20	ND
Styrene	100-42-5	0.20	ND
Tert-butyl alcohol	75-65-0	0.20	ND
1,1,2,2-Tetrachloroethane	79-34-5	0.20	ND
Tetrachloroethene	127-18-4	0.20	ND
Toluene	108-88-3	0.20	ND
1,2,4-Trichlorobenzene	120-82-1	0.20	ND
1,1,1-Trichloroethane	71-55-6	0.20	ND
1,1,2-Trichloroethane	79-00-5	0.20	ND
Trichloroethene	79-01-6	0.20	ND
Trichlorofluoromethane	75-69-4	0.20	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.20	ND
1,2,4-Trimethylbenzene	95-63-6	0.20	ND
1,3,5-Trimethylbenzene	108-67-8	0.20	ND
2,2,4-Trimethylpentane	540-84-1	0.20	ND
Vinyl bromide	593-60-2	0.20	ND
Vinyl chloride	75-01-4	0.20	ND
Xylenes (m&p)	179601-23-1	0.40	ND
Xylenes (o)	95-47-6	0.20	ND

Data Path : C:\DATA\2024\06-2024\06-06-2024\
Data File : aa6664.D
Acq On : 6 Jun 2024 2:48 pm
Operator : jjw
Sample : 4869
Misc : 5086, 3277, 3016, 3282, 2896B, 3786, 4866
ALS Vial : 8 Sample Multiplier: 1

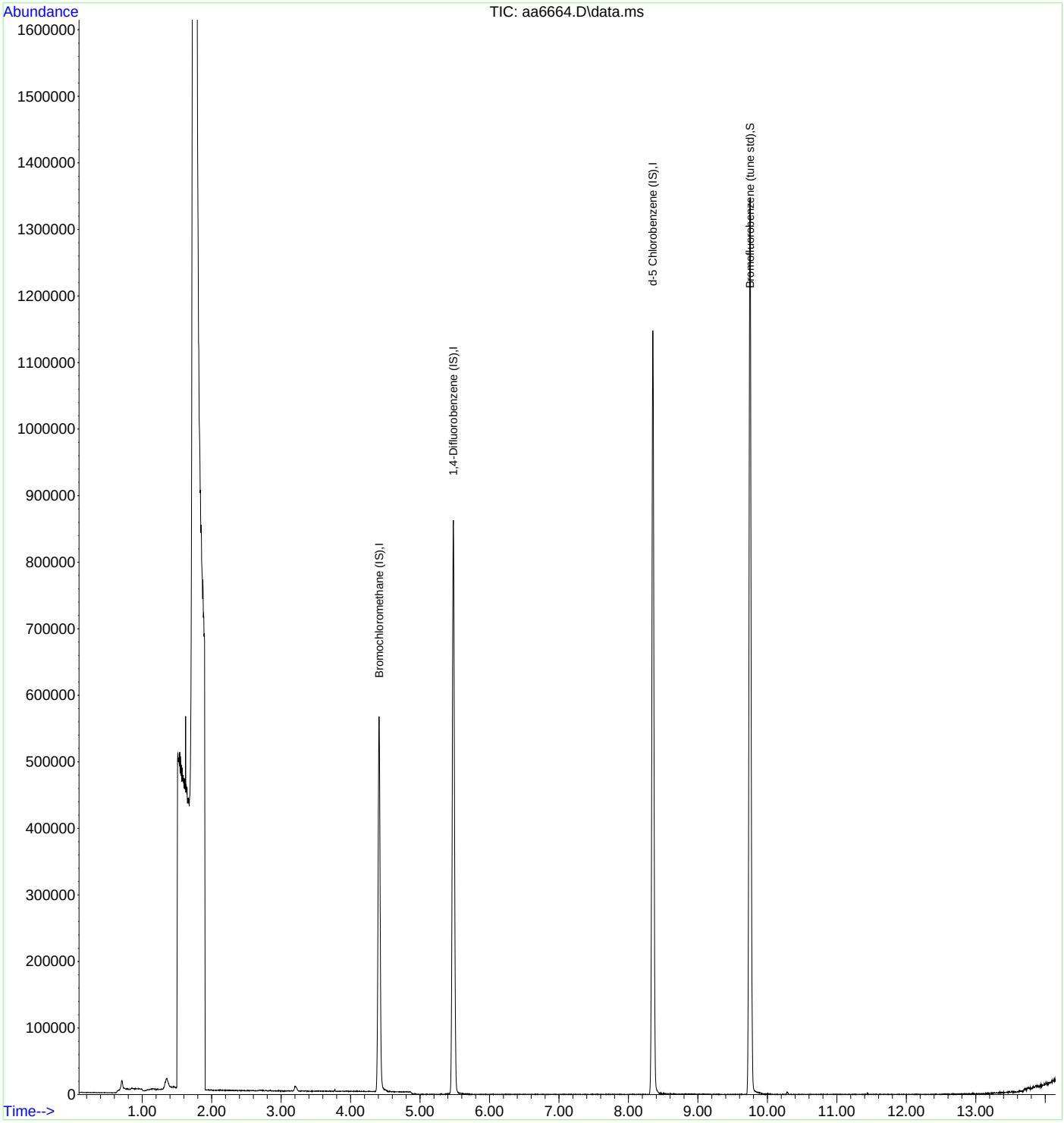
Quant Time: Jun 06 15:05:34 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.412	130	213430	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.480	114	778158	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.351	117	736788	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.749	95	624858	8.97	ppbV	0.000
Target Compounds						Qvalue

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

Data Path : C:\DATA\2024\06-2024\06-06-2024\
Data File : aa6664.D
Acq On : 6 Jun 2024 2:48 pm
Operator : jjw
Sample : 4869
Misc : 5086, 3277, 3016, 3282, 2896B, 3786, 4866
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 06 15:05:34 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration



LAST PAGE OF DOCUMENT

Integrated Analytical Laboratories LLC

ANALYTICAL DATA REPORT

JS Held - Hoboken
5 Marine View Plaza
Suite 401
Hoboken, NJ 07030

Project Name: **48-55 36TH ST**
IAL Case Number: **E24-02450**

These data have been reviewed and accepted by:

Michael H. Leffin, Ph.D.
Laboratory Director

This report shall not be reproduced, except in its entirety, without the written consent of Integrated Analytical Laboratories, LLC. The test results included in this report relate only to the samples analyzed. The results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252

IAL is a NELAP accredited lab (TNI01284) and maintains certification in Connecticut (PH-0699), New Jersey (14751), New York (11402) and Pennsylvania (68-00773).

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Sample Summary

IAL Case No.

E24-02450

Client JS Held - Hoboken

Project 48-55 36TH ST

Received On 7/17/2024@16:17

Lab ID	*Client Sample ID*	*Depth Top/Bottom*	*Sampling Time*	*Matrix*	*# of Container*
02450-001	SB-19	2.0/2.5	7/16/2024@18:00	Soil	4
02450-002	SB-20A	6.5/7.0	7/16/2024@18:35	Soil	4
02450-003	SB-20B	9.5/10.0	7/16/2024@18:40	Soil	4
02450-004	SB-14A	1/1.5	7/16/2024@19:00	Soil	4
02450-005	SB-14B	4.5/5.0	7/16/2024@19:05	Soil	4
02450-006	SB-21A	1/1.5	7/16/2024@20:00	Soil	4
02450-007	SB-21B	4.5/5	7/16/2024@20:05	Soil	4

Integrated Analytical Labs ~ 273 Franklin Road, Randolph, NJ 07869 ~ (973) 361-4252

DATA QUALIFIERS AND FLAGS

B	Indicates the analyte found in the associated method blank and in the sample due to potential lab contamination.
C	Indicates analyte is a common laboratory contaminant.
D	Indicates analyte was reported from diluted analysis.
E	Identifies a compound concentration that exceeds the upper level of the calibration range of the instrument
J	Indicates an estimated value either when the concentration in the sample is less than the RL or for qualification of TICs
J1	Indicates an estimated value when ICC or CCV did not meet the criteria.
M	Indicates matrix interference
N	Presumptive evidence of a compound from the use of GC/MS library search.
T	Sample analyzed outside of holding time
X	Indicates samples analyzed for total and dissolved metals differ at ≤20% RPD.
Y	Indicates DO depletion in the BOD blank is >0.20ppm
Z	Indicates internal standard failure. Sample results are either biased high or biased low.
$	Value outside NJDEP DKQP Limits
*	Result outside of QC limits

PROJECT NOTES

- All results for soils, solids, and sludges are reported on a dry-weight basis except where noted
- All test results and QC are compliant with TNI or other applicable state agency requirements/guidance unless otherwise notated in the case narrative and/or project information page.
- The case narrative for this SDG should be consulted to determine any non-conformances.
- Any samples with 15-minute or "analyze immediately" holding times (e.g. pH, Dissolved Oxygen, Sulfite, etc.) which are analyzed in the laboratory are considered out of holding time.
- IAL is a NELAP/TNI certified laboratory (TNI ID# TNI01284). IAL retains certification in Connecticut (PH-0699), New Jersey (14751), New York (11402), and Pennsylvania (68-00773).
- Certification is not required to perform analyses in the following states: AL, CO, DE, GA, HI, ID, IN, KY, MD, MI, MS, MO, MT, NE, NM, SD and TN. IAL can perform all analyses, except Drinking Water, within its scope of capabilities in these states.

ACRONYMS AND ABBREVIATIONS

CFU	Colony Forming Unit	ND	Indicates analyte was analyzed for but not detected at MDL or RL (only if MDL is not used)
CCB	Continuing Calibration Blank		
CCV	Continuing Calibration Verification	NTU	Nephelometric Turbidity Units
DF	Dilution Factor	ppb	Parts per billion. Reported as µg/L or µg/kg
DL	Attached as a suffix to a diluted sample	ppm	Parts per million. Reported as mg/L, µg/mL or mg/kg
DUP	Duplicate	QC	Quality Control
ICB	Initial Calibration Blank	% Rec	Percent Recovery
ICC	Initial Calibration Curve	RL	Reporting Limit. The RL is typically determined by the concentration of the lowest standard in the calibration curve
ICV	Initial Calibration Verification		
kg	kilogram		
L	Liter	RPD	Relative Percent Difference
LCS	Laboratory Control Sample	RSD	Relative Standard Deviation
LCSD	Laboratory Control Sample Duplicate	RT	Retention Time
MDL	Method Detection Limit as determined according to 40 CFR Part 136 Appendix B	SU	Standard Units
		TIC	Tentatively Identified Compound AKA Library Search Compounds
MF	Membrane Filter		
mg	milligram (1000mg = 1g)	TNI	The NELAC (National Environmental Laboratory Accreditation Council) Institute
µg	microgram (1000µg = 1mg)		
ml	milliliter (1000ml = 1L)	TNTC	Too numerous to count
µl	microliter (1000µl = 1ml)	*	When attached to a compound name, indicates this analyte was analyzed by Method SW-846 8270 SIM
µmhos	Conductivity units - resistance expressed in ohms		
MPN	Most Probable Number	^	When attached to a compound name, indicates this analyte was analyzed by Method SW-846 8011 or EPA 504.1
MS	Matrix Spike		
MSD	Matrix Spike Duplicate		
NA	Not applicable	<	Less than; In conjunction with a numerical value, indicates a concentration less than the RL or MDL
NC	Not calculated		

SAMPLE DELIVERY GROUP CASE NARRATIVE
(Conformance / Non-Conformance Summary)

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E24-02450

Integrated Analytical Laboratories, LLC. received seven (7) samples** from JS Held - Hoboken (IAL SDG# **E24-02450**, Project: 48-55 36TH ST) on July 17, 2024 for the analysis of :

(7) NY Part 375 VO

**Number of samples listed above may be greater than what is listed on the chain of custody. Any samples that require in-house filtration or splitting will be counted as separate samples.

Samples were received in good condition with documentation in order.
Cooler temperature was acceptable at 4 ± 2 degree C.

Volatiles By SW 8260D	**Batch: L240718-01**	**Matrix: Soil**

QC

- Calibration curve met QC criteria.
- Internal standards recovery met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- LCS percent recovery met QC criteria.
- MS/MSD RPD met QC criteria.
- MS/MSD percent recovery met QC criteria.

E24-02450

- All samples were received within holding time.
- All samples were analyzed within holding time.
- #005,006 and 007 were flagged with a C qualifier, indicating laboratory contamination for Methylene chloride. Methylene chloride is used as a solvent in the laboratory, resulting in occasional laboratory contamination.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E24-02450-001	1	NA
E24-02450-002	1	NA
E24-02450-003	1	NA
E24-02450-004	1	NA
E24-02450-005	1	NA
E24-02450-006	1	NA
E24-02450-007	1	NA

A review of the QA/QC measures for the analysis of the sample(s) contained in this report has been performed by:

Heather Reilly
Reviewed by

7/22/2024
Date

RESULTS SUMMARY REPORT

SUMMARY REPORT
Client: JS Held - Hoboken
Project: 48-55 36TH ST
Lab Case No.: E24-02450

Lab ID:	02450-001			02450-002			02450-003			02450-004		
Client ID:	SB-19			SB-20A			SB-20B			SB-14A		
Depth:	2.0/2.5			6.5/7.0			9.5/10.0			1/1.5		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date	7/16/24			7/16/24			7/16/24			7/16/24		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Volatiles (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Vinyl chloride	ND		0.000321	ND		0.000305	ND		0.000324	ND		0.000324
1,1-Dichloroethene	ND		0.000347	ND		0.000329	ND		0.00035	ND		0.00035
Acetone	0.015		0.00495	0.021		0.0047	0.040		0.005	0.052		0.005
Methylene chloride	ND		0.00297	ND		0.00282	ND		0.003	ND		0.003
trans-1,2-Dichloroethene	ND		0.00035	ND		0.000333	ND		0.000354	ND		0.000354
Methyl tert-butyl ether (MTBE)	ND		0.000216	ND		0.000205	ND		0.000218	ND		0.000218
1,1-Dichloroethane	ND		0.000252	ND		0.00024	ND		0.000255	ND		0.000255
cis-1,2-Dichloroethene	ND		0.000212	ND		0.000201	ND		0.000214	ND		0.000214
2-Butanone (MEK)	ND		0.00198	ND		0.00188	ND		0.002	ND		0.002
Chloroform	ND		0.000495	ND		0.00047	ND		0.0005	ND		0.0005
1,1,1-Trichloroethane	ND		0.000304	ND		0.000289	ND		0.000307	ND		0.000307
Carbon tetrachloride	ND		0.000198	ND		0.000188	ND		0.0002	ND		0.0002
1,2-Dichloroethane (EDC)	ND		0.000229	ND		0.000217	ND		0.000231	ND		0.000231
Benzene	ND		0.000244	ND		0.000231	ND		0.000246	ND		0.000246
Trichloroethene	ND		0.000148	ND		0.00014	ND		0.000149	ND		0.000149
Toluene	ND		0.000495	ND		0.00047	ND		0.0005	ND		0.0005
Tetrachloroethene	0.00132		0.000313	ND		0.000297	ND		0.000316	0.000364	J	0.000316
Chlorobenzene	ND		0.000171	ND		0.000163	ND		0.000173	ND		0.000173
Ethylbenzene	ND		0.00025	ND		0.000238	ND		0.000253	ND		0.000253
Total Xylenes	ND		0.000139	ND		0.000132	ND		0.00014	ND		0.00014
n-Propylbenzene	ND		0.000276	ND		0.000262	ND		0.000279	ND		0.000279
1,3,5-Trimethylbenzene	ND		0.00021	ND		0.000199	ND		0.000212	ND		0.000212
tert-Butylbenzene	ND		0.000218	ND		0.000207	ND		0.00022	ND		0.00022
1,2,4-Trimethylbenzene	ND		0.000268	ND		0.000255	ND		0.000271	ND		0.000271
sec-Butylbenzene	ND		0.000234	ND		0.000222	ND		0.000236	ND		0.000236
1,3-Dichlorobenzene	ND		0.000262	ND		0.000249	ND		0.000265	ND		0.000265
1,4-Dichlorobenzene	ND		0.000307	ND		0.000291	ND		0.00031	ND		0.00031
n-Butylbenzene	ND		0.000365	ND		0.000347	ND		0.000369	ND		0.000369
1,2-Dichlorobenzene	ND		0.000248	ND		0.000236	ND		0.000251	ND		0.000251
m,p-Xylene	ND		0.000259	ND		0.000246	ND		0.000262	ND		0.000262
o-Xylene	ND		0.000139	ND		0.000132	ND		0.00014	ND		0.00014
TOTAL VO's:	0.016			0.021			0.040			0.052	J	

ND = Analyzed for but Not Detected at the MDL
J = Indicates an estimated value either when the concentration in the sample is greater than MDL and less than RL, or for qualification of TICs

SUMMARY REPORT
Client: JS Held - Hoboken
Project: 48-55 36TH ST
Lab Case No.: E24-02450

Lab ID:	02450-005			02450-006			02450-007		
Client ID:	SB-14B			SB-21A			SB-21B		
Depth:	4.5/5.0			1/1.5			4.5/5		
Matrix:	Soil			Soil			Soil		
Sampled Date	7/16/24			7/16/24			7/16/24		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Volatiles (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Vinyl chloride	ND		0.000369	ND		0.000561	ND		0.000347
1,1-Dichloroethene	ND		0.000399	ND		0.000606	ND		0.000375
Acetone	0.032		0.0057	0.019		0.00865	0.034		0.00535
Methylene chloride	0.00379	CJ	0.00342	0.00671	CJ	0.00519	0.0036	CJ	0.00321
trans-1,2-Dichloroethene	ND		0.000404	ND		0.000612	ND		0.000379
Methyl tert-butyl ether (MTBE)	ND		0.000249	ND		0.000377	ND		0.000233
1,1-Dichloroethane	ND		0.000291	ND		0.000441	ND		0.000273
cis-1,2-Dichloroethene	ND		0.000244	ND		0.00037	ND		0.000229
2-Butanone (MEK)	ND		0.00228	ND		0.00346	ND		0.00214
Chloroform	ND		0.00057	ND		0.000865	ND		0.000535
1,1,1-Trichloroethane	ND		0.00035	ND		0.000531	ND		0.000328
Carbon tetrachloride	ND		0.000228	ND		0.000346	ND		0.000214
1,2-Dichloroethane (EDC)	ND		0.000263	ND		0.0004	ND		0.000247
Benzene	ND		0.00028	ND		0.000426	ND		0.000263
Trichloroethene	ND		0.00017	ND		0.000258	ND		0.000159
Toluene	ND		0.00057	ND		0.000865	ND		0.000535
Tetrachloroethene	ND		0.00036	0.012		0.000547	ND		0.000338
Chlorobenzene	ND		0.000197	ND		0.000299	ND		0.000185
Ethylbenzene	ND		0.000288	ND		0.000438	ND		0.000271
Total Xylenes	ND		0.00016	ND		0.000242	ND		0.00015
n-Propylbenzene	ND		0.000318	ND		0.000483	ND		0.000299
1,3,5-Trimethylbenzene	ND		0.000242	ND		0.000367	ND		0.000227
tert-Butylbenzene	ND		0.000251	ND		0.000381	ND		0.000235
1,2,4-Trimethylbenzene	ND		0.000309	ND		0.000469	ND		0.00029
sec-Butylbenzene	ND		0.000269	ND		0.000408	ND		0.000253
1,3-Dichlorobenzene	ND		0.000302	ND		0.000458	ND		0.000284
1,4-Dichlorobenzene	ND		0.000353	ND		0.000536	ND		0.000332
n-Butylbenzene	ND		0.000421	ND		0.000638	ND		0.000395
1,2-Dichlorobenzene	ND		0.000286	ND		0.000434	ND		0.000269
m,p-Xylene	ND		0.000299	ND		0.000453	ND		0.00028
o-Xylene	ND		0.00016	ND		0.000242	ND		0.00015
TOTAL VO's:	0.036	CJ		0.038	CJ		0.038	CJ	

ND = Analyzed for but Not Detected at the MDL
C = Common Laboratory and/or Bottle Contaminant.
J = Indicates an estimated value either when the concentration in the sample is greater than MDL and less than RL, or for qualification of TICs

ANALYTICAL RESULTS

VOLATILE ORGANICS

Lab ID: E24-02450-001
Client ID: SB-19/2.0-2.
Date Received: 07/17/2024
Date Analyzed: 07/18/2024
Data file: L0149.D 07/18/2024 17:45

GC/MS Column: DB-624
Sample wt/vol: 5.36g
Matrix-Units: Soil-mg/Kg
% Moisture: 5.6
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Vinyl chloride	ND		0.00099	0.000321
1,1-Dichloroethene	ND		0.00099	0.000347
Acetone	0.015		0.0099	0.00495
Methylene chloride	ND		0.00495	0.00297
trans-1,2-Dichloroethene	ND		0.00099	0.00035
Methyl tert-butyl ether (MTBE)	ND		0.00099	0.000216
1,1-Dichloroethane	ND		0.00099	0.000252
cis-1,2-Dichloroethene	ND		0.00099	0.000212
2-Butanone (MEK)	ND		0.0099	0.00198
Chloroform	ND		0.00099	0.000495
1,1,1-Trichloroethane	ND		0.00099	0.000304
Carbon tetrachloride	ND		0.00099	0.000198
1,2-Dichloroethane (EDC)	ND		0.00099	0.000229
Benzene	ND		0.00099	0.000244
Trichloroethene	ND		0.00099	0.000148
Toluene	ND		0.00099	0.000495
Tetrachloroethene	0.00132		0.00099	0.000313
Chlorobenzene	ND		0.00099	0.000171
Ethylbenzene	ND		0.00099	0.00025
Total Xylenes	ND		0.00198	0.000139
n-Propylbenzene	ND		0.00099	0.000276
1,3,5-Trimethylbenzene	ND		0.00099	0.00021
tert-Butylbenzene	ND		0.00099	0.000218
1,2,4-Trimethylbenzene	ND		0.00099	0.000268
sec-Butylbenzene	ND		0.00099	0.000234
1,3-Dichlorobenzene	ND		0.00099	0.000262
1,4-Dichlorobenzene	ND		0.00099	0.000307
n-Butylbenzene	ND		0.00099	0.000365
1,2-Dichlorobenzene	ND		0.00099	0.000248
m,p-Xylene	ND		0.00198	0.000259
o-Xylene	ND		0.00099	0.000139

Total Target Compounds (31): 0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

VOLATILE ORGANICS

Lab ID: E24-02450-002
Client ID: SB-20A/6.5-7
Date Received: 07/17/2024
Date Analyzed: 07/18/2024
Data file: L0143.D 07/18/2024 14:54

GC/MS Column: DB-624
Sample wt/vol: 5.62g
Matrix-Units: Soil-mg/Kg
% Moisture: 5.1
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Vinyl chloride	ND		0.00094	0.000305
1,1-Dichloroethene	ND		0.00094	0.000329
Acetone	0.021		0.0094	0.0047
Methylene chloride	ND		0.0047	0.00282
trans-1,2-Dichloroethene	ND		0.00094	0.000333
Methyl tert-butyl ether (MTBE)	ND		0.00094	0.000205
1,1-Dichloroethane	ND		0.00094	0.00024
cis-1,2-Dichloroethene	ND		0.00094	0.000201
2-Butanone (MEK)	ND		0.0094	0.00188
Chloroform	ND		0.00094	0.00047
1,1,1-Trichloroethane	ND		0.00094	0.000289
Carbon tetrachloride	ND		0.00094	0.000188
1,2-Dichloroethane (EDC)	ND		0.00094	0.000217
Benzene	ND		0.00094	0.000231
Trichloroethene	ND		0.00094	0.00014
Toluene	ND		0.00094	0.00047
Tetrachloroethene	ND		0.00094	0.000297
Chlorobenzene	ND		0.00094	0.000163
Ethylbenzene	ND		0.00094	0.000238
Total Xylenes	ND		0.00188	0.000132
n-Propylbenzene	ND		0.00094	0.000262
1,3,5-Trimethylbenzene	ND		0.00094	0.000199
tert-Butylbenzene	ND		0.00094	0.000207
1,2,4-Trimethylbenzene	ND		0.00094	0.000255
sec-Butylbenzene	ND		0.00094	0.000222
1,3-Dichlorobenzene	ND		0.00094	0.000249
1,4-Dichlorobenzene	ND		0.00094	0.000291
n-Butylbenzene	ND		0.00094	0.000347
1,2-Dichlorobenzene	ND		0.00094	0.000236
m,p-Xylene	ND		0.00188	0.000246
o-Xylene	ND		0.00094	0.000132

Total Target Compounds (31): 0.021

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

VOLATILE ORGANICS

Lab ID: E24-02450-003
Client ID: SB-20B/9.5-1
Date Received: 07/17/2024
Date Analyzed: 07/18/2024
Data file: L0144.D 07/18/2024 15:22

GC/MS Column: DB-624
Sample wt/vol: 5.17g
Matrix-Units: Soil-mg/Kg
% Moisture: 3.1
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Vinyl chloride	ND		0.001	0.000324
1,1-Dichloroethene	ND		0.001	0.00035
Acetone	0.040		0.010	0.005
Methylene chloride	ND		0.005	0.003
trans-1,2-Dichloroethene	ND		0.001	0.000354
Methyl tert-butyl ether (MTBE)	ND		0.001	0.000218
1,1-Dichloroethane	ND		0.001	0.000255
cis-1,2-Dichloroethene	ND		0.001	0.000214
2-Butanone (MEK)	ND		0.010	0.002
Chloroform	ND		0.001	0.0005
1,1,1-Trichloroethane	ND		0.001	0.000307
Carbon tetrachloride	ND		0.001	0.0002
1,2-Dichloroethane (EDC)	ND		0.001	0.000231
Benzene	ND		0.001	0.000246
Trichloroethene	ND		0.001	0.000149
Toluene	ND		0.001	0.0005
Tetrachloroethene	ND		0.001	0.000316
Chlorobenzene	ND		0.001	0.000173
Ethylbenzene	ND		0.001	0.000253
Total Xylenes	ND		0.002	0.00014
n-Propylbenzene	ND		0.001	0.000279
1,3,5-Trimethylbenzene	ND		0.001	0.000212
tert-Butylbenzene	ND		0.001	0.00022
1,2,4-Trimethylbenzene	ND		0.001	0.000271
sec-Butylbenzene	ND		0.001	0.000236
1,3-Dichlorobenzene	ND		0.001	0.000265
1,4-Dichlorobenzene	ND		0.001	0.00031
n-Butylbenzene	ND		0.001	0.000369
1,2-Dichlorobenzene	ND		0.001	0.000251
m,p-Xylene	ND		0.002	0.000262
o-Xylene	ND		0.001	0.00014

Total Target Compounds (31): 0.040

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

VOLATILE ORGANICS

Lab ID: E24-02450-004
Client ID: SB-14A/1-1.5
Date Received: 07/17/2024
Date Analyzed: 07/18/2024
Data file: L0145.D 07/18/2024 15:50

GC/MS Column: DB-624
Sample wt/vol: 5.30g
Matrix-Units: Soil-mg/Kg
% Moisture: 5.2
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Vinyl chloride	ND		0.001	0.000324
1,1-Dichloroethene	ND		0.001	0.00035
Acetone	0.052		0.010	0.005
Methylene chloride	ND		0.005	0.003
trans-1,2-Dichloroethene	ND		0.001	0.000354
Methyl tert-butyl ether (MTBE)	ND		0.001	0.000218
1,1-Dichloroethane	ND		0.001	0.000255
cis-1,2-Dichloroethene	ND		0.001	0.000214
2-Butanone (MEK)	ND		0.010	0.002
Chloroform	ND		0.001	0.0005
1,1,1-Trichloroethane	ND		0.001	0.000307
Carbon tetrachloride	ND		0.001	0.0002
1,2-Dichloroethane (EDC)	ND		0.001	0.000231
Benzene	ND		0.001	0.000246
Trichloroethene	ND		0.001	0.000149
Toluene	ND		0.001	0.0005
Tetrachloroethene	0.000364	J	0.001	0.000316
Chlorobenzene	ND		0.001	0.000173
Ethylbenzene	ND		0.001	0.000253
Total Xylenes	ND		0.002	0.00014
n-Propylbenzene	ND		0.001	0.000279
1,3,5-Trimethylbenzene	ND		0.001	0.000212
tert-Butylbenzene	ND		0.001	0.00022
1,2,4-Trimethylbenzene	ND		0.001	0.000271
sec-Butylbenzene	ND		0.001	0.000236
1,3-Dichlorobenzene	ND		0.001	0.000265
1,4-Dichlorobenzene	ND		0.001	0.00031
n-Butylbenzene	ND		0.001	0.000369
1,2-Dichlorobenzene	ND		0.001	0.000251
m,p-Xylene	ND		0.002	0.000262
o-Xylene	ND		0.001	0.00014
Total Target Compounds (31):	0.052	J		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

VOLATILE ORGANICS

Lab ID: E24-02450-005
Client ID: SB-14B/4.5-5
Date Received: 07/17/2024
Date Analyzed: 07/18/2024
Data file: L0146.D 07/18/2024 16:19

GC/MS Column: DB-624
Sample wt/vol: 4.46g
Matrix-Units: Soil-mg/Kg
% Moisture: 1.40
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Vinyl chloride	ND		0.00114	0.000369
1,1-Dichloroethene	ND		0.00114	0.000399
Acetone	0.032		0.011	0.0057
Methylene chloride	0.00379	CJ	0.0057	0.00342
trans-1,2-Dichloroethene	ND		0.00114	0.000404
Methyl tert-butyl ether (MTBE)	ND		0.00114	0.000249
1,1-Dichloroethane	ND		0.00114	0.000291
cis-1,2-Dichloroethene	ND		0.00114	0.000244
2-Butanone (MEK)	ND		0.011	0.00228
Chloroform	ND		0.00114	0.00057
1,1,1-Trichloroethane	ND		0.00114	0.00035
Carbon tetrachloride	ND		0.00114	0.000228
1,2-Dichloroethane (EDC)	ND		0.00114	0.000263
Benzene	ND		0.00114	0.00028
Trichloroethene	ND		0.00114	0.00017
Toluene	ND		0.00114	0.00057
Tetrachloroethene	ND		0.00114	0.00036
Chlorobenzene	ND		0.00114	0.000197
Ethylbenzene	ND		0.00114	0.000288
Total Xylenes	ND		0.00228	0.00016
n-Propylbenzene	ND		0.00114	0.000318
1,3,5-Trimethylbenzene	ND		0.00114	0.000242
tert-Butylbenzene	ND		0.00114	0.000251
1,2,4-Trimethylbenzene	ND		0.00114	0.000309
sec-Butylbenzene	ND		0.00114	0.000269
1,3-Dichlorobenzene	ND		0.00114	0.000302
1,4-Dichlorobenzene	ND		0.00114	0.000353
n-Butylbenzene	ND		0.00114	0.000421
1,2-Dichlorobenzene	ND		0.00114	0.000286
m,p-Xylene	ND		0.00228	0.000299
o-Xylene	ND		0.00114	0.00016
Total Target Compounds (31):	0.035	CJ		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

VOLATILE ORGANICS

Lab ID: E24-02450-006
Client ID: SB-21A/1-1.5
Date Received: 07/17/2024
Date Analyzed: 07/18/2024
Data file: L0147.D 07/18/2024 16:47

GC/MS Column: DB-624
Sample wt/vol: 3.35g
Matrix-Units: Soil-mg/Kg
% Moisture: 13.7
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Vinyl chloride	ND		0.00173	0.000561
1,1-Dichloroethene	ND		0.00173	0.000606
Acetone	0.019		0.017	0.00865
Methylene chloride	0.00671	CJ	0.00865	0.00519
trans-1,2-Dichloroethene	ND		0.00173	0.000612
Methyl tert-butyl ether (MTBE)	ND		0.00173	0.000377
1,1-Dichloroethane	ND		0.00173	0.000441
cis-1,2-Dichloroethene	ND		0.00173	0.00037
2-Butanone (MEK)	ND		0.017	0.00346
Chloroform	ND		0.00173	0.000865
1,1,1-Trichloroethane	ND		0.00173	0.000531
Carbon tetrachloride	ND		0.00173	0.000346
1,2-Dichloroethane (EDC)	ND		0.00173	0.0004
Benzene	ND		0.00173	0.000426
Trichloroethene	ND		0.00173	0.000258
Toluene	ND		0.00173	0.000865
Tetrachloroethene	0.012		0.00173	0.000547
Chlorobenzene	ND		0.00173	0.000299
Ethylbenzene	ND		0.00173	0.000438
Total Xylenes	ND		0.00346	0.000242
n-Propylbenzene	ND		0.00173	0.000483
1,3,5-Trimethylbenzene	ND		0.00173	0.000367
tert-Butylbenzene	ND		0.00173	0.000381
1,2,4-Trimethylbenzene	ND		0.00173	0.000469
sec-Butylbenzene	ND		0.00173	0.000408
1,3-Dichlorobenzene	ND		0.00173	0.000458
1,4-Dichlorobenzene	ND		0.00173	0.000536
n-Butylbenzene	ND		0.00173	0.000638
1,2-Dichlorobenzene	ND		0.00173	0.000434
m,p-Xylene	ND		0.00346	0.000453
o-Xylene	ND		0.00173	0.000242
Total Target Compounds (31):	0.037	CJ		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

VOLATILE ORGANICS

Lab ID: E24-02450-007
Client ID: SB-21B/4.5-1
Date Received: 07/17/2024
Date Analyzed: 07/18/2024
Data file: L0148.D 07/18/2024 17:17

GC/MS Column: DB-624
Sample wt/vol: 4.99g
Matrix-Units: Soil-mg/Kg
% Moisture: 6.40
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Vinyl chloride	ND		0.00107	0.000347
1,1-Dichloroethene	ND		0.00107	0.000375
Acetone	0.034		0.011	0.00535
Methylene chloride	0.0036	CJ	0.00535	0.00321
trans-1,2-Dichloroethene	ND		0.00107	0.000379
Methyl tert-butyl ether (MTBE)	ND		0.00107	0.000233
1,1-Dichloroethane	ND		0.00107	0.000273
cis-1,2-Dichloroethene	ND		0.00107	0.000229
2-Butanone (MEK)	ND		0.011	0.00214
Chloroform	ND		0.00107	0.000535
1,1,1-Trichloroethane	ND		0.00107	0.000328
Carbon tetrachloride	ND		0.00107	0.000214
1,2-Dichloroethane (EDC)	ND		0.00107	0.000247
Benzene	ND		0.00107	0.000263
Trichloroethene	ND		0.00107	0.000159
Toluene	ND		0.00107	0.000535
Tetrachloroethene	ND		0.00107	0.000338
Chlorobenzene	ND		0.00107	0.000185
Ethylbenzene	ND		0.00107	0.000271
Total Xylenes	ND		0.00214	0.00015
n-Propylbenzene	ND		0.00107	0.000299
1,3,5-Trimethylbenzene	ND		0.00107	0.000227
tert-Butylbenzene	ND		0.00107	0.000235
1,2,4-Trimethylbenzene	ND		0.00107	0.00029
sec-Butylbenzene	ND		0.00107	0.000253
1,3-Dichlorobenzene	ND		0.00107	0.000284
1,4-Dichlorobenzene	ND		0.00107	0.000332
n-Butylbenzene	ND		0.00107	0.000395
1,2-Dichlorobenzene	ND		0.00107	0.000269
m,p-Xylene	ND		0.00214	0.00028
o-Xylene	ND		0.00107	0.00015
Total Target Compounds (31):	0.038	CJ		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

VOLATILE ORGANICS

Lab ID: BLKS240718-01
Client ID: BLKS240718-01
Date Received:
Date Analyzed: 07/18/2024
Data file: L0136.D 07/18/2024 11:35

GC/MS Column: DB-624
Sample wt/vol: 5.00g
Matrix-Units: Soil-mg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Vinyl chloride	ND		0.001	0.000324
1,1-Dichloroethene	ND		0.001	0.00035
Acetone	ND		0.010	0.005
Methylene chloride	ND		0.005	0.003
trans-1,2-Dichloroethene	ND		0.001	0.000354
Methyl tert-butyl ether (MTBE)	ND		0.001	0.000218
1,1-Dichloroethane	ND		0.001	0.000255
cis-1,2-Dichloroethene	ND		0.001	0.000214
2-Butanone (MEK)	ND		0.010	0.002
Chloroform	ND		0.001	0.0005
1,1,1-Trichloroethane	ND		0.001	0.000307
Carbon tetrachloride	ND		0.001	0.0002
1,2-Dichloroethane (EDC)	ND		0.001	0.000231
Benzene	ND		0.001	0.000246
Trichloroethene	ND		0.001	0.000149
Toluene	ND		0.001	0.0005
Tetrachloroethene	ND		0.001	0.000316
Chlorobenzene	ND		0.001	0.000173
Ethylbenzene	ND		0.001	0.000253
Total Xylenes	ND		0.002	0.00014
n-Propylbenzene	ND		0.001	0.000279
1,3,5-Trimethylbenzene	ND		0.001	0.000212
tert-Butylbenzene	ND		0.001	0.00022
1,2,4-Trimethylbenzene	ND		0.001	0.000271
sec-Butylbenzene	ND		0.001	0.000236
1,3-Dichlorobenzene	ND		0.001	0.000265
1,4-Dichlorobenzene	ND		0.001	0.00031
n-Butylbenzene	ND		0.001	0.000369
1,2-Dichlorobenzene	ND		0.001	0.000251
m,p-Xylene	ND		0.002	0.000262
o-Xylene	ND		0.001	0.00014

Total Target Compounds (31): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

SAMPLE TRACKING

FINALIZED 07/24/2024

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Chain of Custody Record

Contact Us: 973-361-4252
Web: www.ialonline.com

Customer Information	Reporting Information
Company: JS Held LLC	☒ Check here if same as "Customer Information"
Address: 5 Marine View Plaza Suite 401, Hoboken, NJ	REPORT TO:
Telephone #: 201-876-9400	Address:
Project Manager: Leah DeGidio	Attn:
Email Address(es): LdeGidio@jsheld.com	INVOICE TO:
Project Name:	Address:
Project Location (State): ~~NJ~~ (NY)	Attn:
Bottle Order #:	PO # 240302017
☒ "Report to"/"Invoice To" same as above	Quote #
Sampled by: JT	
COMPLETED BY IAL: ____ Field Sampling ____ Equipment Rental	

Rush TAT Charge
24 hr - 100%...
48 hr - 75%....
72 hr - 50%....
96 hr - 35%....
5 day - 25%....
6-9 day - 10%

Deliverables *Surchage may apply for regulatory

NJ, CT, PA	NY
☐ Results Only (Level I)	☒ ASP Category A
☐ Reduced (Level II/III)	☐ ASP Category B*
☐ Regulatory/ Full* (Level IV)	

EDDs
☐ NJ SRP
☐ NYSDEC EQuIS
☐ lab approved custom EDD
☐ NO EDD REQ'D

Concentrations Expected: (Low) Med High
Known Hazard: ☐ YES ☐ NO
Describe:

Turn-Around Time (TAT)
Standard (10 business days) Verbal
Rush/date needed (only if pre-approved)** 72-Hr rush
Hard Copy: Standard 3 week Other - call for price

Petroleum Hydrocarbons - Selection is REQUIRED
☐ NJ EPH-DRO - Category 1 — TAT for PHC, if other than 2 weeks:
☐ NJ EPH-C40 - Category 2 ☐ CT ETPH
☐ NJ EPH-Fractionated - Cat 2 ☐ DRO-8015

Regulatory Requirement

New Jersey	New York
☐ GWQS	☐ AWQS (TOGS Table 1)
☐ 2017 SRS/IGW	☐ GWEL (TOGS Table 5)
☐ 2021 SRS/MGW	☒ Part 375-6.8(a) - Unrestricted
☐ Ecological	☒ Part 375-6.8(b) - Restricted
☐ DW	☒ CP-51 Table 2 or 3 (selection required)
☐ SPLP	

Other States / Criteria
☐ Pennsylvania Act 2
☐ CT RCSA 22a-133k1-k3
☐ TSCA PCBs
OTHER Regulatory Requirements - specify in comments

Sample Matrix
DW - Drinking Water; WW - Waste Water; GW - Groundwater; SW - Surface Water; LIQ - Liquid (specify); M - Multiphasic; OI - Oil; S - Soil; SED - Sediment; SOL - Solid (specify); SL - Sludge; W - Wipe

SAMPLE INFORMATION

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# containers	IAL #	ANALYTICAL PARAMETERS (please note if contingent) VOC + 15	Sample Specific Notes:
SB-19	2.0-2.5	7/16/24	18:00	S	4	1	X	
SB-20A	6.5-7.0	↓	18:35	↓	↓	2	X	
SB-20B	9.5-10.0		18:40			3	H	
SB-14A	1-1.5		19:00			4	X	
SB-14B	4.5-5.0		19:05			5	H	
SB-21A	1-1.5		20:00			6	X	SB-21A
SB-21B	4.5-5	↓	20:05	↓	↓	7	H	SB-21B

Samples previously analyzed by IAL? YES / NO

Preservative Code: 1 = None; 2 = HCl; 3 = HNO3; 4 = MeOH; 5 = NaOH; 6 = H2SO4; 7 = Other
Container Code: A = Amber Glass; B = Plastic; C = Vial; D = Glass; E = EnCore; T = Terracore
Preservative (use code)
Container Type (use code)

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time (TAT) will not start until any ambiguities have been resolved. TAT starts the following day if samples rec'd at lab ≥ 5PM. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY IAL'S TERMS & CONDITIONS (found on rear of pink copy).

Carrier (check one):
☐ IAL Courier
☐ Client Courier
☐ FedEx/UPS***
***Tracking #:

Special Instructions/QC Requirements & Comments:
X - run analysis
H - hold

Relinquished by (Signature and Company)	Date	Time	Received by (Signature and Company)	Date	Time
JS Held Jake Twill	7/17/24	1145	Steph Tinley	7/17/24	1146
Steph Tinley	7/17/24	1617		7/17/24	1617

FOR LAB USE ONLY
SDG #: 24450
Cooler Temp: 4 °C

IAL Rev 06/2021

LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

Certification IDs: TNI (TNI01284); CT (PH-0699); NJ (14751); NY (11402); PA (68-00773).

PAGE: 1 of 1

INTEGRATED ANALYTICAL LABORATORIES, LLC

Jul 19, 2024 @ 09:48

PROJECT INFORMATION

RUSH

E24-02450: 48-55 36TH ST

To: Leah DeEgidio
JS Held - Hoboken
Fax: 201-626-8095
EMail: Ldeegidio@jsheld.com

Report To

JS Held - Hoboken
5 Marine View Plaza
Suite 401
Hoboken, NJ 07030
Attn: Leah DeEgidio

Bill To

JS Held - Hoboken
J.S. Held
50 Jericho Quadrangle, Suite 117
Jericho, NY 11753
Attn: Accounts Payable

Report Format	P.O. #	Received At Lab	PHC Due	Verbal Due	Hardcopy Due
Category A	240302017	Jul 17, 2024 @ 16:17	NA	Jul 22, 2024	Aug 07, 2024 *

* Any ***Conditional or Hold*** status will delay final hardcopy report sent date.

Diskette Req. Not Required

Criteria Requirement: NY Part 375-6.8(UUSCO+RUSCO)

Lab ID	Client Sample ID	Depth	Sampling Time	Matrix	Unit	Field pH/Temp
02450-001	SB-19	2.0/2.5	07/16/24@18:00	Soil	mg/Kg (ppm)	
02450-002	SB-20A	6.5/7.0	07/16/24@18:35	Soil	mg/Kg (ppm)	
02450-003	SB-20B	9.5/10.0	07/16/24@18:40	Soil	mg/Kg (ppm)	
02450-004	SB-14A	1/1.5	07/16/24@19:00	Soil	mg/Kg (ppm)	
02450-005	SB-14B	4.5/5.0	07/16/24@19:05	Soil	mg/Kg (ppm)	
02450-006	SB-21A	1/1.5	07/16/24@20:00	Soil	mg/Kg (ppm)	
02450-007	SB-21B	4.5/5	07/16/24@20:05	Soil	mg/Kg (ppm)	

* No Cert = IAL does not hold certification for this test/method

Sample #	Test	Status	Analytical Method	TAT	Holding Time Expires
001	NY Part 375 VO	Analyze	8260D	RUSH 72 HRS	7/30/2024
002	NY Part 375 VO	Analyze	8260D	RUSH 72 HRS	7/30/2024
003	NY Part 375 VO	Analyze	8260D	RUSH 72 HRS	7/30/2024
004	NY Part 375 VO	Analyze	8260D	RUSH 72 HRS	7/30/2024
005	NY Part 375 VO	Analyze	8260D	RUSH 72 HRS	7/30/2024
006	NY Part 375 VO	Analyze	8260D	RUSH 72 HRS	7/30/2024
007	NY Part 375 VO	Analyze	8260D	RUSH 72 HRS	7/30/2024

Project Notes:

NOTE 2 taken by kfalconer on 07/18/2024 10:52
PER LEAH D, ANALYZE FOR NY PART 375 VO LIST.

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Jul 19, 2024 @ 09:48

PROJECT INFORMATION

RUSH

E24-02450: 48-55 36TH ST

NOTE 3 taken by kfalconer on 07/18/2024 10:53
PER BEN NEUMANN, ANALYZE ALL SAMPLES.

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SAMPLE RECEIPT VERIFICATION

CASE NO: **E 24** **02450** CLIENT: JS Held

COOLER TEMPERATURE: 2° - 6°C: ✓ (See Chain of Custody)

COC: (COMPLETE) / INCOMPLETE

Comments

KEY
✓ = YES/NA
✗ = NO

VOA received: (check one) ☐ Encore ☒ Terra Core ☐ IGW - Methanol ☐ No Preservative

✓	Bottles Intact
✓	no-Missing Bottles
✓	no-Extra Bottles
✓	Sufficient Sample Volume
✓	no-headspace/bubbles in VOs
✓	Labels intact/correct
✓	pH Check[1] (refer to Receipt pH Log)
✓	Correct bottles/preservative
✓	Sufficient Holding/Prep Time[1]
☐	Multiphasic Sample
☐	Sample to be Subcontracted
✓	**Chain of Custody is Clear**

[1] All samples with "Analyze Immediately" holding times will be analyzed by this laboratory past the holding time. This includes but is not limited to the following tests: pH, Temperature, Free Residual Chlorine, Total Residual Chlorine, Dissolved Oxygen, Sulfite.

ADDITIONAL COMMENTS:

SAMPLE(S) VERIFIED BY: INITIAL CRonK DATE 7/17/24

CORRECTIVE ACTION REQUIRED: **YES** ☐ (SEE BELOW) **NO** ☒

If COC is **NOT** clear, ***STOP*** until you get client to authorize/clarify work.

CLIENT NOTIFIED: YES ☐ Date/ Time: _____ NO ☐

PROJECT CONTACT:

SUBCONTRACTED LAB:

DATE SHIPPED:

ADDITIONAL COMMENTS:

VERIFIED/TAKEN BY: INITIAL KJ DATE 7/18/24

Rev 2 2/11/2021

Laboratory Custody Chronicle

IAL Case No.
E24-02450

Client JS Held - Hoboken

Project 48-55 36TH ST

Received On 7/17/2024@16:17

Department: Volatiles			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
NY Part 375 VO	02450-001	Soil	n/a	n/a	7/18/24	Mei
"	-002	"	n/a	n/a	7/18/24	Mei
"	-003	"	n/a	n/a	7/18/24	Mei
"	-004	"	n/a	n/a	7/18/24	Mei
"	-005	"	n/a	n/a	7/18/24	Mei
"	-006	"	n/a	n/a	7/18/24	Mei
"	-007	"	n/a	n/a	7/18/24	Mei

NOTE: All soil, sediment, sludge, and solid samples are reported on a dry-weight basis.

Integrated Analytical Labs ~ 273 Franklin Road, Randolph, NJ 07869 ~ (973) 361-4252

LAST PAGE OF DOCUMENT

Integrated Analytical Laboratories LLC

EPA TO-15 DATA PACKAGE

ANALYTICAL DATA PACKAGE FOR THE
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
ALBANY NEW YORK 12233

Integrated Analytical Laboratories, LLC — **Randolph, NJ 07869**
Project#: 48-55 36th Street — **NY ELAP Certification#: 11402**
SDG #: E24-03187 — **NJDEP (Primary AB) Certification#: 14751**
Date of first sample receipt: 9/17/2024 — **Date of last sample receipt: 9/17/2024**

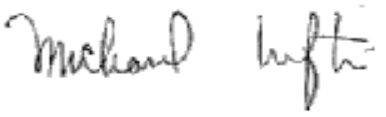
Client: JS Held-Hoboken

Project/Site: 48-55 36th Street/NY

Client Sample Number	Laboratory Sample	Sample Location	Date/Time of Collection
IA-1	E24-03187-01	NA	9/16/2024 10:22
IA-2	E24-03187-02	NA	9/16/2024 10:30
IA-3	E24-03187-03	NA	9/16/2024 10:35
IA-4	E24-03187-04	NA	9/16/2024 10:38
IA-5	E24-03187-05	NA	9/16/2024 10:44
IA-6	E24-03187-06	NA	9/16/2024 10:50
IA-7	E24-03187-07	NA	9/16/2024 10:55
AA-1	E24-03187-08	NA	9/16/2024 11:20

This report shall not be reproduced, except in its entirety, without the written consent of Integrated Analytical Laboratories, LLC. The test results included in this report relate only to the samples analyzed. The results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

I certify that this data package is in compliance with the terms and conditions of this contract, both technically and for completeness, for other than the conditions detailed above. Release of data contained in this hardcopy data package and in the computer-readable data submitted on CD/diskette and by electronic mail has been authorized by the laboratory manager or his designee, as verified by the following signature.



Michael H. Leftin, Ph.D.
Laboratory Director

Date: September 23, 2024



Ming-Hwa Reitan
QA/QC Manager

Date: October 8, 2024

Integrated Analytical Laboratories LLC

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Laboratory Acronyms

The following is a list of laboratory acronyms commonly used in EPA Method TO-15 testing:

Acronym	Definition
BLK	Blank/Method Blank
BFB	4-Bromofluorobenzene (Tuning Standard)
CAS Number	Chemical Abstract Service Registry Number
cc	cubic centimeters
CCCVS	Closing Calibration Check Verification Standard
COC	Chain of Custody
DCVS	Daily Calibration Verification Standard
DF	Dilution Factor
EPA	U. S. Environmental Protection Agency (aka USEPA)
"Hg	Inches of Mercury
IA	Indoor Air
IASL	Indoor Air Screening Level
ICAL	Initial Calibration
ICVSS	Initial Calibration Verification Standard
ISTD	Internal Standard
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LCS	Laboratory Control Sample/Spike
LLTO-15	Low Level TO-15
MDL	Method Detection Limit
MDLV	Method Detection Limit Verification
ml	milliliters
ND	Not Detected (at or above RL)
NJDEP	New Jersey Department of Environmental Protection
PM	Project Manager
ppbv	parts per billion, volume-to-volume ratio
PQL	Practical Quantitation Limit - MDLx3
QA	Quality Assurance
QC	Quality Control
RAL	Rapid Action Limit
RL	Reporting Limit
RLLCS	Reporting Limit Laboratory Control Sample
RPD	Relative Percent Difference
RRF	Relative Response Factor
RSD	Relative Standard Deviation
SDG	Sample Delivery Group
SGSL	Soil Gas Screening Levels
SS	Sub Slab
TAT	Turnaround Time
TIC	Tentatively Identified Compound
µg/m3	micrograms per cubic meter

Section I: Chain of Custody

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Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

External Chain of Custody Record/
Field Test Data Sheet
USEPA Method TO-15

Contact Us: 973-361-4252
Fax: 973-366-5613
Web: www.ialonline.com

pg 1 of 2

Client Contact Information	Project Information	Invoice Information
Company: JS Held	Project Name: 48-55 36th Street	Attn:
Address: 5 Marine View Plaza Suite 401, Hoboken, NJ	Project Location (State): NY	Address: same
Phone: 201-876-9400	Project Manager: Leah DeEgidio	PO #: 240302017
Fax:	PM Signature:	Quote #:
Report to: Leah DeEgidio	PM E-Mail: LdeEgidio@jsheld.com	
	Sampler: JT	

Analysis Turnaround Time - IF NO TAT IS SPECIFIED, 2 WEEK TAT IS ASSUMED

IAL Standard: 2 weeks (10 business days)

Rush (**pre-approved by lab): 24hr** 48hr** 72hr** 96hr** 1wk**

	Sample Identification	Start DATE & TIME (24hr Clock)	End DATE & TIME (24hr Clock)	Starting Vacuum ("Hg)	Ending Vacuum ("Hg)	Starting Temp. (°F)	Ending Temp. (°F)	Outgoing Vacuum - Lab ("Hg)	Incoming Vacuum - Lab ("Hg)	Flow Regulator ID	Canister ID	Canister Size (1L or 6L)	Flow Controller Readout (cc/min)	EPA TO - 15	NJDEP LLTO-15 (includes 30 TICs)	Library Search (10, 20, or 30 TICs)	Other (Explain in Comments)	Regulatory/ NY Cat B / Full (NJ Required)	Reduced / NY Cat A Data Package	Results Only	Indoor Air	Ambient / Outdoor Air	Sub Slab / Soil Gas / Near Slab (Circle One)	Stack Emission / SVE System	High Concentrations Expected
1	IA-1	9/16/24 10:22	9/17/24 10:25	-25	0	76	76	-29.0	0.0	7340692	3001	6L	3.44	X				X			X				
2	IA-2	9/16/24 10:30	9/17/24 10:30	-30	0	76	76	-29.0	0.0	AZ867680005	4868	6L	3.2	X				X			X				
3	IA-3	9/16/24 10:35	9/17/24 10:35	-24	-1	76	76	-29.0	-1.0	A0097056-8	~~2753~~ 2578 09/18/24 KW	6L	3.2	X				X			X				
4	IA-4	9/16/24 10:38	9/17/24 10:40	-28	-1	69	69	-29.0	-1.0	7340681	3006	6L	3.39	X				X			X				
5	IA-5	9/16/24 10:44	9/17/24 10:45	-27	-1	69	70	-29.0	-1.0	AZ867680002	2069	6L	3.2	X				X			X				
6	IA-6	9/16/24 10:50	9/17/24 10:50	-30	-3	72	72	-29.0	-2.5	AZ867680008	2033	6L	3.2	X				X			X				

Barometric Pressure

Start		Stop	

Matrix

Comments/ Special Analysis Instructions / QC Requirements:

Note: Hold or contingent samples may be designated by writing an "H" or "C" in the appropriate analysis box.

ALL FIELDS IN RED ARE REQUIRED

Shipping Information / Canister Preparation (for laboratory use only)

Individual Preparing Canisters / Title: ~~P. Jenkins, J. Walukiewicz~~ / Air Department Sample Custodians

Lab Affixed Seal Number(s): Jacob Reiten (JR)

Date/Time Shipping Container Sealed: 09/10/2024

Laboratory Canister Certification

GC/MS Analyst Signature: Joseph J Walukiewicz III (JJW)

IAL SDG#: 03187

External Chain of Custody

Relinquished	Received	Date / Time	Reason for Change of External Custody
JSH J. Twill	Joseph J Walukiewicz III (JJW)	9/10/24	shipment from laboratory to client
		9/17/24 1330	Lab pickup from JS Held
		9/17/24 1653	Received at IAL Lab

Name/Title Resealing Shipping Container Name:

Date/Time Sample Shipping Container Resealed:

Date/Time Sample Shipping Container Opened: 09/17/2024 1655

NJDEP Affixed Seal Number:

Individual Opening Sample Shipping Container: ~~Padraic Jenkins~~ Joseph Walukiewicz

Date/Time Internal Chain of Custody Initiated: 09/18/2024

White and yellow - lab copies; Pink - client copy

Use appropriate care with IAL sampling equipment when sampling and packing for shipment. The client is responsible for all damage incurred to IAL equipment. Notify IAL if equipment is damaged upon receipt. Holding time before sampling is 15 days, after sampling is 30 days; failure to follow these times may result in data rejection by regulatory agencies. The lab will contact you if your COC is not clear, incomplete, or if discrepancies exist. The use of initials is not permitted on the COC except when correcting errors. 06/2014

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Randolph, NJ 07869

External Chain of Custody Record/
Field Test Data Sheet
USEPA Method TO-15

Contact Us: 973-361-4252
Fax: 973-366-5613
Web: www.ialonline.com

Carrier (check one): ____ IAL Courier ____ Client Courier ____ FedEx/UPS

Client Contact Information	Project Information	Invoice Information
Company: JS Held	Project Name: 48-55 36th Street	Attn:
Address: 5 Marine View Plaza Suite 401, Hoboken, NJ	Project Location (State): NY	Address: same
Phone: 201-876-9400	Project Manager: Leah DeEgidio	
Fax:	PM Signature:	PO #: 240302017
Report to: Leah DeEgidio	PM E-Mail: LdeEgidio@jsheld.com	Quote #:
	Sampler: JT	

Analysis Turnaround Time - IF NO TAT IS SPECIFIED, 2 WEEK TAT IS ASSUMED

IAL Standard: 2 weeks (10 business days)

Rush (**pre-approved by lab): 24hr** 48hr** 72hr** 96hr** 1wk**

Barometric Pressure: Start ____ Stop ____

	Sample Identification	Start DATE & TIME (24hr Clock)	End DATE & TIME (24hr Clock)	Starting Vacuum ("Hg)	Ending Vacuum ("Hg)	Starting Temp. (°F)	Ending Temp. (°F)	Outgoing Vacuum - Lab ("Hg)	Incoming Vacuum - Lab ("Hg)	Flow Regulator ID	Canister ID	Canister Size (1L or 6L)	Flow Controller Readout (cc/min)	EPA TO - 15	NJDEP LLTO-15 (includes 30 TICs)	Library Search (10, 20, or 30 TICs)	Other (Explain in Comments)	Regulatory/ NY Cat B / Full (NJ Required)	Reduced / NY Cat A Data Package	Results Only	Indoor Air	Ambient / Outdoor Air	Sub Slab / Soil Gas / Near Slab (Circle One)	Stack Emission / SVE System	High Concentrations Expected
①	IA-7	9/16/24 10:55	9/17/24 10:55	-9	0	75	74	-29.0	0.0	AZ86768016	3047	6L	3.2	X				X			X				
②	AA-1	9/16/24 11:20	9/17/24 11:25	-29	0	70	70	-29.0	0.0	AZ86768006	3805	6L	3.32	X				X				X			

Comments/ Special Analysis Instructions / QC Requirements:

Note: Hold or contingent samples may be designated by writing an "H" or "C" in the appropriate analysis box.

ALL FIELDS IN RED ARE REQUIRED

Shipping Information / Canister Preparation (for laboratory use only)

Individual Preparing Canisters / Title: ~~P. Jenkins, J. Walukiewicz~~ / Air Department Sample Custodians

Lab Affixed Seal Number(s): (2206 Reitzel)

Date/Time Shipping Container Sealed: 9/10/24

Laboratory Canister Certification

GC/MS Analyst Signature: Joseph J Walukiewicz III (IAL)

IAL SDG#: 03187

External Chain of Custody

Relinquished	Received	Date / Time	Reason for Change of External Custody
JSH J. Twill	Joseph J Walukiewicz III (IAL)	9/10/24	shipment from laboratory to client
		9/17/24 1300	lab pickup from JS Held
		9/17/24 1653	Received at air lab

Name/Title Resealing Shipping Container Name:

Date/Time Sample Shipping Container Resealed:

Date/Time Sample Shipping Container Opened: 09/17/2024 16:55

NJDEP Affixed Seal Number:

Individual Opening Sample Shipping Container: ~~Padraic Jenkins~~ / Joseph Walukiewicz

Date/Time Internal Chain of Custody Initiated: 09/18/2024

White and yellow - lab copies; Pink - client copy

Use appropriate care with IAL sampling equipment when sampling and packing for shipment. The client is responsible for all damage incurred to IAL equipment. Notify IAL if equipment is damaged upon receipt. Holding time before sampling is 15 days, after sampling is 30 days; failure to follow these times may result in data rejection by regulatory agencies. The lab will contact you if your COC is not clear, incomplete, or if discrepancies exist. The use of initials is not permitted on the COC except when correcting errors. 06/2014

PROJECT INFORMATION

RUSH

E24-03187: 48-55 36TH STREET

To: Leah DeEgidio
JS Held - Hoboken
Fax: 201-626-8095
EMail: Ldeegidio@jsheld.com

Report To

JS Held - Hoboken
5 Marine View Plaza
Suite 401
Hoboken, NJ 07030
Attn: Leah DeEgidio

Bill To

JS Held - Hoboken
J.S. Held
50 Jericho Quadrangle, Suite 117
Jericho, NY 11753
Attn: Accounts Payable

Report Format	P.O. #	Received At Lab	PHC Due	Verbal Due	Hardcopy Due	
Air Regulatory	240302017	Sep 17, 2024 @ 16:53	NA	Sep 25, 2024	Oct 08, 2024	*

* Any ***Conditional or Hold*** status will delay final hardcopy report sent date.

Diskette Req. SRP TXT

Lab ID	Client Sample ID	Depth	Sampling Time	Matrix	Unit	Field pH/Temp
03187-001	IA-1	NA	09/17/24@10:25	Air-Indoor	ppbV	
03187-002	IA-2	NA	09/17/24@10:30	Air-Indoor	ppbV	
03187-003	IA-3	NA	09/17/24@10:35	Air-Indoor	ppbV	
03187-004	IA-4	NA	09/17/24@10:40	Air-Indoor	ppbV	
03187-005	IA-5	NA	09/17/24@10:45	Air-Indoor	ppbV	
03187-006	IA-6	NA	09/17/24@10:50	Air-Indoor	ppbV	
03187-007	IA-7	NA	09/17/24@10:55	Air-Indoor	ppbV	
03187-008	AA-1	NA	09/17/24@11:25	Air-Ambient	ppbV	

* No Cert = IAL does not hold certification for this test/method

Sample #	Test	Status	Analytical Method	TAT	Holding Time Expires
001	EPA TO-15	Analyze	TO-15	6 Business Days	10/17/2024
002	EPA TO-15	Analyze	TO-15	6 Business Days	10/17/2024
003	EPA TO-15	Analyze	TO-15	6 Business Days	10/17/2024
004	EPA TO-15	Analyze	TO-15	6 Business Days	10/17/2024
005	EPA TO-15	Analyze	TO-15	6 Business Days	10/17/2024
006	EPA TO-15	Analyze	TO-15	6 Business Days	10/17/2024
007	EPA TO-15	Analyze	TO-15	6 Business Days	10/17/2024
008	EPA TO-15	Analyze	TO-15	6 Business Days	10/17/2024

Project Notes:

NOTE 1 taken by kfalconer on 09/18/2024 09:31
SAMPLES IA-1, IA-2, IA-7, AA-1 ENDING VACUUM 0

CLIENT DID NOT RECORD BAROMETRIC PRESSURE.

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Internal Chain of Custody

Instructions: Use 1 form for each 20 samples of aliquot.

Laboratory Person Accepting Responsibility for Sample(s)			
Laboratory:	Integrated Analytical Laboratories	Location:	273 Franklin Rd Randolph, NJ 07869
Name:	Joseph Walukiewicz	Title:	Air Department Receiving
Case No.:	E24-03187	Analytical Parameter/Fraction: (check one)	____ NJDEP LLTO-15 __X__ EPA TO-15

Sample No.	Aliquot/Extract No.
FA-1	E24-03187-01
" -2	E24-" " " -02
" -3	E24-" " " -03
" -4	E24-" " " -04
" -5	E24-" " " -05
" -6	E24-" " " -06
" -7	E24-" " " -07
AA-1	E24-" " " -08
	E24-
	E24-

Sample No.	Aliquot/Extract No.
	E24-
	E24-
	E24-
	E24-
	E24-
	E24-
	E24-
	E24-
	E24
	E24

Date	Time	Relinquished By	Received By	Purpose of Change of Custody
09/18/24	1025	SIGNATURE PRINTED NAME	SIGNATURE Joseph Walukiewicz PRINTED NAME JOSEPH WALUKIEWICZ	1. Sample log-in 2. Pressure Check 3. Pre-analysis storage
09/18/24	1035	SIGNATURE Joseph Walukiewicz PRINTED NAME JOSEPH WALUKIEWICZ	SIGNATURE PRINTED NAME	Placement in TO-15 sample storage area until ready for analysis
09/18/24	1443	SIGNATURE PRINTED NAME	SIGNATURE Joseph Walukiewicz PRINTED NAME JOSEPH WALUKIEWICZ	TO-15 analysis on: 03187-01 to -08
		SIGNATURE PRINTED NAME	SIGNATURE Joseph Walukiewicz PRINTED NAME JOSEPH WALUKIEWICZ	TO-15 analysis on:
		SIGNATURE PRINTED NAME	SIGNATURE PRINTED NAME	
		SIGNATURE PRINTED NAME	SIGNATURE PRINTED NAME	
		SIGNATURE PRINTED NAME	SIGNATURE PRINTED NAME	
		SIGNATURE PRINTED NAME	SIGNATURE PRINTED NAME	

Rev. 12/16

Page 1 of 1

Section II: Methodology Review

Methodology Summary for Air Collected from Hazardous Waste Site Contract

Laboratory:	**Integrated Analytical Lab, LLC**	**Project No:**	**48-55 36th Street**
Location:	**Randolph, NJ**	**SDG No:**	**E24-03187**

Name	Required Methodology	Indicate Method
Volatile Organics	US EPA TO-15	US EPA Method TO-15

Section III: Case Narrative

CASE NARRATIVE

Integrated Analytical Laboratories, LLC — **Randolph, NJ 07869**
Project #: 48-55 36th Street — **NJDEP (Primary AB) Certification#: 14751**
SDG #: E24-03187 — **NY ELAP Certification #: 11402**
CT DPH Certification#: PH-0699
Analytical Method: EPA Method TO-15 — **PADEP Certification#: 68-00773**

Date of first sample receipt: 9/17/2024 — **Date of last sample receipt: 9/17/2024**

Client: JS Held-Hoboken
Project/Site: 48-55 36th Street / NY

Client ID	Lab ID	Receipt Date	Analysis Date	DF	Diluted For
IA-1	E24-03187-01	09/17/2024	09/18/2024	1.0	NA
IA-2	E24-03187-02	09/17/2024	09/18/2024	1.0	NA
IA-3	E24-03187-03	09/17/2024	09/18/2024	1.0	NA
IA-4	E24-03187-04	09/17/2024	09/18/2024	1.0	NA
IA-5	E24-03187-05	09/17/2024	09/18/2024	1.0	NA
IA-6	E24-03187-06	09/17/2024	09/18/2024	1.0	NA
IA-7	E24-03187-07	09/17/2024	09/18/2024	1.0	NA
AA-1	E24-03187-08	09/17/2024	09/18/2024	1.0	NA

IAL Sample ID	Canister ID	Outgoing Pressure ("Hg)	Incoming Pressure ("Hg)	Flow Controller ID	Outgoing Flow Rate (cc/min)	Incoming Flow Rate (cc/min)	Flow Rate RPD*
E24-03187-01	3001	-29	0.0	7340692	3.44	3.35	2.65
E24-03187-02	4868	-29	0.0	A286768005	3.20	3.13	2.21
E24-03187-03	2758	-29	-1.0	A0097055-8	3.20	3.10	3.17
E24-03187-04	3006	-29	-1.0	7340681	3.39	3.24	4.52
E24-03187-05	2069	-29	-1.0	A286768002	3.20	3.10	3.17
E24-03187-06	2033	-29	-2.5	A287892008	3.20	3.12	2.53
E24-03187-07	3047	-29	0.0	A286768016	3.20	3.11	2.85
E24-03187-08	3805	-29	0.0	A286768006	3.32	3.23	2.75

*Pre-sampling and Post-sampling Flow Controller calibration check RPD ≤ 20%

Flow Controller Note: none

Sample Receipt: Samples were received in good condition. Documentation was in order.
Samples were received at IAL by: Joseph Walukiewicz

Sample Preparation: None required.

Sample Analysis:
Hold Time: All within recommended hold times.
Instrument Calibration: Meets method criteria.
Analysis performed by: jjw
SDG Non-Conformances: none

CASE NARRATIVE

Integrated Analytical Laboratories, LLC — **Randolph, NJ 07869**
Project #: 48-55 36th Street — **NJDEP (Primary AB) Certification#: 14751**
SDG #: E24-03187 — **NY ELAP Certification #: 11402**
CT DPH Certification#: PH-0699
Analytical Method: EPA Method TO-15 — **PADEP Certification#: 68-00773**

Date of first sample receipt: 9/17/2024 — **Date of last sample receipt: 9/17/2024**

Client: JS Held-Hoboken
Project/Site: 48-55 36th Street / NY

Tentatively Identified Compounds: Tentatively Identified Compounds (TICs) are determined using a NIST library search. TICs are reported at 10% of the applicable internal standard. Dilution factors are calculated into the final reported result. Since the compounds found are tentatively identified, the conversion from ppbv to ug/m3 may not be made.

Canister-to-Canister dilutions: none

Dilutions: Dilutions, if necessary, will be conducted directly on the instrument up to a 500x dilution. When dilutions of 1000x or higher are necessary, the laboratory must inject a volume of sample into another certified clean canister and add humidified Z-1 zero air to the remainder of the canister volume. Tedlar bags are not used for dilutions.

If a sample is received with historically high levels of analytes, a 100x can-to-can dilution my be used from the start. A 100x canister-to-canister dilution may be also be used at the analyst's discretion.

On-instrument dilutions are conducted as follows:

Dilution Factor	Sample Volume Injected (cc)
1	500
2.5	200
5	100
10	50
20	25
25	20
50	10
100	5
200	2.5
250	2
500	1

Canister-to-canister dilutions are conducted as follows:

A certified clean canister is obtained and evacuated to approximately -30"Hg. Both the clean/dilution canister and sample canister are fitted with a ¼" Swagelok® nut fitting equipped with septa. Depending on dilution factor necessary, a sample aliquot is removed from the canister and injected into the clean canister using 30cc Multifit gas-tight syringe. Once the correct sample aliquot has been transferred, the dilution canister should be connected to the humidified Z-1 zero air supply and filled to ambient pressure (0"Hg).

Dilution Factor	Sample Aliquot	Z-1 Make-up Added
100	60ml	5940ml
1000	6ml	5994ml

CASE NARRATIVE

Integrated Analytical Laboratories, LLC — **Randolph, NJ 07869**
Project #: 48-55 36th Street — **NJDEP (Primary AB) Certification#: 14751**
SDG #: E24-03187 — **NY ELAP Certification #: 11402**
CT DPH Certification#: PH-0699
Analytical Method: EPA Method TO-15 — **PADEP Certification#: 68-00773**

Date of first sample receipt: 9/17/2024 — **Date of last sample receipt: 9/17/2024**

Client: JS Held-Hoboken
Project/Site: 48-55 36th Street / NY

If further dilutions need to be made from the dilution canister, they may be made on-instrument. Using a 100x dilution canister, the following on-instrument dilutions can be produced:

Dilution Factor	Sample Volume Injected
100	500ml
250	200ml
500	100ml
1000	50ml
2000	25ml
2500	20ml
5000	10ml

Using a 1000x dilution canister, the following on-instrument dilutions can be produced:

Dilution Factor	Sample Volume Injected
1000	500ml
2500	200ml
5000	100ml
10,000	50ml
20,000	25ml
25,000	20ml
50,000	10ml

If further dilutions need to be made from the dilution canister, beyond 50,000x, a subsequent canister-to-canister dilution must be made using the above prescribed protocol.

GC Column and ID: RTX-1 SN 1119138, RTX-VMS SN 1586881, or equivalent

Calibration Standards: Only gas phase standards were used. Primary and second-source standards provided by Scott Specialty Gases or Airgas Specialty Gases/ Air Liquide

Working Standards: Primary source standards* are created from:
- Airgas Specialty Gases #EB0103704, valid 1/18/2021 through 12/30/2024, @ approximately 100ppb per compound, with exception of m&p-xylenes @ 200ppb. Standard is directly introduced into the instrument for all calibration standard concentrations. Dilutions are made accordingly, on instrument. The 10ppbv standard is also used for the Daily Calibration Verification Standard (DCVS), the Laboratory Control Sample (LCS) and Closing Calibration Verification Standard (CCCVS).

The second source standard*, used as the Initial Calibration Verification Standard (ICVSS), is introduced into the instrument in the same manner as the primary source standard, using:

CASE NARRATIVE

Integrated Analytical Laboratories, LLC | **Randolph, NJ 07869**
Project #: 48-55 36th Street | **NJDEP (Primary AB) Certification#: 14751**
SDG #: E24-03187 | **NY ELAP Certification #: 11402**
CT DPH Certification#: PH-0699
Analytical Method: EPA Method TO-15 | **PADEP Certification#: 68-00773**

Date of first sample receipt: 9/17/2024 | **Date of last sample receipt: 9/17/2024**

Client: JS Held-Hoboken
Project/Site: 48-55 36th Street / NY

- Airgas Specialty Gases Cylinder #EB0116272, valid 7/28/2021 through 5/12/2025, @ approximately 100ppb per compound, with exception of m&p-xylenes @ 200ppb.

Internal standards* are created from:
- Airgas Specialty Gases Cylinder #ALM018474, valid 2/24/2022 through 2/24/2025. @ 5ppm per compound. Standard is directly introduced into the instrument to reach the 10ppbv concentrations. 1cc of internal standard is added to every standard, method blank, instrument blank, and sample run.

*Standard may be used past its expiration date provided that concentrations are verified by a current/unexpired second source standard.

05/29/2024
- 100 ppbv internal standard mix (AA6554BFB) - prepared in cylinder #ALM018474
  - 10 ppbv per standard/sample - 50 ml injected
- 100 ppbv calibration standard (aa6560std01) - prepared in cylinder #EB0103704
  - 40 ppbv standard - 200 ml injected
  - 20 ppbv standard - 100 ml injected
  - 10 ppbv standard* - 50 ml injected
    - *Standard also used for CCCVS
  - 2 ppbv standard - 10 ml injected
  - 0.20 ppbv standard* - 1 ml injected
    - *Standard also used for RLLCS

05/31/2024
- 100 ppbv internal standard mix (AA6579BFB) - prepared in cylinder #ALM018474
  - 10 ppbv per standard/sample - 50 ml injected
- 100 ppbv calibration standard (AA6580DCVS) - prepared in cylinder #EB0103704
  - 10 ppbv standard* - 50 ml injected
    - *Standard also used for DCVS & CCCVS
  - 0.20 ppbv standard* - 1 ml injected
    - *Standard also used for RLLCS
- Method Blank (AA6582BLK) - prepared in canister #1127
  - 500 ml injected

09/11/2024
- 100 ppbv internal standard mix (AA7123BFB) - prepared in cylinder #ALM018474
  - 10 ppbv per standard/sample - 50 ml injected
- 100 ppbv calibration standard (aa7128std01) - prepared in cylinder #EB0103704
  - 40 ppbv standard - 200 ml injected
  - 20 ppbv standard - 100 ml injected
  - 10 ppbv standard* - 50 ml injected
    - *Standard also used for CCCVS
  - 2 ppbv standard - 10 ml injected

CASE NARRATIVE

Integrated Analytical Laboratories, LLC — **Randolph, NJ 07869**
Project #: 48-55 36th Street — **NJDEP (Primary AB) Certification#: 14751**
SDG #: E24-03187 — **NY ELAP Certification #: 11402**
CT DPH Certification#: PH-0699
Analytical Method: EPA Method TO-15 — **PADEP Certification#: 68-00773**

Date of first sample receipt: 9/17/2024 — **Date of last sample receipt: 9/17/2024**

Client: JS Held-Hoboken
Project/Site: 48-55 36th Street / NY

09/11/2024

0.20 ppbv standard* - 1 ml injected
*Standard also used for RLLCS
0.20 ppbv standard* - 1 ml injected
*Standard also used for RLLCS
Method Blank (AA7131BLK) - prepared in canister #1127
500 ml injected

09/18/2024

100 ppbv internal standard mix (AA7223BFB) - prepared in cylinder #ALM018474
10 ppbv per standard/sample - 50 ml injected
100 ppbv calibration standard (AA7224DCVS) - prepared in cylinder #EB0103704
10 ppbv standard* - 50 ml injected
*Standard also used for DCVS & CCCVS
Method Blank (AA7226BLK) - prepared in canister #1127
500 ml injected
Sample E24-03187-01 (AA7231) - sample taken in canister #3001
500 ml sample volume injected, 1x dilution
Sample E24-03187-02 (AA7232) - sample taken in canister #4868
500 ml sample volume injected, 1x dilution
Sample E24-03187-03 (AA7233) - sample taken in canister #2758
500 ml sample volume injected, 1x dilution
Sample E24-03187-04 (AA7234) - sample taken in canister #3006
500 ml sample volume injected, 1x dilution
Sample E24-03187-05 (AA7235) - sample taken in canister #2069
500 ml sample volume injected, 1x dilution
Sample E24-03187-06 (AA7236) - sample taken in canister #2033
500 ml sample volume injected, 1x dilution
Sample E24-03187-07 (AA7237) - sample taken in canister #3047
500 ml sample volume injected, 1x dilution
Sample E24-03187-08 (AA7240) - sample taken in canister #3805
500 ml sample volume injected, 1x dilution

CASE NARRATIVE

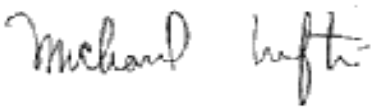
Integrated Analytical Laboratories, LLC — **Randolph, NJ 07869**
Project #: 48-55 36th Street — **NJDEP (Primary AB) Certification#: 14751**
SDG #: E24-03187 — **NY ELAP Certification #: 11402**
CT DPH Certification#: PH-0699
Analytical Method: EPA Method TO-15 — **PADEP Certification#: 68-00773**

Date of first sample receipt: 9/17/2024 — **Date of last sample receipt: 9/17/2024**

Client: JS Held-Hoboken
Project/Site: 48-55 36th Street / NY

All work recorded herein has been done in accordance with normal professional standards using accepted testing methodologies, quality assurance and quality control procedures except where otherwise agreed to by the client and testing company in writing. All conversions are based upon a room temperature of 77°F(25°C) and room pressure of 101.325 kPa (1atm).

I certify that this data package is in compliance with the terms and conditions of this contract, both technically and for completeness, for other than the conditions detailed above. Release of data contained in this hardcopy data package and in the computer-readable data submitted on CD/diskette and by electronic mail has been authorized by the laboratory manager or his designee, as verified by the following signature.



Michael H. Leftin, Ph.D.
Laboratory Director

October 8, 2024
Date

Integrated Analytical Laboratories LLC

Airgas
an Air Liquide company

R 362

Received 01/06/2023

Airgas Specialty Gases
Airgas USA LLC
6141 Easton Road
Plumsteadville, PA 18949
Airgas.com

CERTIFICATE OF ANALYSIS

Grade of Product: CERTIFIED HYDROCARBON

Customer:	INTEGRATED ANALYTICAL LABS		
Part Number:	X76NI99C15AC001		
Cylinder Number:	EB0103704	Reference Number:	160-402619255-1
Laboratory:	124 - Plumsteadville - PA	Cylinder Volume:	101.0 CF
Analysis Date:	Dec 30, 2022	Cylinder Pressure:	1400 PSIG
Lot Number:	160-402619255-1	Valve Outlet:	350SS
		Expiration Date:	Dec 30, 2024

Traceability Statement: Hydrocarbon Process standards are NIST traceable either directly by weight or by comparison to Airgas laboratory standards that are directly NIST traceable by weight.

CERTIFIED CONCENTRATIONS

Component	Requested Concentration	Reported Mole %	Accuracy
1,1 DICHLOROETHANE	100.000 PPB	107.000 PPB	+/- 10%
1,1 DICHLOROETHYLENE	100.000 PPB	104.000 PPB	+/- 10%
1,1,1 TRICHLOROETHANE	100.000 PPB	109.000 PPB	+/- 10%
1,1,2 TRICHLORO ETHANE	100.000 PPB	108.000 PPB	+/- 10%
1,1,2,2 TETRACHLOROETHANE	100.000 PPB	114.000 PPB	+/- 10%
1,2 DIBROMO ETHANE	100.000 PPB	108.000 PPB	+/- 10%
1,2 DICHLORO PROPANE	100.000 PPB	110.000 PPB	+/- 10%
1,2 DICHLOROBENZENE	100.000 PPB	107.000 PPB	+/- 10%
1,2 DICHLOROETHANE	100.000 PPB	109.000 PPB	+/- 10%
1,2,4 TRICHLOROBENZENE	100.000 PPB	110.000 PPB	+/- 10%
1,2,4 TRIMETHYLBENZENE	100.000 PPB	108.000 PPB	+/- 10%
1,3 BUTADIENE	100.000 PPB	107.000 PPB	+/- 10%
1,3 DICHLORO BENZENE	100.000 PPB	111.000 PPB	+/- 10%
1,3,5 TRIMETHYL BENZENE	100.000 PPB	109.000 PPB	+/- 10%
1,4 DICHLOROBENZENE	100.000 PPB	107.000 PPB	+/- 10%
1,4 DIOXANE	100.000 PPB	117.000 PPB	+/- 10%
2 CHLOROTOLUENE	100.000 PPB	109.000 PPB	+/- 10%
3 CHLOROPROPYLENE	100.000 PPB	108.000 PPB	+/- 10%
4 ETHYL TOLUENE	100.000 PPB	108.000 PPB	+/- 10%
ACETONE	100.000 PPB	108.000 PPB	+/- 10%
ACROLEIN	100.000 PPB	100.000 PPB	+/- 10%
BENZENE	100.000 PPB	108.000 PPB	+/- 10%
BENZYL CHLORIDE	100.000 PPB	100.000 PPB	+/- 10%
BROMO DICHLORO METHANE	100.000 PPB	115.000 PPB	+/- 10%
BROMOFORM	100.000 PPB	113.000 PPB	+/- 10%
CARBON DISULFIDE	100.000 PPB	107.000 PPB	+/- 10%
CARBON TETRACHLORIDE	100.000 PPB	110.000 PPB	+/- 10%
CHLORO DIBROMO METHANE	100.000 PPB	112.000 PPB	+/- 10%
CHLOROBENZENE	100.000 PPB	111.000 PPB	+/- 10%
CHLOROFORM	100.000 PPB	108.000 PPB	+/- 10%
CIS 1,2 DICHLOROETHYLENE	100.000 PPB	109.000 PPB	+/- 10%
CIS 1,3 DICHLOROPROPENE	100.000 PPB	111.000 PPB	+/- 10%
CUMENE	100.000 PPB	107.000 PPB	+/- 10%
CYCLOHEXANE	100.000 PPB	112.000 PPB	+/- 10%
ETHANOL	100.000 PPB	104.000 PPB	+/- 10%
ETHYL ACETATE	100.000 PPB	108.000 PPB	+/- 10%
ETHYL BENZENE	100.000 PPB	111.000 PPB	+/- 10%
ETHYL CHLORIDE	100.000 PPB	106.000 PPB	+/- 10%
HEXACHLORO 1,3 BUTADIENE	100.000 PPB	111.000 PPB	+/- 10%

Approved for Release

Integrated Analytical Laboratories LLC

Airgas
an Air Liquide company

Airgas Specialty Gases
Airgas USA LLC
6141 Easton Road
Plumsteadville, PA 18949
Airgas.com

HEXANE	100.000 PPB	111.000 PPB	+/- 10%
ISOOCTANE	100.000 PPB	109.000 PPB	+/- 10%
ISOPROPYL ALCOHOL	100.000 PPB	89.000 PPB	+/- 10%
M XYLENE	100.000 PPB	112.000 PPB	+/- 10%
METHYL BROMIDE	100.000 PPB	100.000 PPB	+/- 10%
METHYL BUTYL KETONE	100.000 PPB	113.000 PPB	+/- 10%
METHYL CHLORIDE	100.000 PPB	112.000 PPB	+/- 10%
METHYL ETHYL KETONE	100.000 PPB	110.000 PPB	+/- 10%
METHYL ISOBUTYL KETONE	100.000 PPB	109.000 PPB	+/- 10%
METHYL METHACRYLATE	100.000 PPB	110.000 PPB	+/- 10%
METHYL TERT BUTYL ETHER	100.000 PPB	112.000 PPB	+/- 10%
METHYLENE CHLORIDE	100.000 PPB	108.000 PPB	+/- 10%
N BUTANE	100.000 PPB	109.000 PPB	+/- 10%
N HEPTANE	100.000 PPB	111.000 PPB	+/- 10%
N NONANE	100.000 PPB	110.000 PPB	+/- 10%
N PENTANE	100.000 PPB	108.000 PPB	+/- 10%
N PROPYL BENZENE	100.000 PPB	108.000 PPB	+/- 10%
NAPHTHALENE	100.000 PPB	100.000 PPB	+/- 10%
O XYLENE	100.000 PPB	110.000 PPB	+/- 10%
P XYLENE	100.000 PPB	111.000 PPB	+/- 10%
PERCHLOROETHYLENE	100.000 PPB	112.000 PPB	+/- 10%
PROPYLENE	100.000 PPB	109.000 PPB	+/- 10%
R11 TRICHLOROFLUOROMETHANE	100.000 PPB	110.000 PPB	+/- 10%
R113 TRICHLOROTRIFLUOROETHANE	100.000 PPB	109.000 PPB	+/- 10%
R114 DICHLOROTETRAFLUOROETHANE	100.000 PPB	98.000 PPB	+/- 10%
R12 DICHLORODIFLUOROMETHANE	100.000 PPB	106.000 PPB	+/- 10%
STYRENE	100.000 PPB	113.000 PPB	+/- 10%
TERT BUTANOL	100.000 PPB	115.000 PPB	+/- 10%
TETRAHYDROFURAN	100.000 PPB	110.000 PPB	+/- 10%
TOLUENE	100.000 PPB	108.000 PPB	+/- 10%
TRANS 1,2 DICHLOROETHYLENE	100.000 PPB	111.000 PPB	+/- 10%
TRANS 1,3 DICHLOROPROPENE	100.000 PPB	111.000 PPB	+/- 10%
TRICHLOROETHYLENE	100.000 PPB	100.000 PPB	+/- 10%
VINYL ACETATE	100.000 PPB	110.000 PPB	+/- 10%
VINYL BROMIDE	100.000 PPB	101.000 PPB	+/- 10%
VINYL CHLORIDE	100.000 PPB	108.000 PPB	+/- 10%
NITROGEN	99.99925 %	99.999187 %	+/- 10%

Permanent Notes: CUSTOM TO MIX - TO-15/17 MODIFIED NJ STD + NAPHTHALENE

Notes: PO number: 22578

Approved for Release

Integrated Analytical Laboratories LLC

Airgas
an Air Liquide company

Airgas Specialty Gases
Airgas USA LLC
6141 Easton Road
Plumsteadville, PA 18949
Airgas.com

R366

CERTIFICATE OF ANALYSIS

Grade of Product: CERTIFIED HYDROCARBON

Customer:	INTEGRATED ANALYTICAL LABS		
Part Number:	X76NI99C15AC001		
Cylinder Number:	EB0116272	Reference Number:	160-402744241-1
Laboratory:	124 - Plumsteadville - PA	Cylinder Volume:	146.0 CF
Analysis Date:	May 12, 2023	Cylinder Pressure:	2050 PSIG
Lot Number:	160-402744241-1	Valve Outlet:	350SS
		Expiration Date:	May 12, 2025

Traceability Statement: Hydrocarbon Process standards are NIST traceable either directly by weight or by comparison to Airgas laboratory standards that are directly NIST traceable by weight.

CERTIFIED CONCENTRATIONS

Component	Requested Concentration	Reported Mole %	Accuracy
1,1 DICHLOROETHANE	100.000 PPB	100.000 PPB	+/- 10%
1,1 DICHLOROETHYLENE	100.000 PPB	100.000 PPB	+/- 10%
1,1,1 TRICHLOROETHANE	100.000 PPB	104.000 PPB	+/- 10%
1,1,2 TRICHLORO ETHANE	100.000 PPB	101.000 PPB	+/- 10%
1,1,2,2 TETRACHLOROETHANE	100.000 PPB	104.000 PPB	+/- 10%
1,2 DIBROMO ETHANE	100.000 PPB	103.000 PPB	+/- 10%
1,2 DICHLORO PROPANE	100.000 PPB	103.000 PPB	+/- 10%
1,2 DICHLOROBENZENE	100.000 PPB	101.000 PPB	+/- 10%
1,2 DICHLOROETHANE	100.000 PPB	102.000 PPB	+/- 10%
1,2,4 TRICHLOROBENZENE	100.000 PPB	100.000 PPB	+/- 10%
1,2,4 TRIMETHYLBENZENE	100.000 PPB	102.000 PPB	+/- 10%
1,3 BUTADIENE	100.000 PPB	106.000 PPB	+/- 10%
1,3 DICHLORO BENZENE	100.000 PPB	105.000 PPB	+/- 10%
1,3,5 TRIMETHYL BENZENE	100.000 PPB	103.000 PPB	+/- 10%
1,4 DICHLOROBENZENE	100.000 PPB	100.000 PPB	+/- 10%
1,4 DIOXANE	100.000 PPB	113.000 PPB	+/- 10%
2 CHLOROTOLUENE	100.000 PPB	107.000 PPB	+/- 10%
3 CHLOROPROPYLENE	100.000 PPB	106.000 PPB	+/- 10%
4 ETHYL TOLUENE	100.000 PPB	106.000 PPB	+/- 10%
ACETONE	100.000 PPB	108.000 PPB	+/- 10%
ACROLEIN	100.000 PPB	105.000 PPB	+/- 10%
BENZENE	100.000 PPB	103.000 PPB	+/- 10%
BENZYL CHLORIDE	100.000 PPB	102.000 PPB	+/- 10%
BROMO DICHLORO METHANE	100.000 PPB	112.000 PPB	+/- 10%
BROMOFORM	100.000 PPB	113.000 PPB	+/- 10%
CARBON DISULFIDE	100.000 PPB	95.000 PPB	+/- 10%
CARBON TETRACHLORIDE	100.000 PPB	107.000 PPB	+/- 10%
CHLORO DIBROMO METHANE	100.000 PPB	110.000 PPB	+/- 10%
CHLOROBENZENE	100.000 PPB	104.000 PPB	+/- 10%
CHLOROFORM	100.000 PPB	106.000 PPB	+/- 10%
CIS 1,2 DICHLOROETHYLENE	100.000 PPB	102.000 PPB	+/- 10%
CIS 1,3 DICHLOROPROPENE	100.000 PPB	94.000 PPB	+/- 10%
CUMENE	100.000 PPB	106.000 PPB	+/- 10%
CYCLOHEXANE	100.000 PPB	109.000 PPB	+/- 10%
ETHANOL	100.000 PPB	98.000 PPB	+/- 10%
ETHYL ACETATE	100.000 PPB	104.000 PPB	+/- 10%
ETHYL BENZENE	100.000 PPB	105.000 PPB	+/- 10%
ETHYL CHLORIDE	100.000 PPB	104.000 PPB	+/- 10%
HEXACHLORO 1,3 BUTADIENE	100.000 PPB	101.000 PPB	+/- 10%

Approved for Release

Integrated Analytical Laboratories LLC

Airgas
an Air Liquide company

Airgas Specialty Gases
Airgas USA LLC
6141 Easton Road
Plumsteadville, PA 18949
Airgas.com

HEXANE	100.000 PPB	107.000 PPB	+/- 10%
ISOOCTANE	100.000 PPB	106.000 PPB	+/- 10%
ISOPROPYL ALCOHOL	100.000 PPB	95.000 PPB	+/- 10%
M XYLENE	100.000 PPB	106.000 PPB	+/- 10%
METHYL BROMIDE	100.000 PPB	103.000 PPB	+/- 10%
METHYL BUTYL KETONE	100.000 PPB	109.000 PPB	+/- 10%
METHYL CHLORIDE	100.000 PPB	108.000 PPB	+/- 10%
METHYL ETHYL KETONE	100.000 PPB	105.000 PPB	+/- 10%
METHYL ISOBUTYL KETONE	100.000 PPB	105.000 PPB	+/- 10%
METHYL METHACRYLATE	100.000 PPB	106.000 PPB	+/- 10%
METHYL TERT BUTYL ETHER	100.000 PPB	107.000 PPB	+/- 10%
METHYLENE CHLORIDE	100.000 PPB	101.000 PPB	+/- 10%
N BUTANE	100.000 PPB	107.000 PPB	+/- 10%
N HEPTANE	100.000 PPB	107.000 PPB	+/- 10%
N NONANE	100.000 PPB	108.000 PPB	+/- 10%
N PENTANE	100.000 PPB	105.000 PPB	+/- 10%
N PROPYL BENZENE	100.000 PPB	112.000 PPB	+/- 10%
NAPHTHALENE	100.000 PPB	101.000 PPB	+/- 10%
O XYLENE	100.000 PPB	102.000 PPB	+/- 10%
P XYLENE	100.000 PPB	106.000 PPB	+/- 10%
PERCHLOROETHYLENE	100.000 PPB	104.000 PPB	+/- 10%
PROPYLENE	100.000 PPB	108.000 PPB	+/- 10%
R11 TRICHLOROFLUOROMETHANE	100.000 PPB	106.000 PPB	+/- 10%
R113 TRICHLOROTRIFLUOROETHANE	100.000 PPB	102.000 PPB	+/- 10%
R114 DICHLOROTETRAFLUOROETHANE	100.000 PPB	99.000 PPB	+/- 10%
R12 DICHLORODIFLUOROMETHANE	100.000 PPB	109.000 PPB	+/- 10%
STYRENE	100.000 PPB	106.000 PPB	+/- 10%
TERT BUTANOL	100.000 PPB	111.000 PPB	+/- 10%
TETRAHYDROFURAN	100.000 PPB	106.000 PPB	+/- 10%
TOLUENE	100.000 PPB	101.000 PPB	+/- 10%
TRANS 1,2 DICHLOROETHYLENE	100.000 PPB	108.000 PPB	+/- 10%
TRANS 1,3 DICHLOROPROPENE	100.000 PPB	106.000 PPB	+/- 10%
TRICHLOROETHYLENE	100.000 PPB	102.000 PPB	+/- 10%
VINYL ACETATE	100.000 PPB	105.000 PPB	+/- 10%
VINYL BROMIDE	100.000 PPB	100.000 PPB	+/- 10%
VINYL CHLORIDE	100.000 PPB	107.000 PPB	+/- 10%
NITROGEN	99.99925 %	99.999216 %	

Permanent Notes: CUSTOM TO MIX - TO-15/17 MODIFIED NJ STD + NAPHTHALENE

Notes: PO Number: 22896

Approved for Release

Section IV: Method Detection Limit Summary

INTEGRATED ANALYTICAL LABORATORIES, LLC
REPORTING METHOD DETECTION LIMIT (MDL) REPORT

Integrated Analytical Laboratories - Randolph, NJ

Matrix: Air
MDL Effective Date: 8/16/2023
Column ID: Restek RtX-VMS, 30 meter, 0.32mm ID, 1.8 um DF
Instrument ID: GC - Agilent 7890A / MS - Agilent 5975C (IAL ID: *Instrument AA*)
Analyst: Joe Waluliewicz
Report Prepared by: Joe Waluliewicz

Compound Name	CAS #	Molecular Weight	MDL ppbv	MDL µg/m^3	PQL ppbv	RL ppbv	RL µg/m^3	True value/ MDL
Propene	115-07-1	42.08	0.18	0.31	0.54	0.20	0.34	1
Dichlorodifluoromethane	75-71-8	120.9	0.081	0.40	0.24	0.20	0.99	3
1,2-Dichlorotetrafluoroethane	76-14-2	170.9	0.071	0.50	0.21	0.20	1.4	3
n-Butane	106-97-8	58	0.13	0.32	0.40	0.20	0.47	2
Chloromethane	74-87-3	50.49	0.15	0.30	0.44	0.20	0.41	1
Vinyl chloride	75-01-4	62.5	0.11	0.29	0.34	0.20	0.51	2
1,3-Butadiene	106-99-0	54.09	0.12	0.27	0.37	0.20	0.44	2
Bromomethane	74-83-9	94.94	0.12	0.46	0.36	0.20	0.78	2
Chloroethane	75-00-3	64.52	0.12	0.32	0.36	0.20	0.53	2
Vinyl bromide	593-60-2	106.9	0.080	0.35	0.24	0.20	0.87	3
Trichlorofluoromethane	75-69-4	137.4	0.068	0.38	0.20	0.20	1.1	3
Ethanol	64-17-5	46.07	0.17	0.32	0.51	0.20	0.38	1
1,1-Dichloroethene	75-35-4	96.94	0.086	0.34	0.26	0.20	0.79	3
Carbon disulfide	75-15-0	76.14	0.076	0.24	0.23	0.20	0.62	3
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	187.40	0.087	0.66	0.26	0.20	1.5	3
Acrolein	107-02-8	56.06	0.15	0.34	0.44	0.20	0.46	2
Allyl Chloride	107-05-1	76.53	0.088	0.27	0.26	0.20	0.63	3
Isopropanol	67-63-0	60.1	0.10	0.25	0.30	0.20	0.49	2
Methylene chloride	75-09-2	84.94	0.10	0.36	0.31	0.20	0.69	2
Acetone	67-64-1	58.08	0.12	0.28	0.36	0.20	0.48	2
1,2-Dichloroethene (trans)	156-60-5	96.94	0.080	0.32	0.24	0.20	0.79	3
n-Pentane	109-66-0	72.15	0.16	0.48	0.49	0.20	0.59	1
n-Hexane	110-54-3	86.17	0.087	0.31	0.26	0.20	0.70	3
Methyl tert-butyl ether	1634-04-4	88.15	0.080	0.29	0.24	0.20	0.72	3
Tert-butyl alcohol	75-65-0	74.12	0.14	0.44	0.43	0.20	0.61	2
1,1-Dichloroethane	75-34-3	98.96	0.079	0.32	0.24	0.20	0.81	3
1,2-Dichloroethene (cis)	156-59-2	96.94	0.083	0.33	0.25	0.20	0.79	3
Cyclohexane	110-82-7	84.16	0.078	0.27	0.23	0.20	0.69	3
Chloroform	67-66-3	119.4	0.077	0.38	0.23	0.20	0.98	3
Ethyl acetate	141-78-6	88.11	0.11	0.40	0.33	0.20	0.72	2
Carbon tetrachloride	56-23-5	153.8	0.080	0.50	0.24	0.20	1.3	3
Tetrahydrofuran	109-99-9	72.11	0.11	0.31	0.32	0.20	0.59	2
1,1,1-Trichloroethane	71-55-6	133.4	0.071	0.39	0.21	0.20	1.1	3
Methyl ethyl ketone	78-93-3	72.11	0.11	0.31	0.32	0.20	0.59	2
n-Heptane	142-82-5	100.2	0.090	0.37	0.27	0.20	0.82	2
Benzene	71-43-2	78.11	0.076	0.24	0.23	0.20	0.64	3
1,2-Dichloroethane	107-06-2	98.96	0.079	0.32	0.24	0.20	0.81	3
Trichloroethene	79-01-6	131.4	0.064	0.34	0.19	0.20	1.1	3
2,2,4-Trimethylpentane	540-84-1	114.2	0.085	0.40	0.26	0.20	0.93	3
1,2-Dichloropropane	78-87-5	113	0.085	0.39	0.25	0.20	0.92	3
Bromodichloromethane	75-27-4	163.8	0.066	0.44	0.20	0.20	1.3	3
Methyl methacrylate	80-62-6	100.12	0.079	0.32	0.24	0.20	0.82	3
1,4-Dioxane	123-91-1	88.12	0.092	0.33	0.28	0.20	0.72	2
1,3-Dichloropropene (cis)	10061-01-5	111.0	0.070	0.32	0.21	0.20	0.91	3
Toluene	108-88-3	92.14	0.064	0.24	0.19	0.20	0.75	3
Methyl isobutyl ketone	108-10-1	100.2	0.11	0.43	0.32	0.20	0.82	2
Tetrachloroethene	127-18-4	165.8	0.063	0.43	0.19	0.20	1.4	3
1,3-Dichloropropene (trans)	10061-02-6	111	0.077	0.35	0.23	0.20	0.91	3
1,1,2-Trichloroethane	79-00-5	133.4	0.075	0.41	0.22	0.20	1.1	3
Dibromochloromethane	124-48-1	208.3	0.073	0.62	0.22	0.20	1.7	3
1,2-Dibromoethane	106-93-4	187.9	0.067	0.52	0.20	0.20	1.5	3
Methyl n-butyl ketone	591-78-6	100.16	0.13	0.54	0.40	0.20	0.82	2
n-Nonane	111-84-2	128.2	0.10	0.52	0.30	0.20	1.0	2
Chlorobenzene	108-90-7	112.6	0.073	0.34	0.22	0.20	0.92	3
Ethylbenzene	100-41-4	106.2	0.067	0.29	0.20	0.20	0.9	3
Xylenes (m&p)	179601-23-1	106.2	0.15	0.64	0.44	0.40	1.74	3
Xylene (o)	79-34-5	167.9	0.073	0.50	0.22	0.20	1.4	3
Styrene	100-42-5	104.1	0.072	0.31	0.22	0.20	0.85	3
Bromoform	75-25-2	252.8	0.075	0.77	0.22	0.20	2.1	3
Cumene (Isopropylbenzene)	98-82-8	120.2	0.069	0.34	0.21	0.20	0.98	3
n-Propyl benzene	103-65-1	120.19	0.085	0.42	0.25	0.20	0.98	3
1,1,2,2-Tetrachloroethane	95-47-6	106.2	0.069	0.30	0.21	0.20	0.87	3
4-Ethyltoluene	622-96-8	120.2	0.090	0.44	0.27	0.20	0.98	2
2-Chlorotoluene	95-49-8	126.6	0.077	0.40	0.23	0.20	1.0	3
1,3,5-Trimethylbenzene	108-67-8	120.2	0.076	0.37	0.23	0.20	0.98	3
1,2,4-Trimethylbenzene	95-63-6	120.2	0.080	0.39	0.24	0.20	0.98	3

INTEGRATED ANALYTICAL LABORATORIES, LLC
REPORTING METHOD DETECTION LIMIT (MDL) REPORT

Integrated Analytical Laboratories - Randolph, NJ

Matrix: Air
Column ID: Restek RtX-VMS, 30 meter, 0.32mm ID, 1.8 um DF
Instrument ID: GC - Agilent 7890A / MS - Agilent 5975C (IAL ID: *Instrument AA*)
Report Prepared by: Joe Waluliewicz

MDL Effective Date: 8/16/2023
Analyst: Joe Waluliewicz

Compound Name	CAS #	Molecular Weight	MDL ppbv	MDL µg/m^3	PQL ppbv	RL ppbv	RL µg/m^3	True value/ MDL
1,3-Dichlorobenzene	541-73-1	147	0.086	0.52	0.26	0.20	1.2	3
1,4-Dichlorobenzene	106-46-7	147.0	0.089	0.54	0.27	0.20	1.2	2
Benzyl chloride	100-44-7	126.6	0.064	0.33	0.19	0.20	1.0	3
1,2-Dichlorobenzene	95-50-1	147.0	0.083	0.50	0.25	0.20	1.2	3
1,3-Hexachlorobutadiene	87-68-3	260.8	0.096	1.03	0.29	0.20	2.1	2
1,2,4-Trichlorobenzene	120-82-1	181.5	0.12	0.89	0.36	0.20	1.5	2
Naphthalene	91-20-3	128	0.15	0.79	0.45	0.20	1.0	2

Where:
MDL is defined as the higher of the MDL Spike and MDL Blank
PQL is MDLx3
RL is defined as the lowest point of the calibration curve
ppbv is parts per billion by volume and is how results come off the instrument
µg/m^3 = ppbv x molecular weight / 24.45

Location of this file: P:\PAL Reports\LLTO-15 and TO-15 Common Files\Agilent MDL

Instrument used for Clean Canister Certification Analysis? YES

Michael Leftin, Ph.D.
Laboratory Director

Date: August 16, 2023

INTEGRATED ANALYTICAL LABORATORIES, LLC
METHOD DETECTION LIMIT VERIFICATION (MDLV) REPORT

Integrated Analytical Laboratories - Randolph, NJ

Analysis Level:	0.20 ppbv, 0.40 for m&p-xylenes
Matrix:	Air
Column ID:	RTX-VMS, 30-meter, 0.32 mm ID, 1.8 µm d_f
Instrument Identification:	AA
Date of Verification Study:	8/16/2023
Study Identification File #:	aa3415rllcs
Analyst:	Joe Walukiewicz
Analysis/Processing Method:	C:\MSDCHEM\1\METHODS\230815.M
Cylinder ID:	EB0103704

Michael Leftin, Ph.D.
Laboratory Director

Date: August 16, 2023

Compound Name	CAS #	MDLV (ppbv)	RL (ppbv)	RL/MDLV Ratio
Propene	115-07-1	0.23	0.20	1
Dichlorodifluoromethane	124-48-1	0.24	0.20	1
1,2-Dichlorotetrafluoroethane	76-14-2	0.26	0.20	1
n-Butane	106-97-8	0.23	0.20	1
Chloromethane	74-87-3	0.24	0.20	1
Vinyl chloride	75-01-4	0.26	0.20	1
1,3-Butadiene	106-99-0	0.23	0.20	1
Bromomethane	74-83-9	0.23	0.20	1
Chloroethane	75-00-3	0.22	0.20	1
Vinyl bromide	593-60-2	0.23	0.20	1
Trichlorofluoromethane	75-69-4	0.26	0.20	1
Ethanol	64-17-5	0.30	0.20	2
1,1-Dichloroethene	75-35-4	0.22	0.20	1
Carbon disulfide	75-15-0	0.22	0.20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.27	0.20	1
Acrolein	107-02-8	0.24	0.20	1
Allyl Chloride	107-05-1	0.22	0.20	1
Isopropanol	67-63-0	0.20	0.20	1
Methylene chloride	75-09-2	0.35	0.20	2
Acetone	67-64-1	0.27	0.20	1
1,2-Dichloroethene (trans)	156-60-5	0.22	0.20	1
n-Pentane	109-66-0	0.25	0.20	1
n-Hexane	110-54-3	0.26	0.20	1
Methyl tert-butyl ether	1634-04-4	0.25	0.20	1
Tert-butyl alcohol	75-65-0	0.24	0.20	1
1,1-Dichloroethane	75-34-3	0.24	0.20	1
1,2-Dichloroethene (cis)	156-59-2	0.21	0.20	1
Cyclohexane	110-82-7	0.24	0.20	1
Chloroform	67-66-3	0.23	0.20	1
Ethyl acetate	141-78-6	0.23	0.20	1
Carbon tetrachloride	56-23-5	0.26	0.20	1
Tetrahydrofuran	109-99-9	0.23	0.20	1
1,1,1-Trichloroethane	71-55-6	0.24	0.20	1
Methyl ethyl ketone	78-93-3	0.24	0.20	1
n-Heptane	142-82-5	0.23	0.20	1
Benzene	71-43-2	0.24	0.20	1
1,2-Dichloroethane	106-93-4	0.23	0.20	1
Trichloroethene	79-01-6	0.25	0.20	1
2,2,4-Trimethylpentane	540-84-1	0.29	0.20	1
1,2-Dichloropropane	78-87-5	0.26	0.20	1
Bromodichloromethane	75-27-4	0.28	0.20	1
Methyl methacrylate	80-62-6	0.22	0.20	1
1,4-Dioxane	123-91-1	0.28	0.20	1
1,3-Dichloropropene (cis)	10061-01-5	0.25	0.20	1
Toluene	108-88-3	0.24	0.20	1
Methyl isobutyl ketone	108-10-1	0.22	0.20	1
Tetrachloroethene	127-18-4	0.26	0.20	1
1,3-Dichloropropene (trans)	10061-02-6	0.24	0.20	1
1,1,2-Trichloroethane	79-00-5	0.23	0.20	1
Dibromochloromethane	75-71-8	0.24	0.20	1
1,2-Dibromoethane	107-06-2	0.22	0.20	1
Methyl n-butyl ketone	591-78-6	0.21	0.20	1

INTEGRATED ANALYTICAL LABORATORIES, LLC
METHOD DETECTION LIMIT VERIFICATION (MDLV) REPORT

Integrated Analytical Laboratories - Randolph, NJ

Analysis Level:	0.20 ppbv, 0.40 for m&p-xylenes
Matrix:	Air
Column ID:	RTX-VMS, 30-meter, 0.32 mm ID, 1.8 µm d_f
Instrument Identification:	AA
Date of Verification Study:	8/16/2023
Study Identification File #:	aa3415rllcs
Analyst:	Joe Walukiewicz
Analysis/Processing Method:	C:\MSDCHEM\1\METHODS\230815.M
Cylinder ID:	EB0103704

Michael Leftin, Ph.D.
Laboratory Director

Date: August 16, 2023

Compound Name	CAS #	MDLV (ppbv)	RL (ppbv)	RL/MDLV Ratio
n-Nonane	111-84-2	0.21	0.20	1
Chlorobenzene	108-90-7	0.28	0.20	1
Ethylbenzene	100-41-4	0.26	0.20	1
Xylenes (m&p)	179601-23-1	0.54	0.40	1
Xylene (o)	95-47-6	0.26	0.20	1
Styrene	100-42-5	0.23	0.20	1
Bromoform	75-25-2	0.26	0.20	1
Cumene	98-82-8	0.24	0.20	1
n-Propyl benzene	103-65-1	0.25	0.20	1
1,1,2,2-Tetrachloroethane	79-34-5	0.25	0.20	1
4-Ethyltoluene	622-96-8	0.24	0.20	1
2-Chlorotoluene	95-49-8	0.25	0.20	1
1,3,5-Trimethylbenzene	108-67-8	0.24	0.20	1
1,2,4-Trimethylbenzene	95-63-6	0.22	0.20	1
1,3-Dichlorobenzene	541-73-1	0.27	0.20	1
1,4-Dichlorobenzene	106-46-7	0.24	0.20	1
Benzyl chloride	100-44-7	0.17	0.20	1
1,2-Dichlorobenzene	95-50-1	0.25	0.20	1
1,3-Hexachlorobutadiene	87-68-3	0.31	0.20	2
1,2,4-Trichlorobenzene	120-82-1	0.25	0.20	1
Naphthalene	91-20-3	0.28	0.20	1

INTEGRATED ANALYTICAL LABORATORIES, LLC
REPORTING METHOD DETECTION LIMIT (MDL) REPORT

Integrated Analytical Laboratories - Randolph, NJ

Matrix: Air
MDL Effective Date: 8/1/2024
Column ID: Restek RtX-VMS, 30 meter, 0.32mm ID, 1.8 um DF
Instrument ID: GC - Agilent 7890A / MS - Agilent 5975C (IAL ID: *Instrument AA*)
Analyst: Joe Walukiewicz
Report Prepared by: Joe Walukiewicz

Compound Name	CAS #	Molecular Weight	MDL ppbv	MDL µg/m^3	PQL ppbv	RL ppbv	RL µg/m^3	True value/ MDL
Propene	115-07-1	42.08	0.18	0.31	0.54	0.20	0.34	1
Dichlorodifluoromethane	75-71-8	120.9	0.081	0.40	0.24	0.20	0.99	3
1,2-Dichlorotetrafluoroethane	76-14-2	170.9	0.071	0.50	0.21	0.20	1.4	3
n-Butane	106-97-8	58	0.13	0.32	0.40	0.20	0.47	2
Chloromethane	74-87-3	50.49	0.15	0.30	0.44	0.20	0.41	1
Vinyl chloride	75-01-4	62.5	0.11	0.29	0.34	0.20	0.51	2
1,3-Butadiene	106-99-0	54.09	0.12	0.27	0.37	0.20	0.44	2
Bromomethane	74-83-9	94.94	0.12	0.46	0.36	0.20	0.78	2
Chloroethane	75-00-3	64.52	0.12	0.32	0.36	0.20	0.53	2
Vinyl bromide	593-60-2	106.9	0.080	0.35	0.24	0.20	0.87	3
Trichlorofluoromethane	75-69-4	137.4	0.068	0.38	0.20	0.20	1.1	3
Ethanol	64-17-5	46.07	0.17	0.32	0.51	0.20	0.38	1
1,1-Dichloroethene	75-35-4	96.94	0.086	0.34	0.26	0.20	0.79	3
Carbon disulfide	75-15-0	76.14	0.076	0.24	0.23	0.20	0.62	3
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	187.40	0.087	0.66	0.26	0.20	1.5	3
Acrolein	107-02-8	56.06	0.15	0.34	0.44	0.20	0.46	2
Allyl Chloride	107-05-1	76.53	0.088	0.27	0.26	0.20	0.63	3
Isopropanol	67-63-0	60.1	0.10	0.25	0.30	0.20	0.49	2
Methylene chloride	75-09-2	84.94	0.10	0.36	0.31	0.20	0.69	2
Acetone	67-64-1	58.08	0.12	0.28	0.36	0.20	0.48	2
1,2-Dichloroethene (trans)	156-60-5	96.94	0.080	0.32	0.24	0.20	0.79	3
n-Pentane	109-66-0	72.15	0.16	0.48	0.49	0.20	0.59	1
n-Hexane	110-54-3	86.17	0.087	0.31	0.26	0.20	0.70	3
Methyl tert-butyl ether	1634-04-4	88.15	0.080	0.29	0.24	0.20	0.72	3
Tert-butyl alcohol	75-65-0	74.12	0.14	0.44	0.43	0.20	0.61	2
1,1-Dichloroethane	75-34-3	98.96	0.079	0.32	0.24	0.20	0.81	3
1,2-Dichloroethene (cis)	156-59-2	96.94	0.083	0.33	0.25	0.20	0.79	3
Cyclohexane	110-82-7	84.16	0.078	0.27	0.23	0.20	0.69	3
Chloroform	67-66-3	119.4	0.077	0.38	0.23	0.20	0.98	3
Ethyl acetate	141-78-6	88.11	0.11	0.40	0.33	0.20	0.72	2
Carbon tetrachloride	56-23-5	153.8	0.080	0.50	0.24	0.20	1.3	3
Tetrahydrofuran	109-99-9	72.11	0.11	0.31	0.32	0.20	0.59	2
1,1,1-Trichloroethane	71-55-6	133.4	0.071	0.39	0.21	0.20	1.1	3
Methyl ethyl ketone	78-93-3	72.11	0.11	0.31	0.32	0.20	0.59	2
n-Heptane	142-82-5	100.2	0.090	0.37	0.27	0.20	0.82	2
Benzene	71-43-2	78.11	0.076	0.24	0.23	0.20	0.64	3
1,2-Dichloroethane	107-06-2	98.96	0.079	0.32	0.24	0.20	0.81	3
Trichloroethene	79-01-6	131.4	0.064	0.34	0.19	0.20	1.1	3
2,2,4-Trimethylpentane	540-84-1	114.2	0.085	0.40	0.26	0.20	0.93	3
1,2-Dichloropropane	78-87-5	113	0.085	0.39	0.25	0.20	0.92	3
Bromodichloromethane	75-27-4	163.8	0.066	0.44	0.20	0.20	1.3	3
Methyl methacrylate	80-62-6	100.12	0.079	0.32	0.24	0.20	0.82	3
1,4-Dioxane	123-91-1	88.12	0.092	0.33	0.28	0.20	0.72	2
1,3-Dichloropropene (cis)	10061-01-5	111.0	0.070	0.32	0.21	0.20	0.91	3
Toluene	108-88-3	92.14	0.064	0.24	0.19	0.20	0.75	3
Methyl isobutyl ketone	108-10-1	100.2	0.11	0.43	0.32	0.20	0.82	2
Tetrachloroethene	127-18-4	165.8	0.063	0.43	0.19	0.20	1.4	3
1,3-Dichloropropene (trans)	10061-02-6	111	0.077	0.35	0.23	0.20	0.91	3
1,1,2-Trichloroethane	79-00-5	133.4	0.075	0.41	0.22	0.20	1.1	3
Dibromochloromethane	124-48-1	208.3	0.073	0.62	0.22	0.20	1.7	3
1,2-Dibromoethane	106-93-4	187.9	0.067	0.52	0.20	0.20	1.5	3
Methyl n-butyl ketone	591-78-6	100.16	0.13	0.54	0.40	0.20	0.82	2
n-Nonane	111-84-2	128.2	0.10	0.52	0.30	0.20	1.0	2
Chlorobenzene	108-90-7	112.6	0.073	0.34	0.22	0.20	0.92	3
Ethylbenzene	100-41-4	106.2	0.067	0.29	0.20	0.20	0.9	3
Xylenes (m&p)	179601-23-1	106.2	0.15	0.64	0.44	0.40	1.74	3
Xylene (o)	79-34-5	167.9	0.073	0.50	0.22	0.20	1.4	3
Styrene	100-42-5	104.1	0.072	0.31	0.22	0.20	0.85	3
Bromoform	75-25-2	252.8	0.075	0.77	0.22	0.20	2.1	3
Cumene (Isopropylbenzene)	98-82-8	120.2	0.069	0.34	0.21	0.20	0.98	3
n-Propyl benzene	103-65-1	120.19	0.085	0.42	0.25	0.20	0.98	3
1,1,2,2-Tetrachloroethane	95-47-6	106.2	0.069	0.30	0.21	0.20	0.87	3
4-Ethyltoluene	622-96-8	120.2	0.090	0.44	0.27	0.20	0.98	2
2-Chlorotoluene	95-49-8	126.6	0.077	0.40	0.23	0.20	1.0	3
1,3,5-Trimethylbenzene	108-67-8	120.2	0.076	0.37	0.23	0.20	0.98	3
1,2,4-Trimethylbenzene	95-63-6	120.2	0.080	0.39	0.24	0.20	0.98	3

INTEGRATED ANALYTICAL LABORATORIES, LLC
REPORTING METHOD DETECTION LIMIT (MDL) REPORT

Integrated Analytical Laboratories - Randolph, NJ

Matrix: Air
MDL Effective Date: 8/1/2024
Column ID: Restek RtX-VMS, 30 meter, 0.32mm ID, 1.8 um DF
Instrument ID: GC - Agilent 7890A / MS - Agilent 5975C (IAL ID: *Instrument AA*)
Analyst: Joe Walukiewicz
Report Prepared by: Joe Walukiewicz

Compound Name	CAS #	Molecular Weight	MDL ppbv	MDL µg/m^3	PQL ppbv	RL ppbv	RL µg/m^3	True value/ MDL
1,3-Dichlorobenzene	541-73-1	147	0.086	0.52	0.26	0.20	1.2	3
1,4-Dichlorobenzene	106-46-7	147.0	0.089	0.54	0.27	0.20	1.2	2
Benzyl chloride	100-44-7	126.6	0.064	0.33	0.19	0.20	1.0	3
1,2-Dichlorobenzene	95-50-1	147.0	0.083	0.50	0.25	0.20	1.2	3
1,3-Hexachlorobutadiene	87-68-3	260.8	0.096	1.03	0.29	0.20	2.1	2
1,2,4-Trichlorobenzene	120-82-1	181.5	0.12	0.89	0.36	0.20	1.5	2
Naphthalene	91-20-3	128	0.15	0.79	0.45	0.20	1.0	2

Where:
MDL is defined as the higher of the MDL Spike and MDL Blank
PQL is MDLx3
RL is defined as the lowest point of the calibration curve
ppbv is parts per billion by volume and is how results come off the instrument
µg/m^3 = ppbv x molecular weight / 24.45

Location of this file: P:\PAL Reports\LLTO-15 and TO-15 Common Files\Agilent MDL

Instrument used for Clean Canister Certification Analysis? YES

Michael Leftin, Ph.D.
Laboratory Director

Date: August 1, 2024

INTEGRATED ANALYTICAL LABORATORIES, LLC
METHOD DETECTION LIMIT VERIFICATION (MDLV) REPORT

Integrated Analytical Laboratories - Randolph, NJ

Analysis Level:	0.20 ppbv, 0.40 for m&p-xylenes
Matrix:	Air
Column ID:	RTX-VMS, 30-meter, 0.32 mm ID, 1.8 µm d_f
Instrument Identification:	AA
Date of Verification Study:	8/5/2024
Study Identification File #:	aa6955rllcs
Analyst:	Joe Walukiewicz
Analysis/Processing Method:	C:\MSDCHEM\1\METHODS\240802.M
Cylinder ID:	EB0103704

Michael Leftin, Ph.D.
Laboratory Director

Date: August 5, 2024

Compound Name	CAS #	MDLV (ppbv)	RL (ppbv)	RL/MDLV Ratio
Propene	115-07-1	0.21	0.20	1
Dichlorodifluoromethane	124-48-1	0.20	0.20	1
1,2-Dichlorotetrafluoroethane	76-14-2	0.19	0.20	1
n-Butane	106-97-8	0.21	0.20	1
Chloromethane	74-87-3	0.18	0.20	1
Vinyl chloride	75-01-4	0.19	0.20	1
1,3-Butadiene	106-99-0	0.19	0.20	1
Bromomethane	74-83-9	0.16	0.20	1
Chloroethane	75-00-3	0.17	0.20	1
Vinyl bromide	593-60-2	0.14	0.20	1
Trichlorofluoromethane	75-69-4	0.22	0.20	1
Ethanol	64-17-5	0.18	0.20	1
1,1-Dichloroethene	75-35-4	0.16	0.20	1
Carbon disulfide	75-15-0	0.17	0.20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.23	0.20	1
Acrolein	107-02-8	0.17	0.20	1
Allyl Chloride	107-05-1	0.17	0.20	1
Isopropanol	67-63-0	0.14	0.20	1
Methylene chloride	75-09-2	0.35	0.20	2
Acetone	67-64-1	0.20	0.20	1
1,2-Dichloroethene (trans)	156-60-5	0.19	0.20	1
n-Pentane	109-66-0	0.22	0.20	1
n-Hexane	110-54-3	0.22	0.20	1
Methyl tert-butyl ether	1634-04-4	0.21	0.20	1
Tert-butyl alcohol	75-65-0	0.21	0.20	1
1,1-Dichloroethane	75-34-3	0.20	0.20	1
1,2-Dichloroethene (cis)	156-59-2	0.18	0.20	1
Cyclohexane	110-82-7	0.21	0.20	1
Chloroform	67-66-3	0.19	0.20	1
Ethyl acetate	141-78-6	0.17	0.20	1
Carbon tetrachloride	56-23-5	0.21	0.20	1
Tetrahydrofuran	109-99-9	0.17	0.20	1
1,1,1-Trichloroethane	71-55-6	0.22	0.20	1
Methyl ethyl ketone	78-93-3	0.19	0.20	1
n-Heptane	142-82-5	0.21	0.20	1
Benzene	71-43-2	0.20	0.20	1
1,2-Dichloroethane	106-93-4	0.20	0.20	1
Trichloroethene	79-01-6	0.18	0.20	1
2,2,4-Trimethylpentane	540-84-1	0.18	0.20	1
1,2-Dichloropropane	78-87-5	0.21	0.20	1
Bromodichloromethane	75-27-4	0.21	0.20	1
Methyl methacrylate	80-62-6	0.19	0.20	1
1,4-Dioxane	123-91-1	0.22	0.20	1
1,3-Dichloropropene (cis)	10061-01-5	0.21	0.20	1
Toluene	108-88-3	0.21	0.20	1
Methyl isobutyl ketone	108-10-1	0.19	0.20	1
Tetrachloroethene	127-18-4	0.21	0.20	1
1,3-Dichloropropene (trans)	10061-02-6	0.19	0.20	1
1,1,2-Trichloroethane	79-00-5	0.20	0.20	1
Dibromochloromethane	75-71-8	0.20	0.20	1
1,2-Dibromoethane	107-06-2	0.19	0.20	1
Methyl n-butyl ketone	591-78-6	0.20	0.20	1

INTEGRATED ANALYTICAL LABORATORIES, LLC
METHOD DETECTION LIMIT VERIFICATION (MDLV) REPORT

Integrated Analytical Laboratories - Randolph, NJ

Analysis Level:	0.20 ppbv, 0.40 for m&p-xylenes
Matrix:	Air
Column ID:	RTX-VMS, 30-meter, 0.32 mm ID, 1.8 µm d_f
Instrument Identification:	AA
Date of Verification Study:	8/5/2024
Study Identification File #:	aa6955rllcs
Analyst:	Joe Walukiewicz
Analysis/Processing Method:	C:\MSDCHEM\1\METHODS\240802.M
Cylinder ID:	EB0103704

Michael Leftin, Ph.D.
Laboratory Director

Date: August 5, 2024

Compound Name	CAS #	MDLV (ppbv)	RL (ppbv)	RL/MDLV Ratio
n-Nonane	111-84-2	0.19	0.20	1
Chlorobenzene	108-90-7	0.21	0.20	1
Ethylbenzene	100-41-4	0.21	0.20	1
Xylenes (m&p)	179601-23-1	0.40	0.40	1
Xylene (o)	95-47-6	0.19	0.20	1
Styrene	100-42-5	0.18	0.20	1
Bromoform	75-25-2	0.19	0.20	1
Cumene	98-82-8	0.19	0.20	1
n-Propyl benzene	103-65-1	0.20	0.20	1
1,1,2,2-Tetrachloroethane	79-34-5	0.21	0.20	1
4-Ethyltoluene	622-96-8	0.20	0.20	1
2-Chlorotoluene	95-49-8	0.20	0.20	1
1,3,5-Trimethylbenzene	108-67-8	0.18	0.20	1
1,2,4-Trimethylbenzene	95-63-6	0.17	0.20	1
1,3-Dichlorobenzene	541-73-1	0.23	0.20	1
1,4-Dichlorobenzene	106-46-7	0.18	0.20	1
Benzyl chloride	100-44-7	0.15	0.20	1
1,2-Dichlorobenzene	95-50-1	0.19	0.20	1
1,3-Hexachlorobutadiene	87-68-3	0.23	0.20	1
1,2,4-Trichlorobenzene	120-82-1	0.23	0.20	1
Naphthalene	91-20-3	0.20	0.20	1

Section V: Quality Control Data Summary

BFB Tune Summary

Method Blank

Laboratory Control Sample

Laboratory Sample Duplicate

Internal Standard Area Summary

BFB

Data Path: C:\DATA\2024\05-2024\05-29-2024\
Data File: AA6554BFB.D
Acq On: 5/29/2024 9:16:00AM
Operator: jjw
Sample: BFB
Misc: ALM018474
ALS Vial: 1 **Multiplier:** 1
Integration File: rteint.p
Method: C:\msdchem\1\METHODS\240326.M
Last Update: Wed Mar 27 13:46:33 2024
Spectrum Information:

PassFail	Target Mass	Rel. to Mass	Lower Limit %	Higher Limit %	Raw Abundance	% Relative Abundance
PASS	50	95	8	40	242304	21.7
PASS	75	95	30	66	578901	51.8
PASS	95	95	100	100	1118037	100.0
PASS	96	95	5	9	75616	6.8
PASS	173	174	0.00	2	6315	0.9
PASS	174	95	50	100	683392	61.1
PASS	175	174	4	9	49440	7.2
PASS	176	174	93	101	651648	95.4
PASS	177	176	5	9	42576	6.5

Runs with this BFB:

Lab Sample Number	Date File	Field Sample	Date/Time of Sample/Standard Analysis
BFB	AA6554BFB	NA	5/29/2024 9:16:00 AM
0.2 PPBV STD	AA6556STD05	NA	5/29/2024 12:40:00 PM
2 PPBV STD	AA6557STD04	NA	5/29/2024 1:11:00 PM
10 PPBV STD STD	AA6558STD03	NA	5/29/2024 1:46:00 PM
20 PPBV STD	AA6559STD02	NA	5/29/2024 2:18:00 PM
40 PPBV STD	AA6560STD01	NA	5/29/2024 2:55:00 PM
10 PPBV ICVSS	AA6561ICVSS	NA	5/29/2024 5:16:00 PM

BFB

Data Path: C:\DATA\2024\05-2024\05-31-2024\
Data File: AA6579BFB.D
Acq On: 5/31/2024 9:25:00AM
Operator: jjw
Sample: BFB
Misc: ALM018474
ALS Vial: 1 **Multiplier:** 1
Integration File: rteint.p
Method: C:\msdchem\1\METHODS\240529.M
Last Update: Wed May 29 15:44:50 2024
Spectrum Information:

PassFail	Target Mass	Rel. to Mass	Lower Limit %	Higher Limit %	Raw Abundance	% Relative Abundance
PASS	50	95	8	40	63501	20.1
PASS	75	95	30	66	156501	49.5
PASS	95	95	100	100	316480	100.0
PASS	96	95	5	9	20299	6.4
PASS	173	174	0.00	2	2010	1.0
PASS	174	95	50	100	210859	66.6
PASS	175	174	4	9	15064	7.1
PASS	176	174	93	101	198549	94.2
PASS	177	176	5	9	13677	6.9

Runs with this BFB:

Lab Sample Number	Date File	Field Sample	Date/Time of Sample/Standard Analysis
BFB	AA6579BFB	NA	5/31/2024 9:25:00 AM
10 PPBV DCVS	AA6580DCVS	NA	5/31/2024 9:55:00 AM
10 PPBV LCS	AA6581LCS	NA	5/31/2024 10:25:00 AM
METHOD BLANK	AA6582BLK	NA	5/31/2024 11:57:00 AM
02 PPBV RLLCS	AA6583RLLCS	NA	5/31/2024 12:31:00 PM
5089	AA6584	NA	5/31/2024 1:04:00 PM
2069	AA6585	NA	5/31/2024 1:36:00 PM
10 PPBV CCCVS	AA6598CCCVS	NA	5/31/2024 10:11:00 PM

BFB

Data Path: C:\DATA\2024\09-2024\09-11-2024\
Data File: AA7123BFB.D
Acq On: 9/11/2024 10:57:00AM
Operator: jjw
Sample: BFB
Misc: ALM018474
ALS Vial: 1 **Multiplier:** 1
Integration File: rteint.p
Method: C:\msdchem\1\METHODS\240910.M
Last Update: Tue Sep 10 16:28:10 2024
Spectrum Information:

PassFail	Target Mass	Rel. to Mass	Lower Limit %	Higher Limit %	Raw Abundance	% Relative Abundance
PASS	50	95	8	40	159531	29.8
PASS	75	95	30	66	315840	58.9
PASS	95	95	100	100	535957	100.0
PASS	96	95	5	9	34323	6.4
PASS	173	174	0.00	2	3211	1.0
PASS	174	95	50	100	312192	58.2
PASS	175	174	4	9	23893	7.7
PASS	176	174	93	101	305323	97.8
PASS	177	176	5	9	20368	6.7

Runs with this BFB:

Lab Sample Number	Date File	Field Sample	Date/Time of Sample/Standard Analysis
BFB	AA7123BFB	NA	9/11/2024 10:57:00 AM
0.2 PPBV STD	AA7124STD05	NA	9/11/2024 12:03:00 PM
2 PPBV STD	AA7125STD04	NA	9/11/2024 12:35:00 PM
10 PPBV STD	AA7126STD03	NA	9/11/2024 1:09:00 PM
20 PPBV STD	AA7127STD02	NA	9/11/2024 1:44:00 PM
40 PPBV STD	AA7128STD01	NA	9/11/2024 2:20:00 PM
10 PPBV ICVSS	AA7129ICVSS	NA	9/11/2024 2:52:00 PM
10 PPBV LCS	AA7130LCS	NA	9/11/2024 3:24:00 PM
METHOD BLANK	AA7131BLK	NA	9/11/2024 3:57:00 PM
02 PPBV RLLCS	AA7131RLLCS	NA	9/11/2024 4:33:00 PM
10 PPBV CCCVS	AA7142CCCVS	NA	9/11/2024 10:56:00 PM

BFB

Data Path: C:\DATA\2024\09-2024\09-18-2024\
Data File: AA7223BFB.D
Acq On: 9/18/2024 10:23:00AM
Operator: jjw
Sample: BFB
Misc: ALM018474
ALS Vial: 1 **Multiplier:** 1
Integration File: rteint.p
Method: C:\msdchem\1\METHODS\240910.M
Last Update: Wed Sep 11 16:19:32 2024
Spectrum Information:

PassFail	Target Mass	Rel. to Mass	Lower Limit %	Higher Limit %	Raw Abundance	% Relative Abundance
PASS	50	95	8	40	208299	32.3
PASS	75	95	30	66	392576	60.9
PASS	95	95	100	100	645013	100.0
PASS	96	95	5	9	41525	6.4
PASS	173	174	0.00	2	4864	1.3
PASS	174	95	50	100	368597	57.1
PASS	175	174	4	9	31027	8.4
PASS	176	174	93	101	360149	97.7
PASS	177	176	5	9	24189	6.7

Runs with this BFB:

Lab Sample Number	Date File	Field Sample	Date/Time of Sample/Standard Analysis
BFB	AA7223BFB	NA	9/18/2024 10:23:00 AM
10 PPBV DCVS	AA7224DCVS	NA	9/18/2024 10:54:00 AM
10 PPBV LCS	AA7225LCS	NA	9/18/2024 11:25:00 AM
METHOD BLANK	AA7226BLK	NA	9/18/2024 11:55:00 AM
E24-03187-01	AA7231	IA-1	9/18/2024 2:43:00 PM
E24-03187-02	AA7232	IA-2	9/18/2024 3:19:00 PM
E24-03187-03	AA7233	IA-3	9/18/2024 3:51:00 PM
E24-03187-04	AA7234	IA-4	9/18/2024 4:40:00 PM
E24-03187-05	AA7235	IA-5	9/18/2024 5:11:00 PM
E24-03187-06	AA7236	IA-6	9/18/2024 5:50:00 PM
E24-03187-07	AA7237	IA-7	9/18/2024 6:22:00 PM
E24-03187-08	AA7240	AA-1	9/18/2024 7:54:00 PM
E24-03187-28	AA7241	AA-1	9/18/2024 8:26:00 PM

INTEGRATED ANALYTICAL LABORATORIES, LLC

Method Blank Report

Lab Sample Name:	**METHOD BLANK**	**Data File:**	**AA6582BLK**
Field Sample Name:	**METHOD BLANK**	**Date Analyzed:**	**5/31/2024**
Matrix:	**Air**	**Sample Volume:**	**500ml**
Dilution Factor:	**1**	**GC/MS Column:**	**RTX-1, 0.32 mmID**

Runs with this Method Blank:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6579BFB]	05/31/2024 9:25
10 PPBV DCVS [AA6580DCVS]	05/31/2024 9:55
10 PPBV LCS [AA6581LCS]	05/31/2024 10:25
METHOD BLANK [AA6582BLK]	05/31/2024 11:57
02 PPBV RLLCS [AA6583RLLCS]	05/31/2024 12:31
5089 [AA6584]	05/31/2024 13:04
2069 [AA6585]	05/31/2024 13:36
10 PPBV CCCVS [AA6598CCCVS]	05/31/2024 22:11

Compound	CAS #	Reporting Limit (ppbv)	Concentration (ppbv)
Acetone	67-64-1	0.20	ND
Benzene	71-43-2	0.20	ND
Bromodichloromethane	75-27-4	0.20	ND
Bromoform	75-25-2	0.20	ND
Bromomethane	74-83-9	0.20	ND
1,3-Butadiene	106-99-0	0.20	ND
Chlorobenzene	108-90-7	0.20	ND
Chloroethane	75-00-3	0.20	ND
Chloroform	67-66-3	0.20	ND
Chloromethane	74-87-3	0.20	ND
Carbon disulfide	75-15-0	0.20	ND
Carbon tetrachloride	56-23-5	0.20	ND
Cyclohexane	110-82-7	0.20	ND
Dibromochloromethane	124-48-1	0.20	ND
1,2-Dibromoethane	106-93-4	0.17	ND
1,2-Dichlorobenzene	95-50-1	0.20	ND
1,3-Dichlorobenzene	541-73-1	0.20	ND
1,4-Dichlorobenzene	106-46-7	0.20	ND
Dichlorodifluoromethane	75-71-8	0.20	ND
1,1-Dichloroethane	75-34-3	0.20	ND
1,2-Dichloroethane	107-06-2	0.20	ND
1,1-Dichloroethene	75-35-4	0.20	ND
1,2-Dichloroethene (cis)	156-59-2	0.20	ND
1,2-Dichloroethene (trans)	156-60-5	0.20	ND
1,2-Dichloropropane	78-87-5	0.20	ND
1,3-Dichloropropene (cis)	10061-01-5	0.20	ND
1,3-Dichloropropene (trans)	10061-02-6	0.19	ND
1,2-Dichlorotetrafluoroethane	76-14-2	0.20	ND
1,4-Dioxane	123-91-1	0.20	ND
Ethylbenzene	100-41-4	0.18	ND
n-Heptane	142-82-5	0.20	ND
1,3-Hexachlorobutadiene	87-68-3	0.20	ND
n-Hexane	110-54-3	0.20	ND
Methylene chloride	75-09-2	0.20	ND

Method Blank must be less than the Practical Quantitation Limit (PQL).

INTEGRATED ANALYTICAL LABORATORIES, LLC

Method Blank Report

Lab Sample Name:	**METHOD BLANK**	**Data File:**	**AA6582BLK**
Field Sample Name:	**METHOD BLANK**	**Date Analyzed:**	**5/31/2024**
Matrix:	**Air**	**Sample Volume:**	**500ml**
Dilution Factor:	**1**	**GC/MS Column:**	**RTX-1, 0.32 mmID**

Runs with this Method Blank:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6579BFB]	05/31/2024 9:25
10 PPBV DCVS [AA6580DCVS]	05/31/2024 9:55
10 PPBV LCS [AA6581LCS]	05/31/2024 10:25
METHOD BLANK [AA6582BLK]	05/31/2024 11:57
02 PPBV RLLCS [AA6583RLLCS]	05/31/2024 12:31
5089 [AA6584]	05/31/2024 13:04
2069 [AA6585]	05/31/2024 13:36
10 PPBV CCCVS [AA6598CCCVS]	05/31/2024 22:11

Compound	CAS #	Reporting Limit (ppbv)	Concentration (ppbv)
Methyl ethyl ketone	78-93-3	0.20	ND
Methyl isobutyl ketone	108-10-1	0.20	ND
Methyl tert-butyl ether	1634-04-4	0.20	ND
Styrene	100-42-5	0.20	ND
Tert-butyl alcohol	75-65-0	0.20	ND
1,1,2,2-Tetrachloroethane	79-34-5	0.20	ND
Tetrachloroethene	127-18-4	0.20	ND
Toluene	108-88-3	0.20	ND
1,2,4-Trichlorobenzene	120-82-1	0.20	ND
1,1,1-Trichloroethane	71-55-6	0.17	ND
1,1,2-Trichloroethane	79-00-5	0.20	ND
Trichloroethene	79-01-6	0.17	ND
Trichlorofluoromethane	75-69-4	0.20	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.20	ND
1,2,4-Trimethylbenzene	95-63-6	0.20	ND
1,3,5-Trimethylbenzene	108-67-8	0.20	ND
2,2,4-Trimethylpentane	540-84-1	0.20	ND
Vinyl bromide	593-60-2	0.20	ND
Vinyl chloride	75-01-4	0.20	ND
Xylenes (m&p)	179601-23-1	0.20	ND
Xylenes (o)	95-47-6	0.20	ND

Method Blank must be less than the Practical Quantitation Limit (PQL).

INTEGRATED ANALYTICAL LABORATORIES, LLC

Method Blank Report

Lab Sample Name:	**METHOD BLANK**	**Data File:**	**AA7226BLK**
Field Sample Name:	**METHOD BLANK**	**Date Analyzed:**	**9/18/2024**
Matrix:	**Air**	**Sample Volume:**	**500ml**
Dilution Factor:	**1**	**GC/MS Column:**	**RTX-1, 0.32 mmID**

Runs with this Method Blank:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA7223BFB]	09/18/2024 10:23
10 PPBV DCVS [AA7224DCVS]	09/18/2024 10:54
10 PPBV LCS [AA7225LCS]	09/18/2024 11:25
METHOD BLANK [AA7226BLK]	09/18/2024 11:55
E24-03187-01 [AA7231]	09/18/2024 14:43
E24-03187-02 [AA7232]	09/18/2024 15:19
E24-03187-03 [AA7233]	09/18/2024 15:51
E24-03187-04 [AA7234]	09/18/2024 16:40
E24-03187-05 [AA7235]	09/18/2024 17:11
E24-03187-06 [AA7236]	09/18/2024 17:50
E24-03187-07 [AA7237]	09/18/2024 18:22
E24-03187-08 [AA7240]	09/18/2024 19:54
E24-03187-28 [AA7241]	09/18/2024 20:26

Compound	CAS #	Reporting Limit (ppbv)	Concentration (ppbv)
Acetone	67-64-1	0.20	ND
Benzene	71-43-2	0.20	ND
Bromodichloromethane	75-27-4	0.20	ND
Bromoform	75-25-2	0.20	ND
Bromomethane	74-83-9	0.20	ND
1,3-Butadiene	106-99-0	0.20	ND
Chlorobenzene	108-90-7	0.20	ND
Chloroethane	75-00-3	0.20	ND
Chloroform	67-66-3	0.20	ND
Chloromethane	74-87-3	0.20	ND
Carbon disulfide	75-15-0	0.20	ND
Carbon tetrachloride	56-23-5	0.20	ND
Cyclohexane	110-82-7	0.20	ND
Dibromochloromethane	124-48-1	0.20	ND
1,2-Dibromoethane	106-93-4	0.17	ND
1,2-Dichlorobenzene	95-50-1	0.20	ND
1,3-Dichlorobenzene	541-73-1	0.20	ND
1,4-Dichlorobenzene	106-46-7	0.20	ND
Dichlorodifluoromethane	75-71-8	0.20	ND
1,1-Dichloroethane	75-34-3	0.20	ND
1,2-Dichloroethane	107-06-2	0.20	ND
1,1-Dichloroethene	75-35-4	0.20	ND
1,2-Dichloroethene (cis)	156-59-2	0.20	ND
1,2-Dichloroethene (trans)	156-60-5	0.20	ND
1,2-Dichloropropane	78-87-5	0.20	ND
1,3-Dichloropropene (cis)	10061-01-5	0.20	ND
1,3-Dichloropropene (trans)	10061-02-6	0.19	ND
1,2-Dichlorotetrafluoroethane	76-14-2	0.20	ND

Method Blank must be less than the Practical Quantitation Limit (PQL).

INTEGRATED ANALYTICAL LABORATORIES, LLC

Method Blank Report

Lab Sample Name:	**METHOD BLANK**	**Data File:**	**AA7226BLK**
Field Sample Name:	**METHOD BLANK**	**Date Analyzed:**	**9/18/2024**
Matrix:	**Air**	**Sample Volume:**	**500ml**
Dilution Factor:	**1**	**GC/MS Column:**	**RTX-1, 0.32 mmID**

Runs with this Method Blank:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA7223BFB]	09/18/2024 10:23
10 PPBV DCVS [AA7224DCVS]	09/18/2024 10:54
10 PPBV LCS [AA7225LCS]	09/18/2024 11:25
METHOD BLANK [AA7226BLK]	09/18/2024 11:55
E24-03187-01 [AA7231]	09/18/2024 14:43
E24-03187-02 [AA7232]	09/18/2024 15:19
E24-03187-03 [AA7233]	09/18/2024 15:51
E24-03187-04 [AA7234]	09/18/2024 16:40
E24-03187-05 [AA7235]	09/18/2024 17:11
E24-03187-06 [AA7236]	09/18/2024 17:50
E24-03187-07 [AA7237]	09/18/2024 18:22
E24-03187-08 [AA7240]	09/18/2024 19:54
E24-03187-28 [AA7241]	09/18/2024 20:26

Compound	CAS #	Reporting Limit (ppbv)	Concentration (ppbv)
1,4-Dioxane	123-91-1	0.20	ND
Ethylbenzene	100-41-4	0.18	ND
n-Heptane	142-82-5	0.20	ND
1,3-Hexachlorobutadiene	87-68-3	0.20	ND
n-Hexane	110-54-3	0.20	ND
Methylene chloride	75-09-2	0.20	ND
Methyl ethyl ketone	78-93-3	0.20	ND
Methyl isobutyl ketone	108-10-1	0.20	ND
Methyl tert-butyl ether	1634-04-4	0.20	ND
Styrene	100-42-5	0.20	ND
Tert-butyl alcohol	75-65-0	0.20	ND
1,1,2,2-Tetrachloroethane	79-34-5	0.20	ND
Tetrachloroethene	127-18-4	0.20	ND
Toluene	108-88-3	0.20	ND
1,2,4-Trichlorobenzene	120-82-1	0.20	ND
1,1,1-Trichloroethane	71-55-6	0.17	ND
1,1,2-Trichloroethane	79-00-5	0.20	ND
Trichloroethene	79-01-6	0.17	ND
Trichlorofluoromethane	75-69-4	0.20	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.20	ND
1,2,4-Trimethylbenzene	95-63-6	0.20	ND
1,3,5-Trimethylbenzene	108-67-8	0.20	ND
2,2,4-Trimethylpentane	540-84-1	0.20	ND
Vinyl bromide	593-60-2	0.20	ND
Vinyl chloride	75-01-4	0.20	ND
Xylenes (m&p)	179601-23-1	0.20	ND
Xylenes (o)	95-47-6	0.20	ND

Method Blank must be less than the Practical Quantitation Limit (PQL).

Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA6581LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 5/31/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6579BFB]	05/31/2024 9:25
10 PPBV DCVS [AA6580DCVS]	05/31/2024 9:55
10 PPBV LCS [AA6581LCS]	05/31/2024 10:25
METHOD BLANK [AA6582BLK]	05/31/2024 11:57
02 PPBV RLLCS [AA6583RLLCS]	05/31/2024 12:31
5089 [AA6584]	05/31/2024 13:04
2069 [AA6585]	05/31/2024 13:36
10 PPBV CCCVS [AA6598CCCVS]	05/31/2024 22:11

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
Acetone	67-64-1	11	100
Benzene	71-43-2	11	110
Bromodichloromethane	75-27-4	12	110
Bromoform	75-25-2	11	100
Bromomethane	74-83-9	11	100
1,3-Butadiene	106-99-0	11	110
Chlorobenzene	108-90-7	11	110
Chloroethane	75-00-3	11	110
Chloroform	67-66-3	11	110
Chloromethane	74-87-3	14	120
Carbon disulfide	75-15-0	11	100
Carbon tetrachloride	56-23-5	11	110
Cyclohexane	110-82-7	11	110
Dibromochloromethane	124-48-1	11	100
1,2-Dibromoethane	106-93-4	11	100
1,2-Dichlorobenzene	95-50-1	10.0	91
1,3-Dichlorobenzene	541-73-1	10	91
1,4-Dichlorobenzene	106-46-7	10.0	91
Dichlorodifluoromethane	75-71-8	11	100
1,1-Dichloroethane	75-34-3	11	100
1,2-Dichloroethane	107-06-2	11	110
1,1-Dichloroethene	75-35-4	11	100
1,2-Dichloroethene (cis)	156-59-2	12	110
1,2-Dichloroethene (trans)	156-60-5	12	110
1,2-Dichloropropane	78-87-5	11	110
1,3-Dichloropropene (cis)	10061-01-5	11	100
1,3-Dichloropropene (trans)	10061-02-6	12	120
1,2-Dichlorotetrafluoroethane	76-14-2	9.9	90
1,4-Dioxane	123-91-1	12	100
Ethylbenzene	100-41-4	10	100
n-Heptane	142-82-5	11	110
1,3-Hexachlorobutadiene	87-68-3	10	88

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.

*** Values outside of QC limits* Values outside of 70-130% QC limits**

Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA6581LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 5/31/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6579BFB]	05/31/2024 9:25
10 PPBV DCVS [AA6580DCVS]	05/31/2024 9:55
10 PPBV LCS [AA6581LCS]	05/31/2024 10:25
METHOD BLANK [AA6582BLK]	05/31/2024 11:57
02 PPBV RLLCS [AA6583RLLCS]	05/31/2024 12:31
5089 [AA6584]	05/31/2024 13:04
2069 [AA6585]	05/31/2024 13:36
10 PPBV CCCVS [AA6598CCCVS]	05/31/2024 22:11

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
n-Hexane	110-54-3	11	110
Methylene chloride	75-09-2	10	91
Methyl ethyl ketone	78-93-3	11	93
Methyl isobutyl ketone	108-10-1	11	100
Methyl tert-butyl ether	1634-04-4	11	100
Styrene	100-42-5	11	100
Tert-butyl alcohol	75-65-0	12	100
1,1,2,2-Tetrachloroethane	79-34-5	11	100
Tetrachloroethene	127-18-4	11	110
Toluene	108-88-3	11	110
1,2,4-Trichlorobenzene	120-82-1	11	96
1,1,1-Trichloroethane	71-55-6	11	110
1,1,2-Trichloroethane	79-00-5	11	100
Trichloroethene	79-01-6	10	100
Trichlorofluoromethane	75-69-4	11	100
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	11	110
1,2,4-Trimethylbenzene	95-63-6	10	91
1,3,5-Trimethylbenzene	108-67-8	10	91
2,2,4-Trimethylpentane	540-84-1	11	110
Vinyl bromide	593-60-2	11	110
Vinyl chloride	75-01-4	12	120
Xylenes (m&p)	179601-23-1	21	110
Xylenes (o)	95-47-6	10	100

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.

*** Values outside of QC limits* Values outside of 70-130% QC limits**

INTEGRATED ANALYTICAL LABORATORIES, LLC

Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA7225LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 9/18/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA7223BFB]	09/18/2024 10:23
10 PPBV DCVS [AA7224DCVS]	09/18/2024 10:54
10 PPBV LCS [AA7225LCS]	09/18/2024 11:25
METHOD BLANK [AA7226BLK]	09/18/2024 11:55
E24-03187-01 [AA7231]	09/18/2024 14:43
E24-03187-02 [AA7232]	09/18/2024 15:19
E24-03187-03 [AA7233]	09/18/2024 15:51
E24-03187-04 [AA7234]	09/18/2024 16:40
E24-03187-05 [AA7235]	09/18/2024 17:11
E24-03187-06 [AA7236]	09/18/2024 17:50
E24-03187-07 [AA7237]	09/18/2024 18:22
E24-03187-08 [AA7240]	09/18/2024 19:54
E24-03187-28 [AA7241]	09/18/2024 20:26

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
Acetone	67-64-1	13	120
Benzene	71-43-2	11	110
Bromodichloromethane	75-27-4	11	100
Bromoform	75-25-2	11	100
Bromomethane	74-83-9	11	100
1,3-Butadiene	106-99-0	12	120
Chlorobenzene	108-90-7	11	110
Chloroethane	75-00-3	12	120
Chloroform	67-66-3	12	120
Chloromethane	74-87-3	13	110
Carbon disulfide	75-15-0	12	110
Carbon tetrachloride	56-23-5	11	110
Cyclohexane	110-82-7	11	110
Dibromochloromethane	124-48-1	12	110
1,2-Dibromoethane	106-93-4	11	100
1,2-Dichlorobenzene	95-50-1	10	91
1,3-Dichlorobenzene	541-73-1	11	100
1,4-Dichlorobenzene	106-46-7	11	100
Dichlorodifluoromethane	75-71-8	12	110
1,1-Dichloroethane	75-34-3	12	110
1,2-Dichloroethane	107-06-2	12	120
1,1-Dichloroethene	75-35-4	12	110
1,2-Dichloroethene (cis)	156-59-2	13	120
1,2-Dichloroethene (trans)	156-60-5	13	120
1,2-Dichloropropane	78-87-5	11	110
1,3-Dichloropropene (cis)	10061-01-5	11	100
1,3-Dichloropropene (trans)	10061-02-6	12	120

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.

*** Values outside of QC limits* Values outside of 70-130% QC limits**

INTEGRATED ANALYTICAL LABORATORIES, LLC

Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA7225LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 9/18/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA7223BFB]	09/18/2024 10:23
10 PPBV DCVS [AA7224DCVS]	09/18/2024 10:54
10 PPBV LCS [AA7225LCS]	09/18/2024 11:25
METHOD BLANK [AA7226BLK]	09/18/2024 11:55
E24-03187-01 [AA7231]	09/18/2024 14:43
E24-03187-02 [AA7232]	09/18/2024 15:19
E24-03187-03 [AA7233]	09/18/2024 15:51
E24-03187-04 [AA7234]	09/18/2024 16:40
E24-03187-05 [AA7235]	09/18/2024 17:11
E24-03187-06 [AA7236]	09/18/2024 17:50
E24-03187-07 [AA7237]	09/18/2024 18:22
E24-03187-08 [AA7240]	09/18/2024 19:54
E24-03187-28 [AA7241]	09/18/2024 20:26

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
1,2-Dichlorotetrafluoroethane	76-14-2	9.9	90
1,4-Dioxane	123-91-1	12	100
Ethylbenzene	100-41-4	11	110
n-Heptane	142-82-5	13	130
1,3-Hexachlorobutadiene	87-68-3	9.5	83
n-Hexane	110-54-3	11	110
Methylene chloride	75-09-2	11	100
Methyl ethyl ketone	78-93-3	13	110
Methyl isobutyl ketone	108-10-1	12	110
Methyl tert-butyl ether	1634-04-4	11	100
Styrene	100-42-5	11	100
Tert-butyl alcohol	75-65-0	12	100
1,1,2,2-Tetrachloroethane	79-34-5	11	100
Tetrachloroethene	127-18-4	11	110
Toluene	108-88-3	11	110
1,2,4-Trichlorobenzene	120-82-1	9.0	79
1,1,1-Trichloroethane	71-55-6	11	110
1,1,2-Trichloroethane	79-00-5	11	100
Trichloroethene	79-01-6	10	100
Trichlorofluoromethane	75-69-4	12	110
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	11	110
1,2,4-Trimethylbenzene	95-63-6	11	100
1,3,5-Trimethylbenzene	108-67-8	11	100
2,2,4-Trimethylpentane	540-84-1	10	100
Vinyl bromide	593-60-2	11	110
Vinyl chloride	75-01-4	12	120
Xylenes (m&p)	179601-23-1	22	110

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.

*** Values outside of QC limits* Values outside of 70-130% QC limits**

Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA7225LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 9/18/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA7223BFB]	09/18/2024 10:23
10 PPBV DCVS [AA7224DCVS]	09/18/2024 10:54
10 PPBV LCS [AA7225LCS]	09/18/2024 11:25
METHOD BLANK [AA7226BLK]	09/18/2024 11:55
E24-03187-01 [AA7231]	09/18/2024 14:43
E24-03187-02 [AA7232]	09/18/2024 15:19
E24-03187-03 [AA7233]	09/18/2024 15:51
E24-03187-04 [AA7234]	09/18/2024 16:40
E24-03187-05 [AA7235]	09/18/2024 17:11
E24-03187-06 [AA7236]	09/18/2024 17:50
E24-03187-07 [AA7237]	09/18/2024 18:22
E24-03187-08 [AA7240]	09/18/2024 19:54
E24-03187-28 [AA7241]	09/18/2024 20:26

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
Xylenes (o)	95-47-6	10	100

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.

*** Values outside of QC limits* Values outside of 70-130% QC limits**

Analysis: Volatile Organic Compounds by EPA Method TO-15
Laboratory Sample Duplicate Report

SDG Number: E24-01789
IAL Sample ID: E24-01789-03
Matrix: Air
Summa ID: 3810

Date Received: 5/23/24
Date Analyzed: 5/30/24,5/30/24
Lab Data File#: AA6573,AA6574
Dilution Factor: 1
Injection Volume: 500ml
GC/MS Column: RTX-1, 0.32 mmID

Compound	CAS #	Sample E24-01789-03 Concentration Reported ppbv	Q	Sample Dup E24-01789-23 Concentration Reported ppbv	Q	Reporting Limits ppbv	RPD
Acetone	67-64-1	**7.7**	X	**9.9**	X	0.40	**-25.00%**
Allyl Chloride	107-05-1	0.40	U	0.40	U	0.40	0.00%
Benzene	71-43-2	0.20	U	**0.21**		0.20	**NC**
Bromodichloromethane	75-27-4	0.40	U	0.40	U	0.40	0.00%
Bromoform	75-25-2	0.40	U	0.40	U	0.40	0.00%
Bromomethane	74-83-9	0.40	U	0.40	U	0.40	0.00%
1,3-Butadiene	106-99-0	0.40	U	0.40	U	0.40	0.00%
Chlorobenzene	108-90-7	0.40	U	0.40	U	0.40	0.00%
Chloroethane	75-00-3	0.40	U	0.40	U	0.40	0.00%
Chloroform	67-66-3	0.40	U	0.40	U	0.40	0.00%
Chloromethane	74-87-3	0.40	U	0.40	U	0.40	0.00%
Carbon disulfide	75-15-0	0.40	U	0.40	U	0.40	0.00%
Carbon tetrachloride	56-23-5	0.20	U	0.20	U	0.20	0.00%
2-Chlorotoluene	95-49-8	0.40	U	0.40	U	0.40	0.00%
Cyclohexane	110-82-7	0.40	U	0.40	U	0.40	0.00%
Dibromochloromethane	124-48-1	0.40	U	0.40	U	0.40	0.00%
1,2-Dibromoethane	106-93-4	0.20	U	0.20	U	0.20	0.00%
1,2-Dichlorobenzene	95-50-1	0.40	U	0.40	U	0.40	0.00%
1,3-Dichlorobenzene	541-73-1	0.40	U	0.40	U	0.40	0.00%
1,4-Dichlorobenzene	106-46-7	0.40	U	0.40	U	0.40	0.00%
Dichlorodifluoromethane	75-71-8	0.40	U	0.40	U	0.40	0.00%
1,1-Dichloroethane	75-34-3	0.40	U	0.40	U	0.40	0.00%
1,2-Dichloroethane	107-06-2	0.40	U	0.40	U	0.40	0.00%
1,1-Dichloroethene	75-35-4	0.40	U	0.40	U	0.40	0.00%
1,2-Dichloroethene (cis)	156-59-2	0.40	U	0.40	U	0.40	0.00%
1,2-Dichloroethene (trans)	156-60-5	0.40	U	0.40	U	0.40	0.00%
1,2-Dichloropropane	78-87-5	0.20	U	0.20	U	0.20	0.00%
1,3-Dichloropropene (cis)	10061-01-5	0.20	U	0.20	U	0.20	0.00%
1,3-Dichloropropene (trans)	10061-02-6	0.20	U	0.20	U	0.20	0.00%
1,2-Dichlorotetrafluoroethane	76-14-2	0.40	U	0.40	U	0.40	0.00%
Ethylbenzene	100-41-4	0.20	U	0.20	U	0.20	0.00%
4-Ethyltoluene	622-96-8	0.40	U	0.40	U	0.40	0.00%
n-Heptane	142-82-5	0.40	U	0.40	U	0.40	0.00%
1,3-Hexachlorobutadiene	87-68-3	0.40	U	0.40	U	0.40	0.00%
n-Hexane	110-54-3	0.40	U	0.40	U	0.40	0.00%
Methylene chloride	75-09-2	0.40	U	0.40	U	0.40	0.00%
Methyl ethyl ketone	78-93-3	**0.42**		**0.46**		0.40	**-9.09%**
Methyl isobutyl ketone	108-10-1	0.40	U	0.40	U	0.40	0.00%

Qualifiers:
E=Concentration exceeds upper level of calibration range for instrument.
D=Extra dilution required for this compound. X=Duplicate samples do not met RPD criteria.
U=Compound ND or under reporting limit.

Analysis: Volatile Organic Compounds by EPA Method TO-15
Laboratory Sample Duplicate Report

SDG Number: E24-01789
IAL Sample ID: E24-01789-03
Matrix: Air
Summa ID: 3810

Date Received: 5/23/24
Date Analyzed: 5/30/24,5/30/24
Lab Data File#: AA6573,AA6574
Dilution Factor: 1
Injection Volume: 500ml
GC/MS Column: RTX-1, 0.32 mmID

Compound	CAS #	Sample E24-01789-03 Concentration Reported ppbv	Q	Sample Dup E24-01789-23 Concentration Reported ppbv	Q	Reporting Limits ppbv	RPD
Methyl tert-butyl ether	1634-04-4	0.40	U	0.40	U	0.40	0.00%
Styrene	100-42-5	0.40	U	0.40	U	0.40	0.00%
Tert-butyl alcohol	75-65-0	0.40	U	0.40	U	0.40	0.00%
1,1,2,2-Tetrachloroethane	79-34-5	0.40	U	0.40	U	0.40	0.00%
Tetrachloroethene	127-18-4	0.40	U	0.40	U	0.40	0.00%
Toluene	108-88-3	0.40	U	0.40	U	0.40	0.00%
1,2,4-Trichlorobenzene	120-82-1	0.40	U	0.40	U	0.40	0.00%
1,1,1-Trichloroethane	71-55-6	0.40	U	0.40	U	0.40	0.00%
1,1,2-Trichloroethane	79-00-5	0.40	U	0.40	U	0.40	0.00%
Trichloroethene	79-01-6	0.20	U	0.20	U	0.20	0.00%
Trichlorofluoromethane	75-69-4	0.40	U	0.40	U	0.40	0.00%
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.40	U	0.40	U	0.40	0.00%
1,2,4-Trimethylbenzene	95-63-6	0.40	U	0.40	U	0.40	0.00%
1,3,5-Trimethylbenzene	108-67-8	0.40	U	0.40	U	0.40	0.00%
2,2,4-Trimethylpentane	540-84-1	0.40	U	0.40	U	0.40	0.00%
Vinyl bromide	593-60-2	0.40	U	0.40	U	0.40	0.00%
Vinyl chloride	75-01-4	0.20	U	0.20	U	0.20	0.00%
Xylenes (m&p)	179601-23-1	0.40	U	0.40	U	0.40	0.00%
Xylenes (o)	95-47-6	0.40	U	0.40	U	0.40	0.00%

RPD must be <25% for all laboratory duplicate samples. Laboratory duplicate samples are run once daily.
NC = The RPD could not be calculated since the compound was only detected in either the parent or duplicate sample.

Qualifiers:
E=Concentration exceeds upper level of calibration range for instrument.
D=Extra dilution required for this compound. X=Duplicate samples do not met RPD criteria.
U=Compound ND or under reporting limit.

Analysis: Volatile Organic Compounds by EPA Method TO-15
Laboratory Sample Duplicate Report

		Date Received:	9/17/24
SDG Number:	E24-03187	Date Analyzed:	9/18/24,9/18/24
IAL Sample ID:	E24-03187-08	Lab Data File#:	AA7240,AA7241
Matrix:	Air	Dilution Factor:	1
Summa ID:	3805	Injection Volume:	500ml
		GC/MS Column:	RTX-1, 0.32 mmID

		Sample		Sample Dup			
		E24-03187-08		**E24-03187-28**			
		Concentration		**Concentration**		**Reporting**	
		Reported		**Reported**		**Limits**	
Compound	**CAS #**	**ppbv**	**Q**	**ppbv**	**Q**	**ppbv**	**RPD**
Acetone	67-64-1	**4.5**		**4.6**		0.20	**-2.20%**
Benzene	71-43-2	0.20	U	**0.20**		0.20	**NC**
Bromodichloromethane	75-27-4	0.20	U	0.20	U	0.20	0.00%
Bromoform	75-25-2	0.20	U	0.20	U	0.20	0.00%
Bromomethane	74-83-9	0.20	U	0.20	U	0.20	0.00%
1,3-Butadiene	106-99-0	0.20	U	0.20	U	0.20	0.00%
Chlorobenzene	108-90-7	0.20	U	0.20	U	0.20	0.00%
Chloroethane	75-00-3	0.20	U	0.20	U	0.20	0.00%
Chloroform	67-66-3	0.20	U	0.20	U	0.20	0.00%
Chloromethane	74-87-3	0.20	U	0.20	U	0.20	0.00%
Carbon disulfide	75-15-0	0.20	U	0.20	U	0.20	0.00%
Carbon tetrachloride	56-23-5	0.040	U	0.040	U	0.040	0.00%
Cyclohexane	110-82-7	0.20	U	0.20	U	0.20	0.00%
Dibromochloromethane	124-48-1	0.20	U	0.20	U	0.20	0.00%
1,2-Dibromoethane	106-93-4	0.20	U	0.20	U	0.20	0.00%
1,2-Dichlorobenzene	95-50-1	0.20	U	0.20	U	0.20	0.00%
1,3-Dichlorobenzene	541-73-1	0.20	U	0.20	U	0.20	0.00%
1,4-Dichlorobenzene	106-46-7	0.20	U	0.20	U	0.20	0.00%
Dichlorodifluoromethane	75-71-8	0.20	U	0.20	U	0.20	0.00%
1,1-Dichloroethane	75-34-3	0.20	U	0.20	U	0.20	0.00%
1,2-Dichloroethane	107-06-2	0.20	U	0.20	U	0.20	0.00%
1,1-Dichloroethene	75-35-4	0.20	U	0.20	U	0.20	0.00%
1,2-Dichloroethene (cis)	156-59-2	0.20	U	0.20	U	0.20	0.00%
1,2-Dichloroethene (trans)	156-60-5	0.20	U	0.20	U	0.20	0.00%
1,2-Dichloropropane	78-87-5	0.20	U	0.20	U	0.20	0.00%
1,3-Dichloropropene (cis)	10061-01-5	0.20	U	0.20	U	0.20	0.00%
1,3-Dichloropropene (trans)	10061-02-6	0.20	U	0.20	U	0.20	0.00%
1,2-Dichlorotetrafluoroethane	76-14-2	0.20	U	0.20	U	0.20	0.00%
1,4-Dioxane	123-91-1	0.20	U	0.20	U	0.20	0.00%
Ethylbenzene	100-41-4	0.20	U	0.20	U	0.20	0.00%
n-Heptane	142-82-5	0.20	U	0.20	U	0.20	0.00%
1,3-Hexachlorobutadiene	87-68-3	0.20	U	0.20	U	0.20	0.00%
n-Hexane	110-54-3	0.20	U	0.20	U	0.20	0.00%
Methylene chloride	75-09-2	**2.8**		**2.8**		0.20	**0.00%**
Methyl ethyl ketone	78-93-3	**0.44**		**0.44**		0.20	**0.00%**
Methyl isobutyl ketone	108-10-1	0.20	U	0.20	U	0.20	0.00%
Methyl tert-butyl ether	1634-04-4	0.20	U	0.20	U	0.20	0.00%
Styrene	100-42-5	0.20	U	0.20	U	0.20	0.00%

Qualifiers:
E=Concentration exceeds upper level of calibration range for instrument.
D=Extra dilution required for this compound. X=Duplicate samples do not met RPD criteria.
U=Compound ND or under reporting limit.

Analysis: Volatile Organic Compounds by EPA Method TO-15
Laboratory Sample Duplicate Report

		Date Received:	9/17/24
SDG Number:	E24-03187	Date Analyzed:	9/18/24,9/18/24
IAL Sample ID:	E24-03187-08	Lab Data File#:	AA7240,AA7241
Matrix:	Air	Dilution Factor:	1
Summa ID:	3805	Injection Volume:	500ml
		GC/MS Column:	RTX-1, 0.32 mmID

		Sample		Sample Dup			
		E24-03187-08		**E24-03187-28**			
		Concentration Reported		**Concentration Reported**		**Reporting Limits**	
Compound	**CAS #**	**ppbv**	**Q**	**ppbv**	**Q**	**ppbv**	**RPD**
Tert-butyl alcohol	75-65-0	0.20	U	0.20	U	0.20	0.00%
1,1,2,2-Tetrachloroethane	79-34-5	0.20	U	0.20	U	0.20	0.00%
Tetrachloroethene	127-18-4	0.20	U	0.20	U	0.20	0.00%
Toluene	108-88-3	**0.79**		**0.79**		0.20	**0.00%**
1,2,4-Trichlorobenzene	120-82-1	0.20	U	0.20	U	0.20	0.00%
1,1,1-Trichloroethane	71-55-6	0.20	U	0.20	U	0.20	0.00%
1,1,2-Trichloroethane	79-00-5	0.20	U	0.20	U	0.20	0.00%
Trichloroethene	79-01-6	0.046	U	0.046	U	0.046	0.00%
Trichlorofluoromethane	75-69-4	**0.27**		**0.26**		0.20	**3.77%**
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.20	U	0.20	U	0.20	0.00%
1,2,4-Trimethylbenzene	95-63-6	0.20	U	0.20	U	0.20	0.00%
1,3,5-Trimethylbenzene	108-67-8	0.20	U	0.20	U	0.20	0.00%
2,2,4-Trimethylpentane	540-84-1	0.20	U	0.20	U	0.20	0.00%
Vinyl bromide	593-60-2	0.20	U	0.20	U	0.20	0.00%
Vinyl chloride	75-01-4	0.20	U	0.20	U	0.20	0.00%
Xylenes (m&p)	179601-23-1	**0.31**		**0.30**		0.20	**3.28%**
Xylenes (o)	95-47-6	0.20	U	0.20	U	0.20	0.00%

RPD must be <25% for all laboratory duplicate samples. Laboratory duplicate samples are run once daily.
NC = The RPD could not be calculated since the compound was only detected in either the parent or duplicate sample.

Qualifiers:
E=Concentration exceeds upper level of calibration range for instrument.
D=Extra dilution required for this compound. X=Duplicate samples do not met RPD criteria.
U=Compound ND or under reporting limit.

Initial Calibration Curve Internal Standard Area and Retention Time Summary

Instrument: AA **ICAL Date:** 5/29/2024

		BROMOCHLOROMETHANE				1,4-DIFLUOROBENZENE				D-5 CHLOROBENZENE			
		Area #		RT		Area #		RT		Area #		RT	
AVERAGE OF CALIBRATION STANDARDS		250669		4.419		1087820		5.481		975494		8.352	
UPPER LIMIT		350936		4.749		1522949		5.811		1365692		8.682	
LOWER LIMIT		150401		4.089		652692		5.151		585297		8.022	
Lab ID		Area #	%	RT	+/-	Area #	%	RT	+/-	Area #	%	RT	+/-
40 PPBV STD	AA 6560 STD01	259539	3.54	4.438	0.02	1398154	28.53	5.490	-0.01	1151205	18.01	8.351	0.00
20 PPBV STD	AA 6559 STD02	232784	-7.13	4.425	0.01	1025078	-5.77	5.480	0.00	911734	-6.54	8.354	0.00
10 PPBV STD	AA 5447 STD03	240829	-3.93	4.416	0.00	1010790	-7.08	5.483	0.00	932743	-4.38	8.351	0.00
2 PPBV STD	AA 6557 STD04	243744	-2.76	4.406	-0.01	931187	-14.40	5.477	0.00	883473	-9.43	8.354	0.00
0.2 PPBV STD	AA 6556 STD05	276448	10.28	4.409	-0.01	1073893	-1.28	5.477	0.00	998317	2.34	8.351	0.00
ICVSS	AA 6561 ICVSS	242079	-3.43	4.412	-0.01	1024301	-5.84	5.480	0.00	930904	-4.57	8.354	0.00

Difference of Internal Area must be within +/- 40%; Retention Times must be within +/- 0.33 minute.

* Values outsite QC limits.

Internal Standard Area and Retention Time Summary

Lab File ID (Standard): AA6580DCVS **Date Analyzed:** 5/31/2024

Instrument: AA **ICAL Date:** 5/29/2024

			BROMOCHLOROMETHANE				1,4-DIFLUOROBENZENE				D-5 CHLOROBENZENE			
			Area #		RT		Area #		RT		Area #		RT	
	CALIBRATION STANDARD		218171		4.416		937834		5.480		833201		8.351	
	UPPER LIMIT		305439		4.75		1312968		5.81		1166481		8.68	
	LOWER LIMIT		130903		4.09		562700		5.15		499921		8.02	
Lab ID		DF	Area #	%	RT	+/-	Area #	%	RT	+/-	Area #	%	RT	+/-
Method Blank	AA6582BLK	1.0	186404	-14.56	4.409	-0.01	714274	-23.84	5.477	0.00	686714	-17.58	8.351	0.00
Reporting Limit Laboratory Control Standard	AA6583RLLCS	1.0	216164	-0.92	4.409	-0.01	831580	-11.33	5.477	0.00	746858	-10.36	8.351	0.00
5089	AA6584	1.0	218988	0.37	4.409	-0.01	803746	-14.30	5.477	0.00	748085	-10.22	8.348	0.00
2069	AA6585	1.0	218840	0.31	4.409	-0.01	810912	-13.53	5.477	0.00	743332	-10.79	8.351	0.00
Closing Calibration	AA6598CCCVS	1.0	229343	5.12	4.423	0.01	1091057	16.34	5.487	0.01	1162426	39.51	8.352	0.00

Difference of Internal Area must be within +/- 40%; Retention Times must be within +/- 0.33 minute.
* Values outsite QC limits.

Initial Calibration Curve Internal Standard Area and Retention Time Summary

Instrument: AA **ICAL Date:** 9/11/2024

		BROMOCHLOROMETHANE				1,4-DIFLUOROBENZENE				D-5 CHLOROBENZENE			
		Area #		RT		Area #		RT		Area #		RT	
AVERAGE OF CALIBRATION STANDARDS		228169		4.418		1024939		5.483		1220015		8.352	
UPPER LIMIT		319437		4.748		1434915		5.813		1708021		8.682	
LOWER LIMIT		136901		4.088		614964		5.153		732009		8.022	
Lab ID		Area #	%	RT	+/-	Area #	%	RT	+/-	Area #	%	RT	+/-
40 PPBV STD	AA 7128 STD01	230981	1.23	4.432	0.01	1167632	13.92	5.486	0.00	1449441	18.81	8.354	0.00
20 PPBV STD	AA 7127 STD02	235108	3.04	4.419	0.00	1107080	8.01	5.486	0.00	1385185	13.54	8.355	0.00
10 PPBV STD	AA 7126 STD03	240050	5.21	4.419	0.00	1036486	1.13	5.483	0.00	1236750	1.37	8.351	0.00
2 PPBV STD	AA 7125 STD04	242257	6.17	4.412	-0.01	1044344	1.89	5.483	0.00	1289735	5.71	8.351	0.00
0.2 PPBV STD	AA 7124 STD05	192449	-15.66	4.409	-0.01	769155	-24.96	5.477	0.01	738964	-39.43	8.348	0.00
ICVSS	AA 7129 ICVSS	213938	-6.24	4.406	-0.01	819131	-20.08	5.477	0.01	784817	-35.67	8.348	0.00

Difference of Internal Area must be within +/- 40%; Retention Times must be within +/- 0.33 minute.

* Values outsite QC limits.

Internal Standard Area and Retention Time Summary

Lab File ID (Standard): AA7224DCVS **Date Analyzed:** 9/18/2024

Instrument: AA **ICAL Date:** 9/11/2024

			BROMOCHLOROMETHANE				1,4-DIFLUOROBENZENE				D-5 CHLOROBENZENE			
			Area #		RT		Area #		RT		Area #		RT	
	CALIBRATION STANDARD		250538		4.422		1198748		5.483		1518051		8.351	
	UPPER LIMIT		350753		4.75		1678247		5.81		2125271		8.68	
	LOWER LIMIT		150323		4.09		719249		5.15		910831		8.02	
Lab ID		DF	Area #	%	RT	+/-	Area #	%	RT	+/-	Area #	%	RT	+/-
Method Blank	AA7226BLK	1.0	283740	13.25	4.419	0.00	1275820	6.43	5.483	0.00	1548256	1.99	8.351	0.00
E24-03187-01	AA7231	1.0	228537	-8.78	4.438	0.02	1139382	-4.95	5.483	0.00	1039807	-31.50	8.358	0.01
E24-03187-02	AA7232	1.0	232802	-7.08	4.454	0.03	1401324	16.90	5.490	0.01	1182827	-22.08	8.358	0.01
E24-03187-03	AA7233	1.0	249790	-0.30	4.438	0.02	1404111	17.13	5.490	0.01	1216267	-19.88	8.358	0.01
E24-03187-04	AA7234	1.0	264983	5.77	4.441	0.02	1498126	24.97	5.486	0.00	1273693	-16.10	8.354	0.00
E24-03187-05	AA7235	1.0	241259	-3.70	4.451	0.03	1418540	18.34	5.490	0.01	1222290	-19.48	8.354	0.00
E24-03187-06	AA7236	1.0	231014	-7.79	4.448	0.03	1384702	15.51	5.490	0.01	1212228	-20.15	8.358	0.01
E24-03187-07	AA7237	1.0	260086	3.81	4.445	0.02	1429317	19.23	5.490	0.01	1252049	-17.52	8.358	0.01
E24-03187-08	AA7240	1.0	258081	3.01	4.448	0.03	1468777	22.53	5.489	0.01	1256252	-17.25	8.354	0.00
E24-03187-28	AA7241	1.0	256813	2.50	4.441	0.02	1430540	19.34	5.490	0.01	1237327	-18.49	8.358	0.01

Difference of Internal Area must be within +/- 40%; Retention Times must be within +/- 0.33 minute.
* Values outsite QC limits.

Section VI: Sample Data Summary

Certificate of Analysis

Summary of Results

**Quantitation Reports, Chromatograms,
and Peak Integration Reports**

CERTIFICATE OF ANALYSIS

ANALYTICAL DATA PACKAGE FOR THE
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
ALBANY NEW YORK 12233

Integrated Analytical Laboratories, LLC — **Randolph, NJ 07869**
Project#: 48-55 36th Street — **NY ELAP Certification#: 11402**
SDG #: E24-03187 — **NJDEP (Primary AB) Certification#: 14751**
Date of first sample receipt: 9/17/2024 — **Date of last sample receipt: 9/17/2024**

Client: JS Held-Hoboken
5 Marine View Plaza
Hoboken, NJ 07030
Attention: Attention: Leah DeEgidio

Project/Site: 48-55 36th Street/NY

Analysis conducted at: Integrated Analytical Laboratories, LLC
273 Franklin Road
Randolph, NJ 07869
Contact: Michael H. Leftin, Ph.D.

Sample(s):
E24-03187-01
E24-03187-02
E24-03187-03
E24-03187-04
E24-03187-05
E24-03187-06
E24-03187-07
E24-03187-08

Samples for this analysis were received in good condition with a chain of custody.

All work recorded herein has been done in accordance with normal professional standards using accepted testing methodologies, quality assurance and quality control procedures except where otherwise agreed to by the client and testing company in writing. Once analysis has been performed on canisters that meets regulatory criteria, samples are recycled for future use, unless other provisions have been made by the client.

Michael H. Leftin, Ph.D.
Laboratory Director

Date: October 8, 2024

Volatile Organic Compounds by EPA Method TO-15
Summary of Results

Lab ID:	E24-03187-01	Instrument ID:	AA
Client ID:	IA-1	GC/MS Column:	RTX-1, 0.32 mmID
Date Sampled:	09/16/2024 10:22	Injection Volmue:	500ml
Date Received:	09/17/2024	Matrix:	Air-Indoor
Date Analyzed:	09/18/2024 14:43	% Moisture:	NA
Data File:	AA7231	Dilution Factor:	1
Summa ID:	3001	Analyst:	J. Walukiewicz

			Concentration Reported		Reporting Limits	
Compound	**CAS #**	**Q**	**ppbv**	**ug/m3**	**ppbv**	**ug/m3**
Acetone	67-64-1		19	46	0.20	0.48
Benzene	71-43-2		0.22	0.71	0.20	0.64
Bromodichloromethane	75-27-4		ND	ND	0.20	1.3
Bromoform	75-25-2		ND	ND	0.20	2.1
Bromomethane	74-83-9		ND	ND	0.20	0.78
1,3-Butadiene	106-99-0		ND	ND	0.20	0.44
Chlorobenzene	108-90-7		ND	ND	0.20	0.92
Chloroethane	75-00-3		ND	ND	0.20	0.53
Chloroform	67-66-3		0.48	2.4	0.20	0.98
Chloromethane	74-87-3		ND	ND	0.20	0.41
Carbon disulfide	75-15-0		ND	ND	0.20	0.62
Carbon tetrachloride	56-23-5		ND	ND	0.040	0.25
Cyclohexane	110-82-7		0.23	0.79	0.20	0.69
Dibromochloromethane	124-48-1		ND	ND	0.20	1.7
1,2-Dibromoethane	106-93-4		ND	ND	0.20	1.5
1,2-Dichlorobenzene	95-50-1		ND	ND	0.20	1.2
1,3-Dichlorobenzene	541-73-1		ND	ND	0.20	1.2
1,4-Dichlorobenzene	106-46-7		ND	ND	0.20	1.2
Dichlorodifluoromethane	75-71-8		ND	ND	0.20	0.99
1,1-Dichloroethane	75-34-3		ND	ND	0.20	0.81
1,2-Dichloroethane	107-06-2		ND	ND	0.20	0.81
1,1-Dichloroethene	75-35-4		ND	ND	0.20	0.79
1,2-Dichloroethene (cis)	156-59-2		ND	ND	0.20	0.79
1,2-Dichloroethene (trans)	156-60-5		ND	ND	0.20	0.79
1,2-Dichloropropane	78-87-5		ND	ND	0.20	0.92
1,3-Dichloropropene (cis)	10061-01-5		ND	ND	0.20	0.91
1,3-Dichloropropene (trans)	10061-02-6		ND	ND	0.20	0.91
1,2-Dichlorotetrafluoroethane	76-14-2		ND	ND	0.20	1.4
1,4-Dioxane	123-91-1		ND	ND	0.20	0.72
Ethylbenzene	100-41-4		0.26	1.2	0.20	0.87
n-Heptane	142-82-5		0.30	1.2	0.20	0.82
1,3-Hexachlorobutadiene	87-68-3		ND	ND	0.20	2.1
n-Hexane	110-54-3		ND	ND	0.20	0.70
Methylene chloride	75-09-2		ND	ND	0.20	0.69
Methyl ethyl ketone	78-93-3		1.7	5.0	0.20	0.59
Methyl isobutyl ketone	108-10-1		0.27	1.1	0.20	0.82
Methyl tert-butyl ether	1634-04-4		ND	ND	0.20	0.72
Styrene	100-42-5		ND	ND	0.20	0.85
Tert-butyl alcohol	75-65-0		0.29	0.87	0.20	0.61
1,1,2,2-Tetrachloroethane	79-34-5		ND	ND	0.20	1.4
Tetrachloroethene	127-18-4		ND	ND	0.20	1.4
Toluene	108-88-3		3.0	11	0.20	0.75
1,2,4-Trichlorobenzene	120-82-1		ND	ND	0.20	1.5
1,1,1-Trichloroethane	71-55-6		ND	ND	0.20	1.1
1,1,2-Trichloroethane	79-00-5		ND	ND	0.20	1.1

Qualifiers:
D = Dilution required

Volatile Organic Compounds by EPA Method TO-15
Summary of Results

Lab ID:	E24-03187-01	Instrument ID:	AA
Client ID:	IA-1	GC/MS Column:	RTX-1, 0.32 mmID
Date Sampled:	09/16/2024 10:22	Injection Volmue:	500ml
Date Received:	09/17/2024	Matrix:	Air-Indoor
Date Analyzed:	09/18/2024 14:43	% Moisture:	NA
Data File:	AA7231	Dilution Factor:	1
Summa ID:	3001	Analyst:	J. Walukiewicz

			Concentration Reported		Reporting Limits	
Compound	**CAS #**	**Q**	**ppbv**	**ug/m3**	**ppbv**	**ug/m3**
Trichloroethene	79-01-6		ND	ND	0.046	0.25
Trichlorofluoromethane	75-69-4		0.28	1.6	0.20	1.1
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1		ND	ND	0.20	1.5
1,2,4-Trimethylbenzene	95-63-6		ND	ND	0.20	0.98
1,3,5-Trimethylbenzene	108-67-8		ND	ND	0.20	0.98
2,2,4-Trimethylpentane	540-84-1		ND	ND	0.20	0.93
Vinyl bromide	593-60-2		ND	ND	0.20	0.87
Vinyl chloride	75-01-4		ND	ND	0.20	0.51
Xylenes (m&p)	179601-23-1		0.97	4.2	0.20	0.87
Xylenes (o)	95-47-6		0.27	1.2	0.20	0.87

Qualifiers:
D = Dilution required

Data Path : C:\DATA\2024\09-2024\09-18-2024\
Data File : aa7231.D
Acq On : 18 Sep 2024 2:43 pm
Operator : jjw
Sample : E24-03187-01
Misc : 3001, 500cc
ALS Vial : 9 Sample Multiplier: 1

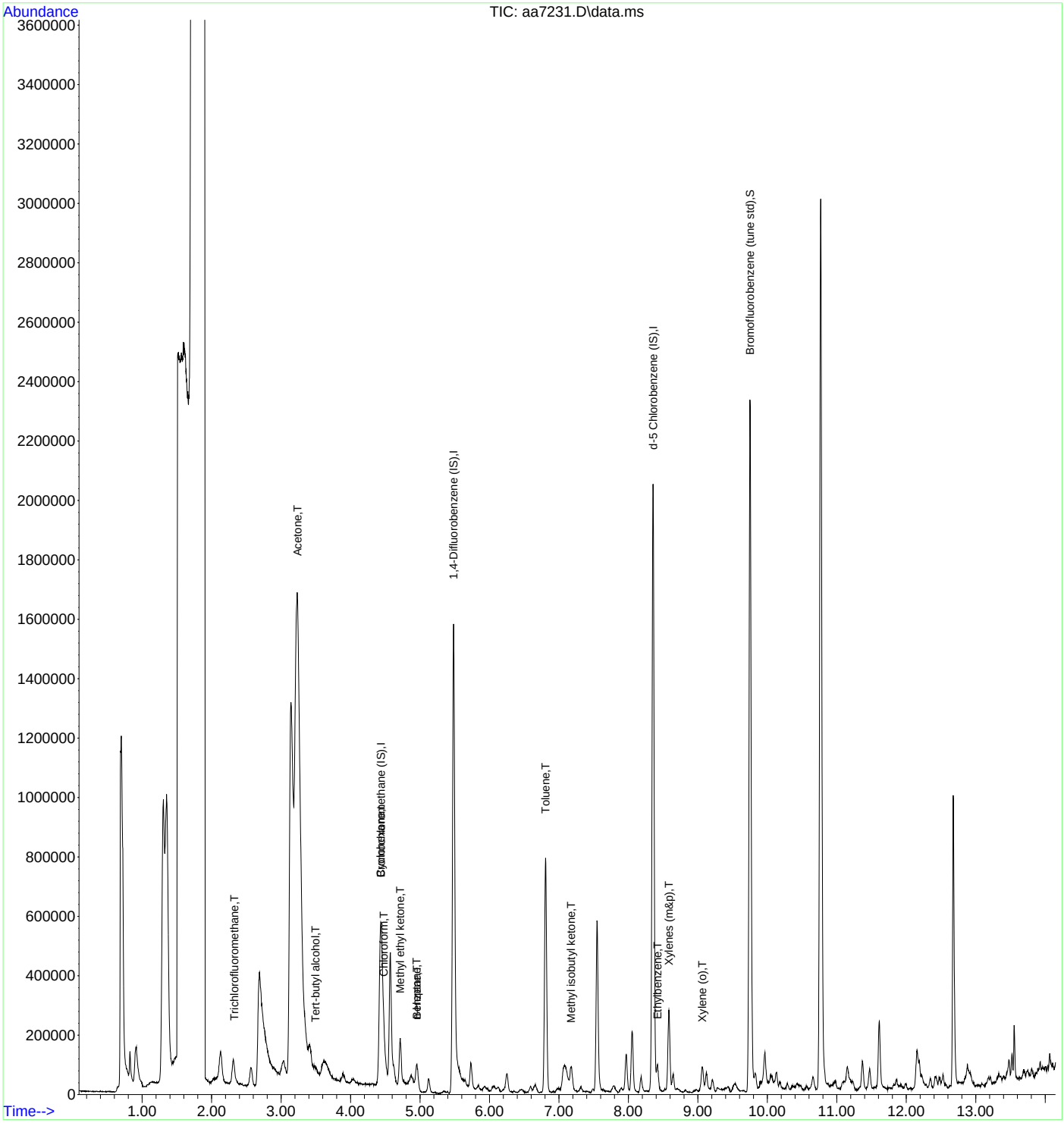
Quant Time: Sep 18 15:08:26 2024
Quant Method : C:\msdchem\1\METHODS\240910.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Sep 11 16:19:32 2024
Response via : Initial Calibration

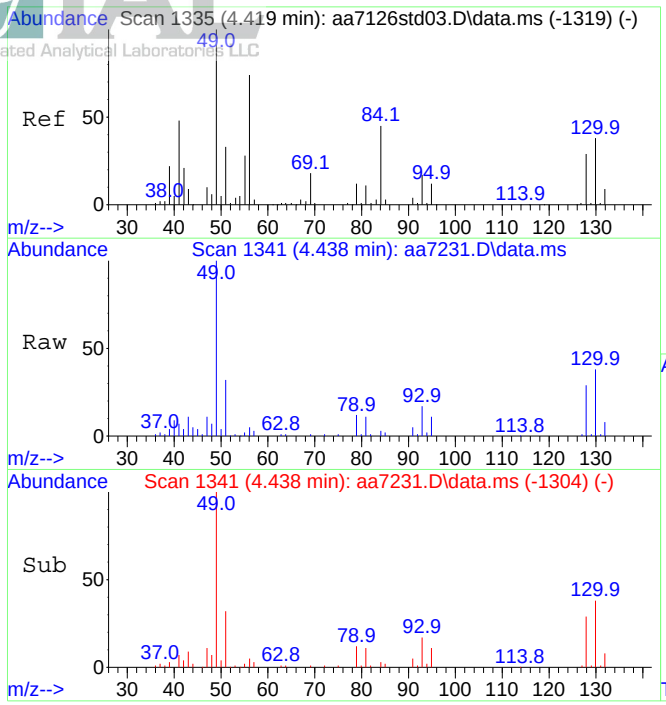
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.438	130	228537	10.00	ppbV	0.019
39) 1,4-Difluorobenzene (IS)	5.483	114	1139382	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.358	117	1039807	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.750	95	874074	9.56	ppbV	0.000
Target Compounds						Qvalue
12) Trichlorofluoromethane	2.326	101	24209	0.28	ppbV	99
21) Acetone	3.239	43	1557323	19.24	ppbV	96
26) Tert-butyl alcohol	3.496	59	31435	0.29	ppbV	100
29) Cyclohexane	4.435	56	21807	0.23	ppbV	87
30) Chloroform	4.480	83	42542	0.48	ppbV	92
35) Methyl ethyl ketone	4.715	43	230076	1.70	ppbV	99
36) n-Heptane	4.950	43	42865	0.30	ppbV	90
37) Benzene	4.956	78	30110	0.22	ppbV	91
47) Toluene	6.808	91	608236	2.97	ppbV	100
48) Methyl isobutyl ketone	7.175	43	68507	0.27	ppbV	99
58) Ethylbenzene	8.419	91	63963	0.26	ppbV	97
59) Xylenes (m&p)	8.583	91	179249	0.97	ppbV	97
60) Xylene (o)	9.065	91	50657	0.27	ppbV	98

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

Data Path : C:\DATA\2024\09-2024\09-18-2024\
Data File : aa7231.D
Acq On : 18 Sep 2024 2:43 pm
Operator : jjw
Sample : E24-03187-01
Misc : 3001, 500cc
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 18 15:08:26 2024
Quant Method : C:\msdchem\1\METHODS\240910.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Sep 11 16:19:32 2024
Response via : Initial Calibration

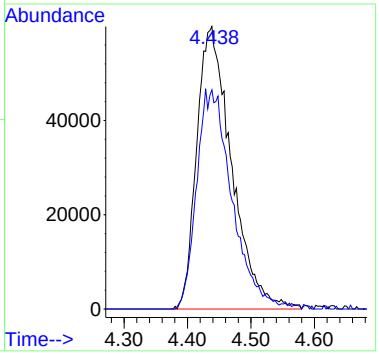


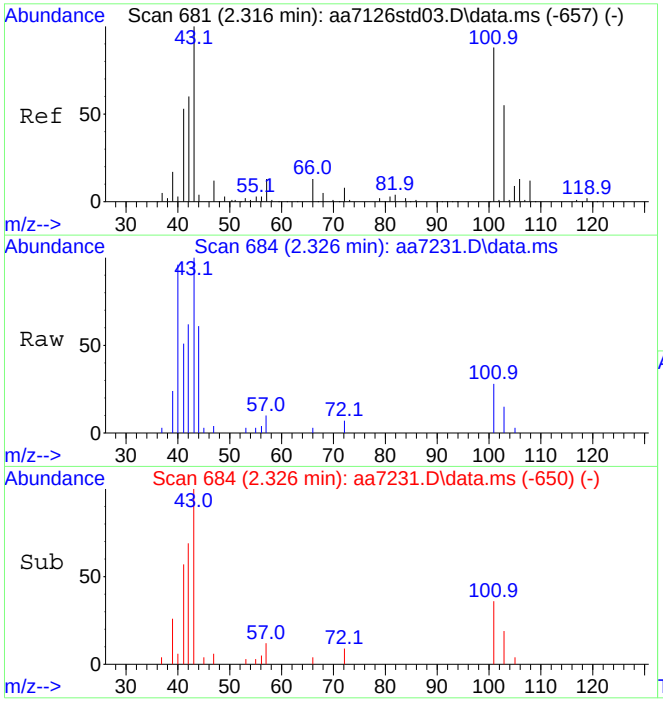


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.438 min Scan# 1341
Delta R.T. 0.019 min
Lab File: aa7231.D
Acq: 18 Sep 2024 2:43 pm

Tgt Ion:130 Resp: 228537

Ion	Ratio	Lower	Upper
130	100		
128	78.8	58.5	98.5

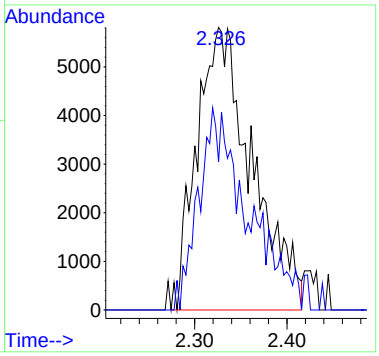


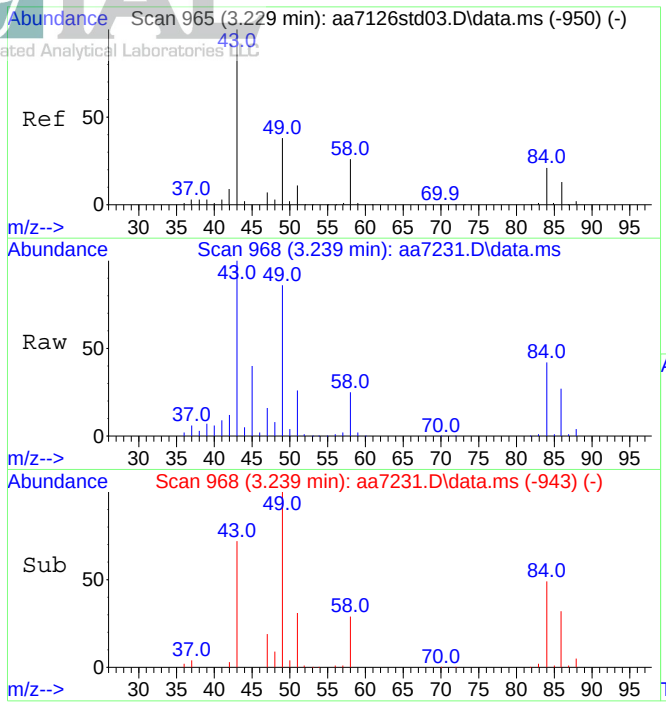


#12
Trichlorofluoromethane
Concen: 0.28 ppbV
RT: 2.326 min Scan# 684
Delta R.T. 0.010 min
Lab File: aa7231.D
Acq: 18 Sep 2024 2:43 pm

Tgt Ion:101 Resp: 24209

Ion	Ratio	Lower	Upper
101	100		
103	63.4	51.4	77.0

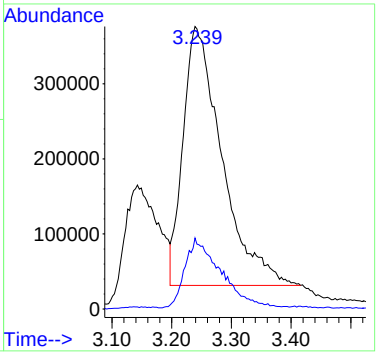


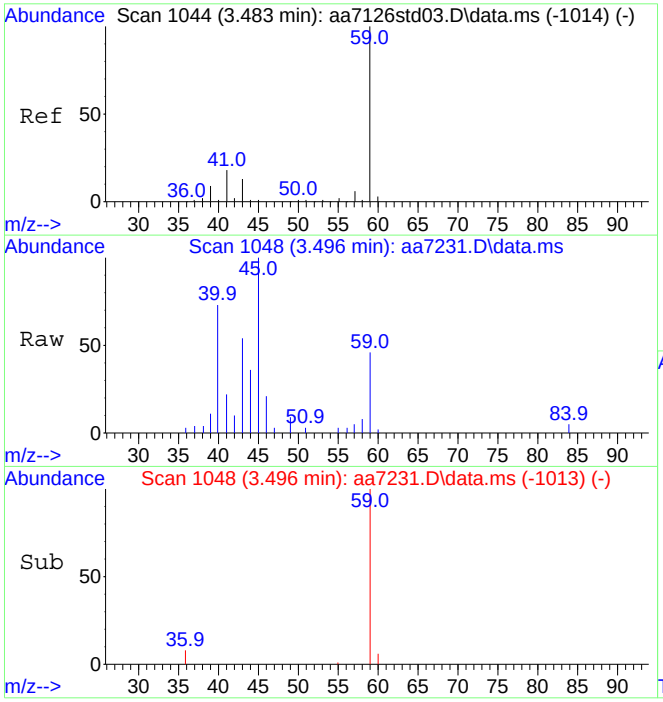


#21
Acetone
Concen: 19.24 ppbV
RT: 3.239 min Scan# 968
Delta R.T. 0.010 min
Lab File: aa7231.D
Acq: 18 Sep 2024 2:43 pm

Tgt Ion: 43 Resp: 1557323

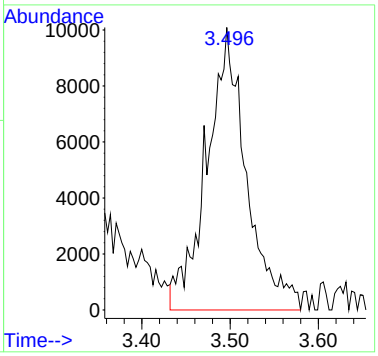
Ion	Ratio	Lower	Upper
43	100		
58	24.8	21.6	32.4

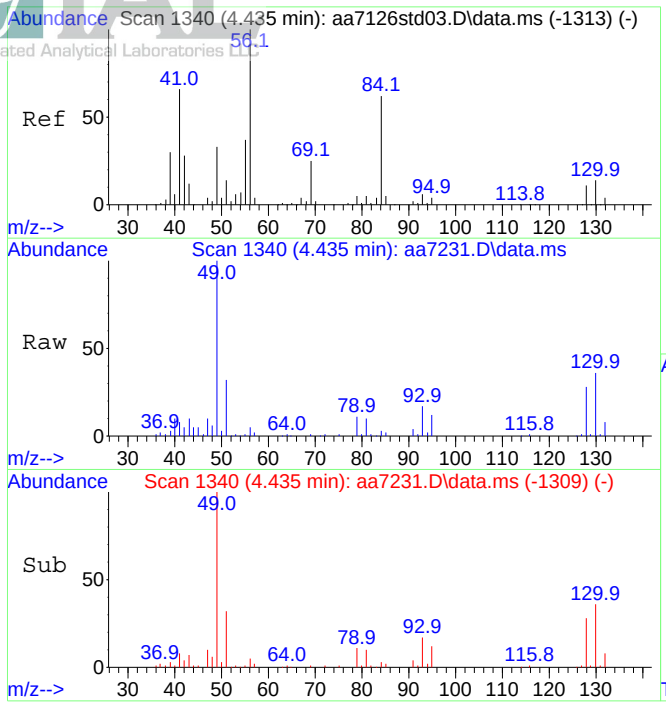




#26
Tert-butyl alcohol
Concen: 0.29 ppbV
RT: 3.496 min Scan# 1048
Delta R.T. 0.013 min
Lab File: aa7231.D
Acq: 18 Sep 2024 2:43 pm

Tgt Ion: 59 Resp: 31435

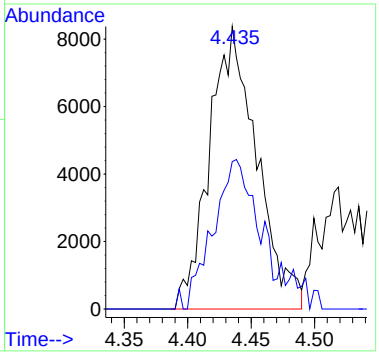


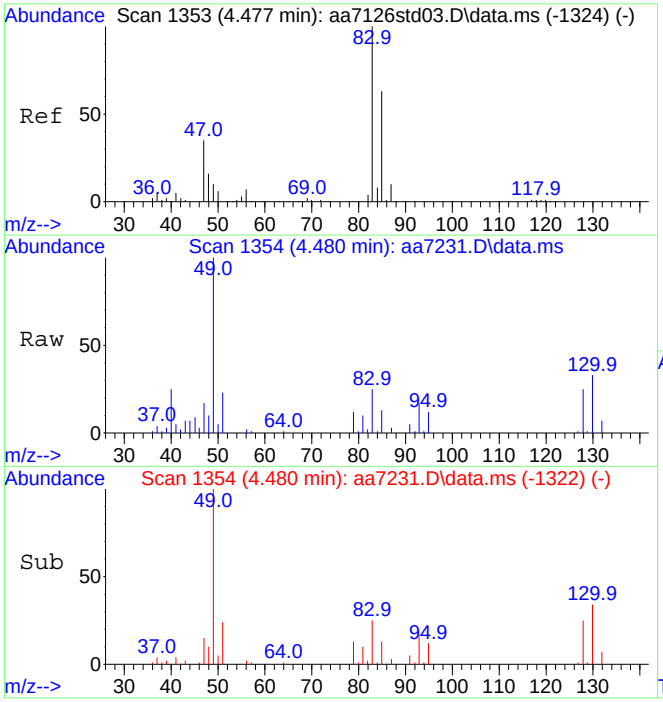


#29
Cyclohexane
Concen: 0.23 ppbV
RT: 4.435 min Scan# 1340
Delta R.T. 0.000 min
Lab File: aa7231.D
Acq: 18 Sep 2024 2:43 pm

Tgt Ion: 56 Resp: 21807

Ion	Ratio	Lower	Upper
56	100		
84	55.1	52.6	79.0

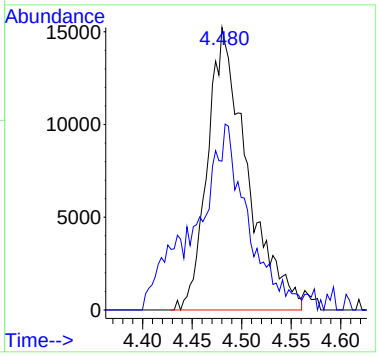


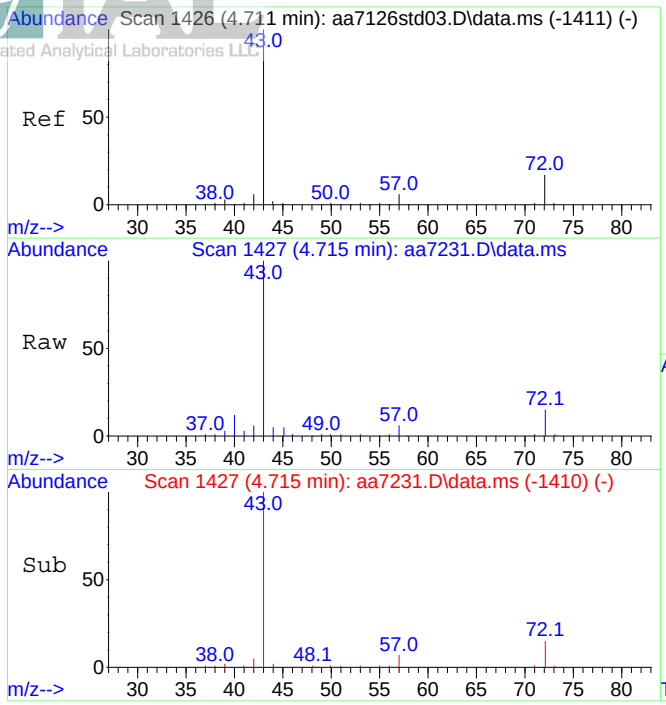


#30
Chloroform
Concen: 0.48 ppbV
RT: 4.480 min Scan# 1354
Delta R.T. 0.003 min
Lab File: aa7231.D
Acq: 18 Sep 2024 2:43 pm

Tgt Ion: 83 Resp: 42542

Ion	Ratio	Lower	Upper
83	100		
85	72.1	52.7	79.1

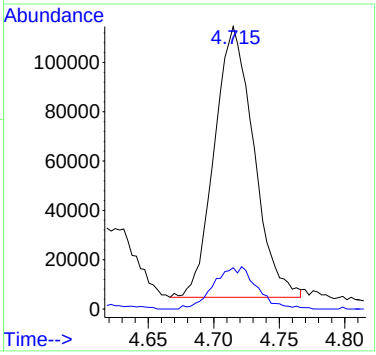


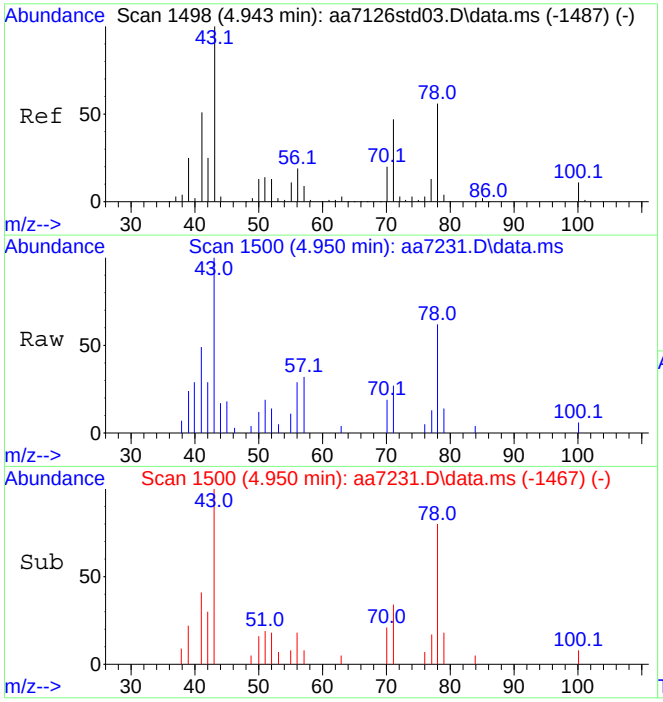


#35
Methyl ethyl ketone
Concen: 1.70 ppbV
RT: 4.715 min Scan# 1427
Delta R.T. 0.004 min
Lab File: aa7231.D
Acq: 18 Sep 2024 2:43 pm

Tgt Ion: 43 Resp: 230076

Ion	Ratio	Lower	Upper
43	100		
72	16.9	13.8	20.8

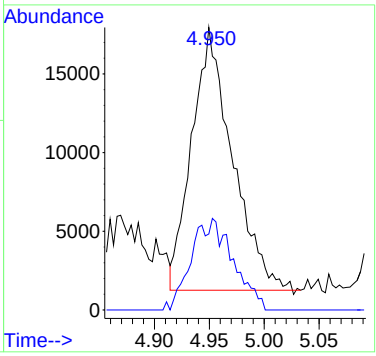


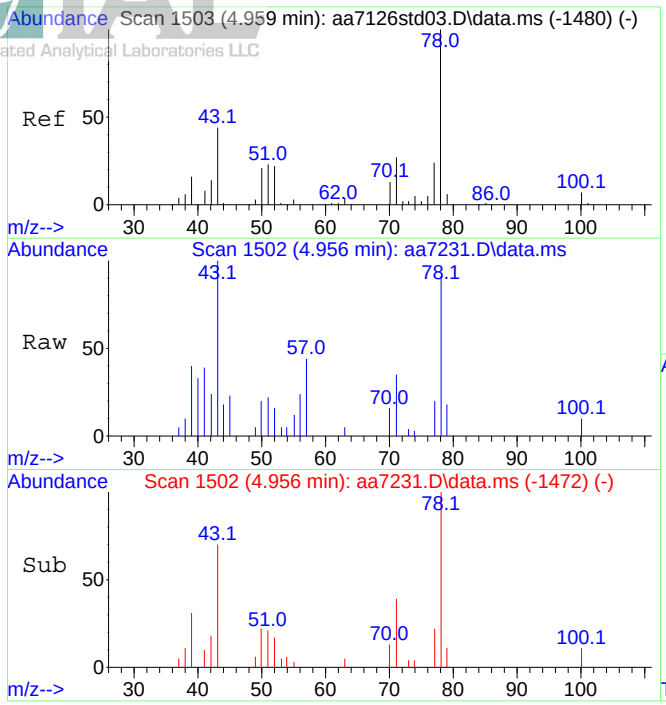


#36
n-Heptane
Concen: 0.30 ppbV
RT: 4.950 min Scan# 1500
Delta R.T. 0.007 min
Lab File: aa7231.D
Acq: 18 Sep 2024 2:43 pm

Tgt Ion: 43 Resp: 42865

Ion	Ratio	Lower	Upper
43	100		
71	36.0	33.9	50.9

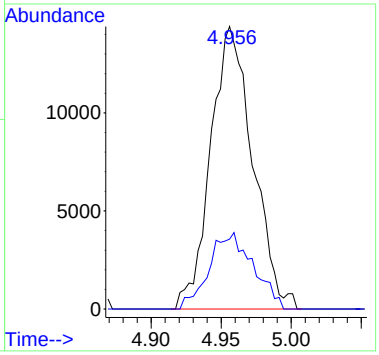


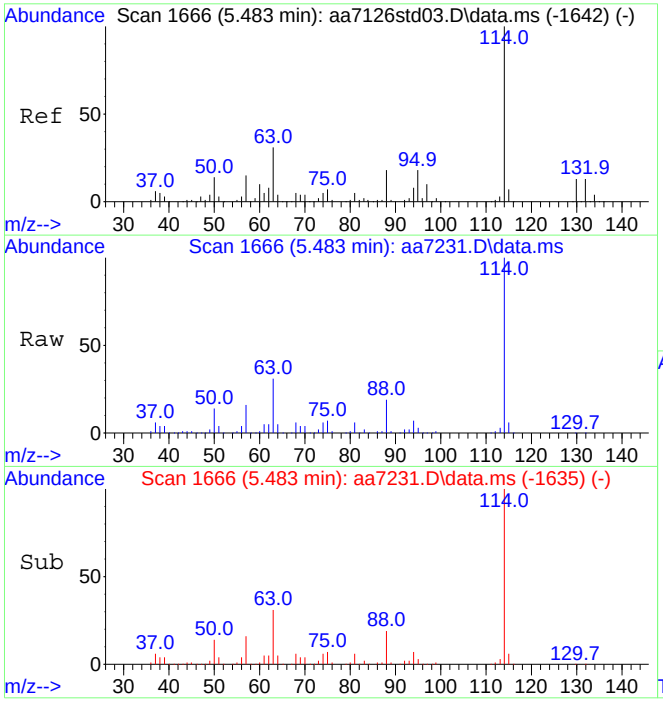


#37
Benzene
Concen: 0.22 ppbV
RT: 4.956 min Scan# 1502
Delta R.T. -0.003 min
Lab File: aa7231.D
Acq: 18 Sep 2024 2:43 pm

Tgt Ion: 78 Resp: 30110

Ion	Ratio	Lower	Upper
78	100		
51	28.2	19.0	28.4

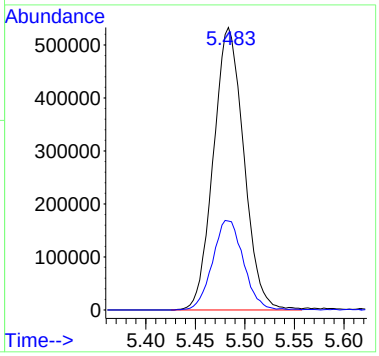


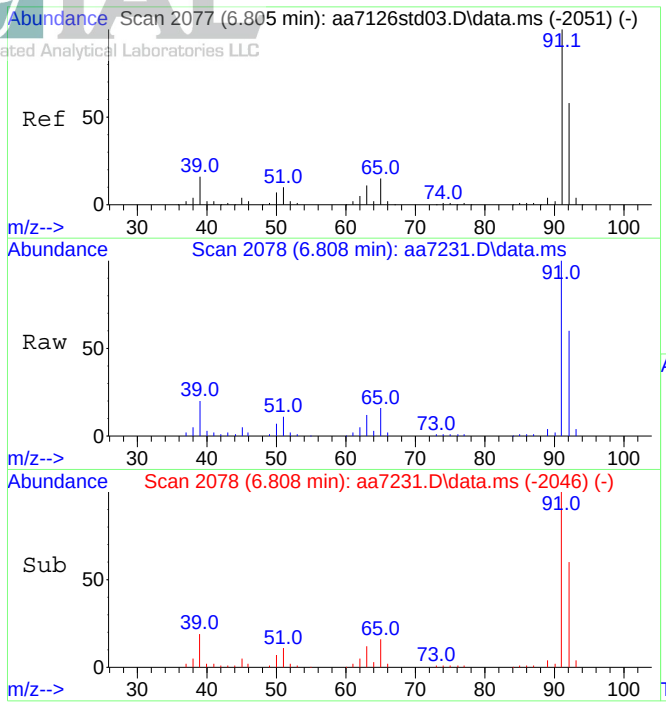


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.483 min Scan# 1666
Delta R.T. 0.000 min
Lab File: aa7231.D
Acq: 18 Sep 2024 2:43 pm

Tgt Ion:114 Resp: 1139382

Ion	Ratio	Lower	Upper
114	100		
63	32.3	11.2	51.2

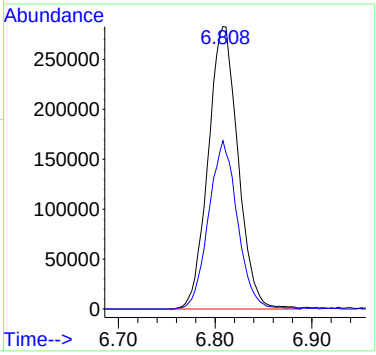


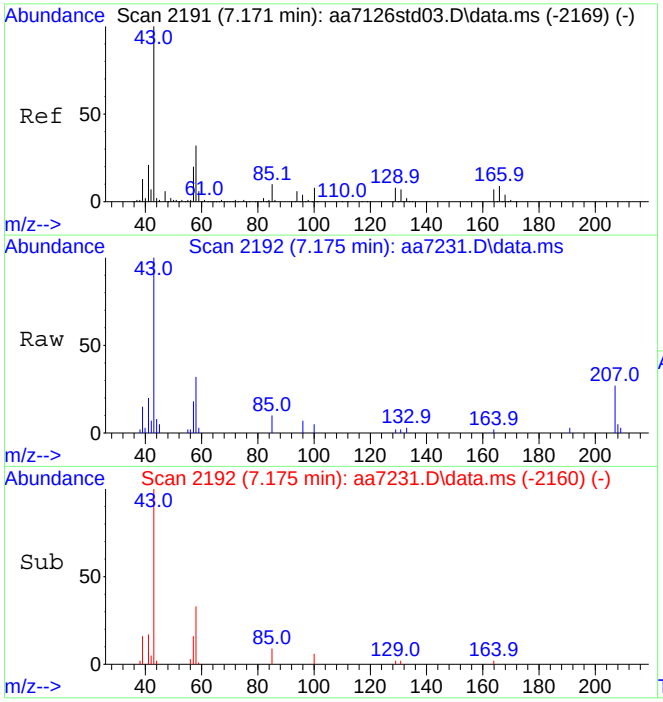


#47
Toluene
Concen: 2.97 ppbV
RT: 6.808 min Scan# 2078
Delta R.T. 0.003 min
Lab File: aa7231.D
Acq: 18 Sep 2024 2:43 pm

Tgt Ion: 91 Resp: 608236

Ion	Ratio	Lower	Upper
91	100		
92	57.5	46.1	69.1

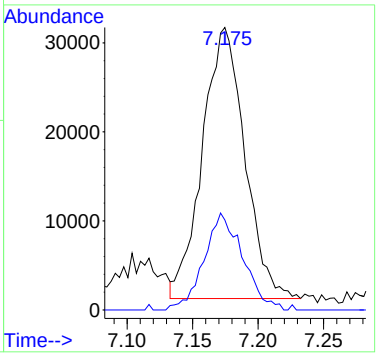


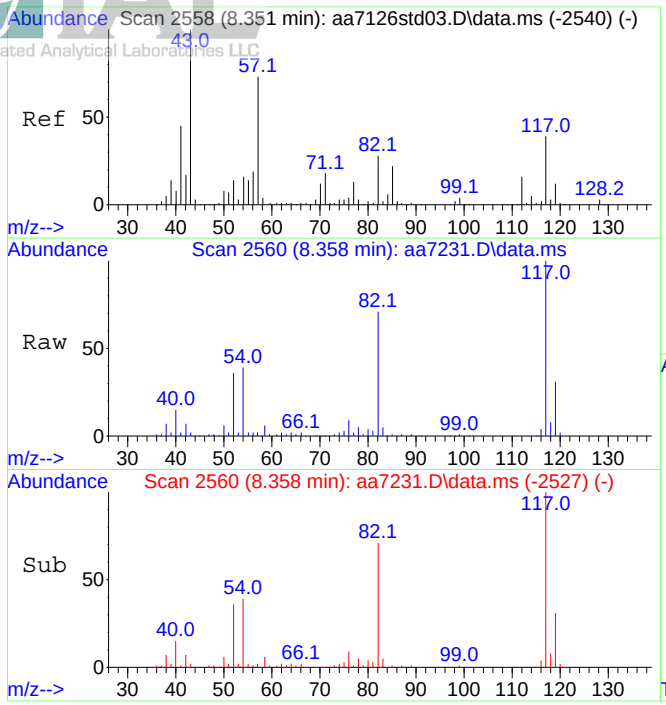


#48
Methyl isobutyl ketone
Concen: 0.27 ppbV
RT: 7.175 min Scan# 2192
Delta R.T. 0.003 min
Lab File: aa7231.D
Acq: 18 Sep 2024 2:43 pm

Tgt Ion: 43 Resp: 68507

Ion	Ratio	Lower	Upper
43	100		
58	32.6	25.5	38.3

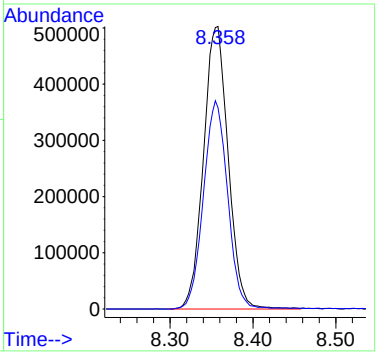


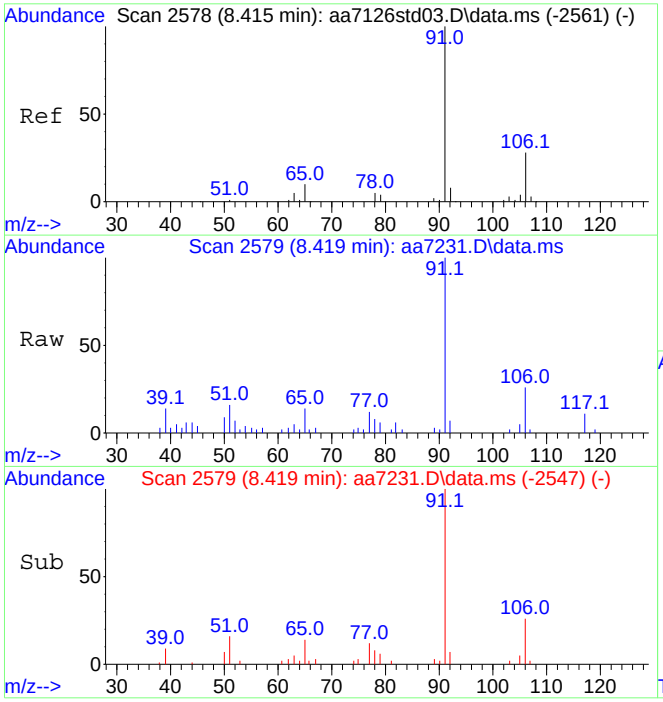


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.358 min Scan# 2560
Delta R.T. 0.007 min
Lab File: aa7231.D
Acq: 18 Sep 2024 2:43 pm

Tgt Ion:117 Resp: 1039807

Ion	Ratio	Lower	Upper
117	100		
82	72.3	51.5	91.5

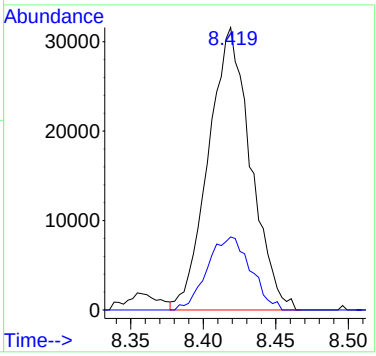


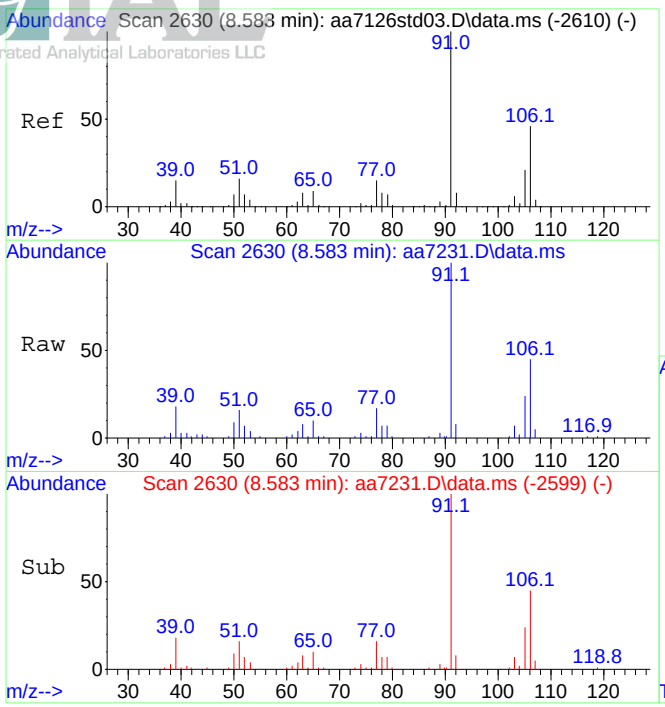


#58
Ethylbenzene
Concen: 0.26 ppbV
RT: 8.419 min Scan# 2579
Delta R.T. 0.003 min
Lab File: aa7231.D
Acq: 18 Sep 2024 2:43 pm

Tgt Ion: 91 Resp: 63963

Ion	Ratio	Lower	Upper
91	100		
106	26.5	22.6	33.8

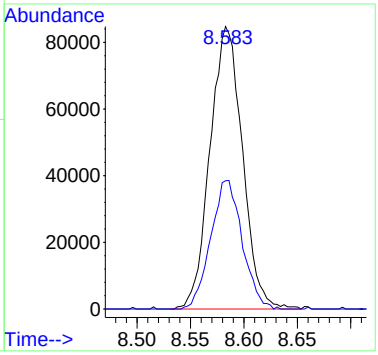


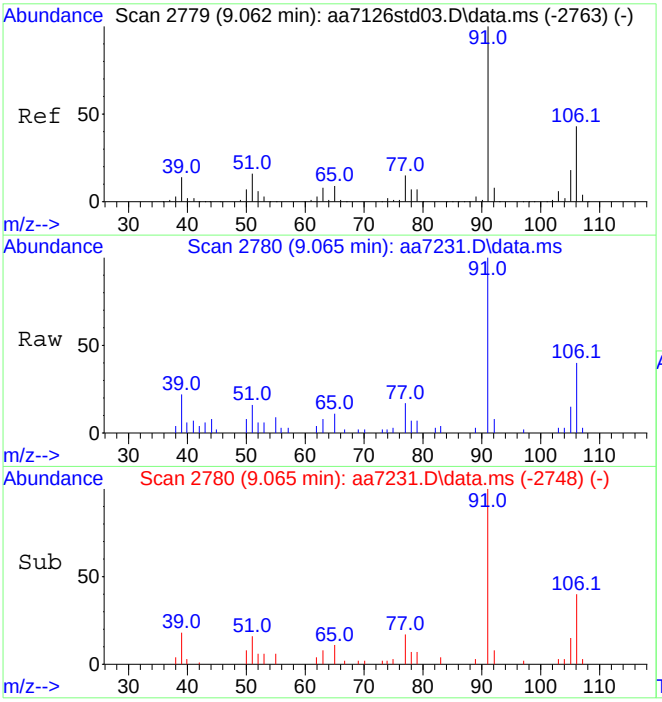


#59
Xylenes (m&p)
Concen: 0.97 ppbV
RT: 8.583 min Scan# 2630
Delta R.T. 0.000 min
Lab File: aa7231.D
Acq: 18 Sep 2024 2:43 pm

Tgt Ion: 91 Resp: 179249

Ion	Ratio	Lower	Upper
91	100		
106	44.1	36.6	55.0

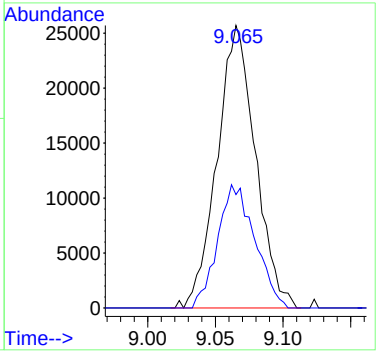


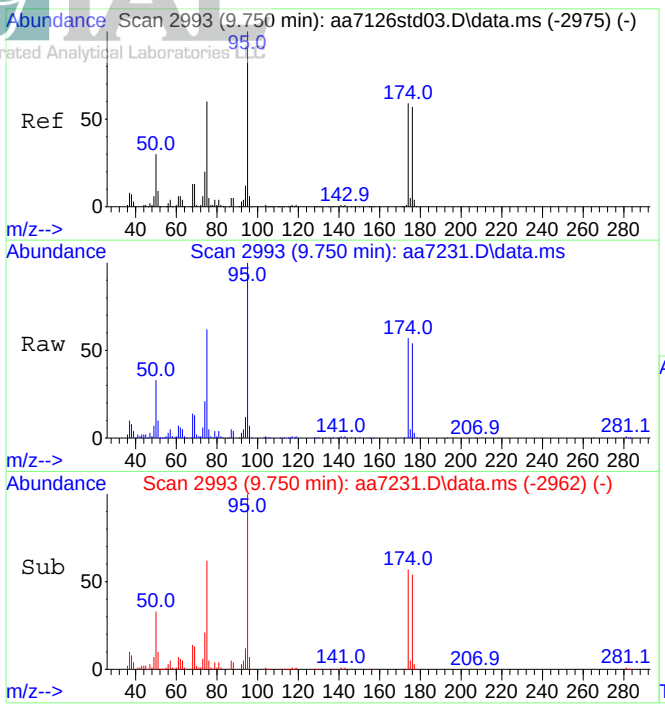


#60
Xylene (o)
Concen: 0.27 ppbV
RT: 9.065 min Scan# 2780
Delta R.T. 0.003 min
Lab File: aa7231.D
Acq: 18 Sep 2024 2:43 pm

Tgt Ion: 91 Resp: 50657

Ion	Ratio	Lower	Upper
91	100		
106	42.4	34.7	52.1

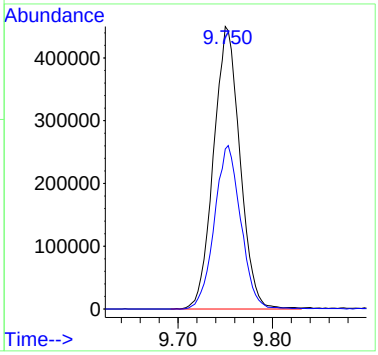




#64
Bromofluorobenzene (tune std)
Concen: 9.56 ppbV
RT: 9.750 min Scan# 2993
Delta R.T. 0.000 min
Lab File: aa7231.D
Acq: 18 Sep 2024 2:43 pm

Tgt Ion: 95 Resp: 874074

Ion	Ratio	Lower	Upper
95	100		
174	58.0	48.2	72.4



INTEGRATED ANALYTICAL LABORATORIES, LLC
Integrated Analytical Laboratories LLC

Volatile Organic Compounds by EPA Method TO-15
Summary of Results

Lab ID:	E24-03187-02	Instrument ID:	AA
Client ID:	IA-2	GC/MS Column:	RTX-1, 0.32 mmID
Date Sampled:	09/16/2024 10:30	Injection Volmue:	500ml
Date Received:	09/17/2024	Matrix:	Air-Indoor
Date Analyzed:	09/18/2024 15:19	% Moisture:	NA
Data File:	AA7232	Dilution Factor:	1
Summa ID:	4868	Analyst:	J. Walukiewicz

			Concentration Reported		Reporting Limits	
Compound	**CAS #**	**Q**	**ppbv**	**ug/m3**	**ppbv**	**ug/m3**
Acetone	67-64-1		9.0	21	0.20	0.48
Benzene	71-43-2		0.26	0.83	0.20	0.64
Bromodichloromethane	75-27-4		ND	ND	0.20	1.3
Bromoform	75-25-2		ND	ND	0.20	2.1
Bromomethane	74-83-9		ND	ND	0.20	0.78
1,3-Butadiene	106-99-0		ND	ND	0.20	0.44
Chlorobenzene	108-90-7		ND	ND	0.20	0.92
Chloroethane	75-00-3		ND	ND	0.20	0.53
Chloroform	67-66-3		0.70	3.4	0.20	0.98
Chloromethane	74-87-3		ND	ND	0.20	0.41
Carbon disulfide	75-15-0		ND	ND	0.20	0.62
Carbon tetrachloride	56-23-5		ND	ND	0.040	0.25
Cyclohexane	110-82-7		ND	ND	0.20	0.69
Dibromochloromethane	124-48-1		ND	ND	0.20	1.7
1,2-Dibromoethane	106-93-4		ND	ND	0.20	1.5
1,2-Dichlorobenzene	95-50-1		ND	ND	0.20	1.2
1,3-Dichlorobenzene	541-73-1		ND	ND	0.20	1.2
1,4-Dichlorobenzene	106-46-7		ND	ND	0.20	1.2
Dichlorodifluoromethane	75-71-8		ND	ND	0.20	0.99
1,1-Dichloroethane	75-34-3		ND	ND	0.20	0.81
1,2-Dichloroethane	107-06-2		ND	ND	0.20	0.81
1,1-Dichloroethene	75-35-4		ND	ND	0.20	0.79
1,2-Dichloroethene (cis)	156-59-2		ND	ND	0.20	0.79
1,2-Dichloroethene (trans)	156-60-5		ND	ND	0.20	0.79
1,2-Dichloropropane	78-87-5		ND	ND	0.20	0.92
1,3-Dichloropropene (cis)	10061-01-5		ND	ND	0.20	0.91
1,3-Dichloropropene (trans)	10061-02-6		ND	ND	0.20	0.91
1,2-Dichlorotetrafluoroethane	76-14-2		ND	ND	0.20	1.4
1,4-Dioxane	123-91-1		ND	ND	0.20	0.72
Ethylbenzene	100-41-4		ND	ND	0.20	0.87
n-Heptane	142-82-5		ND	ND	0.20	0.82
1,3-Hexachlorobutadiene	87-68-3		ND	ND	0.20	2.1
n-Hexane	110-54-3		ND	ND	0.20	0.70
Methylene chloride	75-09-2		1.9	6.6	0.20	0.69
Methyl ethyl ketone	78-93-3		0.39	1.1	0.20	0.59
Methyl isobutyl ketone	108-10-1		ND	ND	0.20	0.82
Methyl tert-butyl ether	1634-04-4		ND	ND	0.20	0.72
Styrene	100-42-5		0.29	1.3	0.20	0.85
Tert-butyl alcohol	75-65-0		ND	ND	0.20	0.61
1,1,2,2-Tetrachloroethane	79-34-5		ND	ND	0.20	1.4
Tetrachloroethene	127-18-4		ND	ND	0.20	1.4
Toluene	108-88-3		0.80	3.0	0.20	0.75
1,2,4-Trichlorobenzene	120-82-1		ND	ND	0.20	1.5
1,1,1-Trichloroethane	71-55-6		ND	ND	0.20	1.1
1,1,2-Trichloroethane	79-00-5		ND	ND	0.20	1.1

Qualifiers:
D = Dilution required

Volatile Organic Compounds by EPA Method TO-15
Summary of Results

Lab ID:	E24-03187-02	Instrument ID:	AA
Client ID:	IA-2	GC/MS Column:	RTX-1, 0.32 mmID
Date Sampled:	09/16/2024 10:30	Injection Volmue:	500ml
Date Received:	09/17/2024	Matrix:	Air-Indoor
Date Analyzed:	09/18/2024 15:19	% Moisture:	NA
Data File:	AA7232	Dilution Factor:	1
Summa ID:	4868	Analyst:	J. Walukiewicz

			Concentration Reported		Reporting Limits	
Compound	**CAS #**	**Q**	**ppbv**	**ug/m3**	**ppbv**	**ug/m3**
Trichloroethene	79-01-6		ND	ND	0.046	0.25
Trichlorofluoromethane	75-69-4		ND	ND	0.20	1.1
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1		ND	ND	0.20	1.5
1,2,4-Trimethylbenzene	95-63-6		ND	ND	0.20	0.98
1,3,5-Trimethylbenzene	108-67-8		ND	ND	0.20	0.98
2,2,4-Trimethylpentane	540-84-1		ND	ND	0.20	0.93
Vinyl bromide	593-60-2		ND	ND	0.20	0.87
Vinyl chloride	75-01-4		ND	ND	0.20	0.51
Xylenes (m&p)	179601-23-1		0.34	1.5	0.20	0.87
Xylenes (o)	95-47-6		ND	ND	0.20	0.87

Qualifiers:
D = Dilution required

Data Path : C:\DATA\2024\09-2024\09-18-2024\
Data File : aa7232.D
Acq On : 18 Sep 2024 3:19 pm
Operator : jjw
Sample : E24-03187-02
Misc : 4868, 500cc
ALS Vial : 10 Sample Multiplier: 1

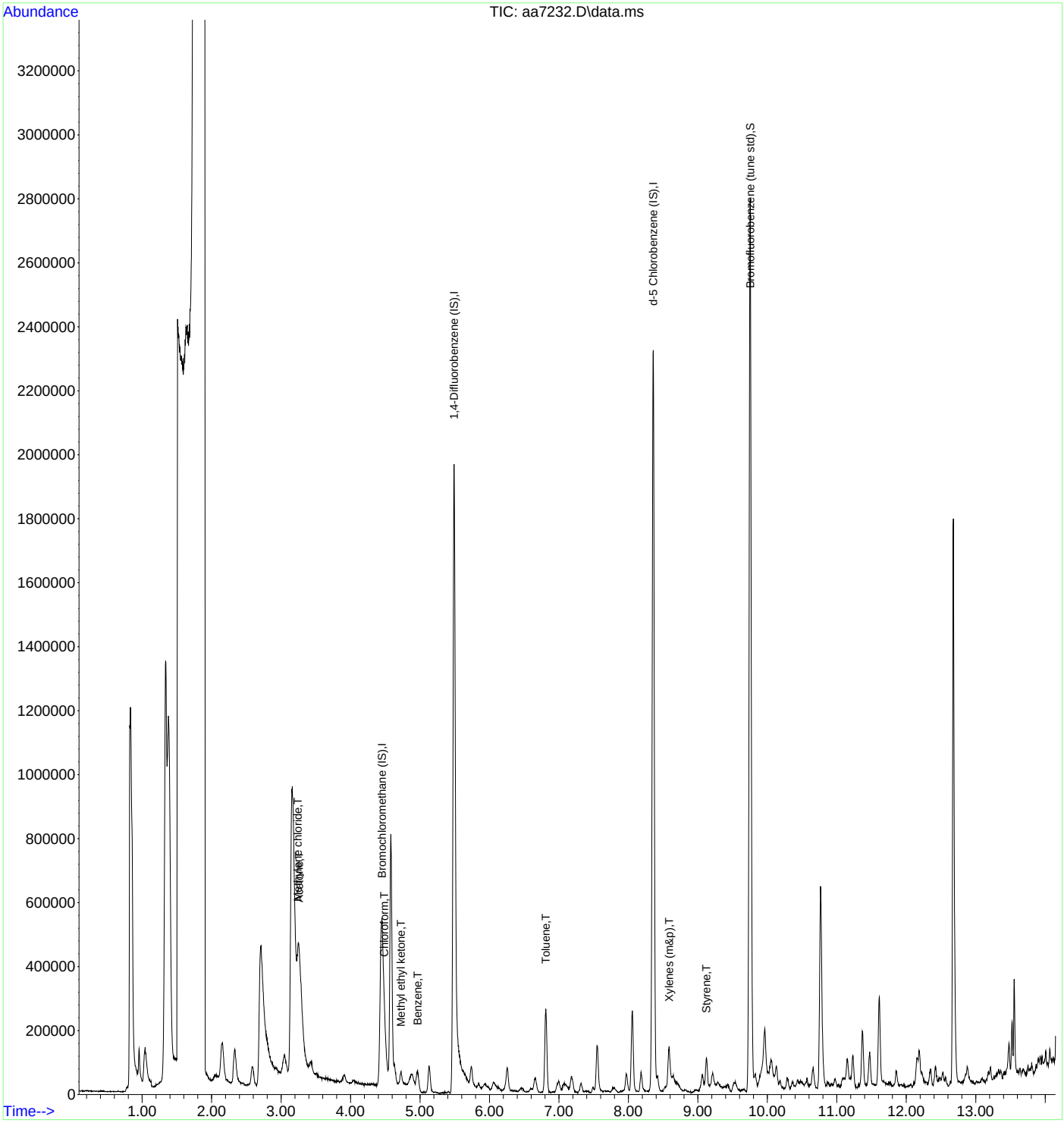
Quant Time: Sep 18 15:44:19 2024
Quant Method : C:\msdchem\1\METHODS\240910.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Sep 11 16:19:32 2024
Response via : Initial Calibration

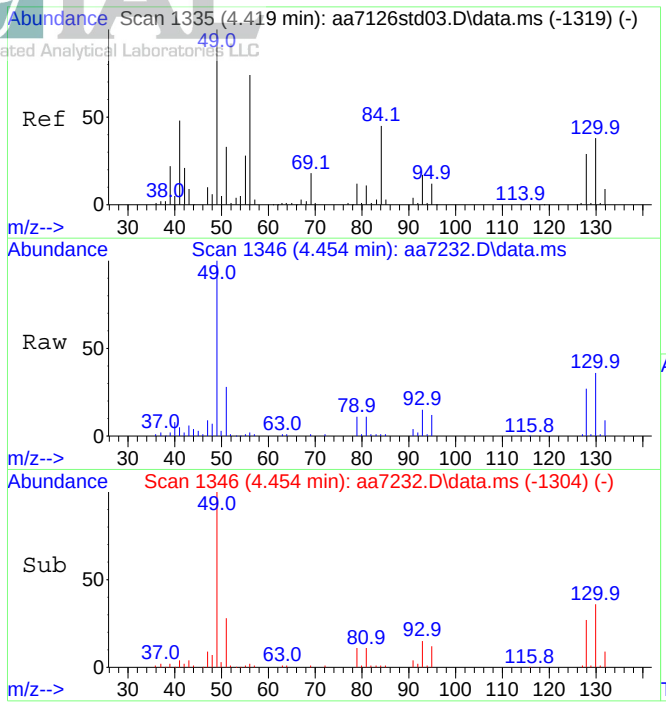
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.454	130	232802	10.00	ppbV	0.035
39) 1,4-Difluorobenzene (IS)	5.490	114	1401324	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.358	117	1182827	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.756	95	1059120	10.18	ppbV	0.000
Target Compounds						Qvalue
20) Methylene chloride	3.242	49	115313	1.89	ppbV	95
21) Acetone	3.258	43	744192	9.03	ppbV	96
30) Chloroform	4.486	83	62835	0.70	ppbV	96
35) Methyl ethyl ketone	4.728	43	53603	0.39	ppbV	95
37) Benzene	4.966	78	35733	0.26	ppbV	100
47) Toluene	6.811	91	201653	0.80	ppbV	100
59) Xylenes (m&p)	8.586	91	71187	0.34	ppbV	95
61) Styrene	9.123	104	42691	0.29	ppbV	99

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

Data Path : C:\DATA\2024\09-2024\09-18-2024\
Data File : aa7232.D
Acq On : 18 Sep 2024 3:19 pm
Operator : jjw
Sample : E24-03187-02
Misc : 4868, 500cc
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 18 15:44:19 2024
Quant Method : C:\msdchem\1\METHODS\240910.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Sep 11 16:19:32 2024
Response via : Initial Calibration

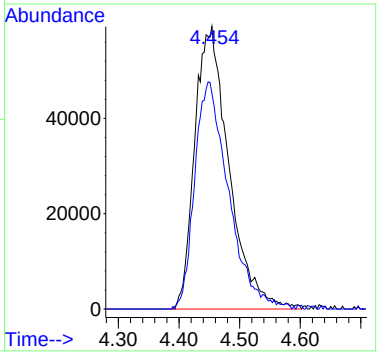


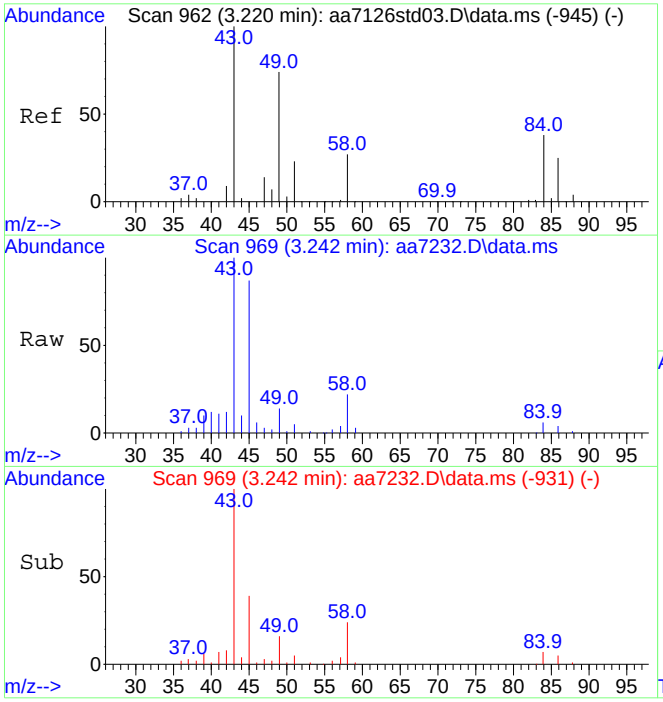


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.454 min Scan# 1346
Delta R.T. 0.035 min
Lab File: aa7232.D
Acq: 18 Sep 2024 3:19 pm

Tgt Ion:130 Resp: 232802

Ion	Ratio	Lower	Upper
130	100		
128	79.4	58.5	98.5

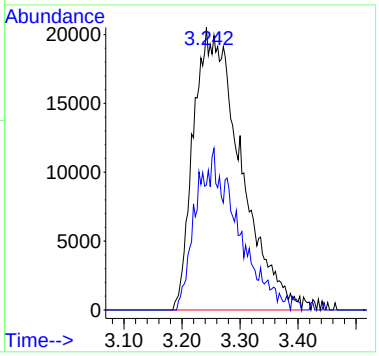


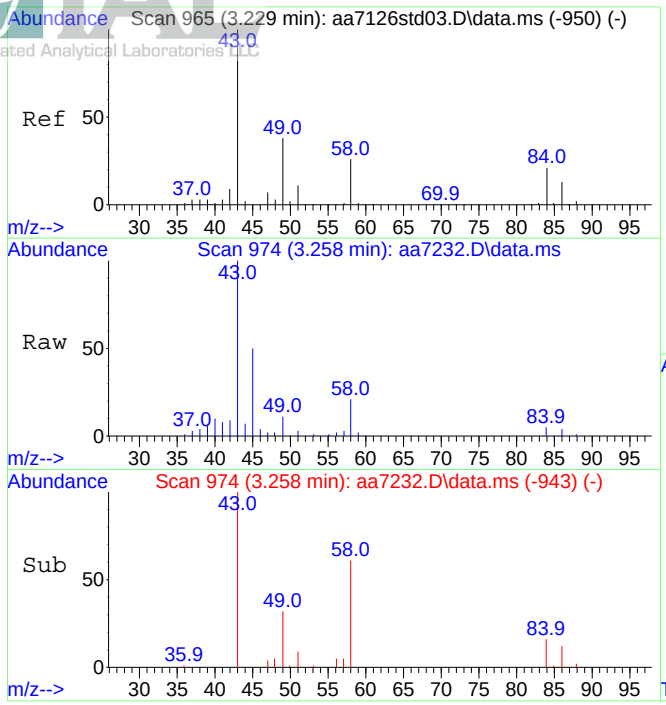


#20
Methylene chloride
Concen: 1.89 ppbV
RT: 3.242 min Scan# 969
Delta R.T. 0.023 min
Lab File: aa7232.D
Acq: 18 Sep 2024 3:19 pm

Tgt Ion: 49 Resp: 115313

Ion	Ratio	Lower	Upper
49	100		
84	50.4	33.6	73.6

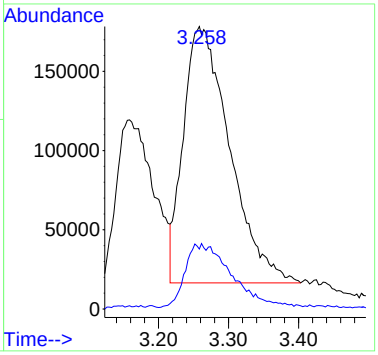


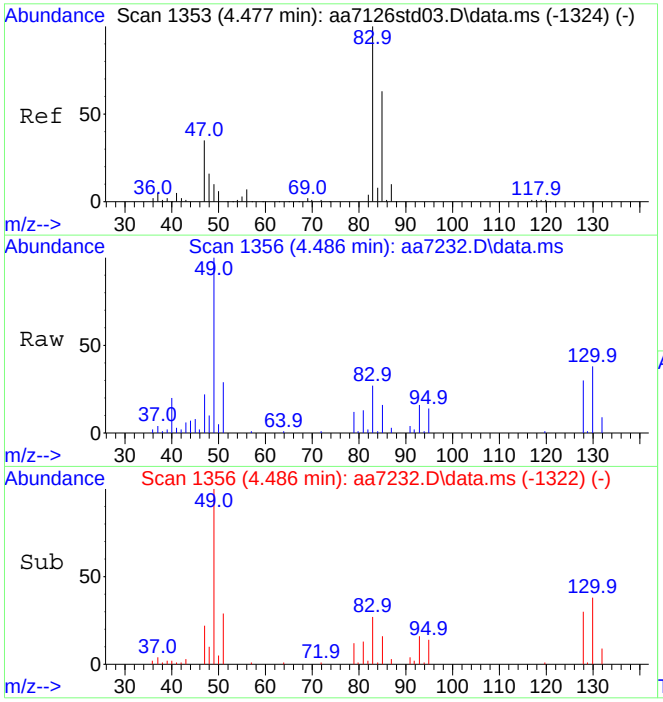


#21
Acetone
Concen: 9.03 ppbV
RT: 3.258 min Scan# 974
Delta R.T. 0.029 min
Lab File: aa7232.D
Acq: 18 Sep 2024 3:19 pm

Tgt Ion: 43 Resp: 744192

Ion	Ratio	Lower	Upper
43	100		
58	24.7	21.6	32.4

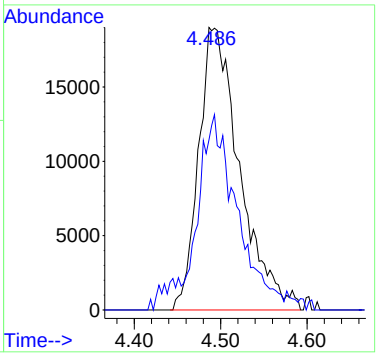


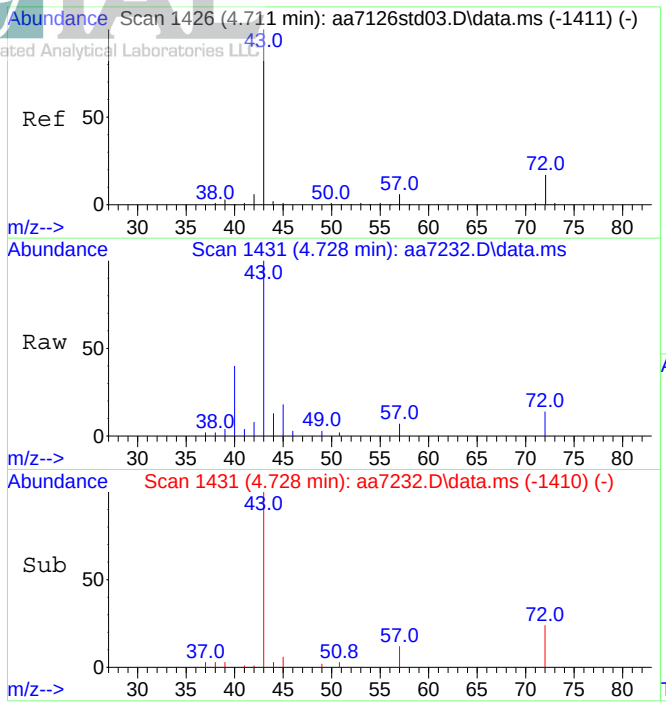


#30
Chloroform
Concen: 0.70 ppbV
RT: 4.486 min Scan# 1356
Delta R.T. 0.009 min
Lab File: aa7232.D
Acq: 18 Sep 2024 3:19 pm

Tgt Ion: 83 Resp: 62835

Ion	Ratio	Lower	Upper
83	100		
85	63.0	52.7	79.1

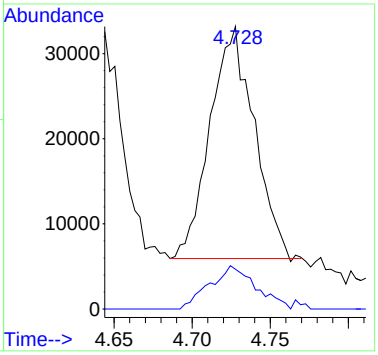


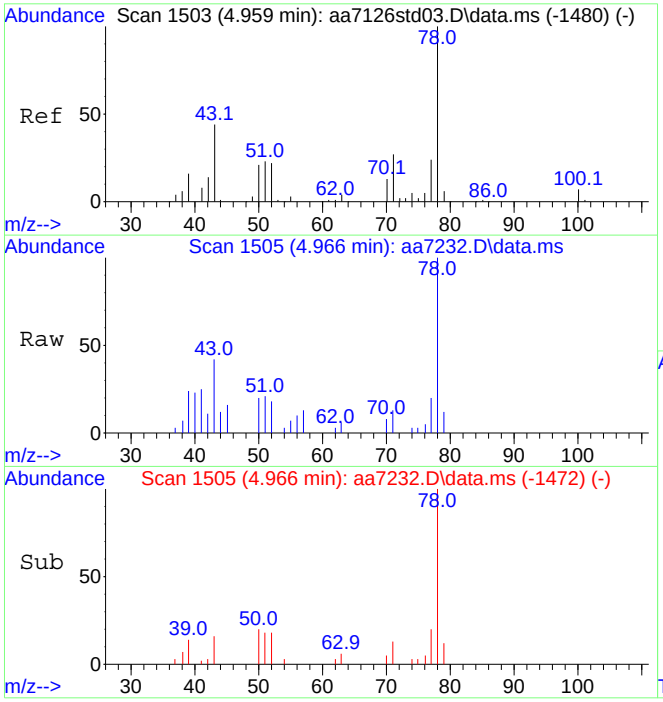


#35
Methyl ethyl ketone
Concen: 0.39 ppbV
RT: 4.728 min Scan# 1431
Delta R.T. 0.017 min
Lab File: aa7232.D
Acq: 18 Sep 2024 3:19 pm

Tgt Ion: 43 Resp: 53603

Ion	Ratio	Lower	Upper
43	100		
72	19.4	13.8	20.8

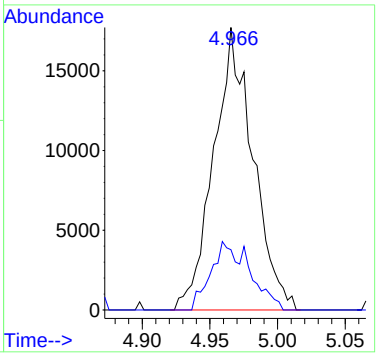


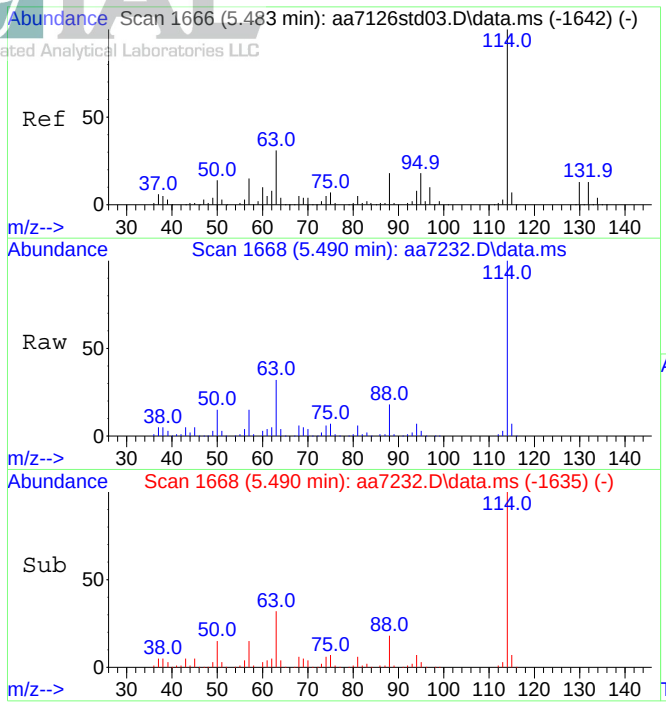


#37
Benzene
Concen: 0.26 ppbV
RT: 4.966 min Scan# 1505
Delta R.T. 0.006 min
Lab File: aa7232.D
Acq: 18 Sep 2024 3:19 pm

Tgt Ion: 78 Resp: 35733

Ion	Ratio	Lower	Upper
78	100		
51	23.9	19.0	28.4

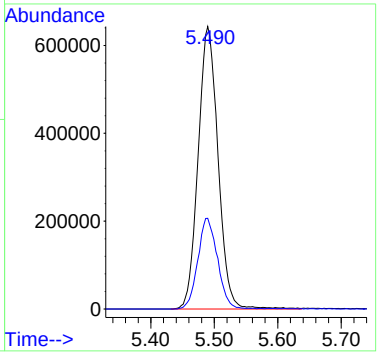


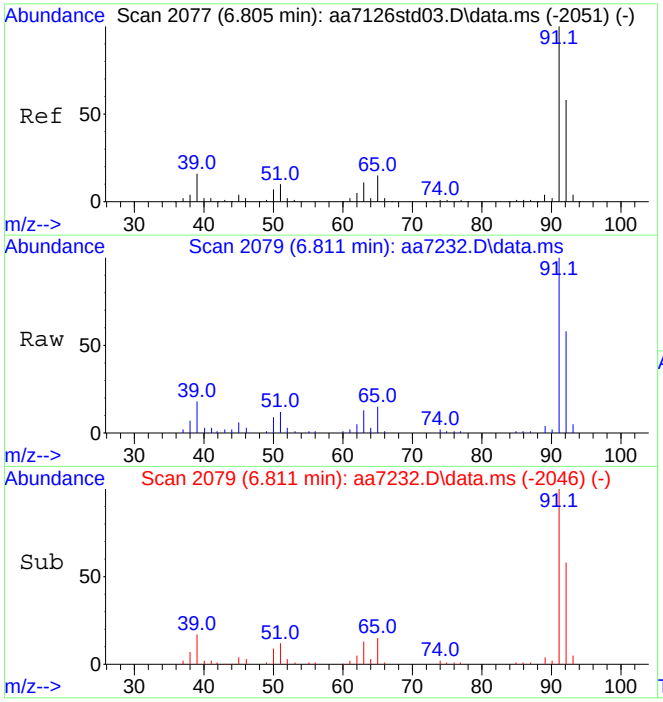


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.490 min Scan# 1668
Delta R.T. 0.007 min
Lab File: aa7232.D
Acq: 18 Sep 2024 3:19 pm

Tgt Ion:114 Resp: 1401324

Ion	Ratio	Lower	Upper
114	100		
63	31.7	11.2	51.2

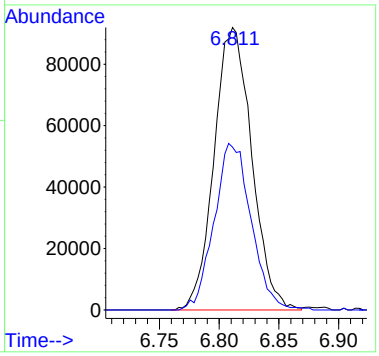


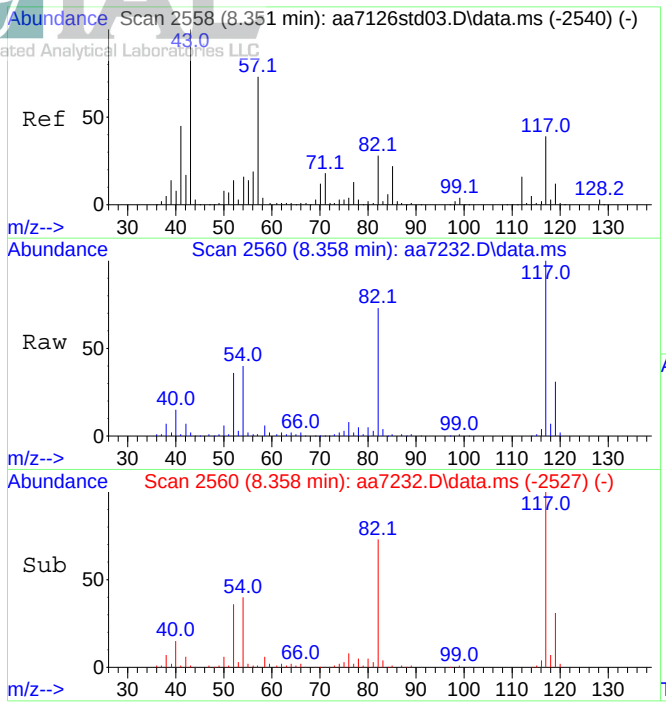


#47
Toluene
Concen: 0.80 ppbV
RT: 6.811 min Scan# 2079
Delta R.T. 0.006 min
Lab File: aa7232.D
Acq: 18 Sep 2024 3:19 pm

Tgt Ion: 91 Resp: 201653

Ion	Ratio	Lower	Upper
91	100		
92	57.9	46.1	69.1

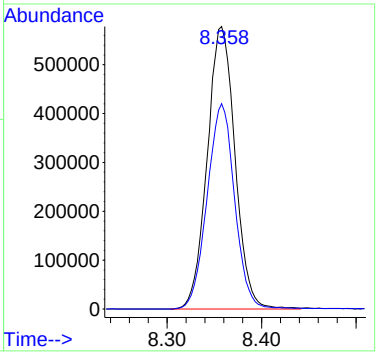


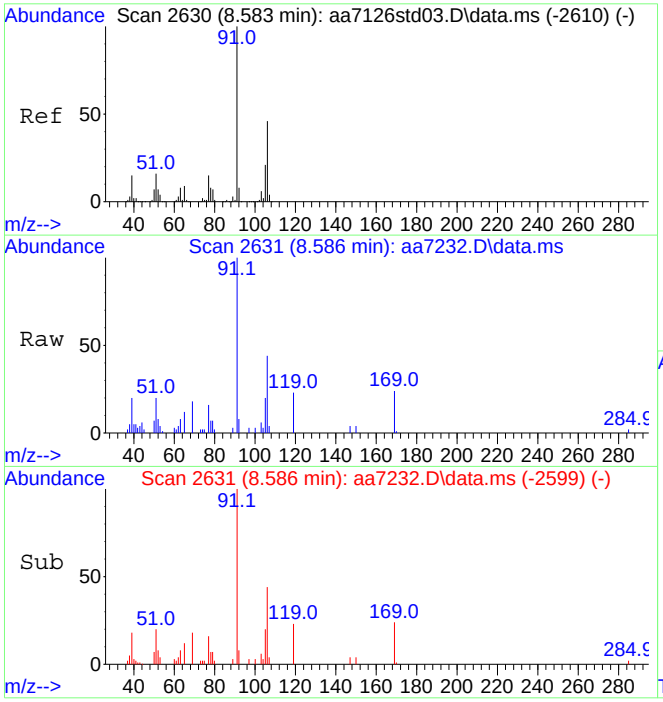


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.358 min Scan# 2560
Delta R.T. 0.007 min
Lab File: aa7232.D
Acq: 18 Sep 2024 3:19 pm

Tgt Ion:117 Resp: 1182827

Ion	Ratio	Lower	Upper
117	100		
82	72.2	51.5	91.5

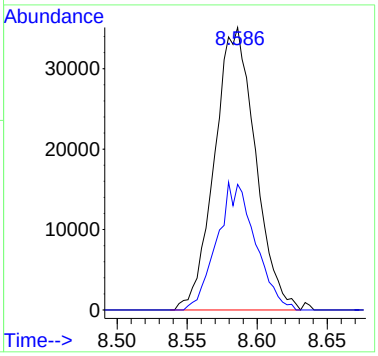


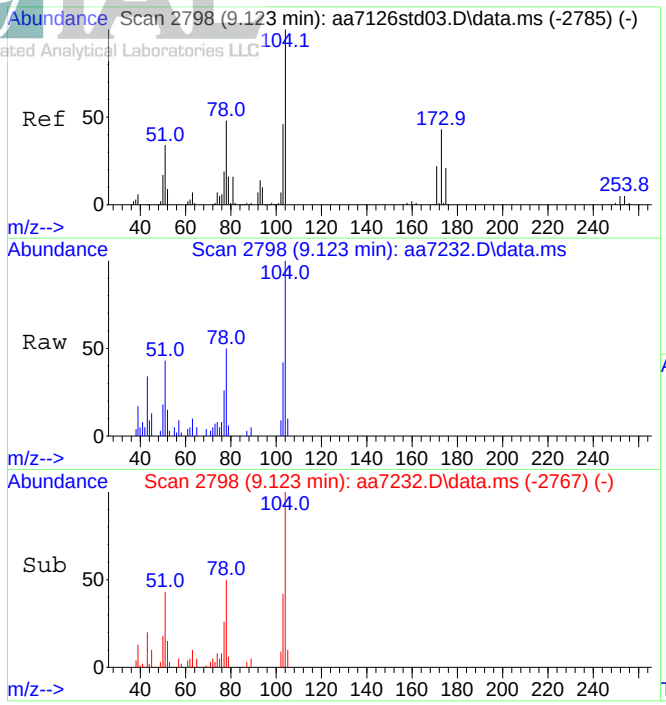


#59
Xylenes (m&p)
Concen: 0.34 ppbV
RT: 8.586 min Scan# 2631
Delta R.T. 0.003 min
Lab File: aa7232.D
Acq: 18 Sep 2024 3:19 pm

Tgt Ion: 91 Resp: 71187

Ion	Ratio	Lower	Upper
91	100		
106	42.5	36.6	55.0

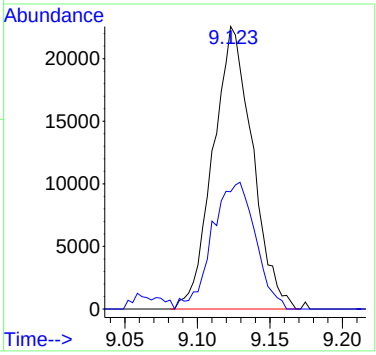


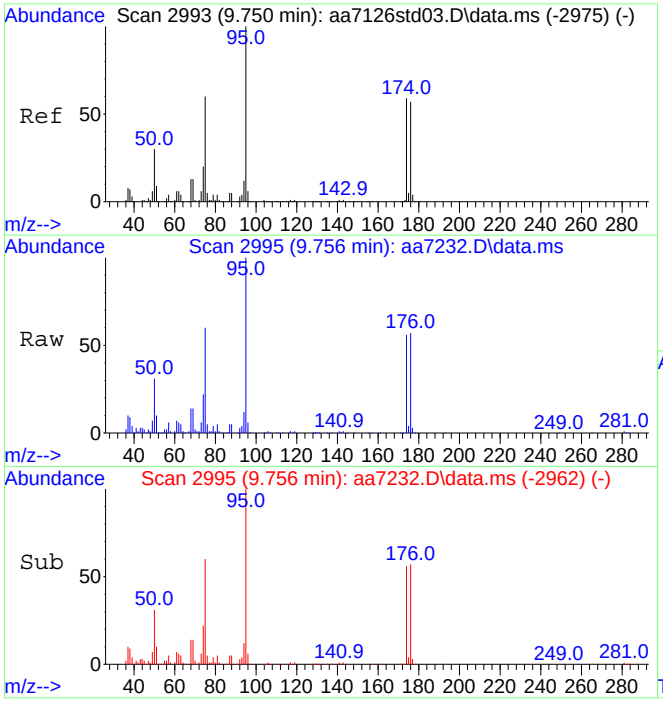


#61
Styrene
Concen: 0.29 ppbV
RT: 9.123 min Scan# 2798
Delta R.T. 0.000 min
Lab File: aa7232.D
Acq: 18 Sep 2024 3:19 pm

Tgt Ion:104 Resp: 42691

Ion	Ratio	Lower	Upper
104	100		
103	49.1	38.7	58.1

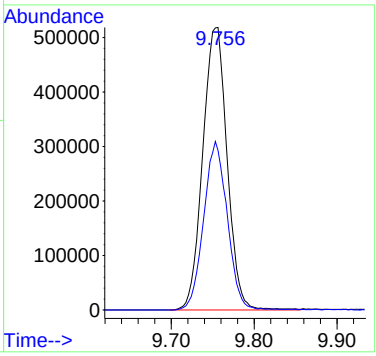




#64
Bromofluorobenzene (tune std)
Concen: 10.18 ppbV
RT: 9.756 min Scan# 2995
Delta R.T. 0.006 min
Lab File: aa7232.D
Acq: 18 Sep 2024 3:19 pm

Tgt Ion: 95 Resp: 1059120

Ion	Ratio	Lower	Upper
95	100		
174	57.7	48.2	72.4



Volatile Organic Compounds by EPA Method TO-15
Summary of Results

Lab ID:	E24-03187-03	Instrument ID:	AA
Client ID:	IA-3	GC/MS Column:	RTX-1, 0.32 mmID
Date Sampled:	09/16/2024 10:35	Injection Volmue:	500ml
Date Received:	09/17/2024	Matrix:	Air-Indoor
Date Analyzed:	09/18/2024 15:51	% Moisture:	NA
Data File:	AA7233	Dilution Factor:	1
Summa ID:	2758	Analyst:	J. Walukiewicz

			Concentration Reported		Reporting Limits	
Compound	**CAS #**	**Q**	**ppbv**	**ug/m3**	**ppbv**	**ug/m3**
Acetone	67-64-1		9.4	22	0.20	0.48
Benzene	71-43-2		ND	ND	0.20	0.64
Bromodichloromethane	75-27-4		ND	ND	0.20	1.3
Bromoform	75-25-2		ND	ND	0.20	2.1
Bromomethane	74-83-9		ND	ND	0.20	0.78
1,3-Butadiene	106-99-0		ND	ND	0.20	0.44
Chlorobenzene	108-90-7		ND	ND	0.20	0.92
Chloroethane	75-00-3		ND	ND	0.20	0.53
Chloroform	67-66-3		ND	ND	0.20	0.98
Chloromethane	74-87-3		ND	ND	0.20	0.41
Carbon disulfide	75-15-0		ND	ND	0.20	0.62
Carbon tetrachloride	56-23-5		ND	ND	0.040	0.25
Cyclohexane	110-82-7		ND	ND	0.20	0.69
Dibromochloromethane	124-48-1		ND	ND	0.20	1.7
1,2-Dibromoethane	106-93-4		ND	ND	0.20	1.5
1,2-Dichlorobenzene	95-50-1		ND	ND	0.20	1.2
1,3-Dichlorobenzene	541-73-1		ND	ND	0.20	1.2
1,4-Dichlorobenzene	106-46-7		ND	ND	0.20	1.2
Dichlorodifluoromethane	75-71-8		ND	ND	0.20	0.99
1,1-Dichloroethane	75-34-3		ND	ND	0.20	0.81
1,2-Dichloroethane	107-06-2		ND	ND	0.20	0.81
1,1-Dichloroethene	75-35-4		ND	ND	0.20	0.79
1,2-Dichloroethene (cis)	156-59-2		ND	ND	0.20	0.79
1,2-Dichloroethene (trans)	156-60-5		ND	ND	0.20	0.79
1,2-Dichloropropane	78-87-5		ND	ND	0.20	0.92
1,3-Dichloropropene (cis)	10061-01-5		ND	ND	0.20	0.91
1,3-Dichloropropene (trans)	10061-02-6		ND	ND	0.20	0.91
1,2-Dichlorotetrafluoroethane	76-14-2		ND	ND	0.20	1.4
1,4-Dioxane	123-91-1		ND	ND	0.20	0.72
Ethylbenzene	100-41-4		ND	ND	0.20	0.87
n-Heptane	142-82-5		ND	ND	0.20	0.82
1,3-Hexachlorobutadiene	87-68-3		ND	ND	0.20	2.1
n-Hexane	110-54-3		0.50	1.8	0.20	0.70
Methylene chloride	75-09-2		ND	ND	0.20	0.69
Methyl ethyl ketone	78-93-3		0.88	2.6	0.20	0.59
Methyl isobutyl ketone	108-10-1		ND	ND	0.20	0.82
Methyl tert-butyl ether	1634-04-4		ND	ND	0.20	0.72
Styrene	100-42-5		ND	ND	0.20	0.85
Tert-butyl alcohol	75-65-0		ND	ND	0.20	0.61
1,1,2,2-Tetrachloroethane	79-34-5		ND	ND	0.20	1.4
Tetrachloroethene	127-18-4		ND	ND	0.20	1.4
Toluene	108-88-3		1.2	4.5	0.20	0.75
1,2,4-Trichlorobenzene	120-82-1		ND	ND	0.20	1.5
1,1,1-Trichloroethane	71-55-6		ND	ND	0.20	1.1
1,1,2-Trichloroethane	79-00-5		ND	ND	0.20	1.1

Qualifiers:
D = Dilution required

Volatile Organic Compounds by EPA Method TO-15
Summary of Results

Lab ID:	E24-03187-03	Instrument ID:	AA
Client ID:	IA-3	GC/MS Column:	RTX-1, 0.32 mmID
Date Sampled:	09/16/2024 10:35	Injection Volmue:	500ml
Date Received:	09/17/2024	Matrix:	Air-Indoor
Date Analyzed:	09/18/2024 15:51	% Moisture:	NA
Data File:	AA7233	Dilution Factor:	1
Summa ID:	2758	Analyst:	J. Walukiewicz

			Concentration Reported		Reporting Limits	
Compound	**CAS #**	**Q**	**ppbv**	**ug/m3**	**ppbv**	**ug/m3**
Trichloroethene	79-01-6		ND	ND	0.046	0.25
Trichlorofluoromethane	75-69-4		0.27	1.5	0.20	1.1
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1		ND	ND	0.20	1.5
1,2,4-Trimethylbenzene	95-63-6		ND	ND	0.20	0.98
1,3,5-Trimethylbenzene	108-67-8		ND	ND	0.20	0.98
2,2,4-Trimethylpentane	540-84-1		ND	ND	0.20	0.93
Vinyl bromide	593-60-2		ND	ND	0.20	0.87
Vinyl chloride	75-01-4		ND	ND	0.20	0.51
Xylenes (m&p)	179601-23-1		0.47	2.0	0.20	0.87
Xylenes (o)	95-47-6		ND	ND	0.20	0.87

Qualifiers:
D = Dilution required

Data Path : C:\DATA\2024\09-2024\09-18-2024\
Data File : aa7233.D
Acq On : 18 Sep 2024 3:51 pm
Operator : jjw
Sample : E24-03187-03
Misc : 2758, 500cc
ALS Vial : 11 Sample Multiplier: 1

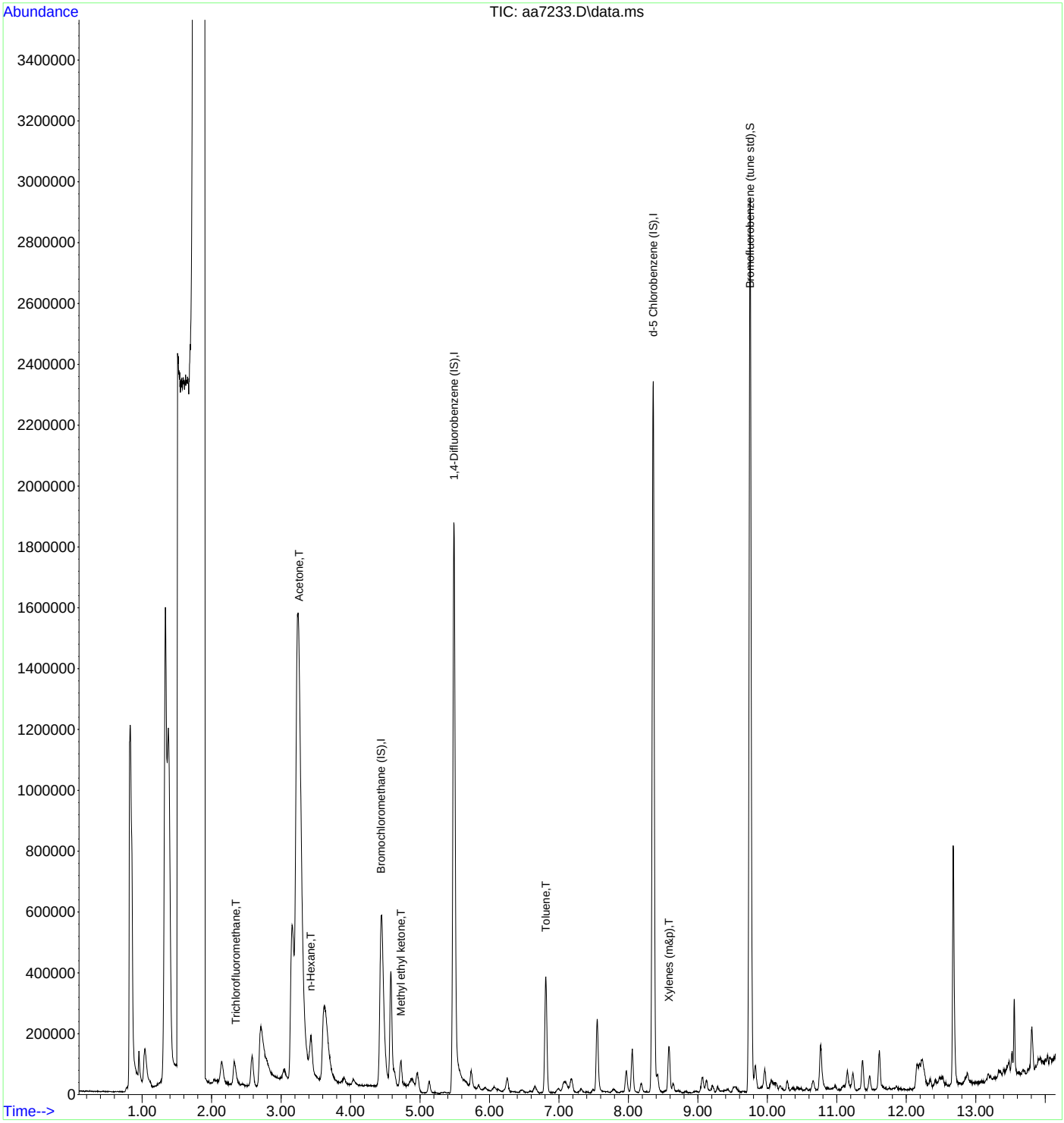
Quant Time: Sep 18 16:12:14 2024
Quant Method : C:\msdchem\1\METHODS\240910.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Sep 11 16:19:32 2024
Response via : Initial Calibration

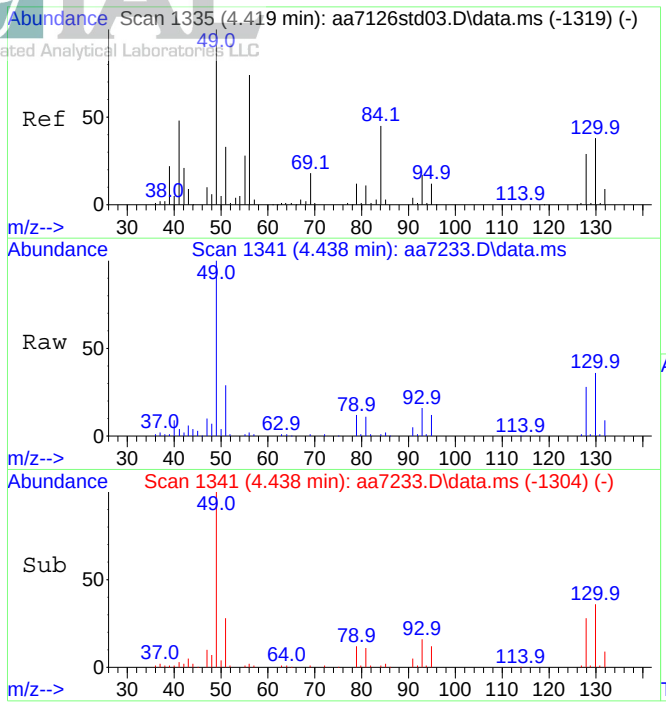
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.438	130	249790	10.00	ppbV	0.019
39) 1,4-Difluorobenzene (IS)	5.490	114	1404111	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.358	117	1216267	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.750	95	1130329	10.57	ppbV	0.000
Target Compounds						Qvalue
12) Trichlorofluoromethane	2.348	101	25630	0.27	ppbV	92
21) Acetone	3.258	43	834169	9.43	ppbV	100
24) n-Hexane	3.425	57	73734	0.50	ppbV	85
35) Methyl ethyl ketone	4.727	43	130052	0.88	ppbV	99
47) Toluene	6.811	91	301986	1.20	ppbV	98
59) Xylenes (m&p)	8.583	91	101603	0.47	ppbV	97

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

Data Path : C:\DATA\2024\09-2024\09-18-2024\
Data File : aa7233.D
Acq On : 18 Sep 2024 3:51 pm
Operator : jjw
Sample : E24-03187-03
Misc : 2758, 500cc
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 18 16:12:14 2024
Quant Method : C:\msdchem\1\METHODS\240910.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Sep 11 16:19:32 2024
Response via : Initial Calibration

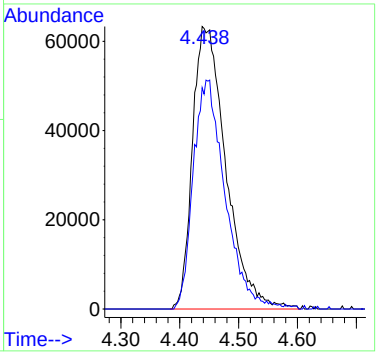


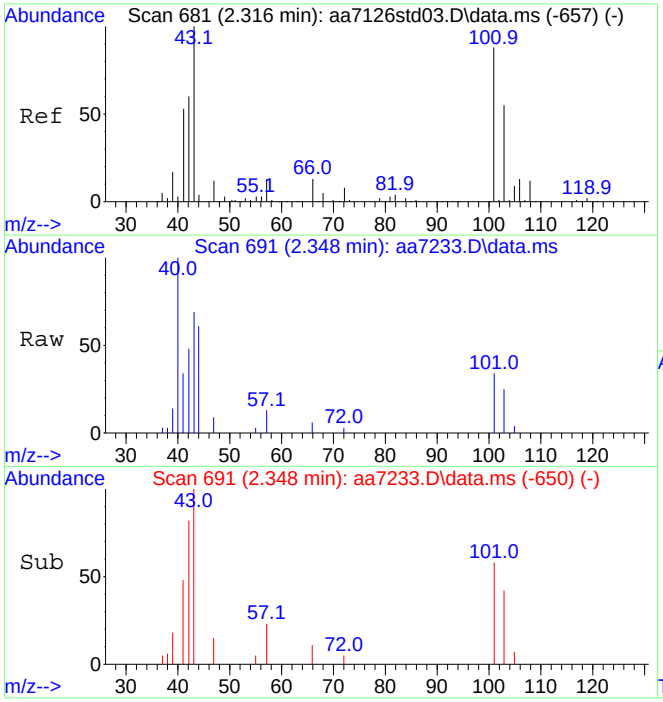


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.438 min Scan# 1341
Delta R.T. 0.019 min
Lab File: aa7233.D
Acq: 18 Sep 2024 3:51 pm

Tgt Ion:130 Resp: 249790

Ion	Ratio	Lower	Upper
130	100		
128	77.1	58.5	98.5

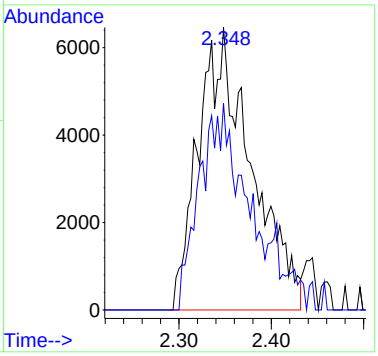


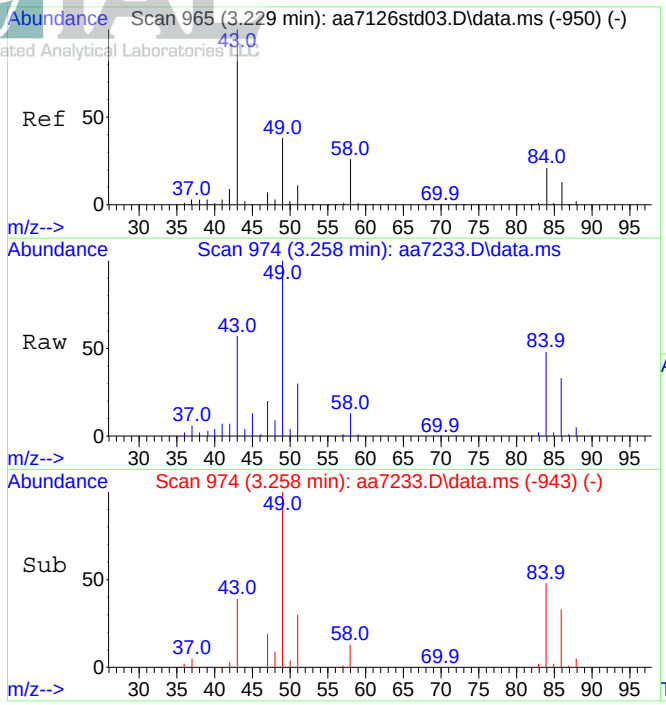


#12
Trichlorofluoromethane
Concen: 0.27 ppbV
RT: 2.348 min Scan# 691
Delta R.T. 0.032 min
Lab File: aa7233.D
Acq: 18 Sep 2024 3:51 pm

Tgt Ion:101 Resp: 25630

Ion	Ratio	Lower	Upper
101	100		
103	70.6	51.4	77.0

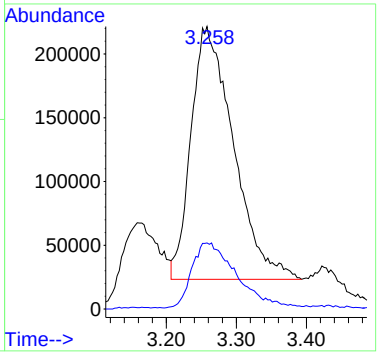


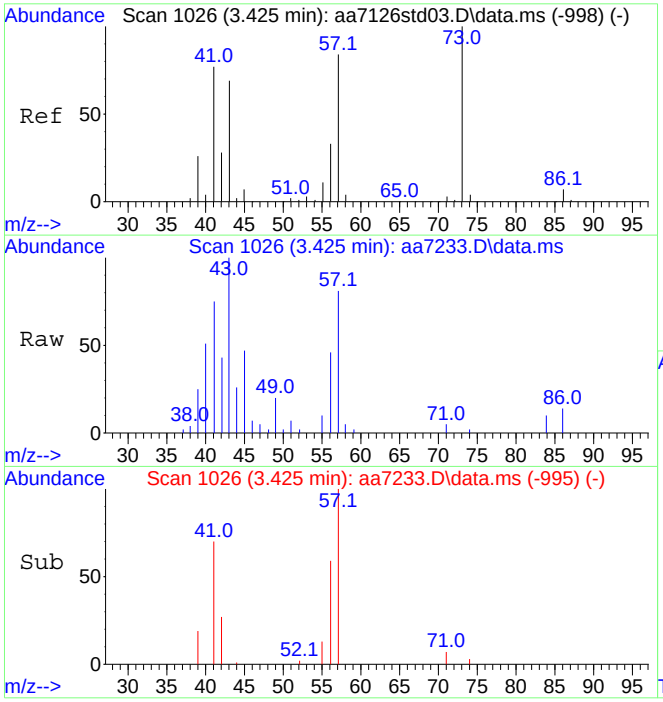


#21
Acetone
Concen: 9.43 ppbV
RT: 3.258 min Scan# 974
Delta R.T. 0.029 min
Lab File: aa7233.D
Acq: 18 Sep 2024 3:51 pm

Tgt Ion: 43 Resp: 834169

Ion	Ratio	Lower	Upper
43	100		
58	27.2	21.6	32.4

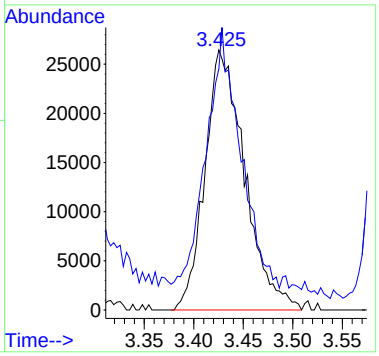


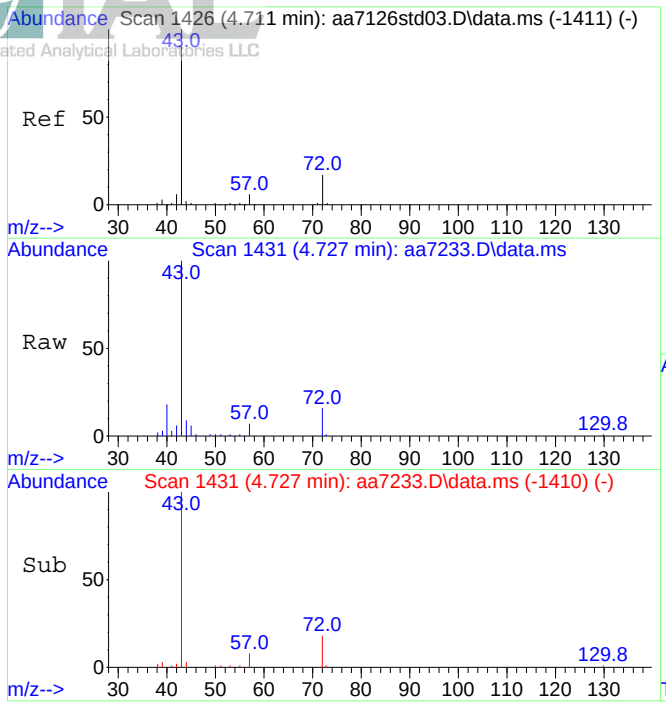


#24
n-Hexane
Concen: 0.50 ppbV
RT: 3.425 min Scan# 1026
Delta R.T. 0.000 min
Lab File: aa7233.D
Acq: 18 Sep 2024 3:51 pm

Tgt Ion: 57 Resp: 73734

Ion	Ratio	Lower	Upper
57	100		
41	88.6	82.8	124.2

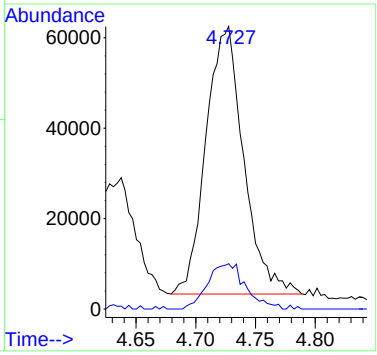


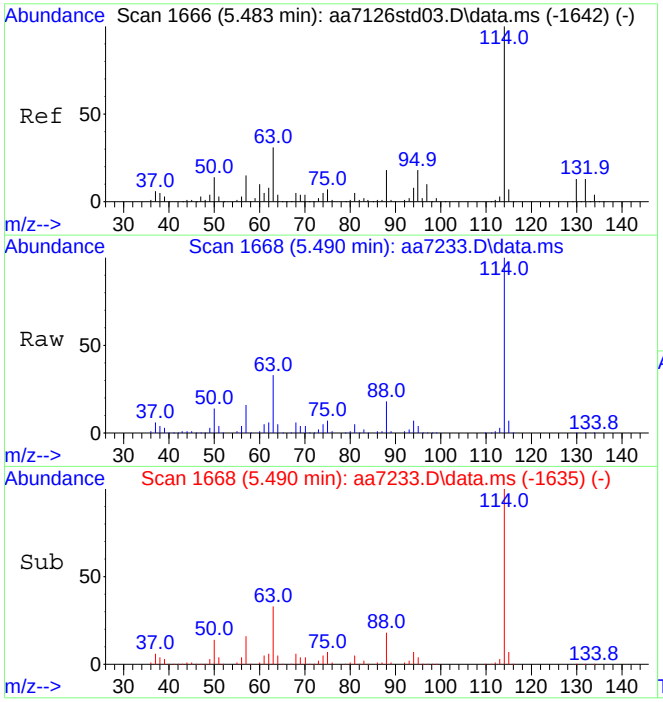


#35
Methyl ethyl ketone
Concen: 0.88 ppbV
RT: 4.727 min Scan# 1431
Delta R.T. 0.016 min
Lab File: aa7233.D
Acq: 18 Sep 2024 3:51 pm

Tgt Ion: 43 Resp: 130052

Ion	Ratio	Lower	Upper
43	100		
72	17.1	13.8	20.8

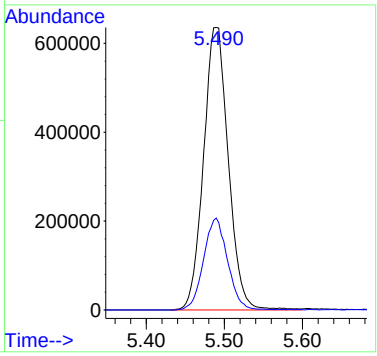


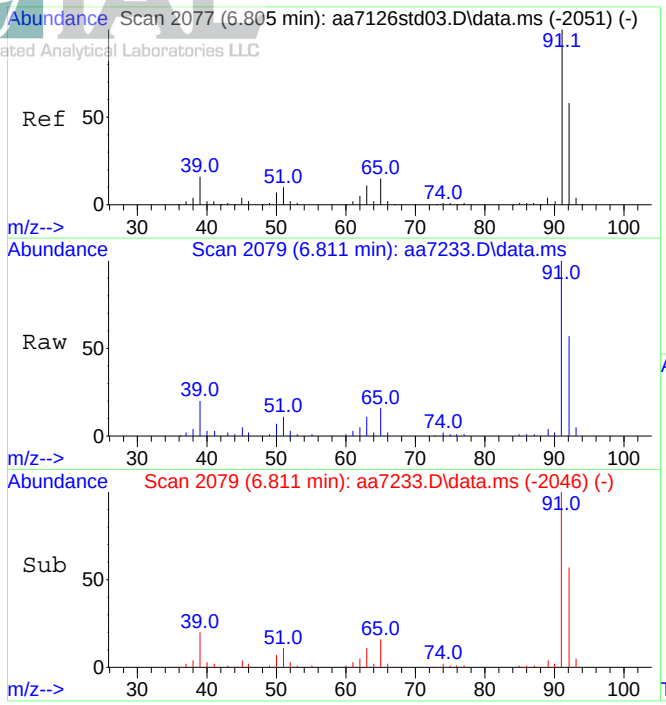


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.490 min Scan# 1668
Delta R.T. 0.007 min
Lab File: aa7233.D
Acq: 18 Sep 2024 3:51 pm

Tgt Ion:114 Resp: 1404111

Ion	Ratio	Lower	Upper
114	100		
63	31.4	11.2	51.2

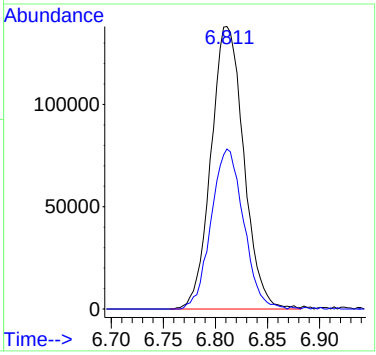


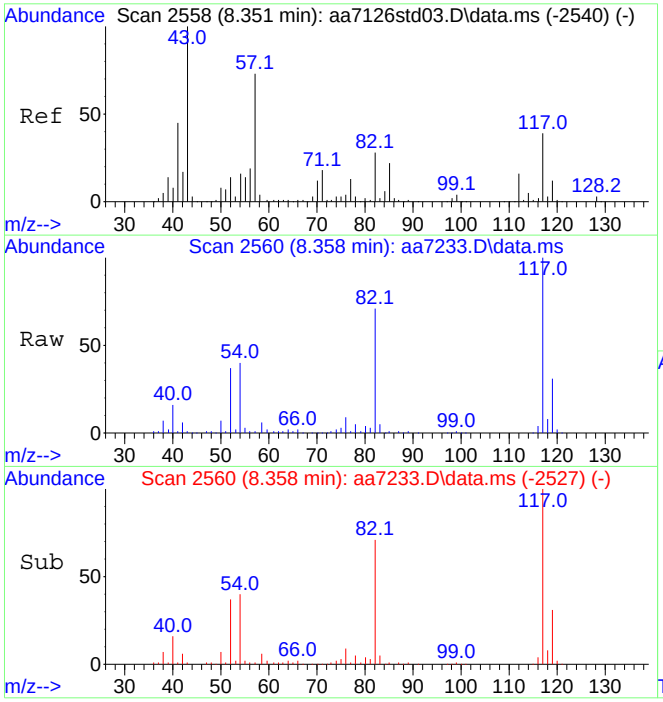


#47
Toluene
Concen: 1.20 ppbV
RT: 6.811 min Scan# 2079
Delta R.T. 0.006 min
Lab File: aa7233.D
Acq: 18 Sep 2024 3:51 pm

Tgt Ion: 91 Resp: 301986

Ion	Ratio	Lower	Upper
91	100		
92	56.0	46.1	69.1

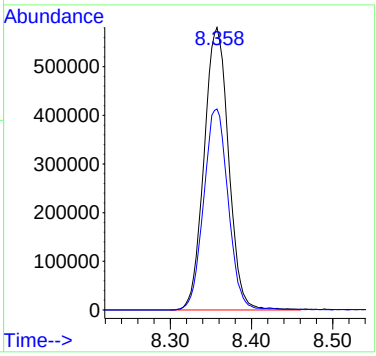


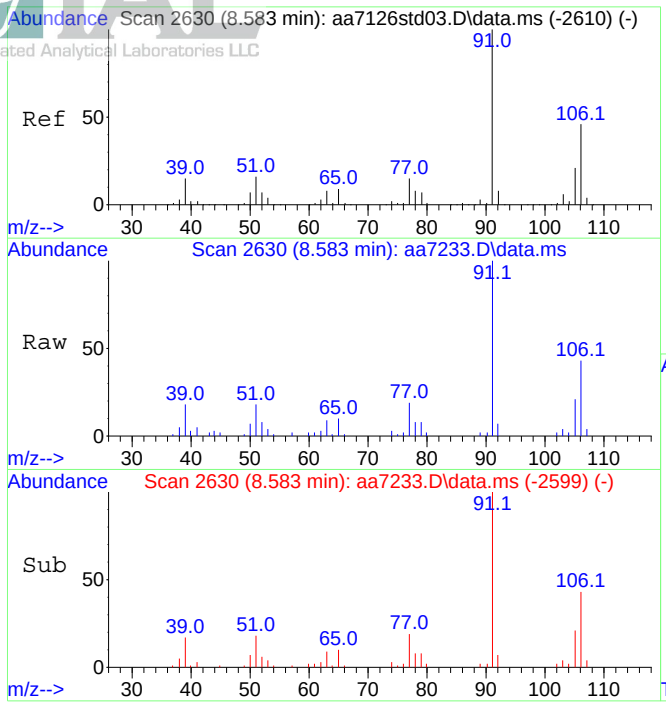


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.358 min Scan# 2560
Delta R.T. 0.007 min
Lab File: aa7233.D
Acq: 18 Sep 2024 3:51 pm

Tgt Ion:117 Resp: 1216267

Ion	Ratio	Lower	Upper
117	100		
82	71.5	51.5	91.5

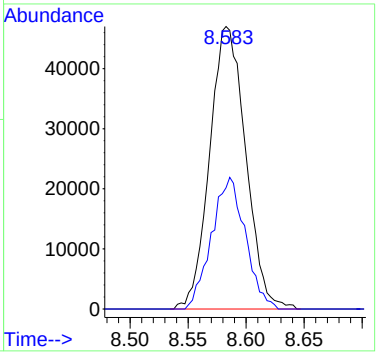


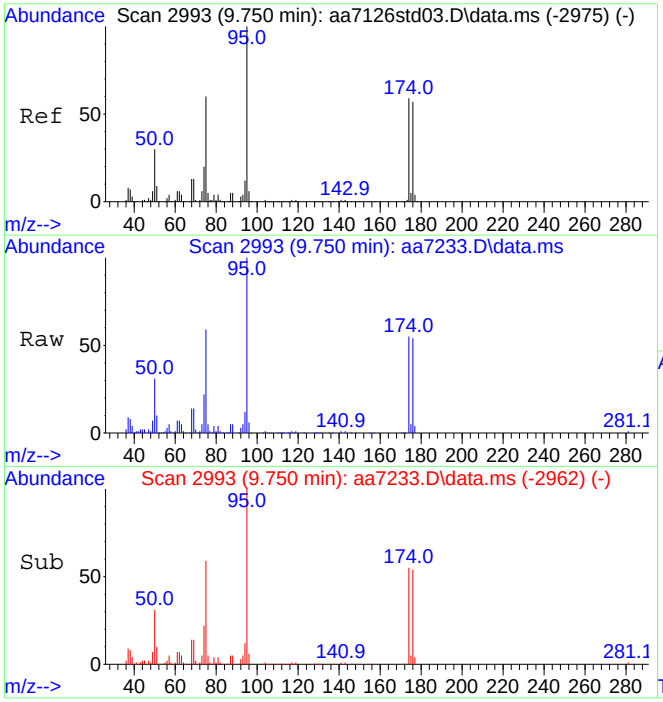


#59
Xylenes (m&p)
Concen: 0.47 ppbV
RT: 8.583 min Scan# 2630
Delta R.T. -0.000 min
Lab File: aa7233.D
Acq: 18 Sep 2024 3:51 pm

Tgt Ion: 91 Resp: 101603

Ion	Ratio	Lower	Upper
91	100		
106	43.6	36.6	55.0

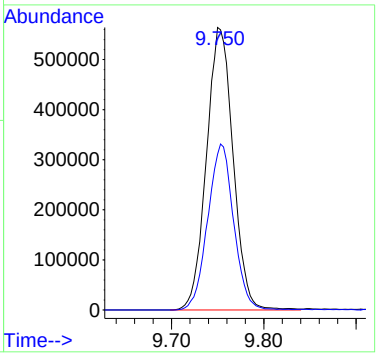




#64
Bromofluorobenzene (tune std)
Concen: 10.57 ppbV
RT: 9.750 min Scan# 2993
Delta R.T. -0.000 min
Lab File: aa7233.D
Acq: 18 Sep 2024 3:51 pm

Tgt Ion: 95 Resp: 1130329

Ion	Ratio	Lower	Upper
95	100		
174	57.2	48.2	72.4



Volatile Organic Compounds by EPA Method TO-15
Summary of Results

Lab ID:	E24-03187-04	Instrument ID:	AA
Client ID:	IA-4	GC/MS Column:	RTX-1, 0.32 mmID
Date Sampled:	09/16/2024 10:38	Injection Volmue:	500ml
Date Received:	09/17/2024	Matrix:	Air-Indoor
Date Analyzed:	09/18/2024 16:40	% Moisture:	NA
Data File:	AA7234	Dilution Factor:	1
Summa ID:	3006	Analyst:	J. Walukiewicz

			Concentration Reported		Reporting Limits	
Compound	**CAS #**	**Q**	**ppbv**	**ug/m3**	**ppbv**	**ug/m3**
Acetone	67-64-1		5.3	13	0.20	0.48
Benzene	71-43-2		ND	ND	0.20	0.64
Bromodichloromethane	75-27-4		ND	ND	0.20	1.3
Bromoform	75-25-2		ND	ND	0.20	2.1
Bromomethane	74-83-9		ND	ND	0.20	0.78
1,3-Butadiene	106-99-0		ND	ND	0.20	0.44
Chlorobenzene	108-90-7		ND	ND	0.20	0.92
Chloroethane	75-00-3		ND	ND	0.20	0.53
Chloroform	67-66-3		0.26	1.3	0.20	0.98
Chloromethane	74-87-3		ND	ND	0.20	0.41
Carbon disulfide	75-15-0		ND	ND	0.20	0.62
Carbon tetrachloride	56-23-5		ND	ND	0.040	0.25
Cyclohexane	110-82-7		ND	ND	0.20	0.69
Dibromochloromethane	124-48-1		ND	ND	0.20	1.7
1,2-Dibromoethane	106-93-4		ND	ND	0.20	1.5
1,2-Dichlorobenzene	95-50-1		ND	ND	0.20	1.2
1,3-Dichlorobenzene	541-73-1		ND	ND	0.20	1.2
1,4-Dichlorobenzene	106-46-7		ND	ND	0.20	1.2
Dichlorodifluoromethane	75-71-8		ND	ND	0.20	0.99
1,1-Dichloroethane	75-34-3		ND	ND	0.20	0.81
1,2-Dichloroethane	107-06-2		ND	ND	0.20	0.81
1,1-Dichloroethene	75-35-4		ND	ND	0.20	0.79
1,2-Dichloroethene (cis)	156-59-2		ND	ND	0.20	0.79
1,2-Dichloroethene (trans)	156-60-5		ND	ND	0.20	0.79
1,2-Dichloropropane	78-87-5		ND	ND	0.20	0.92
1,3-Dichloropropene (cis)	10061-01-5		ND	ND	0.20	0.91
1,3-Dichloropropene (trans)	10061-02-6		ND	ND	0.20	0.91
1,2-Dichlorotetrafluoroethane	76-14-2		ND	ND	0.20	1.4
1,4-Dioxane	123-91-1		ND	ND	0.20	0.72
Ethylbenzene	100-41-4		ND	ND	0.20	0.87
n-Heptane	142-82-5		ND	ND	0.20	0.82
1,3-Hexachlorobutadiene	87-68-3		ND	ND	0.20	2.1
n-Hexane	110-54-3		0.47	1.6	0.20	0.70
Methylene chloride	75-09-2		ND	ND	0.20	0.69
Methyl ethyl ketone	78-93-3		0.31	0.93	0.20	0.59
Methyl isobutyl ketone	108-10-1		ND	ND	0.20	0.82
Methyl tert-butyl ether	1634-04-4		ND	ND	0.20	0.72
Styrene	100-42-5		0.20	0.87	0.20	0.85
Tert-butyl alcohol	75-65-0		ND	ND	0.20	0.61
1,1,2,2-Tetrachloroethane	79-34-5		ND	ND	0.20	1.4
Tetrachloroethene	127-18-4		ND	ND	0.20	1.4
Toluene	108-88-3		0.29	1.1	0.20	0.75
1,2,4-Trichlorobenzene	120-82-1		ND	ND	0.20	1.5
1,1,1-Trichloroethane	71-55-6		ND	ND	0.20	1.1
1,1,2-Trichloroethane	79-00-5		ND	ND	0.20	1.1

Qualifiers:
D = Dilution required

Volatile Organic Compounds by EPA Method TO-15
Summary of Results

Lab ID:	E24-03187-04	Instrument ID:	AA
Client ID:	IA-4	GC/MS Column:	RTX-1, 0.32 mmID
Date Sampled:	09/16/2024 10:38	Injection Volmue:	500ml
Date Received:	09/17/2024	Matrix:	Air-Indoor
Date Analyzed:	09/18/2024 16:40	% Moisture:	NA
Data File:	AA7234	Dilution Factor:	1
Summa ID:	3006	Analyst:	J. Walukiewicz

			Concentration Reported		Reporting Limits	
Compound	**CAS #**	**Q**	**ppbv**	**ug/m3**	**ppbv**	**ug/m3**
Trichloroethene	79-01-6		ND	ND	0.046	0.25
Trichlorofluoromethane	75-69-4		0.26	1.5	0.20	1.1
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1		ND	ND	0.20	1.5
1,2,4-Trimethylbenzene	95-63-6		ND	ND	0.20	0.98
1,3,5-Trimethylbenzene	108-67-8		ND	ND	0.20	0.98
2,2,4-Trimethylpentane	540-84-1		ND	ND	0.20	0.93
Vinyl bromide	593-60-2		ND	ND	0.20	0.87
Vinyl chloride	75-01-4		ND	ND	0.20	0.51
Xylenes (m&p)	179601-23-1		ND	ND	0.20	0.87
Xylenes (o)	95-47-6		ND	ND	0.20	0.87

Qualifiers:
D = Dilution required

Data Path : C:\DATA\2024\09-2024\09-18-2024\
Data File : aa7234.D
Acq On : 18 Sep 2024 4:40 pm
Operator : jjw
Sample : E24-03187-04
Misc : 3006, 500cc
ALS Vial : 12 Sample Multiplier: 1

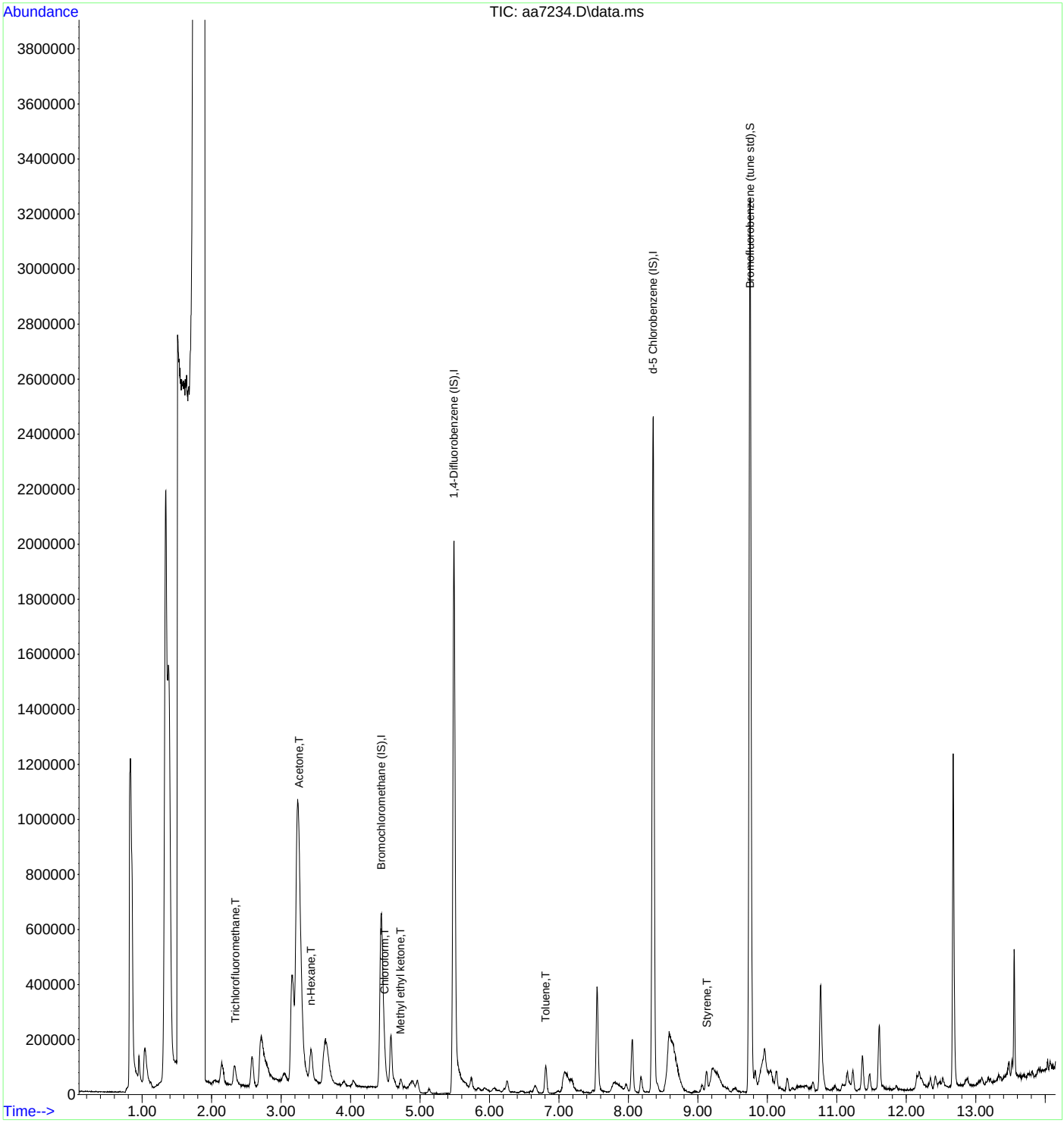
Quant Time: Sep 18 16:55:17 2024
Quant Method : C:\msdchem\1\METHODS\240910.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Sep 11 16:19:32 2024
Response via : Initial Calibration

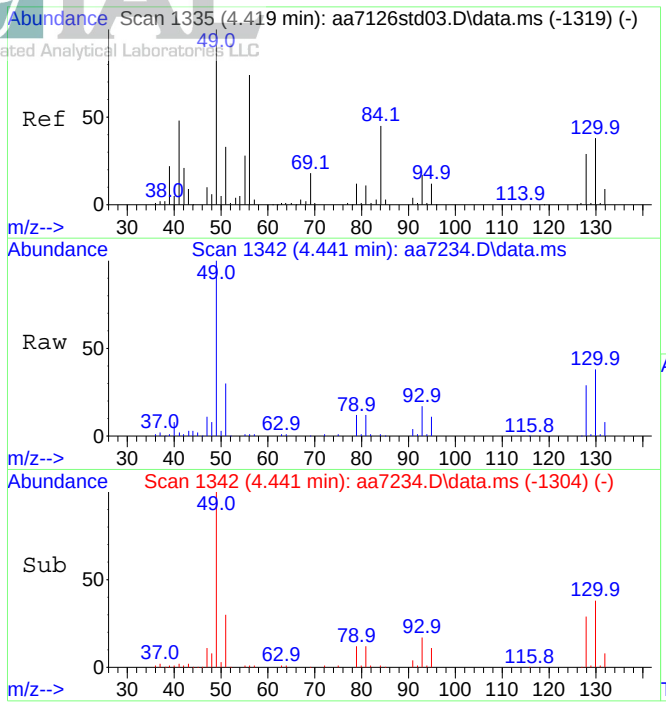
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.441	130	264983	10.00	ppbV	0.022
39) 1,4-Difluorobenzene (IS)	5.486	114	1498126	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.354	117	1273693	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.753	95	1261831	11.27	ppbV	0.000
Target Compounds						Qvalue
12) Trichlorofluoromethane	2.342	101	26335	0.27	ppbV	96
21) Acetone	3.258	43	493995	5.26	ppbV	97
24) n-Hexane	3.432	57	73046	0.47	ppbV	86
30) Chloroform	4.490	83	26345	0.26	ppbV	99
35) Methyl ethyl ketone	4.721	43	49321	0.31	ppbV	97
47) Toluene	6.808	91	79214	0.29	ppbV	98
61) Styrene	9.129	104	31998	0.21	ppbV	95

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

Data Path : C:\DATA\2024\09-2024\09-18-2024\
Data File : aa7234.D
Acq On : 18 Sep 2024 4:40 pm
Operator : jjw
Sample : E24-03187-04
Misc : 3006, 500cc
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 18 16:55:17 2024
Quant Method : C:\msdchem\1\METHODS\240910.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Sep 11 16:19:32 2024
Response via : Initial Calibration

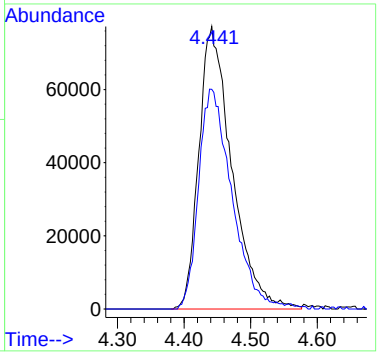


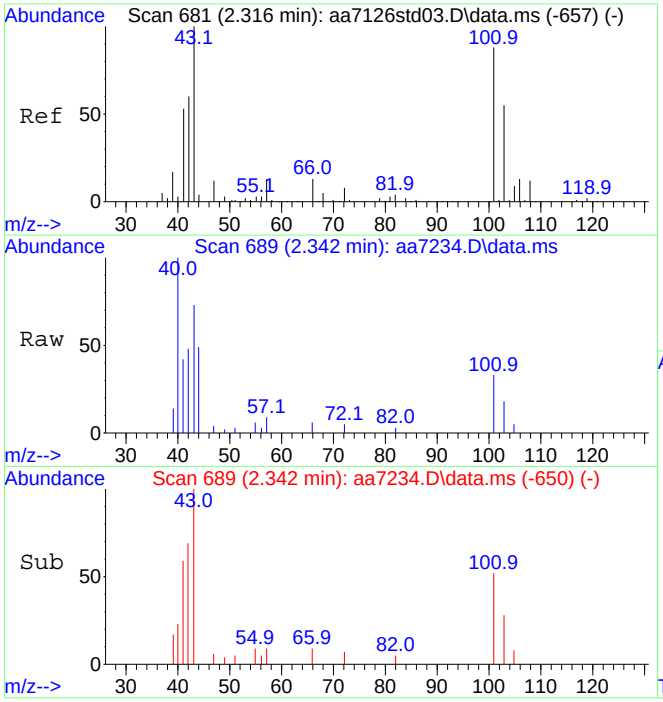


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.441 min Scan# 1342
Delta R.T. 0.022 min
Lab File: aa7234.D
Acq: 18 Sep 2024 4:40 pm

Tgt Ion:130 Resp: 264983

Ion	Ratio	Lower	Upper
130	100		
128	79.3	58.5	98.5

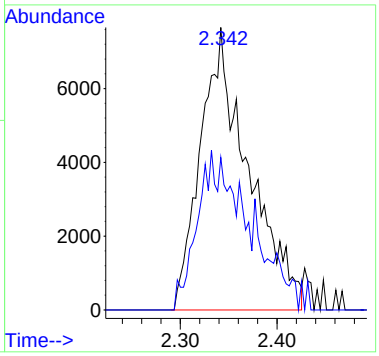


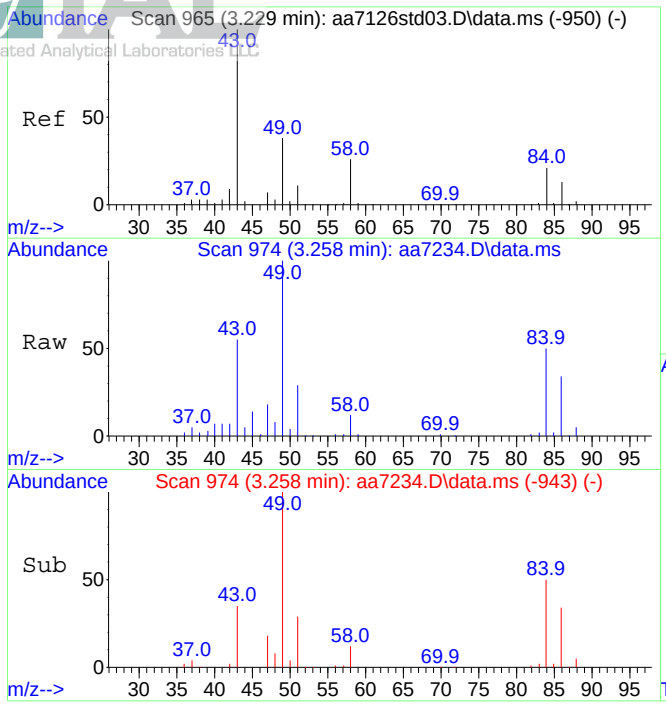


#12
Trichlorofluoromethane
Concen: 0.27 ppbV
RT: 2.342 min Scan# 689
Delta R.T. 0.026 min
Lab File: aa7234.D
Acq: 18 Sep 2024 4:40 pm

Tgt Ion:101 Resp: 26335

Ion	Ratio	Lower	Upper
101	100		
103	60.9	51.4	77.0

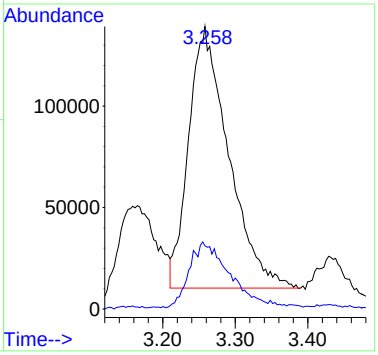


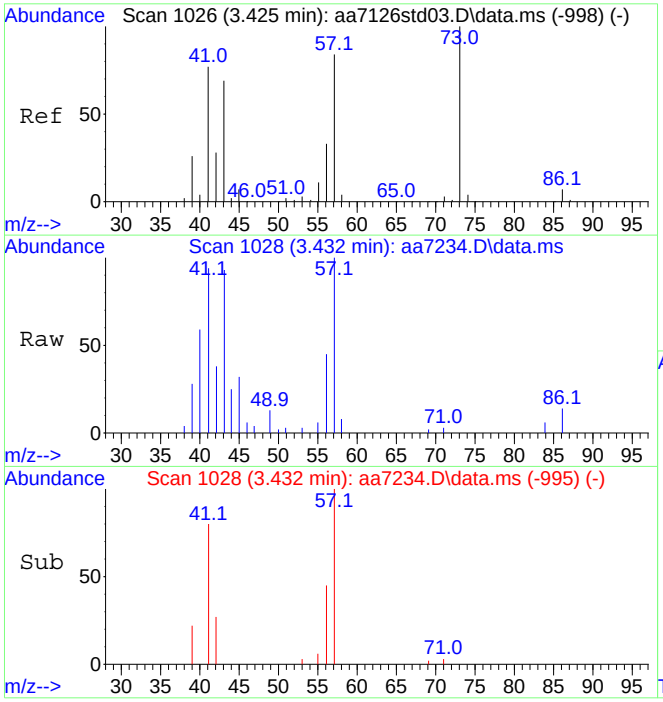


#21
Acetone
Concen: 5.26 ppbV
RT: 3.258 min Scan# 974
Delta R.T. 0.029 min
Lab File: aa7234.D
Acq: 18 Sep 2024 4:40 pm

Tgt Ion: 43 Resp: 493995

Ion	Ratio	Lower	Upper
43	100		
58	25.7	21.6	32.4

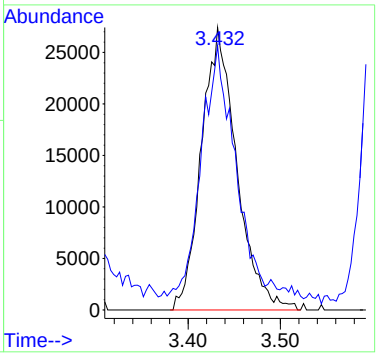


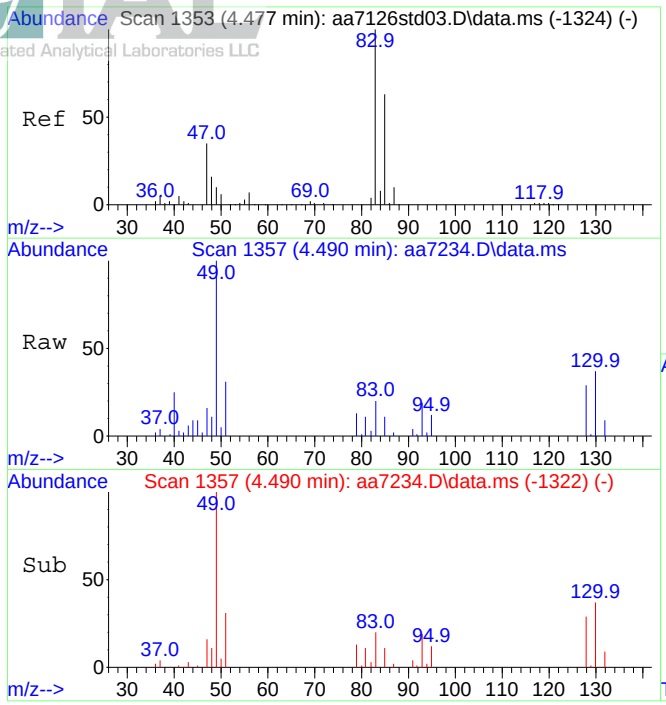


#24
n-Hexane
Concen: 0.47 ppbV
RT: 3.432 min Scan# 1028
Delta R.T. 0.007 min
Lab File: aa7234.D
Acq: 18 Sep 2024 4:40 pm

Tgt Ion: 57 Resp: 73046

Ion	Ratio	Lower	Upper
57	100		
41	88.9	82.8	124.2

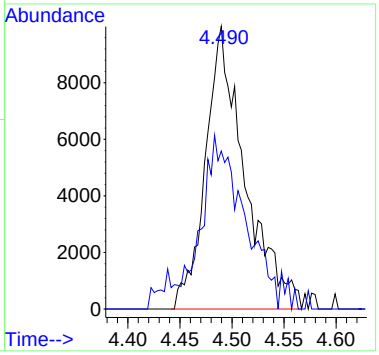


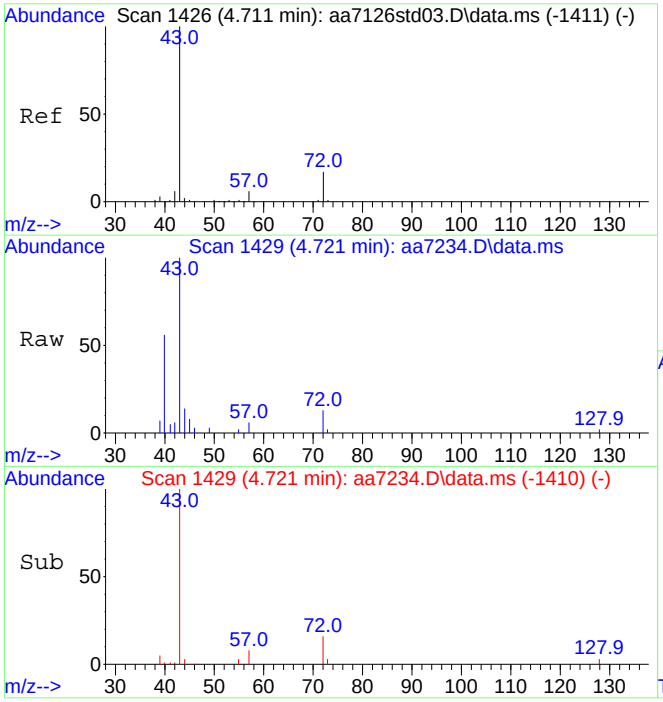


#30
Chloroform
Concen: 0.26 ppbV
RT: 4.490 min Scan# 1357
Delta R.T. 0.013 min
Lab File: aa7234.D
Acq: 18 Sep 2024 4:40 pm

Tgt Ion: 83 Resp: 26345

Ion	Ratio	Lower	Upper
83	100		
85	65.0	52.7	79.1

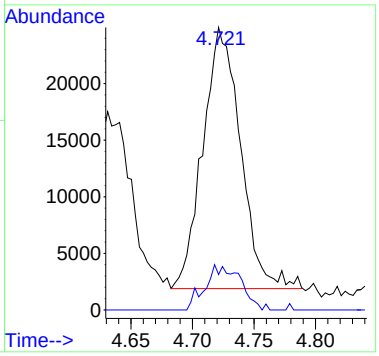


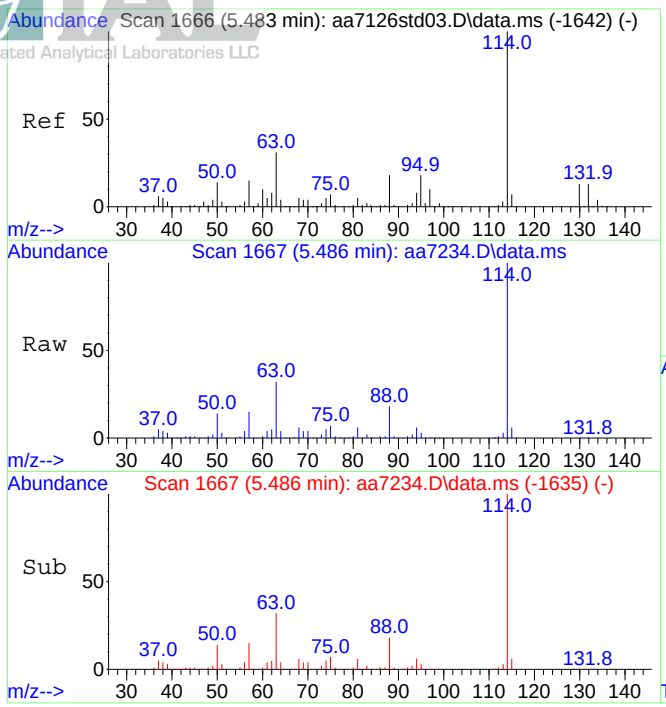


#35
Methyl ethyl ketone
Concen: 0.31 ppbV
RT: 4.721 min Scan# 1429
Delta R.T. 0.010 min
Lab File: aa7234.D
Acq: 18 Sep 2024 4:40 pm

Tgt Ion: 43 Resp: 49321

Ion	Ratio	Lower	Upper
43	100		
72	16.0	13.8	20.8

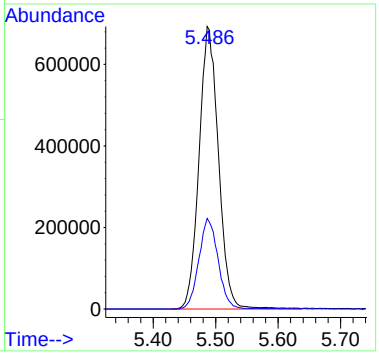


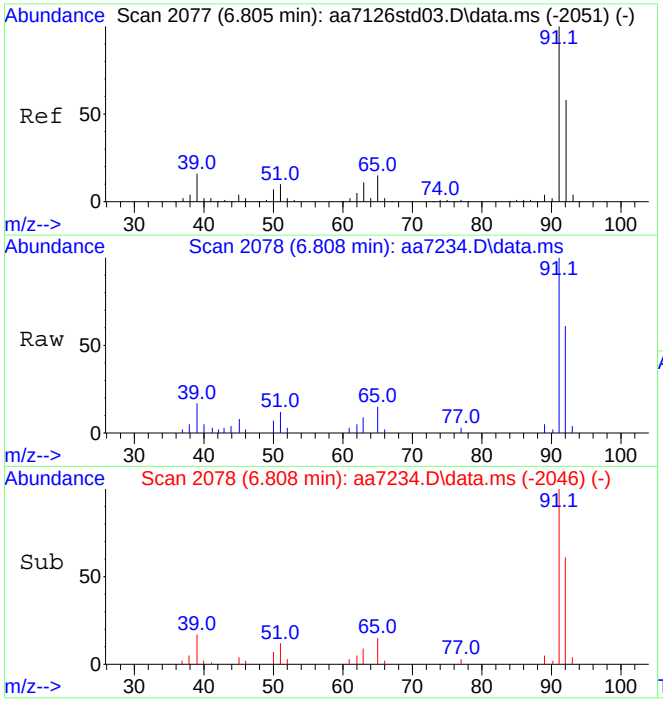


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.486 min Scan# 1667
Delta R.T. 0.003 min
Lab File: aa7234.D
Acq: 18 Sep 2024 4:40 pm

Tgt Ion:114 Resp: 1498126

Ion	Ratio	Lower	Upper
114	100		
63	31.8	11.2	51.2

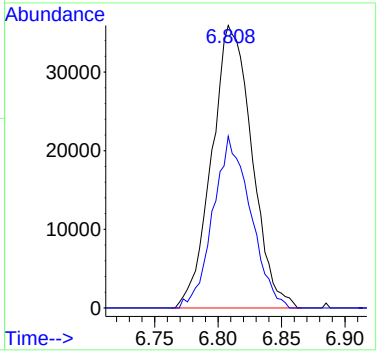


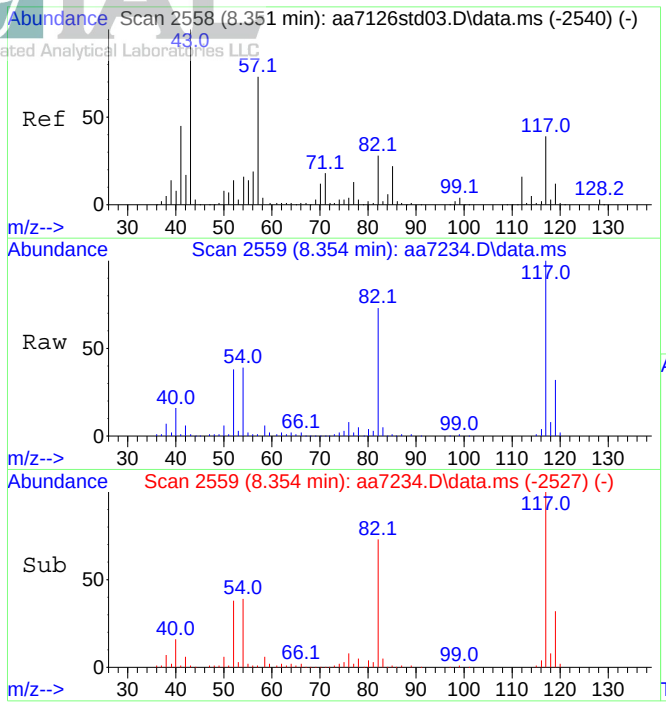


#47
Toluene
Concen: 0.29 ppbV
RT: 6.808 min Scan# 2078
Delta R.T. 0.003 min
Lab File: aa7234.D
Acq: 18 Sep 2024 4:40 pm

Tgt Ion: 91 Resp: 79214

Ion	Ratio	Lower	Upper
91	100		
92	56.4	46.1	69.1

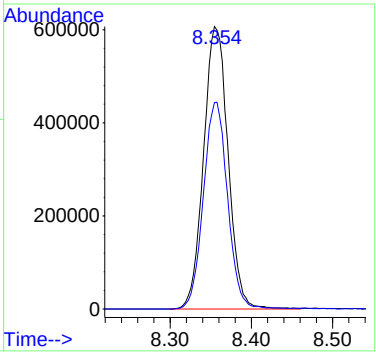


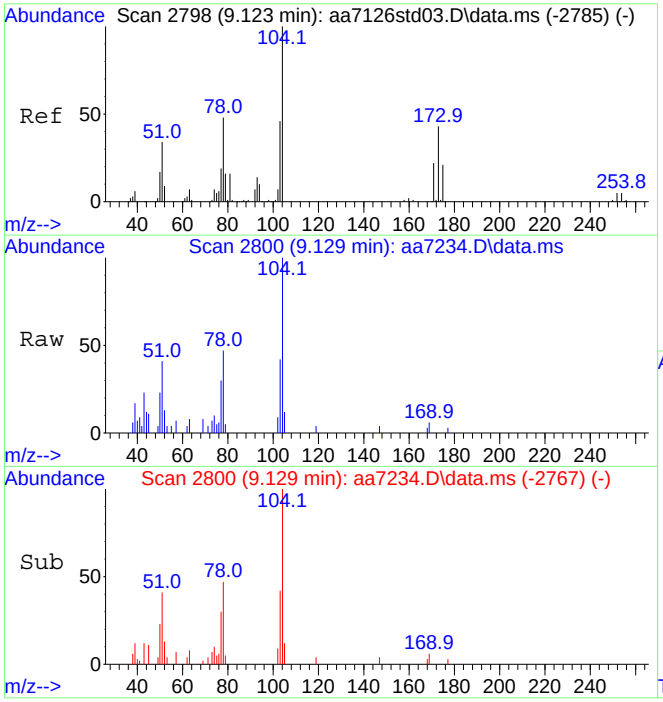


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.354 min Scan# 2559
Delta R.T. 0.003 min
Lab File: aa7234.D
Acq: 18 Sep 2024 4:40 pm

Tgt Ion:117 Resp: 1273693

Ion	Ratio	Lower	Upper
117	100		
82	72.1	51.5	91.5

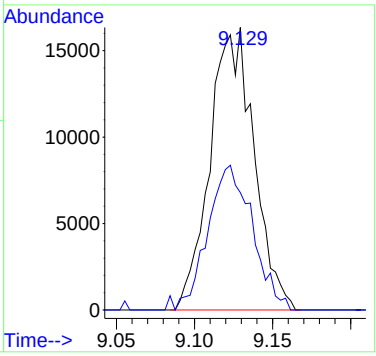


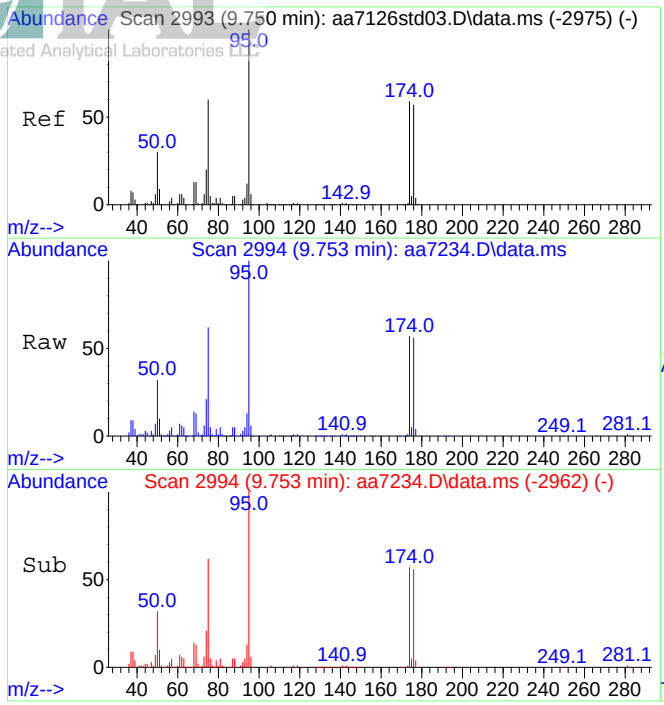


#61
Styrene
Concen: 0.21 ppbV
RT: 9.129 min Scan# 2800
Delta R.T. 0.006 min
Lab File: aa7234.D
Acq: 18 Sep 2024 4:40 pm

Tgt Ion:104 Resp: 31998

Ion	Ratio	Lower	Upper
104	100		
103	51.7	38.7	58.1

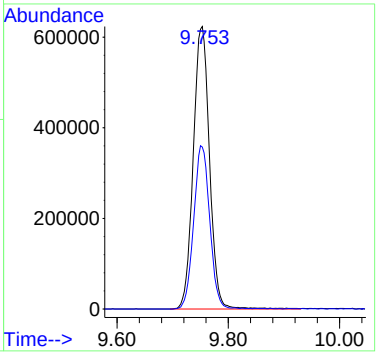




#64
Bromofluorobenzene (tune std)
Concen: 11.27 ppbV
RT: 9.753 min Scan# 2994
Delta R.T. 0.003 min
Lab File: aa7234.D
Acq: 18 Sep 2024 4:40 pm

Tgt Ion: 95 Resp: 1261831

Ion	Ratio	Lower	Upper
95	100		
174	57.2	48.2	72.4



Volatile Organic Compounds by EPA Method TO-15
Summary of Results

Lab ID:	E24-03187-05	Instrument ID:	AA
Client ID:	IA-5	GC/MS Column:	RTX-1, 0.32 mmID
Date Sampled:	09/16/2024 10:44	Injection Volmue:	500ml
Date Received:	09/17/2024	Matrix:	Air-Indoor
Date Analyzed:	09/18/2024 17:11	% Moisture:	NA
Data File:	AA7235	Dilution Factor:	1
Summa ID:	2069	Analyst:	J. Walukiewicz

			Concentration Reported		Reporting Limits	
Compound	**CAS #**	**Q**	**ppbv**	**ug/m3**	**ppbv**	**ug/m3**
Acetone	67-64-1		12	28	0.20	0.48
Benzene	71-43-2		0.28	0.90	0.20	0.64
Bromodichloromethane	75-27-4		ND	ND	0.20	1.3
Bromoform	75-25-2		ND	ND	0.20	2.1
Bromomethane	74-83-9		ND	ND	0.20	0.78
1,3-Butadiene	106-99-0		ND	ND	0.20	0.44
Chlorobenzene	108-90-7		ND	ND	0.20	0.92
Chloroethane	75-00-3		ND	ND	0.20	0.53
Chloroform	67-66-3		0.27	1.3	0.20	0.98
Chloromethane	74-87-3		ND	ND	0.20	0.41
Carbon disulfide	75-15-0		ND	ND	0.20	0.62
Carbon tetrachloride	56-23-5		ND	ND	0.040	0.25
Cyclohexane	110-82-7		ND	ND	0.20	0.69
Dibromochloromethane	124-48-1		ND	ND	0.20	1.7
1,2-Dibromoethane	106-93-4		ND	ND	0.20	1.5
1,2-Dichlorobenzene	95-50-1		ND	ND	0.20	1.2
1,3-Dichlorobenzene	541-73-1		ND	ND	0.20	1.2
1,4-Dichlorobenzene	106-46-7		ND	ND	0.20	1.2
Dichlorodifluoromethane	75-71-8		ND	ND	0.20	0.99
1,1-Dichloroethane	75-34-3		ND	ND	0.20	0.81
1,2-Dichloroethane	107-06-2		ND	ND	0.20	0.81
1,1-Dichloroethene	75-35-4		ND	ND	0.20	0.79
1,2-Dichloroethene (cis)	156-59-2		ND	ND	0.20	0.79
1,2-Dichloroethene (trans)	156-60-5		ND	ND	0.20	0.79
1,2-Dichloropropane	78-87-5		ND	ND	0.20	0.92
1,3-Dichloropropene (cis)	10061-01-5		ND	ND	0.20	0.91
1,3-Dichloropropene (trans)	10061-02-6		ND	ND	0.20	0.91
1,2-Dichlorotetrafluoroethane	76-14-2		ND	ND	0.20	1.4
1,4-Dioxane	123-91-1		ND	ND	0.20	0.72
Ethylbenzene	100-41-4		ND	ND	0.20	0.87
n-Heptane	142-82-5		ND	ND	0.20	0.82
1,3-Hexachlorobutadiene	87-68-3		ND	ND	0.20	2.1
n-Hexane	110-54-3		0.20	0.72	0.20	0.70
Methylene chloride	75-09-2		9.7	34	0.20	0.69
Methyl ethyl ketone	78-93-3		0.96	2.8	0.20	0.59
Methyl isobutyl ketone	108-10-1		ND	ND	0.20	0.82
Methyl tert-butyl ether	1634-04-4		ND	ND	0.20	0.72
Styrene	100-42-5		0.25	1.1	0.20	0.85
Tert-butyl alcohol	75-65-0		ND	ND	0.20	0.61
1,1,2,2-Tetrachloroethane	79-34-5		ND	ND	0.20	1.4
Tetrachloroethene	127-18-4		ND	ND	0.20	1.4
Toluene	108-88-3		1.5	5.6	0.20	0.75
1,2,4-Trichlorobenzene	120-82-1		ND	ND	0.20	1.5
1,1,1-Trichloroethane	71-55-6		ND	ND	0.20	1.1
1,1,2-Trichloroethane	79-00-5		ND	ND	0.20	1.1

Qualifiers:
D = Dilution required

Volatile Organic Compounds by EPA Method TO-15
Summary of Results

Lab ID:	E24-03187-05	Instrument ID:	AA
Client ID:	IA-5	GC/MS Column:	RTX-1, 0.32 mmID
Date Sampled:	09/16/2024 10:44	Injection Volmue:	500ml
Date Received:	09/17/2024	Matrix:	Air-Indoor
Date Analyzed:	09/18/2024 17:11	% Moisture:	NA
Data File:	AA7235	Dilution Factor:	1
Summa ID:	2069	Analyst:	J. Walukiewicz

			Concentration Reported		Reporting Limits	
Compound	**CAS #**	**Q**	**ppbv**	**ug/m3**	**ppbv**	**ug/m3**
Trichloroethene	79-01-6		ND	ND	0.046	0.25
Trichlorofluoromethane	75-69-4		0.27	1.5	0.20	1.1
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1		ND	ND	0.20	1.5
1,2,4-Trimethylbenzene	95-63-6		ND	ND	0.20	0.98
1,3,5-Trimethylbenzene	108-67-8		ND	ND	0.20	0.98
2,2,4-Trimethylpentane	540-84-1		ND	ND	0.20	0.93
Vinyl bromide	593-60-2		ND	ND	0.20	0.87
Vinyl chloride	75-01-4		ND	ND	0.20	0.51
Xylenes (m&p)	179601-23-1		0.61	2.7	0.20	0.87
Xylenes (o)	95-47-6		ND	ND	0.20	0.87

Qualifiers:
D = Dilution required

Data Path : C:\DATA\2024\09-2024\09-18-2024\
Data File : aa7235.D
Acq On : 18 Sep 2024 5:11 pm
Operator : jjw
Sample : E24-03187-05
Misc : 2069, 500cc
ALS Vial : 13 Sample Multiplier: 1

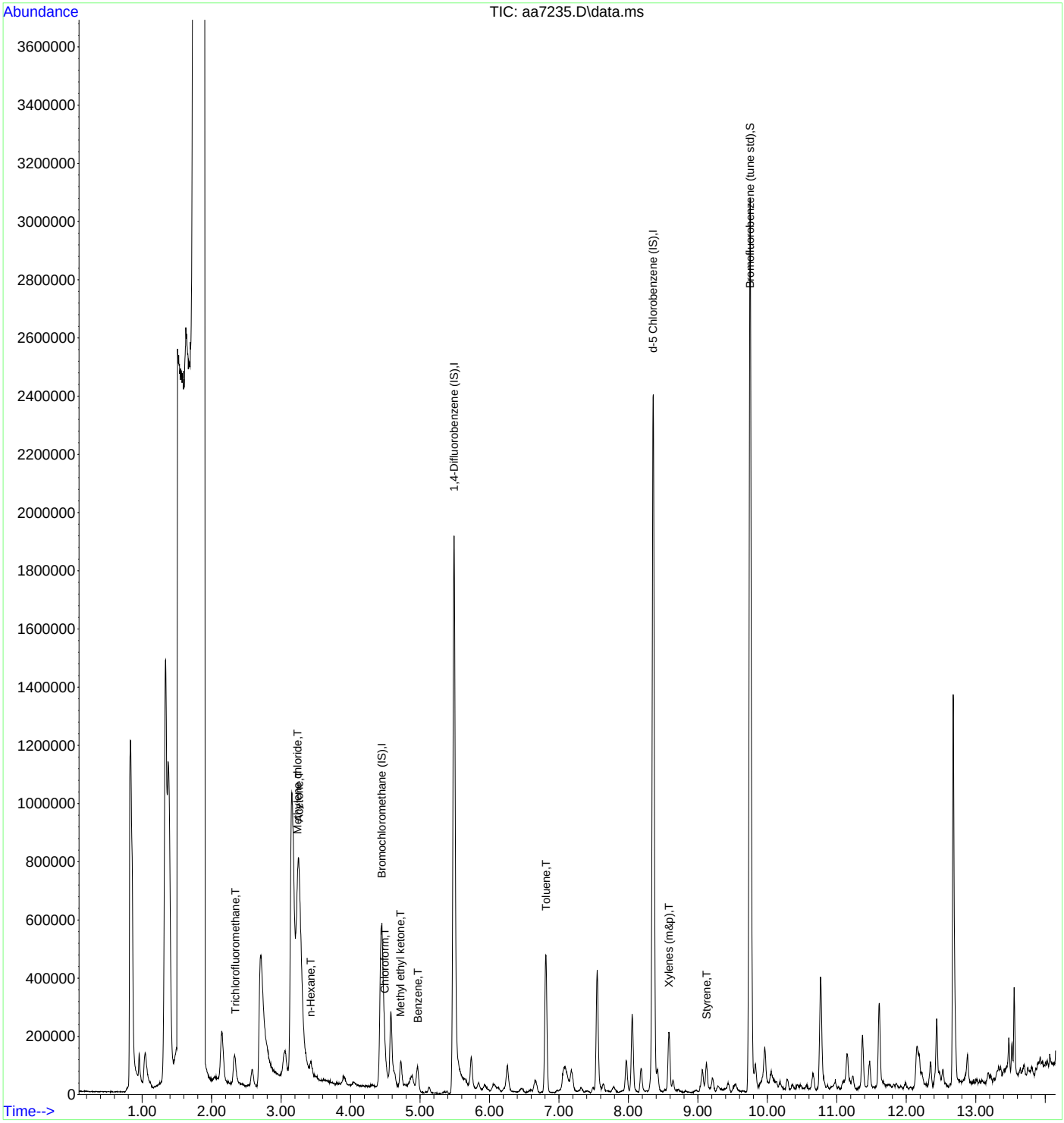
Quant Time: Sep 19 09:31:59 2024
Quant Method : C:\msdchem\1\METHODS\240910.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Sep 11 16:19:32 2024
Response via : Initial Calibration

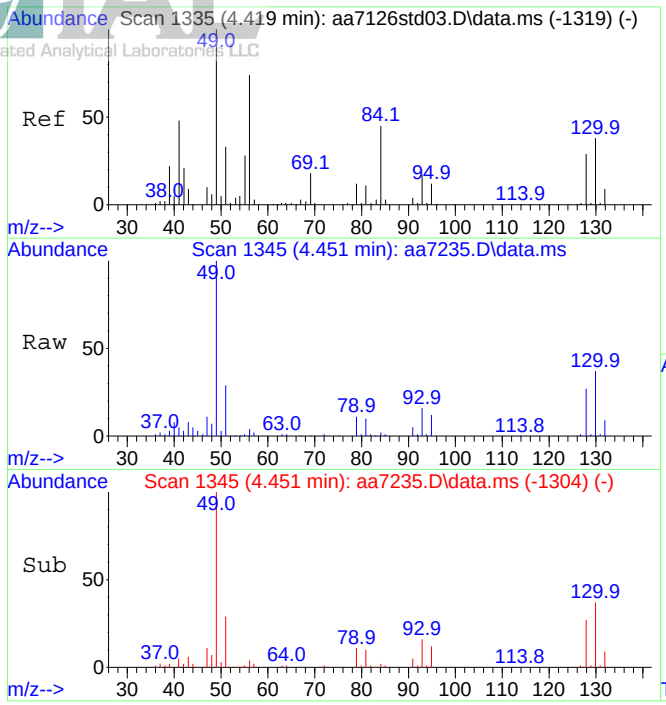
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.451	130	241259	10.00	ppbV	0.032
39) 1,4-Difluorobenzene (IS)	5.490	114	1418540	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.354	117	1222290	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.753	95	1156872	10.76	ppbV	0.000
Target Compounds						Qvalue
12) Trichlorofluoromethane	2.342	101	24715m	0.27	ppbV	
20) Methylene chloride	3.236	49	614462	9.74	ppbV	96
21) Acetone	3.258	43	1004644	11.76	ppbV	99
24) n-Hexane	3.425	57	29029	0.20	ppbV	87
30) Chloroform	4.493	83	24942	0.27	ppbV	99
35) Methyl ethyl ketone	4.721	43	136656	0.96	ppbV	100
37) Benzene	4.969	78	40405	0.28	ppbV	98
47) Toluene	6.814	91	380093	1.49	ppbV	99
59) Xylenes (m&p)	8.583	91	133168	0.61	ppbV	99
61) Styrene	9.126	104	37088	0.25	ppbV	99

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

Data Path : C:\DATA\2024\09-2024\09-18-2024\
Data File : aa7235.D
Acq On : 18 Sep 2024 5:11 pm
Operator : jjw
Sample : E24-03187-05
Misc : 2069, 500cc
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 19 09:31:59 2024
Quant Method : C:\msdchem\1\METHODS\240910.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Sep 11 16:19:32 2024
Response via : Initial Calibration

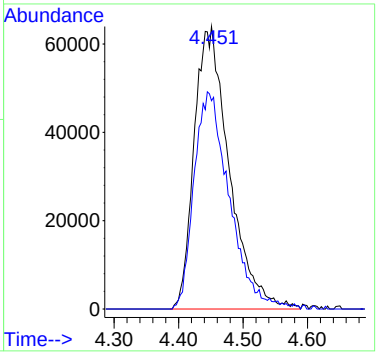


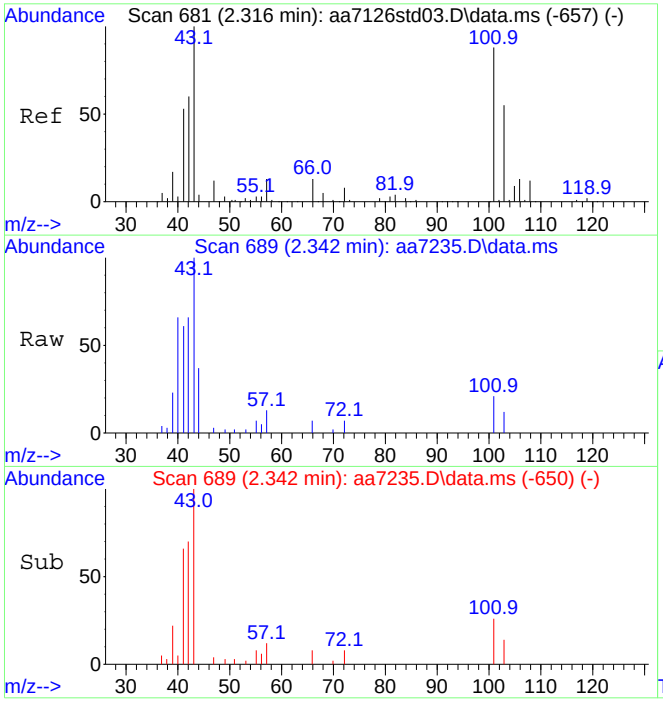


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.451 min Scan# 1345
Delta R.T. 0.032 min
Lab File: aa7235.D
Acq: 18 Sep 2024 5:11 pm

Tgt Ion:130 Resp: 241259

Ion	Ratio	Lower	Upper
130	100		
128	77.5	58.5	98.5

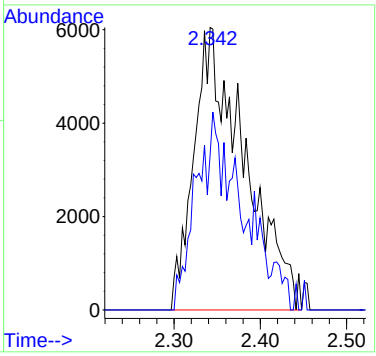


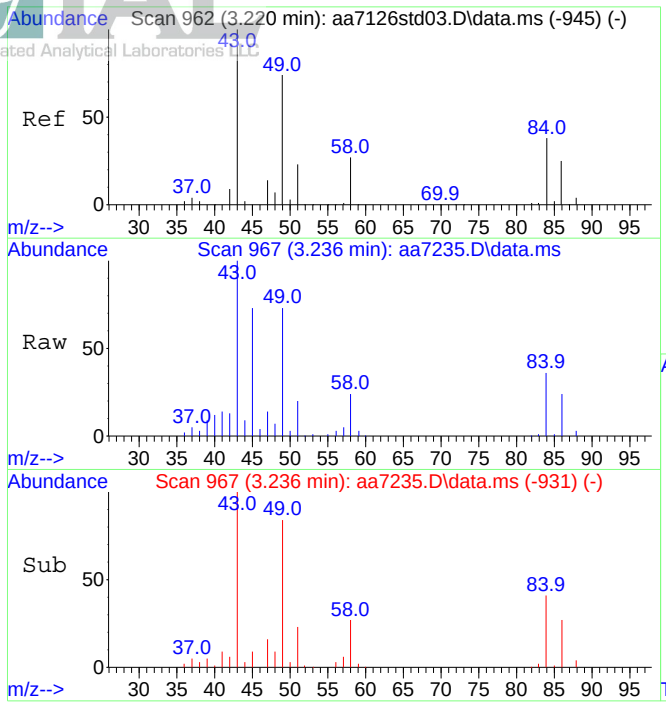


#12
Trichlorofluoromethane
Concen: 0.27 ppbV m
RT: 2.342 min Scan# 689
Delta R.T. 0.026 min
Lab File: aa7235.D
Acq: 18 Sep 2024 5:11 pm

Tgt Ion:101 Resp: 24715

Ion	Ratio	Lower	Upper
101	100		
103	52.5	51.4	77.0

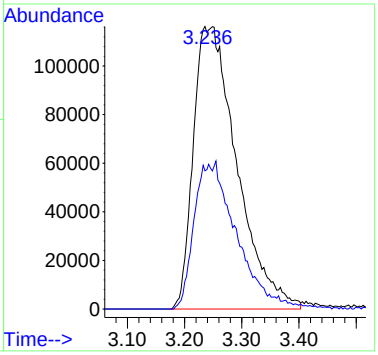


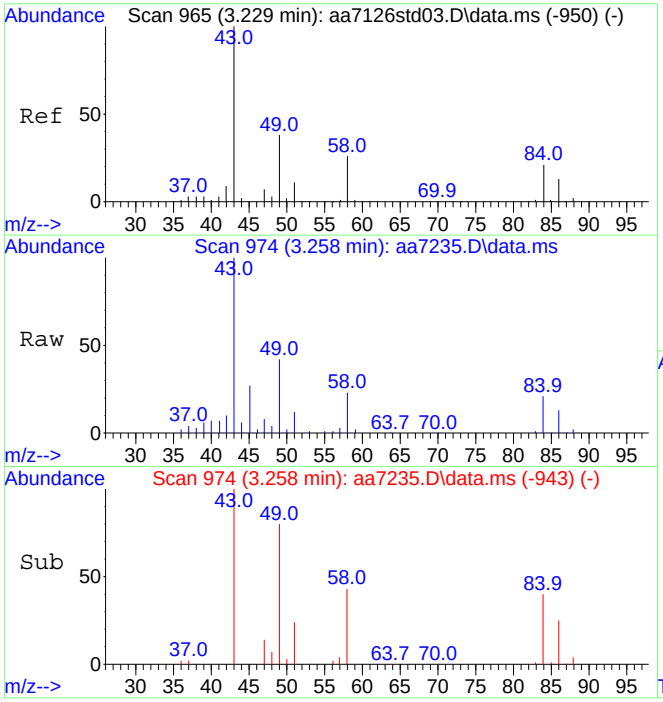


#20
Methylene chloride
Concen: 9.74 ppbV
RT: 3.236 min Scan# 967
Delta R.T. 0.016 min
Lab File: aa7235.D
Acq: 18 Sep 2024 5:11 pm

Tgt Ion: 49 Resp: 614462

Ion	Ratio	Lower	Upper
49	100		
84	50.4	33.6	73.6

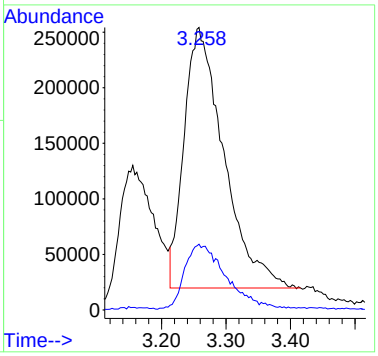


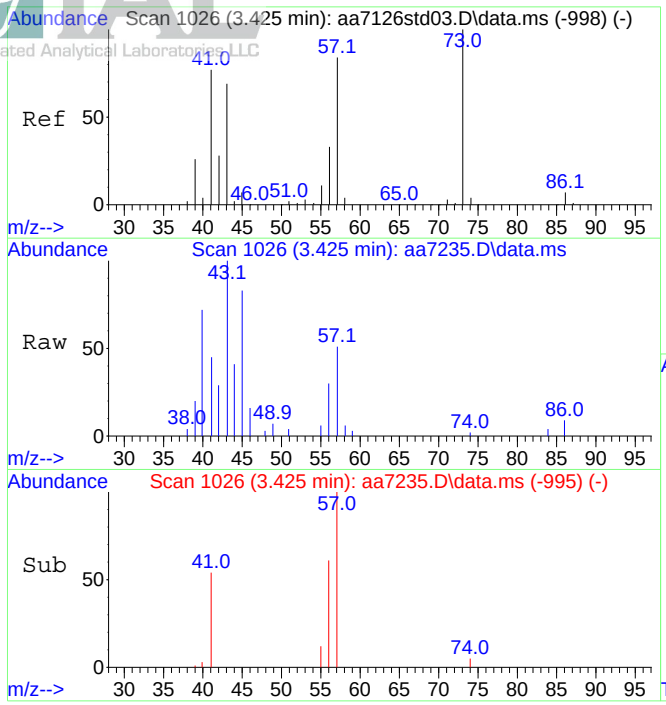


#21
Acetone
Concen: 11.76 ppbV
RT: 3.258 min Scan# 974
Delta R.T. 0.029 min
Lab File: aa7235.D
Acq: 18 Sep 2024 5:11 pm

Tgt Ion: 43 Resp: 1004644

Ion	Ratio	Lower	Upper
43	100		
58	26.4	21.6	32.4

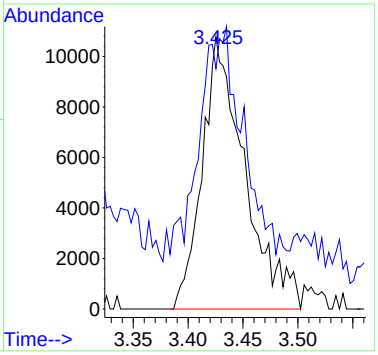


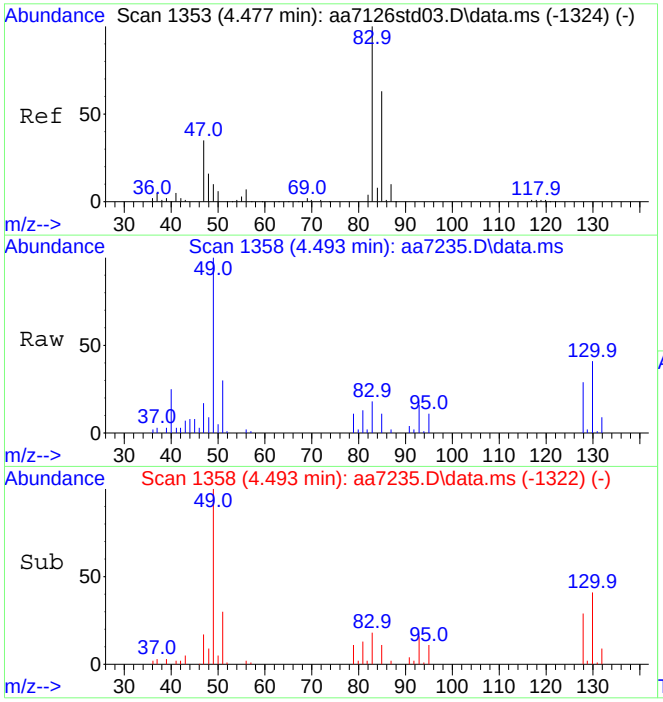


#24
n-Hexane
Concen: 0.20 ppbV
RT: 3.425 min Scan# 1026
Delta R.T. 0.000 min
Lab File: aa7235.D
Acq: 18 Sep 2024 5:11 pm

Tgt Ion: 57 Resp: 29029

Ion	Ratio	Lower	Upper
57	100		
41	89.9	82.8	124.2

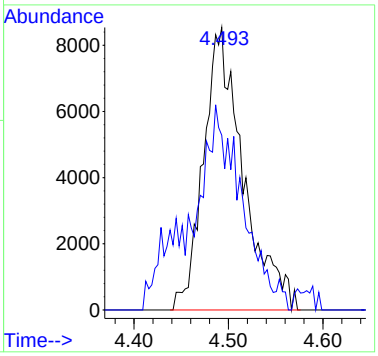


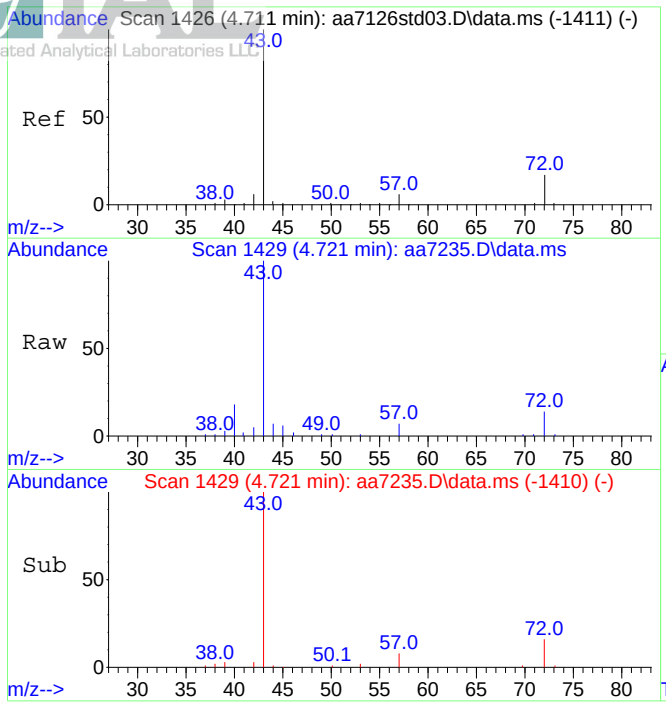


#30
Chloroform
Concen: 0.27 ppbV
RT: 4.493 min Scan# 1358
Delta R.T. 0.016 min
Lab File: aa7235.D
Acq: 18 Sep 2024 5:11 pm

Tgt Ion: 83 Resp: 24942

Ion	Ratio	Lower	Upper
83	100		
85	64.9	52.7	79.1

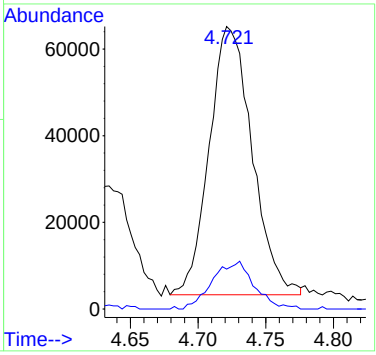


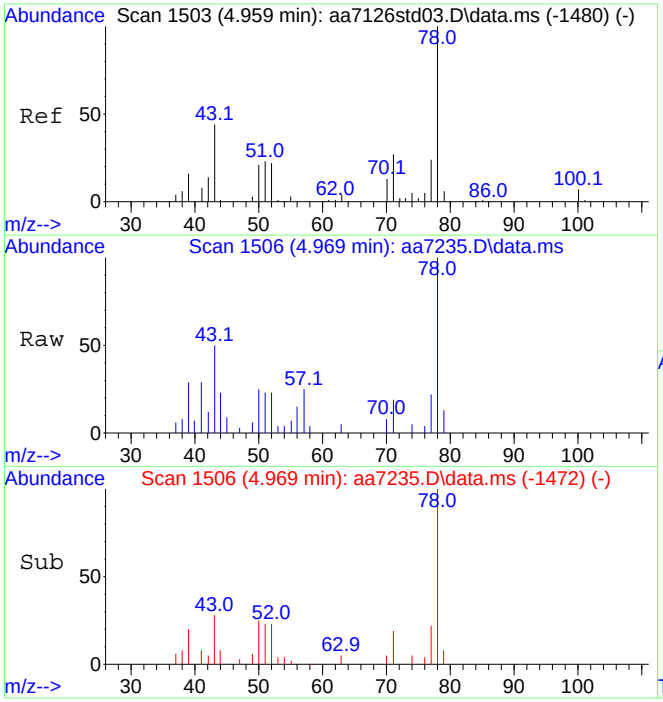


#35
Methyl ethyl ketone
Concen: 0.96 ppbV
RT: 4.721 min Scan# 1429
Delta R.T. 0.010 min
Lab File: aa7235.D
Acq: 18 Sep 2024 5:11 pm

Tgt Ion: 43 Resp: 136656

Ion	Ratio	Lower	Upper
43	100		
72	17.3	13.8	20.8

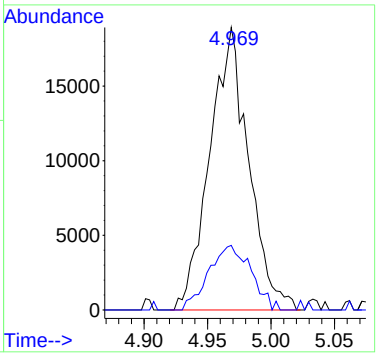


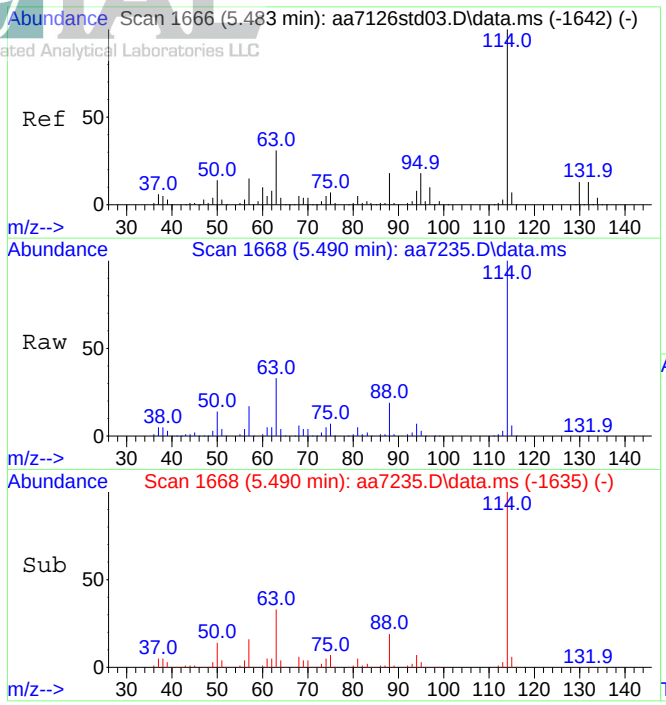


#37
Benzene
Concen: 0.28 ppbV
RT: 4.969 min Scan# 1506
Delta R.T. 0.010 min
Lab File: aa7235.D
Acq: 18 Sep 2024 5:11 pm

Tgt Ion: 78 Resp: 40405

Ion	Ratio	Lower	Upper
78	100		
51	24.8	19.0	28.4

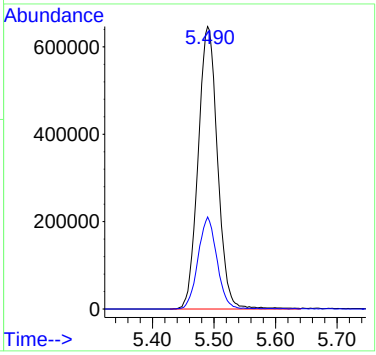


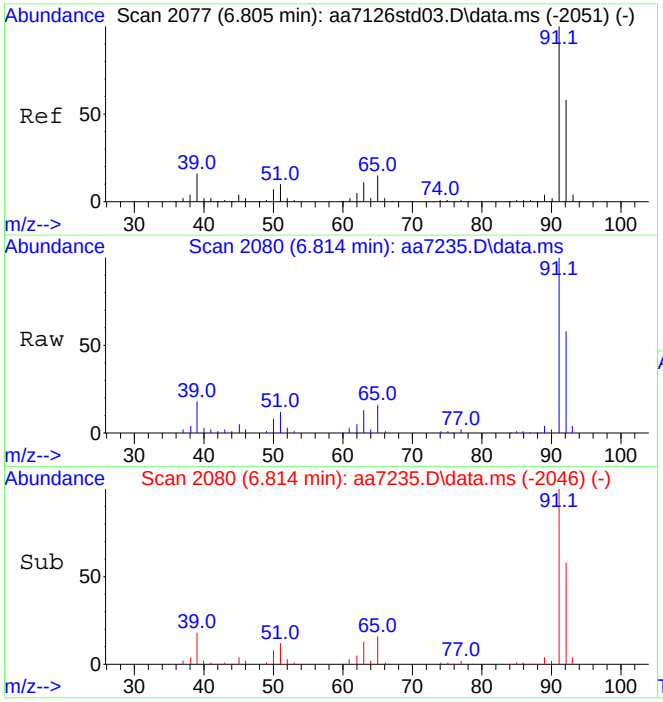


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.490 min Scan# 1668
Delta R.T. 0.007 min
Lab File: aa7235.D
Acq: 18 Sep 2024 5:11 pm

Tgt Ion:114 Resp: 1418540

Ion	Ratio	Lower	Upper
114	100		
63	31.8	11.2	51.2

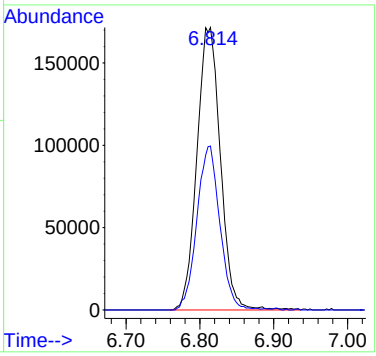


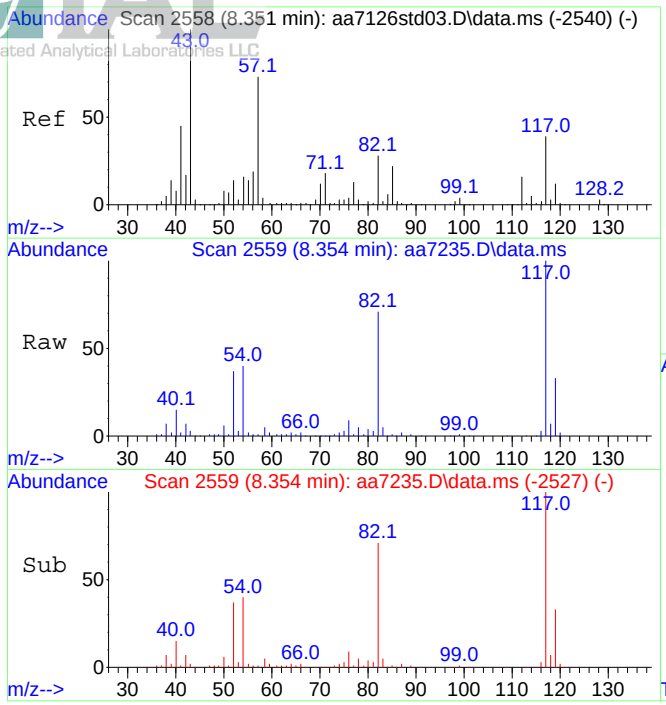


#47
Toluene
Concen: 1.49 ppbV
RT: 6.814 min Scan# 2080
Delta R.T. 0.010 min
Lab File: aa7235.D
Acq: 18 Sep 2024 5:11 pm

Tgt Ion: 91 Resp: 380093

Ion	Ratio	Lower	Upper
91	100		
92	56.6	46.1	69.1

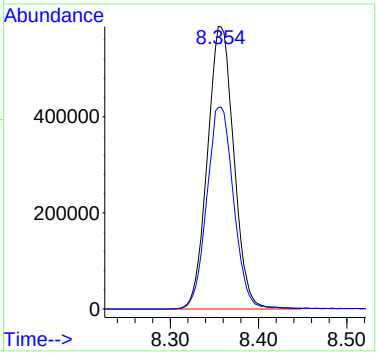


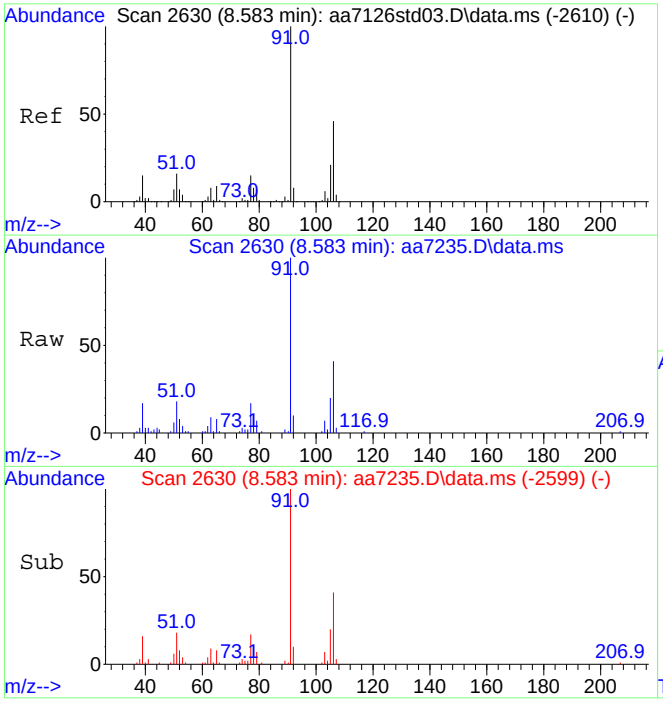


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.354 min Scan# 2559
Delta R.T. 0.003 min
Lab File: aa7235.D
Acq: 18 Sep 2024 5:11 pm

Tgt Ion:117 Resp: 1222290

Ion	Ratio	Lower	Upper
117	100		
82	72.6	51.5	91.5

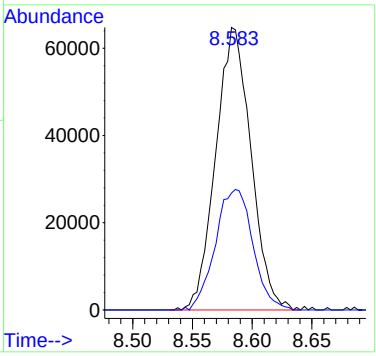


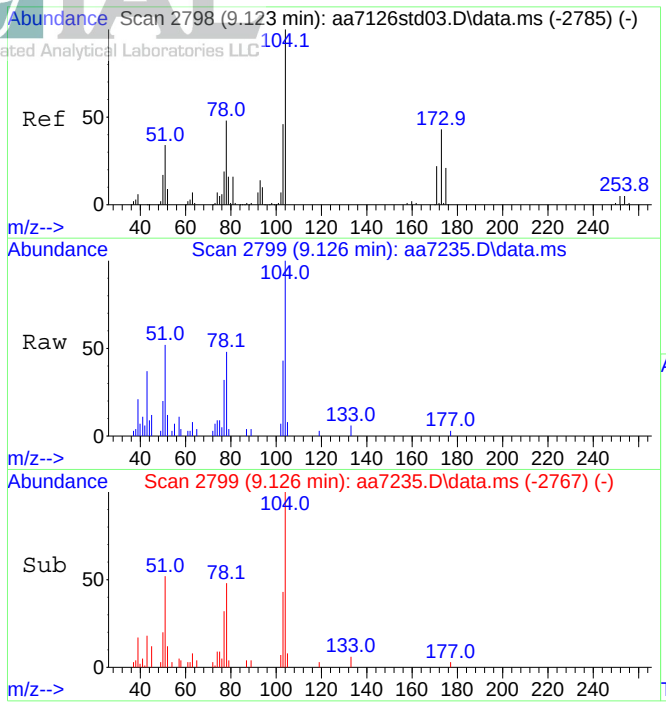


#59
Xylenes (m&p)
Concen: 0.61 ppbV
RT: 8.583 min Scan# 2630
Delta R.T. -0.000 min
Lab File: aa7235.D
Acq: 18 Sep 2024 5:11 pm

Tgt Ion: 91 Resp: 133168

Ion	Ratio	Lower	Upper
91	100		
106	45.4	36.6	55.0

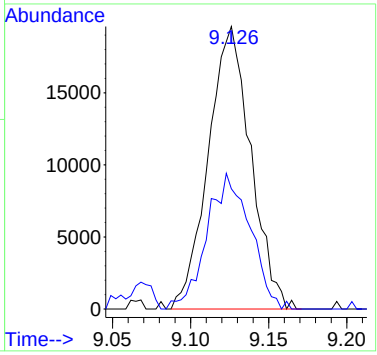


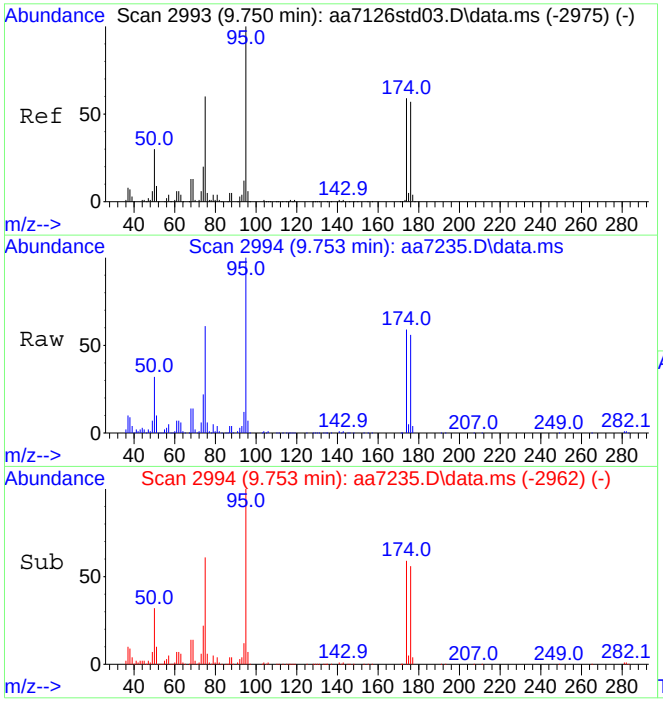


#61
Styrene
Concen: 0.25 ppbV
RT: 9.126 min Scan# 2799
Delta R.T. 0.003 min
Lab File: aa7235.D
Acq: 18 Sep 2024 5:11 pm

Tgt Ion:104 Resp: 37088

Ion	Ratio	Lower	Upper
104	100		
103	49.0	38.7	58.1

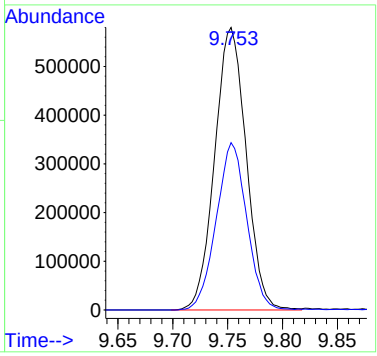


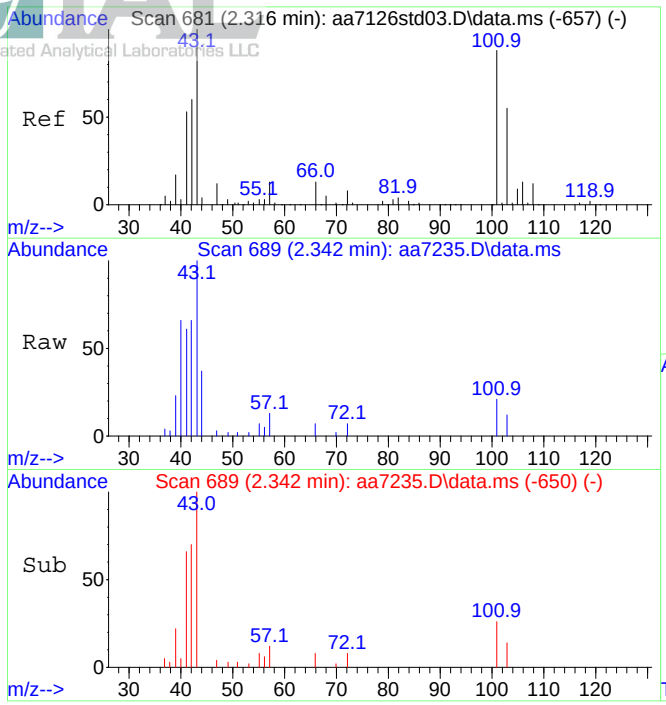


#64
Bromofluorobenzene (tune std)
Concen: 10.76 ppbV
RT: 9.753 min Scan# 2994
Delta R.T. 0.003 min
Lab File: aa7235.D
Acq: 18 Sep 2024 5:11 pm

Tgt Ion: 95 Resp: 1156872

Ion	Ratio	Lower	Upper
95	100		
174	57.6	48.2	72.4

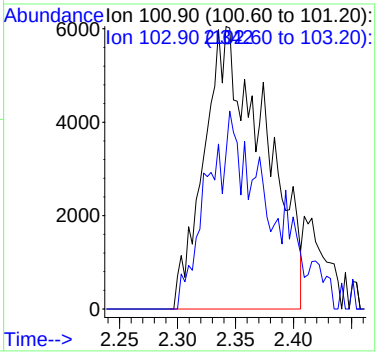




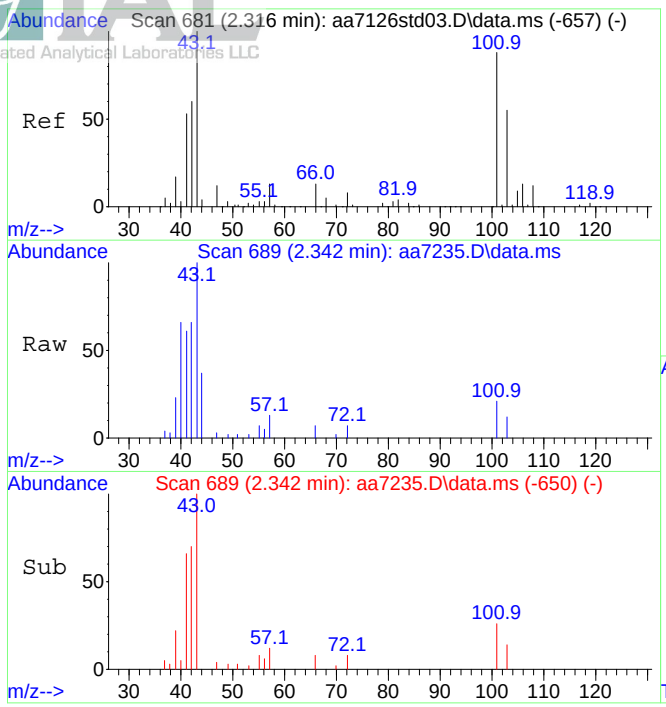
#12
Trichlorofluoromethane
Concen: 0.24 ppbV
RT: 2.342 min Scan# 689
Delta R.T. 0.026 min
Lab File: aa7235.D
Acq: 18 Sep 2024 5:11 pm

Tgt Ion:101 Resp: 22030

Ion	Ratio	Lower	Upper
101	100		
103	59.0	51.4	77.0



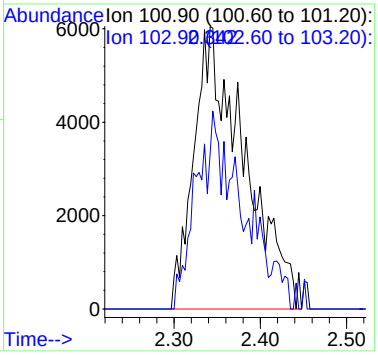
Before Manual Integration



#12
Trichlorofluoromethane
Concen: 0.27 ppbV m
RT: 2.342 min Scan# 689
Delta R.T. 0.026 min
Lab File: aa7235.D
Acq: 18 Sep 2024 5:11 pm

Tgt Ion:101 Resp: 24715

Ion	Ratio	Lower	Upper
101	100		
103	52.5	51.4	77.0



After Manual Integration

INTEGRATED ANALYTICAL LABORATORIES, LLC
Integrated Analytical Laboratories LLC

Volatile Organic Compounds by EPA Method TO-15
Summary of Results

Lab ID:	E24-03187-06	Instrument ID:	AA
Client ID:	IA-6	GC/MS Column:	RTX-1, 0.32 mmID
Date Sampled:	09/16/2024 10:50	Injection Volmue:	500ml
Date Received:	09/17/2024	Matrix:	Air-Indoor
Date Analyzed:	09/18/2024 17:50	% Moisture:	NA
Data File:	AA7236	Dilution Factor:	1
Summa ID:	2033	Analyst:	J. Walukiewicz

			Concentration Reported		Reporting Limits	
Compound	**CAS #**	**Q**	**ppbv**	**ug/m3**	**ppbv**	**ug/m3**
Acetone	67-64-1		9.5	23	0.20	0.48
Benzene	71-43-2		0.26	0.83	0.20	0.64
Bromodichloromethane	75-27-4		ND	ND	0.20	1.3
Bromoform	75-25-2		ND	ND	0.20	2.1
Bromomethane	74-83-9		ND	ND	0.20	0.78
1,3-Butadiene	106-99-0		ND	ND	0.20	0.44
Chlorobenzene	108-90-7		ND	ND	0.20	0.92
Chloroethane	75-00-3		ND	ND	0.20	0.53
Chloroform	67-66-3		0.31	1.5	0.20	0.98
Chloromethane	74-87-3		ND	ND	0.20	0.41
Carbon disulfide	75-15-0		ND	ND	0.20	0.62
Carbon tetrachloride	56-23-5		ND	ND	0.040	0.25
Cyclohexane	110-82-7		ND	ND	0.20	0.69
Dibromochloromethane	124-48-1		ND	ND	0.20	1.7
1,2-Dibromoethane	106-93-4		ND	ND	0.20	1.5
1,2-Dichlorobenzene	95-50-1		ND	ND	0.20	1.2
1,3-Dichlorobenzene	541-73-1		ND	ND	0.20	1.2
1,4-Dichlorobenzene	106-46-7		ND	ND	0.20	1.2
Dichlorodifluoromethane	75-71-8		ND	ND	0.20	0.99
1,1-Dichloroethane	75-34-3		ND	ND	0.20	0.81
1,2-Dichloroethane	107-06-2		ND	ND	0.20	0.81
1,1-Dichloroethene	75-35-4		ND	ND	0.20	0.79
1,2-Dichloroethene (cis)	156-59-2		ND	ND	0.20	0.79
1,2-Dichloroethene (trans)	156-60-5		ND	ND	0.20	0.79
1,2-Dichloropropane	78-87-5		ND	ND	0.20	0.92
1,3-Dichloropropene (cis)	10061-01-5		ND	ND	0.20	0.91
1,3-Dichloropropene (trans)	10061-02-6		ND	ND	0.20	0.91
1,2-Dichlorotetrafluoroethane	76-14-2		ND	ND	0.20	1.4
1,4-Dioxane	123-91-1		ND	ND	0.20	0.72
Ethylbenzene	100-41-4		ND	ND	0.20	0.87
n-Heptane	142-82-5		ND	ND	0.20	0.82
1,3-Hexachlorobutadiene	87-68-3		ND	ND	0.20	2.1
n-Hexane	110-54-3		ND	ND	0.20	0.70
Methylene chloride	75-09-2		0.68	2.3	0.20	0.69
Methyl ethyl ketone	78-93-3		0.38	1.1	0.20	0.59
Methyl isobutyl ketone	108-10-1		ND	ND	0.20	0.82
Methyl tert-butyl ether	1634-04-4		ND	ND	0.20	0.72
Styrene	100-42-5		0.25	1.1	0.20	0.85
Tert-butyl alcohol	75-65-0		ND	ND	0.20	0.61
1,1,2,2-Tetrachloroethane	79-34-5		ND	ND	0.20	1.4
Tetrachloroethene	127-18-4		ND	ND	0.20	1.4
Toluene	108-88-3		0.57	2.1	0.20	0.75
1,2,4-Trichlorobenzene	120-82-1		ND	ND	0.20	1.5
1,1,1-Trichloroethane	71-55-6		ND	ND	0.20	1.1
1,1,2-Trichloroethane	79-00-5		ND	ND	0.20	1.1

Qualifiers:
D = Dilution required

Volatile Organic Compounds by EPA Method TO-15
Summary of Results

Lab ID:	E24-03187-06	Instrument ID:	AA
Client ID:	IA-6	GC/MS Column:	RTX-1, 0.32 mmID
Date Sampled:	09/16/2024 10:50	Injection Volmue:	500ml
Date Received:	09/17/2024	Matrix:	Air-Indoor
Date Analyzed:	09/18/2024 17:50	% Moisture:	NA
Data File:	AA7236	Dilution Factor:	1
Summa ID:	2033	Analyst:	J. Walukiewicz

			Concentration Reported		Reporting Limits	
Compound	**CAS #**	**Q**	**ppbv**	**ug/m3**	**ppbv**	**ug/m3**
Trichloroethene	79-01-6		ND	ND	0.046	0.25
Trichlorofluoromethane	75-69-4		0.29	1.7	0.20	1.1
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1		ND	ND	0.20	1.5
1,2,4-Trimethylbenzene	95-63-6		ND	ND	0.20	0.98
1,3,5-Trimethylbenzene	108-67-8		ND	ND	0.20	0.98
2,2,4-Trimethylpentane	540-84-1		ND	ND	0.20	0.93
Vinyl bromide	593-60-2		ND	ND	0.20	0.87
Vinyl chloride	75-01-4		ND	ND	0.20	0.51
Xylenes (m&p)	179601-23-1		0.29	1.2	0.20	0.87
Xylenes (o)	95-47-6		ND	ND	0.20	0.87

Qualifiers:
D = Dilution required

Data Path : C:\DATA\2024\09-2024\09-18-2024\
Data File : aa7236.D
Acq On : 18 Sep 2024 5:50 pm
Operator : jjw
Sample : E24-03187-06
Misc : 2033, 500cc
ALS Vial : 14 Sample Multiplier: 1

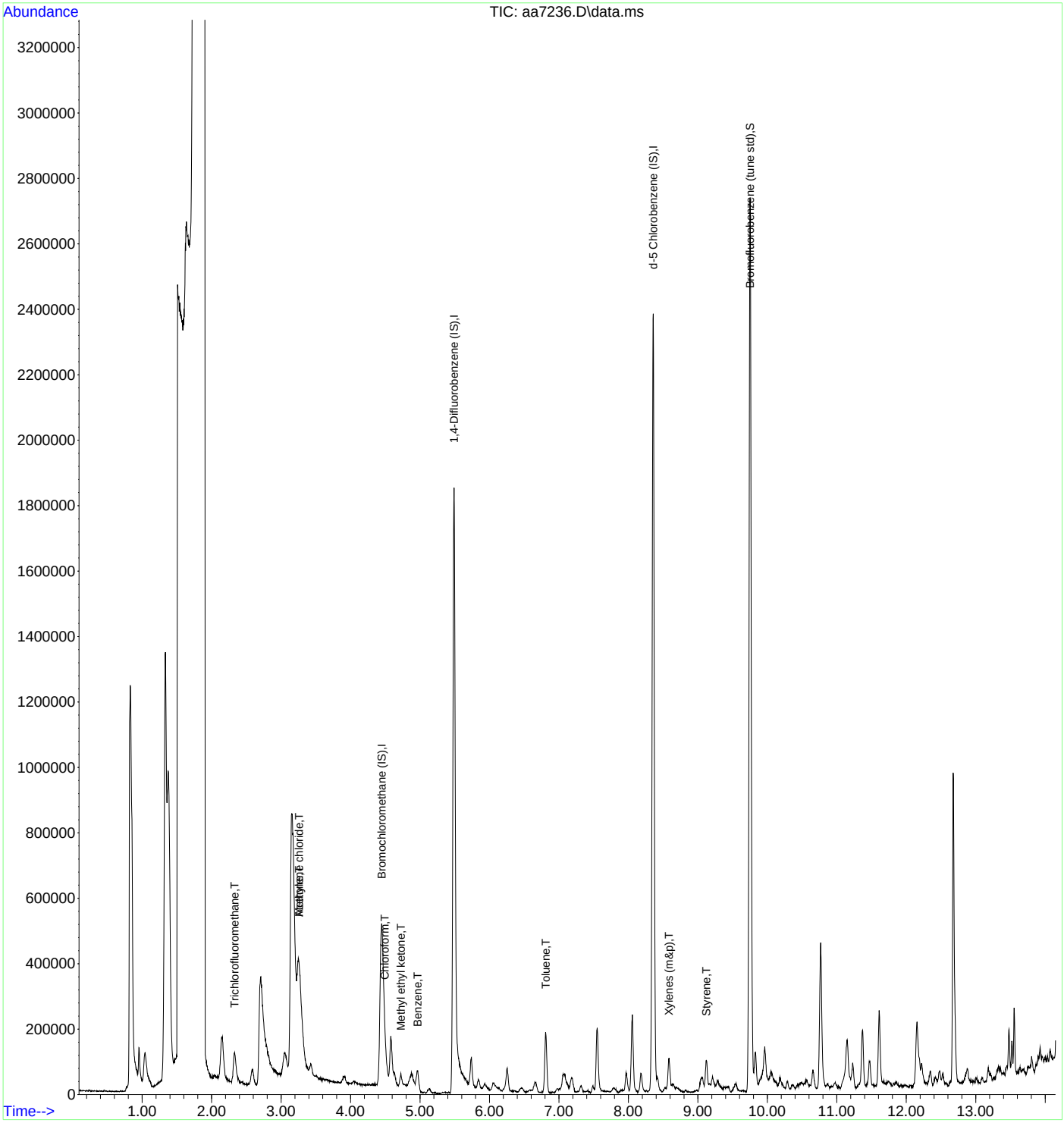
Quant Time: Sep 19 09:37:30 2024
Quant Method : C:\msdchem\1\METHODS\240910.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Sep 11 16:19:32 2024
Response via : Initial Calibration

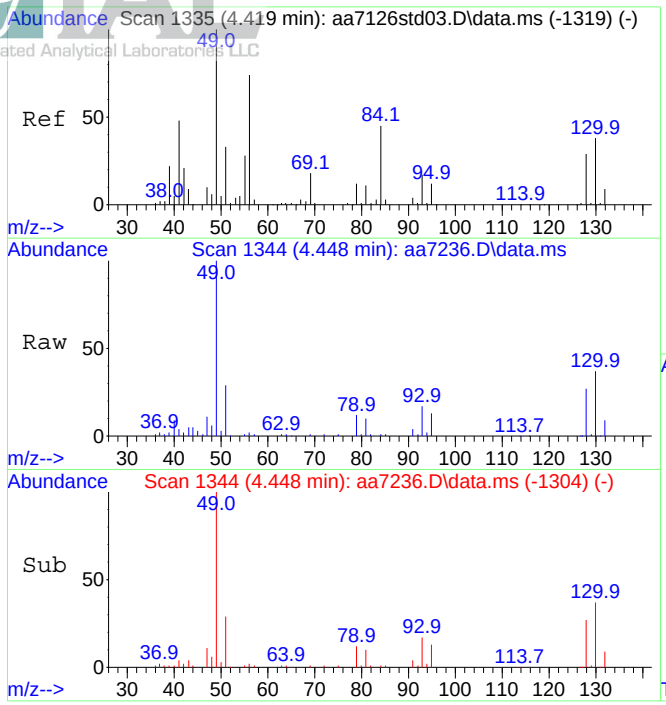
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.448	130	231014	10.00	ppbV	0.029
39) 1,4-Difluorobenzene (IS)	5.490	114	1384702	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.358	117	1212228	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.750	95	1055366	9.90	ppbV	0.000
Target Compounds						Qvalue
12) Trichlorofluoromethane	2.332	101	25489	0.29	ppbV	# 18
20) Methylene chloride	3.258	49	40820	0.68	ppbV	86
21) Acetone	3.258	43	775312	9.48	ppbV	95
30) Chloroform	4.493	83	27894	0.31	ppbV	99
35) Methyl ethyl ketone	4.728	43	51426	0.38	ppbV	100
37) Benzene	4.966	78	35666	0.26	ppbV	96
47) Toluene	6.811	91	141334	0.57	ppbV	100
59) Xylenes (m&p)	8.583	91	61925	0.29	ppbV	95
61) Styrene	9.123	104	37258	0.25	ppbV	98

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

Data Path : C:\DATA\2024\09-2024\09-18-2024\
Data File : aa7236.D
Acq On : 18 Sep 2024 5:50 pm
Operator : jjw
Sample : E24-03187-06
Misc : 2033, 500cc
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 19 09:37:30 2024
Quant Method : C:\msdchem\1\METHODS\240910.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Sep 11 16:19:32 2024
Response via : Initial Calibration

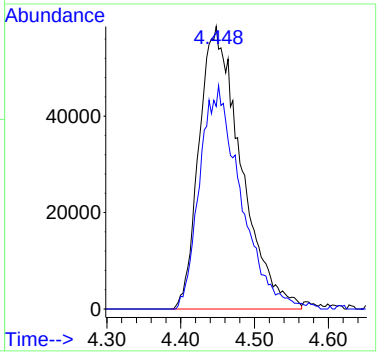


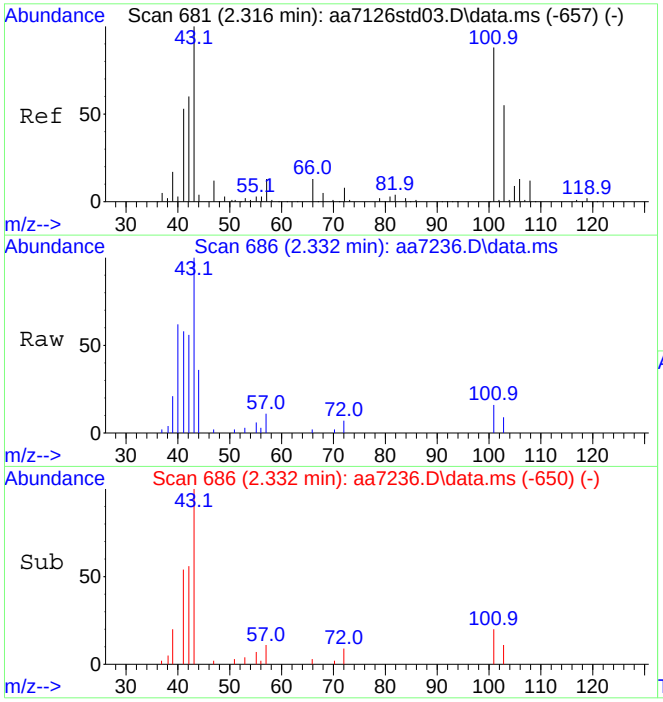


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.448 min Scan# 1344
Delta R.T. 0.029 min
Lab File: aa7236.D
Acq: 18 Sep 2024 5:50 pm

Tgt Ion:130 Resp: 231014

Ion	Ratio	Lower	Upper
130	100		
128	77.1	58.5	98.5

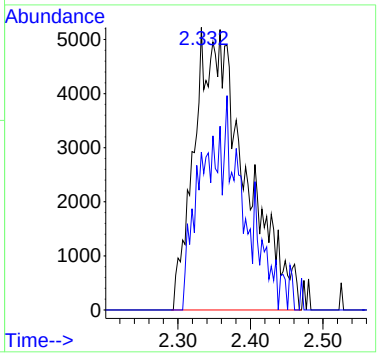


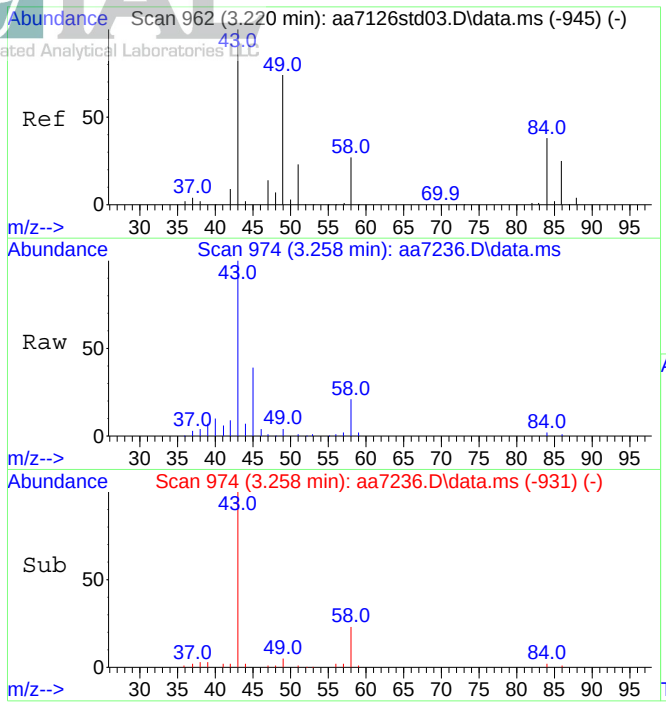


#12
Trichlorofluoromethane
Concen: 0.29 ppbV
RT: 2.332 min Scan# 686
Delta R.T. 0.016 min
Lab File: aa7236.D
Acq: 18 Sep 2024 5:50 pm

Tgt Ion:101 Resp: 25489

Ion	Ratio	Lower	Upper
101	100		
103	0.0	51.4	77.0#

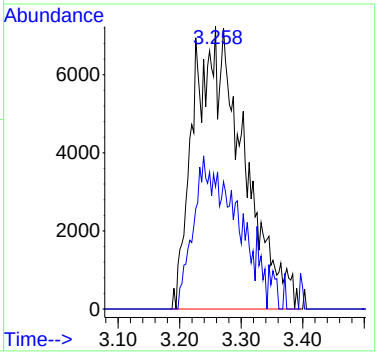


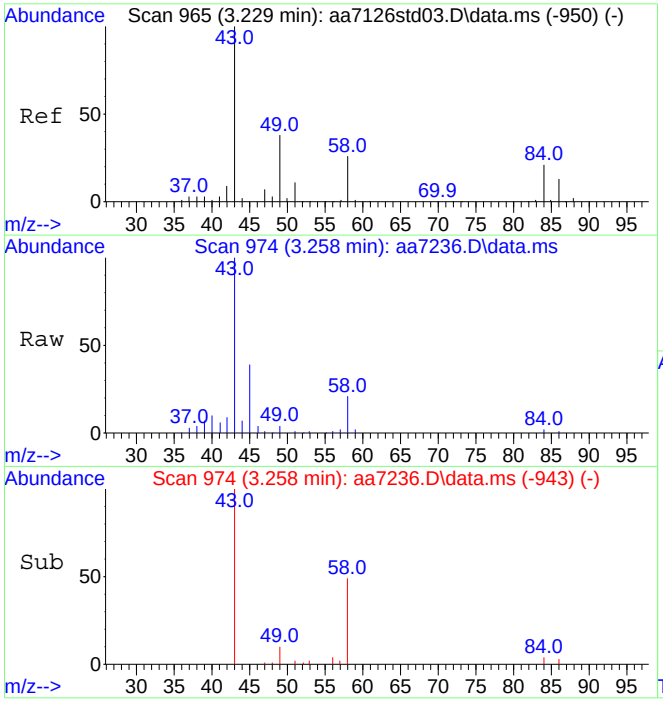


#20
Methylene chloride
Concen: 0.68 ppbV
RT: 3.258 min Scan# 974
Delta R.T. 0.039 min
Lab File: aa7236.D
Acq: 18 Sep 2024 5:50 pm

Tgt Ion: 49 Resp: 40820

Ion	Ratio	Lower	Upper
49	100		
84	43.8	33.6	73.6

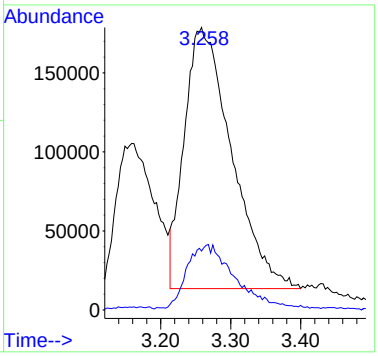


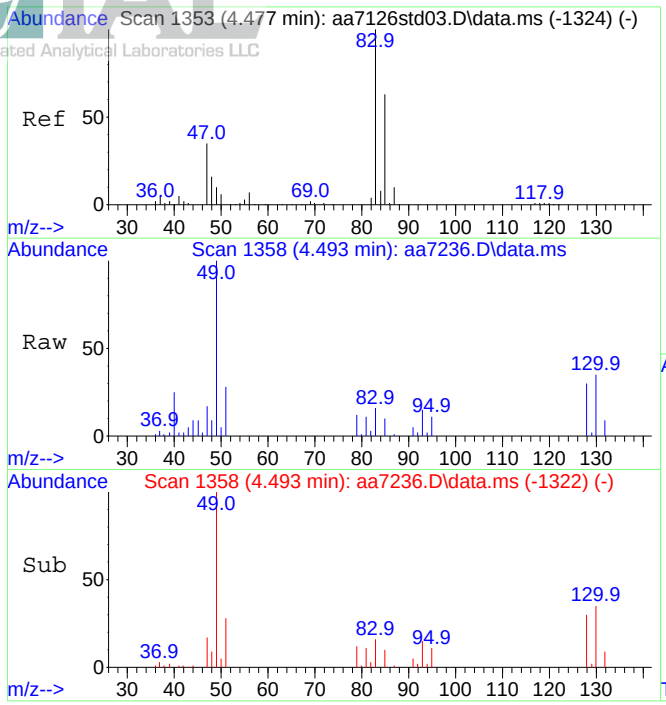


#21
Acetone
Concen: 9.48 ppbV
RT: 3.258 min Scan# 974
Delta R.T. 0.029 min
Lab File: aa7236.D
Acq: 18 Sep 2024 5:50 pm

Tgt Ion: 43 Resp: 775312

Ion	Ratio	Lower	Upper
43	100		
58	24.4	21.6	32.4

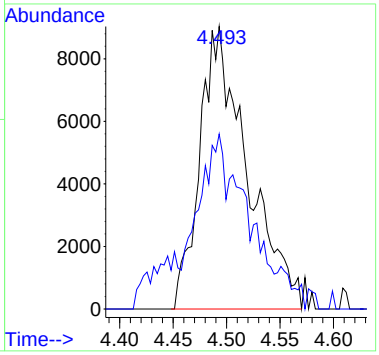


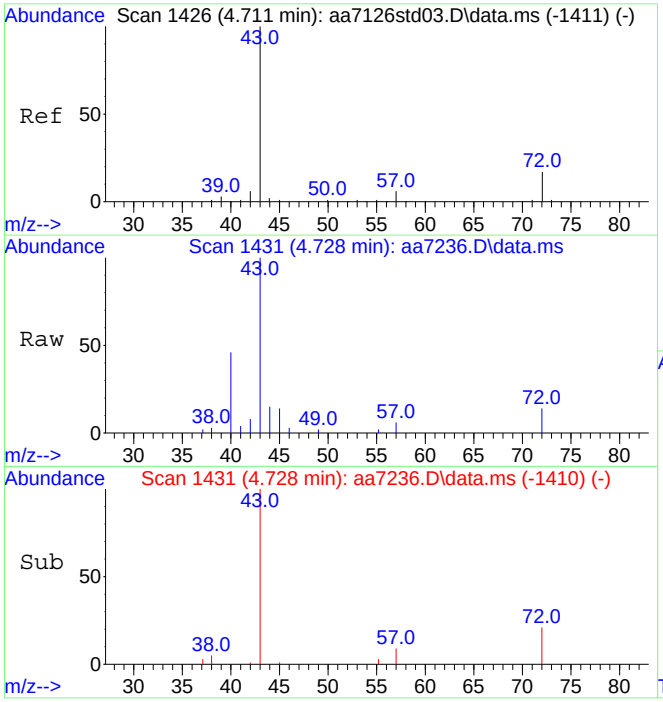


#30
Chloroform
Concen: 0.31 ppbV
RT: 4.493 min Scan# 1358
Delta R.T. 0.016 min
Lab File: aa7236.D
Acq: 18 Sep 2024 5:50 pm

Tgt Ion: 83 Resp: 27894

Ion	Ratio	Lower	Upper
83	100		
85	66.4	52.7	79.1

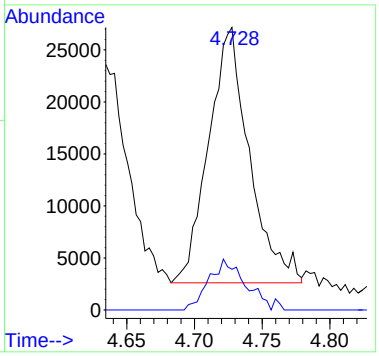


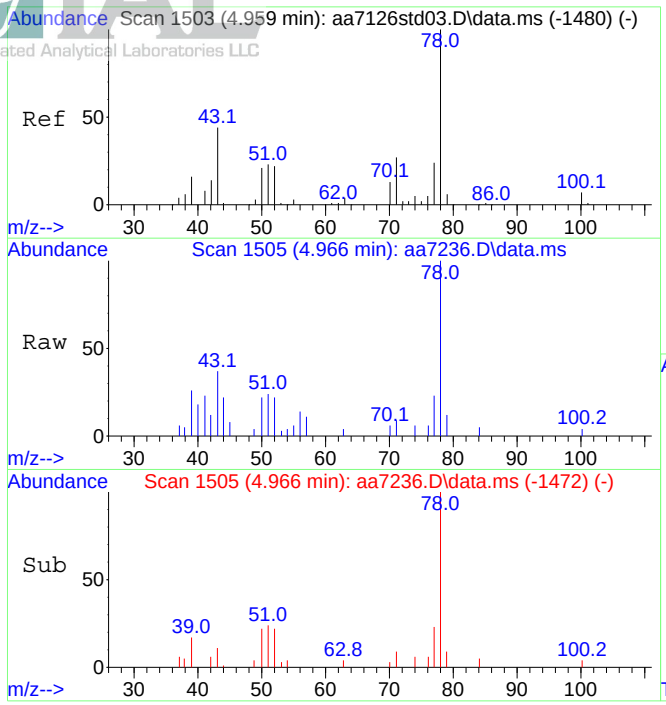


#35
Methyl ethyl ketone
Concen: 0.38 ppbV
RT: 4.728 min Scan# 1431
Delta R.T. 0.016 min
Lab File: aa7236.D
Acq: 18 Sep 2024 5:50 pm

Tgt Ion: 43 Resp: 51426

Ion	Ratio	Lower	Upper
43	100		
72	17.5	13.8	20.8

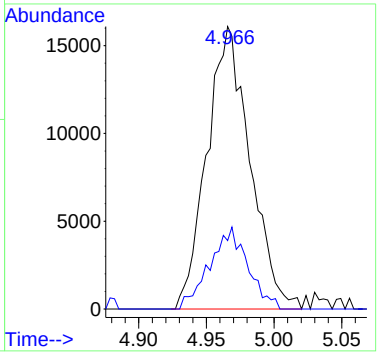


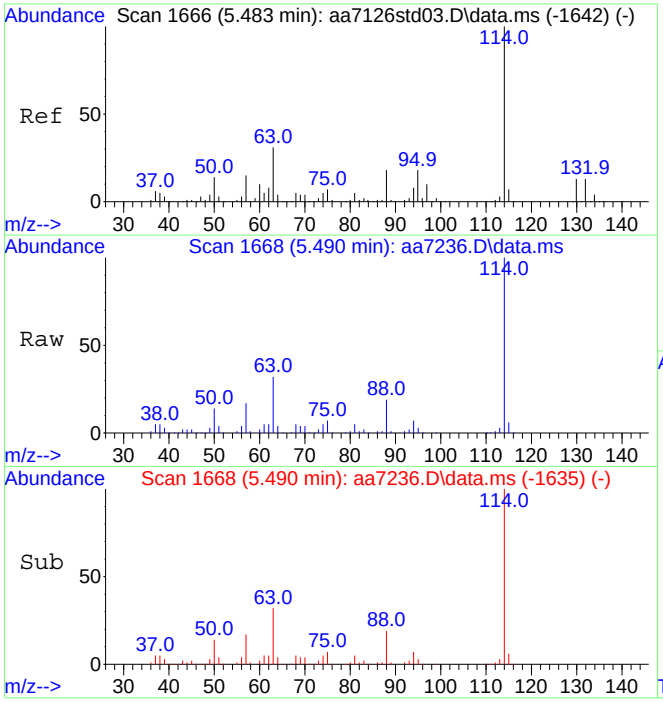


#37
Benzene
Concen: 0.26 ppbV
RT: 4.966 min Scan# 1505
Delta R.T. 0.007 min
Lab File: aa7236.D
Acq: 18 Sep 2024 5:50 pm

Tgt Ion: 78 Resp: 35666

Ion	Ratio	Lower	Upper
78	100		
51	25.4	19.0	28.4

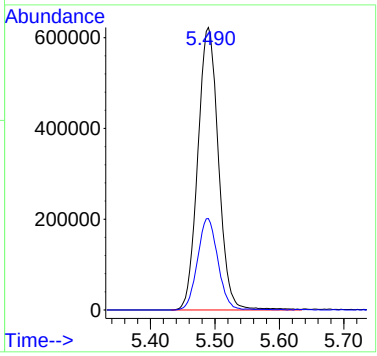


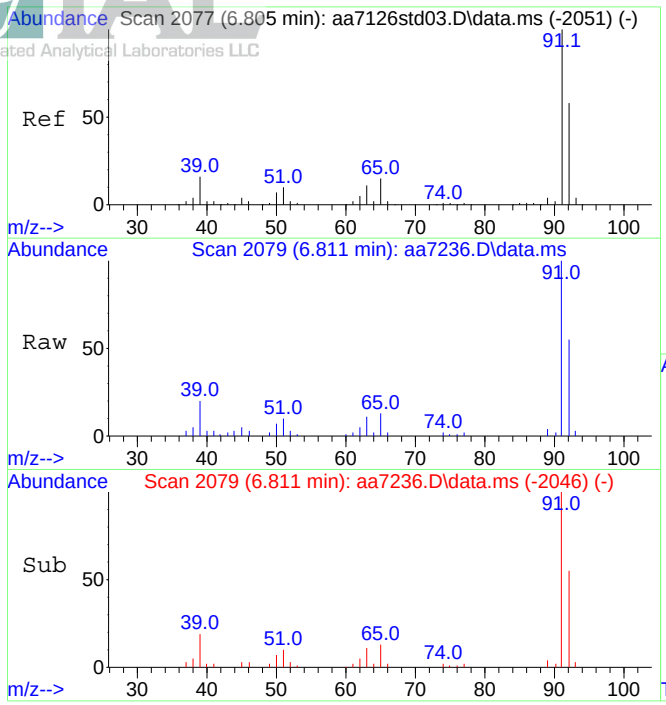


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.490 min Scan# 1668
Delta R.T. 0.007 min
Lab File: aa7236.D
Acq: 18 Sep 2024 5:50 pm

Tgt Ion:114 Resp: 1384702

Ion	Ratio	Lower	Upper
114	100		
63	32.1	11.2	51.2

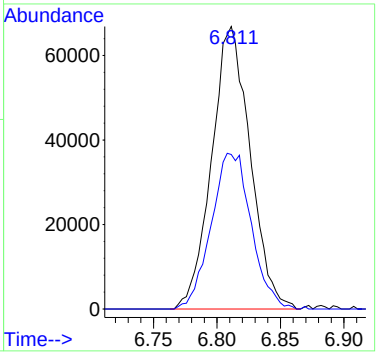


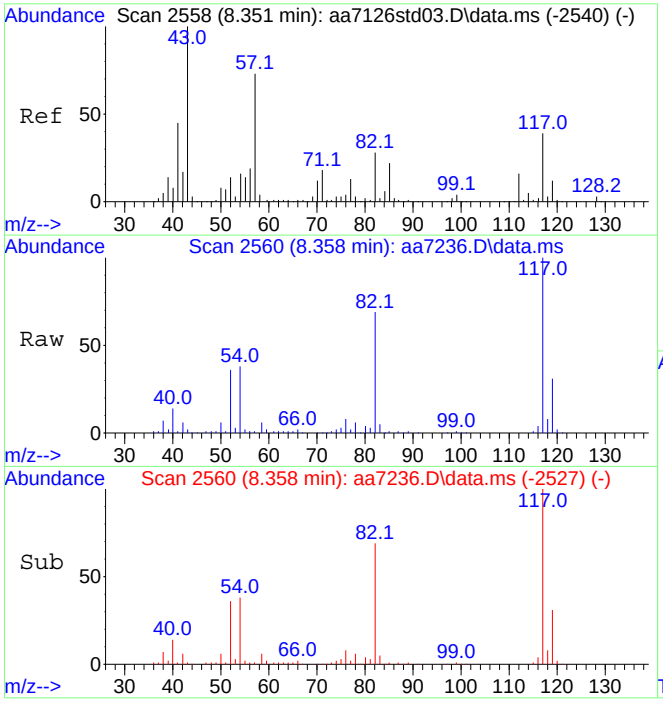


#47
Toluene
Concen: 0.57 ppbV
RT: 6.811 min Scan# 2079
Delta R.T. 0.007 min
Lab File: aa7236.D
Acq: 18 Sep 2024 5:50 pm

Tgt Ion: 91 Resp: 141334

Ion	Ratio	Lower	Upper
91	100		
92	57.3	46.1	69.1

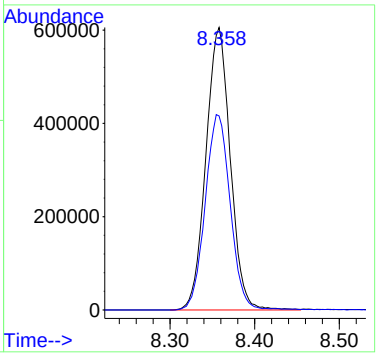


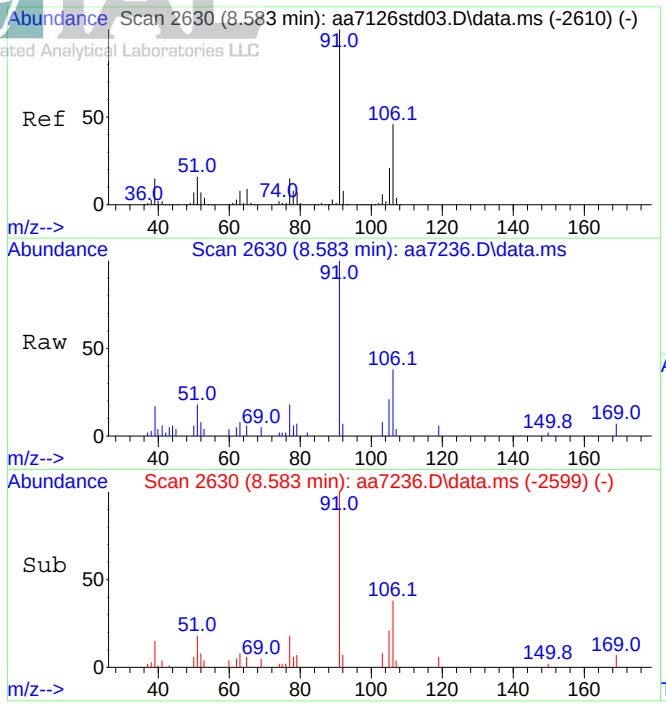


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.358 min Scan# 2560
Delta R.T. 0.007 min
Lab File: aa7236.D
Acq: 18 Sep 2024 5:50 pm

Tgt Ion:117 Resp: 1212228

Ion	Ratio	Lower	Upper
117	100		
82	71.1	51.5	91.5

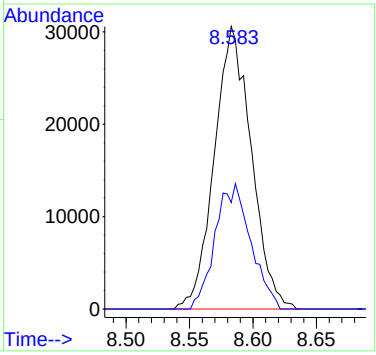


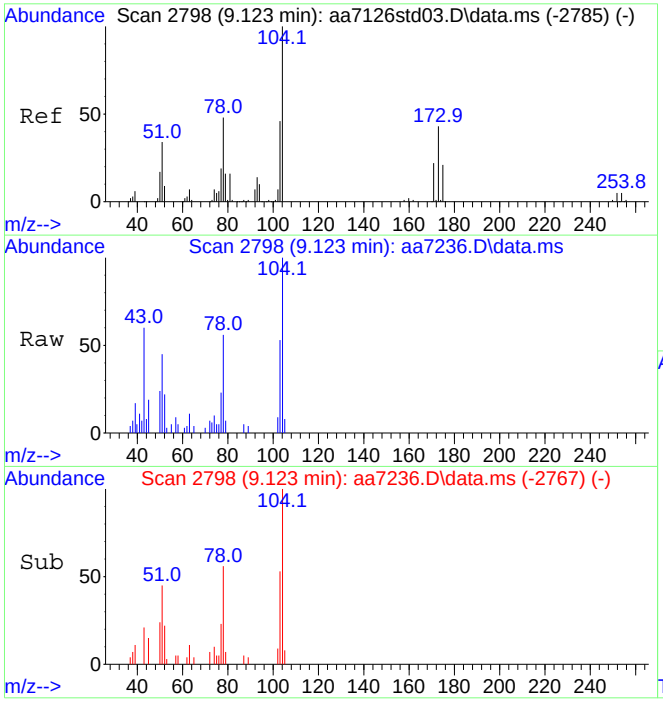


#59
Xylenes (m&p)
Concen: 0.29 ppbV
RT: 8.583 min Scan# 2630
Delta R.T. 0.000 min
Lab File: aa7236.D
Acq: 18 Sep 2024 5:50 pm

Tgt Ion: 91 Resp: 61925

Ion	Ratio	Lower	Upper
91	100		
106	42.7	36.6	55.0

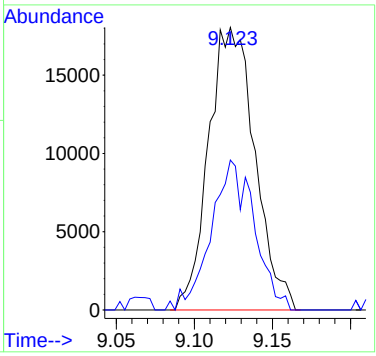


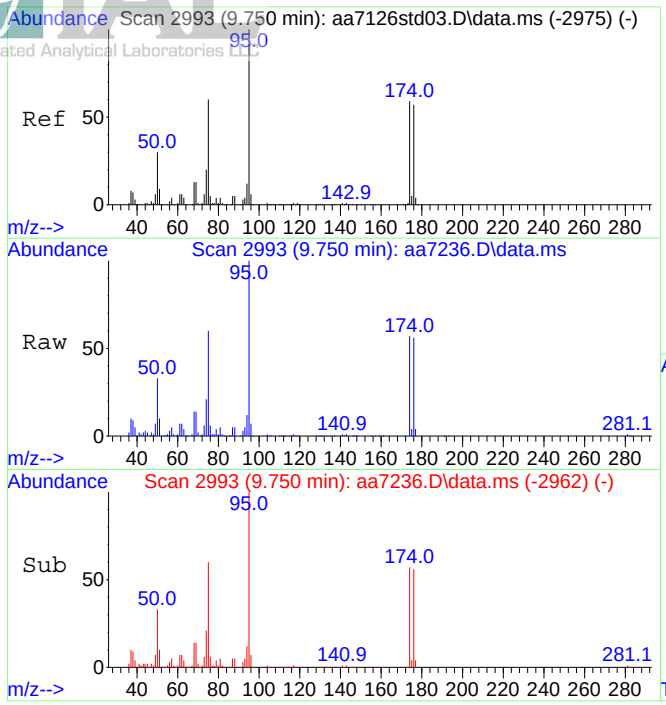


#61
Styrene
Concen: 0.25 ppbV
RT: 9.123 min Scan# 2798
Delta R.T. 0.000 min
Lab File: aa7236.D
Acq: 18 Sep 2024 5:50 pm

Tgt Ion:104 Resp: 37258

Ion	Ratio	Lower	Upper
104	100		
103	49.5	38.7	58.1

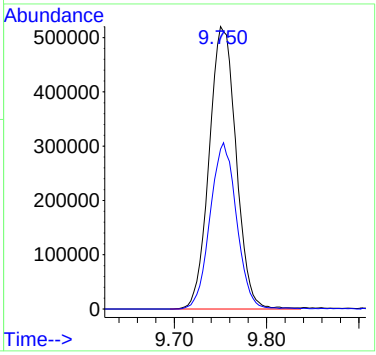




#64
Bromofluorobenzene (tune std)
Concen: 9.90 ppbV
RT: 9.750 min Scan# 2993
Delta R.T. 0.000 min
Lab File: aa7236.D
Acq: 18 Sep 2024 5:50 pm

Tgt Ion: 95 Resp: 1055366

Ion	Ratio	Lower	Upper
95	100		
174	57.8	48.2	72.4



Volatile Organic Compounds by EPA Method TO-15
Summary of Results

Lab ID:	E24-03187-07	Instrument ID:	AA
Client ID:	IA-7	GC/MS Column:	RTX-1, 0.32 mmID
Date Sampled:	09/16/2024 10:55	Injection Volmue:	500ml
Date Received:	09/17/2024	Matrix:	Air-Indoor
Date Analyzed:	09/18/2024 18:22	% Moisture:	NA
Data File:	AA7237	Dilution Factor:	1
Summa ID:	3047	Analyst:	J. Walukiewicz

			Concentration Reported		Reporting Limits	
Compound	**CAS #**	**Q**	**ppbv**	**ug/m3**	**ppbv**	**ug/m3**
Acetone	67-64-1		29	70	0.20	0.48
Benzene	71-43-2		0.43	1.4	0.20	0.64
Bromodichloromethane	75-27-4		ND	ND	0.20	1.3
Bromoform	75-25-2		ND	ND	0.20	2.1
Bromomethane	74-83-9		ND	ND	0.20	0.78
1,3-Butadiene	106-99-0		ND	ND	0.20	0.44
Chlorobenzene	108-90-7		ND	ND	0.20	0.92
Chloroethane	75-00-3		ND	ND	0.20	0.53
Chloroform	67-66-3		ND	ND	0.20	0.98
Chloromethane	74-87-3		ND	ND	0.20	0.41
Carbon disulfide	75-15-0		ND	ND	0.20	0.62
Carbon tetrachloride	56-23-5		ND	ND	0.040	0.25
Cyclohexane	110-82-7		0.40	1.4	0.20	0.69
Dibromochloromethane	124-48-1		ND	ND	0.20	1.7
1,2-Dibromoethane	106-93-4		ND	ND	0.20	1.5
1,2-Dichlorobenzene	95-50-1		ND	ND	0.20	1.2
1,3-Dichlorobenzene	541-73-1		ND	ND	0.20	1.2
1,4-Dichlorobenzene	106-46-7		ND	ND	0.20	1.2
Dichlorodifluoromethane	75-71-8		ND	ND	0.20	0.99
1,1-Dichloroethane	75-34-3		ND	ND	0.20	0.81
1,2-Dichloroethane	107-06-2		ND	ND	0.20	0.81
1,1-Dichloroethene	75-35-4		ND	ND	0.20	0.79
1,2-Dichloroethene (cis)	156-59-2		ND	ND	0.20	0.79
1,2-Dichloroethene (trans)	156-60-5		ND	ND	0.20	0.79
1,2-Dichloropropane	78-87-5		ND	ND	0.20	0.92
1,3-Dichloropropene (cis)	10061-01-5		ND	ND	0.20	0.91
1,3-Dichloropropene (trans)	10061-02-6		ND	ND	0.20	0.91
1,2-Dichlorotetrafluoroethane	76-14-2		ND	ND	0.20	1.4
1,4-Dioxane	123-91-1		ND	ND	0.20	0.72
Ethylbenzene	100-41-4		0.52	2.3	0.20	0.87
n-Heptane	142-82-5		0.55	2.2	0.20	0.82
1,3-Hexachlorobutadiene	87-68-3		ND	ND	0.20	2.1
n-Hexane	110-54-3		0.60	2.1	0.20	0.70
Methylene chloride	75-09-2		ND	ND	0.20	0.69
Methyl ethyl ketone	78-93-3		2.5	7.5	0.20	0.59
Methyl isobutyl ketone	108-10-1		0.44	1.8	0.20	0.82
Methyl tert-butyl ether	1634-04-4		ND	ND	0.20	0.72
Styrene	100-42-5		ND	ND	0.20	0.85
Tert-butyl alcohol	75-65-0		ND	ND	0.20	0.61
1,1,2,2-Tetrachloroethane	79-34-5		ND	ND	0.20	1.4
Tetrachloroethene	127-18-4		ND	ND	0.20	1.4
Toluene	108-88-3		5.5	21	0.20	0.75
1,2,4-Trichlorobenzene	120-82-1		ND	ND	0.20	1.5
1,1,1-Trichloroethane	71-55-6		ND	ND	0.20	1.1
1,1,2-Trichloroethane	79-00-5		ND	ND	0.20	1.1

Qualifiers:
D = Dilution required

Volatile Organic Compounds by EPA Method TO-15
Summary of Results

Lab ID:	E24-03187-07	Instrument ID:	AA
Client ID:	IA-7	GC/MS Column:	RTX-1, 0.32 mmID
Date Sampled:	09/16/2024 10:55	Injection Volmue:	500ml
Date Received:	09/17/2024	Matrix:	Air-Indoor
Date Analyzed:	09/18/2024 18:22	% Moisture:	NA
Data File:	AA7237	Dilution Factor:	1
Summa ID:	3047	Analyst:	J. Walukiewicz

			Concentration Reported		Reporting Limits	
Compound	**CAS #**	**Q**	**ppbv**	**ug/m3**	**ppbv**	**ug/m3**
Trichloroethene	79-01-6		ND	ND	0.046	0.25
Trichlorofluoromethane	75-69-4		0.59	3.3	0.20	1.1
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1		ND	ND	0.20	1.5
1,2,4-Trimethylbenzene	95-63-6		ND	ND	0.20	0.98
1,3,5-Trimethylbenzene	108-67-8		ND	ND	0.20	0.98
2,2,4-Trimethylpentane	540-84-1		ND	ND	0.20	0.93
Vinyl bromide	593-60-2		ND	ND	0.20	0.87
Vinyl chloride	75-01-4		ND	ND	0.20	0.51
Xylenes (m&p)	179601-23-1		2.0	8.5	0.20	0.87
Xylenes (o)	95-47-6		0.51	2.2	0.20	0.87

Qualifiers:
D = Dilution required

Data Path : C:\DATA\2024\09-2024\09-18-2024\
Data File : aa7237.D
Acq On : 18 Sep 2024 6:22 pm
Operator : jjw
Sample : E24-03187-07
Misc : 3047, 500cc
ALS Vial : 15 Sample Multiplier: 1

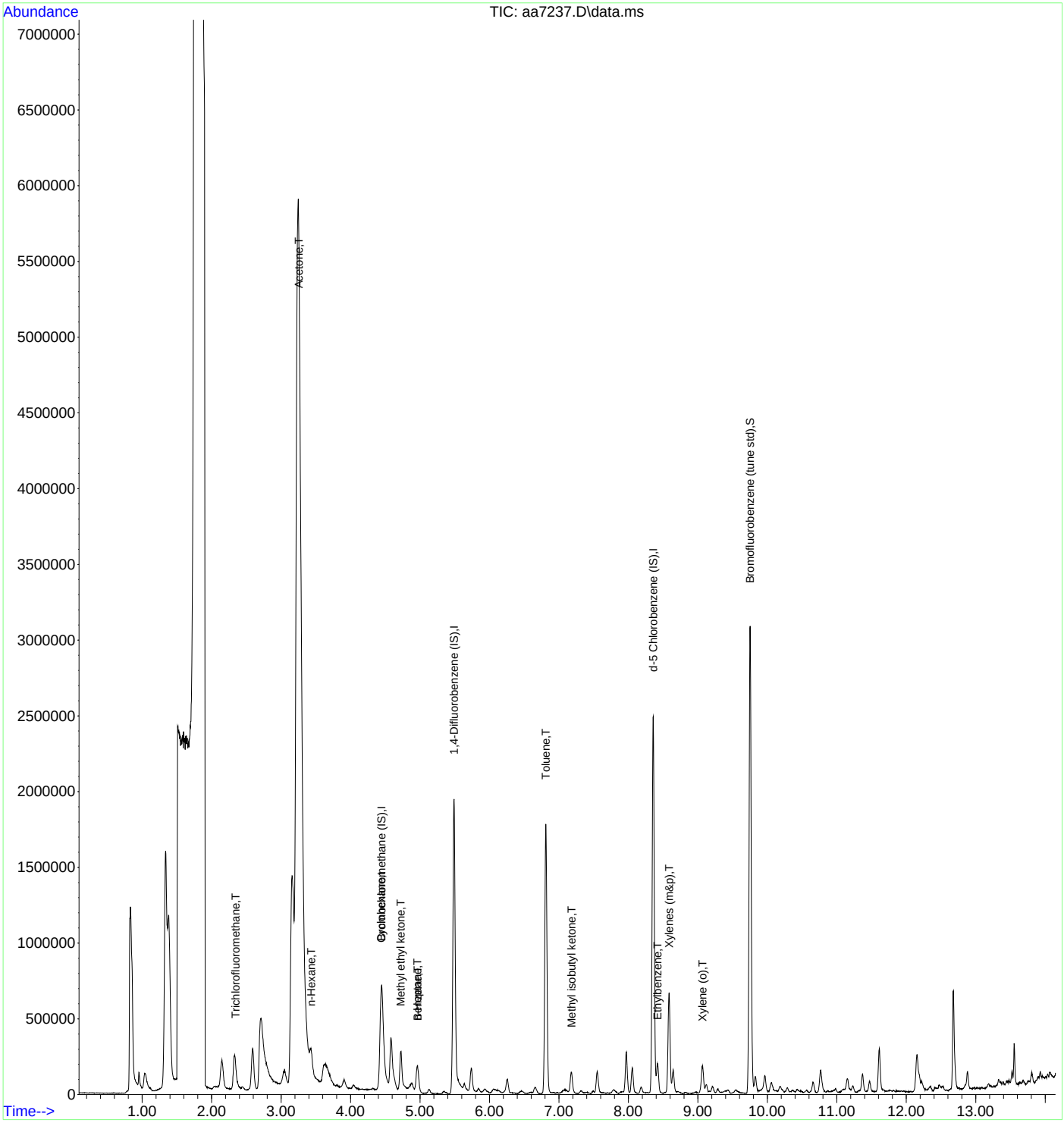
Quant Time: Sep 19 09:39:50 2024
Quant Method : C:\msdchem\1\METHODS\240910.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Sep 11 16:19:32 2024
Response via : Initial Calibration

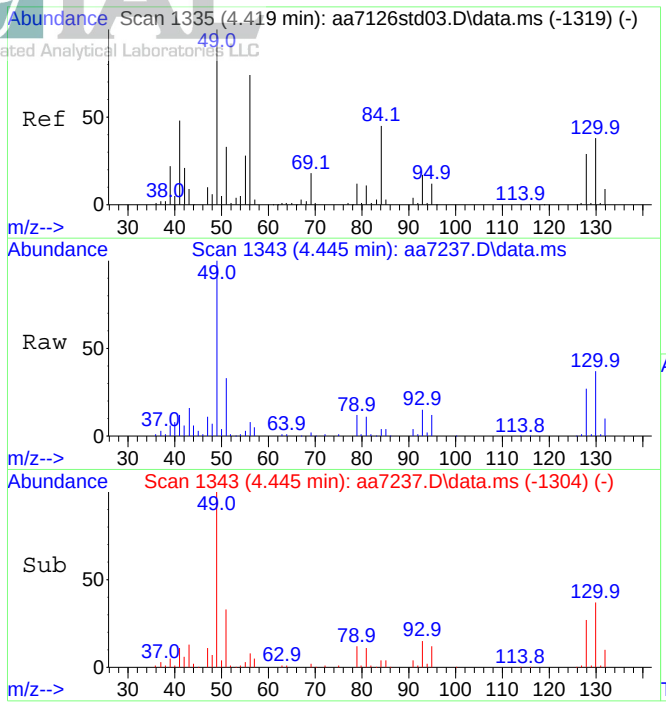
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.445	130	260086	10.00	ppbV		0.026
39) 1,4-Difluorobenzene (IS)	5.490	114	1429317	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.358	117	1252049	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.750	95	1199561	10.90	ppbV		0.000
Target Compounds							Qvalue
12) Trichlorofluoromethane	2.345	101	57917	0.59	ppbV		95
21) Acetone	3.255	43	2698988	29.30	ppbV		99
24) n-Hexane	3.435	57	91843	0.60	ppbV		90
29) Cyclohexane	4.441	56	43252	0.40	ppbV	#	81
35) Methyl ethyl ketone	4.724	43	390339	2.54	ppbV		99
36) n-Heptane	4.962	43	89208	0.55	ppbV		92
37) Benzene	4.965	78	65869	0.43	ppbV		93
47) Toluene	6.811	91	1402139	5.45	ppbV		100
48) Methyl isobutyl ketone	7.181	43	139966	0.43	ppbV		96
58) Ethylbenzene	8.422	91	151464	0.52	ppbV		98
59) Xylenes (m&p)	8.586	91	435230	1.95	ppbV		98
60) Xylene (o)	9.068	91	114419	0.51	ppbV		99

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

Data Path : C:\DATA\2024\09-2024\09-18-2024\
Data File : aa7237.D
Acq On : 18 Sep 2024 6:22 pm
Operator : jjw
Sample : E24-03187-07
Misc : 3047, 500cc
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 19 09:39:50 2024
Quant Method : C:\msdchem\1\METHODS\240910.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Sep 11 16:19:32 2024
Response via : Initial Calibration

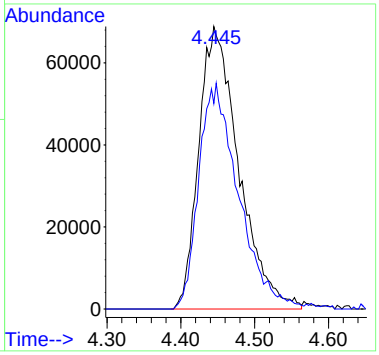


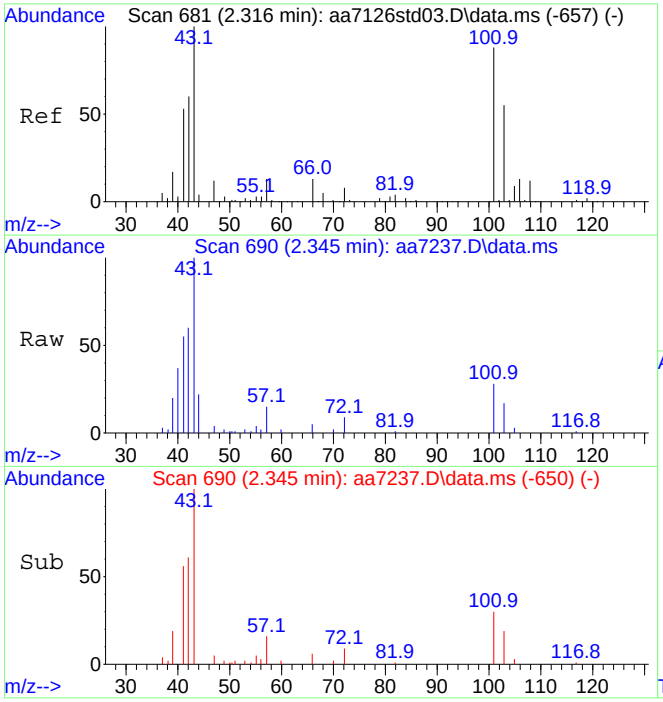


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.445 min Scan# 1343
Delta R.T. 0.026 min
Lab File: aa7237.D
Acq: 18 Sep 2024 6:22 pm

Tgt Ion:130 Resp: 260086

Ion	Ratio	Lower	Upper
130	100		
128	79.0	58.5	98.5

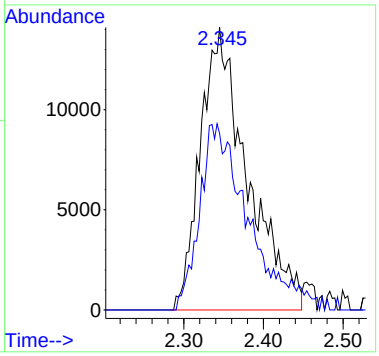


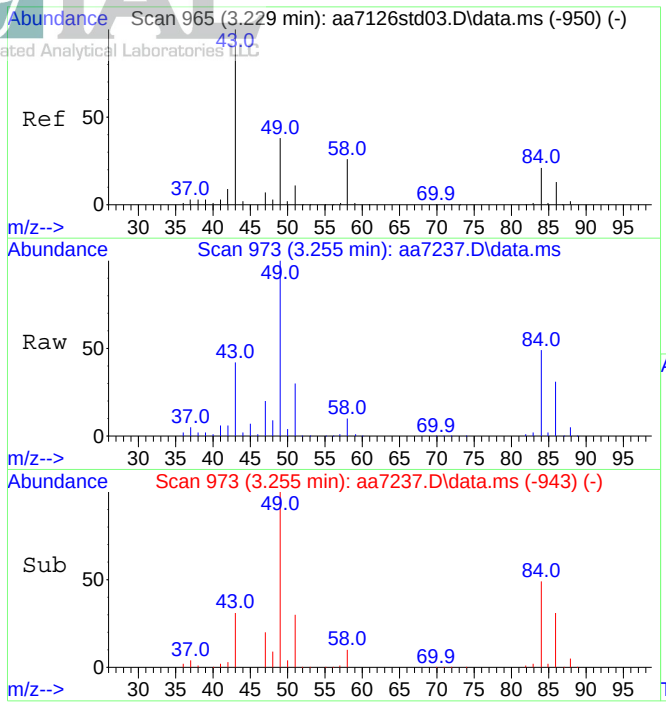


#12
Trichlorofluoromethane
Concen: 0.59 ppbV
RT: 2.345 min Scan# 690
Delta R.T. 0.029 min
Lab File: aa7237.D
Acq: 18 Sep 2024 6:22 pm

Tgt Ion:101 Resp: 57917

Ion	Ratio	Lower	Upper
101	100		
103	67.8	51.4	77.0

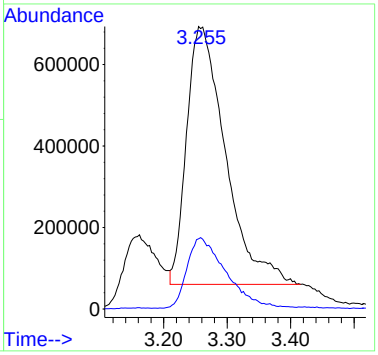


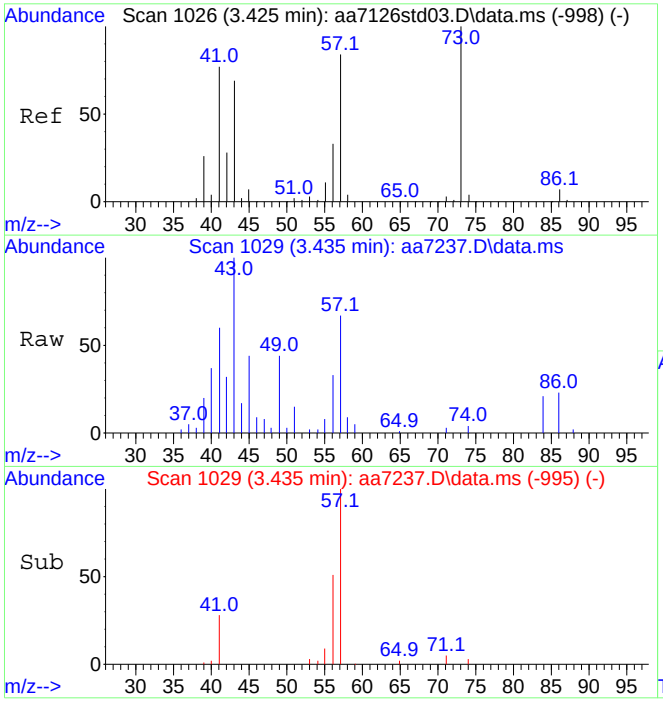


#21
Acetone
Concen: 29.30 ppbV
RT: 3.255 min Scan# 973
Delta R.T. 0.026 min
Lab File: aa7237.D
Acq: 18 Sep 2024 6:22 pm

Tgt Ion: 43 Resp: 2698988

Ion	Ratio	Lower	Upper
43	100		
58	27.3	21.6	32.4

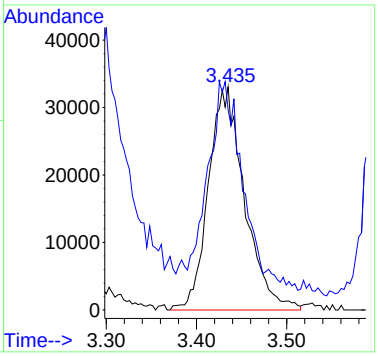


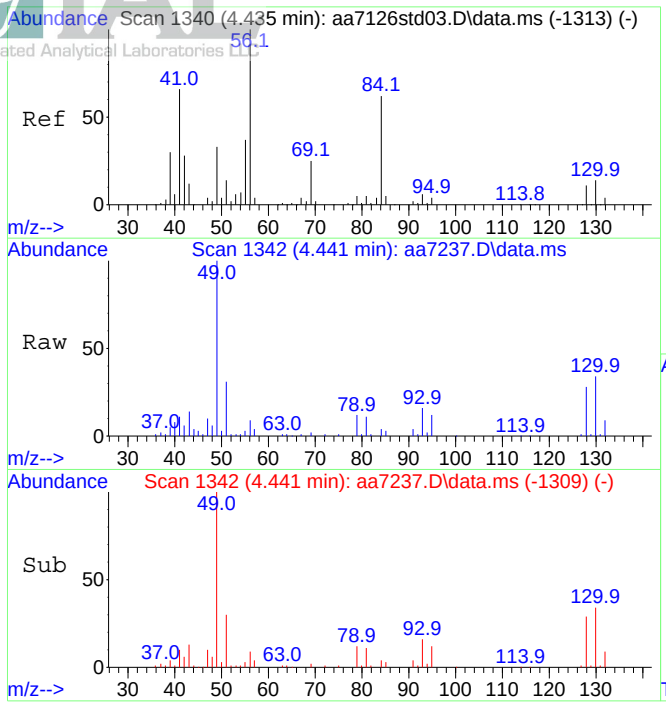


#24
n-Hexane
Concen: 0.60 ppbV
RT: 3.435 min Scan# 1029
Delta R.T. 0.010 min
Lab File: aa7237.D
Acq: 18 Sep 2024 6:22 pm

Tgt Ion: 57 Resp: 91843

Ion	Ratio	Lower	Upper
57	100		
41	92.8	82.8	124.2

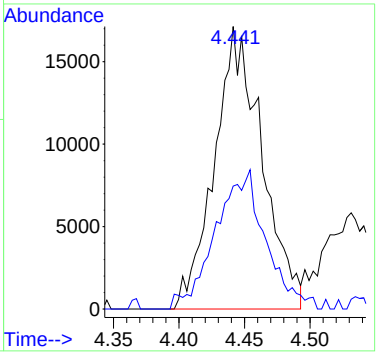


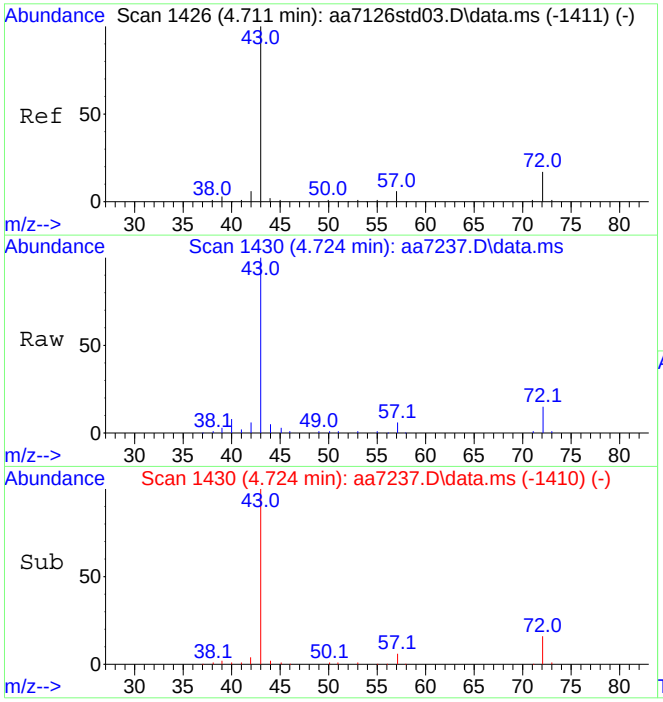


#29
Cyclohexane
Concen: 0.40 ppbV
RT: 4.441 min Scan# 1342
Delta R.T. 0.006 min
Lab File: aa7237.D
Acq: 18 Sep 2024 6:22 pm

Tgt Ion: 56 Resp: 43252

Ion	Ratio	Lower	Upper
56	100		
84	50.6	52.6	79.0#

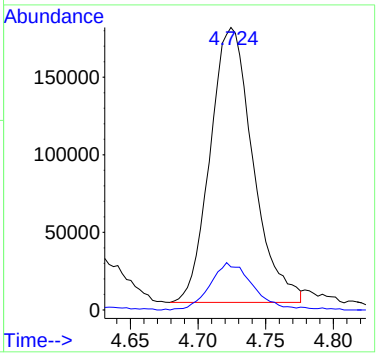


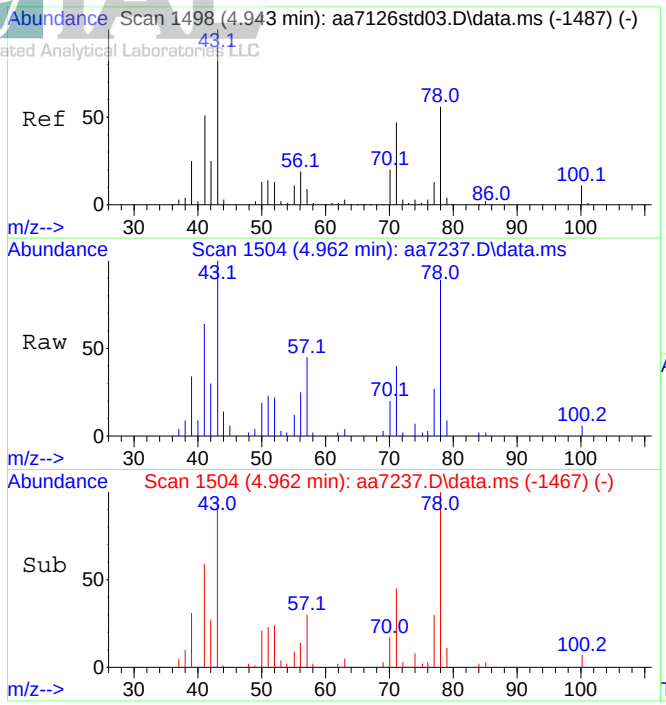


#35
Methyl ethyl ketone
Concen: 2.54 ppbV
RT: 4.724 min Scan# 1430
Delta R.T. 0.013 min
Lab File: aa7237.D
Acq: 18 Sep 2024 6:22 pm

Tgt Ion: 43 Resp: 390339

Ion	Ratio	Lower	Upper
43	100		
72	17.1	13.8	20.8

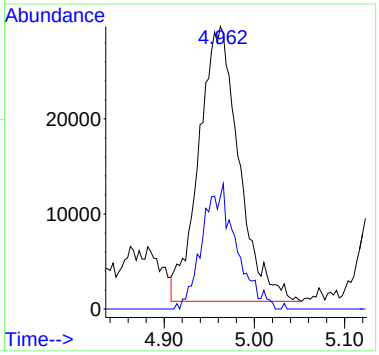


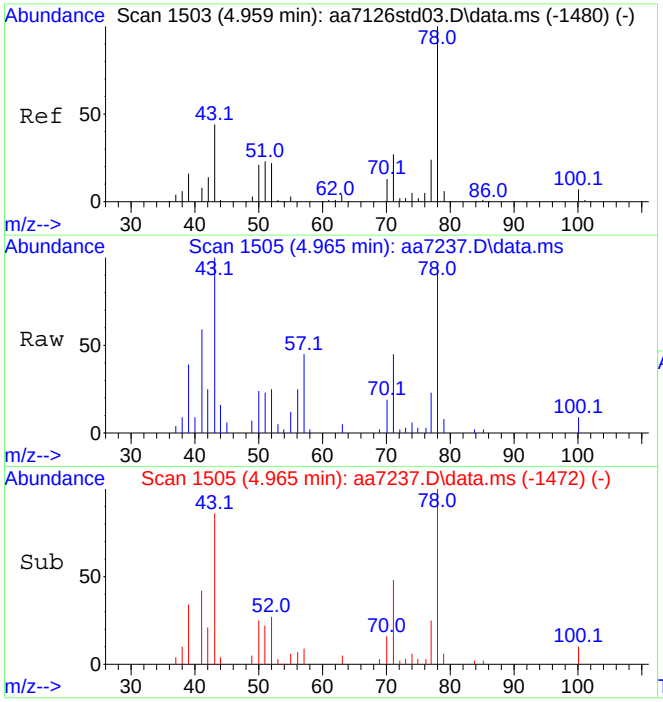


#36
n-Heptane
Concen: 0.55 ppbV
RT: 4.962 min Scan# 1504
Delta R.T. 0.019 min
Lab File: aa7237.D
Acq: 18 Sep 2024 6:22 pm

Tgt Ion: 43 Resp: 89208

Ion	Ratio	Lower	Upper
43	100		
71	37.5	33.9	50.9

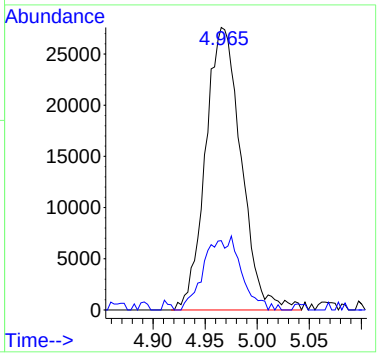


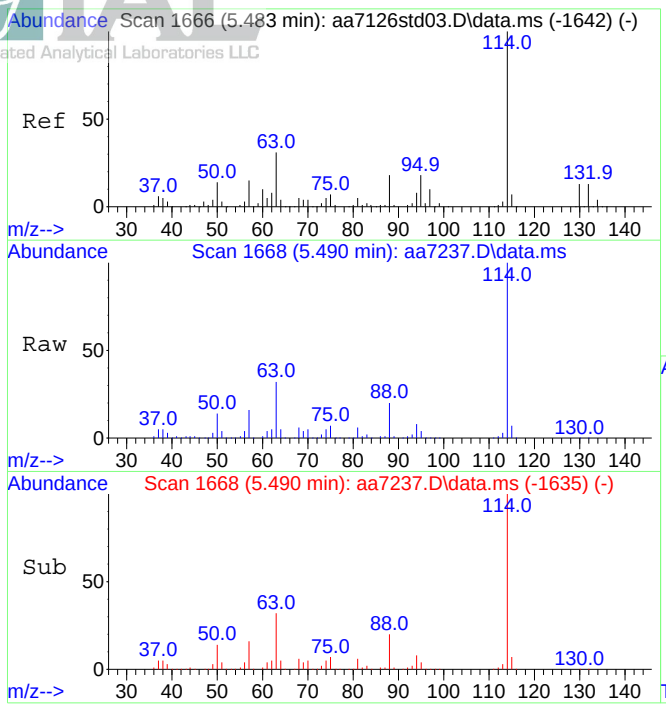


#37
Benzene
Concen: 0.43 ppbV
RT: 4.965 min Scan# 1505
Delta R.T. 0.006 min
Lab File: aa7237.D
Acq: 18 Sep 2024 6:22 pm

Tgt Ion: 78 Resp: 65869

Ion	Ratio	Lower	Upper
78	100		
51	27.0	19.0	28.4

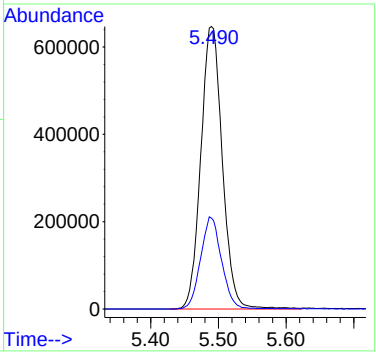


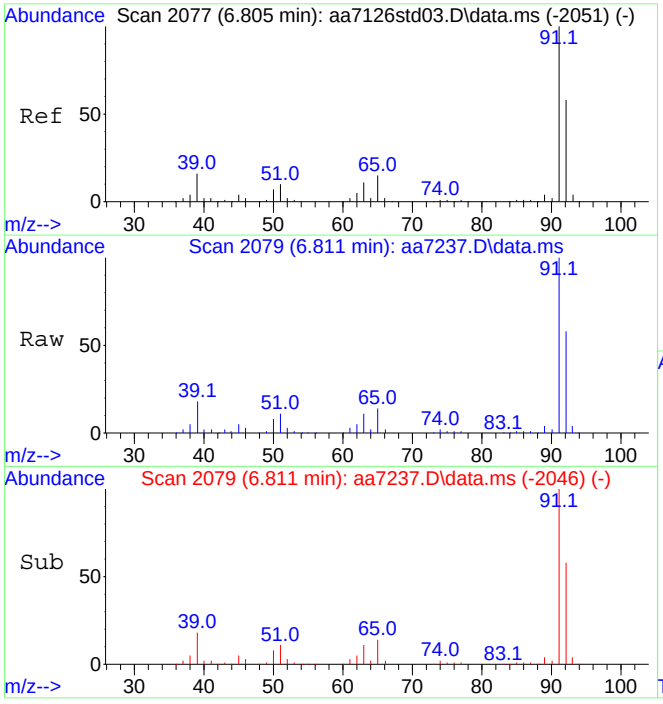


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.490 min Scan# 1668
Delta R.T. 0.007 min
Lab File: aa7237.D
Acq: 18 Sep 2024 6:22 pm

Tgt Ion:114 Resp: 1429317

Ion	Ratio	Lower	Upper
114	100		
63	31.8	11.2	51.2

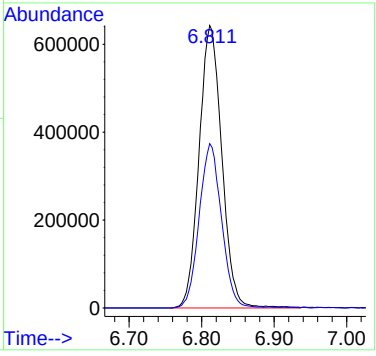


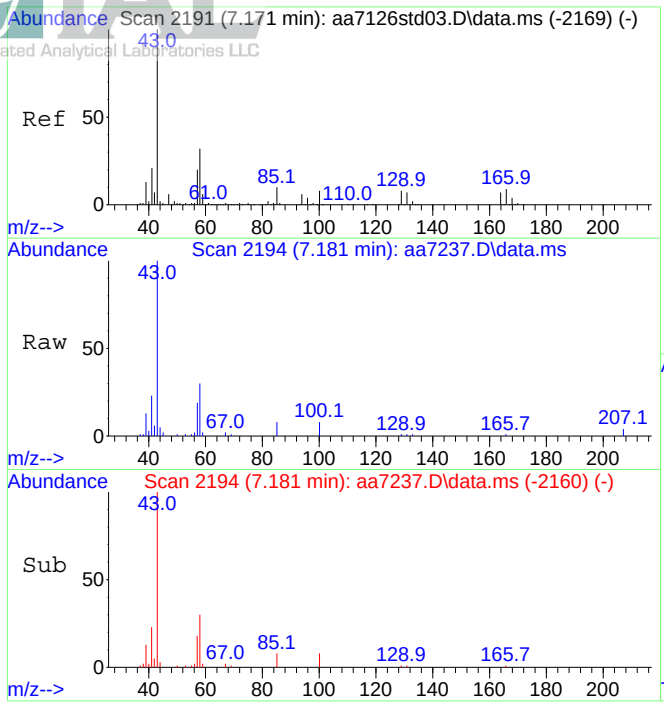


#47
Toluene
Concen: 5.45 ppbV
RT: 6.811 min Scan# 2079
Delta R.T. 0.006 min
Lab File: aa7237.D
Acq: 18 Sep 2024 6:22 pm

Tgt Ion: 91 Resp: 1402139

Ion	Ratio	Lower	Upper
91	100		
92	57.3	46.1	69.1

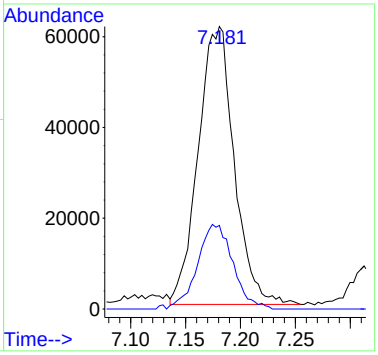


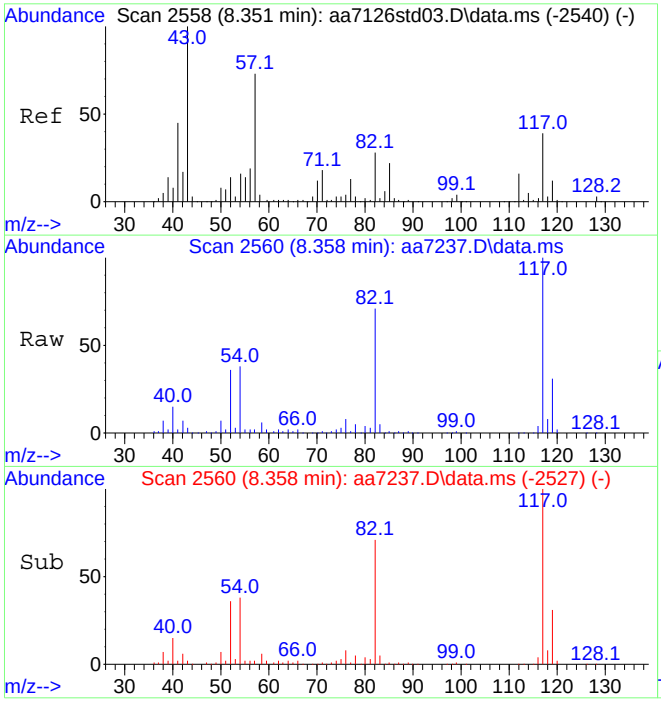


#48
Methyl isobutyl ketone
Concen: 0.43 ppbV
RT: 7.181 min Scan# 2194
Delta R.T. 0.010 min
Lab File: aa7237.D
Acq: 18 Sep 2024 6:22 pm

Tgt Ion: 43 Resp: 139966

Ion	Ratio	Lower	Upper
43	100		
58	29.8	25.5	38.3

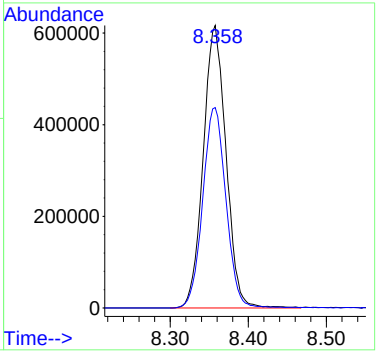


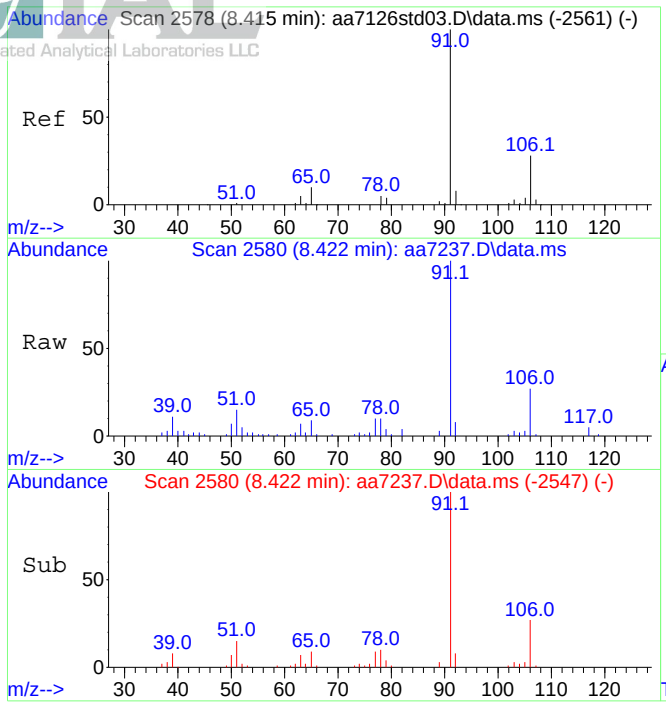


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.358 min Scan# 2560
Delta R.T. 0.007 min
Lab File: aa7237.D
Acq: 18 Sep 2024 6:22 pm

Tgt Ion:117 Resp: 1252049

Ion	Ratio	Lower	Upper
117	100		
82	72.1	51.5	91.5

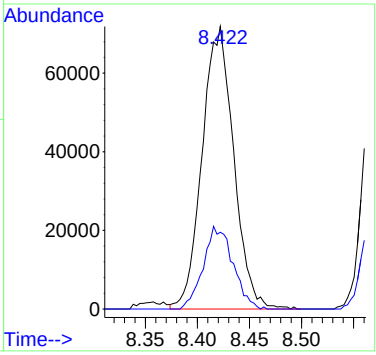


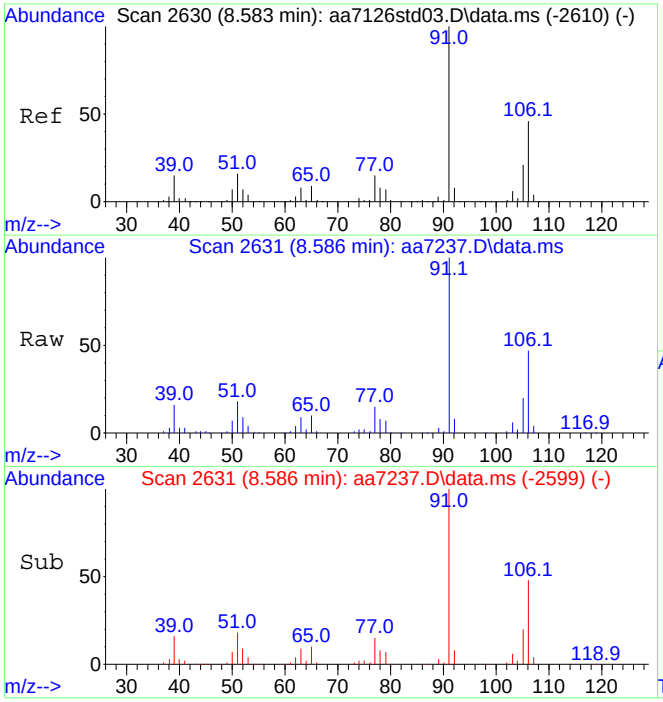


#58
Ethylbenzene
Concen: 0.52 ppbV
RT: 8.422 min Scan# 2580
Delta R.T. 0.006 min
Lab File: aa7237.D
Acq: 18 Sep 2024 6:22 pm

Tgt Ion: 91 Resp: 151464

Ion	Ratio	Lower	Upper
91	100		
106	27.4	22.6	33.8

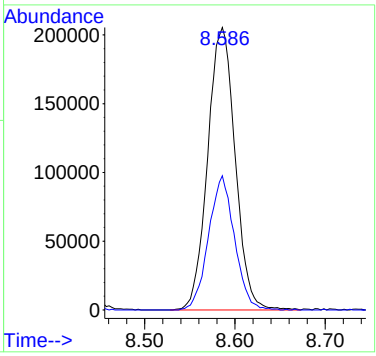


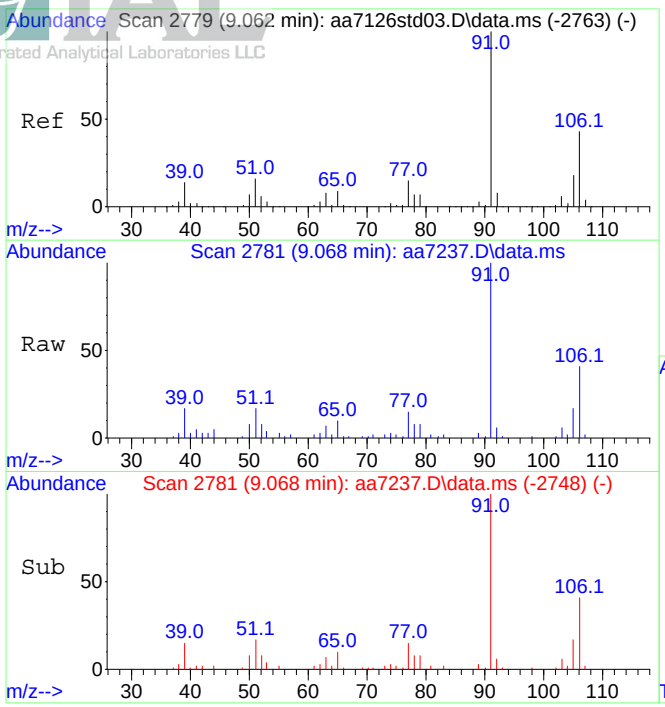


#59
Xylenes (m&p)
Concen: 1.95 ppbV
RT: 8.586 min Scan# 2631
Delta R.T. 0.003 min
Lab File: aa7237.D
Acq: 18 Sep 2024 6:22 pm

Tgt Ion: 91 Resp: 435230

Ion	Ratio	Lower	Upper
91	100		
106	44.7	36.6	55.0

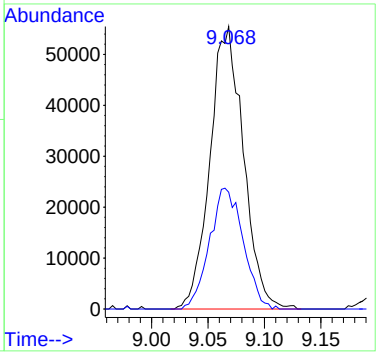


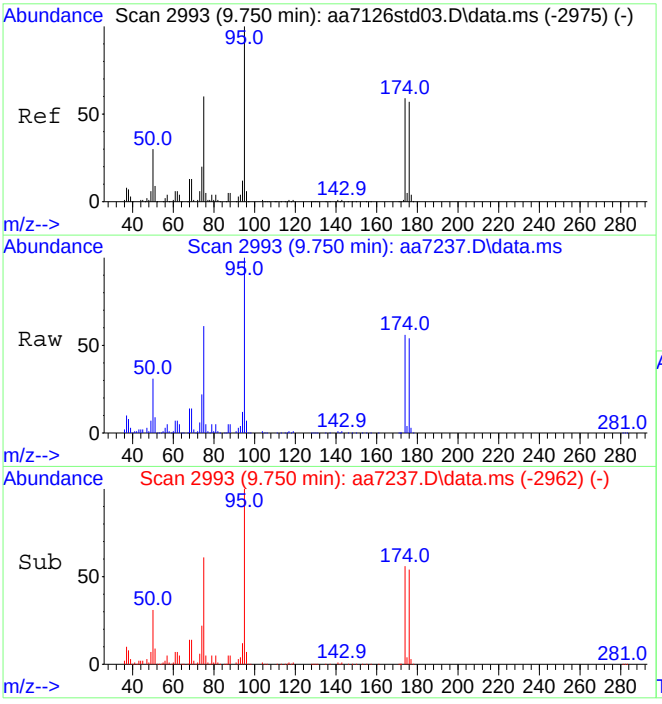


#60
Xylene (o)
Concen: 0.51 ppbV
RT: 9.068 min Scan# 2781
Delta R.T. 0.006 min
Lab File: aa7237.D
Acq: 18 Sep 2024 6:22 pm

Tgt Ion: 91 Resp: 114419

Ion	Ratio	Lower	Upper
91	100		
106	43.0	34.7	52.1

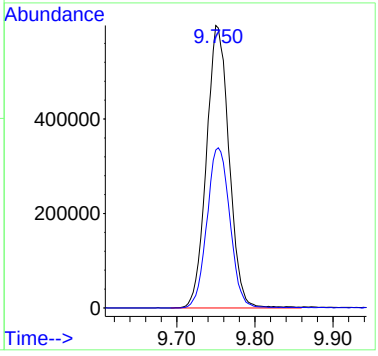




#64
Bromofluorobenzene (tune std)
Concen: 10.90 ppbV
RT: 9.750 min Scan# 2993
Delta R.T. -0.000 min
Lab File: aa7237.D
Acq: 18 Sep 2024 6:22 pm

Tgt Ion: 95 Resp: 1199561

Ion	Ratio	Lower	Upper
95	100		
174	57.9	48.2	72.4



Volatile Organic Compounds by EPA Method TO-15
Summary of Results

Lab ID:	E24-03187-08	Instrument ID:	AA
Client ID:	AA-1	GC/MS Column:	RTX-1, 0.32 mmID
Date Sampled:	09/16/2024 11:20	Injection Volmue:	500ml
Date Received:	09/17/2024	Matrix:	Air-Ambient
Date Analyzed:	09/18/2024 19:54	% Moisture:	NA
Data File:	AA7240	Dilution Factor:	1
Summa ID:	3805	Analyst:	J. Walukiewicz

			Concentration Reported		Reporting Limits	
Compound	**CAS #**	**Q**	**ppbv**	**ug/m3**	**ppbv**	**ug/m3**
Acetone	67-64-1		4.5	11	0.20	0.48
Benzene	71-43-2		ND	ND	0.20	0.64
Bromodichloromethane	75-27-4		ND	ND	0.20	1.3
Bromoform	75-25-2		ND	ND	0.20	2.1
Bromomethane	74-83-9		ND	ND	0.20	0.78
1,3-Butadiene	106-99-0		ND	ND	0.20	0.44
Chlorobenzene	108-90-7		ND	ND	0.20	0.92
Chloroethane	75-00-3		ND	ND	0.20	0.53
Chloroform	67-66-3		ND	ND	0.20	0.98
Chloromethane	74-87-3		ND	ND	0.20	0.41
Carbon disulfide	75-15-0		ND	ND	0.20	0.62
Carbon tetrachloride	56-23-5		ND	ND	0.040	0.25
Cyclohexane	110-82-7		ND	ND	0.20	0.69
Dibromochloromethane	124-48-1		ND	ND	0.20	1.7
1,2-Dibromoethane	106-93-4		ND	ND	0.20	1.5
1,2-Dichlorobenzene	95-50-1		ND	ND	0.20	1.2
1,3-Dichlorobenzene	541-73-1		ND	ND	0.20	1.2
1,4-Dichlorobenzene	106-46-7		ND	ND	0.20	1.2
Dichlorodifluoromethane	75-71-8		ND	ND	0.20	0.99
1,1-Dichloroethane	75-34-3		ND	ND	0.20	0.81
1,2-Dichloroethane	107-06-2		ND	ND	0.20	0.81
1,1-Dichloroethene	75-35-4		ND	ND	0.20	0.79
1,2-Dichloroethene (cis)	156-59-2		ND	ND	0.20	0.79
1,2-Dichloroethene (trans)	156-60-5		ND	ND	0.20	0.79
1,2-Dichloropropane	78-87-5		ND	ND	0.20	0.92
1,3-Dichloropropene (cis)	10061-01-5		ND	ND	0.20	0.91
1,3-Dichloropropene (trans)	10061-02-6		ND	ND	0.20	0.91
1,2-Dichlorotetrafluoroethane	76-14-2		ND	ND	0.20	1.4
1,4-Dioxane	123-91-1		ND	ND	0.20	0.72
Ethylbenzene	100-41-4		ND	ND	0.20	0.87
n-Heptane	142-82-5		ND	ND	0.20	0.82
1,3-Hexachlorobutadiene	87-68-3		ND	ND	0.20	2.1
n-Hexane	110-54-3		ND	ND	0.20	0.70
Methylene chloride	75-09-2		2.8	9.6	0.20	0.69
Methyl ethyl ketone	78-93-3		0.44	1.3	0.20	0.59
Methyl isobutyl ketone	108-10-1		ND	ND	0.20	0.82
Methyl tert-butyl ether	1634-04-4		ND	ND	0.20	0.72
Styrene	100-42-5		ND	ND	0.20	0.85
Tert-butyl alcohol	75-65-0		ND	ND	0.20	0.61
1,1,2,2-Tetrachloroethane	79-34-5		ND	ND	0.20	1.4
Tetrachloroethene	127-18-4		ND	ND	0.20	1.4
Toluene	108-88-3		0.79	3.0	0.20	0.75
1,2,4-Trichlorobenzene	120-82-1		ND	ND	0.20	1.5
1,1,1-Trichloroethane	71-55-6		ND	ND	0.20	1.1
1,1,2-Trichloroethane	79-00-5		ND	ND	0.20	1.1

Qualifiers:
D = Dilution required

Volatile Organic Compounds by EPA Method TO-15
Summary of Results

Lab ID:	E24-03187-08	Instrument ID:	AA
Client ID:	AA-1	GC/MS Column:	RTX-1, 0.32 mmID
Date Sampled:	09/16/2024 11:20	Injection Volmue:	500ml
Date Received:	09/17/2024	Matrix:	Air-Ambient
Date Analyzed:	09/18/2024 19:54	% Moisture:	NA
Data File:	AA7240	Dilution Factor:	1
Summa ID:	3805	Analyst:	J. Walukiewicz

			Concentration Reported		Reporting Limits	
Compound	**CAS #**	**Q**	**ppbv**	**ug/m3**	**ppbv**	**ug/m3**
Trichloroethene	79-01-6		ND	ND	0.046	0.25
Trichlorofluoromethane	75-69-4		0.27	1.5	0.20	1.1
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1		ND	ND	0.20	1.5
1,2,4-Trimethylbenzene	95-63-6		ND	ND	0.20	0.98
1,3,5-Trimethylbenzene	108-67-8		ND	ND	0.20	0.98
2,2,4-Trimethylpentane	540-84-1		ND	ND	0.20	0.93
Vinyl bromide	593-60-2		ND	ND	0.20	0.87
Vinyl chloride	75-01-4		ND	ND	0.20	0.51
Xylenes (m&p)	179601-23-1		0.31	1.3	0.20	0.87
Xylenes (o)	95-47-6		ND	ND	0.20	0.87

Qualifiers:
D = Dilution required

Data Path : C:\DATA\2024\09-2024\09-18-2024\
Data File : aa7240.D
Acq On : 18 Sep 2024 7:54 pm
Operator : jjw
Sample : E24-03187-08
Misc : 3805, 500cc
ALS Vial : 18 Sample Multiplier: 1

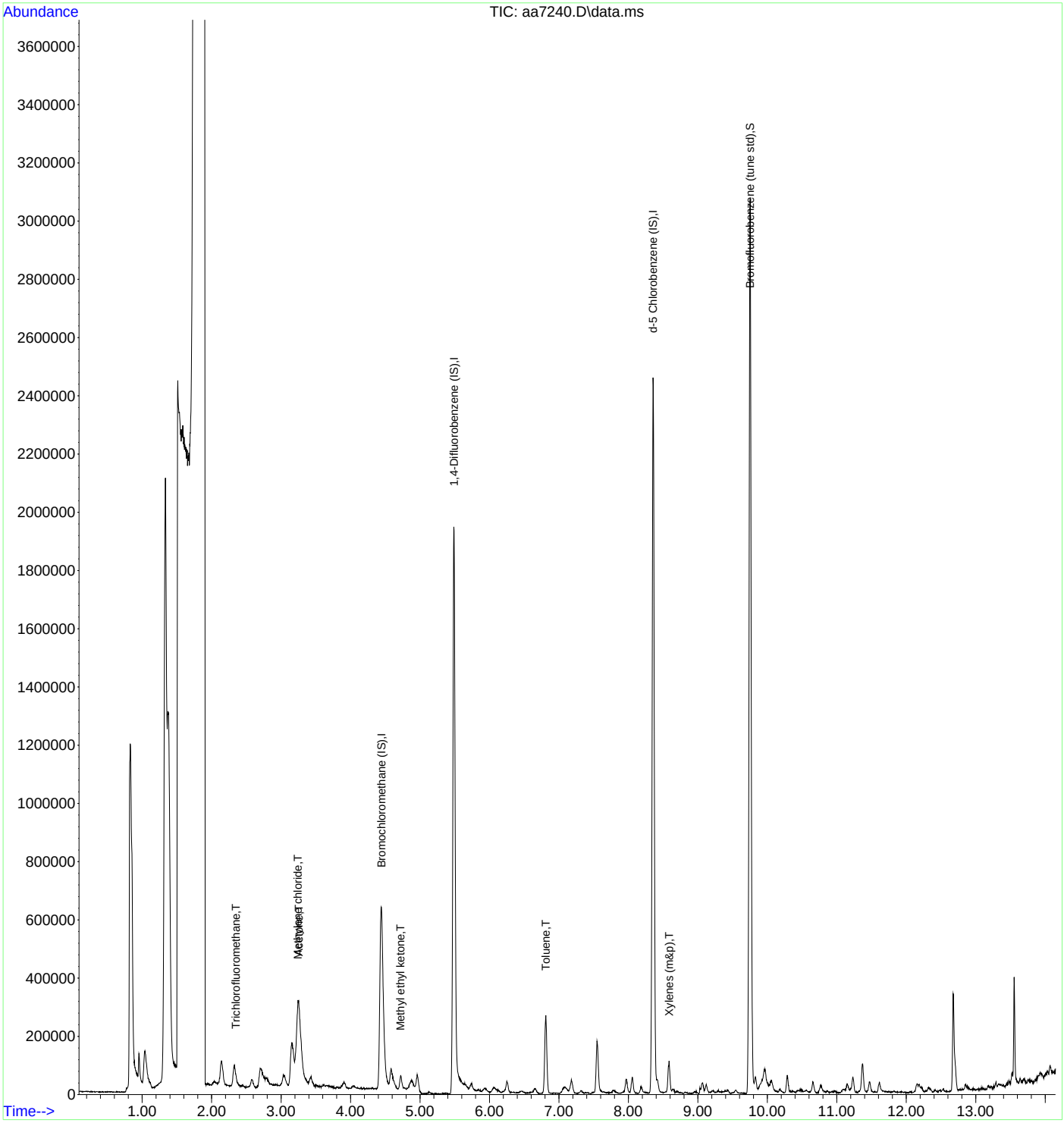
Quant Time: Sep 19 09:57:34 2024
Quant Method : C:\msdchem\1\METHODS\240910.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Sep 11 16:19:32 2024
Response via : Initial Calibration

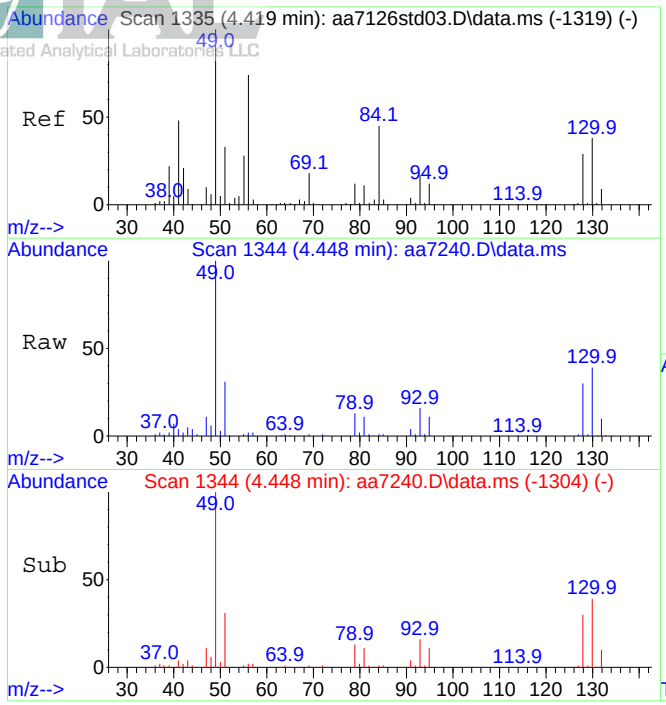
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.448	130	258081	10.00	ppbV	0.029
39) 1,4-Difluorobenzene (IS)	5.489	114	1468777	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.354	117	1256252	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.753	95	1196122	10.83	ppbV	0.000
Target Compounds						Qvalue
12) Trichlorofluoromethane	2.348	101	26301	0.27	ppbV	84
20) Methylene chloride	3.242	49	187076	2.77	ppbV	99
21) Acetone	3.255	43	407949	4.46	ppbV	96
35) Methyl ethyl ketone	4.721	43	67694	0.44	ppbV	99
47) Toluene	6.811	91	209245	0.79	ppbV	100
59) Xylenes (m&p)	8.586	91	68257	0.30	ppbV	97

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

Data Path : C:\DATA\2024\09-2024\09-18-2024\
Data File : aa7240.D
Acq On : 18 Sep 2024 7:54 pm
Operator : jjw
Sample : E24-03187-08
Misc : 3805, 500cc
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Sep 19 09:57:34 2024
Quant Method : C:\msdchem\1\METHODS\240910.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Sep 11 16:19:32 2024
Response via : Initial Calibration

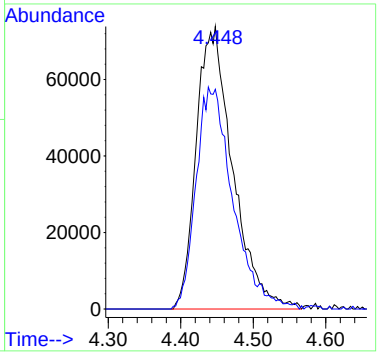


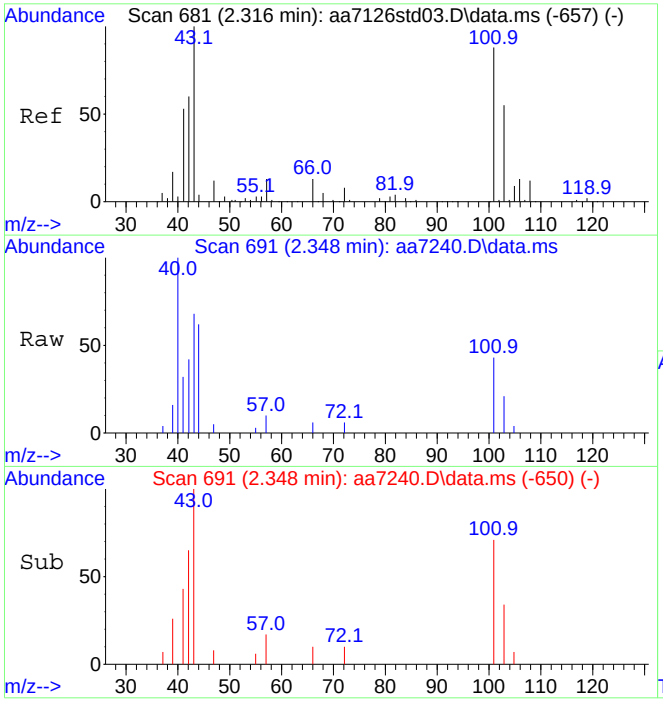


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.448 min Scan# 1344
Delta R.T. 0.029 min
Lab File: aa7240.D
Acq: 18 Sep 2024 7:54 pm

Tgt Ion:130 Resp: 258081

Ion	Ratio	Lower	Upper
130	100		
128	79.3	58.5	98.5

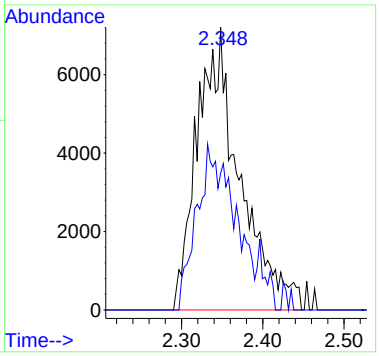


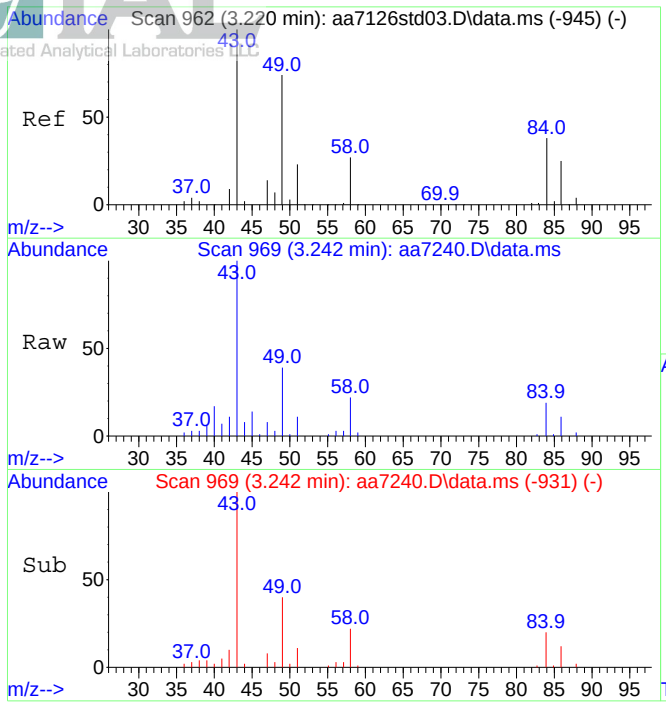


#12
Trichlorofluoromethane
Concen: 0.27 ppbV
RT: 2.348 min Scan# 691
Delta R.T. 0.032 min
Lab File: aa7240.D
Acq: 18 Sep 2024 7:54 pm

Tgt Ion:101 Resp: 26301

Ion	Ratio	Lower	Upper
101	100		
103	51.6	51.4	77.0

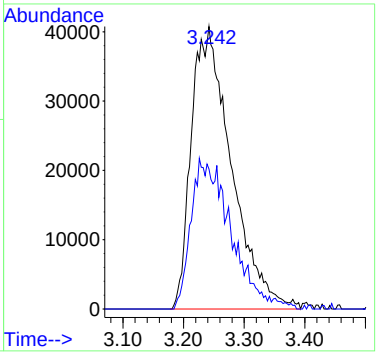


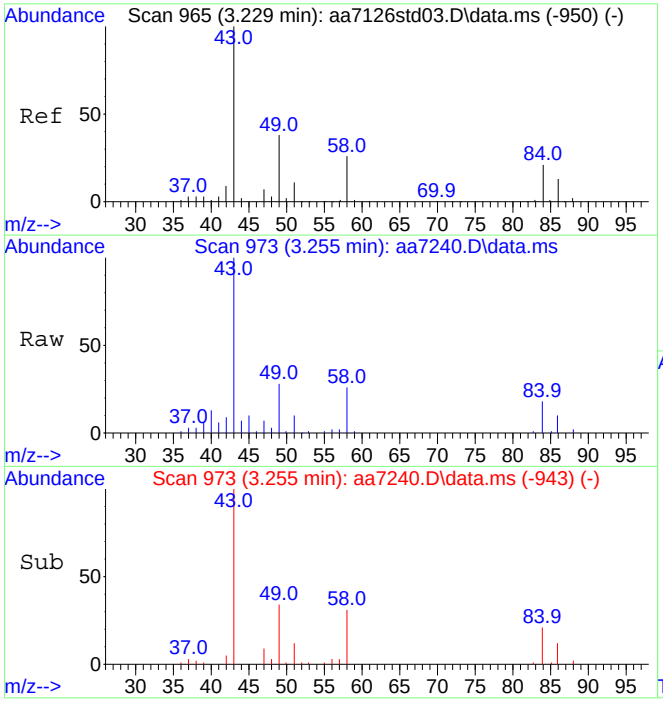


#20
Methylene chloride
Concen: 2.77 ppbV
RT: 3.242 min Scan# 969
Delta R.T. 0.022 min
Lab File: aa7240.D
Acq: 18 Sep 2024 7:54 pm

Tgt Ion: 49 Resp: 187076

Ion	Ratio	Lower	Upper
49	100		
84	52.9	33.6	73.6

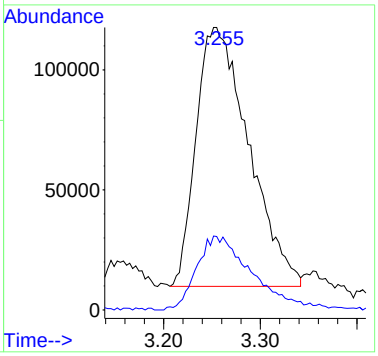


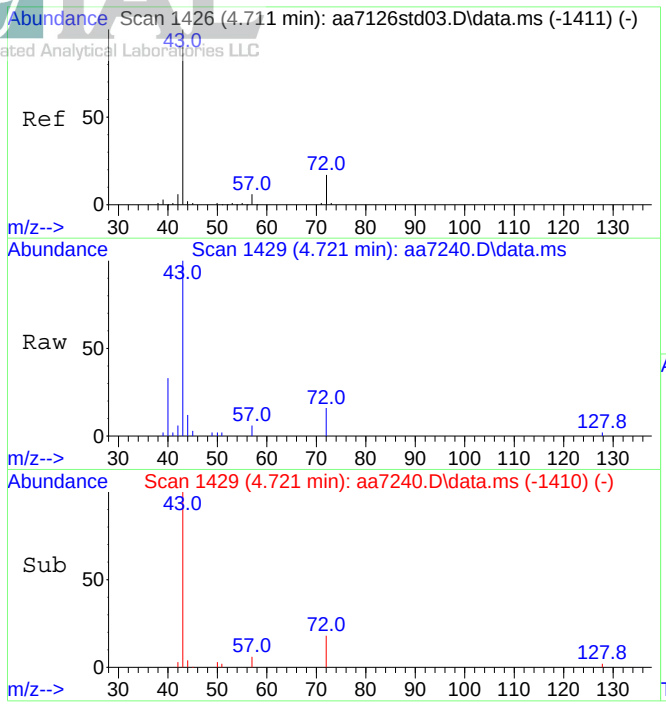


#21
Acetone
Concen: 4.46 ppbV
RT: 3.255 min Scan# 973
Delta R.T. 0.026 min
Lab File: aa7240.D
Acq: 18 Sep 2024 7:54 pm

Tgt Ion: 43 Resp: 407949

Ion	Ratio	Lower	Upper
43	100		
58	29.3	21.6	32.4

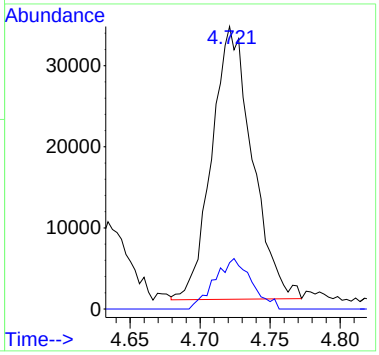


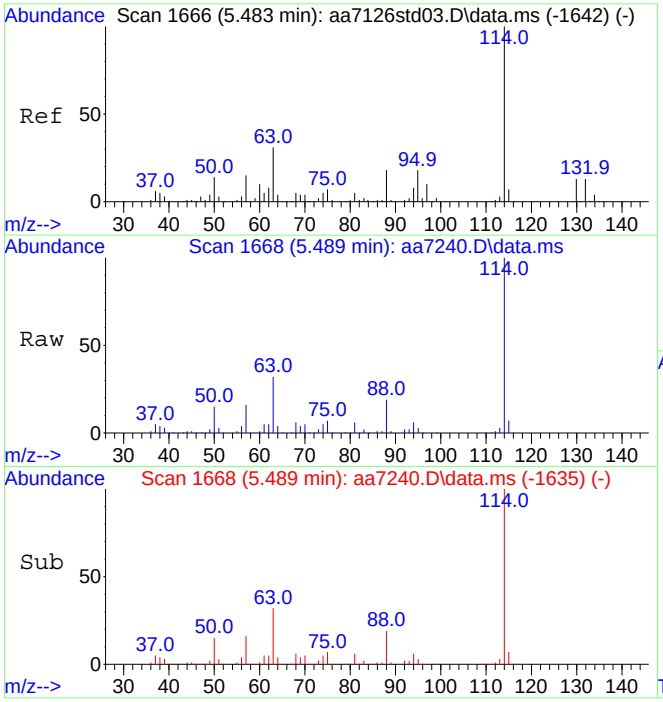


#35
Methyl ethyl ketone
Concen: 0.44 ppbV
RT: 4.721 min Scan# 1429
Delta R.T. 0.010 min
Lab File: aa7240.D
Acq: 18 Sep 2024 7:54 pm

Tgt Ion: 43 Resp: 67694

Ion	Ratio	Lower	Upper
43	100		
72	16.9	13.8	20.8

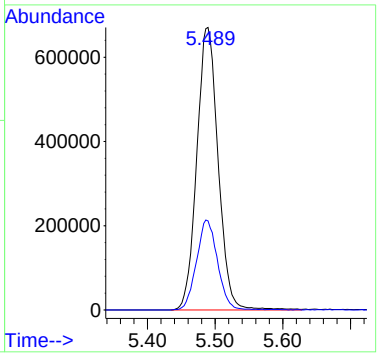


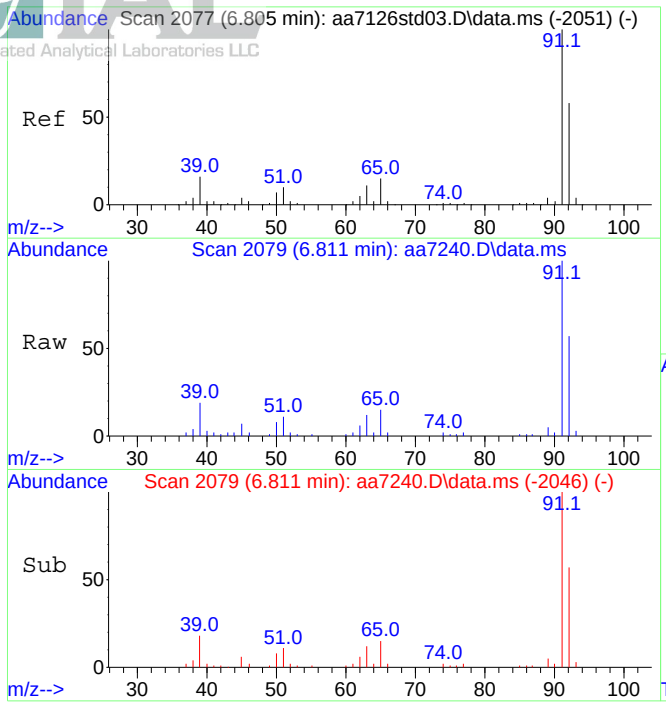


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.489 min Scan# 1668
Delta R.T. 0.006 min
Lab File: aa7240.D
Acq: 18 Sep 2024 7:54 pm

Tgt Ion:114 Resp: 1468777

Ion	Ratio	Lower	Upper
114	100		
63	31.4	11.2	51.2

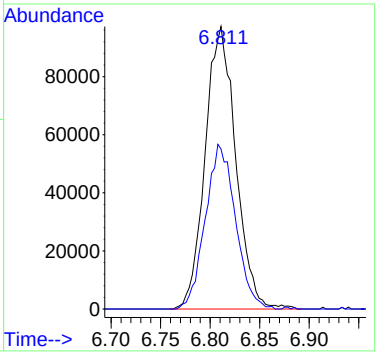


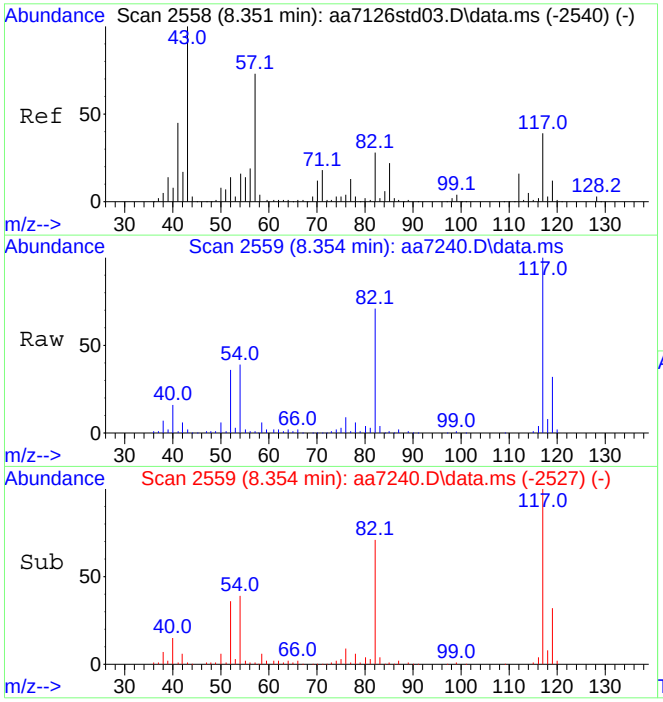


#47
Toluene
Concen: 0.79 ppbV
RT: 6.811 min Scan# 2079
Delta R.T. 0.006 min
Lab File: aa7240.D
Acq: 18 Sep 2024 7:54 pm

Tgt Ion: 91 Resp: 209245

Ion	Ratio	Lower	Upper
91	100		
92	57.2	46.1	69.1

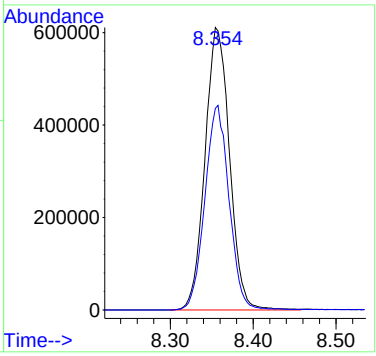


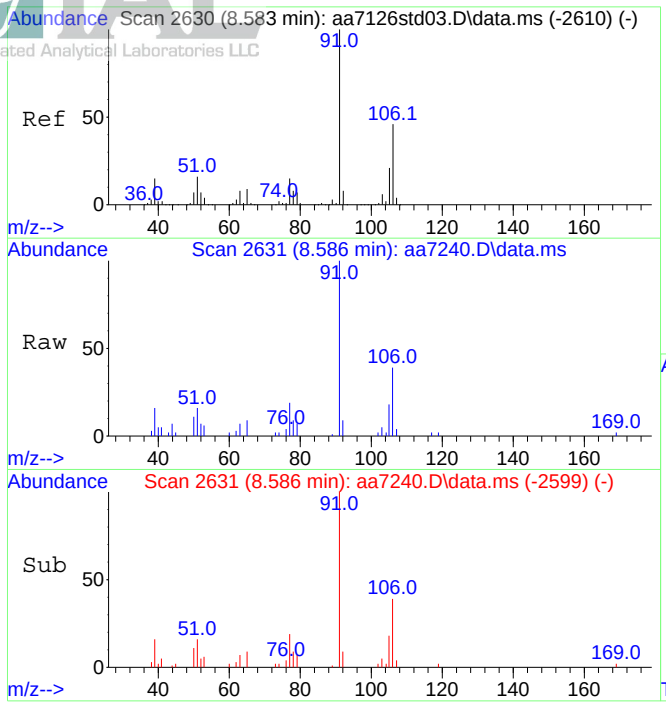


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.354 min Scan# 2559
Delta R.T. 0.003 min
Lab File: aa7240.D
Acq: 18 Sep 2024 7:54 pm

Tgt Ion:117 Resp: 1256252

Ion	Ratio	Lower	Upper
117	100		
82	71.7	51.5	91.5

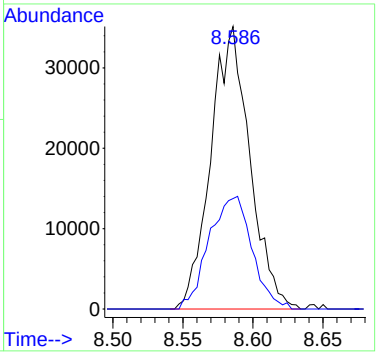


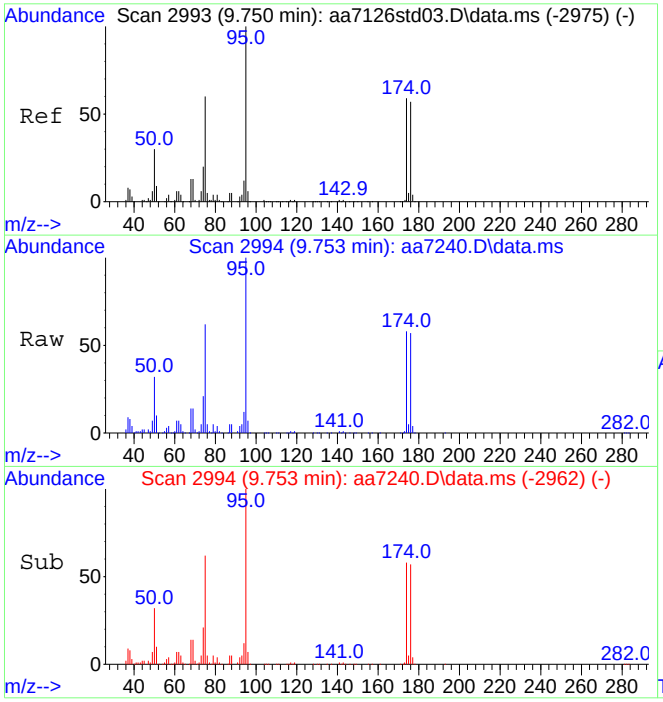


#59
Xylenes (m&p)
Concen: 0.30 ppbV
RT: 8.586 min Scan# 2631
Delta R.T. 0.003 min
Lab File: aa7240.D
Acq: 18 Sep 2024 7:54 pm

Tgt Ion: 91 Resp: 68257

Ion	Ratio	Lower	Upper
91	100		
106	43.8	36.6	55.0

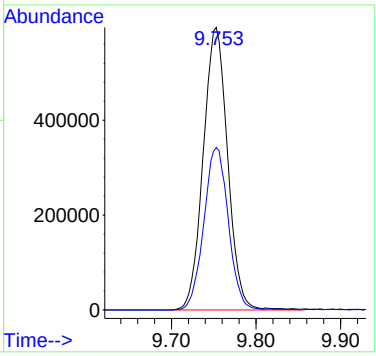




#64
Bromofluorobenzene (tune std)
Concen: 10.83 ppbV
RT: 9.753 min Scan# 2994
Delta R.T. 0.003 min
Lab File: aa7240.D
Acq: 18 Sep 2024 7:54 pm

Tgt Ion: 95 Resp: 1196122

Ion	Ratio	Lower	Upper
95	100		
174	57.7	48.2	72.4



Section VII: Standards Data

Initial Calibration Data

Initial Calibration Verification Data

Continuing Calibration Data

INTEGRATED ANALYTICAL LABORATORIES, LLC

Initial Calibration Data Summary Report

Initial Calibration Curve: 5/29/2024 **Method ID:** 240529.M

Instrument: AA

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6554BFB]	05/29/2024 09:16
0.2 PPBV STD [AA6556STD05]	05/29/2024 12:40
2 PPBV STD [AA6557STD04]	05/29/2024 13:11
10 PPBV STD [AA6558STD03]	05/29/2024 13:46
20 PPBV STD [AA6559STD02]	05/29/2024 14:18
40 PPBV STD [AA6560STD01]	05/29/2024 14:55
10 PPBV ICVSS [AA6561ICVSS]	05/29/2024 17:16

	Parameter	RRF 0.2ppbv	RRF 2ppbv	RRF 10ppbv	RRF 20ppbv	RRF 40ppbv	Avg ppbv	% RSD
1)	Bromochloromethane	----------ISTD----------						
2)	Propene	1.0	1.1	1.0	1.1	1.0	1.1	3.6
3)	Dichlorodifluoromethane	2.4	2.9	3.0	3.1	3.0	2.9	9.0
4)	1,2-Dichlorotetrafluoroethane	3.2	4.0	4.0	4.2	4.6	4.0	12
5)	n-Butane	1.9	2.3	2.1	2.2	2.3	2.2	6.6
6)	Chloromethane	0.12	0.17	0.20	0.22	0.18	0.18	21
7)	Vinyl chloride	1.0	1.3	1.4	1.5	1.4	1.3	13
8)	1,3-Butadiene	1.1	1.2	1.2	1.3	1.3	1.2	7.5
9)	Bromomethane	0.75	1.1	1.1	1.2	1.00	1.0	16
10)	Chloroethane	0.54	0.76	0.79	0.83	0.82	0.75	16
11)	Vinyl bromide	0.77	1.3	1.4	1.4	1.4	1.2	22
12)	Trichlorofluoromethane	2.7	3.3	3.4	3.5	3.6	3.3	11
13)	Ethanol	0.70	0.42	0.44	0.49	0.53	0.52	21
14)	1,1-Dichloroethene	1.8	2.6	2.7	2.8	2.9	2.5	17
15)	Carbon disulfide	3.2	4.4	4.5	4.6	4.5	4.2	14
16)	1,1,2-Trichloro-1,2,2-trifluoroethane	2.7	3.2	3.0	3.1	3.6	3.1	10
17)	Acrolein	0.47	0.51	0.58	0.61	0.65	0.56	13
18)	Allyl Chloride	0.43	0.70	0.71	0.72	0.69	0.65	19
19)	Isopropanol	2.4	2.5	2.9	3.1	3.2	2.8	12
20)	Methylene chloride	2.0	1.7	1.7	1.8	1.8	1.8	7.5
21)	Acetone	2.0	2.2	2.3	2.3	2.4	2.2	6.1
22)	1,2-Dichloroethene (trans)	1.7	2.2	2.4	2.5	2.8	2.3	18
23)	n-Pentane	2.4	2.6	2.6	2.8	3.3	2.7	12
24)	n-Hexane	3.1	3.7	3.8	3.9	4.7	3.8	15
25)	Methyl tert-butyl ether	3.8	4.7	4.4	4.5	5.5	4.6	13
26)	Tert-butyl alcohol	2.5	2.9	3.0	3.2	3.9	3.1	16
27)	1,1-Dichloroethane	2.2	2.8	2.9	3.0	3.3	2.8	15
28)	1,2-Dichloroethene (trans)	1.4	2.0	2.2	2.3	2.5	2.1	19
29)	Cyclohexane	2.1	2.6	2.5	2.6	3.1	2.6	14
30)	Chloroform	2.3	3.0	3.3	3.5	3.9	3.2	19
31)	Ethyl acetate	0.40	0.48	0.54	0.58	0.72	0.54	22
32)	Carbon tetrachloride	2.6	3.3	3.2	3.3	3.9	3.3	14
33)	Tetrahydrofuran	1.5	1.7	2.0	2.1	2.3	1.9	17
34)	1,1,1-Trichloroethane	2.4	3.0	2.9	3.1	3.7	3.0	16
35)	Methyl ethyl ketone	2.4	2.7	3.1	3.4	4.2	3.2	22
36)	n-Heptane	2.5	2.9	2.8	3.0	3.8	3.0	16
37)	Benzene	3.5	4.2	4.6	4.8	5.7	4.6	17
38)	1,2-Dichloroethane	1.5	1.9	2.1	2.2	2.7	2.1	21

***% RSD (Relative Standard Deviation) must be within 30%**

****An exception is made for 2 compounds that must be within 40%**

RRF - Relative Response Factor

INTEGRATED ANALYTICAL LABORATORIES, LLC

Initial Calibration Data Summary Report

Initial Calibration Curve: 5/29/2024 **Method ID:** 240529.M

Instrument: AA

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6554BFB]	05/29/2024 09:16
0.2 PPBV STD [AA6556STD05]	05/29/2024 12:40
2 PPBV STD [AA6557STD04]	05/29/2024 13:11
10 PPBV STD [AA6558STD03]	05/29/2024 13:46
20 PPBV STD [AA6559STD02]	05/29/2024 14:18
40 PPBV STD [AA6560STD01]	05/29/2024 14:55
10 PPBV ICVSS [AA6561ICVSS]	05/29/2024 17:16

	Parameter	RRF 0.2ppbv	RRF 2ppbv	RRF 10ppbv	RRF 20ppbv	RRF 40ppbv	Avg ppbv	% RSD
39)	1,4-Difluorobenzene	----------ISTD----------						
40)	Trichloroethene	0.38	0.47	0.47	0.47	0.47	0.45	8.6
41)	2,2,4-Trimethylpentane	1.5	2.1	1.8	1.8	1.7	1.8	12
42)	1,2-Dichloropropane	0.37	0.43	0.42	0.42	0.44	0.42	6.2
43)	Bromodichloromethane	0.62	0.75	0.75	0.75	0.75	0.72	7.8
44)	Methyl methacrylate	0.45	0.52	0.51	0.53	0.58	0.52	9.1
45)	1,4-Dioxane	0.20	0.24	0.24	0.24	0.25	0.24	8.2
46)	1,3-Dichloropropene (cis)	0.53	0.63	0.63	0.63	0.65	0.61	7.4
47)	Toluene	1.1	1.4	1.3	1.3	1.3	1.3	7.7
48)	Methyl isobutyl ketone	0.86	1.0	0.91	0.91	1.00	0.94	6.6
49)	Tetrachloroethene	0.44	0.53	0.50	0.48	0.48	0.49	7.2
50)	1,3-Dichloropropene (trans)	0.46	0.62	0.62	0.62	0.62	0.59	12
51)	1,1,2-Trichloroethane	0.38	0.47	0.44	0.45	0.48	0.44	9.1
52)	Dibromochloromethane	0.58	0.75	0.72	0.72	0.77	0.71	11
53)	1,2-Dibromoethane	0.52	0.67	0.64	0.64	0.70	0.63	11
54)	Methyl n-butyl ketone	0.74	0.87	0.83	0.85	1.1	0.88	15
55)	d-5 Chlorbenzene	----------ISTD----------						
56)	n-Nonane	0.98	1.2	1.1	1.1	1.5	1.2	17
57)	Chlorobenzene	0.88	1.1	1.0	1.0	1.2	1.0	11
58)	Ethylbenzene	1.7	2.0	1.8	1.9	2.4	2.0	15
59)	Xylenes (m&p)	1.3	1.6	1.4	1.4	1.7	1.5	13
60)	Xylenes (o)	1.3	1.6	1.4	1.5	1.9	1.6	15
61)	Styrene	0.77	1.1	1.0	1.0	1.3	1.0	19
62)	Bromoform	0.53	0.71	0.69	0.70	0.85	0.70	17
63)	Cumene	1.6	2.1	1.9	1.9	2.5	2.0	17
65)	n-Propyl benzene	2.2	2.9	2.5	2.5	3.5	2.7	19
66)	1,1,2,2-Tetrachloroethane	0.93	1.2	1.1	1.1	1.5	1.1	18
67)	4-Ethyltoluene	1.8	2.3	2.1	2.1	2.9	2.2	20
68)	2-Chlorotoluene	1.5	2.0	1.7	1.7	2.4	1.9	17
69)	1,3,5-Trimethylbenzene	1.4	1.9	1.7	1.7	2.3	1.8	19
70)	1,2,4-Trimethylbenzene	1.3	1.9	1.7	1.7	2.4	1.8	22
71)	1,3-Dichlorobenzene	1.0	1.1	0.99	1.0	1.4	1.1	17
72)	1,4-Dichlorobenzene	0.87	1.1	1.0	1.1	1.5	1.1	21
73)	Benzyl chloride	1.2	1.7	1.7	1.8	2.6	1.8	29
74)	1,2-Dichlorobenzene	0.83	1.1	1.00	1.0	1.4	1.1	19
75)	1,3-Hexachlorobutadiene	0.67	0.67	0.59	0.57	0.57	0.61	8.7
76)	1,2,4-Trichlorobenzene	0.91	0.84	0.79	0.77	0.82	0.82	6.6
77)	Naphthalene	2.5	2.2	2.1	2.2	2.6	2.3	10

***% RSD (Relative Standard Deviation) must be within 30%**

****An exception is made for 2 compounds that must be within 40%**

RRF - Relative Response Factor

Method Path : C:\msdchem\1\METHODS\
Method File : 240529.M
Title : TO-15 on the Agilent 7890A / 5975C
Last Update : Wed May 29 15:44:50 2024
Response Via : Initial Calibration

Calibration Files
0.2 =aa6556std05.D 2 =aa6557std04.D 10 =aa6558std03.D 20 =aa6559std02.D 40 =aa6560std01.D

		Compound	0.2	2	10	20	40	Avg	%RSD
1)	I	Bromochloromethane...	ISTD						
2)	T	Propene	1.030	1.106	1.030	1.072	1.009	1.050	3.69
3)	T	Dichlorodifluoro...	2.414	2.897	2.972	3.065	2.968	2.863	9.00
4)	T	1,2-Dichlorotetr...	3.249	4.044	4.000	4.202	4.570	4.013	12.02
5)	T	n-Butane	1.938	2.276	2.139	2.180	2.305	2.168	6.69
6)	T	Chloromethane	0.123	0.172	0.201	0.220	0.176	0.178	20.53
7)	T	Vinyl chloride	1.021	1.325	1.389	1.454	1.401	1.318	13.07
8)	T	1,3-Butadiene	1.065	1.225	1.242	1.293	1.283	1.222	7.55
9)	T	Bromomethane	0.754	1.123	1.102	1.172	0.999	1.030	16.20
10)	T	Chloroethane	0.540	0.761	0.793	0.829	0.823	0.749	16.00
11)	T	Vinyl bromide	0.768	1.310	1.368	1.405	1.395	1.249	21.75
12)	T	Trichlorofluorom...	2.694	3.337	3.368	3.515	3.570	3.297	10.64
13)	T	Ethanol	0.696	0.422	0.438	0.486	0.531	0.515	21.40
14)	T	1,1-Dichloroethene	1.794	2.565	2.691	2.783	2.851	2.537	16.91
15)	T	Carbon disulfide	3.162	4.388	4.469	4.581	4.532	4.226	14.18
16)	T	1,1,2-Trichloro-...	2.680	3.248	2.992	3.094	3.562	3.115	10.43
17)	T	Acrolein	0.471	0.512	0.577	0.611	0.652	0.564	13.01
18)	T	Allyl chloride	0.433	0.698	0.710	0.716	0.689	0.649	18.66
19)	T	Isopropanol	2.411	2.511	2.890	3.078	3.217	2.821	12.42
20)	T	Methylene chloride	2.040	1.727	1.702	1.761	1.802	1.807	7.52
21)	T	Acetone	2.022	2.235	2.262	2.301	2.399	2.244	6.19
22)	T	1,2-Dichloroethe...	1.672	2.189	2.352	2.464	2.793	2.294	17.97
23)	T	n-Pentane	2.440	2.625	2.578	2.774	3.287	2.741	11.95
24)	T	n-Hexane	3.128	3.671	3.784	3.920	4.700	3.840	14.76
25)	T	Methyl tert-buty...	3.818	4.725	4.394	4.508	5.454	4.580	12.94
26)	T	Tert-butyl alcohol	2.523	2.936	3.031	3.247	3.912	3.130	16.30
27)	T	1,1-Dichloroethane	2.188	2.807	2.875	3.025	3.341	2.847	14.82
28)	T	1,2-Dichloroethe...	1.442	1.970	2.157	2.263	2.500	2.066	19.28
29)	t	Cyclohexane	2.080	2.565	2.489	2.572	3.112	2.564	14.34
30)	T	Chloroform	2.298	3.010	3.288	3.456	3.914	3.193	18.74
31)	T	Ethyl acetate	0.398	0.483	0.538	0.584	0.716	0.544	21.81
32)	T	Carbon tetrachlo...	2.590	3.272	3.241	3.285	3.904	3.258	14.28
33)	T	Tetrahydrofuran	1.472	1.746	1.971	2.067	2.343	1.920	17.16
34)	T	1,1,1-Trichloroe...	2.372	2.970	2.919	3.055	3.721	3.007	15.98
35)	T	Methyl ethyl ketone	2.419	2.733	3.147	3.381	4.221	3.180	21.69
36)	T	n-Heptane	2.487	2.911	2.840	2.989	3.806	3.007	16.17
37)	T	Benzene	3.520	4.218	4.574	4.782	5.671	4.553	17.30
38)	T	1,2-Dichloroethane	1.484	1.923	2.120	2.232	2.656	2.083	20.60
39)	I	1,4-Difluorobenzen...	ISTD						
40)	T	Trichloroethene	0.382	0.472	0.469	0.471	0.466	0.452	8.65
41)	T	2,2,4-Trimethylp...	1.493	2.052	1.847	1.809	1.702	1.781	11.52
42)	T	1,2-Dichloropropane	0.371	0.429	0.419	0.417	0.439	0.415	6.23
43)	T	Bromodichloromet...	0.621	0.749	0.748	0.749	0.747	0.723	7.87
44)	T	Methyl methacrylate	0.447	0.523	0.513	0.528	0.580	0.518	9.15
45)	T	1,4-Dioxane	0.203	0.241	0.239	0.244	0.253	0.236	8.24
46)	T	cis-1,3-Dichloro...	0.533	0.630	0.627	0.632	0.645	0.613	7.42
47)	T	Toluene	1.116	1.383	1.296	1.281	1.326	1.280	7.77
48)	T	Methyl isobutyl ...	0.860	1.004	0.910	0.910	0.997	0.936	6.64
49)	T	Tetrachloroethene	0.436	0.533	0.495	0.482	0.479	0.485	7.22
50)	T	trans-1,3-Dichlo...	0.464	0.619	0.618	0.623	0.623	0.589	11.88
51)	T	1,1,2-Trichloroe...	0.376	0.473	0.440	0.445	0.477	0.442	9.12
52)	T	Dibromochloromet...	0.576	0.747	0.720	0.718	0.765	0.705	10.62
53)	T	1,2-Dibromoethane	0.517	0.669	0.644	0.642	0.698	0.634	10.89
54)	T	Methyl n-butyl k...	0.741	0.866	0.832	0.846	1.098	0.877	15.13
55)	I	d-5 Chlorobenzene ...	ISTD						
56)	T	n-Nonane	0.979	1.227	1.073	1.072	1.492	1.169	17.22
57)	T	Chlorobenzene	0.882	1.089	1.007	1.022	1.178	1.036	10.55
58)	T	Ethylbenzene	1.692	2.041	1.833	1.853	2.438	1.971	14.65
59)	T	Xylenes (m&p)	1.270	1.589	1.403	1.402	1.745	1.482	12.53
60)	T	Xylene (o)	1.295	1.644	1.448	1.486	1.929	1.560	15.41

Method Path : C:\msdchem\1\METHODS\
Method File : 240529.M

61)	T	Styrene	0.770	1.063	1.013	1.024	1.317	1.037	18.75
62)	T	Bromoform	0.527	0.714	0.690	0.698	0.851	0.696	16.54
63)	T	Cumene	1.601	2.128	1.865	1.866	2.491	1.990	16.90
64)	S	Bromofluorobenze...	0.866	0.867	0.859	0.909	1.229	0.946	16.85
65)	T	n-Propyl benzene	2.237	2.873	2.496	2.528	3.549	2.737	18.55
66)	T	1,1,2,2-Tetrachl...	0.927	1.197	1.066	1.082	1.471	1.149	17.77
67)	T	4-Ethyltoluene	1.768	2.289	2.062	2.098	2.944	2.232	19.68
68)	T	2-Chlorotoluene	1.531	1.962	1.703	1.725	2.362	1.857	17.32
69)	T	1,3,5-Trimethylb...	1.390	1.943	1.685	1.724	2.335	1.815	19.33
70)	T	1,2,4-Trimethylb...	1.333	1.887	1.703	1.748	2.433	1.821	21.91
71)	T	1,3-Dichlorobenzene	1.007	1.070	0.993	1.024	1.433	1.105	16.78
72)	T	1,4-Dichlorobenzene	0.869	1.096	1.037	1.075	1.511	1.117	21.24
73)	T	Benzyl chloride	1.218	1.651	1.686	1.796	2.633	1.797	28.75
74)	T	1,2-Dichlorobenzene	0.828	1.076	0.999	1.017	1.395	1.063	19.48
75)	T	1,3-Hexachlorobu...	0.674	0.665	0.586	0.569	0.565	0.612	8.70
76)	T	1,2,4-Trichlorob...	0.908	0.836	0.787	0.767	0.822	0.824	6.61
77)	T	Naphthalene	2.540	2.210	2.118	2.150	2.626	2.329	10.15

(#) = Out of Range

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6556std05.D
Acq On : 29 May 2024 12:40 pm
Operator : jjw
Sample : 0.2 ppbv std
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 29 15:43:04 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:42:31 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.409	130	276448	10.00	ppbV		0.000
39) 1,4-Difluorobenzene (IS)	5.477	114	1073893	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.351	117	998317	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.750	95	864418	8.96	ppbV		0.000
Target Compounds							Qvalue
2) Propene	1.454	41	6210	0.21	ppbV		97
3) Dichlorodifluoromethane	1.496	85	14150	0.17	ppbV	#	88
4) 1,2-Dichlorotetrafluor...	1.626	85	17606	0.15	ppbV		96
5) n-Butane	1.709	43	11682	0.19	ppbV		92
6) Chloromethane	1.774	52	761	0.14	ppbV		42
7) Vinyl chloride	1.757	62	6097	0.16	ppbV	#	49
8) 1,3-Butadiene	1.781	39	6299	0.18	ppbV	#	80
9) Bromomethane	2.072	94	4168	0.14	ppbV		94
10) Chloroethane	2.181	64	3166	0.14	ppbV	#	44
11) Vinyl bromide	2.294	106	4287	0.11	ppbV		89
12) Trichlorofluoromethane	2.303	101	16384	0.17	ppbV		97
13) Ethanol	2.683	45	4002	0.31	ppbV		78
14) 1,1-Dichloroethene	2.728	61	10315	0.14	ppbV		95
15) Carbon disulfide	2.747	76	18707	0.15	ppbV	#	89
16) 1,1,2-Trichloro-1,2,2-...	2.776	101	16151	0.18	ppbV		98
17) Acrolein	2.988	56	2603	0.16	ppbV		94
18) Allyl chloride	3.120	76	2587	0.13	ppbV		100
19) Isopropanol	3.114	45	11866	0.15	ppbV	#	88
20) Methylene chloride	3.204	49	12182	0.25	ppbV		95
21) Acetone	3.223	43	12074	0.19	ppbV	#	86
22) 1,2-Dichloroethene (tr...	3.335	61	10260	0.15	ppbV		97
23) n-Pentane	3.422	43	14571	0.19	ppbV		94
24) n-Hexane	3.416	57	19194	0.17	ppbV		92
25) Methyl tert-butyl ether	3.425	73	23645	0.18	ppbV		96
26) Tert-butyl alcohol	3.480	59	16042	0.18	ppbV		100
27) 1,1-Dichloroethane	3.818	63	12942	0.16	ppbV		92
28) 1,2-Dichloroethene (cis)	4.249	61	8688	0.14	ppbV		97
29) Cyclohexane	4.432	56	12879	0.17	ppbV		100
30) Chloroform	4.474	83	13724	0.15	ppbV		99
31) Ethyl acetate	4.570	45	2379	0.15	ppbV		97
32) Carbon tetrachloride	4.596	117	15894	0.17	ppbV		99
33) Tetrahydrofuran	4.602	42	9035	0.16	ppbV		95
34) 1,1,1-Trichloroethane	4.641	97	14296	0.16	ppbV		98
35) Methyl ethyl ketone	4.708	43	14712	0.16	ppbV		94
36) n-Heptane	4.937	43	15263	0.18	ppbV		91
37) Benzene	4.956	78	21020	0.16	ppbV		98
38) 1,2-Dichloroethane	5.117	62	8943	0.14	ppbV		96
40) Trichloroethene	5.451	130	8210	0.16	ppbV		96
41) 2,2,4-Trimethylpentane	4.859	57	34944	0.18	ppbV		99
42) 1,2-Dichloropropane	5.914	63	8856	0.19	ppbV		97
43) Bromodichloromethane	5.972	83	15337	0.19	ppbV		97
44) Methyl methacrylate	6.117	41	10567	0.18	ppbV		97
45) 1,4-Dioxane	6.152	88	5094	0.19	ppbV		95
46) cis-1,3-Dichloropropene	6.567	75	12702	0.19	ppbV		99
47) Toluene	6.805	91	25897	0.18	ppbV		95
48) Methyl isobutyl ketone	7.178	43	20143	0.20	ppbV		98
49) Tetrachloroethene	7.187	166	10480	0.20	ppbV		97
50) trans-1,3-Dichloropropene	7.207	75	11069	0.17	ppbV	#	82
51) 1,1,2-Trichloroethane	7.374	97	8729	0.18	ppbV	#	77

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6556std05.D
Acq On : 29 May 2024 12:40 pm
Operator : jjw
Sample : 0.2 ppbv std
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

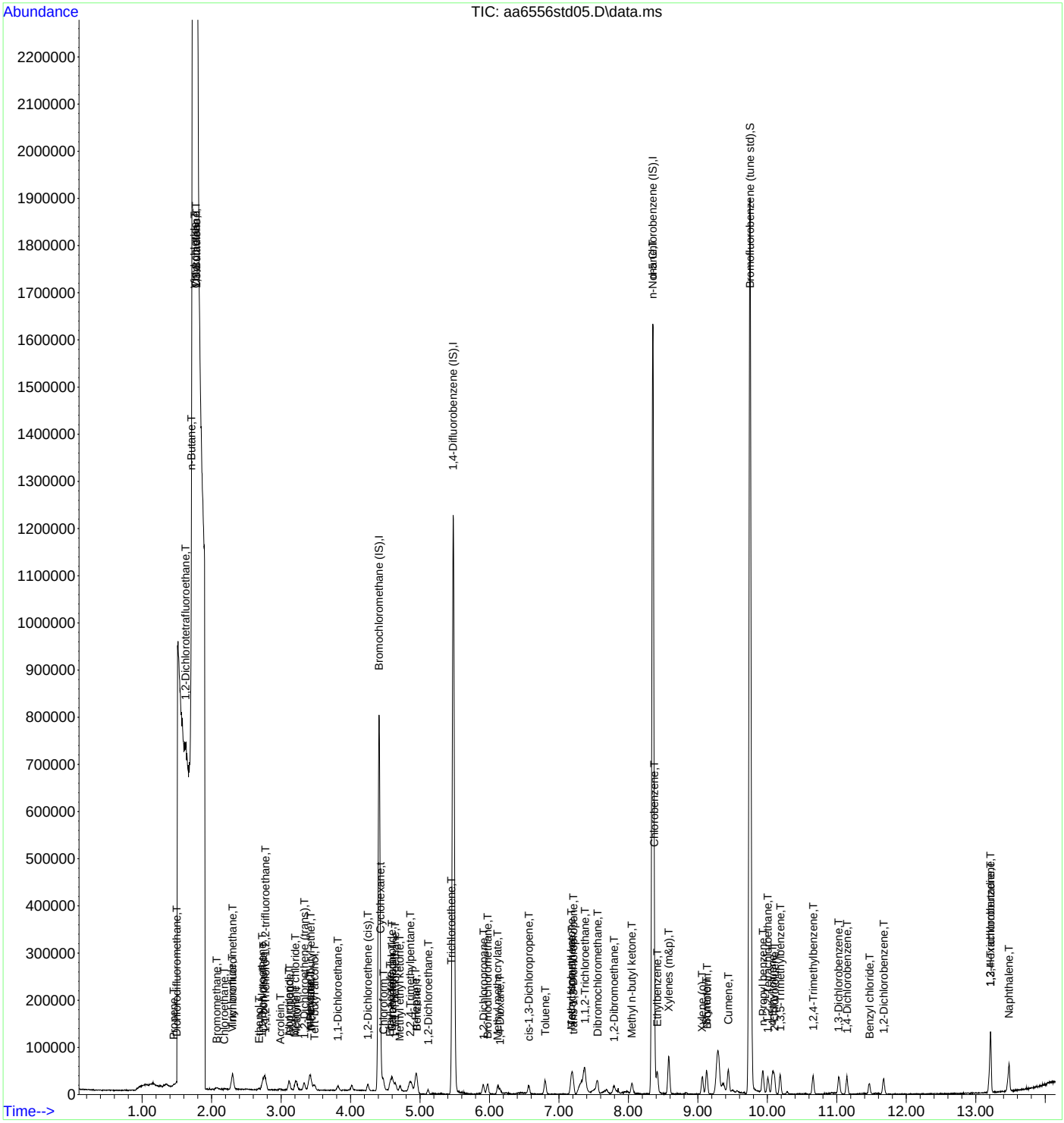
Quant Time: May 29 15:43:04 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:42:31 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
52) Dibromochloromethane	7.557	129	13847	0.17	ppbV		99
53) 1,2-Dibromoethane	7.795	107	11999	0.17	ppbV		98
54) Methyl n-butyl ketone	8.049	43	17996	0.18	ppbV		96
56) n-Nonane	8.348	43	21708	0.18	ppbV		94
57) Chlorobenzene	8.374	112	19540	0.18	ppbV	#	35
58) Ethylbenzene	8.416	91	37490	0.18	ppbV		98
59) Xylenes (m&p)	8.580	91	56561	0.37	ppbV		100
60) Xylene (o)	9.062	91	28443	0.18	ppbV		98
61) Styrene	9.123	104	17364	0.16	ppbV		100
62) Bromoform	9.133	173	11886	0.16	ppbV		99
63) Cumene	9.438	105	34197	0.16	ppbV		97
65) n-Propyl benzene	9.936	91	48235	0.17	ppbV		94
66) 1,1,2,2-Tetrachloroethane	10.007	83	21094	0.18	ppbV		98
67) 4-Ethyltoluene	10.075	105	38115	0.16	ppbV		100
68) 2-Chlorotoluene	10.104	91	33319	0.17	ppbV		97
69) 1,3,5-Trimethylbenzene	10.187	105	30244	0.16	ppbV		99
70) 1,2,4-Trimethylbenzene	10.660	105	28735	0.15	ppbV		98
71) 1,3-Dichlorobenzene	11.026	146	22317	0.20	ppbV		99
72) 1,4-Dichlorobenzene	11.149	146	18557	0.16	ppbV		99
73) Benzyl chloride	11.473	91	24328	0.13	ppbV		96
74) 1,2-Dichlorobenzene	11.676	146	17696	0.16	ppbV		97
75) 1,3-Hexachlorobutadiene	13.213	225	14934	0.25	ppbV		96
76) 1,2,4-Trichlorobenzene	13.213	180	19953	0.25	ppbV		98
77) Naphthalene	13.480	128	50709	0.22	ppbV		97

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

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6556std05.D
Acq On : 29 May 2024 12:40 pm
Operator : jjw
Sample : 0.2 ppbv std
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 29 15:43:04 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:42:31 2024
Response via : Initial Calibration



Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6557std04.D
Acq On : 29 May 2024 1:11 pm
Operator : jjw
Sample : 2.0 ppbv std
Misc : EB0103704
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 29 16:05:04 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.406	130	243744	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.477	114	931187	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.354	117	883473	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.750	95	765844	9.16	ppbV	0.000
Target Compounds						Qvalue
2) Propene	1.470	41	58751	2.30	ppbV	98
3) Dichlorodifluoromethane	1.496	85	149684	2.14	ppbV	100
4) 1,2-Dichlorotetrafluor...	1.626	85	193188	1.98	ppbV	98
5) n-Butane	1.708	43	120953	2.29	ppbV	97
6) Chloromethane	1.777	52	9410	2.16	ppbV	89
7) Vinyl chloride	1.767	62	69778	2.17	ppbV	98
8) 1,3-Butadiene	1.774	39	63876	2.15	ppbV	97
9) Bromomethane	2.062	94	54769	2.18	ppbV	99
10) Chloroethane	2.184	64	39327	2.15	ppbV	99
11) Vinyl bromide	2.281	106	64521	2.12	ppbV	98
12) Trichlorofluoromethane	2.300	101	178965	2.23	ppbV	99
13) Ethanol	2.670	45	21400	1.71	ppbV	99
14) 1,1-Dichloroethene	2.724	61	130045	2.10	ppbV	100
15) Carbon disulfide	2.747	76	228907	2.22	ppbV	98
16) 1,1,2-Trichloro-1,2,2-...	2.773	101	172612	2.27	ppbV	99
17) Acrolein	2.978	56	24941	1.81	ppbV	93
18) Allyl chloride	3.113	76	36750	2.32	ppbV	100
19) Isopropanol	3.120	45	108944	1.58	ppbV	97
20) Methylene chloride	3.204	49	90902	2.06	ppbV	97
21) Acetone	3.220	43	117683	2.15	ppbV	96
22) 1,2-Dichloroethene (tr...	3.329	61	118457	2.12	ppbV	99
23) n-Pentane	3.413	43	144352	2.16	ppbV	96
24) n-Hexane	3.416	57	198634	2.12	ppbV	96
25) Methyl tert-butyl ether	3.419	73	257993	2.31	ppbV	92
26) Tert-butyl alcohol	3.477	59	164606	2.16	ppbV	100
27) 1,1-Dichloroethane	3.821	63	136846	1.97	ppbV	100
28) 1,2-Dichloroethene (cis)	4.248	61	104674	2.08	ppbV	100
29) Cyclohexane	4.425	56	140036	2.24	ppbV	100
30) Chloroform	4.470	83	158461	2.04	ppbV	99
31) Ethyl acetate	4.567	45	25417	1.92	ppbV	99
32) Carbon tetrachloride	4.593	117	177030	2.23	ppbV	99
33) Tetrahydrofuran	4.599	42	94463	2.02	ppbV	98
34) 1,1,1-Trichloroethane	4.641	97	157815	2.15	ppbV	98
35) Methyl ethyl ketone	4.712	43	146553	1.89	ppbV	99
36) n-Heptane	4.937	43	157513	2.15	ppbV	98
37) Benzene	4.953	78	222063	2.00	ppbV	99
38) 1,2-Dichloroethane	5.113	62	102187	2.01	ppbV	99
40) Trichloroethene	5.454	130	87869	2.09	ppbV	99
41) 2,2,4-Trimethylpentane	4.863	57	427145	2.58	ppbV	99
42) 1,2-Dichloropropane	5.911	63	88685	2.29	ppbV	99
43) Bromodichloromethane	5.972	83	160200	2.38	ppbV	98
44) Methyl methacrylate	6.117	41	107105	2.22	ppbV	97
45) 1,4-Dioxane	6.149	88	52568	2.39	ppbV	98
46) cis-1,3-Dichloropropene	6.564	75	130172	2.28	ppbV	99
47) Toluene	6.801	91	277919	2.33	ppbV	100
48) Methyl isobutyl ketone	7.168	43	203627	2.34	ppbV	98
49) Tetrachloroethene	7.191	166	111135	2.46	ppbV	100
50) trans-1,3-Dichloropropene	7.213	75	127958	2.33	ppbV	98
51) 1,1,2-Trichloroethane	7.374	97	95114	2.31	ppbV	100

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6557std04.D
Acq On : 29 May 2024 1:11 pm
Operator : jjw
Sample : 2.0 ppbv std
Misc : EB0103704
ALS Vial : 4 Sample Multiplier: 1

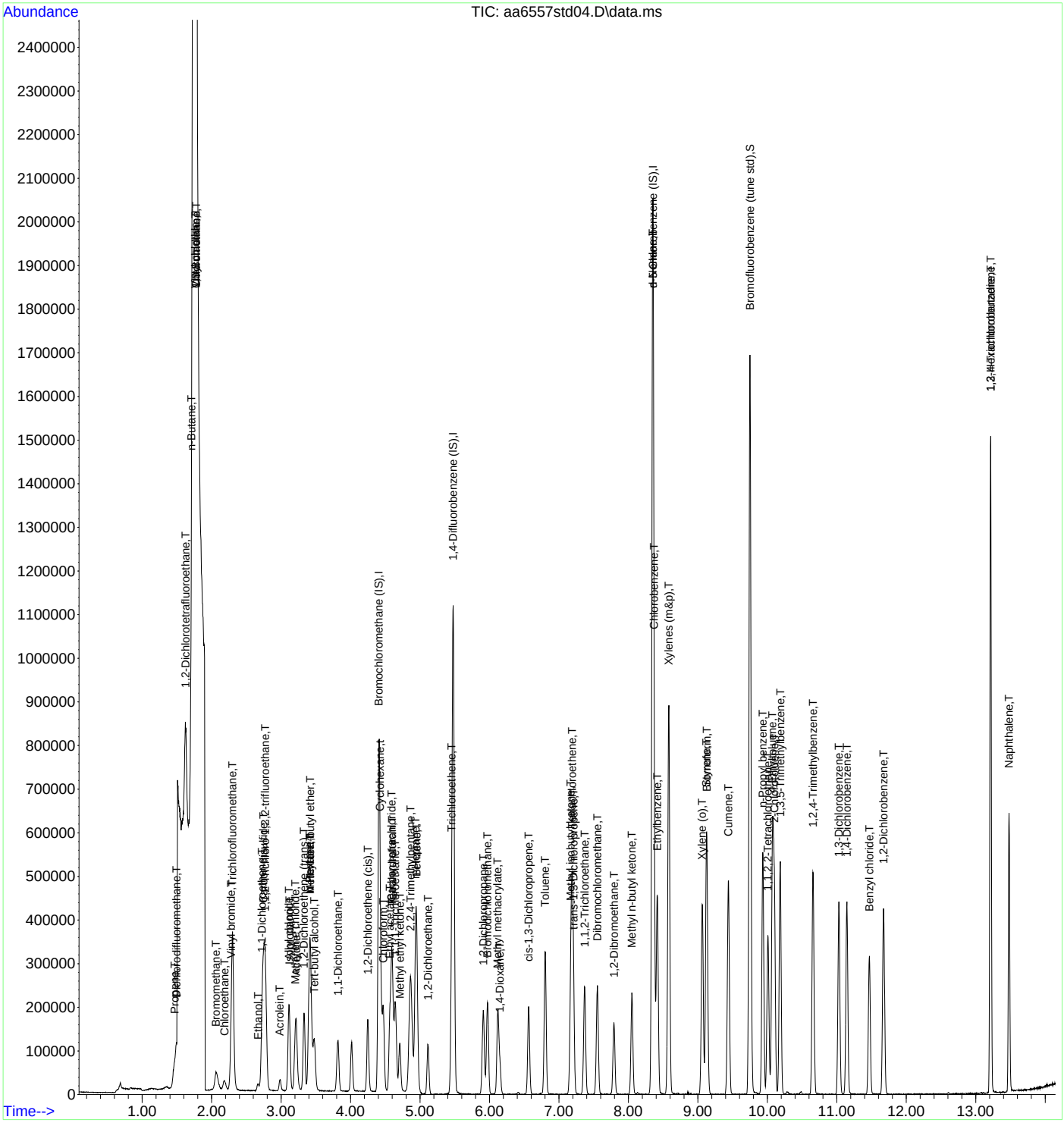
Quant Time: May 29 16:05:04 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.554	129	155622	2.37	ppbV	99
53) 1,2-Dibromoethane	7.792	107	134449	2.28	ppbV	98
54) Methyl n-butyl ketone	8.049	43	182152	2.23	ppbV	99
56) n-Nonane	8.348	43	240746	2.33	ppbV	100
57) Chlorobenzene	8.371	112	213631	2.34	ppbV	96
58) Ethylbenzene	8.416	91	400238	2.30	ppbV	100
59) Xylenes (m&p)	8.580	91	626076	4.78	ppbV	100
60) Xylene (o)	9.062	91	319546	2.32	ppbV	99
61) Styrene	9.123	104	212185	2.32	ppbV	99
62) Bromoform	9.129	173	142572	2.32	ppbV	99
63) Cumene	9.441	105	402361	2.29	ppbV	100
65) n-Propyl benzene	9.933	91	548551	2.27	ppbV	99
66) 1,1,2,2-Tetrachloroethane	10.007	83	241161	2.38	ppbV	98
67) 4-Ethyltoluene	10.071	105	436721	2.21	ppbV	99
68) 2-Chlorotoluene	10.100	91	377903	2.30	ppbV	99
69) 1,3,5-Trimethylbenzene	10.187	105	374308	2.33	ppbV	99
70) 1,2,4-Trimethylbenzene	10.657	105	360088	2.24	ppbV	100
71) 1,3-Dichlorobenzene	11.030	146	209789	2.15	ppbV	98
72) 1,4-Dichlorobenzene	11.145	146	207189	2.10	ppbV	100
73) Benzyl chloride	11.470	91	291655	1.84	ppbV	99
74) 1,2-Dichlorobenzene	11.673	146	203374	2.17	ppbV	98
75) 1,3-Hexachlorobutadiene	13.216	225	130377	2.41	ppbV	99
76) 1,2,4-Trichlorobenzene	13.216	180	162583	2.23	ppbV	100
77) Naphthalene	13.480	128	390557	1.90	ppbV	100

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

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6557std04.D
Acq On : 29 May 2024 1:11 pm
Operator : jjw
Sample : 2.0 ppbv std
Misc : EB0103704
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 29 16:05:04 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration



Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6558std03.D
Acq On : 29 May 2024 1:46 pm
Operator : jjw
Sample : 10 ppbv std
Misc : EB0103704
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 29 16:05:30 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.416	130	240829	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.483	114	1010790	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.351	117	932743	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.753	95	800854	9.08	ppbV	0.000
Target Compounds						Qvalue
2) Propene	1.473	41	274657	10.87	ppbV	97
3) Dichlorodifluoromethane	1.509	85	756375	10.97	ppbV	100
4) 1,2-Dichlorotetrafluor...	1.629	85	938641	9.71	ppbV	99
5) n-Butane	1.709	43	561545	10.76	ppbV	100
6) Chloromethane	1.774	52	54205	12.61	ppbV	100
7) Vinyl chloride	1.770	62	362582	11.42	ppbV	100
8) 1,3-Butadiene	1.777	39	320142	10.88	ppbV	100
9) Bromomethane	2.072	94	281183	11.33	ppbV	98
10) Chloroethane	2.184	64	202415	11.22	ppbV	100
11) Vinyl bromide	2.287	106	333039	11.07	ppbV	100
12) Trichlorofluoromethane	2.303	101	892115	11.24	ppbV	100
13) Ethanol	2.670	45	109612	8.85	ppbV	100
14) 1,1-Dichloroethene	2.728	61	674109	11.03	ppbV	100
15) Carbon disulfide	2.750	76	1151657	11.31	ppbV	100
16) 1,1,2-Trichloro-1,2,2-...	2.769	101	785526	10.47	ppbV	100
17) Acrolein	2.991	56	138932	10.22	ppbV	100
18) Allyl chloride	3.114	76	184693	11.81	ppbV	100
19) Isopropanol	3.117	45	619477	9.12	ppbV	100
20) Methylene chloride	3.204	49	442782	10.18	ppbV	100
21) Acetone	3.223	43	588242	10.89	ppbV	100
22) 1,2-Dichloroethene (tr...	3.332	61	628721	11.38	ppbV	100
23) n-Pentane	3.419	43	690198	10.46	ppbV	99
24) n-Hexane	3.416	57	1002351	10.84	ppbV	100
25) Methyl tert-butyl ether	3.422	73	1185133	10.74	ppbV	100
26) Tert-butyl alcohol	3.477	59	838725	11.13	ppbV	100
27) 1,1-Dichloroethane	3.821	63	740756	10.80	ppbV	100
28) 1,2-Dichloroethene (cis)	4.249	61	566091	11.38	ppbV	100
29) Cyclohexane	4.432	56	671377	10.87	ppbV	100
30) Chloroform	4.474	83	855198	11.12	ppbV	100
31) Ethyl acetate	4.564	45	139805	10.68	ppbV	100
32) Carbon tetrachloride	4.596	117	858451	10.94	ppbV	100
33) Tetrahydrofuran	4.599	42	522056	11.29	ppbV	100
34) 1,1,1-Trichloroethane	4.647	97	766176	10.58	ppbV	100
35) Methyl ethyl ketone	4.708	43	833728	10.89	ppbV	100
36) n-Heptane	4.943	43	759296	10.49	ppbV	100
37) Benzene	4.956	78	1189688	10.85	ppbV	100
38) 1,2-Dichloroethane	5.113	62	556426	11.09	ppbV	100
40) Trichloroethene	5.457	130	474332	10.38	ppbV	100
41) 2,2,4-Trimethylpentane	4.866	57	2034499	11.30	ppbV	100
42) 1,2-Dichloropropane	5.914	63	465873	11.11	ppbV	100
43) Bromodichloromethane	5.972	83	869300	11.90	ppbV	100
44) Methyl methacrylate	6.120	41	570433	10.89	ppbV	100
45) 1,4-Dioxane	6.146	88	282524	11.84	ppbV	100
46) cis-1,3-Dichloropropene	6.567	75	703032	11.34	ppbV	100
47) Toluene	6.801	91	1414424	10.93	ppbV	100
48) Methyl isobutyl ketone	7.171	43	1002006	10.59	ppbV	100
49) Tetrachloroethene	7.191	166	560367	11.43	ppbV	100
50) trans-1,3-Dichloropropene	7.210	75	693708	11.64	ppbV	100
51) 1,1,2-Trichloroethane	7.371	97	480731	10.75	ppbV	100

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6558std03.D
Acq On : 29 May 2024 1:46 pm
Operator : jjw
Sample : 10 ppbv std
Misc : EB0103704
ALS Vial : 5 Sample Multiplier: 1

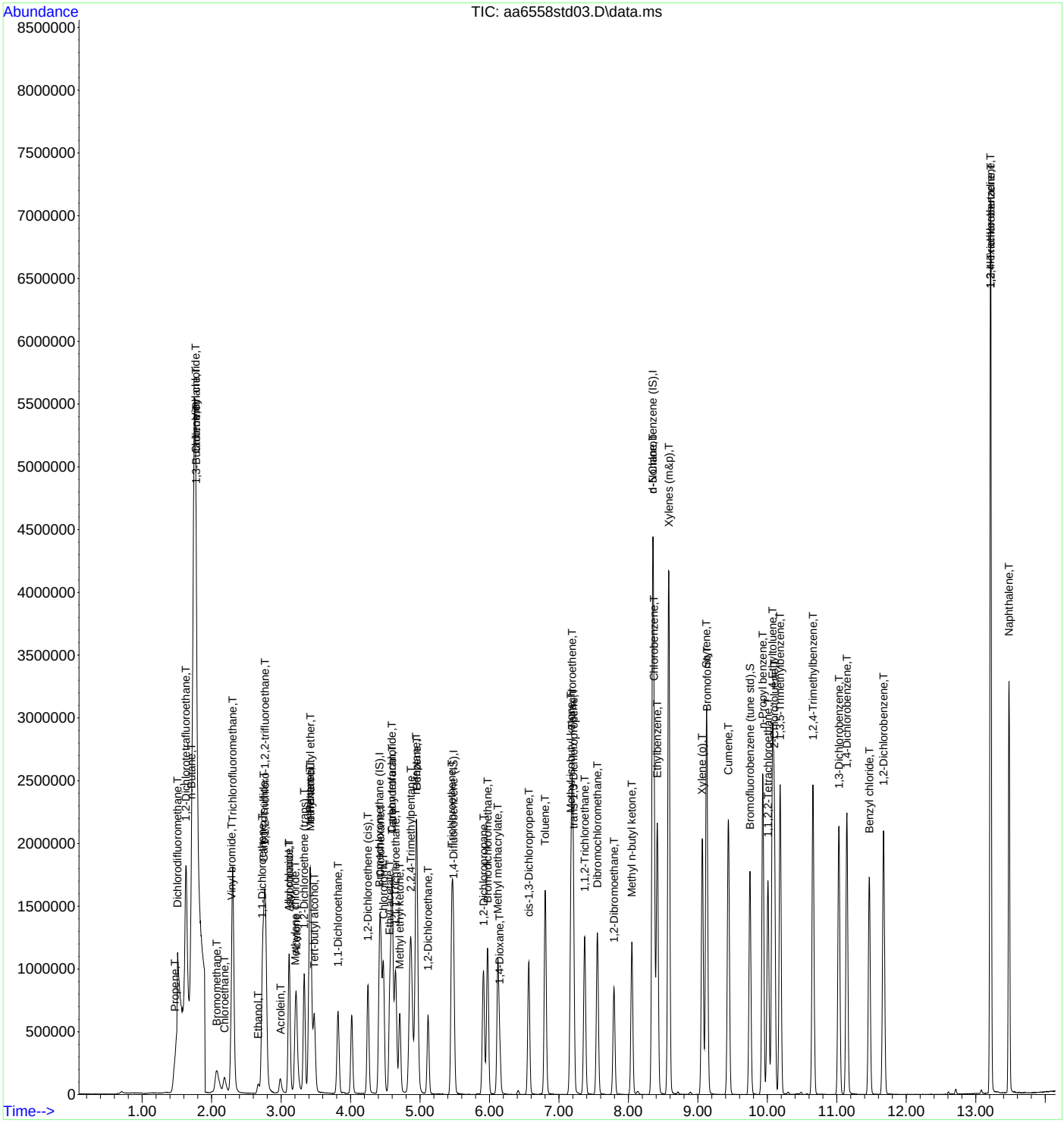
Quant Time: May 29 16:05:30 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.554	129	815306	11.44	ppbV	100
53) 1,2-Dibromoethane	7.792	107	703423	10.98	ppbV	100
54) Methyl n-butyl ketone	8.049	43	950190	10.72	ppbV	100
56) n-Nonane	8.351	43	1100770	10.10	ppbV	100
57) Chlorobenzene	8.371	112	1042681	10.79	ppbV	100
58) Ethylbenzene	8.416	91	1897518	10.32	ppbV	100
59) Xylenes (m&p)	8.583	91	2917626	21.11	ppbV	100
60) Xylene (o)	9.062	91	1486045	10.21	ppbV	100
61) Styrene	9.123	104	1068093	11.04	ppbV	100
62) Bromoform	9.133	173	727324	11.20	ppbV	100
63) Cumene	9.438	105	1861677	10.03	ppbV	100
65) n-Propyl benzene	9.933	91	2515170	9.85	ppbV	100
66) 1,1,2,2-Tetrachloroethane	10.010	83	1133749	10.58	ppbV	100
67) 4-Ethyltoluene	10.075	105	2077120	9.98	ppbV	100
68) 2-Chlorotoluene	10.100	91	1731846	10.00	ppbV	100
69) 1,3,5-Trimethylbenzene	10.184	105	1713250	10.12	ppbV	100
70) 1,2,4-Trimethylbenzene	10.657	105	1715919	10.10	ppbV	100
71) 1,3-Dichlorobenzene	11.033	146	1027727	9.97	ppbV	100
72) 1,4-Dichlorobenzene	11.145	146	1035040	9.93	ppbV	100
73) Benzyl chloride	11.470	91	1572204	9.38	ppbV	100
74) 1,2-Dichlorobenzene	11.673	146	997427	10.06	ppbV	100
75) 1,3-Hexachlorobutadiene	13.213	225	606322	10.63	ppbV	100
76) 1,2,4-Trichlorobenzene	13.216	180	807618	10.51	ppbV	100
77) Naphthalene	13.480	128	1975571	9.09	ppbV	100

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

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6558std03.D
Acq On : 29 May 2024 1:46 pm
Operator : jjw
Sample : 10 ppbv std
Misc : EB0103704
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 29 16:05:30 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration



Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6559std02.D
Acq On : 29 May 2024 2:18 pm
Operator : jjw
Sample : 20 ppbv std
Misc : EB0103704
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 29 16:06:18 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.425	130	232784	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.480	114	1025078	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.354	117	911734	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.750	95	829134	9.61	ppbV	0.000
Target Compounds						Qvalue
2) Propene	1.480	41	544013	22.27	ppbV	97
3) Dichlorodifluoromethane	1.516	85	1512429	22.69	ppbV	100
4) 1,2-Dichlorotetrafluor...	1.636	85	1917229	20.52	ppbV	99
5) n-Butane	1.715	43	1106377	21.93	ppbV	97
6) Chloromethane	1.784	52	114751	27.62	ppbV	97
7) Vinyl chloride	1.777	62	731193	23.83	ppbV	100
8) 1,3-Butadiene	1.781	39	644220	22.65	ppbV	98
9) Bromomethane	2.078	94	545831	22.76	ppbV	99
10) Chloroethane	2.191	64	409088	23.46	ppbV	98
11) Vinyl bromide	2.287	106	660638	22.72	ppbV	99
12) Trichlorofluoromethane	2.310	101	1799897	23.45	ppbV	99
13) Ethanol	2.673	45	235242	19.64	ppbV	99
14) 1,1-Dichloroethene	2.731	61	1347624	22.82	ppbV	99
15) Carbon disulfide	2.756	76	2282103	23.20	ppbV	100
16) 1,1,2-Trichloro-1,2,2-...	2.776	101	1569935	21.65	ppbV	100
17) Acrolein	2.998	56	284325	21.64	ppbV	99
18) Allyl chloride	3.120	76	359809	23.81	ppbV	100
19) Isopropanol	3.123	45	1275369	19.42	ppbV	99
20) Methylene chloride	3.210	49	885621	21.06	ppbV	100
21) Acetone	3.229	43	1157082	22.15	ppbV	100
22) 1,2-Dichloroethene (tr...	3.335	61	1273151	23.84	ppbV	99
23) n-Pentane	3.419	43	1394842	21.86	ppbV	98
24) n-Hexane	3.416	57	2025556	22.66	ppbV	99
25) Methyl tert-butyl ether	3.422	73	2350847	22.05	ppbV	98
26) Tert-butyl alcohol	3.477	59	1738663	23.86	ppbV	100
27) 1,1-Dichloroethane	3.824	63	1506683	22.74	ppbV	100
28) 1,2-Dichloroethene (cis)	4.255	61	1148289	23.87	ppbV	100
29) Cyclohexane	4.435	56	1340930	22.47	ppbV	99
30) Chloroform	4.477	83	1737844	23.38	ppbV	99
31) Ethyl acetate	4.567	45	293619	23.20	ppbV	98
32) Carbon tetrachloride	4.596	117	1697695	22.38	ppbV	99
33) Tetrahydrofuran	4.599	42	1068142	23.90	ppbV	99
34) 1,1,1-Trichloroethane	4.647	97	1550092	22.14	ppbV	100
35) Methyl ethyl ketone	4.708	43	1731666	23.39	ppbV	100
36) n-Heptane	4.943	43	1544562	22.07	ppbV	100
37) Benzene	4.956	78	2404288	22.69	ppbV	99
38) 1,2-Dichloroethane	5.120	62	1132565	23.36	ppbV	99
40) Trichloroethene	5.461	130	964688	20.81	ppbV	99
41) 2,2,4-Trimethylpentane	4.866	57	4042916	22.15	ppbV	100
42) 1,2-Dichloropropane	5.914	63	948199	22.29	ppbV	100
43) Bromodichloromethane	5.975	83	1765068	23.83	ppbV	97
44) Methyl methacrylate	6.123	41	1190229	22.40	ppbV	100
45) 1,4-Dioxane	6.145	88	584840	24.17	ppbV	99
46) cis-1,3-Dichloropropene	6.567	75	1439187	22.89	ppbV	100
47) Toluene	6.805	91	2835950	21.61	ppbV	100
48) Methyl isobutyl ketone	7.174	43	2033609	21.19	ppbV	100
49) Tetrachloroethene	7.190	166	1107096	22.27	ppbV	100
50) trans-1,3-Dichloropropene	7.210	75	1416746	23.45	ppbV	100
51) 1,1,2-Trichloroethane	7.374	97	984279	21.71	ppbV	99

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6559std02.D
Acq On : 29 May 2024 2:18 pm
Operator : jjw
Sample : 20 ppbv std
Misc : EB0103704
ALS Vial : 6 Sample Multiplier: 1

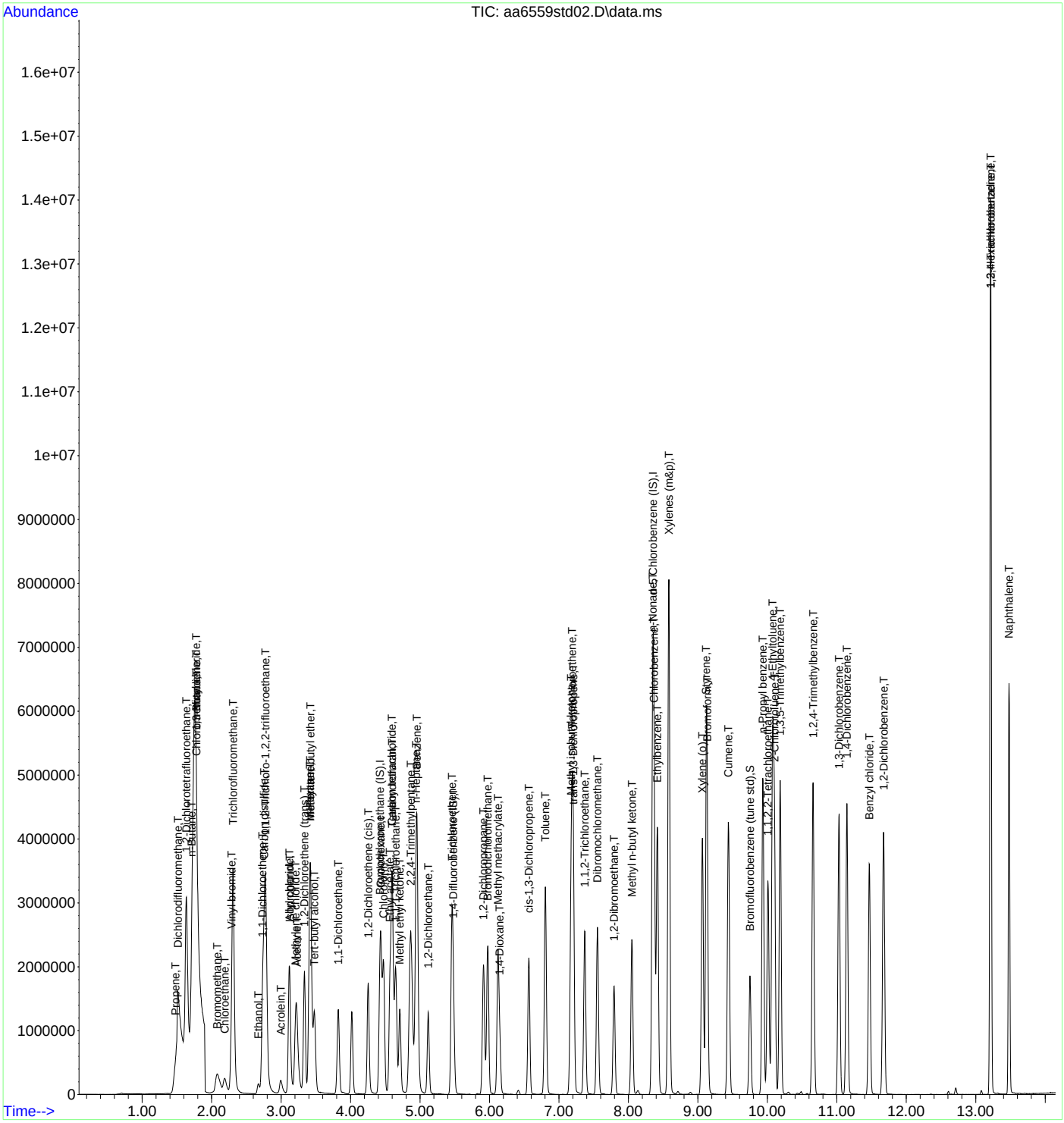
Quant Time: May 29 16:06:18 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.554	129	1649262	22.82	ppbV	100
53) 1,2-Dibromoethane	7.795	107	1420547	21.86	ppbV	100
54) Methyl n-butyl ketone	8.052	43	1958802	21.80	ppbV	100
56) n-Nonane	8.348	43	2150653	20.18	ppbV	99
57) Chlorobenzene	8.370	112	2068748	21.91	ppbV	100
58) Ethylbenzene	8.415	91	3750723	20.87	ppbV	100
59) Xylenes (m&p)	8.583	91	5702458	42.21	ppbV	99
60) Xylene (o)	9.065	91	2980281	20.95	ppbV	99
61) Styrene	9.120	104	2110477	22.31	ppbV	100
62) Bromoform	9.136	173	1438600	22.67	ppbV	100
63) Cumene	9.438	105	3640428	20.06	ppbV	99
65) n-Propyl benzene	9.933	91	4978447	19.95	ppbV	100
66) 1,1,2,2-Tetrachloroethane	10.007	83	2248627	21.47	ppbV	100
67) 4-Ethyltoluene	10.074	105	4132186	20.31	ppbV	99
68) 2-Chlorotoluene	10.103	91	3429519	20.26	ppbV	100
69) 1,3,5-Trimethylbenzene	10.184	105	3426622	20.70	ppbV	99
70) 1,2,4-Trimethylbenzene	10.660	105	3441480	20.73	ppbV	100
71) 1,3-Dichlorobenzene	11.033	146	2073260	20.57	ppbV	100
72) 1,4-Dichlorobenzene	11.145	146	2097540	20.59	ppbV	100
73) Benzyl chloride	11.470	91	3274358	19.99	ppbV	100
74) 1,2-Dichlorobenzene	11.676	146	1984761	20.48	ppbV	99
75) 1,3-Hexachlorobutadiene	13.216	225	1152385	20.66	ppbV	100
76) 1,2,4-Trichlorobenzene	13.216	180	1538918	20.48	ppbV	98
77) Naphthalene	13.479	128	3920601	18.46	ppbV	100

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

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6559std02.D
Acq On : 29 May 2024 2:18 pm
Operator : jjw
Sample : 20 ppbv std
Misc : EB0103704
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 29 16:06:18 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration



Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6560std01.D
Acq On : 29 May 2024 2:55 pm
Operator : jjw
Sample : 40 ppbv std
Misc : EB0103704
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 29 15:33:09 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.438	130	259539	10.00	ppbV		0.026
39) 1,4-Difluorobenzene (IS)	5.490	114	1398154	10.00	ppbV		0.014
55) d-5 Chlorobenzene (IS)	8.351	117	1151205	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.750	95	1414587	13.70	ppbV		0.000
Target Compounds							Qvalue
2) Propene	1.523	41	1142227	39.26	ppbV		100
3) Dichlorodifluoromethane	1.550	85	3265934	50.06	ppbV		100
4) 1,2-Dichlorotetrafluor...	1.664	85	4649559	49.37	ppbV		97
5) n-Butane	1.750	43	2608188	40.60	ppbV		100
6) Chloromethane	1.815	52	204731	48.69	ppbV		88
7) Vinyl chloride	1.815	62	1570322	48.59	ppbV		99
8) 1,3-Butadiene	1.818	39	1425634	38.81	ppbV		98
9) Bromomethane	2.120	94	1037392	44.51	ppbV		98
10) Chloroethane	2.216	64	905256	50.82	ppbV		99
11) Vinyl bromide	2.310	106	1463102	54.50	ppbV		100
12) Trichlorofluoromethane	2.335	101	4076568	53.50	ppbV		99
13) Ethanol	2.692	45	573243	48.16	ppbV		91
14) 1,1-Dichloroethene	2.760	61	3078402	52.09	ppbV		95
15) Carbon disulfide	2.779	76	5033811	53.65	ppbV		96
16) 1,1,2-Trichloro-1,2,2-...	2.798	101	4030555	53.48	ppbV		97
17) Acrolein	3.017	56	677189	47.80	ppbV		100
18) Allyl chloride	3.142	76	772500	52.45	ppbV		100
19) Isopropanol	3.146	45	2972095	39.43	ppbV		98
20) Methylene chloride	3.229	49	2020607	48.06	ppbV		87
21) Acetone	3.245	43	2690258	46.34	ppbV		96
22) 1,2-Dichloroethene (tr...	3.355	61	3218797	62.26	ppbV		93
23) n-Pentane	3.435	43	3685172	50.56	ppbV		100
24) n-Hexane	3.432	57	5415528	51.83	ppbV		95
25) Methyl tert-butyl ether	3.441	73	6341672	54.05	ppbV		99
26) Tert-butyl alcohol	3.496	59	4670327	56.35	ppbV		100
27) 1,1-Dichloroethane	3.843	63	3710731	53.46	ppbV		99
28) 1,2-Dichloroethene (cis)	4.268	61	2829337	56.82	ppbV		93
29) Cyclohexane	4.445	56	3618784	51.25	ppbV		92
30) Chloroform	4.486	83	4388064	60.64	ppbV		100
31) Ethyl acetate	4.580	45	803157	53.77	ppbV		93
32) Carbon tetrachloride	4.605	117	4499351	60.76	ppbV		100
33) Tetrahydrofuran	4.612	42	2700255	49.65	ppbV		94
34) 1,1,1-Trichloroethane	4.660	97	4210588	60.26	ppbV		100
35) Methyl ethyl ketone	4.718	43	4819880	55.58	ppbV		95
36) n-Heptane	4.956	43	4385464	48.40	ppbV		92
37) Benzene	4.969	78	6358079	58.39	ppbV		97
38) 1,2-Dichloroethane	5.126	62	3005422	60.84	ppbV		100
40) Trichloroethene	5.467	130	2608762	46.76	ppbV		99
41) 2,2,4-Trimethylpentane	4.875	57	10374158	38.27	ppbV		99
42) 1,2-Dichloropropane	5.924	63	2722594	44.56	ppbV		99
43) Bromodichloromethane	5.981	83	4805129	49.38	ppbV		100
44) Methyl methacrylate	6.123	41	3568315	41.17	ppbV		92
45) 1,4-Dioxane	6.152	88	1658461	50.67	ppbV		94
46) cis-1,3-Dichloropropene	6.573	75	4001330	46.35	ppbV		100
47) Toluene	6.811	91	8006090	44.44	ppbV		99
48) Methyl isobutyl ketone	7.174	43	6079413	37.73	ppbV		96
49) Tetrachloroethene	7.197	166	2999039	48.20	ppbV		100
50) trans-1,3-Dichloropropene	7.216	75	3865763	47.06	ppbV	#	70
51) 1,1,2-Trichloroethane	7.377	97	2879234	48.35	ppbV		97

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6560std01.D
Acq On : 29 May 2024 2:55 pm
Operator : jjw
Sample : 40 ppbv std
Misc : EB0103704
ALS Vial : 7 Sample Multiplier: 1

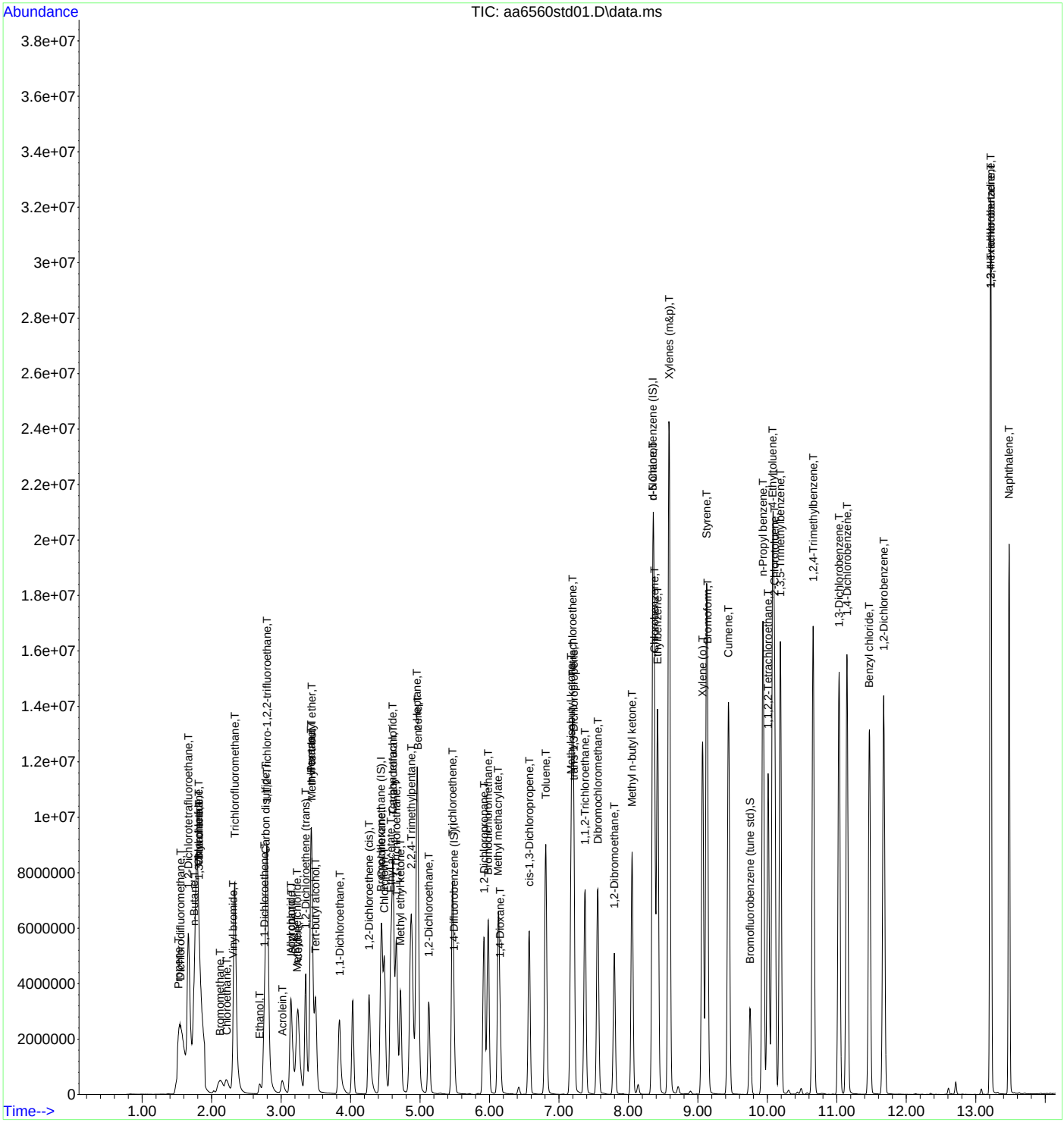
Quant Time: May 29 15:33:09 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.560	129	4789120	52.49	ppbV	100
53) 1,2-Dibromoethane	7.798	107	4214665	49.82	ppbV	100
54) Methyl n-butyl ketone	8.052	43	6940012	48.04	ppbV	96
56) n-Nonane	8.351	43	7555637	47.30	ppbV	91
57) Chlorobenzene	8.377	112	6019868	54.26	ppbV	97
58) Ethylbenzene	8.419	91	12459258	56.39	ppbV	98
59) Xylenes (m&p)	8.586	91	17915958	108.01	ppbV	98
60) Xylene (o)	9.068	91	9769196	55.51	ppbV	98
61) Styrene	9.126	104	6854147	60.05	ppbV	99
62) Bromoform	9.139	173	4428252	62.69	ppbV	99
63) Cumene	9.441	105	12273690	55.33	ppbV	99
65) n-Propyl benzene	9.936	91	17652384	58.75	ppbV	97
66) 1,1,2,2-Tetrachloroethane	10.010	83	7720543	59.17	ppbV	100
67) 4-Ethyltoluene	10.075	105	14639002	61.29	ppbV	98
68) 2-Chlorotoluene	10.103	91	11857804	58.29	ppbV	99
69) 1,3,5-Trimethylbenzene	10.187	105	11719331	59.58	ppbV	100
70) 1,2,4-Trimethylbenzene	10.660	105	12098566	62.04	ppbV	99
71) 1,3-Dichlorobenzene	11.033	146	7325087	68.56	ppbV	99
72) 1,4-Dichlorobenzene	11.148	146	7443078	68.71	ppbV	99
73) Benzyl chloride	11.467	91	12122899	66.89	ppbV	97
74) 1,2-Dichlorobenzene	11.676	146	6872332	64.83	ppbV	99
75) 1,3-Hexachlorobutadiene	13.216	225	2887878	50.17	ppbV	100
76) 1,2,4-Trichlorobenzene	13.216	180	4161678	52.94	ppbV	99
77) Naphthalene	13.480	128	12094453	55.40	ppbV	98

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

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6560std01.D
Acq On : 29 May 2024 2:55 pm
Operator : jjw
Sample : 40 ppbv std
Misc : EB0103704
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 29 15:33:09 2024
Quant Method : C:\msdchem\1\METHODS\240326.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Mar 27 13:46:33 2024
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES, LLC

Initial Calibration Data Summary Report

Initial Calibration Curve: 9/11/2024 **Method ID:** 240910.M

Instrument: AA

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA7123BFB]	09/11/2024 10:57
0.2 PPBV STD [AA7124STD05]	09/11/2024 12:03
2 PPBV STD [AA7125STD04]	09/11/2024 12:35
10 PPBV STD [AA7126STD03]	09/11/2024 13:09
20 PPBV STD [AA7127STD02]	09/11/2024 13:44
40 PPBV STD [AA7128STD01]	09/11/2024 14:20
10 PPBV ICVSS [AA7129ICVSS]	09/11/2024 14:52

	Parameter	RRF 0.2ppbv	RRF 2ppbv	RRF 10ppbv	RRF 20ppbv	RRF 40ppbv	Avg ppbv	% RSD
1)	Bromochloromethane	----------ISTD----------						
2)	Propene	1.8	1.5	1.4	1.5	1.5	1.6	11
3)	Dichlorodifluoromethane	3.3	2.9	2.9	3.2	3.2	3.1	6.1
4)	1,2-Dichlorotetrafluoroethane	5.3	4.6	3.7	4.1	4.3	4.4	14
5)	n-Butane	4.5	4.2	3.3	3.6	3.5	3.8	13
6)	Chloromethane	0.25	0.29	0.25	0.26	0.28	0.27	5.8
7)	Vinyl chloride	1.9	1.7	1.7	1.8	1.8	1.8	4.9
8)	1,3-Butadiene	2.3	2.6	2.0	2.1	2.0	2.2	11
9)	Bromomethane	1.1	0.91	0.94	1.0	1.0	0.99	6.0
10)	Chloroethane	0.70	0.80	0.82	0.90	0.92	0.83	11
11)	Vinyl bromide	0.99	1.1	1.1	1.2	1.3	1.1	10
12)	Trichlorofluoromethane	4.1	3.9	3.3	3.7	3.7	3.7	7.9
13)	Ethanol	0.82	0.79	0.69	0.76	0.80	0.77	6.4
14)	1,1-Dichloroethene	3.4	3.2	3.3	3.6	3.7	3.4	6.3
15)	Carbon disulfide	4.5	4.4	4.6	4.9	5.1	4.7	6.1
16)	1,1,2-Trichloro-1,2,2-trifluoroethane	4.1	4.4	3.0	3.3	3.4	3.6	16
17)	Acrolein	0.78	0.70	0.73	0.78	0.79	0.76	5.0
18)	Allyl Chloride	0.67	0.69	0.74	0.82	0.82	0.75	9.2
19)	Isopropanol	6.3	4.5	4.5	4.9	4.7	5.0	16
20)	Methylene chloride	3.9	2.1	2.1	2.4	2.5	2.6	28
21)	Acetone	4.2	3.2	3.4	3.5	3.5	3.5	10
22)	1,2-Dichloroethene (trans)	2.8	2.6	2.9	3.2	3.4	3.0	11
23)	n-Pentane	5.6	5.2	3.8	4.4	4.8	4.8	14
24)	n-Hexane	6.3	6.5	5.1	5.6	6.0	5.9	9.1
25)	Methyl tert-butyl ether	6.2	7.6	5.3	5.8	6.0	6.2	14
26)	Tert-butyl alcohol	4.8	5.6	4.1	4.6	4.8	4.8	11
27)	1,1-Dichloroethane	4.2	3.8	3.6	4.0	4.2	3.9	6.5
28)	1,2-Dichloroethene (trans)	2.7	2.6	2.7	3.0	3.1	2.8	7.9
29)	Cyclohexane	4.2	5.2	3.6	3.8	4.0	4.2	15
30)	Chloroform	4.0	3.7	3.5	3.9	4.1	3.9	6.6
31)	Ethyl acetate	1.0	1.0	0.93	1.0	1.1	1.0	6.4
32)	Carbon tetrachloride	4.0	4.9	3.5	3.7	3.9	4.0	14
33)	Tetrahydrofuran	3.2	3.7	3.4	3.8	4.0	3.6	8.7
34)	1,1,1-Trichloroethane	4.0	4.7	3.3	3.5	3.6	3.8	15
35)	Methyl ethyl ketone	6.1	5.7	5.4	6.0	6.4	5.9	6.4
36)	n-Heptane	5.4	7.4	5.9	6.4	6.2	6.3	12
37)	Benzene	6.2	6.1	5.1	5.8	6.4	5.9	8.1
38)	1,2-Dichloroethane	3.1	3.0	2.8	3.1	3.3	3.1	5.9

***% RSD (Relative Standard Deviation) must be within 30%**

****An exception is made for 2 compounds that must be within 40%**

RRF - Relative Response Factor

INTEGRATED ANALYTICAL LABORATORIES, LLC

Initial Calibration Data Summary Report

Initial Calibration Curve: 9/11/2024 **Method ID:** 240910.M

Instrument: AA

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA7123BFB]	09/11/2024 10:57
0.2 PPBV STD [AA7124STD05]	09/11/2024 12:03
2 PPBV STD [AA7125STD04]	09/11/2024 12:35
10 PPBV STD [AA7126STD03]	09/11/2024 13:09
20 PPBV STD [AA7127STD02]	09/11/2024 13:44
40 PPBV STD [AA7128STD01]	09/11/2024 14:20
10 PPBV ICVSS [AA7129ICVSS]	09/11/2024 14:52

	Parameter	RRF 0.2ppbv	RRF 2ppbv	RRF 10ppbv	RRF 20ppbv	RRF 40ppbv	Avg ppbv	% RSD
39)	1,4-Difluorobenzene	----------ISTD----------						
40)	Trichloroethene	0.51	0.49	0.43	0.45	0.45	0.47	7.1
41)	2,2,4-Trimethylpentane	2.8	2.8	2.2	2.2	2.2	2.4	13
42)	1,2-Dichloropropane	0.77	0.77	0.60	0.60	0.58	0.66	14
43)	Bromodichloromethane	1.0	1.0	0.86	0.89	0.87	0.94	9.5
44)	Methyl methacrylate	1.1	1.3	1.0	1.1	1.0	1.1	9.5
45)	1,4-Dioxane	0.32	0.37	0.29	0.30	0.28	0.31	11
46)	1,3-Dichloropropene (cis)	0.99	0.98	0.82	0.84	0.80	0.89	10
47)	Toluene	1.9	2.2	1.7	1.7	1.6	1.8	14
48)	Methyl isobutyl ketone	2.1	3.0	2.1	2.1	2.0	2.3	18
49)	Tetrachloroethene	0.59	0.71	0.55	0.57	0.55	0.59	11
50)	1,3-Dichloropropene (trans)	0.82	1.0	0.89	0.93	0.90	0.91	8.8
51)	1,1,2-Trichloroethane	0.62	0.69	0.54	0.55	0.52	0.58	12
52)	Dibromochloromethane	0.81	1.0	0.82	0.85	0.82	0.86	10
53)	1,2-Dibromoethane	0.75	0.93	0.76	0.78	0.75	0.79	9.9
54)	Methyl n-butyl ketone	1.8	2.6	2.1	2.1	2.0	2.1	15
55)	d-5 Chlorbenzene	----------ISTD----------						
56)	n-Nonane	2.4	3.2	2.3	2.2	2.1	2.4	18
57)	Chlorobenzene	1.3	1.3	1.1	1.0	1.0	1.1	13
58)	Ethylbenzene	2.6	2.8	2.1	2.1	2.0	2.3	16
59)	Xylenes (m&p)	1.9	2.2	1.7	1.7	1.5	1.8	15
60)	Xylenes (o)	2.0	2.2	1.6	1.6	1.5	1.8	16
61)	Styrene	1.1	1.3	1.2	1.2	1.3	1.2	7.3
62)	Bromoform	0.71	0.74	0.65	0.67	0.68	0.69	4.8
63)	Cumene	2.3	2.8	2.1	2.1	1.9	2.2	16
65)	n-Propyl benzene	3.4	4.1	3.1	3.0	2.9	3.3	15
66)	1,1,2,2-Tetrachloroethane	1.6	1.8	1.3	1.3	1.2	1.4	16
67)	4-Ethyltoluene	2.7	3.1	2.4	2.4	2.4	2.6	12
68)	2-Chlorotoluene	2.3	2.6	2.0	2.0	1.9	2.2	14
69)	1,3,5-Trimethylbenzene	2.0	2.5	1.9	1.8	1.7	2.0	15
70)	1,2,4-Trimethylbenzene	1.9	2.5	1.9	1.9	1.9	2.0	13
71)	1,3-Dichlorobenzene	1.3	1.1	0.98	0.98	1.0	1.1	12
72)	1,4-Dichlorobenzene	1.2	1.1	1.0	1.0	1.1	1.1	7.0
73)	Benzyl chloride	2.0	2.1	1.9	1.9	2.0	2.0	3.9
74)	1,2-Dichlorobenzene	1.1	1.2	0.96	0.96	0.99	1.0	9.6
75)	1,3-Hexachlorobutadiene	0.80	0.68	0.57	0.62	0.67	0.67	13
76)	1,2,4-Trichlorobenzene	1.3	0.85	0.80	0.88	1.0	0.97	21
77)	Naphthalene	3.2	2.3	2.0	2.0	2.0	2.3	23

***% RSD (Relative Standard Deviation) must be within 30%**

****An exception is made for 2 compounds that must be within 40%**

RRF - Relative Response Factor

Method Path : C:\msdchem\1\METHODS\
Method File : 240910.M
Title : TO-15 on the Agilent 7890A / 5975C
Last Update : Wed Sep 11 16:19:32 2024
Response Via : Initial Calibration

Calibration Files
0.2 =aa7124std05.D 2 =aa7125std04.D 10 =aa7126std03.D 20 =aa7127std02.D 40 =aa7128std01.D

		Compound	0.2	2	10	20	40	Avg	%RSD
1)	I	Bromochloromethane...	----------ISTD----------						
2)	T	Propene	1.848	1.541	1.383	1.497	1.525	1.559	11.12
3)	T	Dichlorodifluoro...	3.342	2.927	2.886	3.185	3.165	3.101	6.16
4)	T	1,2-Dichlorotetr...	5.324	4.588	3.731	4.050	4.255	4.390	13.85
5)	T	n-Butane	4.499	4.159	3.293	3.586	3.525	3.812	13.08
6)	T	Chloromethane	0.251	0.285	0.254	0.264	0.282	0.267	5.83
7)	T	Vinyl chloride	1.893	1.667	1.722	1.791	1.825	1.780	4.97
8)	T	1,3-Butadiene	2.289	2.584	2.041	2.122	2.022	2.212	10.55
9)	T	Bromomethane	1.056	0.914	0.935	1.011	1.017	0.987	6.03
10)	T	Chloroethane	0.695	0.797	0.823	0.903	0.924	0.828	11.07
11)	T	Vinyl bromide	0.988	1.077	1.078	1.204	1.282	1.126	10.36
12)	T	Trichlorofluorom...	4.124	3.915	3.327	3.669	3.704	3.748	7.95
13)	T	Ethanol	0.817	0.794	0.690	0.758	0.795	0.771	6.45
14)	T	1,1-Dichloroethene	3.410	3.154	3.287	3.624	3.670	3.429	6.39
15)	T	Carbon disulfide	4.485	4.436	4.558	4.928	5.080	4.698	6.13
16)	T	1,1,2-Trichloro-...	4.062	4.395	2.993	3.253	3.432	3.627	16.08
17)	T	Acrolein	0.779	0.703	0.726	0.778	0.788	0.755	5.02
18)	T	Allyl chloride	0.672	0.687	0.741	0.818	0.816	0.747	9.24
19)	T	Isopropanol	6.336	4.458	4.475	4.905	4.705	4.976	15.72
20)	T	Methylene chloride	3.894	2.119	2.142	2.401	2.515	2.614	28.11
21)	T	Acetone	4.166	3.197	3.360	3.484	3.499	3.541	10.45
22)	T	1,2-Dichloroethe...	2.774	2.618	2.869	3.244	3.410	2.983	11.12
23)	T	n-Pentane	5.585	5.226	3.846	4.418	4.777	4.770	14.25
24)	T	n-Hexane	6.269	6.465	5.119	5.615	6.017	5.897	9.13
25)	T	Methyl tert-buty...	6.162	7.563	5.349	5.757	6.040	6.174	13.56
26)	T	Tert-butyl alcohol	4.780	5.643	4.145	4.571	4.771	4.782	11.42
27)	T	1,1-Dichloroethane	4.156	3.771	3.573	3.991	4.164	3.931	6.52
28)	T	1,2-Dichloroethe...	2.745	2.594	2.708	2.999	3.141	2.837	7.94
29)	t	Cyclohexane	4.247	5.183	3.598	3.829	3.983	4.168	14.75
30)	T	Chloroform	4.049	3.678	3.516	3.940	4.129	3.862	6.68
31)	T	Ethyl acetate	1.040	1.039	0.930	1.046	1.116	1.034	6.45
32)	T	Carbon tetrachlo...	4.009	4.891	3.453	3.719	3.861	3.987	13.69
33)	T	Tetrahydrofuran	3.206	3.692	3.381	3.793	3.995	3.613	8.79
34)	T	1,1,1-Trichloroe...	3.993	4.721	3.265	3.511	3.598	3.818	14.90
35)	T	Methyl ethyl ketone	6.114	5.720	5.370	6.031	6.359	5.919	6.46
36)	T	n-Heptane	5.432	7.433	5.910	6.354	6.223	6.270	11.81
37)	T	Benzene	6.238	6.110	5.140	5.821	6.356	5.933	8.19
38)	T	1,2-Dichloroethane	3.134	2.978	2.783	3.109	3.260	3.053	5.94
39)	I	1,4-Difluorobenzen...	----------ISTD----------						
40)	T	Trichloroethene	0.511	0.485	0.428	0.448	0.451	0.465	7.13
41)	T	2,2,4-Trimethylp...	2.794	2.797	2.191	2.216	2.184	2.436	13.47
42)	T	1,2-Dichloropropane	0.767	0.766	0.602	0.599	0.582	0.663	14.27
43)	T	Bromodichloromet...	1.049	1.015	0.861	0.886	0.865	0.935	9.56
44)	T	Methyl methacrylate	1.095	1.284	1.047	1.067	1.020	1.103	9.54
45)	T	1,4-Dioxane	0.321	0.365	0.291	0.297	0.282	0.311	10.76
46)	T	cis-1,3-Dichloro...	0.985	0.984	0.823	0.838	0.800	0.886	10.24
47)	T	Toluene	1.858	2.217	1.676	1.677	1.568	1.799	14.21
48)	T	Methyl isobutyl ...	2.081	2.950	2.128	2.139	1.959	2.251	17.63
49)	T	Tetrachloroethene	0.588	0.711	0.547	0.570	0.554	0.594	11.32
50)	T	trans-1,3-Dichlo...	0.821	1.041	0.885	0.928	0.895	0.914	8.83
51)	T	1,1,2-Trichloroe...	0.617	0.692	0.541	0.549	0.523	0.584	11.95
52)	T	Dibromochloromet...	0.809	1.018	0.821	0.847	0.821	0.863	10.13
53)	T	1,2-Dibromoethane	0.748	0.933	0.760	0.782	0.749	0.794	9.91
54)	T	Methyl n-butyl k...	1.809	2.641	2.087	2.114	2.000	2.130	14.54
55)	I	d-5 Chlorobenzene ...	----------ISTD----------						
56)	T	n-Nonane	2.405	3.158	2.294	2.243	2.053	2.431	17.53
57)	T	Chlorobenzene	1.292	1.303	1.060	1.031	1.010	1.139	12.79
58)	T	Ethylbenzene	2.610	2.819	2.147	2.073	1.958	2.321	16.05
59)	T	Xylenes (m&p)	1.923	2.163	1.688	1.675	1.463	1.783	15.03
60)	T	Xylene (o)	2.032	2.201	1.646	1.608	1.534	1.804	16.31

Method Path : C:\msdchem\1\METHODS\
Method File : 240910.M

61)	T	Styrene	1.106	1.347	1.183	1.223	1.264	1.225	7.35
62)	T	Bromoform	0.707	0.737	0.651	0.668	0.684	0.689	4.86
63)	T	Cumene	2.324	2.836	2.086	2.050	1.922	2.243	16.12
64)	S	Bromofluorobenze...	0.846	0.913	0.897	0.868	0.872	0.879	2.97
65)	T	n-Propyl benzene	3.425	4.080	3.087	3.042	2.866	3.300	14.56
66)	T	1,1,2,2-Tetrachl...	1.558	1.772	1.320	1.287	1.240	1.435	15.64
67)	T	4-Ethyltoluene	2.744	3.086	2.419	2.387	2.372	2.601	11.96
68)	T	2-Chlorotoluene	2.326	2.581	1.988	1.952	1.912	2.152	13.53
69)	T	1,3,5-Trimethylb...	1.957	2.495	1.863	1.841	1.738	1.979	15.11
70)	T	1,2,4-Trimethylb...	1.917	2.451	1.880	1.881	1.869	2.000	12.65
71)	T	1,3-Dichlorobenzene	1.273	1.126	0.976	0.981	1.020	1.075	11.70
72)	T	1,4-Dichlorobenzene	1.187	1.117	1.004	1.018	1.053	1.076	7.05
73)	T	Benzyl chloride	1.969	2.088	1.882	1.915	1.979	1.967	3.99
74)	T	1,2-Dichlorobenzene	1.132	1.163	0.962	0.957	0.985	1.040	9.61
75)	T	1,3-Hexachlorobu...	0.798	0.676	0.572	0.623	0.674	0.669	12.59
76)	T	1,2,4-Trichlorob...	1.306	0.854	0.799	0.875	1.002	0.967	21.04
77)	T	Naphthalene	3.164	2.267	1.975	1.988	1.964	2.272	22.66

(#) = Out of Range

Data Path : C:\DATA\2024\09-2024\09-11-2024\
Data File : aa7124std05.D
Acq On : 11 Sep 2024 12:03 pm
Operator : jjw
Sample : 0.2 ppbv std
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 11 15:57:55 2024
Quant Method : C:\msdchem\1\METHODS\240910.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Sep 11 15:56:56 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.409	130	192449	10.00	ppbV		0.000
39) 1,4-Difluorobenzene (IS)	5.477	114	769155	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.348	117	738964	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.747	95	625210	9.62	ppbV		0.000
Target Compounds							Qvalue
2) Propene	1.483	41	7755	0.26	ppbV	#	12
3) Dichlorodifluoromethane	1.499	85	13636	0.23	ppbV		91
4) 1,2-Dichlorotetrafluor...	1.629	85	20081	0.24	ppbV		98
5) n-Butane	1.705	43	18875	0.26	ppbV		96
6) Chloromethane	1.774	52	1083	0.21	ppbV		35
7) Vinyl chloride	1.774	62	7871	0.23	ppbV	#	75
8) 1,3-Butadiene	1.781	39	9426	0.22	ppbV		90
9) Bromomethane	2.065	94	4063	0.21	ppbV		81
10) Chloroethane	2.194	64	2834	0.18	ppbV	#	45
11) Vinyl bromide	2.284	106	3840	0.18	ppbV		93
12) Trichlorofluoromethane	2.300	101	17460	0.24	ppbV		99
13) Ethanol	2.683	45	3271	0.22	ppbV	#	80
14) 1,1-Dichloroethene	2.721	61	13649	0.21	ppbV		98
15) Carbon disulfide	2.747	76	18473	0.20	ppbV	#	66
16) 1,1,2-Trichloro-1,2,2-...	2.766	101	17041	0.24	ppbV		97
17) Acrolein	2.985	56	2999	0.21	ppbV		93
18) Allyl chloride	3.107	76	2793	0.19	ppbV		100
19) Isopropanol	3.117	45	21705	0.23	ppbV	#	89
20) Methylene chloride	3.197	49	16186	0.32	ppbV		90
21) Acetone	3.216	43	17319	0.25	ppbV		94
22) 1,2-Dichloroethene (tr...	3.323	61	11850	0.21	ppbV		94
23) n-Pentane	3.413	43	23215	0.25	ppbV		97
24) n-Hexane	3.413	57	26785	0.24	ppbV		89
25) Methyl tert-butyl ether	3.422	73	26565	0.22	ppbV		93
26) Tert-butyl alcohol	3.474	59	21160	0.23	ppbV		100
27) 1,1-Dichloroethane	3.818	63	17117	0.23	ppbV		97
28) 1,2-Dichloroethene (cis)	4.245	61	11517	0.21	ppbV		98
29) Cyclohexane	4.422	56	18308	0.23	ppbV		99
30) Chloroform	4.464	83	16831	0.23	ppbV		97
31) Ethyl acetate	4.567	45	4325	0.22	ppbV	#	57
32) Carbon tetrachloride	4.593	117	17129	0.22	ppbV		98
33) Tetrahydrofuran	4.605	42	13698	0.20	ppbV		96
34) 1,1,1-Trichloroethane	4.641	97	16752	0.23	ppbV		95
35) Methyl ethyl ketone	4.708	43	25887	0.23	ppbV		96
36) n-Heptane	4.940	43	23208	0.19	ppbV		95
37) Benzene	4.953	78	25931	0.23	ppbV		95
38) 1,2-Dichloroethane	5.110	62	13150	0.22	ppbV		100
40) Trichloroethene	5.454	130	7861	0.22	ppbV		98
41) 2,2,4-Trimethylpentane	4.863	57	46853	0.25	ppbV	#	68
42) 1,2-Dichloropropane	5.908	63	13103	0.26	ppbV		92
43) Bromodichloromethane	5.972	83	18550	0.26	ppbV		97
44) Methyl methacrylate	6.120	41	18531	0.22	ppbV		97
45) 1,4-Dioxane	6.152	88	5775	0.24	ppbV		99
46) cis-1,3-Dichloropropene	6.564	75	16817	0.25	ppbV		97
47) Toluene	6.795	91	30872	0.22	ppbV		99
48) Methyl isobutyl ketone	7.165	43	34901	0.20	ppbV		98
49) Tetrachloroethene	7.184	166	10139	0.22	ppbV		100
50) trans-1,3-Dichloropropene	7.210	75	14026	0.20	ppbV		93
51) 1,1,2-Trichloroethane	7.371	97	10247	0.23	ppbV		94

Data Path : C:\DATA\2024\09-2024\09-11-2024\
Data File : aa7124std05.D
Acq On : 11 Sep 2024 12:03 pm
Operator : jjw
Sample : 0.2 ppbv std
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

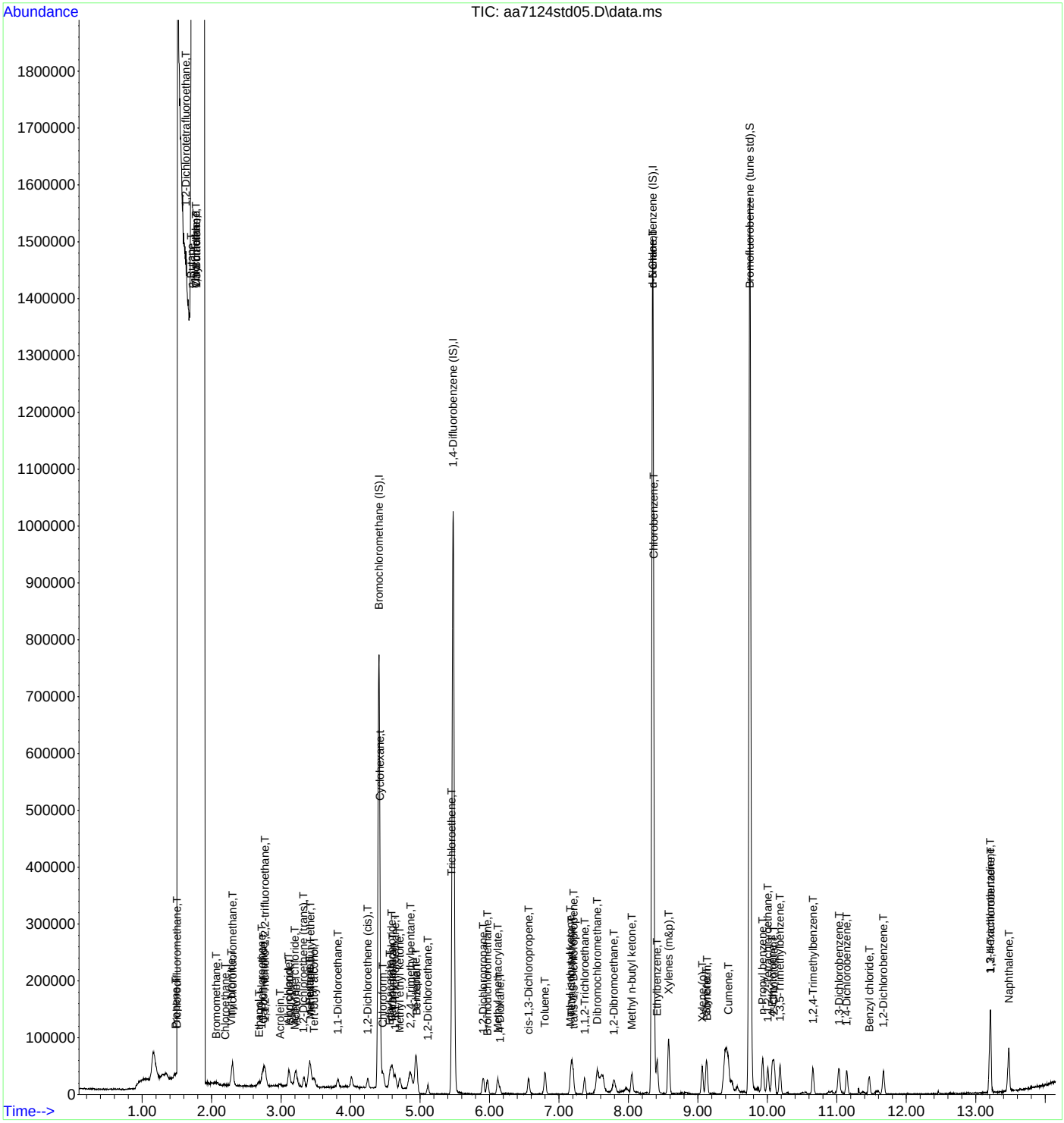
Quant Time: Sep 11 15:57:55 2024
Quant Method : C:\msdchem\1\METHODS\240910.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Sep 11 15:56:56 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
52) Dibromochloromethane	7.551	129	13938	0.21	ppbV		99
53) 1,2-Dibromoethane	7.789	107	12424	0.20	ppbV		99
54) Methyl n-butyl ketone	8.049	43	31446	0.19	ppbV		97
56) n-Nonane	8.348	43	39457	0.22	ppbV		96
57) Chlorobenzene	8.364	112	21203	0.25	ppbV	#	68
58) Ethylbenzene	8.412	91	42824	0.25	ppbV		98
59) Xylenes (m&p)	8.580	91	63389	0.48	ppbV		95
60) Xylene (o)	9.065	91	33039	0.25	ppbV		97
61) Styrene	9.123	104	18472	0.20	ppbV		99
62) Bromoform	9.133	173	11803	0.23	ppbV		97
63) Cumene	9.441	105	36759	0.22	ppbV		100
65) n-Propyl benzene	9.930	91	54671	0.22	ppbV	#	87
66) 1,1,2,2-Tetrachloroethane	10.007	83	26244	0.25	ppbV		97
67) 4-Ethyltoluene	10.071	105	43796	0.23	ppbV		99
68) 2-Chlorotoluene	10.094	91	37466	0.24	ppbV		97
69) 1,3,5-Trimethylbenzene	10.181	105	31528	0.22	ppbV		95
70) 1,2,4-Trimethylbenzene	10.657	105	30606	0.21	ppbV		97
71) 1,3-Dichlorobenzene	11.033	146	20885	0.26	ppbV		90
72) 1,4-Dichlorobenzene	11.139	146	18766	0.24	ppbV		95
73) Benzyl chloride	11.467	91	29100	0.20	ppbV		97
74) 1,2-Dichlorobenzene	11.669	146	17909	0.23	ppbV		99
75) 1,3-Hexachlorobutadiene	13.206	225	13096	0.27	ppbV		100
76) 1,2,4-Trichlorobenzene	13.216	180	21232	0.30	ppbV		96
77) Naphthalene	13.476	128	46763	0.26	ppbV		96

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

Data Path : C:\DATA\2024\09-2024\09-11-2024\
Data File : aa7124std05.D
Acq On : 11 Sep 2024 12:03 pm
Operator : jjw
Sample : 0.2 ppbv std
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 11 15:57:55 2024
Quant Method : C:\msdchem\1\METHODS\240910.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Sep 11 15:56:56 2024
Response via : Initial Calibration



Data Path : C:\DATA\2024\09-2024\09-11-2024\
Data File : aa7125std04.D
Acq On : 11 Sep 2024 12:35 pm
Operator : jjw
Sample : 2 ppbv std
Misc : EB0103704
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 11 15:47:27 2024
Quant Method : C:\msdchem\1\METHODS\240910.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Sep 11 14:41:59 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.412	130	242257	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.483	114	1044344	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.351	117	1289735	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.750	95	1177021	10.38	ppbV	0.000
Target Compounds						Qvalue
2) Propene	1.483	41	81368	2.15	ppbV	99
3) Dichlorodifluoromethane	1.519	85	150314	2.00	ppbV	100
4) 1,2-Dichlorotetrafluor...	1.643	85	217853	2.05	ppbV	99
5) n-Butane	1.729	43	219640	2.38	ppbV	99
6) Chloromethane	1.791	52	15439	2.37	ppbV	97
7) Vinyl chloride	1.784	62	87226	2.02	ppbV	100
8) 1,3-Butadiene	1.794	39	133953	2.50	ppbV	95
9) Bromomethane	2.085	94	44303	1.85	ppbV	100
10) Chloroethane	2.204	64	40909	2.04	ppbV	97
11) Vinyl bromide	2.303	106	52695	1.93	ppbV	98
12) Trichlorofluoromethane	2.319	101	208668	2.30	ppbV	99
13) Ethanol	2.689	45	40003	1.97	ppbV	97
14) 1,1-Dichloroethene	2.744	61	158949	1.91	ppbV	97
15) Carbon disulfide	2.760	76	230000	2.02	ppbV	98
16) 1,1,2-Trichloro-1,2,2-...	2.785	101	232133	2.64	ppbV	99
17) Acrolein	3.001	56	34083	1.86	ppbV	100
18) Allyl chloride	3.126	76	35973	1.99	ppbV	100
19) Isopropanol	3.130	45	192255	1.55	ppbV	97
20) Methylene chloride	3.213	49	110901	1.75	ppbV	99
21) Acetone	3.236	43	167265	1.95	ppbV	99
22) 1,2-Dichloroethene (tr...	3.345	61	140804	1.95	ppbV	100
23) n-Pentane	3.422	43	273451	2.39	ppbV	98
24) n-Hexane	3.425	57	347688	2.43	ppbV	97
25) Methyl tert-butyl ether	3.429	73	410412	2.74	ppbV	90
26) Tert-butyl alcohol	3.483	59	314450	2.71	ppbV	100
27) 1,1-Dichloroethane	3.827	63	182692	1.92	ppbV	100
28) 1,2-Dichloroethene (cis)	4.255	61	136977	1.99	ppbV	99
29) Cyclohexane	4.432	56	281273	2.79	ppbV	99
30) Chloroform	4.480	83	192450	2.06	ppbV	99
31) Ethyl acetate	4.573	45	54353	2.17	ppbV	98
32) Carbon tetrachloride	4.599	117	263059	2.72	ppbV	100
33) Tetrahydrofuran	4.605	42	198534	2.27	ppbV	99
34) 1,1,1-Trichloroethane	4.650	97	249342	2.70	ppbV	100
35) Methyl ethyl ketone	4.711	43	304881	2.13	ppbV	99
36) n-Heptane	4.943	43	399733	2.47	ppbV	99
37) Benzene	4.959	78	319747	2.22	ppbV	99
38) 1,2-Dichloroethane	5.120	62	157284	2.13	ppbV	99
40) Trichloroethene	5.461	130	101325	2.09	ppbV	99
41) 2,2,4-Trimethylpentane	4.869	57	636731	2.50	ppbV	99
42) 1,2-Dichloropropane	5.911	63	177539	2.56	ppbV	99
43) Bromodichloromethane	5.975	83	243771	2.50	ppbV	100
44) Methyl methacrylate	6.120	41	295058	2.56	ppbV	99
45) 1,4-Dioxane	6.149	88	89223	2.75	ppbV	98
46) cis-1,3-Dichloropropene	6.563	75	228025	2.46	ppbV	100
47) Toluene	6.805	91	500135	2.66	ppbV	100
48) Methyl isobutyl ketone	7.168	43	671560	2.86	ppbV	100
49) Tetrachloroethene	7.187	166	166280	2.68	ppbV	99
50) trans-1,3-Dichloropropene	7.210	75	241353	2.53	ppbV	98
51) 1,1,2-Trichloroethane	7.371	97	156119	2.56	ppbV	100

Data Path : C:\DATA\2024\09-2024\09-11-2024\
Data File : aa7125std04.D
Acq On : 11 Sep 2024 12:35 pm
Operator : jjw
Sample : 2 ppbv std
Misc : EB0103704
ALS Vial : 4 Sample Multiplier: 1

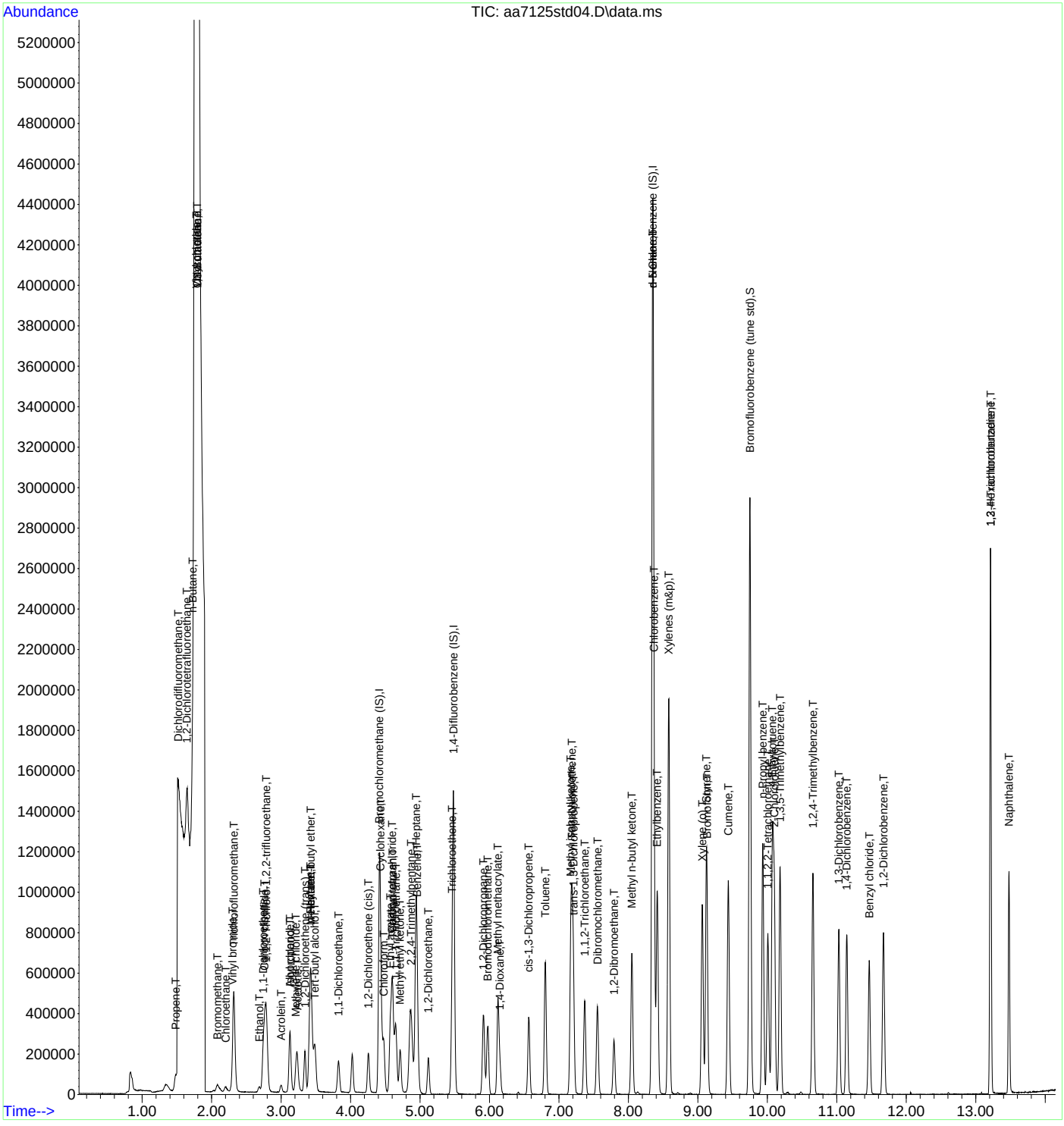
Quant Time: Sep 11 15:47:27 2024
Quant Method : C:\msdchem\1\METHODS\240910.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Sep 11 14:41:59 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.557	129	238047	2.64	ppbV	100
53) 1,2-Dibromoethane	7.792	107	210464	2.54	ppbV	100
54) Methyl n-butyl ketone	8.049	43	623398	2.80	ppbV	99
56) n-Nonane	8.348	43	904191	2.88	ppbV	100
57) Chlorobenzene	8.370	112	372978	2.54	ppbV	94
58) Ethylbenzene	8.412	91	807053	2.70	ppbV	100
59) Xylenes (m&p)	8.579	91	1244221	5.41	ppbV	99
60) Xylene (o)	9.065	91	624566	2.68	ppbV	100
61) Styrene	9.123	104	392713	2.49	ppbV	100
62) Bromoform	9.133	173	214781	2.42	ppbV	100
63) Cumene	9.438	105	782637	2.70	ppbV	100
65) n-Propyl benzene	9.933	91	1136570	2.67	ppbV	100
66) 1,1,2,2-Tetrachloroethane	10.007	83	521001	2.81	ppbV	99
67) 4-Ethyltoluene	10.071	105	859655	2.56	ppbV	100
68) 2-Chlorotoluene	10.100	91	725777	2.62	ppbV	99
69) 1,3,5-Trimethylbenzene	10.184	105	701591	2.75	ppbV	99
70) 1,2,4-Trimethylbenzene	10.657	105	682869	2.65	ppbV	99
71) 1,3-Dichlorobenzene	11.030	146	322432	2.32	ppbV	99
72) 1,4-Dichlorobenzene	11.142	146	308294	2.22	ppbV	99
73) Benzyl chloride	11.470	91	538577	2.12	ppbV	100
74) 1,2-Dichlorobenzene	11.673	146	321093	2.39	ppbV	98
75) 1,3-Hexachlorobutadiene	13.216	225	193673	2.25	ppbV	98
76) 1,2,4-Trichlorobenzene	13.216	180	242315	1.93	ppbV	99
77) Naphthalene	13.480	128	584774	1.88	ppbV	100

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

Data Path : C:\DATA\2024\09-2024\09-11-2024\
Data File : aa7125std04.D
Acq On : 11 Sep 2024 12:35 pm
Operator : jjw
Sample : 2 ppbv std
Misc : EB0103704
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 11 15:47:27 2024
Quant Method : C:\msdchem\1\METHODS\240910.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Sep 11 14:41:59 2024
Response via : Initial Calibration



Data Path : C:\DATA\2024\09-2024\09-11-2024\
Data File : aa7126std03.D
Acq On : 11 Sep 2024 1:09 pm
Operator : jjw
Sample : 10 ppbv std
Misc : EB0103704
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 11 16:02:24 2024
Quant Method : C:\msdchem\1\METHODS\240910.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Sep 11 15:58:45 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.419	130	240050	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.483	114	1036486	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.351	117	1236750	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.750	95	1109862	10.21	ppbV	0.000
Target Compounds						Qvalue
2) Propene	1.483	41	361651	9.66	ppbV	97
3) Dichlorodifluoromethane	1.519	85	734436	9.87	ppbV	100
4) 1,2-Dichlorotetrafluor...	1.647	85	877829	8.33	ppbV	100
5) n-Butane	1.729	43	887478	9.70	ppbV	98
6) Chloromethane	1.791	52	64869	10.14	ppbV	89
7) Vinyl chloride	1.781	62	444849	10.41	ppbV	100
8) 1,3-Butadiene	1.794	39	523751	9.87	ppbV	100
9) Bromomethane	2.078	94	224495	9.48	ppbV	100
10) Chloroethane	2.197	64	209539	10.54	ppbV	100
11) Vinyl bromide	2.297	106	261493	9.68	ppbV	100
12) Trichlorofluoromethane	2.316	101	879654	9.78	ppbV	100
13) Ethanol	2.683	45	172953	9.35	ppbV	100
14) 1,1-Dichloroethene	2.744	61	821431	9.98	ppbV	100
15) Carbon disulfide	2.766	76	1173172	10.40	ppbV	100
16) 1,1,2-Trichloro-1,2,2-...	2.785	101	781882	8.98	ppbV	100
17) Acrolein	3.001	56	174241	9.61	ppbV	100
18) Allyl chloride	3.126	76	192135	10.72	ppbV	100
19) Isopropanol	3.130	45	957489	8.02	ppbV	100
20) Methylene chloride	3.220	49	555449	8.85	ppbV	100
21) Acetone	3.229	43	870983	10.25	ppbV	100
22) 1,2-Dichloroethene (tr...	3.342	61	764463	10.68	ppbV	100
23) n-Pentane	3.429	43	1047633	9.15	ppbV	99
24) n-Hexane	3.425	57	1352402	9.55	ppbV	100
25) Methyl tert-butyl ether	3.429	73	1438159	9.70	ppbV	100
26) Tert-butyl alcohol	3.483	59	1141937	9.95	ppbV	100
27) 1,1-Dichloroethane	3.830	63	917756	9.73	ppbV	100
28) 1,2-Dichloroethene (cis)	4.258	61	701012	10.29	ppbV	99
29) Cyclohexane	4.435	56	967224	9.67	ppbV	100
30) Chloroform	4.477	83	912569	9.84	ppbV	100
31) Ethyl acetate	4.570	45	241005	9.71	ppbV	100
32) Carbon tetrachloride	4.602	117	912022	9.53	ppbV	100
33) Tetrahydrofuran	4.602	42	892810	10.29	ppbV	100
34) 1,1,1-Trichloroethane	4.650	97	854409	9.32	ppbV	100
35) Methyl ethyl ketone	4.711	43	1416548	9.97	ppbV	100
36) n-Heptane	4.943	43	1319571	8.77	ppbV	99
37) Benzene	4.959	78	1335183	9.37	ppbV	100
38) 1,2-Dichloroethane	5.120	62	728123	9.94	ppbV	100
40) Trichloroethene	5.461	130	443580	9.21	ppbV	100
41) 2,2,4-Trimethylpentane	4.869	57	2475171	9.80	ppbV	99
42) 1,2-Dichloropropane	5.914	63	686476	9.99	ppbV	100
43) Bromodichloromethane	5.975	83	1026411	10.59	ppbV	100
44) Methyl methacrylate	6.123	41	1193678	10.45	ppbV	100
45) 1,4-Dioxane	6.149	88	352448	10.93	ppbV	100
46) cis-1,3-Dichloropropene	6.567	75	946831	10.31	ppbV	100
47) Toluene	6.805	91	1876653	10.06	ppbV	100
48) Methyl isobutyl ketone	7.171	43	2404094	10.30	ppbV	100
49) Tetrachloroethene	7.194	166	634658	10.31	ppbV	100
50) trans-1,3-Dichloropropene	7.210	75	1018616	10.75	ppbV	100
51) 1,1,2-Trichloroethane	7.371	97	605395	9.99	ppbV	100

Data Path : C:\DATA\2024\09-2024\09-11-2024\
Data File : aa7126std03.D
Acq On : 11 Sep 2024 1:09 pm
Operator : jjw
Sample : 10 ppbv std
Misc : EB0103704
ALS Vial : 5 Sample Multiplier: 1

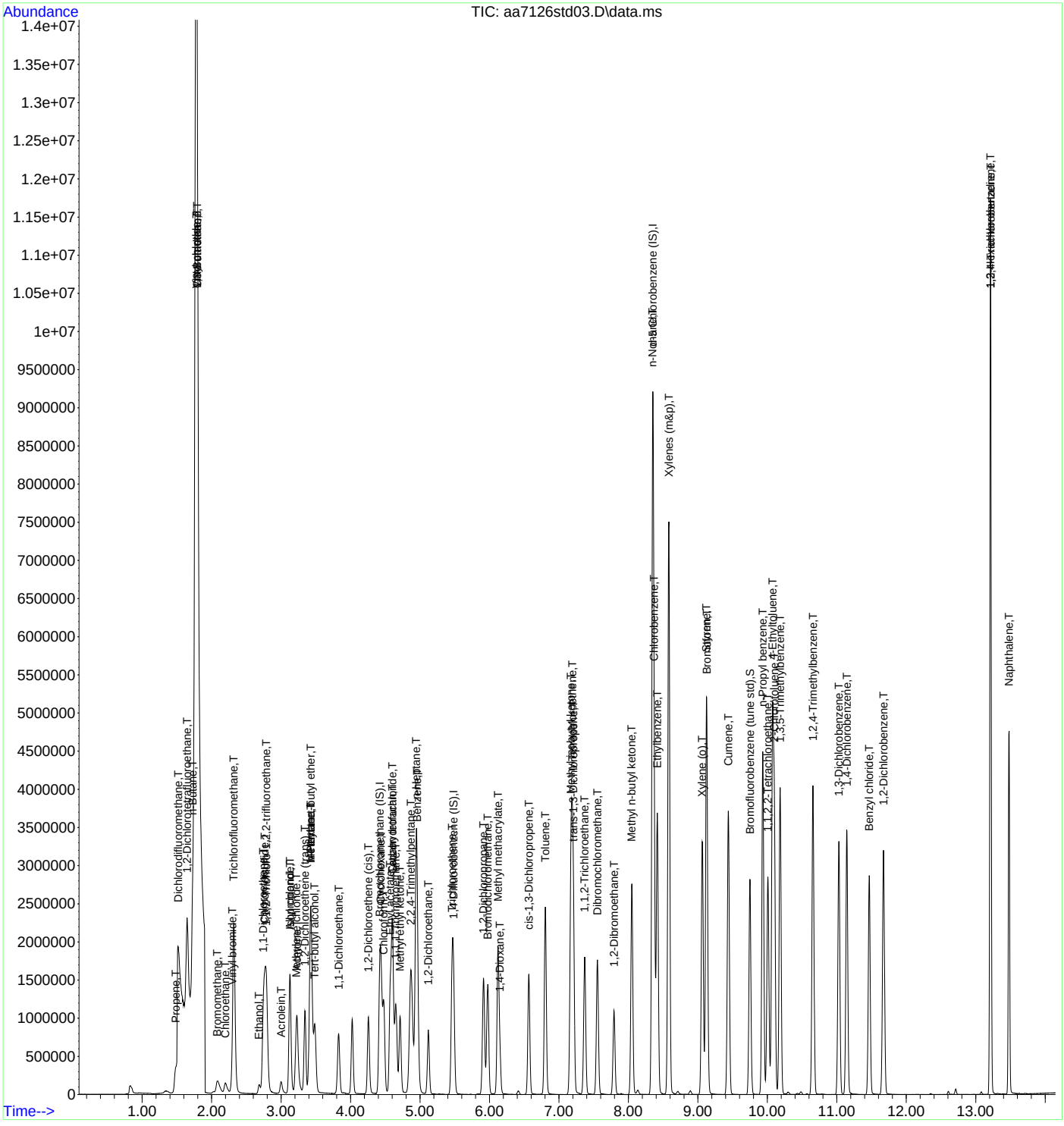
Quant Time: Sep 11 16:02:24 2024
Quant Method : C:\msdchem\1\METHODS\240910.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Sep 11 15:58:45 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.554	129	953374	10.66	ppbV	100
53) 1,2-Dibromoethane	7.795	107	851011	10.34	ppbV	100
54) Methyl n-butyl ketone	8.046	43	2443313	11.07	ppbV	100
56) n-Nonane	8.348	43	3120885	10.38	ppbV	100
57) Chlorobenzene	8.370	112	1454533	10.32	ppbV	100
58) Ethylbenzene	8.415	91	2946962	10.26	ppbV	100
59) Xylenes (m&p)	8.583	91	4656612	21.12	ppbV	100
60) Xylene (o)	9.062	91	2239190	10.04	ppbV	100
61) Styrene	9.123	104	1653767	10.92	ppbV	100
62) Bromoform	9.129	173	910092	10.67	ppbV	100
63) Cumene	9.438	105	2760681	9.95	ppbV	100
65) n-Propyl benzene	9.933	91	4123365	10.10	ppbV	100
66) 1,1,2,2-Tetrachloroethane	10.007	83	1861491	10.49	ppbV	100
67) 4-Ethyltoluene	10.075	105	3230957	10.04	ppbV	100
68) 2-Chlorotoluene	10.100	91	2680069	10.07	ppbV	100
69) 1,3,5-Trimethylbenzene	10.184	105	2511248	10.26	ppbV	100
70) 1,2,4-Trimethylbenzene	10.657	105	2510701	10.15	ppbV	100
71) 1,3-Dichlorobenzene	11.030	146	1340285	10.08	ppbV	100
72) 1,4-Dichlorobenzene	11.145	146	1328338	9.98	ppbV	100
73) Benzyl chloride	11.467	91	2327779	9.57	ppbV	100
74) 1,2-Dichlorobenzene	11.673	146	1272836	9.90	ppbV	100
75) 1,3-Hexachlorobutadiene	13.213	225	785020	9.49	ppbV	100
76) 1,2,4-Trichlorobenzene	13.216	180	1086447	9.08	ppbV	100
77) Naphthalene	13.480	128	2442799	8.70	ppbV	100

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

Data Path : C:\DATA\2024\09-2024\09-11-2024\
Data File : aa7126std03.D
Acq On : 11 Sep 2024 1:09 pm
Operator : jjw
Sample : 10 ppbv std
Misc : EB0103704
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 11 16:02:24 2024
Quant Method : C:\msdchem\1\METHODS\240910.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Sep 11 15:58:45 2024
Response via : Initial Calibration



Data Path : C:\DATA\2024\09-2024\09-11-2024\
Data File : aa7127std02.D
Acq On : 11 Sep 2024 1:44 pm
Operator : jjw
Sample : 20 ppbv std
Misc : EB0103704
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 11 14:05:24 2024
Quant Method : C:\msdchem\1\METHODS\240910.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Sep 11 13:33:21 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.419	130	235108	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.486	114	1107080	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.355	117	1385185	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.750	95	1202247	9.80	ppbV	0.000
Target Compounds						Qvalue
2) Propene	1.490	41	767334	20.52	ppbV	98
3) Dichlorodifluoromethane	1.530	85	1587724	22.06	ppbV	100
4) 1,2-Dichlorotetrafluor...	1.654	85	1866290	17.45	ppbV	100
5) n-Butane	1.733	43	1837885	19.62	ppbV	100
6) Chloromethane	1.791	52	139165	22.10	ppbV	99
7) Vinyl chloride	1.784	62	909368	21.97	ppbV	98
8) 1,3-Butadiene	1.798	39	1067818	19.71	ppbV	97
9) Bromomethane	2.091	94	475435	20.88	ppbV	97
10) Chloroethane	2.200	64	450085	24.81	ppbV	100
11) Vinyl bromide	2.303	106	571668	23.22	ppbV	99
12) Trichlorofluoromethane	2.323	101	1897881	21.31	ppbV	100
13) Ethanol	2.686	45	370755	17.98	ppbV	99
14) 1,1-Dichloroethene	2.747	61	1772097	22.95	ppbV	100
15) Carbon disulfide	2.766	76	2479435	23.47	ppbV	100
16) 1,1,2-Trichloro-1,2,2-...	2.789	101	1667126	18.58	ppbV	99
17) Acrolein	3.011	56	366049	21.15	ppbV	99
18) Allyl chloride	3.130	76	415285	25.23	ppbV	100
19) Isopropanol	3.133	45	2052862	16.38	ppbV	100
20) Methylene chloride	3.220	49	1219105	19.07	ppbV	100
21) Acetone	3.236	43	1769509	21.06	ppbV	99
22) 1,2-Dichloroethene (tr...	3.345	61	1693052	26.15	ppbV	99
23) n-Pentane	3.432	43	2243422	19.88	ppbV	99
24) n-Hexane	3.429	57	2930699	20.95	ppbV	100
25) Methyl tert-butyl ether	3.432	73	3031684	20.28	ppbV	97
26) Tert-butyl alcohol	3.487	59	2471832	21.65	ppbV	100
27) 1,1-Dichloroethane	3.831	63	2007770	22.28	ppbV	100
28) 1,2-Dichloroethene (cis)	4.258	61	1537110	24.37	ppbV	99
29) Cyclohexane	4.438	56	2016258	19.75	ppbV	99
30) Chloroform	4.480	83	2001042	22.71	ppbV	100
31) Ethyl acetate	4.573	45	531331	22.53	ppbV	100
32) Carbon tetrachloride	4.602	117	1941156	20.05	ppbV	100
33) Tetrahydrofuran	4.602	42	1979881	24.58	ppbV	99
34) 1,1,1-Trichloroethane	4.651	97	1799440	19.17	ppbV	99
35) Methyl ethyl ketone	4.715	43	3119202	23.13	ppbV	100
36) n-Heptane	4.946	43	3316288	20.34	ppbV	99
37) Benzene	4.962	78	2955929	21.57	ppbV	100
38) 1,2-Dichloroethane	5.123	62	1593336	22.86	ppbV	100
40) Trichloroethene	5.464	130	991633	18.87	ppbV	100
41) 2,2,4-Trimethylpentane	4.869	57	5348665	18.63	ppbV	99
42) 1,2-Dichloropropane	5.917	63	1472312	18.69	ppbV	100
43) Bromodichloromethane	5.975	83	2256897	20.91	ppbV	99
44) Methyl methacrylate	6.123	41	2597635	20.54	ppbV	100
45) 1,4-Dioxane	6.146	88	770002	21.37	ppbV	100
46) cis-1,3-Dichloropropene	6.570	75	2059754	20.00	ppbV	99
47) Toluene	6.805	91	4010951	18.90	ppbV	100
48) Methyl isobutyl ketone	7.171	43	5163025	19.54	ppbV	99
49) Tetrachloroethene	7.194	166	1412634	20.74	ppbV	99
50) trans-1,3-Dichloropropene	7.210	75	2280073	22.49	ppbV	99
51) 1,1,2-Trichloroethane	7.371	97	1313675	19.25	ppbV	100

Data Path : C:\DATA\2024\09-2024\09-11-2024\
Data File : aa7127std02.D
Acq On : 11 Sep 2024 1:44 pm
Operator : jjw
Sample : 20 ppbv std
Misc : EB0103704
ALS Vial : 6 Sample Multiplier: 1

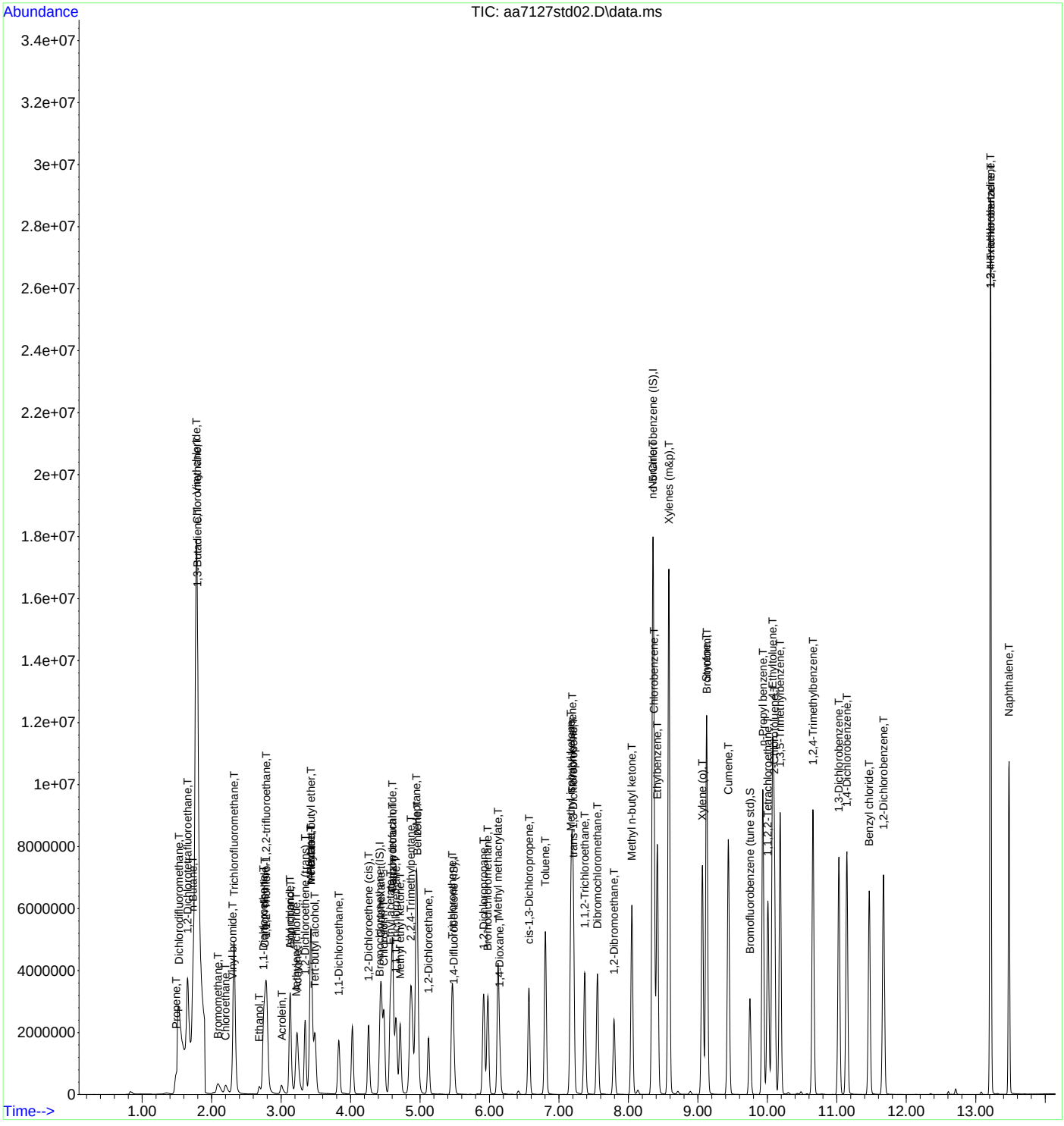
Quant Time: Sep 11 14:05:24 2024
Quant Method : C:\msdchem\1\METHODS\240910.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Sep 11 13:33:21 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.554	129	2101292	21.50	ppbV	99
53) 1,2-Dibromoethane	7.792	107	1870099	20.76	ppbV	100
54) Methyl n-butyl ketone	8.049	43	5288116	21.92	ppbV	99
56) n-Nonane	8.351	43	6834616	18.84	ppbV	99
57) Chlorobenzene	8.371	112	3171865	18.80	ppbV	100
58) Ethylbenzene	8.416	91	6375212	18.23	ppbV	100
59) Xylenes (m&p)	8.583	91	10346097	38.80	ppbV	100
60) Xylene (o)	9.065	91	4898959	18.05	ppbV	100
61) Styrene	9.123	104	3828880	22.80	ppbV	99
62) Bromoform	9.129	173	2092132	21.63	ppbV	100
63) Cumene	9.438	105	6075561	18.16	ppbV	100
65) n-Propyl benzene	9.936	91	9100523	18.61	ppbV	100
66) 1,1,2,2-Tetrachloroethane	10.007	83	4065220	18.94	ppbV	100
67) 4-Ethyltoluene	10.075	105	7140849	18.75	ppbV	100
68) 2-Chlorotoluene	10.100	91	5894660	18.52	ppbV	100
69) 1,3,5-Trimethylbenzene	10.184	105	5560560	19.07	ppbV	99
70) 1,2,4-Trimethylbenzene	10.657	105	5629169	19.51	ppbV	100
71) 1,3-Dichlorobenzene	11.030	146	3018169	19.36	ppbV	99
72) 1,4-Dichlorobenzene	11.145	146	3018939	19.77	ppbV	100
73) Benzyl chloride	11.467	91	5306597	19.35	ppbV	100
74) 1,2-Dichlorobenzene	11.673	146	2835492	18.85	ppbV	98
75) 1,3-Hexachlorobutadiene	13.213	225	1915210	20.27	ppbV	99
76) 1,2,4-Trichlorobenzene	13.216	180	2667650	19.38	ppbV	99
77) Naphthalene	13.480	128	5506398	14.68	ppbV	100

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

Data Path : C:\DATA\2024\09-2024\09-11-2024\
Data File : aa7127std02.D
Acq On : 11 Sep 2024 1:44 pm
Operator : jjw
Sample : 20 ppbv std
Misc : EB0103704
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 11 14:05:24 2024
Quant Method : C:\msdchem\1\METHODS\240910.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Sep 11 13:33:21 2024
Response via : Initial Calibration



Data Path : C:\DATA\2024\09-2024\09-11-2024\
Data File : aa7128std01.D
Acq On : 11 Sep 2024 2:20 pm
Operator : jjw
Sample : 40 ppbv std
Misc : EB0103704
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 11 16:04:10 2024
Quant Method : C:\msdchem\1\METHODS\240910.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Sep 11 15:58:45 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.432	130	230981	10.00	ppbV		0.013
39) 1,4-Difluorobenzene (IS)	5.486	114	1167632	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.354	117	1449441	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.750	95	1264194	9.92	ppbV		0.000
Target Compounds							Qvalue
2) Propene	1.509	41	1536292	42.66	ppbV		99
3) Dichlorodifluoromethane	1.533	85	3099293	43.27	ppbV		99
4) 1,2-Dichlorotetrafluor...	1.657	85	3852465	38.00	ppbV		98
5) n-Butane	1.736	43	3549576	40.31	ppbV		99
6) Chloromethane	1.801	52	296606	48.17	ppbV		45
7) Vinyl chloride	1.791	62	1821239	44.31	ppbV		100
8) 1,3-Butadiene	1.798	39	1998913	39.13	ppbV		96
9) Bromomethane	2.097	94	939652	41.23	ppbV		97
10) Chloroethane	2.207	64	904829	47.29	ppbV		99
11) Vinyl bromide	2.303	106	1196613	46.02	ppbV		100
12) Trichlorofluoromethane	2.326	101	3764472	43.49	ppbV		99
13) Ethanol	2.689	45	763551	42.88	ppbV		88
14) 1,1-Dichloroethene	2.750	61	3526320	44.52	ppbV		100
15) Carbon disulfide	2.773	76	5021791	46.28	ppbV		99
16) 1,1,2-Trichloro-1,2,2-...	2.789	101	3456045	41.25	ppbV		100
17) Acrolein	3.011	56	728237	41.76	ppbV		99
18) Allyl chloride	3.130	76	814584	47.22	ppbV		100
19) Isopropanol	3.136	45	3868796	33.66	ppbV		98
20) Methylene chloride	3.223	49	2509803	41.56	ppbV		99
21) Acetone	3.242	43	3491598	42.69	ppbV		99
22) 1,2-Dichloroethene (tr...	3.348	61	3496844	50.75	ppbV		99
23) n-Pentane	3.425	43	4766527	43.26	ppbV		100
24) n-Hexane	3.425	57	6170739	45.30	ppbV		99
25) Methyl tert-butyl ether	3.432	73	6250282	43.83	ppbV		95
26) Tert-butyl alcohol	3.490	59	5069762	45.90	ppbV		100
27) 1,1-Dichloroethane	3.834	63	4116550	45.34	ppbV		99
28) 1,2-Dichloroethene (cis)	4.261	61	3163166	48.26	ppbV		100
29) Cyclohexane	4.441	56	4121952	42.82	ppbV		99
30) Chloroform	4.480	83	4120204	46.18	ppbV		100
31) Ethyl acetate	4.573	45	1113526	46.61	ppbV		99
32) Carbon tetrachloride	4.605	117	3959456	43.00	ppbV		100
33) Tetrahydrofuran	4.605	42	4097076	49.09	ppbV		99
34) 1,1,1-Trichloroethane	4.657	97	3623147	41.09	ppbV		100
35) Methyl ethyl ketone	4.715	43	6462818	47.27	ppbV		100
36) n-Heptane	4.949	43	4669788	32.24	ppbV		89
37) Benzene	4.962	78	6342139	46.28	ppbV		100
38) 1,2-Dichloroethane	5.123	62	3283541	46.56	ppbV		99
40) Trichloroethene	5.464	130	2105193	38.81	ppbV		100
41) 2,2,4-Trimethylpentane	4.872	57	11116602	39.08	ppbV		99
42) 1,2-Dichloropropane	5.917	63	3016052	38.95	ppbV		100
43) Bromodichloromethane	5.978	83	4646219	42.55	ppbV		98
44) Methyl methacrylate	6.123	41	5239586	40.70	ppbV		100
45) 1,4-Dioxane	6.149	88	1539477	42.38	ppbV		98
46) cis-1,3-Dichloropropene	6.567	75	4147714	40.10	ppbV		100
47) Toluene	6.808	91	7908632	37.64	ppbV		99
48) Methyl isobutyl ketone	7.171	43	9970826	37.93	ppbV		98
49) Tetrachloroethene	7.194	166	2899859	41.81	ppbV		100
50) trans-1,3-Dichloropropene	7.213	75	4641493	43.48	ppbV	#	70
51) 1,1,2-Trichloroethane	7.370	97	2639736	38.68	ppbV		100

Data Path : C:\DATA\2024\09-2024\09-11-2024\
Data File : aa7128std01.D
Acq On : 11 Sep 2024 2:20 pm
Operator : jjw
Sample : 40 ppbv std
Misc : EB0103704
ALS Vial : 7 Sample Multiplier: 1

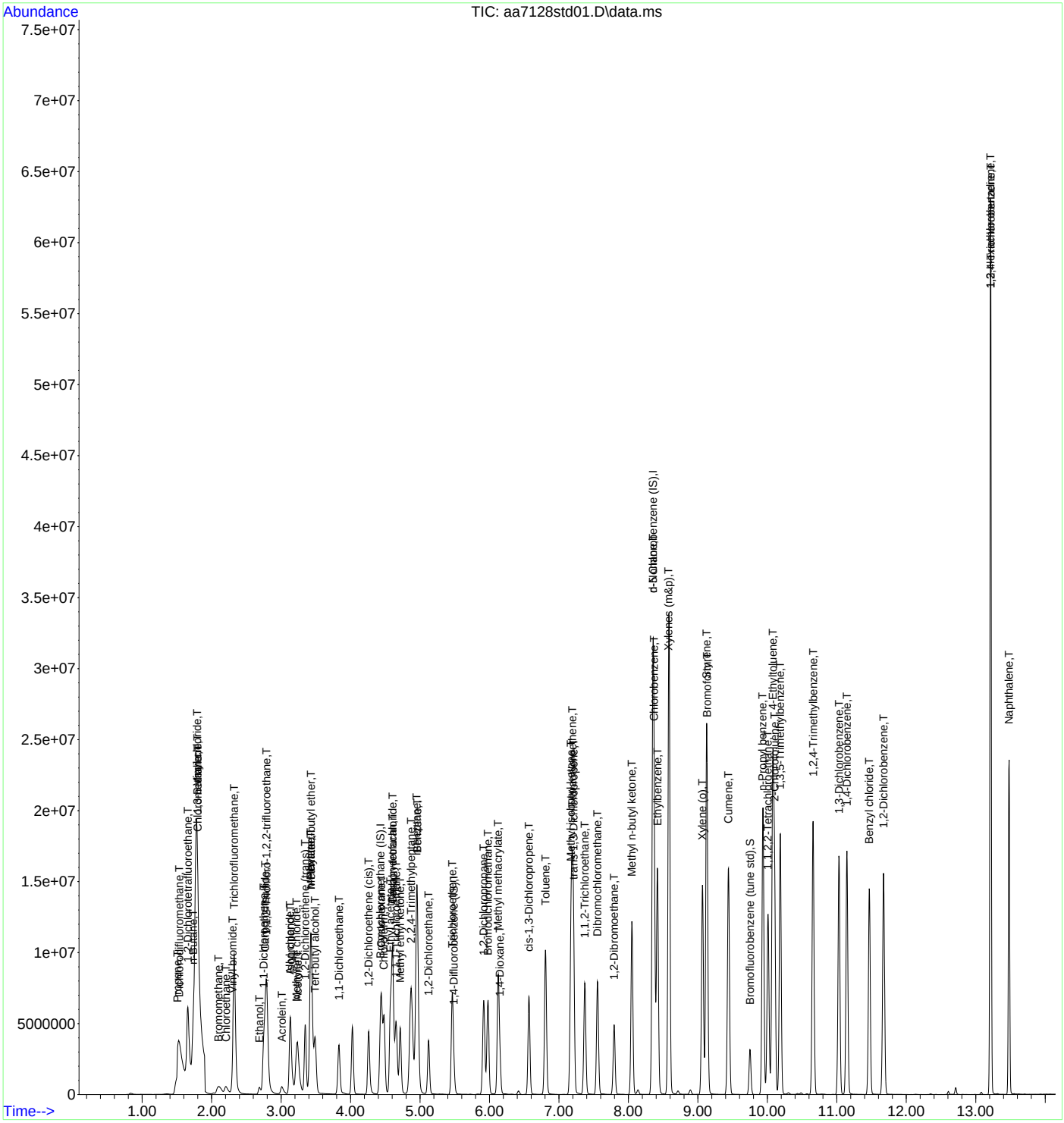
Quant Time: Sep 11 16:04:10 2024
Quant Method : C:\msdchem\1\METHODS\240910.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Sep 11 15:58:45 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.554	129	4294311	42.61	ppbV	99
53) 1,2-Dibromoethane	7.795	107	3776790	40.72	ppbV	99
54) Methyl n-butyl ketone	8.049	43	10553408	42.43	ppbV	99
56) n-Nonane	8.354	43	13090834	37.16	ppbV	97
57) Chlorobenzene	8.370	112	6498302	39.36	ppbV	99
58) Ethylbenzene	8.419	91	12600395	37.45	ppbV	99
59) Xylenes (m&p)	8.576	91	18918840	73.22	ppbV	92
60) Xylene (o)	9.065	91	9783863	37.41	ppbV	100
61) Styrene	9.126	104	8282921	46.66	ppbV	100
62) Bromoform	9.132	173	4479813	44.83	ppbV	100
63) Cumene	9.441	105	11920835	36.66	ppbV	99
65) n-Propyl benzene	9.930	91	17948237	37.52	ppbV	98
66) 1,1,2,2-Tetrachloroethane	10.007	83	8193049	39.38	ppbV	100
67) 4-Ethyltoluene	10.078	105	14849998	39.38	ppbV	99
68) 2-Chlorotoluene	10.103	91	12080225	38.73	ppbV	100
69) 1,3,5-Trimethylbenzene	10.184	105	10980711	38.28	ppbV	100
70) 1,2,4-Trimethylbenzene	10.660	105	11705113	40.38	ppbV	99
71) 1,3-Dichlorobenzene	11.033	146	6564516	42.11	ppbV	100
72) 1,4-Dichlorobenzene	11.145	146	6530695	41.88	ppbV	99
73) Benzyl chloride	11.467	91	11473625	40.25	ppbV	99
74) 1,2-Dichlorobenzene	11.673	146	6108677	40.53	ppbV	98
75) 1,3-Hexachlorobutadiene	13.213	225	4336589	44.75	ppbV	98
76) 1,2,4-Trichlorobenzene	13.216	180	6390257	45.58	ppbV	100
77) Naphthalene	13.476	128	11385204	34.58	ppbV	98

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

Data Path : C:\DATA\2024\09-2024\09-11-2024\
Data File : aa7128std01.D
Acq On : 11 Sep 2024 2:20 pm
Operator : jjw
Sample : 40 ppbv std
Misc : EB0103704
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 11 16:04:10 2024
Quant Method : C:\msdchem\1\METHODS\240910.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Sep 11 15:58:45 2024
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES, LLC

Initial Calibration Verification Sample Standard

Lab Sample Name: 10 PPBV ICVSS **Data File:** AA6561ICVSS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 5/29/2024

Amount of standard injected (ml): 50

Runs with this ICVSS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6554BFB]	05/29/2024 9:16
0.2 PPBV STD [AA6556STD05]	05/29/2024 12:40
2 PPBV STD [AA6557STD04]	05/29/2024 13:11
10 PPBV STD [AA6558STD03]	05/29/2024 13:46
20 PPBV STD [AA6559STD02]	05/29/2024 14:18
40 PPBV STD [AA6560STD01]	05/29/2024 14:55
10 PPBV ICVSS [AA6561ICVSS]	05/29/2024 17:16

Compound	CAS #	Injected Amount (ppbv)	Recovered Amount (ppbv)	% Recovery	QC Limit
Acetone	67-64-1	11	12	110	
Acrolein	107-02-8	9.4	11	120	
Allyl Chloride	107-05-1	11	12	110	
Benzene	71-43-2	10	11	110	
Benzyl chloride	100-44-7	11	9.6	89	
Bromodichloromethane	75-27-4	11	12	110	
Bromoform	75-25-2	11	11	96	
Bromomethane	74-83-9	11	12	110	
1,3-Butadiene	106-99-0	11	12	110	
n-Butane	106-97-8	11	12	110	
Chlorobenzene	108-90-7	10	11	110	
Chloroethane	75-00-3	9.8	12	120	
Chloroform	67-66-3	11	11	100	
Chloromethane	74-87-3	9.9	13	130	
Carbon disulfide	75-15-0	10	12	120	
Carbon tetrachloride	56-23-5	11	11	100	
2-Chlorotoluene	95-49-8	11	10	91	
Cumene	98-82-8	10	10	99	
Cyclohexane	110-82-7	11	12	110	
Dibromochloromethane	124-48-1	11	11	100	
1,2-Dibromoethane	106-93-4	11	11	100	
1,2-Dichlorobenzene	95-50-1	10	10	97	
1,3-Dichlorobenzene	541-73-1	10	10	96	
1,4-Dichlorobenzene	106-46-7	10	10	97	
Dichlorodifluoromethane	75-71-8	11	11	100	
1,1-Dichloroethane	75-34-3	11	12	110	
1,2-Dichloroethane	107-06-2	11	11	100	
1,1-Dichloroethene	75-35-4	11	12	110	
1,2-Dichloroethene (cis)	156-59-2	10	12	120	
1,2-Dichloroethene (trans)	156-60-5	11	12	110	
1,2-Dichloropropane	78-87-5	11	11	100	
1,3-Dichloropropene (cis)	10061-01-5	9.9	12	120	
1,3-Dichloropropene (trans)	10061-02-6	11	12	110	
1,2-Dichlorotetrafluoroethane	76-14-2	11	10	89	
1,4-Dioxane	123-91-1	11	12	110	
Ethanol	64-17-5	9.8	10	100	
Ethyl acetate	141-78-6	10	12	120	
Ethylbenzene	100-41-4	10	11	110	
4-Ethyltoluene	622-96-8	11	10	93	
n-Heptane	142-82-5	11	11	100	

ICVSS recovery must be within 70-130% of the spiked value for all compounds.

*** Values outside of QC limits**

INTEGRATED ANALYTICAL LABORATORIES, LLC

Initial Calibration Verification Sample Standard

Lab Sample Name: 10 PPBV ICVSS **Data File:** AA6561ICVSS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 5/29/2024

Amount of standard injected (ml): 50

Runs with this ICVSS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6554BFB]	05/29/2024 9:16
0.2 PPBV STD [AA6556STD05]	05/29/2024 12:40
2 PPBV STD [AA6557STD04]	05/29/2024 13:11
10 PPBV STD [AA6558STD03]	05/29/2024 13:46
20 PPBV STD [AA6559STD02]	05/29/2024 14:18
40 PPBV STD [AA6560STD01]	05/29/2024 14:55
10 PPBV ICVSS [AA6561ICVSS]	05/29/2024 17:16

Compound	CAS #	Injected Amount (ppbv)	Recovered Amount (ppbv)	% Recovery	QC Limit
1,3-Hexachlorobutadiene	87-68-3	9.8	10	100	
n-Hexane	110-54-3	11	12	110	
Isopropanol	67-63-0	8.1	9.9	120	
Methylene chloride	75-09-2	11	11	100	
Methyl ethyl ketone	78-93-3	11	12	110	
Methyl isobutyl ketone	108-10-1	10	11	110	
Methyl methacrylate	80-62-6	11	12	110	
Methyl n-butyl ketone	591-78-6	11	11	99	
Methyl tert-butyl ether	1634-04-4	11	11	100	
Naphthalene	91-20-3	11	9.1	85	
n-Nonane	111-84-2	11	11	97	
n-Pentane	109-66-0	11	11	99	
Propene	115-07-1	11	12	110	
n-Propyl benzene	103-65-1	11	10.0	91	
Styrene	100-42-5	11	11	100	
Tert-butyl alcohol	75-65-0	12	12	100	
1,1,2,2-Tetrachloroethane	79-34-5	10	11	110	
Tetrachloroethene	127-18-4	12	11	93	
Tetrahydrofuran	109-99-9	11	12	110	
Toluene	108-88-3	11	11	100	
1,2,4-Trichlorobenzene	120-82-1	10	11	110	
1,1,1-Trichloroethane	71-55-6	11	11	100	
1,1,2-Trichloroethane	79-00-5	11	11	100	
Trichloroethene	79-01-6	10	10	98	
Trichlorofluoromethane	75-69-4	11	12	110	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	11	11	100	
1,2,4-Trimethylbenzene	95-63-6	10	10	100	
1,3,5-Trimethylbenzene	108-67-8	10	10	96	
2,2,4-Trimethylpentane	540-84-1	11	12	110	
Vinyl bromide	593-60-2	10	11	110	
Vinyl chloride	75-01-4	11	12	110	
Xylenes (m&p)	179601-23-1	21	22	110	
Xylenes (o)	95-47-6	10	11	110	

ICVSS recovery must be within 70-130% of the spiked value for all compounds.

*** Values outside of QC limits**

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6561icvss.D
Acq On : 29 May 2024 5:16 pm
Operator : jjw
Sample : 10 ppbv icvss
Misc : EB0116272
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 30 10:48:22 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.412	130	242079	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.480	114	1024301	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.354	117	930904	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.750	95	819051	9.30	ppbV	0.000
Target Compounds						Qvalue
2) Propene	1.470	41	295359	11.63	ppbV	98
3) Dichlorodifluoromethane	1.509	85	776026	11.20	ppbV	99
4) 1,2-Dichlorotetrafluor...	1.629	85	976935	10.06	ppbV	99
5) n-Butane	1.712	43	623050	11.87	ppbV	99
6) Chloromethane	1.774	52	56607	13.10	ppbV	94
7) Vinyl chloride	1.770	62	386689	12.12	ppbV	99
8) 1,3-Butadiene	1.777	39	340949	11.53	ppbV	99
9) Bromomethane	2.072	94	294022	11.79	ppbV	99
10) Chloroethane	2.181	64	215495	11.88	ppbV	100
11) Vinyl bromide	2.284	106	340589	11.26	ppbV	99
12) Trichlorofluoromethane	2.300	101	924702	11.59	ppbV	99
13) Ethanol	2.670	45	124849	10.02	ppbV	100
14) 1,1-Dichloroethene	2.731	61	722015	11.76	ppbV	98
15) Carbon disulfide	2.753	76	1220444	11.93	ppbV	100
16) 1,1,2-Trichloro-1,2,2-...	2.773	101	811936	10.77	ppbV	98
17) Acrolein	2.988	56	148588	10.87	ppbV	98
18) Allyl chloride	3.117	76	195404	12.43	ppbV	100
19) Isopropanol	3.117	45	678381	9.93	ppbV	99
20) Methylene chloride	3.207	49	473261	10.82	ppbV	98
21) Acetone	3.220	43	635449	11.70	ppbV	99
22) 1,2-Dichloroethene (tr...	3.332	61	675217	12.16	ppbV	96
23) n-Pentane	3.416	43	749023	11.29	ppbV	98
24) n-Hexane	3.419	57	1075039	11.56	ppbV	100
25) Methyl tert-butyl ether	3.422	73	1227288	11.07	ppbV	97
26) Tert-butyl alcohol	3.477	59	894849	11.81	ppbV	100
27) 1,1-Dichloroethane	3.821	63	793260	11.51	ppbV	99
28) 1,2-Dichloroethene (cis)	4.248	61	602979	12.05	ppbV	97
29) Cyclohexane	4.432	56	720408	11.61	ppbV	98
30) Chloroform	4.473	83	884482	11.44	ppbV	100
31) Ethyl acetate	4.567	45	153476	11.66	ppbV	98
32) Carbon tetrachloride	4.596	117	867346	11.00	ppbV	100
33) Tetrahydrofuran	4.596	42	564904	12.16	ppbV	98
34) 1,1,1-Trichloroethane	4.647	97	786581	10.80	ppbV	100
35) Methyl ethyl ketone	4.705	43	897094	11.65	ppbV	99
36) n-Heptane	4.940	43	823524	11.31	ppbV	98
37) Benzene	4.956	78	1222515	11.09	ppbV	100
38) 1,2-Dichloroethane	5.117	62	576924	11.44	ppbV	100
40) Trichloroethene	5.457	130	480963	10.38	ppbV	99
41) 2,2,4-Trimethylpentane	4.869	57	2127194	11.66	ppbV	99
42) 1,2-Dichloropropane	5.911	63	482710	11.36	ppbV	99
43) Bromodichloromethane	5.972	83	893791	12.07	ppbV	100
44) Methyl methacrylate	6.120	41	623370	11.74	ppbV	96
45) 1,4-Dioxane	6.145	88	295794	12.23	ppbV	99
46) cis-1,3-Dichloropropene	6.567	75	731256	11.64	ppbV	100
47) Toluene	6.805	91	1431765	10.92	ppbV	99
48) Methyl isobutyl ketone	7.171	43	1084912	11.31	ppbV	99
49) Tetrachloroethene	7.190	166	551683	11.11	ppbV	99
50) trans-1,3-Dichloropropene	7.210	75	715458	11.85	ppbV	98
51) 1,1,2-Trichloroethane	7.370	97	491811	10.86	ppbV	99

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6561icvss.D
Acq On : 29 May 2024 5:16 pm
Operator : jjw
Sample : 10 ppbv icvss
Misc : EB0116272
ALS Vial : 8 Sample Multiplier: 1

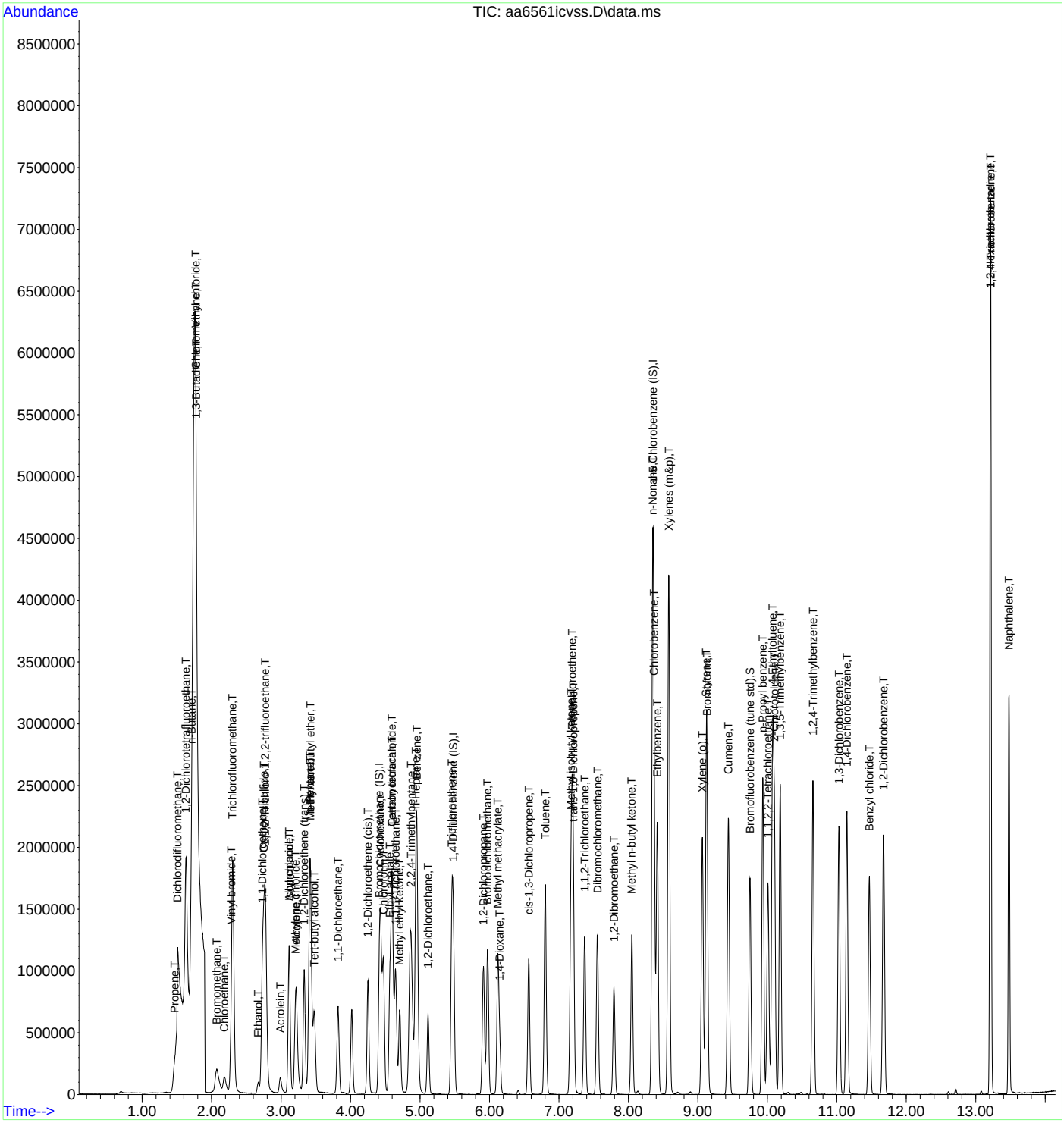
Quant Time: May 30 10:48:22 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.557	129	811619	11.24	ppbV	99
53) 1,2-Dibromoethane	7.792	107	711438	10.96	ppbV	99
54) Methyl n-butyl ketone	8.046	43	1023608	11.40	ppbV	99
56) n-Nonane	8.348	43	1174365	10.79	ppbV	99
57) Chlorobenzene	8.370	112	1046381	10.85	ppbV	98
58) Ethylbenzene	8.415	91	1949323	10.62	ppbV	100
59) Xylenes (m&p)	8.583	91	2965697	21.50	ppbV	100
60) Xylene (o)	9.065	91	1532788	10.55	ppbV	98
61) Styrene	9.120	104	1086762	11.25	ppbV	99
62) Bromoform	9.132	173	716125	11.05	ppbV	99
63) Cumene	9.441	105	1884946	10.17	ppbV	99
65) n-Propyl benzene	9.933	91	2546280	9.99	ppbV	100
66) 1,1,2,2-Tetrachloroethane	10.007	83	1152044	10.78	ppbV	100
67) 4-Ethyltoluene	10.075	105	2119259	10.20	ppbV	100
68) 2-Chlorotoluene	10.100	91	1763579	10.20	ppbV	99
69) 1,3,5-Trimethylbenzene	10.184	105	1734824	10.27	ppbV	100
70) 1,2,4-Trimethylbenzene	10.657	105	1736724	10.25	ppbV	99
71) 1,3-Dichlorobenzene	11.033	146	1033640	10.05	ppbV	100
72) 1,4-Dichlorobenzene	11.145	146	1041591	10.01	ppbV	99
73) Benzyl chloride	11.470	91	1613519	9.65	ppbV	100
74) 1,2-Dichlorobenzene	11.673	146	1002672	10.13	ppbV	100
75) 1,3-Hexachlorobutadiene	13.213	225	596173	10.47	ppbV	100
76) 1,2,4-Trichlorobenzene	13.216	180	806032	10.51	ppbV	100
77) Naphthalene	13.480	128	1971102	9.09	ppbV	100

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

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6561icvss.D
Acq On : 29 May 2024 5:16 pm
Operator : jjw
Sample : 10 ppbv icvss
Misc : EB0116272
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 30 10:48:22 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES, LLC

Initial Calibration Verification Sample Standard

Lab Sample Name: 10 PPBV ICVSS **Data File:** AA7129ICVSS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 9/11/2024

Amount of standard injected (ml): 50

Runs with this ICVSS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA7123BFB]	09/11/2024 10:57
0.2 PPBV STD [AA7124STD05]	09/11/2024 12:03
2 PPBV STD [AA7125STD04]	09/11/2024 12:35
10 PPBV STD [AA7126STD03]	09/11/2024 13:09
20 PPBV STD [AA7127STD02]	09/11/2024 13:44
40 PPBV STD [AA7128STD01]	09/11/2024 14:20
10 PPBV ICVSS [AA7129ICVSS]	09/11/2024 14:52
10 PPBV LCS [AA7130LCS]	09/11/2024 15:24
METHOD BLANK [AA7131BLK]	09/11/2024 15:57
02 PPBV RLLCS [AA7131RLLCS]	09/11/2024 16:33
10 PPBV CCCVS [AA7142CCCVS]	09/11/2024 22:56

Compound	CAS #	Injected Amount (ppbv)	Recovered Amount (ppbv)	% Recovery	QC Limit
Acetone	67-64-1	11	9.9	94	
Acrolein	107-02-8	9.4	9.7	100	
Allyl Chloride	107-05-1	11	11	99	
Benzene	71-43-2	10	8.4	81	
Benzyl chloride	100-44-7	11	9.2	85	
Bromodichloromethane	75-27-4	11	10	94	
Bromoform	75-25-2	11	10	88	
Bromomethane	74-83-9	11	11	100	
1,3-Butadiene	106-99-0	11	9.2	84	
n-Butane	106-97-8	11	9.4	89	
Chlorobenzene	108-90-7	10	10	96	
Chloroethane	75-00-3	9.8	11	110	
Chloroform	67-66-3	11	8.9	82	
Chloromethane	74-87-3	9.9	11	110	
Carbon disulfide	75-15-0	10	11	110	
Carbon tetrachloride	56-23-5	11	8.3	78	
2-Chlorotoluene	95-49-8	11	9.4	85	
Cumene	98-82-8	10	9.3	92	
Cyclohexane	110-82-7	11	8.5	78	
Dibromochloromethane	124-48-1	11	9.2	85	
1,2-Dibromoethane	106-93-4	11	8.9	83	
1,2-Dichlorobenzene	95-50-1	10	9.6	93	
1,3-Dichlorobenzene	541-73-1	10	9.6	92	
1,4-Dichlorobenzene	106-46-7	10	9.5	92	
Dichlorodifluoromethane	75-71-8	11	10	92	
1,1-Dichloroethane	75-34-3	11	9.0	86	
1,2-Dichloroethane	107-06-2	11	8.8	84	
1,1-Dichloroethene	75-35-4	11	9.3	86	
1,2-Dichloroethene (cis)	156-59-2	10	9.4	91	
1,2-Dichloroethene (trans)	156-60-5	11	9.9	93	
1,2-Dichloropropane	78-87-5	11	9.2	88	
1,3-Dichloropropene (cis)	10061-01-5	9.9	9.4	95	
1,3-Dichloropropene (trans)	10061-02-6	11	9.1	86	
1,2-Dichlorotetrafluoroethane	76-14-2	11	8.6	77	
1,4-Dioxane	123-91-1	11	9.7	87	

ICVSS recovery must be within 70-130% of the spiked value for all compounds.

*** Values outside of QC limits**

INTEGRATED ANALYTICAL LABORATORIES, LLC

Initial Calibration Verification Sample Standard

Lab Sample Name: 10 PPBV ICVSS **Data File:** AA7129ICVSS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 9/11/2024

Amount of standard injected (ml): 50

Runs with this ICVSS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA7123BFB]	09/11/2024 10:57
0.2 PPBV STD [AA7124STD05]	09/11/2024 12:03
2 PPBV STD [AA7125STD04]	09/11/2024 12:35
10 PPBV STD [AA7126STD03]	09/11/2024 13:09
20 PPBV STD [AA7127STD02]	09/11/2024 13:44
40 PPBV STD [AA7128STD01]	09/11/2024 14:20
10 PPBV ICVSS [AA7129ICVSS]	09/11/2024 14:52
10 PPBV LCS [AA7130LCS]	09/11/2024 15:24
METHOD BLANK [AA7131BLK]	09/11/2024 15:57
02 PPBV RLLCS [AA7131RLLCS]	09/11/2024 16:33
10 PPBV CCCVS [AA7142CCCVS]	09/11/2024 22:56

Compound	CAS #	Injected Amount (ppbv)	Recovered Amount (ppbv)	% Recovery	QC Limit
Ethanol	64-17-5	9.8	11	110	
Ethyl acetate	141-78-6	10	8.2	80	
Ethylbenzene	100-41-4	10	9.6	92	
4-Ethyltoluene	622-96-8	11	8.9	82	
n-Heptane	142-82-5	11	7.7	71	
1,3-Hexachlorobutadiene	87-68-3	9.8	9.1	93	
n-Hexane	110-54-3	11	8.7	81	
Isopropanol	67-63-0	8.1	7.7	95	
Methylene chloride	75-09-2	11	9.5	89	
Methyl ethyl ketone	78-93-3	11	8.8	81	
Methyl isobutyl ketone	108-10-1	10	7.9	77	
Methyl methacrylate	80-62-6	11	8.5	79	
Methyl n-butyl ketone	591-78-6	11	8.0	72	
Methyl tert-butyl ether	1634-04-4	11	8.7	80	
Naphthalene	91-20-3	11	8.9	83	
n-Nonane	111-84-2	11	8.7	77	
n-Pentane	109-66-0	11	8.8	79	
Propene	115-07-1	11	11	100	
n-Propyl benzene	103-65-1	11	9.1	83	
Styrene	100-42-5	11	9.9	91	
Tert-butyl alcohol	75-65-0	12	8.7	76	
1,1,2,2-Tetrachloroethane	79-34-5	10	10.0	97	
Tetrachloroethene	127-18-4	12	8.6	73	
Tetrahydrofuran	109-99-9	11	8.9	83	
Toluene	108-88-3	11	8.5	81	
1,2,4-Trichlorobenzene	120-82-1	10	8.5	85	
1,1,1-Trichloroethane	71-55-6	11	8.1	76	
1,1,2-Trichloroethane	79-00-5	11	8.5	79	
Trichloroethene	79-01-6	10	9.3	91	
Trichlorofluoromethane	75-69-4	11	9.3	88	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	11	8.3	76	
1,2,4-Trimethylbenzene	95-63-6	10	9.4	92	
1,3,5-Trimethylbenzene	108-67-8	10	9.6	92	
2,2,4-Trimethylpentane	540-84-1	11	12	110	
Vinyl bromide	593-60-2	10	11	110	

ICVSS recovery must be within 70-130% of the spiked value for all compounds.

*** Values outside of QC limits**

INTEGRATED ANALYTICAL LABORATORIES, LLC

Initial Calibration Verification Sample Standard

Lab Sample Name: 10 PPBV ICVSS **Data File:** AA7129ICVSS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 9/11/2024

Amount of standard injected (ml): 50

Runs with this ICVSS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA7123BFB]	09/11/2024 10:57
0.2 PPBV STD [AA7124STD05]	09/11/2024 12:03
2 PPBV STD [AA7125STD04]	09/11/2024 12:35
10 PPBV STD [AA7126STD03]	09/11/2024 13:09
20 PPBV STD [AA7127STD02]	09/11/2024 13:44
40 PPBV STD [AA7128STD01]	09/11/2024 14:20
10 PPBV ICVSS [AA7129ICVSS]	09/11/2024 14:52
10 PPBV LCS [AA7130LCS]	09/11/2024 15:24
METHOD BLANK [AA7131BLK]	09/11/2024 15:57
02 PPBV RLLCS [AA7131RLLCS]	09/11/2024 16:33
10 PPBV CCCVS [AA7142CCCVS]	09/11/2024 22:56

Compound	CAS #	Injected Amount (ppbv)	Recovered Amount (ppbv)	% Recovery	QC Limit
Vinyl chloride	75-01-4	11	11	97	
Xylenes (m&p)	179601-23-1	21	19	91	
Xylenes (o)	95-47-6	10	9.5	91	

ICVSS recovery must be within 70-130% of the spiked value for all compounds.

*** Values outside of QC limits**

Data Path : C:\DATA\2024\09-2024\09-11-2024\
Data File : aa7129icvss.D
Acq On : 11 Sep 2024 2:52 pm
Operator : jjw
Sample : 10 ppbv icvss
Misc : EB0116272
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 11 16:22:38 2024
Quant Method : C:\msdchem\1\METHODS\240910.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Sep 11 16:19:32 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.406	130	213938	10.00	ppbV		-0.013
39) 1,4-Difluorobenzene (IS)	5.477	114	819131	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.348	117	784817	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.750	95	676880	9.81	ppbV		0.000
Target Compounds							Qvalue
2) Propene	1.467	41	372826	11.18	ppbV		98
3) Dichlorodifluoromethane	1.499	85	686314	10.34	ppbV		100
4) 1,2-Dichlorotetrafluor...	1.629	85	806104	8.58	ppbV		100
5) n-Butane	1.708	43	770560	9.45	ppbV		99
6) Chloromethane	1.774	52	60766	10.63	ppbV		48
7) Vinyl chloride	1.764	62	418820	11.00	ppbV		99
8) 1,3-Butadiene	1.774	39	436513	9.23	ppbV		97
9) Bromomethane	2.069	94	233686	11.07	ppbV		99
10) Chloroethane	2.181	64	203541	11.49	ppbV		97
11) Vinyl bromide	2.284	106	258704	10.74	ppbV		100
12) Trichlorofluoromethane	2.300	101	741662	9.25	ppbV		100
13) Ethanol	2.667	45	177847	10.78	ppbV		99
14) 1,1-Dichloroethene	2.728	61	684810	9.34	ppbV		99
15) Carbon disulfide	2.747	76	1071728	10.66	ppbV		100
16) 1,1,2-Trichloro-1,2,2-...	2.769	101	644023	8.30	ppbV		100
17) Acrolein	2.982	56	157482	9.75	ppbV		99
18) Allyl chloride	3.110	76	169684	10.62	ppbV		100
19) Isopropanol	3.113	45	822842	7.73	ppbV		99
20) Methylene chloride	3.204	49	531881	9.51	ppbV		98
21) Acetone	3.216	43	750134	9.90	ppbV		99
22) 1,2-Dichloroethene (tr...	3.329	61	631502	9.90	ppbV		99
23) n-Pentane	3.416	43	903089	8.85	ppbV		99
24) n-Hexane	3.413	57	1101046	8.73	ppbV		99
25) Methyl tert-butyl ether	3.419	73	1155489	8.75	ppbV		99
26) Tert-butyl alcohol	3.474	59	894985	8.75	ppbV		100
27) 1,1-Dichloroethane	3.818	63	759772	9.03	ppbV		100
28) 1,2-Dichloroethene (cis)	4.248	61	572753	9.44	ppbV		99
29) Cyclohexane	4.429	56	761319	8.54	ppbV		98
30) Chloroform	4.474	83	738340	8.94	ppbV		100
31) Ethyl acetate	4.560	45	182130	8.23	ppbV		99
32) Carbon tetrachloride	4.593	117	707060	8.29	ppbV		98
33) Tetrahydrofuran	4.593	42	691407	8.94	ppbV		100
34) 1,1,1-Trichloroethane	4.644	97	660092	8.08	ppbV		100
35) Methyl ethyl ketone	4.705	43	1108715	8.76	ppbV		100
36) n-Heptane	4.940	43	1030664	7.68	ppbV		98
37) Benzene	4.953	78	1064260	8.38	ppbV		100
38) 1,2-Dichloroethane	5.113	62	574372	8.79	ppbV		99
40) Trichloroethene	5.454	130	353173	9.28	ppbV		100
41) 2,2,4-Trimethylpentane	4.866	57	2337240	11.71	ppbV		98
42) 1,2-Dichloropropane	5.911	63	499069	9.19	ppbV		100
43) Bromodichloromethane	5.972	83	775925	10.13	ppbV		99
44) Methyl methacrylate	6.117	41	768931	8.51	ppbV		97
45) 1,4-Dioxane	6.146	88	247010	9.69	ppbV		100
46) cis-1,3-Dichloropropene	6.560	75	684189	9.43	ppbV		99
47) Toluene	6.801	91	1251152	8.49	ppbV		99
48) Methyl isobutyl ketone	7.168	43	1453057	7.88	ppbV		99
49) Tetrachloroethene	7.187	166	416468	8.56	ppbV		99
50) trans-1,3-Dichloropropene	7.210	75	682849	9.12	ppbV	#	69
51) 1,1,2-Trichloroethane	7.367	97	405484	8.47	ppbV		100

Data Path : C:\DATA\2024\09-2024\09-11-2024\
Data File : aa7129icvss.D
Acq On : 11 Sep 2024 2:52 pm
Operator : jjw
Sample : 10 ppbv icvss
Misc : EB0116272
ALS Vial : 8 Sample Multiplier: 1

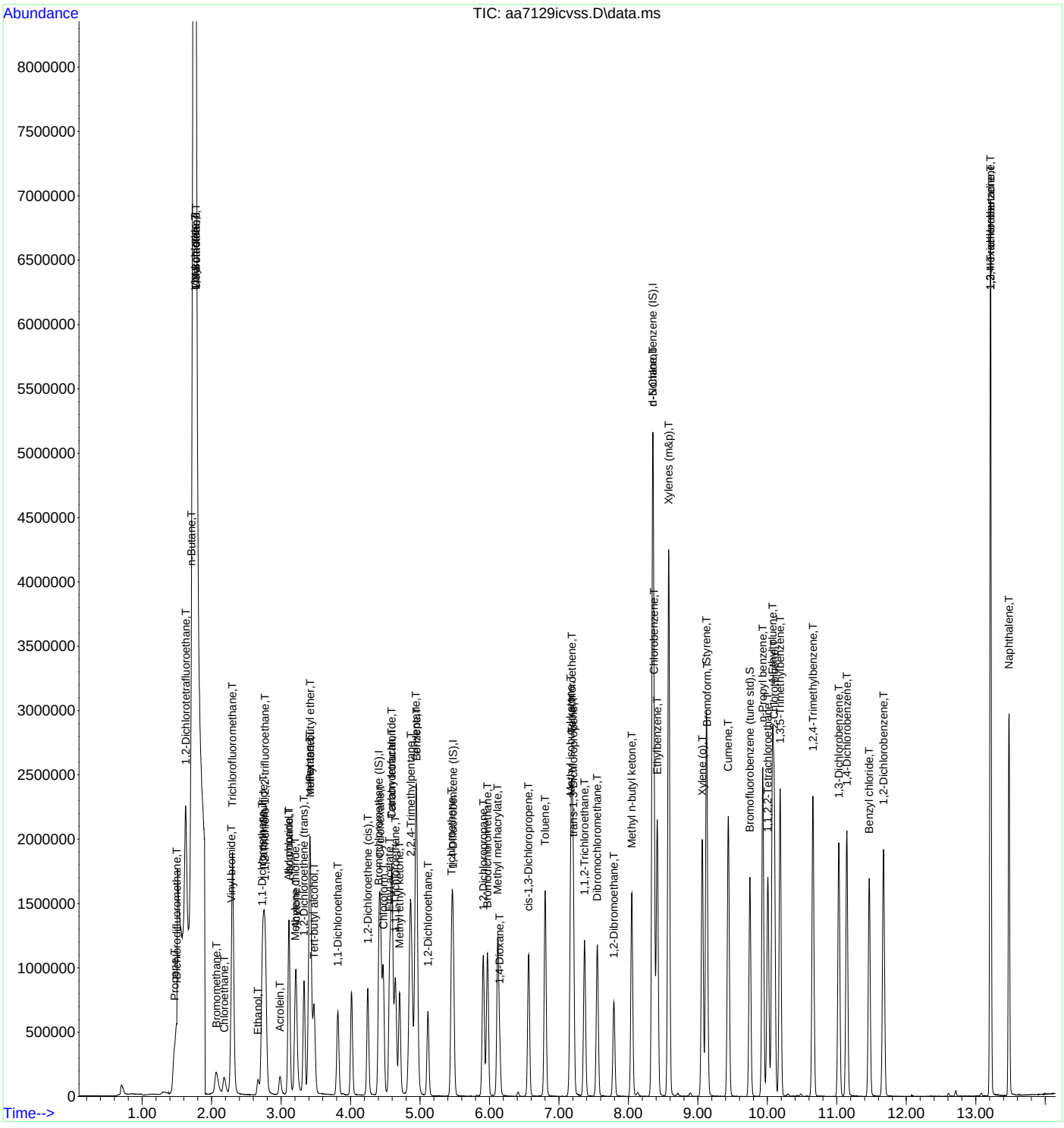
Quant Time: Sep 11 16:22:38 2024
Quant Method : C:\msdchem\1\METHODS\240910.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Sep 11 16:19:32 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.551	129	647099	9.15	ppbV	100
53) 1,2-Dibromoethane	7.789	107	581543	8.94	ppbV	99
54) Methyl n-butyl ketone	8.049	43	1394835	7.99	ppbV	99
56) n-Nonane	8.348	43	1653656	8.67	ppbV	99
57) Chlorobenzene	8.371	112	902749	10.10	ppbV	100
58) Ethylbenzene	8.416	91	1742693	9.57	ppbV	100
59) Xylenes (m&p)	8.579	91	2683173	19.18	ppbV	100
60) Xylene (o)	9.065	91	1345065	9.50	ppbV	100
61) Styrene	9.123	104	952422	9.91	ppbV	99
62) Bromoform	9.133	173	556704	10.29	ppbV	100
63) Cumene	9.438	105	1634437	9.28	ppbV	100
65) n-Propyl benzene	9.933	91	2361494	9.12	ppbV	100
66) 1,1,2,2-Tetrachloroethane	10.007	83	1121560	9.96	ppbV	100
67) 4-Ethyltoluene	10.075	105	1826875	8.95	ppbV	100
68) 2-Chlorotoluene	10.097	91	1588214	9.40	ppbV	100
69) 1,3,5-Trimethylbenzene	10.184	105	1496462	9.64	ppbV	99
70) 1,2,4-Trimethylbenzene	10.657	105	1472335	9.38	ppbV	100
71) 1,3-Dichlorobenzene	11.030	146	810085	9.60	ppbV	100
72) 1,4-Dichlorobenzene	11.145	146	804920	9.53	ppbV	100
73) Benzyl chloride	11.467	91	1417511	9.18	ppbV	100
74) 1,2-Dichlorobenzene	11.673	146	784340	9.61	ppbV	99
75) 1,3-Hexachlorobutadiene	13.213	225	478391	9.12	ppbV	99
76) 1,2,4-Trichlorobenzene	13.213	180	643983	8.48	ppbV	100
77) Naphthalene	13.480	128	1585855	8.90	ppbV	100

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

Data Path : C:\DATA\2024\09-2024\09-11-2024\
Data File : aa7129icvss.D
Acq On : 11 Sep 2024 2:52 pm
Operator : jjw
Sample : 10 ppbv icvss
Misc : EB0116272
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 11 16:22:38 2024
Quant Method : C:\msdchem\1\METHODS\240910.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Sep 11 16:19:32 2024
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES, LLC

Continuing Calibration Data Summary Report

Initial Calibration Curve:	**5/29/2024**	**Date/Time of Calibration:**	**5/31/2024 09:55**
Instrument:	**AA**	**Sample ID:**	**DCS**
Amount of standard injected (ml):	**50**	**Laboratory ID:**	**AA6580DCVS**

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6579BFB]	05/31/2024 09:25
10 PPBV DCVS [AA6580DCVS]	05/31/2024 09:55
10 PPBV LCS [AA6581LCS]	05/31/2024 10:25
METHOD BLANK [AA6582BLK]	05/31/2024 11:57
02 PPBV RLLCS [AA6583RLLCS]	05/31/2024 12:31
CLEAN CAN CERTIFICATION, BATCH MASTER 5089 [AA6584]	05/31/2024 13:04
CLEAN CAN CERTIFICATION, BATCH MASTER 2069 [AA6585]	05/31/2024 13:36
10 PPBV CCCVS [AA6598CCCVS]	05/31/2024 22:11

Compound Name	Average RRF	Standard RRF	% Difference	PassFail	*
Acetone	2.2	2.3	-3.0	PASS	
Benzene	4.6	4.7	-3.0	PASS	
Bromodichloromethane	0.72	0.72	-0.10	PASS	
Bromoform	0.70	0.72	-2.7	PASS	
Bromomethane	1.0	1.2	-14	PASS	
1,3-Butadiene	1.2	1.2	1.3	PASS	
Chlorobenzene	1.0	1.0	-0.80	PASS	
Chloroethane	0.75	0.79	-5.7	PASS	
Chloroform	3.2	3.4	-4.9	PASS	
Chloromethane	0.18	0.22	-24	PASS	
Carbon disulfide	4.2	4.5	-7.1	PASS	
Carbon tetrachloride	3.3	3.3	-0.20	PASS	
Cyclohexane	2.6	2.6	0.50	PASS	
Dibromochloromethane	0.71	0.71	-0.70	PASS	
1,2-Dibromoethane	0.63	0.64	-0.60	PASS	
1,2-Dichlorobenzene	1.1	1.0	3.4	PASS	
1,3-Dichlorobenzene	1.1	1.0	7.1	PASS	
1,4-Dichlorobenzene	1.1	1.1	3.5	PASS	
Dichlorodifluoromethane	2.9	3.0	-4.2	PASS	
1,1-Dichloroethane	2.8	2.9	-3.4	PASS	
1,2-Dichloroethane	2.1	2.2	-3.8	PASS	
1,1-Dichloroethene	2.5	2.7	-7.7	PASS	
1,2-Dichloroethene (cis)	2.1	2.2	-6.0	PASS	
1,2-Dichloroethene (trans)	2.3	2.4	-4.6	PASS	
1,2-Dichloropropane	0.42	0.42	-0.50	PASS	
1,3-Dichloropropene (cis)	0.61	0.62	-1.5	PASS	
1,3-Dichloropropene (trans)	0.59	0.61	-4.1	PASS	
1,2-Dichlorotetrafluoroethane	4.0	4.1	-1.0	PASS	
1,4-Dioxane	0.24	0.24	-1.7	PASS	
Ethylbenzene	2.0	1.9	3.1	PASS	
n-Heptane	3.0	2.9	2.3	PASS	
1,3-Hexachlorobutadiene	0.61	0.59	3.4	PASS	
n-Hexane	3.8	3.9	-0.70	PASS	
Methylene chloride	1.8	1.7	4.4	PASS	
Methyl ethyl ketone	3.2	3.2	-1.0	PASS	
Methyl isobutyl ketone	0.94	0.91	2.6	PASS	
Methyl tert-butyl ether	4.6	4.5	2.8	PASS	
Styrene	1.0	1.1	-1.8	PASS	
Tert-butyl alcohol	3.1	3.1	0.50	PASS	
1,1,2,2-Tetrachloroethane	1.1	1.1	4.4	PASS	
Tetrachloroethene	0.49	0.49	-1.2	PASS	
Toluene	1.3	1.3	-0.90	PASS	

***%Difference must be within +/- 30%**
RRF - Relative Response Factor

INTEGRATED ANALYTICAL LABORATORIES, LLC

Continuing Calibration Data Summary Report

Initial Calibration Curve:	**5/29/2024**	**Date/Time of Calibration:**	**5/31/2024 09:55**
Instrument:	**AA**	**Sample ID:**	**DCS**
Amount of standard injected (ml):	**50**	**Laboratory ID:**	**AA6580DCVS**

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6579BFB]	05/31/2024 09:25
10 PPBV DCVS [AA6580DCVS]	05/31/2024 09:55
10 PPBV LCS [AA6581LCS]	05/31/2024 10:25
METHOD BLANK [AA6582BLK]	05/31/2024 11:57
02 PPBV RLLCS [AA6583RLLCS]	05/31/2024 12:31
CLEAN CAN CERTIFICATION, BATCH MASTER 5089 [AA6584]	05/31/2024 13:04
CLEAN CAN CERTIFICATION, BATCH MASTER 2069 [AA6585]	05/31/2024 13:36
10 PPBV CCCVS [AA6598CCCVS]	05/31/2024 22:11

Compound Name	Average RRF	Standard RRF	% Difference	PassFail	*
1,2,4-Trichlorobenzene	0.82	0.80	3.4	PASS	
1,1,1-Trichloroethane	3.0	3.0	1.2	PASS	
1,1,2-Trichloroethane	0.44	0.44	0.20	PASS	
Trichloroethene	0.45	0.47	-2.9	PASS	
Trichlorofluoromethane	3.3	3.4	-3.9	PASS	
1,1,2-Trichloro-1,2,2-trifluoroethane	3.1	3.1	1.1	PASS	
1,2,4-Trimethylbenzene	1.8	1.8	3.7	PASS	
1,3,5-Trimethylbenzene	1.8	1.7	4.0	PASS	
2,2,4-Trimethylpentane	1.8	1.8	-2.4	PASS	
Vinyl bromide	1.2	1.4	-10	PASS	
Vinyl chloride	1.3	1.4	-6.8	PASS	
Xylenes (m&p)	1.5	1.5	1.8	PASS	
Xylenes (o)	1.6	1.5	3.5	PASS	

***%Difference must be within +/- 30%**
RRF - Relative Response Factor

Data Path : C:\DATA\2024\05-2024\05-31-2024\
Data File : aa6580dcvs.D
Acq On : 31 May 2024 9:55 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 31 10:12:29 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 0% Max. R.T. Dev 0.40min
Max. RRF Dev : 30% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane (IS)	1.000	1.000	0.0	91	0.00
2	T	Propene	1.050	1.042	0.8	92	0.00
3	T	Dichlorodifluoromethane	2.863	2.984	-4.2	91	0.00
4	T	1,2-Dichlorotetrafluoroetha	4.013	4.052	-1.0	92	0.00
5	T	n-Butane	2.168	2.148	0.9	91	0.00
6	T	Chloromethane	0.178	0.220	-23.6	99	0.00
7	T	Vinyl chloride	1.318	1.408	-6.8	92	0.00
8	T	1,3-Butadiene	1.222	1.206	1.3	88	0.00
9	T	Bromomethane	1.030	1.170	-13.6	96	0.00
10	T	Chloroethane	0.749	0.792	-5.7	91	0.00
11	T	Vinyl bromide	1.249	1.375	-10.1	91	0.00
12	T	Trichlorofluoromethane	3.297	3.424	-3.9	92	0.00
13	T	Ethanol	0.515	0.512	0.6	106	0.00
14	T	1,1-Dichloroethene	2.537	2.733	-7.7	92	0.00
15	T	Carbon disulfide	4.226	4.527	-7.1	92	0.00
16	T	1,1,2-Trichloro-1,2,2-trifl	3.115	3.080	1.1	93	0.00
17	T	Acrolein	0.564	0.581	-3.0	91	0.00
18	T	Allyl chloride	0.649	0.722	-11.2	92	0.00
19	T	Isopropanol	2.821	2.963	-5.0	93	0.00
20	T	Methylene chloride	1.807	1.728	4.4	92	0.00
21	T	Acetone	2.244	2.312	-3.0	93	0.00
22	T	1,2-Dichloroethene (trans)	2.294	2.400	-4.6	92	0.00
23	T	n-Pentane	2.741	2.680	2.2	94	0.00
24	T	n-Hexane	3.840	3.865	-0.7	93	0.00
25	T	Methyl tert-butyl ether	4.580	4.453	2.8	92	0.00
26	T	Tert-butyl alcohol	3.130	3.114	0.5	93	0.00
27	T	1,1-Dichloroethane	2.847	2.945	-3.4	93	0.00
28	T	1,2-Dichloroethene (cis)	2.066	2.190	-6.0	92	0.00
29	t	Cyclohexane	2.564	2.552	0.5	93	0.00
30	T	Chloroform	3.193	3.350	-4.9	92	0.00
31	T	Ethyl acetate	0.544	0.558	-2.6	94	0.00
32	T	Carbon tetrachloride	3.258	3.264	-0.2	91	0.00
33	T	Tetrahydrofuran	1.920	1.997	-4.0	92	0.00
34	T	1,1,1-Trichloroethane	3.007	2.971	1.2	92	0.00
35	T	Methyl ethyl ketone	3.180	3.211	-1.0	92	0.00
36	T	n-Heptane	3.007	2.939	2.3	94	0.00
37	T	Benzene	4.553	4.689	-3.0	93	0.00
38	T	1,2-Dichloroethane	2.083	2.163	-3.8	92	0.00
39	I	1,4-Difluorobenzene (IS)	1.000	1.000	0.0	93	0.00
40	T	Trichloroethene	0.452	0.465	-2.9	92	0.00
41	T	2,2,4-Trimethylpentane	1.781	1.823	-2.4	92	0.00
42	T	1,2-Dichloropropane	0.415	0.417	-0.5	92	0.00
43	T	Bromodichloromethane	0.723	0.724	-0.1	90	0.00
44	T	Methyl methacrylate	0.518	0.519	-0.2	94	0.00
45	T	1,4-Dioxane	0.236	0.240	-1.7	93	0.00
46	T	cis-1,3-Dichloropropene	0.613	0.622	-1.5	92	0.00
47	T	Toluene	1.280	1.292	-0.9	93	0.00
48	T	Methyl isobutyl ketone	0.936	0.912	2.6	93	0.00
49	T	Tetrachloroethene	0.485	0.491	-1.2	92	0.00
50	T	trans-1,3-Dichloropropene	0.589	0.613	-4.1	92	0.00
51	T	1,1,2-Trichloroethane	0.442	0.441	0.2	93	0.00
52	T	Dibromochloromethane	0.705	0.710	-0.7	91	0.00
53	T	1,2-Dibromoethane	0.634	0.638	-0.6	92	0.00

Data Path : C:\DATA\2024\05-2024\05-31-2024\
Data File : aa6580dcvs.D
Acq On : 31 May 2024 9:55 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 31 10:12:29 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 0% Max. R.T. Dev 0.40min
Max. RRF Dev : 30% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
54	T	Methyl n-butyl ketone	0.877	0.841	4.1	94	0.00
55	I	d-5 Chlorobenzene (IS)	1.000	1.000	0.0	89	0.00
56	T	n-Nonane	1.169	1.112	4.9	93	0.00
57	T	Chlorobenzene	1.036	1.044	-0.8	93	0.00
58	T	Ethylbenzene	1.971	1.909	3.1	93	0.00
59	T	Xylenes (m&p)	1.482	1.455	1.8	93	0.00
60	T	Xylene (o)	1.560	1.506	3.5	93	0.00
61	T	Styrene	1.037	1.056	-1.8	93	0.00
62	T	Bromoform	0.696	0.715	-2.7	93	0.00
63	T	Cumene	1.990	1.933	2.9	93	0.00
64	S	Bromofluorobenzene (tune st	0.946	0.851	10.0	88	0.00
65	T	n-Propyl benzene	2.737	2.572	6.0	92	0.00
66	T	1,1,2,2-Tetrachloroethane	1.149	1.098	4.4	92	0.00
67	T	4-Ethyltoluene	2.232	2.133	4.4	92	0.00
68	T	2-Chlorotoluene	1.857	1.766	4.9	93	0.00
69	T	1,3,5-Trimethylbenzene	1.815	1.742	4.0	92	0.00
70	T	1,2,4-Trimethylbenzene	1.821	1.753	3.7	92	0.00
71	T	1,3-Dichlorobenzene	1.105	1.026	7.1	92	0.00
72	T	1,4-Dichlorobenzene	1.117	1.078	3.5	93	0.00
73	T	Benzyl chloride	1.797	1.719	4.3	91	0.00
74	T	1,2-Dichlorobenzene	1.063	1.027	3.4	92	0.00
75	T	1,3-Hexachlorobutadiene	0.612	0.591	3.4	90	0.00
76	T	1,2,4-Trichlorobenzene	0.824	0.796	3.4	90	0.00
77	T	Naphthalene	2.329	2.107	9.5	89	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

INTEGRATED ANALYTICAL LABORATORIES, LLC

Quantitation Report (QT Reviewed)

Data Path : C:\DATA\2024\05-2024\05-31-2024\
Data File : aa6580dcvs.D
Acq On : 31 May 2024 9:55 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 31 10:12:29 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.416	130	218171	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.480	114	937834	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.351	117	833201	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.750	95	708705	8.99	ppbV	0.000
Target Compounds						Qvalue
2) Propene	1.470	41	247906	10.83	ppbV	97
3) Dichlorodifluoromethane	1.509	85	690056	11.05	ppbV	100
4) 1,2-Dichlorotetrafluor...	1.629	85	866359	9.90	ppbV	100
5) n-Butane	1.712	43	510809	10.80	ppbV	100
6) Chloromethane	1.777	52	53703	13.79	ppbV	97
7) Vinyl chloride	1.767	62	331877	11.54	ppbV	99
8) 1,3-Butadiene	1.781	39	281541	10.56	ppbV	96
9) Bromomethane	2.075	94	255265	11.36	ppbV	100
10) Chloroethane	2.184	64	183273	11.21	ppbV	100
11) Vinyl bromide	2.284	106	303005	11.12	ppbV	99
12) Trichlorofluoromethane	2.303	101	821815	11.43	ppbV	99
13) Ethanol	2.667	45	116156	10.35	ppbV	97
14) 1,1-Dichloroethene	2.731	61	620155	11.20	ppbV	100
15) Carbon disulfide	2.750	76	1056730	11.46	ppbV	100
16) 1,1,2-Trichloro-1,2,2-...	2.776	101	732352	10.78	ppbV	99
17) Acrolein	2.988	56	126827	10.30	ppbV	99
18) Allyl chloride	3.117	76	170196	12.02	ppbV	100
19) Isopropanol	3.117	45	575259	9.35	ppbV	99
20) Methylene chloride	3.207	49	407240	10.33	ppbV	99
21) Acetone	3.220	43	544717	11.13	ppbV	100
22) 1,2-Dichloroethene (tr...	3.332	61	581138	11.61	ppbV	99
23) n-Pentane	3.419	43	631375	10.56	ppbV	99
24) n-Hexane	3.416	57	927470	11.07	ppbV	100
25) Methyl tert-butyl ether	3.419	73	1088163	10.89	ppbV	99
26) Tert-butyl alcohol	3.477	59	781175	11.44	ppbV	100
27) 1,1-Dichloroethane	3.821	63	687554	11.07	ppbV	99
28) 1,2-Dichloroethene (cis)	4.248	61	520873	11.55	ppbV	100
29) Cyclohexane	4.428	56	623569	11.15	ppbV	99
30) Chloroform	4.470	83	789446	11.33	ppbV	98
31) Ethyl acetate	4.564	45	131450	11.08	ppbV	97
32) Carbon tetrachloride	4.596	117	783410	11.02	ppbV	99
33) Tetrahydrofuran	4.596	42	479150	11.44	ppbV	99
34) 1,1,1-Trichloroethane	4.647	97	706504	10.77	ppbV	100
35) Methyl ethyl ketone	4.708	43	770700	11.11	ppbV	99
36) n-Heptane	4.940	43	711683	10.85	ppbV	100
37) Benzene	4.956	78	1104804	11.12	ppbV	99
38) 1,2-Dichloroethane	5.113	62	514271	11.32	ppbV	99
40) Trichloroethene	5.457	130	436269	10.29	ppbV	100
41) 2,2,4-Trimethylpentane	4.866	57	1863385	11.16	ppbV	99
42) 1,2-Dichloropropane	5.914	63	430374	11.06	ppbV	100
43) Bromodichloromethane	5.969	83	781335	11.53	ppbV	97
44) Methyl methacrylate	6.120	41	535170	11.01	ppbV	97
45) 1,4-Dioxane	6.145	88	263068	11.88	ppbV	99
46) cis-1,3-Dichloropropene	6.563	75	647126	11.25	ppbV	100
47) Toluene	6.801	91	1308713	10.90	ppbV	100
48) Methyl isobutyl ketone	7.171	43	931926	10.61	ppbV	100
49) Tetrachloroethene	7.190	166	515959	11.34	ppbV	100
50) trans-1,3-Dichloropropene	7.207	75	637813	11.54	ppbV	100
51) 1,1,2-Trichloroethane	7.370	97	446370	10.76	ppbV	99

Data Path : C:\DATA\2024\05-2024\05-31-2024\
Data File : aa6580dcvs.D
Acq On : 31 May 2024 9:55 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

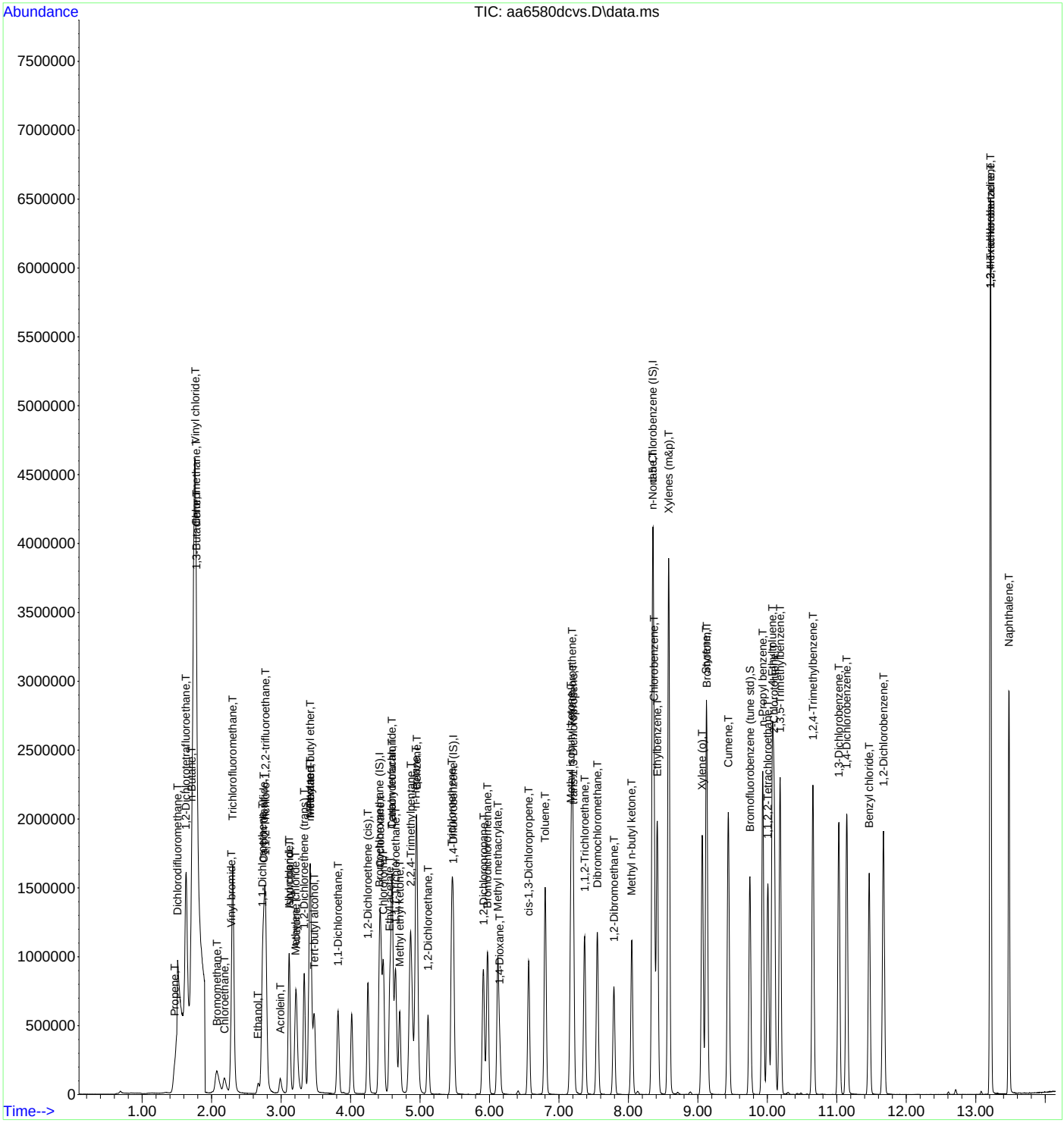
Quant Time: May 31 10:12:29 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.554	129	745615	11.28	ppbV	99
53) 1,2-Dibromoethane	7.792	107	646594	10.87	ppbV	100
54) Methyl n-butyl ketone	8.046	43	890936	10.84	ppbV	99
56) n-Nonane	8.348	43	1019492	10.47	ppbV	99
57) Chlorobenzene	8.370	112	965482	11.19	ppbV	100
58) Ethylbenzene	8.415	91	1765634	10.75	ppbV	100
59) Xylenes (m&p)	8.579	91	2703673	21.90	ppbV	100
60) Xylene (o)	9.062	91	1380624	10.62	ppbV	99
61) Styrene	9.120	104	993828	11.50	ppbV	99
62) Bromoform	9.129	173	673567	11.61	ppbV	100
63) Cumene	9.438	105	1723391	10.39	ppbV	100
65) n-Propyl benzene	9.933	91	2314743	10.15	ppbV	100
66) 1,1,2,2-Tetrachloroethane	10.007	83	1043054	10.90	ppbV	100
67) 4-Ethyltoluene	10.071	105	1919267	10.32	ppbV	99
68) 2-Chlorotoluene	10.097	91	1603719	10.37	ppbV	100
69) 1,3,5-Trimethylbenzene	10.184	105	1581902	10.46	ppbV	99
70) 1,2,4-Trimethylbenzene	10.657	105	1577805	10.40	ppbV	100
71) 1,3-Dichlorobenzene	11.030	146	948841	10.30	ppbV	100
72) 1,4-Dichlorobenzene	11.142	146	960882	10.32	ppbV	99
73) Benzyl chloride	11.467	91	1432182	9.57	ppbV	100
74) 1,2-Dichlorobenzene	11.673	146	915485	10.34	ppbV	99
75) 1,3-Hexachlorobutadiene	13.213	225	547041	10.73	ppbV	99
76) 1,2,4-Trichlorobenzene	13.213	180	729536	10.62	ppbV	100
77) Naphthalene	13.480	128	1755399	9.05	ppbV	100

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

Data Path : C:\DATA\2024\05-2024\05-31-2024\
Data File : aa6580dcvs.D
Acq On : 31 May 2024 9:55 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 31 10:12:29 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES, LLC

Continuing Calibration Data Summary Report

Initial Calibration Curve: 9/11/2024
Instrument: AA
Amount of standard injected (ml): 50

Date/Time of Calibration: 9/18/2024 10:54
Sample ID: DCS
Laboratory ID: AA7224DCVS

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA7223BFB]	09/18/2024 10:23
10 PPBV DCVS [AA7224DCVS]	09/18/2024 10:54
10 PPBV LCS [AA7225LCS]	09/18/2024 11:25
METHOD BLANK [AA7226BLK]	09/18/2024 11:55
E24-03187-01 [AA7231]	09/18/2024 14:43
E24-03187-02 [AA7232]	09/18/2024 15:19
E24-03187-03 [AA7233]	09/18/2024 15:51
E24-03187-04 [AA7234]	09/18/2024 16:40
E24-03187-05 [AA7235]	09/18/2024 17:11
E24-03187-06 [AA7236]	09/18/2024 17:50
E24-03187-07 [AA7237]	09/18/2024 18:22
E24-03187-08 [AA7240]	09/18/2024 19:54
E24-03187-28 [AA7241]	09/18/2024 20:26

Compound Name	Average RRF	Standard RRF	% Difference	PassFail	*
Acetone	3.5	4.2	-18	PASS	
Benzene	5.9	6.3	-6.7	PASS	
Bromodichloromethane	0.94	0.94	-0.40	PASS	
Bromoform	0.69	0.70	-1.3	PASS	
Bromomethane	0.99	1.1	-8.9	PASS	
1,3-Butadiene	2.2	2.6	-16	PASS	
Chlorobenzene	1.1	1.1	3.2	PASS	
Chloroethane	0.83	0.98	-19	PASS	
Chloroform	3.9	4.4	-13	PASS	
Chloromethane	0.27	0.30	-11	PASS	
Carbon disulfide	4.7	5.4	-16	PASS	
Carbon tetrachloride	4.0	3.9	1.1	PASS	
Cyclohexane	4.2	4.2	0.00	PASS	
Dibromochloromethane	0.86	0.89	-3.6	PASS	
1,2-Dibromoethane	0.79	0.84	-5.3	PASS	
1,2-Dichlorobenzene	1.0	1.0	0.80	PASS	
1,3-Dichlorobenzene	1.1	1.1	1.4	PASS	
1,4-Dichlorobenzene	1.1	1.1	-2.1	PASS	
Dichlorodifluoromethane	3.1	3.5	-12	PASS	
1,1-Dichloroethane	3.9	4.5	-14	PASS	
1,2-Dichloroethane	3.1	3.5	-14	PASS	
1,1-Dichloroethene	3.4	4.1	-19	PASS	
1,2-Dichloroethene (cis)	2.8	3.3	-18	PASS	
1,2-Dichloroethene (trans)	3.0	3.6	-20	PASS	
1,2-Dichloropropane	0.66	0.66	1.2	PASS	
1,3-Dichloropropene (cis)	0.89	0.89	-0.70	PASS	
1,3-Dichloropropene (trans)	0.91	0.99	-8.8	PASS	
1,2-Dichlorotetrafluoroethane	4.4	4.5	-1.8	PASS	
1,4-Dioxane	0.31	0.31	0.00	PASS	
Ethylbenzene	2.3	2.3	2.9	PASS	
n-Heptane	6.3	7.1	-14	PASS	
1,3-Hexachlorobutadiene	0.67	0.60	11	PASS	
n-Hexane	5.9	6.2	-5.3	PASS	
Methylene chloride	2.6	2.7	-2.0	PASS	
Methyl ethyl ketone	5.9	6.9	-17	PASS	
Methyl isobutyl ketone	2.3	2.4	-5.4	PASS	
Methyl tert-butyl ether	6.2	6.2	-0.90	PASS	

***%Difference must be within +/- 30%**
RRF - Relative Response Factor

INTEGRATED ANALYTICAL LABORATORIES, LLC

Continuing Calibration Data Summary Report

Initial Calibration Curve:	**9/11/2024**	**Date/Time of Calibration:**	**9/18/2024 10:54**
Instrument:	**AA**	**Sample ID:**	**DCS**
Amount of standard injected (ml):	**50**	**Laboratory ID:**	**AA7224DCVS**

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA7223BFB]	09/18/2024 10:23
10 PPBV DCVS [AA7224DCVS]	09/18/2024 10:54
10 PPBV LCS [AA7225LCS]	09/18/2024 11:25
METHOD BLANK [AA7226BLK]	09/18/2024 11:55
E24-03187-01 [AA7231]	09/18/2024 14:43
E24-03187-02 [AA7232]	09/18/2024 15:19
E24-03187-03 [AA7233]	09/18/2024 15:51
E24-03187-04 [AA7234]	09/18/2024 16:40
E24-03187-05 [AA7235]	09/18/2024 17:11
E24-03187-06 [AA7236]	09/18/2024 17:50
E24-03187-07 [AA7237]	09/18/2024 18:22
E24-03187-08 [AA7240]	09/18/2024 19:54
E24-03187-28 [AA7241]	09/18/2024 20:26

Compound Name	Average RRF	Standard RRF	% Difference	PassFail	*
Styrene	1.2	1.3	-4.5	PASS	
Tert-butyl alcohol	4.8	5.0	-4.1	PASS	
1,1,2,2-Tetrachloroethane	1.4	1.4	3.6	PASS	
Tetrachloroethene	0.59	0.59	1.0	PASS	
Toluene	1.8	1.8	-1.2	PASS	
1,2,4-Trichlorobenzene	0.97	0.82	15	PASS	
1,1,1-Trichloroethane	3.8	3.8	0.70	PASS	
1,1,2-Trichloroethane	0.58	0.59	-1.2	PASS	
Trichloroethene	0.47	0.47	0.00	PASS	
Trichlorofluoromethane	3.7	4.1	-9.7	PASS	
1,1,2-Trichloro-1,2,2-trifluoroethane	3.6	3.5	2.3	PASS	
1,2,4-Trimethylbenzene	2.0	2.0	-1.8	PASS	
1,3,5-Trimethylbenzene	2.0	2.0	-0.60	PASS	
2,2,4-Trimethylpentane	2.4	2.3	6.4	PASS	
Vinyl bromide	1.1	1.3	-12	PASS	
Vinyl chloride	1.8	2.0	-14	PASS	
Xylenes (m&p)	1.8	1.8	-1.2	PASS	
Xylenes (o)	1.8	1.7	5.0	PASS	

***%Difference must be within +/- 30%**
RRF - Relative Response Factor

Data Path : C:\DATA\2024\09-2024\09-18-2024\
Data File : aa7224dcvs.D
Acq On : 18 Sep 2024 10:54 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 18 11:11:44 2024
Quant Method : C:\msdchem\1\METHODS\240910.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Sep 11 16:19:32 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 0% Max. R.T. Dev 0.40min
Max. RRF Dev : 30% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane (IS)	1.000	1.000	0.0	104	0.00
2	T	Propene	1.559	1.668	-7.0	126	0.01
3	T	Dichlorodifluoromethane	3.101	3.475	-12.1	126	0.01
4	T	1,2-Dichlorotetrafluoroetha	4.390	4.468	-1.8	125	0.00
5	T	n-Butane	3.812	4.228	-10.9	134	0.00
6	T	Chloromethane	0.267	0.297	-11.2	122	0.01
7	T	Vinyl chloride	1.780	2.033	-14.2	123	0.01
8	T	1,3-Butadiene	2.212	2.556	-15.6	131	0.00
9	T	Bromomethane	0.987	1.075	-8.9	120	0.02
10	T	Chloroethane	0.828	0.981	-18.5	124	0.01
11	T	Vinyl bromide	1.126	1.261	-12.0	122	0.01
12	T	Trichlorofluoromethane	3.748	4.111	-9.7	129	0.00
13	T	Ethanol	0.771	0.807	-4.7	122	0.00
14	T	1,1-Dichloroethene	3.429	4.077	-18.9	129	0.00
15	T	Carbon disulfide	4.698	5.446	-15.9	125	0.00
16	T	1,1,2-Trichloro-1,2,2-trifl	3.627	3.543	2.3	124	0.00
17	T	Acrolein	0.755	0.875	-15.9	126	0.00
18	T	Allyl chloride	0.747	0.881	-17.9	124	0.00
19	T	Isopropanol	4.976	5.523	-11.0	129	0.00
20	T	Methylene chloride	2.614	2.665	-2.0	130	0.00
21	T	Acetone	3.541	4.170	-17.8	130	0.00
22	T	1,2-Dichloroethene (trans)	2.983	3.579	-20.0	130	0.00
23	T	n-Pentane	4.770	4.954	-3.9	134	0.00
24	T	n-Hexane	5.897	6.211	-5.3	127	0.00
25	T	Methyl tert-butyl ether	6.174	6.228	-0.9	122	0.00
26	T	Tert-butyl alcohol	4.782	4.979	-4.1	125	0.00
27	T	1,1-Dichloroethane	3.931	4.498	-14.4	131	0.00
28	T	1,2-Dichloroethene (cis)	2.837	3.345	-17.9	129	0.00
29	t	Cyclohexane	4.168	4.169	-0.0	121	0.00
30	T	Chloroform	3.862	4.378	-13.4	130	0.00
31	T	Ethyl acetate	1.034	1.178	-13.9	132	0.00
32	T	Carbon tetrachloride	3.987	3.943	1.1	119	0.00
33	T	Tetrahydrofuran	3.613	4.340	-20.1	134	0.00
34	T	1,1,1-Trichloroethane	3.818	3.792	0.7	121	0.00
35	T	Methyl ethyl ketone	5.919	6.925	-17.0	135	0.00
36	T	n-Heptane	6.270	7.143	-13.9	126	0.00
37	T	Benzene	5.933	6.329	-6.7	129	0.00
38	T	1,2-Dichloroethane	3.053	3.470	-13.7	130	0.00
39	I	1,4-Difluorobenzene (IS)	1.000	1.000	0.0	116	0.00
40	T	Trichloroethene	0.465	0.465	0.0	126	0.00
41	T	2,2,4-Trimethylpentane	2.436	2.279	6.4	120	0.00
42	T	1,2-Dichloropropane	0.663	0.655	1.2	126	0.00
43	T	Bromodichloromethane	0.935	0.939	-0.4	126	0.00
44	T	Methyl methacrylate	1.103	1.209	-9.6	134	0.00
45	T	1,4-Dioxane	0.311	0.311	0.0	124	0.00
46	T	cis-1,3-Dichloropropene	0.886	0.892	-0.7	125	0.00
47	T	Toluene	1.799	1.820	-1.2	126	0.00
48	T	Methyl isobutyl ketone	2.251	2.372	-5.4	129	0.00
49	T	Tetrachloroethene	0.594	0.588	1.0	124	0.00
50	T	trans-1,3-Dichloropropene	0.914	0.994	-8.8	130	0.00
51	T	1,1,2-Trichloroethane	0.584	0.591	-1.2	126	0.00
52	T	Dibromochloromethane	0.863	0.894	-3.6	126	0.00
53	T	1,2-Dibromoethane	0.794	0.836	-5.3	127	0.00

Data Path : C:\DATA\2024\09-2024\09-18-2024\
Data File : aa7224dcvs.D
Acq On : 18 Sep 2024 10:54 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 18 11:11:44 2024
Quant Method : C:\msdchem\1\METHODS\240910.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Sep 11 16:19:32 2024
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 0% Max. R.T. Dev 0.40min
Max. RRF Dev : 30% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
54	T	Methyl n-butyl ketone	2.130	2.435	-14.3	135	0.00
55	I	d-5 Chlorobenzene (IS)	1.000	1.000	0.0	123	0.00
56	T	n-Nonane	2.431	2.551	-4.9	136	0.00
57	T	Chlorobenzene	1.139	1.102	3.2	128	0.00
58	T	Ethylbenzene	2.321	2.254	2.9	129	0.00
59	T	Xylenes (m&p)	1.783	1.804	-1.2	131	0.00
60	T	Xylene (o)	1.804	1.713	5.0	128	0.00
61	T	Styrene	1.225	1.280	-4.5	133	0.00
62	T	Bromoform	0.689	0.698	-1.3	132	0.00
63	T	Cumene	2.243	2.180	2.8	128	0.00
64	S	Bromofluorobenzene (tune st	0.879	0.889	-1.1	122	0.00
65	T	n-Propyl benzene	3.300	3.376	-2.3	134	0.00
66	T	1,1,2,2-Tetrachloroethane	1.435	1.383	3.6	129	0.00
67	T	4-Ethyltoluene	2.601	2.629	-1.1	133	0.00
68	T	2-Chlorotoluene	2.152	2.154	-0.1	133	0.00
69	T	1,3,5-Trimethylbenzene	1.979	1.990	-0.6	131	0.00
70	T	1,2,4-Trimethylbenzene	2.000	2.035	-1.8	133	0.00
71	T	1,3-Dichlorobenzene	1.075	1.060	1.4	133	0.00
72	T	1,4-Dichlorobenzene	1.076	1.099	-2.1	134	0.00
73	T	Benzyl chloride	1.967	2.074	-5.4	135	0.00
74	T	1,2-Dichlorobenzene	1.040	1.032	0.8	132	0.00
75	T	1,3-Hexachlorobutadiene	0.669	0.595	11.1	128	0.00
76	T	1,2,4-Trichlorobenzene	0.967	0.822	15.0	126	0.00
77	T	Naphthalene	2.272	2.016	11.3	125	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data Path : C:\DATA\2024\09-2024\09-18-2024\
Data File : aa7224dcvs.D
Acq On : 18 Sep 2024 10:54 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 18 11:11:44 2024
Quant Method : C:\msdchem\1\METHODS\240910.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Sep 11 16:19:32 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.422	130	250538	10.00	ppbV		0.000
39) 1,4-Difluorobenzene (IS)	5.483	114	1198748	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.351	117	1518051	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.750	95	1349554	10.11	ppbV		0.000
Target Compounds							Qvalue
2) Propene	1.496	41	455615	11.67	ppbV		99
3) Dichlorodifluoromethane	1.530	85	922742	11.88	ppbV		99
4) 1,2-Dichlorotetrafluor...	1.654	85	1097106	9.98	ppbV		99
5) n-Butane	1.736	43	1154483	12.09	ppbV		100
6) Chloromethane	1.801	52	83403	12.46	ppbV		73
7) Vinyl chloride	1.795	62	550056	12.34	ppbV		99
8) 1,3-Butadiene	1.801	39	685220	12.37	ppbV		93
9) Bromomethane	2.094	94	269257	10.89	ppbV		99
10) Chloroethane	2.210	64	260592	12.56	ppbV		99
11) Vinyl bromide	2.310	106	319070	11.31	ppbV		99
12) Trichlorofluoromethane	2.326	101	1132826	12.06	ppbV		100
13) Ethanol	2.692	45	210325	10.89	ppbV	#	87
14) 1,1-Dichloroethene	2.750	61	1062356	12.37	ppbV		99
15) Carbon disulfide	2.770	76	1459973	12.41	ppbV		98
16) 1,1,2-Trichloro-1,2,2-...	2.792	101	967678	10.65	ppbV		100
17) Acrolein	3.007	56	219266	11.59	ppbV		99
18) Allyl chloride	3.133	76	238463	12.74	ppbV		100
19) Isopropanol	3.136	45	1231440	9.88	ppbV		100
20) Methylene chloride	3.223	49	721154	11.01	ppbV		98
21) Acetone	3.239	43	1128403	12.72	ppbV		99
22) 1,2-Dichloroethene (tr...	3.351	61	995308	13.32	ppbV		99
23) n-Pentane	3.435	43	1340328	11.21	ppbV		99
24) n-Hexane	3.432	57	1711576	11.58	ppbV		96
25) Methyl tert-butyl ether	3.435	73	1747588	11.30	ppbV		96
26) Tert-butyl alcohol	3.490	59	1434532	11.97	ppbV		100
27) 1,1-Dichloroethane	3.834	63	1205784	12.24	ppbV		100
28) 1,2-Dichloroethene (cis)	4.261	61	913496	12.85	ppbV		99
29) Cyclohexane	4.441	56	1169838	11.20	ppbV		100
30) Chloroform	4.483	83	1184636	12.24	ppbV		99
31) Ethyl acetate	4.573	45	318777	12.30	ppbV		96
32) Carbon tetrachloride	4.605	117	1086568	10.88	ppbV		99
33) Tetrahydrofuran	4.609	42	1195974	13.21	ppbV		97
34) 1,1,1-Trichloroethane	4.657	97	1035653	10.83	ppbV		99
35) Methyl ethyl ketone	4.718	43	1908471	12.87	ppbV		98
36) n-Heptane	4.946	43	1986414	12.64	ppbV		97
37) Benzene	4.962	78	1712417	11.52	ppbV		98
38) 1,2-Dichloroethane	5.123	62	947742	12.39	ppbV		99
40) Trichloroethene	5.461	130	557663	10.01	ppbV		99
41) 2,2,4-Trimethylpentane	4.876	57	2978342	10.20	ppbV		99
42) 1,2-Dichloropropane	5.917	63	864091	10.87	ppbV		98
43) Bromodichloromethane	5.978	83	1294362	11.55	ppbV		99
44) Methyl methacrylate	6.123	41	1594261	12.06	ppbV		96
45) 1,4-Dioxane	6.152	88	435664	11.68	ppbV		96
46) cis-1,3-Dichloropropene	6.570	75	1186538	11.17	ppbV		100
47) Toluene	6.805	91	2356229	10.92	ppbV		100
48) Methyl isobutyl ketone	7.171	43	3098949	11.48	ppbV		98
49) Tetrachloroethene	7.194	166	789557	11.09	ppbV		100
50) trans-1,3-Dichloropropene	7.210	75	1322814	12.07	ppbV		93
51) 1,1,2-Trichloroethane	7.371	97	764970	10.92	ppbV		100

Data Path : C:\DATA\2024\09-2024\09-18-2024\
Data File : aa7224dcvs.D
Acq On : 18 Sep 2024 10:54 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

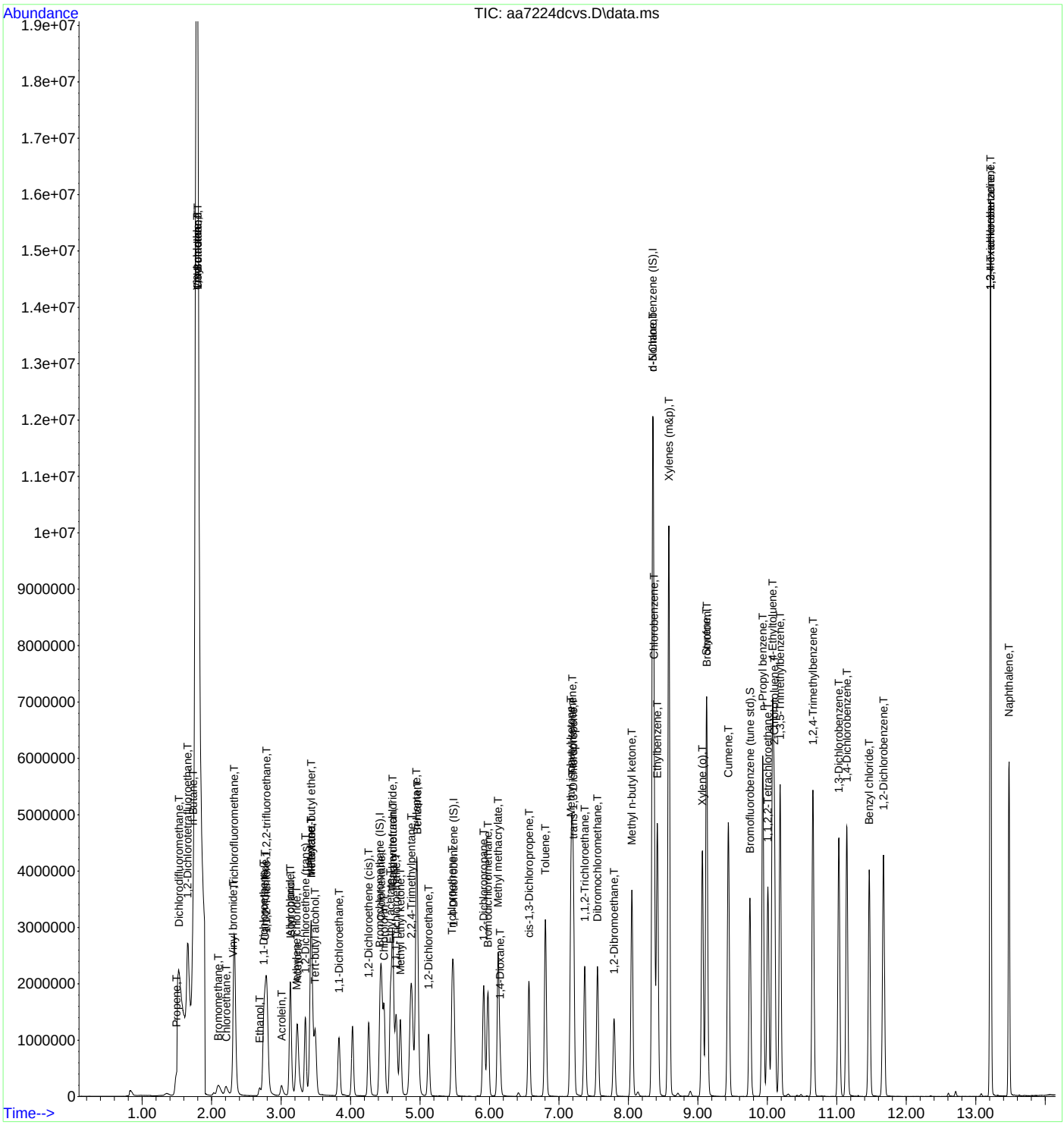
Quant Time: Sep 18 11:11:44 2024
Quant Method : C:\msdchem\1\METHODS\240910.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Sep 11 16:19:32 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.554	129	1200730	11.60	ppbV	100
53) 1,2-Dibromoethane	7.792	107	1082899	11.37	ppbV	99
54) Methyl n-butyl ketone	8.049	43	3298388	12.92	ppbV	97
56) n-Nonane	8.351	43	4259755	11.55	ppbV	97
57) Chlorobenzene	8.371	112	1856154	10.73	ppbV	98
58) Ethylbenzene	8.416	91	3798494	10.78	ppbV	100
59) Xylenes (m&p)	8.583	91	6106950	22.57	ppbV	99
60) Xylene (o)	9.065	91	2860400	10.44	ppbV	99
61) Styrene	9.123	104	2195327	11.81	ppbV	100
62) Bromoform	9.129	173	1197194	11.44	ppbV	100
63) Cumene	9.438	105	3540495	10.40	ppbV	100
65) n-Propyl benzene	9.933	91	5534869	11.05	ppbV	99
66) 1,1,2,2-Tetrachloroethane	10.007	83	2393674	10.99	ppbV	100
67) 4-Ethyltoluene	10.075	105	4309813	10.91	ppbV	100
68) 2-Chlorotoluene	10.100	91	3564668	10.91	ppbV	99
69) 1,3,5-Trimethylbenzene	10.184	105	3292556	10.96	ppbV	98
70) 1,2,4-Trimethylbenzene	10.657	105	3336861	10.99	ppbV	99
71) 1,3-Dichlorobenzene	11.030	146	1785769	10.94	ppbV	100
72) 1,4-Dichlorobenzene	11.145	146	1785546	10.93	ppbV	99
73) Benzyl chloride	11.467	91	3148795	10.55	ppbV	100
74) 1,2-Dichlorobenzene	11.673	146	1675516	10.61	ppbV	99
75) 1,3-Hexachlorobutadiene	13.213	225	1002927	9.88	ppbV	100
76) 1,2,4-Trichlorobenzene	13.213	180	1372597	9.35	ppbV	100
77) Naphthalene	13.480	128	3060381	8.88	ppbV	99

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

Data Path : C:\DATA\2024\09-2024\09-18-2024\
Data File : aa7224dcvs.D
Acq On : 18 Sep 2024 10:54 am
Operator : jjw
Sample : 10 ppbv DCVS
Misc : EB0103704
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 18 11:11:44 2024
Quant Method : C:\msdchem\1\METHODS\240910.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Sep 11 16:19:32 2024
Response via : Initial Calibration



Section VIII: Raw Quality Control Data Package

BFB Tune Spectra

Method Blank

Laboratory Control Sample

Laboratory Sample Duplicate

Instrument Run Logs

Pressure Gauge Readings (initial and final)

Example Calculations

Screening Data

Clean Canister Certification

BFB

Data Path: C:\DATA\2024\05-2024\05-29-2024\
Data File: AA6554BFB.D
Acq On: 5/29/2024 9:16:00AM
Operator: jjw
Sample: BFB
Misc: ALM018474
ALS Vial: 1 **Multiplier:** 1
Integration File: rteint.p
Method: C:\msdchem\1\METHODS\240326.M
Last Update: Wed Mar 27 13:46:33 2024
Spectrum Information:

PassFail	Target Mass	Rel. to Mass	Lower Limit %	Higher Limit %	Raw Abundance	% Relative Abundance
PASS	50	95	8	40	242304	21.7
PASS	75	95	30	66	578901	51.8
PASS	95	95	100	100	1118037	100.0
PASS	96	95	5	9	75616	6.8
PASS	173	174	0.00	2	6315	0.9
PASS	174	95	50	100	683392	61.1
PASS	175	174	4	9	49440	7.2
PASS	176	174	93	101	651648	95.4
PASS	177	176	5	9	42576	6.5

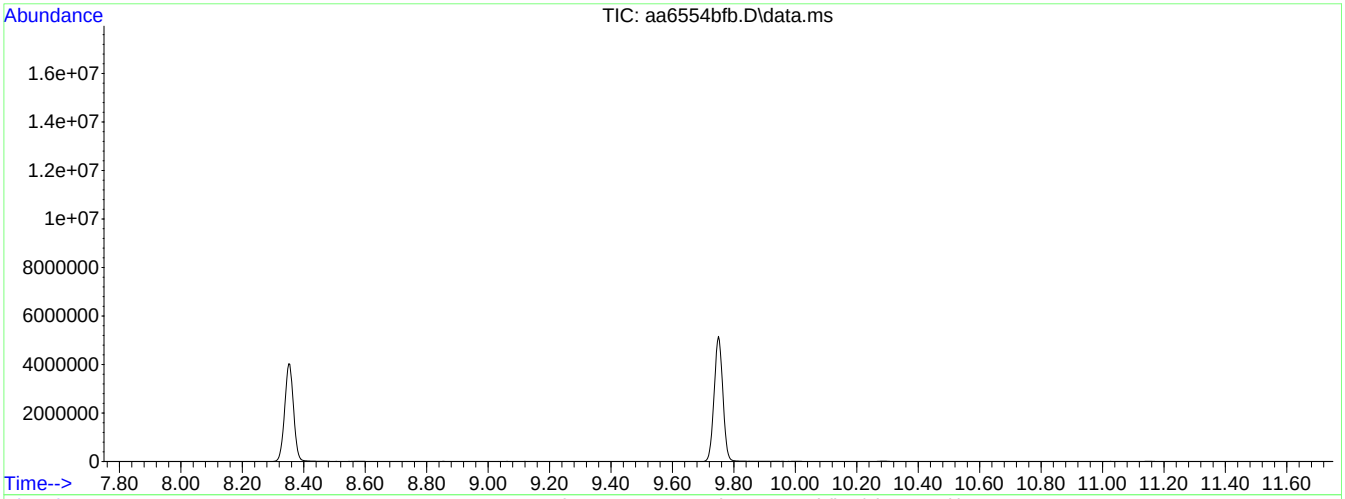
Runs with this BFB:

Lab Sample Number	Date File	Field Sample	Date/Time of Sample/Standard Analysis
BFB	AA6554BFB	NA	5/29/2024 9:16:00 AM
0.2 PPBV STD	AA6556STD05	NA	5/29/2024 12:40:00 PM
2 PPBV STD	AA6557STD04	NA	5/29/2024 1:11:00 PM
10 PPBV STD STD	AA6558STD03	NA	5/29/2024 1:46:00 PM
20 PPBV STD	AA6559STD02	NA	5/29/2024 2:18:00 PM
40 PPBV STD	AA6560STD01	NA	5/29/2024 2:55:00 PM
10 PPBV ICVSS	AA6561ICVSS	NA	5/29/2024 5:16:00 PM

Data Path : C:\DATA\2024\05-2024\05-29-2024\
Data File : aa6554bfb.D
Acq On : 29 May 2024 9:16 am
Operator : jjw
Sample : BFB
Misc : ALM018474
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\240326.M
Title : TO-15 on the Agilent 7890A / 5975C
Last Update : Wed Mar 27 13:46:33 2024



AutoFind: Scans 2992, 2993, 2994; Background Corrected with Scan 2974

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	21.7	242304	PASS
75	95	30	66	51.8	578901	PASS
95	95	100	100	100.0	1118037	PASS
96	95	5	9	6.8	75616	PASS
173	174	0.00	2	0.9	6315	PASS
174	95	50	100	61.1	683392	PASS
175	174	4	9	7.2	49440	PASS
176	174	93	101	95.4	651648	PASS
177	176	5	9	6.5	42576	PASS

BFB

Data Path: C:\DATA\2024\05-2024\05-31-2024\
Data File: AA6579BFB.D
Acq On: 5/31/2024 9:25:00AM
Operator: jjw
Sample: BFB
Misc: ALM018474
ALS Vial: 1 **Multiplier:** 1
Integration File: rteint.p
Method: C:\msdchem\1\METHODS\240529.M
Last Update: Wed May 29 15:44:50 2024
Spectrum Information:

PassFail	Target Mass	Rel. to Mass	Lower Limit %	Higher Limit %	Raw Abundance	% Relative Abundance
PASS	50	95	8	40	63501	20.1
PASS	75	95	30	66	156501	49.5
PASS	95	95	100	100	316480	100.0
PASS	96	95	5	9	20299	6.4
PASS	173	174	0.00	2	2010	1.0
PASS	174	95	50	100	210859	66.6
PASS	175	174	4	9	15064	7.1
PASS	176	174	93	101	198549	94.2
PASS	177	176	5	9	13677	6.9

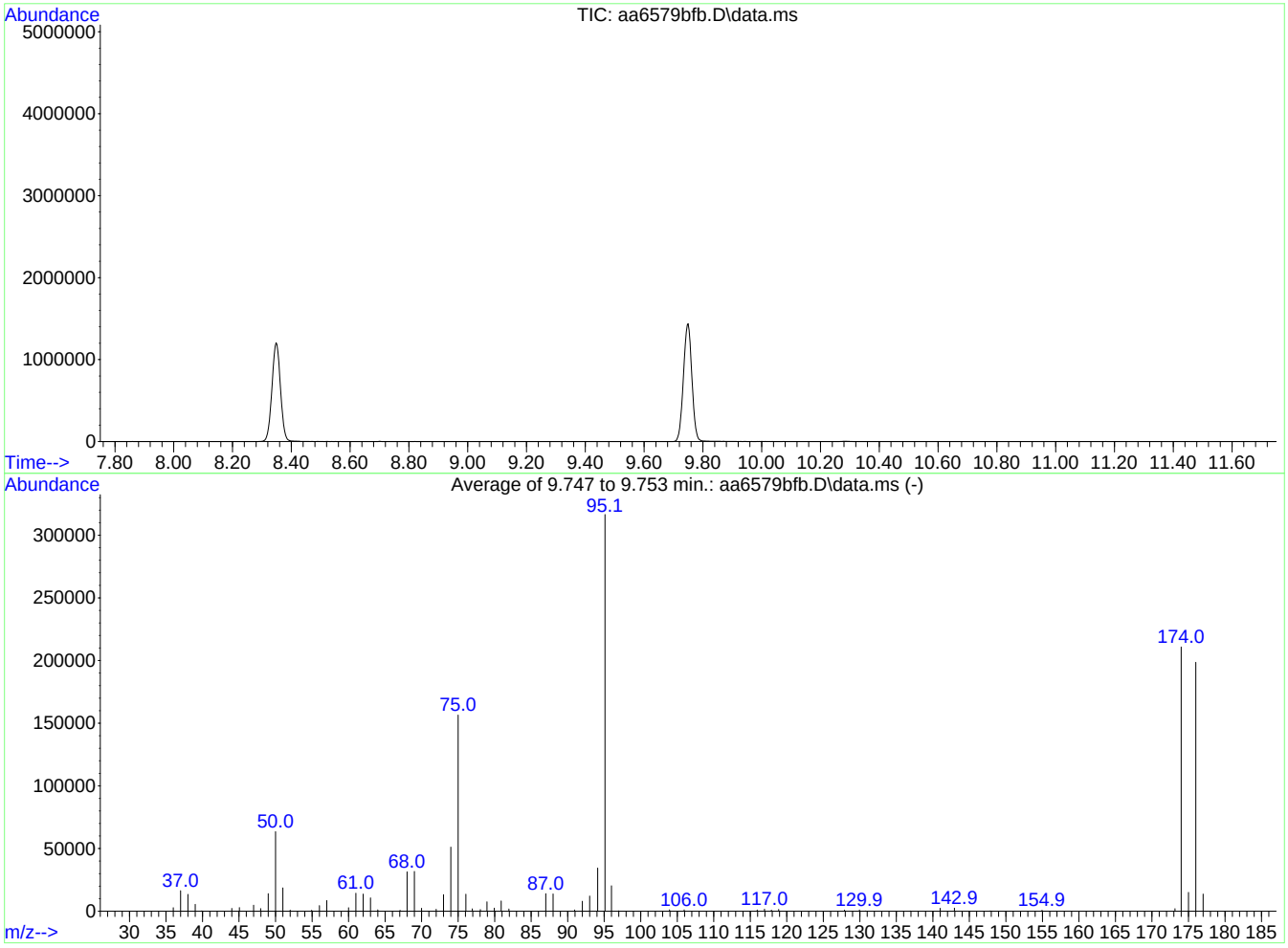
Runs with this BFB:

Lab Sample Number	Date File	Field Sample	Date/Time of Sample/Standard Analysis
BFB	AA6579BFB	NA	5/31/2024 9:25:00 AM
10 PPBV DCVS	AA6580DCVS	NA	5/31/2024 9:55:00 AM
10 PPBV LCS	AA6581LCS	NA	5/31/2024 10:25:00 AM
METHOD BLANK	AA6582BLK	NA	5/31/2024 11:57:00 AM
02 PPBV RLLCS	AA6583RLLCS	NA	5/31/2024 12:31:00 PM
5089	AA6584	NA	5/31/2024 1:04:00 PM
2069	AA6585	NA	5/31/2024 1:36:00 PM
10 PPBV CCCVS	AA6598CCCVS	NA	5/31/2024 10:11:00 PM

Data Path : C:\DATA\2024\05-2024\05-31-2024\
Data File : aa6579bfb.D
Acq On : 31 May 2024 9:25 am
Operator : jjw
Sample : BFB
Misc : ALM018474
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\240529.M
Title : TO-15 on the Agilent 7890A / 5975C
Last Update : Wed May 29 15:44:50 2024



AutoFind: Scans 2992, 2993, 2994; Background Corrected with Scan 2975

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	20.1	63501	PASS
75	95	30	66	49.5	156501	PASS
95	95	100	100	100.0	316480	PASS
96	95	5	9	6.4	20299	PASS
173	174	0.00	2	1.0	2010	PASS
174	95	50	100	66.6	210859	PASS
175	174	4	9	7.1	15064	PASS
176	174	93	101	94.2	198549	PASS
177	176	5	9	6.9	13677	PASS

BFB

Data Path: C:\DATA\2024\09-2024\09-11-2024\
Data File: AA7123BFB.D
Acq On: 9/11/2024 10:57:00AM
Operator: jjw
Sample: BFB
Misc: ALM018474
ALS Vial: 1 **Multiplier:** 1
Integration File: rteint.p
Method: C:\msdchem\1\METHODS\240910.M
Last Update: Tue Sep 10 16:28:10 2024
Spectrum Information:

PassFail	Target Mass	Rel. to Mass	Lower Limit %	Higher Limit %	Raw Abundance	% Relative Abundance
PASS	50	95	8	40	159531	29.8
PASS	75	95	30	66	315840	58.9
PASS	95	95	100	100	535957	100.0
PASS	96	95	5	9	34323	6.4
PASS	173	174	0.00	2	3211	1.0
PASS	174	95	50	100	312192	58.2
PASS	175	174	4	9	23893	7.7
PASS	176	174	93	101	305323	97.8
PASS	177	176	5	9	20368	6.7

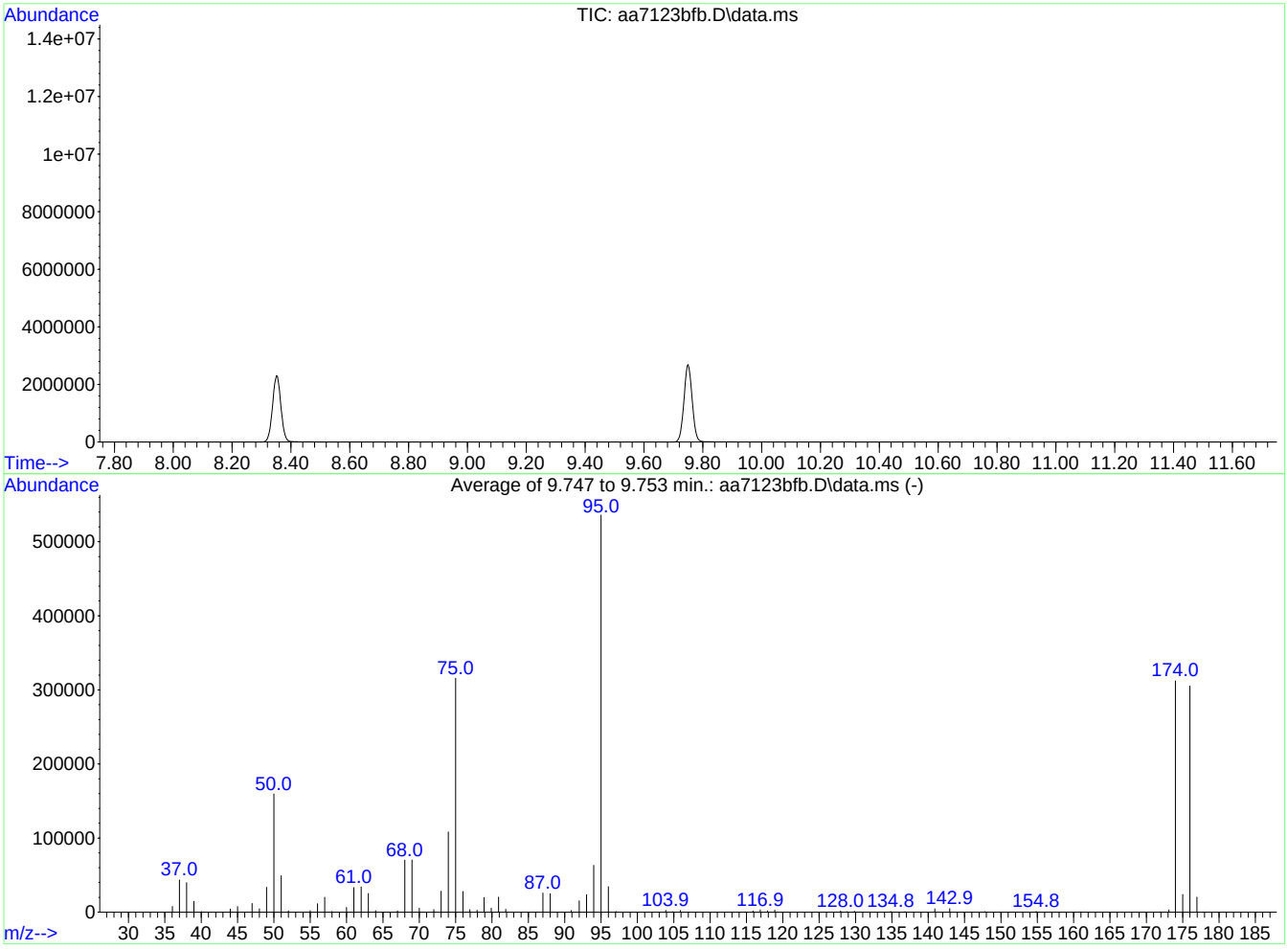
Runs with this BFB:

Lab Sample Number	Date File	Field Sample	Date/Time of Sample/Standard Analysis
BFB	AA7123BFB	NA	9/11/2024 10:57:00 AM
0.2 PPBV STD	AA7124STD05	NA	9/11/2024 12:03:00 PM
2 PPBV STD	AA7125STD04	NA	9/11/2024 12:35:00 PM
10 PPBV STD	AA7126STD03	NA	9/11/2024 1:09:00 PM
20 PPBV STD	AA7127STD02	NA	9/11/2024 1:44:00 PM
40 PPBV STD	AA7128STD01	NA	9/11/2024 2:20:00 PM
10 PPBV ICVSS	AA7129ICVSS	NA	9/11/2024 2:52:00 PM
10 PPBV LCS	AA7130LCS	NA	9/11/2024 3:24:00 PM
METHOD BLANK	AA7131BLK	NA	9/11/2024 3:57:00 PM
02 PPBV RLLCS	AA7131RLLCS	NA	9/11/2024 4:33:00 PM
10 PPBV CCCVS	AA7142CCCVS	NA	9/11/2024 10:56:00 PM

Data Path : C:\DATA\2024\09-2024\09-11-2024\
Data File : aa7123bfb.D
Acq On : 11 Sep 2024 10:57 am
Operator : jjw
Sample : BFB
Misc : ALM018474
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\240910.M
Title : TO-15 on the Agilent 7890A / 5975C
Last Update : Tue Sep 10 16:28:10 2024



AutoFind: Scans 2992, 2993, 2994; Background Corrected with Scan 2976

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	29.8	159531	PASS
75	95	30	66	58.9	315840	PASS
95	95	100	100	100.0	535957	PASS
96	95	5	9	6.4	34323	PASS
173	174	0.00	2	1.0	3211	PASS
174	95	50	100	58.2	312192	PASS
175	174	4	9	7.7	23893	PASS
176	174	93	101	97.8	305323	PASS
177	176	5	9	6.7	20368	PASS

BFB

Data Path: C:\DATA\2024\09-2024\09-18-2024\
Data File: AA7223BFB.D
Acq On: 9/18/2024 10:23:00AM
Operator: jjw
Sample: BFB
Misc: ALM018474
ALS Vial: 1 **Multiplier:** 1
Integration File: rteint.p
Method: C:\msdchem\1\METHODS\240910.M
Last Update: Wed Sep 11 16:19:32 2024
Spectrum Information:

PassFail	Target Mass	Rel. to Mass	Lower Limit %	Higher Limit %	Raw Abundance	% Relative Abundance
PASS	50	95	8	40	208299	32.3
PASS	75	95	30	66	392576	60.9
PASS	95	95	100	100	645013	100.0
PASS	96	95	5	9	41525	6.4
PASS	173	174	0.00	2	4864	1.3
PASS	174	95	50	100	368597	57.1
PASS	175	174	4	9	31027	8.4
PASS	176	174	93	101	360149	97.7
PASS	177	176	5	9	24189	6.7

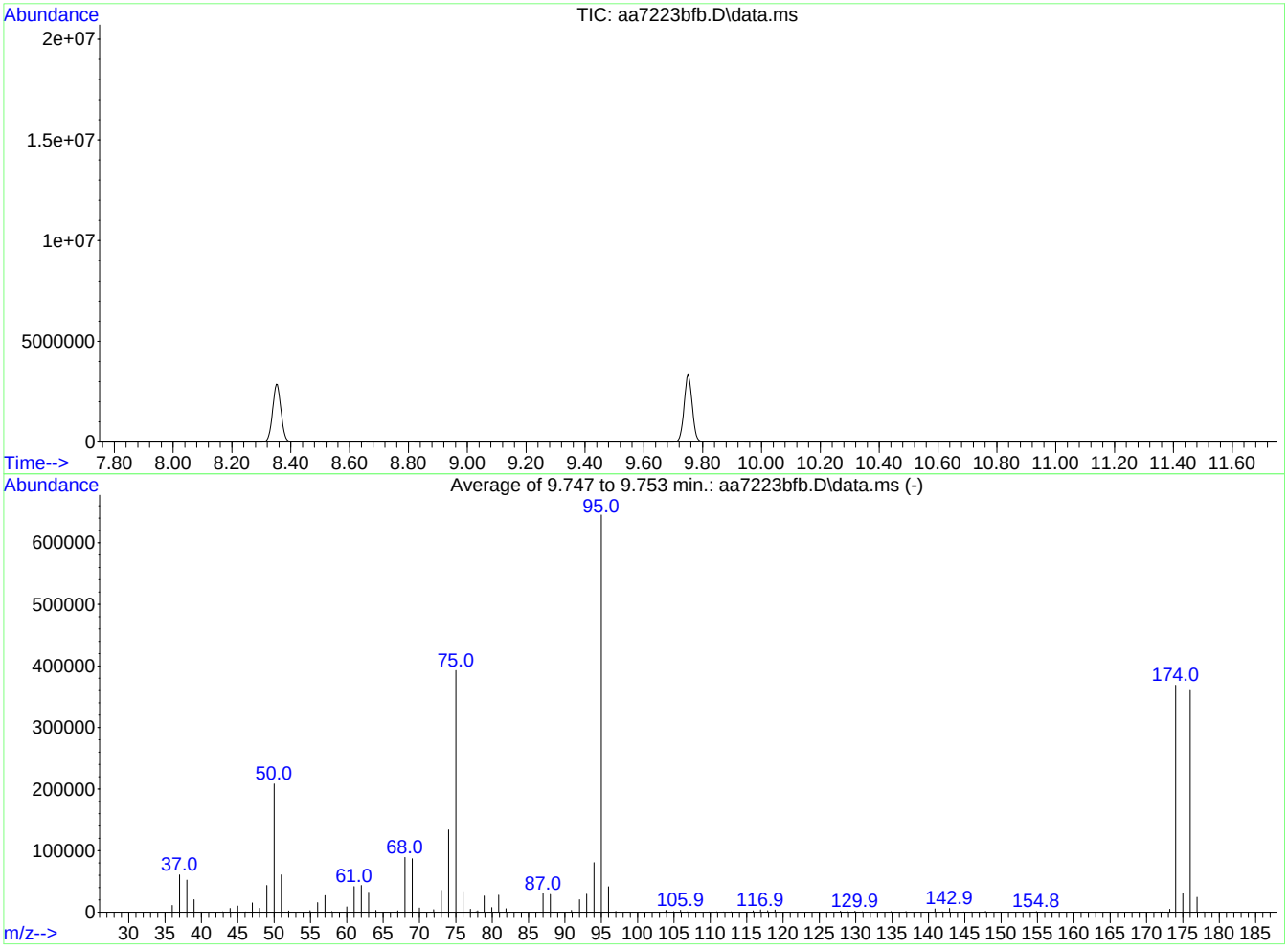
Runs with this BFB:

Lab Sample Number	Date File	Field Sample	Date/Time of Sample/Standard Analysis
BFB	AA7223BFB	NA	9/18/2024 10:23:00 AM
10 PPBV DCVS	AA7224DCVS	NA	9/18/2024 10:54:00 AM
10 PPBV LCS	AA7225LCS	NA	9/18/2024 11:25:00 AM
METHOD BLANK	AA7226BLK	NA	9/18/2024 11:55:00 AM
E24-03187-01	AA7231	IA-1	9/18/2024 2:43:00 PM
E24-03187-02	AA7232	IA-2	9/18/2024 3:19:00 PM
E24-03187-03	AA7233	IA-3	9/18/2024 3:51:00 PM
E24-03187-04	AA7234	IA-4	9/18/2024 4:40:00 PM
E24-03187-05	AA7235	IA-5	9/18/2024 5:11:00 PM
E24-03187-06	AA7236	IA-6	9/18/2024 5:50:00 PM
E24-03187-07	AA7237	IA-7	9/18/2024 6:22:00 PM
E24-03187-08	AA7240	AA-1	9/18/2024 7:54:00 PM
E24-03187-28	AA7241	AA-1	9/18/2024 8:26:00 PM

Data Path : C:\DATA\2024\09-2024\09-18-2024\
Data File : aa7223bfb.D
Acq On : 18 Sep 2024 10:23 am
Operator : jjw
Sample : BFB
Misc : ALM018474
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\240910.M
Title : TO-15 on the Agilent 7890A / 5975C
Last Update : Wed Sep 11 16:19:32 2024



AutoFind: Scans 2992, 2993, 2994; Background Corrected with Scan 2975

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	32.3	208299	PASS
75	95	30	66	60.9	392576	PASS
95	95	100	100	100.0	645013	PASS
96	95	5	9	6.4	41525	PASS
173	174	0.00	2	1.3	4864	PASS
174	95	50	100	57.1	368597	PASS
175	174	4	9	8.4	31027	PASS
176	174	93	101	97.7	360149	PASS
177	176	5	9	6.7	24189	PASS

INTEGRATED ANALYTICAL LABORATORIES, LLC

Method Blank Report

Lab Sample Name:	**METHOD BLANK**	**Data File:**	**AA6582BLK**
Field Sample Name:	**METHOD BLANK**	**Date Analyzed:**	**5/31/2024**
Matrix:	**Air**	**Sample Volume:**	**500ml**
Dilution Factor:	**1**	**GC/MS Column:**	**RTX-1, 0.32 mmID**

Runs with this Method Blank:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6579BFB]	05/31/2024 9:25
10 PPBV DCVS [AA6580DCVS]	05/31/2024 9:55
10 PPBV LCS [AA6581LCS]	05/31/2024 10:25
METHOD BLANK [AA6582BLK]	05/31/2024 11:57
02 PPBV RLLCS [AA6583RLLCS]	05/31/2024 12:31
5089 [AA6584]	05/31/2024 13:04
2069 [AA6585]	05/31/2024 13:36
10 PPBV CCCVS [AA6598CCCVS]	05/31/2024 22:11

Compound	CAS #	Reporting Limit (ppbv)	Concentration (ppbv)
Acetone	67-64-1	0.20	ND
Benzene	71-43-2	0.20	ND
Bromodichloromethane	75-27-4	0.20	ND
Bromoform	75-25-2	0.20	ND
Bromomethane	74-83-9	0.20	ND
1,3-Butadiene	106-99-0	0.20	ND
Chlorobenzene	108-90-7	0.20	ND
Chloroethane	75-00-3	0.20	ND
Chloroform	67-66-3	0.20	ND
Chloromethane	74-87-3	0.20	ND
Carbon disulfide	75-15-0	0.20	ND
Carbon tetrachloride	56-23-5	0.20	ND
Cyclohexane	110-82-7	0.20	ND
Dibromochloromethane	124-48-1	0.20	ND
1,2-Dibromoethane	106-93-4	0.17	ND
1,2-Dichlorobenzene	95-50-1	0.20	ND
1,3-Dichlorobenzene	541-73-1	0.20	ND
1,4-Dichlorobenzene	106-46-7	0.20	ND
Dichlorodifluoromethane	75-71-8	0.20	ND
1,1-Dichloroethane	75-34-3	0.20	ND
1,2-Dichloroethane	107-06-2	0.20	ND
1,1-Dichloroethene	75-35-4	0.20	ND
1,2-Dichloroethene (cis)	156-59-2	0.20	ND
1,2-Dichloroethene (trans)	156-60-5	0.20	ND
1,2-Dichloropropane	78-87-5	0.20	ND
1,3-Dichloropropene (cis)	10061-01-5	0.20	ND
1,3-Dichloropropene (trans)	10061-02-6	0.19	ND
1,2-Dichlorotetrafluoroethane	76-14-2	0.20	ND
1,4-Dioxane	123-91-1	0.20	ND
Ethylbenzene	100-41-4	0.18	ND
n-Heptane	142-82-5	0.20	ND
1,3-Hexachlorobutadiene	87-68-3	0.20	ND
n-Hexane	110-54-3	0.20	ND
Methylene chloride	75-09-2	0.20	ND

Method Blank must be less than the Practical Quantitation Limit (PQL).

INTEGRATED ANALYTICAL LABORATORIES, LLC

Method Blank Report

Lab Sample Name:	**METHOD BLANK**	**Data File:**	**AA6582BLK**
Field Sample Name:	**METHOD BLANK**	**Date Analyzed:**	**5/31/2024**
Matrix:	**Air**	**Sample Volume:**	**500ml**
Dilution Factor:	**1**	**GC/MS Column:**	**RTX-1, 0.32 mmID**

Runs with this Method Blank:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6579BFB]	05/31/2024 9:25
10 PPBV DCVS [AA6580DCVS]	05/31/2024 9:55
10 PPBV LCS [AA6581LCS]	05/31/2024 10:25
METHOD BLANK [AA6582BLK]	05/31/2024 11:57
02 PPBV RLLCS [AA6583RLLCS]	05/31/2024 12:31
5089 [AA6584]	05/31/2024 13:04
2069 [AA6585]	05/31/2024 13:36
10 PPBV CCCVS [AA6598CCCVS]	05/31/2024 22:11

Compound	CAS #	Reporting Limit (ppbv)	Concentration (ppbv)
Methyl ethyl ketone	78-93-3	0.20	ND
Methyl isobutyl ketone	108-10-1	0.20	ND
Methyl tert-butyl ether	1634-04-4	0.20	ND
Styrene	100-42-5	0.20	ND
Tert-butyl alcohol	75-65-0	0.20	ND
1,1,2,2-Tetrachloroethane	79-34-5	0.20	ND
Tetrachloroethene	127-18-4	0.20	ND
Toluene	108-88-3	0.20	ND
1,2,4-Trichlorobenzene	120-82-1	0.20	ND
1,1,1-Trichloroethane	71-55-6	0.17	ND
1,1,2-Trichloroethane	79-00-5	0.20	ND
Trichloroethene	79-01-6	0.17	ND
Trichlorofluoromethane	75-69-4	0.20	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.20	ND
1,2,4-Trimethylbenzene	95-63-6	0.20	ND
1,3,5-Trimethylbenzene	108-67-8	0.20	ND
2,2,4-Trimethylpentane	540-84-1	0.20	ND
Vinyl bromide	593-60-2	0.20	ND
Vinyl chloride	75-01-4	0.20	ND
Xylenes (m&p)	179601-23-1	0.20	ND
Xylenes (o)	95-47-6	0.20	ND

Method Blank must be less than the Practical Quantitation Limit (PQL).

Data Path : C:\DATA\2024\05-2024\05-31-2024\
Data File : aa6582blk.D
Acq On : 31 May 2024 11:57 am
Operator : jjw
Sample : Method Blank
Misc : 1127
ALS Vial : 5 Sample Multiplier: 1

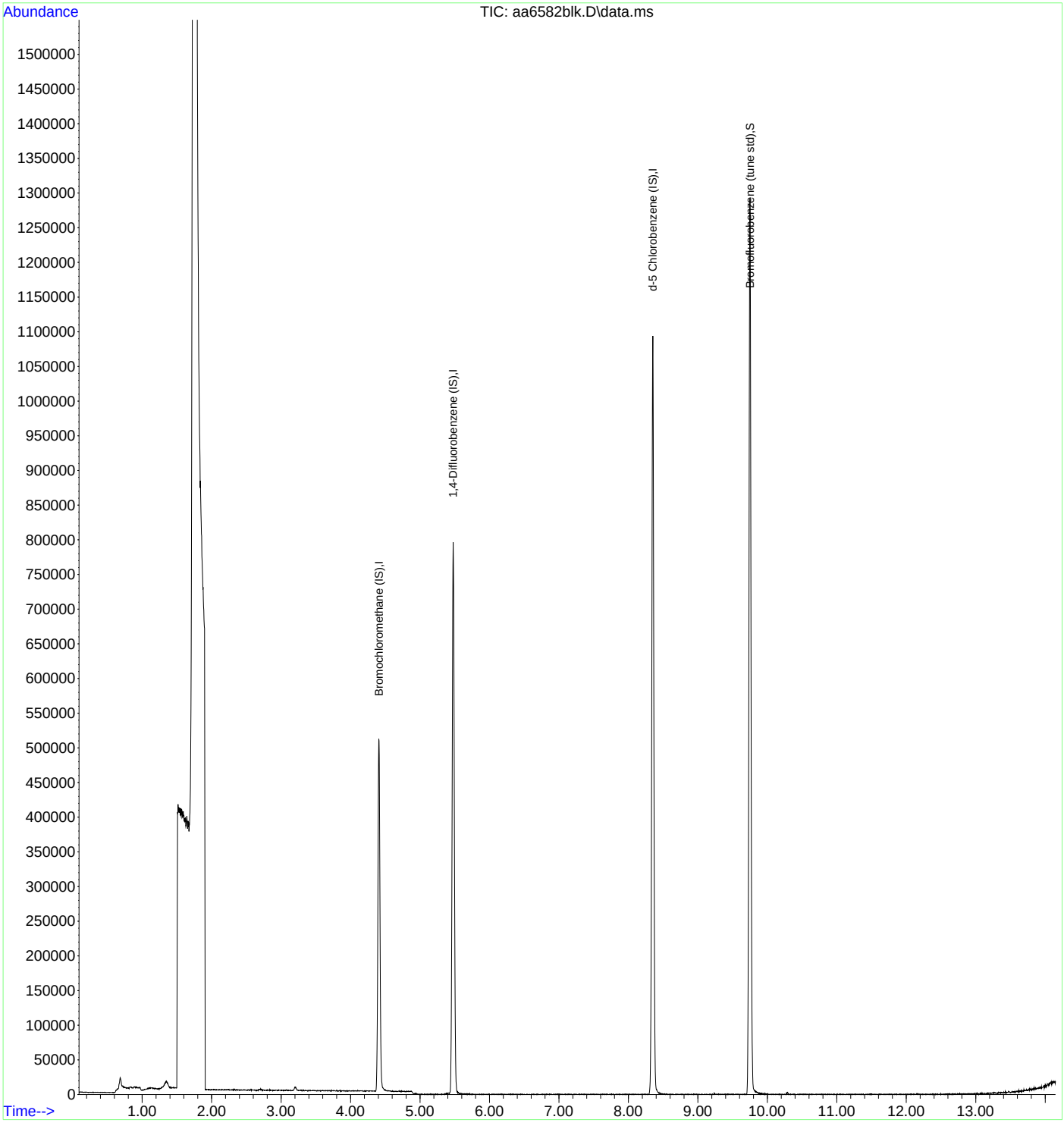
Quant Time: May 31 12:13:26 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.409	130	186404	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.477	114	714274	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.351	117	686714	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.750	95	584220	8.99	ppbV	0.000
Target Compounds						Qvalue

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

Data Path : C:\DATA\2024\05-2024\05-31-2024\
Data File : aa6582blk.D
Acq On : 31 May 2024 11:57 am
Operator : jjw
Sample : Method Blank
Misc : 1127
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 31 12:13:26 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES, LLC

Method Blank Report

Lab Sample Name:	**METHOD BLANK**	**Data File:**	**AA7226BLK**
Field Sample Name:	**METHOD BLANK**	**Date Analyzed:**	**9/18/2024**
Matrix:	**Air**	**Sample Volume:**	**500ml**
Dilution Factor:	**1**	**GC/MS Column:**	**RTX-1, 0.32 mmID**

Runs with this Method Blank:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA7223BFB]	09/18/2024 10:23
10 PPBV DCVS [AA7224DCVS]	09/18/2024 10:54
10 PPBV LCS [AA7225LCS]	09/18/2024 11:25
METHOD BLANK [AA7226BLK]	09/18/2024 11:55
E24-03187-01 [AA7231]	09/18/2024 14:43
E24-03187-02 [AA7232]	09/18/2024 15:19
E24-03187-03 [AA7233]	09/18/2024 15:51
E24-03187-04 [AA7234]	09/18/2024 16:40
E24-03187-05 [AA7235]	09/18/2024 17:11
E24-03187-06 [AA7236]	09/18/2024 17:50
E24-03187-07 [AA7237]	09/18/2024 18:22
E24-03187-08 [AA7240]	09/18/2024 19:54
E24-03187-28 [AA7241]	09/18/2024 20:26

Compound	CAS #	Reporting Limit (ppbv)	Concentration (ppbv)
Acetone	67-64-1	0.20	ND
Benzene	71-43-2	0.20	ND
Bromodichloromethane	75-27-4	0.20	ND
Bromoform	75-25-2	0.20	ND
Bromomethane	74-83-9	0.20	ND
1,3-Butadiene	106-99-0	0.20	ND
Chlorobenzene	108-90-7	0.20	ND
Chloroethane	75-00-3	0.20	ND
Chloroform	67-66-3	0.20	ND
Chloromethane	74-87-3	0.20	ND
Carbon disulfide	75-15-0	0.20	ND
Carbon tetrachloride	56-23-5	0.20	ND
Cyclohexane	110-82-7	0.20	ND
Dibromochloromethane	124-48-1	0.20	ND
1,2-Dibromoethane	106-93-4	0.17	ND
1,2-Dichlorobenzene	95-50-1	0.20	ND
1,3-Dichlorobenzene	541-73-1	0.20	ND
1,4-Dichlorobenzene	106-46-7	0.20	ND
Dichlorodifluoromethane	75-71-8	0.20	ND
1,1-Dichloroethane	75-34-3	0.20	ND
1,2-Dichloroethane	107-06-2	0.20	ND
1,1-Dichloroethene	75-35-4	0.20	ND
1,2-Dichloroethene (cis)	156-59-2	0.20	ND
1,2-Dichloroethene (trans)	156-60-5	0.20	ND
1,2-Dichloropropane	78-87-5	0.20	ND
1,3-Dichloropropene (cis)	10061-01-5	0.20	ND
1,3-Dichloropropene (trans)	10061-02-6	0.19	ND
1,2-Dichlorotetrafluoroethane	76-14-2	0.20	ND

Method Blank must be less than the Practical Quantitation Limit (PQL).

INTEGRATED ANALYTICAL LABORATORIES, LLC

Method Blank Report

Lab Sample Name:	**METHOD BLANK**	**Data File:**	**AA7226BLK**
Field Sample Name:	**METHOD BLANK**	**Date Analyzed:**	**9/18/2024**
Matrix:	**Air**	**Sample Volume:**	**500ml**
Dilution Factor:	**1**	**GC/MS Column:**	**RTX-1, 0.32 mmID**

Runs with this Method Blank:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA7223BFB]	09/18/2024 10:23
10 PPBV DCVS [AA7224DCVS]	09/18/2024 10:54
10 PPBV LCS [AA7225LCS]	09/18/2024 11:25
METHOD BLANK [AA7226BLK]	09/18/2024 11:55
E24-03187-01 [AA7231]	09/18/2024 14:43
E24-03187-02 [AA7232]	09/18/2024 15:19
E24-03187-03 [AA7233]	09/18/2024 15:51
E24-03187-04 [AA7234]	09/18/2024 16:40
E24-03187-05 [AA7235]	09/18/2024 17:11
E24-03187-06 [AA7236]	09/18/2024 17:50
E24-03187-07 [AA7237]	09/18/2024 18:22
E24-03187-08 [AA7240]	09/18/2024 19:54
E24-03187-28 [AA7241]	09/18/2024 20:26

Compound	CAS #	Reporting Limit (ppbv)	Concentration (ppbv)
1,4-Dioxane	123-91-1	0.20	ND
Ethylbenzene	100-41-4	0.18	ND
n-Heptane	142-82-5	0.20	ND
1,3-Hexachlorobutadiene	87-68-3	0.20	ND
n-Hexane	110-54-3	0.20	ND
Methylene chloride	75-09-2	0.20	ND
Methyl ethyl ketone	78-93-3	0.20	ND
Methyl isobutyl ketone	108-10-1	0.20	ND
Methyl tert-butyl ether	1634-04-4	0.20	ND
Styrene	100-42-5	0.20	ND
Tert-butyl alcohol	75-65-0	0.20	ND
1,1,2,2-Tetrachloroethane	79-34-5	0.20	ND
Tetrachloroethene	127-18-4	0.20	ND
Toluene	108-88-3	0.20	ND
1,2,4-Trichlorobenzene	120-82-1	0.20	ND
1,1,1-Trichloroethane	71-55-6	0.17	ND
1,1,2-Trichloroethane	79-00-5	0.20	ND
Trichloroethene	79-01-6	0.17	ND
Trichlorofluoromethane	75-69-4	0.20	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.20	ND
1,2,4-Trimethylbenzene	95-63-6	0.20	ND
1,3,5-Trimethylbenzene	108-67-8	0.20	ND
2,2,4-Trimethylpentane	540-84-1	0.20	ND
Vinyl bromide	593-60-2	0.20	ND
Vinyl chloride	75-01-4	0.20	ND
Xylenes (m&p)	179601-23-1	0.20	ND
Xylenes (o)	95-47-6	0.20	ND

Method Blank must be less than the Practical Quantitation Limit (PQL).

Data Path : C:\DATA\2024\09-2024\09-18-2024\
Data File : aa7226blk.D
Acq On : 18 Sep 2024 11:55 am
Operator : jjw
Sample : Method Blank
Misc : 1127
ALS Vial : 4 Sample Multiplier: 1

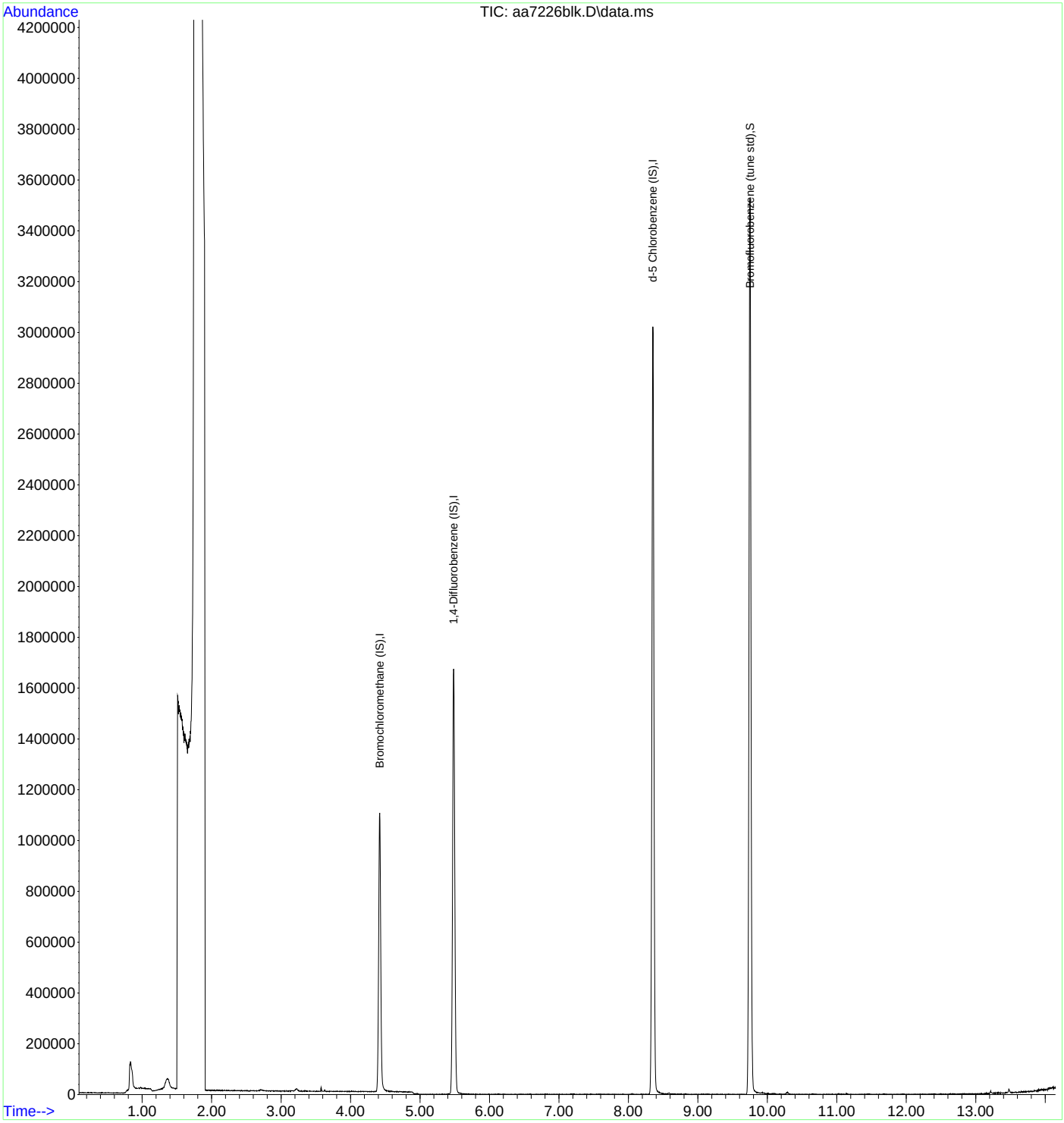
Quant Time: Sep 18 12:11:52 2024
Quant Method : C:\msdchem\1\METHODS\240910.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Sep 11 16:19:32 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.419	130	283740	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.483	114	1275820	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.351	117	1548256	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.750	95	1377989	10.12	ppbV	0.000
Target Compounds						Qvalue

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

Data Path : C:\DATA\2024\09-2024\09-18-2024\
Data File : aa7226blk.D
Acq On : 18 Sep 2024 11:55 am
Operator : jjw
Sample : Method Blank
Misc : 1127
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 18 12:11:52 2024
Quant Method : C:\msdchem\1\METHODS\240910.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Sep 11 16:19:32 2024
Response via : Initial Calibration



Data Path : C:\DATA\2024\09-2024\09-18-2024\
Data File : aa7226blk.D
Acq On : 18 Sep 2024 11:55 am
Operator : jjw
Sample : Method Blank
Misc : 1127
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0.3 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\240910.M
Title : TO-15 on the Agilent 7890A / 5975C

Signal : TIC: aa7226blk.D\data.ms

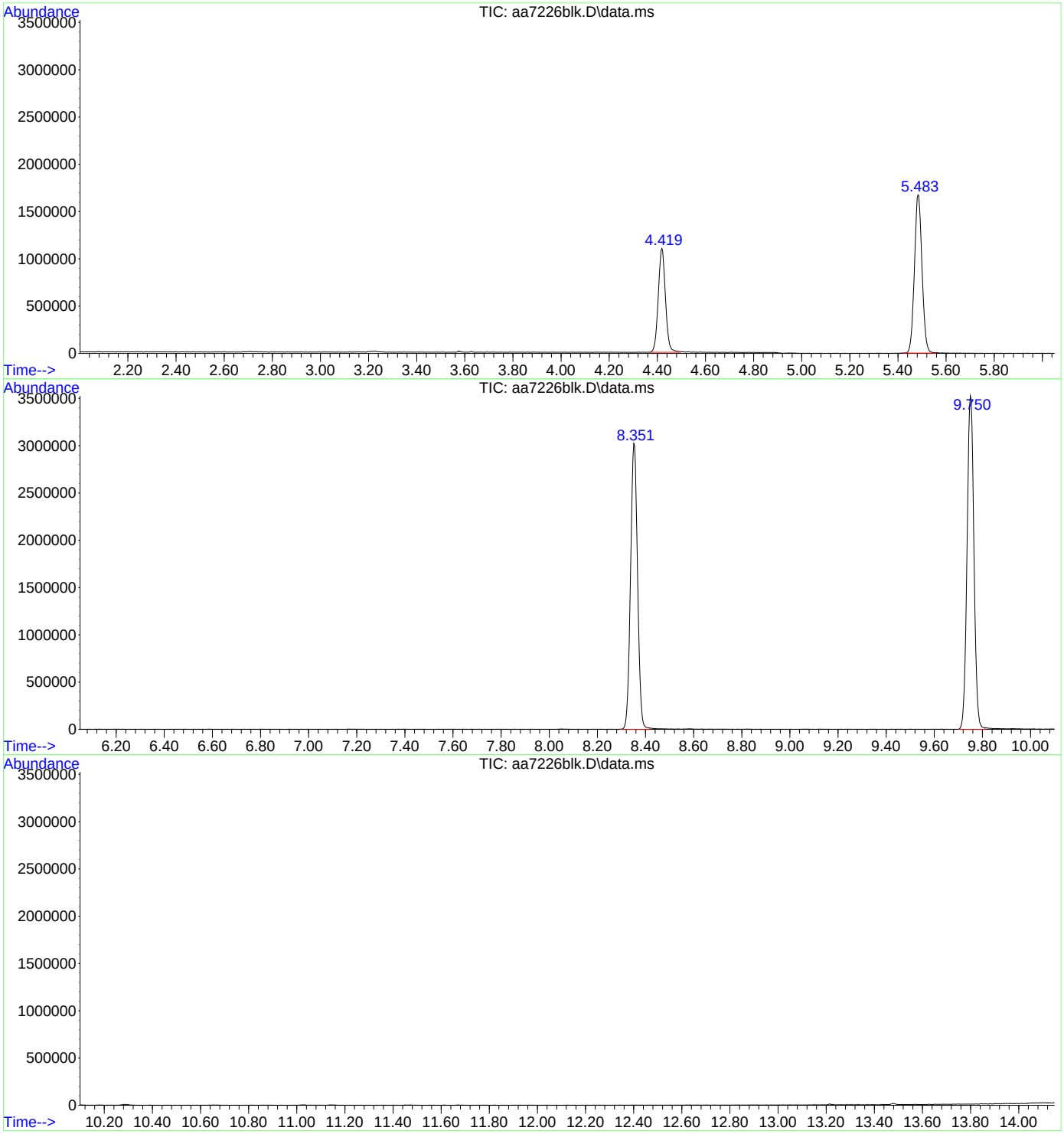
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.419	1320	1335	1359	rBV	1096291	2263268	32.66%	11.974%
2	5.483	1646	1666	1689	rBV2	1672363	3649039	52.66%	19.306%
3	8.351	2540	2558	2579	rBV	3020961	6059064	87.43%	32.056%
4	9.750	2977	2993	3012	rBV2	3523687	6930084	100.00%	36.664%

Sum of corrected areas: 18901455

Data Path : C:\DATA\2024\09-2024\09-18-2024\
Data File : aa7226blk.D
Acq On : 18 Sep 2024 11:55 am
Operator : jjw
Sample : Method Blank
Misc : 1127
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\240910.M
Quant Title : TO-15 on the Agilent 7890A / 5975C

TIC Library : C:\Database\NIST05a.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : C:\DATA\2024\09-2024\09-18-2024\
Data File : aa7226blk.D
Acq On : 18 Sep 2024 11:55 am
Operator : jjw
Sample : Method Blank
Misc : 1127
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\240910.M
Quant Title : TO-15 on the Agilent 7890A / 5975C

TIC Library : C:\Database\NIST05a.L
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected
****

Data Path : C:\DATA\2024\09-2024\09-18-2024\
Data File : aa7226blk.D
Acq On : 18 Sep 2024 11:55 am
Operator : jjw
Sample : Method Blank
Misc : 1127
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\240910.M
Quant Title : TO-15 on the Agilent 7890A / 5975C

TIC Library : C:\Database\NIST05a.L
TIC Integration Parameters: LSCINT.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA6581LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 5/31/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6579BFB]	05/31/2024 9:25
10 PPBV DCVS [AA6580DCVS]	05/31/2024 9:55
10 PPBV LCS [AA6581LCS]	05/31/2024 10:25
METHOD BLANK [AA6582BLK]	05/31/2024 11:57
02 PPBV RLLCS [AA6583RLLCS]	05/31/2024 12:31
5089 [AA6584]	05/31/2024 13:04
2069 [AA6585]	05/31/2024 13:36
10 PPBV CCCVS [AA6598CCCVS]	05/31/2024 22:11

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
Acetone	67-64-1	11	100
Benzene	71-43-2	11	110
Bromodichloromethane	75-27-4	12	110
Bromoform	75-25-2	11	100
Bromomethane	74-83-9	11	100
1,3-Butadiene	106-99-0	11	110
Chlorobenzene	108-90-7	11	110
Chloroethane	75-00-3	11	110
Chloroform	67-66-3	11	110
Chloromethane	74-87-3	14	120
Carbon disulfide	75-15-0	11	100
Carbon tetrachloride	56-23-5	11	110
Cyclohexane	110-82-7	11	110
Dibromochloromethane	124-48-1	11	100
1,2-Dibromoethane	106-93-4	11	100
1,2-Dichlorobenzene	95-50-1	10.0	91
1,3-Dichlorobenzene	541-73-1	10	91
1,4-Dichlorobenzene	106-46-7	10.0	91
Dichlorodifluoromethane	75-71-8	11	100
1,1-Dichloroethane	75-34-3	11	100
1,2-Dichloroethane	107-06-2	11	110
1,1-Dichloroethene	75-35-4	11	100
1,2-Dichloroethene (cis)	156-59-2	12	110
1,2-Dichloroethene (trans)	156-60-5	12	110
1,2-Dichloropropane	78-87-5	11	110
1,3-Dichloropropene (cis)	10061-01-5	11	100
1,3-Dichloropropene (trans)	10061-02-6	12	120
1,2-Dichlorotetrafluoroethane	76-14-2	9.9	90
1,4-Dioxane	123-91-1	12	100
Ethylbenzene	100-41-4	10	100
n-Heptane	142-82-5	11	110
1,3-Hexachlorobutadiene	87-68-3	10	88

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.

*** Values outside of QC limits* Values outside of 70-130% QC limits**

Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA6581LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 5/31/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6579BFB]	05/31/2024 9:25
10 PPBV DCVS [AA6580DCVS]	05/31/2024 9:55
10 PPBV LCS [AA6581LCS]	05/31/2024 10:25
METHOD BLANK [AA6582BLK]	05/31/2024 11:57
02 PPBV RLLCS [AA6583RLLCS]	05/31/2024 12:31
5089 [AA6584]	05/31/2024 13:04
2069 [AA6585]	05/31/2024 13:36
10 PPBV CCCVS [AA6598CCCVS]	05/31/2024 22:11

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
n-Hexane	110-54-3	11	110
Methylene chloride	75-09-2	10	91
Methyl ethyl ketone	78-93-3	11	93
Methyl isobutyl ketone	108-10-1	11	100
Methyl tert-butyl ether	1634-04-4	11	100
Styrene	100-42-5	11	100
Tert-butyl alcohol	75-65-0	12	100
1,1,2,2-Tetrachloroethane	79-34-5	11	100
Tetrachloroethene	127-18-4	11	110
Toluene	108-88-3	11	110
1,2,4-Trichlorobenzene	120-82-1	11	96
1,1,1-Trichloroethane	71-55-6	11	110
1,1,2-Trichloroethane	79-00-5	11	100
Trichloroethene	79-01-6	10	100
Trichlorofluoromethane	75-69-4	11	100
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	11	110
1,2,4-Trimethylbenzene	95-63-6	10	91
1,3,5-Trimethylbenzene	108-67-8	10	91
2,2,4-Trimethylpentane	540-84-1	11	110
Vinyl bromide	593-60-2	11	110
Vinyl chloride	75-01-4	12	120
Xylenes (m&p)	179601-23-1	21	110
Xylenes (o)	95-47-6	10	100

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.

*** Values outside of QC limits* Values outside of 70-130% QC limits**

Data Path : C:\DATA\2024\05-2024\05-31-2024\
Data File : aa6581lcs.D
Acq On : 31 May 2024 10:25 am
Operator : jjw
Sample : 10 ppbv LCS
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 31 10:44:41 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.413	130	217896	10.00	ppbV		0.000
39) 1,4-Difluorobenzene (IS)	5.480	114	924338	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.351	117	855079	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.750	95	717376	8.87	ppbV		0.000
Target Compounds							Qvalue
2) Propene	1.467	41	250352	10.95	ppbV		97
3) Dichlorodifluoromethane	1.509	85	696382	11.16	ppbV		100
4) 1,2-Dichlorotetrafluor...	1.633	85	863703	9.88	ppbV		99
5) n-Butane	1.709	43	516548	10.94	ppbV		99
6) Chloromethane	1.777	52	52533	13.51	ppbV	#	1
7) Vinyl chloride	1.767	62	336251	11.71	ppbV		100
8) 1,3-Butadiene	1.777	39	292453	10.99	ppbV		98
9) Bromomethane	2.078	94	257218	11.46	ppbV		100
10) Chloroethane	2.184	64	182836	11.20	ppbV		100
11) Vinyl bromide	2.287	106	302136	11.10	ppbV		99
12) Trichlorofluoromethane	2.303	101	817816	11.39	ppbV		100
13) Ethanol	2.673	45	116661	10.41	ppbV		90
14) 1,1-Dichloroethene	2.728	61	618967	11.20	ppbV		100
15) Carbon disulfide	2.750	76	1059012	11.50	ppbV		99
16) 1,1,2-Trichloro-1,2,2-...	2.776	101	721903	10.63	ppbV		100
17) Acrolein	2.988	56	126424	10.28	ppbV		99
18) Allyl chloride	3.117	76	180665	12.77	ppbV		100
19) Isopropanol	3.117	45	578101	9.40	ppbV		100
20) Methylene chloride	3.207	49	407939	10.36	ppbV		99
21) Acetone	3.223	43	547019	11.19	ppbV		99
22) 1,2-Dichloroethene (tr...	3.332	61	586446	11.73	ppbV		99
23) n-Pentane	3.416	43	630593	10.56	ppbV		99
24) n-Hexane	3.416	57	926061	11.07	ppbV		100
25) Methyl tert-butyl ether	3.419	73	1086989	10.89	ppbV		99
26) Tert-butyl alcohol	3.477	59	787753	11.55	ppbV		100
27) 1,1-Dichloroethane	3.818	63	685336	11.05	ppbV		100
28) 1,2-Dichloroethene (cis)	4.252	61	526110	11.69	ppbV		100
29) Cyclohexane	4.429	56	622527	11.14	ppbV		99
30) Chloroform	4.474	83	778668	11.19	ppbV		99
31) Ethyl acetate	4.564	45	129536	10.93	ppbV		98
32) Carbon tetrachloride	4.596	117	782759	11.03	ppbV		100
33) Tetrahydrofuran	4.596	42	479553	11.46	ppbV		100
34) 1,1,1-Trichloroethane	4.647	97	706453	10.78	ppbV		100
35) Methyl ethyl ketone	4.705	43	772038	11.14	ppbV		100
36) n-Heptane	4.940	43	706813	10.79	ppbV		100
37) Benzene	4.953	78	1095969	11.05	ppbV		99
38) 1,2-Dichloroethane	5.113	62	509226	11.22	ppbV		100
40) Trichloroethene	5.457	130	437160	10.46	ppbV		100
41) 2,2,4-Trimethylpentane	4.863	57	1848141	11.23	ppbV		99
42) 1,2-Dichloropropane	5.914	63	426366	11.11	ppbV		99
43) Bromodichloromethane	5.972	83	781738	11.70	ppbV		98
44) Methyl methacrylate	6.120	41	535805	11.18	ppbV		97
45) 1,4-Dioxane	6.146	88	263008	12.05	ppbV		99
46) cis-1,3-Dichloropropene	6.564	75	644087	11.36	ppbV		100
47) Toluene	6.801	91	1308619	11.06	ppbV		100
48) Methyl isobutyl ketone	7.168	43	928848	10.73	ppbV		100
49) Tetrachloroethene	7.191	166	514116	11.47	ppbV		100
50) trans-1,3-Dichloropropene	7.207	75	640466	11.75	ppbV		100
51) 1,1,2-Trichloroethane	7.371	97	441079	10.79	ppbV		100

Data Path : C:\DATA\2024\05-2024\05-31-2024\
Data File : aa6581lcs.D
Acq On : 31 May 2024 10:25 am
Operator : jjw
Sample : 10 ppbv LCS
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

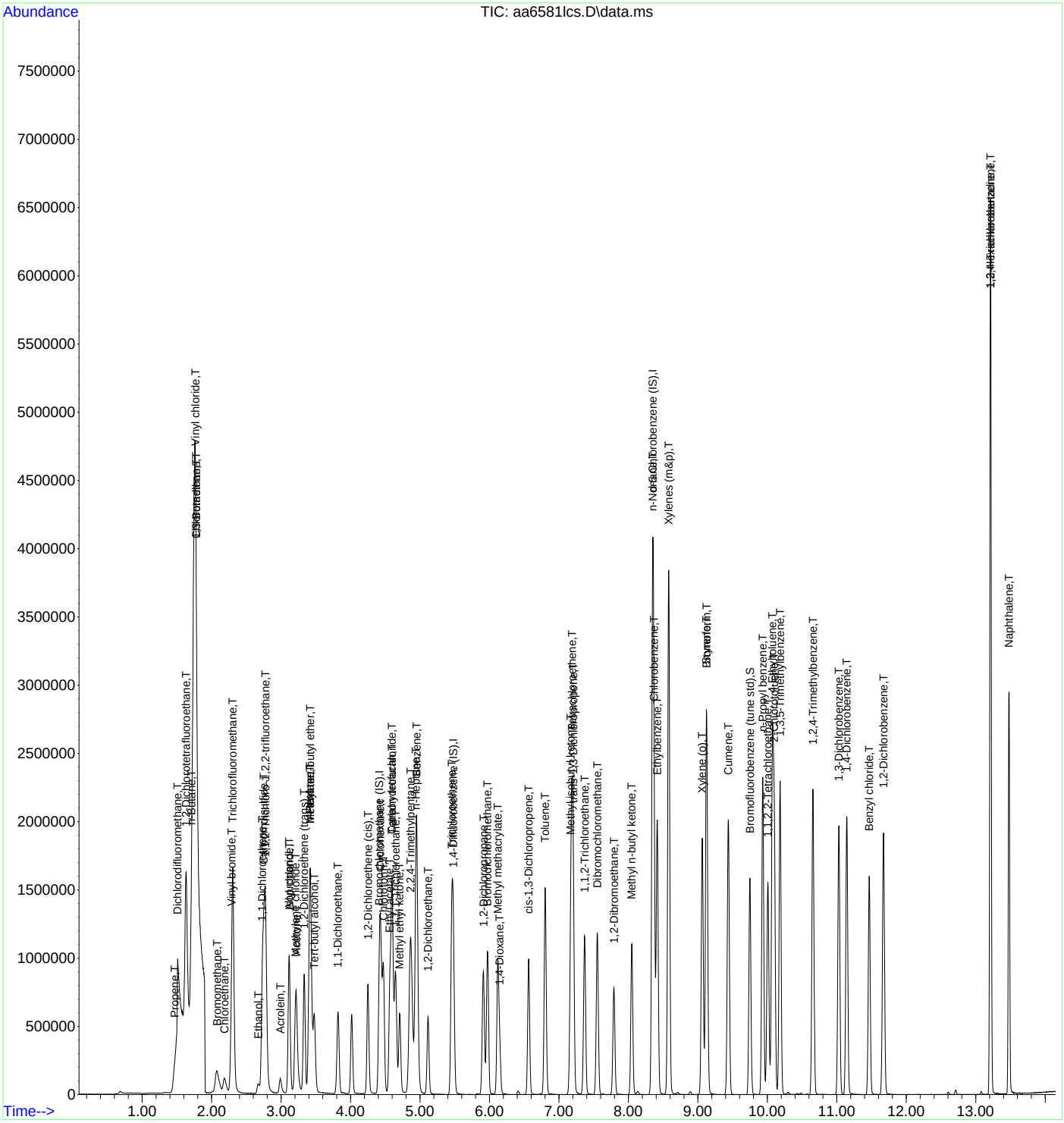
Quant Time: May 31 10:44:41 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.554	129	745710	11.44	ppbV	99
53) 1,2-Dibromoethane	7.792	107	649336	11.08	ppbV	100
54) Methyl n-butyl ketone	8.046	43	879260	10.85	ppbV	100
56) n-Nonane	8.348	43	1012226	10.13	ppbV	100
57) Chlorobenzene	8.371	112	961725	10.86	ppbV	100
58) Ethylbenzene	8.416	91	1756601	10.42	ppbV	100
59) Xylenes (m&p)	8.580	91	2687375	21.21	ppbV	100
60) Xylene (o)	9.062	91	1379332	10.34	ppbV	99
61) Styrene	9.123	104	996296	11.23	ppbV	99
62) Bromoform	9.126	173	674563	11.33	ppbV	99
63) Cumene	9.438	105	1708123	10.04	ppbV	100
65) n-Propyl benzene	9.933	91	2300704	9.83	ppbV	99
66) 1,1,2,2-Tetrachloroethane	10.007	83	1037421	10.56	ppbV	99
67) 4-Ethyltoluene	10.071	105	1915686	10.04	ppbV	100
68) 2-Chlorotoluene	10.097	91	1592504	10.03	ppbV	100
69) 1,3,5-Trimethylbenzene	10.184	105	1572844	10.13	ppbV	99
70) 1,2,4-Trimethylbenzene	10.657	105	1581654	10.16	ppbV	100
71) 1,3-Dichlorobenzene	11.030	146	952587	10.08	ppbV	100
72) 1,4-Dichlorobenzene	11.142	146	954591	9.99	ppbV	99
73) Benzyl chloride	11.467	91	1428846	9.30	ppbV	100
74) 1,2-Dichlorobenzene	11.673	146	908622	10.00	ppbV	100
75) 1,3-Hexachlorobutadiene	13.213	225	547950	10.48	ppbV	99
76) 1,2,4-Trichlorobenzene	13.213	180	740000	10.50	ppbV	100
77) Naphthalene	13.480	128	1772755	8.90	ppbV	100

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

Data Path : C:\DATA\2024\05-2024\05-31-2024\
Data File : aa6581lcs.D
Acq On : 31 May 2024 10:25 am
Operator : jjw
Sample : 10 ppbv LCS
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 31 10:44:41 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration



Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA7225LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 9/18/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA7223BFB]	09/18/2024 10:23
10 PPBV DCVS [AA7224DCVS]	09/18/2024 10:54
10 PPBV LCS [AA7225LCS]	09/18/2024 11:25
METHOD BLANK [AA7226BLK]	09/18/2024 11:55
E24-03187-01 [AA7231]	09/18/2024 14:43
E24-03187-02 [AA7232]	09/18/2024 15:19
E24-03187-03 [AA7233]	09/18/2024 15:51
E24-03187-04 [AA7234]	09/18/2024 16:40
E24-03187-05 [AA7235]	09/18/2024 17:11
E24-03187-06 [AA7236]	09/18/2024 17:50
E24-03187-07 [AA7237]	09/18/2024 18:22
E24-03187-08 [AA7240]	09/18/2024 19:54
E24-03187-28 [AA7241]	09/18/2024 20:26

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
Acetone	67-64-1	13	120
Benzene	71-43-2	11	110
Bromodichloromethane	75-27-4	11	100
Bromoform	75-25-2	11	100
Bromomethane	74-83-9	11	100
1,3-Butadiene	106-99-0	12	120
Chlorobenzene	108-90-7	11	110
Chloroethane	75-00-3	12	120
Chloroform	67-66-3	12	120
Chloromethane	74-87-3	13	110
Carbon disulfide	75-15-0	12	110
Carbon tetrachloride	56-23-5	11	110
Cyclohexane	110-82-7	11	110
Dibromochloromethane	124-48-1	12	110
1,2-Dibromoethane	106-93-4	11	100
1,2-Dichlorobenzene	95-50-1	10	91
1,3-Dichlorobenzene	541-73-1	11	100
1,4-Dichlorobenzene	106-46-7	11	100
Dichlorodifluoromethane	75-71-8	12	110
1,1-Dichloroethane	75-34-3	12	110
1,2-Dichloroethane	107-06-2	12	120
1,1-Dichloroethene	75-35-4	12	110
1,2-Dichloroethene (cis)	156-59-2	13	120
1,2-Dichloroethene (trans)	156-60-5	13	120
1,2-Dichloropropane	78-87-5	11	110
1,3-Dichloropropene (cis)	10061-01-5	11	100
1,3-Dichloropropene (trans)	10061-02-6	12	120

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.

*** Values outside of QC limits* Values outside of 70-130% QC limits**

Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA7225LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 9/18/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA7223BFB]	09/18/2024 10:23
10 PPBV DCVS [AA7224DCVS]	09/18/2024 10:54
10 PPBV LCS [AA7225LCS]	09/18/2024 11:25
METHOD BLANK [AA7226BLK]	09/18/2024 11:55
E24-03187-01 [AA7231]	09/18/2024 14:43
E24-03187-02 [AA7232]	09/18/2024 15:19
E24-03187-03 [AA7233]	09/18/2024 15:51
E24-03187-04 [AA7234]	09/18/2024 16:40
E24-03187-05 [AA7235]	09/18/2024 17:11
E24-03187-06 [AA7236]	09/18/2024 17:50
E24-03187-07 [AA7237]	09/18/2024 18:22
E24-03187-08 [AA7240]	09/18/2024 19:54
E24-03187-28 [AA7241]	09/18/2024 20:26

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
1,2-Dichlorotetrafluoroethane	76-14-2	9.9	90
1,4-Dioxane	123-91-1	12	100
Ethylbenzene	100-41-4	11	110
n-Heptane	142-82-5	13	130
1,3-Hexachlorobutadiene	87-68-3	9.5	83
n-Hexane	110-54-3	11	110
Methylene chloride	75-09-2	11	100
Methyl ethyl ketone	78-93-3	13	110
Methyl isobutyl ketone	108-10-1	12	110
Methyl tert-butyl ether	1634-04-4	11	100
Styrene	100-42-5	11	100
Tert-butyl alcohol	75-65-0	12	100
1,1,2,2-Tetrachloroethane	79-34-5	11	100
Tetrachloroethene	127-18-4	11	110
Toluene	108-88-3	11	110
1,2,4-Trichlorobenzene	120-82-1	9.0	79
1,1,1-Trichloroethane	71-55-6	11	110
1,1,2-Trichloroethane	79-00-5	11	100
Trichloroethene	79-01-6	10	100
Trichlorofluoromethane	75-69-4	12	110
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	11	110
1,2,4-Trimethylbenzene	95-63-6	11	100
1,3,5-Trimethylbenzene	108-67-8	11	100
2,2,4-Trimethylpentane	540-84-1	10	100
Vinyl bromide	593-60-2	11	110
Vinyl chloride	75-01-4	12	120
Xylenes (m&p)	179601-23-1	22	110

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.

*** Values outside of QC limits* Values outside of 70-130% QC limits**

INTEGRATED ANALYTICAL LABORATORIES, LLC

Laboratory Control Spike

Lab Sample Name: 10 PPBV LCS **Data File:** AA7225LCS

Spike Amount: 10 ppbv, except m&p-Xylenes at 20 ppbv **Date Analyzed:** 9/18/2024

Runs with this LCS:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA7223BFB]	09/18/2024 10:23
10 PPBV DCVS [AA7224DCVS]	09/18/2024 10:54
10 PPBV LCS [AA7225LCS]	09/18/2024 11:25
METHOD BLANK [AA7226BLK]	09/18/2024 11:55
E24-03187-01 [AA7231]	09/18/2024 14:43
E24-03187-02 [AA7232]	09/18/2024 15:19
E24-03187-03 [AA7233]	09/18/2024 15:51
E24-03187-04 [AA7234]	09/18/2024 16:40
E24-03187-05 [AA7235]	09/18/2024 17:11
E24-03187-06 [AA7236]	09/18/2024 17:50
E24-03187-07 [AA7237]	09/18/2024 18:22
E24-03187-08 [AA7240]	09/18/2024 19:54
E24-03187-28 [AA7241]	09/18/2024 20:26

Compound	CAS #	Calculated Amount (ppbv)	% Recovery
Xylenes (o)	95-47-6	10	100

LCS recovery must be within 70-130% of the spiked value for all compounds except Acetone, Dioxane (1,4-), Hexachlorobutadiene, Naphthalene, and 1,2,4-Trichlorobenzene. These compounds must be within 40-160%.

*** Values outside of QC limits* Values outside of 70-130% QC limits**

Data Path : C:\DATA\2024\09-2024\09-18-2024\
Data File : aa7225lcs.D
Acq On : 18 Sep 2024 11:25 am
Operator : jjw
Sample : 10 ppbv LCS
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 18 11:43:55 2024
Quant Method : C:\msdchem\1\METHODS\240910.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Sep 11 16:19:32 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane (IS)	4.422	130	282630	10.00	ppbV		0.000
39) 1,4-Difluorobenzene (IS)	5.486	114	1334980	10.00	ppbV		0.000
55) d-5 Chlorobenzene (IS)	8.351	117	1724546	10.00	ppbV		0.000
System Monitoring Compounds							
64) Bromofluorobenzene (tu...	9.750	95	1537755	10.14	ppbV		0.000
Target Compounds							Qvalue
2) Propene	1.496	41	510187	11.58	ppbV		99
3) Dichlorodifluoromethane	1.533	85	1040685	11.87	ppbV		100
4) 1,2-Dichlorotetrafluor...	1.657	85	1223935	9.87	ppbV		99
5) n-Butane	1.736	43	1287751	11.95	ppbV		99
6) Chloromethane	1.798	52	99777	13.22	ppbV		89
7) Vinyl chloride	1.791	62	600783	11.94	ppbV		100
8) 1,3-Butadiene	1.801	39	759749	12.16	ppbV		94
9) Bromomethane	2.101	94	296696	10.64	ppbV		99
10) Chloroethane	2.207	64	289968	12.39	ppbV		100
11) Vinyl bromide	2.307	106	362253	11.39	ppbV		98
12) Trichlorofluoromethane	2.326	101	1256805	11.87	ppbV		100
13) Ethanol	2.689	45	243331	11.17	ppbV		99
14) 1,1-Dichloroethene	2.750	61	1191573	12.30	ppbV		99
15) Carbon disulfide	2.773	76	1626885	12.25	ppbV		99
16) 1,1,2-Trichloro-1,2,2-...	2.792	101	1081010	10.55	ppbV		99
17) Acrolein	3.007	56	248823	11.66	ppbV		99
18) Allyl chloride	3.133	76	269482	12.77	ppbV		100
19) Isopropanol	3.136	45	1390801	9.89	ppbV		100
20) Methylene chloride	3.226	49	804460	10.89	ppbV		98
21) Acetone	3.236	43	1262749	12.62	ppbV		99
22) 1,2-Dichloroethene (tr...	3.348	61	1119537	13.28	ppbV		98
23) n-Pentane	3.429	43	1498811	11.12	ppbV		100
24) n-Hexane	3.429	57	1900768	11.40	ppbV		96
25) Methyl tert-butyl ether	3.435	73	1951426	11.18	ppbV		96
26) Tert-butyl alcohol	3.490	59	1617735	11.97	ppbV		100
27) 1,1-Dichloroethane	3.834	63	1343741	12.09	ppbV		100
28) 1,2-Dichloroethene (cis)	4.261	61	1018327	12.70	ppbV		99
29) Cyclohexane	4.445	56	1304317	11.07	ppbV		100
30) Chloroform	4.483	83	1309428	11.99	ppbV		100
31) Ethyl acetate	4.573	45	358286	12.26	ppbV		97
32) Carbon tetrachloride	4.605	117	1215561	10.79	ppbV		99
33) Tetrahydrofuran	4.605	42	1339207	13.11	ppbV		97
34) 1,1,1-Trichloroethane	4.657	97	1146587	10.63	ppbV		99
35) Methyl ethyl ketone	4.718	43	2135016	12.76	ppbV		98
36) n-Heptane	4.949	43	2221890	12.54	ppbV		96
37) Benzene	4.966	78	1894016	11.30	ppbV		99
38) 1,2-Dichloroethane	5.123	62	1060471	12.29	ppbV		100
40) Trichloroethene	5.464	130	623737	10.06	ppbV		99
41) 2,2,4-Trimethylpentane	4.876	57	3291224	10.12	ppbV		99
42) 1,2-Dichloropropane	5.917	63	978145	11.05	ppbV		99
43) Bromodichloromethane	5.978	83	1427381	11.43	ppbV		97
44) Methyl methacrylate	6.123	41	1809791	12.30	ppbV		95
45) 1,4-Dioxane	6.152	88	489438	11.78	ppbV		97
46) cis-1,3-Dichloropropene	6.567	75	1338376	11.32	ppbV		100
47) Toluene	6.805	91	2643481	11.00	ppbV		99
48) Methyl isobutyl ketone	7.174	43	3465699	11.53	ppbV		98
49) Tetrachloroethene	7.191	166	883587	11.14	ppbV		100
50) trans-1,3-Dichloropropene	7.210	75	1476312	12.10	ppbV	#	58
51) 1,1,2-Trichloroethane	7.371	97	846395	10.85	ppbV		99

Data Path : C:\DATA\2024\09-2024\09-18-2024\
Data File : aa7225lcs.D
Acq On : 18 Sep 2024 11:25 am
Operator : jjw
Sample : 10 ppbv LCS
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

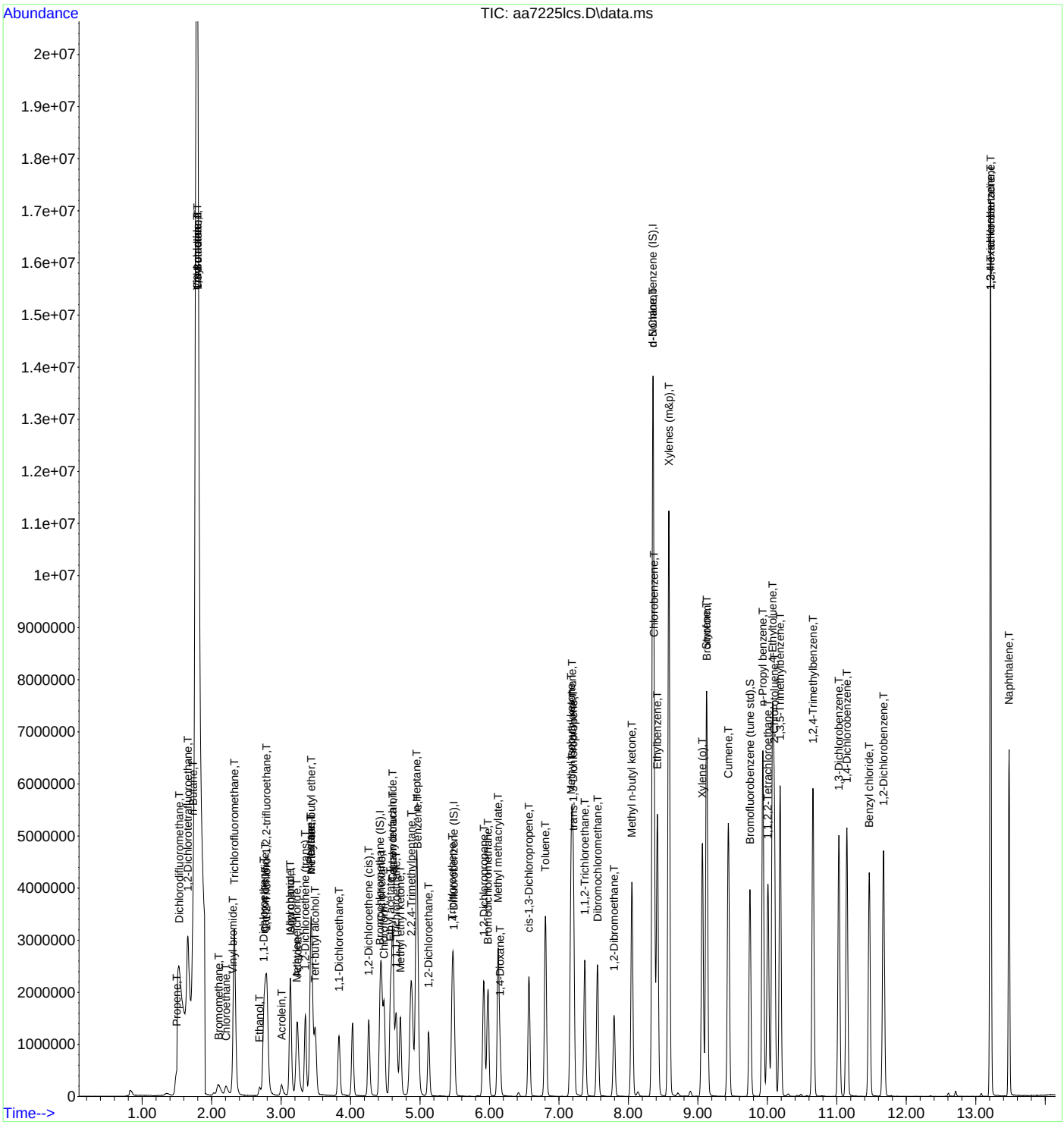
Quant Time: Sep 18 11:43:55 2024
Quant Method : C:\msdchem\1\METHODS\240910.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Sep 11 16:19:32 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Dibromochloromethane	7.557	129	1341426	11.64	ppbV	100
53) 1,2-Dibromoethane	7.795	107	1213021	11.44	ppbV	99
54) Methyl n-butyl ketone	8.049	43	3671094	12.91	ppbV	98
56) n-Nonane	8.351	43	4745342	11.32	ppbV	97
57) Chlorobenzene	8.371	112	2076037	10.57	ppbV	98
58) Ethylbenzene	8.416	91	4216151	10.53	ppbV	100
59) Xylenes (m&p)	8.583	91	6791180	22.09	ppbV	99
60) Xylene (o)	9.065	91	3172679	10.20	ppbV	99
61) Styrene	9.123	104	2428708	11.50	ppbV	100
62) Bromoform	9.129	173	1321803	11.12	ppbV	100
63) Cumene	9.438	105	3894667	10.07	ppbV	100
65) n-Propyl benzene	9.933	91	6072995	10.67	ppbV	100
66) 1,1,2,2-Tetrachloroethane	10.007	83	2654630	10.72	ppbV	100
67) 4-Ethyltoluene	10.075	105	4736871	10.56	ppbV	100
68) 2-Chlorotoluene	10.100	91	3891187	10.49	ppbV	99
69) 1,3,5-Trimethylbenzene	10.184	105	3608190	10.57	ppbV	99
70) 1,2,4-Trimethylbenzene	10.657	105	3639897	10.55	ppbV	100
71) 1,3-Dichlorobenzene	11.030	146	1966367	10.60	ppbV	100
72) 1,4-Dichlorobenzene	11.145	146	1963176	10.58	ppbV	100
73) Benzyl chloride	11.467	91	3465342	10.22	ppbV	100
74) 1,2-Dichlorobenzene	11.673	146	1838062	10.25	ppbV	99
75) 1,3-Hexachlorobutadiene	13.216	225	1096849	9.51	ppbV	100
76) 1,2,4-Trichlorobenzene	13.213	180	1497797	8.98	ppbV	100
77) Naphthalene	13.480	128	3369177	8.60	ppbV	100

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

Data Path : C:\DATA\2024\09-2024\09-18-2024\
Data File : aa7225lcs.D
Acq On : 18 Sep 2024 11:25 am
Operator : jjw
Sample : 10 ppbv LCS
Misc : EB0103704
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 18 11:43:55 2024
Quant Method : C:\msdchem\1\METHODS\240910.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Sep 11 16:19:32 2024
Response via : Initial Calibration



Analysis: Volatile Organic Compounds by EPA Method TO-15
Laboratory Sample Duplicate Report

SDG Number: E24-01789
IAL Sample ID: E24-01789-03
Matrix: Air
Summa ID: 3810

Date Received: 5/23/24
Date Analyzed: 5/30/24,5/30/24
Lab Data File#: AA6573,AA6574
Dilution Factor: 1
Injection Volume: 500ml
GC/MS Column: RTX-1, 0.32 mmID

		Sample		Sample Dup			
		E24-01789-03		**E24-01789-23**			
		Concentration		**Concentration**		**Reporting**	
		Reported		**Reported**		**Limits**	
Compound	**CAS #**	**ppbv**	**Q**	**ppbv**	**Q**	**ppbv**	**RPD**
Acetone	67-64-1	**7.7**	X	**9.9**	X	0.40	**-25.00%**
Allyl Chloride	107-05-1	0.40	U	0.40	U	0.40	0.00%
Benzene	71-43-2	0.20	U	**0.21**		0.20	**NC**
Bromodichloromethane	75-27-4	0.40	U	0.40	U	0.40	0.00%
Bromoform	75-25-2	0.40	U	0.40	U	0.40	0.00%
Bromomethane	74-83-9	0.40	U	0.40	U	0.40	0.00%
1,3-Butadiene	106-99-0	0.40	U	0.40	U	0.40	0.00%
Chlorobenzene	108-90-7	0.40	U	0.40	U	0.40	0.00%
Chloroethane	75-00-3	0.40	U	0.40	U	0.40	0.00%
Chloroform	67-66-3	0.40	U	0.40	U	0.40	0.00%
Chloromethane	74-87-3	0.40	U	0.40	U	0.40	0.00%
Carbon disulfide	75-15-0	0.40	U	0.40	U	0.40	0.00%
Carbon tetrachloride	56-23-5	0.20	U	0.20	U	0.20	0.00%
2-Chlorotoluene	95-49-8	0.40	U	0.40	U	0.40	0.00%
Cyclohexane	110-82-7	0.40	U	0.40	U	0.40	0.00%
Dibromochloromethane	124-48-1	0.40	U	0.40	U	0.40	0.00%
1,2-Dibromoethane	106-93-4	0.20	U	0.20	U	0.20	0.00%
1,2-Dichlorobenzene	95-50-1	0.40	U	0.40	U	0.40	0.00%
1,3-Dichlorobenzene	541-73-1	0.40	U	0.40	U	0.40	0.00%
1,4-Dichlorobenzene	106-46-7	0.40	U	0.40	U	0.40	0.00%
Dichlorodifluoromethane	75-71-8	0.40	U	0.40	U	0.40	0.00%
1,1-Dichloroethane	75-34-3	0.40	U	0.40	U	0.40	0.00%
1,2-Dichloroethane	107-06-2	0.40	U	0.40	U	0.40	0.00%
1,1-Dichloroethene	75-35-4	0.40	U	0.40	U	0.40	0.00%
1,2-Dichloroethene (cis)	156-59-2	0.40	U	0.40	U	0.40	0.00%
1,2-Dichloroethene (trans)	156-60-5	0.40	U	0.40	U	0.40	0.00%
1,2-Dichloropropane	78-87-5	0.20	U	0.20	U	0.20	0.00%
1,3-Dichloropropene (cis)	10061-01-5	0.20	U	0.20	U	0.20	0.00%
1,3-Dichloropropene (trans)	10061-02-6	0.20	U	0.20	U	0.20	0.00%
1,2-Dichlorotetrafluoroethane	76-14-2	0.40	U	0.40	U	0.40	0.00%
Ethylbenzene	100-41-4	0.20	U	0.20	U	0.20	0.00%
4-Ethyltoluene	622-96-8	0.40	U	0.40	U	0.40	0.00%
n-Heptane	142-82-5	0.40	U	0.40	U	0.40	0.00%
1,3-Hexachlorobutadiene	87-68-3	0.40	U	0.40	U	0.40	0.00%
n-Hexane	110-54-3	0.40	U	0.40	U	0.40	0.00%
Methylene chloride	75-09-2	0.40	U	0.40	U	0.40	0.00%
Methyl ethyl ketone	78-93-3	**0.42**		**0.46**		0.40	**-9.09%**
Methyl isobutyl ketone	108-10-1	0.40	U	0.40	U	0.40	0.00%

Qualifiers:
E=Concentration exceeds upper level of calibration range for instrument.
D=Extra dilution required for this compound. X=Duplicate samples do not met RPD criteria.
U=Compound ND or under reporting limit.

Analysis: Volatile Organic Compounds by EPA Method TO-15
Laboratory Sample Duplicate Report

SDG Number: E24-01789
IAL Sample ID: E24-01789-03
Matrix: Air
Summa ID: 3810

Date Received: 5/23/24
Date Analyzed: 5/30/24,5/30/24
Lab Data File#: AA6573,AA6574
Dilution Factor: 1
Injection Volume: 500ml
GC/MS Column: RTX-1, 0.32 mmID

Compound	CAS #	Sample E24-01789-03 Concentration Reported ppbv	Q	Sample Dup E24-01789-23 Concentration Reported ppbv	Q	Reporting Limits ppbv	RPD
Methyl tert-butyl ether	1634-04-4	0.40	U	0.40	U	0.40	0.00%
Styrene	100-42-5	0.40	U	0.40	U	0.40	0.00%
Tert-butyl alcohol	75-65-0	0.40	U	0.40	U	0.40	0.00%
1,1,2,2-Tetrachloroethane	79-34-5	0.40	U	0.40	U	0.40	0.00%
Tetrachloroethene	127-18-4	0.40	U	0.40	U	0.40	0.00%
Toluene	108-88-3	0.40	U	0.40	U	0.40	0.00%
1,2,4-Trichlorobenzene	120-82-1	0.40	U	0.40	U	0.40	0.00%
1,1,1-Trichloroethane	71-55-6	0.40	U	0.40	U	0.40	0.00%
1,1,2-Trichloroethane	79-00-5	0.40	U	0.40	U	0.40	0.00%
Trichloroethene	79-01-6	0.20	U	0.20	U	0.20	0.00%
Trichlorofluoromethane	75-69-4	0.40	U	0.40	U	0.40	0.00%
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.40	U	0.40	U	0.40	0.00%
1,2,4-Trimethylbenzene	95-63-6	0.40	U	0.40	U	0.40	0.00%
1,3,5-Trimethylbenzene	108-67-8	0.40	U	0.40	U	0.40	0.00%
2,2,4-Trimethylpentane	540-84-1	0.40	U	0.40	U	0.40	0.00%
Vinyl bromide	593-60-2	0.40	U	0.40	U	0.40	0.00%
Vinyl chloride	75-01-4	0.20	U	0.20	U	0.20	0.00%
Xylenes (m&p)	179601-23-1	0.40	U	0.40	U	0.40	0.00%
Xylenes (o)	95-47-6	0.40	U	0.40	U	0.40	0.00%

RPD must be <25% for all laboratory duplicate samples. Laboratory duplicate samples are run once daily.
NC = The RPD could not be calculated since the compound was only detected in either the parent or duplicate sample.

Qualifiers:
E=Concentration exceeds upper level of calibration range for instrument.
D=Extra dilution required for this compound. X=Duplicate samples do not met RPD criteria.
U=Compound ND or under reporting limit.

Data Path : C:\DATA\2024\05-2024\05-30-2024\
Data File : aa6573.D
Acq On : 30 May 2024 7:17 pm
Operator : jjw
Sample : E24-01789-03
Misc : 3810, 500cc
ALS Vial : 12 Sample Multiplier: 1

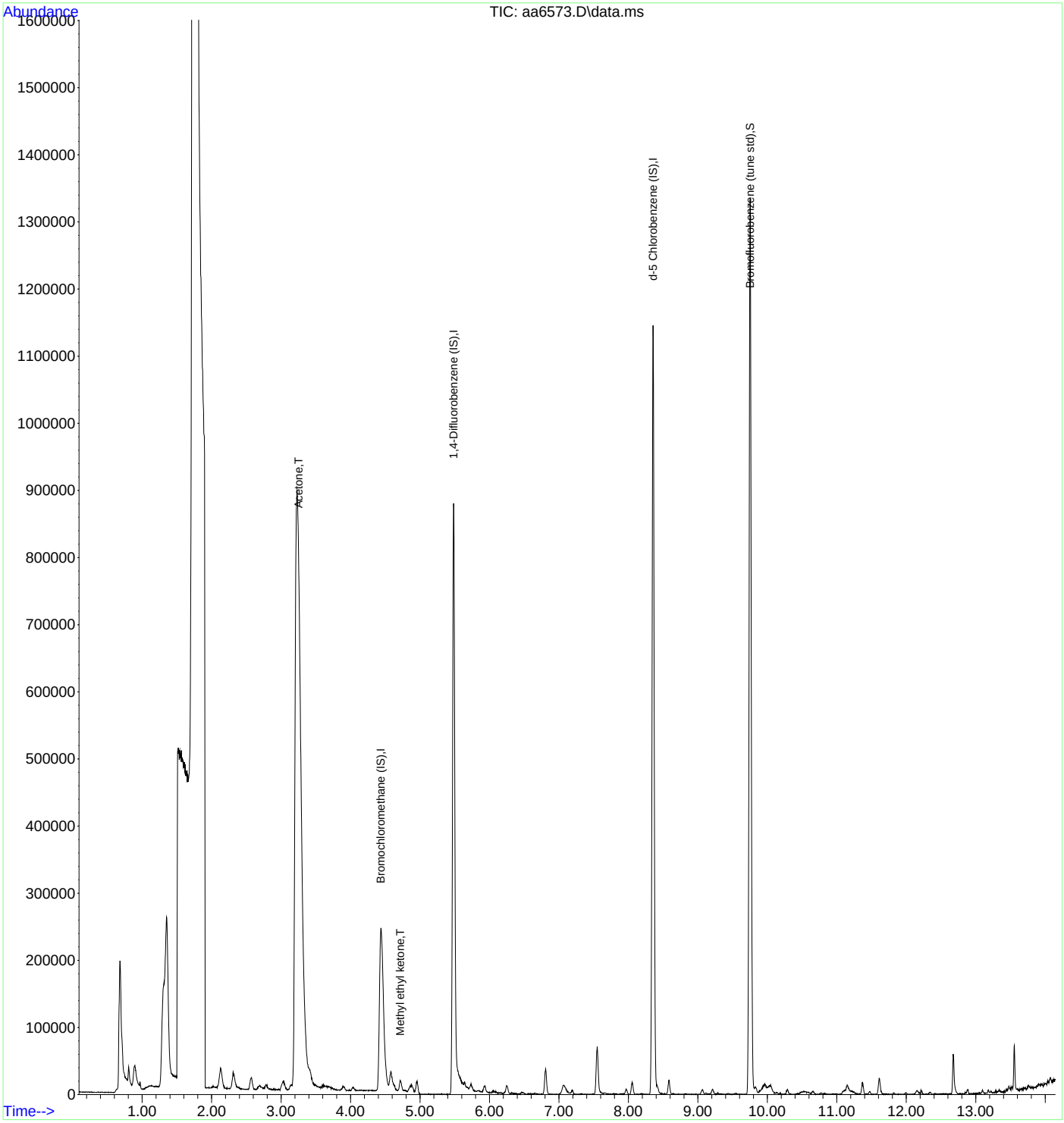
Quant Time: May 31 09:33:34 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

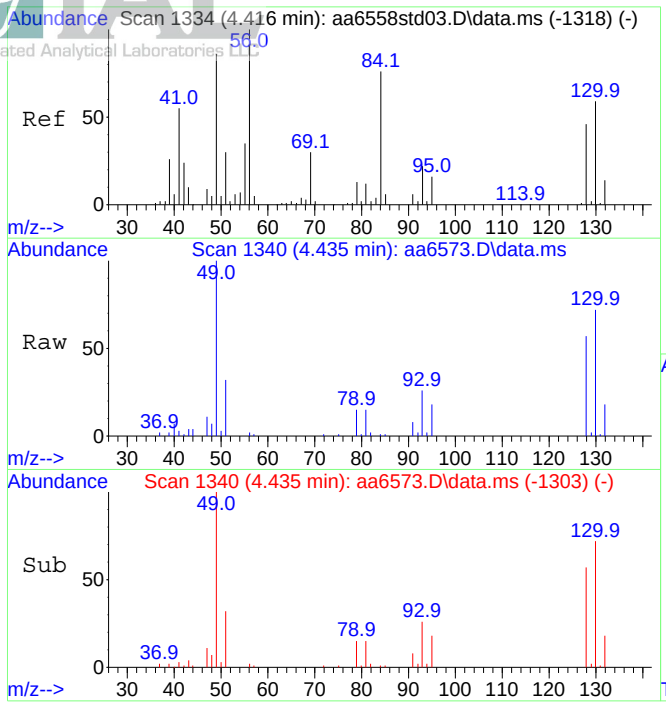
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.435	130	172291	10.00	ppbV	0.019
39) 1,4-Difluorobenzene (IS)	5.483	114	803636	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.355	117	735403	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.753	95	612864	8.81	ppbV	0.000
Target Compounds						Qvalue
21) Acetone	3.252	43	296636	7.67	ppbV	98
35) Methyl ethyl ketone	4.715	43	22937	0.42	ppbV	96

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

Data Path : C:\DATA\2024\05-2024\05-30-2024\
Data File : aa6573.D
Acq On : 30 May 2024 7:17 pm
Operator : jjw
Sample : E24-01789-03
Misc : 3810, 500cc
ALS Vial : 12 Sample Multiplier: 1

Quant Time: May 31 09:33:34 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

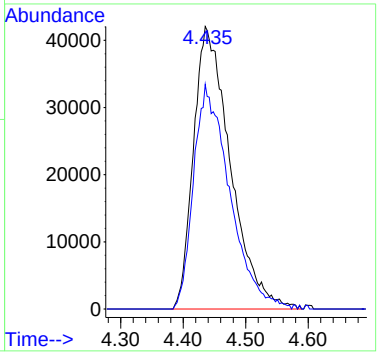


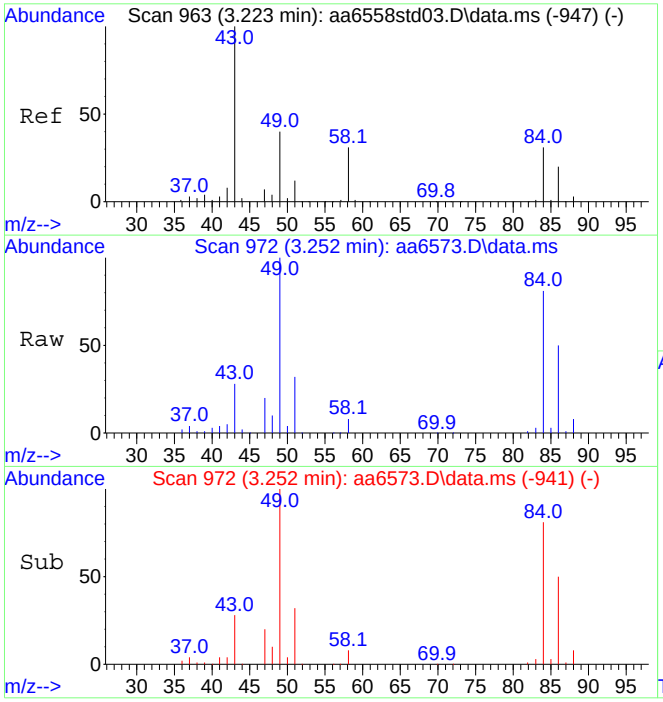


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.435 min Scan# 1340
Delta R.T. 0.019 min
Lab File: aa6573.D
Acq: 30 May 2024 7:17 pm

Tgt Ion:130 Resp: 172291

Ion	Ratio	Lower	Upper
130	100		
128	77.8	57.8	97.8

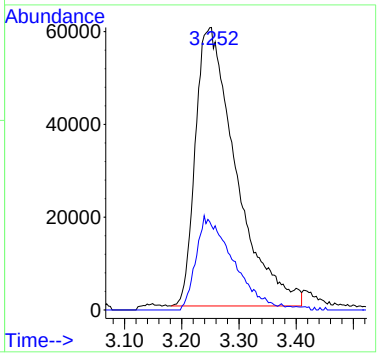


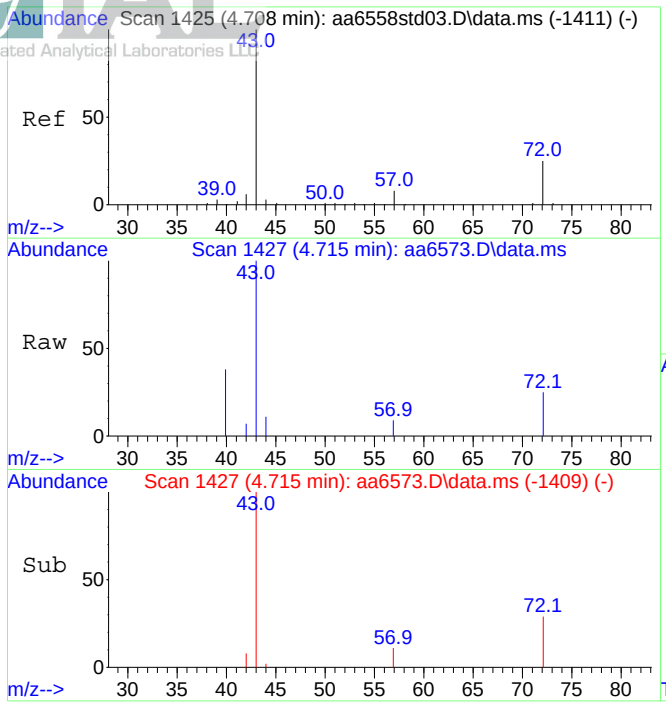


#21
Acetone
Concen: 7.67 ppbV
RT: 3.252 min Scan# 972
Delta R.T. 0.029 min
Lab File: aa6573.D
Acq: 30 May 2024 7:17 pm

Tgt Ion: 43 Resp: 296636

Ion	Ratio	Lower	Upper
43	100		
58	30.4	25.4	38.0

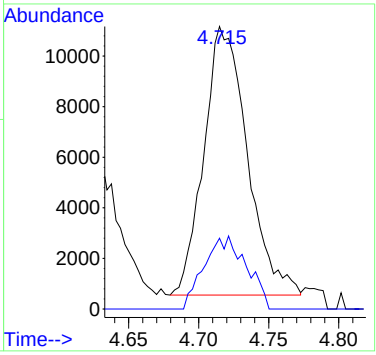


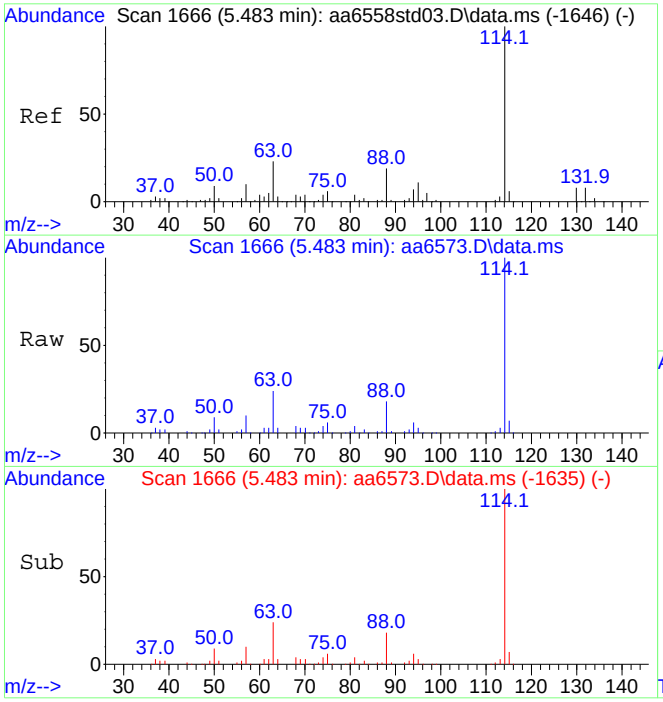


#35
Methyl ethyl ketone
Concen: 0.42 ppbV
RT: 4.715 min Scan# 1427
Delta R.T. 0.007 min
Lab File: aa6573.D
Acq: 30 May 2024 7:17 pm

Tgt Ion: 43 Resp: 22937

Ion	Ratio	Lower	Upper
43	100		
72	26.2	19.5	29.3

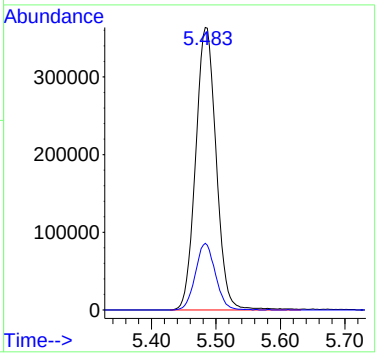


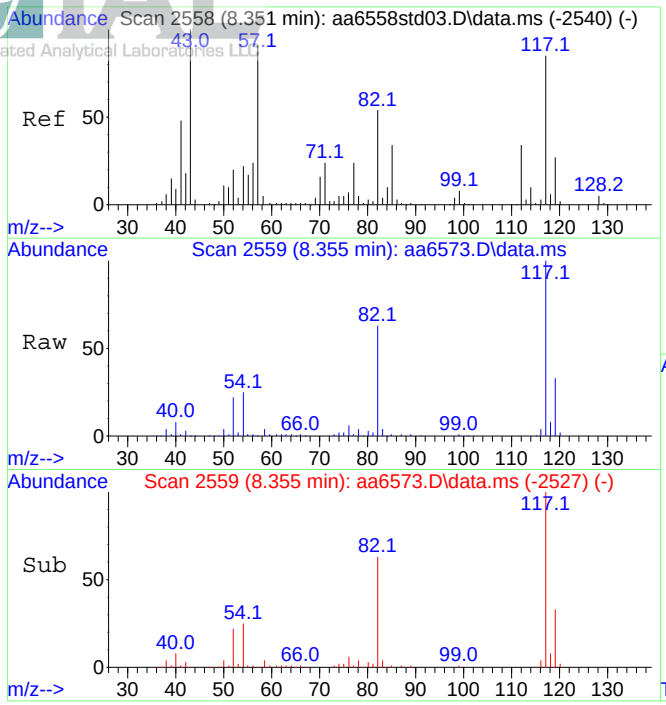


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.483 min Scan# 1666
Delta R.T. 0.000 min
Lab File: aa6573.D
Acq: 30 May 2024 7:17 pm

Tgt Ion:114 Resp: 803636

Ion	Ratio	Lower	Upper
114	100		
63	23.0	3.6	43.6

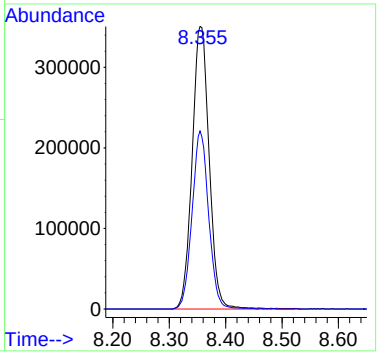


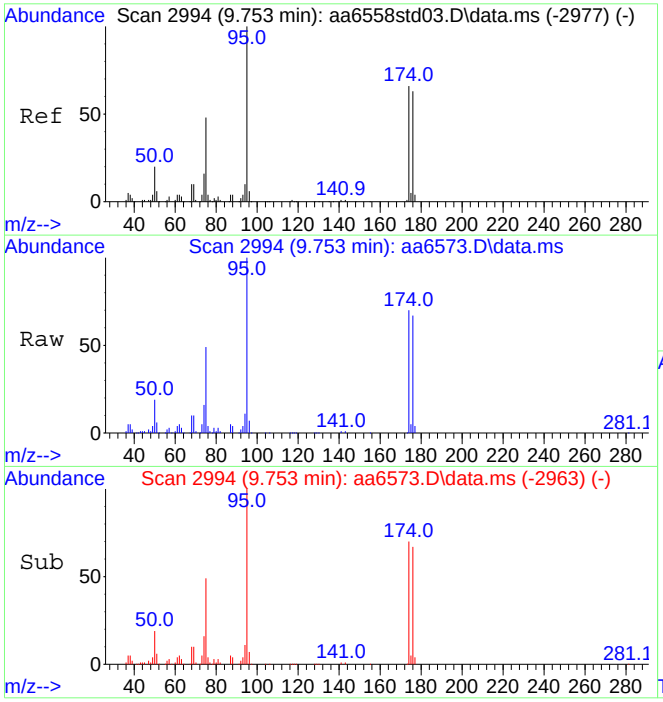


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.355 min Scan# 2559
Delta R.T. 0.003 min
Lab File: aa6573.D
Acq: 30 May 2024 7:17 pm

Tgt Ion:117 Resp: 735403

Ion	Ratio	Lower	Upper
117	100		
82	61.2	42.3	82.3

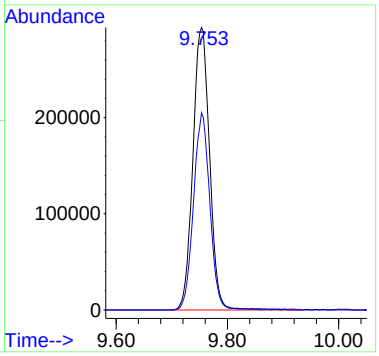




#64
Bromofluorobenzene (tune std)
Concen: 8.81 ppbV
RT: 9.753 min Scan# 2994
Delta R.T. 0.000 min
Lab File: aa6573.D
Acq: 30 May 2024 7:17 pm

Tgt Ion: 95 Resp: 612864

Ion	Ratio	Lower	Upper
95	100		
174	67.9	52.9	79.3



Data Path : C:\DATA\2024\05-2024\05-30-2024\
Data File : aa6574.D
Acq On : 30 May 2024 7:54 pm
Operator : jjw
Sample : E24-01789-23
Misc : Dup of E24-01789-03, Can # 3810, 500cc
ALS Vial : 13 Sample Multiplier: 1

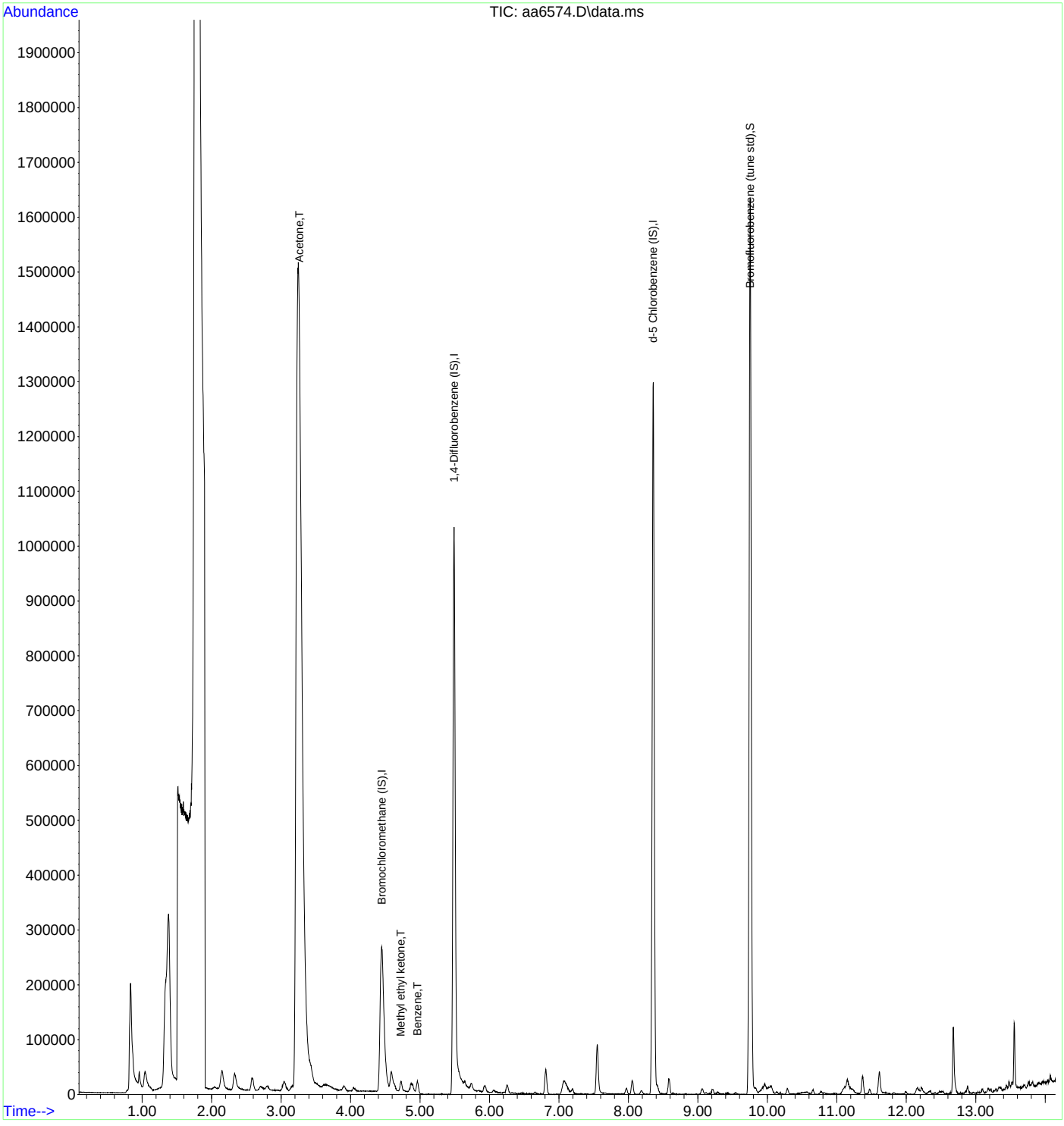
Quant Time: May 31 09:35:11 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

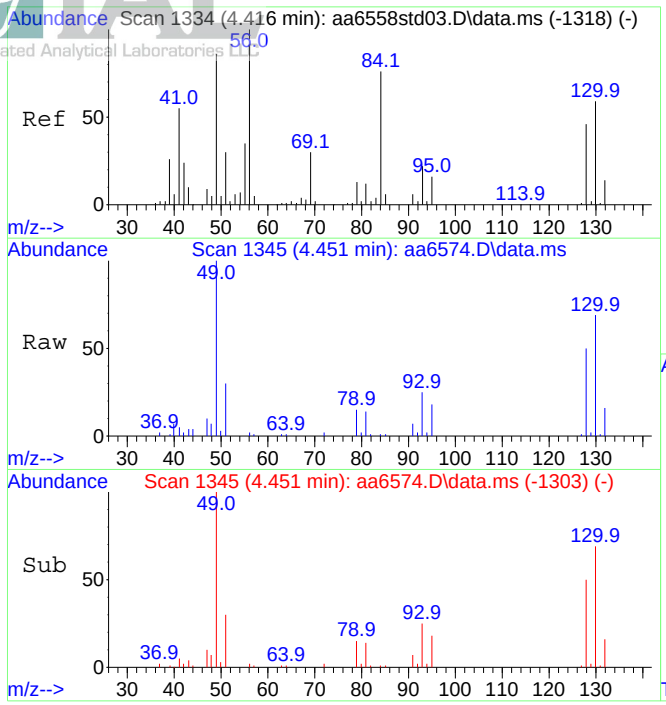
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.451	130	183124	10.00	ppbV	0.035
39) 1,4-Difluorobenzene (IS)	5.490	114	938152	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.355	117	831648	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.753	95	741758	9.43	ppbV	0.000
Target Compounds						Qvalue
21) Acetone	3.261	43	405124	9.86	ppbV	98
35) Methyl ethyl ketone	4.724	43	26707	0.46	ppbV	99
37) Benzene	4.962	78	17229	0.21	ppbV	94

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

Data Path : C:\DATA\2024\05-2024\05-30-2024\
Data File : aa6574.D
Acq On : 30 May 2024 7:54 pm
Operator : jjw
Sample : E24-01789-23
Misc : Dup of E24-01789-03, Can # 3810, 500cc
ALS Vial : 13 Sample Multiplier: 1

Quant Time: May 31 09:35:11 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

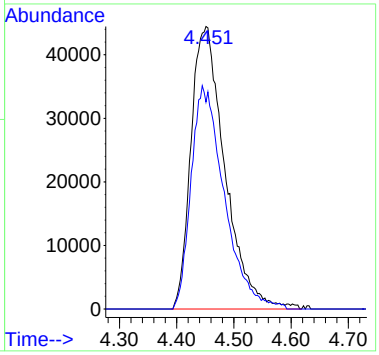


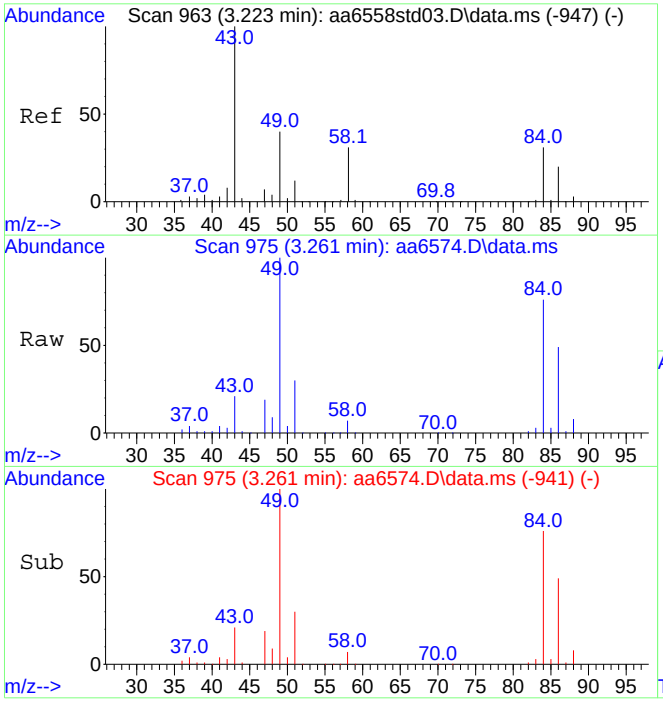


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.451 min Scan# 1345
Delta R.T. 0.035 min
Lab File: aa6574.D
Acq: 30 May 2024 7:54 pm

Tgt Ion:130 Resp: 183124

Ion	Ratio	Lower	Upper
130	100		
128	77.3	57.8	97.8

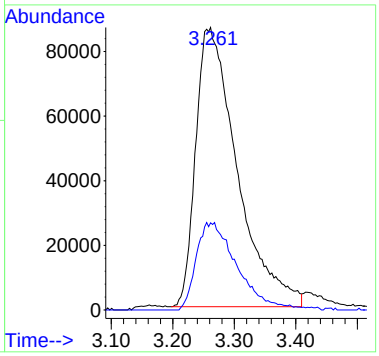


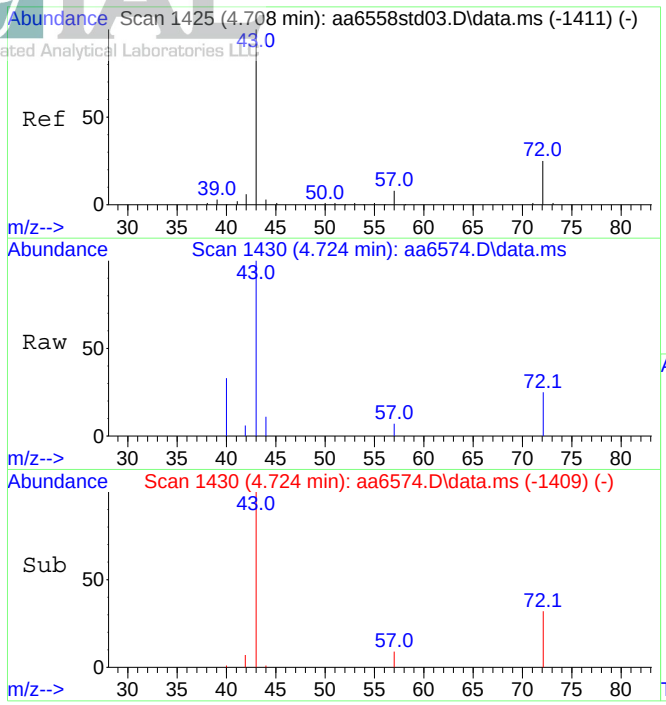


#21
Acetone
Concen: 9.86 ppbV
RT: 3.261 min Scan# 975
Delta R.T. 0.039 min
Lab File: aa6574.D
Acq: 30 May 2024 7:54 pm

Tgt Ion: 43 Resp: 405124

Ion	Ratio	Lower	Upper
43	100		
58	30.6	25.4	38.0

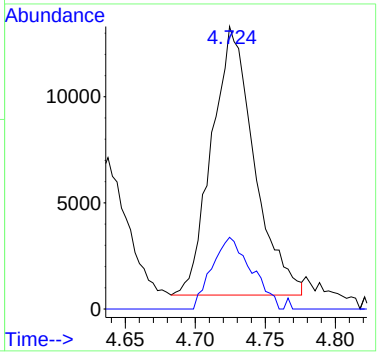


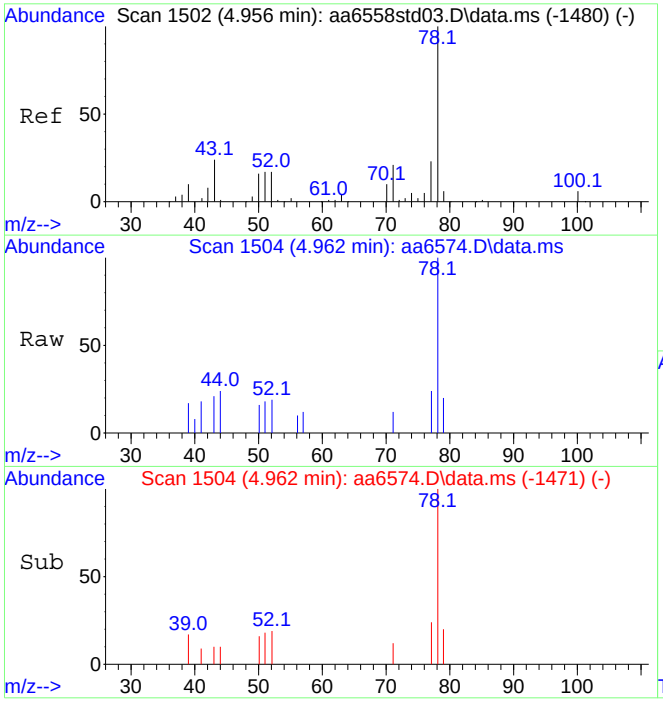


#35
Methyl ethyl ketone
Concen: 0.46 ppbV
RT: 4.724 min Scan# 1430
Delta R.T. 0.016 min
Lab File: aa6574.D
Acq: 30 May 2024 7:54 pm

Tgt Ion: 43 Resp: 26707

Ion	Ratio	Lower	Upper
43	100		
72	24.7	19.5	29.3

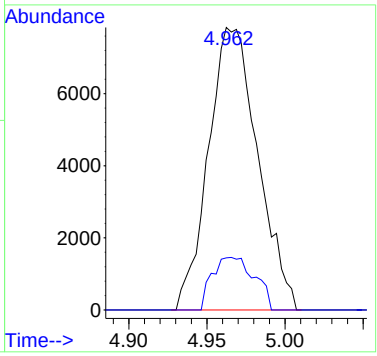


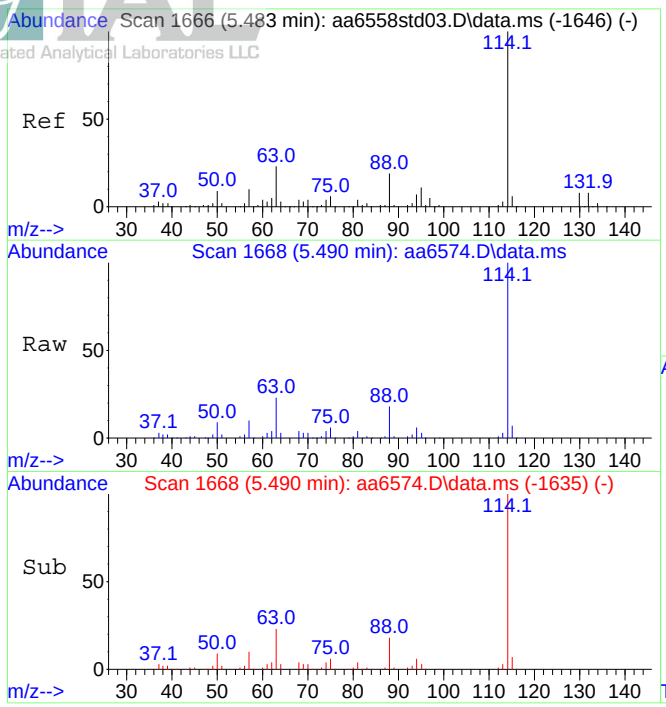


#37
Benzene
Concen: 0.21 ppbV
RT: 4.962 min Scan# 1504
Delta R.T. 0.006 min
Lab File: aa6574.D
Acq: 30 May 2024 7:54 pm

Tgt Ion: 78 Resp: 17229

Ion	Ratio	Lower	Upper
78	100		
51	16.0	14.9	22.3

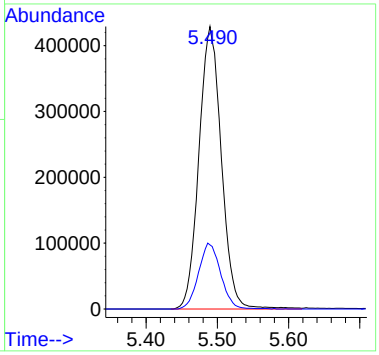


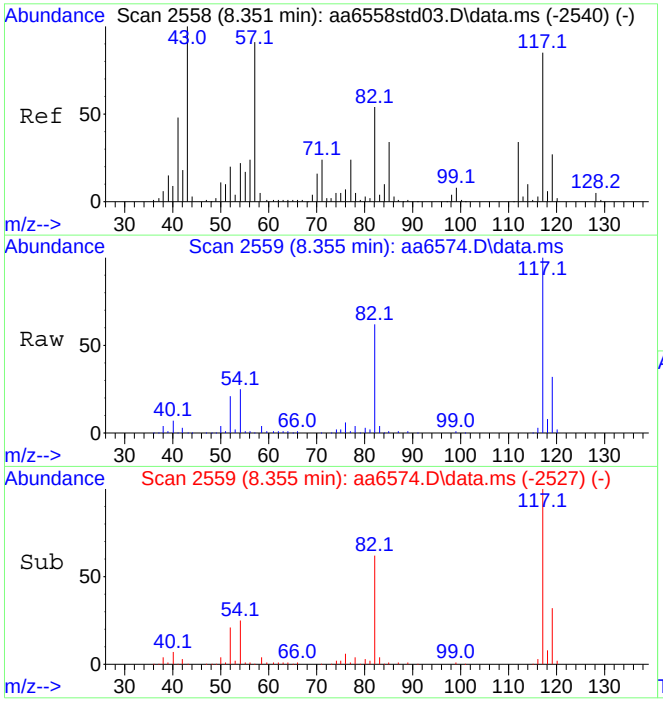


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.490 min Scan# 1668
Delta R.T. 0.006 min
Lab File: aa6574.D
Acq: 30 May 2024 7:54 pm

Tgt Ion:114 Resp: 938152

Ion	Ratio	Lower	Upper
114	100		
63	23.0	3.6	43.6

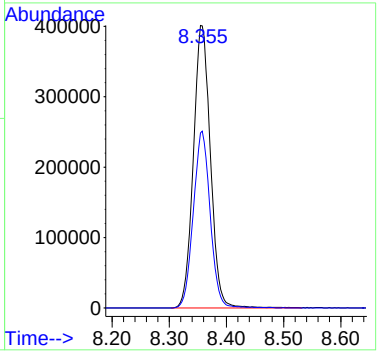


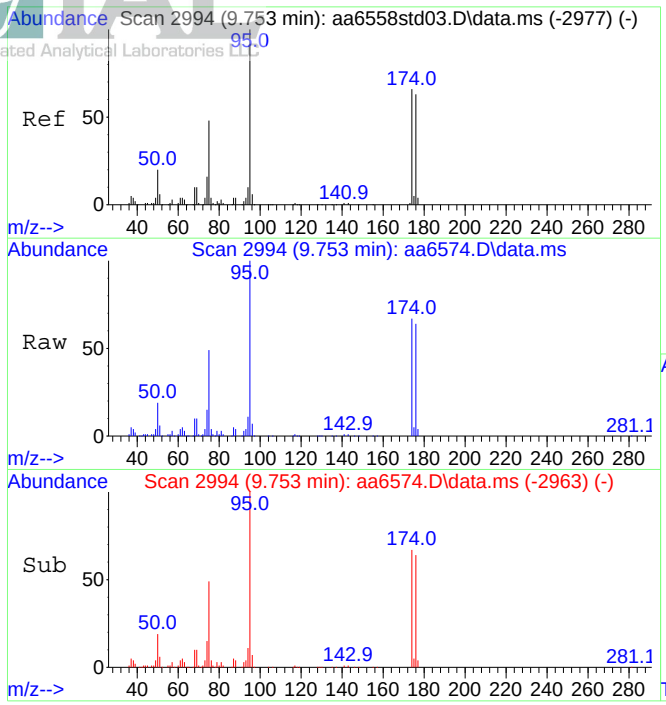


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.355 min Scan# 2559
Delta R.T. 0.003 min
Lab File: aa6574.D
Acq: 30 May 2024 7:54 pm

Tgt Ion:117 Resp: 831648

Ion	Ratio	Lower	Upper
117	100		
82	61.7	42.3	82.3

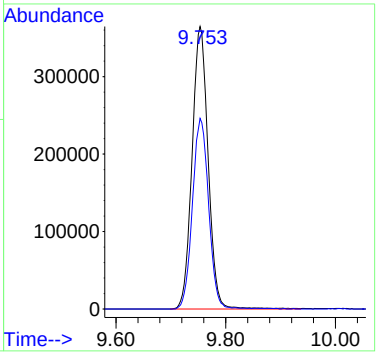




#64
Bromofluorobenzene (tune std)
Concen: 9.43 ppbV
RT: 9.753 min Scan# 2994
Delta R.T. 0.000 min
Lab File: aa6574.D
Acq: 30 May 2024 7:54 pm

Tgt Ion: 95 Resp: 741758

Ion	Ratio	Lower	Upper
95	100		
174	67.9	52.9	79.3



INTEGRATED ANALYTICAL LABORATORIES, LLC

Integrated Analytical Laboratories LLC

Analysis: Volatile Organic Compounds by EPA Method TO-15

Laboratory Sample Duplicate Report

		Date Received:	9/17/24
SDG Number:	E24-03187	Date Analyzed:	9/18/24,9/18/24
IAL Sample ID:	E24-03187-08	Lab Data File#:	AA7240,AA7241
Matrix:	Air	Dilution Factor:	1
Summa ID:	3805	Injection Volume:	500ml
		GC/MS Column:	RTX-1, 0.32 mmID

		Sample		Sample Dup			
		E24-03187-08		**E24-03187-28**			
		Concentration		**Concentration**		**Reporting**	
		Reported		**Reported**		**Limits**	
Compound	**CAS #**	**ppbv**	**Q**	**ppbv**	**Q**	**ppbv**	**RPD**
Acetone	67-64-1	**4.5**		**4.6**		0.20	**-2.20%**
Benzene	71-43-2	0.20	U	**0.20**		0.20	**NC**
Bromodichloromethane	75-27-4	0.20	U	0.20	U	0.20	0.00%
Bromoform	75-25-2	0.20	U	0.20	U	0.20	0.00%
Bromomethane	74-83-9	0.20	U	0.20	U	0.20	0.00%
1,3-Butadiene	106-99-0	0.20	U	0.20	U	0.20	0.00%
Chlorobenzene	108-90-7	0.20	U	0.20	U	0.20	0.00%
Chloroethane	75-00-3	0.20	U	0.20	U	0.20	0.00%
Chloroform	67-66-3	0.20	U	0.20	U	0.20	0.00%
Chloromethane	74-87-3	0.20	U	0.20	U	0.20	0.00%
Carbon disulfide	75-15-0	0.20	U	0.20	U	0.20	0.00%
Carbon tetrachloride	56-23-5	0.040	U	0.040	U	0.040	0.00%
Cyclohexane	110-82-7	0.20	U	0.20	U	0.20	0.00%
Dibromochloromethane	124-48-1	0.20	U	0.20	U	0.20	0.00%
1,2-Dibromoethane	106-93-4	0.20	U	0.20	U	0.20	0.00%
1,2-Dichlorobenzene	95-50-1	0.20	U	0.20	U	0.20	0.00%
1,3-Dichlorobenzene	541-73-1	0.20	U	0.20	U	0.20	0.00%
1,4-Dichlorobenzene	106-46-7	0.20	U	0.20	U	0.20	0.00%
Dichlorodifluoromethane	75-71-8	0.20	U	0.20	U	0.20	0.00%
1,1-Dichloroethane	75-34-3	0.20	U	0.20	U	0.20	0.00%
1,2-Dichloroethane	107-06-2	0.20	U	0.20	U	0.20	0.00%
1,1-Dichloroethene	75-35-4	0.20	U	0.20	U	0.20	0.00%
1,2-Dichloroethene (cis)	156-59-2	0.20	U	0.20	U	0.20	0.00%
1,2-Dichloroethene (trans)	156-60-5	0.20	U	0.20	U	0.20	0.00%
1,2-Dichloropropane	78-87-5	0.20	U	0.20	U	0.20	0.00%
1,3-Dichloropropene (cis)	10061-01-5	0.20	U	0.20	U	0.20	0.00%
1,3-Dichloropropene (trans)	10061-02-6	0.20	U	0.20	U	0.20	0.00%
1,2-Dichlorotetrafluoroethane	76-14-2	0.20	U	0.20	U	0.20	0.00%
1,4-Dioxane	123-91-1	0.20	U	0.20	U	0.20	0.00%
Ethylbenzene	100-41-4	0.20	U	0.20	U	0.20	0.00%
n-Heptane	142-82-5	0.20	U	0.20	U	0.20	0.00%
1,3-Hexachlorobutadiene	87-68-3	0.20	U	0.20	U	0.20	0.00%
n-Hexane	110-54-3	0.20	U	0.20	U	0.20	0.00%
Methylene chloride	75-09-2	**2.8**		**2.8**		0.20	**0.00%**
Methyl ethyl ketone	78-93-3	**0.44**		**0.44**		0.20	**0.00%**
Methyl isobutyl ketone	108-10-1	0.20	U	0.20	U	0.20	0.00%
Methyl tert-butyl ether	1634-04-4	0.20	U	0.20	U	0.20	0.00%
Styrene	100-42-5	0.20	U	0.20	U	0.20	0.00%

Qualifiers:
E=Concentration exceeds upper level of calibration range for instrument.
D=Extra dilution required for this compound. X=Duplicate samples do not met RPD criteria.
U=Compound ND or under reporting limit.

Analysis: Volatile Organic Compounds by EPA Method TO-15
Laboratory Sample Duplicate Report

SDG Number: E24-03187
IAL Sample ID: E24-03187-08
Matrix: Air
Summa ID: 3805

Date Received: 9/17/24
Date Analyzed: 9/18/24,9/18/24
Lab Data File#: AA7240,AA7241
Dilution Factor: 1
Injection Volume: 500ml
GC/MS Column: RTX-1, 0.32 mmID

Compound	CAS #	Sample E24-03187-08 Concentration Reported ppbv	Q	Sample Dup E24-03187-28 Concentration Reported ppbv	Q	Reporting Limits ppbv	RPD
Tert-butyl alcohol	75-65-0	0.20	U	0.20	U	0.20	0.00%
1,1,2,2-Tetrachloroethane	79-34-5	0.20	U	0.20	U	0.20	0.00%
Tetrachloroethene	127-18-4	0.20	U	0.20	U	0.20	0.00%
Toluene	108-88-3	**0.79**		**0.79**		0.20	**0.00%**
1,2,4-Trichlorobenzene	120-82-1	0.20	U	0.20	U	0.20	0.00%
1,1,1-Trichloroethane	71-55-6	0.20	U	0.20	U	0.20	0.00%
1,1,2-Trichloroethane	79-00-5	0.20	U	0.20	U	0.20	0.00%
Trichloroethene	79-01-6	0.046	U	0.046	U	0.046	0.00%
Trichlorofluoromethane	75-69-4	**0.27**		**0.26**		0.20	**3.77%**
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.20	U	0.20	U	0.20	0.00%
1,2,4-Trimethylbenzene	95-63-6	0.20	U	0.20	U	0.20	0.00%
1,3,5-Trimethylbenzene	108-67-8	0.20	U	0.20	U	0.20	0.00%
2,2,4-Trimethylpentane	540-84-1	0.20	U	0.20	U	0.20	0.00%
Vinyl bromide	593-60-2	0.20	U	0.20	U	0.20	0.00%
Vinyl chloride	75-01-4	0.20	U	0.20	U	0.20	0.00%
Xylenes (m&p)	179601-23-1	**0.31**		**0.30**		0.20	**3.28%**
Xylenes (o)	95-47-6	0.20	U	0.20	U	0.20	0.00%

RPD must be <25% for all laboratory duplicate samples. Laboratory duplicate samples are run once daily.
NC = The RPD could not be calculated since the compound was only detected in either the parent or duplicate sample.

Qualifiers:
E=Concentration exceeds upper level of calibration range for instrument.
D=Extra dilution required for this compound. X=Duplicate samples do not met RPD criteria.
U=Compound ND or under reporting limit.

Data Path : C:\DATA\2024\09-2024\09-18-2024\
Data File : aa7240.D
Acq On : 18 Sep 2024 7:54 pm
Operator : jjw
Sample : E24-03187-08
Misc : 3805, 500cc
ALS Vial : 18 Sample Multiplier: 1

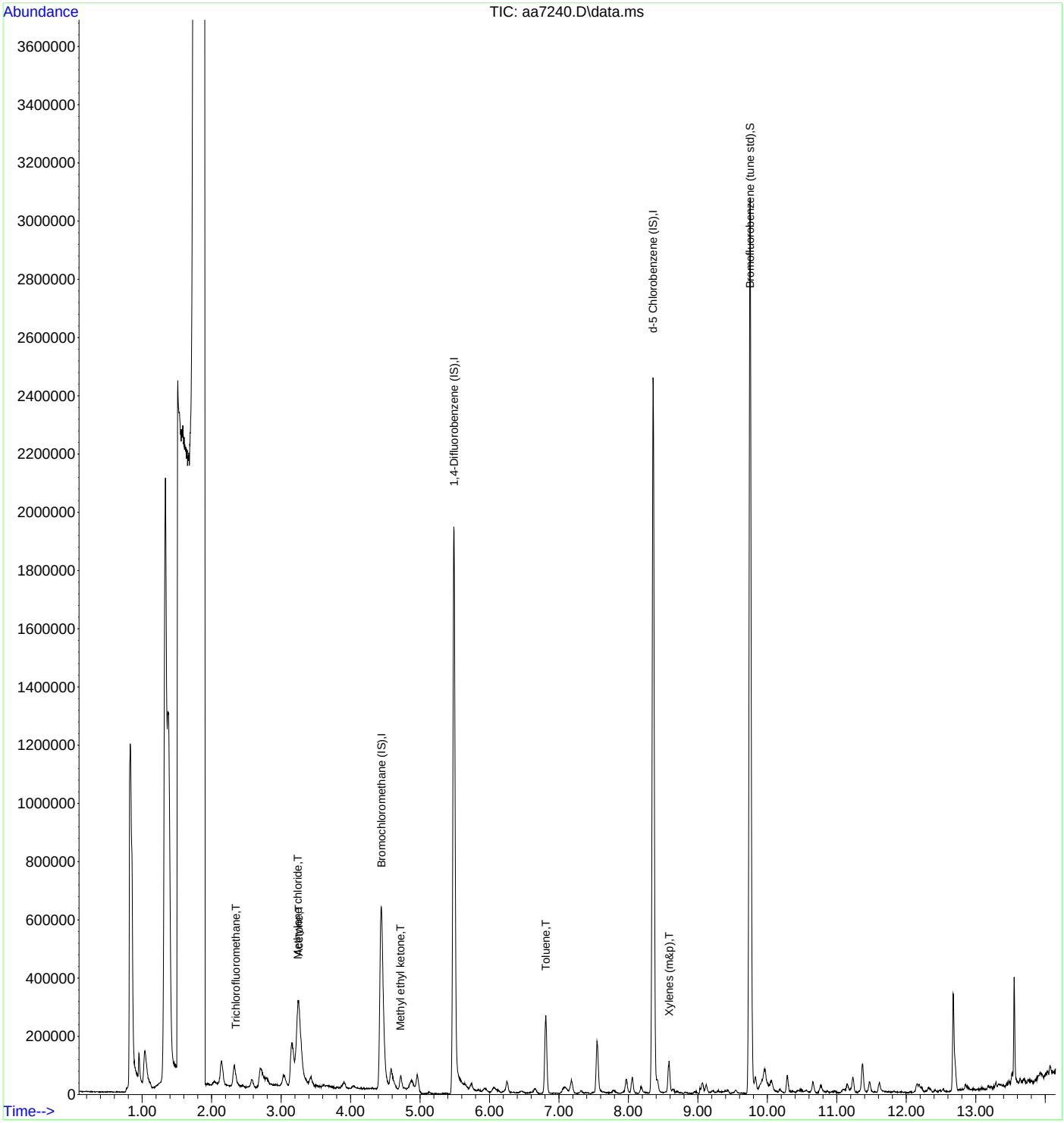
Quant Time: Sep 19 09:57:34 2024
Quant Method : C:\msdchem\1\METHODS\240910.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Sep 11 16:19:32 2024
Response via : Initial Calibration

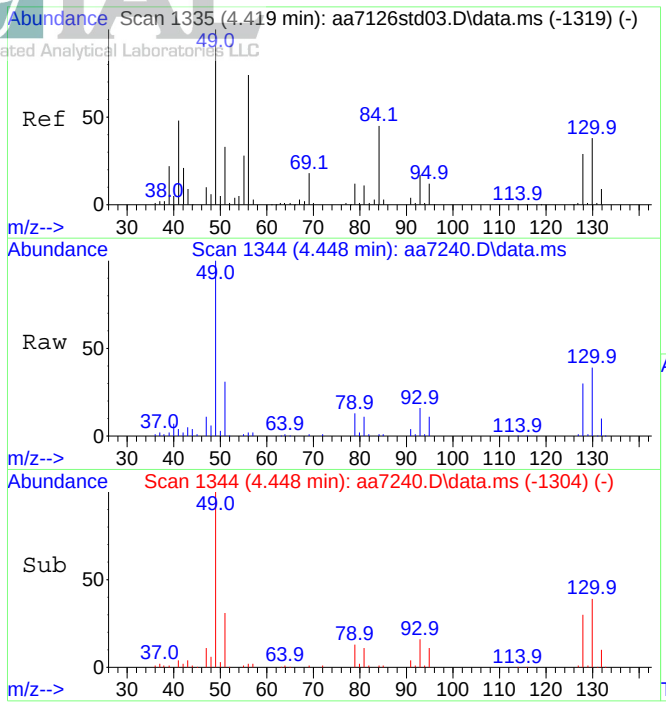
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.448	130	258081	10.00	ppbV	0.029
39) 1,4-Difluorobenzene (IS)	5.489	114	1468777	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.354	117	1256252	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.753	95	1196122	10.83	ppbV	0.000
Target Compounds						Qvalue
12) Trichlorofluoromethane	2.348	101	26301	0.27	ppbV	84
20) Methylene chloride	3.242	49	187076	2.77	ppbV	99
21) Acetone	3.255	43	407949	4.46	ppbV	96
35) Methyl ethyl ketone	4.721	43	67694	0.44	ppbV	99
47) Toluene	6.811	91	209245	0.79	ppbV	100
59) Xylenes (m&p)	8.586	91	68257	0.30	ppbV	97

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

Data Path : C:\DATA\2024\09-2024\09-18-2024\
Data File : aa7240.D
Acq On : 18 Sep 2024 7:54 pm
Operator : jjw
Sample : E24-03187-08
Misc : 3805, 500cc
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Sep 19 09:57:34 2024
Quant Method : C:\msdchem\1\METHODS\240910.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Sep 11 16:19:32 2024
Response via : Initial Calibration

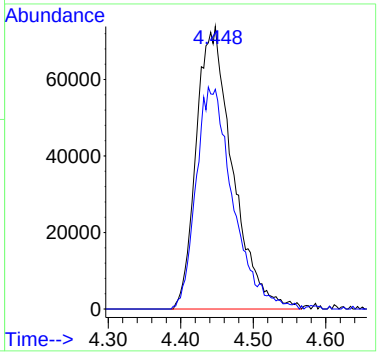


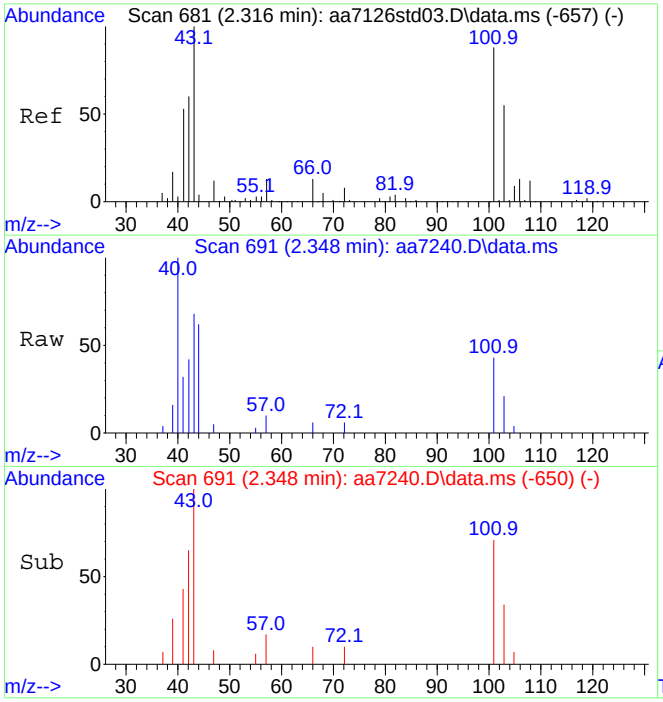


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.448 min Scan# 1344
Delta R.T. 0.029 min
Lab File: aa7240.D
Acq: 18 Sep 2024 7:54 pm

Tgt Ion:130 Resp: 258081

Ion	Ratio	Lower	Upper
130	100		
128	79.3	58.5	98.5

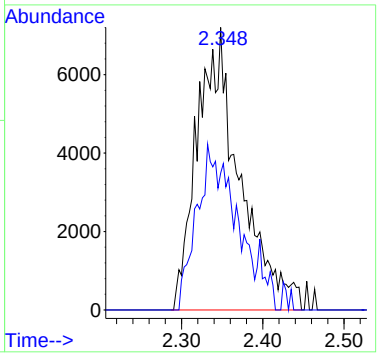


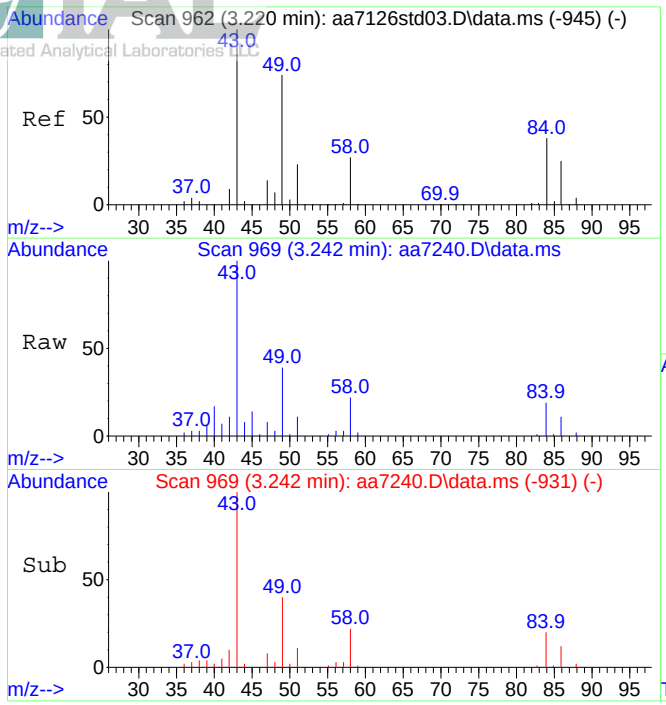


#12
Trichlorofluoromethane
Concen: 0.27 ppbV
RT: 2.348 min Scan# 691
Delta R.T. 0.032 min
Lab File: aa7240.D
Acq: 18 Sep 2024 7:54 pm

Tgt Ion:101 Resp: 26301

Ion	Ratio	Lower	Upper
101	100		
103	51.6	51.4	77.0

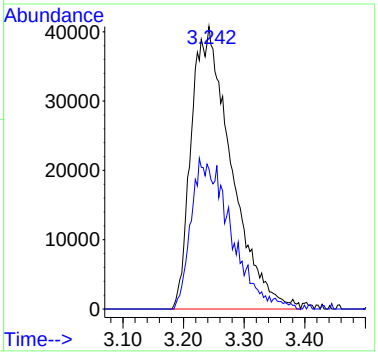


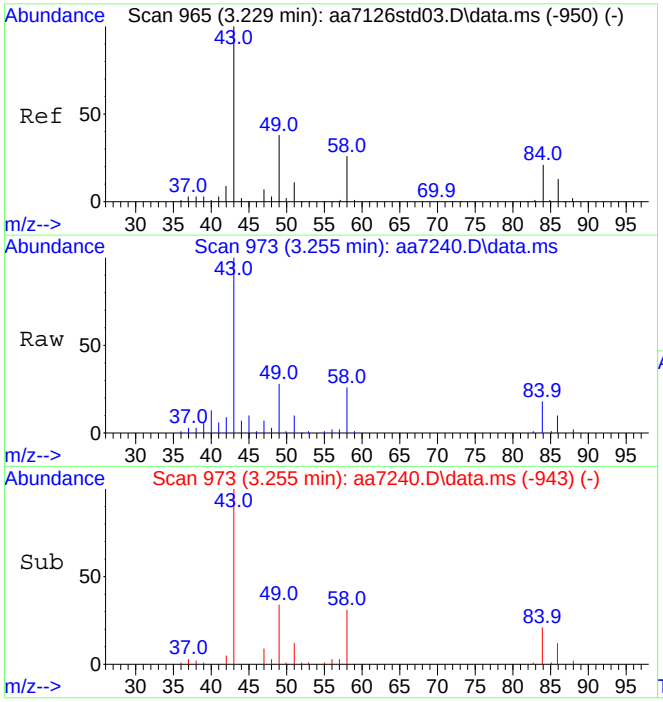


#20
Methylene chloride
Concen: 2.77 ppbV
RT: 3.242 min Scan# 969
Delta R.T. 0.022 min
Lab File: aa7240.D
Acq: 18 Sep 2024 7:54 pm

Tgt Ion: 49 Resp: 187076

Ion	Ratio	Lower	Upper
49	100		
84	52.9	33.6	73.6

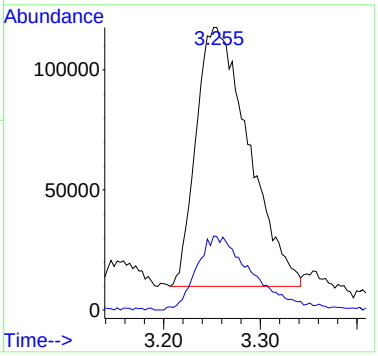


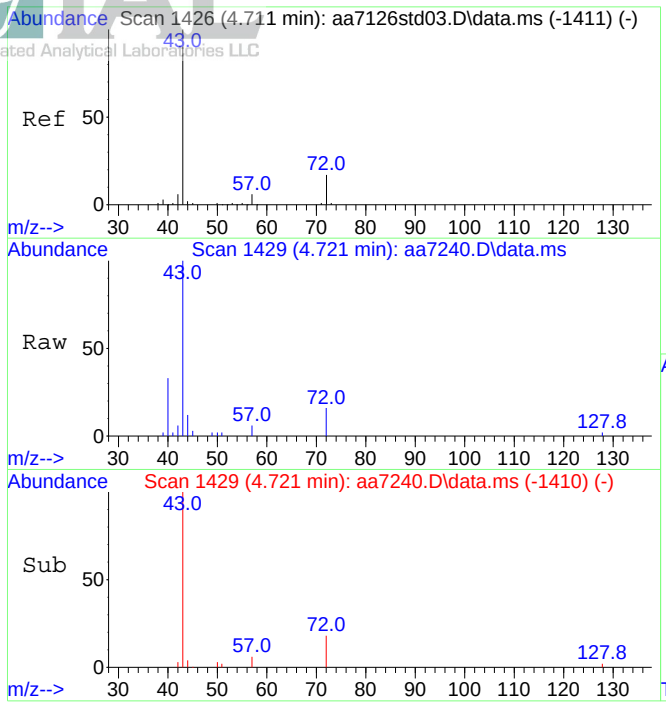


#21
Acetone
Concen: 4.46 ppbV
RT: 3.255 min Scan# 973
Delta R.T. 0.026 min
Lab File: aa7240.D
Acq: 18 Sep 2024 7:54 pm

Tgt Ion: 43 Resp: 407949

Ion	Ratio	Lower	Upper
43	100		
58	29.3	21.6	32.4

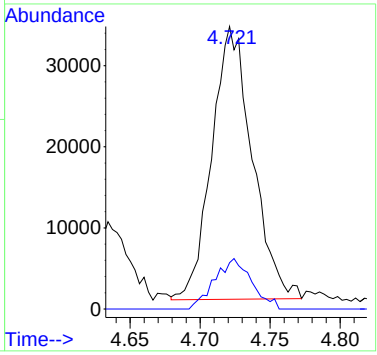


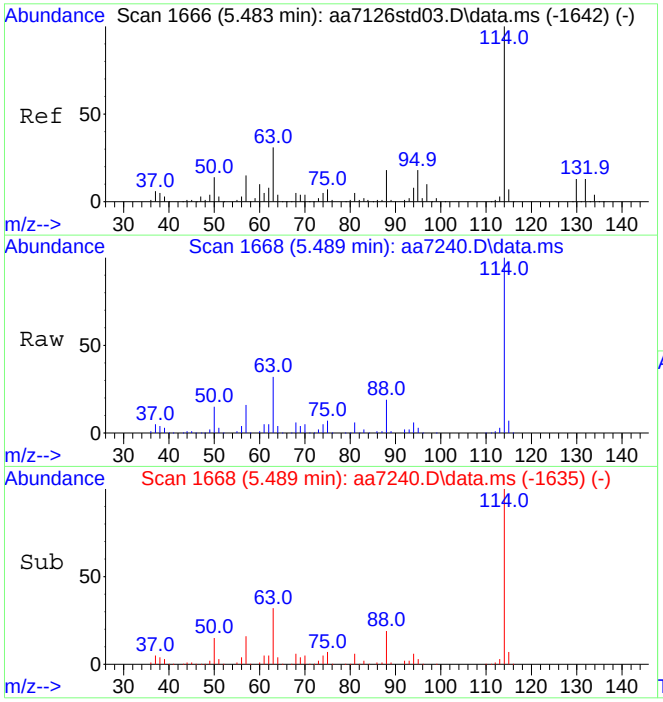


#35
Methyl ethyl ketone
Concen: 0.44 ppbV
RT: 4.721 min Scan# 1429
Delta R.T. 0.010 min
Lab File: aa7240.D
Acq: 18 Sep 2024 7:54 pm

Tgt Ion: 43 Resp: 67694

Ion	Ratio	Lower	Upper
43	100		
72	16.9	13.8	20.8

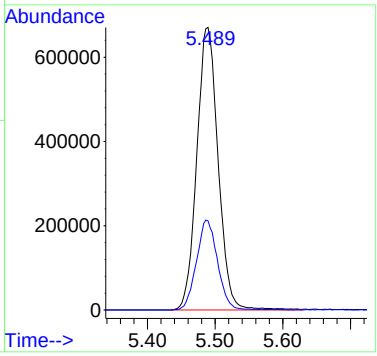


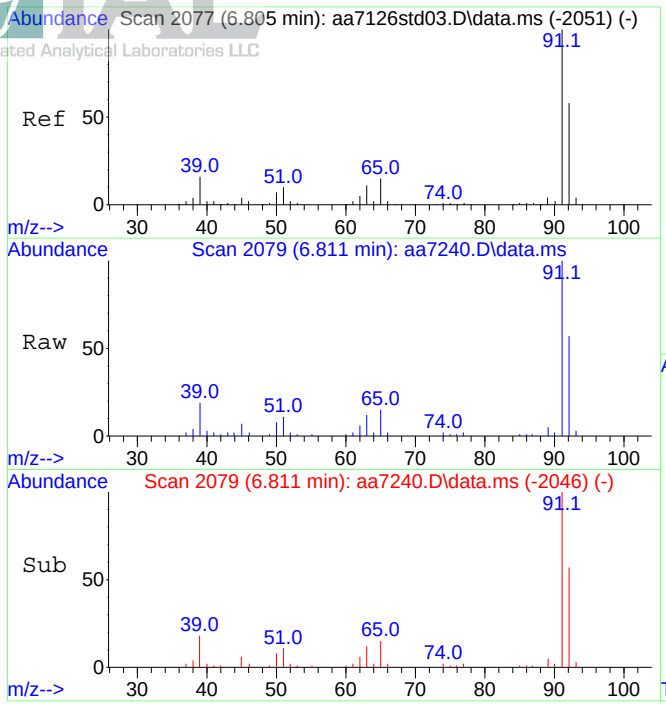


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.489 min Scan# 1668
Delta R.T. 0.006 min
Lab File: aa7240.D
Acq: 18 Sep 2024 7:54 pm

Tgt Ion:114 Resp: 1468777

Ion	Ratio	Lower	Upper
114	100		
63	31.4	11.2	51.2

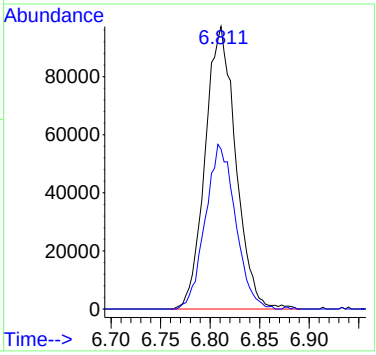


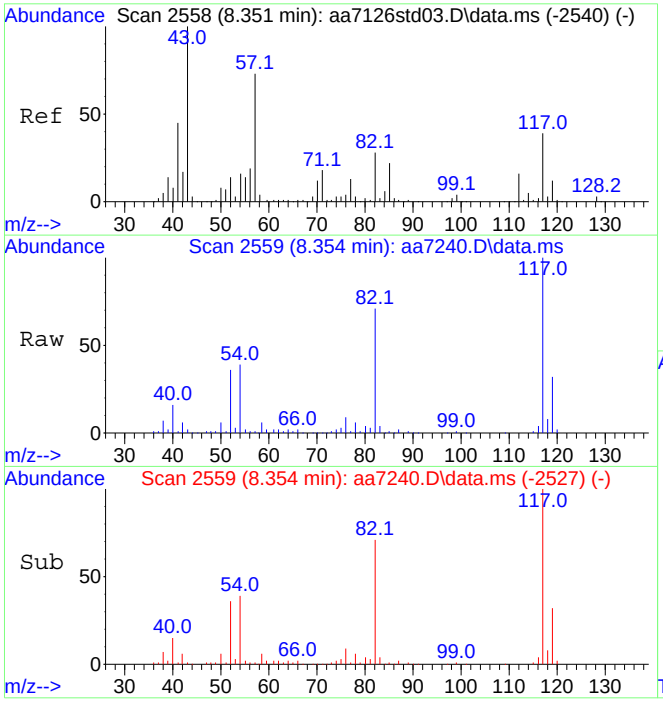


#47
Toluene
Concen: 0.79 ppbV
RT: 6.811 min Scan# 2079
Delta R.T. 0.006 min
Lab File: aa7240.D
Acq: 18 Sep 2024 7:54 pm

Tgt Ion: 91 Resp: 209245

Ion	Ratio	Lower	Upper
91	100		
92	57.2	46.1	69.1

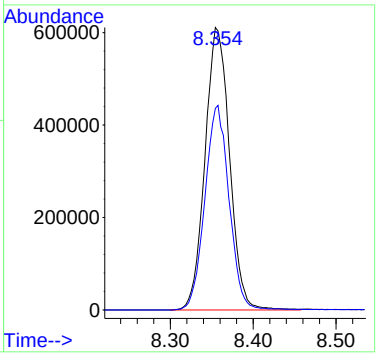


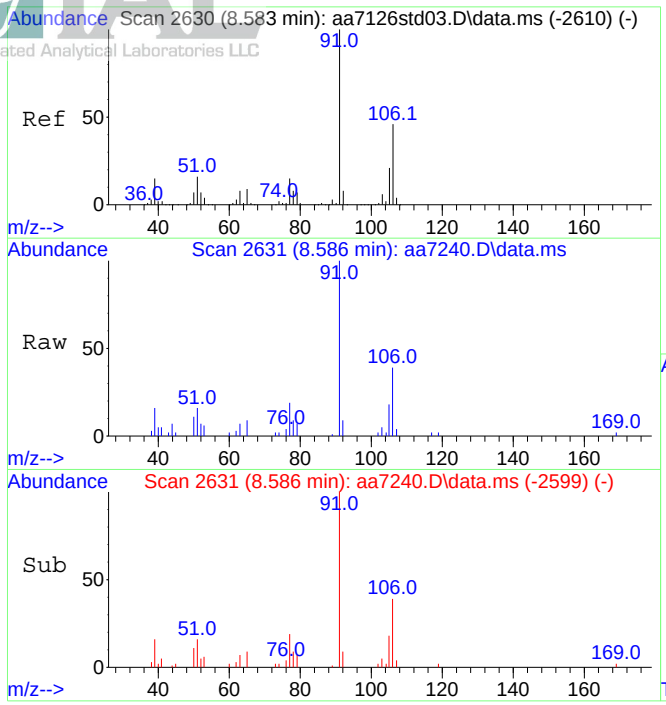


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.354 min Scan# 2559
Delta R.T. 0.003 min
Lab File: aa7240.D
Acq: 18 Sep 2024 7:54 pm

Tgt Ion:117 Resp: 1256252

Ion	Ratio	Lower	Upper
117	100		
82	71.7	51.5	91.5

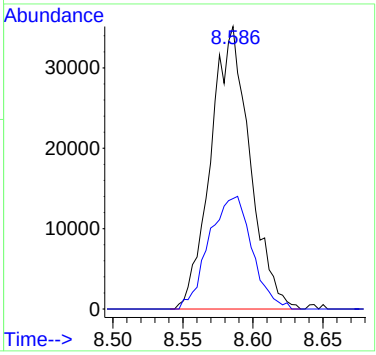


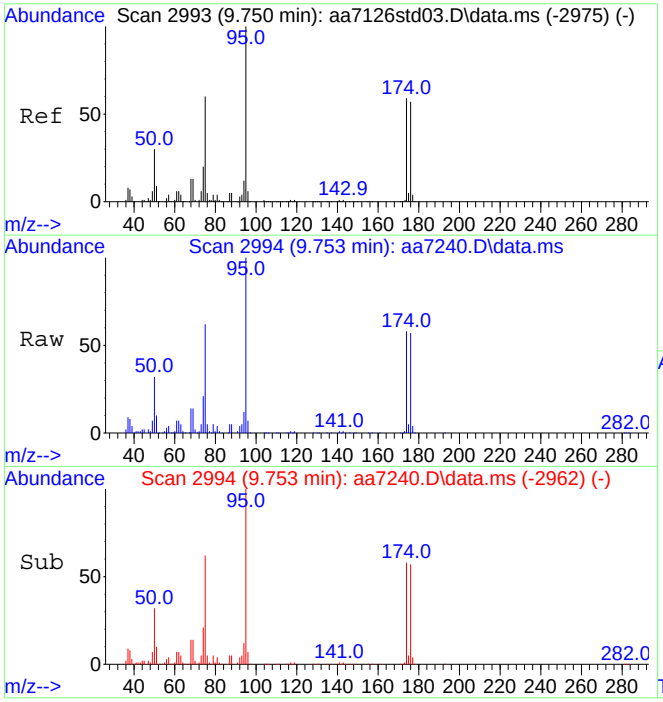


#59
Xylenes (m&p)
Concen: 0.30 ppbV
RT: 8.586 min Scan# 2631
Delta R.T. 0.003 min
Lab File: aa7240.D
Acq: 18 Sep 2024 7:54 pm

Tgt Ion: 91 Resp: 68257

Ion	Ratio	Lower	Upper
91	100		
106	43.8	36.6	55.0

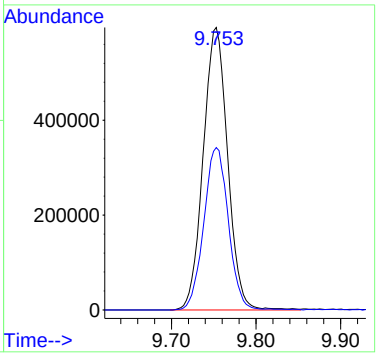




#64
Bromofluorobenzene (tune std)
Concen: 10.83 ppbV
RT: 9.753 min Scan# 2994
Delta R.T. 0.003 min
Lab File: aa7240.D
Acq: 18 Sep 2024 7:54 pm

Tgt Ion: 95 Resp: 1196122

Ion	Ratio	Lower	Upper
95	100		
174	57.7	48.2	72.4



Data Path : C:\DATA\2024\09-2024\09-18-2024\
Data File : aa7241.D
Acq On : 18 Sep 2024 8:26 pm
Operator : jjw
Sample : E24-03187-28
Misc : Dup of E24-03187-08, 3805, 500cc
ALS Vial : 19 Sample Multiplier: 1

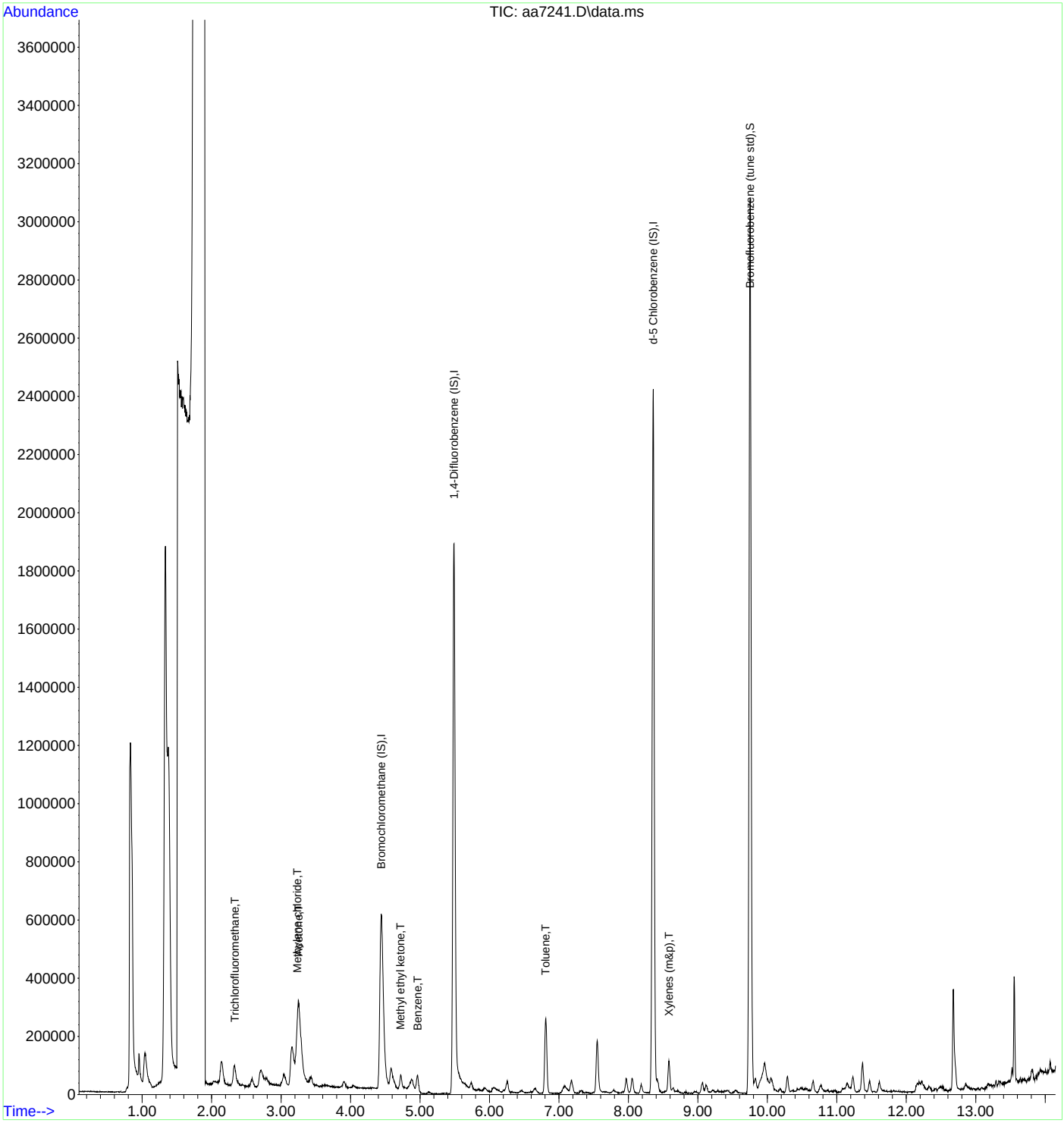
Quant Time: Sep 19 09:55:26 2024
Quant Method : C:\msdchem\1\METHODS\240910.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Sep 11 16:19:32 2024
Response via : Initial Calibration

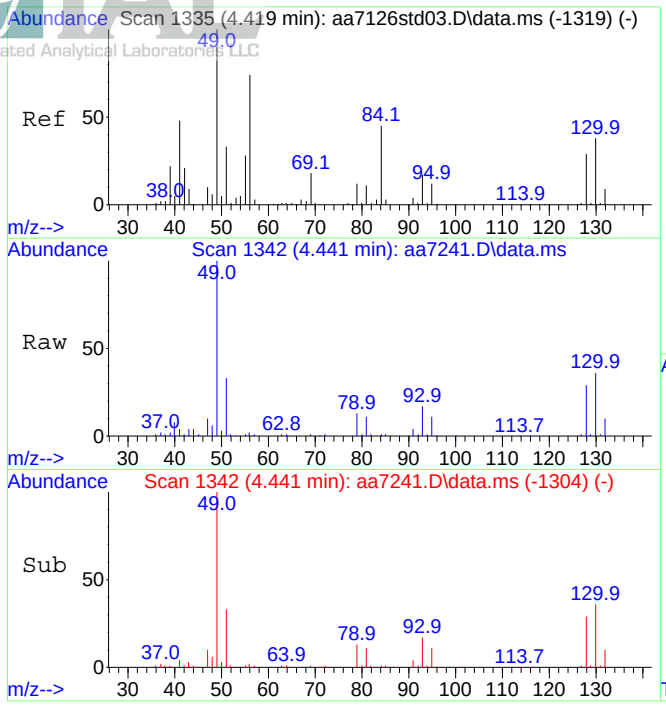
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.441	130	256813	10.00	ppbV	0.022
39) 1,4-Difluorobenzene (IS)	5.490	114	1430540	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.358	117	1237327	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.753	95	1188332	10.92	ppbV	0.000
Target Compounds						Qvalue
12) Trichlorofluoromethane	2.335	101	24966	0.26	ppbV	# 53
20) Methylene chloride	3.236	49	187418	2.79	ppbV	95
21) Acetone	3.252	43	421372	4.63	ppbV	95
35) Methyl ethyl ketone	4.721	43	66761	0.44	ppbV	99
37) Benzene	4.965	78	31174	0.20	ppbV	98
47) Toluene	6.808	91	203538	0.79	ppbV	99
59) Xylenes (m&p)	8.583	91	65696	0.30	ppbV	98

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

Data Path : C:\DATA\2024\09-2024\09-18-2024\
Data File : aa7241.D
Acq On : 18 Sep 2024 8:26 pm
Operator : jjw
Sample : E24-03187-28
Misc : Dup of E24-03187-08, 3805, 500cc
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 19 09:55:26 2024
Quant Method : C:\msdchem\1\METHODS\240910.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed Sep 11 16:19:32 2024
Response via : Initial Calibration

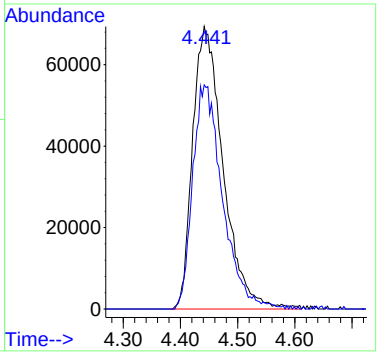


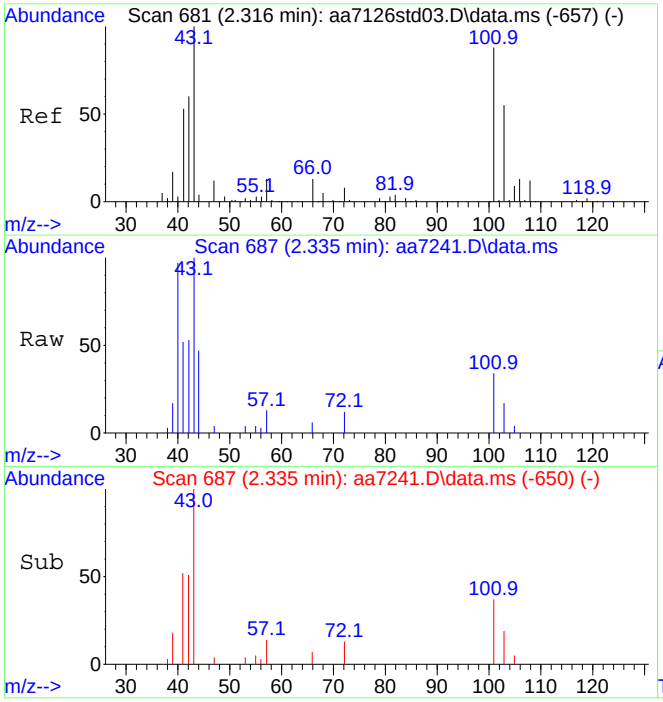


#1
Bromochloromethane (IS)
Concen: 10.00 ppbV
RT: 4.441 min Scan# 1342
Delta R.T. 0.022 min
Lab File: aa7241.D
Acq: 18 Sep 2024 8:26 pm

Tgt Ion:130 Resp: 256813

Ion	Ratio	Lower	Upper
130	100		
128	77.7	58.5	98.5

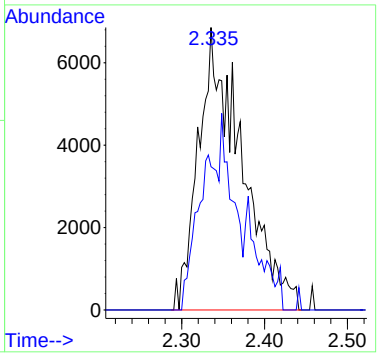


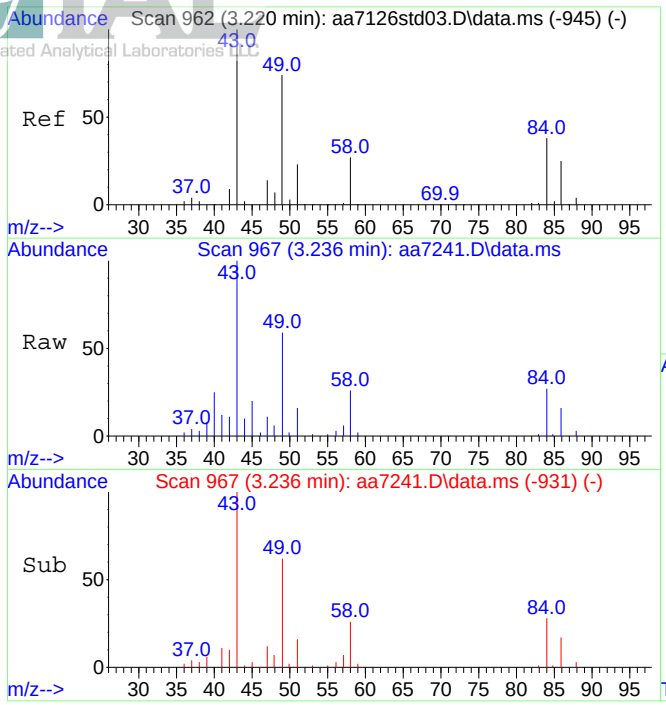


#12
Trichlorofluoromethane
Concen: 0.26 ppbV
RT: 2.335 min Scan# 687
Delta R.T. 0.019 min
Lab File: aa7241.D
Acq: 18 Sep 2024 8:26 pm

Tgt Ion:101 Resp: 24966

Ion	Ratio	Lower	Upper
101	100		
103	27.3	51.4	77.0#

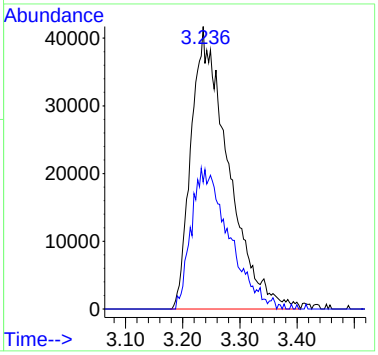


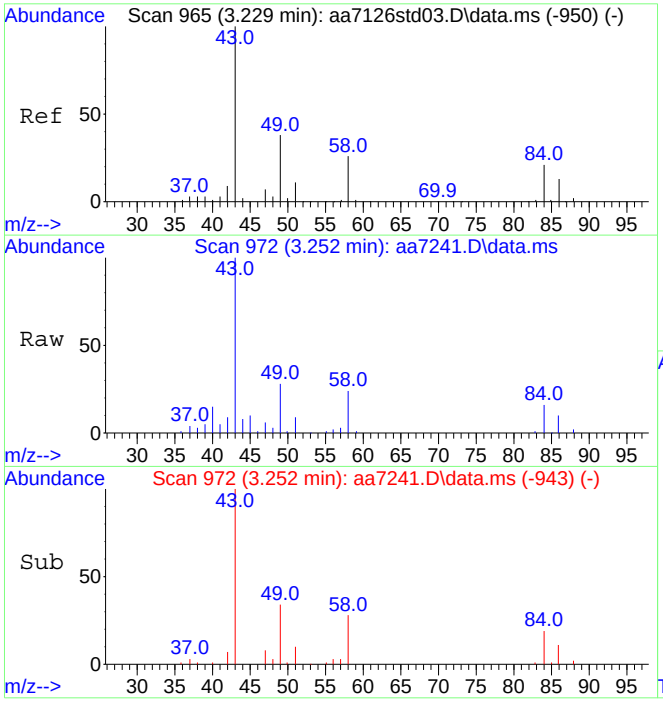


#20
Methylene chloride
Concen: 2.79 ppbV
RT: 3.236 min Scan# 967
Delta R.T. 0.016 min
Lab File: aa7241.D
Acq: 18 Sep 2024 8:26 pm

Tgt Ion: 49 Resp: 187418

Ion	Ratio	Lower	Upper
49	100		
84	50.2	33.6	73.6

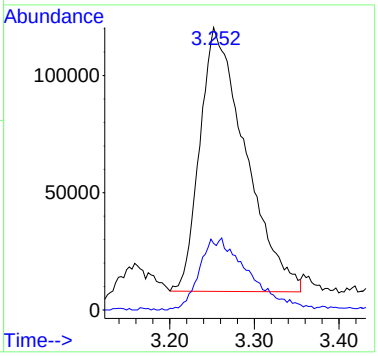


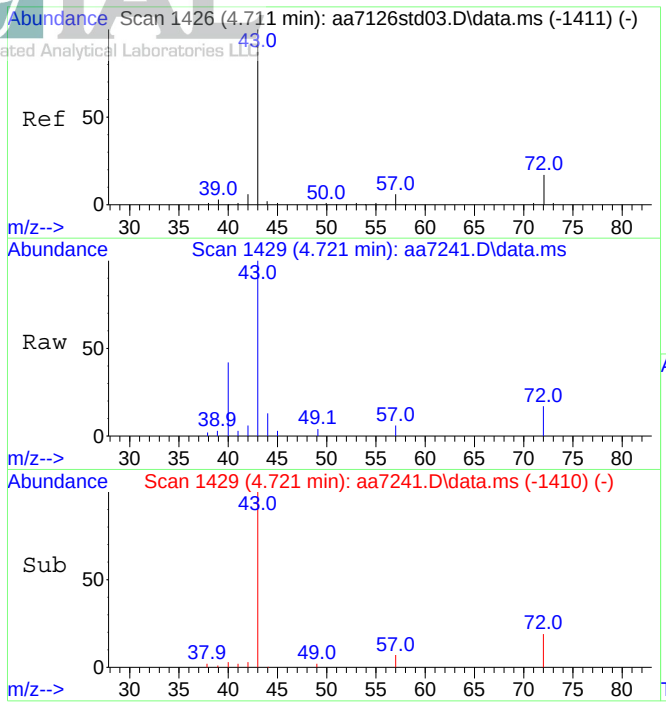


#21
Acetone
Concen: 4.63 ppbV
RT: 3.252 min Scan# 972
Delta R.T. 0.023 min
Lab File: aa7241.D
Acq: 18 Sep 2024 8:26 pm

Tgt Ion: 43 Resp: 421372

Ion	Ratio	Lower	Upper
43	100		
58	29.4	21.6	32.4

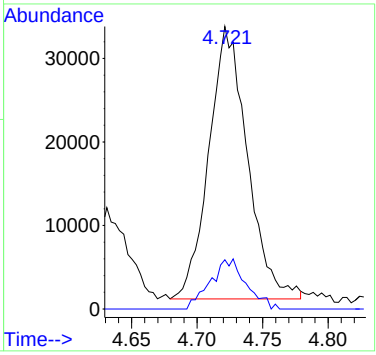


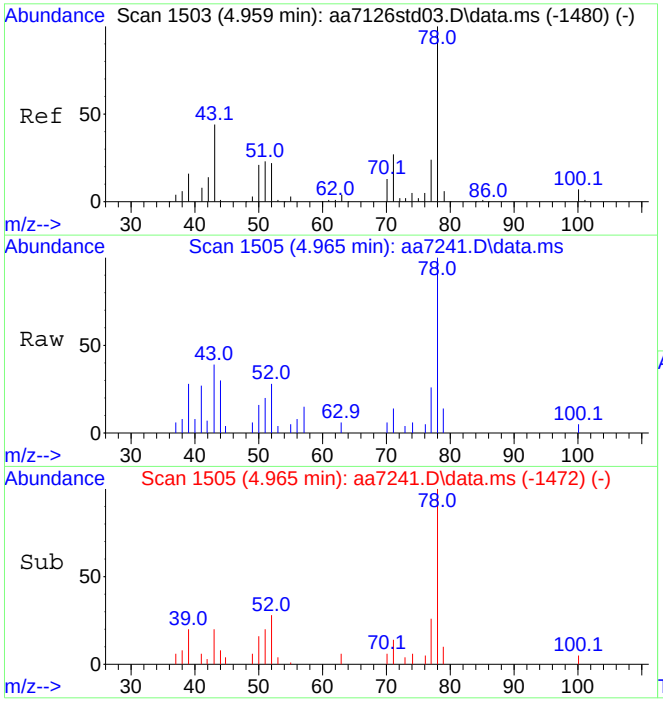


#35
Methyl ethyl ketone
Concen: 0.44 ppbV
RT: 4.721 min Scan# 1429
Delta R.T. 0.010 min
Lab File: aa7241.D
Acq: 18 Sep 2024 8:26 pm

Tgt Ion: 43 Resp: 66761

Ion	Ratio	Lower	Upper
43	100		
72	17.0	13.8	20.8

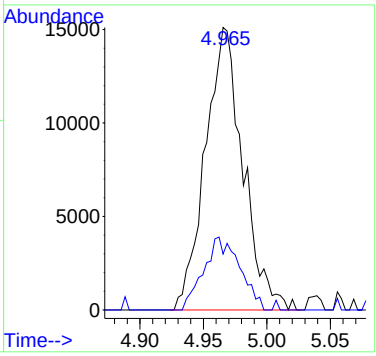


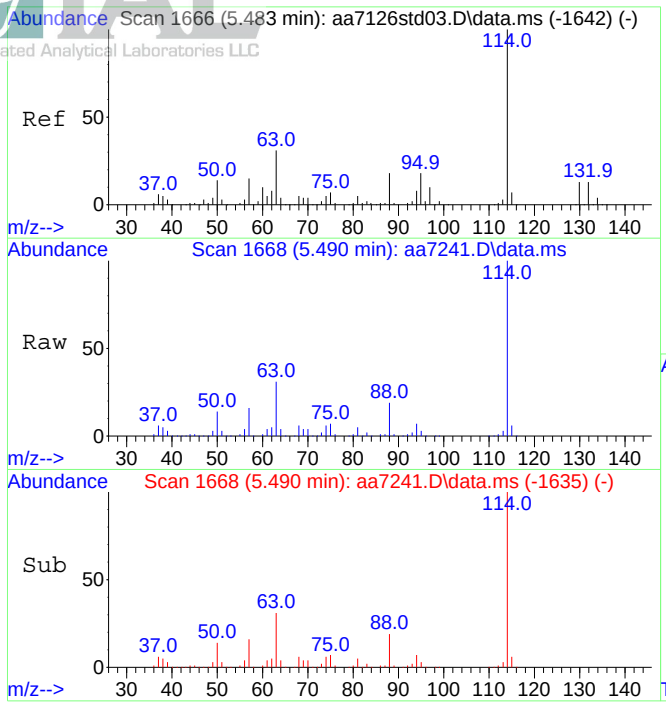


#37
Benzene
Concen: 0.20 ppbV
RT: 4.965 min Scan# 1505
Delta R.T. 0.006 min
Lab File: aa7241.D
Acq: 18 Sep 2024 8:26 pm

Tgt Ion: 78 Resp: 31174

Ion	Ratio	Lower	Upper
78	100		
51	24.8	19.0	28.4

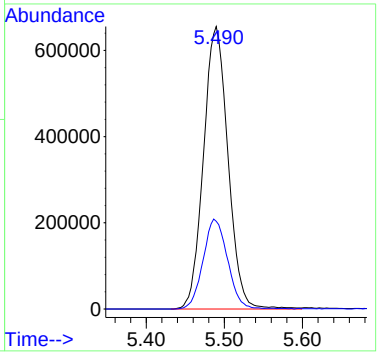


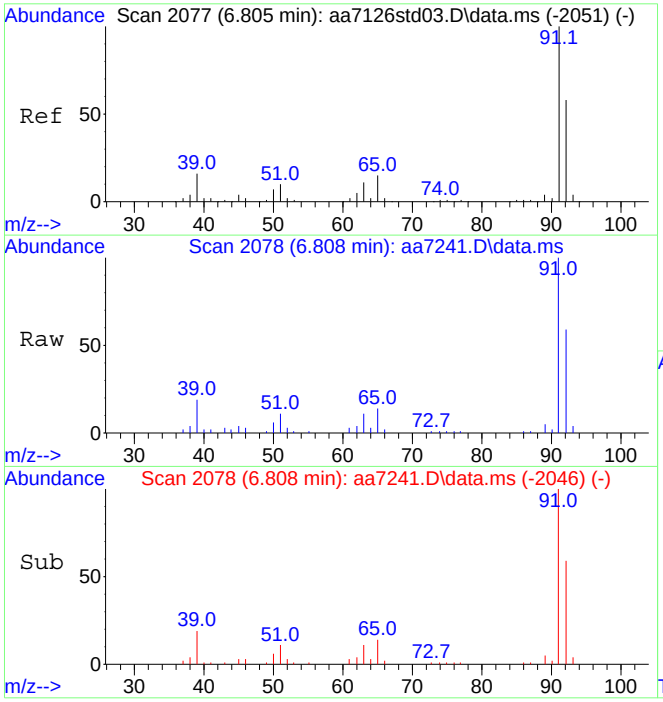


#39
1,4-Difluorobenzene (IS)
Concen: 10.00 ppbV
RT: 5.490 min Scan# 1668
Delta R.T. 0.007 min
Lab File: aa7241.D
Acq: 18 Sep 2024 8:26 pm

Tgt Ion:114 Resp: 1430540

Ion	Ratio	Lower	Upper
114	100		
63	31.9	11.2	51.2

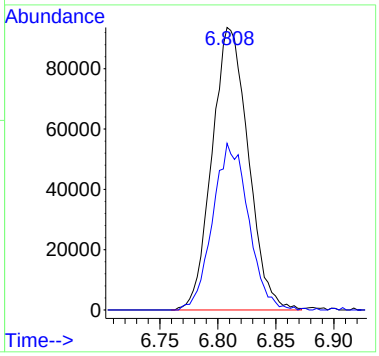


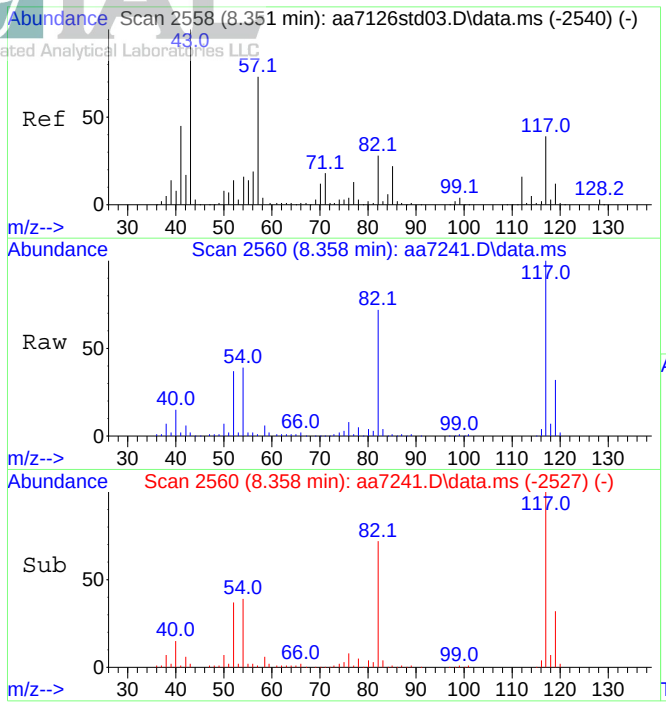


#47
Toluene
Concen: 0.79 ppbV
RT: 6.808 min Scan# 2078
Delta R.T. 0.003 min
Lab File: aa7241.D
Acq: 18 Sep 2024 8:26 pm

Tgt Ion: 91 Resp: 203538

Ion	Ratio	Lower	Upper
91	100		
92	58.2	46.1	69.1

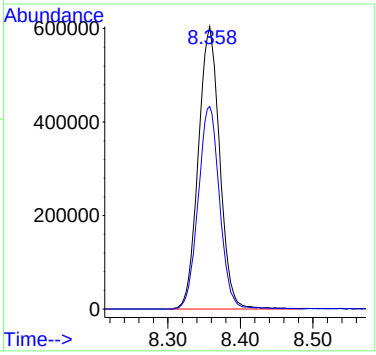


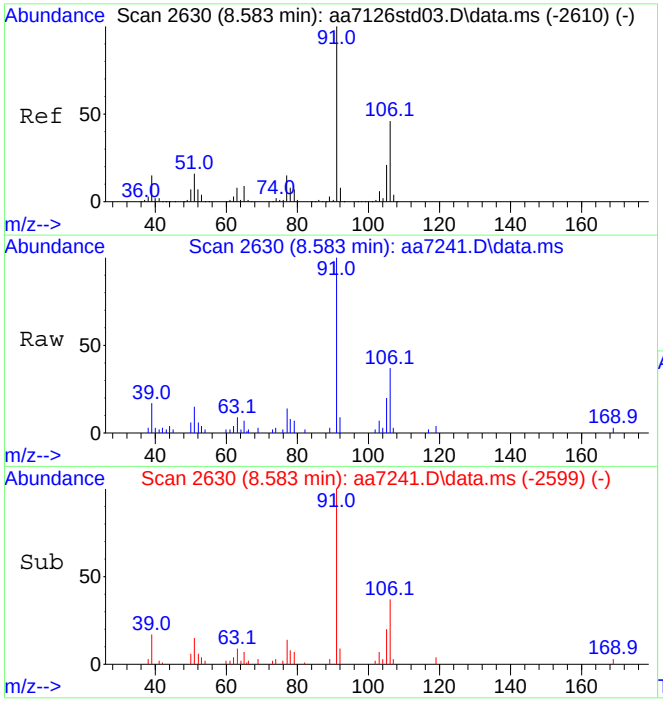


#55
d-5 Chlorobenzene (IS)
Concen: 10.00 ppbV
RT: 8.358 min Scan# 2560
Delta R.T. 0.007 min
Lab File: aa7241.D
Acq: 18 Sep 2024 8:26 pm

Tgt Ion:117 Resp: 1237327

Ion	Ratio	Lower	Upper
117	100		
82	71.8	51.5	91.5

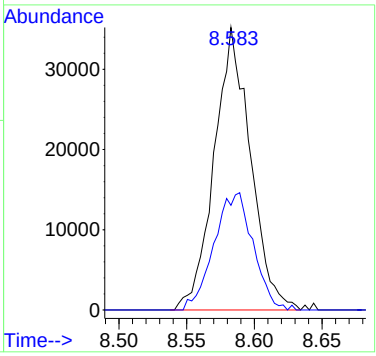


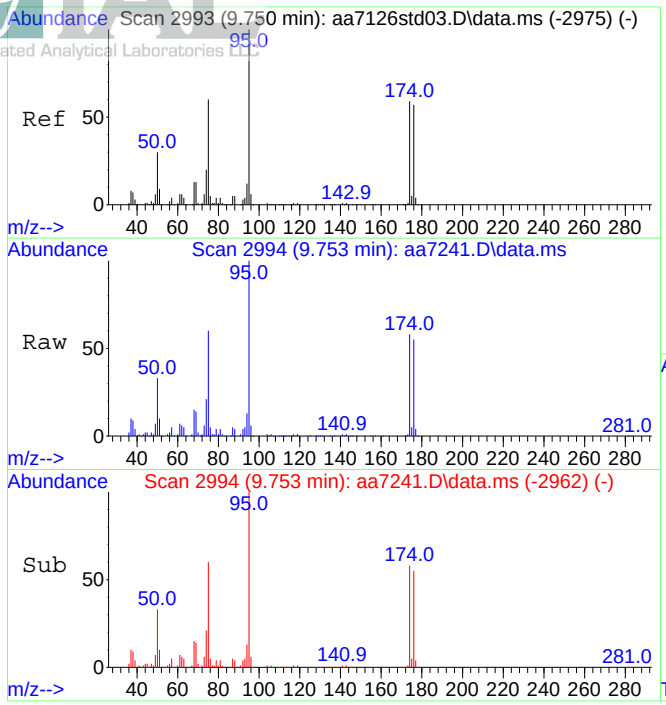


#59
Xylenes (m&p)
Concen: 0.30 ppbV
RT: 8.583 min Scan# 2630
Delta R.T. 0.000 min
Lab File: aa7241.D
Acq: 18 Sep 2024 8:26 pm

Tgt Ion: 91 Resp: 65696

Ion	Ratio	Lower	Upper
91	100		
106	44.7	36.6	55.0

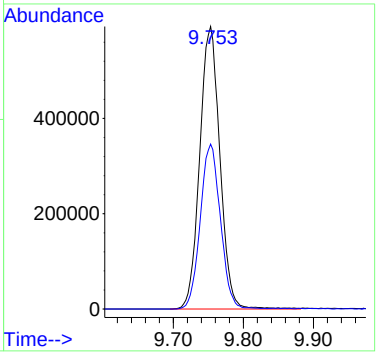




#64
Bromofluorobenzene (tune std)
Concen: 10.92 ppbV
RT: 9.753 min Scan# 2994
Delta R.T. 0.003 min
Lab File: aa7241.D
Acq: 18 Sep 2024 8:26 pm

Tgt Ion: 95 Resp: 1188332

Ion	Ratio	Lower	Upper
95	100		
174	58.1	48.2	72.4



INTEGRATED ANALYTICAL LABORATORIES, LLC

Integrated Analytical Laboratories
GC/MS Run Log

Instrument ID: Agilent 7890A / 5975C
Column: Restek RTX-1 SN 992567

Target Directory: D:\Agilent GCMS\

Date of Analysis: 5/29/2024
Date of Initial Calibration: 5/29/2024

File #	Laboratory Sample ID	QC Check	Dilution Factor	Can #	Analyst	Injection Volume (cc)	Comments	*Make-up Air*		*Acquisition*		*Room*		*TO-15 Standard*	
								Added to canister (cc)	Added for dilution	Date	Time	Temp	BP "Hg	Working ID	Vendor ID (Lot#)
aa6554bfb	BFB	✓		ALM018474	JJW	0.5				**5/29/2024**	**9:16**	70	29.63		160-402352677-1
aa6555dcvs	10 ppbv DCVS	✓		EB0103704	JJW	50	Failed Criteria							3/27/2024	160-401980152-1
aa6556std05	0.2 ppbv Std	✓		EB0103704	JJW	1								5/29/2024	160-401980152-1
aa6557std04	2 ppbv Std	✓		EB0103704	JJW	10								5/29/2024	160-401980152-1
aa6558std03	10 ppbv Std	✓		EB0103704	JJW	50								5/29/2024	160-401980152-1
aa6559std02	20 ppbv Std	✓		EB0103704	JJW	100								5/29/2024	160-401980152-1
aa6560std01	40 ppbv Std	✓		EB0103704	JJW	200								5/29/2024	160-401980152-1
aa6561icvss	10 ppbv ICVSS	✓		EB0116272	JJW	50				5/29/2024	17:16			5/29/2024	160-402744241-1

Analyst Name: J Walukiewicz

Signature: Joseph Walukiewicz

INTEGRATED ANALYTICAL LABORATORIES, LLC

Integrated Analytical Laboratories
GC/MS Run Log

Instrument ID: Agilent 7890A / 5975C
Column: Restek RTX-1 SN 992567

Target Directory: D:\Agilent GCMS\

Date of Analysis: 5/31/2024
Date of Initial Calibration: 5/29/2024

File #	Laboratory Sample ID	QC Check	Dilution Factor	Can #	Analyst	Injection Volume (cc)	Comments	*Make-up Air*		*Acquisition*		*Room*		*TO-15 Standard*	
								Added to canister (cc)	Added for dilution	Date	Time	Temp	BP "Hg	Working ID	Vendor ID (Lot#)
aa6579bfb	BFB	✓		ALM018474	JJW	0.5				**5/31/2024**	**9:25**	70	29.46		160-402352677-1
aa6580dcvs	10 ppbv DCVS	✓		EB0103704	JJW	50								5/29/2024	160-401980152-1
aa6581lcs	10 ppbv LCS	✓		EB0103704	JJW	50								5/29/2024	160-401980152-1
aa6582blk	Method Blank	✓		1127	JJW	500									
aa6583rllcs	0.2 ppbv RLLCS	✓		EB0103704	JJW	1								5/29/2024	160-401980152-1
aa6584	5089	✓		5089	JJW	500									
aa6585	2069	✓		2069	JJW	500									
aa6586	E24-01842-01	✓		3804	JJW	500									
aa6587	E24-01842-02	✓		4866	JJW	500									
aa6588	E24-01842-03	✓		5087	JJW	500									
aa6589	E24-01842-04	✓		2885	JJW	500									
aa6590	blk	✓		x	JJW	500									
aa6591	E24-01842-05	✓		3016	JJW	500									
aa6592	E24-01842-25	✓		3016	JJW	500	Dup of 1840-05								
aa6593	E24-01840-01x5 dil	✓	5	3805	JJW	100									
aa6594	E24-01840-02x5 dil	✓	5	4866	JJW	100									
aa6595	E24-01840-03x5 dil	✓	5	5087	JJW	100									
aa6596	E24-01840-04x5 dil	✓	5	2885	JJW	100									
aa6597	blank	✓		x	JJW	500									
aa6598cccvs	10 ppbv CCCVS	✓		EB0103704	JJW	50				5/31/2024	22:11			5/29/2024	160-401980152-1

Analyst Name: J Walukiewicz

Signature: Joseph Walukiewicz

INTEGRATED ANALYTICAL LABORATORIES, LLC

Integrated Analytical Laboratories
GC/MS Run Log

Instrument ID: Agilent 7890A / 5975C
Column: Restek RTX-1 SN 992567

Target Directory: D:\Agilent GCMS\

Date of Analysis: 9/11/2024
Date of Initial Calibration: 9/11/2024

File #	Laboratory Sample ID	QC Check	Dilution Factor	Can #	Analyst	Injection Volume (cc)	Comments	*Make-up Air*		*Acquisition*		*Room*		*TO-15 Standard*	
								Added to canister (cc)	Added for dilution	Date	Time	Temp	BP "Hg	Working ID	Vendor ID (Lot#)
aa7123bfb	BFB	✓		ALM018474	JJW	0.5				**9/11/2024**	**10:57**	76	29.48		160-402352677-1
aaprime	40 ppbv Std	✓		EB0103704	JJW	200								9/10/2024	160-401980152-1
aa7124std05	0.2 ppbv Std	✓		EB0103704	JJW	1								9/10/2024	160-401980152-1
aa7125std04	2 ppbv Std	✓		EB0103704	JJW	10								9/11/2024	160-401980152-1
aa7126std03	10 ppbv Std	✓		EB0103704	JJW	50								9/12/2024	160-401980152-1
aa7127std02	20 ppbv Std	✓		EB0103704	JJW	100								9/13/2024	160-401980152-1
aa7128std01	40 ppbv Std	✓		EB0103704	JJW	200								9/14/2024	160-401980152-1
aa7129icvss	10 ppbv ICVSS	✓		EB0116272	JJW	50				9/11/2024	14:52			5/29/2024	160-402744241-1
aa7130lcs	10 ppbv LCS	✓		EB0103704	JJW	50								9/10/2024	160-401980152-1
aa7131blk	Method Blank	✓		1127	JJW	500									
aa7131rllcs	0.2 ppbv RLLCS	✓		EB0103704	JJW	1								9/10/2024	160-401980152-1
aa7132	E24-03006-01x10 dil	✓	10	3289	JJW	50									
aa7133	E24-03006-21x10 dil	✓	10	3289	JJW	50	Dup of 3006-01x10								
aa7134	E24-03006-02x10 dil	✓	10	2893	JJW	50									
aa7135	E24-03022-04x10 dil	✓	10	2095	JJW	50									
aa7136	E24-03022-05	✓		2897	JJW	500									
aa7137	E24-03022-06	✓		2895	JJW	500									
aa7138	E24-03022-06x10 dil	✓	10	2895	JJW	50									
aa7139	E24-03022-07	✓		3043A	JJW	500									
aa7140	E24-03022-07x10 dil	✓	10	3043A	JJW	50									
aa7141	blk	✓		x	JJW	500									
aa7142cccvs	10 ppbv CCCVS	✓		EB0103704	JJW	50				9/11/2024	22:56			9/10/2024	160-401980152-1

Analyst Name: J Walukiewicz

Signature: Joseph Walukiewicz

INTEGRATED ANALYTICAL LABORATORIES, LLC

Integrated Analytical Laboratories
GC/MS Run Log

Instrument ID: Agilent 7890A / 5975C
Column: Restek RTX-1 SN 992567

Target Directory: D:\Agilent GCMS\

Date of Analysis: 9/18/2024
Date of Initial Calibration: 9/11/2024

File #	Laboratory Sample ID	QC Check	Dilution Factor	Can #	Analyst	Injection Volume (cc)	Comments	*Make-up Air*		*Acquisition*		*Room*		*TO-15 Standard*	
								Added to canister (cc)	Added for dilution	Date	Time	Temp	BP "Hg	Working ID	Vendor ID (Lot#)
aa7223bfb	BFB	✓		ALM018474	JJW	0.5				**9/18/2024**	**10:23**	74	29.32		160-402352677-1
aa7224dcvs	10 ppbv DCVS	✓		EB0103704	JJW	50								9/10/2024	160-401980152-1
aa7225lcs	10 ppbv LCS	✓		EB0103704	JJW	50								9/10/2024	160-401980152-1
aa7226blk	Method Blank	✓		1127	JJW	500									
aa7227rllcs	0.2 ppbv RLLCS	✓		EB0103704	JJW	1								9/10/2024	160-401980152-1
aa7228	E24-03158-06	✓		2749	JJW	500									
aa7229	E24-03158-04	✓		3042	JJW	500									
aa7230	E24-03158-05	✓		5093	JJW	500									
aa7231	E24-03187-01	✓		3001	JJW	500									
aa7232	E24-03187-02	✓		4868	JJW	500									
aa7233	E24-03187-03	✓		2758	JJW	500									
aa7234	E24-03187-04	✓		3006	JJW	500									
aa7235	E24-03187-05	✓		2069	JJW	500									
aa7236	E24-03187-06	✓		2033	JJW	500									
aa7237	E24-03187-07	✓		3047	JJW	500									
aa7238	E24-03158-05x10 dil	✓	10	5093	JJW	50									
aa7239	blk	✓		x	JJW	500									
aa7240	E24-03187-08	✓		3805	JJW	500									
aa7241	E24-03187-28	✓		3805	JJW	500	Dup of 3187-08								
aa7242	blk	✓		x	JJW	500									
aa7243cccvs	10 ppbv CCCVS	✓		EB0103704	JJW	50				9/18/2024	21:26			9/10/2024	160-401980152-1

Analyst Name: J Walukiewicz

Signature: Joseph Walukiewicz

Integrated Analytical Laboratories LLC

INTEGRATED ANALYTICAL LABORATORIES, LLC

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

External Chain of Custody Record/
Field Test Data Sheet
USEPA Method TO-15

Contact Us: 973-361-4252
Fax: 973-366-5613
Web: www.ialonline.com

Carrier (check one): ____ IAL Courier ____Client Courier _____FedEx/UPS

pg 1 of 2

Client Contact Information	Project Information	Invoice Information
Company: JS Held	Project Name: 48-55 36th Street	Attn:
Address: 5 marine View Plaza Suite 401, Hoboken, NJ	Project Location (State): NY	Address: same
Phone: 201-876-9400	Project Manager: Leah DeEgidio	PO #: 240302017
Fax:	PM Signature:	Quote #:
Report to: Leah DeEgidio	PM E-Mail: LdeEgidio@jsheld.com	
	Sampler: JT	

Analysis Turnaround Time - IF NO TAT IS SPECIFIED, 2 WEEK TAT IS ASSUMED

IAL Standard: 2 weeks (10 business days)

Rush (**pre-approved by lab): 24hr** 48hr** 72hr** 96hr** 1wk**

	Sample Identification	Start DATE & TIME (24hr Clock)	End DATE & TIME (24hr Clock)	Starting Vacuum ("Hg)	Ending Vacuum ("Hg)	Starting Temp. (°F)	Ending Temp. (°F)	Outgoing Vacuum - Lab ("Hg)	Incoming Vacuum - Lab ("Hg)	Barometric Pressure Start: Flow Regulator ID	Barometric Pressure Stop: Canister ID	Canister Size (1L or 6L)	Flow Controller Readout (cc/min)	EPA TO - 15	NJDEP LLTO-15 (includes 30 TICs)	Library Search (10, 20, or 30 TICs)	Other (Explain in Comments)	Regulatory/ NY Cat B / Full (NJ Required)	Reduced / NY Cat A Data Package	Results Only	Indoor Air	Ambient / Outdoor Air	Sub Slab / Soil Gas / Near Slab (Circle One)	Stack Emission / SVE System	High Concentrations Expected
1	IA-1	9/16/24 10:22	9/17/24 10:25	-25	0	76	76	-29.0	0.0	7340692	3001	6L	3.44	X				X			X				
2	IA-2	9/16/24 10:30	9/17/24 10:30	-30	0	76	76	-29.0	0.0	AZ86768005	4868	6L	3.2	X				X			X				
3	IA-3	9/16/24 10:35	9/17/24 10:35	-24	-1	76	76	-29.0	-1.0	A0097055-8	~~2753~~ 2578 09/18/24 KW	6L	3.2	X				X			X				
4	IA-4	9/16/24 10:38	9/17/24 10:40	-28	-1	69	69	-29.0	-1.0	7340681	3006	6L	3.39	X				X			X				
5	IA-5	9/16/24 10:44	9/17/24 10:45	-27	-1	69	70	-29.0	-1.0	AZ86768002	2069	6L	3.2	X				X			X				
6	IA-6	9/16/24 10:50	9/17/24 10:50	-30	-3	72	72	-29.0	-2.5	AZ87892008	2033	6L	3.2	X				X			X				

Comments/ Special Analysis Instructions / QC Requirements:

Note: Hold or contingent samples may be designated by writing an "H" or "C" in the appropriate analysis box.

ALL FIELDS IN RED ARE REQUIRED

Shipping Information / Canister Preparation (for laboratory use only)

Individual Preparing Canisters / Title: ~~P. Jenkins, J. Walukiewicz~~ / Air Department Sample Custodians

Lab Affixed Seal Number(s): Jacob Reiten (JR)

Date/Time Shipping Container Sealed: 09/10/2024

Laboratory Canister Certification

GC/MS Analyst Signature: Joseph J Walukiewicz III (JJW)

IAL SDG#: 03187

External Chain of Custody

Relinquished	Received	Date / Time	Reason for Change of External Custody
JSH J. Twill	Joseph J Walukiewicz III (JJW)	9/10/24	shipment from laboratory to client
		9/17/24 1300	Lab pickup from JS Held
		9/17/24 1653	Received at IAL Lab

Name/Title Resealing Shipping Container Name:

Date/Time Sample Shipping Container Resealed:

Date/Time Sample Shipping Container Opened: 09/17/2024 1655

NJDEP Affixed Seal Number:

Individual Opening Sample Shipping Container: ~~Padraic Jenkins~~ Joseph Walukiewicz

Date/Time Internal Chain of Custody Initiated: 09/18/2024

White and yellow - lab copies; Pink - client copy

Use appropriate care with IAL sampling equipment when sampling and packing for shipment. The client is responsible for all damage incurred to IAL equipment. Notify IAL if equipment is damaged upon receipt. Holding time before sampling is 15 days, after sampling is 30 days; failure to follow these times may result in data rejection by regulatory agencies. The lab will contact you if your COC is not clear, incomplete, or if discrepancies exist. The use of initials is not permitted on the COC except when correcting errors. 06/2014

IAL
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Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

External Chain of Custody Record/
Field Test Data Sheet
USEPA Method TO-15

Contact Us: 973-361-4252
Fax: 973-366-5613
Web: www.ialonline.com

Carrier (check one): ____ IAL Courier ____ Client Courier ____ FedEx/UPS

Client Contact Information	Project Information	Invoice Information
Company: JS Held	Project Name: 48-55 36th Street	Attn:
Address: 5 Marine View Plaza Suite 401, Hoboken, NJ	Project Location (State): NY	Address: same
Phone: 201-876-9400	Project Manager: Leah DeEgidio	
Fax:	PM Signature:	PO #: 240302017
Report to: Leah DeEgidio	PM E-Mail: LdeEgidio@jsheld.com	Quote #:
	Sampler: JT	

Analysis Turnaround Time - IF NO TAT IS SPECIFIED, 2 WEEK TAT IS ASSUMED

IAL Standard: 2 weeks (10 business days)

Rush (**pre-approved by lab): 24hr** 48hr** 72hr** 96hr** 1wk**

	Sample Identification	Start DATE & TIME (24hr Clock)	End DATE & TIME (24hr Clock)	Starting Vacuum ("Hg)	Ending Vacuum ("Hg)	Starting Temp. (°F)	Ending Temp. (°F)	Outgoing Vacuum - Lab ("Hg)	Barometric Pressure Start: Incoming Vacuum - Lab ("Hg)	Flow Regulator ID	Barometric Pressure Stop: Canister ID	Canister Size (1L or 6L)	Flow Controller Readout (cc/min)	EPA TO - 15	NJDEP LLTO-15 (includes 30 TICs)	Library Search (10, 20, or 30 TICs)	Other (Explain in Comments)	Regulatory/ NY Cat B / Full (NJ Required)	Reduced / NY Cat A Data Package	Results Only	Indoor Air	Ambient / Outdoor Air	Sub Slab / Soil Gas / Near Slab (Circle One)	Stack Emission / SVE System	High Concentrations Expected
①	IA-7	9/16/24 10:55	9/17/24 10:55	-9	0	75	74	-29.0	0.0	AZ86768016	3047	6L	3.2	X				X			X				
②	AA-1	9/16/24 11:20	9/17/24 11:25	-29	0	70	70	-29.0	0.0	AZ86768006	3805	6L	3.32	X				X				X			

Comments/ Special Analysis Instructions / QC Requirements:

Note: Hold or contingent samples may be designated by writing an "H" or "C" in the appropriate analysis box.

ALL FIELDS IN RED ARE REQUIRED

Shipping Information / Canister Preparation (for laboratory use only)

Individual Preparing Canisters / Title: ~~P. Jenkins, J. Walukiewicz~~ / Air Department Sample Custodians

Lab Affixed Seal Number(s): (2206 Reitzel)

Date/Time Shipping Container Sealed: 9/10/24

Laboratory Canister Certification

GC/MS Analyst Signature: Joseph J Walukiewicz III (IAL)

IAL SDG#: 03187

External Chain of Custody

Relinquished	Received	Date / Time	Reason for Change of External Custody
JT		9/10/24	shipment from laboratory to client
JSH J.Twill	Joseph J Walukiewicz III (IAL)	9/17/24 1300	lab pickup from JS Held
		9/17/24 1653	Received at air lab

Name/Title Resealing Shipping Container Name:

Date/Time Sample Shipping Container Resealed:

Date/Time Sample Shipping Container Opened: 09/17/2024 16:55

NJDEP Affixed Seal Number:

Individual Opening Sample Shipping Container: ~~Padraic Jenkins~~ / Joseph Walukiewicz

Date/Time Internal Chain of Custody Initiated: 09/18/2024

White and yellow - lab copies; Pink - client copy

Use appropriate care with IAL sampling equipment when sampling and packing for shipment. The client is responsible for all damage incurred to IAL equipment. Notify IAL if equipment is damaged upon receipt. Holding time before sampling is 15 days, after sampling is 30 days; failure to follow these times may result in data rejection by regulatory agencies. The lab will contact you if your COC is not clear, incomplete, or if discrepancies exist. The use of initials is not permitted on the COC except when correcting errors. 06/2014

Example Calculation (EPA TO-15)

$$\frac{\text{Area of Compound}}{\text{Area of Internal Standard}} \times \frac{\text{Concentration of Internal Standard (10 ppbv)}}{\text{Response Factor}} = \text{Concentration of Compound (ppbv)}$$

Conversion from ppbv to µg/m ^{3}

$$\frac{\text{Concentration of Compound (ppbv)} \times \text{Molecular Weight of Compound}}{24.45} = \text{Concentration of Compound (µg/m3)}$$

INTEGRATED ANALYTICAL LABORATORIES, LLC

Clean Canister Certification Report

Lab Sample Name: Clean Canister, Batch Master 2069 **Data File:** AA6585
Field Sample Name: Canister 2069 **Date Analyzed:** 5/31/2024
Sample Volume: 500ml **Matrix:** Air

Canisters associated with this run: 2069 (used for E24-03187-05), 3805 (used for E24-03187-08), 3006 (used for E24-03187-04), 4868 (used for E24-03187-02), 3001 (used for E24-03187-01), 3047 (used for E24-03187-07), 2758 (used for E24-03187-03), 2033 (used for E24-03187-06)

Runs with this Clean Canister Certification:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6579BFB]	05/31/2024 09:25
10 PPBV DCVS [AA6580DCVS]	05/31/2024 09:55
10 PPBV LCS [AA6581LCS]	05/31/2024 10:25
METHOD BLANK [AA6582BLK]	05/31/2024 11:57
02 PPBV RLLCS [AA6583RLLCS]	05/31/2024 12:31
CLEAN CAN CERTIFICATION, BATCH MASTER 5089 [AA6584]	05/31/2024 13:04
CLEAN CAN CERTIFICATION, BATCH MASTER 2069 [AA6585]	05/31/2024 13:36
10 PPBV CCCVS [AA6598CCCVS]	05/31/2024 22:11

This canister has been certified clean, all compounds are below 0.2 ppbv.

Compound	CAS #	RL (ppbv)	Calculated Amount (ppbv)
Acetone	67-64-1	0.20	ND
Benzene	71-43-2	0.20	ND
Bromodichloromethane	75-27-4	0.20	ND
Bromoform	75-25-2	0.20	ND
Bromomethane	74-83-9	0.20	ND
1,3-Butadiene	106-99-0	0.20	ND
Chlorobenzene	108-90-7	0.20	ND
Chloroethane	75-00-3	0.20	ND
Chloroform	67-66-3	0.20	ND
Chloromethane	74-87-3	0.20	ND
Carbon disulfide	75-15-0	0.20	ND
Carbon tetrachloride	56-23-5	0.20	ND
Cyclohexane	110-82-7	0.20	ND
Dibromochloromethane	124-48-1	0.20	ND
1,2-Dibromoethane	106-93-4	0.20	ND
1,2-Dichlorobenzene	95-50-1	0.20	ND
1,3-Dichlorobenzene	541-73-1	0.20	ND
1,4-Dichlorobenzene	106-46-7	0.20	ND
Dichlorodifluoromethane	75-71-8	0.20	ND
1,1-Dichloroethane	75-34-3	0.20	ND
1,2-Dichloroethane	107-06-2	0.20	ND
1,1-Dichloroethene	75-35-4	0.20	ND
1,2-Dichloroethene (cis)	156-59-2	0.20	ND
1,2-Dichloroethene (trans)	156-60-5	0.20	ND
1,2-Dichloropropane	78-87-5	0.20	ND
1,3-Dichloropropene (cis)	10061-01-5	0.20	ND
1,3-Dichloropropene (trans)	10061-02-6	0.20	ND
1,2-Dichlorotetrafluoroethane	76-14-2	0.20	ND
1,4-Dioxane	123-91-1	0.20	ND
Ethylbenzene	100-41-4	0.20	ND
n-Heptane	142-82-5	0.20	ND
1,3-Hexachlorobutadiene	87-68-3	0.20	ND

Clean Canister Certification Report

Lab Sample Name:	**Clean Canister, Batch Master 2069**	**Data File:**	**AA6585**
Field Sample Name:	**Canister 2069**	**Date Analyzed:**	**5/31/2024**
Sample Volume:	**500ml**	**Matrix:**	**Air**

Canisters associated with this run: 2069 (used for E24-03187-05), 3805 (used for E24-03187-08), 3006 (used for E24-03187-04), 4868 (used for E24-03187-02), 3001 (used for E24-03187-01), 3047 (used for E24-03187-07), 2758 (used for E24-03187-03), 2033 (used for E24-03187-06)

Runs with this Clean Canister Certification:

Standard/Sample Run	Date/Time of Sample/Standard Injection
BFB [AA6579BFB]	05/31/2024 09:25
10 PPBV DCVS [AA6580DCVS]	05/31/2024 09:55
10 PPBV LCS [AA6581LCS]	05/31/2024 10:25
METHOD BLANK [AA6582BLK]	05/31/2024 11:57
02 PPBV RLLCS [AA6583RLLCS]	05/31/2024 12:31
CLEAN CAN CERTIFICATION, BATCH MASTER 5089 [AA6584]	05/31/2024 13:04
CLEAN CAN CERTIFICATION, BATCH MASTER 2069 [AA6585]	05/31/2024 13:36
10 PPBV CCCVS [AA6598CCCVS]	05/31/2024 22:11

This canister has been certified clean, all compounds are below 0.2 ppbv.

Compound	CAS #	RL (ppbv)	Calculated Amount (ppbv)
n-Hexane	110-54-3	0.20	ND
Methylene chloride	75-09-2	0.20	ND
Methyl ethyl ketone	78-93-3	0.20	ND
Methyl isobutyl ketone	108-10-1	0.20	ND
Methyl tert-butyl ether	1634-04-4	0.20	ND
Styrene	100-42-5	0.20	ND
Tert-butyl alcohol	75-65-0	0.20	ND
1,1,2,2-Tetrachloroethane	79-34-5	0.20	ND
Tetrachloroethene	127-18-4	0.20	ND
Toluene	108-88-3	0.20	ND
1,2,4-Trichlorobenzene	120-82-1	0.20	ND
1,1,1-Trichloroethane	71-55-6	0.20	ND
1,1,2-Trichloroethane	79-00-5	0.20	ND
Trichloroethene	79-01-6	0.20	ND
Trichlorofluoromethane	75-69-4	0.20	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.20	ND
1,2,4-Trimethylbenzene	95-63-6	0.20	ND
1,3,5-Trimethylbenzene	108-67-8	0.20	ND
2,2,4-Trimethylpentane	540-84-1	0.20	ND
Vinyl bromide	593-60-2	0.20	ND
Vinyl chloride	75-01-4	0.20	ND
Xylenes (m&p)	179601-23-1	0.40	ND
Xylenes (o)	95-47-6	0.20	ND

Data Path : C:\DATA\2024\05-2024\05-31-2024\
Data File : aa6585.D
Acq On : 31 May 2024 1:36 pm
Operator : jjw
Sample : 2069
Misc : 3805, 3006, 4868, 3001, 3047, 2758, 2033
ALS Vial : 19 Sample Multiplier: 1

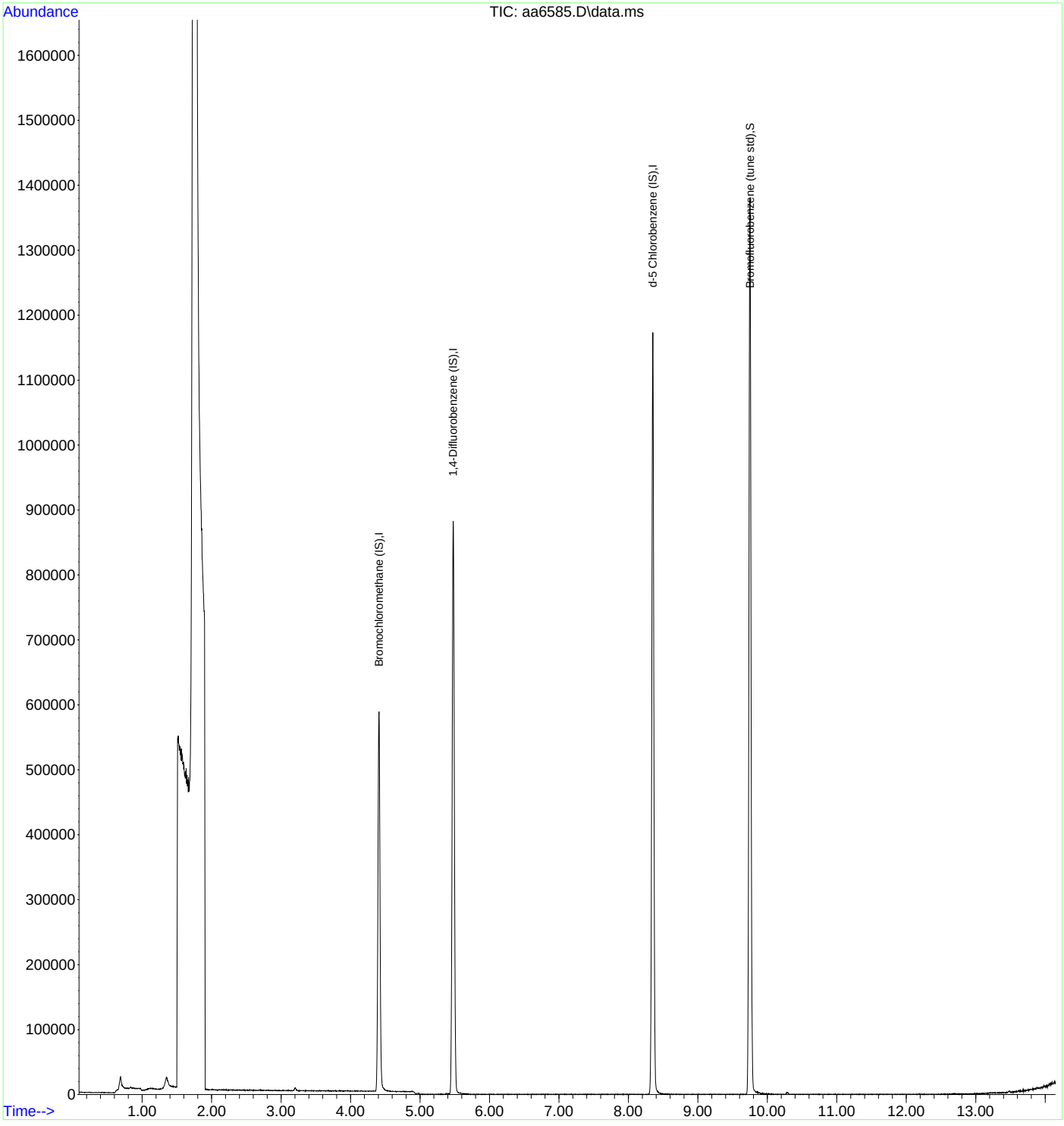
Quant Time: May 31 13:53:29 2024
Quant Method : C:\msdchem\1\METHODS\240529.M
Quant Title : TO-15 on the Agilent 7890A / 5975C
QLast Update : Wed May 29 15:44:50 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane (IS)	4.409	130	218840	10.00	ppbV	0.000
39) 1,4-Difluorobenzene (IS)	5.477	114	810912	10.00	ppbV	0.000
55) d-5 Chlorobenzene (IS)	8.351	117	743332	10.00	ppbV	0.000
System Monitoring Compounds						
64) Bromofluorobenzene (tu...	9.750	95	627974	8.93	ppbV	0.000
Target Compounds						Qvalue

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

Data Path : C:\DATA\2024\05-2024\05-31-2024\
Data File : aa6585.D
Acq On : 31 May 2024 1:36 pm
Operator : jjw
Sample : 2069
Misc : 3805, 3006, 4868, 3001, 3047, 2758, 2033
ALS Vial : 19 Sample Multiplier: 1

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LAST PAGE OF DOCUMENT

ATTACHMENT D

NYSDOH INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY FORM

JS|HELD

OSR – 3

NEW YORK STATE DEPARTMENT OF HEALTH
INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY
CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Preparer's Name Jake Twill Date/Time Prepared 9/16/24

Preparer's Affiliation J.S Held LLC Phone No. (201) 876-9400

Purpose of Investigation FNN Due Diligence

1. OCCUPANT:

Interviewed: (Y) / N

Last Name: Fotjo Kamda First Name: Rodrigue

Address: Nai Cuisine

County: USA

Home Phone: / Office Phone: 203-407-0986

Number of Occupants/persons at this location 5 Age of Occupants 20's - 40's

2. OWNER OR LANDLORD: (Check if same as occupant ___)

Interviewed: Y (N)

Last Name: _____ First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)

Residential School (Commercial/Multi-use) → wholesale sushi production
Industrial Church Other: _____

If the property is residential, type? (Circle appropriate response)

Ranch	2-Family	3-Family
Raised Ranch	Split Level	Colonial
Cape Cod	Contemporary	Mobile Home
Duplex	Apartment House	Townhouses/Condos
Modular	Log Home	Other:_____

If multiple units, how many? _____

If the property is commercial, type?

Business Type(s) mai - sushi production

Does it include residences (i.e., multi-use)? Y (N) If yes, how many? _____

Other characteristics:

Number of floors 1 Building age _____

Is the building insulated? Y / N How air tight? Tight / (Average) / Not Tight

4. AIRFLOW

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow between floors

Airflow near source

Outdoor air infiltration

Infiltration into air ducts

5. **BASEMENT AND CONSTRUCTION CHARACTERISTICS** (Circle all that apply)

a. Above grade construction:	wood frame	(concrete)	stone	brick
b. Basement type:	full	crawlspace	slab	other no basement / slab on grade
c. Basement floor:	concrete	dirt	stone	other _____
d. Basement floor:	uncovered	covered	covered with _____	
e. Concrete floor:	unsealed	sealed	sealed with _____	
f. Foundation walls:	poured	block	stone	other _____
g. Foundation walls:	unsealed	sealed	sealed with _____	
h. The basement is:	wet	damp	dry	moldy
i. The basement is:	finished	unfinished	partially finished	
j. Sump present?	Y / (N)			
k. Water in sump?	Y / N / (not applicable)			

Basement/Lowest level depth below grade: NA (feet)

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

Not identified

6. **HEATING, VENTING and AIR CONDITIONING** (Circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

*(Hot air circulation)	Heat pump	Hot water baseboard	
Space Heaters	Stream radiation	Radiant floor	
Electric baseboard	Wood stove	Outdoor wood boiler	Other _____

The primary type of fuel used is:

(Natural Gas)	Fuel Oil	Kerosene
Electric	Propane	Solar
Wood	Coal	

Domestic hot water tank fueled by: _____

Boiler/furnace located in: NA Basement Outdoors ~~Main Floor~~ Other _____

Air conditioning: (Central Air) Window units Open Windows None

Are there air distribution ducts present? Y / N

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

7. OCCUPANCY

NA → main floor continuous occupancy in shifts

Is basement/lowest level occupied? [Full-time] Occasionally Seldom Almost Never

Level	**General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)**
Basement	—
1st Floor	offices, storage, sushi production
2nd Floor	—
3rd Floor	—
4th Floor	—

8. FACTORS THAT MAY influence INDOOR AIR QUALITY

a. Is there an attached garage? dock area, not true vehicle garage — Y (N)

b. Does the garage have a separate heating unit? (Y) N / NA — Electric parked

c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car) ~~(Y)~~ N / (NA) → ~~END~~ Please specify forklift

d. Has the building ever had a fire? Y (N) When? _____

e. Is a kerosene or unvented gas space heater present? Y (N) Where? _____

f. Is there a workshop or hobby/craft area? Y (N) Where & Type? _____

g. Is there smoking in the building? Y (N) How frequently? _____

h. Have cleaning products been used recently? (Y) N When & Type? Kitchen, see attached inventory

i. Have cosmetic products been used recently? Y (N) When & Type? _____

j. Has painting/staining been done in the last 6 months? Y (N) Where & When? _____

k. Is there new carpet, drapes or other textiles? Y (N) Where & When? _____

l. Have air fresheners been used recently? (Y) N When & Type? periodically automat dispense bathroom / ppc room (serviced by ecolab)

m. Is there a kitchen exhaust fan? (Y) N If yes, where vented? roof

n. Is there a bathroom exhaust fan? Y / N If yes, where vented? _____

o. Is there a clothes dryer? Y (N) If yes, is it vented outside? Y / N

p. Has there been a pesticide application? Y (N) When & Type? _____

Are there odors in the building? Y (N)
If yes, please describe: _____

Do any of the building occupants use solvents at work? Y (N)
(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist

If yes, what types of solvents are used? _____

If yes, are their clothes washed at work? Y / N

Do any of the building occupants regularly use or work at a dry-cleaning service? (Circle appropriate response) - uniforms serviced Ecolab.

Yes, use dry-cleaning regularly (weekly) No
Yes, use dry-cleaning infrequently (monthly or less) (Unknown)
Yes, work at a dry-cleaning service

do not work though

Is there a radon mitigation system for the building/structure? Y (N) Date of Installation: _____
Is the system active or passive? Active/Passive

9. WATER AND SEWAGE

Water Supply: (Public Water) Drilled Well Driven Well Dug Well Other: _____

Sewage Disposal: (Public Sewer) Septic Tank Leach Field Dry Well Other: _____

10. RELOCATION INFORMATION (for oil spill residential emergency)

a. Provide reasons why relocation is recommended: _____

b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel

c. Responsibility for costs associated with reimbursement explained? Y / N

d. Relocation package provided and explained to residents? Y / N

11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

Basement:

SEE Attached sample Location figures

First Floor:

See attached sample Location figures

12. OUTDOOR PLOT

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.

13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: NA

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo ** Y / N
~~Chem room~~			UO			Y
Bathroom	Ecolab micro aerosol Air freshener	1.8oz	U / UO	2-methylpentane-2,4, diol, ethanol, propane, butane	NA	N
Chem Room	Ecolab multi surface cleane	2L	U / UO	Hydrogen peroxide, polyglycoside d-glucopyranose	NA	N
chem room	Apex manual detergent	3LB Block	U / UO	Sodium chloride, polyethylene glycol, dodecylbenzene sulfonic acid	NA	N
Chem room	Ecolab grease cutter	1-gal cont.	U/UO	sodium hydroxide	NA	N
11	Ecolab Pathways Drain treatment	2.5 gal cont.	U/UO	propylene glycol	NA	N
11	Ecolab 100 Neutral floor cleaner	2.5 gal cont	U/UO	ethoxylates	NA	N
11	Ecolab sanitizing wash N' walk	2.5 gal cont.	U/UO	propylene glycol, boric acid, polyglycoside, alkyldimethyl n-oxides, Bislaurylamine	NA	N

* Describe the condition of the product containers as **Unopened (UO), Used (U),** or **Deteriorated (D)**
** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

* chemical room within building contains standard commercial kitchen cleaning agents / soaps / sanitizers used for cookware and surfaces

* all products provided by Ecolab