



October 22, 2025

Mr. Rafi Alam

New York State Department of Environmental Conservation

Division of Environmental Remediation, Remedial Bureau B, Section D

625 Broadway, 11th Floor

Albany, NY 12233-7020

*RE: Post Remediation Groundwater Monitoring Summary Report and Monitoring Well
Decommissioning Work Plan
585 Union Street, Brooklyn, New York
BCP #C224329*

Dear Mr. Alam:

Impact Environmental Engineering and Geology, PLLC (IEEG) has prepared a *Post Remediation Groundwater Monitoring Summary Report and Monitoring Well Decommissioning Work Plan* for 585 Union Street, Brooklyn, New York on behalf of Gowanus Union Street LLC, the Volunteer, under the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP), Site number C224329.

In accordance with the August 2023 NYSDEC approved Site Management Plan (SMP), groundwater monitoring was required annually until remedial action objectives (RAO) could be achieved.

Previous investigations of groundwater beneath the Site documented concentrations of petroleum related volatile organic compounds (VOCs) above the Technical and Operational Guidance Series (TOGs) 1.1.1 Ambient Water Quality Standards (AWQS). These exceedances were primarily detected in pre-existing wells located on the southern portion of the Site within the petroleum source area. Refer to **Figure 1** for source area.

On May 22, 2023, post-remedial groundwater monitoring wells (designated as MW-9 and MW-10), were installed in the southern central portion of the Site proximal and hydraulically downgradient from the petroleum source area in order to evaluate groundwater conditions associated with said source area. Monitoring wells MW-9 and MW-10 were augured and constructed of 4-inch PVC and are screened over the intervals described in the table below. The wells have a minimum annular space of two-inches around the entire monitoring well circumference, have a sand pack with a minimum of 2-feet above the top of the monitoring well screen, and have a minimum 2-foot-thick bentonite seal. Both wells were completed with locking "J" plugs with stick up to account for the basement slab. Refer to **Figure 1** for monitoring well

locations and the table below for Well ID #s, groundwater depths, terminal depths of each well, and screen intervals.

Well ID#	Depth to GW (ft)	Depth to Bottom of Well (ft)	Screen Interval (ft)
MW-9	10-11'	20'	10-20'
MW-10	10-11'	20'	10-20'

On June 9, 2023, groundwater monitoring wells (MW-9 and MW-10) were sampled to evaluate post-remedial groundwater conditions. The samples were analyzed for Commissioners Policy 51 (CP-51) Table 2 List VOCs in accordance with USEPA Method 8260C. The results indicated that benzene was detected in MW-9 above the NYSDEC AWQS. Per the SMP, until the ROAs for MW-9 and MW-10 are achieved, the monitoring wells will be sampled annually beginning August 2023.

The following is a summary of analytical results from the annual groundwater sample events which occurred between August 2023 and August 2025:

- On August 9, 2023, MW-9 and MW-10 were sampled and analyzed for CP-51 Table 2 List VOCs (USEPA Method 8260C), benzene was non-detect in MW-9, however, benzene was detected above the NYSDEC AWQS in MW-10. No other compounds exceed regulatory standards.
- On August 14, 2024, MW-9 and MW-10 were sampled and analyzed for CP-51 Table 2 List VOCs (USEPA Method 8260C), no compounds tested within either well exceed regulatory standards.
- On August 18, 2025, MW-9 and MW-10 were sampled and analyzed for CP-51 Table 2 List VOCs (USEPA Method 8260C), no compounds tested within either well exceed regulatory standards.

Refer to **Figure 2** for post remediation groundwater analytical data.

Based on the results of the August 14, 2024, and August 18, 2025, groundwater sampling events, IEEG requests approval to discontinue annual post-remediation groundwater sampling required under the SMP as ROAs have been achieved for groundwater in the former petroleum source area.

Additionally, IEEG requests permission to decommission the groundwater monitoring wells in accordance with the NYSDEC's *Groundwater Monitoring Well Decommissioning Procedures*, dated August 2009, an addendum to the *Commissioner's Policy CP-43: Groundwater Monitoring Well Decommissioning Policy*, issued November 3, 2009 (**Appendix D**).

The portion of the well occupied by the screen will be filled with clean sand, and the casing riser pipe annular space will be filled with a cement/bentonite grout to grade. The PVC casings will be cut to grade prior to grouting in place and sealed with a permanently affixed PVC cap. The grout mixture was mixed based on the "Standard Grout Mixture" as described in Section 6.1 of the NYSDEC CP-43 Groundwater Monitoring Well Decommissioning Policy document, which is comprised of:

- One 94-pound bag of Type I Portland cement;
- 3.9 pounds powdered bentonite; and
- 7.8 gallons potable water.

Please contact IEEG at (631) 298-6600 if you have any questions or comments regarding this matter.

Sincerely,

IMPACT ENVIRONMENTAL ENGINEERING AND GEOLOGY, PLLC



Diana Posten
Project Manager

Enclosure

L. Gorton– NYSDEC
H. Dudek– NYSDEC

Attachments:

Figure 1 – Monitoring Well Location Map

Figure 2 – Post Remediation Groundwater Analytical Data

Table 1 – Post Remediation Groundwater Analytical Data Table

Appendix A – Post Remediation Groundwater Analytical Laboratory Reports

Appendix B – Data Usability Summary Reports (2023-2025)

Appendix C – EDD Proof of Submissions

Appendix D – *Monitoring Well Decommissioning Procedures*, dated August 2009, an addendum to the *Commissioner's Policy CP-43: Groundwater Monitoring Well Decommissioning Policy*, issued November 3, 2009

FIGURES

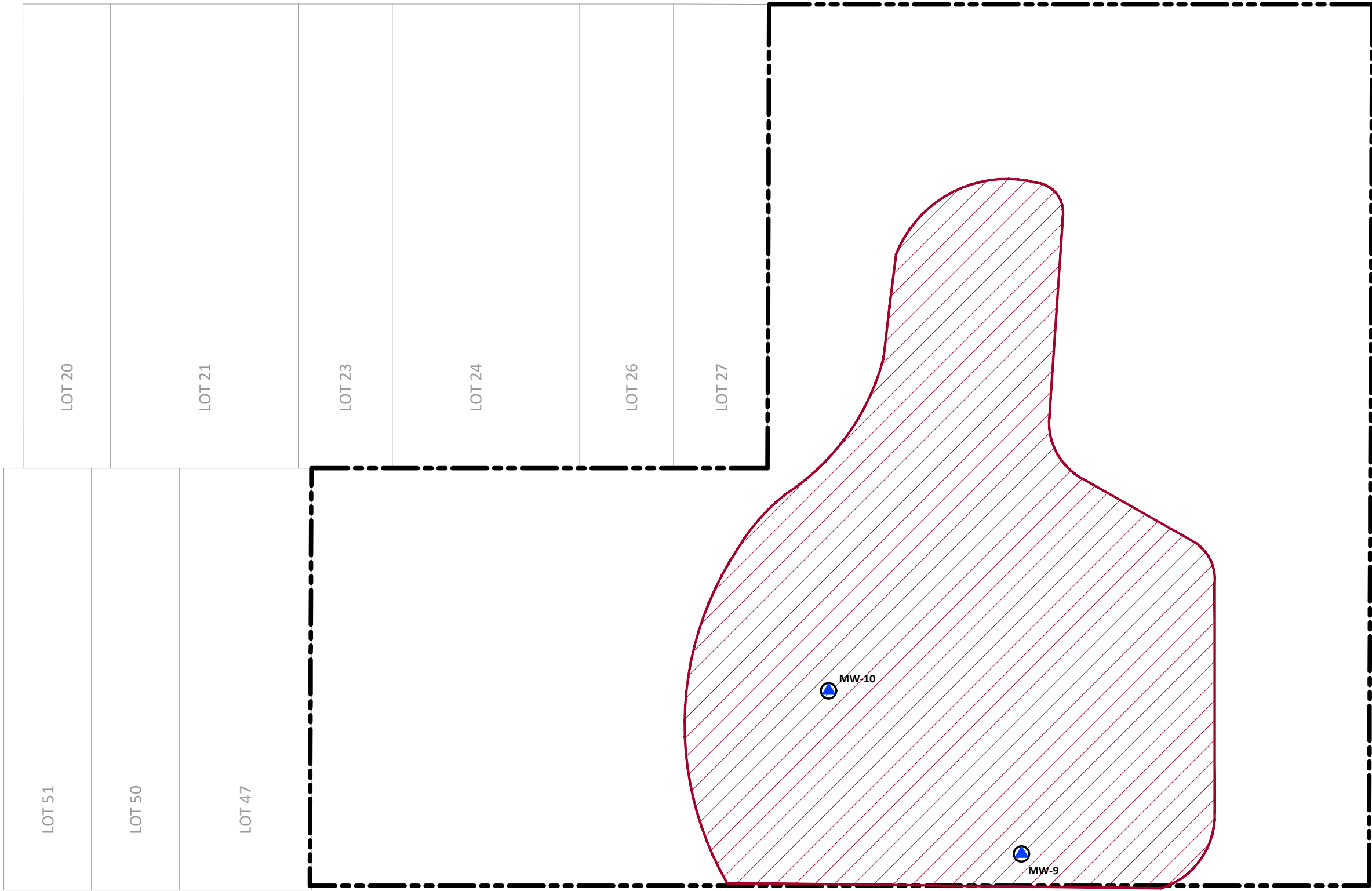
585 Union Street, Brooklyn, NY

Post Remediation Groundwater Monitoring Summary Report
and Monitoring Well Decommissioning Work Plan

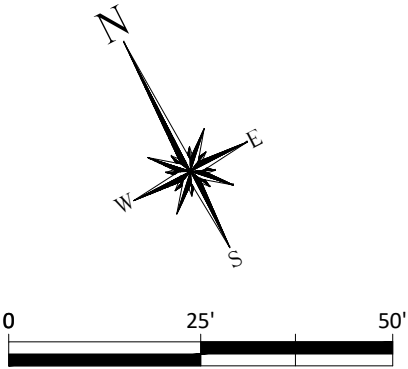
NYSDEC BCP #C224329



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NOTES:
1. BASE MAP BOUNDARY BASED ON BORO LAND SURVEYING SURVEY, DATED 05/18/2019.



- LEGEND
- MONITORING WELL LOCATION
 - PETROLEUM SOURCE AREA

FIGURE 1:
MONITORING WELL
LOCATION MAP

585 UNION STREET
BROOKLYN, NY
BLOCK 433, LOT 28

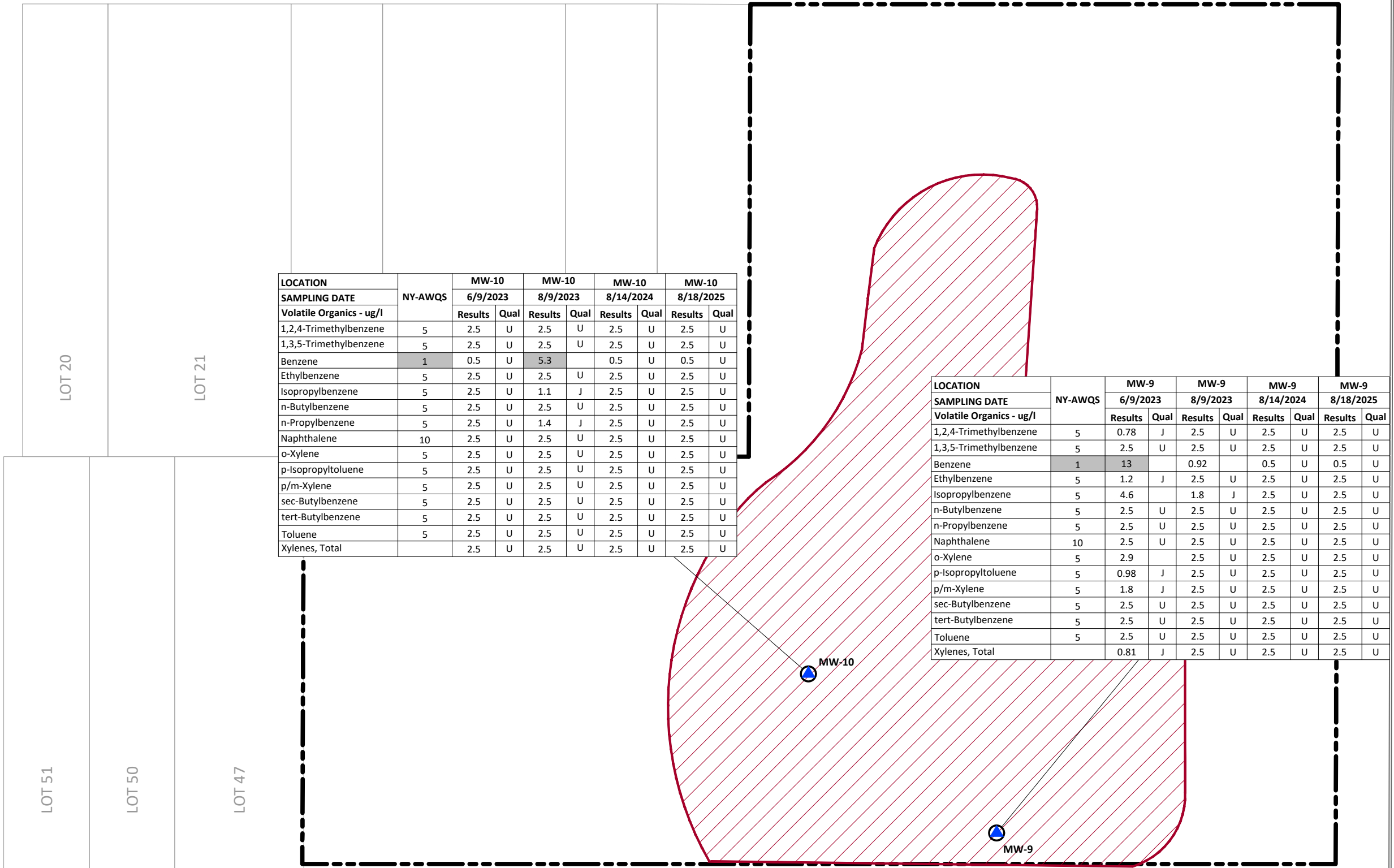
SHEET NO.
Figure 1

PROJECT NO.	14729
DESIGNED BY:	AB
DRAWN BY:	AB
CHECKED BY:	DP
DATE:	10/16/2025
SCALE:	1" = 25'

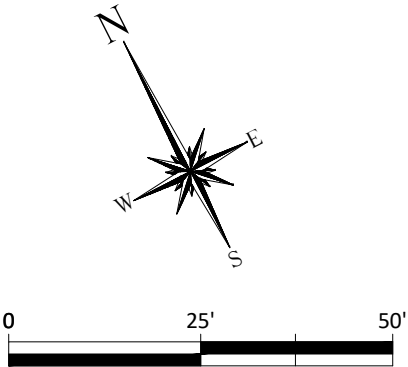
REVISIONS	



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LYNDHURST, NEW JERSEY 07071



- NOTES:
1. BASE MAP BOUNDARY BASED ON BORO LAND SURVEYING SURVEY, DATED 05/18/2019.
 2. GROUNDWATER SAMPLE ANALYTICAL RESULTS ARE COMPARED TO THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYSDEC) TECHNICAL AND OPERATIONAL GUIDANCE SERIES (TOGS) 1.1.1 AMBIENT WATER QUALITY STANDARDS (AWQS).
 3. J: ANALYTE DETECTED AT OR ABOVE THE MDL BUT BELOW THE RL.
 4. U: ANALYTE NOT DETECTED AT OR ABOVE THE LEVEL INDICATED.



- LEGEND
- MONITORING WELL LOCATION
 - PETROLEUM SOURCE AREA

FIGURE 2:
POST REMEDIATION
GROUNDWATER
ANALYTICAL DATA

585 UNION STREET
BROOKLYN, NY
BLOCK 433, LOT 28

SHEET NO.
Figure 2

PROJECT NO.	14729
DESIGNED BY:	AB
DRAWN BY:	AB
CHECKED BY:	DP
DATE:	10/16/2025
SCALE:	1" = 25'

REVISIONS	



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TABLE

585 Union Street, Brooklyn, NY

Post Remediation Groundwater Monitoring Summary Report
and Monitoring Well Decommissioning Work Plan

NYSDEC BCP #C224329



IMPACT ENVIRONMENTAL
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Groundwater Sampling Analytical Results for MW-9 and MW-10
585 Union Street, Brooklyn, NY

LOCATION		NY-AWQS		MW-9		MW-9		MW-9		MW-9		MW-10		MW-10		MW-10		MW-10	
SAMPLING DATE				6/9/2023		8/9/2023		8/14/2024		8/18/2025		6/9/2023		8/9/2023		8/14/2024		8/18/2025	
LAB SAMPLE ID				L2332652-01		L2346073-01		L2446277-01		L2551893-01		L2332652-02		L2346073-02		L2446277-02		L2551893-02	
SAMPLE TYPE				WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
	CasNum		Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
Volatile Organics by GC/MS																			
1,2,4-Trimethylbenzene	95-63-6	5	ug/l	0.78	J	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,3,5-Trimethylbenzene	108-67-8	5	ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Benzene	71-43-2	1	ug/l	13		0.92		0.5	U	0.5	U	0.5	U	5.3		0.5	U	0.5	U
Ethylbenzene	100-41-4	5	ug/l	1.2	J	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Isopropylbenzene	98-82-8	5	ug/l	4.6	J	1.8	J	2.5	U	2.5	U	2.5	U	1.1	J	2.5	U	2.5	U
n-Butylbenzene	104-51-8	5	ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
n-Propylbenzene	103-65-1	5	ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	1.4	J	2.5	U	2.5	U
Naphthalene	91-20-3	10	ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
o-Xylene	95-47-6	5	ug/l	2.9		2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
p-Isopropyltoluene	99-87-6	5	ug/l	0.98	J	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
p/m-Xylene	179601-23-1	5	ug/l	1.8	J	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
sec-Butylbenzene	135-98-8	5	ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
tert-Butylbenzene	98-06-6	5	ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Toluene	108-88-3	5	ug/l	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Xylenes, Total	1330-20-7		ug/l	0.81	J	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U

NY-AWQS: New York TOGS 111 Ambient Water Quality Standards criteria reflects all addendum to criteria through June 2004.

Indicates Exceedance

APPENDICES

585 Union Street, Brooklyn, NY

Post Remediation Groundwater Monitoring Summary
Report and Monitoring Well Decommissioning Work Plan

NYSDEC BCP #C224329



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Appendix A

Post Remediation Groundwater Analytical Laboratory Reports

Post Remediation Groundwater Monitoring Summary Report and
Monitoring Well Decommissioning Work Plan

NYSDEC BCP #C224329



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www.alphalab.com



Alpha Analytical

Laboratory Code: 11148

SDG Number: L2332652

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Project Name: 585 UNION STREET
Project Number: 14729

Lab Number: L2332652
Report Date: 06/14/23

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2332652-01	MW-9	WATER	585 UNION STREET	06/09/23 08:20	06/09/23
L2332652-02	MW-10	WATER	585 UNION STREET	06/09/23 09:20	06/09/23

Project Name: 585 UNION STREET
Project Number: 14729

Lab Number: L2332652
Report Date: 06/14/23

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: 585 UNION STREET
Project Number: 14729

Lab Number: L2332652
Report Date: 06/14/23

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Report Date: 06/14/23
Title: Technical Director/Representative

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers



Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where

Report Format: DU Report with 'J' Qualifiers



Project Name: 585 UNION STREET
Project Number: 14729

Lab Number: L2332652
Report Date: 06/14/23

Data Qualifiers

the identification is based on a mass spectral library search.

- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.



Volatile Organics Instruments

Volatile Organics:

Instrument: Agilent 7890 GC/5975C MSD
 Trap: Supelco K Trap (VOACARB 3000)
 Concentrator: EST Encon (or equivalent)
 Autosampler: EST Centurion (or equivalent)
 Purge time: 11 min

Columns (length x ID x df):
 RTX-VMS 20m x 0.18mm x 1um
 RTX-VMS 30m x 0.25mm x 1.4um
 RTX-502.2 40m x 0.18mm x 1um

Volatile Organics: VPH

Instrument: Agilent 6890 (or equivalent)
 Trap: Supelco K Trap (VOACARB 3000)
 Concentrator: EST Encon (or equivalent)
 Autosampler: EST Centurion (or equivalent)

Column Type: Restek RTX 502.2
 Column Length: 105 Meters
 df: 3.00 um
 ID: 0.53mm

Volatile Organics: PIANO

Instrument: Agilent 7890 GC/5975C MSD
 Trap: Supelco K Trap (VOACARB 3000)
 Concentrator: Tekmar Velocity / EST Encon
 Autosampler: Varian Archon / EST Centurion
 Purge time: 11 min

Column Type: DB-VRX
 Column Length: 60 Meters
 df: 1.40 um
 ID: 0.25 mm
 Desorb: 1 min

Volatile Organics: Dissolved Gas

Instrument: Agilent 7890 (or equivalent) with FID/TCD

Column Type: Haysep S Column
 Column Length: 2 Meters packed
 (100/200 mesh)

Autosampler: LEAP Headspace

Purge time: 0.6 min

Volatile Organics in Air Instruments

Volatile Organics in Air:

Instruments: Agilent 6890 GC / 5975 MSD Shimadzu QP2010-SE / QP2020

Concentrator: Entech 7100A or 7200
 Autosampler: Entech 7016CA or 7016D

Column Type: Restek RTX-1
 Column Length: 60 Meters
 df: 1.00 um
 ID: 0.25 mm or 0.32 mm

Trap 1: Glass Bead: manufacturer-Entech: 20 cm packing material

Trap 2: Tenax: manufacturer-Entech: 20 cm packing material



Semivolatile Organics Instruments - Westborough

Semivolatile Organics (Acid/Base/Neutral Extractables):

Instrument: Agilent 5973N MSD	Injection volume: 1 μ L; 2 μ L LVI
Column Type: Restek RXI-5SILMS	df: 0.32 μ m
Column Length: 30 Meters	ID: 0.25 mm

Polynuclear Aromatic Hydrocarbons by 8270 SIM:

Instrument: Agilent 5973 MSD	Injection volume: 1 μ L; 2 μ L LVI
Column Type: Restek RXI-5SILMS	df: 0.25 μ m
Column Length: 30 Meters	ID: 0.25 mm

Pesticides/PCB/Herbicides:

Instrument: Agilent 6890 w/Dual Micro ECDs	Injection Volume: 1 μ L
Column A: Restek RTX-CL/STX-CL	df: 0.32
Column B: Restek RTX/STX-CLP Pesticide II	df: 0.25
Column Length: 30 Meters	ID: 0.32 mm

Petroleum/EPH:

Instrument: Agilent 6890 w/FID / HP 5890 w/ FID	Injection Volume: 1 μ L
Column: Restek RTX 5	df: 0.25
Column Length: 30 Meters	
ID: 0.32 mm	



Semivolatile Organic Instruments - Mansfield

Semivolatile Organics (ALK-PAH Extractables):

Instrument: Agilent 5973N / 5975 MSD	Injection volume: 1 ul
Column Type: ZB-5	df: 0.25 um
Column Length: 60 Meters	ID: 0.25 mm

Semivolatile Organics (8270):

Instrument: Agilent 5973N / 5975 MSD	Injection volume: 2 ul
Column Type: ZB-Semivolatiles	df: 0.25 um
Column Length: 30 Meters	ID: 0.25 mm

Semivolatile Organics (8270 SIM):

Instrument: Agilent 5973N / 5975 MSD	Injection volume: 3 ul
Column Type: ZB-5	df: 0.25 um
Column Length: 30 Meters	ID: 0.25 mm

Semivolatile Organics (1,4-Dioxane):

Instrument: Agilent 5973N / 5975 / 5977 MSD	Injection volume: 3 ul
Column Type: RTX-5	df: 0.25um, 0.18 um
Column Length: 30 Meters	ID: 0.25um, 0.18 mm

Semivolatile Organics (209 Congener):

Instrument: Agilent 5973N / 5975 MSD	Injection volume: 3 ul
Column Type: RTX-5, RTX-PCB	df: 0.25um, 0.18 um
Column Length: 60 Meters	ID: 0.25um, 0.18 mm

Semivolatile Organics (8081):

Instrument: Agilent 6890 / 7890	Injection volume: 1 ul
Column Type: RTX-5 / RTX-CLP II	df: 0.25 um
Column Length: 60 Meters	ID: 0.25 mm

Semivolatile Organics (8082):

Instrument: Agilent 6890 w/Dual Micro ECDs	Injection Volume: 1uL
Column A: Restek RTX-CL/STX-CL	df: 0.32
Column B: Restek RTX/STX-CLPPesticide II	df: 0.25
Column Length: 30 Meters	ID: 0.32 mm

Semivolatile Organics (SHC Extractables):

Instrument: Agilent 6890	Injection volume: 1 ul
Column Type: RTX-5	df: 0.25 um
Column Length: 60 Meters	ID: 0.25 mm



Sample Delivery Group Summary

Alpha Job Number : L2332652

Received : 09-JUN-2023

Reviewer : Maile Kolton

Account Name : Impact Environmental

Project Number : 14729

Project Name : 585 UNION STREET

Delivery Information

Samples Delivered By : Alpha Courier

Chain of Custody : Present

Cooler Information

Cooler	Seal/Seal#	Preservation	Temperature(°C)	Additional Information
A	Absent/	Ice	4.1	
B	Absent/	Ice	3.3	

Condition Information

1) All samples on COC received?	YES
2) Extra samples received?	NO
3) Are there any sample container discrepancies?	NO
4) Are there any discrepancies between COC & sample labels?	NO
5) Are samples in appropriate containers for requested analysis?	YES
6) Are samples properly preserved for requested analysis?	YES
7) Are samples within holding time for requested analysis?	YES
8) All sampling equipment returned?	NA

Volatile Organics/VPH

1) Reagent Water Vials Frozen by Client?	NO

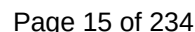
ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Jun 14 2023, 12:40 pm

Login Number: L2332652

Account: IMPENV Impact Environmental Project: 14729

Received: 09JUN23 Due Date: 14JUN23

Sample #	Client ID	Mat PR Collected
L2332652-01	MW-9	1 3C 09JUN23 08:20
STD TAT 3-5 days; 1-day, 50%; 2-day, 25% 8260: report CP51 list and include MTBE (report list built) 8270 SIM: report CP51 list include acenaphthylene (report list built) ASP-B Package Due Date: 06/14/23 ASP-B, E&I-FEE, NYTCL-8260		
L2332652-02	MW-10	1 3C 09JUN23 09:20
STD TAT 3-5 days; 1-day, 50%; 2-day, 25% 8260: report CP51 list and include MTBE (report list built) 8270 SIM: report CP51 list include acenaphthylene (report list built) Package Due Date: 06/14/23 NYTCL-8260		



Organics

GC/MS 8260

Analysis

Volatiles QC Summary

Surrogate Recovery Summary

Form 2

Volatiles

Client: Impact Environmental
Project Name: 585 UNION STREET

Lab Number: L2332652
Project Number: 14729
Matrix: Water

CLIENT ID (LAB SAMPLE NO.)	SMC1 DCA	SMC2 TOL	SMC3 BFB	SMC4 DBFM	TOT OUT
MW-9 (L2332652-01)	104	102	103	87	0
MW-10 (L2332652-02)	115	96	105	105	0
WG1790520-3LCS	106	98	99	101	0
WG1790520-4LCSD	106	97	102	97	0
WG1790520-5BLANK	121	95	98	121	0
WG1790988-3LCS	107	98	105	98	0
WG1790988-4LCSD	105	99	104	97	0
WG1790988-5BLANK	110	96	105	103	0

QC LIMITS

(70-130) DCA = 1,2-DICHLOROETHANE-D4
(70-130) TOL = TOLUENE-D8
(70-130) BFB = 4-BROMOFLUOROBENZENE
(70-130) DBFM = DIBROMOFLUOROMETHANE

* Values outside of QC limits

FORM II NYTCL-8260



Laboratory Control Sample Summary

Form 3

Volatiles

Client : Impact Environmental Lab Number : L2332652
 Project Name : 585 UNION STREET Project Number : 14729
 Matrix (Level) : WATER (LOW)
 LCS Sample ID : WG1790520-3 Analysis Date : 06/12/23 10:08 File ID : V22230612A01
 LCSD Sample ID : WG1790520-4 Analysis Date : 06/12/23 10:32 File ID : V22230612A02

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R			
Benzene	10	11	110	10	11	110	0	70-130	20
Toluene	10	10	100	10	10	100	0	70-130	20
Ethylbenzene	10	10	100	10	10	100	0	70-130	20
Methyl tert butyl ether	10	9.3	93	10	9.8	98	5	63-130	20
p/m-Xylene	20	20	100	20	20	100	0	70-130	20
o-Xylene	20	20	100	20	20	100	0	70-130	20
n-Butylbenzene	10	11	110	10	10	100	10	53-136	20
sec-Butylbenzene	10	11	110	10	11	110	0	70-130	20
tert-Butylbenzene	10	10	100	10	9.8	98	2	70-130	20
Isopropylbenzene	10	11	110	10	10	100	10	70-130	20
p-Isopropyltoluene	10	9.7	97	10	9.8	98	1	70-130	20
Naphthalene	10	7.8	78	10	8.2	82	5	70-130	20
n-Propylbenzene	10	11	110	10	11	110	0	69-130	20
1,3,5-Trimethylbenzene	10	9.2	92	10	9.6	96	4	64-130	20
1,2,4-Trimethylbenzene	10	10	100	10	9.4	94	6	70-130	20

Laboratory Control Sample Summary

Form 3

Volatiles

Client : Impact Environmental Lab Number : L2332652
 Project Name : 585 UNION STREET Project Number : 14729
 Matrix (Level) : WATER (LOW)
 LCS Sample ID : WG1790988-3 Analysis Date : 06/13/23 07:09 File ID : V22230613A02
 LCSD Sample ID : WG1790988-4 Analysis Date : 06/13/23 07:34 File ID : V22230613A03

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R			
Benzene	10	11	110	10	11	110	0	70-130	20
Toluene	10	11	110	10	10	100	10	70-130	20
Ethylbenzene	10	11	110	10	10	100	10	70-130	20
Methyl tert butyl ether	10	9.6	96	10	9.7	97	1	63-130	20
p/m-Xylene	20	21	105	20	20	100	5	70-130	20
o-Xylene	20	20	100	20	20	100	0	70-130	20
n-Butylbenzene	10	11	110	10	11	110	0	53-136	20
sec-Butylbenzene	10	11	110	10	11	110	0	70-130	20
tert-Butylbenzene	10	10	100	10	9.8	98	2	70-130	20
Isopropylbenzene	10	11	110	10	10	100	10	70-130	20
p-Isopropyltoluene	10	10	100	10	9.9	99	1	70-130	20
Naphthalene	10	7.9	79	10	8.0	80	1	70-130	20
n-Propylbenzene	10	11	110	10	11	110	0	69-130	20
1,3,5-Trimethylbenzene	10	9.8	98	10	9.6	96	2	64-130	20
1,2,4-Trimethylbenzene	10	9.6	96	10	9.5	95	1	70-130	20

**Method Blank Summary
Form 4
Volatiles**

Client	: Impact Environmental	Lab Number	: L2332652
Project Name	: 585 UNION STREET	Project Number	: 14729
Lab Sample ID	: WG1790520-5	Lab File ID	: V22230612A05
Instrument ID	: VOA122		
Matrix	: WATER	Analysis Date	: 06/12/23 11:45

Client Sample No.	Lab Sample ID	Analysis Date
WG1790520-3LCS	WG1790520-3	06/12/23 10:08
WG1790520-4LCSD	WG1790520-4	06/12/23 10:32
MW-9	L2332652-01	06/12/23 14:38

Method Blank Summary
Form 4
Volatiles

Client	: Impact Environmental	Lab Number	: L2332652
Project Name	: 585 UNION STREET	Project Number	: 14729
Lab Sample ID	: WG1790988-5	Lab File ID	: V22230613A07
Instrument ID	: VOA122		
Matrix	: WATER	Analysis Date	: 06/13/23 09:11

Client Sample No.	Lab Sample ID	Analysis Date
WG1790988-3LCS	WG1790988-3	06/13/23 07:09
WG1790988-4LCSD	WG1790988-4	06/13/23 07:34
MW-10	L2332652-02	06/13/23 17:24

Instrument Performance Check (Tune) Summary

Form 5

Volatiles

Bromofluorobenzene (BFB)

Client : Impact Environmental	Lab Number : L2332652
Project Name : 585 UNION STREET	Project Number : 14729
Instrument ID : VOA122	Analysis Date : 04/25/23 17:26
Tune Standard : WG1771536-1	Tune File ID : V22230425NBF1_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	20.4
75	30.0 - 80.0% of mass 95	50
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.4
173	Less than 2.0% of mass 174	0.9 (1)1
174	Greater than 50.0% of mass 95	84.3
175	5.0 - 9.0% of mass 174	6.4 (7.6)1
176	Greater than 95.0% but less than 101% of mass	82.1 (97.3)1
177	5.0 - 9.0% of mass 176	5.5 (6.7)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
STD0.19PPB	R1688396-1	V22230425N03	04/25/23 18:36
STD0.5PPB	R1688396-3	V22230425N05	04/25/23 19:26
STD2PPB	R1688396-2	V22230425N07	04/25/23 20:15
STD10PPB	R1688396-4	V22230425N09	04/25/23 21:04
STD30PPB	R1688396-5	V22230425N10	04/25/23 21:28
STD80PPB	R1688396-7	V22230425N11	04/25/23 21:53
STD120PPB	R1688396-6	V22230425N12	04/25/23 22:17
STD200PPB	R1688396-8	V22230425N13	04/25/23 22:41
ICV Quant Report	R1688396-9	V22230425N19	04/26/23 01:08

Instrument Performance Check (Tune) Summary

Form 5

Volatiles

Bromofluorobenzene (BFB)

Client : Impact Environmental	Lab Number : L2332652
Project Name : 585 UNION STREET	Project Number : 14729
Instrument ID : VOA122	Analysis Date : 06/12/23 09:49
Tune Standard : WG1790520-1	Tune File ID : V22230612ABF1_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	21.6
75	30.0 - 80.0% of mass 95	50.8
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	7.1
173	Less than 2.0% of mass 174	0.6 (.7)1
174	Greater than 50.0% of mass 95	79.1
175	5.0 - 9.0% of mass 174	6.2 (7.8)1
176	Greater than 95.0% but less than 101% of mass	77.3 (97.8)1
177	5.0 - 9.0% of mass 176	5.1 (6.6)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
WG1790520-2CCAL	WG1790520-2	V22230612A01	06/12/23 10:08
WG1790520-3LCS	WG1790520-3	V22230612A01	06/12/23 10:08
WG1790520-4LCSD	WG1790520-4	V22230612A02	06/12/23 10:32
WG1790520-5BLANK	WG1790520-5	V22230612A05	06/12/23 11:45
MW-9	L2332652-01	V22230612A12	06/12/23 14:38

Instrument Performance Check (Tune) Summary

Form 5

Volatiles

Bromofluorobenzene (BFB)

Client : Impact Environmental	Lab Number : L2332652
Project Name : 585 UNION STREET	Project Number : 14729
Instrument ID : VOA122	Analysis Date : 06/13/23 06:34
Tune Standard : WG1790988-1	Tune File ID : V22230613ABF1_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	21.1
75	30.0 - 80.0% of mass 95	49.7
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.7 (1)1
174	Greater than 50.0% of mass 95	75
175	5.0 - 9.0% of mass 174	5.9 (7.8)1
176	Greater than 95.0% but less than 101% of mass	75.3 (100.)1
177	5.0 - 9.0% of mass 176	5.2 (7)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
WG1790988-2CCAL	WG1790988-2	V22230613A02	06/13/23 07:09
WG1790988-3LCS	WG1790988-3	V22230613A02	06/13/23 07:09
WG1790988-4LCSD	WG1790988-4	V22230613A03	06/13/23 07:34
WG1790988-5BLANK	WG1790988-5	V22230613A07	06/13/23 09:11
MW-10	L2332652-02	V22230613A27	06/13/23 17:24

Internal Standard Area and RT Summary

Form 8a

Volatiles

Client : Impact Environmental
 Project Name : 585 UNION STREET
 Instrument ID : VOA122
 Sample No : WG1790520-2

Lab Number : L2332652
 Project Number : 14729
 Analysis Date : 06/12/23 10:08:00
 Lab File ID : V22230612A01

	Fluorobenzene (IS)		Chlorobenzene-d5		1,4-Dichlorobenzene-D4	
	Area	RT	Area	RT	Area	RT
WG1790520-2	239558	6.28	233642	9.87	127139	12.50
Upper Limit	479116	6.78	467284	10.37	254278	13.00
Lower Limit	119779	5.78	116821	9.37	63570	12.00
Sample ID						
WG1790520-3 LCS	239558	6.28	233642	9.87	127139	12.50
WG1790520-4 LCSD	255416	6.28	248323	9.87	132278	12.50
WG1790520-5 BLANK	201355	6.28	212213	9.87	107618	12.50
MW-9	280043	6.28	278847	9.87	134222	12.50

Area Upper Limit = +100% of internal standard area
 Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT
 RT Lower Limit = -0.50 minutes of internal standard RT

* Values outside of QC limits



Internal Standard Area and RT Summary

Form 8a

Volatiles

Client : Impact Environmental
 Project Name : 585 UNION STREET
 Instrument ID : VOA122
 Sample No : WG1790988-2

Lab Number : L2332652
 Project Number : 14729
 Analysis Date : 06/13/23 07:09:00
 Lab File ID : V22230613A02

	Fluorobenzene (IS)		Chlorobenzene-d5		1,4-Dichlorobenzene-D4	
	Area	RT	Area	RT	Area	RT
WG1790988-2	250466	6.29	241286	9.87	129668	12.50
Upper Limit	500932	6.79	482572	10.37	259336	13.00
Lower Limit	125233	5.79	120643	9.37	64834	12.00
Sample ID						
WG1790988-3 LCS	250466	6.29	241286	9.87	129668	12.50
WG1790988-4 LCSD	258043	6.28	246646	9.87	132314	12.50
WG1790988-5 BLANK	230948	6.28	249457	9.87	122760	12.50
MW-10	221671	6.29	240948	9.87	122641	12.50

Area Upper Limit = +100% of internal standard area
 Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT
 RT Lower Limit = -0.50 minutes of internal standard RT

* Values outside of QC limits





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Volatile Organics - EPA 8260D (WATER)

Holding Time: 14 days
Container/Sample Preservation: 3 - Vial HCl preserved

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
Methylene chloride	75-09-2	3	0.678	ug/l	70-130	20	70-130	20	20			
1,1-Dichloroethane	75-34-3	0.75	0.21	ug/l	70-130	20	70-130	20	20			
Chloroform	67-66-3	0.75	0.222	ug/l	70-130	20	70-130	20	20			
Carbon tetrachloride	56-23-5	0.5	0.134	ug/l	63-132	20	63-132	20	20			
1,2-Dichloropropane	78-87-5	1.75	0.137	ug/l	70-130	20	70-130	20	20			
Dibromochloromethane	124-48-1	0.5	0.149	ug/l	63-130	20	63-130	20	20			
1,1,2-Trichloroethane	79-00-5	0.75	0.144	ug/l	70-130	20	70-130	20	20			
Tetrachloroethene	127-18-4	0.5	0.181	ug/l	70-130	20	70-130	20	20			
Chlorobenzene	108-90-7	0.5	0.178	ug/l	75-130	25	75-130	25	25			
Trichlorofluoromethane	75-69-4	2.5	0.161	ug/l	62-150	20	62-150	20	20			
1,2-Dichloroethane	107-06-2	0.5	0.132	ug/l	70-130	20	70-130	20	20			
1,1,1-Trichloroethane	71-55-6	0.5	0.158	ug/l	67-130	20	67-130	20	20			
Bromodichloromethane	75-27-4	0.5	0.192	ug/l	67-130	20	67-130	20	20			
trans-1,3-Dichloropropene	10061-02-6	0.5	0.164	ug/l	70-130	20	70-130	20	20			
cis-1,3-Dichloropropene	10061-01-5	0.5	0.144	ug/l	70-130	20	70-130	20	20			
1,3-Dichloropropene, Total	542-75-6	0.5	0.144	ug/l				20	20			
1,1-Dichloropropene	563-58-6	2.5	0.24	ug/l	70-130	20	70-130	20	20			
Bromoform	75-25-2	2	0.248	ug/l	54-136	20	54-136	20	20			
1,1,2,2-Tetrachloroethane	79-34-5	0.5	0.167	ug/l	67-130	20	67-130	20	20			
Benzene	71-43-2	0.5	0.159	ug/l	70-130	25	70-130	25	25			
Toluene	108-88-3	0.75	0.203	ug/l	70-130	25	70-130	25	25			
Ethylbenzene	100-41-4	0.5	0.167	ug/l	70-130	20	70-130	20	20			
Chloromethane	74-87-3	2.5	0.2	ug/l	64-130	20	64-130	20	20			
Bromomethane	74-83-9	1	0.256	ug/l	39-139	20	39-139	20	20			
Vinyl chloride	75-01-4	1	0.0714	ug/l	55-140	20	55-140	20	20			
Chloroethane	75-00-3	1	0.134	ug/l	55-138	20	55-138	20	20			
1,1-Dichloroethene	75-35-4	0.5	0.169	ug/l	61-145	25	61-145	25	25			
trans-1,2-Dichloroethene	156-60-5	0.75	0.163	ug/l	70-130	20	70-130	20	20			
1,2-Dichloroethene (total)	540-59-0	0.5	0.163	ug/l				20	20			
Trichloroethene	79-01-6	0.5	0.175	ug/l	70-130	25	70-130	25	25			
1,2-Dichlorobenzene	95-50-1	2.5	0.184	ug/l	70-130	20	70-130	20	20			
1,3-Dichlorobenzene	541-73-1	2.5	0.186	ug/l	70-130	20	70-130	20	20			
1,4-Dichlorobenzene	106-46-7	2.5	0.187	ug/l	70-130	20	70-130	20	20			
Methyl tert butyl ether	1634-04-4	1	0.166	ug/l	63-130	20	63-130	20	20			
p/m-Xylene	179601-23-1	1	0.332	ug/l	70-130	20	70-130	20	20			
o-Xylene	95-47-6	1	0.392	ug/l	70-130	20	70-130	20	20			
Xylene (Total)	1330-20-7	1	0.33	ug/l				20	20			
cis-1,2-Dichloroethene	156-59-2	0.5	0.187	ug/l	70-130	20	70-130	20	20			
Dibromomethane	74-95-3	5	0.363	ug/l	70-130	20	70-130	20	20			
1,4-Dichlorobutane	110-56-5	5	0.464	ug/l	70-130	20	70-130	20	20			
1,2,3-Trichloropropane	96-18-4	5	0.176	ug/l	64-130	20	64-130	20	20			
Styrene	100-42-5	1	0.359	ug/l	70-130	20	70-130	20	20			

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Volatile Organics - EPA 8260D (WATER)

Holding Time: 14 days
Container/Sample Preservation: 3 - Vial HCl preserved

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
Dichlorodifluoromethane	75-71-8	5	0.244	ug/l	36-147	20	36-147	20	20			
Acetone	67-64-1	5	1.46	ug/l	58-148	20	58-148	20	20			
Carbon disulfide	75-15-0	5	0.299	ug/l	51-130	20	51-130	20	20			
2-Butanone	78-93-3	5	1.94	ug/l	63-138	20	63-138	20	20			
Vinyl acetate	108-05-4	5	0.311	ug/l	70-130	20	70-130	20	20			
4-Methyl-2-pentanone	108-10-1	5	0.416	ug/l	59-130	20	59-130	20	20			
2-Hexanone	591-78-6	5	0.515	ug/l	57-130	20	57-130	20	20			
Ethyl methacrylate	97-63-2	5	0.606	ug/l	70-130	20	70-130	20	20			
Acrylonitrile	107-13-1	5	0.43	ug/l	70-130	20	70-130	20	20			
Bromochloromethane	74-97-5	2.5	0.152	ug/l	70-130	20	70-130	20	20			
Tetrahydrofuran	109-99-9	5	0.525	ug/l	58-130	20	58-130	20	20			
2,2-Dichloropropane	594-20-7	2.5	0.204	ug/l	63-133	20	63-133	20	20			
1,2-Dibromoethane	106-93-4	2	0.193	ug/l	70-130	20	70-130	20	20			
1,3-Dichloropropane	142-28-9	2.5	0.212	ug/l	70-130	20	70-130	20	20			
1,1,1,2-Tetrachloroethane	630-20-6	0.5	0.164	ug/l	64-130	20	64-130	20	20			
Bromobenzene	108-86-1	2.5	0.152	ug/l	70-130	20	70-130	20	20			
n-Butylbenzene	104-51-8	0.5	0.192	ug/l	53-136	20	53-136	20	20			
sec-Butylbenzene	135-98-8	0.5	0.181	ug/l	70-130	20	70-130	20	20			
tert-Butylbenzene	98-06-6	2.5	0.196	ug/l	70-130	20	70-130	20	20			
o-Chlorotoluene	95-49-8	2.5	0.215	ug/l	70-130	20	70-130	20	20			
p-Chlorotoluene	106-43-4	2.5	0.185	ug/l	70-130	20	70-130	20	20			
1,2-Dibromo-3-chloropropane	96-12-8	2.5	0.353	ug/l	41-144	20	41-144	20	20			
Hexachlorobutadiene	87-68-3	0.5	0.217	ug/l	63-130	20	63-130	20	20			
Isopropylbenzene	98-82-8	0.5	0.187	ug/l	70-130	20	70-130	20	20			
p-Isopropyltoluene	99-87-6	0.5	0.188	ug/l	70-130	20	70-130	20	20			
Naphthalene	91-20-3	2.5	0.216	ug/l	70-130	20	70-130	20	20			
n-Propylbenzene	103-65-1	0.5	0.173	ug/l	69-130	20	69-130	20	20			
1,2,3-Trichlorobenzene	87-61-6	2.5	0.234	ug/l	70-130	20	70-130	20	20			
1,2,4-Trichlorobenzene	120-82-1	2.5	0.22	ug/l	70-130	20	70-130	20	20			
1,3,5-Trimethylbenzene	108-67-8	2.5	0.217	ug/l	64-130	20	64-130	20	20			
1,2,4-Trimethylbenzene	95-63-6	2.5	0.191	ug/l	70-130	20	70-130	20	20			
trans-1,4-Dichloro-2-butene	110-57-6	2.5	0.213	ug/l	70-130	20	70-130	20	20			
Ethyl ether	60-29-7	2.5	0.163	ug/l	59-134	20	59-134	20	20			
1,2-Dichloroethane-d4	17060-07-0									70-130		
Toluene-d8	2037-26-5									70-130		
4-Bromofluorobenzene	460-00-4									70-130		
Dibromofluoromethane	1868-53-7									70-130		

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VOCs - EPA 8260D/5035 High & Low (SOIL)

Holding Time: 14 days
 Container/Sample Preservation: 1 - 1 Vial MeOH/2 Vial Water

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
Methylene chloride	75-09-2	5	2.29	ug/kg	70-130	30	70-130	30	30			
1,1-Dichloroethane	75-34-3	1	0.145	ug/kg	70-130	30	70-130	30	30			
Chloroform	67-66-3	1.5	0.14	ug/kg	70-130	30	70-130	30	30			
Carbon tetrachloride	56-23-5	1	0.23	ug/kg	70-130	30	70-130	30	30			
1,2-Dichloropropane	78-87-5	1	0.125	ug/kg	70-130	30	70-130	30	30			
Dibromochloromethane	124-48-1	1	0.14	ug/kg	70-130	30	70-130	30	30			
1,1,2-Trichloroethane	79-00-5	1	0.267	ug/kg	70-130	30	70-130	30	30			
Tetrachloroethene	127-18-4	0.5	0.196	ug/kg	70-130	30	70-130	30	30			
Chlorobenzene	108-90-7	0.5	0.127	ug/kg	70-130	30	70-130	30	30			
Trichlorofluoromethane	75-69-4	4	0.695	ug/kg	70-139	30	70-139	30	30			
1,2-Dichloroethane	107-06-2	1	0.257	ug/kg	70-130	30	70-130	30	30			
1,1,1-Trichloroethane	71-55-6	0.5	0.167	ug/kg	70-130	30	70-130	30	30			
Bromodichloromethane	75-27-4	0.5	0.109	ug/kg	70-130	30	70-130	30	30			
trans-1,3-Dichloropropene	10061-02-6	1	0.273	ug/kg	70-130	30	70-130	30	30			
cis-1,3-Dichloropropene	10061-01-5	0.5	0.158	ug/kg	70-130	30	70-130	30	30			
1,3-Dichloropropene, Total	542-75-6	0.5	0.158	ug/kg				30	30			
1,1-Dichloropropene	563-58-6	0.5	0.159	ug/kg	70-130	30	70-130	30	30			
Bromoform	75-25-2	4	0.246	ug/kg	70-130	30	70-130	30	30			
1,1,2,2-Tetrachloroethane	79-34-5	0.5	0.166	ug/kg	70-130	30	70-130	30	30			
Benzene	71-43-2	0.5	0.166	ug/kg	70-130	30	70-130	30	30			
Toluene	108-88-3	1	0.543	ug/kg	70-130	30	70-130	30	30			
Ethylbenzene	100-41-4	1	0.141	ug/kg	70-130	30	70-130	30	30			
Chloromethane	74-87-3	4	0.932	ug/kg	52-130	30	52-130	30	30			
Bromomethane	74-83-9	2	0.581	ug/kg	57-147	30	57-147	30	30			
Vinyl chloride	75-01-4	1	0.335	ug/kg	67-130	30	67-130	30	30			
Chloroethane	75-00-3	2	0.452	ug/kg	50-151	30	50-151	30	30			
1,1-Dichloroethene	75-35-4	1	0.238	ug/kg	65-135	30	65-135	30	30			
trans-1,2-Dichloroethene	156-60-5	1.5	0.137	ug/kg	70-130	30	70-130	30	30			
Trichloroethene	79-01-6	0.5	0.137	ug/kg	70-130	30	70-130	30	30			
1,2-Dichlorobenzene	95-50-1	2	0.144	ug/kg	70-130	30	70-130	30	30			
1,3-Dichlorobenzene	541-73-1	2	0.148	ug/kg	70-130	30	70-130	30	30			
1,4-Dichlorobenzene	106-46-7	2	0.171	ug/kg	70-130	30	70-130	30	30			
Methyl tert butyl ether	1634-04-4	2	0.201	ug/kg	66-130	30	66-130	30	30			
p/m-Xylene	179601-23-1	2	0.56	ug/kg	70-130	30	70-130	30	30			
o-Xylene	95-47-6	1	0.291	ug/kg	70-130	30	70-130	30	30			
Xylene (Total)	1330-20-7	1	0.291	ug/kg				30	30			
cis-1,2-Dichloroethene	156-59-2	1	0.175	ug/kg	70-130	30	70-130	30	30			
1,2-Dichloroethene (total)	540-59-0	1	0.137	ug/kg				30	30			
Dibromomethane	74-95-3	2	0.238	ug/kg	70-130	30	70-130	30	30			
1,4-Dichlorobutane	110-56-5	10	0.226	ug/kg	70-130	30	70-130	30	30			
1,2,3-Trichloropropane	96-18-4	2	0.127	ug/kg	68-130	30	68-130	30	30			
Styrene	100-42-5	1	0.196	ug/kg	70-130	30	70-130	30	30			

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VOCs - EPA 8260D/5035 High & Low (SOIL)

Holding Time: 14 days
Container/Sample Preservation: 1 - 1 Vial MeOH/2 Vial Water

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
Dichlorodifluoromethane	75-71-8	10	0.915	ug/kg	30-146	30	30-146	30	30			
Acetone	67-64-1	25	10	ug/kg	54-140	30	54-140	30	30			
Carbon disulfide	75-15-0	10	4.55	ug/kg	59-130	30	59-130	30	30			
2-Butanone	78-93-3	10	2.22	ug/kg	70-130	30	70-130	30	30			
Vinyl acetate	108-05-4	10	2.15	ug/kg	70-130	30	70-130	30	30			
4-Methyl-2-pentanone	108-10-1	10	1.28	ug/kg	70-130	30	70-130	30	30			
2-Hexanone	591-78-6	10	1.18	ug/kg	70-130	30	70-130	30	30			
Ethyl methacrylate	97-63-2	10	1.58	ug/kg	70-130	30	70-130	30	30			
Acrylonitrile	107-13-1	4	1.15	ug/kg	70-130	30	70-130	30	30			
Bromochloromethane	74-97-5	2	0.205	ug/kg	70-130	30	70-130	30	30			
Tetrahydrofuran	109-99-9	4	1.59	ug/kg	66-130	30	66-130	30	30			
2,2-Dichloropropane	594-20-7	2	0.202	ug/kg	70-130	30	70-130	30	30			
1,2-Dibromoethane	106-93-4	1	0.279	ug/kg	70-130	30	70-130	30	30			
1,3-Dichloropropane	142-28-9	2	0.167	ug/kg	69-130	30	69-130	30	30			
1,1,1,2-Tetrachloroethane	630-20-6	0.5	0.132	ug/kg	70-130	30	70-130	30	30			
Bromobenzene	108-86-1	2	0.145	ug/kg	70-130	30	70-130	30	30			
n-Butylbenzene	104-51-8	1	0.167	ug/kg	70-130	30	70-130	30	30			
sec-Butylbenzene	135-98-8	1	0.146	ug/kg	70-130	30	70-130	30	30			
tert-Butylbenzene	98-06-6	2	0.118	ug/kg	70-130	30	70-130	30	30			
o-Chlorotoluene	95-49-8	2	0.191	ug/kg	70-130	30	70-130	30	30			
p-Chlorotoluene	106-43-4	2	0.108	ug/kg	70-130	30	70-130	30	30			
1,2-Dibromo-3-chloropropane	96-12-8	3	0.998	ug/kg	68-130	30	68-130	30	30			
Hexachlorobutadiene	87-68-3	4	0.169	ug/kg	67-130	30	67-130	30	30			
Isopropylbenzene	98-82-8	1	0.109	ug/kg	70-130	30	70-130	30	30			
p-Isopropyltoluene	99-87-6	1	0.109	ug/kg	70-130	30	70-130	30	30			
Naphthalene	91-20-3	4	0.65	ug/kg	70-130	30	70-130	30	30			
n-Propylbenzene	103-65-1	1	0.171	ug/kg	70-130	30	70-130	30	30			
1,2,3-Trichlorobenzene	87-61-6	2	0.322	ug/kg	70-130	30	70-130	30	30			
1,2,4-Trichlorobenzene	120-82-1	2	0.272	ug/kg	70-130	30	70-130	30	30			
1,3,5-Trimethylbenzene	108-67-8	2	0.193	ug/kg	70-130	30	70-130	30	30			
1,2,4-Trimethylbenzene	95-63-6	2	0.334	ug/kg	70-130	30	70-130	30	30			
trans-1,4-Dichloro-2-butene	110-57-6	5	1.42	ug/kg	70-130	30	70-130	30	30			
Ethyl ether	60-29-7	2	0.341	ug/kg	67-130	30	67-130	30	30			
1,2-Dichloroethane-d4	17060-07-0										70-130	
Toluene-d8	2037-26-5										70-130	
4-Bromofluorobenzene	460-00-4										70-130	
Dibromofluoromethane	1868-53-7										70-130	

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Volatiles Sample Data

Results Summary

Form 1

Volatile Organics by GC/MS

Client : Impact Environmental
 Project Name : 585 UNION STREET
 Lab ID : L2332652-01
 Client ID : MW-9
 Sample Location : 585 UNION STREET
 Sample Matrix : WATER
 Analytical Method : 1,8260D
 Lab File ID : V22230612A12
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2332652
 Project Number : 14729
 Date Collected : 06/09/23 08:20
 Date Received : 06/09/23
 Date Analyzed : 06/12/23 14:38
 Dilution Factor : 1
 Analyst : PID
 Instrument ID : VOA122
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
71-43-2	Benzene	13	0.50	0.16	
108-88-3	Toluene	0.81	2.5	0.70	J
100-41-4	Ethylbenzene	1.2	2.5	0.70	J
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	1.8	2.5	0.70	J
95-47-6	o-Xylene	0.98	2.5	0.70	J
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	4.6	2.5	0.70	
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	ND	2.5	0.70	U
103-65-1	n-Propylbenzene	2.9	2.5	0.70	
108-67-8	1,3,5-Trimethylbenzene	ND	2.5	0.70	U
95-63-6	1,2,4-Trimethylbenzene	0.78	2.5	0.70	J

Results Summary

Form 1

Volatile Organics by GC/MS

Client : Impact Environmental
 Project Name : 585 UNION STREET
 Lab ID : L2332652-02
 Client ID : MW-10
 Sample Location : 585 UNION STREET
 Sample Matrix : WATER
 Analytical Method : 1,8260D
 Lab File ID : V22230613A27
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2332652
 Project Number : 14729
 Date Collected : 06/09/23 09:20
 Date Received : 06/09/23
 Date Analyzed : 06/13/23 17:24
 Dilution Factor : 1
 Analyst : MJV
 Instrument ID : VOA122
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	ND	2.5	0.70	U
103-65-1	n-Propylbenzene	ND	2.5	0.70	U
108-67-8	1,3,5-Trimethylbenzene	ND	2.5	0.70	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.70	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Impact Environmental
 Project Name : 585 UNION STREET
 Lab ID : WG1790520-5
 Client ID : WG1790520-5BLANK
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8260D
 Lab File ID : V22230612A05
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2332652
 Project Number : 14729
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 06/12/23 11:45
 Dilution Factor : 1
 Analyst : PID
 Instrument ID : VOA122
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	ND	2.5	0.70	U
103-65-1	n-Propylbenzene	ND	2.5	0.70	U
108-67-8	1,3,5-Trimethylbenzene	ND	2.5	0.70	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.70	U

Results Summary

Form 1

Volatile Organics by GC/MS

Client : Impact Environmental
 Project Name : 585 UNION STREET
 Lab ID : WG1790988-5
 Client ID : WG1790988-5BLANK
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8260D
 Lab File ID : V22230613A07
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2332652
 Project Number : 14729
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 06/13/23 09:11
 Dilution Factor : 1
 Analyst : PID
 Instrument ID : VOA122
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	ND	2.5	0.70	U
103-65-1	n-Propylbenzene	ND	2.5	0.70	U
108-67-8	1,3,5-Trimethylbenzene	ND	2.5	0.70	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.70	U

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230612A\
 Data File : V22230612A12.D
 Acq On : 12 Jun 2023 02:38 pm
 Operator : VOA122:PID
 Sample : L2332652-01,31,10,10,,A,R3C
 Misc : WG1790520,ICAL19961 (Sig #1); WG,ICAL19961 (Sig #2)
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 12 16:08:21 2023
 Quant Method : K:\VOA122\2023\230612A\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 16:18:21 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA122\2023\230612A\V22230612A01.D
 Sub List : 8260-NYCP51 - NYCP51

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

Internal Standards						
1) Fluorobenzene	6.284	96	280043	10.000	ug/L	0.00
Standard Area 1 = 239558			Recovery	=	116.90%	
62) Chlorobenzene-d5	9.866	117	278847	10.000	ug/L	0.00
Standard Area 1 = 233642			Recovery	=	119.35%	
83) 1,4-Dichlorobenzene-d4	12.501	152	134222	10.000	ug/L	0.00
Standard Area 1 = 127139			Recovery	=	105.57%	
System Monitoring Compounds						
38) Dibromofluoromethane	5.453	113	81602	8.652	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	86.52%	
46) 1,2-Dichloroethane-d4	5.996	65	86200	10.356	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	103.56%	
63) Toluene-d8	8.001	98	351564	10.198	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	101.98%	
87) 4-Bromofluorobenzene	11.317	95	116980	10.302	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	103.02%	
Target Compounds						
						Qvalue
21) Methyl tert-butyl ether	3.955	73	621	0.097	ug/L	# 1
44) Benzene	5.863	78	197921	13.342	ug/L	95
64) Toluene	8.060	92	8866	0.807	ug/L	91
78) Ethylbenzene	9.929	91	26249	1.176	ug/L	94
80) p/m Xylene	10.112	106	15331	1.755	ug/L	86
81) o Xylene	10.635	106	8184	0.980	ug/L	90
86) Isopropylbenzene	11.008	105	93282	4.641	ug/L	98
89) n-Propylbenzene	11.476	91	68835	2.919	ug/L	98
94) 1,3,5-Trimethylbenzene	11.690	105	6669	0.393	ug/L	95
98) tert-Butylbenzene	12.021	119	3696	0.216	ug/L	89
101) 1,2,4-Trimethylbenzene	12.097	105	13104	0.780	ug/L	96
102) sec-Butylbenzene	12.209	105	12652	0.621	ug/L	85
103) p-Isopropyltoluene	12.362	119	2701	0.151	ug/L	# 86
107) n-Butylbenzene	12.787	91	3602	0.238	ug/L	# 87
114) Naphthalene	14.624	128	2097	0.172	ug/L	100

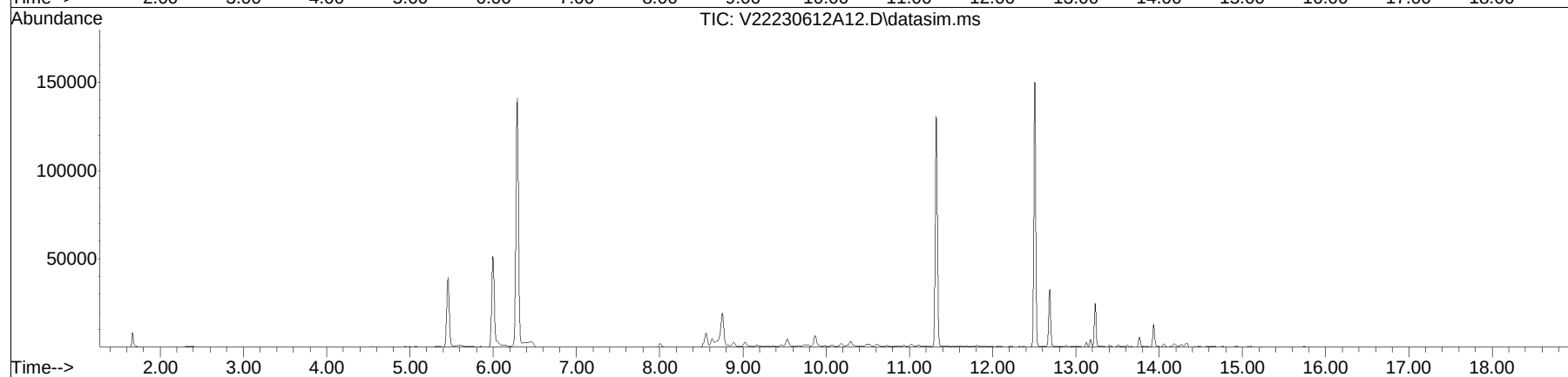
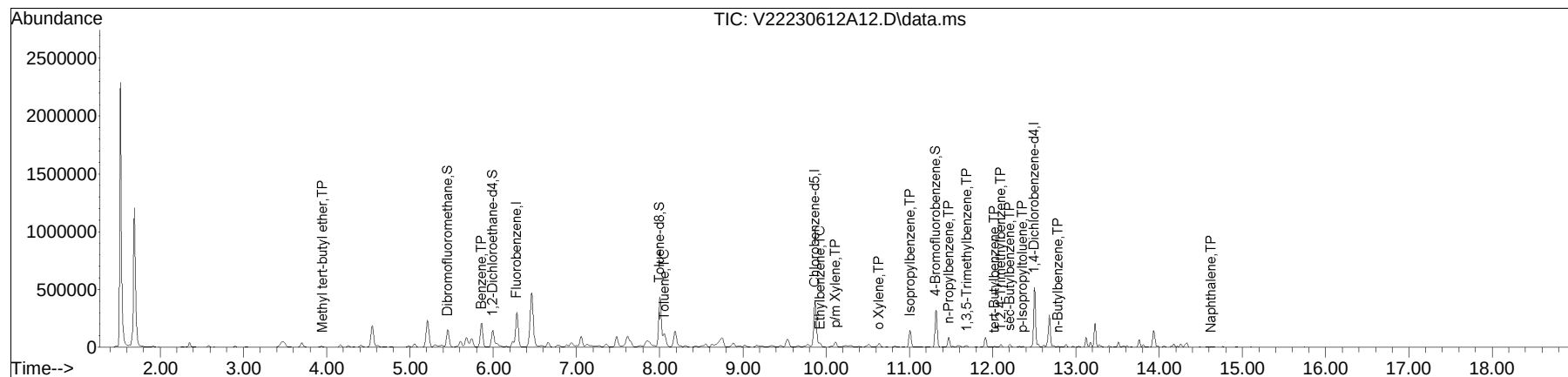
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230612A\
 Data File : V22230612A12.D
 Acq On : 12 Jun 2023 02:38 pm
 Operator : VOA122:PID
 Sample : L2332652-01,31,10,10,,A,R3C
 Misc : WG1790520,ICAL19961 (Sig #1); WG,ICAL19961 (Sig #2)
 ALS Vial : 12 Sample Multiplier: 1

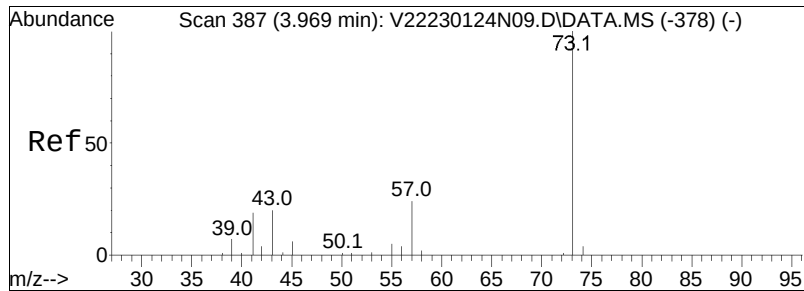
Quant Time: Jun 12 16:08:21 2023
 Quant Method : K:\VOA122\2023\230612A\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 16:18:21 2023
 Response via : Initial Calibration

Sub List : 8260-NYCP51 - NYCP5130612A\V22230612A01.D•



V122_230425N_8260.m Tue Jun 13 07:17:00 2023

Page: 2



#21

Methyl tert-butyl ether

Concen: 0.10 ug/L

RT: 3.955 min Scan# 385

Delta R.T. -0.014 min

Lab File: V22230612A12.D

Acq: 12 Jun 2023 02:38 pm

Tgt Ion: 73 Resp: 621

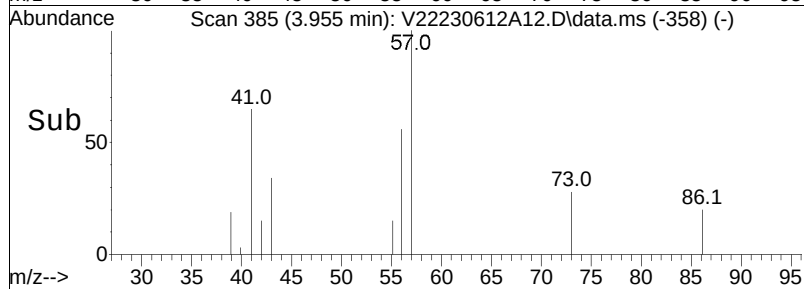
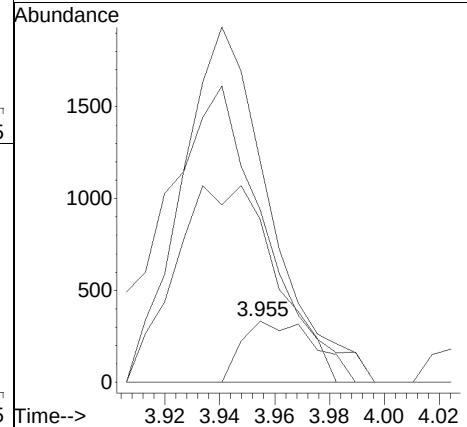
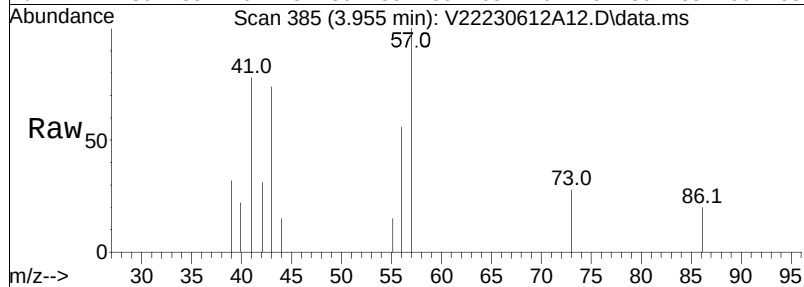
Ion Ratio Lower Upper

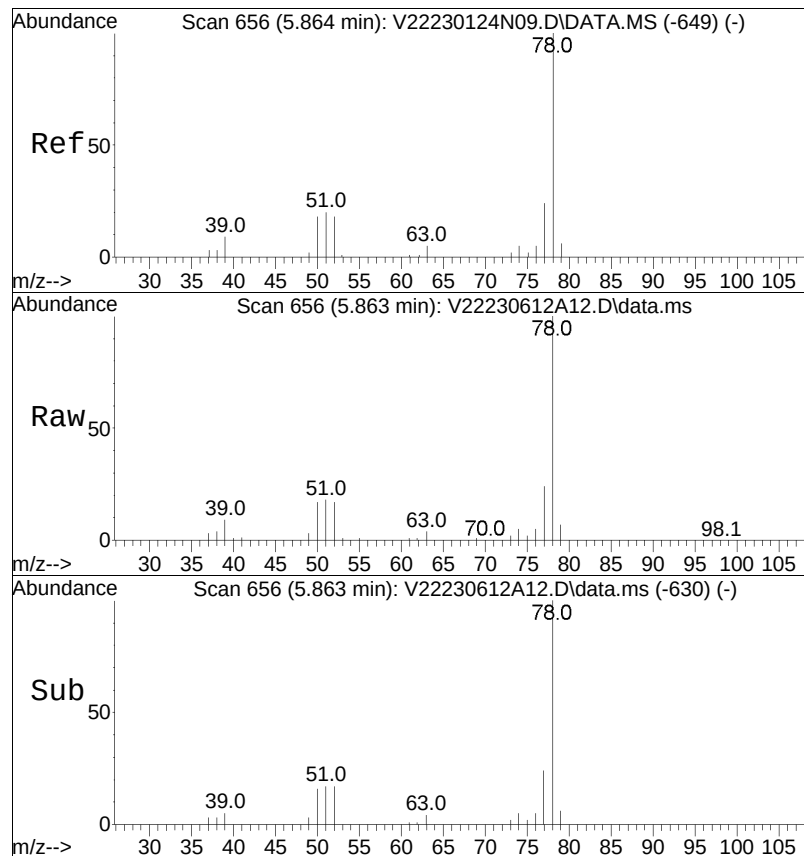
73 100

57 696.3 13.6 28.2#

43 444.8 12.7 26.5#

41 706.3 11.4 23.8#





#44

Benzene

Concen: 13.34 ug/L

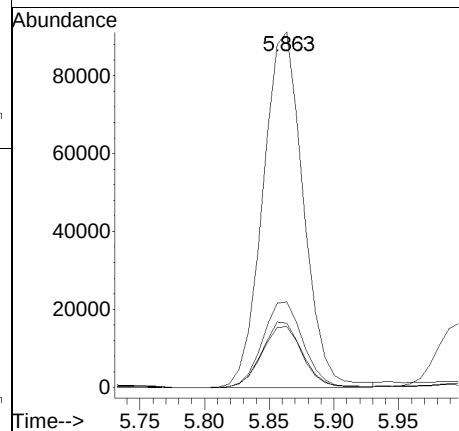
RT: 5.863 min Scan# 656

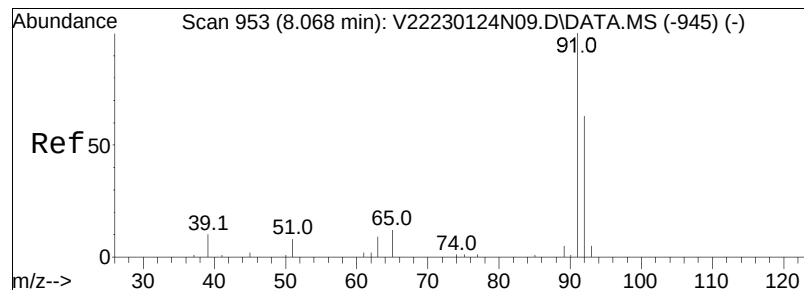
Delta R.T. -0.000 min

Lab File: V22230612A12.D

Acq: 12 Jun 2023 02:38 pm

Tgt Ion:	78	Resp:	197921
Ion	Ratio	Lower	Upper
78	100		
77	24.3	15.4	32.0
51	18.5	9.8	20.4
52	17.5	9.2	19.2





#64

Toluene

Concen: 0.81 ug/L

RT: 8.060 min Scan# 952

Delta R.T. -0.008 min

Lab File: V22230612A12.D

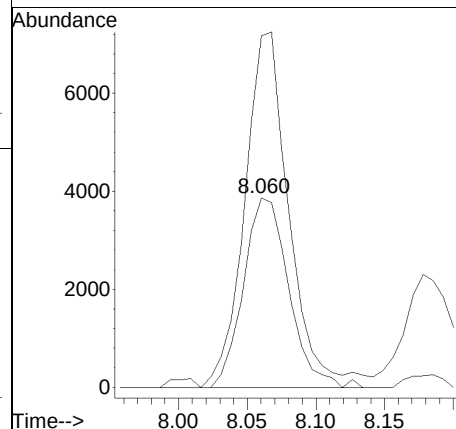
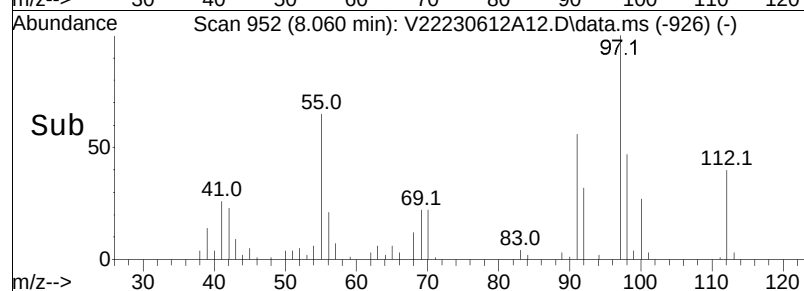
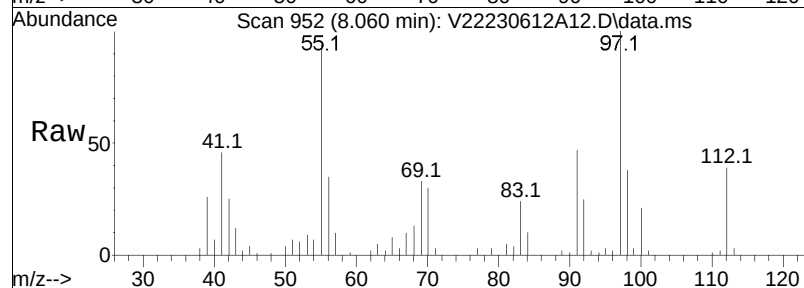
Acq: 12 Jun 2023 02:38 pm

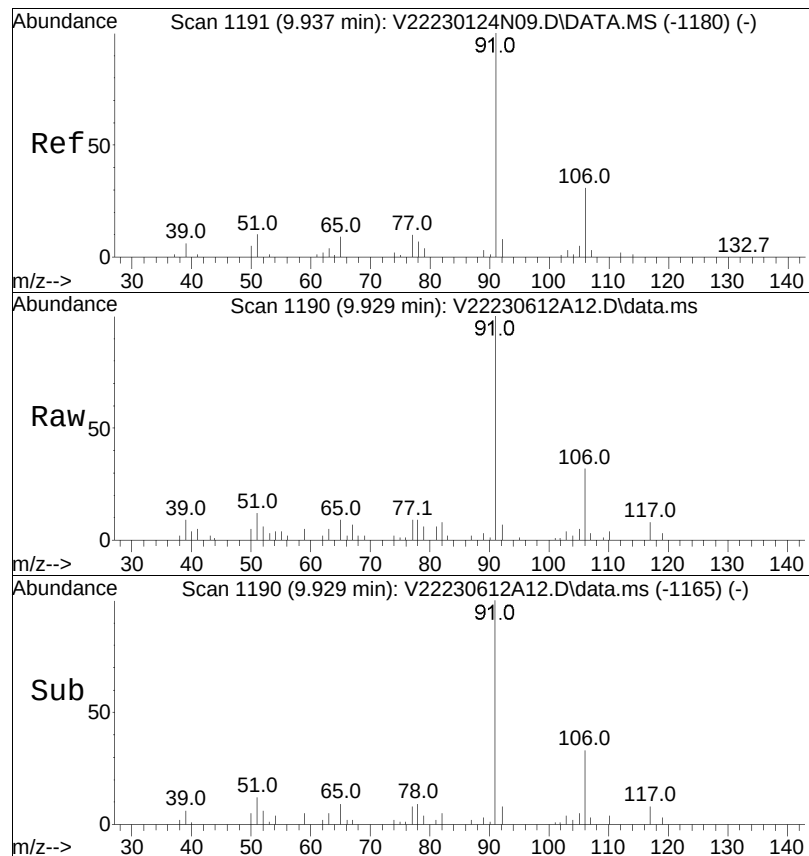
Tgt Ion: 92 Resp: 8866

Ion Ratio Lower Upper

92 100

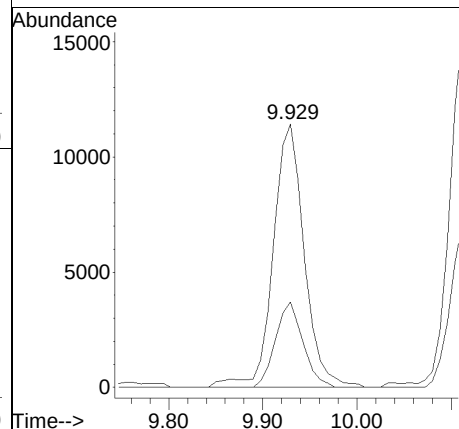
91 184.0 137.0 205.6

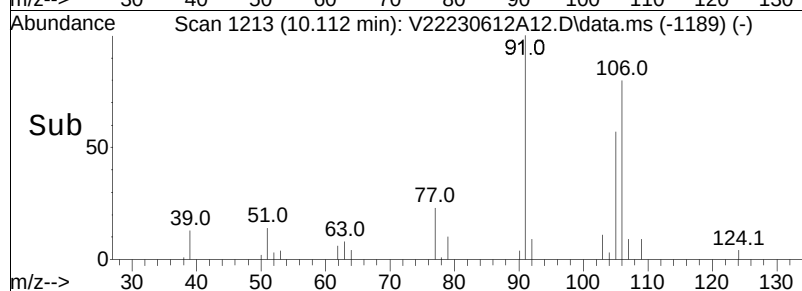
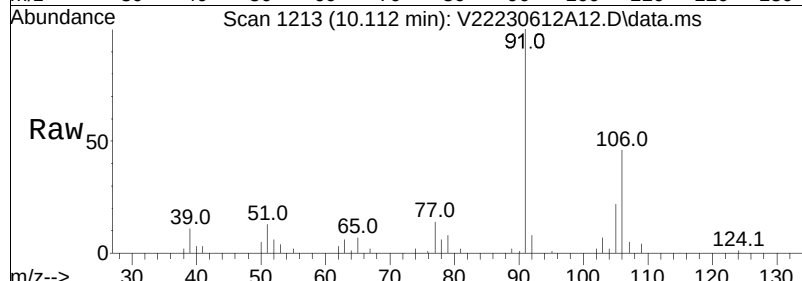
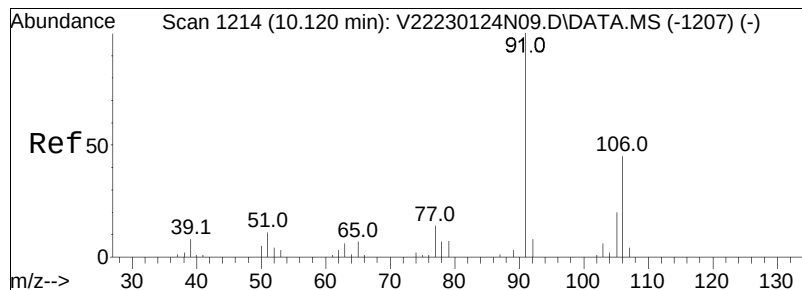




#78
 Ethylbenzene
 Concen: 1.18 ug/L
 RT: 9.929 min Scan# 1190
 Delta R.T. 0.000 min
 Lab File: V22230612A12.D
 Acq: 12 Jun 2023 02:38 pm

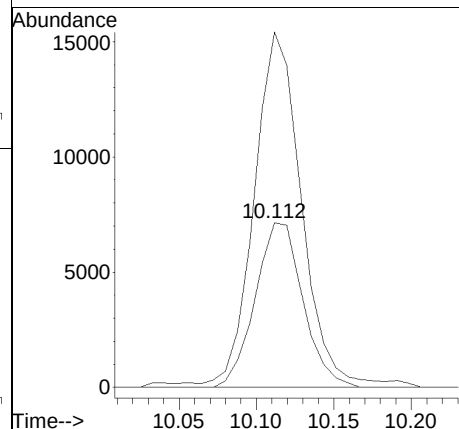
Tgt Ion	Ratio	Lower	Upper
91	100		
106	28.6	25.8	38.6

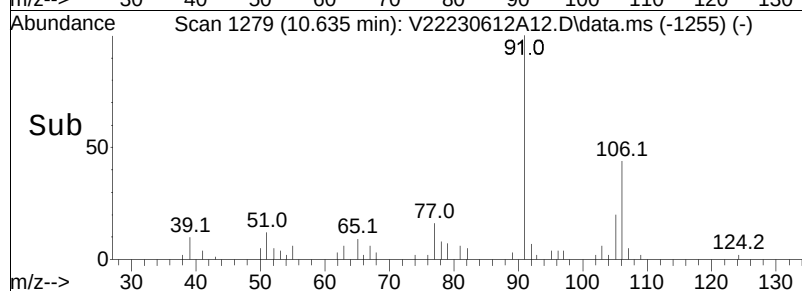
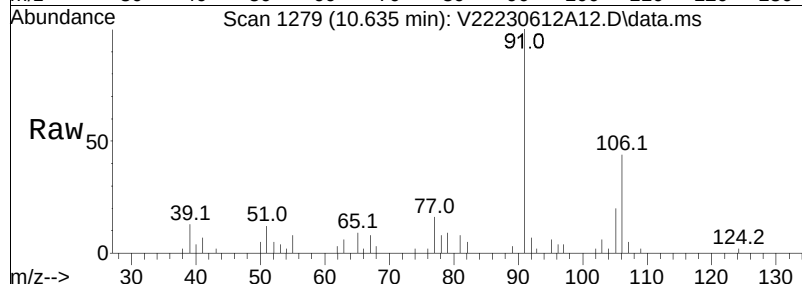
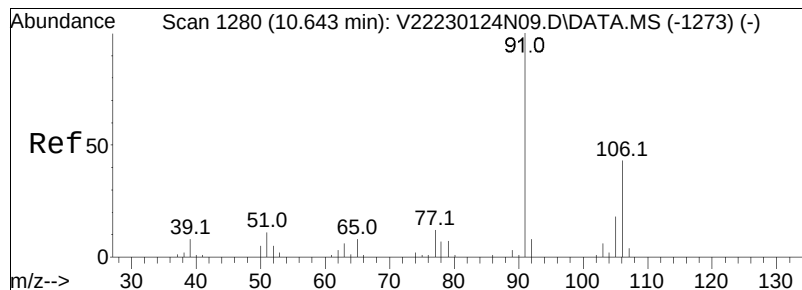




#80
 p/m Xylene
 Concen: 1.75 ug/L
 RT: 10.112 min Scan# 1213
 Delta R.T. -0.008 min
 Lab File: V22230612A12.D
 Acq: 12 Jun 2023 02:38 pm

Tgt Ion	Ratio	Lower	Upper
106	100		
91	216.1	156.0	234.0





#81

o Xylene

Concen: 0.98 ug/L

RT: 10.635 min Scan# 1279

Delta R.T. -0.008 min

Lab File: V22230612A12.D

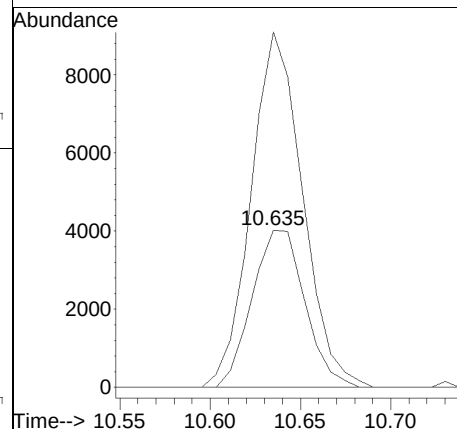
Acq: 12 Jun 2023 02:38 pm

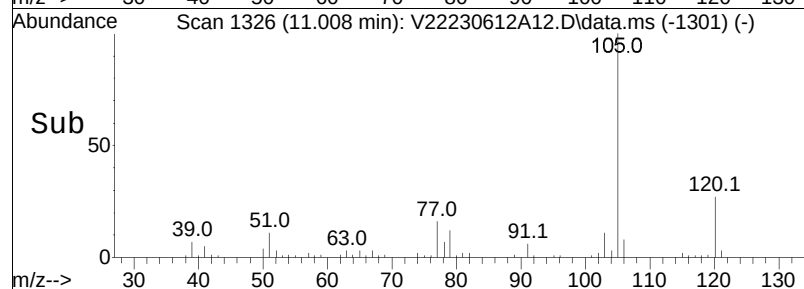
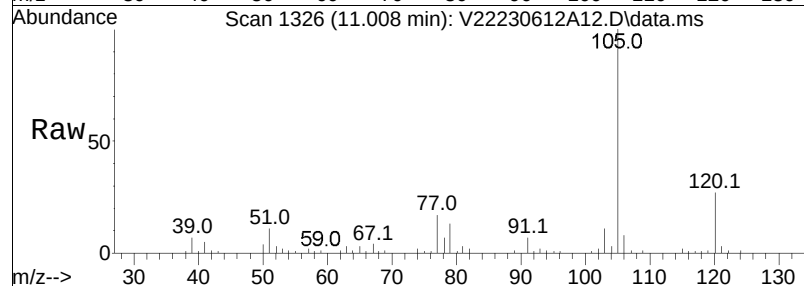
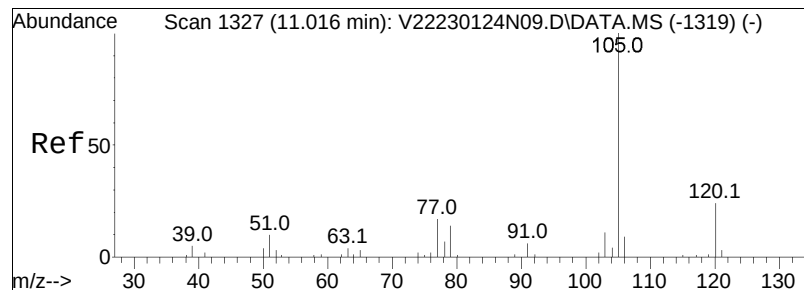
Tgt Ion:106 Resp: 8184

Ion Ratio Lower Upper

106 100

91 220.8 164.0 246.0





#86

Isopropylbenzene

Concen: 4.64 ug/L

RT: 11.008 min Scan# 1326

Delta R.T. -0.000 min

Lab File: V22230612A12.D

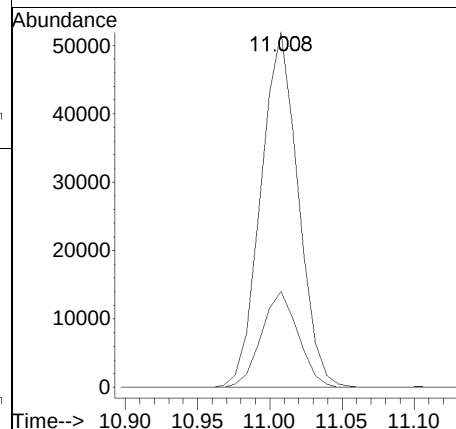
Acq: 12 Jun 2023 02:38 pm

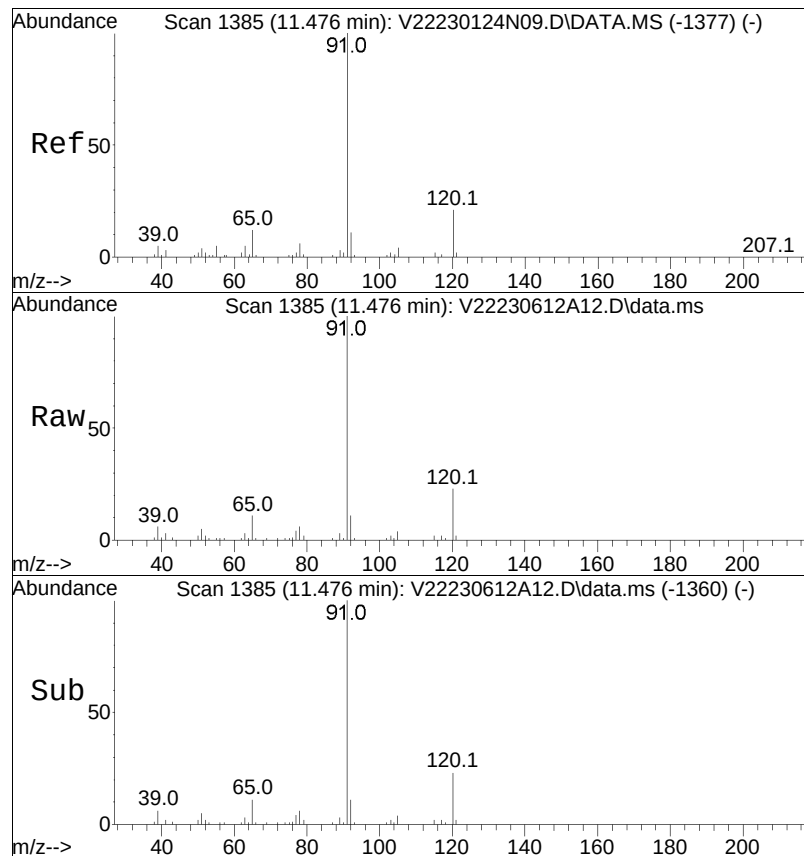
Tgt Ion:105 Resp: 93282

Ion Ratio Lower Upper

105 100

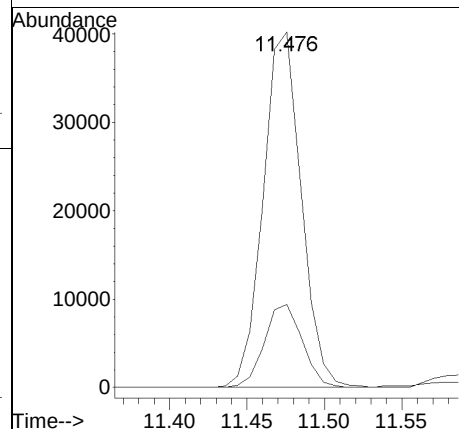
120 26.6 7.7 47.7

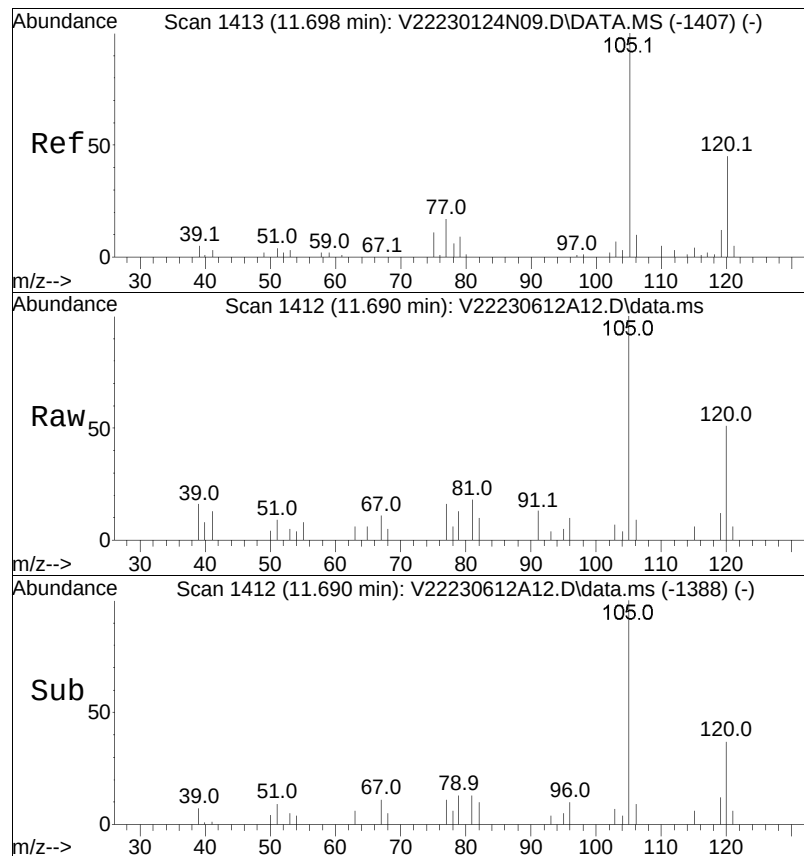




#89
 n-Propylbenzene
 Concen: 2.92 ug/L
 RT: 11.476 min Scan# 1385
 Delta R.T. -0.000 min
 Lab File: V22230612A12.D
 Acq: 12 Jun 2023 02:38 pm

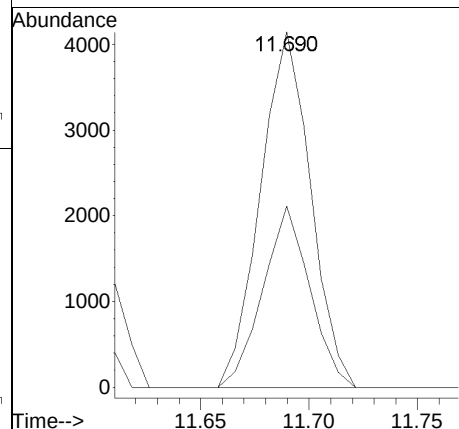
Tgt Ion	Ratio	Resp	Lower	Upper
91	100	68835		
120	23.2		19.5	29.3

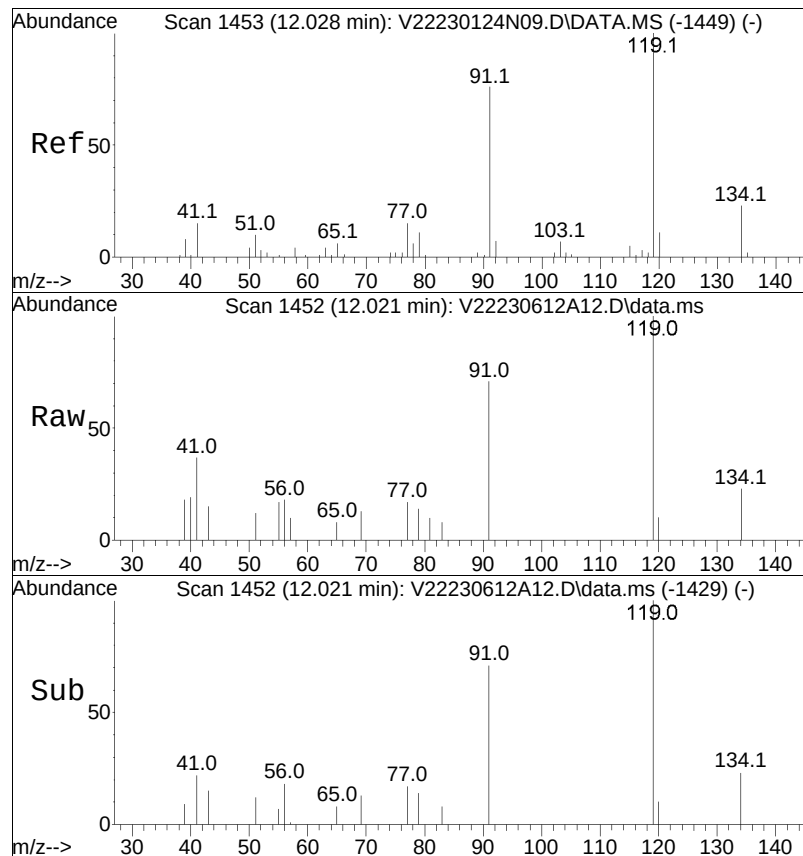




#94
 1,3,5-Trimethylbenzene
 Concen: 0.39 ug/L
 RT: 11.690 min Scan# 1412
 Delta R.T. -0.008 min
 Lab File: V22230612A12.D
 Acq: 12 Jun 2023 02:38 pm

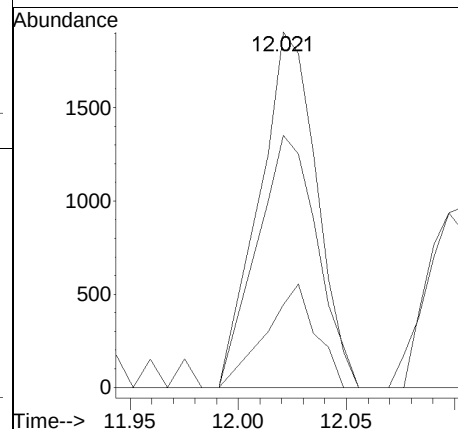
Tgt Ion	Ratio	Lower	Upper
105	100		
120	47.7	40.9	61.3

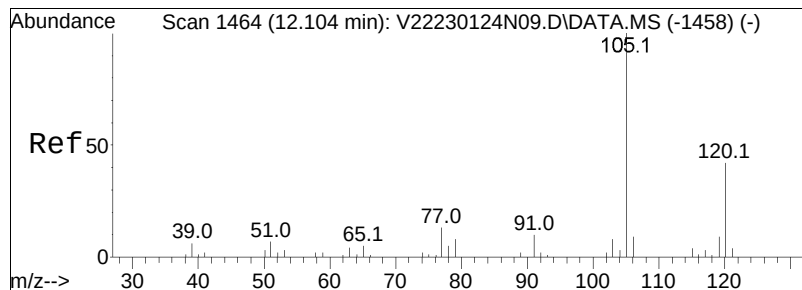




#98
 tert-Butylbenzene
 Concen: 0.22 ug/L
 RT: 12.021 min Scan# 1452
 Delta R.T. -0.007 min
 Lab File: V22230612A12.D
 Acq: 12 Jun 2023 02:38 pm

Tgt	Ion	Ratio	Resp	Lower	Upper
119	100		3696		
91	74.1	50.2		75.4	
134	26.5	20.8		31.2	





#101

1,2,4-Trimethylbenzene

Concen: 0.78 ug/L

RT: 12.097 min Scan# 1463

Delta R.T. -0.007 min

Lab File: V22230612A12.D

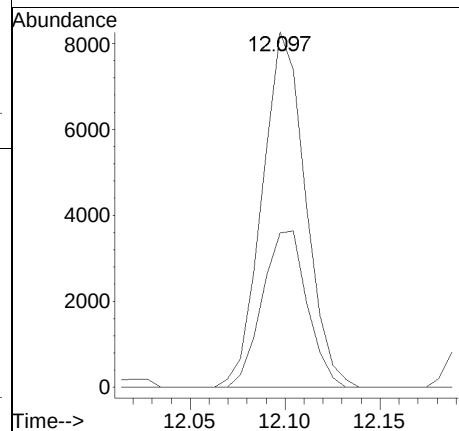
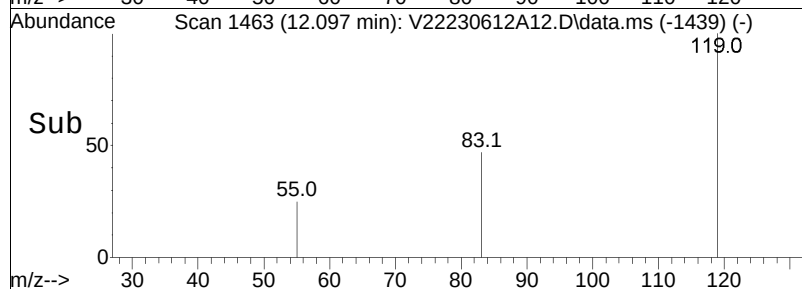
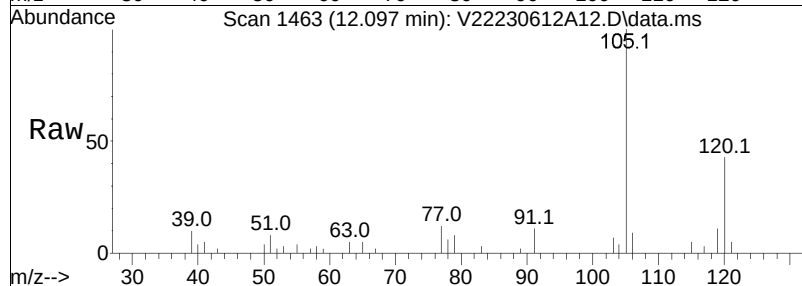
Acq: 12 Jun 2023 02:38 pm

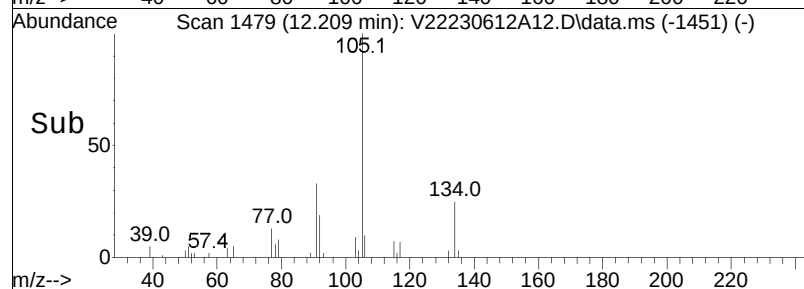
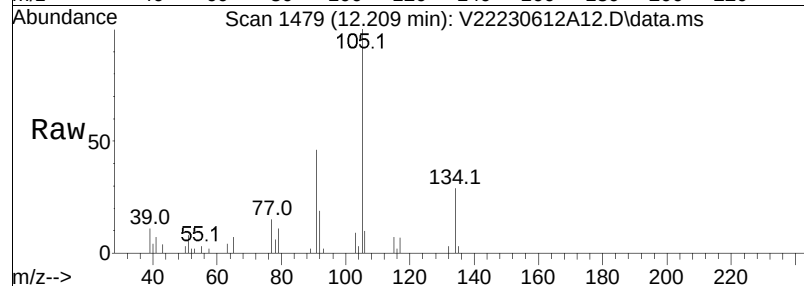
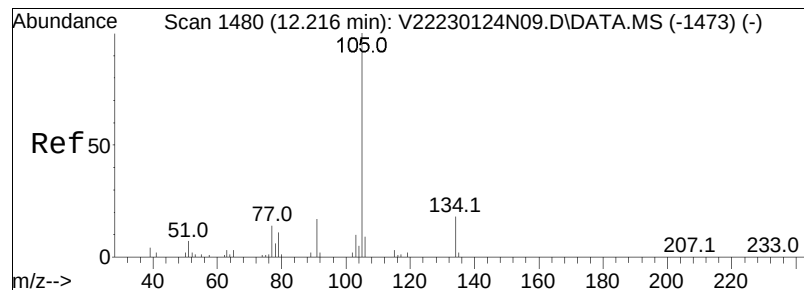
Tgt Ion:105 Resp: 13104

Ion Ratio Lower Upper

105 100

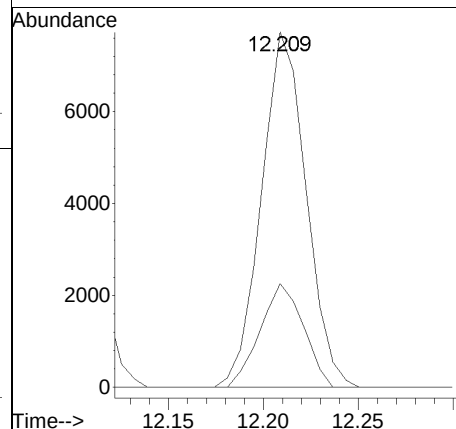
120 45.6 38.5 57.7

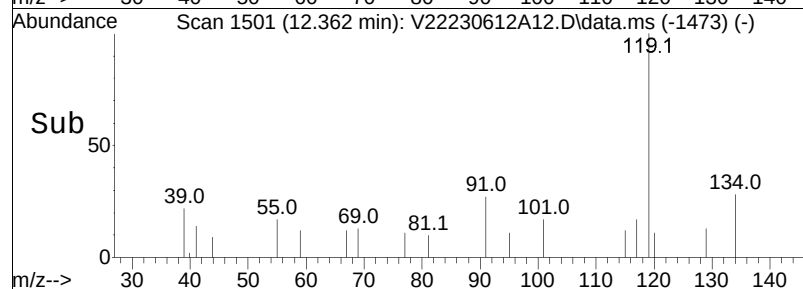
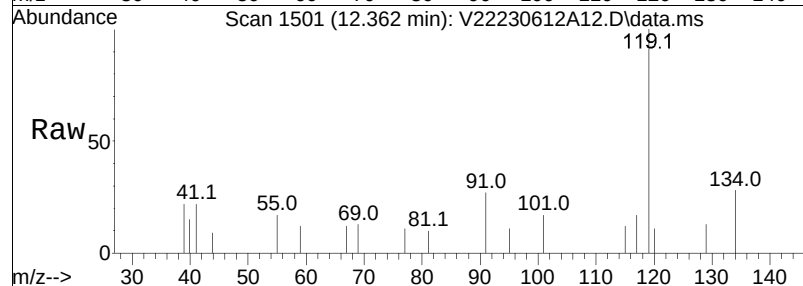
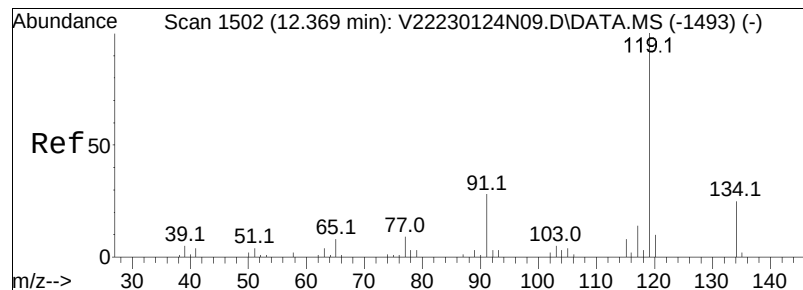




#102
 sec-Butylbenzene
 Concen: 0.62 ug/L
 RT: 12.209 min Scan# 1479
 Delta R.T. -0.007 min
 Lab File: V22230612A12.D
 Acq: 12 Jun 2023 02:38 pm

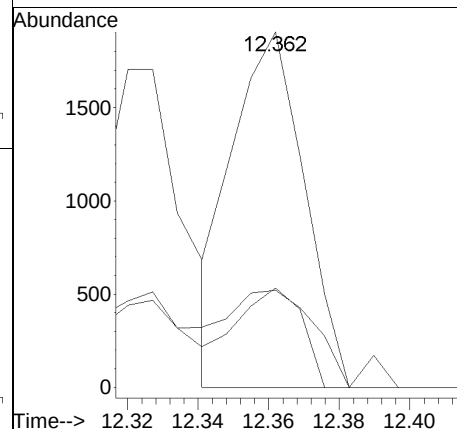
Tgt Ion	Ratio	Lower	Upper
105	100		
134	28.3	13.9	28.9

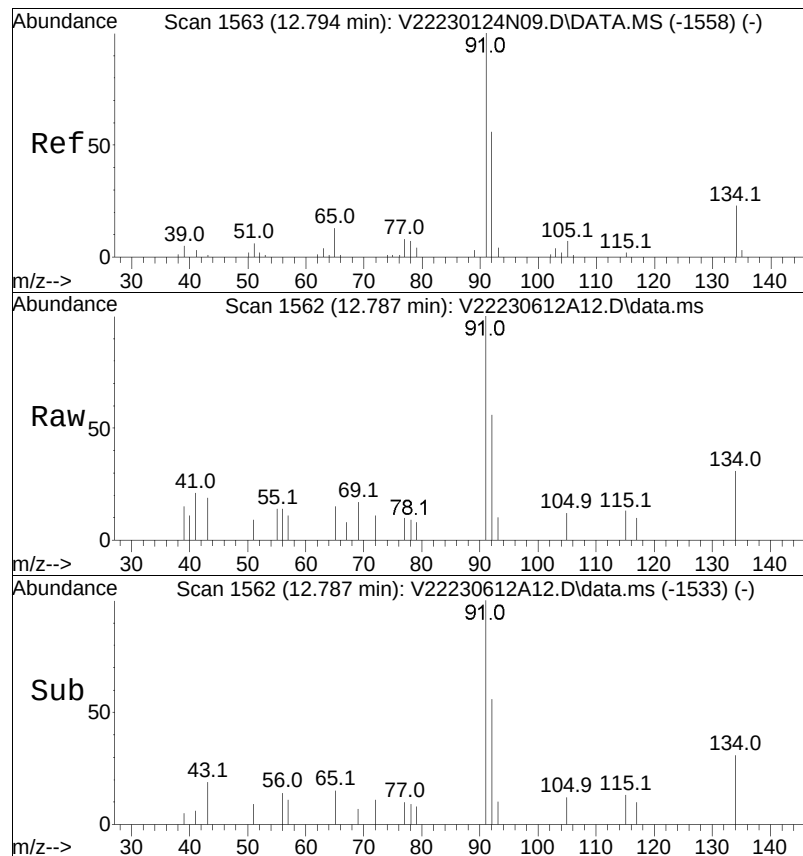




#103
 p-Isopropyltoluene
 Concen: 0.15 ug/L
 RT: 12.362 min Scan# 1501
 Delta R.T. -0.007 min
 Lab File: V22230612A12.D
 Acq: 12 Jun 2023 02:38 pm

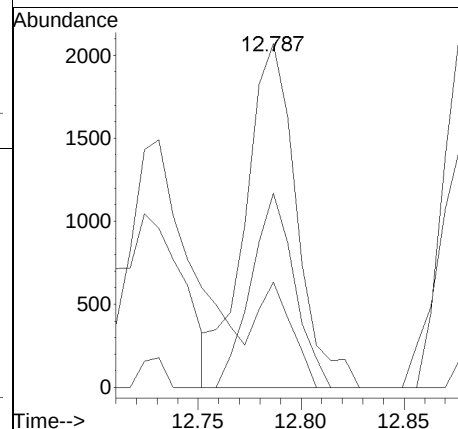
Tgt Ion	Ratio	Lower	Upper
119	100		
134	25.9	17.7	36.7
91	35.1	14.1	29.3

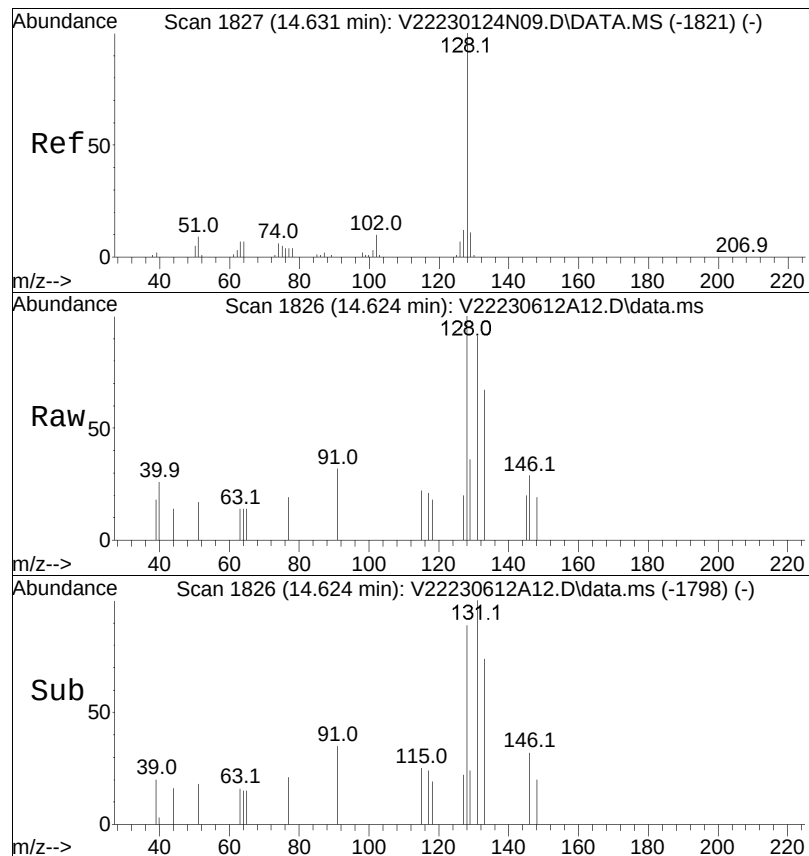




#107
 n-Butylbenzene
 Concen: 0.24 ug/L
 RT: 12.787 min Scan# 1562
 Delta R.T. -0.000 min
 Lab File: V22230612A12.D
 Acq: 12 Jun 2023 02:38 pm

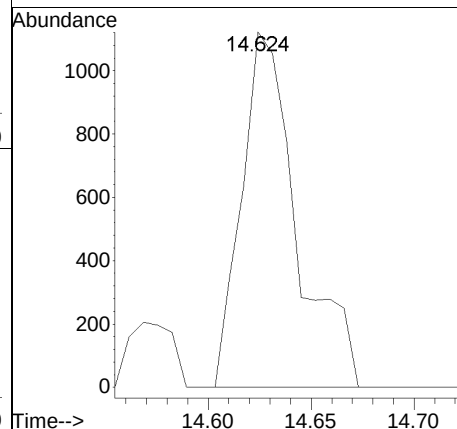
Tgt Ion:	91	Resp:	3602
Ion Ratio	Lower	Upper	
91	100		
92	47.7	44.6	66.8
134	20.2	22.9	34.3#





#114
 Naphthalene
 Concen: 0.17 ug/L
 RT: 14.624 min Scan# 1826
 Delta R.T. -0.007 min
 Lab File: V22230612A12.D
 Acq: 12 Jun 2023 02:38 pm

Tgt Ion:128 Resp: 2097



Manual Integration Report

Data Path : K:\V0A122\2023\230612A\ QMethod : V122_230425N_8260.m
Data File : V22230612A12.D Operator : V0A122:PID
Date Inj'd : 6/12/2023 2:38 pm Instrument : V0A122
Sample : L2332652-01,31,10,10,,A,R3Quant Date : 6/12/2023 4:08 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230613A\
 Data File : V22230613A27.D
 Acq On : 13 Jun 2023 05:24 pm
 Operator : VOA122:mjv
 Sample : L2332652-02,31,10,10,,A,R3C
 Misc : WG1790988,ICAL19961
 ALS Vial : 27 Sample Multiplier: 1

Quant Time: Jun 14 06:08:45 2023
 Quant Method : K:\VOA122\2023\230613A\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 16:18:21 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA122\2023\230613A\V22230613A02.D
 Sub List : 8260-NYCP51 - NYCP51

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

Internal Standards						
1) Fluorobenzene	6.285	96	221671	10.000	ug/L	0.00
Standard Area 1 = 250466			Recovery	=	88.50%	
62) Chlorobenzene-d5	9.866	117	240948	10.000	ug/L	0.00
Standard Area 1 = 241286			Recovery	=	99.86%	
83) 1,4-Dichlorobenzene-d4	12.501	152	122641	10.000	ug/L	0.00
Standard Area 1 = 129668			Recovery	=	94.58%	
System Monitoring Compounds						
38) Dibromofluoromethane	5.454	113	78175	10.472	ug/L	0.00
Spiked Amount 10.000	Range	70 - 130	Recovery	=	104.72%	
46) 1,2-Dichloroethane-d4	5.997	65	75770	11.500	ug/L	0.00
Spiked Amount 10.000	Range	70 - 130	Recovery	=	115.00%	
63) Toluene-d8	8.001	98	285437	9.582	ug/L	0.00
Spiked Amount 10.000	Range	70 - 130	Recovery	=	95.82%	
87) 4-Bromofluorobenzene	11.317	95	109199	10.525	ug/L	0.00
Spiked Amount 10.000	Range	70 - 130	Recovery	=	105.25%	
Target Compounds						
21) Methyl tert-butyl ether	3.962	73	213	N.D.		
44) Benzene	0.000		0	N.D.		
64) Toluene	8.068	92	946	0.100	ug/L	83
78) Ethylbenzene	9.866	91	545	N.D.		
80) p/m Xylene	10.120	106	79	N.D.		
81) o Xylene	0.000		0	N.D.		
86) Isopropylbenzene	11.008	105	1079	N.D.		
89) n-Propylbenzene	11.476	91	934	N.D.		
94) 1,3,5-Trimethylbenzene	11.690	105	87	N.D.		
98) tert-Butylbenzene	12.021	119	2339	0.149	ug/L	# 84
101) 1,2,4-Trimethylbenzene	0.000		0	N.D.	d	
102) sec-Butylbenzene	12.216	105	411	N.D.		
103) p-Isopropyltoluene	12.362	119	928	N.D.		
107) n-Butylbenzene	12.787	91	162	N.D.		
114) Naphthalene	14.624	128	1351	0.122	ug/L	100

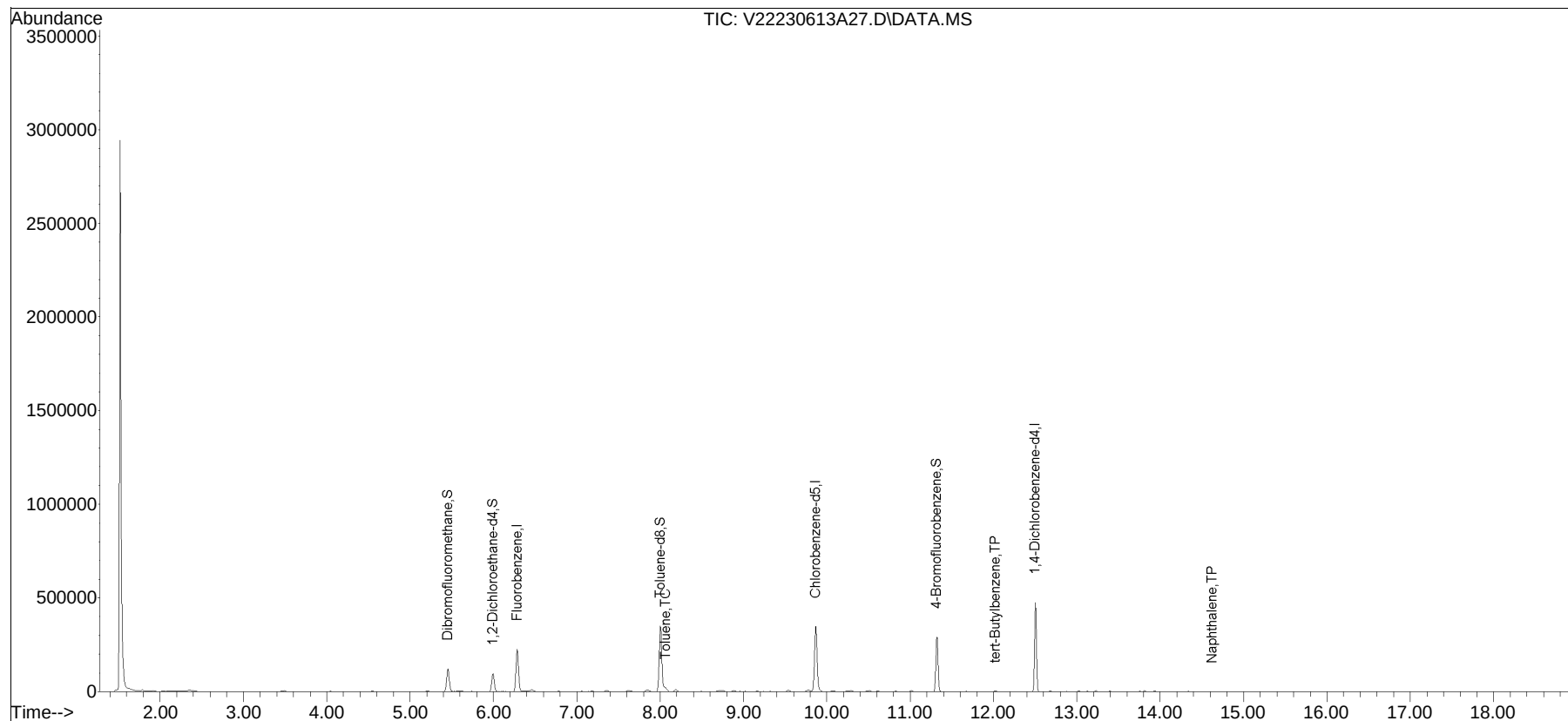
(#) = qualifier out of range (m) = manual integration (+) = signals summed

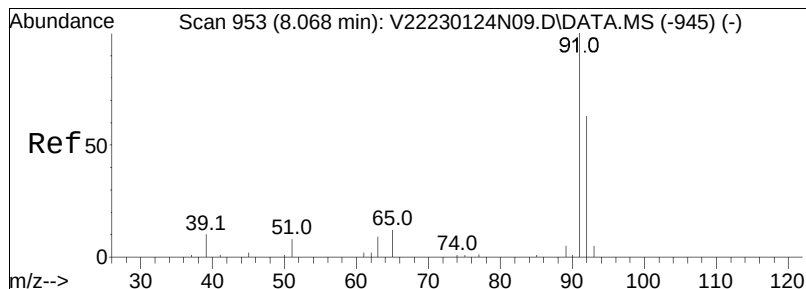
Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230613A\
 Data File : V22230613A27.D
 Acq On : 13 Jun 2023 05:24 pm
 Operator : VOA122:mjv
 Sample : L2332652-02,31,10,10,,A,R3C
 Misc : WG1790988,ICAL19961
 ALS Vial : 27 Sample Multiplier: 1

Quant Time: Jun 14 06:08:45 2023
 Quant Method : K:\VOA122\2023\230613A\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 16:18:21 2023
 Response via : Initial Calibration

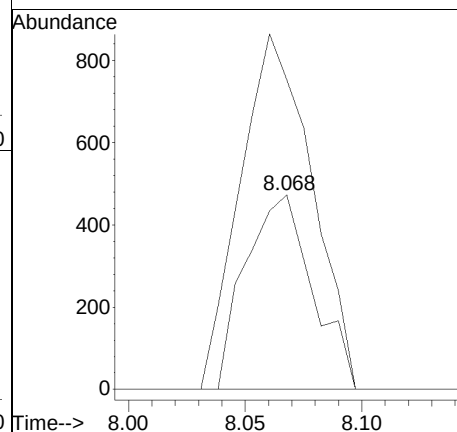
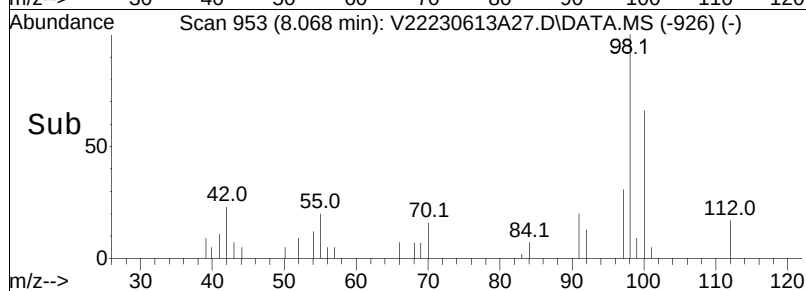
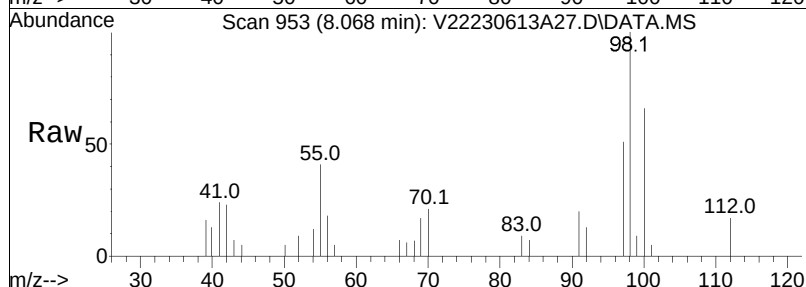
Sub List : 8260-NYCP51 - NYCP5130613A\V22230613A02.D•

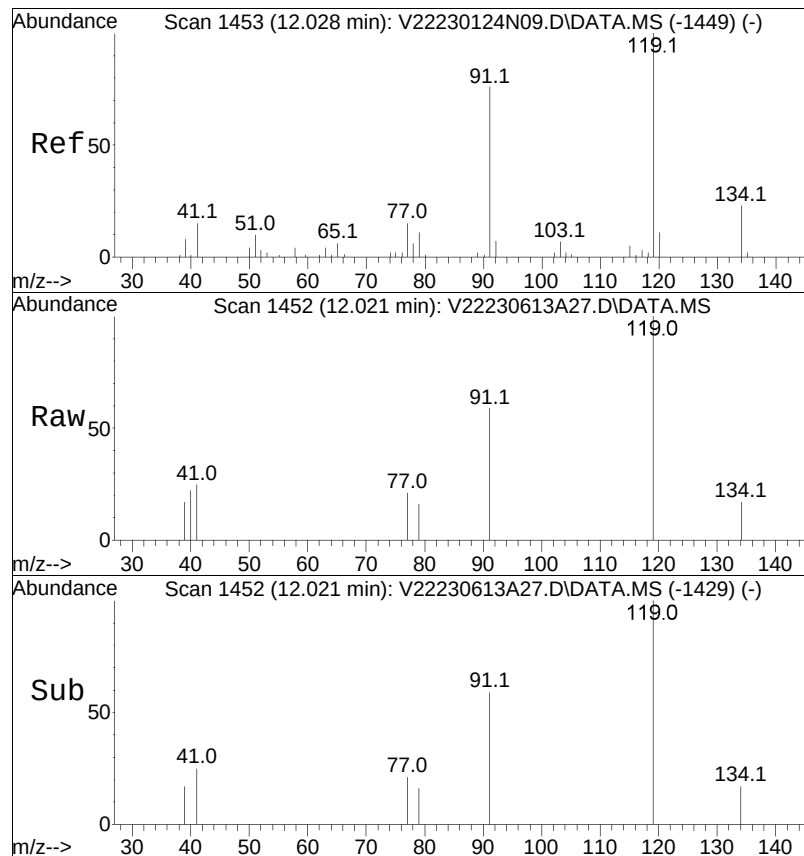




#64
Toluene
Concen: 0.10 ug/L
RT: 8.068 min Scan# 953
Delta R.T. -0.000 min
Lab File: V22230613A27.D
Acq: 13 Jun 2023 05:24 pm

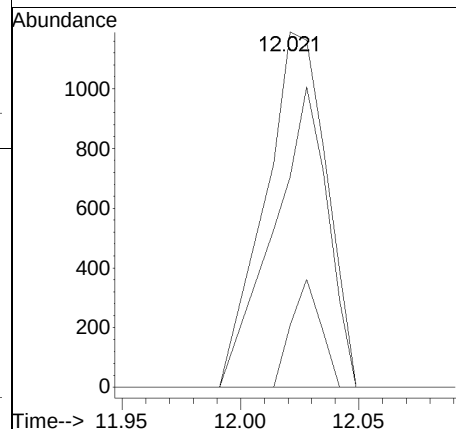
Tgt Ion: 92 Resp: 946
Ion Ratio Lower Upper
92 100
91 195.1 137.0 205.6

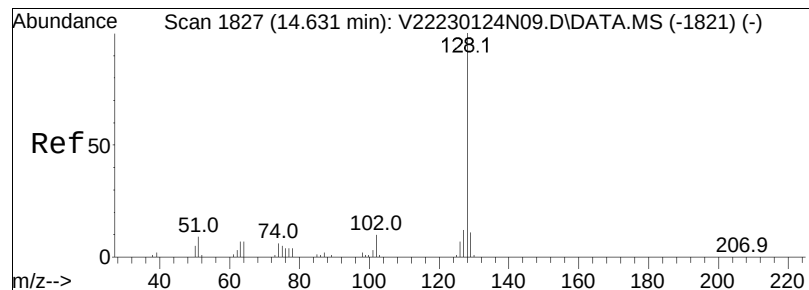




#98
 tert-Butylbenzene
 Concen: 0.15 ug/L
 RT: 12.021 min Scan# 1452
 Delta R.T. -0.007 min
 Lab File: V22230613A27.D
 Acq: 13 Jun 2023 05:24 pm

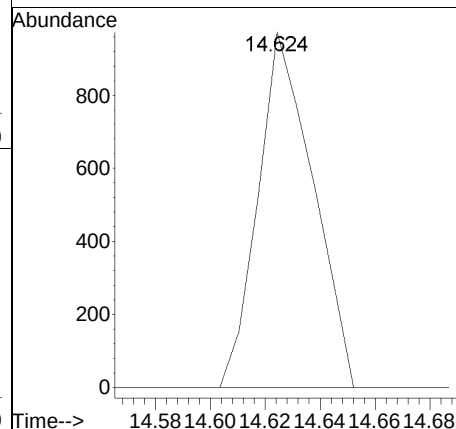
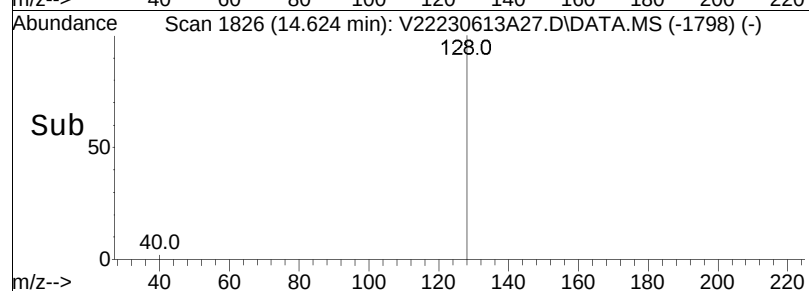
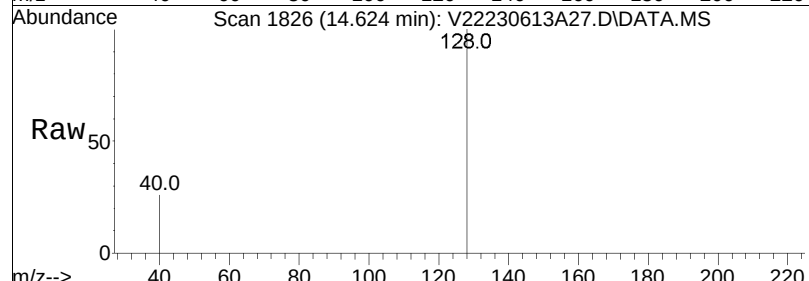
Tgt Ion	Ratio	Lower	Upper
119	100		
91	75.7	50.2	75.4#
134	18.6	20.8	31.2#





#114
Naphthalene
Concen: 0.12 ug/L
RT: 14.624 min Scan# 1826
Delta R.T. -0.007 min
Lab File: V22230613A27.D
Acq: 13 Jun 2023 05:24 pm

Tgt Ion:128 Resp: 1351



Manual Integration Report

Data Path : K:\V0A122\2023\230613A\ QMethod : V122_230425N_8260.m
Data File : V22230613A27.D Operator : V0A122:mjv
Date Inj'd : 6/13/2023 5:24 pm Instrument : V0A122
Sample : L2332652-02,31,10,10,,A,R3Quant Date : 6/14/2023 5:57 am

There are no manual integrations or false positives in this file.

Volatiles Standards Data

Initial Calibration

Initial Calibration Summary

Form 6

Volatiles

Client : Impact Environmental
 Project Name : 585 UNION STREET
 Instrument ID : VOA122
 Calibration dates : 04/25/23 18:36 04/25/23 22:41

Lab Number : L2332652
 Project Number : 14729
 Ical Ref : ICAL19961

Calibration Files

L11 =V22230425N03.D L1 =V22230425N05.D L2 =V22230425N07.D L3 =V22230425N09.D L4 =V22230425N10.D
 L6 =V22230425N11.D L8 =V22230425N12.D L10 =V22230425N13.D

Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
1) I Fluorobenzene	-----ISTD-----									
2) TP Dichlorodifluo		0.132	0.163	0.157	0.144	0.130	0.134	0.127	0.141	10.11
3) TP Chloromethane		0.168	0.182	0.180	0.167	0.151	0.153	0.147	0.164	8.51
4) TC Vinyl chloride	0.197	0.194	0.216	0.214	0.197	0.179	0.182	0.175	0.194	7.92
5) TP Bromomethane		0.139	0.170	0.154	0.148	0.140	0.145	0.143	0.148	7.42
6) TP Chloroethane		0.182	0.152	0.143	0.127	0.121	0.125	0.125	0.139	15.82
7) TP Trichlorofluor		0.211	0.270	0.261	0.245	0.227	0.235	0.229	0.240	8.55
8) TP Ethyl ether		0.049	0.049	0.052	0.052	0.050	0.052	0.052	0.051	3.24
10) TC 1,1-Dichloroet		0.145	0.163	0.155	0.143	0.132	0.134	0.135	0.144	7.97
11) TP Carbon disulfide		0.430	0.522	0.505	0.467	0.431	0.438	0.424	0.459	8.61
12) TP Freon-113		0.126	0.152	0.154	0.147	0.138	0.146	0.148	0.144	6.49
13) TP Iodomethane		0.163	0.218	0.249	0.248	0.234	0.238	0.228	0.225	13.20
14) TP Acrolein		0.028	0.022	0.015	0.015	0.014	0.014	0.014	*Q	0.9991
15) TP Methylene chlo		0.188	0.188	0.185	0.168	0.152	0.153	0.150	0.169	10.54
17) TP Acetone		0.090	0.038	0.033	0.025	0.023	0.024	0.024	*L	0.9982
18) TP trans-1,2-Dich		0.146	0.164	0.161	0.154	0.144	0.153	0.149	0.153	4.71
19) TP Methyl acetate		0.223	0.090	0.062	0.053	0.049	0.050	0.050	*L	0.9995
21) TP Methyl tert butyl ether		0.218	0.211	0.229	0.228	0.228	0.239	0.245	0.228	5.00
22) TP tert-Butyl alc		0.005	0.006	0.006	0.007	0.006	0.007	0.007	0.006#	8.72
24) TP Diisopropyl ether		0.330	0.342	0.336	0.328	0.322	0.334	0.337	0.333	1.93
25) TP 1,1-Dichloroet		0.253	0.296	0.289	0.281	0.259	0.264	0.260	0.272#	6.18
26) TP Halothane		0.099	0.115	0.117	0.114	0.112	0.118	0.122	0.114	6.37
27) TP Acrylonitrile		0.032	0.030	0.032	0.030	0.027	0.028	0.028	0.030	6.86
28) TP Ethyl tert-but		0.295	0.295	0.303	0.302	0.301	0.316	0.322	0.305	3.43
29) TP Vinyl acetate			0.137	0.136	0.169	0.168	0.176	0.172	0.160	11.53
30) TP cis-1,2-Dichlo		0.178	0.181	0.182	0.171	0.158	0.161	0.158	0.170#	6.35
31) TP 2,2-Dichloropr		0.207	0.227	0.210	0.228	0.215	0.221	0.217	0.218	3.72
32) TP Bromochloromet		0.084	0.090	0.092	0.087	0.079	0.080	0.079	0.085#	6.13
33) TP Cyclohexane		0.224	0.244	0.246	0.236	0.242	0.258	0.257	0.244	4.84
34) TC Chloroform		0.266	0.278	0.276	0.267	0.250	0.265	0.262	0.266	3.47
35) TP Ethyl acetate			0.088	0.060	0.063	0.064	0.067	0.069	0.069	14.64
36) TP Carbon tetrachloride	0.200	0.176	0.214	0.219	0.216	0.212	0.223	0.223	0.210	7.43
37) TP Tetrahydrofuran			0.028	0.023	0.020	0.019	0.019	0.019	0.021	17.08
38) S Dibromofluoromethane	0.351	0.351	0.348	0.352	0.334	0.316	0.320	0.321	0.337	4.69
39) TP 1,1,1-Trichlor		0.194	0.225	0.234	0.227	0.224	0.242	0.237	0.226	7.05
41) TP 2-Butanone			0.051	0.031	0.031	0.031	0.032	0.034	*L	0.9972



Initial Calibration Summary

Form 6

Volatiles

Client : Impact Environmental
 Project Name : 585 UNION STREET
 Instrument ID : VOA122
 Calibration dates : 04/25/23 18:36 04/25/23 22:41

Lab Number : L2332652
 Project Number : 14729
 Ical Ref : ICAL19961

Calibration Files

L11 =V22230425N03.D L1 =V22230425N05.D L2 =V22230425N07.D L3 =V22230425N09.D L4 =V22230425N10.D
 L6 =V22230425N11.D L8 =V22230425N12.D L10 =V22230425N13.D

Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
42) TP 1,1-Dichloropr	0.133	0.169	0.180	0.183	0.184	0.214	0.214	0.182	15.17	
44) TP Benzene	0.522	0.486	0.516	0.542	0.533	0.534	0.555	0.549	0.530	4.15
45) TP Tertiary-Amyl Methyl Ether	0.296	0.281	0.275	0.264	0.259	0.273	0.286	0.276	4.57	
46) S 1,2-Dichloroethane-d4	0.300	0.307	0.297	0.301	0.293	0.288	0.292	0.299	0.297	2.05
47) T 1,2-Dichloroet	0.163	0.158	0.159	0.154	0.155	0.161	0.161	0.159	2.11	
50) TP Methyl cyclohe	0.238	0.276	0.260	0.253	0.247	0.263	0.267	0.258	4.96	
51) TP Trichloroethene	0.212	0.152	0.161	0.165	0.163	0.166	0.176	0.182	0.172#	10.69
53) TP Dibromomethane	0.082	0.083	0.090	0.085	0.081	0.084	0.084	0.084	3.34	
54) TC 1,2-Dichloropr	0.113	0.119	0.131	0.132	0.138	0.143	0.145	0.132	9.06	
56) TP 2-Chloroethyl	0.057	0.056	0.057	0.056	0.056	0.058	0.059	0.057	2.17	
57) TP Bromodichlorom	0.173	0.179	0.188	0.185	0.194	0.204	0.205	0.190#	6.34	
60) TP 1,4-Dioxane	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001#	6.58	
61) TP cis-1,3-Dichloropropene	0.180	0.173	0.183	0.203	0.216	0.218	0.229	0.232	0.204#	11.28
62) I Chlorobenzene-d5	-----ISTD-----									
63) S Toluene-d8	1.253	1.248	1.250	1.232	1.229	1.235	1.226	1.217	1.236	1.05
64) TC Toluene	0.388	0.359	0.402	0.397	0.401	0.396	0.406	0.402	0.394	3.82
65) TP 4-Methyl-2-pen	0.018	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.020#	5.24
66) TP Tetrachloroethene	0.137	0.165	0.161	0.163	0.161	0.170	0.169	0.161	6.91	
68) TP trans-1,3-Dichloropropene	0.185	0.171	0.179	0.188	0.212	0.228	0.240	0.242	0.205#	13.89
70) TP Ethyl methacry	0.149	0.145	0.136	0.136	0.130	0.131	0.131	0.137	5.51	
71) TP 1,1,2-Trichlor	0.078	0.074	0.081	0.089	0.094	0.099	0.102	0.088#	12.32	
72) TP Chlorodibromom	0.115	0.117	0.128	0.144	0.155	0.165	0.169	0.142#	15.79	
73) TP 1,3-Dichloropr	0.158	0.157	0.166	0.183	0.193	0.204	0.207	0.181	11.71	
74) TP 1,2-Dibromoethane	0.095	0.097	0.102	0.111	0.118	0.124	0.125	0.110#	11.54	
76) TP 2-Hexanone	0.071	0.057	0.054	0.050	0.051	0.051	0.051	0.056	14.23	
77) TP Chlorobenzene	0.442	0.467	0.467	0.467	0.460	0.472	0.470	0.463	2.19	
78) TC Ethylbenzene	0.818	0.707	0.813	0.812	0.821	0.805	0.821	0.805	0.800	4.78
79) TP 1,1,1,2-Tetrac	0.128	0.137	0.140	0.150	0.160	0.170	0.176	0.151	11.78	
80) TP p/m Xylene	0.298	0.275	0.307	0.315	0.322	0.320	0.333	0.337	0.313	6.39
81) TP o Xylene	0.290	0.259	0.291	0.297	0.306	0.307	0.323	0.325	0.300	7.05
82) TP Styrene	0.441	0.430	0.474	0.493	0.512	0.515	0.534	0.525	0.490	7.92
83) I 1,4-Dichlorobenzene-d4	-----ISTD-----									
84) TP Bromoform	0.129	0.140	0.148	0.161	0.174	0.188	0.200	0.163	15.99	
86) TP Isopropylbenzene	1.328	1.482	1.517	1.555	1.519	1.560	1.521	1.497	5.29	
87) S 4-Bromofluorobenzene	0.855	0.841	0.852	0.848	0.849	0.849	0.840	0.835	0.846	0.82
88) TP Bromobenzene	0.358	0.382	0.384	0.388	0.377	0.387	0.383	0.380	2.69	



Initial Calibration Summary

Form 6

Volatiles

Client : Impact Environmental
 Project Name : 585 UNION STREET
 Instrument ID : VOA122
 Calibration dates : 04/25/23 18:36 04/25/23 22:41

Lab Number : L2332652
 Project Number : 14729
 Ical Ref : ICAL19961

Calibration Files

L11 =V22230425N03.D L1 =V22230425N05.D L2 =V22230425N07.D L3 =V22230425N09.D L4 =V22230425N10.D
 L6 =V22230425N11.D L8 =V22230425N12.D L10 =V22230425N13.D

Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
89) TP n-Propylbenzene	1.561	1.744	1.771	1.814	1.782	1.844	1.783	1.757	5.24	
90) TP 1,4-Dichlorobu	0.380	0.318	0.295	0.291	0.293	0.309	0.320	0.315	9.77	
91) TP 1,1,2,2-Tetrac	0.242	0.226	0.214	0.224	0.220	0.230	0.230	0.227	3.91	
92) TP 4-Ethyltoluene	1.330	1.473	1.484	1.497	1.449	1.489	1.444	1.452	3.97	
93) TP 2-Chlorotoluene	0.926	1.038	1.033	1.007	1.022	1.024	1.020	1.010	3.78	
94) TP 1,3,5-Trimethy	1.159	1.305	1.300	1.293	1.254	1.279	1.257	1.264	4.00	
95) TP 1,2,3-Trichlor	0.200	0.189	0.180	0.179	0.180	0.193	0.204	0.189	5.46	
96) TP trans-1,4-Dich	0.079	0.067	0.065	0.064	0.064	0.065	0.066	0.067	7.92	
97) TP 4-Chlorotoluene	0.992	1.055	1.067	1.074	1.057	1.089	1.082	1.059	3.04	
98) TP tert-Butylbenzene	1.082	1.286	1.298	1.329	1.302	1.337	1.309	1.278	6.90	
101) TP 1,2,4-Trimethy	1.168	1.271	1.299	1.295	1.250	1.260	1.220	1.252	3.65	
102) TP sec-Butylbenzene	1.342	1.538	1.540	1.569	1.539	1.578	1.517	1.517	5.28	
103) TP p-Isopropyltol	1.192	1.365	1.351	1.381	1.338	1.360	1.320	1.330	4.81	
104) TP 1,3-Dichlorobe	0.691	0.751	0.738	0.745	0.729	0.748	0.741	0.735	2.79	
105) TP 1,4-Dichlorobe	0.703	0.742	0.726	0.736	0.719	0.736	0.732	0.728	1.80	
106) TP p-Diethylbenzene	0.714	0.821	0.814	0.842	0.814	0.831	0.818	0.808	5.27	
107) TP n-Butylbenzene	0.993	1.176	1.152	1.175	1.136	1.151	1.110	1.127	5.64	
108) TP 1,2-Dichlorobe	0.643	0.680	0.662	0.671	0.646	0.661	0.656	0.660	1.97	
109) TP 1,2,4,5-Tetram	1.013	1.093	1.142	1.198	1.188	1.205	1.176	1.145	6.10	
110) TP 1,2-Dibromo-3-	0.030	0.041	0.043	0.044	0.044	0.046	0.046	0.042	13.51	
111) TP 1,3,5-Trichlor	0.450	0.501	0.496	0.514	0.489	0.493	0.479	0.489	4.18	
112) TP Hexachlorobuta	0.133	0.178	0.169	0.179	0.179	0.184	0.180	0.172	10.25	
113) TP 1,2,4-Trichlor	0.396	0.430	0.434	0.445	0.430	0.433	0.423	0.427	3.63	
114) TP Naphthalene	0.890	0.918	0.929	0.942	0.896	0.902	0.866	0.906	2.83	
115) TP 1,2,3-Trichlor	0.369	0.378	0.371	0.377	0.362	0.369	0.358	0.369#	2.01	

Response Factor Report VOA122

Method Path : I:\VOLATILES\VOA122\2023\230425NICAL\
 Method File : V122_230425N_8260.m
 Title : VOLATILES BY GC/MS
 Last Update : Wed Apr 26 16:18:21 2023
 Response Via : Initial Calibration

Calibration Files

L11 =V22230425N03.D L1 =V22230425N05.D L2 =V22230425N07.D L3 =V22230425N09.D L4 =V22230425N10.D
 L6 =V22230425N11.D L8 =V22230425N12.D L10 =V22230425N13.D

Compound		L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD

1) I	Fluorobenzene	-----ISTD-----									
2) TP	Dichlorodifluo...	0.132	0.163	0.157	0.144	0.130	0.134	0.127	0.141	10.11	
3) TP	Chloromethane	0.168	0.182	0.180	0.167	0.151	0.153	0.147	0.164	8.51	
4) TC	Vinyl chloride	0.197	0.194	0.216	0.214	0.197	0.179	0.182	0.175	0.194	7.92
5) TP	Bromomethane	0.139	0.170	0.154	0.148	0.140	0.145	0.143	0.148	7.42	
6) TP	Chloroethane	0.182	0.152	0.143	0.127	0.121	0.125	0.125	0.139	15.82	
7) TP	Trichlorofluor...	0.211	0.270	0.261	0.245	0.227	0.235	0.229	0.240	8.55	
8) TP	Ethyl ether	0.049	0.049	0.052	0.052	0.050	0.052	0.052	0.051	3.24	
10) TC	1,1-Dichloroet...	0.145	0.163	0.155	0.143	0.132	0.134	0.135	0.144	7.97	
11) TP	Carbon disulfide	0.430	0.522	0.505	0.467	0.431	0.438	0.424	0.459	8.61	
12) TP	Freon-113	0.126	0.152	0.154	0.147	0.138	0.146	0.148	0.144	6.49	
13) TP	Iodomethane	0.163	0.218	0.249	0.248	0.234	0.238	0.228	0.225	13.20	
14) TP	Acrolein	0.028	0.022	0.015	0.015	0.014	0.014	0.014	*Q	0.9991	
15) TP	Methylene chlo...	0.188	0.188	0.185	0.168	0.152	0.153	0.150	0.169	10.54	
17) TP	Acetone	0.090	0.038	0.033	0.025	0.023	0.024	0.024	*L	0.9982	
18) TP	trans-1,2-Dich...	0.146	0.164	0.161	0.154	0.144	0.153	0.149	0.153	4.71	
19) TP	Methyl acetate	0.223	0.090	0.062	0.053	0.049	0.050	0.050	*L	0.9995	
21) TP	Methyl tert-bu...	0.218	0.211	0.229	0.228	0.228	0.239	0.245	0.228	5.00	
22) TP	tert-Butyl alc...	0.005	0.006	0.006	0.007	0.006	0.007	0.007	0.006#	8.72	
24) TP	Diisopropyl ether	0.330	0.342	0.336	0.328	0.322	0.334	0.337	0.333	1.93	
25) TP	1,1-Dichloroet...	0.253	0.296	0.289	0.281	0.259	0.264	0.260	0.272#	6.18	
26) TP	Halothane	0.099	0.115	0.117	0.114	0.112	0.118	0.122	0.114	6.37	
27) TP	Acrylonitrile	0.032	0.030	0.032	0.030	0.027	0.028	0.028	0.030	6.86	
28) TP	Ethyl tert-but...	0.295	0.295	0.303	0.302	0.301	0.316	0.322	0.305	3.43	
29) TP	Vinyl acetate		0.137	0.136	0.169	0.168	0.176	0.172	0.160	11.53	
30) TP	cis-1,2-Dichlo...	0.178	0.181	0.182	0.171	0.158	0.161	0.158	0.170#	6.35	
31) TP	2,2-Dichloropr...	0.207	0.227	0.210	0.228	0.215	0.221	0.217	0.218	3.72	
32) TP	Bromochloromet...	0.084	0.090	0.092	0.087	0.079	0.080	0.079	0.085#	6.13	
33) TP	Cyclohexane	0.224	0.244	0.246	0.236	0.242	0.258	0.257	0.244	4.84	
34) TC	Chloroform	0.266	0.278	0.276	0.267	0.250	0.265	0.262	0.266	3.47	
35) TP	Ethyl acetate		0.088	0.060	0.063	0.064	0.067	0.069	0.069	14.64	

Response Factor Report VOA122

Method Path : I:\VOLATILES\VOA122\2023\230425NICAL\
 Method File : V122_230425N_8260.m
 Title : VOLATILES BY GC/MS
 Last Update : Wed Apr 26 16:18:21 2023
 Response Via : Initial Calibration

Calibration Files

L11 =V22230425N03.D L1 =V22230425N05.D L2 =V22230425N07.D L3 =V22230425N09.D L4 =V22230425N10.D
 L6 =V22230425N11.D L8 =V22230425N12.D L10 =V22230425N13.D

	Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
36)	TP Carbon tetrach...	0.200	0.176	0.214	0.219	0.216	0.212	0.223	0.223	0.210	7.43
37)	TP Tetrahydrofuran			0.028	0.023	0.020	0.019	0.019	0.019	0.021	17.08
38)	S Dibromofluorom...	0.351	0.351	0.348	0.352	0.334	0.316	0.320	0.321	0.337	4.69
39)	TP 1,1,1-Trichlor...		0.194	0.225	0.234	0.227	0.224	0.242	0.237	0.226	7.05
41)	TP 2-Butanone			0.051	0.031	0.031	0.031	0.032	0.034	*L	0.9972
42)	TP 1,1-Dichloropr...		0.133	0.169	0.180	0.183	0.184	0.214	0.214	0.182	15.17
44)	TP Benzene	0.522	0.486	0.516	0.542	0.533	0.534	0.555	0.549	0.530	4.15
45)	TP tert-Amyl meth...		0.296	0.281	0.275	0.264	0.259	0.273	0.286	0.276	4.57
46)	S 1,2-Dichloroet...	0.300	0.307	0.297	0.301	0.293	0.288	0.292	0.299	0.297	2.05
47)	T 1,2-Dichloroet...		0.163	0.158	0.159	0.154	0.155	0.161	0.161	0.159	2.11
50)	TP Methyl cyclohe...		0.238	0.276	0.260	0.253	0.247	0.263	0.267	0.258	4.96
51)	TP Trichloroethene	0.212	0.152	0.161	0.165	0.163	0.166	0.176	0.182	0.172#	10.69
53)	TP Dibromomethane		0.082	0.083	0.090	0.085	0.081	0.084	0.084	0.084	3.34
54)	TC 1,2-Dichloropr...		0.113	0.119	0.131	0.132	0.138	0.143	0.145	0.132	9.06
56)	TP 2-Chloroethyl ...		0.057	0.056	0.057	0.056	0.056	0.058	0.059	0.057	2.17
57)	TP Bromodichlorom...		0.173	0.179	0.188	0.185	0.194	0.204	0.205	0.190#	6.34
60)	TP 1,4-Dioxane		0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001#	6.58
61)	TP cis-1,3-Dichlo...	0.180	0.173	0.183	0.203	0.216	0.218	0.229	0.232	0.204#	11.28
62)	I Chlorobenzene-d5	-----ISTD-----									
63)	S Toluene-d8	1.253	1.248	1.250	1.232	1.229	1.235	1.226	1.217	1.236	1.05
64)	TC Toluene	0.388	0.359	0.402	0.397	0.401	0.396	0.406	0.402	0.394	3.82
65)	TP 4-Methyl-2-pen...		0.018	0.021	0.021	0.021	0.021	0.021	0.021	0.020#	5.24
66)	TP Tetrachloroethene		0.137	0.165	0.161	0.163	0.161	0.170	0.169	0.161	6.91
68)	TP trans-1,3-Dich...	0.185	0.171	0.179	0.188	0.212	0.228	0.240	0.242	0.205#	13.89
70)	TP Ethyl methacry...		0.149	0.145	0.136	0.136	0.130	0.131	0.131	0.137	5.51
71)	TP 1,1,2-Trichlor...		0.078	0.074	0.081	0.089	0.094	0.099	0.102	0.088#	12.32
72)	TP Chlorodibromom...		0.115	0.117	0.128	0.144	0.155	0.165	0.169	0.142#	15.79
73)	TP 1,3-Dichloropr...		0.158	0.157	0.166	0.183	0.193	0.204	0.207	0.181	11.71
74)	TP 1,2-Dibromoethane		0.095	0.097	0.102	0.111	0.118	0.124	0.125	0.110#	11.54
76)	TP 2-Hexanone			0.071	0.057	0.054	0.050	0.051	0.051	0.056	14.23
77)	TP Chlorobenzene		0.442	0.467	0.467	0.467	0.460	0.472	0.470	0.463	2.19

Response Factor Report VOA122

Method Path : I:\VOLATILES\VOA122\2023\230425NICAL\
 Method File : V122_230425N_8260.m
 Title : VOLATILES BY GC/MS
 Last Update : Wed Apr 26 16:18:21 2023
 Response Via : Initial Calibration

Calibration Files

L11 =V22230425N03.D L1 =V22230425N05.D L2 =V22230425N07.D L3 =V22230425N09.D L4 =V22230425N10.D
 L6 =V22230425N11.D L8 =V22230425N12.D L10 =V22230425N13.D

	Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
78)	TC Ethylbenzene	0.818	0.707	0.813	0.812	0.821	0.805	0.821	0.805	0.800	4.78
79)	TP 1,1,1,2-Tetrac...	0.128	0.137	0.140	0.150	0.160	0.170	0.176	0.151	11.78	
80)	TP p/m Xylene	0.298	0.275	0.307	0.315	0.322	0.320	0.333	0.337	0.313	6.39
81)	TP o Xylene	0.290	0.259	0.291	0.297	0.306	0.307	0.323	0.325	0.300	7.05
82)	TP Styrene	0.441	0.430	0.474	0.493	0.512	0.515	0.534	0.525	0.490	7.92
83)	I 1,4-Dichlorobenzene-d4	-----ISTD-----									
84)	TP Bromoform	0.129	0.140	0.148	0.161	0.174	0.188	0.200	0.163	15.99	
86)	TP Isopropylbenzene	1.328	1.482	1.517	1.555	1.519	1.560	1.521	1.497	5.29	
87)	S 4-Bromofluorob...	0.855	0.841	0.852	0.848	0.849	0.849	0.840	0.835	0.846	0.82
88)	TP Bromobenzene	0.358	0.382	0.384	0.388	0.377	0.387	0.383	0.380	2.69	
89)	TP n-Propylbenzene	1.561	1.744	1.771	1.814	1.782	1.844	1.783	1.757	5.24	
90)	TP 1,4-Dichlorobu...	0.380	0.318	0.295	0.291	0.293	0.309	0.320	0.315	9.77	
91)	TP 1,1,2,2-Tetrac...	0.242	0.226	0.214	0.224	0.220	0.230	0.230	0.227	3.91	
92)	TP 4-Ethyltoluene	1.330	1.473	1.484	1.497	1.449	1.489	1.444	1.452	3.97	
93)	TP 2-Chlorotoluene	0.926	1.038	1.033	1.007	1.022	1.024	1.020	1.010	3.78	
94)	TP 1,3,5-Trimethy...	1.159	1.305	1.300	1.293	1.254	1.279	1.257	1.264	4.00	
95)	TP 1,2,3-Trichlor...	0.200	0.189	0.180	0.179	0.180	0.193	0.204	0.189	5.46	
96)	TP trans-1,4-Dich...	0.079	0.067	0.065	0.064	0.064	0.065	0.066	0.067	7.92	
97)	TP 4-Chlorotoluene	0.992	1.055	1.067	1.074	1.057	1.089	1.082	1.059	3.04	
98)	TP tert-Butylbenzene	1.082	1.286	1.298	1.329	1.302	1.337	1.309	1.278	6.90	
101)	TP 1,2,4-Trimethy...	1.168	1.271	1.299	1.295	1.250	1.260	1.220	1.252	3.65	
102)	TP sec-Butylbenzene	1.342	1.538	1.540	1.569	1.539	1.578	1.517	1.517	5.28	
103)	TP p-Isopropyltol...	1.192	1.365	1.351	1.381	1.338	1.360	1.320	1.330	4.81	
104)	TP 1,3-Dichlorobe...	0.691	0.751	0.738	0.745	0.729	0.748	0.741	0.735	2.79	
105)	TP 1,4-Dichlorobe...	0.703	0.742	0.726	0.736	0.719	0.736	0.732	0.728	1.80	
106)	TP p-Diethylbenzene	0.714	0.821	0.814	0.842	0.814	0.831	0.818	0.808	5.27	
107)	TP n-Butylbenzene	0.993	1.176	1.152	1.175	1.136	1.151	1.110	1.127	5.64	
108)	TP 1,2-Dichlorobe...	0.643	0.680	0.662	0.671	0.646	0.661	0.656	0.660	1.97	
109)	TP 1,2,4,5-Tetram...	1.013	1.093	1.142	1.198	1.188	1.205	1.176	1.145	6.10	
110)	TP 1,2-Dibromo-3-...	0.030	0.041	0.043	0.044	0.044	0.046	0.046	0.042	13.51	
111)	TP 1,3,5-Trichlor...	0.450	0.501	0.496	0.514	0.489	0.493	0.479	0.489	4.18	

Response Factor Report VOA122

Method Path : I:\VOLATILES\VOA122\2023\230425NICAL\
Method File : V122_230425N_8260.m
Title : VOLATILES BY GC/MS
Last Update : Wed Apr 26 16:18:21 2023
Response Via : Initial Calibration

Calibration Files

L11 =V22230425N03.D L1 =V22230425N05.D L2 =V22230425N07.D L3 =V22230425N09.D L4 =V22230425N10.D
L6 =V22230425N11.D L8 =V22230425N12.D L10 =V22230425N13.D

Compound		L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
112)	TP Hexachlorobuta...	0.133	0.178	0.169	0.179	0.179	0.184	0.180	0.172	10.25	
113)	TP 1,2,4-Trichlor...	0.396	0.430	0.434	0.445	0.430	0.433	0.423	0.427	3.63	
114)	TP Naphthalene	0.890	0.918	0.929	0.942	0.896	0.902	0.866	0.906	2.83	
115)	TP 1,2,3-Trichlor...	0.369	0.378	0.371	0.377	0.362	0.369	0.358	0.369#	2.01	

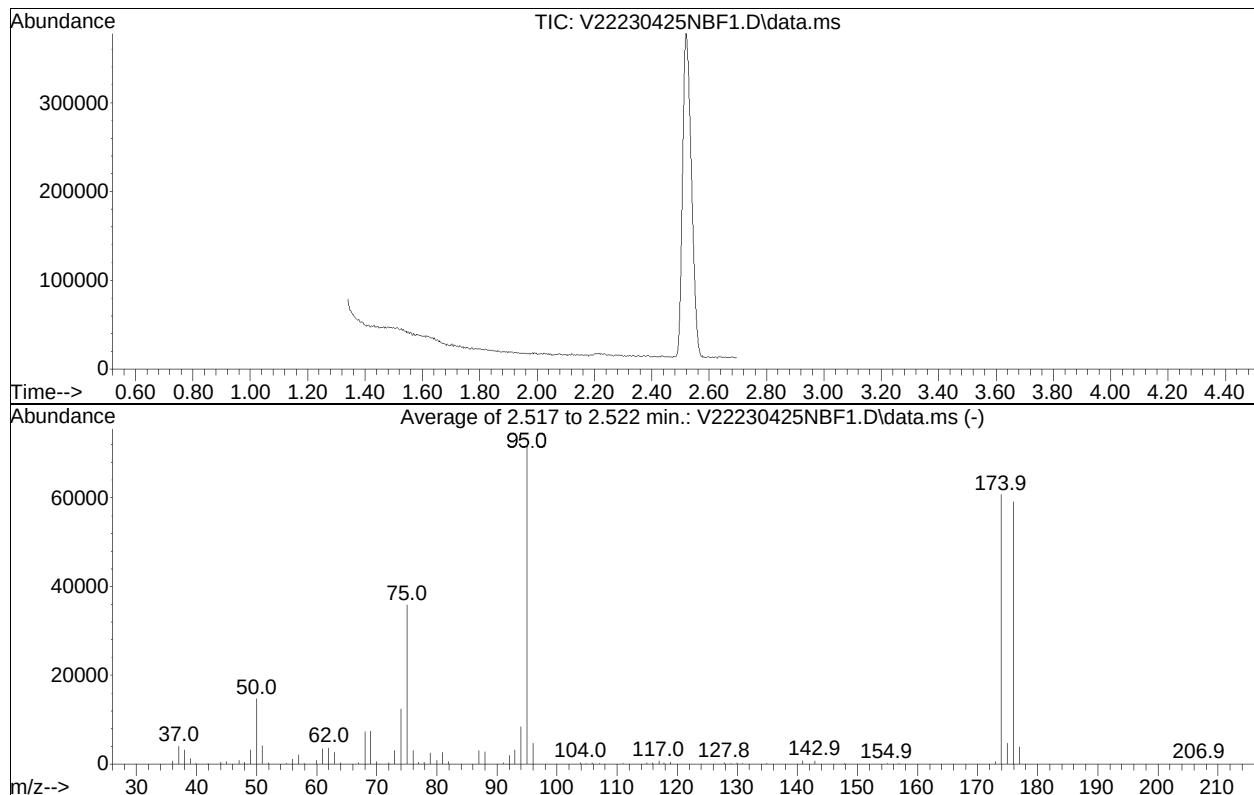
(#) = Out of Range

BFB

Data Path : I:\VOLATILES\VOA122\2023\230425NICAL\
 Data File : V22230425NBF1.D
 Acq On : 25 Apr 2023 05:26 pm
 Operator : VOA122:TMS
 Sample : WG1771536-1
 Misc : WG1771536
 ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : I:\VOLATILES\VOA122\2023\230425NICAL\V122_230425N_8260.m
 Title : VOLATILES BY GC/MS
 Last Update : Wed Apr 26 15:59:30 2023



AutoFind: Scans 423, 424, 425; Background Corrected with Scan 408

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.4	14670	PASS
75	95	30	60	50.0	35989	PASS
95	95	100	100	100.0	72003	PASS
96	95	5	9	6.4	4606	PASS
173	174	0.00	2	1.0	632	PASS
174	95	50	100	84.3	60723	PASS
175	174	5	9	7.6	4632	PASS
176	174	95	101	97.3	59096	PASS
177	176	5	9	6.7	3954	PASS

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA122\2023\230425NICAL\
 Data File : V22230425N03.D
 Acq On : 25 Apr 2023 06:36 pm
 Operator : VOA122:KJD
 Sample : I8260STD0.19PPB
 Misc : WG1771536
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 26 15:45:14 2023
 Quant Method : I:\VOLATILES\VOA122\2023\230425NICAL\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 15:33:46 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA122\2023\230425NICAL\V22230425N09.D
 Sub List : 8260-L11_MCP - L11 MCP

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

Internal Standards						
1) Fluorobenzene	6.292	96	330212	10.000	ug/L	0.00
Standard Area 1 = 315952			Recovery	=	104.51%	
62) Chlorobenzene-d5	9.874	117	334730	10.000	ug/L	0.00
Standard Area 1 = 314946			Recovery	=	106.28%	
83) 1,4-Dichlorobenzene-d4	12.508	152	175426	10.000	ug/L	0.00
Standard Area 1 = 169884			Recovery	=	103.26%	
System Monitoring Compounds						
38) Dibromofluoromethane	5.454	113	115984	9.985	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	99.85%	
46) 1,2-Dichloroethane-d4	5.997	65	99073	9.958	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	99.58%	
63) Toluene-d8	8.009	98	419500	10.173	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	101.73%	
87) 4-Bromofluorobenzene	11.325	95	150002	10.089	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	100.89%	
Target Compounds						
						Qvalue
4) Vinyl chloride	1.968	62	1238M6	0.175	ug/L	
36) Carbon tetrachloride	5.419	117	1253	0.173	ug/L #	56
44) Benzene	5.864	78	3276	0.183	ug/L #	79
51) Trichloroethene	6.462	95	1327	0.243	ug/L #	81
61) cis-1,3-Dichloropropene	7.795	75	1128	0.168	ug/L #	61
64) Toluene	8.068	92	2465	0.185	ug/L	77
68) trans-1,3-Dichloropropene	8.549	75	1177	0.187	ug/L #	70
78) Ethylbenzene	9.937	91	5200	0.191	ug/L	97
80) p/m Xylene	10.120	106	3796	0.360	ug/L	87
81) o Xylene	10.643	106	3688	0.372	ug/L	91
82) Styrene	10.706	104	5611	0.340	ug/L	94

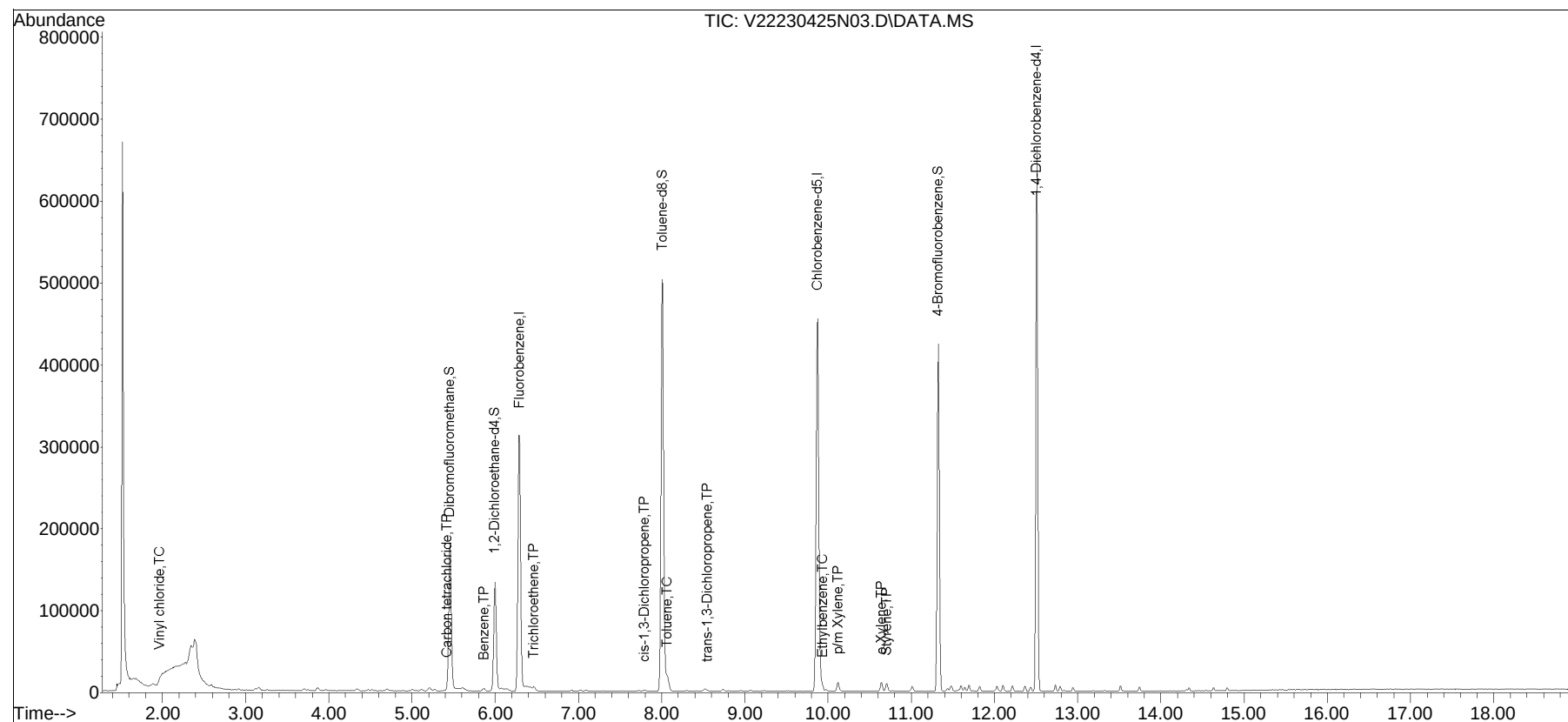
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA122\2023\230425NICAL\
 Data File : V22230425N03.D
 Acq On : 25 Apr 2023 06:36 pm
 Operator : VOA122:KJD
 Sample : I8260STD0.19PPB
 Misc : WG1771536
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 26 15:45:14 2023
 Quant Method : I:\VOLATILES\VOA122\2023\230425NICAL\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 15:33:46 2023
 Response via : Initial Calibration

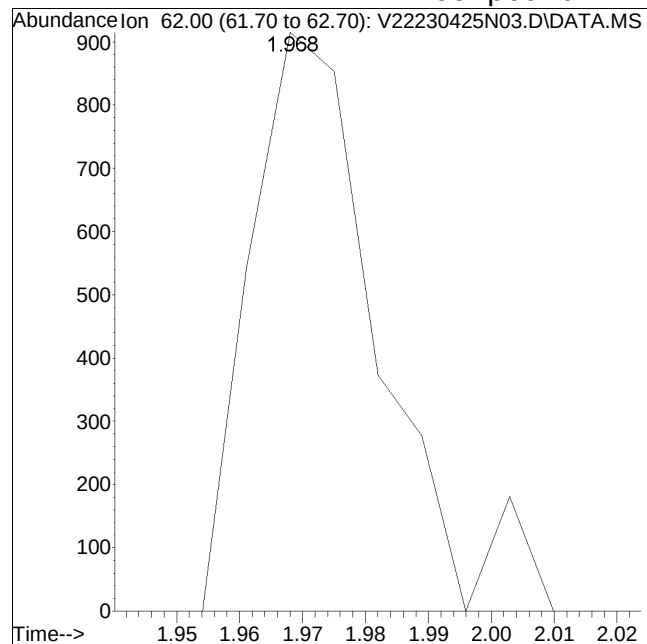
Sub List : 8260-L11_MCP - L11 MCP2\2023\230425NICAL\V22230425N09.D•



Manual Integration Report

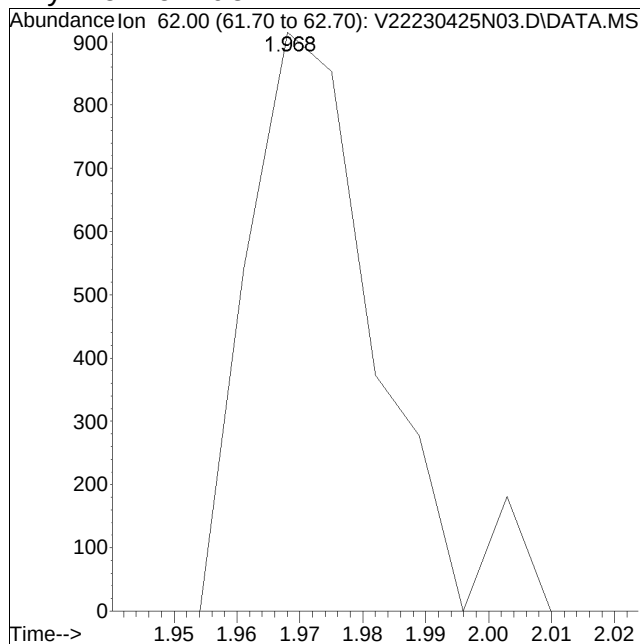
Data Path : I:\VOLATILES\VOA122\2023\2QMethod : V122_230425N_8260.m
Data File : V22230425N03.D Operator : VOA122:KJD
Date Inj'd : 4/25/2023 6:36 pm Instrument : VOA122
Sample : I8260STD0.19PPB Quant Date : 4/26/2023 3:35 pm

Compound #4: Vinyl chloride



Original Peak Response = 1314

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).



Manual Peak Response = 1238 M6

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA122\2023\230425NICAL\
 Data File : V22230425N05.D
 Acq On : 25 Apr 2023 07:26 pm
 Operator : VOA122:KJD
 Sample : I8260STD0.5PPB
 Misc : WG1771536
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 26 15:47:43 2023
 Quant Method : I:\VOLATILES\VOA122\2023\230425NICAL\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 15:33:46 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA122\2023\230425NICAL\V22230425N09.D
 Sub List : 8260-Curve - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	6.292	96	327656	10.000	ug/L	0.00
Standard Area 1 = 315952			Recovery	=	103.70%	
62) Chlorobenzene-d5	9.874	117	330177	10.000	ug/L	0.00
Standard Area 1 = 314946			Recovery	=	104.84%	
83) 1,4-Dichlorobenzene-d4	12.508	152	173939	10.000	ug/L	0.00
Standard Area 1 = 169884			Recovery	=	102.39%	
System Monitoring Compounds						
38) Dibromofluoromethane	5.453	113	115137	9.990	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	99.90%	
46) 1,2-Dichloroethane-d4	5.996	65	100706	10.201	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	102.01%	
63) Toluene-d8	8.009	98	412211	10.134	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	101.34%	
87) 4-Bromofluorobenzene	11.325	95	146239	9.920	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	99.20%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.682	85	2156	0.418	ug/L	93
3) Chloromethane	1.884	50	2760	0.468	ug/L #	94
4) Vinyl chloride	1.968	62	3180	0.454	ug/L	91
5) Bromomethane	2.317	94	2276	0.451	ug/L	85
6) Chloroethane	2.435	64	2984	0.639	ug/L	72
7) Trichlorofluoromethane	2.588	101	3458	0.404	ug/L #	83
8) Ethyl ether	2.909	74	796	0.464	ug/L #	1
10) 1,1-Dichloroethene	3.118	96	2383	0.470	ug/L	90
11) Carbon disulfide	3.153	76	7045	0.426	ug/L	97
12) Freon-113	3.160	101	2068	0.411	ug/L	93
13) Iodomethane	3.265	142	2665	0.327	ug/L	95
14) Acrolein	3.467	56	461	0.929	ug/L #	24
15) Methylene chloride	3.704	84	3079	0.508	ug/L	89
17) Acetone	3.739	43	1477M4	1.361	ug/L	
18) trans-1,2-Dichloroethene	3.864	96	2397	0.455	ug/L	97
19) Methyl acetate	3.871	43	3655	1.802	ug/L #	82
21) Methyl tert-butyl ether	3.962	73	3572	0.477	ug/L #	70
22) tert-Butyl alcohol	4.045	59	418	2.010	ug/L #	44
24) Diisopropyl ether	4.338	45	5414	0.491	ug/L	93
25) 1,1-Dichloroethane	4.471	63	4149	0.438	ug/L	96
26) Halothane	4.526	117	1628	0.426	ug/L	85

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA122\2023\230425NICAL\
 Data File : V22230425N05.D
 Acq On : 25 Apr 2023 07:26 pm
 Operator : VOA122:KJD
 Sample : I8260STD0.5PPB
 Misc : WG1771536
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 26 15:47:43 2023
 Quant Method : I:\VOLATILES\VOA122\2023\230425NICAL\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 15:33:46 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA122\2023\230425NICAL\V22230425N09.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
27) Acrylonitrile	4.512	53	532	0.508	ug/L	# 24
28) Ethyl tert-butyl ether	4.701	59	4838	0.487	ug/L	88
29) Vinyl acetate	0.000		0	N.D.	d	
30) cis-1,2-Dichloroethene	5.000	96	2922	0.490	ug/L	95
31) 2,2-Dichloropropane	5.119	77	3391	0.493	ug/L	91
32) Bromochloromethane	5.209	128	1382	0.461	ug/L	92
33) Cyclohexane	5.216	56	3663	0.455	ug/L	84
34) Chloroform	5.272	83	4366	0.482	ug/L	96
35) Ethyl acetate	0.000		0	N.D.	d	
36) Carbon tetrachloride	5.419	117	2890	0.402	ug/L	# 88
37) Tetrahydrofuran	0.000		0	N.D.	d	
39) 1,1,1-Trichloroethane	5.481	97	3172	0.413	ug/L	96
41) 2-Butanone	0.000		0	N.D.	d	
42) 1,1-Dichloropropene	5.614	75	2187	0.371	ug/L	# 88
44) Benzene	5.871	78	7958	0.448	ug/L	98
45) tert-Amyl methyl ether	5.974	73	4850	0.538	ug/L	# 84
47) 1,2-Dichloroethane	6.063	62	2677	0.513	ug/L	92
50) Methyl cyclohexane	6.469	83	3903	0.458	ug/L	# 78
51) Trichloroethene	6.462	95	2483	0.459	ug/L	90
53) Dibromomethane	6.911	93	1349	0.460	ug/L	# 84
54) 1,2-Dichloropropane	7.022	63	1855	0.433	ug/L	# 91
56) 2-Chloroethyl vinyl ether	7.721	63	927	0.500	ug/L	# 38
57) Bromodichloromethane	7.095	83	2833	0.459	ug/L	# 91
60) 1,4-Dioxane	7.302	88	3433	93.609	ug/L	# 63
61) cis-1,3-Dichloropropene	7.788	75	2830	0.425	ug/L	93
64) Toluene	8.068	92	5932	0.452	ug/L	89
65) 4-Methyl-2-pentanone	8.495	58	297	0.434	ug/L	# 1
66) Tetrachloroethene	8.526	166	2265	0.427	ug/L	96
68) trans-1,3-Dichloropropene	8.549	75	2821	0.455	ug/L	# 29
70) Ethyl methacrylate	8.740	69	2462	0.548	ug/L	# 70
71) 1,1,2-Trichloroethane	8.740	83	1280	0.477	ug/L	94
72) Chlorodibromomethane	8.954	129	1906	0.452	ug/L	86
73) 1,3-Dichloropropane	9.065	76	2605	0.474	ug/L	99
74) 1,2-Dibromoethane	9.239	107	1567	0.466	ug/L	95
76) 2-Hexanone	9.517	43	1736	0.920	ug/L	# 57
77) Chlorobenzene	9.890	112	7297	0.473	ug/L	# 63
78) Ethylbenzene	9.937	91	11667	0.435	ug/L	98
79) 1,1,1,2-Tetrachloroethane	9.977	131	2108	0.457	ug/L	# 62
80) p/m Xylene	10.120	106	9075	0.873	ug/L	97
81) o Xylene	10.643	106	8542	0.872	ug/L	94

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA122\2023\230425NICAL\
 Data File : V22230425N05.D
 Acq On : 25 Apr 2023 07:26 pm
 Operator : VOA122:KJD
 Sample : I8260STD0.5PPB
 Misc : WG1771536
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 26 15:47:43 2023
 Quant Method : I:\VOLATILES\VOA122\2023\230425NICAL\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 15:33:46 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA122\2023\230425NICAL\V22230425N09.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
82)	Styrene	10.706	104	14182	0.872	ug/L	97
84)	Bromoform	10.730	173	1126	0.438	ug/L	77
86)	Isopropylbenzene	11.008	105	11548	0.438	ug/L	95
88)	Bromobenzene	11.436	156	3115	0.467	ug/L	99
89)	n-Propylbenzene	11.476	91	13575	0.441	ug/L	97
90)	1,4-Dichlorobutane	11.491	55	3301M6	0.644	ug/L	
91)	1,1,2,2-Tetrachloroethane	11.555	83	2104	0.566	ug/L	92
92)	4-Ethyltoluene	11.603	105	11563	0.448	ug/L	98
93)	2-Chlorotoluene	11.642	91	8057M6	0.448	ug/L	
94)	1,3,5-Trimethylbenzene	11.698	105	10079	0.446	ug/L	96
95)	1,2,3-Trichloropropane	11.698	75	1736	0.556	ug/L	84
96)	trans-1,4-Dichloro-2-b...	11.745	53	686	0.611	ug/L #	77
97)	4-Chlorotoluene	11.825	91	8626	0.465	ug/L	98
98)	tert-Butylbenzene	12.028	119	9408	0.417	ug/L	96
101)	1,2,4-Trimethylbenzene	12.104	105	10159	0.449	ug/L	99
102)	sec-Butylbenzene	12.216	105	11668	0.436	ug/L	98
103)	p-Isopropyltoluene	12.362	119	10363	0.441	ug/L	96
104)	1,3-Dichlorobenzene	12.432	146	6009	0.468	ug/L	98
105)	1,4-Dichlorobenzene	12.522	146	6118M3	0.484	ug/L	
106)	p-Diethylbenzene	12.731	119	6208	0.439	ug/L	100
107)	n-Butylbenzene	12.787	91	8636	0.431	ug/L	97
108)	1,2-Dichlorobenzene	12.947	146	5588	0.486	ug/L	95
109)	1,2,4,5-Tetramethylben...	13.517	119	8810	0.443	ug/L	97
110)	1,2-Dibromo-3-chloropr...	13.712	155	257	0.347	ug/L #	72
111)	1,3,5-Trichlorobenzene	13.740	180	3911	0.453	ug/L	95
112)	Hexachlorobutadiene	14.311	225	1159	0.394	ug/L	96
113)	1,2,4-Trichlorobenzene	14.339	180	3440	0.456	ug/L	98
114)	Naphthalene	14.631	128	7736	0.479	ug/L	100
115)	1,2,3-Trichlorobenzene	14.798	180	3210	0.498	ug/L	98

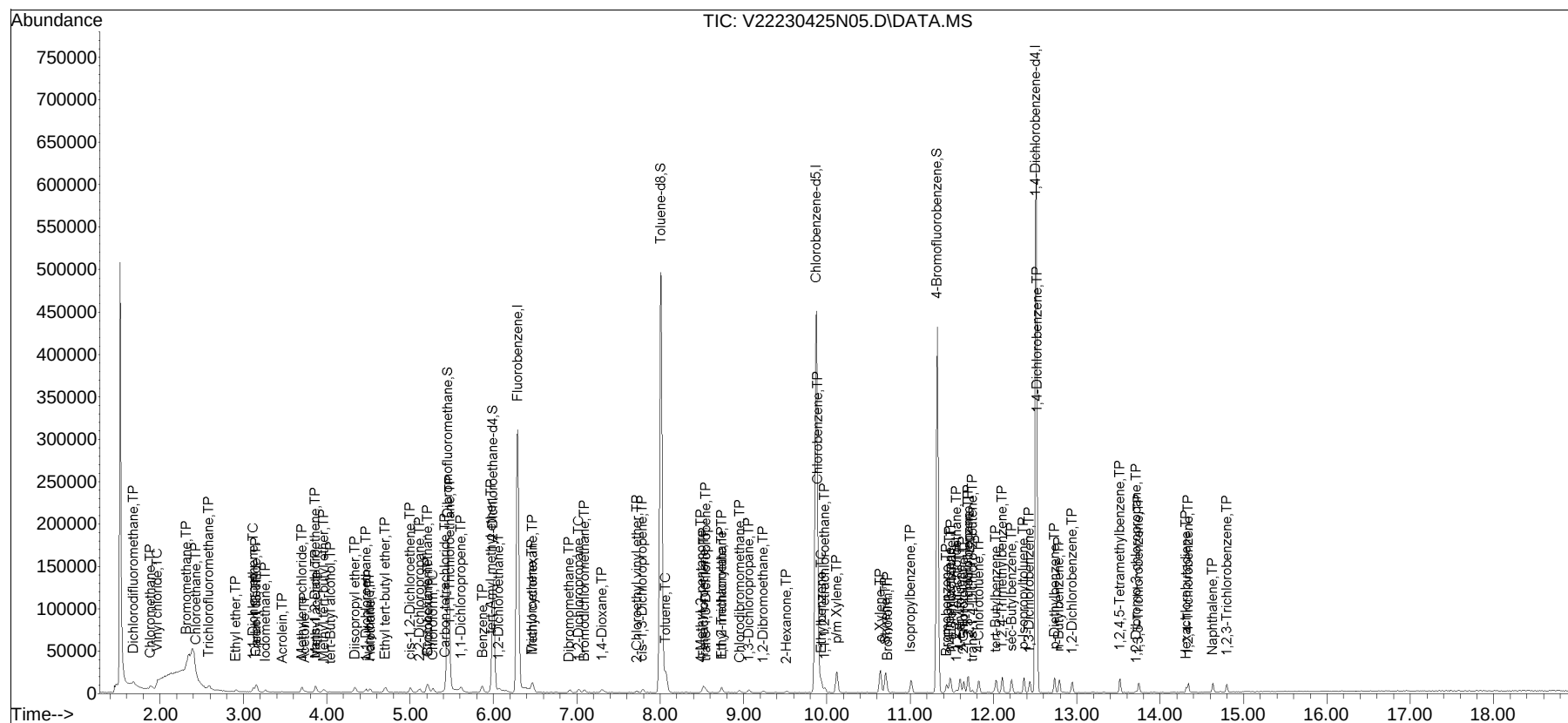
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA122\2023\230425NICAL\
Data File : V22230425N05.D
Acq On : 25 Apr 2023 07:26 pm
Operator : VOA122:KJD
Sample : I8260STD0.5PPB
Misc : WG1771536
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 26 15:47:43 2023
Quant Method : I:\VOLATILES\VOA122\2023\230425NICAL\V122_230425N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Apr 26 15:33:46 2023
Response via : Initial Calibration

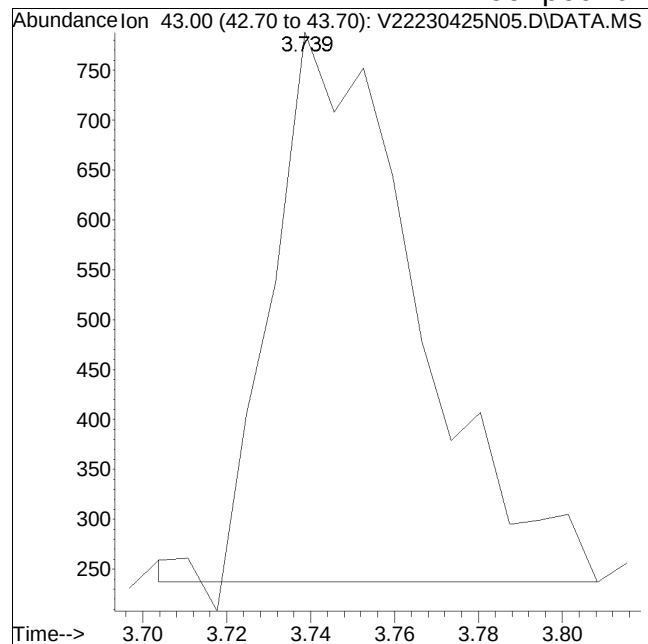
Sub List : 8260-Curve - Megamix plus Diox30425NICAL\V22230425N09.D•



Manual Integration Report

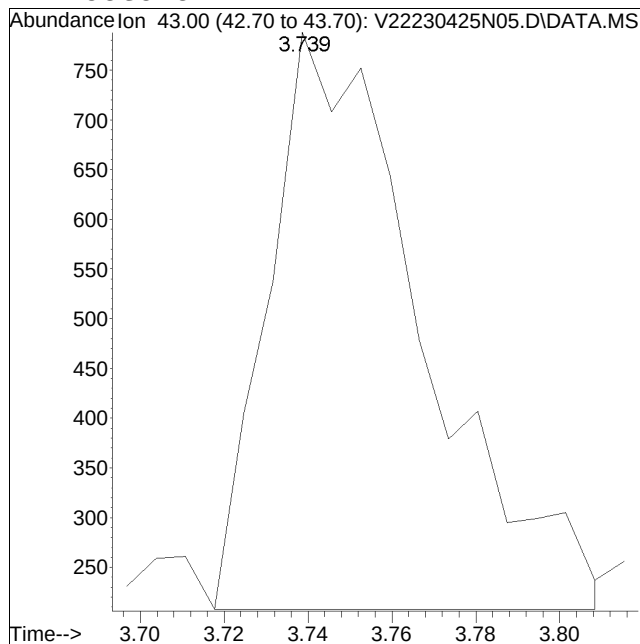
Data Path : I:\VOLATILES\VOA122\2023\2QMethod : V122_230425N_8260.m
Data File : V22230425N05.D Operator : VOA122:KJD
Date Inj'd : 4/25/2023 7:26 pm Instrument : VOA122
Sample : I8260STD0.5PPB Quant Date : 4/26/2023 3:35 pm

Compound #17: Acetone



Original Peak Response = 1317

M4 = Poor automated baseline construction.

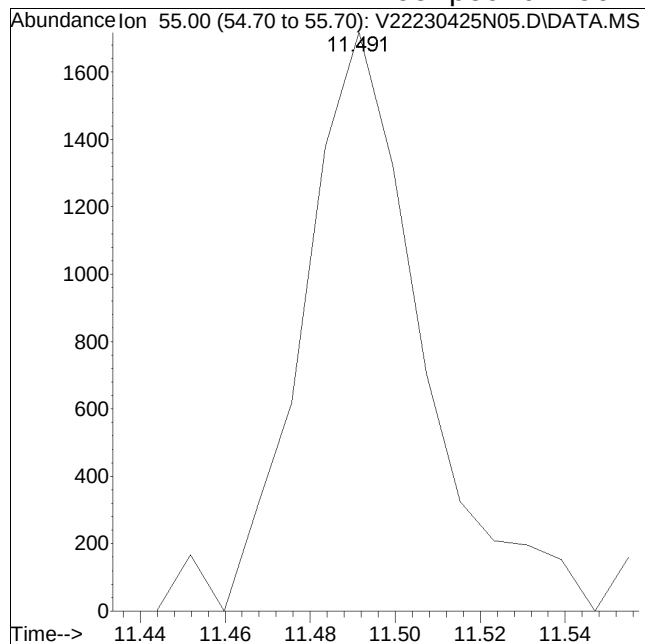


Manual Peak Response = 1477 M4

Manual Integration Report

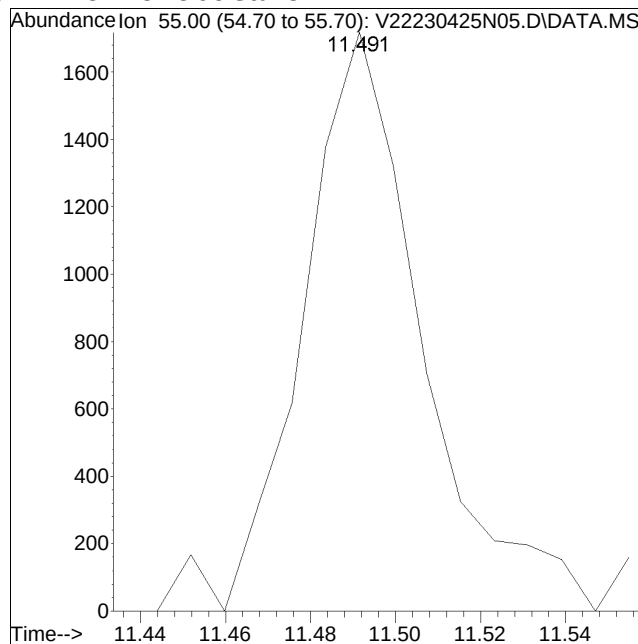
Data Path : I:\VOLATILES\VOA122\2023\20Method : V122_230425N_8260.m
Data File : V22230425N05.D Operator : VOA122:KJD
Date Inj'd : 4/25/2023 7:26 pm Instrument : VOA122
Sample : I8260STD0.5PPB Quant Date : 4/26/2023 3:35 pm

Compound #90: 1,4-Dichlorobutane



Original Peak Response = 3381

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

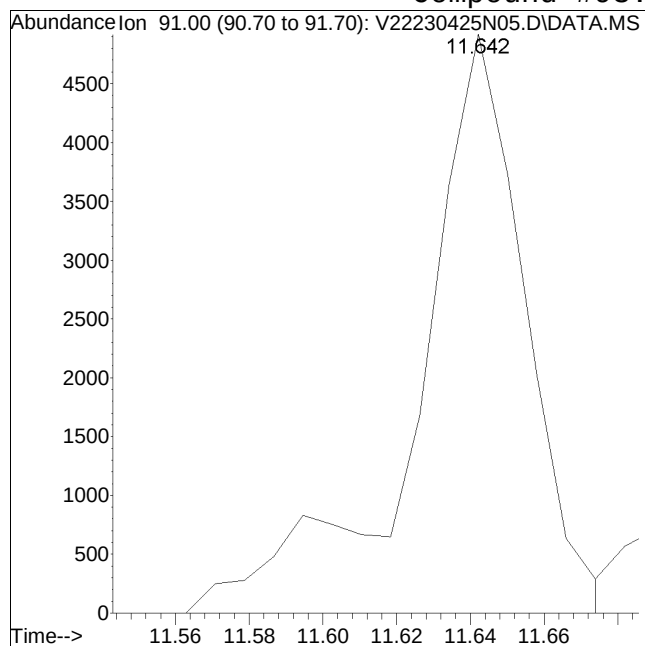


Manual Peak Response = 3301 M6

Manual Integration Report

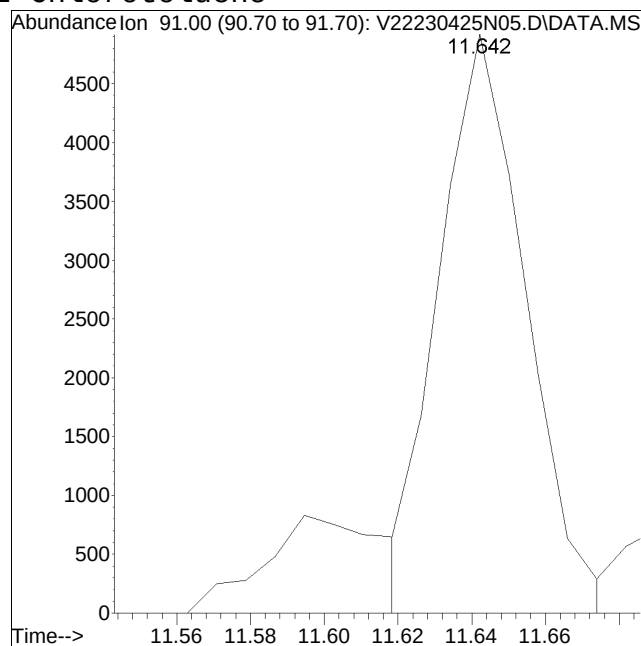
Data Path : I:\VOLATILES\VOA122\2023\20Method : V122_230425N_8260.m
Data File : V22230425N05.D Operator : VOA122:KJD
Date Inj'd : 4/25/2023 7:26 pm Instrument : VOA122
Sample : I8260STD0.5PPB Quant Date : 4/26/2023 3:35 pm

Compound #93: 2-Chlorotoluene



Original Peak Response = 9916

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

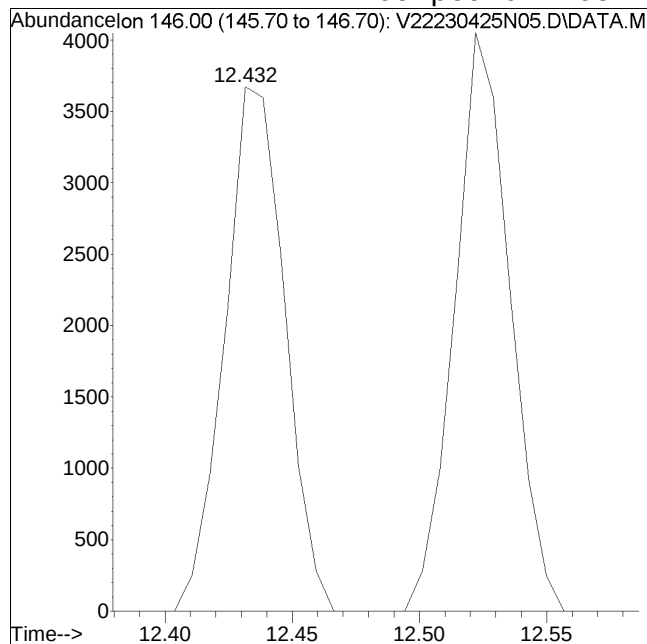


Manual Peak Response = 8057 M6

Manual Integration Report

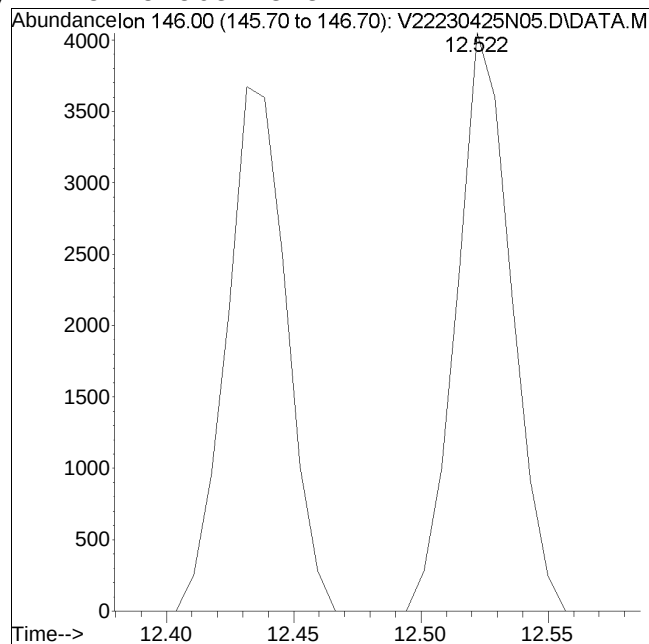
Data Path : I:\VOLATILES\VOA122\2023\20Method : V122_230425N_8260.m
Data File : V22230425N05.D Operator : VOA122:KJD
Date Inj'd : 4/25/2023 7:26 pm Instrument : VOA122
Sample : I8260STD0.5PPB Quant Date : 4/26/2023 3:35 pm

Compound #105: 1,4-Dichlorobenzene



Original Peak Response = 6009

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.



Manual Peak Response = 6118 M3

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA122\2023\230425NICAL\
 Data File : V22230425N07.D
 Acq On : 25 Apr 2023 08:15 pm
 Operator : VOA122:KJD
 Sample : I8260STD2PPB
 Misc : WG1771536
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 26 15:49:51 2023
 Quant Method : I:\VOLATILES\VOA122\2023\230425NICAL\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 15:33:46 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA122\2023\230425NICAL\V22230425N09.D
 Sub List : 8260-Curve - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	6.292	96	309245	10.000	ug/L	0.00
Standard Area 1 = 315952			Recovery	=	97.88%	
62) Chlorobenzene-d5	9.874	117	312177	10.000	ug/L	0.00
Standard Area 1 = 314946			Recovery	=	99.12%	
83) 1,4-Dichlorobenzene-d4	12.508	152	167202	10.000	ug/L	0.00
Standard Area 1 = 169884			Recovery	=	98.42%	
System Monitoring Compounds						
38) Dibromofluoromethane	5.453	113	107734	9.904	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	99.04%	
46) 1,2-Dichloroethane-d4	5.997	65	91774	9.849	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	98.49%	
63) Toluene-d8	8.009	98	390153	10.144	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	101.44%	
87) 4-Bromofluorobenzene	11.325	95	142465	10.053	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	100.53%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.682	85	10079	2.072	ug/L	97
3) Chloromethane	1.884	50	11241	2.021	ug/L	96
4) Vinyl chloride	1.968	62	13363	2.020	ug/L	98
5) Bromomethane	2.310	94	10543	2.212	ug/L	94
6) Chloroethane	2.435	64	9429	2.139	ug/L	85
7) Trichlorofluoromethane	2.588	101	16693	2.064	ug/L	95
8) Ethyl ether	2.909	74	3012	1.862	ug/L #	1
10) 1,1-Dichloroethene	3.118	96	10083	2.108	ug/L	99
11) Carbon disulfide	3.153	76	32290	2.069	ug/L	100
12) Freon-113	3.160	101	9389	1.975	ug/L	97
13) Iodomethane	3.265	142	13481	1.751	ug/L	97
14) Acrolein	3.453	56	1365	2.914	ug/L #	72
15) Methylene chloride	3.704	84	11626	2.032	ug/L	93
17) Acetone	3.746	43	2323	2.268	ug/L	93
18) trans-1,2-Dichloroethene	3.864	96	10123	2.036	ug/L	97
19) Methyl acetate	3.871	43	5560	2.905	ug/L #	90
21) Methyl tert-butyl ether	3.962	73	13077	1.849	ug/L	94
22) tert-Butyl alcohol	4.045	59	1835	9.350	ug/L #	47
24) Diisopropyl ether	4.338	45	21124	2.032	ug/L	95
25) 1,1-Dichloroethane	4.471	63	18316	2.048	ug/L	98
26) Halothane	4.519	117	7112	1.970	ug/L	96

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA122\2023\230425NICAL\
 Data File : V22230425N07.D
 Acq On : 25 Apr 2023 08:15 pm
 Operator : VOA122:KJD
 Sample : I8260STD2PPB
 Misc : WG1771536
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 26 15:49:51 2023
 Quant Method : I:\VOLATILES\VOA122\2023\230425NICAL\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 15:33:46 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA122\2023\230425NICAL\V22230425N09.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
27) Acrylonitrile	4.519	53	1868	1.889	ug/L	91
28) Ethyl tert-butyl ether	4.701	59	18236	1.944	ug/L	89
29) Vinyl acetate	4.708	43	8448	2.015	ug/L #	89
30) cis-1,2-Dichloroethene	5.000	96	11214	1.992	ug/L	96
31) 2,2-Dichloropropane	5.112	77	14070	2.168	ug/L	98
32) Bromochloromethane	5.203	128	5549	1.959	ug/L	93
33) Cyclohexane	5.216	56	15102	1.987	ug/L	92
34) Chloroform	5.272	83	17179	2.010	ug/L	98
35) Ethyl acetate	5.391	43	5435	2.936	ug/L #	81
36) Carbon tetrachloride	5.426	117	13205	1.946	ug/L #	94
37) Tetrahydrofuran	5.433	42	1736	2.395	ug/L	96
39) 1,1,1-Trichloroethane	5.488	97	13903	1.919	ug/L	99
41) 2-Butanone	5.579	43	3147	3.330	ug/L #	37
42) 1,1-Dichloropropene	5.607	75	10446	1.878	ug/L	98
44) Benzene	5.864	78	31904	1.903	ug/L	98
45) tert-Amyl methyl ether	5.974	73	17368	2.041	ug/L	94
47) 1,2-Dichloroethane	6.070	62	9777	1.984	ug/L	98
50) Methyl cyclohexane	6.469	83	17083	2.123	ug/L	90
51) Trichloroethene	6.469	95	9977	1.955	ug/L	95
53) Dibromomethane	6.919	93	5112	1.847	ug/L	89
54) 1,2-Dichloropropane	7.029	63	7356	1.821	ug/L	99
56) 2-Chloroethyl vinyl ether	7.714	63	3455	1.974	ug/L #	68
57) Bromodichloromethane	7.088	83	11046	1.898	ug/L #	97
60) 1,4-Dioxane	7.302	88	12978	374.943	ug/L #	80
61) cis-1,3-Dichloropropene	7.788	75	11334	1.804	ug/L #	89
64) Toluene	8.068	92	25071	2.021	ug/L	99
65) 4-Methyl-2-pentanone	8.495	58	1281	1.981	ug/L #	71
66) Tetrachloroethene	8.518	166	10324	2.058	ug/L	97
68) trans-1,3-Dichloropropene	8.549	75	11161	1.906	ug/L	84
70) Ethyl methacrylate	8.740	69	9061	2.134	ug/L	83
71) 1,1,2-Trichloroethane	8.740	83	4639	1.829	ug/L	99
72) Chlorodibromomethane	8.954	129	7289	1.830	ug/L	97
73) 1,3-Dichloropropane	9.073	76	9796	1.887	ug/L	97
74) 1,2-Dibromoethane	9.239	107	6030	1.898	ug/L	98
76) 2-Hexanone	9.517	43	4435	2.486	ug/L #	83
77) Chlorobenzene	9.898	112	29127	1.998	ug/L	88
78) Ethylbenzene	9.929	91	50764	2.002	ug/L	99
79) 1,1,1,2-Tetrachloroethane	9.977	131	8569	1.966	ug/L	97
80) p/m Xylene	10.120	106	38333	3.901	ug/L	98
81) o Xylene	10.643	106	36333	3.925	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA122\2023\230425NICAL\
 Data File : V22230425N07.D
 Acq On : 25 Apr 2023 08:15 pm
 Operator : VOA122:KJD
 Sample : I8260STD2PPB
 Misc : WG1771536
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 26 15:49:51 2023
 Quant Method : I:\VOLATILES\VOA122\2023\230425NICAL\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 15:33:46 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA122\2023\230425NICAL\V22230425N09.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
82)	Styrene	10.706	104	59239	3.852	ug/L	98
84)	Bromoform	10.730	173	4669	1.890	ug/L	97
86)	Isopropylbenzene	11.008	105	49547	1.953	ug/L	99
88)	Bromobenzene	11.436	156	12770	1.989	ug/L	99
89)	n-Propylbenzene	11.476	91	58334	1.970	ug/L	98
90)	1,4-Dichlorobutane	11.492	55	10632	2.156	ug/L	99
91)	1,1,2,2-Tetrachloroethane	11.555	83	7549	2.112	ug/L	99
92)	4-Ethyltoluene	11.603	105	49257	1.986	ug/L	99
93)	2-Chlorotoluene	11.642	91	34722M6	2.011	ug/L	
94)	1,3,5-Trimethylbenzene	11.698	105	43654	2.008	ug/L	99
95)	1,2,3-Trichloropropane	11.698	75	6333	2.110	ug/L	95
96)	trans-1,4-Dichloro-2-b...	11.745	53	2231	2.068	ug/L	98
97)	4-Chlorotoluene	11.825	91	35274	1.976	ug/L	98
98)	tert-Butylbenzene	12.028	119	43011	1.981	ug/L	99
101)	1,2,4-Trimethylbenzene	12.104	105	42488	1.956	ug/L	100
102)	sec-Butylbenzene	12.216	105	51423	1.997	ug/L	99
103)	p-Isopropyltoluene	12.369	119	45658	2.021	ug/L	99
104)	1,3-Dichlorobenzene	12.432	146	25102	2.034	ug/L	99
105)	1,4-Dichlorobenzene	12.522	146	24809M3	2.042	ug/L	
106)	p-Diethylbenzene	12.731	119	27459	2.019	ug/L	99
107)	n-Butylbenzene	12.787	91	39327	2.042	ug/L	98
108)	1,2-Dichlorobenzene	12.947	146	22724	2.055	ug/L	98
109)	1,2,4,5-Tetramethylben...	13.518	119	36545	1.914	ug/L	99
110)	1,2-Dibromo-3-chloropr...	13.712	155	1365	1.918	ug/L	96
111)	1,3,5-Trichlorobenzene	13.747	180	16767	2.020	ug/L	98
112)	Hexachlorobutadiene	14.311	225	5960	2.107	ug/L	98
113)	1,2,4-Trichlorobenzene	14.339	180	14393	1.983	ug/L	99
114)	Naphthalene	14.631	128	30693	1.976	ug/L	100
115)	1,2,3-Trichlorobenzene	14.798	180	12648	2.041	ug/L	98

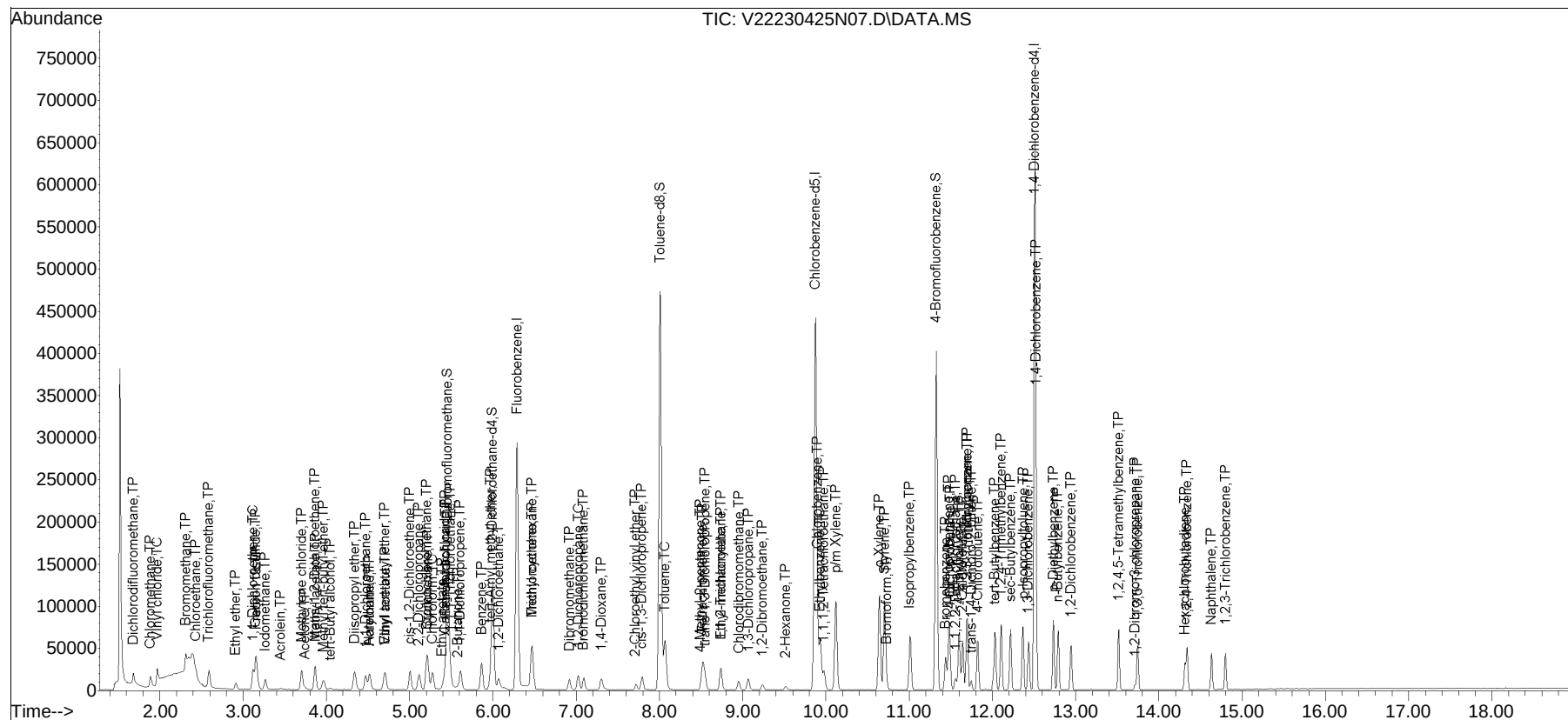
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA122\2023\230425NICAL\
 Data File : V22230425N07.D
 Acq On : 25 Apr 2023 08:15 pm
 Operator : VOA122:KJD
 Sample : I8260STD2PPB
 Misc : WG1771536
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 26 15:49:51 2023
 Quant Method : I:\VOLATILES\VOA122\2023\230425NICAL\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 15:33:46 2023
 Response via : Initial Calibration

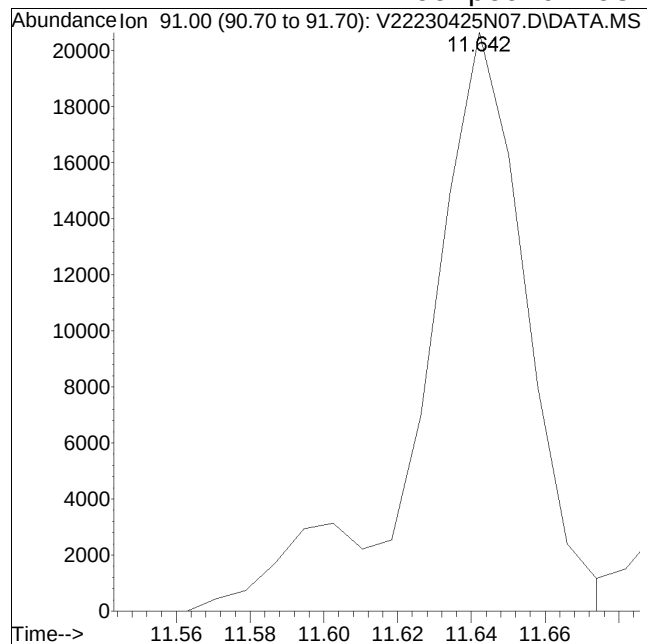
Sub List : 8260-Curve - Megamix plus Diox30425NICAL\V22230425N09.D•



Manual Integration Report

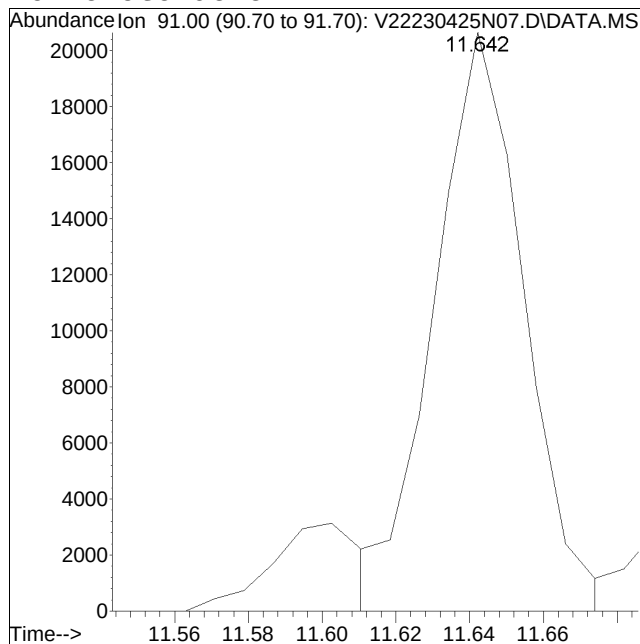
Data Path : I:\VOLATILES\VOA122\2023\2QMethod : V122_230425N_8260.m
Data File : V22230425N07.D Operator : VOA122:KJD
Date Inj'd : 4/25/2023 8:15 pm Instrument : VOA122
Sample : I8260STD2PPB Quant Date : 4/26/2023 3:35 pm

Compound #93: 2-Chlorotoluene



Original Peak Response = 40036

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

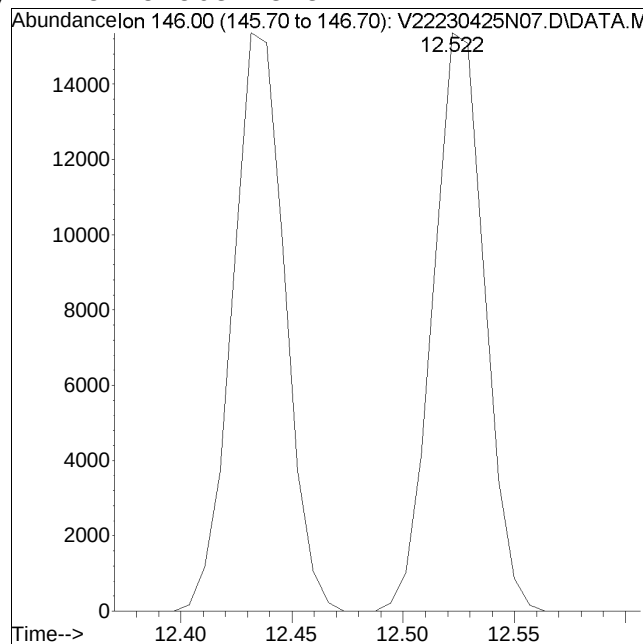
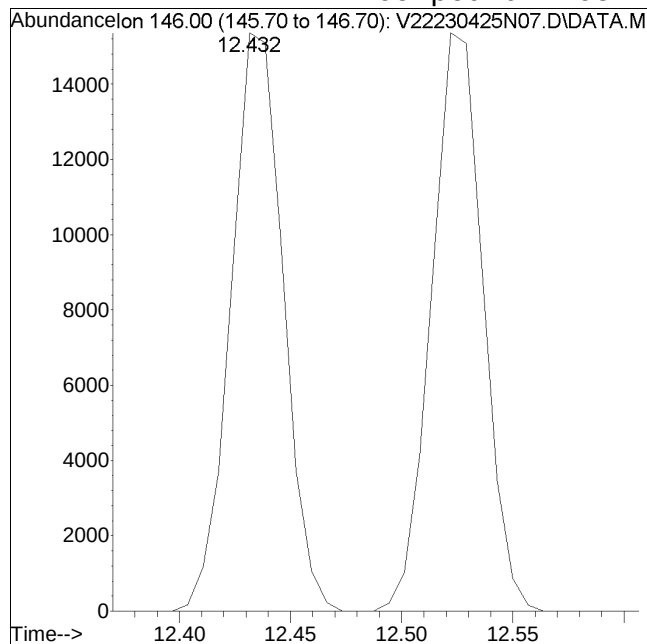


Manual Peak Response = 34722 M6

Manual Integration Report

Data Path : I:\VOLATILES\VOA122\2023\20Method : V122_230425N_8260.m
Data File : V22230425N07.D Operator : VOA122:KJD
Date Inj'd : 4/25/2023 8:15 pm Instrument : VOA122
Sample : I8260STD2PPB Quant Date : 4/26/2023 3:35 pm

Compound #105: 1,4-Dichlorobenzene



Original Peak Response = 25102

Manual Peak Response = 24809 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA122\2023\230425NICAL\
 Data File : V22230425N09.D
 Acq On : 25 Apr 2023 09:04 pm
 Operator : VOA122:KJD
 Sample : I8260STD10PPB
 Misc : WG1771536
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 26 15:33:19 2023
 Quant Method : I:\VOLATILES\VOA122\2023\230425NICAL\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 15:33:48 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA122\2023\230425NICAL\V22230425N09.D
 Sub List : 8260-Curve - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	6.292	96	315952	10.000	ug/L	0.00
Standard Area 1 = 315952			Recovery	=	100.00%	
62) Chlorobenzene-d5	9.874	117	314946	10.000	ug/L	0.00
Standard Area 1 = 314946			Recovery	=	100.00%	
83) 1,4-Dichlorobenzene-d4	12.508	152	169884	10.000	ug/L	0.00
Standard Area 1 = 169884			Recovery	=	100.00%	
System Monitoring Compounds						
38) Dibromofluoromethane	5.453	113	111137	10.000	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	100.00%	
46) 1,2-Dichloroethane-d4	5.996	65	95199	10.000	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	100.00%	
63) Toluene-d8	8.009	98	388008	10.000	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	100.00%	
87) 4-Bromofluorobenzene	11.325	95	143986	10.000	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	100.00%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.682	85	49707	10.000	ug/L	99
3) Chloromethane	1.891	50	56838	10.000	ug/L	99
4) Vinyl chloride	1.968	62	67573	10.000	ug/L	100
5) Bromomethane	2.310	94	48691	10.000	ug/L	96
6) Chloroethane	2.435	64	45045	10.000	ug/L	96
7) Trichlorofluoromethane	2.588	101	82615	10.000	ug/L	98
8) Ethyl ether	2.916	74	16525	10.000	ug/L #	1
10) 1,1-Dichloroethene	3.118	96	48860	10.000	ug/L	95
11) Carbon disulfide	3.153	76	159429	10.000	ug/L	100
12) Freon-113	3.160	101	48567	10.000	ug/L	96
13) Iodomethane	3.265	142	78648	10.000	ug/L	97
14) Acrolein	3.453	56	4786	10.000	ug/L #	83
15) Methylene chloride	3.704	84	58442	10.000	ug/L	94
17) Acetone	3.739	43	10463	10.000	ug/L	95
18) trans-1,2-Dichloroethene	3.864	96	50802	10.000	ug/L	97
19) Methyl acetate	3.864	43	19556	10.000	ug/L	93
21) Methyl tert-butyl ether	3.969	73	72244	10.000	ug/L	97
22) tert-Butyl alcohol	4.045	59	10026	50.000	ug/L	94
24) Diisopropyl ether	4.338	45	106223	10.000	ug/L	97
25) 1,1-Dichloroethane	4.471	63	91379	10.000	ug/L	100
26) Halothane	4.519	117	36892	10.000	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA122\2023\230425NICAL\
 Data File : V22230425N09.D
 Acq On : 25 Apr 2023 09:04 pm
 Operator : VOA122:KJD
 Sample : I8260STD10PPB
 Misc : WG1771536
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 26 15:33:19 2023
 Quant Method : I:\VOLATILES\VOA122\2023\230425NICAL\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 15:33:48 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA122\2023\230425NICAL\V22230425N09.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
27) Acrylonitrile	4.512	53	10102	10.000	ug/L	98
28) Ethyl tert-butyl ether	4.701	59	95826	10.000	ug/L	89
29) Vinyl acetate	4.708	43	42829	10.000	ug/L #	91
30) cis-1,2-Dichloroethene	5.007	96	57528	10.000	ug/L	96
31) 2,2-Dichloropropane	5.119	77	66312	10.000	ug/L	99
32) Bromochloromethane	5.202	128	28935	10.000	ug/L	96
33) Cyclohexane	5.216	56	77653	10.000	ug/L	95
34) Chloroform	5.272	83	87318	10.000	ug/L	98
35) Ethyl acetate	5.384	43	18910	10.000	ug/L	96
36) Carbon tetrachloride	5.419	117	69322	10.000	ug/L	97
37) Tetrahydrofuran	5.433	42	7406	10.000	ug/L	98
39) 1,1,1-Trichloroethane	5.488	97	74036	10.000	ug/L	99
41) 2-Butanone	5.572	43	9654	10.000	ug/L #	52
42) 1,1-Dichloropropene	5.614	75	56820	10.000	ug/L	99
44) Benzene	5.864	78	171321	10.000	ug/L	99
45) tert-Amyl methyl ether	5.974	73	86931	10.000	ug/L	99
47) 1,2-Dichloroethane	6.070	62	50351	10.000	ug/L	98
50) Methyl cyclohexane	6.469	83	82200	10.000	ug/L	95
51) Trichloroethene	6.469	95	52144	10.000	ug/L	99
53) Dibromomethane	6.918	93	28280	10.000	ug/L	87
54) 1,2-Dichloropropane	7.022	63	41278	10.000	ug/L	98
56) 2-Chloroethyl vinyl ether	7.721	63	17882	10.000	ug/L #	88
57) Bromodichloromethane	7.088	83	59456	10.000	ug/L	99
60) 1,4-Dioxane	7.302	88	17682	500.000	ug/L #	82
61) cis-1,3-Dichloropropene	7.795	75	64204	10.000	ug/L	95
64) Toluene	8.068	92	125152	10.000	ug/L	99
65) 4-Methyl-2-pentanone	8.495	58	6525	10.000	ug/L	81
66) Tetrachloroethene	8.526	166	50606	10.000	ug/L	97
68) trans-1,3-Dichloropropene	8.549	75	59077	10.000	ug/L	97
70) Ethyl methacrylate	8.740	69	42846	10.000	ug/L	93
71) 1,1,2-Trichloroethane	8.740	83	25582	10.000	ug/L	97
72) Chlorodibromomethane	8.954	129	40193	10.000	ug/L	99
73) 1,3-Dichloropropane	9.065	76	52371	10.000	ug/L	99
74) 1,2-Dibromoethane	9.239	107	32053	10.000	ug/L	98
76) 2-Hexanone	9.517	43	17999	10.000	ug/L	91
77) Chlorobenzene	9.897	112	147061	10.000	ug/L	98
78) Ethylbenzene	9.929	91	255848	10.000	ug/L	100
79) 1,1,1,2-Tetrachloroethane	9.977	131	43964	10.000	ug/L	98
80) p/m Xylene	10.120	106	198248	20.000	ug/L	98
81) o Xylene	10.643	106	186800	20.000	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA122\2023\230425NICAL\
 Data File : V22230425N09.D
 Acq On : 25 Apr 2023 09:04 pm
 Operator : VOA122:KJD
 Sample : I8260STD10PPB
 Misc : WG1771536
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 26 15:33:19 2023
 Quant Method : I:\VOLATILES\VOA122\2023\230425NICAL\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 15:33:48 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA122\2023\230425NICAL\V22230425N09.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
82)	Styrene	10.706	104	310307	20.000	ug/L	97
84)	Bromoform	10.730	173	25100	10.000	ug/L	99
86)	Isopropylbenzene	11.008	105	257783	10.000	ug/L	99
88)	Bromobenzene	11.436	156	65217	10.000	ug/L	99
89)	n-Propylbenzene	11.476	91	300886	10.000	ug/L	99
90)	1,4-Dichlorobutane	11.491	55	50095	10.000	ug/L	100
91)	1,1,2,2-Tetrachloroethane	11.555	83	36312	10.000	ug/L	99
92)	4-Ethyltoluene	11.602	105	252052	10.000	ug/L	99
93)	2-Chlorotoluene	11.642	91	175463M6	10.000	ug/L	
94)	1,3,5-Trimethylbenzene	11.698	105	220891	10.000	ug/L	99
95)	1,2,3-Trichloropropane	11.698	75	30499	10.000	ug/L	97
96)	trans-1,4-Dichloro-2-b...	11.745	53	10959	10.000	ug/L	96
97)	4-Chlorotoluene	11.825	91	181348	10.000	ug/L	99
98)	tert-Butylbenzene	12.028	119	220579	10.000	ug/L	98
101)	1,2,4-Trimethylbenzene	12.104	105	220738	10.000	ug/L	98
102)	sec-Butylbenzene	12.216	105	261629	10.000	ug/L	100
103)	p-Isopropyltoluene	12.369	119	229531	10.000	ug/L	99
104)	1,3-Dichlorobenzene	12.438	146	125413	10.000	ug/L	99
105)	1,4-Dichlorobenzene	12.522	146	123417	10.000	ug/L	99
106)	p-Diethylbenzene	12.731	119	138217	10.000	ug/L	99
107)	n-Butylbenzene	12.787	91	195645	10.000	ug/L	98
108)	1,2-Dichlorobenzene	12.947	146	112379	10.000	ug/L	99
109)	1,2,4,5-Tetramethylben...	13.517	119	194021	10.000	ug/L	99
110)	1,2-Dibromo-3-chloropr...	13.712	155	7231	10.000	ug/L	97
111)	1,3,5-Trichlorobenzene	13.747	180	84321	10.000	ug/L	98
112)	Hexachlorobutadiene	14.311	225	28736	10.000	ug/L	99
113)	1,2,4-Trichlorobenzene	14.339	180	73760	10.000	ug/L	100
114)	Naphthalene	14.631	128	157798	10.000	ug/L	100
115)	1,2,3-Trichlorobenzene	14.798	180	62965	10.000	ug/L	97

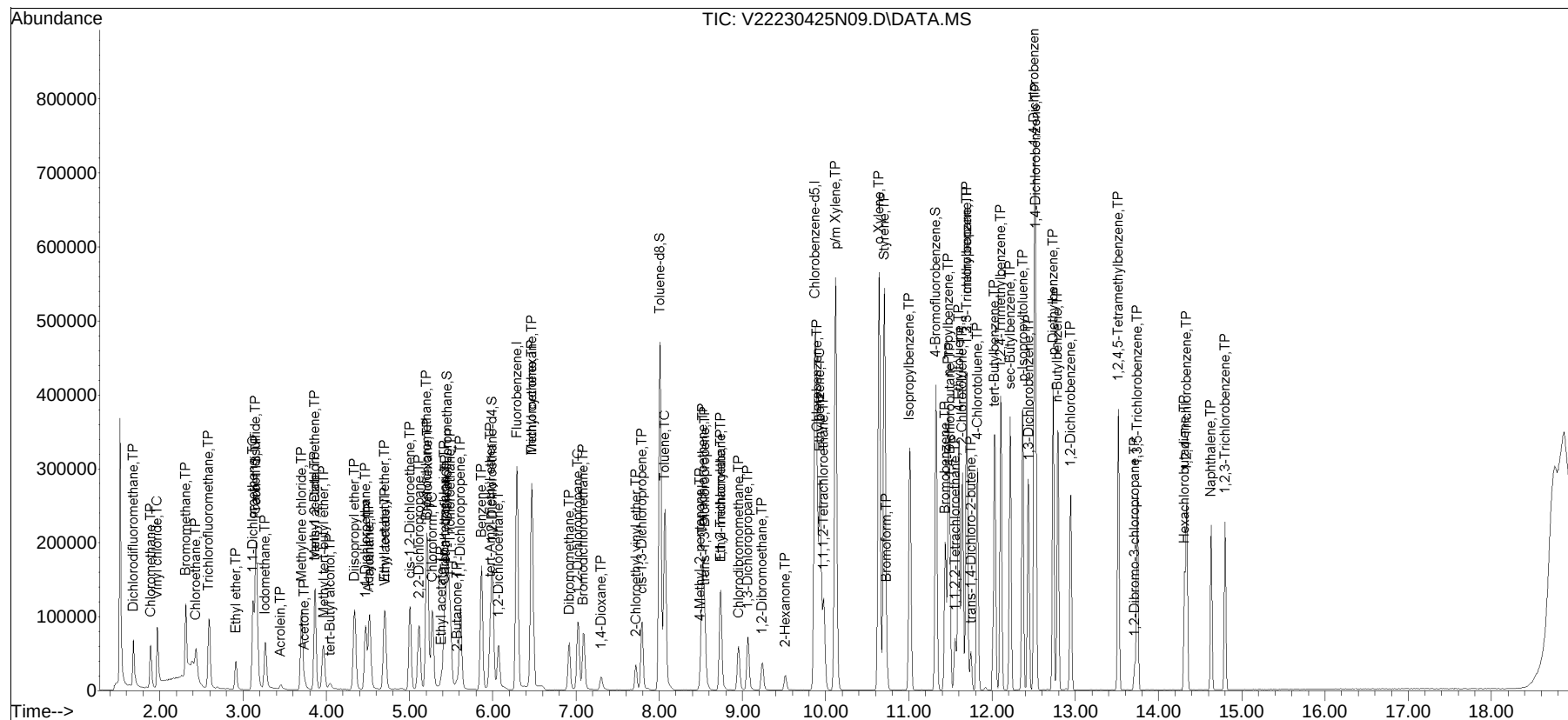
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA122\2023\230425NICAL\
Data File : V22230425N09.D
Acq On : 25 Apr 2023 09:04 pm
Operator : VOA122:KJD
Sample : I8260STD10PPB
Misc : WG1771536
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 26 15:33:19 2023
Quant Method : I:\VOLATILES\VOA122\2023\230425NICAL\V122_230425N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Apr 26 15:33:48 2023
Response via : Initial Calibration

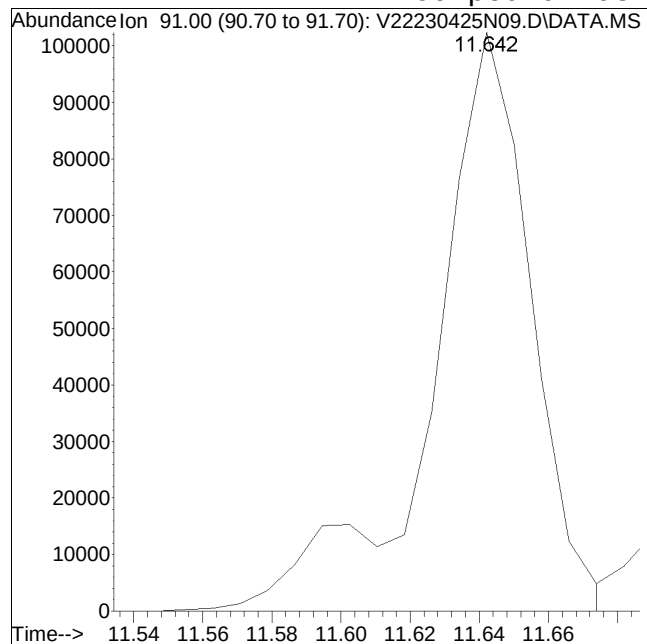
Sub List : 8260-Curve - Megamix plus Diox30425NICAL\V22230425N09.D•



Manual Integration Report

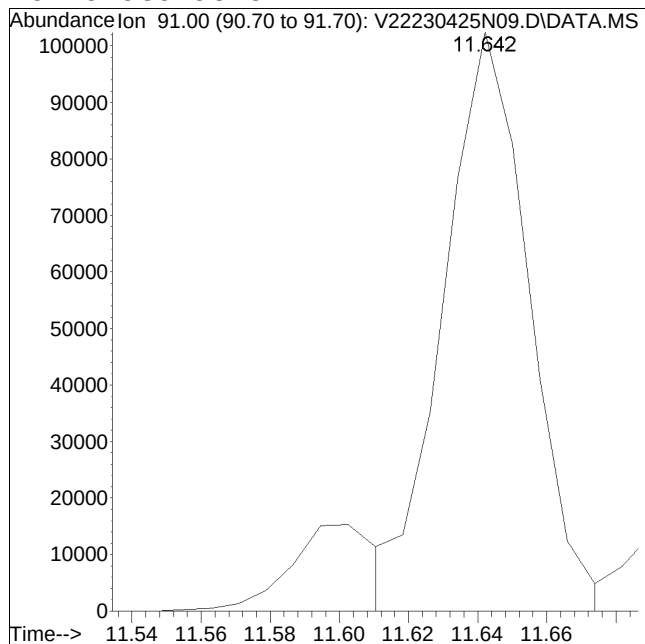
Data Path : I:\VOLATILES\VOA122\2023\2QMethod : V122_230425N_8260.m
Data File : V22230425N09.D Operator : VOA122:KJD
Date Inj'd : 4/25/2023 9:04 pm Instrument : VOA122
Sample : I8260STD10PPB Quant Date : 4/26/2023 3:33 pm

Compound #93: 2-Chlorotoluene



Original Peak Response = 202035

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).



Manual Peak Response = 175463 M6

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA122\2023\230425NICAL\
 Data File : V22230425N10.D
 Acq On : 25 Apr 2023 09:28 pm
 Operator : VOA122:KJD
 Sample : I8260STD30PPB
 Misc : WG1771536
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 26 15:50:47 2023
 Quant Method : I:\VOLATILES\VOA122\2023\230425NICAL\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 15:33:46 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA122\2023\230425NICAL\V22230425N09.D
 Sub List : 8260-Curve - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	6.292	96	344414	10.000	ug/L	0.00
Standard Area 1 = 315952			Recovery	=	109.01%	
62) Chlorobenzene-d5	9.874	117	314746	10.000	ug/L	0.00
Standard Area 1 = 314946			Recovery	=	99.94%	
83) 1,4-Dichlorobenzene-d4	12.508	152	171913	10.000	ug/L	0.00
Standard Area 1 = 169884			Recovery	=	101.19%	
System Monitoring Compounds						
38) Dibromofluoromethane	5.460	113	115189	9.508	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	95.08%	
46) 1,2-Dichloroethane-d4	5.996	65	101046	9.737	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	97.37%	
63) Toluene-d8	8.009	98	386935	9.979	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	99.79%	
87) 4-Bromofluorobenzene	11.325	95	145898	10.013	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	100.13%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.682	85	149206	27.537	ug/L	98
3) Chloromethane	1.891	50	172832	27.895	ug/L	98
4) Vinyl chloride	1.968	62	203652	27.647	ug/L	99
5) Bromomethane	2.310	94	152954	28.817	ug/L	98
6) Chloroethane	2.428	64	131613	26.804	ug/L	100
7) Trichlorofluoromethane	2.588	101	252696	28.059	ug/L	99
8) Ethyl ether	2.916	74	53540	29.722	ug/L	# 1
10) 1,1-Dichloroethene	3.118	96	147897	27.768	ug/L	94
11) Carbon disulfide	3.153	76	482014	27.735	ug/L	100
12) Freon-113	3.160	101	151537	28.623	ug/L	96
13) Iodomethane	3.265	142	256717	29.944	ug/L	96
14) Acrolein	3.453	56	15822	30.327	ug/L	91
15) Methylene chloride	3.704	84	173213	27.189	ug/L	92
17) Acetone	3.739	43	25626	22.468	ug/L	95
18) trans-1,2-Dichloroethene	3.864	96	159219	28.751	ug/L	97
19) Methyl acetate	3.864	43	54840	25.725	ug/L	97
21) Methyl tert-butyl ether	3.962	73	236060	29.975	ug/L	98
22) tert-Butyl alcohol	4.045	59	33642	153.909	ug/L	94
24) Diisopropyl ether	4.338	45	339050	29.281	ug/L	98
25) 1,1-Dichloroethane	4.471	63	290771	29.191	ug/L	99
26) Halothane	4.519	117	117356	29.182	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA122\2023\230425NICAL\
 Data File : V22230425N10.D
 Acq On : 25 Apr 2023 09:28 pm
 Operator : VOA122:KJD
 Sample : I8260STD30PPB
 Misc : WG1771536
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 26 15:50:47 2023
 Quant Method : I:\VOLATILES\VOA122\2023\230425NICAL\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 15:33:46 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA122\2023\230425NICAL\V22230425N09.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
27) Acrylonitrile	4.512	53	31031	28.179	ug/L	98
28) Ethyl tert-butyl ether	4.701	59	311919	29.861	ug/L	96
29) Vinyl acetate	4.708	43	174410	37.357	ug/L	95
30) cis-1,2-Dichloroethene	5.007	96	176937	28.215	ug/L	96
31) 2,2-Dichloropropane	5.112	77	235374	32.562	ug/L	99
32) Bromochloromethane	5.202	128	90316	28.634	ug/L	98
33) Cyclohexane	5.216	56	244023	28.828	ug/L	97
34) Chloroform	5.272	83	275467	28.941	ug/L	98
35) Ethyl acetate	5.384	43	65338	31.697	ug/L	99
36) Carbon tetrachloride	5.426	117	223134	29.528	ug/L	99
37) Tetrahydrofuran	5.433	42	20362	25.222	ug/L #	86
39) 1,1,1-Trichloroethane	5.488	97	234174	29.016	ug/L	99
41) 2-Butanone	5.572	43	31580	30.009	ug/L #	61
42) 1,1-Dichloropropene	5.614	75	188865	30.492	ug/L	99
44) Benzene	5.864	78	550850	29.496	ug/L	99
45) tert-Amyl methyl ether	5.974	73	272340	28.739	ug/L	100
47) 1,2-Dichloroethane	6.070	62	159147	28.996	ug/L	99
50) Methyl cyclohexane	6.469	83	261911	29.230	ug/L	96
51) Trichloroethene	6.469	95	168530	29.649	ug/L	97
53) Dibromomethane	6.918	93	88115	28.583	ug/L	89
54) 1,2-Dichloropropane	7.022	63	136461	30.327	ug/L	99
56) 2-Chloroethyl vinyl ether	7.721	63	57992	29.750	ug/L	96
57) Bromodichloromethane	7.095	83	191579	29.559	ug/L	100
60) 1,4-Dioxane	7.302	88	22196	575.776	ug/L #	82
61) cis-1,3-Dichloropropene	7.795	75	222826	31.838	ug/L	97
64) Toluene	8.068	92	378367	30.252	ug/L	99
65) 4-Methyl-2-pentanone	8.495	58	19463	29.847	ug/L	88
66) Tetrachloroethene	8.518	166	154113	30.473	ug/L	96
68) trans-1,3-Dichloropropene	8.549	75	199993	33.874	ug/L	99
70) Ethyl methacrylate	8.732	69	128365	29.979	ug/L	96
71) 1,1,2-Trichloroethane	8.740	83	83793	32.775	ug/L	97
72) Chlorodibromomethane	8.954	129	135932	33.841	ug/L	98
73) 1,3-Dichloropropane	9.065	76	172543	32.967	ug/L	99
74) 1,2-Dibromoethane	9.239	107	105128	32.819	ug/L	98
76) 2-Hexanone	9.517	43	50688	28.179	ug/L	94
77) Chlorobenzene	9.897	112	441049	30.010	ug/L	98
78) Ethylbenzene	9.929	91	775021	30.311	ug/L	100
79) 1,1,1,2-Tetrachloroethane	9.977	131	141465	32.198	ug/L	98
80) p/m Xylene	10.120	106	607847	61.361	ug/L	98
81) o Xylene	10.643	106	577419	61.861	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA122\2023\230425NICAL\
 Data File : V22230425N10.D
 Acq On : 25 Apr 2023 09:28 pm
 Operator : VOA122:KJD
 Sample : I8260STD30PPB
 Misc : WG1771536
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 26 15:50:47 2023
 Quant Method : I:\VOLATILES\VOA122\2023\230425NICAL\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 15:33:46 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA122\2023\230425NICAL\V22230425N09.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
82)	Styrene	10.706	104	966953	62.362	ug/L	98
84)	Bromoform	10.730	173	83121	32.725	ug/L	98
86)	Isopropylbenzene	11.016	105	801779	30.736	ug/L	99
88)	Bromobenzene	11.436	156	199920	30.293	ug/L	99
89)	n-Propylbenzene	11.476	91	935330	30.719	ug/L	99
90)	1,4-Dichlorobutane	11.491	55	150297	29.648	ug/L	99
91)	1,1,2,2-Tetrachloroethane	11.555	83	115711	31.490	ug/L	100
92)	4-Ethyltoluene	11.602	105	771947	30.265	ug/L	100
93)	2-Chlorotoluene	11.642	91	519535M6	29.260	ug/L	
94)	1,3,5-Trimethylbenzene	11.698	105	666832	29.832	ug/L	99
95)	1,2,3-Trichloropropane	11.698	75	92102	29.842	ug/L	98
96)	trans-1,4-Dichloro-2-b...	11.745	53	33168	29.908	ug/L	99
97)	4-Chlorotoluene	11.825	91	553729	30.174	ug/L	100
98)	tert-Butylbenzene	12.035	119	685602	30.715	ug/L	97
101)	1,2,4-Trimethylbenzene	12.104	105	667764	29.894	ug/L	98
102)	sec-Butylbenzene	12.216	105	808963	30.555	ug/L	100
103)	p-Isopropyltoluene	12.369	119	712040	30.655	ug/L	99
104)	1,3-Dichlorobenzene	12.438	146	384093	30.265	ug/L	99
105)	1,4-Dichlorobenzene	12.529	146	379648	30.398	ug/L	99
106)	p-Diethylbenzene	12.731	119	434045	31.033	ug/L	99
107)	n-Butylbenzene	12.793	91	606180	30.618	ug/L	99
108)	1,2-Dichlorobenzene	12.947	146	345831	30.410	ug/L	98
109)	1,2,4,5-Tetramethylben...	13.517	119	617668	31.459	ug/L	99
110)	1,2-Dibromo-3-chloropr...	13.712	155	22583	30.862	ug/L	97
111)	1,3,5-Trichlorobenzene	13.747	180	265122	31.071	ug/L	98
112)	Hexachlorobutadiene	14.311	225	92468	31.799	ug/L	99
113)	1,2,4-Trichlorobenzene	14.339	180	229665	30.769	ug/L	99
114)	Naphthalene	14.631	128	485796	30.423	ug/L	100
115)	1,2,3-Trichlorobenzene	14.798	180	194495	30.525	ug/L	99

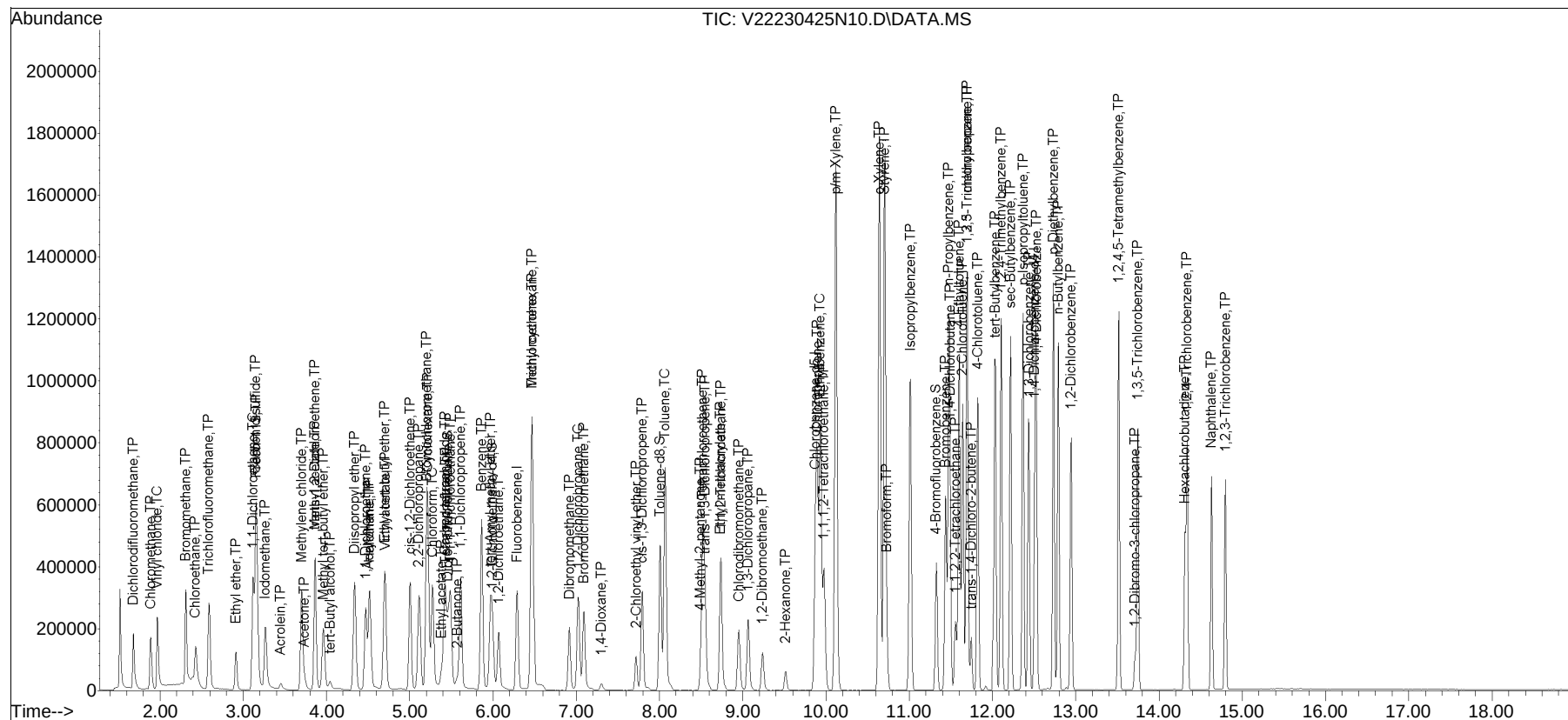
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA122\2023\230425NICAL\
 Data File : V22230425N10.D
 Acq On : 25 Apr 2023 09:28 pm
 Operator : VOA122:KJD
 Sample : I8260STD30PPB
 Misc : WG1771536
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 26 15:50:47 2023
 Quant Method : I:\VOLATILES\VOA122\2023\230425NICAL\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 15:33:46 2023
 Response via : Initial Calibration

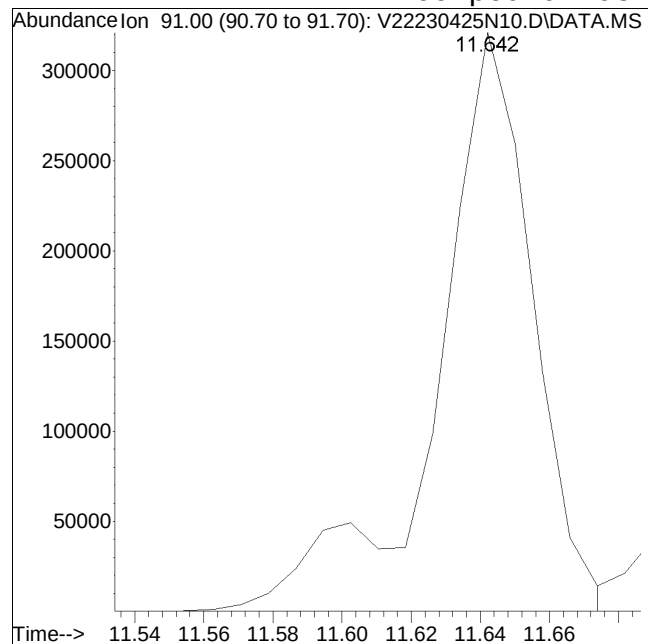
Sub List : 8260-Curve - Megamix plus Diox30425NICAL\V22230425N09.D•



Manual Integration Report

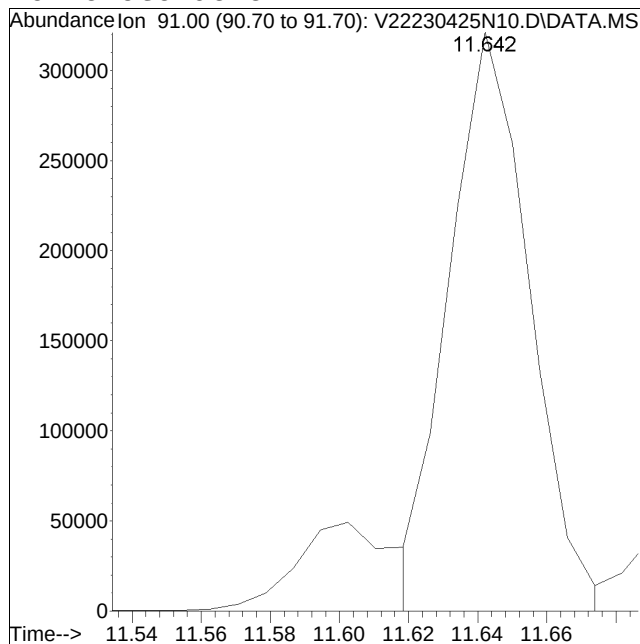
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Data File : V22230425N10.D Operator : VOA122:KJD
Date Inj'd : 4/25/2023 9:28 pm Instrument : VOA122
Sample : I8260STD30PPB Quant Date : 4/26/2023 3:35 pm

Compound #93: 2-Chlorotoluene



Original Peak Response = 614940

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).



Manual Peak Response = 519535 M6

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA122\2023\230425NICAL\
 Data File : V22230425N11.D
 Acq On : 25 Apr 2023 09:53 pm
 Operator : VOA122:KJD
 Sample : I8260STD80PPB
 Misc : WG1771536
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 26 15:51:46 2023
 Quant Method : I:\VOLATILES\VOA122\2023\230425NICAL\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 15:33:46 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA122\2023\230425NICAL\V22230425N09.D
 Sub List : 8260-Curve - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	6.292	96	381122	10.000	ug/L	0.00
Standard Area 1 = 315952			Recovery	=	120.63%	
62) Chlorobenzene-d5	9.874	117	325415	10.000	ug/L	0.00
Standard Area 1 = 314946			Recovery	=	103.32%	
83) 1,4-Dichlorobenzene-d4	12.508	152	178967	10.000	ug/L	0.00
Standard Area 1 = 169884			Recovery	=	105.35%	
System Monitoring Compounds						
38) Dibromofluoromethane	5.454	113	120489	8.988	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	89.88%	
46) 1,2-Dichloroethane-d4	5.997	65	109674	9.551	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	95.51%	
63) Toluene-d8	8.009	98	401796	10.022	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	100.22%	
87) 4-Bromofluorobenzene	11.325	95	152011	10.022	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	100.22%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.682	85	395423	65.948	ug/L	98
3) Chloromethane	1.884	50	460684	67.193	ug/L	98
4) Vinyl chloride	1.968	62	545081	66.872	ug/L	99
5) Bromomethane	2.310	94	425852	72.505	ug/L	98
6) Chloroethane	2.428	64	368786	67.871	ug/L	100
7) Trichlorofluoromethane	2.588	101	691763	69.415	ug/L	100
8) Ethyl ether	2.916	74	153803	77.158	ug/L	# 1
10) 1,1-Dichloroethene	3.118	96	403469	68.456	ug/L	94
11) Carbon disulfide	3.153	76	1313171	68.283	ug/L	99
12) Freon-113	3.160	101	421816	72.001	ug/L	96
13) Iodomethane	3.265	142	713452	75.203	ug/L	96
14) Acrolein	3.453	56	41973	72.703	ug/L	99
15) Methylene chloride	3.704	84	463880	65.802	ug/L	93
17) Acetone	3.739	43	71197	56.411	ug/L	96
18) trans-1,2-Dichloroethene	3.864	96	439651	71.744	ug/L	97
19) Methyl acetate	3.864	43	148122	62.791	ug/L	98
21) Methyl tert-butyl ether	3.962	73	694330	79.675	ug/L	98
22) tert-Butyl alcohol	4.045	59	95000	392.756	ug/L	97
24) Diisopropyl ether	4.338	45	981612	76.609	ug/L	97
25) 1,1-Dichloroethane	4.471	63	788774	71.559	ug/L	100
26) Halothane	4.519	117	342812	77.034	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA122\2023\230425NICAL\
 Data File : V22230425N11.D
 Acq On : 25 Apr 2023 09:53 pm
 Operator : VOA122:KJD
 Sample : I8260STD80PPB
 Misc : WG1771536
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 26 15:51:46 2023
 Quant Method : I:\VOLATILES\VOA122\2023\230425NICAL\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 15:33:46 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA122\2023\230425NICAL\V22230425N09.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
27) Acrylonitrile	4.512	53	82312	67.548	ug/L	96
28) Ethyl tert-butyl ether	4.701	59	916315	79.272	ug/L	95
29) Vinyl acetate	4.708	43	512549	99.210	ug/L	95
30) cis-1,2-Dichloroethene	5.007	96	481889	69.442	ug/L	96
31) 2,2-Dichloropropane	5.112	77	654043	81.766	ug/L	100
32) Bromochloromethane	5.203	128	241500	69.191	ug/L	98
33) Cyclohexane	5.216	56	738005	78.788	ug/L	94
34) Chloroform	5.272	83	763311	72.469	ug/L	97
35) Ethyl acetate	5.384	43	193995	85.046	ug/L	99
36) Carbon tetrachloride	5.419	117	646491	77.312	ug/L	99
37) Tetrahydrofuran	5.433	42	56941	63.738	ug/L #	83
39) 1,1,1-Trichloroethane	5.488	97	683279	76.509	ug/L	98
41) 2-Butanone	5.572	43	94229	80.916	ug/L #	59
42) 1,1-Dichloropropene	5.614	75	559521	81.634	ug/L	99
44) Benzene	5.864	78	1629491	78.849	ug/L	98
45) tert-Amyl methyl ether	5.974	73	790607	75.395	ug/L	100
47) 1,2-Dichloroethane	6.070	62	473086	77.891	ug/L	98
50) Methyl cyclohexane	6.469	83	752087	75.850	ug/L	95
51) Trichloroethene	6.469	95	506014	80.448	ug/L	97
53) Dibromomethane	6.919	93	246273	72.193	ug/L	89
54) 1,2-Dichloropropane	7.022	63	420900	84.531	ug/L	98
56) 2-Chloroethyl vinyl ether	7.722	63	170187	78.898	ug/L	96
57) Bromodichloromethane	7.088	83	591895	82.529	ug/L	100
60) 1,4-Dioxane	7.302	88	29540	692.478	ug/L #	82
61) cis-1,3-Dichloropropene	7.795	75	663225	85.636	ug/L	97
64) Toluene	8.068	92	1030348	79.679	ug/L	99
65) 4-Methyl-2-pentanone	8.495	58	53683	79.626	ug/L	90
66) Tetrachloroethene	8.518	166	417834	79.910	ug/L	96
68) trans-1,3-Dichloropropene	8.549	75	594081	97.325	ug/L	99
70) Ethyl methacrylate	8.732	69	337961	76.340	ug/L	98
71) 1,1,2-Trichloroethane	8.740	83	245057	92.711	ug/L	97
72) Chlorodibromomethane	8.954	129	402881	97.012	ug/L	99
73) 1,3-Dichloropropane	9.065	76	503690	93.083	ug/L	99
74) 1,2-Dibromoethane	9.239	107	306616	92.582	ug/L	100
76) 2-Hexanone	9.517	43	131087	70.487	ug/L	96
77) Chlorobenzene	9.898	112	1196331	78.732	ug/L	98
78) Ethylbenzene	9.929	91	2096819	79.319	ug/L	100
79) 1,1,1,2-Tetrachloroethane	9.977	131	417626	91.937	ug/L	97
80) p/m Xylene	10.120	106	1664636	162.532	ug/L	99
81) o Xylene	10.643	106	1600062	165.802	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA122\2023\230425NICAL\
 Data File : V22230425N11.D
 Acq On : 25 Apr 2023 09:53 pm
 Operator : VOA122:KJD
 Sample : I8260STD80PPB
 Misc : WG1771536
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 26 15:51:46 2023
 Quant Method : I:\VOLATILES\VOA122\2023\230425NICAL\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 15:33:46 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA122\2023\230425NICAL\V22230425N09.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
82)	Styrene	10.706	104	2682947	167.359	ug/L	96
84)	Bromoform	10.730	173	249162	94.230	ug/L	99
86)	Isopropylbenzene	11.008	105	2174624	80.077	ug/L	100
88)	Bromobenzene	11.436	156	539175	78.478	ug/L	100
89)	n-Propylbenzene	11.476	91	2551243	80.488	ug/L	100
90)	1,4-Dichlorobutane	11.492	55	419123	79.419	ug/L	99
91)	1,1,2,2-Tetrachloroethane	11.555	83	315594	82.501	ug/L	100
92)	4-Ethyltoluene	11.603	105	2074663	78.133	ug/L	99
93)	2-Chlorotoluene	11.642	91	1463845M6	79.193	ug/L	
94)	1,3,5-Trimethylbenzene	11.698	105	1794850	77.131	ug/L	99
95)	1,2,3-Trichloropropane	11.698	75	258010	80.303	ug/L	98
96)	trans-1,4-Dichloro-2-b...	11.745	53	92014	79.701	ug/L	98
97)	4-Chlorotoluene	11.825	91	1513083	79.201	ug/L	99
98)	tert-Butylbenzene	12.028	119	1863674	80.202	ug/L	98
101)	1,2,4-Trimethylbenzene	12.104	105	1790211	76.985	ug/L	98
102)	sec-Butylbenzene	12.216	105	2203529	79.949	ug/L	100
103)	p-Isopropyltoluene	12.369	119	1915919	79.235	ug/L	98
104)	1,3-Dichlorobenzene	12.432	146	1043394	78.974	ug/L	99
105)	1,4-Dichlorobenzene	12.522	146	1029830	79.208	ug/L	99
106)	p-Diethylbenzene	12.731	119	1166013	80.080	ug/L	98
107)	n-Butylbenzene	12.787	91	1625889	78.886	ug/L	99
108)	1,2-Dichlorobenzene	12.940	146	924677	78.106	ug/L	98
109)	1,2,4,5-Tetramethylben...	13.518	119	1701113	83.227	ug/L	99
110)	1,2-Dibromo-3-chloropr...	13.712	155	63511	83.374	ug/L	100
111)	1,3,5-Trichlorobenzene	13.747	180	700760	78.888	ug/L	97
112)	Hexachlorobutadiene	14.311	225	255969	84.555	ug/L	99
113)	1,2,4-Trichlorobenzene	14.339	180	615691	79.236	ug/L	99
114)	Naphthalene	14.631	128	1283254	77.195	ug/L	100
115)	1,2,3-Trichlorobenzene	14.798	180	517718	78.050	ug/L	99

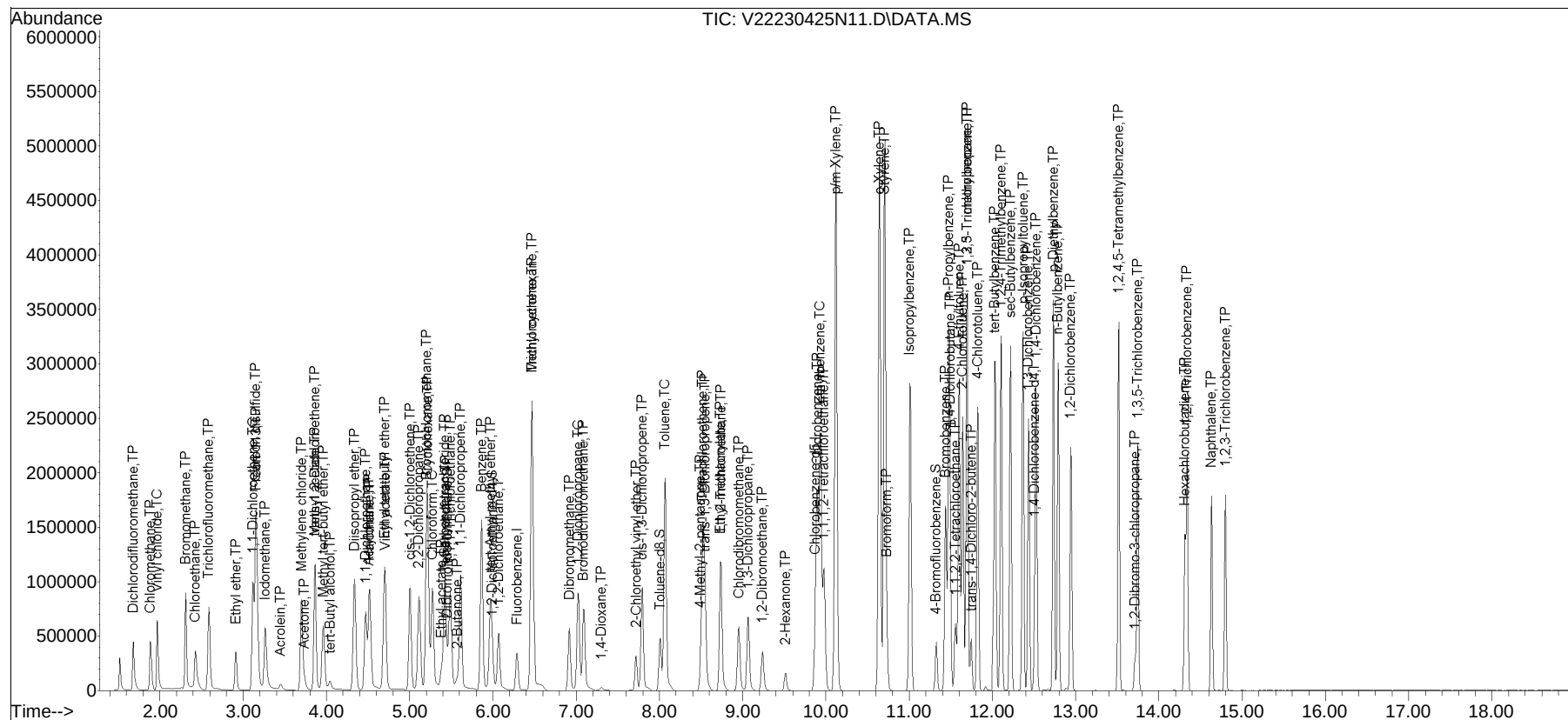
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA122\2023\230425NICAL\
Data File : V22230425N11.D
Acq On : 25 Apr 2023 09:53 pm
Operator : VOA122:KJD
Sample : I8260STD80PPB
Misc : WG1771536
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 26 15:51:46 2023
Quant Method : I:\VOLATILES\VOA122\2023\230425NICAL\V122_230425N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Apr 26 15:33:46 2023
Response via : Initial Calibration

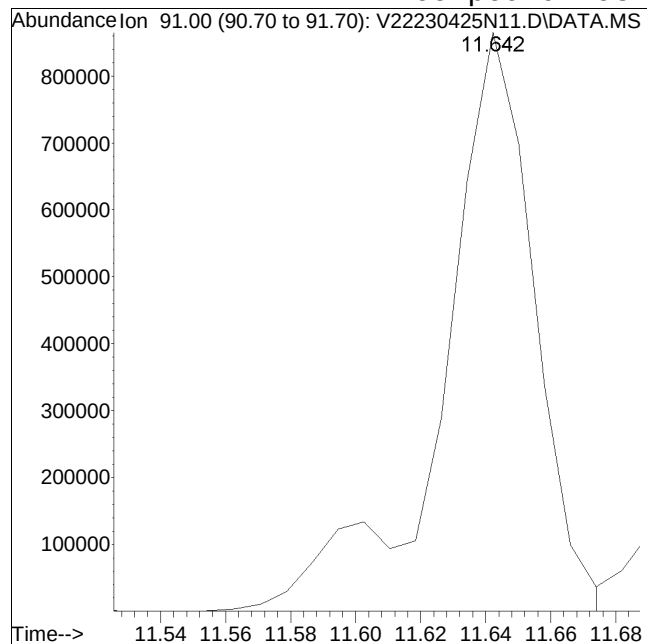
Sub List : 8260-Curve - Megamix plus Diox30425NICAL\V22230425N09.D•



Manual Integration Report

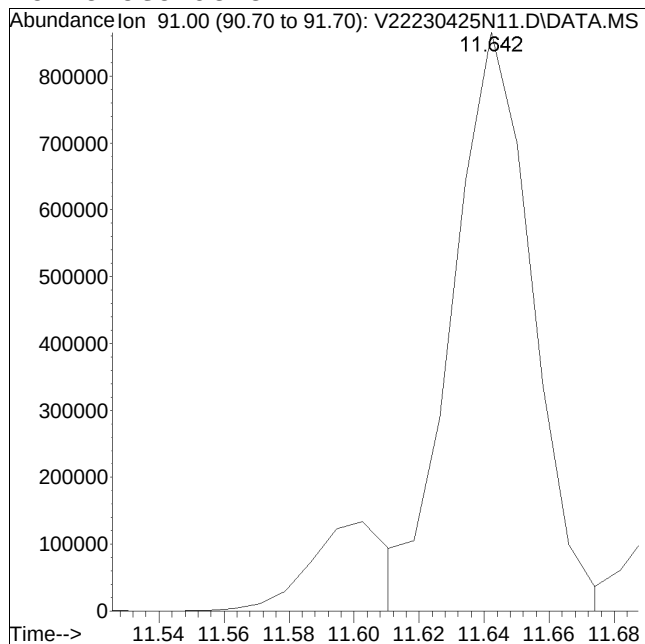
Data Path : I:\VOLATILES\VOA122\2023\2QMethod : V122_230425N_8260.m
Data File : V22230425N11.D Operator : VOA122:KJD
Date Inj'd : 4/25/2023 9:53 pm Instrument : VOA122
Sample : I8260STD80PPB Quant Date : 4/26/2023 3:35 pm

Compound #93: 2-Chlorotoluene



Original Peak Response = 1683750

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).



Manual Peak Response = 1463845 M6

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA122\2023\230425NICAL\
 Data File : V22230425N12.D
 Acq On : 25 Apr 2023 10:17 pm
 Operator : VOA122:KJD
 Sample : I8260STD120PPB
 Misc : WG1771536
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 26 15:52:42 2023
 Quant Method : I:\VOLATILES\VOA122\2023\230425NICAL\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 15:33:46 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA122\2023\230425NICAL\V22230425N09.D
 Sub List : 8260-Curve - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	6.292	96	389715	10.000	ug/L	0.00
Standard Area 1 = 315952			Recovery	=	123.35%	
62) Chlorobenzene-d5	9.874	117	330778	10.000	ug/L	0.00
Standard Area 1 = 314946			Recovery	=	105.03%	
83) 1,4-Dichlorobenzene-d4	12.515	152	182039	10.000	ug/L	0.00
Standard Area 1 = 169884			Recovery	=	107.15%	
System Monitoring Compounds						
38) Dibromofluoromethane	5.460	113	124718	9.098	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	90.98%	
46) 1,2-Dichloroethane-d4	5.996	65	113855	9.696	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	96.96%	
63) Toluene-d8	8.009	98	405561	9.952	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	99.52%	
87) 4-Bromofluorobenzene	11.325	95	152879	9.909	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	99.09%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.682	85	625244	101.978	ug/L	98
3) Chloromethane	1.884	50	713939	101.835	ug/L	98
4) Vinyl chloride	1.968	62	850181	102.003	ug/L	99
5) Bromomethane	2.310	94	676401	112.624	ug/L	99
6) Chloroethane	2.428	64	583957	105.101	ug/L	100
7) Trichlorofluoromethane	2.588	101	1099065	107.855	ug/L	100
8) Ethyl ether	2.916	74	243186	119.308	ug/L #	1
10) 1,1-Dichloroethene	3.118	96	627301	104.087	ug/L	93
11) Carbon disulfide	3.153	76	2048972	104.194	ug/L	99
12) Freon-113	3.160	101	682258	113.889	ug/L	96
13) Iodomethane	3.265	142	1112850	114.716	ug/L	95
14) Acrolein	3.453	56	65024	110.148	ug/L	96
15) Methylene chloride	3.704	84	713697	99.006	ug/L	92
17) Acetone	3.739	43	111275	86.221	ug/L	96
18) trans-1,2-Dichloroethene	3.864	96	713202	113.817	ug/L	99
19) Methyl acetate	3.864	43	236130	97.892	ug/L	97
21) Methyl tert-butyl ether	3.962	73	1119996	125.687	ug/L	98
22) tert-Butyl alcohol	4.045	59	152546	616.761	ug/L #	91
24) Diisopropyl ether	4.338	45	1561669	119.191	ug/L	97
25) 1,1-Dichloroethane	4.470	63	1236259	109.682	ug/L	100
26) Halothane	4.519	117	553831	121.708	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA122\2023\230425NICAL\
 Data File : V22230425N12.D
 Acq On : 25 Apr 2023 10:17 pm
 Operator : VOA122:KJD
 Sample : I8260STD120PPB
 Misc : WG1771536
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 26 15:52:42 2023
 Quant Method : I:\VOLATILES\VOA122\2023\230425NICAL\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 15:33:46 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA122\2023\230425NICAL\V22230425N09.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
27) Acrylonitrile	4.512	53	131130	105.237	ug/L	95
28) Ethyl tert-butyl ether	4.701	59	1479217	125.148	ug/L	95
29) Vinyl acetate	4.707	43	823283	155.842	ug/L	95
30) cis-1,2-Dichloroethene	5.007	96	755247	106.435	ug/L	96
31) 2,2-Dichloropropane	5.112	77	1033172	126.315	ug/L	99
32) Bromochloromethane	5.202	128	375948	105.336	ug/L	97
33) Cyclohexane	5.216	56	1204614	125.766	ug/L	94
34) Chloroform	5.272	83	1238728	115.013	ug/L	99
35) Ethyl acetate	5.384	43	315041	135.067	ug/L	99
36) Carbon tetrachloride	5.426	117	1043171	122.000	ug/L	99
37) Tetrahydrofuran	5.432	42	90176	98.715	ug/L #	83
39) 1,1,1-Trichloroethane	5.488	97	1133672	124.142	ug/L	99
41) 2-Butanone	5.572	43	148375	124.603	ug/L #	60
42) 1,1-Dichloropropene	5.614	75	1002083	142.980	ug/L	99
44) Benzene	5.863	78	2594134	122.760	ug/L	99
45) tert-Amyl methyl ether	5.974	73	1278830	119.265	ug/L	100
47) 1,2-Dichloroethane	6.070	62	752883	121.225	ug/L	99
50) Methyl cyclohexane	6.469	83	1228511	121.166	ug/L	95
51) Trichloroethene	6.469	95	822510	127.882	ug/L	97
53) Dibromomethane	6.918	93	390972	112.083	ug/L	89
54) 1,2-Dichloropropane	7.029	63	669734	131.540	ug/L	99
56) 2-Chloroethyl vinyl ether	7.721	63	269049	121.980	ug/L	97
57) Bromodichloromethane	7.095	83	952641	129.900	ug/L	100
60) 1,4-Dioxane	7.301	88	45127	1034.544	ug/L #	85
61) cis-1,3-Dichloropropene	7.795	75	1069129	135.003	ug/L	97
64) Toluene	8.068	92	1613343	122.741	ug/L	98
65) 4-Methyl-2-pentanone	8.495	58	84155	122.800	ug/L	91
66) Tetrachloroethene	8.518	166	676117	127.209	ug/L	97
68) trans-1,3-Dichloropropene	8.549	75	952818	153.565	ug/L	100
70) Ethyl methacrylate	8.732	69	521405	115.868	ug/L	95
71) 1,1,2-Trichloroethane	8.740	83	394113	146.685	ug/L	97
72) Chlorodibromomethane	8.954	129	656725	155.572	ug/L	99
73) 1,3-Dichloropropane	9.065	76	808286	146.951	ug/L	99
74) 1,2-Dibromoethane	9.239	107	492126	146.186	ug/L	100
76) 2-Hexanone	9.517	43	203090	107.433	ug/L	95
77) Chlorobenzene	9.897	112	1872426	121.229	ug/L	98
78) Ethylbenzene	9.937	91	3257569	121.230	ug/L	99
79) 1,1,1,2-Tetrachloroethane	9.977	131	673898	145.947	ug/L	97
80) p/m Xylene	10.119	106	2647316	254.288	ug/L	100
81) o Xylene	10.643	106	2560286	261.000	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA122\2023\230425NICAL\
 Data File : V22230425N12.D
 Acq On : 25 Apr 2023 10:17 pm
 Operator : VOA122:KJD
 Sample : I8260STD120PPB
 Misc : WG1771536
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 26 15:52:42 2023
 Quant Method : I:\VOLATILES\VOA122\2023\230425NICAL\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 15:33:46 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA122\2023\230425NICAL\V22230425N09.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
82)	Styrene	10.706	104	4236970	260.012	ug/L	94
84)	Bromoform	10.730	173	411627	153.045	ug/L	99
86)	Isopropylbenzene	11.016	105	3408764	123.404	ug/L	100
88)	Bromobenzene	11.436	156	845953	121.052	ug/L	99
89)	n-Propylbenzene	11.476	91	4027260	124.910	ug/L	99
90)	1,4-Dichlorobutane	11.491	55	675510	125.842	ug/L	100
91)	1,1,2,2-Tetrachloroethane	11.555	83	503080	129.293	ug/L	100
92)	4-Ethyltoluene	11.602	105	3253650	120.467	ug/L	99
93)	2-Chlorotoluene	11.642	91	2236715M6	118.963	ug/L	
94)	1,3,5-Trimethylbenzene	11.698	105	2794785	118.075	ug/L	99
95)	1,2,3-Trichloropropane	11.698	75	421229	128.890	ug/L	98
96)	trans-1,4-Dichloro-2-b...	11.745	53	141487	120.485	ug/L	93
97)	4-Chlorotoluene	11.824	91	2378461	122.397	ug/L	98
98)	tert-Butylbenzene	12.035	119	2920808	123.574	ug/L	96
101)	1,2,4-Trimethylbenzene	12.104	105	2752199	116.357	ug/L	99
102)	sec-Butylbenzene	12.216	105	3446412	122.933	ug/L	99
103)	p-Isopropyltoluene	12.369	119	2970991	120.795	ug/L	97
104)	1,3-Dichlorobenzene	12.438	146	1633231	121.533	ug/L	99
105)	1,4-Dichlorobenzene	12.529	146	1608823	121.653	ug/L	99
106)	p-Diethylbenzene	12.731	119	1815062	122.551	ug/L	98
107)	n-Butylbenzene	12.793	91	2513680	119.903	ug/L	99
108)	1,2-Dichlorobenzene	12.947	146	1443418	119.866	ug/L	98
109)	1,2,4,5-Tetramethylben...	13.517	119	2631445	126.571	ug/L	99
110)	1,2-Dibromo-3-chloropr...	13.712	155	99803	128.805	ug/L	99
111)	1,3,5-Trichlorobenzene	13.747	180	1077877	119.295	ug/L	97
112)	Hexachlorobutadiene	14.311	225	402830	130.823	ug/L	99
113)	1,2,4-Trichlorobenzene	14.339	180	945100	119.576	ug/L	99
114)	Naphthalene	14.631	128	1970266	116.523	ug/L	100
115)	1,2,3-Trichlorobenzene	14.798	180	806841	119.585	ug/L	99

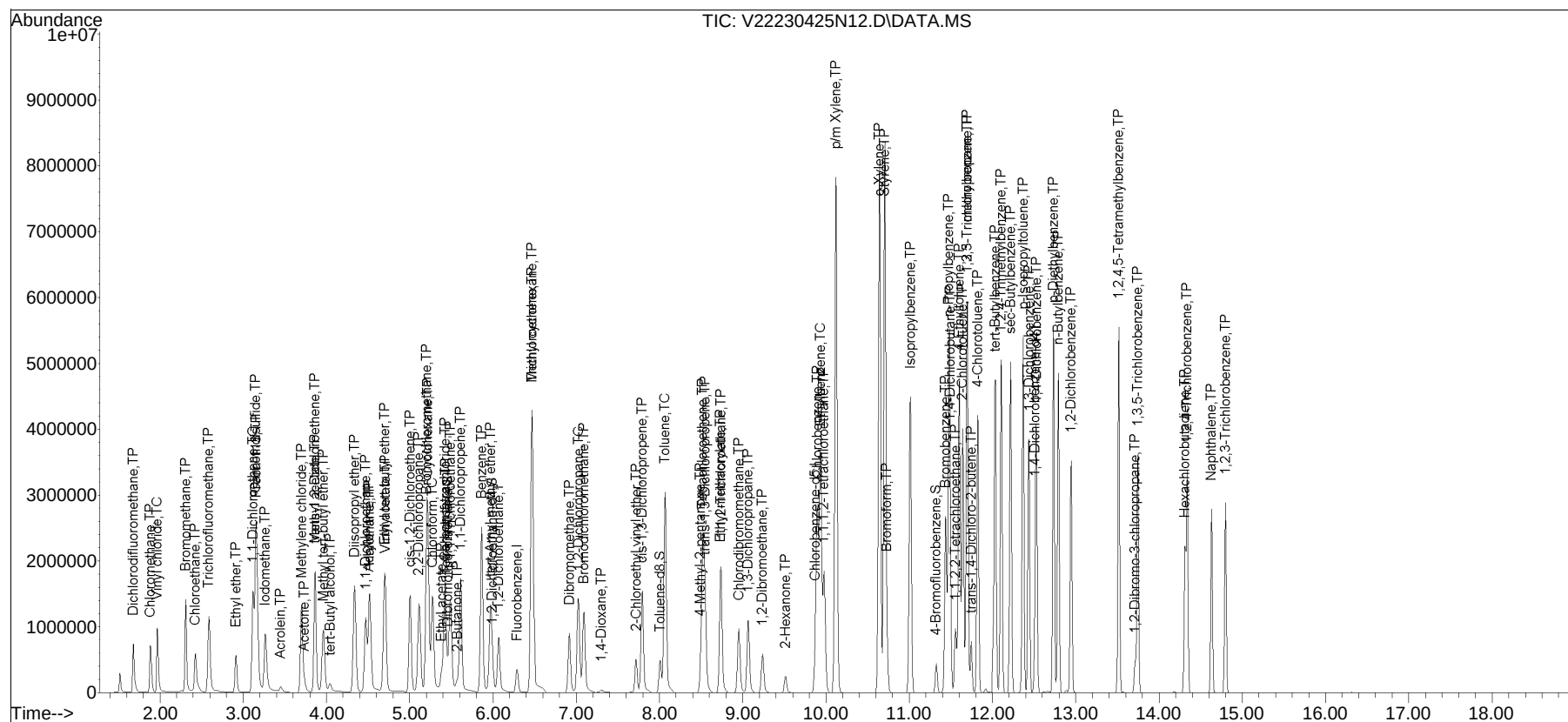
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA122\2023\230425NICAL\
Data File : V22230425N12.D
Acq On : 25 Apr 2023 10:17 pm
Operator : VOA122:KJD
Sample : I8260STD120PPB
Misc : WG1771536
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 26 15:52:42 2023
Quant Method : I:\VOLATILES\VOA122\2023\230425NICAL\V122_230425N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Apr 26 15:33:46 2023
Response via : Initial Calibration

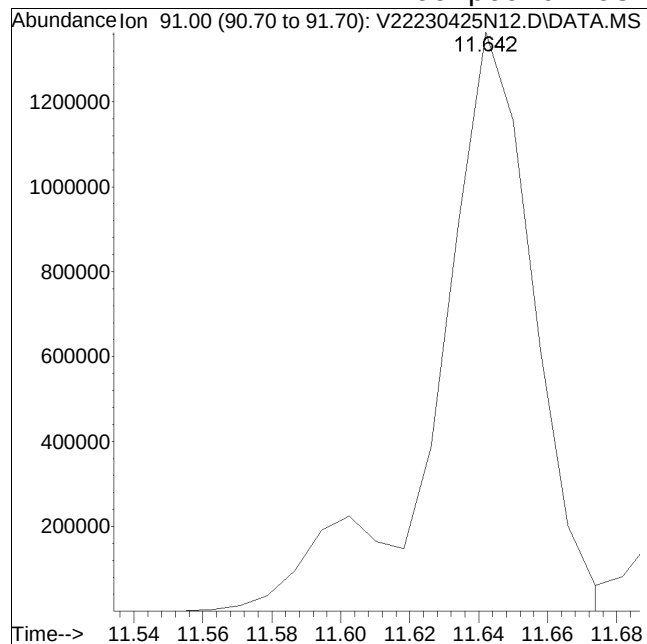
Sub List : 8260-Curve - Megamix plus Diox30425NICAL\V22230425N09.D•



Manual Integration Report

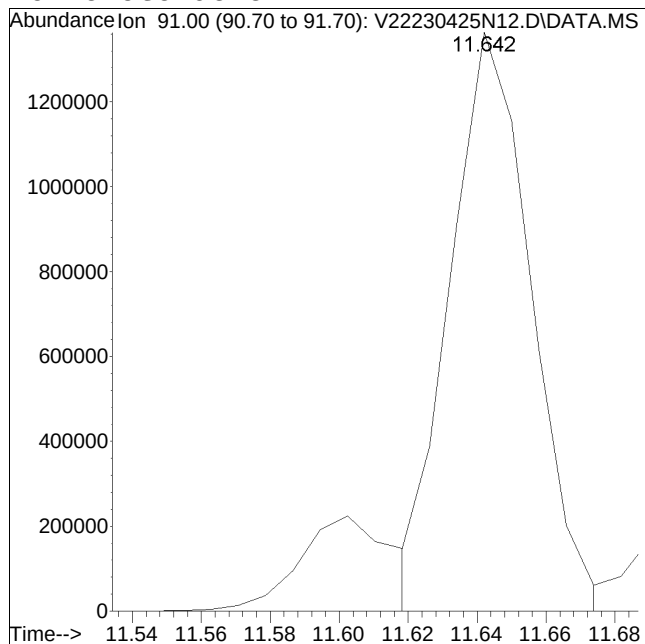
Data Path : I:\VOLATILES\VOA122\2023\2QMethod : V122_230425N_8260.m
Data File : V22230425N12.D Operator : VOA122:KJD
Date Inj'd : 4/25/2023 10:17 pm Instrument : VOA122
Sample : I8260STD120PPB Quant Date : 4/26/2023 3:35 pm

Compound #93: 2-Chlorotoluene



Original Peak Response = 2650292

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).



Manual Peak Response = 2236715 M6

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA122\2023\230425NICAL\
 Data File : V22230425N13.D
 Acq On : 25 Apr 2023 10:41 pm
 Operator : VOA122:KJD
 Sample : I8260STD200PPB
 Misc : WG1771536
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 26 15:43:58 2023
 Quant Method : I:\VOLATILES\VOA122\2023\230425NICAL\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 15:33:46 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA122\2023\230425NICAL\V22230425N09.D
 Sub List : 8260-Curve - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	6.292	96	404857	10.000	ug/L	0.00
Standard Area 1 = 315952			Recovery	=	128.14%	
62) Chlorobenzene-d5	9.874	117	342999	10.000	ug/L	0.00
Standard Area 1 = 314946			Recovery	=	108.91%	
83) 1,4-Dichlorobenzene-d4	12.515	152	188507	10.000	ug/L	0.00
Standard Area 1 = 169884			Recovery	=	110.96%	
System Monitoring Compounds						
38) Dibromofluoromethane	5.460	113	129874	9.120	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	91.20%	
46) 1,2-Dichloroethane-d4	5.996	65	121119	9.929	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	99.29%	
63) Toluene-d8	8.009	98	417309	9.876	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	98.76%	
87) 4-Bromofluorobenzene	11.325	95	157318	9.847	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	98.47%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.682	85	1030313	161.760	ug/L	98
3) Chloromethane	1.884	50	1193597	163.885	ug/L	98
4) Vinyl chloride	1.968	62	1414327	163.341	ug/L	99
5) Bromomethane	2.310	94	1158555	185.690	ug/L	98
6) Chloroethane	2.421	64	1010722	175.107	ug/L	100
7) Trichlorofluoromethane	2.588	101	1858036	175.515	ug/L	100
8) Ethyl ether	2.916	74	423139	199.830	ug/L #	1
10) 1,1-Dichloroethene	3.118	96	1094364	174.795	ug/L	95
11) Carbon disulfide	3.153	76	3435270	168.156	ug/L	99
12) Freon-113	3.160	101	1195229	192.057	ug/L	94
13) Iodomethane	3.265	142	1844878	183.063	ug/L	95
14) Acrolein	3.453	56	113119	184.452	ug/L	97
15) Methylene chloride	3.704	84	1211339	161.756	ug/L	93
17) Acetone	3.739	43	192692	143.723	ug/L	94
18) trans-1,2-Dichloroethene	3.864	96	1208897	185.707	ug/L	97
19) Methyl acetate	3.864	43	408274	162.926	ug/L	97
21) Methyl tert-butyl ether	3.962	73	1981169	214.013	ug/L	98
22) tert-Butyl alcohol	4.045	59	271246	1055.663	ug/L #	91
24) Diisopropyl ether	4.338	45	2725349	200.227	ug/L	97
25) 1,1-Dichloroethane	4.471	63	2107260	179.966	ug/L	100
26) Halothane	4.519	117	991587	209.758	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA122\2023\230425NICAL\
 Data File : V22230425N13.D
 Acq On : 25 Apr 2023 10:41 pm
 Operator : VOA122:KJD
 Sample : I8260STD200PPB
 Misc : WG1771536
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 26 15:43:58 2023
 Quant Method : I:\VOLATILES\VOA122\2023\230425NICAL\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 15:33:46 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA122\2023\230425NICAL\V22230425N09.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
27) Acrylonitrile	4.512	53	229938	177.633	ug/L	97
28) Ethyl tert-butyl ether	4.701	59	2609717	212.535	ug/L	94
29) Vinyl acetate	4.708	43	1394112	254.027	ug/L	95
30) cis-1,2-Dichloroethene	5.007	96	1280530	173.712	ug/L	95
31) 2,2-Dichloropropane	5.112	77	1760763	207.218	ug/L	99
32) Bromochloromethane	5.203	128	639713	172.537	ug/L	96
33) Cyclohexane	5.216	56	2080576	209.096	ug/L	94
34) Chloroform	5.272	83	2118087	189.304	ug/L	99
35) Ethyl acetate	5.384	43	559823	231.035	ug/L	99
36) Carbon tetrachloride	5.426	117	1804717	203.169	ug/L	99
37) Tetrahydrofuran	5.426	42	157738	166.216	ug/L #	82
39) 1,1,1-Trichloroethane	5.488	97	1922693	202.669	ug/L	99
41) 2-Butanone	5.572	43	273768	221.307	ug/L #	58
42) 1,1-Dichloropropene	5.614	75	1732681	237.978	ug/L	99
44) Benzene	5.864	78	4449356	202.678	ug/L	98
45) tert-Amyl methyl ether	5.974	73	2313281	207.670	ug/L	99
47) 1,2-Dichloroethane	6.070	62	1303683	202.061	ug/L	99
50) Methyl cyclohexane	6.469	83	2163588	205.410	ug/L	95
51) Trichloroethene	6.469	95	1471884	220.287	ug/L	96
53) Dibromomethane	6.918	93	678952	187.361	ug/L	89
54) 1,2-Dichloropropane	7.029	63	1173489	221.860	ug/L	99
56) 2-Chloroethyl vinyl ether	7.721	63	480042	209.499	ug/L	96
57) Bromodichloromethane	7.095	83	1658249	217.657	ug/L	100
60) 1,4-Dioxane	7.302	88	75749	1671.610	ug/L #	85
61) cis-1,3-Dichloropropene	7.795	75	1879272	228.427	ug/L	97
64) Toluene	8.068	92	2760337	202.520	ug/L	97
65) 4-Methyl-2-pentanone	8.495	58	142783	200.927	ug/L	89
66) Tetrachloroethene	8.518	166	1159091	210.309	ug/L	96
68) trans-1,3-Dichloropropene	8.549	75	1657119	257.560	ug/L	99
70) Ethyl methacrylate	8.732	69	895259	191.859	ug/L	94
71) 1,1,2-Trichloroethane	8.740	83	700673	251.492	ug/L	97
72) Chlorodibromomethane	8.954	129	1161699	265.391	ug/L	98
73) 1,3-Dichloropropane	9.065	76	1422561	249.415	ug/L	99
74) 1,2-Dibromoethane	9.239	107	860452	246.491	ug/L	99
76) 2-Hexanone	9.517	43	348754	177.916	ug/L	97
77) Chlorobenzene	9.898	112	3223091	201.242	ug/L	98
78) Ethylbenzene	9.937	91	5525305	198.298	ug/L	98
79) 1,1,1,2-Tetrachloroethane	9.977	131	1204569	251.581	ug/L	98
80) p/m Xylene	10.120	106	4617639	427.744	ug/L	95
81) o Xylene	10.643	106	4460323	438.493	ug/L	95

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA122\2023\230425NICAL\
 Data File : V22230425N13.D
 Acq On : 25 Apr 2023 10:41 pm
 Operator : VOA122:KJD
 Sample : I8260STD200PPB
 Misc : WG1771536
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 26 15:43:58 2023
 Quant Method : I:\VOLATILES\VOA122\2023\230425NICAL\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 15:33:46 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA122\2023\230425NICAL\V22230425N09.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
82)	Styrene	10.706	104	7204877	426.391	ug/L	91
84)	Bromoform	10.730	173	755710	271.335	ug/L	99
86)	Isopropylbenzene	11.016	105	5733535	200.444	ug/L	98
88)	Bromobenzene	11.436	156	1442508	199.334	ug/L	100
89)	n-Propylbenzene	11.484	91	6723141	201.370	ug/L	97
90)	1,4-Dichlorobutane	11.491	55	1206824	217.107	ug/L	99
91)	1,1,2,2-Tetrachloroethane	11.555	83	868069	215.441	ug/L	100
92)	4-Ethyltoluene	11.603	105	5443314	194.625	ug/L	97
93)	2-Chlorotoluene	11.642	91	3845247	197.498	ug/L #	88
94)	1,3,5-Trimethylbenzene	11.698	105	4739755	193.376	ug/L	99
95)	1,2,3-Trichloropropane	11.698	75	770737	227.743	ug/L	98
96)	trans-1,4-Dichloro-2-b...	11.745	53	247175	203.263	ug/L	92
97)	4-Chlorotoluene	11.825	91	4078039	202.658	ug/L	98
98)	tert-Butylbenzene	12.035	119	4934064	201.588	ug/L	94
101)	1,2,4-Trimethylbenzene	12.104	105	4599996	187.804	ug/L	100
102)	sec-Butylbenzene	12.223	105	5720557	197.050	ug/L	98
103)	p-Isopropyltoluene	12.369	119	4976593	195.396	ug/L	95
104)	1,3-Dichlorobenzene	12.439	146	2793441	200.734	ug/L	98
105)	1,4-Dichlorobenzene	12.529	146	2758480	201.428	ug/L	99
106)	p-Diethylbenzene	12.738	119	3084363	201.108	ug/L	97
107)	n-Butylbenzene	12.794	91	4183574	192.710	ug/L	99
108)	1,2-Dichlorobenzene	12.947	146	2474576	198.445	ug/L	98
109)	1,2,4,5-Tetramethylben...	13.517	119	4432792	205.899	ug/L	97
110)	1,2-Dibromo-3-chloropr...	13.712	155	171587	213.851	ug/L	100
111)	1,3,5-Trichlorobenzene	13.747	180	1804090	192.818	ug/L	97
112)	Hexachlorobutadiene	14.311	225	677628	212.515	ug/L	98
113)	1,2,4-Trichlorobenzene	14.339	180	1595979	194.998	ug/L	99
114)	Naphthalene	14.631	128	3264655	186.449	ug/L	100
115)	1,2,3-Trichlorobenzene	14.798	180	1349691	193.179	ug/L	98

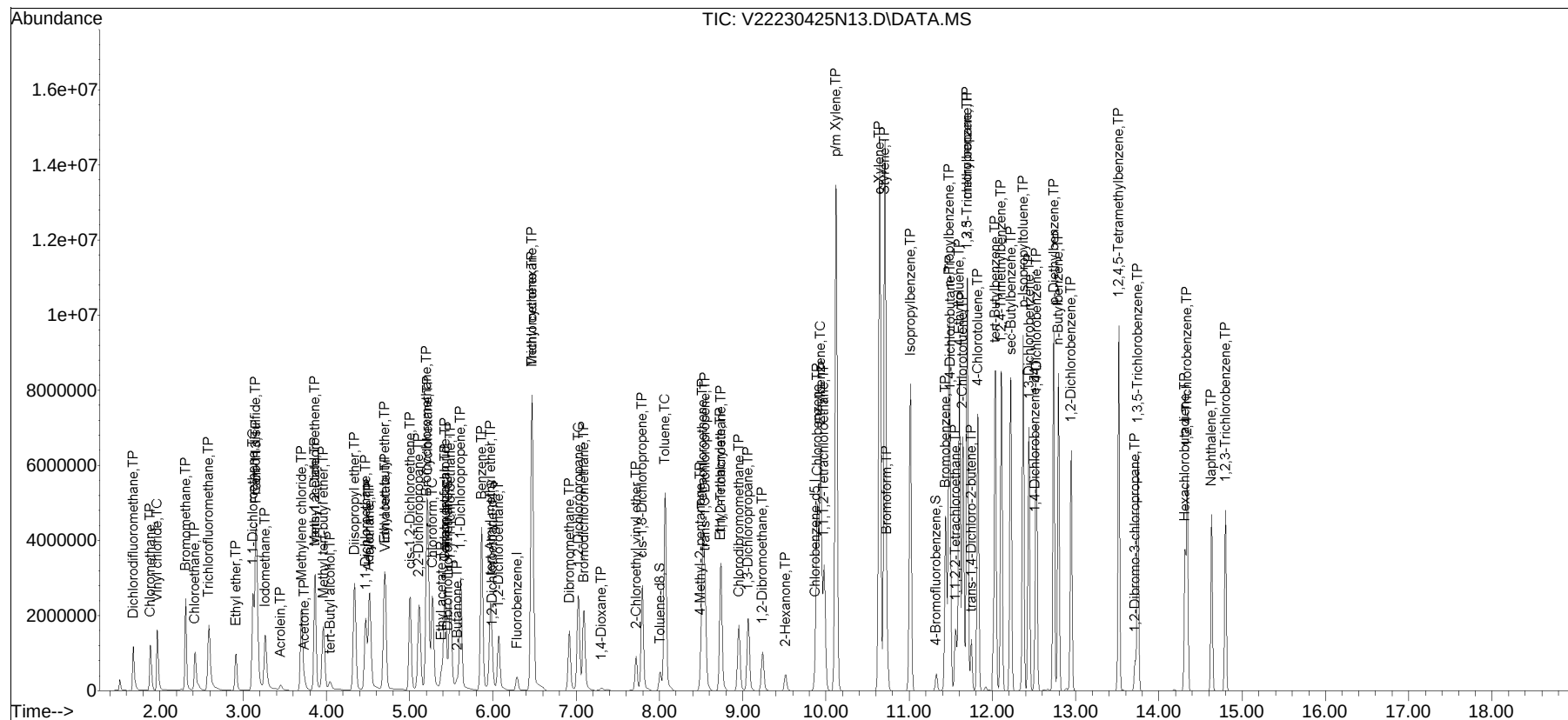
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA122\2023\230425NICAL\
Data File : V22230425N13.D
Acq On : 25 Apr 2023 10:41 pm
Operator : VOA122:KJD
Sample : I8260STD200PPB
Misc : WG1771536
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 26 15:43:58 2023
Quant Method : I:\VOLATILES\VOA122\2023\230425NICAL\V122_230425N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Apr 26 15:33:46 2023
Response via : Initial Calibration

Sub List : 8260-Curve - Megamix plus Diox30425NICAL\V22230425N09.D•



Manual Integration Report

Data Path	: I:\VOLATILES\VOA122\2023\2Q	Method	: V122_230425N_8260.m
Data File	: V22230425N13.D	Operator	: VOA122:KJD
Date Inj'd	: 4/25/2023 10:41 pm	Instrument	: VOA122
Sample	: I8260STD200PPB	Quant Date	: 4/26/2023 3:35 pm

There are no manual integrations or false positives in this file.

Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\VOA122\2023\230425NICAL\
 Data File : V22230425N19.D
 Acq On : 26 Apr 2023 01:08 am
 Operator : VOA122:KJD
 Sample : C8260STD10PPB
 Misc : WG1771536
 ALS Vial : 19 Sample Multiplier: 1

Quant Time: Apr 26 16:19:02 2023
 Quant Method : I:\VOLATILES\VOA122\2023\230425NICAL\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 16:18:23 2023
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Fluorobenzene	1.000	1.000	0.0	102	0.00
2 TP	Dichlorodifluoromethane	0.141	0.162	-14.9	104	0.00
3 TP	Chloromethane	0.164	0.194	-18.3	110	0.00
4 TC	Vinyl chloride	0.194	0.239	-23.2#	114	0.00
5 TP	Bromomethane	0.148	0.206	-39.2#	136	0.00
6 TP	Chloroethane	0.139	0.150	-7.9	107	0.00
7 TP	Trichlorofluoromethane	0.240	0.266	-10.8	103	0.00
8 TP	Ethyl ether	0.051	0.061	-19.6	119	0.00
10 TC	1,1-Dichloroethene	0.144	0.153	-6.3	100	0.00
11 TP	Carbon disulfide	0.459	0.506	-10.2	102	0.00
12 TP	Freon-113	0.144	0.150	-4.2	99	0.00
13 TP	Iodomethane	0.225	0.273	-21.3#	111	0.00
14 TP	Acrolein	* 10.000	7.941	20.6#	82	0.00
15 TP	Methylene chloride	0.169	0.183	-8.3	100	0.00
17 TP	Acetone	* 10.000	9.043	9.6	76	0.00
18 TP	trans-1,2-Dichloroethene	0.153	0.162	-5.9	102	0.00
19 TP	Methyl acetate	* 10.000	8.968	10.3	87	0.00
21 TP	Methyl tert-butyl ether	0.228	0.232	-1.8	103	0.00
22 TP	tert-Butyl alcohol	0.00619	0.00558#	9.9	89	0.00
24 TP	Diisopropyl ether	0.333	0.314	5.7	95	0.00
25 TP	1,1-Dichloroethane	0.272	0.290#	-6.6	102	0.00
26 TP	Halothane	0.114	0.121	-6.1	105	0.00
27 TP	Acrylonitrile	0.030	0.030	0.0	94	0.00
28 TP	Ethyl tert-butyl ether	0.305	0.281	7.9	94	0.00
29 TP	Vinyl acetate	0.160	0.143	10.6	107	0.00
30 TP	cis-1,2-Dichloroethene	0.170	0.171#	-0.6	96	0.00
31 TP	2,2-Dichloropropane	0.218	0.203	6.9	98	0.00
32 TP	Bromochloromethane	0.085	0.088#	-3.5	97	0.00
33 TP	Cyclohexane	0.244	0.224	8.2	93	0.00
34 TC	Chloroform	0.266	0.274	-3.0	100	0.00
35 TP	Ethyl acetate	0.069	0.060	13.0	103	0.00
36 TP	Carbon tetrachloride	0.210	0.214	-1.9	99	0.00
37 TP	Tetrahydrofuran	0.021	0.021	0.0	93	0.00
38 S	Dibromofluoromethane	0.337	0.343	-1.8	99	0.00
39 TP	1,1,1-Trichloroethane	0.226	0.243	-7.5	105	0.00
41 TP	2-Butanone	* 10.000	7.541	24.6#	88	0.00
42 TP	1,1-Dichloropropene	0.182	0.179	1.6	101	0.00
44 TP	Benzene	0.530	0.518	2.3	97	0.00
45 TP	tert-Amyl methyl ether	0.276	0.251	9.1	93	0.00

Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\VOA122\2023\230425NICAL\
 Data File : V22230425N19.D
 Acq On : 26 Apr 2023 01:08 am
 Operator : VOA122:KJD
 Sample : C8260STD10PPB
 Misc : WG1771536
 ALS Vial : 19 Sample Multiplier: 1

Quant Time: Apr 26 16:19:02 2023
 Quant Method : I:\VOLATILES\VOA122\2023\230425NICAL\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 16:18:23 2023
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
46 S	1,2-Dichloroethane-d4	0.297	0.293	1.3	99	0.00
47 T	1,2-Dichloroethane	0.159	0.157	1.3	100	0.00
50 TP	Methyl cyclohexane	0.258	0.245	5.0	95	0.00
51 TP	Trichloroethene	0.172	0.161#	6.4	99	0.00
53 TP	Dibromomethane	0.084	0.086	-2.4	97	0.00
54 TC	1,2-Dichloropropane	0.132	0.126	4.5	98	0.00
56 TP	2-Chloroethyl vinyl ether	0.057	0.054	5.3	97	0.00
57 TP	Bromodichloromethane	0.190	0.181#	4.7	98	0.00
60 TP	1,4-Dioxane	0.00102	0.00102#	0.0	92	0.00
61 TP	cis-1,3-Dichloropropene	0.204	0.197#	3.4	98	0.00
62 I	Chlorobenzene-d5	1.000	1.000	0.0	99	0.00
63 S	Toluene-d8	1.236	1.230	0.5	99	0.00
64 TC	Toluene	0.394	0.402	-2.0	100	0.00
65 TP	4-Methyl-2-pentanone	0.020	0.018#	10.0	87	0.00
66 TP	Tetrachloroethene	0.161	0.166	-3.1	102	0.00
68 TP	trans-1,3-Dichloropropene	0.205	0.184#	10.2	98	0.00
70 TP	Ethyl methacrylate	0.137	0.130	5.1	95	0.00
71 TP	1,1,2-Trichloroethane	0.088	0.079#	10.2	97	0.00
72 TP	Chlorodibromomethane	0.142	0.128#	9.9	100	0.00
73 TP	1,3-Dichloropropane	0.181	0.161	11.0	96	0.00
74 TP	1,2-Dibromoethane	0.110	0.098#	10.9	96	0.00
76 TP	2-Hexanone	0.056	0.047	16.1	82	0.00
77 TP	Chlorobenzene	0.463	0.472	-1.9	100	0.00
78 TC	Ethylbenzene	0.800	0.821	-2.6	100	0.00
79 TP	1,1,1,2-Tetrachloroethane	0.151	0.137	9.3	98	0.00
80 TP	p/m Xylene	0.313	0.313	0.0	99	0.00
81 TP	o Xylene	0.300	0.297	1.0	100	0.00
82 TP	Styrene	0.490	0.490	0.0	99	0.00
83 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	99	0.00
84 TP	Bromoform	0.163	0.146	10.4	98	0.00
86 TP	Isopropylbenzene	1.497	1.519	-1.5	99	0.00
87 S	4-Bromofluorobenzene	0.846	0.847	-0.1	99	0.00
88 TP	Bromobenzene	0.380	0.375	1.3	97	0.00
89 TP	n-Propylbenzene	1.757	1.783	-1.5	100	0.00
90 TP	1,4-Dichlorobutane	0.315	0.300	4.8	101	0.00
91 TP	1,1,2,2-Tetrachloroethane	0.227	0.208	8.4	96	0.00
92 TP	4-Ethyltoluene	1.452	1.487	-2.4	99	0.00

Evaluate Continuing Calibration Report

Data Path : I:\VOLATILES\VOA122\2023\230425NICAL\
 Data File : V22230425N19.D
 Acq On : 26 Apr 2023 01:08 am
 Operator : VOA122:KJD
 Sample : C8260STD10PPB
 Misc : WG1771536
 ALS Vial : 19 Sample Multiplier: 1

Quant Time: Apr 26 16:19:02 2023
 Quant Method : I:\VOLATILES\VOA122\2023\230425NICAL\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 16:18:23 2023
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
93 TP	2-Chlorotoluene	1.010	1.009	0.1	97	0.00
94 TP	1,3,5-Trimethylbenzene	1.264	1.283	-1.5	98	0.00
95 TP	1,2,3-Trichloropropane	0.189	0.167	11.6	92	0.00
96 TP	trans-1,4-Dichloro-2-butene	0.067	0.060	10.4	92	0.00
97 TP	4-Chlorotoluene	1.059	1.046	1.2	97	0.00
98 TP	tert-Butylbenzene	1.278	1.275	0.2	97	0.00
101 TP	1,2,4-Trimethylbenzene	1.252	1.343	-7.3	103	0.00
102 TP	sec-Butylbenzene	1.517	1.532	-1.0	99	0.00
103 TP	p-Isopropyltoluene	1.330	1.354	-1.8	99	0.00
104 TP	1,3-Dichlorobenzene	0.735	0.743	-1.1	100	0.00
105 TP	1,4-Dichlorobenzene	0.728	0.692	4.9	95	0.00
106 TP	p-Diethylbenzene	0.808	0.788	2.5	96	0.00
107 TP	n-Butylbenzene	1.127	1.198	-6.3	103	0.00
108 TP	1,2-Dichlorobenzene	0.660	0.652	1.2	98	0.00
109 TP	1,2,4,5-Tetramethylbenzene	1.145	1.057	7.7	92	0.00
110 TP	1,2-Dibromo-3-chloropropane	0.042	0.041	2.4	97	0.00
111 TP	1,3,5-Trichlorobenzene	0.489	0.496	-1.4	99	0.00
112 TP	Hexachlorobutadiene	0.172	0.165	4.1	97	0.00
113 TP	1,2,4-Trichlorobenzene	0.427	0.417	2.3	95	0.00
114 TP	Naphthalene	0.906	0.874	3.5	93	0.00
115 TP	1,2,3-Trichlorobenzene	0.369	0.360#	2.4	96	0.00

* Evaluation of CC level amount vs concentration.
 (#) = Out of Range SPCC's out = 14 CCC's out = 1

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA122\2023\230425NICAL\
 Data File : V22230425N19.D
 Acq On : 26 Apr 2023 01:08 am
 Operator : VOA122:KJD
 Sample : C8260STD10PPB
 Misc : WG1771536
 ALS Vial : 19 Sample Multiplier: 1

Quant Time: Apr 26 16:19:02 2023
 Quant Method : I:\VOLATILES\VOA122\2023\230425NICAL\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 16:18:23 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA122\2023\230425NICAL\V22230425N09.D
 Sub List : 8260-Curve - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	6.292	96	320725	10.000	ug/L	0.00
Standard Area 1 = 315952			Recovery	=	101.51%	
62) Chlorobenzene-d5	9.874	117	312938	10.000	ug/L	0.00
Standard Area 1 = 314946			Recovery	=	99.36%	
83) 1,4-Dichlorobenzene-d4	12.508	152	168565	10.000	ug/L	0.00
Standard Area 1 = 169884			Recovery	=	99.22%	
System Monitoring Compounds						
38) Dibromofluoromethane	5.454	113	110163	10.199	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	101.99%	
46) 1,2-Dichloroethane-d4	5.997	65	93947	9.855	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	98.55%	
63) Toluene-d8	8.009	98	384983	9.951	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	99.51%	
87) 4-Bromofluorobenzene	11.325	95	142852	10.017	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	100.17%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.682	85	51833	11.463	ug/L	98
3) Chloromethane	1.884	50	62241	11.827	ug/L	98
4) Vinyl chloride	1.968	62	76748	12.321	ug/L	98
5) Bromomethane	2.310	94	66177	13.902	ug/L	98
6) Chloroethane	2.428	64	48267	10.803	ug/L	97
7) Trichlorofluoromethane	2.589	101	85349	11.099	ug/L	99
8) Ethyl ether	2.909	74	19651	12.044	ug/L	# 1
10) 1,1-Dichloroethene	3.118	96	49104	10.633	ug/L	96
11) Carbon disulfide	3.153	76	162171	11.005	ug/L	99
12) Freon-113	3.160	101	48034	10.377	ug/L	97
13) Iodomethane	3.265	142	87410	12.091	ug/L	96
14) Acrolein	3.453	56	3904	7.941	ug/L	93
15) Methylene chloride	3.704	84	58624	10.817	ug/L	95
17) Acetone	3.746	43	7944	9.043	ug/L	97
18) trans-1,2-Dichloroethene	3.864	96	51880	10.574	ug/L	99
19) Methyl acetate	3.864	43	17033	8.968	ug/L	98
21) Methyl tert-butyl ether	3.962	73	74542	10.178	ug/L	97
22) tert-Butyl alcohol	4.045	59	8947	45.045	ug/L	97
24) Diisopropyl ether	4.338	45	100833	9.450	ug/L	97
25) 1,1-Dichloroethane	4.471	63	92962	10.660	ug/L	99
26) Halothane	4.519	117	38855	10.627	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA122\2023\230425NICAL\
 Data File : V22230425N19.D
 Acq On : 26 Apr 2023 01:08 am
 Operator : VOA122:KJD
 Sample : C8260STD10PPB
 Misc : WG1771536
 ALS Vial : 19 Sample Multiplier: 1

Quant Time: Apr 26 16:19:02 2023
 Quant Method : I:\VOLATILES\VOA122\2023\230425NICAL\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 16:18:23 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA122\2023\230425NICAL\V22230425N09.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
27) Acrylonitrile	4.512	53	9506	9.969	ug/L	95
28) Ethyl tert-butyl ether	4.701	59	90233	9.227	ug/L	93
29) Vinyl acetate	4.708	43	45802	8.951	ug/L #	94
30) cis-1,2-Dichloroethene	5.007	96	54984	10.079	ug/L	95
31) 2,2-Dichloropropane	5.112	77	65073	9.313	ug/L	99
32) Bromochloromethane	5.203	128	28149	10.384	ug/L	98
33) Cyclohexane	5.217	56	71952	9.204	ug/L	99
34) Chloroform	5.272	83	87746	10.274	ug/L	98
35) Ethyl acetate	5.384	43	19390	8.824	ug/L	98
36) Carbon tetrachloride	5.426	117	68619	10.170	ug/L	98
37) Tetrahydrofuran	5.433	42	6876	9.998	ug/L	96
39) 1,1,1-Trichloroethane	5.488	97	77911	10.740	ug/L	99
41) 2-Butanone	5.579	43	8530	7.541	ug/L #	50
42) 1,1-Dichloropropene	5.614	75	57324	9.799	ug/L	100
44) Benzene	5.864	78	166060	9.774	ug/L	99
45) tert-Amyl methyl ether	5.974	73	80619	9.098	ug/L	98
47) 1,2-Dichloroethane	6.070	62	50271	9.867	ug/L	99
50) Methyl cyclohexane	6.469	83	78450	9.488	ug/L	95
51) Trichloroethene	6.469	95	51491	9.333	ug/L	98
53) Dibromomethane	6.919	93	27505	10.209	ug/L	88
54) 1,2-Dichloropropane	7.022	63	40354	9.562	ug/L	99
56) 2-Chloroethyl vinyl ether	7.714	63	17416	9.555	ug/L	93
57) Bromodichloromethane	7.088	83	58132	9.556	ug/L	98
60) 1,4-Dioxane	7.302	88	16302	496.955	ug/L #	86
61) cis-1,3-Dichloropropene	7.795	75	63200	9.654	ug/L	96
64) Toluene	8.068	92	125754	10.202	ug/L	99
65) 4-Methyl-2-pentanone	8.495	58	5667	8.897	ug/L	80
66) Tetrachloroethene	8.518	166	51840	10.296	ug/L	98
68) trans-1,3-Dichloropropene	8.549	75	57700	8.973	ug/L	98
70) Ethyl methacrylate	8.740	69	40566	9.473	ug/L	94
71) 1,1,2-Trichloroethane	8.740	83	24874	9.012	ug/L	97
72) Chlorodibromomethane	8.954	129	40088	9.027	ug/L	98
73) 1,3-Dichloropropane	9.065	76	50366	8.884	ug/L	99
74) 1,2-Dibromoethane	9.239	107	30759	8.915	ug/L	98
76) 2-Hexanone	9.517	43	14684	8.424	ug/L	93
77) Chlorobenzene	9.898	112	147762	10.190	ug/L	98
78) Ethylbenzene	9.929	91	256895	10.258	ug/L	100
79) 1,1,1,2-Tetrachloroethane	9.977	131	42901	9.052	ug/L	97
80) p/m Xylene	10.120	106	196135	20.003	ug/L	98
81) o Xylene	10.643	106	186060	19.845	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA122\2023\230425NICAL\
 Data File : V22230425N19.D
 Acq On : 26 Apr 2023 01:08 am
 Operator : VOA122:KJD
 Sample : C8260STD10PPB
 Misc : WG1771536
 ALS Vial : 19 Sample Multiplier: 1

Quant Time: Apr 26 16:19:02 2023
 Quant Method : I:\VOLATILES\VOA122\2023\230425NICAL\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 16:18:23 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\VOLATILES\VOA122\2023\230425NICAL\V22230425N09.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
82)	Styrene	10.706	104	306710	19.982	ug/L	98
84)	Bromoform	10.730	173	24581	8.947	ug/L	99
86)	Isopropylbenzene	11.008	105	256030	10.144	ug/L	100
88)	Bromobenzene	11.436	156	63274	9.885	ug/L	100
89)	n-Propylbenzene	11.476	91	300483	10.146	ug/L	98
90)	1,4-Dichlorobutane	11.492	55	50506	9.508	ug/L	99
91)	1,1,2,2-Tetrachloroethane	11.555	83	35040	9.170	ug/L	98
92)	4-Ethyltoluene	11.603	105	250620	10.238	ug/L	99
93)	2-Chlorotoluene	11.642	91	170076M6	9.988	ug/L	
94)	1,3,5-Trimethylbenzene	11.698	105	216207	10.148	ug/L	99
95)	1,2,3-Trichloropropane	11.698	75	28155	8.827	ug/L	98
96)	trans-1,4-Dichloro-2-b...	11.745	53	10093	8.936	ug/L	97
97)	4-Chlorotoluene	11.825	91	176353	9.876	ug/L	99
98)	tert-Butylbenzene	12.028	119	214878	9.978	ug/L	98
101)	1,2,4-Trimethylbenzene	12.105	105	226318	10.725	ug/L	98
102)	sec-Butylbenzene	12.216	105	258317	10.099	ug/L	100
103)	p-Isopropyltoluene	12.369	119	228303	10.187	ug/L	99
104)	1,3-Dichlorobenzene	12.432	146	125305	10.120	ug/L	99
105)	1,4-Dichlorobenzene	12.522	146	116648	9.507	ug/L	98
106)	p-Diethylbenzene	12.731	119	132884	9.761	ug/L	99
107)	n-Butylbenzene	12.787	91	201890	10.623	ug/L	98
108)	1,2-Dichlorobenzene	12.947	146	109923	9.887	ug/L	99
109)	1,2,4,5-Tetramethylben...	13.518	119	178153	9.231	ug/L	99
110)	1,2-Dibromo-3-chloropr...	13.712	155	6983	9.921	ug/L	94
111)	1,3,5-Trichlorobenzene	13.747	180	83616	10.144	ug/L	97
112)	Hexachlorobutadiene	14.311	225	27736	9.575	ug/L	99
113)	1,2,4-Trichlorobenzene	14.339	180	70258	9.753	ug/L	99
114)	Naphthalene	14.631	128	147299	9.645	ug/L	100
115)	1,2,3-Trichlorobenzene	14.798	180	60690	9.753	ug/L	99

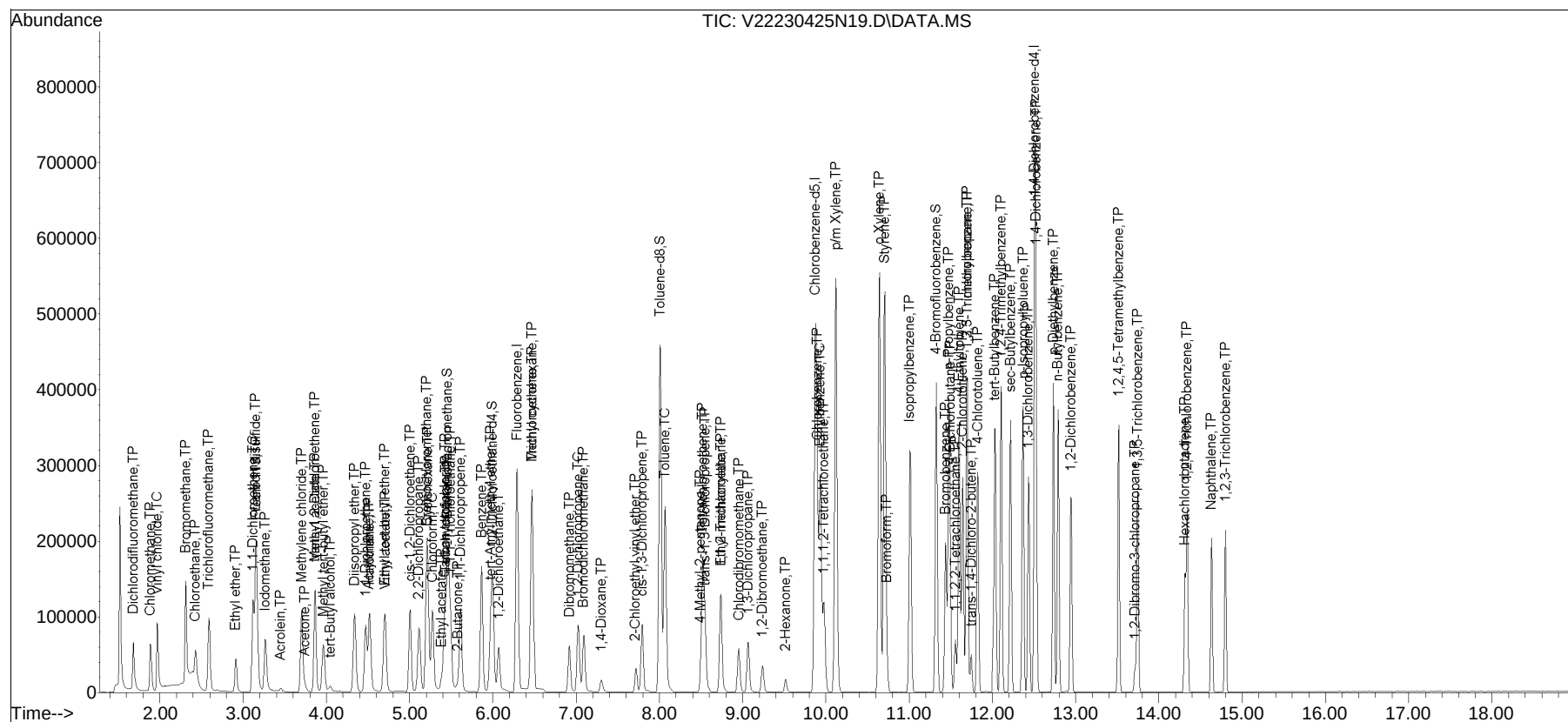
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA122\2023\230425NICAL\
 Data File : V22230425N19.D
 Acq On : 26 Apr 2023 01:08 am
 Operator : VOA122:KJD
 Sample : C8260STD10PPB
 Misc : WG1771536
 ALS Vial : 19 Sample Multiplier: 1

Quant Time: Apr 26 16:19:02 2023
 Quant Method : I:\VOLATILES\VOA122\2023\230425NICAL\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 16:18:23 2023
 Response via : Initial Calibration

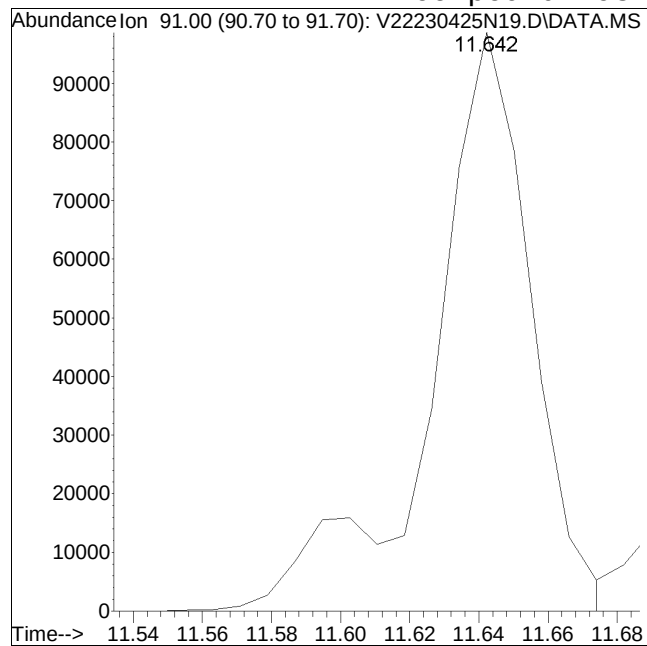
Sub List : 8260-Curve - Megamix plus Diox30425NICAL\V22230425N09.D•



Manual Integration Report

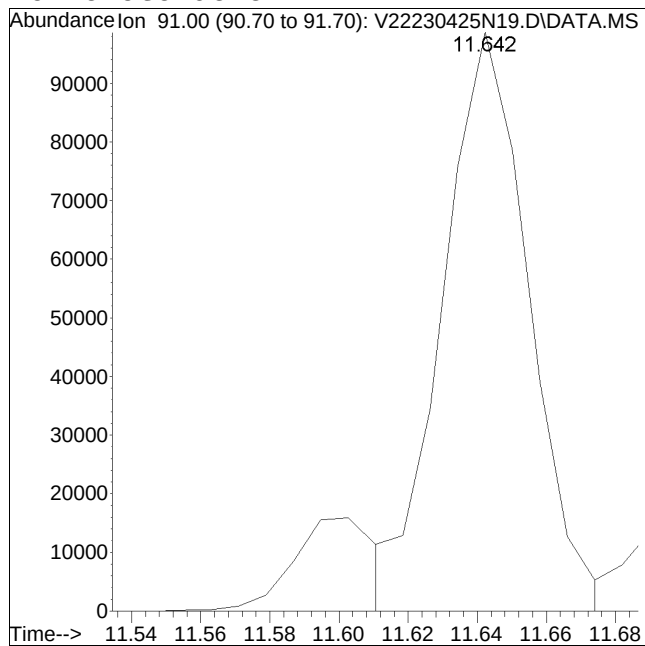
Data Path : I:\VOLATILES\VOA122\2023\2QMethod : V122_230425N_8260.m
Data File : V22230425N19.D Operator : VOA122:KJD
Date Inj'd : 4/26/2023 1:08 am Instrument : VOA122
Sample : C8260STD10PPB Quant Date : 4/26/2023 4:19 pm

Compound #93: 2-Chlorotoluene



Original Peak Response = 196362

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).



Manual Peak Response = 170076 M6

Method Path : I:\VOLATILES\VOA122\2023\230425NICAL\
Method File : V122_230425N_8260.m
Title : VOLATILES BY GC/MS
Last Update : Wed Apr 26 15:59:30 2023

	COMPOUND	CalFit	Units	TrueMid	MidConc	%RE	TrueLow	LowConc	%RE
14	TP Acrolein	Q	ug/L	10.0	10.038	0.4	0.50	0.365	-27.0
17	TP Acetone	L	ug/L	10.0	12.581	25.8	0.50	0.453	-9.4
19	TP Methyl acetate	L	ug/L	10.0	10.741	7.4	0.50	0.501	0.2
41	TP 2-Butanone	L	ug/L	10.0	8.771	-12.3	2.00	2.439	22.0

Calibration Correlation Report

	COMPOUND	CalFit	CoefOfDet	QuadTerm	LinTerm	Constant
14	TP Acrolein	Quadratic	0.999142	-0.000020	0.014225	0.000888332
17	TP Acetone	Linear	0.998178	0.000000	0.0235876	0.00343948
19	TP Methyl acetate	Linear	0.999475	0.000000	0.0495489	0.00867263
41	TP 2-Butanone	Linear	0.997186	0.000000	0.0321867	0.00232473

Continuing Calibration

Calibration Verification Summary

Form 7

Volatiles

Client : Impact Environmental
 Project Name : 585 UNION STREET
 Instrument ID : VOA122
 Lab File ID : V22230612A01
 Sample No : WG1790520-2
 Channel :

Lab Number : L2332652
 Project Number : 14729
 Calibration Date : 06/12/23 10:08
 Init. Calib. Date(s) : 04/25/23 04/25/23
 Init. Calib. Times : 18:36 22:41

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	76	0
Dichlorodifluoromethane	0.141	0.215	-	-52.5*	20	104	0
Chloromethane	0.164	0.228	-	-39*	20	96	0
Vinyl chloride	0.194	0.221	-	-13.9	20	78	0
Bromomethane	0.148	0.101	-	31.8*	20	50	0
Chloroethane	0.139	0.155	-	-11.5	20	82	0
Trichlorofluoromethane	0.24	0.305	-	-27.1*	20	88	0
Ethyl ether	0.051	0.05	-	2	20	73	0
1,1-Dichloroethene	0.144	0.173	-	-20.1*	20	85	0
Carbon disulfide	0.459	0.594	-	-29.4*	20	89	0
Freon-113	0.144	0.172	-	-19.4	20	85	0
Acrolein	10	8.974	-	10.3	20	68	0
Methylene chloride	0.169	0.202	-	-19.5	20	83	0
Acetone	10	9.512	-	4.9	20	59	0
trans-1,2-Dichloroethene	0.153	0.173	-	-13.1	20	82	0
Methyl acetate	10	9.568	-	4.3	20	69	0
Methyl tert-butyl ether	0.228	0.213	-	6.6	20	71	0
tert-Butyl alcohol	0.00619	0.00541*	-	12.6	20	65	0
Diisopropyl ether	0.333	0.354	-	-6.3	20	80	0
1,1-Dichloroethane	0.272	0.343	-	-26.1*	20	90	0
Halothane	0.114	0.113	-	0.9	20	73	0
Acrylonitrile	0.03	0.032	-	-6.7	20	76	0
Ethyl tert-butyl ether	0.305	0.301	-	1.3	20	75	0
Vinyl acetate	0.16	0.187	-	-16.9	20	105	0
cis-1,2-Dichloroethene	0.17	0.194*	-	-14.1	20	81	0
2,2-Dichloropropane	0.218	0.251	-	-15.1	20	91	-.01
Bromochloromethane	0.085	0.09*	-	-5.9	20	74	0
Cyclohexane	0.244	0.278	-	-13.9	20	86	0
Chloroform	0.266	0.312	-	-17.3	20	86	0
Ethyl acetate	0.069	0.062	-	10.1	20	79	0
Carbon tetrachloride	0.21	0.224	-	-6.7	20	77	0
Tetrahydrofuran	0.021	0.021	-	0	20	69	0
Dibromofluoromethane	0.337	0.341	-	-1.2	20	73	0
1,1,1-Trichloroethane	0.226	0.242	-	-7.1	20	78	0
2-Butanone	10	8.181	-	18.2	20	71	0
1,1-Dichloropropene	0.182	0.197	-	-8.2	20	83	0
Benzene	0.53	0.583	-	-10	20	82	0
tert-Amyl methyl ether	0.276	0.236	-	14.5	20	65	0
1,2-Dichloroethane-d4	0.297	0.314	-	-5.7	20	79	0
1,2-Dichloroethane	0.159	0.184	-	-15.7	20	87	0
Methyl cyclohexane	0.258	0.28	-	-8.5	20	82	0
Trichloroethene	0.172	0.172*	-	0	20	79	0
Dibromomethane	0.084	0.084	-	0	20	71	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : Impact Environmental
 Project Name : 585 UNION STREET
 Instrument ID : VOA122
 Lab File ID : V22230612A01
 Sample No : WG1790520-2
 Channel :

Lab Number : L2332652
 Project Number : 14729
 Calibration Date : 06/12/23 10:08
 Init. Calib. Date(s) : 04/25/23 04/25/23
 Init. Calib. Times : 18:36 22:41

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,2-Dichloropropane	0.132	0.141	-	-6.8	20	82	0
Bromodichloromethane	0.19	0.18*	-	5.3	20	73	0
1,4-Dioxane	0.00102	0.00086*	-	15.7	20	58	0
cis-1,3-Dichloropropene	0.204	0.198*	-	2.9	20	74	0
Chlorobenzene-d5	1	1	-	0	20	74	0
Toluene-d8	1.236	1.212	-	1.9	20	73	0
Toluene	0.394	0.413	-	-4.8	20	77	0
4-Methyl-2-pentanone	0.02	0.018*	-	10	20	63	0
Tetrachloroethene	0.161	0.133	-	17.4	20	61	0
trans-1,3-Dichloropropene	0.205	0.186*	-	9.3	20	73	0
Ethyl methacrylate	0.137	0.097	-	29.2*	20	53	0
1,1,2-Trichloroethane	0.088	0.081*	-	8	20	74	0
Chlorodibromomethane	0.142	0.118*	-	16.9	20	68	0
1,3-Dichloropropane	0.181	0.172	-	5	20	77	0
1,2-Dibromoethane	0.11	0.097*	-	11.8	20	71	0
2-Hexanone	0.056	0.036	-	35.7*	20	46	0
Chlorobenzene	0.463	0.471	-	-1.7	20	75	0
Ethylbenzene	0.8	0.827	-	-3.4	20	76	0
1,1,1,2-Tetrachloroethane	0.151	0.133	-	11.9	20	71	0
p/m Xylene	0.313	0.32	-	-2.2	20	75	0
o Xylene	0.3	0.301	-	-0.3	20	75	0
Styrene	0.49	0.504	-	-2.9	20	76	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	75	0
Bromoform	0.163	0.128	-	21.5*	20	65	0
Isopropylbenzene	1.497	1.686	-	-12.6	20	83	0
4-Bromofluorobenzene	0.846	0.84	-	0.7	20	74	0
Bromobenzene	0.38	0.369	-	2.9	20	72	0
n-Propylbenzene	1.757	1.984	-	-12.9	20	84	0
1,4-Dichlorobutane	0.315	0.313	-	0.6	20	79	0
1,1,2,2-Tetrachloroethane	0.227	0.217	-	4.4	20	76	0
4-Ethyltoluene	1.452	1.489	-	-2.5	20	75	0
2-Chlorotoluene	1.01	1.076	-	-6.5	20	78	0
1,3,5-Trimethylbenzene	1.264	1.167	-	7.7	20	67	0
1,2,3-Trichloropropane	0.189	0.163	-	13.8	20	68	0
trans-1,4-Dichloro-2-buten	0.067	0.057	-	14.9	20	66	0
4-Chlorotoluene	1.059	1.085	-	-2.5	20	76	0
tert-Butylbenzene	1.278	1.341	-	-4.9	20	77	0
1,2,4-Trimethylbenzene	1.252	1.254	-	-0.2	20	72	0
sec-Butylbenzene	1.517	1.729	-	-14	20	84	0
p-Isopropyltoluene	1.33	1.294	-	2.7	20	72	0
1,3-Dichlorobenzene	0.735	0.698	-	5	20	71	-0.01
1,4-Dichlorobenzene	0.728	0.7	-	3.8	20	72	0
p-Diethylbenzene	0.808	0.775	-	4.1	20	71	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : Impact Environmental
 Project Name : 585 UNION STREET
 Instrument ID : VOA122
 Lab File ID : V22230612A01
 Sample No : WG1790520-2
 Channel :

Lab Number : L2332652
 Project Number : 14729
 Calibration Date : 06/12/23 10:08
 Init. Calib. Date(s) : 04/25/23 04/25/23
 Init. Calib. Times : 18:36 22:41

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
n-Butylbenzene	1.127	1.208	-	-7.2	20	78	0
1,2-Dichlorobenzene	0.66	0.672	-	-1.8	20	76	0
1,2,4,5-Tetramethylbenzene	1.145	0.96	-	16.2	20	63	0
1,2-Dibromo-3-chloropropan	0.042	0.032	-	23.8*	20	57	0
1,3,5-Trichlorobenzene	0.489	0.448	-	8.4	20	68	0
Hexachlorobutadiene	0.172	0.164	-	4.7	20	73	0
1,2,4-Trichlorobenzene	0.427	0.377*	-	11.7	20	65	0
Naphthalene	0.906	0.711	-	21.5*	20	57	0
1,2,3-Trichlorobenzene	0.369	0.325*	-	11.9	20	66	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : Impact Environmental
 Project Name : 585 UNION STREET
 Instrument ID : VOA122
 Lab File ID : V22230613A02
 Sample No : WG1790988-2
 Channel :

Lab Number : L2332652
 Project Number : 14729
 Calibration Date : 06/13/23 07:09
 Init. Calib. Date(s) : 04/25/23 04/25/23
 Init. Calib. Times : 18:36 22:41

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	79	0
Dichlorodifluoromethane	0.141	0.206	-	-46.1*	20	104	0
Chloromethane	0.164	0.245	-	-49.4*	20	108	0
Vinyl chloride	0.194	0.231	-	-19.1	20	85	0
Bromomethane	0.148	0.112	-	24.3*	20	58	0
Chloroethane	0.139	0.153	-	-10.1	20	85	0
Trichlorofluoromethane	0.24	0.297	-	-23.8*	20	90	0
Ethyl ether	0.051	0.053	-	-3.9	20	80	0
1,1-Dichloroethene	0.144	0.171	-	-18.8	20	88	0
Carbon disulfide	0.459	0.61	-	-32.9*	20	96	0
Freon-113	0.144	0.18	-	-25*	20	93	0
Acrolein	10	9.228	-	7.7	20	73	0
Methylene chloride	0.169	0.2	-	-18.3	20	86	0
Acetone	10	9.028	-	9.7	20	59	0
trans-1,2-Dichloroethene	0.153	0.173	-	-13.1	20	85	0
Methyl acetate	10	10.036	-	-0.4	20	75	0
Methyl tert-butyl ether	0.228	0.22	-	3.5	20	76	0
tert-Butyl alcohol	0.00619	0.00554*	-	10.5	20	69	0
Diisopropyl ether	0.333	0.365	-	-9.6	20	86	0
1,1-Dichloroethane	0.272	0.345	-	-26.8*	20	95	0
Halothane	0.114	0.12	-	-5.3	20	81	0
Acrylonitrile	0.03	0.032	-	-6.7	20	79	0
Ethyl tert-butyl ether	0.305	0.307	-	-0.7	20	80	0
Vinyl acetate	0.16	0.196	-	-22.5*	20	115	0
cis-1,2-Dichloroethene	0.17	0.191*	-	-12.4	20	83	0
2,2-Dichloropropane	0.218	0.258	-	-18.3	20	97	0
Bromochloromethane	0.085	0.087*	-	-2.4	20	75	0
Cyclohexane	0.244	0.311	-	-27.5*	20	100	0
Chloroform	0.266	0.305	-	-14.7	20	88	0
Ethyl acetate	0.069	0.067	-	2.9	20	89	0
Carbon tetrachloride	0.21	0.234	-	-11.4	20	85	0
Tetrahydrofuran	0.021	0.022	-	-4.8	20	76	0
Dibromofluoromethane	0.337	0.329	-	2.4	20	74	0
1,1,1-Trichloroethane	0.226	0.252	-	-11.5	20	85	0
2-Butanone	10	8.312	-	16.9	20	75	0
1,1-Dichloropropene	0.182	0.211	-	-15.9	20	93	0
Benzene	0.53	0.59	-	-11.3	20	86	0
tert-Amyl methyl ether	0.276	0.24	-	13	20	69	0
1,2-Dichloroethane-d4	0.297	0.317	-	-6.7	20	83	0
1,2-Dichloroethane	0.159	0.185	-	-16.4	20	92	0
Methyl cyclohexane	0.258	0.288	-	-11.6	20	88	0
Trichloroethene	0.172	0.18*	-	-4.7	20	87	0
Dibromomethane	0.084	0.087	-	-3.6	20	77	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : Impact Environmental
 Project Name : 585 UNION STREET
 Instrument ID : VOA122
 Lab File ID : V22230613A02
 Sample No : WG1790988-2
 Channel :

Lab Number : L2332652
 Project Number : 14729
 Calibration Date : 06/13/23 07:09
 Init. Calib. Date(s) : 04/25/23 04/25/23
 Init. Calib. Times : 18:36 22:41

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,2-Dichloropropane	0.132	0.151	-	-14.4	20	92	0
Bromodichloromethane	0.19	0.193*	-	-1.6	20	81	0
1,4-Dioxane	0.00102	0.00086*	-	15.7	20	61	0
cis-1,3-Dichloropropene	0.204	0.208*	-	-2	20	81	0
Chlorobenzene-d5	1	1	-	0	20	77	0
Toluene-d8	1.236	1.213	-	1.9	20	75	0
Toluene	0.394	0.418	-	-6.1	20	81	0
4-Methyl-2-pentanone	0.02	0.018*	-	10	20	68	0
Tetrachloroethene	0.161	0.134	-	16.8	20	64	0
trans-1,3-Dichloropropene	0.205	0.19*	-	7.3	20	78	0
Ethyl methacrylate	0.137	0.104	-	24.1*	20	58	0
1,1,2-Trichloroethane	0.088	0.085*	-	3.4	20	80	0
Chlorodibromomethane	0.142	0.117*	-	17.6	20	70	0
1,3-Dichloropropane	0.181	0.176	-	2.8	20	81	0
1,2-Dibromoethane	0.11	0.096*	-	12.7	20	72	0
2-Hexanone	0.056	0.038	-	32.1*	20	51	0
Chlorobenzene	0.463	0.474	-	-2.4	20	78	0
Ethylbenzene	0.8	0.862	-	-7.7	20	81	0
1,1,1,2-Tetrachloroethane	0.151	0.133	-	11.9	20	73	0
p/m Xylene	0.313	0.332	-	-6.1	20	81	0
o Xylene	0.3	0.307	-	-2.3	20	79	0
Styrene	0.49	0.507	-	-3.5	20	79	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	76	0
Bromoform	0.163	0.122	-	25.2*	20	63	0
Isopropylbenzene	1.497	1.628	-	-8.8	20	82	0
4-Bromofluorobenzene	0.846	0.891	-	-5.3	20	80	0
Bromobenzene	0.38	0.364	-	4.2	20	72	0
n-Propylbenzene	1.757	1.993	-	-13.4	20	86	0
1,4-Dichlorobutane	0.315	0.318	-	-1	20	82	0
1,1,2,2-Tetrachloroethane	0.227	0.214	-	5.7	20	76	0
4-Ethyltoluene	1.452	1.542	-	-6.2	20	79	0
2-Chlorotoluene	1.01	1.117	-	-10.6	20	83	0
1,3,5-Trimethylbenzene	1.264	1.239	-	2	20	73	0
1,2,3-Trichloropropane	0.189	0.171	-	9.5	20	73	0
trans-1,4-Dichloro-2-buten	0.067	0.061	-	9	20	73	0
4-Chlorotoluene	1.059	1.17	-	-10.5	20	84	0
tert-Butylbenzene	1.278	1.273	-	0.4	20	75	0
1,2,4-Trimethylbenzene	1.252	1.205	-	3.8	20	71	0
sec-Butylbenzene	1.517	1.703	-	-12.3	20	84	0
p-Isopropyltoluene	1.33	1.344	-	-1.1	20	76	0
1,3-Dichlorobenzene	0.735	0.728	-	1	20	75	0
1,4-Dichlorobenzene	0.728	0.715	-	1.8	20	75	0
p-Diethylbenzene	0.808	0.765	-	5.3	20	72	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : Impact Environmental
 Project Name : 585 UNION STREET
 Instrument ID : VOA122
 Lab File ID : V22230613A02
 Sample No : WG1790988-2
 Channel :

Lab Number : L2332652
 Project Number : 14729
 Calibration Date : 06/13/23 07:09
 Init. Calib. Date(s) : 04/25/23 04/25/23
 Init. Calib. Times : 18:36 22:41

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
n-Butylbenzene	1.127	1.219	-	-8.2	20	81	0
1,2-Dichlorobenzene	0.66	0.621	-	5.9	20	72	0
1,2,4,5-Tetramethylbenzene	1.145	0.954	-	16.7	20	64	0
1,2-Dibromo-3-chloropropan	0.042	0.033	-	21.4*	20	60	0
1,3,5-Trichlorobenzene	0.489	0.445	-	9	20	68	0
Hexachlorobutadiene	0.172	0.17	-	1.2	20	77	0
1,2,4-Trichlorobenzene	0.427	0.368*	-	13.8	20	65	0
Naphthalene	0.906	0.72	-	20.5*	20	59	0
1,2,3-Trichlorobenzene	0.369	0.321*	-	13	20	66	0

* Value outside of QC limits.



Evaluate Continuing Calibration Report

Data Path : K:\VOA122\2023\230612A\
 Data File : V22230612A01.D
 Acq On : 12 Jun 2023 10:08 am
 Operator : VOA122:PID
 Sample : WG1790520-2 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG1790520,ICAL19961 (Sig #1); WG,ICAL19961 (Sig #2)
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 12 10:51:38 2023
 Quant Method : K:\VOA122\2023\230612A\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 16:18:21 2023
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Fluorobenzene	1.000	1.000	0.0	76	0.00
2 TP	Dichlorodifluoromethane	0.141	0.215	-52.5#	104	0.00
3 TP	Chloromethane	0.164	0.228	-39.0#	96	0.00
4 TC	Vinyl chloride	0.194	0.221	-13.9	78	0.00
5 TP	Bromomethane	0.148	0.101	31.8#	50#	0.00
6 TP	Chloroethane	0.139	0.155	-11.5	82	0.00
7 TP	Trichlorofluoromethane	0.240	0.305	-27.1#	88	0.00
8 TP	Ethyl ether	0.051	0.050	2.0	73	0.00
10 TC	1,1-Dichloroethene	0.144	0.173	-20.1#	85	0.00
11 TP	Carbon disulfide	0.459	0.594	-29.4#	89	0.00
12 TP	Freon-113	0.144	0.172	-19.4	85	0.00
14 TP	Acrolein	* 10.000	8.974	10.3	68	0.00
15 TP	Methylene chloride	0.169	0.202	-19.5	83	0.00
17 TP	Acetone	* 10.000	9.512	4.9	59	0.00
18 TP	trans-1,2-Dichloroethene	0.153	0.173	-13.1	82	0.00
19 TP	Methyl acetate	* 10.000	9.568	4.3	69	0.00
21 TP	Methyl tert-butyl ether	0.228	0.213	6.6	71	0.00
22 TP	tert-Butyl alcohol	0.00619	0.00541#	12.6	65	0.00
24 TP	Diisopropyl ether	0.333	0.354	-6.3	80	0.00
25 TP	1,1-Dichloroethane	0.272	0.343	-26.1#	90	0.00
26 TP	Halothane	0.114	0.113	0.9	73	0.00
27 TP	Acrylonitrile	0.030	0.032	-6.7	76	0.00
28 TP	Ethyl tert-butyl ether	0.305	0.301	1.3	75	0.00
29 TP	Vinyl acetate	0.160	0.187	-16.9	105	0.00
30 TP	cis-1,2-Dichloroethene	0.170	0.194#	-14.1	81	0.00
31 TP	2,2-Dichloropropane	0.218	0.251	-15.1	91	-0.01
32 TP	Bromochloromethane	0.085	0.090#	-5.9	74	0.00
33 TP	Cyclohexane	0.244	0.278	-13.9	86	0.00
34 TC	Chloroform	0.266	0.312	-17.3	86	0.00
35 TP	Ethyl acetate	0.069	0.062	10.1	79	0.00
36 TP	Carbon tetrachloride	0.210	0.224	-6.7	77	0.00
37 TP	Tetrahydrofuran	0.021	0.021	0.0	69	0.00
38 S	Dibromofluoromethane	0.337	0.341	-1.2	73	0.00
39 TP	1,1,1-Trichloroethane	0.226	0.242	-7.1	78	0.00
41 TP	2-Butanone	* 10.000	8.181	18.2	71	0.00
42 TP	1,1-Dichloropropene	0.182	0.197	-8.2	83	0.00
44 TP	Benzene	0.530	0.583	-10.0	82	0.00
45 TP	tert-Amyl methyl ether	0.276	0.236	14.5	65	0.00
46 S	1,2-Dichloroethane-d4	0.297	0.314	-5.7	79	0.00

Evaluate Continuing Calibration Report

Data Path : K:\VOA122\2023\230612A\
 Data File : V22230612A01.D
 Acq On : 12 Jun 2023 10:08 am
 Operator : VOA122:PID
 Sample : WG1790520-2 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG1790520,ICAL19961 (Sig #1); WG,ICAL19961 (Sig #2)
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 12 10:51:38 2023
 Quant Method : K:\VOA122\2023\230612A\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 16:18:21 2023
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
47 T	1,2-Dichloroethane	0.159	0.184	-15.7	87	0.00
50 TP	Methyl cyclohexane	0.258	0.280	-8.5	82	0.00
51 TP	Trichloroethene	0.172	0.172#	0.0	79	0.00
53 TP	Dibromomethane	0.084	0.084	0.0	71	0.00
54 TC	1,2-Dichloropropane	0.132	0.141	-6.8	82	0.00
57 TP	Bromodichloromethane	0.190	0.180#	5.3	73	0.00
60 TP	1,4-Dioxane	0.00102	0.00086#	15.7	58	0.00
61 TP	cis-1,3-Dichloropropene	0.204	0.198#	2.9	74	0.00
62 I	Chlorobenzene-d5	1.000	1.000	0.0	74	0.00
63 S	Toluene-d8	1.236	1.212	1.9	73	0.00
64 TC	Toluene	0.394	0.413	-4.8	77	0.00
65 TP	4-Methyl-2-pentanone	0.020	0.018#	10.0	63	0.00
66 TP	Tetrachloroethene	0.161	0.133	17.4	61	0.00
68 TP	trans-1,3-Dichloropropene	0.205	0.186#	9.3	73	0.00
70 TP	Ethyl methacrylate	0.137	0.097	29.2#	53	0.00
71 TP	1,1,2-Trichloroethane	0.088	0.081#	8.0	74	0.00
72 TP	Chlorodibromomethane	0.142	0.118#	16.9	68	0.00
73 TP	1,3-Dichloropropane	0.181	0.172	5.0	77	0.00
74 TP	1,2-Dibromoethane	0.110	0.097#	11.8	71	0.00
76 TP	2-Hexanone	0.056	0.036	35.7#	46#	0.00
77 TP	Chlorobenzene	0.463	0.471	-1.7	75	0.00
78 TC	Ethylbenzene	0.800	0.827	-3.4	76	0.00
79 TP	1,1,1,2-Tetrachloroethane	0.151	0.133	11.9	71	0.00
80 TP	p/m Xylene	0.313	0.320	-2.2	75	0.00
81 TP	o Xylene	0.300	0.301	-0.3	75	0.00
82 TP	Styrene	0.490	0.504	-2.9	76	0.00
83 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	75	0.00
84 TP	Bromoform	0.163	0.128	21.5#	65	0.00
86 TP	Isopropylbenzene	1.497	1.686	-12.6	83	0.00
87 S	4-Bromofluorobenzene	0.846	0.840	0.7	74	0.00
88 TP	Bromobenzene	0.380	0.369	2.9	72	0.00
89 TP	n-Propylbenzene	1.757	1.984	-12.9	84	0.00
90 TP	1,4-Dichlorobutane	0.315	0.313	0.6	79	0.00
91 TP	1,1,2,2-Tetrachloroethane	0.227	0.217	4.4	76	0.00
92 TP	4-Ethyltoluene	1.452	1.489	-2.5	75	0.00
93 TP	2-Chlorotoluene	1.010	1.076	-6.5	78	0.00
94 TP	1,3,5-Trimethylbenzene	1.264	1.167	7.7	67	0.00

Evaluate Continuing Calibration Report

Data Path : K:\VOA122\2023\230612A\
 Data File : V22230612A01.D
 Acq On : 12 Jun 2023 10:08 am
 Operator : VOA122:PID
 Sample : WG1790520-2 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG1790520,ICAL19961 (Sig #1); WG,ICAL19961 (Sig #2)
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 12 10:51:38 2023
 Quant Method : K:\VOA122\2023\230612A\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 16:18:21 2023
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
95 TP	1,2,3-Trichloropropane	0.189	0.163	13.8	68	0.00
96 TP	trans-1,4-Dichloro-2-butene	0.067	0.057	14.9	66	0.00
97 TP	4-Chlorotoluene	1.059	1.085	-2.5	76	0.00
98 TP	tert-Butylbenzene	1.278	1.341	-4.9	77	0.00
101 TP	1,2,4-Trimethylbenzene	1.252	1.254	-0.2	72	0.00
102 TP	sec-Butylbenzene	1.517	1.729	-14.0	84	0.00
103 TP	p-Isopropyltoluene	1.330	1.294	2.7	72	0.00
104 TP	1,3-Dichlorobenzene	0.735	0.698	5.0	71	-0.01
105 TP	1,4-Dichlorobenzene	0.728	0.700	3.8	72	0.00
106 TP	p-Diethylbenzene	0.808	0.775	4.1	71	0.00
107 TP	n-Butylbenzene	1.127	1.208	-7.2	78	0.00
108 TP	1,2-Dichlorobenzene	0.660	0.672	-1.8	76	0.00
109 TP	1,2,4,5-Tetramethylbenzene	1.145	0.960	16.2	63	0.00
110 TP	1,2-Dibromo-3-chloropropane	0.042	0.032	23.8#	57	0.00
111 TP	1,3,5-Trichlorobenzene	0.489	0.448	8.4	68	0.00
112 TP	Hexachlorobutadiene	0.172	0.164	4.7	73	0.00
113 TP	1,2,4-Trichlorobenzene	0.427	0.377#	11.7	65	0.00
114 TP	Naphthalene	0.906	0.711	21.5#	57	0.00
115 TP	1,2,3-Trichlorobenzene	0.369	0.325#	11.9	66	0.00

* Evaluation of CC level amount vs concentration.

(#) = Out of Range SPCC's out = 14 CCC's out = 1

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230612A\
 Data File : V22230612A01.D
 Acq On : 12 Jun 2023 10:08 am
 Operator : VOA122:PID
 Sample : WG1790520-2 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG1790520, ICAL19961 (Sig #1); WG, ICAL19961 (Sig #2)
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 12 10:51:38 2023
 Quant Method : K:\VOA122\2023\230612A\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 16:18:21 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA122\2023\230612A\V22230612A01.D
 Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane

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

Internal Standards						
1) Fluorobenzene	6.284	96	239558	10.000	ug/L	0.00
Standard Area 1 = 239558			Recovery	=	100.00%	
62) Chlorobenzene-d5	9.866	117	233642	10.000	ug/L	0.00
Standard Area 1 = 233642			Recovery	=	100.00%	
83) 1,4-Dichlorobenzene-d4	12.501	152	127139	10.000	ug/L	0.00
Standard Area 1 = 127139			Recovery	=	100.00%	
System Monitoring Compounds						
38) Dibromofluoromethane	5.453	113	81653	10.121	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	101.21%	
46) 1,2-Dichloroethane-d4	5.989	65	75283	10.573	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	105.73%	
63) Toluene-d8	8.001	98	283079	9.800	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	98.00%	
87) 4-Bromofluorobenzene	11.317	95	106818	9.931	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	99.31%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.682	85	51593	15.275	ug/L	98
3) Chloromethane	1.884	50	54551	13.878	ug/L	99
4) Vinyl chloride	1.968	62	52874	11.365	ug/L	98
5) Bromomethane	2.310	94	24146	6.791	ug/L	99
6) Chloroethane	2.435	64	37102	11.117	ug/L	99
7) Trichlorofluoromethane	2.588	101	73100	12.727	ug/L	100
8) Ethyl ether	2.909	74	12057	9.893	ug/L #	1
10) 1,1-Dichloroethene	3.118	96	41366	11.993	ug/L	83
11) Carbon disulfide	3.153	76	142205	12.920	ug/L	99
12) Freon-113	3.160	101	41166	11.907	ug/L	93
14) Acrolein	3.453	56	3267	8.974	ug/L	100
15) Methylene chloride	3.697	84	48503	11.982	ug/L	84
17) Acetone	3.739	43	6199	9.512	ug/L	97
18) trans-1,2-Dichloroethene	3.857	96	41499	11.324	ug/L	89
19) Methyl acetate	3.864	43	13435	9.568	ug/L #	94
21) Methyl tert-butyl ether	3.962	73	51131	9.347	ug/L #	90
22) tert-Butyl alcohol	4.038	59	6483	43.699	ug/L #	80
24) Diisopropyl ether	4.331	45	84789	10.639	ug/L	93
25) 1,1-Dichloroethane	4.464	63	82130	12.609	ug/L	98
26) Halothane	4.512	117	27006	9.888	ug/L	99
27) Acrylonitrile	4.512	53	7719	10.838	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230612A\
 Data File : V22230612A01.D
 Acq On : 12 Jun 2023 10:08 am
 Operator : VOA122:PID
 Sample : WG1790520-2 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG1790520, ICAL19961 (Sig #1); WG, ICAL19961 (Sig #2)
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 12 10:51:38 2023
 Quant Method : K:\VOA122\2023\230612A\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 16:18:21 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA122\2023\230612A\V22230612A01.D
 Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
28) Ethyl tert-butyl ether	4.694	59	72001	9.857	ug/L	97
29) Vinyl acetate	4.701	43	44912	11.751	ug/L #	91
30) cis-1,2-Dichloroethene	5.000	96	46571	11.429	ug/L	89
31) 2,2-Dichloropropane	5.105	77	60179	11.531	ug/L	91
32) Bromochloromethane	5.196	128	21532	10.634	ug/L #	84
33) Cyclohexane	5.209	56	66702	11.423	ug/L	88
34) Chloroform	5.272	83	74684	11.707	ug/L	96
35) Ethyl acetate	5.377	43	14965	9.118	ug/L	96
36) Carbon tetrachloride	5.419	117	53575	10.631	ug/L	99
37) Tetrahydrofuran	5.426	42	5088	9.905	ug/L	90
39) 1,1,1-Trichloroethane	5.481	97	58045	10.712	ug/L	95
41) 2-Butanone	5.572	43	6865	8.181	ug/L #	52
42) 1,1-Dichloropropene	5.607	75	47210	10.804	ug/L	96
44) Benzene	5.856	78	139688	11.008	ug/L	96
45) tert-Amyl methyl ether	5.967	73	56624	8.555	ug/L #	91
47) 1,2-Dichloroethane	6.063	62	43973	11.555	ug/L	98
50) Methyl cyclohexane	6.462	83	67116	10.867	ug/L	86
51) Trichloroethene	6.462	95	41121	9.979	ug/L	97
53) Dibromomethane	6.911	93	20020	9.949	ug/L #	85
54) 1,2-Dichloropropane	7.014	63	33743	10.705	ug/L	98
57) Bromodichloromethane	7.088	83	43165	9.500	ug/L	99
60) 1,4-Dioxane	7.294	88	10269	419.109	ug/L #	75
61) cis-1,3-Dichloropropene	7.788	75	47500	9.714	ug/L	93
64) Toluene	8.060	92	96579	10.494	ug/L	99
65) 4-Methyl-2-pentanone	8.495	58	4138	8.702	ug/L #	79
66) Tetrachloroethene	8.518	166	31037	8.256	ug/L	93
68) trans-1,3-Dichloropropene	8.541	75	43361	9.032	ug/L	96
70) Ethyl methacrylate	8.732	69	22601	7.069	ug/L	91
71) 1,1,2-Trichloroethane	8.732	83	18869	9.157	ug/L	96
72) Chlorodibromomethane	8.946	129	27474	8.287	ug/L	99
73) 1,3-Dichloropropane	9.057	76	40222	9.502	ug/L	99
74) 1,2-Dibromoethane	9.231	107	22767	8.838	ug/L	99
76) 2-Hexanone	9.509	43	8324	6.396	ug/L	92
77) Chlorobenzene	9.890	112	109956	10.156	ug/L	95
78) Ethylbenzene	9.921	91	193186	10.332	ug/L	98
79) 1,1,1,2-Tetrachloroethane	9.969	131	31130	8.798	ug/L	98
80) p/m Xylene	10.112	106	149580	20.433	ug/L	93
81) o Xylene	10.635	106	140824	20.118	ug/L	94
82) Styrene	10.698	104	235517	20.552	ug/L	95
84) Bromoform	10.722	173	16287	7.860	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230612A\
 Data File : V22230612A01.D
 Acq On : 12 Jun 2023 10:08 am
 Operator : VOA122:PID
 Sample : WG1790520-2 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG1790520,ICAL19961 (Sig #1); WG,ICAL19961 (Sig #2)
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 12 10:51:38 2023
 Quant Method : K:\VOA122\2023\230612A\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 16:18:21 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA122\2023\230612A\V22230612A01.D
 Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
86)	Isopropylbenzene	11.008	105	214404	11.262	ug/L	98
88)	Bromobenzene	11.428	156	46939	9.723	ug/L	99
89)	n-Propylbenzene	11.468	91	252262	11.293	ug/L	97
90)	1,4-Dichlorobutane	11.484	55	39741	9.919	ug/L	100
91)	1,1,2,2-Tetrachloroethane	11.547	83	27593	9.574	ug/L	99
92)	4-Ethyltoluene	11.595	105	189351	10.256	ug/L	99
93)	2-Chlorotoluene	11.634	91	136815M6	10.653	ug/L	
94)	1,3,5-Trimethylbenzene	11.690	105	148312	9.229	ug/L	97
95)	1,2,3-Trichloropropane	11.690	75	20697	8.603	ug/L	93
96)	trans-1,4-Dichloro-2-b...	11.737	53	7190	8.440	ug/L	84
97)	4-Chlorotoluene	11.817	91	137989	10.246	ug/L	98
98)	tert-Butylbenzene	12.021	119	170457	10.494	ug/L	96
101)	1,2,4-Trimethylbenzene	12.097	105	159492	10.021	ug/L	97
102)	sec-Butylbenzene	12.209	105	219761	11.391	ug/L	98
103)	p-Isopropyltoluene	12.362	119	164559	9.735	ug/L	97
104)	1,3-Dichlorobenzene	12.425	146	88693	9.497	ug/L	98
105)	1,4-Dichlorobenzene	12.515	146	89036	9.621	ug/L	97
106)	p-Diethylbenzene	12.724	119	98571	9.599	ug/L	98
107)	n-Butylbenzene	12.780	91	153522	10.710	ug/L	97
108)	1,2-Dichlorobenzene	12.940	146	85441	10.189	ug/L	97
109)	1,2,4,5-Tetramethylben...	13.510	119	122062	8.386	ug/L	99
110)	1,2-Dibromo-3-chloropr...	13.705	155	4107	7.736	ug/L	97
111)	1,3,5-Trichlorobenzene	13.740	180	56994	9.168	ug/L	96
112)	Hexachlorobutadiene	14.304	225	20864	9.550	ug/L	99
113)	1,2,4-Trichlorobenzene	14.332	180	47967	8.828	ug/L	98
114)	Naphthalene	14.624	128	90391	7.847	ug/L	100
115)	1,2,3-Trichlorobenzene	14.791	180	41302	8.800	ug/L	99

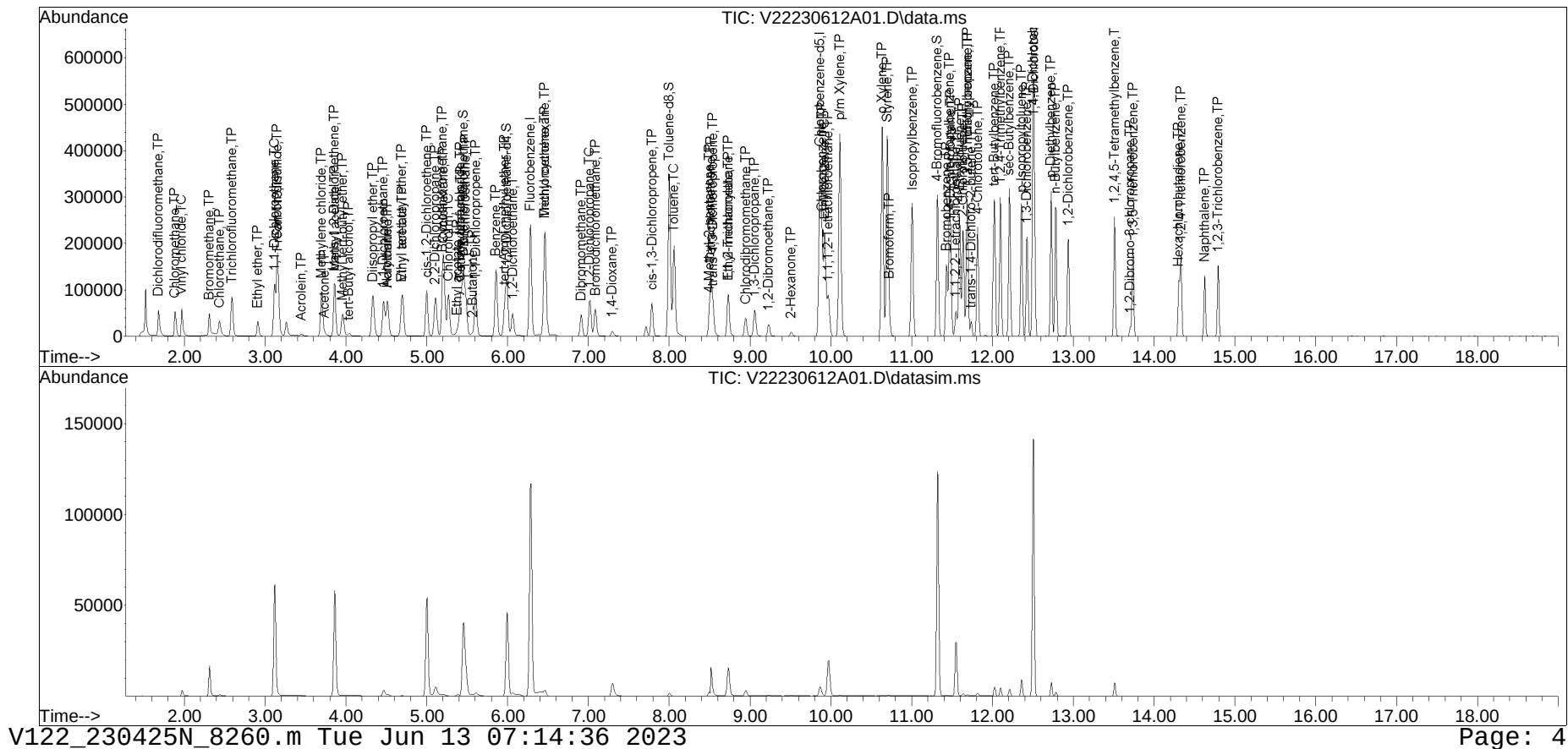
(#) = qualifier out of range (m) = manual integration (+) = signals summed

(QT Reviewed)

```
Data Path   : K:\V0A122\2023\230612A\  
Data File  : V22230612A01.D  
Acq On     : 12 Jun 2023  10:08 am  
Operator   : V0A122:PID  
Sample     : WG1790520-2 (Sig #1); 8260 CCAL (Sig #2)  
Misc       : WG1790520,ICAL19961 (Sig #1); WG,ICAL19961 (Sig #2)  
ALS Vial   : 1      Sample Multiplier: 1
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Quant Time: Jun 12 10:51:38 2023
Quant Method : K:\VOA122\2023\230612A\V122_230425N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Apr 26 16:18:21 2023
Response via : Initial Calibration

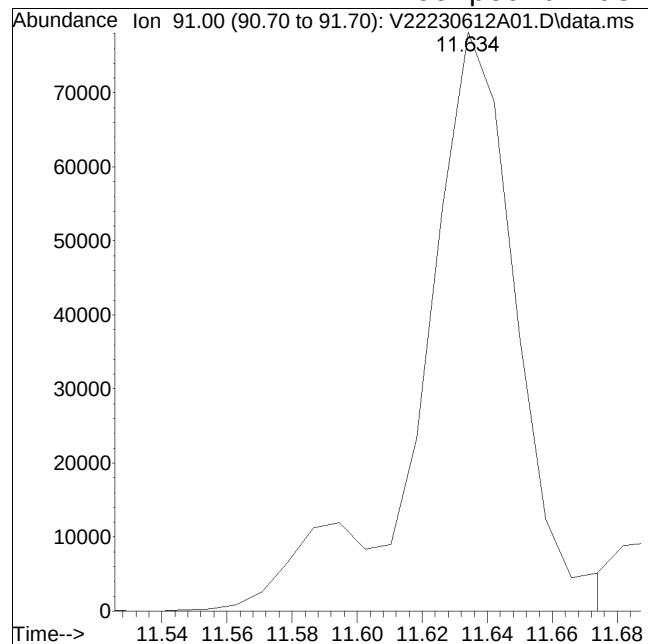
Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane



Manual Integration Report

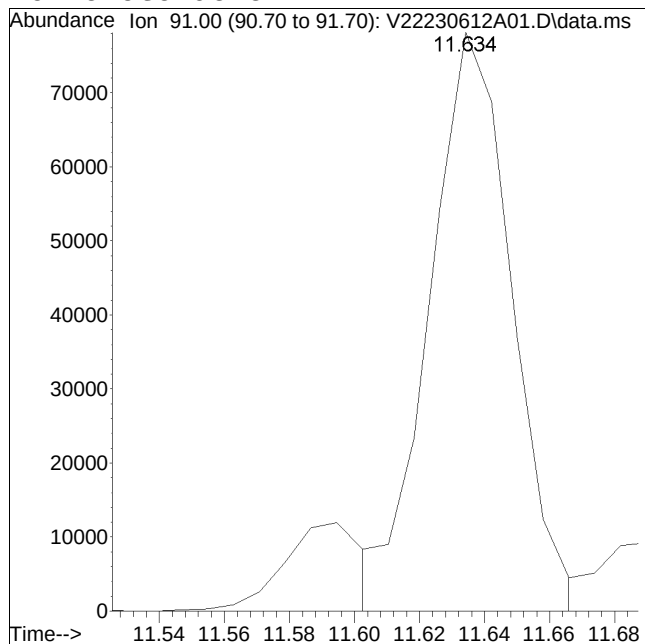
Data Path : K:\VOA122\2023\230612A\ QMethod : V122_230425N_8260.m
Data File : V22230612A01.D Operator : VOA122:PID
Date Inj'd : 6/12/2023 10:08 am Instrument : VOA122
Sample : WG1790520-2 Quant Date : 6/12/2023 10:48 am

Compound #93: 2-Chlorotoluene



Original Peak Response = 159309

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).



Manual Peak Response = 136815 M6

Evaluate Continuing Calibration Report

Data Path : K:\VOA122\2023\230613A\
 Data File : V22230613A02.D
 Acq On : 13 Jun 2023 07:09 am
 Operator : VOA122:PID
 Sample : WG1790988-2 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG1790988,ICAL19961 (Sig #1); WG,ICAL19961 (Sig #2)
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 13 07:57:36 2023
 Quant Method : K:\VOA122\2023\230613A\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 16:18:21 2023
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Fluorobenzene	1.000	1.000	0.0	79	0.00
2 TP	Dichlorodifluoromethane	0.141	0.206	-46.1#	104	0.00
3 TP	Chloromethane	0.164	0.245	-49.4#	108	0.00
4 TC	Vinyl chloride	0.194	0.231	-19.1	85	0.00
5 TP	Bromomethane	0.148	0.112	24.3#	58	0.00
6 TP	Chloroethane	0.139	0.153	-10.1	85	0.00
7 TP	Trichlorofluoromethane	0.240	0.297	-23.8#	90	0.00
8 TP	Ethyl ether	0.051	0.053	-3.9	80	0.00
10 TC	1,1-Dichloroethene	0.144	0.171	-18.8	88	0.00
11 TP	Carbon disulfide	0.459	0.610	-32.9#	96	0.00
12 TP	Freon-113	0.144	0.180	-25.0#	93	0.00
14 TP	Acrolein	* 10.000	9.228	7.7	73	0.00
15 TP	Methylene chloride	0.169	0.200	-18.3	86	0.00
17 TP	Acetone	* 10.000	9.028	9.7	59	0.00
18 TP	trans-1,2-Dichloroethene	0.153	0.173	-13.1	85	0.00
19 TP	Methyl acetate	* 10.000	10.036	-0.4	75	0.00
21 TP	Methyl tert-butyl ether	0.228	0.220	3.5	76	0.00
22 TP	tert-Butyl alcohol	0.00619	0.00554#	10.5	69	0.00
24 TP	Diisopropyl ether	0.333	0.365	-9.6	86	0.00
25 TP	1,1-Dichloroethane	0.272	0.345	-26.8#	95	0.00
26 TP	Halothane	0.114	0.120	-5.3	81	0.00
27 TP	Acrylonitrile	0.030	0.032	-6.7	79	0.00
28 TP	Ethyl tert-butyl ether	0.305	0.307	-0.7	80	0.00
29 TP	Vinyl acetate	0.160	0.196	-22.5#	115	0.00
30 TP	cis-1,2-Dichloroethene	0.170	0.191#	-12.4	83	0.00
31 TP	2,2-Dichloropropane	0.218	0.258	-18.3	97	0.00
32 TP	Bromochloromethane	0.085	0.087#	-2.4	75	0.00
33 TP	Cyclohexane	0.244	0.311	-27.5#	100	0.00
34 TC	Chloroform	0.266	0.305	-14.7	88	0.00
35 TP	Ethyl acetate	0.069	0.067	2.9	89	0.00
36 TP	Carbon tetrachloride	0.210	0.234	-11.4	85	0.00
37 TP	Tetrahydrofuran	0.021	0.022	-4.8	76	0.00
38 S	Dibromofluoromethane	0.337	0.329	2.4	74	0.00
39 TP	1,1,1-Trichloroethane	0.226	0.252	-11.5	85	0.00
41 TP	2-Butanone	* 10.000	8.312	16.9	75	0.00
42 TP	1,1-Dichloropropene	0.182	0.211	-15.9	93	0.00
44 TP	Benzene	0.530	0.590	-11.3	86	0.00
45 TP	tert-Amyl methyl ether	0.276	0.240	13.0	69	0.00
46 S	1,2-Dichloroethane-d4	0.297	0.317	-6.7	83	0.00

Evaluate Continuing Calibration Report

Data Path : K:\VOA122\2023\230613A\
 Data File : V22230613A02.D
 Acq On : 13 Jun 2023 07:09 am
 Operator : VOA122:PID
 Sample : WG1790988-2 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG1790988,ICAL19961 (Sig #1); WG,ICAL19961 (Sig #2)
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 13 07:57:36 2023
 Quant Method : K:\VOA122\2023\230613A\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 16:18:21 2023
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
47 T	1,2-Dichloroethane	0.159	0.185	-16.4	92	0.00
50 TP	Methyl cyclohexane	0.258	0.288	-11.6	88	0.00
51 TP	Trichloroethene	0.172	0.180#	-4.7	87	0.00
53 TP	Dibromomethane	0.084	0.087	-3.6	77	0.00
54 TC	1,2-Dichloropropane	0.132	0.151	-14.4	92	0.00
57 TP	Bromodichloromethane	0.190	0.193#	-1.6	81	0.00
60 TP	1,4-Dioxane	0.00102	0.00086#	15.7	61	0.00
61 TP	cis-1,3-Dichloropropene	0.204	0.208#	-2.0	81	0.00
62 I	Chlorobenzene-d5	1.000	1.000	0.0	77	0.00
63 S	Toluene-d8	1.236	1.213	1.9	75	0.00
64 TC	Toluene	0.394	0.418	-6.1	81	0.00
65 TP	4-Methyl-2-pentanone	0.020	0.018#	10.0	68	0.00
66 TP	Tetrachloroethene	0.161	0.134	16.8	64	0.00
68 TP	trans-1,3-Dichloropropene	0.205	0.190#	7.3	78	0.00
70 TP	Ethyl methacrylate	0.137	0.104	24.1#	58	0.00
71 TP	1,1,2-Trichloroethane	0.088	0.085#	3.4	80	0.00
72 TP	Chlorodibromomethane	0.142	0.117#	17.6	70	0.00
73 TP	1,3-Dichloropropane	0.181	0.176	2.8	81	0.00
74 TP	1,2-Dibromoethane	0.110	0.096#	12.7	72	0.00
76 TP	2-Hexanone	0.056	0.038	32.1#	51	0.00
77 TP	Chlorobenzene	0.463	0.474	-2.4	78	0.00
78 TC	Ethylbenzene	0.800	0.862	-7.7	81	0.00
79 TP	1,1,1,2-Tetrachloroethane	0.151	0.133	11.9	73	0.00
80 TP	p/m Xylene	0.313	0.332	-6.1	81	0.00
81 TP	o Xylene	0.300	0.307	-2.3	79	0.00
82 TP	Styrene	0.490	0.507	-3.5	79	0.00
83 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	76	0.00
84 TP	Bromoform	0.163	0.122	25.2#	63	0.00
86 TP	Isopropylbenzene	1.497	1.628	-8.8	82	0.00
87 S	4-Bromofluorobenzene	0.846	0.891	-5.3	80	0.00
88 TP	Bromobenzene	0.380	0.364	4.2	72	0.00
89 TP	n-Propylbenzene	1.757	1.993	-13.4	86	0.00
90 TP	1,4-Dichlorobutane	0.315	0.318	-1.0	82	0.00
91 TP	1,1,2,2-Tetrachloroethane	0.227	0.214	5.7	76	0.00
92 TP	4-Ethyltoluene	1.452	1.542	-6.2	79	0.00
93 TP	2-Chlorotoluene	1.010	1.117	-10.6	83	0.00
94 TP	1,3,5-Trimethylbenzene	1.264	1.239	2.0	73	0.00

Evaluate Continuing Calibration Report

Data Path : K:\VOA122\2023\230613A\
 Data File : V22230613A02.D
 Acq On : 13 Jun 2023 07:09 am
 Operator : VOA122:PID
 Sample : WG1790988-2 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG1790988,ICAL19961 (Sig #1); WG,ICAL19961 (Sig #2)
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 13 07:57:36 2023
 Quant Method : K:\VOA122\2023\230613A\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 16:18:21 2023
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
95 TP	1,2,3-Trichloropropane	0.189	0.171	9.5	73	0.00
96 TP	trans-1,4-Dichloro-2-butene	0.067	0.061	9.0	73	0.00
97 TP	4-Chlorotoluene	1.059	1.170	-10.5	84	0.00
98 TP	tert-Butylbenzene	1.278	1.273	0.4	75	0.00
101 TP	1,2,4-Trimethylbenzene	1.252	1.205	3.8	71	0.00
102 TP	sec-Butylbenzene	1.517	1.703	-12.3	84	0.00
103 TP	p-Isopropyltoluene	1.330	1.344	-1.1	76	0.00
104 TP	1,3-Dichlorobenzene	0.735	0.728	1.0	75	0.00
105 TP	1,4-Dichlorobenzene	0.728	0.715	1.8	75	0.00
106 TP	p-Diethylbenzene	0.808	0.765	5.3	72	0.00
107 TP	n-Butylbenzene	1.127	1.219	-8.2	81	0.00
108 TP	1,2-Dichlorobenzene	0.660	0.621	5.9	72	0.00
109 TP	1,2,4,5-Tetramethylbenzene	1.145	0.954	16.7	64	0.00
110 TP	1,2-Dibromo-3-chloropropane	0.042	0.033	21.4#	60	0.00
111 TP	1,3,5-Trichlorobenzene	0.489	0.445	9.0	68	0.00
112 TP	Hexachlorobutadiene	0.172	0.170	1.2	77	0.00
113 TP	1,2,4-Trichlorobenzene	0.427	0.368#	13.8	65	0.00
114 TP	Naphthalene	0.906	0.720	20.5#	59	0.00
115 TP	1,2,3-Trichlorobenzene	0.369	0.321#	13.0	66	0.00

* Evaluation of CC level amount vs concentration.

(#) = Out of Range SPCC's out = 14 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230613A\
 Data File : V22230613A02.D
 Acq On : 13 Jun 2023 07:09 am
 Operator : VOA122:PID
 Sample : WG1790988-2 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG1790988, ICAL19961 (Sig #1); WG, ICAL19961 (Sig #2)
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 13 07:57:36 2023
 Quant Method : K:\VOA122\2023\230613A\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 16:18:21 2023
 Response via : Initial Calibration

Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane

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

Internal Standards						
1) Fluorobenzene	6.285	96	250466	10.000	ug/L	0.00
62) Chlorobenzene-d5	9.866	117	241286	10.000	ug/L	0.00
83) 1,4-Dichlorobenzene-d4	12.501	152	129668	10.000	ug/L	0.00
System Monitoring Compounds						
38) Dibromofluoromethane	5.454	113	82476	9.778	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	97.78%		
46) 1,2-Dichloroethane-d4	5.997	65	79378	10.662	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	106.62%		
63) Toluene-d8	8.002	98	292757	9.814	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	98.14%		
87) 4-Bromofluorobenzene	11.317	95	115580	10.536	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	105.36%		
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.682	85	51536	14.594	ug/L	99
3) Chloromethane	1.884	50	61444	14.951	ug/L	98
4) Vinyl chloride	1.968	62	57762	11.875	ug/L	99
5) Bromomethane	2.310	94	28160	7.575	ug/L	99
6) Chloroethane	2.435	64	38386	11.001	ug/L	99
7) Trichlorofluoromethane	2.589	101	74382	12.386	ug/L	100
8) Ethyl ether	2.909	74	13231	10.384	ug/L	# 1
10) 1,1-Dichloroethene	3.118	96	42865	11.886	ug/L	83
11) Carbon disulfide	3.153	76	152677	13.267	ug/L	99
12) Freon-113	3.160	101	45075	12.470	ug/L	91
14) Acrolein	3.446	56	3506	9.228	ug/L	92
15) Methylene chloride	3.697	84	50168	11.853	ug/L	83
17) Acetone	3.739	43	6195	9.028	ug/L	98
18) trans-1,2-Dichloroethene	3.857	96	43422	11.332	ug/L	88
19) Methyl acetate	3.864	43	14627	10.036	ug/L	# 93
21) Methyl tert-butyl ether	3.962	73	55227	9.656	ug/L	# 90
22) tert-Butyl alcohol	4.038	59	6939	44.736	ug/L	# 77
24) Diisopropyl ether	4.338	45	91311	10.958	ug/L	93
25) 1,1-Dichloroethane	4.464	63	86455	12.695	ug/L	97
26) Halothane	4.512	117	30052	10.525	ug/L	99
27) Acrylonitrile	4.512	53	8024	10.775	ug/L	95
28) Ethyl tert-butyl ether	4.694	59	76840	10.061	ug/L	95
29) Vinyl acetate	4.708	43	49056	12.276	ug/L	# 91
30) cis-1,2-Dichloroethene	5.000	96	47868	11.236	ug/L	88
31) 2,2-Dichloropropane	5.112	77	64551	11.830	ug/L	91

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230613A\
 Data File : V22230613A02.D
 Acq On : 13 Jun 2023 07:09 am
 Operator : VOA122:PID
 Sample : WG1790988-2 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG1790988, ICAL19961 (Sig #1); WG, ICAL19961 (Sig #2)
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 13 07:57:36 2023
 Quant Method : K:\VOA122\2023\230613A\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 16:18:21 2023
 Response via : Initial Calibration

Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
32)	Bromochloromethane	5.196	128	21792	10.294	ug/L	# 79
33)	Cyclohexane	5.210	56	77963	12.770	ug/L	85
34)	Chloroform	5.272	83	76495	11.469	ug/L	97
35)	Ethyl acetate	5.384	43	16804	9.792	ug/L	97
36)	Carbon tetrachloride	5.419	117	58723	11.145	ug/L	98
37)	Tetrahydrofuran	5.426	42	5632	10.487	ug/L	95
39)	1,1,1-Trichloroethane	5.481	97	63013	11.123	ug/L	96
41)	2-Butanone	5.572	43	7283	8.312	ug/L	91
42)	1,1-Dichloropropene	5.607	75	52725	11.541	ug/L	96
44)	Benzene	5.856	78	147898	11.147	ug/L	95
45)	tert-Amyl methyl ether	5.967	73	60100	8.685	ug/L	# 90
47)	1,2-Dichloroethane	6.063	62	46374	11.655	ug/L	97
50)	Methyl cyclohexane	6.462	83	72169	11.176	ug/L	# 82
51)	Trichloroethene	6.462	95	45188	10.488	ug/L	94
53)	Dibromomethane	6.911	93	21895	10.407	ug/L	# 79
54)	1,2-Dichloropropane	7.022	63	37876	11.493	ug/L	98
57)	Bromodichloromethane	7.088	83	48273	10.161	ug/L	99
60)	1,4-Dioxane	7.294	88	10806	421.818	ug/L	# 76
61)	cis-1,3-Dichloropropene	7.788	75	52017	10.175	ug/L	93
64)	Toluene	8.060	92	100899	10.616	ug/L	99
65)	4-Methyl-2-pentanone	8.495	58	4419	8.998	ug/L	# 79
66)	Tetrachloroethene	8.518	166	32286	8.317	ug/L	91
68)	trans-1,3-Dichloropropene	8.542	75	45898	9.257	ug/L	96
70)	Ethyl methacrylate	8.732	69	25064	7.591	ug/L	97
71)	1,1,2-Trichloroethane	8.732	83	20541	9.653	ug/L	92
72)	Chlorodibromomethane	8.946	129	28246	8.250	ug/L	98
73)	1,3-Dichloropropane	9.057	76	42361	9.691	ug/L	99
74)	1,2-Dibromoethane	9.231	107	23112	8.688	ug/L	99
76)	2-Hexanone	9.509	43	9161	6.816	ug/L	# 88
77)	Chlorobenzene	9.890	112	114373	10.229	ug/L	94
78)	Ethylbenzene	9.929	91	207908	10.767	ug/L	97
79)	1,1,1,2-Tetrachloroethane	9.969	131	31974	8.750	ug/L	97
80)	p/m Xylene	10.112	106	160136	21.182	ug/L	94
81)	o Xylene	10.635	106	148361	20.523	ug/L	92
82)	Styrene	10.699	104	244442	20.655	ug/L	96
84)	Bromoform	10.722	173	15835	7.493	ug/L	97
86)	Isopropylbenzene	11.008	105	211098	10.872	ug/L	98
88)	Bromobenzene	11.436	156	47183	9.583	ug/L	100
89)	n-Propylbenzene	11.468	91	258369	11.341	ug/L	97
90)	1,4-Dichlorobutane	11.484	55	41170	10.076	ug/L	98
91)	1,1,2,2-Tetrachloroethane	11.547	83	27760	9.444	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230613A\
 Data File : V22230613A02.D
 Acq On : 13 Jun 2023 07:09 am
 Operator : VOA122:PID
 Sample : WG1790988-2 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG1790988,ICAL19961 (Sig #1); WG,ICAL19961 (Sig #2)
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 13 07:57:36 2023
 Quant Method : K:\VOA122\2023\230613A\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 16:18:21 2023
 Response via : Initial Calibration

Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane

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

92)	4-Ethyltoluene	11.595	105	200009	10.622	ug/L	98
93)	2-Chlorotoluene	11.634	91	144794M6	11.054	ug/L	
94)	1,3,5-Trimethylbenzene	11.690	105	160698	9.805	ug/L	97
95)	1,2,3-Trichloropropane	11.690	75	22200	9.048	ug/L	95
96)	trans-1,4-Dichloro-2-b...	11.737	53	7964	9.167	ug/L	87
97)	4-Chlorotoluene	11.817	91	151648	11.040	ug/L	97
98)	tert-Butylbenzene	12.021	119	165073	9.964	ug/L	95
101)	1,2,4-Trimethylbenzene	12.098	105	156292	9.628	ug/L	96
102)	sec-Butylbenzene	12.209	105	220812	11.222	ug/L	98
103)	p-Isopropyltoluene	12.362	119	174261	10.108	ug/L	97
104)	1,3-Dichlorobenzene	12.432	146	94356	9.906	ug/L	98
105)	1,4-Dichlorobenzene	12.522	146	92665	9.818	ug/L	97
106)	p-Diethylbenzene	12.724	119	99136	9.466	ug/L	98
107)	n-Butylbenzene	12.787	91	158119	10.816	ug/L	96
108)	1,2-Dichlorobenzene	12.940	146	80517	9.414	ug/L	97
109)	1,2,4,5-Tetramethylben...	13.511	119	123756	8.336	ug/L	98
110)	1,2-Dibromo-3-chloropr...	13.706	155	4314	7.968	ug/L	99
111)	1,3,5-Trichlorobenzene	13.740	180	57755	9.109	ug/L	96
112)	Hexachlorobutadiene	14.304	225	22004	9.875	ug/L	97
113)	1,2,4-Trichlorobenzene	14.332	180	47733	8.614	ug/L	99
114)	Naphthalene	14.624	128	93303	7.942	ug/L	100
115)	1,2,3-Trichlorobenzene	14.791	180	41618	8.695	ug/L	98

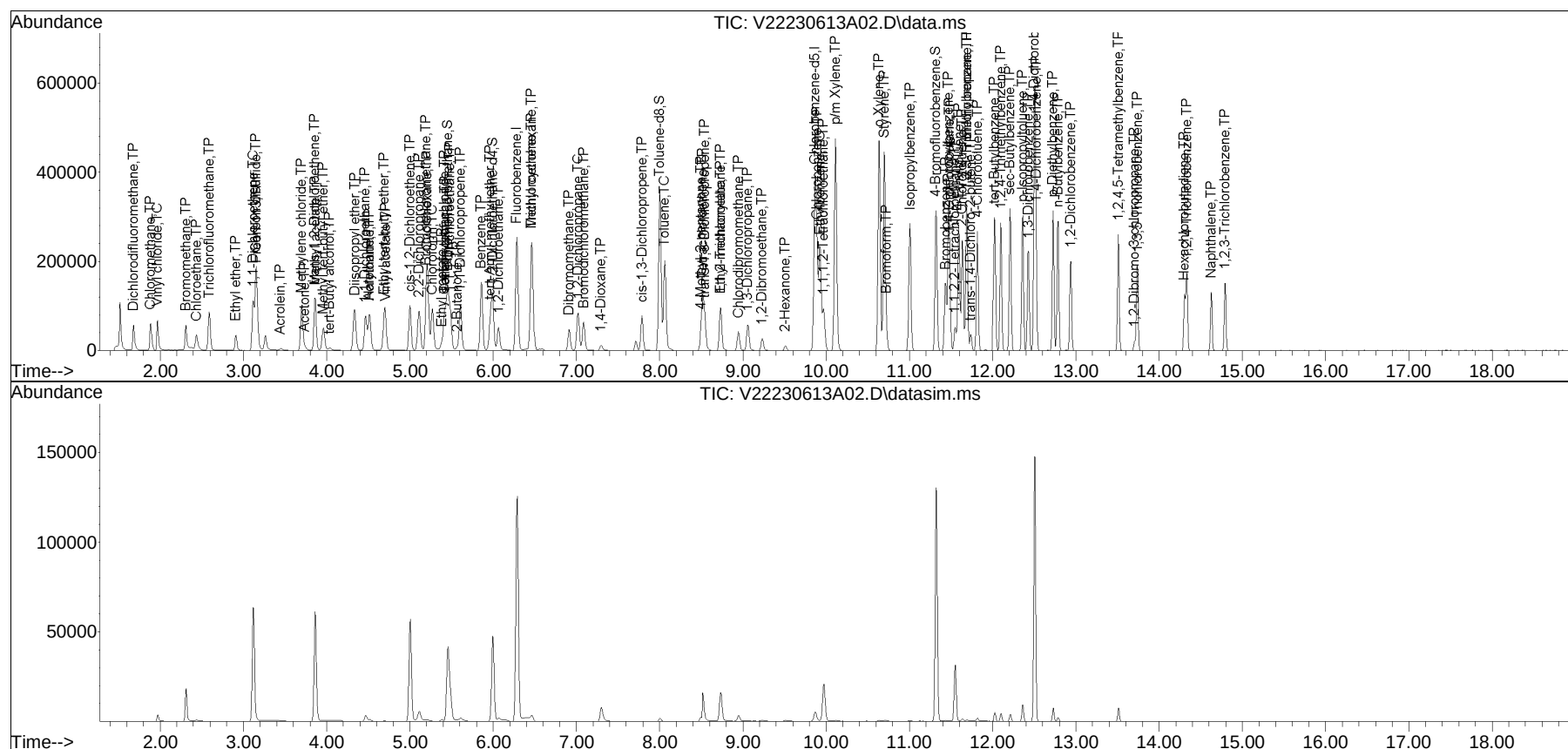
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230613A\
 Data File : V22230613A02.D
 Acq On : 13 Jun 2023 07:09 am
 Operator : VOA122:PID
 Sample : WG1790988-2 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG1790988,ICAL19961 (Sig #1); WG,ICAL19961 (Sig #2)
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 13 07:57:36 2023
 Quant Method : K:\VOA122\2023\230613A\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 16:18:21 2023
 Response via : Initial Calibration

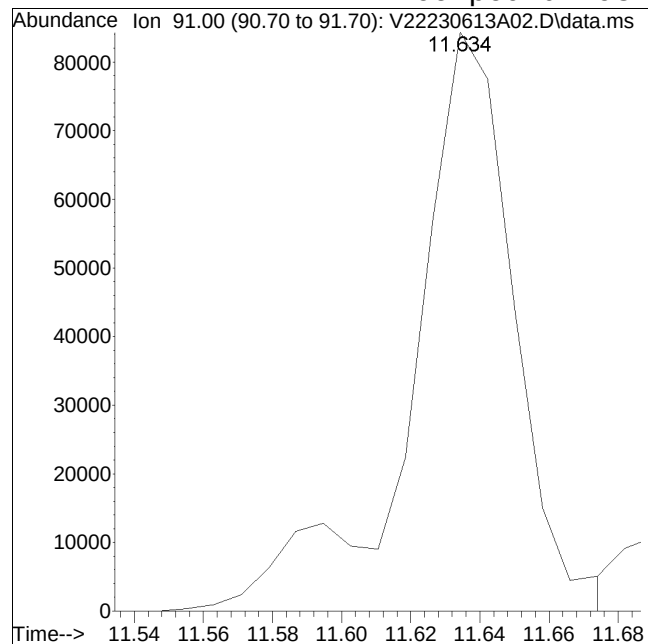
Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane



Manual Integration Report

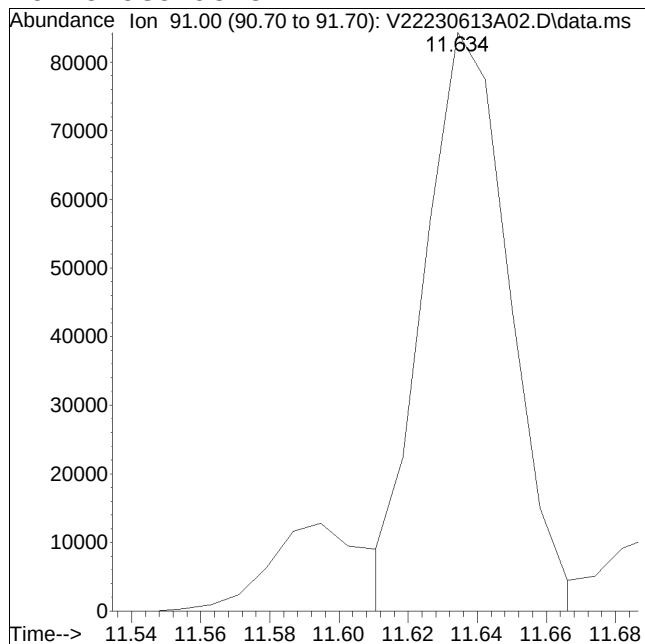
Data Path : K:\VOA122\2023\230613A\ QMethod : V122_230425N_8260.m
Data File : V22230613A02.D Operator : VOA122:PID
Date Inj'd : 6/13/2023 7:09 am Instrument : VOA122
Sample : WG1790988-2 Quant Date : 6/13/2023 7:56 am

Compound #93: 2-Chlorotoluene



Original Peak Response = 172324

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).



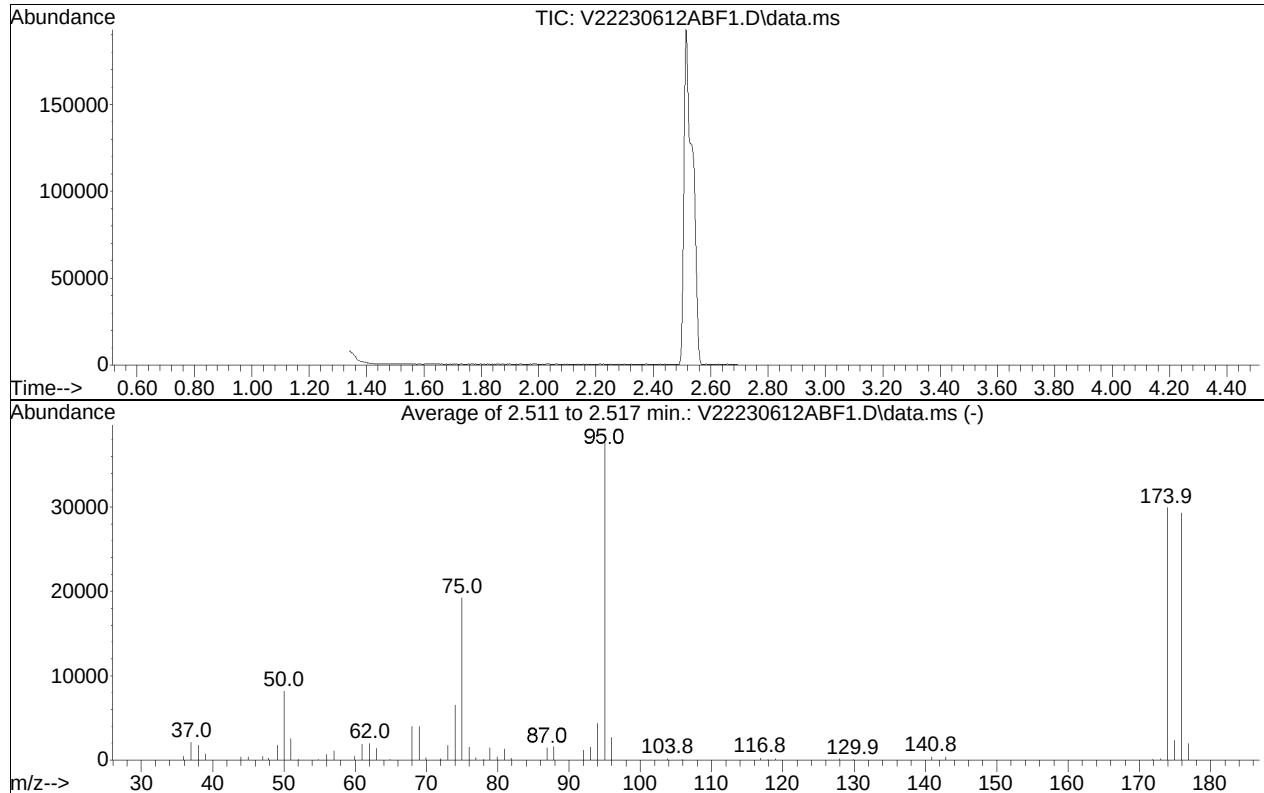
Manual Peak Response = 144794 M6

BFB

Data Path : K:\VOA122\2023\230612A\
 Data File : V22230612ABF1.D
 Acq On : 12 Jun 2023 09:49 am
 Operator : VOA122:PID
 Sample : WG1790520-1
 Misc : WG1790520,ICAL19961
 ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : K:\VOA122\2023\230612A\V122_230425N_8260.m
 Title : VOLATILES BY GC/MS
 Last Update : Wed Apr 26 16:18:21 2023



Spectrum Information: Average of 2.511 to 2.517 min.

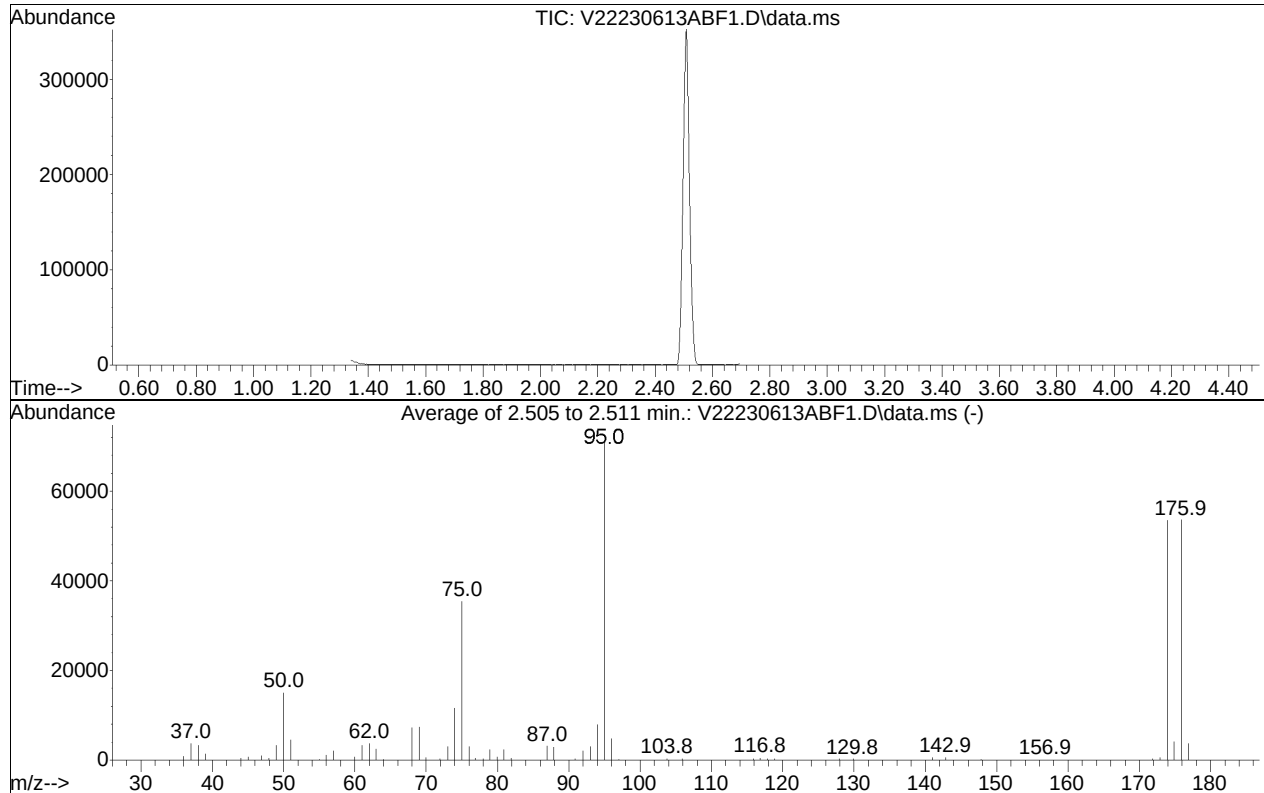
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.6	8176	PASS
75	95	30	60	50.8	19261	PASS
95	95	100	100	100.0	37880	PASS
96	95	5	9	7.1	2676	PASS
173	174	0.00	2	0.7	210	PASS
174	95	50	100	79.1	29957	PASS
175	174	5	9	7.8	2330	PASS
176	174	95	101	97.8	29296	PASS
177	176	5	9	6.6	1934	PASS

BFB

Data Path : K:\VOA122\2023\230613A\
 Data File : V22230613ABF1.D
 Acq On : 13 Jun 2023 06:34 am
 Operator : VOA122:PID
 Sample : WG1790988-1
 Misc : WG1790988,ICAL19961
 ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : K:\VOA122\2023\230613A\V122_230425N_8260.m
 Title : VOLATILES BY GC/MS
 Last Update : Wed Apr 26 16:18:21 2023



Spectrum Information: Average of 2.505 to 2.511 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.1	15071	PASS
75	95	30	60	49.7	35400	PASS
95	95	100	100	100.0	71299	PASS
96	95	5	9	6.8	4813	PASS
173	174	0.00	2	1.0	526	PASS
174	95	50	100	75.0	53507	PASS
175	174	5	9	7.8	4178	PASS
176	174	95	101	100.4	53717	PASS
177	176	5	9	7.0	3743	PASS

Volatiles Raw QC Data

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230612A\
 Data File : V22230612A05.D
 Acq On : 12 Jun 2023 11:45 am
 Operator : VOA122:PID
 Sample : WG1790520-5,31,10,10 (Sig #1); METHOD BLK (Sig #2)
 Misc : WG1790520,ICAL19961 (Sig #1); WG,ICAL19961 (Sig #2)
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 12 12:06:49 2023
 Quant Method : K:\VOA122\2023\230612A\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 16:18:21 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA122\2023\230612A\V22230612A01.D
 Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane

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

Internal Standards						
1) Fluorobenzene	6.284	96	201355	10.000	ug/L	0.00
Standard Area 1 = 239558			Recovery	=	84.05%	
62) Chlorobenzene-d5	9.866	117	212213	10.000	ug/L	0.00
Standard Area 1 = 233642			Recovery	=	90.83%	
83) 1,4-Dichlorobenzene-d4	12.501	152	107618	10.000	ug/L	0.00
Standard Area 1 = 127139			Recovery	=	84.65%	
System Monitoring Compounds						
38) Dibromofluoromethane	5.453	113	82226	12.126	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	121.26%	
46) 1,2-Dichloroethane-d4	5.996	65	72619	12.133	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	121.33%	
63) Toluene-d8	8.001	98	250516	9.549	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	95.49%	
87) 4-Bromofluorobenzene	11.317	95	89476	9.828	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	98.28%	
Target Compounds						
21) Methyl tert-butyl ether	0.000		0		N.D.	Qvalue
44) Benzene	0.000		0		N.D.	
64) Toluene	0.000		0		N.D.	
78) Ethylbenzene	9.874	91	271		N.D.	
80) p/m Xylene	0.000		0		N.D.	
81) o Xylene	0.000		0		N.D.	
86) Isopropylbenzene	0.000		0		N.D.	
89) n-Propylbenzene	11.317	91	202		N.D.	
94) 1,3,5-Trimethylbenzene	0.000		0		N.D.	
98) tert-Butylbenzene	0.000		0		N.D.	
101) 1,2,4-Trimethylbenzene	0.000		0		N.D.	
102) sec-Butylbenzene	0.000		0		N.D.	
103) p-Isopropyltoluene	0.000		0		N.D.	
107) n-Butylbenzene	12.787	91	147		N.D.	
114) Naphthalene	0.000		0		N.D.	

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

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230612A\
 Data File : V22230612A05.D
 Acq On : 12 Jun 2023 11:45 am
 Operator : VOA122:PID
 Sample : WG1790520-5,31,10,10 (Sig #1); METHOD BLK (Sig #2)
 Misc : WG1790520,ICAL19961 (Sig #1); WG,ICAL19961 (Sig #2)
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 12 12:06:49 2023
 Quant Method : K:\VOA122\2023\230612A\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 16:18:21 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA122\2023\230612A\V22230612A01.D
 Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane

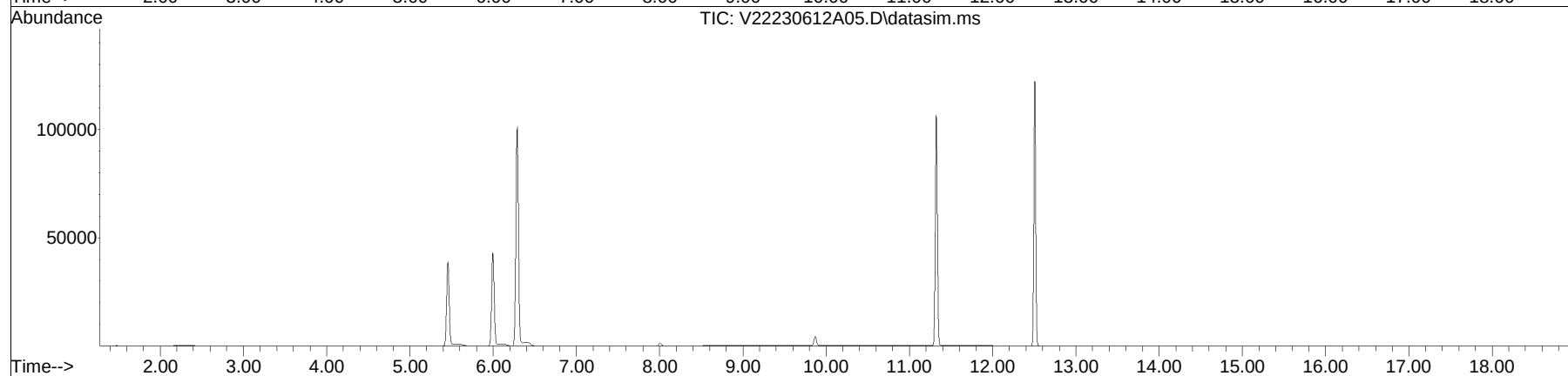
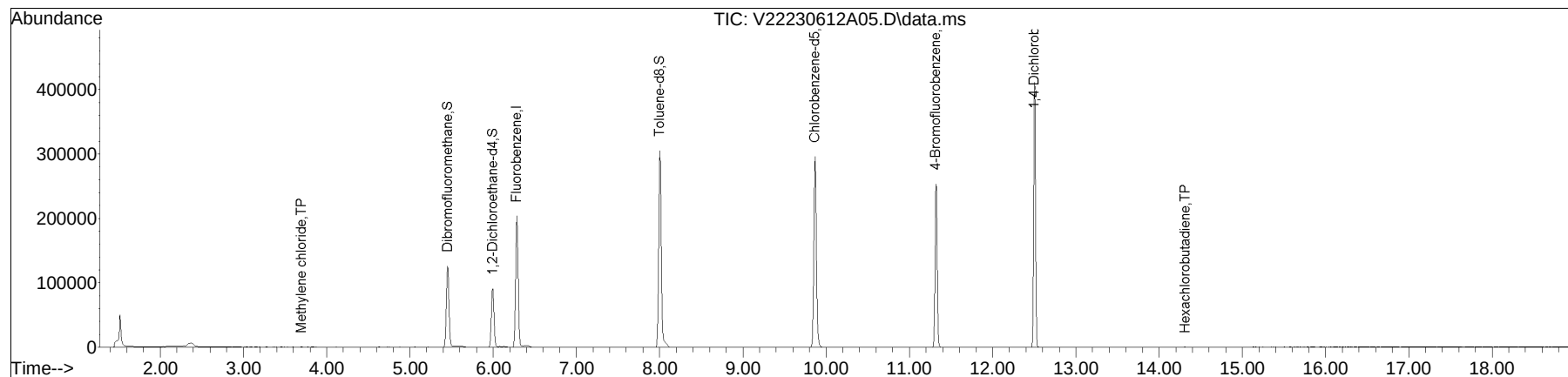
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230612A\
 Data File : V22230612A05.D
 Acq On : 12 Jun 2023 11:45 am
 Operator : VOA122:PID
 Sample : WG1790520-5,31,10,10 (Sig #1); METHOD BLK (Sig #2)
 Misc : WG1790520,ICAL19961 (Sig #1); WG,ICAL19961 (Sig #2)
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 12 12:06:49 2023
 Quant Method : K:\VOA122\2023\230612A\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 16:18:21 2023
 Response via : Initial Calibration

Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane



V122_230425N_8260.m Tue Jun 13 07:16:45 2023

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Manual Integration Report

Data Path	: K:\V0A122\2023\230612A\	QMethod	: V122_230425N_8260.m
Data File	: V22230612A05.D	Operator	: V0A122:PID
Date Inj'd	: 6/12/2023 11:45 am	Instrument	: V0A122
Sample	: WG1790520-5,31,10,10	Quant Date	: 6/12/2023 12:06 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230613A\
 Data File : V22230613A07.D
 Acq On : 13 Jun 2023 09:11 am
 Operator : VOA122:PID
 Sample : WG1790988-5,31,10,10 (Sig #1); METHOD BLK (Sig #2)
 Misc : WG1790988,ICAL19961 (Sig #1); WG,ICAL19961 (Sig #2)
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 13 09:33:11 2023
 Quant Method : K:\VOA122\2023\230613A\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 16:18:21 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA122\2023\230613A\V22230613A02.D
 Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane

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

Internal Standards						
1) Fluorobenzene	6.284	96	230948	10.000	ug/L	0.00
Standard Area 1 = 250466			Recovery	=	92.21%	
62) Chlorobenzene-d5	9.866	117	249457	10.000	ug/L	0.00
Standard Area 1 = 241286			Recovery	=	103.39%	
83) 1,4-Dichlorobenzene-d4	12.501	152	122760	10.000	ug/L	0.00
Standard Area 1 = 129668			Recovery	=	94.67%	
System Monitoring Compounds						
38) Dibromofluoromethane	5.453	113	80318	10.327	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	103.27%	
46) 1,2-Dichloroethane-d4	5.996	65	75845	11.049	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	110.49%	
63) Toluene-d8	8.001	98	296751	9.622	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	96.22%	
87) 4-Bromofluorobenzene	11.317	95	109503	10.544	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	105.44%	
Target Compounds						Qvalue
21) Methyl tert-butyl ether	0.000		0		N.D.	
44) Benzene	0.000		0		N.D.	
64) Toluene	0.000		0		N.D.	
78) Ethylbenzene	9.866	91	303		N.D.	
80) p/m Xylene	0.000		0		N.D.	
81) o Xylene	0.000		0		N.D.	
86) Isopropylbenzene	0.000		0		N.D.	
89) n-Propylbenzene	11.325	91	199		N.D.	
94) 1,3,5-Trimethylbenzene	0.000		0		N.D.	
98) tert-Butylbenzene	0.000		0		N.D.	
101) 1,2,4-Trimethylbenzene	0.000		0		N.D.	
102) sec-Butylbenzene	0.000		0		N.D.	
103) p-Isopropyltoluene	0.000		0		N.D.	
107) n-Butylbenzene	12.787	91	156		N.D.	
114) Naphthalene	0.000		0		N.D.	

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

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230613A\
 Data File : V22230613A07.D
 Acq On : 13 Jun 2023 09:11 am
 Operator : VOA122:PID
 Sample : WG1790988-5,31,10,10 (Sig #1); METHOD BLK (Sig #2)
 Misc : WG1790988,ICAL19961 (Sig #1); WG,ICAL19961 (Sig #2)
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 13 09:33:11 2023
 Quant Method : K:\VOA122\2023\230613A\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 16:18:21 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA122\2023\230613A\V22230613A02.D
 Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane

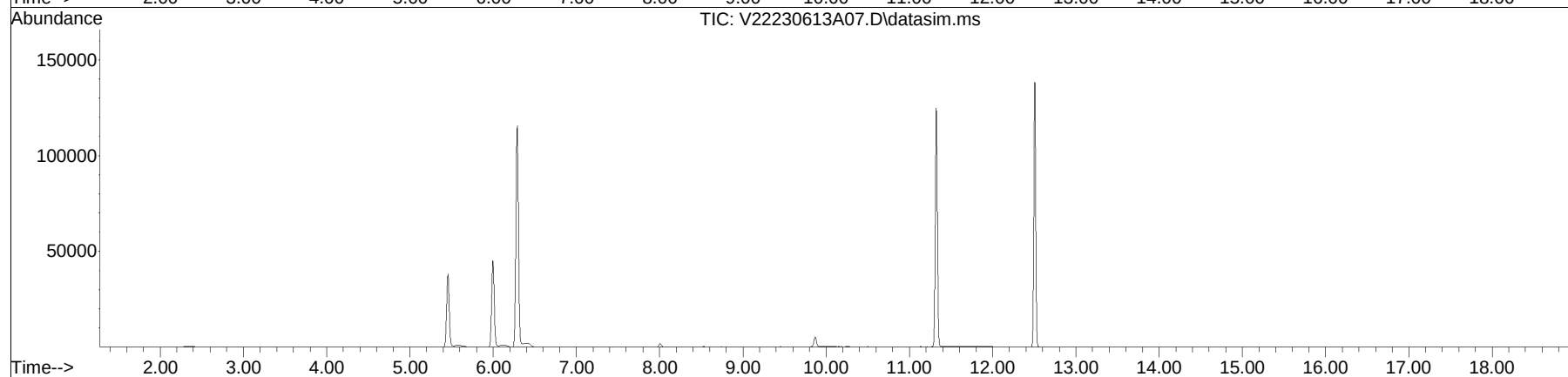
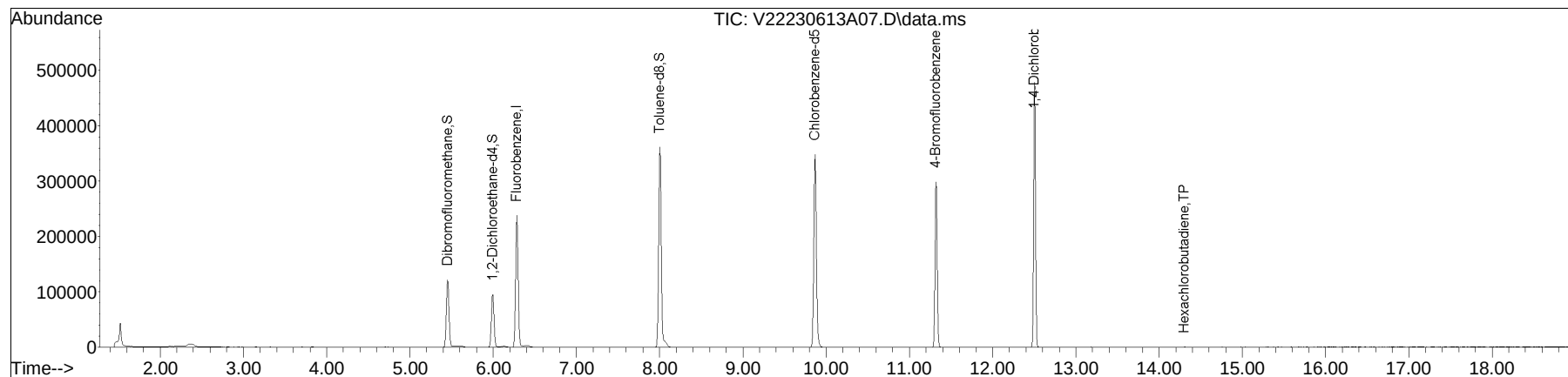
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230613A\
 Data File : V22230613A07.D
 Acq On : 13 Jun 2023 09:11 am
 Operator : VOA122:PID
 Sample : WG1790988-5,31,10,10 (Sig #1); METHOD BLK (Sig #2)
 Misc : WG1790988,ICAL19961 (Sig #1); WG,ICAL19961 (Sig #2)
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 13 09:33:11 2023
 Quant Method : K:\VOA122\2023\230613A\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 16:18:21 2023
 Response via : Initial Calibration

Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane



V122_230425N_8260.m Wed Jun 14 06:12:23 2023

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Manual Integration Report

Data Path	: K:\V0A122\2023\230613A\	QMethod	: V122_230425N_8260.m
Data File	: V22230613A07.D	Operator	: V0A122:PID
Date Inj'd	: 6/13/2023 9:11 am	Instrument	: V0A122
Sample	: WG1790988-5,31,10,10	Quant Date	: 6/13/2023 9:32 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230612A\
 Data File : V22230612A01.D
 Acq On : 12 Jun 2023 10:08 am
 Operator : VOA122:PID
 Sample : WG1790520-3,31,10,10 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG1790520,ICAL19961 (Sig #1); WG,ICAL19961 (Sig #2)
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 12 10:51:38 2023
 Quant Method : K:\VOA122\2023\230612A\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 16:18:21 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA122\2023\230612A\V22230612A01.D
 Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane

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

Internal Standards						
1) Fluorobenzene	6.284	96	239558	10.000	ug/L	0.00
Standard Area 1 = 239558			Recovery	=	100.00%	
62) Chlorobenzene-d5	9.866	117	233642	10.000	ug/L	0.00
Standard Area 1 = 233642			Recovery	=	100.00%	
83) 1,4-Dichlorobenzene-d4	12.501	152	127139	10.000	ug/L	0.00
Standard Area 1 = 127139			Recovery	=	100.00%	
System Monitoring Compounds						
38) Dibromofluoromethane	5.453	113	81653	10.121	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	101.21%	
46) 1,2-Dichloroethane-d4	5.989	65	75283	10.573	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	105.73%	
63) Toluene-d8	8.001	98	283079	9.800	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	98.00%	
87) 4-Bromofluorobenzene	11.317	95	106818	9.931	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	99.31%	
Target Compounds						Qvalue
21) Methyl tert-butyl ether	3.962	73	51131	9.347	ug/L	# 90
44) Benzene	5.856	78	139688	11.008	ug/L	96
64) Toluene	8.060	92	96579	10.494	ug/L	99
78) Ethylbenzene	9.921	91	193186	10.332	ug/L	98
80) p/m Xylene	10.112	106	149580	20.433	ug/L	93
81) o Xylene	10.635	106	140824	20.118	ug/L	94
86) Isopropylbenzene	11.008	105	214404	11.262	ug/L	98
89) n-Propylbenzene	11.468	91	252262	11.293	ug/L	97
94) 1,3,5-Trimethylbenzene	11.690	105	148312	9.229	ug/L	97
98) tert-Butylbenzene	12.021	119	170457	10.494	ug/L	96
101) 1,2,4-Trimethylbenzene	12.097	105	159492	10.021	ug/L	97
102) sec-Butylbenzene	12.209	105	219761	11.391	ug/L	98
103) p-Isopropyltoluene	12.362	119	164559	9.735	ug/L	97
107) n-Butylbenzene	12.780	91	153522	10.710	ug/L	97
114) Naphthalene	14.624	128	90391	7.847	ug/L	100

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

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230612A\
 Data File : V22230612A01.D
 Acq On : 12 Jun 2023 10:08 am
 Operator : VOA122:PID
 Sample : WG1790520-3,31,10,10 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG1790520,ICAL19961 (Sig #1); WG,ICAL19961 (Sig #2)
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 12 10:51:38 2023
 Quant Method : K:\VOA122\2023\230612A\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 16:18:21 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA122\2023\230612A\V22230612A01.D
 Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane

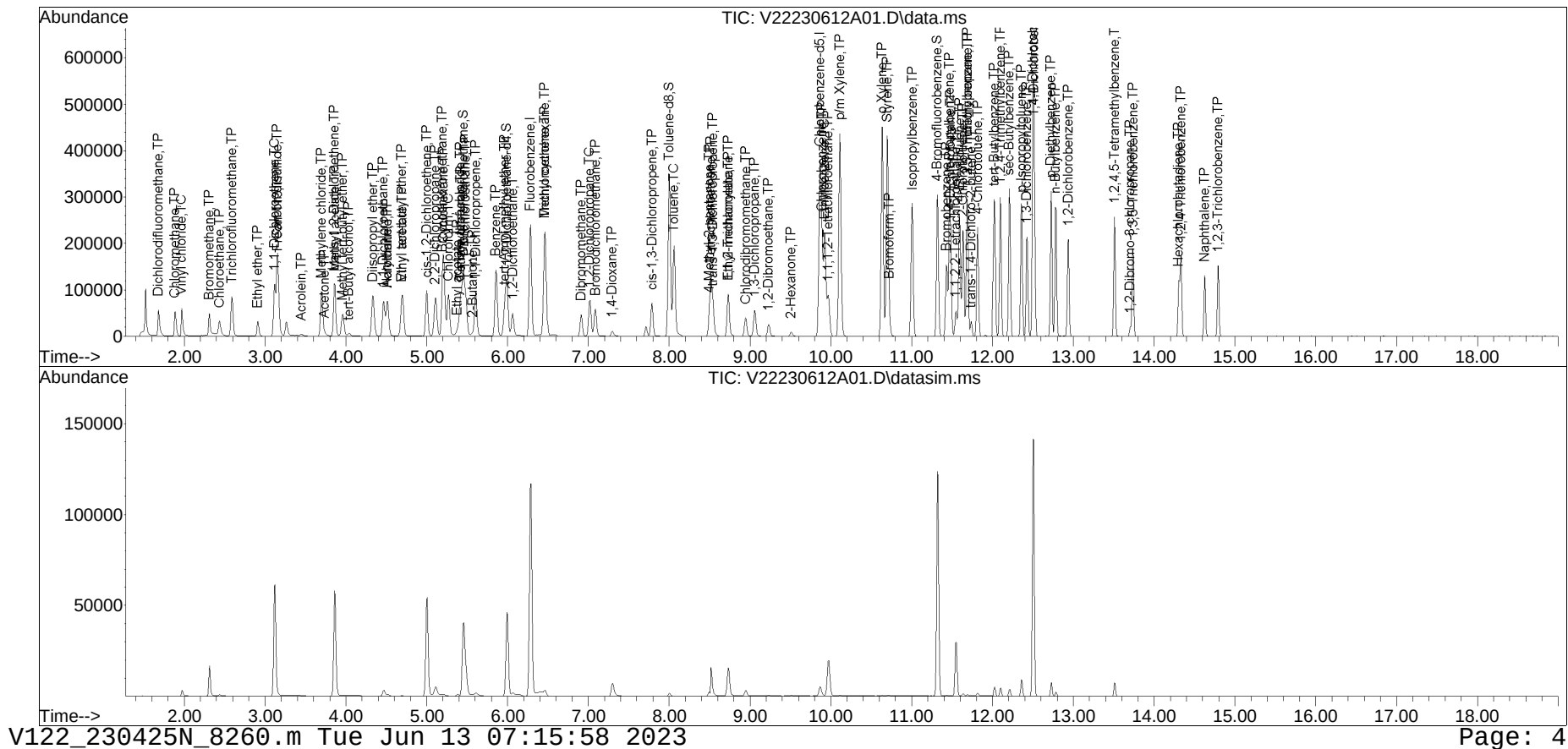
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

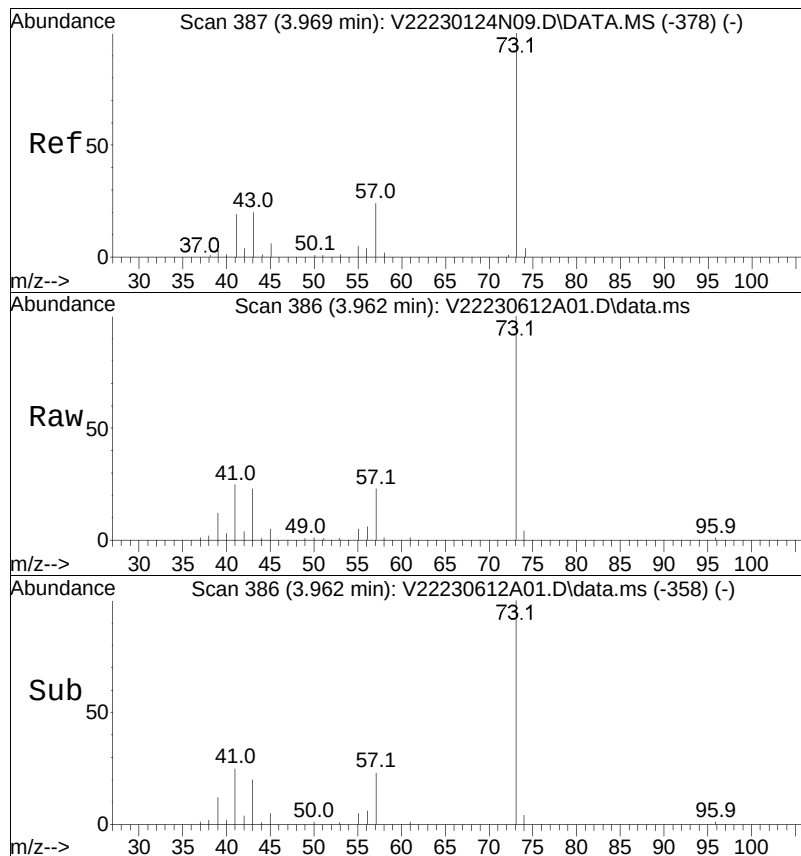
(QT Reviewed)

Data Path : K:\V0A122\2023\230612A\
Data File : V22230612A01.D
Acq On : 12 Jun 2023 10:08 am
Operator : V0A122:PID
Sample : WG1790520-3,31,10,10 (Sig #1); 8260 CCAL (Sig #2)
Misc : WG1790520,ICAL19961 (Sig #1); WG,ICAL19961 (Sig #2)
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 12 10:51:38 2023
Quant Method : K:\VOA122\2023\230612A\V122_230425N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Apr 26 16:18:21 2023
Response via : Initial Calibration

Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane





#21

Methyl tert-butyl ether

Concen: 9.35 ug/L

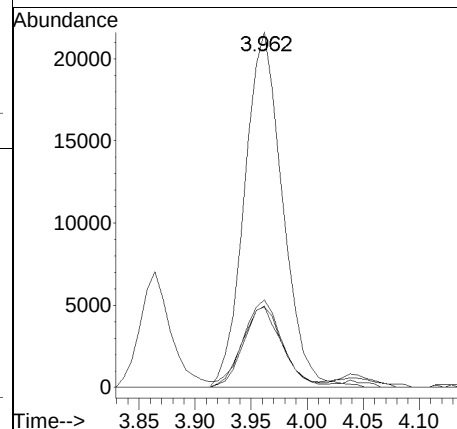
RT: 3.962 min Scan# 386

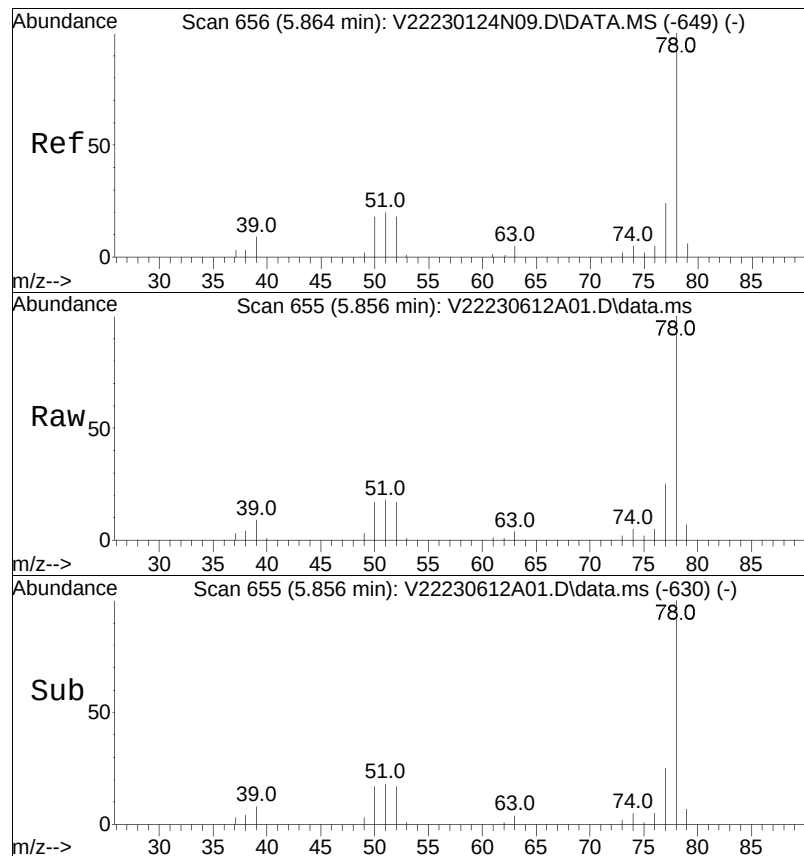
Delta R.T. -0.007 min

Lab File: V22230612A01.D

Acq: 12 Jun 2023 10:08 am

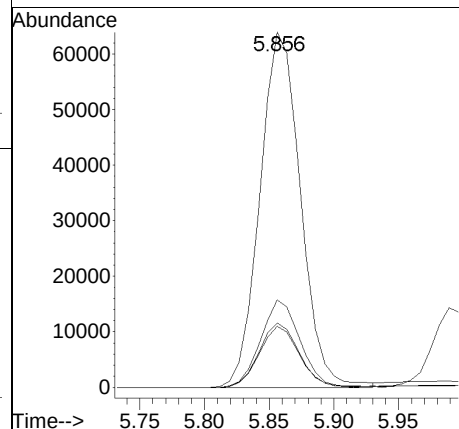
Tgt Ion:	73	Resp:	51131
Ion	Ratio	Lower	Upper
73	100		
57	23.5	13.6	28.2
43	23.9	12.7	26.5
41	25.2	11.4	23.8#

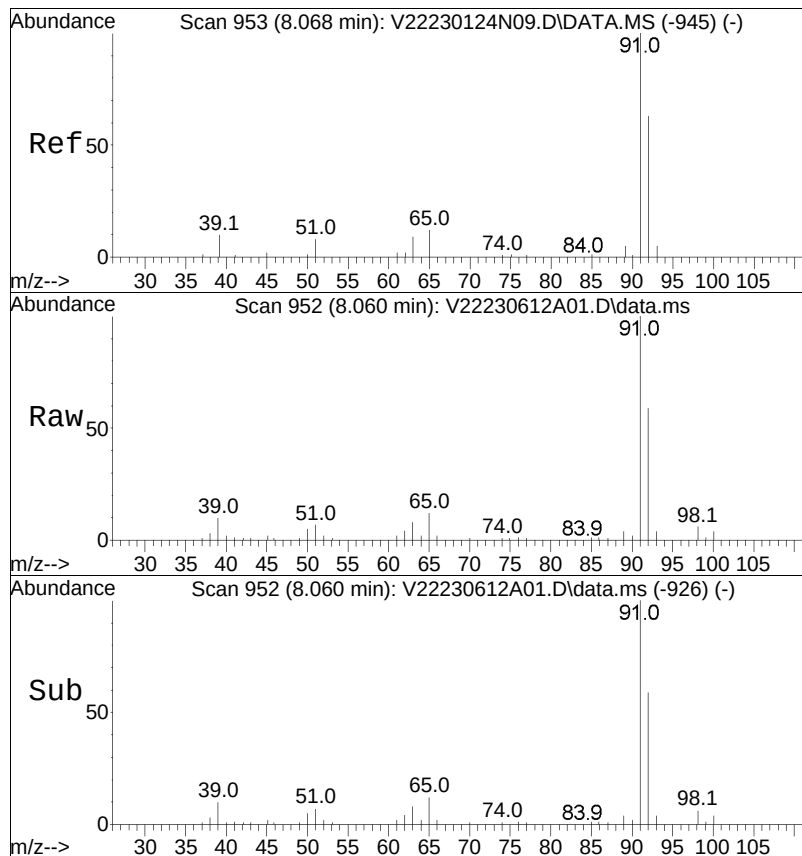




#44
Benzene
Concen: 11.01 ug/L
RT: 5.856 min Scan# 655
Delta R.T. -0.007 min
Lab File: V22230612A01.D
Acq: 12 Jun 2023 10:08 am

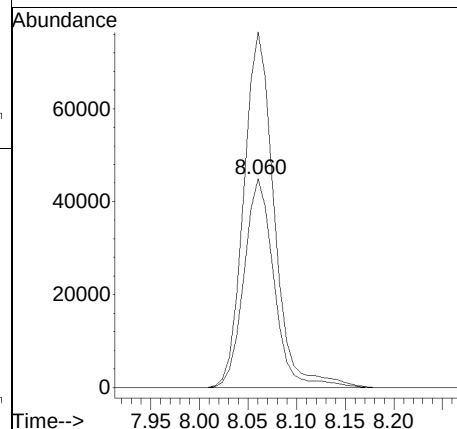
Tgt Ion: 78	Resp: 139688
Ion Ratio	Lower Upper
78 100	
77 24.0	15.4 32.0
51 17.8	9.8 20.4
52 17.1	9.2 19.2

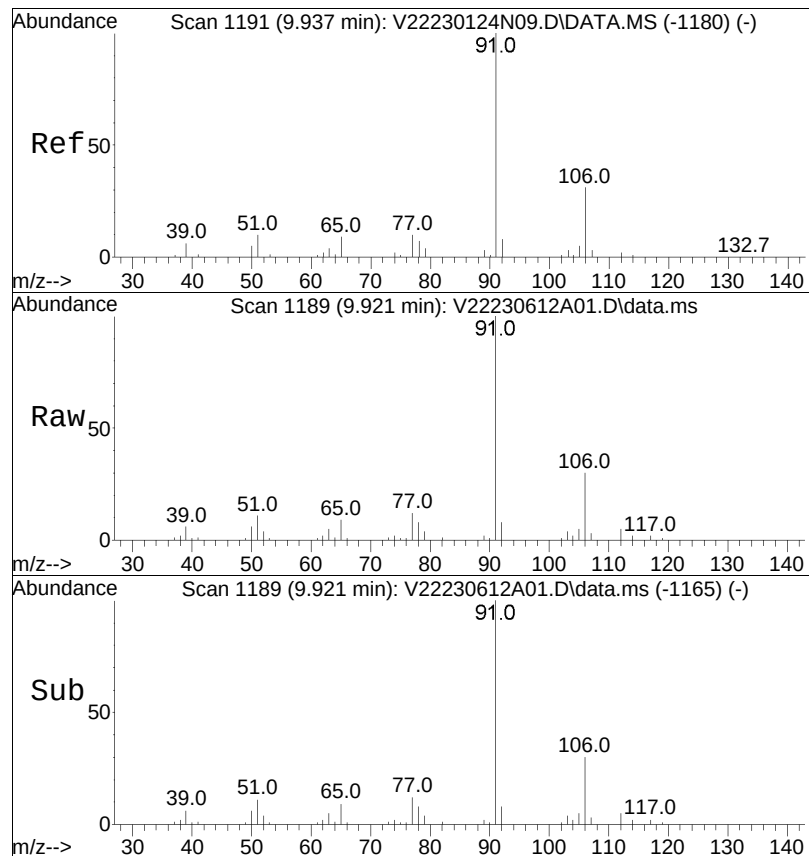




#64
 Toluene
 Concen: 10.49 ug/L
 RT: 8.060 min Scan# 952
 Delta R.T. -0.008 min
 Lab File: V22230612A01.D
 Acq: 12 Jun 2023 10:08 am

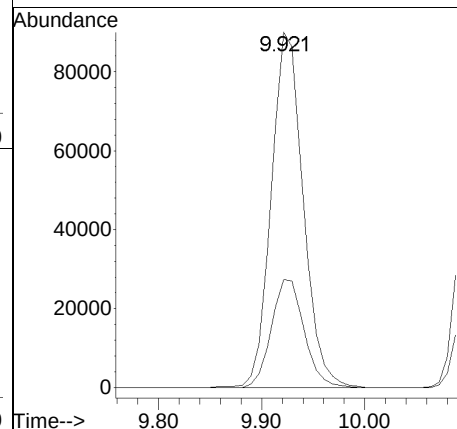
Tgt	Ion	Resp	Lower	Upper
92	100			
91	172.1	96579	137.0	205.6

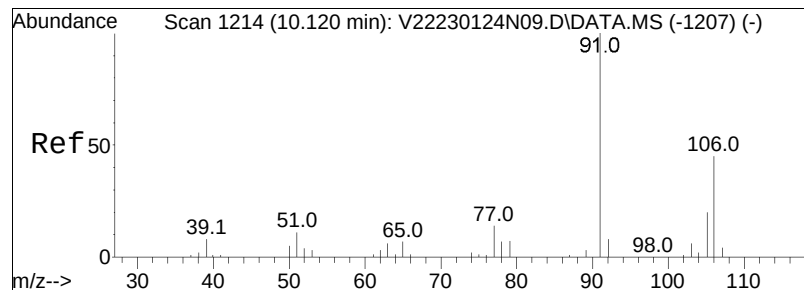




#78
 Ethylbenzene
 Concen: 10.33 ug/L
 RT: 9.921 min Scan# 1189
 Delta R.T. -0.008 min
 Lab File: V22230612A01.D
 Acq: 12 Jun 2023 10:08 am

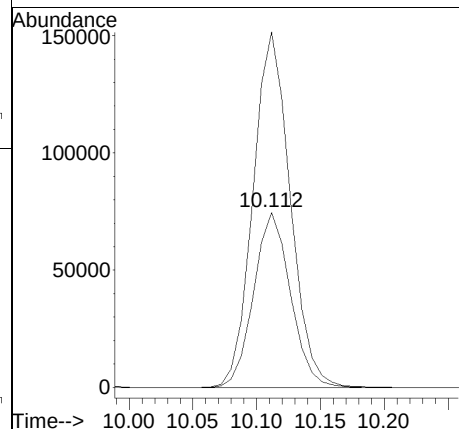
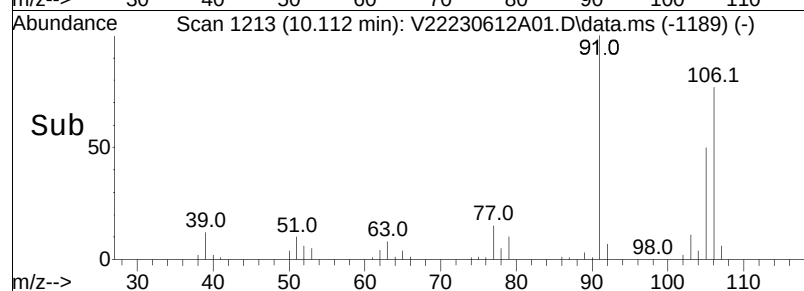
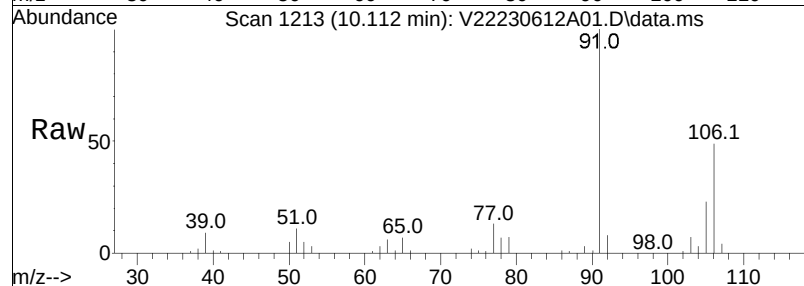
Tgt	Ion	Resp	Lower	Upper
91	100	193186		
106	31.1	25.8	38.6	

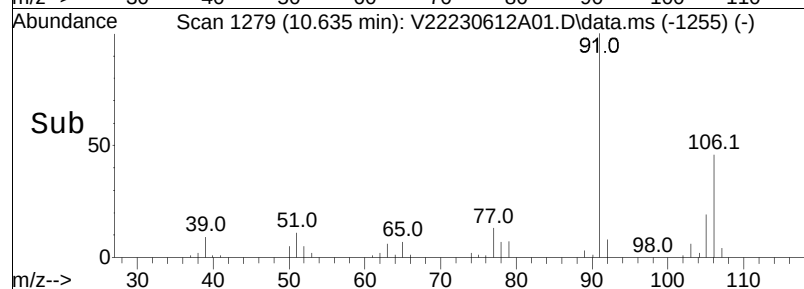
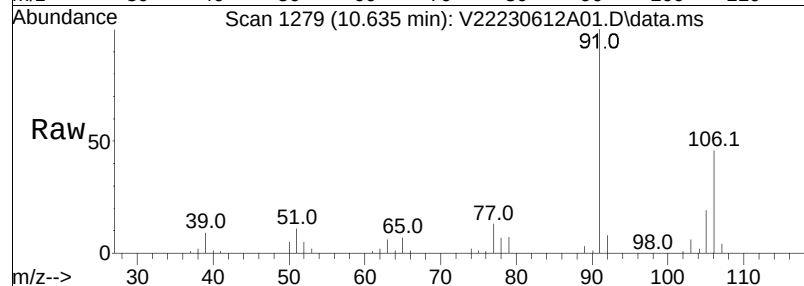
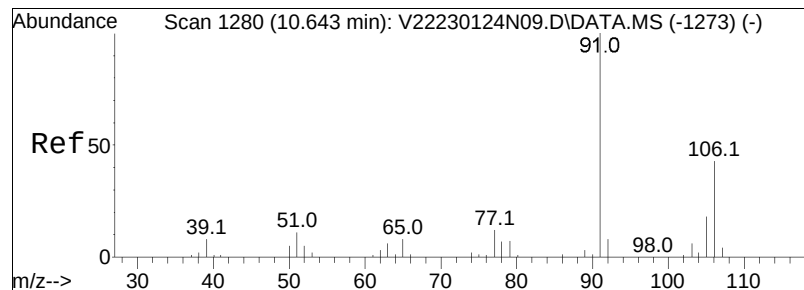




#80
 p/m Xylene
 Concen: 20.43 ug/L
 RT: 10.112 min Scan# 1213
 Delta R.T. -0.008 min
 Lab File: V22230612A01.D
 Acq: 12 Jun 2023 10:08 am

Tgt Ion	106	91	Ratio	Lower	Upper
Resp	149580				
Ratio	100	205.2		156.0	234.0





#81

o Xylene

Concen: 20.12 ug/L

RT: 10.635 min Scan# 1279

Delta R.T. -0.008 min

Lab File: V22230612A01.D

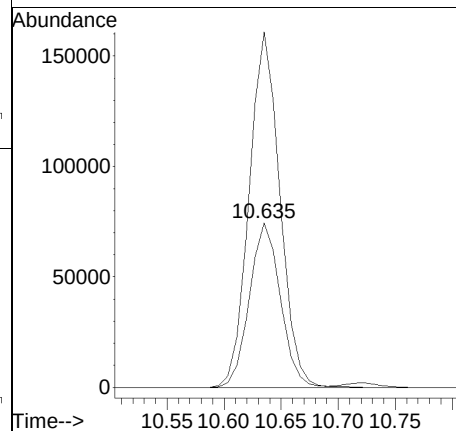
Acq: 12 Jun 2023 10:08 am

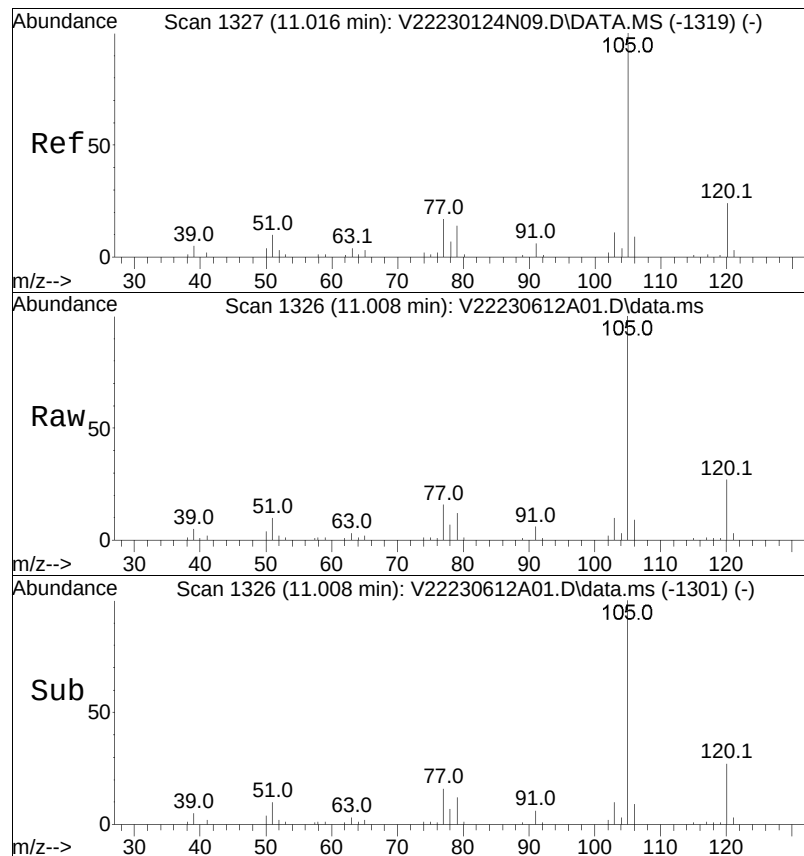
Tgt Ion:106 Resp: 140824

Ion Ratio Lower Upper

106 100

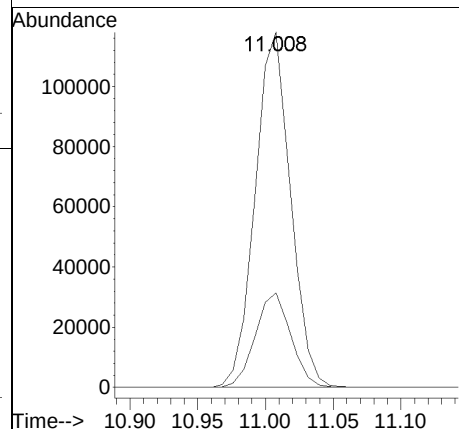
91 213.5 164.0 246.0

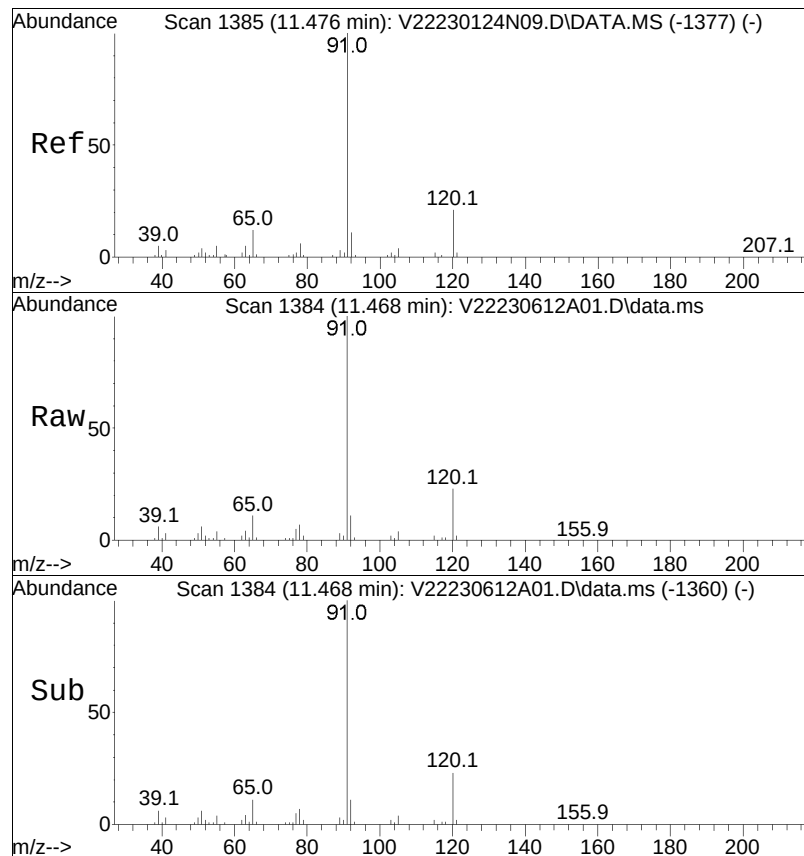




#86
 Isopropylbenzene
 Concen: 11.26 ug/L
 RT: 11.008 min Scan# 1326
 Delta R.T. -0.000 min
 Lab File: V22230612A01.D
 Acq: 12 Jun 2023 10:08 am

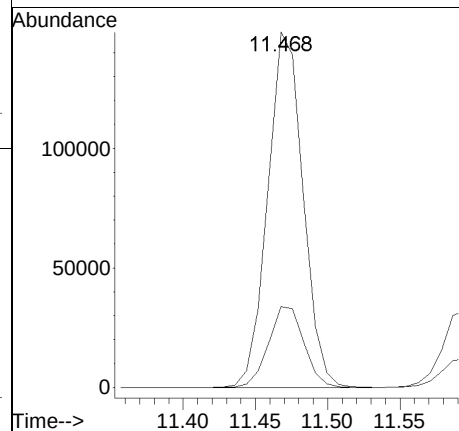
Tgt	Ion	Ratio	Lower	Upper
105	100			
120	26.7	7.7	47.7	

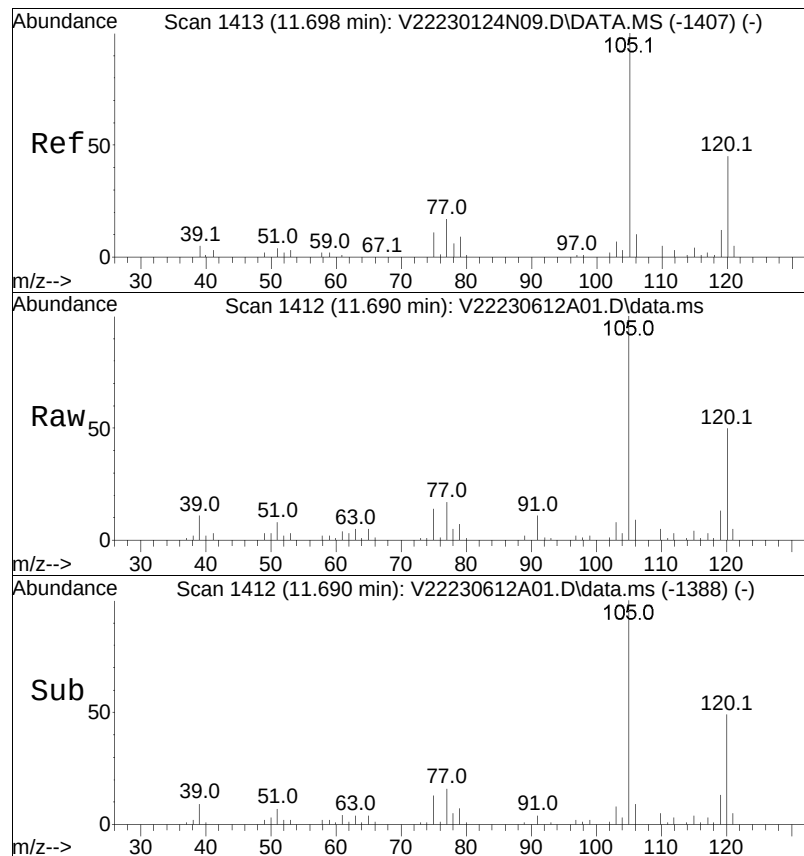




#89
 n-Propylbenzene
 Concen: 11.29 ug/L
 RT: 11.468 min Scan# 1384
 Delta R.T. -0.008 min
 Lab File: V22230612A01.D
 Acq: 12 Jun 2023 10:08 am

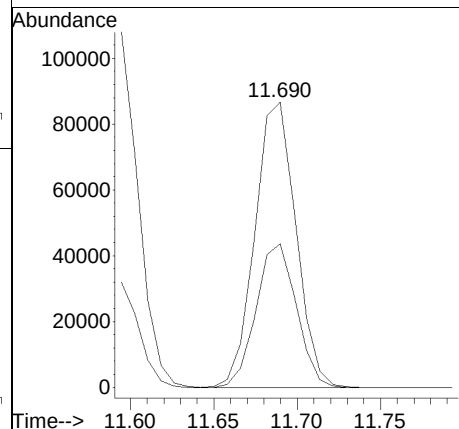
Tgt Ion	Ratio	Lower	Upper
91	100		
120	22.9	19.5	29.3

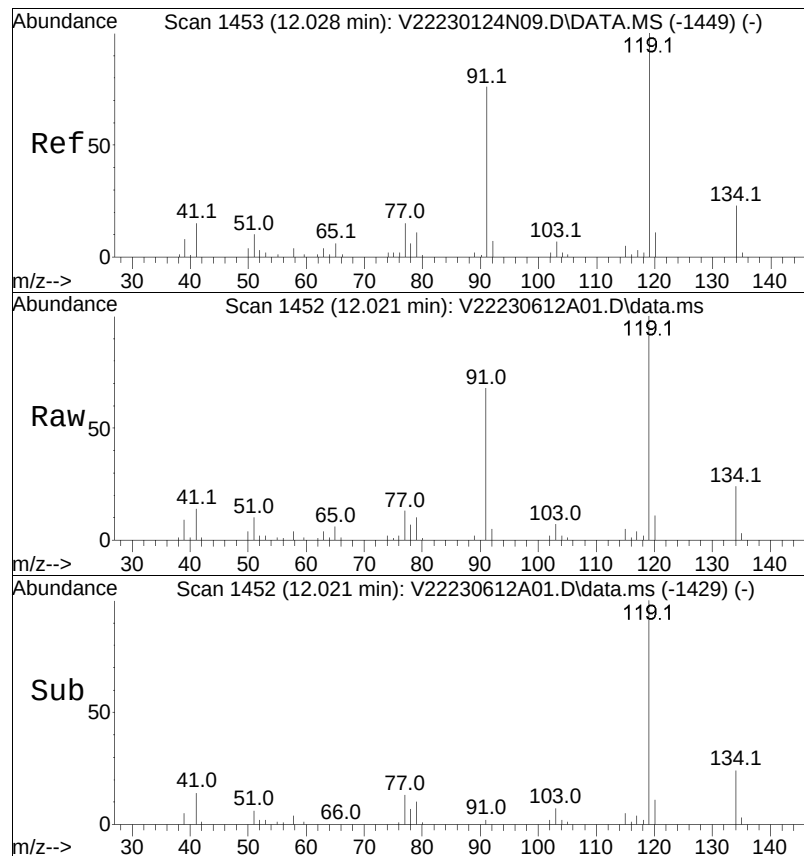




#94
 1,3,5-Trimethylbenzene
 Concen: 9.23 ug/L
 RT: 11.690 min Scan# 1412
 Delta R.T. -0.008 min
 Lab File: V22230612A01.D
 Acq: 12 Jun 2023 10:08 am

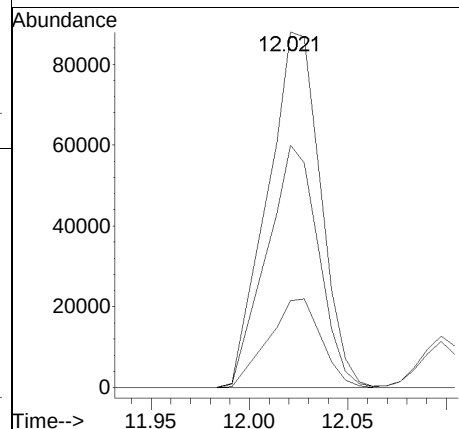
Tgt Ion	105	120	Ratio	Lower	Upper
105	100				
120	49.3			40.9	61.3

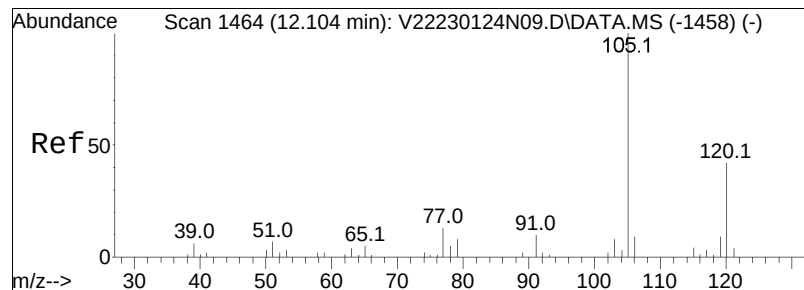




#98
 tert-Butylbenzene
 Concen: 10.49 ug/L
 RT: 12.021 min Scan# 1452
 Delta R.T. -0.007 min
 Lab File: V22230612A01.D
 Acq: 12 Jun 2023 10:08 am

Tgt	Ion	Ratio	Resp	Lower	Upper
119	119	100	170457		
91	91	65.9		50.2	75.4
134	134	24.5		20.8	31.2





#101

1,2,4-Trimethylbenzene

Concen: 10.02 ug/L

RT: 12.097 min Scan# 1463

Delta R.T. -0.007 min

Lab File: V22230612A01.D

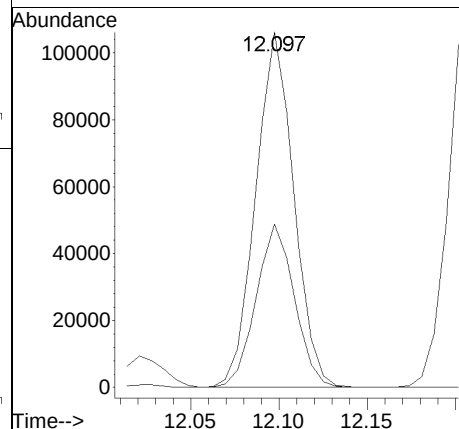
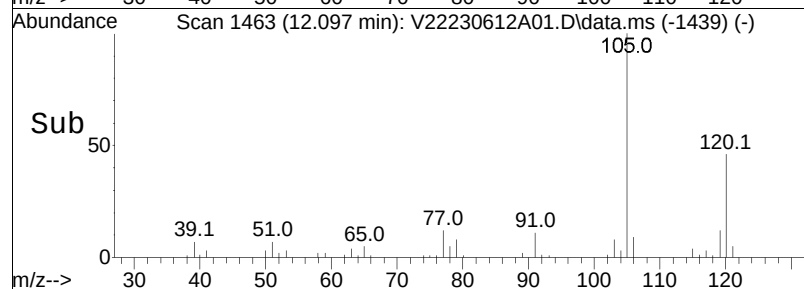
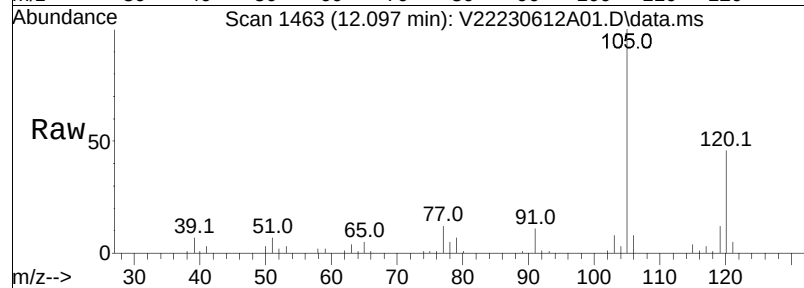
Acq: 12 Jun 2023 10:08 am

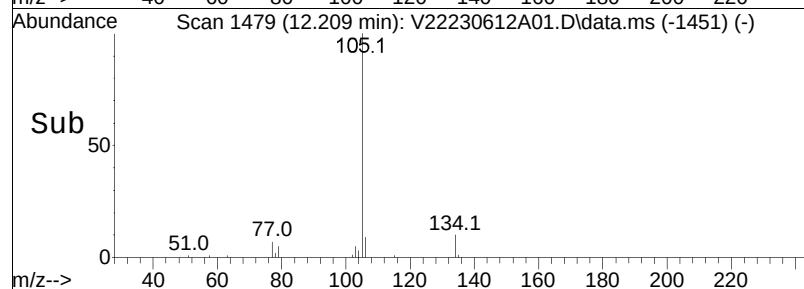
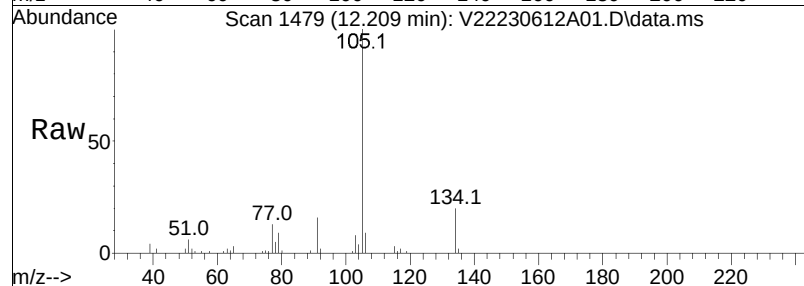
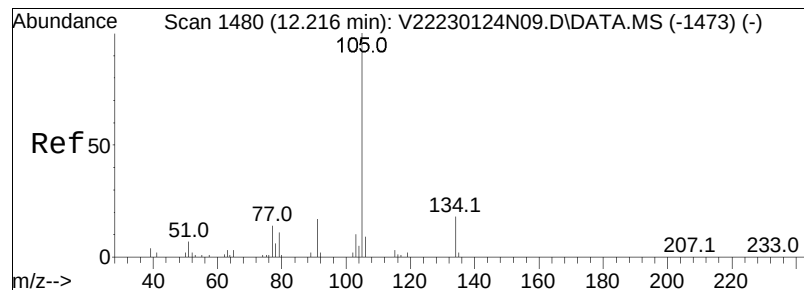
Tgt Ion:105 Resp: 159492

Ion Ratio Lower Upper

105 100

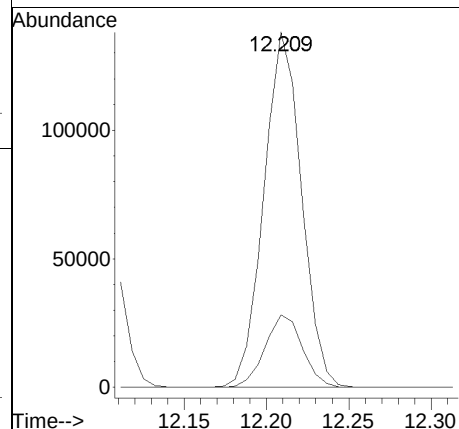
120 46.2 38.5 57.7

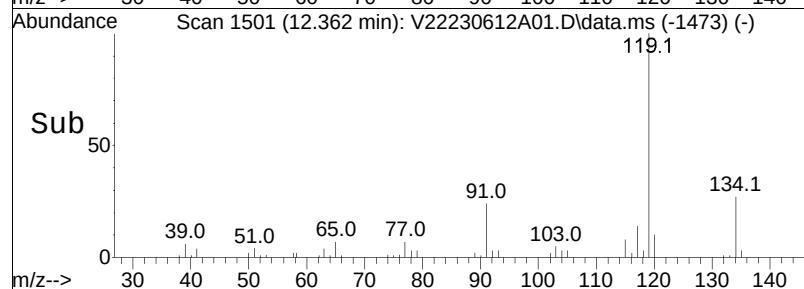
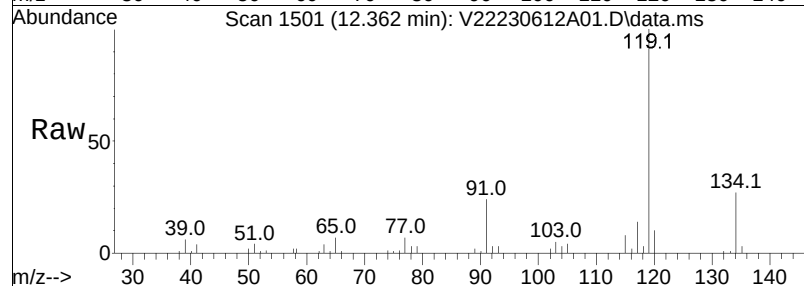
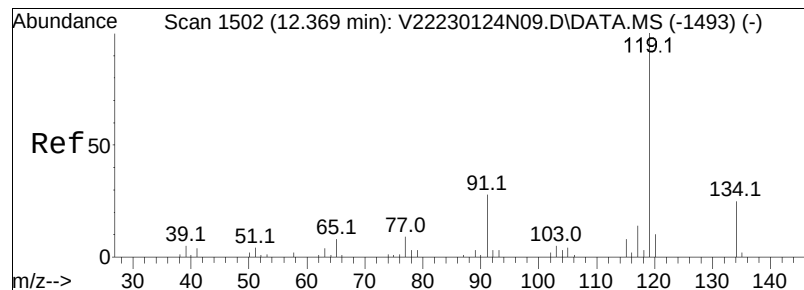




#102
 sec-Butylbenzene
 Concen: 11.39 ug/L
 RT: 12.209 min Scan# 1479
 Delta R.T. -0.007 min
 Lab File: V22230612A01.D
 Acq: 12 Jun 2023 10:08 am

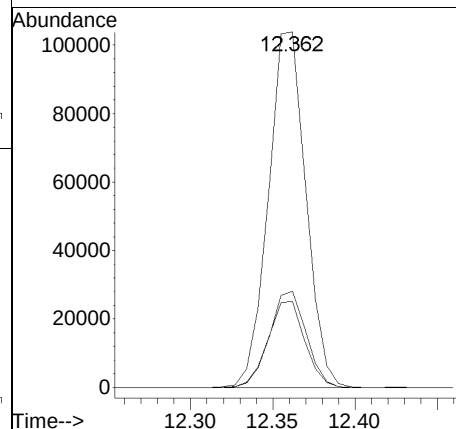
Tgt Ion	Ratio	Lower	Upper
105	100		
134	20.3	13.9	28.9

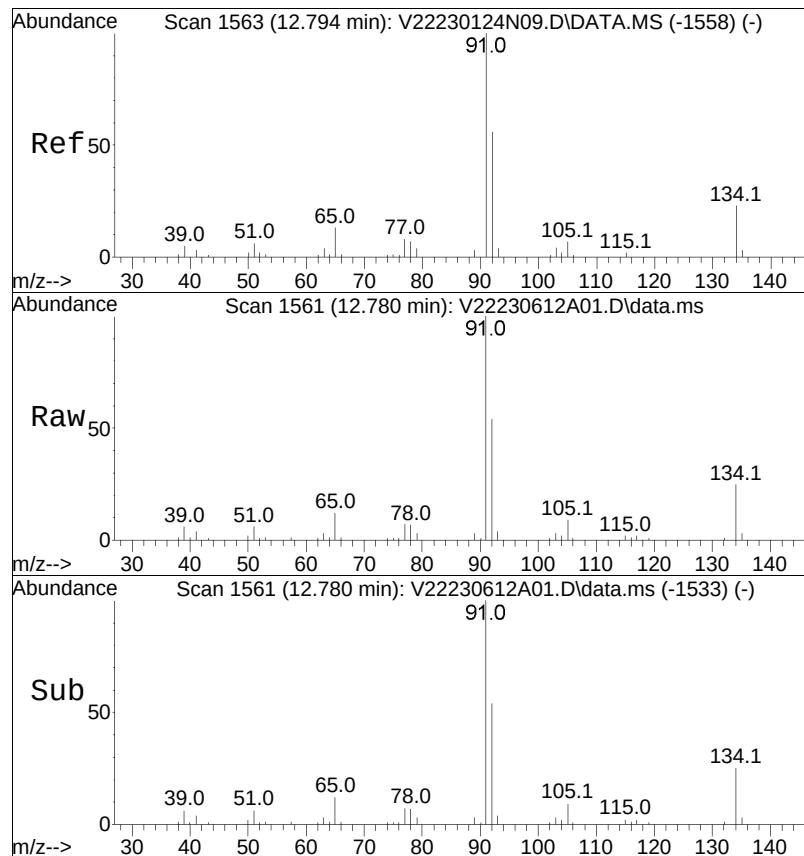




#103
 p-Isopropyltoluene
 Concen: 9.74 ug/L
 RT: 12.362 min Scan# 1501
 Delta R.T. -0.007 min
 Lab File: V22230612A01.D
 Acq: 12 Jun 2023 10:08 am

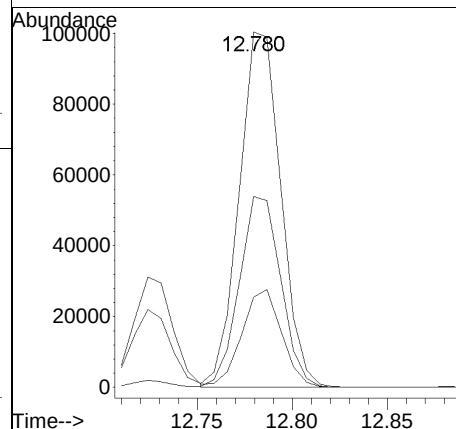
Tgt Ion	Ratio	Lower	Upper
119	100		
134	26.5	17.7	36.7
91	24.0	14.1	29.3

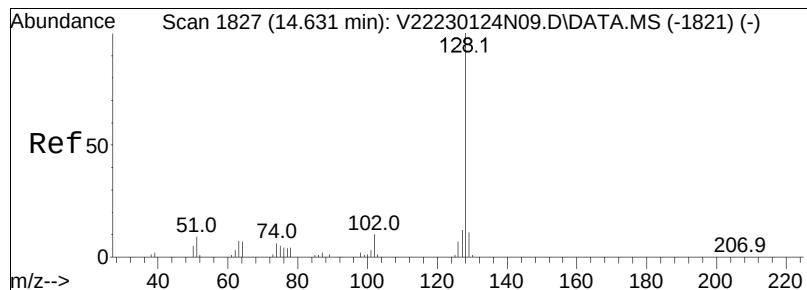




#107
 n-Butylbenzene
 Concen: 10.71 ug/L
 RT: 12.780 min Scan# 1561
 Delta R.T. -0.007 min
 Lab File: V22230612A01.D
 Acq: 12 Jun 2023 10:08 am

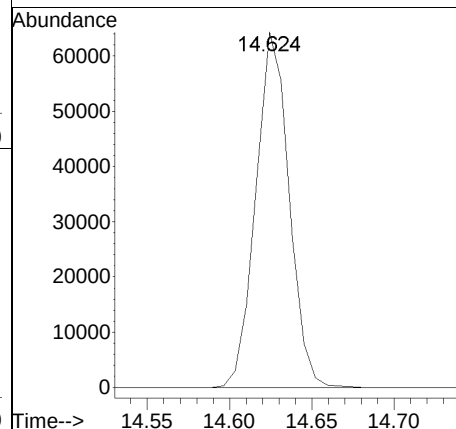
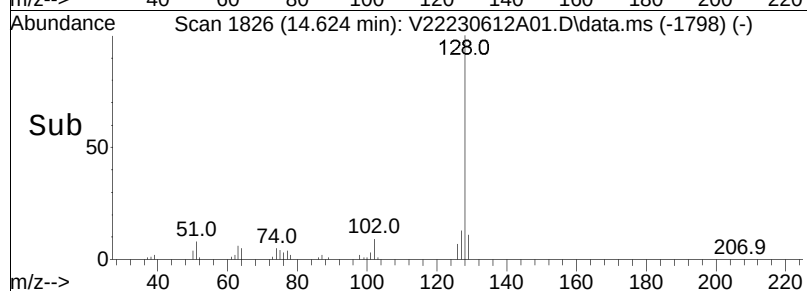
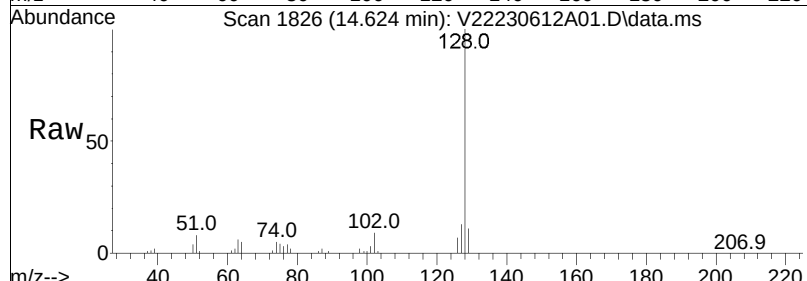
Tgt Ion: 91	Resp: 153522
Ion Ratio	Lower Upper
91 100	
92 53.5	44.6 66.8
134 26.4	22.9 34.3





#114
Naphthalene
Concen: 7.85 ug/L
RT: 14.624 min Scan# 1826
Delta R.T. -0.007 min
Lab File: V22230612A01.D
Acq: 12 Jun 2023 10:08 am

Tgt Ion:128 Resp: 90391



Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230613A\
 Data File : V22230613A02.D
 Acq On : 13 Jun 2023 07:09 am
 Operator : VOA122:PID
 Sample : WG1790988-3,31,10,10 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG1790988,ICAL19961 (Sig #1); WG,ICAL19961 (Sig #2)
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 13 07:57:36 2023
 Quant Method : K:\VOA122\2023\230613A\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 16:18:21 2023
 Response via : Initial Calibration

Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane

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

Internal Standards						
1) Fluorobenzene	6.285	96	250466	10.000	ug/L	0.00
62) Chlorobenzene-d5	9.866	117	241286	10.000	ug/L	0.00
83) 1,4-Dichlorobenzene-d4	12.501	152	129668	10.000	ug/L	0.00
System Monitoring Compounds						
38) Dibromofluoromethane	5.454	113	82476	9.778	ug/L	0.00
Spiked Amount	10.000	Range 70 - 130	Recovery	=	97.78%	
46) 1,2-Dichloroethane-d4	5.997	65	79378	10.662	ug/L	0.00
Spiked Amount	10.000	Range 70 - 130	Recovery	=	106.62%	
63) Toluene-d8	8.002	98	292757	9.814	ug/L	0.00
Spiked Amount	10.000	Range 70 - 130	Recovery	=	98.14%	
87) 4-Bromofluorobenzene	11.317	95	115580	10.536	ug/L	0.00
Spiked Amount	10.000	Range 70 - 130	Recovery	=	105.36%	
Target Compounds						
21) Methyl tert-butyl ether	3.962	73	55227	9.656	ug/L	Qvalue # 90
44) Benzene	5.856	78	147898	11.147	ug/L	95
64) Toluene	8.060	92	100899	10.616	ug/L	99
78) Ethylbenzene	9.929	91	207908	10.767	ug/L	97
80) p/m Xylene	10.112	106	160136	21.182	ug/L	94
81) o Xylene	10.635	106	148361	20.523	ug/L	92
86) Isopropylbenzene	11.008	105	211098	10.872	ug/L	98
89) n-Propylbenzene	11.468	91	258369	11.341	ug/L	97
94) 1,3,5-Trimethylbenzene	11.690	105	160698	9.805	ug/L	97
98) tert-Butylbenzene	12.021	119	165073	9.964	ug/L	95
101) 1,2,4-Trimethylbenzene	12.098	105	156292	9.628	ug/L	96
102) sec-Butylbenzene	12.209	105	220812	11.222	ug/L	98
103) p-Isopropyltoluene	12.362	119	174261	10.108	ug/L	97
107) n-Butylbenzene	12.787	91	158119	10.816	ug/L	96
114) Naphthalene	14.624	128	93303	7.942	ug/L	100

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

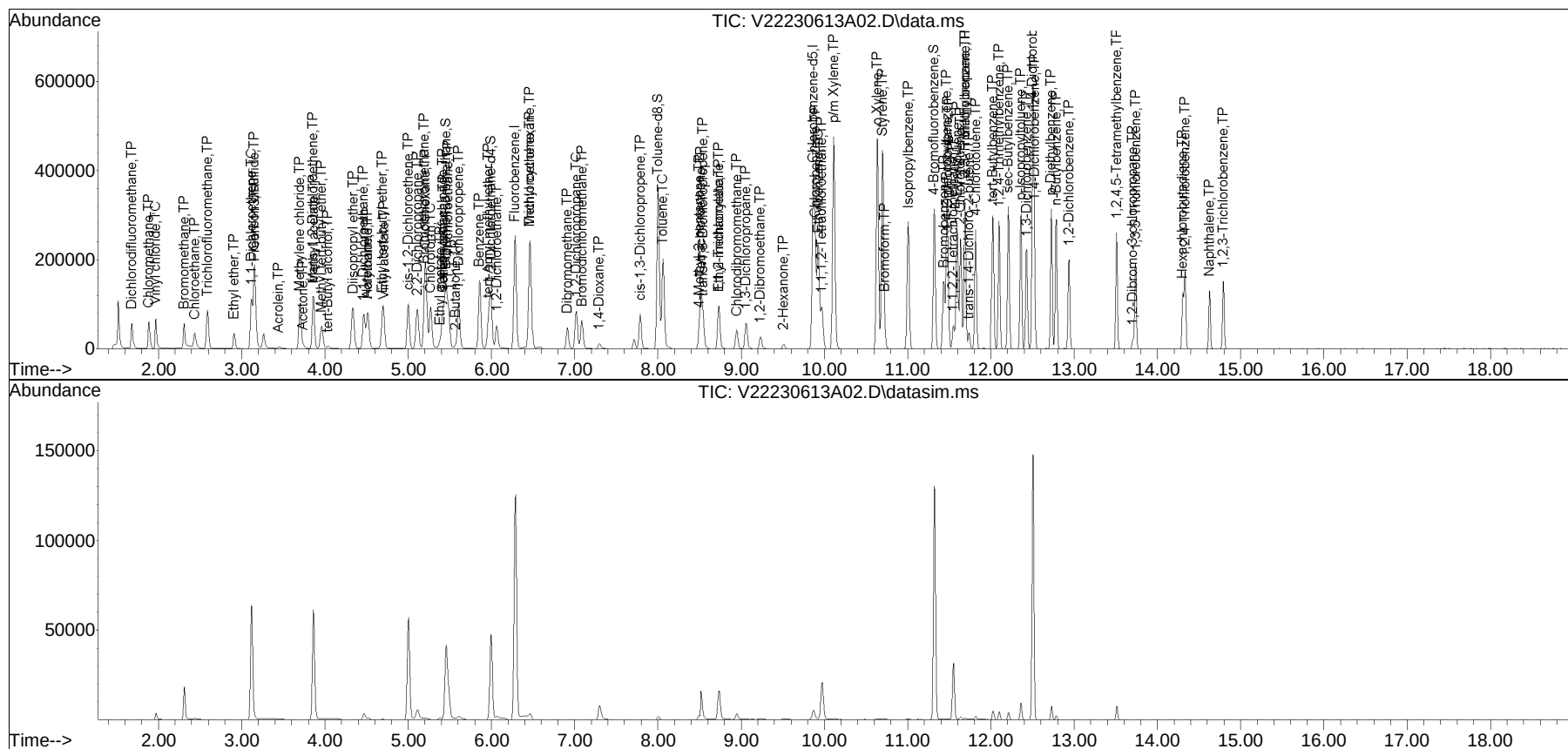
Quantitation Report

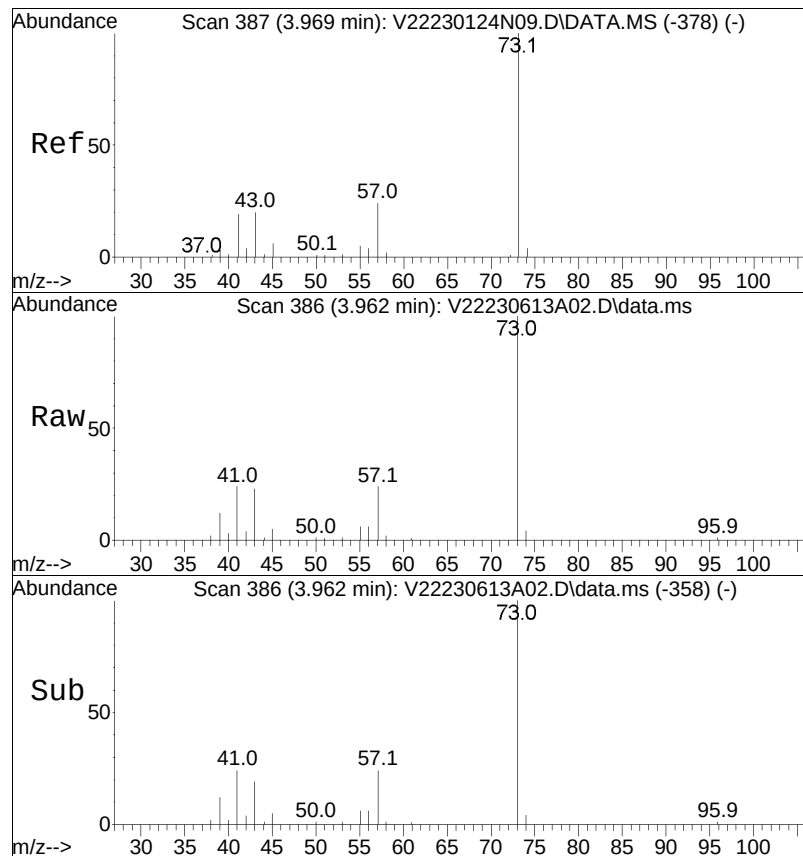
(QT Reviewed)

Data Path : K:\V0A122\2023\230613A\
Data File : V22230613A02.D
Acq On : 13 Jun 2023 07:09 am
Operator : V0A122:PID
Sample : WG1790988-3,31,10,10 (Sig #1); 8260 CCAL (Sig #2)
Misc : WG1790988,ICAL19961 (Sig #1); WG,ICAL19961 (Sig #2)
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 13 07:57:36 2023
Quant Method : K:\VOA122\2023\230613A\V122_230425N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Apr 26 16:18:21 2023
Response via : Initial Calibration

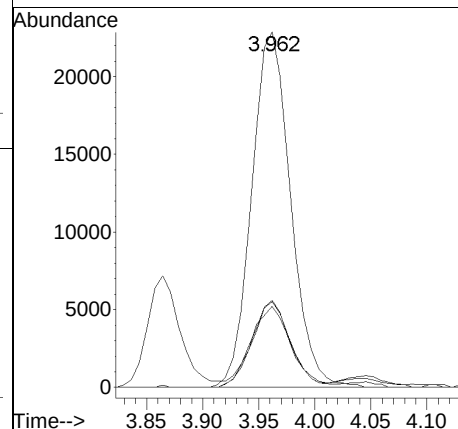
Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane

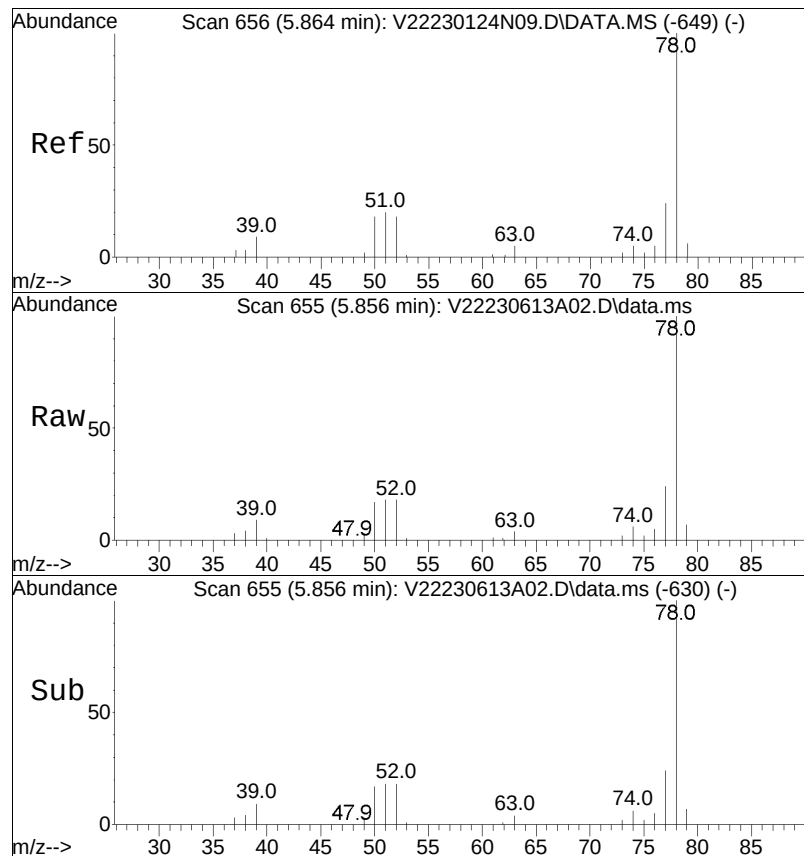




#21
Methyl tert-butyl ether
Concen: 9.66 ug/L
RT: 3.962 min Scan# 386
Delta R.T. -0.007 min
Lab File: V22230613A02.D
Acq: 13 Jun 2023 07:09 am

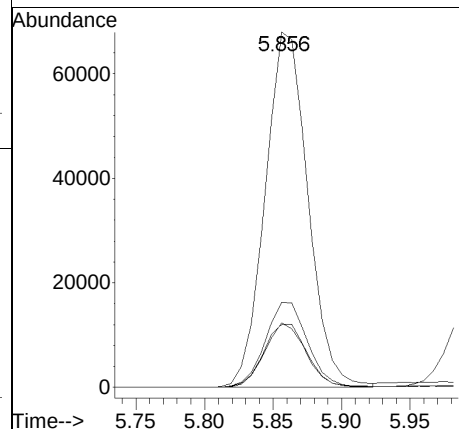
Tgt Ion:	73	Resp:	55227
Ion Ratio	Lower	Upper	
73	100		
57	23.9	13.6	28.2
43	23.8	12.7	26.5
41	24.1	11.4	23.8#

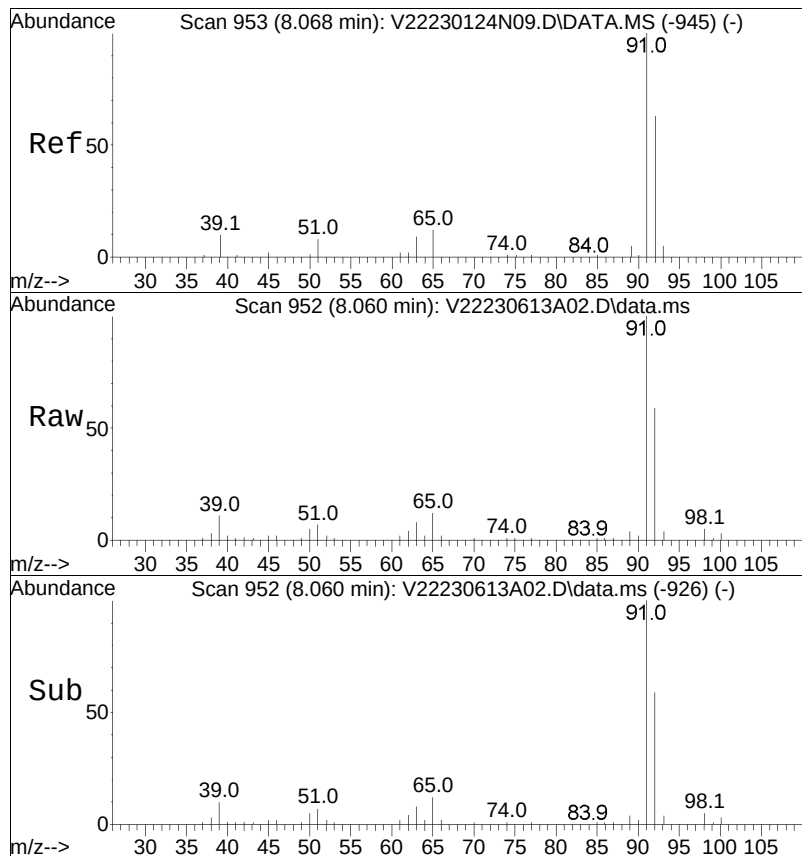




#44
Benzene
Concen: 11.15 ug/L
RT: 5.856 min Scan# 655
Delta R.T. -0.007 min
Lab File: V22230613A02.D
Acq: 13 Jun 2023 07:09 am

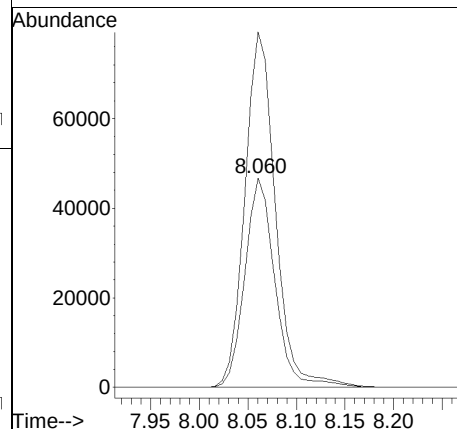
Tgt	Ion: 78	Resp:	147898
Ion	Ratio	Lower	Upper
78	100		
77	24.0	15.4	32.0
51	18.2	9.8	20.4
52	17.5	9.2	19.2

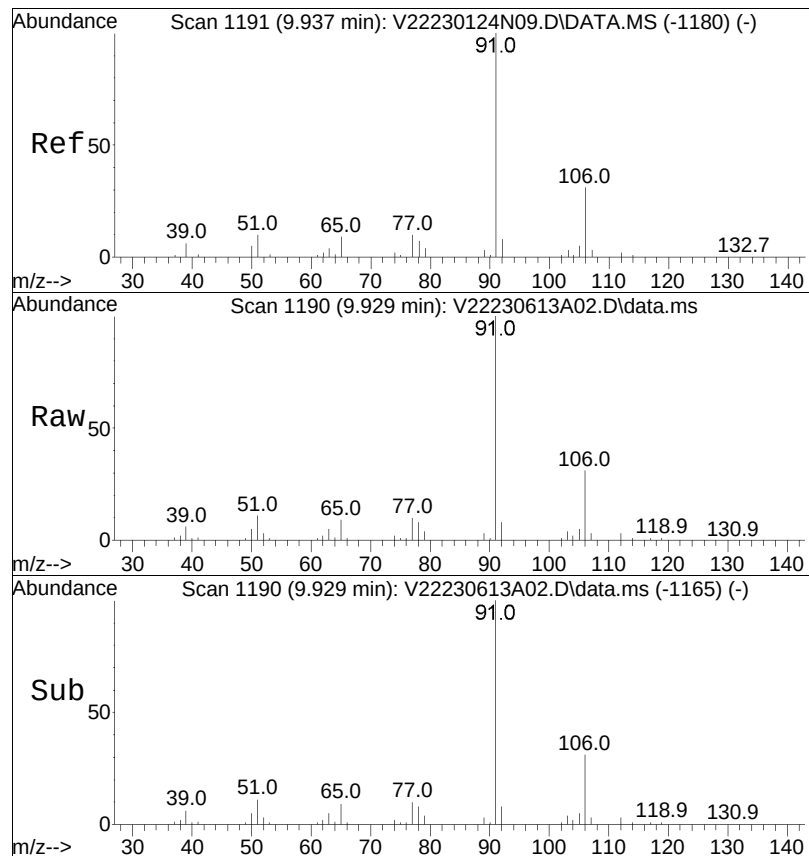




#64
 Toluene
 Concen: 10.62 ug/L
 RT: 8.060 min Scan# 952
 Delta R.T. -0.008 min
 Lab File: V22230613A02.D
 Acq: 13 Jun 2023 07:09 am

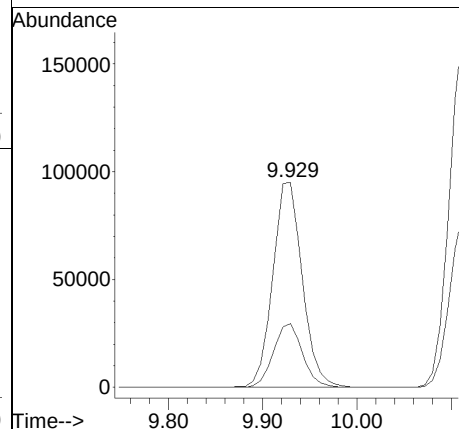
Tgt Ion	Ratio	Lower	Upper
92	100		
91	172.0	137.0	205.6

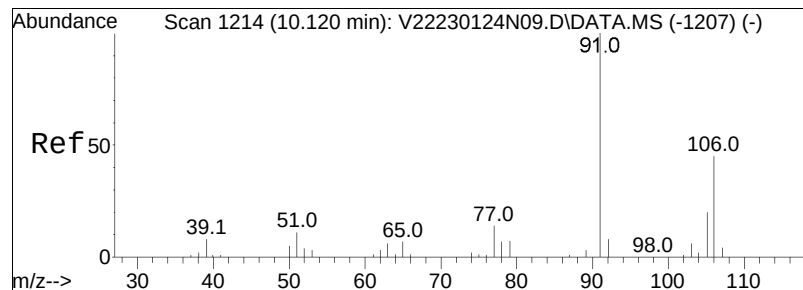




#78
 Ethylbenzene
 Concen: 10.77 ug/L
 RT: 9.929 min Scan# 1190
 Delta R.T. 0.000 min
 Lab File: V22230613A02.D
 Acq: 13 Jun 2023 07:09 am

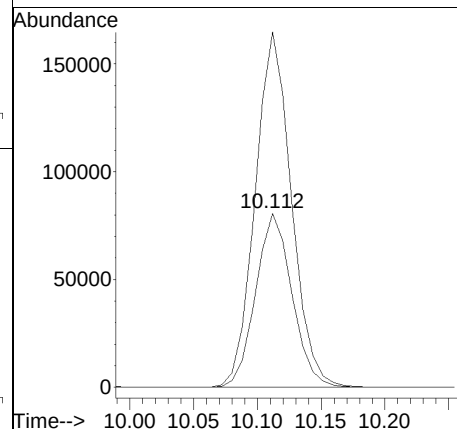
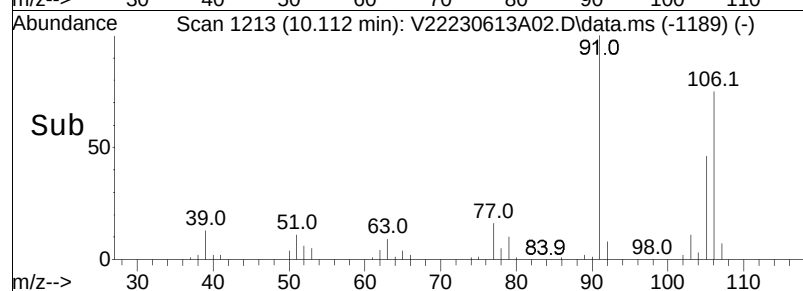
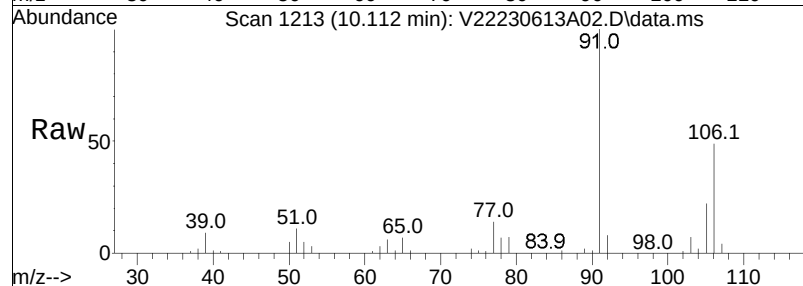
Tgt	Ion	Resp	Lower	Upper
91	100	207908		
106	30.6	25.8	38.6	

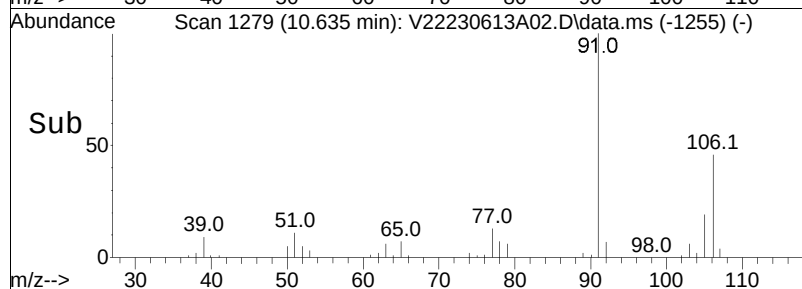
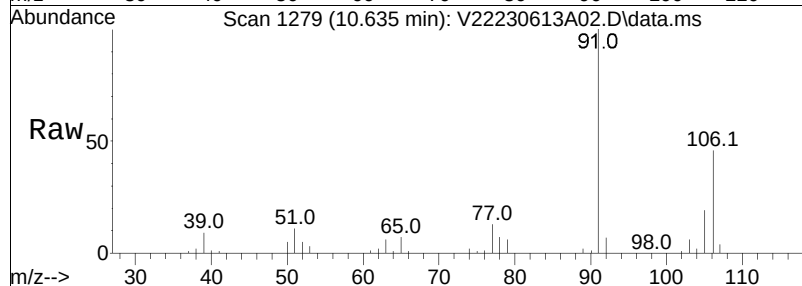
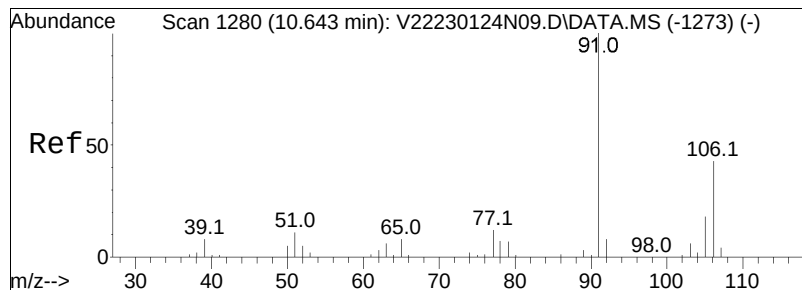




#80
 p/m Xylene
 Concen: 21.18 ug/L
 RT: 10.112 min Scan# 1213
 Delta R.T. -0.008 min
 Lab File: V22230613A02.D
 Acq: 13 Jun 2023 07:09 am

Tgt Ion	Ratio	Lower	Upper
106	100		
91	203.4	156.0	234.0





#81

o Xylene

Concen: 20.52 ug/L

RT: 10.635 min Scan# 1279

Delta R.T. -0.008 min

Lab File: V22230613A02.D

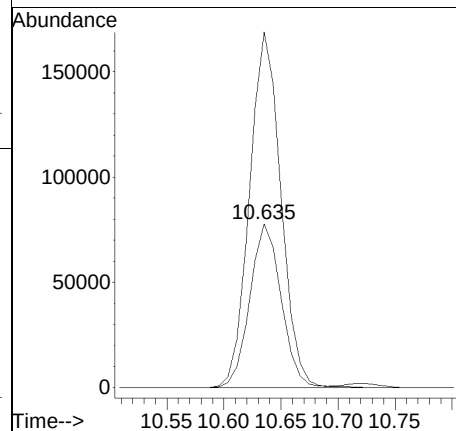
Acq: 13 Jun 2023 07:09 am

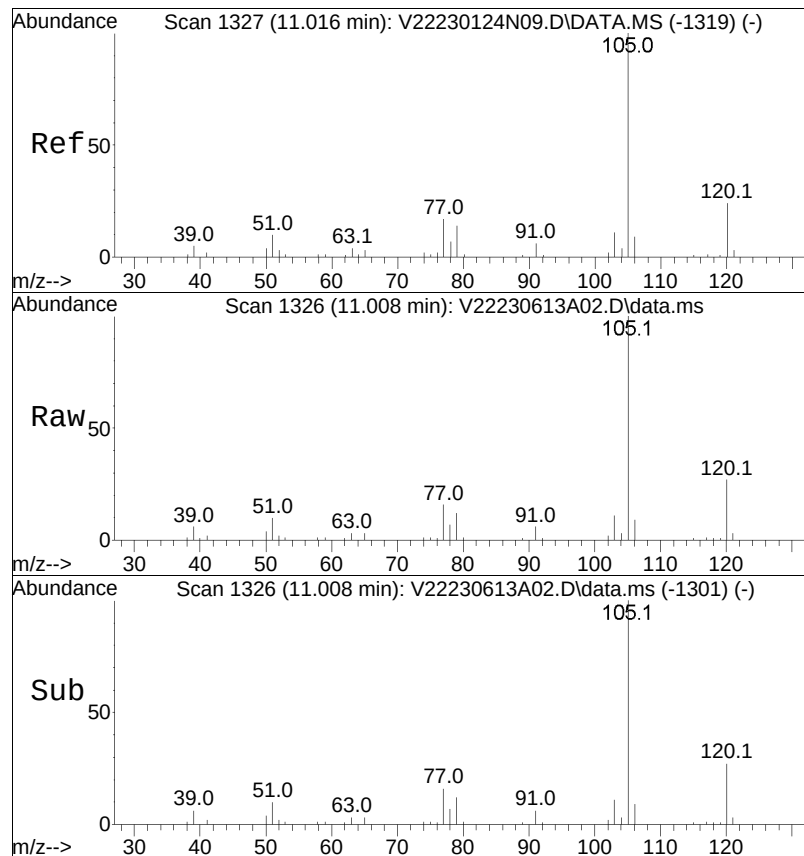
Tgt Ion:106 Resp: 148361

Ion Ratio Lower Upper

106 100

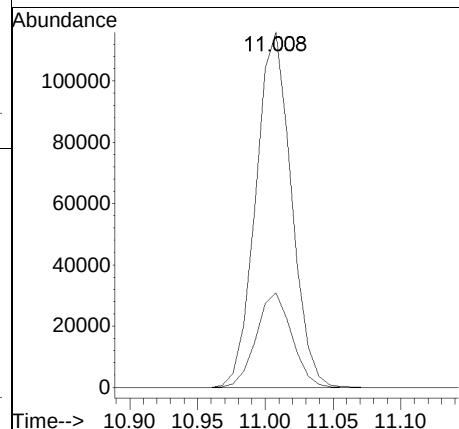
91 216.9 164.0 246.0

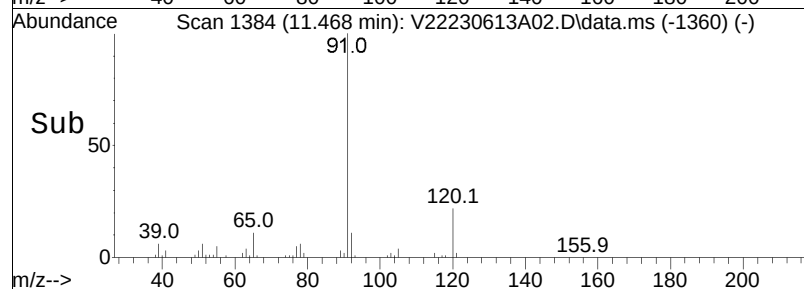
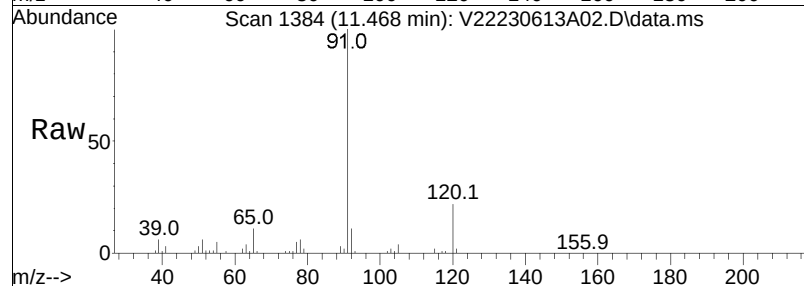
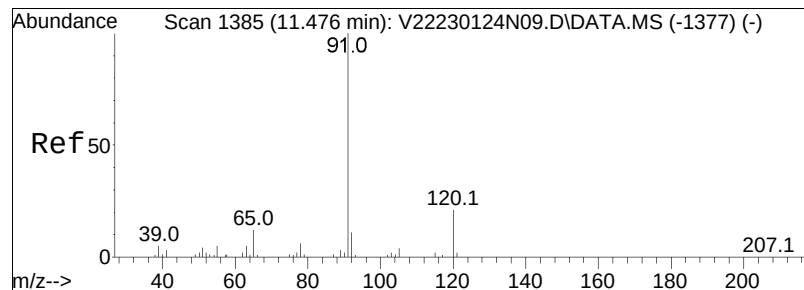




#86
 Isopropylbenzene
 Concen: 10.87 ug/L
 RT: 11.008 min Scan# 1326
 Delta R.T. 0.000 min
 Lab File: V22230613A02.D
 Acq: 13 Jun 2023 07:09 am

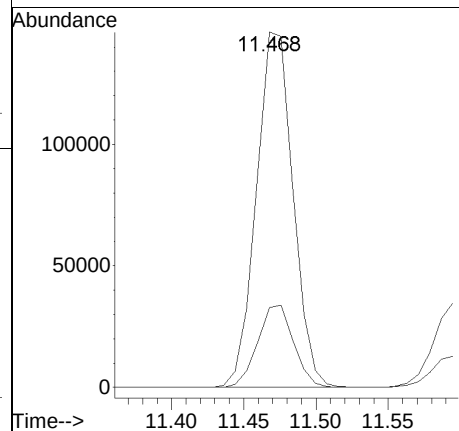
Tgt Ion	105	120	Ratio	Lower	Upper
105	100				
120	26.6		7.7		47.7

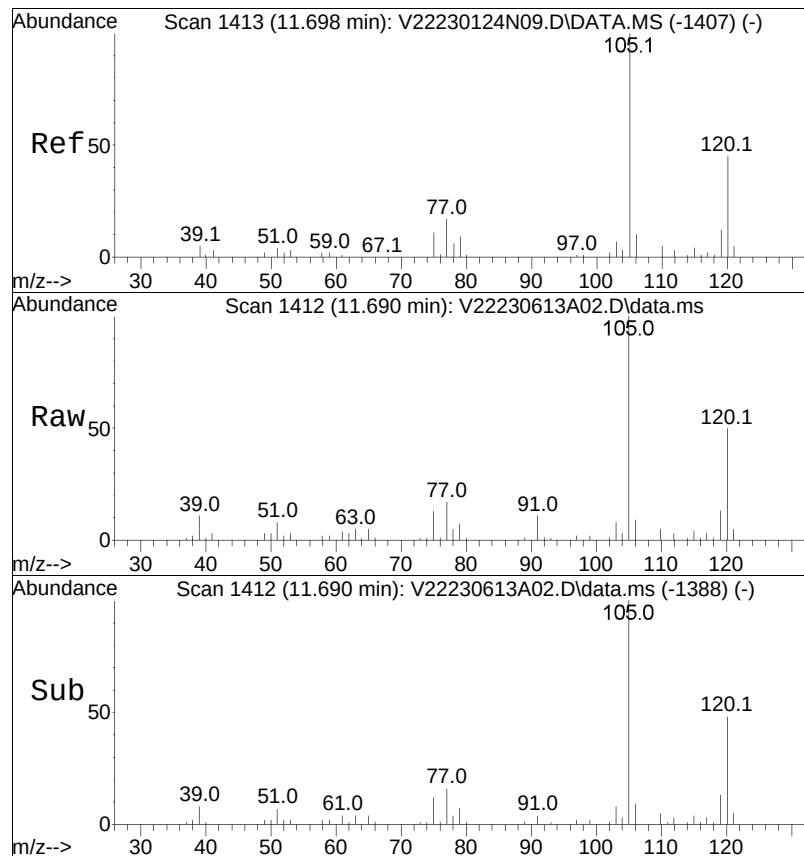




#89
 n-Propylbenzene
 Concen: 11.34 ug/L
 RT: 11.468 min Scan# 1384
 Delta R.T. -0.008 min
 Lab File: V22230613A02.D
 Acq: 13 Jun 2023 07:09 am

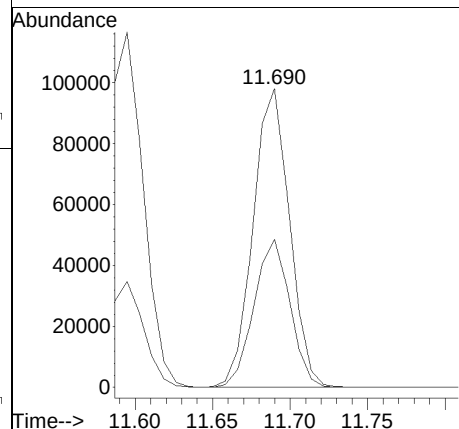
Tgt Ion:	91	Resp:	258369
Ion Ratio	Lower	Upper	
91	100		
120	22.7	19.5	29.3

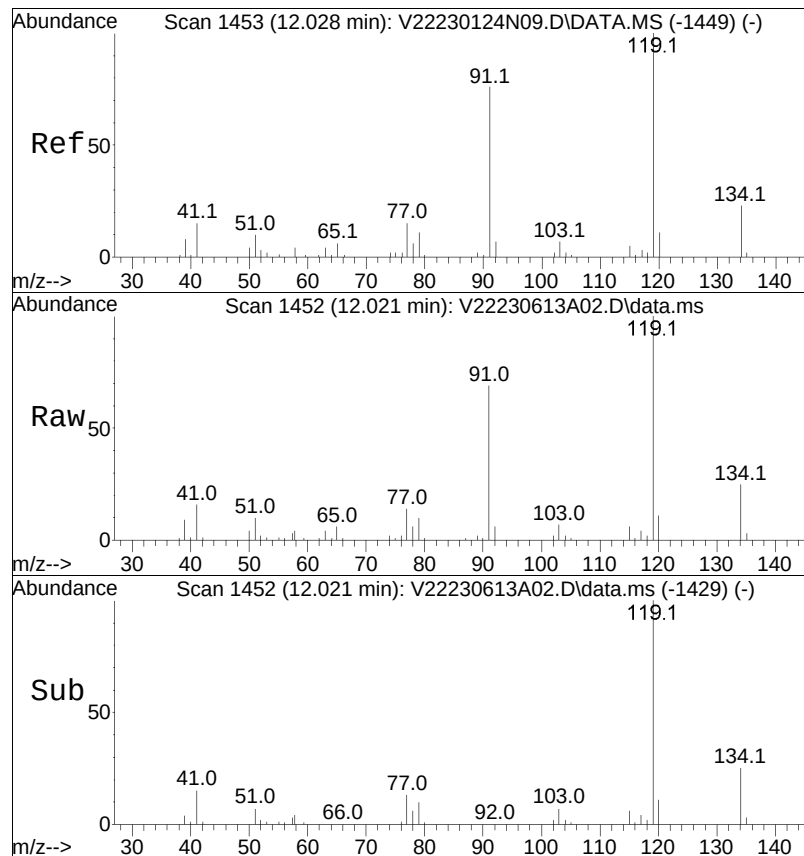




#94
 1,3,5-Trimethylbenzene
 Concen: 9.80 ug/L
 RT: 11.690 min Scan# 1412
 Delta R.T. -0.008 min
 Lab File: V22230613A02.D
 Acq: 13 Jun 2023 07:09 am

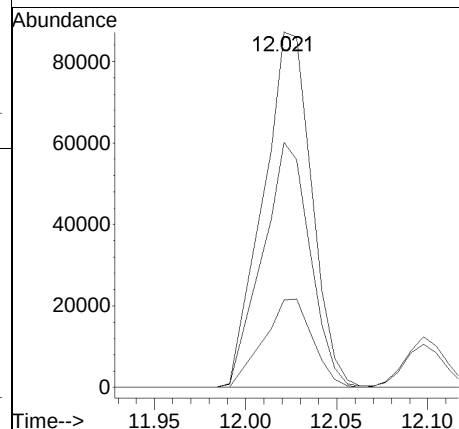
Tgt Ion	Ratio	Lower	Upper
105	100		
120	49.0	40.9	61.3

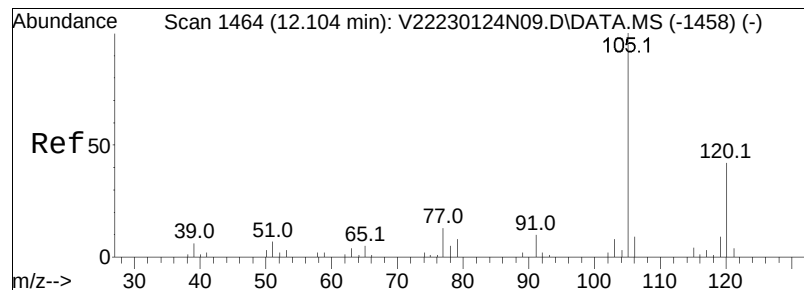




#98
 tert-Butylbenzene
 Concen: 9.96 ug/L
 RT: 12.021 min Scan# 1452
 Delta R.T. -0.007 min
 Lab File: V22230613A02.D
 Acq: 13 Jun 2023 07:09 am

Tgt	Ion:119	Resp:	165073
Ion	Ratio	Lower	Upper
119	100		
91	68.0	50.2	75.4
134	25.2	20.8	31.2





#101

1,2,4-Trimethylbenzene

Concen: 9.63 ug/L

RT: 12.098 min Scan# 1463

Delta R.T. -0.007 min

Lab File: V22230613A02.D

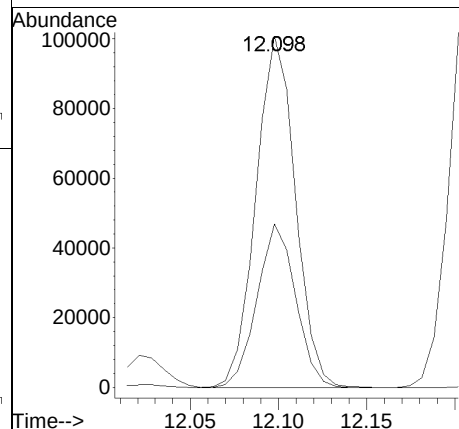
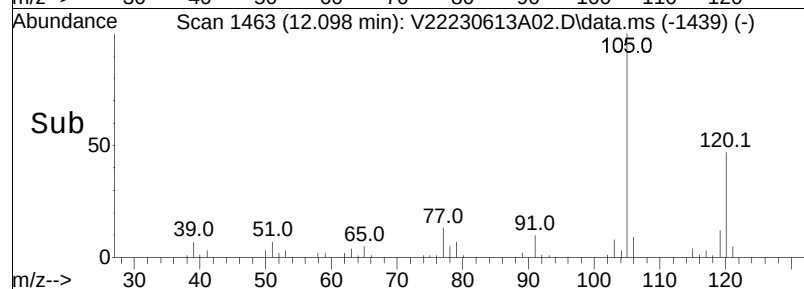
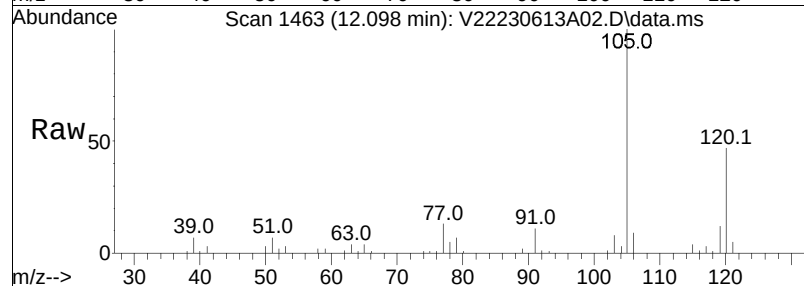
Acq: 13 Jun 2023 07:09 am

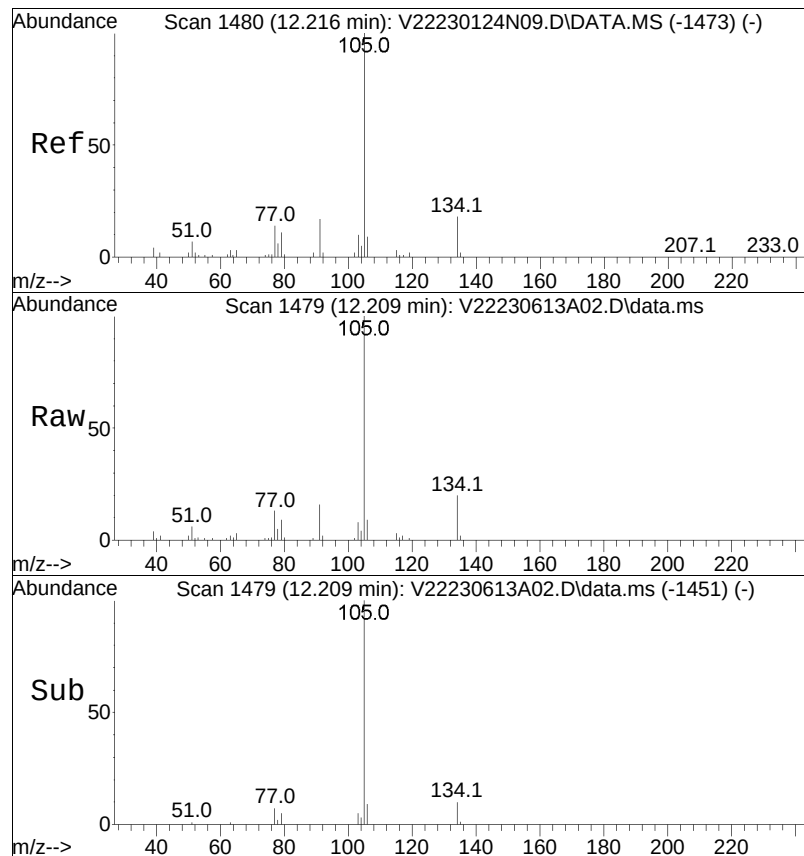
Tgt Ion:105 Resp: 156292

Ion Ratio Lower Upper

105 100

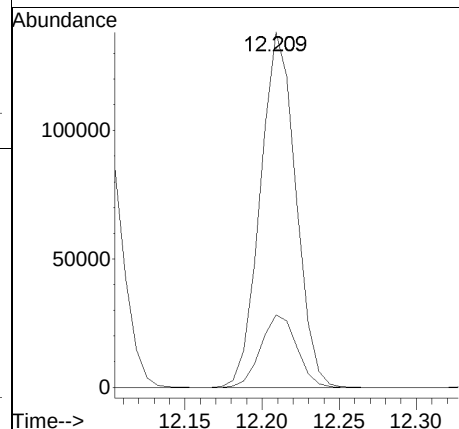
120 45.6 38.5 57.7

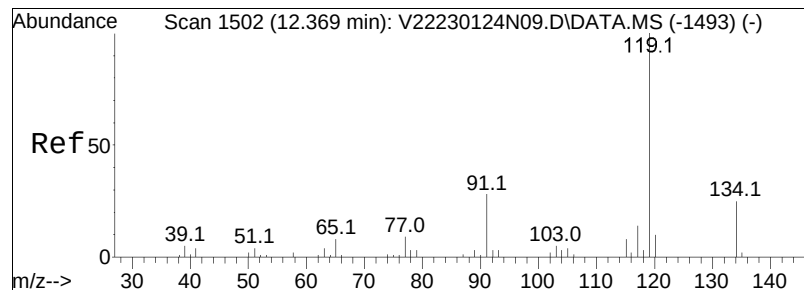




#102
 sec-Butylbenzene
 Concen: 11.22 ug/L
 RT: 12.209 min Scan# 1479
 Delta R.T. -0.007 min
 Lab File: V22230613A02.D
 Acq: 13 Jun 2023 07:09 am

Tgt Ion:	105	Resp:	220812
Ion Ratio	Lower	Upper	
105	100		
134	20.7	13.9	28.9





#103

p-Isopropyltoluene

Concen: 10.11 ug/L

RT: 12.362 min Scan# 1501

Delta R.T. -0.007 min

Lab File: V22230613A02.D

Acq: 13 Jun 2023 07:09 am

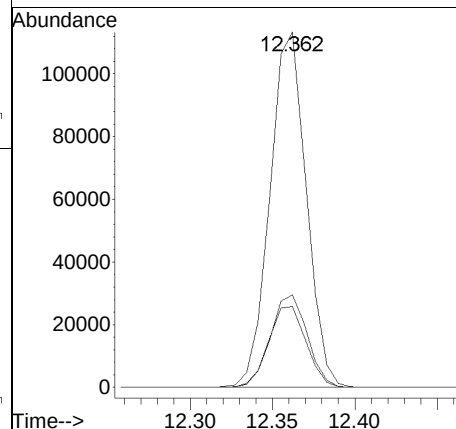
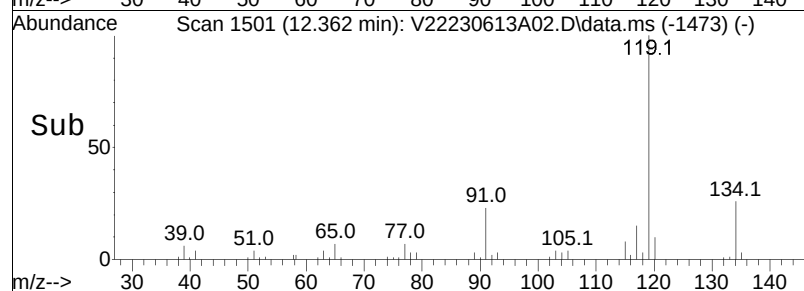
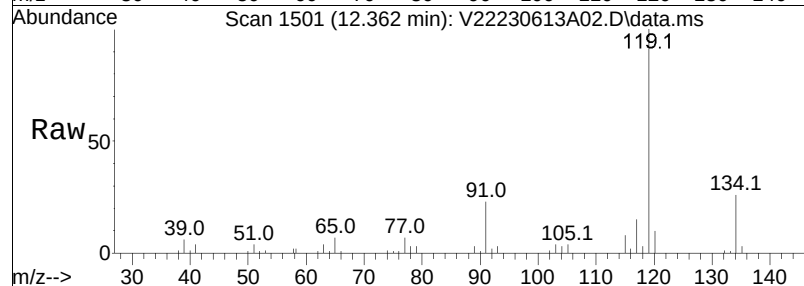
Tgt Ion: 119 Resp: 174261

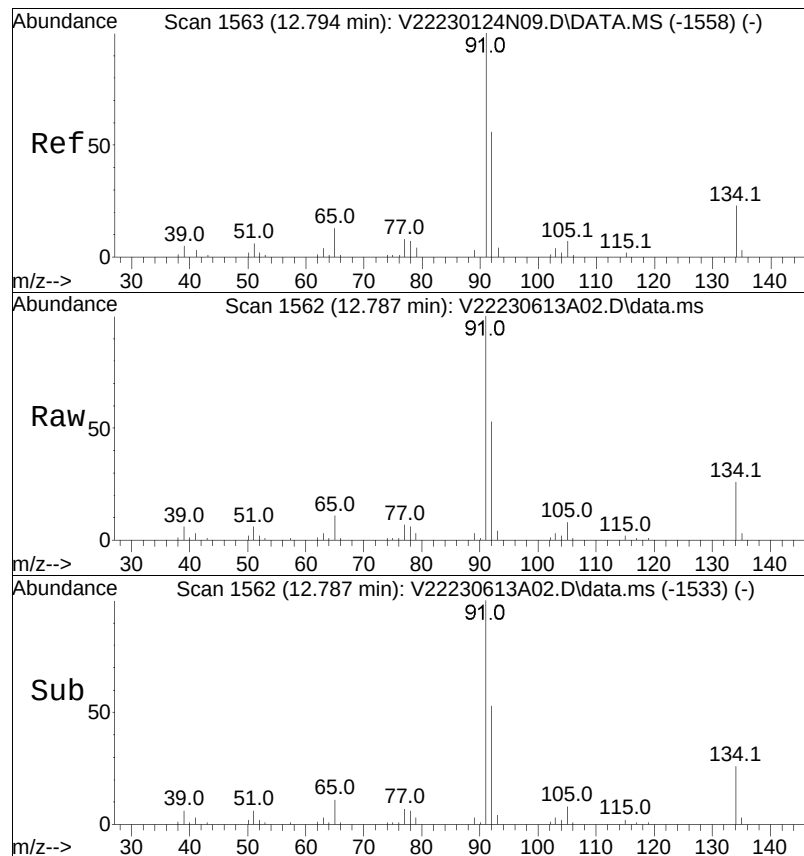
Ion Ratio Lower Upper

119 100

134 26.4 17.7 36.7

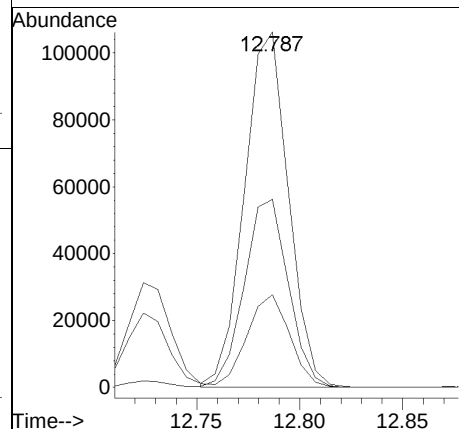
91 23.7 14.1 29.3

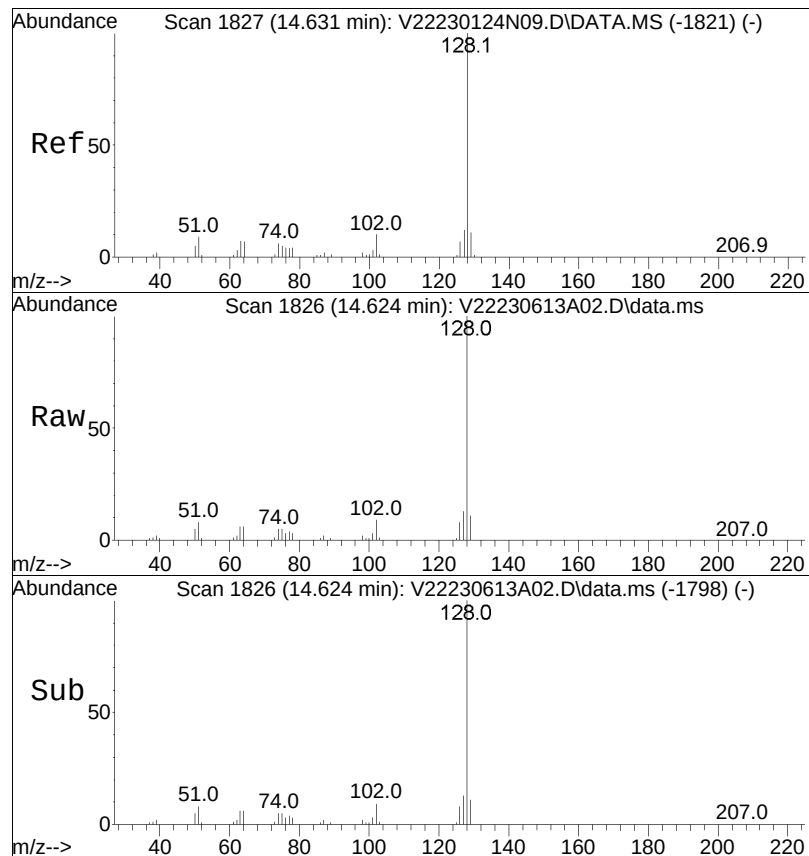




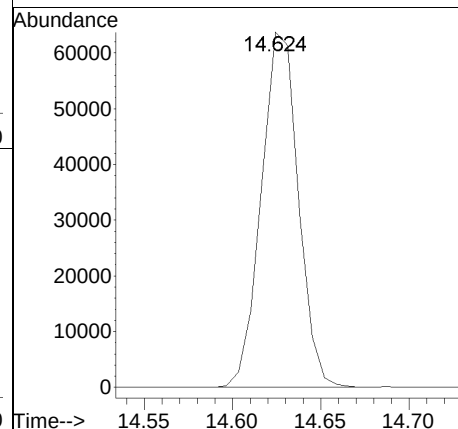
#107
 n-Butylbenzene
 Concen: 10.82 ug/L
 RT: 12.787 min Scan# 1562
 Delta R.T. 0.000 min
 Lab File: V22230613A02.D
 Acq: 13 Jun 2023 07:09 am

Tgt Ion:	91	Resp:	158119
Ion Ratio	Lower	Upper	
91	100		
92	53.2	44.6	66.8
134	25.3	22.9	34.3





#114
 Naphthalene
 Concen: 7.94 ug/L
 RT: 14.624 min Scan# 1826
 Delta R.T. -0.007 min
 Lab File: V22230613A02.D
 Acq: 13 Jun 2023 07:09 am
 Tgt Ion:128 Resp: 93303



Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230612A\
 Data File : V22230612A02.D
 Acq On : 12 Jun 2023 10:32 am
 Operator : VOA122:PID
 Sample : WG1790520-4,31,10,10 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG1790520,ICAL19961 (Sig #1); WG,ICAL19961 (Sig #2)
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 12 10:53:19 2023
 Quant Method : K:\VOA122\2023\230612A\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 16:18:21 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA122\2023\230612A\V22230612A01.D
 Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane

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

Internal Standards						
1) Fluorobenzene	6.284	96	255416	10.000	ug/L	0.00
Standard Area 1 = 239558			Recovery	=	106.62%	
62) Chlorobenzene-d5	9.866	117	248323	10.000	ug/L	0.00
Standard Area 1 = 233642			Recovery	=	106.28%	
83) 1,4-Dichlorobenzene-d4	12.501	152	132278	10.000	ug/L	0.00
Standard Area 1 = 127139			Recovery	=	104.04%	
System Monitoring Compounds						
38) Dibromofluoromethane	5.453	113	83284	9.682	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	96.82%	
46) 1,2-Dichloroethane-d4	5.989	65	80468	10.599	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	105.99%	
63) Toluene-d8	8.001	98	298019	9.708	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	97.08%	
87) 4-Bromofluorobenzene	11.317	95	113631	10.154	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	101.54%	
Target Compounds						Qvalue
21) Methyl tert-butyl ether	3.955	73	57206	9.808	ug/L	# 90
44) Benzene	5.856	78	149750	11.068	ug/L	96
64) Toluene	8.060	92	101986	10.427	ug/L	100
78) Ethylbenzene	9.921	91	205149	10.323	ug/L	98
80) p/m Xylene	10.112	106	157442	20.235	ug/L	95
81) o Xylene	10.635	106	146359	19.672	ug/L	94
86) Isopropylbenzene	11.008	105	207137	10.458	ug/L	99
89) n-Propylbenzene	11.476	91	251047	10.802	ug/L	97
94) 1,3,5-Trimethylbenzene	11.690	105	161073	9.634	ug/L	97
98) tert-Butylbenzene	12.021	119	165354	9.784	ug/L	96
101) 1,2,4-Trimethylbenzene	12.097	105	155220	9.373	ug/L	97
102) sec-Butylbenzene	12.209	105	213861	10.655	ug/L	99
103) p-Isopropyltoluene	12.362	119	172195	9.791	ug/L	98
107) n-Butylbenzene	12.787	91	155524	10.428	ug/L	97
114) Naphthalene	14.624	128	98462	8.215	ug/L	100

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

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230612A\
 Data File : V22230612A02.D
 Acq On : 12 Jun 2023 10:32 am
 Operator : VOA122:PID
 Sample : WG1790520-4,31,10,10 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG1790520,ICAL19961 (Sig #1); WG,ICAL19961 (Sig #2)
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 12 10:53:19 2023
 Quant Method : K:\VOA122\2023\230612A\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 16:18:21 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA122\2023\230612A\V22230612A01.D
 Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane

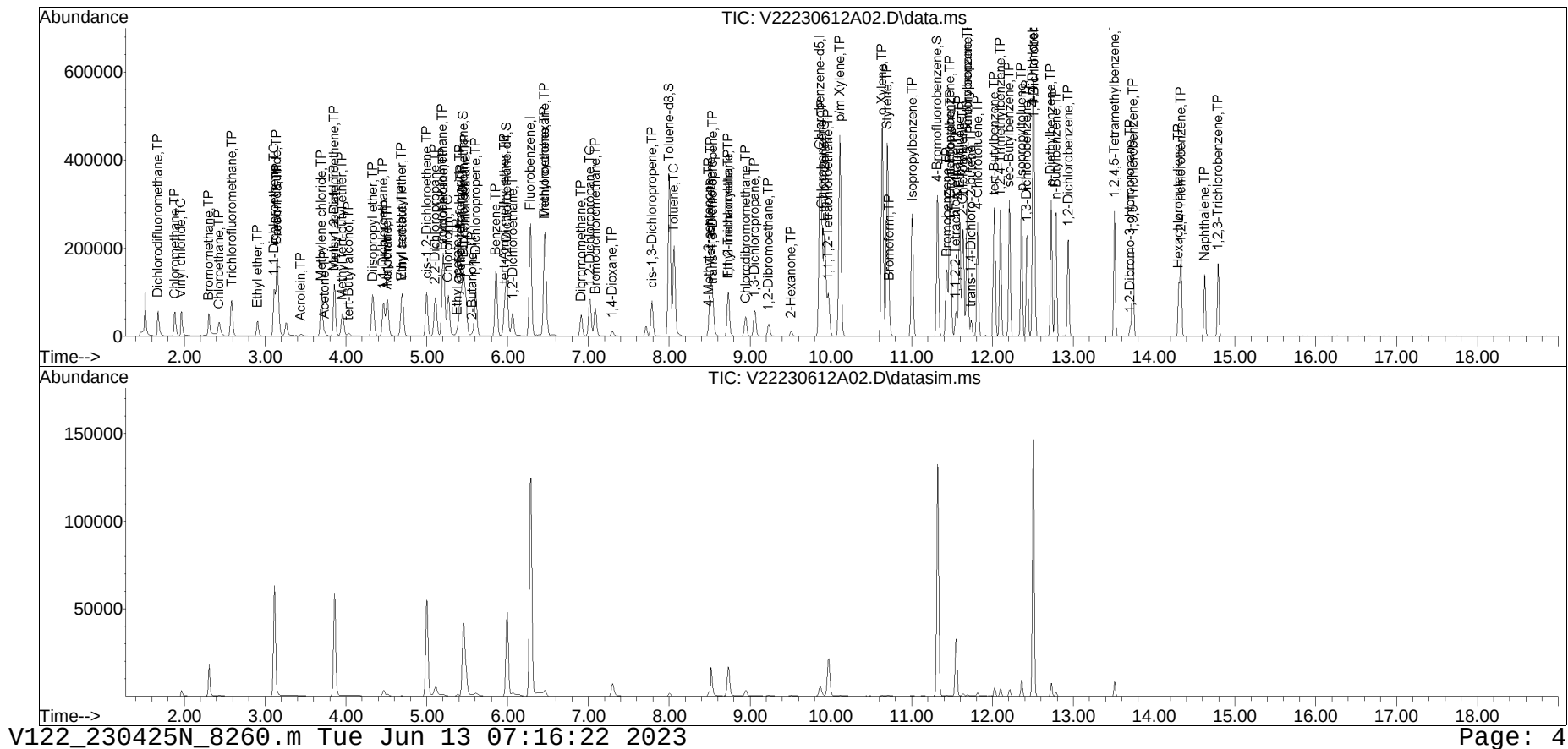
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

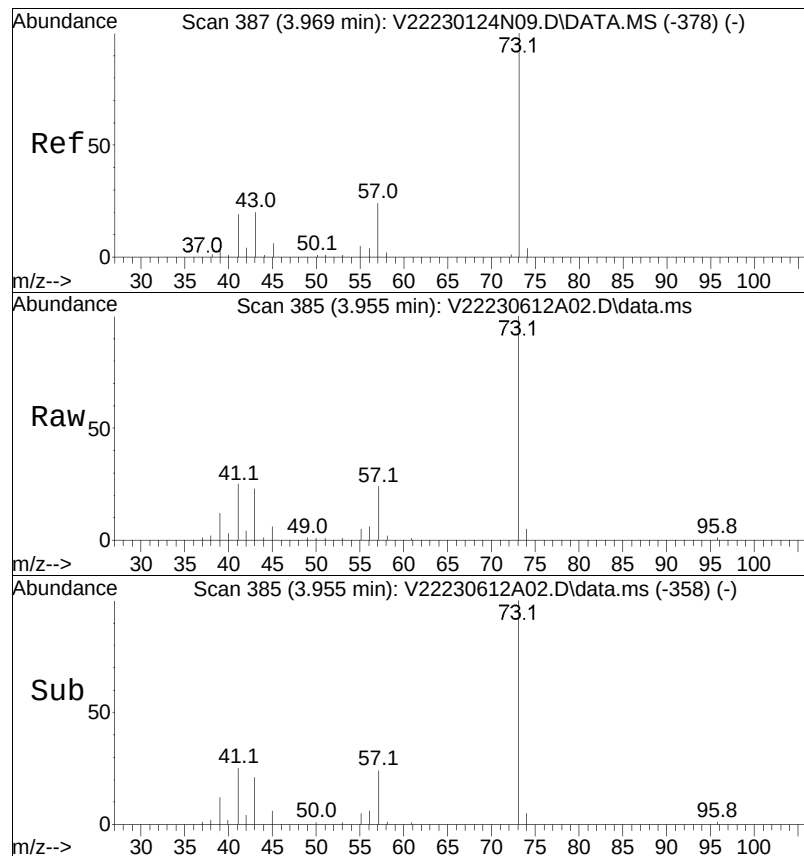
(QT Reviewed)

Data Path : K:\V0A122\2023\230612A\
Data File : V22230612A02.D
Acq On : 12 Jun 2023 10:32 am
Operator : V0A122:PID
Sample : WG1790520-4,31,10,10 (Sig #1); 8260 CCAL (Sig #2)
Misc : WG1790520,ICAL19961 (Sig #1); WG,ICAL19961 (Sig #2)
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 12 10:53:19 2023
Quant Method : K:\VOA122\2023\230612A\V122_230425N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Apr 26 16:18:21 2023
Response via : Initial Calibration

Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane





#21

Methyl tert-butyl ether

Concen: 9.81 ug/L

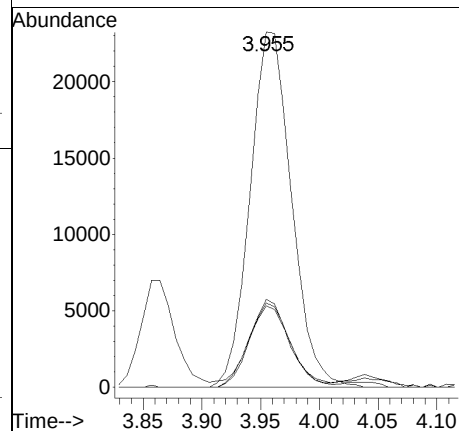
RT: 3.955 min Scan# 385

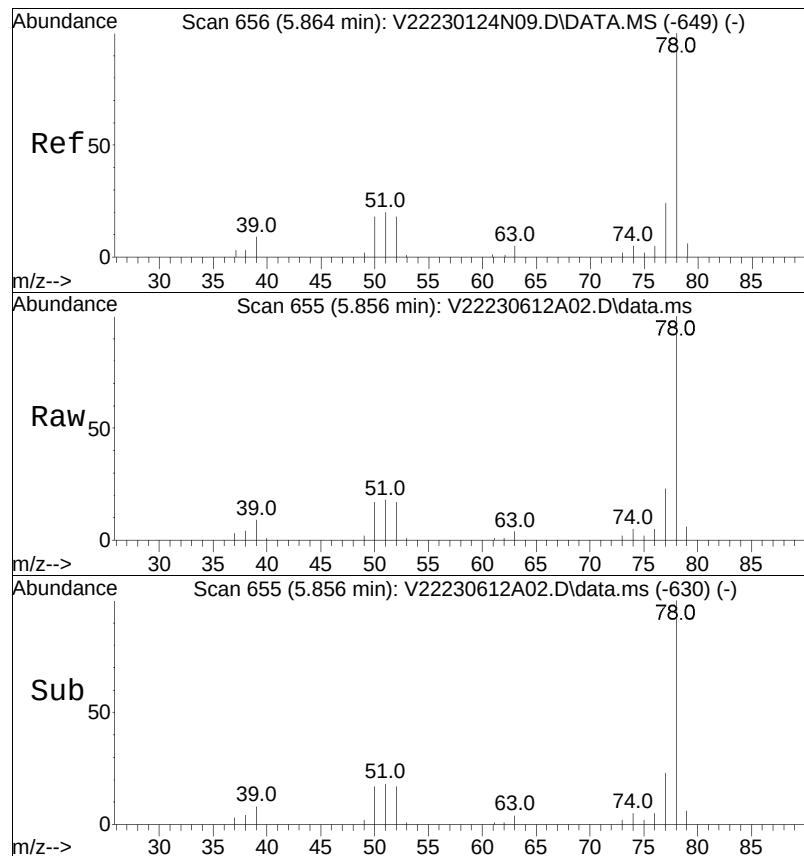
Delta R.T. -0.014 min

Lab File: V22230612A02.D

Acq: 12 Jun 2023 10:32 am

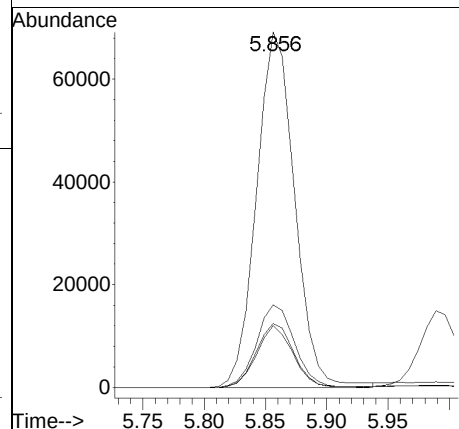
Tgt Ion:	73	Resp:	57206
Ion	Ratio	Lower	Upper
73	100		
57	23.1	13.6	28.2
43	24.1	12.7	26.5
41	24.3	11.4	23.8#

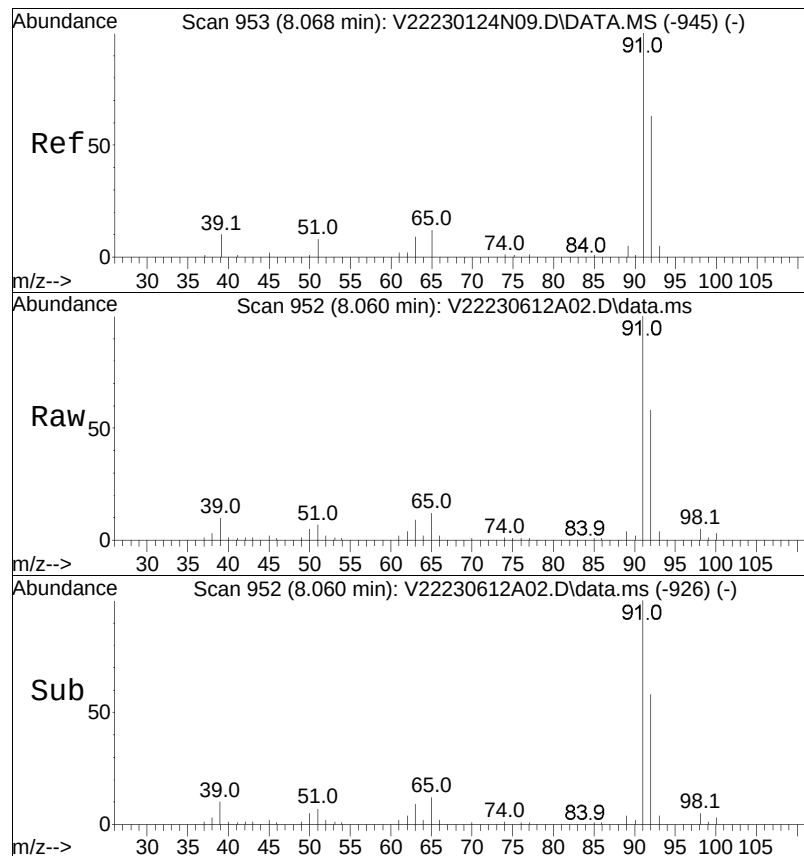




#44
 Benzene
 Concen: 11.07 ug/L
 RT: 5.856 min Scan# 655
 Delta R.T. -0.007 min
 Lab File: V22230612A02.D
 Acq: 12 Jun 2023 10:32 am

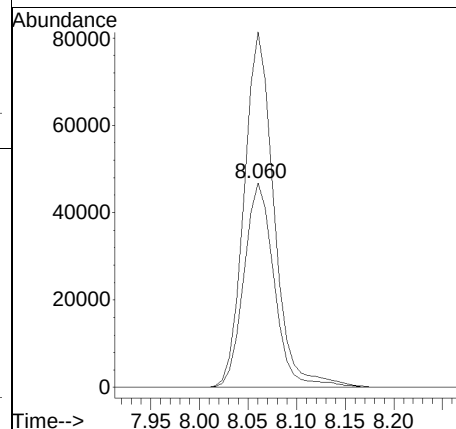
Tgt Ion: 78	Resp: 149750
Ion Ratio	Lower Upper
78 100	
77 23.1	15.4 32.0
51 17.8	9.8 20.4
52 16.5	9.2 19.2

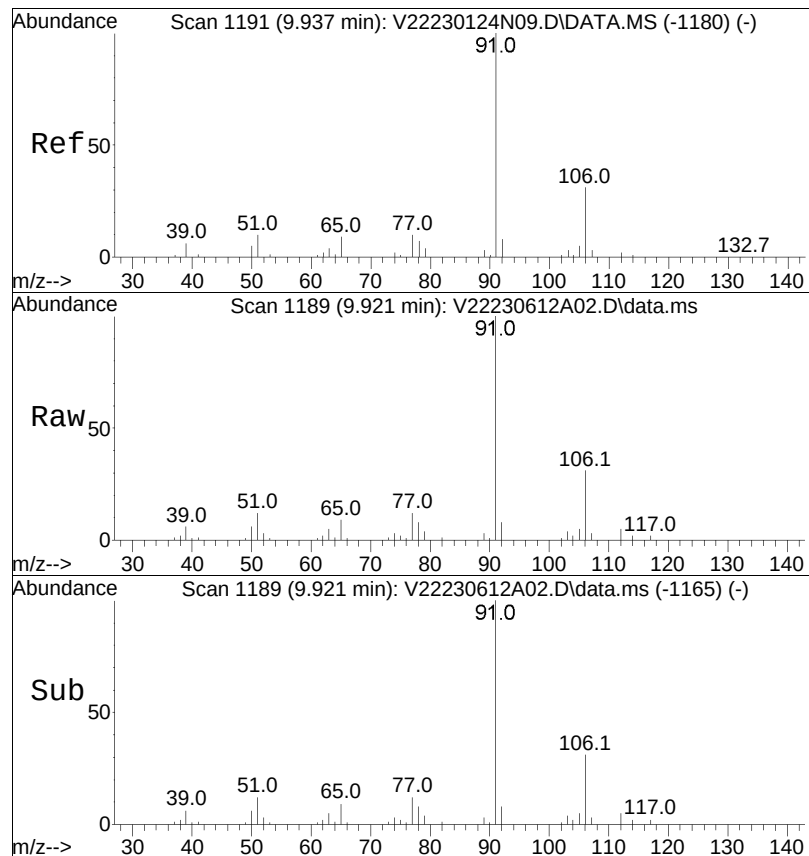




#64
 Toluene
 Concen: 10.43 ug/L
 RT: 8.060 min Scan# 952
 Delta R.T. -0.008 min
 Lab File: V22230612A02.D
 Acq: 12 Jun 2023 10:32 am

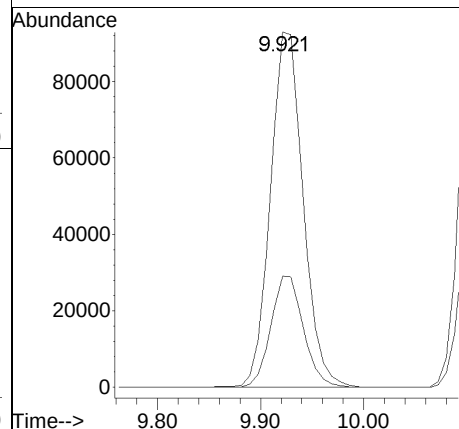
Tgt Ion	Ratio	Lower	Upper
92	100		
91	171.3	137.0	205.6

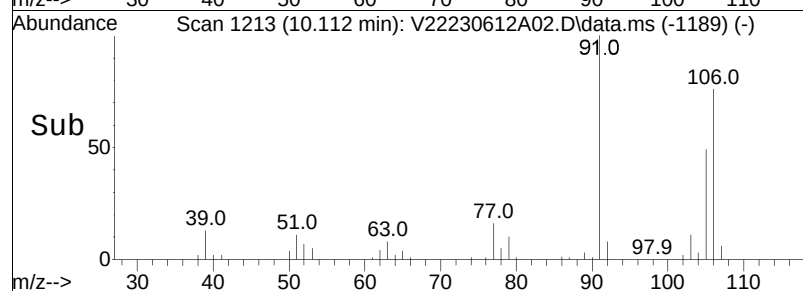
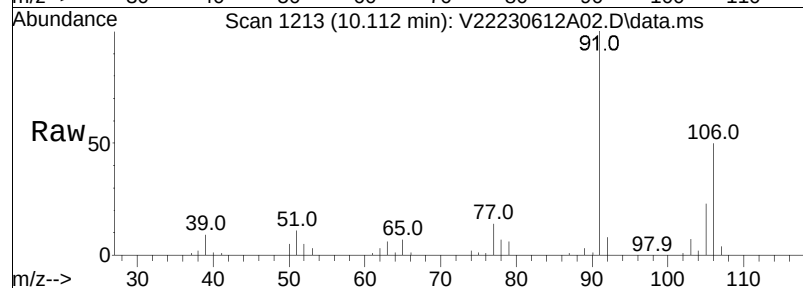
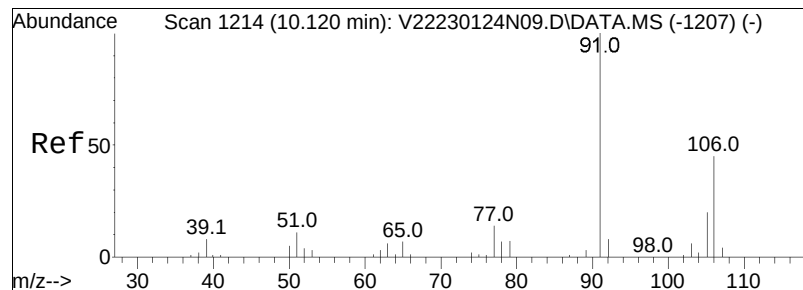




#78
 Ethylbenzene
 Concen: 10.32 ug/L
 RT: 9.921 min Scan# 1189
 Delta R.T. -0.008 min
 Lab File: V22230612A02.D
 Acq: 12 Jun 2023 10:32 am

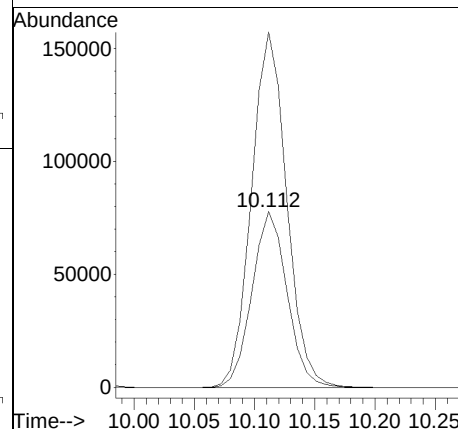
Tgt	Ion	Resp	Lower	Upper
91	100	205149		
106	31.1	25.8	38.6	

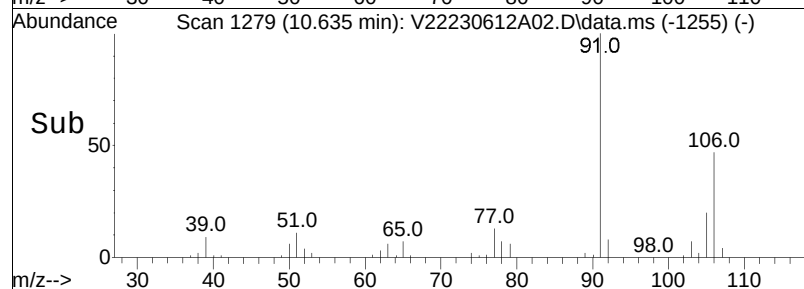
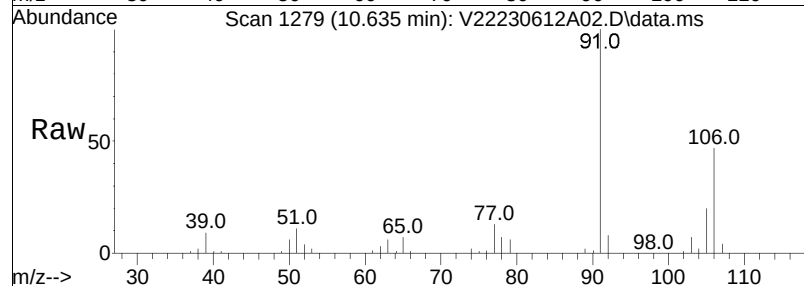
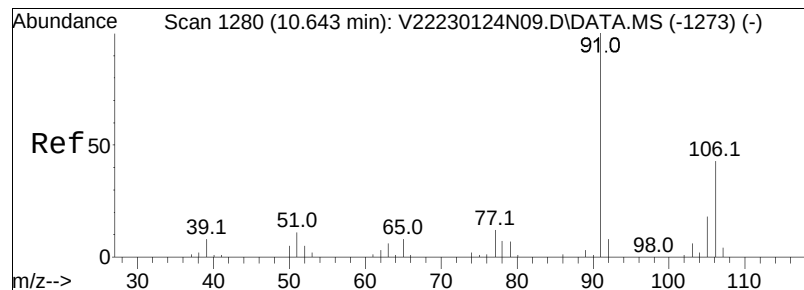




#80
 p/m Xylene
 Concen: 20.24 ug/L
 RT: 10.112 min Scan# 1213
 Delta R.T. -0.008 min
 Lab File: V22230612A02.D
 Acq: 12 Jun 2023 10:32 am

Tgt	Ion	Ratio	Lower	Upper
106	100			
91	202.7	156.0	234.0	





#81

o Xylene

Concen: 19.67 ug/L

RT: 10.635 min Scan# 1279

Delta R.T. -0.008 min

Lab File: V22230612A02.D

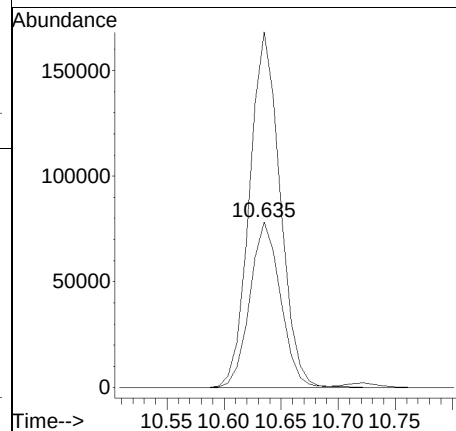
Acq: 12 Jun 2023 10:32 am

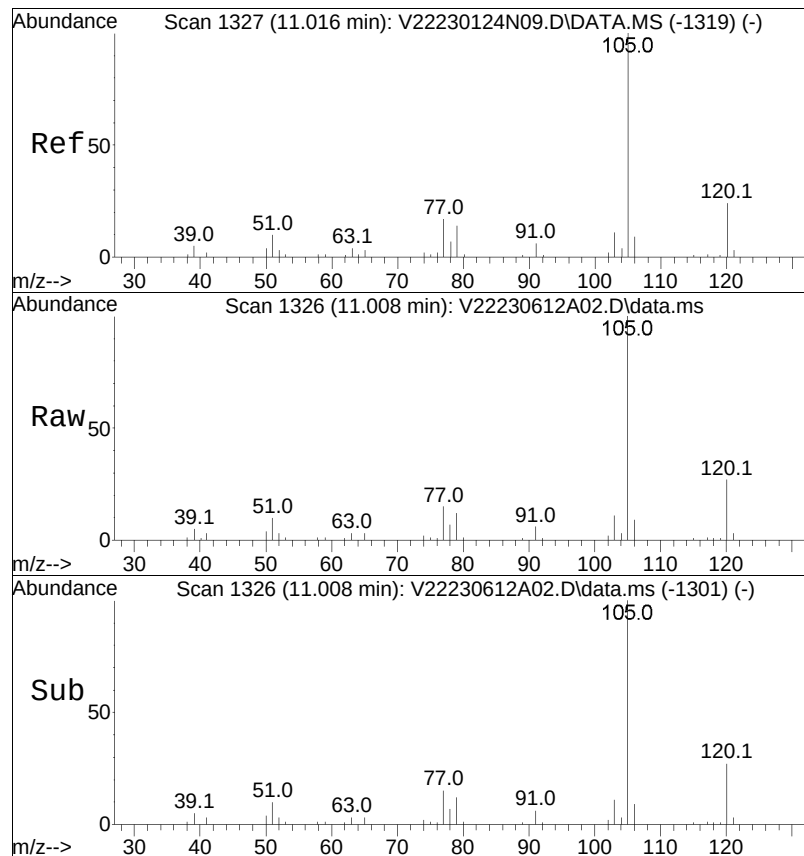
Tgt Ion:106 Resp: 146359

Ion Ratio Lower Upper

106 100

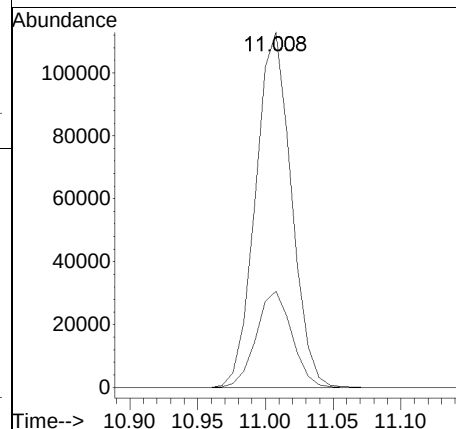
91 214.0 164.0 246.0

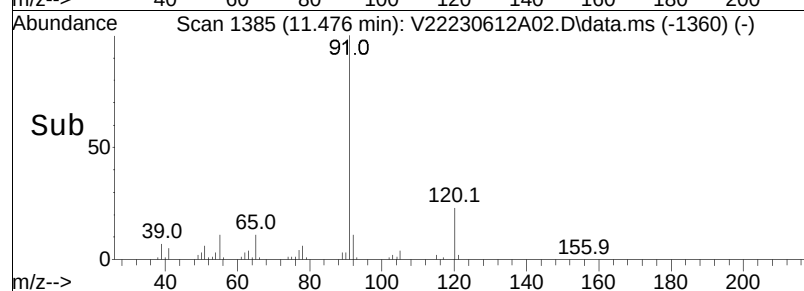
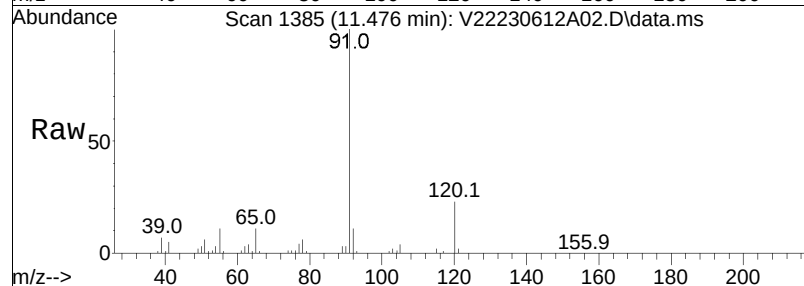
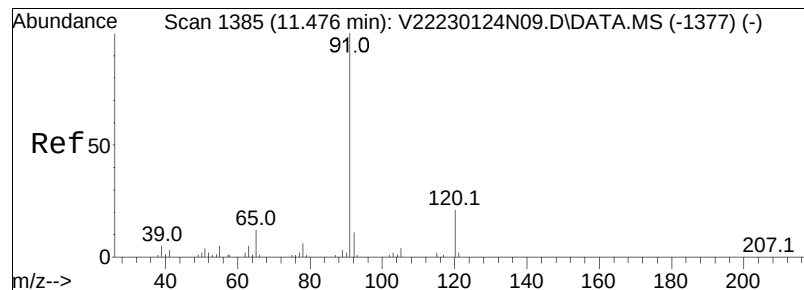




#86
 Isopropylbenzene
 Concen: 10.46 ug/L
 RT: 11.008 min Scan# 1326
 Delta R.T. 0.000 min
 Lab File: V22230612A02.D
 Acq: 12 Jun 2023 10:32 am

Tgt Ion	105	Resp	207137
Ion Ratio	Lower	Upper	
105	100		
120	26.9	7.7	47.7





#89

n-Propylbenzene

Concen: 10.80 ug/L

RT: 11.476 min Scan# 1385

Delta R.T. 0.000 min

Lab File: V22230612A02.D

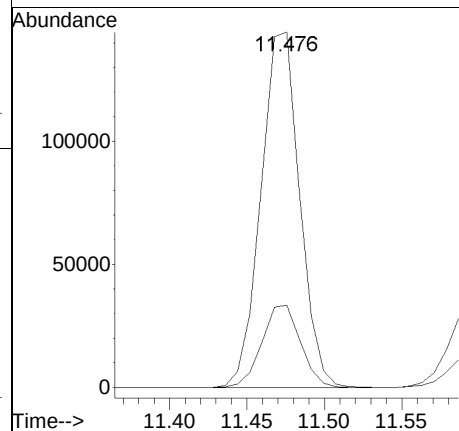
Acq: 12 Jun 2023 10:32 am

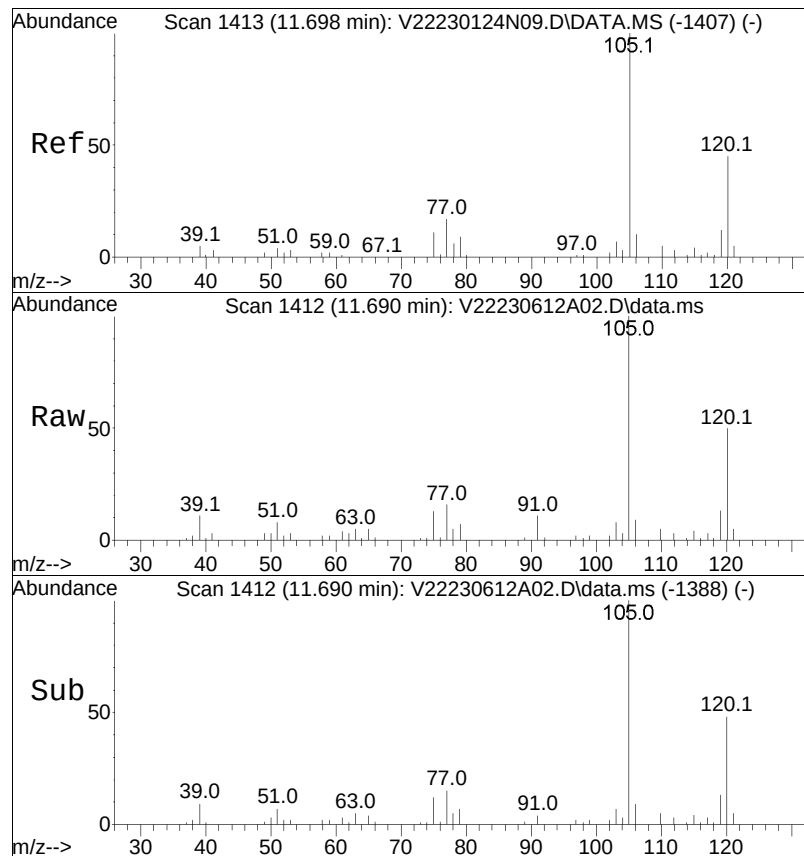
Tgt Ion: 91 Resp: 251047

Ion Ratio Lower Upper

91 100

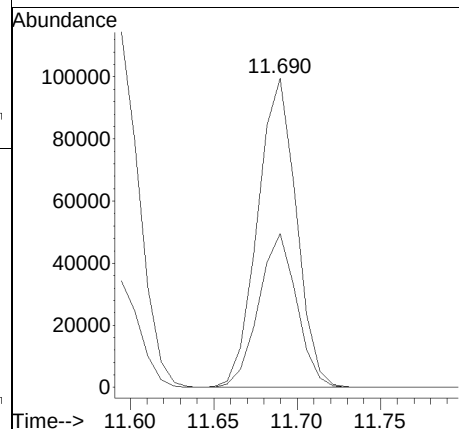
120 23.1 19.5 29.3

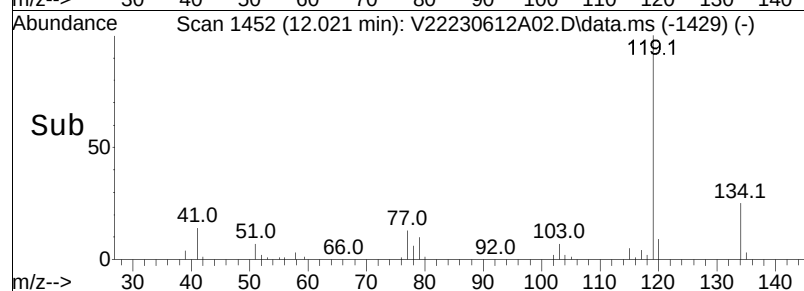
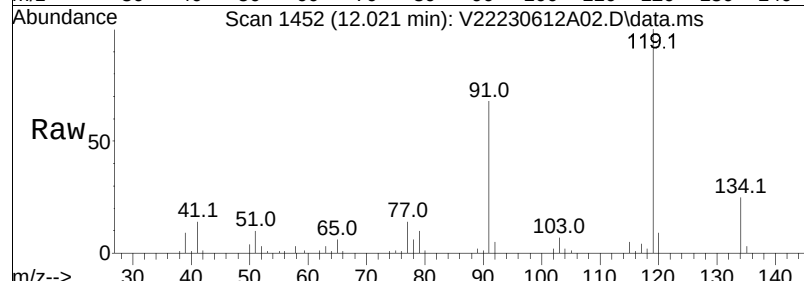
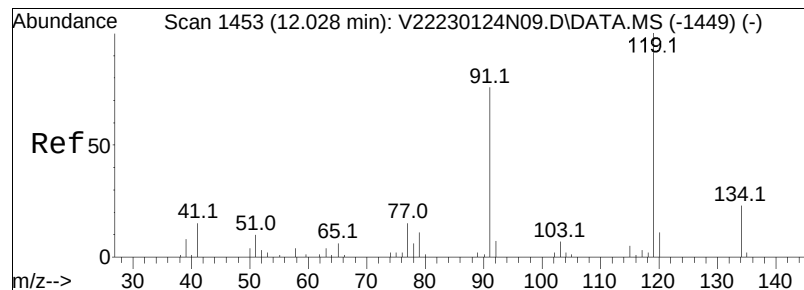




#94
 1,3,5-Trimethylbenzene
 Concen: 9.63 ug/L
 RT: 11.690 min Scan# 1412
 Delta R.T. -0.008 min
 Lab File: V22230612A02.D
 Acq: 12 Jun 2023 10:32 am

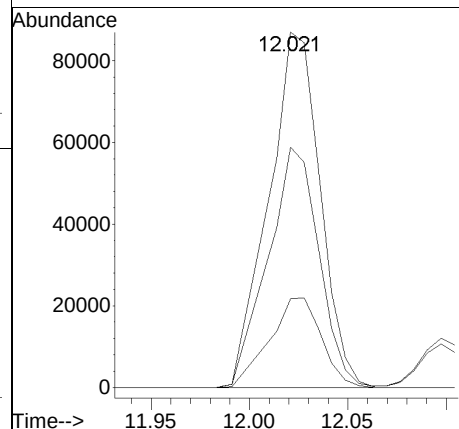
Tgt Ion	105	120	Ratio	Lower	Upper
105	100				
120	48.7			40.9	61.3

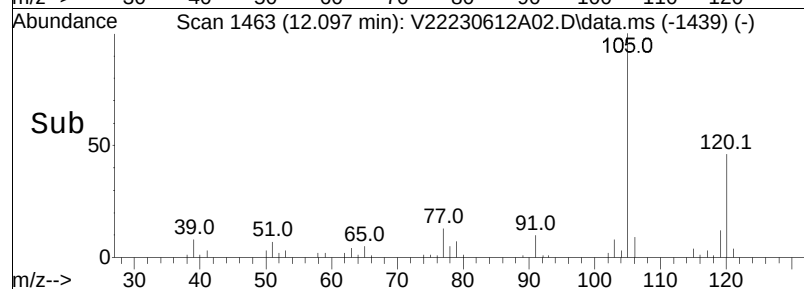
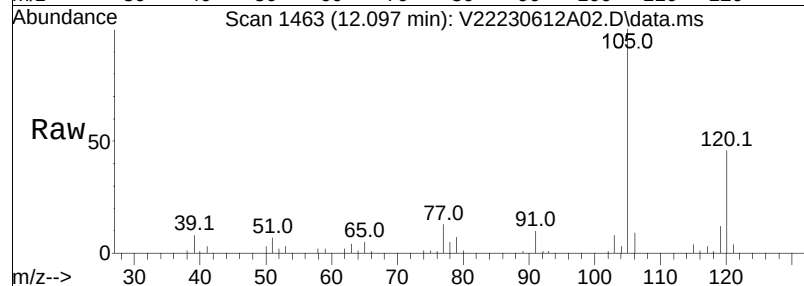
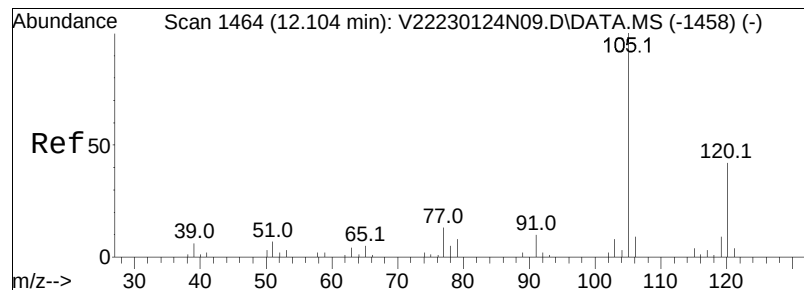




#98
 tert-Butylbenzene
 Concen: 9.78 ug/L
 RT: 12.021 min Scan# 1452
 Delta R.T. -0.007 min
 Lab File: V22230612A02.D
 Acq: 12 Jun 2023 10:32 am

Tgt	Ion:119	Resp:	165354
Ion	Ratio	Lower	Upper
119	100		
91	66.2	50.2	75.4
134	25.1	20.8	31.2





#101

1,2,4-Trimethylbenzene

Concen: 9.37 ug/L

RT: 12.097 min Scan# 1463

Delta R.T. -0.007 min

Lab File: V22230612A02.D

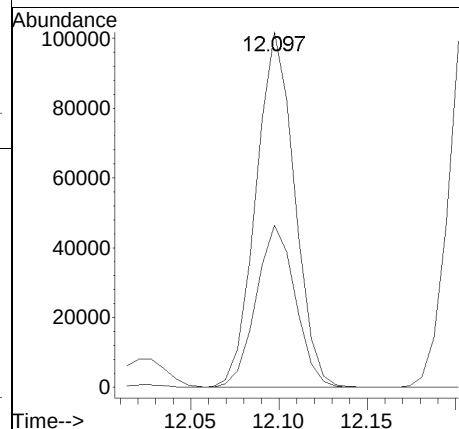
Acq: 12 Jun 2023 10:32 am

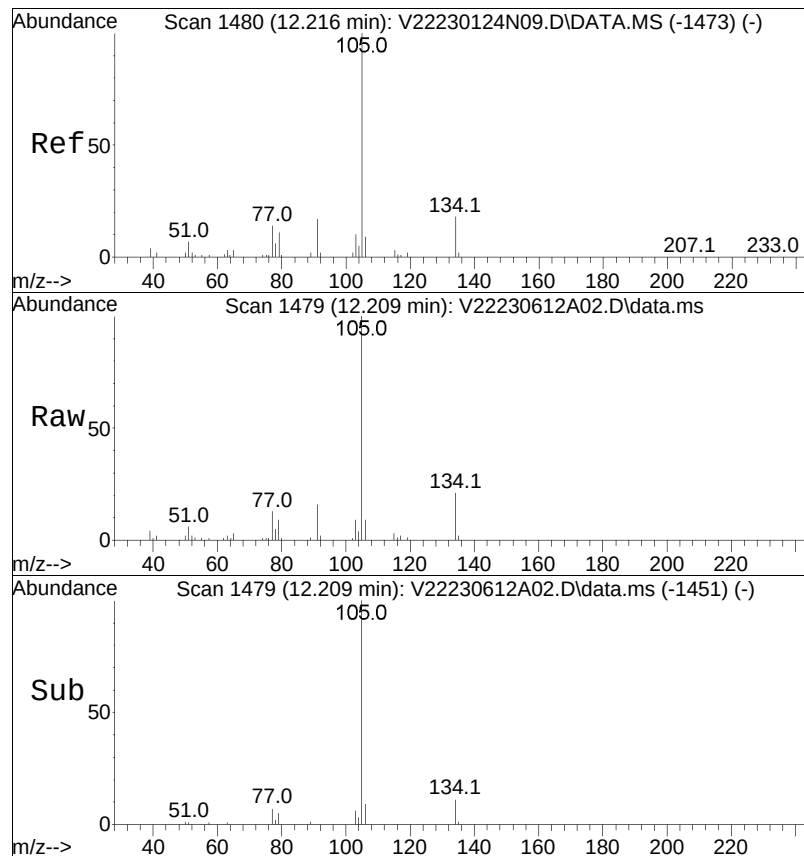
Tgt Ion:105 Resp: 155220

Ion Ratio Lower Upper

105 100

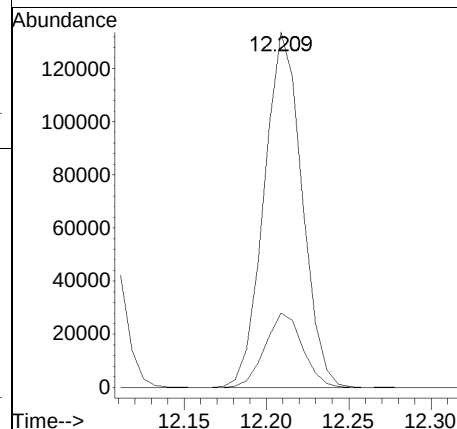
120 46.3 38.5 57.7

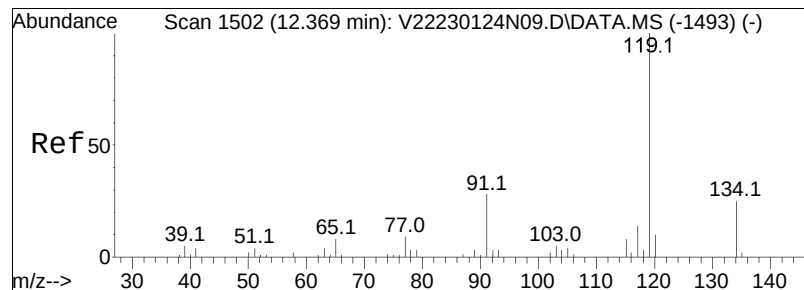




#102
 sec-Butylbenzene
 Concen: 10.65 ug/L
 RT: 12.209 min Scan# 1479
 Delta R.T. -0.007 min
 Lab File: V22230612A02.D
 Acq: 12 Jun 2023 10:32 am

Tgt Ion	Ratio	Lower	Upper
105	100		
134	20.7	13.9	28.9





#103

p-Isopropyltoluene

Concen: 9.79 ug/L

RT: 12.362 min Scan# 1501

Delta R.T. -0.007 min

Lab File: V22230612A02.D

Acq: 12 Jun 2023 10:32 am

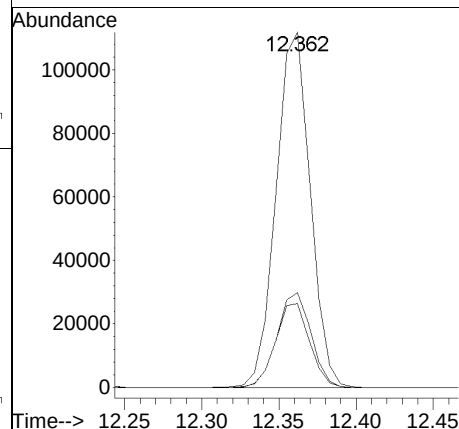
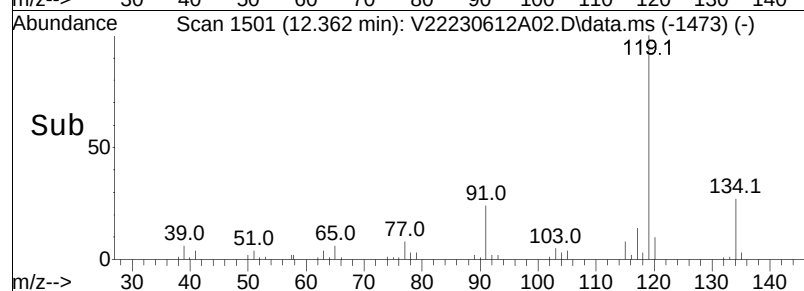
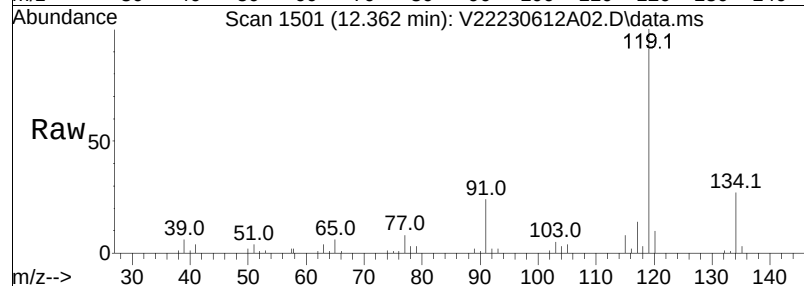
Tgt Ion: 119 Resp: 172195

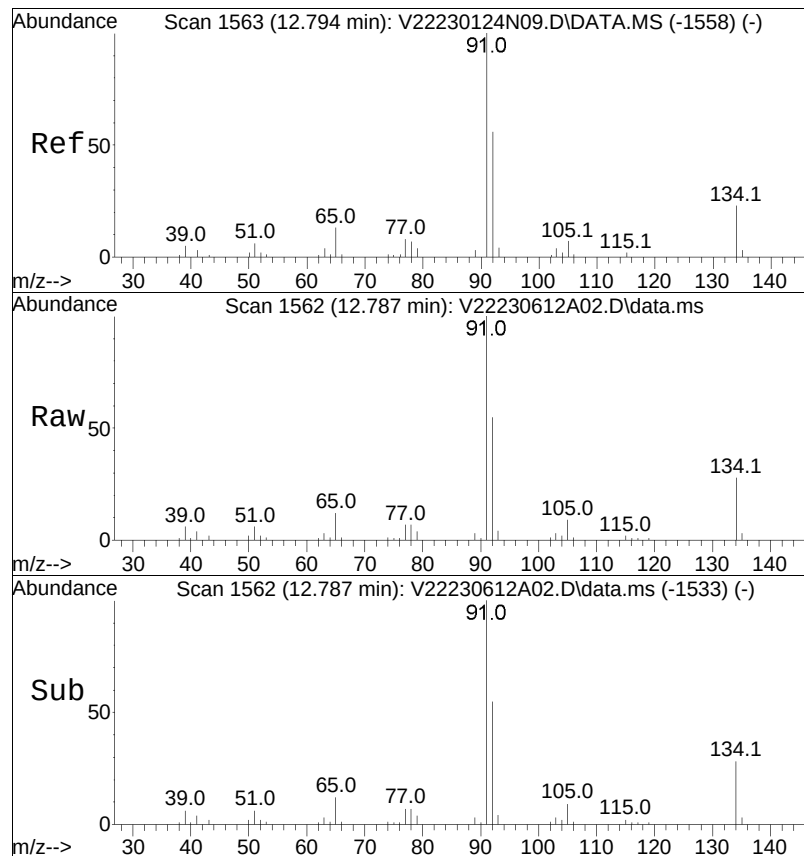
Ion Ratio Lower Upper

119 100

134 26.6 17.7 36.7

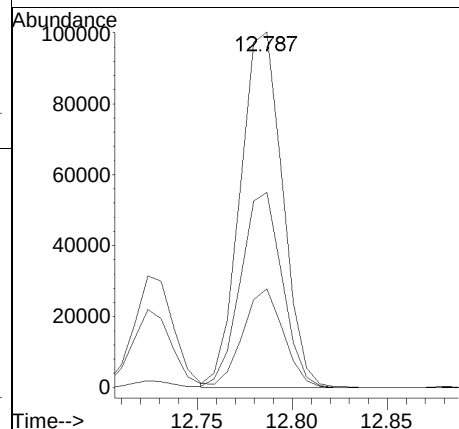
91 23.6 14.1 29.3

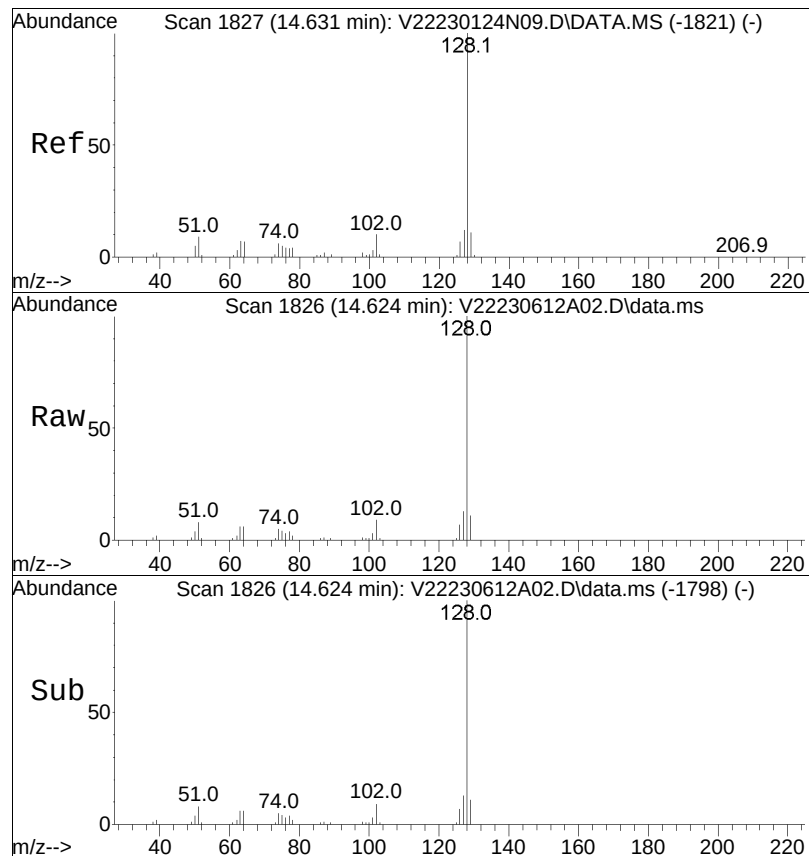




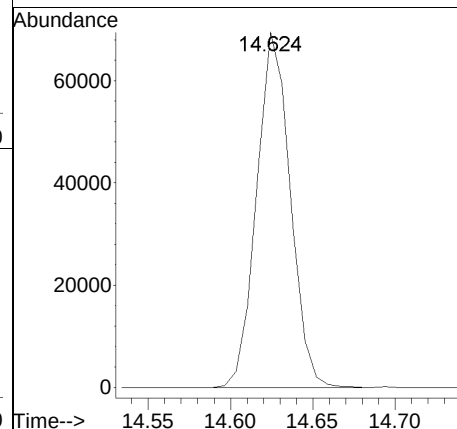
#107
 n-Butylbenzene
 Concen: 10.43 ug/L
 RT: 12.787 min Scan# 1562
 Delta R.T. 0.000 min
 Lab File: V22230612A02.D
 Acq: 12 Jun 2023 10:32 am

Tgt Ion: 91	Resp: 155524
Ion Ratio	Lower Upper
91 100	
92 54.0	44.6 66.8
134 26.4	22.9 34.3





#114
 Naphthalene
 Concen: 8.22 ug/L
 RT: 14.624 min Scan# 1826
 Delta R.T. -0.007 min
 Lab File: V22230612A02.D
 Acq: 12 Jun 2023 10:32 am
 Tgt Ion:128 Resp: 98462



Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230613A\
 Data File : V22230613A03.D
 Acq On : 13 Jun 2023 07:34 am
 Operator : VOA122:PID
 Sample : WG1790988-4,31,10,10 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG1790988,ICAL19961 (Sig #1); WG,ICAL19961 (Sig #2)
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 13 07:58:22 2023
 Quant Method : K:\VOA122\2023\230613A\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 16:18:21 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA122\2023\230613A\V22230613A02.D
 Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane

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

Internal Standards						
1) Fluorobenzene	6.284	96	258043	10.000	ug/L	0.00
Standard Area 1 = 250466			Recovery	=	103.03%	
62) Chlorobenzene-d5	9.866	117	246646	10.000	ug/L	0.00
Standard Area 1 = 241286			Recovery	=	102.22%	
83) 1,4-Dichlorobenzene-d4	12.501	152	132314	10.000	ug/L	0.00
Standard Area 1 = 129668			Recovery	=	102.04%	
System Monitoring Compounds						
38) Dibromofluoromethane	5.453	113	84093	9.677	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	96.77%	
46) 1,2-Dichloroethane-d4	5.996	65	80653	10.515	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	105.15%	
63) Toluene-d8	8.001	98	300488	9.855	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	98.55%	
87) 4-Bromofluorobenzene	11.317	95	115974	10.361	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	103.61%	
Target Compounds						
						Qvalue
21) Methyl tert-butyl ether	3.962	73	57025	9.678	ug/L	# 89
44) Benzene	5.864	78	150165	10.986	ug/L	96
64) Toluene	8.060	92	101773	10.476	ug/L	100
78) Ethylbenzene	9.921	91	205340	10.403	ug/L	98
80) p/m Xylene	10.112	106	158843	20.554	ug/L	94
81) o Xylene	10.635	106	149338	20.209	ug/L	93
86) Isopropylbenzene	11.008	105	208834	10.541	ug/L	98
89) n-Propylbenzene	11.468	91	256474	11.032	ug/L	96
94) 1,3,5-Trimethylbenzene	11.690	105	161447	9.654	ug/L	97
98) tert-Butylbenzene	12.021	119	165877	9.813	ug/L	95
101) 1,2,4-Trimethylbenzene	12.097	105	158178	9.549	ug/L	97
102) sec-Butylbenzene	12.209	105	221803	11.047	ug/L	97
103) p-Isopropyltoluene	12.362	119	174939	9.944	ug/L	98
107) n-Butylbenzene	12.787	91	159319	10.680	ug/L	96
114) Naphthalene	14.624	128	95424	7.960	ug/L	100

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

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230613A\
 Data File : V22230613A03.D
 Acq On : 13 Jun 2023 07:34 am
 Operator : VOA122:PID
 Sample : WG1790988-4,31,10,10 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG1790988,ICAL19961 (Sig #1); WG,ICAL19961 (Sig #2)
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 13 07:58:22 2023
 Quant Method : K:\VOA122\2023\230613A\V122_230425N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Apr 26 16:18:21 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA122\2023\230613A\V22230613A02.D
 Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane

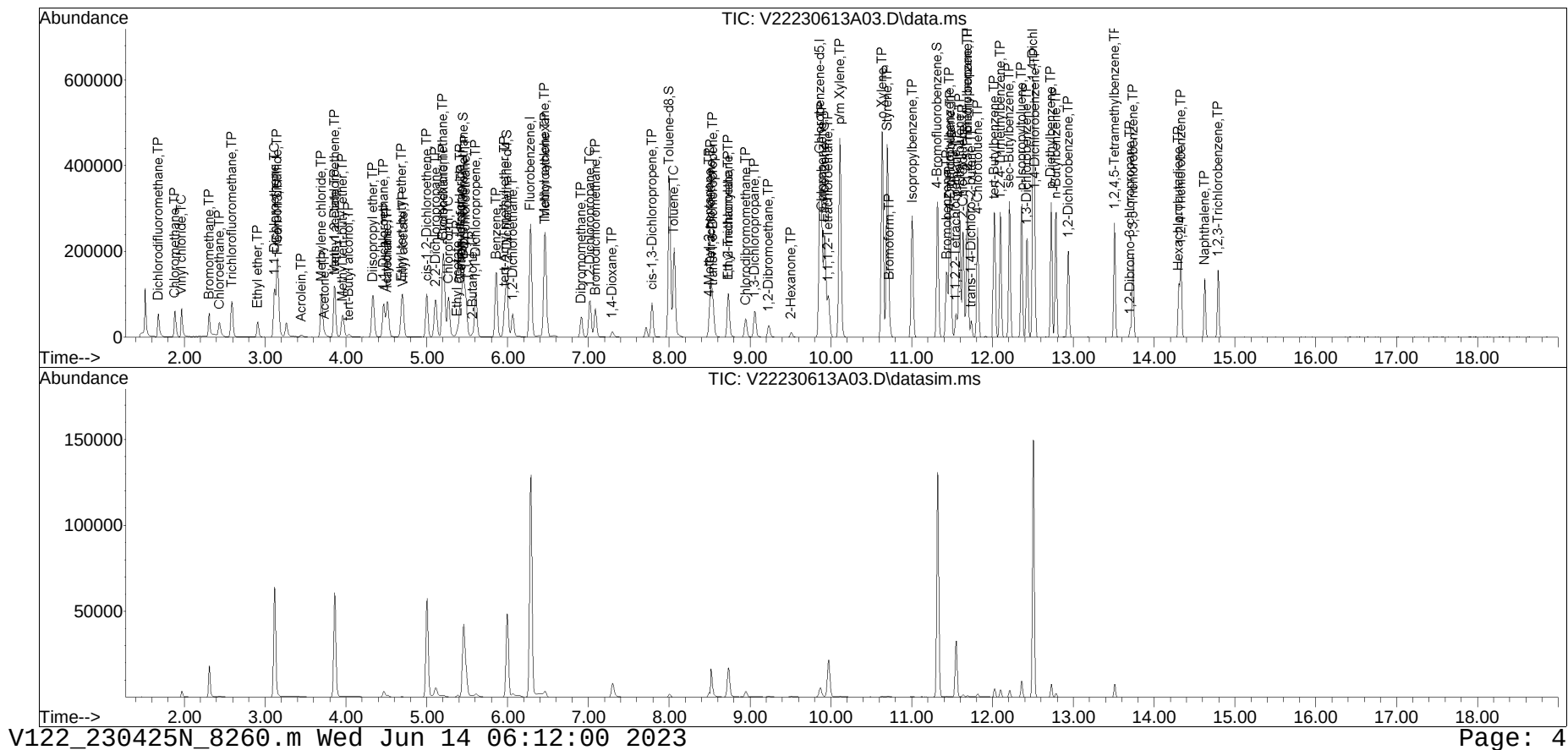
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

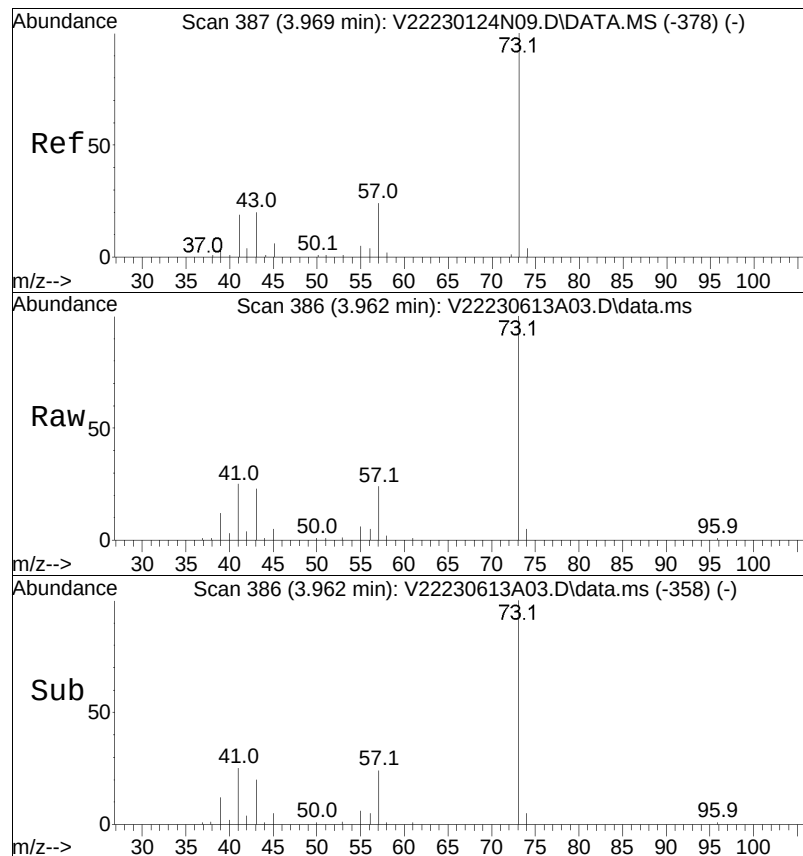
(QT Reviewed)

Data Path : K:\V0A122\2023\230613A\
Data File : V22230613A03.D
Acq On : 13 Jun 2023 07:34 am
Operator : V0A122:PID
Sample : WG1790988-4,31,10,10 (Sig #1); 8260 CCAL (Sig #2)
Misc : WG1790988,ICAL19961 (Sig #1); WG,ICAL19961 (Sig #2)
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 13 07:58:22 2023
Quant Method : K:\VOA122\2023\230613A\V122_230425N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Apr 26 16:18:21 2023
Response via : Initial Calibration

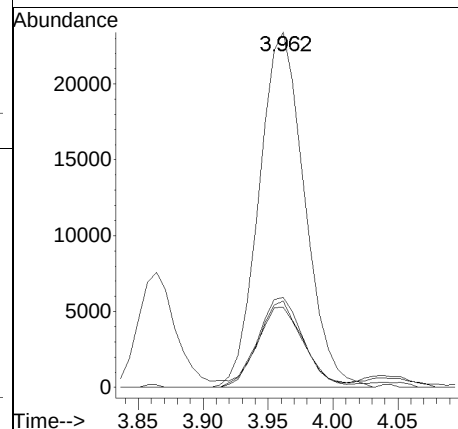
Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane

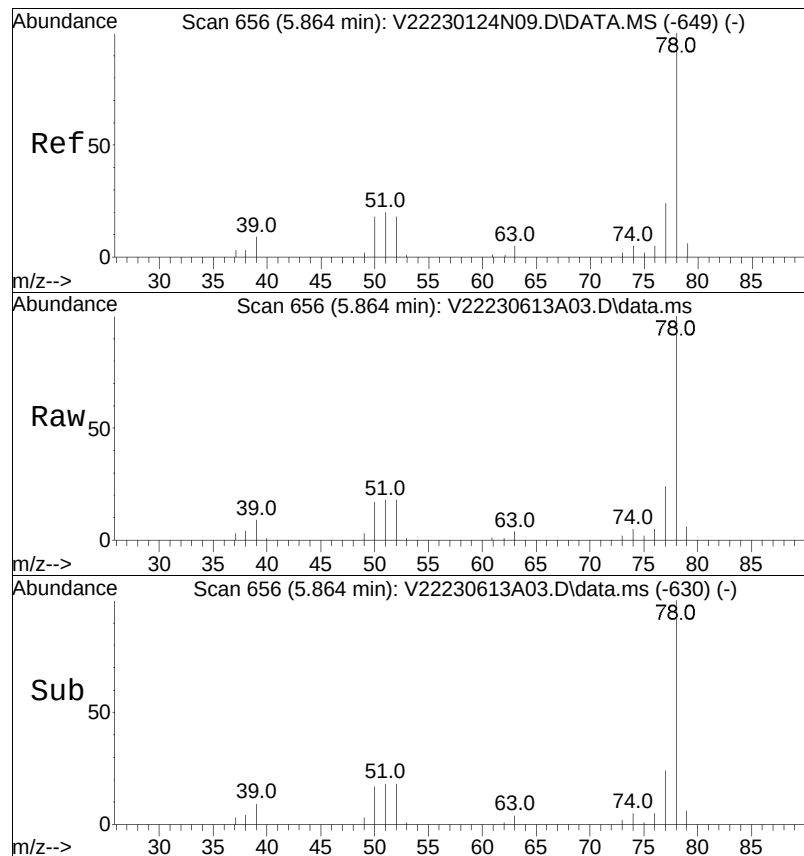




#21
 Methyl tert-butyl ether
 Concen: 9.68 ug/L
 RT: 3.962 min Scan# 386
 Delta R.T. -0.007 min
 Lab File: V22230613A03.D
 Acq: 13 Jun 2023 07:34 am

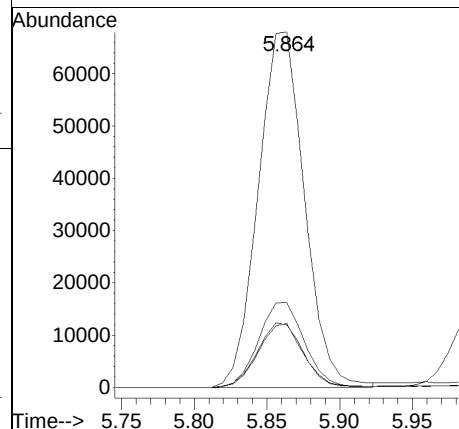
Tgt Ion:	73	Resp:	57025
Ion	Ratio	Lower	Upper
73	100		
57	23.9	13.6	28.2
43	23.4	12.7	26.5
41	25.5	11.4	23.8#

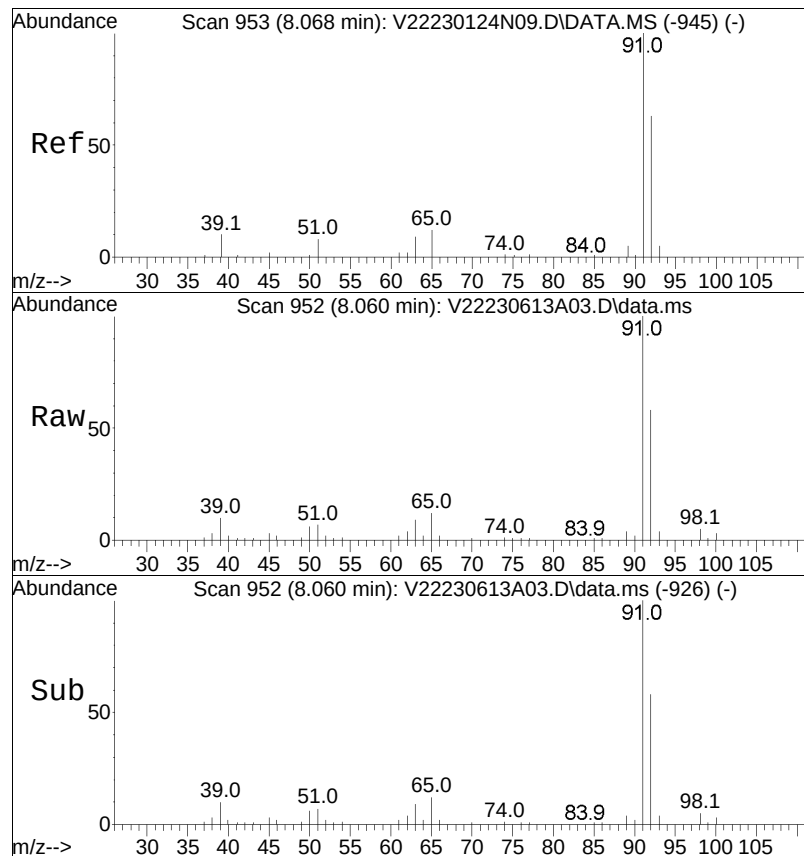




#44
 Benzene
 Concen: 10.99 ug/L
 RT: 5.864 min Scan# 656
 Delta R.T. -0.000 min
 Lab File: V22230613A03.D
 Acq: 13 Jun 2023 07:34 am

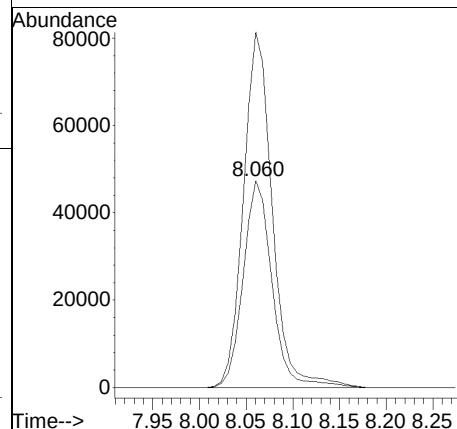
Tgt Ion:	78	Resp:	150165
Ion Ratio	Lower	Upper	
78	100		
77	23.9	15.4	32.0
51	18.1	9.8	20.4
52	17.4	9.2	19.2

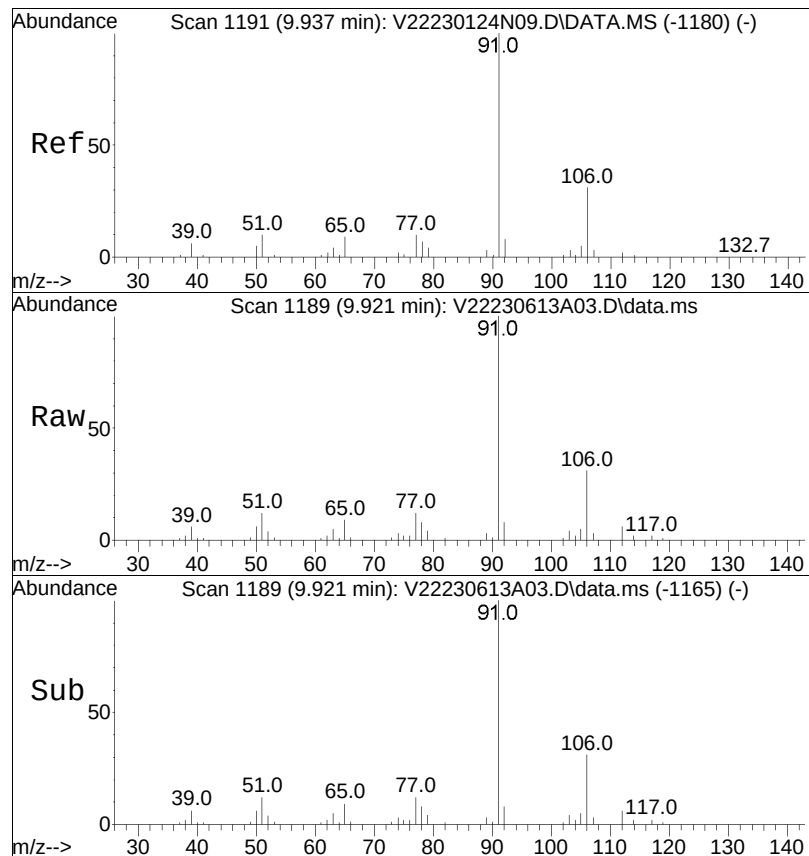




#64
 Toluene
 Concen: 10.48 ug/L
 RT: 8.060 min Scan# 952
 Delta R.T. -0.008 min
 Lab File: V22230613A03.D
 Acq: 13 Jun 2023 07:34 am

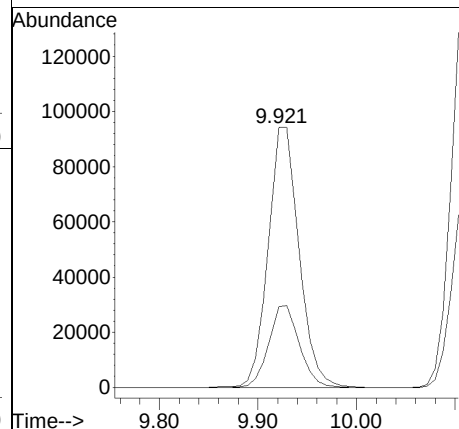
Tgt Ion	Ratio	Lower	Upper
92	100		
91	171.6	137.0	205.6

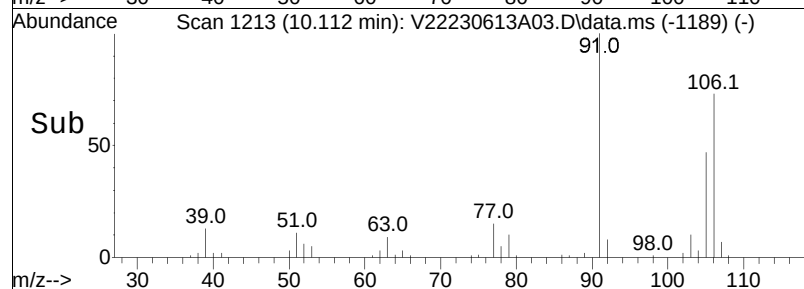
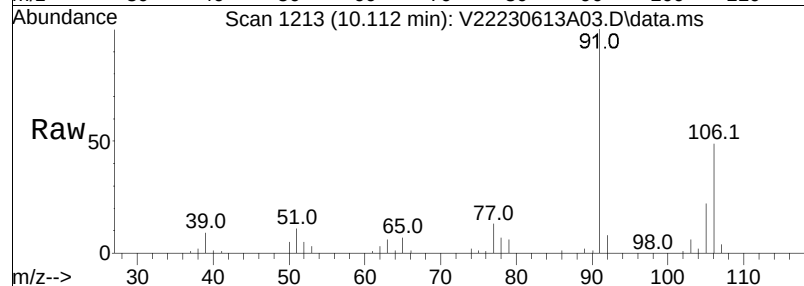
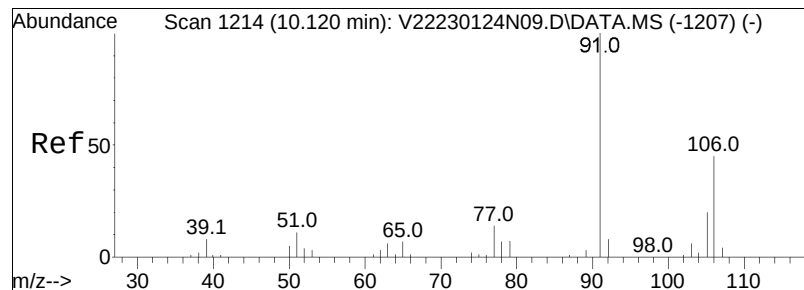




#78
 Ethylbenzene
 Concen: 10.40 ug/L
 RT: 9.921 min Scan# 1189
 Delta R.T. -0.008 min
 Lab File: V22230613A03.D
 Acq: 13 Jun 2023 07:34 am

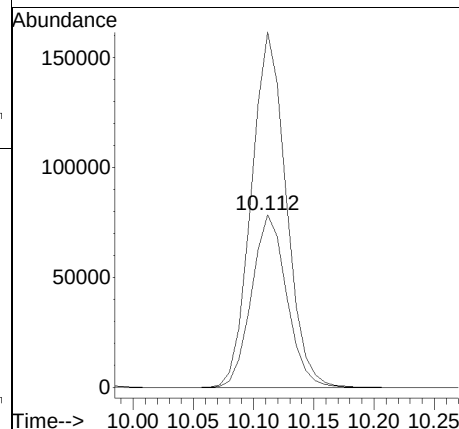
Tgt	Ion	Resp	Lower	Upper
91	100	205340		
106	31.1	25.8	38.6	

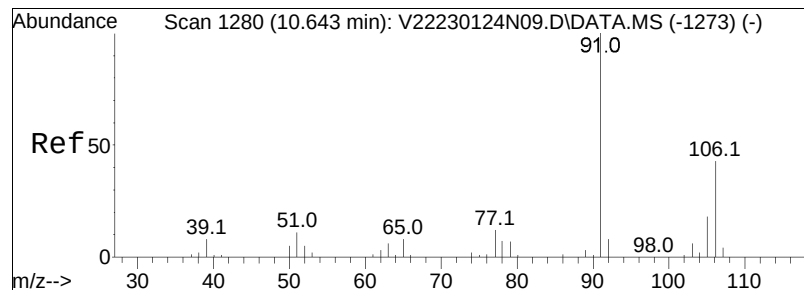




#80
 p/m Xylene
 Concen: 20.55 ug/L
 RT: 10.112 min Scan# 1213
 Delta R.T. -0.008 min
 Lab File: V22230613A03.D
 Acq: 13 Jun 2023 07:34 am

Tgt Ion	106	91	Ratio	100	204.1	Resp	158843
Ion	106	91	Ratio	100	204.1	Lower	156.0
						Upper	234.0





#81

o Xylene

Concen: 20.21 ug/L

RT: 10.635 min Scan# 1279

Delta R.T. -0.008 min

Lab File: V22230613A03.D

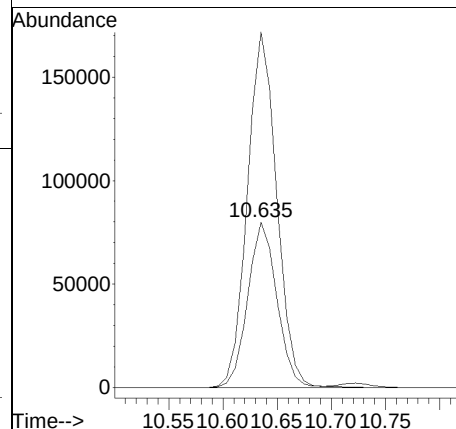
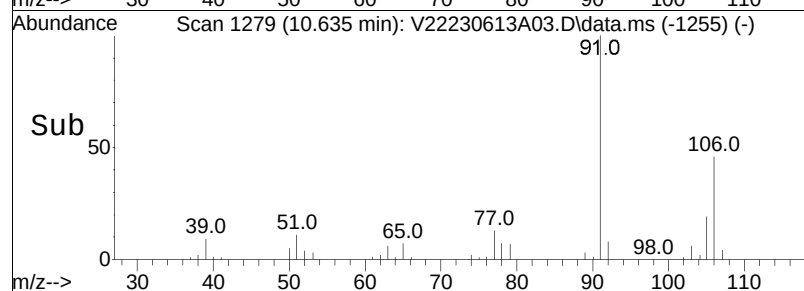
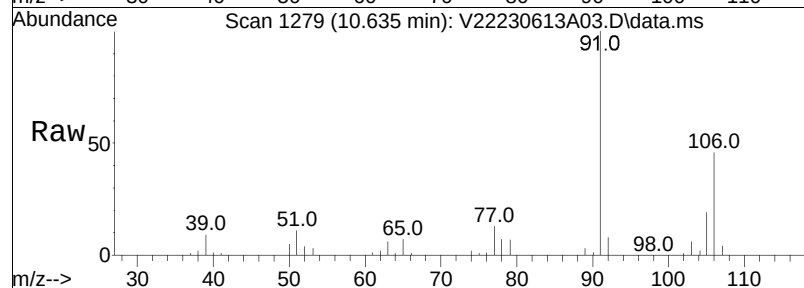
Acq: 13 Jun 2023 07:34 am

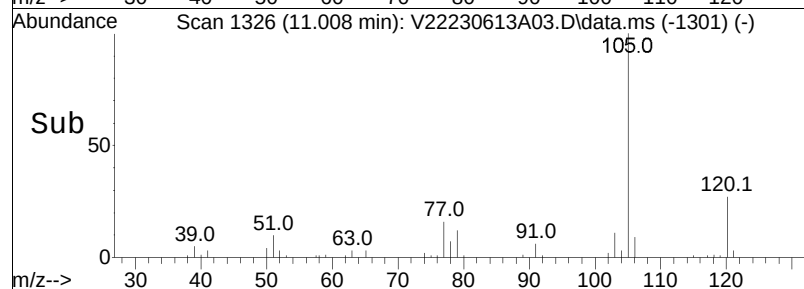
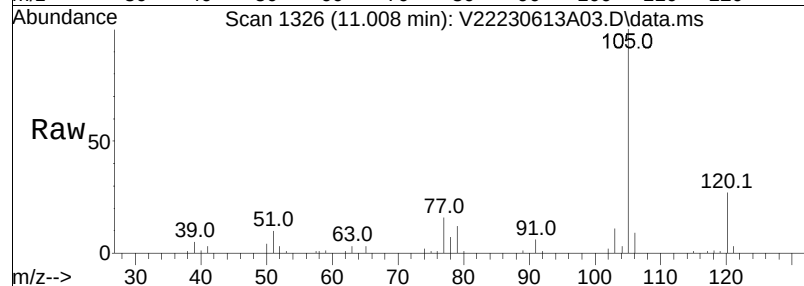
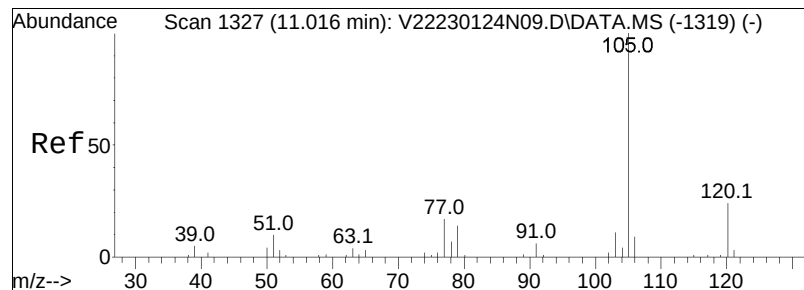
Tgt Ion:106 Resp: 149338

Ion Ratio Lower Upper

106 100

91 215.5 164.0 246.0





#86

Isopropylbenzene

Concen: 10.54 ug/L

RT: 11.008 min Scan# 1326

Delta R.T. -0.000 min

Lab File: V22230613A03.D

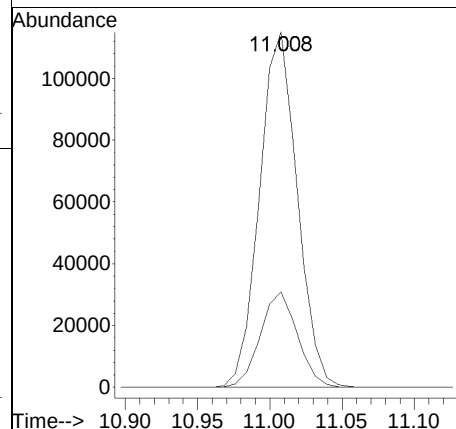
Acq: 13 Jun 2023 07:34 am

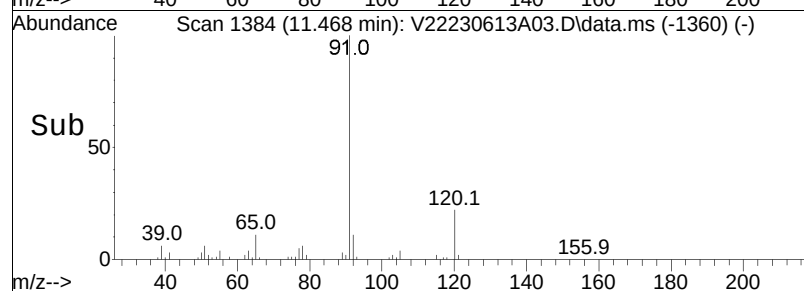
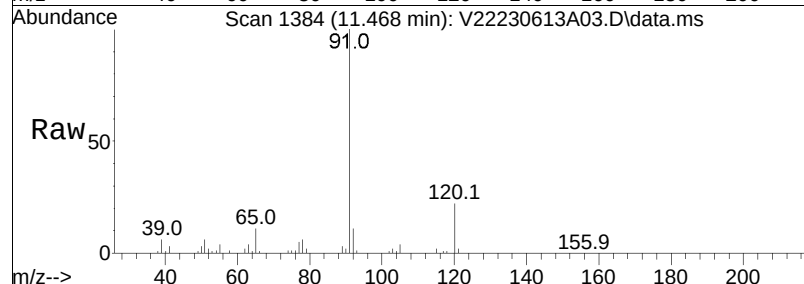
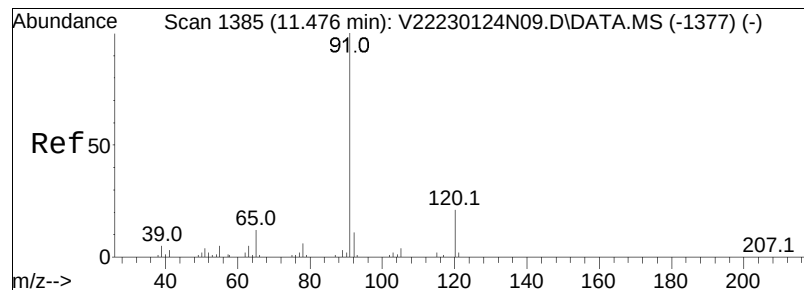
Tgt Ion:105 Resp: 208834

Ion Ratio Lower Upper

105 100

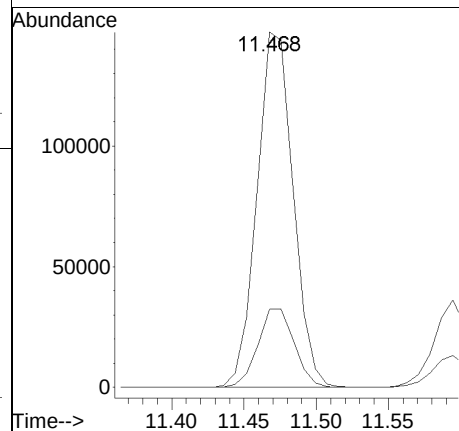
120 26.5 7.7 47.7

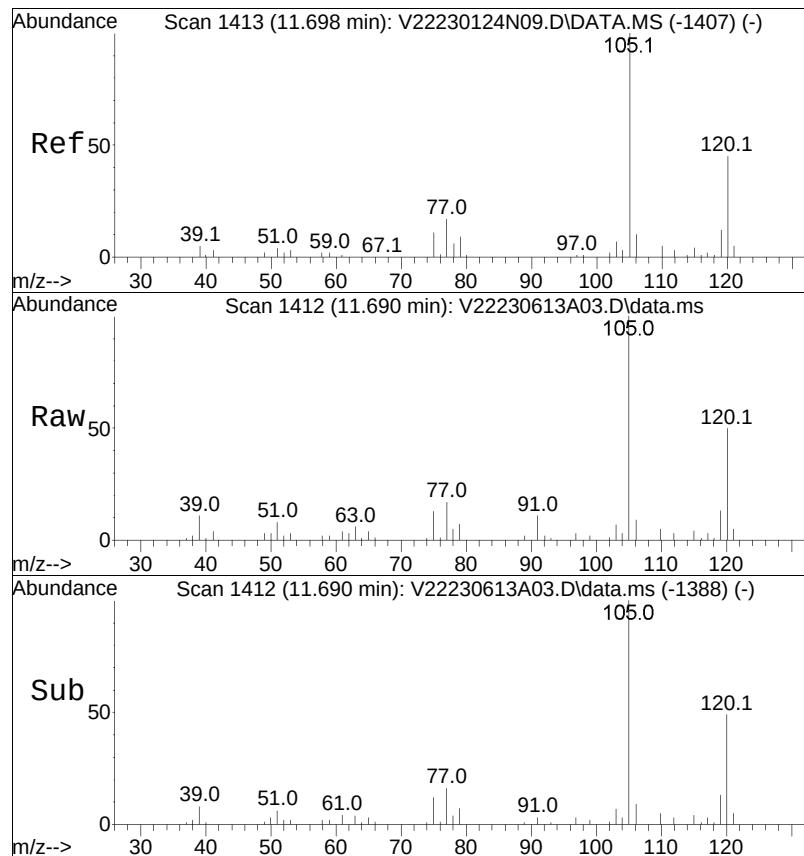




#89
 n-Propylbenzene
 Concen: 11.03 ug/L
 RT: 11.468 min Scan# 1384
 Delta R.T. -0.008 min
 Lab File: V22230613A03.D
 Acq: 13 Jun 2023 07:34 am

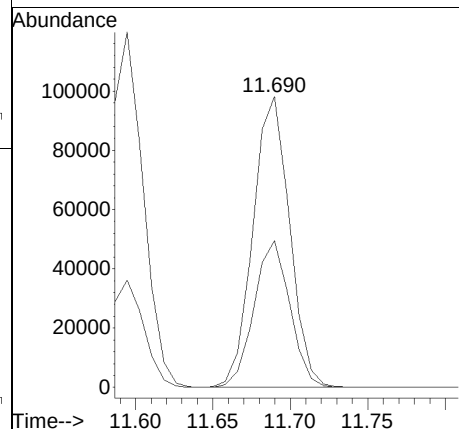
Tgt Ion:	91	Resp:	256474
Ion Ratio	Lower	Upper	
91	100		
120	22.3	19.5	29.3

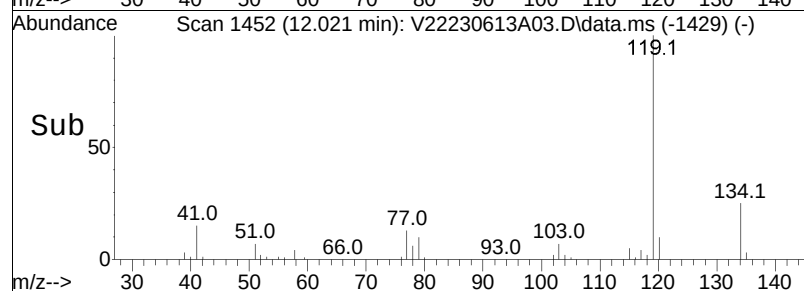
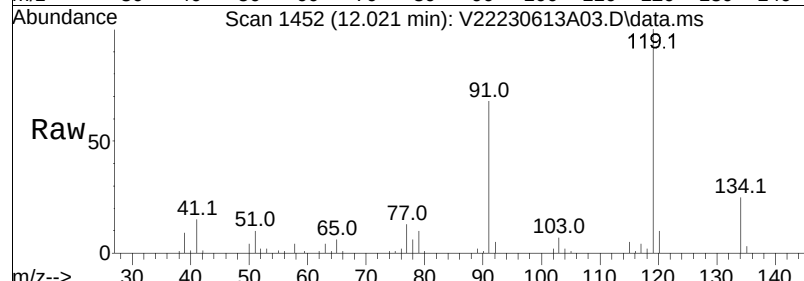
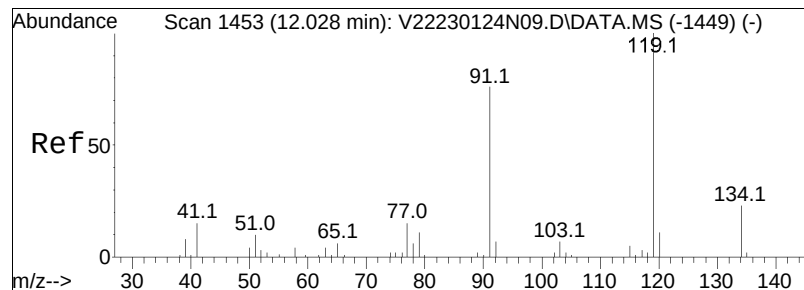




#94
 1,3,5-Trimethylbenzene
 Concen: 9.65 ug/L
 RT: 11.690 min Scan# 1412
 Delta R.T. -0.008 min
 Lab File: V22230613A03.D
 Acq: 13 Jun 2023 07:34 am

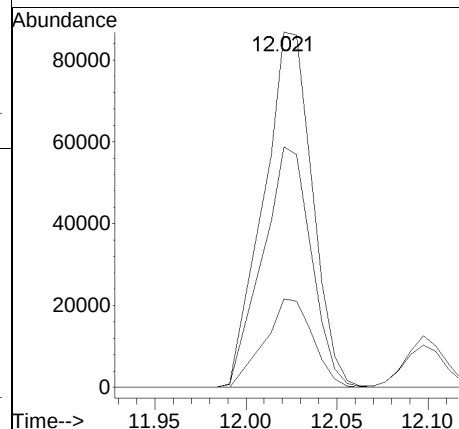
Tgt Ion	Ratio	Lower	Upper
105	100		
120	49.4	40.9	61.3

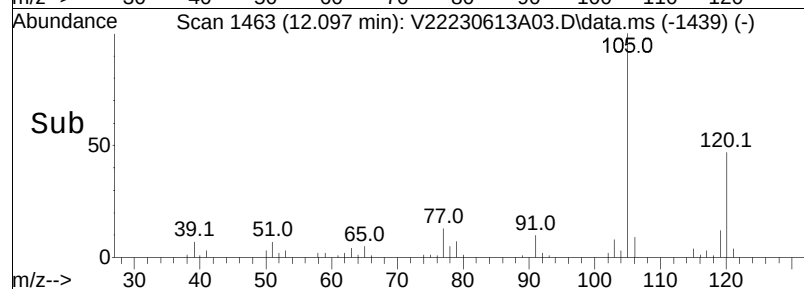
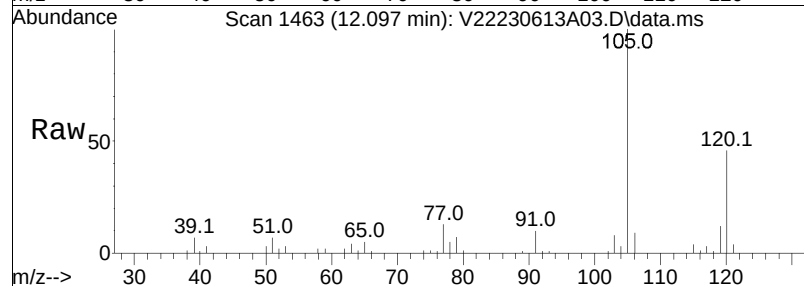
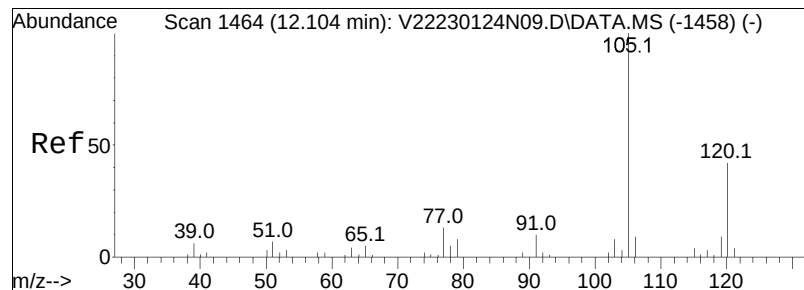




#98
 tert-Butylbenzene
 Concen: 9.81 ug/L
 RT: 12.021 min Scan# 1452
 Delta R.T. -0.007 min
 Lab File: V22230613A03.D
 Acq: 13 Jun 2023 07:34 am

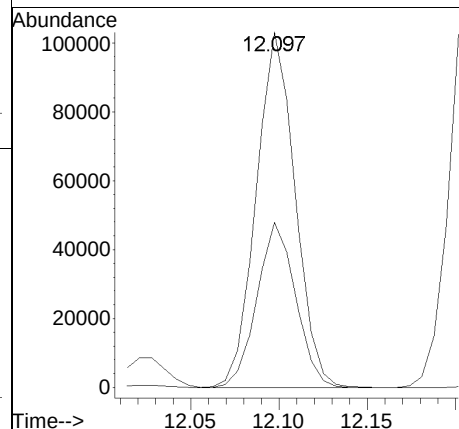
Tgt	Ion:119	Resp:	165877
Ion	Ratio	Lower	Upper
119	100		
91	67.9	50.2	75.4
134	24.9	20.8	31.2

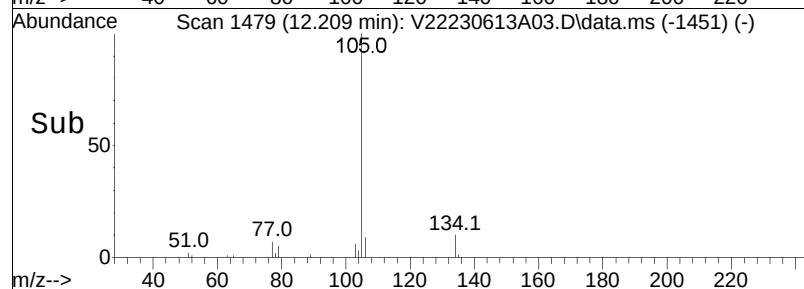
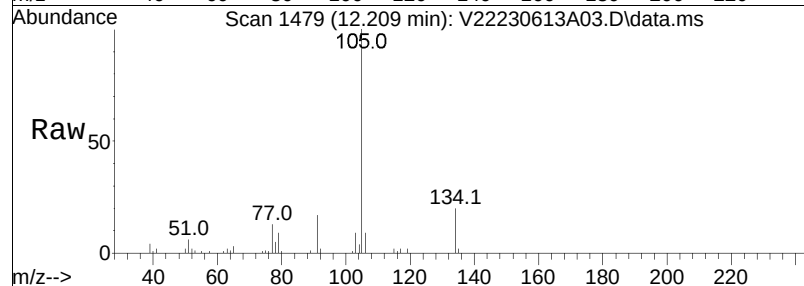
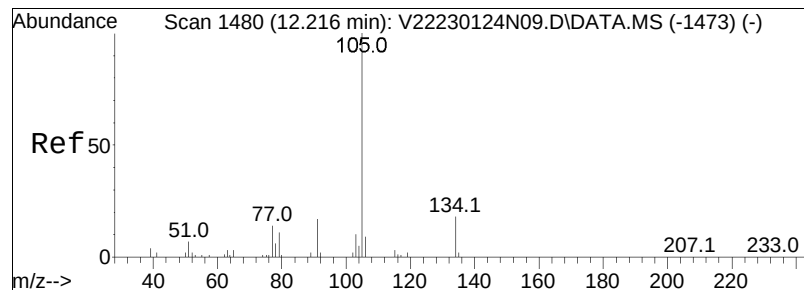




#101
 1,2,4-Trimethylbenzene
 Concen: 9.55 ug/L
 RT: 12.097 min Scan# 1463
 Delta R.T. -0.007 min
 Lab File: V22230613A03.D
 Acq: 13 Jun 2023 07:34 am

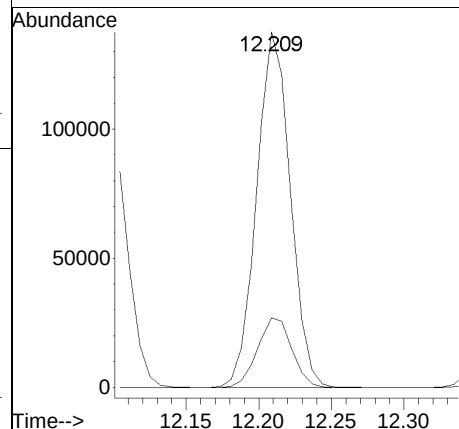
Tgt Ion	Ratio	Lower	Upper
105	100		
120	46.1	38.5	57.7

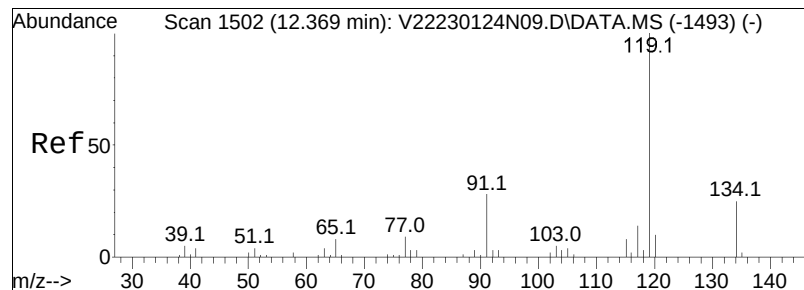




#102
 sec-Butylbenzene
 Concen: 11.05 ug/L
 RT: 12.209 min Scan# 1479
 Delta R.T. -0.007 min
 Lab File: V22230613A03.D
 Acq: 13 Jun 2023 07:34 am

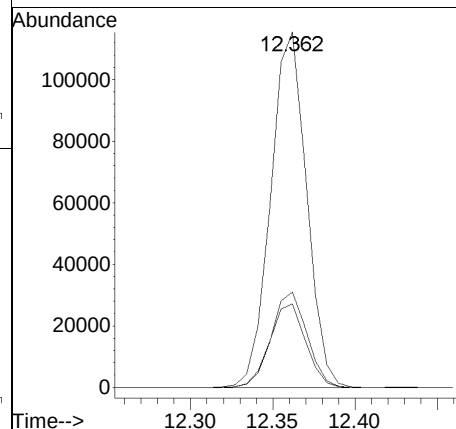
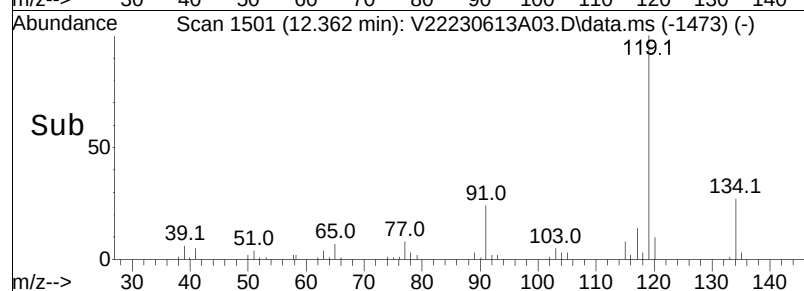
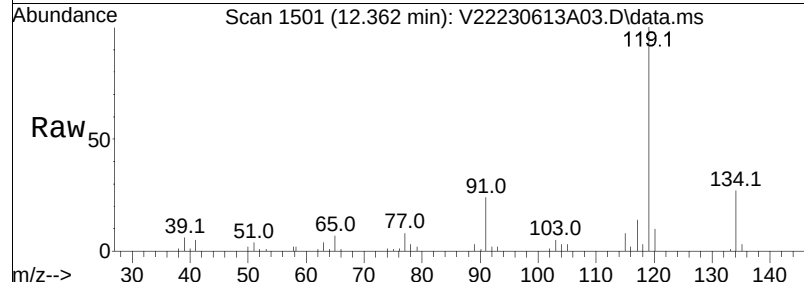
Tgt Ion	Ratio	Lower	Upper
105	100		
134	19.9	13.9	28.9

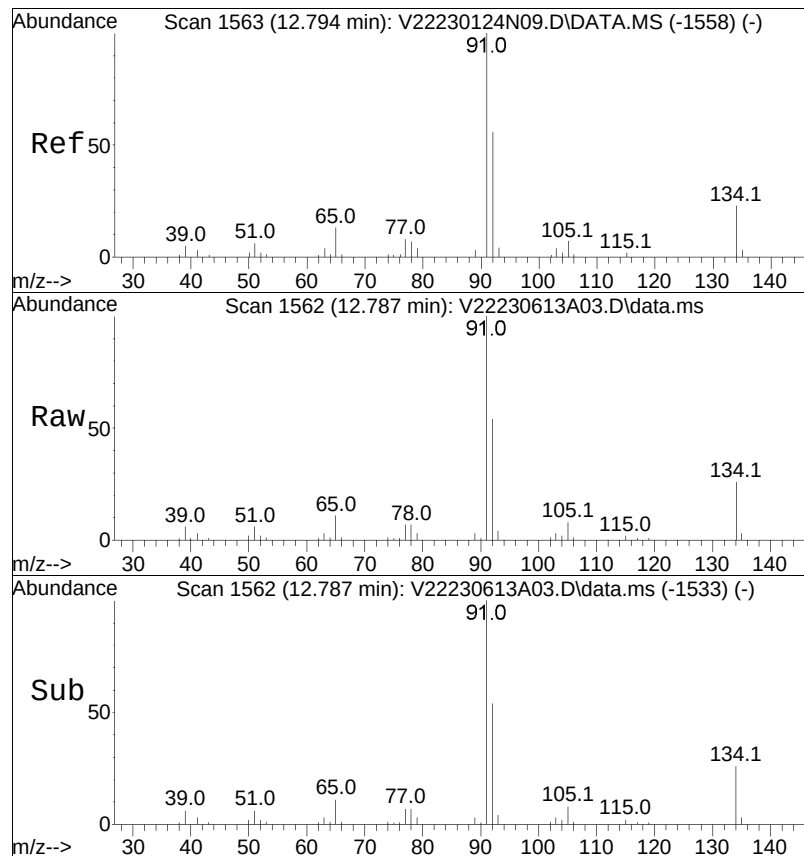




#103
 p-Isopropyltoluene
 Concen: 9.94 ug/L
 RT: 12.362 min Scan# 1501
 Delta R.T. -0.007 min
 Lab File: V22230613A03.D
 Acq: 13 Jun 2023 07:34 am

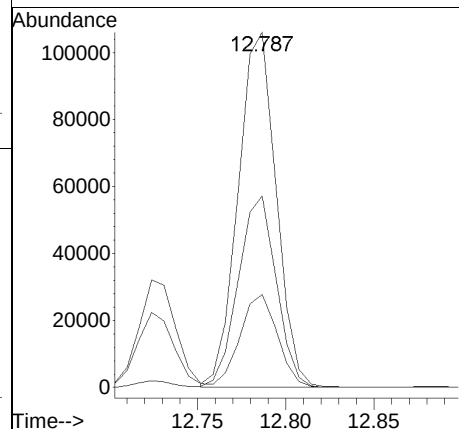
Tgt Ion:	119	Resp:	174939
Ion Ratio	Lower	Upper	
119	100		
134	26.6	17.7	36.7
91	23.6	14.1	29.3

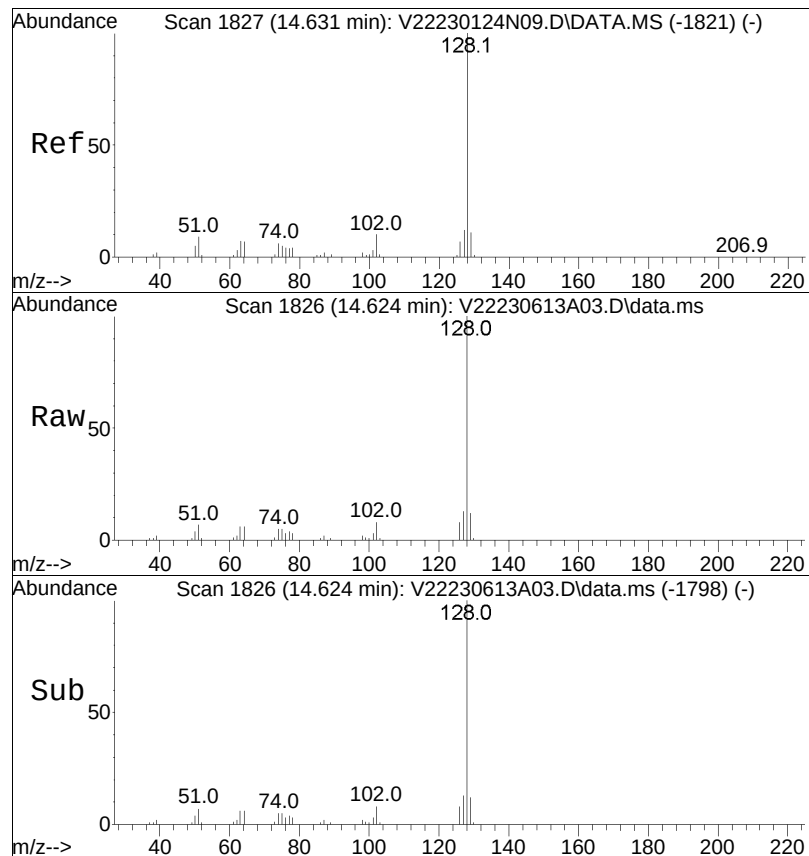




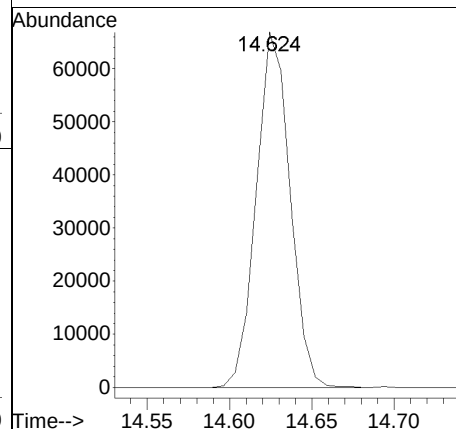
#107
 n-Butylbenzene
 Concen: 10.68 ug/L
 RT: 12.787 min Scan# 1562
 Delta R.T. -0.000 min
 Lab File: V22230613A03.D
 Acq: 13 Jun 2023 07:34 am

Tgt Ion: 91	Resp: 159319
Ion Ratio	Lower Upper
91 100	
92 53.9	44.6 66.8
134 25.7	22.9 34.3





#114
 Naphthalene
 Concen: 7.96 ug/L
 RT: 14.624 min Scan# 1826
 Delta R.T. -0.007 min
 Lab File: V22230613A03.D
 Acq: 13 Jun 2023 07:34 am
 Tgt Ion:128 Resp: 95424



Manual Integration Report

Data Path	: K:\V0A122\2023\230613A\	QMethod	: V122_230425N_8260.m
Data File	: V22230613A03.D	Operator	: V0A122:PID
Date Inj'd	: 6/13/2023 7:34 am	Instrument	: V0A122
Sample	: WG1790988-4,31,10,10	Quant Date	: 6/13/2023 7:58 am

There are no manual integrations or false positives in this file.



Calculation of Volatile Organic Compounds

Aqueous Concentration Formula: $Amt * DF * Uf * (1/Vo)$

Where:

DF = Dilution Factor

Vo = Sample Volume Purged (mL)

Uf = ng Unit Correction Factor (mL)

Soil Concentration Formula: $Amt * DF * (1/Wt)$

Where:

DF = Dilution Factor

Wt = Weight of Sample (g)

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Jun 14 2023, 09:48 am

Work Group: WG1790520 for Department: 31 GC/MS - Volatiles

Created: 13-JUN-23 Due: Operator: mjb

Sample	Client ID	C Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L2331196-01	MW-01-16-21-20230605	S NYCP51-8260	WATER	SEC	U	0619	0619	S0	Vial-B
L2332159-01	MW-12_20230608	S NYTCL-8260	WATER	SEC	U	0622	0615	S0	Vial-B
L2332159-02	MW-13_20230608	S NYTCL-8260	WATER	SEC	U	0622	0615	S0	Vial-B
L2332159-03	TRIP BLANK_20230608	S NYTCL-8260	WATER	SEC	U	0622	0615	S0	Vial-B
L2332404-01	MP-1D	S NYTCL-8260	WATER	SEC	U	0622	0615	S0	Vial-B
L2332404-02	MP-1	S NYTCL-8260	WATER	SEC	U	0622	0615	S0	Vial-B
L2332404-03	MW-12D	S NYTCL-8260	WATER	SEC	U	0622	0615	S0	Vial-B
L2332404-04	MW-12S	S NYTCL-8260	WATER	SEC	U	0622	0615	S0	Vial-B
L2332404-05	MW-4S	S NYTCL-8260	WATER	SEC	U	0622	0615	S0	Vial-B
L2332404-06	MW-4D2	S NYTCL-8260	WATER	SEC	U	0622	0615	S0	Vial-B
L2332404-07	TB_06082023	S NYTCL-8260	WATER	SEC	U	0622	0615	S0	Vial-B
L2332404-08	EQUIPMENT BLANK	S NYTCL-8260	WATER	SEC	U	0622	0615	S0	Vial-B
L2332652-01	MW-9	S NYTCL-8260	WATER	DONE	U	0623	0614	3C	Vial-B
L2332668-02	EQUIPMENT BLANK	S NYTCL-8260	WATER	DONE	U	0623	0614	3C	Vial-B
L2332668-03	TRIP BLANK	S NYTCL-8260	WATER	DONE	U	0623	0614	3C	Vial-B
WG1790520-1	MS BFB Tune Standard	S NYCP51-8260	WATER	DONE	U				
WG1790520-1	MS BFB Tune Standard	S NYTCL-8260	WATER	DONE	U				
WG1790520-2	Continuing Calibrati	S NYCP51-8260	WATER	DONE	U				
WG1790520-2	Continuing Calibrati	S NYTCL-8260	WATER	DONE	U				
WG1790520-3	Laboratory Control S	S NYTCL-8260	WATER	DONE	U				
WG1790520-3	Laboratory Control S	S NYCP51-8260	WATER	DACQ	U				
WG1790520-4	LCS Duplicate	S NYTCL-8260	WATER	DONE	U				
WG1790520-4	LCS Duplicate	S NYCP51-8260	WATER	DACQ	U				
WG1790520-5	Laboratory Method Bl	S NYCP51-8260	WATER	DACQ	U				
WG1790520-5	Laboratory Method Bl	S NYTCL-8260	WATER	DONE	U				
WG1790520-6	Matrix Spike	S NYCP51-8260	WATER	DACQ	U				
WG1790520-6	Matrix Spike	S NYTCL-8260	WATER	SEC	U				
WG1790520-7	Matrix Spike Duplica	S NYTCL-8260	WATER	SEC	U				
WG1790520-7	Matrix Spike Duplica	S NYCP51-8260	WATER	DACQ	U				
Comments:									
WG1790520-4	WG1790520-3								
WG1790520-6	L2332404-01								
WG1790520-7	L2332404-01								

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Jun 14 2023, 09:48 am

Work Group: WG1790988 for Department: 31 GC/MS - Volatiles

Created: 14-JUN-23 Due: Operator: MJV

Sample	Client ID	C Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L2331955-01	OUTFALL-001	S NYTCL-8260-BTEX	WATER	SEC	U	0620	0621	S0	Vial-B
L2332652-02	MW-10	S NYTCL-8260	WATER	DONE	U	0623	0614	3C	Vial-B
L2332738-01	MW-11S	S NYTCL-8260	WATER	SEC	U	0623	0616	S0	Vial-B
L2332738-02	MW-11D	S NYTCL-8260	WATER	DONE	U	0623	0616	S0	Vial-B
L2332738-03	MW-13S	S NYTCL-8260	WATER	DONE	U	0623	0616	S0	Vial-B
L2332738-04	MW-13D	S NYTCL-8260	WATER	DONE	U	0623	0616	S0	Vial-B
L2332738-05	MW-10S	S NYTCL-8260	WATER	DONE	U	0623	0616	S0	Vial-B
L2332738-06	MW-10D	S NYTCL-8260	WATER	DONE	U	0623	0616	S0	Vial-B
L2332738-07	TB_06092023	S NYTCL-8260	WATER	DONE	U	0623	0616	S0	Vial-B
WG1790988-1	MS BFB Tune Standard	S NYTCL-8260-BTEX	WATER	DONE	U				
WG1790988-1	MS BFB Tune Standard	S NYTCL-8260	WATER	DONE	U				
WG1790988-2	Continuing Calibrati	S NYTCL-8260-BTEX	WATER	DONE	U				
WG1790988-2	Continuing Calibrati	S NYTCL-8260	WATER	DONE	U				
WG1790988-3	Laboratory Control S	S NYTCL-8260-BTEX	WATER	DONE	U				
WG1790988-3	Laboratory Control S	S NYTCL-8260	WATER	DACQ	U				
WG1790988-4	LCS Duplicate	S NYTCL-8260-BTEX	WATER	DONE	U				
WG1790988-4	LCS Duplicate	S NYTCL-8260	WATER	DACQ	U				
WG1790988-5	Laboratory Method Bl	S NYTCL-8260-BTEX	WATER	DONE	U				
WG1790988-5	Laboratory Method Bl	S NYTCL-8260	WATER	DACQ	U				
Comments:									
WG1790988-4	WG1790988-3								

Inst: VOA122

BFB: V9622

Method

GC: 8260_water

Initials: TMS

IS/SS: V9651

Autosampler: 8260V122



Date: 04/25/23

ICAL: V9643C,V9659

Concentrator: 8260water

Run: N

ICV: V9649,V9628,V9630,V9657,V9658,V9629

QC: _____ Seq: _____

Vial	Data File	Sample	pH<2
1	V22230425NBF1	BFB TUNE	
1	V22230425N01	BLK	
2	V22230425N02	BLK	
3	V22230425N03	I8260STD0.19PPB	
4	V22230425N04	I8260STD0.19PPB	
5	V22230425N05	I8260STD0.5PPB	
6	V22230425N06	I8260STD0.5PPB	
7	V22230425N07	I8260STD2PPB	
8	V22230425N08	I8260STD2PPB	
9	V22230425N09	I8260STD10PPB	
10	V22230425N10	I8260STD30PPB	
11	V22230425N11	I8260STD80PPB	
12	V22230425N12	I8260STD120PPB	
13	V22230425N13	I8260STD200PPB	
14	V22230425N14	BLK	
15	V22230425N15	BLK	
16	V22230425N16	BLK	
17	V22230425N17	BLK	
18	V22230425N18	BLK	
19	V22230425N19	C8260STD10PPB	
20	V22230425N20	C8260STD10PPB	
21	V22230425N21	BLK	
22	V22230425N22	METHOD BLK	
23	V22230425N23	MDL 0.19PPB	
24	V22230425N24	MDL 0.5PPB	
25	V22230425N25	MDL 2PPB	
26	V22230425N26	BLK	
27	V22230425N27	8260 HEXANE	
28	V22230425N28	8260 HEXANE	
29	V22230425N29	BLK	

Inst: VOA122 BFB: V9721
 Initials: PID IS/SS: V9739
 Date: 06/12/23 ICAL: V9697D, V9738
 Run: A

Method
 GC: 8260_water
 Autosampler: 8260V122
 Concentrator: 8260water



QC: _____ Seq: _____

Vial	Data File	Sample		pH<2
1	V22230612ABF1	BFB TUNE	09:49	
1	V22230612A01	8260 CCAL	LCS	
2	V22230612A02	8260 CCAL	LCSD	
3	V22230612A03	8260 CCAL		
4	V22230612A04	BLK		
5	V22230612A05	METHOD BLK		
6	V22230612A06	L2331739-01,31,10,10,,A	8260	pH>2
7	V22230612A07	L2331739-02,31,10,10,,A	8260	pH>2
8	V22230612A08	L2331739-03,31,10,10,,A	8260	pH>2
9	V22230612A09	L2331739-04,31,10,10,,A	8260	pH>2
10	V22230612A10	L2331739-05,31,10,10,,A	8260	pH>2
11	V22230612A11	L2331196-01,31,10,10,,A	NYSTARS	pH<2
12	V22230612A12	L2332652-01,31,10,10,,A,R3C	NYSTARS	pH<2
13	V22230612A13	L2332668-02,31,10,10,,A,R3C	NYTCL/10	pH<2
14	V22230612A14	L2332668-03,31,10,10,,A,R3C	NYTCL/10	TB pH<2
15	V22230612A15	L2332159-03,31,10,10,,A	NY/PCE	TB pH<2
16	V22230612A16	L2332159-01,31,10,10,,A	NY/PCE	pH<2
17	V22230612A17	L2332159-02,31,10,10,,A	NY/PCE	pH<2
18	V22230612A18	L2332404-01,31,10,10,,A	NYTCL	pH<2
19	V22230612A19	L2332404-02,31,10,10,,A	NYTCL	pH<2
20	V22230612A20	L2332404-03,31,10,10,,A	NYTCL	pH<2
21	V22230612A21	L2332404-04,31,10,10,,A	NYTCL	pH<2
22	V22230612A22	L2332404-06,31,10,10,,A	NYTCL	pH<2
23	V22230612A23	L2332404-08,31,10,10,,A	NYTCL	pH<2
24	V22230612A24	L2332404-07,31,10,10,,A	NYTCL	TB pH<2
25	V22230612A25	L2332404-05,31,10,10,,A	NYTCL	pH<2
26	V22230612A26	L2332404-01MS,31,10,10,,A1	NYTCL	pH<2
27	V22230612A27	L2332404-01MSD,31,10,10,,A2	NYTCL	pH<2
28	V22230612A28	HSTD		
29	V22230612A29	BLK		
30	V22230612A30	BLK		

Inst: VOA122 BFB: V9721
 Initials: MJV IS/SS: V9739
 Date: 06/13/23 ICAL: V9697D,V9750
 Run: A

Method
 GC: 8260_water
 Autosampler: 8260V122
 Concentrator: 8260water



QC: _____ Seq: _____

Vial	Data File	Sample		pH<2
1	V22230613ABF1	BFB TUNE	06:34	
1	V22230613A01	8260 CCAL	QC FAILS	
2	V22230613A02	8260 CCAL	LCS	
3	V22230613A03	8260 CCAL	LCSD	
4	V22230613A04	BLK		
5	V22230613A05	8260 CCAL		
6	V22230613A06	BLK		
7	V22230613A07	METHOD BLK		
8	V22230613A08	L2332738-01,31,10,10,,A	NYTCL	pH<2
9	V22230613A09	L2332738-02,31,10,10,,A	NYTCL	pH<2
10	V22230613A10	L2332738-03,31,10,10,,A	NYTCL	pH<2
11	V22230613A11	L2332738-04,31,10,10,,A	NYTCL	pH<2
12	V22230613A12	L2332738-05,31,10,10,,A	NYTCL	pH<2
13	V22230613A13	L2332738-06,31,10,10,,A	NYTCL	pH<2
14	V22230613A14	L2332738-07,31,10,10,,A	NYTCL TB	pH<2
15	V22230613A15	L2331319-01,31,10,10,,A	PA SHORT	pH<2
16	V22230613A16	L2331319-02,31,10,10,,A	PA SHORT	pH<2
17	V22230613A17	L2331319-03,31,10,10,,A	PA SHORT	pH<2
18	V22230613A18	L2331319-05,31,10,10,,A	PA SHORT	pH<2
19	V22230613A19	L2331319-06,31,10,10,,A	PA SHORT	pH<2
20	V22230613A20	L2331319-07,31,10,10,,A	PA SHORT	pH<2
21	V22230613A21	L2331319-08,31,10,10,,A	PA SHORT	pH<2
22	V22230613A22	L2331319-09,31,10,10,,A	PA SHORT	pH<2
23	V22230613A23	L2331319-10,31,10,10,,A	PA SHORT	pH<2
24	V22230613A24	L2331319-11,31,10,10,,A	PA SHORT HS TB	pH<2
25	V22230613A25	L2331320-30,31,10,10,,A	PA/SHORT NBB	pH<2
26	V22230613A26	L2331955-01,31,10,10,,A	NYBTEX	pH<2
27	V22230613A27	L2332652-02,31,10,10,,A,R3C	NYSTARS	pH<2
28	V22230613A28	HSTD		
29	V22230613A29	BLK		
30	V22230613A30	BLK		



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Alpha Analytical

Laboratory Code: 11148

SDG Number: L2346073

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Project Name: 585 UNION STREET
Project Number: 14729

Lab Number: L2346073
Report Date: 08/11/23

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2346073-01	MW-9	WATER	585 UNION STREET	08/09/23 09:20	08/09/23
L2346073-02	MW-10	WATER	585 UNION STREET	08/09/23 08:30	08/09/23
L2346073-03	DUP	WATER	585 UNION STREET	08/09/23 08:30	08/09/23
L2346073-04	EQUIPMENT BLANK	WATER	585 UNION STREET	08/09/23 08:30	08/09/23
L2346073-05	TRIP BLANK	WATER	585 UNION STREET	08/09/23 00:00	08/09/23

Project Name: 585 UNION STREET
Project Number: 14729

Lab Number: L2346073
Report Date: 08/11/23

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: 585 UNION STREET
Project Number: 14729

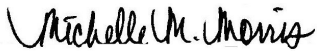
Lab Number: L2346073
Report Date: 08/11/23

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Report Date: 08/11/23

Title: Technical Director/Representative

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers



Project Name: 585 UNION STREET
Project Number: 14729

Lab Number: L2346073
Report Date: 08/11/23

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where

Report Format: DU Report with 'J' Qualifiers



Project Name: 585 UNION STREET
Project Number: 14729

Lab Number: L2346073
Report Date: 08/11/23

Data Qualifiers

the identification is based on a mass spectral library search.

- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were estimated.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers





Volatile Organics Instruments

Volatile Organics:

Instrument: Agilent 7890 GC/5975C MSD
 Trap: Supelco K Trap (VOACARB 3000)
 Concentrator: EST Encon (or equivalent)
 Autosampler: EST Centurion (or equivalent)
 Purge time: 11 min

Columns (length x ID x df):
 RTX-VMS 20m x 0.18mm x 1um
 RTX-VMS 30m x 0.25mm x 1.4um
 RTX-502.2 40m x 0.18mm x 1um

Volatile Organics: VPH

Instrument: Agilent 6890 (or equivalent)
 Trap: Supelco K Trap (VOACARB 3000)
 Concentrator: EST Encon (or equivalent)
 Autosampler: EST Centurion (or equivalent)

Column Type: Restek RTX 502.2
 Column Length: 105 Meters
 df: 3.00 um
 ID: 0.53mm

Volatile Organics: PIANO

Instrument: Agilent 7890 GC/5975C MSD
 Trap: Supelco K Trap (VOACARB 3000)
 Concentrator: Tekmar Velocity / EST Encon
 Autosampler: Varian Archon / EST Centurion
 Purge time: 11 min

Column Type: DB-VRX
 Column Length: 60 Meters
 df: 1.40 um
 ID: 0.25 mm
 Desorb: 1 min

Volatile Organics: Dissolved Gas

Instrument: Agilent 7890 (or equivalent) with FID/TCD

Column Type: Haysep S Column
 Column Length: 2 Meters packed
 (100/200 mesh)

Autosampler: LEAP Headspace

Purge time: 0.6 min

Volatile Organics in Air Instruments

Volatile Organics in Air:

Instruments: Agilent 6890 GC / 5975 MSD Shimadzu QP2010-SE / QP2020

Concentrator: Entech 7100A or 7200
 Autosampler: Entech 7016CA or 7016D

Column Type: Restek RTX-1
 Column Length: 60 Meters
 df: 1.00 um
 ID: 0.25 mm or 0.32 mm

Trap 1: Glass Bead: manufacturer-Entech: 20 cm packing material

Trap 2: Tenax: manufacturer-Entech: 20 cm packing material



Semivolatile Organics Instruments - Westborough

Semivolatile Organics (Acid/Base/Neutral Extractables):

Instrument: Agilent 5973N MSD	Injection volume: 1 μ L; 2 μ L LVI
Column Type: Restek RXI-5SILMS	df: 0.32 μ m
Column Length: 30 Meters	ID: 0.25 mm

Polynuclear Aromatic Hydrocarbons by 8270 SIM:

Instrument: Agilent 5973 MSD	Injection volume: 1 μ L; 2 μ L LVI
Column Type: Restek RXI-5SILMS	df: 0.25 μ m
Column Length: 30 Meters	ID: 0.25 mm

Pesticides/PCB/Herbicides:

Instrument: Agilent 6890 w/Dual Micro ECDs	Injection Volume: 1 μ L
Column A: Restek RTX-CL/STX-CL	df: 0.32
Column B: Restek RTX/STX-CLP Pesticide II	df: 0.25
Column Length: 30 Meters	ID: 0.32 mm

Petroleum/EPH:

Instrument: Agilent 6890 w/FID / HP 5890 w/ FID	Injection Volume: 1 μ L
Column: Restek RTX 5	df: 0.25
Column Length: 30 Meters	
ID: 0.32 mm	



Semivolatile Organic Instruments - Mansfield

Semivolatile Organics (ALK-PAH Extractables):

Instrument: Agilent 5973N / 5975 MSD	Injection volume: 1 ul
Column Type: ZB-5	df: 0.25 um
Column Length: 60 Meters	ID: 0.25 mm

Semivolatile Organics (8270):

Instrument: Agilent 5973N / 5975 MSD	Injection volume: 2 ul
Column Type: ZB-Semivolatiles	df: 0.25 um
Column Length: 30 Meters	ID: 0.25 mm

Semivolatile Organics (8270 SIM):

Instrument: Agilent 5973N / 5975 MSD	Injection volume: 3 ul
Column Type: ZB-5	df: 0.25 um
Column Length: 30 Meters	ID: 0.25 mm

Semivolatile Organics (1,4-Dioxane):

Instrument: Agilent 5973N / 5975 / 5977 MSD	Injection volume: 3 ul
Column Type: RTX-5	df: 0.25um, 0.18 um
Column Length: 30 Meters	ID: 0.25um, 0.18 mm

Semivolatile Organics (209 Congener):

Instrument: Agilent 5973N / 5975 MSD	Injection volume: 3 ul
Column Type: RTX-5, RTX-PCB	df: 0.25um, 0.18 um
Column Length: 60 Meters	ID: 0.25um, 0.18 mm

Semivolatile Organics (8081):

Instrument: Agilent 6890 / 7890	Injection volume: 1 ul
Column Type: RTX-5 / RTX-CLP II	df: 0.25 um
Column Length: 60 Meters	ID: 0.25 mm

Semivolatile Organics (8082):

Instrument: Agilent 6890 w/Dual Micro ECDs	Injection Volume: 1uL
Column A: Restek RTX-CL/STX-CL	df: 0.32
Column B: Restek RTX/STX-CLPPesticide II	df: 0.25
Column Length: 30 Meters	ID: 0.32 mm

Semivolatile Organics (SHC Extractables):

Instrument: Agilent 6890	Injection volume: 1 ul
Column Type: RTX-5	df: 0.25 um
Column Length: 60 Meters	ID: 0.25 mm



Sample Delivery Group Summary

Alpha Job Number : L2346073

Received : 09-AUG-2023

Reviewer : Majid Abdul

Account Name : Impact Environmental

Project Number : 14729

Project Name : 585 UNION STREET

Delivery Information

Samples Delivered By : Alpha Courier

Chain of Custody : Present

Cooler Information

Cooler	Seal/Seal#	Preservation	Temperature(°C)	Additional Information
A	Absent/	Ice	4.1	

Condition Information

1) All samples on COC received?	YES
2) Extra samples received?	NO
3) Are there any sample container discrepancies?	NO
4) Are there any discrepancies between COC & sample labels?	NO
5) Are samples in appropriate containers for requested analysis?	YES
6) Are samples properly preserved for requested analysis?	YES
7) Are samples within holding time for requested analysis?	YES
8) All sampling equipment returned?	NA

Volatile Organics/VPH

1) Reagent Water Vials Frozen by Client?	NO

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Aug 11 2023, 03:58 pm

Login Number: L2346073

Account: IMPENV Impact Environmental Project: 14729

Received: 09AUG23 Due Date: 11AUG23

Sample #	Client ID	Mat PR Collected
L2346073-01 MW-9		1 3B 09AUG23 09:20
8260: report CP51 list and include MTBE (report list built). STD TAT 3-5 days; 1-day, 50%; 2-day, 25% 8260: report CP51 list and include MTBE (report list built). 8270 SIM: report CP51 list include acenaphthylene (report list built) ASP-B Package Due Date: 08/11/23		
ASP-B, E&I - FEE, NYCP51-8260		
L2346073-02 MW-10		1 3B 09AUG23 08:30
8260: report CP51 list and include MTBE (report list built). STD TAT 3-5 days; 1-day, 50%; 2-day, 25% 8260: report CP51 list and include MTBE (report list built). 8270 SIM: report CP51 list include acenaphthylene (report list built) L2346073-02 MS L2346073-02 MSD Package Due Date: 08/11/23		
MS/MSD, NYCP51-8260		
L2346073-03 DUP		1 3B 09AUG23 08:30
8260: report CP51 list and include MTBE (report list built). STD TAT 3-5 days; 1-day, 50%; 2-day, 25% 8260: report CP51 list and include MTBE (report list built). 8270 SIM: report CP51 list include acenaphthylene (report list built) Package Due Date: 08/11/23		
NYCP51-8260		
L2346073-04 EQUIPMENT BLANK		1 3B 09AUG23 08:30
8260: report CP51 list and include MTBE (report list built). STD TAT 3-5 days; 1-day, 50%; 2-day, 25% 8260: report CP51 list and include MTBE (report list built). 8270 SIM: report CP51 list include acenaphthylene (report list built) Package Due Date: 08/11/23		
NYCP51-8260		
L2346073-05 TRIP BLANK		1 3B 09AUG23 00:00
8260: report CP51 list and include MTBE (report list built). STD TAT 3-5 days; 1-day, 50%; 2-day, 25% 8260: report CP51 list and include MTBE (report list built). 8270 SIM: report CP51 list include acenaphthylene (report list built) Package Due Date: 08/11/23		

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Aug 11 2023, 03:58 pm

Login Number: L2346073

Account: IMPENV Impact EnvironmentalProject: 14729

Received: 09AUG23 Due Date: 11AUG23

Sample #	Client ID	Mat PR Collected

NYCP51-8260		

Page 2

Logged By: Majid Abdul

Organics

GC/MS 8260

Analysis

Volatiles QC Summary

Surrogate Recovery Summary

Form 2

Volatiles

Client: Impact Environmental
Project Name: 585 UNION STREET

Lab Number: L2346073
Project Number: 14729
Matrix: Water

CLIENT ID (LAB SAMPLE NO.)	SMC1 DCA	SMC2 TOL	SMC3 BFB	SMC4 DBFM	TOT OUT
MW-9 (L2346073-01)	108	103	104	104	0
MW-10 (L2346073-02)	112	100	106	112	0
DUP (L2346073-03)	113	100	106	109	0
EQUIPMENT BLANK (L2346073-04)	110	99	101	110	0
TRIP BLANK (L2346073-05)	113	100	105	111	0
WG1814675-3LCS	103	102	107	101	0
WG1814675-4LCSD	105	101	106	103	0
WG1814675-5BLANK	106	100	104	107	0
MW-10MS	106	101	106	102	0
MW-10MSD	104	101	108	103	0

QC LIMITS

(70-130) DCA = 1,2-DICHLOROETHANE-D4
(70-130) TOL = TOLUENE-D8
(70-130) BFB = 4-BROMOFLUOROBENZENE
(70-130) DBFM = DIBROMOFLUOROMETHANE

* Values outside of QC limits

FORM II NYCP51-8260



Laboratory Control Sample Summary

Form 3

Volatiles

Client : Impact Environmental Lab Number : L2346073
 Project Name : 585 UNION STREET Project Number : 14729
 Matrix (Level) : WATER (LOW)
 LCS Sample ID : WG1814675-3 Analysis Date : 08/10/23 09:29 File ID : V22230810A03
 LCSD Sample ID : WG1814675-4 Analysis Date : 08/10/23 09:54 File ID : V22230810A04

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R			
Benzene	10	11	110	10	11	110	0	70-130	20
Toluene	10	11	110	10	11	110	0	70-130	20
Ethylbenzene	10	11	110	10	11	110	0	70-130	20
Methyl tert butyl ether	10	10	100	10	10	100	0	63-130	20
p/m-Xylene	20	22	110	20	23	115	4	70-130	20
o-Xylene	20	22	110	20	22	110	0	70-130	20
n-Butylbenzene	10	11	110	10	11	110	0	53-136	20
sec-Butylbenzene	10	11	110	10	11	110	0	70-130	20
tert-Butylbenzene	10	11	110	10	11	110	0	70-130	20
Isopropylbenzene	10	12	120	10	12	120	0	70-130	20
p-Isopropyltoluene	10	11	110	10	11	110	0	70-130	20
Naphthalene	10	10	100	10	10	100	0	70-130	20
n-Propylbenzene	10	12	120	10	11	110	9	69-130	20
1,3,5-Trimethylbenzene	10	11	110	10	11	110	0	64-130	20
1,2,4-Trimethylbenzene	10	11	110	10	11	110	0	70-130	20

Matrix Spike Sample Summary

Form 3

Volatiles

Client : Impact Environmental
 Project Name : 585 UNION STREET
 Client Sample ID : MW-10
 Lab Sample ID : L2346073-02
 Matrix Spike : WG1814675-6
 Matrix Spike Dup : WG1814675-7

Lab Number : L2346073
 Project Number : 14729
 Matrix (Level) : WATER (LOW)
 Analysis Date : 08/10/23 11:57
 MS Analysis Date : 08/10/23 19:22
 MSD Analysis Date : 08/10/23 19:47

Parameter	Sample Conc. (ug/l)	Matrix Spike Sample			Matrix Spike Duplicate			RPD	Recovery Limits	RPD Limit
		Spike Added (ug/l)	Spike Conc. (ug/l)	%R	Spike Added (ug/l)	Spike Conc. (ug/l)	%R			
Benzene	5.3	10	17	117	10	17	117	0	70-130	20
Toluene	ND	10	11	110	10	11	110	0	70-130	20
Ethylbenzene	ND	10	11	110	10	11	110	0	70-130	20
Methyl tert butyl ether	ND	10	10	100	10	10	100	0	63-130	20
p/m-Xylene	ND	20	22	110	20	22	110	0	70-130	20
o-Xylene	ND	20	23	115	20	23	115	0	70-130	20
n-Butylbenzene	ND	10	11	110	10	11	110	0	53-136	20
sec-Butylbenzene	ND	10	11	110	10	11	110	0	70-130	20
tert-Butylbenzene	ND	10	11	110	10	11	110	0	70-130	20
Isopropylbenzene	1.1J	10	13	130	10	13	130	0	70-130	20
p-Isopropyltoluene	ND	10	11	110	10	11	110	0	70-130	20
Naphthalene	1.4J	10	13	130	10	13	130	0	70-130	20
n-Propylbenzene	ND	10	11	110	10	11	110	0	69-130	20
1,3,5-Trimethylbenzene	ND	10	11	110	10	11	110	0	64-130	20
1,2,4-Trimethylbenzene	ND	10	11	110	10	11	110	0	70-130	20



**Method Blank Summary
Form 4
Volatiles**

Client	: Impact Environmental	Lab Number	: L2346073
Project Name	: 585 UNION STREET	Project Number	: 14729
Lab Sample ID	: WG1814675-5	Lab File ID	: V22230810A06
Instrument ID	: VOA122		
Matrix	: WATER	Analysis Date	: 08/10/23 10:43

Client Sample No.	Lab Sample ID	Analysis Date
WG1814675-3LCS	WG1814675-3	08/10/23 09:29
WG1814675-4LCSD	WG1814675-4	08/10/23 09:54
MW-9	L2346073-01	08/10/23 11:32
MW-10	L2346073-02	08/10/23 11:57
DUP	L2346073-03	08/10/23 12:21
EQUIPMENT BLANK	L2346073-04	08/10/23 12:46
TRIP BLANK	L2346073-05	08/10/23 13:11
MW-10MS	WG1814675-6	08/10/23 19:22
MW-10MSD	WG1814675-7	08/10/23 19:47

Instrument Performance Check (Tune) Summary

Form 5

Volatiles

Bromofluorobenzene (BFB)

Client : Impact Environmental	Lab Number : L2346073
Project Name : 585 UNION STREET	Project Number : 14729
Instrument ID : VOA122	Analysis Date : 07/26/23 15:48
Tune Standard : WG1808429-1	Tune File ID : V22230726NBF1_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	22.9
75	30.0 - 80.0% of mass 95	49.7
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.4
173	Less than 2.0% of mass 174	0.5 (.6)1
174	Greater than 50.0% of mass 95	83
175	5.0 - 9.0% of mass 174	6.4 (7.8)1
176	Greater than 95.0% but less than 101% of mass	80.1 (96.6)1
177	5.0 - 9.0% of mass 176	5.2 (6.5)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
STD0.19PPB	R1722735-2	V22230726N03	07/26/23 17:01
STD0.5PPB	R1722735-3	V22230726N05	07/26/23 17:50
STD2PPB	R1722735-1	V22230726N07	07/26/23 18:40
STD10PPB	R1722735-7	V22230726N09	07/26/23 19:30
STD30PPB	R1722735-5	V22230726N10	07/26/23 19:55
STD80PPB	R1722735-6	V22230726N11	07/26/23 20:20
STD120PPB	R1722735-4	V22230726N12	07/26/23 20:45
STD200PPB	R1722735-9	V22230726N13	07/26/23 21:10
Correlation Data Summary	R1722735-8	V22230726N18	07/26/23 23:15
ICV Quant Report	R1722735-8	V22230726N18	07/26/23 23:15

Instrument Performance Check (Tune) Summary

Form 5

Volatiles

Bromofluorobenzene (BFB)

Client : Impact Environmental	Lab Number : L2346073
Project Name : 585 UNION STREET	Project Number : 14729
Instrument ID : VOA122	Analysis Date : 08/10/23 08:27
Tune Standard : WG1814675-1	Tune File ID : V22230810ABF1_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	21.9
75	30.0 - 80.0% of mass 95	49.9
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.4 (.5)1
174	Greater than 50.0% of mass 95	81
175	5.0 - 9.0% of mass 174	6.3 (7.8)1
176	Greater than 95.0% but less than 101% of mass	78.8 (97.3)1
177	5.0 - 9.0% of mass 176	5.4 (6.9)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
WG1814675-2CCAL	WG1814675-2	V22230810A03	08/10/23 09:29
WG1814675-3LCS	WG1814675-3	V22230810A03	08/10/23 09:29
WG1814675-4LCSD	WG1814675-4	V22230810A04	08/10/23 09:54
WG1814675-5BLANK	WG1814675-5	V22230810A06	08/10/23 10:43
MW-9	L2346073-01	V22230810A08	08/10/23 11:32
MW-10	L2346073-02	V22230810A09	08/10/23 11:57
DUP	L2346073-03	V22230810A10	08/10/23 12:21
EQUIPMENT BLANK	L2346073-04	V22230810A11	08/10/23 12:46
TRIP BLANK	L2346073-05	V22230810A12	08/10/23 13:11
WG1814675-6MS	WG1814675-6	V22230810A27	08/10/23 19:22
WG1814675-7MSD	WG1814675-7	V22230810A28	08/10/23 19:47

Internal Standard Area and RT Summary

Form 8a

Volatiles

Client : Impact Environmental
 Project Name : 585 UNION STREET
 Instrument ID : VOA122
 Sample No : WG1814675-2

Lab Number : L2346073
 Project Number : 14729
 Analysis Date : 08/10/23 09:29:00
 Lab File ID : V22230810A03

	Fluorobenzene (IS)		Chlorobenzene-d5		1,4-Dichlorobenzene-D4	
	Area	RT	Area	RT	Area	RT
WG1814675-2	397815	6.28	393438	9.87	214484	12.50
Upper Limit	795630	6.78	786876	10.37	428968	13.00
Lower Limit	198908	5.78	196719	9.37	107242	12.00
Sample ID						
WG1814675-3 LCS	397815	6.28	393438	9.87	214484	12.50
WG1814675-4 LCSD	382870	6.28	390122	9.87	216726	12.50
WG1814675-5 BLANK	364856	6.28	389452	9.87	218499	12.50
MW-9	357397	6.28	368407	9.87	209467	12.50
MW-10	325807	6.29	360159	9.87	204319	12.50
DUP	340898	6.28	369175	9.87	214373	12.50
EQUIPMENT BLANK	347587	6.28	382185	9.87	217618	12.50
TRIP BLANK	355325	6.28	395896	9.87	218035	12.50
MW-10 MS	369394	6.28	377483	9.87	207754	12.50
MW-10 MSD	382169	6.28	391075	9.87	214818	12.50

Area Upper Limit = +100% of internal standard area
 Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT
 RT Lower Limit = -0.50 minutes of internal standard RT

* Values outside of QC limits





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Volatile Organics - EPA 8260D (WATER)

Holding Time: 14 days
Container/Sample Preservation: 3 - Vial HCl preserved

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
Methylene chloride	75-09-2	3	0.678	ug/l	70-130	20	70-130	20	20			
1,1-Dichloroethane	75-34-3	0.75	0.21	ug/l	70-130	20	70-130	20	20			
Chloroform	67-66-3	0.75	0.222	ug/l	70-130	20	70-130	20	20			
Carbon tetrachloride	56-23-5	0.5	0.134	ug/l	63-132	20	63-132	20	20			
1,2-Dichloropropane	78-87-5	1.75	0.137	ug/l	70-130	20	70-130	20	20			
Dibromochloromethane	124-48-1	0.5	0.149	ug/l	63-130	20	63-130	20	20			
1,1,2-Trichloroethane	79-00-5	0.75	0.144	ug/l	70-130	20	70-130	20	20			
Tetrachloroethene	127-18-4	0.5	0.181	ug/l	70-130	20	70-130	20	20			
Chlorobenzene	108-90-7	0.5	0.178	ug/l	75-130	25	75-130	25	25			
Trichlorofluoromethane	75-69-4	2.5	0.161	ug/l	62-150	20	62-150	20	20			
1,2-Dichloroethane	107-06-2	0.5	0.132	ug/l	70-130	20	70-130	20	20			
1,1,1-Trichloroethane	71-55-6	0.5	0.158	ug/l	67-130	20	67-130	20	20			
Bromodichloromethane	75-27-4	0.5	0.192	ug/l	67-130	20	67-130	20	20			
trans-1,3-Dichloropropene	10061-02-6	0.5	0.164	ug/l	70-130	20	70-130	20	20			
cis-1,3-Dichloropropene	10061-01-5	0.5	0.144	ug/l	70-130	20	70-130	20	20			
1,3-Dichloropropene, Total	542-75-6	0.5	0.144	ug/l				20	20			
1,1-Dichloropropene	563-58-6	2.5	0.24	ug/l	70-130	20	70-130	20	20			
Bromoform	75-25-2	2	0.248	ug/l	54-136	20	54-136	20	20			
1,1,2,2-Tetrachloroethane	79-34-5	0.5	0.167	ug/l	67-130	20	67-130	20	20			
Benzene	71-43-2	0.5	0.159	ug/l	70-130	25	70-130	25	25			
Toluene	108-88-3	0.75	0.203	ug/l	70-130	25	70-130	25	25			
Ethylbenzene	100-41-4	0.5	0.167	ug/l	70-130	20	70-130	20	20			
Chloromethane	74-87-3	2.5	0.2	ug/l	64-130	20	64-130	20	20			
Bromomethane	74-83-9	1	0.256	ug/l	39-139	20	39-139	20	20			
Vinyl chloride	75-01-4	1	0.0714	ug/l	55-140	20	55-140	20	20			
Chloroethane	75-00-3	1	0.134	ug/l	55-138	20	55-138	20	20			
1,1-Dichloroethene	75-35-4	0.5	0.169	ug/l	61-145	25	61-145	25	25			
trans-1,2-Dichloroethene	156-60-5	0.75	0.163	ug/l	70-130	20	70-130	20	20			
1,2-Dichloroethene (total)	540-59-0	0.5	0.163	ug/l				20	20			
Trichloroethene	79-01-6	0.5	0.175	ug/l	70-130	25	70-130	25	25			
1,2-Dichlorobenzene	95-50-1	2.5	0.184	ug/l	70-130	20	70-130	20	20			
1,3-Dichlorobenzene	541-73-1	2.5	0.186	ug/l	70-130	20	70-130	20	20			
1,4-Dichlorobenzene	106-46-7	2.5	0.187	ug/l	70-130	20	70-130	20	20			
Methyl tert butyl ether	1634-04-4	1	0.166	ug/l	63-130	20	63-130	20	20			
p/m-Xylene	179601-23-1	1	0.332	ug/l	70-130	20	70-130	20	20			
o-Xylene	95-47-6	1	0.392	ug/l	70-130	20	70-130	20	20			
Xylene (Total)	1330-20-7	1	0.33	ug/l				20	20			
cis-1,2-Dichloroethene	156-59-2	0.5	0.187	ug/l	70-130	20	70-130	20	20			
Dibromomethane	74-95-3	5	0.363	ug/l	70-130	20	70-130	20	20			
1,4-Dichlorobutane	110-56-5	5	0.464	ug/l	70-130	20	70-130	20	20			
1,2,3-Trichloropropane	96-18-4	5	0.176	ug/l	64-130	20	64-130	20	20			
Styrene	100-42-5	1	0.359	ug/l	70-130	20	70-130	20	20			

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Sol/Solids only)
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Volatile Organics - EPA 8260D (WATER)

Holding Time: 14 days
Container/Sample Preservation: 3 - Vial HCl preserved

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
Dichlorodifluoromethane	75-71-8	5	0.244	ug/l	36-147	20	36-147	20	20			
Acetone	67-64-1	5	1.46	ug/l	58-148	20	58-148	20	20			
Carbon disulfide	75-15-0	5	0.299	ug/l	51-130	20	51-130	20	20			
2-Butanone	78-93-3	5	1.94	ug/l	63-138	20	63-138	20	20			
Vinyl acetate	108-05-4	5	0.311	ug/l	70-130	20	70-130	20	20			
4-Methyl-2-pentanone	108-10-1	5	0.416	ug/l	59-130	20	59-130	20	20			
2-Hexanone	591-78-6	5	0.515	ug/l	57-130	20	57-130	20	20			
Ethyl methacrylate	97-63-2	5	0.606	ug/l	70-130	20	70-130	20	20			
Acrylonitrile	107-13-1	5	0.43	ug/l	70-130	20	70-130	20	20			
Bromochloromethane	74-97-5	2.5	0.152	ug/l	70-130	20	70-130	20	20			
Tetrahydrofuran	109-99-9	5	0.525	ug/l	58-130	20	58-130	20	20			
2,2-Dichloropropane	594-20-7	2.5	0.204	ug/l	63-133	20	63-133	20	20			
1,2-Dibromoethane	106-93-4	2	0.193	ug/l	70-130	20	70-130	20	20			
1,3-Dichloropropane	142-28-9	2.5	0.212	ug/l	70-130	20	70-130	20	20			
1,1,1,2-Tetrachloroethane	630-20-6	0.5	0.164	ug/l	64-130	20	64-130	20	20			
Bromobenzene	108-86-1	2.5	0.152	ug/l	70-130	20	70-130	20	20			
n-Butylbenzene	104-51-8	0.5	0.192	ug/l	53-136	20	53-136	20	20			
sec-Butylbenzene	135-98-8	0.5	0.181	ug/l	70-130	20	70-130	20	20			
tert-Butylbenzene	98-06-6	2.5	0.196	ug/l	70-130	20	70-130	20	20			
o-Chlorotoluene	95-49-8	2.5	0.215	ug/l	70-130	20	70-130	20	20			
p-Chlorotoluene	106-43-4	2.5	0.185	ug/l	70-130	20	70-130	20	20			
1,2-Dibromo-3-chloropropane	96-12-8	2.5	0.353	ug/l	41-144	20	41-144	20	20			
Hexachlorobutadiene	87-68-3	0.5	0.217	ug/l	63-130	20	63-130	20	20			
Isopropylbenzene	98-82-8	0.5	0.187	ug/l	70-130	20	70-130	20	20			
p-Isopropyltoluene	99-87-6	0.5	0.188	ug/l	70-130	20	70-130	20	20			
Naphthalene	91-20-3	2.5	0.216	ug/l	70-130	20	70-130	20	20			
n-Propylbenzene	103-65-1	0.5	0.173	ug/l	69-130	20	69-130	20	20			
1,2,3-Trichlorobenzene	87-61-6	2.5	0.234	ug/l	70-130	20	70-130	20	20			
1,2,4-Trichlorobenzene	120-82-1	2.5	0.22	ug/l	70-130	20	70-130	20	20			
1,3,5-Trimethylbenzene	108-67-8	2.5	0.217	ug/l	64-130	20	64-130	20	20			
1,2,4-Trimethylbenzene	95-63-6	2.5	0.191	ug/l	70-130	20	70-130	20	20			
trans-1,4-Dichloro-2-butene	110-57-6	2.5	0.213	ug/l	70-130	20	70-130	20	20			
Ethyl ether	60-29-7	2.5	0.163	ug/l	59-134	20	59-134	20	20			
1,2-Dichloroethane-d4	17060-07-0									70-130		
Toluene-d8	2037-26-5									70-130		
4-Bromofluorobenzene	460-00-4									70-130		
Dibromofluoromethane	1868-53-7									70-130		

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VOCs - EPA 8260D/5035 High & Low (SOIL)

Holding Time: 14 days
Container/Sample Preservation: 1 - 1 Vial MeOH/2 Vial Water

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
Methylene chloride	75-09-2	5	2.29	ug/kg	70-130	30	70-130	30	30			
1,1-Dichloroethane	75-34-3	1	0.145	ug/kg	70-130	30	70-130	30	30			
Chloroform	67-66-3	1.5	0.14	ug/kg	70-130	30	70-130	30	30			
Carbon tetrachloride	56-23-5	1	0.23	ug/kg	70-130	30	70-130	30	30			
1,2-Dichloropropane	78-87-5	1	0.125	ug/kg	70-130	30	70-130	30	30			
Dibromochloromethane	124-48-1	1	0.14	ug/kg	70-130	30	70-130	30	30			
1,1,2-Trichloroethane	79-00-5	1	0.267	ug/kg	70-130	30	70-130	30	30			
Tetrachloroethene	127-18-4	0.5	0.196	ug/kg	70-130	30	70-130	30	30			
Chlorobenzene	108-90-7	0.5	0.127	ug/kg	70-130	30	70-130	30	30			
Trichlorofluoromethane	75-69-4	4	0.695	ug/kg	70-139	30	70-139	30	30			
1,2-Dichloroethane	107-06-2	1	0.257	ug/kg	70-130	30	70-130	30	30			
1,1,1-Trichloroethane	71-55-6	0.5	0.167	ug/kg	70-130	30	70-130	30	30			
Bromodichloromethane	75-27-4	0.5	0.109	ug/kg	70-130	30	70-130	30	30			
trans-1,3-Dichloropropene	10061-02-6	1	0.273	ug/kg	70-130	30	70-130	30	30			
cis-1,3-Dichloropropene	10061-01-5	0.5	0.158	ug/kg	70-130	30	70-130	30	30			
1,3-Dichloropropene, Total	542-75-6	0.5	0.158	ug/kg				30	30			
1,1-Dichloropropene	563-58-6	0.5	0.159	ug/kg	70-130	30	70-130	30	30			
Bromoform	75-25-2	4	0.246	ug/kg	70-130	30	70-130	30	30			
1,1,2,2-Tetrachloroethane	79-34-5	0.5	0.166	ug/kg	70-130	30	70-130	30	30			
Benzene	71-43-2	0.5	0.166	ug/kg	70-130	30	70-130	30	30			
Toluene	108-88-3	1	0.543	ug/kg	70-130	30	70-130	30	30			
Ethylbenzene	100-41-4	1	0.141	ug/kg	70-130	30	70-130	30	30			
Chloromethane	74-87-3	4	0.932	ug/kg	52-130	30	52-130	30	30			
Bromomethane	74-83-9	2	0.581	ug/kg	57-147	30	57-147	30	30			
Vinyl chloride	75-01-4	1	0.335	ug/kg	67-130	30	67-130	30	30			
Chloroethane	75-00-3	2	0.452	ug/kg	50-151	30	50-151	30	30			
1,1-Dichloroethene	75-35-4	1	0.238	ug/kg	65-135	30	65-135	30	30			
trans-1,2-Dichloroethene	156-60-5	1.5	0.137	ug/kg	70-130	30	70-130	30	30			
Trichloroethene	79-01-6	0.5	0.137	ug/kg	70-130	30	70-130	30	30			
1,2-Dichlorobenzene	95-50-1	2	0.144	ug/kg	70-130	30	70-130	30	30			
1,3-Dichlorobenzene	541-73-1	2	0.148	ug/kg	70-130	30	70-130	30	30			
1,4-Dichlorobenzene	106-46-7	2	0.171	ug/kg	70-130	30	70-130	30	30			
Methyl tert butyl ether	1634-04-4	2	0.201	ug/kg	66-130	30	66-130	30	30			
p/m-Xylene	179601-23-1	2	0.56	ug/kg	70-130	30	70-130	30	30			
o-Xylene	95-47-6	1	0.291	ug/kg	70-130	30	70-130	30	30			
Xylene (Total)	1330-20-7	1	0.291	ug/kg				30	30			
cis-1,2-Dichloroethene	156-59-2	1	0.175	ug/kg	70-130	30	70-130	30	30			
1,2-Dichloroethene (total)	540-59-0	1	0.137	ug/kg				30	30			
Dibromomethane	74-95-3	2	0.238	ug/kg	70-130	30	70-130	30	30			
1,4-Dichlorobutane	110-56-5	10	0.226	ug/kg	70-130	30	70-130	30	30			
1,2,3-Trichloropropane	96-18-4	2	0.127	ug/kg	68-130	30	68-130	30	30			
Styrene	100-42-5	1	0.196	ug/kg	70-130	30	70-130	30	30			

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VOCs - EPA 8260D/5035 High & Low (SOIL)

Holding Time: 14 days
Container/Sample Preservation: 1 - 1 Vial MeOH/2 Vial Water

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
Dichlorodifluoromethane	75-71-8	10	0.915	ug/kg	30-146	30	30-146	30	30			
Acetone	67-64-1	25	10	ug/kg	54-140	30	54-140	30	30			
Carbon disulfide	75-15-0	10	4.55	ug/kg	59-130	30	59-130	30	30			
2-Butanone	78-93-3	10	2.22	ug/kg	70-130	30	70-130	30	30			
Vinyl acetate	108-05-4	10	2.15	ug/kg	70-130	30	70-130	30	30			
4-Methyl-2-pentanone	108-10-1	10	1.28	ug/kg	70-130	30	70-130	30	30			
2-Hexanone	591-78-6	10	1.18	ug/kg	70-130	30	70-130	30	30			
Ethyl methacrylate	97-63-2	10	1.58	ug/kg	70-130	30	70-130	30	30			
Acrylonitrile	107-13-1	4	1.15	ug/kg	70-130	30	70-130	30	30			
Bromochloromethane	74-97-5	2	0.205	ug/kg	70-130	30	70-130	30	30			
Tetrahydrofuran	109-99-9	4	1.59	ug/kg	66-130	30	66-130	30	30			
2,2-Dichloropropane	594-20-7	2	0.202	ug/kg	70-130	30	70-130	30	30			
1,2-Dibromoethane	106-93-4	1	0.279	ug/kg	70-130	30	70-130	30	30			
1,3-Dichloropropane	142-28-9	2	0.167	ug/kg	69-130	30	69-130	30	30			
1,1,1,2-Tetrachloroethane	630-20-6	0.5	0.132	ug/kg	70-130	30	70-130	30	30			
Bromobenzene	108-86-1	2	0.145	ug/kg	70-130	30	70-130	30	30			
n-Butylbenzene	104-51-8	1	0.167	ug/kg	70-130	30	70-130	30	30			
sec-Butylbenzene	135-98-8	1	0.146	ug/kg	70-130	30	70-130	30	30			
tert-Butylbenzene	98-06-6	2	0.118	ug/kg	70-130	30	70-130	30	30			
o-Chlorotoluene	95-49-8	2	0.191	ug/kg	70-130	30	70-130	30	30			
p-Chlorotoluene	106-43-4	2	0.108	ug/kg	70-130	30	70-130	30	30			
1,2-Dibromo-3-chloropropane	96-12-8	3	0.998	ug/kg	68-130	30	68-130	30	30			
Hexachlorobutadiene	87-68-3	4	0.169	ug/kg	67-130	30	67-130	30	30			
Isopropylbenzene	98-82-8	1	0.109	ug/kg	70-130	30	70-130	30	30			
p-Isopropyltoluene	99-87-6	1	0.109	ug/kg	70-130	30	70-130	30	30			
Naphthalene	91-20-3	4	0.65	ug/kg	70-130	30	70-130	30	30			
n-Propylbenzene	103-65-1	1	0.171	ug/kg	70-130	30	70-130	30	30			
1,2,3-Trichlorobenzene	87-61-6	2	0.322	ug/kg	70-130	30	70-130	30	30			
1,2,4-Trichlorobenzene	120-82-1	2	0.272	ug/kg	70-130	30	70-130	30	30			
1,3,5-Trimethylbenzene	108-67-8	2	0.193	ug/kg	70-130	30	70-130	30	30			
1,2,4-Trimethylbenzene	95-63-6	2	0.334	ug/kg	70-130	30	70-130	30	30			
trans-1,4-Dichloro-2-butene	110-57-6	5	1.42	ug/kg	70-130	30	70-130	30	30			
Ethyl ether	60-29-7	2	0.341	ug/kg	67-130	30	67-130	30	30			
1,2-Dichloroethane-d4	17060-07-0										70-130	
Toluene-d8	2037-26-5										70-130	
4-Bromofluorobenzene	460-00-4										70-130	
Dibromofluoromethane	1868-53-7										70-130	

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.



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Volatiles Sample Data

Results Summary

Form 1

Volatile Organics by GC/MS

Client : Impact Environmental
 Project Name : 585 UNION STREET
 Lab ID : L2346073-01
 Client ID : MW-9
 Sample Location : 585 UNION STREET
 Sample Matrix : WATER
 Analytical Method : 1,8260D
 Lab File ID : V22230810A08
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2346073
 Project Number : 14729
 Date Collected : 08/09/23 09:20
 Date Received : 08/09/23
 Date Analyzed : 08/10/23 11:32
 Dilution Factor : 1
 Analyst : PID
 Instrument ID : VOA122
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
71-43-2	Benzene	0.92	0.50	0.16	
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	1.8	2.5	0.70	J
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	ND	2.5	0.70	U
103-65-1	n-Propylbenzene	ND	2.5	0.70	U
108-67-8	1,3,5-Trimethylbenzene	ND	2.5	0.70	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.70	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Impact Environmental
 Project Name : 585 UNION STREET
 Lab ID : L2346073-02
 Client ID : MW-10
 Sample Location : 585 UNION STREET
 Sample Matrix : WATER
 Analytical Method : 1,8260D
 Lab File ID : V22230810A09
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2346073
 Project Number : 14729
 Date Collected : 08/09/23 08:30
 Date Received : 08/09/23
 Date Analyzed : 08/10/23 11:57
 Dilution Factor : 1
 Analyst : PID
 Instrument ID : VOA122
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
71-43-2	Benzene	5.3	0.50	0.16	
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	1.1	2.5	0.70	J
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	1.4	2.5	0.70	J
103-65-1	n-Propylbenzene	ND	2.5	0.70	U
108-67-8	1,3,5-Trimethylbenzene	ND	2.5	0.70	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.70	U

Results Summary

Form 1

Volatile Organics by GC/MS

Client : Impact Environmental
 Project Name : 585 UNION STREET
 Lab ID : L2346073-03
 Client ID : DUP
 Sample Location : 585 UNION STREET
 Sample Matrix : WATER
 Analytical Method : 1,8260D
 Lab File ID : V22230810A10
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2346073
 Project Number : 14729
 Date Collected : 08/09/23 08:30
 Date Received : 08/09/23
 Date Analyzed : 08/10/23 12:21
 Dilution Factor : 1
 Analyst : PID
 Instrument ID : VOA122
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
71-43-2	Benzene	5.4	0.50	0.16	
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	1.2	2.5	0.70	J
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	1.5	2.5	0.70	J
103-65-1	n-Propylbenzene	ND	2.5	0.70	U
108-67-8	1,3,5-Trimethylbenzene	ND	2.5	0.70	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.70	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Impact Environmental
 Project Name : 585 UNION STREET
 Lab ID : L2346073-04
 Client ID : EQUIPMENT BLANK
 Sample Location : 585 UNION STREET
 Sample Matrix : WATER
 Analytical Method : 1,8260D
 Lab File ID : V22230810A11
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2346073
 Project Number : 14729
 Date Collected : 08/09/23 08:30
 Date Received : 08/09/23
 Date Analyzed : 08/10/23 12:46
 Dilution Factor : 1
 Analyst : PID
 Instrument ID : VOA122
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	ND	2.5	0.70	U
103-65-1	n-Propylbenzene	ND	2.5	0.70	U
108-67-8	1,3,5-Trimethylbenzene	ND	2.5	0.70	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.70	U

Results Summary

Form 1

Volatile Organics by GC/MS

Client : Impact Environmental
 Project Name : 585 UNION STREET
 Lab ID : L2346073-05
 Client ID : TRIP BLANK
 Sample Location : 585 UNION STREET
 Sample Matrix : WATER
 Analytical Method : 1,8260D
 Lab File ID : V22230810A12
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2346073
 Project Number : 14729
 Date Collected : 08/09/23 00:00
 Date Received : 08/09/23
 Date Analyzed : 08/10/23 13:11
 Dilution Factor : 1
 Analyst : PID
 Instrument ID : VOA122
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	ND	2.5	0.70	U
103-65-1	n-Propylbenzene	ND	2.5	0.70	U
108-67-8	1,3,5-Trimethylbenzene	ND	2.5	0.70	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.70	U



Results Summary

Form 1

Volatile Organics by GC/MS

Client : Impact Environmental
 Project Name : 585 UNION STREET
 Lab ID : WG1814675-5
 Client ID : WG1814675-5BLANK
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8260D
 Lab File ID : V22230810A06
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2346073
 Project Number : 14729
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 08/10/23 10:43
 Dilution Factor : 1
 Analyst : PID
 Instrument ID : VOA122
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	ND	2.5	0.70	U
103-65-1	n-Propylbenzene	ND	2.5	0.70	U
108-67-8	1,3,5-Trimethylbenzene	ND	2.5	0.70	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.70	U

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230810A\
 Data File : V22230810A08.D
 Acq On : 10 Aug 2023 11:32 am
 Operator : VOA122:PID
 Sample : L2346073-01,31,10,10,,A,R3B
 Misc : WG1814675,ICAL20205 (Sig #1); WG,ICAL20205 (Sig #2)
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 10 19:32:54 2023
 Quant Method : K:\VOA122\2023\230810A\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:11:40 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA122\2023\230810A\V22230810A03.D
 Sub List : 8260-NYCP51 - NYCP51

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

Internal Standards						
1) Fluorobenzene	6.277	96	357397	10.000	ug/L	0.00
Standard Area 1 = 397815			Recovery	=	89.84%	
62) Chlorobenzene-d5	9.866	117	368407	10.000	ug/L	0.00
Standard Area 1 = 393438			Recovery	=	93.64%	
83) 1,4-Dichlorobenzene-d4	12.501	152	209467	10.000	ug/L	0.00
Standard Area 1 = 214484			Recovery	=	97.66%	
System Monitoring Compounds						
38) Dibromofluoromethane	5.454	113	129347	10.425	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	104.25%	
46) 1,2-Dichloroethane-d4	5.989	65	132448	10.799	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	107.99%	
63) Toluene-d8	8.002	98	458271	10.250	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	102.50%	
87) 4-Bromofluorobenzene	11.317	95	181831	10.438	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	104.38%	
Target Compounds						
						Qvalue
21) Methyl tert-butyl ether	3.962	73	371	N.D.		
44) Benzene	5.856	78	17937	0.919	ug/L #	89
64) Toluene	8.060	92	509	N.D.		
78) Ethylbenzene	9.921	91	2765	0.102	ug/L #	80
80) p/m Xylene	10.112	106	1578	0.149	ug/L #	74
81) o Xylene	10.635	106	593	N.D.		
86) Isopropylbenzene	11.000	105	51304	1.850	ug/L	98
89) n-Propylbenzene	11.468	91	16321	0.495	ug/L	98
94) 1,3,5-Trimethylbenzene	11.682	105	529	N.D.		
98) tert-Butylbenzene	12.014	119	3078	0.140	ug/L #	78
101) 1,2,4-Trimethylbenzene	12.098	105	2709	0.122	ug/L	92
102) sec-Butylbenzene	12.209	105	12668	0.437	ug/L #	75
103) p-Isopropyltoluene	12.355	119	1765	0.072	ug/L #	70
107) n-Butylbenzene	12.780	91	2087	0.104	ug/L #	83
114) Naphthalene	14.624	128	1525	0.105	ug/L	100

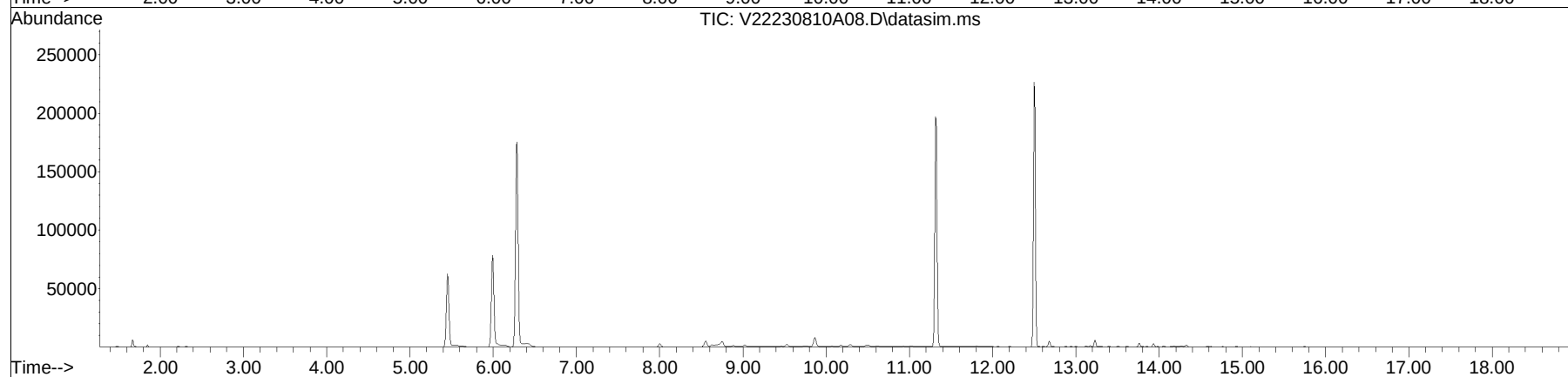
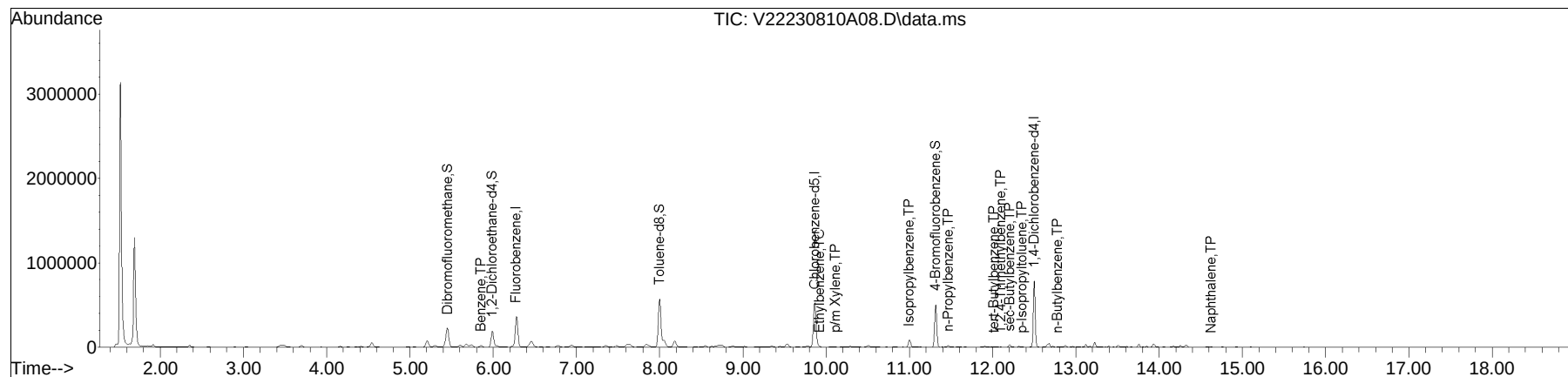
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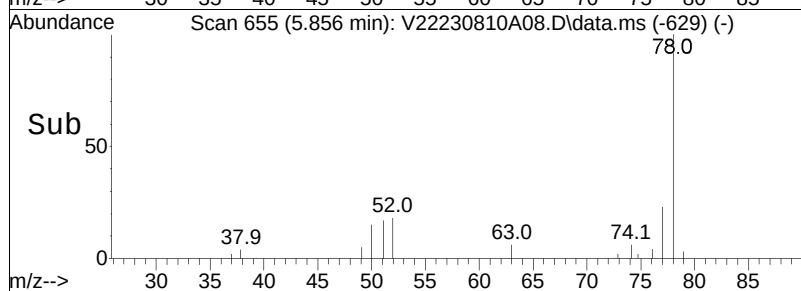
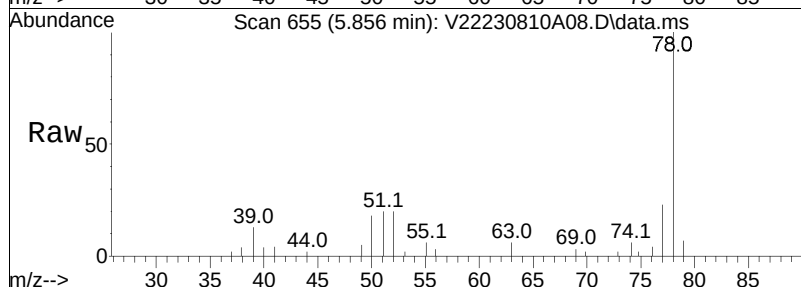
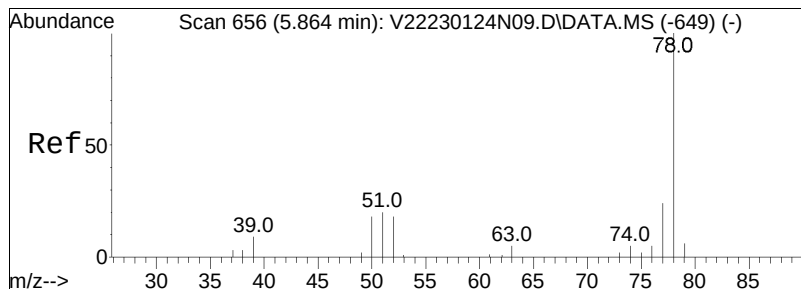
Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230810A\
 Data File : V22230810A08.D
 Acq On : 10 Aug 2023 11:32 am
 Operator : VOA122:PID
 Sample : L2346073-01,31,10,10,,A,R3B
 Misc : WG1814675,ICAL20205 (Sig #1); WG,ICAL20205 (Sig #2)
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 10 19:32:54 2023
 Quant Method : K:\VOA122\2023\230810A\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:11:40 2023
 Response via : Initial Calibration

Sub List : 8260-NYCP51 - NYCP5130810A\V22230810A03.D•





#44

Benzene

Concen: 0.92 ug/L

RT: 5.856 min Scan# 655

Delta R.T. 0.000 min

Lab File: V22230810A08.D

Acq: 10 Aug 2023 11:32 am

Tgt Ion: 78 Resp: 17937

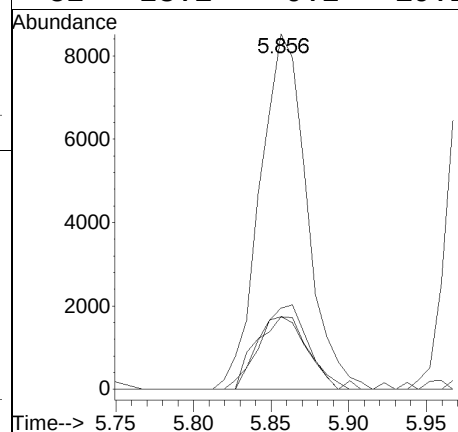
Ion Ratio Lower Upper

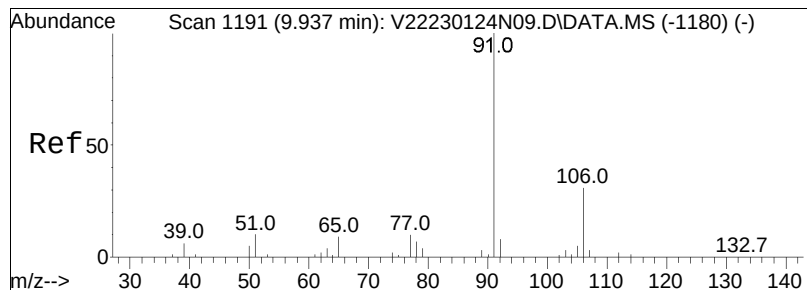
78 100

77 23.4 15.4 32.0

51 22.4 9.8 20.4#

52 23.1 9.2 19.2#





#78

Ethylbenzene

Concen: 0.10 ug/L

RT: 9.921 min Scan# 1189

Delta R.T. 0.000 min

Lab File: V22230810A08.D

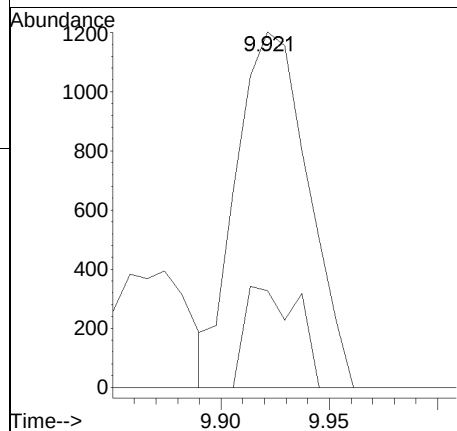
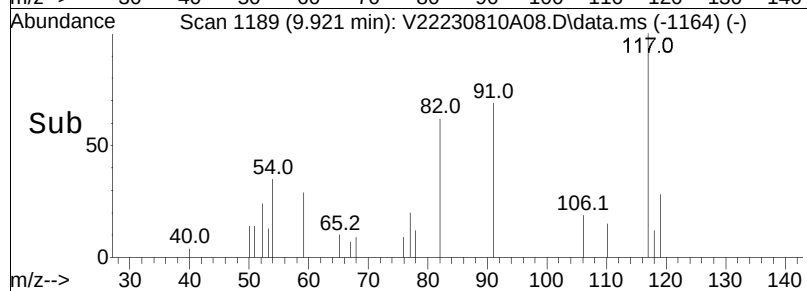
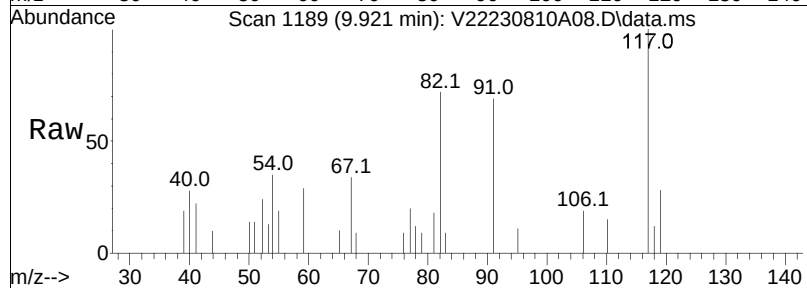
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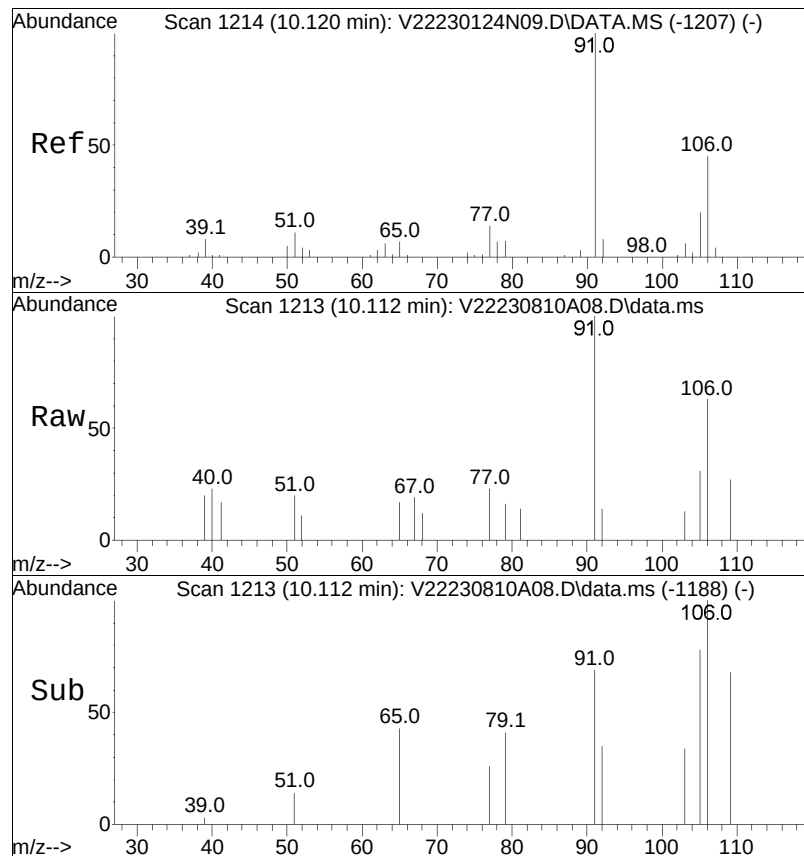
Tgt Ion: 91 Resp: 2765

Ion Ratio Lower Upper

91 100

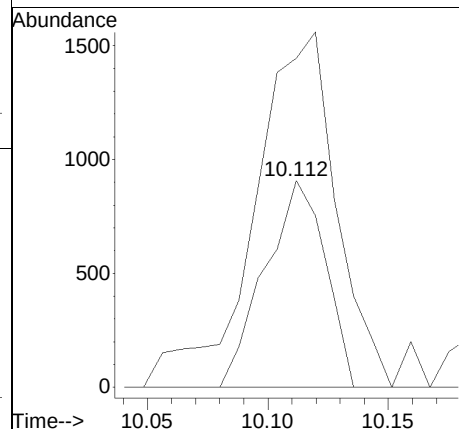
106 20.9 25.8 38.6#

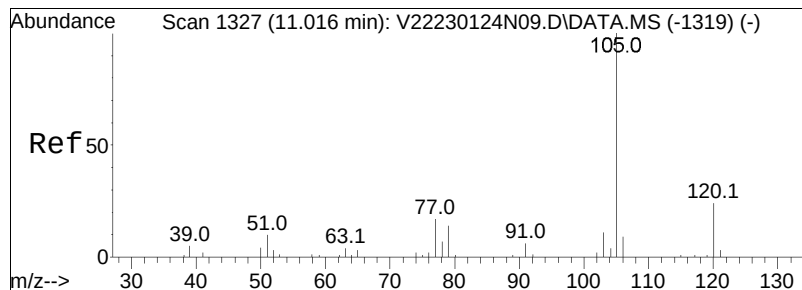




#80
 p/m Xylene
 Concen: 0.15 ug/L
 RT: 10.112 min Scan# 1213
 Delta R.T. 0.001 min
 Lab File: V22230810A08.D
 Acq: 10 Aug 2023 11:32 am

Tgt	Ion	Ratio	Lower	Upper
106	100			
91	234.1	156.0	234.0#	





#86

Isopropylbenzene

Concen: 1.85 ug/L

RT: 11.000 min Scan# 1325

Delta R.T. -0.008 min

Lab File: V22230810A08.D

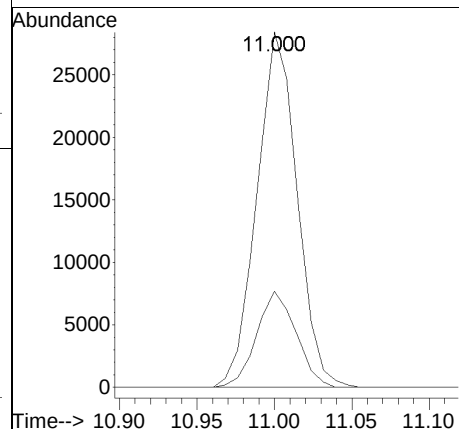
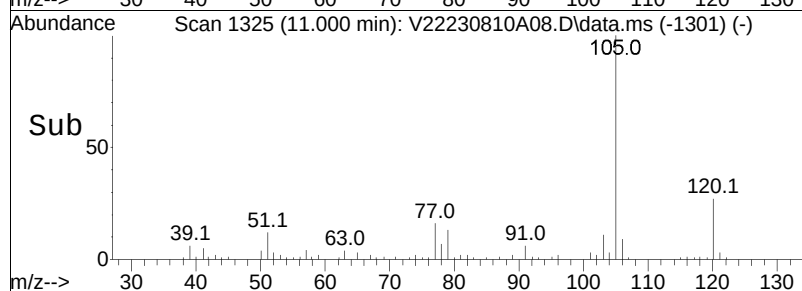
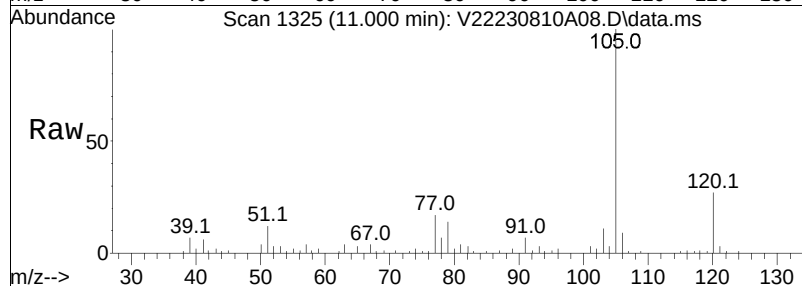
Acq: 10 Aug 2023 11:32 am

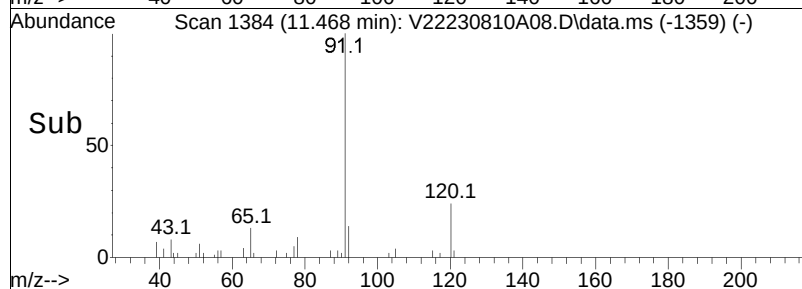
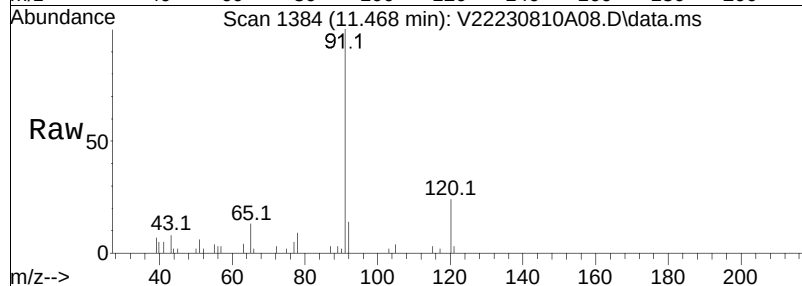
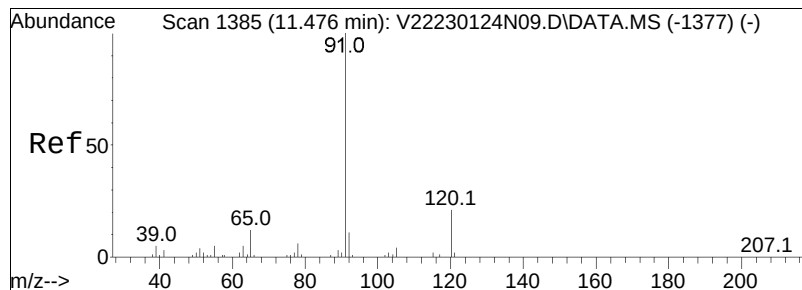
Tgt Ion:105 Resp: 51304

Ion Ratio Lower Upper

105 100

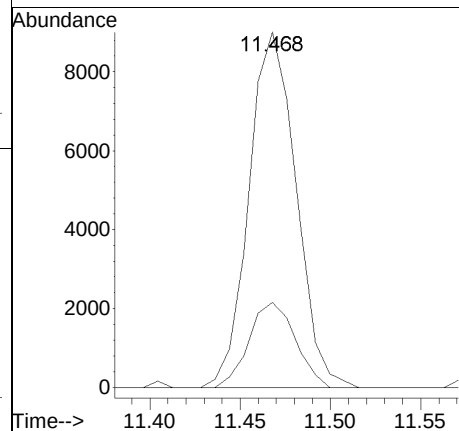
120 26.6 7.7 47.7

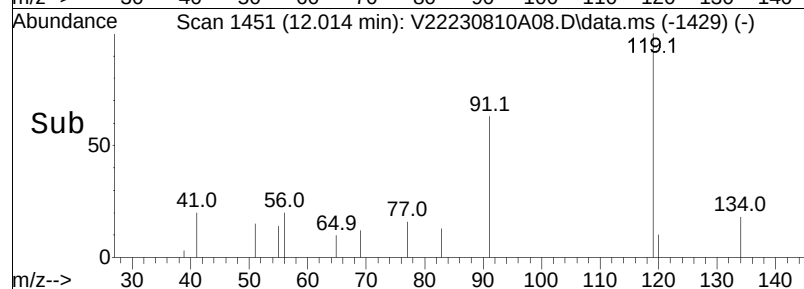
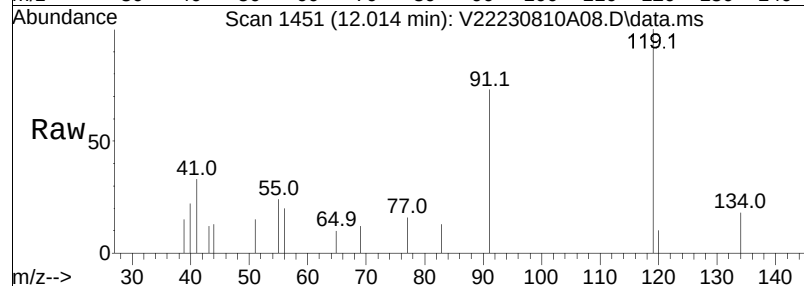
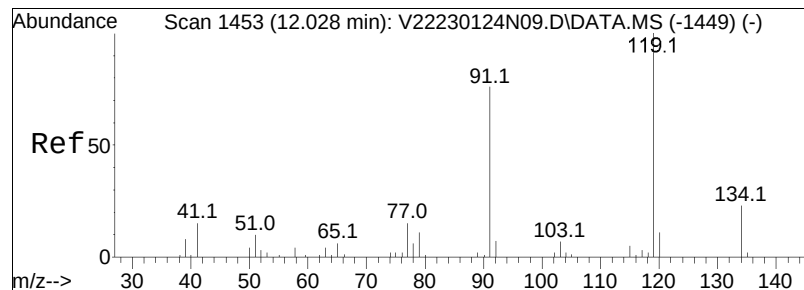




#89
 n-Propylbenzene
 Concen: 0.49 ug/L
 RT: 11.468 min Scan# 1384
 Delta R.T. -0.000 min
 Lab File: V22230810A08.D
 Acq: 10 Aug 2023 11:32 am

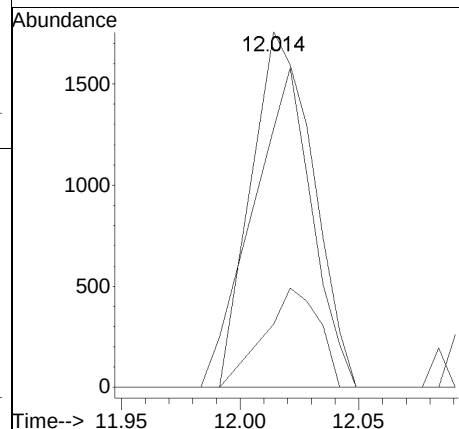
Tgt	Ion	Resp	Lower	Upper
91	100	16321		
120	23.5	19.5	29.3	

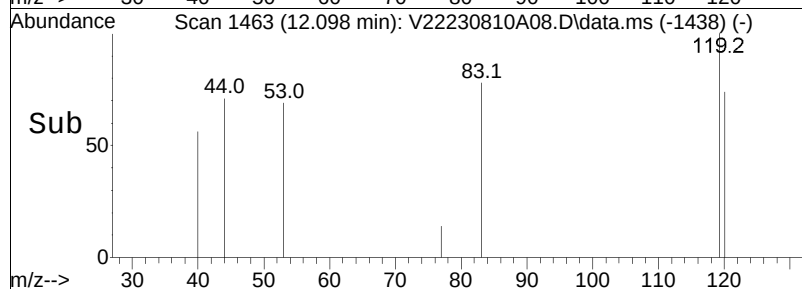
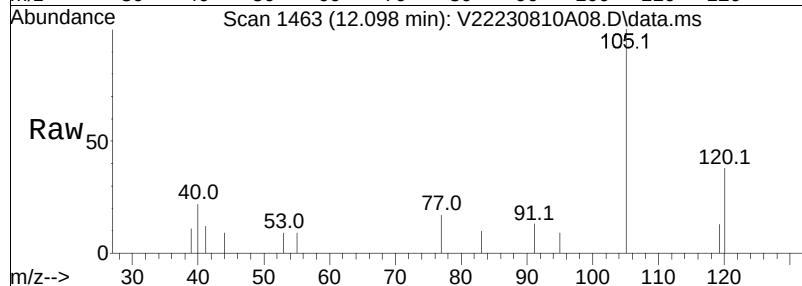
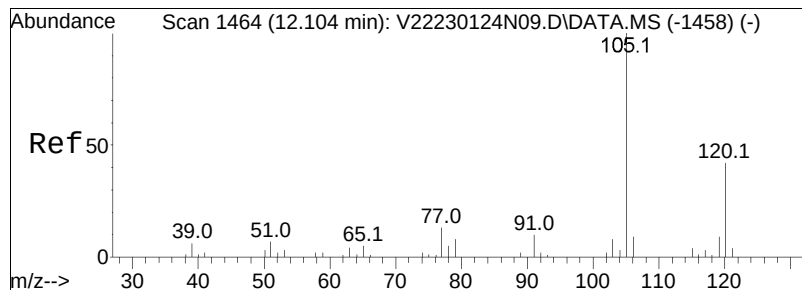




#98
 tert-Butylbenzene
 Concen: 0.14 ug/L
 RT: 12.014 min Scan# 1451
 Delta R.T. -0.007 min
 Lab File: V22230810A08.D
 Acq: 10 Aug 2023 11:32 am

Tgt Ion	Ratio	Lower	Upper
119	100		
91	85.1	50.2	75.4#
134	28.0	20.8	31.2





#101

1,2,4-Trimethylbenzene

Concen: 0.12 ug/L

RT: 12.098 min Scan# 1463

Delta R.T. 0.001 min

Lab File: V22230810A08.D

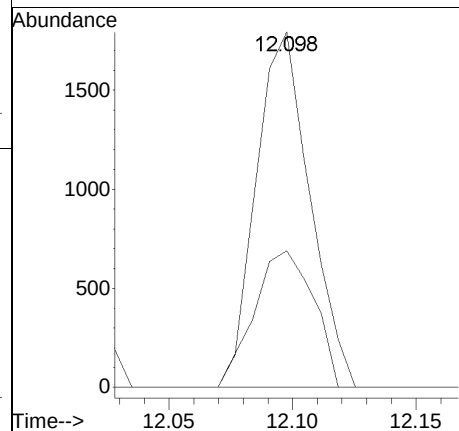
Acq: 10 Aug 2023 11:32 am

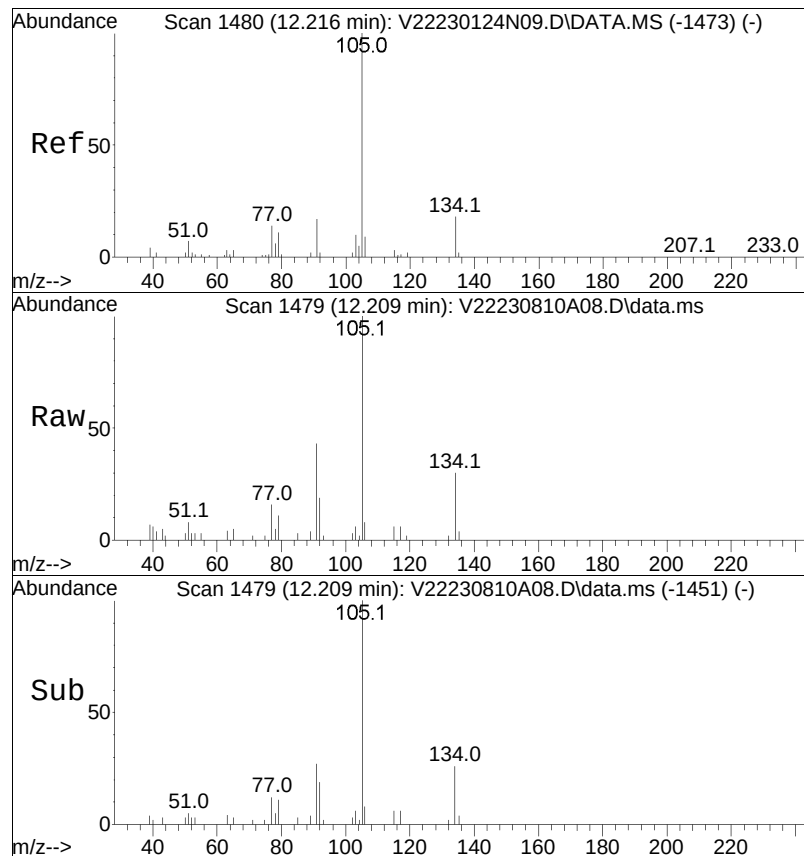
Tgt Ion:105 Resp: 2709

Ion Ratio Lower Upper

105 100

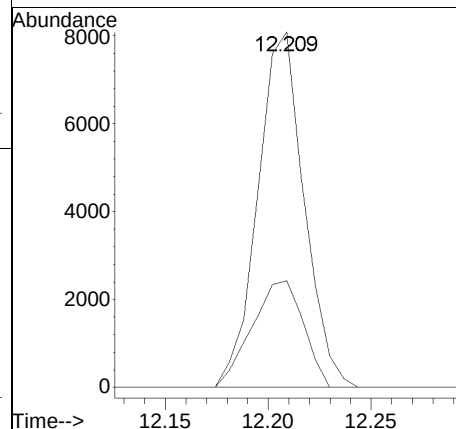
120 42.6 38.5 57.7

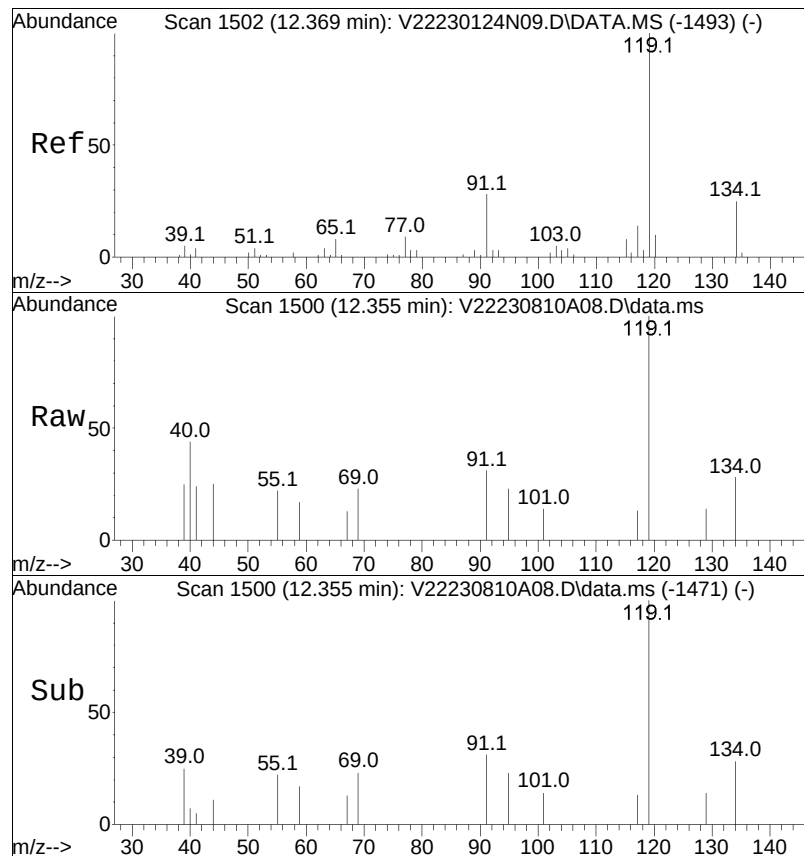




#102
 sec-Butylbenzene
 Concen: 0.44 ug/L
 RT: 12.209 min Scan# 1479
 Delta R.T. -0.000 min
 Lab File: V22230810A08.D
 Acq: 10 Aug 2023 11:32 am

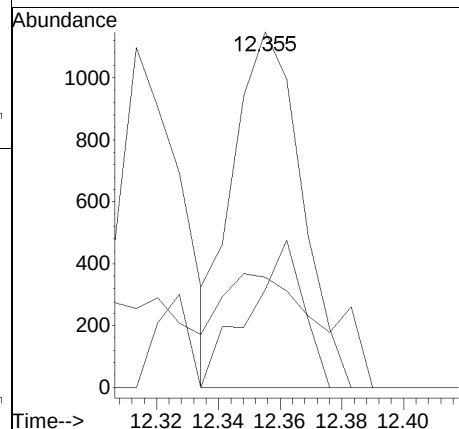
Tgt Ion	Ratio	Lower	Upper
105	100		
134	33.3	13.9	28.9#

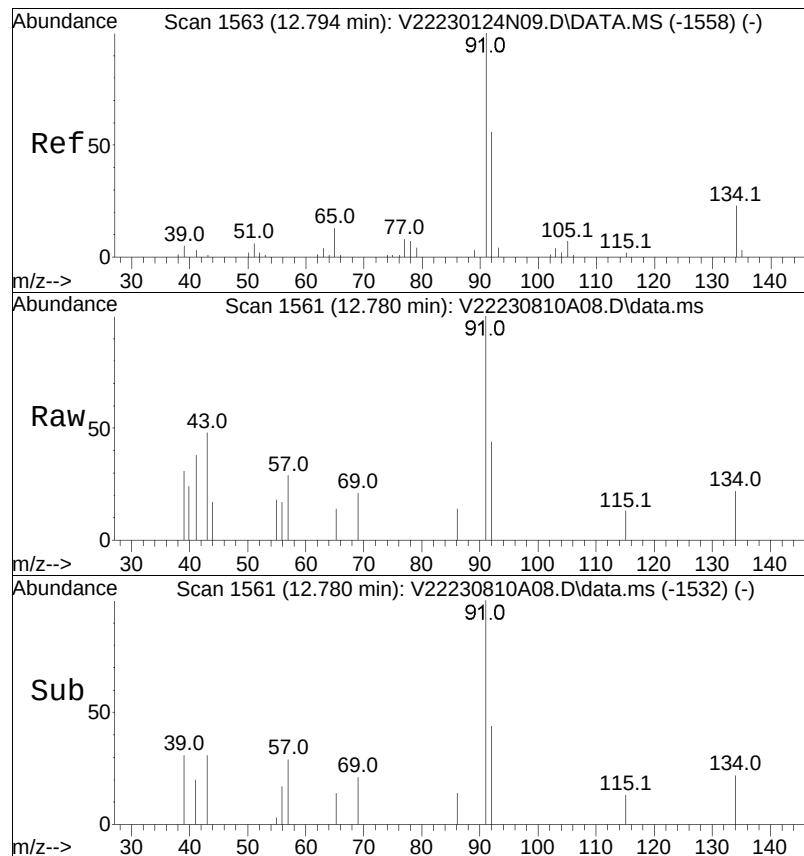




#103
 p-Isopropyltoluene
 Concen: 0.07 ug/L
 RT: 12.355 min Scan# 1500
 Delta R.T. 0.000 min
 Lab File: V22230810A08.D
 Acq: 10 Aug 2023 11:32 am

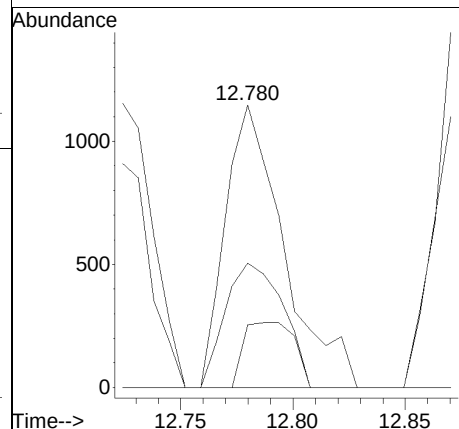
Tgt Ion	Ratio	Lower	Upper
119	100		
134	33.1	17.7	36.7
91	47.3	14.1	29.3

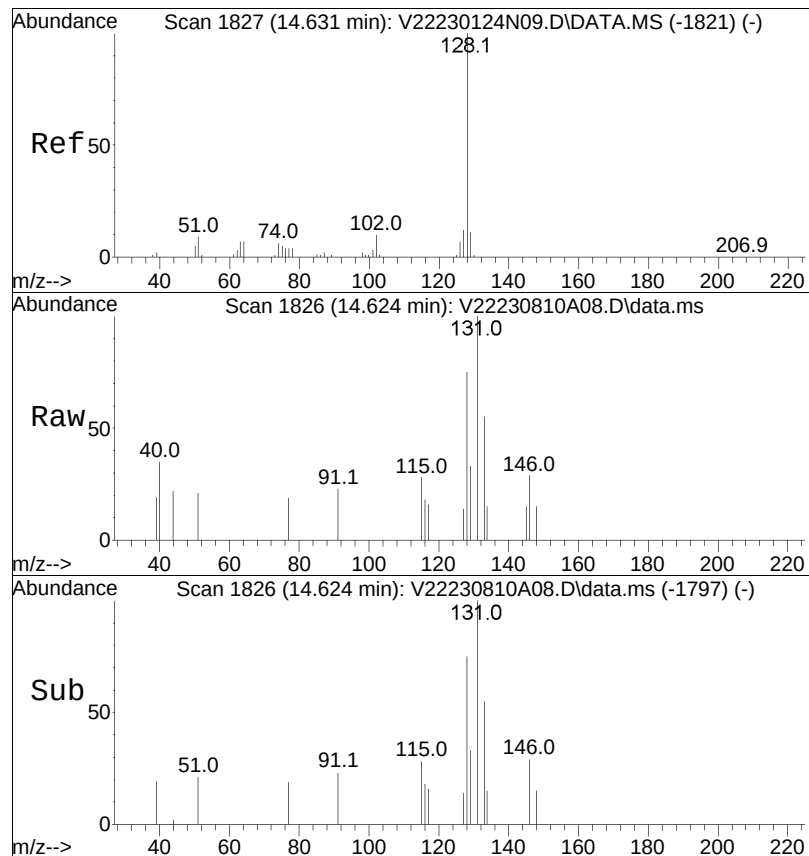




#107
 n-Butylbenzene
 Concen: 0.10 ug/L
 RT: 12.780 min Scan# 1561
 Delta R.T. 0.001 min
 Lab File: V22230810A08.D
 Acq: 10 Aug 2023 11:32 am

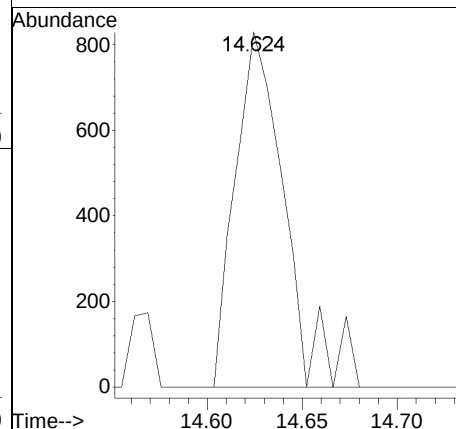
Tgt Ion:	91	Resp:	2087
Ion Ratio	Lower	Upper	
91	100		
92	43.4	44.6	66.8#
134	19.8	22.9	34.3#





#114
Naphthalene
Concen: 0.11 ug/L
RT: 14.624 min Scan# 1826
Delta R.T. 0.000 min
Lab File: V22230810A08.D
Acq: 10 Aug 2023 11:32 am

Tgt Ion:128 Resp: 1525



Manual Integration Report

Data Path : K:\V0A122\2023\230810A\ QMethod : V122_230726N_8260.m
Data File : V22230810A08.D Operator : V0A122:PID
Date Inj'd : 8/10/2023 11:32 am Instrument : V0A122
Sample : L2346073-01,31,10,10,,A,R3Quant Date : 8/10/2023 7:32 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230810A\
 Data File : V22230810A09.D
 Acq On : 10 Aug 2023 11:57 am
 Operator : VOA122:PID
 Sample : L2346073-02,31,10,10,,A,R3B
 Misc : WG1814675,ICAL20205 (Sig #1); WG,ICAL20205 (Sig #2)
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 10 19:37:26 2023
 Quant Method : K:\VOA122\2023\230810A\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:11:40 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA122\2023\230810A\V22230810A03.D
 Sub List : 8260-NYCP51 - NYCP51

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

Internal Standards						
1) Fluorobenzene	6.285	96	325807	10.000	ug/L	0.00
Standard Area 1 = 397815			Recovery	=	81.90%	
62) Chlorobenzene-d5	9.866	117	360159	10.000	ug/L	0.00
Standard Area 1 = 393438			Recovery	=	91.54%	
83) 1,4-Dichlorobenzene-d4	12.501	152	204319	10.000	ug/L	0.00
Standard Area 1 = 214484			Recovery	=	95.26%	
System Monitoring Compounds						
38) Dibromofluoromethane	5.447	113	126455	11.181	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	111.81%	
46) 1,2-Dichloroethane-d4	5.989	65	125512	11.226	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	112.26%	
63) Toluene-d8	8.002	98	435609	9.966	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	99.66%	
87) 4-Bromofluorobenzene	11.317	95	179362	10.556	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	105.56%	
Target Compounds						
						Qvalue
21) Methyl tert-butyl ether	0.000		0	N.D.		
44) Benzene	5.856	78	95130	5.349	ug/L #	91
64) Toluene	8.053	92	1229	0.090	ug/L	93
78) Ethylbenzene	9.921	91	414	N.D.		
80) p/m Xylene	10.112	106	781	0.076	ug/L #	7
81) o Xylene	10.627	106	5484	0.557	ug/L	100
86) Isopropylbenzene	11.000	105	30889	1.142	ug/L	100
89) n-Propylbenzene	11.468	91	4595	0.143	ug/L #	86
94) 1,3,5-Trimethylbenzene	11.682	105	620	N.D.		
98) tert-Butylbenzene	12.021	119	4711	0.220	ug/L #	85
101) 1,2,4-Trimethylbenzene	12.098	105	5164	0.239	ug/L	97
102) sec-Butylbenzene	12.202	105	3618	0.128	ug/L	85
103) p-Isopropyltoluene	12.355	119	2410M3	0.101	ug/L	
107) n-Butylbenzene	12.780	91	1170	N.D.		
114) Naphthalene	14.624	128	20253	1.436	ug/L	100

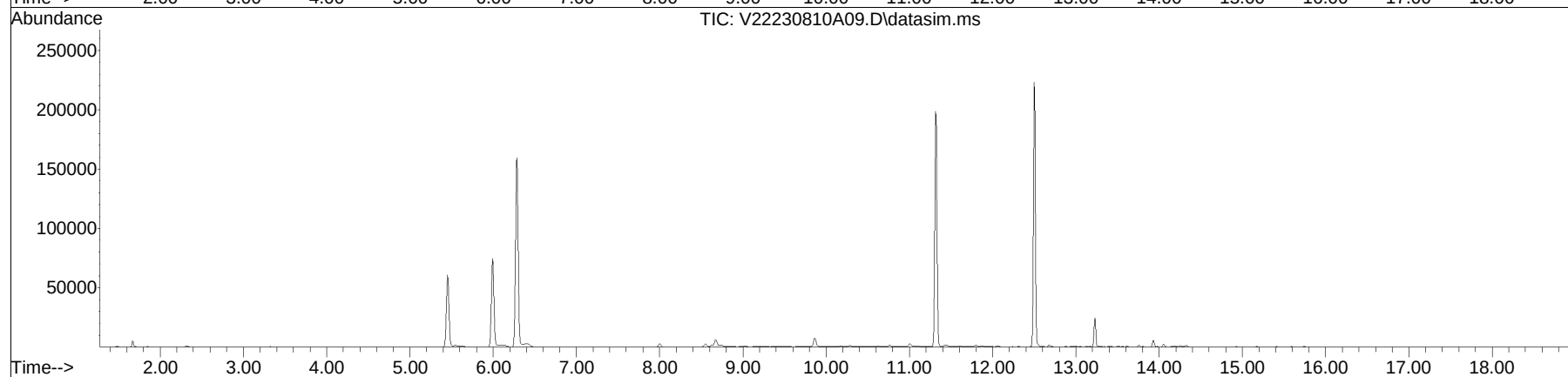
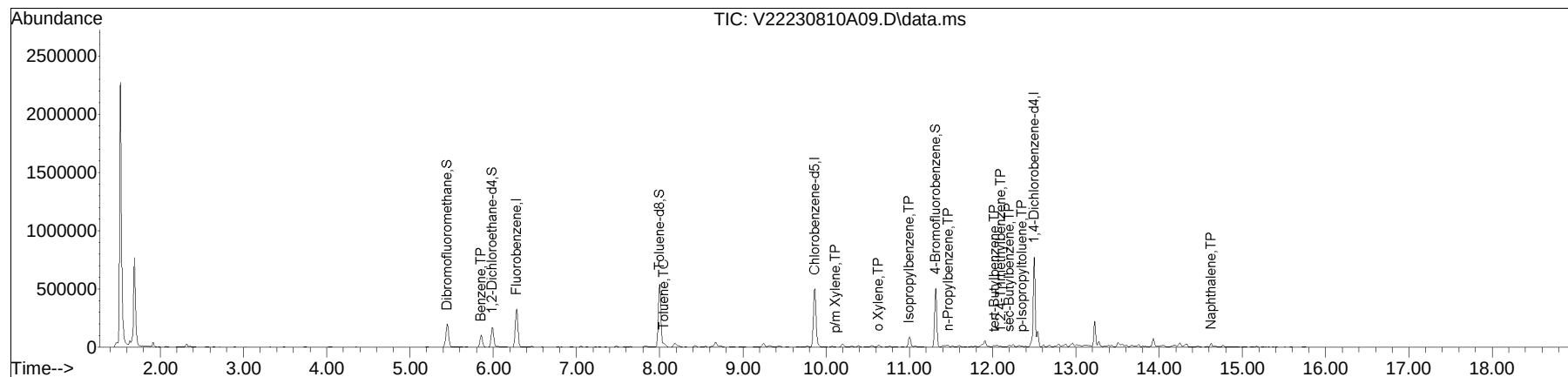
(#) = qualifier out of range (m) = manual integration (+) = signals summed

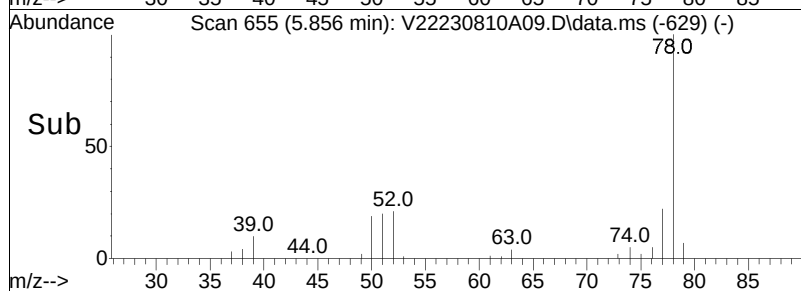
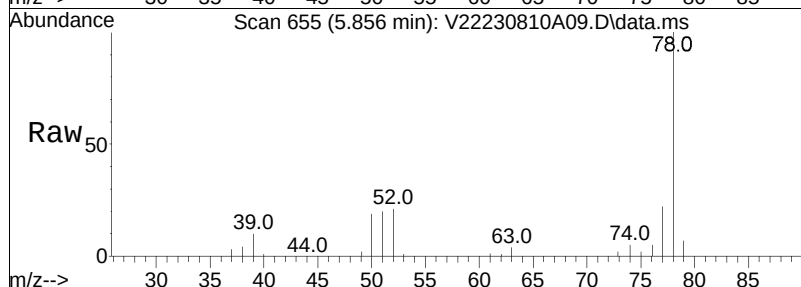
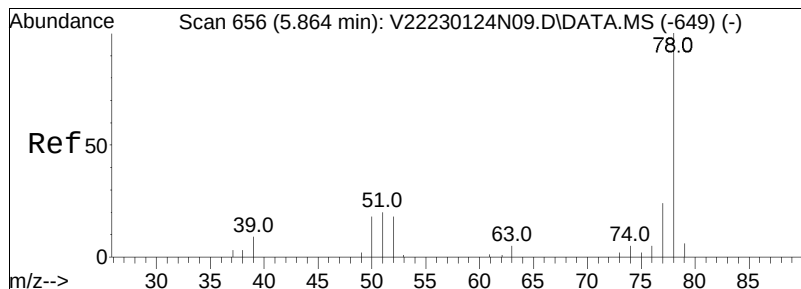
Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230810A\
 Data File : V22230810A09.D
 Acq On : 10 Aug 2023 11:57 am
 Operator : VOA122:PID
 Sample : L2346073-02,31,10,10,,A,R3B
 Misc : WG1814675,ICAL20205 (Sig #1); WG,ICAL20205 (Sig #2)
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 10 19:37:26 2023
 Quant Method : K:\VOA122\2023\230810A\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:11:40 2023
 Response via : Initial Calibration

Sub List : 8260-NYCP51 - NYCP5130810A\V22230810A03.D•





#44

Benzene

Concen: 5.35 ug/L

RT: 5.856 min Scan# 655

Delta R.T. 0.000 min

Lab File: V22230810A09.D

Acq: 10 Aug 2023 11:57 am

Tgt Ion: 78 Resp: 95130

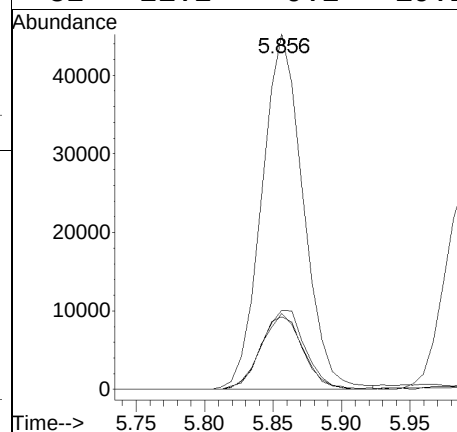
Ion Ratio Lower Upper

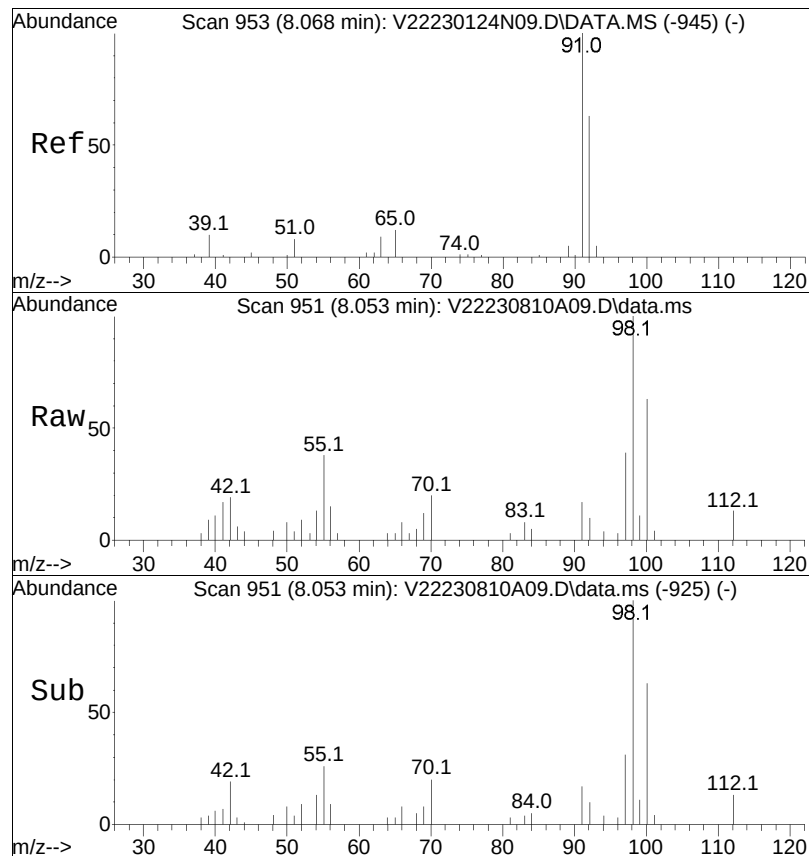
78 100

77 23.5 15.4 32.0

51 21.5 9.8 20.4#

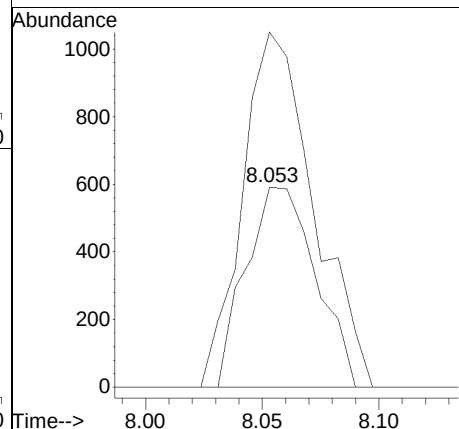
52 21.2 9.2 19.2#

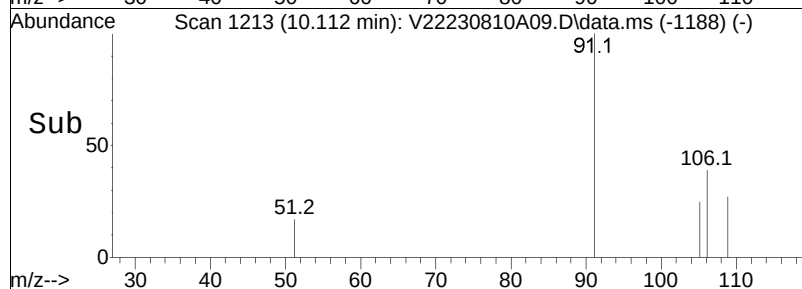
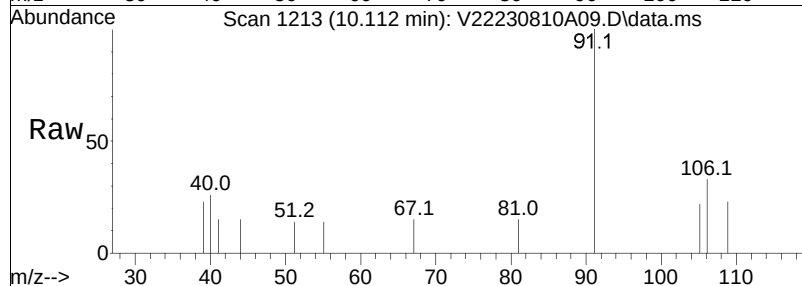
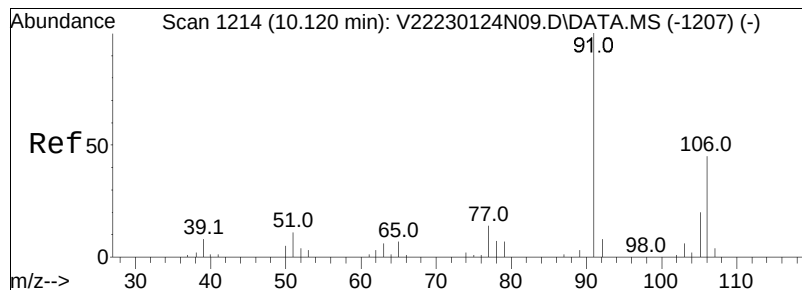




#64
Toluene
Concen: 0.09 ug/L
RT: 8.053 min Scan# 951
Delta R.T. -0.007 min
Lab File: V22230810A09.D
Acq: 10 Aug 2023 11:57 am

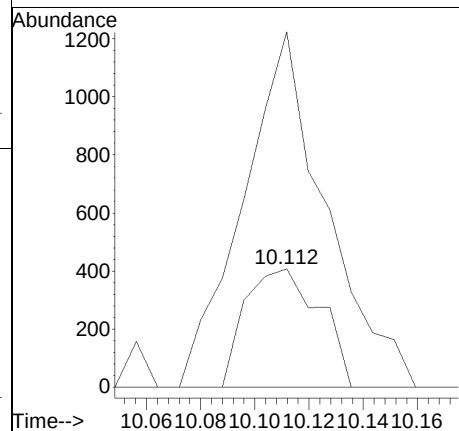
Tgt Ion:	92	91	Ratio	100	181.6	Resp:	1229	Lower	Upper

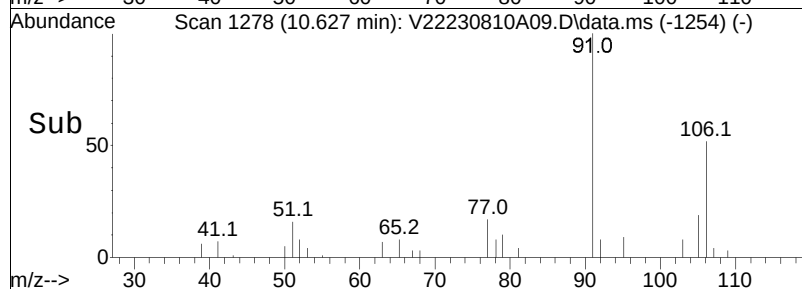
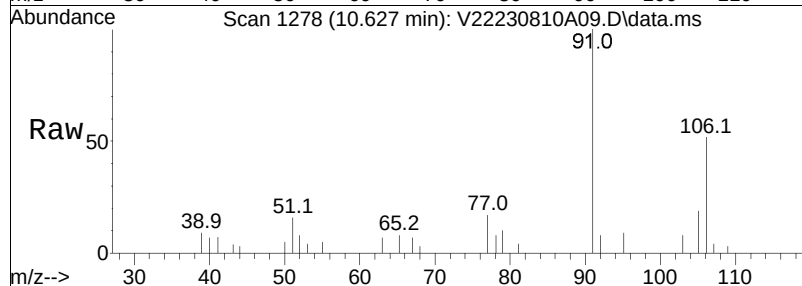
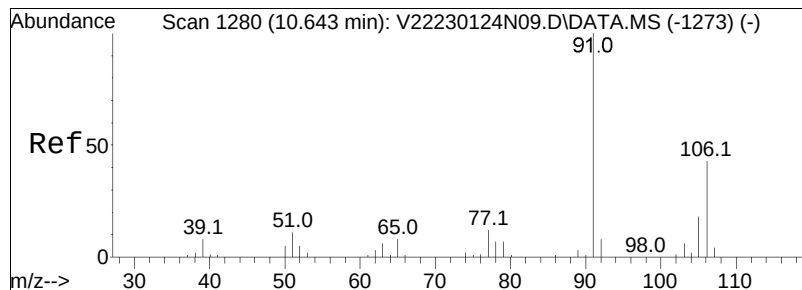




#80
 p/m Xylene
 Concen: 0.08 ug/L
 RT: 10.112 min Scan# 1213
 Delta R.T. 0.001 min
 Lab File: V22230810A09.D
 Acq: 10 Aug 2023 11:57 am

Tgt Ion	Ratio	Lower	Upper
106	100		
91	333.3	156.0	234.0#





#81

o Xylene

Concen: 0.56 ug/L

RT: 10.627 min Scan# 1278

Delta R.T. -0.008 min

Lab File: V22230810A09.D

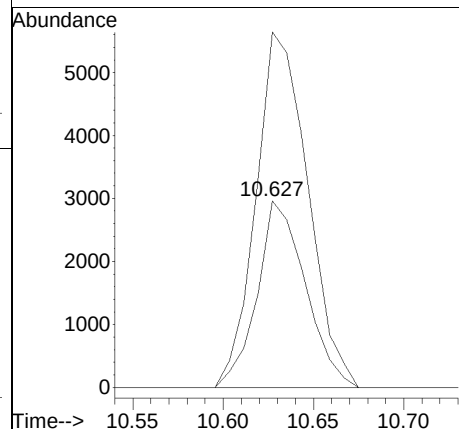
Acq: 10 Aug 2023 11:57 am

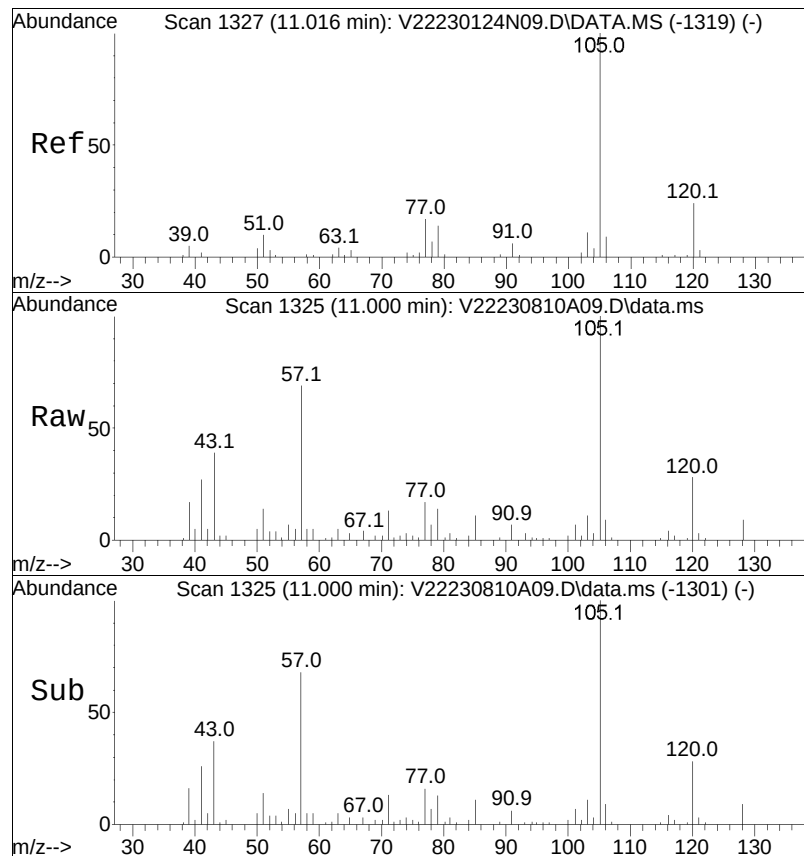
Tgt Ion:106 Resp: 5484

Ion Ratio Lower Upper

106 100

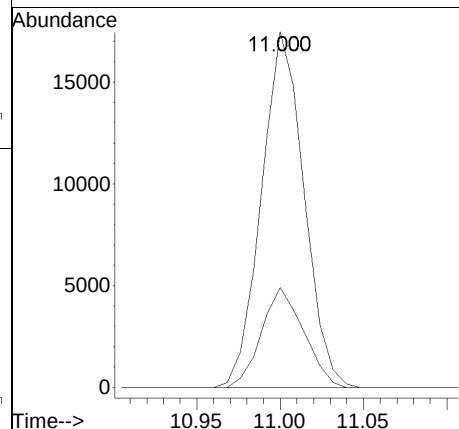
91 205.0 164.0 246.0

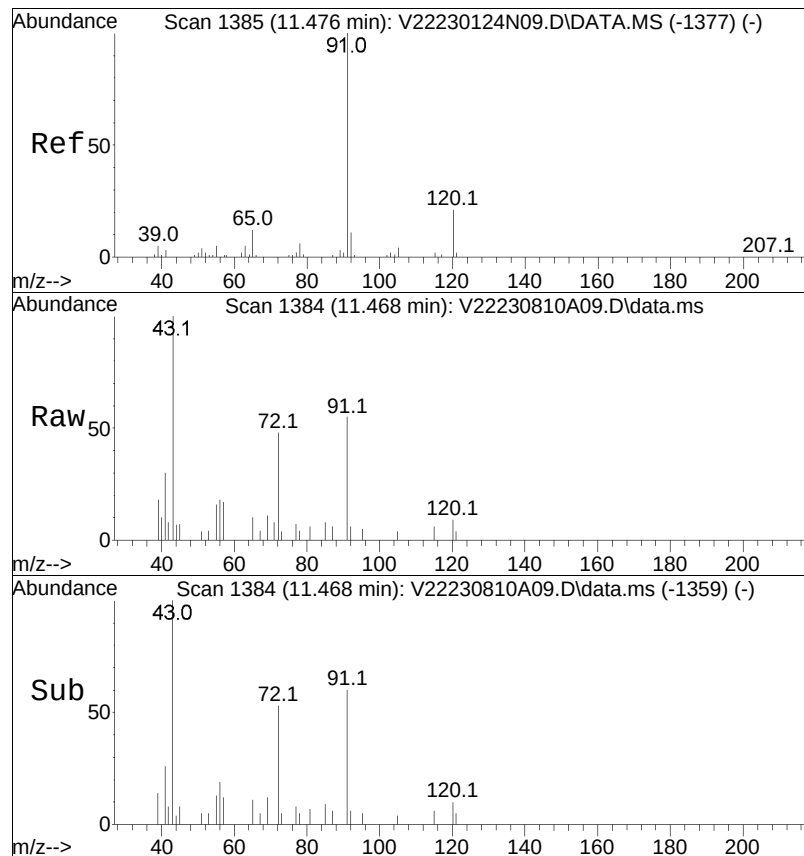




#86
Isopropylbenzene
Concen: 1.14 ug/L
RT: 11.000 min Scan# 1325
Delta R.T. -0.008 min
Lab File: V22230810A09.D
Acq: 10 Aug 2023 11:57 am

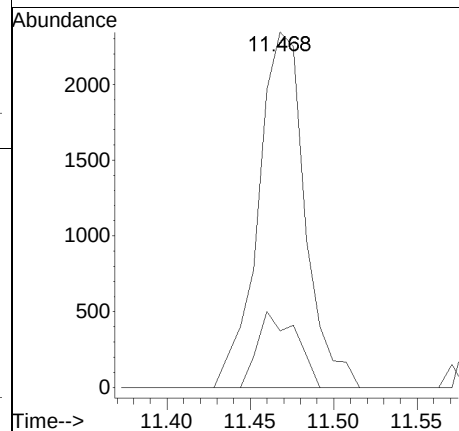
Tgt Ion	Ratio	Lower	Upper
105	100		
120	27.8	7.7	47.7

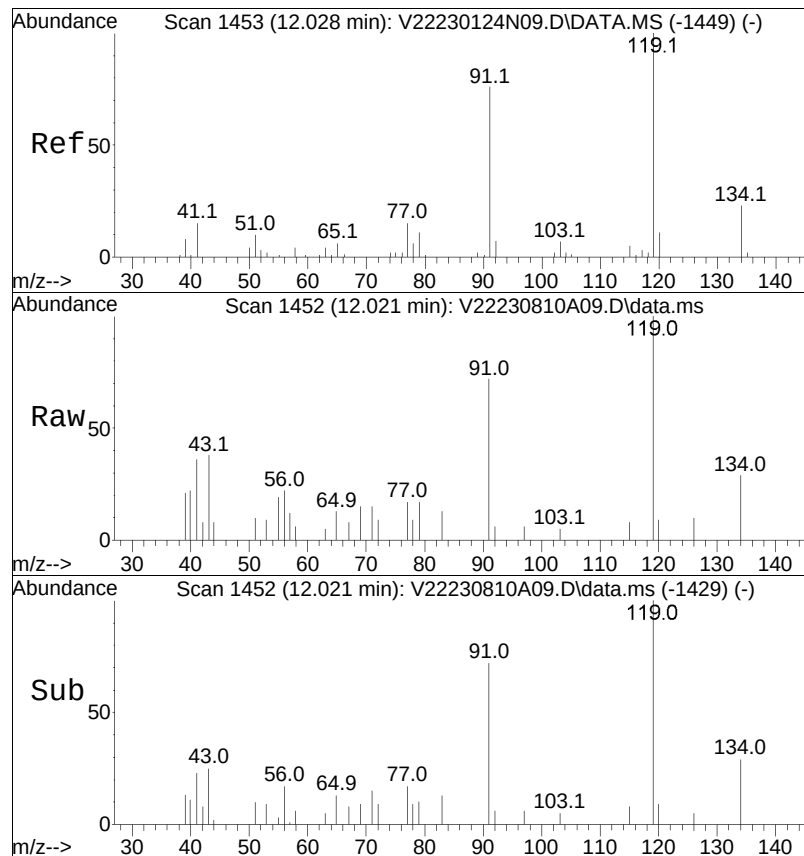




#89
 n-Propylbenzene
 Concen: 0.14 ug/L
 RT: 11.468 min Scan# 1384
 Delta R.T. -0.000 min
 Lab File: V22230810A09.D
 Acq: 10 Aug 2023 11:57 am

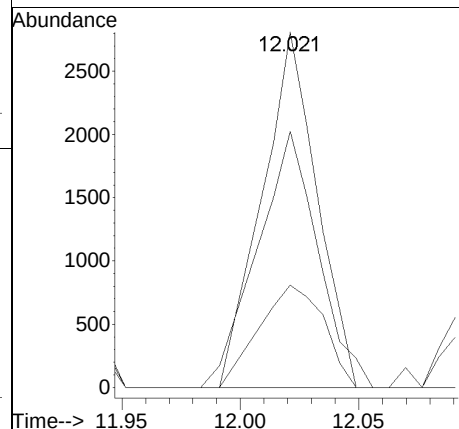
Tgt Ion	Ratio	Lower	Upper
91	100		
120	17.6	19.5	29.3

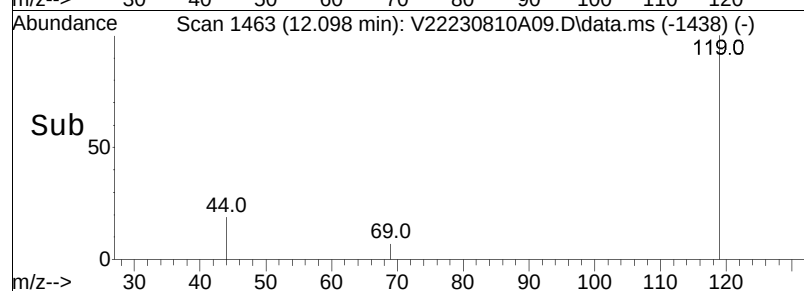
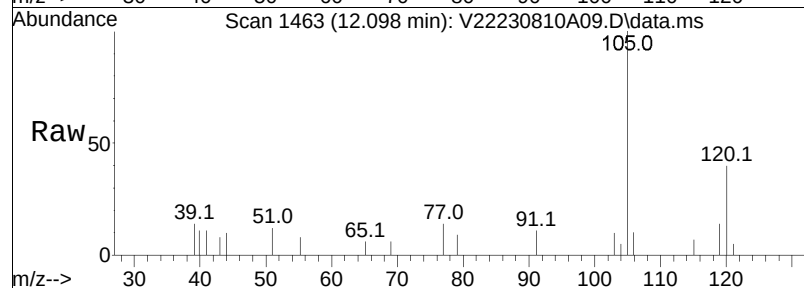
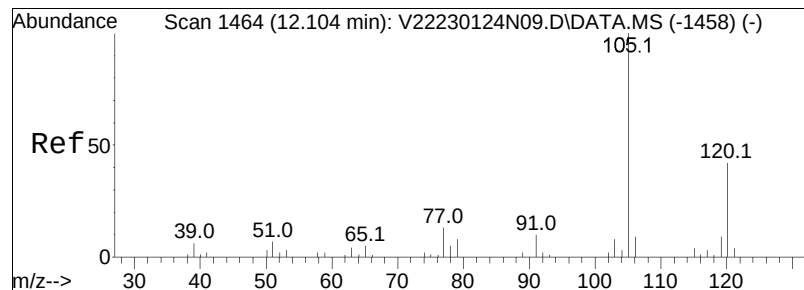




#98
 tert-Butylbenzene
 Concen: 0.22 ug/L
 RT: 12.021 min Scan# 1452
 Delta R.T. -0.000 min
 Lab File: V22230810A09.D
 Acq: 10 Aug 2023 11:57 am

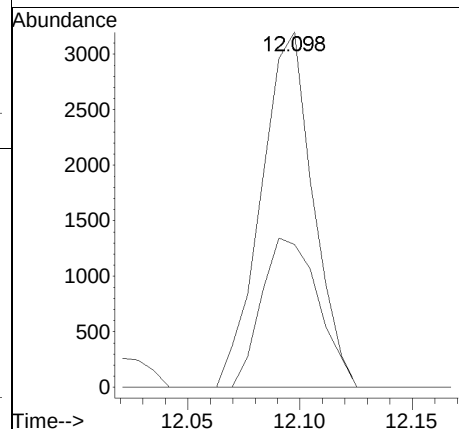
Tgt Ion	Ratio	Lower	Upper
119	100		
91	74.7	50.2	75.4
134	33.9	20.8	31.2

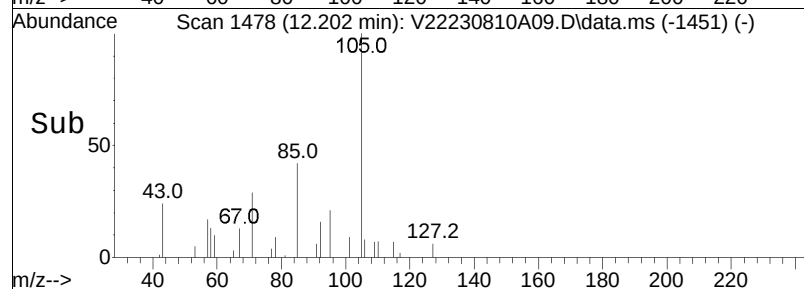
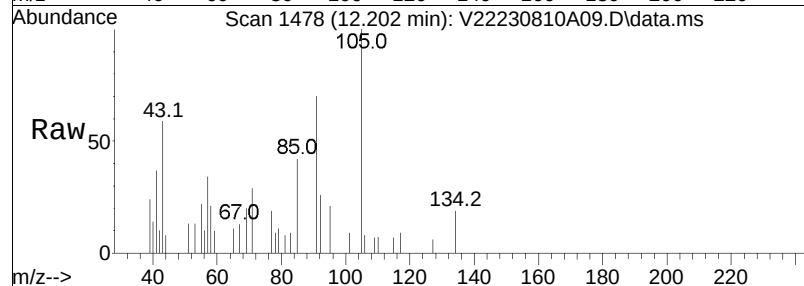
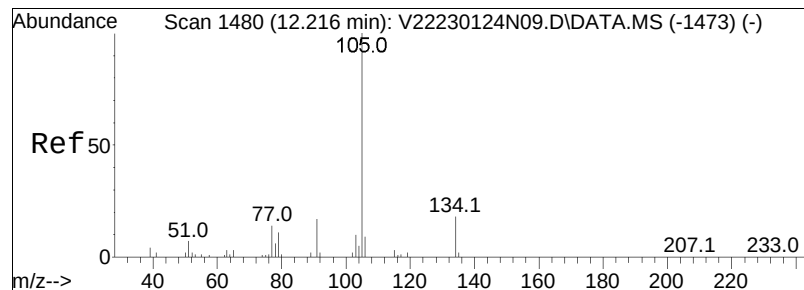




#101
 1,2,4-Trimethylbenzene
 Concen: 0.24 ug/L
 RT: 12.098 min Scan# 1463
 Delta R.T. 0.001 min
 Lab File: V22230810A09.D
 Acq: 10 Aug 2023 11:57 am

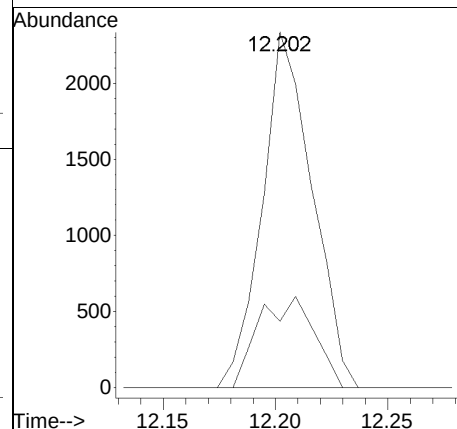
Tgt Ion	Ratio	Lower	Upper
105	100		
120	45.9	38.5	57.7

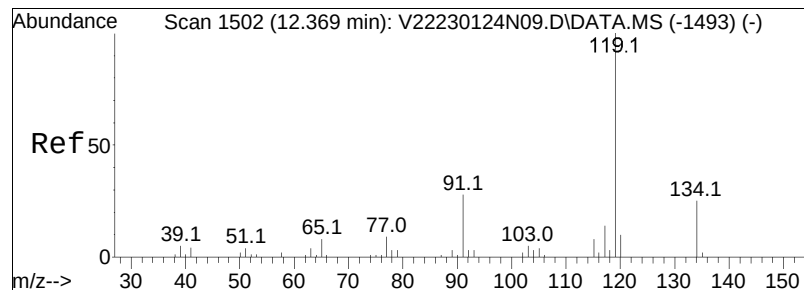




#102
 sec-Butylbenzene
 Concen: 0.13 ug/L
 RT: 12.202 min Scan# 1478
 Delta R.T. -0.007 min
 Lab File: V22230810A09.D
 Acq: 10 Aug 2023 11:57 am

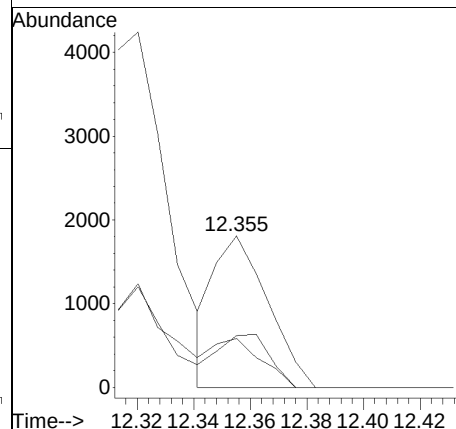
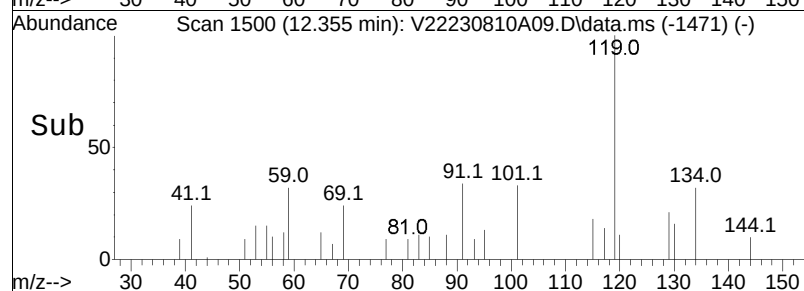
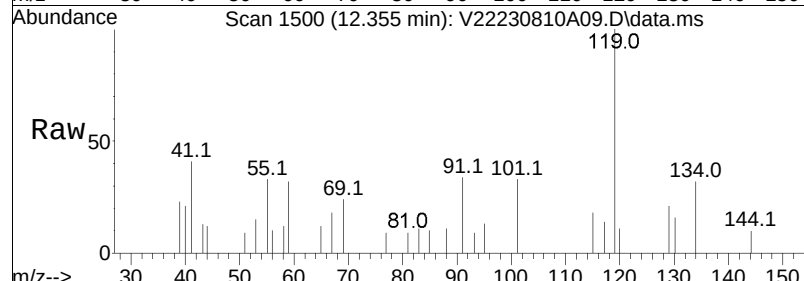
Tgt Ion	Ratio	Lower	Upper
105	100		
134	28.3	13.9	28.9

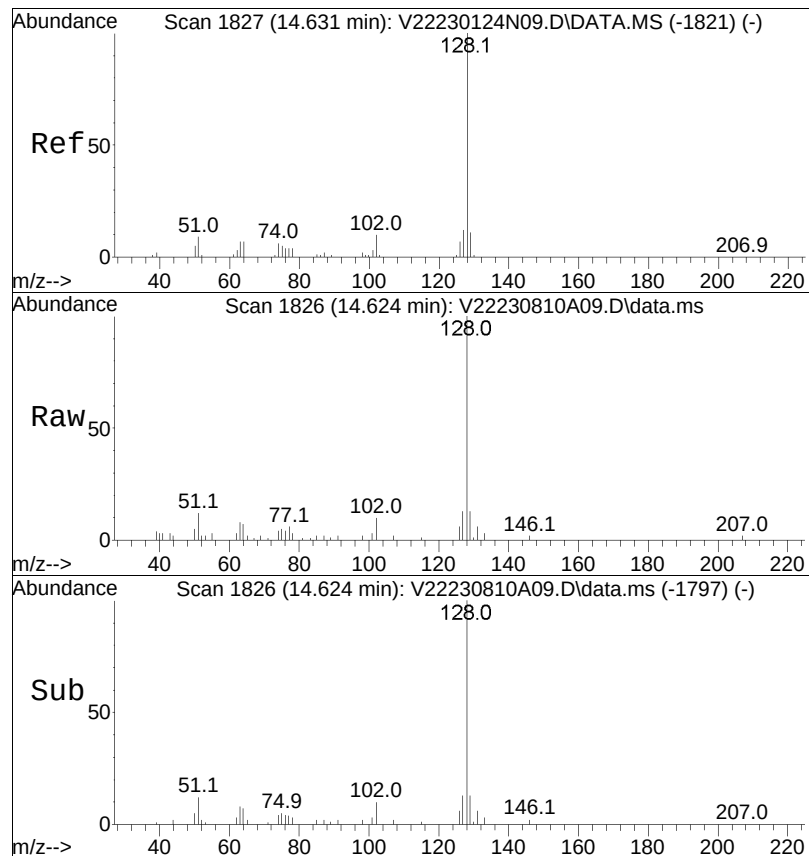




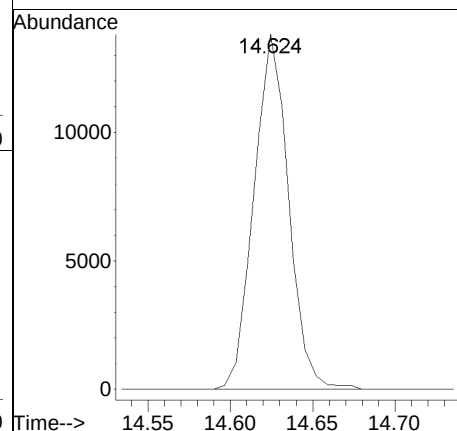
#103
 p-Isopropyltoluene
 Concen: 0.10 ug/L M3
 RT: 12.355 min Scan# 1500
 Delta R.T. 0.000 min
 Lab File: V22230810A09.D
 Acq: 10 Aug 2023 11:57 am

Tgt Ion	Ratio	Lower	Upper
119	100		
134	84.4	17.7	36.7#
91	79.4	14.1	29.3#





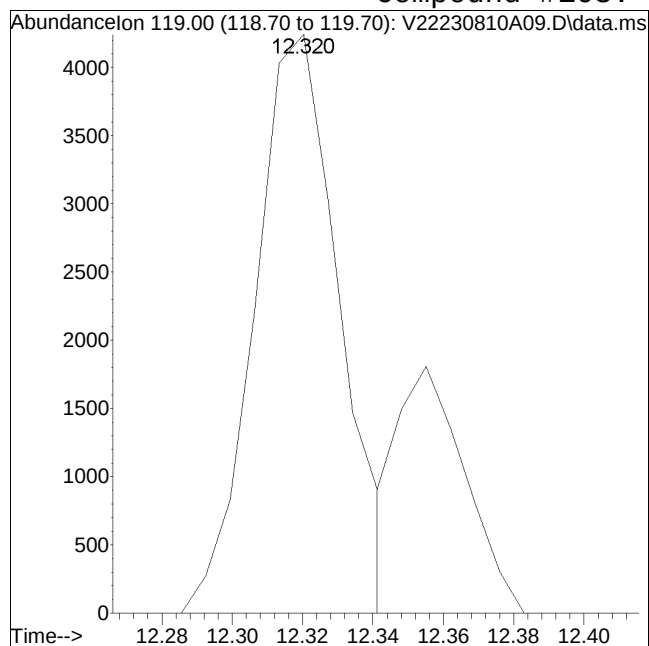
#114
 Naphthalene
 Concen: 1.44 ug/L
 RT: 14.624 min Scan# 1826
 Delta R.T. 0.000 min
 Lab File: V22230810A09.D
 Acq: 10 Aug 2023 11:57 am
 Tgt Ion:128 Resp: 20253



Manual Integration Report

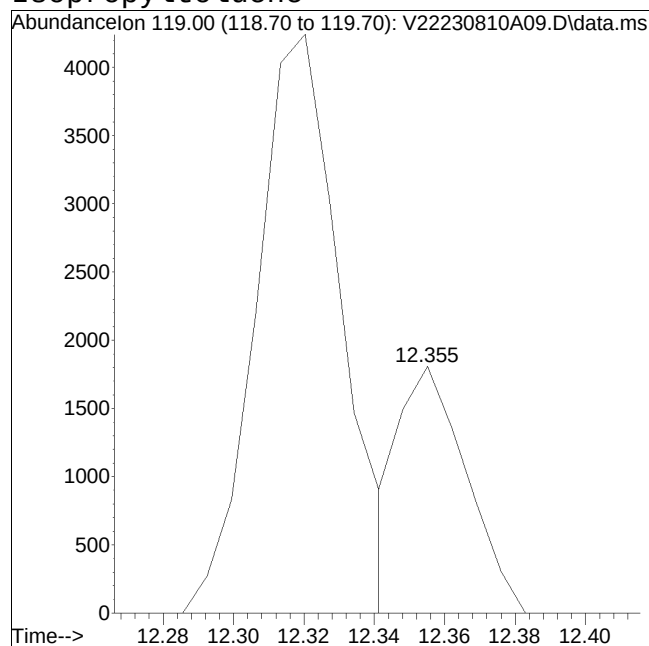
Data Path : K:\VOA122\2023\230810A\ QMethod : V122_230726N_8260.m
Data File : V22230810A09.D Operator : VOA122:PID
Date Inj'd : 8/10/2023 11:57 am Instrument : VOA122
Sample : L2346073-02,31,10,10,,A,R3 Quant Date : 8/10/2023 7:33 pm

Compound #103: p-Isopropyltoluene



Original Peak Response = 7100

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.



Manual Peak Response = 2410 M3

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230810A\
 Data File : V22230810A10.D
 Acq On : 10 Aug 2023 12:21 pm
 Operator : VOA122:PID
 Sample : L2346073-03,31,10,10,,A,R3B
 Misc : WG1814675,ICAL20205 (Sig #1); WG,ICAL20205 (Sig #2)
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 10 19:37:41 2023
 Quant Method : K:\VOA122\2023\230810A\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:11:40 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA122\2023\230810A\V22230810A03.D
 Sub List : 8260-NYCP51 - NYCP51

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

Internal Standards						
1) Fluorobenzene	6.284	96	340898	10.000	ug/L	0.00
Standard Area 1 = 397815			Recovery	=	85.69%	
62) Chlorobenzene-d5	9.866	117	369175	10.000	ug/L	0.00
Standard Area 1 = 393438			Recovery	=	93.83%	
83) 1,4-Dichlorobenzene-d4	12.501	152	214373	10.000	ug/L	0.00
Standard Area 1 = 214484			Recovery	=	99.95%	
System Monitoring Compounds						
38) Dibromofluoromethane	5.446	113	129085	10.908	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	109.08%	
46) 1,2-Dichloroethane-d4	5.989	65	131821	11.268	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	112.68%	
63) Toluene-d8	8.001	98	449112	10.024	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	100.24%	
87) 4-Bromofluorobenzene	11.317	95	188309	10.562	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	105.62%	
Target Compounds						
						Qvalue
21) Methyl tert-butyl ether	0.000		0	N.D.		
44) Benzene	5.856	78	100450	5.398	ug/L #	91
64) Toluene	8.053	92	1151	0.082	ug/L	91
78) Ethylbenzene	9.929	91	201	N.D.		
80) p/m Xylene	10.120	106	963	0.091	ug/L #	57
81) o Xylene	10.635	106	5657	0.560	ug/L	90
86) Isopropylbenzene	11.000	105	32899	1.159	ug/L	99
89) n-Propylbenzene	11.468	91	4396	0.130	ug/L #	87
94) 1,3,5-Trimethylbenzene	11.690	105	408	N.D.		
98) tert-Butylbenzene	12.021	119	4806	0.214	ug/L #	84
101) 1,2,4-Trimethylbenzene	12.090	105	5957	0.263	ug/L	89
102) sec-Butylbenzene	12.209	105	3620	0.122	ug/L #	81
103) p-Isopropyltoluene	12.355	119	2397M3	0.096	ug/L	
107) n-Butylbenzene	12.787	91	1295	N.D.		
114) Naphthalene	14.624	128	22007	1.487	ug/L	100

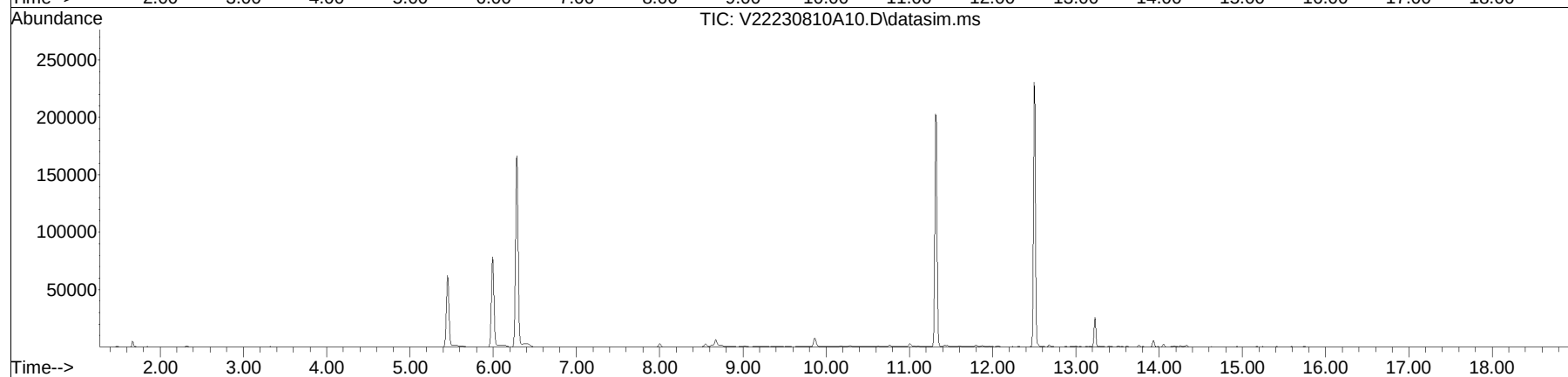
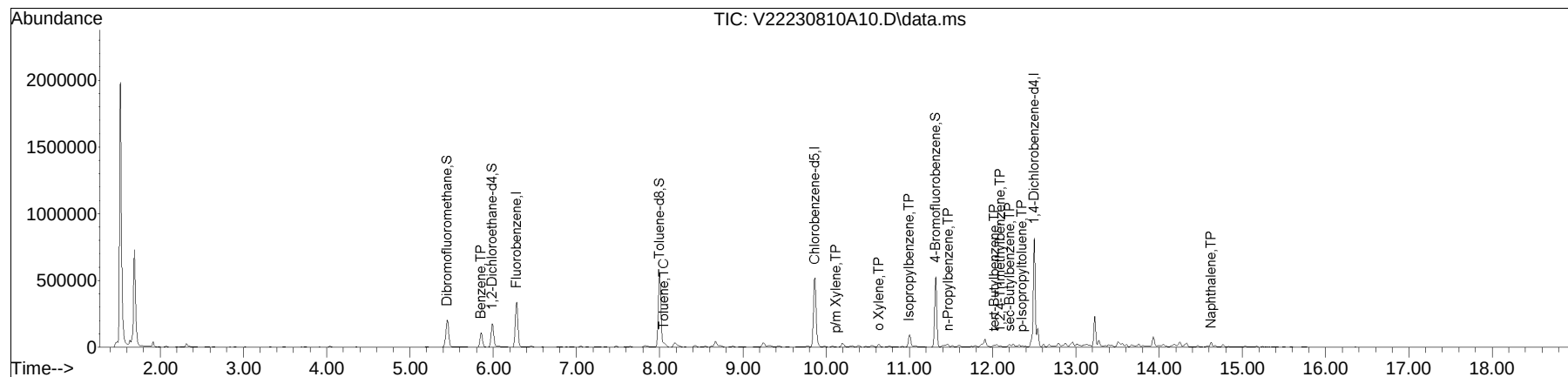
(#) = qualifier out of range (m) = manual integration (+) = signals summed

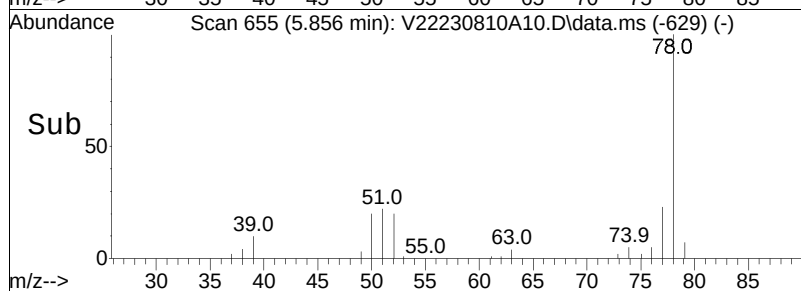
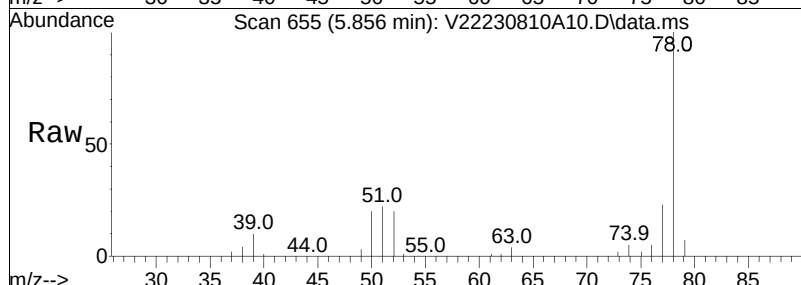
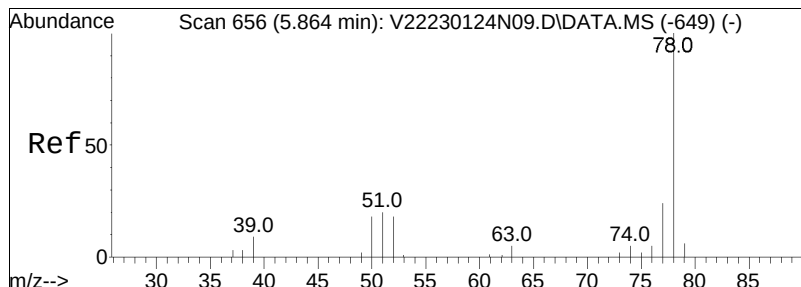
Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230810A\
 Data File : V22230810A10.D
 Acq On : 10 Aug 2023 12:21 pm
 Operator : VOA122:PID
 Sample : L2346073-03,31,10,10,,A,R3B
 Misc : WG1814675,ICAL20205 (Sig #1); WG,ICAL20205 (Sig #2)
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 10 19:37:41 2023
 Quant Method : K:\VOA122\2023\230810A\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:11:40 2023
 Response via : Initial Calibration

Sub List : 8260-NYCP51 - NYCP5130810A\V22230810A03.D•





#44

Benzene

Concen: 5.40 ug/L

RT: 5.856 min Scan# 655

Delta R.T. 0.000 min

Lab File: V22230810A10.D

Acq: 10 Aug 2023 12:21 pm

Tgt Ion: 78 Resp: 100450

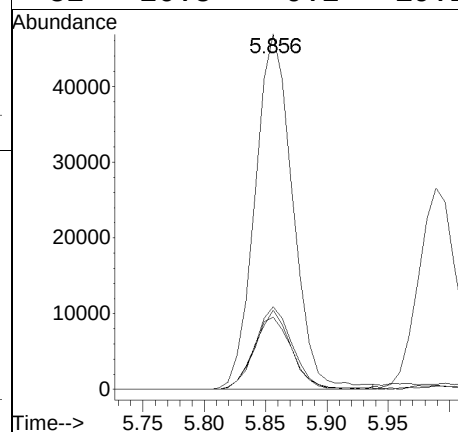
Ion Ratio Lower Upper

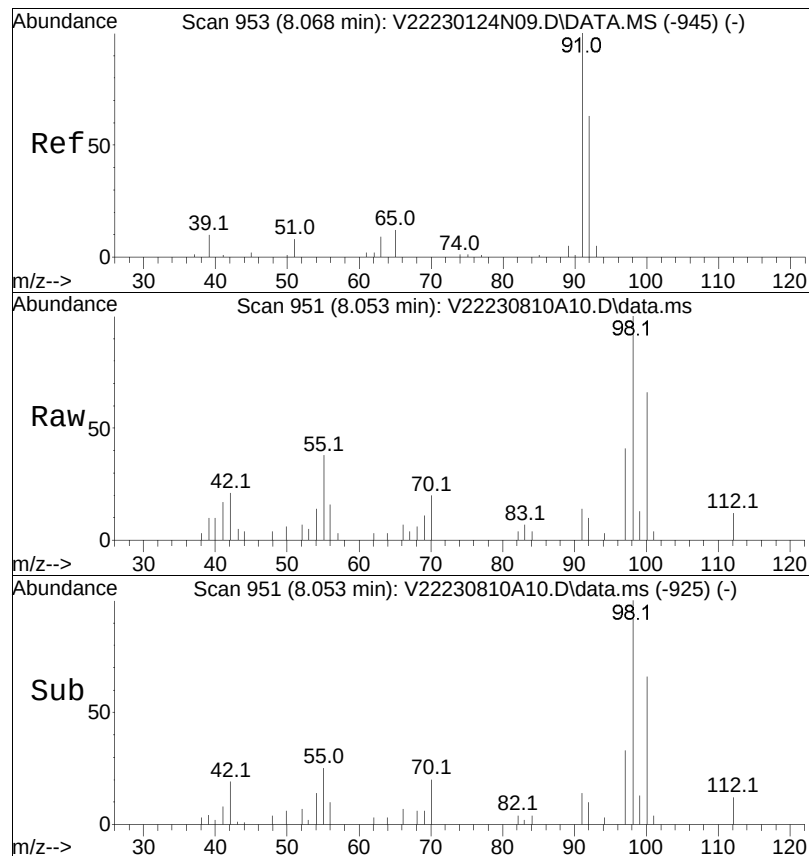
78 100

77 23.0 15.4 32.0

51 21.4 9.8 20.4#

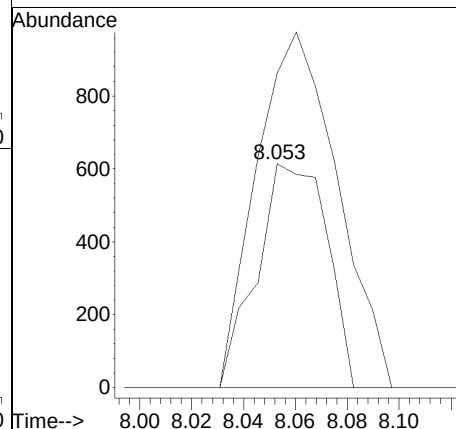
52 20.5 9.2 19.2#

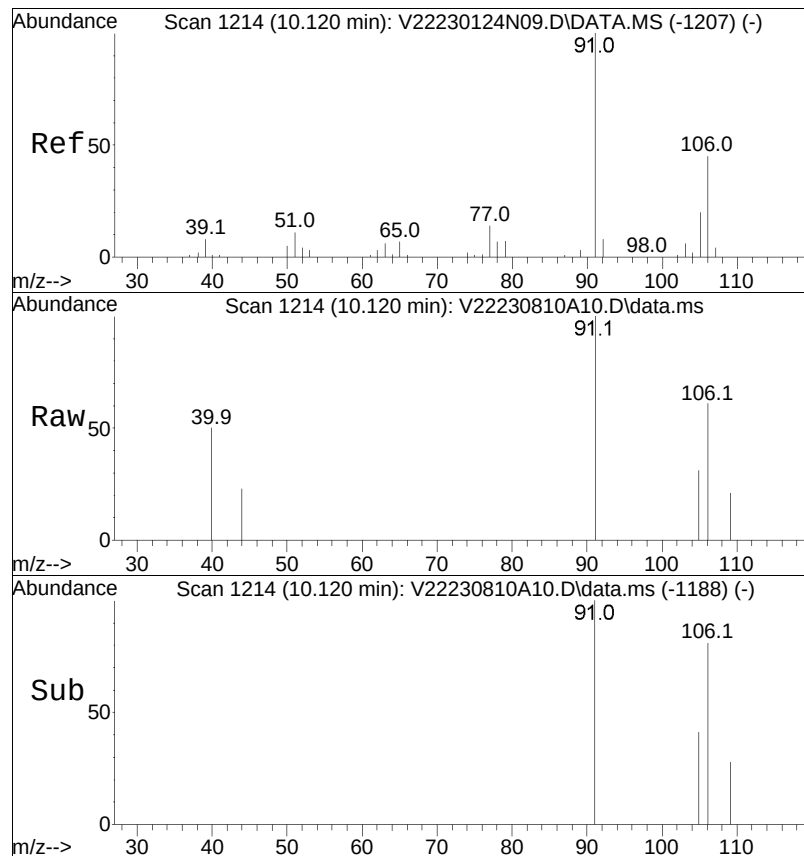




#64
Toluene
Concen: 0.08 ug/L
RT: 8.053 min Scan# 951
Delta R.T. -0.007 min
Lab File: V22230810A10.D
Acq: 10 Aug 2023 12:21 pm

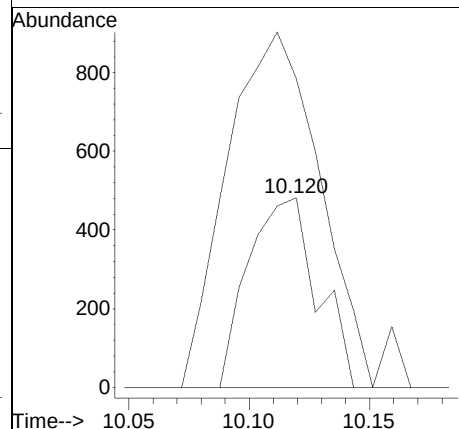
Tgt Ion:	92	91	Ratio	100	184.1	Resp:	1151	Lower	Upper

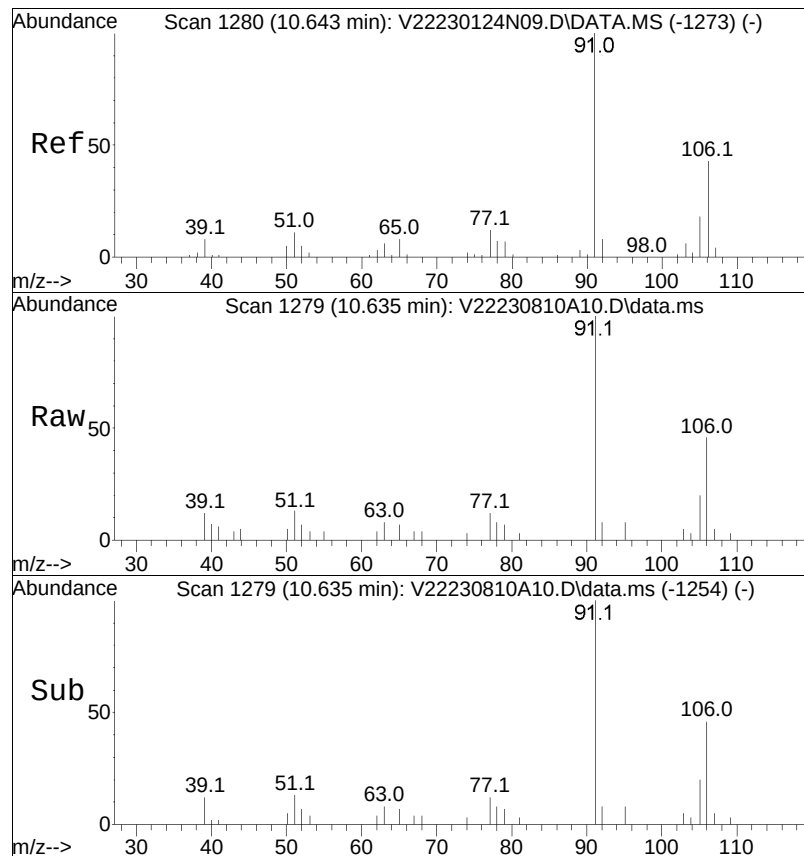




#80
 p/m Xylene
 Concen: 0.09 ug/L
 RT: 10.120 min Scan# 1214
 Delta R.T. 0.008 min
 Lab File: V22230810A10.D
 Acq: 10 Aug 2023 12:21 pm

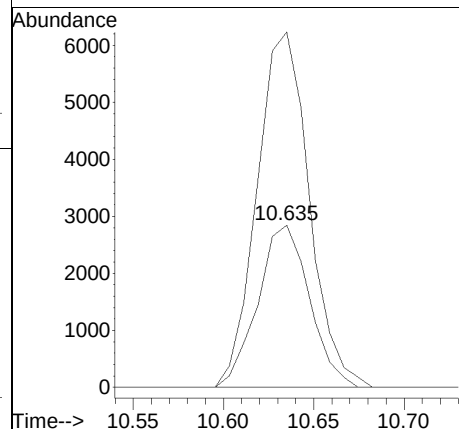
Tgt	Ion	Ratio	Lower	Upper
106	100			
91	258.7	156.0	234.0#	

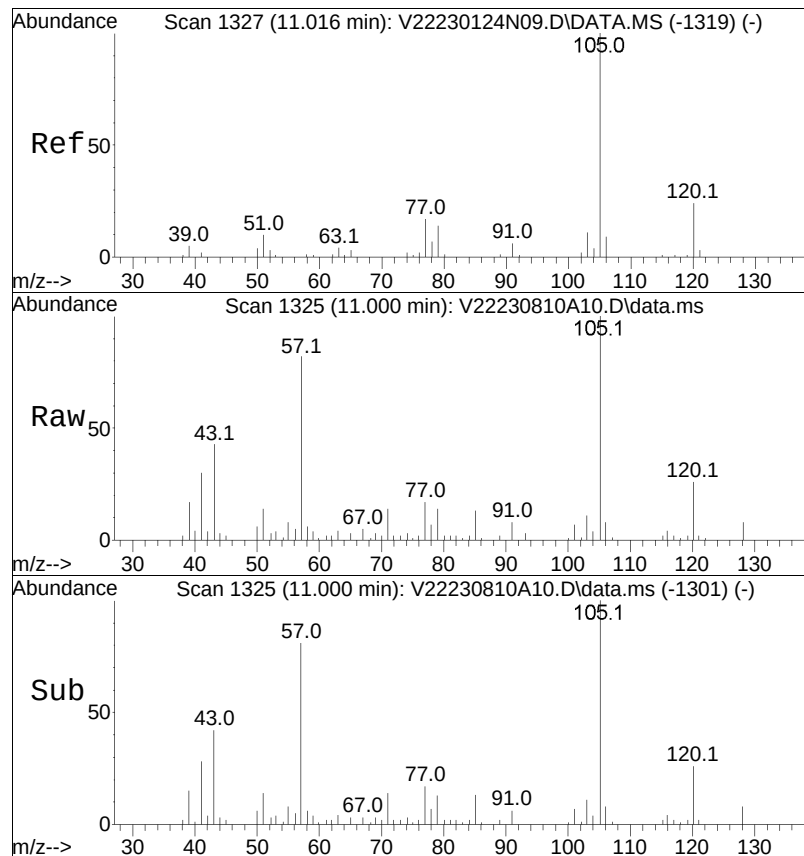




#81
 o Xylene
 Concen: 0.56 ug/L
 RT: 10.635 min Scan# 1279
 Delta R.T. -0.000 min
 Lab File: V22230810A10.D
 Acq: 10 Aug 2023 12:21 pm

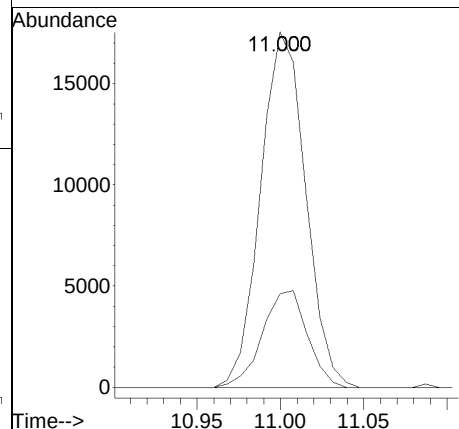
Tgt Ion	Ratio	Lower	Upper
106	100		
91	221.0	164.0	246.0

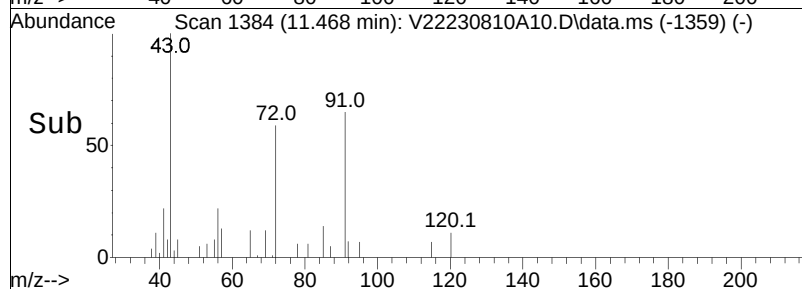
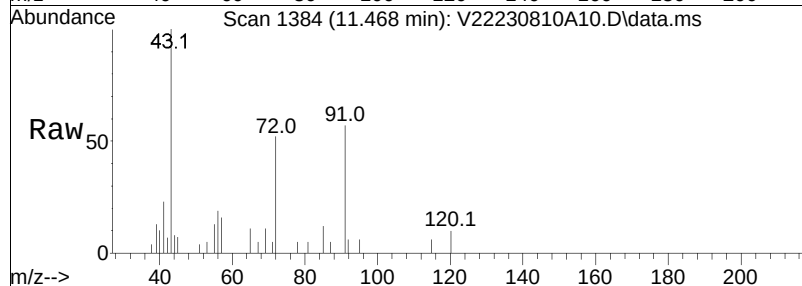
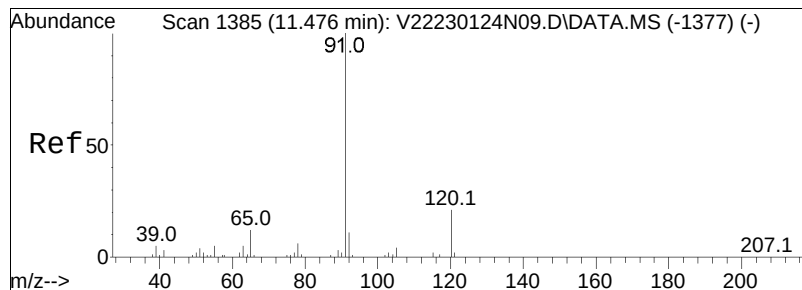




#86
Isopropylbenzene
Concen: 1.16 ug/L
RT: 11.000 min Scan# 1325
Delta R.T. -0.008 min
Lab File: V22230810A10.D
Acq: 10 Aug 2023 12:21 pm

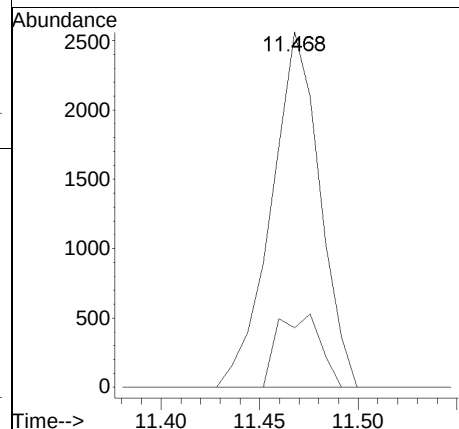
Tgt Ion	Ratio	Lower	Upper
105	100		
120	27.3	7.7	47.7

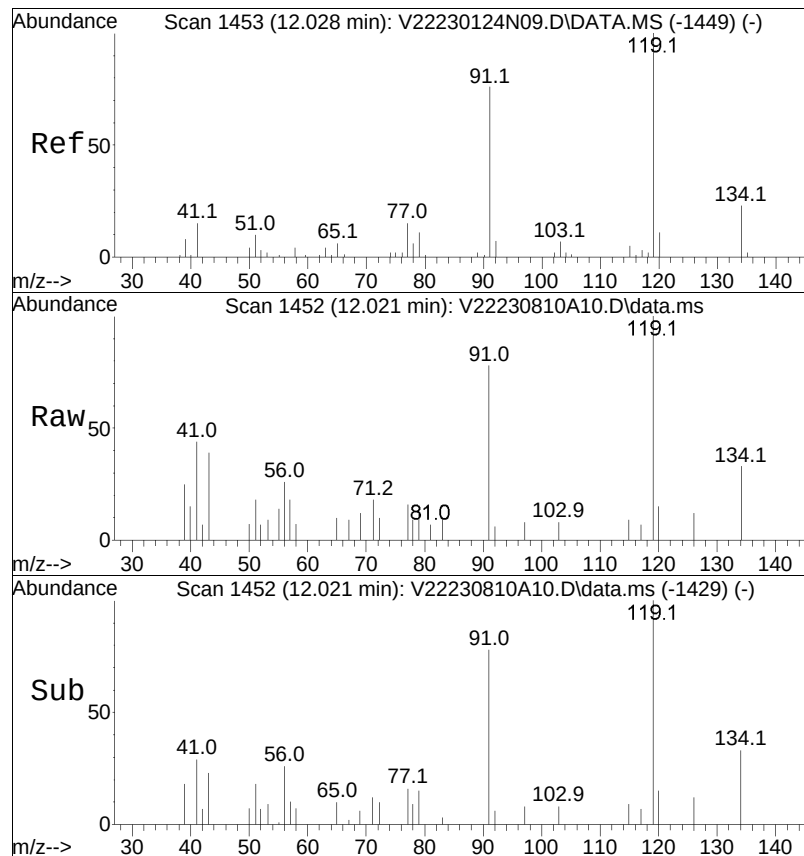




#89
 n-Propylbenzene
 Concen: 0.13 ug/L
 RT: 11.468 min Scan# 1384
 Delta R.T. -0.000 min
 Lab File: V22230810A10.D
 Acq: 10 Aug 2023 12:21 pm

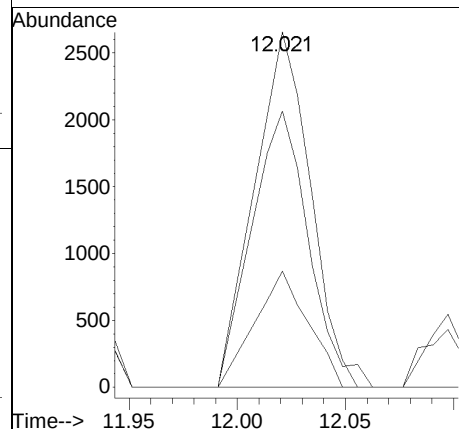
Tgt Ion	Ratio	Lower	Upper
91	100		
120	18.2	19.5	29.3

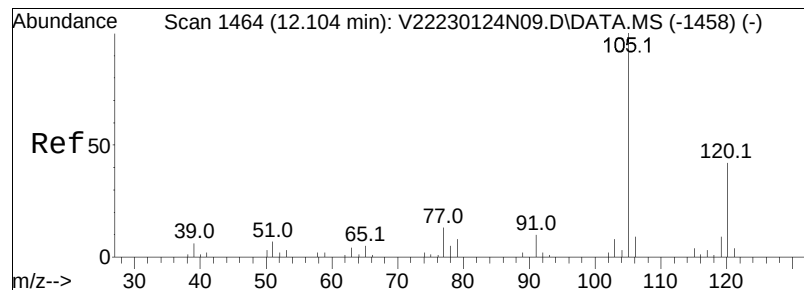




#98
 tert-Butylbenzene
 Concen: 0.21 ug/L
 RT: 12.021 min Scan# 1452
 Delta R.T. -0.000 min
 Lab File: V22230810A10.D
 Acq: 10 Aug 2023 12:21 pm

Tgt Ion	Ratio	Lower	Upper
119	100		
91	76.7	50.2	75.4#
134	32.0	20.8	31.2#





#101

1,2,4-Trimethylbenzene

Concen: 0.26 ug/L

RT: 12.090 min Scan# 1462

Delta R.T. -0.007 min

Lab File: V22230810A10.D

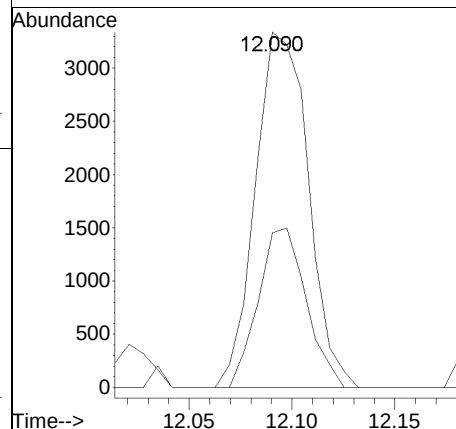
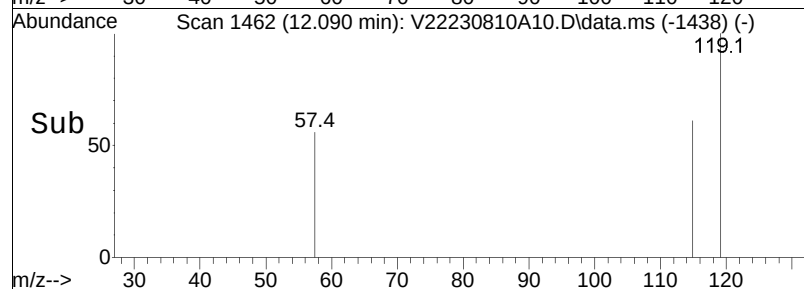
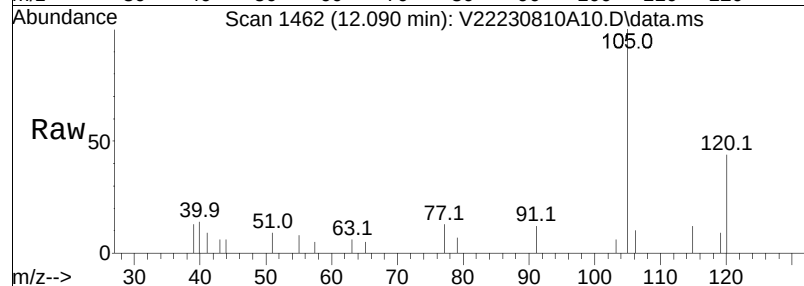
Acq: 10 Aug 2023 12:21 pm

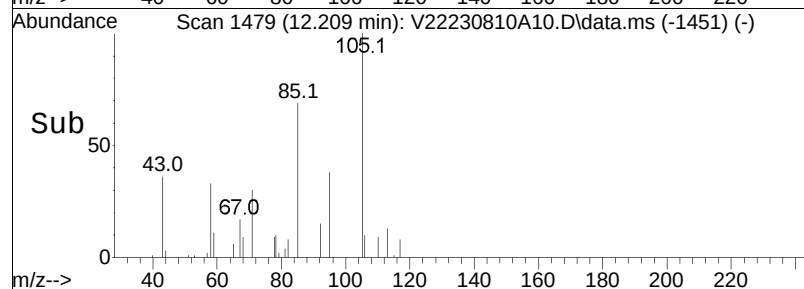
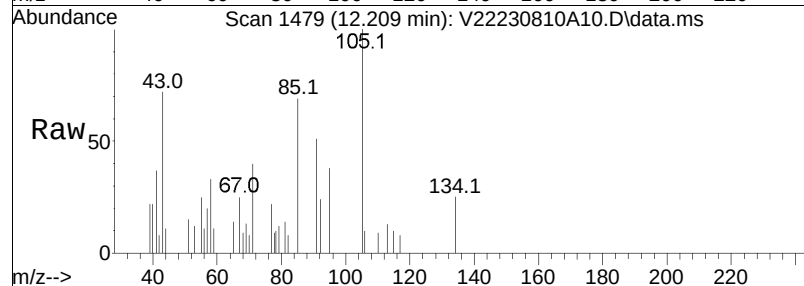
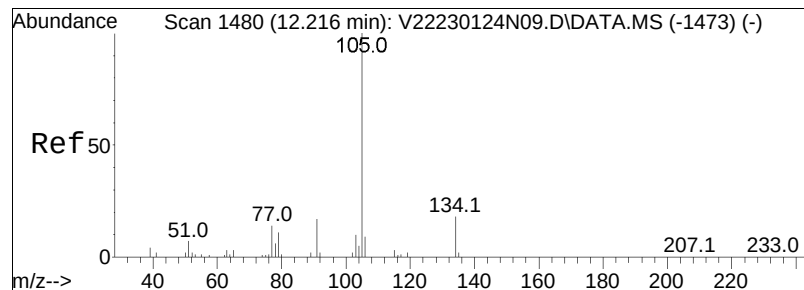
Tgt Ion:105 Resp: 5957

Ion Ratio Lower Upper

105 100

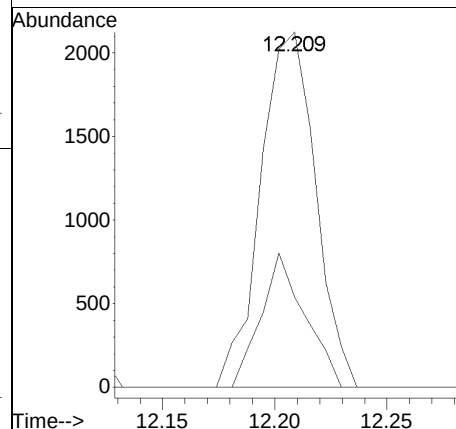
120 40.6 38.5 57.7

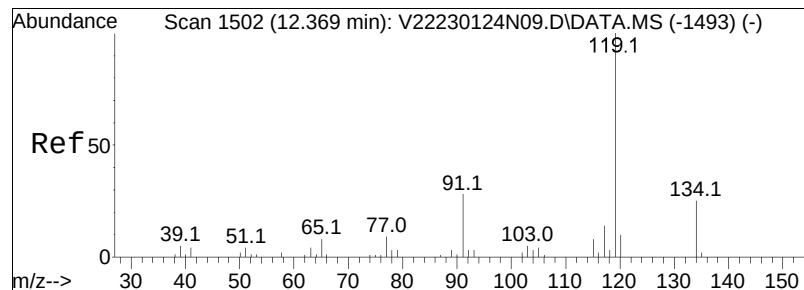




#102
 sec-Butylbenzene
 Concen: 0.12 ug/L
 RT: 12.209 min Scan# 1479
 Delta R.T. -0.000 min
 Lab File: V22230810A10.D
 Acq: 10 Aug 2023 12:21 pm

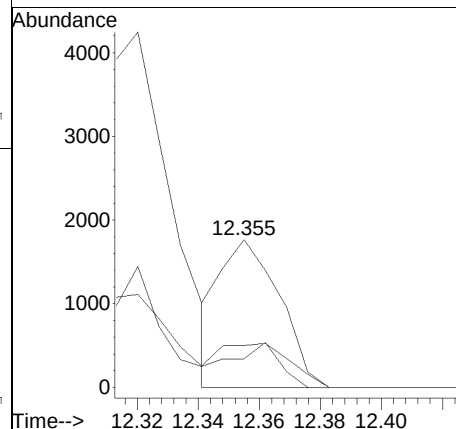
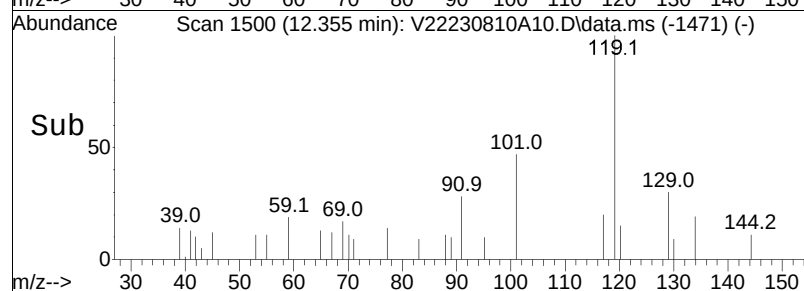
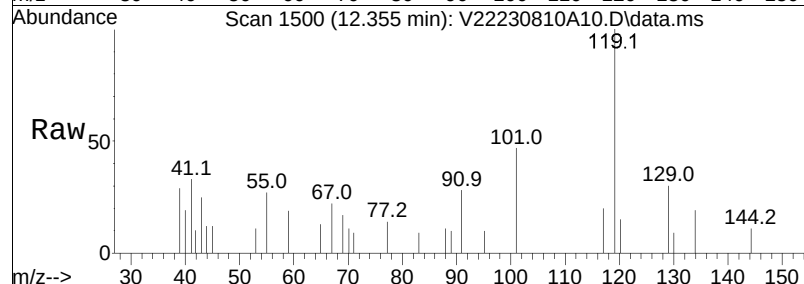
Tgt Ion	Ratio	Lower	Upper
105	100		
134	30.2	13.9	28.9#

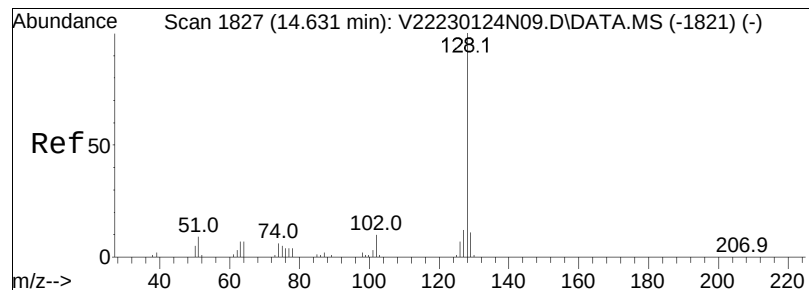




#103
 p-Isopropyltoluene
 Concen: 0.10 ug/L M3
 RT: 12.355 min Scan# 1500
 Delta R.T. -0.000 min
 Lab File: V22230810A10.D
 Acq: 10 Aug 2023 12:21 pm

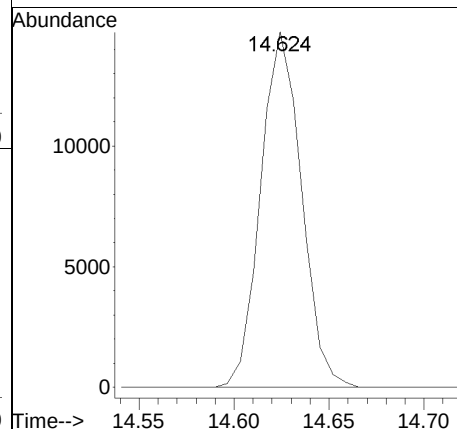
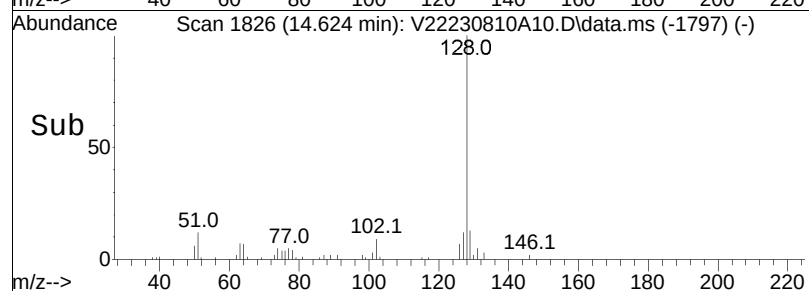
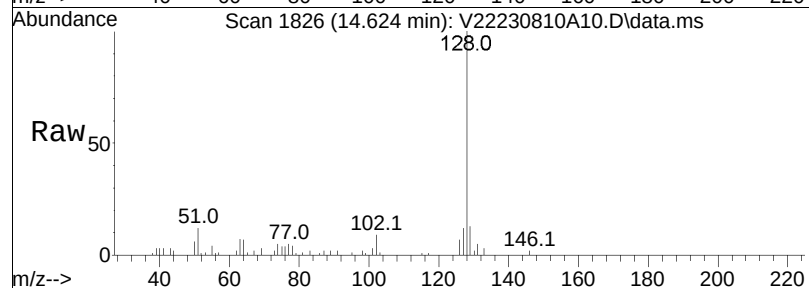
Tgt Ion	Ratio	Lower	Upper
119	100		
134	87.0	17.7	36.7#
91	84.4	14.1	29.3#





#114
Naphthalene
Concen: 1.49 ug/L
RT: 14.624 min Scan# 1826
Delta R.T. 0.000 min
Lab File: V22230810A10.D
Acq: 10 Aug 2023 12:21 pm

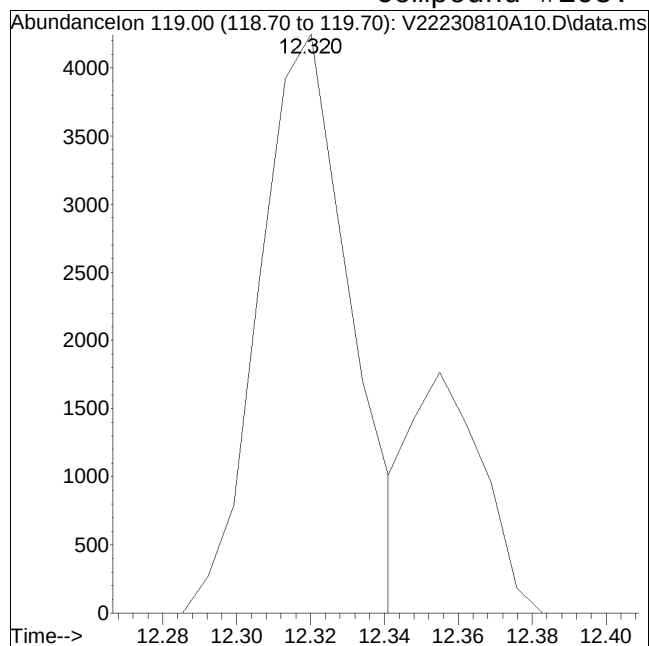
Tgt Ion:128 Resp: 22007



Manual Integration Report

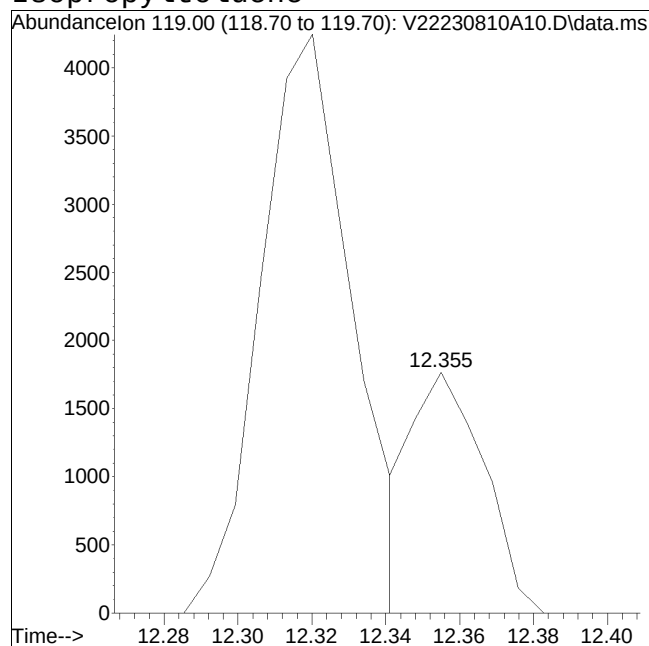
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Data File : V22230810A10.D Operator : V0A122:PID
Date Inj'd : 8/10/2023 12:21 pm Instrument : V0A122
Sample : L2346073-03,31,10,10,,A,R3 Quant Date : 8/10/2023 7:33 pm

Compound #103: p-Isopropyltoluene



Original Peak Response = 7251

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.



Manual Peak Response = 2397 M3

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230810A\
 Data File : V22230810A11.D
 Acq On : 10 Aug 2023 12:46 pm
 Operator : VOA122:PID
 Sample : L2346073-04,31,10,10,,A,R3B
 Misc : WG1814675,ICAL20205 (Sig #1); WG,ICAL20205 (Sig #2)
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 10 19:33:30 2023
 Quant Method : K:\VOA122\2023\230810A\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:11:40 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA122\2023\230810A\V22230810A03.D
 Sub List : 8260-NYCP51 - NYCP51

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

Internal Standards						
1) Fluorobenzene	6.284	96	347587	10.000	ug/L	0.00
Standard Area 1 = 397815			Recovery = 87.37%			
62) Chlorobenzene-d5	9.866	117	382185	10.000	ug/L	0.00
Standard Area 1 = 393438			Recovery = 97.14%			
83) 1,4-Dichlorobenzene-d4	12.501	152	217618	10.000	ug/L	0.00
Standard Area 1 = 214484			Recovery = 101.46%			
System Monitoring Compounds						
38) Dibromofluoromethane	5.453	113	132788	11.005	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 110.05%			
46) 1,2-Dichloroethane-d4	5.989	65	131055	10.987	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 109.87%			
63) Toluene-d8	8.001	98	460537	9.929	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.29%			
87) 4-Bromofluorobenzene	11.317	95	183598	10.145	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.45%			
Target Compounds						
21) Methyl tert-butyl ether	0.000		0	N.D.		
44) Benzene	5.856	78	374	N.D.		
64) Toluene	8.053	92	1188	0.082	ug/L	94
78) Ethylbenzene	9.913	91	505	N.D.		
80) p/m Xylene	10.120	106	719	N.D.		
81) o Xylene	0.000		0	N.D.		
86) Isopropylbenzene	0.000		0	N.D.		
89) n-Propylbenzene	11.476	91	79	N.D.		
94) 1,3,5-Trimethylbenzene	11.579	105	262	N.D.		
98) tert-Butylbenzene	0.000		0	N.D.		
101) 1,2,4-Trimethylbenzene	12.104	105	251	N.D.		
102) sec-Butylbenzene	12.104	105	251	N.D.		
103) p-Isopropyltoluene	0.000		0	N.D.		
107) n-Butylbenzene	0.000		0	N.D.		
114) Naphthalene	14.624	128	435	N.D.		

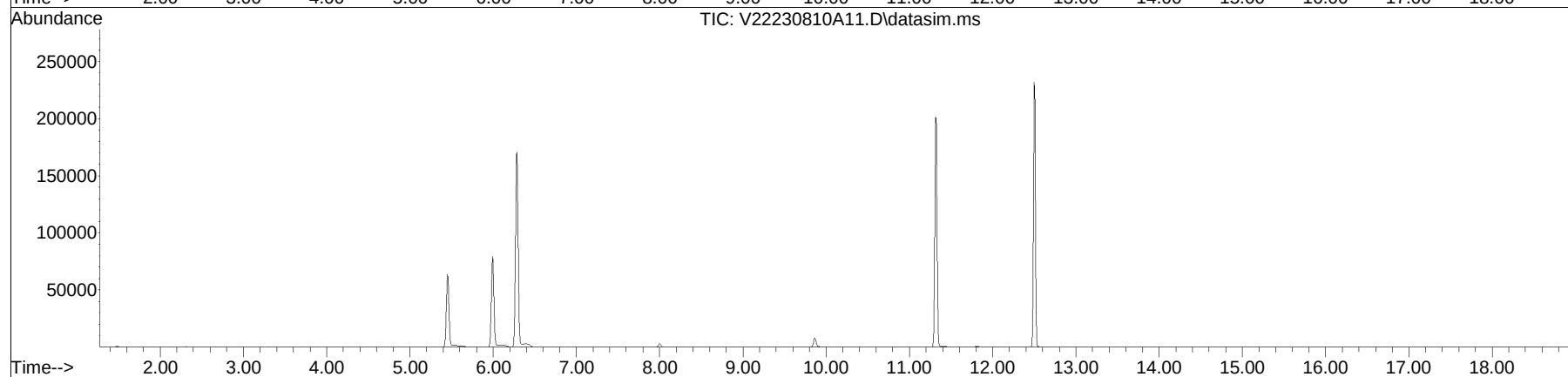
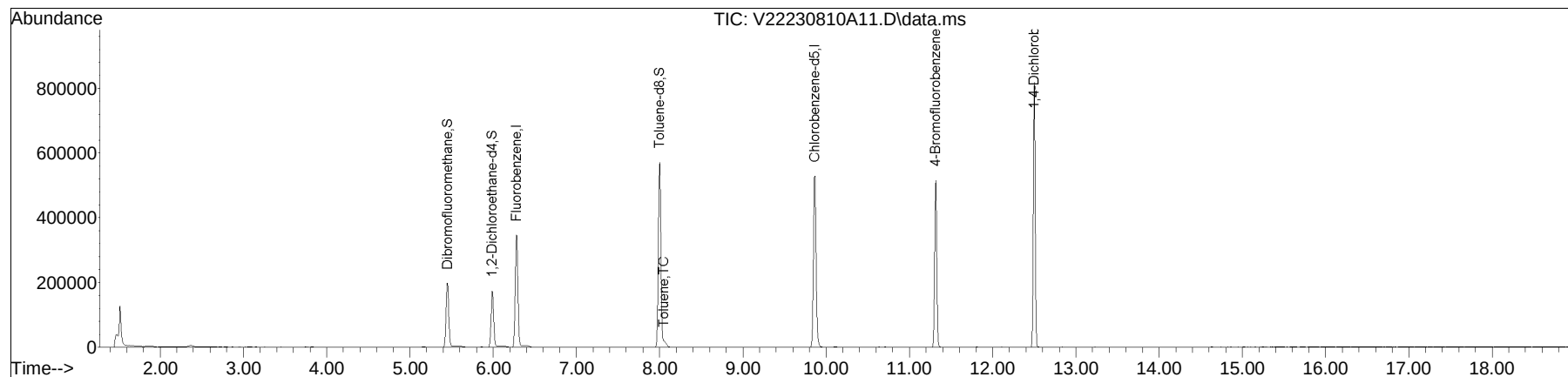
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230810A\
 Data File : V22230810A11.D
 Acq On : 10 Aug 2023 12:46 pm
 Operator : VOA122:PID
 Sample : L2346073-04,31,10,10,,A,R3B
 Misc : WG1814675,ICAL20205 (Sig #1); WG,ICAL20205 (Sig #2)
 ALS Vial : 11 Sample Multiplier: 1

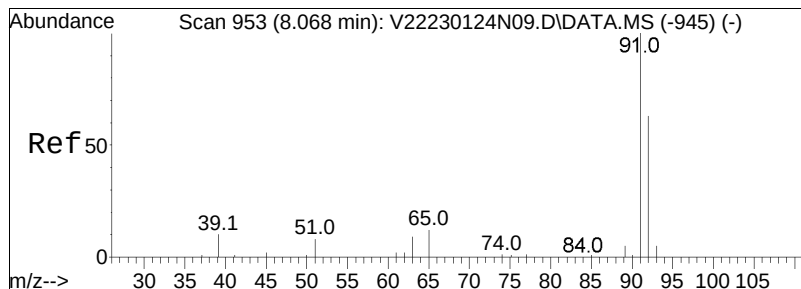
Quant Time: Aug 10 19:33:30 2023
 Quant Method : K:\VOA122\2023\230810A\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:11:40 2023
 Response via : Initial Calibration

Sub List : 8260-NYCP51 - NYCP5130810A\V22230810A03.D•



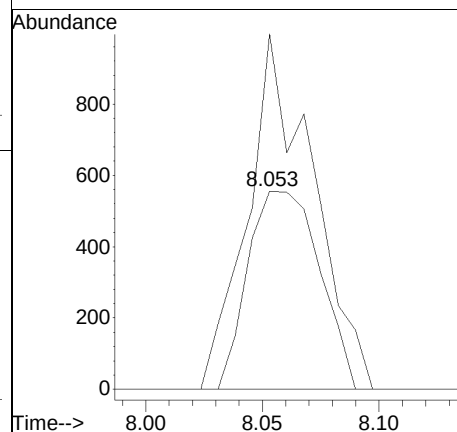
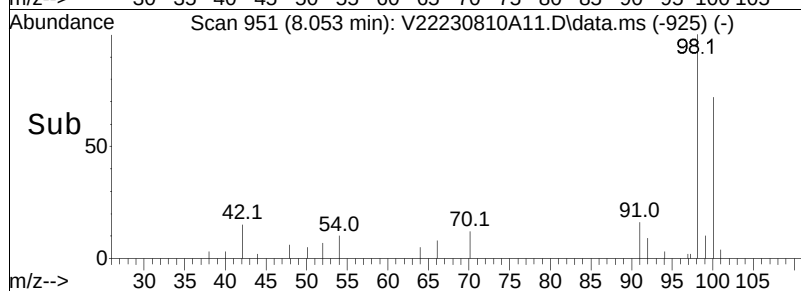
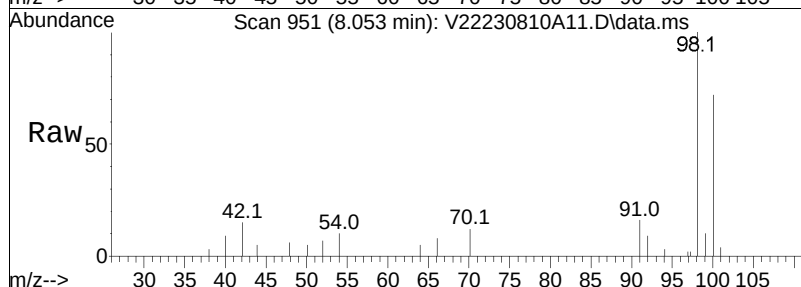
V122_230726N_8260.m Fri Aug 11 07:01:19 2023

Page: 2



#64
 Toluene
 Concen: 0.08 ug/L
 RT: 8.053 min Scan# 951
 Delta R.T. -0.007 min
 Lab File: V22230810A11.D
 Acq: 10 Aug 2023 12:46 pm

Tgt Ion: 92 Resp: 1188
 Ion Ratio Lower Upper
 92 100
 91 163.2 137.0 205.6



Manual Integration Report

Data Path : K:\V0A122\2023\230810A\ QMethod : V122_230726N_8260.m
Data File : V22230810A11.D Operator : V0A122:PID
Date Inj'd : 8/10/2023 12:46 pm Instrument : V0A122
Sample : L2346073-04,31,10,10,,A,R3Quant Date : 8/10/2023 7:33 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230810A\
 Data File : V22230810A12.D
 Acq On : 10 Aug 2023 01:11 pm
 Operator : VOA122:PID
 Sample : L2346073-05,31,10,10,,A,R3B
 Misc : WG1814675,ICAL20205 (Sig #1); WG,ICAL20205 (Sig #2)
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 10 19:33:41 2023
 Quant Method : K:\VOA122\2023\230810A\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:11:40 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA122\2023\230810A\V22230810A03.D
 Sub List : 8260-NYCP51 - NYCP51

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

Internal Standards						
1) Fluorobenzene	6.277	96	355325	10.000	ug/L	0.00
Standard Area 1 = 397815			Recovery = 89.32%			
62) Chlorobenzene-d5	9.866	117	395896	10.000	ug/L	0.00
Standard Area 1 = 393438			Recovery = 100.62%			
83) 1,4-Dichlorobenzene-d4	12.501	152	218035	10.000	ug/L	0.00
Standard Area 1 = 214484			Recovery = 101.66%			
System Monitoring Compounds						
38) Dibromofluoromethane	5.453	113	136406	11.058	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 110.58%			
46) 1,2-Dichloroethane-d4	5.989	65	137875	11.307	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 113.07%			
63) Toluene-d8	8.001	98	480461	10.000	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.00%			
87) 4-Bromofluorobenzene	11.317	95	191023	10.535	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 105.35%			
Target Compounds						
						Qvalue
21) Methyl tert-butyl ether	0.000		0	N.D.		
44) Benzene	5.849	78	903	N.D.		
64) Toluene	8.060	92	1638	0.109	ug/L	94
78) Ethylbenzene	9.921	91	733	N.D.		
80) p/m Xylene	10.112	106	651	N.D.		
81) o Xylene	0.000		0	N.D.		
86) Isopropylbenzene	0.000		0	N.D.		
89) n-Propylbenzene	11.317	91	508	N.D.		
94) 1,3,5-Trimethylbenzene	11.682	105	157	N.D.		
98) tert-Butylbenzene	0.000		0	N.D.		
101) 1,2,4-Trimethylbenzene	12.097	105	443	N.D.		
102) sec-Butylbenzene	12.097	105	443	N.D.		
103) p-Isopropyltoluene	0.000		0	N.D.		
107) n-Butylbenzene	0.000		0	N.D.		
114) Naphthalene	14.631	128	222	N.D.		

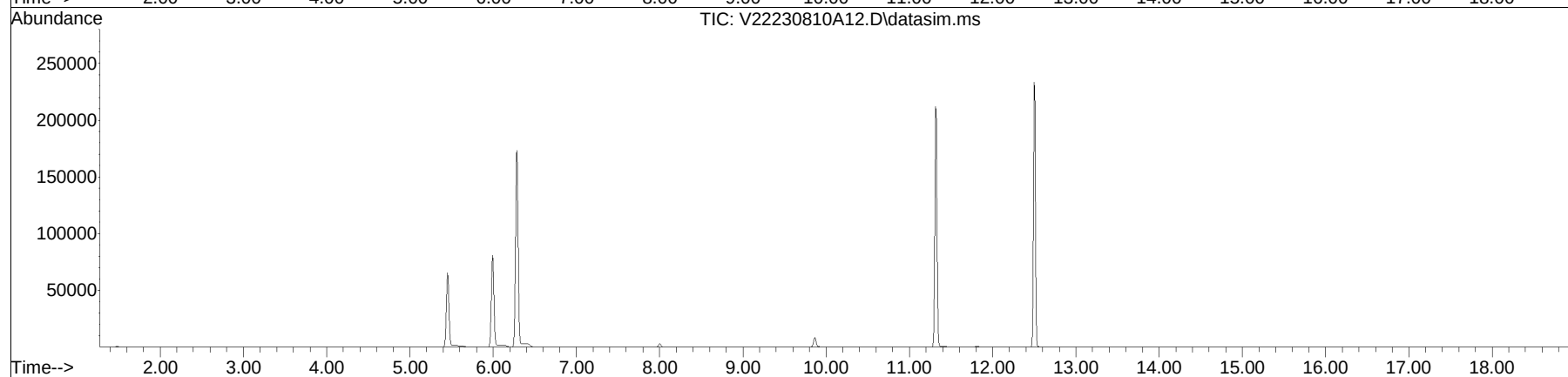
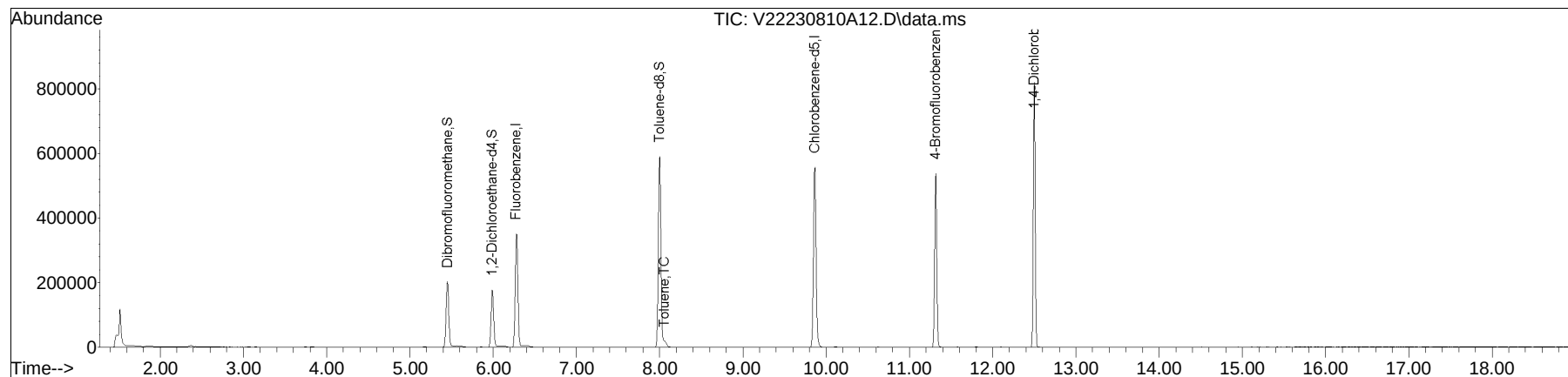
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230810A\
 Data File : V22230810A12.D
 Acq On : 10 Aug 2023 01:11 pm
 Operator : VOA122:PID
 Sample : L2346073-05,31,10,10,,A,R3B
 Misc : WG1814675,ICAL20205 (Sig #1); WG,ICAL20205 (Sig #2)
 ALS Vial : 12 Sample Multiplier: 1

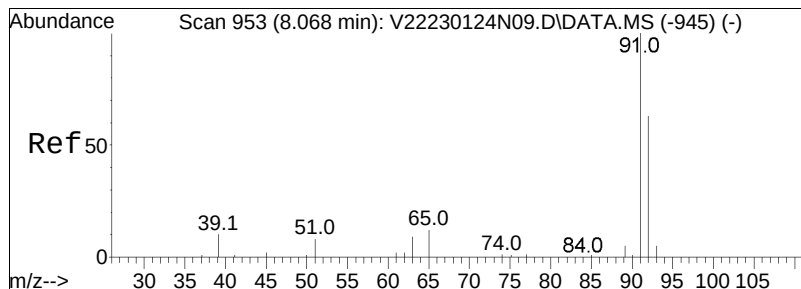
Quant Time: Aug 10 19:33:41 2023
 Quant Method : K:\VOA122\2023\230810A\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:11:40 2023
 Response via : Initial Calibration

Sub List : 8260-NYCP51 - NYCP5130810A\V22230810A03.D•



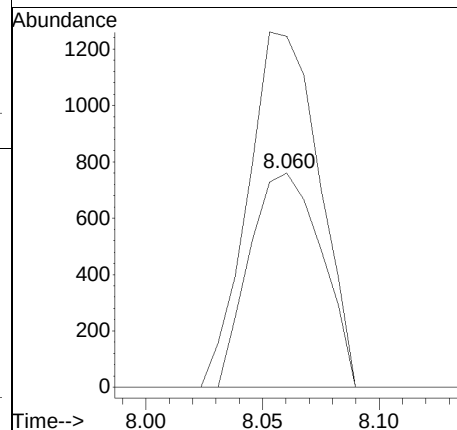
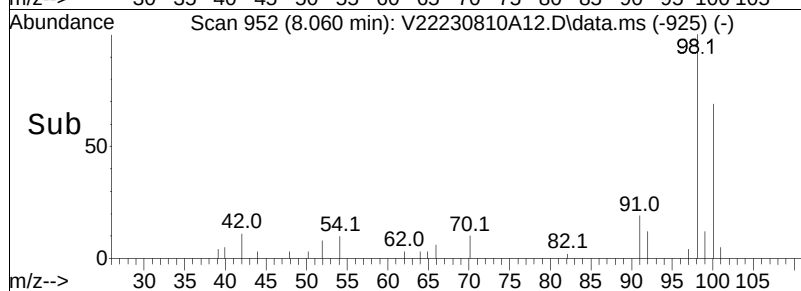
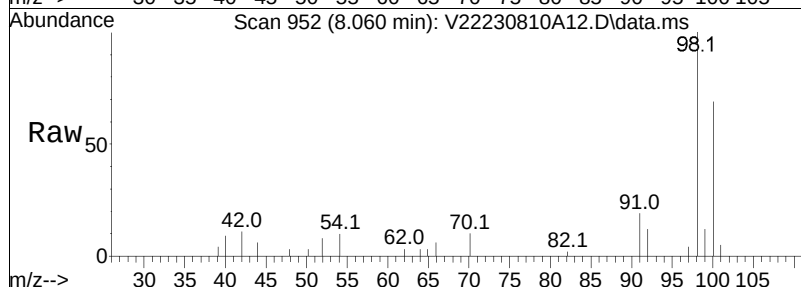
V122_230726N_8260.m Fri Aug 11 07:01:25 2023

Page: 2



#64
 Toluene
 Concen: 0.11 ug/L
 RT: 8.060 min Scan# 952
 Delta R.T. 0.000 min
 Lab File: V22230810A12.D
 Acq: 10 Aug 2023 01:11 pm

Tgt Ion: 92 Resp: 1638
 Ion Ratio Lower Upper
 92 100
 91 163.2 137.0 205.6



Manual Integration Report

Data Path : K:\V0A122\2023\230810A\ QMethod : V122_230726N_8260.m
Data File : V22230810A12.D Operator : V0A122:PID
Date Inj'd : 8/10/2023 1:11 pm Instrument : V0A122
Sample : L2346073-05,31,10,10,,A,R3Quant Date : 8/10/2023 7:33 pm

There are no manual integrations or false positives in this file.

Volatiles Standards Data

Initial Calibration

Initial Calibration Summary

Form 6

Volatiles

Client : Impact Environmental
 Project Name : 585 UNION STREET
 Instrument ID : VOA122
 Calibration dates : 07/26/23 17:01 07/26/23 21:10

Lab Number : L2346073
 Project Number : 14729
 Ical Ref : ICAL20205

Calibration Files

L11 =V22230726N03.D L1 =V22230726N05.D L2 =V22230726N07.D L3 =V22230726N09.D L4 =V22230726N10.D
 L6 =V22230726N11.D L8 =V22230726N12.D L10 =V22230726N13.D

Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
1) I Fluorobenzene	-----ISTD-----									
2) TP Dichlorodifluo		0.186	0.255	0.241	0.210	0.187	0.178	0.171	0.204	16.00
3) TP Chloromethane		0.295	0.331	0.305	0.263	0.232	0.218	0.216	0.266	17.19
4) TC Vinyl chloride	0.219	0.188	0.249	0.231	0.204	0.185	0.178	0.181	0.204	12.74
5) TP Bromomethane		0.060	0.075	0.070	0.063	0.068	0.074	0.084	0.071	11.38
6) TP Chloroethane		0.121	0.152	0.136	0.121	0.105	0.099	0.092	0.118	18.10
7) TP Trichlorofluor		0.223	0.298	0.275	0.243	0.224	0.211	0.206	0.240	14.39
8) TP Ethyl ether		0.059	0.068	0.070	0.068	0.062	0.062	0.061	0.064	6.71
10) TC 1,1-Dichloroet		0.138	0.182	0.167	0.145	0.133	0.130	0.131	0.147	13.73
11) TP Carbon disulfide		0.498	0.599	0.553	0.483	0.441	0.420	0.423	0.488	13.93
12) TP Freon-113		0.122	0.192	0.180	0.161	0.143	0.138	0.135	0.153	16.73
13) TP Iodomethane			0.066	0.102	0.141	0.164	0.163	*L		0.9959
14) TP Acrolein			0.018	0.020	0.020	0.019	0.019	0.019	0.019	5.67
15) TP Methylene chlo			0.226	0.194	0.169	0.148	0.143	0.143	0.171	19.63
17) TP Acetone			0.045	0.041	0.036	0.032	0.032	0.031	0.036	16.22
18) TP trans-1,2-Dich		0.151	0.185	0.177	0.158	0.143	0.142	0.137	0.156	11.73
19) TP Methyl acetate		0.103	0.096	0.091	0.088	0.080	0.079	0.078	0.088	10.76
21) TP Methyl tert butyl ether		0.226	0.272	0.302	0.305	0.300	0.301	0.299	0.286	10.00
22) TP tert-Butyl alc			0.008	0.010	0.009	0.009	0.009	0.009	0.009#	6.66
24) TP Diisopropyl ether		0.412	0.486	0.510	0.505	0.493	0.485	0.477	0.481	6.79
25) TP 1,1-Dichloroet		0.336	0.397	0.375	0.338	0.304	0.293	0.294	0.334	12.20
26) TP Halothane		0.091	0.130	0.129	0.118	0.110	0.108	0.114	0.114	11.69
27) TP Acrylonitrile		0.031	0.046	0.051	0.045	0.042	0.041	0.041	0.042	14.03
28) TP Ethyl tert-but		0.307	0.365	0.404	0.415	0.414	0.415	0.414	0.391	10.48
29) TP Vinyl acetate			0.130	0.134	0.187	0.187	0.168	0.162	0.161	15.40
30) TP cis-1,2-Dichlo		0.169	0.205	0.190	0.174	0.157	0.153	0.153	0.172#	11.57
31) TP 2,2-Dichloropr		0.182	0.239	0.223	0.219	0.201	0.194	0.194	0.207	9.63
32) TP Bromochloromet		0.085	0.094	0.096	0.082	0.073	0.071	0.069	0.081#	13.23
33) TP Cyclohexane		0.242	0.364	0.384	0.354	0.346	0.332	0.330	0.336	13.45
34) TC Chloroform		0.290	0.339	0.292	0.272	0.255	0.250	0.249	0.278	11.62
35) TP Ethyl acetate			0.086	0.102	0.101	0.102	0.102	0.102	0.099	6.65
36) TP Carbon tetrachloride	0.174	0.166	0.243	0.238	0.221	0.210	0.204	0.208	0.208	13.14
37) TP Tetrahydrofuran			0.034	0.035	0.032	0.030	0.030	0.029	0.032	7.53
38) S Dibromofluoromethane	0.383	0.382	0.380	0.364	0.339	0.316	0.308	0.305	0.347	9.87
39) TP 1,1,1-Trichlor		0.204	0.275	0.268	0.247	0.241	0.233	0.235	0.243	9.72
41) TP 2-Butanone			0.040	0.044	0.045	0.044	0.046	0.046	0.044	4.82



Initial Calibration Summary

Form 6

Volatiles

Client : Impact Environmental
 Project Name : 585 UNION STREET
 Instrument ID : VOA122
 Calibration dates : 07/26/23 17:01 07/26/23 21:10

Lab Number : L2346073
 Project Number : 14729
 Ical Ref : ICAL20205

Calibration Files

L11 =V22230726N03.D L1 =V22230726N05.D L2 =V22230726N07.D L3 =V22230726N09.D L4 =V22230726N10.D
 L6 =V22230726N11.D L8 =V22230726N12.D L10 =V22230726N13.D

Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
42) TP 1,1-Dichloropr		0.139	0.192	0.210	0.205	0.223	0.217	0.221	0.201	14.55
44) TP Benzene	0.514	0.458	0.594	0.585	0.555	0.559	0.547	0.554	0.546	7.87
45) TP Tertiary-Amyl Methyl Ether		0.217	0.258	0.283	0.290	0.295	0.311	0.312	0.281	11.95
46) S 1,2-Dichloroethane-d4	0.370	0.367	0.370	0.356	0.339	0.320	0.314	0.310	0.343	7.54
47) T 1,2-Dichloroet		0.209	0.228	0.217	0.199	0.189	0.184	0.181	0.201	8.72
50) TP Methyl cyclohe		0.207	0.280	0.285	0.278	0.271	0.268	0.265	0.265	10.00
51) TP Trichloroethene	0.231	0.166	0.209	0.201	0.184	0.177	0.176	0.179	0.190#	11.41
53) TP Dibromomethane		0.083	0.094	0.094	0.088	0.081	0.080	0.080	0.086	7.63
54) TC 1,2-Dichloropr		0.131	0.160	0.169	0.172	0.166	0.164	0.166	0.161	8.50
56) TP 2-Chloroethyl			0.053	0.065	0.070	0.073	0.075	0.075	0.068	12.75
57) TP Bromodichlorom		0.164	0.204	0.200	0.205	0.197	0.195	0.197	0.194#	7.15
60) TP 1,4-Dioxane		0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001#	7.65
61) TP cis-1,3-Dichlo		0.163	0.192	0.218	0.226	0.226	0.226	0.228	0.211#	11.74
62) I Chlorobenzene-d5	-----ISTD-----									
63) S Toluene-d8	1.190	1.204	1.204	1.216	1.221	1.219	1.224	1.231	1.214	1.10
64) TC Toluene		0.313	0.406	0.403	0.391	0.383	0.376	0.385	0.380	8.28
65) TP 4-Methyl-2-pen			0.021	0.028	0.030	0.032	0.034	0.033	0.030#	16.38
66) TP Tetrachloroethene		0.108	0.135	0.132	0.133	0.132	0.127	0.130	0.128	7.07
68) TP trans-1,3-Dich		0.130	0.161	0.193	0.216	0.225	0.227	0.229	0.197#	19.63
70) TP Ethyl methacry			0.090	0.111	0.120	0.122	0.122	0.121	0.114	11.09
71) TP 1,1,2-Trichlor		0.066	0.078	0.090	0.097	0.099	0.099	0.100	0.090#	14.32
72) TP Chlorodibromom		0.095	0.112	0.132	0.145	0.153	0.156	0.161	0.136#	18.09
73) TP 1,3-Dichloropr		0.133	0.160	0.184	0.197	0.203	0.205	0.212	0.185	15.58
74) TP 1,2-Dibromoethane		0.068	0.095	0.106	0.116	0.121	0.122	0.124	0.107#	18.83
76) TP 2-Hexanone			0.051	0.061	0.066	0.067	0.068	0.067	0.063	10.32
77) TP Chlorobenzene		0.403	0.474	0.461	0.443	0.433	0.424	0.432	0.439	5.42
78) TC Ethylbenzene		0.614	0.771	0.797	0.773	0.746	0.729	0.733	0.738	8.06
79) TP 1,1,1,2-Tetrac		0.106	0.129	0.141	0.151	0.159	0.160	0.167	0.145	14.83
80) TP p/m Xylene		0.235	0.291	0.316	0.305	0.294	0.285	0.283	0.287	8.95
81) TP o Xylene		0.215	0.274	0.301	0.294	0.282	0.275	0.272	0.273	10.15
82) TP Styrene		0.324	0.431	0.486	0.479	0.460	0.446	0.433	0.437	12.36
83) I 1,4-Dichlorobenzene-d4	-----ISTD-----									
84) TP Bromoform		0.097	0.110	0.132	0.139	0.150	0.157	0.163	0.135	17.99
86) TP Isopropylbenzene		0.932	1.333	1.463	1.419	1.392	1.372	1.355	1.324	13.44
87) S 4-Bromofluorobenzene	0.817	0.828	0.822	0.842	0.837	0.822	0.838	0.846	0.832	1.29
88) TP Bromobenzene		0.303	0.332	0.343	0.331	0.321	0.323	0.324	0.325	3.78



Initial Calibration Summary

Form 6

Volatiles

Client : Impact Environmental
 Project Name : 585 UNION STREET
 Instrument ID : VOA122
 Calibration dates : 07/26/23 17:01 07/26/23 21:10

Lab Number : L2346073
 Project Number : 14729
 Ical Ref : ICAL20205

Calibration Files

L11 =V22230726N03.D L1 =V22230726N05.D L2 =V22230726N07.D L3 =V22230726N09.D L4 =V22230726N10.D
 L6 =V22230726N11.D L8 =V22230726N12.D L10 =V22230726N13.D

Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
89) TP n-Propylbenzene	1.270	1.598	1.701	1.669	1.630	1.607	1.553	1.575	9.09	
90) TP 1,4-Dichlorobu	0.308	0.349	0.385	0.378	0.377	0.383	0.382	0.366	7.72	
91) TP 1,1,2,2-Tetrac	0.203	0.187	0.193	0.206	0.209	0.209	0.210	0.203	4.50	
92) TP 4-Ethyltoluene	0.989	1.329	1.429	1.394	1.374	1.349	1.350	1.316	11.24	
93) TP 2-Chlorotoluene	0.831	0.990	1.004	0.963	0.939	0.937	0.903	0.938	6.21	
94) TP 1,3,5-Trimethy	0.811	1.074	1.188	1.163	1.167	1.156	1.166	1.104	12.16	
95) TP 1,2,3-Trichlor	0.145	0.168	0.177	0.172	0.175	0.181	0.183	0.172	7.39	
96) TP trans-1,4-Dich		0.065	0.073	0.077	0.079	0.080	0.078	0.075	7.21	
97) TP 4-Chlorotoluene	0.809	0.980	1.019	0.996	0.987	0.975	0.978	0.964	7.24	
98) TP tert-Butylbenzene	0.785	1.014	1.131	1.107	1.108	1.097	1.101	1.049	11.65	
101) TP 1,2,4-Trimethy	0.717	0.997	1.138	1.130	1.146	1.130	1.135	1.056	15.01	
102) TP sec-Butylbenzene	0.974	1.431	1.524	1.477	1.455	1.434	1.388	1.383	13.39	
103) TP p-Isopropyltol	0.763	1.133	1.279	1.273	1.269	1.249	1.217	1.169	15.91	
104) TP 1,3-Dichlorobe	0.582	0.675	0.671	0.662	0.654	0.642	0.634	0.646	4.95	
105) TP 1,4-Dichlorobe	0.654	0.674	0.676	0.652	0.645	0.637	0.635	0.653	2.50	
106) TP p-Diethylbenzene	0.452	0.619	0.728	0.740	0.758	0.749	0.744	0.684	16.50	
107) TP n-Butylbenzene	0.617	0.949	1.056	1.041	1.041	1.023	1.009	0.962	16.22	
108) TP 1,2-Dichlorobe	0.533	0.608	0.605	0.588	0.585	0.584	0.576	0.583#	4.22	
109) TP 1,2,4,5-Tetram		0.640	0.870	0.961	1.001	1.003	0.999	0.912	15.68	
110) TP 1,2-Dibromo-3-	0.027	0.030	0.035	0.036	0.039	0.040	0.040	0.035	14.98	
111) TP 1,3,5-Trichlor	0.299	0.388	0.413	0.411	0.409	0.401	0.401	0.389	10.38	
112) TP Hexachlorobuta	0.095	0.145	0.147	0.143	0.145	0.144	0.145	0.138	13.89	
113) TP 1,2,4-Trichlor	0.262	0.315	0.344	0.354	0.349	0.348	0.346	0.331#	9.91	
114) TP Naphthalene	0.440	0.560	0.722	0.784	0.778	0.780	0.769	0.690	19.71	
115) TP 1,2,3-Trichlor	0.239	0.274	0.309	0.310	0.300	0.301	0.296	0.290#	8.70	

Response Factor Report VOA122

Method Path : K:\VOA122\2023\230726NICAL\
 Method File : V122_230726N_8260.m
 Title : VOLATILES BY GC/MS
 Last Update : Thu Jul 27 09:11:40 2023
 Response Via : Initial Calibration

Calibration Files

L11 =V22230726N03.D L1 =V22230726N05.D L2 =V22230726N07.D L3 =V22230726N09.D L4 =V22230726N10.D
 L6 =V22230726N11.D L8 =V22230726N12.D L10 =V22230726N13.D

Compound		L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD

1) I	Fluorobenzene	-----ISTD-----									
2) TP	Dichlorodifluo...	0.186	0.255	0.241	0.210	0.187	0.178	0.171	0.204	16.00	
3) TP	Chloromethane	0.295	0.331	0.305	0.263	0.232	0.218	0.216	0.266	17.19	
4) TC	Vinyl chloride	0.219 0.188	0.249	0.231	0.204	0.185	0.178	0.181	0.204	12.74	
5) TP	Bromomethane	0.060	0.075	0.070	0.063	0.068	0.074	0.084	0.071	11.38	
6) TP	Chloroethane	0.121	0.152	0.136	0.121	0.105	0.099	0.092	0.118	18.10	
7) TP	Trichlorofluor...	0.223	0.298	0.275	0.243	0.224	0.211	0.206	0.240	14.39	
8) TP	Ethyl ether	0.059	0.068	0.070	0.068	0.062	0.062	0.061	0.064	6.71	
10) TC	1,1-Dichloroet...	0.138	0.182	0.167	0.145	0.133	0.130	0.131	0.147	13.73	
11) TP	Carbon disulfide	0.498	0.599	0.553	0.483	0.441	0.420	0.423	0.488	13.93	
12) TP	Freon-113	0.122	0.192	0.180	0.161	0.143	0.138	0.135	0.153	16.73	
13) TP	Iodomethane		0.066	0.102	0.141	0.164	0.163	*L		0.9959	
14) TP	Acrolein		0.018	0.020	0.020	0.019	0.019	0.019	0.019	5.67	
15) TP	Methylene chlo...		0.226	0.194	0.169	0.148	0.143	0.143	0.171	19.63	
17) TP	Acetone		0.045	0.041	0.036	0.032	0.032	0.031	0.036	16.22	
18) TP	trans-1,2-Dich...	0.151	0.185	0.177	0.158	0.143	0.142	0.137	0.156	11.73	
19) TP	Methyl acetate	0.103	0.096	0.091	0.088	0.080	0.079	0.078	0.088	10.76	
21) TP	Methyl tert-bu...	0.226	0.272	0.302	0.305	0.300	0.301	0.299	0.286	10.00	
22) TP	tert-Butyl alc...		0.008	0.010	0.009	0.009	0.009	0.009	0.009#	6.66	
24) TP	Diisopropyl ether	0.412	0.486	0.510	0.505	0.493	0.485	0.477	0.481	6.79	
25) TP	1,1-Dichloroet...	0.336	0.397	0.375	0.338	0.304	0.293	0.294	0.334	12.20	
26) TP	Halothane	0.091	0.130	0.129	0.118	0.110	0.108	0.114	0.114	11.69	
27) TP	Acrylonitrile	0.031	0.046	0.051	0.045	0.042	0.041	0.041	0.042	14.03	
28) TP	Ethyl tert-but...	0.307	0.365	0.404	0.415	0.414	0.415	0.414	0.391	10.48	
29) TP	Vinyl acetate		0.130	0.134	0.187	0.187	0.168	0.162	0.161	15.40	
30) TP	cis-1,2-Dichlo...	0.169	0.205	0.190	0.174	0.157	0.153	0.153	0.172#	11.57	
31) TP	2,2-Dichloropr...	0.182	0.239	0.223	0.219	0.201	0.194	0.194	0.207	9.63	
32) TP	Bromochloromet...	0.085	0.094	0.096	0.082	0.073	0.071	0.069	0.081#	13.23	
33) TP	Cyclohexane	0.242	0.364	0.384	0.354	0.346	0.332	0.330	0.336	13.45	
34) TC	Chloroform	0.290	0.339	0.292	0.272	0.255	0.250	0.249	0.278	11.62	
35) TP	Ethyl acetate		0.086	0.102	0.101	0.102	0.102	0.102	0.099	6.65	

Response Factor Report VOA122

Method Path : K:\VOA122\2023\230726NICAL\
 Method File : V122_230726N_8260.m
 Title : VOLATILES BY GC/MS
 Last Update : Thu Jul 27 09:11:40 2023
 Response Via : Initial Calibration

Calibration Files

L11 =V22230726N03.D L1 =V22230726N05.D L2 =V22230726N07.D L3 =V22230726N09.D L4 =V22230726N10.D
 L6 =V22230726N11.D L8 =V22230726N12.D L10 =V22230726N13.D

	Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
36)	TP Carbon tetrach...	0.174	0.166	0.243	0.238	0.221	0.210	0.204	0.208	0.208	13.14
37)	TP Tetrahydrofuran		0.034	0.035	0.032	0.030	0.030	0.029	0.032		7.53
38)	S Dibromofluorom...	0.383	0.382	0.380	0.364	0.339	0.316	0.308	0.305	0.347	9.87
39)	TP 1,1,1-Trichlor...		0.204	0.275	0.268	0.247	0.241	0.233	0.235	0.243	9.72
41)	TP 2-Butanone		0.040	0.044	0.045	0.044	0.046	0.046	0.044		4.82
42)	TP 1,1-Dichloropr...		0.139	0.192	0.210	0.205	0.223	0.217	0.221	0.201	14.55
44)	TP Benzene	0.514	0.458	0.594	0.585	0.555	0.559	0.547	0.554	0.546	7.87
45)	TP tert-Amyl meth...		0.217	0.258	0.283	0.290	0.295	0.311	0.312	0.281	11.95
46)	S 1,2-Dichloroet...	0.370	0.367	0.370	0.356	0.339	0.320	0.314	0.310	0.343	7.54
47)	T 1,2-Dichloroet...		0.209	0.228	0.217	0.199	0.189	0.184	0.181	0.201	8.72
50)	TP Methyl cyclohe...		0.207	0.280	0.285	0.278	0.271	0.268	0.265	0.265	10.00
51)	TP Trichloroethene	0.231	0.166	0.209	0.201	0.184	0.177	0.176	0.179	0.190#	11.41
53)	TP Dibromomethane		0.083	0.094	0.094	0.088	0.081	0.080	0.080	0.086	7.63
54)	TC 1,2-Dichloropr...		0.131	0.160	0.169	0.172	0.166	0.164	0.166	0.161	8.50
56)	TP 2-Chloroethyl ...			0.053	0.065	0.070	0.073	0.075	0.075	0.068	12.75
57)	TP Bromodichlorom...		0.164	0.204	0.200	0.205	0.197	0.195	0.197	0.194#	7.15
60)	TP 1,4-Dioxane		0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001#	7.65
61)	TP cis-1,3-Dichlo...		0.163	0.192	0.218	0.226	0.226	0.226	0.228	0.211#	11.74
62)	I Chlorobenzene-d5	-----ISTD-----									
63)	S Toluene-d8	1.190	1.204	1.204	1.216	1.221	1.219	1.224	1.231	1.214	1.10
64)	TC Toluene		0.313	0.406	0.403	0.391	0.383	0.376	0.385	0.380	8.28
65)	TP 4-Methyl-2-pen...			0.021	0.028	0.030	0.032	0.034	0.033	0.030#	16.38
66)	TP Tetrachloroethene		0.108	0.135	0.132	0.133	0.132	0.127	0.130	0.128	7.07
68)	TP trans-1,3-Dich...		0.130	0.161	0.193	0.216	0.225	0.227	0.229	0.197#	19.63
70)	TP Ethyl methacry...			0.090	0.111	0.120	0.122	0.122	0.121	0.114	11.09
71)	TP 1,1,2-Trichlor...		0.066	0.078	0.090	0.097	0.099	0.099	0.100	0.090#	14.32
72)	TP Chlorodibromom...		0.095	0.112	0.132	0.145	0.153	0.156	0.161	0.136#	18.09
73)	TP 1,3-Dichloropr...		0.133	0.160	0.184	0.197	0.203	0.205	0.212	0.185	15.58
74)	TP 1,2-Dibromoethane		0.068	0.095	0.106	0.116	0.121	0.122	0.124	0.107#	18.83
76)	TP 2-Hexanone			0.051	0.061	0.066	0.067	0.068	0.067	0.063	10.32
77)	TP Chlorobenzene		0.403	0.474	0.461	0.443	0.433	0.424	0.432	0.439	5.42

Response Factor Report VOA122

Method Path : K:\VOA122\2023\230726NICAL\
 Method File : V122_230726N_8260.m
 Title : VOLATILES BY GC/MS
 Last Update : Thu Jul 27 09:11:40 2023
 Response Via : Initial Calibration

Calibration Files

L11 =V22230726N03.D L1 =V22230726N05.D L2 =V22230726N07.D L3 =V22230726N09.D L4 =V22230726N10.D
 L6 =V22230726N11.D L8 =V22230726N12.D L10 =V22230726N13.D

	Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
78)	TC Ethylbenzene	0.614	0.771	0.797	0.773	0.746	0.729	0.733	0.738	8.06	
79)	TP 1,1,1,2-Tetrac...	0.106	0.129	0.141	0.151	0.159	0.160	0.167	0.145	14.83	
80)	TP p/m Xylene	0.235	0.291	0.316	0.305	0.294	0.285	0.283	0.287	8.95	
81)	TP o Xylene	0.215	0.274	0.301	0.294	0.282	0.275	0.272	0.273	10.15	
82)	TP Styrene	0.324	0.431	0.486	0.479	0.460	0.446	0.433	0.437	12.36	
83)	I 1,4-Dichlorobenzene-d4	-----ISTD-----									
84)	TP Bromoform	0.097	0.110	0.132	0.139	0.150	0.157	0.163	0.135	17.99	
86)	TP Isopropylbenzene	0.932	1.333	1.463	1.419	1.392	1.372	1.355	1.324	13.44	
87)	S 4-Bromofluorob...	0.817	0.828	0.822	0.842	0.837	0.822	0.838	0.846	0.832	1.29
88)	TP Bromobenzene	0.303	0.332	0.343	0.331	0.321	0.323	0.324	0.325	3.78	
89)	TP n-Propylbenzene	1.270	1.598	1.701	1.669	1.630	1.607	1.553	1.575	9.09	
90)	TP 1,4-Dichlorobu...	0.308	0.349	0.385	0.378	0.377	0.383	0.382	0.366	7.72	
91)	TP 1,1,2,2-Tetrac...	0.203	0.187	0.193	0.206	0.209	0.209	0.210	0.203	4.50	
92)	TP 4-Ethyltoluene	0.989	1.329	1.429	1.394	1.374	1.349	1.350	1.316	11.24	
93)	TP 2-Chlorotoluene	0.831	0.990	1.004	0.963	0.939	0.937	0.903	0.938	6.21	
94)	TP 1,3,5-Trimethy...	0.811	1.074	1.188	1.163	1.167	1.156	1.166	1.104	12.16	
95)	TP 1,2,3-Trichlor...	0.145	0.168	0.177	0.172	0.175	0.181	0.183	0.172	7.39	
96)	TP trans-1,4-Dich...		0.065	0.073	0.077	0.079	0.080	0.078	0.075	7.21	
97)	TP 4-Chlorotoluene	0.809	0.980	1.019	0.996	0.987	0.975	0.978	0.964	7.24	
98)	TP tert-Butylbenzene	0.785	1.014	1.131	1.107	1.108	1.097	1.101	1.049	11.65	
101)	TP 1,2,4-Trimethy...	0.717	0.997	1.138	1.130	1.146	1.130	1.135	1.056	15.01	
102)	TP sec-Butylbenzene	0.974	1.431	1.524	1.477	1.455	1.434	1.388	1.383	13.39	
103)	TP p-Isopropyltol...	0.763	1.133	1.279	1.273	1.269	1.249	1.217	1.169	15.91	
104)	TP 1,3-Dichlorobe...	0.582	0.675	0.671	0.662	0.654	0.642	0.634	0.646	4.95	
105)	TP 1,4-Dichlorobe...	0.654	0.674	0.676	0.652	0.645	0.637	0.635	0.653	2.50	
106)	TP p-Diethylbenzene	0.452	0.619	0.728	0.740	0.758	0.749	0.744	0.684	16.50	
107)	TP n-Butylbenzene	0.617	0.949	1.056	1.041	1.041	1.023	1.009	0.962	16.22	
108)	TP 1,2-Dichlorobe...	0.533	0.608	0.605	0.588	0.585	0.584	0.576	0.583#	4.22	
109)	TP 1,2,4,5-Tetram...		0.640	0.870	0.961	1.001	1.003	0.999	0.912	15.68	
110)	TP 1,2-Dibromo-3-...	0.027	0.030	0.035	0.036	0.039	0.040	0.040	0.035	14.98	
111)	TP 1,3,5-Trichlor...	0.299	0.388	0.413	0.411	0.409	0.401	0.401	0.389	10.38	

Response Factor Report VOA122

Method Path : K:\VOA122\2023\230726NICAL\
 Method File : V122_230726N_8260.m
 Title : VOLATILES BY GC/MS
 Last Update : Thu Jul 27 09:11:40 2023
 Response Via : Initial Calibration

Calibration Files

L11 =V22230726N03.D L1 =V22230726N05.D L2 =V22230726N07.D L3 =V22230726N09.D L4 =V22230726N10.D
 L6 =V22230726N11.D L8 =V22230726N12.D L10 =V22230726N13.D

Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
112) TP Hexachlorobuta...	0.095	0.145	0.147	0.143	0.145	0.144	0.145	0.138	13.89	
113) TP 1,2,4-Trichlor...	0.262	0.315	0.344	0.354	0.349	0.348	0.346	0.331#	9.91	
114) TP Naphthalene	0.440	0.560	0.722	0.784	0.778	0.780	0.769	0.690	19.71	
115) TP 1,2,3-Trichlor...	0.239	0.274	0.309	0.310	0.300	0.301	0.296	0.290#	8.70	

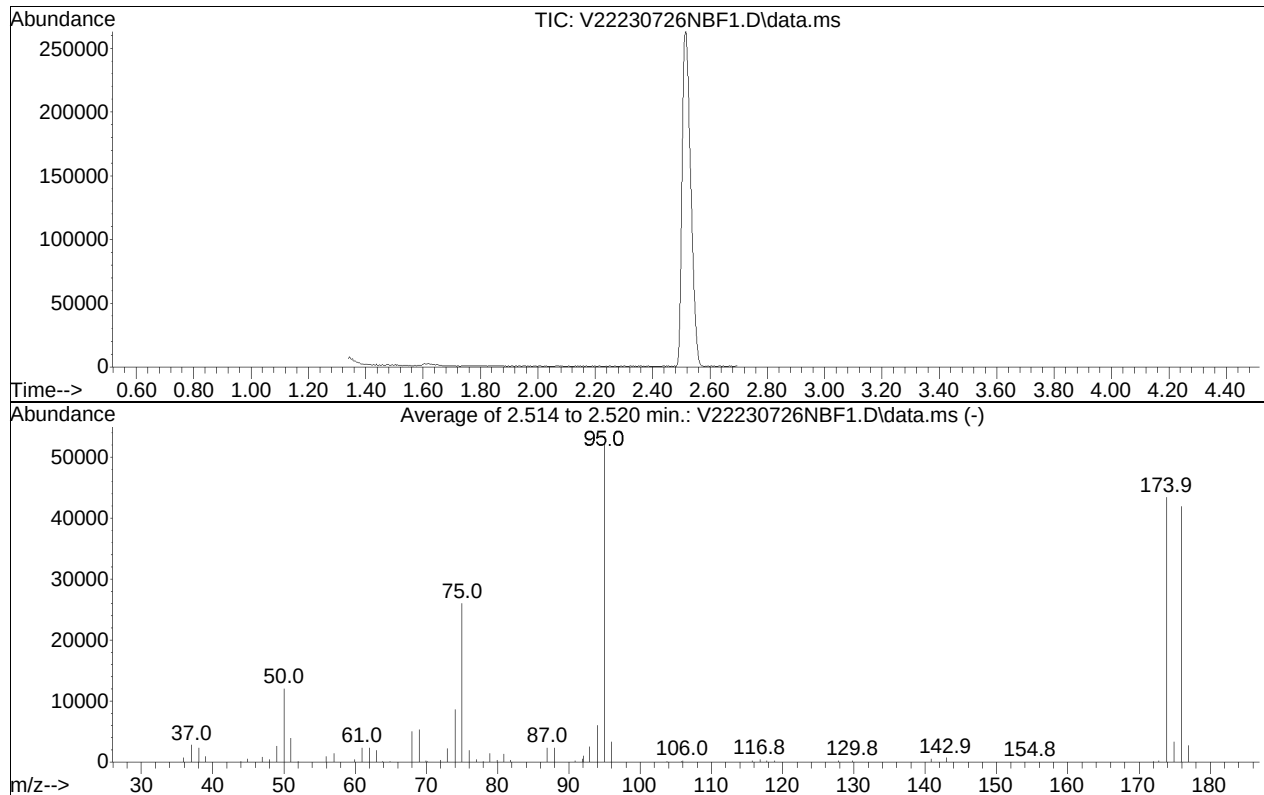
(#) = Out of Range

BFB

Data Path : K:\VOA122\2023\230726NICAL\
 Data File : V22230726NBF1.D
 Acq On : 26 Jul 2023 03:48 pm
 Operator : VOA122:TMS
 Sample : WG1808429-1
 Misc : WG1808429
 ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : K:\VOA122\2023\230726NICAL\V122_230726N_8260.m
 Title : VOLATILES BY GC/MS
 Last Update : Thu Jul 27 09:11:40 2023



AutoFind: Scans 422, 423, 424; Background Corrected with Scan 409

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	22.9	12019	PASS
75	95	30	60	49.7	26072	PASS
95	95	100	100	100.0	52424	PASS
96	95	5	9	6.4	3350	PASS
173	174	0.00	2	0.6	261	PASS
174	95	50	100	83.0	43504	PASS
175	174	5	9	7.8	3372	PASS
176	174	95	101	96.6	42013	PASS
177	176	5	9	6.5	2719	PASS

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230726NICAL\
 Data File : V22230726N03.D
 Acq On : 26 Jul 2023 05:01 pm
 Operator : VOA122:PID
 Sample : I8260STD0.19PPB
 Misc : WG1808429,ICAL (Sig #1); WG,ICAL20151 (Sig #2)
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 27 09:03:28 2023
 Quant Method : K:\VOA122\2023\230726NICAL\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:03:05 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA122\2023\230726NICAL\V22230726N09.D
 Sub List : 8260-L11 - Level 11 for 8260-LRR product

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

Internal Standards						
1) Fluorobenzene	6.284	96	335678	10.000	ug/L	0.00
Standard Area 1 = 368457			Recovery	=	91.10%	
62) Chlorobenzene-d5	9.866	117	364178	10.000	ug/L	0.00
Standard Area 1 = 369809			Recovery	=	98.48%	
83) 1,4-Dichlorobenzene-d4	12.501	152	203077	10.000	ug/L	0.00
Standard Area 1 = 207432			Recovery	=	97.90%	
System Monitoring Compounds						
38) Dibromofluoromethane	5.454	113	128536	11.030	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	110.30%	
46) 1,2-Dichloroethane-d4	5.989	65	124228	10.784	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	107.84%	
63) Toluene-d8	8.001	98	433255	9.803	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	98.03%	
87) 4-Bromofluorobenzene	11.317	95	165842	9.820	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	98.20%	
Target Compounds						
4) Vinyl chloride	1.968	62	1395	0.203	ug/L	82
36) Carbon tetrachloride	5.412	117	1112	0.159	ug/L #	58
44) Benzene	5.856	78	3277	0.179	ug/L #	86
51) Trichloroethene	6.469	95	1476	0.231	ug/L #	62

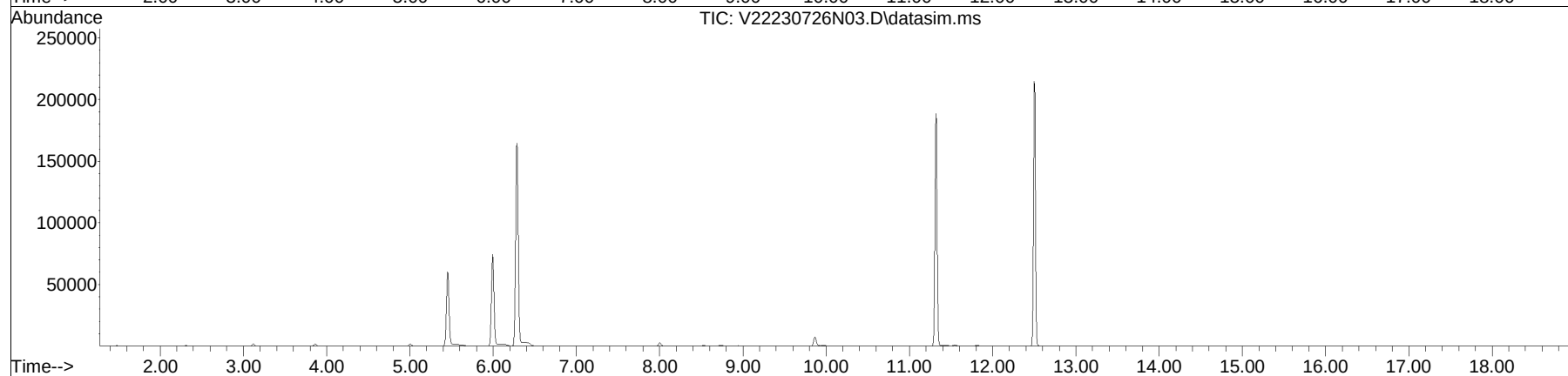
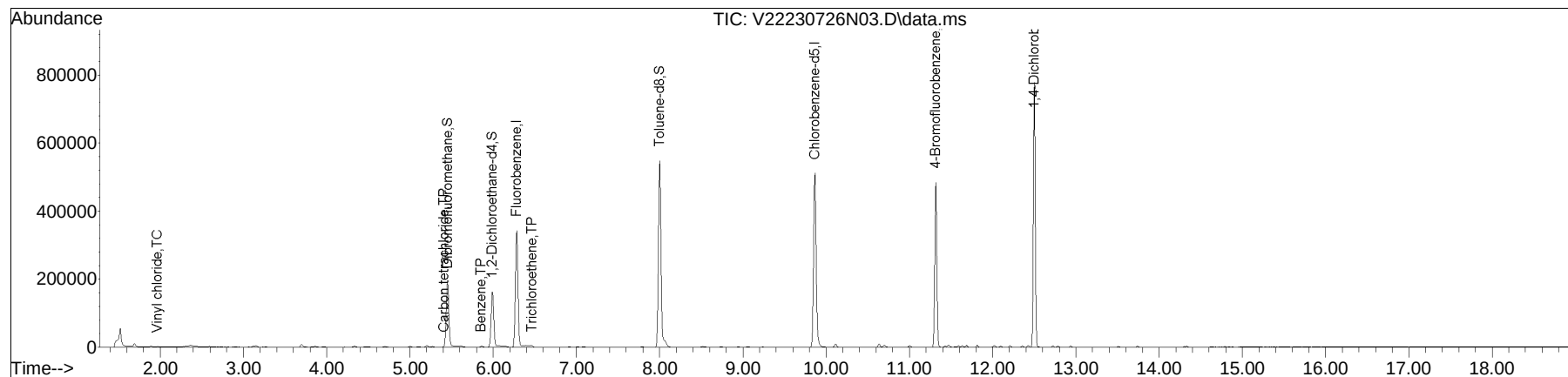
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230726NICAL\
 Data File : V22230726N03.D
 Acq On : 26 Jul 2023 05:01 pm
 Operator : VOA122:PID
 Sample : I8260STD0.19PPB
 Misc : WG1808429,ICAL (Sig #1); WG,ICAL20151 (Sig #2)
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 27 09:03:28 2023
 Quant Method : K:\VOA122\2023\230726NICAL\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:03:05 2023
 Response via : Initial Calibration

Sub List : 8260-L11 - Level 11 for 8260-LRR productN09.D•



V122_230726N_8260.m Thu Jul 27 09:39:10 2023

Page: 2

Manual Integration Report

Data Path	: K:\VOA122\2023\230726NICALQ	Method	: V122_230726N_8260.m
Data File	: V22230726N03.D	Operator	: VOA122:PID
Date Inj'd	: 7/26/2023 5:01 pm	Instrument	: VOA122
Sample	: I8260STD0.19PPB	Quant Date	: 7/27/2023 9:03 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230726NICAL\
 Data File : V22230726N05.D
 Acq On : 26 Jul 2023 05:50 pm
 Operator : VOA122:PID
 Sample : I8260STD0.5PPB
 Misc : WG1808429,ICAL (Sig #1); WG,ICAL20151 (Sig #2)
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 27 09:03:37 2023
 Quant Method : K:\VOA122\2023\230726NICAL\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:03:05 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA122\2023\230726NICAL\V22230726N09.D
 Sub List : 8260-Curve - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	6.285	96	323206	10.000	ug/L	0.00
Standard Area 1 = 368457			Recovery	=	87.72%	
62) Chlorobenzene-d5	9.866	117	349299	10.000	ug/L	0.00
Standard Area 1 = 369809			Recovery	=	94.45%	
83) 1,4-Dichlorobenzene-d4	12.501	152	199660	10.000	ug/L	0.00
Standard Area 1 = 207432			Recovery	=	96.25%	
System Monitoring Compounds						
38) Dibromofluoromethane	5.454	113	123428	11.001	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	110.01%	
46) 1,2-Dichloroethane-d4	5.989	65	118553	10.689	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	106.89%	
63) Toluene-d8	8.002	98	420674	9.924	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	99.24%	
87) 4-Bromofluorobenzene	11.317	95	165401	9.961	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	99.61%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.682	85	3001	0.455	ug/L	94
3) Chloromethane	1.891	50	4760	0.555	ug/L	92
4) Vinyl chloride	1.968	62	3041	0.460	ug/L	99
5) Bromomethane	2.310	94	966	0.424	ug/L #	78
6) Chloroethane	2.428	64	1953	0.512	ug/L	93
7) Trichlorofluoromethane	2.589	101	3611	0.465	ug/L	97
8) Ethyl ether	2.916	74	950	0.458	ug/L #	1
10) 1,1-Dichloroethene	3.118	96	2238	0.472	ug/L #	76
11) Carbon disulfide	3.146	76	8053	0.510	ug/L	93
12) Freon-113	3.153	101	1972	0.399	ug/L	94
13) Iodomethane	3.265	142	846	0.213	ug/L #	63
14) Acrolein	0.000		0	N.D.	d	
15) Methylene chloride	3.697	84	4473	0.745	ug/L #	55
17) Acetone	0.000		0	N.D.	d	
18) trans-1,2-Dichloroethene	3.857	96	2434	0.483	ug/L	79
19) Methyl acetate	3.871	43	1660	0.584	ug/L #	62
21) Methyl tert-butyl ether	3.962	73	3660	0.396	ug/L #	81
22) tert-Butyl alcohol	0.000		0	N.D.	d	
24) Diisopropyl ether	4.331	45	6660	0.428	ug/L #	88
25) 1,1-Dichloroethane	4.471	63	5431	0.503	ug/L	93
26) Halothane	4.512	117	1473	0.398	ug/L	90

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230726NICAL\
 Data File : V22230726N05.D
 Acq On : 26 Jul 2023 05:50 pm
 Operator : VOA122:PID
 Sample : I8260STD0.5PPB
 Misc : WG1808429,ICAL (Sig #1); WG,ICAL20151 (Sig #2)
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 27 09:03:37 2023
 Quant Method : K:\VOA122\2023\230726NICAL\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:03:05 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA122\2023\230726NICAL\V22230726N09.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
27)	Acrylonitrile	4.526	53	509	0.371	ug/L	# 86
28)	Ethyl tert-butyl ether	4.694	59	4966	0.393	ug/L	82
29)	Vinyl acetate	0.000		0	N.D.	d	
30)	cis-1,2-Dichloroethene	5.007	96	2726	0.492	ug/L	# 79
31)	2,2-Dichloropropane	5.105	77	2937	0.438	ug/L	# 77
32)	Bromochloromethane	5.203	128	1371	0.521	ug/L	# 63
33)	Cyclohexane	5.210	56	3917	0.361	ug/L	69
34)	Chloroform	5.272	83	4685	0.521	ug/L	96
35)	Ethyl acetate	0.000		0	N.D.	d	
36)	Carbon tetrachloride	5.412	117	2683	0.399	ug/L	# 88
37)	Tetrahydrofuran	0.000		0	N.D.	d	
39)	1,1,1-Trichloroethane	5.481	97	3300	0.420	ug/L	94
41)	2-Butanone	0.000		0	N.D.	d	
42)	1,1-Dichloropropene	5.607	75	2250	0.346	ug/L	98
44)	Benzene	5.856	78	7409	0.420	ug/L	# 84
45)	tert-Amyl methyl ether	5.960	73	3510	0.387	ug/L	# 79
47)	1,2-Dichloroethane	6.056	62	3376	0.520	ug/L	90
50)	Methyl cyclohexane	6.454	83	3341	0.390	ug/L	# 67
51)	Trichloroethene	6.462	95	2679	0.435	ug/L	92
53)	Dibromomethane	6.911	93	1335	0.482	ug/L	# 79
54)	1,2-Dichloropropane	7.022	63	2122	0.407	ug/L	# 92
56)	2-Chloroethyl vinyl ether	7.729	63	595	0.288	ug/L	# 68
57)	Bromodichloromethane	7.088	83	2653	0.422	ug/L	# 93
60)	1,4-Dioxane	7.302	88	2690	86.417	ug/L	# 49
61)	cis-1,3-Dichloropropene	7.788	75	2634	0.386	ug/L	# 85
64)	Toluene	8.060	92	5458	0.412	ug/L	94
65)	4-Methyl-2-pentanone	0.000		0	N.D.		
66)	Tetrachloroethene	8.518	166	1892	0.423	ug/L	92
68)	trans-1,3-Dichloropropene	8.549	75	2262	0.328	ug/L	# 81
70)	Ethyl methacrylate	8.732	69	1123	0.300	ug/L	# 76
71)	1,1,2-Trichloroethane	8.732	83	1161	0.369	ug/L	93
72)	Chlorodibromomethane	8.954	129	1662	0.349	ug/L	# 95
73)	1,3-Dichloropropane	9.057	76	2316	0.359	ug/L	100
74)	1,2-Dibromoethane	9.231	107	1186	0.316	ug/L	99
76)	2-Hexanone	9.517	43	614	0.296	ug/L	# 46
77)	Chlorobenzene	9.890	112	7030	0.459	ug/L	# 64
78)	Ethylbenzene	9.921	91	10731	0.417	ug/L	96
79)	1,1,1,2-Tetrachloroethane	9.969	131	1846	0.365	ug/L	# 61
80)	p/m Xylene	10.112	106	8213	0.819	ug/L	99
81)	o Xylene	10.635	106	7524	0.788	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230726NICAL\
 Data File : V22230726N05.D
 Acq On : 26 Jul 2023 05:50 pm
 Operator : VOA122:PID
 Sample : I8260STD0.5PPB
 Misc : WG1808429,ICAL (Sig #1); WG,ICAL20151 (Sig #2)
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 27 09:03:37 2023
 Quant Method : K:\VOA122\2023\230726NICAL\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:03:05 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA122\2023\230726NICAL\V22230726N09.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
82)	Styrene	10.699	104	11328	0.742	ug/L	97
84)	Bromoform	10.714	173	967	0.358	ug/L	89
86)	Isopropylbenzene	11.008	105	9305	0.352	ug/L	98
88)	Bromobenzene	11.428	156	3028	0.466	ug/L	96
89)	n-Propylbenzene	11.468	91	12674	0.403	ug/L	97
90)	1,4-Dichlorobutane	11.484	55	3076	0.421	ug/L	100
91)	1,1,2,2-Tetrachloroethane	11.539	83	2031	0.502	ug/L	88
92)	4-Ethyltoluene	11.595	105	9877	0.376	ug/L	98
93)	2-Chlorotoluene	11.634	91	8298M1	0.443	ug/L	
94)	1,3,5-Trimethylbenzene	11.682	105	8093	0.367	ug/L	97
95)	1,2,3-Trichloropropane	11.690	75	1450	0.423	ug/L #	79
96)	trans-1,4-Dichloro-2-b...	0.000		0	N.D.	d	
97)	4-Chlorotoluene	11.817	91	8077	0.420	ug/L	97
98)	tert-Butylbenzene	12.021	119	7833	0.374	ug/L	99
101)	1,2,4-Trimethylbenzene	12.098	105	7153	0.339	ug/L	96
102)	sec-Butylbenzene	12.209	105	9727	0.352	ug/L	95
103)	p-Isopropyltoluene	12.355	119	7619	0.326	ug/L	97
104)	1,3-Dichlorobenzene	12.425	146	5807	0.450	ug/L	98
105)	1,4-Dichlorobenzene	12.515	146	6526M3	0.500	ug/L	
106)	p-Diethylbenzene	12.724	119	4511	0.330	ug/L	96
107)	n-Butylbenzene	12.780	91	6162	0.321	ug/L	94
108)	1,2-Dichlorobenzene	12.940	146	5324	0.458	ug/L	100
109)	1,2,4,5-Tetramethylben...	13.511	119	4746	0.280	ug/L	99
110)	1,2-Dibromo-3-chloropr...	13.706	155	268	0.380	ug/L	84
111)	1,3,5-Trichlorobenzene	13.740	180	2988	0.385	ug/L	95
112)	Hexachlorobutadiene	14.304	225	944	0.343	ug/L	97
113)	1,2,4-Trichlorobenzene	14.332	180	2620	0.396	ug/L	96
114)	Naphthalene	14.624	128	4393	0.319	ug/L	100
115)	1,2,3-Trichlorobenzene	14.791	180	2389	0.413	ug/L	98

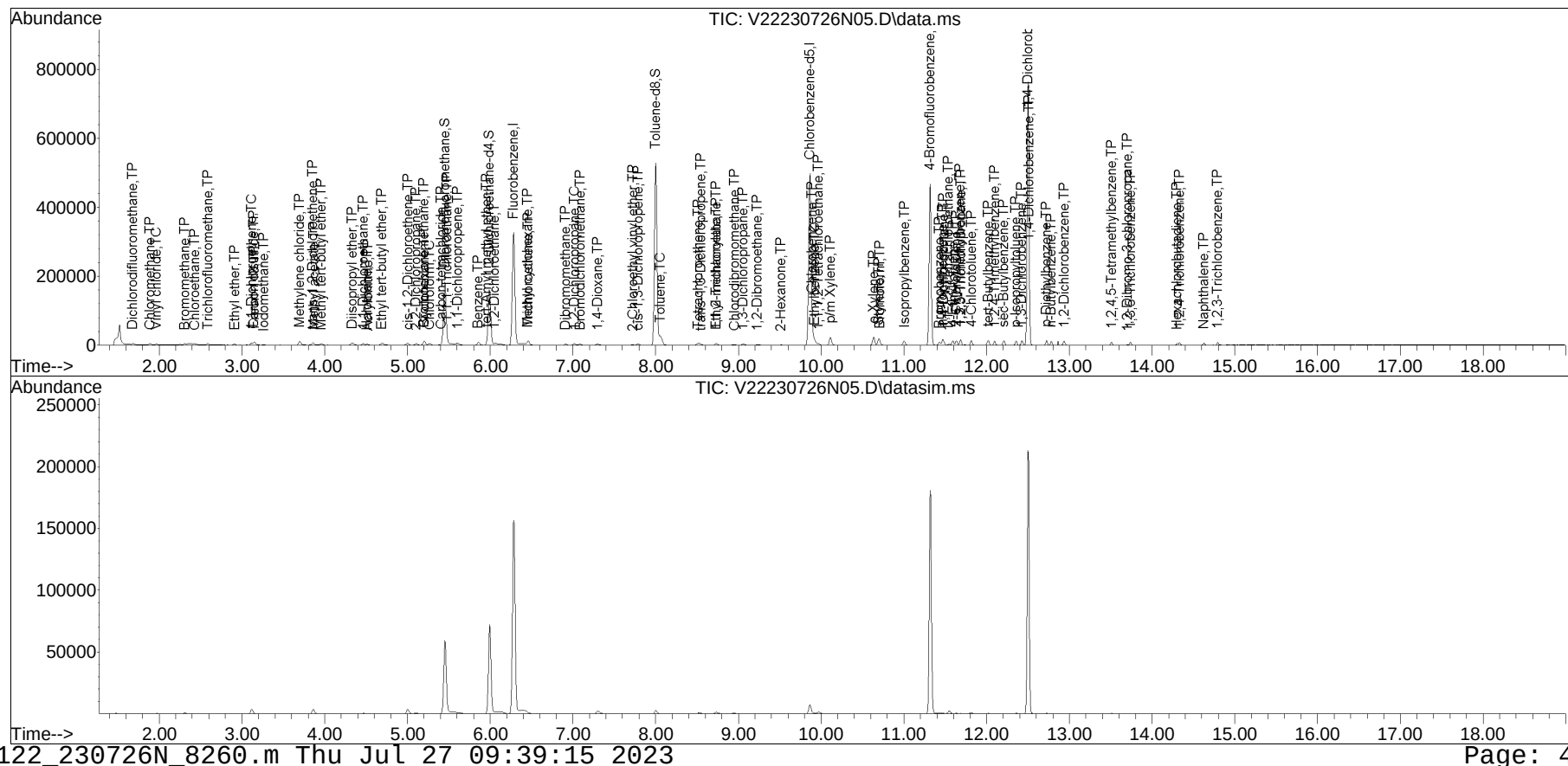
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230726NICAL\
 Data File : V22230726N05.D
 Acq On : 26 Jul 2023 05:50 pm
 Operator : VOA122:PID
 Sample : I8260STD0.5PPB
 Misc : WG1808429,ICAL (Sig #1); WG,ICAL20151 (Sig #2)
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 27 09:03:37 2023
 Quant Method : K:\VOA122\2023\230726NICAL\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:03:05 2023
 Response via : Initial Calibration

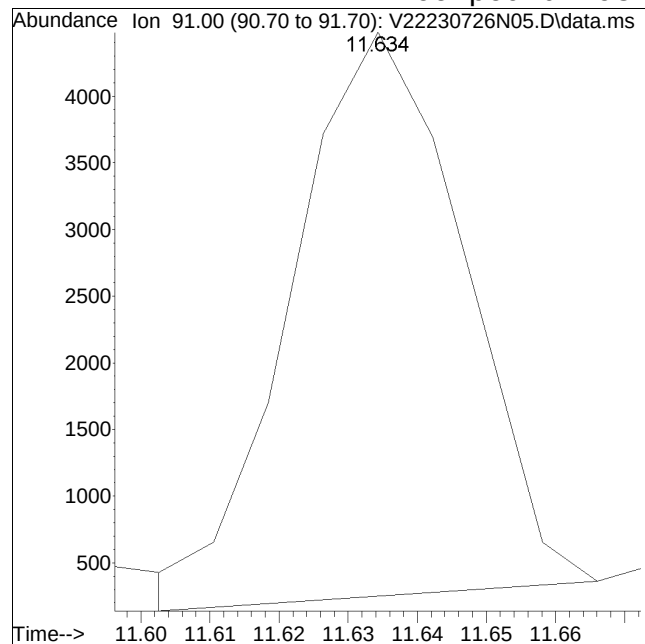
Sub List : 8260-Curve - Megamix plus Diox\VOA122\230726N09.D•



Manual Integration Report

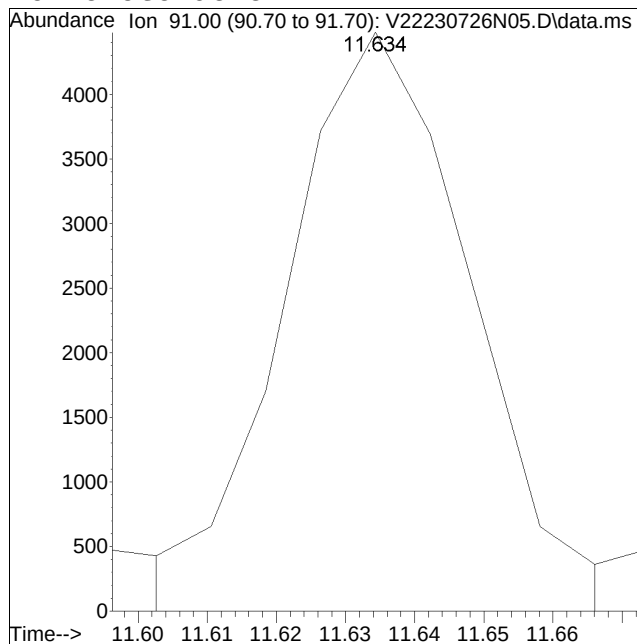
Data Path : K:\VOA122\2023\230726NICALQMethod : V122_230726N_8260.m
Data File : V22230726N05.D Operator : VOA122:PID
Date Inj'd : 7/26/2023 5:50 pm Instrument : VOA122
Sample : I8260STD0.5PPB Quant Date : 7/27/2023 9:03 am

Compound #93: 2-Chlorotoluene



Original Peak Response = 7345

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

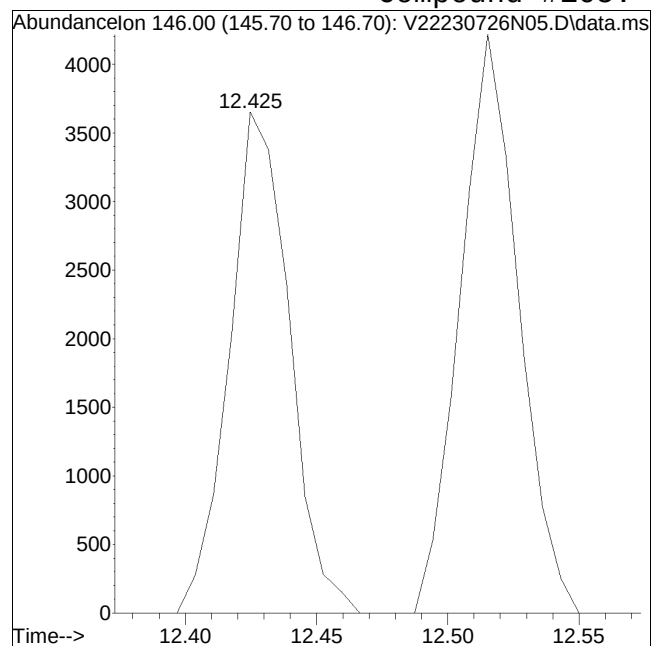


Manual Peak Response = 8298 M1

Manual Integration Report

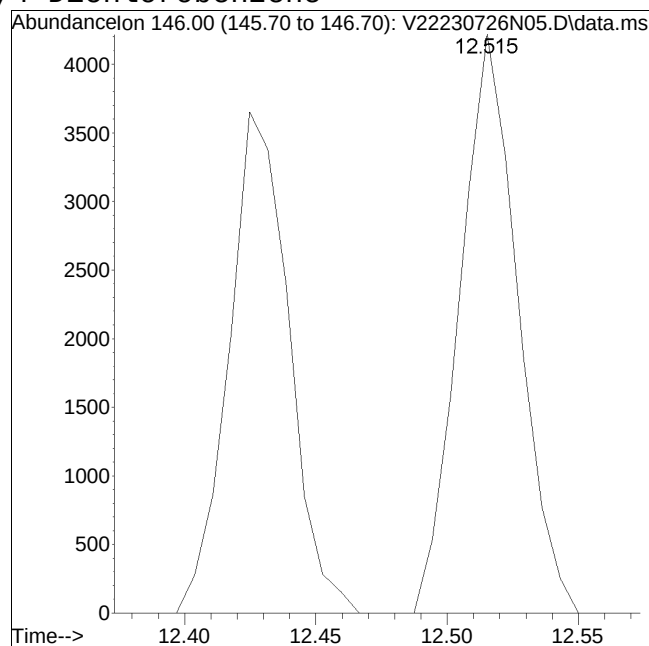
Data Path : K:\VOA122\2023\230726NICALQMethod : V122_230726N_8260.m
Data File : V22230726N05.D Operator : VOA122:PID
Date Inj'd : 7/26/2023 5:50 pm Instrument : VOA122
Sample : I8260STD0.5PPB Quant Date : 7/27/2023 9:03 am

Compound #105: 1,4-Dichlorobenzene



Original Peak Response = 5807

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.



Manual Peak Response = 6526 M3

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230726NICAL\
 Data File : V22230726N07.D
 Acq On : 26 Jul 2023 06:40 pm
 Operator : VOA122:PID
 Sample : I8260STD2PPB
 Misc : WG1808429, ICAL (Sig #1); WG, ICAL20151 (Sig #2)
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 27 09:03:46 2023
 Quant Method : K:\VOA122\2023\230726NICAL\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:03:05 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA122\2023\230726NICAL\V22230726N09.D
 Sub List : 8260-Curve - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	6.285	96	334047	10.000	ug/L	0.00
Standard Area 1 = 368457			Recovery	=	90.66%	
62) Chlorobenzene-d5	9.866	117	357096	10.000	ug/L	0.00
Standard Area 1 = 369809			Recovery	=	96.56%	
83) 1,4-Dichlorobenzene-d4	12.501	152	204133	10.000	ug/L	0.00
Standard Area 1 = 207432			Recovery	=	98.41%	
System Monitoring Compounds						
38) Dibromofluoromethane	5.454	113	127087	10.959	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	109.59%	
46) 1,2-Dichloroethane-d4	5.989	65	123499	10.773	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	107.73%	
63) Toluene-d8	8.002	98	429912	9.920	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	99.20%	
87) 4-Bromofluorobenzene	11.317	95	167810	9.885	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	98.85%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.682	85	17046	2.502	ug/L	98
3) Chloromethane	1.885	50	22114	2.493	ug/L	98
4) Vinyl chloride	1.968	62	16632	2.436	ug/L	100
5) Bromomethane	2.310	94	4990	2.118	ug/L	91
6) Chloroethane	2.428	64	10138	2.574	ug/L	99
7) Trichlorofluoromethane	2.589	101	19937	2.486	ug/L	99
8) Ethyl ether	2.909	74	4547	2.123	ug/L #	1
10) 1,1-Dichloroethene	3.118	96	12154	2.482	ug/L #	76
11) Carbon disulfide	3.146	76	39988	2.453	ug/L	99
12) Freon-113	3.153	101	12819	2.509	ug/L	95
13) Iodomethane	3.265	142	4426	1.076	ug/L	95
14) Acrolein	3.453	56	1171	1.828	ug/L	97
15) Methylene chloride	3.697	84	15106	2.433	ug/L #	63
17) Acetone	3.746	43	3028	2.514	ug/L	93
18) trans-1,2-Dichloroethene	3.857	96	12327	2.366	ug/L	78
19) Methyl acetate	3.871	43	6415	2.185	ug/L #	79
21) Methyl tert-butyl ether	3.962	73	18158	1.899	ug/L #	77
22) tert-Butyl alcohol	4.039	59	2642	8.888	ug/L #	74
24) Diisopropyl ether	4.338	45	32461	2.019	ug/L #	92
25) 1,1-Dichloroethane	4.471	63	26529	2.379	ug/L	96
26) Halothane	4.513	117	8694	2.275	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230726NICAL\
 Data File : V22230726N07.D
 Acq On : 26 Jul 2023 06:40 pm
 Operator : VOA122:PID
 Sample : I8260STD2PPB
 Misc : WG1808429,ICAL (Sig #1); WG,ICAL20151 (Sig #2)
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 27 09:03:46 2023
 Quant Method : K:\VOA122\2023\230726NICAL\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:03:05 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA122\2023\230726NICAL\V22230726N09.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
27) Acrylonitrile	4.513	53	3076	2.169	ug/L	97
28) Ethyl tert-butyl ether	4.694	59	24401	1.870	ug/L #	79
29) Vinyl acetate	4.715	43	8656	1.608	ug/L #	81
30) cis-1,2-Dichloroethene	5.000	96	13694	2.389	ug/L #	78
31) 2,2-Dichloropropane	5.105	77	15954	2.303	ug/L #	84
32) Bromochloromethane	5.196	128	6273	2.309	ug/L #	58
33) Cyclohexane	5.210	56	24299	2.166	ug/L	72
34) Chloroform	5.265	83	22642M4	2.437	ug/L	
35) Ethyl acetate	5.384	43	5730	1.729	ug/L #	82
36) Carbon tetrachloride	5.419	117	16240	2.336	ug/L #	95
37) Tetrahydrofuran	5.440	42	2281M6	2.157	ug/L	
39) 1,1,1-Trichloroethane	5.481	97	18393	2.263	ug/L	95
41) 2-Butanone	5.579	43	2677	1.811	ug/L #	75
42) 1,1-Dichloropropene	5.607	75	12835	1.911	ug/L	98
44) Benzene	5.856	78	39716	2.178	ug/L #	92
45) tert-Amyl methyl ether	5.967	73	17230	1.837	ug/L #	83
47) 1,2-Dichloroethane	6.063	62	15215	2.266	ug/L	97
50) Methyl cyclohexane	6.462	83	18684	2.112	ug/L #	65
51) Trichloroethene	6.462	95	13937	2.191	ug/L	90
53) Dibromomethane	6.911	93	6313	2.207	ug/L #	84
54) 1,2-Dichloropropane	7.014	63	10675	1.983	ug/L	95
56) 2-Chloroethyl vinyl ether	7.714	63	3517	1.647	ug/L #	81
57) Bromodichloromethane	7.088	83	13622	2.097	ug/L	95
60) 1,4-Dioxane	7.294	88	13308	413.647	ug/L #	57
61) cis-1,3-Dichloropropene	7.788	75	12835	1.818	ug/L #	88
64) Toluene	8.060	92	29002	2.140	ug/L	98
65) 4-Methyl-2-pentanone	8.488	58	1466	1.384	ug/L #	53
66) Tetrachloroethene	8.518	166	9610	2.100	ug/L	94
68) trans-1,3-Dichloropropene	8.542	75	11486	1.630	ug/L	89
70) Ethyl methacrylate	8.732	69	6411	1.675	ug/L	82
71) 1,1,2-Trichloroethane	8.732	83	5598	1.742	ug/L	96
72) Chlorodibromomethane	8.946	129	8011	1.645	ug/L	99
73) 1,3-Dichloropropane	9.057	76	11414	1.729	ug/L	100
74) 1,2-Dibromoethane	9.232	107	6799	1.773	ug/L	95
76) 2-Hexanone	9.509	43	3652	1.725	ug/L #	79
77) Chlorobenzene	9.890	112	33883	2.164	ug/L	93
78) Ethylbenzene	9.921	91	55063	2.091	ug/L	98
79) 1,1,1,2-Tetrachloroethane	9.969	131	9229	1.785	ug/L	97
80) p/m Xylene	10.112	106	41570	4.054	ug/L	98
81) o Xylene	10.635	106	39139	4.009	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230726NICAL\
 Data File : V22230726N07.D
 Acq On : 26 Jul 2023 06:40 pm
 Operator : VOA122:PID
 Sample : I8260STD2PPB
 Misc : WG1808429,ICAL (Sig #1); WG,ICAL20151 (Sig #2)
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 27 09:03:46 2023
 Quant Method : K:\VOA122\2023\230726NICAL\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:03:05 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA122\2023\230726NICAL\V22230726N09.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
82)	Styrene	10.699	104	61548	3.944	ug/L	99
84)	Bromoform	10.722	173	4498	1.628	ug/L	94
86)	Isopropylbenzene	11.000	105	54403	2.014	ug/L	99
88)	Bromobenzene	11.428	156	13554	2.042	ug/L	99
89)	n-Propylbenzene	11.468	91	65252	2.029	ug/L	98
90)	1,4-Dichlorobutane	11.484	55	14252	1.908	ug/L	94
91)	1,1,2,2-Tetrachloroethane	11.547	83	7623	1.844	ug/L	99
92)	4-Ethyltoluene	11.587	105	54243	2.019	ug/L	99
93)	2-Chlorotoluene	11.634	91	40433M6	2.111	ug/L	
94)	1,3,5-Trimethylbenzene	11.682	105	43850	1.946	ug/L	97
95)	1,2,3-Trichloropropane	11.682	75	6846	1.955	ug/L	99
96)	trans-1,4-Dichloro-2-b...	11.737	53	2661	1.732	ug/L #	69
97)	4-Chlorotoluene	11.817	91	40023	2.035	ug/L	100
98)	tert-Butylbenzene	12.021	119	41397	1.933	ug/L	98
101)	1,2,4-Trimethylbenzene	12.098	105	40721	1.889	ug/L	98
102)	sec-Butylbenzene	12.209	105	58428	2.069	ug/L	97
103)	p-Isopropyltoluene	12.355	119	46269	1.939	ug/L	99
104)	1,3-Dichlorobenzene	12.425	146	27574	2.092	ug/L	98
105)	1,4-Dichlorobenzene	12.515	146	27505M3	2.063	ug/L	
106)	p-Diethylbenzene	12.724	119	25282	1.810	ug/L	98
107)	n-Butylbenzene	12.780	91	38760	1.973	ug/L	99
108)	1,2-Dichlorobenzene	12.933	146	24808	2.086	ug/L	97
109)	1,2,4,5-Tetramethylben...	13.511	119	26109	1.505	ug/L	99
110)	1,2-Dibromo-3-chloropr...	13.706	155	1208	1.675	ug/L	90
111)	1,3,5-Trichlorobenzene	13.740	180	15857	1.998	ug/L	97
112)	Hexachlorobutadiene	14.304	225	5939	2.110	ug/L	97
113)	1,2,4-Trichlorobenzene	14.332	180	12870	1.904	ug/L	97
114)	Naphthalene	14.624	128	22881	1.623	ug/L	100
115)	1,2,3-Trichlorobenzene	14.791	180	11198	1.892	ug/L	96

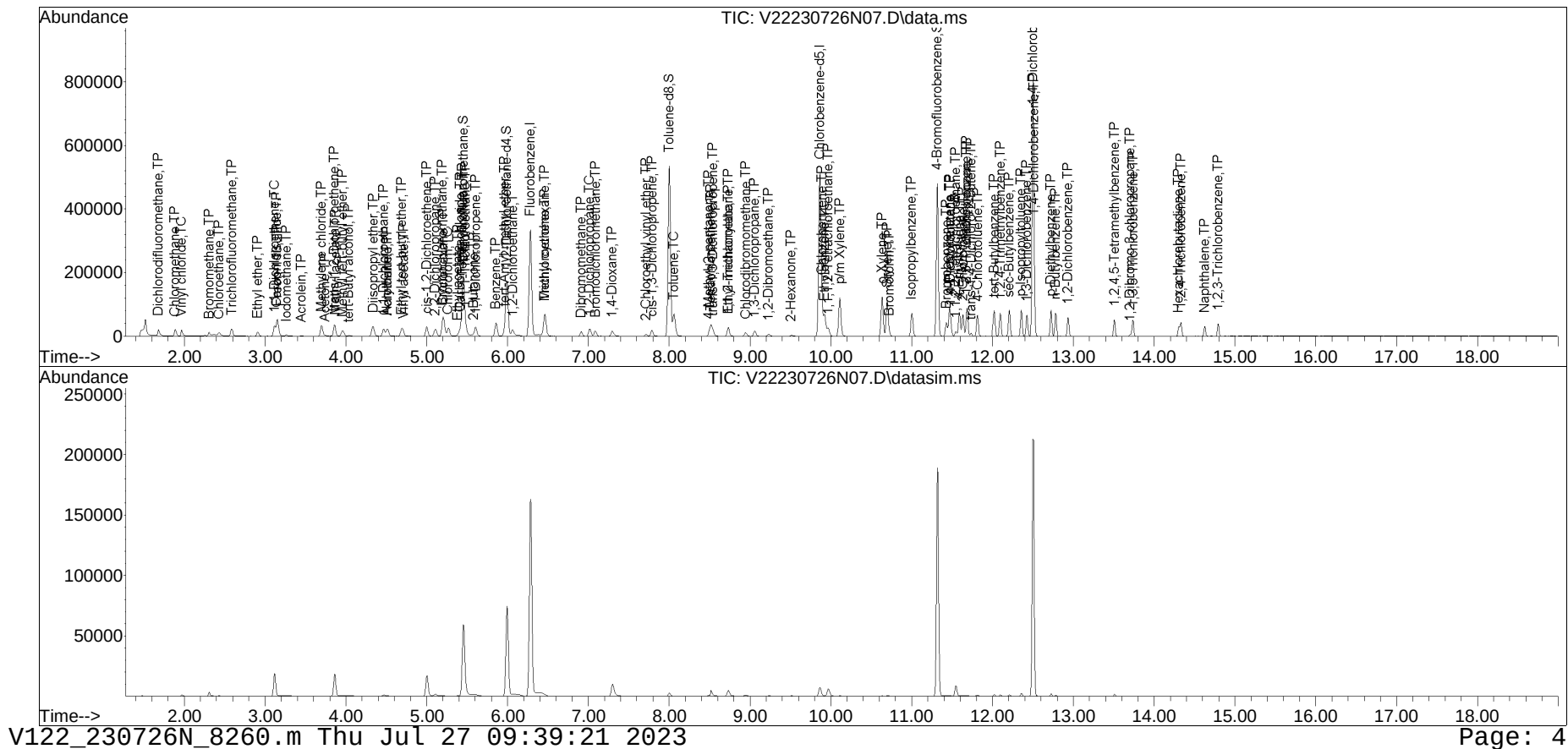
(#) = qualifier out of range (m) = manual integration (+) = signals summed

(QT Reviewed)

Data Path : K:\VOA122\2023\230726NICAL\
Data File : V22230726N07.D
Acq On : 26 Jul 2023 06:40 pm
Operator : VOA122:PID
Sample : I8260STD2PPB
Misc : WG1808429,ICAL (Sig #1); WG,ICAL20151 (Sig #2)
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 27 09:03:46 2023
Quant Method : K:\VOA122\2023\230726NICAL\V122_230726N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Jul 27 09:03:05 2023
Response via : Initial Calibration

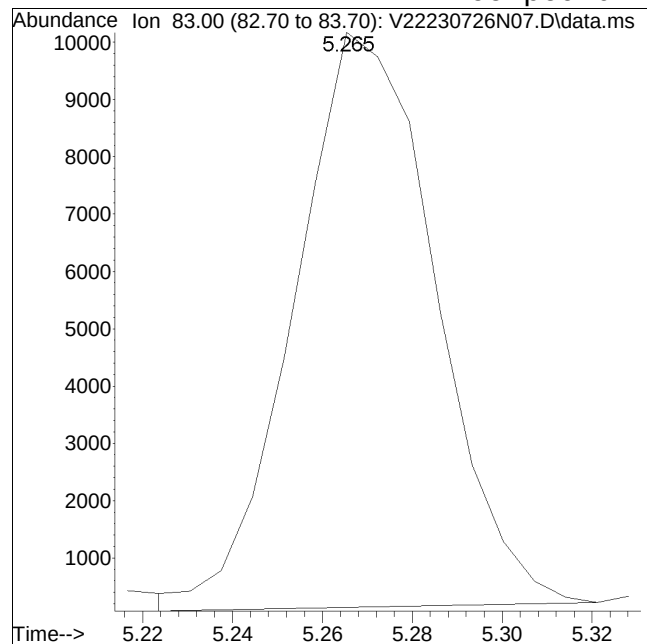
Sub List : 8260-Curve - Megamix plus Diox\V22230726N09.D•



Manual Integration Report

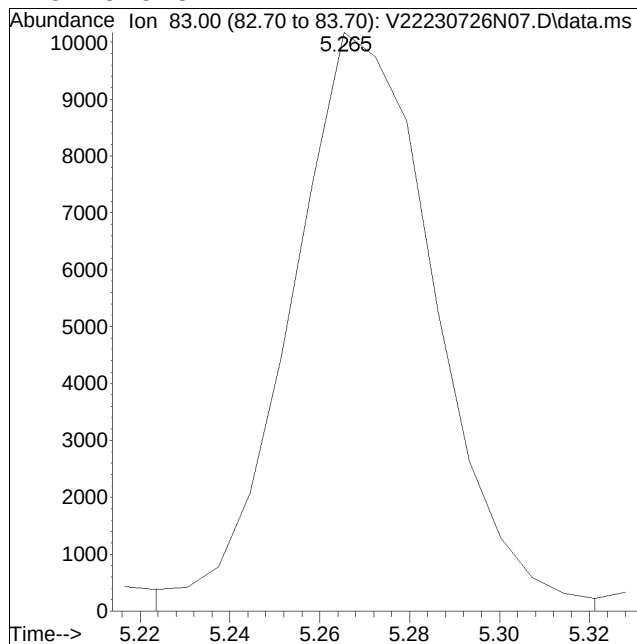
Data Path : K:\VOA122\2023\230726NICALQMethod : V122_230726N_8260.m
Data File : V22230726N07.D Operator : VOA122:PID
Date Inj'd : 7/26/2023 6:40 pm Instrument : VOA122
Sample : I8260STD2PPB Quant Date : 7/27/2023 9:03 am

Compound #34: Chloroform



Original Peak Response = 21773

M4 = Poor automated baseline construction.

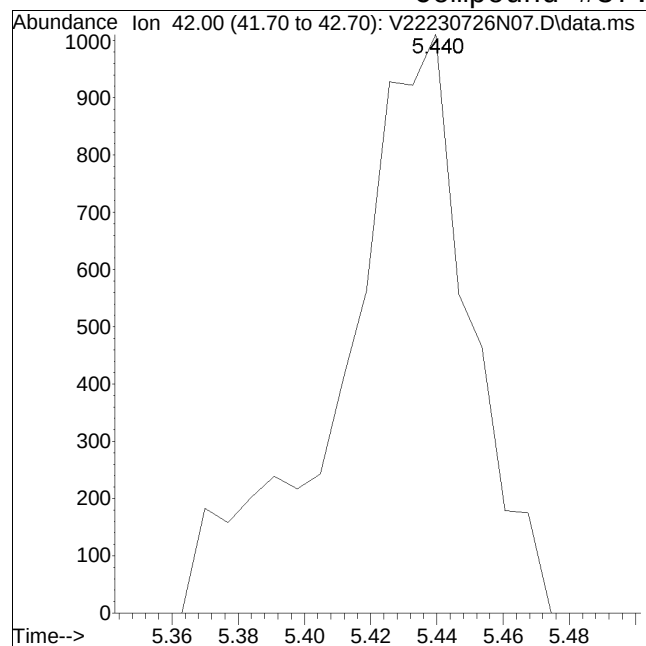


Manual Peak Response = 22642 M4

Manual Integration Report

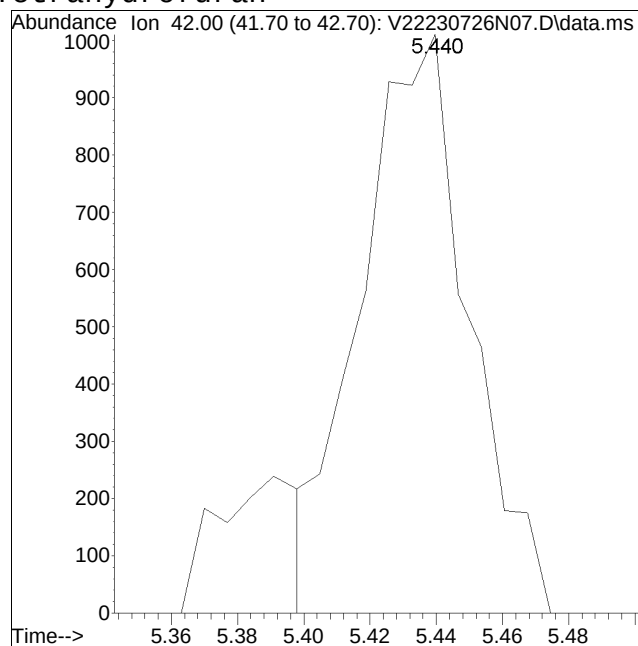
Data Path : K:\VOA122\2023\230726NICALQMethod : V122_230726N_8260.m
Data File : V22230726N07.D Operator : VOA122:PID
Date Inj'd : 7/26/2023 6:40 pm Instrument : VOA122
Sample : I8260STD2PPB Quant Date : 7/27/2023 9:03 am

Compound #37: Tetrahydrofuran



Original Peak Response = 2699

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

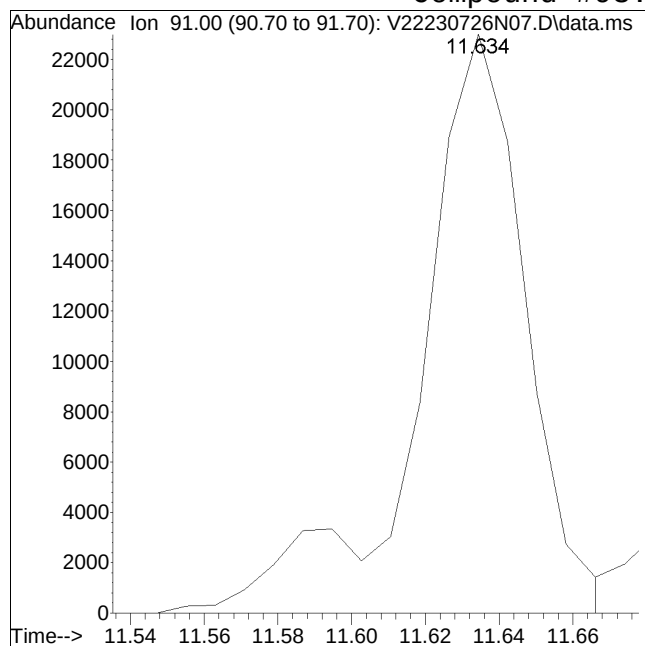


Manual Peak Response = 2281 M6

Manual Integration Report

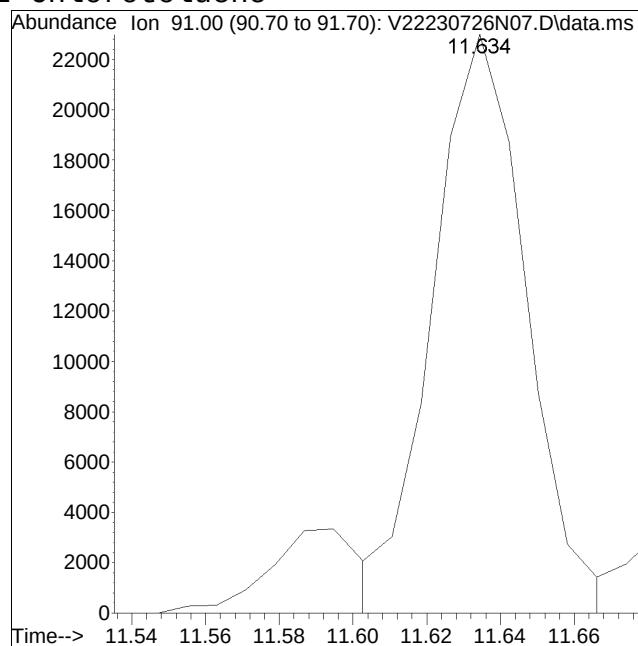
Data Path : K:\VOA122\2023\230726NICALQMethod : V122_230726N_8260.m
Data File : V22230726N07.D Operator : VOA122:PID
Date Inj'd : 7/26/2023 6:40 pm Instrument : VOA122
Sample : I8260STD2PPB Quant Date : 7/27/2023 9:03 am

Compound #93: 2-Chlorotoluene



Original Peak Response = 46212

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

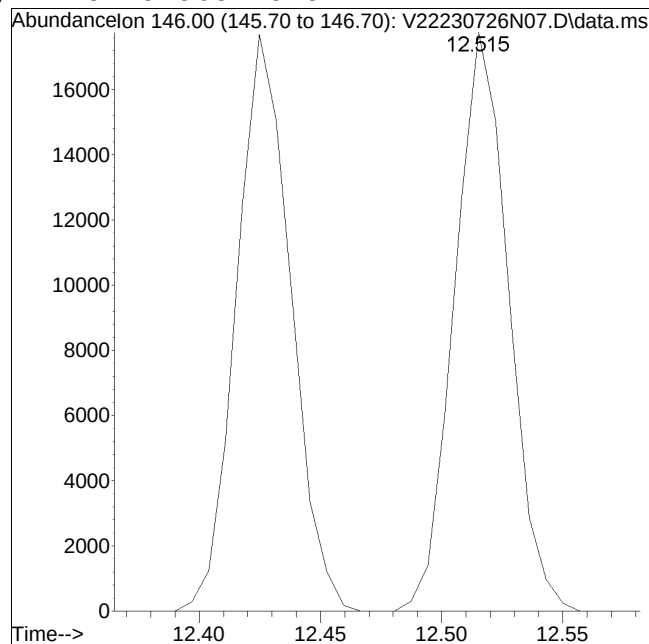
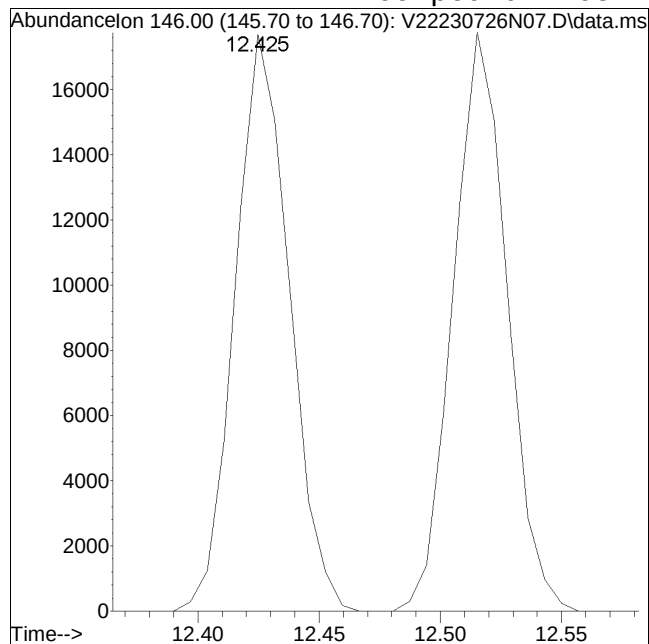


Manual Peak Response = 40433 M6

Manual Integration Report

Data Path : K:\VOA122\2023\230726NICALQMethod : V122_230726N_8260.m
Data File : V22230726N07.D Operator : VOA122:PID
Date Inj'd : 7/26/2023 6:40 pm Instrument : VOA122
Sample : I8260STD2PPB Quant Date : 7/27/2023 9:03 am

Compound #105: 1,4-Dichlorobenzene



Original Peak Response = 27574

Manual Peak Response = 27505 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230726NICAL\
 Data File : V22230726N09.D
 Acq On : 26 Jul 2023 07:30 pm
 Operator : VOA122:PID
 Sample : I8260STD10PPB
 Misc : WG1808429, ICAL (Sig #1); WG, ICAL20151 (Sig #2)
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 27 09:03:55 2023
 Quant Method : K:\VOA122\2023\230726NICAL\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:03:05 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA122\2023\230726NICAL\V22230726N09.D
 Sub List : 8260-Curve - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	6.284	96	368457	10.000	ug/L	0.00
Standard Area 1 = 368457			Recovery	=	100.00%	
62) Chlorobenzene-d5	9.866	117	369809	10.000	ug/L	0.00
Standard Area 1 = 369809			Recovery	=	100.00%	
83) 1,4-Dichlorobenzene-d4	12.501	152	207432	10.000	ug/L	0.00
Standard Area 1 = 207432			Recovery	=	100.00%	
System Monitoring Compounds						
38) Dibromofluoromethane	5.453	113	134077	10.482	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	104.82%	
46) 1,2-Dichloroethane-d4	5.989	65	131221	10.378	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	103.78%	
63) Toluene-d8	8.001	98	449518	10.016	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	100.16%	
87) 4-Bromofluorobenzene	11.317	95	174666	10.125	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	101.25%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.682	85	88705	11.802	ug/L	97
3) Chloromethane	1.891	50	112316	11.478	ug/L	96
4) Vinyl chloride	1.968	62	85044	11.294	ug/L	98
5) Bromomethane	2.309	94	25887	9.962	ug/L	97
6) Chloroethane	2.428	64	50219	11.560	ug/L	98
7) Trichlorofluoromethane	2.588	101	101152	11.437	ug/L	99
8) Ethyl ether	2.909	74	25760	10.905	ug/L #	1
10) 1,1-Dichloroethene	3.118	96	61433	11.374	ug/L #	74
11) Carbon disulfide	3.153	76	203868	11.336	ug/L	100
12) Freon-113	3.160	101	66409	11.785	ug/L	95
13) Iodomethane	3.264	142	37494	8.266	ug/L	95
14) Acrolein	3.453	56	7481	10.587	ug/L	99
15) Methylene chloride	3.697	84	71484	10.439	ug/L #	62
17) Acetone	3.738	43	15036	11.319	ug/L	99
18) trans-1,2-Dichloroethene	3.857	96	65105	11.331	ug/L	81
19) Methyl acetate	3.864	43	33627	10.386	ug/L #	85
21) Methyl tert-butyl ether	3.962	73	111238	10.545	ug/L #	82
22) tert-Butyl alcohol	4.038	59	17636	53.786	ug/L	94
24) Diisopropyl ether	4.338	45	188077	10.605	ug/L #	92
25) 1,1-Dichloroethane	4.470	63	138352	11.246	ug/L	95
26) Halothane	4.519	117	47495	11.267	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230726NICAL\
 Data File : V22230726N09.D
 Acq On : 26 Jul 2023 07:30 pm
 Operator : VOA122:PID
 Sample : I8260STD10PPB
 Misc : WG1808429,ICAL (Sig #1); WG,ICAL20151 (Sig #2)
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 27 09:03:55 2023
 Quant Method : K:\VOA122\2023\230726NICAL\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:03:05 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA122\2023\230726NICAL\V22230726N09.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
27) Acrylonitrile	4.505	53	18659	11.929	ug/L	96
28) Ethyl tert-butyl ether	4.694	59	148843	10.341	ug/L #	77
29) Vinyl acetate	4.707	43	49448	8.328	ug/L #	85
30) cis-1,2-Dichloroethene	5.000	96	70055	11.081	ug/L #	79
31) 2,2-Dichloropropane	5.112	77	82026	10.735	ug/L	86
32) Bromochloromethane	5.195	128	35202	11.746	ug/L #	72
33) Cyclohexane	5.209	56	141309	11.419	ug/L	70
34) Chloroform	5.272	83	107758	10.517	ug/L #	94
35) Ethyl acetate	5.377	43	37694	10.314	ug/L #	93
36) Carbon tetrachloride	5.418	117	87779	11.447	ug/L	97
37) Tetrahydrofuran	5.425	42	12831	11.003	ug/L #	85
39) 1,1,1-Trichloroethane	5.481	97	98704	11.008	ug/L	94
41) 2-Butanone	5.565	43	16309	10.004	ug/L #	47
42) 1,1-Dichloropropene	5.607	75	77443	10.456	ug/L	98
44) Benzene	5.856	78	215637	10.721	ug/L #	90
45) tert-Amyl methyl ether	5.967	73	104104	10.063	ug/L #	86
47) 1,2-Dichloroethane	6.063	62	79915	10.789	ug/L	96
50) Methyl cyclohexane	6.462	83	104846	10.743	ug/L #	63
51) Trichloroethene	6.462	95	74178	10.575	ug/L	100
53) Dibromomethane	6.911	93	34636	10.979	ug/L #	84
54) 1,2-Dichloropropane	7.014	63	62234	10.480	ug/L	96
56) 2-Chloroethyl vinyl ether	7.714	63	23821	10.114	ug/L #	82
57) Bromodichloromethane	7.088	83	73604	10.273	ug/L	99
60) 1,4-Dioxane	7.301	88	19441	547.843	ug/L #	57
61) cis-1,3-Dichloropropene	7.788	75	80159	10.294	ug/L #	89
64) Toluene	8.060	92	148991	10.615	ug/L	98
65) 4-Methyl-2-pentanone	8.495	58	10511	9.584	ug/L #	77
66) Tetrachloroethene	8.518	166	48783	10.296	ug/L	93
68) trans-1,3-Dichloropropene	8.541	75	71265	9.768	ug/L	92
70) Ethyl methacrylate	8.732	69	41213	10.399	ug/L	92
71) 1,1,2-Trichloroethane	8.732	83	33347	10.023	ug/L	98
72) Chlorodibromomethane	8.946	129	48803	9.678	ug/L	99
73) 1,3-Dichloropropane	9.057	76	68153	9.969	ug/L	100
74) 1,2-Dibromoethane	9.231	107	39157	9.858	ug/L	99
76) 2-Hexanone	9.509	43	22394	10.214	ug/L	90
77) Chlorobenzene	9.889	112	170404	10.508	ug/L	98
78) Ethylbenzene	9.921	91	294620	10.802	ug/L	99
79) 1,1,1,2-Tetrachloroethane	9.969	131	52141	9.736	ug/L	98
80) p/m Xylene	10.111	106	233795	22.014	ug/L	97
81) o Xylene	10.635	106	222554	22.011	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230726NICAL\
 Data File : V22230726N09.D
 Acq On : 26 Jul 2023 07:30 pm
 Operator : VOA122:PID
 Sample : I8260STD10PPB
 Misc : WG1808429,ICAL (Sig #1); WG,ICAL20151 (Sig #2)
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 27 09:03:55 2023
 Quant Method : K:\VOA122\2023\230726NICAL\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:03:05 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA122\2023\230726NICAL\V22230726N09.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
82)	Styrene	10.698	104	359086	22.219	ug/L	97
84)	Bromoform	10.722	173	27395	9.756	ug/L	96
86)	Isopropylbenzene	11.008	105	303486	11.054	ug/L	98
88)	Bromobenzene	11.428	156	71166	10.550	ug/L	99
89)	n-Propylbenzene	11.468	91	352908	10.799	ug/L	99
90)	1,4-Dichlorobutane	11.483	55	79772	10.510	ug/L	95
91)	1,1,2,2-Tetrachloroethane	11.547	83	40062	9.536	ug/L	99
92)	4-Ethyltoluene	11.587	105	296471	10.858	ug/L	99
93)	2-Chlorotoluene	11.634	91	208309M6	10.703	ug/L	
94)	1,3,5-Trimethylbenzene	11.682	105	246526	10.768	ug/L	99
95)	1,2,3-Trichloropropane	11.690	75	36777	10.334	ug/L	97
96)	trans-1,4-Dichloro-2-b...	11.737	53	15204	9.741	ug/L #	71
97)	4-Chlorotoluene	11.816	91	211321	10.572	ug/L	99
98)	tert-Butylbenzene	12.021	119	234521	10.778	ug/L	99
101)	1,2,4-Trimethylbenzene	12.097	105	236003	10.773	ug/L	97
102)	sec-Butylbenzene	12.209	105	316115	11.017	ug/L	99
103)	p-Isopropyltoluene	12.355	119	265397	10.943	ug/L	98
104)	1,3-Dichlorobenzene	12.424	146	139238	10.394	ug/L	97
105)	1,4-Dichlorobenzene	12.515	146	140209	10.348	ug/L	98
106)	p-Diethylbenzene	12.724	119	151027	10.639	ug/L	99
107)	n-Butylbenzene	12.779	91	219006	10.971	ug/L	99
108)	1,2-Dichlorobenzene	12.933	146	125445	10.379	ug/L	97
109)	1,2,4,5-Tetramethylben...	13.510	119	180435	10.234	ug/L	99
110)	1,2-Dibromo-3-chloropr...	13.705	155	7359	10.044	ug/L	98
111)	1,3,5-Trichlorobenzene	13.740	180	85687	10.622	ug/L	96
112)	Hexachlorobutadiene	14.304	225	30502	10.665	ug/L	99
113)	1,2,4-Trichlorobenzene	14.332	180	71359	10.387	ug/L	98
114)	Naphthalene	14.624	128	149753	10.457	ug/L	100
115)	1,2,3-Trichlorobenzene	14.791	180	64092	10.657	ug/L	97

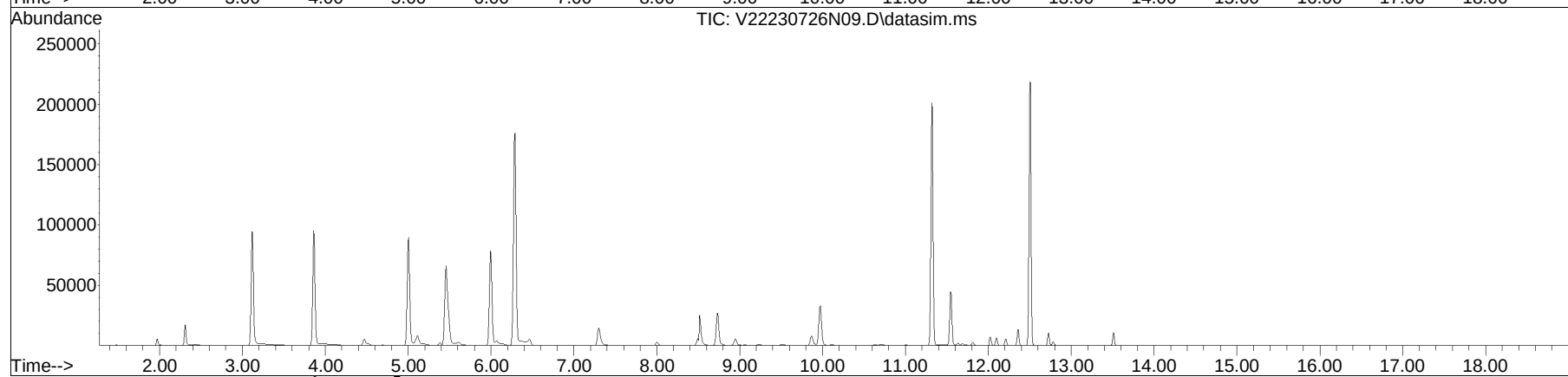
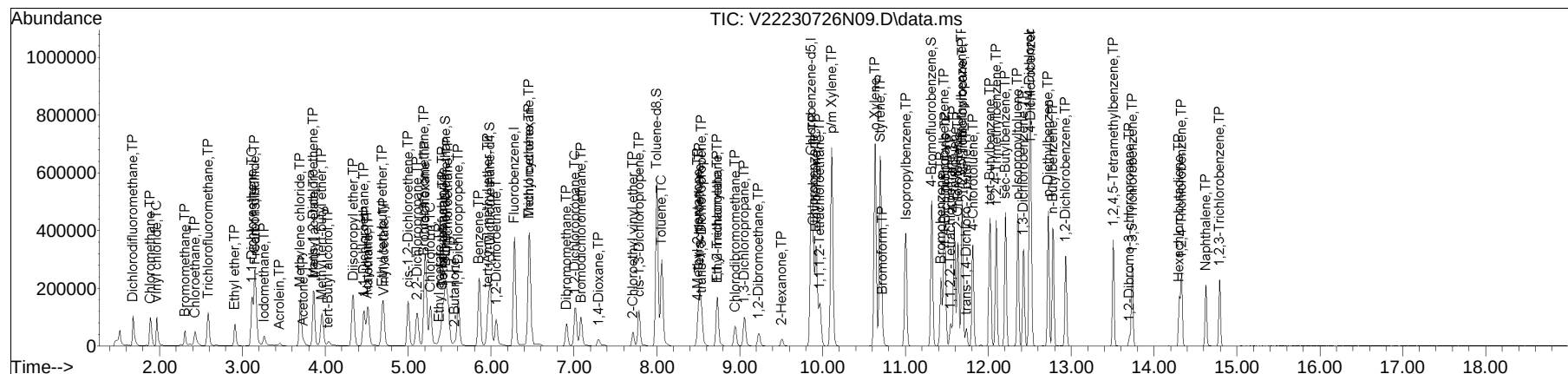
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230726NICAL\
 Data File : V22230726N09.D
 Acq On : 26 Jul 2023 07:30 pm
 Operator : VOA122:PID
 Sample : I8260STD10PPB
 Misc : WG1808429,ICAL (Sig #1); WG,ICAL20151 (Sig #2)
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 27 09:03:55 2023
 Quant Method : K:\VOA122\2023\230726NICAL\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:03:05 2023
 Response via : Initial Calibration

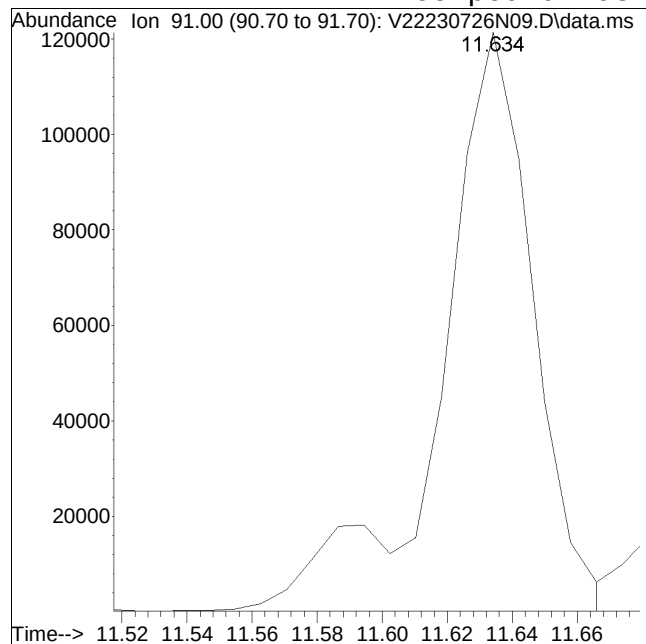
Sub List : 8260-Curve - Megamix plus Diox\VOA122\230726N09.D•



Manual Integration Report

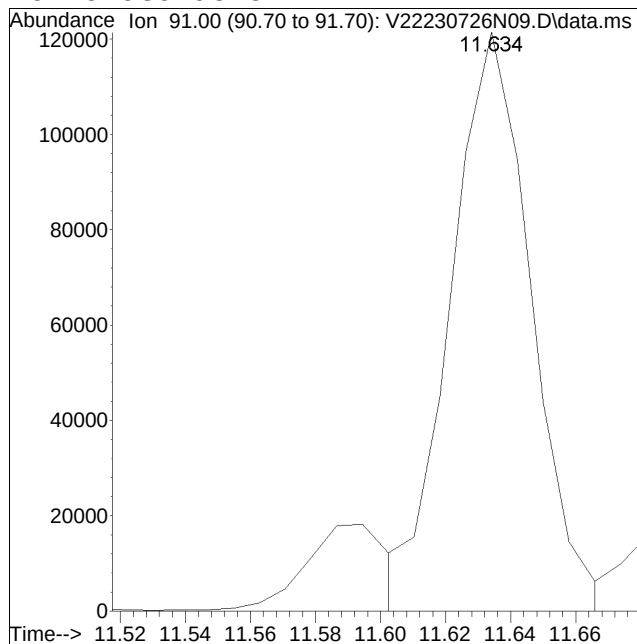
Data Path : K:\VOA122\2023\230726NICALQMethod : V122_230726N_8260.m
Data File : V22230726N09.D Operator : VOA122:PID
Date Inj'd : 7/26/2023 7:30 pm Instrument : VOA122
Sample : I8260STD10PPB Quant Date : 7/27/2023 9:03 am

Compound #93: 2-Chlorotoluene



Original Peak Response = 238896

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).



Manual Peak Response = 208309 M6

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230726NICAL\
 Data File : V22230726N10.D
 Acq On : 26 Jul 2023 07:55 pm
 Operator : VOA122:PID
 Sample : I8260STD30PPB
 Misc : WG1808429, ICAL (Sig #1); WG, ICAL20151 (Sig #2)
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 27 09:04:05 2023
 Quant Method : K:\VOA122\2023\230726NICAL\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:03:05 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA122\2023\230726NICAL\V22230726N09.D
 Sub List : 8260-Curve - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	6.284	96	412675	10.000	ug/L	0.00
Standard Area 1 = 368457			Recovery	=	112.00%	
62) Chlorobenzene-d5	9.866	117	385480	10.000	ug/L	0.00
Standard Area 1 = 369809			Recovery	=	104.24%	
83) 1,4-Dichlorobenzene-d4	12.501	152	216488	10.000	ug/L	0.00
Standard Area 1 = 207432			Recovery	=	104.37%	
System Monitoring Compounds						
38) Dibromofluoromethane	5.453	113	139868	9.763	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	97.63%	
46) 1,2-Dichloroethane-d4	5.989	65	139942	9.882	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	98.82%	
63) Toluene-d8	8.001	98	470637	10.060	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	100.60%	
87) 4-Bromofluorobenzene	11.317	95	181241	10.067	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	100.67%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.682	85	260328	30.925	ug/L	97
3) Chloromethane	1.891	50	325066	29.660	ug/L	98
4) Vinyl chloride	1.968	62	252115	29.893	ug/L	98
5) Bromomethane	2.310	94	77901	26.768	ug/L	96
6) Chloroethane	2.428	64	150150	30.859	ug/L	97
7) Trichlorofluoromethane	2.588	101	301135	30.400	ug/L	100
8) Ethyl ether	2.916	74	83705	31.638	ug/L #	1
10) 1,1-Dichloroethene	3.118	96	179773	29.717	ug/L #	72
11) Carbon disulfide	3.153	76	598158	29.696	ug/L	100
12) Freon-113	3.160	101	199027	31.535	ug/L	95
13) Iodomethane	3.265	142	173956	34.240	ug/L	95
14) Acrolein	3.453	56	25316	31.989	ug/L	100
15) Methylene chloride	3.697	84	209207	27.278	ug/L #	65
17) Acetone	3.739	43	44141	29.667	ug/L	99
18) trans-1,2-Dichloroethene	3.864	96	195778	30.422	ug/L	81
19) Methyl acetate	3.864	43	108985	30.053	ug/L #	84
21) Methyl tert-butyl ether	3.962	73	377107	31.918	ug/L #	84
22) tert-Butyl alcohol	4.045	59	54810	149.248	ug/L	95
24) Diisopropyl ether	4.331	45	625518	31.493	ug/L #	91
25) 1,1-Dichloroethane	4.471	63	418628	30.383	ug/L	95
26) Halothane	4.512	117	146427	31.013	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230726NICAL\
 Data File : V22230726N10.D
 Acq On : 26 Jul 2023 07:55 pm
 Operator : VOA122:PID
 Sample : I8260STD30PPB
 Misc : WG1808429,ICAL (Sig #1); WG,ICAL20151 (Sig #2)
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 27 09:04:05 2023
 Quant Method : K:\VOA122\2023\230726NICAL\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:03:05 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA122\2023\230726NICAL\V22230726N09.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
27) Acrylonitrile	4.512	53	56074	32.007	ug/L	96
28) Ethyl tert-butyl ether	4.694	59	513707	31.866	ug/L	84
29) Vinyl acetate	4.701	43	231163	34.760	ug/L #	88
30) cis-1,2-Dichloroethene	5.000	96	215339	30.412	ug/L #	80
31) 2,2-Dichloropropane	5.112	77	271066	31.673	ug/L	87
32) Bromochloromethane	5.202	128	101424	30.215	ug/L #	71
33) Cyclohexane	5.209	56	437644	31.575	ug/L	71
34) Chloroform	5.272	83	336131	29.290	ug/L	95
35) Ethyl acetate	5.377	43	124841	30.499	ug/L #	93
36) Carbon tetrachloride	5.419	117	273937	31.895	ug/L	99
37) Tetrahydrofuran	5.426	42	39486	30.232	ug/L	90
39) 1,1,1-Trichloroethane	5.481	97	306215	30.490	ug/L	95
41) 2-Butanone	5.565	43	56303	30.835	ug/L #	51
42) 1,1-Dichloropropene	5.607	75	253300	30.535	ug/L	97
44) Benzene	5.856	78	686929	30.492	ug/L #	90
45) tert-Amyl methyl ether	5.967	73	358676	30.956	ug/L #	89
47) 1,2-Dichloroethane	6.063	62	246375	29.699	ug/L	98
50) Methyl cyclohexane	6.462	83	344253	31.494	ug/L #	64
51) Trichloroethene	6.462	95	227821	28.998	ug/L	97
53) Dibromomethane	6.911	93	108873	30.814	ug/L #	85
54) 1,2-Dichloropropane	7.022	63	212607	31.965	ug/L	96
56) 2-Chloroethyl vinyl ether	7.714	63	86163	32.663	ug/L #	82
57) Bromodichloromethane	7.088	83	253973	31.648	ug/L	100
60) 1,4-Dioxane	7.294	88	25051	630.291	ug/L #	60
61) cis-1,3-Dichloropropene	7.788	75	280289	32.139	ug/L #	90
64) Toluene	8.060	92	451710	30.873	ug/L	97
65) 4-Methyl-2-pentanone	8.495	58	34912	30.537	ug/L #	78
66) Tetrachloroethene	8.518	166	153569	31.093	ug/L	95
68) trans-1,3-Dichloropropene	8.541	75	250261	32.907	ug/L	92
70) Ethyl methacrylate	8.732	69	138401	33.501	ug/L	91
71) 1,1,2-Trichloroethane	8.732	83	112260	32.370	ug/L	97
72) Chlorodibromomethane	8.946	129	168138	31.988	ug/L	99
73) 1,3-Dichloropropane	9.057	76	228210	32.025	ug/L	100
74) 1,2-Dibromoethane	9.231	107	134429	32.468	ug/L	99
76) 2-Hexanone	9.509	43	76368	33.414	ug/L	91
77) Chlorobenzene	9.890	112	512784	30.335	ug/L	99
78) Ethylbenzene	9.921	91	893954	31.443	ug/L	99
79) 1,1,1,2-Tetrachloroethane	9.969	131	174877	31.327	ug/L	97
80) p/m Xylene	10.112	106	706334	63.804	ug/L	98
81) o Xylene	10.635	106	680005	64.518	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230726NICAL\
 Data File : V22230726N10.D
 Acq On : 26 Jul 2023 07:55 pm
 Operator : VOA122:PID
 Sample : I8260STD30PPB
 Misc : WG1808429, ICAL (Sig #1); WG, ICAL20151 (Sig #2)
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 27 09:04:05 2023
 Quant Method : K:\VOA122\2023\230726NICAL\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:03:05 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA122\2023\230726NICAL\V22230726N09.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
82)	Styrene	10.698	104	1108306	65.791	ug/L	97
84)	Bromoform	10.722	173	90356	30.831	ug/L	99
86)	Isopropylbenzene	11.000	105	921268	32.152	ug/L	99
88)	Bromobenzene	11.428	156	214994	30.538	ug/L	99
89)	n-Propylbenzene	11.468	91	1084044	31.785	ug/L	99
90)	1,4-Dichlorobutane	11.484	55	245383	30.976	ug/L	95
91)	1,1,2,2-Tetrachloroethane	11.547	83	133774	30.511	ug/L	100
92)	4-Ethyltoluene	11.595	105	905447	31.773	ug/L	100
93)	2-Chlorotoluene	11.634	91	625193M1	30.779	ug/L	
94)	1,3,5-Trimethylbenzene	11.682	105	755569	31.623	ug/L	99
95)	1,2,3-Trichloropropane	11.690	75	111620	30.053	ug/L	97
96)	trans-1,4-Dichloro-2-b...	11.737	53	49859	30.609	ug/L #	76
97)	4-Chlorotoluene	11.817	91	647096	31.020	ug/L	99
98)	tert-Butylbenzene	12.021	119	719258	31.674	ug/L	99
101)	1,2,4-Trimethylbenzene	12.097	105	734082	32.106	ug/L	98
102)	sec-Butylbenzene	12.209	105	959556	32.042	ug/L	99
103)	p-Isopropyltoluene	12.355	119	826798	32.666	ug/L	98
104)	1,3-Dichlorobenzene	12.425	146	430211	30.770	ug/L	98
105)	1,4-Dichlorobenzene	12.515	146	423576	29.953	ug/L	98
106)	p-Diethylbenzene	12.724	119	480879	32.458	ug/L	99
107)	n-Butylbenzene	12.780	91	676238	32.458	ug/L	99
108)	1,2-Dichlorobenzene	12.933	146	381862	30.272	ug/L	97
109)	1,2,4,5-Tetramethylben...	13.510	119	624392	33.932	ug/L	99
110)	1,2-Dibromo-3-chloropr...	13.705	155	23276	30.441	ug/L	97
111)	1,3,5-Trichlorobenzene	13.740	180	266695	31.678	ug/L	97
112)	Hexachlorobutadiene	14.304	225	92683	31.051	ug/L	98
113)	1,2,4-Trichlorobenzene	14.332	180	229622	32.027	ug/L	98
114)	Naphthalene	14.624	128	508884	34.047	ug/L	100
115)	1,2,3-Trichlorobenzene	14.791	180	201130	32.045	ug/L	99

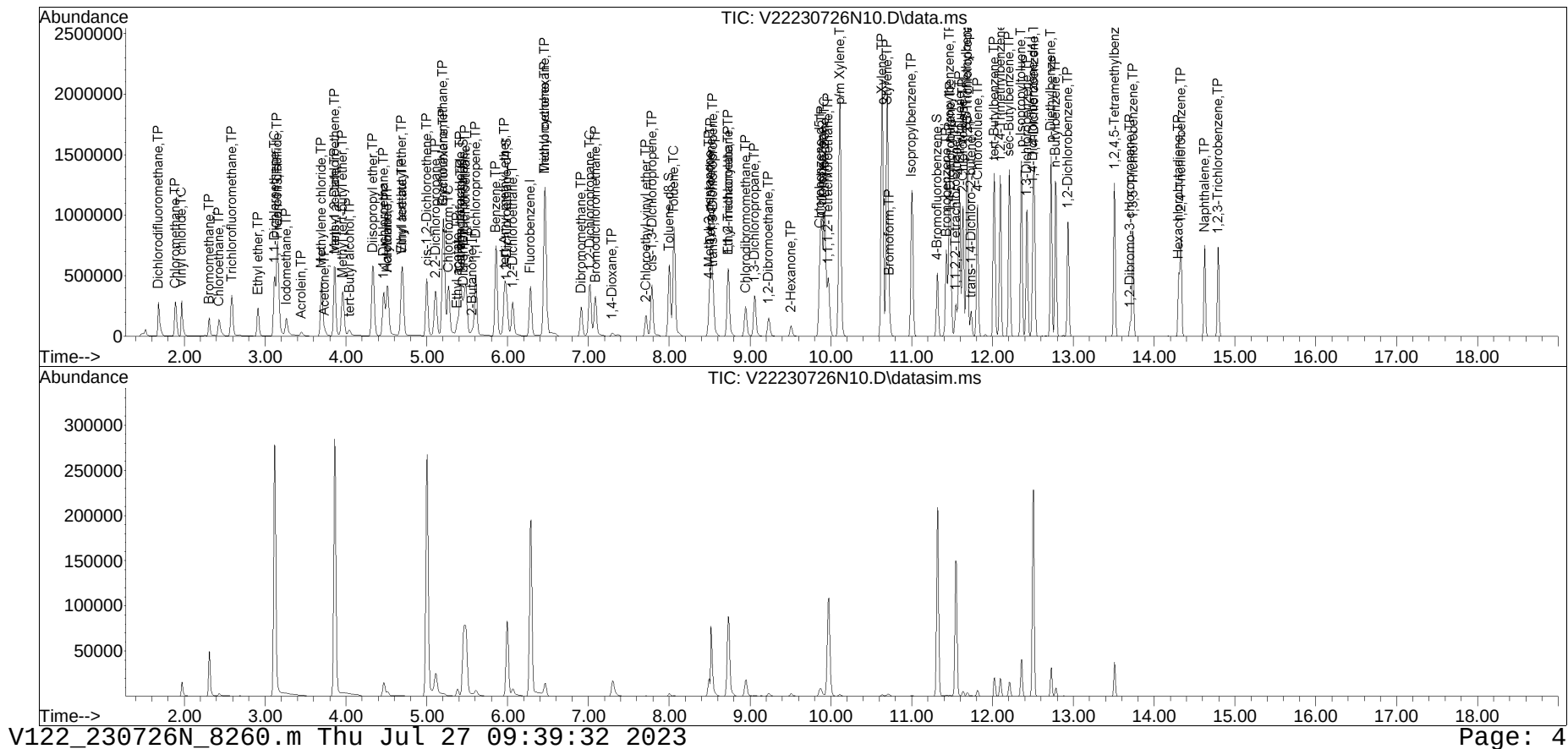
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(QT Reviewed)

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Data Path   : K:\VOA122\2023\230726NICAL\  
Data File  : V22230726N10.D  
Acq On     : 26 Jul 2023   07:55 pm  
Operator   : VOA122:PID  
Sample     : I8260STD30PPB  
Misc       : WG1808429,ICAL (Sig #1); WG,ICAL20151 (Sig #2)  
ALS Vial   : 10   Sample Multiplier: 1
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Quant Time: Jul 27 09:04:05 2023
Quant Method : K:\VOA122\2023\230726NICAL\V122_230726N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Jul 27 09:03:05 2023
Response via : Initial Calibration

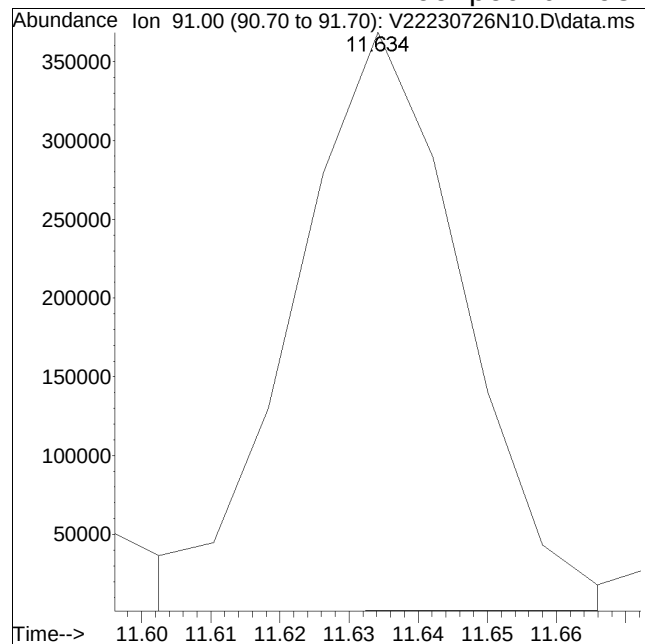
Sub List : 8260-Curve - Megamix plus Diox\V22230726N09.D•



Manual Integration Report

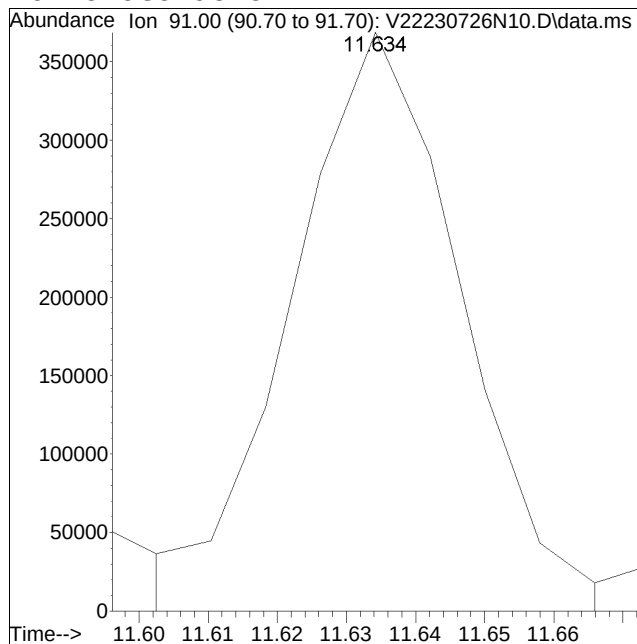
Data Path : K:\VOA122\2023\230726NICALQMethod : V122_230726N_8260.m
Data File : V22230726N10.D Operator : VOA122:PID
Date Inj'd : 7/26/2023 7:55 pm Instrument : VOA122
Sample : I8260STD30PPB Quant Date : 7/27/2023 9:03 am

Compound #93: 2-Chlorotoluene



Original Peak Response = 619390

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.



Manual Peak Response = 625193 M1

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230726NICAL\
 Data File : V22230726N11.D
 Acq On : 26 Jul 2023 08:20 pm
 Operator : VOA122:PID
 Sample : I8260STD80PPB
 Misc : WG1808429,ICAL (Sig #1); WG,ICAL20151 (Sig #2)
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 27 09:04:14 2023
 Quant Method : K:\VOA122\2023\230726NICAL\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:03:05 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA122\2023\230726NICAL\V22230726N09.D
 Sub List : 8260-Curve - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	6.284	96	467041	10.000	ug/L	0.00
Standard Area 1 = 368457			Recovery	=	126.76%	
62) Chlorobenzene-d5	9.866	117	413272	10.000	ug/L	0.00
Standard Area 1 = 369809			Recovery	=	111.75%	
83) 1,4-Dichlorobenzene-d4	12.501	152	229711	10.000	ug/L	0.00
Standard Area 1 = 207432			Recovery	=	110.74%	
System Monitoring Compounds						
38) Dibromofluoromethane	5.453	113	147631	9.106	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	91.06%	
46) 1,2-Dichloroethane-d4	5.996	65	149325	9.317	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	93.17%	
63) Toluene-d8	8.001	98	503795	10.045	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	100.45%	
87) 4-Bromofluorobenzene	11.317	95	188917	9.889	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	98.89%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.682	85	699280	73.399	ug/L	97
3) Chloromethane	1.891	50	866413	69.852	ug/L	98
4) Vinyl chloride	1.968	62	692926	72.595	ug/L	98
5) Bromomethane	2.310	94	253497	76.965	ug/L	98
6) Chloroethane	2.428	64	391688	71.129	ug/L	97
7) Trichlorofluoromethane	2.588	101	835397	74.518	ug/L	99
8) Ethyl ether	2.909	74	230923	77.121	ug/L #	1
10) 1,1-Dichloroethene	3.118	96	496472	72.516	ug/L #	70
11) Carbon disulfide	3.153	76	1646232	72.214	ug/L	100
12) Freon-113	3.160	101	532892	74.607	ug/L	96
13) Iodomethane	3.265	142	610977	106.259	ug/L	97
14) Acrolein	3.446	56	70538	78.757	ug/L	94
15) Methylene chloride	3.697	84	554206	63.850	ug/L #	65
17) Acetone	3.739	43	119161	70.766	ug/L	96
18) trans-1,2-Dichloroethene	3.857	96	533032	73.187	ug/L	81
19) Methyl acetate	3.864	43	300583	73.238	ug/L #	85
21) Methyl tert-butyl ether	3.962	73	1119590	83.730	ug/L #	86
22) tert-Butyl alcohol	4.045	59	160936	387.216	ug/L #	89
24) Diisopropyl ether	4.331	45	1842458	81.964	ug/L #	91
25) 1,1-Dichloroethane	4.471	63	1135397	72.811	ug/L	96
26) Halothane	4.512	117	412328	77.165	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230726NICAL\
 Data File : V22230726N11.D
 Acq On : 26 Jul 2023 08:20 pm
 Operator : VOA122:PID
 Sample : I8260STD80PPB
 Misc : WG1808429,ICAL (Sig #1); WG,ICAL20151 (Sig #2)
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 27 09:04:14 2023
 Quant Method : K:\VOA122\2023\230726NICAL\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:03:05 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA122\2023\230726NICAL\V22230726N09.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
27) Acrylonitrile	4.505	53	155571	78.463	ug/L	95
28) Ethyl tert-butyl ether	4.694	59	1546780	84.781	ug/L	84
29) Vinyl acetate	4.701	43	697740	92.707	ug/L #	89
30) cis-1,2-Dichloroethene	5.000	96	587913	73.365	ug/L #	81
31) 2,2-Dichloropropane	5.112	77	751408	77.579	ug/L	89
32) Bromochloromethane	5.195	128	272692	71.781	ug/L #	72
33) Cyclohexane	5.209	56	1291357	82.324	ug/L	70
34) Chloroform	5.272	83	952250	73.320	ug/L	95
35) Ethyl acetate	5.377	43	380413	82.116	ug/L #	94
36) Carbon tetrachloride	5.419	117	785002	80.760	ug/L	99
37) Tetrahydrofuran	5.426	42	112780	76.297	ug/L	91
39) 1,1,1-Trichloroethane	5.481	97	899567	79.145	ug/L	94
41) 2-Butanone	5.565	43	166052	80.355	ug/L #	48
42) 1,1-Dichloropropene	5.607	75	832546	88.679	ug/L	95
44) Benzene	5.856	78	2089153	81.940	ug/L #	91
45) tert-Amyl methyl ether	5.967	73	1100365	83.914	ug/L #	91
47) 1,2-Dichloroethane	6.063	62	706589	75.261	ug/L	99
50) Methyl cyclohexane	6.462	83	1013936	81.963	ug/L #	66
51) Trichloroethene	6.462	95	660220	74.253	ug/L	97
53) Dibromomethane	6.911	93	302103	75.549	ug/L	86
54) 1,2-Dichloropropane	7.022	63	621239	82.529	ug/L	95
56) 2-Chloroethyl vinyl ether	7.714	63	274430	91.922	ug/L #	85
57) Bromodichloromethane	7.088	83	734467	80.870	ug/L	100
60) 1,4-Dioxane	7.301	88	33897	753.582	ug/L #	61
61) cis-1,3-Dichloropropene	7.788	75	844960	85.607	ug/L #	90
64) Toluene	8.060	92	1267915	80.831	ug/L	97
65) 4-Methyl-2-pentanone	8.488	58	107250	87.502	ug/L #	81
66) Tetrachloroethene	8.518	166	437938	82.706	ug/L	96
68) trans-1,3-Dichloropropene	8.541	75	744450	91.304	ug/L	93
70) Ethyl methacrylate	8.724	69	404242	91.270	ug/L	91
71) 1,1,2-Trichloroethane	8.732	83	326093	87.705	ug/L	96
72) Chlorodibromomethane	8.946	129	504600	89.545	ug/L	99
73) 1,3-Dichloropropane	9.057	76	672143	87.980	ug/L	100
74) 1,2-Dibromoethane	9.231	107	398547	89.785	ug/L	99
76) 2-Hexanone	9.509	43	221293	90.314	ug/L	93
77) Chlorobenzene	9.890	112	1430351	78.925	ug/L	99
78) Ethylbenzene	9.921	91	2466501	80.921	ug/L	99
79) 1,1,1,2-Tetrachloroethane	9.969	131	526336	87.945	ug/L	98
80) p/m Xylene	10.112	106	1946819	164.031	ug/L	99
81) o Xylene	10.635	106	1865034	165.053	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230726NICAL\
 Data File : V22230726N11.D
 Acq On : 26 Jul 2023 08:20 pm
 Operator : VOA122:PID
 Sample : I8260STD80PPB
 Misc : WG1808429,ICAL (Sig #1); WG,ICAL20151 (Sig #2)
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 27 09:04:14 2023
 Quant Method : K:\VOA122\2023\230726NICAL\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:03:05 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA122\2023\230726NICAL\V22230726N09.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
82)	Styrene	10.698	104	3042623	168.469	ug/L	96
84)	Bromoform	10.722	173	275618	88.632	ug/L	98
86)	Isopropylbenzene	11.000	105	2557590	84.120	ug/L	99
88)	Bromobenzene	11.428	156	589046	78.854	ug/L	99
89)	n-Propylbenzene	11.468	91	2995445	82.772	ug/L	99
90)	1,4-Dichlorobutane	11.483	55	692421	82.377	ug/L	95
91)	1,1,2,2-Tetrachloroethane	11.547	83	383257	82.382	ug/L	100
92)	4-Ethyltoluene	11.595	105	2525746	83.529	ug/L	100
93)	2-Chlorotoluene	11.634	91	1726471M6	80.103	ug/L	
94)	1,3,5-Trimethylbenzene	11.690	105	2144397	84.584	ug/L	99
95)	1,2,3-Trichloropropane	11.690	75	321907	81.683	ug/L	97
96)	trans-1,4-Dichloro-2-b...	11.737	53	144607	83.665	ug/L #	79
97)	4-Chlorotoluene	11.817	91	1814559	81.978	ug/L	100
98)	tert-Butylbenzene	12.021	119	2036448	84.516	ug/L	99
101)	1,2,4-Trimethylbenzene	12.097	105	2105330	86.780	ug/L	98
102)	sec-Butylbenzene	12.209	105	2672957	84.118	ug/L	100
103)	p-Isopropyltoluene	12.355	119	2332748	86.859	ug/L	98
104)	1,3-Dichlorobenzene	12.425	146	1201398	80.982	ug/L	98
105)	1,4-Dichlorobenzene	12.515	146	1184777	78.958	ug/L	98
106)	p-Diethylbenzene	12.724	119	1392753	88.596	ug/L	99
107)	n-Butylbenzene	12.780	91	1913039	86.536	ug/L	100
108)	1,2-Dichlorobenzene	12.933	146	1074408	80.272	ug/L	97
109)	1,2,4,5-Tetramethylben...	13.510	119	1840028	94.240	ug/L	99
110)	1,2-Dibromo-3-chloropr...	13.705	155	71107	87.642	ug/L	100
111)	1,3,5-Trichlorobenzene	13.740	180	751690	84.147	ug/L	97
112)	Hexachlorobutadiene	14.304	225	267267	84.387	ug/L	99
113)	1,2,4-Trichlorobenzene	14.332	180	640658	84.213	ug/L	99
114)	Naphthalene	14.624	128	1429482	90.134	ug/L	100
115)	1,2,3-Trichlorobenzene	14.791	180	551582	82.823	ug/L	99

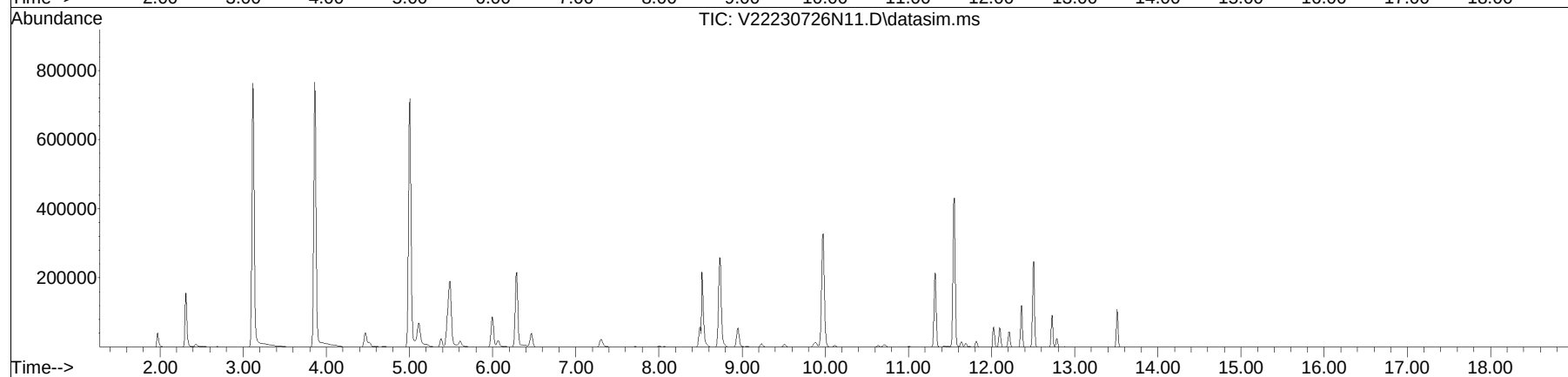
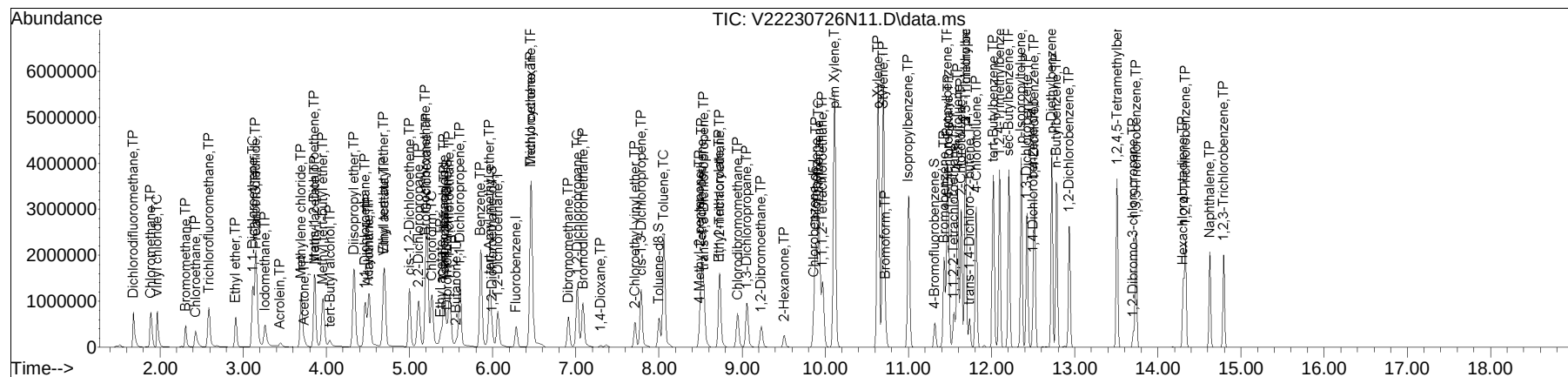
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230726NICAL\
 Data File : V22230726N11.D
 Acq On : 26 Jul 2023 08:20 pm
 Operator : VOA122:PID
 Sample : I8260STD80PPB
 Misc : WG1808429,ICAL (Sig #1); WG,ICAL20151 (Sig #2)
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 27 09:04:14 2023
 Quant Method : K:\VOA122\2023\230726NICAL\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:03:05 2023
 Response via : Initial Calibration

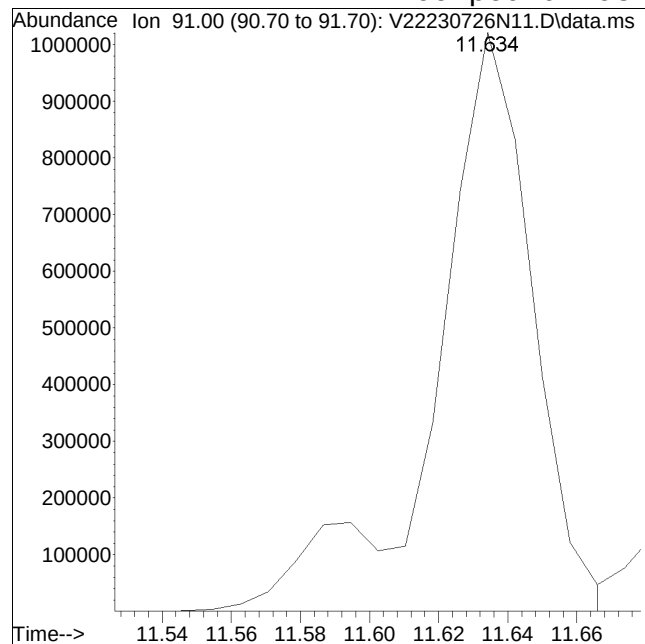
Sub List : 8260-Curve - Megamix plus Diox\V22230726N09.D•



Manual Integration Report

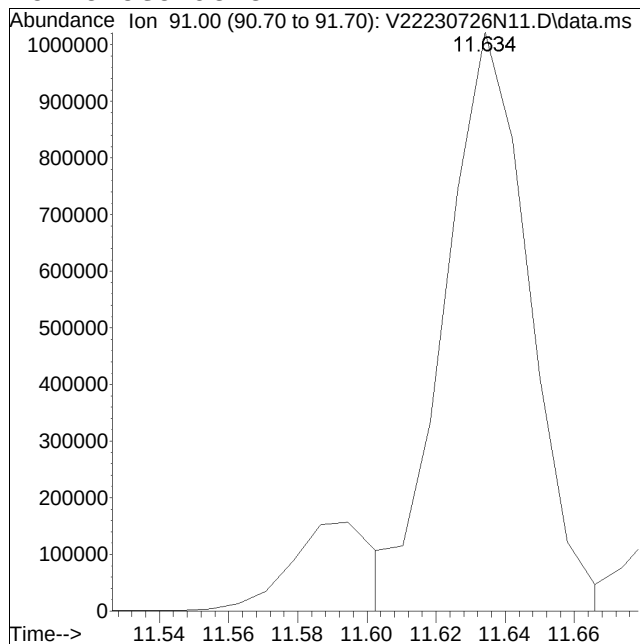
Data Path : K:\VOA122\2023\230726NICALQMethod : V122_230726N_8260.m
Data File : V22230726N11.D Operator : VOA122:PID
Date Inj'd : 7/26/2023 8:20 pm Instrument : VOA122
Sample : I8260STD80PPB Quant Date : 7/27/2023 9:04 am

Compound #93: 2-Chlorotoluene



Original Peak Response = 1987597

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).



Manual Peak Response = 1726471 M6

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230726NICAL\
 Data File : V22230726N12.D
 Acq On : 26 Jul 2023 08:45 pm
 Operator : VOA122:PID
 Sample : I8260STD120PPB
 Misc : WG1808429, ICAL (Sig #1); WG, ICAL20151 (Sig #2)
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jul 27 09:04:23 2023
 Quant Method : K:\VOA122\2023\230726NICAL\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:03:05 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA122\2023\230726NICAL\V22230726N09.D
 Sub List : 8260-Curve - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	6.284	96	493342	10.000	ug/L	0.00
Standard Area 1 = 368457			Recovery	=	133.89%	
62) Chlorobenzene-d5	9.866	117	432259	10.000	ug/L	0.00
Standard Area 1 = 369809			Recovery	=	116.89%	
83) 1,4-Dichlorobenzene-d4	12.501	152	236340	10.000	ug/L	0.00
Standard Area 1 = 207432			Recovery	=	113.94%	
System Monitoring Compounds						
38) Dibromofluoromethane	5.453	113	151986	8.874	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	88.74%	
46) 1,2-Dichloroethane-d4	5.989	65	155009	9.156	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	91.56%	
63) Toluene-d8	8.001	98	529256	10.089	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	100.89%	
87) 4-Bromofluorobenzene	11.317	95	198150	10.081	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	100.81%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.682	85	1053173	104.652	ug/L	97
3) Chloromethane	1.891	50	1291987	98.610	ug/L	98
4) Vinyl chloride	1.968	62	1055290	104.665	ug/L	98
5) Bromomethane	2.310	94	441009	126.757	ug/L	98
6) Chloroethane	2.428	64	584670	100.514	ug/L	97
7) Trichlorofluoromethane	2.588	101	1249974	105.554	ug/L	99
8) Ethyl ether	2.909	74	364722	115.312	ug/L #	1
10) 1,1-Dichloroethene	3.118	96	767523	106.130	ug/L #	75
11) Carbon disulfide	3.146	76	2488307	103.334	ug/L	100
12) Freon-113	3.160	101	816585	108.230	ug/L	95
13) Iodomethane	3.265	142	965570	158.976	ug/L	97
14) Acrolein	3.446	56	110839	117.156	ug/L	97
15) Methylene chloride	3.697	84	848943	92.592	ug/L #	67
17) Acetone	3.739	43	187571	105.454	ug/L	96
18) trans-1,2-Dichloroethene	3.857	96	839530	109.125	ug/L	80
19) Methyl acetate	3.857	43	467469	107.828	ug/L #	85
21) Methyl tert-butyl ether	3.962	73	1781188	126.108	ug/L #	87
22) tert-Butyl alcohol	4.045	59	269314	613.432	ug/L #	90
24) Diisopropyl ether	4.331	45	2873583	121.020	ug/L	91
25) 1,1-Dichloroethane	4.464	63	1731685	105.130	ug/L	97
26) Halothane	4.512	117	637816	113.001	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230726NICAL\
 Data File : V22230726N12.D
 Acq On : 26 Jul 2023 08:45 pm
 Operator : VOA122:PID
 Sample : I8260STD120PPB
 Misc : WG1808429,ICAL (Sig #1); WG,ICAL20151 (Sig #2)
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jul 27 09:04:23 2023
 Quant Method : K:\VOA122\2023\230726NICAL\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:03:05 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA122\2023\230726NICAL\V22230726N09.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
27) Acrylonitrile	4.505	53	244143	116.571	ug/L	95
28) Ethyl tert-butyl ether	4.694	59	2456253	127.452	ug/L	82
29) Vinyl acetate	4.701	43	994985	125.153	ug/L #	89
30) cis-1,2-Dichloroethene	5.000	96	904771	106.887	ug/L #	82
31) 2,2-Dichloropropane	5.112	77	1148816	112.286	ug/L	91
32) Bromochloromethane	5.202	128	418887	104.386	ug/L #	74
33) Cyclohexane	5.209	56	1967454	118.739	ug/L	71
34) Chloroform	5.272	83	1477361	107.687	ug/L	97
35) Ethyl acetate	5.377	43	606458	123.932	ug/L #	93
36) Carbon tetrachloride	5.419	117	1209887	117.836	ug/L	99
37) Tetrahydrofuran	5.426	42	174720	111.898	ug/L	94
39) 1,1,1-Trichloroethane	5.481	97	1378893	114.849	ug/L	96
41) 2-Butanone	5.565	43	269830	123.613	ug/L #	50
42) 1,1-Dichloropropene	5.607	75	1285536	129.630	ug/L	98
44) Benzene	5.856	78	3237800	120.222	ug/L #	92
45) tert-Amyl methyl ether	5.967	73	1843838	133.115	ug/L	93
47) 1,2-Dichloroethane	6.063	62	1089930	109.903	ug/L	99
50) Methyl cyclohexane	6.462	83	1588347	121.551	ug/L #	67
51) Trichloroethene	6.462	95	1040321	110.764	ug/L	97
53) Dibromomethane	6.911	93	472174	111.785	ug/L	86
54) 1,2-Dichloropropane	7.022	63	969677	121.950	ug/L	95
56) 2-Chloroethyl vinyl ether	7.714	63	443098	140.505	ug/L #	86
57) Bromodichloromethane	7.088	83	1153349	120.222	ug/L	100
60) 1,4-Dioxane	7.301	88	56643	1192.126	ug/L #	64
61) cis-1,3-Dichloropropene	7.788	75	1335977	128.139	ug/L #	91
64) Toluene	8.060	92	1952322	118.995	ug/L	97
65) 4-Methyl-2-pentanone	8.488	58	173962	135.697	ug/L #	84
66) Tetrachloroethene	8.518	166	659369	119.054	ug/L	96
68) trans-1,3-Dichloropropene	8.541	75	1178029	138.135	ug/L	94
70) Ethyl methacrylate	8.724	69	633982	136.853	ug/L	91
71) 1,1,2-Trichloroethane	8.732	83	511861	131.621	ug/L	97
72) Chlorodibromomethane	8.946	129	808897	137.239	ug/L	100
73) 1,3-Dichloropropane	9.057	76	1063814	133.132	ug/L	99
74) 1,2-Dibromoethane	9.231	107	631896	136.101	ug/L	99
76) 2-Hexanone	9.509	43	351835	137.283	ug/L	94
77) Chlorobenzene	9.890	112	2200747	116.101	ug/L	99
78) Ethylbenzene	9.921	91	3781627	118.618	ug/L	100
79) 1,1,1,2-Tetrachloroethane	9.969	131	832417	132.978	ug/L	98
80) p/m Xylene	10.112	106	2959722	238.421	ug/L	100
81) o Xylene	10.635	106	2855828	241.636	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230726NICAL\
 Data File : V22230726N12.D
 Acq On : 26 Jul 2023 08:45 pm
 Operator : VOA122:PID
 Sample : I8260STD120PPB
 Misc : WG1808429,ICAL (Sig #1); WG,ICAL20151 (Sig #2)
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jul 27 09:04:23 2023
 Quant Method : K:\VOA122\2023\230726NICAL\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:03:05 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA122\2023\230726NICAL\V22230726N09.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
82)	Styrene	10.698	104	4631271	245.168	ug/L	95
84)	Bromoform	10.722	173	443951	138.759	ug/L	100
86)	Isopropylbenzene	11.008	105	3890788	124.380	ug/L	99
88)	Bromobenzene	11.428	156	915494	119.116	ug/L	99
89)	n-Propylbenzene	11.468	91	4556415	122.375	ug/L	100
90)	1,4-Dichlorobutane	11.483	55	1087454	125.746	ug/L	95
91)	1,1,2,2-Tetrachloroethane	11.547	83	593867	124.072	ug/L	100
92)	4-Ethyltoluene	11.595	105	3825393	122.961	ug/L	100
93)	2-Chlorotoluene	11.634	91	2657579M6	119.845	ug/L	
94)	1,3,5-Trimethylbenzene	11.690	105	3278946	125.708	ug/L	99
95)	1,2,3-Trichloropropane	11.690	75	513389	126.617	ug/L	96
96)	trans-1,4-Dichloro-2-b...	11.737	53	226837	127.559	ug/L	81
97)	4-Chlorotoluene	11.817	91	2766225	121.467	ug/L	100
98)	tert-Butylbenzene	12.021	119	3111738	125.520	ug/L	98
101)	1,2,4-Trimethylbenzene	12.097	105	3204839	128.396	ug/L	99
102)	sec-Butylbenzene	12.209	105	4066238	124.375	ug/L	100
103)	p-Isopropyltoluene	12.355	119	3542535	128.205	ug/L	98
104)	1,3-Dichlorobenzene	12.425	146	1821981	119.368	ug/L	98
105)	1,4-Dichlorobenzene	12.515	146	1807790	117.098	ug/L	98
106)	p-Diethylbenzene	12.724	119	2123203	131.274	ug/L	99
107)	n-Butylbenzene	12.780	91	2900145	127.508	ug/L	100
108)	1,2-Dichlorobenzene	12.940	146	1656612	120.298	ug/L	97
109)	1,2,4,5-Tetramethylben...	13.510	119	2845881	141.668	ug/L	99
110)	1,2-Dibromo-3-chloropr...	13.705	155	114594	137.279	ug/L	98
111)	1,3,5-Trichlorobenzene	13.740	180	1137173	123.729	ug/L	97
112)	Hexachlorobutadiene	14.304	225	409730	125.740	ug/L	99
113)	1,2,4-Trichlorobenzene	14.332	180	987938	126.219	ug/L	98
114)	Naphthalene	14.624	128	2212868	135.615	ug/L	100
115)	1,2,3-Trichlorobenzene	14.791	180	852609	124.433	ug/L	98

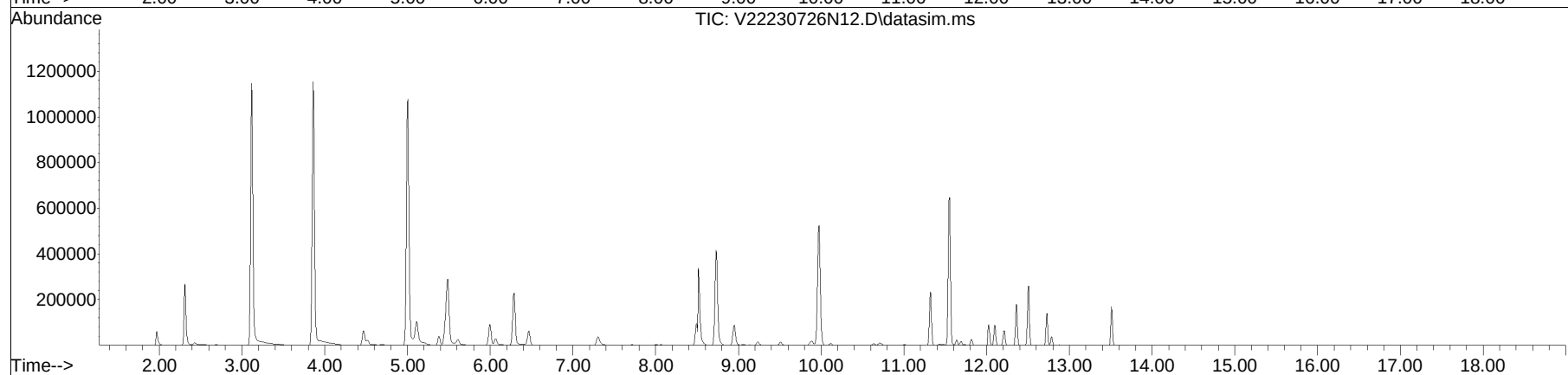
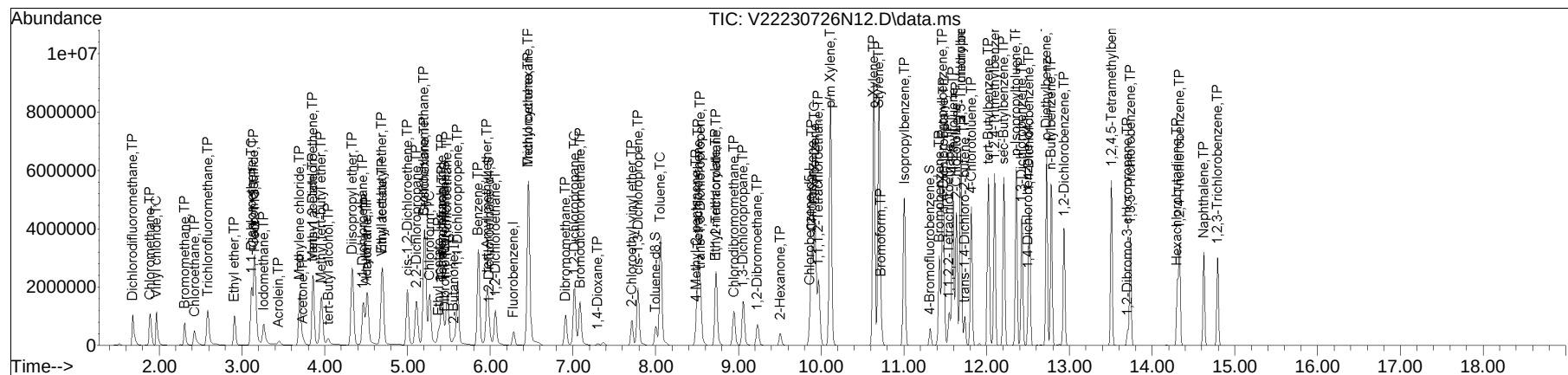
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230726NICAL\
 Data File : V22230726N12.D
 Acq On : 26 Jul 2023 08:45 pm
 Operator : VOA122:PID
 Sample : I8260STD120PPB
 Misc : WG1808429,ICAL (Sig #1); WG,ICAL20151 (Sig #2)
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jul 27 09:04:23 2023
 Quant Method : K:\VOA122\2023\230726NICAL\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:03:05 2023
 Response via : Initial Calibration

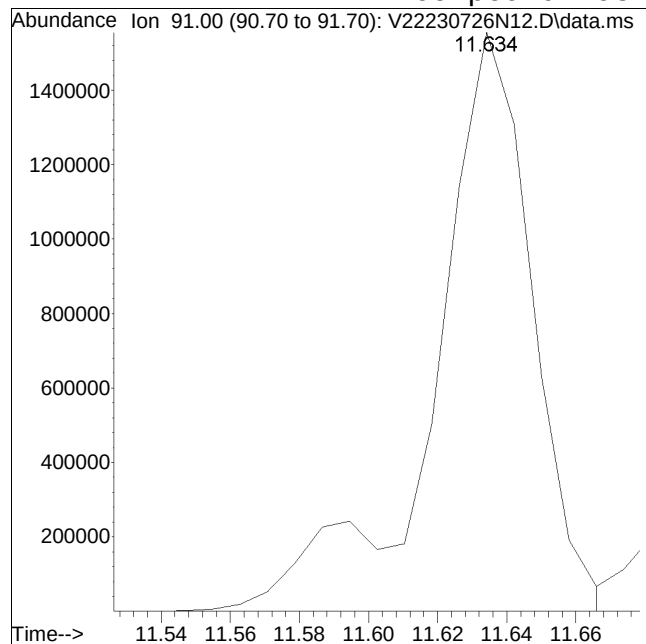
Sub List : 8260-Curve - Megamix plus Diox\VOA122\230726N09.D•



Manual Integration Report

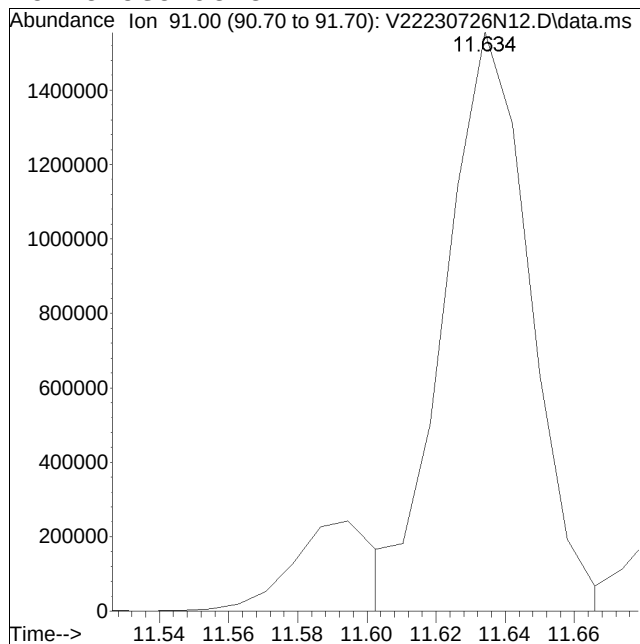
Data Path : K:\VOA122\2023\230726NICALQMethod : V122_230726N_8260.m
Data File : V22230726N12.D Operator : VOA122:PID
Date Inj'd : 7/26/2023 8:45 pm Instrument : VOA122
Sample : I8260STD120PPB Quant Date : 7/27/2023 9:04 am

Compound #93: 2-Chlorotoluene



Original Peak Response = 3052863

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).



Manual Peak Response = 2657579 M6

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230726NICAL\
 Data File : V22230726N13.D
 Acq On : 26 Jul 2023 09:10 pm
 Operator : VOA122:PID
 Sample : I8260STD200PPB
 Misc : WG1808429, ICAL (Sig #1); WG, ICAL20151 (Sig #2)
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jul 27 09:04:32 2023
 Quant Method : K:\VOA122\2023\230726NICAL\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:03:05 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA122\2023\230726NICAL\V22230726N09.D
 Sub List : 8260-Curve - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	6.284	96	521899	10.000	ug/L	0.00
Standard Area 1 = 368457			Recovery	=	141.64%	
62) Chlorobenzene-d5	9.866	117	449792	10.000	ug/L	0.00
Standard Area 1 = 369809			Recovery	=	121.63%	
83) 1,4-Dichlorobenzene-d4	12.501	152	244853	10.000	ug/L	0.00
Standard Area 1 = 207432			Recovery	=	118.04%	
System Monitoring Compounds						
38) Dibromofluoromethane	5.453	113	159147	8.784	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	87.84%	
46) 1,2-Dichloroethane-d4	5.996	65	161546	9.020	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	90.20%	
63) Toluene-d8	8.001	98	553616	10.142	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	101.42%	
87) 4-Bromofluorobenzene	11.317	95	207148	10.173	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	101.73%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.682	85	1784792	167.647	ug/L	97
3) Chloromethane	1.891	50	2254206	162.636	ug/L	98
4) Vinyl chloride	1.968	62	1888922	177.094	ug/L	98
5) Bromomethane	2.310	94	873331	237.283	ug/L	98
6) Chloroethane	2.421	64	955888	155.340	ug/L	98
7) Trichlorofluoromethane	2.581	101	2149186	171.557	ug/L	99
8) Ethyl ether	2.909	74	636740	190.299	ug/L #	1
10) 1,1-Dichloroethene	3.118	96	1370093	179.085	ug/L #	76
11) Carbon disulfide	3.146	76	4410062	173.119	ug/L	99
12) Freon-113	3.160	101	1409990	176.654	ug/L	95
13) Iodomethane	3.265	142	1819316	283.151	ug/L	96
14) Acrolein	3.446	56	200208	200.039	ug/L	98
15) Methylene chloride	3.697	84	1495853	154.222	ug/L #	69
17) Acetone	3.739	43	323200	171.763	ug/L	95
18) trans-1,2-Dichloroethene	3.857	96	1431755	175.921	ug/L	77
19) Methyl acetate	3.857	43	810894	176.809	ug/L #	85
21) Methyl tert-butyl ether	3.962	73	3118874	208.733	ug/L #	88
22) tert-Butyl alcohol	4.038	59	487718	1050.117	ug/L #	92
24) Diisopropyl ether	4.331	45	4978045	198.177	ug/L	91
25) 1,1-Dichloroethane	4.464	63	3068736	176.108	ug/L	97
26) Halothane	4.512	117	1193275	199.843	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230726NICAL\
 Data File : V22230726N13.D
 Acq On : 26 Jul 2023 09:10 pm
 Operator : VOA122:PID
 Sample : I8260STD200PPB
 Misc : WG1808429,ICAL (Sig #1); WG,ICAL20151 (Sig #2)
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jul 27 09:04:32 2023
 Quant Method : K:\VOA122\2023\230726NICAL\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:03:05 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA122\2023\230726NICAL\V22230726N09.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
27) Acrylonitrile	4.505	53	426079	192.308	ug/L	95
28) Ethyl tert-butyl ether	4.694	59	4323062	212.045	ug/L #	81
29) Vinyl acetate	4.701	43	1686685	200.550	ug/L #	88
30) cis-1,2-Dichloroethene	5.000	96	1598618	178.522	ug/L #	82
31) 2,2-Dichloropropane	5.112	77	2029337	187.496	ug/L	92
32) Bromochloromethane	5.202	128	724874	170.754	ug/L #	74
33) Cyclohexane	5.209	56	3444423	196.501	ug/L	71
34) Chloroform	5.272	83	2603151	179.365	ug/L	97
35) Ethyl acetate	5.377	43	1064472	205.626	ug/L #	93
36) Carbon tetrachloride	5.419	117	2166361	199.447	ug/L	99
37) Tetrahydrofuran	5.426	42	306265	185.413	ug/L	95
39) 1,1,1-Trichloroethane	5.481	97	2454311	193.235	ug/L	96
41) 2-Butanone	5.565	43	476460	206.330	ug/L #	50
42) 1,1-Dichloropropene	5.607	75	2306997	219.902	ug/L	98
44) Benzene	5.856	78	5786381	203.096	ug/L #	92
45) tert-Amyl methyl ether	5.967	73	3257308	222.293	ug/L	93
47) 1,2-Dichloroethane	6.063	62	1893318	180.466	ug/L	99
50) Methyl cyclohexane	6.462	83	2770452	200.413	ug/L #	68
51) Trichloroethene	6.462	95	1873211	188.529	ug/L	97
53) Dibromomethane	6.911	93	831613	186.108	ug/L #	86
54) 1,2-Dichloropropane	7.022	63	1737198	206.522	ug/L	95
56) 2-Chloroethyl vinyl ether	7.714	63	787640	236.092	ug/L	86
57) Bromodichloromethane	7.088	83	2054740	202.461	ug/L	100
60) 1,4-Dioxane	7.301	88	102553	2040.263	ug/L #	63
61) cis-1,3-Dichloropropene	7.788	75	2384741	216.214	ug/L	92
64) Toluene	8.060	92	3462838	202.835	ug/L	96
65) 4-Methyl-2-pentanone	8.495	58	295355	221.407	ug/L #	84
66) Tetrachloroethene	8.518	166	1166862	202.474	ug/L	96
68) trans-1,3-Dichloropropene	8.541	75	2062827	232.457	ug/L	95
70) Ethyl methacrylate	8.724	69	1084175	224.910	ug/L	89
71) 1,1,2-Trichloroethane	8.732	83	902730	223.082	ug/L	97
72) Chlorodibromomethane	8.946	129	1450376	236.482	ug/L	99
73) 1,3-Dichloropropane	9.057	76	1903231	228.897	ug/L	99
74) 1,2-Dibromoethane	9.231	107	1117853	231.383	ug/L	99
76) 2-Hexanone	9.509	43	606153	227.296	ug/L	95
77) Chlorobenzene	9.890	112	3882497	196.838	ug/L	99
78) Ethylbenzene	9.929	91	6590068	198.653	ug/L	99
79) 1,1,1,2-Tetrachloroethane	9.969	131	1501421	230.502	ug/L	98
80) p/m Xylene	10.112	106	5090450	394.077	ug/L	98
81) o Xylene	10.635	106	4898479	398.312	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230726NICAL\
 Data File : V22230726N13.D
 Acq On : 26 Jul 2023 09:10 pm
 Operator : VOA122:PID
 Sample : I8260STD200PPB
 Misc : WG1808429,ICAL (Sig #1); WG,ICAL20151 (Sig #2)
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jul 27 09:04:32 2023
 Quant Method : K:\VOA122\2023\230726NICAL\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:03:05 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA122\2023\230726NICAL\V22230726N09.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
82)	Styrene	10.698	104	7783703	395.988	ug/L	94
84)	Bromoform	10.722	173	797598	240.626	ug/L	99
86)	Isopropylbenzene	11.008	105	6636594	204.781	ug/L	100
88)	Bromobenzene	11.428	156	1584787	199.030	ug/L	100
89)	n-Propylbenzene	11.468	91	7605160	197.155	ug/L	99
90)	1,4-Dichlorobutane	11.483	55	1868595	208.559	ug/L	95
91)	1,1,2,2-Tetrachloroethane	11.547	83	1030593	207.828	ug/L	100
92)	4-Ethyltoluene	11.595	105	6610197	205.086	ug/L	99
93)	2-Chlorotoluene	11.634	91	4421794M6	192.470	ug/L	
94)	1,3,5-Trimethylbenzene	11.690	105	5709713	211.289	ug/L	100
95)	1,2,3-Trichloropropane	11.690	75	894394	212.915	ug/L	97
96)	trans-1,4-Dichloro-2-b...	11.737	53	379716	206.106	ug/L	88
97)	4-Chlorotoluene	11.817	91	4788585	202.960	ug/L	100
98)	tert-Butylbenzene	12.021	119	5389680	209.848	ug/L	97
101)	1,2,4-Trimethylbenzene	12.097	105	5559717	214.995	ug/L	99
102)	sec-Butylbenzene	12.209	105	6797495	200.688	ug/L	99
103)	p-Isopropyltoluene	12.362	119	5957909	208.121	ug/L	98
104)	1,3-Dichlorobenzene	12.431	146	3104209	196.303	ug/L	97
105)	1,4-Dichlorobenzene	12.522	146	3109029	194.383	ug/L	98
106)	p-Diethylbenzene	12.724	119	3644830	217.518	ug/L	99
107)	n-Butylbenzene	12.786	91	4943092	209.772	ug/L	99
108)	1,2-Dichlorobenzene	12.940	146	2822075	197.805	ug/L	97
109)	1,2,4,5-Tetramethylben...	13.510	119	4892022	235.057	ug/L	99
110)	1,2-Dibromo-3-chloropr...	13.705	155	197792	228.709	ug/L	100
111)	1,3,5-Trichlorobenzene	13.740	180	1962454	206.099	ug/L	96
112)	Hexachlorobutadiene	14.304	225	712230	210.973	ug/L	98
113)	1,2,4-Trichlorobenzene	14.332	180	1694675	208.984	ug/L	98
114)	Naphthalene	14.624	128	3764848	222.706	ug/L	100
115)	1,2,3-Trichlorobenzene	14.791	180	1451482	204.470	ug/L	98

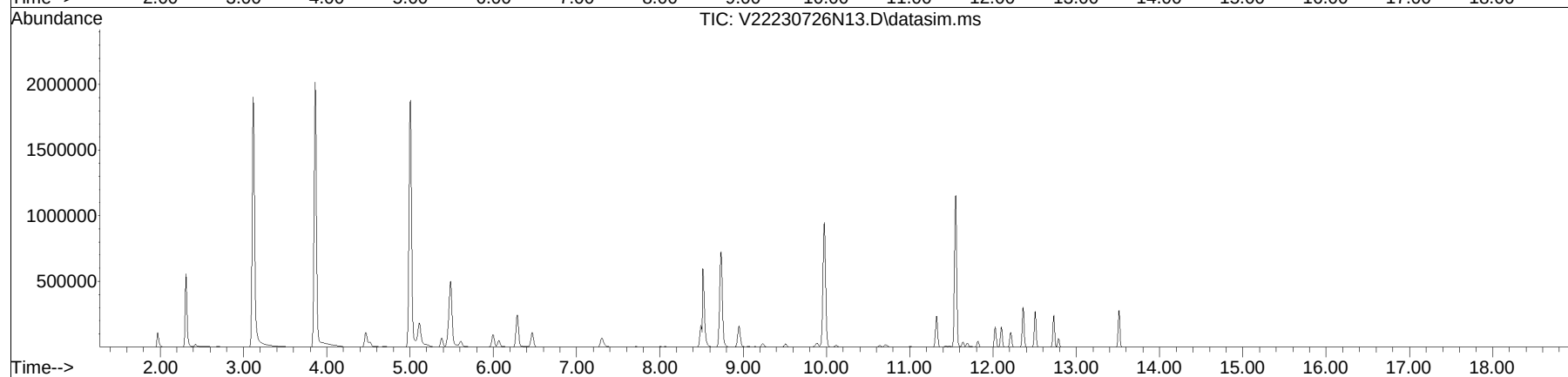
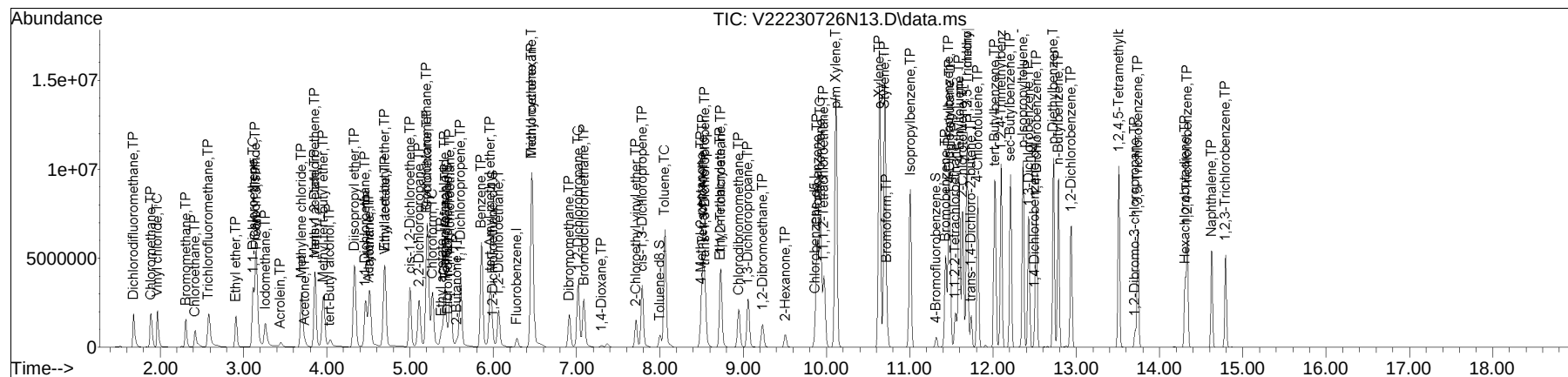
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230726NICAL\
 Data File : V22230726N13.D
 Acq On : 26 Jul 2023 09:10 pm
 Operator : VOA122:PID
 Sample : I8260STD200PPB
 Misc : WG1808429,ICAL (Sig #1); WG,ICAL20151 (Sig #2)
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jul 27 09:04:32 2023
 Quant Method : K:\VOA122\2023\230726NICAL\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:03:05 2023
 Response via : Initial Calibration

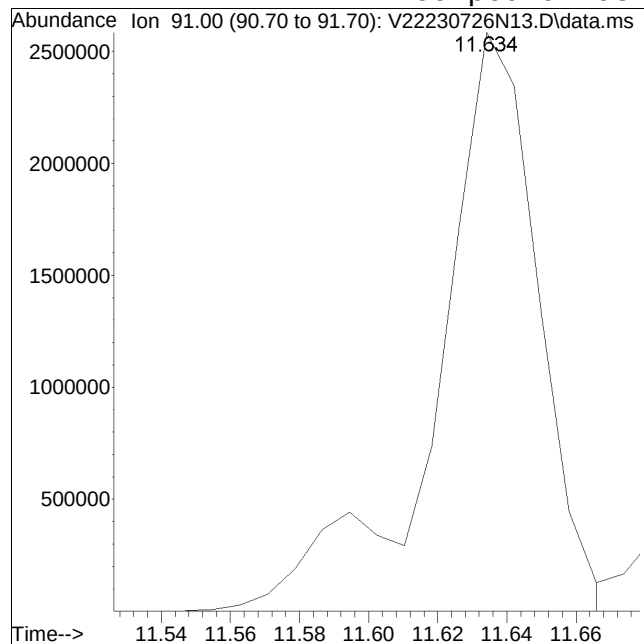
Sub List : 8260-Curve - Megamix plus Diox\VOA122\230726N09.D•



Manual Integration Report

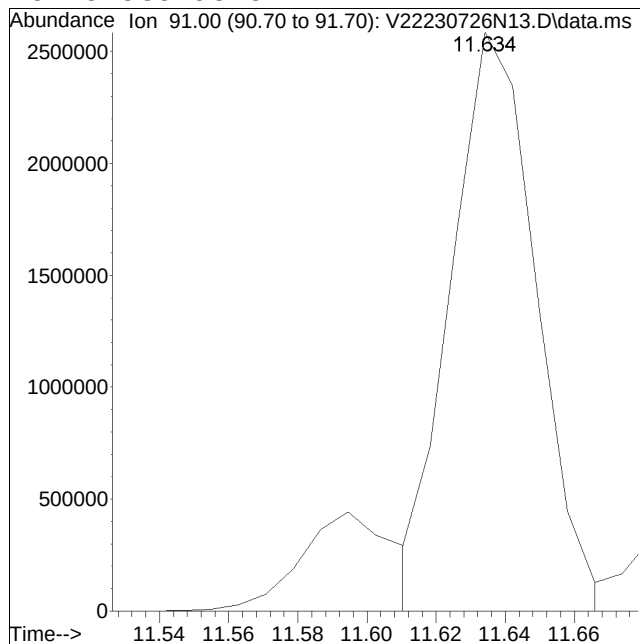
Data Path : K:\VOA122\2023\230726NICALQMethod : V122_230726N_8260.m
Data File : V22230726N13.D Operator : VOA122:PID
Date Inj'd : 7/26/2023 9:10 pm Instrument : VOA122
Sample : I8260STD200PPB Quant Date : 7/27/2023 9:04 am

Compound #93: 2-Chlorotoluene



Original Peak Response = 5243416

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).



Manual Peak Response = 4421794 M6

Evaluate Continuing Calibration Report

Data Path : K:\VOA122\2023\230726NICAL\
 Data File : V22230726N18.D
 Acq On : 26 Jul 2023 11:15 pm
 Operator : VOA122:PID
 Sample : C8260STD10PPB
 Misc : WG1808429,ICAL (Sig #1); WG,ICAL20151 (Sig #2)
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jul 27 09:13:21 2023
 Quant Method : K:\VOA122\2023\230726NICAL\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:11:40 2023
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Fluorobenzene	1.000	1.000	0.0	111	0.00
2 TP	Dichlorodifluoromethane	0.204	0.115	43.6#	53	0.00
3 TP	Chloromethane	0.266	0.227	14.7	83	0.00
4 TC	Vinyl chloride	0.204	0.195	4.4	94	0.00
5 TP	Bromomethane	0.071	0.076	-7.0	120	0.00
6 TP	Chloroethane	0.118	0.125	-5.9	102	0.00
7 TP	Trichlorofluoromethane	0.240	0.245	-2.1	99	0.00
8 TP	Ethyl ether	0.064	0.070	-9.4	111	0.00
10 TC	1,1-Dichloroethene	0.147	0.144	2.0	96	0.00
11 TP	Carbon disulfide	0.488	0.479	1.8	96	0.00
12 TP	Freon-113	0.153	0.156	-2.0	96	0.00
13 TP	Iodomethane	* 10.000	3.983	60.2#	41#	0.00
14 TP	Acrolein	0.019	0.017	10.5	93	0.00
15 TP	Methylene chloride	0.171	0.187	-9.4	107	0.00
17 TP	Acetone	0.036	0.033	8.3	90	0.00
18 TP	trans-1,2-Dichloroethene	0.156	0.163	-4.5	102	0.00
19 TP	Methyl acetate	0.088	0.075	14.8	91	0.00
21 TP	Methyl tert-butyl ether	0.286	0.269	5.9	99	0.00
22 TP	tert-Butyl alcohol	0.00890	0.00828#	7.0	96	0.00
24 TP	Diisopropyl ether	0.481	0.459	4.6	100	0.00
25 TP	1,1-Dichloroethane	0.334	0.345	-3.3	102	0.00
26 TP	Halothane	0.114	0.119	-4.4	102	0.00
27 TP	Acrylonitrile	0.042	0.046	-9.5	102	0.00
28 TP	Ethyl tert-butyl ether	0.391	0.362	7.4	99	0.00
29 TP	Vinyl acetate	0.161	0.125	22.4#	104	0.00
30 TP	cis-1,2-Dichloroethene	0.172	0.176#	-2.3	103	0.00
31 TP	2,2-Dichloropropane	0.207	0.190	8.2	95	0.00
32 TP	Bromochloromethane	0.081	0.086#	-6.2	100	0.00
33 TP	Cyclohexane	0.336	0.327	2.7	95	0.00
34 TC	Chloroform	0.278	0.286	-2.9	109	0.00
35 TP	Ethyl acetate	0.099	0.089	10.1	96	0.00
36 TP	Carbon tetrachloride	0.208	0.217	-4.3	101	0.00
37 TP	Tetrahydrofuran	0.032	0.032	0.0	102	0.00
38 S	Dibromofluoromethane	0.347	0.354	-2.0	108	0.00
39 TP	1,1,1-Trichloroethane	0.243	0.245	-0.8	102	0.00
41 TP	2-Butanone	0.044	0.038	13.6	96	0.00
42 TP	1,1-Dichloropropene	0.201	0.191	5.0	101	0.00
44 TP	Benzene	0.546	0.547	-0.2	104	0.00
45 TP	tert-Amyl methyl ether	0.281	0.258	8.2	102	0.00

Evaluate Continuing Calibration Report

Data Path : K:\VOA122\2023\230726NICAL\
 Data File : V22230726N18.D
 Acq On : 26 Jul 2023 11:15 pm
 Operator : VOA122:PID
 Sample : C8260STD10PPB
 Misc : WG1808429, ICAL (Sig #1); WG, ICAL20151 (Sig #2)
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jul 27 09:13:21 2023
 Quant Method : K:\VOA122\2023\230726NICAL\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:11:40 2023
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
46 S	1,2-Dichloroethane-d4	0.343	0.342	0.3	107	0.00
47 T	1,2-Dichloroethane	0.201	0.198	1.5	102	0.00
50 TP	Methyl cyclohexane	0.265	0.256	3.4	100	0.00
51 TP	Trichloroethene	0.190	0.188#	1.1	104	0.00
53 TP	Dibromomethane	0.086	0.087	-1.2	103	0.00
54 TC	1,2-Dichloropropane	0.161	0.160	0.6	105	0.00
56 TP	2-Chloroethyl vinyl ether	0.068	0.058	14.7	99	0.00
57 TP	Bromodichloromethane	0.194	0.186#	4.1	103	0.00
60 TP	1,4-Dioxane	0.00096	0.00110#	-14.6	115	0.00
61 TP	cis-1,3-Dichloropropene	0.211	0.203#	3.8	104	0.00
62 I	Chlorobenzene-d5	1.000	1.000	0.0	111	0.00
63 S	Toluene-d8	1.214	1.216	-0.2	112	0.00
64 TC	Toluene	0.380	0.373	1.8	103	0.00
65 TP	4-Methyl-2-pentanone	0.030	0.025#	16.7	97	0.00
66 TP	Tetrachloroethene	0.128	0.124	3.1	105	0.00
68 TP	trans-1,3-Dichloropropene	0.197	0.182#	7.6	105	0.00
70 TP	Ethyl methacrylate	0.114	0.107	6.1	107	0.00
71 TP	1,1,2-Trichloroethane	0.090	0.081#	10.0	100	0.00
72 TP	Chlorodibromomethane	0.136	0.124#	8.8	105	0.00
73 TP	1,3-Dichloropropane	0.185	0.169	8.6	102	0.00
74 TP	1,2-Dibromoethane	0.107	0.097#	9.3	102	0.00
76 TP	2-Hexanone	0.063	0.052	17.5	95	0.00
77 TP	Chlorobenzene	0.439	0.440	-0.2	107	0.00
78 TC	Ethylbenzene	0.738	0.754	-2.2	106	0.00
79 TP	1,1,1,2-Tetrachloroethane	0.145	0.127	12.4	101	0.00
80 TP	p/m Xylene	0.287	0.298	-3.8	105	0.00
81 TP	o Xylene	0.273	0.279	-2.2	104	0.00
82 TP	Styrene	0.437	0.454	-3.9	104	0.00
83 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	110	0.00
84 TP	Bromoform	0.135	0.123	8.9	102	0.00
86 TP	Isopropylbenzene	1.324	1.379	-4.2	103	0.00
87 S	4-Bromofluorobenzene	0.832	0.861	-3.5	112	0.00
88 TP	Bromobenzene	0.325	0.324	0.3	103	0.00
89 TP	n-Propylbenzene	1.575	1.668	-5.9	107	0.00
90 TP	1,4-Dichlorobutane	0.366	0.368	-0.5	105	0.00
91 TP	1,1,2,2-Tetrachloroethane	0.203	0.167#	17.7	95	0.00
92 TP	4-Ethyltoluene	1.316	1.364	-3.6	105	0.00

Evaluate Continuing Calibration Report

Data Path : K:\VOA122\2023\230726NICAL\
 Data File : V22230726N18.D
 Acq On : 26 Jul 2023 11:15 pm
 Operator : VOA122:PID
 Sample : C8260STD10PPB
 Misc : WG1808429, ICAL (Sig #1); WG, ICAL20151 (Sig #2)
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jul 27 09:13:21 2023
 Quant Method : K:\VOA122\2023\230726NICAL\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:11:40 2023
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
93 TP	2-Chlorotoluene	0.938	0.969	-3.3	106	0.00
94 TP	1,3,5-Trimethylbenzene	1.104	1.113	-0.8	103	0.00
95 TP	1,2,3-Trichloropropane	0.172	0.161	6.4	100	0.00
96 TP	trans-1,4-Dichloro-2-butene	0.075	0.065	13.3	97	0.00
97 TP	4-Chlorotoluene	0.964	0.992	-2.9	107	0.00
98 TP	tert-Butylbenzene	1.049	1.068	-1.8	103	0.00
101 TP	1,2,4-Trimethylbenzene	1.056	1.136	-7.6	109	0.00
102 TP	sec-Butylbenzene	1.383	1.449	-4.8	104	0.00
103 TP	p-Isopropyltoluene	1.169	1.227	-5.0	105	0.00
104 TP	1,3-Dichlorobenzene	0.646	0.665	-2.9	109	0.00
105 TP	1,4-Dichlorobenzene	0.653	0.624	4.4	101	0.00
106 TP	p-Diethylbenzene	0.684	0.663	3.1	100	0.00
107 TP	n-Butylbenzene	0.962	1.053	-9.5	109	0.00
108 TP	1,2-Dichlorobenzene	0.583	0.581#	0.3	105	0.00
109 TP	1,2,4,5-Tetramethylbenzene	0.912	0.819	10.2	103	0.00
110 TP	1,2-Dibromo-3-chloropropane	0.035	0.033	5.7	103	0.00
111 TP	1,3,5-Trichlorobenzene	0.389	0.381	2.1	101	0.00
112 TP	Hexachlorobutadiene	0.138	0.143	-3.6	107	0.00
113 TP	1,2,4-Trichlorobenzene	0.331	0.327#	1.2	104	0.00
114 TP	Naphthalene	0.690	0.692	-0.3	105	0.00
115 TP	1,2,3-Trichlorobenzene	0.290	0.290#	0.0	103	0.00

* Evaluation of CC level amount vs concentration.
 (#) = Out of Range SPCC's out = 16 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230726NICAL\
 Data File : V22230726N18.D
 Acq On : 26 Jul 2023 11:15 pm
 Operator : VOA122:PID
 Sample : C8260STD10PPB
 Misc : WG1808429, ICAL (Sig #1); WG, ICAL20151 (Sig #2)
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jul 27 09:13:21 2023
 Quant Method : K:\VOA122\2023\230726NICAL\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:11:40 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA122\2023\230726NICAL\V22230726N09.D
 Sub List : 8260-Curve - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	6.284	96	409186	10.000	ug/L	0.00
Standard Area 1 = 368457			Recovery	=	111.05%	
62) Chlorobenzene-d5	9.866	117	412336	10.000	ug/L	0.00
Standard Area 1 = 369809			Recovery	=	111.50%	
83) 1,4-Dichlorobenzene-d4	12.501	152	227206	10.000	ug/L	0.00
Standard Area 1 = 207432			Recovery	=	109.53%	
System Monitoring Compounds						
38) Dibromofluoromethane	5.453	113	144959	10.205	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	102.05%	
46) 1,2-Dichloroethane-d4	5.989	65	140064	9.975	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	99.75%	
63) Toluene-d8	8.001	98	501286	10.018	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	100.18%	
87) 4-Bromofluorobenzene	11.317	95	195735	10.359	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	103.59%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.682	85	47033	5.635	ug/L	98
3) Chloromethane	1.891	50	93007	8.559	ug/L	98
4) Vinyl chloride	1.968	62	79920	9.557	ug/L	97
5) Bromomethane	2.310	94	31065	10.765	ug/L	94
6) Chloroethane	2.428	64	51345	10.642	ug/L	95
7) Trichlorofluoromethane	2.588	101	100336	10.215	ug/L	98
8) Ethyl ether	2.909	74	28632	10.914	ug/L #	1
10) 1,1-Dichloroethene	3.118	96	59108	9.854	ug/L #	74
11) Carbon disulfide	3.153	76	196059	9.816	ug/L	100
12) Freon-113	3.160	101	63968	10.222	ug/L	95
13) Iodomethane	3.265	142	15356	3.983	ug/L	97
14) Acrolein	3.446	56	6937	8.840	ug/L	96
15) Methylene chloride	3.697	84	76580	10.964	ug/L #	65
17) Acetone	3.739	43	13481	9.138	ug/L	96
18) trans-1,2-Dichloroethene	3.857	96	66515	10.424	ug/L	81
19) Methyl acetate	3.864	43	30540	8.493	ug/L #	87
21) Methyl tert-butyl ether	3.962	73	110150	9.402	ug/L #	86
22) tert-Butyl alcohol	4.045	59	16935	46.507	ug/L	96
24) Diisopropyl ether	4.331	45	187821	9.537	ug/L #	91
25) 1,1-Dichloroethane	4.464	63	141123	10.330	ug/L	97
26) Halothane	4.512	117	48497	10.359	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230726NICAL\
 Data File : V22230726N18.D
 Acq On : 26 Jul 2023 11:15 pm
 Operator : VOA122:PID
 Sample : C8260STD10PPB
 Misc : WG1808429,ICAL (Sig #1); WG,ICAL20151 (Sig #2)
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jul 27 09:13:21 2023
 Quant Method : K:\VOA122\2023\230726NICAL\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:11:40 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA122\2023\230726NICAL\V22230726N09.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
27) Acrylonitrile	4.505	53	19009	10.943	ug/L	97
28) Ethyl tert-butyl ether	4.694	59	147983	9.258	ug/L #	78
29) Vinyl acetate	4.701	43	51350	7.787	ug/L #	87
30) cis-1,2-Dichloroethene	5.000	96	72165	10.279	ug/L #	80
31) 2,2-Dichloropropane	5.105	77	77768	9.164	ug/L	88
32) Bromochloromethane	5.202	128	35206	10.578	ug/L #	73
33) Cyclohexane	5.209	56	133812	9.737	ug/L	73
34) Chloroform	5.272	83	116965	10.279	ug/L	96
35) Ethyl acetate	5.377	43	36214	8.922	ug/L #	94
36) Carbon tetrachloride	5.419	117	88607	10.405	ug/L	97
37) Tetrahydrofuran	5.433	42	13148	10.152	ug/L #	86
39) 1,1,1-Trichloroethane	5.481	97	100385	10.081	ug/L	95
41) 2-Butanone	5.572	43	15642	8.640	ug/L #	49
42) 1,1-Dichloropropene	5.607	75	78227	9.511	ug/L	96
44) Benzene	5.856	78	223785	10.018	ug/L #	92
45) tert-Amyl methyl ether	5.967	73	105691	9.200	ug/L #	89
47) 1,2-Dichloroethane	6.063	62	81166	9.868	ug/L	96
50) Methyl cyclohexane	6.462	83	104926	9.681	ug/L #	66
51) Trichloroethene	6.462	95	77105	9.898	ug/L	98
53) Dibromomethane	6.911	93	35762	10.208	ug/L #	82
54) 1,2-Dichloropropane	7.022	63	65281	9.899	ug/L	94
56) 2-Chloroethyl vinyl ether	7.714	63	23643	8.442	ug/L #	86
57) Bromodichloromethane	7.088	83	76086	9.562	ug/L	100
60) 1,4-Dioxane	7.294	88	22419	568.879	ug/L #	62
61) cis-1,3-Dichloropropene	7.788	75	83104	9.610	ug/L	92
64) Toluene	8.060	92	153892	9.833	ug/L	98
65) 4-Methyl-2-pentanone	8.495	58	10184	8.328	ug/L #	84
66) Tetrachloroethene	8.518	166	51108	9.674	ug/L	97
68) trans-1,3-Dichloropropene	8.541	75	74920	9.210	ug/L	94
70) Ethyl methacrylate	8.732	69	44246	9.387	ug/L	97
71) 1,1,2-Trichloroethane	8.732	83	33306	8.978	ug/L	99
72) Chlorodibromomethane	8.946	129	51177	9.102	ug/L	99
73) 1,3-Dichloropropane	9.057	76	69786	9.155	ug/L	100
74) 1,2-Dibromoethane	9.231	107	39963	9.023	ug/L	99
76) 2-Hexanone	9.509	43	21247	8.139	ug/L	89
77) Chlorobenzene	9.882	112	181634	10.045	ug/L	98
78) Ethylbenzene	9.921	91	311049	10.228	ug/L	98
79) 1,1,1,2-Tetrachloroethane	9.969	131	52451	8.784	ug/L	98
80) p/m Xylene	10.112	106	246130	20.785	ug/L	98
81) o Xylene	10.635	106	230370	20.434	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230726NICAL\
 Data File : V22230726N18.D
 Acq On : 26 Jul 2023 11:15 pm
 Operator : VOA122:PID
 Sample : C8260STD10PPB
 Misc : WG1808429,ICAL (Sig #1); WG,ICAL20151 (Sig #2)
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jul 27 09:13:21 2023
 Quant Method : K:\VOA122\2023\230726NICAL\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:11:40 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA122\2023\230726NICAL\V22230726N09.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
82)	Styrene	10.698	104	374497	20.783	ug/L	97
84)	Bromoform	10.722	173	27862	9.059	ug/L	100
86)	Isopropylbenzene	11.000	105	313308	10.418	ug/L	99
88)	Bromobenzene	11.428	156	73616	9.963	ug/L	99
89)	n-Propylbenzene	11.468	91	379067	10.590	ug/L	98
90)	1,4-Dichlorobutane	11.484	55	83718	10.070	ug/L	93
91)	1,1,2,2-Tetrachloroethane	11.547	83	38006	8.260	ug/L	98
92)	4-Ethyltoluene	11.587	105	309895	10.362	ug/L	99
93)	2-Chlorotoluene	11.634	91	220183M4	10.328	ug/L	
94)	1,3,5-Trimethylbenzene	11.682	105	252913	10.086	ug/L	99
95)	1,2,3-Trichloropropane	11.690	75	36672	9.408	ug/L	96
96)	trans-1,4-Dichloro-2-b...	11.737	53	14727	8.615	ug/L #	73
97)	4-Chlorotoluene	11.809	91	225371	10.294	ug/L	100
98)	tert-Butylbenzene	12.021	119	242687	10.183	ug/L	99
101)	1,2,4-Trimethylbenzene	12.097	105	258037	10.753	ug/L	97
102)	sec-Butylbenzene	12.209	105	329288	10.477	ug/L	99
103)	p-Isopropyltoluene	12.355	119	278681	10.491	ug/L	98
104)	1,3-Dichlorobenzene	12.425	146	151101	10.297	ug/L	97
105)	1,4-Dichlorobenzene	12.515	146	141720	9.549	ug/L	97
106)	p-Diethylbenzene	12.724	119	150578	9.684	ug/L	99
107)	n-Butylbenzene	12.780	91	239278	10.943	ug/L	99
108)	1,2-Dichlorobenzene	12.933	146	132062	9.975	ug/L	97
109)	1,2,4,5-Tetramethylben...	13.510	119	186051	8.975	ug/L	99
110)	1,2-Dibromo-3-chloropr...	13.705	155	7546	9.403	ug/L	98
111)	1,3,5-Trichlorobenzene	13.733	180	86514	9.791	ug/L	97
112)	Hexachlorobutadiene	14.304	225	32547	10.390	ug/L	99
113)	1,2,4-Trichlorobenzene	14.332	180	74276	9.871	ug/L	98
114)	Naphthalene	14.624	128	157283	10.027	ug/L	100
115)	1,2,3-Trichlorobenzene	14.791	180	65919	10.007	ug/L	97

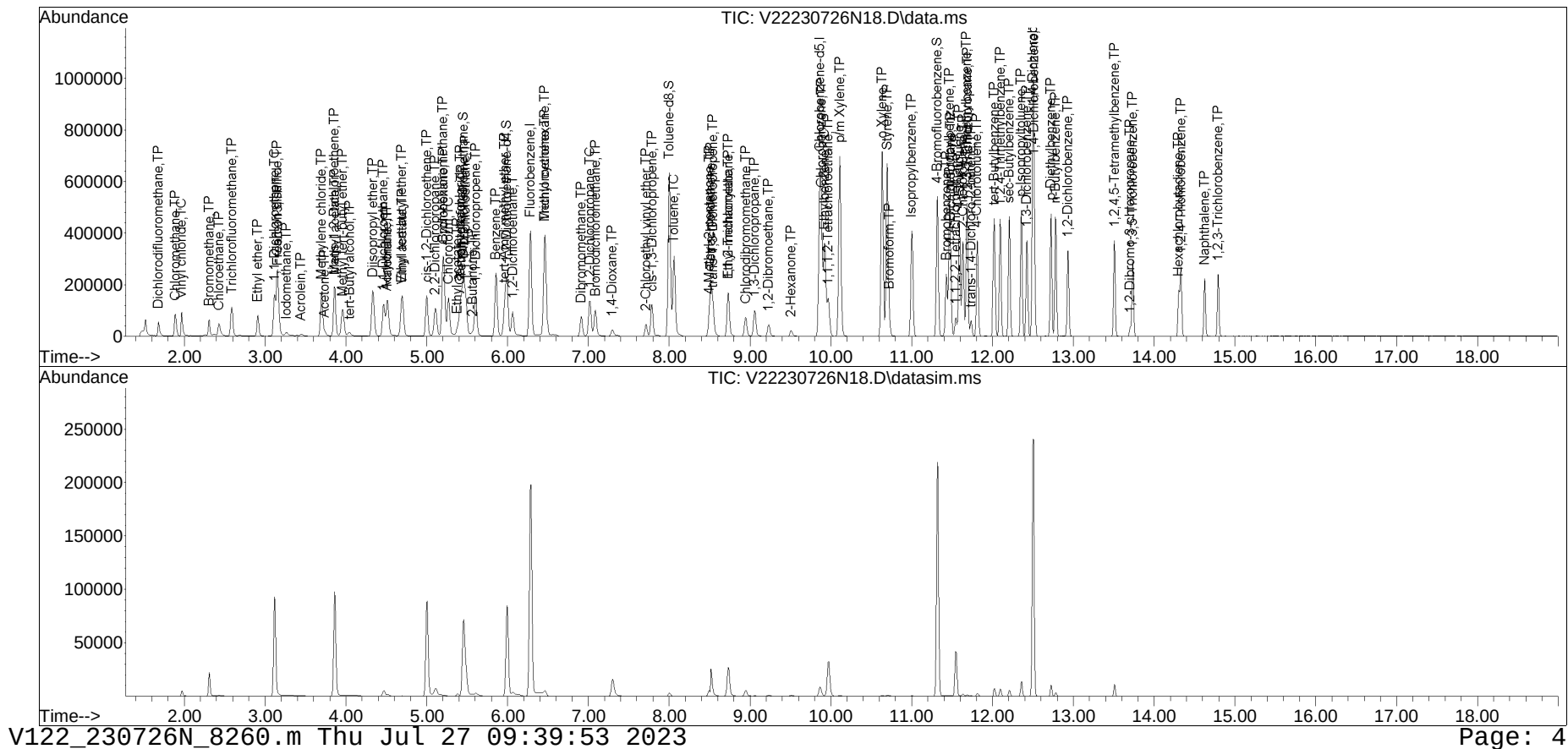
(#) = qualifier out of range (m) = manual integration (+) = signals summed

(QT Reviewed)

```
Data Path   : K:\VOA122\2023\230726NICAL\  
Data File  : V22230726N18.D  
Acq On     : 26 Jul 2023  11:15 pm  
Operator   : VOA122:PID  
Sample     : C8260STD10PPB  
Misc       : WG1808429,ICAL (Sig #1); WG,ICAL20151 (Sig #2)  
ALS Vial   : 18   Sample Multiplier: 1
```

Quant Time: Jul 27 09:13:21 2023
Quant Method : K:\VOA122\2023\230726NICAL\V122_230726N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Jul 27 09:11:40 2023
Response via : Initial Calibration

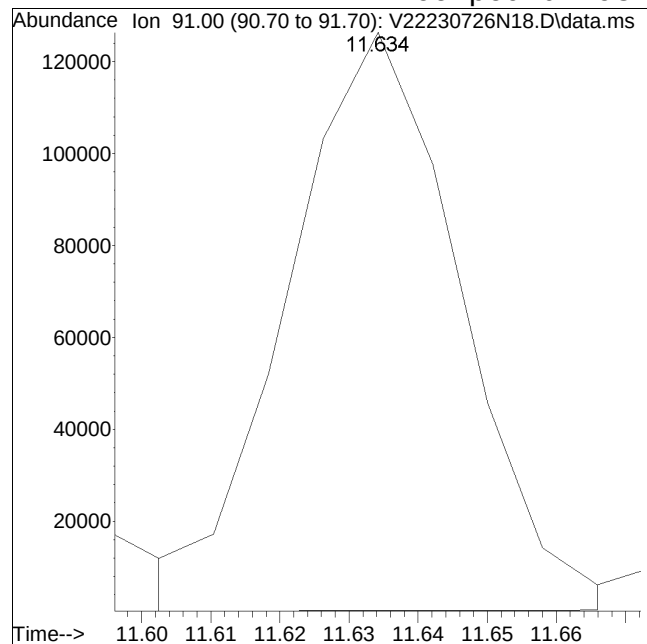
Sub List : 8260-Curve - Megamix plus Diox\V22230726N09.D•



Manual Integration Report

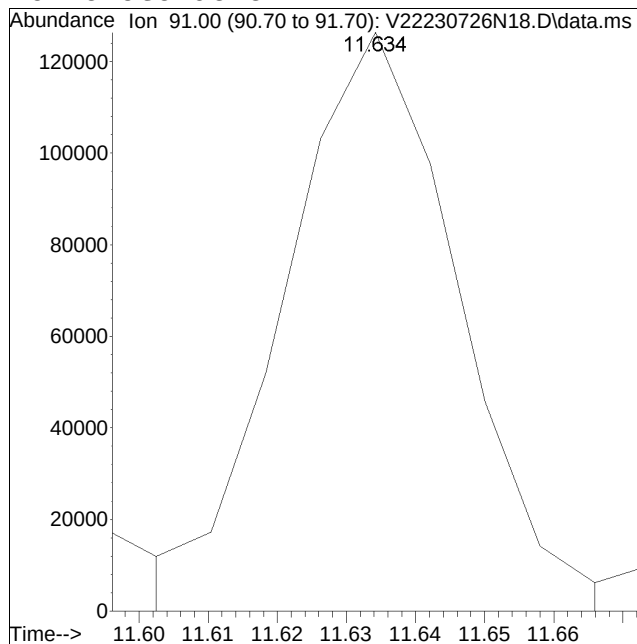
Data Path : K:\VOA122\2023\230726NICALQMethod : V122_230726N_8260.m
Data File : V22230726N18.D Operator : VOA122:PID
Date Inj'd : 7/26/2023 11:15 pm Instrument : VOA122
Sample : C8260STD10PPB Quant Date : 7/27/2023 9:12 am

Compound #93: 2-Chlorotoluene



Original Peak Response = 217984

M4 = Poor automated baseline construction.



Manual Peak Response = 220183 M4

Method Path : K:\VOA122\2023\230726NICAL\
Method File : V122_230726N_8260.m
Title : VOLATILES BY GC/MS
Last Update : Thu Jul 27 09:11:40 2023

	COMPOUND	CalFit	Units	TrueMid	MidConc	%RE	TrueLow	LowConc	%RE
13 TP	Iodomethane	L	ug/L	10.0	7.930	-20.7	2.00	2.492	24.6

Calibration Correlation Report

	COMPOUND	CalFit	CoefOfDet	QuadTerm	LinTerm	Constant
13 TP	Iodomethane	Linear	0.995948	0.000000	0.162745	-0.0272992

Continuing Calibration

Calibration Verification Summary

Form 7

Volatiles

Client : Impact Environmental
 Project Name : 585 UNION STREET
 Instrument ID : VOA122
 Lab File ID : V22230810A03
 Sample No : WG1814675-2
 Channel :

Lab Number : L2346073
 Project Number : 14729
 Calibration Date : 08/10/23 09:29
 Init. Calib. Date(s) : 07/26/23 07/26/23
 Init. Calib. Times : 17:01 21:10

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	108	0
Dichlorodifluoromethane	0.204	0.239	-	-17.2	20	107	0
Chloromethane	0.266	0.307	-	-15.4	20	109	0
Vinyl chloride	0.204	0.188	-	7.8	20	88	0
Bromomethane	0.071	0.054	-	23.9*	20	83	0
Chloroethane	0.118	0.136	-	-15.3	20	108	0
Trichlorofluoromethane	0.24	0.288	-	-20	20	113	0
Ethyl ether	0.064	0.067	-	-4.7	20	103	0
1,1-Dichloroethene	0.147	0.173	-	-17.7	20	112	0
Carbon disulfide	0.488	0.592	-	-21.3*	20	116	0
Freon-113	0.153	0.183	-	-19.6	20	110	0
Acrolein	0.019	0.02	-	-5.3	20	104	0
Methylene chloride	0.171	0.193	-	-12.9	20	108	0
Acetone	0.036	0.031	-	13.9	20	81	0
trans-1,2-Dichloroethene	0.156	0.181	-	-16	20	110	0
Methyl acetate	0.088	0.079	-	10.2	20	94	0
Methyl tert-butyl ether	0.286	0.286	-	0	20	102	0
tert-Butyl alcohol	0.0089	0.00794*	-	10.8	20	90	0
Diisopropyl ether	0.481	0.481	-	0	20	102	0
1,1-Dichloroethane	0.334	0.384	-	-15	20	111	0
Halothane	0.114	0.132	-	-15.8	20	110	0
Acrylonitrile	0.042	0.044	-	-4.8	20	93	0
Ethyl tert-butyl ether	0.391	0.386	-	1.3	20	103	0
Vinyl acetate	0.161	0.184	-	-14.3	20	148	0
cis-1,2-Dichloroethene	0.172	0.2*	-	-16.3	20	113	0
2,2-Dichloropropane	0.207	0.269	-	-30*	20	130	0
Bromochloromethane	0.081	0.087*	-	-7.4	20	98	0
Cyclohexane	0.336	0.408	-	-21.4*	20	115	0
Chloroform	0.278	0.31	-	-11.5	20	114	0
Ethyl acetate	0.099	0.083	-	16.2	20	88	0
Carbon tetrachloride	0.208	0.254	-	-22.1*	20	115	0
Tetrahydrofuran	0.032	0.03	-	6.3	20	94	0
Dibromofluoromethane	0.347	0.349	-	-0.6	20	104	0
1,1,1-Trichloroethane	0.243	0.282	-	-16	20	114	0
2-Butanone	0.044	0.038	-	13.6	20	92	0
1,1-Dichloropropene	0.201	0.223	-	-10.9	20	115	0
Benzene	0.546	0.593	-	-8.6	20	109	0
tert-Amyl methyl ether	0.281	0.273	-	2.8	20	104	0
1,2-Dichloroethane-d4	0.343	0.352	-	-2.6	20	107	0
1,2-Dichloroethane	0.201	0.207	-	-3	20	103	0
Methyl cyclohexane	0.265	0.293	-	-10.6	20	111	0
Trichloroethene	0.19	0.183*	-	3.7	20	98	0
Dibromomethane	0.086	0.09	-	-4.7	20	103	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : Impact Environmental
 Project Name : 585 UNION STREET
 Instrument ID : VOA122
 Lab File ID : V22230810A03
 Sample No : WG1814675-2
 Channel :

Lab Number : L2346073
 Project Number : 14729
 Calibration Date : 08/10/23 09:29
 Init. Calib. Date(s) : 07/26/23 07/26/23
 Init. Calib. Times : 17:01 21:10

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,2-Dichloropropane	0.161	0.17	-	-5.6	20	108	0
Bromodichloromethane	0.194	0.206*	-	-6.2	20	111	0
1,4-Dioxane	0.00096	0.00091*	-	5.2	20	93	0
cis-1,3-Dichloropropene	0.211	0.22*	-	-4.3	20	109	0
Chlorobenzene-d5	1	1	-	0	20	106	0
Toluene-d8	1.214	1.234	-	-1.6	20	108	0
Toluene	0.38	0.413	-	-8.7	20	109	0
4-Methyl-2-pentanone	0.03	0.027*	-	10	20	99	0
Tetrachloroethene	0.128	0.138	-	-7.8	20	111	0
trans-1,3-Dichloropropene	0.197	0.193*	-	2	20	107	0
Ethyl methacrylate	0.114	0.109	-	4.4	20	104	0
1,1,2-Trichloroethane	0.09	0.086*	-	4.4	20	101	0
Chlorodibromomethane	0.136	0.123*	-	9.6	20	100	0
1,3-Dichloropropane	0.185	0.178	-	3.8	20	103	0
1,2-Dibromoethane	0.107	0.101*	-	5.6	20	102	0
2-Hexanone	0.063	0.051	-	19	20	89	0
Chlorobenzene	0.439	0.458	-	-4.3	20	106	0
Ethylbenzene	0.738	0.828	-	-12.2	20	111	0
1,1,1,2-Tetrachloroethane	0.145	0.136	-	6.2	20	103	0
p/m Xylene	0.287	0.32	-	-11.5	20	108	0
o Xylene	0.273	0.303	-	-11	20	107	0
Styrene	0.437	0.487	-	-11.4	20	107	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	103	0
Bromoform	0.135	0.127	-	5.9	20	99	0
Isopropylbenzene	1.324	1.546	-	-16.8	20	109	0
4-Bromofluorobenzene	0.832	0.888	-	-6.7	20	109	0
Bromobenzene	0.325	0.351	-	-8	20	106	0
n-Propylbenzene	1.575	1.817	-	-15.4	20	110	0
1,4-Dichlorobutane	0.366	0.359	-	1.9	20	97	0
1,1,2,2-Tetrachloroethane	0.203	0.198*	-	2.5	20	106	0
4-Ethyltoluene	1.316	1.47	-	-11.7	20	106	0
2-Chlorotoluene	0.938	1.055	-	-12.5	20	109	0
1,3,5-Trimethylbenzene	1.104	1.193	-	-8.1	20	104	0
1,2,3-Trichloropropane	0.172	0.165	-	4.1	20	96	0
trans-1,4-Dichloro-2-buten	0.075	0.064	-	14.7	20	91	0
4-Chlorotoluene	0.964	1.081	-	-12.1	20	110	0
tert-Butylbenzene	1.049	1.116	-	-6.4	20	102	0
1,2,4-Trimethylbenzene	1.056	1.133	-	-7.3	20	103	0
sec-Butylbenzene	1.383	1.57	-	-13.5	20	107	0
p-Isopropyltoluene	1.169	1.301	-	-11.3	20	105	0
1,3-Dichlorobenzene	0.646	0.672	-	-4	20	104	0
1,4-Dichlorobenzene	0.653	0.671	-	-2.8	20	103	0
p-Diethylbenzene	0.684	0.738	-	-7.9	20	105	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : Impact Environmental
 Project Name : 585 UNION STREET
 Instrument ID : VOA122
 Lab File ID : V22230810A03
 Sample No : WG1814675-2
 Channel :

Lab Number : L2346073
 Project Number : 14729
 Calibration Date : 08/10/23 09:29
 Init. Calib. Date(s) : 07/26/23 07/26/23
 Init. Calib. Times : 17:01 21:10

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
n-Butylbenzene	0.962	1.086	-	-12.9	20	106	0
1,2-Dichlorobenzene	0.583	0.591*	-	-1.4	20	101	0
1,2,4,5-Tetramethylbenzene	0.912	0.93	-	-2	20	111	0
1,2-Dibromo-3-chloropropan	0.035	0.034	-	2.9	20	98	0
1,3,5-Trichlorobenzene	0.389	0.431	-	-10.8	20	108	0
Hexachlorobutadiene	0.138	0.176	-	-27.5*	20	123	0
1,2,4-Trichlorobenzene	0.331	0.369*	-	-11.5	20	111	0
Naphthalene	0.69	0.706	-	-2.3	20	101	0
1,2,3-Trichlorobenzene	0.29	0.329*	-	-13.4	20	110	0

* Value outside of QC limits.



Evaluate Continuing Calibration Report

Data Path : K:\VOA122\2023\230810A\
 Data File : V22230810A03.D
 Acq On : 10 Aug 2023 09:29 am
 Operator : VOA122:PID
 Sample : WG1814675-2 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG1814675,ICAL20205 (Sig #1); WG,ICAL20205 (Sig #2)
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 10 10:02:59 2023
 Quant Method : K:\VOA122\2023\230810A\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:11:40 2023
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Fluorobenzene	1.000	1.000	0.0	108	0.00
2 TP	Dichlorodifluoromethane	0.204	0.239	-17.2	107	0.00
3 TP	Chloromethane	0.266	0.307	-15.4	109	0.00
4 TC	Vinyl chloride	0.204	0.188	7.8	88	0.00
5 TP	Bromomethane	0.071	0.054	23.9#	83	0.00
6 TP	Chloroethane	0.118	0.136	-15.3	108	0.00
7 TP	Trichlorofluoromethane	0.240	0.288	-20.0	113	0.00
8 TP	Ethyl ether	0.064	0.067	-4.7	103	0.00
10 TC	1,1-Dichloroethene	0.147	0.173	-17.7	112	0.00
11 TP	Carbon disulfide	0.488	0.592	-21.3#	116	0.00
12 TP	Freon-113	0.153	0.183	-19.6	110	0.00
14 TP	Acrolein	0.019	0.020	-5.3	104	0.00
15 TP	Methylene chloride	0.171	0.193	-12.9	108	0.00
17 TP	Acetone	0.036	0.031	13.9	81	0.00
18 TP	trans-1,2-Dichloroethene	0.156	0.181	-16.0	110	0.00
19 TP	Methyl acetate	0.088	0.079	10.2	94	0.00
21 TP	Methyl tert-butyl ether	0.286	0.286	0.0	102	0.00
22 TP	tert-Butyl alcohol	0.00890	0.00794#	10.8	90	0.00
24 TP	Diisopropyl ether	0.481	0.481	0.0	102	0.00
25 TP	1,1-Dichloroethane	0.334	0.384	-15.0	111	0.00
26 TP	Halothane	0.114	0.132	-15.8	110	0.00
27 TP	Acrylonitrile	0.042	0.044	-4.8	93	0.00
28 TP	Ethyl tert-butyl ether	0.391	0.386	1.3	103	0.00
29 TP	Vinyl acetate	0.161	0.184	-14.3	148	0.00
30 TP	cis-1,2-Dichloroethene	0.172	0.200#	-16.3	113	0.00
31 TP	2,2-Dichloropropane	0.207	0.269	-30.0#	130	0.00
32 TP	Bromochloromethane	0.081	0.087#	-7.4	98	0.00
33 TP	Cyclohexane	0.336	0.408	-21.4#	115	0.00
34 TC	Chloroform	0.278	0.310	-11.5	114	0.00
35 TP	Ethyl acetate	0.099	0.083	16.2	88	0.00
36 TP	Carbon tetrachloride	0.208	0.254	-22.1#	115	0.00
37 TP	Tetrahydrofuran	0.032	0.030	6.3	94	0.00
38 S	Dibromofluoromethane	0.347	0.349	-0.6	104	0.00
39 TP	1,1,1-Trichloroethane	0.243	0.282	-16.0	114	0.00
41 TP	2-Butanone	0.044	0.038	13.6	92	0.00
42 TP	1,1-Dichloropropene	0.201	0.223	-10.9	115	0.00
44 TP	Benzene	0.546	0.593	-8.6	109	0.00
45 TP	tert-Amyl methyl ether	0.281	0.273	2.8	104	0.00
46 S	1,2-Dichloroethane-d4	0.343	0.352	-2.6	107	0.00

Evaluate Continuing Calibration Report

Data Path : K:\VOA122\2023\230810A\
 Data File : V22230810A03.D
 Acq On : 10 Aug 2023 09:29 am
 Operator : VOA122:PID
 Sample : WG1814675-2 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG1814675,ICAL20205 (Sig #1); WG,ICAL20205 (Sig #2)
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 10 10:02:59 2023
 Quant Method : K:\VOA122\2023\230810A\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:11:40 2023
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
47 T	1,2-Dichloroethane	0.201	0.207	-3.0	103	0.00
50 TP	Methyl cyclohexane	0.265	0.293	-10.6	111	0.00
51 TP	Trichloroethene	0.190	0.183#	3.7	98	0.00
53 TP	Dibromomethane	0.086	0.090	-4.7	103	0.00
54 TC	1,2-Dichloropropane	0.161	0.170	-5.6	108	0.00
57 TP	Bromodichloromethane	0.194	0.206#	-6.2	111	0.00
60 TP	1,4-Dioxane	0.00096	0.00091#	5.2	93	0.00
61 TP	cis-1,3-Dichloropropene	0.211	0.220#	-4.3	109	0.00
62 I	Chlorobenzene-d5	1.000	1.000	0.0	106	0.00
63 S	Toluene-d8	1.214	1.234	-1.6	108	0.00
64 TC	Toluene	0.380	0.413	-8.7	109	0.00
65 TP	4-Methyl-2-pentanone	0.030	0.027#	10.0	99	0.00
66 TP	Tetrachloroethene	0.128	0.138	-7.8	111	0.00
68 TP	trans-1,3-Dichloropropene	0.197	0.193#	2.0	107	0.00
70 TP	Ethyl methacrylate	0.114	0.109	4.4	104	0.00
71 TP	1,1,2-Trichloroethane	0.090	0.086#	4.4	101	0.00
72 TP	Chlorodibromomethane	0.136	0.123#	9.6	100	0.00
73 TP	1,3-Dichloropropane	0.185	0.178	3.8	103	0.00
74 TP	1,2-Dibromoethane	0.107	0.101#	5.6	102	0.00
76 TP	2-Hexanone	0.063	0.051	19.0	89	0.00
77 TP	Chlorobenzene	0.439	0.458	-4.3	106	0.00
78 TC	Ethylbenzene	0.738	0.828	-12.2	111	0.00
79 TP	1,1,1,2-Tetrachloroethane	0.145	0.136	6.2	103	0.00
80 TP	p/m Xylene	0.287	0.320	-11.5	108	0.00
81 TP	o Xylene	0.273	0.303	-11.0	107	0.00
82 TP	Styrene	0.437	0.487	-11.4	107	0.00
83 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	103	0.00
84 TP	Bromoform	0.135	0.127	5.9	99	0.00
86 TP	Isopropylbenzene	1.324	1.546	-16.8	109	0.00
87 S	4-Bromofluorobenzene	0.832	0.888	-6.7	109	0.00
88 TP	Bromobenzene	0.325	0.351	-8.0	106	0.00
89 TP	n-Propylbenzene	1.575	1.817	-15.4	110	0.00
90 TP	1,4-Dichlorobutane	0.366	0.359	1.9	97	0.00
91 TP	1,1,2,2-Tetrachloroethane	0.203	0.198#	2.5	106	0.00
92 TP	4-Ethyltoluene	1.316	1.470	-11.7	106	0.00
93 TP	2-Chlorotoluene	0.938	1.055	-12.5	109	0.00
94 TP	1,3,5-Trimethylbenzene	1.104	1.193	-8.1	104	0.00

Evaluate Continuing Calibration Report

Data Path : K:\VOA122\2023\230810A\
 Data File : V22230810A03.D
 Acq On : 10 Aug 2023 09:29 am
 Operator : VOA122:PID
 Sample : WG1814675-2 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG1814675, ICAL20205 (Sig #1); WG, ICAL20205 (Sig #2)
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 10 10:02:59 2023
 Quant Method : K:\VOA122\2023\230810A\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:11:40 2023
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
95 TP	1,2,3-Trichloropropane	0.172	0.165	4.1	96	0.00
96 TP	trans-1,4-Dichloro-2-butene	0.075	0.064	14.7	91	0.00
97 TP	4-Chlorotoluene	0.964	1.081	-12.1	110	0.00
98 TP	tert-Butylbenzene	1.049	1.116	-6.4	102	0.00
101 TP	1,2,4-Trimethylbenzene	1.056	1.133	-7.3	103	0.00
102 TP	sec-Butylbenzene	1.383	1.570	-13.5	107	0.00
103 TP	p-Isopropyltoluene	1.169	1.301	-11.3	105	0.00
104 TP	1,3-Dichlorobenzene	0.646	0.672	-4.0	104	0.00
105 TP	1,4-Dichlorobenzene	0.653	0.671	-2.8	103	0.00
106 TP	p-Diethylbenzene	0.684	0.738	-7.9	105	0.00
107 TP	n-Butylbenzene	0.962	1.086	-12.9	106	0.00
108 TP	1,2-Dichlorobenzene	0.583	0.591#	-1.4	101	0.00
109 TP	1,2,4,5-Tetramethylbenzene	0.912	0.930	-2.0	111	0.00
110 TP	1,2-Dibromo-3-chloropropane	0.035	0.034	2.9	98	0.00
111 TP	1,3,5-Trichlorobenzene	0.389	0.431	-10.8	108	0.00
112 TP	Hexachlorobutadiene	0.138	0.176	-27.5#	123	0.00
113 TP	1,2,4-Trichlorobenzene	0.331	0.369#	-11.5	111	0.00
114 TP	Naphthalene	0.690	0.706	-2.3	101	0.00
115 TP	1,2,3-Trichlorobenzene	0.290	0.329#	-13.4	110	0.00

* Evaluation of CC level amount vs concentration.

(#) = Out of Range SPCC's out = 16 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230810A\
 Data File : V22230810A03.D
 Acq On : 10 Aug 2023 09:29 am
 Operator : VOA122:PID
 Sample : WG1814675-2 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG1814675, ICAL20205 (Sig #1); WG, ICAL20205 (Sig #2)
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 10 10:02:59 2023
 Quant Method : K:\VOA122\2023\230810A\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:11:40 2023
 Response via : Initial Calibration

Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane

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

Internal Standards						
1) Fluorobenzene	6.284	96	397815	10.000	ug/L	0.00
62) Chlorobenzene-d5	9.866	117	393438	10.000	ug/L	0.00
83) 1,4-Dichlorobenzene-d4	12.501	152	214484	10.000	ug/L	0.00
System Monitoring Compounds						
38) Dibromofluoromethane	5.447	113	138953	10.062	ug/L	0.00
Spiked Amount	10.000		Recovery	=	100.62%	
46) 1,2-Dichloroethane-d4	5.989	65	140170	10.268	ug/L	0.00
Spiked Amount	10.000		Recovery	=	102.68%	
63) Toluene-d8	8.001	98	485428	10.167	ug/L	0.00
Spiked Amount	10.000		Recovery	=	101.67%	
87) 4-Bromofluorobenzene	11.317	95	190488	10.679	ug/L	0.00
Spiked Amount	10.000		Recovery	=	106.79%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.682	85	95268	11.740	ug/L	98
3) Chloromethane	1.884	50	122072	11.554	ug/L	97
4) Vinyl chloride	1.968	62	74608	9.177	ug/L	97
5) Bromomethane	2.310	94	21589	7.695	ug/L	93
6) Chloroethane	2.435	64	54165	11.548	ug/L	98
7) Trichlorofluoromethane	2.588	101	114647	12.006	ug/L	100
8) Ethyl ether	2.909	74	26652	10.450	ug/L #	1
10) 1,1-Dichloroethene	3.111	96	68979	11.829	ug/L #	70
11) Carbon disulfide	3.146	76	235545	12.131	ug/L	99
12) Freon-113	3.160	101	72801	11.966	ug/L	96
14) Acrolein	3.446	56	7798	10.222	ug/L	96
15) Methylene chloride	3.697	84	76969	11.335	ug/L #	65
17) Acetone	3.739	43	12206	8.510	ug/L	99
18) trans-1,2-Dichloroethene	3.857	96	71856	11.583	ug/L	78
19) Methyl acetate	3.857	43	31497	9.010	ug/L #	88
21) Methyl tert-butyl ether	3.955	73	113926	10.003	ug/L #	87
22) tert-Butyl alcohol	4.038	59	15786	44.591	ug/L #	92
24) Diisopropyl ether	4.331	45	191384	9.996	ug/L #	91
25) 1,1-Dichloroethane	4.464	63	152922	11.513	ug/L	95
26) Halothane	4.512	117	52340	11.500	ug/L	100
27) Acrylonitrile	4.505	53	17357	10.277	ug/L	95
28) Ethyl tert-butyl ether	4.694	59	153657	9.888	ug/L	86
29) Vinyl acetate	4.701	43	73094	11.402	ug/L #	88
30) cis-1,2-Dichloroethene	5.000	96	79512	11.649	ug/L #	79
31) 2,2-Dichloropropane	5.105	77	106930	12.961	ug/L	94

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230810A\
 Data File : V22230810A03.D
 Acq On : 10 Aug 2023 09:29 am
 Operator : VOA122:PID
 Sample : WG1814675-2 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG1814675, ICAL20205 (Sig #1); WG, ICAL20205 (Sig #2)
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 10 10:02:59 2023
 Quant Method : K:\VOA122\2023\230810A\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:11:40 2023
 Response via : Initial Calibration

Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
32)	Bromochloromethane	5.196	128	34447	10.645	ug/L	# 68
33)	Cyclohexane	5.209	56	162363	12.152	ug/L	69
34)	Chloroform	5.265	83	123148	11.132	ug/L	96
35)	Ethyl acetate	5.377	43	32996	8.362	ug/L	# 95
36)	Carbon tetrachloride	5.412	117	101195	12.223	ug/L	97
37)	Tetrahydrofuran	5.426	42	12071	9.587	ug/L	# 83
39)	1,1,1-Trichloroethane	5.481	97	112160	11.585	ug/L	96
41)	2-Butanone	5.565	43	14960	8.499	ug/L	# 81
42)	1,1-Dichloropropene	5.600	75	88878	11.114	ug/L	96
44)	Benzene	5.856	78	235785	10.857	ug/L	# 91
45)	tert-Amyl methyl ether	5.967	73	108468	9.711	ug/L	# 89
47)	1,2-Dichloroethane	6.063	62	82338	10.296	ug/L	99
50)	Methyl cyclohexane	6.462	83	116657	11.071	ug/L	# 60
51)	Trichloroethene	6.462	95	72904	9.626	ug/L	96
53)	Dibromomethane	6.911	93	35797	10.510	ug/L	84
54)	1,2-Dichloropropane	7.014	63	67447	10.519	ug/L	96
57)	Bromodichloromethane	7.081	83	81941	10.592	ug/L	99
60)	1,4-Dioxane	7.294	88	18161	474.005	ug/L	# 58
61)	cis-1,3-Dichloropropene	7.780	75	87361	10.391	ug/L	93
64)	Toluene	8.060	92	162523	10.883	ug/L	98
65)	4-Methyl-2-pentanone	8.488	58	10449	8.955	ug/L	# 82
66)	Tetrachloroethene	8.518	166	54198	10.751	ug/L	95
68)	trans-1,3-Dichloropropene	8.541	75	76081	9.801	ug/L	97
70)	Ethyl methacrylate	8.724	69	42820	9.521	ug/L	95
71)	1,1,2-Trichloroethane	8.724	83	33657	9.509	ug/L	94
72)	Chlorodibromomethane	8.946	129	48564	9.052	ug/L	100
73)	1,3-Dichloropropane	9.057	76	70212	9.654	ug/L	99
74)	1,2-Dibromoethane	9.231	107	39822	9.423	ug/L	99
76)	2-Hexanone	9.509	43	20028	8.040	ug/L	90
77)	Chlorobenzene	9.882	112	180068	10.437	ug/L	95
78)	Ethylbenzene	9.921	91	325639	11.222	ug/L	98
79)	1,1,1,2-Tetrachloroethane	9.969	131	53683	9.422	ug/L	97
80)	p/m Xylene	10.112	106	252028	22.305	ug/L	94
81)	o Xylene	10.635	106	238135	22.137	ug/L	94
82)	Styrene	10.691	104	383204	22.287	ug/L	94
84)	Bromoform	10.714	173	27232	9.379	ug/L	99
86)	Isopropylbenzene	11.000	105	331502	11.677	ug/L	98
88)	Bromobenzene	11.428	156	75368	10.806	ug/L	99
89)	n-Propylbenzene	11.468	91	389808	11.536	ug/L	97
90)	1,4-Dichlorobutane	11.484	55	77024	9.814	ug/L	95
91)	1,1,2,2-Tetrachloroethane	11.547	83	42465	9.776	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230810A\
 Data File : V22230810A03.D
 Acq On : 10 Aug 2023 09:29 am
 Operator : VOA122:PID
 Sample : WG1814675-2 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG1814675,ICAL20205 (Sig #1); WG,ICAL20205 (Sig #2)
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 10 10:02:59 2023
 Quant Method : K:\VOA122\2023\230810A\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:11:40 2023
 Response via : Initial Calibration

Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
92)	4-Ethyltoluene	11.587	105	315313	11.168	ug/L	98
93)	2-Chlorotoluene	11.634	91	226361M1	11.248	ug/L	
94)	1,3,5-Trimethylbenzene	11.682	105	255821	10.807	ug/L	97
95)	1,2,3-Trichloropropane	11.682	75	35449	9.634	ug/L	95
96)	trans-1,4-Dichloro-2-b...	11.729	53	13804	8.554	ug/L #	76
97)	4-Chlorotoluene	11.809	91	231864	11.219	ug/L	96
98)	tert-Butylbenzene	12.021	119	239375	10.640	ug/L	97
101)	1,2,4-Trimethylbenzene	12.090	105	243077	10.731	ug/L	98
102)	sec-Butylbenzene	12.209	105	336769	11.350	ug/L	98
103)	p-Isopropyltoluene	12.355	119	279081	11.129	ug/L	97
104)	1,3-Dichlorobenzene	12.425	146	144176	10.408	ug/L	97
105)	1,4-Dichlorobenzene	12.515	146	143873	10.269	ug/L	98
106)	p-Diethylbenzene	12.724	119	158287	10.784	ug/L	97
107)	n-Butylbenzene	12.780	91	232899	11.283	ug/L	98
108)	1,2-Dichlorobenzene	12.933	146	126837	10.149	ug/L	97
109)	1,2,4,5-Tetramethylben...	13.511	119	199451	10.192	ug/L	97
110)	1,2-Dibromo-3-chloropr...	13.705	155	7228	9.541	ug/L	95
111)	1,3,5-Trichlorobenzene	13.733	180	92517	11.092	ug/L	99
112)	Hexachlorobutadiene	14.304	225	37668	12.738	ug/L	98
113)	1,2,4-Trichlorobenzene	14.332	180	79132	11.140	ug/L	98
114)	Naphthalene	14.624	128	151507	10.231	ug/L	100
115)	1,2,3-Trichlorobenzene	14.791	180	70642	11.360	ug/L	99

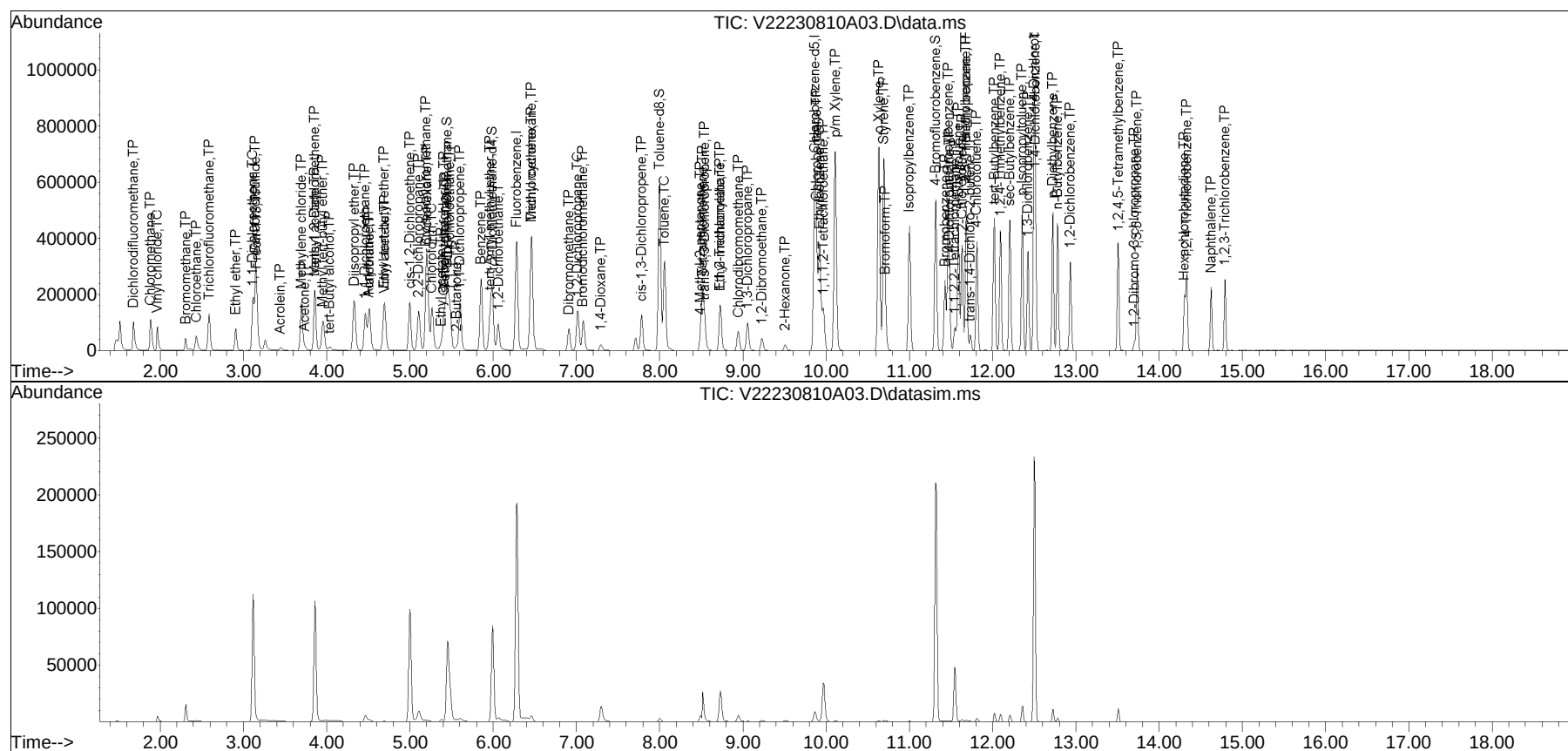
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230810A\
 Data File : V22230810A03.D
 Acq On : 10 Aug 2023 09:29 am
 Operator : VOA122:PID
 Sample : WG1814675-2 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG1814675,ICAL20205 (Sig #1); WG,ICAL20205 (Sig #2)
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 10 10:02:59 2023
 Quant Method : K:\VOA122\2023\230810A\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:11:40 2023
 Response via : Initial Calibration

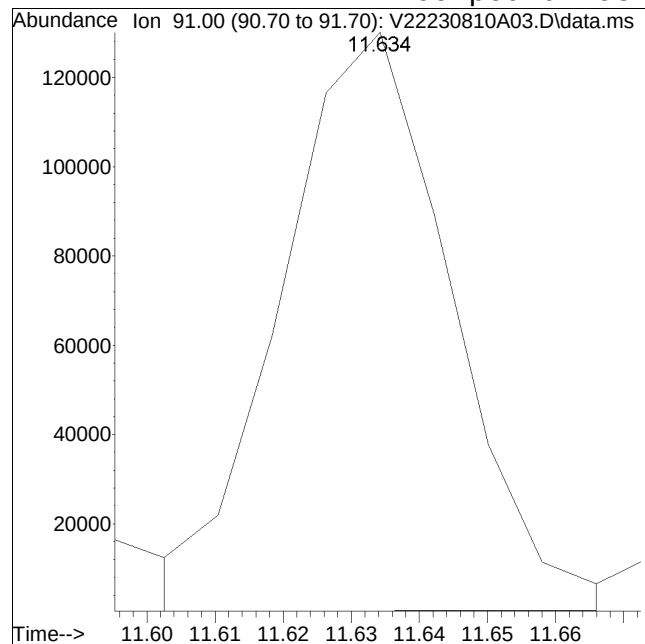
Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane



Manual Integration Report

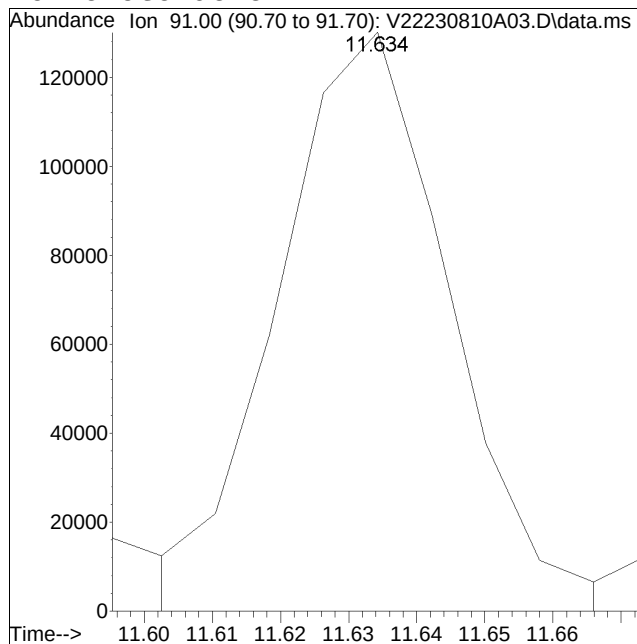
Data Path : K:\VOA122\2023\230810A\ QMethod : V122_230726N_8260.m
Data File : V22230810A03.D Operator : VOA122:PID
Date Inj'd : 8/10/2023 9:29 am Instrument : VOA122
Sample : WG1814675-2 Quant Date : 8/10/2023 10:02 am

Compound #93: 2-Chlorotoluene



Original Peak Response = 224427

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.



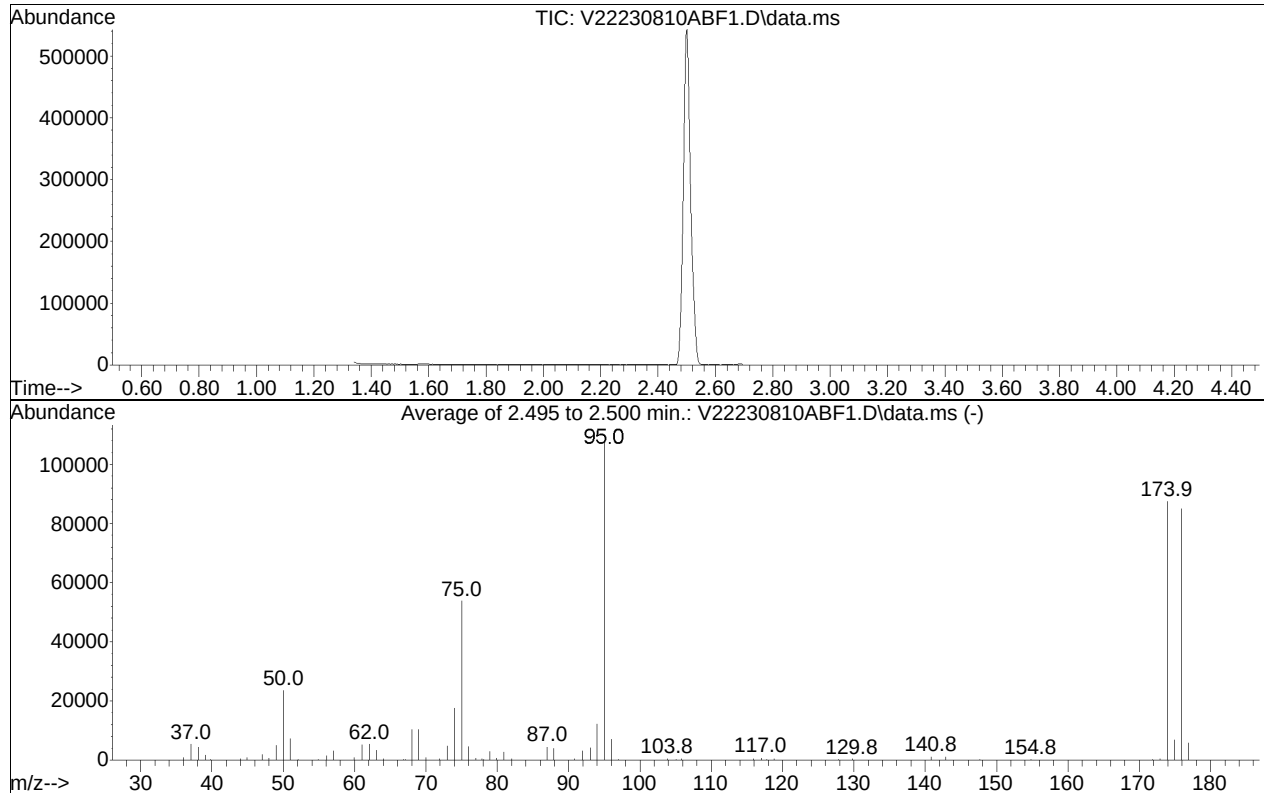
Manual Peak Response = 226361 M1

BFB

Data Path : K:\VOA122\2023\230810A\
 Data File : V22230810ABF1.D
 Acq On : 10 Aug 2023 08:27 am
 Operator : VOA122:PID
 Sample : WG1814675-1
 Misc : WG1814675
 ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : K:\VOA122\2023\230810A\V122_230726N_8260.m
 Title : VOLATILES BY GC/MS
 Last Update : Thu Jul 27 09:11:40 2023



AutoFind: Scans 415, 416, 417; Background Corrected with Scan 401

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.9	23667	PASS
75	95	30	60	49.9	53955	PASS
95	95	100	100	100.0	108021	PASS
96	95	5	9	6.6	7114	PASS
173	174	0.00	2	0.5	463	PASS
174	95	50	100	81.0	87451	PASS
175	174	5	9	7.8	6787	PASS
176	174	95	101	97.3	85075	PASS
177	176	5	9	6.9	5851	PASS

Volatiles Raw QC Data

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230810A\
 Data File : V22230810A06.D
 Acq On : 10 Aug 2023 10:43 am
 Operator : VOA122:PID
 Sample : WG1814675-5,31,10,10 (Sig #1); METHOD BLK (Sig #2)
 Misc : WG1814675,ICAL20205 (Sig #1); WG,ICAL20205 (Sig #2)
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 10 11:03:12 2023
 Quant Method : K:\VOA122\2023\230810A\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:11:40 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA122\2023\230810A\V22230810A03.D
 Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane

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

Internal Standards						
1) Fluorobenzene	6.284	96	364856	10.000	ug/L	0.00
Standard Area 1 = 397815			Recovery = 91.71%			
62) Chlorobenzene-d5	9.866	117	389452	10.000	ug/L	0.00
Standard Area 1 = 393438			Recovery = 98.99%			
83) 1,4-Dichlorobenzene-d4	12.501	152	218499	10.000	ug/L	0.00
Standard Area 1 = 214484			Recovery = 101.87%			
System Monitoring Compounds						
38) Dibromofluoromethane	5.453	113	136027	10.740	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 107.40%			
46) 1,2-Dichloroethane-d4	5.989	65	133021	10.624	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 106.24%			
63) Toluene-d8	8.001	98	474210	10.033	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.33%			
87) 4-Bromofluorobenzene	11.317	95	188204	10.357	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 103.57%			
Target Compounds						Qvalue
21) Methyl tert-butyl ether	0.000		0		N.D.	
44) Benzene	0.000		0		N.D.	
64) Toluene	0.000		0		N.D.	
78) Ethylbenzene	9.874	91	780		N.D.	
80) p/m Xylene	0.000		0		N.D.	
81) o Xylene	0.000		0		N.D.	
86) Isopropylbenzene	0.000		0		N.D.	
89) n-Propylbenzene	11.317	91	712		N.D.	
94) 1,3,5-Trimethylbenzene	0.000		0		N.D.	
98) tert-Butylbenzene	0.000		0		N.D.	
101) 1,2,4-Trimethylbenzene	12.209	105	144		N.D.	
102) sec-Butylbenzene	12.209	105	144		N.D.	
103) p-Isopropyltoluene	12.355	119	76		N.D.	
107) n-Butylbenzene	12.787	91	465		N.D.	
114) Naphthalene	14.638	128	476		N.D.	

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

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230810A\
 Data File : V22230810A06.D
 Acq On : 10 Aug 2023 10:43 am
 Operator : VOA122:PID
 Sample : WG1814675-5,31,10,10 (Sig #1); METHOD BLK (Sig #2)
 Misc : WG1814675,ICAL20205 (Sig #1); WG,ICAL20205 (Sig #2)
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 10 11:03:12 2023
 Quant Method : K:\VOA122\2023\230810A\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:11:40 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA122\2023\230810A\V22230810A03.D
 Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane

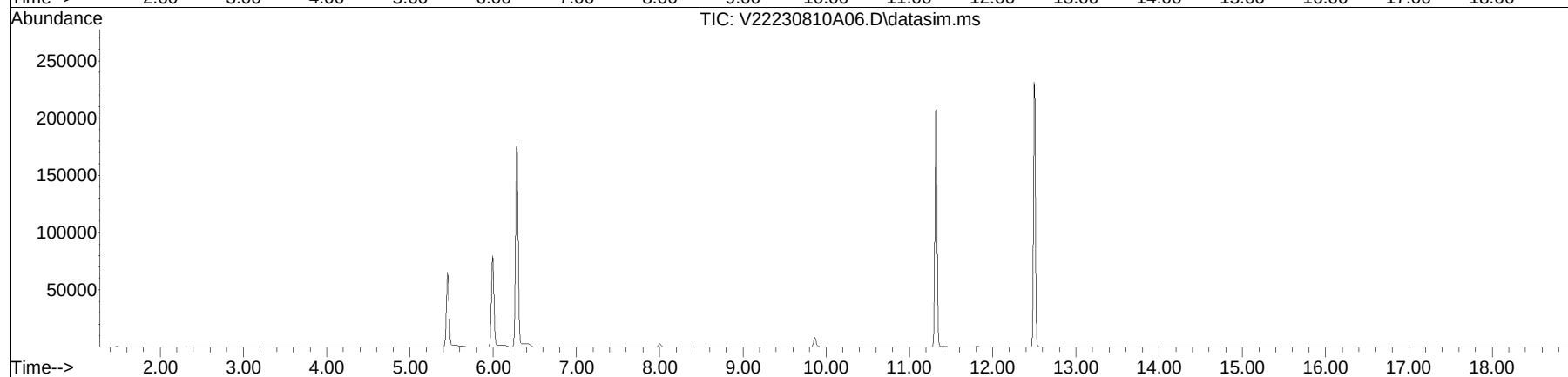
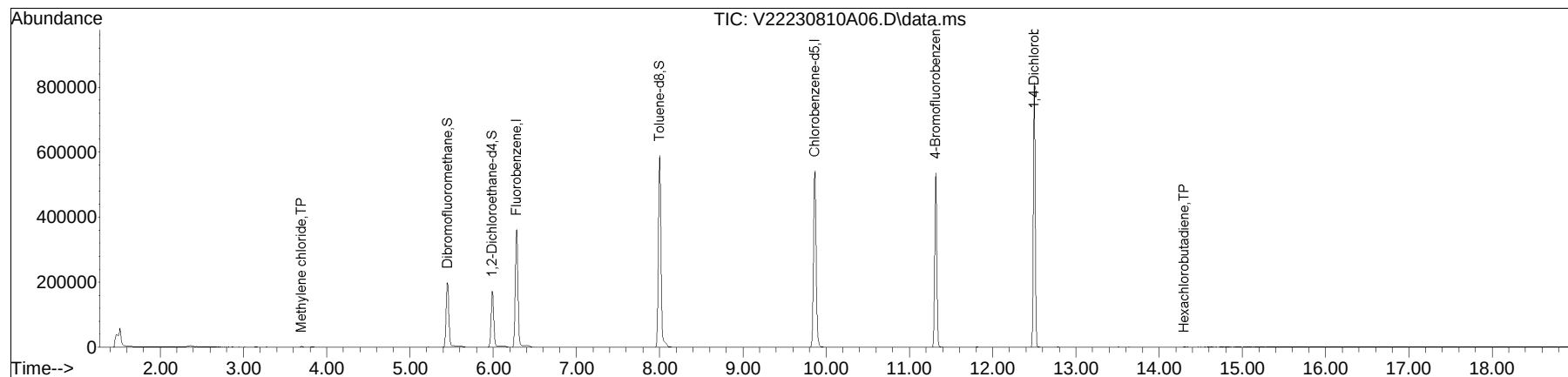
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230810A\
 Data File : V22230810A06.D
 Acq On : 10 Aug 2023 10:43 am
 Operator : VOA122:PID
 Sample : WG1814675-5,31,10,10 (Sig #1); METHOD BLK (Sig #2)
 Misc : WG1814675,ICAL20205 (Sig #1); WG,ICAL20205 (Sig #2)
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 10 11:03:12 2023
 Quant Method : K:\VOA122\2023\230810A\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:11:40 2023
 Response via : Initial Calibration

Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane



V122_230726N_8260.m Fri Aug 11 07:00:40 2023

Page: 4

Manual Integration Report

Data Path	: K:\V0A122\2023\230810A\	QMethod	: V122_230726N_8260.m
Data File	: V22230810A06.D	Operator	: V0A122:PID
Date Inj'd	: 8/10/2023 10:43 am	Instrument	: V0A122
Sample	: WG1814675-5,31,10,10	Quant Date	: 8/10/2023 11:03 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230810A\
 Data File : V22230810A03.D
 Acq On : 10 Aug 2023 09:29 am
 Operator : VOA122:PID
 Sample : WG1814675-3,31,10,10 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG1814675,ICAL20205 (Sig #1); WG,ICAL20205 (Sig #2)
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 10 10:02:59 2023
 Quant Method : K:\VOA122\2023\230810A\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:11:40 2023
 Response via : Initial Calibration

Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane

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

Internal Standards						
1) Fluorobenzene	6.284	96	397815	10.000	ug/L	0.00
62) Chlorobenzene-d5	9.866	117	393438	10.000	ug/L	0.00
83) 1,4-Dichlorobenzene-d4	12.501	152	214484	10.000	ug/L	0.00
System Monitoring Compounds						
38) Dibromofluoromethane	5.447	113	138953	10.062	ug/L	0.00
Spiked Amount	10.000	Range 70 - 130	Recovery	=	100.62%	
46) 1,2-Dichloroethane-d4	5.989	65	140170	10.268	ug/L	0.00
Spiked Amount	10.000	Range 70 - 130	Recovery	=	102.68%	
63) Toluene-d8	8.001	98	485428	10.167	ug/L	0.00
Spiked Amount	10.000	Range 70 - 130	Recovery	=	101.67%	
87) 4-Bromofluorobenzene	11.317	95	190488	10.679	ug/L	0.00
Spiked Amount	10.000	Range 70 - 130	Recovery	=	106.79%	
Target Compounds						
21) Methyl tert-butyl ether	3.955	73	113926	10.003	ug/L	# 87
44) Benzene	5.856	78	235785	10.857	ug/L	# 91
64) Toluene	8.060	92	162523	10.883	ug/L	98
78) Ethylbenzene	9.921	91	325639	11.222	ug/L	98
80) p/m Xylene	10.112	106	252028	22.305	ug/L	94
81) o Xylene	10.635	106	238135	22.137	ug/L	94
86) Isopropylbenzene	11.000	105	331502	11.677	ug/L	98
89) n-Propylbenzene	11.468	91	389808	11.536	ug/L	97
94) 1,3,5-Trimethylbenzene	11.682	105	255821	10.807	ug/L	97
98) tert-Butylbenzene	12.021	119	239375	10.640	ug/L	97
101) 1,2,4-Trimethylbenzene	12.090	105	243077	10.731	ug/L	98
102) sec-Butylbenzene	12.209	105	336769	11.350	ug/L	98
103) p-Isopropyltoluene	12.355	119	279081	11.129	ug/L	97
107) n-Butylbenzene	12.780	91	232899	11.283	ug/L	98
114) Naphthalene	14.624	128	151507	10.231	ug/L	100

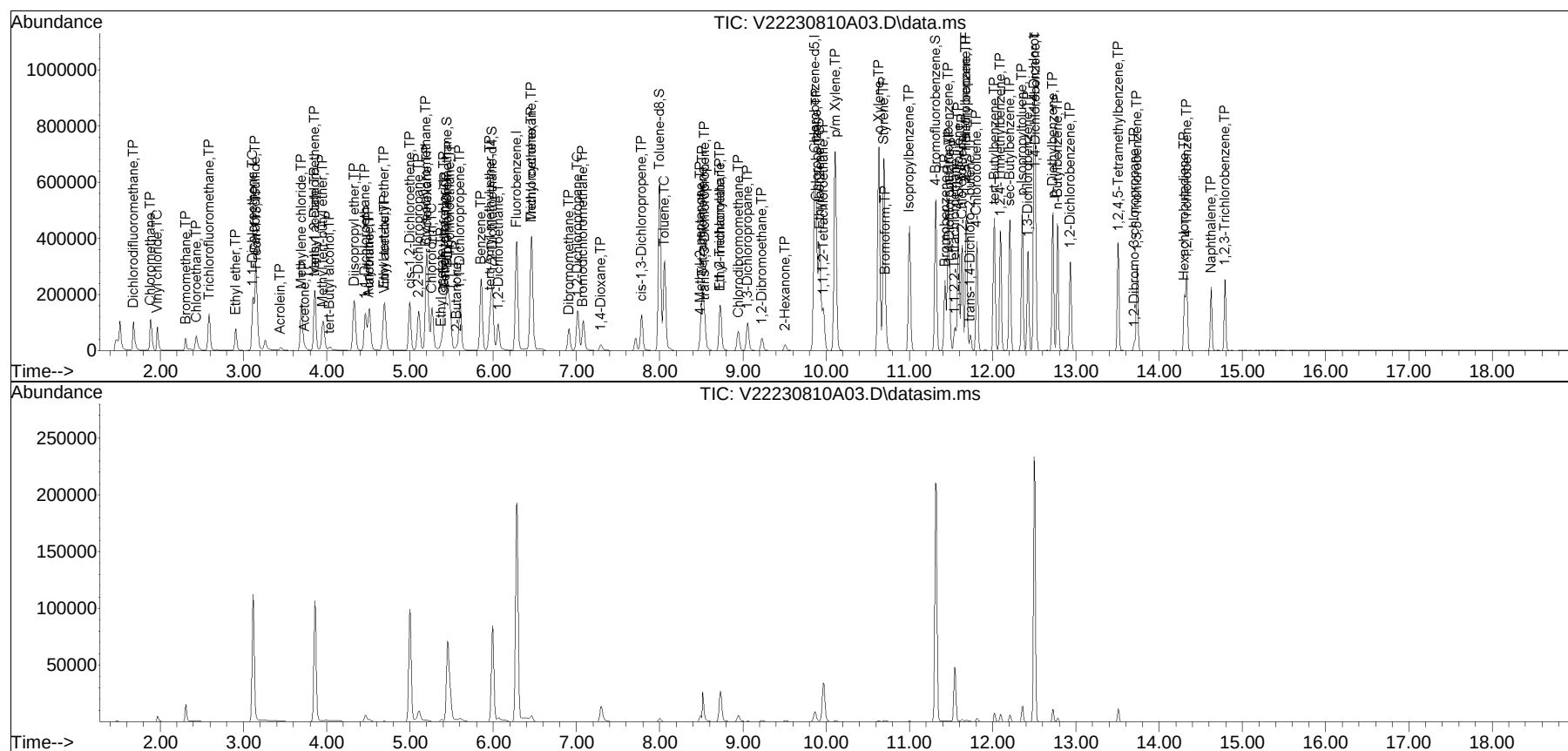
(#) = qualifier out of range (m) = manual integration (+) = signals summed

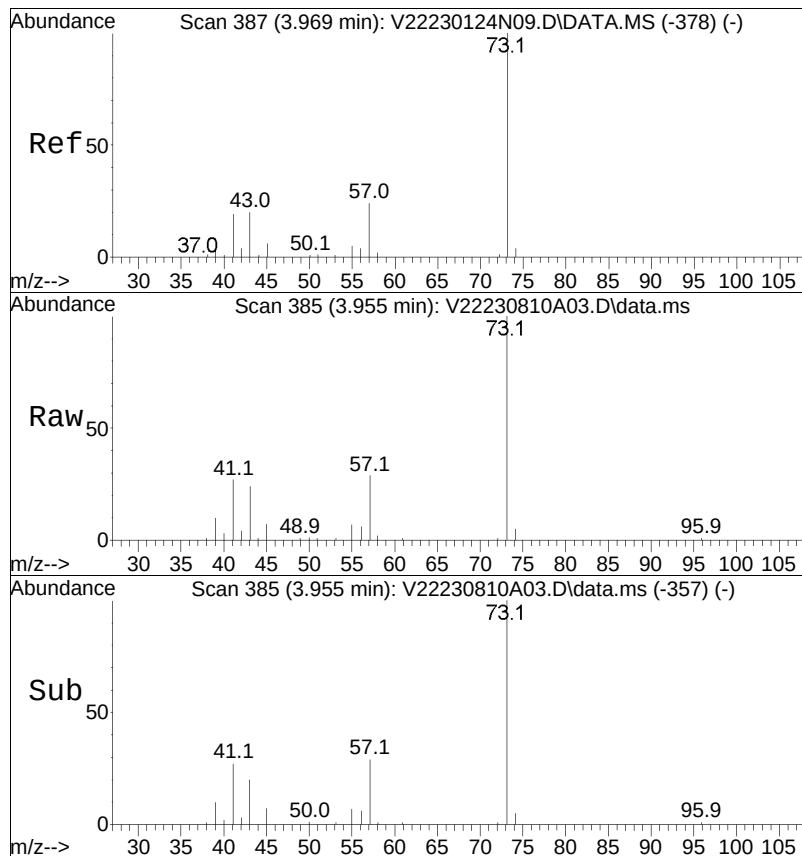
Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230810A\
 Data File : V22230810A03.D
 Acq On : 10 Aug 2023 09:29 am
 Operator : VOA122:PID
 Sample : WG1814675-3,31,10,10 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG1814675,ICAL20205 (Sig #1); WG,ICAL20205 (Sig #2)
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 10 10:02:59 2023
 Quant Method : K:\VOA122\2023\230810A\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:11:40 2023
 Response via : Initial Calibration

Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane





#21

Methyl tert-butyl ether

Concen: 10.00 ug/L

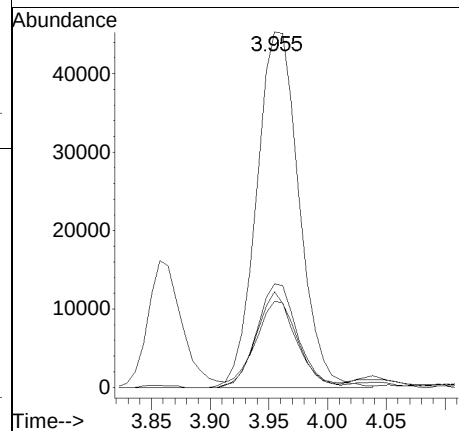
RT: 3.955 min Scan# 385

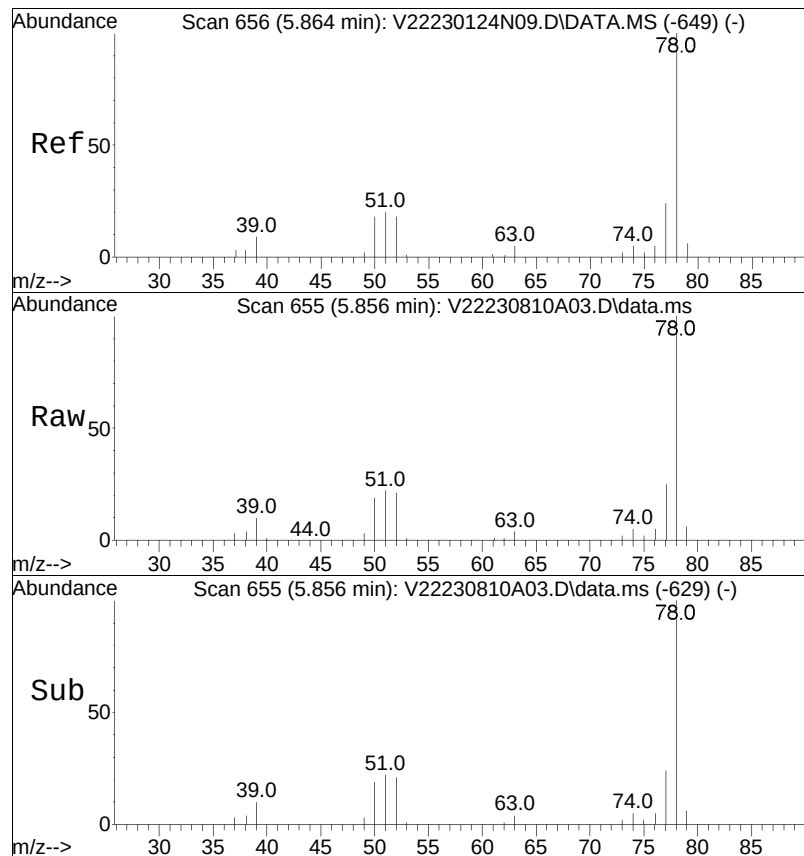
Delta R.T. -0.007 min

Lab File: V22230810A03.D

Acq: 10 Aug 2023 09:29 am

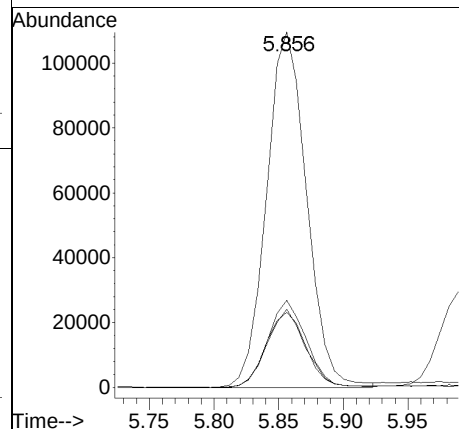
Tgt Ion:	73	Resp:	113926
Ion Ratio	Lower	Upper	
73	100		
57	27.9	13.6	28.2
43	22.5	12.7	26.5
41	25.1	11.4	23.8#

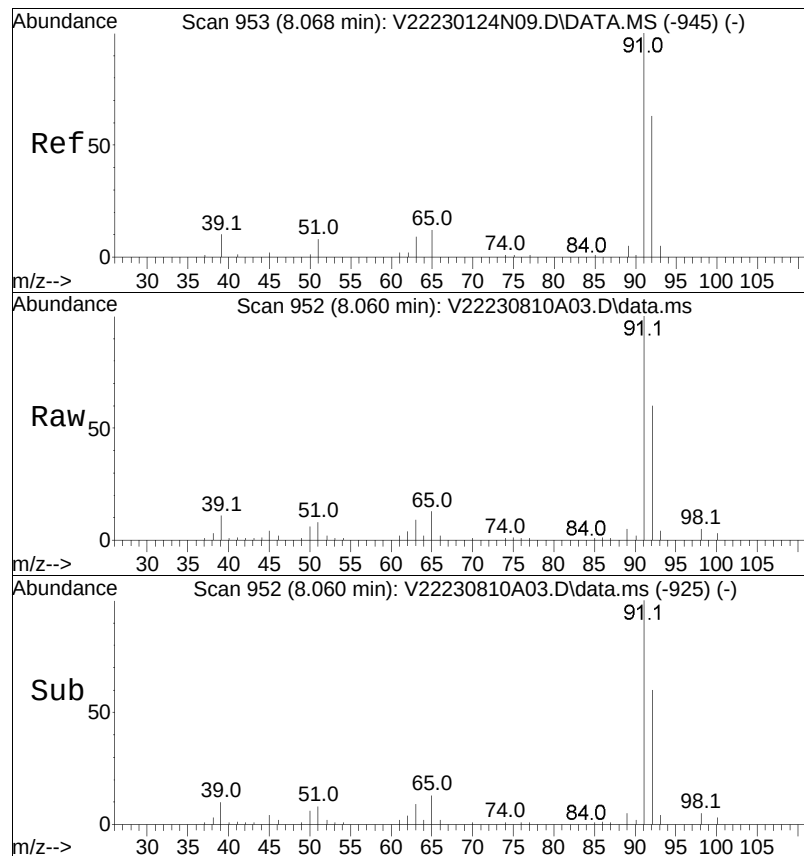




#44
 Benzene
 Concen: 10.86 ug/L
 RT: 5.856 min Scan# 655
 Delta R.T. 0.000 min
 Lab File: V22230810A03.D
 Acq: 10 Aug 2023 09:29 am

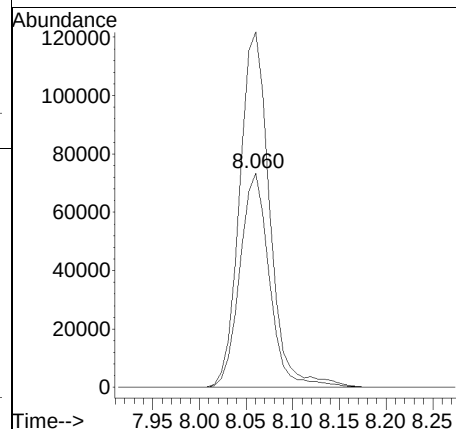
Tgt	Ion: 78	Resp:	235785
Ion	Ratio	Lower	Upper
78	100		
77	23.8	15.4	32.0
51	21.1	9.8	20.4#
52	21.1	9.2	19.2#

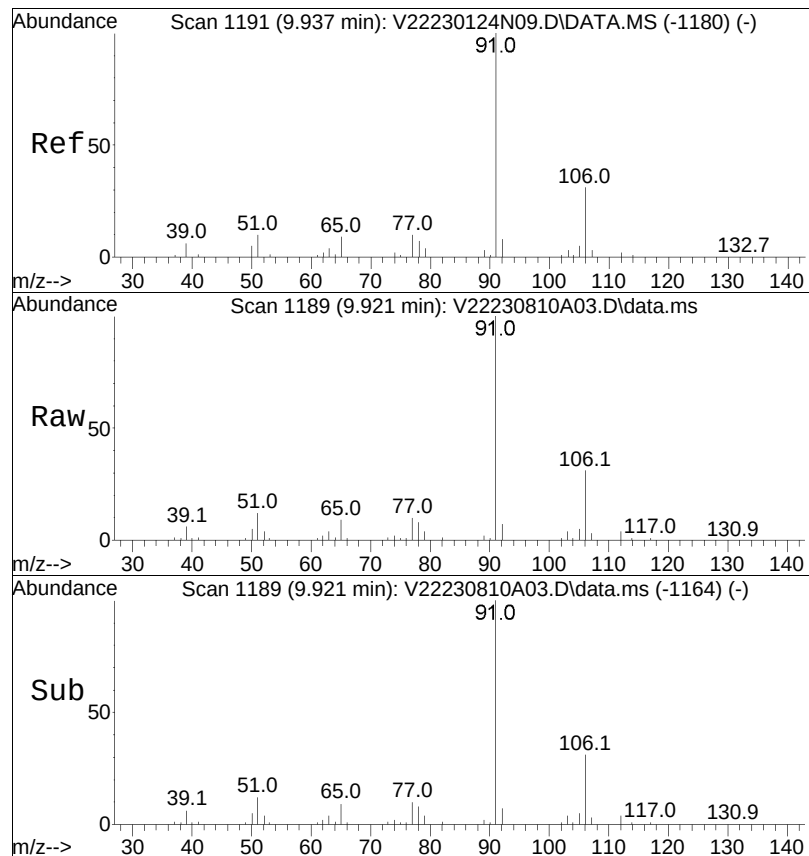




#64
 Toluene
 Concen: 10.88 ug/L
 RT: 8.060 min Scan# 952
 Delta R.T. 0.000 min
 Lab File: V22230810A03.D
 Acq: 10 Aug 2023 09:29 am

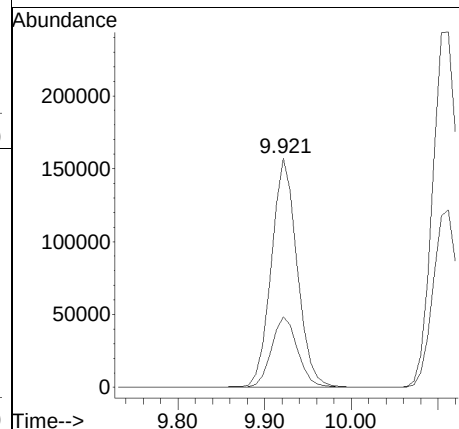
Tgt Ion	Ratio	Lower	Upper
92	100		
91	168.2	137.0	205.6

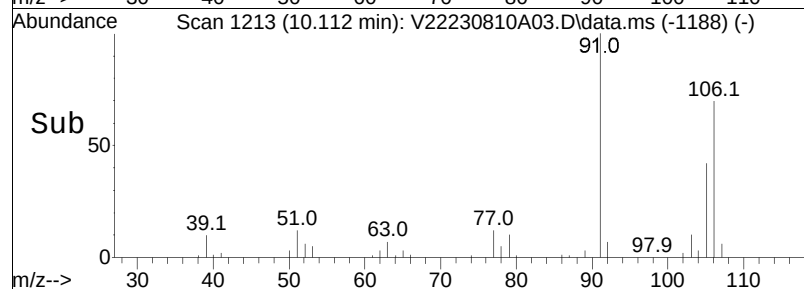
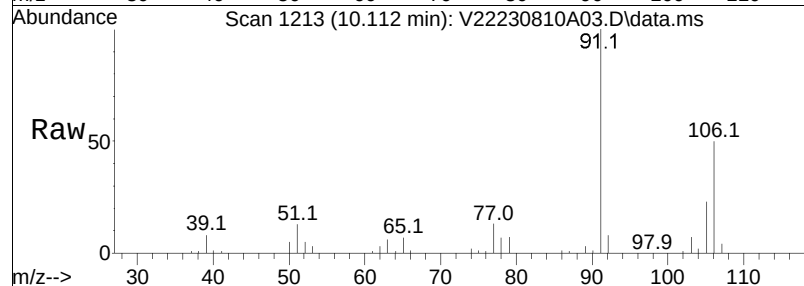
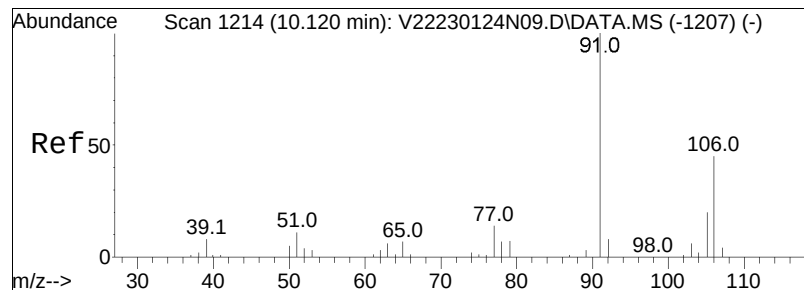




#78
 Ethylbenzene
 Concen: 11.22 ug/L
 RT: 9.921 min Scan# 1189
 Delta R.T. 0.000 min
 Lab File: V22230810A03.D
 Acq: 10 Aug 2023 09:29 am

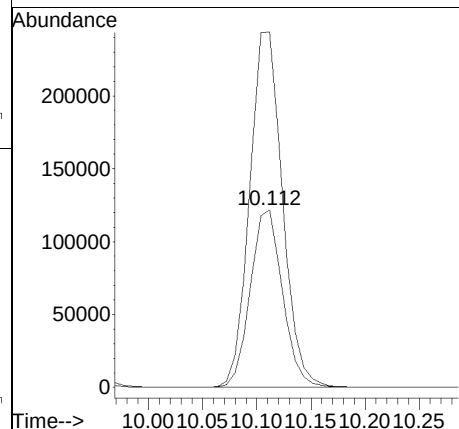
Tgt Ion	91	106	Ratio	Lower	Upper
91	100				
106	31.2		25.8	38.6	

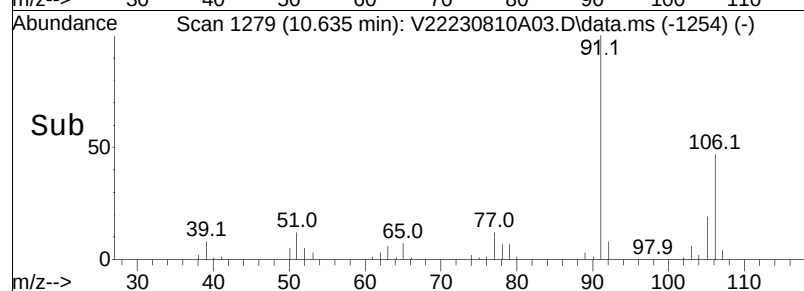
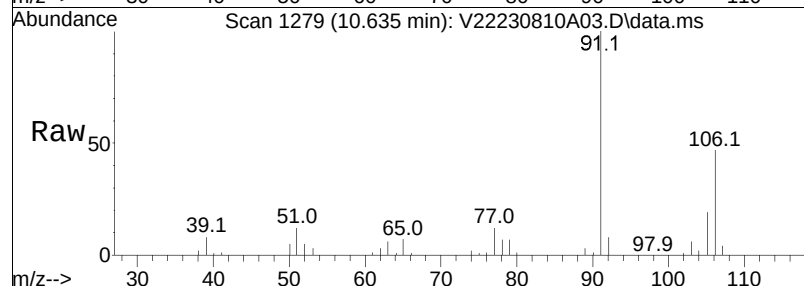
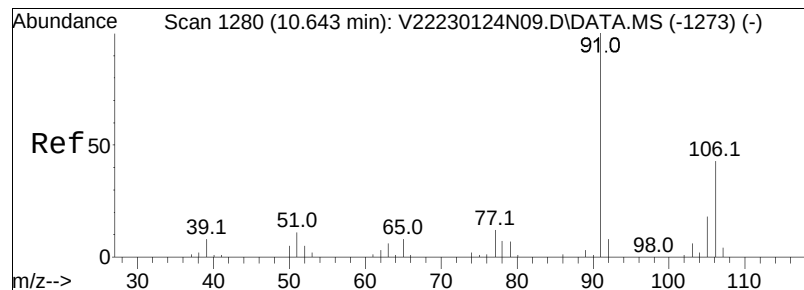




#80
 p/m Xylene
 Concen: 22.31 ug/L
 RT: 10.112 min Scan# 1213
 Delta R.T. 0.001 min
 Lab File: V22230810A03.D
 Acq: 10 Aug 2023 09:29 am

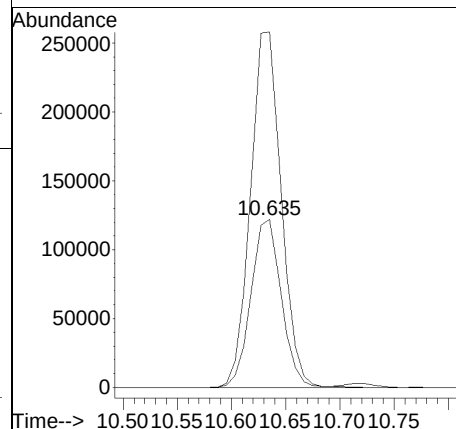
Tgt Ion	Ratio	Lower	Upper
106	100		
91	203.9	156.0	234.0

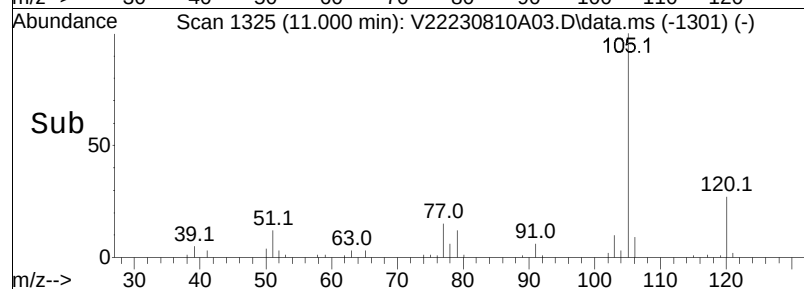
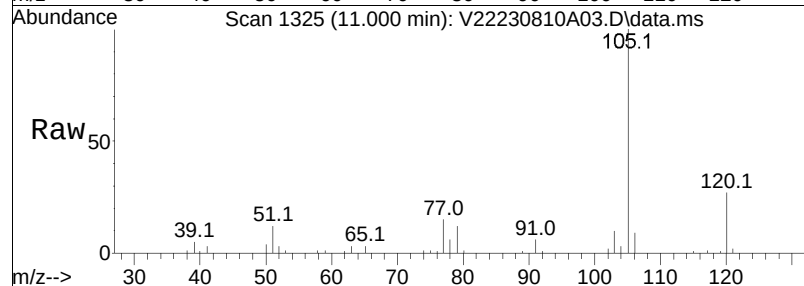
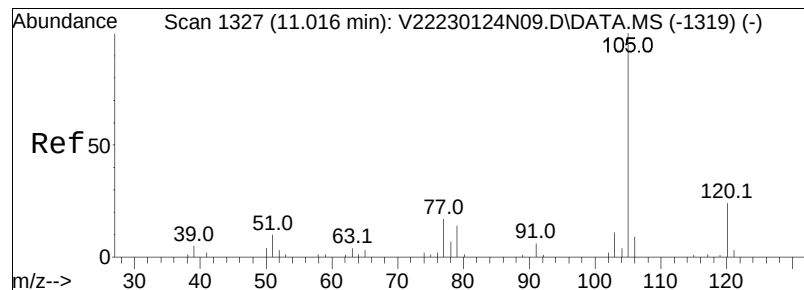




#81
 o Xylene
 Concen: 22.14 ug/L
 RT: 10.635 min Scan# 1279
 Delta R.T. 0.000 min
 Lab File: V22230810A03.D
 Acq: 10 Aug 2023 09:29 am

Tgt Ion	Ratio	Lower	Upper
106	100		
91	213.5	164.0	246.0





#86

Isopropylbenzene

Concen: 11.68 ug/L

RT: 11.000 min Scan# 1325

Delta R.T. -0.008 min

Lab File: V22230810A03.D

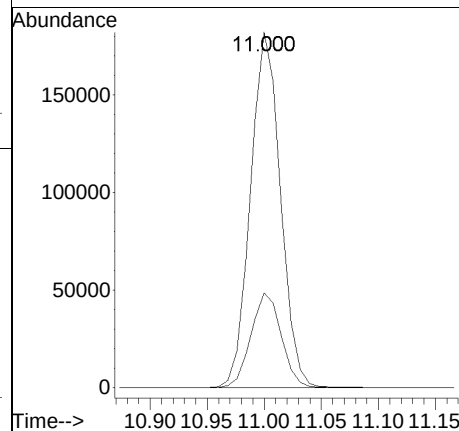
Acq: 10 Aug 2023 09:29 am

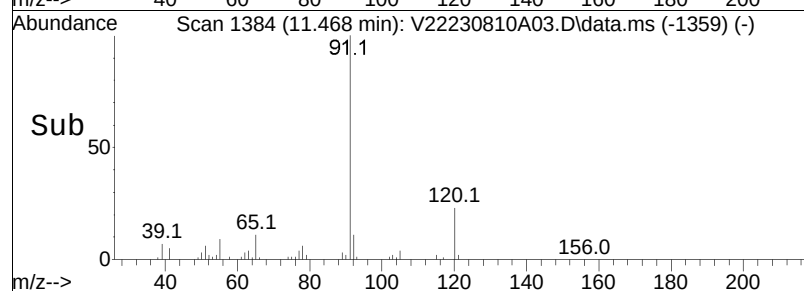
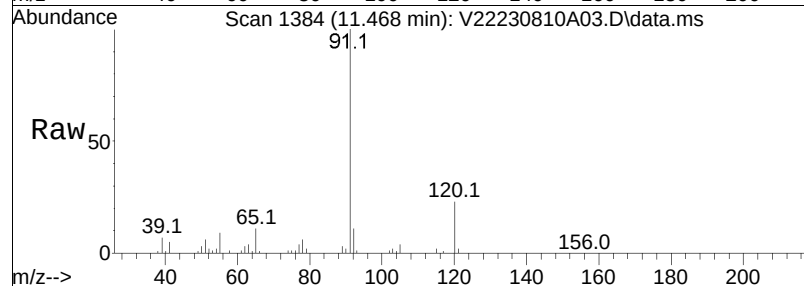
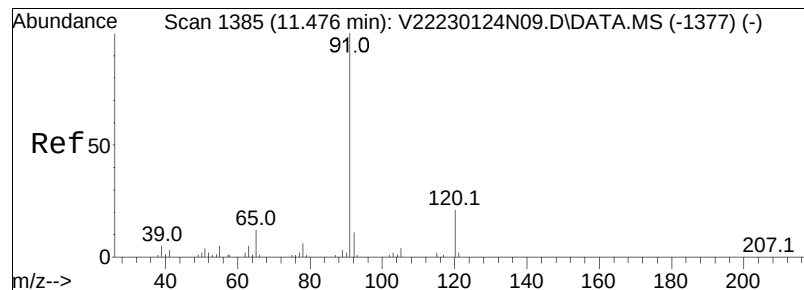
Tgt Ion:105 Resp: 331502

Ion Ratio Lower Upper

105 100

120 26.8 7.7 47.7





#89

n-Propylbenzene

Concen: 11.54 ug/L

RT: 11.468 min Scan# 1384

Delta R.T. -0.000 min

Lab File: V22230810A03.D

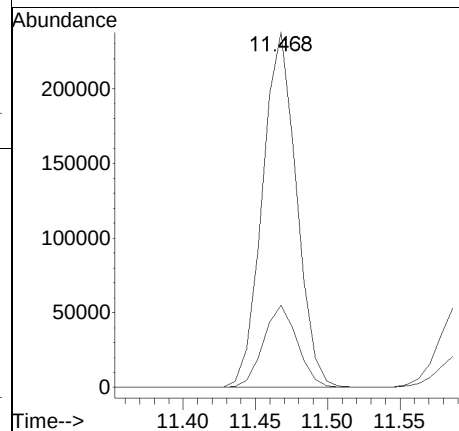
Acq: 10 Aug 2023 09:29 am

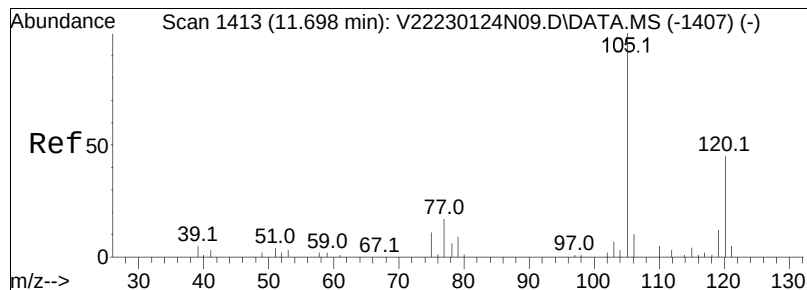
Tgt Ion: 91 Resp: 389808

Ion Ratio Lower Upper

91 100

120 23.0 19.5 29.3





#94

1,3,5-Trimethylbenzene

Concen: 10.81 ug/L

RT: 11.682 min Scan# 1411

Delta R.T. -0.000 min

Lab File: V22230810A03.D

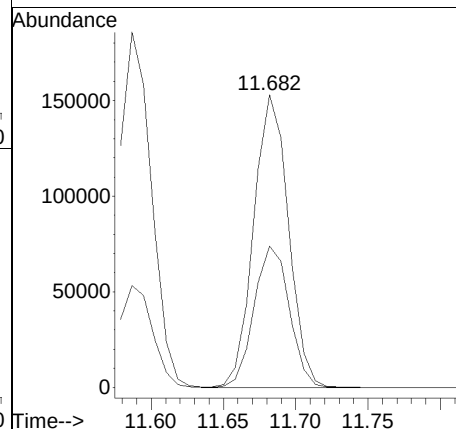
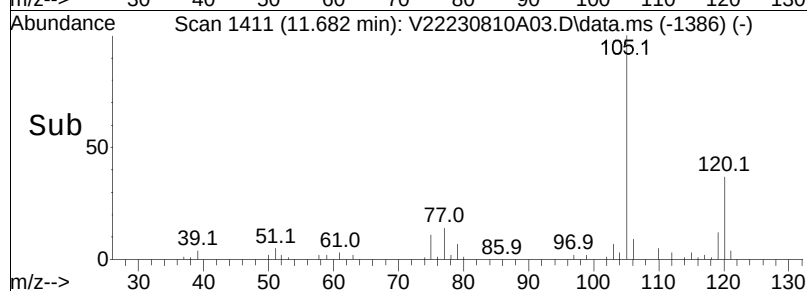
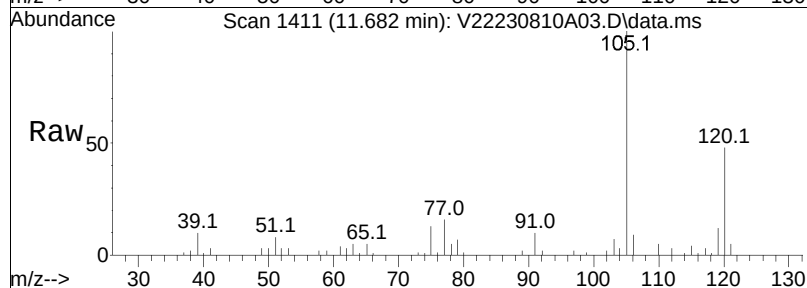
Acq: 10 Aug 2023 09:29 am

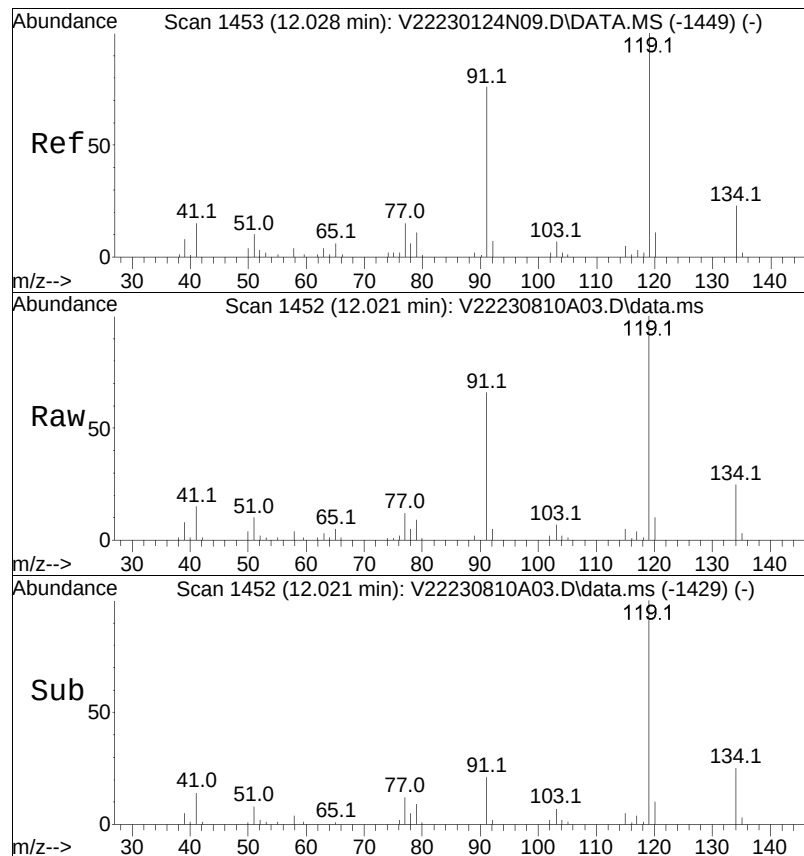
Tgt Ion:105 Resp: 255821

Ion Ratio Lower Upper

105 100

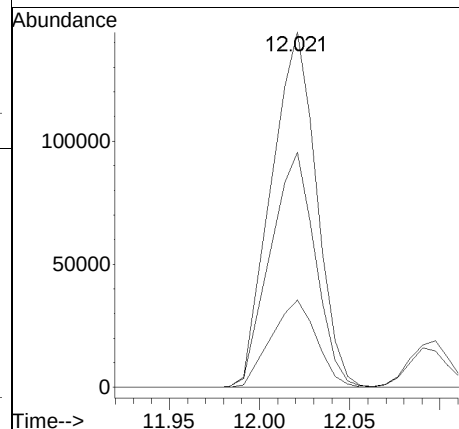
120 49.0 40.9 61.3

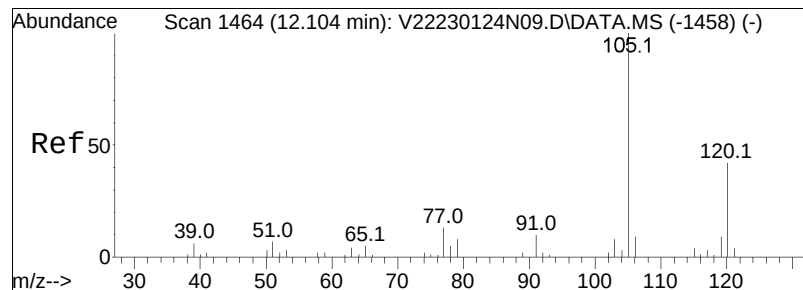




#98
 tert-Butylbenzene
 Concen: 10.64 ug/L
 RT: 12.021 min Scan# 1452
 Delta R.T. -0.000 min
 Lab File: V22230810A03.D
 Acq: 10 Aug 2023 09:29 am

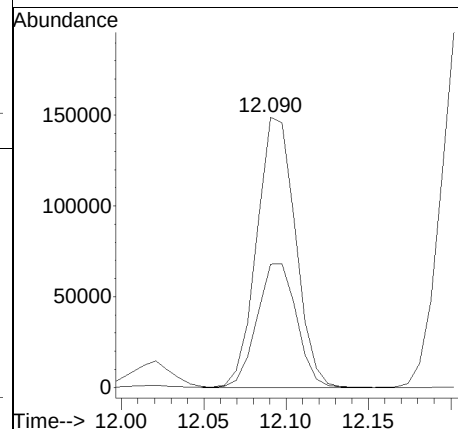
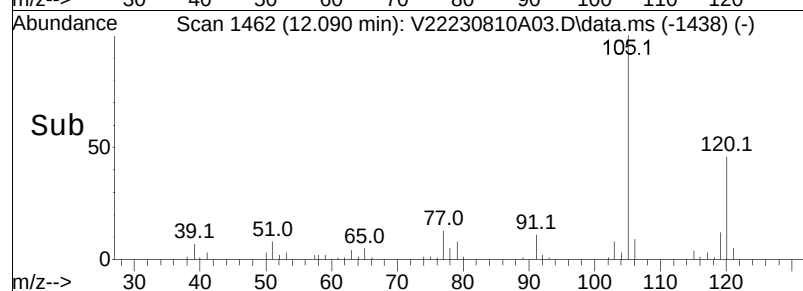
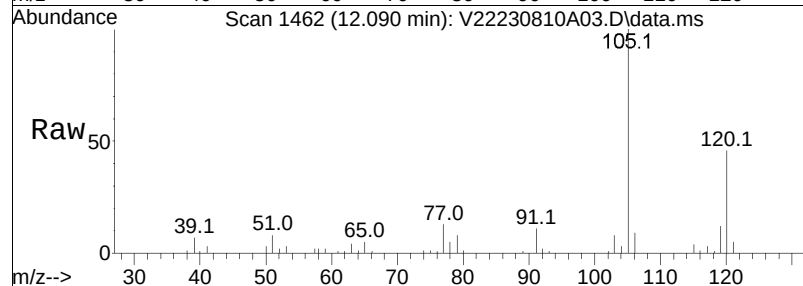
Tgt	Ion:119	Resp:	239375
Ion	Ratio	Lower	Upper
119	100		
91	65.1	50.2	75.4
134	24.4	20.8	31.2

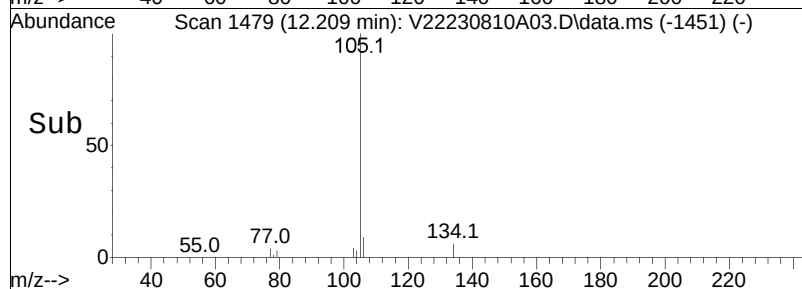
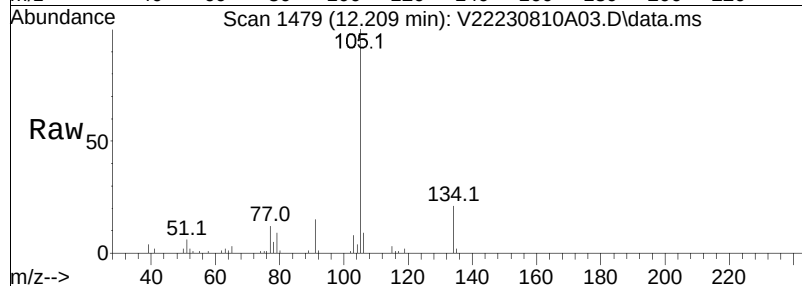
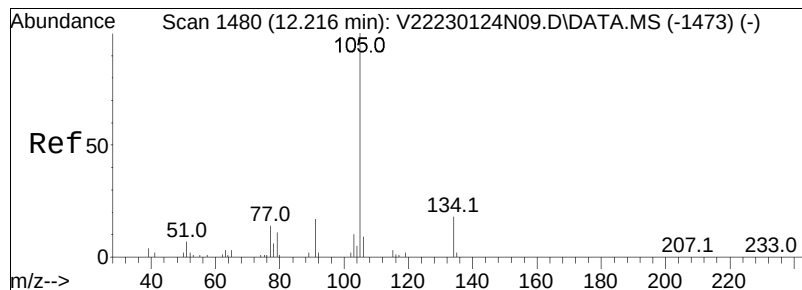




#101
 1,2,4-Trimethylbenzene
 Concen: 10.73 ug/L
 RT: 12.090 min Scan# 1462
 Delta R.T. -0.007 min
 Lab File: V22230810A03.D
 Acq: 10 Aug 2023 09:29 am

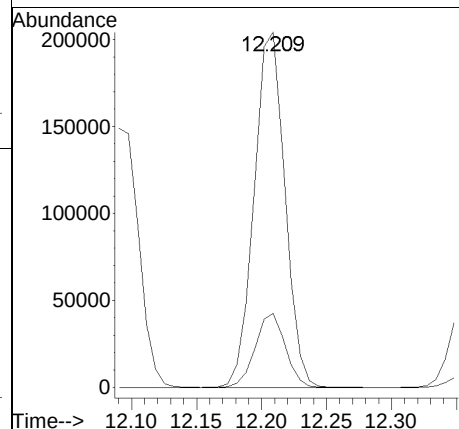
Tgt Ion	105	120	Ratio	Lower	Upper
Resp	243077				
Ion	100	46.8		38.5	57.7

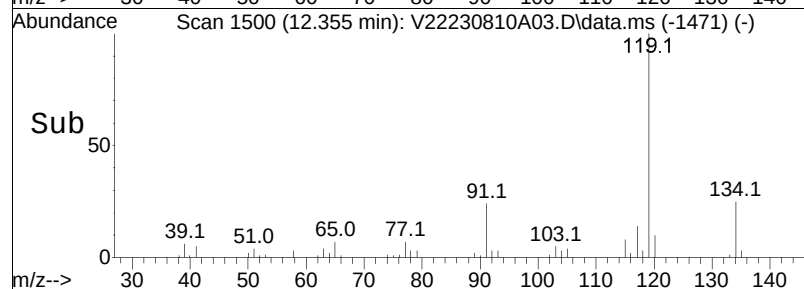
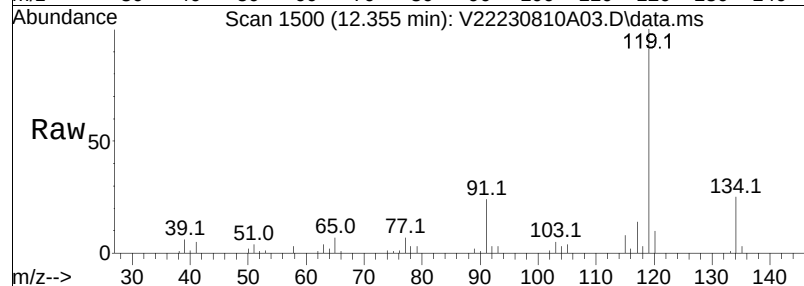
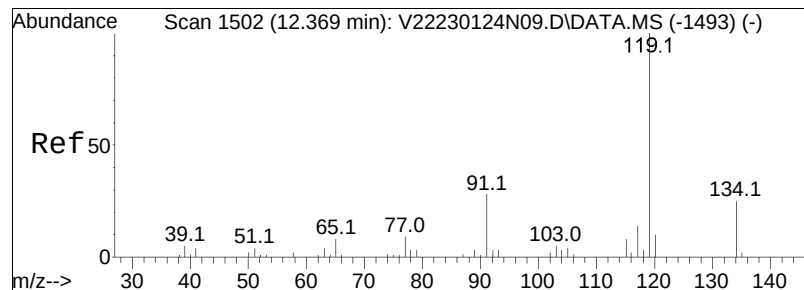




#102
 sec-Butylbenzene
 Concen: 11.35 ug/L
 RT: 12.209 min Scan# 1479
 Delta R.T. -0.000 min
 Lab File: V22230810A03.D
 Acq: 10 Aug 2023 09:29 am

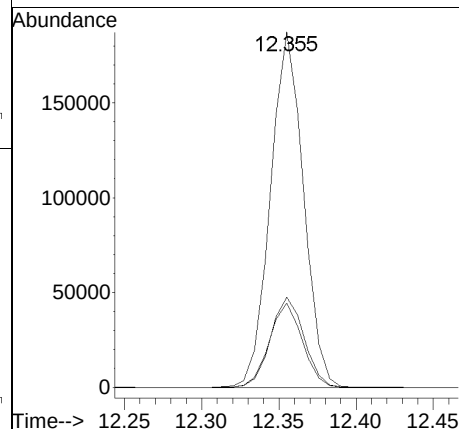
Tgt Ion	Ratio	Lower	Upper
105	100		
134	20.3	13.9	28.9

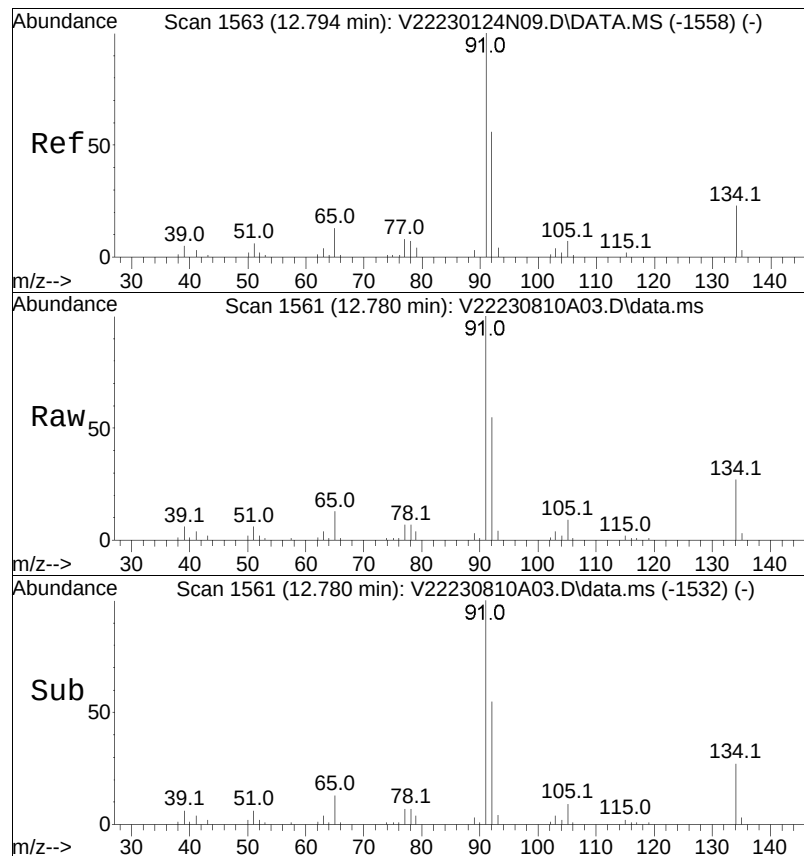




#103
 p-Isopropyltoluene
 Concen: 11.13 ug/L
 RT: 12.355 min Scan# 1500
 Delta R.T. 0.000 min
 Lab File: V22230810A03.D
 Acq: 10 Aug 2023 09:29 am

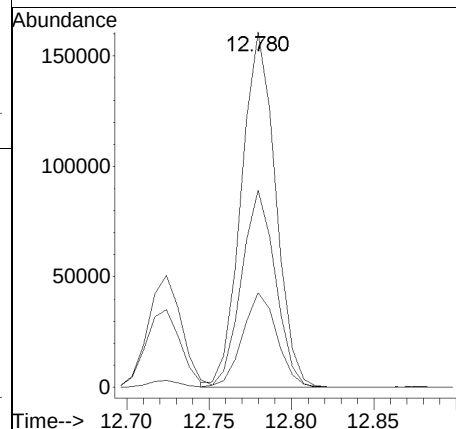
Tgt Ion	Ratio	Lower	Upper
119	100		
134	25.8	17.7	36.7
91	23.7	14.1	29.3

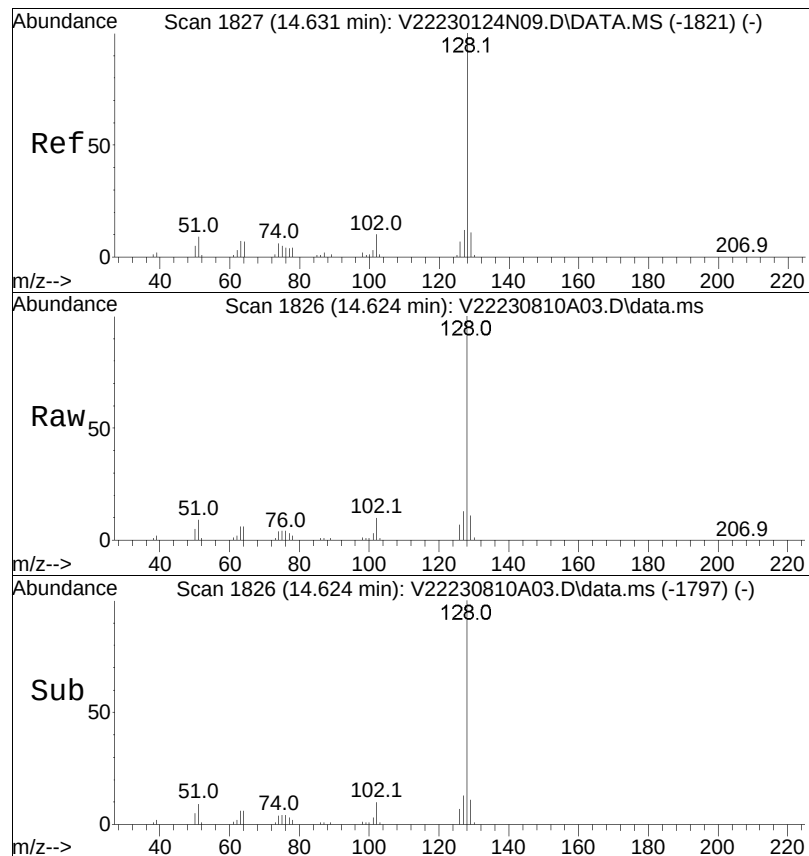




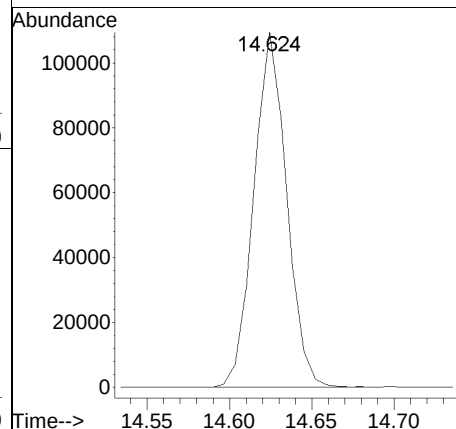
#107
 n-Butylbenzene
 Concen: 11.28 ug/L
 RT: 12.780 min Scan# 1561
 Delta R.T. 0.001 min
 Lab File: V22230810A03.D
 Acq: 10 Aug 2023 09:29 am

Tgt Ion:	91	Resp:	232899
Ion Ratio	Lower	Upper	
91	100		
92	55.1	44.6	66.8
134	26.6	22.9	34.3





#114
 Naphthalene
 Concen: 10.23 ug/L
 RT: 14.624 min Scan# 1826
 Delta R.T. 0.000 min
 Lab File: V22230810A03.D
 Acq: 10 Aug 2023 09:29 am
 Tgt Ion:128 Resp: 151507



Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230810A\
 Data File : V22230810A04.D
 Acq On : 10 Aug 2023 09:54 am
 Operator : VOA122:PID
 Sample : WG1814675-4,31,10,10 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG1814675,ICAL20205 (Sig #1); WG,ICAL20205 (Sig #2)
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 10 10:35:40 2023
 Quant Method : K:\VOA122\2023\230810A\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:11:40 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA122\2023\230810A\V22230810A03.D
 Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane

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

Internal Standards						
1) Fluorobenzene	6.284	96	382870	10.000	ug/L	0.00
Standard Area 1 = 397815			Recovery	=	96.24%	
62) Chlorobenzene-d5	9.866	117	390122	10.000	ug/L	0.00
Standard Area 1 = 393438			Recovery	=	99.16%	
83) 1,4-Dichlorobenzene-d4	12.501	152	216726	10.000	ug/L	0.00
Standard Area 1 = 214484			Recovery	=	101.05%	
System Monitoring Compounds						
38) Dibromofluoromethane	5.453	113	137229	10.325	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	103.25%	
46) 1,2-Dichloroethane-d4	5.989	65	137940	10.499	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	104.99%	
63) Toluene-d8	8.001	98	479301	10.124	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	101.24%	
87) 4-Bromofluorobenzene	11.317	95	190530	10.571	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	105.71%	
Target Compounds						
						Qvalue
21) Methyl tert-butyl ether	3.955	73	112805	10.291	ug/L	# 87
44) Benzene	5.856	78	231197	11.061	ug/L	# 91
64) Toluene	8.060	92	159194	10.751	ug/L	98
78) Ethylbenzene	9.921	91	318953	11.085	ug/L	98
80) p/m Xylene	10.111	106	253373	22.615	ug/L	95
81) o Xylene	10.635	106	240891	22.584	ug/L	95
86) Isopropylbenzene	11.000	105	330531	11.523	ug/L	97
89) n-Propylbenzene	11.468	91	390230	11.429	ug/L	97
94) 1,3,5-Trimethylbenzene	11.682	105	255355	10.676	ug/L	97
98) tert-Butylbenzene	12.021	119	245208	10.786	ug/L	98
101) 1,2,4-Trimethylbenzene	12.097	105	245071	10.707	ug/L	97
102) sec-Butylbenzene	12.209	105	340669	11.363	ug/L	98
103) p-Isopropyltoluene	12.355	119	280843	11.084	ug/L	97
107) n-Butylbenzene	12.779	91	233009	11.172	ug/L	98
114) Naphthalene	14.624	128	153968	10.290	ug/L	100

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

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230810A\
 Data File : V22230810A04.D
 Acq On : 10 Aug 2023 09:54 am
 Operator : VOA122:PID
 Sample : WG1814675-4,31,10,10 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG1814675,ICAL20205 (Sig #1); WG,ICAL20205 (Sig #2)
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 10 10:35:40 2023
 Quant Method : K:\VOA122\2023\230810A\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:11:40 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA122\2023\230810A\V22230810A03.D
 Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane

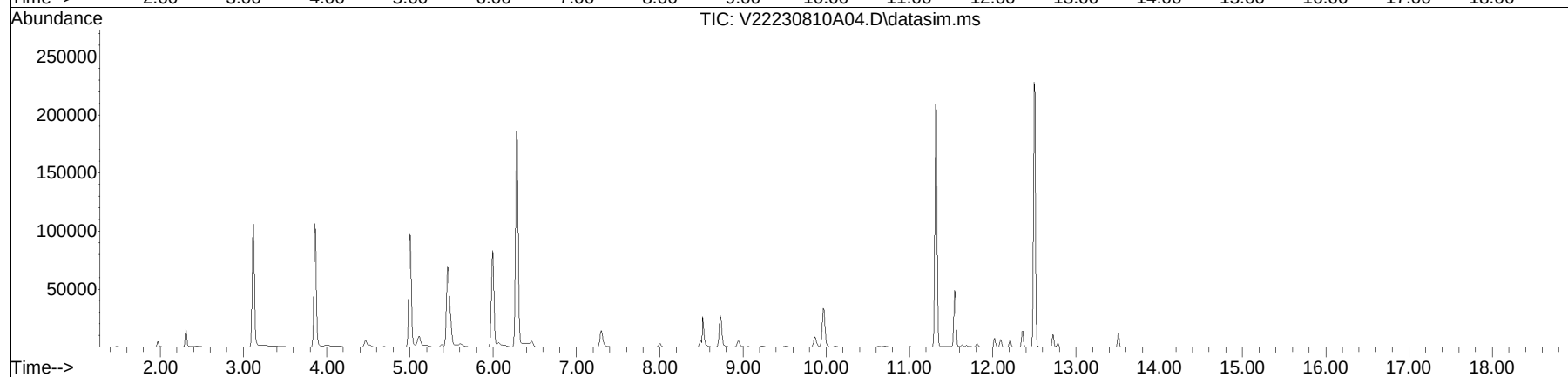
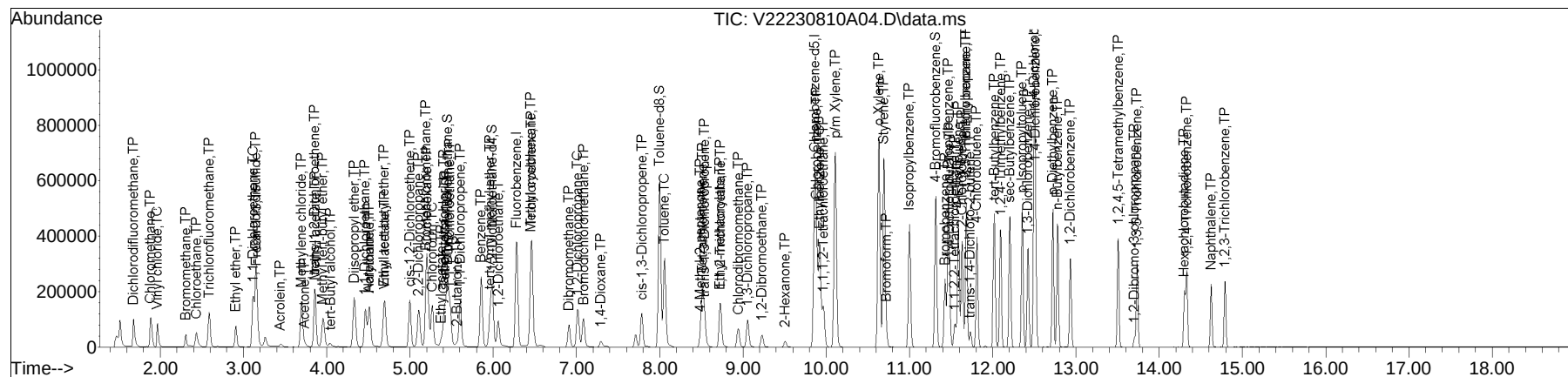
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

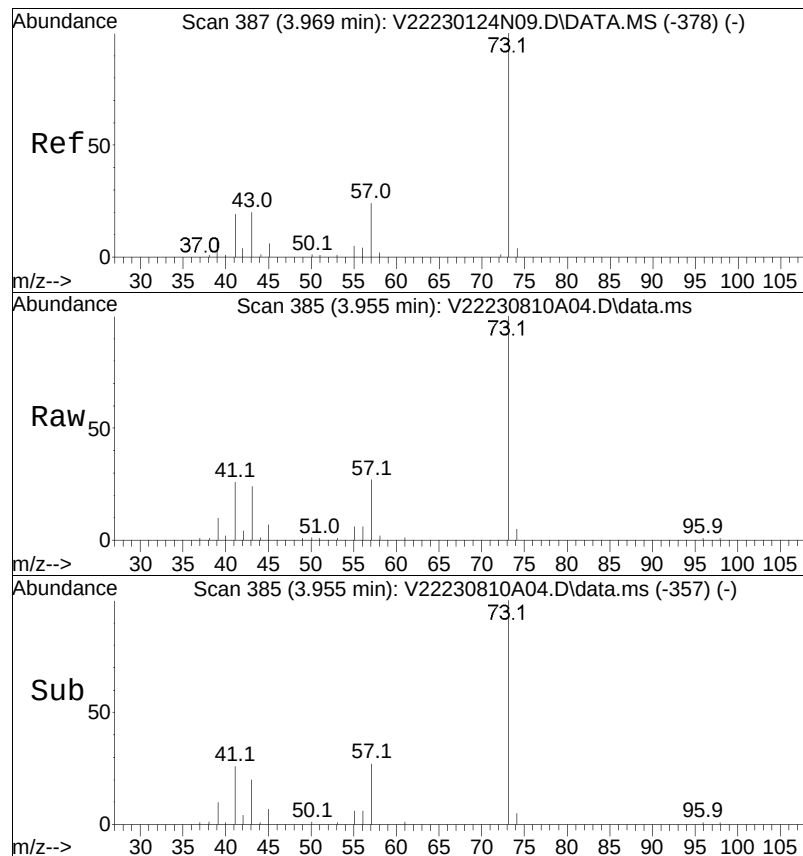
Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230810A\
 Data File : V22230810A04.D
 Acq On : 10 Aug 2023 09:54 am
 Operator : VOA122:PID
 Sample : WG1814675-4,31,10,10 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG1814675,ICAL20205 (Sig #1); WG,ICAL20205 (Sig #2)
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 10 10:35:40 2023
 Quant Method : K:\VOA122\2023\230810A\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:11:40 2023
 Response via : Initial Calibration

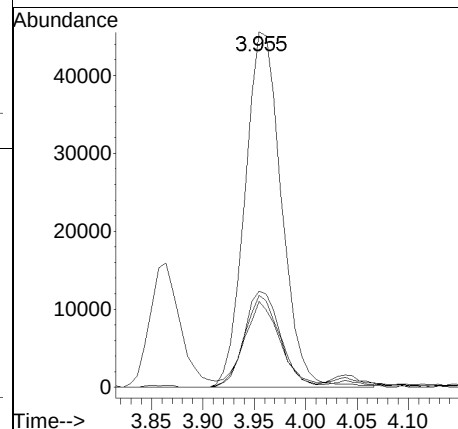
Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane

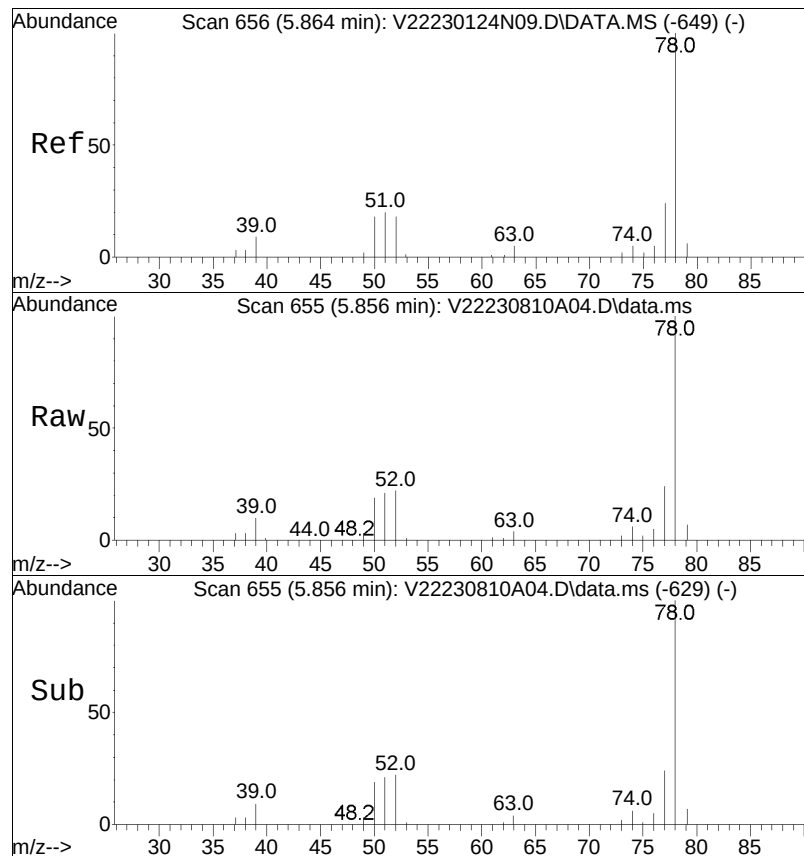




#21
Methyl tert-butyl ether
Concen: 10.29 ug/L
RT: 3.955 min Scan# 385
Delta R.T. -0.007 min
Lab File: V22230810A04.D
Acq: 10 Aug 2023 09:54 am

Tgt Ion:	73	Resp:	112805
Ion Ratio	Lower	Upper	
73	100		
57	26.9	13.6	28.2
43	23.4	12.7	26.5
41	25.2	11.4	23.8#





#44

Benzene

Concen: 11.06 ug/L

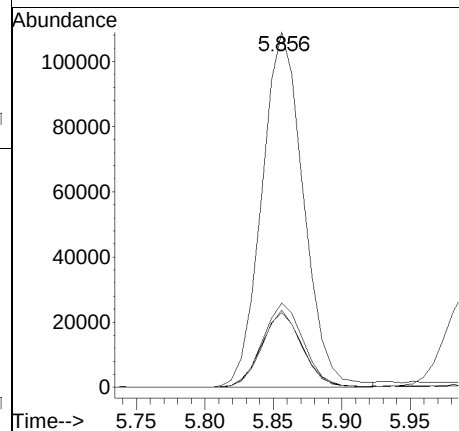
RT: 5.856 min Scan# 655

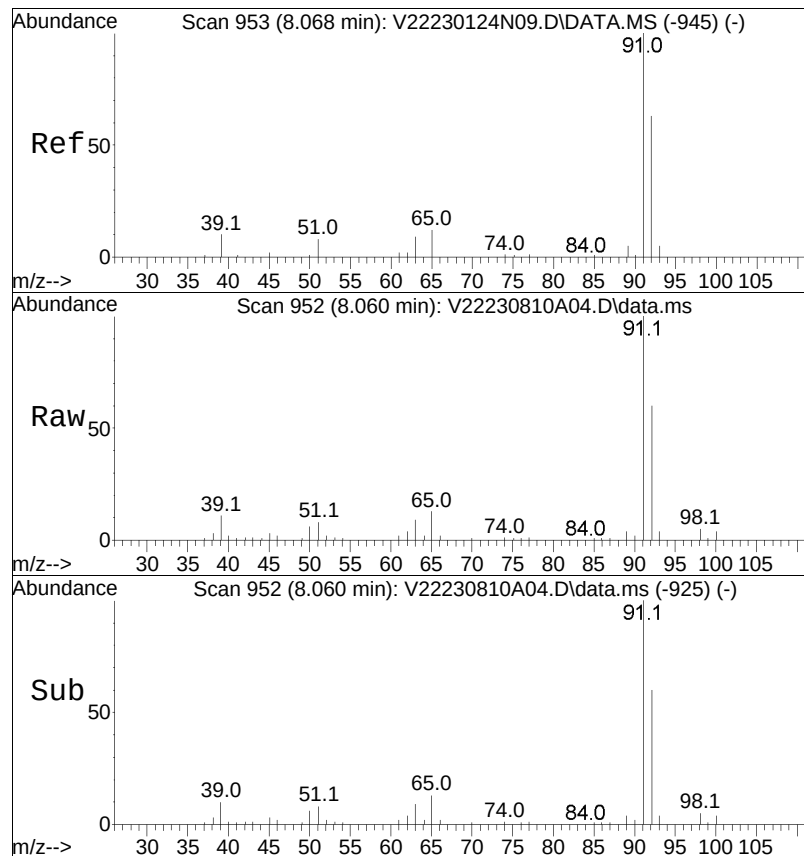
Delta R.T. 0.000 min

Lab File: V22230810A04.D

Acq: 10 Aug 2023 09:54 am

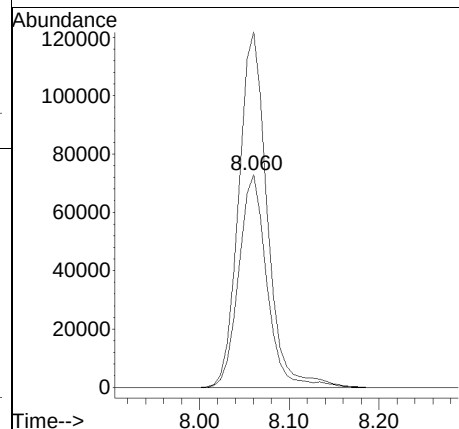
Tgt	Ion: 78	Resp:	231197
Ion	Ratio	Lower	Upper
78	100		
77	23.4	15.4	32.0
51	20.6	9.8	20.4#
52	21.1	9.2	19.2#

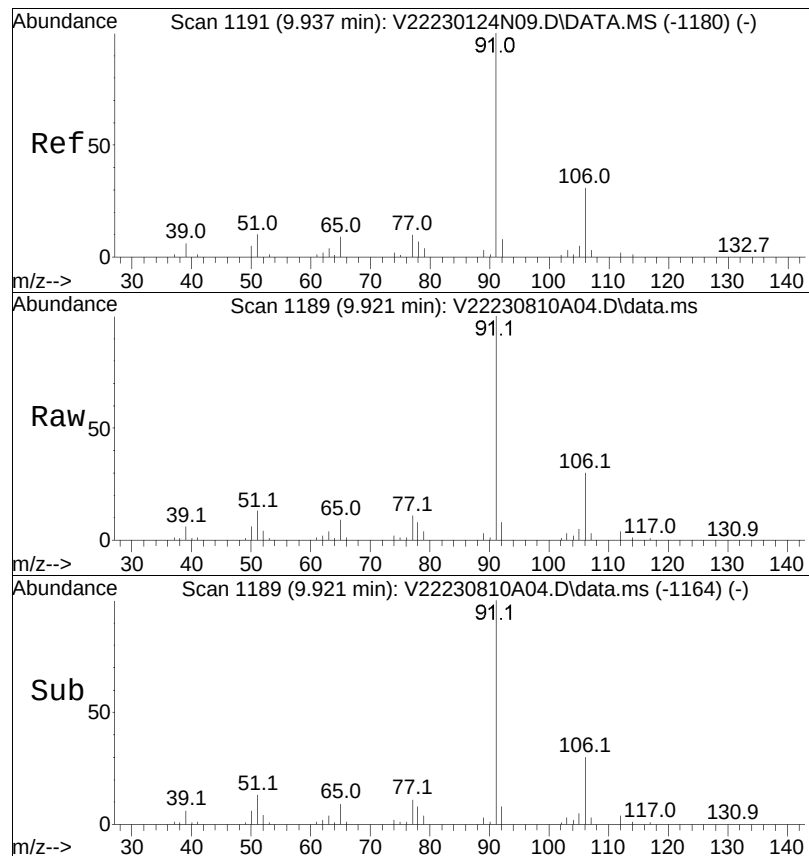




#64
 Toluene
 Concen: 10.75 ug/L
 RT: 8.060 min Scan# 952
 Delta R.T. 0.000 min
 Lab File: V22230810A04.D
 Acq: 10 Aug 2023 09:54 am

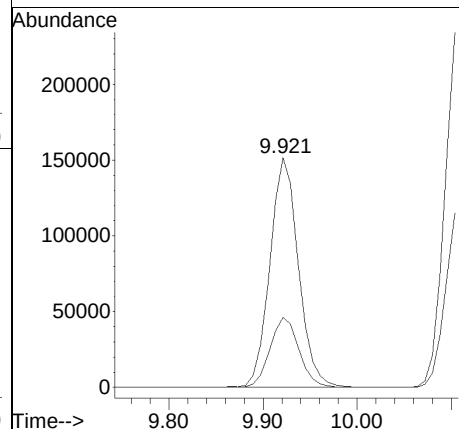
Tgt Ion	Ratio	Lower	Upper
92	100		
91	168.3	137.0	205.6

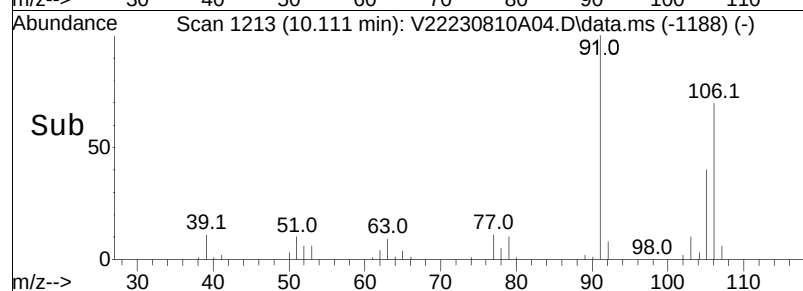
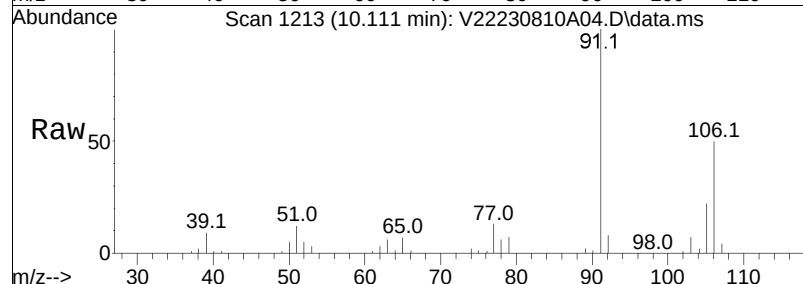
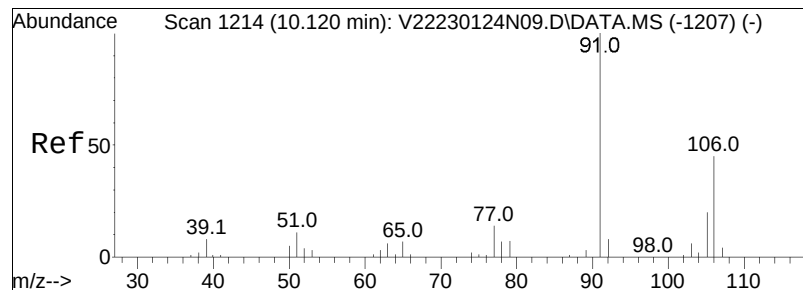




#78
 Ethylbenzene
 Concen: 11.09 ug/L
 RT: 9.921 min Scan# 1189
 Delta R.T. 0.000 min
 Lab File: V22230810A04.D
 Acq: 10 Aug 2023 09:54 am

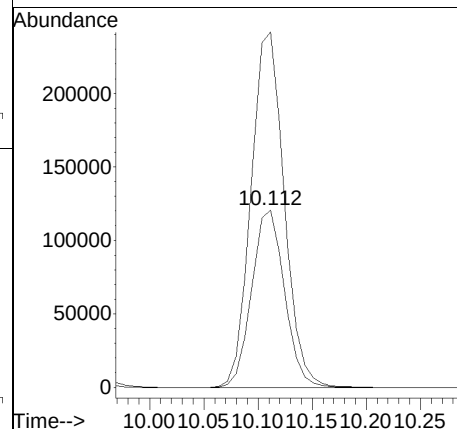
Tgt	Ion	Resp	Lower	Upper
91	100			
106	30.9	25.8	38.6	

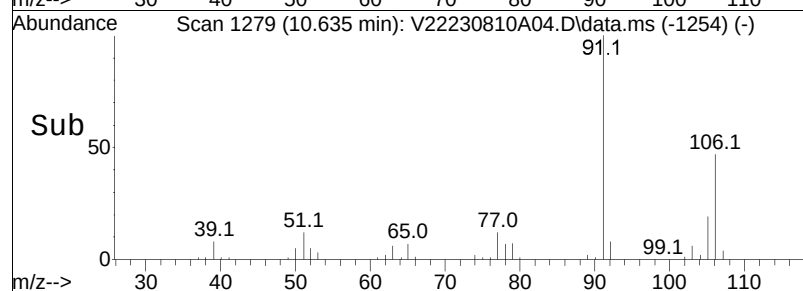
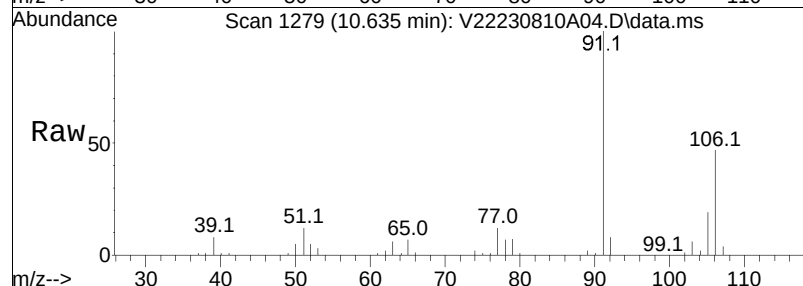
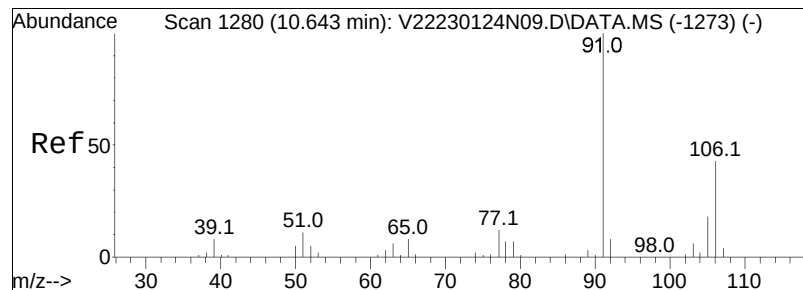




#80
 p/m Xylene
 Concen: 22.62 ug/L
 RT: 10.111 min Scan# 1213
 Delta R.T. 0.000 min
 Lab File: V22230810A04.D
 Acq: 10 Aug 2023 09:54 am

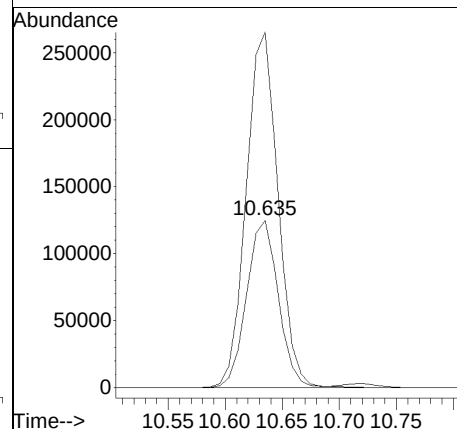
Tgt	Ion	Ratio	Lower	Upper
106	100			
91	202.6	156.0	234.0	

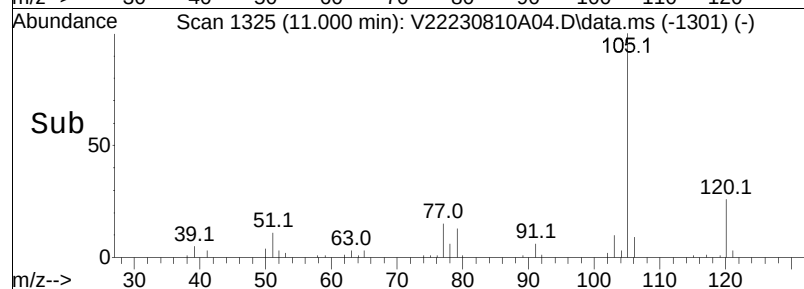
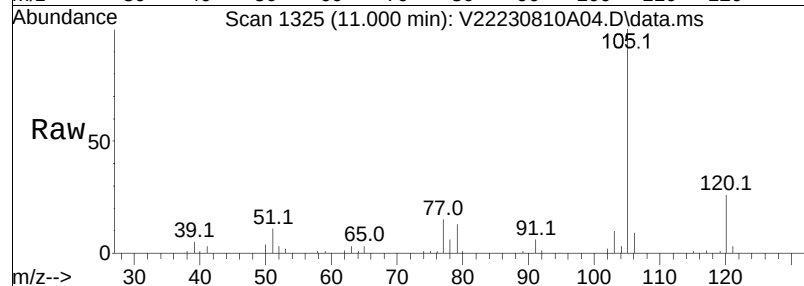
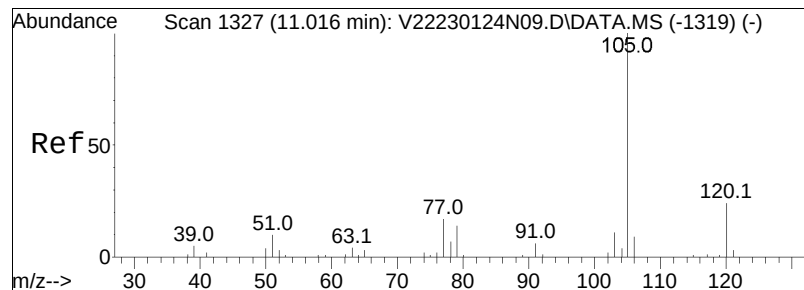




#81
o Xylene
Concen: 22.58 ug/L
RT: 10.635 min Scan# 1279
Delta R.T. -0.000 min
Lab File: V22230810A04.D
Acq: 10 Aug 2023 09:54 am

Tgt Ion	Ratio	Lower	Upper
106	100		
91	212.6	164.0	246.0





#86

Isopropylbenzene

Concen: 11.52 ug/L

RT: 11.000 min Scan# 1325

Delta R.T. -0.008 min

Lab File: V22230810A04.D

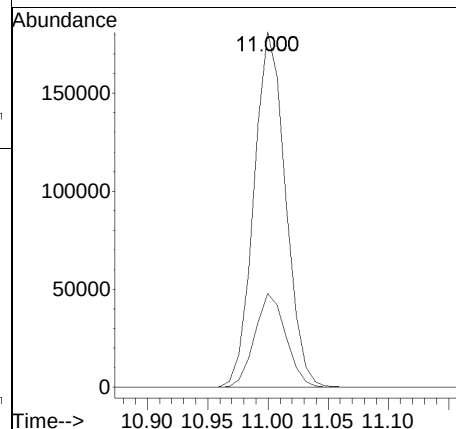
Acq: 10 Aug 2023 09:54 am

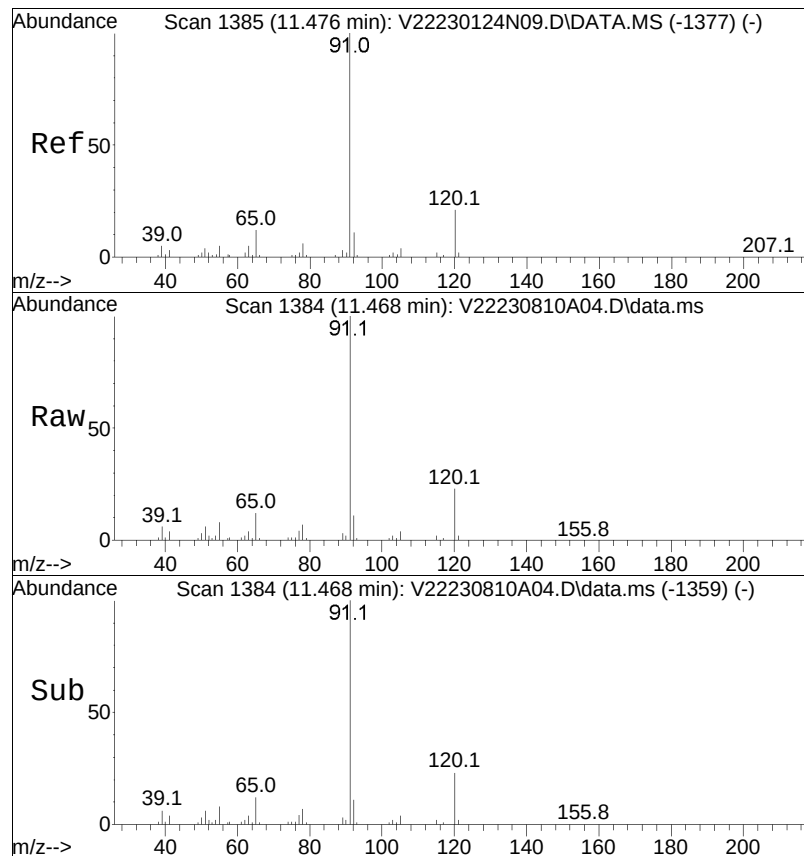
Tgt Ion:105 Resp: 330531

Ion Ratio Lower Upper

105 100

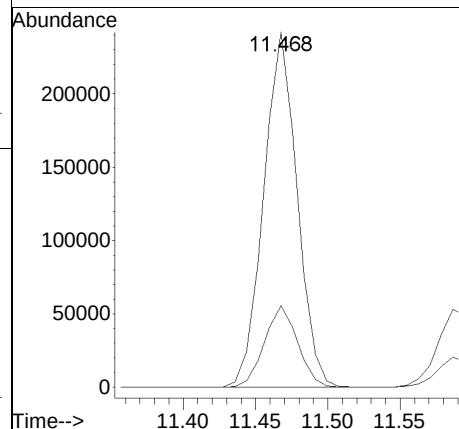
120 26.1 7.7 47.7

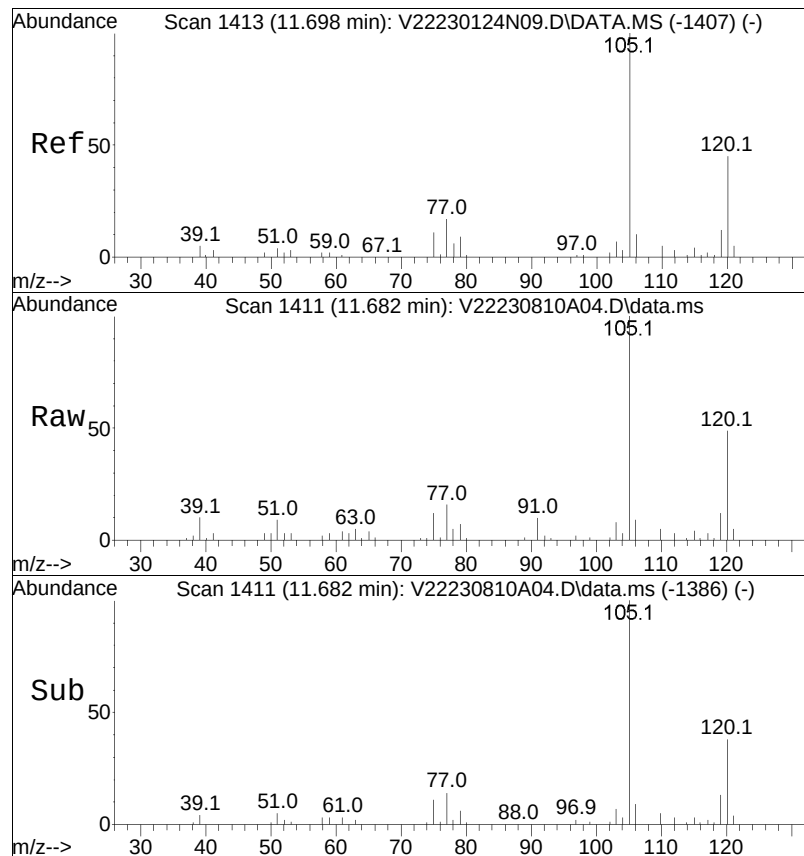




#89
 n-Propylbenzene
 Concen: 11.43 ug/L
 RT: 11.468 min Scan# 1384
 Delta R.T. -0.000 min
 Lab File: V22230810A04.D
 Acq: 10 Aug 2023 09:54 am

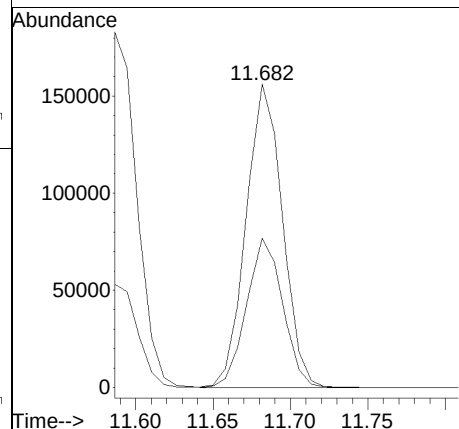
Tgt Ion:	91	Resp:	390230
Ion Ratio	Lower	Upper	
91	100		
120	22.8	19.5	29.3

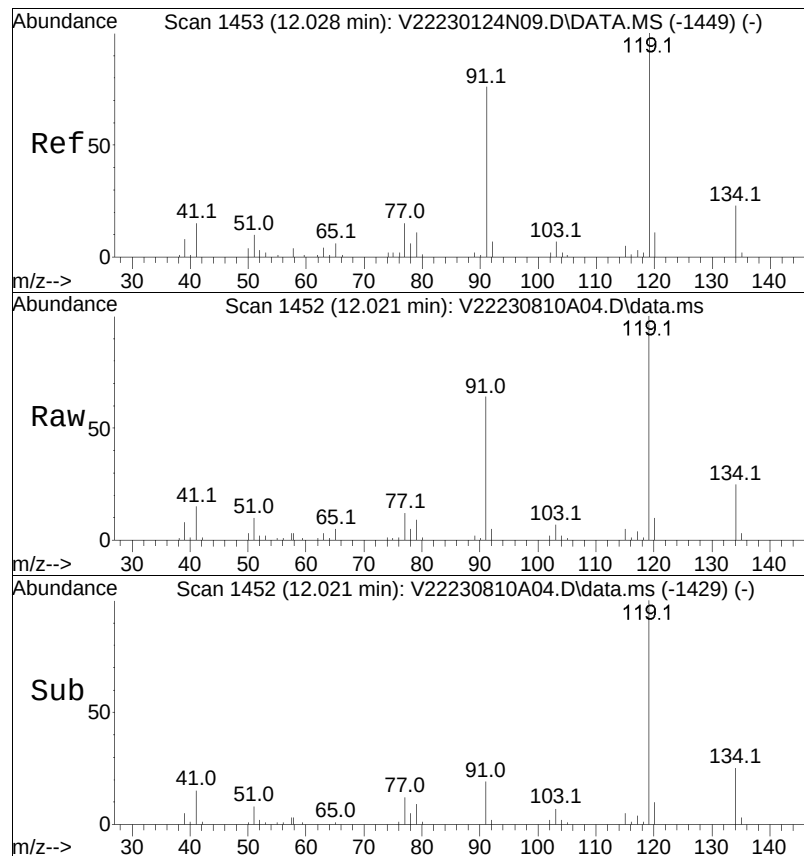




#94
 1,3,5-Trimethylbenzene
 Concen: 10.68 ug/L
 RT: 11.682 min Scan# 1411
 Delta R.T. -0.000 min
 Lab File: V22230810A04.D
 Acq: 10 Aug 2023 09:54 am

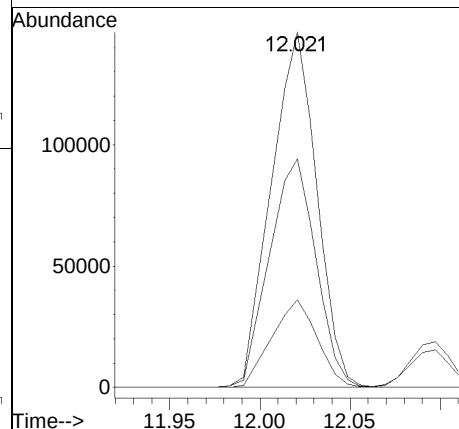
Tgt Ion	Ratio	Lower	Upper
105	100		
120	48.8	40.9	61.3

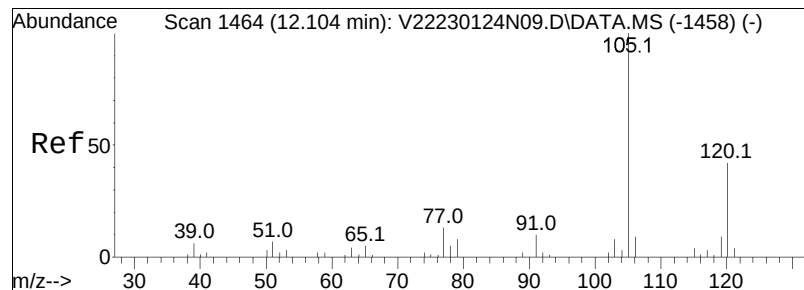




#98
 tert-Butylbenzene
 Concen: 10.79 ug/L
 RT: 12.021 min Scan# 1452
 Delta R.T. -0.000 min
 Lab File: V22230810A04.D
 Acq: 10 Aug 2023 09:54 am

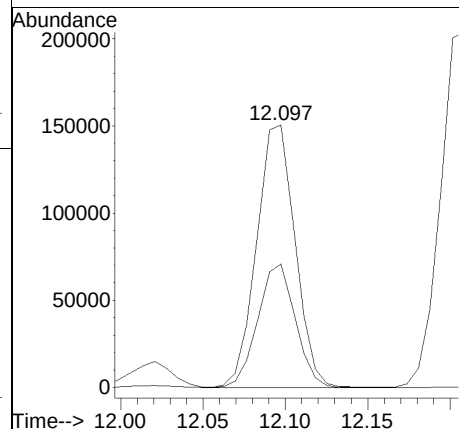
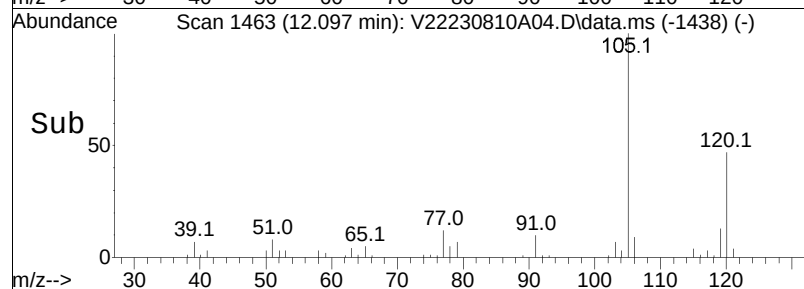
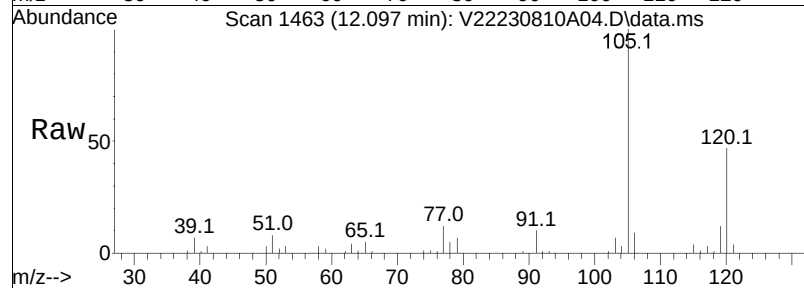
Tgt	Ion:119	Resp:	245208
Ion	Ratio	Lower	Upper
119	100		
91	64.2	50.2	75.4
134	24.5	20.8	31.2

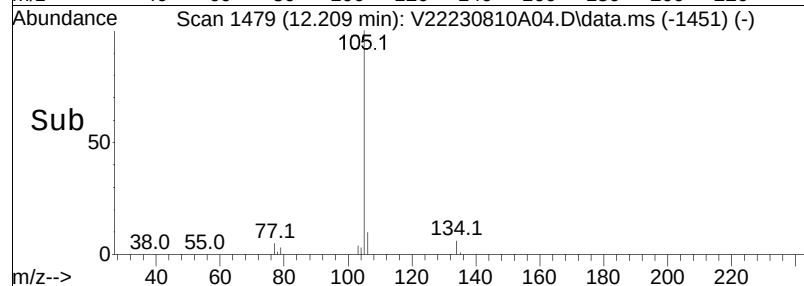
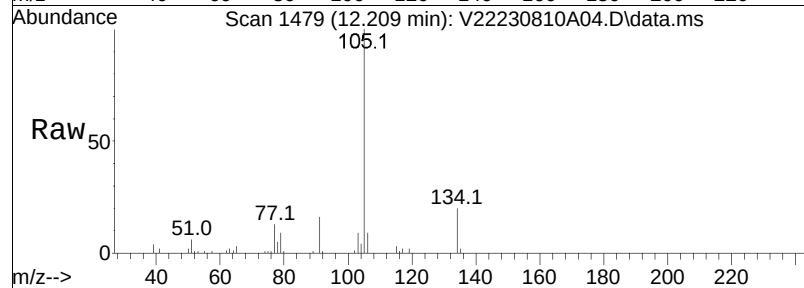
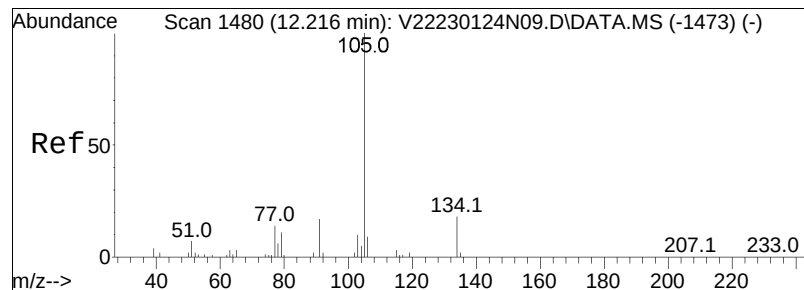




#101
 1,2,4-Trimethylbenzene
 Concen: 10.71 ug/L
 RT: 12.097 min Scan# 1463
 Delta R.T. 0.000 min
 Lab File: V22230810A04.D
 Acq: 10 Aug 2023 09:54 am

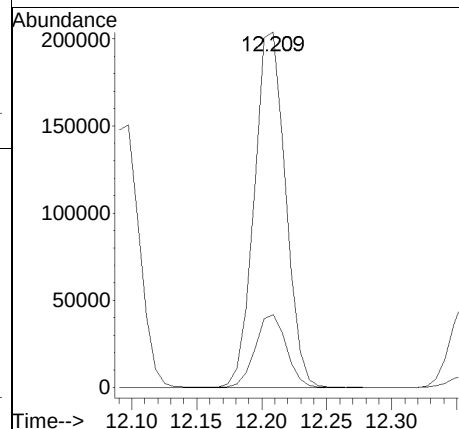
Tgt Ion:105 Resp: 245071
 Ion Ratio Lower Upper
 105 100
 120 45.8 38.5 57.7

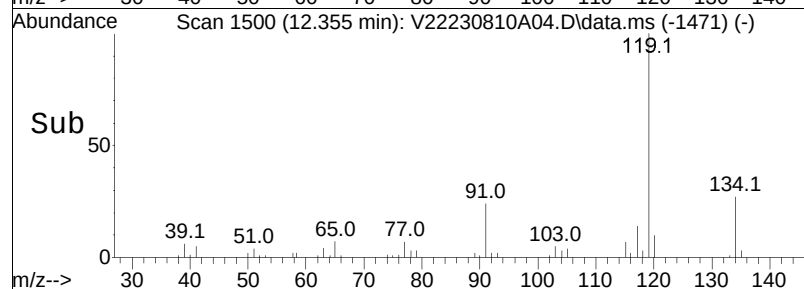
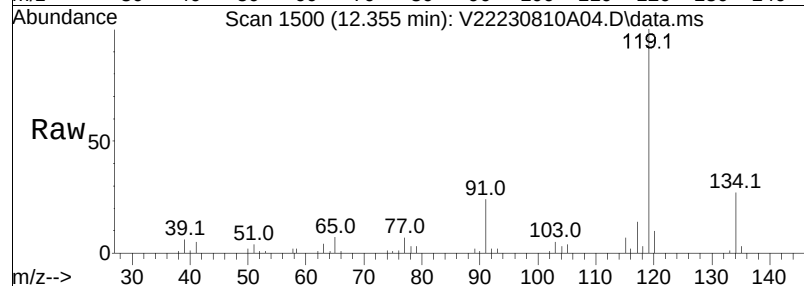
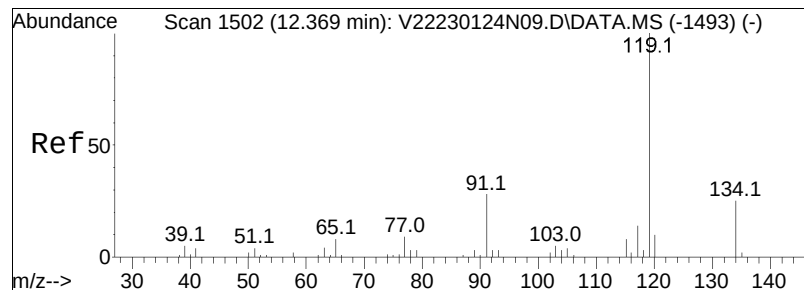




#102
 sec-Butylbenzene
 Concen: 11.36 ug/L
 RT: 12.209 min Scan# 1479
 Delta R.T. -0.000 min
 Lab File: V22230810A04.D
 Acq: 10 Aug 2023 09:54 am

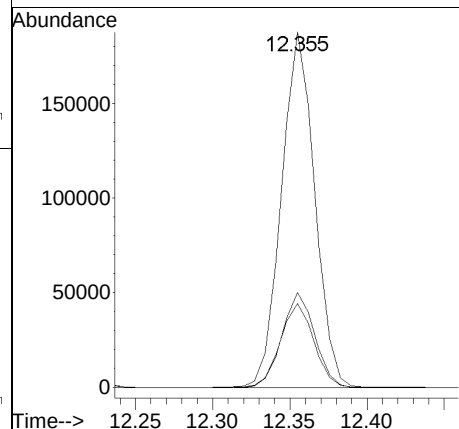
Tgt Ion	Ratio	Lower	Upper
105	100		
134	20.3	13.9	28.9

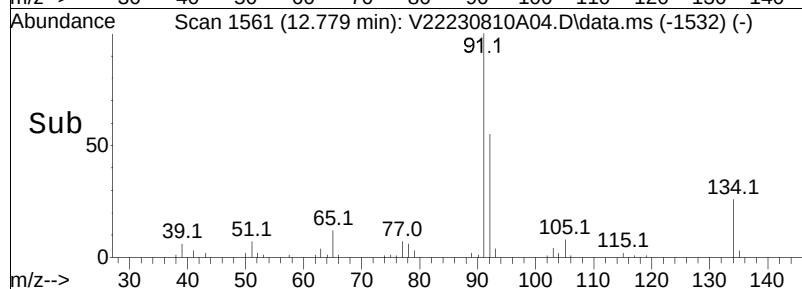
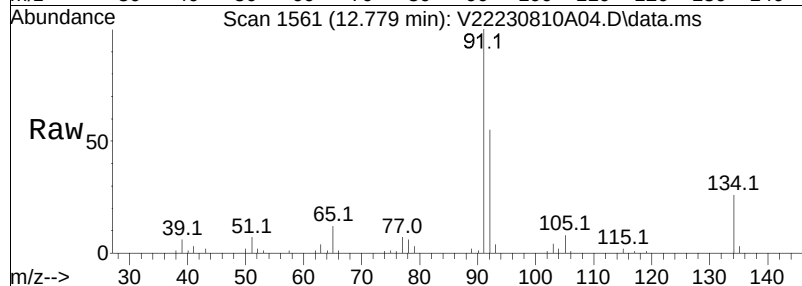
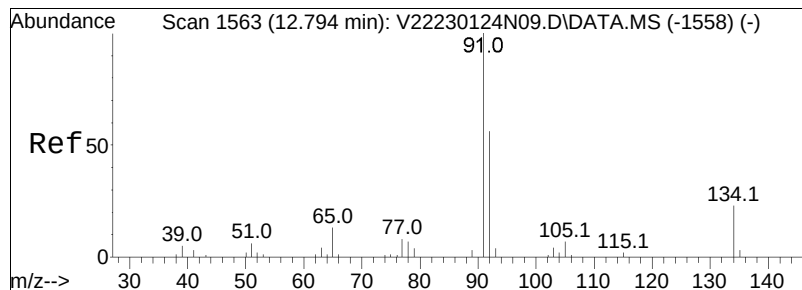




#103
 p-Isopropyltoluene
 Concen: 11.08 ug/L
 RT: 12.355 min Scan# 1500
 Delta R.T. -0.000 min
 Lab File: V22230810A04.D
 Acq: 10 Aug 2023 09:54 am

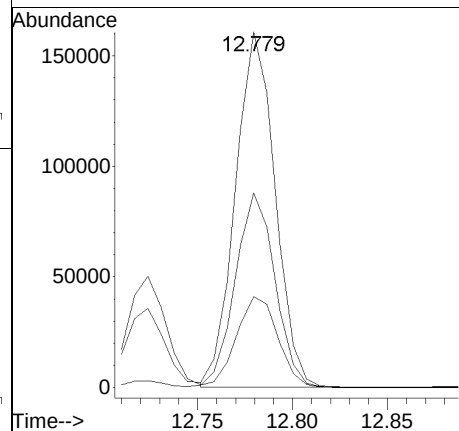
Tgt Ion	Ratio	Lower	Upper
119	100		
134	26.3	17.7	36.7
91	23.8	14.1	29.3

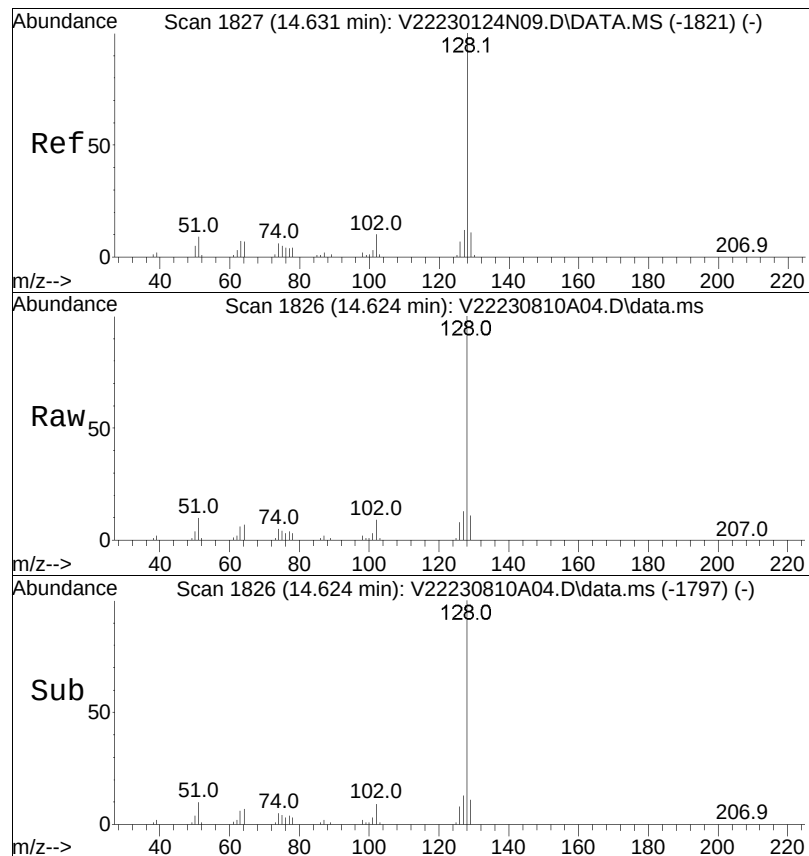




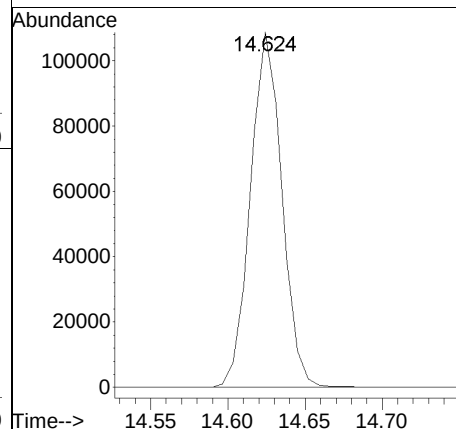
#107
 n-Butylbenzene
 Concen: 11.17 ug/L
 RT: 12.779 min Scan# 1561
 Delta R.T. 0.000 min
 Lab File: V22230810A04.D
 Acq: 10 Aug 2023 09:54 am

Tgt Ion:	91	Resp:	233009
Ion Ratio	Lower	Upper	
91	100		
92	55.0	44.6	66.8
134	26.7	22.9	34.3





#114
 Naphthalene
 Concen: 10.29 ug/L
 RT: 14.624 min Scan# 1826
 Delta R.T. 0.000 min
 Lab File: V22230810A04.D
 Acq: 10 Aug 2023 09:54 am
 Tgt Ion:128 Resp: 153968



Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230810A\
 Data File : V22230810A27.D
 Acq On : 10 Aug 2023 07:22 pm
 Operator : VOA122:PID
 Sample : WG1814675-6,31,10,10,,A1,R3B (Sig #1); L2346073-02MS,31,10,10,,A1,
 R3B (Sig #2)
 Misc : WG1814675,ICAL20205 (Sig #1); WG,ICAL20205 (Sig #2)
 ALS Vial : 27 Sample Multiplier: 1

Quant Time: Aug 11 06:56:39 2023
 Quant Method : K:\VOA122\2023\230810A\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:11:40 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA122\2023\230810A\V22230810A03.D
 Sub List : 8260-NYCP51 - NYCP51

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.284	96	369394	10.000	ug/L	0.00
Standard Area 1 = 397815			Recovery =	92.86%		
62) Chlorobenzene-d5	9.866	117	377483	10.000	ug/L	0.00
Standard Area 1 = 393438			Recovery =	95.94%		
83) 1,4-Dichlorobenzene-d4	12.501	152	207754	10.000	ug/L	0.00
Standard Area 1 = 214484			Recovery =	96.86%		
System Monitoring Compounds						
38) Dibromofluoromethane	5.446	113	130888	10.207	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	102.07%		
46) 1,2-Dichloroethane-d4	5.989	65	133895	10.563	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	105.63%		
63) Toluene-d8	8.001	98	462949	10.106	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	101.06%		
87) 4-Bromofluorobenzene	11.317	95	182546	10.565	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	105.65%		
Target Compounds						
21) Methyl tert-butyl ether	3.955	73	110386	10.438	ug/L	# 87
44) Benzene	5.856	78	336739	16.699	ug/L	# 92
64) Toluene	8.060	92	158154	11.038	ug/L	99
78) Ethylbenzene	9.921	91	317475	11.403	ug/L	97
80) p/m Xylene	10.112	106	243676	22.478	ug/L	93
81) o Xylene	10.635	106	236381	22.903	ug/L	92
86) Isopropylbenzene	11.000	105	349850	12.723	ug/L	98
89) n-Propylbenzene	11.468	91	369841	11.300	ug/L	97
94) 1,3,5-Trimethylbenzene	11.682	105	244182	10.650	ug/L	96
98) tert-Butylbenzene	12.021	119	233311	10.706	ug/L	96
101) 1,2,4-Trimethylbenzene	12.097	105	246540	11.236	ug/L	96
102) sec-Butylbenzene	12.209	105	314853	10.956	ug/L	98
103) p-Isopropyltoluene	12.355	119	266962	10.991	ug/L	97
107) n-Butylbenzene	12.780	91	214227	10.715	ug/L	98
114) Naphthalene	14.624	128	182456	12.720	ug/L	100

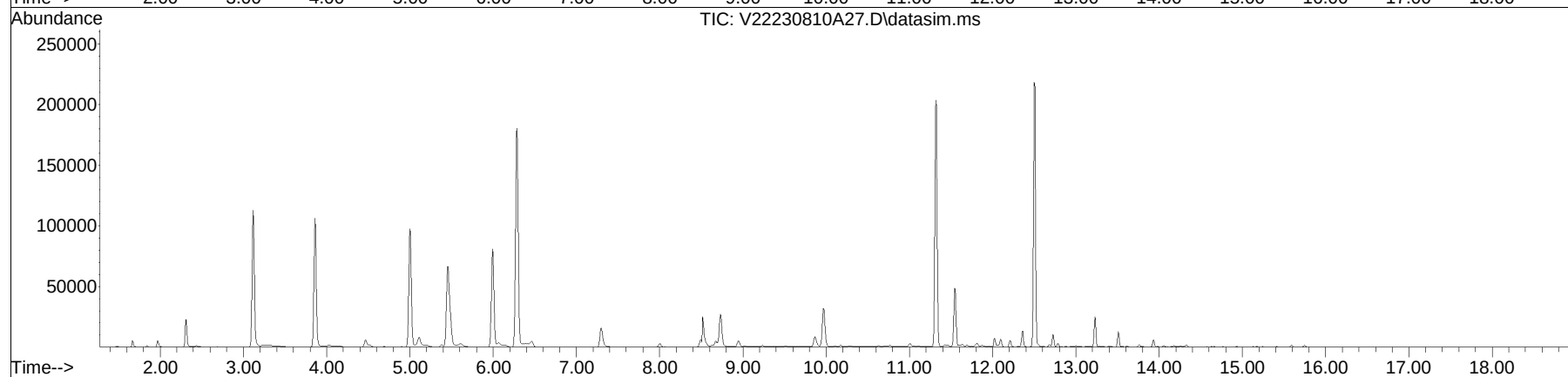
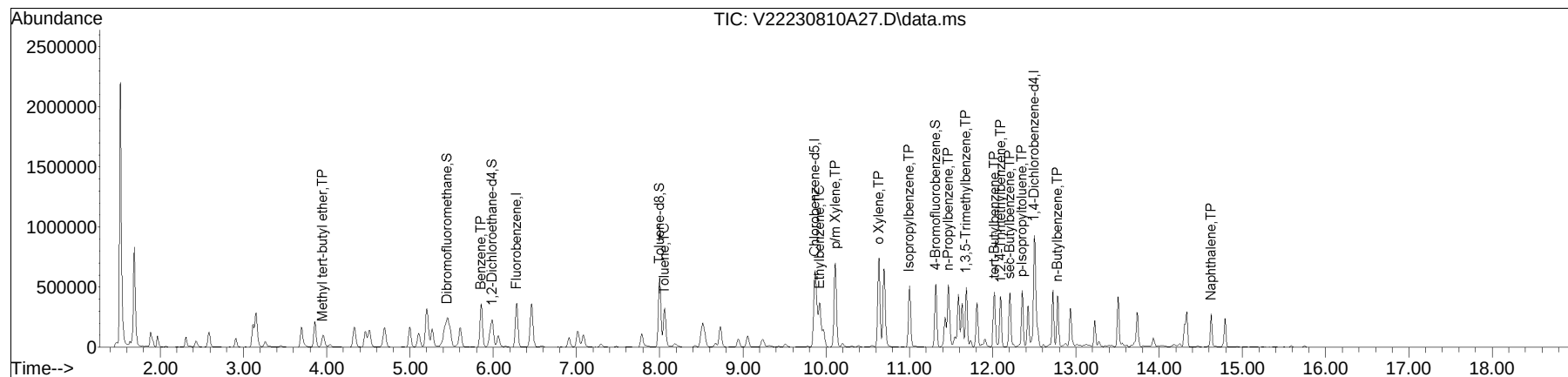
(#) = qualifier out of range (m) = manual integration (+) = signals summed

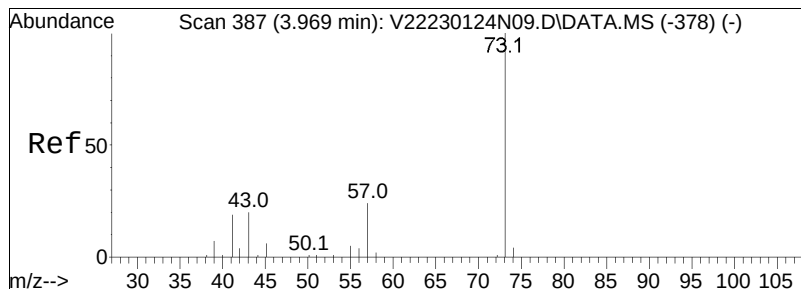
Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230810A\
 Data File : V22230810A27.D
 Acq On : 10 Aug 2023 07:22 pm
 Operator : VOA122:PID
 Sample : WG1814675-6,31,10,10,,A1,R3B (Sig #1); L2346073-02MS,31,10,10,,A1,R3B (Sig #2)
 Misc : WG1814675,ICAL20205 (Sig #1); WG,ICAL20205 (Sig #2)
 ALS Vial : 27 Sample Multiplier: 1

Quant Time: Aug 11 06:56:39 2023
 Quant Method : K:\VOA122\2023\230810A\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:11:40 2023
 Response via : Initial Calibration

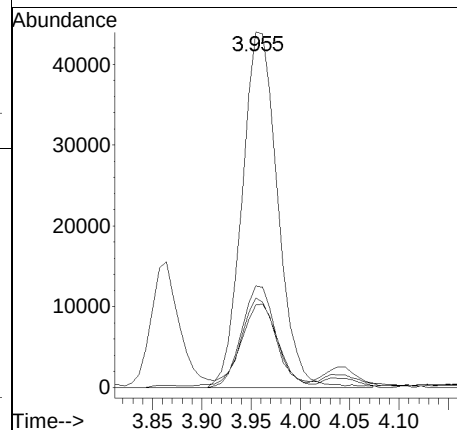
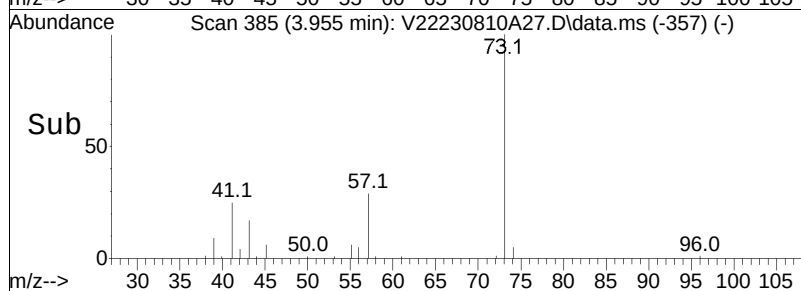
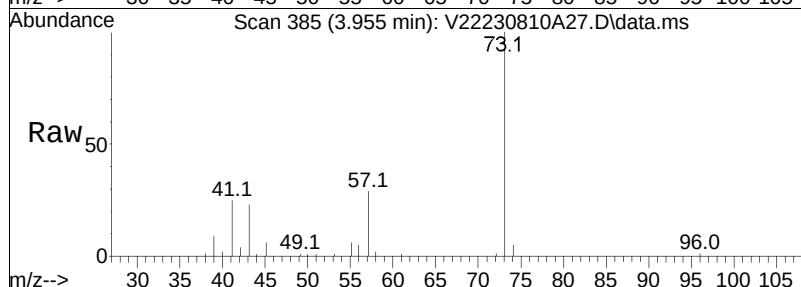
Sub List : 8260-NYCP51 - NYCP5130810A\V22230810A03.D•

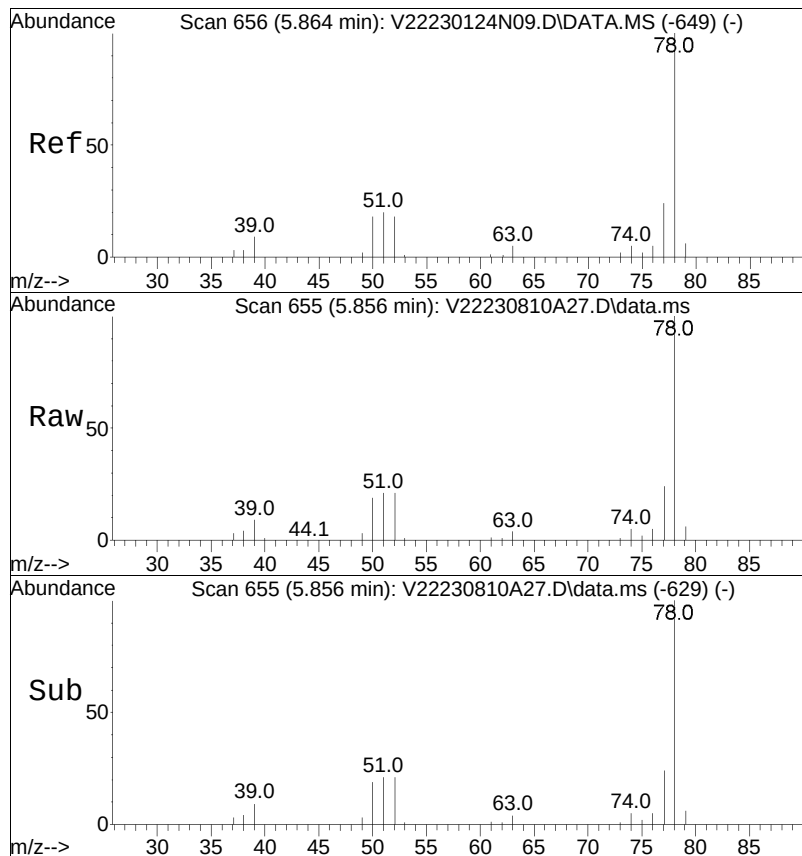




#21
Methyl tert-butyl ether
Concen: 10.44 ug/L
RT: 3.955 min Scan# 385
Delta R.T. -0.007 min
Lab File: V22230810A27.D
Acq: 10 Aug 2023 07:22 pm

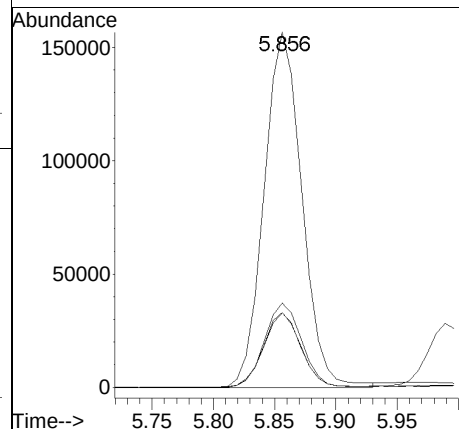
Tgt Ion:	73	Resp:	110386
Ion Ratio	Lower	Upper	
73	100		
57	27.7	13.6	28.2
43	22.9	12.7	26.5
41	24.8	11.4	23.8#

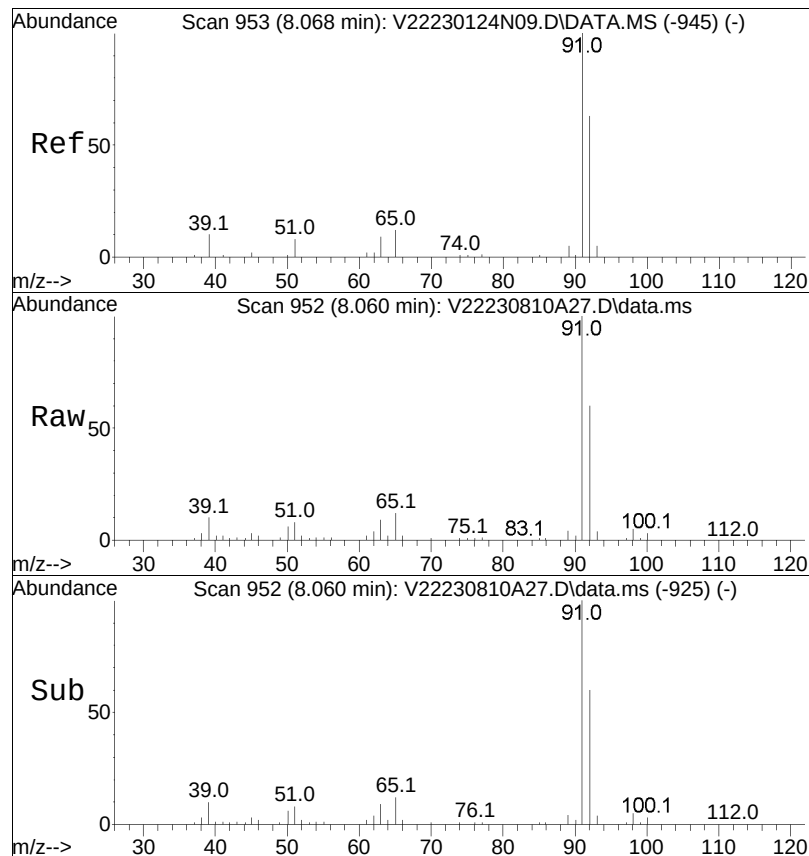




#44
 Benzene
 Concen: 16.70 ug/L
 RT: 5.856 min Scan# 655
 Delta R.T. 0.000 min
 Lab File: V22230810A27.D
 Acq: 10 Aug 2023 07:22 pm

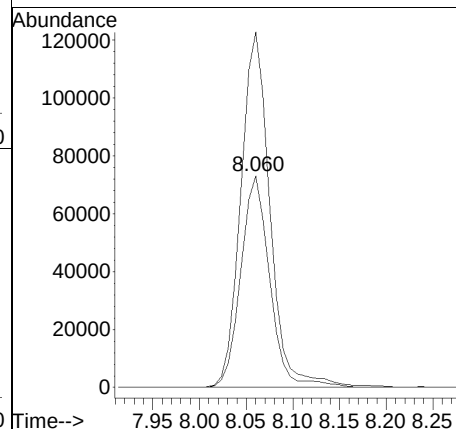
Tgt Ion: 78	Resp: 336739
Ion Ratio	Lower Upper
78 100	
77 23.6	15.4 32.0
51 20.6	9.8 20.4#
52 20.9	9.2 19.2#

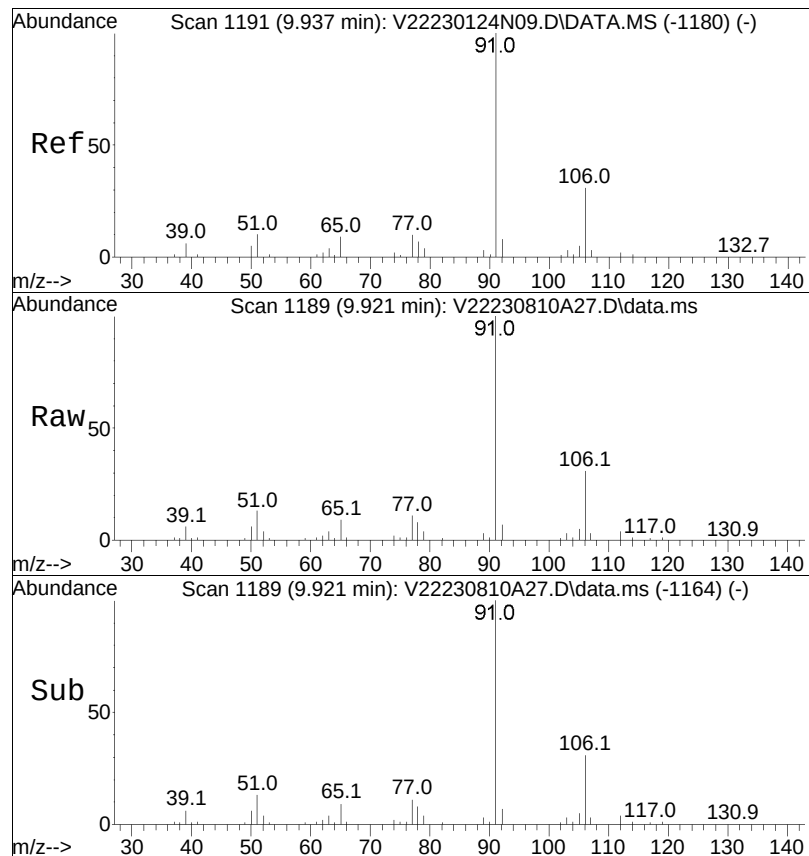




#64
Toluene
Concen: 11.04 ug/L
RT: 8.060 min Scan# 952
Delta R.T. 0.000 min
Lab File: V22230810A27.D
Acq: 10 Aug 2023 07:22 pm

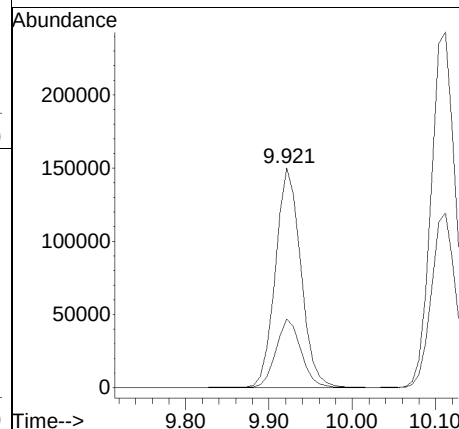
Tgt Ion: 92 Resp: 158154
Ion Ratio Lower Upper
92 100
91 169.5 137.0 205.6

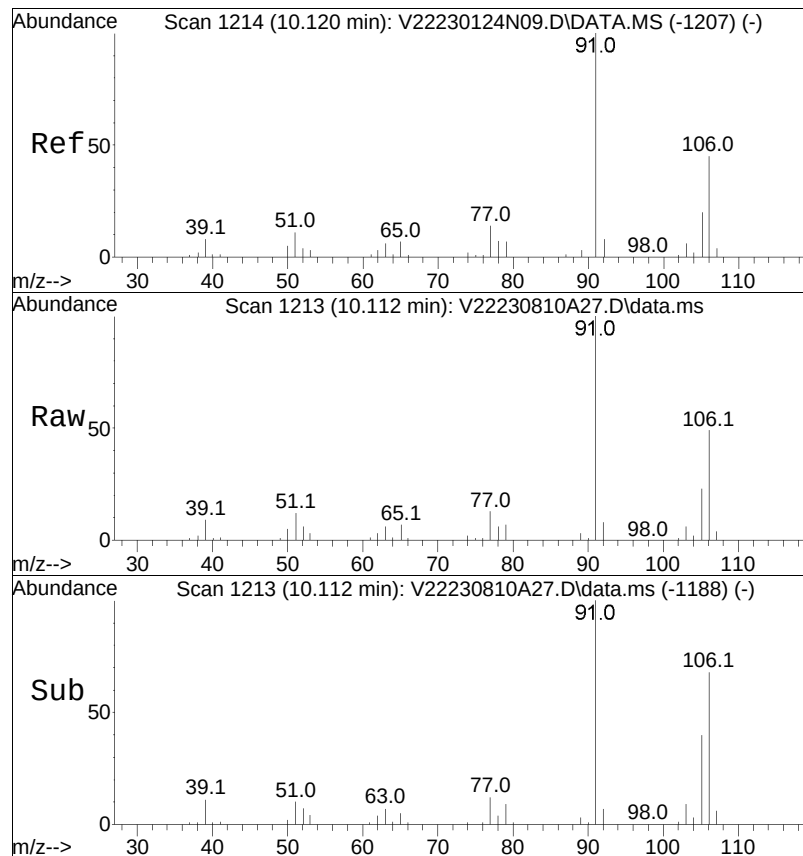




#78
 Ethylbenzene
 Concen: 11.40 ug/L
 RT: 9.921 min Scan# 1189
 Delta R.T. 0.000 min
 Lab File: V22230810A27.D
 Acq: 10 Aug 2023 07:22 pm

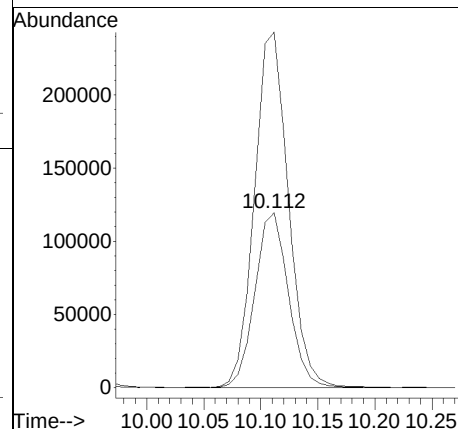
Tgt Ion:	91	Resp:	317475
Ion Ratio	Lower	Upper	
91	100		
106	30.5	25.8	38.6

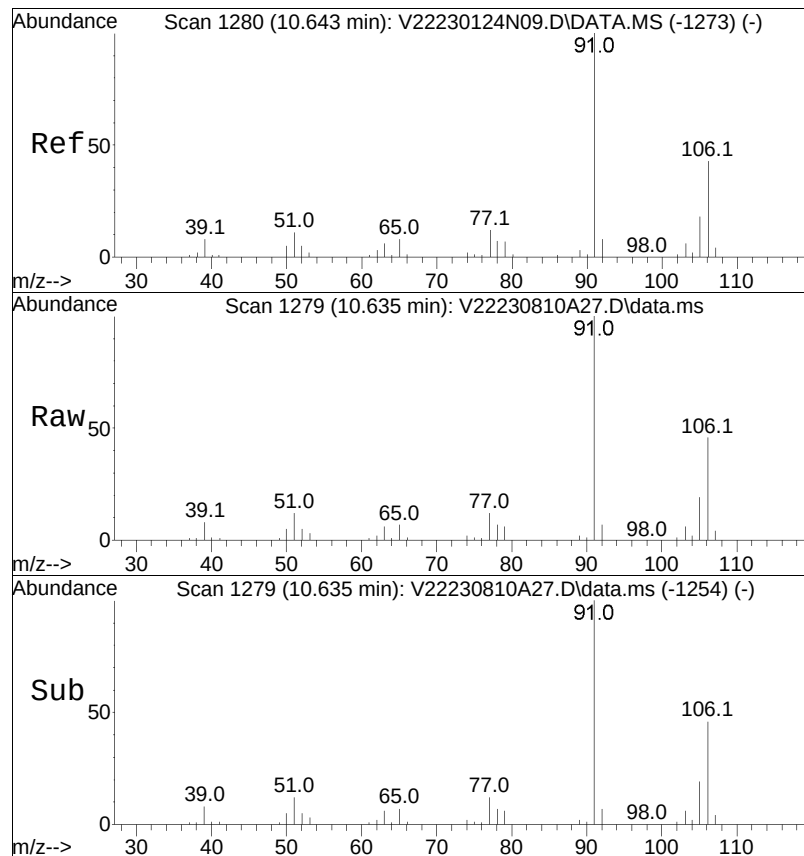




#80
 p/m Xylene
 Concen: 22.48 ug/L
 RT: 10.112 min Scan# 1213
 Delta R.T. 0.001 min
 Lab File: V22230810A27.D
 Acq: 10 Aug 2023 07:22 pm

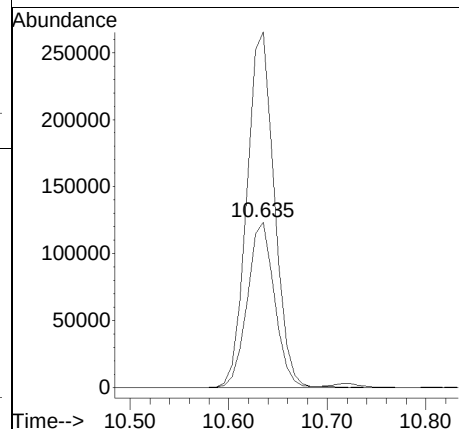
Tgt Ion	Ratio	Lower	Upper
106	100		
91	205.8	156.0	234.0

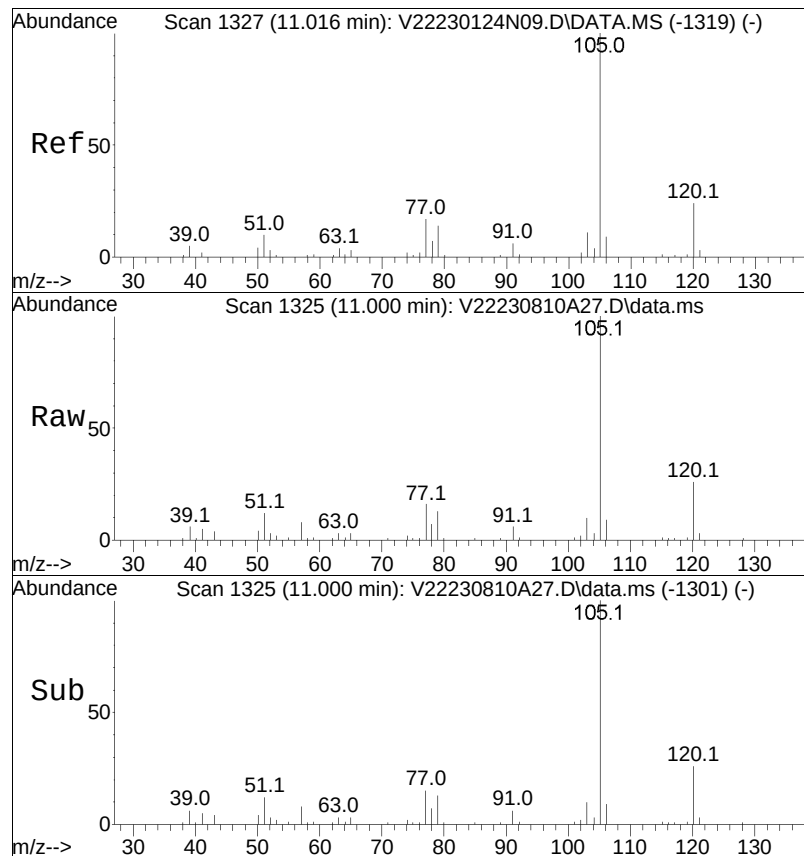




#81
 o Xylene
 Concen: 22.90 ug/L
 RT: 10.635 min Scan# 1279
 Delta R.T. -0.000 min
 Lab File: V22230810A27.D
 Acq: 10 Aug 2023 07:22 pm

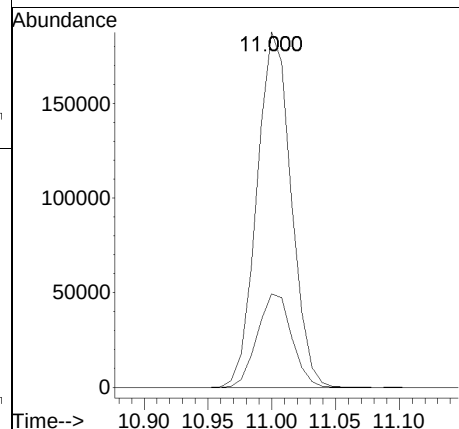
Tgt Ion	Ion	Ratio	Lower	Upper
106	100			
91	216.6	164.0	246.0	

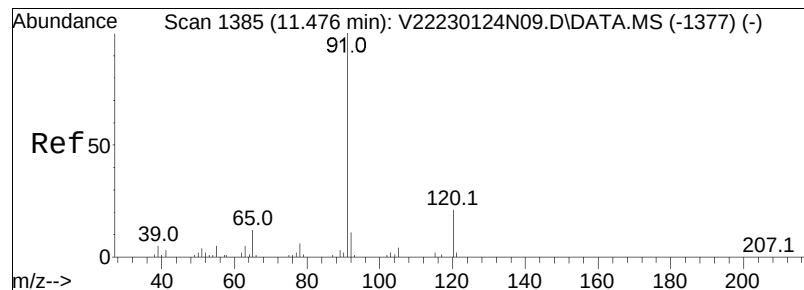




#86
 Isopropylbenzene
 Concen: 12.72 ug/L
 RT: 11.000 min Scan# 1325
 Delta R.T. -0.008 min
 Lab File: V22230810A27.D
 Acq: 10 Aug 2023 07:22 pm

Tgt	Ion	Ratio	Lower	Upper
105	100			
120	26.5	7.7	47.7	





#89

n-Propylbenzene

Concen: 11.30 ug/L

RT: 11.468 min Scan# 1384

Delta R.T. -0.000 min

Lab File: V22230810A27.D

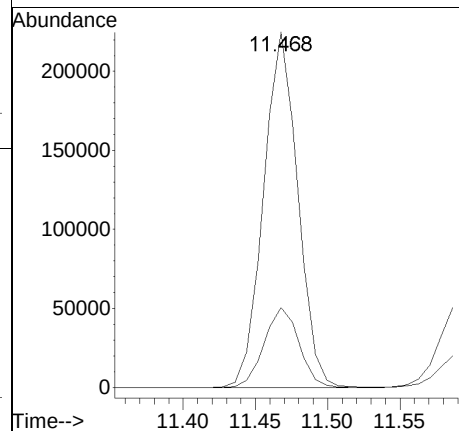
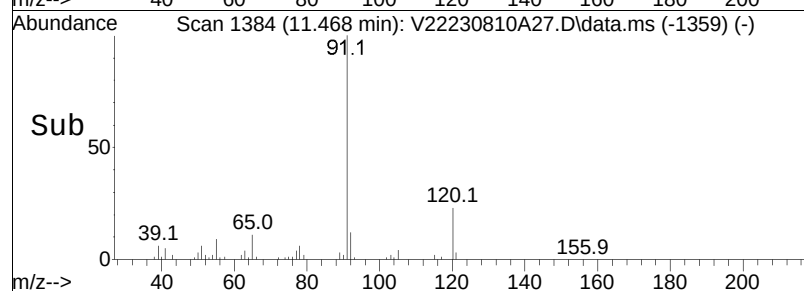
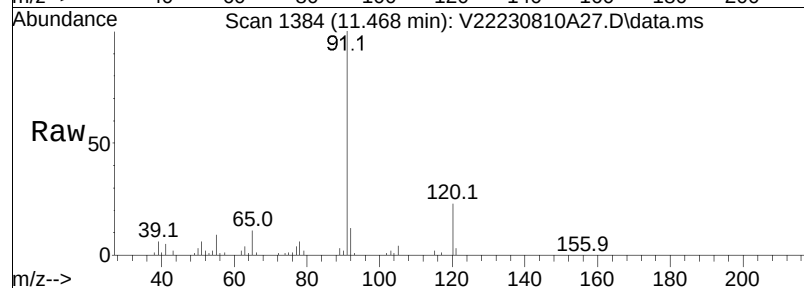
Acq: 10 Aug 2023 07:22 pm

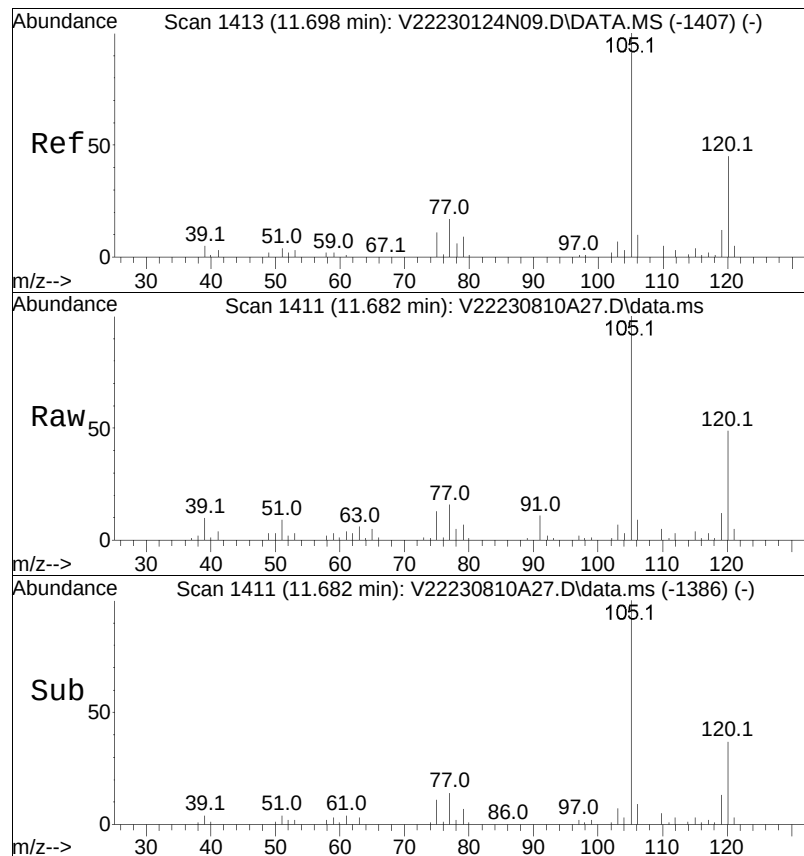
Tgt Ion: 91 Resp: 369841

Ion Ratio Lower Upper

91 100

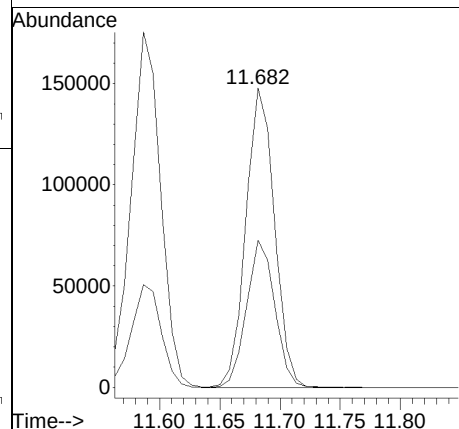
120 22.8 19.5 29.3

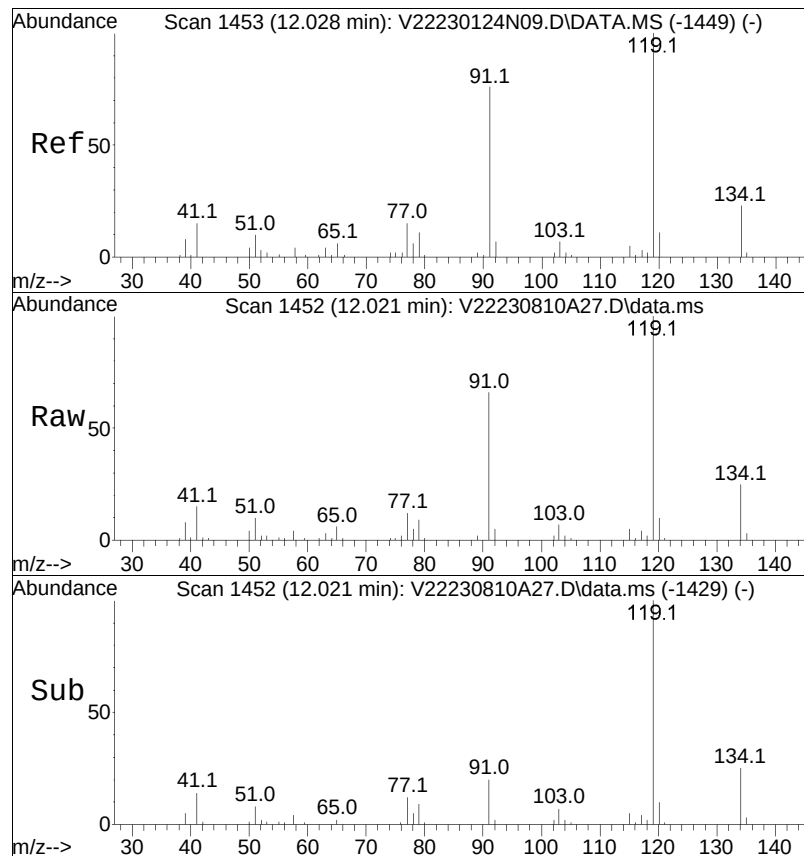




#94
 1,3,5-Trimethylbenzene
 Concen: 10.65 ug/L
 RT: 11.682 min Scan# 1411
 Delta R.T. -0.000 min
 Lab File: V22230810A27.D
 Acq: 10 Aug 2023 07:22 pm

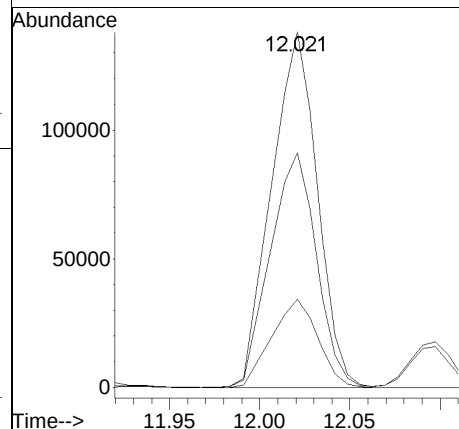
Tgt Ion:	105	Resp:	244182
Ion Ratio	Lower	Upper	
105	100		
120	48.5	40.9	61.3

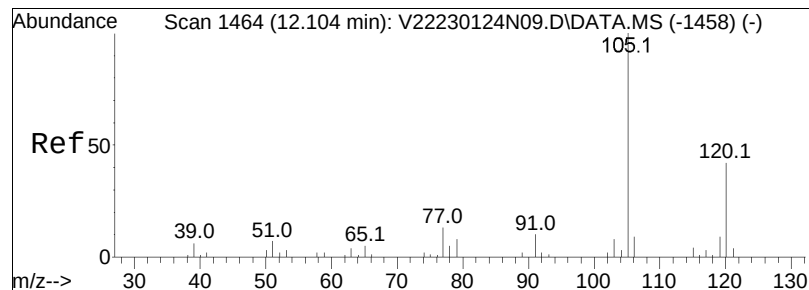




#98
 tert-Butylbenzene
 Concen: 10.71 ug/L
 RT: 12.021 min Scan# 1452
 Delta R.T. -0.000 min
 Lab File: V22230810A27.D
 Acq: 10 Aug 2023 07:22 pm

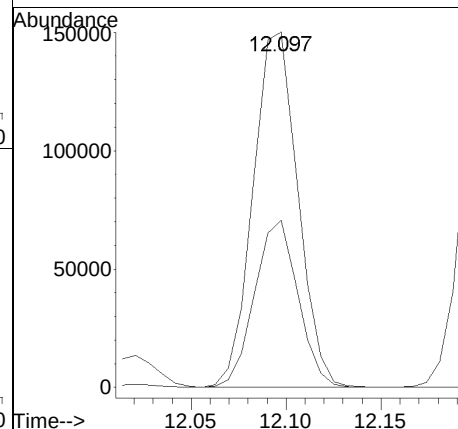
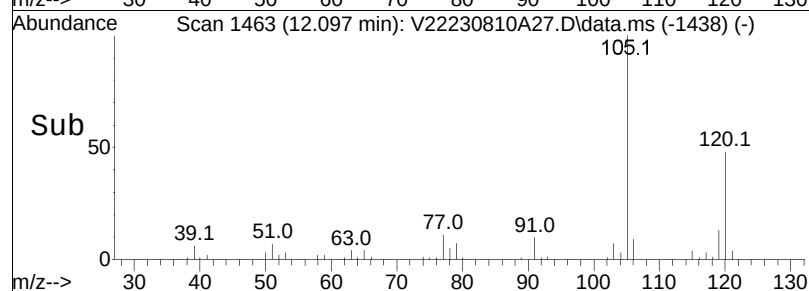
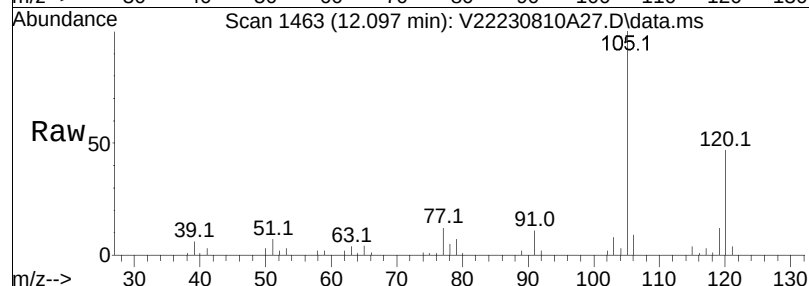
Tgt	Ion	Ratio	Lower	Upper
119	100			
91	66.0	50.2	75.4	
134	24.8	20.8	31.2	

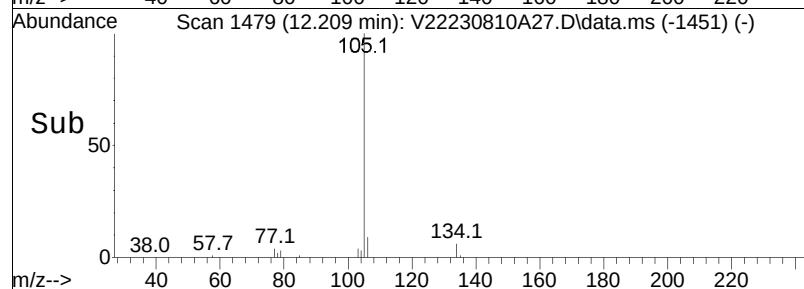
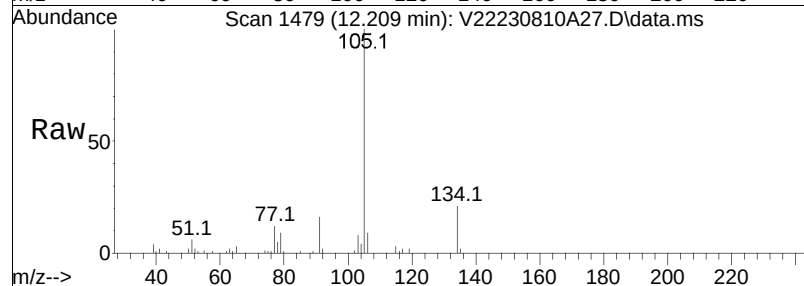
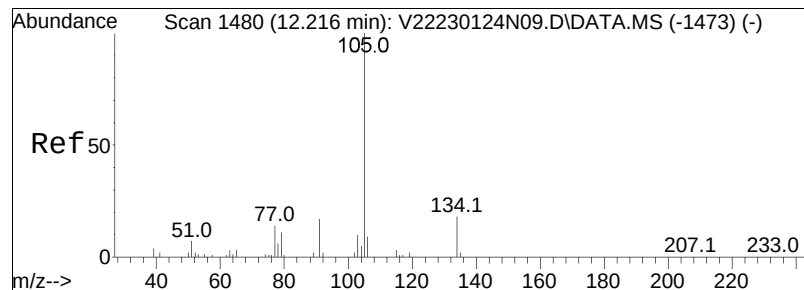




#101
 1,2,4-Trimethylbenzene
 Concen: 11.24 ug/L
 RT: 12.097 min Scan# 1463
 Delta R.T. 0.000 min
 Lab File: V22230810A27.D
 Acq: 10 Aug 2023 07:22 pm

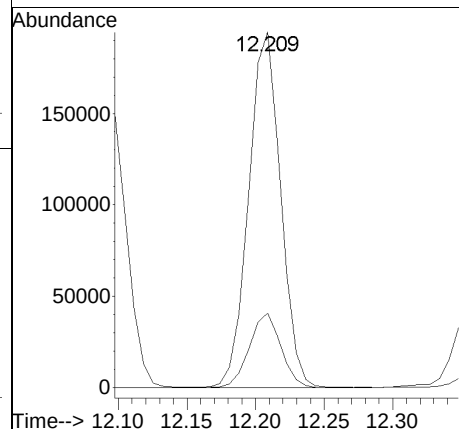
Tgt Ion	Ratio	Lower	Upper
105	100		
120	45.5	38.5	57.7

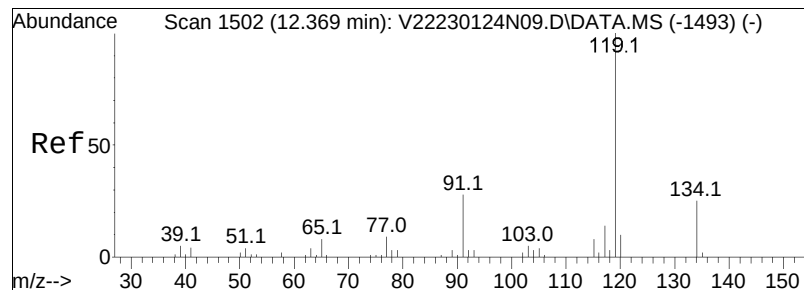




#102
 sec-Butylbenzene
 Concen: 10.96 ug/L
 RT: 12.209 min Scan# 1479
 Delta R.T. -0.000 min
 Lab File: V22230810A27.D
 Acq: 10 Aug 2023 07:22 pm

Tgt Ion	Ratio	Lower	Upper
105	100		
134	20.5	13.9	28.9





#103

p-Isopropyltoluene

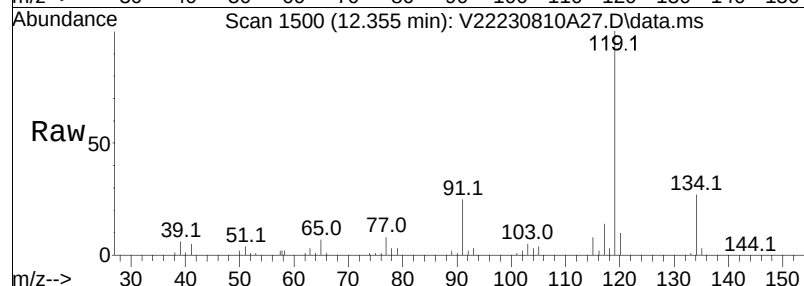
Concen: 10.99 ug/L

RT: 12.355 min Scan# 1500

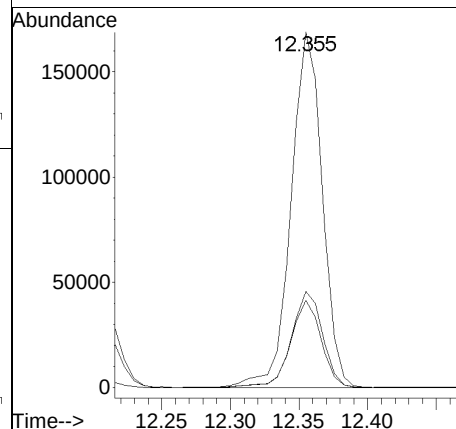
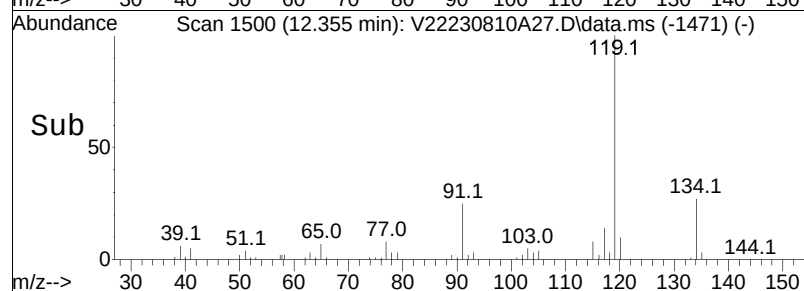
Delta R.T. -0.000 min

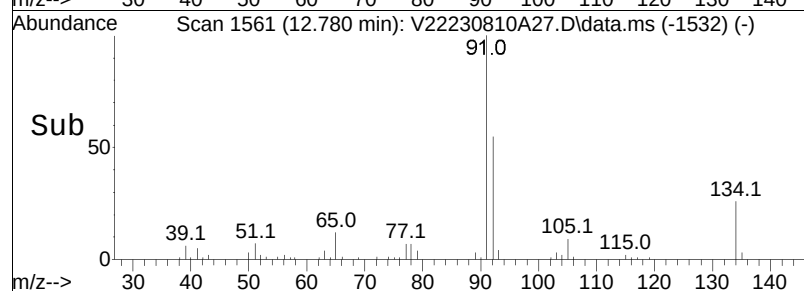
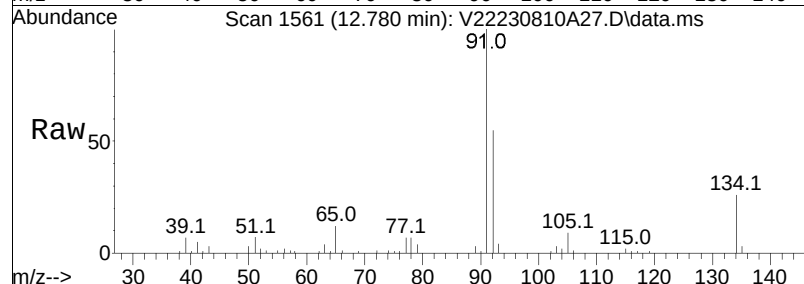
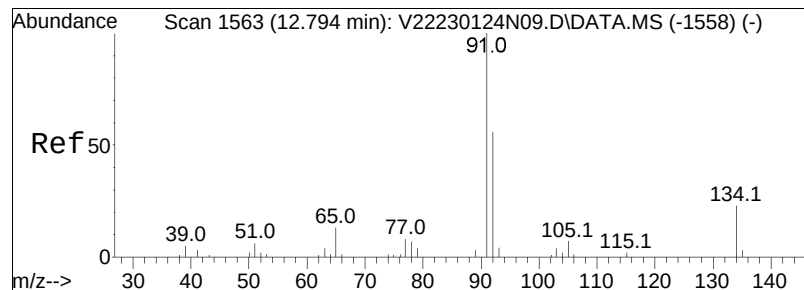
Lab File: V22230810A27.D

Acq: 10 Aug 2023 07:22 pm



Tgt	Ion:119	Resp:	266962
Ion	Ratio	Lower	Upper
119	100		
134	26.9	17.7	36.7
91	24.2	14.1	29.3





#107

n-Butylbenzene

Concen: 10.71 ug/L

RT: 12.780 min Scan# 1561

Delta R.T. 0.001 min

Lab File: V22230810A27.D

Acq: 10 Aug 2023 07:22 pm

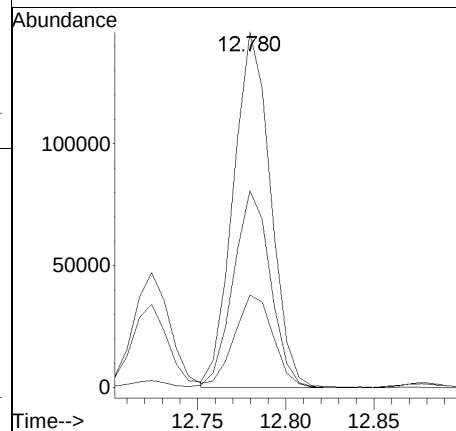
Tgt Ion: 91 Resp: 214227

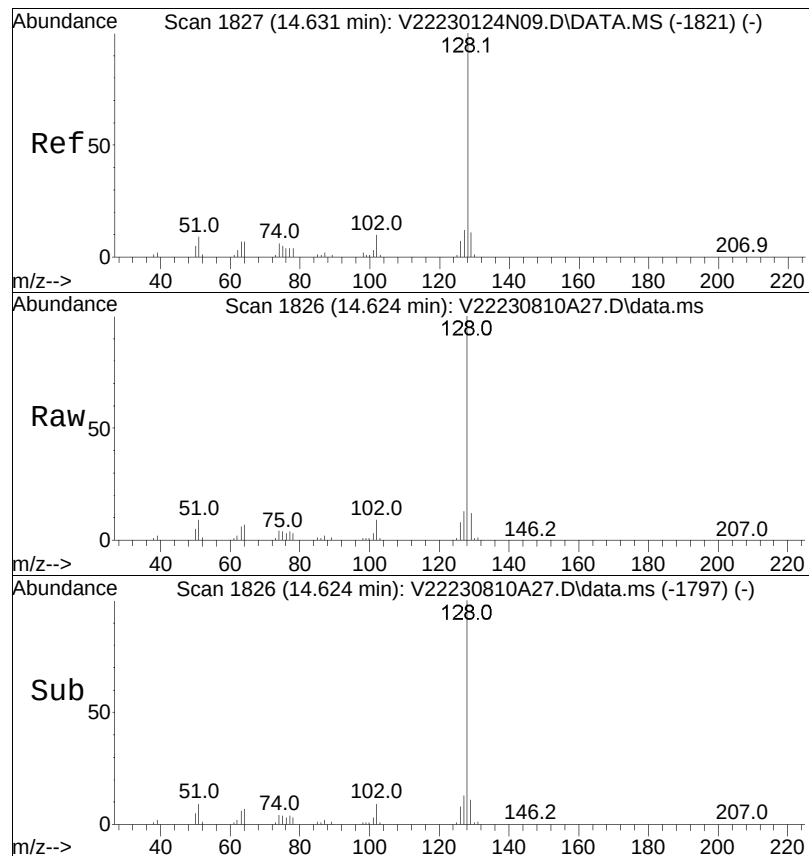
Ion Ratio Lower Upper

91 100

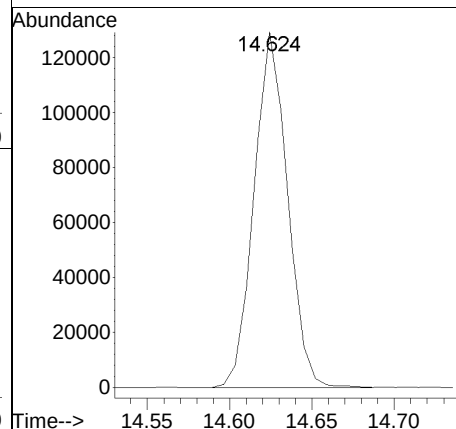
92 55.1 44.6 66.8

134 27.0 22.9 34.3





#114
 Naphthalene
 Concen: 12.72 ug/L
 RT: 14.624 min Scan# 1826
 Delta R.T. 0.000 min
 Lab File: V22230810A27.D
 Acq: 10 Aug 2023 07:22 pm
 Tgt Ion:128 Resp: 182456



Manual Integration Report

Data Path : K:\V0A122\2023\230810A\ QMethod : V122_230726N_8260.m
Data File : V22230810A27.D Operator : V0A122:PID
Date Inj'd : 8/10/2023 7:22 pm Instrument : V0A122
Sample : WG1814675-6,31,10,10,,A1,RQuant Date : 8/11/2023 6:56 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230810A\
 Data File : V22230810A28.D
 Acq On : 10 Aug 2023 07:47 pm
 Operator : VOA122:PID
 Sample : WG1814675-7,31,10,10,,A2,R3B (Sig #1); L2346073-02MSD,31,10,10,,A2,R3B (Sig #2)
 Misc : WG1814675,ICAL20205 (Sig #1); WG,ICAL20205 (Sig #2)
 ALS Vial : 28 Sample Multiplier: 1

Quant Time: Aug 11 06:56:44 2023
 Quant Method : K:\VOA122\2023\230810A\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:11:40 2023
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA122\2023\230810A\V22230810A03.D
 Sub List : 8260-NYCP51 - NYCP51

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

Internal Standards						
1) Fluorobenzene	6.284	96	382169	10.000	ug/L	0.00
Standard Area 1 = 397815			Recovery	=	96.07%	
62) Chlorobenzene-d5	9.866	117	391075	10.000	ug/L	0.00
Standard Area 1 = 393438			Recovery	=	99.40%	
83) 1,4-Dichlorobenzene-d4	12.501	152	214818	10.000	ug/L	0.00
Standard Area 1 = 214484			Recovery	=	100.16%	
System Monitoring Compounds						
38) Dibromofluoromethane	5.453	113	136546	10.292	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	102.92%	
46) 1,2-Dichloroethane-d4	5.989	65	136179	10.384	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	103.84%	
63) Toluene-d8	8.001	98	479768	10.109	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	101.09%	
87) 4-Bromofluorobenzene	11.317	95	192902	10.798	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	107.98%	
Target Compounds						
21) Methyl tert-butyl ether	3.962	73	113876	10.408	ug/L	# 88
44) Benzene	5.856	78	347290	16.646	ug/L	# 92
64) Toluene	8.060	92	165148	11.126	ug/L	98
78) Ethylbenzene	9.921	91	325159	11.273	ug/L	99
80) p/m Xylene	10.112	106	252915	22.519	ug/L	95
81) o Xylene	10.635	106	243126	22.738	ug/L	93
86) Isopropylbenzene	11.000	105	362777	12.759	ug/L	98
89) n-Propylbenzene	11.468	91	384594	11.364	ug/L	97
94) 1,3,5-Trimethylbenzene	11.682	105	252386	10.645	ug/L	97
98) tert-Butylbenzene	12.021	119	243868	10.823	ug/L	97
101) 1,2,4-Trimethylbenzene	12.097	105	249086	10.979	ug/L	96
102) sec-Butylbenzene	12.209	105	328924	11.069	ug/L	98
103) p-Isopropyltoluene	12.355	119	280241	11.158	ug/L	97
107) n-Butylbenzene	12.780	91	222234	10.750	ug/L	98
114) Naphthalene	14.624	128	190175	12.823	ug/L	100

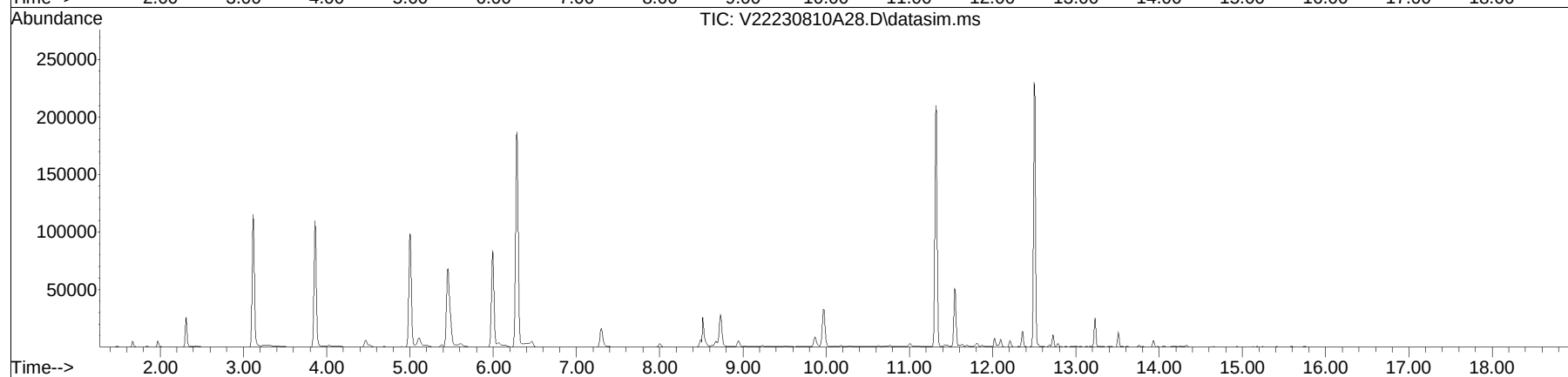
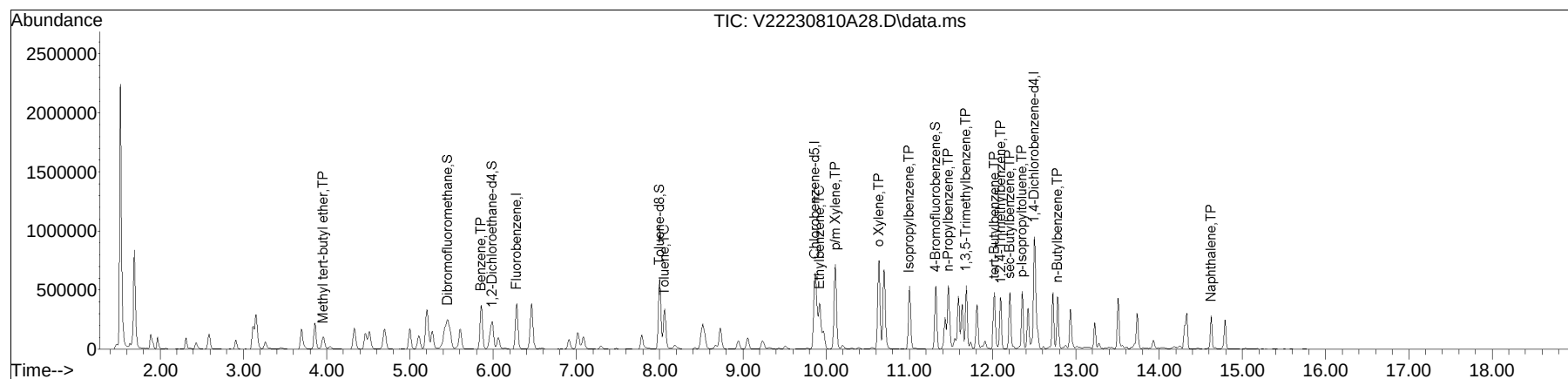
(#) = qualifier out of range (m) = manual integration (+) = signals summed

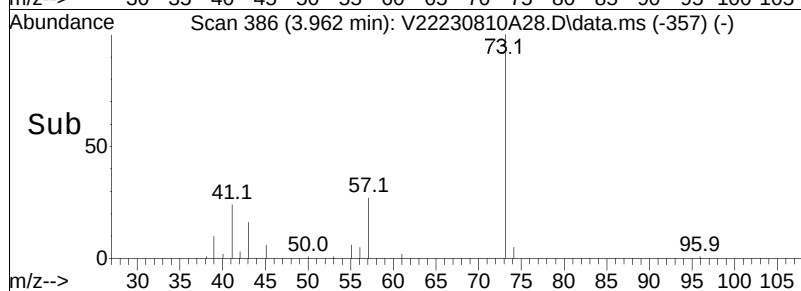
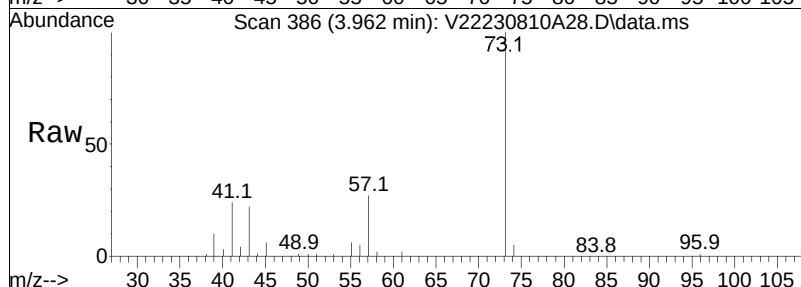
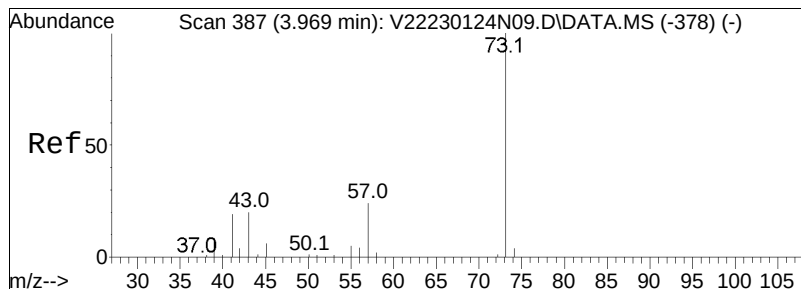
Quantitation Report (QT Reviewed)

Data Path : K:\VOA122\2023\230810A\
 Data File : V22230810A28.D
 Acq On : 10 Aug 2023 07:47 pm
 Operator : VOA122:PID
 Sample : WG1814675-7,31,10,10,,A2,R3B (Sig #1); L2346073-02MSD,31,10,10,,A2,R3B (Sig #2)
 Misc : WG1814675,ICAL20205 (Sig #1); WG,ICAL20205 (Sig #2)
 ALS Vial : 28 Sample Multiplier: 1

Quant Time: Aug 11 06:56:44 2023
 Quant Method : K:\VOA122\2023\230810A\V122_230726N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Jul 27 09:11:40 2023
 Response via : Initial Calibration

Sub List : 8260-NYCP51 - NYCP5130810A\V22230810A03.D•





#21

Methyl tert-butyl ether

Concen: 10.41 ug/L

RT: 3.962 min Scan# 386

Delta R.T. -0.000 min

Lab File: V22230810A28.D

Acq: 10 Aug 2023 07:47 pm

Tgt Ion: 73 Resp: 113876

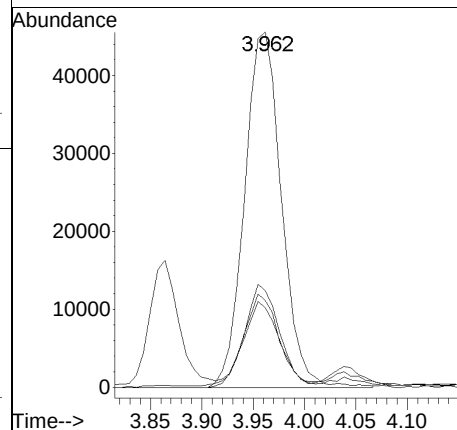
Ion Ratio Lower Upper

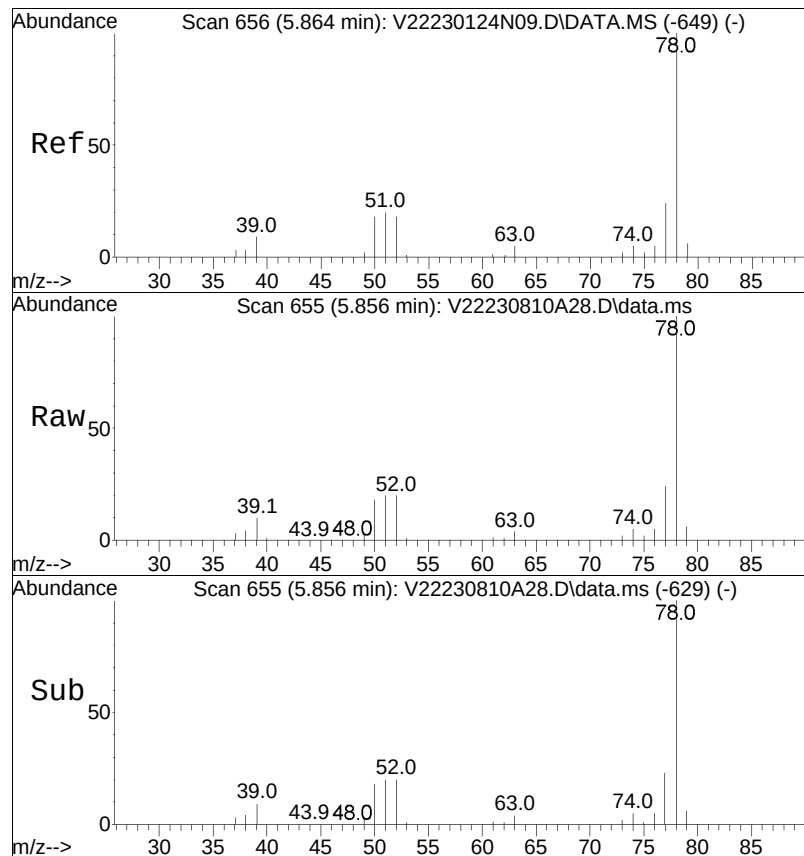
73 100

57 27.6 13.6 28.2

43 22.5 12.7 26.5

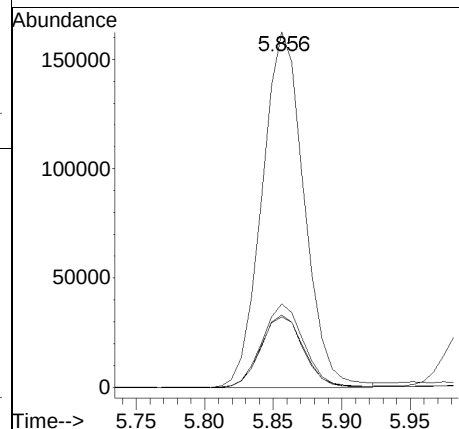
41 24.8 11.4 23.8#

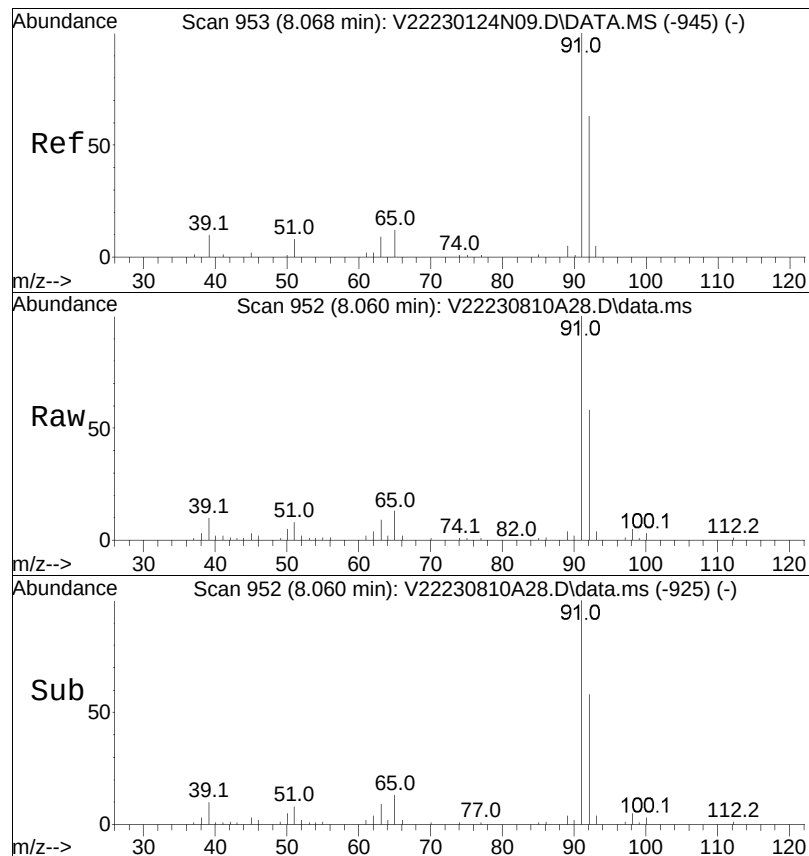




#44
Benzene
Concen: 16.65 ug/L
RT: 5.856 min Scan# 655
Delta R.T. 0.000 min
Lab File: V22230810A28.D
Acq: 10 Aug 2023 07:47 pm

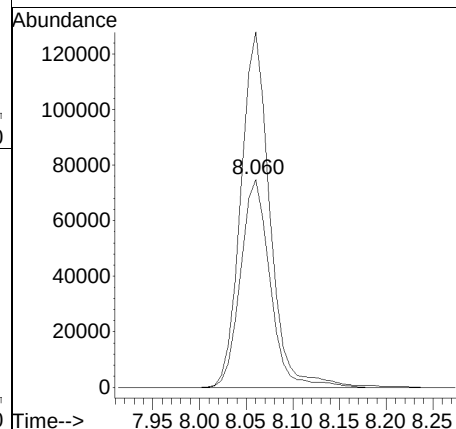
Tgt	Ion: 78	Resp:	347290
Ion	Ratio	Lower	Upper
78	100		
77	23.4	15.4	32.0
51	20.2	9.8	20.4
52	20.6	9.2	19.2#

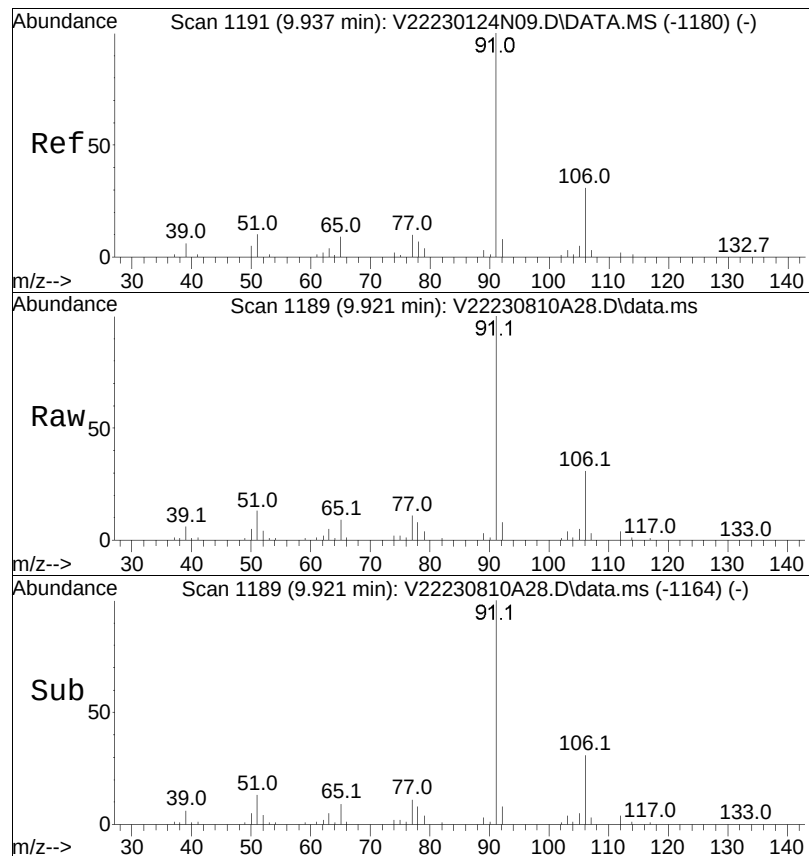




#64
 Toluene
 Concen: 11.13 ug/L
 RT: 8.060 min Scan# 952
 Delta R.T. 0.000 min
 Lab File: V22230810A28.D
 Acq: 10 Aug 2023 07:47 pm

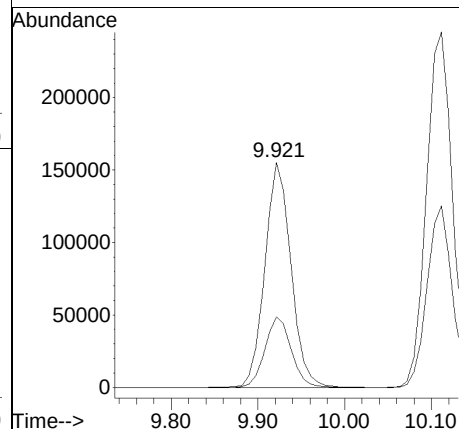
Tgt Ion	Ratio	Lower	Upper
92	100		
91	168.4	137.0	205.6

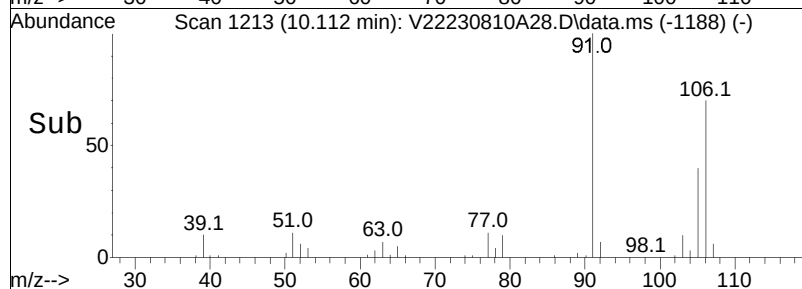
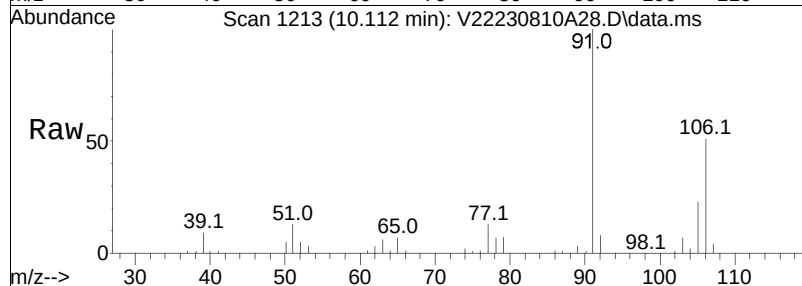
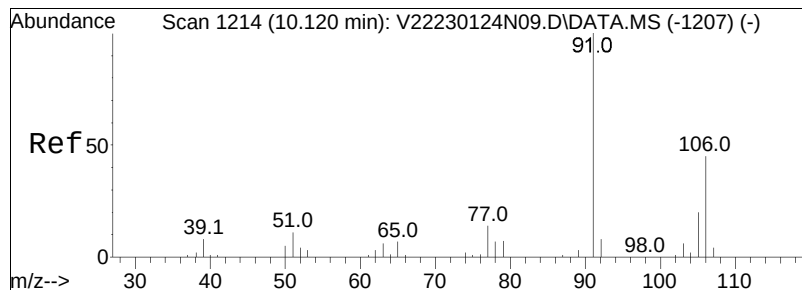




#78
 Ethylbenzene
 Concen: 11.27 ug/L
 RT: 9.921 min Scan# 1189
 Delta R.T. 0.000 min
 Lab File: V22230810A28.D
 Acq: 10 Aug 2023 07:47 pm

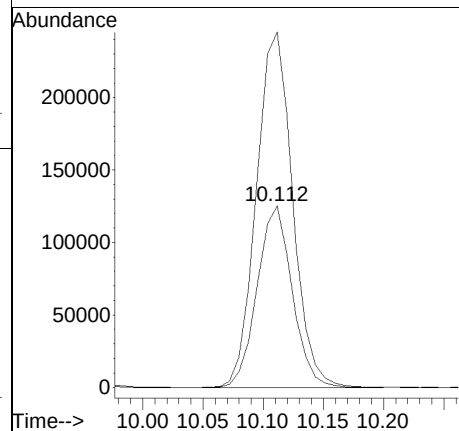
Tgt Ion	91	106	Ratio	Lower	Upper
91	100				
106	31.4		25.8	38.6	

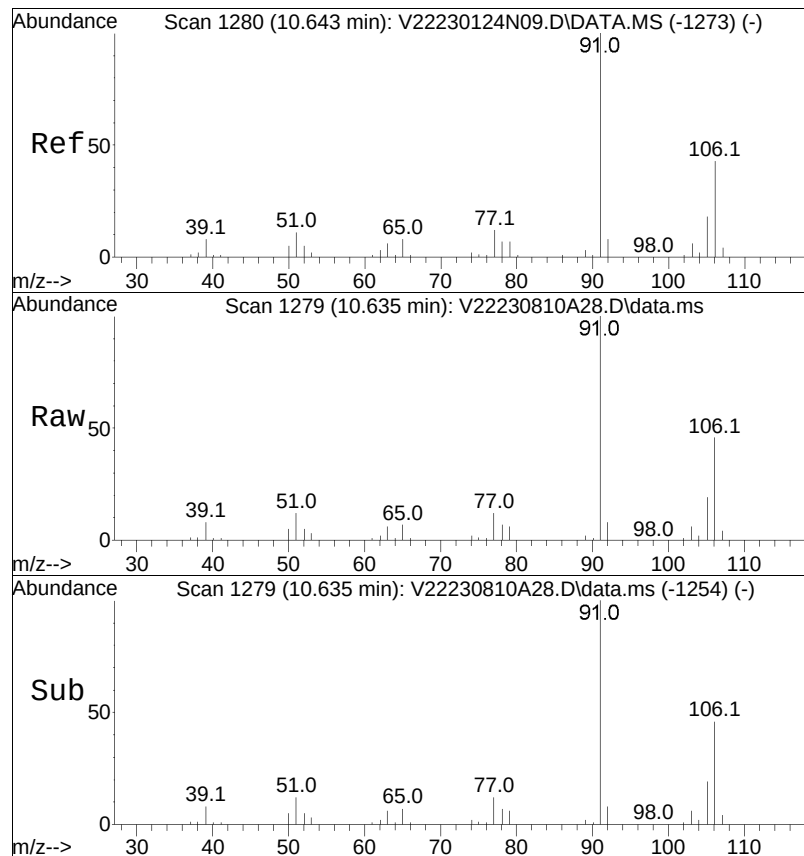




#80
 p/m Xylene
 Concen: 22.52 ug/L
 RT: 10.112 min Scan# 1213
 Delta R.T. 0.001 min
 Lab File: V22230810A28.D
 Acq: 10 Aug 2023 07:47 pm

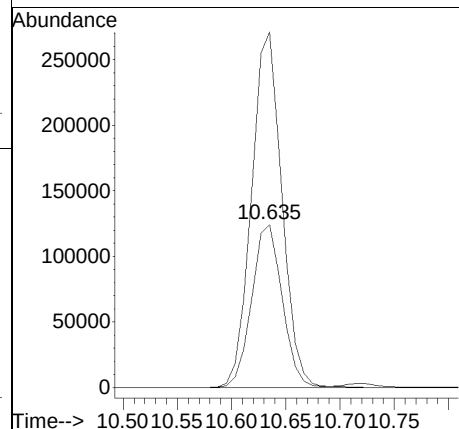
Tgt Ion	Ratio	Lower	Upper
106	100		
91	202.7	156.0	234.0

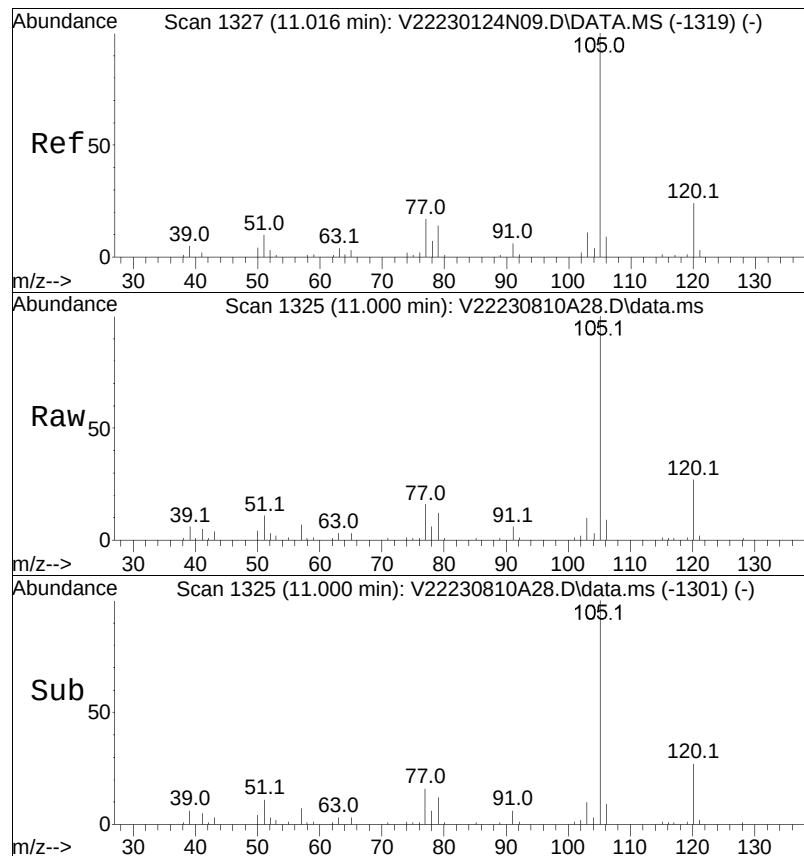




#81
 o Xylene
 Concen: 22.74 ug/L
 RT: 10.635 min Scan# 1279
 Delta R.T. -0.000 min
 Lab File: V22230810A28.D
 Acq: 10 Aug 2023 07:47 pm

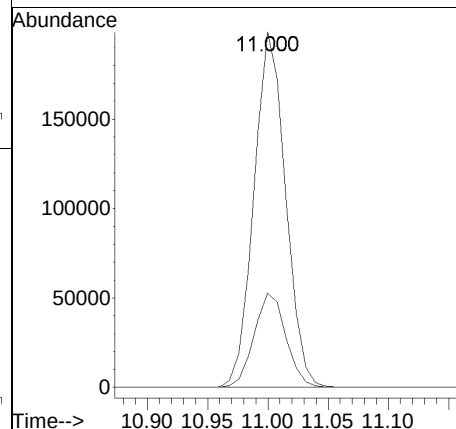
Tgt Ion	Ion	Ratio	Lower	Upper
106	100			
91	216.4	164.0	246.0	

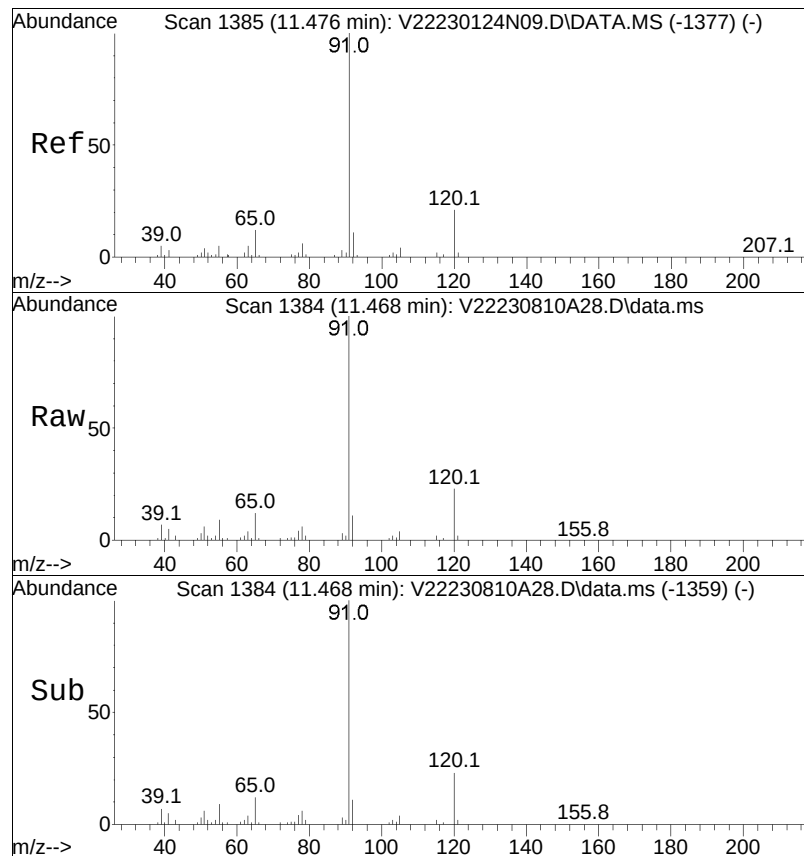




#86
Isopropylbenzene
Concen: 12.76 ug/L
RT: 11.000 min Scan# 1325
Delta R.T. -0.008 min
Lab File: V22230810A28.D
Acq: 10 Aug 2023 07:47 pm

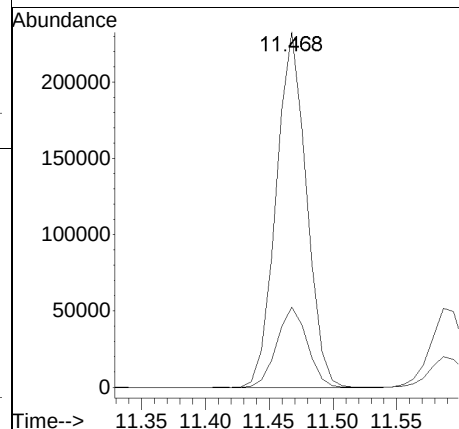
Tgt Ion	105	120	Ratio	Lower	Upper
105	100				
120	26.7		7.7		47.7

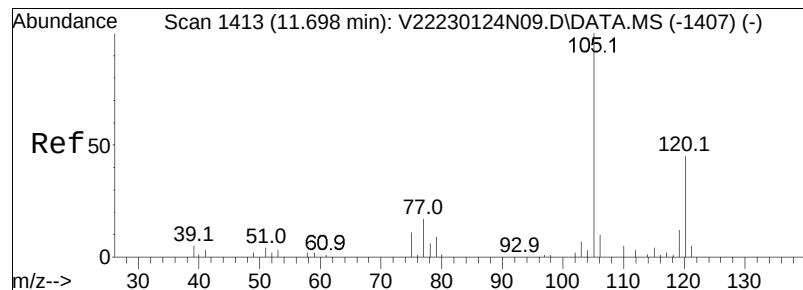




#89
 n-Propylbenzene
 Concen: 11.36 ug/L
 RT: 11.468 min Scan# 1384
 Delta R.T. -0.000 min
 Lab File: V22230810A28.D
 Acq: 10 Aug 2023 07:47 pm

Tgt Ion:	91	Resp:	384594
Ion Ratio	Lower	Upper	
91	100		
120	22.7	19.5	29.3





#94

1,3,5-Trimethylbenzene

Concen: 10.65 ug/L

RT: 11.682 min Scan# 1411

Delta R.T. -0.000 min

Lab File: V22230810A28.D

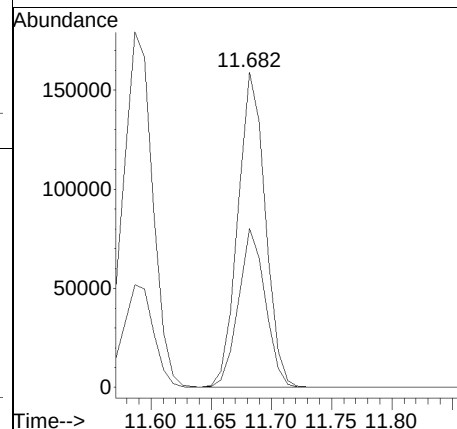
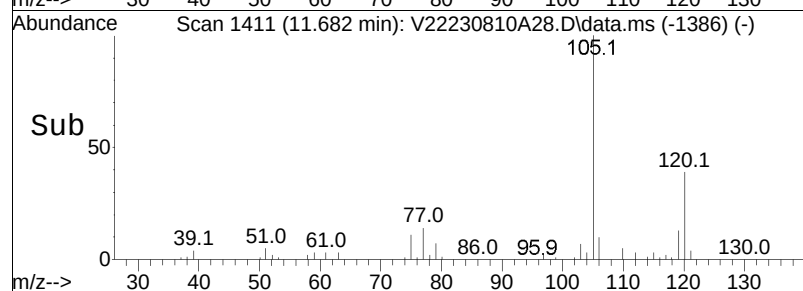
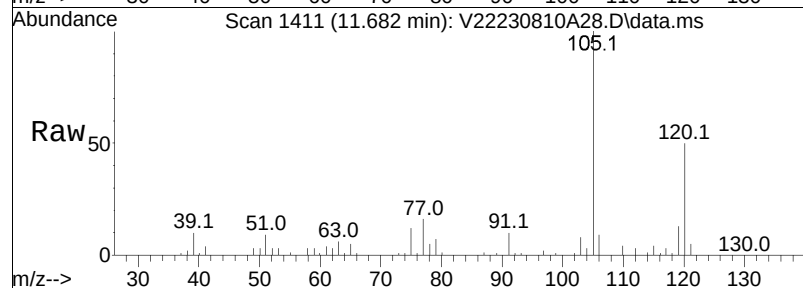
Acq: 10 Aug 2023 07:47 pm

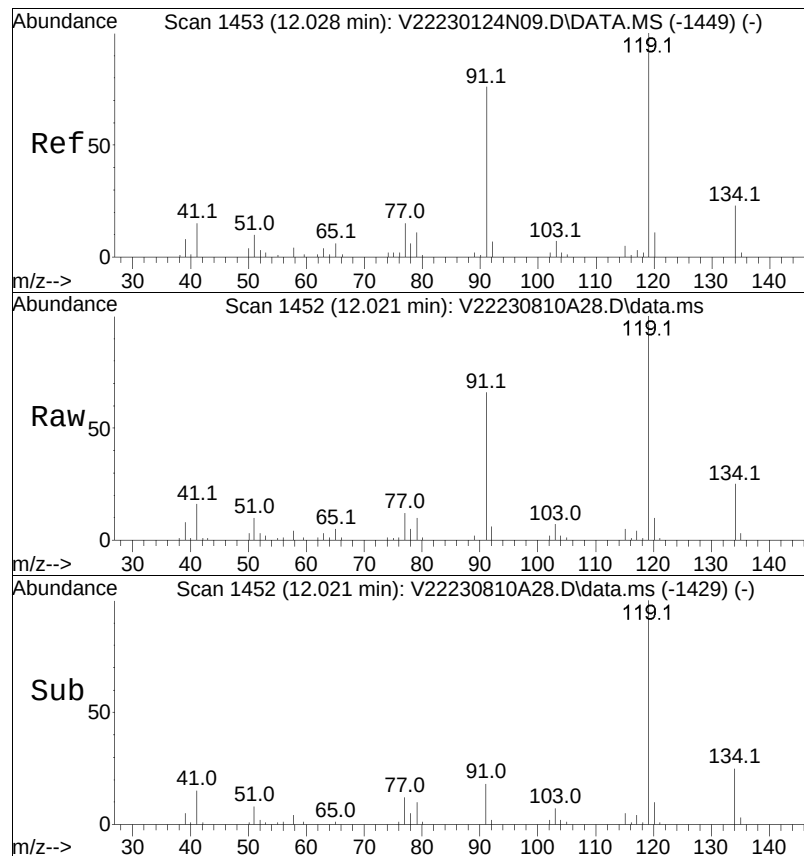
Tgt Ion:105 Resp: 252386

Ion Ratio Lower Upper

105 100

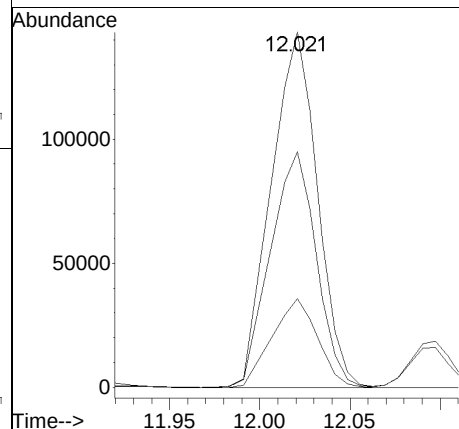
120 49.3 40.9 61.3

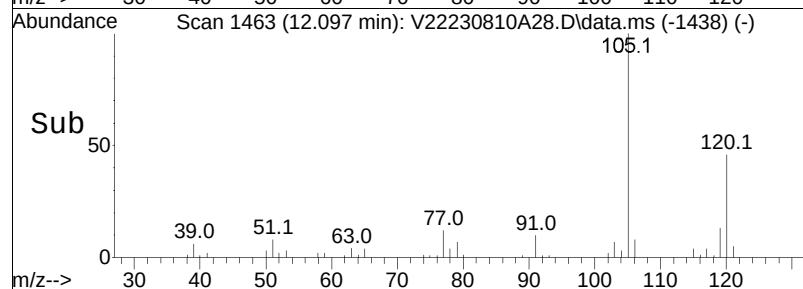
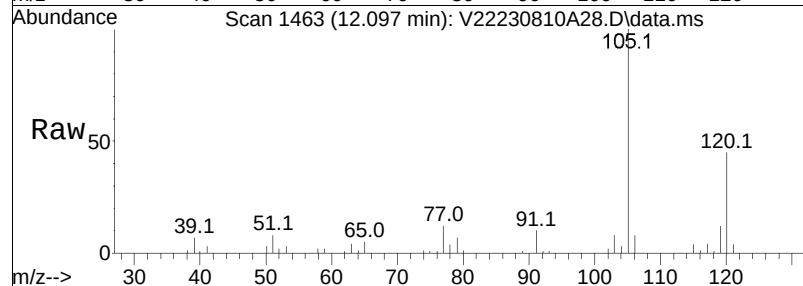
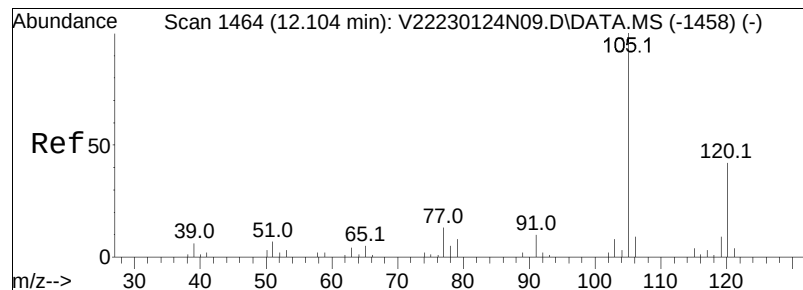




#98
 tert-Butylbenzene
 Concen: 10.82 ug/L
 RT: 12.021 min Scan# 1452
 Delta R.T. -0.000 min
 Lab File: V22230810A28.D
 Acq: 10 Aug 2023 07:47 pm

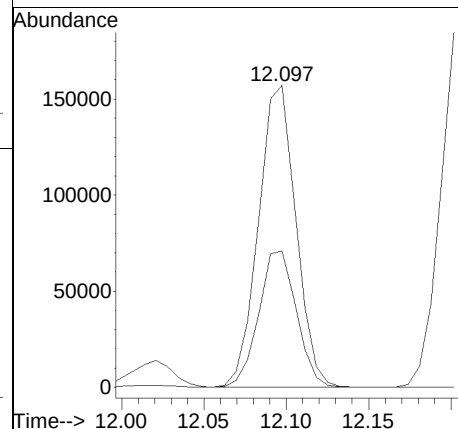
Tgt	Ion:119	Resp:	243868
Ion	Ratio	Lower	Upper
119	100		
91	65.3	50.2	75.4
134	24.5	20.8	31.2

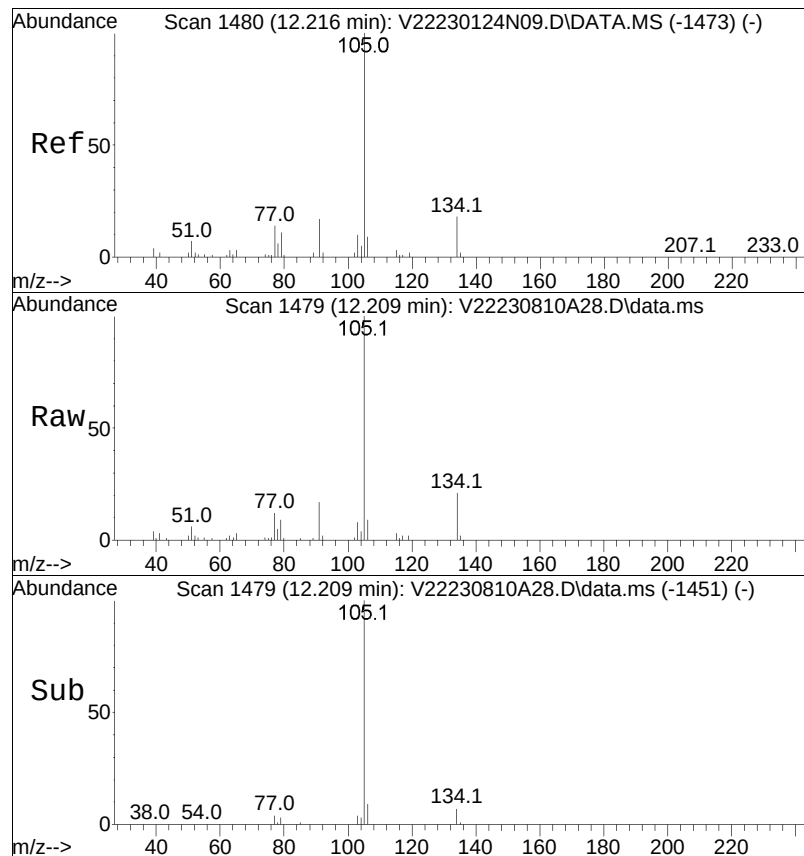




#101
 1,2,4-Trimethylbenzene
 Concen: 10.98 ug/L
 RT: 12.097 min Scan# 1463
 Delta R.T. 0.000 min
 Lab File: V22230810A28.D
 Acq: 10 Aug 2023 07:47 pm

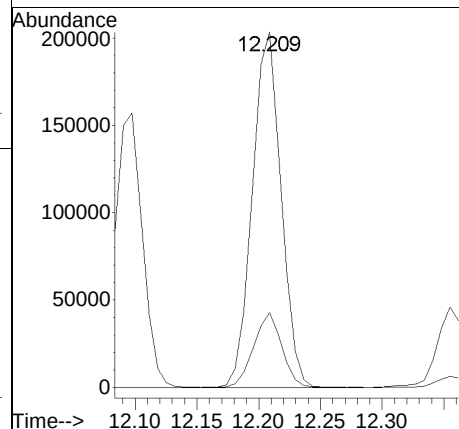
Tgt Ion	105	120	Ratio	Lower	Upper
105	100				
120	45.6		38.5	57.7	

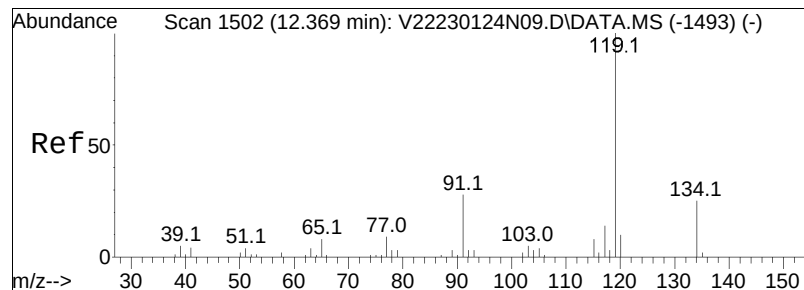




#102
 sec-Butylbenzene
 Concen: 11.07 ug/L
 RT: 12.209 min Scan# 1479
 Delta R.T. -0.000 min
 Lab File: V22230810A28.D
 Acq: 10 Aug 2023 07:47 pm

Tgt Ion	Ratio	Lower	Upper
105	100		
134	20.5	13.9	28.9





#103

p-Isopropyltoluene

Concen: 11.16 ug/L

RT: 12.355 min Scan# 1500

Delta R.T. -0.000 min

Lab File: V22230810A28.D

Acq: 10 Aug 2023 07:47 pm

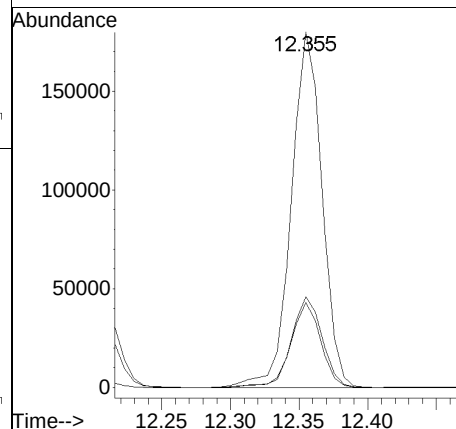
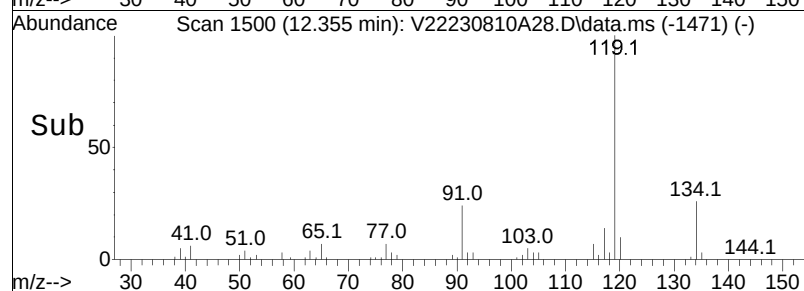
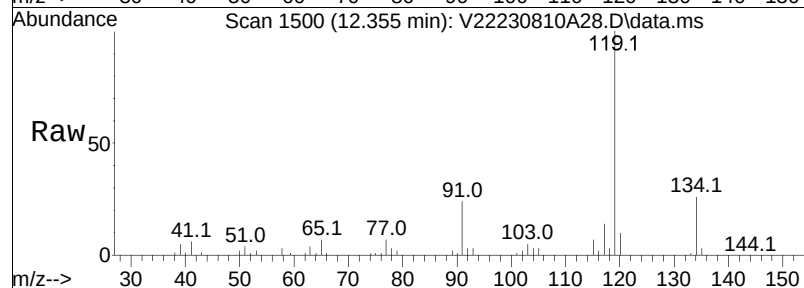
Tgt Ion:119 Resp: 280241

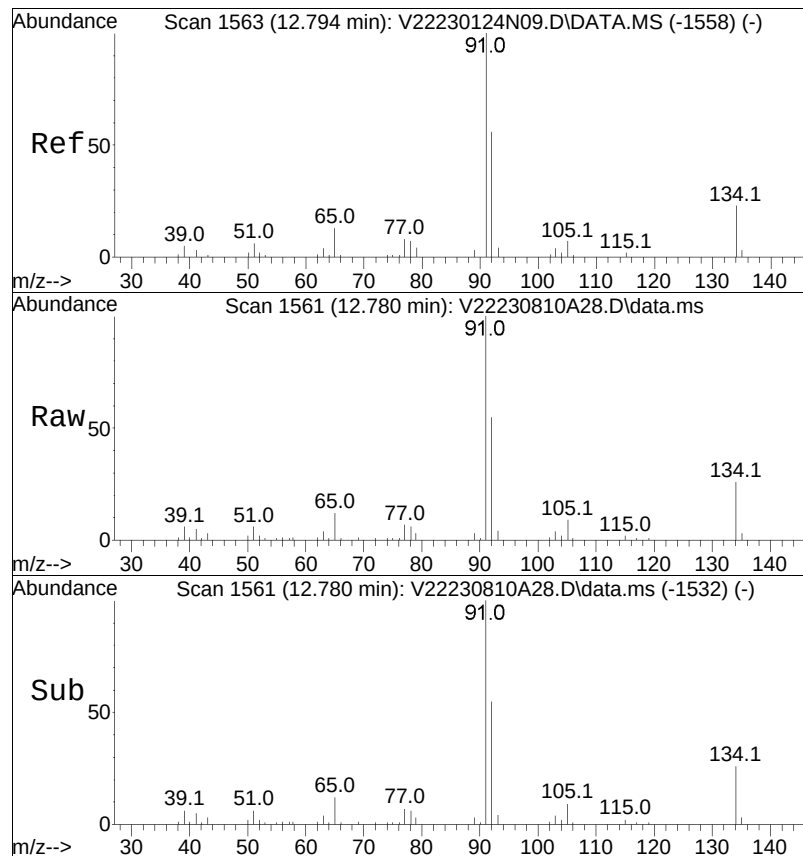
Ion Ratio Lower Upper

119 100

134 25.6 17.7 36.7

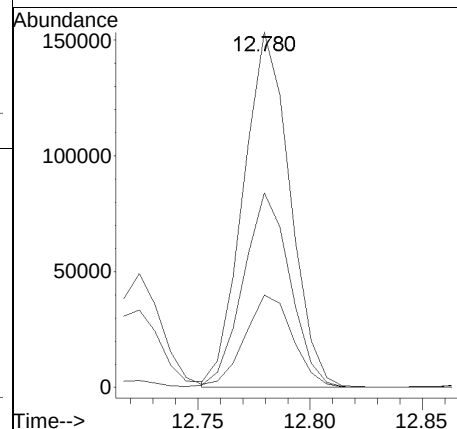
91 23.3 14.1 29.3

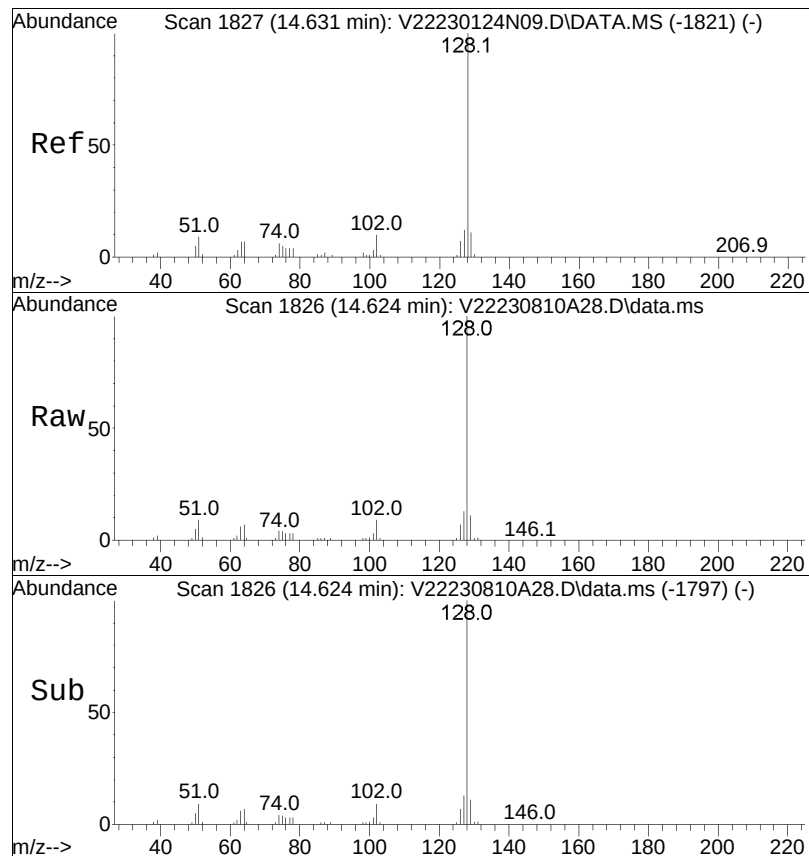




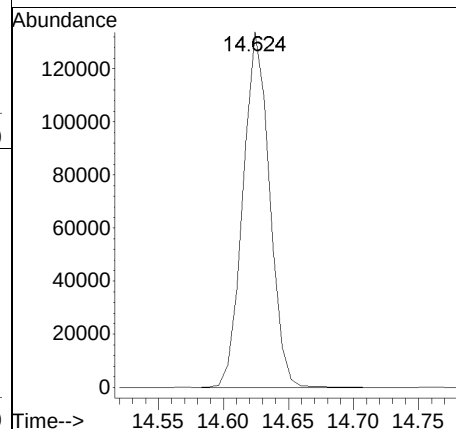
#107
 n-Butylbenzene
 Concen: 10.75 ug/L
 RT: 12.780 min Scan# 1561
 Delta R.T. 0.001 min
 Lab File: V22230810A28.D
 Acq: 10 Aug 2023 07:47 pm

Tgt Ion:	91	Resp:	222234
Ion Ratio	Lower	Upper	
91	100		
92	54.9	44.6	66.8
134	26.6	22.9	34.3





#114
 Naphthalene
 Concen: 12.82 ug/L
 RT: 14.624 min Scan# 1826
 Delta R.T. 0.000 min
 Lab File: V22230810A28.D
 Acq: 10 Aug 2023 07:47 pm
 Tgt Ion:128 Resp: 190175



Manual Integration Report

Data Path : K:\V0A122\2023\230810A\ QMethod : V122_230726N_8260.m
Data File : V22230810A28.D Operator : V0A122:PID
Date Inj'd : 8/10/2023 7:47 pm Instrument : V0A122
Sample : WG1814675-7,31,10,10,,A2,R Quant Date : 8/11/2023 6:56 am

There are no manual integrations or false positives in this file.



Calculation of Volatile Organic Compounds

Aqueous Concentration Formula: $Amt * DF * Uf * (1/Vo)$

Where:

DF = Dilution Factor

Vo = Sample Volume Purged (mL)

Uf = ng Unit Correction Factor (mL)

Soil Concentration Formula: $Amt * DF * (1/Wt)$

Where:

DF = Dilution Factor

Wt = Weight of Sample (g)

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Aug 11 2023, 03:07 pm

Work Group: WG1814675 for Department: 31 GC/MS - Volatiles

Created: 11-AUG-23 Due: Operator: PID

Sample	Client ID	C Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L2346047-01	TK 125 QUALIFIER	S NYTCL-8260-R2	WATER	DONE	U	0823	0811	3B	Vial-B
L2346073-01	MW-9	S NYCP51-8260	WATER	DONE	U	0823	0811	3B	Vial-B
L2346073-02	MW-10	S NYCP51-8260	WATER	DONE	U	0823	0811	3B	Vial-B
L2346073-03	DUP	S NYCP51-8260	WATER	DONE	U	0823	0811	3B	Vial-B
L2346073-04	EQUIPMENT BLANK	S NYCP51-8260	WATER	DONE	U	0823	0811	3B	Vial-B
L2346073-05	TRIP BLANK	S NYCP51-8260	WATER	DONE	U	0823	0811	3B	Vial-B
WG1814675-1	MS BFB Tune Standard	S NYTCL-8260-R2	WATER	DONE	U				
WG1814675-1	MS BFB Tune Standard	S NYCP51-8260	WATER	DONE	U				
WG1814675-2	Continuing Calibrati	S NYCP51-8260	WATER	DONE	U				
WG1814675-2	Continuing Calibrati	S NYTCL-8260-R2	WATER	DONE	U				
WG1814675-3	Laboratory Control S	S NYTCL-8260-R2	WATER	DACQ	U				
WG1814675-3	Laboratory Control S	S NYCP51-8260	WATER	DONE	U				
WG1814675-4	LCS Duplicate	S NYTCL-8260-R2	WATER	DACQ	U				
WG1814675-4	LCS Duplicate	S NYCP51-8260	WATER	DONE	U				
WG1814675-5	Laboratory Method Bl	S NYCP51-8260	WATER	DONE	U				
WG1814675-5	Laboratory Method Bl	S NYTCL-8260-R2	WATER	DACQ	U				
WG1814675-6	Matrix Spike	S NYCP51-8260	WATER	DONE	U				
WG1814675-6	Matrix Spike	S NYTCL-8260-R2	WATER	DACQ	U				
WG1814675-7	Matrix Spike Duplica	S NYCP51-8260	WATER	DONE	U				
WG1814675-7	Matrix Spike Duplica	S NYTCL-8260-R2	WATER	DACQ	U				
Comments:									
WG1814675-4	WG1814675-3								
WG1814675-6	L2346073-02								
WG1814675-7	L2346073-02								

Inst: VOA122
 Initials: TMS/MAG
 Date: **07/26/23**
 Run: **N**

BFB: V9822
 IS/SS: V9825
 ICAL: V9826A, V9820
 ICV: V9809, V9795, V9796, V9827, V9828, V9797

Method
 GC: 8260_water
 Autosampler: 8260V122
 Concentrator: 8260water



QC: _____ Seq: _____

Vial	Data File	Sample	pH<2
1	V22230726NBF1	BFB TUNE	
1	V22230726N01	BLK	
2	V22230726N02	BLK	
3	V22230726N03	I8260STD0.19PPB	
4	V22230726N04	I8260STD0.19PPB	
5	V22230726N05	I8260STD0.5PPB	
6	V22230726N06	I8260STD0.5PPB	
7	V22230726N07	I8260STD2PPB	
8	V22230726N08	I8260STD2PPB	
9	V22230726N09	I8260STD10PPB	
10	V22230726N10	I8260STD30PPB	
11	V22230726N11	I8260STD80PPB	
12	V22230726N12	I8260STD120PPB	
13	V22230726N13	I8260STD200PPB	
14	V22230726N14	BLK	
15	V22230726N15	BLK	
16	V22230726N16	BLK	
17	V22230726N17	BLK	
18	V22230726N18	C8260STD10PPB	
19	V22230726N19	C8260STD10PPB	
20	V22230726N20	BLK	
21	V22230726N21	BLK	
22	V22230726N22	METHOD BLK	
23	V22230726N23	MDL 0.19PPB	
24	V22230726N24	MDL 0.5PPB	
25	V22230726N25	MDL 2PPB	
26	V22230726N26	BLK	

Inst: VOA122 BFB: V9822
 Initials: PID IS/SS: V9844
 Date: 08/10/23 ICAL: V9826B,V9851
 Run: A

Method
 GC: 8260_water
 Autosampler: 8260V122
 Concentrator: 8260water



QC: _____ Seq: _____

Vial	Data File	Sample		pH<2
1	V22230810ABF1	BFB TUNE	08:27	
1	V22230810A01	8260 CCAL	QC FAILS	
2	V22230810A02	8260 CCAL	QC FAILS	
3	V22230810A03	8260 CCAL	LCS	
4	V22230810A04	8260 CCAL	LCSD	
5	V22230810A05	BLK		
6	V22230810A06	METHOD BLK		
7	V22230810A07	L2346047-01,31,10,10,,A,R3B	NY/R2	pH<2
8	V22230810A08	L2346073-01,31,10,10,,A,R3B	NYSTARS	pH<2
9	V22230810A09	L2346073-02,31,10,10,,A,R3B	NYSTARS	pH<2
10	V22230810A10	L2346073-03,31,10,10,,A,R3B	NYSTARS	pH<2
11	V22230810A11	L2346073-04,31,10,10,,A,R3B	NYSTARS	pH<2
12	V22230810A12	L2346073-05,31,10,10,,A,R3B	NYSTARS	TB pH<2
13	V22230810A13	L2344494-01,31,10,10,,A	NJ-3/15/JB	pH<2
14	V22230810A14	L2344494-02,31,10,10,,A	NJ-3/15/JB	pH<2
15	V22230810A15	L2344494-03,31,10,10,,A	NJ-3/15/JB	pH<2
16	V22230810A16	L2344494-04,31,10,10,,A	NJ-3/15/JB	pH<2
17	V22230810A17	L2344494-05,31,10,10,,A	NJ-3/15/JB	pH<2
18	V22230810A18	L2344494-06,31,10,10,,A	NJ-3/15/JB	pH<2
19	V22230810A19	L2345502-01,31,10,10,,A	NJ/15	pH<2
20	V22230810A20	L2344682-07,31,10,10,,A	8260NH	TB pH<2
21	V22230810A21	L2344682-04,31,10,10,,A	8260NH	pH<2
22	V22230810A22	L2344682-03,31,10,10,,A	8260NH	pH<2
23	V22230810A23	L2344682-01D,31,2.0,10,,A	8260NH	pH<2
24	V22230810A24	L2344682-02D,31,1.0,10,,A	8260NH	pH<2
25	V22230810A25	L2344682-05D,31,1.0,10,,A	8260NH	pH<2
26	V22230810A26	L2344682-06D,31,1.0,10,,A	8260NH	pH<2
27	V22230810A27	L2346073-02MS,31,10,10,,A1,R3B	NYSTARS	pH<2
28	V22230810A28	L2346073-02MSD,31,10,10,,A2,R3B	NYSTARS	pH<2
29	V22230810A29	HSTD		
30	V22230810A30	BLK		
31	V22230810A31	BLK		



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Alpha Analytical

Laboratory Code: 11148

SDG Number: L2446277

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Project Name: 585 UNION STREET
Project Number: 14729

Lab Number: L2446277
Report Date: 08/16/24

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2446277-01	MW-9	WATER	585 UNION STREET	08/14/24 10:25	08/15/24
L2446277-02	MW-10	WATER	585 UNION STREET	08/14/24 11:20	08/15/24
L2446277-03	TRIP BLANK	WATER	585 UNION STREET	08/14/24 00:00	08/15/24

Project Name: 585 UNION STREET
Project Number: 14729

Lab Number: L2446277
Report Date: 08/16/24

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: 585 UNION STREET
Project Number: 14729

Lab Number: L2446277
Report Date: 08/16/24

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: *Caitlin Walukh* Report Date: 08/16/24
Title: Technical Director/Representative

DATA PACKAGE GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers



Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where

Report Format: DU Report with 'J' Qualifiers



Project Name: 585 UNION STREET
Project Number: 14729

Lab Number: L2446277
Report Date: 08/16/24

Data Qualifiers

the identification is based on a mass spectral library search.

- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were estimated.
- ND or U** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers





Volatile Organics Instruments

Volatile Organics:

Instrument: Agilent 7890 GC/5975C MSD
 Trap: Supelco K Trap (VOACARB 3000)
 Concentrator: EST Encon (or equivalent)
 Autosampler: EST Centurion (or equivalent)
 Purge time: 11 min

Columns (length x ID x df):
 RTX-VMS 20m x 0.18mm x 1um
 RTX-VMS 30m x 0.25mm x 1.4um
 RTX-502.2 40m x 0.18mm x 1um

Volatile Organics: VPH

Instrument: Agilent 6890 (or equivalent)
 Trap: Supelco K Trap (VOACARB 3000)
 Concentrator: EST Encon (or equivalent)
 Autosampler: EST Centurion (or equivalent)

Column Type: Restek RTX 502.2
 Column Length: 105 Meters
 df: 3.00 um
 ID: 0.53mm

Volatile Organics: PIANO

Instrument: Agilent 7890 GC/5975C MSD
 Trap: Supelco K Trap (VOACARB 3000)
 Concentrator: Tekmar Velocity / EST Encon
 Autosampler: Varian Archon / EST Centurion
 Purge time: 11 min

Column Type: DB-VRX
 Column Length: 60 Meters
 df: 1.40 um
 ID: 0.25 mm
 Desorb: 1 min

Volatile Organics: Dissolved Gas

Instrument: Agilent 7890 (or equivalent) with FID/TCD

Column Type: Haysep S Column
 Column Length: 2 Meters packed
 (100/200 mesh)

Autosampler: LEAP Headspace

Purge time: 0.6 min

Volatile Organics in Air Instruments

Volatile Organics in Air:

Instruments: Agilent 6890 GC / 5975 MSD Shimadzu QP2010-SE / QP2020

Concentrator: Entech 7100A or 7200
 Autosampler: Entech 7016CA or 7016D

Column Type: Restek RTX-1
 Column Length: 60 Meters
 df: 1.00 um
 ID: 0.25 mm or 0.32 mm

Trap 1: Glass Bead: manufacturer-Entech: 20 cm packing material

Trap 2: Tenax: manufacturer-Entech: 20 cm packing material



Semivolatile Organics Instruments - Westborough

Semivolatile Organics (Acid/Base/Neutral Extractables):

Instrument: Agilent 5973N MSD	Injection volume: 1 μ L; 2 μ L LVI
Column Type: Restek RXI-5SILMS	df: 0.32 μ m
Column Length: 30 Meters	ID: 0.25 mm

Polynuclear Aromatic Hydrocarbons by 8270 SIM:

Instrument: Agilent 5973 MSD	Injection volume: 1 μ L; 2 μ L LVI
Column Type: Restek RXI-5SILMS	df: 0.25 μ m
Column Length: 30 Meters	ID: 0.25 mm

Pesticides/PCB/Herbicides:

Instrument: Agilent 6890 w/Dual Micro ECDs	Injection Volume: 1 μ L
Column A: Restek RTX-CL/STX-CL	df: 0.32
Column B: Restek RTX/STX-CLP Pesticide II	df: 0.25
Column Length: 30 Meters	ID: 0.32 mm

Petroleum/EPH:

Instrument: Agilent 6890 w/FID / HP 5890 w/ FID	Injection Volume: 1 μ L
Column: Restek RTX 5	df: 0.25
Column Length: 30 Meters	
ID: 0.32 mm	



Semivolatile Organic Instruments - Mansfield

Semivolatile Organics (ALK-PAH Extractables):

Instrument: Agilent 5973N / 5975 MSD	Injection volume: 1 ul
Column Type: ZB-5	df: 0.25 um
Column Length: 60 Meters	ID: 0.25 mm

Semivolatile Organics (8270):

Instrument: Agilent 5973N / 5975 MSD	Injection volume: 2 ul
Column Type: ZB-Semivolatiles	df: 0.25 um
Column Length: 30 Meters	ID: 0.25 mm

Semivolatile Organics (8270 SIM):

Instrument: Agilent 5973N / 5975 MSD	Injection volume: 3 ul
Column Type: ZB-5	df: 0.25 um
Column Length: 30 Meters	ID: 0.25 mm

Semivolatile Organics (1,4-Dioxane):

Instrument: Agilent 5973N / 5975 / 5977 MSD	Injection volume: 3 ul
Column Type: RTX-5	df: 0.25um, 0.18 um
Column Length: 30 Meters	ID: 0.25um, 0.18 mm

Semivolatile Organics (209 Congener):

Instrument: Agilent 5973N / 5975 MSD	Injection volume: 3 ul
Column Type: RTX-5, RTX-PCB	df: 0.25um, 0.18 um
Column Length: 60 Meters	ID: 0.25um, 0.18 mm

Semivolatile Organics (8081):

Instrument: Agilent 6890 / 7890	Injection volume: 1 ul
Column Type: RTX-5 / RTX-CLP II	df: 0.25 um
Column Length: 60 Meters	ID: 0.25 mm

Semivolatile Organics (8082):

Instrument: Agilent 6890 w/Dual Micro ECDs	Injection Volume: 1uL
Column A: Restek RTX-CL/STX-CL	df: 0.32
Column B: Restek RTX/STX-CLPPesticide II	df: 0.25
Column Length: 30 Meters	ID: 0.32 mm

Semivolatile Organics (SHC Extractables):

Instrument: Agilent 6890	Injection volume: 1 ul
Column Type: RTX-5	df: 0.25 um
Column Length: 60 Meters	ID: 0.25 mm



Sample Delivery Group Summary

Alpha Job Number : L2446277

Received : 15-AUG-2024

Reviewer : Mohammed Wahed

Account Name : Impact Environmental

Project Number : 14729

Project Name : 585 UNION STREET

Delivery Information

Samples Delivered By : Alpha Courier

Chain of Custody : Present

Cooler Information

Cooler	Seal/Seal#	Preservation	Temperature(°C)	Additional Information
A	Absent/	Ice	5.4	

Condition Information

1) All samples on COC received?	YES
2) Extra samples received?	NO
3) Are there any sample container discrepancies?	NO
4) Are there any discrepancies between COC & sample labels?	NO
5) Are samples in appropriate containers for requested analysis?	YES
6) Are samples properly preserved for requested analysis?	YES
7) Are samples within holding time for requested analysis?	YES
8) All sampling equipment returned?	NA

Volatile Organics/VPH

1) Reagent Water Vials Frozen by Client?	NO

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Aug 16 2024, 01:59 pm

Login Number: L2446277

Account: IMPENV Impact Environmental Project: 14729

Received: 15AUG24 Due Date: 16AUG24

Sample #	Client ID	Mat PR Collected
L2446277-01	MW-9	1 3A 14AUG24 10:25
8260: report CP51 list and include MTBE (report list built). STD TAT 3-5 days; 1-day, 50%; 2-day, 25% 8260: report CP51 list and include MTBE (report list built). 8270 SIM: report CP51 list include acenaphthylene (report list built) ASP-B Package Due Date: 08/16/24		
ASP-B, NYCP51-8260		
L2446277-02	MW-10	1 3A 14AUG24 11:20
8260: report CP51 list and include MTBE (report list built). STD TAT 3-5 days; 1-day, 50%; 2-day, 25% 8260: report CP51 list and include MTBE (report list built). 8270 SIM: report CP51 list include acenaphthylene (report list built) Package Due Date: 08/16/24		
NYCP51-8260		
L2446277-03	TRIP BLANK	1 3A 14AUG24 00:00
8260: report CP51 list and include MTBE (report list built). STD TAT 3-5 days; 1-day, 50%; 2-day, 25% 8260: report CP51 list and include MTBE (report list built). 8270 SIM: report CP51 list include acenaphthylene (report list built) Package Due Date: 08/16/24		
NYCP51-8260		

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

NEW YORK CHAIN OF CUSTODY

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3286

Service Centers

Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave. Suite 105

Page 1
of 1

Date Rec'd
in Lab 8/18/24

L2446277

IMPENV



16AUG24

Project Information

Project Name: 585 Union St.

Project Location: 585 Union St

Project # 14729

(Use Project name as Project #) ☐

Project Manager: D. Rosten

ALPHAQuote #:

Turn-Around Time

Standard	

Due Date:

Rush (only if pre approved) ☐

of Days:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

[illegible]

Preservative Code

A = None
B = HCl
C = HNO₃
D = H₂SO₄
E = NaOH
F = MeOH
G = NaHSO₄
H = Na₂S₂O₃
K/E = Zn Ac/NaOH
O = Other

Container Code

P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935

Mansfield: Certification No: MA015

Container Type

Preservative

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

Relinquished By:	Date/Time	Received By:	Date/Time
OMAN PACE	8/15/24 11:16	OMAN PACE	8-15-24 11:16
Paul Mazzella	8/15/24 15:30	Paul Mazzella	8/15/24 15:30
	8/15/24 23:10	Tyler Ford	8/15/24

23:10

Organics

GC/MS 8260

Analysis

Volatiles QC Summary

Surrogate Recovery Summary

Form 2

Volatiles

Client: Impact Environmental
Project Name: 585 UNION STREET

Lab Number: L2446277
Project Number: 14729
Matrix:

CLIENT ID (LAB SAMPLE NO.)	SMC1 DCA	SMC2 TOL	SMC3 BFB	SMC4 DBFM	TOT OUT
MW-9 (L2446277-01)	98	101	92	107	0
MW-10 (L2446277-02)	102	99	91	108	0
TRIP BLANK (L2446277-03)	101	100	95	104	0
WG1960272-3LCS	93	101	88	100	0
WG1960272-4LCSD	96	100	92	102	0
WG1960272-5BLANK	102	101	93	106	0

QC LIMITS

(70-130) DCA = 1,2-DICHLOROETHANE-D4
(70-130) TOL = TOLUENE-D8
(70-130) BFB = 4-BROMOFLUOROBENZENE
(70-130) DBFM = DIBROMOFLUOROMETHANE

* Values outside of QC limits

FORM II NYCP51-8260



Laboratory Control Sample Summary

Form 3

Volatiles

Client : Impact Environmental Lab Number : L2446277
 Project Name : 585 UNION STREET Project Number : 14729
 Matrix (Level) : WATER (LOW)
 LCS Sample ID : WG1960272-3 Analysis Date : 08/16/24 06:49 File ID : VE240816A01
 LCSD Sample ID : WG1960272-4 Analysis Date : 08/16/24 07:13 File ID : VE240816A02

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R			
Benzene	10	11	110	10	11	110	0	70-130	20
Toluene	10	11	110	10	11	110	0	70-130	20
Ethylbenzene	10	11	110	10	11	110	0	70-130	20
p/m-Xylene	20	23	115	20	23	115	0	70-130	20
o-Xylene	20	22	110	20	23	115	4	70-130	20
n-Butylbenzene	10	10	100	10	11	110	10	53-136	20
sec-Butylbenzene	10	10	100	10	11	110	10	70-130	20
tert-Butylbenzene	10	10	100	10	11	110	10	70-130	20
Isopropylbenzene	10	10	100	10	11	110	10	70-130	20
p-Isopropyltoluene	10	10	100	10	11	110	10	70-130	20
Naphthalene	10	7.7	77	10	8.5	85	10	70-130	20
n-Propylbenzene	10	11	110	10	11	110	0	69-130	20
1,3,5-Trimethylbenzene	10	11	110	10	11	110	0	64-130	20
1,2,4-Trimethylbenzene	10	10	100	10	11	110	10	70-130	20

**Method Blank Summary
Form 4
Volatiles**

Client	: Impact Environmental	Lab Number	: L2446277
Project Name	: 585 UNION STREET	Project Number	: 14729
Lab Sample ID	: WG1960272-5	Lab File ID	: VE240816A05
Instrument ID	: ELAINE		
Matrix	: WATER	Analysis Date	: 08/16/24 08:27

Client Sample No.	Lab Sample ID	Analysis Date
WG1960272-3LCS	WG1960272-3	08/16/24 06:49
WG1960272-4LCSD	WG1960272-4	08/16/24 07:13
MW-9	L2446277-01	08/16/24 11:18
MW-10	L2446277-02	08/16/24 11:42
TRIP BLANK	L2446277-03	08/16/24 12:06

Instrument Performance Check (Tune) Summary

Form 5

Volatiles

Bromofluorobenzene (BFB)

Client : Impact Environmental	Lab Number : L2446277
Project Name : 585 UNION STREET	Project Number : 14729
Instrument ID : ELAINE	Analysis Date : 07/31/24 17:25
Tune Standard : WG1954249-1	Tune File ID : VE240731NBF1_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	23.6
75	30.0 - 80.0% of mass 95	47.5
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	7
173	Less than 2.0% of mass 174	0.5 (.6)1
174	Greater than 50.0% of mass 95	83.7
175	5.0 - 9.0% of mass 174	6 (7.1)1
176	Greater than 95.0% but less than 101% of mass	80.5 (96.2)1
177	5.0 - 9.0% of mass 176	5.2 (6.5)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
STD0.19PPB	R1859523-1	VE240731N03	07/31/24 18:35
STD0.5PPB	R1859523-2	VE240731N05	07/31/24 19:26
STD2PPB	R1859523-4	VE240731N07	07/31/24 20:16
STD10PPB	R1859523-3	VE240731N08	07/31/24 20:42
STD30PPB	R1859523-5	VE240731N09	07/31/24 21:07
STD80PPB	R1859523-6	VE240731N10	07/31/24 21:32
STD120PPB	R1859523-7	VE240731N11	07/31/24 21:57
STD200PPB	R1859523-8	VE240731N12	07/31/24 22:22
ICV Quant Report	R1859523-9	VE240731N17	08/01/24 00:28

Instrument Performance Check (Tune) Summary

Form 5

Volatiles

Bromofluorobenzene (BFB)

Client : Impact Environmental	Lab Number : L2446277
Project Name : 585 UNION STREET	Project Number : 14729
Instrument ID : ELAINE	Analysis Date : 08/16/24 06:34
Tune Standard : WG1960272-1	Tune File ID : VE240816ABF1_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	27.1
75	30.0 - 80.0% of mass 95	53.6
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.1
173	Less than 2.0% of mass 174	0.9 (1)1
174	Greater than 50.0% of mass 95	94.2
175	5.0 - 9.0% of mass 174	6.9 (7.3)1
176	Greater than 95.0% but less than 101% of mass	90.9 (96.5)1
177	5.0 - 9.0% of mass 176	6 (6.6)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
WG1960272-2CCAL	WG1960272-2	VE240816A01	08/16/24 06:49
WG1960272-3LCS	WG1960272-3	VE240816A01	08/16/24 06:49
WG1960272-4LCSD	WG1960272-4	VE240816A02	08/16/24 07:13
WG1960272-5BLANK	WG1960272-5	VE240816A05	08/16/24 08:27
MW-9	L2446277-01	VE240816A12	08/16/24 11:18
MW-10	L2446277-02	VE240816A13	08/16/24 11:42
TRIP BLANK	L2446277-03	VE240816A14	08/16/24 12:06

Internal Standard Area and RT Summary

Form 8a

Volatiles

Client : Impact Environmental
 Project Name : 585 UNION STREET
 Instrument ID : ELAINE
 Sample No : WG1960272-2

Lab Number : L2446277
 Project Number : 14729
 Analysis Date : 08/16/24 06:49:00
 Lab File ID : VE240816A01

	Fluorobenzene (IS)		Chlorobenzene-d5		1,4-Dichlorobenzene-D4	
	Area	RT	Area	RT	Area	RT
WG1960272-2	184749	5.96	135681	9.49	81388	12.21
Upper Limit	369498	6.46	271362	9.99	162776	12.71
Lower Limit	92375	5.46	67841	8.99	40694	11.71
Sample ID						
WG1960272-3 LCS	184749	5.96	135681	9.49	81388	12.21
WG1960272-4 LCSD	179101	5.96	130030	9.49	77124	12.20
WG1960272-5 BLANK	165632	5.96	125198	9.49	72798	12.20
MW-9	169389	5.96	126842	9.50	72417	12.20
MW-10	164591	5.96	126334	9.50	72855	12.20
TRIP BLANK	163965	5.96	125003	9.49	69983	12.20

Area Upper Limit = +100% of internal standard area
 Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT
 RT Lower Limit = -0.50 minutes of internal standard RT

* Values outside of QC limits





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Volatile Organics - EPA 8260D (WATER)

Holding Time: 14 days
Container/Sample Preservation: 3 - Vial HCl preserved

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
Methylene chloride	75-09-2	3	0.678	ug/l	70-130	20	70-130	20	20			
1,1-Dichloroethane	75-34-3	0.75	0.21	ug/l	70-130	20	70-130	20	20			
Chloroform	67-66-3	0.75	0.222	ug/l	70-130	20	70-130	20	20			
Carbon tetrachloride	56-23-5	0.5	0.134	ug/l	63-132	20	63-132	20	20			
1,2-Dichloropropane	78-87-5	1.75	0.137	ug/l	70-130	20	70-130	20	20			
Dibromochloromethane	124-48-1	0.5	0.149	ug/l	63-130	20	63-130	20	20			
1,1,2-Trichloroethane	79-00-5	0.75	0.144	ug/l	70-130	20	70-130	20	20			
Tetrachloroethene	127-18-4	0.5	0.181	ug/l	70-130	20	70-130	20	20			
Chlorobenzene	108-90-7	0.5	0.178	ug/l	75-130	25	75-130	25	25			
Trichlorofluoromethane	75-69-4	2.5	0.161	ug/l	62-150	20	62-150	20	20			
1,2-Dichloroethane	107-06-2	0.5	0.132	ug/l	70-130	20	70-130	20	20			
1,1,1-Trichloroethane	71-55-6	0.5	0.158	ug/l	67-130	20	67-130	20	20			
Bromodichloromethane	75-27-4	0.5	0.192	ug/l	67-130	20	67-130	20	20			
trans-1,3-Dichloropropene	10061-02-6	0.5	0.164	ug/l	70-130	20	70-130	20	20			
cis-1,3-Dichloropropene	10061-01-5	0.5	0.144	ug/l	70-130	20	70-130	20	20			
1,3-Dichloropropene, Total	542-75-6	0.5	0.144	ug/l				20	20			
1,1-Dichloropropene	563-58-6	2.5	0.24	ug/l	70-130	20	70-130	20	20			
Bromoform	75-25-2	2	0.248	ug/l	54-136	20	54-136	20	20			
1,1,2,2-Tetrachloroethane	79-34-5	0.5	0.167	ug/l	67-130	20	67-130	20	20			
Benzene	71-43-2	0.5	0.159	ug/l	70-130	25	70-130	25	25			
Toluene	108-88-3	0.75	0.203	ug/l	70-130	25	70-130	25	25			
Ethylbenzene	100-41-4	0.5	0.167	ug/l	70-130	20	70-130	20	20			
Chloromethane	74-87-3	2.5	0.2	ug/l	64-130	20	64-130	20	20			
Bromomethane	74-83-9	1	0.256	ug/l	39-139	20	39-139	20	20			
Vinyl chloride	75-01-4	1	0.0714	ug/l	55-140	20	55-140	20	20			
Chloroethane	75-00-3	1	0.134	ug/l	55-138	20	55-138	20	20			
1,1-Dichloroethene	75-35-4	0.5	0.169	ug/l	61-145	25	61-145	25	25			
trans-1,2-Dichloroethene	156-60-5	0.75	0.163	ug/l	70-130	20	70-130	20	20			
1,2-Dichloroethene (total)	540-59-0	0.5	0.163	ug/l				20	20			
Trichloroethene	79-01-6	0.5	0.175	ug/l	70-130	25	70-130	25	25			
1,2-Dichlorobenzene	95-50-1	2.5	0.184	ug/l	70-130	20	70-130	20	20			
1,3-Dichlorobenzene	541-73-1	2.5	0.186	ug/l	70-130	20	70-130	20	20			
1,4-Dichlorobenzene	106-46-7	2.5	0.187	ug/l	70-130	20	70-130	20	20			
Methyl tert butyl ether	1634-04-4	1	0.166	ug/l	63-130	20	63-130	20	20			
p/m-Xylene	179601-23-1	1	0.332	ug/l	70-130	20	70-130	20	20			
o-Xylene	95-47-6	1	0.392	ug/l	70-130	20	70-130	20	20			
Xylene (Total)	1330-20-7	1	0.33	ug/l				20	20			
cis-1,2-Dichloroethene	156-59-2	0.5	0.187	ug/l	70-130	20	70-130	20	20			
Dibromomethane	74-95-3	5	0.363	ug/l	70-130	20	70-130	20	20			
1,4-Dichlorobutane	110-56-5	5	0.464	ug/l	70-130	20	70-130	20	20			
1,2,3-Trichloropropane	96-18-4	5	0.176	ug/l	64-130	20	64-130	20	20			
Styrene	100-42-5	1	0.359	ug/l	70-130	20	70-130	20	20			

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soll/Solids only)
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Volatile Organics - EPA 8260D (WATER)

Holding Time: 14 days
Container/Sample Preservation: 3 - Vial HCl preserved

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
Dichlorodifluoromethane	75-71-8	5	0.244	ug/l	36-147	20	36-147	20	20			
Acetone	67-64-1	5	1.46	ug/l	58-148	20	58-148	20	20			
Carbon disulfide	75-15-0	5	0.299	ug/l	51-130	20	51-130	20	20			
2-Butanone	78-93-3	5	1.94	ug/l	63-138	20	63-138	20	20			
Vinyl acetate	108-05-4	5	0.311	ug/l	70-130	20	70-130	20	20			
4-Methyl-2-pentanone	108-10-1	5	0.416	ug/l	59-130	20	59-130	20	20			
2-Hexanone	591-78-6	5	0.515	ug/l	57-130	20	57-130	20	20			
Ethyl methacrylate	97-63-2	5	0.606	ug/l	70-130	20	70-130	20	20			
Acrylonitrile	107-13-1	5	0.43	ug/l	70-130	20	70-130	20	20			
Bromochloromethane	74-97-5	2.5	0.152	ug/l	70-130	20	70-130	20	20			
Tetrahydrofuran	109-99-9	5	0.525	ug/l	58-130	20	58-130	20	20			
2,2-Dichloropropane	594-20-7	2.5	0.204	ug/l	63-133	20	63-133	20	20			
1,2-Dibromoethane	106-93-4	2	0.193	ug/l	70-130	20	70-130	20	20			
1,3-Dichloropropane	142-28-9	2.5	0.212	ug/l	70-130	20	70-130	20	20			
1,1,1,2-Tetrachloroethane	630-20-6	0.5	0.164	ug/l	64-130	20	64-130	20	20			
Bromobenzene	108-86-1	2.5	0.152	ug/l	70-130	20	70-130	20	20			
n-Butylbenzene	104-51-8	0.5	0.192	ug/l	53-136	20	53-136	20	20			
sec-Butylbenzene	135-98-8	0.5	0.181	ug/l	70-130	20	70-130	20	20			
tert-Butylbenzene	98-06-6	2.5	0.196	ug/l	70-130	20	70-130	20	20			
o-Chlorotoluene	95-49-8	2.5	0.215	ug/l	70-130	20	70-130	20	20			
p-Chlorotoluene	106-43-4	2.5	0.185	ug/l	70-130	20	70-130	20	20			
1,2-Dibromo-3-chloropropane	96-12-8	2.5	0.353	ug/l	41-144	20	41-144	20	20			
Hexachlorobutadiene	87-68-3	0.5	0.217	ug/l	63-130	20	63-130	20	20			
Isopropylbenzene	98-82-8	0.5	0.187	ug/l	70-130	20	70-130	20	20			
p-Isopropyltoluene	99-87-6	0.5	0.188	ug/l	70-130	20	70-130	20	20			
Naphthalene	91-20-3	2.5	0.216	ug/l	70-130	20	70-130	20	20			
n-Propylbenzene	103-65-1	0.5	0.173	ug/l	69-130	20	69-130	20	20			
1,2,3-Trichlorobenzene	87-61-6	2.5	0.234	ug/l	70-130	20	70-130	20	20			
1,2,4-Trichlorobenzene	120-82-1	2.5	0.22	ug/l	70-130	20	70-130	20	20			
1,3,5-Trimethylbenzene	108-67-8	2.5	0.217	ug/l	64-130	20	64-130	20	20			
1,2,4-Trimethylbenzene	95-63-6	2.5	0.191	ug/l	70-130	20	70-130	20	20			
trans-1,4-Dichloro-2-butene	110-57-6	2.5	0.213	ug/l	70-130	20	70-130	20	20			
Ethyl ether	60-29-7	2.5	0.163	ug/l	59-134	20	59-134	20	20			
1,2-Dichloroethane-d4	17060-07-0										70-130	
Toluene-d8	2037-26-5										70-130	
4-Bromofluorobenzene	460-00-4										70-130	
Dibromofluoromethane	1868-53-7										70-130	

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VOCs - EPA 8260D/5035 High & Low (SOIL)

Holding Time: 14 days
Container/Sample Preservation: 1 - 1 Vial MeOH/2 Vial Water

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
Methylene chloride	75-09-2	5	2.29	ug/kg	70-130	30	70-130	30	30			
1,1-Dichloroethane	75-34-3	1	0.145	ug/kg	70-130	30	70-130	30	30			
Chloroform	67-66-3	1.5	0.14	ug/kg	70-130	30	70-130	30	30			
Carbon tetrachloride	56-23-5	1	0.23	ug/kg	70-130	30	70-130	30	30			
1,2-Dichloropropane	78-87-5	1	0.125	ug/kg	70-130	30	70-130	30	30			
Dibromochloromethane	124-48-1	1	0.14	ug/kg	70-130	30	70-130	30	30			
1,1,2-Trichloroethane	79-00-5	1	0.267	ug/kg	70-130	30	70-130	30	30			
Tetrachloroethene	127-18-4	0.5	0.196	ug/kg	70-130	30	70-130	30	30			
Chlorobenzene	108-90-7	0.5	0.127	ug/kg	70-130	30	70-130	30	30			
Trichlorofluoromethane	75-69-4	4	0.695	ug/kg	70-139	30	70-139	30	30			
1,2-Dichloroethane	107-06-2	1	0.257	ug/kg	70-130	30	70-130	30	30			
1,1,1-Trichloroethane	71-55-6	0.5	0.167	ug/kg	70-130	30	70-130	30	30			
Bromodichloromethane	75-27-4	0.5	0.109	ug/kg	70-130	30	70-130	30	30			
trans-1,3-Dichloropropene	10061-02-6	1	0.273	ug/kg	70-130	30	70-130	30	30			
cis-1,3-Dichloropropene	10061-01-5	0.5	0.158	ug/kg	70-130	30	70-130	30	30			
1,3-Dichloropropene, Total	542-75-6	0.5	0.158	ug/kg				30	30			
1,1-Dichloropropene	563-58-6	0.5	0.159	ug/kg	70-130	30	70-130	30	30			
Bromoform	75-25-2	4	0.246	ug/kg	70-130	30	70-130	30	30			
1,1,2,2-Tetrachloroethane	79-34-5	0.5	0.166	ug/kg	70-130	30	70-130	30	30			
Benzene	71-43-2	0.5	0.166	ug/kg	70-130	30	70-130	30	30			
Toluene	108-88-3	1	0.543	ug/kg	70-130	30	70-130	30	30			
Ethylbenzene	100-41-4	1	0.141	ug/kg	70-130	30	70-130	30	30			
Chloromethane	74-87-3	4	0.932	ug/kg	52-130	30	52-130	30	30			
Bromomethane	74-83-9	2	0.581	ug/kg	57-147	30	57-147	30	30			
Vinyl chloride	75-01-4	1	0.335	ug/kg	67-130	30	67-130	30	30			
Chloroethane	75-00-3	2	0.452	ug/kg	50-151	30	50-151	30	30			
1,1-Dichloroethene	75-35-4	1	0.238	ug/kg	65-135	30	65-135	30	30			
trans-1,2-Dichloroethene	156-60-5	1.5	0.137	ug/kg	70-130	30	70-130	30	30			
Trichloroethene	79-01-6	0.5	0.137	ug/kg	70-130	30	70-130	30	30			
1,2-Dichlorobenzene	95-50-1	2	0.144	ug/kg	70-130	30	70-130	30	30			
1,3-Dichlorobenzene	541-73-1	2	0.148	ug/kg	70-130	30	70-130	30	30			
1,4-Dichlorobenzene	106-46-7	2	0.171	ug/kg	70-130	30	70-130	30	30			
Methyl tert butyl ether	1634-04-4	2	0.201	ug/kg	66-130	30	66-130	30	30			
p/m-Xylene	179601-23-1	2	0.56	ug/kg	70-130	30	70-130	30	30			
o-Xylene	95-47-6	1	0.291	ug/kg	70-130	30	70-130	30	30			
Xylene (Total)	1330-20-7	1	0.291	ug/kg				30	30			
cis-1,2-Dichloroethene	156-59-2	1	0.175	ug/kg	70-130	30	70-130	30	30			
1,2-Dichloroethene (total)	540-59-0	1	0.137	ug/kg				30	30			
Dibromomethane	74-95-3	2	0.238	ug/kg	70-130	30	70-130	30	30			
1,4-Dichlorobutane	110-56-5	10	0.226	ug/kg	70-130	30	70-130	30	30			
1,2,3-Trichloropropane	96-18-4	2	0.127	ug/kg	68-130	30	68-130	30	30			
Styrene	100-42-5	1	0.196	ug/kg	70-130	30	70-130	30	30			

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Page: 2

VOCs - EPA 8260D/5035 High & Low (SOIL)

Holding Time: 14 days
Container/Sample Preservation: 1 - 1 Vial MeOH/2 Vial Water

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
Dichlorodifluoromethane	75-71-8	10	0.915	ug/kg	30-146	30	30-146	30	30			
Acetone	67-64-1	25	10	ug/kg	54-140	30	54-140	30	30			
Carbon disulfide	75-15-0	10	4.55	ug/kg	59-130	30	59-130	30	30			
2-Butanone	78-93-3	10	2.22	ug/kg	70-130	30	70-130	30	30			
Vinyl acetate	108-05-4	10	2.15	ug/kg	70-130	30	70-130	30	30			
4-Methyl-2-pentanone	108-10-1	10	1.28	ug/kg	70-130	30	70-130	30	30			
2-Hexanone	591-78-6	10	1.18	ug/kg	70-130	30	70-130	30	30			
Ethyl methacrylate	97-63-2	10	1.58	ug/kg	70-130	30	70-130	30	30			
Acrylonitrile	107-13-1	4	1.15	ug/kg	70-130	30	70-130	30	30			
Bromochloromethane	74-97-5	2	0.205	ug/kg	70-130	30	70-130	30	30			
Tetrahydrofuran	109-99-9	4	1.59	ug/kg	66-130	30	66-130	30	30			
2,2-Dichloropropane	594-20-7	2	0.202	ug/kg	70-130	30	70-130	30	30			
1,2-Dibromoethane	106-93-4	1	0.279	ug/kg	70-130	30	70-130	30	30			
1,3-Dichloropropane	142-28-9	2	0.167	ug/kg	69-130	30	69-130	30	30			
1,1,1,2-Tetrachloroethane	630-20-6	0.5	0.132	ug/kg	70-130	30	70-130	30	30			
Bromobenzene	108-86-1	2	0.145	ug/kg	70-130	30	70-130	30	30			
n-Butylbenzene	104-51-8	1	0.167	ug/kg	70-130	30	70-130	30	30			
sec-Butylbenzene	135-98-8	1	0.146	ug/kg	70-130	30	70-130	30	30			
tert-Butylbenzene	98-06-6	2	0.118	ug/kg	70-130	30	70-130	30	30			
o-Chlorotoluene	95-49-8	2	0.191	ug/kg	70-130	30	70-130	30	30			
p-Chlorotoluene	106-43-4	2	0.108	ug/kg	70-130	30	70-130	30	30			
1,2-Dibromo-3-chloropropane	96-12-8	3	0.998	ug/kg	68-130	30	68-130	30	30			
Hexachlorobutadiene	87-68-3	4	0.169	ug/kg	67-130	30	67-130	30	30			
Isopropylbenzene	98-82-8	1	0.109	ug/kg	70-130	30	70-130	30	30			
p-Isopropyltoluene	99-87-6	1	0.109	ug/kg	70-130	30	70-130	30	30			
Naphthalene	91-20-3	4	0.65	ug/kg	70-130	30	70-130	30	30			
n-Propylbenzene	103-65-1	1	0.171	ug/kg	70-130	30	70-130	30	30			
1,2,3-Trichlorobenzene	87-61-6	2	0.322	ug/kg	70-130	30	70-130	30	30			
1,2,4-Trichlorobenzene	120-82-1	2	0.272	ug/kg	70-130	30	70-130	30	30			
1,3,5-Trimethylbenzene	108-67-8	2	0.193	ug/kg	70-130	30	70-130	30	30			
1,2,4-Trimethylbenzene	95-63-6	2	0.334	ug/kg	70-130	30	70-130	30	30			
trans-1,4-Dichloro-2-butene	110-57-6	5	1.42	ug/kg	70-130	30	70-130	30	30			
Ethyl ether	60-29-7	2	0.341	ug/kg	67-130	30	67-130	30	30			
1,2-Dichloroethane-d4	17060-07-0										70-130	
Toluene-d8	2037-26-5										70-130	
4-Bromofluorobenzene	460-00-4										70-130	
Dibromofluoromethane	1868-53-7										70-130	

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Volatiles Sample Data

Results Summary

Form 1

Volatile Organics by GC/MS

Client : Impact Environmental
 Project Name : 585 UNION STREET
 Lab ID : L2446277-01
 Client ID : MW-9
 Sample Location : 585 UNION STREET
 Sample Matrix : WATER
 Analytical Method : 1,8260D
 Lab File ID : VE240816A12
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2446277
 Project Number : 14729
 Date Collected : 08/14/24 10:25
 Date Received : 08/15/24
 Date Analyzed : 08/16/24 11:18
 Dilution Factor : 1
 Analyst : PID
 Instrument ID : ELAINE
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
1330-20-7	Xylenes, Total	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	ND	2.5	0.70	U
103-65-1	n-Propylbenzene	ND	2.5	0.70	U
108-67-8	1,3,5-Trimethylbenzene	ND	2.5	0.70	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.70	U

Results Summary

Form 1

Volatile Organics by GC/MS

Client : Impact Environmental
 Project Name : 585 UNION STREET
 Lab ID : L2446277-02
 Client ID : MW-10
 Sample Location : 585 UNION STREET
 Sample Matrix : WATER
 Analytical Method : 1,8260D
 Lab File ID : VE240816A13
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2446277
 Project Number : 14729
 Date Collected : 08/14/24 11:20
 Date Received : 08/15/24
 Date Analyzed : 08/16/24 11:42
 Dilution Factor : 1
 Analyst : PID
 Instrument ID : ELAINE
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
1330-20-7	Xylenes, Total	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	ND	2.5	0.70	U
103-65-1	n-Propylbenzene	ND	2.5	0.70	U
108-67-8	1,3,5-Trimethylbenzene	ND	2.5	0.70	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.70	U

Results Summary

Form 1

Volatile Organics by GC/MS

Client : Impact Environmental
 Project Name : 585 UNION STREET
 Lab ID : L2446277-03
 Client ID : TRIP BLANK
 Sample Location : 585 UNION STREET
 Sample Matrix : WATER
 Analytical Method : 1,8260D
 Lab File ID : VE240816A14
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2446277
 Project Number : 14729
 Date Collected : 08/14/24 00:00
 Date Received : 08/15/24
 Date Analyzed : 08/16/24 12:06
 Dilution Factor : 1
 Analyst : PID
 Instrument ID : ELAINE
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
1330-20-7	Xylenes, Total	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	ND	2.5	0.70	U
103-65-1	n-Propylbenzene	ND	2.5	0.70	U
108-67-8	1,3,5-Trimethylbenzene	ND	2.5	0.70	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.70	U

Results Summary

Form 1

Volatile Organics by GC/MS

Client : Impact Environmental
 Project Name : 585 UNION STREET
 Lab ID : WG1960272-5
 Client ID : WG1960272-5BLANK
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8260D
 Lab File ID : VE240816A05
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2446277
 Project Number : 14729
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 08/16/24 08:27
 Dilution Factor : 1
 Analyst : PID
 Instrument ID : ELAINE
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
1330-20-7	Xylenes, Total	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	ND	2.5	0.70	U
103-65-1	n-Propylbenzene	ND	2.5	0.70	U
108-67-8	1,3,5-Trimethylbenzene	ND	2.5	0.70	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.70	U

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240816A\
 Data File : VE240816A12.D
 Acq On : 16 Aug 2024 11:18 am
 Operator : ELAINE:PID
 Sample : l2446277-01,31,10,10,,a,r3a
 Misc : WG1960272,ICAL21358
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 16 11:44:32 2024
 Quant Method : K:\Elaine\2024\240816A\Elaine_240731N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Aug 01 12:13:24 2024
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240816A\VE240816A01.D
 Sub List : 8260-NYCP51 - NYCP51

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

Internal Standards							
1) Fluorobenzene	5.956	96	169389	10.000	ug/L	-0.01	
Standard Area 1 = 184749			Recovery =	91.69%			
63) Chlorobenzene-d5	9.495	117	126842	10.000	ug/L	0.00	
Standard Area 1 = 135681			Recovery =	93.49%			
84) 1,4-Dichlorobenzene-d4	12.202	152	72417	10.000	ug/L	0.00	
Standard Area 1 = 81388			Recovery =	88.98%			
System Monitoring Compounds							
39) Dibromofluoromethane	5.153	113	42418	10.697	ug/L	0.00	
Spiked Amount 10.000	Range 70 - 130		Recovery =	106.97%			
47) 1,2-Dichloroethane-d4	5.677	65	52013	9.830	ug/L	0.00	
Spiked Amount 10.000	Range 70 - 130		Recovery =	98.30%			
64) Toluene-d8	7.649	98	168922	10.110	ug/L	0.00	
Spiked Amount 10.000	Range 70 - 130		Recovery =	101.10%			
88) 4-Bromofluorobenzene	10.989	95	61807	9.239	ug/L	0.00	
Spiked Amount 10.000	Range 70 - 130		Recovery =	92.39%			
Target Compounds							
							Qvalue
45) Benzene	0.000		0	N.D.	d		
65) Toluene	7.718	92	1125M3	0.129	ug/L		
79) Ethylbenzene	0.000		0	N.D.	d		
81) p/m Xylene	9.737	106	1705M3	0.264	ug/L		
82) o Xylene	10.270	106	516M1	0.082	ug/L		
87) Isopropylbenzene	10.666	105	4019	0.232	ug/L		98
90) n-Propylbenzene	10.973	91	149	N.D.			
95) 1,3,5-Trimethylbenzene	11.377	105	180	N.D.			
99) tert-Butylbenzene	11.717	119	1673	0.135	ug/L #		91
102) 1,2,4-Trimethylbenzene	11.798	105	1314	0.089	ug/L #		73
103) sec-Butylbenzene	11.907	105	5827M3	0.317	ug/L		
104) p-Isopropyltoluene	12.063	119	29	N.D.			
108) n-Butylbenzene	12.498	91	29	N.D.			
115) Naphthalene	14.344	128	600	N.D.			

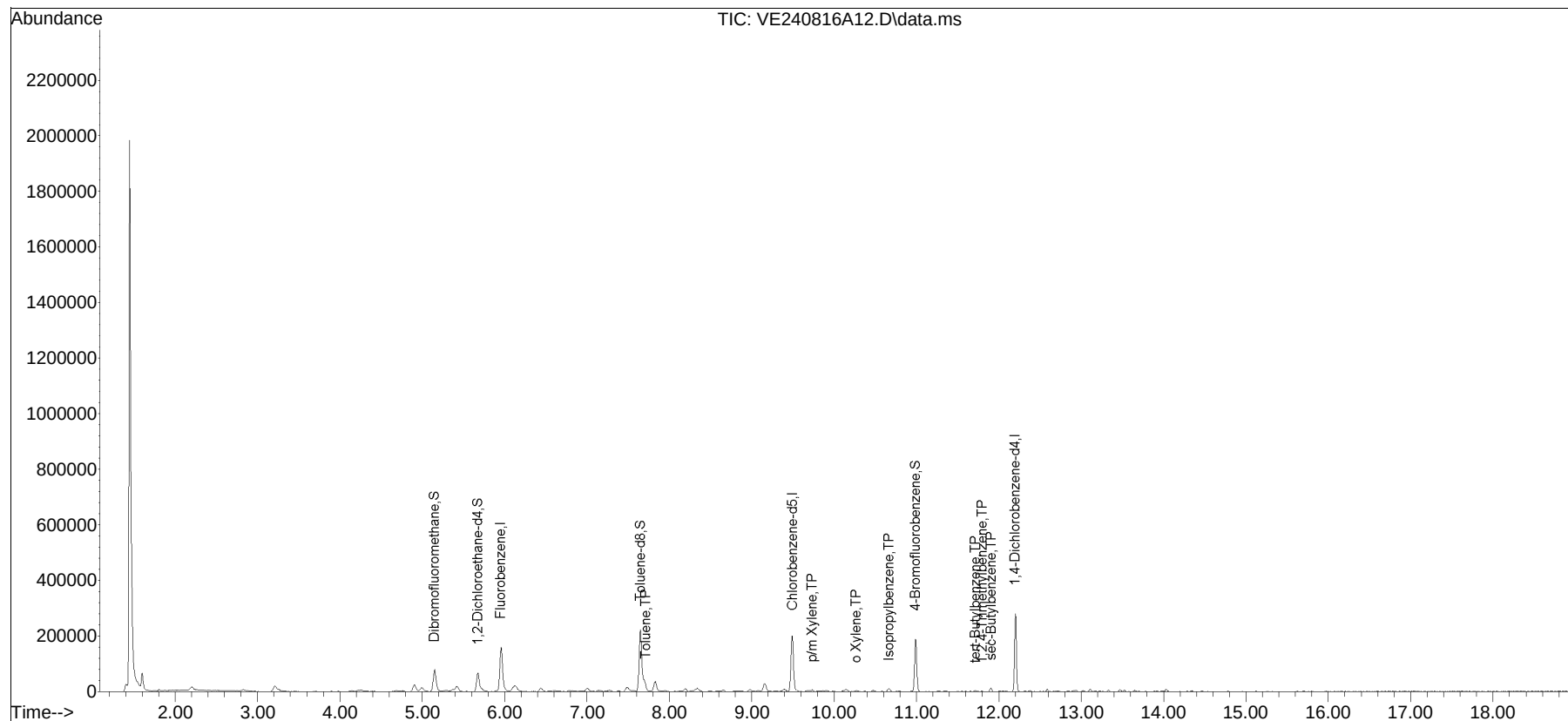
(#) = qualifier out of range (m) = manual integration (+) = signals summed

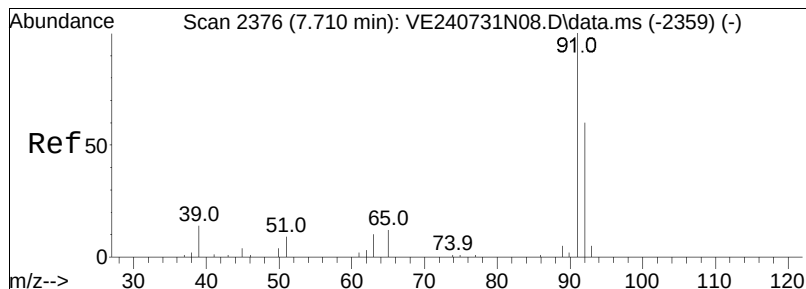
Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240816A\
 Data File : VE240816A12.D
 Acq On : 16 Aug 2024 11:18 am
 Operator : ELAINE:PID
 Sample : l2446277-01,31,10,10,,a,r3a
 Misc : WG1960272,ICAL21358
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 16 11:44:32 2024
 Quant Method : K:\Elaine\2024\240816A\Elaine_240731N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Aug 01 12:13:24 2024
 Response via : Initial Calibration

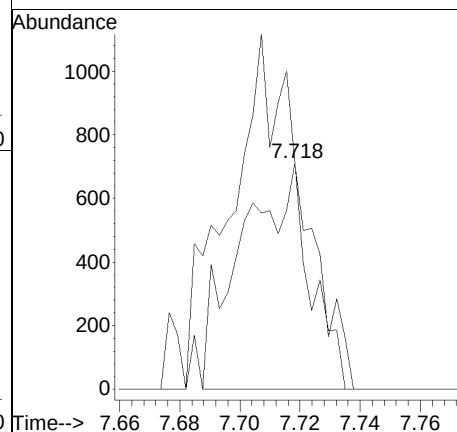
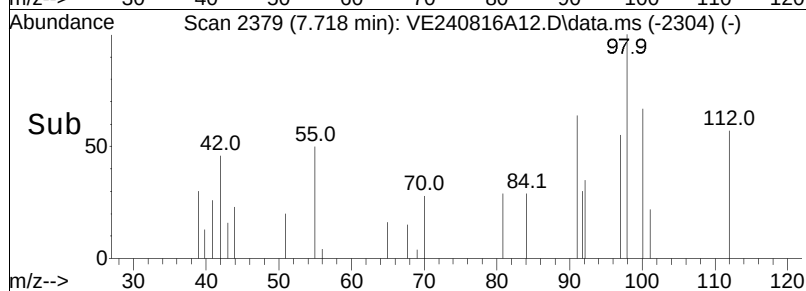
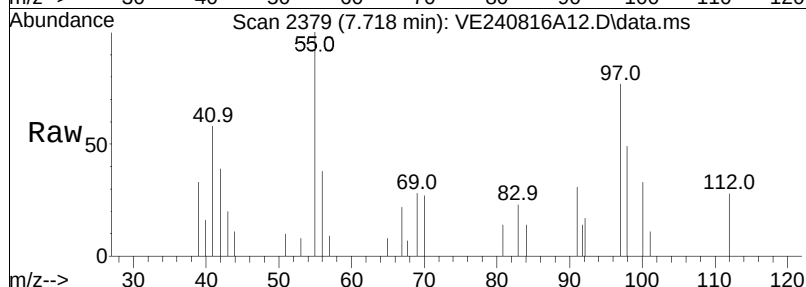
Sub List : 8260-NYCP51 - NYCP5140816A\VE240816A01.D•

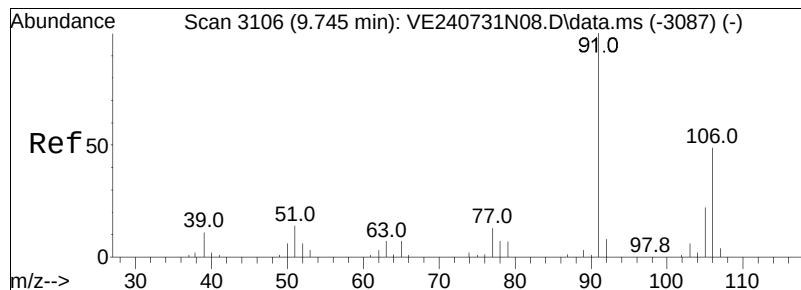




#65
 Toluene
 Concen: 0.13 ug/L M3
 RT: 7.718 min Scan# 2379
 Delta R.T. 0.008 min
 Lab File: VE240816A12.D
 Acq: 16 Aug 2024 11:18 am

Tgt Ion: 92 Resp: 1125
 Ion Ratio Lower Upper
 92 100
 91 171.3 129.1 193.7





#81

p/m Xylene

Concen: 0.26 ug/L M3

RT: 9.737 min Scan# 3103

Delta R.T. -0.008 min

Lab File: VE240816A12.D

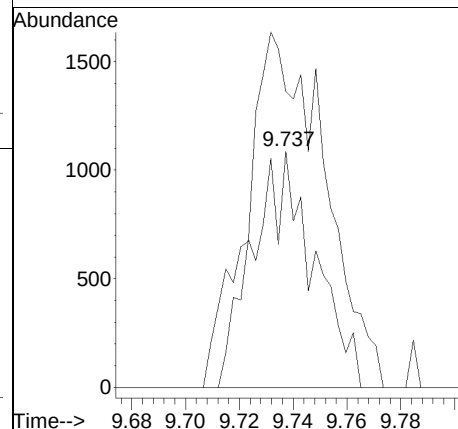
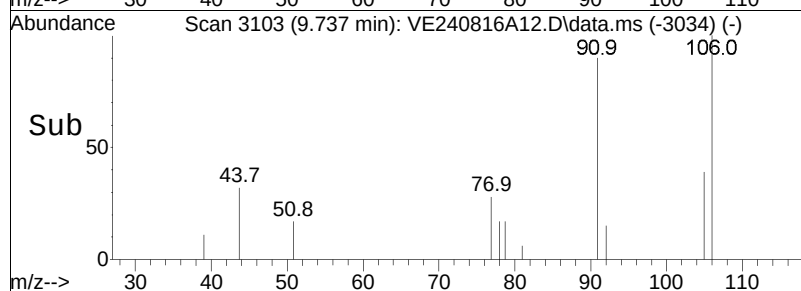
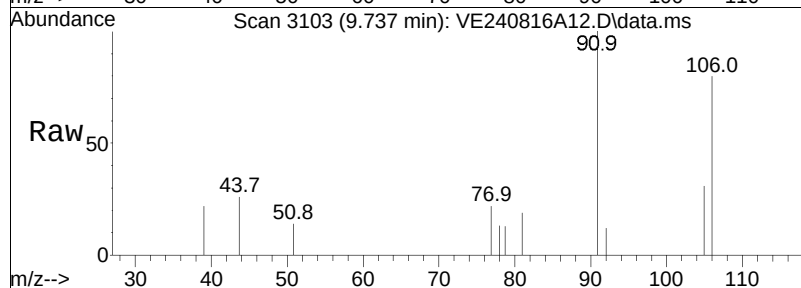
Acq: 16 Aug 2024 11:18 am

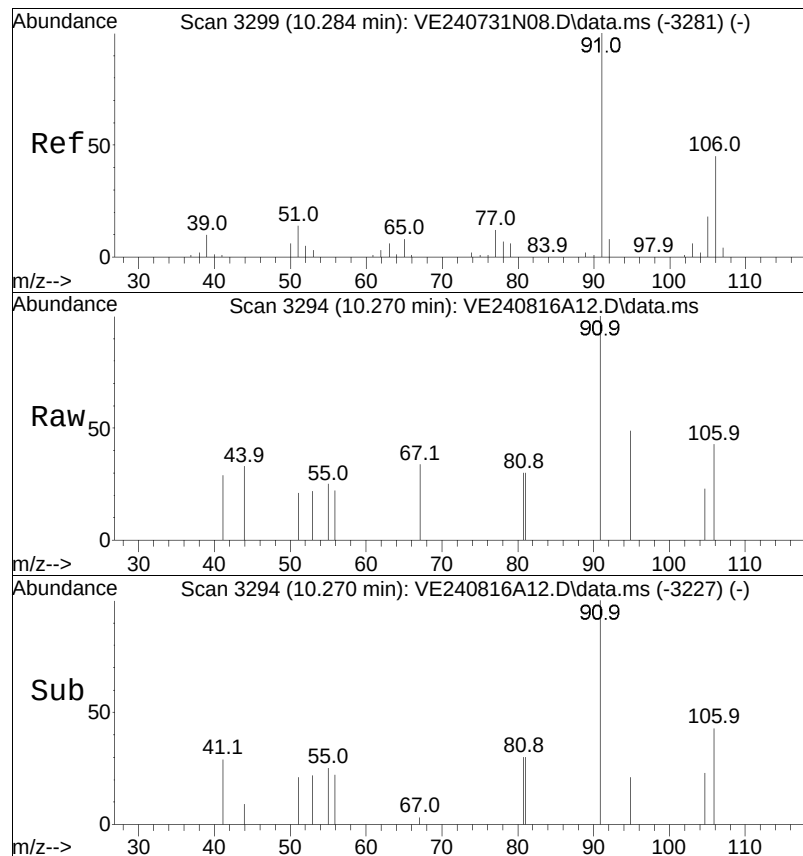
Tgt Ion:106 Resp: 1705

Ion Ratio Lower Upper

106 100

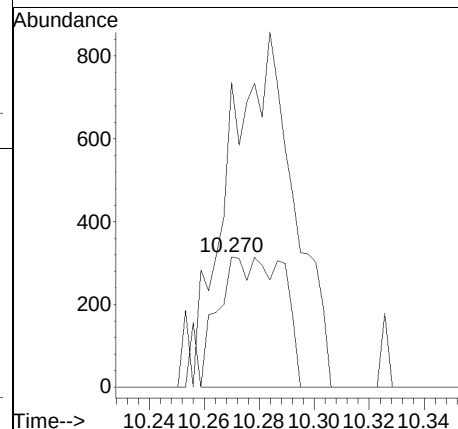
91 193.5 163.3 244.9

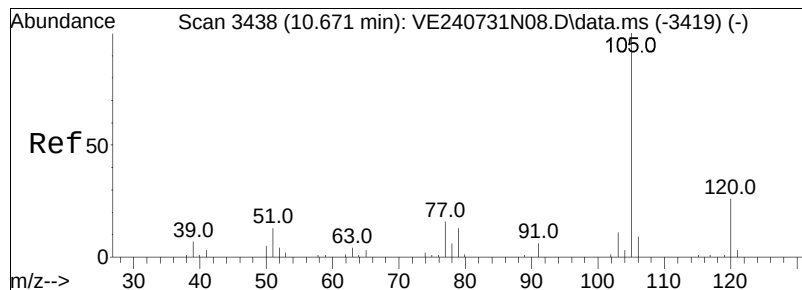




#82
 o Xylene
 Concen: 0.08 ug/L M1
 RT: 10.270 min Scan# 3294
 Delta R.T. -0.014 min
 Lab File: VE240816A12.D
 Acq: 16 Aug 2024 11:18 am

Tgt Ion	Ratio	Lower	Upper
106	100		
91	278.7	181.0	271.6#





#87

Isopropylbenzene

Concen: 0.23 ug/L

RT: 10.666 min Scan# 3436

Delta R.T. -0.005 min

Lab File: VE240816A12.D

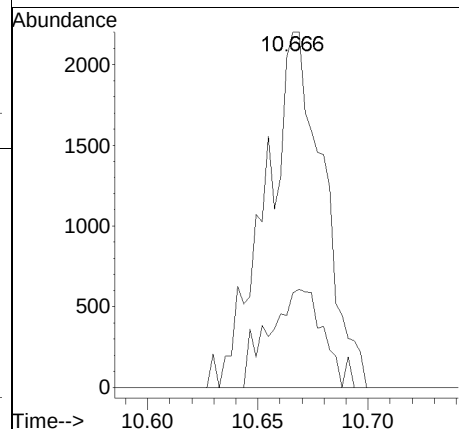
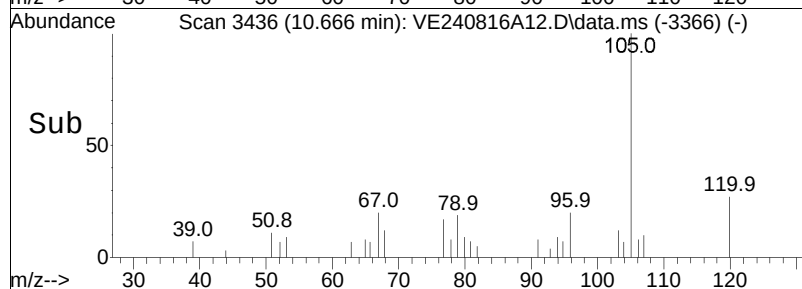
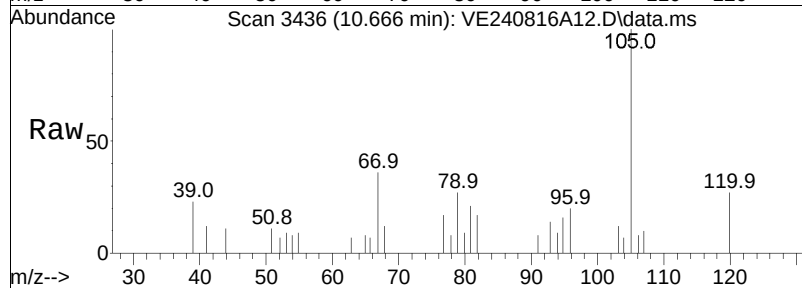
Acq: 16 Aug 2024 11:18 am

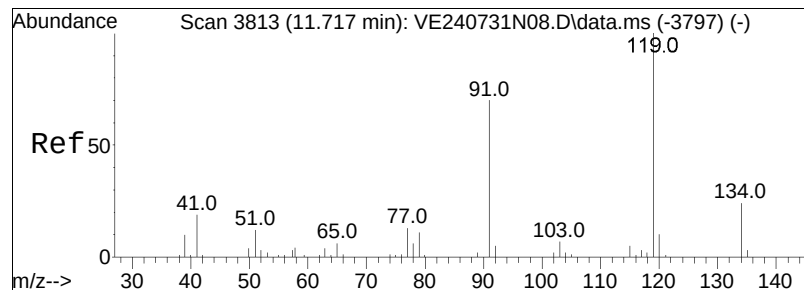
Tgt Ion:105 Resp: 4019

Ion Ratio Lower Upper

105 100

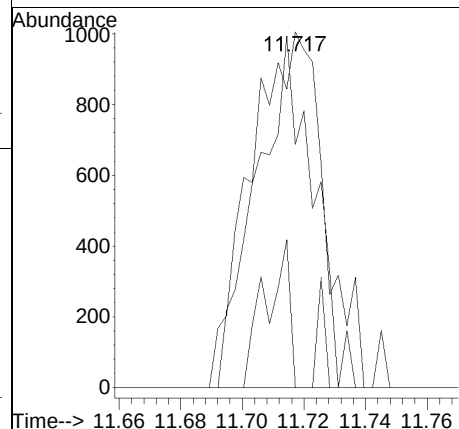
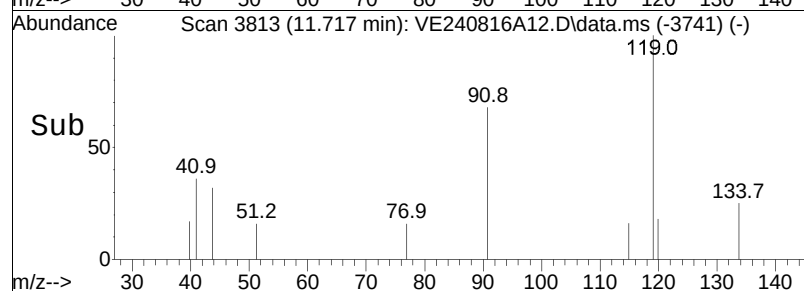
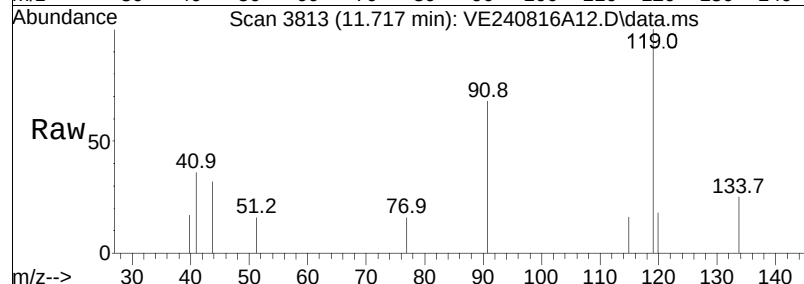
120 26.0 4.8 44.8

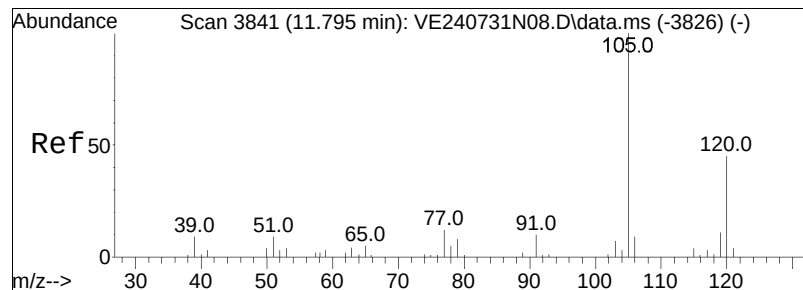




#99
 tert-Butylbenzene
 Concen: 0.13 ug/L
 RT: 11.717 min Scan# 3813
 Delta R.T. 0.000 min
 Lab File: VE240816A12.D
 Acq: 16 Aug 2024 11:18 am

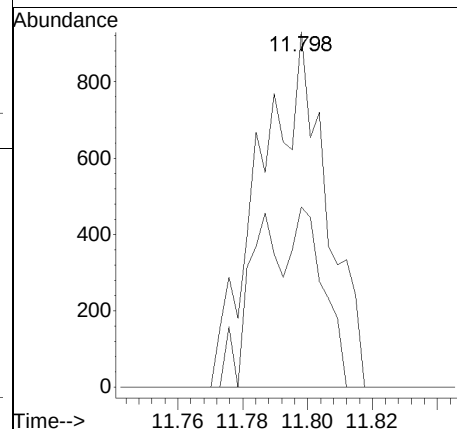
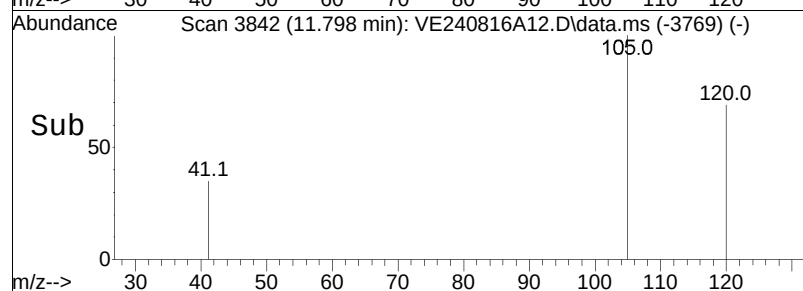
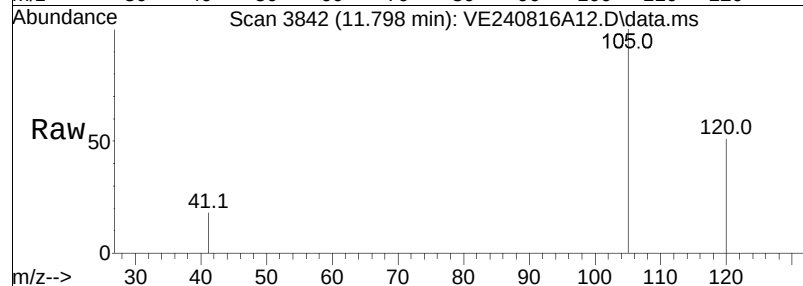
Tgt Ion	Ratio	Lower	Upper
119	100		
91	75.7	56.6	84.8
134	13.7	17.7	26.5

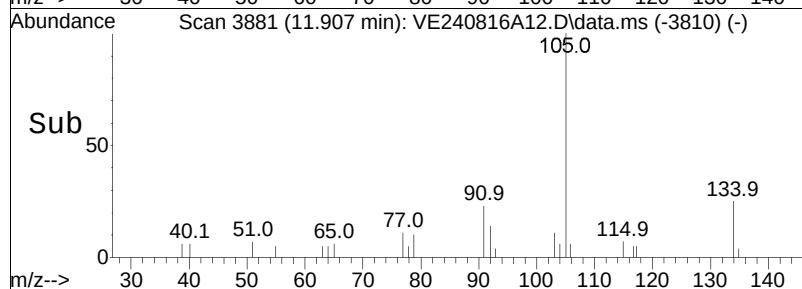
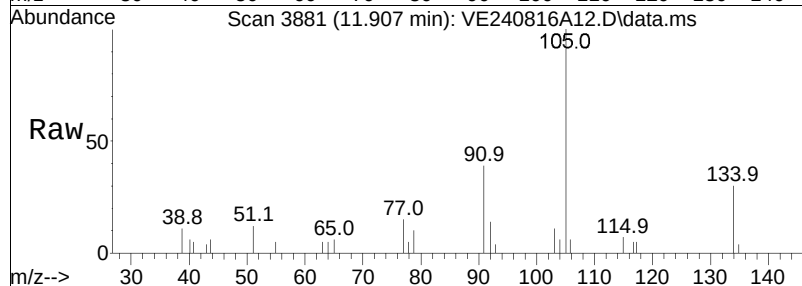
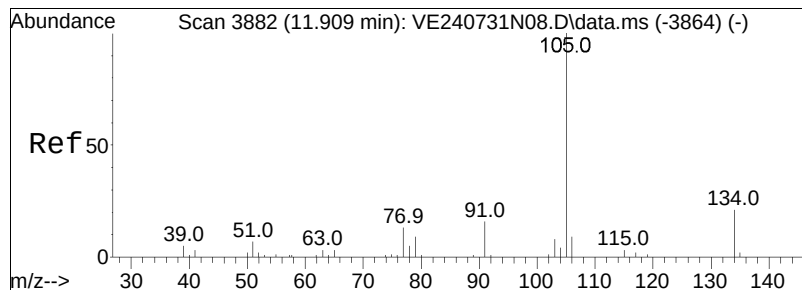




#102
 1,2,4-Trimethylbenzene
 Concen: 0.09 ug/L
 RT: 11.798 min Scan# 3842
 Delta R.T. 0.003 min
 Lab File: VE240816A12.D
 Acq: 16 Aug 2024 11:18 am

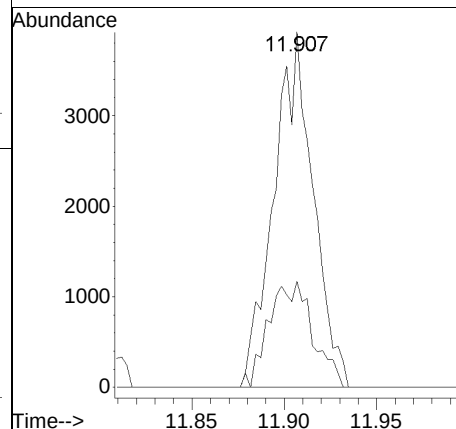
Tgt Ion:105 Resp: 1314
 Ion Ratio Lower Upper
 105 100
 120 25.0 33.6 50.4#





#103
 sec-Butylbenzene
 Concen: 0.32 ug/L M3
 RT: 11.907 min Scan# 3881
 Delta R.T. -0.002 min
 Lab File: VE240816A12.D
 Acq: 16 Aug 2024 11:18 am

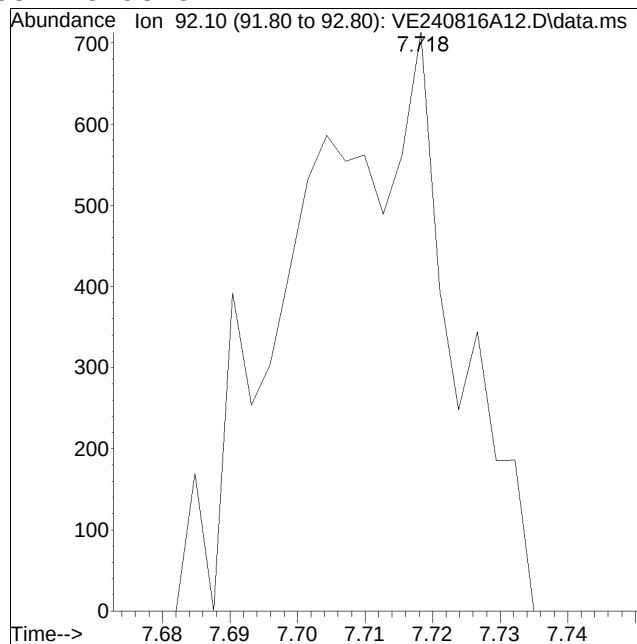
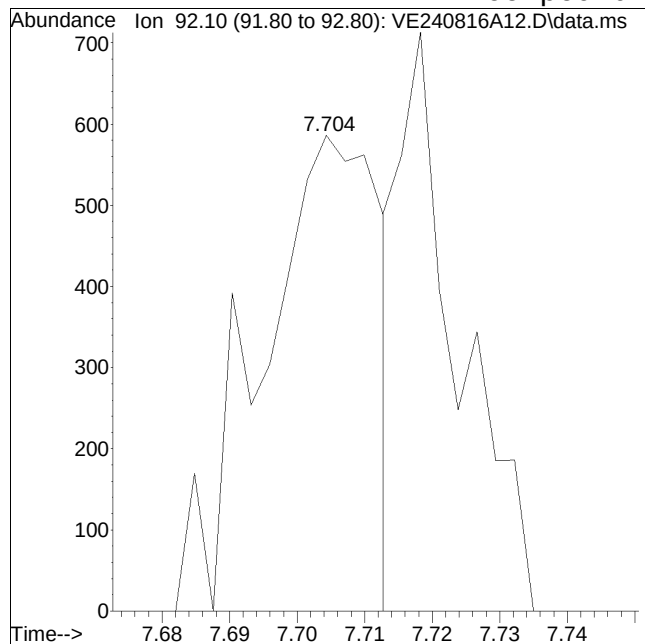
Tgt Ion	Ratio	Lower	Upper
105	100		
134	18.4	13.3	27.5



Manual Integration Report

Data Path : K:\Elaine\2024\240816A\ QMethod : Elaine_240731N_8260.m
 Data File : VE240816A12.D Operator : ELAINE:PID
 Date Inj'd : 8/16/2024 11:18 am Instrument : Elaine
 Sample : l2446277-01,31,10,10,,a,r3 Quant Date : 8/16/2024 11:43 am

Compound #65: Toluene



Original Peak Response = 713

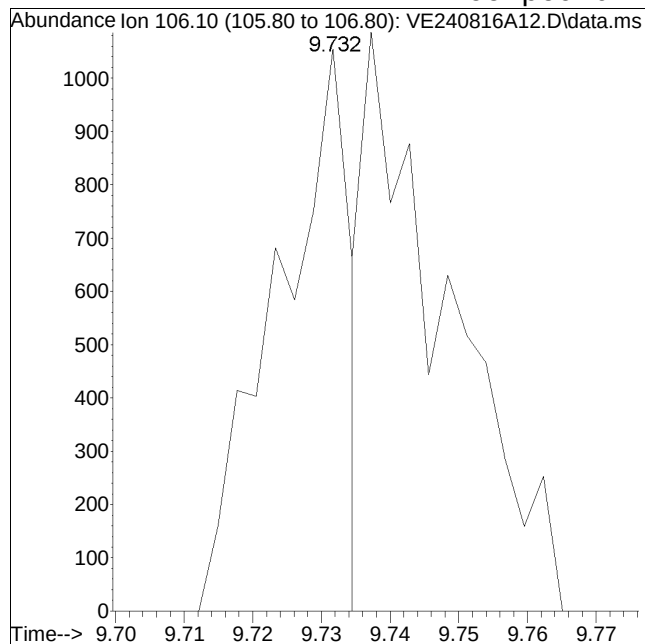
Manual Peak Response = 1125 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

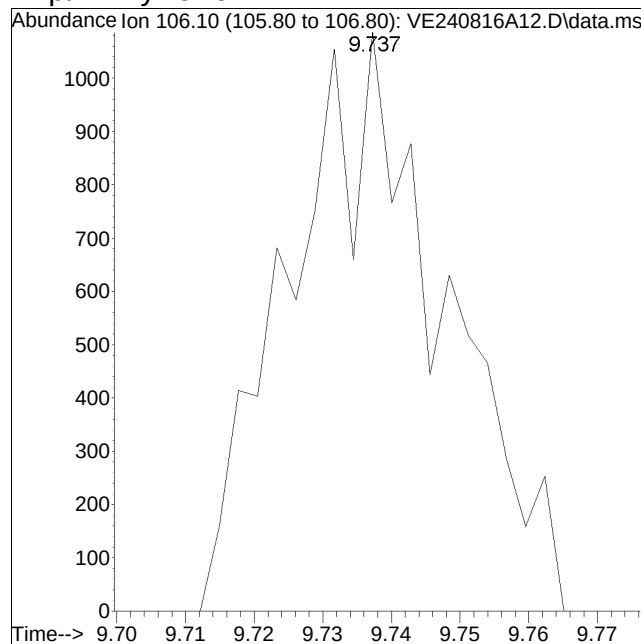
Data Path : K:\Elaine\2024\240816A\ QMethod : Elaine_240731N_8260.m
Data File : VE240816A12.D Operator : ELAINE:PID
Date Inj'd : 8/16/2024 11:18 am Instrument : Elaine
Sample : l2446277-01,31,10,10,,a,r3 Quant Date : 8/16/2024 11:43 am

Compound #81: p/m Xylene



Original Peak Response = 788

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

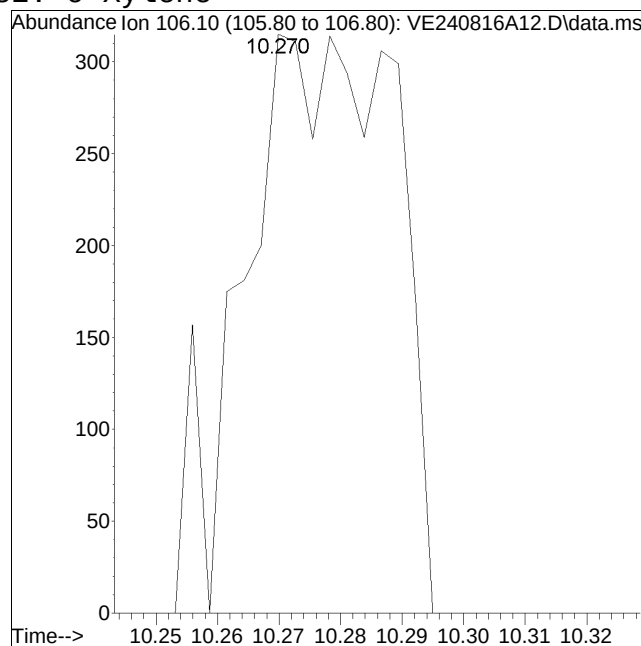
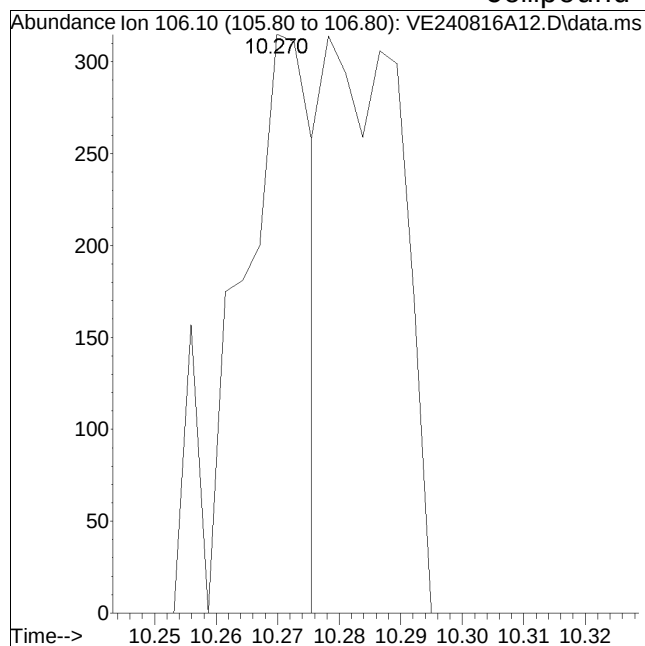


Manual Peak Response = 1705 M3

Manual Integration Report

Data Path : K:\Elaine\2024\240816A\ QMethod : Elaine_240731N_8260.m
Data File : VE240816A12.D Operator : ELAINE:PID
Date Inj'd : 8/16/2024 11:18 am Instrument : Elaine
Sample : l2446277-01,31,10,10,,a,r3 Quant Date : 8/16/2024 11:43 am

Compound #82: o Xylene



Original Peak Response = 267

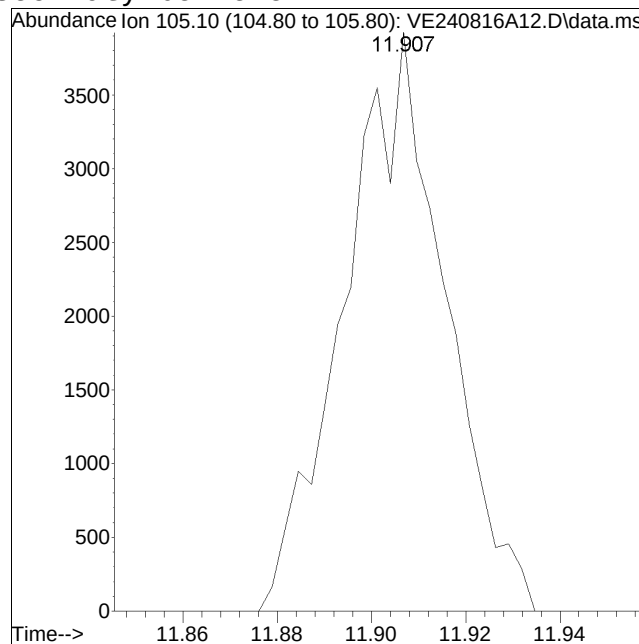
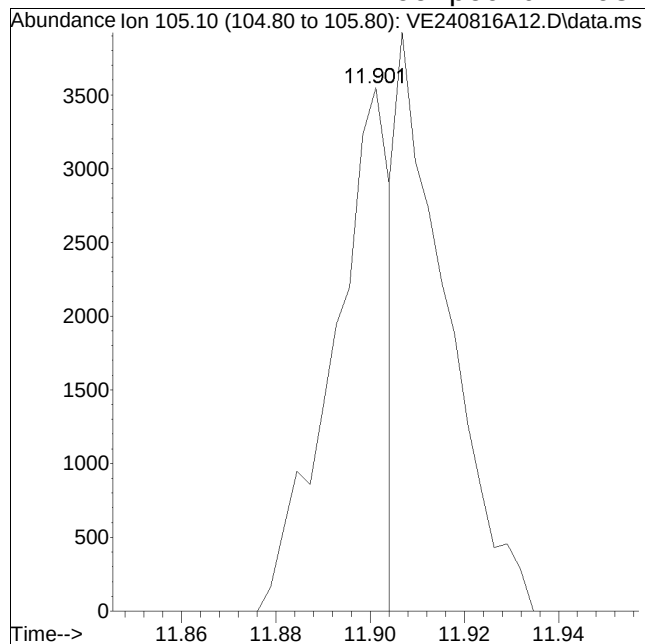
Manual Peak Response = 516 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

Data Path : K:\Elaine\2024\240816A\ QMethod : Elaine_240731N_8260.m
Data File : VE240816A12.D Operator : ELAINE:PID
Date Inj'd : 8/16/2024 11:18 am Instrument : Elaine
Sample : l2446277-01,31,10,10,,a,r3 Quant Date : 8/16/2024 11:43 am

Compound #103: sec-Butylbenzene



Original Peak Response = 2968

Manual Peak Response = 5827 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240816A\
 Data File : VE240816A13.D
 Acq On : 16 Aug 2024 11:42 am
 Operator : ELAINE:PID
 Sample : l2446277-02,31,10,10,,a,r3a
 Misc : WG1960272,ICAL21358
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 16 12:15:19 2024
 Quant Method : K:\Elaine\2024\240816A\Elaine_240731N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Aug 01 12:13:24 2024
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240816A\VE240816A01.D
 Sub List : 8260-NYCP51 - NYCP51

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

Internal Standards						
1) Fluorobenzene	5.959	96	164591	10.000	ug/L	0.00
Standard Area 1 = 184749			Recovery =	89.09%		
63) Chlorobenzene-d5	9.495	117	126334	10.000	ug/L	0.00
Standard Area 1 = 135681			Recovery =	93.11%		
84) 1,4-Dichlorobenzene-d4	12.202	152	72855	10.000	ug/L	0.00
Standard Area 1 = 81388			Recovery =	89.52%		
System Monitoring Compounds						
39) Dibromofluoromethane	5.147	113	41790	10.846	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	108.46%		
47) 1,2-Dichloroethane-d4	5.674	65	52586	10.228	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	102.28%		
64) Toluene-d8	7.649	98	164296	9.873	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	98.73%		
88) 4-Bromofluorobenzene	10.989	95	61374	9.119	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	91.19%		
Target Compounds						
						Qvalue
45) Benzene	5.529	78	153	N.D.		
65) Toluene	7.704	92	397	N.D.		
79) Ethylbenzene	9.562	91	30	N.D.		
81) p/m Xylene	9.743	106	99	N.D.		
82) o Xylene	10.465	106	28	N.D.		
87) Isopropylbenzene	10.674	105	2334	0.134	ug/L	88
90) n-Propylbenzene	11.137	91	50	N.D.		
95) 1,3,5-Trimethylbenzene	11.369	105	33	N.D.		
99) tert-Butylbenzene	11.714	119	2737	0.219	ug/L	# 96
102) 1,2,4-Trimethylbenzene	11.792	105	856	N.D.		
103) sec-Butylbenzene	11.904	105	2179M3	0.118	ug/L	
104) p-Isopropyltoluene	12.057	119	95	N.D.		
108) n-Butylbenzene	12.512	91	27	N.D.		
115) Naphthalene	14.344	128	84	N.D.		

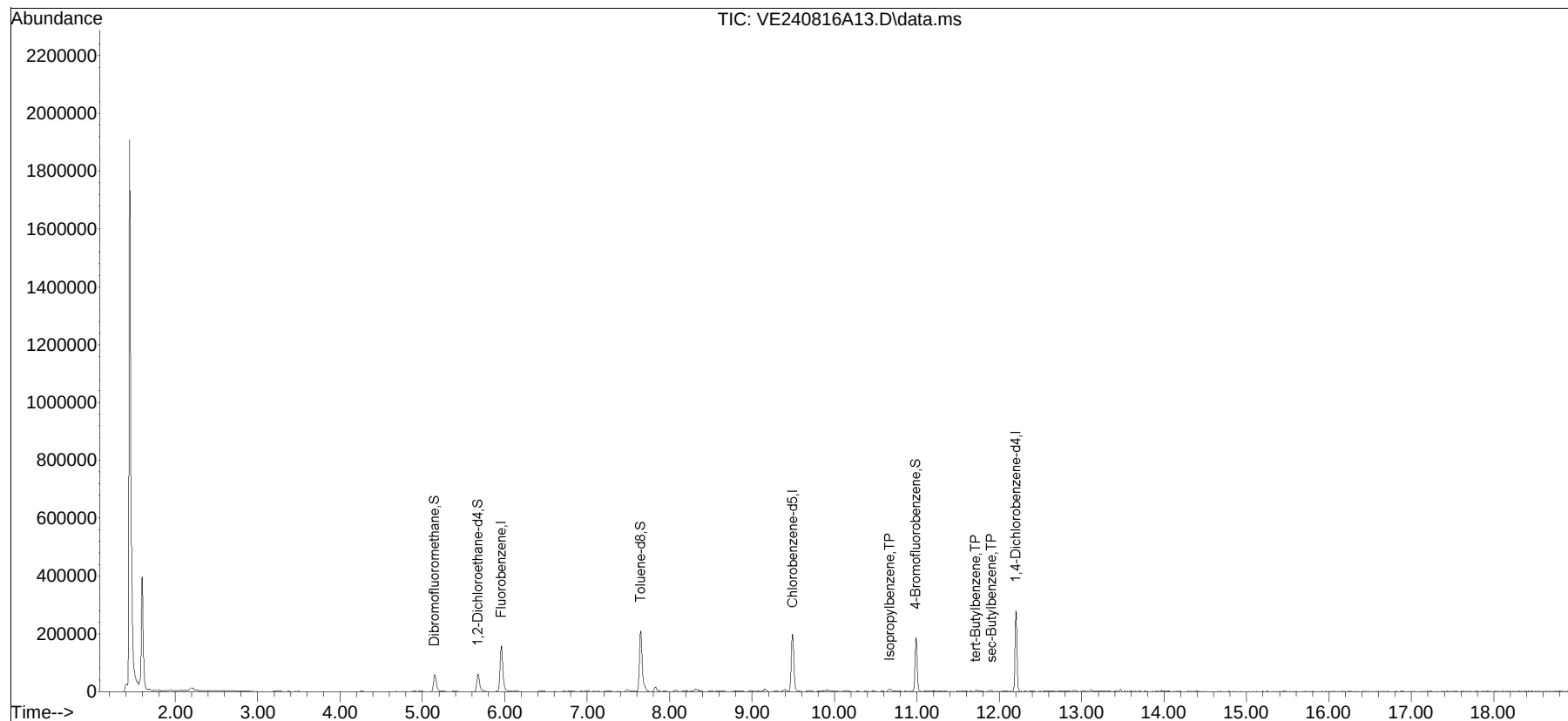
(#) = qualifier out of range (m) = manual integration (+) = signals summed

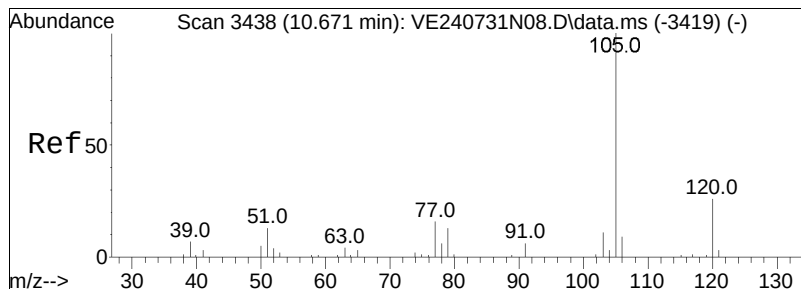
Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240816A\
 Data File : VE240816A13.D
 Acq On : 16 Aug 2024 11:42 am
 Operator : ELAINE:PID
 Sample : l2446277-02,31,10,10,,a,r3a
 Misc : WG1960272,ICAL21358
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 16 12:15:19 2024
 Quant Method : K:\Elaine\2024\240816A\Elaine_240731N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Aug 01 12:13:24 2024
 Response via : Initial Calibration

Sub List : 8260-NYCP51 - NYCP5140816A\VE240816A01.D•





#87

Isopropylbenzene

Concen: 0.13 ug/L

RT: 10.674 min Scan# 3439

Delta R.T. 0.003 min

Lab File: VE240816A13.D

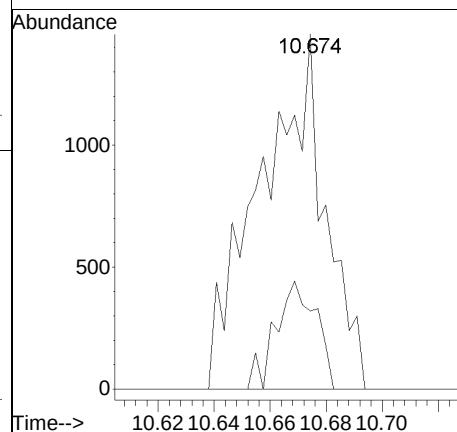
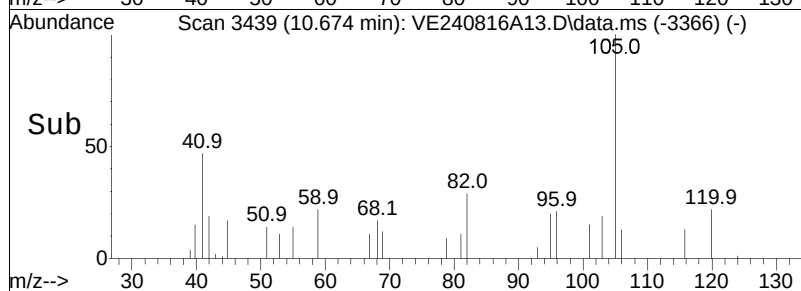
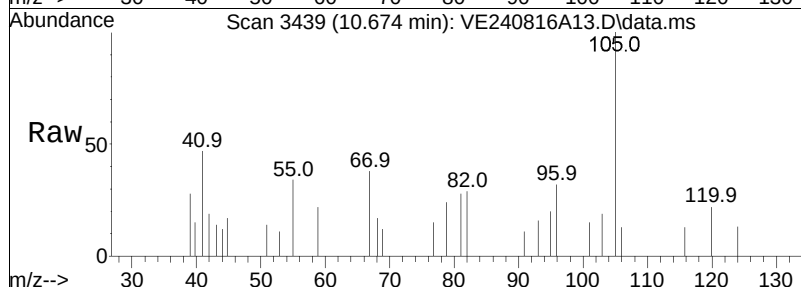
Acq: 16 Aug 2024 11:42 am

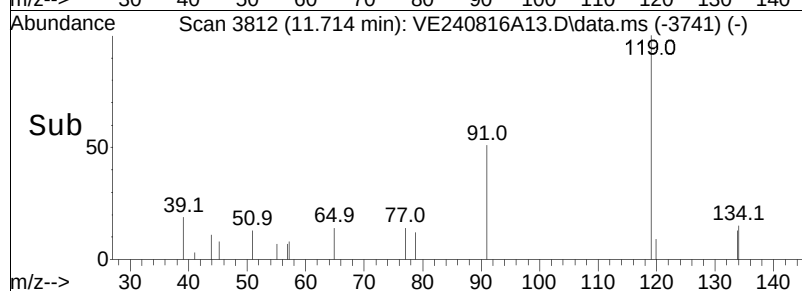
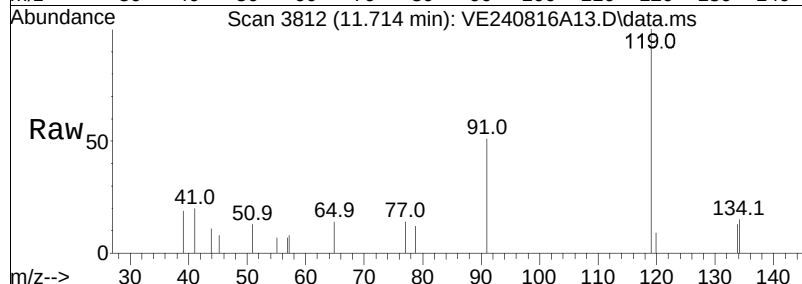
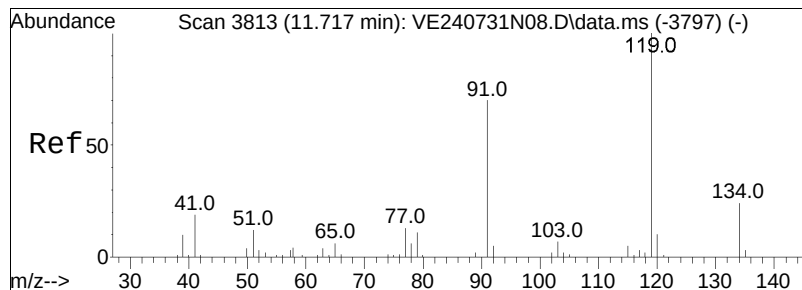
Tgt Ion:105 Resp: 2334

Ion Ratio Lower Upper

105 100

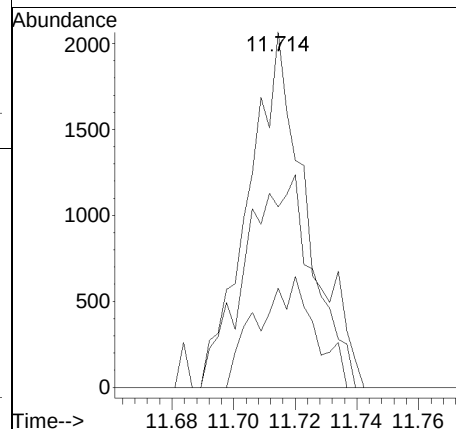
120 18.9 4.8 44.8

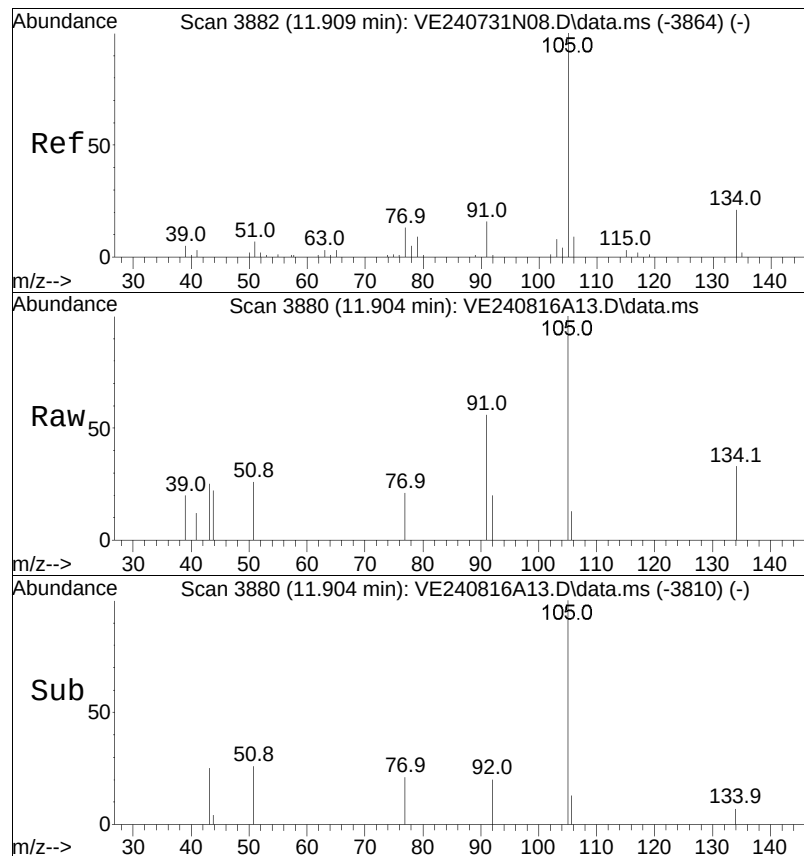




#99
 tert-Butylbenzene
 Concen: 0.22 ug/L
 RT: 11.714 min Scan# 3812
 Delta R.T. -0.003 min
 Lab File: VE240816A13.D
 Acq: 16 Aug 2024 11:42 am

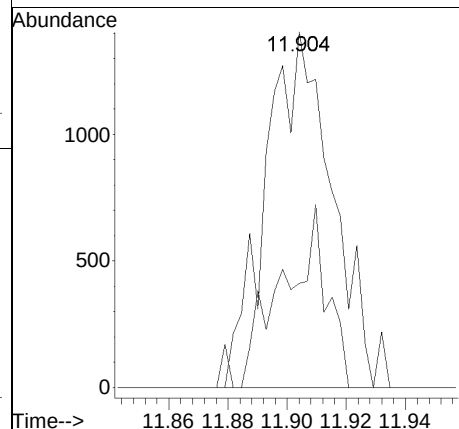
Tgt Ion	Ratio	Lower	Upper
119	100		
91	70.3	56.6	84.8
134	30.3	17.7	26.5





#103
 sec-Butylbenzene
 Concen: 0.12 ug/L M3
 RT: 11.904 min Scan# 3880
 Delta R.T. -0.005 min
 Lab File: VE240816A13.D
 Acq: 16 Aug 2024 11:42 am

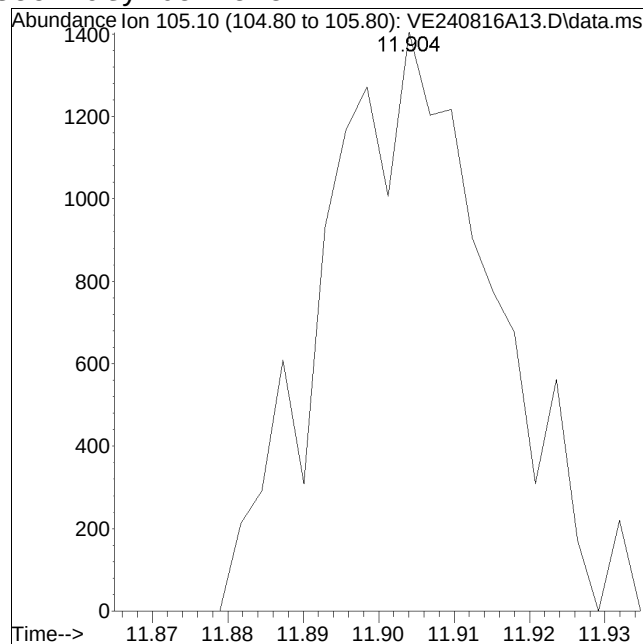
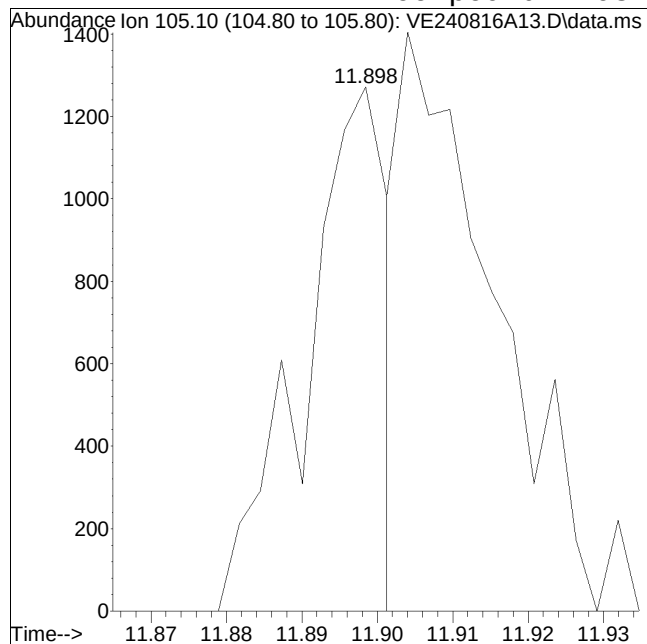
Tgt Ion	Ratio	Lower	Upper
105	100		
134	15.4	13.3	27.5



Manual Integration Report

Data Path : K:\Elaine\2024\240816A\ QMethod : Elaine_240731N_8260.m
Data File : VE240816A13.D Operator : ELAINE:PID
Date Inj'd : 8/16/2024 11:42 am Instrument : Elaine
Sample : l2446277-02,31,10,10,,a,r3 Quant Date : 8/16/2024 12:14 pm

Compound #103: sec-Butylbenzene



Original Peak Response = 970

Manual Peak Response = 2179 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240816A\
 Data File : VE240816A14.D
 Acq On : 16 Aug 2024 12:06 pm
 Operator : ELAINE:PID
 Sample : l2446277-03,31,10,10,,a,r3a
 Misc : WG1960272,ICAL21358
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 16 12:27:32 2024
 Quant Method : K:\Elaine\2024\240816A\Elaine_240731N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Aug 01 12:13:24 2024
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240816A\VE240816A01.D
 Sub List : 8260-NYCP51 - NYCP51

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.956	96	163965	10.000	ug/L	-0.01
Standard Area 1 = 184749			Recovery =	88.75%		
63) Chlorobenzene-d5	9.492	117	125003	10.000	ug/L	0.00
Standard Area 1 = 135681			Recovery =	92.13%		
84) 1,4-Dichlorobenzene-d4	12.202	152	69983	10.000	ug/L	0.00
Standard Area 1 = 81388			Recovery =	85.99%		
System Monitoring Compounds						
39) Dibromofluoromethane	5.150	113	39767	10.360	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	103.60%		
47) 1,2-Dichloroethane-d4	5.671	65	51753	10.105	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	101.05%		
64) Toluene-d8	7.648	98	164816	10.010	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	100.10%		
88) 4-Bromofluorobenzene	10.989	95	61223	9.470	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	94.70%		
Target Compounds						
45) Benzene	5.537	78	1913M6	0.147	ug/L	
65) Toluene	7.718	92	1893M3	0.220	ug/L	
79) Ethylbenzene	9.553	91	108	N.D.		
81) p/m Xylene	9.745	106	132	N.D.		
82) o Xylene	10.284	106	73	N.D.		
87) Isopropylbenzene	10.688	105	27	N.D.		
90) n-Propylbenzene	11.148	91	58	N.D.		
95) 1,3,5-Trimethylbenzene	11.282	105	29	N.D.		
99) tert-Butylbenzene	11.703	119	27	N.D.		
102) 1,2,4-Trimethylbenzene	11.789	105	63	N.D.		
103) sec-Butylbenzene	11.801	105	70	N.D.		
104) p-Isopropyltoluene	12.074	119	26	N.D.		
108) n-Butylbenzene	12.501	91	25	N.D.		
115) Naphthalene	14.341	128	75	N.D.		

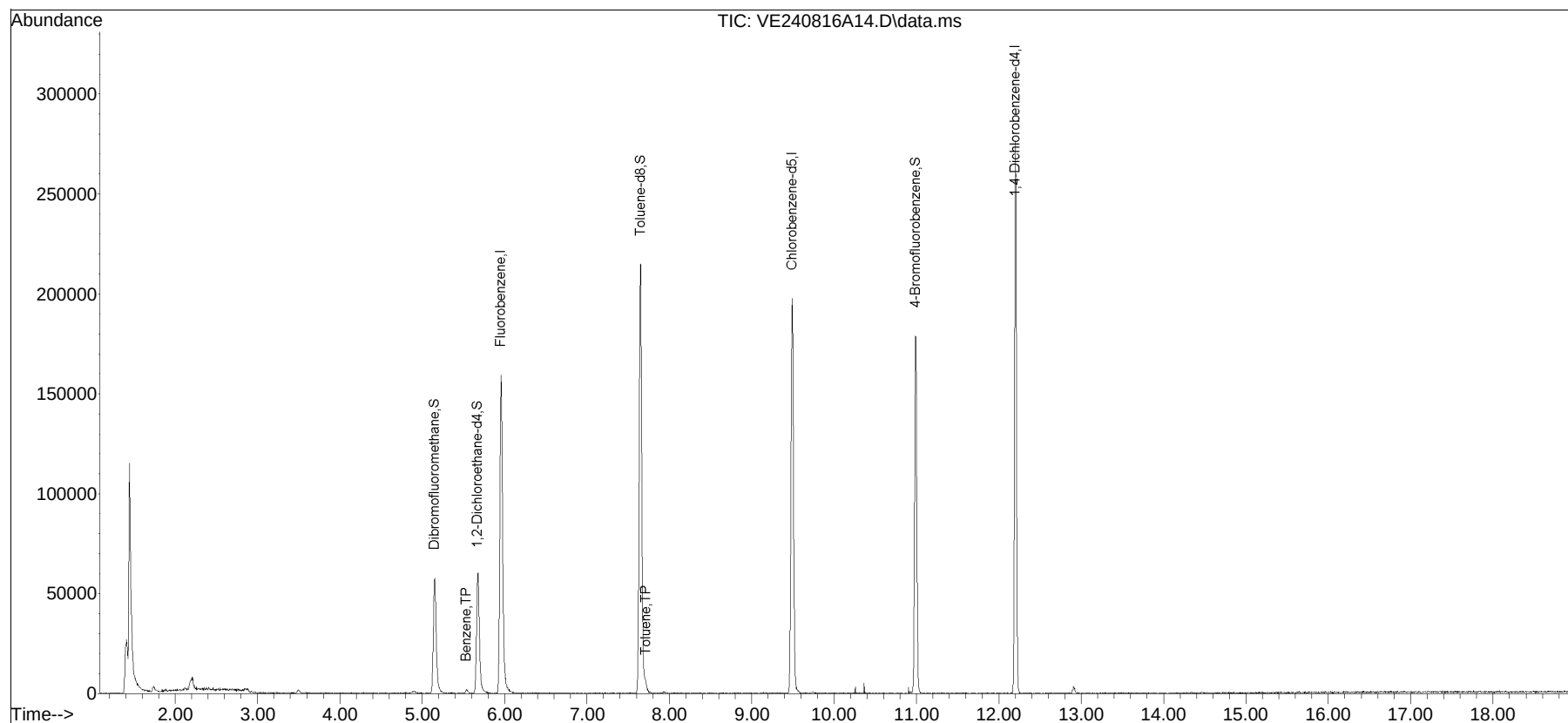
(#) = qualifier out of range (m) = manual integration (+) = signals summed

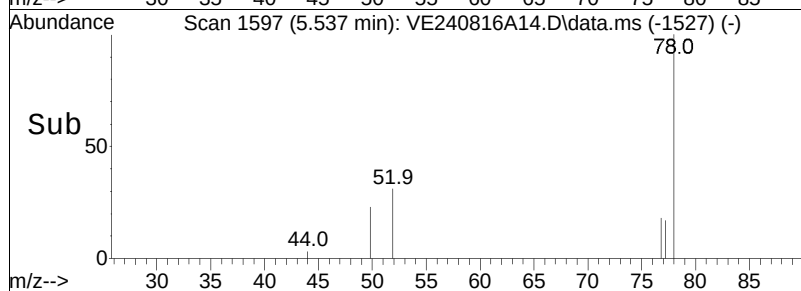
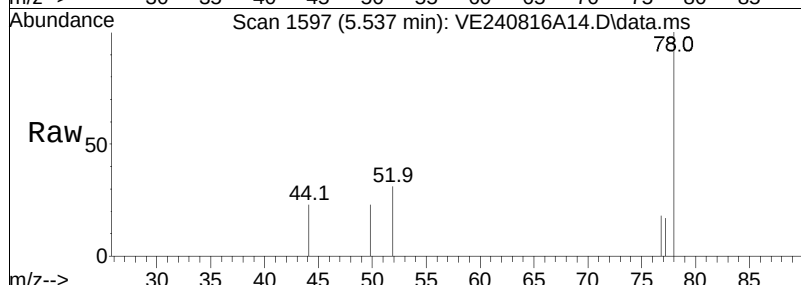
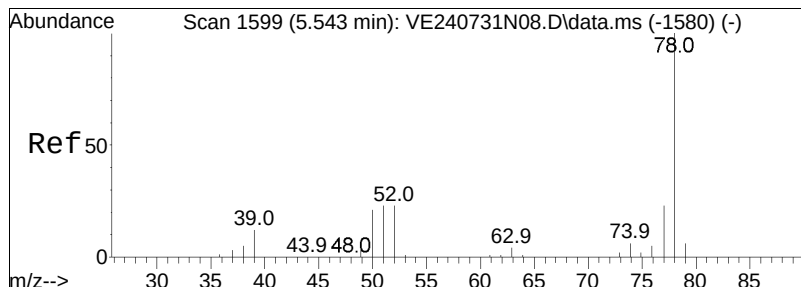
Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240816A\
 Data File : VE240816A14.D
 Acq On : 16 Aug 2024 12:06 pm
 Operator : ELAINE:PID
 Sample : l2446277-03,31,10,10,,a,r3a
 Misc : WG1960272,ICAL21358
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 16 12:27:32 2024
 Quant Method : K:\Elaine\2024\240816A\Elaine_240731N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Aug 01 12:13:24 2024
 Response via : Initial Calibration

Sub List : 8260-NYCP51 - NYCP5140816A\VE240816A01.D•





#45

Benzene

Concen: 0.15 ug/L M6

RT: 5.537 min Scan# 1597

Delta R.T. -0.006 min

Lab File: VE240816A14.D

Acq: 16 Aug 2024 12:06 pm

Tgt Ion: 78 Resp: 1913

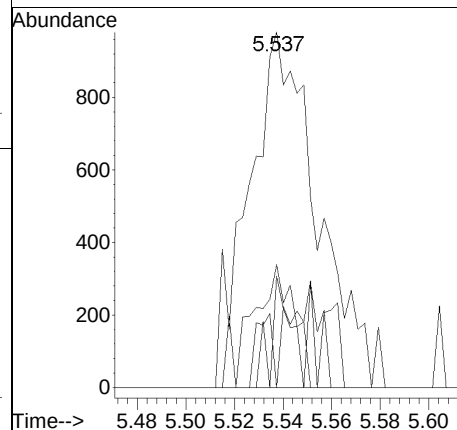
Ion Ratio Lower Upper

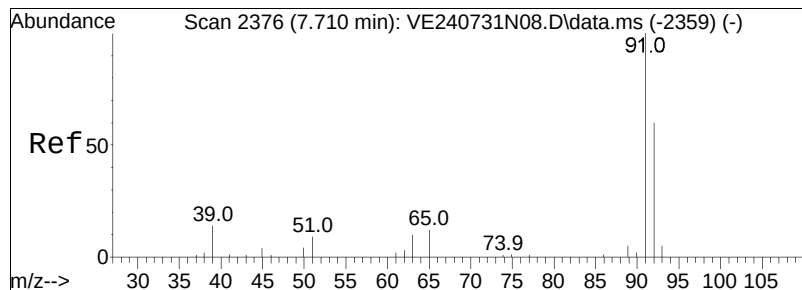
78 100

77 18.3 12.8 26.6

51 0.0 13.5 27.9#

52 7.6 12.0 25.0#





#65

Toluene

Concen: 0.22 ug/L M3

RT: 7.718 min Scan# 2379

Delta R.T. 0.008 min

Lab File: VE240816A14.D

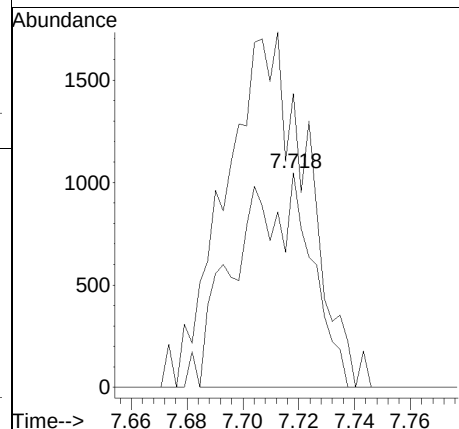
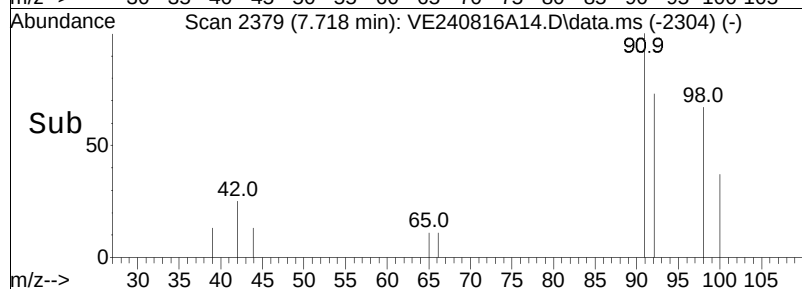
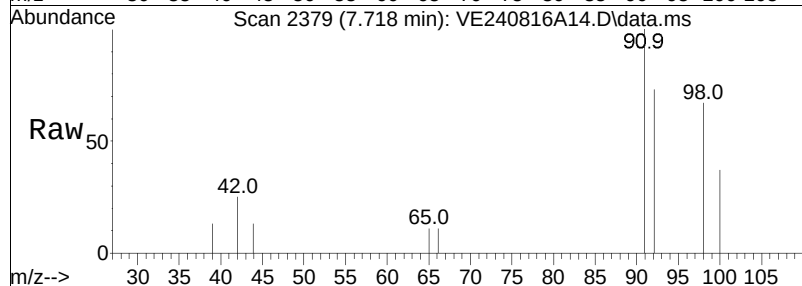
Acq: 16 Aug 2024 12:06 pm

Tgt Ion: 92 Resp: 1893

Ion Ratio Lower Upper

92 100

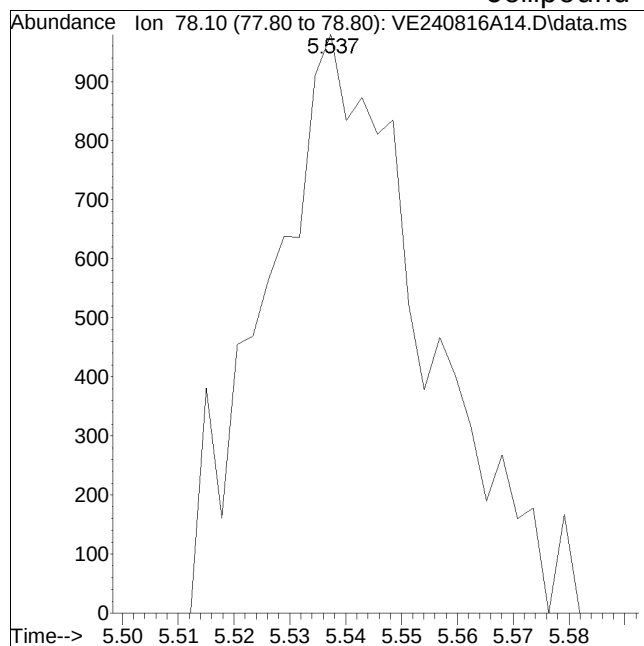
91 186.7 129.1 193.7



Manual Integration Report

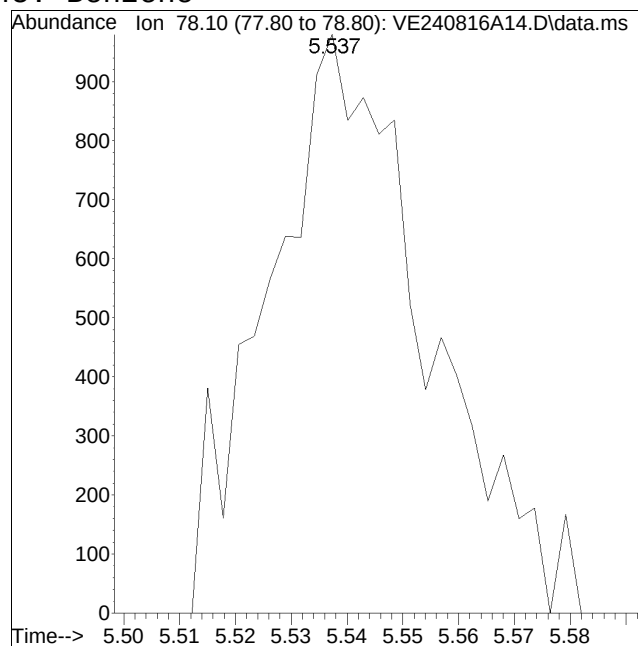
Data Path : K:\Elaine\2024\240816A\ QMethod : Elaine_240731N_8260.m
Data File : VE240816A14.D Operator : ELAINE:PID
Date Inj'd : 8/16/2024 12:06 pm Instrument : Elaine
Sample : l2446277-03,31,10,10,,a,r3 Quant Date : 8/16/2024 12:27 pm

Compound #45: Benzene



Original Peak Response = 1940

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

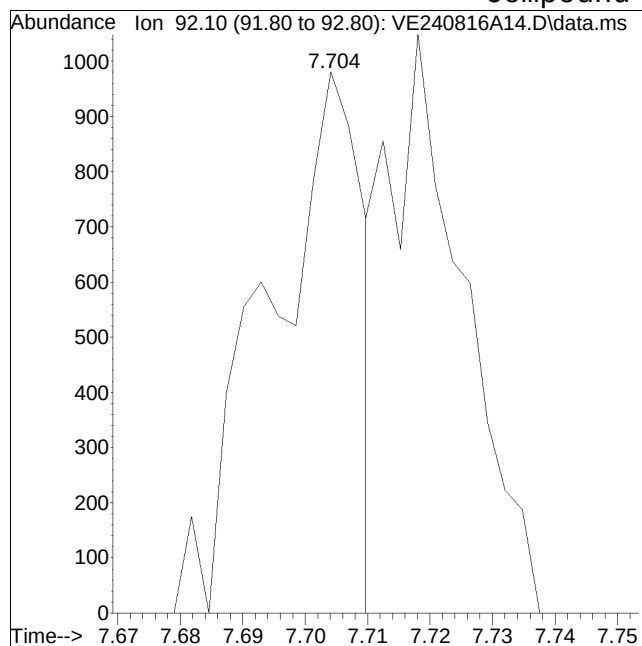


Manual Peak Response = 1913 M6

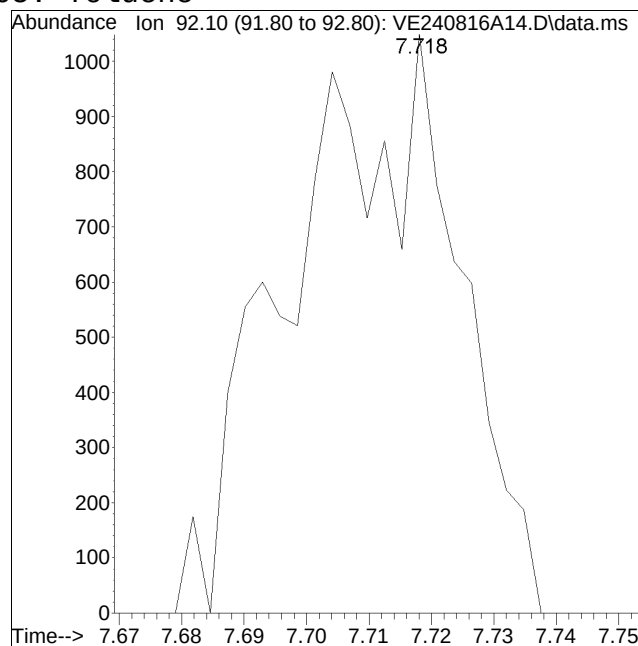
Manual Integration Report

Data Path : K:\Elaine\2024\240816A\ QMethod : Elaine_240731N_8260.m
Data File : VE240816A14.D Operator : ELAINE:PID
Date Inj'd : 8/16/2024 12:06 pm Instrument : Elaine
Sample : l2446277-03,31,10,10,,a,r3 Quant Date : 8/16/2024 12:27 pm

Compound #65: Toluene



Original Peak Response = 1030



Manual Peak Response = 1893 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Volatiles Standards Data

Initial Calibration

Initial Calibration Summary

Form 6

Volatiles

Client : Impact Environmental
 Project Name : 585 UNION STREET
 Instrument ID : ELAINE
 Calibration dates : 07/31/24 18:35 07/31/24 22:22

Lab Number : L2446277
 Project Number : 14729
 Ical Ref : ICAL21358

Calibration Files

L11 =VE240731N03.D L1 =VE240731N05.D L2 =VE240731N07.D L3 =VE240731N08.D L4 =VE240731N09.D
 L6 =VE240731N10.D L8 =VE240731N11.D L10 =VE240731N12.D

Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
1) I Fluorobenzene	-----ISTD-----									
2) TP Dichlorodifluo		0.138	0.246	0.220	0.243	0.243	0.244	0.235	0.224	17.36
3) TP Chloromethane		0.199	0.251	0.263	0.261	0.259	0.260	0.256	0.250	9.09
4) TP Vinyl chloride	0.163	0.159	0.248	0.243	0.263	0.260	0.265	0.260	0.233	19.30
5) TP Bromomethane		0.043	0.054	0.058	0.067	0.084	0.095	0.102	*Q	0.9983
6) TP Chloroethane		0.109	0.166	0.154	0.151	0.153	0.144	0.107	0.140	16.43
7) TP Trichlorofluor		0.189	0.262	0.254	0.291	0.294	0.295	0.287	0.267	14.21
8) TP Ethyl ether		0.098	0.094	0.106	0.111	0.111	0.108	0.108	0.105	6.41
10) TP 1,1-Dichloroet		0.128	0.165	0.154	0.168	0.170	0.170	0.165	0.160	9.41
11) TP Carbon disulfide		0.423	0.489	0.504	0.523	0.517	0.512	0.493	0.494	6.86
12) TP Freon-113		0.120	0.172	0.163	0.178	0.178	0.183	0.175	0.167	13.06
13) TP Iodomethane			0.056	0.087	0.130	0.163	0.172	0.180	*Q	0.9978
14) TP Acrolein		0.042	0.047	0.044	0.045	0.045	0.046	0.048	0.045	4.40
15) TP Methylene chlo		0.219	0.207	0.204	0.201	0.197	0.195	0.191	0.202	4.65
17) TP Acetone			0.094	0.071	0.077	0.071	0.065	0.063	0.073	15.12
18) TP trans-1,2-Dich		0.134	0.173	0.177	0.180	0.183	0.181	0.176	0.172	9.89
19) TP Methyl acetate		0.231	0.183	0.165	0.161	0.156	0.153	0.149	0.171	16.75
21) TP Methyl tert butyl ether		0.595	0.630	0.676	0.661	0.657	0.646	0.629	0.642	4.16
22) TP tert-Butyl alc		0.021	0.023	0.024	0.024	0.023	0.023	0.023	0.023	4.09
24) TP Diisopropyl ether		0.797	0.878	0.965	0.985	0.960	0.936	0.916	0.920	7.03
25) TP 1,1-Dichloroet		0.339	0.407	0.424	0.424	0.420	0.409	0.405	0.404	7.39
26) TP Halothane		0.117	0.137	0.142	0.147	0.145	0.143	0.141	0.139	7.40
27) TP Acrylonitrile		0.076	0.081	0.088	0.089	0.087	0.086	0.084	0.084	5.26
28) TP Ethyl tert-but		0.694	0.779	0.838	0.837	0.826	0.811	0.800	0.798	6.32
29) TP Vinyl acetate		0.679	0.649	0.556	0.550	0.513	0.670	0.667	0.612	11.34
30) TP cis-1,2-Dichlo		0.183	0.211	0.211	0.208	0.214	0.211	0.205	0.206	5.19
31) TP 2,2-Dichloropr		0.240	0.279	0.270	0.284	0.278	0.279	0.263	0.270	5.58
33) TP Bromochloromet		0.089	0.091	0.096	0.096	0.091	0.086	0.085	0.091#	4.89
34) TP Cyclohexane		0.384	0.496	0.452	0.498	0.498	0.499	0.484	0.473	8.98
35) TP Chloroform		0.303	0.352	0.346	0.336	0.339	0.333	0.335	0.335	4.66
36) TP Ethyl acetate		0.314	0.226	0.262	0.255	0.249	0.243	0.242	0.256	11.00
37) TP Carbon tetrachloride	0.229	0.188	0.270	0.260	0.275	0.275	0.279	0.271	0.256	12.38
38) TP Tetrahydrofuran		0.087	0.083	0.081	0.080	0.078	0.074	0.073	0.079	5.85
39) S Dibromofluoromethane	0.242	0.242	0.240	0.238	0.232	0.231	0.224	0.223	0.234	3.26
40) TP 1,1,1-Trichlor		0.265	0.301	0.310	0.316	0.315	0.315	0.308	0.304	5.96
42) TP 2-Butanone			0.118	0.104	0.105	0.104	0.100	0.099	0.105	6.40



Initial Calibration Summary

Form 6

Volatiles

Client : Impact Environmental
 Project Name : 585 UNION STREET
 Instrument ID : ELAINE
 Calibration dates : 07/31/24 18:35 07/31/24 22:22

Lab Number : L2446277
 Project Number : 14729
 Ical Ref : ICAL21358

Calibration Files

L11 =VE240731N03.D L1 =VE240731N05.D L2 =VE240731N07.D L3 =VE240731N08.D L4 =VE240731N09.D
 L6 =VE240731N10.D L8 =VE240731N11.D L10 =VE240731N12.D

Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
43) TP 1,1-Dichloropr	0.193	0.259	0.260	0.270	0.271	0.271	0.268	0.256	11.09	
45) TP Benzene	0.719	0.654	0.814	0.838	0.839	0.835	0.825	0.813	0.792	8.59
46) TP Tertiary-Amyl Methyl Ether	0.549	0.579	0.619	0.622	0.611	0.607	0.598	0.598	4.33	
47) S 1,2-Dichloroethane-d4	0.326	0.322	0.322	0.316	0.305	0.309	0.298	0.302	0.312	3.33
48) T 1,2-Dichloroet	0.295	0.300	0.320	0.314	0.310	0.303	0.299	0.306	2.93	
51) TP Methyl cyclohe	0.281	0.360	0.333	0.364	0.386	0.390	0.377	0.356	10.67	
52) TP Trichloroethene	0.193	0.161	0.200	0.210	0.217	0.216	0.201	0.195	0.199#	8.96
54) TP Dibromomethane	0.096	0.116	0.120	0.119	0.118	0.116	0.117	0.115	7.18	
55) TP 1,2-Dichloropr	0.215	0.233	0.249	0.248	0.246	0.242	0.239	0.239	5.05	
57) TP 2-Chloroethyl	0.127	0.145	0.157	0.163	0.167	0.160	0.158	0.154	8.95	
58) TP Bromodichlorom	0.250	0.293	0.294	0.289	0.290	0.286	0.282	0.283#	5.40	
61) TP 1,4-Dioxane	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002#	1.58	
62) TP cis-1,3-Dichloropropene	0.241	0.293	0.316	0.341	0.345	0.345	0.339	0.334	0.319	11.31
63) I Chlorobenzene-d5	-----ISTD-----									
64) S Toluene-d8	1.316	1.311	1.306	1.323	1.314	1.308	1.321	1.339	1.317	0.79
65) TP Toluene	0.596	0.701	0.712	0.711	0.697	0.702	0.700	0.689	5.96	
66) TP 4-Methyl-2-pen	0.096	0.114	0.124	0.124	0.122	0.121	0.120	0.117	8.43	
67) TP Tetrachloroethene	0.219	0.288	0.302	0.312	0.308	0.313	0.307	0.293	11.47	
69) TP trans-1,3-Dichloropropene	0.319	0.359	0.375	0.414	0.420	0.408	0.405	0.402	0.388	8.92
71) TP Ethyl methacry	0.356	0.363	0.387	0.378	0.367	0.368	0.365	0.369	2.79	
72) TP 1,1,2-Trichlor	0.183	0.190	0.204	0.201	0.193	0.192	0.190	0.193#	3.69	
73) TP Chlorodibromom	0.230	0.258	0.281	0.283	0.277	0.281	0.281	0.270	7.23	
74) TP 1,3-Dichloropr	0.369	0.398	0.430	0.429	0.412	0.410	0.409	0.408	5.11	
75) TP 1,2-Dibromoethane	0.216	0.223	0.237	0.236	0.229	0.228	0.230	0.228	3.24	
77) TP 2-Hexanone	0.238	0.227	0.234	0.233	0.225	0.221	0.222	0.229	2.91	
78) TP Chlorobenzene	0.673	0.728	0.767	0.755	0.737	0.742	0.734	0.734	4.10	
79) TP Ethylbenzene	1.142	1.358	1.408	1.393	1.353	1.359	1.329	1.335	6.66	
80) TP 1,1,1,2-Tetrac	0.215	0.270	0.287	0.286	0.276	0.276	0.273	0.269	9.12	
81) TP p/m Xylene	0.447	0.521	0.548	0.535	0.510	0.508	0.492	0.509	6.43	
82) TP o Xylene	0.454	0.508	0.533	0.516	0.497	0.495	0.479	0.497	5.16	
83) TP Styrene	0.718	0.838	0.886	0.858	0.817	0.812	0.779	0.816	6.74	
84) I 1,4-Dichlorobenzene-d4	-----ISTD-----									
85) TP Bromoform	0.284	0.320	0.331	0.334	0.334	0.338	0.337	0.325	5.92	
87) TP Isopropylbenzene	1.911	2.394	2.445	2.472	2.475	2.556	2.509	2.395	9.15	
88) S 4-Bromofluorobenzene	0.912	0.926	0.900	0.927	0.899	0.923	0.942	0.959	0.924	2.20
89) TP Bromobenzene	0.539	0.594	0.625	0.612	0.613	0.627	0.622	0.605	5.15	



Initial Calibration Summary

Form 6

Volatiles

Client : Impact Environmental
 Project Name : 585 UNION STREET
 Instrument ID : ELAINE
 Calibration dates : 07/31/24 18:35 07/31/24 22:22

Lab Number : L2446277
 Project Number : 14729
 Ical Ref : ICAL21358

Calibration Files

L11 =VE240731N03.D L1 =VE240731N05.D L2 =VE240731N07.D L3 =VE240731N08.D L4 =VE240731N09.D
 L6 =VE240731N10.D L8 =VE240731N11.D L10 =VE240731N12.D

Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
90) TP n-Propylbenzene	2.463	2.827	2.941	2.951	2.948	3.011	2.888	2.861	6.45	
91) TP 1,4-Dichlorobu	1.076	1.063	1.068	1.046	1.022	1.031	1.015	1.046	2.29	
92) TP 1,1,2,2-Tetrac	0.512	0.521	0.493	0.487	0.485	0.530	0.529	0.508	3.87	
93) TP 4-Ethyltoluene	1.935	2.296	2.424	2.400	2.399	2.443	2.350	2.321	7.63	
94) TP 2-Chlorotoluene	1.451	1.722	1.764	1.719	1.699	1.724	1.705	1.683	6.21	
95) TP 1,3,5-Trimethy	1.733	2.008	2.145	2.110	2.089	2.133	2.036	2.036	7.01	
96) TP 1,2,3-Trichlor	0.395	0.420	0.431	0.422	0.414	0.414	0.407	0.415	2.78	
97) TP trans-1,4-Dich	0.185	0.197	0.203	0.201	0.207	0.213	0.219	0.204	5.51	
98) TP 4-Chlorotoluene	1.530	1.763	1.829	1.796	1.785	1.839	1.801	1.763	6.02	
99) TP tert-Butylbenzene	1.412	1.689	1.769	1.762	1.779	1.824	1.747	1.712	8.07	
102) TP 1,2,4-Trimethy	1.747	1.954	2.131	2.103	2.101	2.135	2.057	2.033	6.91	
103) TP sec-Butylbenzene	2.141	2.500	2.584	2.607	2.644	2.708	2.584	2.538	7.33	
104) TP p-Isopropyltol	1.701	2.077	2.196	2.232	2.258	2.294	2.214	2.139	9.58	
105) TP 1,3-Dichlorobe	1.015	1.081	1.169	1.146	1.135	1.148	1.122	1.117	4.72	
106) TP 1,4-Dichlorobe	1.009	1.087	1.157	1.145	1.138	1.145	1.131	1.116	4.67	
107) TP p-Diethylbenzene	1.028	1.180	1.302	1.316	1.335	1.335	1.333	1.261	9.25	
108) TP n-Butylbenzene	1.501	1.792	1.868	1.891	1.948	1.955	1.939	1.842	8.74	
109) TP 1,2-Dichlorobe	0.978	1.026	1.115	1.108	1.094	1.098	1.099	1.074	4.80	
110) TP 1,2,4,5-Tetram	1.737	1.892	2.127	2.116	2.105	2.156	2.192	2.046	8.17	
111) TP 1,2-Dibromo-3-	0.049	0.087	0.092	0.094	0.094	0.097	0.102	*L	0.9989	
112) TP 1,3,5-Trichlor	0.709	0.775	0.890	0.883	0.879	0.919	0.916	0.853	9.33	
113) TP Hexachlorobuta	0.225	0.275	0.285	0.293	0.293	0.305	0.303	0.283	9.74	
114) TP 1,2,4-Trichlor	0.666	0.683	0.789	0.797	0.806	0.839	0.809	0.770	8.71	
115) TP Naphthalene	1.419	1.532	1.695	1.747	1.797	1.858	1.833	1.697	9.67	
116) TP 1,2,3-Trichlor	0.578	0.647	0.721	0.728	0.750	0.771	0.757	0.707	9.89	

Response Factor Report Elaine

Method Path : K:\Elaine\2024\240731N-ICAL\
 Method File : Elaine_240731N_8260.m
 Title : VOLATILES BY GC/MS
 Last Update : Thu Aug 01 12:13:24 2024
 Response Via : Initial Calibration

Calibration Files

L11 =VE240731N03.D L1 =VE240731N05.D L2 =VE240731N07.D L3 =VE240731N08.D L4 =VE240731N09.D
 L6 =VE240731N10.D L8 =VE240731N11.D L10 =VE240731N12.D

Compound		L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
-----ISTD-----											
1) I	Fluorobenzene										
2) TP	Dichlorodifluo...	0.138	0.246	0.220	0.243	0.243	0.244	0.235	0.224	17.36	
3) TP	Chloromethane	0.199	0.251	0.263	0.261	0.259	0.260	0.256	0.250	9.09	
4) TP	Vinyl chloride	0.163	0.159	0.248	0.243	0.263	0.260	0.265	0.260	0.233	19.30
5) TP	Bromomethane	0.043	0.054	0.058	0.067	0.084	0.095	0.102	*Q	0.9983	
6) TP	Chloroethane	0.109	0.166	0.154	0.151	0.153	0.144	0.107	0.140	16.43	
7) TP	Trichlorofluor...	0.189	0.262	0.254	0.291	0.294	0.295	0.287	0.267	14.21	
8) TP	Ethyl ether	0.098	0.094	0.106	0.111	0.111	0.108	0.108	0.105	6.41	
10) TP	1,1-Dichloroet...	0.128	0.165	0.154	0.168	0.170	0.170	0.165	0.160	9.41	
11) TP	Carbon disulfide	0.423	0.489	0.504	0.523	0.517	0.512	0.493	0.494	6.86	
12) TP	Freon-113	0.120	0.172	0.163	0.178	0.178	0.183	0.175	0.167	13.06	
13) TP	Iodomethane		0.056	0.087	0.130	0.163	0.172	0.180	*Q	0.9978	
14) TP	Acrolein	0.042	0.047	0.044	0.045	0.045	0.046	0.048	0.045	4.40	
15) TP	Methylene chlo...	0.219	0.207	0.204	0.201	0.197	0.195	0.191	0.202	4.65	
17) TP	Acetone		0.094	0.071	0.077	0.071	0.065	0.063	0.073	15.12	
18) TP	trans-1,2-Dich...	0.134	0.173	0.177	0.180	0.183	0.181	0.176	0.172	9.89	
19) TP	Methyl acetate	0.231	0.183	0.165	0.161	0.156	0.153	0.149	0.171	16.75	
21) TP	Methyl tert-bu...	0.595	0.630	0.676	0.661	0.657	0.646	0.629	0.642	4.16	
22) TP	tert-Butyl alc...	0.021	0.023	0.024	0.024	0.023	0.023	0.023	0.023	4.09	
24) TP	Diisopropyl ether	0.797	0.878	0.965	0.985	0.960	0.936	0.916	0.920	7.03	
25) TP	1,1-Dichloroet...	0.339	0.407	0.424	0.424	0.420	0.409	0.405	0.404	7.39	
26) TP	Halothane	0.117	0.137	0.142	0.147	0.145	0.143	0.141	0.139	7.40	
27) TP	Acrylonitrile	0.076	0.081	0.088	0.089	0.087	0.086	0.084	0.084	5.26	
28) TP	Ethyl tert-but...	0.694	0.779	0.838	0.837	0.826	0.811	0.800	0.798	6.32	
29) TP	Vinyl acetate	0.679	0.649	0.556	0.550	0.513	0.670	0.667	0.612	11.34	
30) TP	cis-1,2-Dichlo...	0.183	0.211	0.211	0.208	0.214	0.211	0.205	0.206	5.19	
31) TP	2,2-Dichloropr...	0.240	0.279	0.270	0.284	0.278	0.279	0.263	0.270	5.58	
33) TP	Bromochloromet...	0.089	0.091	0.096	0.096	0.091	0.086	0.085	0.091#	4.89	
34) TP	Cyclohexane	0.384	0.496	0.452	0.498	0.498	0.499	0.484	0.473	8.98	
35) TP	Chloroform	0.303	0.352	0.346	0.336	0.339	0.333	0.335	0.335	4.66	
36) TP	Ethyl acetate	0.314	0.226	0.262	0.255	0.249	0.243	0.242	0.256	11.00	

Response Factor Report Elaine

Method Path : K:\Elaine\2024\240731N-ICAL\
 Method File : Elaine_240731N_8260.m
 Title : VOLATILES BY GC/MS
 Last Update : Thu Aug 01 12:13:24 2024
 Response Via : Initial Calibration

Calibration Files

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 L6 =VE240731N10.D L8 =VE240731N11.D L10 =VE240731N12.D

	Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
37)	TP Carbon tetrach...	0.229	0.188	0.270	0.260	0.275	0.275	0.279	0.271	0.256	12.38
38)	TP Tetrahydrofuran		0.087	0.083	0.081	0.080	0.078	0.074	0.073	0.079	5.85
39)	S Dibromofluorom...	0.242	0.242	0.240	0.238	0.232	0.231	0.224	0.223	0.234	3.26
40)	TP 1,1,1-Trichlor...		0.265	0.301	0.310	0.316	0.315	0.315	0.308	0.304	5.96
42)	TP 2-Butanone			0.118	0.104	0.105	0.104	0.100	0.099	0.105	6.40
43)	TP 1,1-Dichloropr...		0.193	0.259	0.260	0.270	0.271	0.271	0.268	0.256	11.09
45)	TP Benzene	0.719	0.654	0.814	0.838	0.839	0.835	0.825	0.813	0.792	8.59
46)	TP tert-Amyl meth...		0.549	0.579	0.619	0.622	0.611	0.607	0.598	0.598	4.33
47)	S 1,2-Dichloroet...	0.326	0.322	0.322	0.316	0.305	0.309	0.298	0.302	0.312	3.33
48)	T 1,2-Dichloroet...		0.295	0.300	0.320	0.314	0.310	0.303	0.299	0.306	2.93
51)	TP Methyl cyclohe...		0.281	0.360	0.333	0.364	0.386	0.390	0.377	0.356	10.67
52)	TP Trichloroethene	0.193	0.161	0.200	0.210	0.217	0.216	0.201	0.195	0.199#	8.96
54)	TP Dibromomethane		0.096	0.116	0.120	0.119	0.118	0.116	0.117	0.115	7.18
55)	TP 1,2-Dichloropr...		0.215	0.233	0.249	0.248	0.246	0.242	0.239	0.239	5.05
57)	TP 2-Chloroethyl ...		0.127	0.145	0.157	0.163	0.167	0.160	0.158	0.154	8.95
58)	TP Bromodichlorom...		0.250	0.293	0.294	0.289	0.290	0.286	0.282	0.283#	5.40
61)	TP 1,4-Dioxane		0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002#	1.58
62)	TP cis-1,3-Dichlo...	0.241	0.293	0.316	0.341	0.345	0.345	0.339	0.334	0.319	11.31
63)	I Chlorobenzene-d5	-----ISTD-----									
64)	S Toluene-d8	1.316	1.311	1.306	1.323	1.314	1.308	1.321	1.339	1.317	0.79
65)	TP Toluene		0.596	0.701	0.712	0.711	0.697	0.702	0.700	0.689	5.96
66)	TP 4-Methyl-2-pen...		0.096	0.114	0.124	0.124	0.122	0.121	0.120	0.117	8.43
67)	TP Tetrachloroethene		0.219	0.288	0.302	0.312	0.308	0.313	0.307	0.293	11.47
69)	TP trans-1,3-Dich...	0.319	0.359	0.375	0.414	0.420	0.408	0.405	0.402	0.388	8.92
71)	TP Ethyl methacry...		0.356	0.363	0.387	0.378	0.367	0.368	0.365	0.369	2.79
72)	TP 1,1,2-Trichlor...		0.183	0.190	0.204	0.201	0.193	0.192	0.190	0.193#	3.69
73)	TP Chlorodibromom...		0.230	0.258	0.281	0.283	0.277	0.281	0.281	0.270	7.23
74)	TP 1,3-Dichloropr...		0.369	0.398	0.430	0.429	0.412	0.410	0.409	0.408	5.11
75)	TP 1,2-Dibromoethane		0.216	0.223	0.237	0.236	0.229	0.228	0.230	0.228	3.24
77)	TP 2-Hexanone		0.238	0.227	0.234	0.233	0.225	0.221	0.222	0.229	2.91
78)	TP Chlorobenzene		0.673	0.728	0.767	0.755	0.737	0.742	0.734	0.734	4.10

Response Factor Report Elaine

Method Path : K:\Elaine\2024\240731N-ICAL\
 Method File : Elaine_240731N_8260.m
 Title : VOLATILES BY GC/MS
 Last Update : Thu Aug 01 12:13:24 2024
 Response Via : Initial Calibration

Calibration Files

L11 =VE240731N03.D L1 =VE240731N05.D L2 =VE240731N07.D L3 =VE240731N08.D L4 =VE240731N09.D
 L6 =VE240731N10.D L8 =VE240731N11.D L10 =VE240731N12.D

	Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
79)	TP Ethylbenzene	1.142	1.358	1.408	1.393	1.353	1.359	1.329	1.335	6.66	
80)	TP 1,1,1,2-Tetrac...	0.215	0.270	0.287	0.286	0.276	0.276	0.273	0.269	9.12	
81)	TP p/m Xylene	0.447	0.521	0.548	0.535	0.510	0.508	0.492	0.509	6.43	
82)	TP o Xylene	0.454	0.508	0.533	0.516	0.497	0.495	0.479	0.497	5.16	
83)	TP Styrene	0.718	0.838	0.886	0.858	0.817	0.812	0.779	0.816	6.74	
84)	I 1,4-Dichlorobenzene-d4	-----ISTD-----									
85)	TP Bromoform	0.284	0.320	0.331	0.334	0.334	0.338	0.337	0.325	5.92	
87)	TP Isopropylbenzene	1.911	2.394	2.445	2.472	2.475	2.556	2.509	2.395	9.15	
88)	S 4-Bromofluorob...	0.912	0.926	0.900	0.927	0.899	0.923	0.942	0.959	0.924	2.20
89)	TP Bromobenzene	0.539	0.594	0.625	0.612	0.613	0.627	0.622	0.605	5.15	
90)	TP n-Propylbenzene	2.463	2.827	2.941	2.951	2.948	3.011	2.888	2.861	6.45	
91)	TP 1,4-Dichlorobu...	1.076	1.063	1.068	1.046	1.022	1.031	1.015	1.046	2.29	
92)	TP 1,1,2,2-Tetrac...	0.512	0.521	0.493	0.487	0.485	0.530	0.529	0.508	3.87	
93)	TP 4-Ethyltoluene	1.935	2.296	2.424	2.400	2.399	2.443	2.350	2.321	7.63	
94)	TP 2-Chlorotoluene	1.451	1.722	1.764	1.719	1.699	1.724	1.705	1.683	6.21	
95)	TP 1,3,5-Trimethy...	1.733	2.008	2.145	2.110	2.089	2.133	2.036	2.036	7.01	
96)	TP 1,2,3-Trichlor...	0.395	0.420	0.431	0.422	0.414	0.414	0.407	0.415	2.78	
97)	TP trans-1,4-Dich...	0.185	0.197	0.203	0.201	0.207	0.213	0.219	0.204	5.51	
98)	TP 4-Chlorotoluene	1.530	1.763	1.829	1.796	1.785	1.839	1.801	1.763	6.02	
99)	TP tert-Butylbenzene	1.412	1.689	1.769	1.762	1.779	1.824	1.747	1.712	8.07	
102)	TP 1,2,4-Trimethy...	1.747	1.954	2.131	2.103	2.101	2.135	2.057	2.033	6.91	
103)	TP sec-Butylbenzene	2.141	2.500	2.584	2.607	2.644	2.708	2.584	2.538	7.33	
104)	TP p-Isopropyltol...	1.701	2.077	2.196	2.232	2.258	2.294	2.214	2.139	9.58	
105)	TP 1,3-Dichlorobe...	1.015	1.081	1.169	1.146	1.135	1.148	1.122	1.117	4.72	
106)	TP 1,4-Dichlorobe...	1.009	1.087	1.157	1.145	1.138	1.145	1.131	1.116	4.67	
107)	TP p-Diethylbenzene	1.028	1.180	1.302	1.316	1.335	1.335	1.333	1.261	9.25	
108)	TP n-Butylbenzene	1.501	1.792	1.868	1.891	1.948	1.955	1.939	1.842	8.74	
109)	TP 1,2-Dichlorobe...	0.978	1.026	1.115	1.108	1.094	1.098	1.099	1.074	4.80	
110)	TP 1,2,4,5-Tetram...	1.737	1.892	2.127	2.116	2.105	2.156	2.192	2.046	8.17	
111)	TP 1,2-Dibromo-3-...	0.049	0.087	0.092	0.094	0.094	0.097	0.102	*L	0.9989	
112)	TP 1,3,5-Trichlor...	0.709	0.775	0.890	0.883	0.879	0.919	0.916	0.853	9.33	

Response Factor Report Elaine

Method Path : K:\Elaine\2024\240731N-ICAL\
Method File : Elaine_240731N_8260.m
Title : VOLATILES BY GC/MS
Last Update : Thu Aug 01 12:13:24 2024
Response Via : Initial Calibration

Calibration Files

L11 =VE240731N03.D L1 =VE240731N05.D L2 =VE240731N07.D L3 =VE240731N08.D L4 =VE240731N09.D
L6 =VE240731N10.D L8 =VE240731N11.D L10 =VE240731N12.D

Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
113) TP Hexachlorobuta...	0.225	0.275	0.285	0.293	0.293	0.305	0.303	0.283	9.74	
114) TP 1,2,4-Trichlor...	0.666	0.683	0.789	0.797	0.806	0.839	0.809	0.770	8.71	
115) TP Naphthalene	1.419	1.532	1.695	1.747	1.797	1.858	1.833	1.697	9.67	
116) TP 1,2,3-Trichlor...	0.578	0.647	0.721	0.728	0.750	0.771	0.757	0.707	9.89	

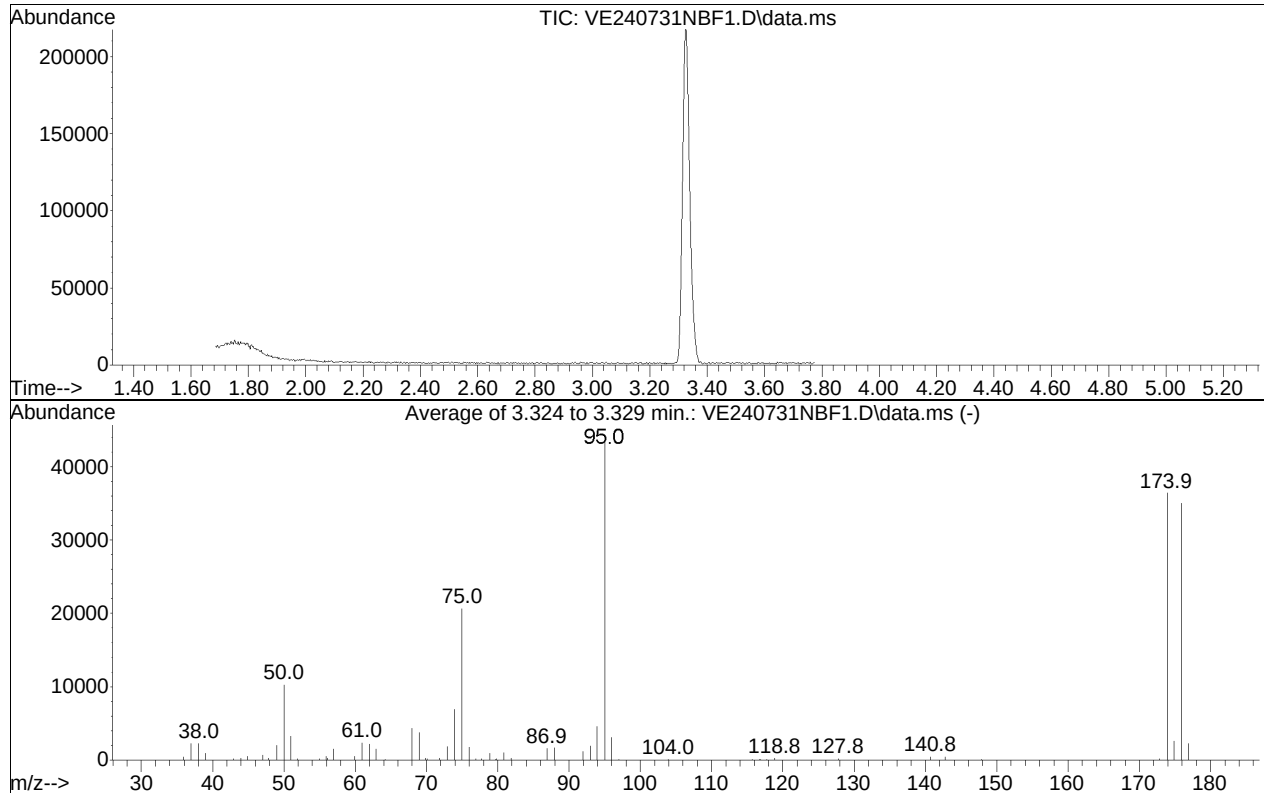
(#) = Out of Range

BFB

Data Path : K:\Elaine\2024\240731N-ICAL\
 Data File : VE240731NBF1.D
 Acq On : 31 Jul 2024 5:25 pm
 Operator : ELAINE:MAG
 Sample : WG1954249-1
 Misc : WG1954249
 ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
 Title : VOLATILES BY GC/MS
 Last Update : Thu Aug 01 12:13:24 2024



AutoFind: Scans 588, 589, 590; Background Corrected with Scan 574

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	23.6	10291	PASS
75	95	30	60	47.5	20672	PASS
95	95	100	100	100.0	43531	PASS
96	95	5	9	7.0	3063	PASS
173	174	0.00	2	0.6	217	PASS
174	95	50	100	83.7	36424	PASS
175	174	5	9	7.1	2596	PASS
176	174	95	101	96.2	35043	PASS
177	176	5	9	6.5	2267	PASS

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
 Data File : VE240731N03.D
 Acq On : 31 Jul 2024 6:35 pm
 Operator : ELAINE:MKS
 Sample : I8260STD0.19PPB
 Misc : WG1954249
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 01 11:59:43 2024
 Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Aug 01 11:56:36 2024
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240731N-ICAL\VE240731N08.D
 Sub List : 8260-L11_MCP - L11 MCP

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

Internal Standards						
1) Fluorobenzene	5.967	96	205517	10.000	ug/L	0.00
Standard Area 1 = 204581			Recovery	=	100.46%	
63) Chlorobenzene-d5	9.497	117	152868	10.000	ug/L	0.00
Standard Area 1 = 147756			Recovery	=	103.46%	
84) 1,4-Dichlorobenzene-d4	12.208	152	86858	10.000	ug/L	0.00
Standard Area 1 = 84505			Recovery	=	102.78%	
System Monitoring Compounds						
39) Dibromofluoromethane	5.158	113	49774	10.178	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	101.78%	
47) 1,2-Dichloroethane-d4	5.680	65	66950	10.310	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	103.10%	
64) Toluene-d8	7.657	98	201231	9.951	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	99.51%	
88) 4-Bromofluorobenzene	10.995	95	79257	9.840	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	98.40%	
Target Compounds						Qvalue
4) Vinyl chloride	1.854	62	637	0.127	ug/L #	12
37) Carbon tetrachloride	5.122	117	895M1	0.167	ug/L	
45) Benzene	5.549	78	2809	0.163	ug/L #	76
52) Trichloroethene	6.156	95	755M1	0.175	ug/L	
62) cis-1,3-Dichloropropene	7.453	75	943	0.135	ug/L #	55
69) trans-1,3-Dichloropropene	8.203	75	927M1	0.146	ug/L	

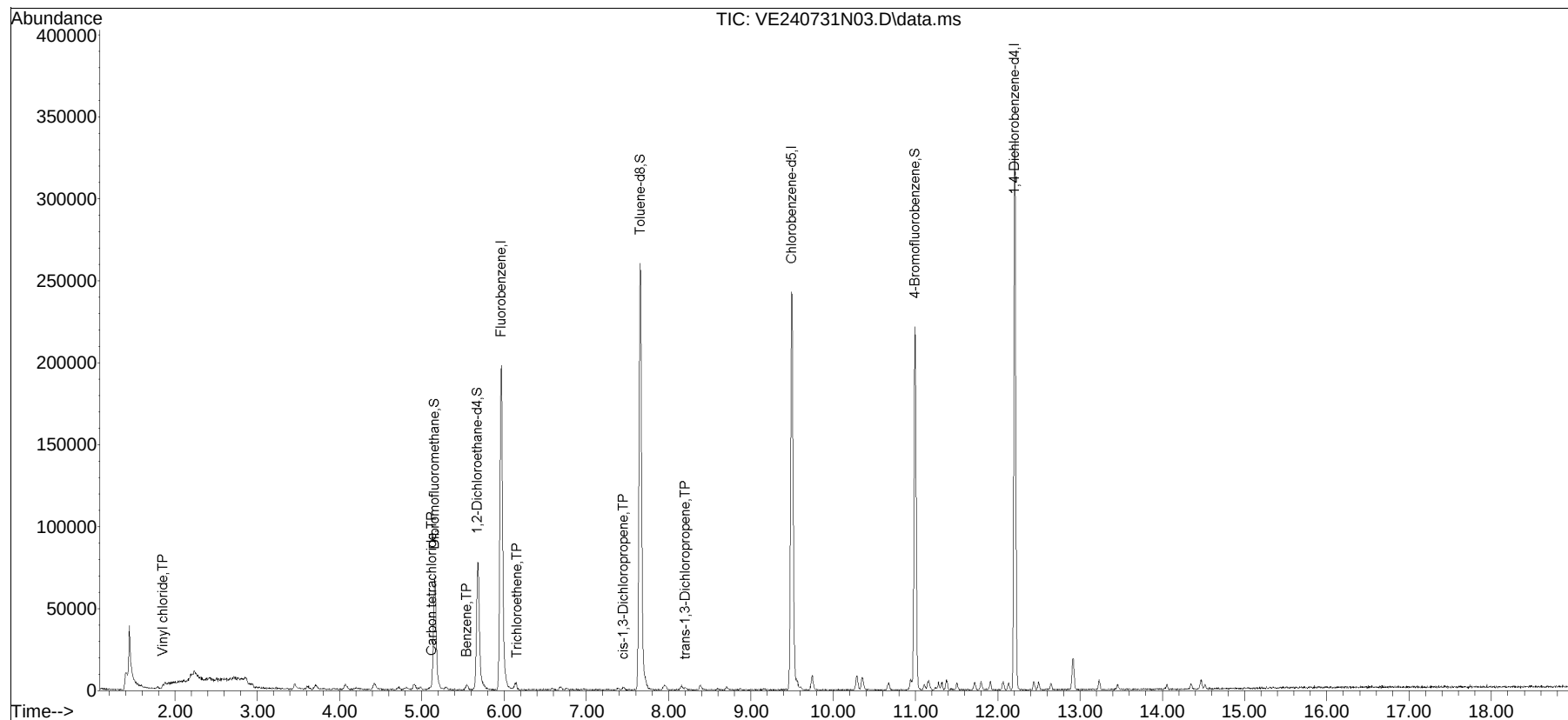
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
 Data File : VE240731N03.D
 Acq On : 31 Jul 2024 6:35 pm
 Operator : ELAINE:MKS
 Sample : I8260STD0.19PPB
 Misc : WG1954249
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 01 11:59:43 2024
 Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Aug 01 11:56:36 2024
 Response via : Initial Calibration

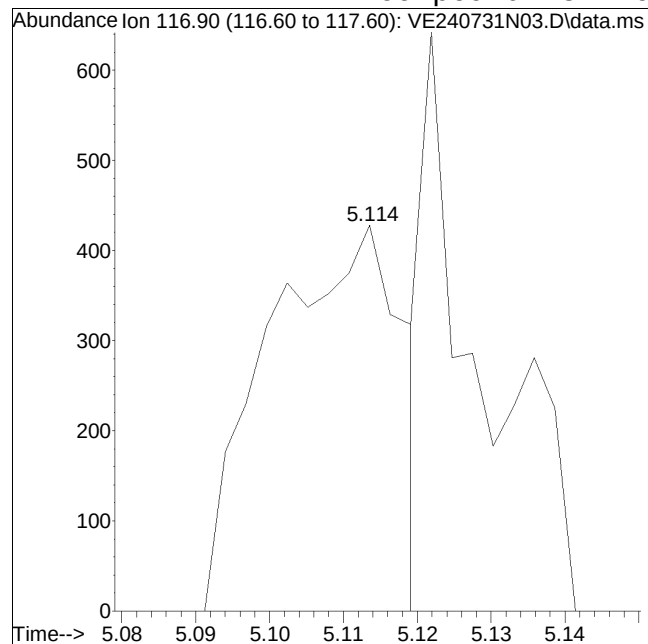
Sub List : 8260-L11_MCP - L11 MCP731N-ICAL\VE240731N08.D•



Manual Integration Report

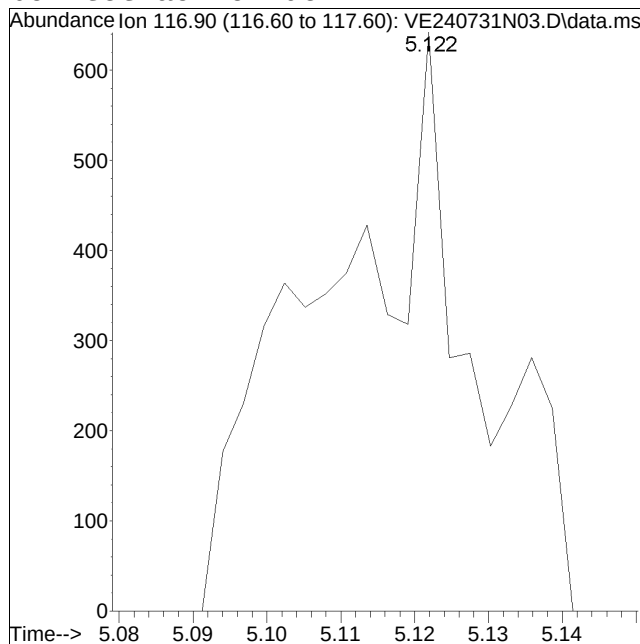
Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N03.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 6:35 pm Instrument : Elaine
Sample : I8260STD0.19PPB Quant Date : 8/1/2024 11:57 am

Compound #37: Carbon tetrachloride



Original Peak Response = 540

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

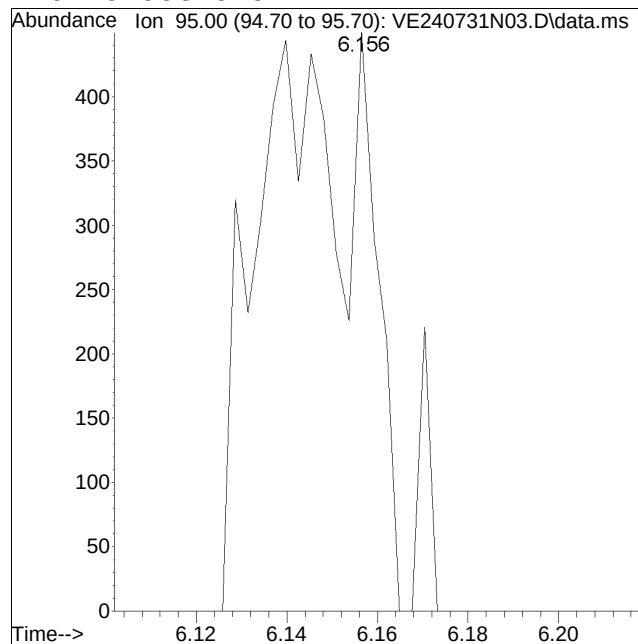
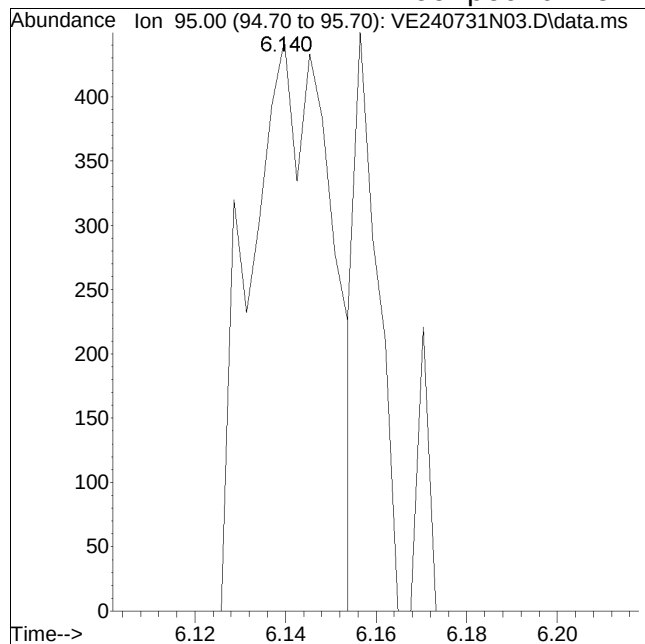


Manual Peak Response = 895 M1

Manual Integration Report

Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N03.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 6:35 pm Instrument : Elaine
Sample : I8260STD0.19PPB Quant Date : 8/1/2024 11:57 am

Compound #52: Trichloroethene



Original Peak Response = 560

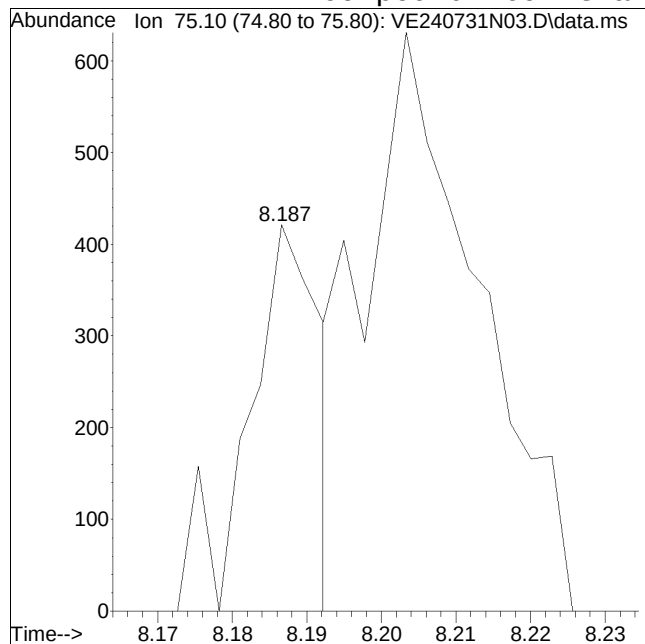
Manual Peak Response = 755 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

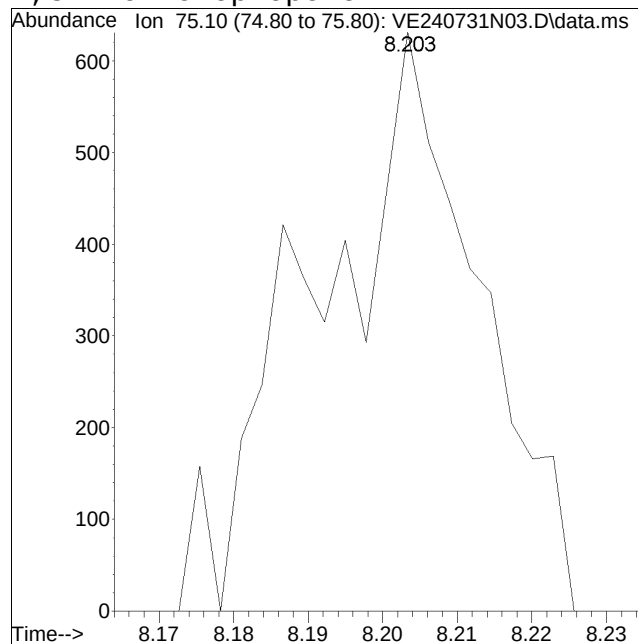
Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N03.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 6:35 pm Instrument : Elaine
Sample : I8260STD0.19PPB Quant Date : 8/1/2024 11:57 am

Compound #69: trans-1,3-Dichloropropene



Original Peak Response = 283

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.



Manual Peak Response = 927 M1

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
 Data File : VE240731N05.D
 Acq On : 31 Jul 2024 7:26 pm
 Operator : ELAINE:MKS
 Sample : I8260STD0.5PPB
 Misc : WG1954249
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 01 12:03:30 2024
 Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Aug 01 11:56:36 2024
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240731N-ICAL\VE240731N08.D
 Sub List : 8260-Curve - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	5.964	96	205652	10.000	ug/L	0.00
Standard Area 1 = 204581			Recovery	=	100.52%	
63) Chlorobenzene-d5	9.497	117	152599	10.000	ug/L	0.00
Standard Area 1 = 147756			Recovery	=	103.28%	
84) 1,4-Dichlorobenzene-d4	12.205	152	86607	10.000	ug/L	0.00
Standard Area 1 = 84505			Recovery	=	102.49%	
System Monitoring Compounds						
39) Dibromofluoromethane	5.158	113	49722	10.161	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	101.61%	
47) 1,2-Dichloroethane-d4	5.680	65	66192	10.187	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	101.87%	
64) Toluene-d8	7.651	98	200132	9.914	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	99.14%	
88) 4-Bromofluorobenzene	10.995	95	80217	9.988	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	99.88%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.592	85	1422	0.314	ug/L	88
3) Chloromethane	1.790	50	2046	0.379	ug/L	89
4) Vinyl chloride	1.857	62	1632	0.326	ug/L	73
5) Bromomethane	2.161	94	446	0.371	ug/L	81
6) Chloroethane	2.272	64	1120M4	0.355	ug/L	
7) Trichlorofluoromethane	2.420	101	1947	0.372	ug/L #	69
8) Ethyl ether	2.716	74	1005M1	0.461	ug/L	
10) 1,1-Dichloroethene	2.900	96	1318	0.415	ug/L #	79
11) Carbon disulfide	2.933	76	4345	0.420	ug/L #	83
12) Freon-113	2.939	101	1230M1	0.367	ug/L	
13) Iodomethane	0.000		0	N.D.	d	
14) Acrolein	3.229	56	430M1	0.473	ug/L	
15) Methylene chloride	3.463	84	2255	0.538	ug/L	95
17) Acetone	3.499	43	1696M1	1.168	ug/L	
18) trans-1,2-Dichloroethene	3.611	96	1381	0.380	ug/L	78
19) Methyl acetate	3.622	43	2374M1	0.700	ug/L	
21) Methyl tert-butyl ether	3.714	73	6120M1	0.440	ug/L	
22) tert-Butyl alcohol	3.792	59	1084M1	2.240	ug/L	
24) Diisopropyl ether	4.079	45	8193	0.413	ug/L #	75
25) 1,1-Dichloroethane	4.196	63	3485	0.399	ug/L	82
26) Halothane	4.258	117	1199M1	0.411	ug/L	

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
 Data File : VE240731N05.D
 Acq On : 31 Jul 2024 7:26 pm
 Operator : ELAINE:MKS
 Sample : I8260STD0.5PPB
 Misc : WG1954249
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 01 12:03:30 2024
 Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Aug 01 11:56:36 2024
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240731N-ICAL\VE240731N08.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
27) Acrylonitrile	4.230	53	782M1	0.433	ug/L	
28) Ethyl tert-butyl ether	4.422	59	7137	0.414	ug/L #	76
29) Vinyl acetate	4.431	43	6978M1	0.610	ug/L	
30) cis-1,2-Dichloroethene	4.709	96	1882M1	0.433	ug/L	
31) 2,2-Dichloropropane	4.818	77	2468	0.444	ug/L #	31
33) Bromochloromethane	4.907	128	912M1	0.463	ug/L	
34) Cyclohexane	4.913	56	3953	0.426	ug/L #	23
35) Chloroform	4.980	83	3115	0.438	ug/L #	88
36) Ethyl acetate	5.097	43	3232M1	0.601	ug/L	
37) Carbon tetrachloride	5.117	117	1932	0.361	ug/L #	25
38) Tetrahydrofuran	5.144	42	890M1	0.535	ug/L	
40) 1,1,1-Trichloroethane	5.178	97	2722M1	0.427	ug/L	
42) 2-Butanone	0.000		0	N.D.	d	
43) 1,1-Dichloropropene	5.301	75	1981	0.370	ug/L #	73
45) Benzene	5.552	78	6728	0.390	ug/L #	79
46) tert-Amyl methyl ether	5.663	73	5646M1	0.444	ug/L	
48) 1,2-Dichloroethane	5.752	62	3030	0.461	ug/L #	59
51) Methyl cyclohexane	6.134	83	2892	0.422	ug/L #	61
52) Trichloroethene	6.148	95	1655M1	0.383	ug/L	
54) Dibromomethane	6.583	93	990M1	0.402	ug/L	
55) 1,2-Dichloropropane	6.684	63	2209M1	0.431	ug/L	
57) 2-Chloroethyl vinyl ether	7.381	63	1303M1	0.404	ug/L	
58) Bromodichloromethane	6.756	83	2570	0.424	ug/L #	77
61) 1,4-Dioxane	6.971	88	3965M1	99.134	ug/L	
62) cis-1,3-Dichloropropene	7.448	75	3009	0.430	ug/L #	84
65) Toluene	7.718	92	4550	0.419	ug/L	94
66) 4-Methyl-2-pentanone	8.148	58	735M1	0.388	ug/L	
67) Tetrachloroethene	8.151	166	1670	0.362	ug/L #	47
69) trans-1,3-Dichloropropene	8.201	75	2736	0.433	ug/L #	86
71) Ethyl methacrylate	8.382	69	2714	0.460	ug/L #	32
72) 1,1,2-Trichloroethane	8.382	83	1399M1	0.449	ug/L	
73) Chlorodibromomethane	8.594	129	1758M1	0.409	ug/L	
74) 1,3-Dichloropropane	8.705	76	2813	0.428	ug/L	95
75) 1,2-Dibromoethane	8.864	107	1649	0.455	ug/L #	59
77) 2-Hexanone	9.157	43	1819	0.509	ug/L #	40
78) Chlorobenzene	9.517	112	5132	0.438	ug/L #	61
79) Ethylbenzene	9.559	91	8713	0.405	ug/L	100
80) 1,1,1,2-Tetrachloroethane	9.609	131	1642	0.375	ug/L #	44
81) p/m Xylene	9.746	106	6826	0.817	ug/L	100
82) o Xylene	10.289	106	6928M1	0.852	ug/L	

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
 Data File : VE240731N05.D
 Acq On : 31 Jul 2024 7:26 pm
 Operator : ELAINE:MKS
 Sample : I8260STD0.5PPB
 Misc : WG1954249
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 01 12:03:30 2024
 Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Aug 01 11:56:36 2024
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240731N-ICAL\VE240731N08.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
83)	Styrene	10.354	104	10959	0.810	ug/L	96
85)	Bromoform	10.381	173	1229M1	0.429	ug/L	
87)	Isopropylbenzene	10.669	105	8275	0.391	ug/L	94
89)	Bromobenzene	11.104	156	2333	0.431	ug/L	96
90)	n-Propylbenzene	11.154	91	10667	0.419	ug/L	99
91)	1,4-Dichlorobutane	11.168	55	4660	0.504	ug/L	98
92)	1,1,2,2-Tetrachloroethane	11.238	83	2216M1	0.519	ug/L	
93)	4-Ethyltoluene	11.282	105	8381	0.399	ug/L	99
94)	2-Chlorotoluene	11.324	91	6283	0.411	ug/L	100
95)	1,3,5-Trimethylbenzene	11.377	105	7504	0.404	ug/L	100
96)	1,2,3-Trichloropropane	11.377	75	1709	0.458	ug/L	98
97)	trans-1,4-Dichloro-2-b...	11.430	53	800M1	0.454	ug/L	
98)	4-Chlorotoluene	11.505	91	6625	0.418	ug/L	99
99)	tert-Butylbenzene	11.717	119	6113	0.399	ug/L	94
102)	1,2,4-Trimethylbenzene	11.798	105	7563	0.410	ug/L	99
103)	sec-Butylbenzene	11.910	105	9273	0.414	ug/L	100
104)	p-Isopropyltoluene	12.066	119	7364	0.387	ug/L	96
105)	1,3-Dichlorobenzene	12.127	146	4394	0.434	ug/L	93
106)	1,4-Dichlorobenzene	12.222	146	4371M3	0.436	ug/L	
107)	p-Diethylbenzene	12.437	119	4450	0.395	ug/L	96
108)	n-Butylbenzene	12.492	91	6499	0.402	ug/L #	40
109)	1,2-Dichlorobenzene	12.643	146	4236	0.439	ug/L	98
110)	1,2,4,5-Tetramethylben...	13.231	119	7522	0.408	ug/L	98
111)	1,2-Dibromo-3-chloropr...	13.424	155	212M1	0.267	ug/L	
112)	1,3,5-Trichlorobenzene	13.457	180	3071	0.398	ug/L	92
113)	Hexachlorobutadiene	14.029	225	974	0.395	ug/L	90
114)	1,2,4-Trichlorobenzene	14.057	180	2885	0.422	ug/L	90
115)	Naphthalene	14.350	128	6143	0.418	ug/L	100
116)	1,2,3-Trichlorobenzene	14.514	180	2501	0.400	ug/L #	83

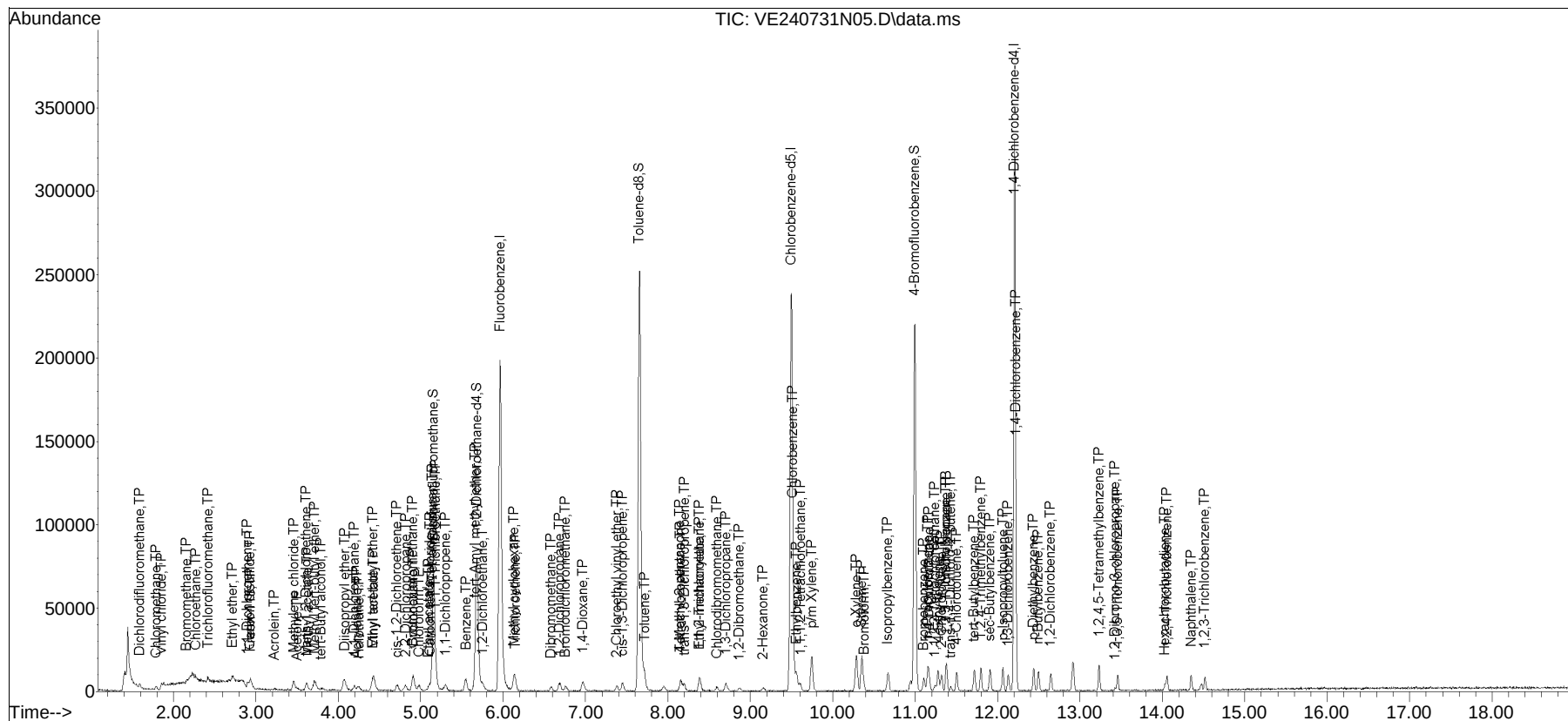
(#) = qualifier out of range (m) = manual integration (+) = signals summed

(QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
Data File : VE240731N05.D
Acq On : 31 Jul 2024 7:26 pm
Operator : ELAINE:MKS
Sample : I8260STD0.5PPB
Misc : WG1954249
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 01 12:03:30 2024
Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 11:56:36 2024
Response via : Initial Calibration

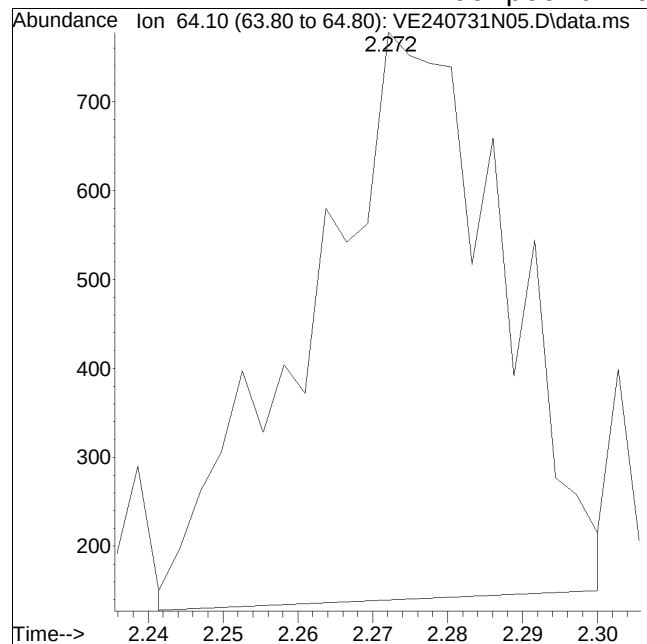
Sub List : 8260-Curve - Megamix plus DioxL\VE240731N08.D•



Manual Integration Report

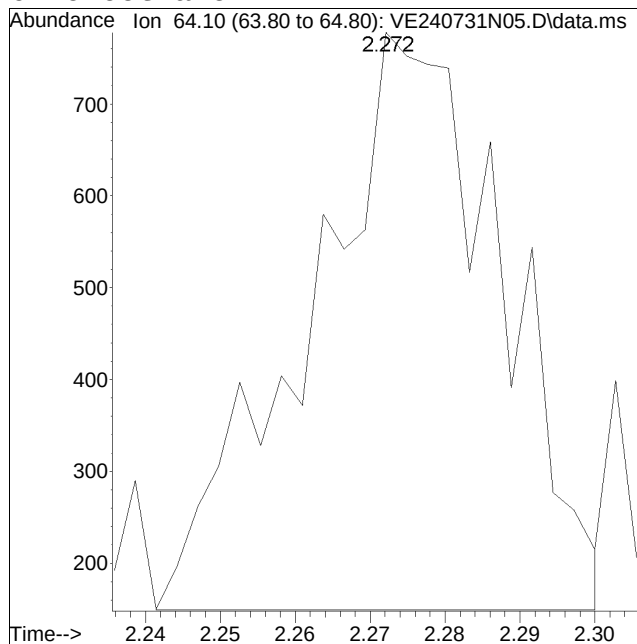
Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N05.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 7:26 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 8/1/2024 11:57 am

Compound #6: Chloroethane



Original Peak Response = 1155

M4 = Poor automated baseline construction.

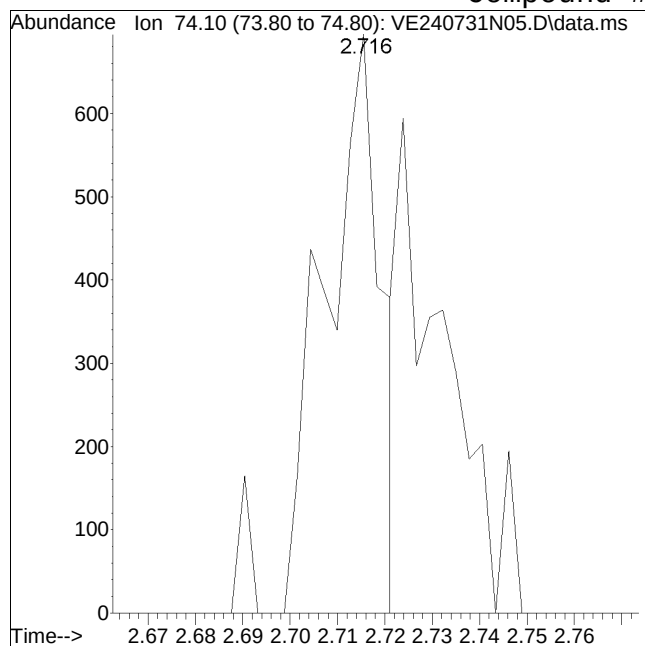


Manual Peak Response = 1120 M4

Manual Integration Report

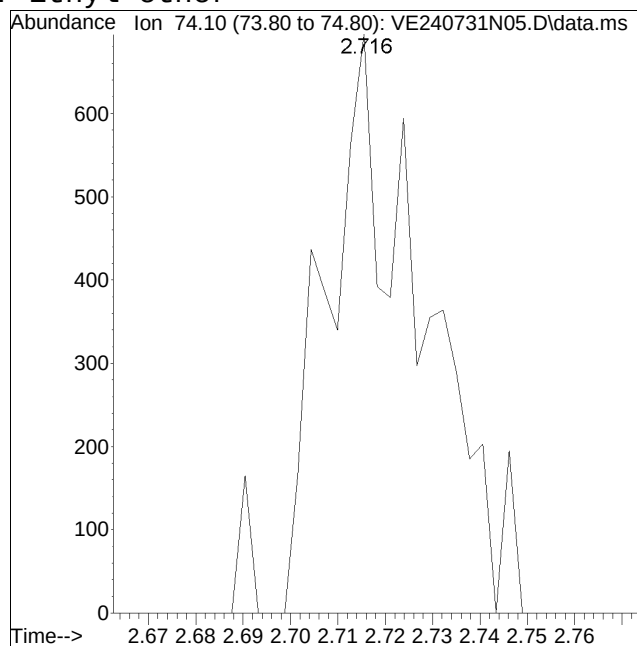
Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N05.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 7:26 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 8/1/2024 11:57 am

Compound #8: Ethyl ether



Original Peak Response = 562

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

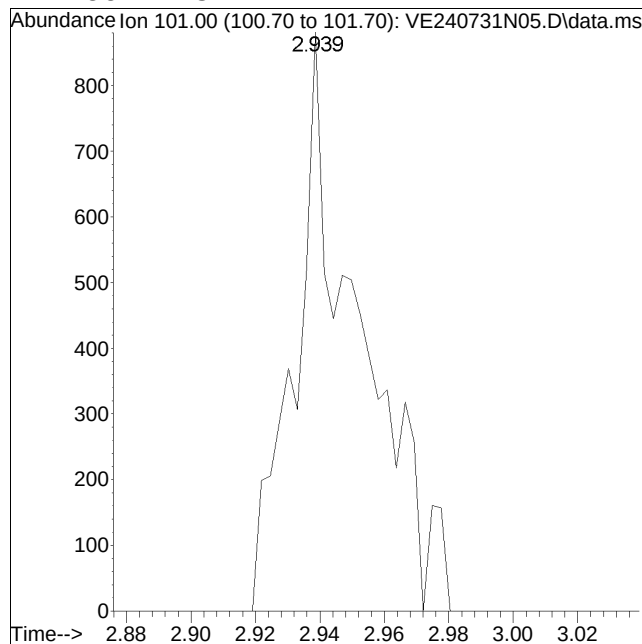
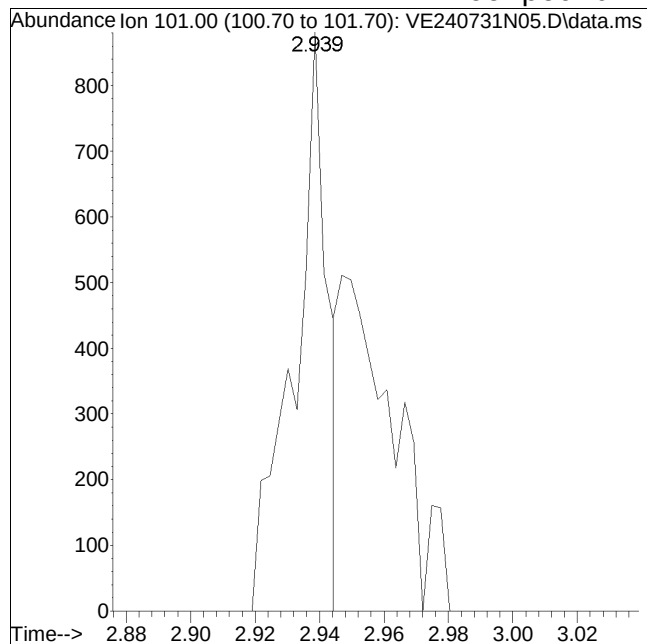


Manual Peak Response = 1005 M1

Manual Integration Report

Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N05.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 7:26 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 8/1/2024 11:57 am

Compound #12: Freon-113



Original Peak Response = 624

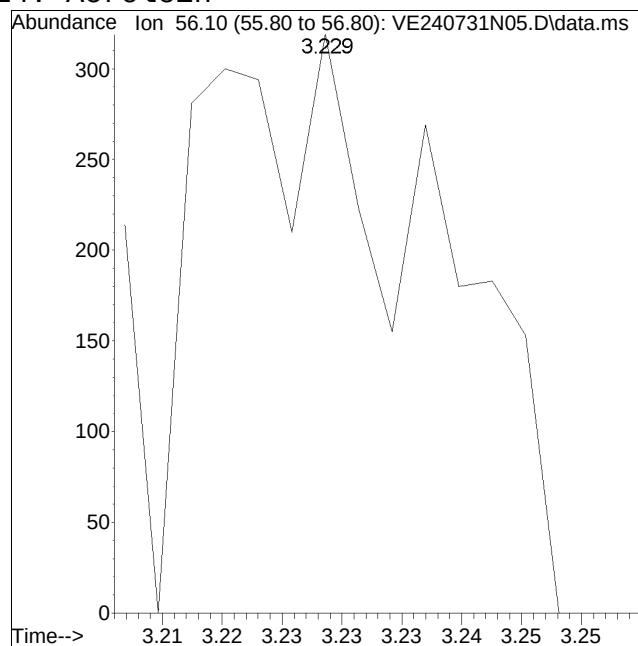
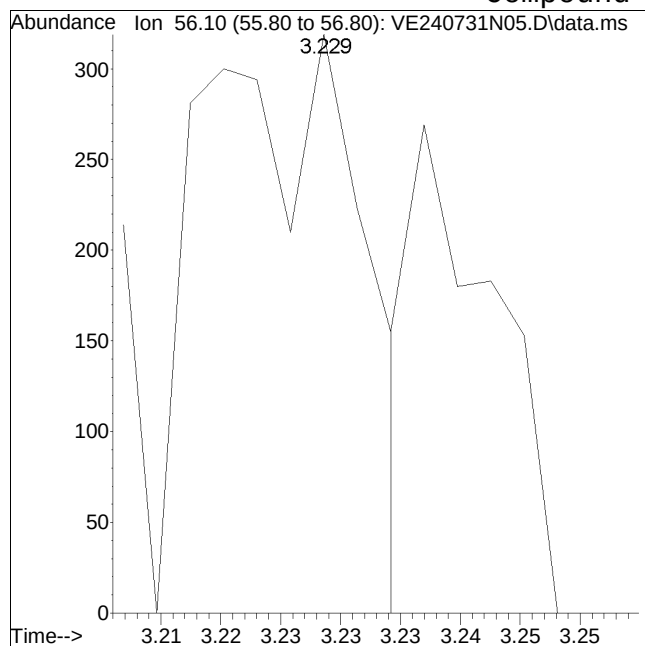
Manual Peak Response = 1230 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N05.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 7:26 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 8/1/2024 11:57 am

Compound #14: Acrolein



Original Peak Response = 298

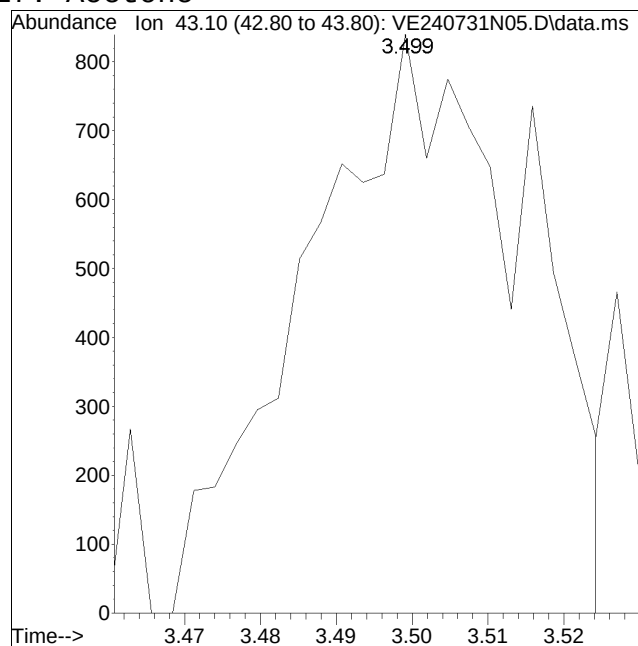
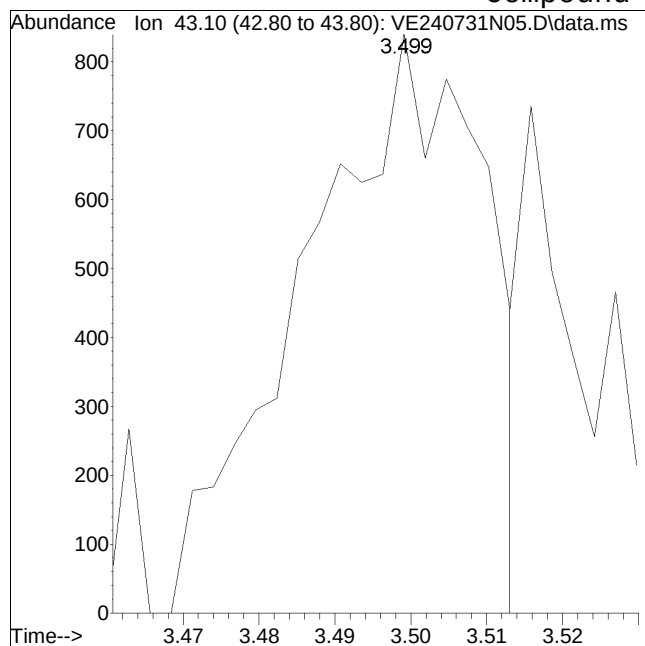
Manual Peak Response = 430 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N05.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 7:26 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 8/1/2024 11:57 am

Compound #17: Acetone



Original Peak Response = 1385

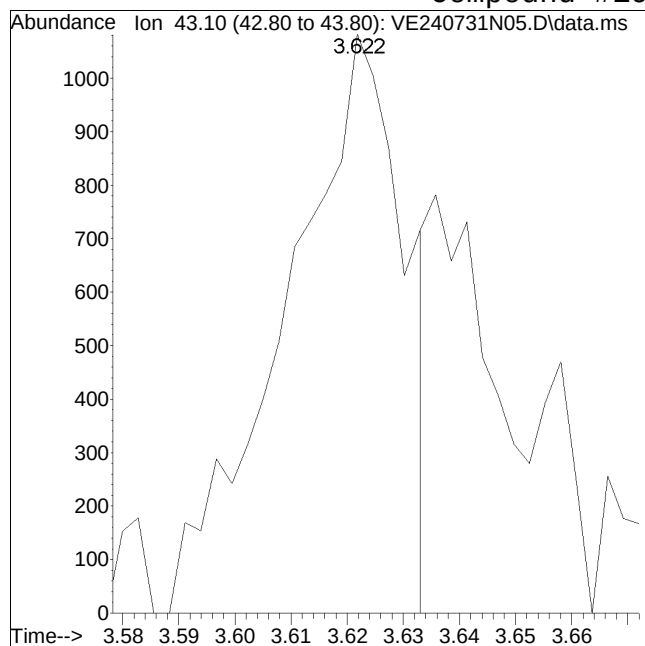
Manual Peak Response = 1696 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

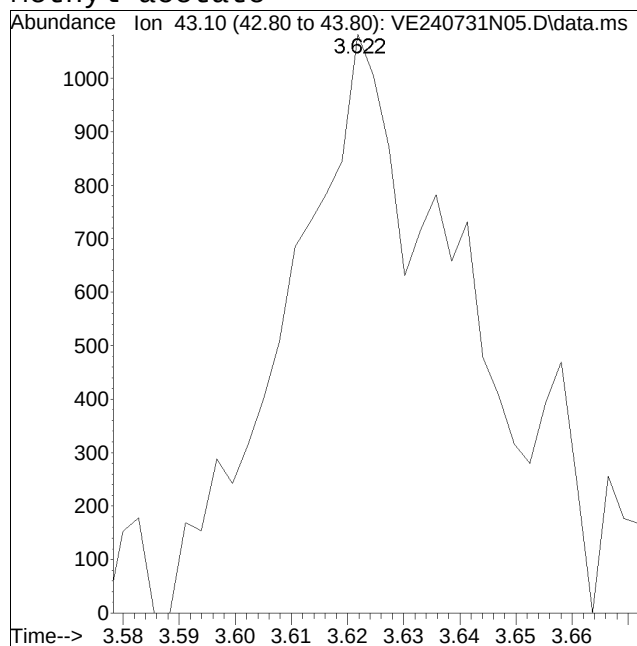
Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N05.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 7:26 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 8/1/2024 11:57 am

Compound #19: Methyl acetate



Original Peak Response = 1578

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

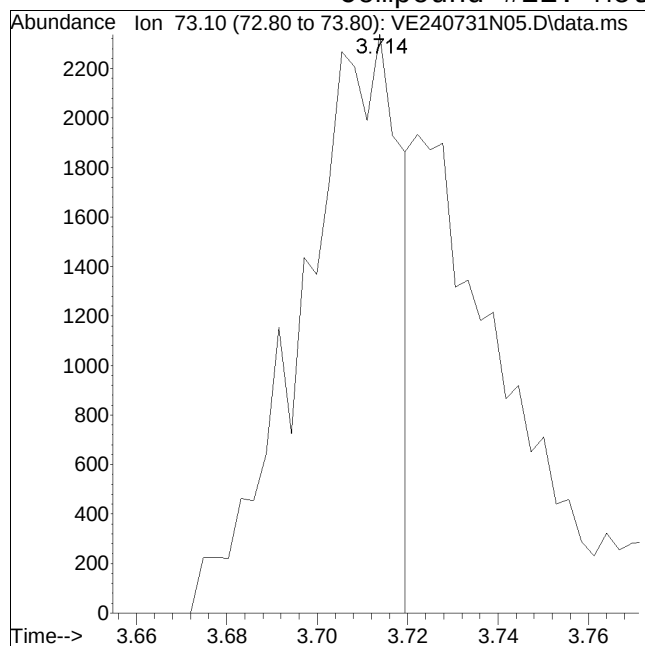


Manual Peak Response = 2374 M1

Manual Integration Report

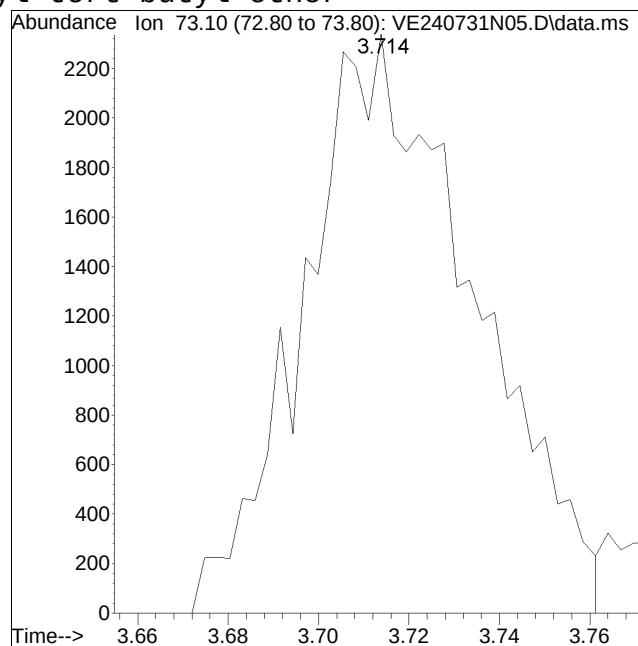
Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N05.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 7:26 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 8/1/2024 11:57 am

Compound #21: Methyl tert-butyl ether



Original Peak Response = 3556

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

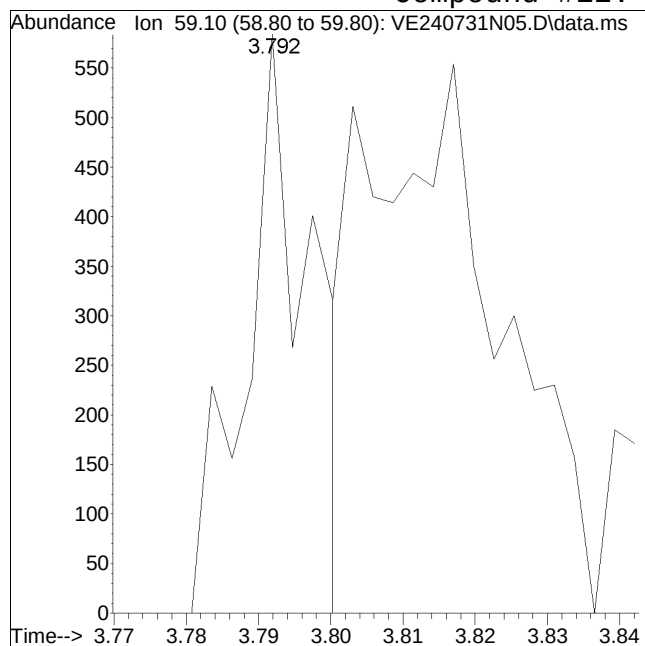


Manual Peak Response = 6120 M1

Manual Integration Report

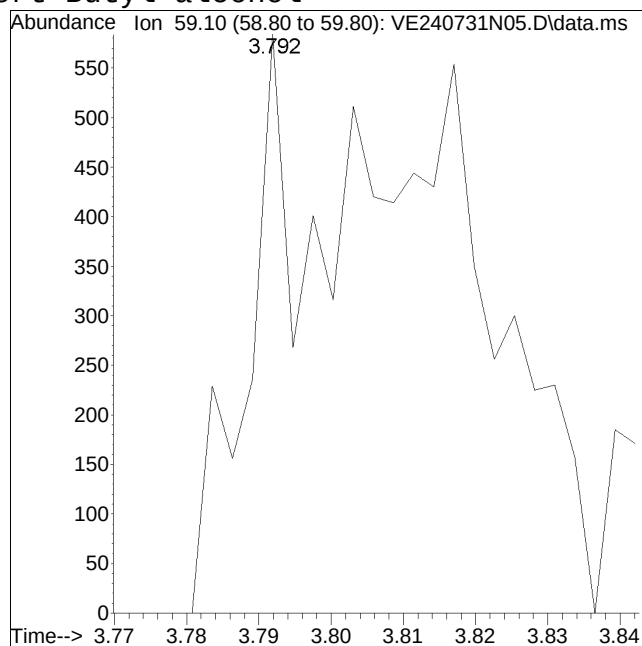
Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N05.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 7:26 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 8/1/2024 11:57 am

Compound #22: tert-Butyl alcohol



Original Peak Response = 366

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

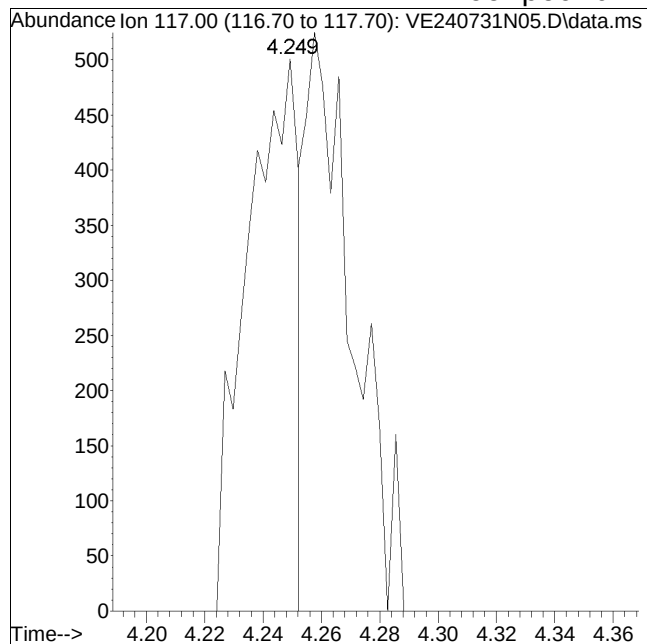


Manual Peak Response = 1084 M1

Manual Integration Report

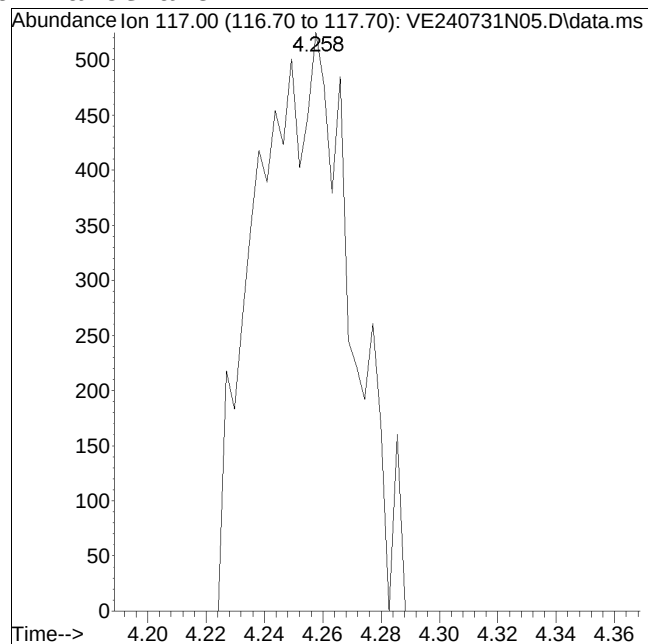
Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N05.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 7:26 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 8/1/2024 11:57 am

Compound #26: Halothane



Original Peak Response = 603

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

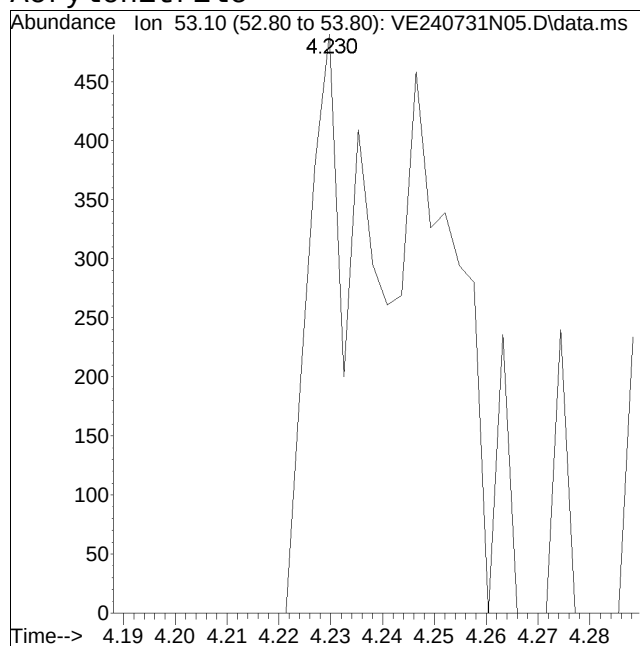
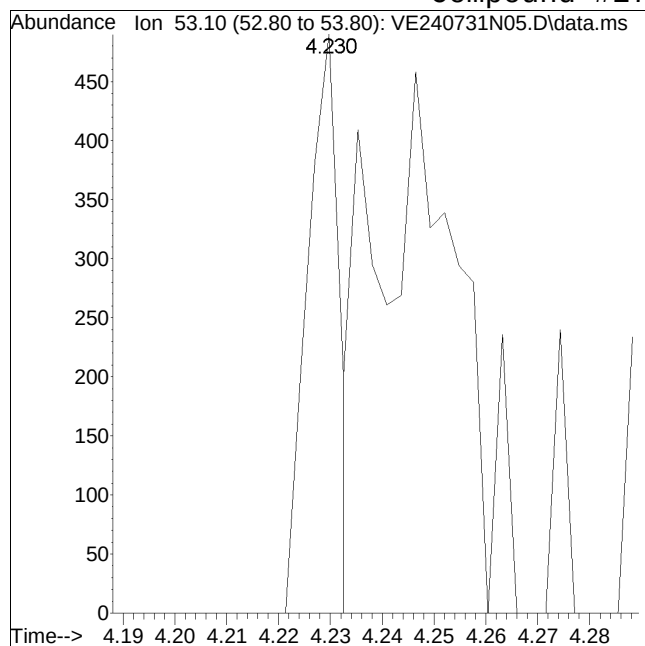


Manual Peak Response = 1199 M1

Manual Integration Report

Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N05.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 7:26 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 8/1/2024 11:57 am

Compound #27: Acrylonitrile



Original Peak Response = 212

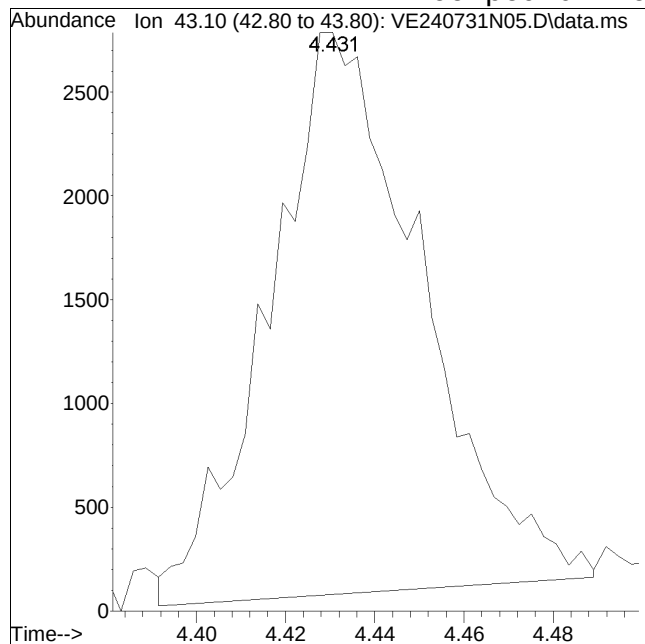
Manual Peak Response = 782 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

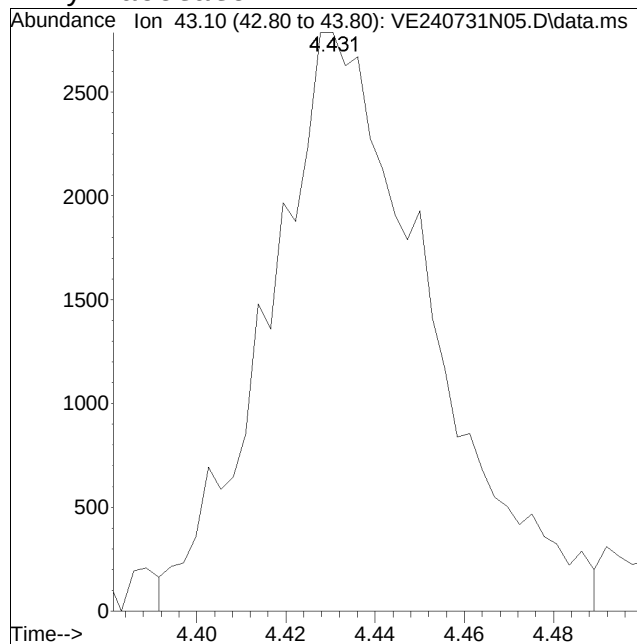
Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N05.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 7:26 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 8/1/2024 11:57 am

Compound #29: Vinyl acetate



Original Peak Response = 6427

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

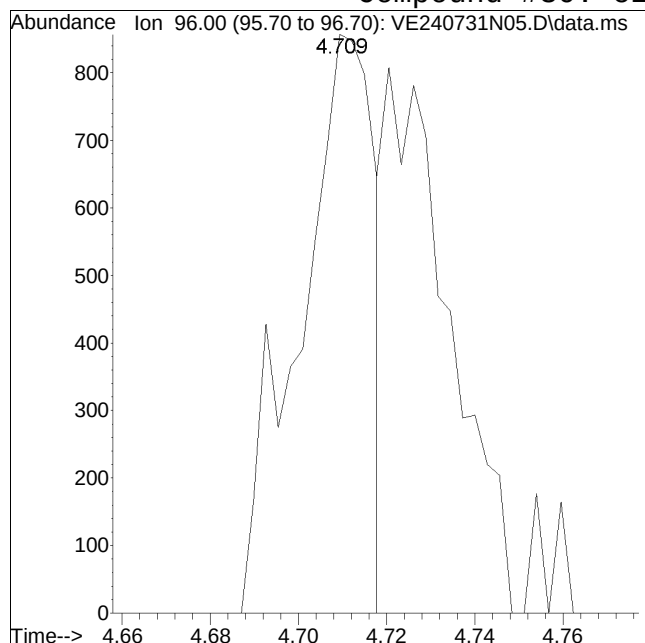


Manual Peak Response = 6978 M1

Manual Integration Report

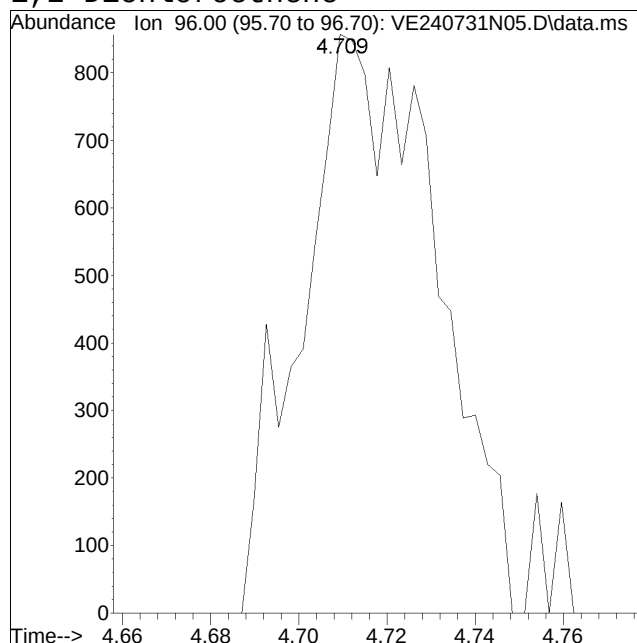
Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N05.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 7:26 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 8/1/2024 11:57 am

Compound #30: cis-1,2-Dichloroethene



Original Peak Response = 1008

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

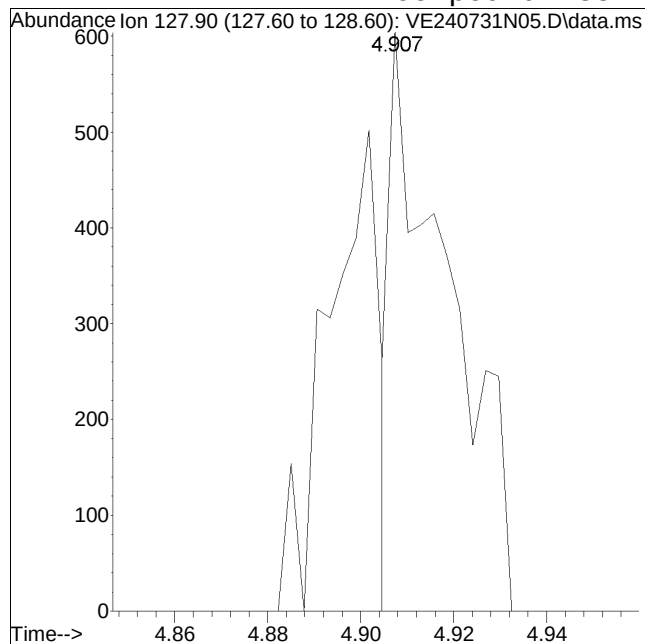


Manual Peak Response = 1882 M1

Manual Integration Report

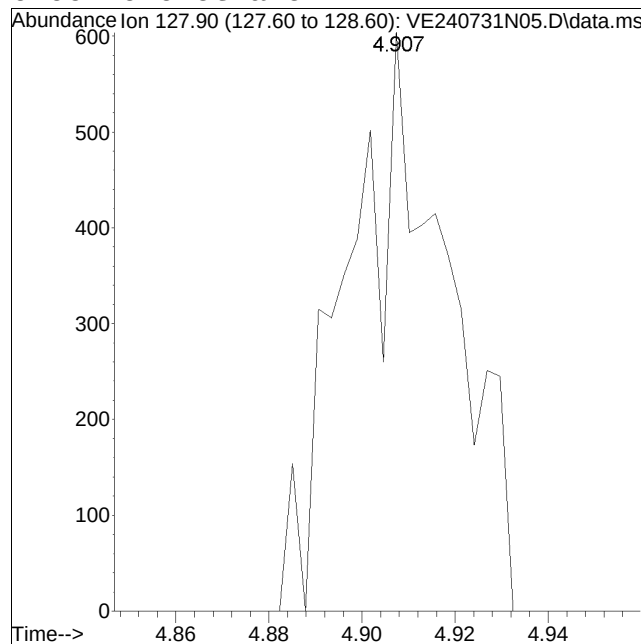
Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N05.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 7:26 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 8/1/2024 11:57 am

Compound #33: Bromochloromethane



Original Peak Response = 531

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

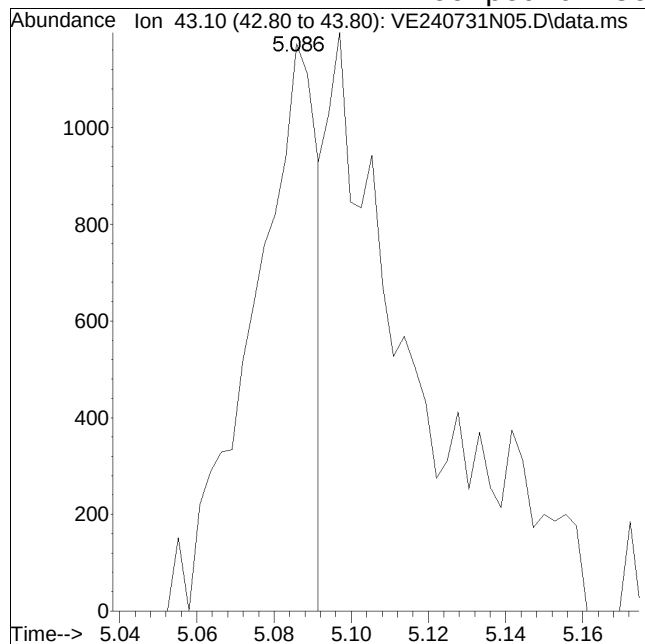


Manual Peak Response = 912 M1

Manual Integration Report

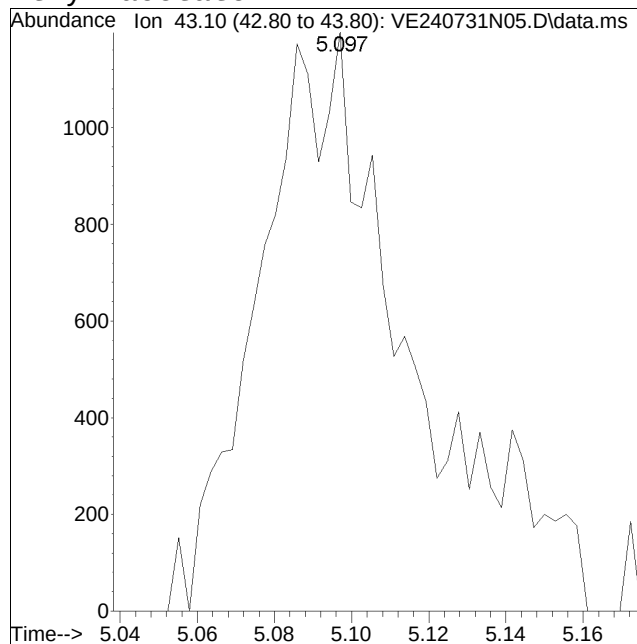
Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N05.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 7:26 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 8/1/2024 11:57 am

Compound #36: Ethyl acetate



Original Peak Response = 1372

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

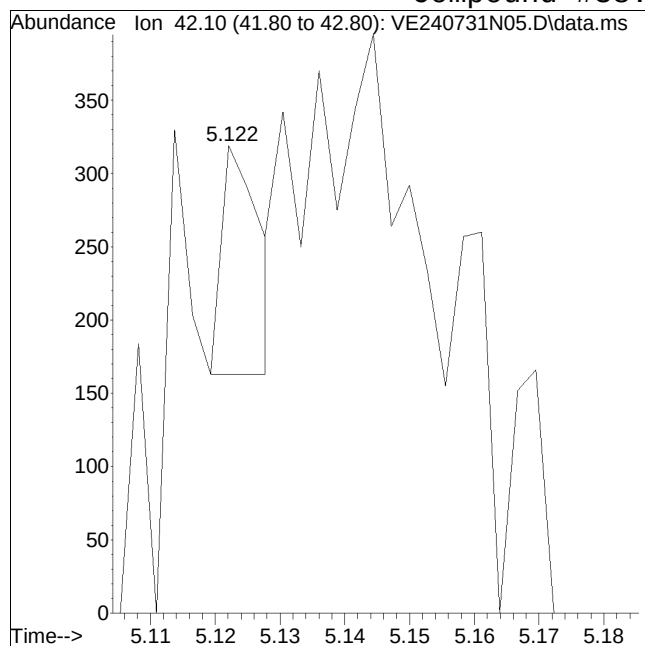


Manual Peak Response = 3232 M1

Manual Integration Report

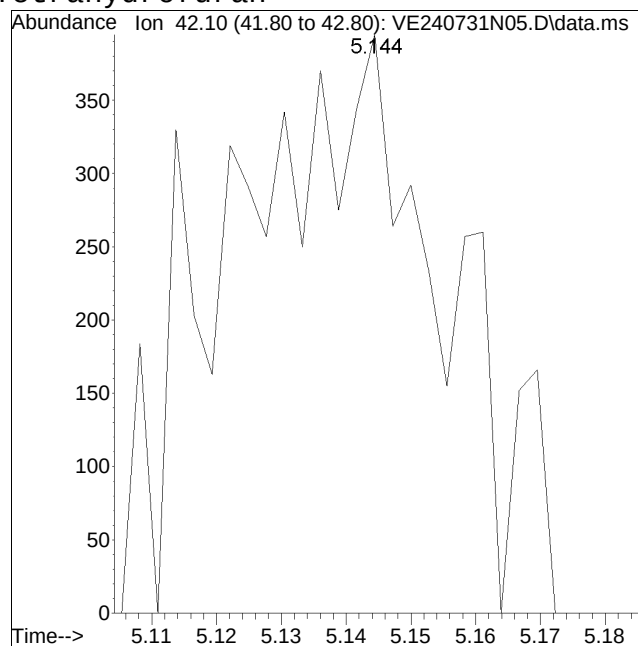
Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N05.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 7:26 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 8/1/2024 11:57 am

Compound #38: Tetrahydrofuran



Original Peak Response = 63

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

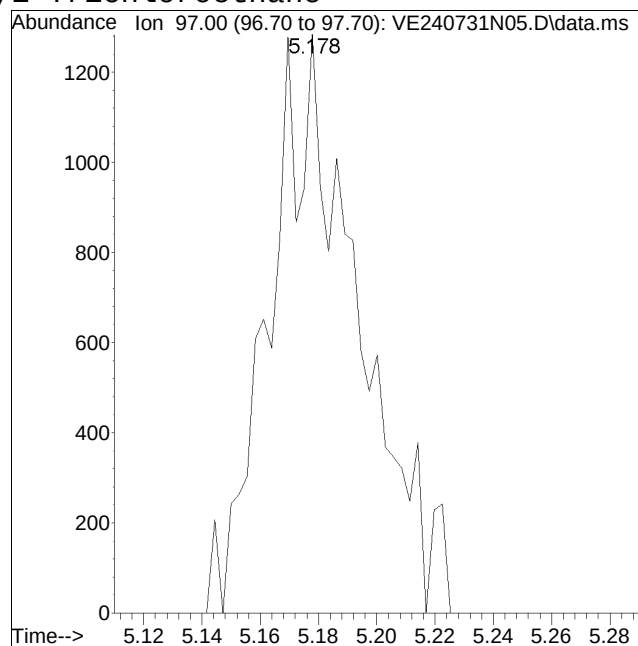
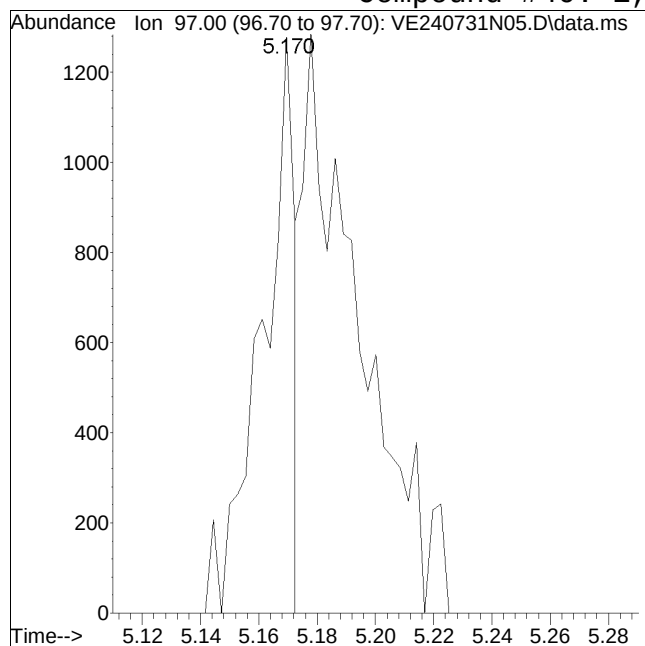


Manual Peak Response = 890 M1

Manual Integration Report

Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N05.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 7:26 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 8/1/2024 11:57 am

Compound #40: 1,1,1-Trichloroethane



Original Peak Response = 977

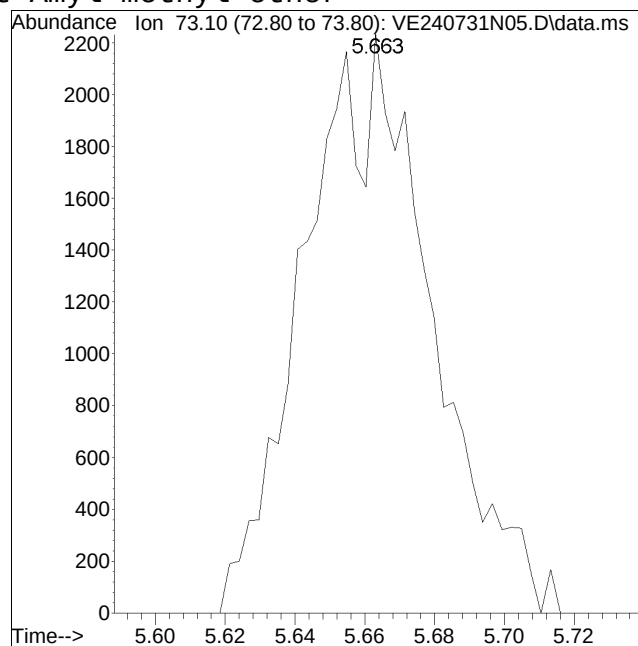
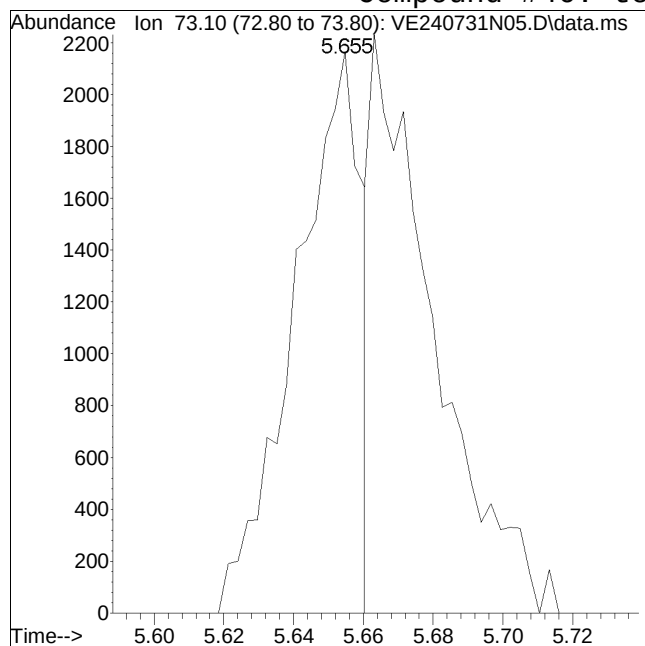
Manual Peak Response = 2722 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N05.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 7:26 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 8/1/2024 11:57 am

Compound #46: tert-Amyl methyl ether

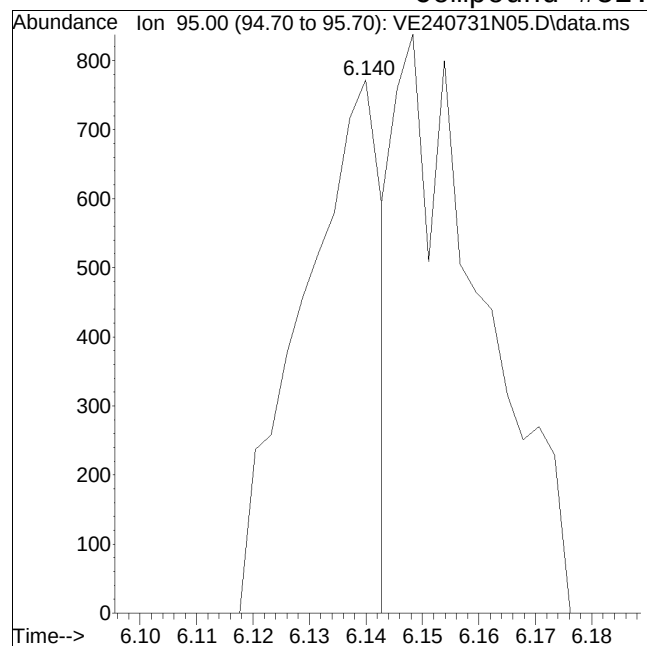


M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

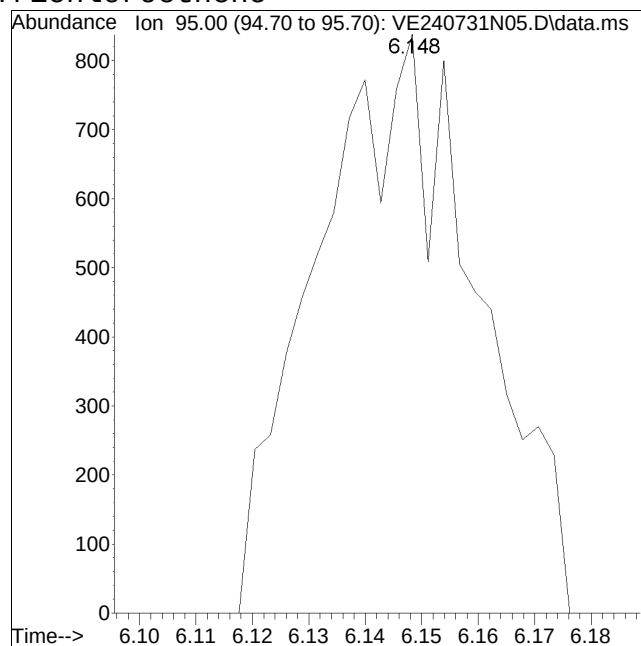
Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N05.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 7:26 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 8/1/2024 11:57 am

Compound #52: Trichloroethene



Original Peak Response = 755

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

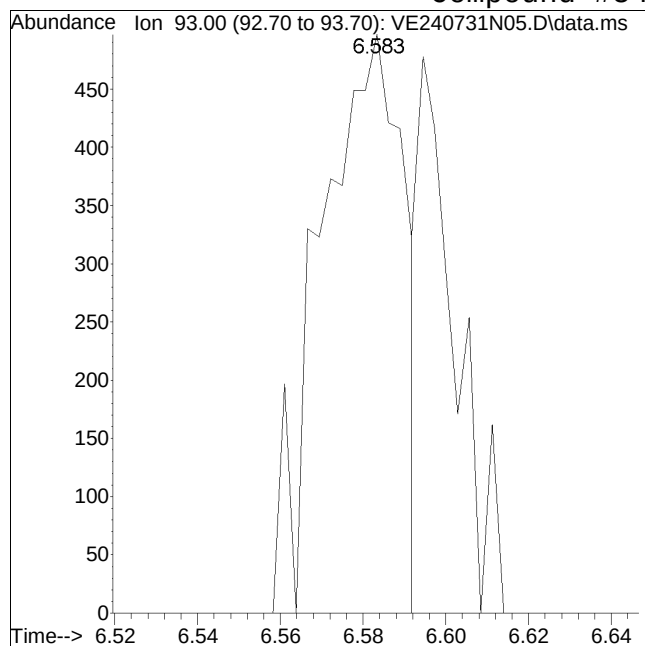


Manual Peak Response = 1655 M1

Manual Integration Report

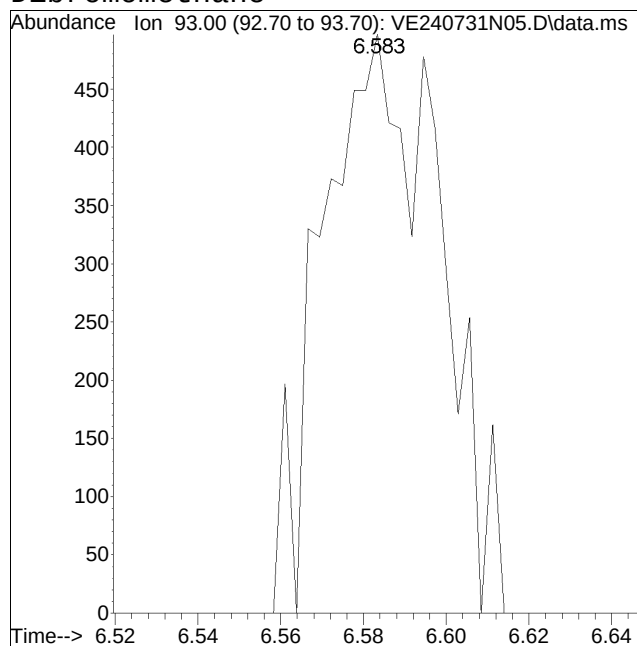
Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N05.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 7:26 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 8/1/2024 11:57 am

Compound #54: Dibromomethane



Original Peak Response = 693

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

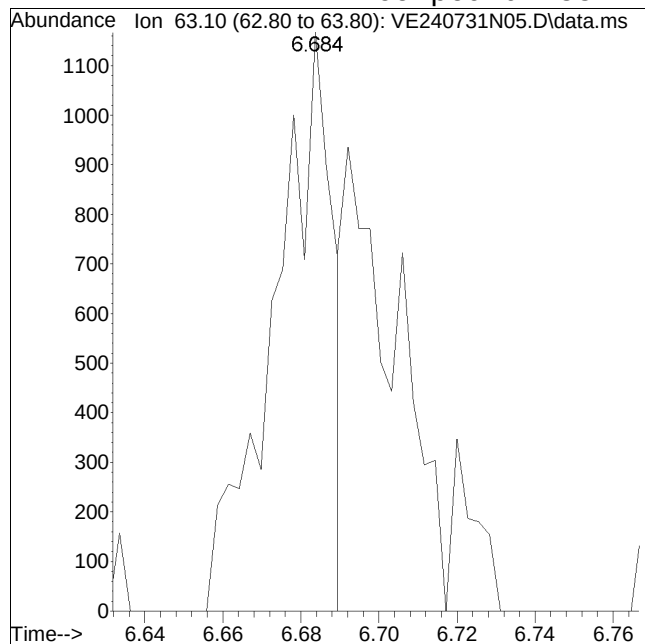


Manual Peak Response = 990 M1

Manual Integration Report

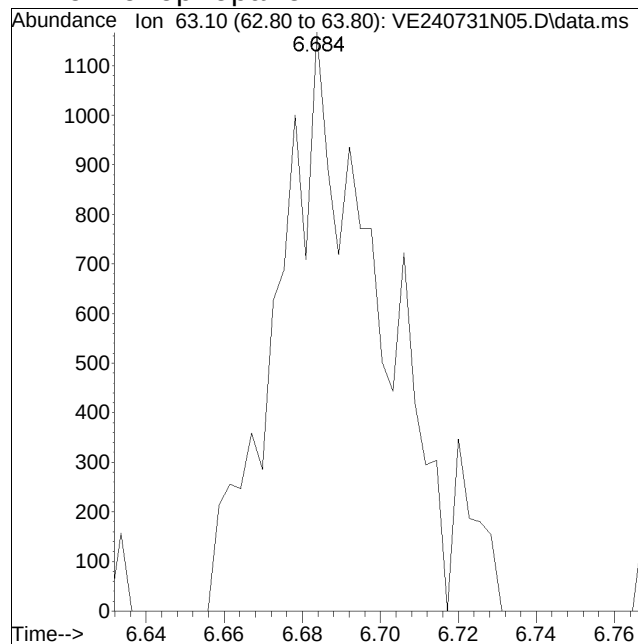
Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N05.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 7:26 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 8/1/2024 11:57 am

Compound #55: 1,2-Dichloropropane



Original Peak Response = 1199

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

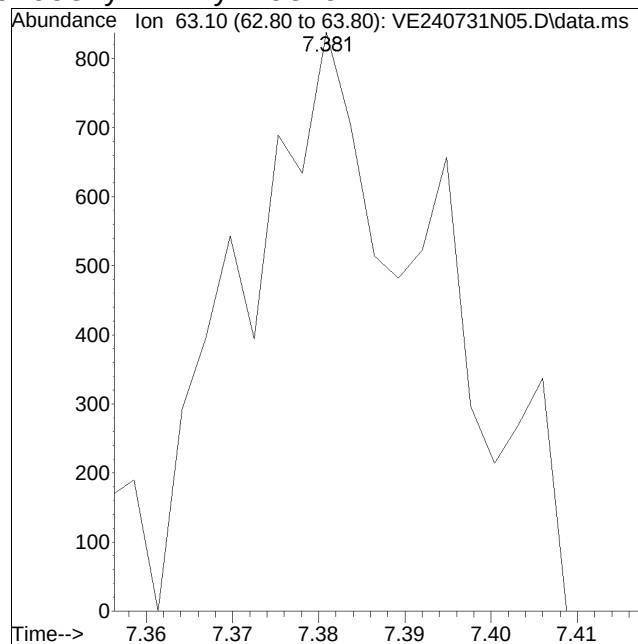
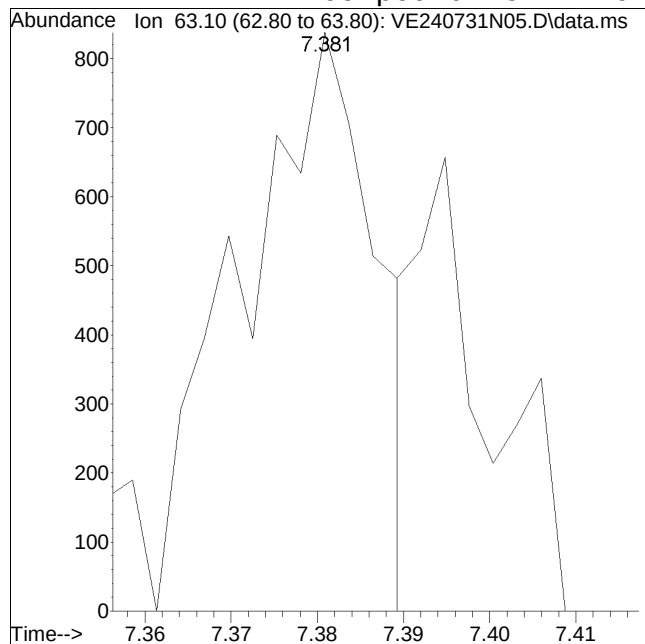


Manual Peak Response = 2209 M1

Manual Integration Report

Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N05.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 7:26 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 8/1/2024 11:57 am

Compound #57: 2-Chloroethyl vinyl ether



Original Peak Response = 918

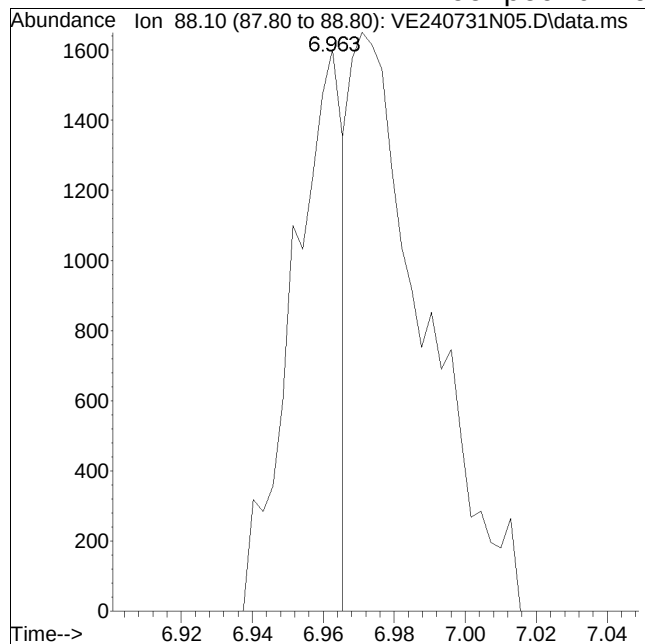
Manual Peak Response = 1303 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

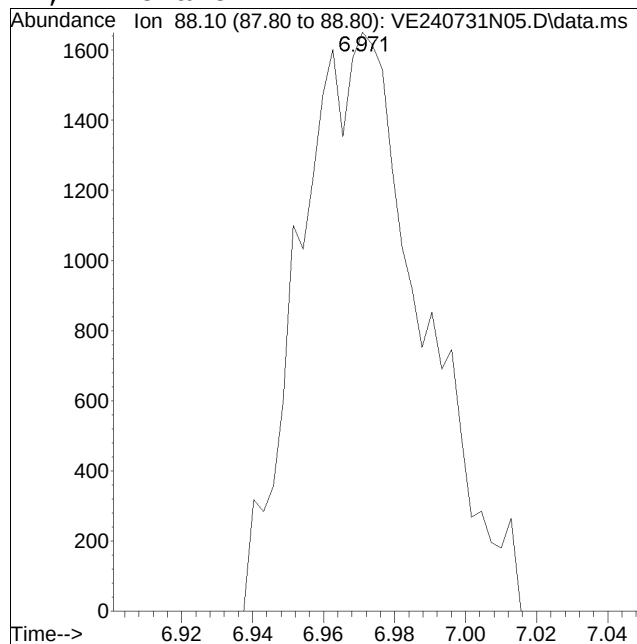
Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N05.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 7:26 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 8/1/2024 11:57 am

Compound #61: 1,4-Dioxane



Original Peak Response = 1567

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

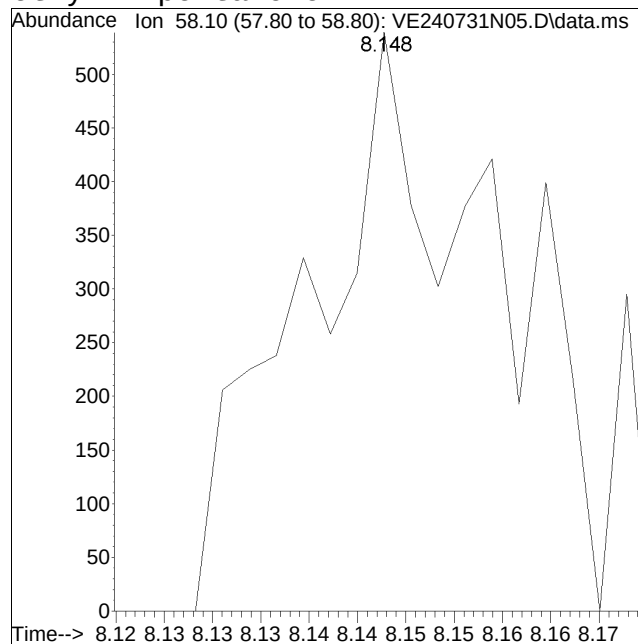
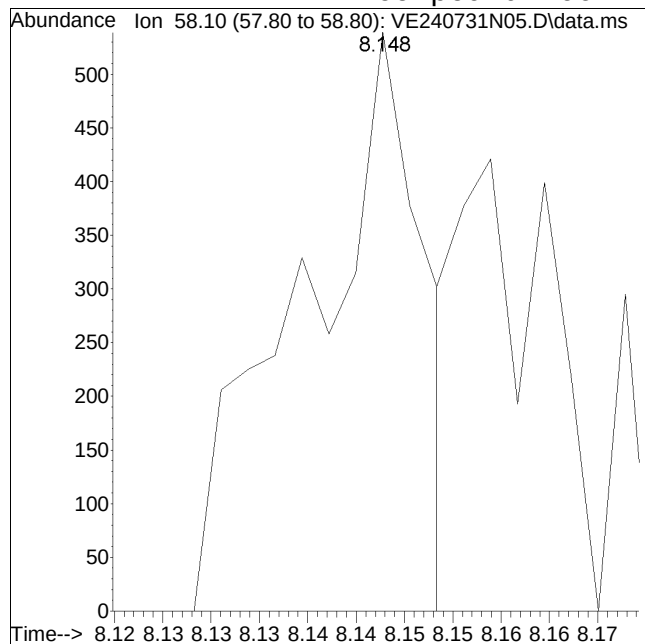


Manual Peak Response = 3965 M1

Manual Integration Report

Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N05.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 7:26 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 8/1/2024 11:57 am

Compound #66: 4-Methyl-2-pentanone



Original Peak Response = 467

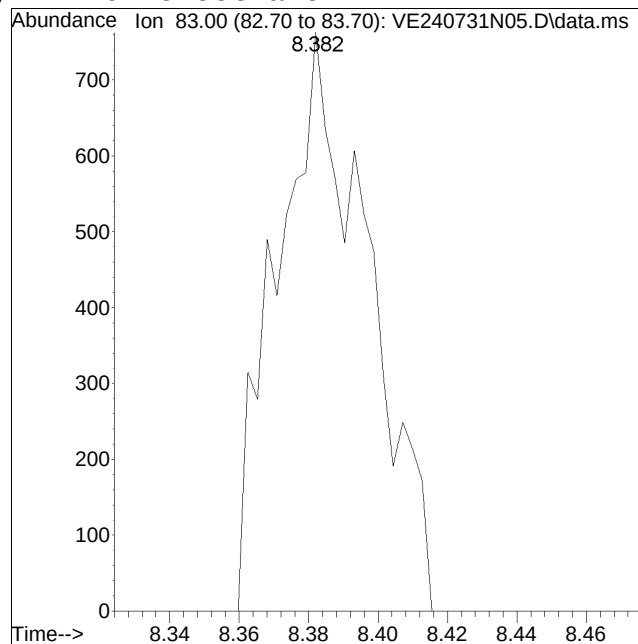
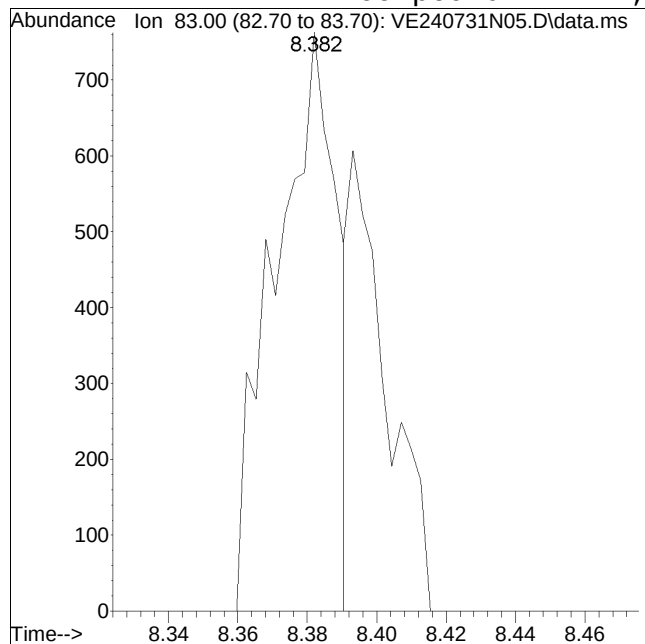
Manual Peak Response = 735 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N05.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 7:26 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 8/1/2024 11:57 am

Compound #72: 1,1,2-Trichloroethane



Original Peak Response = 941

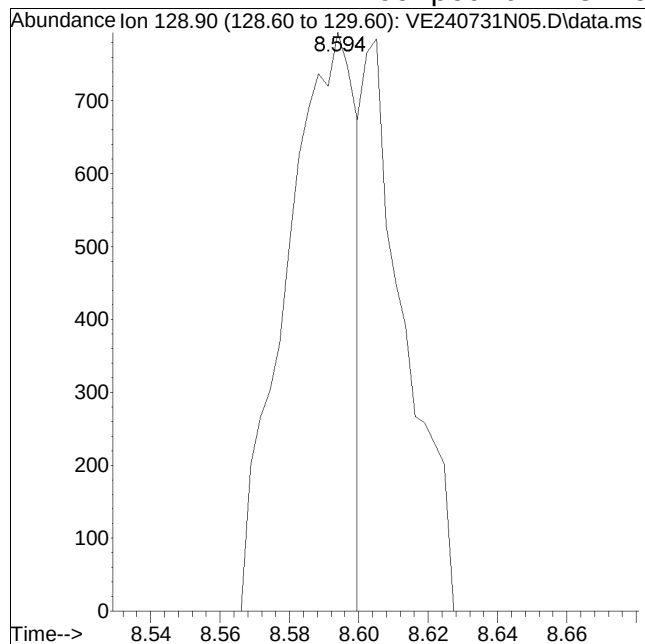
Manual Peak Response = 1399 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

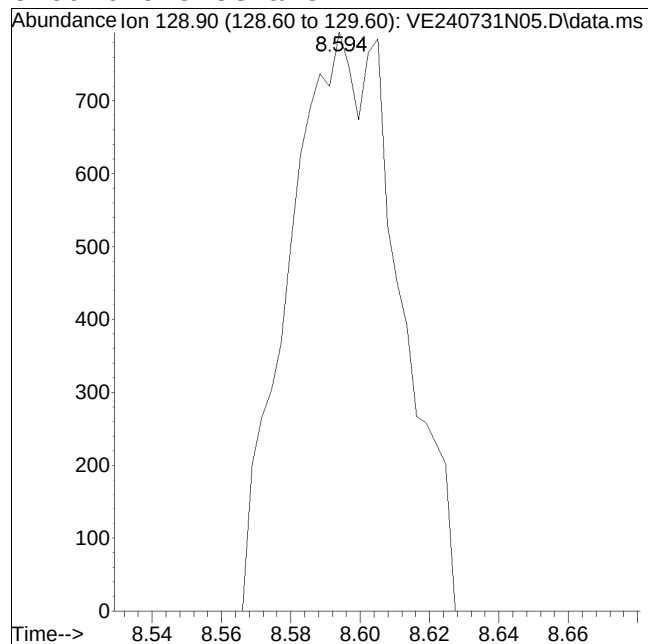
Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N05.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 7:26 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 8/1/2024 11:57 am

Compound #73: Chlorodibromomethane



Original Peak Response = 1109

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

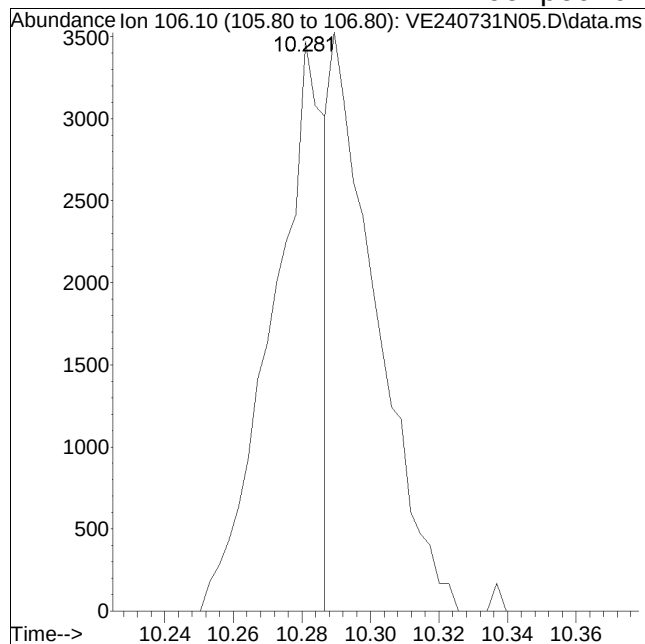


Manual Peak Response = 1758 M1

Manual Integration Report

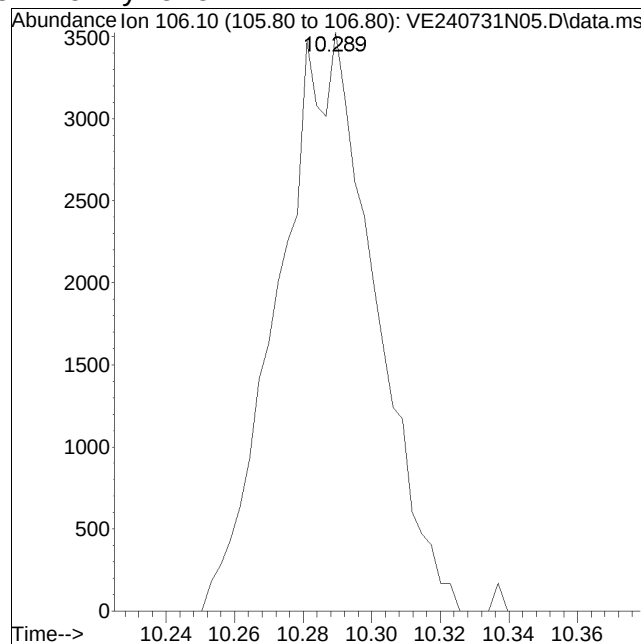
Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N05.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 7:26 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 8/1/2024 11:57 am

Compound #82: o Xylene



Original Peak Response = 3640

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

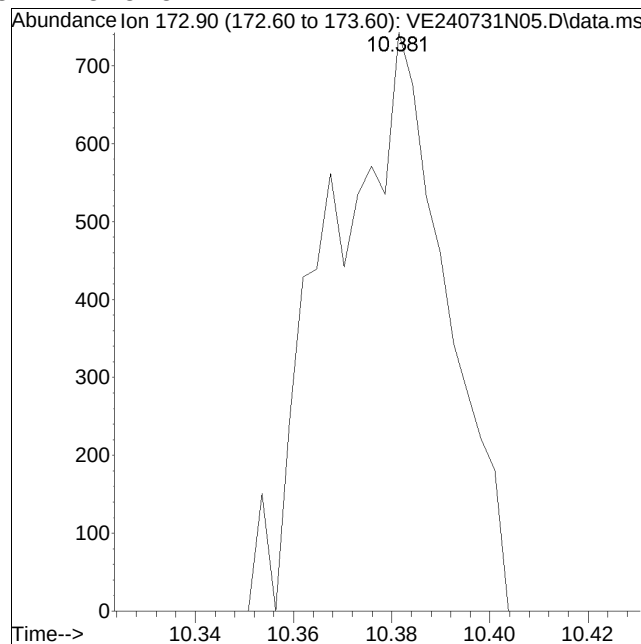
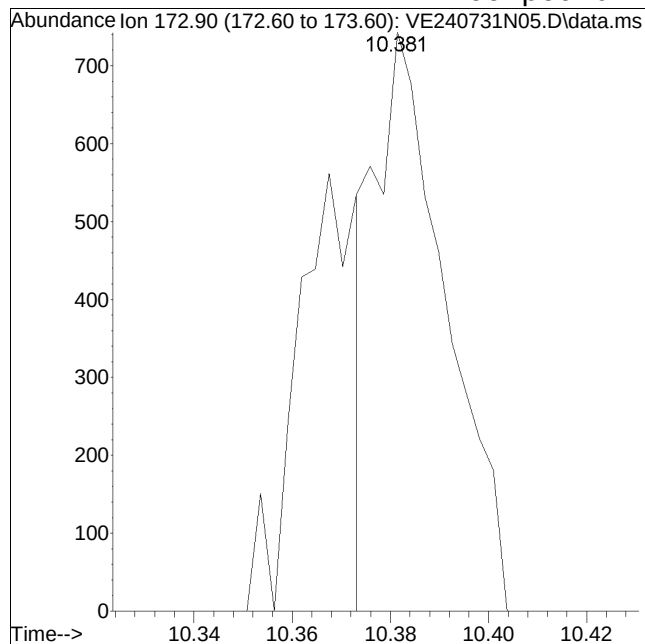


Manual Peak Response = 6928 M1

Manual Integration Report

Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N05.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 7:26 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 8/1/2024 11:57 am

Compound #85: Bromoform



Original Peak Response = 761

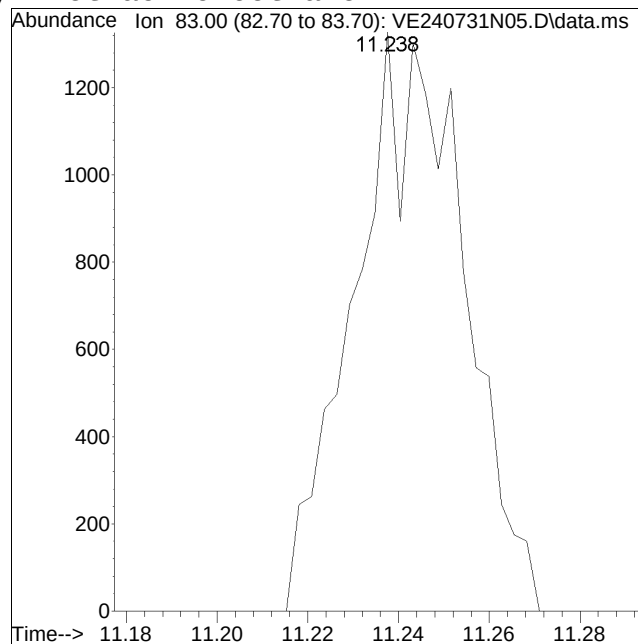
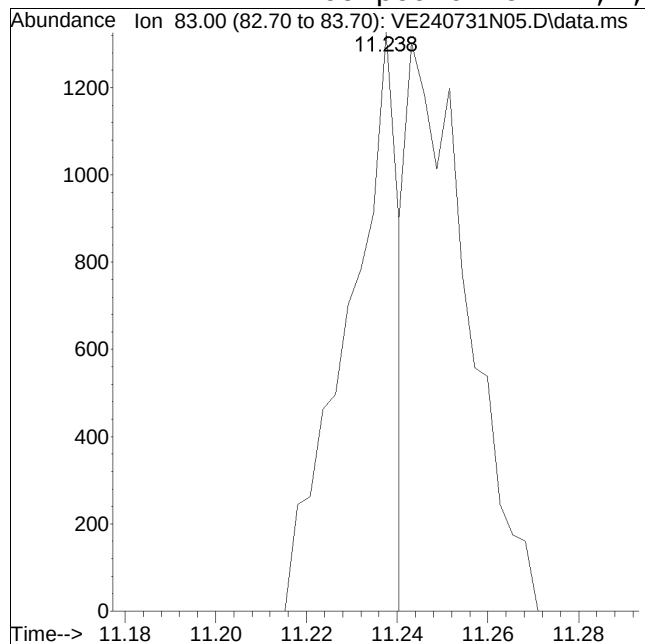
Manual Peak Response = 1229 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N05.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 7:26 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 8/1/2024 11:57 am

Compound #92: 1,1,2,2-Tetrachloroethane



Original Peak Response = 1018

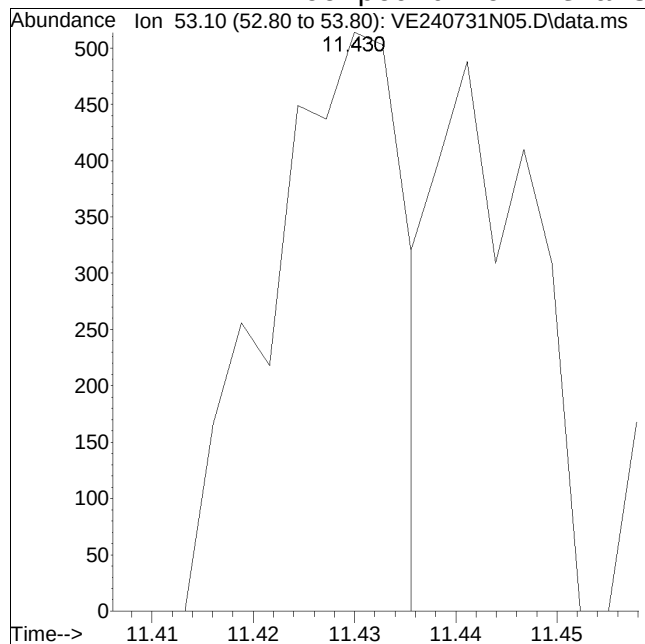
Manual Peak Response = 2216 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

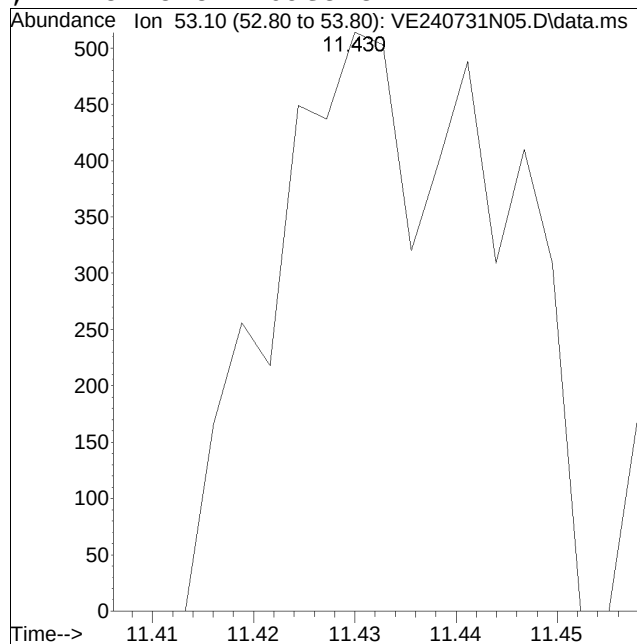
Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N05.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 7:26 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 8/1/2024 11:57 am

Compound #97: trans-1,4-Dichloro-2-butene



Original Peak Response = 479

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

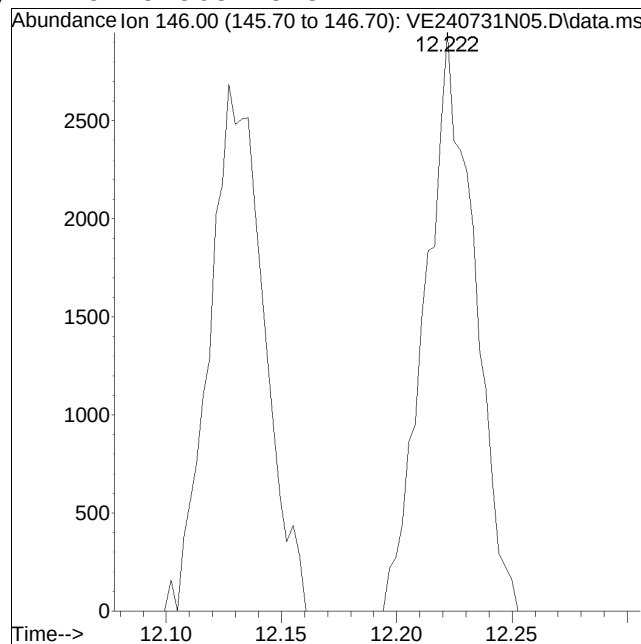
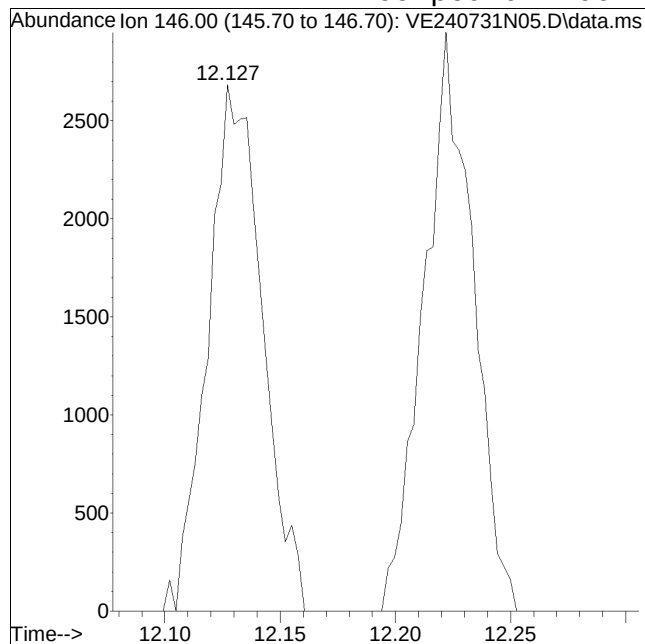


Manual Peak Response = 800 M1

Manual Integration Report

Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N05.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 7:26 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 8/1/2024 11:57 am

Compound #106: 1,4-Dichlorobenzene



Original Peak Response = 4394

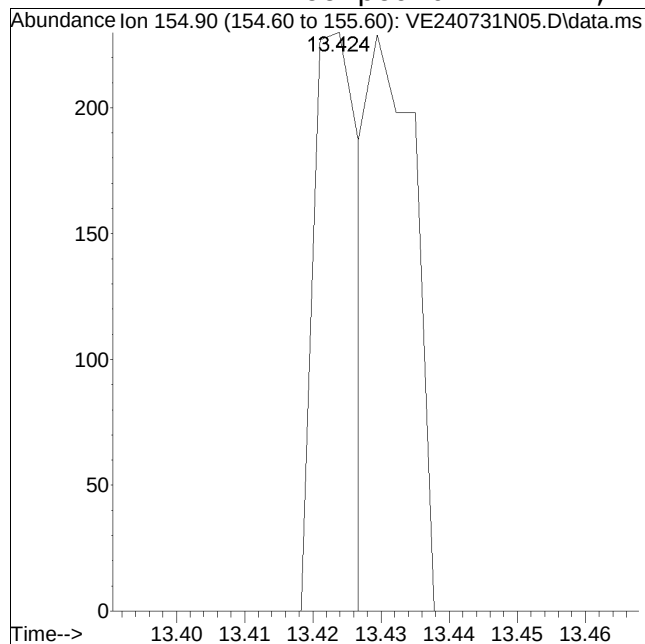
Manual Peak Response = 4371 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

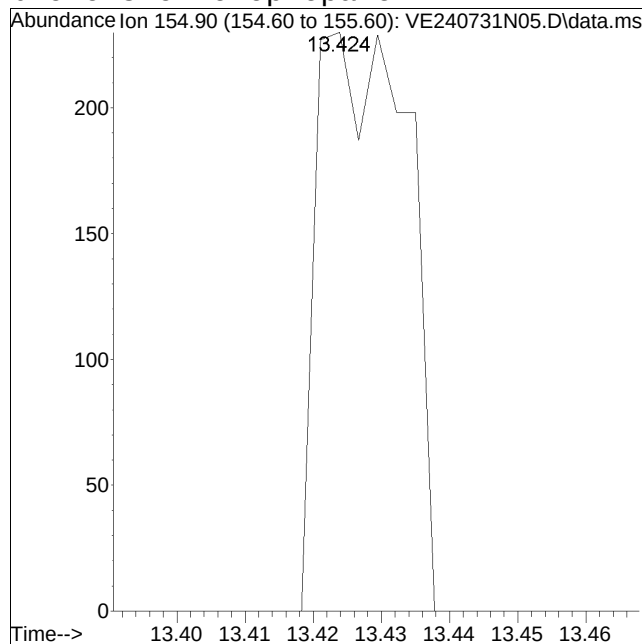
Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N05.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 7:26 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 8/1/2024 11:57 am

Compound #111: 1,2-Dibromo-3-chloropropane



Original Peak Response = 108

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.



Manual Peak Response = 212 M1

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
 Data File : VE240731N07.D
 Acq On : 31 Jul 2024 8:16 pm
 Operator : ELAINE:MKS
 Sample : I8260STD2PPB
 Misc : WG1954249
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 01 12:05:12 2024
 Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Aug 01 11:56:36 2024
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240731N-ICAL\VE240731N08.D
 Sub List : 8260-Curve - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	5.964	96	205965	10.000	ug/L	0.00
Standard Area 1 = 204581			Recovery	=	100.68%	
63) Chlorobenzene-d5	9.497	117	151862	10.000	ug/L	0.00
Standard Area 1 = 147756			Recovery	=	102.78%	
84) 1,4-Dichlorobenzene-d4	12.208	152	86373	10.000	ug/L	0.00
Standard Area 1 = 84505			Recovery	=	102.21%	
System Monitoring Compounds						
39) Dibromofluoromethane	5.153	113	49492	10.098	ug/L	0.00
Spiked Amount 10.000	Range 70	- 130	Recovery	=	100.98%	
47) 1,2-Dichloroethane-d4	5.682	65	66293	10.187	ug/L	0.00
Spiked Amount 10.000	Range 70	- 130	Recovery	=	101.87%	
64) Toluene-d8	7.651	98	198351	9.874	ug/L	0.00
Spiked Amount 10.000	Range 70	- 130	Recovery	=	98.74%	
88) 4-Bromofluorobenzene	10.998	95	77750	9.707	ug/L	0.00
Spiked Amount 10.000	Range 70	- 130	Recovery	=	97.07%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.592	85	10135	2.234	ug/L	# 87
3) Chloromethane	1.787	50	10322	1.907	ug/L	98
4) Vinyl chloride	1.854	62	10227	2.041	ug/L	83
5) Bromomethane	2.160	94	2217	1.844	ug/L	99
6) Chloroethane	2.272	64	6822M1	2.156	ug/L	
7) Trichlorofluoromethane	2.420	101	10784	2.060	ug/L	87
8) Ethyl ether	2.713	74	3876	1.776	ug/L	# 61
10) 1,1-Dichloroethene	2.905	96	6805	2.139	ug/L	87
11) Carbon disulfide	2.933	76	20147	1.943	ug/L	92
12) Freon-113	2.944	101	7065M1	2.106	ug/L	
13) Iodomethane	3.036	142	2297	1.282	ug/L	# 84
14) Acrolein	3.228	56	1941M3	2.134	ug/L	
15) Methylene chloride	3.457	84	8519	2.029	ug/L	89
17) Acetone	3.499	43	3859M1	2.655	ug/L	
18) trans-1,2-Dichloroethene	3.613	96	7133	1.958	ug/L	78
19) Methyl acetate	3.622	43	7542	2.220	ug/L	# 84
21) Methyl tert-butyl ether	3.719	73	25937	1.863	ug/L	96
22) tert-Butyl alcohol	3.803	59	4687	9.669	ug/L	# 72
24) Diisopropyl ether	4.073	45	36164	1.819	ug/L	# 89
25) 1,1-Dichloroethane	4.196	63	16753	1.917	ug/L	95
26) Halothane	4.246	117	5656M1	1.936	ug/L	

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
 Data File : VE240731N07.D
 Acq On : 31 Jul 2024 8:16 pm
 Operator : ELAINE:MKS
 Sample : I8260STD2PPB
 Misc : WG1954249
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 01 12:05:12 2024
 Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Aug 01 11:56:36 2024
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240731N-ICAL\VE240731N08.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
27) Acrylonitrile	4.238	53	3350	1.851	ug/L	#	71
28) Ethyl tert-butyl ether	4.422	59	32105	1.861	ug/L	#	83
29) Vinyl acetate	4.436	43	26731M1	2.333	ug/L		
30) cis-1,2-Dichloroethene	4.715	96	8707	2.000	ug/L		97
31) 2,2-Dichloropropane	4.815	77	11494	2.065	ug/L	#	81
33) Bromochloromethane	4.907	128	3765	1.909	ug/L	#	76
34) Cyclohexane	4.913	56	20412M1	2.195	ug/L		
35) Chloroform	4.980	83	14505	2.035	ug/L		95
36) Ethyl acetate	5.091	43	9324	1.730	ug/L	#	96
37) Carbon tetrachloride	5.114	117	11111	2.073	ug/L		96
38) Tetrahydrofuran	5.130	42	3400M3	2.040	ug/L		
40) 1,1,1-Trichloroethane	5.180	97	12396	1.940	ug/L	#	79
42) 2-Butanone	5.273	43	4841M3	2.253	ug/L		
43) 1,1-Dichloropropene	5.303	75	10689	1.993	ug/L		92
45) Benzene	5.549	78	33518	1.941	ug/L		91
46) tert-Amyl methyl ether	5.655	73	23844	1.870	ug/L		98
48) 1,2-Dichloroethane	5.749	62	12349	1.876	ug/L		96
51) Methyl cyclohexane	6.134	83	14843	2.162	ug/L		86
52) Trichloroethene	6.145	95	8248	1.904	ug/L	#	68
54) Dibromomethane	6.580	93	4791	1.944	ug/L		87
55) 1,2-Dichloropropane	6.686	63	9613	1.871	ug/L		98
57) 2-Chloroethyl vinyl ether	7.381	63	5980	1.853	ug/L	#	77
58) Bromodichloromethane	6.759	83	12056	1.988	ug/L	#	93
61) 1,4-Dioxane	6.968	88	16165	403.548	ug/L		88
62) cis-1,3-Dichloropropene	7.445	75	13006	1.854	ug/L		92
65) Toluene	7.713	92	21290	1.968	ug/L		94
66) 4-Methyl-2-pentanone	8.148	58	3470	1.842	ug/L	#	96
67) Tetrachloroethene	8.159	166	8736	1.904	ug/L		96
69) trans-1,3-Dichloropropene	8.195	75	11383	1.811	ug/L		87
71) Ethyl methacrylate	8.387	69	11034	1.879	ug/L		89
72) 1,1,2-Trichloroethane	8.385	83	5762	1.858	ug/L		97
73) Chlorodibromomethane	8.594	129	7851	1.837	ug/L		98
74) 1,3-Dichloropropane	8.708	76	12084	1.849	ug/L		99
75) 1,2-Dibromoethane	8.867	107	6772	1.878	ug/L		86
77) 2-Hexanone	9.157	43	6900	1.938	ug/L	#	88
78) Chlorobenzene	9.520	112	22113	1.898	ug/L		90
79) Ethylbenzene	9.559	91	41231	1.928	ug/L		98
80) 1,1,1,2-Tetrachloroethane	9.603	131	8186	1.881	ug/L		93
81) p/m Xylene	9.745	106	31668	3.808	ug/L		98
82) o Xylene	10.289	106	30832	3.808	ug/L		95

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
 Data File : VE240731N07.D
 Acq On : 31 Jul 2024 8:16 pm
 Operator : ELAINE:MKS
 Sample : I8260STD2PPB
 Misc : WG1954249
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 01 12:05:12 2024
 Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Aug 01 11:56:36 2024
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240731N-ICAL\VE240731N08.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
83)	Styrene	10.351	104	50933	3.785	ug/L	99
85)	Bromoform	10.379	173	5528	1.934	ug/L	92
87)	Isopropylbenzene	10.669	105	41364	1.959	ug/L	95
89)	Bromobenzene	11.104	156	10259	1.901	ug/L	100
90)	n-Propylbenzene	11.151	91	48832	1.922	ug/L	97
91)	1,4-Dichlorobutane	11.168	55	18365	1.991	ug/L	97
92)	1,1,2,2-Tetrachloroethane	11.243	83	9003	2.115	ug/L	97
93)	4-Ethyltoluene	11.279	105	39669	1.895	ug/L	99
94)	2-Chlorotoluene	11.321	91	29752	1.953	ug/L	99
95)	1,3,5-Trimethylbenzene	11.377	105	34688	1.872	ug/L	100
96)	1,2,3-Trichloropropane	11.377	75	7255	1.949	ug/L	93
97)	trans-1,4-Dichloro-2-b...	11.433	53	3407	1.939	ug/L #	84
98)	4-Chlorotoluene	11.502	91	30450	1.927	ug/L	98
99)	tert-Butylbenzene	11.720	119	29184	1.910	ug/L #	97
102)	1,2,4-Trimethylbenzene	11.798	105	33754	1.834	ug/L	94
103)	sec-Butylbenzene	11.909	105	43184	1.935	ug/L	98
104)	p-Isopropyltoluene	12.063	119	35878	1.891	ug/L	97
105)	1,3-Dichlorobenzene	12.127	146	18671M3	1.849	ug/L	
106)	1,4-Dichlorobenzene	12.225	146	18771	1.878	ug/L	94
107)	p-Diethylbenzene	12.439	119	20387	1.813	ug/L	94
108)	n-Butylbenzene	12.498	91	30950	1.918	ug/L	97
109)	1,2-Dichlorobenzene	12.648	146	17729	1.841	ug/L	98
110)	1,2,4,5-Tetramethylben...	13.229	119	32685	1.779	ug/L	94
111)	1,2-Dibromo-3-chloropr...	13.432	155	1498	1.893	ug/L	95
112)	1,3,5-Trichlorobenzene	13.457	180	13388	1.742	ug/L	93
113)	Hexachlorobutadiene	14.032	225	4746	1.931	ug/L	93
114)	1,2,4-Trichlorobenzene	14.054	180	11806	1.733	ug/L	98
115)	Naphthalene	14.352	128	26466	1.808	ug/L	100
116)	1,2,3-Trichlorobenzene	14.517	180	11185	1.795	ug/L	95

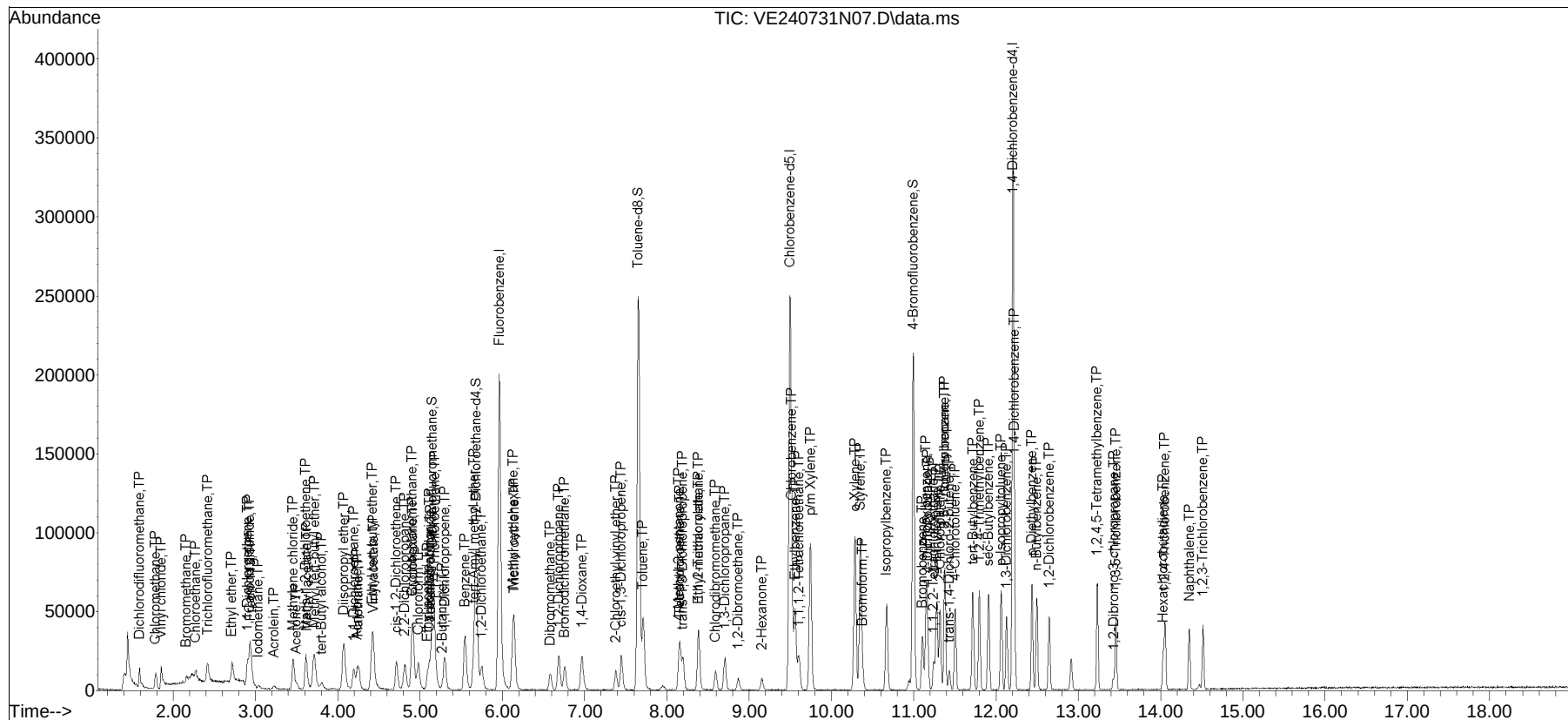
(#) = qualifier out of range (m) = manual integration (+) = signals summed

(QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
Data File : VE240731N07.D
Acq On : 31 Jul 2024 8:16 pm
Operator : ELAINE:MKS
Sample : I8260STD2PPB
Misc : WG1954249
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 01 12:05:12 2024
Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 11:56:36 2024
Response via : Initial Calibration

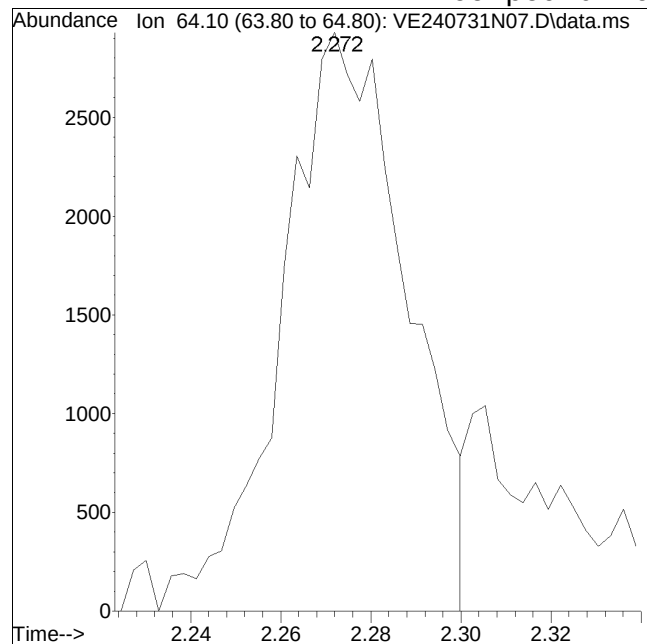
Sub List : 8260-Curve - Megamix plus DioxL\VE240731N08.D•



Manual Integration Report

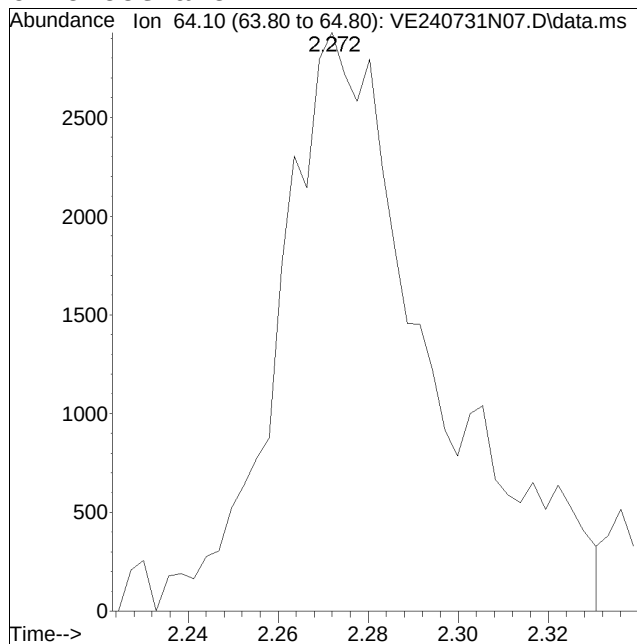
Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N07.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 8:16 pm Instrument : Elaine
Sample : I8260STD2PPB Quant Date : 8/1/2024 11:57 am

Compound #6: Chloroethane



Original Peak Response = 5664

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

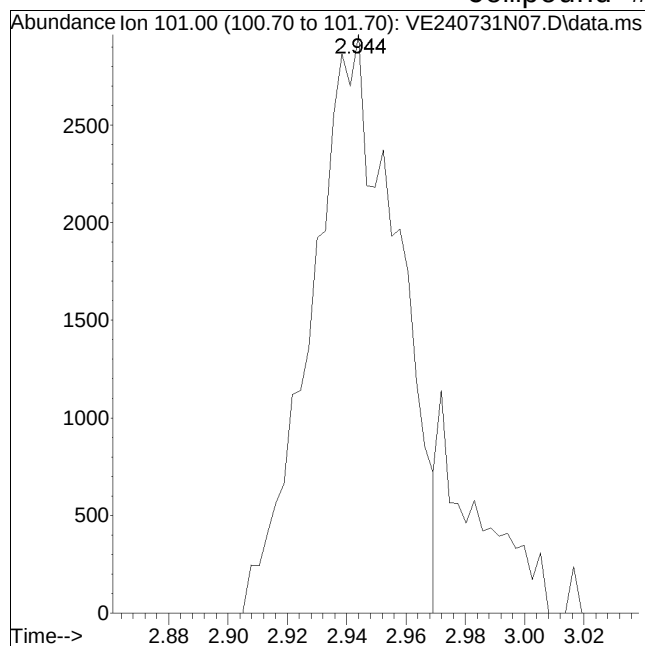


Manual Peak Response = 6822 M1

Manual Integration Report

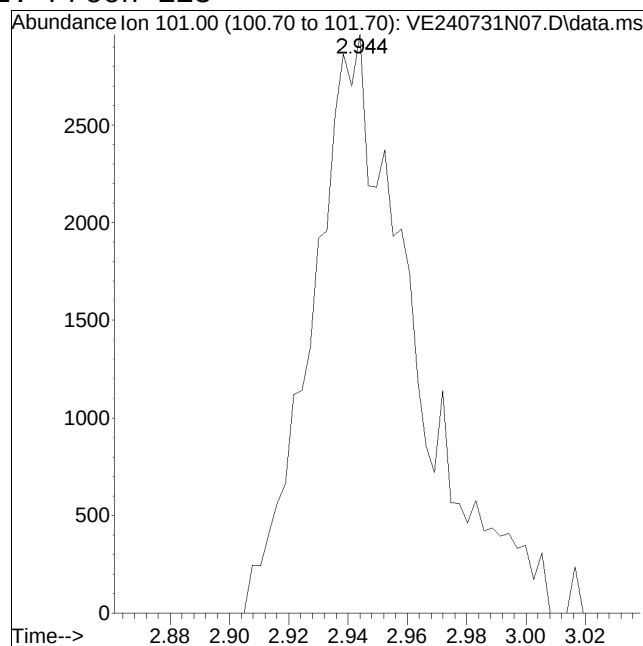
Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N07.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 8:16 pm Instrument : Elaine
Sample : I8260STD2PPB Quant Date : 8/1/2024 11:57 am

Compound #12: Freon-113



Original Peak Response = 6000

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

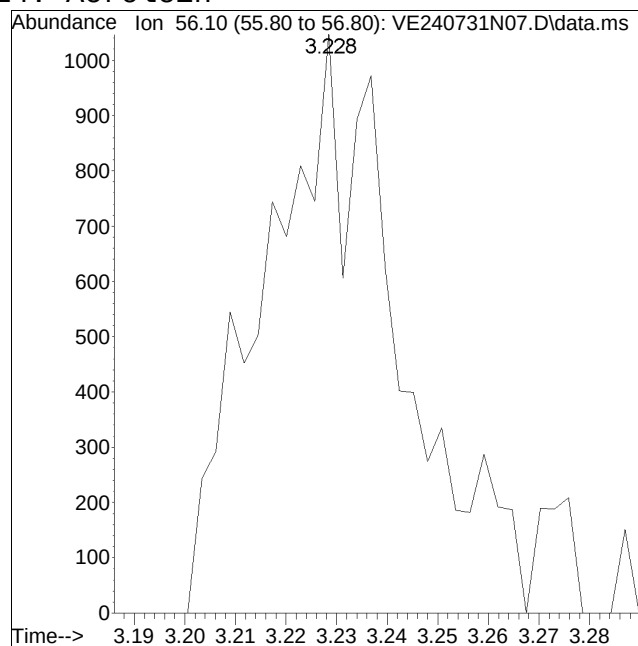
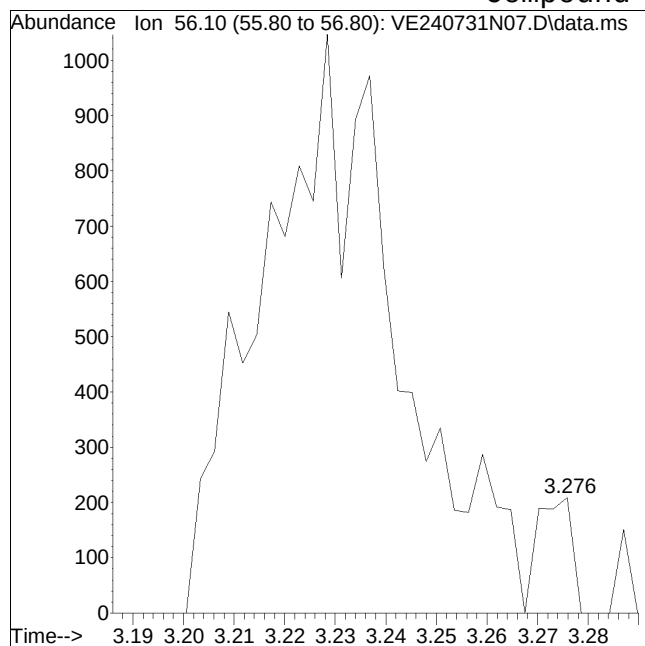


Manual Peak Response = 7065 M1

Manual Integration Report

Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N07.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 8:16 pm Instrument : Elaine
Sample : I8260STD2PPB Quant Date : 8/1/2024 11:57 am

Compound #14: Acrolein



Original Peak Response = 98

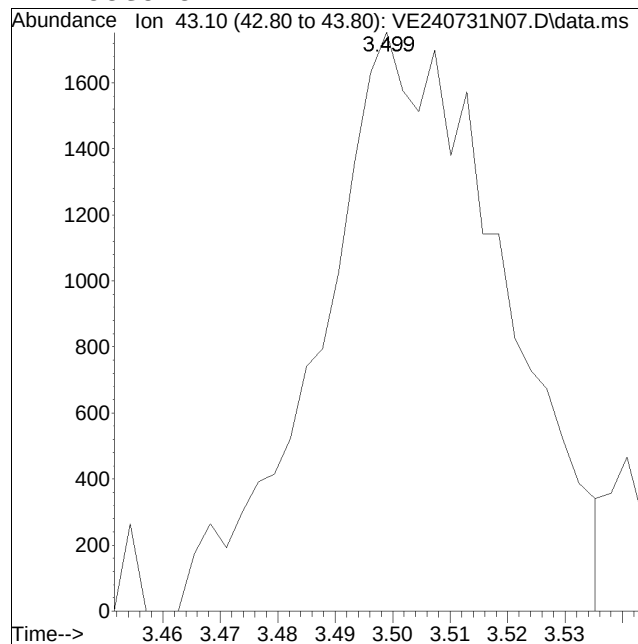
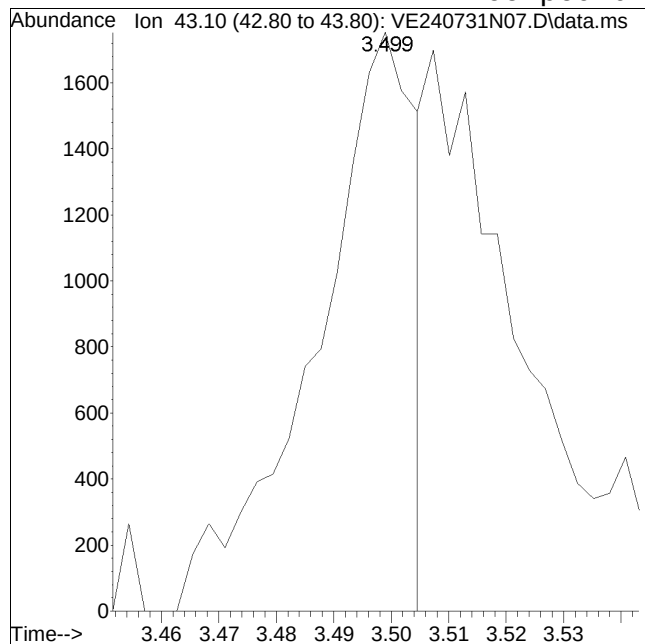
Manual Peak Response = 1941 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N07.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 8:16 pm Instrument : Elaine
Sample : I8260STD2PPB Quant Date : 8/1/2024 11:57 am

Compound #17: Acetone



Original Peak Response = 2117

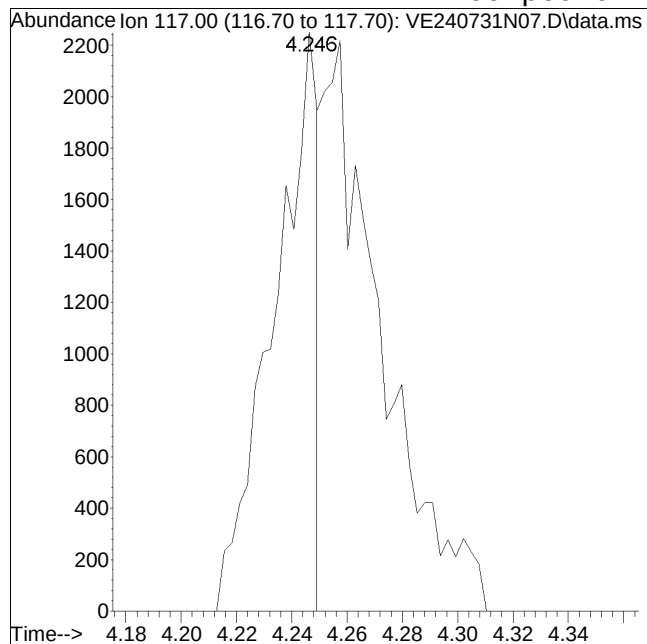
Manual Peak Response = 3859 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

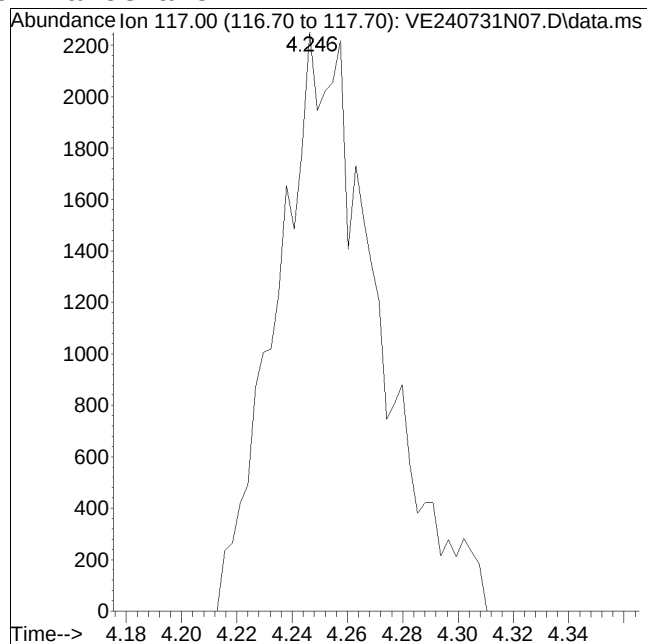
Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N07.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 8:16 pm Instrument : Elaine
Sample : I8260STD2PPB Quant Date : 8/1/2024 11:57 am

Compound #26: Halothane



Original Peak Response = 2453

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

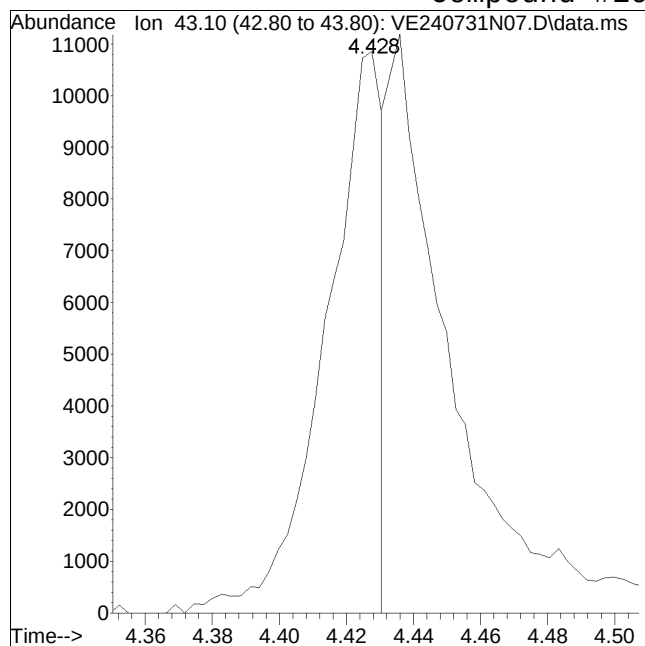


Manual Peak Response = 5656 M1

Manual Integration Report

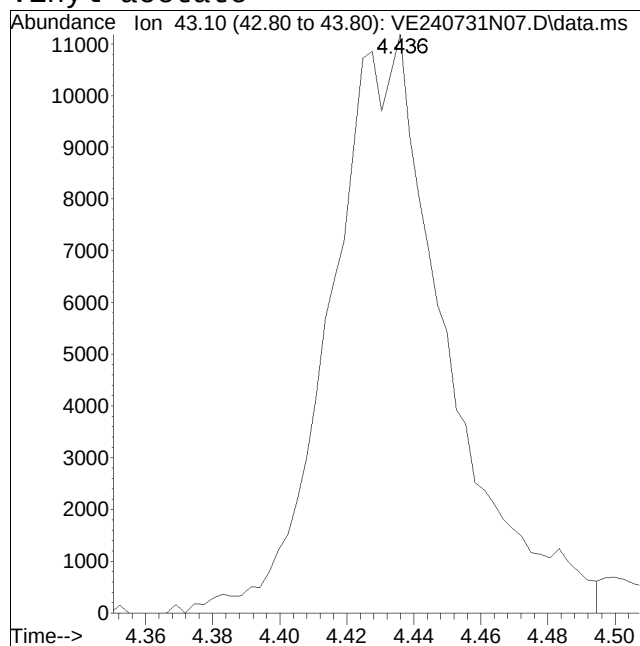
Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N07.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 8:16 pm Instrument : Elaine
Sample : I8260STD2PPB Quant Date : 8/1/2024 11:57 am

Compound #29: Vinyl acetate



Original Peak Response = 12610

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

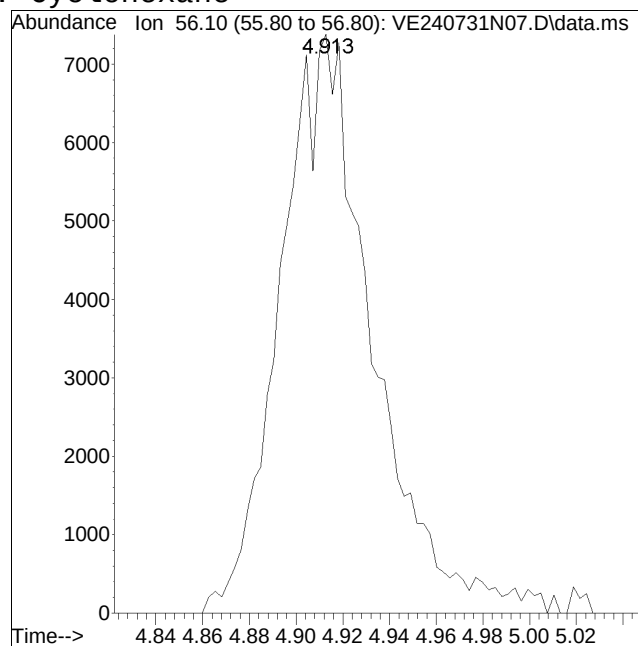
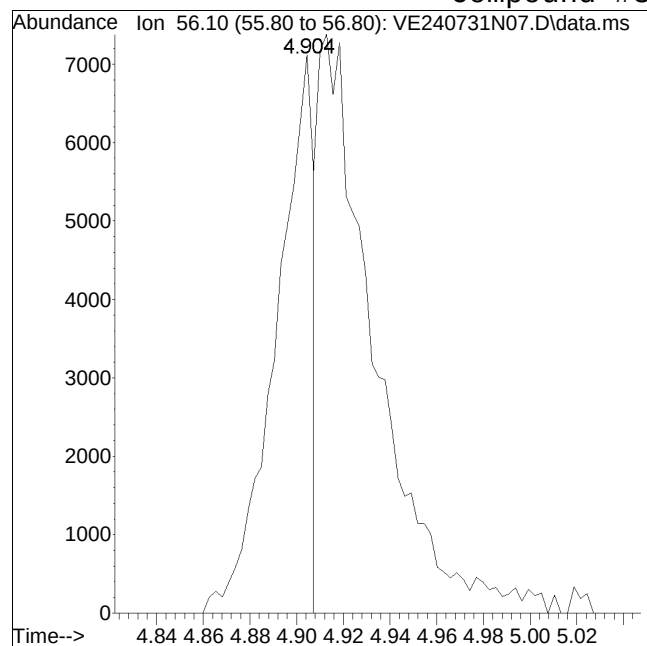


Manual Peak Response = 26731 M1

Manual Integration Report

Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N07.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 8:16 pm Instrument : Elaine
Sample : I8260STD2PPB Quant Date : 8/1/2024 11:57 am

Compound #34: Cyclohexane



Original Peak Response = 7913

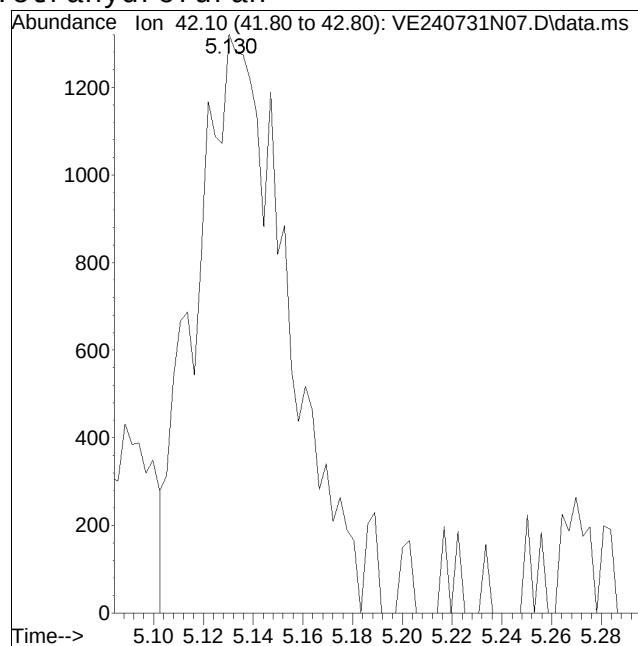
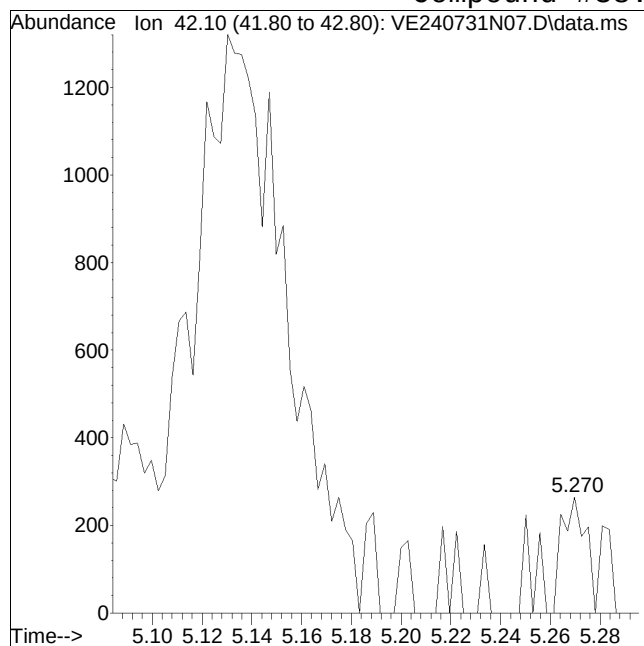
Manual Peak Response = 20412 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N07.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 8:16 pm Instrument : Elaine
Sample : I8260STD2PPB Quant Date : 8/1/2024 11:57 am

Compound #38: Tetrahydrofuran



Original Peak Response = 176

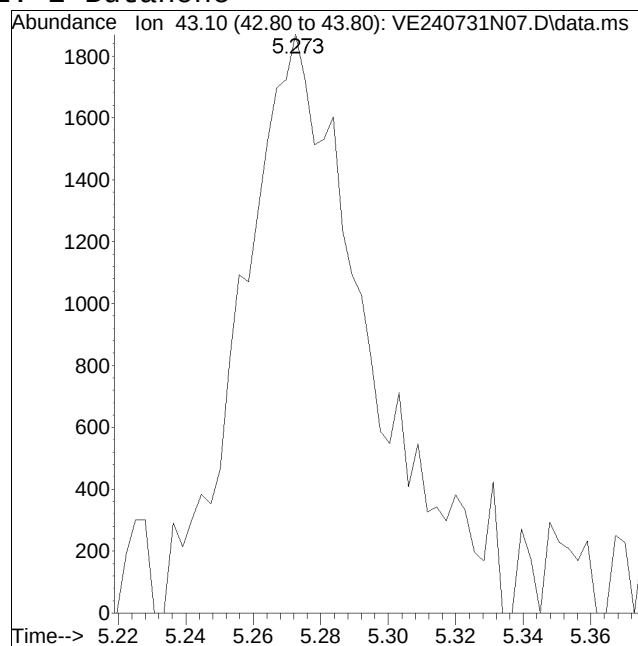
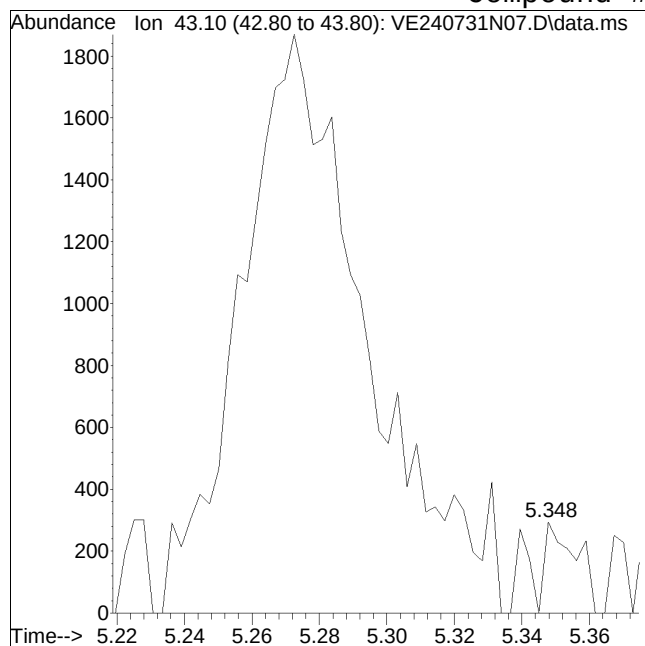
Manual Peak Response = 3400 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N07.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 8:16 pm Instrument : Elaine
Sample : I8260STD2PPB Quant Date : 8/1/2024 11:57 am

Compound #42: 2-Butanone



Original Peak Response = 190

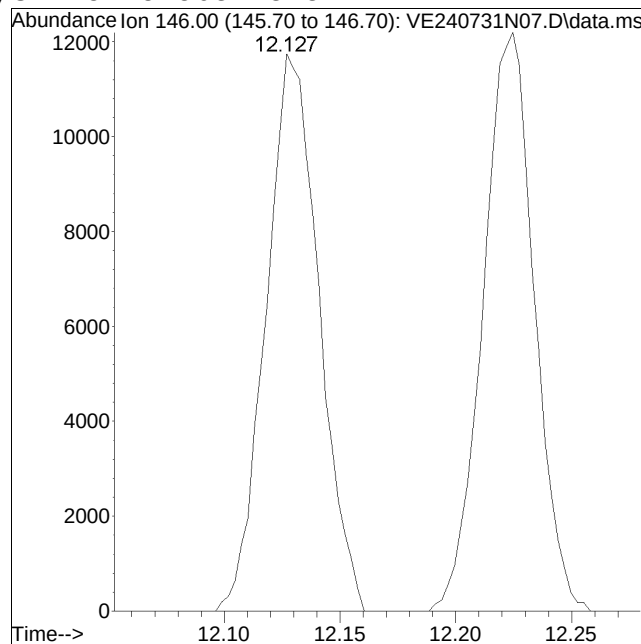
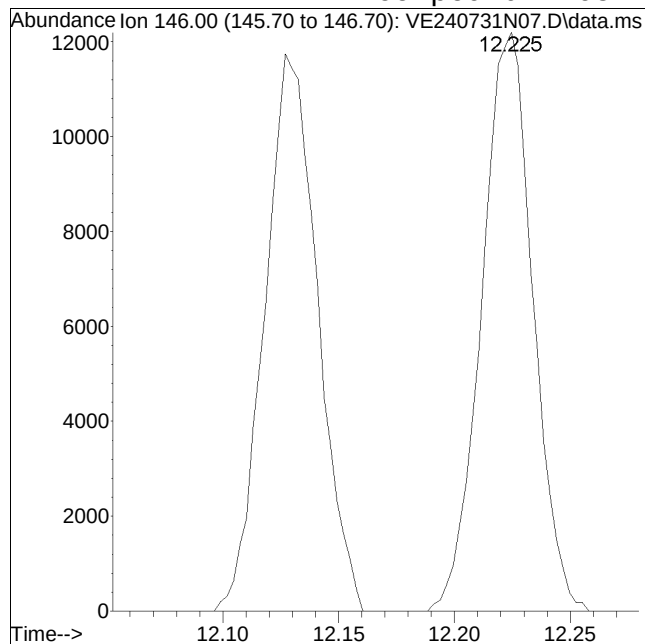
Manual Peak Response = 4841 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N07.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 8:16 pm Instrument : Elaine
Sample : I8260STD2PPB Quant Date : 8/1/2024 11:57 am

Compound #105: 1,3-Dichlorobenzene



Original Peak Response = 18771

Manual Peak Response = 18671 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
 Data File : VE240731N08.D
 Acq On : 31 Jul 2024 8:42 pm
 Operator : ELAINE:MKS
 Sample : I8260STD10PPB
 Misc : WG1954249
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 01 11:56:21 2024
 Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu May 23 13:01:28 2024
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240731N-ICAL\VE240731N08.D
 Sub List : 8260-Curve - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	5.967	96	204581	10.000	ug/L	-0.11
Standard Area 1 = 204581			Recovery	=	100.00%	
63) Chlorobenzene-d5	9.494	117	147756	10.000	ug/L	-0.12
Standard Area 1 = 147756			Recovery	=	100.00%	
84) 1,4-Dichlorobenzene-d4	12.208	152	84505	10.000	ug/L	-0.10
Standard Area 1 = 84505			Recovery	=	100.00%	
System Monitoring Compounds						
39) Dibromofluoromethane	5.155	113	48680	10.071	ug/L	-0.10
Spiked Amount 10.000	Range 70 - 130		Recovery	=	100.71%	
47) 1,2-Dichloroethane-d4	5.680	65	64640	11.293	ug/L	-0.10
Spiked Amount 10.000	Range 70 - 130		Recovery	=	112.93%	
64) Toluene-d8	7.654	98	195456	10.248	ug/L	-0.11
Spiked Amount 10.000	Range 70 - 130		Recovery	=	102.48%	
88) 4-Bromofluorobenzene	10.995	95	78367	9.155	ug/L	-0.11
Spiked Amount 10.000	Range 70 - 130		Recovery	=	91.55%	
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.591	85	45066	10.341	ug/L	95
3) Chloromethane	1.789	50	53760	10.543	ug/L	96
4) Vinyl chloride	1.854	62	49777	10.843	ug/L	93
5) Bromomethane	2.160	94	11943	5.484	ug/L	97
6) Chloroethane	2.275	64	31423	12.949	ug/L	99
7) Trichlorofluoromethane	2.417	101	52002	9.781	ug/L	94
8) Ethyl ether	2.721	74	21677	12.265	ug/L	70
10) 1,1-Dichloroethene	2.905	96	31598	9.087	ug/L #	73
11) Carbon disulfide	2.933	76	103009	9.770	ug/L	96
12) Freon-113	2.938	101	33321M1	8.975	ug/L	
13) Iodomethane	3.042	142	17802	6.094	ug/L	90
14) Acrolein	3.226	56	9036	12.767	ug/L #	70
15) Methylene chloride	3.457	84	41711	9.623	ug/L	85
17) Acetone	3.504	43	14439	12.752	ug/L	95
18) trans-1,2-Dichloroethene	3.610	96	36183	9.609	ug/L	78
19) Methyl acetate	3.622	43	33745	13.642	ug/L	97
21) Methyl tert-butyl ether	3.711	73	138295	12.360	ug/L	95
22) tert-Butyl alcohol	3.806	59	24074	69.596	ug/L #	81
24) Diisopropyl ether	4.071	45	197488	12.583	ug/L	92
25) 1,1-Dichloroethane	4.193	63	86782	11.170	ug/L	96
26) Halothane	4.249	117	29017	9.517	ug/L	95

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
 Data File : VE240731N08.D
 Acq On : 31 Jul 2024 8:42 pm
 Operator : ELAINE:MKS
 Sample : I8260STD10PPB
 Misc : WG1954249
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 01 11:56:21 2024
 Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu May 23 13:01:28 2024
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240731N-ICAL\VE240731N08.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
27) Acrylonitrile	4.235	53	17977	15.263	ug/L	92
28) Ethyl tert-butyl ether	4.419	59	171389	11.890	ug/L	97
29) Vinyl acetate	4.430	43	113807	21.432	ug/L #	94
30) cis-1,2-Dichloroethene	4.712	96	43236	9.861	ug/L	93
31) 2,2-Dichloropropane	4.812	77	55274	9.397	ug/L	96
33) Bromochloromethane	4.907	128	19592	10.285	ug/L	84
34) Cyclohexane	4.907	56	92383	10.659	ug/L	92
35) Chloroform	4.980	83	70787	9.942	ug/L	98
36) Ethyl acetate	5.088	43	53536	13.935	ug/L	97
37) Carbon tetrachloride	5.114	117	53227	9.425	ug/L	95
38) Tetrahydrofuran	5.127	42	16553M1	15.540	ug/L	
40) 1,1,1-Trichloroethane	5.180	97	63467	9.719	ug/L	95
42) 2-Butanone	5.275	43	21339	12.529	ug/L #	90
43) 1,1-Dichloropropene	5.300	75	53283	9.911	ug/L	96
45) Benzene	5.543	78	171532	10.324	ug/L	92
46) tert-Amyl methyl ether	5.663	73	126640	10.776	ug/L	98
48) 1,2-Dichloroethane	5.752	62	65371	11.273	ug/L	95
51) Methyl cyclohexane	6.131	83	68206	9.257	ug/L	85
52) Trichloroethene	6.143	95	43027	9.068	ug/L	97
54) Dibromomethane	6.580	93	24484	10.201	ug/L #	84
55) 1,2-Dichloropropane	6.686	63	51035	11.347	ug/L	98
57) 2-Chloroethyl vinyl ether	7.378	63	32060	12.970	ug/L	89
58) Bromodichloromethane	6.759	83	60227	10.235	ug/L	95
61) 1,4-Dioxane	6.971	88	19894	537.767	ug/L	87
62) cis-1,3-Dichloropropene	7.448	75	69674	10.183	ug/L	95
65) Toluene	7.710	92	105232	10.216	ug/L	93
66) 4-Methyl-2-pentanone	8.150	58	18333	13.376	ug/L	92
67) Tetrachloroethene	8.161	166	44641	10.701	ug/L	95
69) trans-1,3-Dichloropropene	8.195	75	61164	10.422	ug/L	99
71) Ethyl methacrylate	8.382	69	57150	12.437	ug/L	90
72) 1,1,2-Trichloroethane	8.385	83	30175	10.730	ug/L	99
73) Chlorodibromomethane	8.591	129	41583	10.106	ug/L	97
74) 1,3-Dichloropropane	8.705	76	63598	10.633	ug/L	97
75) 1,2-Dibromoethane	8.870	107	35086	10.324	ug/L	88
77) 2-Hexanone	9.151	43	34633	13.757	ug/L	96
78) Chlorobenzene	9.520	112	113340	10.114	ug/L #	80
79) Ethylbenzene	9.556	91	208074	10.388	ug/L	99
80) 1,1,1,2-Tetrachloroethane	9.603	131	42343	10.608	ug/L	97
81) p/m Xylene	9.745	106	161846	21.186	ug/L	99
82) o Xylene	10.284	106	157536	21.096	ug/L	96

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
 Data File : VE240731N08.D
 Acq On : 31 Jul 2024 8:42 pm
 Operator : ELAINE:MKS
 Sample : I8260STD10PPB
 Misc : WG1954249
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 01 11:56:21 2024
 Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu May 23 13:01:28 2024
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240731N-ICAL\VE240731N08.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
83)	Styrene	10.353	104	261864	21.427	ug/L	99
85)	Bromoform	10.378	173	27962	10.670	ug/L	94
87)	Isopropylbenzene	10.671	105	206589	8.866	ug/L	97
89)	Bromobenzene	11.106	156	52794	9.847	ug/L	99
90)	n-Propylbenzene	11.151	91	248567	9.173	ug/L	96
91)	1,4-Dichlorobutane	11.168	55	90223	12.511	ug/L	99
92)	1,1,2,2-Tetrachloroethane	11.243	83	41654	10.363	ug/L	97
93)	4-Ethyltoluene	11.279	105	204854	9.166	ug/L	100
94)	2-Chlorotoluene	11.321	91	149060	9.239	ug/L	97
95)	1,3,5-Trimethylbenzene	11.377	105	181257	9.354	ug/L	97
96)	1,2,3-Trichloropropane	11.382	75	36413	9.806	ug/L	95
97)	trans-1,4-Dichloro-2-b...	11.430	53	17188	11.349	ug/L	88
98)	4-Chlorotoluene	11.502	91	154593	9.170	ug/L	99
99)	tert-Butylbenzene	11.717	119	149482	9.048	ug/L	98
102)	1,2,4-Trimethylbenzene	11.795	105	180087	9.233	ug/L	95
103)	sec-Butylbenzene	11.909	105	218386	9.091	ug/L	99
104)	p-Isopropyltoluene	12.063	119	185594	9.031	ug/L	96
105)	1,3-Dichlorobenzene	12.130	146	98794	9.599	ug/L	96
106)	1,4-Dichlorobenzene	12.225	146	97784	9.413	ug/L	99
107)	p-Diethylbenzene	12.439	119	110030	9.210	ug/L	98
108)	n-Butylbenzene	12.498	91	157868	9.276	ug/L	97
109)	1,2-Dichlorobenzene	12.646	146	94225	9.408	ug/L	98
110)	1,2,4,5-Tetramethylben...	13.231	119	179730	9.214	ug/L	95
111)	1,2-Dibromo-3-chloropr...	13.429	155	7741	10.135	ug/L	92
112)	1,3,5-Trichlorobenzene	13.457	180	75211	10.551	ug/L	93
113)	Hexachlorobutadiene	14.034	225	24042	11.211	ug/L	90
114)	1,2,4-Trichlorobenzene	14.057	180	66652	10.420	ug/L	99
115)	Naphthalene	14.347	128	143235	9.075	ug/L	100
116)	1,2,3-Trichlorobenzene	14.517	180	60948	10.602	ug/L	96

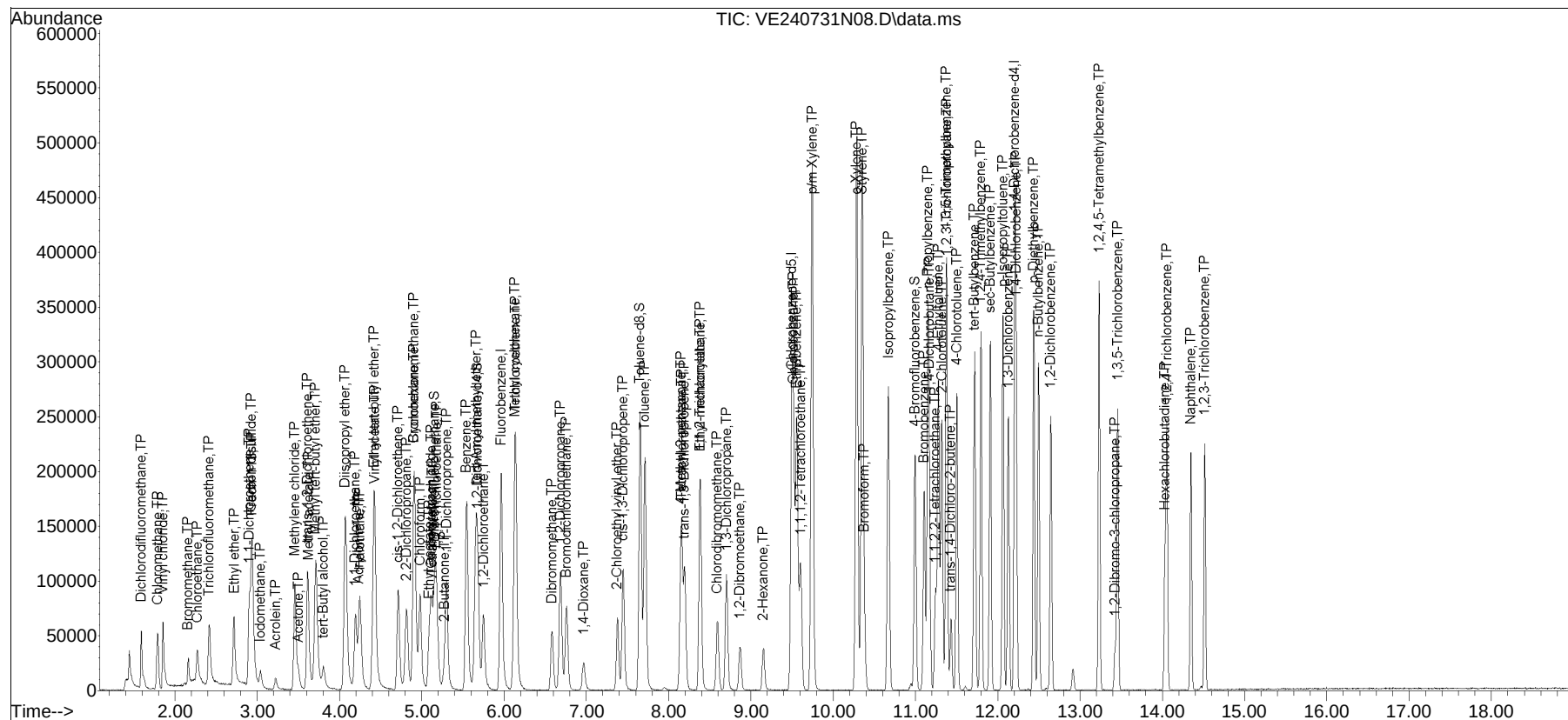
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
 Data File : VE240731N08.D
 Acq On : 31 Jul 2024 8:42 pm
 Operator : ELAINE:MKS
 Sample : I8260STD10PPB
 Misc : WG1954249
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 01 11:56:21 2024
 Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu May 23 13:01:28 2024
 Response via : Initial Calibration

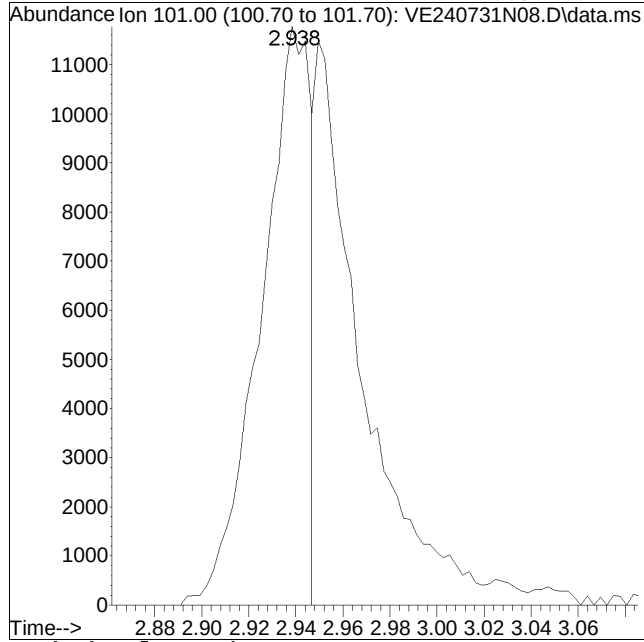
Sub List : 8260-Curve - Megamix plus DioxL\VE240731N08.D•



Manual Integration Report

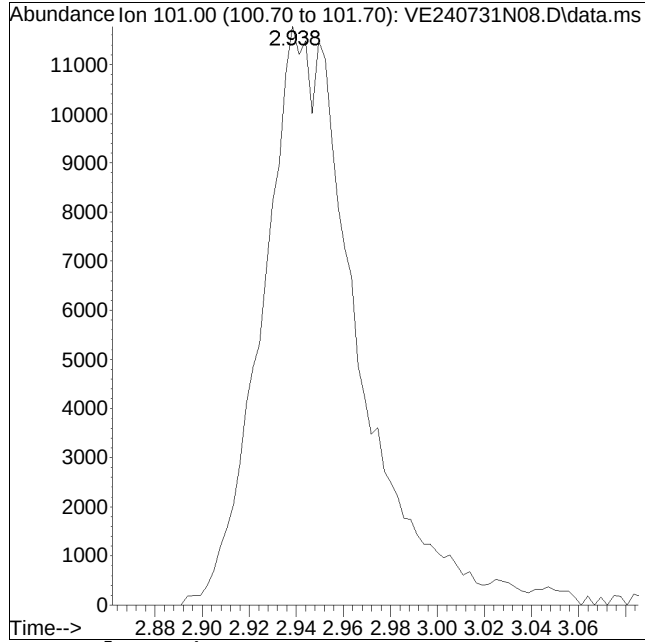
Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N08.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 8:42 pm Instrument : Elaine
Sample : I8260STD10PPB Quant Date : 8/1/2024 11:54 am

Compound #12: Freon-113



Original Peak Response = 17225

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

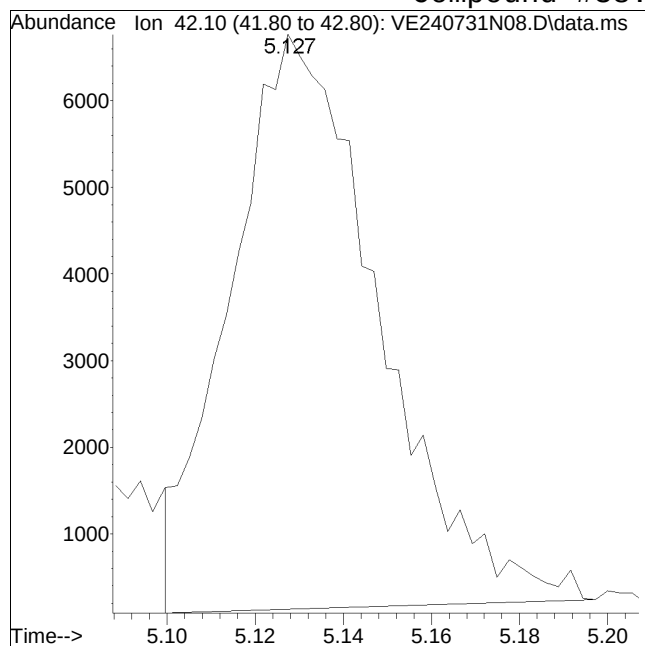


Manual Peak Response = 33321 M1

Manual Integration Report

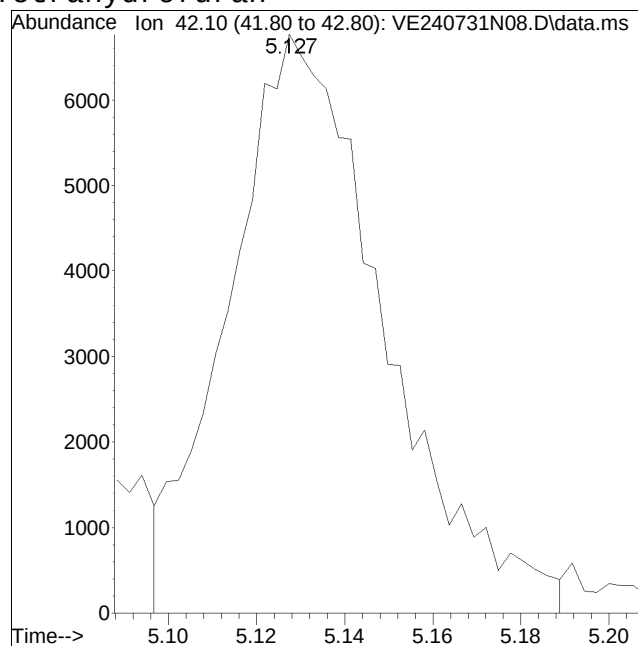
Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N08.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 8:42 pm Instrument : Elaine
Sample : I8260STD10PPB Quant Date : 8/1/2024 11:54 am

Compound #38: Tetrahydrofuran



Original Peak Response = 15510

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.



Manual Peak Response = 16553 M1

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
 Data File : VE240731N09.D
 Acq On : 31 Jul 2024 9:07 pm
 Operator : ELAINE:MKS
 Sample : I8260STD30PPB
 Misc : WG1954249
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 01 12:05:50 2024
 Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Aug 01 11:56:36 2024
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240731N-ICAL\VE240731N08.D
 Sub List : 8260-Curve - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	5.967	96	204403	10.000	ug/L	0.00
Standard Area 1 = 204581			Recovery	=	99.91%	
63) Chlorobenzene-d5	9.500	117	149625	10.000	ug/L	0.00
Standard Area 1 = 147756			Recovery	=	101.26%	
84) 1,4-Dichlorobenzene-d4	12.208	152	84874	10.000	ug/L	0.00
Standard Area 1 = 84505			Recovery	=	100.44%	
System Monitoring Compounds						
39) Dibromofluoromethane	5.156	113	47450	9.756	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	97.56%	
47) 1,2-Dichloroethane-d4	5.685	65	62257	9.640	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	96.40%	
64) Toluene-d8	7.657	98	196570	9.931	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	99.31%	
88) 4-Bromofluorobenzene	10.998	95	76337	9.699	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	96.99%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.592	85	149245	33.146	ug/L	96
3) Chloromethane	1.787	50	160207	29.826	ug/L	97
4) Vinyl chloride	1.854	62	161006	32.374	ug/L	96
5) Bromomethane	2.163	94	41058	34.408	ug/L	95
6) Chloroethane	2.272	64	92566	29.484	ug/L	100
7) Trichlorofluoromethane	2.417	101	178263	34.310	ug/L	97
8) Ethyl ether	2.718	74	68340	31.554	ug/L	75
10) 1,1-Dichloroethene	2.905	96	102934	32.604	ug/L	79
11) Carbon disulfide	2.933	76	320678	31.158	ug/L	96
12) Freon-113	2.941	101	108914	32.715	ug/L	86
13) Iodomethane	3.042	142	79903	44.923	ug/L	90
14) Acrolein	3.223	56	27320	30.261	ug/L	# 65
15) Methylene chloride	3.460	84	123480	29.629	ug/L	87
17) Acetone	3.502	43	47292	32.781	ug/L	96
18) trans-1,2-Dichloroethene	3.611	96	110330	30.519	ug/L	78
19) Methyl acetate	3.619	43	98711	29.278	ug/L	96
21) Methyl tert-butyl ether	3.711	73	405204	29.325	ug/L	95
22) tert-Butyl alcohol	3.806	59	73709	153.222	ug/L	91
24) Diisopropyl ether	4.071	45	603714	30.596	ug/L	91
25) 1,1-Dichloroethane	4.196	63	260295	30.020	ug/L	92
26) Halothane	4.255	117	90214	31.117	ug/L	94

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
 Data File : VE240731N09.D
 Acq On : 31 Jul 2024 9:07 pm
 Operator : ELAINE:MKS
 Sample : I8260STD30PPB
 Misc : WG1954249
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 01 12:05:50 2024
 Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Aug 01 11:56:36 2024
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240731N-ICAL\VE240731N08.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
27) Acrylonitrile	4.238	53	54373	30.272	ug/L	90
28) Ethyl tert-butyl ether	4.419	59	513557	29.991	ug/L	97
29) Vinyl acetate	4.430	43	337157	29.651	ug/L #	94
30) cis-1,2-Dichloroethene	4.712	96	127517	29.519	ug/L	93
31) 2,2-Dichloropropane	4.813	77	173960	31.500	ug/L	97
33) Bromochloromethane	4.907	128	58968	30.124	ug/L	88
34) Cyclohexane	4.910	56	305150	33.060	ug/L	96
35) Chloroform	4.980	83	205797	29.098	ug/L	98
36) Ethyl acetate	5.086	43	156227	29.207	ug/L	96
37) Carbon tetrachloride	5.114	117	168502	31.685	ug/L	94
38) Tetrahydrofuran	5.128	42	49298M1	29.808	ug/L	
40) 1,1,1-Trichloroethane	5.178	97	193545	30.522	ug/L	96
42) 2-Butanone	5.267	43	64303	30.160	ug/L	96
43) 1,1-Dichloropropene	5.301	75	165534	31.094	ug/L	95
45) Benzene	5.546	78	514522	30.022	ug/L	92
46) tert-Amyl methyl ether	5.657	73	381559	30.156	ug/L	97
48) 1,2-Dichloroethane	5.752	62	192313	29.444	ug/L	98
51) Methyl cyclohexane	6.132	83	223375	32.779	ug/L	84
52) Trichloroethene	6.143	95	132908	30.916	ug/L	97
54) Dibromomethane	6.583	93	73052	29.863	ug/L #	84
55) 1,2-Dichloropropane	6.686	63	152088	29.827	ug/L	98
57) 2-Chloroethyl vinyl ether	7.378	63	99727	31.133	ug/L	89
58) Bromodichloromethane	6.762	83	176926	29.402	ug/L	92
61) 1,4-Dioxane	6.971	88	23357	587.548	ug/L	86
62) cis-1,3-Dichloropropene	7.448	75	211389	30.366	ug/L	95
65) Toluene	7.713	92	319096	29.944	ug/L	94
66) 4-Methyl-2-pentanone	8.148	58	55773	30.042	ug/L	93
67) Tetrachloroethene	8.159	166	139900	30.947	ug/L	95
69) trans-1,3-Dichloropropene	8.198	75	188733	30.471	ug/L	99
71) Ethyl methacrylate	8.385	69	169809	29.342	ug/L	91
72) 1,1,2-Trichloroethane	8.382	83	90229	29.528	ug/L	100
73) Chlorodibromomethane	8.594	129	127142	30.194	ug/L	97
74) 1,3-Dichloropropane	8.705	76	192488	29.888	ug/L	97
75) 1,2-Dibromoethane	8.867	107	106125	29.869	ug/L	88
77) 2-Hexanone	9.152	43	104812	29.886	ug/L	98
78) Chlorobenzene	9.520	112	339097	29.545	ug/L #	80
79) Ethylbenzene	9.556	91	625293	29.676	ug/L	99
80) 1,1,1,2-Tetrachloroethane	9.606	131	128406	29.946	ug/L	97
81) p/m Xylene	9.743	106	480185	58.597	ug/L	99
82) o Xylene	10.284	106	463412	58.098	ug/L	96

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
 Data File : VE240731N09.D
 Acq On : 31 Jul 2024 9:07 pm
 Operator : ELAINE:MKS
 Sample : I8260STD30PPB
 Misc : WG1954249
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 01 12:05:50 2024
 Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Aug 01 11:56:36 2024
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240731N-ICAL\VE240731N08.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
83)	Styrene	10.354	104	770256	58.094	ug/L	100
85)	Bromoform	10.376	173	85058	30.287	ug/L	93
87)	Isopropylbenzene	10.671	105	629312	30.330	ug/L	97
89)	Bromobenzene	11.106	156	155787	29.380	ug/L	98
90)	n-Propylbenzene	11.151	91	751510	30.102	ug/L	96
91)	1,4-Dichlorobutane	11.168	55	266291	29.386	ug/L	97
92)	1,1,2,2-Tetrachloroethane	11.240	83	124080	29.659	ug/L	97
93)	4-Ethyltoluene	11.279	105	611178	29.705	ug/L	99
94)	2-Chlorotoluene	11.318	91	437659	29.234	ug/L	97
95)	1,3,5-Trimethylbenzene	11.377	105	537259	29.512	ug/L	98
96)	1,2,3-Trichloropropane	11.380	75	107348	29.353	ug/L	94
97)	trans-1,4-Dichloro-2-b...	11.430	53	51127	29.616	ug/L #	84
98)	4-Chlorotoluene	11.502	91	457411	29.459	ug/L	99
99)	tert-Butylbenzene	11.720	119	448526	29.875	ug/L	98
102)	1,2,4-Trimethylbenzene	11.795	105	535558	29.610	ug/L	95
103)	sec-Butylbenzene	11.910	105	663673	30.258	ug/L	99
104)	p-Isopropyltoluene	12.063	119	568430	30.494	ug/L	96
105)	1,3-Dichlorobenzene	12.130	146	291786	29.406	ug/L	96
106)	1,4-Dichlorobenzene	12.225	146	291447	29.676	ug/L	99
107)	p-Diethylbenzene	12.439	119	335133	30.326	ug/L	97
108)	n-Butylbenzene	12.495	91	481406	30.362	ug/L	97
109)	1,2-Dichlorobenzene	12.646	146	282170	29.816	ug/L	98
110)	1,2,4,5-Tetramethylben...	13.231	119	538890	29.853	ug/L	96
111)	1,2-Dibromo-3-chloropr...	13.427	155	23835	30.657	ug/L	92
112)	1,3,5-Trichlorobenzene	13.457	180	224773	29.756	ug/L	93
113)	Hexachlorobutadiene	14.032	225	74680	30.927	ug/L	92
114)	1,2,4-Trichlorobenzene	14.054	180	202950	30.317	ug/L	99
115)	Naphthalene	14.347	128	444851	30.922	ug/L	100
116)	1,2,3-Trichlorobenzene	14.517	180	185426	30.291	ug/L	95

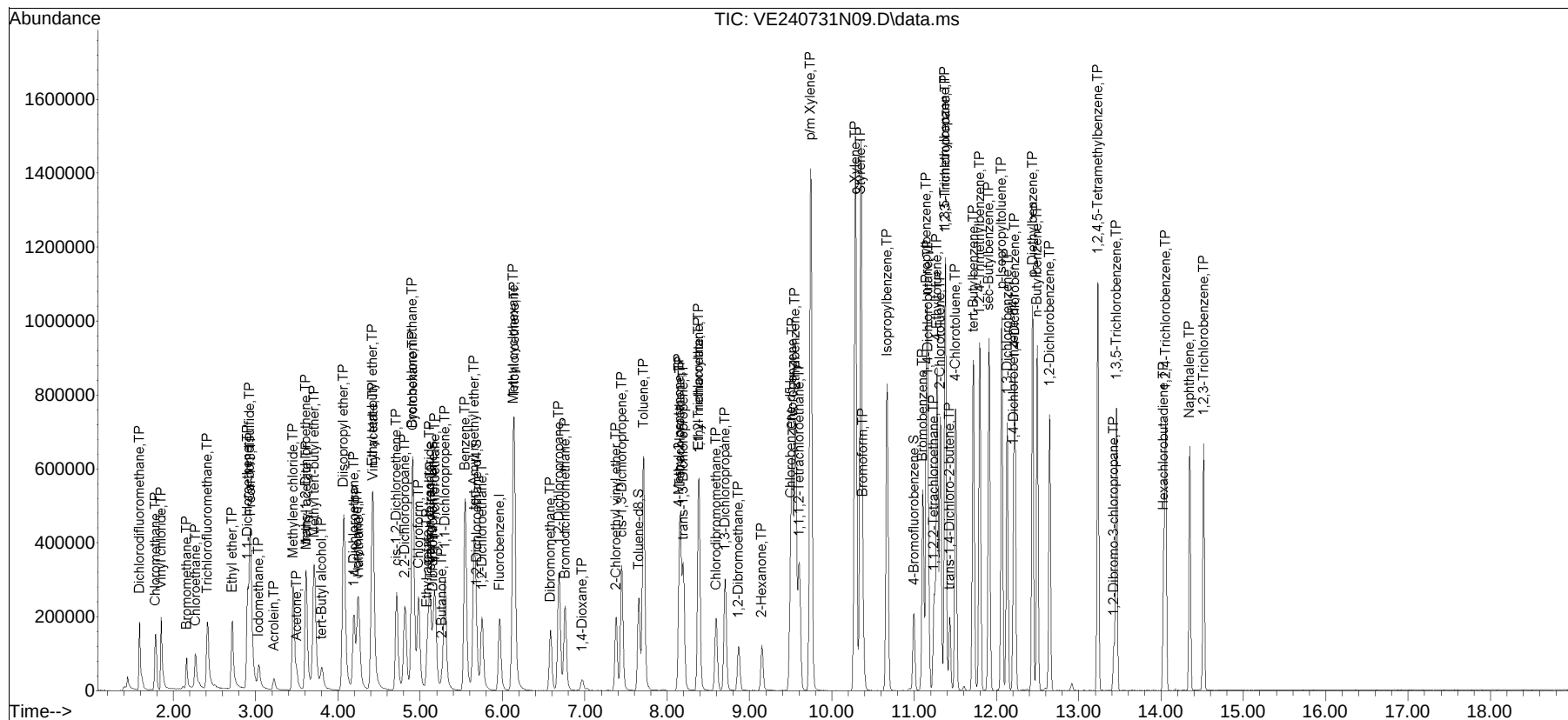
(#) = qualifier out of range (m) = manual integration (+) = signals summed

(QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
Data File : VE240731N09.D
Acq On : 31 Jul 2024 9:07 pm
Operator : ELAINE:MKS
Sample : I8260STD30PPB
Misc : WG1954249
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 01 12:05:50 2024
Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 11:56:36 2024
Response via : Initial Calibration

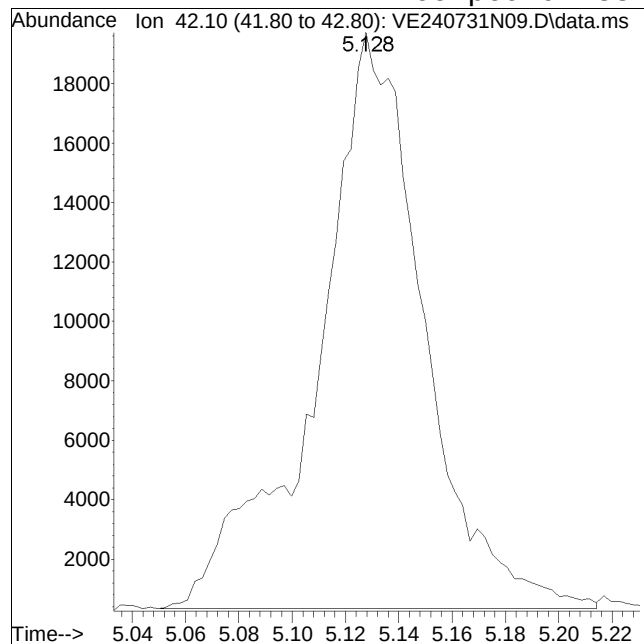
Sub List : 8260-Curve - Megamix plus DioxL\VE240731N08.D•



Manual Integration Report

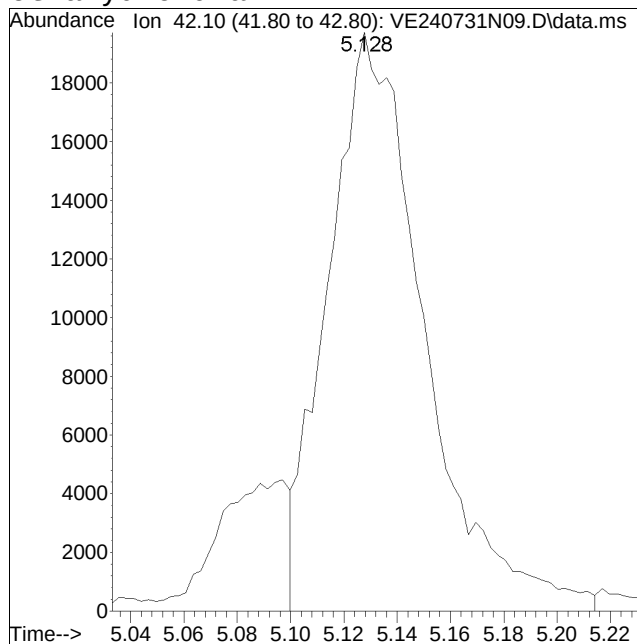
Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N09.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 9:07 pm Instrument : Elaine
Sample : I8260STD30PPB Quant Date : 8/1/2024 11:57 am

Compound #38: Tetrahydrofuran



Original Peak Response = 54266

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.



Manual Peak Response = 49298 M1

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
 Data File : VE240731N10.D
 Acq On : 31 Jul 2024 9:32 pm
 Operator : ELAINE:MKS
 Sample : I8260STD80PPB
 Misc : WG1954249
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 01 12:06:26 2024
 Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Aug 01 11:56:36 2024
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240731N-ICAL\VE240731N08.D
 Sub List : 8260-Curve - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	5.964	96	205552	10.000	ug/L	0.00
Standard Area 1 = 204581			Recovery	=	100.47%	
63) Chlorobenzene-d5	9.497	117	153791	10.000	ug/L	0.00
Standard Area 1 = 147756			Recovery	=	104.08%	
84) 1,4-Dichlorobenzene-d4	12.211	152	85405	10.000	ug/L	0.00
Standard Area 1 = 84505			Recovery	=	101.07%	
System Monitoring Compounds						
39) Dibromofluoromethane	5.155	113	47510	9.714	ug/L	0.00
Spiked Amount 10.000	Range 70	- 130	Recovery	=	97.14%	
47) 1,2-Dichloroethane-d4	5.680	65	63482	9.774	ug/L	0.00
Spiked Amount 10.000	Range 70	- 130	Recovery	=	97.74%	
64) Toluene-d8	7.654	98	201166	9.888	ug/L	0.00
Spiked Amount 10.000	Range 70	- 130	Recovery	=	98.88%	
88) 4-Bromofluorobenzene	10.995	95	78835	9.954	ug/L	0.00
Spiked Amount 10.000	Range 70	- 130	Recovery	=	99.54%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.592	85	398777	88.069	ug/L	96
3) Chloromethane	1.787	50	425203	78.719	ug/L	96
4) Vinyl chloride	1.854	62	427307	85.439	ug/L	94
5) Bromomethane	2.163	94	137967	114.976	ug/L	94
6) Chloroethane	2.266	64	251474	79.651	ug/L	87
7) Trichlorofluoromethane	2.417	101	483684	92.573	ug/L	95
8) Ethyl ether	2.718	74	182990	84.018	ug/L	73
10) 1,1-Dichloroethene	2.902	96	279624	88.076	ug/L	79
11) Carbon disulfide	2.933	76	849801	82.108	ug/L	96
12) Freon-113	2.944	101	292977	87.510	ug/L	88
13) Iodomethane	3.039	142	267444	149.523	ug/L	92
14) Acrolein	3.223	56	74031	81.542	ug/L	# 70
15) Methylene chloride	3.460	84	324549	77.441	ug/L	87
17) Acetone	3.502	43	116076	80.011	ug/L	99
18) trans-1,2-Dichloroethene	3.611	96	301708	82.990	ug/L	81
19) Methyl acetate	3.622	43	256155	75.550	ug/L	97
21) Methyl tert-butyl ether	3.711	73	1080950	77.793	ug/L	95
22) tert-Butyl alcohol	3.806	59	192001	396.889	ug/L	90
24) Diisopropyl ether	4.071	45	1579187	79.586	ug/L	91
25) 1,1-Dichloroethane	4.193	63	690552	79.197	ug/L	97
26) Halothane	4.249	117	237954	81.618	ug/L	93

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
 Data File : VE240731N10.D
 Acq On : 31 Jul 2024 9:32 pm
 Operator : ELAINE:MKS
 Sample : I8260STD80PPB
 Misc : WG1954249
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 01 12:06:26 2024
 Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Aug 01 11:56:36 2024
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240731N-ICAL\VE240731N08.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
27) Acrylonitrile	4.238	53	143107	79.230	ug/L	91
28) Ethyl tert-butyl ether	4.419	59	1358577	78.894	ug/L	97
29) Vinyl acetate	4.428	43	844268	73.834	ug/L #	95
30) cis-1,2-Dichloroethene	4.715	96	352546	81.155	ug/L	97
31) 2,2-Dichloropropane	4.815	77	456698	82.234	ug/L	98
33) Bromochloromethane	4.904	128	149382	75.886	ug/L	87
34) Cyclohexane	4.910	56	818733	88.205	ug/L	97
35) Chloroform	4.980	83	557889	78.440	ug/L	98
36) Ethyl acetate	5.086	43	409173	76.068	ug/L	95
37) Carbon tetrachloride	5.114	117	452565	84.624	ug/L	95
38) Tetrahydrofuran	5.128	42	127579M1	76.709	ug/L	
40) 1,1,1-Trichloroethane	5.181	97	517219	81.109	ug/L	95
42) 2-Butanone	5.267	43	170745	79.637	ug/L #	76
43) 1,1-Dichloropropene	5.300	75	445417	83.200	ug/L	95
45) Benzene	5.546	78	1372838	79.656	ug/L	93
46) tert-Amyl methyl ether	5.657	73	1003985	78.904	ug/L	97
48) 1,2-Dichloroethane	5.749	62	510065	77.658	ug/L	97
51) Methyl cyclohexane	6.131	83	634905	92.647	ug/L	87
52) Trichloroethene	6.143	95	354708	82.049	ug/L	97
54) Dibromomethane	6.583	93	194273	78.972	ug/L #	84
55) 1,2-Dichloropropane	6.684	63	405164	79.014	ug/L	98
57) 2-Chloroethyl vinyl ether	7.381	63	275108	85.405	ug/L	92
58) Bromodichloromethane	6.759	83	477315	78.878	ug/L	93
61) 1,4-Dioxane	6.968	88	30991	775.224	ug/L	88
62) cis-1,3-Dichloropropene	7.448	75	566751	80.959	ug/L	95
65) Toluene	7.715	92	857485	78.288	ug/L	94
66) 4-Methyl-2-pentanone	8.145	58	150511	78.877	ug/L	91
67) Tetrachloroethene	8.162	166	378641	81.491	ug/L	96
69) trans-1,3-Dichloropropene	8.198	75	501573	78.787	ug/L	98
71) Ethyl methacrylate	8.385	69	451462	75.896	ug/L	91
72) 1,1,2-Trichloroethane	8.382	83	237889	75.743	ug/L	99
73) Chlorodibromomethane	8.594	129	340620	78.699	ug/L	98
74) 1,3-Dichloropropane	8.703	76	507269	76.632	ug/L	97
75) 1,2-Dibromoethane	8.870	107	281759	77.154	ug/L	87
77) 2-Hexanone	9.152	43	277176	76.892	ug/L	98
78) Chlorobenzene	9.520	112	906237	76.820	ug/L #	81
79) Ethylbenzene	9.559	91	1664160	76.841	ug/L	99
80) 1,1,1,2-Tetrachloroethane	9.603	131	340057	77.159	ug/L	97
81) p/m Xylene	9.746	106	1254976	148.997	ug/L	98
82) o Xylene	10.287	106	1224130	149.311	ug/L	96

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
 Data File : VE240731N10.D
 Acq On : 31 Jul 2024 9:32 pm
 Operator : ELAINE:MKS
 Sample : I8260STD80PPB
 Misc : WG1954249
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 01 12:06:26 2024
 Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Aug 01 11:56:36 2024
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240731N-ICAL\VE240731N08.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
83)	Styrene	10.353	104	2011221	147.580	ug/L	100
85)	Bromoform	10.381	173	228150	80.733	ug/L	94
87)	Isopropylbenzene	10.671	105	1691278	81.004	ug/L	97
89)	Bromobenzene	11.106	156	418818	78.495	ug/L	98
90)	n-Propylbenzene	11.154	91	2013910	80.167	ug/L	97
91)	1,4-Dichlorobutane	11.171	55	698575	76.612	ug/L	97
92)	1,1,2,2-Tetrachloroethane	11.243	83	331120	78.655	ug/L	97
93)	4-Ethyltoluene	11.279	105	1639001	79.165	ug/L	100
94)	2-Chlorotoluene	11.321	91	1160531M1	77.036	ug/L	
95)	1,3,5-Trimethylbenzene	11.380	105	1427143	77.906	ug/L	98
96)	1,2,3-Trichloropropane	11.382	75	282589	76.789	ug/L	95
97)	trans-1,4-Dichloro-2-b...	11.433	53	141551	81.487	ug/L #	81
98)	4-Chlorotoluene	11.505	91	1219919	78.080	ug/L	99
99)	tert-Butylbenzene	11.720	119	1215335	80.446	ug/L	98
102)	1,2,4-Trimethylbenzene	11.798	105	1435491	78.871	ug/L	96
103)	sec-Butylbenzene	11.912	105	1806280	81.839	ug/L	99
104)	p-Isopropyltoluene	12.066	119	1543039	82.264	ug/L	97
105)	1,3-Dichlorobenzene	12.130	146	775535	77.673	ug/L	96
106)	1,4-Dichlorobenzene	12.225	146	777852	78.710	ug/L	99
107)	p-Diethylbenzene	12.439	119	912031	82.016	ug/L	96
108)	n-Butylbenzene	12.495	91	1330681	83.402	ug/L	97
109)	1,2-Dichlorobenzene	12.646	146	747610	78.507	ug/L	98
110)	1,2,4,5-Tetramethylben...	13.231	119	1438355	79.185	ug/L	95
111)	1,2-Dibromo-3-chloropr...	13.427	155	64007	81.814	ug/L	94
112)	1,3,5-Trichlorobenzene	13.457	180	600411	78.989	ug/L	93
113)	Hexachlorobutadiene	14.032	225	199869	82.257	ug/L	92
114)	1,2,4-Trichlorobenzene	14.057	180	550611	81.739	ug/L	99
115)	Naphthalene	14.347	128	1227574	84.800	ug/L	100
116)	1,2,3-Trichlorobenzene	14.514	180	512444	83.193	ug/L	95

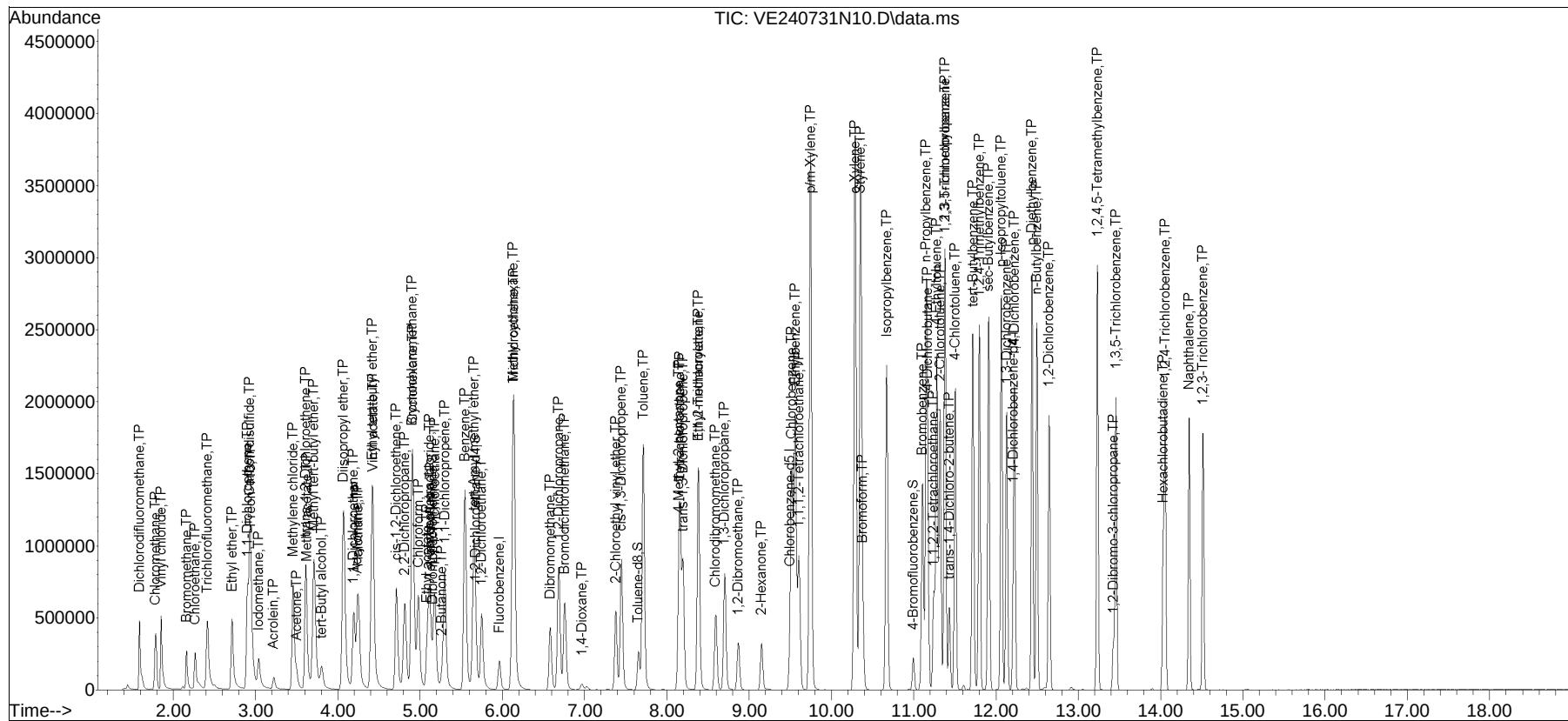
(#) = qualifier out of range (m) = manual integration (+) = signals summed

(QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
Data File : VE240731N10.D
Acq On : 31 Jul 2024 9:32 pm
Operator : ELAINE:MKS
Sample : I8260STD80PPB
Misc : WG1954249
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 01 12:06:26 2024
Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 11:56:36 2024
Response via : Initial Calibration

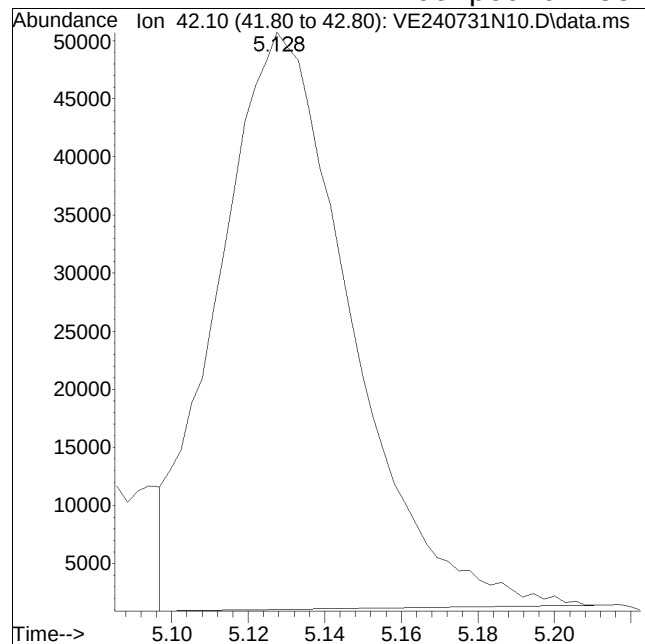
Sub List : 8260-Curve - Megamix plus DioxL\VE240731N08.D•



Manual Integration Report

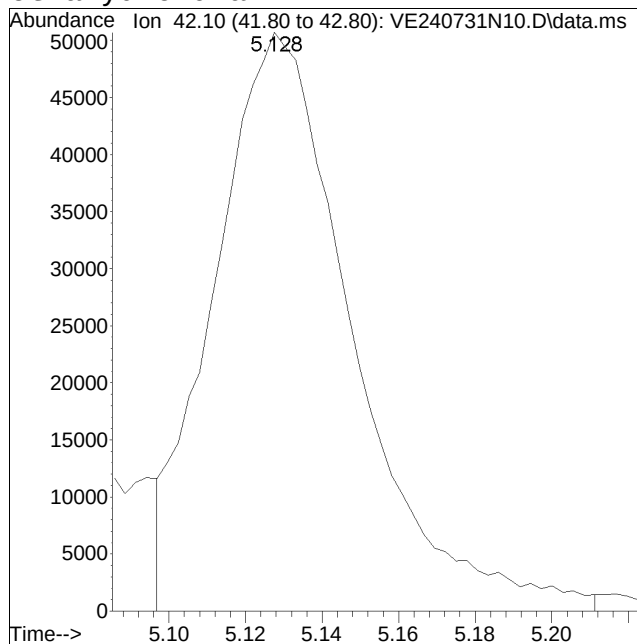
Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N10.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 9:32 pm Instrument : Elaine
Sample : I8260STD80PPB Quant Date : 8/1/2024 11:57 am

Compound #38: Tetrahydrofuran



Original Peak Response = 119488

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

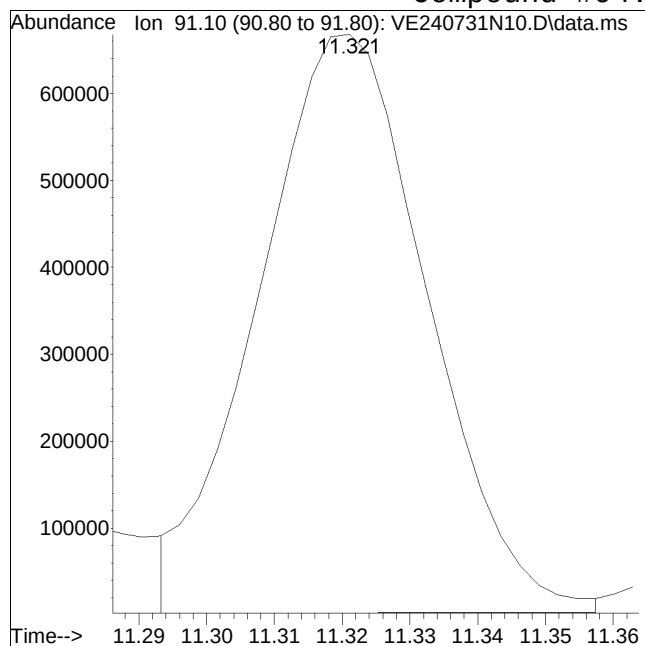


Manual Peak Response = 127579 M1

Manual Integration Report

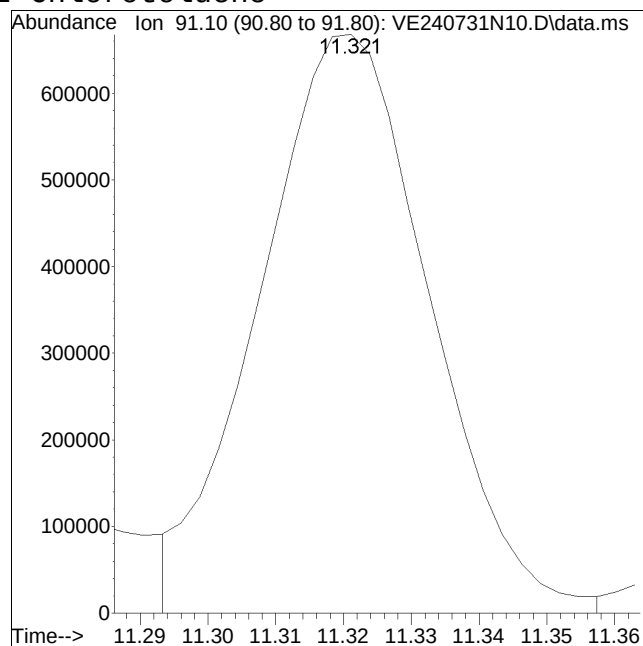
Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N10.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 9:32 pm Instrument : Elaine
Sample : I8260STD80PPB Quant Date : 8/1/2024 11:57 am

Compound #94: 2-Chlorotoluene



Original Peak Response = 1150209

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.



Manual Peak Response = 1160531 M1

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
 Data File : VE240731N11.D
 Acq On : 31 Jul 2024 9:57 pm
 Operator : ELAINE:MKS
 Sample : I8260STD120PPB
 Misc : WG1954249
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 01 12:07:05 2024
 Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Aug 01 11:56:36 2024
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240731N-ICAL\VE240731N08.D
 Sub List : 8260-Curve - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	5.964	96	212189	10.000	ug/L	0.00
Standard Area 1 = 204581			Recovery	=	103.72%	
63) Chlorobenzene-d5	9.497	117	156001	10.000	ug/L	0.00
Standard Area 1 = 147756			Recovery	=	105.58%	
84) 1,4-Dichlorobenzene-d4	12.208	152	84877	10.000	ug/L	0.00
Standard Area 1 = 84505			Recovery	=	100.44%	
System Monitoring Compounds						
39) Dibromofluoromethane	5.158	113	47539	9.415	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	94.15%	
47) 1,2-Dichloroethane-d4	5.680	65	63246	9.434	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	94.34%	
64) Toluene-d8	7.654	98	206007	9.983	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	99.83%	
88) 4-Bromofluorobenzene	10.995	95	79943	10.156	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	101.56%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.591	85	621695	133.006	ug/L	96
3) Chloromethane	1.787	50	661240	118.588	ug/L	96
4) Vinyl chloride	1.854	62	675555	130.850	ug/L	95
5) Bromomethane	2.163	94	241549	195.000	ug/L	96
6) Chloroethane	2.264	64	366944M1	112.589	ug/L	
7) Trichlorofluoromethane	2.414	101	749914	139.038	ug/L	95
8) Ethyl ether	2.715	74	274710	122.185	ug/L	71
10) 1,1-Dichloroethene	2.902	96	432970	132.112	ug/L #	77
11) Carbon disulfide	2.930	76	1302644	121.925	ug/L	96
12) Freon-113	2.941	101	466342	134.936	ug/L	89
13) Iodomethane	3.039	142	437611	237.007	ug/L	92
14) Acrolein	3.223	56	117858	125.755	ug/L #	71
15) Methylene chloride	3.457	84	496205	114.697	ug/L	88
17) Acetone	3.502	43	165824	110.727	ug/L	99
18) trans-1,2-Dichloroethene	3.610	96	460682	122.755	ug/L	80
19) Methyl acetate	3.619	43	388572	111.021	ug/L	98
21) Methyl tert-butyl ether	3.714	73	1643799	114.600	ug/L	95
22) tert-Butyl alcohol	3.806	59	291372	583.461	ug/L	87
24) Diisopropyl ether	4.071	45	2382897	116.334	ug/L	91
25) 1,1-Dichloroethane	4.193	63	1040719	115.624	ug/L	98
26) Halothane	4.249	117	364896	121.244	ug/L	93

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
 Data File : VE240731N11.D
 Acq On : 31 Jul 2024 9:57 pm
 Operator : ELAINE:MKS
 Sample : I8260STD120PPB
 Misc : WG1954249
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 01 12:07:05 2024
 Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Aug 01 11:56:36 2024
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240731N-ICAL\VE240731N08.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
27) Acrylonitrile	4.235	53	217765	116.792	ug/L	92
28) Ethyl tert-butyl ether	4.419	59	2065717	116.206	ug/L	87
29) Vinyl acetate	4.430	43	1705877	144.518	ug/L #	96
30) cis-1,2-Dichloroethene	4.715	96	538397	120.060	ug/L	98
31) 2,2-Dichloropropane	4.815	77	711165	124.049	ug/L	98
33) Bromochloromethane	4.904	128	219330	107.935	ug/L	84
34) Cyclohexane	4.910	56	1269361	132.475	ug/L	98
35) Chloroform	4.980	83	848229	115.532	ug/L	98
36) Ethyl acetate	5.086	43	617701	111.244	ug/L	95
37) Carbon tetrachloride	5.116	117	710348	128.671	ug/L	95
38) Tetrahydrofuran	5.130	42	189666M1	110.473	ug/L	
40) 1,1,1-Trichloroethane	5.180	97	801432	121.748	ug/L	95
42) 2-Butanone	5.267	43	253892	114.714	ug/L #	78
43) 1,1-Dichloropropene	5.300	75	691130	125.059	ug/L	96
45) Benzene	5.546	78	2099718	118.021	ug/L	93
46) tert-Amyl methyl ether	5.657	73	1544881	117.616	ug/L	97
48) 1,2-Dichloroethane	5.749	62	772246	113.897	ug/L	98
51) Methyl cyclohexane	6.134	83	992238	140.261	ug/L	87
52) Trichloroethene	6.143	95	512619	114.867	ug/L	97
54) Dibromomethane	6.580	93	296625	116.807	ug/L #	84
55) 1,2-Dichloropropane	6.686	63	617455	116.649	ug/L	98
57) 2-Chloroethyl vinyl ether	7.378	63	408384	122.814	ug/L	92
58) Bromodichloromethane	6.759	83	727451	116.454	ug/L	92
61) 1,4-Dioxane	6.971	88	49111	1190.061	ug/L	88
62) cis-1,3-Dichloropropene	7.448	75	862920	119.410	ug/L	96
65) Toluene	7.713	92	1314787	118.338	ug/L	94
66) 4-Methyl-2-pentanone	8.145	58	225705	116.607	ug/L	91
67) Tetrachloroethene	8.159	166	585961	124.323	ug/L	95
69) trans-1,3-Dichloropropene	8.198	75	758357	117.434	ug/L	99
71) Ethyl methacrylate	8.385	69	688690	114.137	ug/L	90
72) 1,1,2-Trichloroethane	8.382	83	359465	112.831	ug/L	99
73) Chlorodibromomethane	8.594	129	526073	119.825	ug/L	97
74) 1,3-Dichloropropane	8.705	76	767624	114.320	ug/L	97
75) 1,2-Dibromoethane	8.867	107	426364	115.097	ug/L	87
77) 2-Hexanone	9.149	43	414223	113.282	ug/L	99
78) Chlorobenzene	9.520	112	1389349	116.104	ug/L #	81
79) Ethylbenzene	9.559	91	2544867	115.842	ug/L	99
80) 1,1,1,2-Tetrachloroethane	9.603	131	516387	115.508	ug/L	97
81) p/m Xylene	9.745	106	1901677	222.578	ug/L	98
82) o Xylene	10.289	106	1853015	222.816	ug/L	96

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
 Data File : VE240731N11.D
 Acq On : 31 Jul 2024 9:57 pm
 Operator : ELAINE:MKS
 Sample : I8260STD120PPB
 Misc : WG1954249
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 01 12:07:05 2024
 Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Aug 01 11:56:36 2024
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240731N-ICAL\VE240731N08.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
83)	Styrene	10.356	104	3040245	219.928	ug/L	100
85)	Bromoform	10.381	173	344244	122.572	ug/L	94
87)	Isopropylbenzene	10.671	105	2603670	125.479	ug/L	97
89)	Bromobenzene	11.106	156	638995	120.505	ug/L	98
90)	n-Propylbenzene	11.154	91	3066625	122.831	ug/L	97
91)	1,4-Dichlorobutane	11.170	55	1050044	115.873	ug/L	97
92)	1,1,2,2-Tetrachloroethane	11.243	83	539535	128.960	ug/L	97
93)	4-Ethyltoluene	11.282	105	2488678	120.953	ug/L	100
94)	2-Chlorotoluene	11.321	91	1755872M1	117.280	ug/L	
95)	1,3,5-Trimethylbenzene	11.380	105	2172113	119.311	ug/L	98
96)	1,2,3-Trichloropropane	11.380	75	421191	115.164	ug/L	94
97)	trans-1,4-Dichloro-2-b...	11.433	53	217211	125.820	ug/L #	80
98)	4-Chlorotoluene	11.508	91	1872710	120.607	ug/L	98
99)	tert-Butylbenzene	11.720	119	1857545	123.721	ug/L	98
102)	1,2,4-Trimethylbenzene	11.798	105	2174551	120.221	ug/L	96
103)	sec-Butylbenzene	11.912	105	2758090	125.741	ug/L	99
104)	p-Isopropyltoluene	12.066	119	2336309	125.331	ug/L	96
105)	1,3-Dichlorobenzene	12.133	146	1169649	117.874	ug/L	96
106)	1,4-Dichlorobenzene	12.225	146	1165916	118.711	ug/L	99
107)	p-Diethylbenzene	12.439	119	1359462	123.012	ug/L	96
108)	n-Butylbenzene	12.498	91	1991135	125.574	ug/L	97
109)	1,2-Dichlorobenzene	12.648	146	1118649	118.201	ug/L	98
110)	1,2,4,5-Tetramethylben...	13.234	119	2195611	121.626	ug/L	96
111)	1,2-Dibromo-3-chloropr...	13.426	155	98831	127.113	ug/L	93
112)	1,3,5-Trichlorobenzene	13.457	180	936160	123.926	ug/L	93
113)	Hexachlorobutadiene	14.032	225	311088	128.826	ug/L	93
114)	1,2,4-Trichlorobenzene	14.057	180	854868	127.696	ug/L	99
115)	Naphthalene	14.350	128	1892881	131.573	ug/L	100
116)	1,2,3-Trichlorobenzene	14.517	180	785081	128.247	ug/L	95

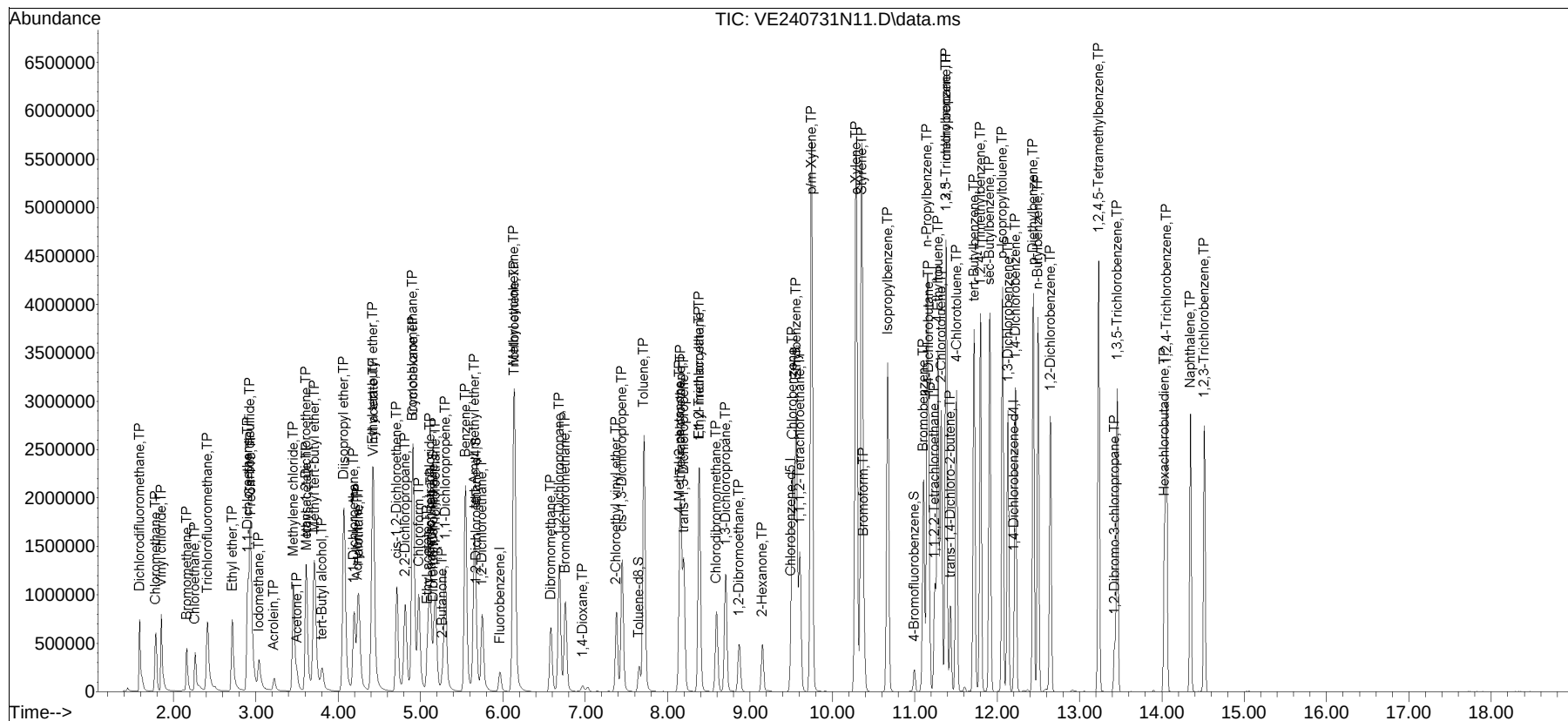
(#) = qualifier out of range (m) = manual integration (+) = signals summed

(QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
Data File : VE240731N11.D
Acq On : 31 Jul 2024 9:57 pm
Operator : ELAINE:MKS
Sample : I8260STD120PPB
Misc : WG1954249
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 01 12:07:05 2024
Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 11:56:36 2024
Response via : Initial Calibration

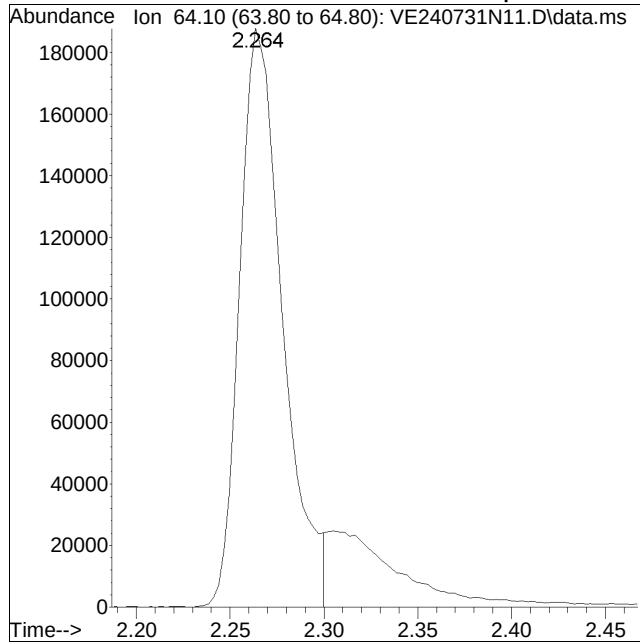
Sub List : 8260-Curve - Megamix plus DioxL\VE240731N08.D•



Manual Integration Report

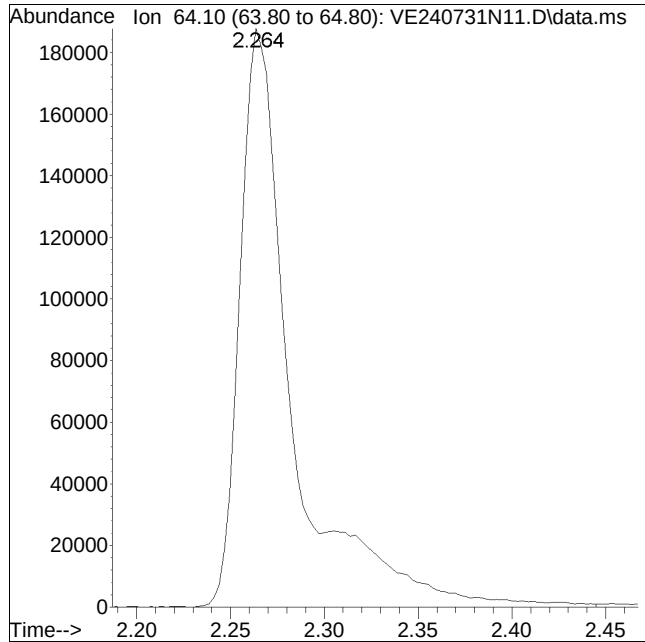
Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N11.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 9:57 pm Instrument : Elaine
Sample : I8260STD120PPB Quant Date : 8/1/2024 11:57 am

Compound #6: Chloroethane



Original Peak Response = 298774

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

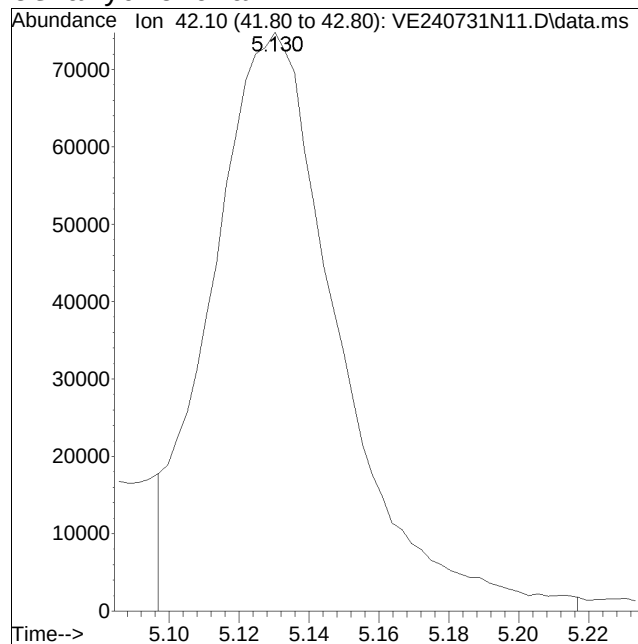
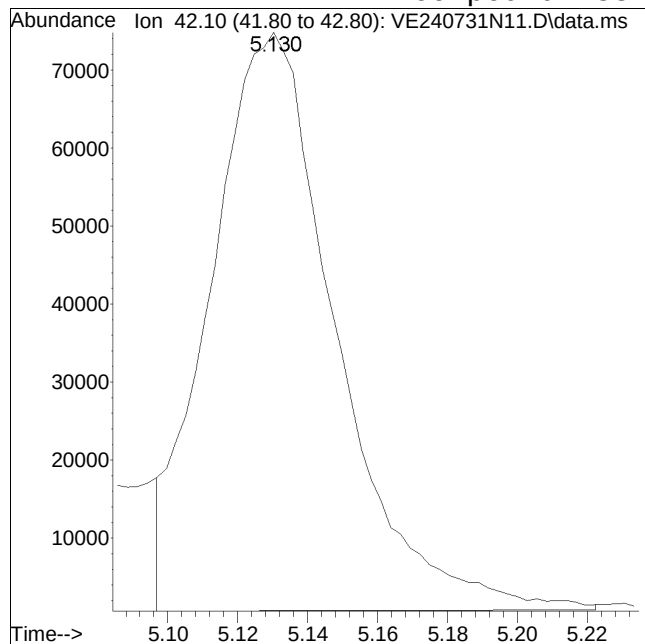


Manual Peak Response = 366944 M1

Manual Integration Report

Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N11.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 9:57 pm Instrument : Elaine
Sample : I8260STD120PPB Quant Date : 8/1/2024 11:57 am

Compound #38: Tetrahydrofuran



Original Peak Response = 184591

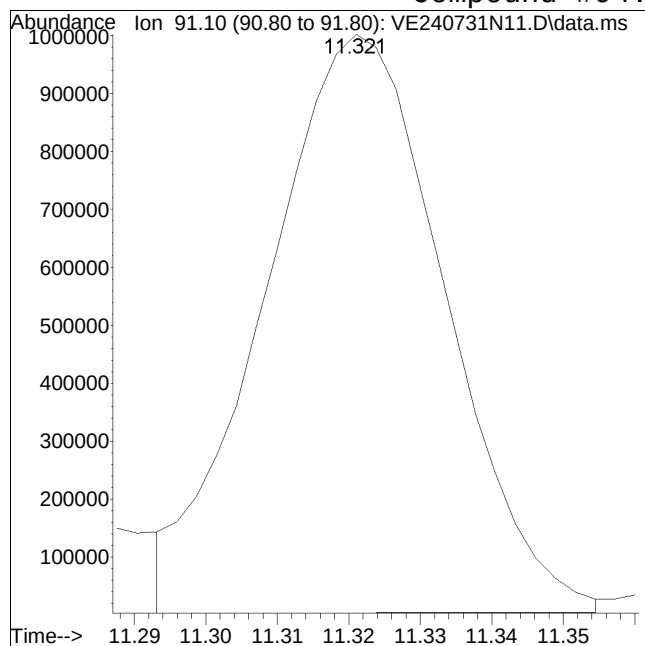
Manual Peak Response = 189666 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

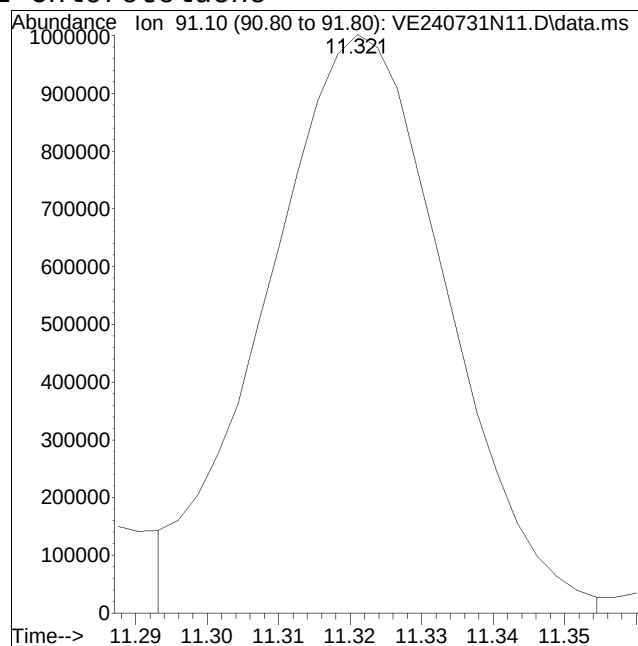
Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N11.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 9:57 pm Instrument : Elaine
Sample : I8260STD120PPB Quant Date : 8/1/2024 11:57 am

Compound #94: 2-Chlorotoluene



Original Peak Response = 1741404

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.



Manual Peak Response = 1755872 M1

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
 Data File : VE240731N12.D
 Acq On : 31 Jul 2024 10:22 pm
 Operator : ELAINE:MKS
 Sample : I8260STD200PPB
 Misc : WG1954249
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 01 12:07:48 2024
 Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Aug 01 11:56:36 2024
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240731N-ICAL\VE240731N08.D
 Sub List : 8260-Curve - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	5.967	96	218082	10.000	ug/L	0.00
Standard Area 1 = 204581			Recovery	=	106.60%	
63) Chlorobenzene-d5	9.497	117	158225	10.000	ug/L	0.00
Standard Area 1 = 147756			Recovery	=	107.09%	
84) 1,4-Dichlorobenzene-d4	12.211	152	85112	10.000	ug/L	0.00
Standard Area 1 = 84505			Recovery	=	100.72%	
System Monitoring Compounds						
39) Dibromofluoromethane	5.155	113	48693	9.383	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	93.83%	
47) 1,2-Dichloroethane-d4	5.680	65	65855	9.557	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	95.57%	
64) Toluene-d8	7.654	98	211806	10.120	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	101.20%	
88) 4-Bromofluorobenzene	10.995	95	81664	10.346	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	103.46%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.589	85	1023946	213.144	ug/L	96
3) Chloromethane	1.787	50	1114665	194.505	ug/L	96
4) Vinyl chloride	1.854	62	1133872	213.688	ug/L	95
5) Bromomethane	2.160	94	443466	348.331	ug/L	95
6) Chloroethane	2.264	64	466826M1	139.365	ug/L	
7) Trichlorofluoromethane	2.409	101	1250069	225.507	ug/L	95
8) Ethyl ether	2.715	74	473080	204.730	ug/L	74
10) 1,1-Dichloroethene	2.899	96	720867	214.013	ug/L #	77
11) Carbon disulfide	2.930	76	2148112	195.626	ug/L	96
12) Freon-113	2.941	101	764970	215.363	ug/L	87
13) Iodomethane	3.039	142	787010	414.722	ug/L	90
14) Acrolein	3.223	56	207835	215.768	ug/L #	68
15) Methylene chloride	3.457	84	830961	186.885	ug/L	88
17) Acetone	3.499	43	275343	178.888	ug/L	100
18) trans-1,2-Dichloroethene	3.610	96	769562	199.519	ug/L	80
19) Methyl acetate	3.619	43	649913	180.672	ug/L	97
21) Methyl tert-butyl ether	3.711	73	2743068	186.070	ug/L	95
22) tert-Butyl alcohol	3.806	59	494549	963.555	ug/L #	74
24) Diisopropyl ether	4.071	45	3996934	189.859	ug/L	91
25) 1,1-Dichloroethane	4.193	63	1767256	191.036	ug/L	97
26) Halothane	4.249	117	614966	198.813	ug/L	95

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
 Data File : VE240731N12.D
 Acq On : 31 Jul 2024 10:22 pm
 Operator : ELAINE:MKS
 Sample : I8260STD200PPB
 Misc : WG1954249
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 01 12:07:48 2024
 Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Aug 01 11:56:36 2024
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240731N-ICAL\VE240731N08.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
27) Acrylonitrile	4.238	53	364875	190.402	ug/L	91
28) Ethyl tert-butyl ether	4.419	59	3489282	190.985	ug/L	87
29) Vinyl acetate	4.427	43	2909289	239.808	ug/L	96
30) cis-1,2-Dichloroethene	4.715	96	893849	193.939	ug/L	96
31) 2,2-Dichloropropane	4.815	77	1146211	194.531	ug/L	98
33) Bromochloromethane	4.904	128	369034	176.699	ug/L	87
34) Cyclohexane	4.910	56	2111879	214.448	ug/L	97
35) Chloroform	4.980	83	1463012	193.883	ug/L	98
36) Ethyl acetate	5.086	43	1054490	184.774	ug/L	95
37) Carbon tetrachloride	5.111	117	1180255	208.012	ug/L	94
38) Tetrahydrofuran	5.127	42	319470M1	181.050	ug/L	
40) 1,1,1-Trichloroethane	5.178	97	1345108	198.818	ug/L	94
42) 2-Butanone	5.264	43	430836	189.401	ug/L #	77
43) 1,1-Dichloropropene	5.300	75	1167560	205.559	ug/L	95
45) Benzene	5.546	78	3545099	193.878	ug/L	93
46) tert-Amyl methyl ether	5.660	73	2608163	193.201	ug/L	97
48) 1,2-Dichloroethane	5.749	62	1303976	187.124	ug/L	98
51) Methyl cyclohexane	6.134	83	1644127	226.130	ug/L	87
52) Trichloroethene	6.143	95	848815	185.062	ug/L	97
54) Dibromomethane	6.580	93	510294	195.517	ug/L #	84
55) 1,2-Dichloropropane	6.686	63	1043986	191.899	ug/L	98
57) 2-Chloroethyl vinyl ether	7.381	63	689730	201.819	ug/L	91
58) Bromodichloromethane	6.759	83	1230248	191.623	ug/L	93
61) 1,4-Dioxane	6.968	88	82040	1934.279	ug/L	87
62) cis-1,3-Dichloropropene	7.450	75	1455382	195.953	ug/L	96
65) Toluene	7.715	92	2216340	196.679	ug/L	95
66) 4-Methyl-2-pentanone	8.145	58	380672	193.904	ug/L	89
67) Tetrachloroethene	8.161	166	969941	202.900	ug/L	95
69) trans-1,3-Dichloropropene	8.198	75	1271120	194.071	ug/L	98
71) Ethyl methacrylate	8.385	69	1153549	188.491	ug/L	90
72) 1,1,2-Trichloroethane	8.385	83	600082	185.709	ug/L	99
73) Chlorodibromomethane	8.594	129	888579	199.549	ug/L	97
74) 1,3-Dichloropropane	8.705	76	1294671	190.102	ug/L	97
75) 1,2-Dibromoethane	8.870	107	726378	193.330	ug/L	88
77) 2-Hexanone	9.149	43	701973	189.278	ug/L	98
78) Chlorobenzene	9.520	112	2322389	191.347	ug/L #	81
79) Ethylbenzene	9.561	91	4205575	188.746	ug/L	99
80) 1,1,1,2-Tetrachloroethane	9.606	131	864694	190.700	ug/L	97
81) p/m Xylene	9.748	106	3113211	359.258	ug/L	98
82) o Xylene	10.292	106	3031575	359.409	ug/L	96

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
 Data File : VE240731N12.D
 Acq On : 31 Jul 2024 10:22 pm
 Operator : ELAINE:MKS
 Sample : I8260STD200PPB
 Misc : WG1954249
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 01 12:07:48 2024
 Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Aug 01 11:56:36 2024
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240731N-ICAL\VE240731N08.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
83)	Styrene	10.359	104	4931534	351.727	ug/L	100
85)	Bromoform	10.384	173	573519	203.644	ug/L	94
87)	Isopropylbenzene	10.671	105	4270477	205.239	ug/L	97
89)	Bromobenzene	11.109	156	1059408	199.237	ug/L	98
90)	n-Propylbenzene	11.156	91	4915379	196.338	ug/L	97
91)	1,4-Dichlorobutane	11.173	55	1727211	190.073	ug/L	97
92)	1,1,2,2-Tetrachloroethane	11.246	83	901020	214.768	ug/L	97
93)	4-Ethyltoluene	11.282	105	4000085	193.873	ug/L	100
94)	2-Chlorotoluene	11.324	91	2902075M1	193.303	ug/L	
95)	1,3,5-Trimethylbenzene	11.382	105	3465448	189.826	ug/L	98
96)	1,2,3-Trichloropropane	11.382	75	693466	189.086	ug/L	94
97)	trans-1,4-Dichloro-2-b...	11.435	53	373208	215.584	ug/L #	81
98)	4-Chlorotoluene	11.508	91	3065128	196.857	ug/L	99
99)	tert-Butylbenzene	11.723	119	2974388	197.561	ug/L	98
102)	1,2,4-Trimethylbenzene	11.801	105	3501105	193.025	ug/L	96
103)	sec-Butylbenzene	11.912	105	4398637	199.979	ug/L	99
104)	p-Isopropyltoluene	12.068	119	3768238	201.589	ug/L	96
105)	1,3-Dichlorobenzene	12.133	146	1909080	191.860	ug/L	96
106)	1,4-Dichlorobenzene	12.225	146	1925869	195.547	ug/L	99
107)	p-Diethylbenzene	12.442	119	2268316	204.684	ug/L	96
108)	n-Butylbenzene	12.501	91	3301190	207.619	ug/L	97
109)	1,2-Dichlorobenzene	12.648	146	1871437	197.197	ug/L	98
110)	1,2,4,5-Tetramethylben...	13.234	119	3731663	206.145	ug/L	95
111)	1,2-Dibromo-3-chloropr...	13.429	155	172945	221.821	ug/L	92
112)	1,3,5-Trichlorobenzene	13.460	180	1558415	205.728	ug/L	93
113)	Hexachlorobutadiene	14.032	225	516197	213.175	ug/L	93
114)	1,2,4-Trichlorobenzene	14.057	180	1377565	205.206	ug/L	100
115)	Naphthalene	14.349	128	3120105	216.278	ug/L	100
116)	1,2,3-Trichlorobenzene	14.520	180	1288109	209.838	ug/L	96

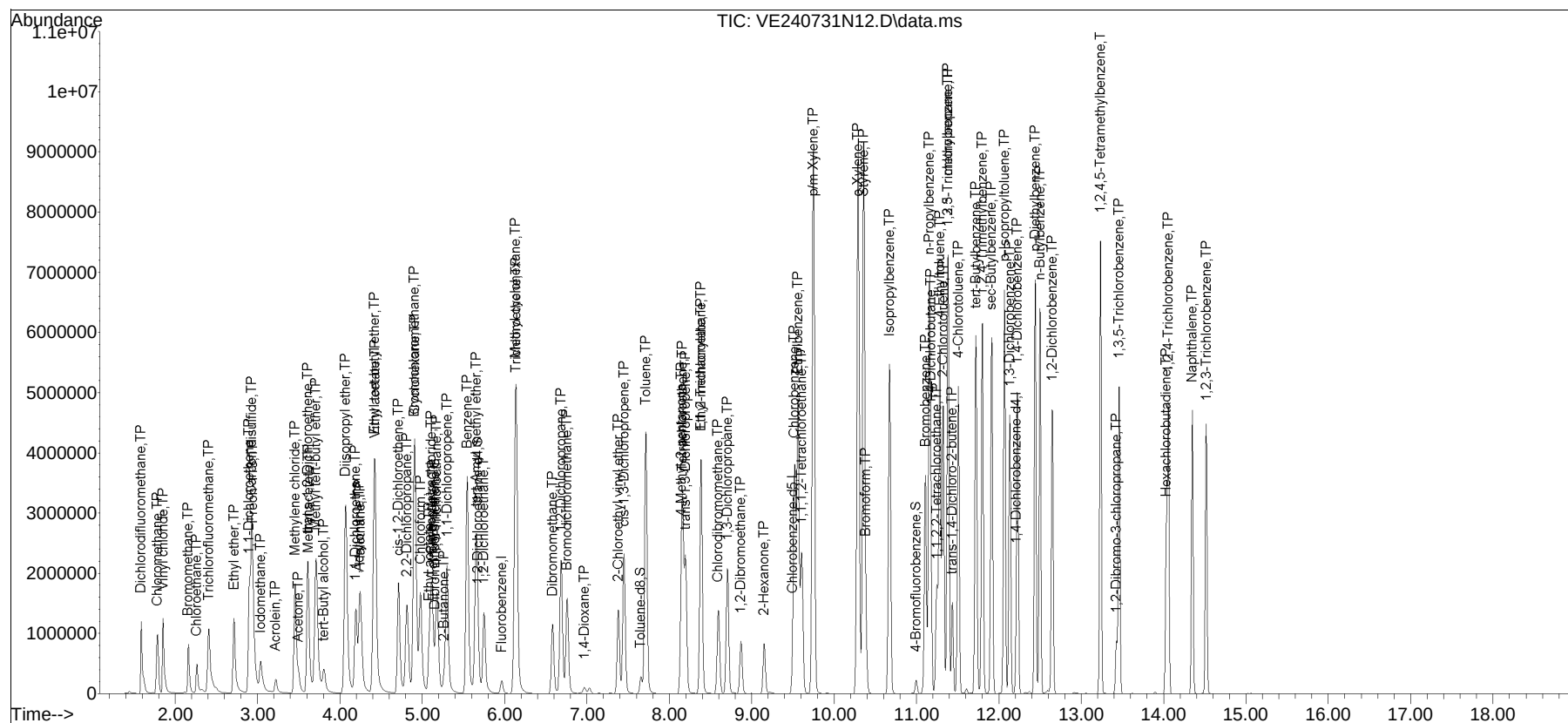
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
Data File : VE240731N12.D
Acq On : 31 Jul 2024 10:22 pm
Operator : ELAINE:MKS
Sample : I8260STD200PPB
Misc : WG1954249
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 01 12:07:48 2024
Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 11:56:36 2024
Response via : Initial Calibration

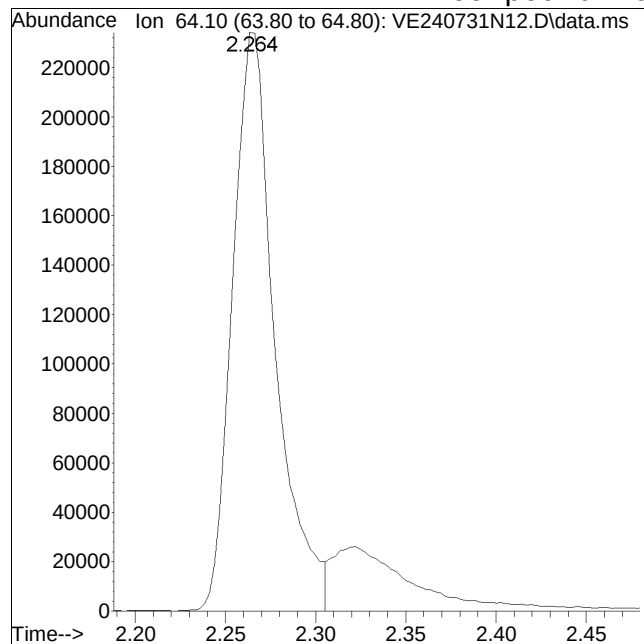
Sub List : 8260-Curve - Megamix plus DioxL\VE240731N08.D•



Manual Integration Report

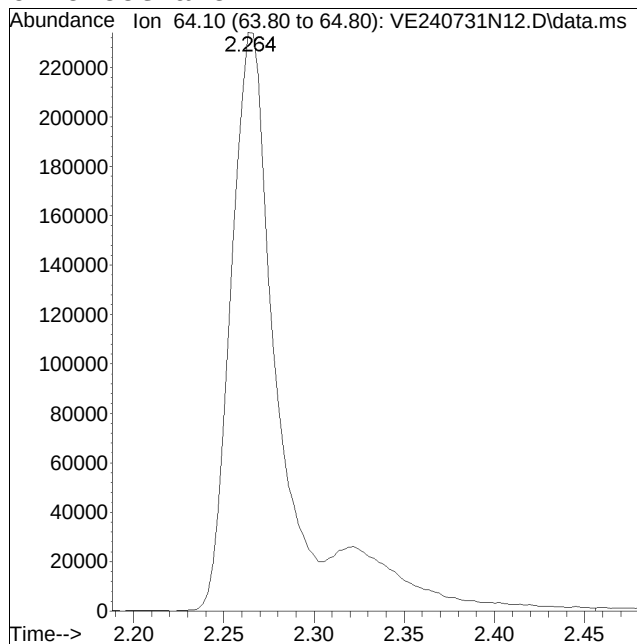
Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N12.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 10:22 pm Instrument : Elaine
Sample : I8260STD200PPB Quant Date : 8/1/2024 11:57 am

Compound #6: Chloroethane



Original Peak Response = 384819

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

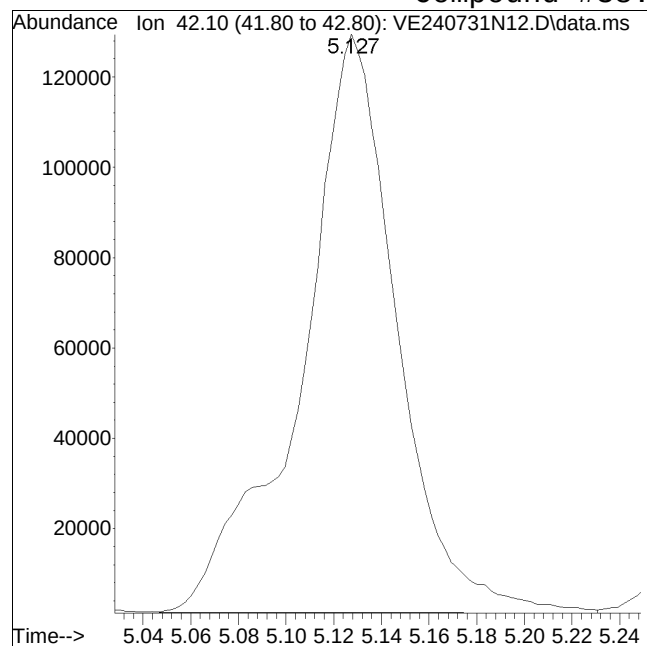


Manual Peak Response = 466826 M1

Manual Integration Report

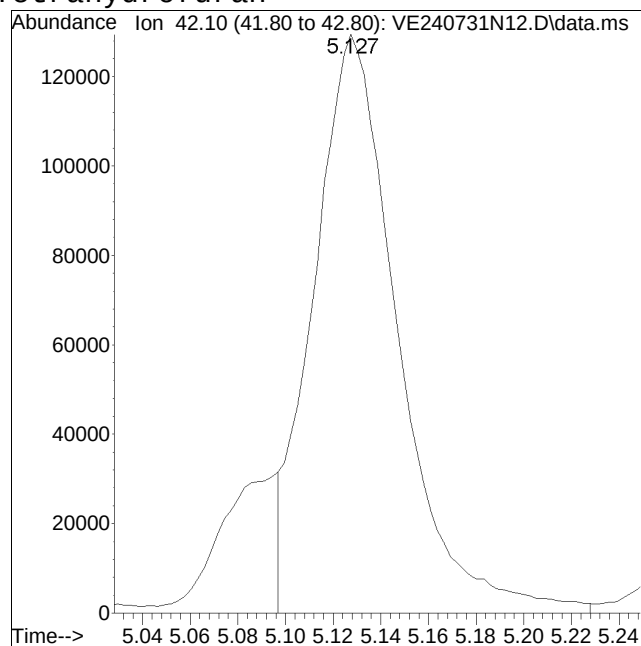
Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N12.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 10:22 pm Instrument : Elaine
Sample : I8260STD200PPB Quant Date : 8/1/2024 11:57 am

Compound #38: Tetrahydrofuran



Original Peak Response = 356527

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

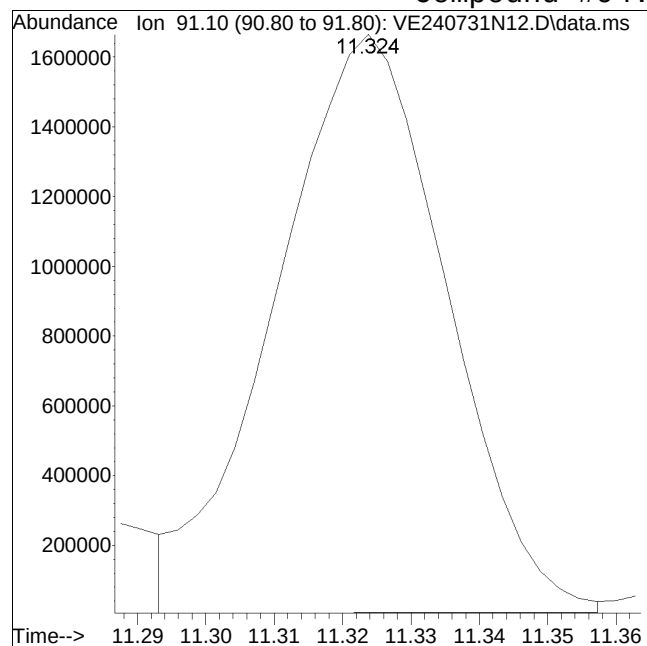


Manual Peak Response = 319470 M1

Manual Integration Report

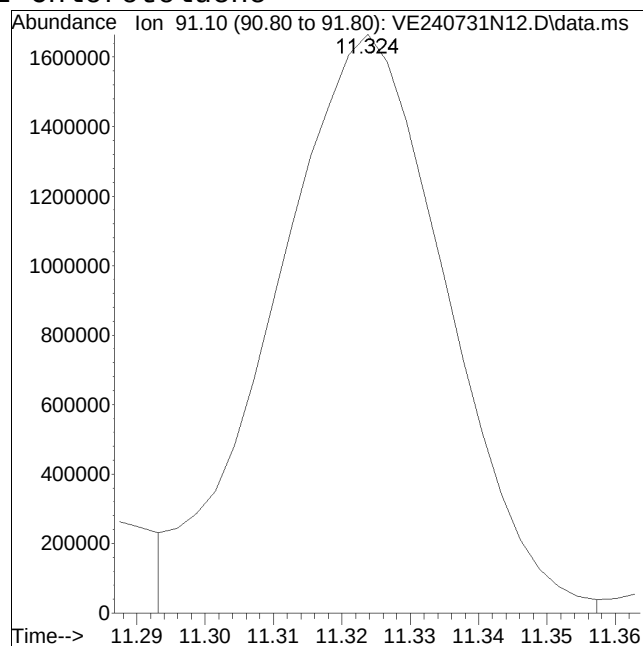
Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N12.D Operator : ELAINE:MKS
Date Inj'd : 7/31/2024 10:22 pm Instrument : Elaine
Sample : I8260STD200PPB Quant Date : 8/1/2024 11:57 am

Compound #94: 2-Chlorotoluene



Original Peak Response = 2876218

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.



Manual Peak Response = 2902075 M1

Evaluate Continuing Calibration Report

Data Path : K:\Elaine\2024\240731N-ICAL\
 Data File : VE240731N17.D
 Acq On : 1 Aug 2024 12:28 am
 Operator : ELAINE:MKS
 Sample : C8260STD10PPB
 Misc : WG1954249
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Aug 01 12:14:14 2024
 Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Aug 01 12:13:24 2024
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Fluorobenzene	1.000	1.000	0.0	102	0.00
2 TP	Dichlorodifluoromethane	0.224	0.184	17.9	85	0.00
3 TP	Chloromethane	0.250	0.279	-11.6	108	0.00
4 TP	Vinyl chloride	0.233	0.239	-2.6	100	0.00
5 TP	Bromomethane	* 10.000	9.312	6.9	112	0.00
6 TP	Chloroethane	0.140	0.152	-8.6	101	0.00
7 TP	Trichlorofluoromethane	0.267	0.291	-9.0	117	0.00
8 TP	Ethyl ether	0.105	0.106	-1.0	102	0.00
10 TP	1,1-Dichloroethene	0.160	0.160	0.0	105	0.00
11 TP	Carbon disulfide	0.494	0.453	8.3	92	0.00
12 TP	Freon-113	0.167	0.181	-8.4	113	0.00
13 TP	Iodomethane	* 10.000	5.388	46.1#	62	0.00
14 TP	Acrolein	0.045	0.032	28.9#	75	0.00
15 TP	Methylene chloride	0.202	0.202	0.0	101	0.00
17 TP	Acetone	0.073	0.073	0.0	105	0.00
18 TP	trans-1,2-Dichloroethene	0.172	0.181	-5.2	104	0.00
19 TP	Methyl acetate	0.171	0.151	11.7	93	0.00
21 TP	Methyl tert-butyl ether	0.642	0.561	12.6	85	0.00
22 TP	tert-Butyl alcohol	0.023	0.022	4.3	96	0.00
24 TP	Diisopropyl ether	0.920	0.922	-0.2	97	0.00
25 TP	1,1-Dichloroethane	0.404	0.436	-7.9	105	0.00
26 TP	Halothane	0.139	0.154	-10.8	111	0.00
27 TP	Acrylonitrile	0.084	0.077	8.3	89	0.00
28 TP	Ethyl tert-butyl ether	0.798	0.794	0.5	97	0.00
29 TP	Vinyl acetate	0.612	0.506	17.3	93	0.00
30 TP	cis-1,2-Dichloroethene	0.206	0.210	-1.9	101	0.00
31 TP	2,2-Dichloropropane	0.270	0.248	8.1	93	0.00
33 TP	Bromochloromethane	0.091	0.092#	-1.1	97	0.00
34 TP	Cyclohexane	0.473	0.498	-5.3	112	0.00
35 TP	Chloroform	0.335	0.346	-3.3	102	0.00
36 TP	Ethyl acetate	0.256	0.246	3.9	96	0.00
37 TP	Carbon tetrachloride	0.256	0.287	-12.1	112	0.00
38 TP	Tetrahydrofuran	0.079	0.075	5.1	94	0.00
39 S	Dibromofluoromethane	0.234	0.239	-2.1	102	0.00
40 TP	1,1,1-Trichloroethane	0.304	0.321	-5.6	106	0.00
42 TP	2-Butanone	0.105	0.098	6.7	95	0.00
43 TP	1,1-Dichloropropene	0.256	0.286	-11.7	112	0.00
45 TP	Benzene	0.792	0.833	-5.2	101	0.00
46 TP	tert-Amyl methyl ether	0.598	0.569	4.8	94	0.00

Evaluate Continuing Calibration Report

Data Path : K:\Elaine\2024\240731N-ICAL\
 Data File : VE240731N17.D
 Acq On : 1 Aug 2024 12:28 am
 Operator : ELAINE:MKS
 Sample : C8260STD10PPB
 Misc : WG1954249
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Aug 01 12:14:14 2024
 Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Aug 01 12:13:24 2024
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
47 S	1,2-Dichloroethane-d4	0.312	0.314	-0.6	101	0.00
48 T	1,2-Dichloroethane	0.306	0.319	-4.2	102	0.00
51 TP	Methyl cyclohexane	0.356	0.371	-4.2	114	0.00
52 TP	Trichloroethene	0.199	0.216	-8.5	105	0.00
54 TP	Dibromomethane	0.115	0.119	-3.5	101	0.00
55 TP	1,2-Dichloropropane	0.239	0.252	-5.4	103	0.00
57 TP	2-Chloroethyl vinyl ether	0.154	0.137	11.0	89	0.00
58 TP	Bromodichloromethane	0.283	0.287#	-1.4	99	0.00
61 TP	1,4-Dioxane	0.00192	0.00183#	4.7	96	0.00
62 TP	cis-1,3-Dichloropropene	0.319	0.344	-7.8	103	0.00
63 I	Chlorobenzene-d5	1.000	1.000	0.0	104	0.00
64 S	Toluene-d8	1.317	1.314	0.2	103	0.00
65 TP	Toluene	0.689	0.694	-0.7	102	0.00
66 TP	4-Methyl-2-pentanone	0.117	0.112	4.3	94	0.00
67 TP	Tetrachloroethene	0.293	0.316	-7.8	109	0.00
69 TP	trans-1,3-Dichloropropene	0.388	0.396	-2.1	100	0.00
71 TP	Ethyl methacrylate	0.369	0.356	3.5	96	0.00
72 TP	1,1,2-Trichloroethane	0.193	0.197#	-2.1	100	0.00
73 TP	Chlorodibromomethane	0.270	0.268	0.7	99	0.00
74 TP	1,3-Dichloropropane	0.408	0.422	-3.4	102	0.00
75 TP	1,2-Dibromoethane	0.228	0.226	0.9	99	0.00
77 TP	2-Hexanone	0.229	0.212	7.4	94	0.00
78 TP	Chlorobenzene	0.734	0.773	-5.3	105	0.00
79 TP	Ethylbenzene	1.335	1.426	-6.8	105	0.00
80 TP	1,1,1,2-Tetrachloroethane	0.269	0.286	-6.3	104	0.00
81 TP	p/m Xylene	0.509	0.545	-7.1	104	0.00
82 TP	o Xylene	0.497	0.524	-5.4	102	0.00
83 TP	Styrene	0.816	0.883	-8.2	104	0.00
84 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	104	0.00
85 TP	Bromoform	0.325	0.321	1.2	101	0.00
87 TP	Isopropylbenzene	2.395	2.542	-6.1	108	0.00
88 S	4-Bromofluorobenzene	0.924	0.917	0.8	103	0.00
89 TP	Bromobenzene	0.605	0.612	-1.2	102	0.00
90 TP	n-Propylbenzene	2.861	3.016	-5.4	106	0.00
91 TP	1,4-Dichlorobutane	1.046	0.991	5.3	96	0.00
92 TP	1,1,2,2-Tetrachloroethane	0.508	0.472	7.1	99	0.00
93 TP	4-Ethyltoluene	2.321	2.520	-8.6	108	0.00

Evaluate Continuing Calibration Report

Data Path : K:\Elaine\2024\240731N-ICAL\
 Data File : VE240731N17.D
 Acq On : 1 Aug 2024 12:28 am
 Operator : ELAINE:MKS
 Sample : C8260STD10PPB
 Misc : WG1954249
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Aug 01 12:14:14 2024
 Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Aug 01 12:13:24 2024
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
94 TP	2-Chlorotoluene	1.683	1.751	-4.0	103	0.00
95 TP	1,3,5-Trimethylbenzene	2.036	2.143	-5.3	104	0.00
96 TP	1,2,3-Trichloropropane	0.415	0.417	-0.5	100	0.00
97 TP	trans-1,4-Dichloro-2-butene	0.204	0.171	16.2	87	0.00
98 TP	4-Chlorotoluene	1.763	1.845	-4.7	105	0.00
99 TP	tert-Butylbenzene	1.712	1.823	-6.5	107	0.00
102 TP	1,2,4-Trimethylbenzene	2.033	2.161	-6.3	105	0.00
103 TP	sec-Butylbenzene	2.538	2.673	-5.3	107	0.00
104 TP	p-Isopropyltoluene	2.139	2.259	-5.6	107	0.00
105 TP	1,3-Dichlorobenzene	1.117	1.178	-5.5	105	0.00
106 TP	1,4-Dichlorobenzene	1.116	1.167	-4.6	105	0.00
107 TP	p-Diethylbenzene	1.261	1.249	1.0	100	0.00
108 TP	n-Butylbenzene	1.842	2.034	-10.4	113	0.00
109 TP	1,2-Dichlorobenzene	1.074	1.130	-5.2	105	0.00
110 TP	1,2,4,5-Tetramethylbenzene	2.046	2.063	-0.8	101	0.00
111 TP	1,2-Dibromo-3-chloropropane *	10.000	8.973	10.3	97	0.00
112 TP	1,3,5-Trichlorobenzene	0.853	0.845	0.9	99	0.00
113 TP	Hexachlorobutadiene	0.283	0.291	-2.8	106	0.00
114 TP	1,2,4-Trichlorobenzene	0.770	0.781	-1.4	103	0.00
115 TP	Naphthalene	1.697	1.637	3.5	100	0.00
116 TP	1,2,3-Trichlorobenzene	0.707	0.697	1.4	100	0.00

* Evaluation of CC level amount vs concentration.
 (#) = Out of Range SPCC's out = 4 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
 Data File : VE240731N17.D
 Acq On : 1 Aug 2024 12:28 am
 Operator : ELAINE:MKS
 Sample : C8260STD10PPB
 Misc : WG1954249
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Aug 01 12:14:14 2024
 Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Aug 01 12:13:24 2024
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240731N-ICAL\VE240731N08.D
 Sub List : 8260-Curve - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	5.964	96	208493	10.000	ug/L	0.00
Standard Area 1 = 204581			Recovery	=	101.91%	
63) Chlorobenzene-d5	9.497	117	153829	10.000	ug/L	0.00
Standard Area 1 = 147756			Recovery	=	104.11%	
84) 1,4-Dichlorobenzene-d4	12.205	152	87716	10.000	ug/L	0.00
Standard Area 1 = 84505			Recovery	=	103.80%	
System Monitoring Compounds						
39) Dibromofluoromethane	5.158	113	49879	10.219	ug/L	0.00
Spiked Amount 10.000	Range 70	- 130	Recovery	=	102.19%	
47) 1,2-Dichloroethane-d4	5.683	65	65490	10.056	ug/L	0.00
Spiked Amount 10.000	Range 70	- 130	Recovery	=	100.56%	
64) Toluene-d8	7.654	98	202159	9.977	ug/L	0.00
Spiked Amount 10.000	Range 70	- 130	Recovery	=	99.77%	
88) 4-Bromofluorobenzene	10.995	95	80452	9.929	ug/L	0.00
Spiked Amount 10.000	Range 70	- 130	Recovery	=	99.29%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.592	85	38360	8.206	ug/L	95
3) Chloromethane	1.784	50	58239	11.190	ug/L	97
4) Vinyl chloride	1.854	62	49740	10.255	ug/L	91
5) Bromomethane	2.163	94	13377	9.312	ug/L	95
6) Chloroethane	2.269	64	31590	10.788	ug/L	91
7) Trichlorofluoromethane	2.417	101	60700	10.891	ug/L	98
8) Ethyl ether	2.713	74	22105	10.072	ug/L	74
10) 1,1-Dichloroethene	2.905	96	33298	9.972	ug/L	79
11) Carbon disulfide	2.930	76	94536	9.176	ug/L	95
12) Freon-113	2.941	101	37812	10.866	ug/L	89
13) Iodomethane	3.039	142	11076	5.388	ug/L	89
14) Acrolein	3.223	56	6767	7.176	ug/L #	62
15) Methylene chloride	3.454	84	42181	10.015	ug/L	89
17) Acetone	3.496	43	15145	9.901	ug/L	98
18) trans-1,2-Dichloroethene	3.611	96	37651	10.490	ug/L	77
19) Methyl acetate	3.619	43	31485	8.829	ug/L	96
21) Methyl tert-butyl ether	3.708	73	116912	8.735	ug/L	96
22) tert-Butyl alcohol	3.803	59	23155	48.488	ug/L #	68
24) Diisopropyl ether	4.068	45	192295	10.030	ug/L	91
25) 1,1-Dichloroethane	4.193	63	90833	10.783	ug/L	96
26) Halothane	4.252	117	32152	11.107	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
 Data File : VE240731N17.D
 Acq On : 1 Aug 2024 12:28 am
 Operator : ELAINE:MKS
 Sample : C8260STD10PPB
 Misc : WG1954249
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Aug 01 12:14:14 2024
 Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Aug 01 12:13:24 2024
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240731N-ICAL\VE240731N08.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
27) Acrylonitrile	4.235	53	15982	9.093	ug/L	86
28) Ethyl tert-butyl ether	4.417	59	165609	9.954	ug/L	98
29) Vinyl acetate	4.428	43	105450	8.264	ug/L #	94
30) cis-1,2-Dichloroethene	4.715	96	43745	10.168	ug/L	93
31) 2,2-Dichloropropane	4.818	77	51622	9.157	ug/L	95
33) Bromochloromethane	4.905	128	19089	10.115	ug/L	83
34) Cyclohexane	4.913	56	103732	10.523	ug/L	95
35) Chloroform	4.980	83	72175	10.336	ug/L	99
36) Ethyl acetate	5.086	43	51304	9.621	ug/L #	92
37) Carbon tetrachloride	5.111	117	59745	11.201	ug/L	97
38) Tetrahydrofuran	5.130	42	15553M1	9.397	ug/L	
40) 1,1,1-Trichloroethane	5.175	97	66968	10.560	ug/L #	76
42) 2-Butanone	5.267	43	20338	9.305	ug/L #	85
43) 1,1-Dichloropropene	5.295	75	59608	11.165	ug/L	96
45) Benzene	5.546	78	173673	10.516	ug/L	93
46) tert-Amyl methyl ether	5.660	73	118656	9.521	ug/L	98
48) 1,2-Dichloroethane	5.749	62	66413	10.419	ug/L	96
51) Methyl cyclohexane	6.134	83	77419	10.431	ug/L	86
52) Trichloroethene	6.140	95	45095	10.860	ug/L	97
54) Dibromomethane	6.578	93	24744	10.345	ug/L #	84
55) 1,2-Dichloropropane	6.684	63	52520	10.534	ug/L	98
57) 2-Chloroethyl vinyl ether	7.381	63	28542	8.897	ug/L	91
58) Bromodichloromethane	6.762	83	59854	10.131	ug/L	94
61) 1,4-Dioxane	6.965	88	19108	477.556	ug/L	87
62) cis-1,3-Dichloropropene	7.448	75	71821	10.797	ug/L	95
65) Toluene	7.715	92	106822	10.085	ug/L	91
66) 4-Methyl-2-pentanone	8.148	58	17267	9.558	ug/L #	91
67) Tetrachloroethene	8.162	166	48681	10.819	ug/L	96
69) trans-1,3-Dichloropropene	8.195	75	60906	10.213	ug/L	98
71) Ethyl methacrylate	8.385	69	54689	9.633	ug/L	92
72) 1,1,2-Trichloroethane	8.379	83	30235	10.167	ug/L	99
73) Chlorodibromomethane	8.591	129	41173	9.901	ug/L	97
74) 1,3-Dichloropropane	8.705	76	64959	10.345	ug/L	97
75) 1,2-Dibromoethane	8.867	107	34815	9.906	ug/L	88
77) 2-Hexanone	9.152	43	32606	9.263	ug/L	97
78) Chlorobenzene	9.520	112	118893	10.534	ug/L #	80
79) Ethylbenzene	9.556	91	219382	10.686	ug/L	99
80) 1,1,1,2-Tetrachloroethane	9.603	131	44053	10.647	ug/L	99
81) p/m Xylene	9.746	106	167676	21.427	ug/L	98
82) o Xylene	10.287	106	161242	21.071	ug/L	96

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
 Data File : VE240731N17.D
 Acq On : 1 Aug 2024 12:28 am
 Operator : ELAINE:MKS
 Sample : C8260STD10PPB
 Misc : WG1954249
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Aug 01 12:14:14 2024
 Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Aug 01 12:13:24 2024
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240731N-ICAL\VE240731N08.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
83)	Styrene	10.354	104	271514	21.640	ug/L	99
85)	Bromoform	10.381	173	28158	9.866	ug/L	93
87)	Isopropylbenzene	10.671	105	223005	10.617	ug/L	98
89)	Bromobenzene	11.106	156	53699	10.126	ug/L	97
90)	n-Propylbenzene	11.151	91	264513	10.539	ug/L	97
91)	1,4-Dichlorobutane	11.168	55	86888	9.472	ug/L	99
92)	1,1,2,2-Tetrachloroethane	11.243	83	41382	9.285	ug/L	99
93)	4-Ethyltoluene	11.279	105	221024	10.855	ug/L	100
94)	2-Chlorotoluene	11.318	91	153587	10.402	ug/L	97
95)	1,3,5-Trimethylbenzene	11.377	105	188009	10.527	ug/L	98
96)	1,2,3-Trichloropropane	11.380	75	36549	10.052	ug/L	94
97)	trans-1,4-Dichloro-2-b...	11.433	53	14957	8.371	ug/L #	85
98)	4-Chlorotoluene	11.502	91	161865	10.465	ug/L	99
99)	tert-Butylbenzene	11.720	119	159878	10.649	ug/L	97
102)	1,2,4-Trimethylbenzene	11.795	105	189585	10.634	ug/L	96
103)	sec-Butylbenzene	11.910	105	234466	10.531	ug/L	99
104)	p-Isopropyltoluene	12.066	119	198149	10.562	ug/L	96
105)	1,3-Dichlorobenzene	12.127	146	103303	10.548	ug/L	96
106)	1,4-Dichlorobenzene	12.222	146	102337	10.454	ug/L	99
107)	p-Diethylbenzene	12.439	119	109518	9.900	ug/L	96
108)	n-Butylbenzene	12.495	91	178383	11.041	ug/L	98
109)	1,2-Dichlorobenzene	12.646	146	99100	10.517	ug/L	97
110)	1,2,4,5-Tetramethylben...	13.231	119	180976	10.082	ug/L	96
111)	1,2-Dibromo-3-chloropr...	13.427	155	7500	8.973	ug/L	85
112)	1,3,5-Trichlorobenzene	13.457	180	74121	9.907	ug/L	92
113)	Hexachlorobutadiene	14.032	225	25535	10.299	ug/L	93
114)	1,2,4-Trichlorobenzene	14.054	180	68475	10.138	ug/L	98
115)	Naphthalene	14.347	128	143556	9.643	ug/L	100
116)	1,2,3-Trichlorobenzene	14.517	180	61106	9.847	ug/L	94

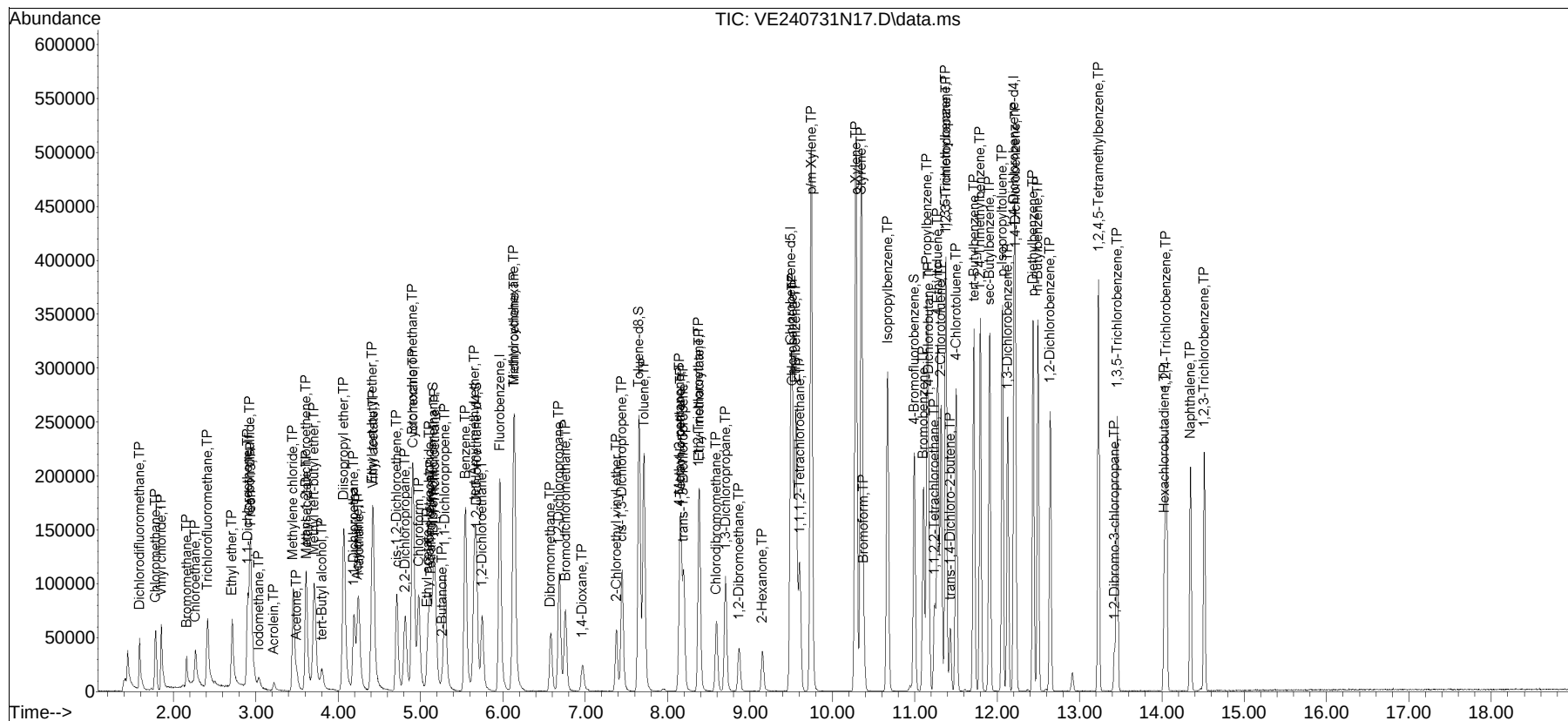
(#) = qualifier out of range (m) = manual integration (+) = signals summed

(QT Reviewed)

Data Path : K:\Elaine\2024\240731N-ICAL\
Data File : VE240731N17.D
Acq On : 1 Aug 2024 12:28 am
Operator : ELAINE:MKS
Sample : C8260STD10PPB
Misc : WG1954249
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Aug 01 12:14:14 2024
Quant Method : K:\Elaine\2024\240731N-ICAL\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 12:13:24 2024
Response via : Initial Calibration

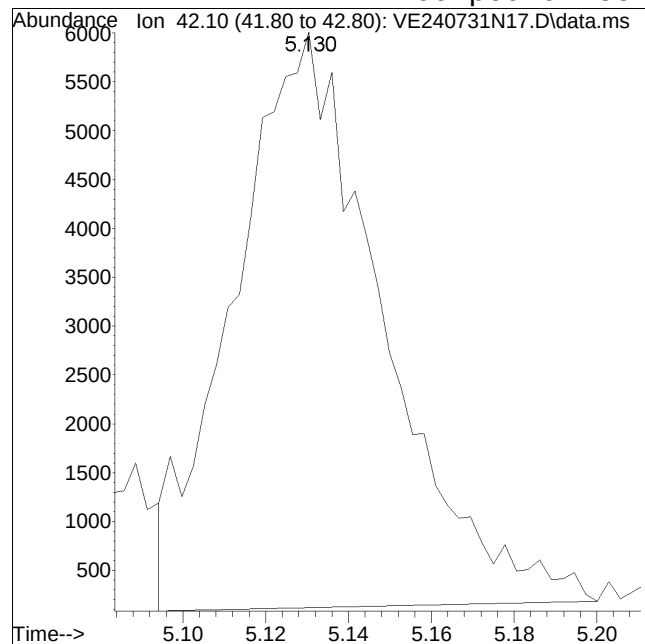
Sub List : 8260-Curve - Megamix plus DioxL\VE240731N08.D•



Manual Integration Report

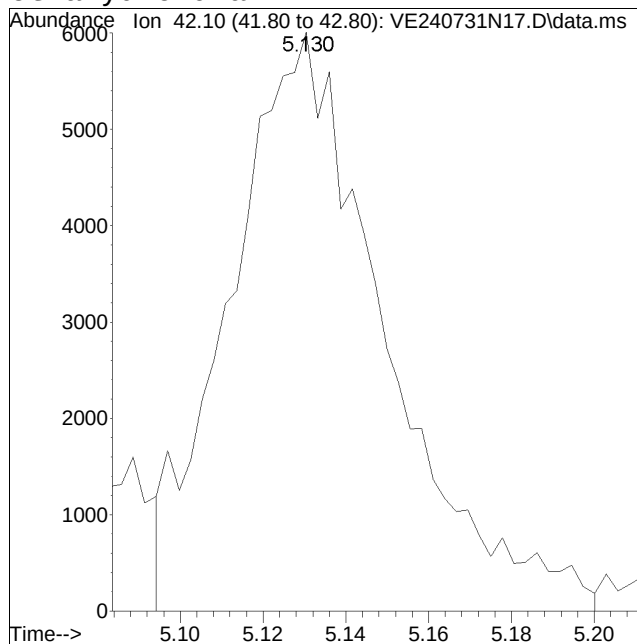
Data Path : K:\Elaine\2024\240731N-ICAQMethod : Elaine_240731N_8260.m
Data File : VE240731N17.D Operator : ELAINE:MKS
Date Inj'd : 8/1/2024 12:28 am Instrument : Elaine
Sample : C8260STD10PPB Quant Date : 8/1/2024 12:13 pm

Compound #38: Tetrahydrofuran



Original Peak Response = 14701

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.



Manual Peak Response = 15553 M1

Method Path : K:\Elaine\2024\240731N-ICAL\
Method File : Elaine_240731N_8260.m
Title : VOLATILES BY GC/MS
Last Update : Thu Aug 01 12:13:24 2024

	COMPOUND	CalFit	Units	TrueMid	MidConc	%RE	TrueLow	LowConc	%RE
5	TP Bromomethane	Q	ug/L	10.0	8.517	-14.8	0.50	0.634	26.8
13	TP Iodomethane	Q	ug/L	10.0	7.698	-23.0	2.00	2.507	25.4
111	TP 1,2-Dibromo-3-chloropropane	L	ug/L	10.0	9.592	-4.1	0.50	0.540	8.0

Calibration Correlation Report

	COMPOUND	CalFit	CoefOfDet	QuadTerm	LinTerm	Constant
5	TP Bromomethane	Quadratic	0.998253	0.001690	0.069754	-0.00225974
13	TP Iodomethane	Quadratic	0.997800	0.002010	0.144116	-0.0251075
111	TP 1,2-Dibromo-3-chloropropane	Linear	0.998896	0.000000	0.0984884	-0.00286624

Continuing Calibration

Calibration Verification Summary

Form 7

Volatiles

Client : Impact Environmental
 Project Name : 585 UNION STREET
 Instrument ID : ELAINE
 Lab File ID : VE240816A01
 Sample No : WG1960272-2
 Channel :

Lab Number : L2446277
 Project Number : 14729
 Calibration Date : 08/16/24 06:49
 Init. Calib. Date(s) : 07/31/24 07/31/24
 Init. Calib. Times : 18:35 22:22

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	90	0
Dichlorodifluoromethane	0.224	0.22	-	1.8	20	90	0
Chloromethane	0.25	0.266	-	-6.4	20	91	-.01
Vinyl chloride	0.233	0.255	-	-9.4	20	95	0
Bromomethane	10	15.169	-	-51.7*	20	166	0
Chloroethane	0.14	0.168	-	-20	20	99	0
Trichlorofluoromethane	0.267	0.322	-	-20.6*	20	114	0
Ethyl ether	0.105	0.108	-	-2.9	20	92	0
1,1-Dichloroethene	0.16	0.164	-	-2.5	20	96	0
Carbon disulfide	0.494	0.533	-	-7.9	20	96	0
Freon-113	0.167	0.185	-	-10.8	20	103	0
Acrolein	0.045	0.034	-	24.4*	20	69	-.01
Methylene chloride	0.202	0.204	-	-1	20	90	0
Acetone	0.073	0.05	-	31.5*	20	64	0
trans-1,2-Dichloroethene	0.172	0.194	-	-12.8	20	99	0
Methyl acetate	0.171	0.117	-	31.6*	20	64	-.01
Methyl tert-butyl ether	0.642	0.584	-	9	20	78	0
tert-Butyl alcohol	0.023	0.014	-	39.1*	20	53	0
Diisopropyl ether	0.92	0.88	-	4.3	20	82	-.01
1,1-Dichloroethane	0.404	0.44	-	-8.9	20	94	0
Halothane	0.139	0.146	-	-5	20	93	0
Acrylonitrile	0.084	0.068	-	19	20	69	0
Ethyl tert-butyl ether	0.798	0.75	-	6	20	81	0
Vinyl acetate	0.612	0.59	-	3.6	20	96	0
cis-1,2-Dichloroethene	0.206	0.226	-	-9.7	20	97	0
2,2-Dichloropropane	0.27	0.307	-	-13.7	20	103	0
Bromochloromethane	0.091	0.101	-	-11	20	96	-.01
Cyclohexane	0.473	0.501	-	-5.9	20	100	0
Chloroform	0.335	0.357	-	-6.6	20	93	0
Ethyl acetate	0.256	0.179	-	30.1*	20	62	0
Carbon tetrachloride	0.256	0.293	-	-14.5	20	102	-.01
Tetrahydrofuran	0.079	0.059	-	25.3*	20	66	0
Dibromofluoromethane	0.234	0.233	-	0.4	20	88	0
1,1,1-Trichloroethane	0.304	0.338	-	-11.2	20	99	-.01
2-Butanone	0.105	0.078	-	25.7*	20	67	-.02
1,1-Dichloropropene	0.256	0.294	-	-14.8	20	102	-.01
Benzene	0.792	0.881	-	-11.2	20	95	0
tert-Amyl methyl ether	0.598	0.536	-	10.4	20	78	-.01
1,2-Dichloroethane-d4	0.312	0.29	-	7.1	20	83	0
1,2-Dichloroethane	0.306	0.31	-	-1.3	20	88	0
Methyl cyclohexane	0.356	0.392	-	-10.1	20	106	0
Trichloroethene	0.199	0.223	-	-12.1	20	96	0
Dibromomethane	0.115	0.117	-	-1.7	20	89	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : Impact Environmental
 Project Name : 585 UNION STREET
 Instrument ID : ELAINE
 Lab File ID : VE240816A01
 Sample No : WG1960272-2
 Channel :

Lab Number : L2446277
 Project Number : 14729
 Calibration Date : 08/16/24 06:49
 Init. Calib. Date(s) : 07/31/24 07/31/24
 Init. Calib. Times : 18:35 22:22

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,2-Dichloropropane	0.239	0.247	-	-3.3	20	89	-.01
Bromodichloromethane	0.283	0.3	-	-6	20	92	0
1,4-Dioxane	0.00192	0.00153*	-	20.3*	20	71	-.01
cis-1,3-Dichloropropene	0.319	0.336	-	-5.3	20	89	0
Chlorobenzene-d5	1	1	-	0	20	92	0
Toluene-d8	1.317	1.324	-	-0.5	20	92	0
Toluene	0.689	0.77	-	-11.8	20	99	0
4-Methyl-2-pentanone	0.117	0.09	-	23.1*	20	66	-.01
Tetrachloroethene	0.293	0.36	-	-22.9*	20	109	-.01
trans-1,3-Dichloropropene	0.388	0.374	-	3.6	20	83	0
Ethyl methacrylate	0.369	0.308	-	16.5	20	73	0
1,1,2-Trichloroethane	0.193	0.195*	-	-1	20	88	-.01
Chlorodibromomethane	0.27	0.265	-	1.9	20	86	0
1,3-Dichloropropane	0.408	0.409	-	-0.2	20	87	-.01
1,2-Dibromoethane	0.228	0.218	-	4.4	20	84	0
2-Hexanone	0.229	0.153	-	33.2*	20	60	0
Chlorobenzene	0.734	0.816	-	-11.2	20	98	0
Ethylbenzene	1.335	1.522	-	-14	20	99	0
1,1,1,2-Tetrachloroethane	0.269	0.3	-	-11.5	20	96	-.01
p/m Xylene	0.509	0.586	-	-15.1	20	98	0
o Xylene	0.497	0.562	-	-13.1	20	97	0
Styrene	0.816	0.911	-	-11.6	20	94	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	96	0
Bromoform	0.325	0.295	-	9.2	20	86	0
Isopropylbenzene	2.395	2.535	-	-5.8	20	100	0
4-Bromofluorobenzene	0.924	0.812	-	12.1	20	84	0
Bromobenzene	0.605	0.622	-	-2.8	20	96	0
n-Propylbenzene	2.861	3.058	-	-6.9	20	100	0
1,4-Dichlorobutane	1.046	0.892	-	14.7	20	81	0
1,1,2,2-Tetrachloroethane	0.508	0.454	-	10.6	20	89	0
4-Ethyltoluene	2.321	2.459	-	-5.9	20	98	0
2-Chlorotoluene	1.683	1.753	-	-4.2	20	96	0
1,3,5-Trimethylbenzene	2.036	2.16	-	-6.1	20	97	0
1,2,3-Trichloropropane	0.415	0.361	-	13	20	81	0
trans-1,4-Dichloro-2-buten	0.204	0.159	-	22.1*	20	76	0
4-Chlorotoluene	1.763	1.823	-	-3.4	20	96	0
tert-Butylbenzene	1.712	1.784	-	-4.2	20	97	0
1,2,4-Trimethylbenzene	2.033	2.115	-	-4	20	96	0
sec-Butylbenzene	2.538	2.672	-	-5.3	20	100	0
p-Isopropyltoluene	2.139	2.25	-	-5.2	20	99	0
1,3-Dichlorobenzene	1.117	1.203	-	-7.7	20	99	0
1,4-Dichlorobenzene	1.116	1.179	-	-5.6	20	98	0
p-Diethylbenzene	1.261	1.285	-	-1.9	20	95	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : Impact Environmental
Project Name : 585 UNION STREET
Instrument ID : ELAINE
Lab File ID : VE240816A01
Sample No : WG1960272-2
Channel :

Lab Number : L2446277
Project Number : 14729
Calibration Date : 08/16/24 06:49
Init. Calib. Date(s) : 07/31/24 07/31/24
Init. Calib. Times : 18:35 22:22

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
n-Butylbenzene	1.842	1.942	-	-5.4	20	100	0
1,2-Dichlorobenzene	1.074	1.1	-	-2.4	20	95	0
1,2,4,5-Tetramethylbenzene	2.046	1.957	-	4.3	20	89	0
1,2-Dibromo-3-chloropropan	10	7.474	-	25.3*	20	74	-.01
1,3,5-Trichlorobenzene	0.853	0.865	-	-1.4	20	94	0
Hexachlorobutadiene	0.283	0.297	-	-4.9	20	101	0
1,2,4-Trichlorobenzene	0.77	0.713	-	7.4	20	87	0
Naphthalene	1.697	1.306	-	23*	20	74	0
1,2,3-Trichlorobenzene	0.707	0.611	-	13.6	20	82	0

* Value outside of QC limits.



Evaluate Continuing Calibration Report

Data Path : K:\Elaine\2024\240816A\
 Data File : VE240816A01.D
 Acq On : 16 Aug 2024 6:49 am
 Operator : ELAINE:PID
 Sample : WG1960272-2
 Misc : WG1960272,ICAL21358
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 16 07:19:31 2024
 Quant Method : K:\Elaine\2024\240816A\Elaine_240731N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Aug 01 12:13:24 2024
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Fluorobenzene	1.000	1.000	0.0	90	0.00
2 TP	Dichlorodifluoromethane	0.224	0.220	1.8	90	0.00
3 TP	Chloromethane	0.250	0.266	-6.4	91	-0.01
4 TP	Vinyl chloride	0.233	0.255	-9.4	95	0.00
5 TP	Bromomethane	* 10.000	15.169	-51.7#	166	0.00
6 TP	Chloroethane	0.140	0.168	-20.0	99	0.00
7 TP	Trichlorofluoromethane	0.267	0.322	-20.6#	114	0.00
8 TP	Ethyl ether	0.105	0.108	-2.9	92	0.00
10 TP	1,1-Dichloroethene	0.160	0.164	-2.5	96	0.00
11 TP	Carbon disulfide	0.494	0.533	-7.9	96	0.00
12 TP	Freon-113	0.167	0.185	-10.8	103	0.00
14 TP	Acrolein	0.045	0.034	24.4#	69	-0.01
15 TP	Methylene chloride	0.202	0.204	-1.0	90	0.00
17 TP	Acetone	0.073	0.050	31.5#	64	0.00
18 TP	trans-1,2-Dichloroethene	0.172	0.194	-12.8	99	0.00
19 TP	Methyl acetate	0.171	0.117	31.6#	64	-0.01
21 TP	Methyl tert-butyl ether	0.642	0.584	9.0	78	0.00
22 TP	tert-Butyl alcohol	0.023	0.014	39.1#	53	0.00
24 TP	Diisopropyl ether	0.920	0.880	4.3	82	-0.01
25 TP	1,1-Dichloroethane	0.404	0.440	-8.9	94	0.00
26 TP	Halothane	0.139	0.146	-5.0	93	0.00
27 TP	Acrylonitrile	0.084	0.068	19.0	69	0.00
28 TP	Ethyl tert-butyl ether	0.798	0.750	6.0	81	0.00
29 TP	Vinyl acetate	0.612	0.590	3.6	96	0.00
30 TP	cis-1,2-Dichloroethene	0.206	0.226	-9.7	97	0.00
31 TP	2,2-Dichloropropane	0.270	0.307	-13.7	103	0.00
33 TP	Bromochloromethane	0.091	0.101	-11.0	96	-0.01
34 TP	Cyclohexane	0.473	0.501	-5.9	100	0.00
35 TP	Chloroform	0.335	0.357	-6.6	93	0.00
36 TP	Ethyl acetate	0.256	0.179	30.1#	62	0.00
37 TP	Carbon tetrachloride	0.256	0.293	-14.5	102	-0.01
38 TP	Tetrahydrofuran	0.079	0.059	25.3#	66	0.00
39 S	Dibromofluoromethane	0.234	0.233	0.4	88	0.00
40 TP	1,1,1-Trichloroethane	0.304	0.338	-11.2	99	-0.01
42 TP	2-Butanone	0.105	0.078	25.7#	67	-0.02
43 TP	1,1-Dichloropropene	0.256	0.294	-14.8	102	-0.01
45 TP	Benzene	0.792	0.881	-11.2	95	0.00
46 TP	tert-Amyl methyl ether	0.598	0.536	10.4	78	-0.01
47 S	1,2-Dichloroethane-d4	0.312	0.290	7.1	83	0.00

Evaluate Continuing Calibration Report

Data Path : K:\Elaine\2024\240816A\
 Data File : VE240816A01.D
 Acq On : 16 Aug 2024 6:49 am
 Operator : ELAINE:PID
 Sample : WG1960272-2
 Misc : WG1960272,ICAL21358
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 16 07:19:31 2024
 Quant Method : K:\Elaine\2024\240816A\Elaine_240731N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Aug 01 12:13:24 2024
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
48 T	1,2-Dichloroethane	0.306	0.310	-1.3	88	0.00
51 TP	Methyl cyclohexane	0.356	0.392	-10.1	106	0.00
52 TP	Trichloroethene	0.199	0.223	-12.1	96	0.00
54 TP	Dibromomethane	0.115	0.117	-1.7	89	0.00
55 TP	1,2-Dichloropropane	0.239	0.247	-3.3	89	-0.01
58 TP	Bromodichloromethane	0.283	0.300	-6.0	92	0.00
61 TP	1,4-Dioxane	0.00192	0.00153#	20.3#	71	-0.01
62 TP	cis-1,3-Dichloropropene	0.319	0.336	-5.3	89	0.00
63 I	Chlorobenzene-d5	1.000	1.000	0.0	92	0.00
64 S	Toluene-d8	1.317	1.324	-0.5	92	0.00
65 TP	Toluene	0.689	0.770	-11.8	99	0.00
66 TP	4-Methyl-2-pentanone	0.117	0.090	23.1#	66	-0.01
67 TP	Tetrachloroethene	0.293	0.360	-22.9#	109	-0.01
69 TP	trans-1,3-Dichloropropene	0.388	0.374	3.6	83	0.00
71 TP	Ethyl methacrylate	0.369	0.308	16.5	73	0.00
72 TP	1,1,2-Trichloroethane	0.193	0.195#	-1.0	88	-0.01
73 TP	Chlorodibromomethane	0.270	0.265	1.9	86	0.00
74 TP	1,3-Dichloropropane	0.408	0.409	-0.2	87	-0.01
75 TP	1,2-Dibromoethane	0.228	0.218	4.4	84	0.00
77 TP	2-Hexanone	0.229	0.153	33.2#	60	0.00
78 TP	Chlorobenzene	0.734	0.816	-11.2	98	0.00
79 TP	Ethylbenzene	1.335	1.522	-14.0	99	0.00
80 TP	1,1,1,2-Tetrachloroethane	0.269	0.300	-11.5	96	-0.01
81 TP	p/m Xylene	0.509	0.586	-15.1	98	0.00
82 TP	o Xylene	0.497	0.562	-13.1	97	0.00
83 TP	Styrene	0.816	0.911	-11.6	94	0.00
84 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	96	0.00
85 TP	Bromoform	0.325	0.295	9.2	86	0.00
87 TP	Isopropylbenzene	2.395	2.535	-5.8	100	0.00
88 S	4-Bromofluorobenzene	0.924	0.812	12.1	84	0.00
89 TP	Bromobenzene	0.605	0.622	-2.8	96	0.00
90 TP	n-Propylbenzene	2.861	3.058	-6.9	100	0.00
91 TP	1,4-Dichlorobutane	1.046	0.892	14.7	81	0.00
92 TP	1,1,2,2-Tetrachloroethane	0.508	0.454	10.6	89	0.00
93 TP	4-Ethyltoluene	2.321	2.459	-5.9	98	0.00
94 TP	2-Chlorotoluene	1.683	1.753	-4.2	96	0.00
95 TP	1,3,5-Trimethylbenzene	2.036	2.160	-6.1	97	0.00

Evaluate Continuing Calibration Report

Data Path : K:\Elaine\2024\240816A\
 Data File : VE240816A01.D
 Acq On : 16 Aug 2024 6:49 am
 Operator : ELAINE:PID
 Sample : WG1960272-2
 Misc : WG1960272,ICAL21358
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 16 07:19:31 2024
 Quant Method : K:\Elaine\2024\240816A\Elaine_240731N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Aug 01 12:13:24 2024
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
96 TP	1,2,3-Trichloropropane	0.415	0.361	13.0	81	0.00
97 TP	trans-1,4-Dichloro-2-butene	0.204	0.159	22.1#	76	0.00
98 TP	4-Chlorotoluene	1.763	1.823	-3.4	96	0.00
99 TP	tert-Butylbenzene	1.712	1.784	-4.2	97	0.00
102 TP	1,2,4-Trimethylbenzene	2.033	2.115	-4.0	96	0.00
103 TP	sec-Butylbenzene	2.538	2.672	-5.3	100	0.00
104 TP	p-Isopropyltoluene	2.139	2.250	-5.2	99	0.00
105 TP	1,3-Dichlorobenzene	1.117	1.203	-7.7	99	0.00
106 TP	1,4-Dichlorobenzene	1.116	1.179	-5.6	98	0.00
107 TP	p-Diethylbenzene	1.261	1.285	-1.9	95	0.00
108 TP	n-Butylbenzene	1.842	1.942	-5.4	100	0.00
109 TP	1,2-Dichlorobenzene	1.074	1.100	-2.4	95	0.00
110 TP	1,2,4,5-Tetramethylbenzene	2.046	1.957	4.3	89	0.00
111 TP	1,2-Dibromo-3-chloropropane *	10.000	7.474	25.3#	74	-0.01
112 TP	1,3,5-Trichlorobenzene	0.853	0.865	-1.4	94	0.00
113 TP	Hexachlorobutadiene	0.283	0.297	-4.9	101	0.00
114 TP	1,2,4-Trichlorobenzene	0.770	0.713	7.4	87	0.00
115 TP	Naphthalene	1.697	1.306	23.0#	74	0.00
116 TP	1,2,3-Trichlorobenzene	0.707	0.611	13.6	82	0.00

* Evaluation of CC level amount vs concentration.

(#) = Out of Range SPCC's out = 2 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240816A\
 Data File : VE240816A01.D
 Acq On : 16 Aug 2024 6:49 am
 Operator : ELAINE:PID
 Sample : WG1960272-2
 Misc : WG1960272,ICAL21358
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 16 07:19:31 2024
 Quant Method : K:\Elaine\2024\240816A\Elaine_240731N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Aug 01 12:13:24 2024
 Response via : Initial Calibration

Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane

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

Internal Standards						
1) Fluorobenzene	5.959	96	184749	10.000	ug/L	0.00
63) Chlorobenzene-d5	9.492	117	135681	10.000	ug/L	0.00
84) 1,4-Dichlorobenzene-d4	12.205	152	81388	10.000	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	5.147	113	43059	9.956	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	99.56%		
47) 1,2-Dichloroethane-d4	5.674	65	53614	9.290	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	92.90%		
64) Toluene-d8	7.649	98	179608	10.050	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	100.50%		
88) 4-Bromofluorobenzene	10.992	95	66071	8.788	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	87.88%		
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.592	85	40729	9.833	ug/L	98
3) Chloromethane	1.778	50	49185	10.665	ug/L	98
4) Vinyl chloride	1.854	62	47085	10.955	ug/L	95
5) Bromomethane	2.161	94	19849	15.169	ug/L	95
6) Chloroethane	2.278	64	31039	11.962	ug/L	97
7) Trichlorofluoromethane	2.414	101	59431	12.033	ug/L	94
8) Ethyl ether	2.713	74	20002	10.285	ug/L #	77
10) 1,1-Dichloroethene	2.900	96	30360	10.261	ug/L #	74
11) Carbon disulfide	2.927	76	98389	10.777	ug/L	98
12) Freon-113	2.939	101	34254	11.109	ug/L	90
14) Acrolein	3.215	56	6208	7.429	ug/L #	81
15) Methylene chloride	3.454	84	37654	10.089	ug/L	87
17) Acetone	3.496	43	9205	6.791	ug/L	93
18) trans-1,2-Dichloroethene	3.602	96	35888	11.284	ug/L	84
19) Methyl acetate	3.611	43	21584	6.831	ug/L	96
21) Methyl tert-butyl ether	3.703	73	107840	9.093	ug/L	95
22) tert-Butyl alcohol	3.797	59	12689M1	29.986	ug/L	
24) Diisopropyl ether	4.060	45	162523	9.566	ug/L	95
25) 1,1-Dichloroethane	4.188	63	81381	10.903	ug/L	97
26) Halothane	4.244	117	26882	10.480	ug/L	90
27) Acrylonitrile	4.232	53	12473	8.008	ug/L #	83
28) Ethyl tert-butyl ether	4.411	59	138616	9.402	ug/L	90
29) Vinyl acetate	4.422	43	109055	9.645	ug/L #	95
30) cis-1,2-Dichloroethene	4.707	96	41829	10.972	ug/L	98
31) 2,2-Dichloropropane	4.813	77	56667	11.344	ug/L	88

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240816A\
 Data File : VE240816A01.D
 Acq On : 16 Aug 2024 6:49 am
 Operator : ELAINE:PID
 Sample : WG1960272-2
 Misc : WG1960272,ICAL21358
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 16 07:19:31 2024
 Quant Method : K:\Elaine\2024\240816A\Elaine_240731N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Aug 01 12:13:24 2024
 Response via : Initial Calibration

Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
33)	Bromochloromethane	4.896	128	18714	11.191	ug/L	90
34)	Cyclohexane	4.899	56	92627	10.604	ug/L	95
35)	Chloroform	4.971	83	65968	10.661	ug/L	98
36)	Ethyl acetate	5.080	43	32982	6.980	ug/L #	84
37)	Carbon tetrachloride	5.103	117	54120	11.451	ug/L	93
38)	Tetrahydrofuran	5.122	42	10901	7.432	ug/L	91
40)	1,1,1-Trichloroethane	5.169	97	62517	11.125	ug/L	95
42)	2-Butanone	5.259	43	14377	7.423	ug/L #	80
43)	1,1-Dichloropropene	5.289	75	54239	11.465	ug/L	97
45)	Benzene	5.538	78	162716	11.118	ug/L	93
46)	tert-Amyl methyl ether	5.652	73	99087	8.972	ug/L	99
48)	1,2-Dichloroethane	5.747	62	57246	10.135	ug/L	99
51)	Methyl cyclohexane	6.123	83	72449	11.015	ug/L	91
52)	Trichloroethene	6.134	95	41239	11.208	ug/L	96
54)	Dibromomethane	6.572	93	21673	10.226	ug/L #	83
55)	1,2-Dichloropropane	6.675	63	45622	10.327	ug/L	97
58)	Bromodichloromethane	6.751	83	55497	10.601	ug/L #	93
61)	1,4-Dioxane	6.957	88	14170M1	399.657	ug/L	
62)	cis-1,3-Dichloropropene	7.442	75	62076	10.531	ug/L	95
65)	Toluene	7.704	92	104438	11.179	ug/L	94
66)	4-Methyl-2-pentanone	8.137	58	12158	7.630	ug/L #	87
67)	Tetrachloroethene	8.151	166	48864	12.312	ug/L	95
69)	trans-1,3-Dichloropropene	8.187	75	50750	9.648	ug/L	98
71)	Ethyl methacrylate	8.382	69	41856	8.359	ug/L #	67
72)	1,1,2-Trichloroethane	8.374	83	26437	10.078	ug/L	96
73)	Chlorodibromomethane	8.586	129	35956	9.803	ug/L	99
74)	1,3-Dichloropropane	8.694	76	55552	10.031	ug/L	96
75)	1,2-Dibromoethane	8.862	107	29593	9.546	ug/L	89
77)	2-Hexanone	9.143	43	20813	6.703	ug/L #	93
78)	Chlorobenzene	9.511	112	110773	11.128	ug/L #	82
79)	Ethylbenzene	9.548	91	206510	11.405	ug/L	99
80)	1,1,1,2-Tetrachloroethane	9.589	131	40736	11.162	ug/L	97
81)	p/m Xylene	9.740	106	158906	23.022	ug/L	99
82)	o Xylene	10.278	106	152403	22.579	ug/L	92
83)	Styrene	10.345	104	247315	22.348	ug/L	99
85)	Bromoform	10.370	173	24046	9.080	ug/L	94
87)	Isopropylbenzene	10.666	105	206349	10.588	ug/L	96
89)	Bromobenzene	11.101	156	50662	10.296	ug/L	98
90)	n-Propylbenzene	11.146	91	248871	10.687	ug/L	96
91)	1,4-Dichlorobutane	11.162	55	72637	8.534	ug/L	99
92)	1,1,2,2-Tetrachloroethane	11.235	83	36924	8.929	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240816A\
 Data File : VE240816A01.D
 Acq On : 16 Aug 2024 6:49 am
 Operator : ELAINE:PID
 Sample : WG1960272-2
 Misc : WG1960272,ICAL21358
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 16 07:19:31 2024
 Quant Method : K:\Elaine\2024\240816A\Elaine_240731N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Aug 01 12:13:24 2024
 Response via : Initial Calibration

Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
93)	4-Ethyltoluene	11.274	105	200115	10.593	ug/L	98
94)	2-Chlorotoluene	11.313	91	142671M1	10.414	ug/L	
95)	1,3,5-Trimethylbenzene	11.371	105	175818	10.609	ug/L	100
96)	1,2,3-Trichloropropane	11.374	75	29403	8.715	ug/L	93
97)	trans-1,4-Dichloro-2-b...	11.430	53	12981	7.830	ug/L	92
98)	4-Chlorotoluene	11.500	91	148347	10.337	ug/L	98
99)	tert-Butylbenzene	11.714	119	145179	10.422	ug/L #	97
102)	1,2,4-Trimethylbenzene	11.792	105	172121	10.405	ug/L	94
103)	sec-Butylbenzene	11.904	105	217480	10.528	ug/L	98
104)	p-Isopropyltoluene	12.057	119	183122	10.520	ug/L	96
105)	1,3-Dichlorobenzene	12.124	146	97898	10.773	ug/L	96
106)	1,4-Dichlorobenzene	12.216	146	95941	10.562	ug/L	100
107)	p-Diethylbenzene	12.434	119	104597	10.190	ug/L	97
108)	n-Butylbenzene	12.490	91	158035	10.542	ug/L	97
109)	1,2-Dichlorobenzene	12.640	146	89552	10.243	ug/L	98
110)	1,2,4,5-Tetramethylben...	13.229	119	159301	9.564	ug/L	94
111)	1,2-Dibromo-3-chloropr...	13.418	155	5758M1	7.474	ug/L	
112)	1,3,5-Trichlorobenzene	13.454	180	70429	10.146	ug/L	94
113)	Hexachlorobutadiene	14.029	225	24183	10.512	ug/L	91
114)	1,2,4-Trichlorobenzene	14.051	180	58063	9.265	ug/L	98
115)	Naphthalene	14.344	128	106333	7.698	ug/L	100
116)	1,2,3-Trichlorobenzene	14.514	180	49712	8.634	ug/L	94

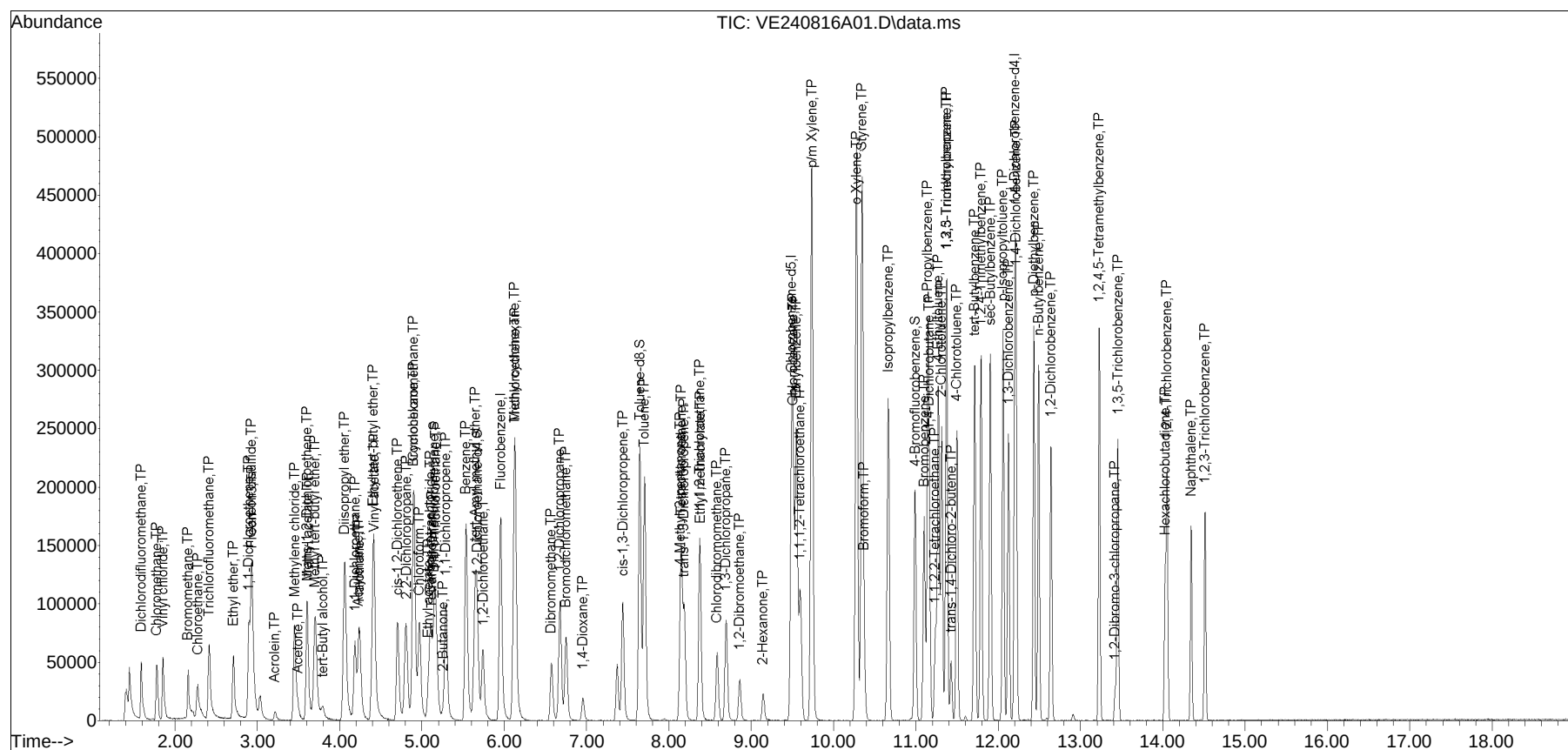
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240816A\
 Data File : VE240816A01.D
 Acq On : 16 Aug 2024 6:49 am
 Operator : ELAINE:PID
 Sample : WG1960272-2
 Misc : WG1960272,ICAL21358
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 16 07:19:31 2024
 Quant Method : K:\Elaine\2024\240816A\Elaine_240731N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Aug 01 12:13:24 2024
 Response via : Initial Calibration

Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane

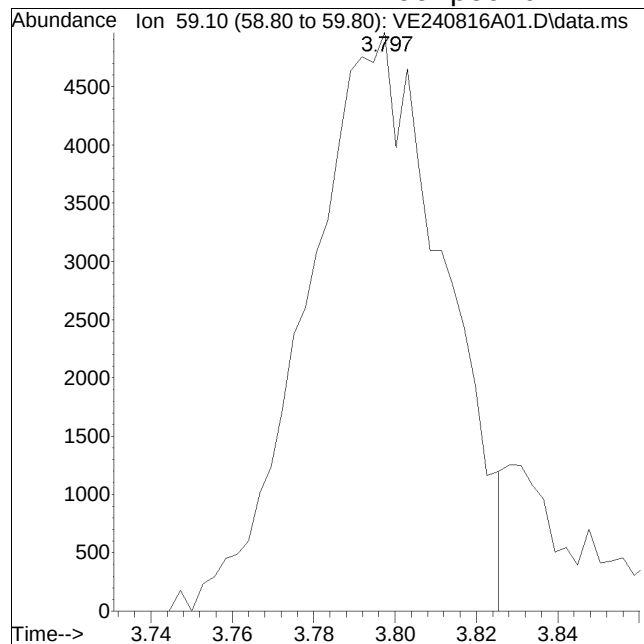


Manual Integration Report

Data Path : K:\Elaine\2024\240816A\
Data File : VE240816A01.D
Date Inj'd : 8/16/2024 6:49 am
Sample : WG1960272-2

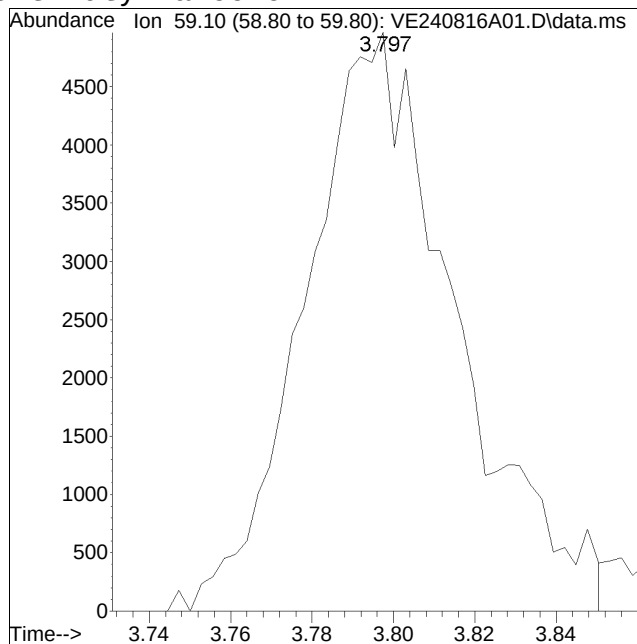
QMethod : Elaine_240731N_8260.m
Operator : ELAINE:PID
Instrument : Elaine
Quant Date : 8/16/2024 7:18 am

Compound #22: tert-Butyl alcohol



Original Peak Response = 11528

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

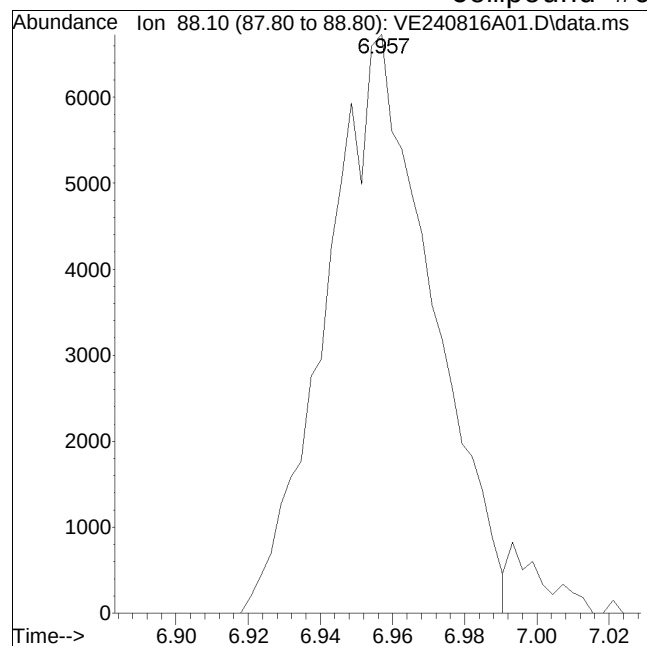


Manual Peak Response = 12689 M1

Manual Integration Report

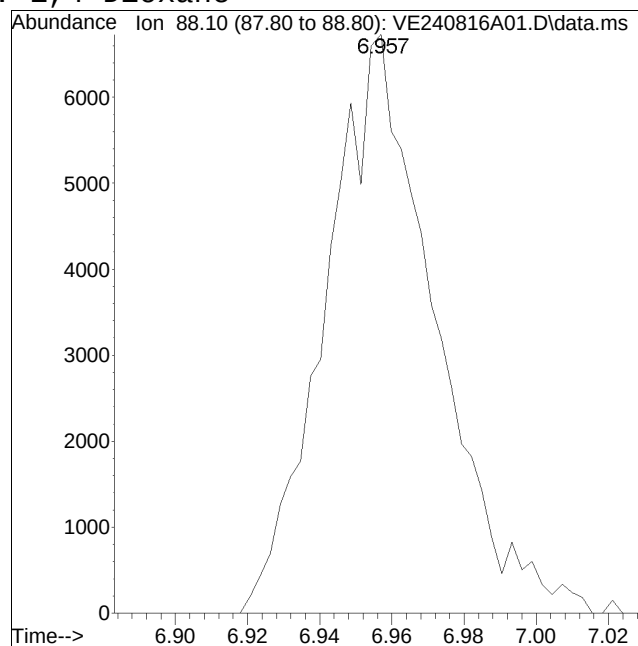
Data Path : K:\Elaine\2024\240816A\ QMethod : Elaine_240731N_8260.m
Data File : VE240816A01.D Operator : ELAINE:PID
Date Inj'd : 8/16/2024 6:49 am Instrument : Elaine
Sample : WG1960272-2 Quant Date : 8/16/2024 7:18 am

Compound #61: 1,4-Dioxane



Original Peak Response = 13626

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

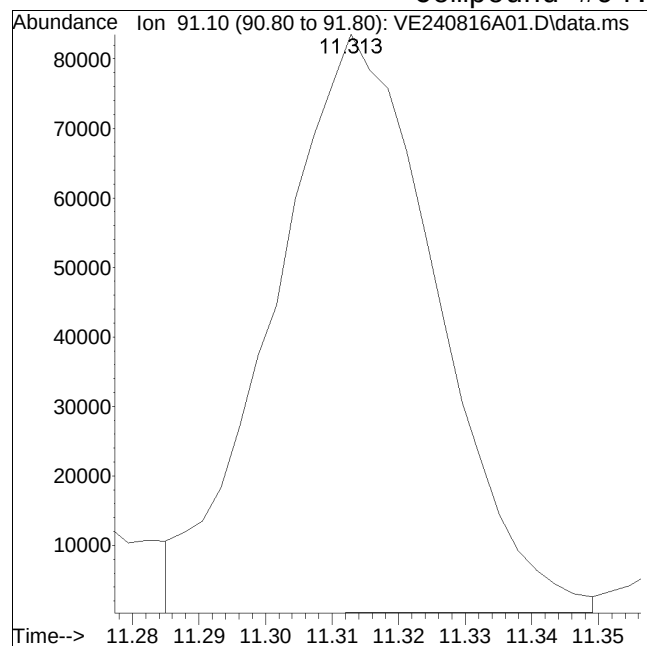


Manual Peak Response = 14170 M1

Manual Integration Report

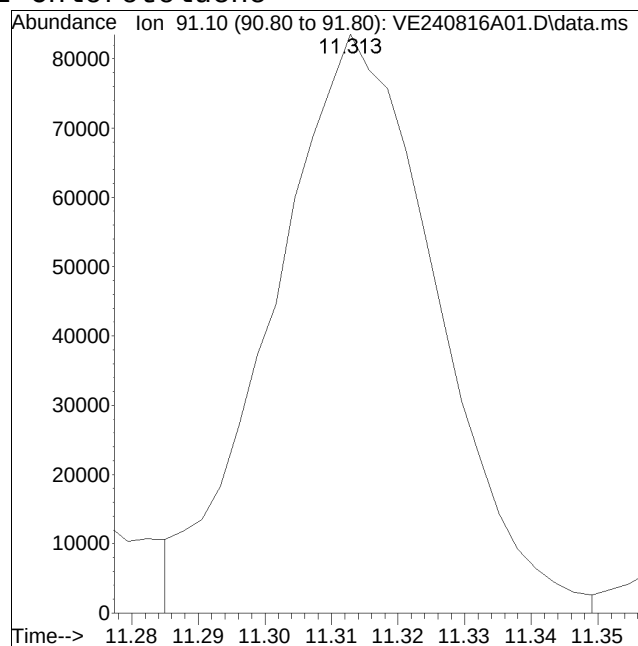
Data Path : K:\Elaine\2024\240816A\ QMethod : Elaine_240731N_8260.m
Data File : VE240816A01.D Operator : ELAINE:PID
Date Inj'd : 8/16/2024 6:49 am Instrument : Elaine
Sample : WG1960272-2 Quant Date : 8/16/2024 7:18 am

Compound #94: 2-Chlorotoluene



Original Peak Response = 141458

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

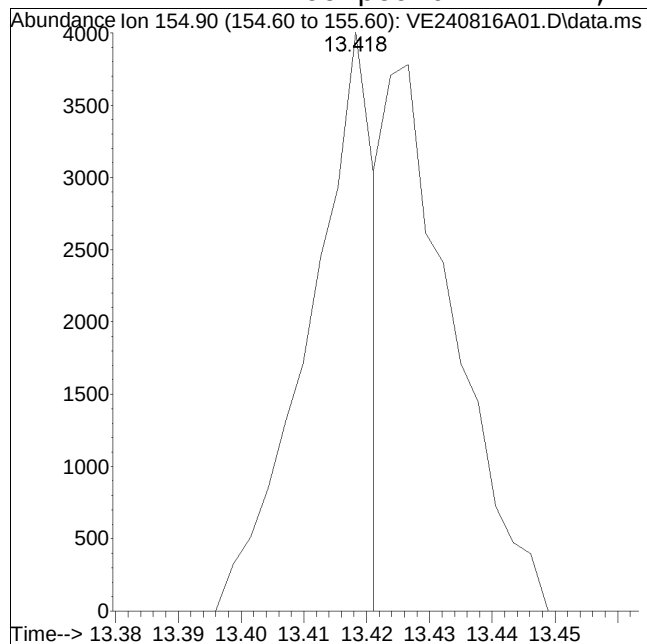


Manual Peak Response = 142671 M1

Manual Integration Report

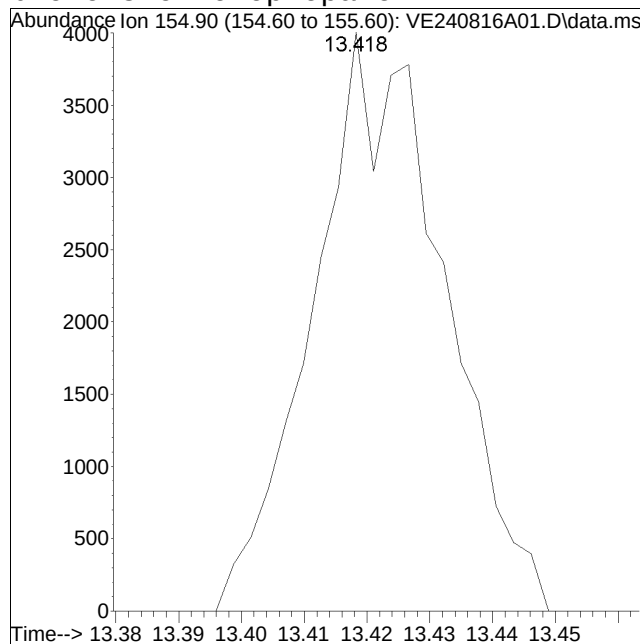
Data Path : K:\Elaine\2024\240816A\ QMethod : Elaine_240731N_8260.m
Data File : VE240816A01.D Operator : ELAINE:PID
Date Inj'd : 8/16/2024 6:49 am Instrument : Elaine
Sample : WG1960272-2 Quant Date : 8/16/2024 7:18 am

Compound #111: 1,2-Dibromo-3-chloropropane



Original Peak Response = 2868

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.



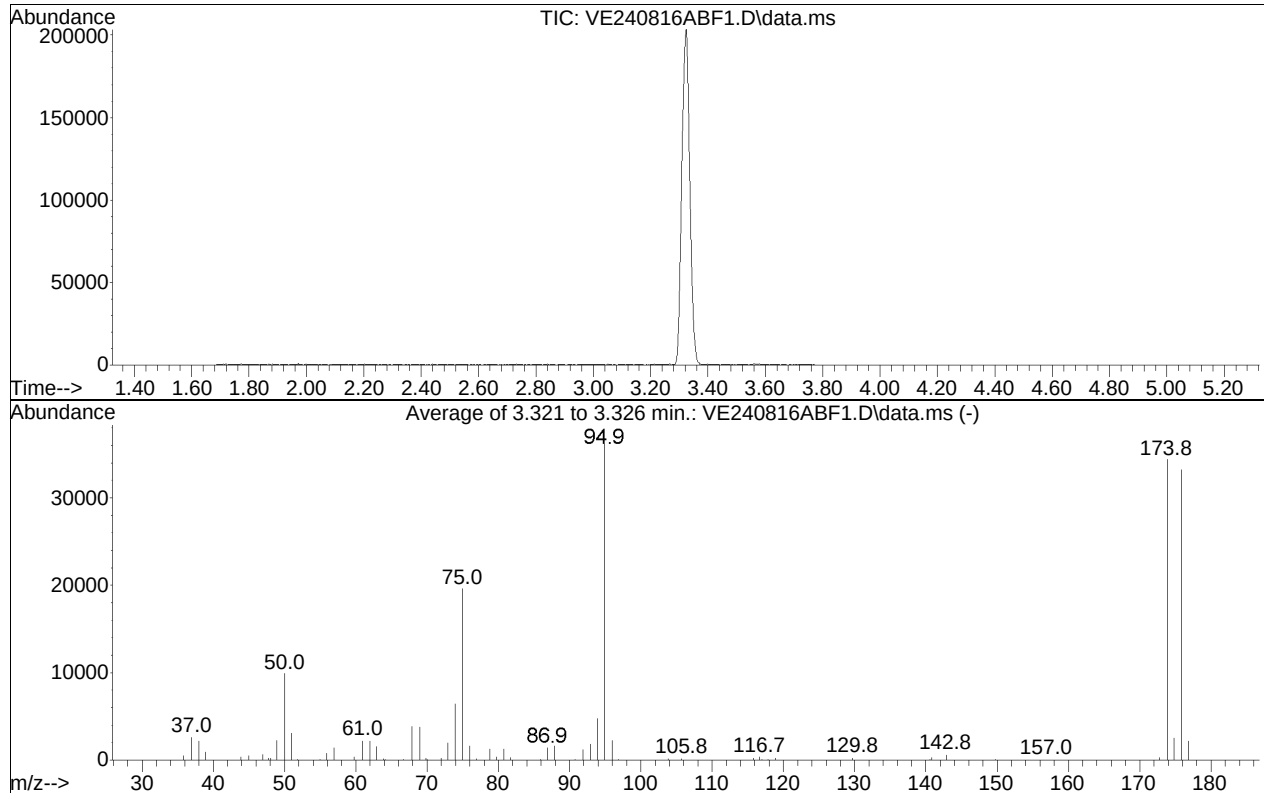
Manual Peak Response = 5758 M1

BFB

Data Path : K:\Elaine\2024\240816A\
 Data File : VE240816ABF1.D
 Acq On : 16 Aug 2024 6:34 am
 Operator : ELAINE:PID
 Sample : WG1960272-1
 Misc : WG1960272
 ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : K:\Elaine\2024\240816A\Elaine_240731N_8260.m
 Title : VOLATILES BY GC/MS
 Last Update : Thu Aug 01 12:13:24 2024



AutoFind: Scans 587, 588, 589; Background Corrected with Scan 572

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	27.1	9897	PASS
75	95	30	60	53.6	19605	PASS
95	95	100	100	100.0	36552	PASS
96	95	5	9	6.1	2245	PASS
173	174	0.00	2	1.0	336	PASS
174	95	50	100	94.2	34440	PASS
175	174	5	9	7.3	2524	PASS
176	174	95	101	96.5	33229	PASS
177	176	5	9	6.6	2189	PASS

Volatiles Raw QC Data

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240816A\
 Data File : VE240816A05.D
 Acq On : 16 Aug 2024 8:27 am
 Operator : ELAINE:PID
 Sample : WG1960272-5,31,10,10
 Misc : WG1960272,ICAL21358
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 16 09:07:44 2024
 Quant Method : K:\Elaine\2024\240816A\Elaine_240731N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Aug 01 12:13:24 2024
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240816A\VE240816A01.D
 Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane

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

Internal Standards						
1) Fluorobenzene	5.956	96	165632	10.000	ug/L	-0.01
Standard Area 1 = 184749			Recovery =	89.65%		
63) Chlorobenzene-d5	9.492	117	125198	10.000	ug/L	0.00
Standard Area 1 = 135681			Recovery =	92.27%		
84) 1,4-Dichlorobenzene-d4	12.202	152	72798	10.000	ug/L	0.00
Standard Area 1 = 81388			Recovery =	89.45%		
System Monitoring Compounds						
39) Dibromofluoromethane	5.150	113	41182	10.621	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	106.21%		
47) 1,2-Dichloroethane-d4	5.671	65	52943	10.233	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	102.33%		
64) Toluene-d8	7.648	98	166681	10.107	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	101.07%		
88) 4-Bromofluorobenzene	10.989	95	62270	9.260	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	92.60%		
Target Compounds						
45) Benzene	0.000		0		N.D.	Qvalue
65) Toluene	0.000		0		N.D.	
79) Ethylbenzene	9.559	91	32		N.D.	
81) p/m Xylene	0.000		0		N.D.	
82) o Xylene	0.000		0		N.D.	
87) Isopropylbenzene	10.671	105	62		N.D.	
90) n-Propylbenzene	11.151	91	92		N.D.	
95) 1,3,5-Trimethylbenzene	11.374	105	32		N.D.	
99) tert-Butylbenzene	11.714	119	37		N.D.	
102) 1,2,4-Trimethylbenzene	11.798	105	69		N.D.	
103) sec-Butylbenzene	11.901	105	32		N.D.	
104) p-Isopropyltoluene	12.066	119	150		N.D.	
108) n-Butylbenzene	12.495	91	316		N.D.	
115) Naphthalene	14.350	128	518		N.D.	

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

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240816A\
 Data File : VE240816A05.D
 Acq On : 16 Aug 2024 8:27 am
 Operator : ELAINE:PID
 Sample : WG1960272-5,31,10,10
 Misc : WG1960272,ICAL21358
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 16 09:07:44 2024
 Quant Method : K:\Elaine\2024\240816A\Elaine_240731N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Aug 01 12:13:24 2024
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240816A\VE240816A01.D
 Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane

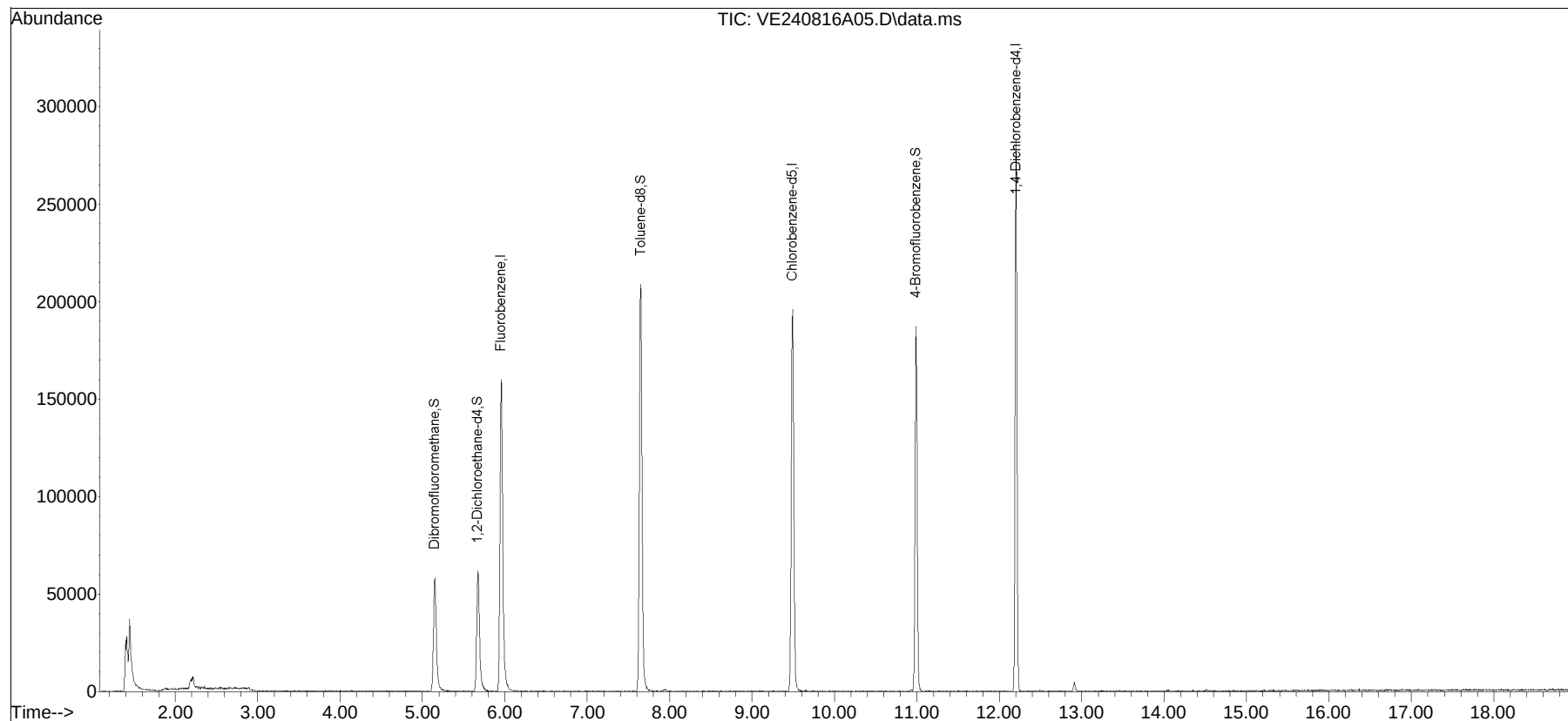
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240816A\
 Data File : VE240816A05.D
 Acq On : 16 Aug 2024 8:27 am
 Operator : ELAINE:PID
 Sample : WG1960272-5,31,10,10
 Misc : WG1960272,ICAL21358
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 16 09:07:44 2024
 Quant Method : K:\Elaine\2024\240816A\Elaine_240731N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Aug 01 12:13:24 2024
 Response via : Initial Calibration

Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane



Manual Integration Report

Data Path	: K:\Elaine\2024\240816A\	QMethod	: Elaine_240731N_8260.m
Data File	: VE240816A05.D	Operator	: ELAINE:PID
Date Inj'd	: 8/16/2024 8:27 am	Instrument	: Elaine
Sample	: WG1960272-5,31,10,10	Quant Date	: 8/16/2024 9:06 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240816A\
 Data File : VE240816A01.D
 Acq On : 16 Aug 2024 6:49 am
 Operator : ELAINE:PID
 Sample : WG1960272-3,31,10,10
 Misc : WG1960272,ICAL21358
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 16 07:19:31 2024
 Quant Method : K:\Elaine\2024\240816A\Elaine_240731N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Aug 01 12:13:24 2024
 Response via : Initial Calibration

Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane

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

Internal Standards						
1) Fluorobenzene	5.959	96	184749	10.000	ug/L	0.00
63) Chlorobenzene-d5	9.492	117	135681	10.000	ug/L	0.00
84) 1,4-Dichlorobenzene-d4	12.205	152	81388	10.000	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	5.147	113	43059	9.956	ug/L	0.00
Spiked Amount	10.000	Range 70 - 130	Recovery	=	99.56%	
47) 1,2-Dichloroethane-d4	5.674	65	53614	9.290	ug/L	0.00
Spiked Amount	10.000	Range 70 - 130	Recovery	=	92.90%	
64) Toluene-d8	7.649	98	179608	10.050	ug/L	0.00
Spiked Amount	10.000	Range 70 - 130	Recovery	=	100.50%	
88) 4-Bromofluorobenzene	10.992	95	66071	8.788	ug/L	0.00
Spiked Amount	10.000	Range 70 - 130	Recovery	=	87.88%	
Target Compounds						
						Qvalue
45) Benzene	5.538	78	162716	11.118	ug/L	93
65) Toluene	7.704	92	104438	11.179	ug/L	94
79) Ethylbenzene	9.548	91	206510	11.405	ug/L	99
81) p/m Xylene	9.740	106	158906	23.022	ug/L	99
82) o Xylene	10.278	106	152403	22.579	ug/L	92
87) Isopropylbenzene	10.666	105	206349	10.588	ug/L	96
90) n-Propylbenzene	11.146	91	248871	10.687	ug/L	96
95) 1,3,5-Trimethylbenzene	11.371	105	175818	10.609	ug/L	100
99) tert-Butylbenzene	11.714	119	145179	10.422	ug/L #	97
102) 1,2,4-Trimethylbenzene	11.792	105	172121	10.405	ug/L	94
103) sec-Butylbenzene	11.904	105	217480	10.528	ug/L	98
104) p-Isopropyltoluene	12.057	119	183122	10.520	ug/L	96
108) n-Butylbenzene	12.490	91	158035	10.542	ug/L	97
115) Naphthalene	14.344	128	106333	7.698	ug/L	100

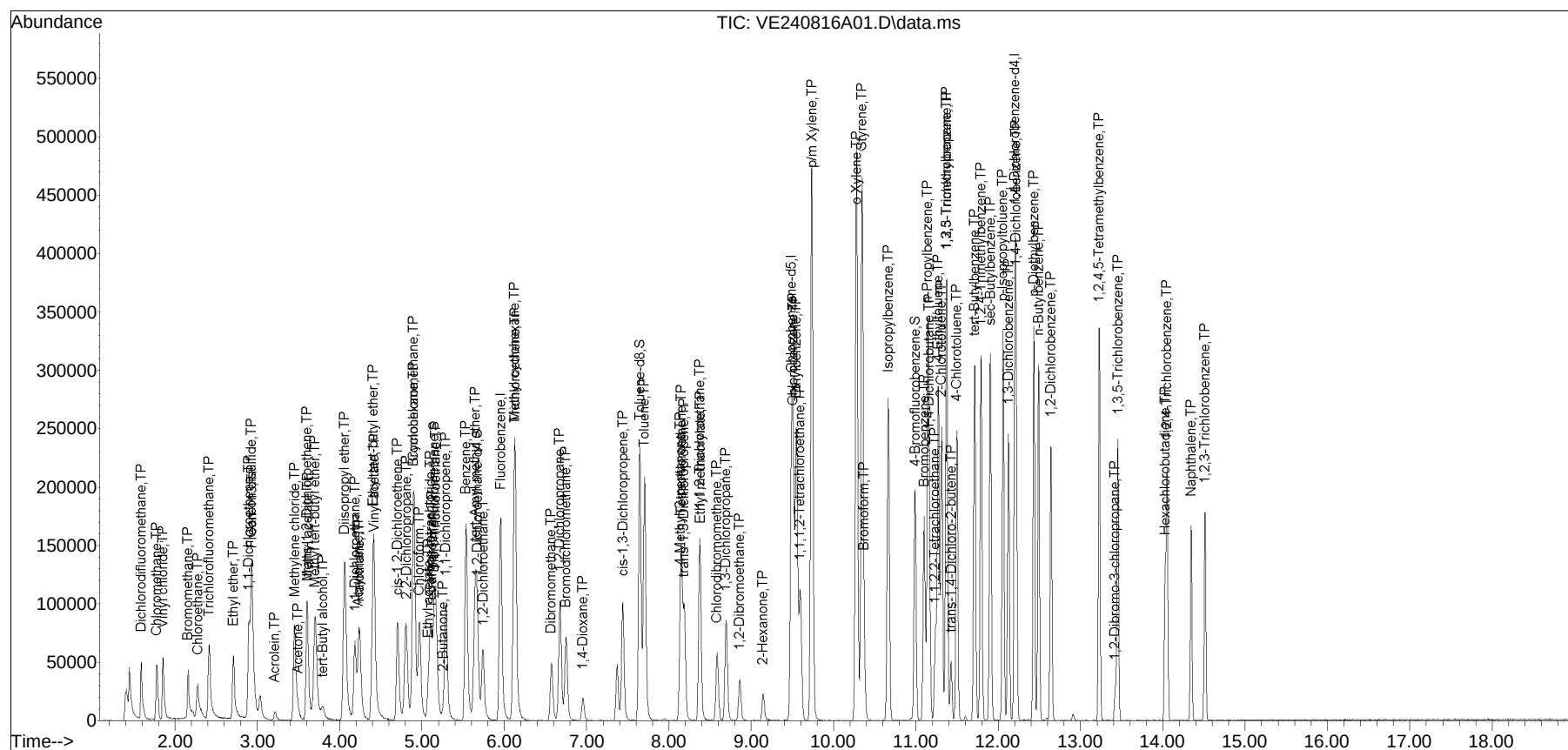
(#) = qualifier out of range (m) = manual integration (+) = signals summed

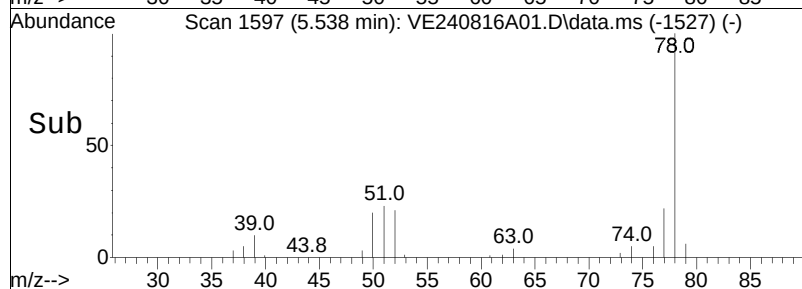
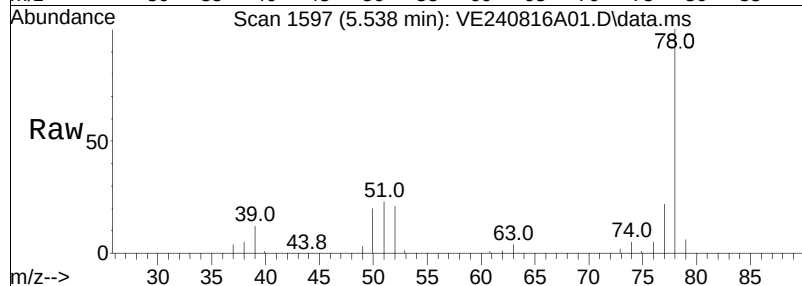
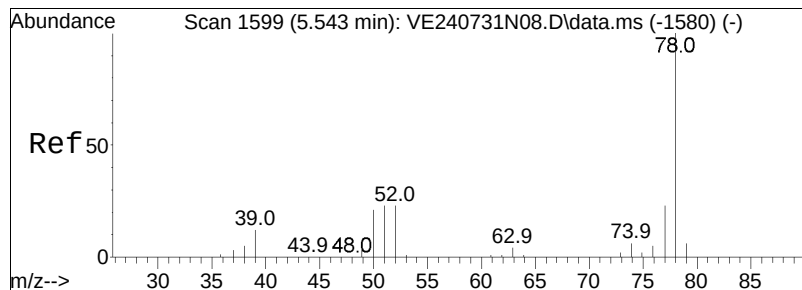
Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240816A\
 Data File : VE240816A01.D
 Acq On : 16 Aug 2024 6:49 am
 Operator : ELAINE:PID
 Sample : WG1960272-3,31,10,10
 Misc : WG1960272,ICAL21358
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 16 07:19:31 2024
 Quant Method : K:\Elaine\2024\240816A\Elaine_240731N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Aug 01 12:13:24 2024
 Response via : Initial Calibration

Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane





#45

Benzene

Concen: 11.12 ug/L

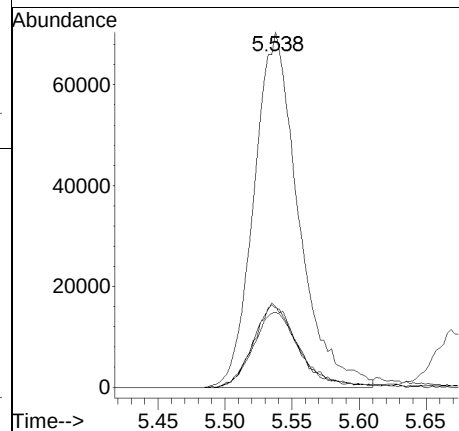
RT: 5.538 min Scan# 1597

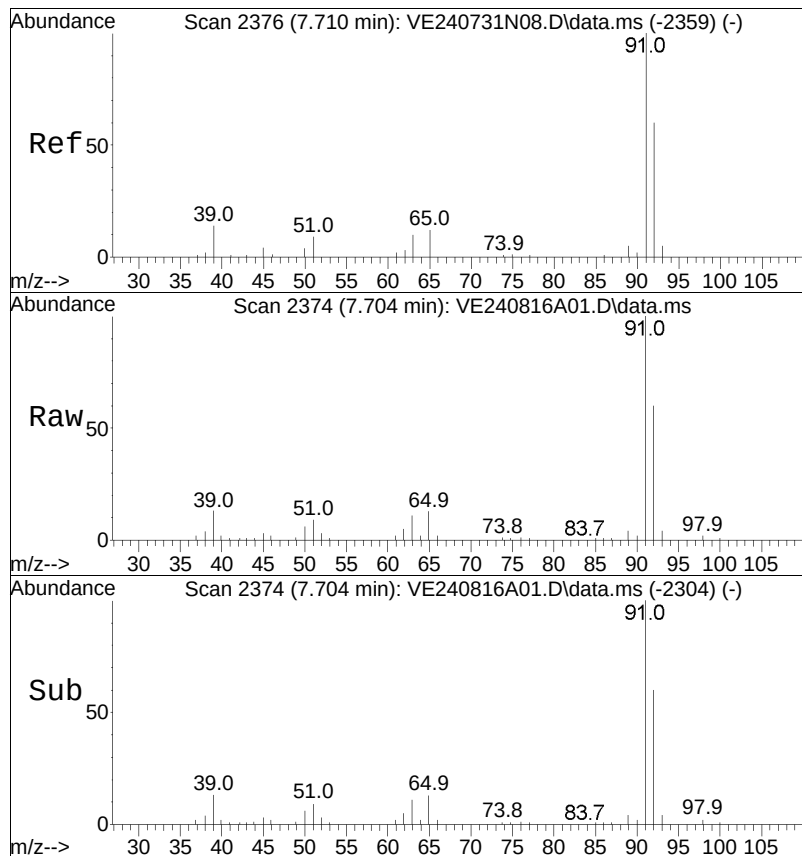
Delta R.T. -0.005 min

Lab File: VE240816A01.D

Acq: 16 Aug 2024 6:49 am

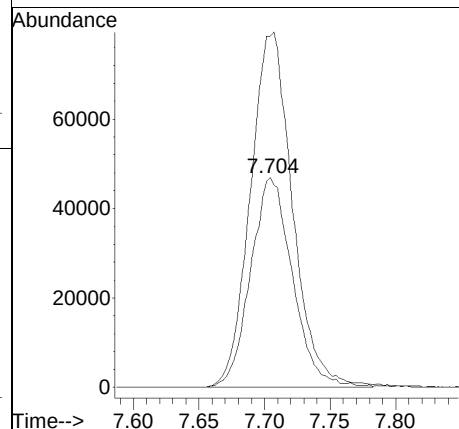
Tgt Ion:	78	Resp:	162716
Ion Ratio	Lower	Upper	
78	100		
77	23.8	12.8	26.6
51	23.2	13.5	27.9
52	21.9	12.0	25.0

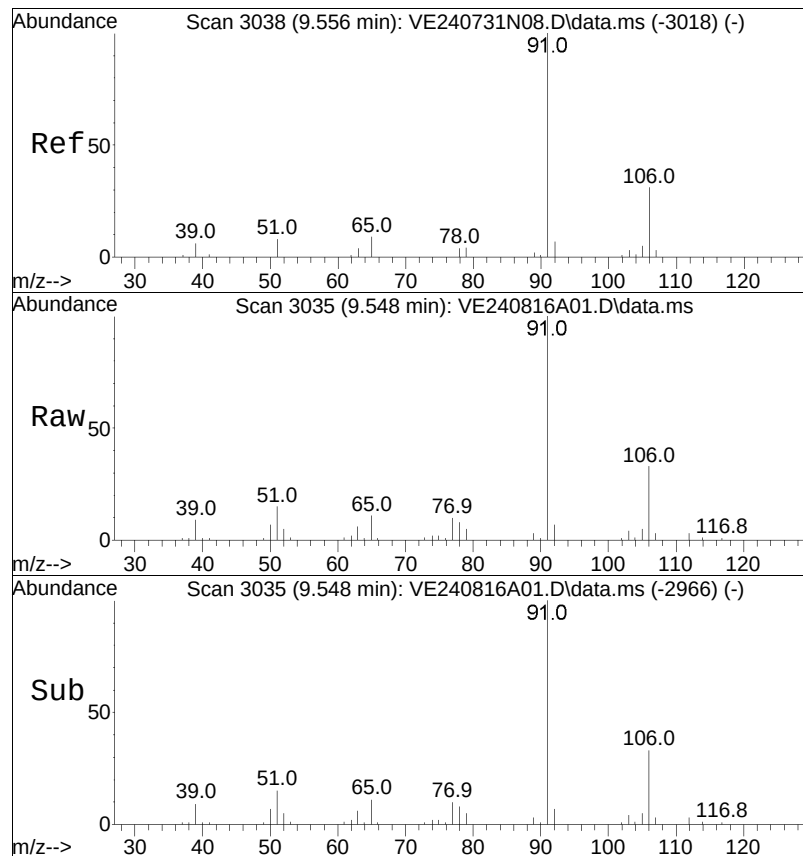




#65
Toluene
Concen: 11.18 ug/L
RT: 7.704 min Scan# 2374
Delta R.T. -0.006 min
Lab File: VE240816A01.D
Acq: 16 Aug 2024 6:49 am

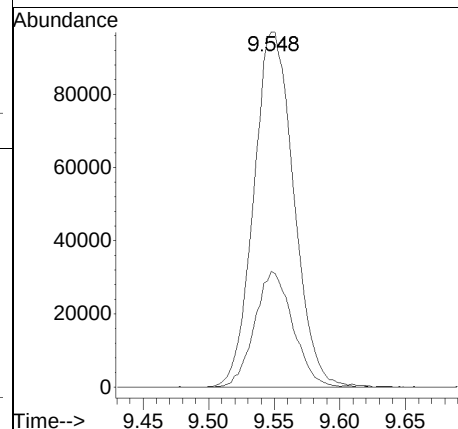
Tgt Ion	Ratio	Lower	Upper
92	100		
91	169.9	129.1	193.7

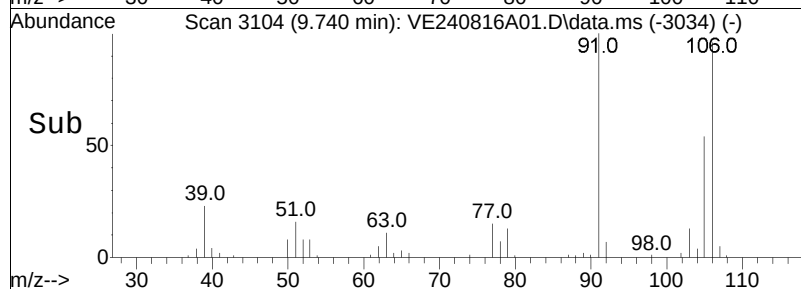
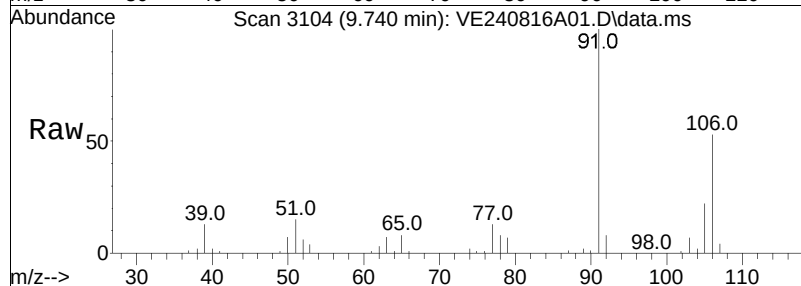
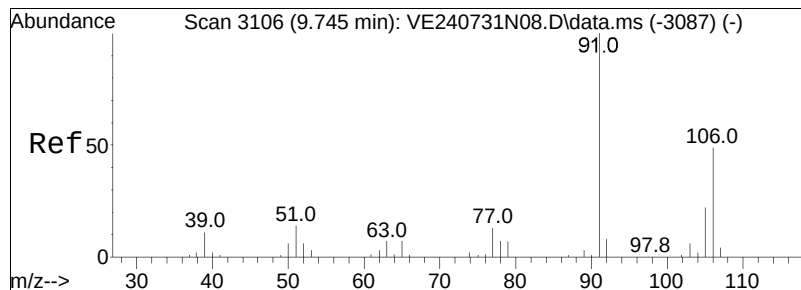




#79
 Ethylbenzene
 Concen: 11.40 ug/L
 RT: 9.548 min Scan# 3035
 Delta R.T. -0.008 min
 Lab File: VE240816A01.D
 Acq: 16 Aug 2024 6:49 am

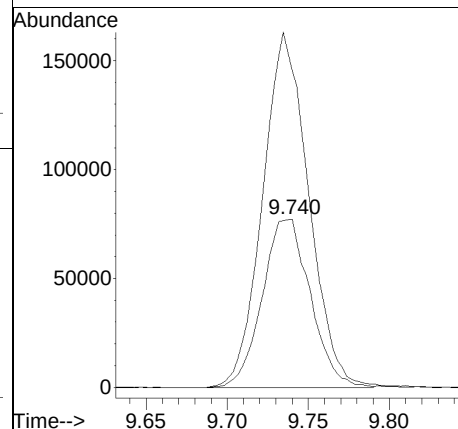
Tgt Ion	Ratio	Lower	Upper
91	100		
106	31.2	25.3	37.9

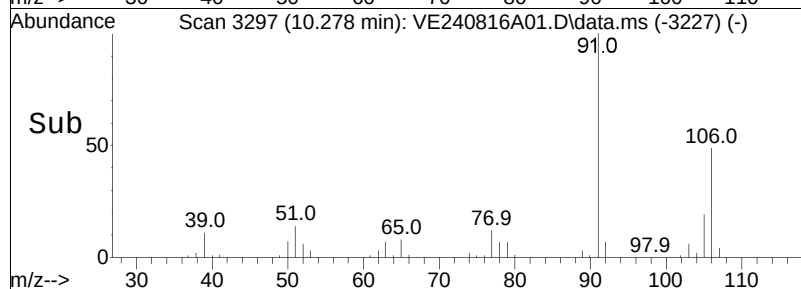
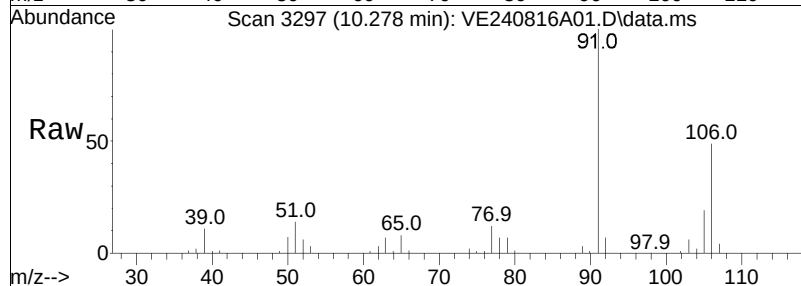
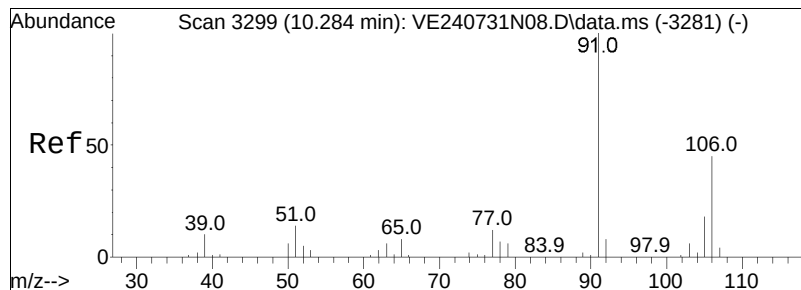




#81
 p/m Xylene
 Concen: 23.02 ug/L
 RT: 9.740 min Scan# 3104
 Delta R.T. -0.005 min
 Lab File: VE240816A01.D
 Acq: 16 Aug 2024 6:49 am

Tgt	Ion	Ratio	Lower	Upper
106	100			
91	202.5	163.3	244.9	





#82

o Xylene

Concen: 22.58 ug/L

RT: 10.278 min Scan# 3297

Delta R.T. -0.006 min

Lab File: VE240816A01.D

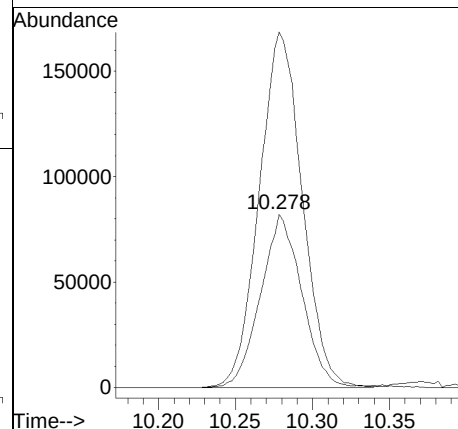
Acq: 16 Aug 2024 6:49 am

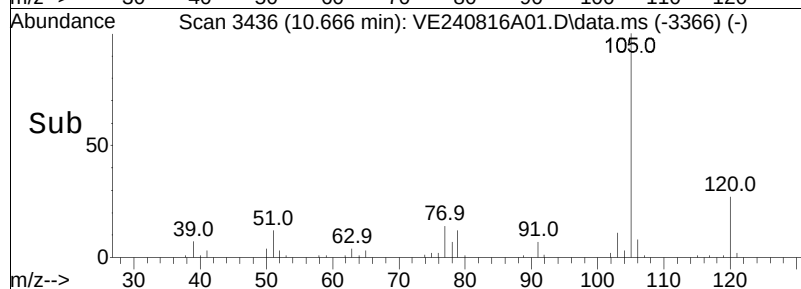
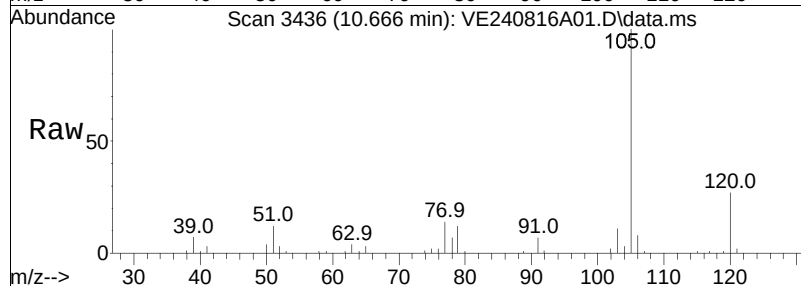
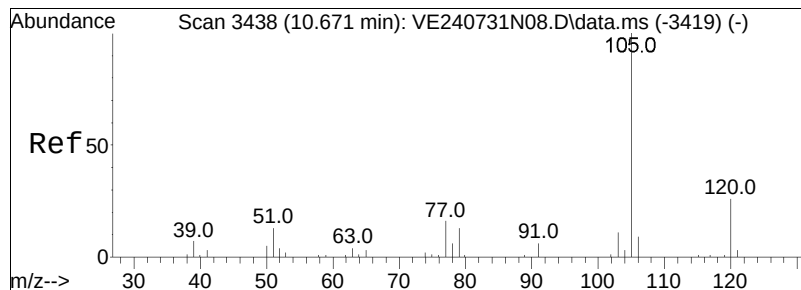
Tgt Ion:106 Resp: 152403

Ion Ratio Lower Upper

106 100

91 214.0 181.0 271.6





#87

Isopropylbenzene

Concen: 10.59 ug/L

RT: 10.666 min Scan# 3436

Delta R.T. -0.005 min

Lab File: VE240816A01.D

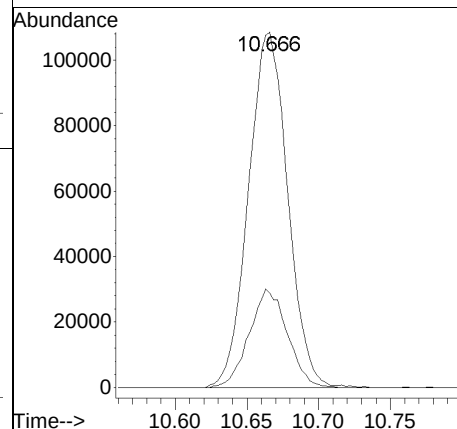
Acq: 16 Aug 2024 6:49 am

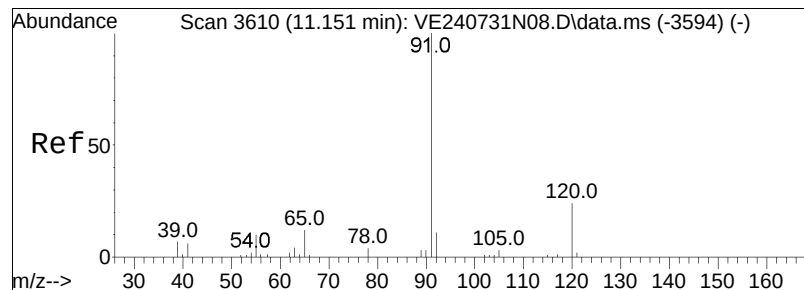
Tgt Ion:105 Resp: 206349

Ion Ratio Lower Upper

105 100

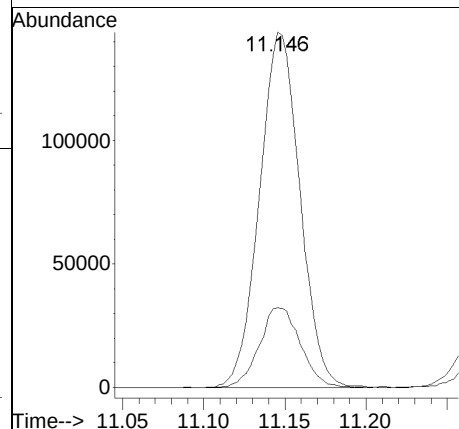
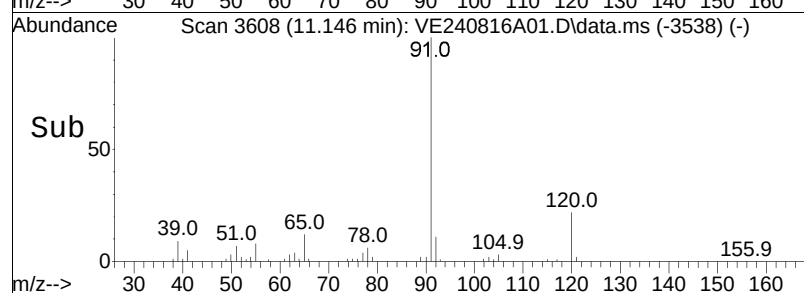
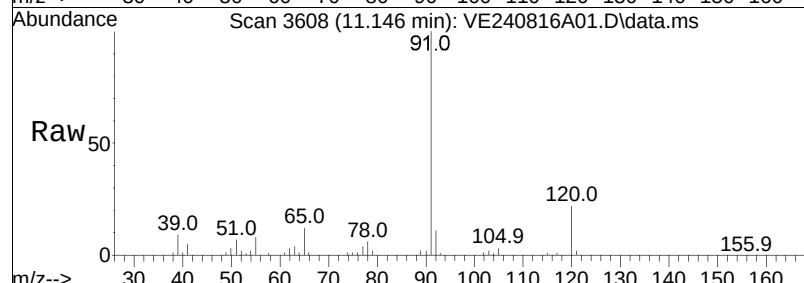
120 26.8 4.8 44.8

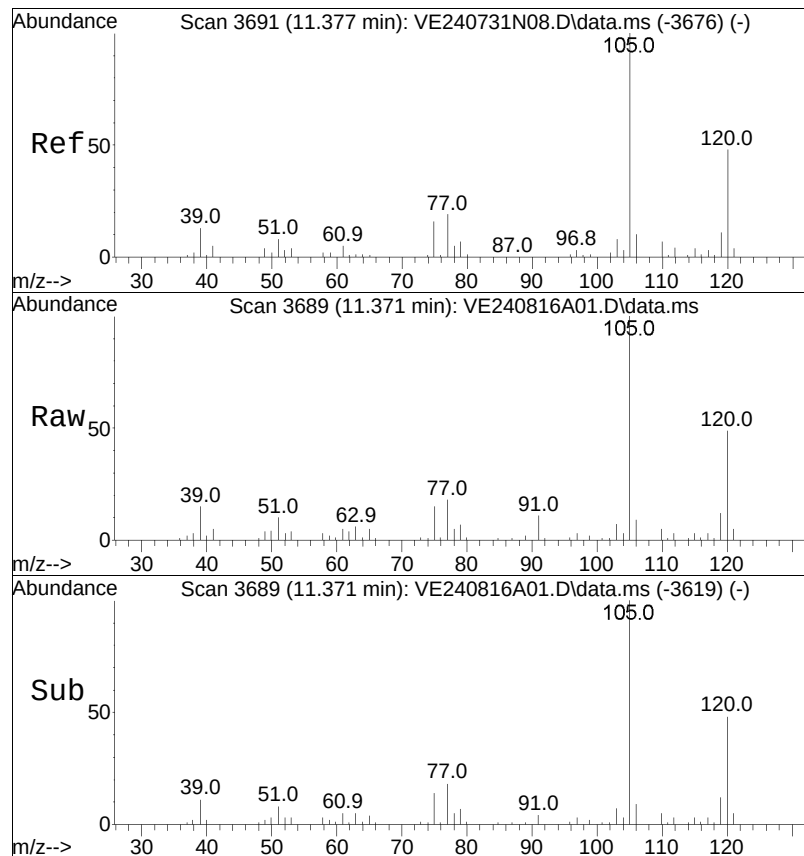




#90
 n-Propylbenzene
 Concen: 10.69 ug/L
 RT: 11.146 min Scan# 3608
 Delta R.T. -0.005 min
 Lab File: VE240816A01.D
 Acq: 16 Aug 2024 6:49 am

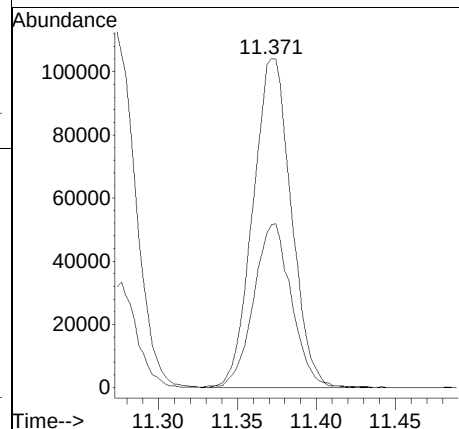
Tgt Ion	Ratio	Lower	Upper
91	100		
120	22.8	16.7	25.1

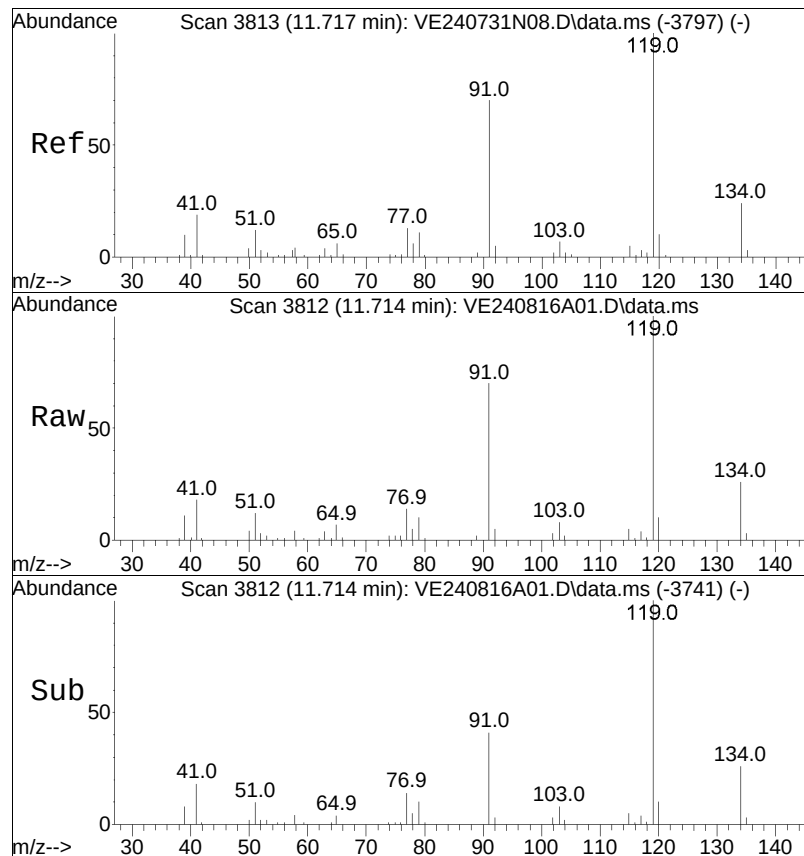




#95
 1,3,5-Trimethylbenzene
 Concen: 10.61 ug/L
 RT: 11.371 min Scan# 3689
 Delta R.T. -0.006 min
 Lab File: VE240816A01.D
 Acq: 16 Aug 2024 6:49 am

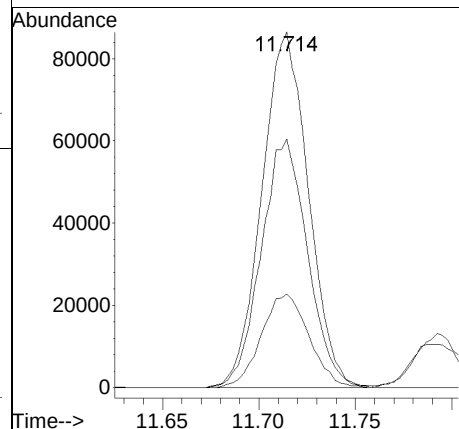
Tgt Ion	105	120	Ratio	Lower	Upper
105	100				
120	48.9		39.3	58.9	

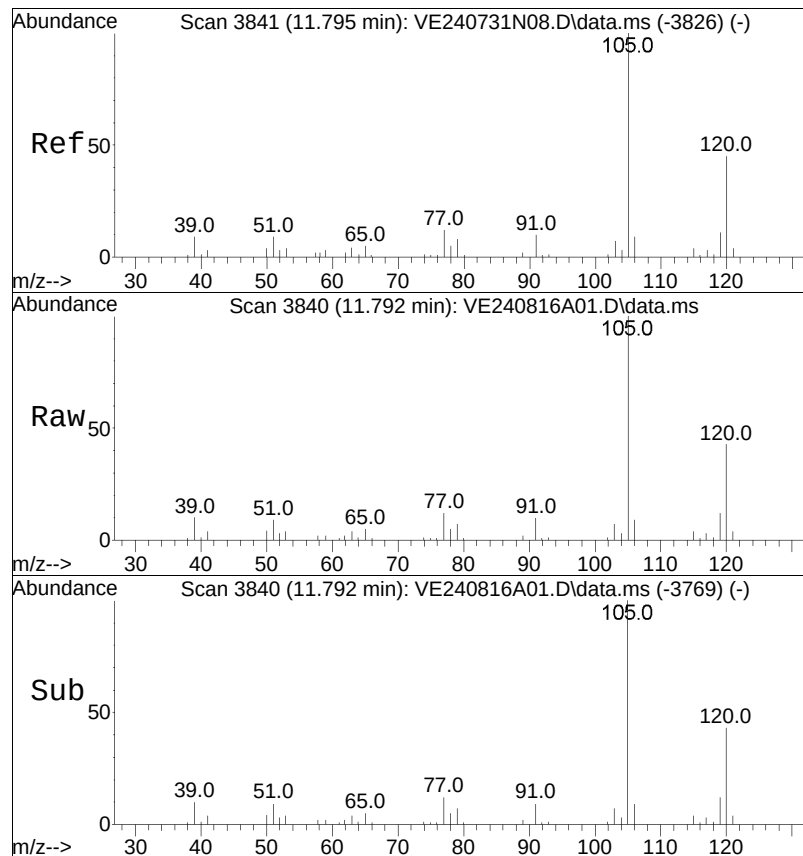




#99
 tert-Butylbenzene
 Concen: 10.42 ug/L
 RT: 11.714 min Scan# 3812
 Delta R.T. -0.003 min
 Lab File: VE240816A01.D
 Acq: 16 Aug 2024 6:49 am

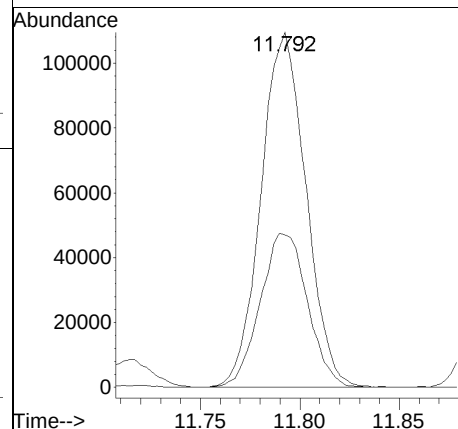
Tgt	Ion	Ratio	Resp	Lower	Upper
119	100		145179		
91	69.6	56.6	84.8		
134	26.7	17.7	26.5#		

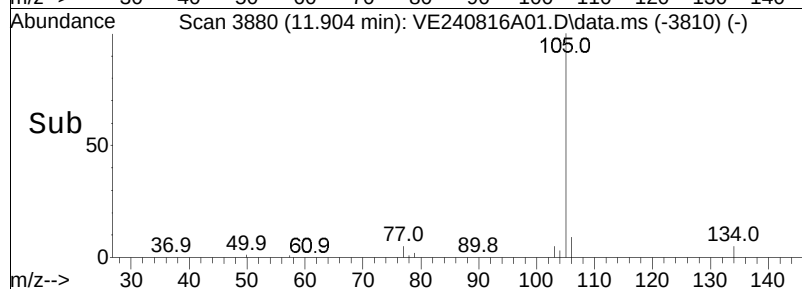
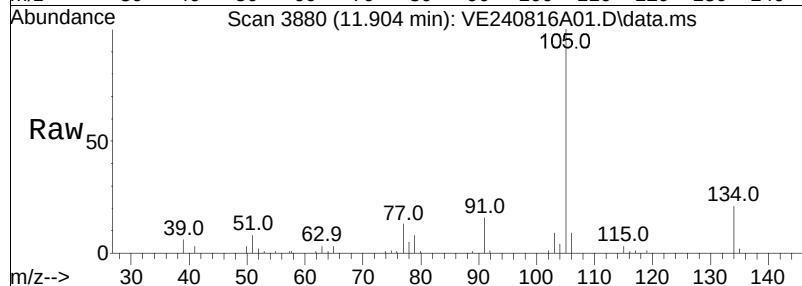
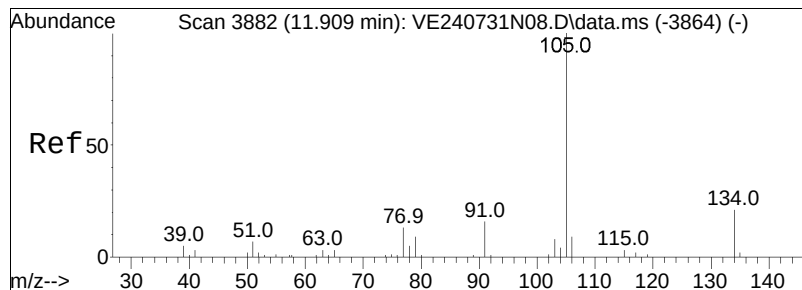




#102
 1,2,4-Trimethylbenzene
 Concen: 10.40 ug/L
 RT: 11.792 min Scan# 3840
 Delta R.T. -0.003 min
 Lab File: VE240816A01.D
 Acq: 16 Aug 2024 6:49 am

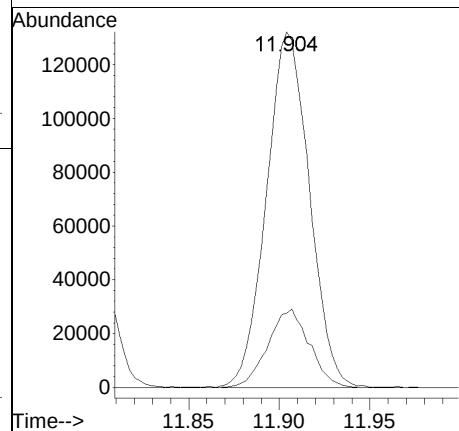
Tgt Ion	105	120	Ratio	Lower	Upper
105	100				
120	45.7		33.6	50.4	

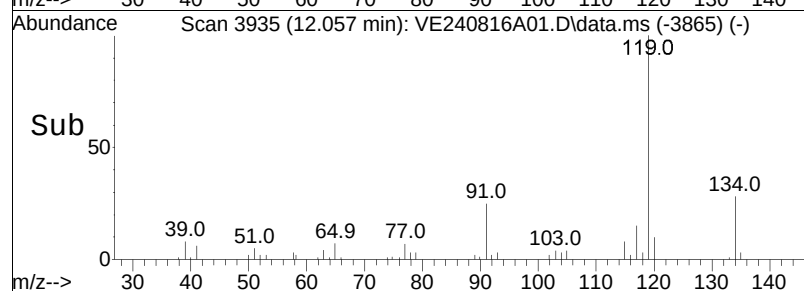
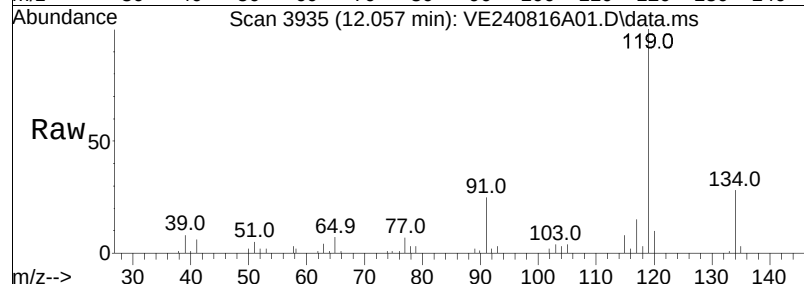
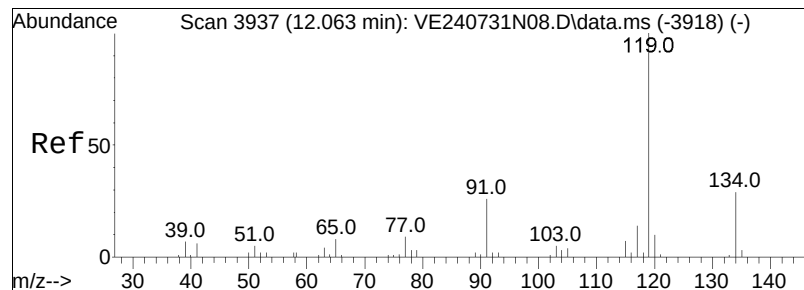




#103
 sec-Butylbenzene
 Concen: 10.53 ug/L
 RT: 11.904 min Scan# 3880
 Delta R.T. -0.005 min
 Lab File: VE240816A01.D
 Acq: 16 Aug 2024 6:49 am

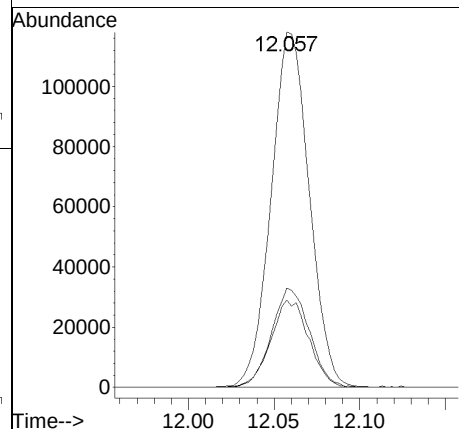
Tgt	Ion	Ratio	Lower	Upper
105	100			
134	21.2	13.3	27.5	

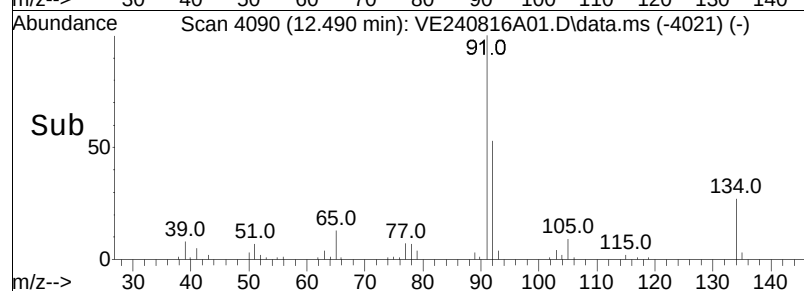
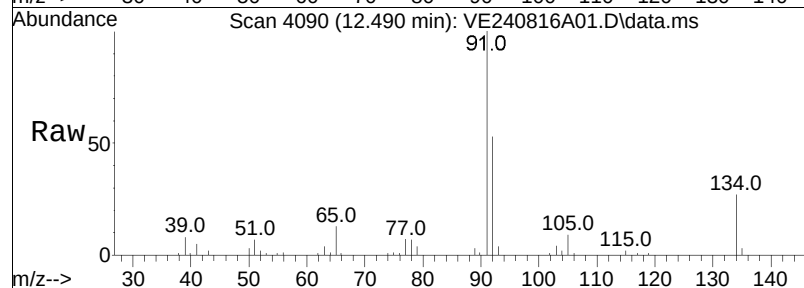
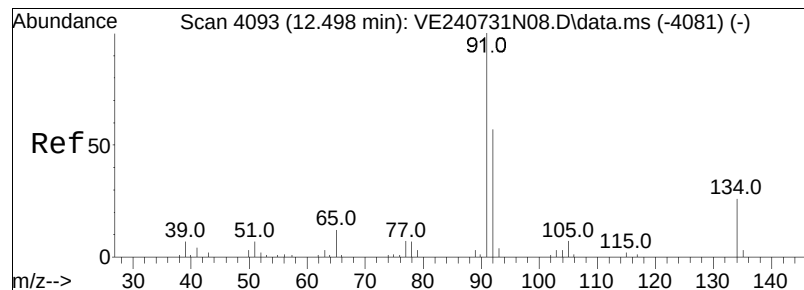




#104
 p-Isopropyltoluene
 Concen: 10.52 ug/L
 RT: 12.057 min Scan# 3935
 Delta R.T. -0.006 min
 Lab File: VE240816A01.D
 Acq: 16 Aug 2024 6:49 am

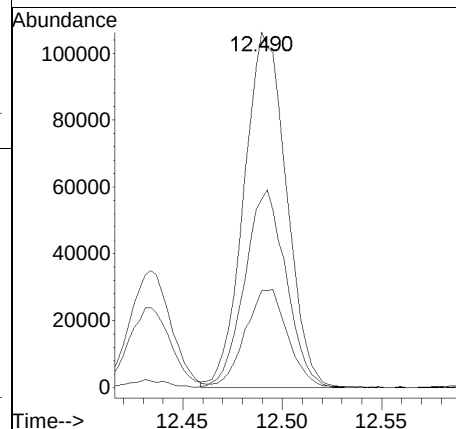
Tgt	Ion:119	Resp:	183122
Ion	Ratio	Lower	Upper
119	100		
134	27.8	15.8	32.8
91	24.6	16.6	34.4

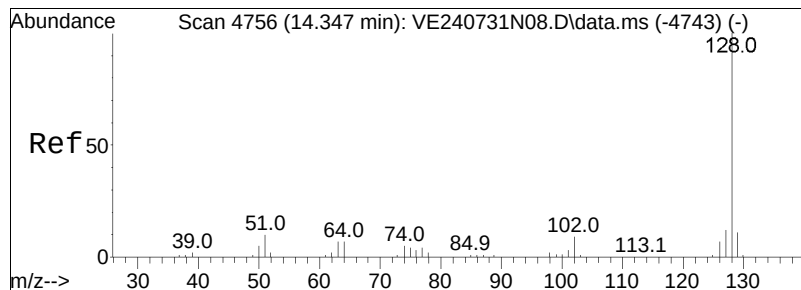




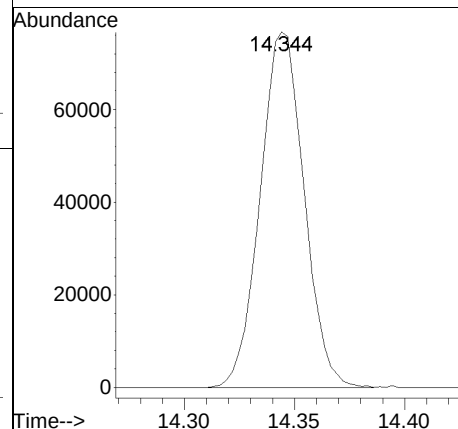
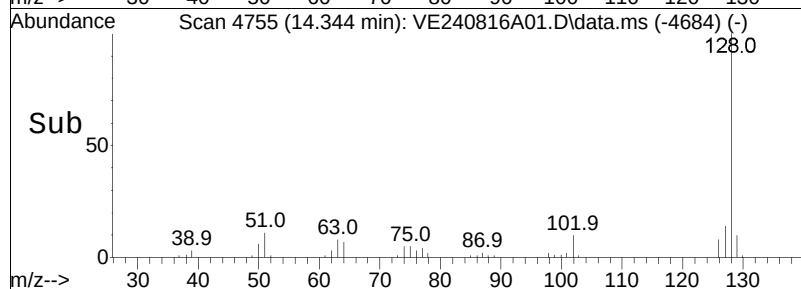
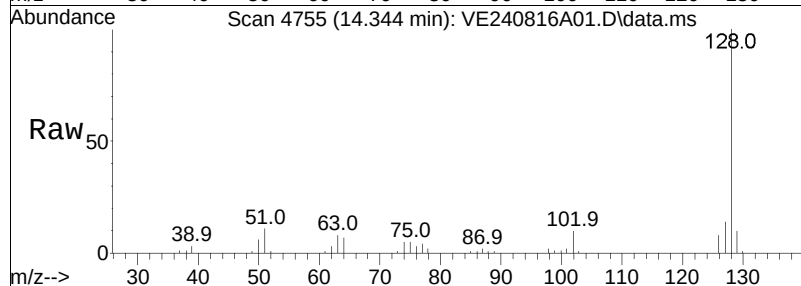
#108
 n-Butylbenzene
 Concen: 10.54 ug/L
 RT: 12.490 min Scan# 4090
 Delta R.T. -0.008 min
 Lab File: VE240816A01.D
 Acq: 16 Aug 2024 6:49 am

Tgt Ion:	91	Resp:	158035
Ion Ratio	Lower	Upper	
91	100		
92	54.3	42.4	63.6
134	27.5	20.3	30.5





#115
Naphthalene
Concen: 7.70 ug/L
RT: 14.344 min Scan# 4755
Delta R.T. -0.003 min
Lab File: VE240816A01.D
Acq: 16 Aug 2024 6:49 am
Tgt Ion:128 Resp: 106333



Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240816A\
 Data File : VE240816A02.D
 Acq On : 16 Aug 2024 7:13 am
 Operator : ELAINE:PID
 Sample : WG1960272-4,31,10,10
 Misc : WG1960272,ICAL21358
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 16 07:37:39 2024
 Quant Method : K:\Elaine\2024\240816A\Elaine_240731N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Aug 01 12:13:24 2024
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240816A\VE240816A01.D
 Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane

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

Internal Standards						
1) Fluorobenzene	5.956	96	179101	10.000	ug/L	-0.01
Standard Area 1 = 184749			Recovery	=	96.94%	
63) Chlorobenzene-d5	9.492	117	130030	10.000	ug/L	0.00
Standard Area 1 = 135681			Recovery	=	95.84%	
84) 1,4-Dichlorobenzene-d4	12.202	152	77124	10.000	ug/L	0.00
Standard Area 1 = 81388			Recovery	=	94.76%	
System Monitoring Compounds						
39) Dibromofluoromethane	5.150	113	42829	10.215	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	102.15%	
47) 1,2-Dichloroethane-d4	5.674	65	53879	9.631	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	96.31%	
64) Toluene-d8	7.648	98	171322	10.003	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	100.03%	
88) 4-Bromofluorobenzene	10.992	95	65348	9.172	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	91.72%	
Target Compounds						
						Qvalue
45) Benzene	5.540	78	159416	11.236	ug/L	# 90
65) Toluene	7.704	92	100135	11.184	ug/L	96
79) Ethylbenzene	9.553	91	198706	11.451	ug/L	99
81) p/m Xylene	9.737	106	154513	23.358	ug/L	99
82) o Xylene	10.284	106	148454	22.950	ug/L	93
87) Isopropylbenzene	10.666	105	200672	10.866	ug/L	96
90) n-Propylbenzene	11.148	91	245201	11.111	ug/L	97
95) 1,3,5-Trimethylbenzene	11.371	105	173318	11.037	ug/L	100
99) tert-Butylbenzene	11.714	119	145221	11.001	ug/L	95
102) 1,2,4-Trimethylbenzene	11.792	105	170839	10.898	ug/L	95
103) sec-Butylbenzene	11.907	105	214618	10.963	ug/L	98
104) p-Isopropyltoluene	12.057	119	179881	10.905	ug/L	96
108) n-Butylbenzene	12.492	91	156365	11.008	ug/L	99
115) Naphthalene	14.344	128	110868	8.470	ug/L	100

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

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240816A\
 Data File : VE240816A02.D
 Acq On : 16 Aug 2024 7:13 am
 Operator : ELAINE:PID
 Sample : WG1960272-4,31,10,10
 Misc : WG1960272,ICAL21358
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 16 07:37:39 2024
 Quant Method : K:\Elaine\2024\240816A\Elaine_240731N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Aug 01 12:13:24 2024
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2024\240816A\VE240816A01.D
 Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane

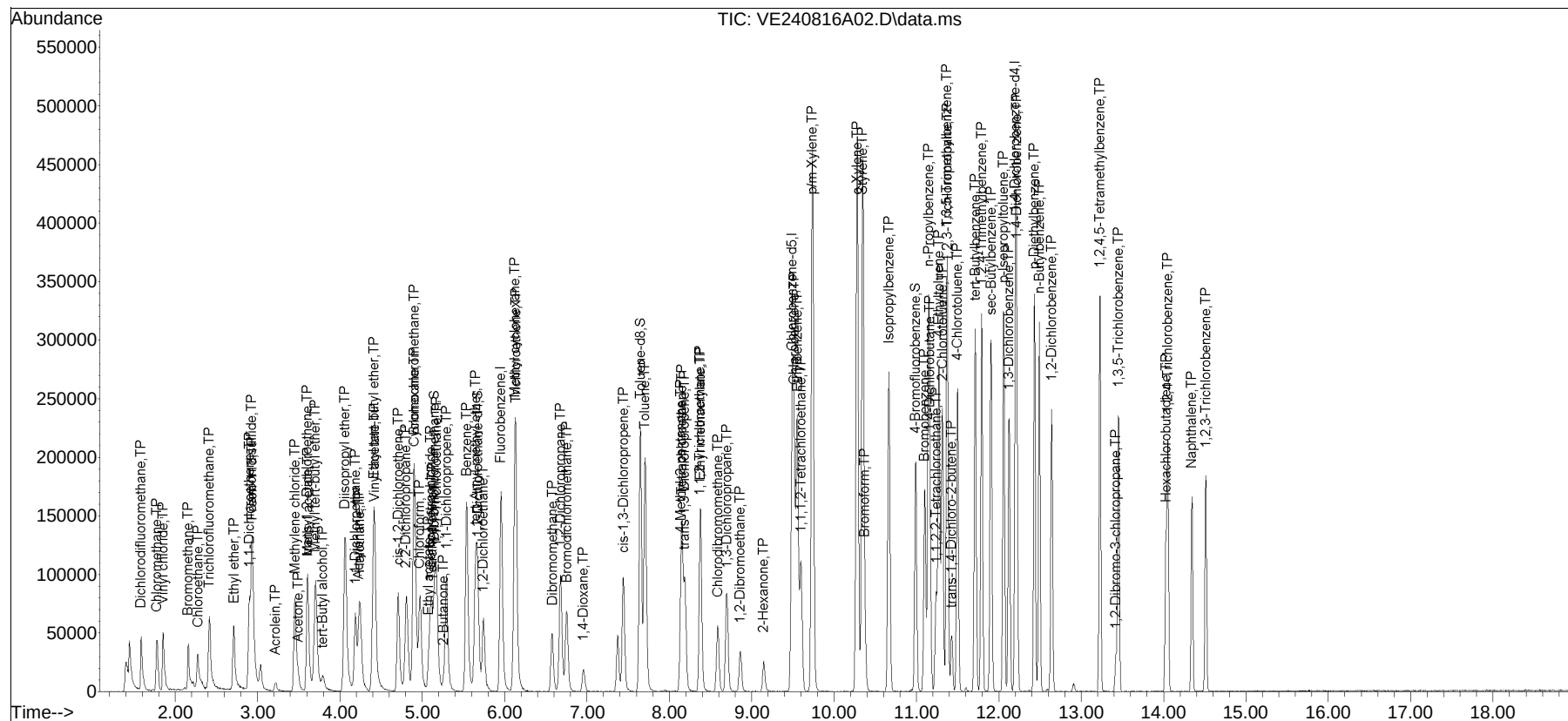
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

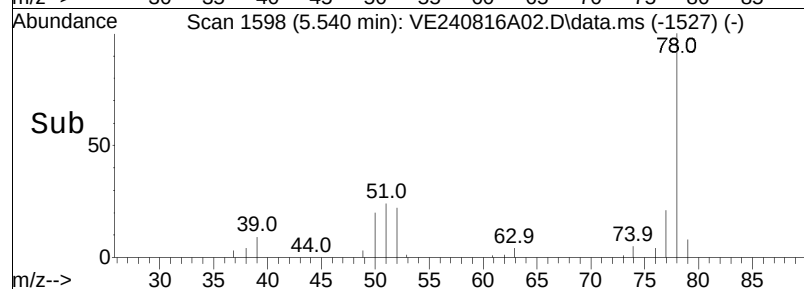
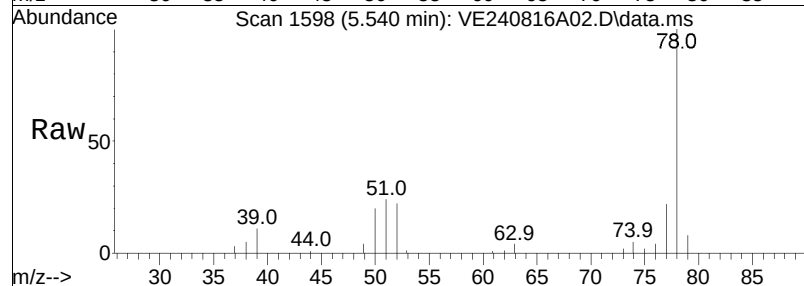
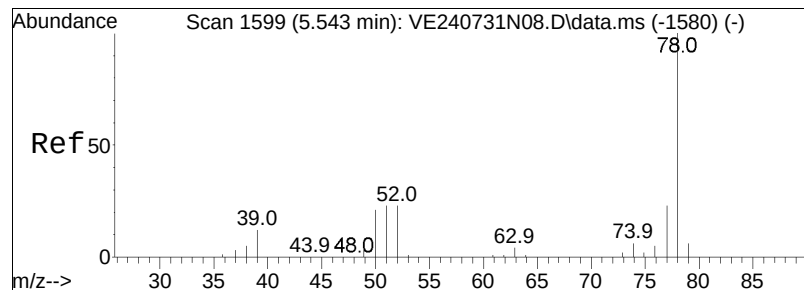
Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2024\240816A\
Data File : VE240816A02.D
Acq On : 16 Aug 2024 7:13 am
Operator : ELAINE:PID
Sample : WG1960272-4,31,10,10
Misc : WG1960272,ICAL21358
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 16 07:37:39 2024
Quant Method : K:\Elaine\2024\240816A\Elaine_240731N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Aug 01 12:13:24 2024
Response via : Initial Calibration

Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane





#45

Benzene

Concen: 11.24 ug/L

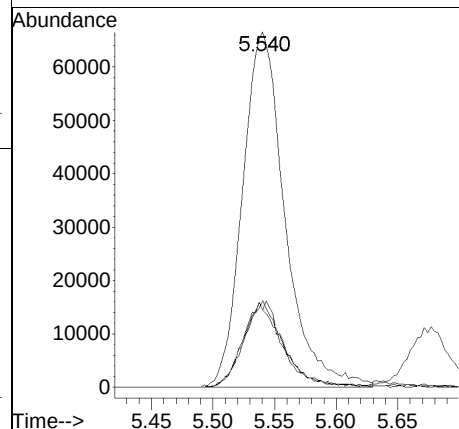
RT: 5.540 min Scan# 1598

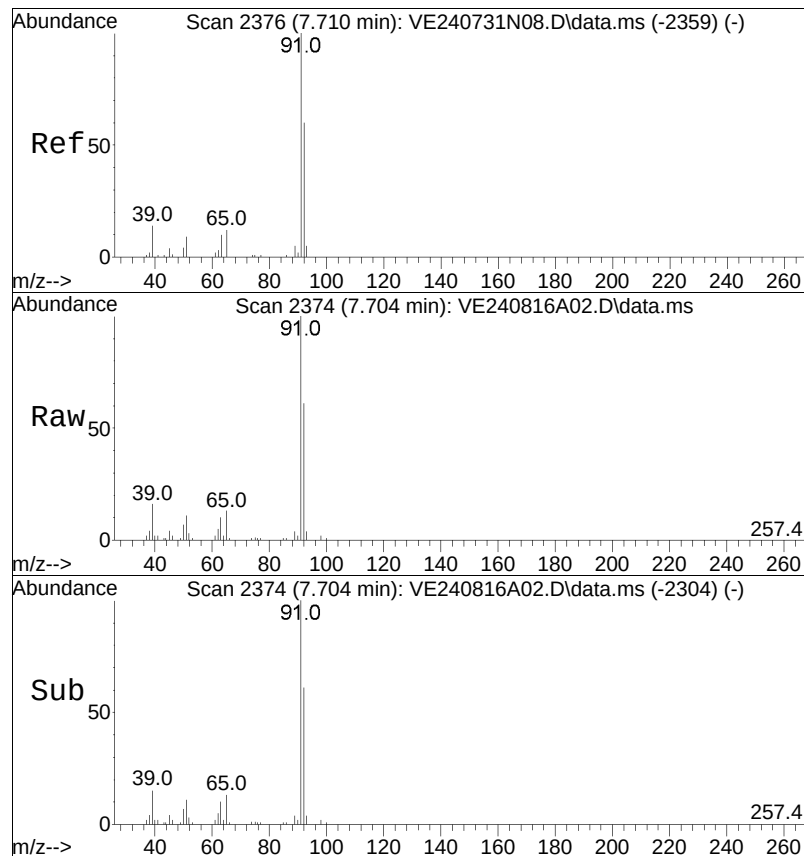
Delta R.T. -0.003 min

Lab File: VE240816A02.D

Acq: 16 Aug 2024 7:13 am

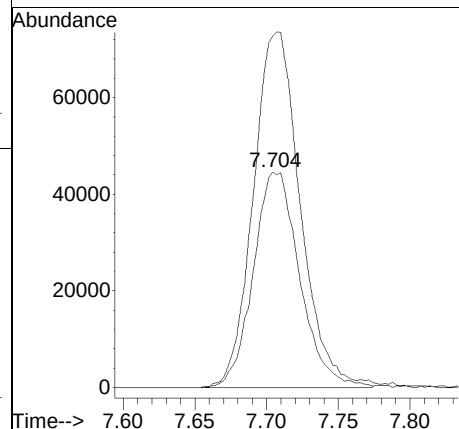
Tgt Ion:	78	Resp:	159416
Ion Ratio	Lower	Upper	
78	100		
77	11.5	12.8	26.6#
51	22.7	13.5	27.9
52	21.5	12.0	25.0

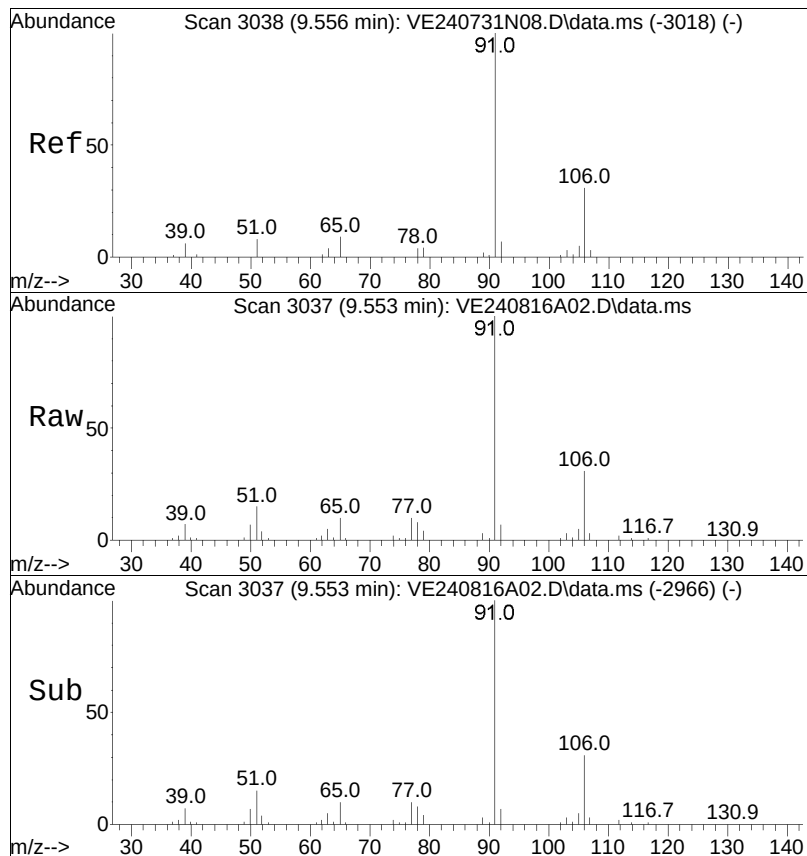




#65
Toluene
Concen: 11.18 ug/L
RT: 7.704 min Scan# 2374
Delta R.T. -0.006 min
Lab File: VE240816A02.D
Acq: 16 Aug 2024 7:13 am

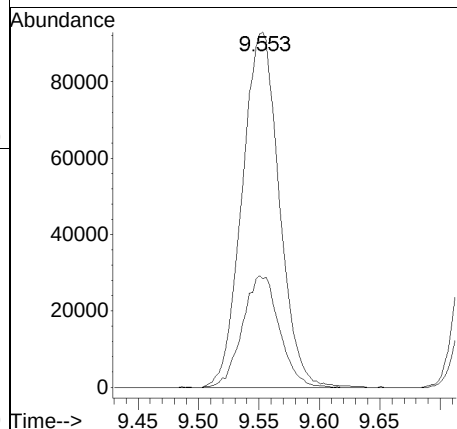
Tgt Ion	Ratio	Lower	Upper
92	100		
91	166.2	129.1	193.7

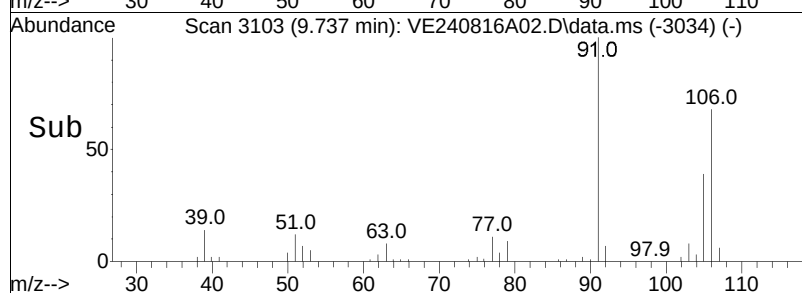
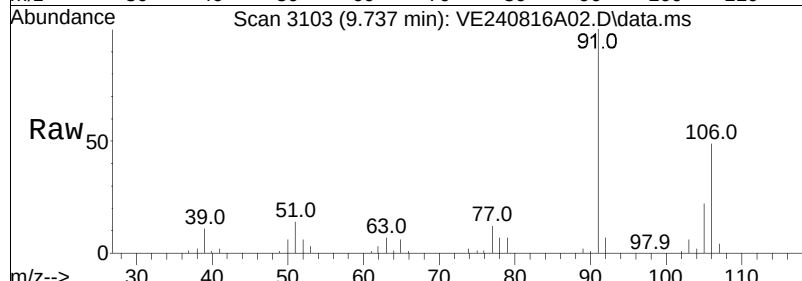
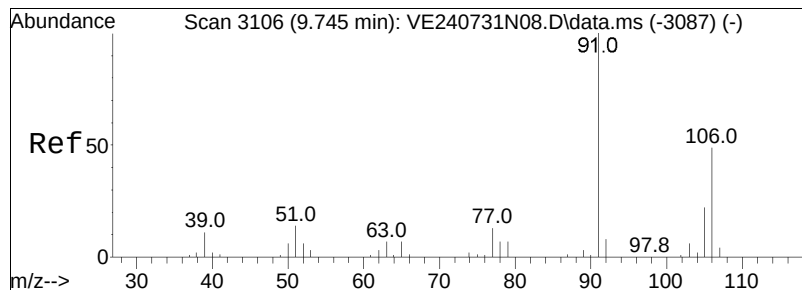




#79
 Ethylbenzene
 Concen: 11.45 ug/L
 RT: 9.553 min Scan# 3037
 Delta R.T. -0.003 min
 Lab File: VE240816A02.D
 Acq: 16 Aug 2024 7:13 am

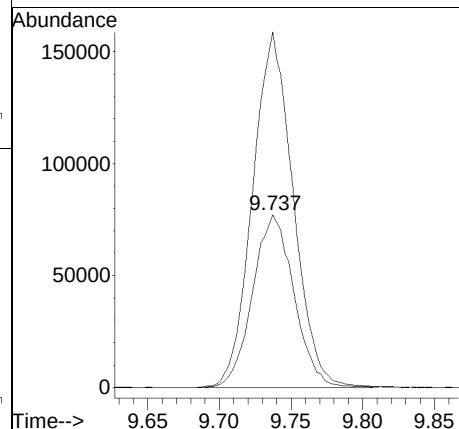
Tgt Ion	Ratio	Lower	Upper
91	100		
106	31.2	25.3	37.9

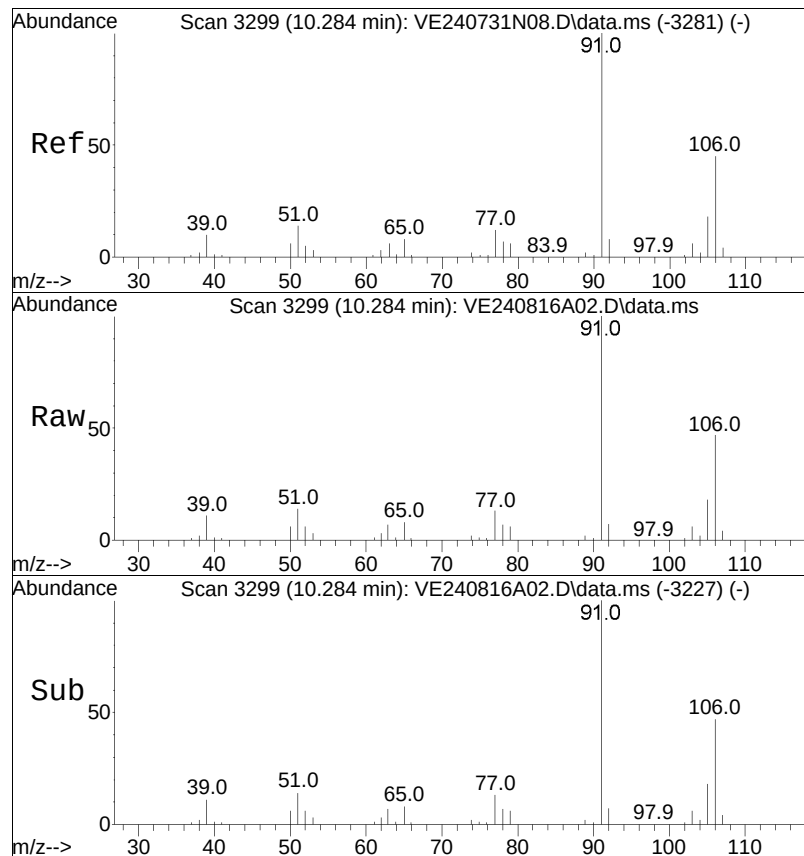




#81
 p/m Xylene
 Concen: 23.36 ug/L
 RT: 9.737 min Scan# 3103
 Delta R.T. -0.008 min
 Lab File: VE240816A02.D
 Acq: 16 Aug 2024 7:13 am

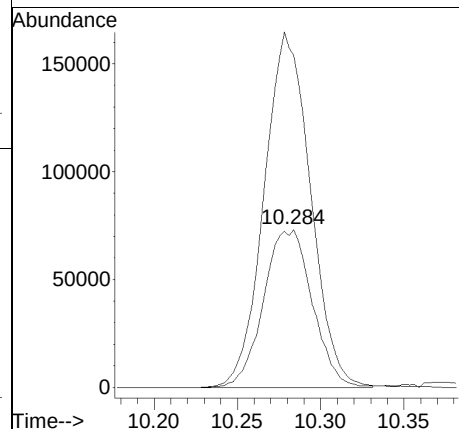
Tgt	Ion	Ratio	Lower	Upper
106	100			
91	202.4	163.3	244.9	

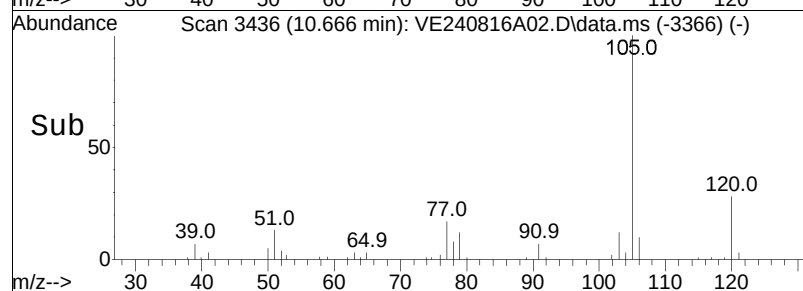
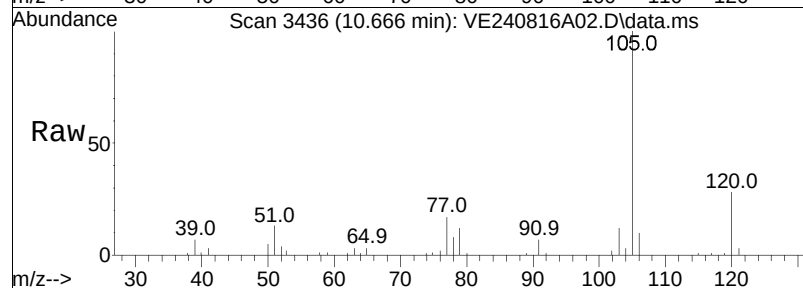
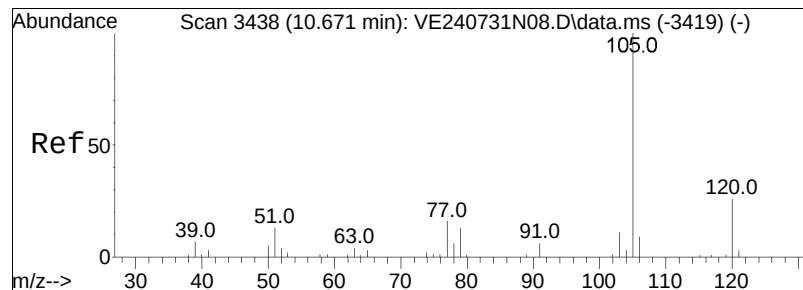




#82
o Xylene
Concen: 22.95 ug/L
RT: 10.284 min Scan# 3299
Delta R.T. -0.000 min
Lab File: VE240816A02.D
Acq: 16 Aug 2024 7:13 am

Tgt	Ion	Ratio	Lower	Upper
106	100			
91	214.5	181.0	271.6	





#87

Isopropylbenzene

Concen: 10.87 ug/L

RT: 10.666 min Scan# 3436

Delta R.T. -0.005 min

Lab File: VE240816A02.D

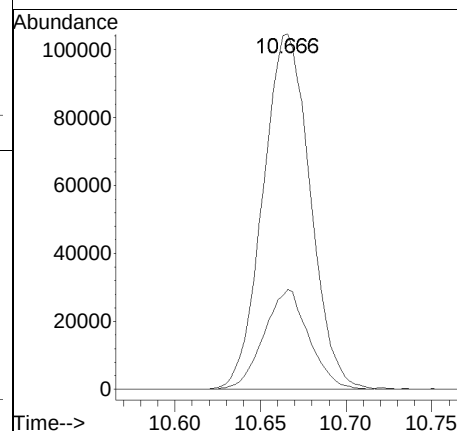
Acq: 16 Aug 2024 7:13 am

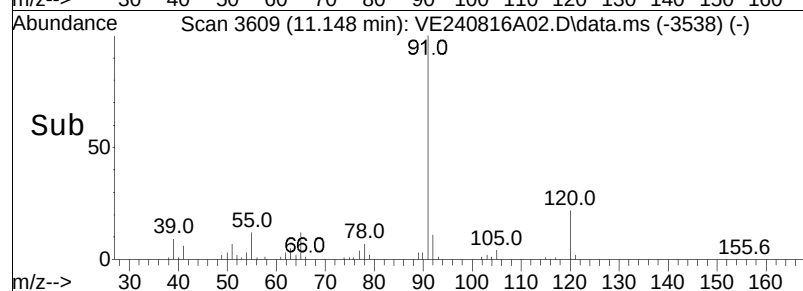
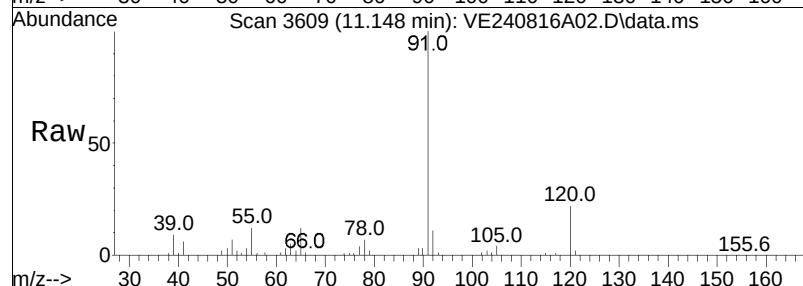
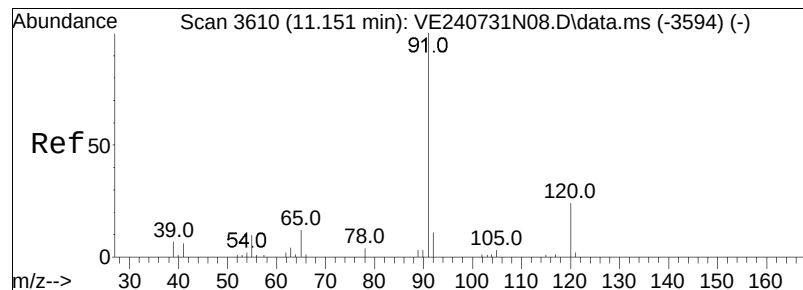
Tgt Ion:105 Resp: 200672

Ion Ratio Lower Upper

105 100

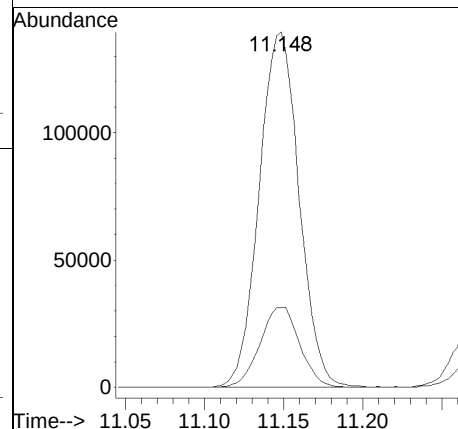
120 26.7 4.8 44.8

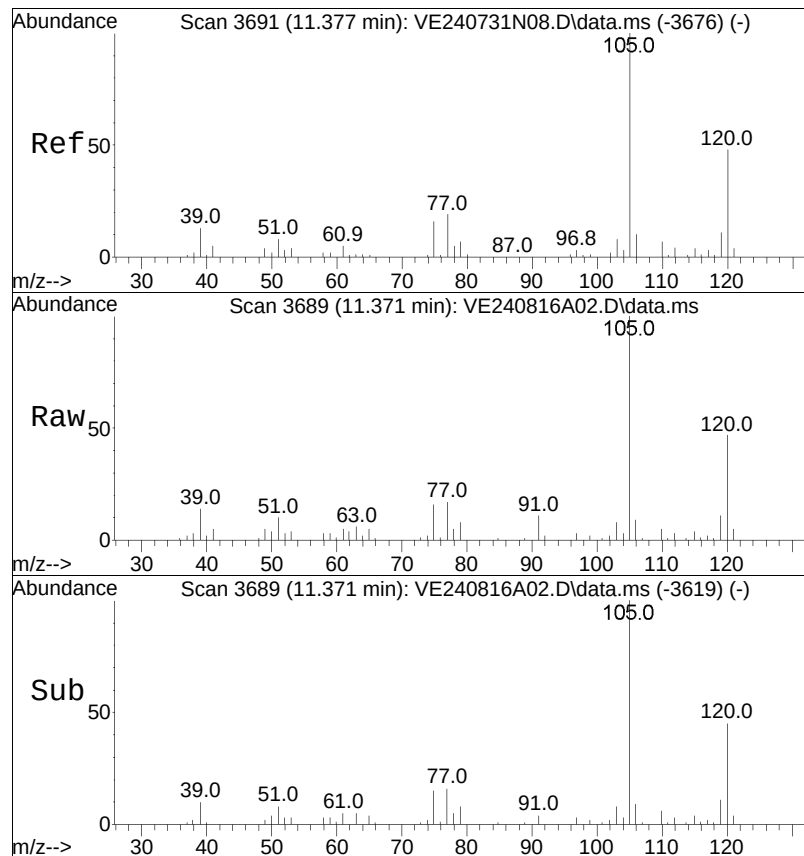




#90
 n-Propylbenzene
 Concen: 11.11 ug/L
 RT: 11.148 min Scan# 3609
 Delta R.T. -0.003 min
 Lab File: VE240816A02.D
 Acq: 16 Aug 2024 7:13 am

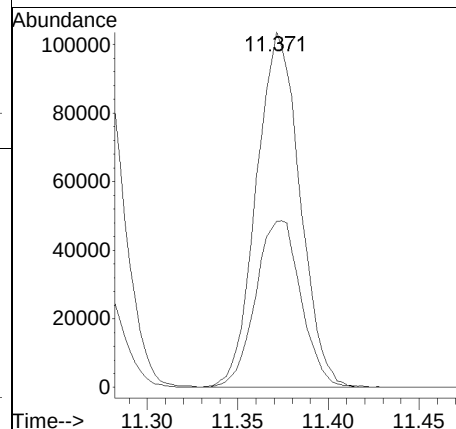
Tgt Ion	Ratio	Lower	Upper
91	100		
120	22.5	16.7	25.1

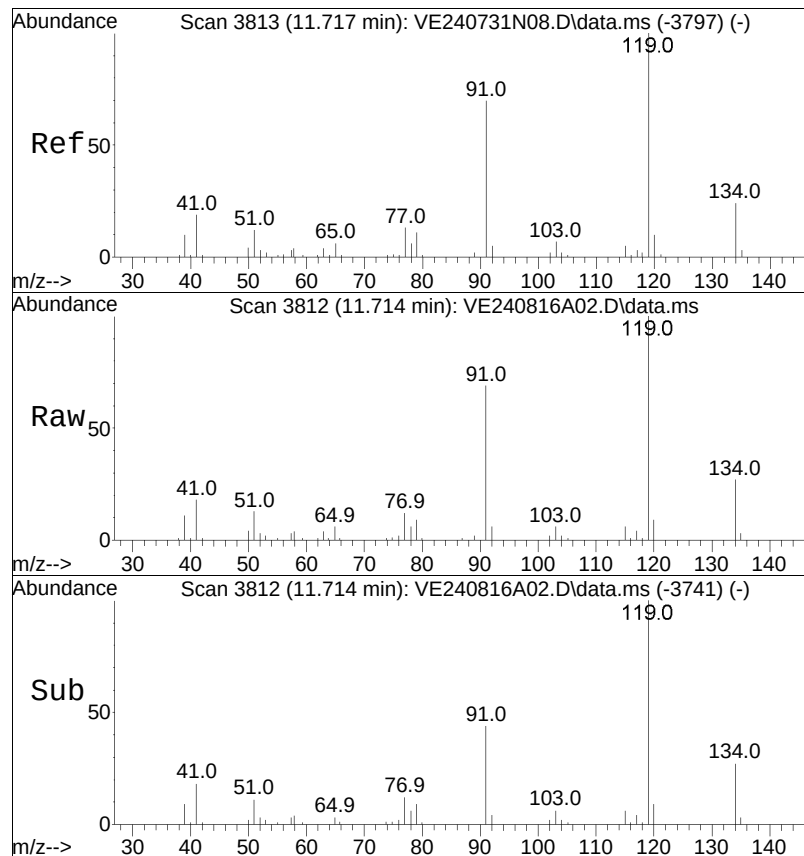




#95
 1,3,5-Trimethylbenzene
 Concen: 11.04 ug/L
 RT: 11.371 min Scan# 3689
 Delta R.T. -0.006 min
 Lab File: VE240816A02.D
 Acq: 16 Aug 2024 7:13 am

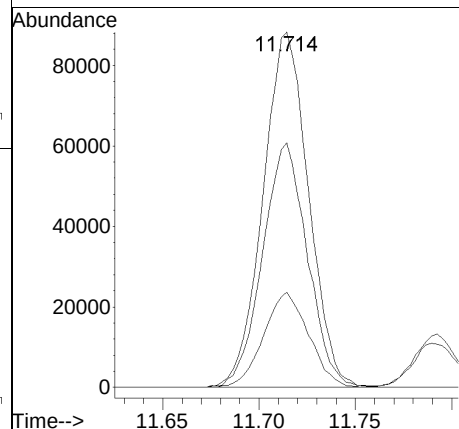
Tgt Ion	105	120	Ratio	Lower	Upper
105	100				
120	48.8		39.3	58.9	

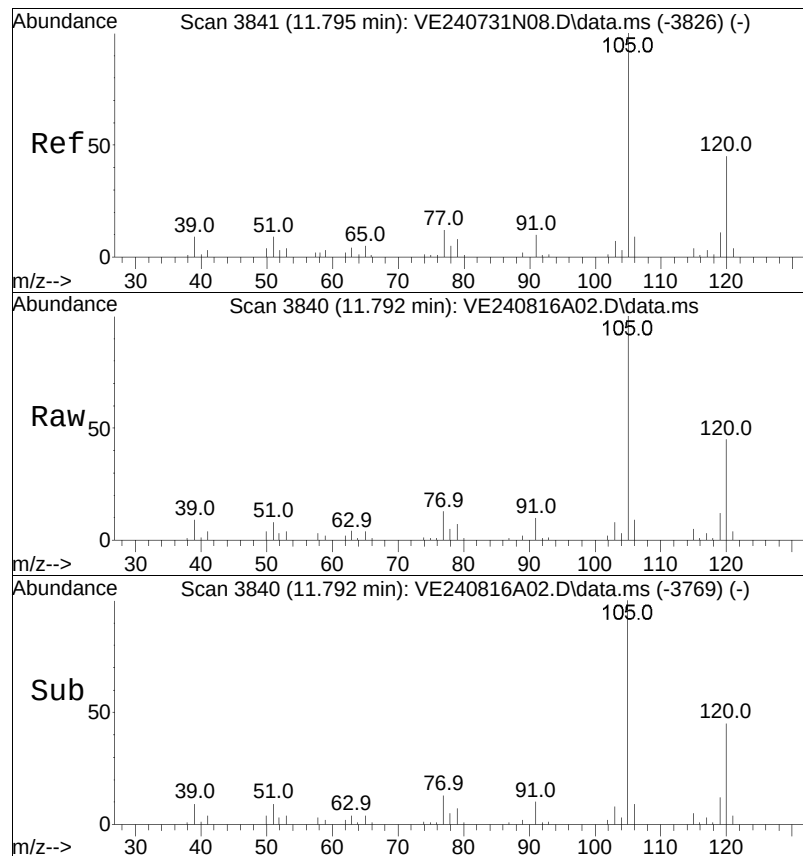




#99
 tert-Butylbenzene
 Concen: 11.00 ug/L
 RT: 11.714 min Scan# 3812
 Delta R.T. -0.003 min
 Lab File: VE240816A02.D
 Acq: 16 Aug 2024 7:13 am

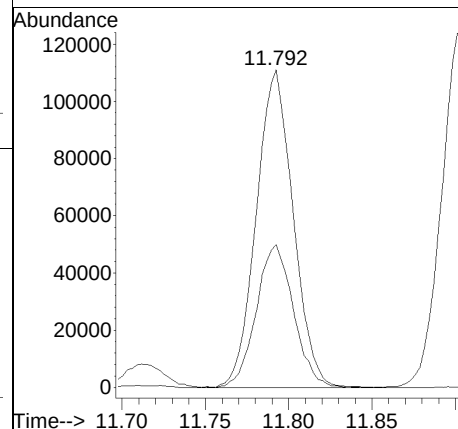
Tgt	Ion:119	Resp:	145221
Ion	Ratio	Lower	Upper
119	100		
91	67.8	56.6	84.8
134	26.4	17.7	26.5

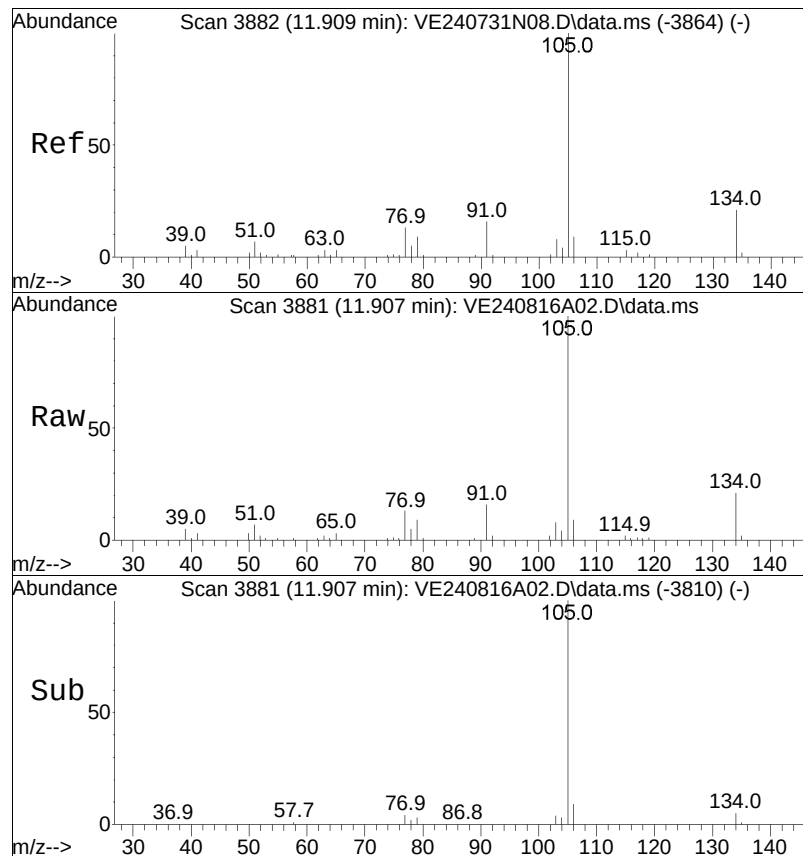




#102
 1,2,4-Trimethylbenzene
 Concen: 10.90 ug/L
 RT: 11.792 min Scan# 3840
 Delta R.T. -0.003 min
 Lab File: VE240816A02.D
 Acq: 16 Aug 2024 7:13 am

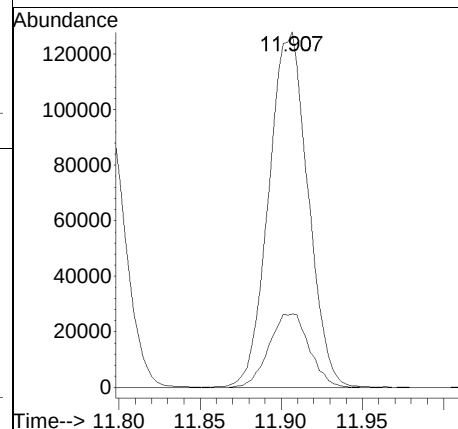
Tgt Ion	Ratio	Lower	Upper
105	100		
120	45.2	33.6	50.4

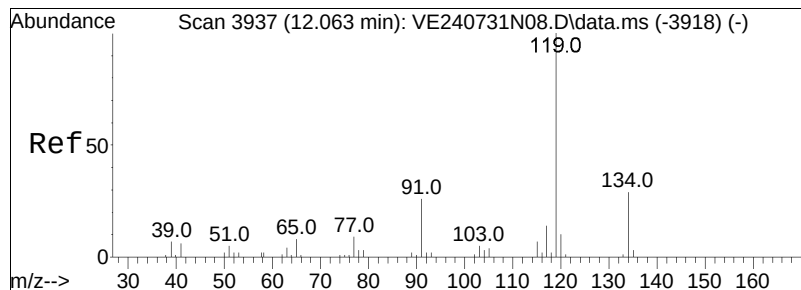




#103
 sec-Butylbenzene
 Concen: 10.96 ug/L
 RT: 11.907 min Scan# 3881
 Delta R.T. -0.002 min
 Lab File: VE240816A02.D
 Acq: 16 Aug 2024 7:13 am

Tgt Ion	Ratio	Lower	Upper
105	100		
134	21.2	13.3	27.5





#104

p-Isopropyltoluene

Concen: 10.90 ug/L

RT: 12.057 min Scan# 3935

Delta R.T. -0.006 min

Lab File: VE240816A02.D

Acq: 16 Aug 2024 7:13 am

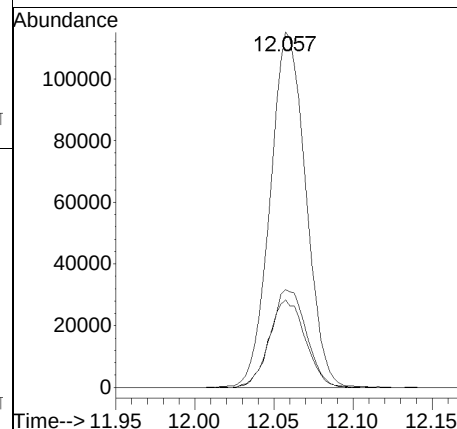
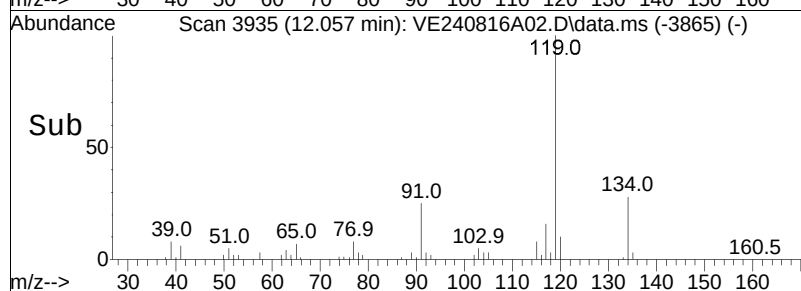
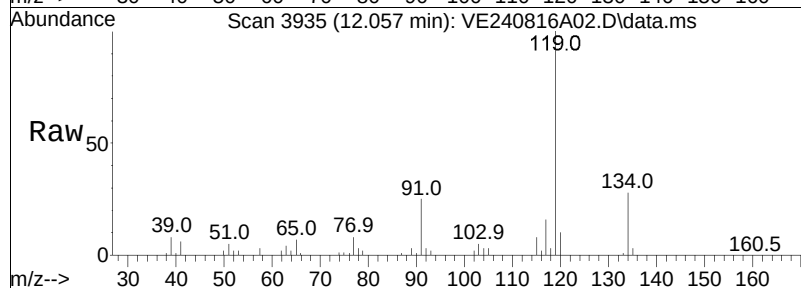
Tgt Ion:119 Resp: 179881

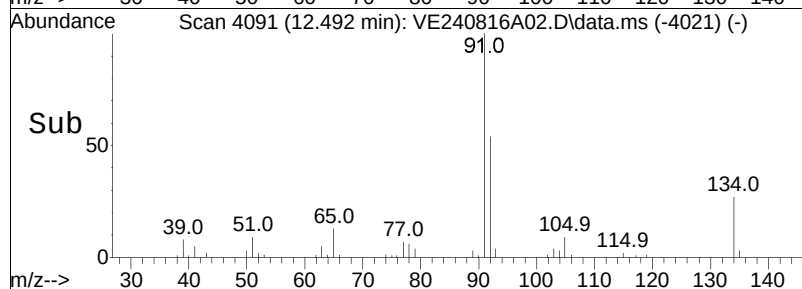
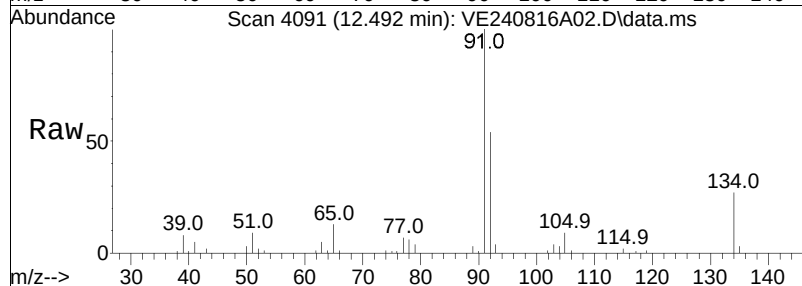
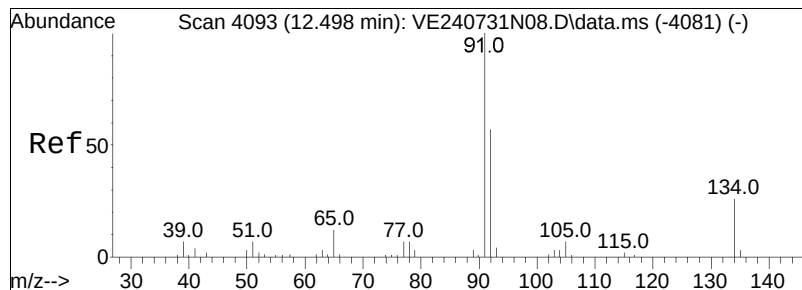
Ion Ratio Lower Upper

119 100

134 27.8 15.8 32.8

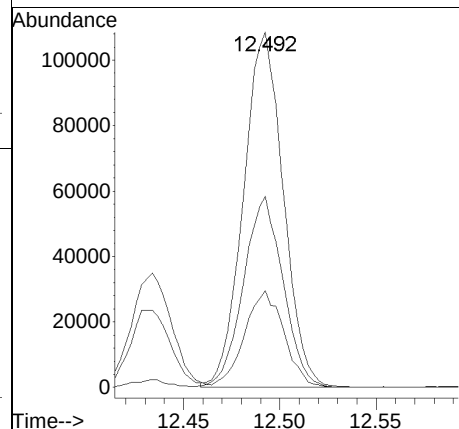
91 25.0 16.6 34.4

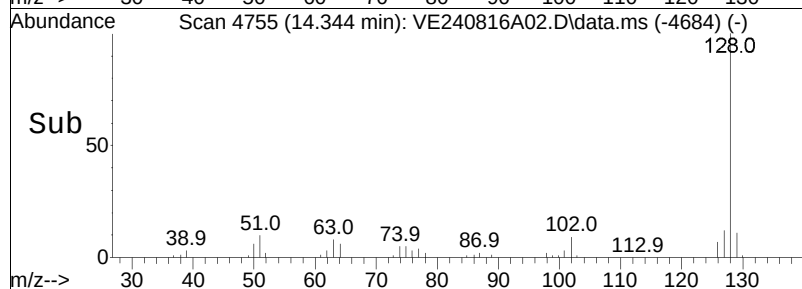
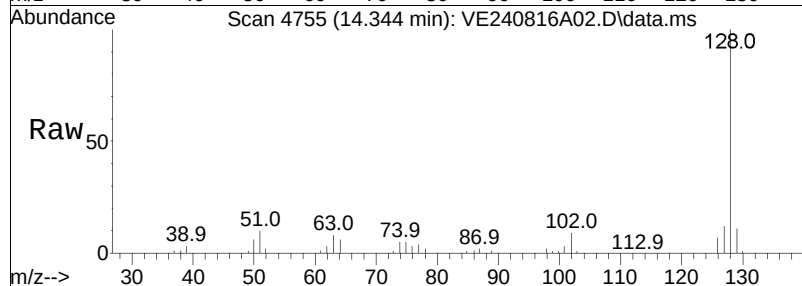
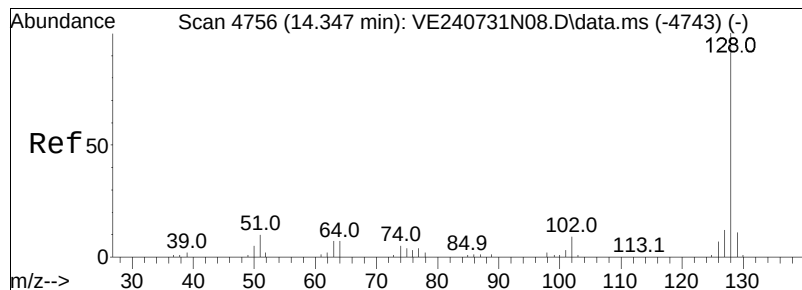




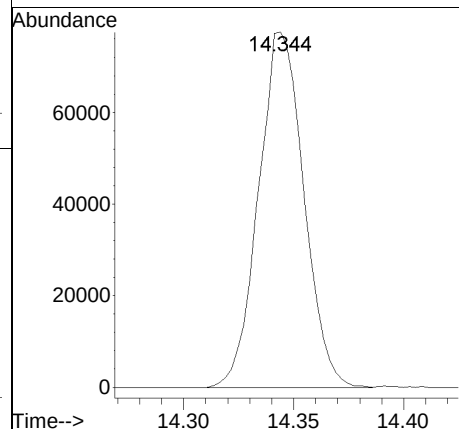
#108
 n-Butylbenzene
 Concen: 11.01 ug/L
 RT: 12.492 min Scan# 4091
 Delta R.T. -0.006 min
 Lab File: VE240816A02.D
 Acq: 16 Aug 2024 7:13 am

Tgt Ion:	91	Resp:	156365
Ion Ratio	Lower	Upper	
91	100		
92	53.4	42.4	63.6
134	26.9	20.3	30.5





#115
 Naphthalene
 Concen: 8.47 ug/L
 RT: 14.344 min Scan# 4755
 Delta R.T. -0.003 min
 Lab File: VE240816A02.D
 Acq: 16 Aug 2024 7:13 am
 Tgt Ion:128 Resp: 110868





Calculation of Volatile Organic Compounds

Aqueous Concentration Formula: $Amt * DF * Uf * (1/Vo)$

Where:

DF = Dilution Factor

Vo = Sample Volume Purged (mL)

Uf = ng Unit Correction Factor (mL)

Soil Concentration Formula: $Amt * DF * (1/Wt)$

Where:

DF = Dilution Factor

Wt = Weight of Sample (g)

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Aug 16 2024, 01:06 pm

Work Group: WG1960272 for Department: 31 GC/MS - Volatiles

Created: 16-AUG-24 Due: Operator: PID

Sample	Client ID	C Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L2445544-59	FB01C_081224	S NYTCL-8260	WATER	SEC	U	0826	0819	S0	Vial-B
L2446277-01	MW-9	S NYCP51-8260	WATER	DONE	U	0828	0816	3A	Vial-B
L2446277-02	MW-10	S NYCP51-8260	WATER	DONE	U	0828	0816	3A	Vial-B
L2446277-03	TRIP BLANK	S NYCP51-8260	WATER	DONE	U	0828	0816	3A	Vial-B
L2446546-05	TRIP BLANK	S NYTCL-8260	WATER	DONE	U	0819	0816	3A	Vial-B
L2446555-01	LMW-8RS_6.75	S NYTCL-8260	WATER	DONE	U	0829	0816	1A	Vial-B
L2446555-02	LMW-9RS_13.75	S NYTCL-8260	WATER	DONE	U	0829	0816	1A	Vial-B
L2446555-05	TRIP BLANK	S NYTCL-8260	WATER	DONE	U	0829	0816	1A	Vial-B
L2446555-06	FIELD BLANK 08152024	S NYTCL-8260	WATER	DONE	U	0829	0816	1A	Vial-B
WG1960272-1	MS BFB Tune Standard	S NYTCL-8260	WATER	DONE	U				
WG1960272-1	MS BFB Tune Standard	S NYCP51-8260	WATER	DONE	U				
WG1960272-2	Continuing Calibrati	S NYTCL-8260	WATER	DONE	U				
WG1960272-2	Continuing Calibrati	S NYCP51-8260	WATER	DONE	U				
WG1960272-3	Laboratory Control S	S NYTCL-8260	WATER	DONE	U				
WG1960272-3	Laboratory Control S	S NYCP51-8260	WATER	DACQ	U				
WG1960272-4	LCS Duplicate	S NYTCL-8260	WATER	DONE	U				
WG1960272-4	LCS Duplicate	S NYCP51-8260	WATER	DACQ	U				
WG1960272-5	Laboratory Method Bl	S NYTCL-8260	WATER	DONE	U				
WG1960272-5	Laboratory Method Bl	S NYCP51-8260	WATER	DACQ	U				
Comments:									
WG1960272-4	WG1960272-3								

Inst: Elaine
Initials: MAG
Date: 07/31/24
Run: N

BFB: V10571
IS/SS: V10570
ICAL: V10561B,V10585
ICV: V10539, V10563, V10564, V10586, V10541, V10540

Method
GC: 8260
Autosampler: 8260
Concentrator: 8260



QC: _____ Seq: _____

Vial	Data File	Sample	obs
1	VE240731NBF1	BFB TUNE 17:25	
1	VE240731N01	BLK	
2	VE240731N02	BLK	
3	VE240731N03	I8260STD0.19PPB	
4	VE240731N04	I8260STD0.19PPB	
5	VE240731N05	I8260STD0.5PPB	
6	VE240731N06	I8260STD0.5PPB	
7	VE240731N07	I8260STD2PPB	
8	VE240731N08	I8260STD10PPB	
9	VE240731N09	I8260STD30PPB	
10	VE240731N10	I8260STD80PPB	
11	VE240731N11	I8260STD120PPB	
12	VE240731N12	I8260STD200PPB	
13	VE240731N13	BLK	
14	VE240731N14	BLK	
15	VE240731N15	BLK	
16	VE240731N16	BLK	
17	VE240731N17	C8260STD10PPB	
18	VE240731N18	C8260STD10PPB	
19	VE240731N19	BLK	
20	VE240731N20	BLK	
21	VE240731N21	METHOD BLK	
22	VE240731N22	MDL LVL 11	
23	VE240731N23	MDL LVL 1	
24	VE240731N24	MDL LVL 2	
25	VE240731N25	BLK	

Inst: Elaine
 Initials: MJV
 Date: 08/16/24
 Run: A

BFB: V10571
 IS/SS: V10570
 ICAL: V10594A,V10606

Method
 GC: 8260
 Autosampler: 8260
 Concentrator: 8260



QC: _____ Seq: _____

Vial	Data File	Sample		obs
1	VE240816ABF1	BFB TUNE	06:34	
1	VE240816A01	8260 CCAL	LCS	
2	VE240816A02	8260 CCAL	LCS D	
3	VE240816A03	8260 CCAL		
4	VE240816A04	BLK		
5	VE240816A05	METHOD BLK		
6	VE240816A06	I2446546-05,31,10,10,,b,r3a	NYTCL/10 TB HS	pH<2
7	VE240816A07	I2446555-05,31,10,10,,a,r1a	NYTCL TB HS	pH<2
8	VE240816A08	I2446555-06,31,10,10,,a,r1a	NYTCL FB	pH<2
9	VE240816A09	I2445544-59,31,10,10,,a	NYCURVE FB	pH<2
10	VE240816A10	L2446555-02d,31,0.2,10,,A,R1/	NYTCL	pH>2
11	VE240816A11	L2446555-01d,31,4.0,10,,A,R1/	NYTCL OILY,FOAM	pH>2
12	VE240816A12	I2446277-01,31,10,10,,a,r3a	NY STARS	pH<2
13	VE240816A13	I2446277-02,31,10,10,,a,r3a	NY STARS	pH<2
14	VE240816A14	I2446277-03,31,10,10,,a,r3a	NY STARS	pH<2
15	VE240816A15	I2446555-02D,31,0.4,10,,c,r1a	NYTCL	pH>2
16	VE240816A16	d STD BENZ		
17	VE240816A17	I2445835-01,31,10,10,,a	NYCURVE	
18	VE240816A18	I2445835-02,31,10,10,,a	NYCURVE	
19	VE240816A19	I2445835-03,31,10,10,,a	NYCURVE	
20	VE240816A20	I2445835-05,31,10,10,,a	NYCURVE	
21	VE240816A21	I2445835-06,31,10,10,,a	NYCURVE	
22	VE240816A22	I2445835-07,31,10,10,,a	NYCURVE	
23	VE240816A23	I2445862-01,31,10,10,,a	NYTCL	
24	VE240816A24	I2445862-02,31,10,10,,a	NYTCL	
25	VE240816A25	I2445771-01,31,10,10,,a	NY/R2	
26	VE240816A26	I2445771-02,31,10,10,,a	NY/R2	
27	VE240816A27	I2445835-02MS,31,10,10,,a1	NYCURVE	
28	VE240816A28	I2445835-02MSD,31,10,10,,a2	NYCURVE	
29	VE240816A29	HSTD		
30	VE240816A30	BLK		
31	VE240816A31	BLK		



Pace Analytical Services

Laboratory Code: 11148

SDG Number: L2551893

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Project Name: 585 UNION STREET
Project Number: 14729

Lab Number: L2551893
Report Date: 08/19/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2551893-01	MW-9	WATER	585 UNION STREET BROOKLYN, NY	08/18/25 11:20	08/18/25
L2551893-02	MW-10	WATER	585 UNION STREET BROOKLYN, NY	08/18/25 12:15	08/18/25
L2551893-03	TRIP BLANK	WATER	585 UNION STREET BROOKLYN, NY	08/18/25 00:00	08/18/25

Project Name: 585 UNION STREET
Project Number: 14729

Lab Number: L2551893
Report Date: 08/19/25

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Pace Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Pace's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Pace to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: 585 UNION STREET
Project Number: 14729

Lab Number: L2551893
Report Date: 08/19/25

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: *Jiffani Morrissey*

Report Date: 08/19/25

Title: Technical Director/Representative

DATA PACKAGE GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers



Project Name: 585 UNION STREET
Project Number: 14729

Lab Number: L2551893
Report Date: 08/19/25

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where

Report Format: DU Report with 'J' Qualifiers



Project Name: 585 UNION STREET
Project Number: 14729

Lab Number: L2551893
Report Date: 08/19/25

Data Qualifiers

the identification is based on a mass spectral library search.

- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were estimated.
- ND or U** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

TYPICAL INSTRUMENT PARAMETERS

Volatile Organics Instruments

Volatile Organics:

Instrument: Agilent 7890 GC/5975C MSD	Columns (length x ID x df):
Trap: Supelco K Trap (VOACARB 3000)	RTX-VMS 20m x 0.18mm x 1um
Concentrator: EST Encon (or equivalent)	RTX-VMS 30m x 0.25mm x 1.4um
Autosampler: EST Centurion (or equivalent)	RTX-502.2 40m x 0.18mm x 1um
Purge time: 11 min	

Volatile Organics: VPH

Instrument: Agilent 6890 (or equivalent)	Column Type: Restek RTX 502.2
Trap: Supelco K Trap (VOACARB 3000)	Column Length: 105 Meters
Concentrator: EST Encon (or equivalent)	df: 3.00 um
Autosampler: EST Centurion (or equivalent)	ID: 0.53mm

Volatile Organics: PIANO

Instrument: Agilent 7890 GC/5975C MSD	Column Type: DB-VRX
Trap: Supelco K Trap (VOACARB 3000)	Column Length: 60 Meters
Concentrator: Tekmar Velocity / EST Encon	df: 1.40 um
Autosampler: Varian Archon / EST Centurion	ID: 0.25 mm
Purge time: 11 min	Desorb: 1 min

Volatile Organics: Dissolved Gas

Instrument: Agilent 7890 (or equivalent) with FID/TCD	Column Type: Haysep S Column
	Column Length: 2 Meters packed (100/200 mesh)
Autosampler: LEAP Headspace	Purge time: 0.6 min

Volatile Organics in Air Instruments

Volatile Organics in Air:

Instruments: Agilent 6890 GC / 5975 MSD Shimadzu QP2010-SE / QP2020

Concentrator: Entech 7100A or 7200	Column Type: Restek RTX-1
Autosampler: Entech 7016CA or 7016D	Column Length: 60 Meters
	df: 1.00 um
	ID: 0.25 mm or 0.32 mm

Trap 1: Glass Bead: manufacturer-Entech: 20 cm packing material

Trap 2: Tenax: manufacturer-Entech: 20 cm packing material

Semivolatile Organics Instruments - Westborough

Semivolatile Organics (Acid/Base/Neutral Extractables):

Instrument: Agilent 5973N MSD	Injection volume: 1 ul;2 uL LVI
Column Type: Restek RXI-5SILMS	df: 0.32 um
Column Length: 30 Meters	ID: 0.25 mm

Polynuclear Aromatic Hydrocarbons by 8270 SIM:

Instrument: Agilent 5973 MSD	Injection volume: 1 ul;2 uL LVI
Column Type: Restek RXI-5SILMS	df: 0.25 um
Column Length: 30 Meters	ID: 0.25 mm

Pesticides/PCB/Herbicides:

Instrument: Agilent 6890 w/Dual Micro ECDs	Injection Volume: 1uL
Column A: Restek RTX-CL/STX-CL	df: 0.32
Column B: Restek RTX/STX-CLPPesticide II	df: 0.25
Column Length: 30 Meters	ID: 0.32 mm

Petroleum/EPH:

Instrument: Agilent 6890 w/FID / HP 5890 w/ FID	Injection Volume: 1uL
Column: Restek RTX 5	df: 0.25
Column Length: 30 Meters	
ID: 0.32 mm	

Semivolatile Organic Instruments - Mansfield

Semivolatile Organics (ALK-PAH Extractables):

Instrument: Agilent 5973N / 5975 MSD	Injection volume: 1 ul
Column Type: ZB-5	df: 0.25 um
Column Length: 60 Meters	ID: 0.25 mm

Semivolatile Organics (8270):

Instrument: Agilent 5973N / 5975 MSD	Injection volume: 2 ul
Column Type: ZB-Semivolatiles	df: 0.25 um
Column Length: 30 Meters	ID: 0.25 mm

Semivolatile Organics (8270 SIM):

Instrument: Agilent 5973N / 5975 MSD	Injection volume: 3 ul
Column Type: ZB-5	df: 0.25 um
Column Length: 30 Meters	ID: 0.25 mm

Semivolatile Organics (1,4-Dioxane):

Instrument: Agilent 5973N / 5975 / 5977 MSD	Injection volume: 3 ul
Column Type: RTX-5	df: 0.25um, 0.18 um
Column Length: 30 Meters	ID: 0.25um, 0.18 mm

Semivolatile Organics (209 Congener):

Instrument: Agilent 5973N / 5975 MSD	Injection volume: 3 ul
Column Type: RTX-5, RTX-PCB	df: 0.25um, 0.18 um
Column Length: 60 Meters	ID: 0.25um, 0.18 mm

Semivolatile Organics (8081):

Instrument: Agilent 6890 / 7890	Injection volume: 1 ul
Column Type: RTX-5 / RTX-CLP II	df: 0.25 um
Column Length: 60 Meters	ID: 0.25 mm

Semivolatile Organics (8082):

Instrument: Agilent 6890 w/Dual Micro ECDs	Injection Volume: 1uL
Column A: Restek RTX-CL/STX-CL	df: 0.32
Column B: Restek RTX/STX-CLPPesticide II	df: 0.25
Column Length: 30 Meters	ID: 0.32 mm

Semivolatile Organics (SHC Extractables):

Instrument: Agilent 6890	Injection volume: 1 ul
Column Type: RTX-5	df: 0.25 um
Column Length: 60 Meters	ID: 0.25 mm



Sample Delivery Group Summary

Pace Job Number : L2551893

Received : 18-AUG-2025

Reviewer : Brendan Grady

Account Name : Impact Environmental

Project Number : 14729

Project Name : 585 UNION STREET

Delivery Information

Samples Delivered By : Pace Courier

Chain of Custody : Present

Cooler Information

Cooler	Seal/Seal#	Preservation	Temperature(°C)	Additional Information
A	Absent/	Ice	3.0	

Condition Information

1) All samples on COC received?	YES
2) Extra samples received?	NO
3) Are there any sample container discrepancies?	NO
4) Are there any discrepancies between COC & sample labels?	NO
5) Are samples in appropriate containers for requested analysis?	YES
6) Are samples properly preserved for requested analysis?	YES
7) Are samples within holding time for requested analysis?	YES
8) All sampling equipment returned?	NA

Volatile Organics/VPH

1) Reagent Water Vials Frozen by Client?	NO

PACE ANALYTICAL SERVICES
LOGIN CHAIN OF CUSTODY REPORT
Aug 19 2025, 08:22 pm

Login Number: L2551893

Account: IMPENV Impact Environmental Project: 14729

Received: 18AUG25 Due Date: 19AUG25

Sample # Client ID Mat PR Collected

L2551893-01 MW-9 1 3A 18AUG25 11:20

T015 SIM for 7 NYS DMCs ASP-B Package Due Date: 08/19/25

ASP-B, NYCP51-8260

L2551893-02 MW-10 1 3A 18AUG25 12:15

T015 SIM for 7 NYS DMCs Package Due Date: 08/19/25

NYCP51-8260

L2551893-03 TRIP BLANK 1 3A 18AUG25 00:00

T015 SIM for 7 NYS DMCs Package Due Date: 08/19/25

NYCP51-8260

Page 1

Logged By: Brendan Grady

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Organics

GC/MS 8260

Analysis

Volatiles QC Summary

Surrogate Recovery Summary

Form 2

Volatiles

Client: Impact Environmental
Project Name: 585 UNION STREET

Lab Number: L2551893
Project Number: 14729
Matrix:

CLIENT ID (LAB SAMPLE NO.)	SMC1 DCA	SMC2 TOL	SMC3 BFB	SMC4 DBFM	TOT OUT
MW-9 (L2551893-01)	118	97	93	108	0
MW-10 (L2551893-02)	120	97	93	109	0
TRIP BLANK (L2551893-03)	124	96	90	114	0
WG2104736-3LCS	123	100	90	107	0
WG2104736-4LCSD	123	101	91	109	0
WG2104736-5BLANK	115	98	89	110	0

QC LIMITS

(70-130) DCA = 1,2-DICHLOROETHANE-D4
(70-130) TOL = TOLUENE-D8
(70-130) BFB = 4-BROMOFLUOROBENZENE
(70-130) DBFM = DIBROMOFLUOROMETHANE

* Values outside of QC limits

FORM II NYCP51-8260



Laboratory Control Sample Summary

Form 3

Volatiles

Client : Impact Environmental **Lab Number** : L2551893
Project Name : 585 UNION STREET **Project Number** : 14729
Matrix (Level) : WATER (LOW)
LCS Sample ID : WG2104736-3 **Analysis Date** : 08/19/25 07:41 **File ID** : VG250819A02
LCSD Sample ID : WG2104736-4 **Analysis Date** : 08/19/25 08:07 **File ID** : VG250819A03

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R			
Benzene	10	10	100	10	10	100	0	70-130	20
Toluene	10	9.3	93	10	9.5	95	2	70-130	20
Ethylbenzene	10	9.0	90	10	9.1	91	1	70-130	20
p/m-Xylene	20	19	95	20	19	95	0	70-130	20
o-Xylene	20	18	90	20	18	90	0	70-130	20
n-Butylbenzene	10	8.8	88	10	8.9	89	1	53-136	20
sec-Butylbenzene	10	8.9	89	10	9.0	90	1	70-130	20
tert-Butylbenzene	10	8.5	85	10	8.7	87	2	70-130	20
Isopropylbenzene	10	8.5	85	10	8.7	87	2	70-130	20
p-Isopropyltoluene	10	8.6	86	10	8.7	87	1	70-130	20
Naphthalene	10	6.4	64 Q	10	6.2	62 Q	3	70-130	20
n-Propylbenzene	10	8.6	86	10	8.7	87	1	69-130	20
1,3,5-Trimethylbenzene	10	8.9	89	10	9.1	91	2	64-130	20
1,2,4-Trimethylbenzene	10	8.7	87	10	8.8	88	1	70-130	20



**Method Blank Summary
Form 4
Volatiles**

Client	: Impact Environmental	Lab Number	: L2551893
Project Name	: 585 UNION STREET	Project Number	: 14729
Lab Sample ID	: WG2104736-5	Lab File ID	: VG250819A05
Instrument ID	: GONZO		
Matrix	: WATER	Analysis Date	: 08/19/25 09:00

Client Sample No.	Lab Sample ID	Analysis Date
WG2104736-3LCS	WG2104736-3	08/19/25 07:41
WG2104736-4LCSD	WG2104736-4	08/19/25 08:07
MW-9	L2551893-01	08/19/25 09:27
MW-10	L2551893-02	08/19/25 09:53
TRIP BLANK	L2551893-03	08/19/25 10:20

Instrument Performance Check (Tune) Summary

Form 5

Volatiles

Bromofluorobenzene (BFB)

Client : Impact Environmental	Lab Number : L2551893
Project Name : 585 UNION STREET	Project Number : 14729
Instrument ID : GONZO	Analysis Date : 06/19/25 23:16
Tune Standard : WG2081469-1	Tune File ID : VG250619NBF01_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	16.8
75	30.0 - 80.0% of mass 95	45.2
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.7 (.8)1
174	Greater than 50.0% of mass 95	87.3
175	5.0 - 9.0% of mass 174	7 (8)1
176	Greater than 95.0% but less than 101% of mass	84 (96.2)1
177	5.0 - 9.0% of mass 176	5.7 (6.8)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
STD0.19PPB	R1979280-1	VG250619N04	06/20/25 01:35
STD0.5PPB	R1979280-2	VG250619N06	06/20/25 02:28
STD2PPB	R1979280-3	VG250619N08	06/20/25 03:21
STD10PPB	R1979280-4	VG250619N10	06/20/25 04:15
STD30PPB	R1979280-5	VG250619N11	06/20/25 04:41
STD80PPB	R1979280-7	VG250619N12	06/20/25 05:08
STD120PPB	R1979280-6	VG250619N13	06/20/25 05:34
STD200PPB	R1979280-8	VG250619N14	06/20/25 06:01
Correlation Data Summary	R1979280-9	VG250619N19	06/20/25 08:14
ICV Quant Report	R1979280-9	VG250619N19	06/20/25 08:14



Instrument Performance Check (Tune) Summary

Form 5

Volatiles

Bromofluorobenzene (BFB)

Client : Impact Environmental	Lab Number : L2551893
Project Name : 585 UNION STREET	Project Number : 14729
Instrument ID : GONZO	Analysis Date : 08/19/25 07:05
Tune Standard : WG2104736-1	Tune File ID : VG250819ABF3_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	22.7
75	30.0 - 80.0% of mass 95	51.1
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	1.4 (1.4)1
174	Greater than 50.0% of mass 95	97.2
175	5.0 - 9.0% of mass 174	7.2 (7.4)1
176	Greater than 95.0% but less than 101% of mass	97.6 (100.)1
177	5.0 - 9.0% of mass 176	6.7 (6.9)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
WG2104736-2CCAL	WG2104736-2	VG250819A02	08/19/25 07:41
WG2104736-3LCS	WG2104736-3	VG250819A02	08/19/25 07:41
WG2104736-4LCSD	WG2104736-4	VG250819A03	08/19/25 08:07
WG2104736-5BLANK	WG2104736-5	VG250819A05	08/19/25 09:00
MW-9	L2551893-01	VG250819A06	08/19/25 09:27
MW-10	L2551893-02	VG250819A07	08/19/25 09:53
TRIP BLANK	L2551893-03	VG250819A08	08/19/25 10:20



Internal Standard Area and RT Summary

Form 8a

Volatiles

Client : Impact Environmental
 Project Name : 585 UNION STREET
 Instrument ID : GONZO
 Sample No : WG2104736-2

Lab Number : L2551893
 Project Number : 14729
 Analysis Date : 08/19/25 07:41:00
 Lab File ID : VG250819A02

	Fluorobenzene (IS)		Chlorobenzene-d5		1,4-Dichlorobenzene-D4	
	Area	RT	Area	RT	Area	RT
WG2104736-2	418534	5.95	337983	9.49	207571	12.20
Upper Limit	837068	6.45	675966	9.99	415142	12.70
Lower Limit	209267	5.45	168992	8.99	103786	11.70
Sample ID						
WG2104736-3 LCS	418534	5.95	337983	9.49	207571	12.20
WG2104736-4 LCSD	423382	5.95	342482	9.48	208075	12.20
WG2104736-5 BLANK	390661	5.95	302422	9.48	173822	12.20
MW-9	398976	5.95	326050	9.49	179971	12.20
MW-10	384885	5.95	313271	9.49	176728	12.20
TRIP BLANK	373004	5.95	302874	9.49	168618	12.20

Area Upper Limit = +100% of internal standard area
 Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT
 RT Lower Limit = -0.50 minutes of internal standard RT

* Values outside of QC limits





Date Created: 04/17/25
Created By: Jason Hebert
File: PM19302-1
Page: 1

Volatile Organics - EPA 8260D (WATER)

Holding Time: 14 days
Container/Sample Preservation: 3 - Vial HCl preserved

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
Methylene chloride	75-09-2	3	0.678	ug/l	70-130	20	70-130	20	20			
1,1-Dichloroethane	75-34-3	0.75	0.21	ug/l	70-130	20	70-130	20	20			
Chloroform	67-66-3	0.75	0.222	ug/l	70-130	20	70-130	20	20			
Carbon tetrachloride	56-23-5	0.5	0.134	ug/l	63-132	20	63-132	20	20			
1,2-Dichloropropane	78-87-5	1.75	0.137	ug/l	70-130	20	70-130	20	20			
Dibromochloromethane	124-48-1	0.5	0.149	ug/l	63-130	20	63-130	20	20			
1,1,2-Trichloroethane	79-00-5	0.75	0.144	ug/l	70-130	20	70-130	20	20			
Tetrachloroethene	127-18-4	0.5	0.181	ug/l	70-130	20	70-130	20	20			
Chlorobenzene	108-90-7	0.5	0.178	ug/l	75-130	25	75-130	25	25			
Trichlorofluoromethane	75-69-4	2.5	0.161	ug/l	62-150	20	62-150	20	20			
1,2-Dichloroethane	107-06-2	0.5	0.132	ug/l	70-130	20	70-130	20	20			
1,1,1-Trichloroethane	71-55-6	0.5	0.158	ug/l	67-130	20	67-130	20	20			
Bromodichloromethane	75-27-4	0.5	0.192	ug/l	67-130	20	67-130	20	20			
trans-1,3-Dichloropropene	10061-02-6	0.5	0.164	ug/l	70-130	20	70-130	20	20			
cis-1,3-Dichloropropene	10061-01-5	0.5	0.144	ug/l	70-130	20	70-130	20	20			
1,3-Dichloropropene, Total	542-75-6	0.5	0.144	ug/l				20	20			
1,1-Dichloropropene	563-58-6	2.5	0.24	ug/l	70-130	20	70-130	20	20			
Bromoform	75-25-2	2	0.248	ug/l	54-136	20	54-136	20	20			
1,1,2,2-Tetrachloroethane	79-34-5	0.5	0.167	ug/l	67-130	20	67-130	20	20			
Benzene	71-43-2	0.5	0.159	ug/l	70-130	25	70-130	25	25			
Toluene	108-88-3	0.75	0.203	ug/l	70-130	25	70-130	25	25			
Ethylbenzene	100-41-4	0.5	0.167	ug/l	70-130	20	70-130	20	20			
Chloromethane	74-87-3	2.5	0.2	ug/l	64-130	20	64-130	20	20			
Bromomethane	74-83-9	1	0.256	ug/l	39-139	20	39-139	20	20			
Vinyl chloride	75-01-4	1	0.0714	ug/l	55-140	20	55-140	20	20			
Chloroethane	75-00-3	1	0.134	ug/l	55-138	20	55-138	20	20			
1,1-Dichloroethene	75-35-4	0.5	0.169	ug/l	61-145	25	61-145	25	25			
trans-1,2-Dichloroethene	156-60-5	0.75	0.163	ug/l	70-130	20	70-130	20	20			
1,2-Dichloroethene (total)	540-59-0	0.5	0.163	ug/l				20	20			
Trichloroethene	79-01-6	0.5	0.175	ug/l	70-130	25	70-130	25	25			
1,2-Dichlorobenzene	95-50-1	2.5	0.184	ug/l	70-130	20	70-130	20	20			
1,3-Dichlorobenzene	541-73-1	2.5	0.186	ug/l	70-130	20	70-130	20	20			
1,4-Dichlorobenzene	106-46-7	2.5	0.187	ug/l	70-130	20	70-130	20	20			
Methyl tert butyl ether	1634-04-4	1	0.166	ug/l	63-130	20	63-130	20	20			
p/m-Xylene	179601-23-1	1	0.332	ug/l	70-130	20	70-130	20	20			
o-Xylene	95-47-6	1	0.392	ug/l	70-130	20	70-130	20	20			
Xylene (Total)	1330-20-7	1	0.33	ug/l				20	20			
cis-1,2-Dichloroethene	156-59-2	0.5	0.187	ug/l	70-130	20	70-130	20	20			
Dibromomethane	74-95-3	5	0.363	ug/l	70-130	20	70-130	20	20			
1,4-Dichlorobutane	110-56-5	5	0.464	ug/l	70-130	20	70-130	20	20			
1,2,3-Trichloropropane	96-18-4	5	0.176	ug/l	64-130	20	64-130	20	20			
Styrene	100-42-5	1	0.359	ug/l	70-130	20	70-130	20	20			

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Pace Analytical Services.



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File: PM19302-1
Page: 2

Volatile Organics - EPA 8260D (WATER)

Holding Time: 14 days
Container/Sample Preservation: 3 - Vial HCl preserved

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
Dichlorodifluoromethane	75-71-8	5	0.244	ug/l	36-147	20	36-147	20	20			
Acetone	67-64-1	5	1.46	ug/l	58-148	20	58-148	20	20			
Carbon disulfide	75-15-0	5	0.299	ug/l	51-130	20	51-130	20	20			
2-Butanone	78-93-3	5	1.94	ug/l	63-138	20	63-138	20	20			
Vinyl acetate	108-05-4	5	0.311	ug/l	70-130	20	70-130	20	20			
4-Methyl-2-pentanone	108-10-1	5	0.416	ug/l	59-130	20	59-130	20	20			
2-Hexanone	591-78-6	5	0.515	ug/l	57-130	20	57-130	20	20			
Ethyl methacrylate	97-63-2	5	0.606	ug/l	70-130	20	70-130	20	20			
Acrylonitrile	107-13-1	5	0.43	ug/l	70-130	20	70-130	20	20			
Bromochloromethane	74-97-5	2.5	0.152	ug/l	70-130	20	70-130	20	20			
Tetrahydrofuran	109-99-9	5	0.525	ug/l	58-130	20	58-130	20	20			
2,2-Dichloropropane	594-20-7	2.5	0.204	ug/l	63-133	20	63-133	20	20			
1,2-Dibromoethane	106-93-4	2	0.193	ug/l	70-130	20	70-130	20	20			
1,3-Dichloropropane	142-28-9	2.5	0.212	ug/l	70-130	20	70-130	20	20			
1,1,1,2-Tetrachloroethane	630-20-6	0.5	0.164	ug/l	64-130	20	64-130	20	20			
Bromobenzene	108-86-1	2.5	0.152	ug/l	70-130	20	70-130	20	20			
n-Butylbenzene	104-51-8	0.5	0.192	ug/l	53-136	20	53-136	20	20			
sec-Butylbenzene	135-98-8	0.5	0.181	ug/l	70-130	20	70-130	20	20			
tert-Butylbenzene	98-06-6	2.5	0.196	ug/l	70-130	20	70-130	20	20			
o-Chlorotoluene	95-49-8	2.5	0.215	ug/l	70-130	20	70-130	20	20			
p-Chlorotoluene	106-43-4	2.5	0.185	ug/l	70-130	20	70-130	20	20			
1,2-Dibromo-3-chloropropane	96-12-8	2.5	0.353	ug/l	41-144	20	41-144	20	20			
Hexachlorobutadiene	87-68-3	0.5	0.217	ug/l	63-130	20	63-130	20	20			
Isopropylbenzene	98-82-8	0.5	0.187	ug/l	70-130	20	70-130	20	20			
p-Isopropyltoluene	99-87-6	0.5	0.188	ug/l	70-130	20	70-130	20	20			
Naphthalene	91-20-3	2.5	0.216	ug/l	70-130	20	70-130	20	20			
n-Propylbenzene	103-65-1	0.5	0.173	ug/l	69-130	20	69-130	20	20			
1,2,3-Trichlorobenzene	87-61-6	2.5	0.234	ug/l	70-130	20	70-130	20	20			
1,2,4-Trichlorobenzene	120-82-1	2.5	0.22	ug/l	70-130	20	70-130	20	20			
1,3,5-Trimethylbenzene	108-67-8	2.5	0.217	ug/l	64-130	20	64-130	20	20			
1,2,4-Trimethylbenzene	95-63-6	2.5	0.191	ug/l	70-130	20	70-130	20	20			
trans-1,4-Dichloro-2-butene	110-57-6	2.5	0.213	ug/l	70-130	20	70-130	20	20			
Ethyl ether	60-29-7	2.5	0.163	ug/l	59-134	20	59-134	20	20			
1,2-Dichloroethane-d4	17060-07-0									70-130		
Toluene-d8	2037-26-5									70-130		
4-Bromofluorobenzene	460-00-4									70-130		
Dibromofluoromethane	1868-53-7									70-130		

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Pace Analytical Services.



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Volatiles Sample Data

Results Summary

Form 1

Volatile Organics by GC/MS

Client : Impact Environmental	Lab Number : L2551893
Project Name : 585 UNION STREET	Project Number : 14729
Lab ID : L2551893-01	Date Collected : 08/18/25 11:20
Client ID : MW-9	Date Received : 08/18/25
Sample Location : 585 UNION STREET BROOKLYN, NY	Date Analyzed : 08/19/25 09:27
Sample Matrix : WATER	Dilution Factor : 1
Analytical Method : 1,8260D	Analyst : PID
Lab File ID : VG250819A06	Instrument ID : GONZO
Sample Amount : 10 ml	GC Column : RTX-502.2
Level : LOW	%Solids : N/A
Extract Volume (MeOH) : N/A	Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
1330-20-7	Xylenes, Total	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	ND	2.5	0.70	U
103-65-1	n-Propylbenzene	ND	2.5	0.70	U
108-67-8	1,3,5-Trimethylbenzene	ND	2.5	0.70	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.70	U

Results Summary

Form 1

Volatile Organics by GC/MS

Client : Impact Environmental	Lab Number : L2551893
Project Name : 585 UNION STREET	Project Number : 14729
Lab ID : L2551893-02	Date Collected : 08/18/25 12:15
Client ID : MW-10	Date Received : 08/18/25
Sample Location : 585 UNION STREET BROOKLYN, NY	Date Analyzed : 08/19/25 09:53
Sample Matrix : WATER	Dilution Factor : 1
Analytical Method : 1,8260D	Analyst : PID
Lab File ID : VG250819A07	Instrument ID : GONZO
Sample Amount : 10 ml	GC Column : RTX-502.2
Level : LOW	%Solids : N/A
Extract Volume (MeOH) : N/A	Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
1330-20-7	Xylenes, Total	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	ND	2.5	0.70	U
103-65-1	n-Propylbenzene	ND	2.5	0.70	U
108-67-8	1,3,5-Trimethylbenzene	ND	2.5	0.70	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.70	U

Results Summary

Form 1

Volatile Organics by GC/MS

Client	: Impact Environmental	Lab Number	: L2551893
Project Name	: 585 UNION STREET	Project Number	: 14729
Lab ID	: L2551893-03	Date Collected	: 08/18/25 00:00
Client ID	: TRIP BLANK	Date Received	: 08/18/25
Sample Location	: 585 UNION STREET BROOKLYN, NY	Date Analyzed	: 08/19/25 10:20
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260D	Analyst	: PID
Lab File ID	: VG250819A08	Instrument ID	: GONZO
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
1330-20-7	Xylenes, Total	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	ND	2.5	0.70	U
103-65-1	n-Propylbenzene	ND	2.5	0.70	U
108-67-8	1,3,5-Trimethylbenzene	ND	2.5	0.70	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.70	U

Results Summary

Form 1

Volatile Organics by GC/MS

Client : Impact Environmental
 Project Name : 585 UNION STREET
 Lab ID : WG2104736-5
 Client ID : WG2104736-5BLANK
 Sample Location :
 Sample Matrix : WATER
 Analytical Method : 1,8260D
 Lab File ID : VG250819A05
 Sample Amount : 10 ml
 Level : LOW
 Extract Volume (MeOH) : N/A

Lab Number : L2551893
 Project Number : 14729
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 08/19/25 09:00
 Dilution Factor : 1
 Analyst : PID
 Instrument ID : GONZO
 GC Column : RTX-502.2
 %Solids : N/A
 Injection Volume : N/A

CAS NO.	Parameter	ug/L			Qualifier
		Results	RL	MDL	
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
1330-20-7	Xylenes, Total	ND	2.5	0.70	U
104-51-8	n-Butylbenzene	ND	2.5	0.70	U
135-98-8	sec-Butylbenzene	ND	2.5	0.70	U
98-06-6	tert-Butylbenzene	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
99-87-6	p-Isopropyltoluene	ND	2.5	0.70	U
91-20-3	Naphthalene	ND	2.5	0.70	U
103-65-1	n-Propylbenzene	ND	2.5	0.70	U
108-67-8	1,3,5-Trimethylbenzene	ND	2.5	0.70	U
95-63-6	1,2,4-Trimethylbenzene	ND	2.5	0.70	U



Quantitation Report (QT Reviewed)

Data Path : K:\Gonzo\2025\250819A\
 Data File : VG250819A06.D
 Acq On : 19 Aug 2025 9:27 am
 Operator : GONZO:PID
 Sample : L2551893-01,31,10,10,,A,R3A
 Misc : WG2104736,ICAL22400 (Sig #1); WG,ICAL22400 (Sig #2)
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 19 12:03:05 2025
 Quant Method : K:\Gonzo\2025\250819A\G_250619N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Jun 20 07:10:41 2025
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Gonzo\2025\250819A\VG250819A02.D
 Sub List : 8260-NYCP51 - NYCP51

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.950	96	398976	10.000	ug/L	0.00
Standard Area 1 = 418534			Recovery	=	95.33%	
59) Chlorobenzene-d5	9.485	117	326050	10.000	ug/L	0.00
Standard Area 1 = 337983			Recovery	=	96.47%	
79) 1,4-Dichlorobenzene-d4	12.198	152	179971	10.000	ug/L	0.00
Standard Area 1 = 207571			Recovery	=	86.70%	
System Monitoring Compounds						
36) Dibromofluoromethane	5.150	113	111686	10.784	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	107.84%	
43) 1,2-Dichloroethane-d4	5.674	65	125189	11.807	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	118.07%	
60) Toluene-d8	7.636	98	394341	9.737	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	97.37%	
83) 4-Bromofluorobenzene	10.989	95	137807	9.284	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	92.84%	
Target Compounds						
41) Benzene	5.547	78	2089	N.D.		
61) Toluene	7.699	92	951	N.D.		
74) Ethylbenzene	9.548	91	845	N.D.		
76) p/m Xylene	9.767	106	923	N.D.		
77) o Xylene	10.296	106	310	N.D.		
82) Isopropylbenzene	10.656	105	13372	0.365	ug/L	98
85) n-Propylbenzene	11.321	91	242	N.D.		
90) 1,3,5-Trimethylbenzene	11.370	105	216	N.D.		
94) tert-Butylbenzene	11.696	119	3479	0.133	ug/L	97
97) 1,2,4-Trimethylbenzene	0.000		0	N.D.	d	
98) sec-Butylbenzene	11.894	105	8782	0.246	ug/L	# 63
99) p-Isopropyltoluene	12.050	119	442	N.D.		
103) n-Butylbenzene	12.488	91	795	N.D.		
110) Naphthalene	14.355	128	775	N.D.		

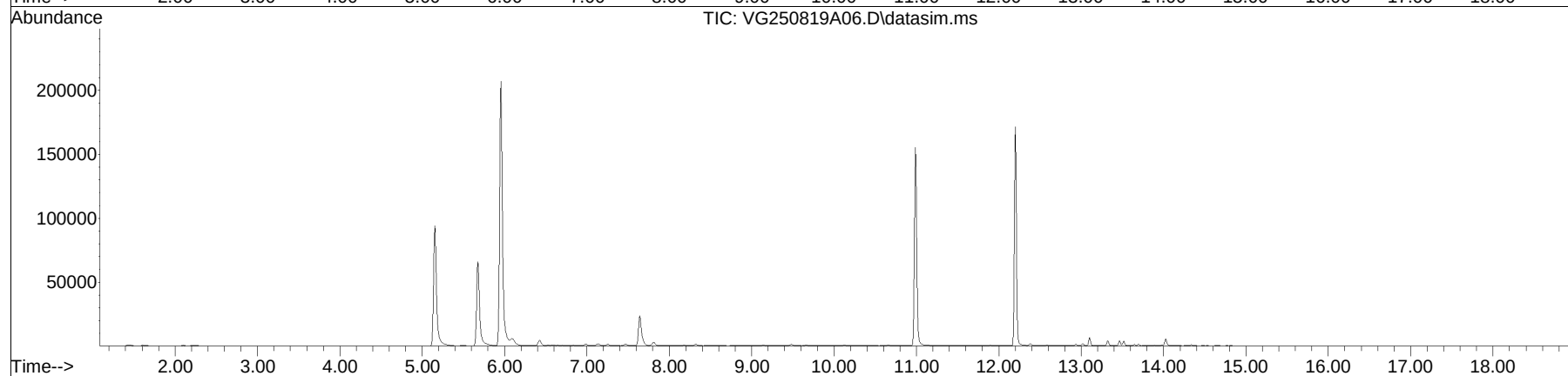
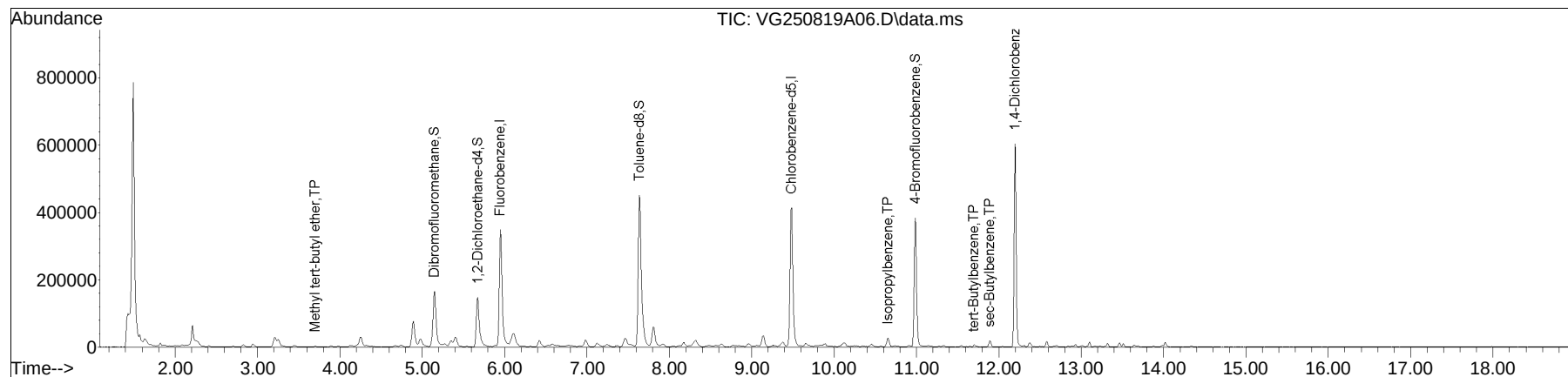
(#) = qualifier out of range (m) = manual integration (+) = signals summed

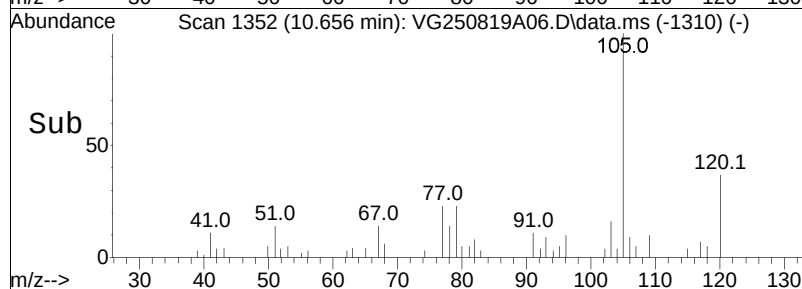
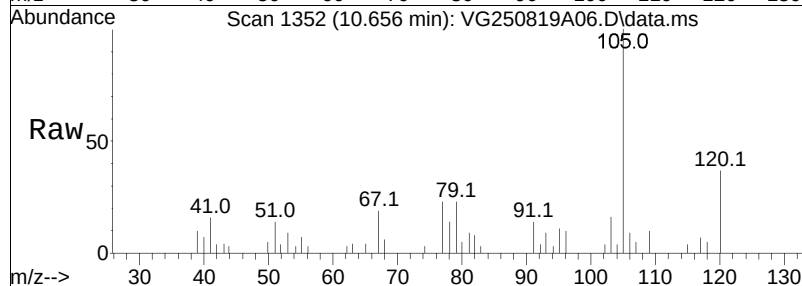
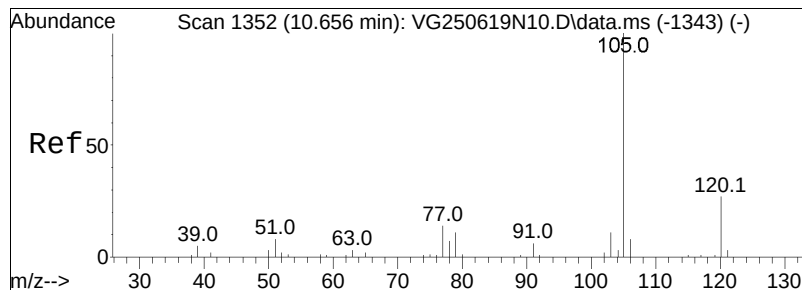
Quantitation Report (QT Reviewed)

Data Path : K:\Gonzo\2025\250819A\
 Data File : VG250819A06.D
 Acq On : 19 Aug 2025 9:27 am
 Operator : GONZO:PID
 Sample : L2551893-01,31,10,10,,A,R3A
 Misc : WG2104736,ICAL22400 (Sig #1); WG,ICAL22400 (Sig #2)
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 19 12:03:05 2025
 Quant Method : K:\Gonzo\2025\250819A\G_250619N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Jun 20 07:10:41 2025
 Response via : Initial Calibration

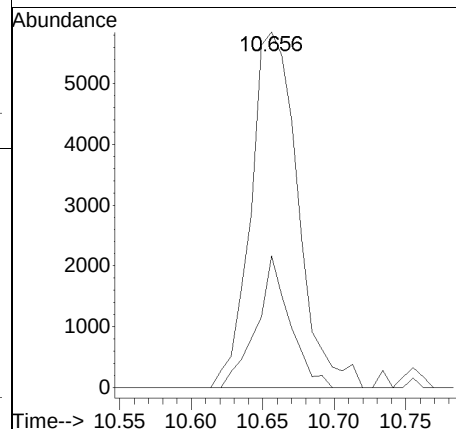
Sub List : 8260-NYCP51 - NYCP510819A\VG250819A02.D•

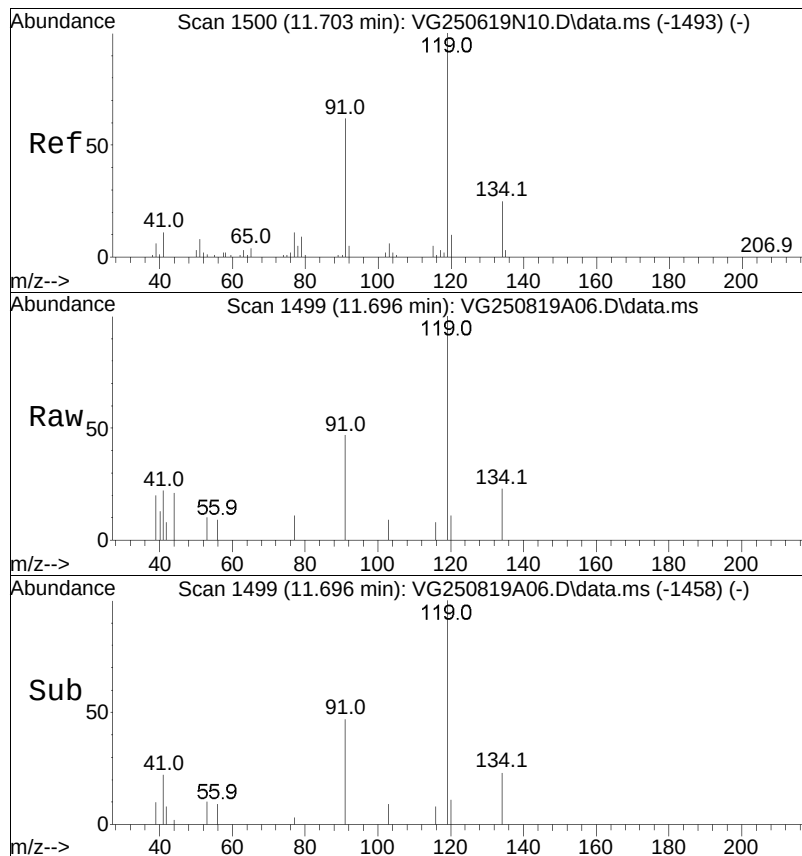




#82
Isopropylbenzene
Concen: 0.36 ug/L
RT: 10.656 min Scan# 1352
Delta R.T. 0.000 min
Lab File: VG250819A06.D
Acq: 19 Aug 2025 9:27 am

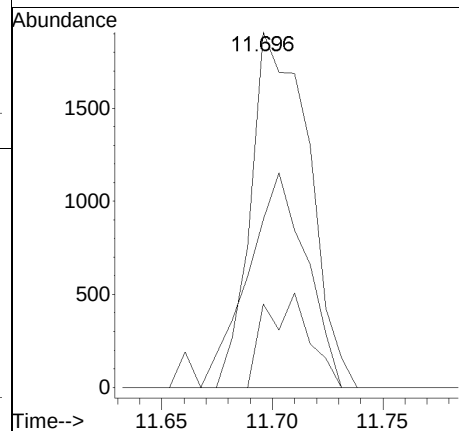
Tgt Ion	Ratio	Lower	Upper
105	100		
120	26.3	7.6	47.6

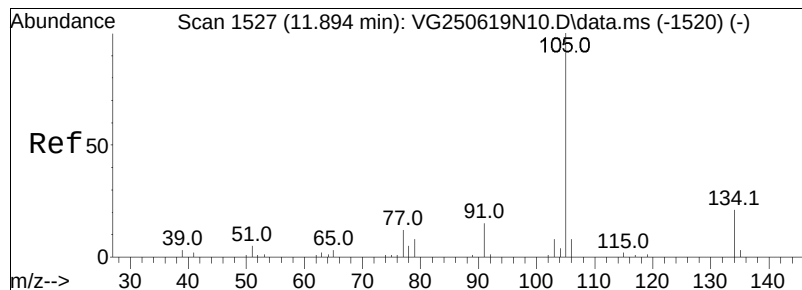




#94
 tert-Butylbenzene
 Concen: 0.13 ug/L
 RT: 11.696 min Scan# 1499
 Delta R.T. -0.007 min
 Lab File: VG250819A06.D
 Acq: 19 Aug 2025 9:27 am

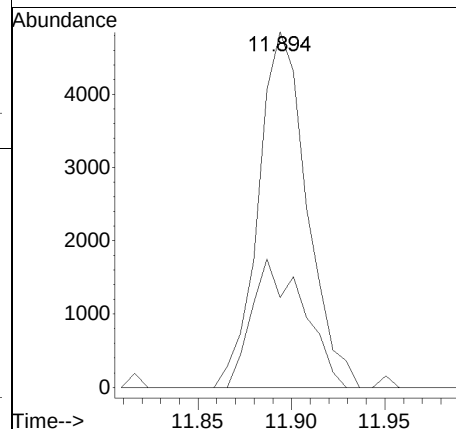
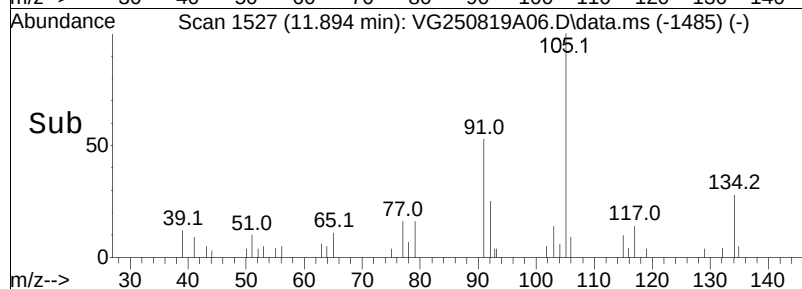
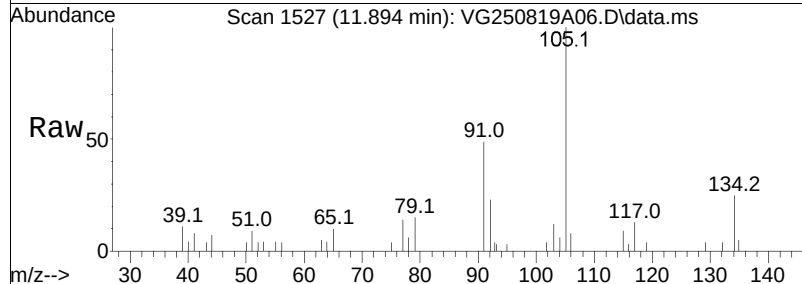
Tgt	Ion:119	Resp:	3479
Ion	Ratio	Lower	Upper
119	100		
91	63.1	50.2	75.2
134	20.2	20.2	30.2





#98
 sec-Butylbenzene
 Concen: 0.25 ug/L
 RT: 11.894 min Scan# 1527
 Delta R.T. 0.000 min
 Lab File: VG250819A06.D
 Acq: 19 Aug 2025 9:27 am

Tgt Ion	Ratio	Lower	Upper
105	100		
134	38.5	13.7	28.5#



Manual Integration Report

Data Path : K:\Gonzo\2025\250819A\ QMethod : G_250619N_8260.m
Data File : VG250819A06.D Operator : GONZO:PID
Date Inj'd : 8/19/2025 9:27 am Instrument : Gonzo
Sample : L2551893-01,31,10,10,,A,R3Quant Date : 8/19/2025 12:02 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : K:\Gonzo\2025\250819A\
 Data File : VG250819A07.D
 Acq On : 19 Aug 2025 9:53 am
 Operator : GONZO:PID
 Sample : L2551893-02,31,10,10,,A,R3A
 Misc : WG2104736,ICAL22400 (Sig #1); WG,ICAL22400 (Sig #2)
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 19 12:02:27 2025
 Quant Method : K:\Gonzo\2025\250819A\G_250619N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Jun 20 07:10:41 2025
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Gonzo\2025\250819A\VG250819A02.D
 Sub List : 8260-NYCP51 - NYCP51

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

Internal Standards						
1) Fluorobenzene	5.950	96	384885	10.000	ug/L	0.00
Standard Area 1 = 418534			Recovery	=	91.96%	
59) Chlorobenzene-d5	9.485	117	313271	10.000	ug/L	0.00
Standard Area 1 = 337983			Recovery	=	92.69%	
79) 1,4-Dichlorobenzene-d4	12.198	152	176728	10.000	ug/L	0.00
Standard Area 1 = 207571			Recovery	=	85.14%	
System Monitoring Compounds						
36) Dibromofluoromethane	5.150	113	109156	10.926	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	109.26%	
43) 1,2-Dichloroethane-d4	5.675	65	122749	12.001	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	120.01%	
60) Toluene-d8	7.636	98	377842	9.710	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	97.10%	
83) 4-Bromofluorobenzene	10.981	95	134986	9.261	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	92.61%	
Target Compounds						
41) Benzene	5.548	78	365	N.D.		
61) Toluene	7.692	92	893	N.D.		
74) Ethylbenzene	9.569	91	584	N.D.		
76) p/m Xylene	9.732	106	77	N.D.		
77) o Xylene	0.000		0	N.D.		
82) Isopropylbenzene	10.663	105	1754	N.D.		
85) n-Propylbenzene	11.137	91	171	N.D.		
90) 1,3,5-Trimethylbenzene	11.307	105	178	N.D.		
94) tert-Butylbenzene	11.703	119	2837	0.110	ug/L	# 86
97) 1,2,4-Trimethylbenzene	11.795	105	790	N.D.		
98) sec-Butylbenzene	11.901	105	2075	N.D.		
99) p-Isopropyltoluene	12.064	119	219	N.D.		
103) n-Butylbenzene	12.488	91	86	N.D.		
110) Naphthalene	14.355	128	364	N.D.		

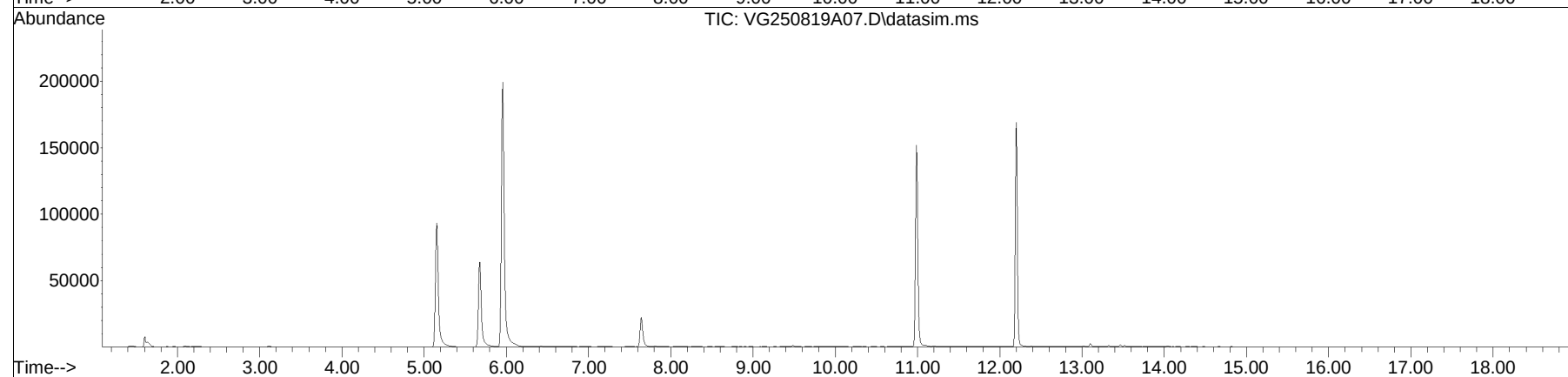
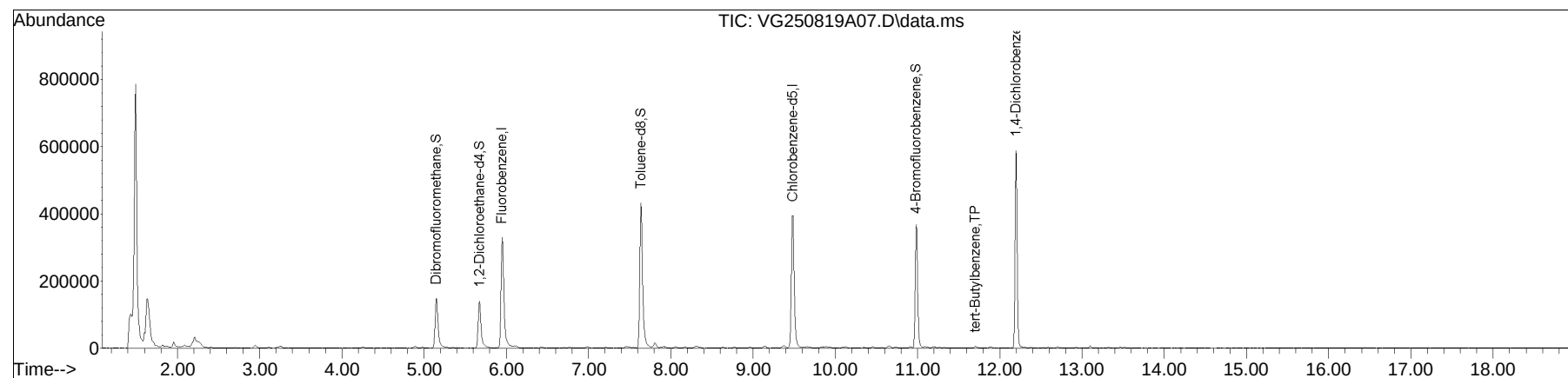
(#) = qualifier out of range (m) = manual integration (+) = signals summed

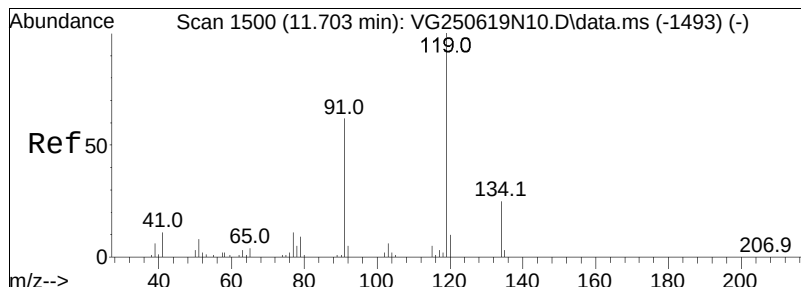
Quantitation Report (QT Reviewed)

Data Path : K:\Gonzo\2025\250819A\
 Data File : VG250819A07.D
 Acq On : 19 Aug 2025 9:53 am
 Operator : GONZO:PID
 Sample : L2551893-02,31,10,10,,A,R3A
 Misc : WG2104736,ICAL22400 (Sig #1); WG,ICAL22400 (Sig #2)
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 19 12:02:27 2025
 Quant Method : K:\Gonzo\2025\250819A\G_250619N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Jun 20 07:10:41 2025
 Response via : Initial Calibration

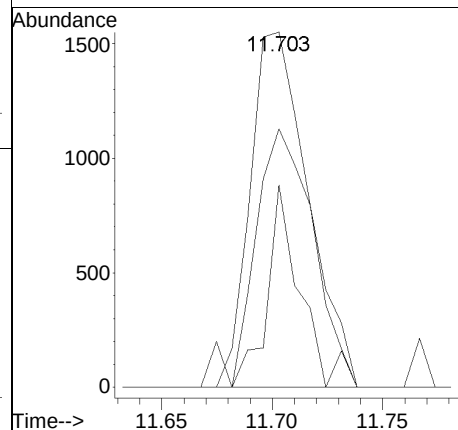
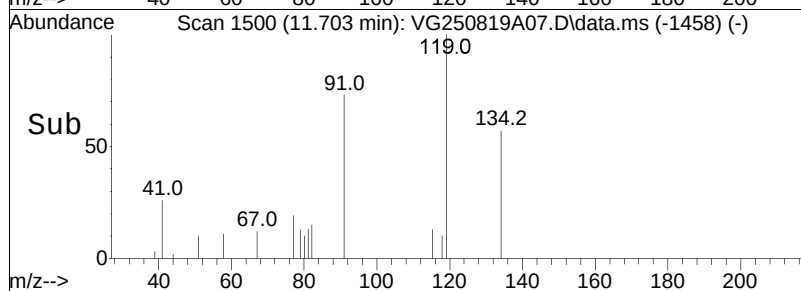
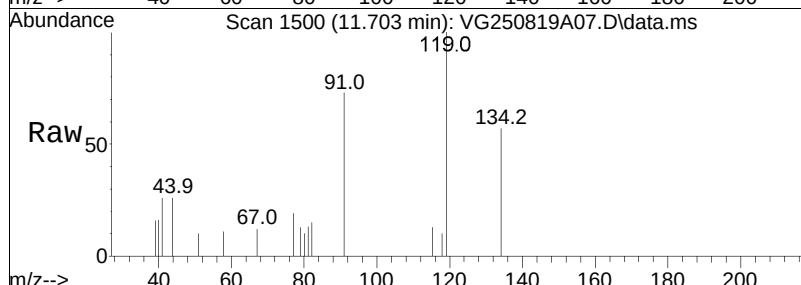
Sub List : 8260-NYCP51 - NYCP510819A\VG250819A02.D•





#94
 tert-Butylbenzene
 Concen: 0.11 ug/L
 RT: 11.703 min Scan# 1500
 Delta R.T. 0.000 min
 Lab File: VG250819A07.D
 Acq: 19 Aug 2025 9:53 am

Tgt Ion	Ratio	Resp	Lower	Upper
119	100	2837		
91	73.9		50.2	75.2
134	32.5		20.2	30.2



Manual Integration Report

Data Path : K:\Gonzo\2025\250819A\ QMethod : G_250619N_8260.m
Data File : VG250819A07.D Operator : GONZO:PID
Date Inj'd : 8/19/2025 9:53 am Instrument : Gonzo
Sample : L2551893-02,31,10,10,,A,R3Quant Date : 8/19/2025 12:02 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : K:\Gonzo\2025\250819A\
 Data File : VG250819A08.D
 Acq On : 19 Aug 2025 10:20 am
 Operator : GONZO:PID
 Sample : L2551893-03,31,10,10,,A,R3A
 Misc : WG2104736,ICAL22400 (Sig #1); WG,ICAL22400 (Sig #2)
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 19 12:02:31 2025
 Quant Method : K:\Gonzo\2025\250819A\G_250619N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Jun 20 07:10:41 2025
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Gonzo\2025\250819A\VG250819A02.D
 Sub List : 8260-NYCP51 - NYCP51

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

Internal Standards						
1) Fluorobenzene	5.950	96	373004	10.000	ug/L	0.00
Standard Area 1 = 418534			Recovery	=	89.12%	
59) Chlorobenzene-d5	9.485	117	302874	10.000	ug/L	0.00
Standard Area 1 = 337983			Recovery	=	89.61%	
79) 1,4-Dichlorobenzene-d4	12.198	152	168618	10.000	ug/L	0.00
Standard Area 1 = 207571			Recovery	=	81.23%	
System Monitoring Compounds						
36) Dibromofluoromethane	5.150	113	110386	11.401	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	114.01%	
43) 1,2-Dichloroethane-d4	5.675	65	122976	12.406	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	124.06%	
60) Toluene-d8	7.636	98	362660	9.640	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	96.40%	
83) 4-Bromofluorobenzene	10.989	95	125025	8.990	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	89.90%	
Target Compounds						Qvalue
41) Benzene	5.548	78	67		N.D.	
61) Toluene	0.000		0		N.D.	
74) Ethylbenzene	9.478	91	556		N.D.	
76) p/m Xylene	9.774	106	88		N.D.	
77) o Xylene	10.162	106	67		N.D.	
82) Isopropylbenzene	10.557	105	66		N.D.	
85) n-Propylbenzene	10.974	91	465		N.D.	
90) 1,3,5-Trimethylbenzene	0.000		0		N.D.	
94) tert-Butylbenzene	11.752	119	92		N.D.	
97) 1,2,4-Trimethylbenzene	11.922	105	90		N.D.	
98) sec-Butylbenzene	11.922	105	90		N.D.	
99) p-Isopropyltoluene	0.000		0		N.D.	
103) n-Butylbenzene	0.000		0		N.D.	
110) Naphthalene	14.476	128	71		N.D.	

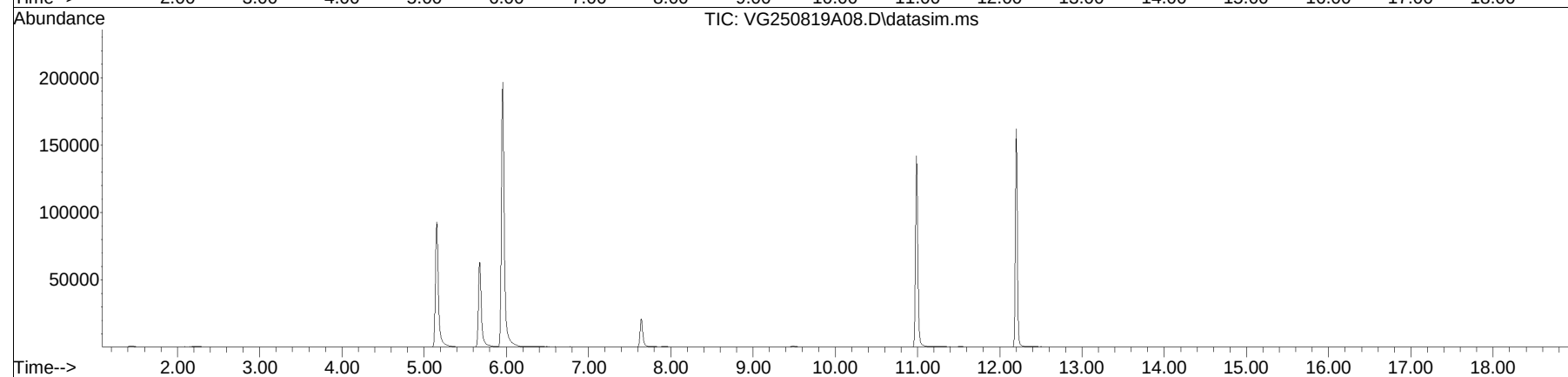
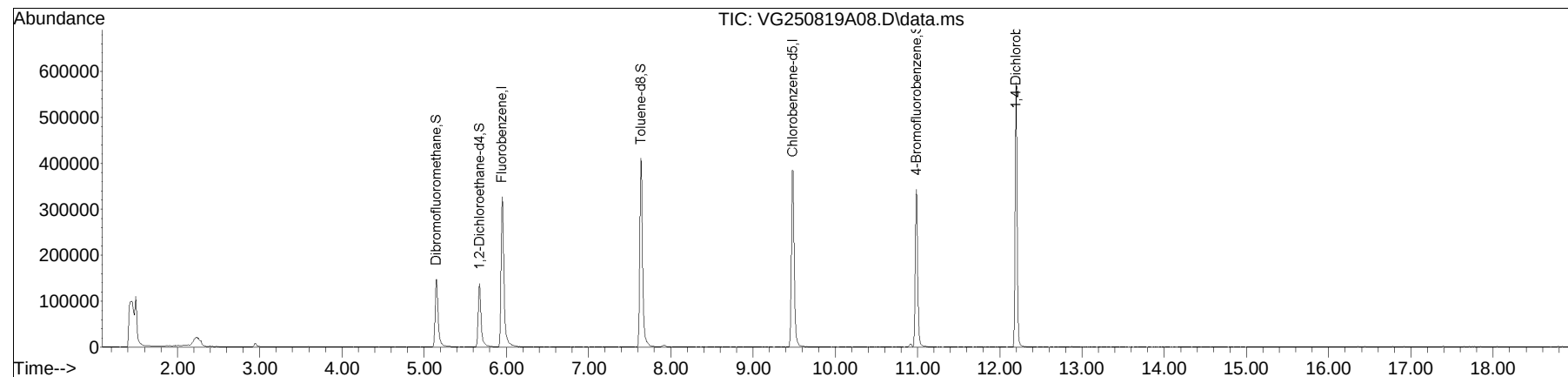
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\Gonzo\2025\250819A\
 Data File : VG250819A08.D
 Acq On : 19 Aug 2025 10:20 am
 Operator : GONZO:PID
 Sample : L2551893-03,31,10,10,,A,R3A
 Misc : WG2104736,ICAL22400 (Sig #1); WG,ICAL22400 (Sig #2)
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 19 12:02:31 2025
 Quant Method : K:\Gonzo\2025\250819A\G_250619N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Jun 20 07:10:41 2025
 Response via : Initial Calibration

Sub List : 8260-NYCP51 - NYCP510819A\VG250819A02.D•



Manual Integration Report

Data Path : K:\Gonzo\2025\250819A\ QMethod : G_250619N_8260.m
Data File : VG250819A08.D Operator : GONZO:PID
Date Inj'd : 8/19/2025 10:20 am Instrument : Gonzo
Sample : L2551893-03,31,10,10,,A,R3Quant Date : 8/19/2025 12:02 pm

There are no manual integrations or false positives in this file.

Volatiles Standards Data

Initial Calibration

Initial Calibration Summary

Form 6

Volatiles

Client : Impact Environmental
 Project Name : 585 UNION STREET
 Instrument ID : GONZO
 Calibration dates : 06/20/25 01:35 06/20/25 06:01

Lab Number : L2551893
 Project Number : 14729
 Ical Ref : ICAL22400

Calibration Files

L11 =VG250619N04.D L1 =VG250619N06.D L2 =VG250619N08.D L3 =VG250619N10.D L4 =VG250619N11.D
 L6 =VG250619N12.D L8 =VG250619N13.D L10 =VG250619N14.D

Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
1) I Fluorobenzene	-----ISTD-----									
2) TP Dichlorodifluo		0.195	0.224	0.223	0.227	0.226	0.228	0.211	0.219	5.51
3) TP Chloromethane		0.202	0.205	0.200	0.206	0.208	0.210	0.201	0.205	1.78
4) TP Vinyl chloride	0.214	0.183	0.230	0.234	0.236	0.240	0.237	0.229	0.225	8.41
5) TP Bromomethane		0.144	0.148	0.136	0.152	0.163	0.170	0.168	0.154	8.28
6) TP Chloroethane		0.180	0.160	0.154	0.147	0.123			0.153	13.76
7) TP Trichlorofluor		0.213	0.280	0.309	0.327	0.327	0.333	0.318	0.301	14.13
8) TP Ethyl ether		0.103	0.103	0.107	0.113	0.115	0.114	0.108	0.109	4.92
10) TP 1,1-Dichloroet		0.143	0.181	0.181	0.190	0.193	0.194	0.184	0.181	9.64
11) TP Carbon disulfide		0.471	0.546	0.546	0.566	0.577	0.580	0.553	0.549	6.71
12) TP Freon-113		0.136	0.182	0.184	0.194	0.191	0.195	0.185	0.181	11.36
13) TP Iodomethane			0.152	0.172	0.228	0.259	0.256	0.242	*L	0.9974
14) TP Acrolein			0.024	0.030	0.029	0.030	0.030	0.029	0.029	7.61
15) TP Methylene chlo		0.294	0.221	0.204	0.210	0.209	0.208	0.196	0.220	15.17
17) TP Acetone			0.049	0.039	0.041	0.043	0.043	0.041	0.043	8.19
18) TP trans-1,2-Dich		0.151	0.200	0.198	0.207	0.211	0.209	0.198	0.196	10.55
19) TP Methyl acetate			0.081	0.097	0.108	0.108	0.109	0.102	0.101	10.70
20) TP Methyl tert butyl ether		0.514	0.549	0.571	0.600	0.604	0.597	0.565	0.572	5.67
21) TP tert-Butyl alc		0.016	0.015	0.017	0.018	0.018	0.018	0.017	0.017	5.91
22) TP Diisopropyl ether		0.510	0.535	0.584	0.610	0.622	0.617	0.585	0.580	7.39
23) TP 1,1-Dichloroet		0.288	0.354	0.356	0.367	0.367	0.365	0.333	0.347	8.25
24) TP Halothane		0.138	0.164	0.166	0.173	0.173	0.172	0.163	0.164	7.64
25) TP Acrylonitrile			0.043	0.054	0.058	0.060	0.059	0.057	0.055	11.48
26) TP Ethyl tert-but		0.538	0.557	0.599	0.617	0.635	0.631	0.601	0.597	6.18
27) TP Vinyl acetate			0.324	0.348	0.388	0.393	0.393	0.375	0.370	7.71
28) TP cis-1,2-Dichlo		0.203	0.228	0.231	0.237	0.239	0.236	0.225	0.228	5.35
29) TP 2,2-Dichloropr		0.237	0.277	0.291	0.315	0.314	0.309	0.290	0.290	9.42
30) TP Bromochloromet		0.115	0.112	0.109	0.105	0.104	0.104	0.099	0.107	5.19
31) TP Cyclohexane		0.275	0.305	0.298	0.313	0.311	0.317	0.299	0.303	4.69
32) TP Chloroform		0.362	0.348	0.355	0.357	0.371	0.365	0.342	0.357	2.80
33) TP Ethyl acetate		0.110	0.137	0.154	0.164	0.170	0.167	0.158	0.152	14.10
34) TP Carbon tetrachloride	0.275	0.242	0.284	0.296	0.295	0.302	0.302	0.284	0.285	6.98
35) TP Tetrahydrofuran			0.057	0.045	0.048	0.050	0.048	0.045	0.049	8.77
36) S Dibromofluoromethane	0.257	0.257	0.259	0.259	0.261	0.259	0.264	0.261	0.260	0.96
37) TP 1,1,1-Trichlor		0.249	0.319	0.313	0.332	0.333	0.330	0.312	0.312	9.41
39) TP 2-Butanone			0.054	0.056	0.066	0.073	0.072	0.068	0.065	12.22



Initial Calibration Summary

Form 6

Volatiles

Client : Impact Environmental
 Project Name : 585 UNION STREET
 Instrument ID : GONZO
 Calibration dates : 06/20/25 01:35 06/20/25 06:01

Lab Number : L2551893
 Project Number : 14729
 Ical Ref : ICAL22400

Calibration Files

L11 =VG250619N04.D L1 =VG250619N06.D L2 =VG250619N08.D L3 =VG250619N10.D L4 =VG250619N11.D
 L6 =VG250619N12.D L8 =VG250619N13.D L10 =VG250619N14.D

Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
40) TP 1,1-Dichloropr		0.212	0.250	0.249	0.258	0.261	0.260	0.248	0.248	6.89
41) TP Benzene	0.751	0.664	0.783	0.796	0.816	0.831	0.819	0.779	0.780	6.86
42) TP Tertiary-Amyl Methyl Ether		0.515	0.539	0.561	0.591	0.606	0.600	0.570	0.569	5.87
43) S 1,2-Dichloroethane-d4	0.268	0.266	0.265	0.272	0.263	0.258	0.260	0.272	0.266	1.92
44) TP 1,2-Dichloroethane	0.262	0.254	0.242	0.250	0.262	0.265	0.260	0.250	0.256	3.19
47) TP Methyl cyclohe		0.218	0.286	0.279	0.294	0.296	0.300	0.284	0.280	10.08
48) TP Trichloroethene	0.278	0.141	0.194	0.217	0.221	0.225	0.222	0.212	0.214	17.69
50) TP Dibromomethane		0.120	0.130	0.128	0.132	0.135	0.133	0.126	0.129	3.89
51) TP 1,2-Dichloropr		0.173	0.200	0.204	0.208	0.212	0.209	0.198	0.200	6.43
53) TP 2-Chloroethyl		0.066	0.085	0.091	0.101	0.105	0.105	0.103	0.094	15.45
54) TP Bromodichlorom		0.251	0.282	0.285	0.293	0.297	0.295	0.280	0.283#	5.56
57) TP 1,4-Dioxane		0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002#	5.47
58) TP cis-1,3-Dichloropropene	0.296	0.322	0.323	0.333	0.349	0.353	0.349	0.330	0.332	5.68
59) I Chlorobenzene-d5	-----ISTD-----									
60) S Toluene-d8	1.244	1.241	1.240	1.244	1.235	1.243	1.243	1.248	1.242	0.30
61) TP Toluene		0.567	0.646	0.646	0.658	0.667	0.661	0.637	0.640	5.27
62) TP 4-Methyl-2-pen		0.067	0.076	0.078	0.082	0.084	0.082	0.079	0.078	7.41
63) TP Tetrachloroethene	0.290	0.239	0.298	0.310	0.315	0.310	0.309	0.297	0.296	8.31
65) TP trans-1,3-Dichloropropene	0.347	0.335	0.357	0.371	0.391	0.391	0.386	0.377	0.369	5.68
67) TP Ethyl methacry		0.264	0.275	0.293	0.314	0.322	0.318	0.308	0.299	7.44
68) TP 1,1,2-Trichlor		0.195	0.179	0.185	0.195	0.196	0.193	0.188	0.190#	3.37
69) TP Chlorodibromom		0.285	0.288	0.295	0.310	0.320	0.316	0.309	0.304	4.60
70) TP 1,3-Dichloropr		0.321	0.370	0.373	0.385	0.388	0.383	0.370	0.370	6.13
71) TP 1,2-Dibromoethane		0.223	0.234	0.242	0.252	0.253	0.246	0.239	0.241	4.34
72) TP 2-Hexanone			0.111	0.130	0.133	0.138	0.135	0.131	0.130	7.41
73) TP Chlorobenzene		0.675	0.765	0.764	0.785	0.790	0.778	0.753	0.758	5.12
74) TP Ethylbenzene		1.065	1.219	1.235	1.263	1.280	1.275	1.243	1.226	6.05
75) TP 1,1,1,2-Tetrac		0.266	0.280	0.290	0.300	0.306	0.304	0.296	0.292	4.92
76) TP p/m Xylene		0.406	0.484	0.498	0.506	0.510	0.508	0.505	0.488	7.62
77) TP o Xylene		0.422	0.485	0.492	0.502	0.510	0.502	0.513	0.490	6.42
78) TP Styrene		0.678	0.798	0.838	0.872	0.883	0.902	0.908	0.840	9.65
79) I 1,4-Dichlorobenzene-d4	-----ISTD-----									
80) TP Bromoform		0.343	0.359	0.360	0.387	0.400	0.398	0.383	0.376	5.78
82) TP Isopropylbenzene		1.623	2.037	2.065	2.144	2.156	2.174	2.054	2.036	9.34
83) S 4-Bromofluorobenzene	0.843	0.825	0.834	0.824	0.827	0.810	0.824	0.811	0.825	1.32
84) TP Bromobenzene		0.546	0.638	0.636	0.650	0.645	0.644	0.603	0.623	6.00



Initial Calibration Summary

Form 6

Volatiles

Client : Impact Environmental
 Project Name : 585 UNION STREET
 Instrument ID : GONZO
 Calibration dates : 06/20/25 01:35 06/20/25 06:01

Lab Number : L2551893
 Project Number : 14729
 Ical Ref : ICAL22400

Calibration Files

L11 =VG250619N04.D L1 =VG250619N06.D L2 =VG250619N08.D L3 =VG250619N10.D L4 =VG250619N11.D
 L6 =VG250619N12.D L8 =VG250619N13.D L10 =VG250619N14.D

Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
85) TP n-Propylbenzene	1.909	2.281	2.358	2.441	2.479	2.478	2.352	2.328		8.55
86) TP 1,4-Dichlorobu	0.700	0.641	0.644	0.671	0.679	0.680	0.643	0.666		3.46
87) TP 1,1,2,2-Tetrachloroethane	0.572	0.549	0.517	0.502	0.523	0.528	0.526	0.496	0.527	4.68
88) TP 4-Ethyltoluene	1.638	2.011	2.038	2.110	2.124	2.131	2.011	2.009		8.55
89) TP 2-Chlorotoluene	1.295	1.476	1.465	1.505	1.526	1.526	1.451	1.463		5.47
90) TP 1,3,5-Trimethy	1.390	1.757	1.756	1.829	1.850	1.841	1.832	1.751		9.36
91) TP 1,2,3-Trichlor	0.356	0.396	0.395	0.414	0.419	0.415	0.408	0.400		5.43
92) TP trans-1,4-Dich	0.157	0.148	0.132	0.146	0.154	0.151	0.143	0.147		5.58
93) TP 4-Chlorotoluene	1.380	1.452	1.555	1.604	1.622	1.618	1.541	1.539		5.96
94) TP tert-Butylbenzene	1.235	1.447	1.470	1.514	1.528	1.520	1.462	1.454		6.99
97) TP 1,2,4-Trimethy	1.469	1.738	1.751	1.818	1.821	1.832	1.801	1.747		7.32
98) TP sec-Butylbenzene	1.610	1.956	2.003	2.064	2.101	2.111	2.033	1.983		8.72
99) TP p-Isopropyltol	1.362	1.744	1.801	1.888	1.888	1.911	1.888	1.783		10.93
100) TP 1,3-Dichlorobe	0.992	1.143	1.134	1.177	1.172	1.176	1.124	1.131		5.74
101) TP 1,4-Dichlorobe	1.100	1.143	1.168	1.192	1.195	1.192	1.140	1.161		3.07
102) TP p-Diethylbenzene	0.853	1.000	1.053	1.112	1.117	1.125	1.123	1.055		9.52
103) TP n-Butylbenzene	1.029	1.320	1.367	1.460	1.473	1.488	1.458	1.371		11.89
104) TP 1,2-Dichlorobe	0.945	1.077	1.095	1.123	1.129	1.118	1.075	1.080		5.88
105) TP 1,2,4,5-Tetram	1.318	1.554	1.607	1.655	1.670	1.682	1.691	1.597		8.28
106) TP 1,2-Dibromo-3-	0.078	0.093	0.096	0.098	0.105	0.104	0.098	0.096		9.36
107) TP 1,3,5-Trichlor	0.620	0.718	0.741	0.753	0.740	0.735	0.672	0.711		6.79
108) TP Hexachlorobuta	0.187	0.231	0.228	0.240	0.239	0.238	0.218	0.226		8.31
109) TP 1,2,4-Trichlor	0.564	0.619	0.633	0.649	0.635	0.623	0.558	0.612		5.82
110) TP Naphthalene	1.187	1.288	1.279	1.321	1.327	1.316	1.194	1.273		4.63
111) TP 1,2,3-Trichlor	0.431	0.478	0.487	0.499	0.496	0.483	0.417	0.470		6.95



Response Factor Report Gonzo

Method Path : K:\Gonzo\2025\250619NICAL\
 Method File : G_250619N_8260.m
 Title : VOLATILES BY GC/MS
 Last Update : Fri Jun 20 07:10:41 2025
 Response Via : Initial Calibration

Calibration Files

L11 =VG250619N04.D L1 =VG250619N06.D L2 =VG250619N08.D L3 =VG250619N10.D L4 =VG250619N11.D
 L6 =VG250619N12.D L8 =VG250619N13.D L10 =VG250619N14.D

Compound		L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
-----ISTD-----											
1) I	Fluorobenzene										
2) TP	Dichlorodifluo...	0.195	0.224	0.223	0.227	0.226	0.228	0.211	0.219	5.51	
3) TP	Chloromethane	0.202	0.205	0.200	0.206	0.208	0.210	0.201	0.205	1.78	
4) TP	Vinyl chloride	0.214 0.183	0.230	0.234	0.236	0.240	0.237	0.229	0.225	8.41	
5) TP	Bromomethane	0.144	0.148	0.136	0.152	0.163	0.170	0.168	0.154	8.28	
6) TP	Chloroethane	0.180	0.160	0.154	0.147	0.123			0.153	13.76	
7) TP	Trichlorofluor...	0.213	0.280	0.309	0.327	0.327	0.333	0.318	0.301	14.13	
8) TP	Ethyl ether	0.103	0.103	0.107	0.113	0.115	0.114	0.108	0.109	4.92	
10) TP	1,1-Dichloroet...	0.143	0.181	0.181	0.190	0.193	0.194	0.184	0.181	9.64	
11) TP	Carbon disulfide	0.471	0.546	0.546	0.566	0.577	0.580	0.553	0.549	6.71	
12) TP	Freon-113	0.136	0.182	0.184	0.194	0.191	0.195	0.185	0.181	11.36	
13) TP	Iodomethane		0.152	0.172	0.228	0.259	0.256	0.242	*L	0.9974	
14) TP	Acrolein		0.024	0.030	0.029	0.030	0.030	0.029	0.029	7.61	
15) TP	Methylene chlo...	0.294	0.221	0.204	0.210	0.209	0.208	0.196	0.220	15.17	
17) TP	Acetone		0.049	0.039	0.041	0.043	0.043	0.041	0.043	8.19	
18) TP	trans-1,2-Dich...	0.151	0.200	0.198	0.207	0.211	0.209	0.198	0.196	10.55	
19) TP	Methyl acetate		0.081	0.097	0.108	0.108	0.109	0.102	0.101	10.70	
20) TP	Methyl tert-bu...	0.514	0.549	0.571	0.600	0.604	0.597	0.565	0.572	5.67	
21) TP	tert-Butyl alc...	0.016	0.015	0.017	0.018	0.018	0.018	0.017	0.017	5.91	
22) TP	Diisopropyl ether	0.510	0.535	0.584	0.610	0.622	0.617	0.585	0.580	7.39	
23) TP	1,1-Dichloroet...	0.288	0.354	0.356	0.367	0.367	0.365	0.333	0.347	8.25	
24) TP	Halothane	0.138	0.164	0.166	0.173	0.173	0.172	0.163	0.164	7.64	
25) TP	Acrylonitrile		0.043	0.054	0.058	0.060	0.059	0.057	0.055	11.48	
26) TP	Ethyl tert-but...	0.538	0.557	0.599	0.617	0.635	0.631	0.601	0.597	6.18	
27) TP	Vinyl acetate		0.324	0.348	0.388	0.393	0.393	0.375	0.370	7.71	
28) TP	cis-1,2-Dichlo...	0.203	0.228	0.231	0.237	0.239	0.236	0.225	0.228	5.35	
29) TP	2,2-Dichloropr...	0.237	0.277	0.291	0.315	0.314	0.309	0.290	0.290	9.42	
30) TP	Bromochloromet...	0.115	0.112	0.109	0.105	0.104	0.104	0.099	0.107	5.19	
31) TP	Cyclohexane	0.275	0.305	0.298	0.313	0.311	0.317	0.299	0.303	4.69	
32) TP	Chloroform	0.362	0.348	0.355	0.357	0.371	0.365	0.342	0.357	2.80	
33) TP	Ethyl acetate	0.110	0.137	0.154	0.164	0.170	0.167	0.158	0.152	14.10	

Response Factor Report Gonzo

Method Path : K:\Gonzo\2025\250619NICAL\
 Method File : G_250619N_8260.m
 Title : VOLATILES BY GC/MS
 Last Update : Fri Jun 20 07:10:41 2025
 Response Via : Initial Calibration

Calibration Files

L11 =VG250619N04.D L1 =VG250619N06.D L2 =VG250619N08.D L3 =VG250619N10.D L4 =VG250619N11.D
 L6 =VG250619N12.D L8 =VG250619N13.D L10 =VG250619N14.D

	Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
34)	TP Carbon tetrach...	0.275	0.242	0.284	0.296	0.295	0.302	0.302	0.284	0.285	6.98
35)	TP Tetrahydrofuran		0.057	0.045	0.048	0.050	0.048	0.045	0.049		8.77
36)	S Dibromofluorom...	0.257	0.257	0.259	0.259	0.261	0.259	0.264	0.261	0.260	0.96
37)	TP 1,1,1-Trichlor...		0.249	0.319	0.313	0.332	0.333	0.330	0.312	0.312	9.41
39)	TP 2-Butanone		0.054	0.056	0.066	0.073	0.072	0.068	0.065		12.22
40)	TP 1,1-Dichloropr...		0.212	0.250	0.249	0.258	0.261	0.260	0.248	0.248	6.89
41)	TP Benzene	0.751	0.664	0.783	0.796	0.816	0.831	0.819	0.779	0.780	6.86
42)	TP tert-Amyl meth...		0.515	0.539	0.561	0.591	0.606	0.600	0.570	0.569	5.87
43)	S 1,2-Dichloroet...	0.268	0.266	0.265	0.272	0.263	0.258	0.260	0.272	0.266	1.92
44)	TP 1,2-Dichloroet...	0.262	0.254	0.242	0.250	0.262	0.265	0.260	0.250	0.256	3.19
47)	TP Methyl cyclohe...		0.218	0.286	0.279	0.294	0.296	0.300	0.284	0.280	10.08
48)	TP Trichloroethene	0.278	0.141	0.194	0.217	0.221	0.225	0.222	0.212	0.214	17.69
50)	TP Dibromomethane		0.120	0.130	0.128	0.132	0.135	0.133	0.126	0.129	3.89
51)	TP 1,2-Dichloropr...		0.173	0.200	0.204	0.208	0.212	0.209	0.198	0.200	6.43
53)	TP 2-Chloroethyl ...		0.066	0.085	0.091	0.101	0.105	0.105	0.103	0.094	15.45
54)	TP Bromodichlorom...		0.251	0.282	0.285	0.293	0.297	0.295	0.280	0.283#	5.56
57)	TP 1,4-Dioxane		0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002#	5.47
58)	TP cis-1,3-Dichlo...	0.296	0.322	0.323	0.333	0.349	0.353	0.349	0.330	0.332	5.68
59)	I Chlorobenzene-d5	-----ISTD-----									
60)	S Toluene-d8	1.244	1.241	1.240	1.244	1.235	1.243	1.243	1.248	1.242	0.30
61)	TP Toluene		0.567	0.646	0.646	0.658	0.667	0.661	0.637	0.640	5.27
62)	TP 4-Methyl-2-pen...		0.067	0.076	0.078	0.082	0.084	0.082	0.079	0.078	7.41
63)	TP Tetrachloroethene	0.290	0.239	0.298	0.310	0.315	0.310	0.309	0.297	0.296	8.31
65)	TP trans-1,3-Dich...	0.347	0.335	0.357	0.371	0.391	0.391	0.386	0.377	0.369	5.68
67)	TP Ethyl methacry...		0.264	0.275	0.293	0.314	0.322	0.318	0.308	0.299	7.44
68)	TP 1,1,2-Trichlor...		0.195	0.179	0.185	0.195	0.196	0.193	0.188	0.190#	3.37
69)	TP Chlorodibromom...		0.285	0.288	0.295	0.310	0.320	0.316	0.309	0.304	4.60
70)	TP 1,3-Dichloropr...		0.321	0.370	0.373	0.385	0.388	0.383	0.370	0.370	6.13
71)	TP 1,2-Dibromoethane		0.223	0.234	0.242	0.252	0.253	0.246	0.239	0.241	4.34
72)	TP 2-Hexanone			0.111	0.130	0.133	0.138	0.135	0.131	0.130	7.41
73)	TP Chlorobenzene		0.675	0.765	0.764	0.785	0.790	0.778	0.753	0.758	5.12

Response Factor Report Gonzo

Method Path : K:\Gonzo\2025\250619NICAL\
 Method File : G_250619N_8260.m
 Title : VOLATILES BY GC/MS
 Last Update : Fri Jun 20 07:10:41 2025
 Response Via : Initial Calibration

Calibration Files

L11 =VG250619N04.D L1 =VG250619N06.D L2 =VG250619N08.D L3 =VG250619N10.D L4 =VG250619N11.D
 L6 =VG250619N12.D L8 =VG250619N13.D L10 =VG250619N14.D

	Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
74) TP	Ethylbenzene	1.065	1.219	1.235	1.263	1.280	1.275	1.243	1.226	6.05	
75) TP	1,1,1,2-Tetrac...	0.266	0.280	0.290	0.300	0.306	0.304	0.296	0.292	4.92	
76) TP	p/m Xylene	0.406	0.484	0.498	0.506	0.510	0.508	0.505	0.488	7.62	
77) TP	o Xylene	0.422	0.485	0.492	0.502	0.510	0.502	0.513	0.490	6.42	
78) TP	Styrene	0.678	0.798	0.838	0.872	0.883	0.902	0.908	0.840	9.65	
79) I	1,4-Dichlorobenzene-d4	-----ISTD-----									
80) TP	Bromoform	0.343	0.359	0.360	0.387	0.400	0.398	0.383	0.376	5.78	
82) TP	Isopropylbenzene	1.623	2.037	2.065	2.144	2.156	2.174	2.054	2.036	9.34	
83) S	4-Bromofluorob...	0.843	0.825	0.834	0.824	0.810	0.824	0.811	0.825	1.32	
84) TP	Bromobenzene	0.546	0.638	0.636	0.650	0.645	0.644	0.603	0.623	6.00	
85) TP	n-Propylbenzene	1.909	2.281	2.358	2.441	2.479	2.478	2.352	2.328	8.55	
86) TP	1,4-Dichlorobu...	0.700	0.641	0.644	0.671	0.679	0.680	0.643	0.666	3.46	
87) TP	1,1,2,2-Tetrac...	0.572	0.549	0.517	0.502	0.523	0.528	0.496	0.527	4.68	
88) TP	4-Ethyltoluene	1.638	2.011	2.038	2.110	2.124	2.131	2.011	2.009	8.55	
89) TP	2-Chlorotoluene	1.295	1.476	1.465	1.505	1.526	1.526	1.451	1.463	5.47	
90) TP	1,3,5-Trimethy...	1.390	1.757	1.756	1.829	1.850	1.841	1.832	1.751	9.36	
91) TP	1,2,3-Trichlor...	0.356	0.396	0.395	0.414	0.419	0.415	0.408	0.400	5.43	
92) TP	trans-1,4-Dich...	0.157	0.148	0.132	0.146	0.154	0.151	0.143	0.147	5.58	
93) TP	4-Chlorotoluene	1.380	1.452	1.555	1.604	1.622	1.618	1.541	1.539	5.96	
94) TP	tert-Butylbenzene	1.235	1.447	1.470	1.514	1.528	1.520	1.462	1.454	6.99	
97) TP	1,2,4-Trimethy...	1.469	1.738	1.751	1.818	1.821	1.832	1.801	1.747	7.32	
98) TP	sec-Butylbenzene	1.610	1.956	2.003	2.064	2.101	2.111	2.033	1.983	8.72	
99) TP	p-Isopropyltol...	1.362	1.744	1.801	1.888	1.888	1.911	1.888	1.783	10.93	
100) TP	1,3-Dichlorobe...	0.992	1.143	1.134	1.177	1.172	1.176	1.124	1.131	5.74	
101) TP	1,4-Dichlorobe...	1.100	1.143	1.168	1.192	1.195	1.192	1.140	1.161	3.07	
102) TP	p-Diethylbenzene	0.853	1.000	1.053	1.112	1.117	1.125	1.123	1.055	9.52	
103) TP	n-Butylbenzene	1.029	1.320	1.367	1.460	1.473	1.488	1.458	1.371	11.89	
104) TP	1,2-Dichlorobe...	0.945	1.077	1.095	1.123	1.129	1.118	1.075	1.080	5.88	
105) TP	1,2,4,5-Tetram...	1.318	1.554	1.607	1.655	1.670	1.682	1.691	1.597	8.28	
106) TP	1,2-Dibromo-3-...	0.078	0.093	0.096	0.098	0.105	0.104	0.098	0.096	9.36	
107) TP	1,3,5-Trichlor...	0.620	0.718	0.741	0.753	0.740	0.735	0.672	0.711	6.79	

Response Factor Report Gonzo

Method Path : K:\Gonzo\2025\250619NICAL\
Method File : G_250619N_8260.m
Title : VOLATILES BY GC/MS
Last Update : Fri Jun 20 07:10:41 2025
Response Via : Initial Calibration

Calibration Files

L11 =VG250619N04.D L1 =VG250619N06.D L2 =VG250619N08.D L3 =VG250619N10.D L4 =VG250619N11.D
L6 =VG250619N12.D L8 =VG250619N13.D L10 =VG250619N14.D

Compound		L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
108)	TP Hexachlorobuta...	0.187	0.231	0.228	0.240	0.239	0.238	0.218	0.226	8.31	
109)	TP 1,2,4-Trichlor...	0.564	0.619	0.633	0.649	0.635	0.623	0.558	0.612	5.82	
110)	TP Naphthalene	1.187	1.288	1.279	1.321	1.327	1.316	1.194	1.273	4.63	
111)	TP 1,2,3-Trichlor...	0.431	0.478	0.487	0.499	0.496	0.483	0.417	0.470	6.95	

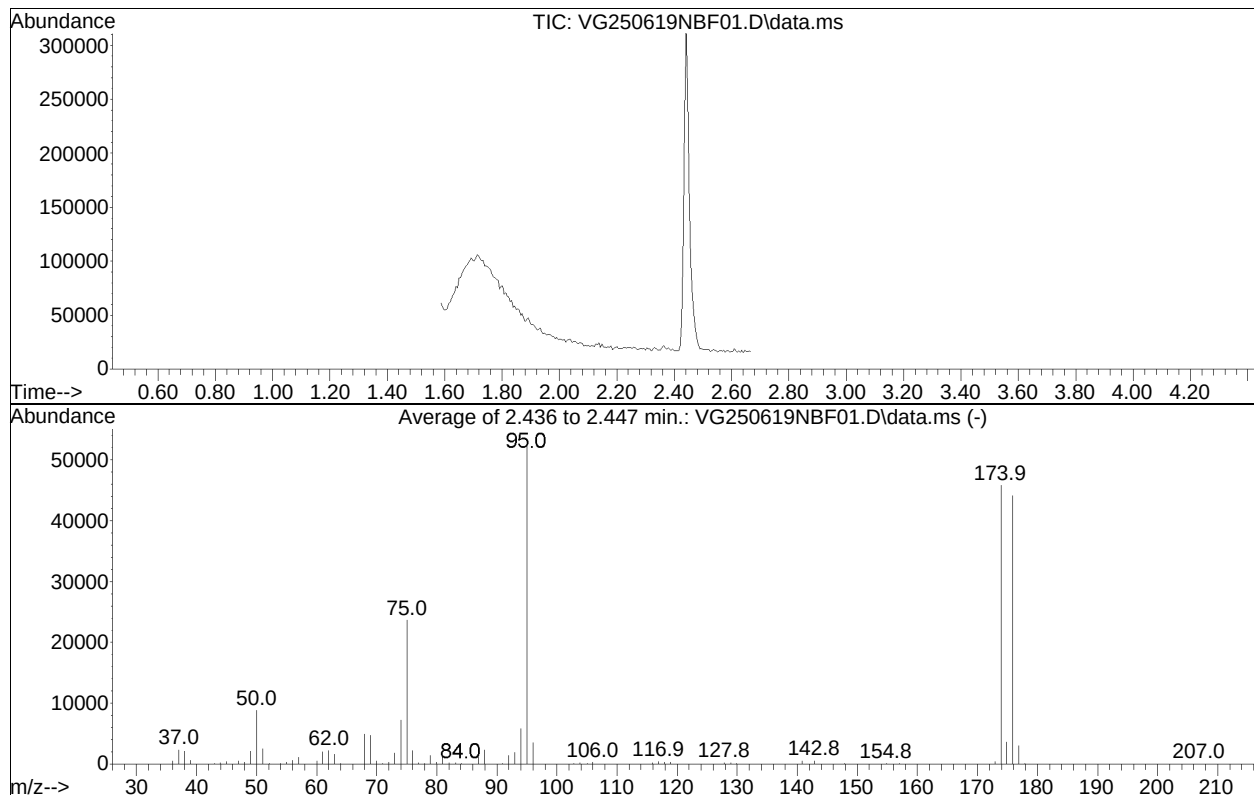
(#) = Out of Range

BFB

Data Path : K:\Gonzo\2025\250619NICAL\
Data File : VG250619NBF01.D
Acq On : 19 Jun 2025 11:16 pm
Operator : GONZO:TMS
Sample : WG2081469-1
Misc : WG2081469
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : K:\Gonzo\2025\250619NICAL\G_250619N_8260.m
Title : VOLATILES BY GC/MS
Last Update : Fri Jun 20 07:10:41 2025



AutoFind: Scans 163, 164, 165; Background Corrected with Scan 155

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.8	8832	PASS
75	95	30	60	45.2	23723	PASS
95	95	100	100	100.0	52520	PASS
96	95	5	9	6.6	3484	PASS
173	174	0.00	2	0.8	385	PASS
174	95	50	100	87.3	45835	PASS
175	174	5	9	8.0	3657	PASS
176	174	95	101	96.2	44115	PASS
177	176	5	9	6.8	3004	PASS

Quantitation Report (QT Reviewed)

Data Path : K:\Gonzo\2025\250619NICAL\
 Data File : VG250619N04.D
 Acq On : 20 Jun 2025 1:35 am
 Operator : GONZO:PID
 Sample : I8260STD0.19PPB
 Misc : WG2081469,ICAL (Sig #1); WG,ICAL (Sig #2)
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 20 07:07:06 2025
 Quant Method : K:\Gonzo\2025\250619NICAL\G_250619N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Jun 20 07:06:34 2025
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Gonzo\2025\250619NICAL\VG250619N10.D
 Sub List : 8260-L11_NJnew - L11 new NJ

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

Internal Standards						
1) Fluorobenzene	5.957	96	560234	10.000	ug/L	0.00
Standard Area 1 = 552092			Recovery	=	101.47%	
59) Chlorobenzene-d5	9.484	117	437183	10.000	ug/L	0.00
Standard Area 1 = 440365			Recovery	=	99.28%	
79) 1,4-Dichlorobenzene-d4	12.198	152	246976	10.000	ug/L	0.00
Standard Area 1 = 255053			Recovery	=	96.83%	
System Monitoring Compounds						
36) Dibromofluoromethane	5.150	113	143739	9.884	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	98.84%	
43) 1,2-Dichloroethane-d4	5.674	65	150365	10.100	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	101.00%	
60) Toluene-d8	7.643	98	543936	10.016	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	100.16%	
83) 4-Bromofluorobenzene	10.988	95	208199	10.221	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	102.21%	
Target Compounds						
						Qvalue
4) Vinyl chloride	1.870	62	2276	0.180	ug/L	87
34) Carbon tetrachloride	5.100	117	2932	0.184	ug/L	94
41) Benzene	5.540	78	7995	0.183	ug/L #	86
44) 1,2-Dichloroethane	5.752	62	2792	0.195	ug/L	92
48) Trichloroethene	6.133	95	2957	0.247	ug/L #	77
58) cis-1,3-Dichloropropene	7.452	75	3151	0.170	ug/L #	74
63) Tetrachloroethene	8.151	166	2411	0.186	ug/L	97
65) trans-1,3-Dichloropropene	8.214	75	2884M6	0.179	ug/L	
87) 1,1,2,2-Tetrachloroethane	11.243	83	2686	0.206	ug/L	97

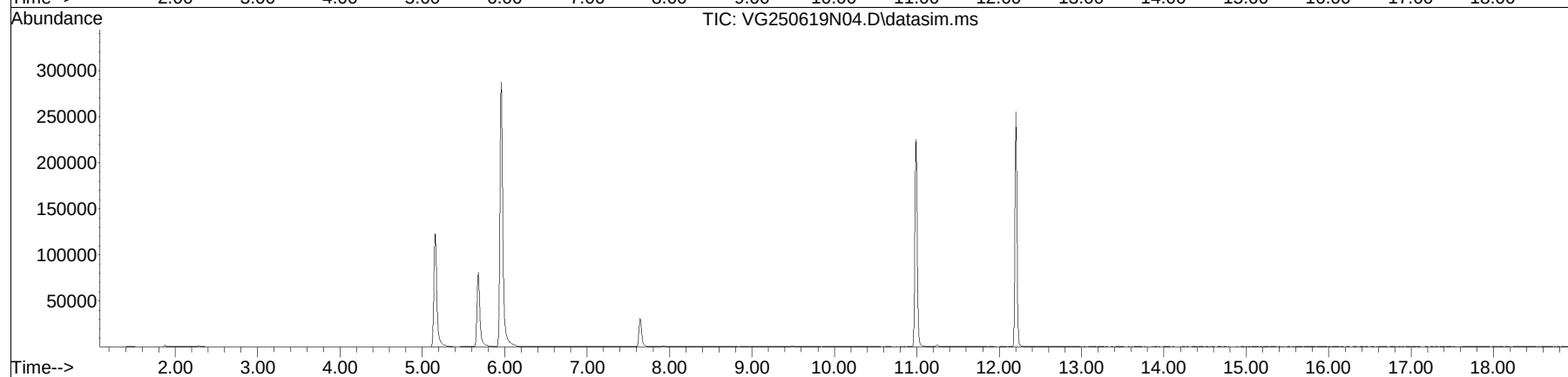
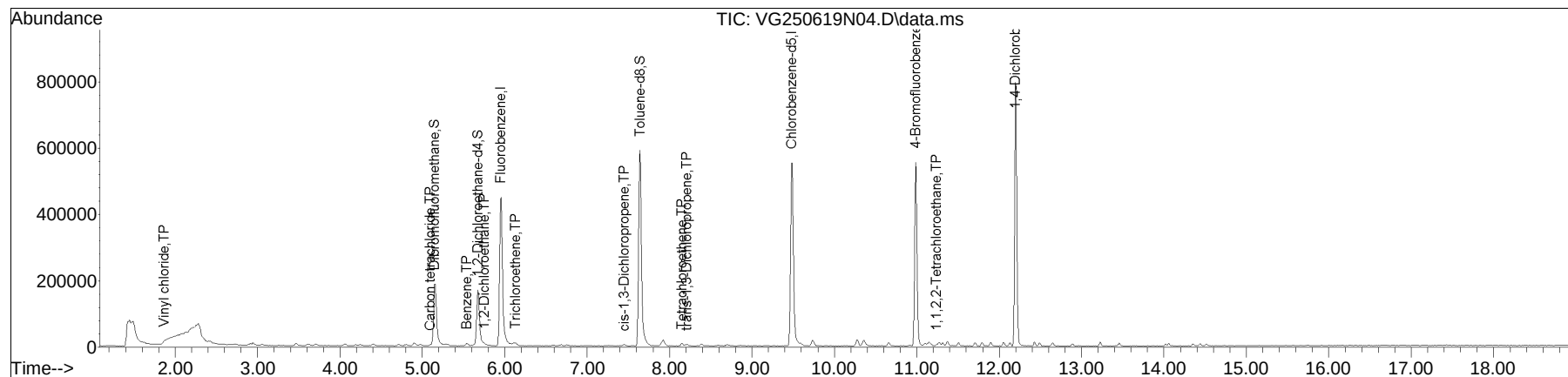
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\Gonzo\2025\250619NICAL\
 Data File : VG250619N04.D
 Acq On : 20 Jun 2025 1:35 am
 Operator : GONZO:PID
 Sample : I8260STD0.19PPB
 Misc : WG2081469,ICAL (Sig #1); WG,ICAL (Sig #2)
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 20 07:07:06 2025
 Quant Method : K:\Gonzo\2025\250619NICAL\G_250619N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Jun 20 07:06:34 2025
 Response via : Initial Calibration

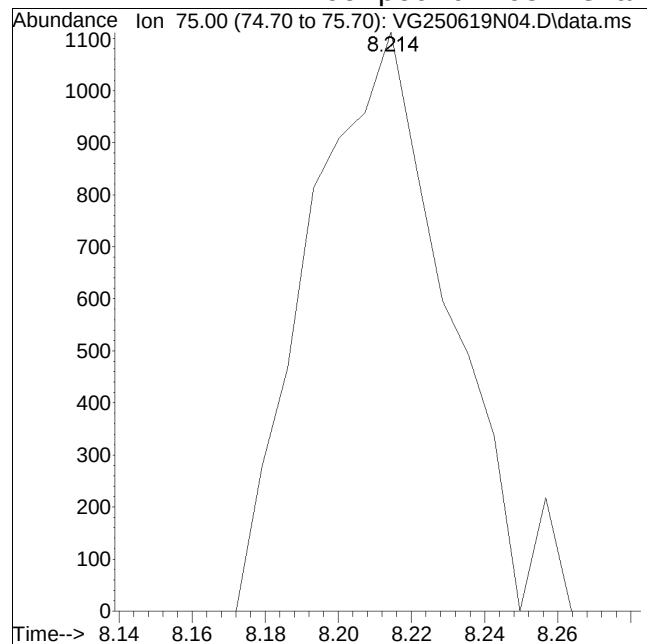
Sub List : 8260-L11_NJnew - L11 new NJAL\VG250619N10.D•



Manual Integration Report

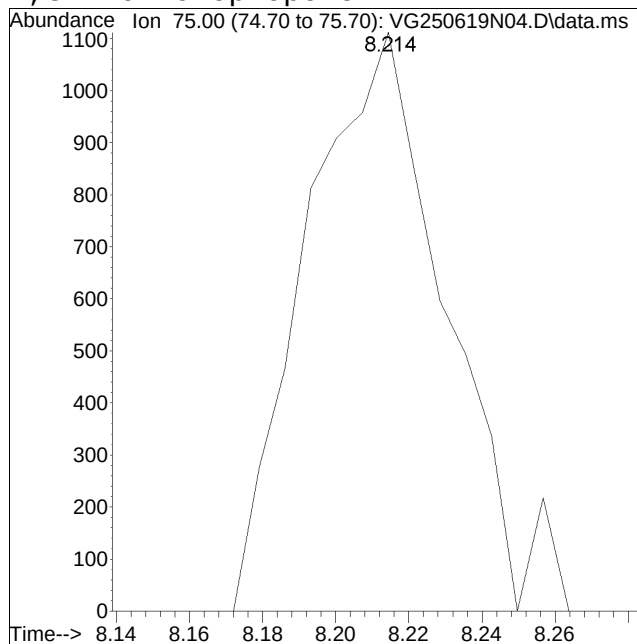
Data Path : K:\Gonzo\2025\250619NICAL\QMethod : G_250619N_8260.m
Data File : VG250619N04.D Operator : GONZO:PID
Date Inj'd : 6/20/2025 1:35 am Instrument : Gonzo
Sample : I8260STD0.19PPB Quant Date : 6/20/2025 7:06 am

Compound #65: trans-1,3-Dichloropropene



Original Peak Response = 2976

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).



Manual Peak Response = 2884 M6

Quantitation Report (QT Reviewed)

Data Path : K:\Gonzo\2025\250619NICAL\
 Data File : VG250619N06.D
 Acq On : 20 Jun 2025 2:28 am
 Operator : GONZO:PID
 Sample : I8260STD0.5PPB
 Misc : WG2081469,ICAL (Sig #1); WG,ICAL (Sig #2)
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 20 07:07:15 2025
 Quant Method : K:\Gonzo\2025\250619NICAL\G_250619N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Jun 20 07:06:34 2025
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Gonzo\2025\250619NICAL\VG250619N10.D
 Sub List : 8260-Curve - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	5.957	96	550951	10.000	ug/L	0.00
Standard Area 1 = 552092			Recovery	=	99.79%	
59) Chlorobenzene-d5	9.484	117	435290	10.000	ug/L	0.00
Standard Area 1 = 440365			Recovery	=	98.85%	
79) 1,4-Dichlorobenzene-d4	12.205	152	249454	10.000	ug/L	0.00
Standard Area 1 = 255053			Recovery	=	97.80%	
System Monitoring Compounds						
36) Dibromofluoromethane	5.150	113	141399	9.887	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	98.87%	
43) 1,2-Dichloroethane-d4	5.674	65	146762	10.024	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	100.24%	
60) Toluene-d8	7.643	98	540052	9.988	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	99.88%	
83) 4-Bromofluorobenzene	10.988	95	205892	10.007	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	100.07%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.614	85	5367	0.445	ug/L	96
3) Chloromethane	1.827	50	5575	0.494	ug/L #	96
4) Vinyl chloride	1.870	62	5032	0.406	ug/L	99
5) Bromomethane	2.176	94	3961	0.466	ug/L	91
6) Chloroethane	2.283	64	4969	0.680	ug/L	68
7) Trichlorofluoromethane	2.425	101	5879	0.354	ug/L	99
8) Ethyl ether	2.724	74	2828	0.471	ug/L #	87
10) 1,1-Dichloroethene	2.916	96	3952	0.396	ug/L	97
11) Carbon disulfide	2.944	76	12973	0.429	ug/L	100
12) Freon-113	2.951	101	3742	0.375	ug/L	79
13) Iodomethane	3.058	142	5150	0.437	ug/L	94
14) Acrolein	0.000		0	N.D.	d	
15) Methylene chloride	3.471	84	8107	0.668	ug/L	88
17) Acetone	0.000		0	N.D.	d	
18) trans-1,2-Dichloroethene	3.620	96	4158	0.385	ug/L	96
19) Methyl acetate	0.000		0	N.D.	d	
20) Methyl tert-butyl ether	3.698	73	14171	0.450	ug/L #	85
21) tert-Butyl alcohol	3.805	59	2271M6	2.416	ug/L	
22) Diisopropyl ether	4.061	45	14052	0.439	ug/L	96
23) 1,1-Dichloroethane	4.196	63	7929	0.415	ug/L	97
24) Halothane	4.253	117	3790	0.419	ug/L	91

Quantitation Report (QT Reviewed)

Data Path : K:\Gonzo\2025\250619NICAL\
 Data File : VG250619N06.D
 Acq On : 20 Jun 2025 2:28 am
 Operator : GONZO:PID
 Sample : I8260STD0.5PPB
 Misc : WG2081469,ICAL (Sig #1); WG,ICAL (Sig #2)
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 20 07:07:15 2025
 Quant Method : K:\Gonzo\2025\250619NICAL\G_250619N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Jun 20 07:06:34 2025
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Gonzo\2025\250619NICAL\VG250619N10.D
 Sub List : 8260-Curve - Megamix plus Diox

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

25) Acrylonitrile	0.000		0	N.D.	d	
26) Ethyl tert-butyl ether	4.403	59	14819	0.451	ug/L #	65
27) Vinyl acetate	0.000		0	N.D.	d	
28) cis-1,2-Dichloroethene	4.709	96	5596	0.445	ug/L #	92
29) 2,2-Dichloropropane	4.808	77	6536	0.409	ug/L	85
30) Bromochloromethane	4.908	128	3163	0.537	ug/L	89
31) Cyclohexane	4.894	56	7562	0.454	ug/L	85
32) Chloroform	4.972	83	9985	0.508	ug/L	95
33) Ethyl acetate	5.107	43	3041M6	0.364	ug/L	
34) Carbon tetrachloride	5.100	117	6662	0.424	ug/L	91
35) Tetrahydrofuran	0.000		0	N.D.	d	
37) 1,1,1-Trichloroethane	5.157	97	6854	0.398	ug/L	99
39) 2-Butanone	0.000		0	N.D.	d	
40) 1,1-Dichloropropene	5.299	75	5831	0.426	ug/L	92
41) Benzene	5.540	78	18286	0.426	ug/L	98
42) tert-Amyl methyl ether	5.639	73	14188	0.453	ug/L	94
44) 1,2-Dichloroethane	5.752	62	6991	0.496	ug/L	85
47) Methyl cyclohexane	6.105	83	5996M6	0.389	ug/L	
48) Trichloroethene	6.133	95	3897	0.331	ug/L #	76
50) Dibromomethane	6.592	93	3298	0.464	ug/L	96
51) 1,2-Dichloropropane	6.676	63	4775	0.432	ug/L	93
53) 2-Chloroethyl vinyl ether	7.396	63	1812	0.352	ug/L #	71
54) Bromodichloromethane	6.761	83	6912	0.443	ug/L #	93
57) 1,4-Dioxane	6.966	88	10073	89.167	ug/L	91
58) cis-1,3-Dichloropropene	7.445	75	8861	0.485	ug/L	97
61) Toluene	7.699	92	12349	0.443	ug/L	95
62) 4-Methyl-2-pentanone	8.151	58	1448M6	0.426	ug/L	
63) Tetrachloroethene	8.151	166	5203	0.404	ug/L	91
65) trans-1,3-Dichloropropene	8.193	75	7296	0.454	ug/L	86
67) Ethyl methacrylate	8.384	69	5756	0.442	ug/L	97
68) 1,1,2-Trichloroethane	8.384	83	4242	0.513	ug/L	90
69) Chlorodibromomethane	8.595	129	6212	0.470	ug/L	87
70) 1,3-Dichloropropane	8.701	76	6987	0.434	ug/L	94
71) 1,2-Dibromoethane	8.864	107	4858	0.462	ug/L	99
72) 2-Hexanone	0.000		0	N.D.	d	
73) Chlorobenzene	9.506	112	14700	0.445	ug/L #	74
74) Ethylbenzene	9.541	91	23188M4	0.435	ug/L	
75) 1,1,1,2-Tetrachloroethane	9.590	131	5797	0.457	ug/L	91
76) p/m Xylene	9.731	106	17687	0.832	ug/L	96
77) o Xylene	10.275	106	18358	0.862	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : K:\Gonzo\2025\250619NICAL\
 Data File : VG250619N06.D
 Acq On : 20 Jun 2025 2:28 am
 Operator : GONZO:PID
 Sample : I8260STD0.5PPB
 Misc : WG2081469,ICAL (Sig #1); WG,ICAL (Sig #2)
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 20 07:07:15 2025
 Quant Method : K:\Gonzo\2025\250619NICAL\G_250619N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Jun 20 07:06:34 2025
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Gonzo\2025\250619NICAL\VG250619N10.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
78)	Styrene	10.352	104	29512	0.807	ug/L	97
80)	Bromoform	10.373	173	4284	0.457	ug/L	99
82)	Isopropylbenzene	10.663	105	20240	0.399	ug/L	94
84)	Bromobenzene	11.102	156	6812	0.438	ug/L	94
85)	n-Propylbenzene	11.144	91	23807	0.410	ug/L	97
86)	1,4-Dichlorobutane	11.172	55	8732M6	0.526	ug/L	
87)	1,1,2,2-Tetrachloroethane	11.243	83	6845	0.521	ug/L	96
88)	4-Ethyltoluene	11.271	105	20426	0.408	ug/L	93
89)	2-Chlorotoluene	11.314	91	16146M6	0.442	ug/L	
90)	1,3,5-Trimethylbenzene	11.370	105	17332	0.397	ug/L	100
91)	1,2,3-Trichloropropane	11.377	75	4435	0.444	ug/L	95
92)	trans-1,4-Dichloro-2-b...	11.441	53	1952	0.533	ug/L #	87
93)	4-Chlorotoluene	11.498	91	17214	0.448	ug/L	97
94)	tert-Butylbenzene	11.710	119	15401	0.425	ug/L	98
97)	1,2,4-Trimethylbenzene	11.788	105	18322	0.420	ug/L	96
98)	sec-Butylbenzene	11.894	105	20087	0.406	ug/L	97
99)	p-Isopropyltoluene	12.056	119	16994	0.382	ug/L	94
100)	1,3-Dichlorobenzene	12.127	146	12373	0.439	ug/L	97
101)	1,4-Dichlorobenzene	12.219	146	13718	0.473	ug/L #	87
102)	p-Diethylbenzene	12.424	119	10639	0.404	ug/L	99
103)	n-Butylbenzene	12.488	91	12831	0.375	ug/L	97
104)	1,2-Dichlorobenzene	12.644	146	11786	0.437	ug/L	98
105)	1,2,4,5-Tetramethylben...	13.224	119	16434	0.413	ug/L	95
106)	1,2-Dibromo-3-chloropr...	13.429	155	970	0.405	ug/L #	64
107)	1,3,5-Trichlorobenzene	13.450	180	7732	0.436	ug/L	95
108)	Hexachlorobutadiene	14.023	225	2330	0.414	ug/L	94
109)	1,2,4-Trichlorobenzene	14.058	180	7038	0.461	ug/L	94
110)	Naphthalene	14.348	128	14811	0.466	ug/L	100
111)	1,2,3-Trichlorobenzene	14.511	180	5377	0.458	ug/L	92

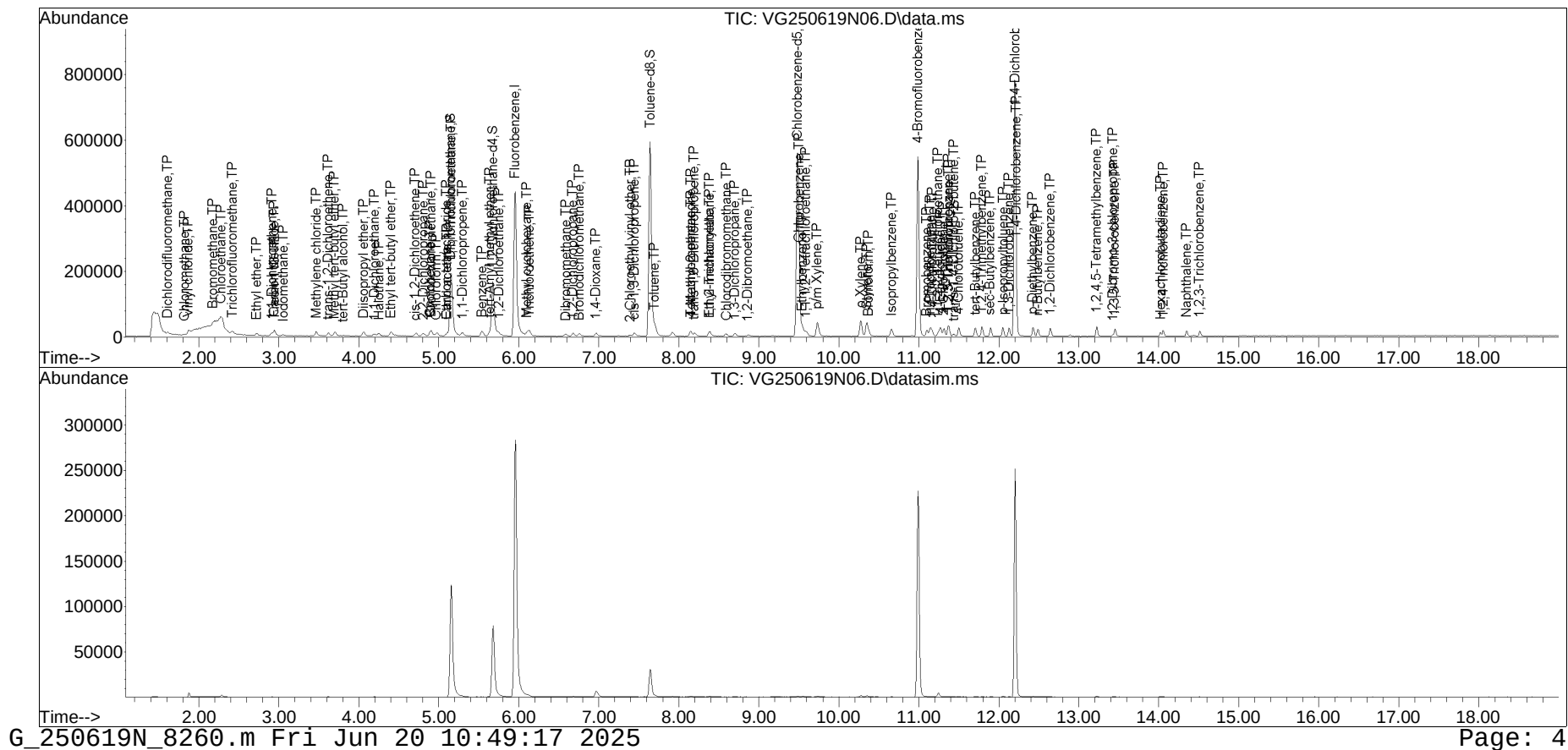
(#) = qualifier out of range (m) = manual integration (+) = signals summed

(QT Reviewed)

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Data Path   : K:\Gonzo\2025\250619NICAL\  
Data File  : VG250619N06.D  
Acq On     : 20 Jun 2025    2:28 am  
Operator   : GONZO:PID  
Sample     : I8260STD0.5PPB  
Misc       : WG2081469,ICAL (Sig #1); WG,ICAL (Sig #2)  
ALS Vial   : 6    Sample Multiplier: 1
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Quant Time: Jun 20 07:07:15 2025
Quant Method : K:\Gonzo\2025\250619NICAL\G_250619N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Jun 20 07:06:34 2025
Response via : Initial Calibration

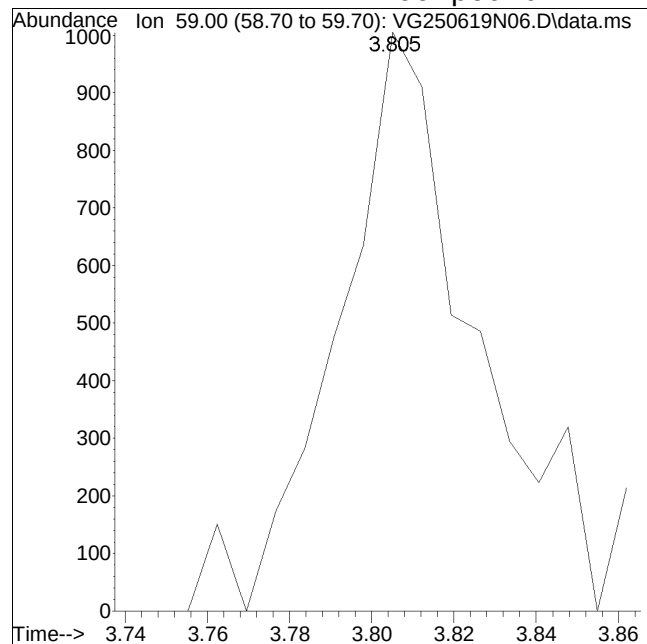
Sub List : 8260-Curve - Megamix plus DioxVG250619N10.D•



Manual Integration Report

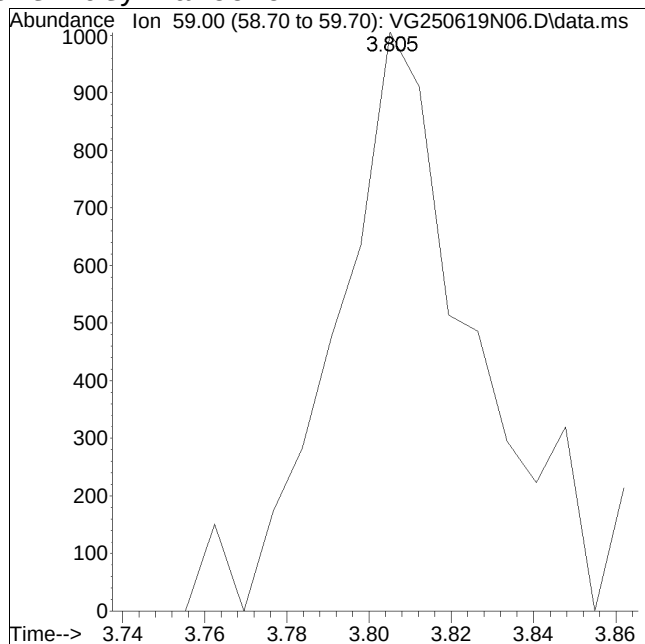
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Data File : VG250619N06.D Operator : GONZO:PID
Date Inj'd : 6/20/2025 2:28 am Instrument : Gonzo
Sample : I8260STD0.5PPB Quant Date : 6/20/2025 7:07 am

Compound #21: tert-Butyl alcohol



Original Peak Response = 2336

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

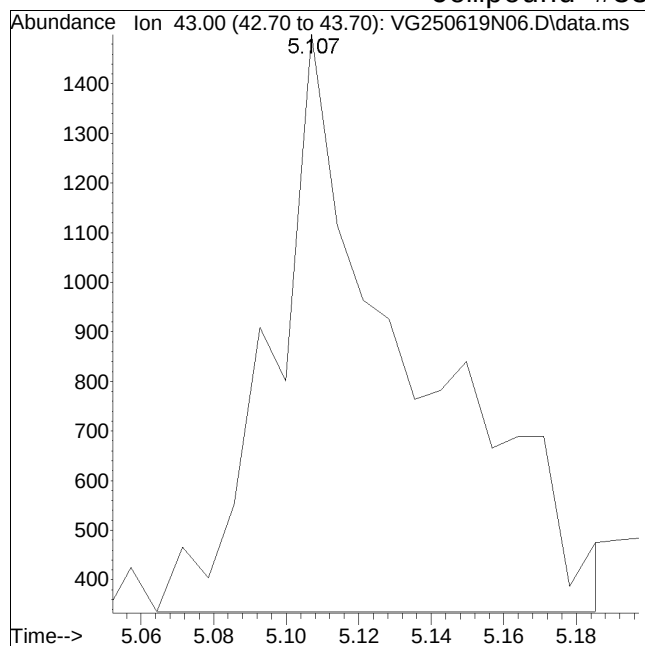


Manual Peak Response = 2271 M6

Manual Integration Report

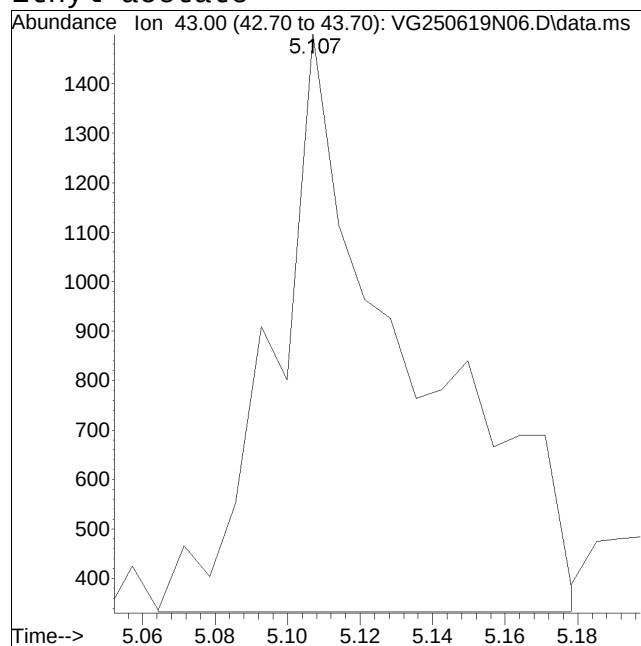
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Data File : VG250619N06.D Operator : GONZO:PID
Date Inj'd : 6/20/2025 2:28 am Instrument : Gonzo
Sample : I8260STD0.5PPB Quant Date : 6/20/2025 7:07 am

Compound #33: Ethyl acetate



Original Peak Response = 3080

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

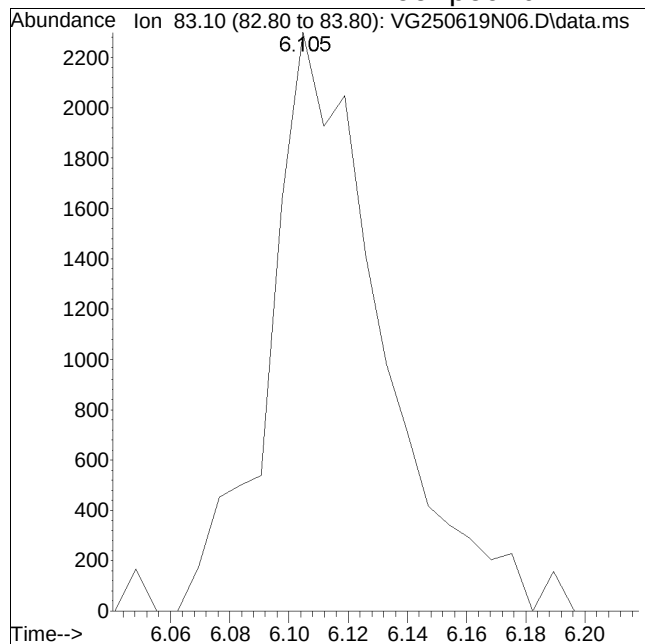


Manual Peak Response = 3041 M6

Manual Integration Report

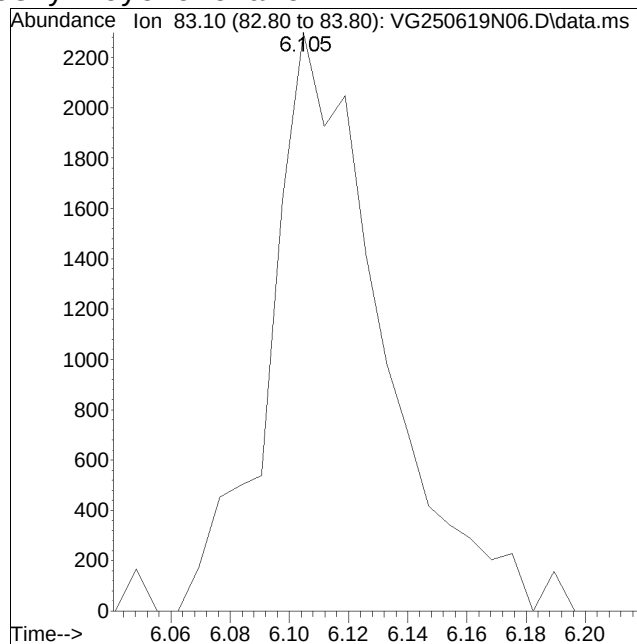
Data Path : K:\Gonzo\2025\250619NICAL\QMethod : G_250619N_8260.m
Data File : VG250619N06.D Operator : GONZO:PID
Date Inj'd : 6/20/2025 2:28 am Instrument : Gonzo
Sample : I8260STD0.5PPB Quant Date : 6/20/2025 7:07 am

Compound #47: Methyl cyclohexane



Original Peak Response = 6063

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

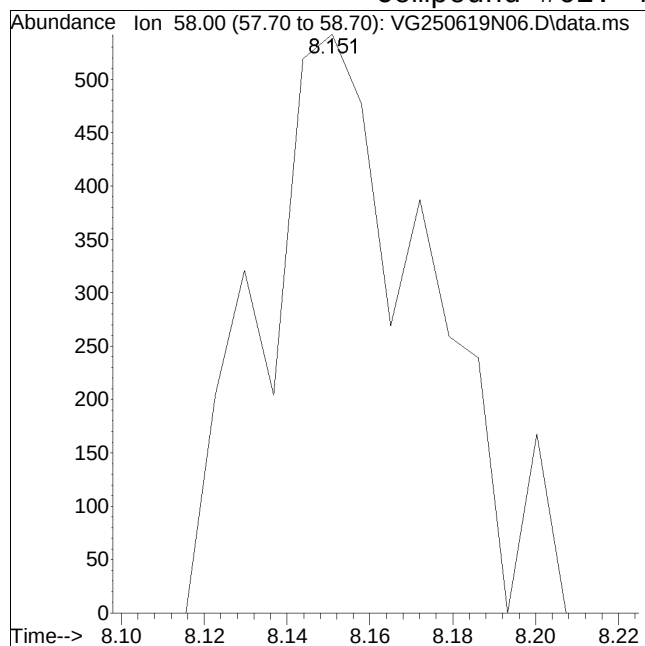


Manual Peak Response = 5996 M6

Manual Integration Report

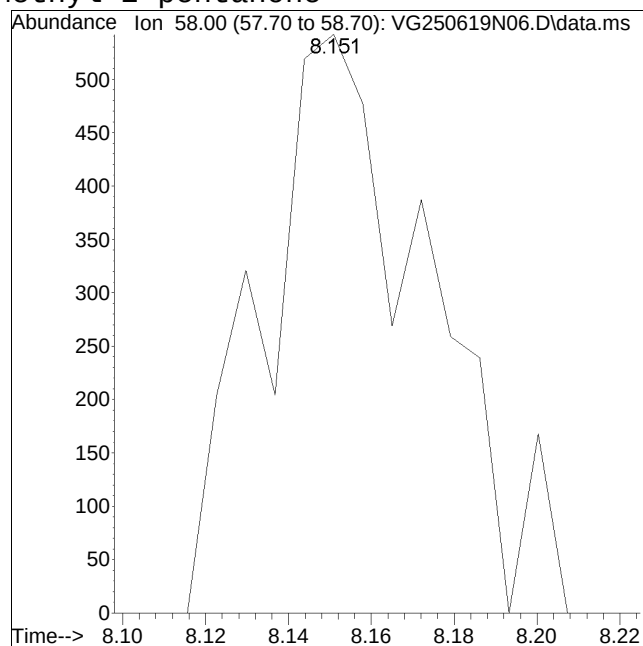
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Data File : VG250619N06.D Operator : GONZO:PID
Date Inj'd : 6/20/2025 2:28 am Instrument : Gonzo
Sample : I8260STD0.5PPB Quant Date : 6/20/2025 7:07 am

Compound #62: 4-Methyl-2-pentanone



Original Peak Response = 1519

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

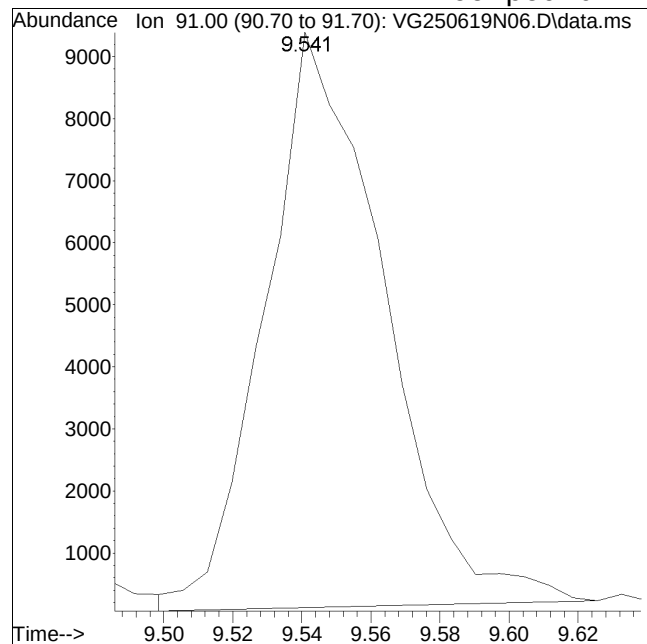


Manual Peak Response = 1448 M6

Manual Integration Report

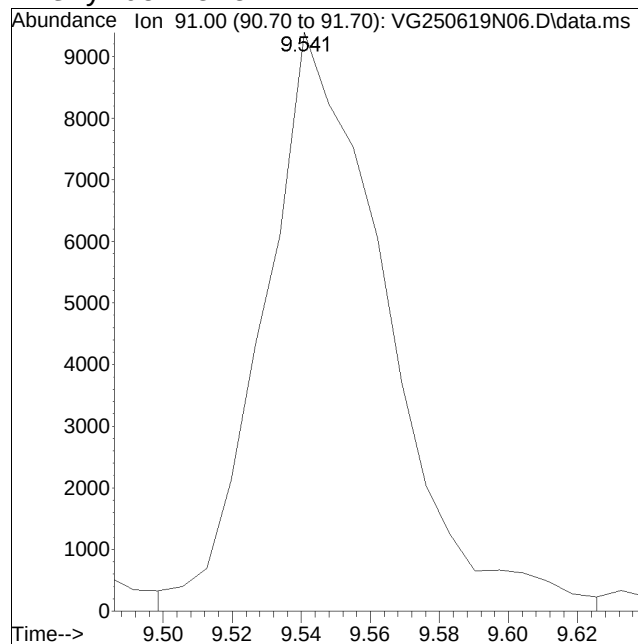
Data Path : K:\Gonzo\2025\250619NICAL\QMethod : G_250619N_8260.m
Data File : VG250619N06.D Operator : GONZO:PID
Date Inj'd : 6/20/2025 2:28 am Instrument : Gonzo
Sample : I8260STD0.5PPB Quant Date : 6/20/2025 7:07 am

Compound #74: Ethylbenzene



Original Peak Response = 22068

M4 = Poor automated baseline construction.

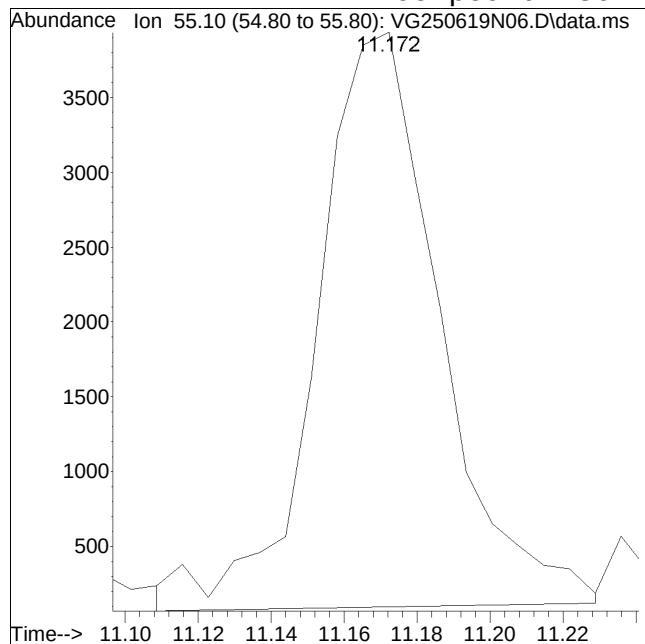


Manual Peak Response = 23188 M4

Manual Integration Report

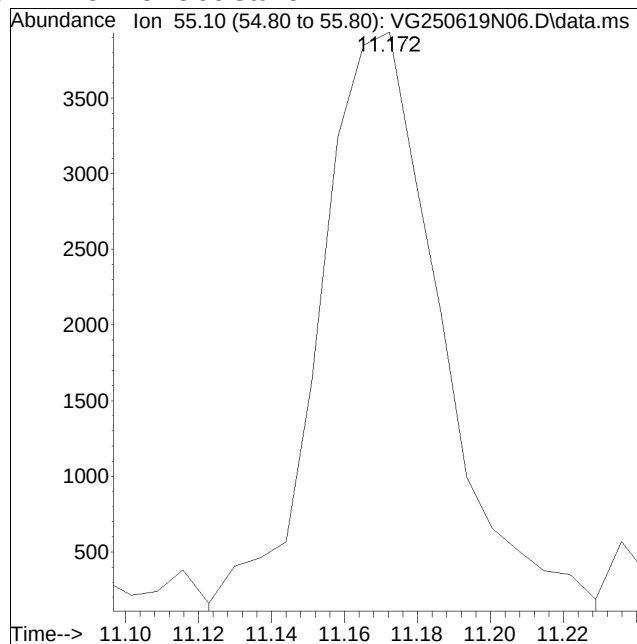
Data Path : K:\Gonzo\2025\250619NICAL\QMethod : G_250619N_8260.m
Data File : VG250619N06.D Operator : GONZO:PID
Date Inj'd : 6/20/2025 2:28 am Instrument : Gonzo
Sample : I8260STD0.5PPB Quant Date : 6/20/2025 7:07 am

Compound #86: 1,4-Dichlorobutane



Original Peak Response = 8970

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

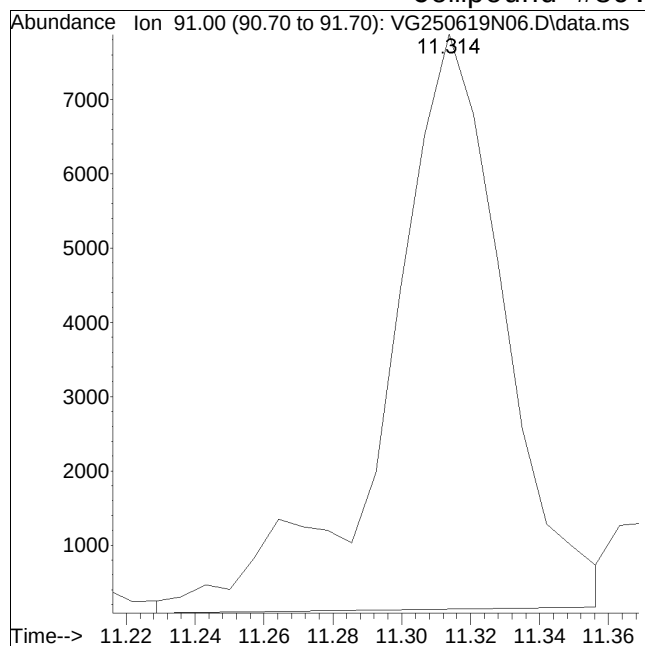


Manual Peak Response = 8732 M6

Manual Integration Report

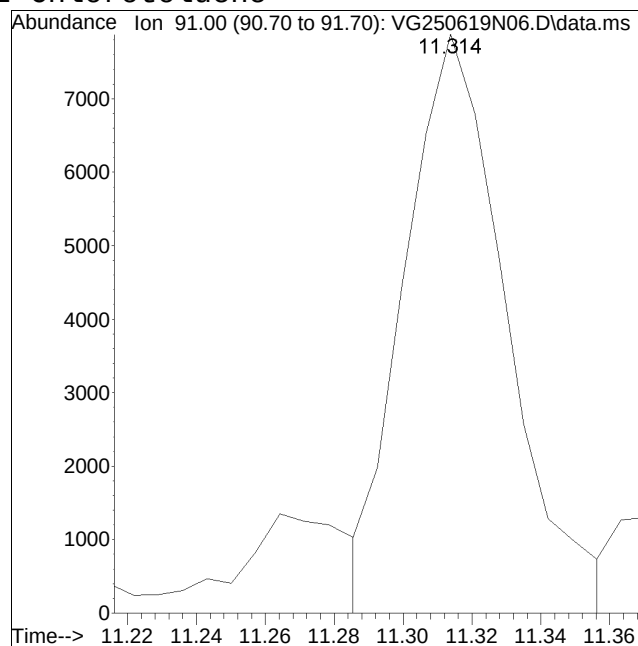
Data Path : K:\Gonzo\2025\250619NICAL\QMethod : G_250619N_8260.m
Data File : VG250619N06.D Operator : GONZO:PID
Date Inj'd : 6/20/2025 2:28 am Instrument : Gonzo
Sample : I8260STD0.5PPB Quant Date : 6/20/2025 7:07 am

Compound #89: 2-Chlorotoluene



Original Peak Response = 18076

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).



Manual Peak Response = 16146 M6

Quantitation Report (QT Reviewed)

Data Path : K:\Gonzo\2025\250619NICAL\
 Data File : VG250619N08.D
 Acq On : 20 Jun 2025 3:21 am
 Operator : GONZO:PID
 Sample : I8260STD2PPB
 Misc : WG2081469,ICAL (Sig #1); WG,ICAL (Sig #2)
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 20 07:07:22 2025
 Quant Method : K:\Gonzo\2025\250619NICAL\G_250619N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Jun 20 07:06:34 2025
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Gonzo\2025\250619NICAL\VG250619N10.D
 Sub List : 8260-Curve - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	5.957	96	543741	10.000	ug/L	0.00
Standard Area 1 = 552092			Recovery	=	98.49%	
59) Chlorobenzene-d5	9.484	117	430333	10.000	ug/L	0.00
Standard Area 1 = 440365			Recovery	=	97.72%	
79) 1,4-Dichlorobenzene-d4	12.198	152	245969	10.000	ug/L	0.00
Standard Area 1 = 255053			Recovery	=	96.44%	
System Monitoring Compounds						
36) Dibromofluoromethane	5.157	113	141043	9.993	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	99.93%	
43) 1,2-Dichloroethane-d4	5.674	65	144308	9.987	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	99.87%	
60) Toluene-d8	7.643	98	533776	9.986	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	99.86%	
83) 4-Bromofluorobenzene	10.988	95	205056	10.108	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	101.08%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.614	85	24388	2.047	ug/L	98
3) Chloromethane	1.827	50	22330	2.006	ug/L	97
4) Vinyl chloride	1.877	62	25007	2.042	ug/L	98
5) Bromomethane	2.176	94	16142	1.922	ug/L	92
6) Chloroethane	2.283	64	17428	2.418	ug/L	86
7) Trichlorofluoromethane	2.418	101	30422	1.859	ug/L	98
8) Ethyl ether	2.717	74	11156	1.884	ug/L #	91
10) 1,1-Dichloroethene	2.916	96	19724	2.003	ug/L	92
11) Carbon disulfide	2.944	76	59425	1.992	ug/L	100
12) Freon-113	2.944	101	19802	2.013	ug/L	99
13) Iodomethane	3.058	142	16503	1.420	ug/L	89
14) Acrolein	3.250	56	2640M6	1.697	ug/L	
15) Methylene chloride	3.464	84	23982	2.002	ug/L	96
17) Acetone	3.535	43	5340	2.294	ug/L #	76
18) trans-1,2-Dichloroethene	3.613	96	21735	2.037	ug/L	92
19) Methyl acetate	3.634	43	8823M6	1.608	ug/L	
20) Methyl tert-butyl ether	3.705	73	59752	1.923	ug/L	97
21) tert-Butyl alcohol	3.805	59	8332	8.982	ug/L #	77
22) Diisopropyl ether	4.061	45	58132	1.842	ug/L	97
23) 1,1-Dichloroethane	4.189	63	38484	2.039	ug/L	97
24) Halothane	4.246	117	17794	1.994	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : K:\Gonzo\2025\250619NICAL\
 Data File : VG250619N08.D
 Acq On : 20 Jun 2025 3:21 am
 Operator : GONZO:PID
 Sample : I8260STD2PPB
 Misc : WG2081469,ICAL (Sig #1); WG,ICAL (Sig #2)
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 20 07:07:22 2025
 Quant Method : K:\Gonzo\2025\250619NICAL\G_250619N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Jun 20 07:06:34 2025
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Gonzo\2025\250619NICAL\VG250619N10.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25)	Acrylonitrile	4.267	53	4659	1.558	ug/L #	89
26)	Ethyl tert-butyl ether	4.403	59	60521	1.865	ug/L	98
27)	Vinyl acetate	4.438	43	35183	1.749	ug/L #	94
28)	cis-1,2-Dichloroethene	4.716	96	24779	1.995	ug/L	98
29)	2,2-Dichloropropane	4.808	77	30168	1.911	ug/L	93
30)	Bromochloromethane	4.908	128	12225	2.102	ug/L	97
31)	Cyclohexane	4.901	56	33161	2.016	ug/L	100
32)	Chloroform	4.979	83	37821	1.948	ug/L	99
33)	Ethyl acetate	5.093	43	14869	1.804	ug/L	96
34)	Carbon tetrachloride	5.100	117	30933	1.995	ug/L	99
35)	Tetrahydrofuran	5.128	42	6147M3	2.322	ug/L	
37)	1,1,1-Trichloroethane	5.171	97	34643	2.039	ug/L	98
39)	2-Butanone	5.285	43	5901M6	1.675	ug/L	
40)	1,1-Dichloropropene	5.292	75	27159	2.012	ug/L	99
41)	Benzene	5.533	78	85144	2.008	ug/L	98
42)	tert-Amyl methyl ether	5.646	73	58666	1.896	ug/L	99
44)	1,2-Dichloroethane	5.745	62	26270	1.890	ug/L	96
47)	Methyl cyclohexane	6.112	83	31087	2.045	ug/L	97
48)	Trichloroethene	6.133	95	21044	1.811	ug/L	87
50)	Dibromomethane	6.577	93	14146	2.016	ug/L	98
51)	1,2-Dichloropropane	6.676	63	21726	1.993	ug/L	97
53)	2-Chloroethyl vinyl ether	7.375	63	9239	1.817	ug/L	100
54)	Bromodichloromethane	6.754	83	30673	1.992	ug/L	98
57)	1,4-Dioxane	6.958	88	44919	402.899	ug/L	100
58)	cis-1,3-Dichloropropene	7.445	75	35079	1.945	ug/L	99
61)	Toluene	7.699	92	55626	2.019	ug/L	100
62)	4-Methyl-2-pentanone	8.144	58	6522	1.940	ug/L	97
63)	Tetrachloroethene	8.137	166	25635	2.011	ug/L	97
65)	trans-1,3-Dichloropropene	8.193	75	30750	1.934	ug/L	86
67)	Ethyl methacrylate	8.384	69	23673	1.839	ug/L	95
68)	1,1,2-Trichloroethane	8.384	83	15386	1.882	ug/L	96
69)	Chlorodibromomethane	8.588	129	24783	1.898	ug/L	98
70)	1,3-Dichloropropane	8.694	76	31819	1.999	ug/L	98
71)	1,2-Dibromoethane	8.864	107	20116	1.937	ug/L	97
72)	2-Hexanone	9.160	43	9537	1.709	ug/L #	91
73)	Chlorobenzene	9.506	112	65809	2.016	ug/L	95
74)	Ethylbenzene	9.541	91	104907	1.989	ug/L	100
75)	1,1,1,2-Tetrachloroethane	9.590	131	24070	1.918	ug/L	95
76)	p/m Xylene	9.731	106	83234	3.962	ug/L	98
77)	o Xylene	10.268	106	83502	3.964	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : K:\Gonzo\2025\250619NICAL\
 Data File : VG250619N08.D
 Acq On : 20 Jun 2025 3:21 am
 Operator : GONZO:PID
 Sample : I8260STD2PPB
 Misc : WG2081469,ICAL (Sig #1); WG,ICAL (Sig #2)
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 20 07:07:22 2025
 Quant Method : K:\Gonzo\2025\250619NICAL\G_250619N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Jun 20 07:06:34 2025
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Gonzo\2025\250619NICAL\VG250619N10.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
78)	Styrene	10.345	104	137330	3.799	ug/L	100
80)	Bromoform	10.373	173	17682	1.912	ug/L	100
82)	Isopropylbenzene	10.656	105	100197	2.001	ug/L	99
84)	Bromobenzene	11.102	156	31381	2.047	ug/L	98
85)	n-Propylbenzene	11.137	91	112203	1.959	ug/L	99
86)	1,4-Dichlorobutane	11.165	55	31512	1.925	ug/L	96
87)	1,1,2,2-Tetrachloroethane	11.243	83	25414	1.962	ug/L	97
88)	4-Ethyltoluene	11.264	105	98942	2.002	ug/L	99
89)	2-Chlorotoluene	11.314	91	72607M6	2.017	ug/L	
90)	1,3,5-Trimethylbenzene	11.370	105	86429	2.007	ug/L	98
91)	1,2,3-Trichloropropane	11.377	75	19480	1.979	ug/L	99
92)	trans-1,4-Dichloro-2-b...	11.434	53	7267	2.011	ug/L	91
93)	4-Chlorotoluene	11.498	91	71446	1.887	ug/L	97
94)	tert-Butylbenzene	11.703	119	71163	1.990	ug/L	98
97)	1,2,4-Trimethylbenzene	11.788	105	85522	1.990	ug/L	99
98)	sec-Butylbenzene	11.894	105	96199	1.973	ug/L	100
99)	p-Isopropyltoluene	12.049	119	85809	1.956	ug/L	99
100)	1,3-Dichlorobenzene	12.127	146	56222	2.021	ug/L	99
101)	1,4-Dichlorobenzene	12.219	146	56228	1.968	ug/L	95
102)	p-Diethylbenzene	12.424	119	49205	1.897	ug/L	99
103)	n-Butylbenzene	12.488	91	64954	1.926	ug/L	100
104)	1,2-Dichlorobenzene	12.644	146	52968	1.994	ug/L	99
105)	1,2,4,5-Tetramethylben...	13.224	119	76440	1.946	ug/L	98
106)	1,2-Dibromo-3-chloropr...	13.422	155	4595	1.946	ug/L	95
107)	1,3,5-Trichlorobenzene	13.450	180	35336	2.020	ug/L	99
108)	Hexachlorobutadiene	14.023	225	11380	2.049	ug/L	98
109)	1,2,4-Trichlorobenzene	14.051	180	30446	2.024	ug/L	98
110)	Naphthalene	14.341	128	63385	2.024	ug/L	100
111)	1,2,3-Trichlorobenzene	14.511	180	23532	2.034	ug/L	100

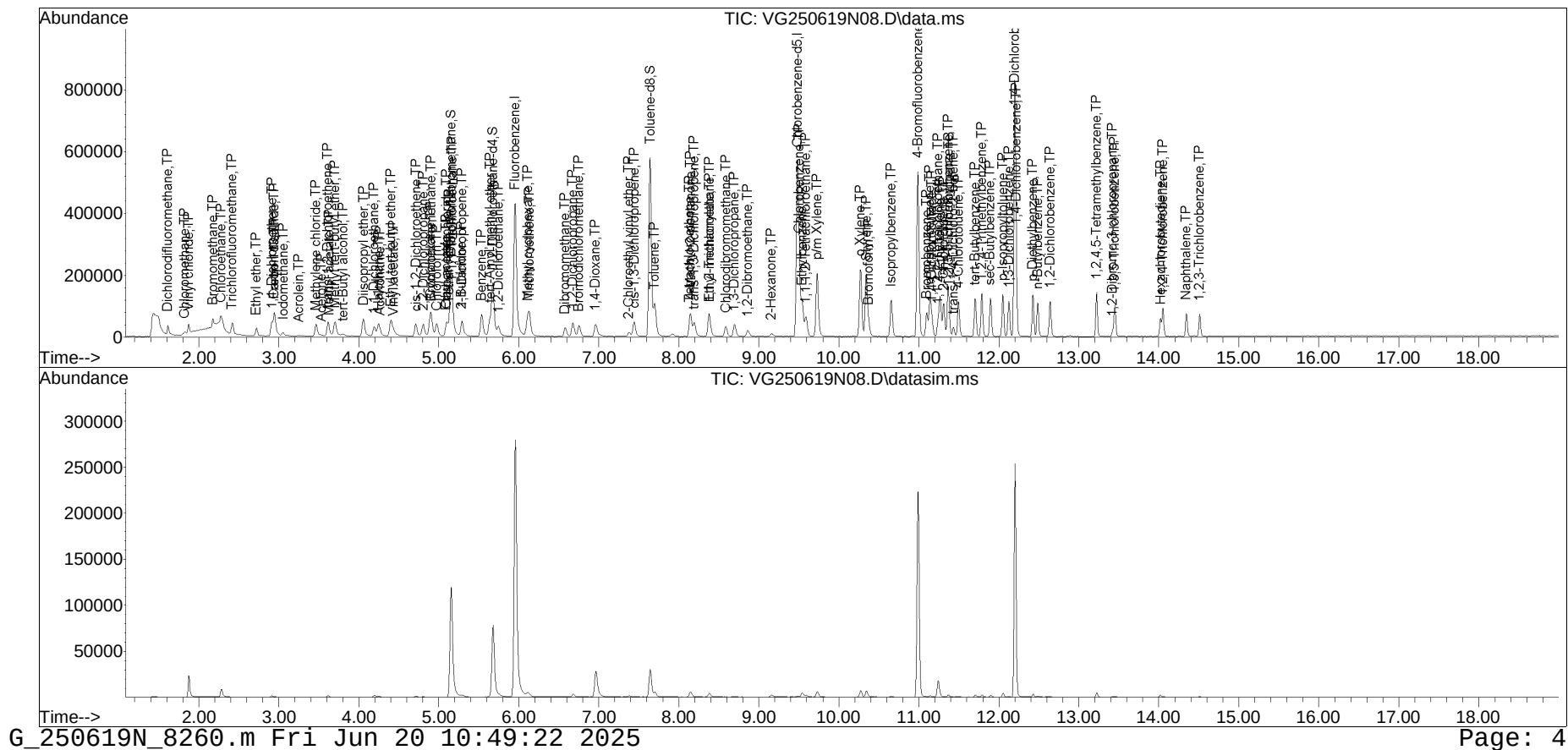
(#) = qualifier out of range (m) = manual integration (+) = signals summed

(QT Reviewed)

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Data Path   : K:\Gonzo\2025\250619NICAL\  
Data File  : VG250619N08.D  
Acq On     : 20 Jun 2025    3:21 am  
Operator   : GONZO:PID  
Sample     : I8260STD2PPB  
Misc       : WG2081469,ICAL (Sig #1); WG,ICAL (Sig #2)  
ALS Vial   : 8    Sample Multiplier: 1
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Quant Time: Jun 20 07:07:22 2025
Quant Method : K:\Gonzo\2025\250619NICAL\G_250619N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Jun 20 07:06:34 2025
Response via : Initial Calibration

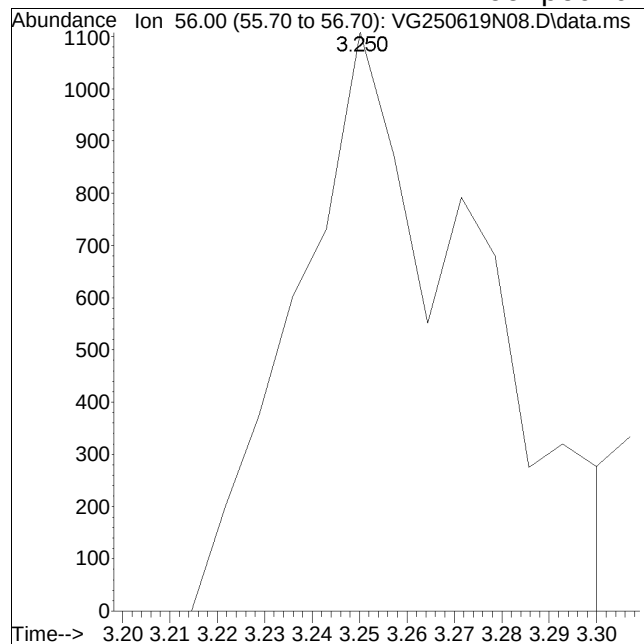
Sub List : 8260-Curve - Megamix plus DioxVG250619N10.D•



Manual Integration Report

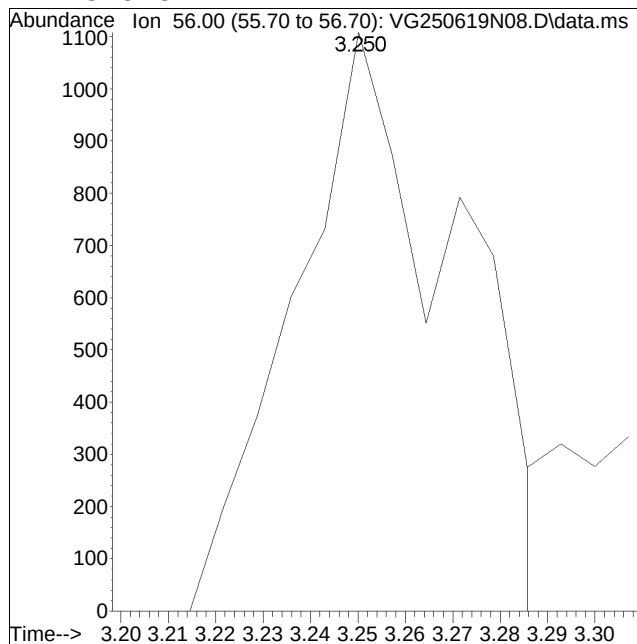
Data Path : K:\Gonzo\2025\250619NICAL\QMethod : G_250619N_8260.m
Data File : VG250619N08.D Operator : GONZO:PID
Date Inj'd : 6/20/2025 3:21 am Instrument : Gonzo
Sample : I8260STD2PPB Quant Date : 6/20/2025 7:07 am

Compound #14: Acrolein



Original Peak Response = 2895

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

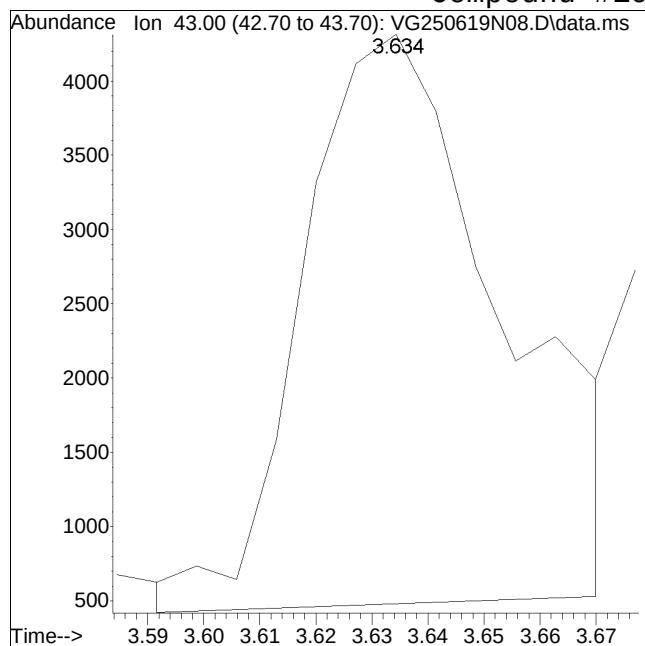


Manual Peak Response = 2640 M6

Manual Integration Report

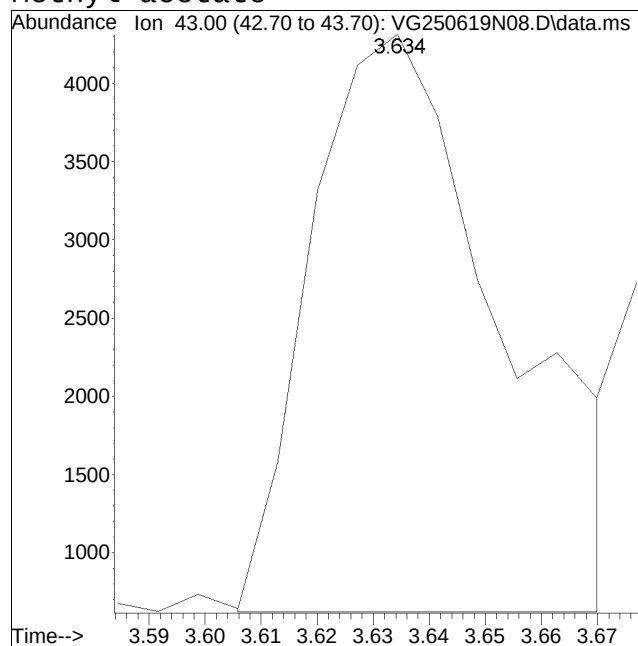
Data Path : K:\Gonzo\2025\250619NICAL\QMethod : G_250619N_8260.m
Data File : VG250619N08.D Operator : GONZO:PID
Date Inj'd : 6/20/2025 3:21 am Instrument : Gonzo
Sample : I8260STD2PPB Quant Date : 6/20/2025 7:07 am

Compound #19: Methyl acetate



Original Peak Response = 9563

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

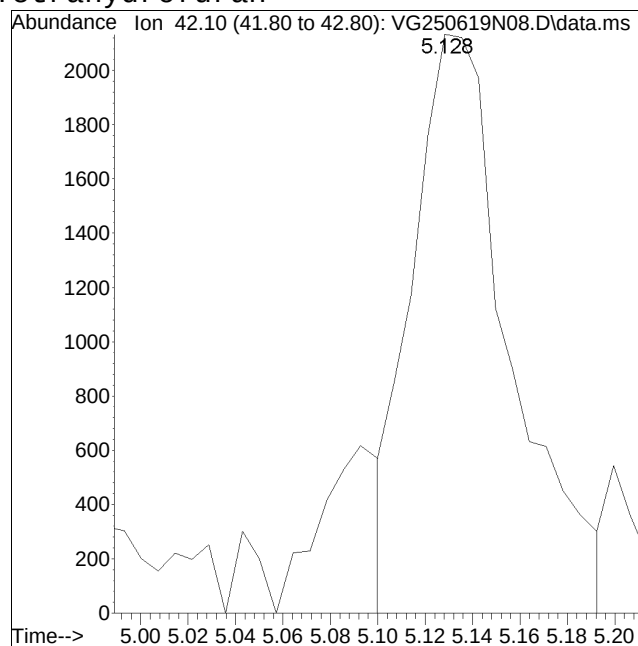
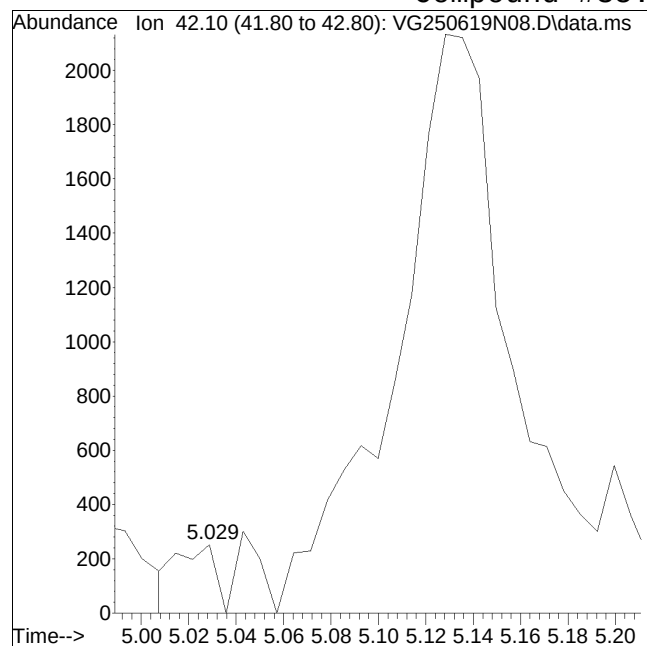


Manual Peak Response = 8823 M6

Manual Integration Report

Data Path : K:\Gonzo\2025\250619NICAL\QMethod : G_250619N_8260.m
Data File : VG250619N08.D Operator : GONZO:PID
Date Inj'd : 6/20/2025 3:21 am Instrument : Gonzo
Sample : I8260STD2PPB Quant Date : 6/20/2025 7:07 am

Compound #35: Tetrahydrofuran



Original Peak Response = 286

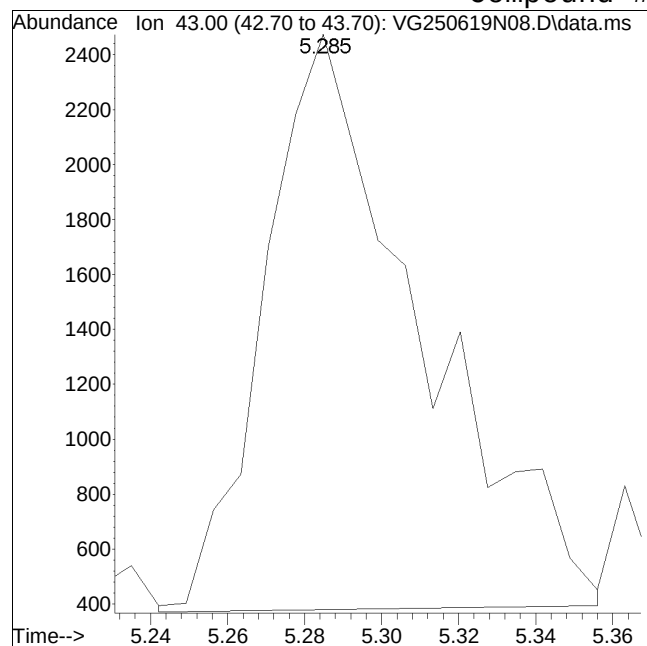
Manual Peak Response = 6147 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

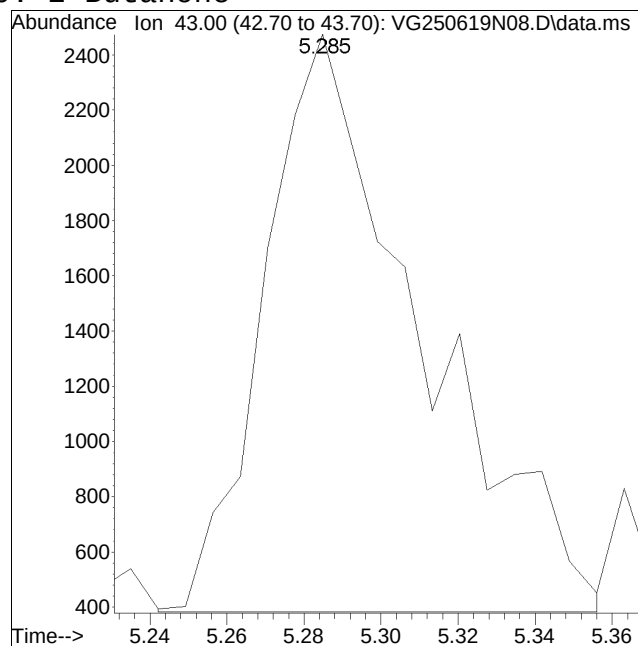
Data Path : K:\Gonzo\2025\250619NICAL\QMethod : G_250619N_8260.m
Data File : VG250619N08.D Operator : GONZO:PID
Date Inj'd : 6/20/2025 3:21 am Instrument : Gonzo
Sample : I8260STD2PPB Quant Date : 6/20/2025 7:07 am

Compound #39: 2-Butanone



Original Peak Response = 5905

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

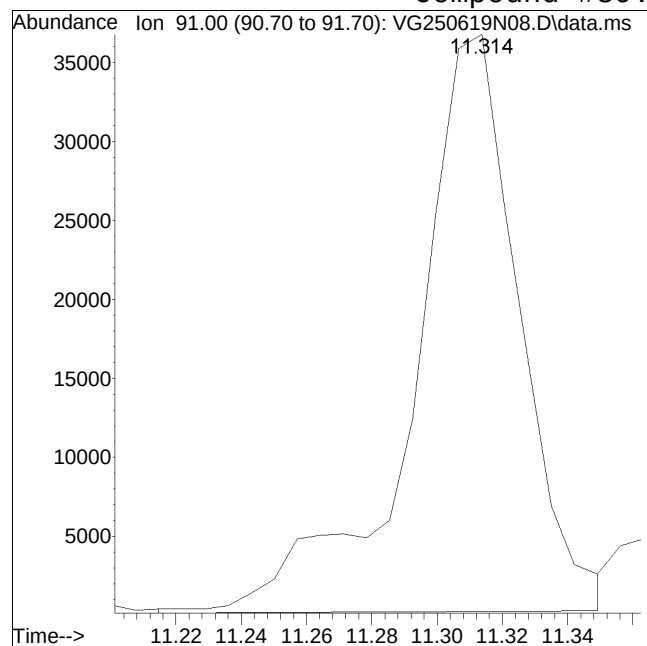


Manual Peak Response = 5901 M6

Manual Integration Report

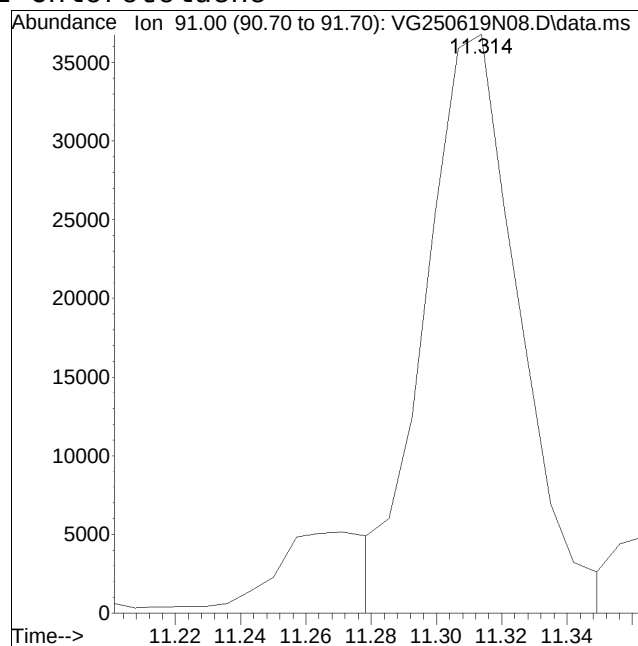
Data Path : K:\Gonzo\2025\250619NICAL\QMethod : G_250619N_8260.m
Data File : VG250619N08.D Operator : GONZO:PID
Date Inj'd : 6/20/2025 3:21 am Instrument : Gonzo
Sample : I8260STD2PPB Quant Date : 6/20/2025 7:07 am

Compound #89: 2-Chlorotoluene



Original Peak Response = 81496

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).



Manual Peak Response = 72607 M6

Quantitation Report (QT Reviewed)

Data Path : K:\Gonzo\2025\250619NICAL\
 Data File : VG250619N10.D
 Acq On : 20 Jun 2025 4:15 am
 Operator : GONZO:PID
 Sample : I8260STD10PPB
 Misc : WG2081469,ICAL (Sig #1); WG,ICAL (Sig #2)
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 20 07:07:29 2025
 Quant Method : K:\Gonzo\2025\250619NICAL\G_250619N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Jun 20 07:06:34 2025
 Response via : Initial Calibration

Sub List : 8260-Curve - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	5.957	96	552092	10.000	ug/L	0.00
59) Chlorobenzene-d5	9.484	117	440365	10.000	ug/L	0.00
79) 1,4-Dichlorobenzene-d4	12.198	152	255053	10.000	ug/L	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	5.150	113	142923	9.973	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	99.73%		
43) 1,2-Dichloroethane-d4	5.674	65	150189	10.237	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	102.37%		
60) Toluene-d8	7.643	98	547657	10.012	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	100.12%		
83) 4-Bromofluorobenzene	10.988	95	210277	9.996	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	99.96%		
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.614	85	123021	10.168	ug/L	100
3) Chloromethane	1.820	50	110468	9.776	ug/L	100
4) Vinyl chloride	1.877	62	128921	10.370	ug/L	100
5) Bromomethane	2.176	94	75272	8.829	ug/L	100
6) Chloroethane	2.283	64	85005	11.614	ug/L	100
7) Trichlorofluoromethane	2.418	101	170591	10.264	ug/L	100
8) Ethyl ether	2.724	74	58807	9.782	ug/L	100
10) 1,1-Dichloroethene	2.909	96	99936	9.995	ug/L	100
11) Carbon disulfide	2.944	76	301684	9.962	ug/L	100
12) Freon-113	2.944	101	101398	10.150	ug/L	100
13) Iodomethane	3.058	142	94752	8.031	ug/L	100
14) Acrolein	3.243	56	16622	10.524	ug/L	100
15) Methylene chloride	3.464	84	112721	9.268	ug/L	100
17) Acetone	3.513	43	21339	9.029	ug/L	100
18) trans-1,2-Dichloroethene	3.613	96	109138	10.073	ug/L	100
19) Methyl acetate	3.620	43	53316	9.572	ug/L	100
20) Methyl tert-butyl ether	3.698	73	315022	9.983	ug/L	100
21) tert-Butyl alcohol	3.805	59	46457	49.321	ug/L	100
22) Diisopropyl ether	4.054	45	322298	10.058	ug/L	100
23) 1,1-Dichloroethane	4.189	63	196459	10.254	ug/L	100
24) Halothane	4.246	117	91759	10.127	ug/L	100
25) Acrylonitrile	4.246	53	29639	9.761	ug/L	100
26) Ethyl tert-butyl ether	4.403	59	330501	10.031	ug/L	100
27) Vinyl acetate	4.424	43	191918	9.394	ug/L	100
28) cis-1,2-Dichloroethene	4.709	96	127475	10.107	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : K:\Gonzo\2025\250619NICAL\
 Data File : VG250619N10.D
 Acq On : 20 Jun 2025 4:15 am
 Operator : GONZO:PID
 Sample : I8260STD10PPB
 Misc : WG2081469,ICAL (Sig #1); WG,ICAL (Sig #2)
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 20 07:07:29 2025
 Quant Method : K:\Gonzo\2025\250619NICAL\G_250619N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Jun 20 07:06:34 2025
 Response via : Initial Calibration

Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
29)	2,2-Dichloropropane	4.808	77	160432	10.008	ug/L	100
30)	Bromochloromethane	4.908	128	60345	10.221	ug/L	100
31)	Cyclohexane	4.894	56	164588	9.854	ug/L	100
32)	Chloroform	4.979	83	195756	9.929	ug/L	100
33)	Ethyl acetate	5.086	43	84763	10.126	ug/L	100
34)	Carbon tetrachloride	5.100	117	163459	10.381	ug/L	100
35)	Tetrahydrofuran	5.128	42	25007M6	9.302	ug/L	
37)	1,1,1-Trichloroethane	5.164	97	172888	10.021	ug/L	100
39)	2-Butanone	5.271	43	30859	8.626	ug/L	100
40)	1,1-Dichloropropene	5.292	75	137312	10.019	ug/L	100
41)	Benzene	5.533	78	439511	10.208	ug/L	100
42)	tert-Amyl methyl ether	5.639	73	309920	9.864	ug/L	100
44)	1,2-Dichloroethane	5.745	62	137802	9.763	ug/L	100
47)	Methyl cyclohexane	6.112	83	154286	9.997	ug/L	100
48)	Trichloroethene	6.133	95	119536	10.133	ug/L	100
50)	Dibromomethane	6.577	93	70693	9.922	ug/L	100
51)	1,2-Dichloropropane	6.676	63	112797	10.193	ug/L	100
53)	2-Chloroethyl vinyl ether	7.368	63	49995	9.682	ug/L	100
54)	Bromodichloromethane	6.754	83	157091	10.046	ug/L	100
57)	1,4-Dioxane	6.959	88	55692	491.972	ug/L	100
58)	cis-1,3-Dichloropropene	7.438	75	183655	10.030	ug/L	100
61)	Toluene	7.699	92	284300	10.083	ug/L	100
62)	4-Methyl-2-pentanone	8.137	58	34253	9.955	ug/L	100
63)	Tetrachloroethene	8.144	166	136645	10.477	ug/L	100
65)	trans-1,3-Dichloropropene	8.193	75	163221	10.034	ug/L	100
67)	Ethyl methacrylate	8.370	69	129124	9.802	ug/L	100
68)	1,1,2-Trichloroethane	8.377	83	81323	9.723	ug/L	100
69)	Chlorodibromomethane	8.588	129	129863	9.716	ug/L	100
70)	1,3-Dichloropropane	8.694	76	164456	10.097	ug/L	100
71)	1,2-Dibromoethane	8.857	107	106743	10.044	ug/L	100
72)	2-Hexanone	9.146	43	57458	10.062	ug/L	100
73)	Chlorobenzene	9.506	112	336245	10.067	ug/L	100
74)	Ethylbenzene	9.541	91	543977	10.076	ug/L	100
75)	1,1,1,2-Tetrachloroethane	9.590	131	127525	9.930	ug/L	100
76)	p/m Xylene	9.724	106	439022	20.421	ug/L	100
77)	o Xylene	10.268	106	433677	20.118	ug/L	100
78)	Styrene	10.338	104	738458	19.965	ug/L	100
80)	Bromoform	10.374	173	91820	9.577	ug/L	100
82)	Isopropylbenzene	10.656	105	526647	10.142	ug/L	100
84)	Bromobenzene	11.095	156	162337	10.214	ug/L	100
85)	n-Propylbenzene	11.137	91	601334	10.127	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : K:\Gonzo\2025\250619NICAL\
 Data File : VG250619N10.D
 Acq On : 20 Jun 2025 4:15 am
 Operator : GONZO:PID
 Sample : I8260STD10PPB
 Misc : WG2081469,ICAL (Sig #1); WG,ICAL (Sig #2)
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 20 07:07:29 2025
 Quant Method : K:\Gonzo\2025\250619NICAL\G_250619N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Jun 20 07:06:34 2025
 Response via : Initial Calibration

Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
86)	1,4-Dichlorobutane	11.165	55	164305	9.680	ug/L	100
87)	1,1,2,2-Tetrachloroethane	11.236	83	127945	9.524	ug/L	100
88)	4-Ethyltoluene	11.264	105	519716	10.143	ug/L	100
89)	2-Chlorotoluene	11.307	91	373597M6	10.010	ug/L	
90)	1,3,5-Trimethylbenzene	11.363	105	447768	10.029	ug/L	100
91)	1,2,3-Trichloropropane	11.377	75	100744	9.868	ug/L	100
92)	trans-1,4-Dichloro-2-b...	11.427	53	33576	8.959	ug/L	100
93)	4-Chlorotoluene	11.491	91	396514	10.102	ug/L	100
94)	tert-Butylbenzene	11.703	119	374982	10.114	ug/L	100
97)	1,2,4-Trimethylbenzene	11.788	105	446684	10.023	ug/L	100
98)	sec-Butylbenzene	11.894	105	510754	10.101	ug/L	100
99)	p-Isopropyltoluene	12.049	119	459240	10.098	ug/L	100
100)	1,3-Dichlorobenzene	12.120	146	289313	10.029	ug/L	100
101)	1,4-Dichlorobenzene	12.219	146	297837	10.055	ug/L	100
102)	p-Diethylbenzene	12.424	119	268480	9.981	ug/L	100
103)	n-Butylbenzene	12.481	91	348666	9.973	ug/L	100
104)	1,2-Dichlorobenzene	12.644	146	279180	10.133	ug/L	100
105)	1,2,4,5-Tetramethylben...	13.224	119	409959	10.066	ug/L	100
106)	1,2-Dibromo-3-chloropr...	13.422	155	24534	10.020	ug/L	100
107)	1,3,5-Trichlorobenzene	13.450	180	188972	10.417	ug/L	100
108)	Hexachlorobutadiene	14.023	225	58182	10.104	ug/L	100
109)	1,2,4-Trichlorobenzene	14.051	180	161410	10.349	ug/L	100
110)	Naphthalene	14.341	128	326250	10.046	ug/L	100
111)	1,2,3-Trichlorobenzene	14.511	180	124336	10.366	ug/L	100

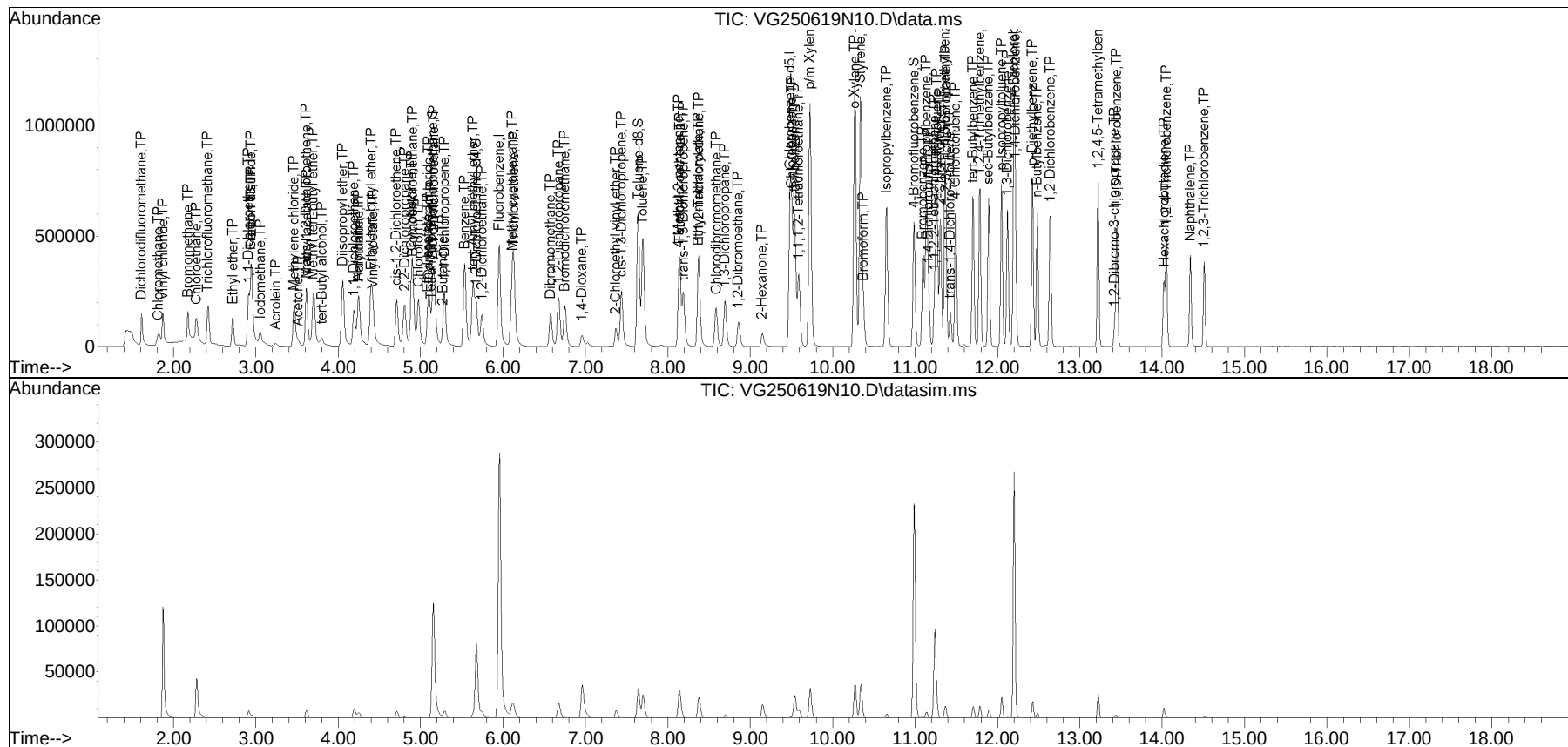
(#) = qualifier out of range (m) = manual integration (+) = signals summed

(QT Reviewed)

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Data Path   : K:\Gonzo\2025\250619NICAL\  
Data File  : VG250619N10.D  
Acq On     : 20 Jun 2025    4:15 am  
Operator   : GONZO:PID  
Sample     : I8260STD10PPB  
Misc       : WG2081469,ICAL (Sig #1); WG,ICAL (Sig #2)  
ALS Vial   : 10    Sample Multiplier: 1
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Quant Time: Jun 20 07:07:29 2025
Quant Method : K:\Gonzo\2025\250619NICAL\G_250619N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Jun 20 07:06:34 2025
Response via : Initial Calibration

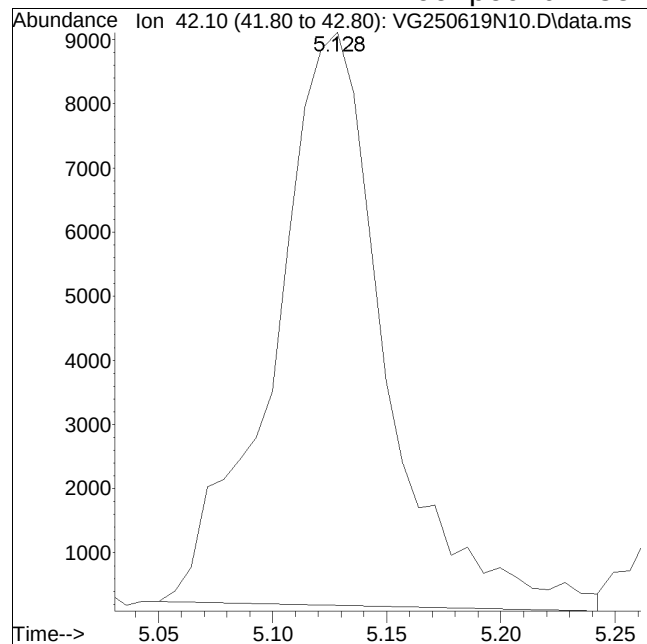
Sub List : 8260-Curve - Megamix plus Diox



Manual Integration Report

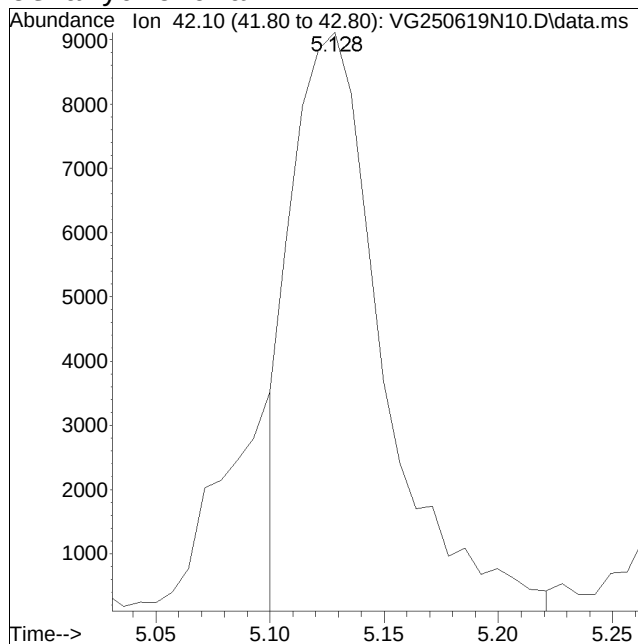
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Data File : VG250619N10.D Operator : GONZO:PID
Date Inj'd : 6/20/2025 4:15 am Instrument : Gonzo
Sample : I8260STD10PPB Quant Date : 6/20/2025 7:07 am

Compound #35: Tetrahydrofuran



Original Peak Response = 30441

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

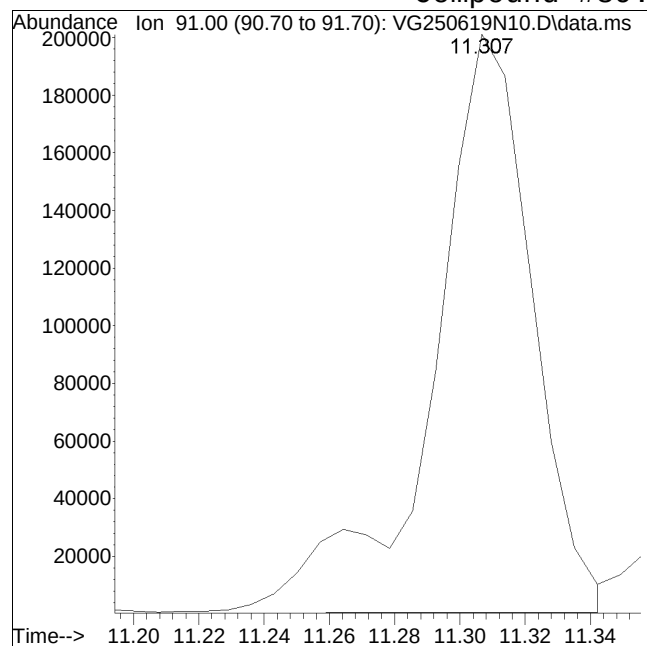


Manual Peak Response = 25007 M6

Manual Integration Report

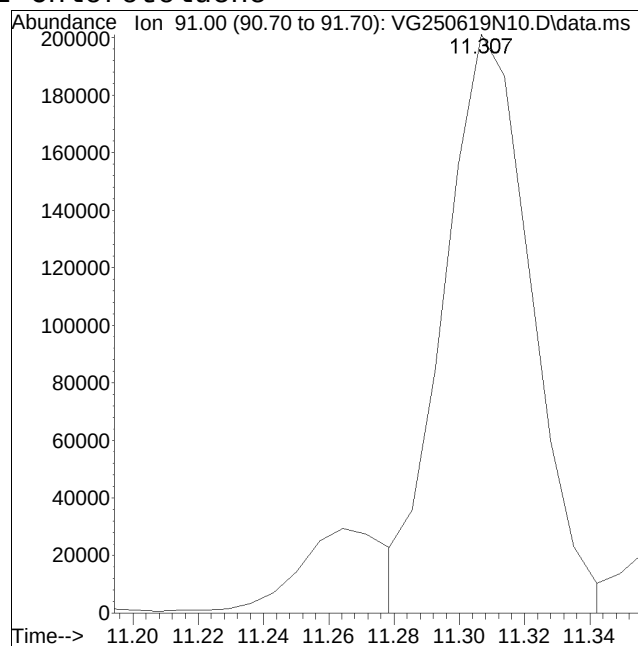
Data Path : K:\Gonzo\2025\250619NICAL\QMethod : G_250619N_8260.m
Data File : VG250619N10.D Operator : GONZO:PID
Date Inj'd : 6/20/2025 4:15 am Instrument : Gonzo
Sample : I8260STD10PPB Quant Date : 6/20/2025 7:07 am

Compound #89: 2-Chlorotoluene



Original Peak Response = 426050

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).



Manual Peak Response = 373597 M6

Quantitation Report (QT Reviewed)

Data Path : K:\Gonzo\2025\250619NICAL\
 Data File : VG250619N11.D
 Acq On : 20 Jun 2025 4:41 am
 Operator : GONZO:PID
 Sample : I8260STD30PPB
 Misc : WG2081469,ICAL (Sig #1); WG,ICAL (Sig #2)
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 20 07:07:37 2025
 Quant Method : K:\Gonzo\2025\250619NICAL\G_250619N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Jun 20 07:06:34 2025
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Gonzo\2025\250619NICAL\VG250619N10.D
 Sub List : 8260-Curve - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	5.957	96	533744	10.000	ug/L	0.00
Standard Area 1 = 552092			Recovery	=	96.68%	
59) Chlorobenzene-d5	9.484	117	425943	10.000	ug/L	0.00
Standard Area 1 = 440365			Recovery	=	96.72%	
79) 1,4-Dichlorobenzene-d4	12.198	152	247904	10.000	ug/L	0.00
Standard Area 1 = 255053			Recovery	=	97.20%	
System Monitoring Compounds						
36) Dibromofluoromethane	5.150	113	139262	10.052	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	100.52%	
43) 1,2-Dichloroethane-d4	5.674	65	140319	9.893	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	98.93%	
60) Toluene-d8	7.643	98	525921	9.940	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	99.40%	
83) 4-Bromofluorobenzene	10.988	95	205056	10.029	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	100.29%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.614	85	363280	31.059	ug/L	99
3) Chloromethane	1.827	50	330313	30.236	ug/L	99
4) Vinyl chloride	1.877	62	378505	31.492	ug/L	100
5) Bromomethane	2.176	94	242740	29.452	ug/L	98
6) Chloroethane	2.275	64	235409	33.269	ug/L	97
7) Trichlorofluoromethane	2.425	101	523966	32.609	ug/L	99
8) Ethyl ether	2.717	74	181122	31.162	ug/L	99
10) 1,1-Dichloroethene	2.916	96	304322	31.483	ug/L	100
11) Carbon disulfide	2.944	76	906807	30.973	ug/L	100
12) Freon-113	2.944	101	311043	32.206	ug/L	97
13) Iodomethane	3.058	142	365479	32.043	ug/L	99
14) Acrolein	3.236	56	47057	30.817	ug/L	90
15) Methylene chloride	3.464	84	335984	28.574	ug/L	99
17) Acetone	3.513	43	66015	28.892	ug/L	99
18) trans-1,2-Dichloroethene	3.613	96	331406	31.639	ug/L	99
19) Methyl acetate	3.620	43	172603	32.052	ug/L	99
20) Methyl tert-butyl ether	3.698	73	961016	31.502	ug/L	99
21) tert-Butyl alcohol	3.798	59	140450	154.235	ug/L	96
22) Diisopropyl ether	4.054	45	976054	31.506	ug/L	100
23) 1,1-Dichloroethane	4.189	63	587154	31.699	ug/L	99
24) Halothane	4.246	117	276941	31.614	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : K:\Gonzo\2025\250619NICAL\
 Data File : VG250619N11.D
 Acq On : 20 Jun 2025 4:41 am
 Operator : GONZO:PID
 Sample : I8260STD30PPB
 Misc : WG2081469,ICAL (Sig #1); WG,ICAL (Sig #2)
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 20 07:07:37 2025
 Quant Method : K:\Gonzo\2025\250619NICAL\G_250619N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Jun 20 07:06:34 2025
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Gonzo\2025\250619NICAL\VG250619N10.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25)	Acrylonitrile	4.246	53	92465	31.497	ug/L	97
26)	Ethyl tert-butyl ether	4.403	59	988003	31.017	ug/L	96
27)	Vinyl acetate	4.424	43	621043	31.444	ug/L	100
28)	cis-1,2-Dichloroethene	4.709	96	379759	31.146	ug/L	96
29)	2,2-Dichloropropane	4.801	77	504072	32.525	ug/L	100
30)	Bromochloromethane	4.901	128	168713	29.557	ug/L	97
31)	Cyclohexane	4.894	56	501105	31.033	ug/L	100
32)	Chloroform	4.972	83	571412	29.980	ug/L	97
33)	Ethyl acetate	5.079	43	263345	32.542	ug/L	97
34)	Carbon tetrachloride	5.100	117	472151	31.017	ug/L	96
35)	Tetrahydrofuran	5.121	42	77531M6	29.832	ug/L	
37)	1,1,1-Trichloroethane	5.164	97	531007	31.836	ug/L	99
39)	2-Butanone	5.263	43	105669	30.553	ug/L	88
40)	1,1-Dichloropropene	5.285	75	413129	31.182	ug/L	100
41)	Benzene	5.533	78	1307052	31.400	ug/L	100
42)	tert-Amyl methyl ether	5.639	73	947126	31.182	ug/L	99
44)	1,2-Dichloroethane	5.738	62	419159	30.718	ug/L	100
47)	Methyl cyclohexane	6.112	83	471177	31.581	ug/L	98
48)	Trichloroethene	6.133	95	353650	31.010	ug/L	98
50)	Dibromomethane	6.577	93	211400	30.690	ug/L	98
51)	1,2-Dichloropropane	6.676	63	332302	31.062	ug/L	98
53)	2-Chloroethyl vinyl ether	7.368	63	161078	32.267	ug/L	100
54)	Bromodichloromethane	6.754	83	468613	30.997	ug/L	100
57)	1,4-Dioxane	6.958	88	67033	612.512	ug/L	98
58)	cis-1,3-Dichloropropene	7.438	75	558568	31.553	ug/L	100
61)	Toluene	7.699	92	840933	30.833	ug/L	99
62)	4-Methyl-2-pentanone	8.137	58	104181	31.304	ug/L	99
63)	Tetrachloroethene	8.144	166	402876	31.937	ug/L	99
65)	trans-1,3-Dichloropropene	8.186	75	499595	31.751	ug/L	100
67)	Ethyl methacrylate	8.370	69	401359	31.499	ug/L	99
68)	1,1,2-Trichloroethane	8.377	83	248648	30.736	ug/L	98
69)	Chlorodibromomethane	8.581	129	396370	30.661	ug/L	100
70)	1,3-Dichloropropane	8.694	76	491470	31.195	ug/L	99
71)	1,2-Dibromoethane	8.856	107	321853	31.312	ug/L	99
72)	2-Hexanone	9.146	43	170328	30.838	ug/L	97
73)	Chlorobenzene	9.506	112	1003090	31.048	ug/L	99
74)	Ethylbenzene	9.541	91	1613882	30.907	ug/L	99
75)	1,1,1,2-Tetrachloroethane	9.590	131	383427	30.866	ug/L	99
76)	p/m Xylene	9.724	106	1292273	62.145	ug/L	97
77)	o Xylene	10.268	106	1282806	61.525	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : K:\Gonzo\2025\250619NICAL\
 Data File : VG250619N11.D
 Acq On : 20 Jun 2025 4:41 am
 Operator : GONZO:PID
 Sample : I8260STD30PPB
 Misc : WG2081469,ICAL (Sig #1); WG,ICAL (Sig #2)
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 20 07:07:37 2025
 Quant Method : K:\Gonzo\2025\250619NICAL\G_250619N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Jun 20 07:06:34 2025
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Gonzo\2025\250619NICAL\VG250619N10.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
78)	Styrene	10.338	104	2227271	62.255	ug/L	99
80)	Bromoform	10.373	173	287688	30.873	ug/L	99
82)	Isopropylbenzene	10.656	105	1594388	31.589	ug/L	100
84)	Bromobenzene	11.094	156	483597	31.304	ug/L	99
85)	n-Propylbenzene	11.137	91	1815748	31.460	ug/L	100
86)	1,4-Dichlorobutane	11.165	55	499220	30.259	ug/L	99
87)	1,1,2,2-Tetrachloroethane	11.236	83	389141	29.803	ug/L	99
88)	4-Ethyltoluene	11.264	105	1569582	31.515	ug/L	99
89)	2-Chlorotoluene	11.307	91	1119249M1	30.855	ug/L	
90)	1,3,5-Trimethylbenzene	11.363	105	1360414	31.347	ug/L	100
91)	1,2,3-Trichloropropane	11.377	75	307709	31.009	ug/L	99
92)	trans-1,4-Dichloro-2-b...	11.427	53	108308	29.732	ug/L	98
93)	4-Chlorotoluene	11.491	91	1193210	31.275	ug/L	100
94)	tert-Butylbenzene	11.703	119	1125964	31.244	ug/L	100
97)	1,2,4-Trimethylbenzene	11.788	105	1352054	31.215	ug/L	100
98)	sec-Butylbenzene	11.894	105	1535253	31.237	ug/L	99
99)	p-Isopropyltoluene	12.049	119	1403937	31.759	ug/L	100
100)	1,3-Dichlorobenzene	12.120	146	875174	31.211	ug/L	99
101)	1,4-Dichlorobenzene	12.219	146	886605	30.794	ug/L	100
102)	p-Diethylbenzene	12.424	119	826927	31.627	ug/L	99
103)	n-Butylbenzene	12.481	91	1086096	31.961	ug/L	99
104)	1,2-Dichlorobenzene	12.636	146	835235	31.190	ug/L	99
105)	1,2,4,5-Tetramethylben...	13.224	119	1230565	31.088	ug/L	100
106)	1,2-Dibromo-3-chloropr...	13.422	155	73095	30.713	ug/L	91
107)	1,3,5-Trichlorobenzene	13.450	180	559688	31.742	ug/L	98
108)	Hexachlorobutadiene	14.023	225	178277	31.854	ug/L	100
109)	1,2,4-Trichlorobenzene	14.051	180	482335	31.816	ug/L	100
110)	Naphthalene	14.341	128	982501	31.125	ug/L	100
111)	1,2,3-Trichlorobenzene	14.511	180	371069	31.828	ug/L	100

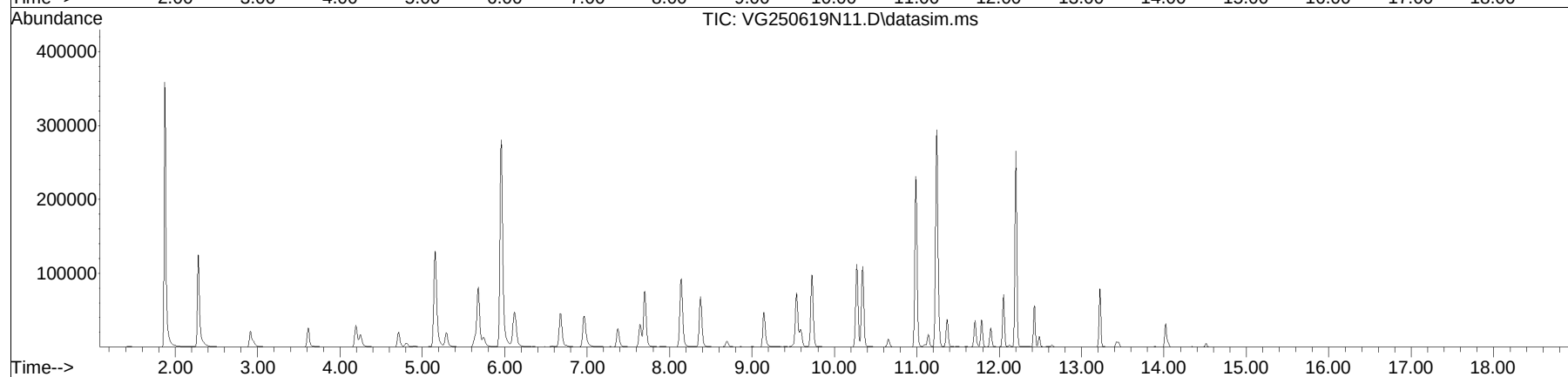
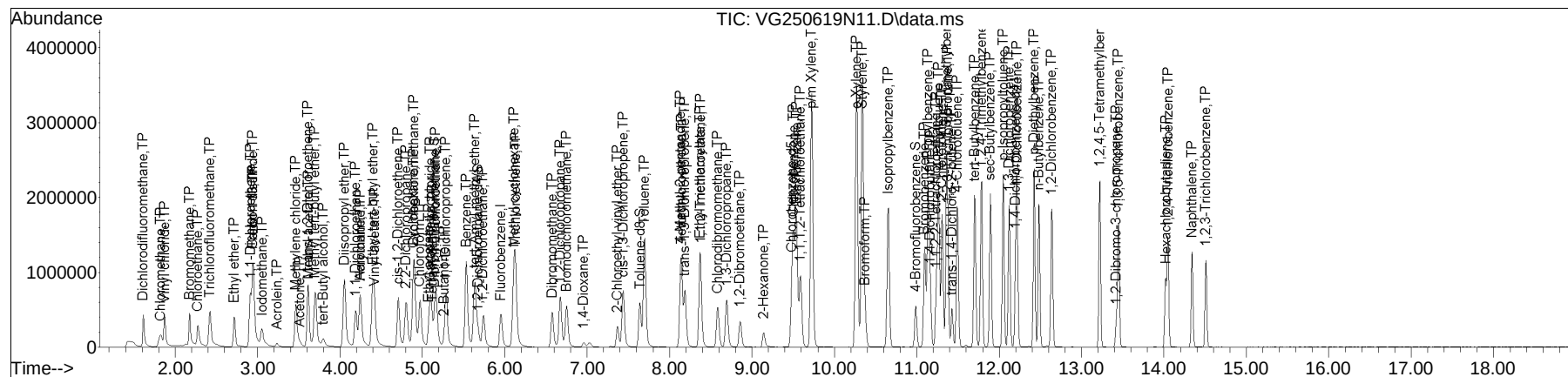
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\Gonzo\2025\250619NICAL\
 Data File : VG250619N11.D
 Acq On : 20 Jun 2025 4:41 am
 Operator : GONZO:PID
 Sample : I8260STD30PPB
 Misc : WG2081469,ICAL (Sig #1); WG,ICAL (Sig #2)
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 20 07:07:37 2025
 Quant Method : K:\Gonzo\2025\250619NICAL\G_250619N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Jun 20 07:06:34 2025
 Response via : Initial Calibration

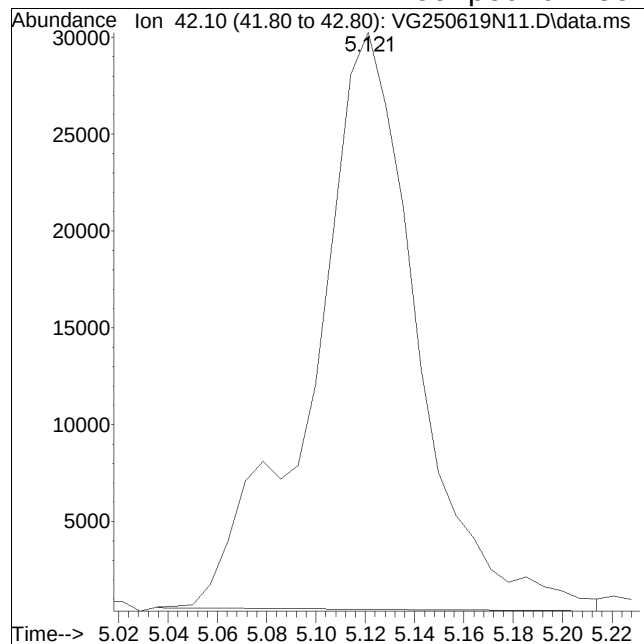
Sub List : 8260-Curve - Megamix plus DioxVG250619N10.D•



Manual Integration Report

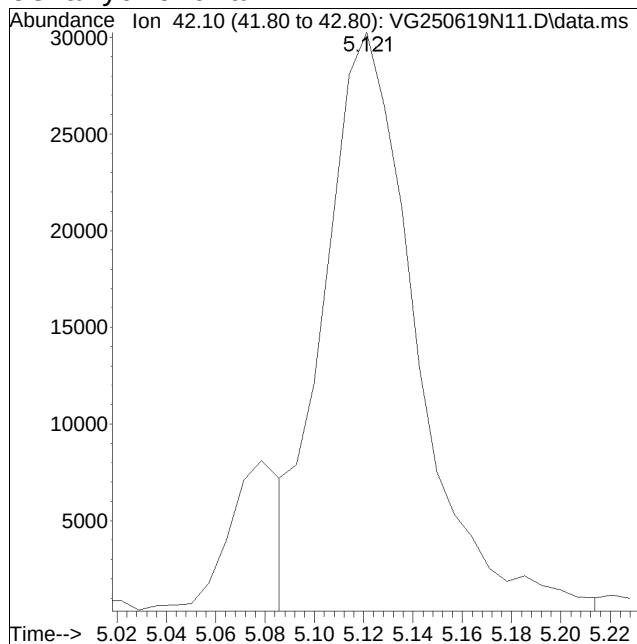
Data Path : K:\Gonzo\2025\250619NICAL\QMethod : G_250619N_8260.m
Data File : VG250619N11.D Operator : GONZO:PID
Date Inj'd : 6/20/2025 4:41 am Instrument : Gonzo
Sample : I8260STD30PPB Quant Date : 6/20/2025 7:07 am

Compound #35: Tetrahydrofuran



Original Peak Response = 87611

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

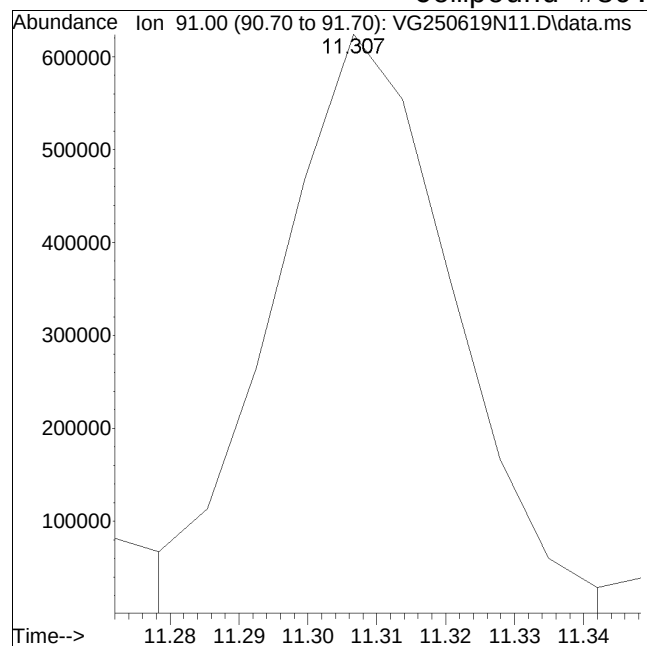


Manual Peak Response = 77531 M6

Manual Integration Report

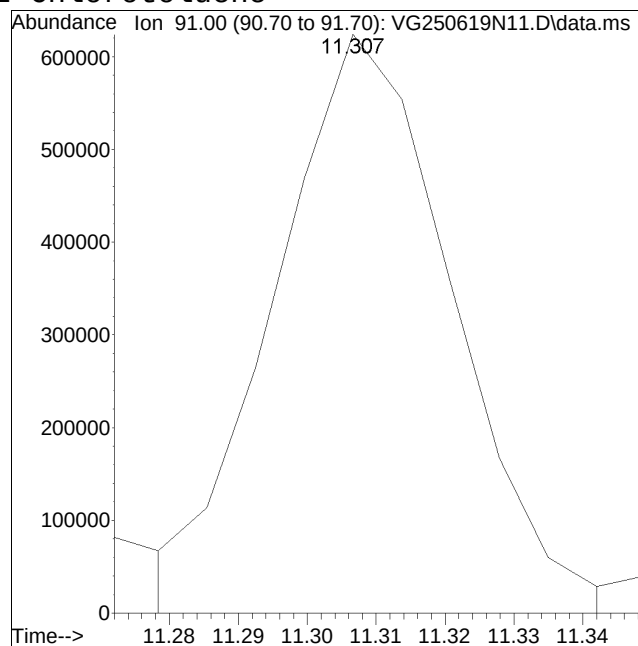
Data Path : K:\Gonzo\2025\250619NICAL\QMethod : G_250619N_8260.m
Data File : VG250619N11.D Operator : GONZO:PID
Date Inj'd : 6/20/2025 4:41 am Instrument : Gonzo
Sample : I8260STD30PPB Quant Date : 6/20/2025 7:07 am

Compound #89: 2-Chlorotoluene



Original Peak Response = 1113910

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.



Manual Peak Response = 1119249 M1

Quantitation Report (QT Reviewed)

Data Path : K:\Gonzo\2025\250619NICAL\
 Data File : VG250619N12.D
 Acq On : 20 Jun 2025 5:08 am
 Operator : GONZO:PID
 Sample : I8260STD80PPB
 Misc : WG2081469,ICAL (Sig #1); WG,ICAL (Sig #2)
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 20 07:07:44 2025
 Quant Method : K:\Gonzo\2025\250619NICAL\G_250619N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Jun 20 07:06:34 2025
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Gonzo\2025\250619NICAL\VG250619N10.D
 Sub List : 8260-Curve - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	5.957	96	537443	10.000	ug/L	0.00
Standard Area 1 = 552092			Recovery	=	97.35%	
59) Chlorobenzene-d5	9.484	117	434690	10.000	ug/L	0.00
Standard Area 1 = 440365			Recovery	=	98.71%	
79) 1,4-Dichlorobenzene-d4	12.198	152	255032	10.000	ug/L	0.00
Standard Area 1 = 255053			Recovery	=	99.99%	
System Monitoring Compounds						
36) Dibromofluoromethane	5.150	113	139195	9.978	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	99.78%	
43) 1,2-Dichloroethane-d4	5.674	65	138897	9.725	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	97.25%	
60) Toluene-d8	7.636	98	540302	10.007	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	100.07%	
83) 4-Bromofluorobenzene	10.988	95	206518	9.818	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	98.18%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.614	85	973090	82.623	ug/L	99
3) Chloromethane	1.820	50	894262	81.295	ug/L	98
4) Vinyl chloride	1.870	62	1030913	85.183	ug/L	100
5) Bromomethane	2.176	94	699470	84.282	ug/L	98
6) Chloroethane	2.276	64	526754	73.931	ug/L	97
7) Trichlorofluoromethane	2.425	101	1405052	86.842	ug/L	100
8) Ethyl ether	2.717	74	495939	84.740	ug/L	96
10) 1,1-Dichloroethene	2.916	96	830465	85.324	ug/L	99
11) Carbon disulfide	2.944	76	2479798	84.118	ug/L	99
12) Freon-113	2.944	101	819542	84.273	ug/L	97
13) Iodomethane	3.051	142	1114658	97.054	ug/L	99
14) Acrolein	3.229	56	127800	83.118	ug/L	86
15) Methylene chloride	3.464	84	898664	75.903	ug/L	99
17) Acetone	3.506	43	185519	80.636	ug/L	99
18) trans-1,2-Dichloroethene	3.613	96	905885	85.890	ug/L	98
19) Methyl acetate	3.620	43	464471	85.657	ug/L	98
20) Methyl tert-butyl ether	3.698	73	2596526	84.528	ug/L	100
21) tert-Butyl alcohol	3.798	59	393603	429.261	ug/L	98
22) Diisopropyl ether	4.054	45	2674425	85.735	ug/L	99
23) 1,1-Dichloroethane	4.189	63	1578370	84.626	ug/L	98
24) Halothane	4.246	117	744877	84.447	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : K:\Gonzo\2025\250619NICAL\
 Data File : VG250619N12.D
 Acq On : 20 Jun 2025 5:08 am
 Operator : GONZO:PID
 Sample : I8260STD80PPB
 Misc : WG2081469,ICAL (Sig #1); WG,ICAL (Sig #2)
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 20 07:07:44 2025
 Quant Method : K:\Gonzo\2025\250619NICAL\G_250619N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Jun 20 07:06:34 2025
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Gonzo\2025\250619NICAL\VG250619N10.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) Acrylonitrile	4.246	53	257586	87.139	ug/L	98
26) Ethyl tert-butyl ether	4.403	59	2729657	85.103	ug/L	97
27) Vinyl acetate	4.417	43	1691856	85.070	ug/L	100
28) cis-1,2-Dichloroethene	4.709	96	1027441	83.685	ug/L	96
29) 2,2-Dichloropropane	4.801	77	1350219	86.522	ug/L	100
30) Bromochloromethane	4.908	128	448052	77.954	ug/L	98
31) Cyclohexane	4.894	56	1337671	82.272	ug/L	99
32) Chloroform	4.972	83	1594364	83.075	ug/L	97
33) Ethyl acetate	5.079	43	733048	89.961	ug/L	99
34) Carbon tetrachloride	5.100	117	1299379	84.774	ug/L	96
35) Tetrahydrofuran	5.114	42	213005M6	81.395	ug/L	
37) 1,1,1-Trichloroethane	5.164	97	1430863	85.195	ug/L	98
39) 2-Butanone	5.264	43	312816	89.825	ug/L #	85
40) 1,1-Dichloropropene	5.285	75	1123279	84.198	ug/L	99
41) Benzene	5.533	78	3571769	85.215	ug/L	100
42) tert-Amyl methyl ether	5.639	73	2607451	85.253	ug/L	99
44) 1,2-Dichloroethane	5.738	62	1141177	83.055	ug/L	99
47) Methyl cyclohexane	6.112	83	1271105	84.611	ug/L	99
48) Trichloroethene	6.126	95	966512	84.165	ug/L	99
50) Dibromomethane	6.570	93	578950	83.469	ug/L	98
51) 1,2-Dichloropropane	6.669	63	909760	84.454	ug/L	98
53) 2-Chloroethyl vinyl ether	7.368	63	452089	89.939	ug/L	99
54) Bromodichloromethane	6.747	83	1277304	83.908	ug/L	100
57) 1,4-Dioxane	6.959	88	93137	845.179	ug/L	99
58) cis-1,3-Dichloropropene	7.438	75	1516341	85.067	ug/L	100
61) Toluene	7.692	92	2319244	83.325	ug/L	98
62) 4-Methyl-2-pentanone	8.130	58	290770	85.613	ug/L	97
63) Tetrachloroethene	8.144	166	1079649	83.865	ug/L	98
65) trans-1,3-Dichloropropene	8.186	75	1360500	84.724	ug/L	99
67) Ethyl methacrylate	8.370	69	1119354	86.080	ug/L	97
68) 1,1,2-Trichloroethane	8.370	83	680672	82.446	ug/L	100
69) Chlorodibromomethane	8.581	129	1113523	84.403	ug/L	100
70) 1,3-Dichloropropane	8.694	76	1347754	83.825	ug/L	99
71) 1,2-Dibromoethane	8.857	107	878705	83.765	ug/L	98
72) 2-Hexanone	9.139	43	478856	84.952	ug/L	98
73) Chlorobenzene	9.506	112	2747203	83.322	ug/L	99
74) Ethylbenzene	9.541	91	4452458	83.552	ug/L	99
75) 1,1,1,2-Tetrachloroethane	9.590	131	1064495	83.968	ug/L	99
76) p/m Xylene	9.724	106	3546292	167.108	ug/L	95
77) o Xylene	10.268	106	3548086	166.745	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : K:\Gonzo\2025\250619NICAL\
 Data File : VG250619N12.D
 Acq On : 20 Jun 2025 5:08 am
 Operator : GONZO:PID
 Sample : I8260STD80PPB
 Misc : WG2081469,ICAL (Sig #1); WG,ICAL (Sig #2)
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 20 07:07:44 2025
 Quant Method : K:\Gonzo\2025\250619NICAL\G_250619N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Jun 20 07:06:34 2025
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Gonzo\2025\250619NICAL\VG250619N10.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
78)	Styrene	10.338	104	6144644	168.295	ug/L	98
80)	Bromoform	10.374	173	816382	85.160	ug/L	100
82)	Isopropylbenzene	10.656	105	4399656	84.733	ug/L	99
84)	Bromobenzene	11.095	156	1315959	82.802	ug/L	100
85)	n-Propylbenzene	11.137	91	5058058	85.186	ug/L	99
86)	1,4-Dichlorobutane	11.165	55	1385822	81.649	ug/L	98
87)	1,1,2,2-Tetrachloroethane	11.236	83	1078184	80.267	ug/L	99
88)	4-Ethyltoluene	11.264	105	4334403	84.596	ug/L	99
89)	2-Chlorotoluene	11.307	91	3112746M1	83.412	ug/L	
90)	1,3,5-Trimethylbenzene	11.363	105	3774553	84.544	ug/L	100
91)	1,2,3-Trichloropropane	11.377	75	854574	83.712	ug/L	100
92)	trans-1,4-Dichloro-2-b...	11.427	53	313545	83.667	ug/L	97
93)	4-Chlorotoluene	11.491	91	3310100	84.335	ug/L	99
94)	tert-Butylbenzene	11.703	119	3118195	84.107	ug/L	99
97)	1,2,4-Trimethylbenzene	11.788	105	3715490	83.381	ug/L	100
98)	sec-Butylbenzene	11.894	105	4285802	84.764	ug/L	100
99)	p-Isopropyltoluene	12.049	119	3852139	84.706	ug/L	99
100)	1,3-Dichlorobenzene	12.120	146	2390775	82.879	ug/L	99
101)	1,4-Dichlorobenzene	12.219	146	2438818	82.338	ug/L	100
102)	p-Diethylbenzene	12.424	119	2278254	84.700	ug/L	99
103)	n-Butylbenzene	12.481	91	3006206	85.991	ug/L	99
104)	1,2-Dichlorobenzene	12.637	146	2304091	83.636	ug/L	100
105)	1,2,4,5-Tetramethylben...	13.224	119	3408101	83.692	ug/L	99
106)	1,2-Dibromo-3-chloropr...	13.422	155	213883	87.356	ug/L	97
107)	1,3,5-Trichlorobenzene	13.450	180	1510366	83.264	ug/L	98
108)	Hexachlorobutadiene	14.023	225	486896	84.564	ug/L	100
109)	1,2,4-Trichlorobenzene	14.044	180	1295145	83.044	ug/L	99
110)	Naphthalene	14.341	128	2707057	83.362	ug/L	100
111)	1,2,3-Trichlorobenzene	14.511	180	1012486	84.417	ug/L	99

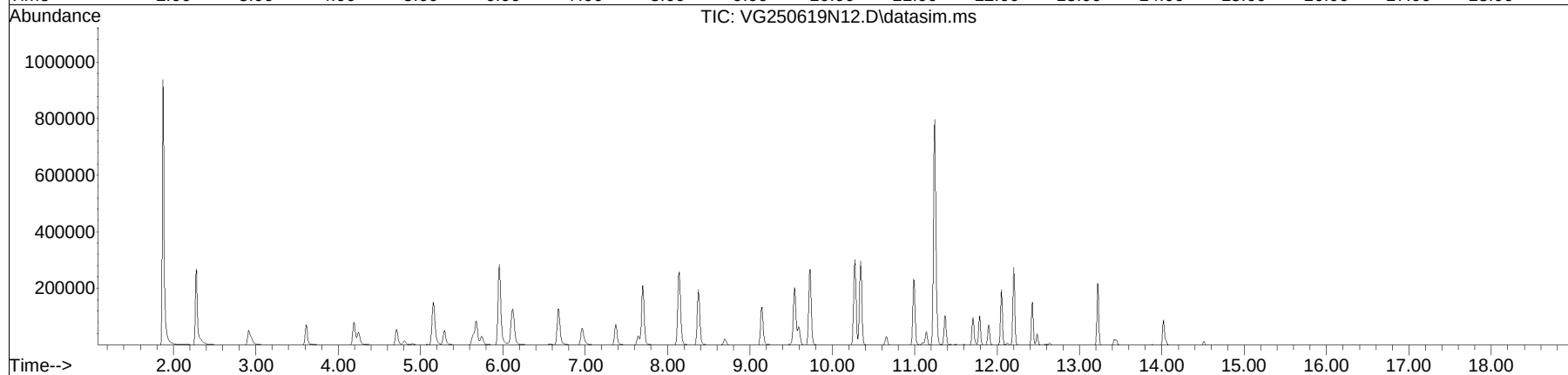
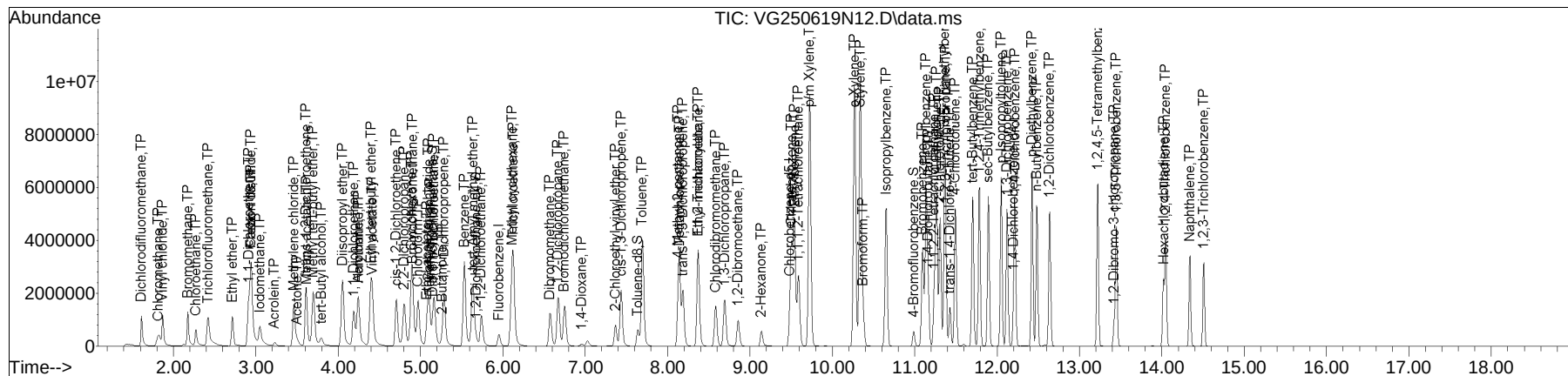
(#) = qualifier out of range (m) = manual integration (+) = signals summed

(QT Reviewed)

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Data Path   : K:\Gonzo\2025\250619NICAL\  
Data File  : VG250619N12.D  
Acq On     : 20 Jun 2025    5:08 am  
Operator   : GONZO:PID  
Sample     : I8260STD80PPB  
Misc       : WG2081469,ICAL (Sig #1); WG,ICAL (Sig #2)  
ALS Vial   : 12    Sample Multiplier: 1
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Quant Time: Jun 20 07:07:44 2025
Quant Method : K:\Gonzo\2025\250619NICAL\G_250619N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Jun 20 07:06:34 2025
Response via : Initial Calibration

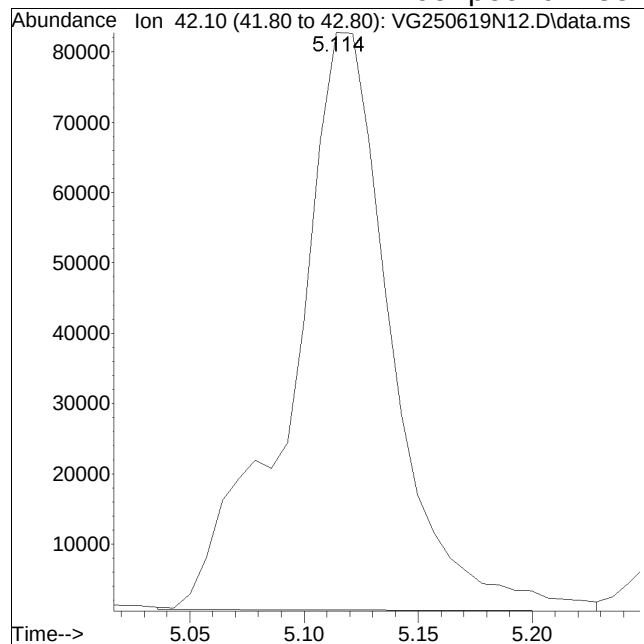
Sub List : 8260-Curve - Megamix plus DioxVG250619N10.D•



Manual Integration Report

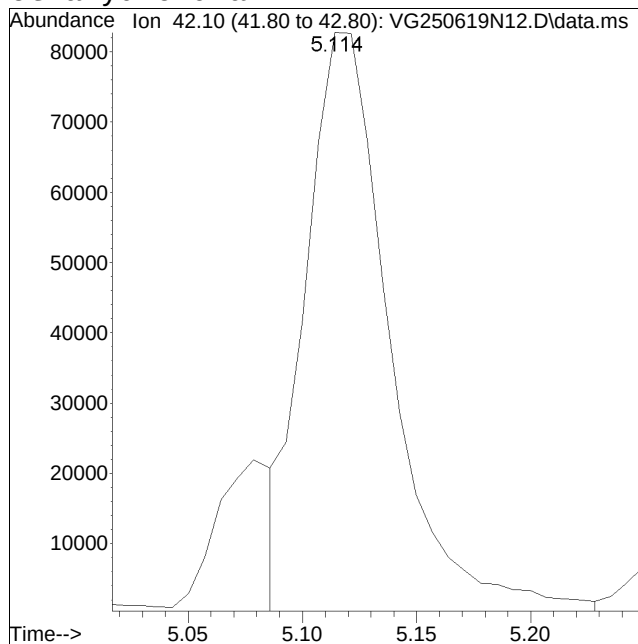
Data Path : K:\Gonzo\2025\250619NICAL\QMethod : G_250619N_8260.m
Data File : VG250619N12.D Operator : GONZO:PID
Date Inj'd : 6/20/2025 5:08 am Instrument : Gonzo
Sample : I8260STD80PPB Quant Date : 6/20/2025 7:07 am

Compound #35: Tetrahydrofuran



Original Peak Response = 247942

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

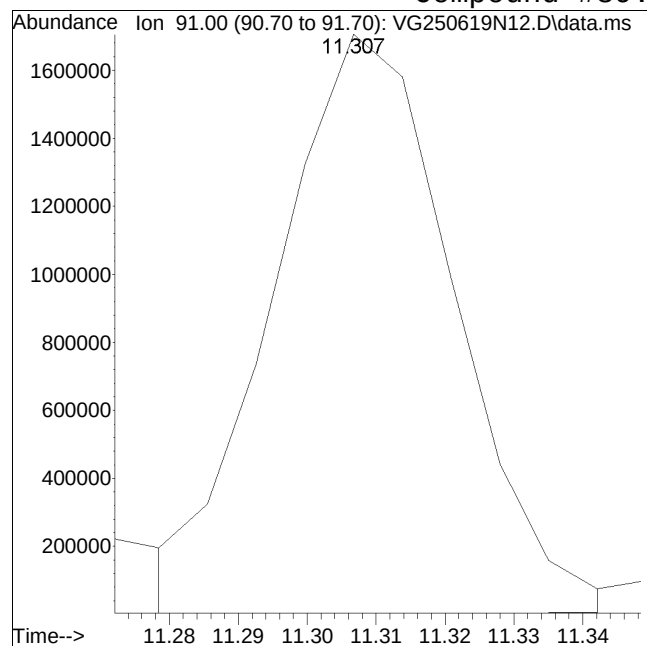


Manual Peak Response = 213005 M6

Manual Integration Report

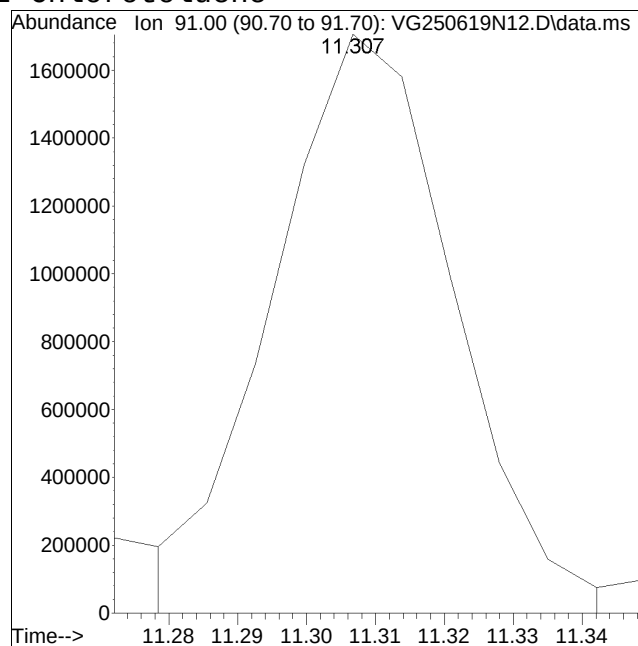
Data Path : K:\Gonzo\2025\250619NICAL\QMethod : G_250619N_8260.m
Data File : VG250619N12.D Operator : GONZO:PID
Date Inj'd : 6/20/2025 5:08 am Instrument : Gonzo
Sample : I8260STD80PPB Quant Date : 6/20/2025 7:07 am

Compound #89: 2-Chlorotoluene



Original Peak Response = 3096653

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.



Manual Peak Response = 3112746 M1

Quantitation Report (QT Reviewed)

Data Path : K:\Gonzo\2025\250619NICAL\
 Data File : VG250619N13.D
 Acq On : 20 Jun 2025 5:34 am
 Operator : GONZO:PID
 Sample : I8260STD120PPB
 Misc : WG2081469,ICAL (Sig #1); WG,ICAL (Sig #2)
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 20 07:07:51 2025
 Quant Method : K:\Gonzo\2025\250619NICAL\G_250619N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Jun 20 07:06:34 2025
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Gonzo\2025\250619NICAL\VG250619N10.D
 Sub List : 8260-Curve - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	5.957	96	549158	10.000	ug/L	0.00
Standard Area 1 = 552092			Recovery	=	99.47%	
59) Chlorobenzene-d5	9.484	117	445369	10.000	ug/L	0.00
Standard Area 1 = 440365			Recovery	=	101.14%	
79) 1,4-Dichlorobenzene-d4	12.198	152	260338	10.000	ug/L	0.00
Standard Area 1 = 255053			Recovery	=	102.07%	
System Monitoring Compounds						
36) Dibromofluoromethane	5.150	113	145105	10.180	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	101.80%	
43) 1,2-Dichloroethane-d4	5.674	65	142867	9.789	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	97.89%	
60) Toluene-d8	7.636	98	553531	10.006	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	100.06%	
83) 4-Bromofluorobenzene	10.988	95	214446	9.987	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	99.87%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.614	85	1499727	124.623	ug/L	99
3) Chloromethane	1.827	50	1381905	122.945	ug/L	98
4) Vinyl chloride	1.870	62	1560294	126.174	ug/L	100
5) Bromomethane	2.176	94	1118913	131.947	ug/L	99
6) Chloroethane	2.276	64	647561	88.948	ug/L	97
7) Trichlorofluoromethane	2.418	101	2192860	132.642	ug/L	99
8) Ethyl ether	2.717	74	752034	125.757	ug/L	98
10) 1,1-Dichloroethene	2.916	96	1280859	128.791	ug/L	100
11) Carbon disulfide	2.944	76	3819815	126.810	ug/L	99
12) Freon-113	2.944	101	1286298	129.447	ug/L	99
13) Iodomethane	3.051	142	1685615	143.637	ug/L	99
14) Acrolein	3.229	56	194644	123.891	ug/L	86
15) Methylene chloride	3.464	84	1369532	113.205	ug/L	100
17) Acetone	3.506	43	284906	121.193	ug/L	100
18) trans-1,2-Dichloroethene	3.613	96	1380503	128.098	ug/L	99
19) Methyl acetate	3.620	43	721182	130.162	ug/L	99
20) Methyl tert-butyl ether	3.698	73	3933317	125.314	ug/L	99
21) tert-Butyl alcohol	3.798	59	593338	633.286	ug/L	95
22) Diisopropyl ether	4.054	45	4068933	127.656	ug/L	99
23) 1,1-Dichloroethane	4.189	63	2402801	126.080	ug/L	98
24) Halothane	4.246	117	1136730	126.122	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : K:\Gonzo\2025\250619NICAL\
 Data File : VG250619N13.D
 Acq On : 20 Jun 2025 5:34 am
 Operator : GONZO:PID
 Sample : I8260STD120PPB
 Misc : WG2081469,ICAL (Sig #1); WG,ICAL (Sig #2)
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 20 07:07:51 2025
 Quant Method : K:\Gonzo\2025\250619NICAL\G_250619N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Jun 20 07:06:34 2025
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Gonzo\2025\250619NICAL\VG250619N10.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) Acrylonitrile	4.239	53	386462	127.948	ug/L	99
26) Ethyl tert-butyl ether	4.403	59	4159985	126.930	ug/L	97
27) Vinyl acetate	4.417	43	2588264	127.367	ug/L	100
28) cis-1,2-Dichloroethene	4.709	96	1553590	123.840	ug/L	94
29) 2,2-Dichloropropane	4.801	77	2034943	127.617	ug/L	99
30) Bromochloromethane	4.908	128	683706	116.417	ug/L	97
31) Cyclohexane	4.894	56	2088112	125.687	ug/L	99
32) Chloroform	4.972	83	2405854	122.683	ug/L	97
33) Ethyl acetate	5.071	43	1103646	132.552	ug/L	97
34) Carbon tetrachloride	5.100	117	1992308	127.209	ug/L	98
35) Tetrahydrofuran	5.121	42	314790M6	117.724	ug/L	
37) 1,1,1-Trichloroethane	5.164	97	2175954	126.795	ug/L	98
39) 2-Butanone	5.256	43	472099	132.671	ug/L	87
40) 1,1-Dichloropropene	5.285	75	1716104	125.891	ug/L	99
41) Benzene	5.533	78	5397186	126.018	ug/L	100
42) tert-Amyl methyl ether	5.639	73	3952472	126.473	ug/L	99
44) 1,2-Dichloroethane	5.738	62	1716426	122.257	ug/L	98
47) Methyl cyclohexane	6.112	83	1974066	128.600	ug/L	100
48) Trichloroethene	6.126	95	1465964	124.934	ug/L	99
50) Dibromomethane	6.570	93	874470	123.386	ug/L	98
51) 1,2-Dichloropropane	6.669	63	1374403	124.866	ug/L	98
53) 2-Chloroethyl vinyl ether	7.368	63	692684	134.863	ug/L	100
54) Bromodichloromethane	6.747	83	1947225	125.188	ug/L	100
57) 1,4-Dioxane	6.958	88	141470	1256.394	ug/L	99
58) cis-1,3-Dichloropropene	7.438	75	2298225	126.181	ug/L	100
61) Toluene	7.699	92	3530278	123.793	ug/L	98
62) 4-Methyl-2-pentanone	8.130	58	440118	126.479	ug/L	98
63) Tetrachloroethene	8.144	166	1653613	125.369	ug/L	97
65) trans-1,3-Dichloropropene	8.186	75	2063119	125.399	ug/L	99
67) Ethyl methacrylate	8.370	69	1697649	127.422	ug/L	97
68) 1,1,2-Trichloroethane	8.377	83	1031613	121.957	ug/L	99
69) Chlorodibromomethane	8.581	129	1691052	125.105	ug/L	100
70) 1,3-Dichloropropane	8.694	76	2044300	124.099	ug/L	100
71) 1,2-Dibromoethane	8.856	107	1316256	122.468	ug/L	99
72) 2-Hexanone	9.139	43	719950	124.662	ug/L	97
73) Chlorobenzene	9.506	112	4156594	123.045	ug/L	99
74) Ethylbenzene	9.541	91	6816377	124.844	ug/L	99
75) 1,1,1,2-Tetrachloroethane	9.590	131	1624418	125.063	ug/L	98
76) p/m Xylene	9.724	106	5434185	249.929	ug/L	95
77) o Xylene	10.275	106	5363595	246.023	ug/L	96

Quantitation Report (QT Reviewed)

Data Path : K:\Gonzo\2025\250619NICAL\
 Data File : VG250619N13.D
 Acq On : 20 Jun 2025 5:34 am
 Operator : GONZO:PID
 Sample : I8260STD120PPB
 Misc : WG2081469,ICAL (Sig #1); WG,ICAL (Sig #2)
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 20 07:07:51 2025
 Quant Method : K:\Gonzo\2025\250619NICAL\G_250619N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Jun 20 07:06:34 2025
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Gonzo\2025\250619NICAL\VG250619N10.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
78)	Styrene	10.338	104	9640008	257.699	ug/L	97
80)	Bromoform	10.373	173	1244039	127.126	ug/L	100
82)	Isopropylbenzene	10.656	105	6790882	128.119	ug/L	100
84)	Bromobenzene	11.094	156	2011230	123.970	ug/L	99
85)	n-Propylbenzene	11.137	91	7740026	127.698	ug/L	100
86)	1,4-Dichlorobutane	11.165	55	2123993	122.590	ug/L	99
87)	1,1,2,2-Tetrachloroethane	11.243	83	1643864	119.885	ug/L	100
88)	4-Ethyltoluene	11.264	105	6656133	127.263	ug/L	99
89)	2-Chlorotoluene	11.307	91	4768594M6	125.179	ug/L	
90)	1,3,5-Trimethylbenzene	11.363	105	5751935	126.209	ug/L	100
91)	1,2,3-Trichloropropane	11.377	75	1295102	124.279	ug/L	99
92)	trans-1,4-Dichloro-2-b...	11.427	53	470464	122.981	ug/L	99
93)	4-Chlorotoluene	11.498	91	5054809	126.162	ug/L	99
94)	tert-Butylbenzene	11.703	119	4749966	125.510	ug/L	99
97)	1,2,4-Trimethylbenzene	11.788	105	5722438	125.803	ug/L	100
98)	sec-Butylbenzene	11.894	105	6594976	127.776	ug/L	100
99)	p-Isopropyltoluene	12.049	119	5971337	128.630	ug/L	100
100)	1,3-Dichlorobenzene	12.120	146	3673772	124.760	ug/L	99
101)	1,4-Dichlorobenzene	12.219	146	3723408	123.145	ug/L	100
102)	p-Diethylbenzene	12.424	119	3515178	128.022	ug/L	98
103)	n-Butylbenzene	12.481	91	4648311	130.253	ug/L	99
104)	1,2-Dichlorobenzene	12.636	146	3493560	124.227	ug/L	99
105)	1,2,4,5-Tetramethylben...	13.224	119	5253943	126.391	ug/L	100
106)	1,2-Dibromo-3-chloropr...	13.422	155	323954	129.616	ug/L	96
107)	1,3,5-Trichlorobenzene	13.450	180	2297117	124.055	ug/L	99
108)	Hexachlorobutadiene	14.023	225	742167	126.273	ug/L	100
109)	1,2,4-Trichlorobenzene	14.051	180	1945831	122.223	ug/L	99
110)	Naphthalene	14.341	128	4110624	124.004	ug/L	100
111)	1,2,3-Trichlorobenzene	14.511	180	1509081	123.257	ug/L	99

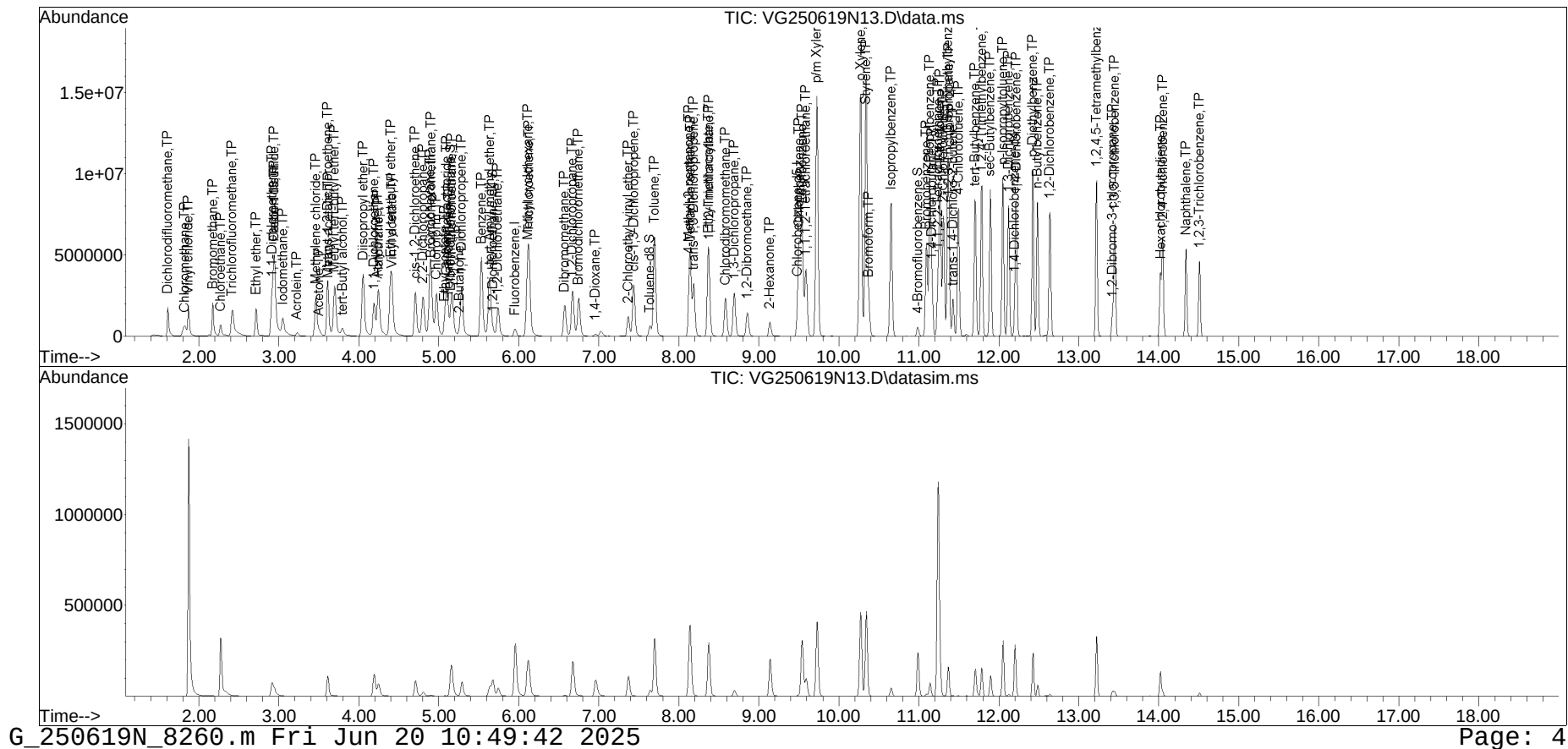
(#) = qualifier out of range (m) = manual integration (+) = signals summed

(QT Reviewed)

Data Path : K:\Gonzo\2025\250619NICAL\
Data File : VG250619N13.D
Acq On : 20 Jun 2025 5:34 am
Operator : GONZO:PID
Sample : I8260STD120PPB
Misc : WG2081469,ICAL (Sig #1); WG,ICAL (Sig #2)
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 20 07:07:51 2025
Quant Method : K:\Gonzo\2025\250619NICAL\G_250619N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Jun 20 07:06:34 2025
Response via : Initial Calibration

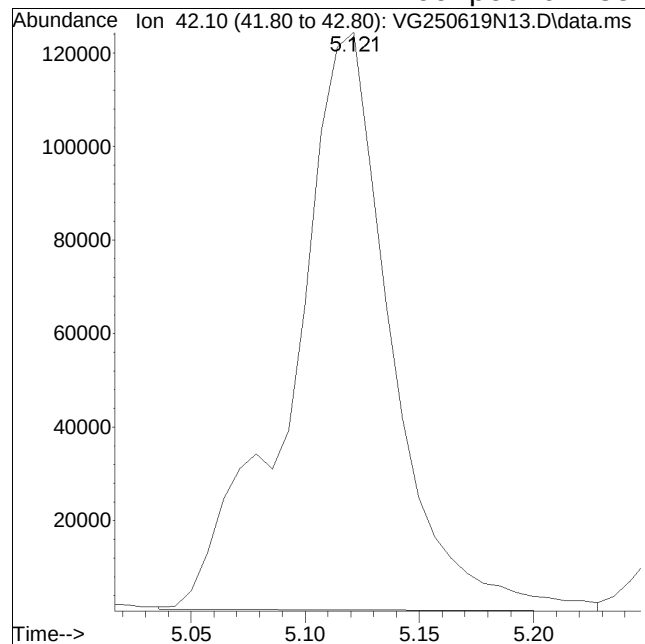
Sub List : 8260-Curve - Megamix plus DioxVG250619N10.D•



Manual Integration Report

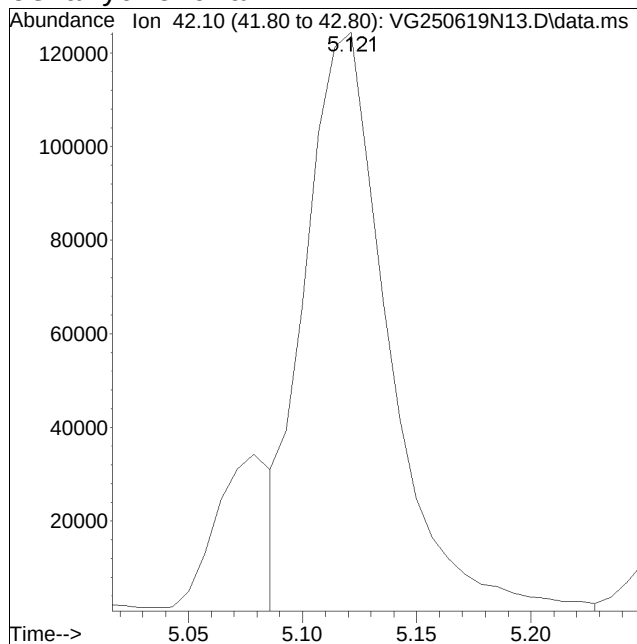
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Data File : VG250619N13.D Operator : GONZO:PID
Date Inj'd : 6/20/2025 5:34 am Instrument : Gonzo
Sample : I8260STD120PPB Quant Date : 6/20/2025 7:07 am

Compound #35: Tetrahydrofuran



Original Peak Response = 371747

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

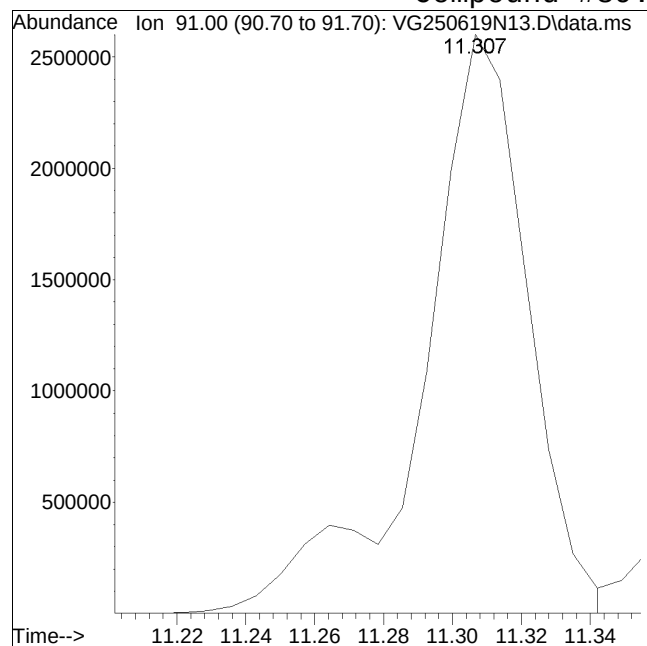


Manual Peak Response = 314790 M6

Manual Integration Report

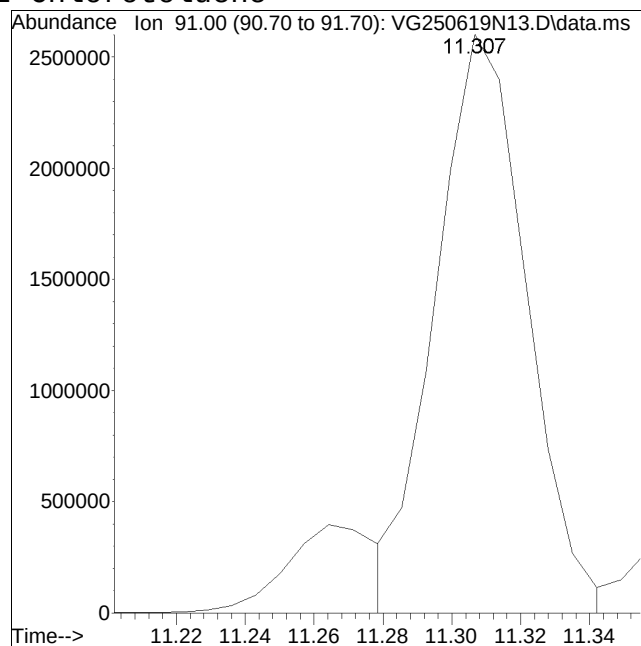
Data Path : K:\Gonzo\2025\250619NICAL\QMethod : G_250619N_8260.m
Data File : VG250619N13.D Operator : GONZO:PID
Date Inj'd : 6/20/2025 5:34 am Instrument : Gonzo
Sample : I8260STD120PPB Quant Date : 6/20/2025 7:07 am

Compound #89: 2-Chlorotoluene



Original Peak Response = 5471193

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).



Manual Peak Response = 4768594 M6

Quantitation Report (QT Reviewed)

Data Path : K:\Gonzo\2025\250619NICAL\
 Data File : VG250619N14.D
 Acq On : 20 Jun 2025 6:01 am
 Operator : GONZO:PID
 Sample : I8260STD200PPB
 Misc : WG2081469,ICAL (Sig #1); WG,ICAL (Sig #2)
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 20 07:07:58 2025
 Quant Method : K:\Gonzo\2025\250619NICAL\G_250619N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Jun 20 07:06:34 2025
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Gonzo\2025\250619NICAL\VG250619N10.D
 Sub List : 8260-Curve - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	5.950	96	577464	10.000	ug/L	0.00
Standard Area 1 = 552092			Recovery	=	104.60%	
59) Chlorobenzene-d5	9.485	117	459638	10.000	ug/L	0.00
Standard Area 1 = 440365			Recovery	=	104.38%	
79) 1,4-Dichlorobenzene-d4	12.205	152	276525	10.000	ug/L	0.00
Standard Area 1 = 255053			Recovery	=	108.42%	
System Monitoring Compounds						
36) Dibromofluoromethane	5.150	113	150686	10.053	ug/L	0.00
Spiked Amount 10.000	Range 70	- 130	Recovery	=	100.53%	
43) 1,2-Dichloroethane-d4	5.674	65	157245	10.247	ug/L	0.00
Spiked Amount 10.000	Range 70	- 130	Recovery	=	102.47%	
60) Toluene-d8	7.636	98	573502	10.045	ug/L	0.00
Spiked Amount 10.000	Range 70	- 130	Recovery	=	100.45%	
83) 4-Bromofluorobenzene	10.989	95	224309	9.835	ug/L	0.00
Spiked Amount 10.000	Range 70	- 130	Recovery	=	98.35%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.614	85	2440048	192.822	ug/L	99
3) Chloromethane	1.827	50	2320906	196.365	ug/L	98
4) Vinyl chloride	1.870	62	2640141	203.031	ug/L	99
5) Bromomethane	2.176	94	1943686	217.973	ug/L	98
6) Chloroethane	2.269	64	757487M1	98.947	ug/L	
7) Trichlorofluoromethane	2.418	101	3677172	211.523	ug/L	99
8) Ethyl ether	2.717	74	1246437	198.215	ug/L	98
10) 1,1-Dichloroethene	2.916	96	2128316	203.513	ug/L	98
11) Carbon disulfide	2.944	76	6387961	201.671	ug/L	99
12) Freon-113	2.944	101	2136456	204.464	ug/L	99
13) Iodomethane	3.051	142	2797839	226.727	ug/L	100
14) Acrolein	3.229	56	330572	200.095	ug/L	87
15) Methylene chloride	3.464	84	2268518	178.324	ug/L	100
17) Acetone	3.506	43	479107	193.812	ug/L	100
18) trans-1,2-Dichloroethene	3.613	96	2287645	201.867	ug/L	98
19) Methyl acetate	3.620	43	1182643	202.985	ug/L	98
20) Methyl tert-butyl ether	3.699	73	6530980	197.876	ug/L	99
21) tert-Butyl alcohol	3.798	59	977475	992.147	ug/L	96
22) Diisopropyl ether	4.054	45	6761663	201.738	ug/L	99
23) 1,1-Dichloroethane	4.189	63	3849238	192.077	ug/L	98
24) Halothane	4.246	117	1879715	198.334	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : K:\Gonzo\2025\250619NICAL\
 Data File : VG250619N14.D
 Acq On : 20 Jun 2025 6:01 am
 Operator : GONZO:PID
 Sample : I8260STD200PPB
 Misc : WG2081469,ICAL (Sig #1); WG,ICAL (Sig #2)
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 20 07:07:58 2025
 Quant Method : K:\Gonzo\2025\250619NICAL\G_250619N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Jun 20 07:06:34 2025
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Gonzo\2025\250619NICAL\VG250619N10.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) Acrylonitrile	4.239	53	660427	207.933	ug/L	98
26) Ethyl tert-butyl ether	4.403	59	6945112	201.523	ug/L	97
27) Vinyl acetate	4.417	43	4331048	202.682	ug/L	100
28) cis-1,2-Dichloroethene	4.709	96	2602326	197.269	ug/L	95
29) 2,2-Dichloropropane	4.801	77	3345427	199.517	ug/L	99
30) Bromochloromethane	4.908	128	1140457	184.670	ug/L	97
31) Cyclohexane	4.894	56	3455622	197.804	ug/L	99
32) Chloroform	4.972	83	3951003	191.600	ug/L	95
33) Ethyl acetate	5.072	43	1827489	208.729	ug/L	97
34) Carbon tetrachloride	5.100	117	3284013	199.406	ug/L	98
35) Tetrahydrofuran	5.114	42	515124M6	183.202	ug/L	
37) 1,1,1-Trichloroethane	5.164	97	3607588	199.914	ug/L	99
39) 2-Butanone	5.257	43	788136	210.628	ug/L	85
40) 1,1-Dichloropropene	5.285	75	2861920	199.655	ug/L	100
41) Benzene	5.533	78	8999509	199.828	ug/L	100
42) tert-Amyl methyl ether	5.632	73	6582705	200.312	ug/L	99
44) 1,2-Dichloroethane	5.738	62	2891284	195.845	ug/L	98
47) Methyl cyclohexane	6.112	83	3282944	203.383	ug/L	100
48) Trichloroethene	6.126	95	2448072	198.406	ug/L	100
50) Dibromomethane	6.571	93	1457265	195.538	ug/L	98
51) 1,2-Dichloropropane	6.669	63	2285978	197.503	ug/L	98
53) 2-Chloroethyl vinyl ether	7.368	63	1184423	219.299	ug/L	99
54) Bromodichloromethane	6.747	83	3233345	197.684	ug/L	99
57) 1,4-Dioxane	6.959	88	235107	1985.634	ug/L	98
58) cis-1,3-Dichloropropene	7.438	75	3813141	199.093	ug/L	99
61) Toluene	7.699	92	5858785	199.066	ug/L	99
62) 4-Methyl-2-pentanone	8.130	58	729358	203.092	ug/L	98
63) Tetrachloroethene	8.144	166	2727006	200.330	ug/L	97
65) trans-1,3-Dichloropropene	8.186	75	3462978	203.950	ug/L	99
67) Ethyl methacrylate	8.370	69	2828204	205.689	ug/L	97
68) 1,1,2-Trichloroethane	8.370	83	1726456	197.765	ug/L	99
69) Chlorodibromomethane	8.581	129	2844638	203.914	ug/L	100
70) 1,3-Dichloropropane	8.694	76	3403711	200.208	ug/L	99
71) 1,2-Dibromoethane	8.857	107	2197905	198.150	ug/L	99
72) 2-Hexanone	9.139	43	1204663	202.116	ug/L	99
73) Chlorobenzene	9.506	112	6923323	198.585	ug/L	99
74) Ethylbenzene	9.541	91	11427843	202.807	ug/L	100
75) 1,1,1,2-Tetrachloroethane	9.590	131	2718927	202.830	ug/L	99
76) p/m Xylene	9.732	106	9286957	413.865	ug/L	97
77) o Xylene	10.275	106	9439647	419.545	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : K:\Gonzo\2025\250619NICAL\
 Data File : VG250619N14.D
 Acq On : 20 Jun 2025 6:01 am
 Operator : GONZO:PID
 Sample : I8260STD200PPB
 Misc : WG2081469,ICAL (Sig #1); WG,ICAL (Sig #2)
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 20 07:07:58 2025
 Quant Method : K:\Gonzo\2025\250619NICAL\G_250619N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Jun 20 07:06:34 2025
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Gonzo\2025\250619NICAL\VG250619N10.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
78)	Styrene	10.345	104	16701780	432.615	ug/L	95
80)	Bromoform	10.374	173	2118978	203.860	ug/L	100
82)	Isopropylbenzene	10.656	105	11356919	201.722	ug/L	100
84)	Bromobenzene	11.095	156	3332733	193.402	ug/L	99
85)	n-Propylbenzene	11.137	91	13007561	202.042	ug/L	100
86)	1,4-Dichlorobutane	11.165	55	3558254	193.350	ug/L	98
87)	1,1,2,2-Tetrachloroethane	11.243	83	2744560	188.441	ug/L	100
88)	4-Ethyltoluene	11.264	105	11121790	200.197	ug/L	100
89)	2-Chlorotoluene	11.314	91	8022194M6	198.262	ug/L	
90)	1,3,5-Trimethylbenzene	11.370	105	10129930	209.260	ug/L	100
91)	1,2,3-Trichloropropane	11.378	75	2257909	203.988	ug/L	99
92)	trans-1,4-Dichloro-2-b...	11.427	53	789930	194.404	ug/L	100
93)	4-Chlorotoluene	11.498	91	8522814	200.268	ug/L	98
94)	tert-Butylbenzene	11.703	119	8083257	201.084	ug/L	98
97)	1,2,4-Trimethylbenzene	11.788	105	9961037	206.166	ug/L	99
98)	sec-Butylbenzene	11.894	105	11245780	205.130	ug/L	100
99)	p-Isopropyltoluene	12.050	119	10439229	211.711	ug/L	99
100)	1,3-Dichlorobenzene	12.120	146	6215792	198.730	ug/L	99
101)	1,4-Dichlorobenzene	12.219	146	6304571	196.307	ug/L	99
102)	p-Diethylbenzene	12.424	119	6212086	212.999	ug/L	99
103)	n-Butylbenzene	12.481	91	8061520	212.673	ug/L	99
104)	1,2-Dichlorobenzene	12.644	146	5943283	198.966	ug/L	99
105)	1,2,4,5-Tetramethylben...	13.224	119	9354768	211.869	ug/L	99
106)	1,2-Dibromo-3-chloropr...	13.422	155	541133	203.837	ug/L	96
107)	1,3,5-Trichlorobenzene	13.450	180	3714077	188.837	ug/L	98
108)	Hexachlorobutadiene	14.023	225	1206581	193.272	ug/L	100
109)	1,2,4-Trichlorobenzene	14.044	180	3088572	182.645	ug/L	98
110)	Naphthalene	14.341	128	6605433	187.600	ug/L	100
111)	1,2,3-Trichlorobenzene	14.511	180	2305282	177.266	ug/L	98

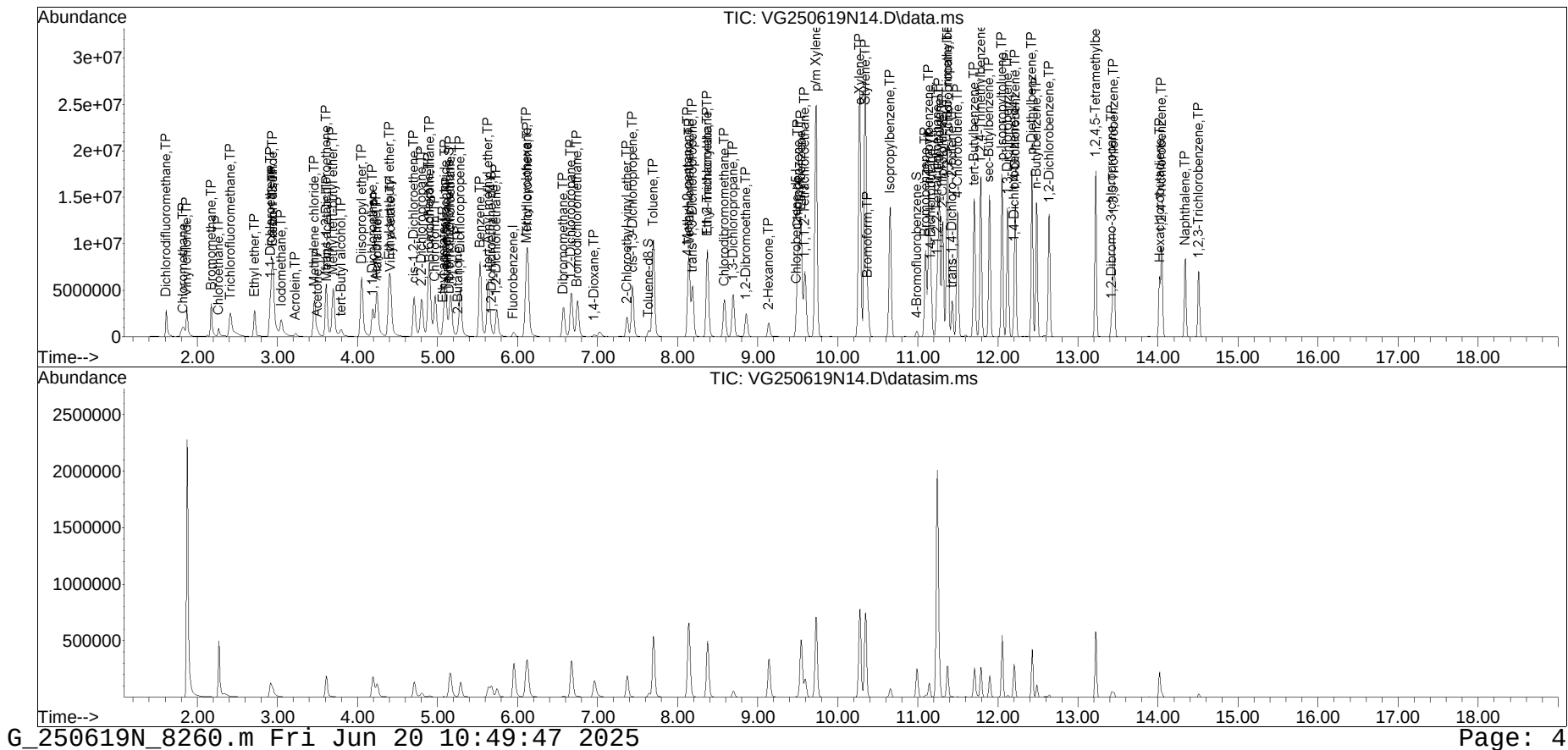
(#) = qualifier out of range (m) = manual integration (+) = signals summed

(QT Reviewed)

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Data File  : VG250619N14.D  
Acq On     : 20 Jun 2025    6:01 am  
Operator   : GONZO:PID  
Sample     : I8260STD200PPB  
Misc       : WG2081469,ICAL (Sig #1); WG,ICAL (Sig #2)  
ALS Vial   : 14    Sample Multiplier: 1
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Quant Time: Jun 20 07:07:58 2025
Quant Method : K:\Gonzo\2025\250619NICAL\G_250619N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Jun 20 07:06:34 2025
Response via : Initial Calibration

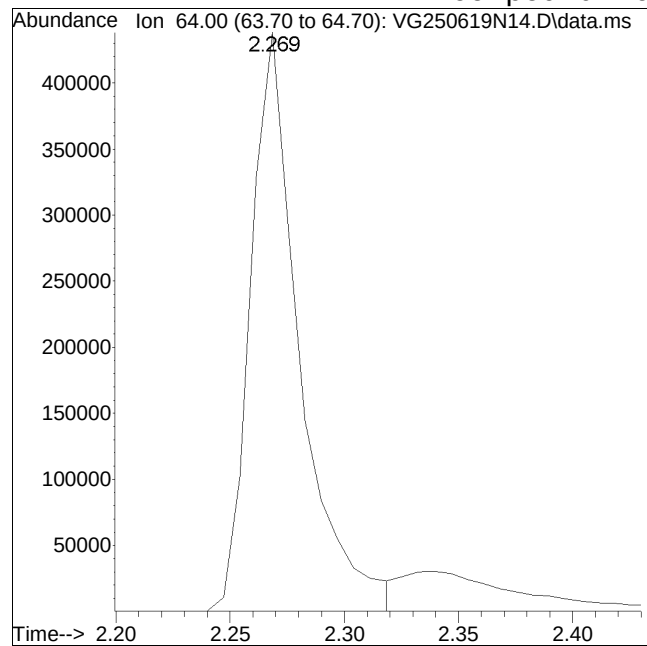
Sub List : 8260-Curve - Megamix plus DioxVG250619N10.D•



Manual Integration Report

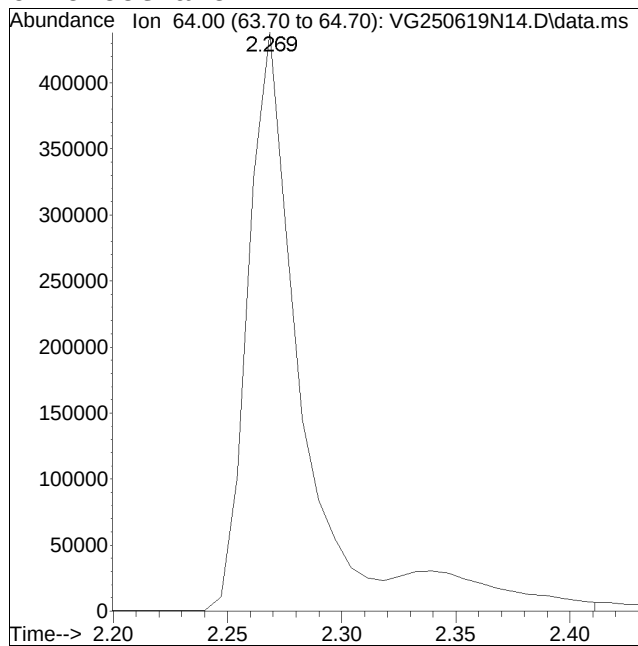
Data Path : K:\Gonzo\2025\250619NICAL\QMethod : G_250619N_8260.m
Data File : VG250619N14.D Operator : GONZO:PID
Date Inj'd : 6/20/2025 6:01 am Instrument : Gonzo
Sample : I8260STD200PPB Quant Date : 6/20/2025 7:07 am

Compound #6: Chloroethane



Original Peak Response = 652478

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

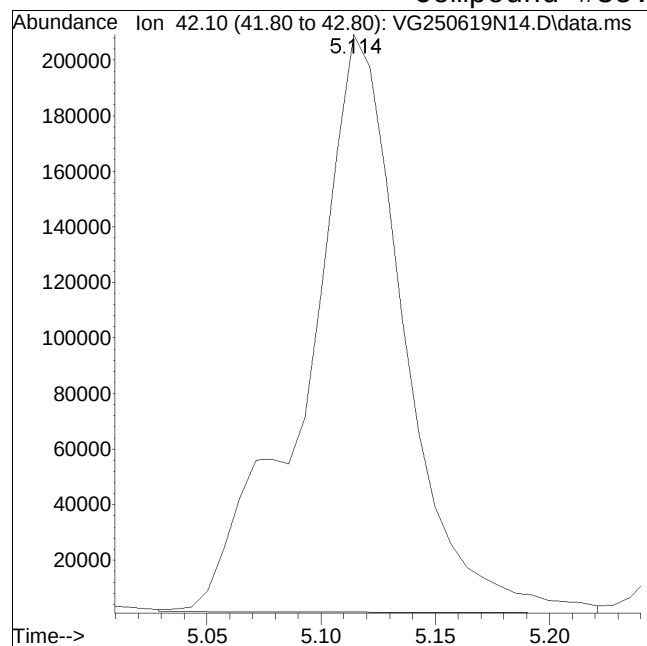


Manual Peak Response = 757487 M1

Manual Integration Report

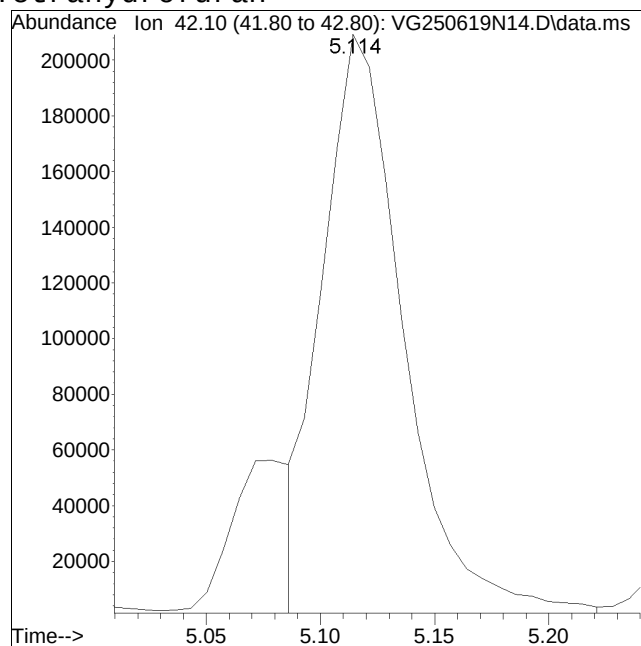
Data Path : K:\Gonzo\2025\250619NICAL\QMethod : G_250619N_8260.m
Data File : VG250619N14.D Operator : GONZO:PID
Date Inj'd : 6/20/2025 6:01 am Instrument : Gonzo
Sample : I8260STD200PPB Quant Date : 6/20/2025 7:07 am

Compound #35: Tetrahydrofuran



Original Peak Response = 617485

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

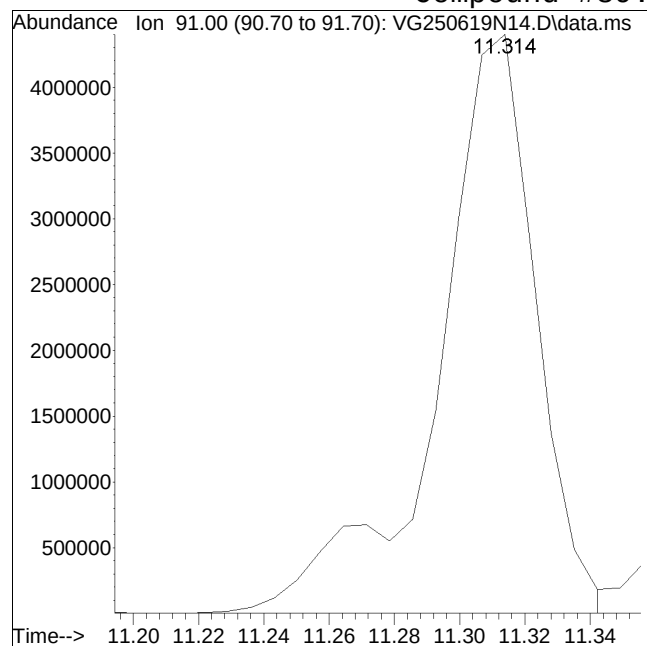


Manual Peak Response = 515124 M6

Manual Integration Report

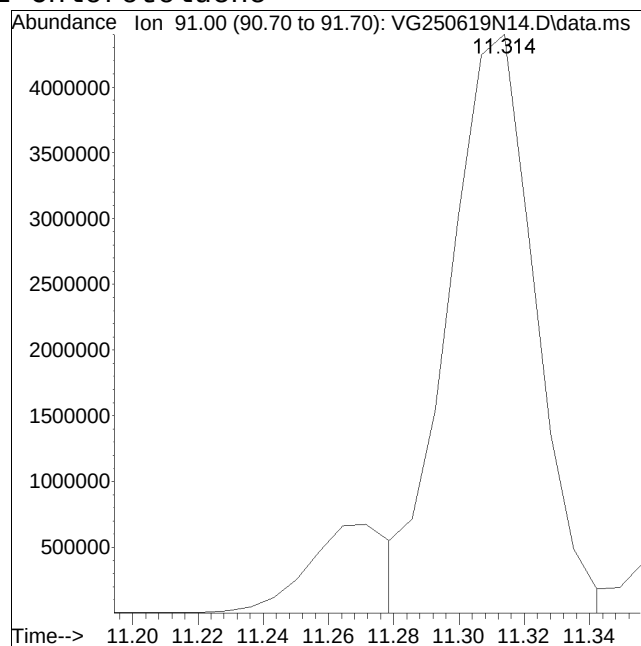
Data Path : K:\Gonzo\2025\250619NICAL\QMethod : G_250619N_8260.m
Data File : VG250619N14.D Operator : GONZO:PID
Date Inj'd : 6/20/2025 6:01 am Instrument : Gonzo
Sample : I8260STD200PPB Quant Date : 6/20/2025 7:07 am

Compound #89: 2-Chlorotoluene



Original Peak Response = 9188370

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).



Manual Peak Response = 8022194 M6

Evaluate Continuing Calibration Report

Data Path : K:\Gonzo\2025\250619NICAL\
 Data File : VG250619N19.D
 Acq On : 20 Jun 2025 8:14 am
 Operator : GONZO:PID
 Sample : C8260STD10PPB
 Misc : WG2081469,ICAL (Sig #1); WG,ICAL (Sig #2)
 ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jun 20 10:24:41 2025
 Quant Method : K:\Gonzo\2025\250619NICAL\G_250619N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Jun 20 07:10:41 2025
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Fluorobenzene	1.000	1.000	0.0	97	0.00
2 TP	Dichlorodifluoromethane	0.219	0.244	-11.4	106	0.00
3 TP	Chloromethane	0.205	0.229	-11.7	111	0.00
4 TP	Vinyl chloride	0.225	0.240	-6.7	100	0.00
5 TP	Bromomethane	0.154	0.146	5.2	104	0.00
6 TP	Chloroethane	0.153	0.154	-0.7	97	0.00
7 TP	Trichlorofluoromethane	0.301	0.293	2.7	92	0.00
8 TP	Ethyl ether	0.109	0.095	12.8	86	0.00
10 TP	1,1-Dichloroethene	0.181	0.174	3.9	94	0.00
11 TP	Carbon disulfide	0.549	0.434	20.9#	77	0.00
12 TP	Freon-113	0.181	0.186	-2.8	98	0.00
13 TP	Iodomethane	* 10.000	5.663	43.4#	64	0.00
14 TP	Acrolein	0.029	0.023	20.7#	74	0.00
15 TP	Methylene chloride	0.220	0.201	8.6	96	0.00
17 TP	Acetone	0.043	0.036	16.3	91	0.00
18 TP	trans-1,2-Dichloroethene	0.196	0.203	-3.6	99	0.00
19 TP	Methyl acetate	0.101	0.092	8.9	93	0.00
20 TP	Methyl tert-butyl ether	0.572	0.478	16.4	81	0.00
21 TP	tert-Butyl alcohol	0.017	0.014	17.6	79	0.00
22 TP	Diisopropyl ether	0.580	0.518	10.7	86	0.00
23 TP	1,1-Dichloroethane	0.347	0.346	0.3	94	0.00
24 TP	Halothane	0.164	0.164	0.0	96	0.00
25 TP	Acrylonitrile	0.055	0.050	9.1	91	0.00
26 TP	Ethyl tert-butyl ether	0.597	0.524	12.2	85	0.00
27 TP	Vinyl acetate	0.370	0.320	13.5	89	0.00
28 TP	cis-1,2-Dichloroethene	0.228	0.218	4.4	92	0.00
29 TP	2,2-Dichloropropane	0.290	0.269	7.2	90	0.00
30 TP	Bromochloromethane	0.107	0.104	2.8	92	0.00
31 TP	Cyclohexane	0.303	0.278	8.3	91	0.00
32 TP	Chloroform	0.357	0.338	5.3	93	0.00
33 TP	Ethyl acetate	0.152	0.139	8.6	88	0.00
34 TP	Carbon tetrachloride	0.285	0.276	3.2	90	0.00
35 TP	Tetrahydrofuran	0.049	0.040	18.4	86	0.00
36 S	Dibromofluoromethane	0.260	0.254	2.3	95	0.00
37 TP	1,1,1-Trichloroethane	0.312	0.312	0.0	97	0.00
39 TP	2-Butanone	0.065	0.049	24.6#	85	0.00
40 TP	1,1-Dichloropropene	0.248	0.256	-3.2	100	0.00
41 TP	Benzene	0.780	0.775	0.6	94	0.00
42 TP	tert-Amyl methyl ether	0.569	0.494	13.2	85	0.00

Evaluate Continuing Calibration Report

Data Path : K:\Gonzo\2025\250619NICAL\
 Data File : VG250619N19.D
 Acq On : 20 Jun 2025 8:14 am
 Operator : GONZO:PID
 Sample : C8260STD10PPB
 Misc : WG2081469,ICAL (Sig #1); WG,ICAL (Sig #2)
 ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jun 20 10:24:41 2025
 Quant Method : K:\Gonzo\2025\250619NICAL\G_250619N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Jun 20 07:10:41 2025
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
43 S	1,2-Dichloroethane-d4	0.266	0.271	-1.9	96	0.00
44 TP	1,2-Dichloroethane	0.256	0.243	5.1	95	0.00
47 TP	Methyl cyclohexane	0.280	0.266	5.0	92	0.00
48 TP	Trichloroethene	0.214	0.210	1.9	94	0.00
50 TP	Dibromomethane	0.129	0.119	7.8	90	0.00
51 TP	1,2-Dichloropropane	0.200	0.196#	2.0	93	0.00
53 TP	2-Chloroethyl vinyl ether	0.094	0.079	16.0	84	0.00
54 TP	Bromodichloromethane	0.283	0.261#	7.8	89	0.00
57 TP	1,4-Dioxane	0.00205	0.00186#	9.3	90	0.00
58 TP	cis-1,3-Dichloropropene	0.332	0.314	5.4	92	0.00
59 I	Chlorobenzene-d5	1.000	1.000	0.0	98	0.00
60 S	Toluene-d8	1.242	1.236	0.5	97	0.00
61 TP	Toluene	0.640	0.618	3.4	94	0.00
62 TP	4-Methyl-2-pentanone	0.078	0.062	20.5#	79	0.00
63 TP	Tetrachloroethene	0.296	0.294	0.7	93	0.00
65 TP	trans-1,3-Dichloropropene	0.369	0.343	7.0	91	0.00
67 TP	Ethyl methacrylate	0.299	0.262	12.4	88	0.00
68 TP	1,1,2-Trichloroethane	0.190	0.174#	8.4	92	0.00
69 TP	Chlorodibromomethane	0.304	0.285	6.3	94	0.00
70 TP	1,3-Dichloropropane	0.370	0.347	6.2	91	0.00
71 TP	1,2-Dibromoethane	0.241	0.224	7.1	90	0.00
72 TP	2-Hexanone	0.130	0.104	20.0#	78	0.00
73 TP	Chlorobenzene	0.758	0.738	2.6	95	0.00
74 TP	Ethylbenzene	1.226	1.183	3.5	94	0.00
75 TP	1,1,1,2-Tetrachloroethane	0.292	0.272	6.8	92	0.00
76 TP	p/m Xylene	0.488	0.479	1.8	94	0.00
77 TP	o Xylene	0.490	0.462	5.7	92	0.00
78 TP	Styrene	0.840	0.785	6.5	92	0.00
79 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	97	0.00
80 TP	Bromoform	0.376	0.341	9.3	91	0.00
82 TP	Isopropylbenzene	2.036	1.991	2.2	93	0.00
83 S	4-Bromofluorobenzene	0.825	0.823	0.2	96	0.00
84 TP	Bromobenzene	0.623	0.619	0.6	94	0.00
85 TP	n-Propylbenzene	2.328	2.296	1.4	94	0.00
86 TP	1,4-Dichlorobutane	0.666	0.596	10.5	89	0.00
87 TP	1,1,2,2-Tetrachloroethane	0.527	0.460	12.7	88	0.00
88 TP	4-Ethyltoluene	2.009	2.000	0.4	95	0.00

Evaluate Continuing Calibration Report

Data Path : K:\Gonzo\2025\250619NICAL\
 Data File : VG250619N19.D
 Acq On : 20 Jun 2025 8:14 am
 Operator : GONZO:PID
 Sample : C8260STD10PPB
 Misc : WG2081469,ICAL (Sig #1); WG,ICAL (Sig #2)
 ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jun 20 10:24:41 2025
 Quant Method : K:\Gonzo\2025\250619NICAL\G_250619N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Jun 20 07:10:41 2025
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
89 TP	2-Chlorotoluene	1.463	1.400	4.3	92	0.00
90 TP	1,3,5-Trimethylbenzene	1.751	1.692	3.4	93	0.00
91 TP	1,2,3-Trichloropropane	0.400	0.369	7.8	90	0.00
92 TP	trans-1,4-Dichloro-2-butene	0.147	0.122	17.0	89	0.00
93 TP	4-Chlorotoluene	1.539	1.499	2.6	93	0.00
94 TP	tert-Butylbenzene	1.454	1.418	2.5	93	0.00
97 TP	1,2,4-Trimethylbenzene	1.747	1.773	-1.5	98	0.00
98 TP	sec-Butylbenzene	1.983	1.945	1.9	94	0.00
99 TP	p-Isopropyltoluene	1.783	1.769	0.8	95	0.00
100 TP	1,3-Dichlorobenzene	1.131	1.089	3.7	93	0.00
101 TP	1,4-Dichlorobenzene	1.161	1.136	2.2	94	0.00
102 TP	p-Diethylbenzene	1.055	0.980	7.1	90	0.00
103 TP	n-Butylbenzene	1.371	1.374	-0.2	97	0.00
104 TP	1,2-Dichlorobenzene	1.080	1.057	2.1	93	0.00
105 TP	1,2,4,5-Tetramethylbenzene	1.597	1.534	3.9	92	0.00
106 TP	1,2-Dibromo-3-chloropropane	0.096	0.084	12.5	84	0.00
107 TP	1,3,5-Trichlorobenzene	0.711	0.680	4.4	89	0.00
108 TP	Hexachlorobutadiene	0.226	0.220	2.7	93	0.00
109 TP	1,2,4-Trichlorobenzene	0.612	0.575	6.0	88	0.00
110 TP	Naphthalene	1.273	1.103	13.4	83	0.00
111 TP	1,2,3-Trichlorobenzene	0.470	0.410	12.8	81	0.00

* Evaluation of CC level amount vs concentration.
 (#) = Out of Range SPCC's out = 4 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : K:\Gonzo\2025\250619NICAL\
 Data File : VG250619N19.D
 Acq On : 20 Jun 2025 8:14 am
 Operator : GONZO:PID
 Sample : C8260STD10PPB
 Misc : WG2081469,ICAL (Sig #1); WG,ICAL (Sig #2)
 ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jun 20 10:24:41 2025
 Quant Method : K:\Gonzo\2025\250619NICAL\G_250619N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Jun 20 07:10:41 2025
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Gonzo\2025\250619NICAL\VG250619N10.D
 Sub List : 8260-Curve - Megamix plus Diox

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

Internal Standards						
1) Fluorobenzene	5.949	96	535552	10.000	ug/L	0.00
Standard Area 1 = 552092			Recovery	=	97.00%	
59) Chlorobenzene-d5	9.484	117	430737	10.000	ug/L	0.00
Standard Area 1 = 440365			Recovery	=	97.81%	
79) 1,4-Dichlorobenzene-d4	12.198	152	246212	10.000	ug/L	0.00
Standard Area 1 = 255053			Recovery	=	96.53%	
System Monitoring Compounds						
36) Dibromofluoromethane	5.150	113	136111	9.791	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	97.91%	
43) 1,2-Dichloroethane-d4	5.674	65	144928	10.183	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	101.83%	
60) Toluene-d8	7.636	98	532538	9.953	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	99.53%	
83) 4-Bromofluorobenzene	10.981	95	202526	9.973	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	99.73%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.614	85	130752	11.141	ug/L	99
3) Chloromethane	1.813	50	122523	11.178	ug/L	98
4) Vinyl chloride	1.870	62	128302	10.639	ug/L	100
5) Bromomethane	2.176	94	78279	9.466	ug/L	98
6) Chloroethane	2.276	64	82680	10.102	ug/L	100
7) Trichlorofluoromethane	2.418	101	156980	9.737	ug/L	92
8) Ethyl ether	2.717	74	50631	8.682	ug/L	94
10) 1,1-Dichloroethene	2.909	96	93448	9.635	ug/L	98
11) Carbon disulfide	2.944	76	232485	7.914	ug/L	99
12) Freon-113	2.944	101	99564	10.274	ug/L	# 73
13) Iodomethane	3.051	142	60294	5.663	ug/L	99
14) Acrolein	3.236	56	12252M3	7.996	ug/L	
15) Methylene chloride	3.464	84	107722	9.131	ug/L	96
17) Acetone	3.513	43	19515	8.512	ug/L	97
18) trans-1,2-Dichloroethene	3.613	96	108500	10.324	ug/L	97
19) Methyl acetate	3.620	43	49334	9.130	ug/L	99
20) Methyl tert-butyl ether	3.698	73	256019	8.364	ug/L	99
21) tert-Butyl alcohol	3.798	59	36733	40.202	ug/L	99
22) Diisopropyl ether	4.054	45	277416	8.925	ug/L	100
23) 1,1-Dichloroethane	4.189	63	185235	9.967	ug/L	99
24) Halothane	4.246	117	88056	10.018	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : K:\Gonzo\2025\250619NICAL\
 Data File : VG250619N19.D
 Acq On : 20 Jun 2025 8:14 am
 Operator : GONZO:PID
 Sample : C8260STD10PPB
 Misc : WG2081469,ICAL (Sig #1); WG,ICAL (Sig #2)
 ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jun 20 10:24:41 2025
 Quant Method : K:\Gonzo\2025\250619NICAL\G_250619N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Jun 20 07:10:41 2025
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Gonzo\2025\250619NICAL\VG250619N10.D
 Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) Acrylonitrile	4.246	53	27006	9.168	ug/L	95
26) Ethyl tert-butyl ether	4.403	59	280772	8.785	ug/L	97
27) Vinyl acetate	4.424	43	171441	8.651	ug/L	100
28) cis-1,2-Dichloroethene	4.709	96	116724	9.541	ug/L	98
29) 2,2-Dichloropropane	4.801	77	144191	9.272	ug/L	98
30) Bromochloromethane	4.901	128	55517	9.693	ug/L	96
31) Cyclohexane	4.894	56	149125	9.204	ug/L	96
32) Chloroform	4.972	83	181239	9.477	ug/L	97
33) Ethyl acetate	5.079	43	74368	9.159	ug/L	97
34) Carbon tetrachloride	5.100	117	147562	9.661	ug/L	96
35) Tetrahydrofuran	5.121	42	21389M6	8.202	ug/L	
37) 1,1,1-Trichloroethane	5.164	97	167006	9.979	ug/L	97
39) 2-Butanone	5.271	43	26092	7.519	ug/L	96
40) 1,1-Dichloropropene	5.285	75	136900	10.298	ug/L	99
41) Benzene	5.533	78	414881	9.933	ug/L	99
42) tert-Amyl methyl ether	5.639	73	264674	8.684	ug/L	98
44) 1,2-Dichloroethane	5.738	62	130379	9.523	ug/L	99
47) Methyl cyclohexane	6.112	83	142704	9.533	ug/L	99
48) Trichloroethene	6.126	95	112520	9.833	ug/L	97
50) Dibromomethane	6.570	93	63886	9.243	ug/L	99
51) 1,2-Dichloropropane	6.676	63	105221	9.802	ug/L	98
53) 2-Chloroethyl vinyl ether	7.368	63	42147	8.414	ug/L	96
54) Bromodichloromethane	6.754	83	139774	9.214	ug/L	99
57) 1,4-Dioxane	6.958	88	49888	454.311	ug/L	98
58) cis-1,3-Dichloropropene	7.438	75	168259	9.473	ug/L	99
61) Toluene	7.692	92	266181	9.651	ug/L	100
62) 4-Methyl-2-pentanone	8.130	58	26899	7.993	ug/L	98
63) Tetrachloroethene	8.137	166	126775	9.938	ug/L	99
65) trans-1,3-Dichloropropene	8.186	75	147792	9.288	ug/L	99
67) Ethyl methacrylate	8.370	69	113043	8.773	ug/L	98
68) 1,1,2-Trichloroethane	8.370	83	74799	9.143	ug/L	99
69) Chlorodibromomethane	8.581	129	122547	9.374	ug/L	98
70) 1,3-Dichloropropane	8.694	76	149263	9.369	ug/L	98
71) 1,2-Dibromoethane	8.856	107	96339	9.268	ug/L	98
72) 2-Hexanone	9.146	43	44692	8.001	ug/L	99
73) Chlorobenzene	9.506	112	317838	9.728	ug/L	99
74) Ethylbenzene	9.534	91	509496	9.649	ug/L	98
75) 1,1,1,2-Tetrachloroethane	9.583	131	116980	9.312	ug/L	99
76) p/m Xylene	9.724	106	412392	19.611	ug/L	100
77) o Xylene	10.268	106	397728	18.863	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : K:\Gonzo\2025\250619NICAL\
 Data File : VG250619N19.D
 Acq On : 20 Jun 2025 8:14 am
 Operator : GONZO:PID
 Sample : C8260STD10PPB
 Misc : WG2081469,ICAL (Sig #1); WG,ICAL (Sig #2)
 ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jun 20 10:24:41 2025
 Quant Method : K:\Gonzo\2025\250619NICAL\G_250619N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Jun 20 07:10:41 2025
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Gonzo\2025\250619NICAL\VG250619N10.D
 Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
78)	Styrene	10.338	104	675929	18.683	ug/L	99
80)	Bromoform	10.366	173	83947	9.071	ug/L	98
82)	Isopropylbenzene	10.649	105	490157	9.778	ug/L	99
84)	Bromobenzene	11.094	156	152509	9.940	ug/L	100
85)	n-Propylbenzene	11.137	91	565202	9.860	ug/L	98
86)	1,4-Dichlorobutane	11.158	55	146723	8.954	ug/L	100
87)	1,1,2,2-Tetrachloroethane	11.236	83	113148	8.725	ug/L	100
88)	4-Ethyltoluene	11.264	105	492443	9.956	ug/L	99
89)	2-Chlorotoluene	11.307	91	344604M1	9.565	ug/L	
90)	1,3,5-Trimethylbenzene	11.363	105	416648	9.667	ug/L	99
91)	1,2,3-Trichloropropane	11.370	75	90890	9.222	ug/L	100
92)	trans-1,4-Dichloro-2-b...	11.427	53	29962	8.282	ug/L	96
93)	4-Chlorotoluene	11.491	91	369128	9.742	ug/L	99
94)	tert-Butylbenzene	11.703	119	349216	9.757	ug/L	100
97)	1,2,4-Trimethylbenzene	11.781	105	436641	10.150	ug/L	99
98)	sec-Butylbenzene	11.894	105	478909	9.811	ug/L	99
99)	p-Isopropyltoluene	12.049	119	435577	9.921	ug/L	99
100)	1,3-Dichlorobenzene	12.120	146	268153	9.629	ug/L	98
101)	1,4-Dichlorobenzene	12.212	146	279740	9.783	ug/L	99
102)	p-Diethylbenzene	12.424	119	241305	9.292	ug/L	99
103)	n-Butylbenzene	12.481	91	338344	10.025	ug/L	99
104)	1,2-Dichlorobenzene	12.636	146	260178	9.782	ug/L	99
105)	1,2,4,5-Tetramethylben...	13.216	119	377801	9.610	ug/L	99
106)	1,2-Dibromo-3-chloropr...	13.422	155	20618	8.723	ug/L	98
107)	1,3,5-Trichlorobenzene	13.450	180	167480	9.564	ug/L	97
108)	Hexachlorobutadiene	14.016	225	54188	9.749	ug/L	98
109)	1,2,4-Trichlorobenzene	14.044	180	141570	9.403	ug/L	99
110)	Naphthalene	14.341	128	271452	8.659	ug/L	100
111)	1,2,3-Trichlorobenzene	14.504	180	101021	8.724	ug/L	100

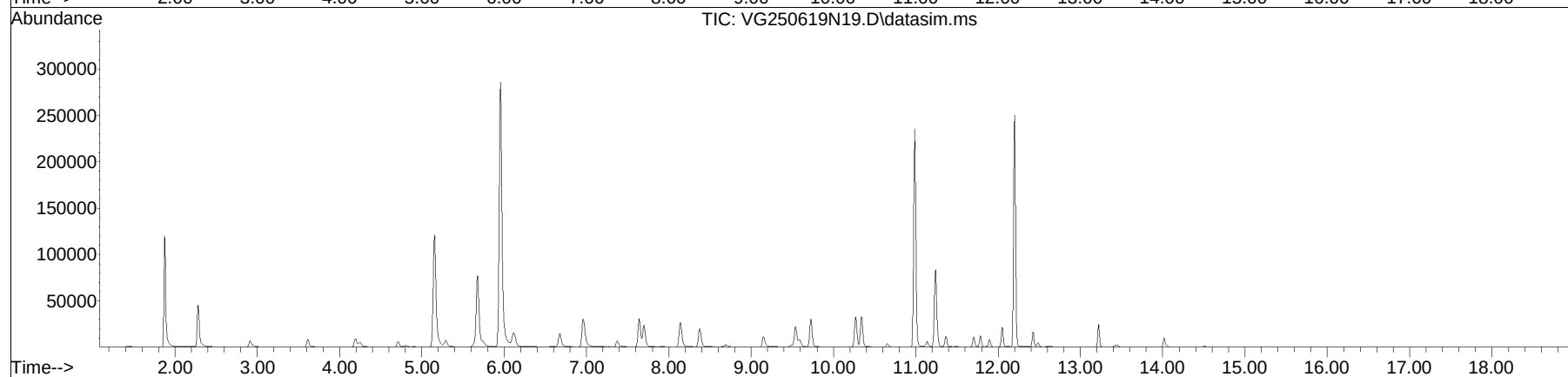
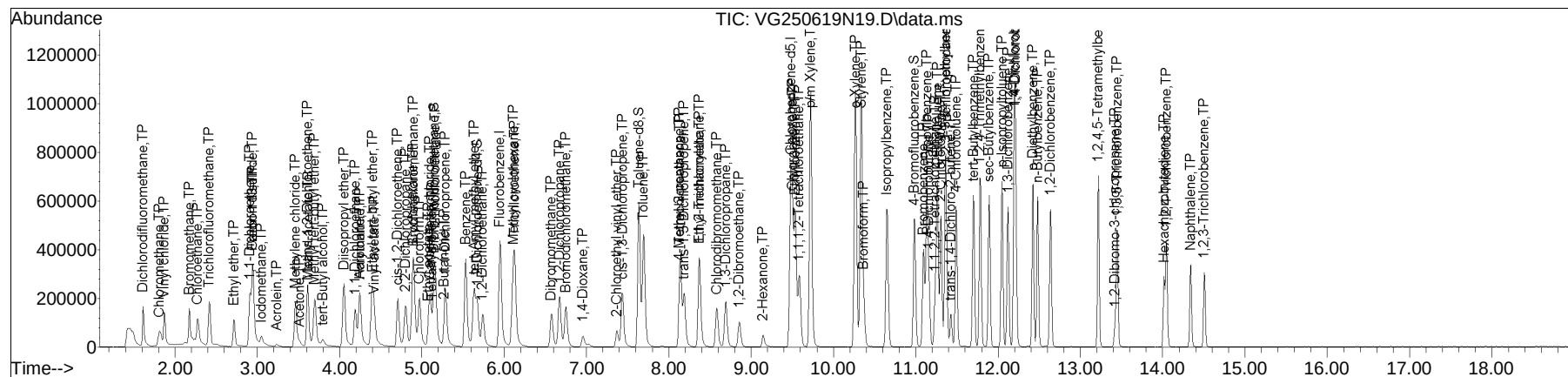
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\Gonzo\2025\250619NICAL\
 Data File : VG250619N19.D
 Acq On : 20 Jun 2025 8:14 am
 Operator : GONZO:PID
 Sample : C8260STD10PPB
 Misc : WG2081469,ICAL (Sig #1); WG,ICAL (Sig #2)
 ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jun 20 10:24:41 2025
 Quant Method : K:\Gonzo\2025\250619NICAL\G_250619N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Jun 20 07:10:41 2025
 Response via : Initial Calibration

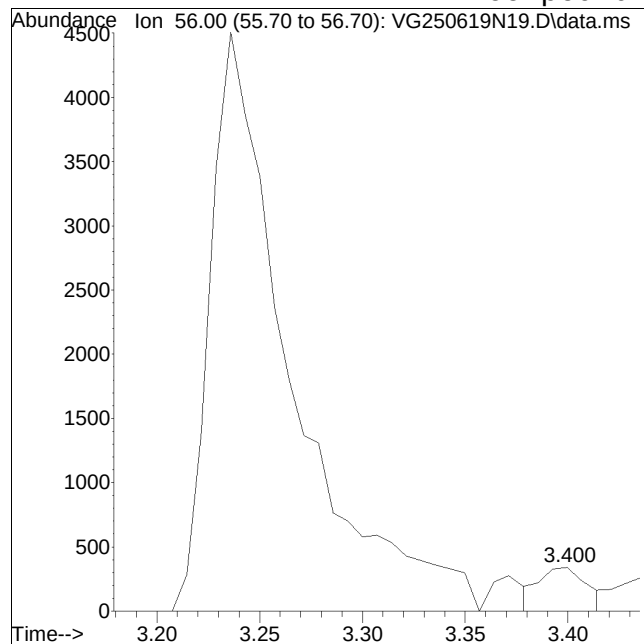
Sub List : 8260-Curve - Megamix plus DioxVG250619N10.D•



Manual Integration Report

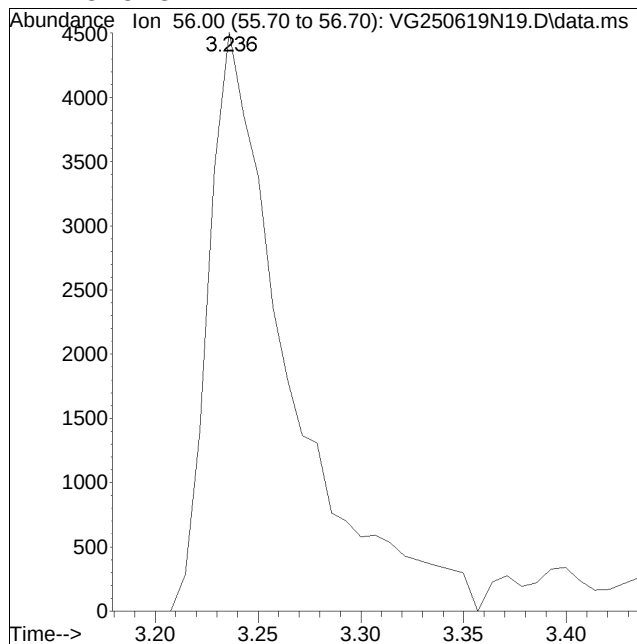
Data Path : K:\Gonzo\2025\250619NICAL\QMethod : G_250619N_8260.m
Data File : VG250619N19.D Operator : GONZO:PID
Date Inj'd : 6/20/2025 8:14 am Instrument : Gonzo
Sample : C8260STD10PPB Quant Date : 6/20/2025 10:22 am

Compound #14: Acrolein



Original Peak Response = 549

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

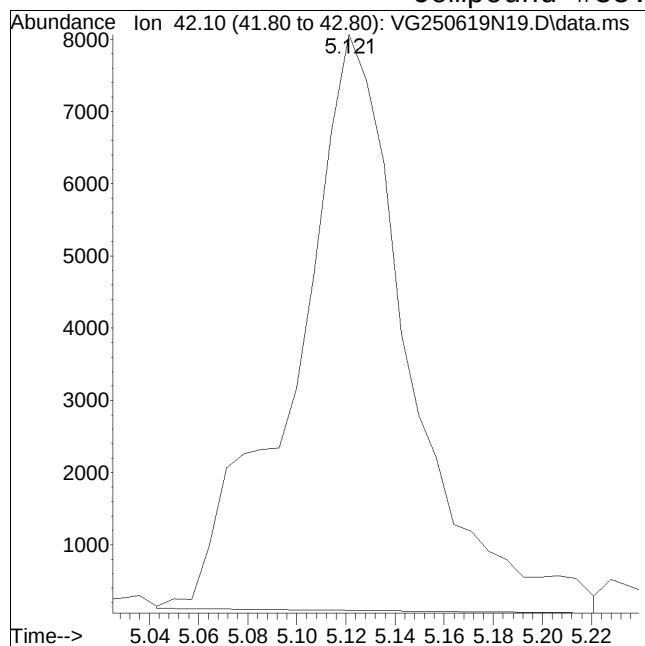


Manual Peak Response = 12252 M3

Manual Integration Report

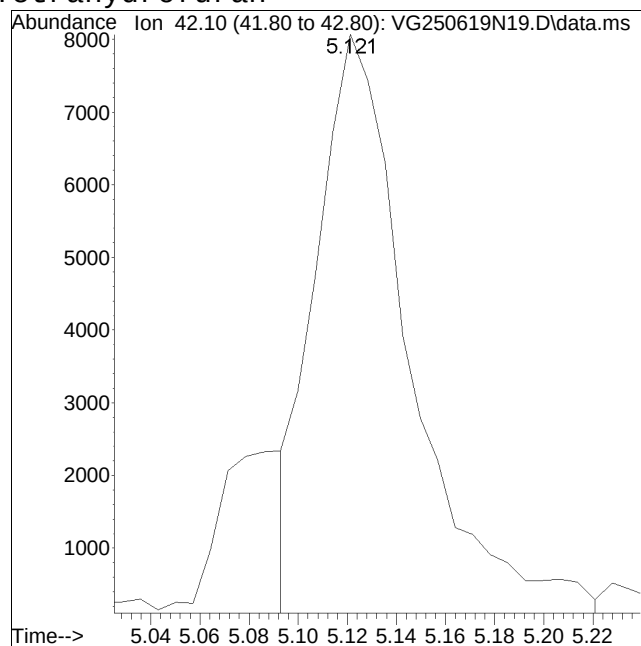
Data Path : K:\Gonzo\2025\250619NICAL\QMethod : G_250619N_8260.m
Data File : VG250619N19.D Operator : GONZO:PID
Date Inj'd : 6/20/2025 8:14 am Instrument : Gonzo
Sample : C8260STD10PPB Quant Date : 6/20/2025 10:22 am

Compound #35: Tetrahydrofuran



Original Peak Response = 25732

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

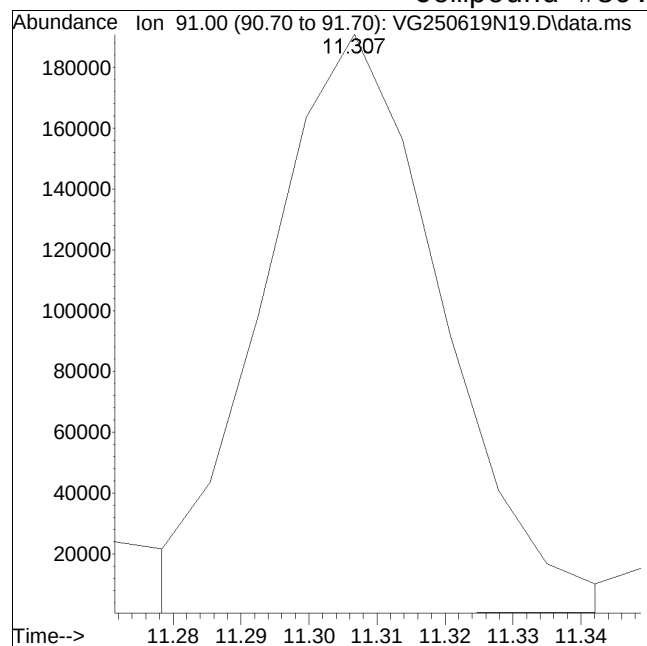


Manual Peak Response = 21389 M6

Manual Integration Report

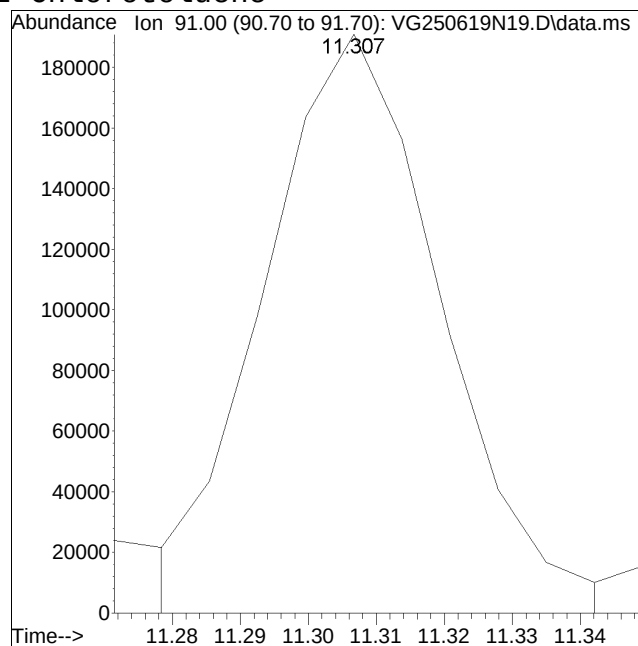
Data Path : K:\Gonzo\2025\250619NICAL\QMethod : G_250619N_8260.m
Data File : VG250619N19.D Operator : GONZO:PID
Date Inj'd : 6/20/2025 8:14 am Instrument : Gonzo
Sample : C8260STD10PPB Quant Date : 6/20/2025 10:22 am

Compound #89: 2-Chlorotoluene



Original Peak Response = 342360

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.



Manual Peak Response = 344604 M1

Method Path : K:\Gonzo\2025\250619NICAL\
Method File : G_250619N_8260.m
Title : VOLATILES BY GC/MS
Last Update : Fri Jun 20 07:10:41 2025

	COMPOUND	CalFit	Units	TrueMid	MidConc	%RE	TrueLow	LowConc	%RE
13 TP	Iodomethane	L	ug/L	10.0	8.024	-19.8	2.00	2.373	18.7

Calibration Correlation Report

	COMPOUND	CalFit	CoefOfDet	QuadTerm	LinTerm	Constant
13 TP	Iodomethane	Linear	0.997429	0.000000	0.249978	-0.0289687

Continuing Calibration

Calibration Verification Summary

Form 7

Volatiles

Client : Impact Environmental
 Project Name : 585 UNION STREET
 Instrument ID : GONZO
 Lab File ID : VG250819A02
 Sample No : WG2104736-2
 Channel :

Lab Number : L2551893
 Project Number : 14729
 Calibration Date : 08/19/25 07:41
 Init. Calib. Date(s) : 06/20/25 06/20/25
 Init. Calib. Times : 01:35 06:01

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	76	0
Dichlorodifluoromethane	0.219	0.218	-	0.5	20	74	0
Chloromethane	0.205	0.218	-	-6.3	20	82	0
Vinyl chloride	0.225	0.291	-	-29.3*	20	95	0
Bromomethane	0.154	0.134	-	13	20	74	0
Chloroethane	0.153	0.248	-	-62.1*	20	122	0
Trichlorofluoromethane	0.301	0.337	-	-12	20	83	0
Ethyl ether	0.109	0.097	-	11	20	69	0
1,1-Dichloroethene	0.181	0.17	-	6.1	20	71	0
Carbon disulfide	0.549	0.638	-	-16.2	20	88	0
Freon-113	0.181	0.188	-	-3.9	20	77	0
Acrolein	0.029	0.026	-	10.3	20	66	0
Methylene chloride	0.22	0.207	-	5.9	20	77	0
Acetone	0.043	0.04	-	7	20	78	0
trans-1,2-Dichloroethene	0.196	0.193	-	1.5	20	74	0
Methyl acetate	0.101	0.099	-	2	20	78	0
Methyl tert-butyl ether	0.572	0.479	-	16.3	20	64	0
tert-Butyl alcohol	0.017	0.012	-	29.4*	20	52	0
Diisopropyl ether	0.58	0.6	-	-3.4	20	78	0
1,1-Dichloroethane	0.347	0.391	-	-12.7	20	83	0
Halothane	0.164	0.165	-	-0.6	20	75	0
Acrylonitrile	0.055	0.06	-	-9.1	20	84	0
Ethyl tert-butyl ether	0.597	0.53	-	11.2	20	67	0
Vinyl acetate	0.37	0.36	-	2.7	20	78	0
cis-1,2-Dichloroethene	0.228	0.207	-	9.2	20	68	0
2,2-Dichloropropane	0.29	0.259	-	10.7	20	68	0
Bromochloromethane	0.107	0.113	-	-5.6	20	78	0
Cyclohexane	0.303	0.317	-	-4.6	20	81	0
Chloroform	0.357	0.36	-	-0.8	20	77	0
Ethyl acetate	0.152	0.151	-	0.7	20	74	0
Carbon tetrachloride	0.285	0.295	-	-3.5	20	75	0
Tetrahydrofuran	0.049	0.05	-	-2	20	84	0
Dibromofluoromethane	0.26	0.278	-	-6.9	20	81	0
1,1,1-Trichloroethane	0.312	0.306	-	1.9	20	74	0
2-Butanone	0.065	0.071	-	-9.2	20	96	0
1,1-Dichloropropene	0.248	0.245	-	1.2	20	75	0
Benzene	0.78	0.777	-	0.4	20	74	0
tert-Amyl methyl ether	0.569	0.431	-	24.3*	20	58	0
1,2-Dichloroethane-d4	0.266	0.327	-	-22.9*	20	91	0
1,2-Dichloroethane	0.256	0.283	-	-10.5	20	86	0
Methyl cyclohexane	0.28	0.248	-	11.4	20	67	0
Trichloroethene	0.214	0.21	-	1.9	20	74	0
Dibromomethane	0.129	0.121	-	6.2	20	71	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : Impact Environmental
 Project Name : 585 UNION STREET
 Instrument ID : GONZO
 Lab File ID : VG250819A02
 Sample No : WG2104736-2
 Channel :

Lab Number : L2551893
 Project Number : 14729
 Calibration Date : 08/19/25 07:41
 Init. Calib. Date(s) : 06/20/25 06/20/25
 Init. Calib. Times : 01:35 06:01

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,2-Dichloropropane	0.2	0.212	-	-6	20	79	0
Bromodichloromethane	0.283	0.283*	-	0	20	75	0
1,4-Dioxane	0.00205	0.00118*	-	42.4*	20	44	0
cis-1,3-Dichloropropene	0.332	0.298*	-	10.2	20	68	0
Chlorobenzene-d5	1	1	-	0	20	77	0
Toluene-d8	1.242	1.241	-	0.1	20	77	0
Toluene	0.64	0.598	-	6.6	20	71	0
4-Methyl-2-pentanone	0.078	0.062	-	20.5*	20	61	0
Tetrachloroethene	0.296	0.307	-	-3.7	20	76	0
trans-1,3-Dichloropropene	0.369	0.315	-	14.6	20	65	0
Ethyl methacrylate	0.299	0.211	-	29.4*	20	55	0
1,1,2-Trichloroethane	0.19	0.18*	-	5.3	20	75	0
Chlorodibromomethane	0.304	0.277	-	8.9	20	72	0
1,3-Dichloropropane	0.37	0.36	-	2.7	20	74	0
1,2-Dibromoethane	0.241	0.225	-	6.6	20	71	0
2-Hexanone	0.13	0.1	-	23.1*	20	59	0
Chlorobenzene	0.758	0.746	-	1.6	20	75	0
Ethylbenzene	1.226	1.102	-	10.1	20	68	0
1,1,1,2-Tetrachloroethane	0.292	0.275	-	5.8	20	73	0
p/m Xylene	0.488	0.463	-	5.1	20	71	0
o Xylene	0.49	0.451	-	8	20	70	0
Styrene	0.84	0.761	-	9.4	20	70	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	81	0
Bromoform	0.376	0.33	-	12.2	20	75	0
Isopropylbenzene	2.036	1.723	-	15.4	20	68	0
4-Bromofluorobenzene	0.825	0.74	-	10.3	20	73	0
Bromobenzene	0.623	0.589	-	5.5	20	75	0
n-Propylbenzene	2.328	2.001	-	14	20	69	0
1,4-Dichlorobutane	0.666	0.653	-	2	20	83	0
1,1,2,2-Tetrachloroethane	0.527	0.449	-	14.8	20	73	0
4-Ethyltoluene	2.009	1.759	-	12.4	20	70	0
2-Chlorotoluene	1.463	1.286	-	12.1	20	71	0
1,3,5-Trimethylbenzene	1.751	1.564	-	10.7	20	73	0
1,2,3-Trichloropropane	0.4	0.369	-	7.8	20	76	0
trans-1,4-Dichloro-2-buten	0.147	0.11	-	25.2*	20	68	0
4-Chlorotoluene	1.539	1.335	-	13.3	20	70	0
tert-Butylbenzene	1.454	1.231	-	15.3	20	68	0
1,2,4-Trimethylbenzene	1.747	1.517	-	13.2	20	70	0
sec-Butylbenzene	1.983	1.756	-	11.4	20	71	0
p-Isopropyltoluene	1.783	1.536	-	13.9	20	69	0
1,3-Dichlorobenzene	1.131	1.066	-	5.7	20	77	0
1,4-Dichlorobenzene	1.161	1.095	-	5.7	20	76	0
p-Diethylbenzene	1.055	0.864	-	18.1	20	67	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Volatiles

Client : Impact Environmental
Project Name : 585 UNION STREET
Instrument ID : GONZO
Lab File ID : VG250819A02
Sample No : WG2104736-2
Channel :

Lab Number : L2551893
Project Number : 14729
Calibration Date : 08/19/25 07:41
Init. Calib. Date(s) : 06/20/25 06/20/25
Init. Calib. Times : 01:35 06:01

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
n-Butylbenzene	1.371	1.205	-	12.1	20	72	0
1,2-Dichlorobenzene	1.08	0.995	-	7.9	20	74	0
1,2,4,5-Tetramethylbenzene	1.597	1.142	-	28.5*	20	58	0
1,2-Dibromo-3-chloropropan	0.096	0.076	-	20.8*	20	64	0
1,3,5-Trichlorobenzene	0.711	0.719	-	-1.1	20	79	0
Hexachlorobutadiene	0.226	0.236	-	-4.4	20	84	0
1,2,4-Trichlorobenzene	0.612	0.53	-	13.4	20	68	0
Naphthalene	1.273	0.813	-	36.1*	20	52	0
1,2,3-Trichlorobenzene	0.47	0.395*	-	16	20	66	0

* Value outside of QC limits.



Evaluate Continuing Calibration Report

Data Path : K:\Gonzo\2025\250819A\
 Data File : VG250819A02.D
 Acq On : 19 Aug 2025 7:41 am
 Operator : GONZO:PID
 Sample : WG2104736-2 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG2104736,ICAL22400 (Sig #1); WG,ICAL22400 (Sig #2)
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 19 08:04:07 2025
 Quant Method : K:\Gonzo\2025\250819A\G_250619N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Jun 20 07:10:41 2025
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Fluorobenzene	1.000	1.000	0.0	76	0.00
2 TP	Dichlorodifluoromethane	0.219	0.218	0.5	74	0.00
3 TP	Chloromethane	0.205	0.218	-6.3	82	0.00
4 TP	Vinyl chloride	0.225	0.291	-29.3#	95	0.00
5 TP	Bromomethane	0.154	0.134	13.0	74	0.00
6 TP	Chloroethane	0.153	0.248	-62.1#	122	0.00
7 TP	Trichlorofluoromethane	0.301	0.337	-12.0	83	0.00
8 TP	Ethyl ether	0.109	0.097	11.0	69	0.00
10 TP	1,1-Dichloroethene	0.181	0.170	6.1	71	0.00
11 TP	Carbon disulfide	0.549	0.638	-16.2	88	0.00
12 TP	Freon-113	0.181	0.188	-3.9	77	0.00
14 TP	Acrolein	0.029	0.026	10.3	66	0.00
15 TP	Methylene chloride	0.220	0.207	5.9	77	0.00
17 TP	Acetone	0.043	0.040	7.0	78	0.00
18 TP	trans-1,2-Dichloroethene	0.196	0.193	1.5	74	0.00
19 TP	Methyl acetate	0.101	0.099	2.0	78	0.00
20 TP	Methyl tert-butyl ether	0.572	0.479	16.3	64	0.00
21 TP	tert-Butyl alcohol	0.017	0.012	29.4#	52	0.00
22 TP	Diisopropyl ether	0.580	0.600	-3.4	78	0.00
23 TP	1,1-Dichloroethane	0.347	0.391	-12.7	83	0.00
24 TP	Halothane	0.164	0.165	-0.6	75	0.00
25 TP	Acrylonitrile	0.055	0.060	-9.1	84	0.00
26 TP	Ethyl tert-butyl ether	0.597	0.530	11.2	67	0.00
27 TP	Vinyl acetate	0.370	0.360	2.7	78	0.00
28 TP	cis-1,2-Dichloroethene	0.228	0.207	9.2	68	0.00
29 TP	2,2-Dichloropropane	0.290	0.259	10.7	68	0.00
30 TP	Bromochloromethane	0.107	0.113	-5.6	78	0.00
31 TP	Cyclohexane	0.303	0.317	-4.6	81	0.00
32 TP	Chloroform	0.357	0.360	-0.8	77	0.00
33 TP	Ethyl acetate	0.152	0.151	0.7	74	0.00
34 TP	Carbon tetrachloride	0.285	0.295	-3.5	75	0.00
35 TP	Tetrahydrofuran	0.049	0.050	-2.0	84	0.00
36 S	Dibromofluoromethane	0.260	0.278	-6.9	81	0.00
37 TP	1,1,1-Trichloroethane	0.312	0.306	1.9	74	0.00
39 TP	2-Butanone	0.065	0.071	-9.2	96	0.00
40 TP	1,1-Dichloropropene	0.248	0.245	1.2	75	0.00
41 TP	Benzene	0.780	0.777	0.4	74	0.00
42 TP	tert-Amyl methyl ether	0.569	0.431	24.3#	58	0.00
43 S	1,2-Dichloroethane-d4	0.266	0.327	-22.9#	91	0.00

Evaluate Continuing Calibration Report

Data Path : K:\Gonzo\2025\250819A\
 Data File : VG250819A02.D
 Acq On : 19 Aug 2025 7:41 am
 Operator : GONZO:PID
 Sample : WG2104736-2 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG2104736,ICAL22400 (Sig #1); WG,ICAL22400 (Sig #2)
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 19 08:04:07 2025
 Quant Method : K:\Gonzo\2025\250819A\G_250619N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Jun 20 07:10:41 2025
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
44 TP	1,2-Dichloroethane	0.256	0.283	-10.5	86	0.00
47 TP	Methyl cyclohexane	0.280	0.248	11.4	67	0.00
48 TP	Trichloroethene	0.214	0.210	1.9	74	0.00
50 TP	Dibromomethane	0.129	0.121	6.2	71	0.00
51 TP	1,2-Dichloropropane	0.200	0.212	-6.0	79	0.00
54 TP	Bromodichloromethane	0.283	0.283#	0.0	75	0.00
57 TP	1,4-Dioxane	0.00205	0.00118#	42.4#	44#	0.00
58 TP	cis-1,3-Dichloropropene	0.332	0.298#	10.2	68	0.00
59 I	Chlorobenzene-d5	1.000	1.000	0.0	77	0.00
60 S	Toluene-d8	1.242	1.241	0.1	77	0.00
61 TP	Toluene	0.640	0.598	6.6	71	0.00
62 TP	4-Methyl-2-pentanone	0.078	0.062	20.5#	61	0.00
63 TP	Tetrachloroethene	0.296	0.307	-3.7	76	0.00
65 TP	trans-1,3-Dichloropropene	0.369	0.315	14.6	65	0.00
67 TP	Ethyl methacrylate	0.299	0.211	29.4#	55	0.00
68 TP	1,1,2-Trichloroethane	0.190	0.180#	5.3	75	0.00
69 TP	Chlorodibromomethane	0.304	0.277	8.9	72	0.00
70 TP	1,3-Dichloropropane	0.370	0.360	2.7	74	0.00
71 TP	1,2-Dibromoethane	0.241	0.225	6.6	71	0.00
72 TP	2-Hexanone	0.130	0.100	23.1#	59	0.00
73 TP	Chlorobenzene	0.758	0.746	1.6	75	0.00
74 TP	Ethylbenzene	1.226	1.102	10.1	68	0.00
75 TP	1,1,1,2-Tetrachloroethane	0.292	0.275	5.8	73	0.00
76 TP	p/m Xylene	0.488	0.463	5.1	71	0.00
77 TP	o Xylene	0.490	0.451	8.0	70	0.00
78 TP	Styrene	0.840	0.761	9.4	70	0.00
79 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	81	0.00
80 TP	Bromoform	0.376	0.330	12.2	75	0.00
82 TP	Isopropylbenzene	2.036	1.723	15.4	68	0.00
83 S	4-Bromofluorobenzene	0.825	0.740	10.3	73	0.00
84 TP	Bromobenzene	0.623	0.589	5.5	75	0.00
85 TP	n-Propylbenzene	2.328	2.001	14.0	69	0.00
86 TP	1,4-Dichlorobutane	0.666	0.653	2.0	83	0.00
87 TP	1,1,2,2-Tetrachloroethane	0.527	0.449	14.8	73	0.00
88 TP	4-Ethyltoluene	2.009	1.759	12.4	70	0.00
89 TP	2-Chlorotoluene	1.463	1.286	12.1	71	0.00
90 TP	1,3,5-Trimethylbenzene	1.751	1.564	10.7	73	0.00

Evaluate Continuing Calibration Report

Data Path : K:\Gonzo\2025\250819A\
 Data File : VG250819A02.D
 Acq On : 19 Aug 2025 7:41 am
 Operator : GONZO:PID
 Sample : WG2104736-2 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG2104736,ICAL22400 (Sig #1); WG,ICAL22400 (Sig #2)
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 19 08:04:07 2025
 Quant Method : K:\Gonzo\2025\250819A\G_250619N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Jun 20 07:10:41 2025
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
91 TP	1,2,3-Trichloropropane	0.400	0.369	7.8	76	0.00
92 TP	trans-1,4-Dichloro-2-butene	0.147	0.110	25.2#	68	0.00
93 TP	4-Chlorotoluene	1.539	1.335	13.3	70	0.00
94 TP	tert-Butylbenzene	1.454	1.231	15.3	68	0.00
97 TP	1,2,4-Trimethylbenzene	1.747	1.517	13.2	70	0.00
98 TP	sec-Butylbenzene	1.983	1.756	11.4	71	0.00
99 TP	p-Isopropyltoluene	1.783	1.536	13.9	69	0.00
100 TP	1,3-Dichlorobenzene	1.131	1.066	5.7	77	0.00
101 TP	1,4-Dichlorobenzene	1.161	1.095	5.7	76	0.00
102 TP	p-Diethylbenzene	1.055	0.864	18.1	67	0.00
103 TP	n-Butylbenzene	1.371	1.205	12.1	72	0.00
104 TP	1,2-Dichlorobenzene	1.080	0.995	7.9	74	0.00
105 TP	1,2,4,5-Tetramethylbenzene	1.597	1.142	28.5#	58	0.00
106 TP	1,2-Dibromo-3-chloropropane	0.096	0.076	20.8#	64	0.00
107 TP	1,3,5-Trichlorobenzene	0.711	0.719	-1.1	79	0.00
108 TP	Hexachlorobutadiene	0.226	0.236	-4.4	84	0.00
109 TP	1,2,4-Trichlorobenzene	0.612	0.530	13.4	68	0.00
110 TP	Naphthalene	1.273	0.813	36.1#	52	0.00
111 TP	1,2,3-Trichlorobenzene	0.470	0.395#	16.0	66	0.00

* Evaluation of CC level amount vs concentration.

(#) = Out of Range SPCC's out = 5 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : K:\Gonzo\2025\250819A\
 Data File : VG250819A02.D
 Acq On : 19 Aug 2025 7:41 am
 Operator : GONZO:PID
 Sample : WG2104736-2 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG2104736, ICAL22400 (Sig #1); WG, ICAL22400 (Sig #2)
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 19 08:04:07 2025
 Quant Method : K:\Gonzo\2025\250819A\G_250619N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Jun 20 07:10:41 2025
 Response via : Initial Calibration

Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane

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

Internal Standards						
1) Fluorobenzene	5.950	96	418534	10.000	ug/L	0.00
59) Chlorobenzene-d5	9.485	117	337983	10.000	ug/L	0.00
79) 1,4-Dichlorobenzene-d4	12.198	152	207571	10.000	ug/L	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	5.150	113	116183	10.694	ug/L	0.00
Spiked Amount	10.000	Range 70 - 130	Recovery	=	106.94%	
43) 1,2-Dichloroethane-d4	5.674	65	136945	12.312	ug/L	0.00
Spiked Amount	10.000	Range 70 - 130	Recovery	=	123.12%	
60) Toluene-d8	7.636	98	419436	9.991	ug/L	0.00
Spiked Amount	10.000	Range 70 - 130	Recovery	=	99.91%	
83) 4-Bromofluorobenzene	10.981	95	153634	8.974	ug/L	0.00
Spiked Amount	10.000	Range 70 - 130	Recovery	=	89.74%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.614	85	91448	9.971	ug/L	99
3) Chloromethane	1.820	50	91071	10.631	ug/L	96
4) Vinyl chloride	1.870	62	121872	12.931	ug/L	96
5) Bromomethane	2.176	94	56029	8.669	ug/L	87
6) Chloroethane	2.283	64	103660	16.206	ug/L	96
7) Trichlorofluoromethane	2.425	101	140976	11.189	ug/L	91
8) Ethyl ether	2.717	74	40706	8.931	ug/L #	75
10) 1,1-Dichloroethene	2.909	96	71337	9.412	ug/L	87
11) Carbon disulfide	2.944	76	266862	11.624	ug/L	99
12) Freon-113	2.944	101	78574	10.375	ug/L	82
14) Acrolein	3.236	56	11002	9.188	ug/L #	81
15) Methylene chloride	3.464	84	86526	9.384	ug/L	88
17) Acetone	3.514	43	16746	9.347	ug/L	97
18) trans-1,2-Dichloroethene	3.613	96	80768	9.834	ug/L	90
19) Methyl acetate	3.620	43	41418	9.808	ug/L	98
20) Methyl tert-butyl ether	3.698	73	200323	8.374	ug/L #	88
21) tert-Butyl alcohol	3.798	59	24072	33.711	ug/L #	78
22) Diisopropyl ether	4.054	45	251301	10.345	ug/L	94
23) 1,1-Dichloroethane	4.189	63	163829	11.279	ug/L	99
24) Halothane	4.246	117	68923	10.034	ug/L	100
25) Acrylonitrile	4.253	53	24950	10.838	ug/L	97
26) Ethyl tert-butyl ether	4.403	59	221844	8.882	ug/L	92
27) Vinyl acetate	4.424	43	150585	9.723	ug/L	96
28) cis-1,2-Dichloroethene	4.709	96	86780	9.076	ug/L #	80
29) 2,2-Dichloropropane	4.801	77	108545	8.932	ug/L	85

Quantitation Report (QT Reviewed)

Data Path : K:\Gonzo\2025\250819A\
 Data File : VG250819A02.D
 Acq On : 19 Aug 2025 7:41 am
 Operator : GONZO:PID
 Sample : WG2104736-2 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG2104736, ICAL22400 (Sig #1); WG, ICAL22400 (Sig #2)
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 19 08:04:07 2025
 Quant Method : K:\Gonzo\2025\250819A\G_250619N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Jun 20 07:10:41 2025
 Response via : Initial Calibration

Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
30)	Bromochloromethane	4.908	128	47216	10.549	ug/L	# 86
31)	Cyclohexane	4.894	56	132575	10.470	ug/L	89
32)	Chloroform	4.972	83	150593	10.076	ug/L	95
33)	Ethyl acetate	5.086	43	63031	9.933	ug/L	98
34)	Carbon tetrachloride	5.100	117	123303	10.330	ug/L	99
35)	Tetrahydrofuran	5.128	42	21053M6	10.331	ug/L	
37)	1,1,1-Trichloroethane	5.164	97	128041	9.790	ug/L	95
39)	2-Butanone	5.271	43	29536	10.891	ug/L	# 77
40)	1,1-Dichloropropene	5.285	75	102342	9.851	ug/L	98
41)	Benzene	5.533	78	325321	9.967	ug/L	97
42)	tert-Amyl methyl ether	5.639	73	180512	7.579	ug/L	# 83
44)	1,2-Dichloroethane	5.738	62	118418	11.067	ug/L	96
47)	Methyl cyclohexane	6.112	83	103722	8.866	ug/L	83
48)	Trichloroethene	6.126	95	88101	9.852	ug/L	98
50)	Dibromomethane	6.571	93	50455	9.341	ug/L	94
51)	1,2-Dichloropropane	6.676	63	88889	10.596	ug/L	95
54)	Bromodichloromethane	6.754	83	118426	9.990	ug/L	98
57)	1,4-Dioxane	6.966	88	24722	288.079	ug/L	# 84
58)	cis-1,3-Dichloropropene	7.438	75	124559	8.973	ug/L	97
61)	Toluene	7.699	92	202105	9.339	ug/L	100
62)	4-Methyl-2-pentanone	8.137	58	20871	7.903	ug/L	86
63)	Tetrachloroethene	8.144	166	103626	10.353	ug/L	99
65)	trans-1,3-Dichloropropene	8.186	75	106358	8.519	ug/L	89
67)	Ethyl methacrylate	8.370	69	71248	7.047	ug/L	82
68)	1,1,2-Trichloroethane	8.377	83	60904	9.488	ug/L	99
69)	Chlorodibromomethane	8.581	129	93722	9.137	ug/L	99
70)	1,3-Dichloropropane	8.694	76	121840	9.746	ug/L	100
71)	1,2-Dibromoethane	8.857	107	76129	9.334	ug/L	99
72)	2-Hexanone	9.146	43	33895	7.734	ug/L	98
73)	Chlorobenzene	9.506	112	252027	9.831	ug/L	98
74)	Ethylbenzene	9.534	91	372300	8.985	ug/L	97
75)	1,1,1,2-Tetrachloroethane	9.590	131	92920	9.427	ug/L	99
76)	p/m Xylene	9.724	106	312993	18.969	ug/L	97
77)	o Xylene	10.268	106	304595	18.411	ug/L	94
78)	Styrene	10.338	104	514341	18.118	ug/L	99
80)	Bromoform	10.374	173	68546	8.785	ug/L	98
82)	Isopropylbenzene	10.649	105	357691	8.464	ug/L	99
84)	Bromobenzene	11.095	156	122275	9.453	ug/L	99
85)	n-Propylbenzene	11.137	91	415347	8.595	ug/L	99
86)	1,4-Dichlorobutane	11.158	55	135555	9.813	ug/L	98
87)	1,1,2,2-Tetrachloroethane	11.236	83	93268	8.531	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : K:\Gonzo\2025\250819A\
 Data File : VG250819A02.D
 Acq On : 19 Aug 2025 7:41 am
 Operator : GONZO:PID
 Sample : WG2104736-2 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG2104736, ICAL22400 (Sig #1); WG, ICAL22400 (Sig #2)
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 19 08:04:07 2025
 Quant Method : K:\Gonzo\2025\250819A\G_250619N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Jun 20 07:10:41 2025
 Response via : Initial Calibration

Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
88)	4-Ethyltoluene	11.264	105	365058	8.754	ug/L	100
89)	2-Chlorotoluene	11.307	91	266864M6	8.786	ug/L	
90)	1,3,5-Trimethylbenzene	11.363	105	324702	8.936	ug/L	99
91)	1,2,3-Trichloropropane	11.370	75	76622	9.222	ug/L	99
92)	trans-1,4-Dichloro-2-b...	11.427	53	22822	7.482	ug/L #	79
93)	4-Chlorotoluene	11.491	91	277142	8.676	ug/L	99
94)	tert-Butylbenzene	11.703	119	255541	8.469	ug/L	99
97)	1,2,4-Trimethylbenzene	11.781	105	314830	8.681	ug/L	99
98)	sec-Butylbenzene	11.894	105	364595	8.860	ug/L	99
99)	p-Isopropyltoluene	12.050	119	318770	8.612	ug/L	99
100)	1,3-Dichlorobenzene	12.120	146	221326	9.427	ug/L	99
101)	1,4-Dichlorobenzene	12.212	146	227195	9.424	ug/L	99
102)	p-Diethylbenzene	12.424	119	179373	8.193	ug/L	99
103)	n-Butylbenzene	12.481	91	250138	8.791	ug/L	98
104)	1,2-Dichlorobenzene	12.637	146	206477	9.209	ug/L	100
105)	1,2,4,5-Tetramethylben...	13.217	119	237144	7.155	ug/L	99
106)	1,2-Dibromo-3-chloropr...	13.422	155	15678	7.867	ug/L	96
107)	1,3,5-Trichlorobenzene	13.450	180	149335	10.115	ug/L	98
108)	Hexachlorobutadiene	14.016	225	48962	10.448	ug/L	98
109)	1,2,4-Trichlorobenzene	14.044	180	109956	8.662	ug/L	97
110)	Naphthalene	14.341	128	168849	6.388	ug/L	100
111)	1,2,3-Trichlorobenzene	14.504	180	81909	8.391	ug/L	99

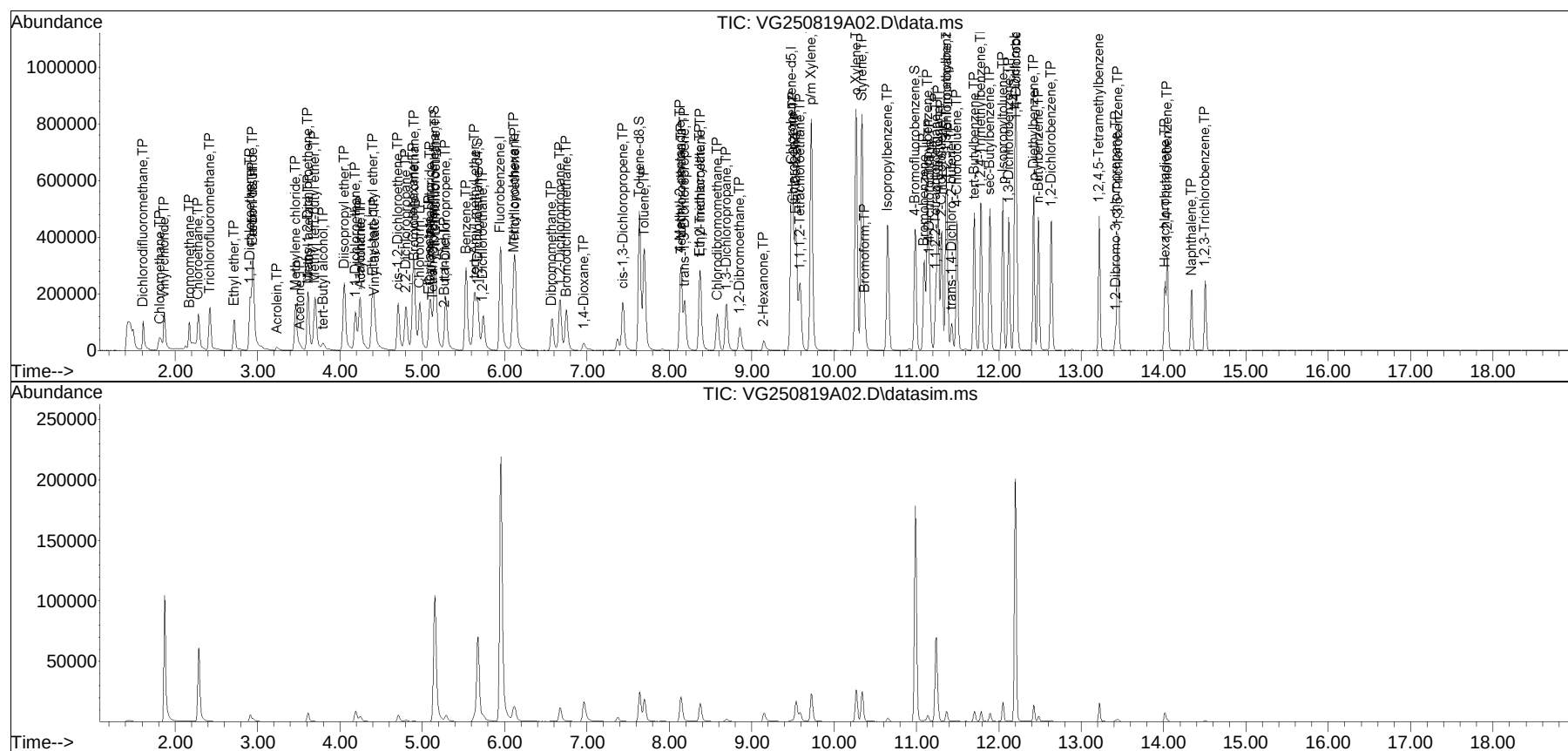
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\Gonzo\2025\250819A\
 Data File : VG250819A02.D
 Acq On : 19 Aug 2025 7:41 am
 Operator : GONZO:PID
 Sample : WG2104736-2 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG2104736,ICAL22400 (Sig #1); WG,ICAL22400 (Sig #2)
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 19 08:04:07 2025
 Quant Method : K:\Gonzo\2025\250819A\G_250619N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Jun 20 07:10:41 2025
 Response via : Initial Calibration

Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane

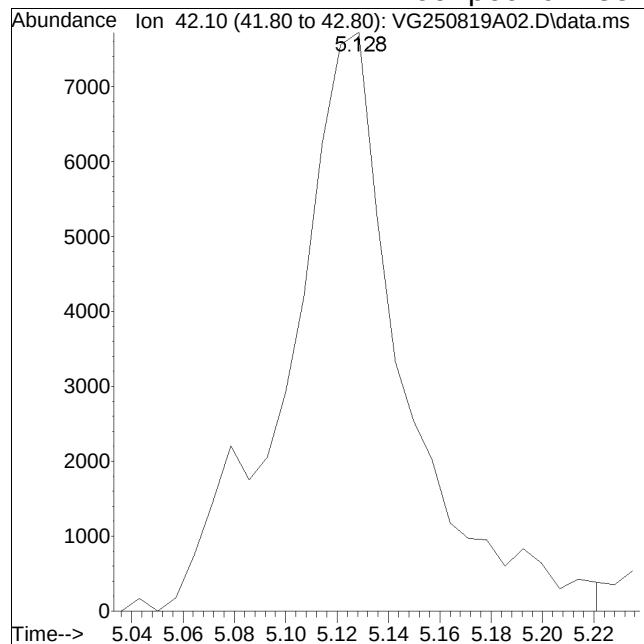


Manual Integration Report

Data Path : K:\Gonzo\2025\250819A\
Data File : VG250819A02.D
Date Inj'd : 8/19/2025 7:41 am
Sample : WG2104736-2

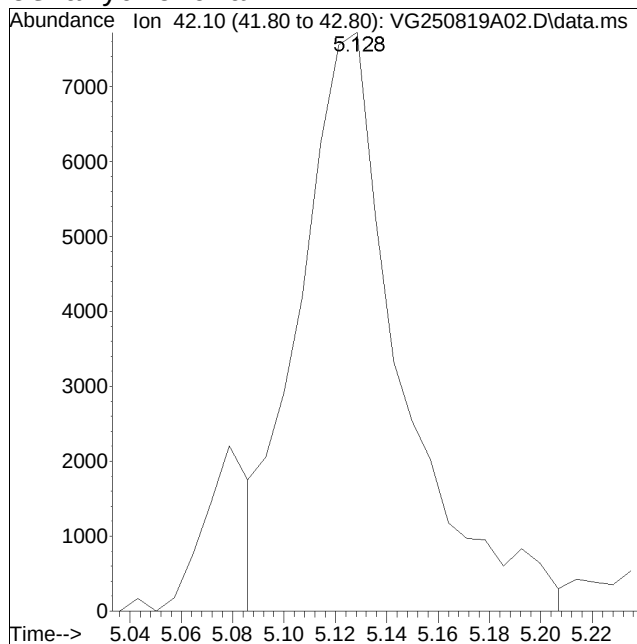
QMethod : G_250619N_8260.m
Operator : GONZO:PID
Instrument : Gonzo
Quant Date : 8/19/2025 8:03 am

Compound #35: Tetrahydrofuran



Original Peak Response = 24107

M6 = Misassignment of peak valley by



Manual Peak Response = 21053 M6

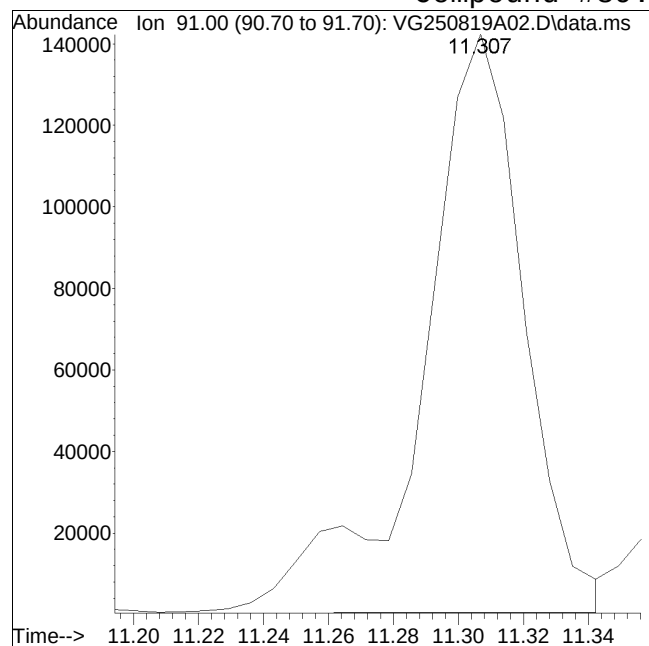
automated integration (poor split of

Manual Integration Report

Data Path : K:\Gonzo\2025\250819A\
Data File : VG250819A02.D
Date Inj'd : 8/19/2025 7:41 am
Sample : WG2104736-2

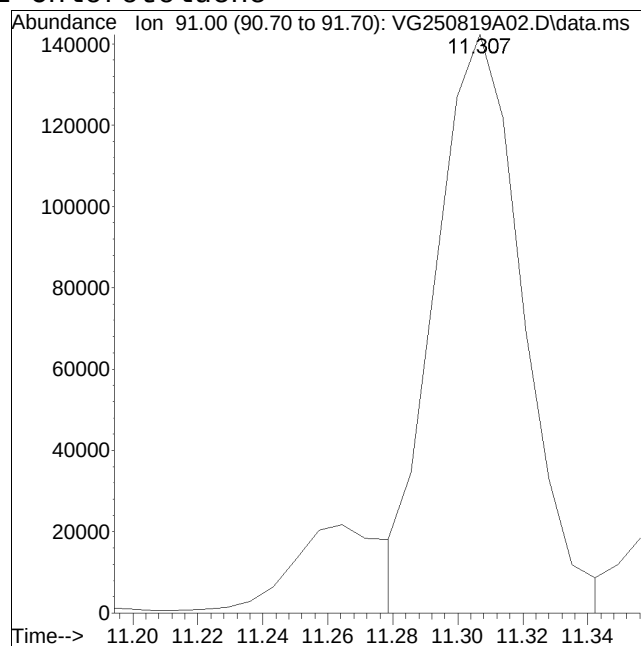
QMethod : G_250619N_8260.m
Operator : GONZO:PID
Instrument : Gonzo
Quant Date : 8/19/2025 8:03 am

Compound #89: 2-Chlorotoluene



Original Peak Response = 307429

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).



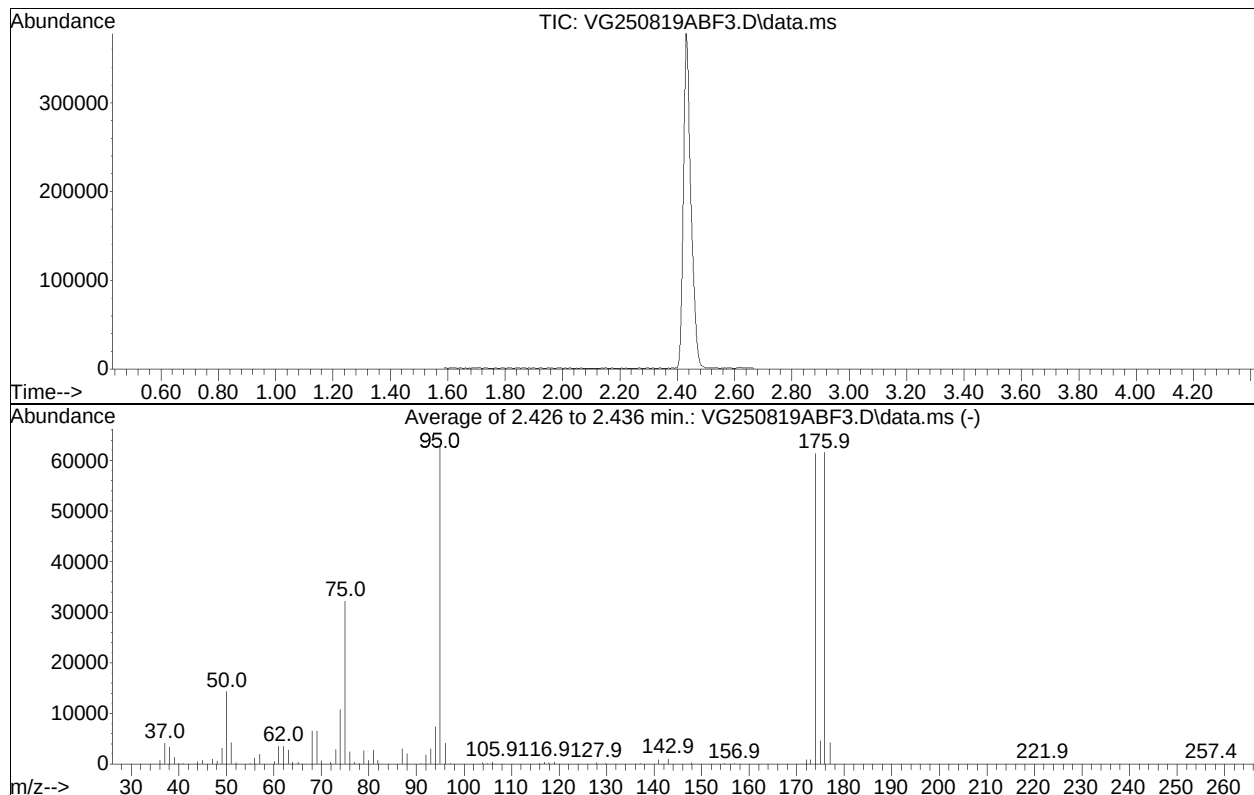
Manual Peak Response = 266864 M6

BFB

Data Path : K:\Gonzo\2025\250819A\
Data File : VG250819ABF3.D
Acq On : 19 Aug 2025 7:05 am
Operator : GONZO:PID
Sample : WG2104736-1
Misc : WG2104736
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : K:\Gonzo\2025\250819A\G_250619N_8260.m
Title : VOLATILES BY GC/MS
Last Update : Fri Jun 20 07:10:41 2025



AutoFind: Scans 161, 162, 163; Background Corrected with Scan 154

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	22.7	14336	PASS
75	95	30	60	51.1	32272	PASS
95	95	100	100	100.0	63117	PASS
96	95	5	9	6.5	4081	PASS
173	174	0.00	2	1.4	862	PASS
174	95	50	100	97.2	61379	PASS
175	174	5	9	7.4	4549	PASS
176	174	95	101	100.4	61616	PASS
177	176	5	9	6.9	4222	PASS

Volatiles Raw QC Data

Quantitation Report (QT Reviewed)

Data Path : K:\Gonzo\2025\250819A\
 Data File : VG250819A05.D
 Acq On : 19 Aug 2025 9:00 am
 Operator : GONZO:PID
 Sample : WG2104736-5,31,10,10 (Sig #1); METHOD BLK (Sig #2)
 Misc : WG2104736,ICAL22400 (Sig #1); WG,ICAL22400 (Sig #2)
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 19 09:29:55 2025
 Quant Method : K:\Gonzo\2025\250819A\G_250619N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Jun 20 07:10:41 2025
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Gonzo\2025\250819A\VG250819A02.D
 Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane

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

Internal Standards						
1) Fluorobenzene	5.950	96	390661	10.000	ug/L	0.00
Standard Area 1 = 418534			Recovery	=	93.34%	
59) Chlorobenzene-d5	9.484	117	302422	10.000	ug/L	0.00
Standard Area 1 = 337983			Recovery	=	89.48%	
79) 1,4-Dichlorobenzene-d4	12.198	152	173822	10.000	ug/L	0.00
Standard Area 1 = 207571			Recovery	=	83.74%	
System Monitoring Compounds						
36) Dibromofluoromethane	5.150	113	111332	10.979	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	109.79%	
43) 1,2-Dichloroethane-d4	5.674	65	119820	11.541	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	115.41%	
60) Toluene-d8	7.636	98	367409	9.781	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	97.81%	
83) 4-Bromofluorobenzene	10.988	95	127450	8.890	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	88.90%	
Target Compounds						Qvalue
41) Benzene	5.547	78	65		N.D.	
61) Toluene	7.692	92	107		N.D.	
74) Ethylbenzene	9.576	91	85		N.D.	
76) p/m Xylene	9.541	106	65		N.D.	
77) o Xylene	10.148	106	83		N.D.	
82) Isopropylbenzene	10.861	105	81		N.D.	
85) n-Propylbenzene	11.165	91	92		N.D.	
90) 1,3,5-Trimethylbenzene	11.385	105	75		N.D.	
94) tert-Butylbenzene	11.703	119	70		N.D.	
97) 1,2,4-Trimethylbenzene	11.837	105	77		N.D.	
98) sec-Butylbenzene	11.901	105	406		N.D.	
99) p-Isopropyltoluene	12.049	119	469		N.D.	
103) n-Butylbenzene	12.502	91	581		N.D.	
110) Naphthalene	14.362	128	252		N.D.	

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

Quantitation Report (QT Reviewed)

Data Path : K:\Gonzo\2025\250819A\
 Data File : VG250819A05.D
 Acq On : 19 Aug 2025 9:00 am
 Operator : GONZO:PID
 Sample : WG2104736-5,31,10,10 (Sig #1); METHOD BLK (Sig #2)
 Misc : WG2104736,ICAL22400 (Sig #1); WG,ICAL22400 (Sig #2)
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 19 09:29:55 2025
 Quant Method : K:\Gonzo\2025\250819A\G_250619N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Jun 20 07:10:41 2025
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Gonzo\2025\250819A\VG250819A02.D
 Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane

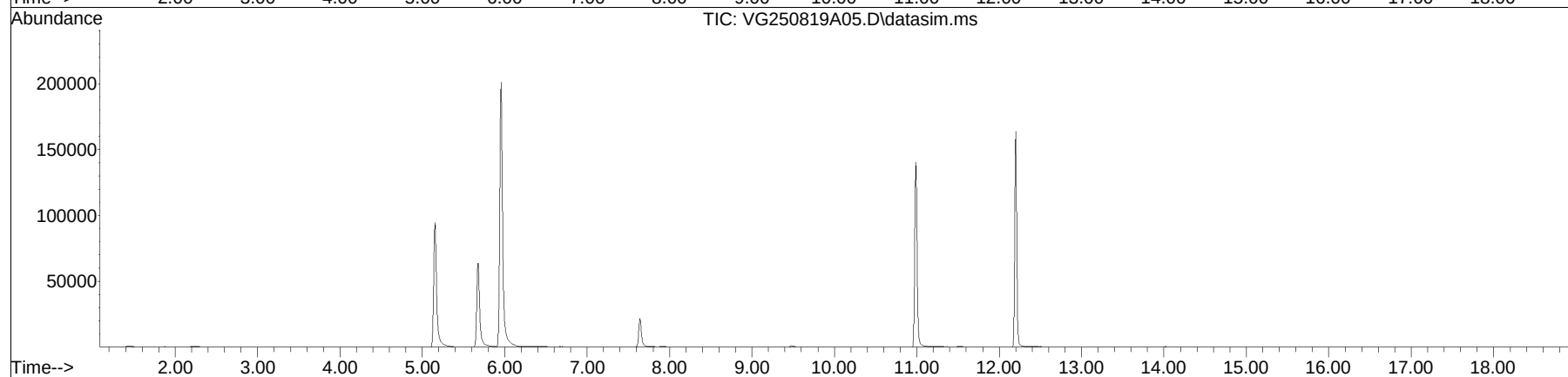
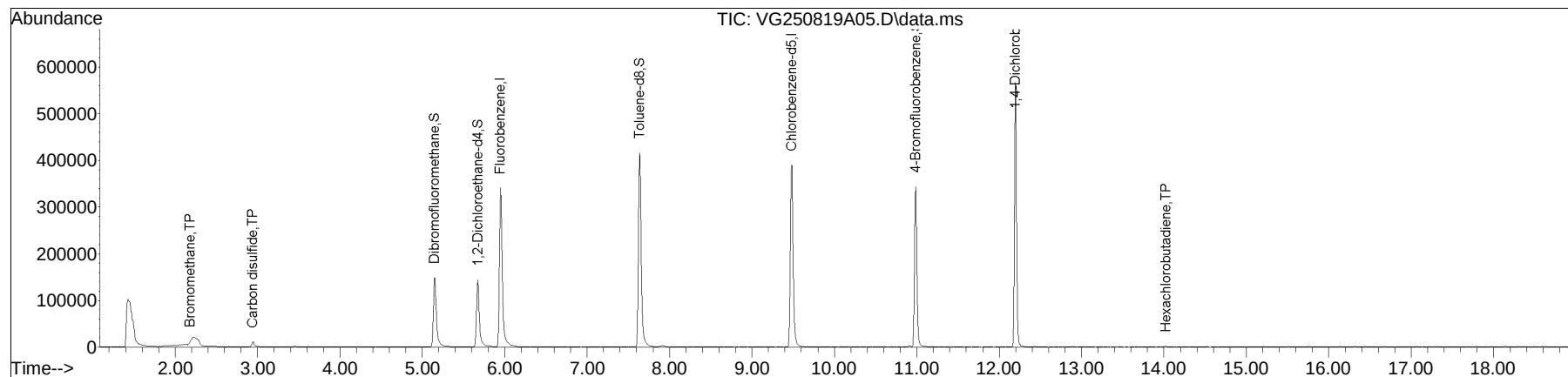
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Quantitation Report (QT Reviewed)

Data Path : K:\Gonzo\2025\250819A\
 Data File : VG250819A05.D
 Acq On : 19 Aug 2025 9:00 am
 Operator : GONZO:PID
 Sample : WG2104736-5,31,10,10 (Sig #1); METHOD BLK (Sig #2)
 Misc : WG2104736,ICAL22400 (Sig #1); WG,ICAL22400 (Sig #2)
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 19 09:29:55 2025
 Quant Method : K:\Gonzo\2025\250819A\G_250619N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Jun 20 07:10:41 2025
 Response via : Initial Calibration

Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane



Manual Integration Report

Data Path	: K:\Gonzo\2025\250819A\	QMethod	: G_250619N_8260.m
Data File	: VG250819A05.D	Operator	: GONZO:PID
Date Inj'd	: 8/19/2025 9:00 am	Instrument	: Gonzo
Sample	: WG2104736-5,31,10,10	Quant Date	: 8/19/2025 9:29 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : K:\Gonzo\2025\250819A\
 Data File : VG250819A02.D
 Acq On : 19 Aug 2025 7:41 am
 Operator : GONZO:PID
 Sample : WG2104736-3,31,10,10 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG2104736,ICAL22400 (Sig #1); WG,ICAL22400 (Sig #2)
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 19 08:04:07 2025
 Quant Method : K:\Gonzo\2025\250819A\G_250619N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Jun 20 07:10:41 2025
 Response via : Initial Calibration

Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane

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

Internal Standards						
1) Fluorobenzene	5.950	96	418534	10.000	ug/L	0.00
59) Chlorobenzene-d5	9.485	117	337983	10.000	ug/L	0.00
79) 1,4-Dichlorobenzene-d4	12.198	152	207571	10.000	ug/L	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	5.150	113	116183	10.694	ug/L	0.00
Spiked Amount	10.000	Range 70 - 130	Recovery	=	106.94%	
43) 1,2-Dichloroethane-d4	5.674	65	136945	12.312	ug/L	0.00
Spiked Amount	10.000	Range 70 - 130	Recovery	=	123.12%	
60) Toluene-d8	7.636	98	419436	9.991	ug/L	0.00
Spiked Amount	10.000	Range 70 - 130	Recovery	=	99.91%	
83) 4-Bromofluorobenzene	10.981	95	153634	8.974	ug/L	0.00
Spiked Amount	10.000	Range 70 - 130	Recovery	=	89.74%	
Target Compounds						
						Qvalue
41) Benzene	5.533	78	325321	9.967	ug/L	97
61) Toluene	7.699	92	202105	9.339	ug/L	100
74) Ethylbenzene	9.534	91	372300	8.985	ug/L	97
76) p/m Xylene	9.724	106	312993	18.969	ug/L	97
77) o Xylene	10.268	106	304595	18.411	ug/L	94
82) Isopropylbenzene	10.649	105	357691	8.464	ug/L	99
85) n-Propylbenzene	11.137	91	415347	8.595	ug/L	99
90) 1,3,5-Trimethylbenzene	11.363	105	324702	8.936	ug/L	99
94) tert-Butylbenzene	11.703	119	255541	8.469	ug/L	99
97) 1,2,4-Trimethylbenzene	11.781	105	314830	8.681	ug/L	99
98) sec-Butylbenzene	11.894	105	364595	8.860	ug/L	99
99) p-Isopropyltoluene	12.050	119	318770	8.612	ug/L	99
103) n-Butylbenzene	12.481	91	250138	8.791	ug/L	98
110) Naphthalene	14.341	128	168849	6.388	ug/L	100

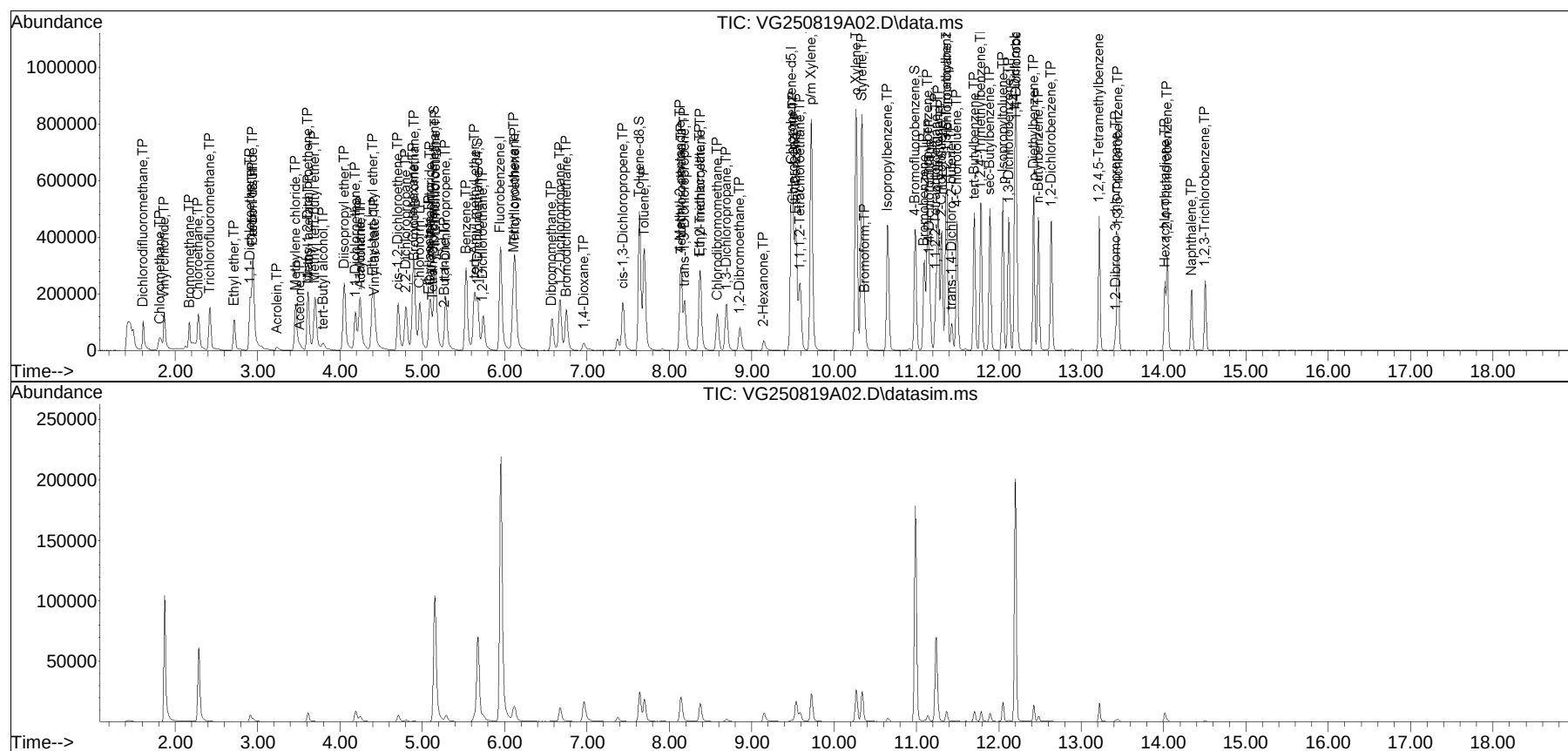
(#) = qualifier out of range (m) = manual integration (+) = signals summed

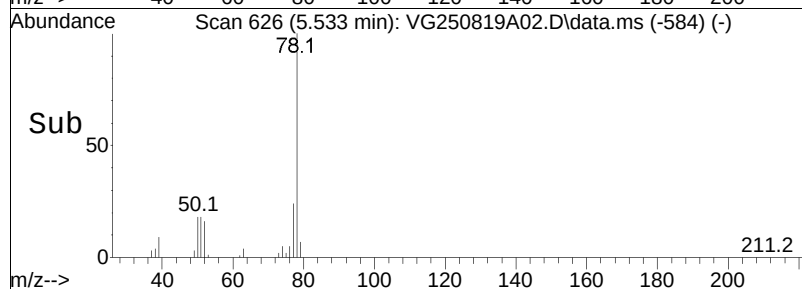
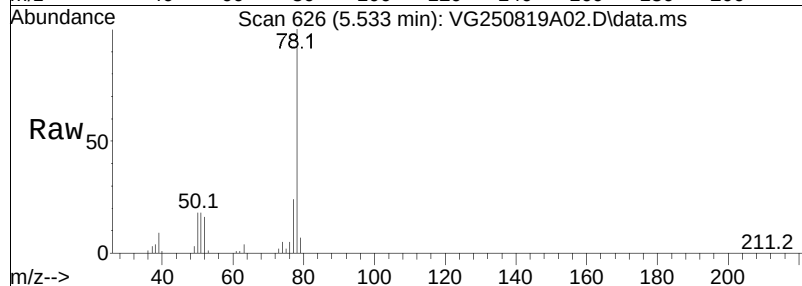
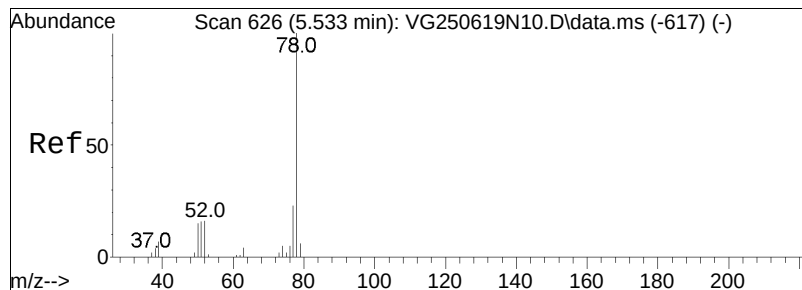
Quantitation Report (QT Reviewed)

Data Path : K:\Gonzo\2025\250819A\
 Data File : VG250819A02.D
 Acq On : 19 Aug 2025 7:41 am
 Operator : GONZO:PID
 Sample : WG2104736-3,31,10,10 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG2104736,ICAL22400 (Sig #1); WG,ICAL22400 (Sig #2)
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 19 08:04:07 2025
 Quant Method : K:\Gonzo\2025\250819A\G_250619N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Jun 20 07:10:41 2025
 Response via : Initial Calibration

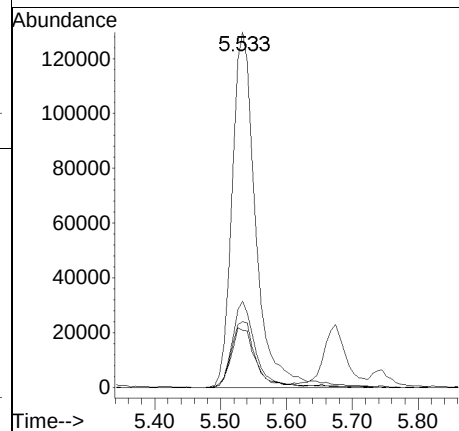
Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane

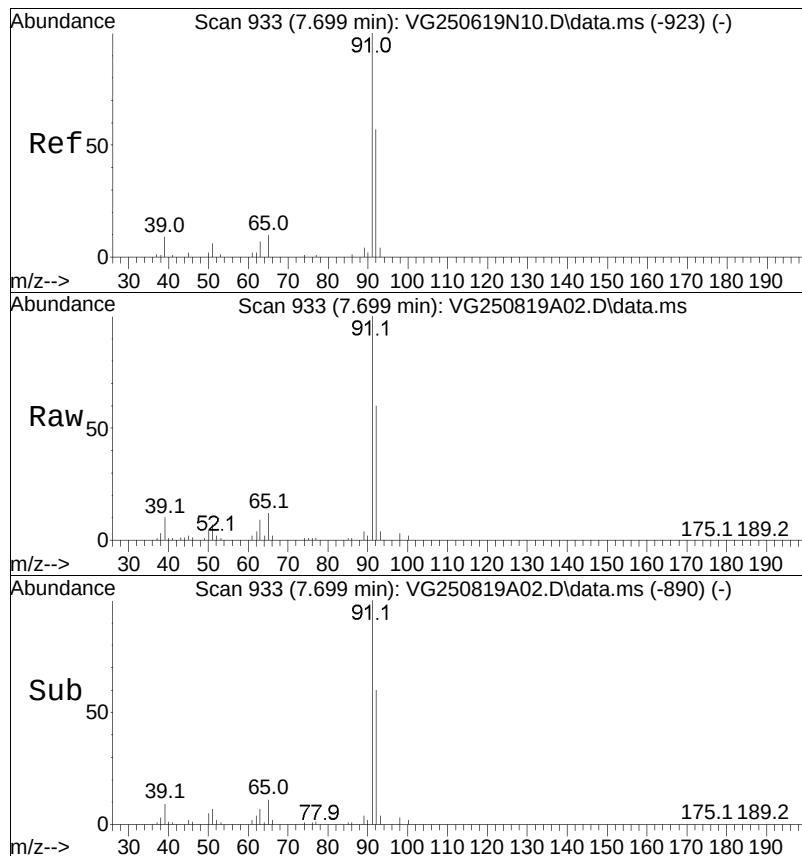




#41
Benzene
Concen: 9.97 ug/L
RT: 5.533 min Scan# 626
Delta R.T. 0.000 min
Lab File: VG250819A02.D
Acq: 19 Aug 2025 7:41 am

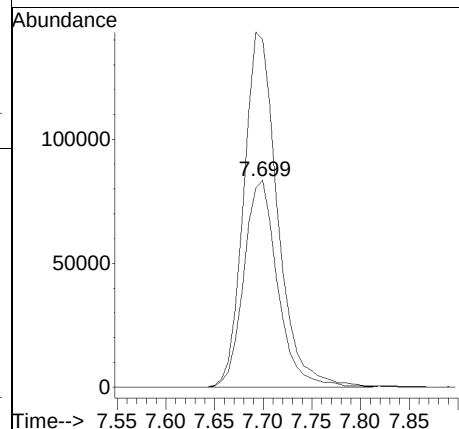
Tgt Ion:	78	Resp:	325321
Ion Ratio	Lower	Upper	
78	100		
77	23.0	15.1	31.3
51	18.3	10.3	21.3
52	17.1	9.9	20.7

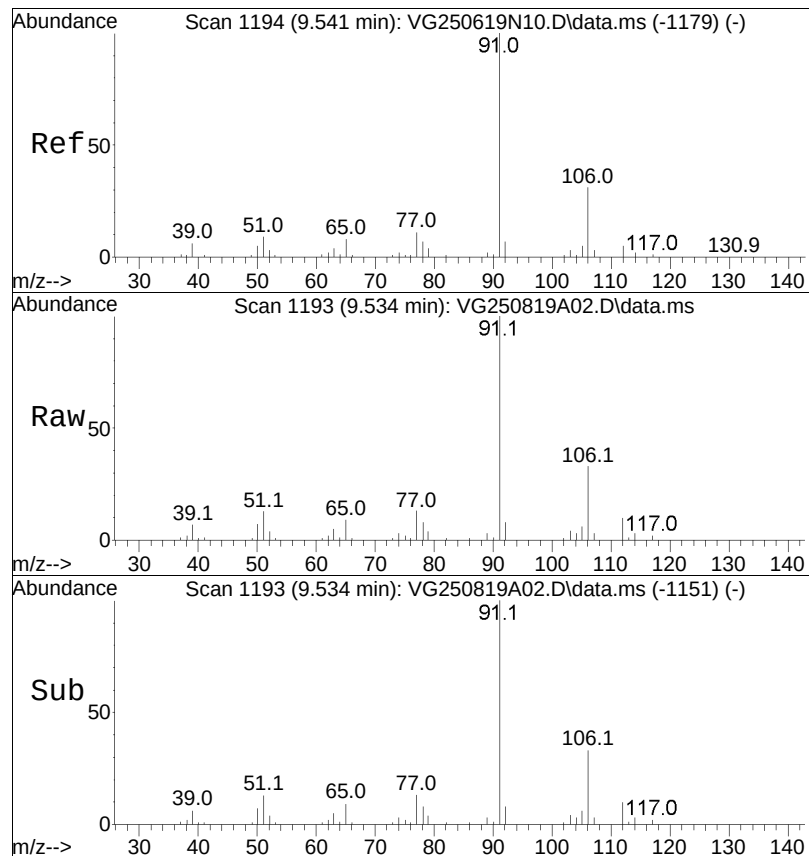




#61
 Toluene
 Concen: 9.34 ug/L
 RT: 7.699 min Scan# 933
 Delta R.T. 0.000 min
 Lab File: VG250819A02.D
 Acq: 19 Aug 2025 7:41 am

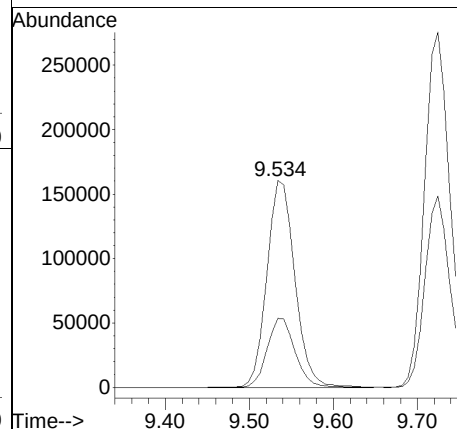
Tgt Ion	Ratio	Lower	Upper
92	100		
91	172.3	138.2	207.2

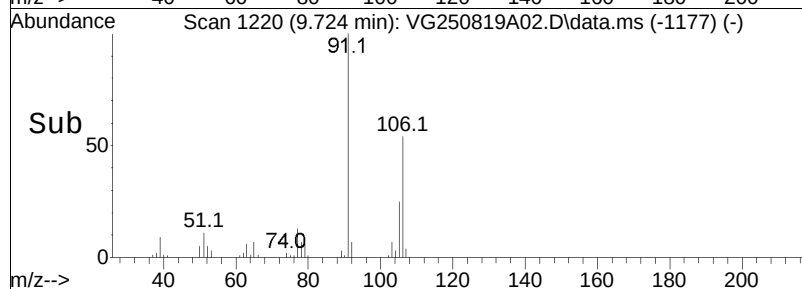
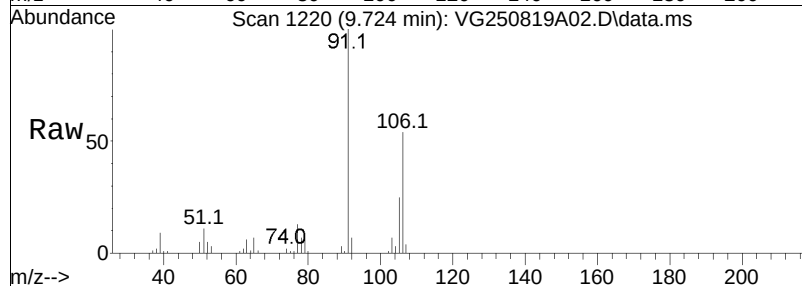
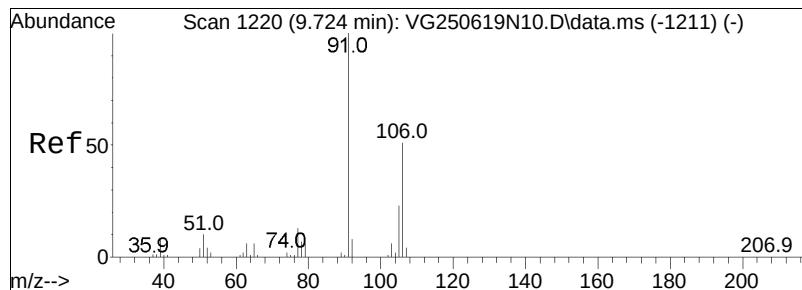




#74
 Ethylbenzene
 Concen: 8.99 ug/L
 RT: 9.534 min Scan# 1193
 Delta R.T. -0.007 min
 Lab File: VG250819A02.D
 Acq: 19 Aug 2025 7:41 am

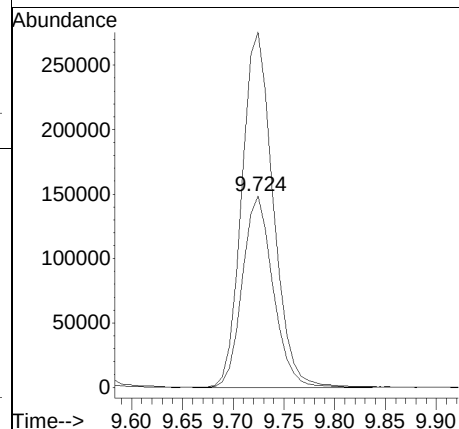
Tgt Ion	Ratio	Lower	Upper
91	100		
106	33.2	25.0	37.6

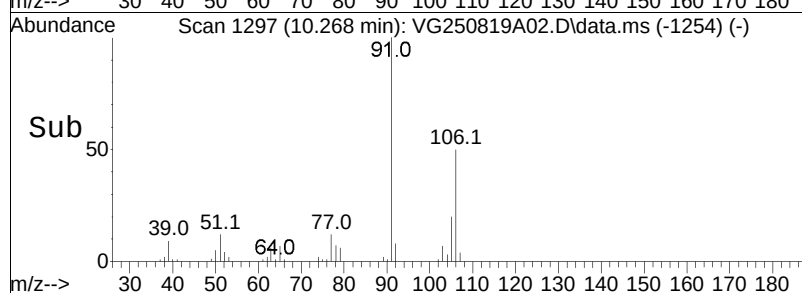
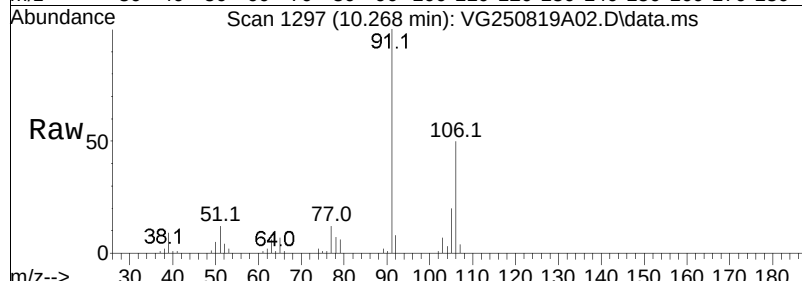
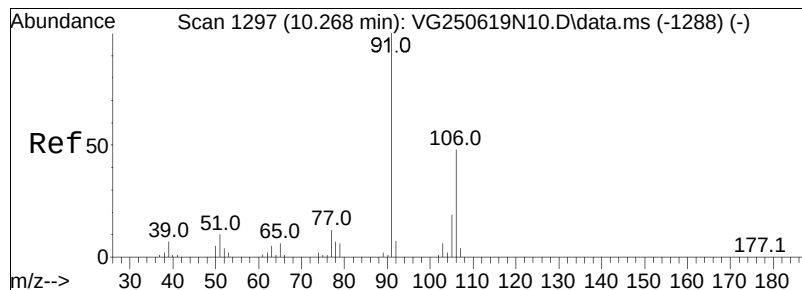




#76
 p/m Xylene
 Concen: 18.97 ug/L
 RT: 9.724 min Scan# 1220
 Delta R.T. 0.000 min
 Lab File: VG250819A02.D
 Acq: 19 Aug 2025 7:41 am

Tgt Ion	Ratio	Lower	Upper
106	100		
91	189.1	154.8	232.2





#77

o Xylene

Concen: 18.41 ug/L

RT: 10.268 min Scan# 1297

Delta R.T. 0.000 min

Lab File: VG250819A02.D

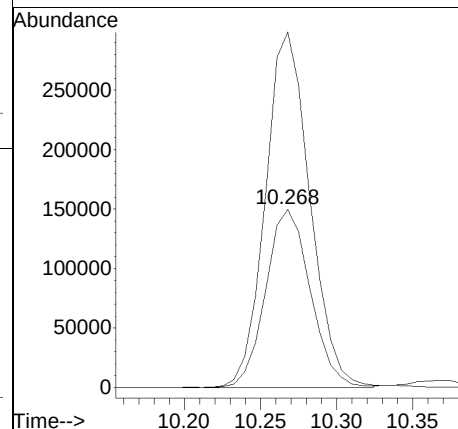
Acq: 19 Aug 2025 7:41 am

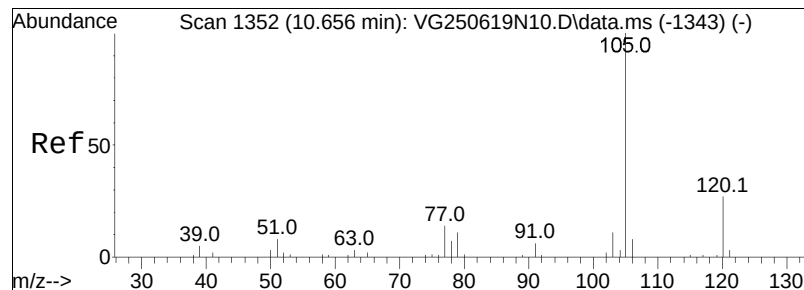
Tgt Ion:106 Resp: 304595

Ion Ratio Lower Upper

106 100

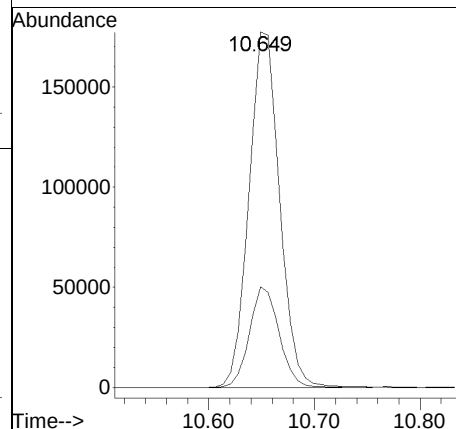
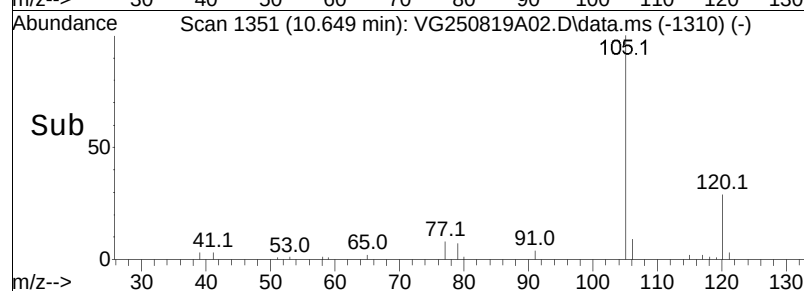
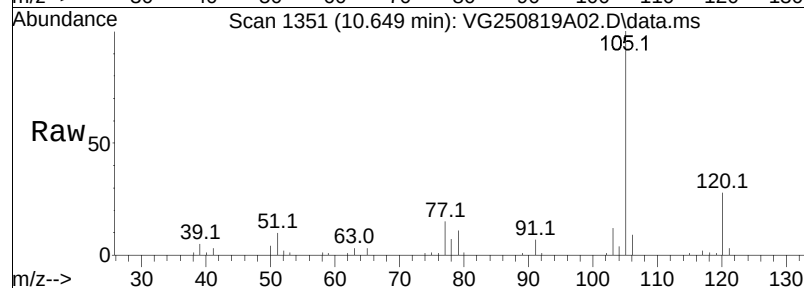
91 198.9 166.0 249.0

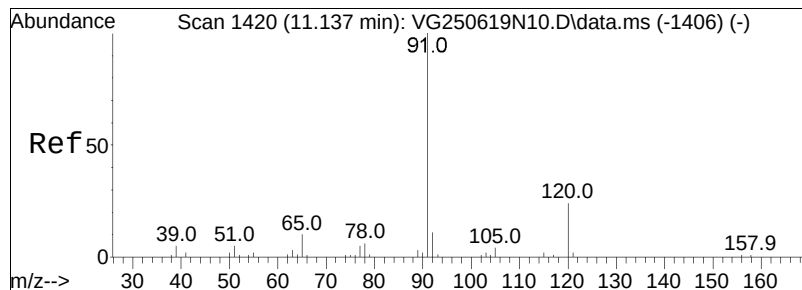




#82
 Isopropylbenzene
 Concen: 8.46 ug/L
 RT: 10.649 min Scan# 1351
 Delta R.T. -0.007 min
 Lab File: VG250819A02.D
 Acq: 19 Aug 2025 7:41 am

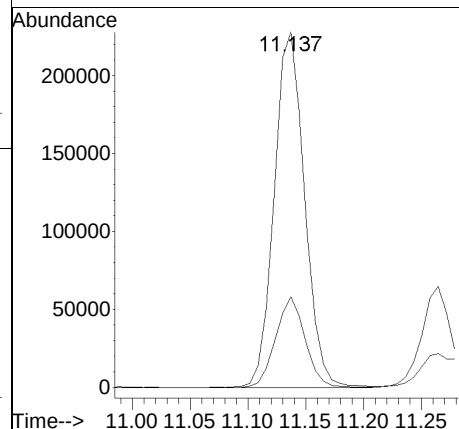
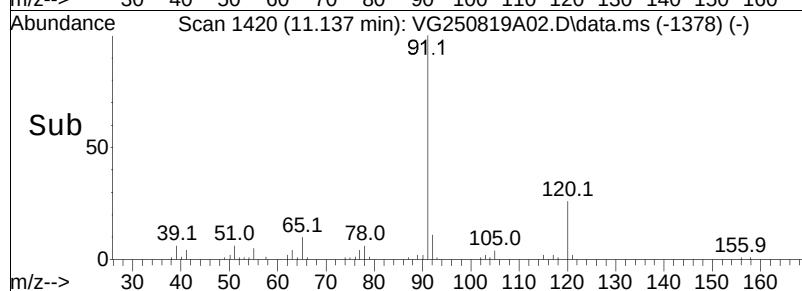
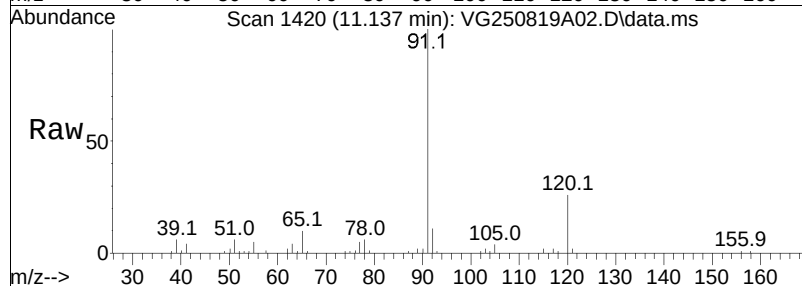
Tgt Ion	Ratio	Lower	Upper
105	100		
120	27.3	7.6	47.6

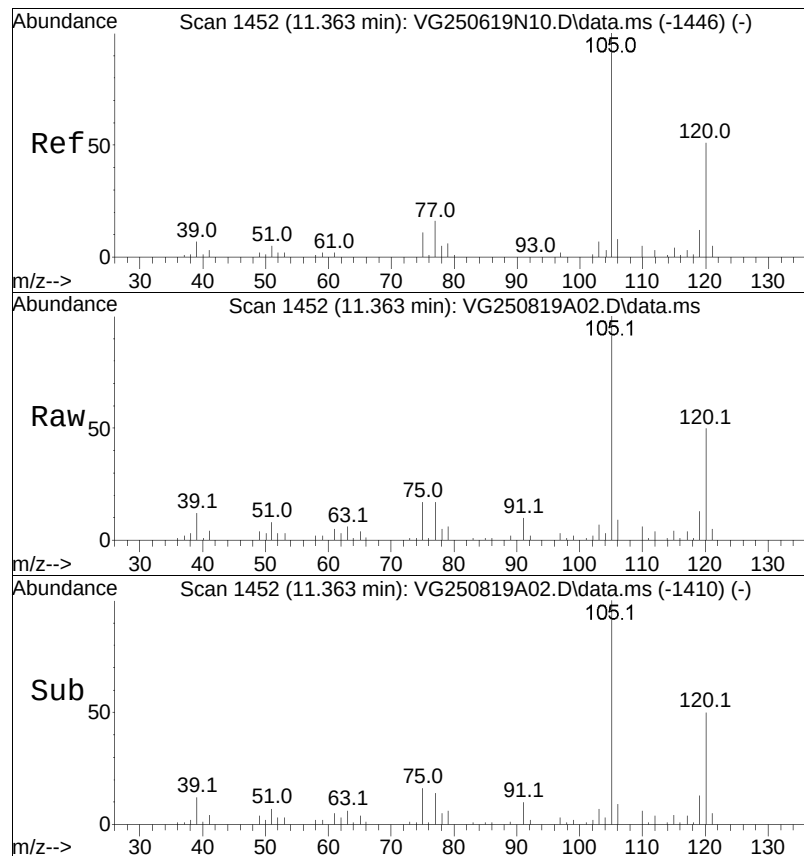




#85
 n-Propylbenzene
 Concen: 8.59 ug/L
 RT: 11.137 min Scan# 1420
 Delta R.T. 0.000 min
 Lab File: VG250819A02.D
 Acq: 19 Aug 2025 7:41 am

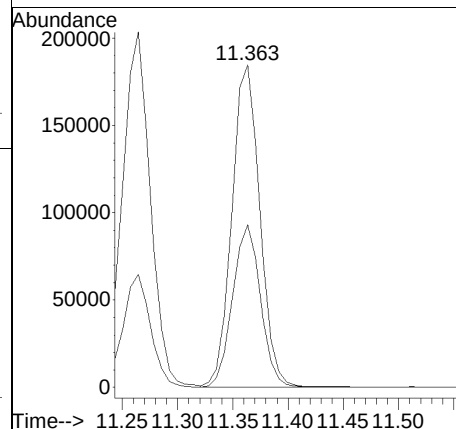
Tgt Ion	Ratio	Lower	Upper
91	100		
120	24.7	19.4	29.2

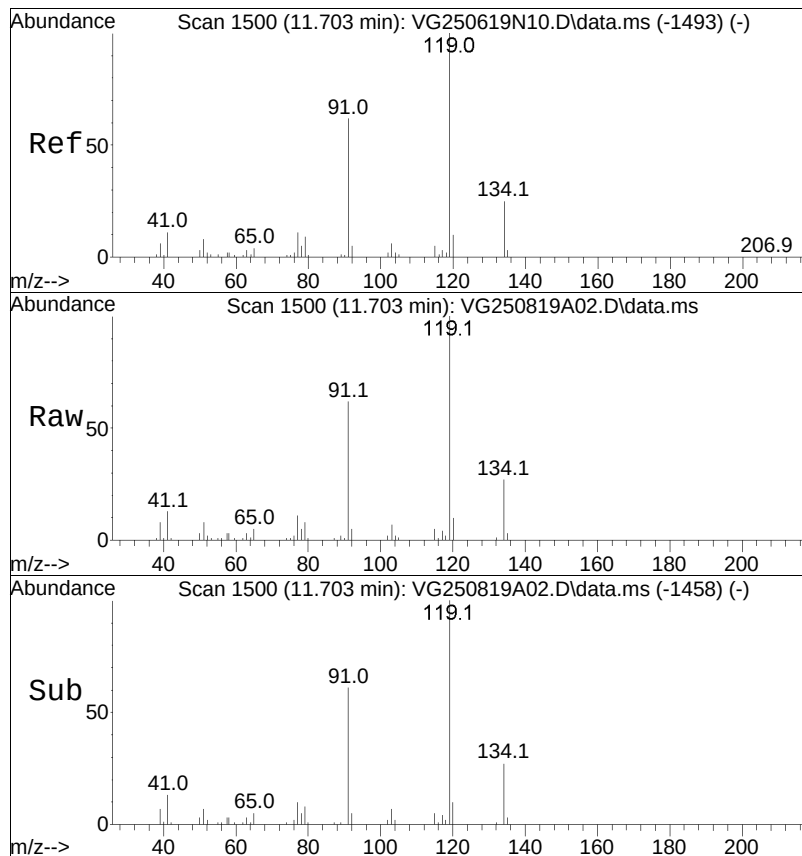




#90
 1,3,5-Trimethylbenzene
 Concen: 8.94 ug/L
 RT: 11.363 min Scan# 1452
 Delta R.T. 0.000 min
 Lab File: VG250819A02.D
 Acq: 19 Aug 2025 7:41 am

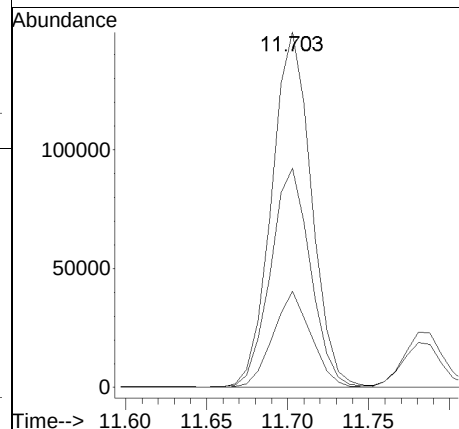
Tgt Ion	105	120	Ratio	Lower	Upper
Resp:	324702				
Ion Ratio	100	50.2		40.7	61.1

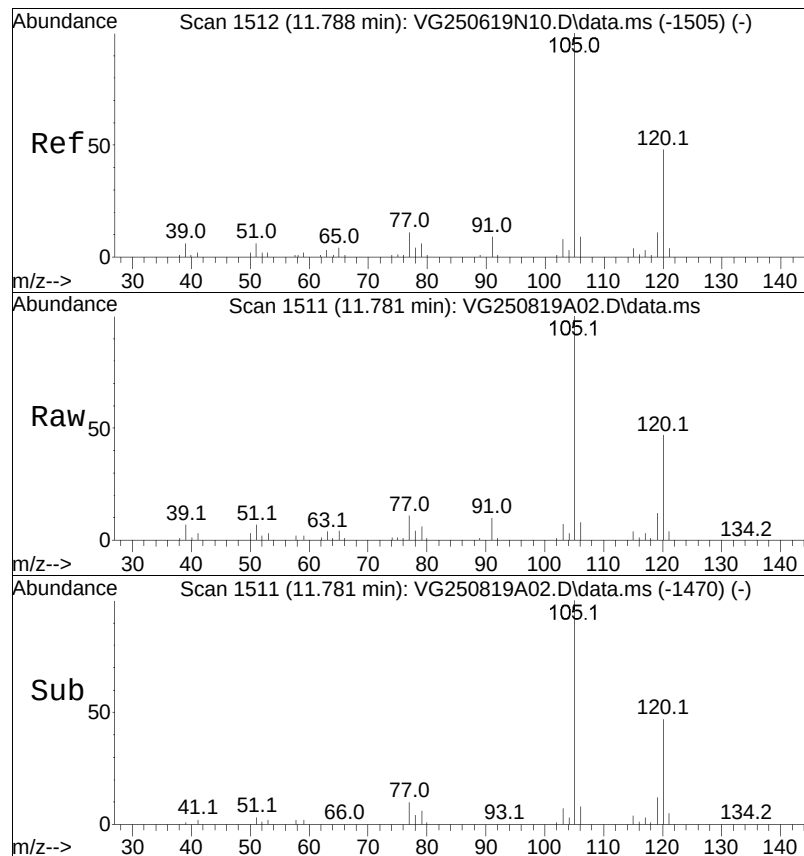




#94
 tert-Butylbenzene
 Concen: 8.47 ug/L
 RT: 11.703 min Scan# 1500
 Delta R.T. 0.000 min
 Lab File: VG250819A02.D
 Acq: 19 Aug 2025 7:41 am

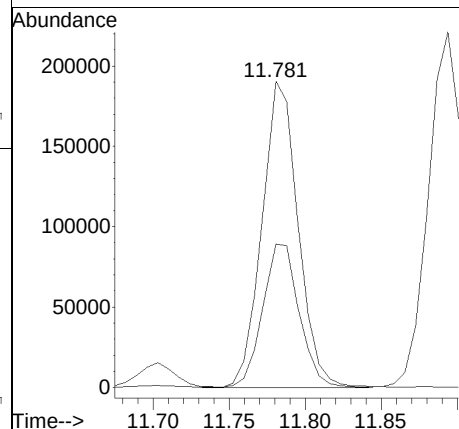
Tgt	Ion	Ratio	Resp	Lower	Upper
119	100		255541		
91	61.7			50.2	75.2
134	25.9			20.2	30.2

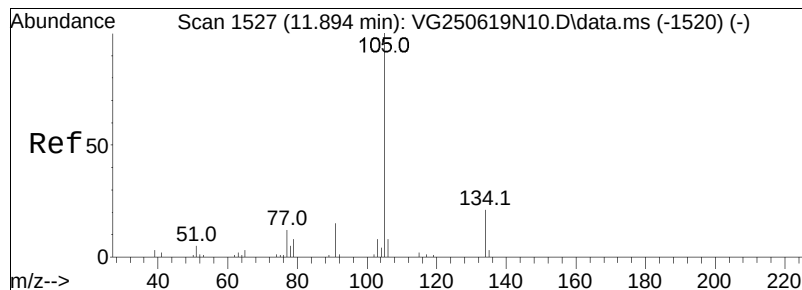




#97
 1,2,4-Trimethylbenzene
 Concen: 8.68 ug/L
 RT: 11.781 min Scan# 1511
 Delta R.T. -0.007 min
 Lab File: VG250819A02.D
 Acq: 19 Aug 2025 7:41 am

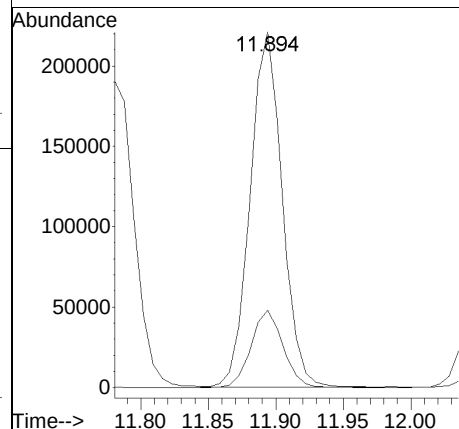
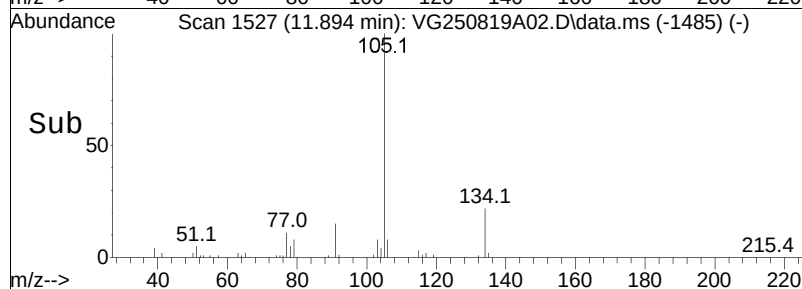
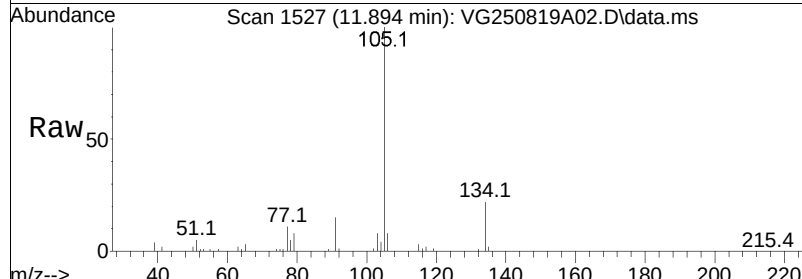
Tgt Ion	Ratio	Lower	Upper
105	100		
120	47.2	38.2	57.2

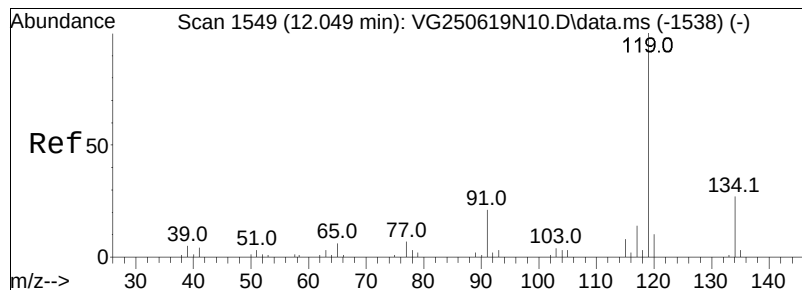




#98
 sec-Butylbenzene
 Concen: 8.86 ug/L
 RT: 11.894 min Scan# 1527
 Delta R.T. 0.000 min
 Lab File: VG250819A02.D
 Acq: 19 Aug 2025 7:41 am

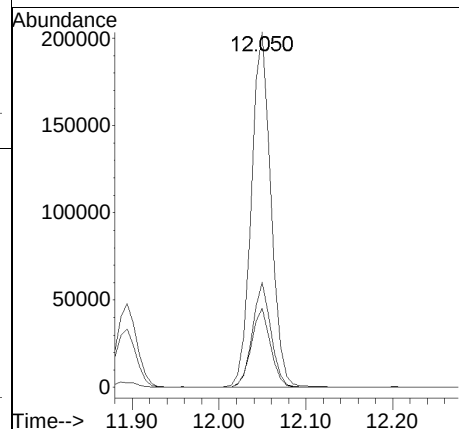
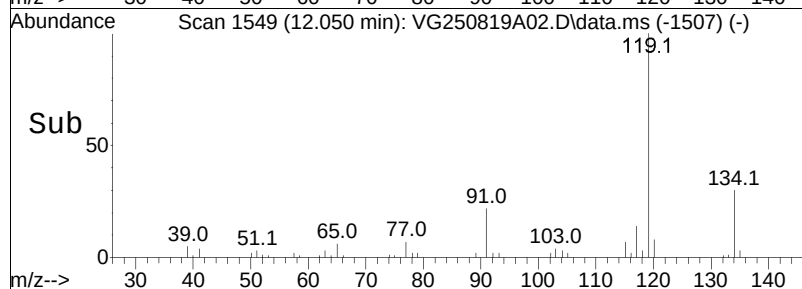
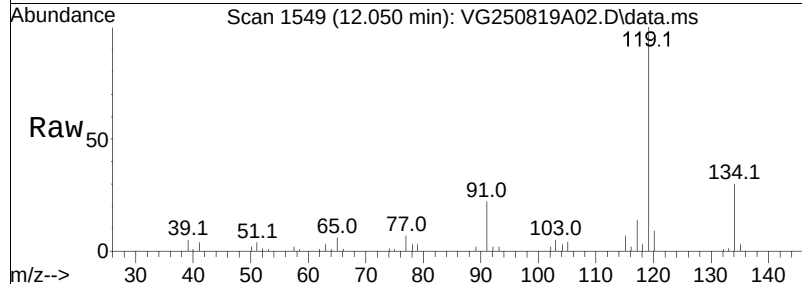
Tgt Ion	Ratio	Lower	Upper
105	100		
134	21.5	13.7	28.5

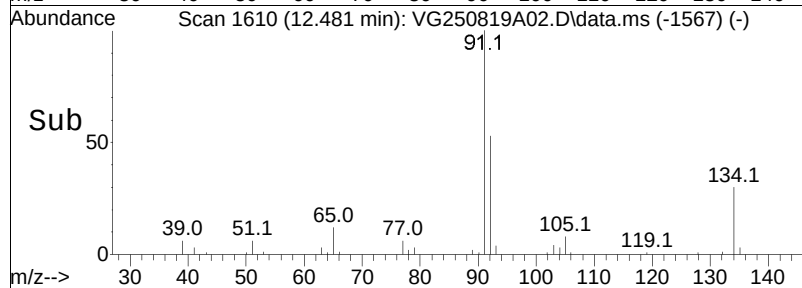
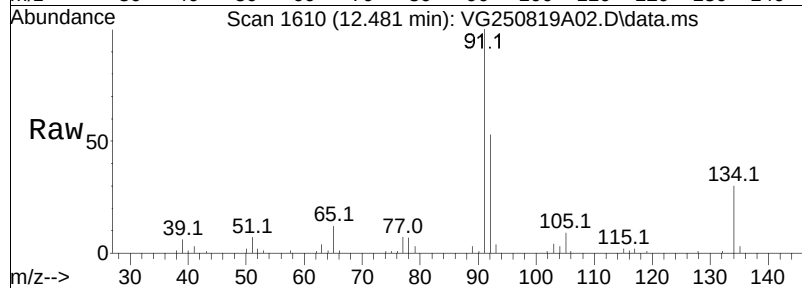
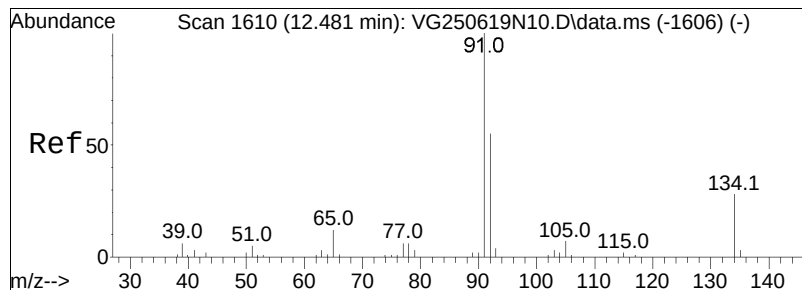




#99
 p-Isopropyltoluene
 Concen: 8.61 ug/L
 RT: 12.050 min Scan# 1549
 Delta R.T. 0.000 min
 Lab File: VG250819A02.D
 Acq: 19 Aug 2025 7:41 am

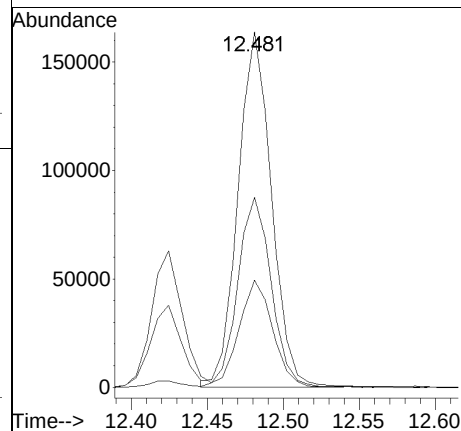
Tgt Ion	Ratio	Resp	Lower	Upper
119	100	318770		
134	28.0		17.7	36.9
91	21.9		14.4	30.0

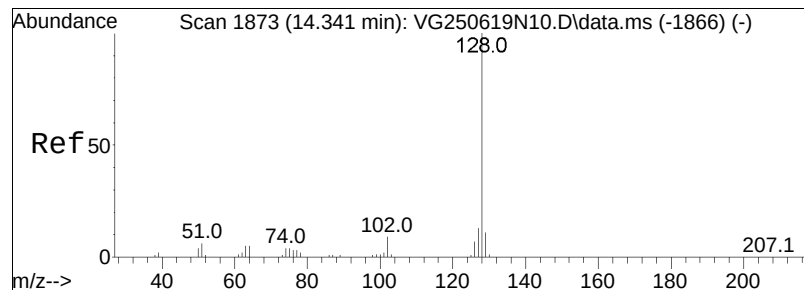




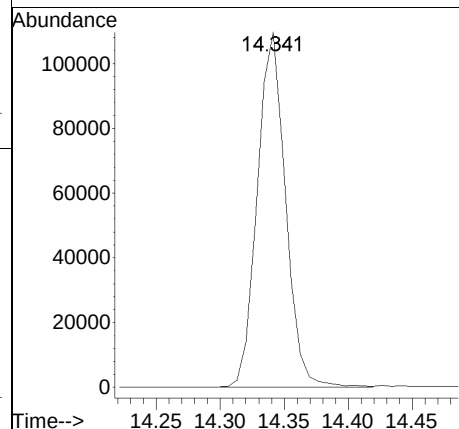
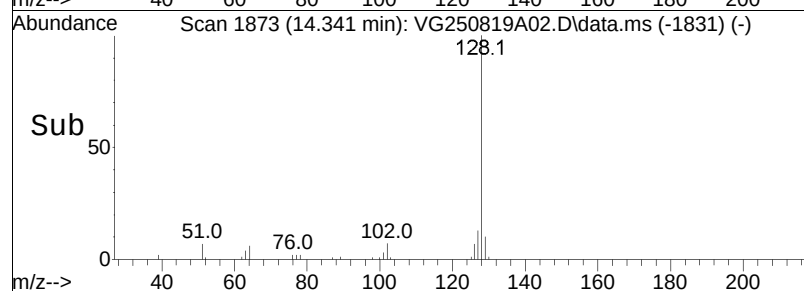
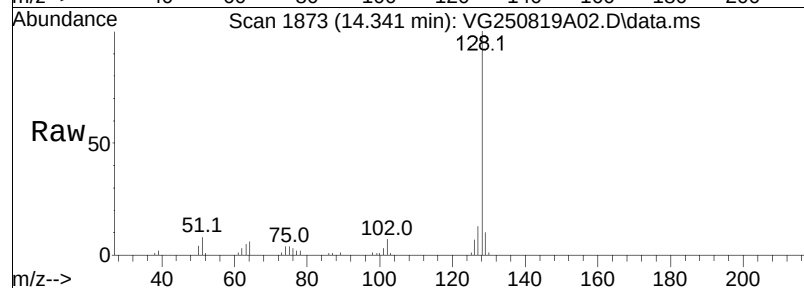
#103
 n-Butylbenzene
 Concen: 8.79 ug/L
 RT: 12.481 min Scan# 1610
 Delta R.T. 0.000 min
 Lab File: VG250819A02.D
 Acq: 19 Aug 2025 7:41 am

Tgt Ion:	91	Resp:	250138
Ion Ratio	Lower	Upper	
91	100		
92	53.9	44.1	66.1
134	30.5	23.1	34.7





#110
Naphthalene
Concen: 6.39 ug/L
RT: 14.341 min Scan# 1873
Delta R.T. 0.000 min
Lab File: VG250819A02.D
Acq: 19 Aug 2025 7:41 am
Tgt Ion:128 Resp: 168849



Quantitation Report (QT Reviewed)

Data Path : K:\Gonzo\2025\250819A\
 Data File : VG250819A03.D
 Acq On : 19 Aug 2025 8:07 am
 Operator : GONZO:PID
 Sample : WG2104736-4,31,10,10 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG2104736,ICAL22400 (Sig #1); WG,ICAL22400 (Sig #2)
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 19 08:29:10 2025
 Quant Method : K:\Gonzo\2025\250819A\G_250619N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Jun 20 07:10:41 2025
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Gonzo\2025\250819A\VG250819A02.D
 Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane

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

Internal Standards						
1) Fluorobenzene	5.949	96	423382	10.000	ug/L	0.00
Standard Area 1 = 418534			Recovery	=	101.16%	
59) Chlorobenzene-d5	9.484	117	342482	10.000	ug/L	0.00
Standard Area 1 = 337983			Recovery	=	101.33%	
79) 1,4-Dichlorobenzene-d4	12.198	152	208075	10.000	ug/L	0.00
Standard Area 1 = 207571			Recovery	=	100.24%	
System Monitoring Compounds						
36) Dibromofluoromethane	5.150	113	119494	10.873	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	108.73%	
43) 1,2-Dichloroethane-d4	5.674	65	138489	12.309	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	123.09%	
60) Toluene-d8	7.636	98	427749	10.055	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	100.55%	
83) 4-Bromofluorobenzene	10.981	95	155559	9.064	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	90.64%	
Target Compounds						Qvalue
41) Benzene	5.533	78	331796	10.049	ug/L	97
61) Toluene	7.692	92	208146	9.492	ug/L	96
74) Ethylbenzene	9.534	91	382908	9.120	ug/L	98
76) p/m Xylene	9.724	106	319960	19.136	ug/L	97
77) o Xylene	10.268	106	309198	18.443	ug/L	95
82) Isopropylbenzene	10.649	105	368484	8.698	ug/L	99
85) n-Propylbenzene	11.137	91	422651	8.725	ug/L	99
90) 1,3,5-Trimethylbenzene	11.363	105	330581	9.076	ug/L	98
94) tert-Butylbenzene	11.703	119	262397	8.675	ug/L	99
97) 1,2,4-Trimethylbenzene	11.781	105	321875	8.853	ug/L	100
98) sec-Butylbenzene	11.894	105	373377	9.051	ug/L	99
99) p-Isopropyltoluene	12.049	119	323819	8.728	ug/L	99
103) n-Butylbenzene	12.481	91	254618	8.927	ug/L	98
110) Naphthalene	14.341	128	164502	6.209	ug/L	100

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

Quantitation Report (QT Reviewed)

Data Path : K:\Gonzo\2025\250819A\
 Data File : VG250819A03.D
 Acq On : 19 Aug 2025 8:07 am
 Operator : GONZO:PID
 Sample : WG2104736-4,31,10,10 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG2104736,ICAL22400 (Sig #1); WG,ICAL22400 (Sig #2)
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 19 08:29:10 2025
 Quant Method : K:\Gonzo\2025\250819A\G_250619N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Jun 20 07:10:41 2025
 Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Gonzo\2025\250819A\VG250819A02.D
 Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane

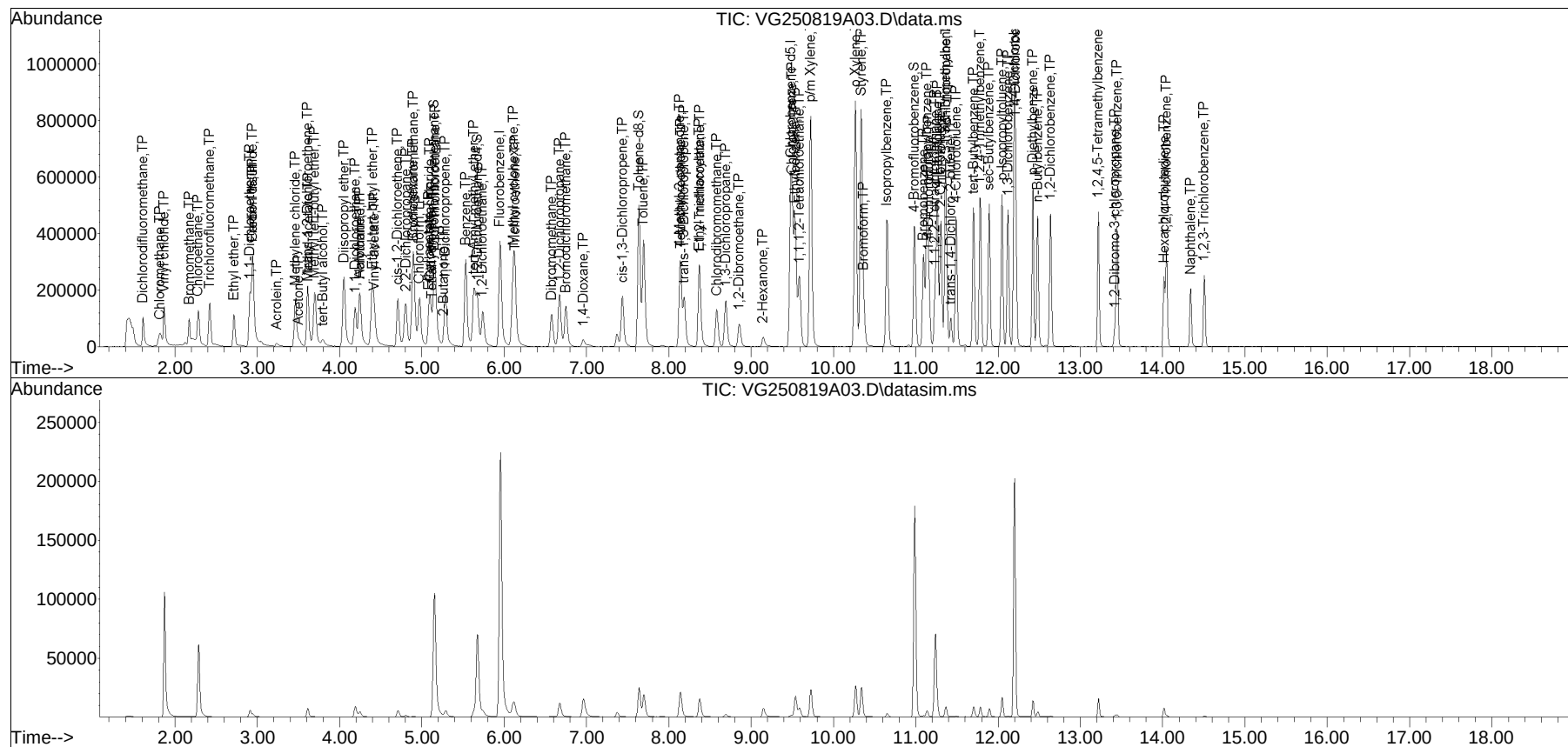
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

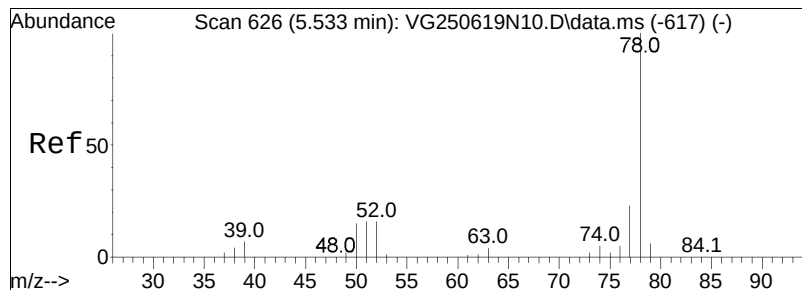
Quantitation Report (QT Reviewed)

Data Path : K:\Gonzo\2025\250819A\
 Data File : VG250819A03.D
 Acq On : 19 Aug 2025 8:07 am
 Operator : GONZO:PID
 Sample : WG2104736-4,31,10,10 (Sig #1); 8260 CCAL (Sig #2)
 Misc : WG2104736,ICAL22400 (Sig #1); WG,ICAL22400 (Sig #2)
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 19 08:29:10 2025
 Quant Method : K:\Gonzo\2025\250819A\G_250619N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Fri Jun 20 07:10:41 2025
 Response via : Initial Calibration

Sub List : 8260-Curve-IM-2CEVE - Megamix plus Diox-Iodomethane





#41

Benzene

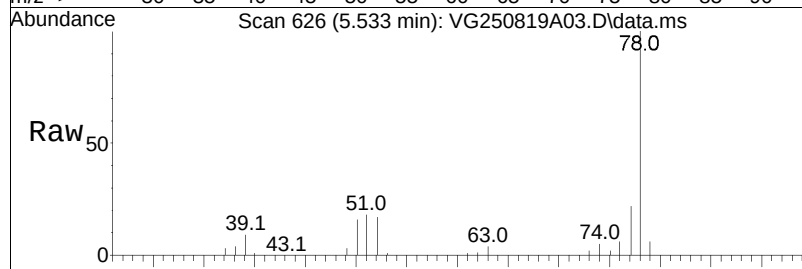
Concen: 10.05 ug/L

RT: 5.533 min Scan# 626

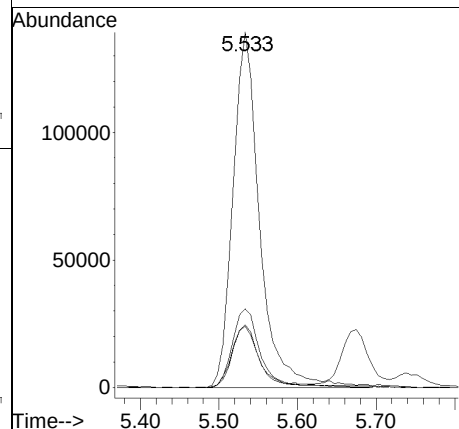
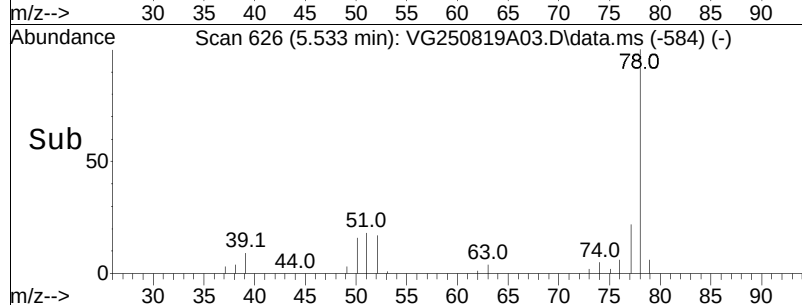
Delta R.T. -0.000 min

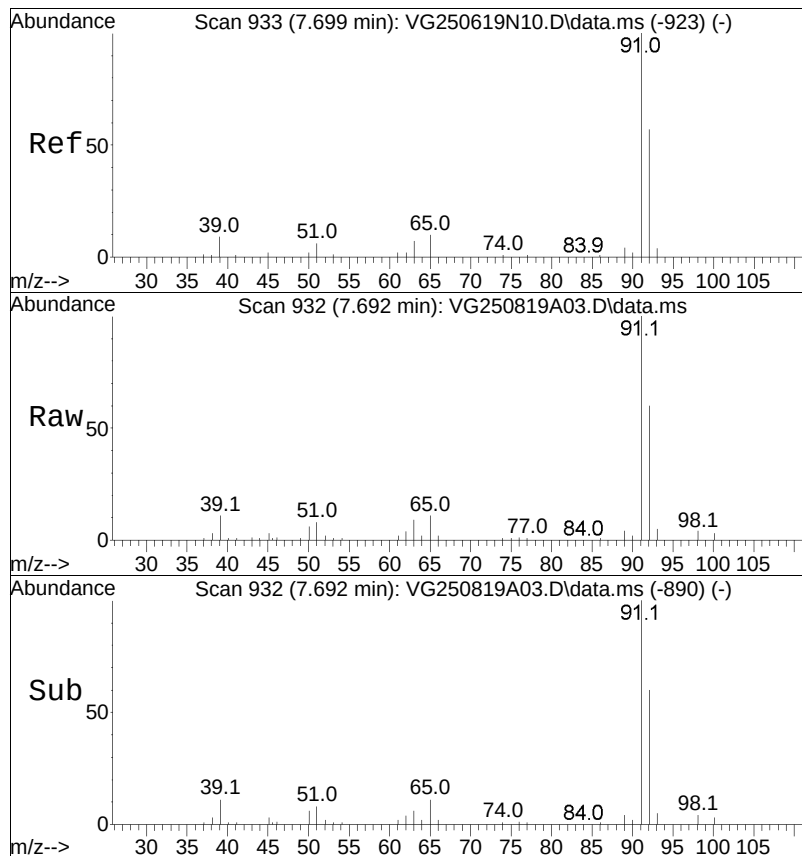
Lab File: VG250819A03.D

Acq: 19 Aug 2025 8:07 am



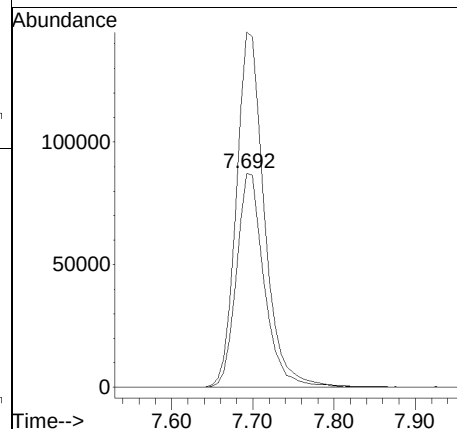
Tgt Ion:	78	Resp:	331796
Ion Ratio	Lower	Upper	
78	100		
77	22.5	15.1	31.3
51	18.1	10.3	21.3
52	17.0	9.9	20.7

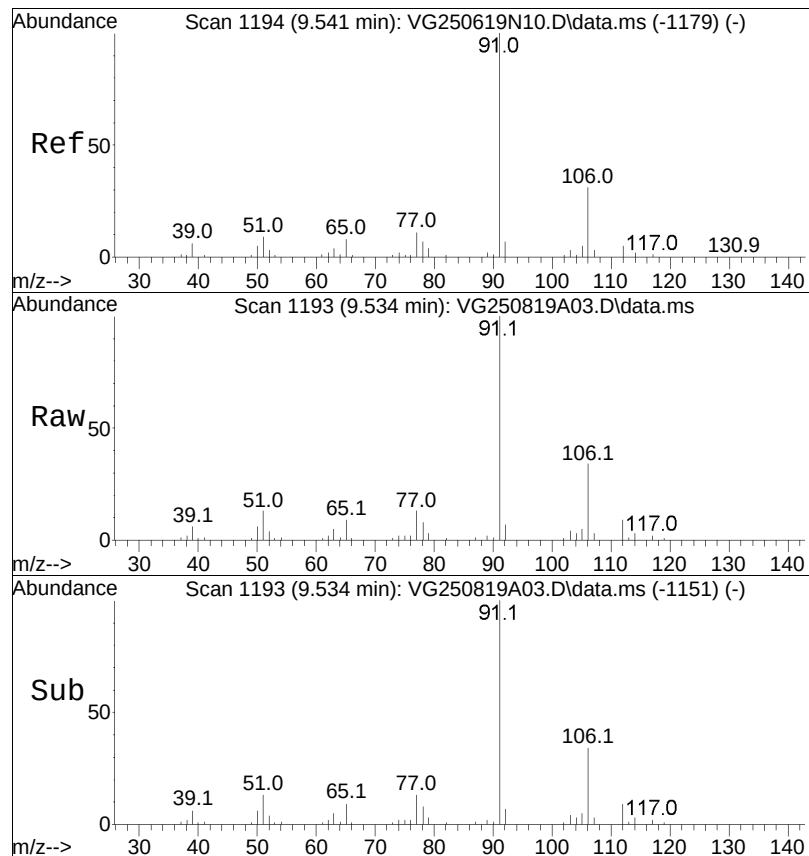




#61
 Toluene
 Concen: 9.49 ug/L
 RT: 7.692 min Scan# 932
 Delta R.T. -0.007 min
 Lab File: VG250819A03.D
 Acq: 19 Aug 2025 8:07 am

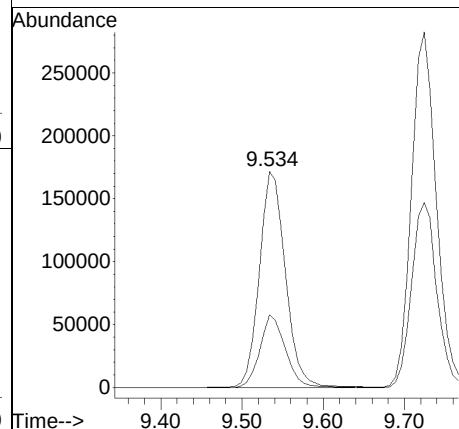
Tgt Ion	Ratio	Lower	Upper
92	100		
91	167.5	138.2	207.2

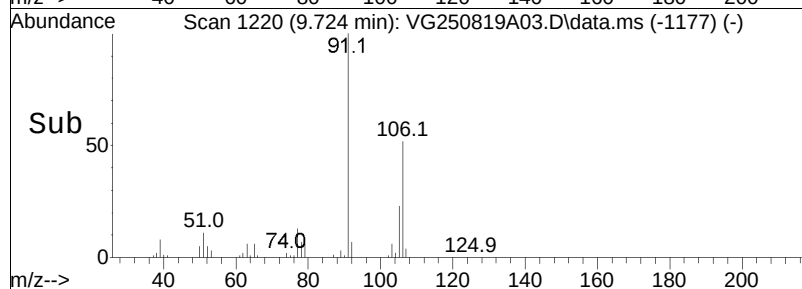
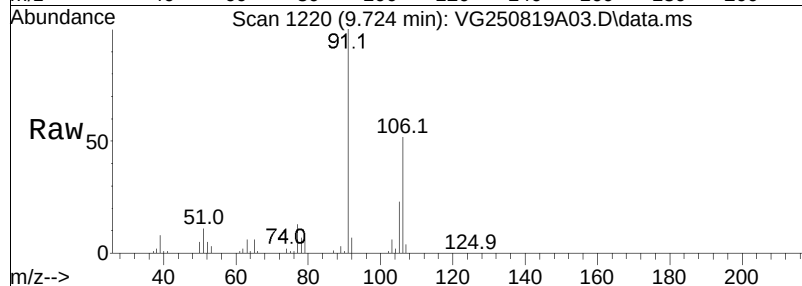
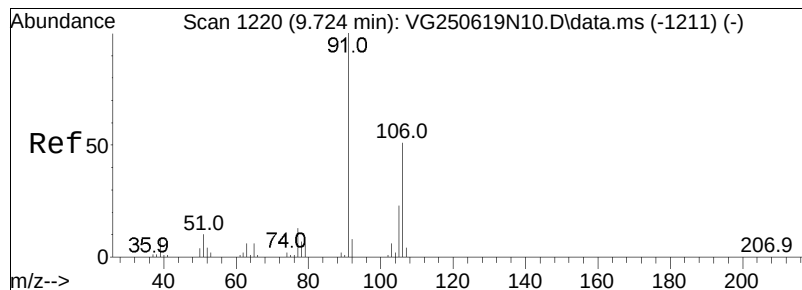




#74
 Ethylbenzene
 Concen: 9.12 ug/L
 RT: 9.534 min Scan# 1193
 Delta R.T. -0.007 min
 Lab File: VG250819A03.D
 Acq: 19 Aug 2025 8:07 am

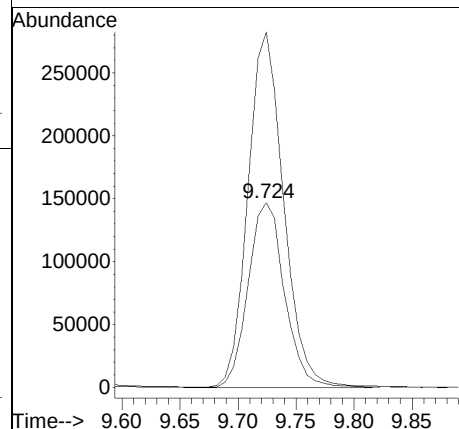
Tgt Ion:	91	106	Ratio	Lower	Upper
Resp:	382908				
Ion Ratio	100	32.7		25.0	37.6

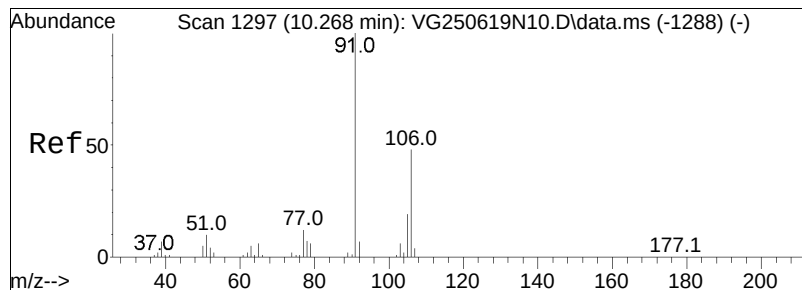




#76
 p/m Xylene
 Concen: 19.14 ug/L
 RT: 9.724 min Scan# 1220
 Delta R.T. -0.000 min
 Lab File: VG250819A03.D
 Acq: 19 Aug 2025 8:07 am

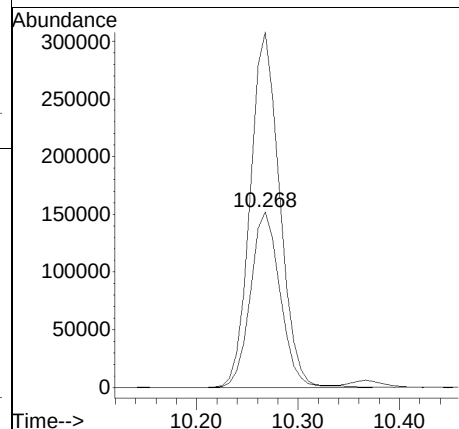
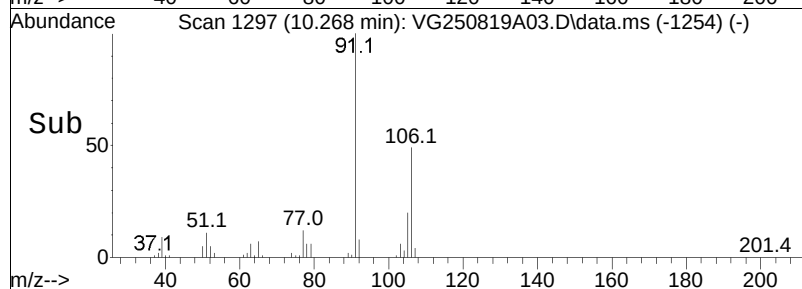
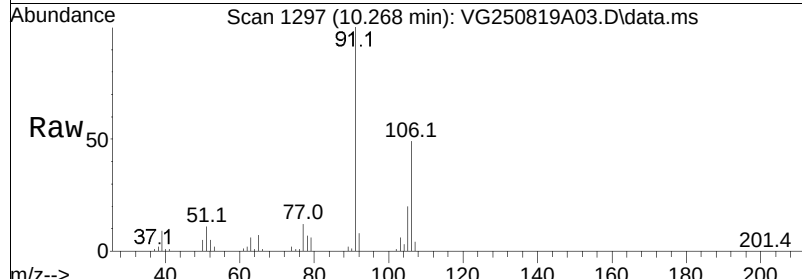
Tgt Ion	Ratio	Lower	Upper
106	100		
91	188.5	154.8	232.2

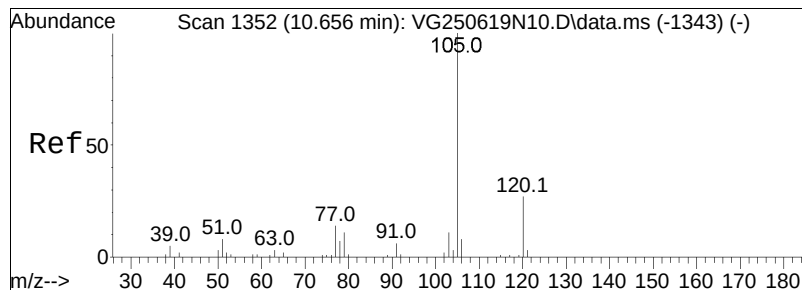




#77
o Xylene
Concen: 18.44 ug/L
RT: 10.268 min Scan# 1297
Delta R.T. -0.000 min
Lab File: VG250819A03.D
Acq: 19 Aug 2025 8:07 am

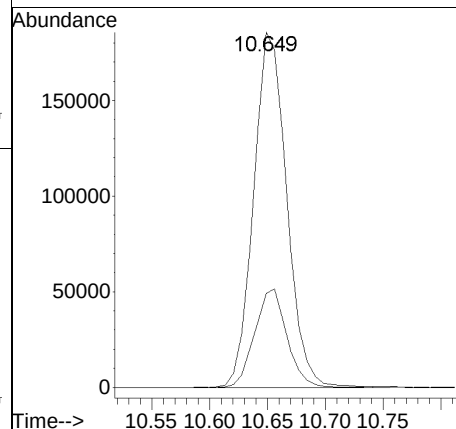
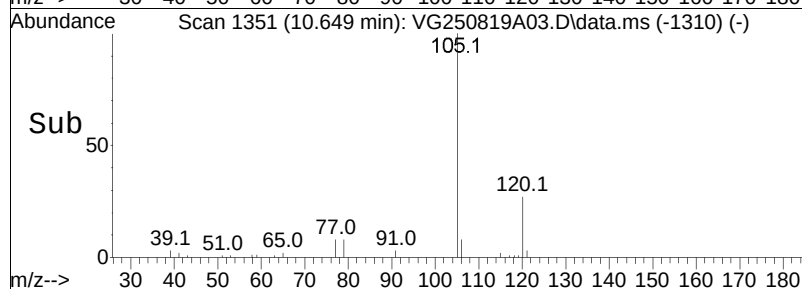
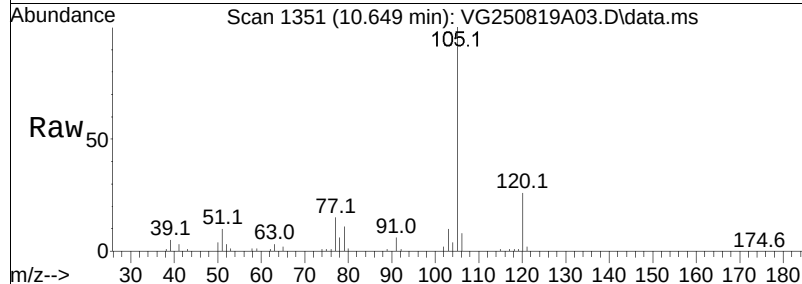
Tgt Ion	Ratio	Lower	Upper
106	100		
91	200.0	166.0	249.0

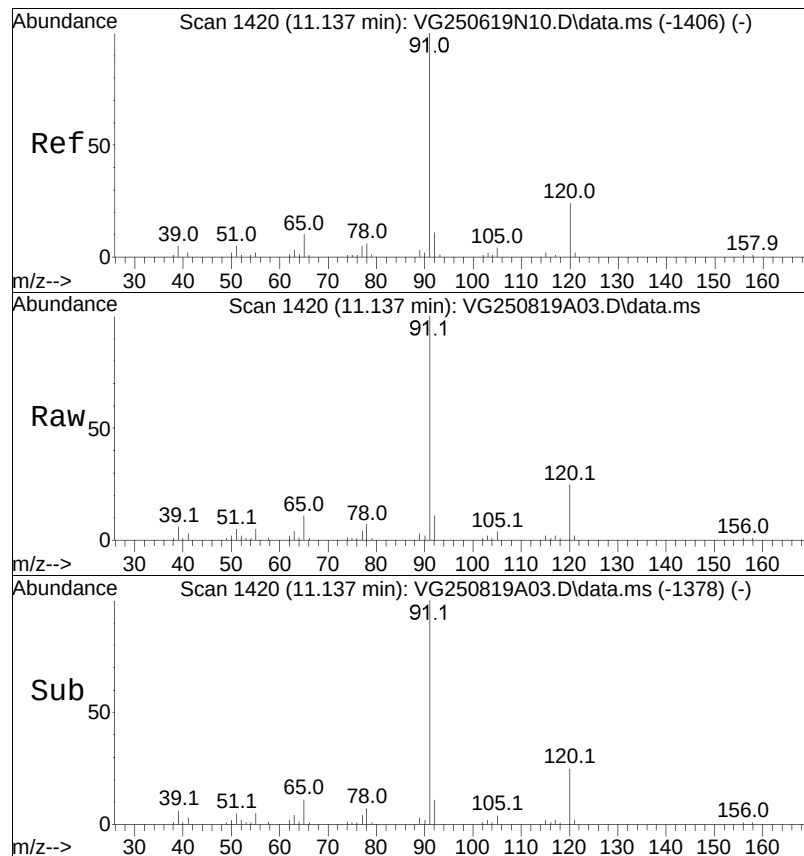




#82
 Isopropylbenzene
 Concen: 8.70 ug/L
 RT: 10.649 min Scan# 1351
 Delta R.T. -0.007 min
 Lab File: VG250819A03.D
 Acq: 19 Aug 2025 8:07 am

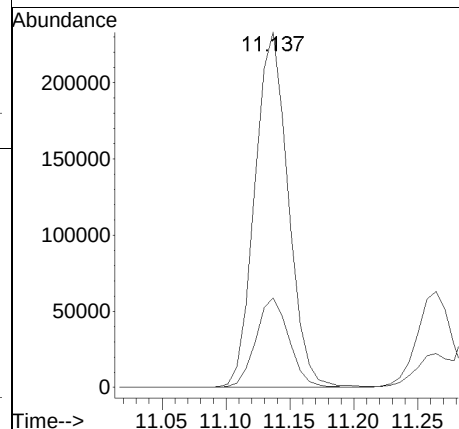
Tgt Ion	Ratio	Lower	Upper
105	100		
120	27.0	7.6	47.6

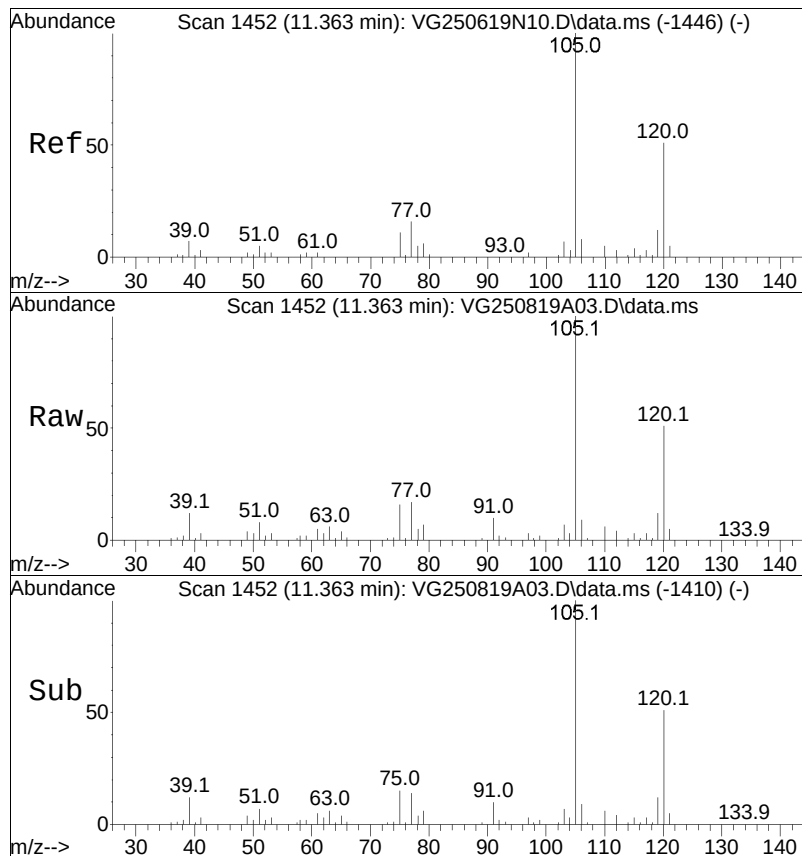




#85
 n-Propylbenzene
 Concen: 8.72 ug/L
 RT: 11.137 min Scan# 1420
 Delta R.T. -0.000 min
 Lab File: VG250819A03.D
 Acq: 19 Aug 2025 8:07 am

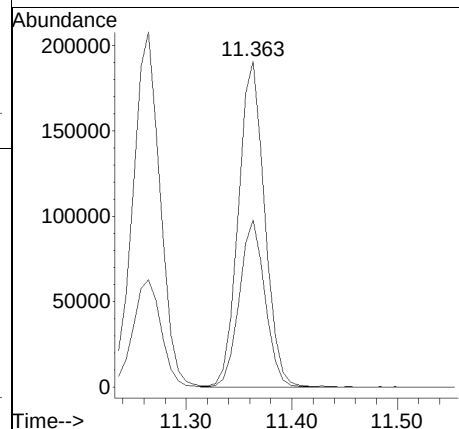
Tgt Ion	Ratio	Lower	Upper
91	100		
120	25.0	19.4	29.2

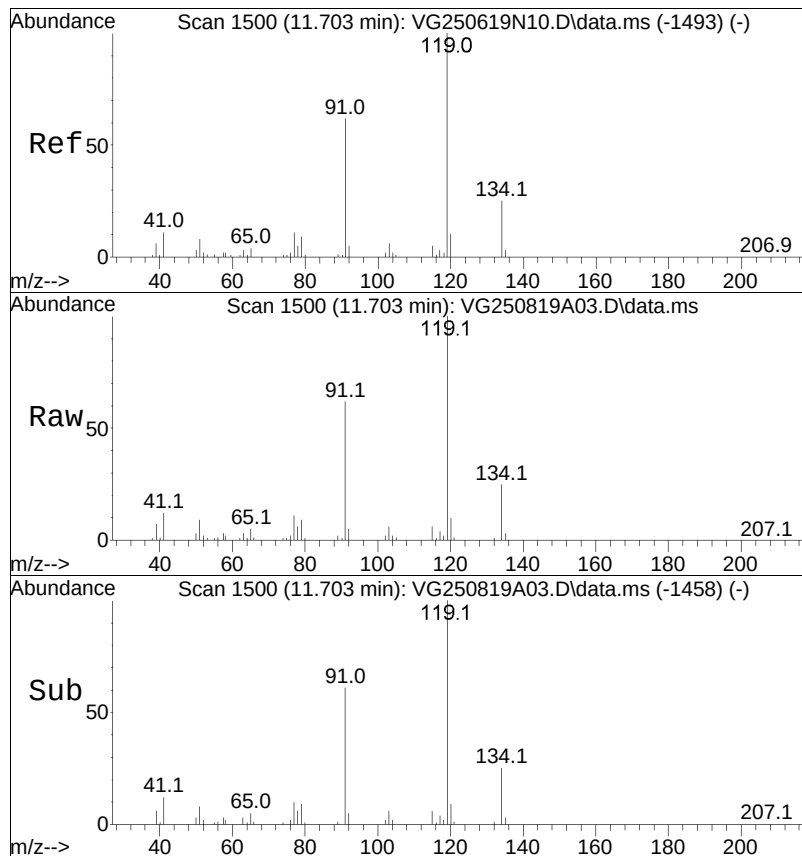




#90
 1,3,5-Trimethylbenzene
 Concen: 9.08 ug/L
 RT: 11.363 min Scan# 1452
 Delta R.T. -0.000 min
 Lab File: VG250819A03.D
 Acq: 19 Aug 2025 8:07 am

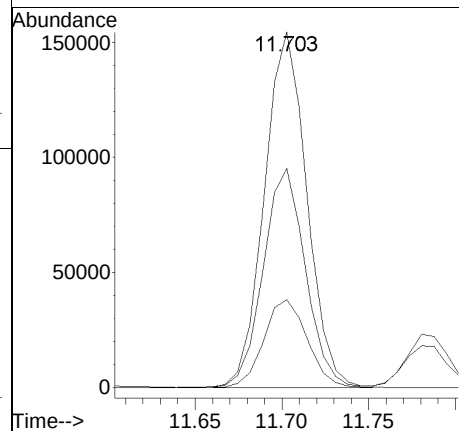
Tgt Ion	Ratio	Lower	Upper
105	100		
120	49.8	40.7	61.1

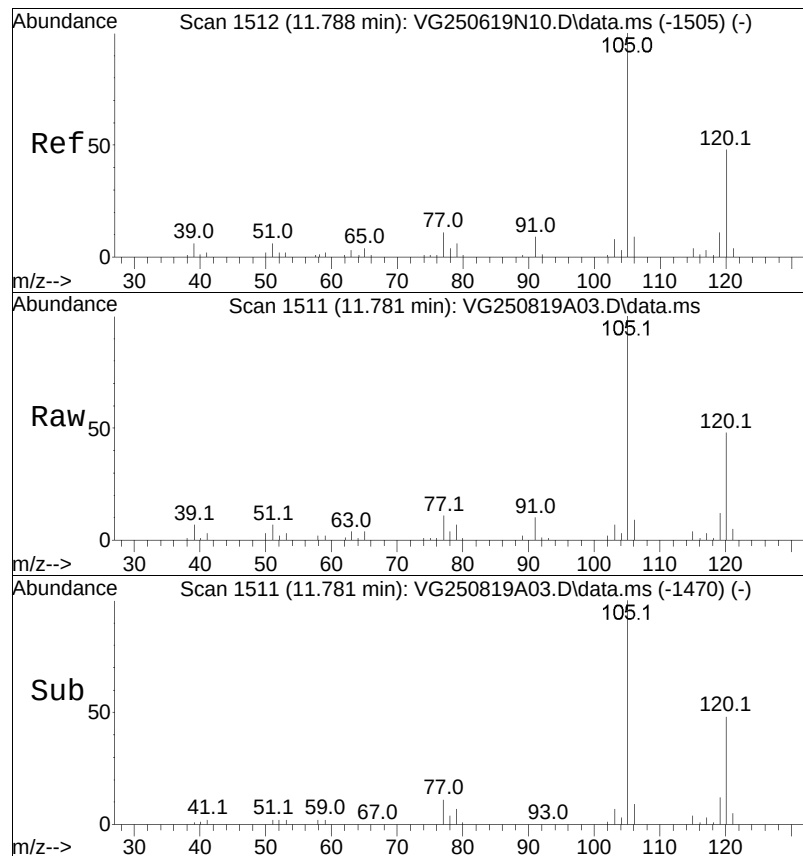




#94
 tert-Butylbenzene
 Concen: 8.67 ug/L
 RT: 11.703 min Scan# 1500
 Delta R.T. -0.000 min
 Lab File: VG250819A03.D
 Acq: 19 Aug 2025 8:07 am

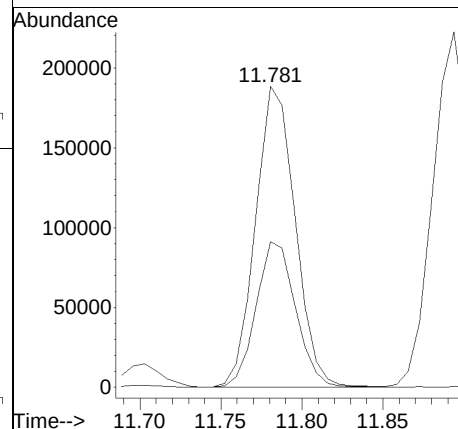
Tgt Ion	Ratio	Resp	Lower	Upper
119	100	262397		
91	61.5		50.2	75.2
134	25.3		20.2	30.2

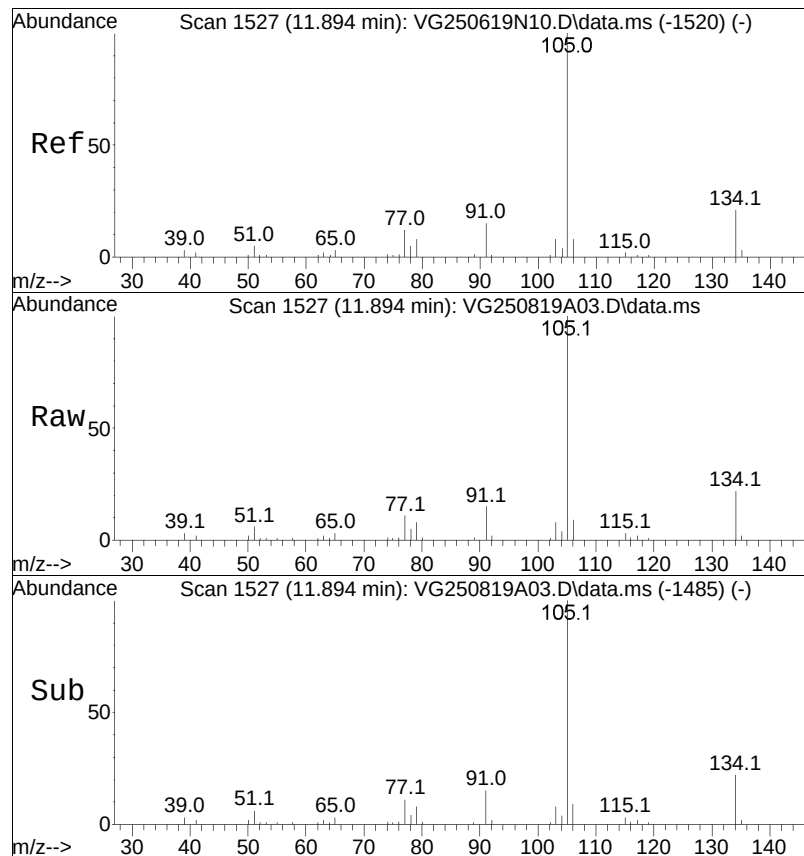




#97
 1,2,4-Trimethylbenzene
 Concen: 8.85 ug/L
 RT: 11.781 min Scan# 1511
 Delta R.T. -0.007 min
 Lab File: VG250819A03.D
 Acq: 19 Aug 2025 8:07 am

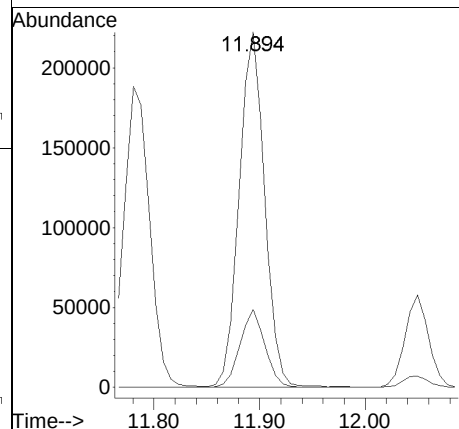
Tgt Ion	105	120	Ratio	Lower	Upper
Resp:	321875				
105	100				
120	48.0		38.2	57.2	

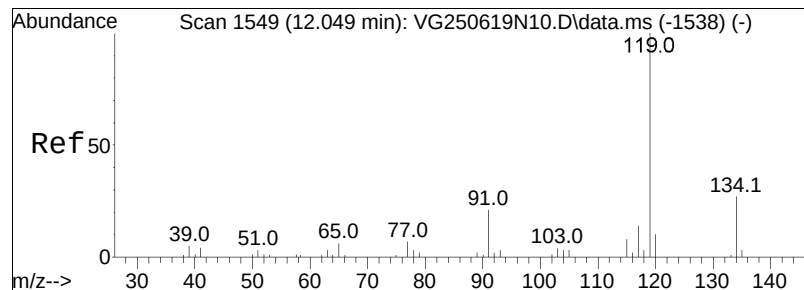




#98
 sec-Butylbenzene
 Concen: 9.05 ug/L
 RT: 11.894 min Scan# 1527
 Delta R.T. -0.000 min
 Lab File: VG250819A03.D
 Acq: 19 Aug 2025 8:07 am

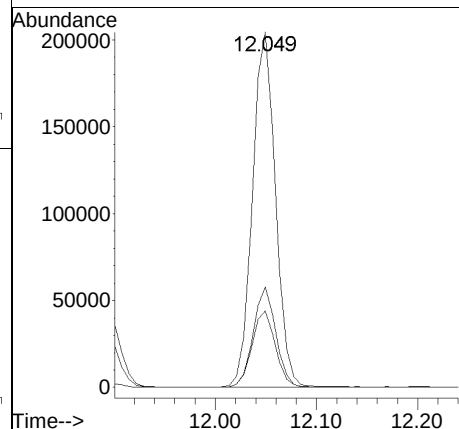
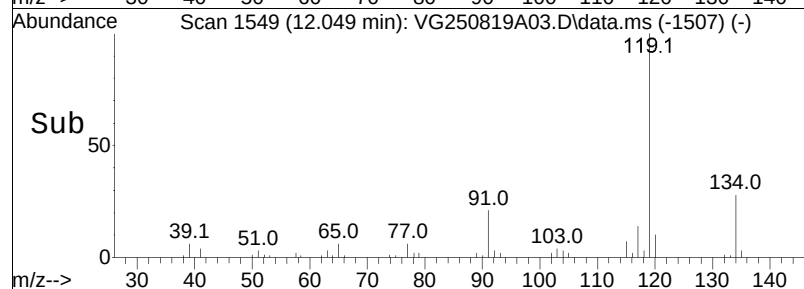
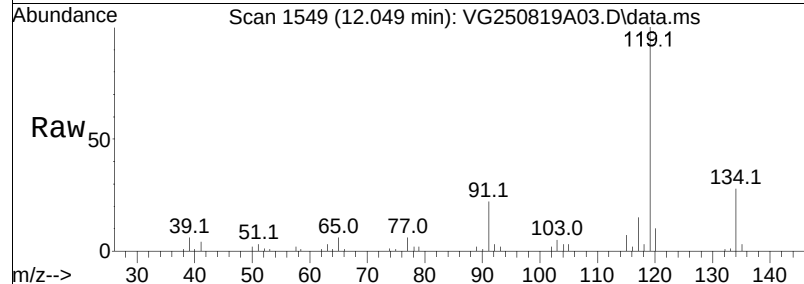
Tgt Ion	105	134	Ratio	Lower	Upper
Resp	373377				
105	100				
134	21.4		13.7	28.5	

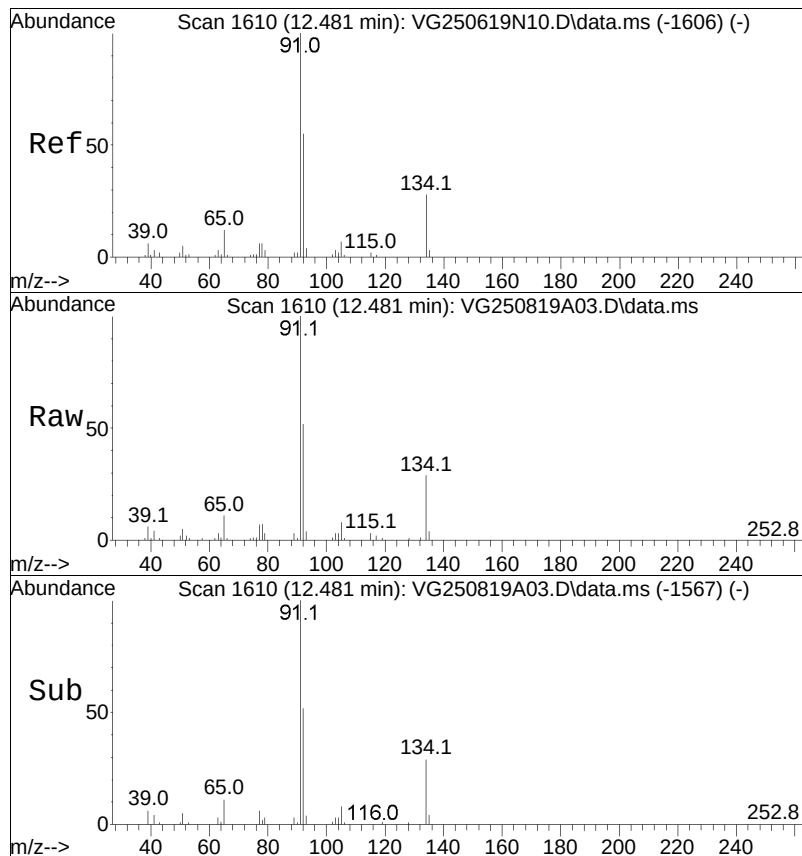




#99
 p-Isopropyltoluene
 Concen: 8.73 ug/L
 RT: 12.049 min Scan# 1549
 Delta R.T. -0.000 min
 Lab File: VG250819A03.D
 Acq: 19 Aug 2025 8:07 am

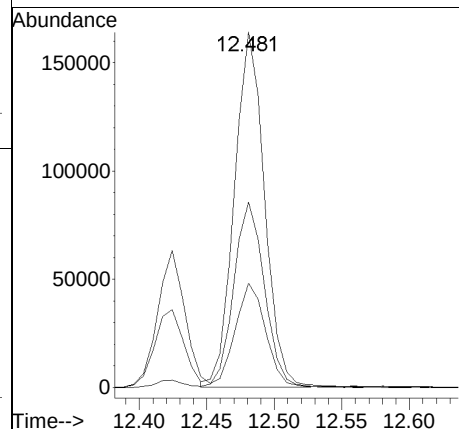
Tgt Ion:	119	Resp:	323819
Ion Ratio	Lower	Upper	
119	100		
134	27.8	17.7	36.9
91	22.1	14.4	30.0

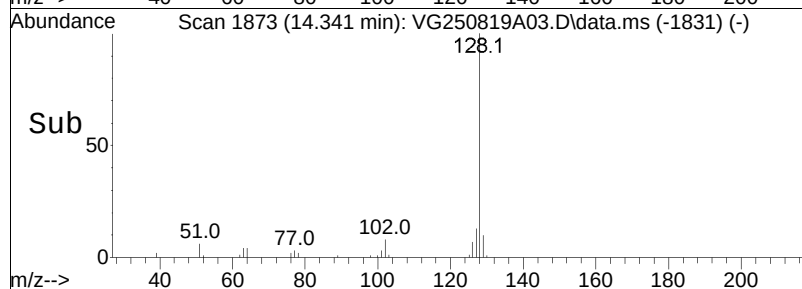
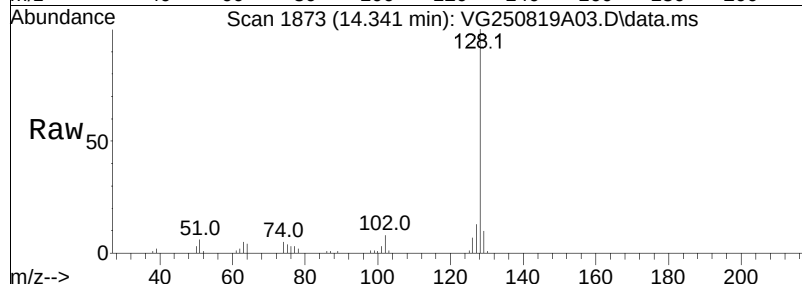
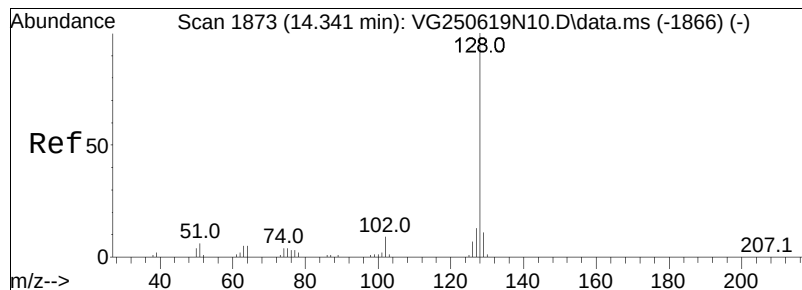




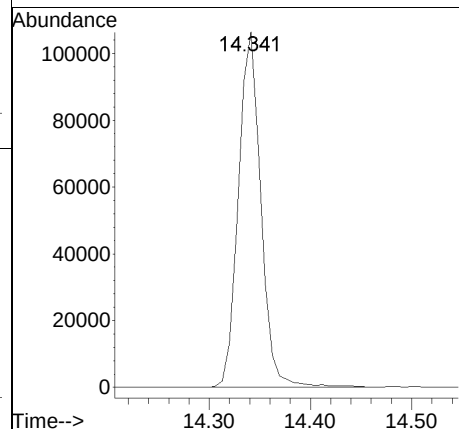
#103
 n-Butylbenzene
 Concen: 8.93 ug/L
 RT: 12.481 min Scan# 1610
 Delta R.T. -0.000 min
 Lab File: VG250819A03.D
 Acq: 19 Aug 2025 8:07 am

Tgt Ion	Ratio	Lower	Upper
91	100		
92	53.2	44.1	66.1
134	29.7	23.1	34.7





#110
 Naphthalene
 Concen: 6.21 ug/L
 RT: 14.341 min Scan# 1873
 Delta R.T. -0.000 min
 Lab File: VG250819A03.D
 Acq: 19 Aug 2025 8:07 am
 Tgt Ion:128 Resp: 164502



Calculation of Volatile Organic Compounds

Aqueous Concentration Formula: $Amt * DF * Uf * (1/Vo)$

Where:

DF = Dilution Factor

Vo = Sample Volume Purged (mL)

Uf = ng Unit Correction Factor (mL)

Soil Concentration Formula: $Amt * DF * (1/Wt)$

Where:

DF = Dilution Factor

Wt = Weight of Sample (g)

PACE ANALYTICAL SERVICES

PACE WORK GROUP REPORT (wk02)

Aug 19 2025, 03:29 pm

Work Group: WG2104736 for Department: 31 GC/MS - Volatiles

Created: 19-AUG-25 Due: Operator: PID

Sample	Client ID	C Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L2551893-01 MW-9		S NYCP51-8260	WATER	DONE	U	0901	0819	3A	Vial-B
L2551893-02 MW-10		S NYCP51-8260	WATER	DONE	U	0901	0819	3A	Vial-B
L2551893-03 TRIP BLANK		S NYCP51-8260	WATER	DONE	U	0901	0819	3A	Vial-B
WG2104736-1 MS BFB Tune Standard		S NYCP51-8260	WATER	DONE	U				
WG2104736-2 Continuing Calibrati		S NYCP51-8260	WATER	DONE	U				
WG2104736-3 Laboratory Control S		S NYCP51-8260	WATER	DONE	U				
WG2104736-4 LCS Duplicate		S NYCP51-8260	WATER	DONE	U				
WG2104736-5 Laboratory Method Bl		S NYCP51-8260	WATER	DONE	U				
Comments:									
WG2104736-4	WG2104736-3								

Inst: Gonzo

BFB: V11220

Method
GC 8260_RTX_VM

Initials: TMS

IS/SS: V11228

Autosampler: 8260water



Date: 06/19/25

ICAL: V11254A,V11257

Concentrator: 8260AA

Run: N

ICV: V11237,V11259,V11199,V11217,V11216,V11260

QC: _____ Seq: _____

			pH<2
Vial	DATA FILE	SAMPLE	
1	VG250619NBF01	BFB TUNE	
1	VG250619N01	BLK	
2	VG250619N02	BLK	
3	VG250619N03	BLK	
4	VG250619N04	I8260STD0.19PPB	
5	VG250619N05	I8260STD0.19PPB	
6	VG250619N06	I8260STD0.5PPB	
7	VG250619N07	I8260STD0.5PPB	
8	VG250619N08	I8260STD2PPB	
9	VG250619N09	I8260STD2PPB	
10	VG250619N10	I8260STD10PPB	
11	VG250619N11	I8260STD30PPB	
12	VG250619N12	I8260STD80PPB	
13	VG250619N13	I8260STD120PPB	
14	VG250619N14	I8260STD200PPB	
15	VG250619N15	BLK	
16	VG250619N16	BLK	
17	VG250619N17	BLK	
18	VG250619N18	BLK	
19	VG250619N19	C8260STD10PPB	
20	VG250619N20	C8260STD10PPB	
21	VG250619N21	BLK	

Inst: Gonzo

BFB: V11327

Method
GC 8260_RTX_VM

Initials: MJV

IS/SS: V11343

Autosampler: 8260water

Date: 08/19/25

ICAL: V11344B,V11364

Concentrator: 8260AA

Run: A

QC: _____ Seq:

Vial	DATA FILE	SAMPLE		pH<2
1	VG250819ABF3	BFB TUNE	07:05	
1	VG250819A01	8260 CCAL	QC FAILS	
2	VG250819A02	8260 CCAL	LCS	
3	VG250819A03	8260 CCAL	LCSD	
4	VG250819A04	BLK		
5	VG250819A05	METHOD BLK		
6	VG250819A06	L2551893-01,31,10,10,,A,R3A	NY STARS	pH<2
7	VG250819A07	L2551893-02,31,10,10,,A,R3A	NY STARS	pH<2
8	VG250819A08	L2551893-03,31,10,10,,A,R3A	NY STARS	TB pH<2
9	VG250819A09	L2551957-01,31,10,10,,A,R3A	PA/SHORT	pH<2
10	VG250819A10	L2551957-02,31,10,10,,A,R3A	PA/SHORT	pH<2
11	VG250819A11	L2551957-03,31,10,10,,A,R3A	PA/SHORT	pH<2
12	VG250819A12	L2551957-04,31,10,10,,A,R3A	PA/SHORT	pH<2
13	VG250819A13	L2551957-05,31,10,10,,A,R3A	PA/SHORT	pH<2
14	VG250819A14	L2551957-06,31,10,10,,A,R3A	PA/SHORT	pH<2
15	VG250819A15	L2551957-07,31,10,10,,A,R3A	PA/SHORT	TB pH<2
16	VG250819A16	L2551414-01,31,10,10,,A,R3E	ME8260CURE	
17	VG250819A17	L2551414-02,31,10,10,,A,R3E	ME8260CURE	
18	VG250819A18	L2549558-05,31,10,10,,A,R3E	ME8260CURE	
19	VG250819A19	L2549558-01D,31,1.0,10,,A,R3E	ME8260CURE	pH<2
20	VG250819A20	L2549558-04D,31,1.0,10,,A,R3E	ME8260CURE	pH<2
21	VG250819A21	L2549558-02,31,10,10,,A,R3E	ME8260CURE	
22	VG250819A22	L2550303-30,31,10,10,,A	NYTCL/10	FB
23	VG250819A23	L2549720-04,31,10,10,,A	NY/R2	
24	VG250819A24	L2549720-07,31,10,10,,A	NY/R2	TB
25	VG250819A25	L2549720-08,31,10,10,,A	NY/R2	TB
26	VG250819A26	L2549720-04MS,31,10,10,,A2	NY/R2	
27	VG250819A27	L2549720-04MSD,31,10,10,,A1	NY/R2	
28	VG250819A28	BLK		
29	VG250819A29	BLK		
30	VG250819A30	BLK		
31	VG250819A31	L2548772-01,31,10,10,,A	8260/RFB	UNPRES VIAL pH>2
32	VG250819A32	L2548772-02,31,10,10,,A	8260/RFB	UNPRES VIAL pH>2
33	VG250819A33	L2548772-03,31,10,10,,B	8260/RFB	UNPRES VIAL pH>2
34	VG250819A34	L2548772-04,31,10,10,,A	8260/RFB	UNPRES VIAL pH>2
35	VG250819A35	L2548772-05,31,10,10,,A	8260/RFB	UNPRES VIAL pH>2
36	VG250819A36	L2548772-06,31,10,10,,A	8260/RFB	UNPRES VIAL pH>2

Inst: Gonzo

BFB: V11327

Initials: MJV

IS/SS: V11343

Date: **08/19/25**

ICAL: V11344B,V11364

Run: **A**

Method

GC 8260_RTX_VM

Autosampler: 8260water

Concentrator: 8260AA



QC: _____ Seq:

Vial	DATA FILE	SAMPLE		pH<2
37	VG250819A37	L2548772-07,31,10,10,,A	8260/RFB	UNPRES VIAL pH>2
38	VG250819A38	HBM		
39	VG250819A39	BLK		
40	VG250819A40	BLK		

Appendix B

DUSR

Post Remediation Groundwater Monitoring Summary Report and
Monitoring Well Decommissioning Work Plan

NYSDEC BCP #C224329



IMPACT ENVIRONMENTAL
170 Keyland Court
Bohemia, New York 11716
TEL: (631) 268-8800
FAX: (631) 269-1599



LABORATORY DATA CONSULTANTS, INC.

2701 Loker Ave. West, Suite 220, Carlsbad, CA 92010 Bus: 760-827-1100 Fax: 760-827-1099

Impact Environmental
170 Keyland Court Bohemia
New York, NY 11716
ATTN: Ms. Diana Posten
dposten@impactenvironmental.com

September 10, 2025

SUBJECT: 585 Union Street - Data Validation

Dear Ms. Posten,

Enclosed are the final validation reports for the fraction listed below. This SDG was received on August 22, 2025. Attachment 1 is a summary of the samples that were reviewed for each analysis.

LDC Project #61531:

SDG #

L2551893

Fraction

VOC

The data validation was performed under Category B guidelines. The analysis was validated using the following documents, as applicable to each method:

- USEPA Region 2 Standard Operating Procedure for Validating Volatile Organic Compounds By Gas Chromatography/Mass Spectrometry, SOP HW-24, Revision 4 (October 2014)
- USEPA National Functional Guidelines for Organic Superfund Methods Data Review, EPA 540-R-20-005 (November 2020)
- EPA SW 846, Third Edition, Test Methods for Evaluating Solid Waste, update 1, July 1992; update IIA, August 1993; update II, September 1994; update IIB, January 1995; update III, December 1996; update IIIA, April 1998; IIIB, November 2004; update IV, February 2007; update V, July 2014; update VI, July 2018

Please feel free to contact us if you have any questions.

Sincerely,

Pei Geng

pgeng@lab-data.com

Project Manager/Senior Chemist

LDC #61531 (Impact Environmental - Bohemia, NY / 585 Union Street)

LDC	SDG#	Received Date	(21) Due Date	Validation Level	VOCs (8260D)
Matrix Type:					Water
A	L2551893	8/22/25	9/15/25	Category B	3
Total	PM: PG				3

These sample counts do not include MS/MSDs and DUPs.

EDD: EDD

Site: 585 Union Street
Laboratory: Pace Analytical Services, LLC, Westborough, MA
SDG: L2551893
Reviewer: Josephine Go and Pei Geng/Laboratory Data Consultants for Impact
Environmental - Bohemia, NY
Date: September 10, 2025

Samples Reviewed and Evaluation Summary

FIELD ID	LAB ID	FRACTIONS VALIDATED
MW-9	L2551893-01	VOC
MW-10	L2551893-02	VOC
TRIP BLANK	L2551893-03	VOC

Associated QC Samples(s):

Field/Trip Blanks: TRIP BLANK
Field Duplicate pair: None Associated

The above-listed water samples were collected on August 18, 2025 and were analyzed for volatile organic compounds (VOC) by SW-846 method 8260D. The data validation was performed in accordance with the USEPA Region 2 *Standard Operating Procedure for Validating Volatile Organic Compounds By Gas Chromatography/Mass Spectrometry*, SOP HW-24, Revision 4 (October 2014) and the USEPA *National Functional Guidelines for Organic Superfund Methods Data Review*, EPA 540-R-20-005 (November 2020), modified as necessary to accommodate the non-CLP methodologies used.

The organic data were evaluated based on the following parameters:

- Overall Evaluation of Data and Potential Usability Issues
- Data Completeness
- Holding Times and Sample Preservation
- Gas Chromatography/Mass Spectrometry (GC/MS) Tunes
- Initial and Continuing Calibrations
- Blank Analysis Results
- Surrogate Recoveries
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) Results
- Laboratory Control Sample (LCS) Results
- Internal Standards
- Field Duplicate Results
- Quantitation Limits and Data Assessment
- Sample Quantitation and Target Analyte Identification

Overall Evaluation of Data and Potential Usability Issues

All results are usable as reported or usable with minor qualification due to laboratory quality control outliers.

The validation findings were based on the following information.

Data Completeness

The data package was complete as defined under the requirements for the NYSDEC ASP category B laboratory deliverables.

Holding Times and Sample Preservation

All criteria were met.

GC/MS Tunes

All criteria were met.

Initial and Continuing Calibrations

Initial calibration:

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all analytes.

Average relative response factors (RRF) for all analytes were within validation criteria.

The percent differences (%D) of the initial calibration verification (ICV) standard were less than or equal to 30.0% for all analytes.

Continuing calibration:

The percent differences (%D) were less than or equal to 20.0% for all analytes with the following exceptions:

Date	Standard ID	Analyte	%D	Associated Samples	Validation Action
08/19/25	VG250819A02.D	Naphthalene	36.1	MW-9 MW-10 TRIP BLANK	UJ (all non-detects)

All of the continuing calibration relative response factors (RRF) were within validation criteria.

Blanks

Contamination was not detected in the method blanks.

No positive results were found in the trip blank sample TRIP BLANK for VOC analysis.

Surrogate Recoveries

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

MS/MSD Results

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

LCS Results

Laboratory control samples (LCS) and laboratory control samples duplicates (LCSD) were analyzed as required by the method. Percent recoveries (%R) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Analyte	LCS %R (70-130)	LCSD %R (70-130)	Validation Action
WG2104736-3,4 (MW-9 MW-10 TRIP BLANK)	Naphthalene	64	62	UJ (all non-detects)

Relative percent differences (RPD) were within QC limits.

Internal Standards

All criteria were met.

Field Duplicate Results

No field duplicates were identified in this SDG.

Quantitation Limits and Data Assessment

No results were reported below the reporting limit (RL) and above the method detection limit (MDL) in the VOC analysis.

Dilutions were not required for VOC analysis.

Sample Quantitation and Target Analyte Identification

Calculations were spot-checked; no discrepancies were noted.

DATA VALIDATION QUALIFIERS

- U - The analyte was analyzed for, but due to blank contamination was flagged as nondetect (U). The result is usable as a nondetect.
- J - Data are flagged (J) when a QC analysis fails outside the primary acceptance limits. The qualified “J” data are not excluded from further review or consideration. However, only one flag (J) is applied to a sample result, even though several associated QC analyses may fail. The ‘J’ data may be biased high or low or the direction of the bias may be indeterminable.
- UJ - The analyte was not detected above the reported sample quantitation limit. Data are flagged (UJ) when a QC analysis fails outside the primary acceptance limits. The qualified “UJ” data are not excluded from further review or consideration. However, only one flag is applied to a sample result, even though several associated QC analyses may fail. The ‘UJ’ data may be biased low.
- JN - The analysis indicates the presence of an analyte that has been “tentatively identified” (N) and the associated numerical value represents its approximate (J) concentration.
- R - Data rejected (R) on the basis of an unacceptable QC analysis should be excluded from further review or consideration. Data are rejected when associated QC analysis results exceed the expanded control limits of the QC criteria. The rejected data are known to contain significant errors based on documented information. The data user must not use the rejected data to make environmental decisions. The presence or absence of the analyte cannot be verified.

VALIDATION COMPLETENESS WORKSHEET

LDC #: 61531A
 SDG #: L2551893
 Laboratory: Pace Analytical Services, LLC, Westborough, MA
 Method: Volatiles (EPA 8260D)

Date: 8/22/2025
 Page: 1 of 1
 Reviewer: JVZ
 2nd Reviewer: CL

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I	Sample Receipt/Technical Holding Time	A / A	
II	GC/MS Instrument Performance Check	A	
III	Initial Calibration/ ICV	A / A	RSD ≤ 20% ICV ≤ 30%
IV	Continuing Calibration	SW	CAI ≤ 20%
V	Laboratory Blanks	A	
VI	Field Blank	ND	TB = 3
VII	Surrogate Spikes	A	
VIII	Matrix Spike/Matrix Spike Duplicate	N	CS
IX	Laboratory Control Sample	SW	LCS / D
X	Field Duplicate	N	
XI	Internal standards	A	
XII	Target Analyte Quantitation	A	
XIII	Target Analyte Identification	A	
XIV	Overall Assessment of Data	A	

Note: A = Acceptable ND = Not detected FT = Field triplicate AB = Ambient blank R = Rinsate
 N = Not provided/applicable NQ = Not qualified TB = Trip blank SB = Source blank
 SW = See worksheet FD = Field duplicate FB = Field blank EB = Equipment blank

	Client ID	Lab ID	QC Type	Matrix	Date	Stage
1	MW-9	L2551893-01		Water	08/18/2025	Category B
2	MW-10	L2551893-02		Water	08/18/2025	Category B
3	TRIP BLANK	L2551893-03	TB	Water	08/18/2025	Category B

(short list)

Notes:

WG 2104736-5 BLANK	

Method: Volatiles (EPA SW 846 Method 8260D)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	✓			
Was cooler temperature criteria met?	✓			
II. GC/MS Instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
IIIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990 ?			✓	
Were all percent relative standard deviations (%RSD) $\leq 20\%$ and relative response factors (RRF) ≥ 0.05 ?	✓			
IIIb. Initial Calibration Verification				
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?	✓			
Were all percent differences (%D) $\leq 30\%$?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) $\leq 20\%$ and relative response factors (RRF) ≥ 0.05 ?		✓		
V. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	✓			
Was a laboratory blank analyzed at least once every 12 hours for each matrix and concentration?	✓			
Was there contamination in the laboratory blanks?		✓		
VI. Field blanks				
Were field blanks were identified in this SDG?	✓			
Were target analytes detected in the field blanks?		✓		
VII. Surrogate spikes				
Were all surrogate percent recovery (%R) within QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VIII. Matrix spike/Matrix spike duplicates				
Were matrix spike (MS) and matrix spike duplicate (MSD) analyzed in this SDG?		✓		
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	

Validation Area	Yes	No	NA	Findings/Comments
IX. Laboratory control samples				
Was an LCS analyzed per analytical batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		✓		
X. Field duplicates				
Were field duplicate pairs identified in this SDG?		✓		
Were target analytes detected in the field duplicates?			✓	
XI. Internal standards				
Were internal standard area counts within -50% to +100% of the associated calibration standard?	✓			
Were retention times within + 30 seconds of the associated calibration standard?	✓			
XII. Target analyte quantitation				
Did the laboratory LOQs/RLs meet the QAPP LOQs/RLs?			✓	
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the analyte?	✓			
Were analyte quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Target analyte identification				
Were relative retention times (RRT's) within + 0.06 RRT units of the standard?	✓			
Did analyte spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XIV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			

LDC#: 61531A

VALIDATION FINDINGS WORKSHEET

Continuing Calibration

Page: 1 of 1
Reviewer: JVG

METHOD: GC/MS VOC (EPA SW 846 Method 8260D)

Continuing calibration standards were analyzed at the required frequencies.

The retention times for all calibrated compounds were within their respective acceptance windows.

All analytes met the continuing calibration standards validation criteria with the exceptions identified below.

[illegible]

	DOD	NFG
%D	20%/50%	20%

RRF: 0.001 - poor performers 0.005 - 1,4-Dioxane 0.05 - all other analytes

LDC#: 61531A

VALIDATION FINDINGS WORKSHEET

Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: JVG

METHOD: GC/MS VOA (EPA SW 846 Method 8260D)

Laboratory control samples (LCS) and laboratory control samples duplicates (LCSD) were analyzed as required by the method.

Percent recoveries (%R) and Relative percent differences (RPD) were within QC limits with the exceptions identified below.

[illegible]

LDC #: 61531A

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: JVG

METHOD: GC/MS VOA (EPA SW 846 Method 8260D)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$$RRF = (A_x)(C_{is}) / (A_{is})(C_x)$$

average RRF = sum of the RRFs/number of standards

$$\%RSD = 100 * (S/X)$$

 A_x = Area of Compound C_x = Concentration of compound,

S= Standard deviation of the RRFs,

 A_{is} = Area of associated internal standard C_{is} = Concentration of internal standard

X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (IS)	Reported RRF (RRF 10 std)	Recalculated RRF (RRF 10 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL GONZO	06/20/25	Benzene (FBZ)	0.796	0.796	0.780	0.780	6.86	6.05
			Ethylbenzene (CBZ)	1.279	1.235	1.226	1.226	4.64	4.64
			Naphthalene (DCB)	0.000	1.279	1.273	1.273	4.63	4.64

LDC #: 61531A

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Page: 1 of 1
Reviewer: JVG

METHOD: GC/MS VOA (EPA SW 846 Method 8260D)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = $100 * (\text{ave. RRF} - \text{RRF}) / \text{ave. RRF}$
 $\text{RRF} = (\text{Ax})(\text{Cis}) / (\text{Ais})(\text{Cx})$

Where:

ave. RRF = initial calibration average RRF

RRF = continuing calibration RRF

Ax = Area of compound,

Cx = Concentration of compound,

Ais = Area of associated internal standard

Cis = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (IS)	Average RRF (Initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported % D	Recalculated %D
1	VG250819A02 GONZO	08/19/25	Benzene (FBZ)	0.780	0.777	0.777	0.4	0.4
			Ethylbenzene (CBZ)	1.226	1.102	1.102	10.1	10.1
			Naphthalene (DCB)	1.273	0.813	0.813	36.1	36.1

LDC# 61531A

VALIDATION FINDINGS WORKSHEET

Page: 1 of 1

Surrogate Results Verification

Reviewer: JVG

METHOD: GC/MS VOA (EPA SW 846 Method 8260D)

The percent recoveries (%R) of surrogate compounds were recalculated for the compounds identified below using the following calculation:

Surrogate Found = (Area surr) (Conc IS) / (Area IS) (average RRF surr)

%Recovery: Surrogate Found/Surrogate Spiked * 100

Sample: 1

Surrogate	Surrogate Spiked (ug/L)	Surrogate Found (ug/L)	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane	10.00	10.784	108	108	0
1,2-Dichloroethane-d4	10.00	11.807	118	118	0
Toluene-d8	10.00	9.737	97	97	0
4-Bromofluorobenzene	10.00	9.284	93	93	0

LDC# 61531A

VALIDATION FINDINGS WORKSHEET

Page: 1 of 1

LCS Results Verification

Reviewer: JVG

METHOD: GC/MS VOA (EPA SW 846 Method 8260D)

The percent recoveries (%R) and relative percent differences (RPD) of the laboratory control sample and laboratory control duplicate were recalculated for the compounds identified below using the following calculation:

$$SSC = (\text{Area spike}) (\text{Conc IS}) / (\text{Area IS}) (\text{average RRF spike})$$

$$\% \text{Recovery} = 100 * SSC / SA$$

Where:

SSC = Spiked concentration

SA = Spike added

LCS = Laboratory control spike recovery

LCSD = Laboratory control spike duplicate recovery

$$RPD = |LCS - LCSD| * 2 / (LCS + LCSD)$$
LCS/LCSD ID: WG2104736-3,4

Compound	SA				LCS		LCSD		LCS/LCSD	
	(ug/L)		(ug/L)		Percent Recovery		Percent Recovery		RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
1,1-Dichloroethane										
Trichloroethene										
Benzene	10.0	10.0	10.0	10.0	100	100	100	100	0	0
Toluene	10.0	10.0	9.3	9.5	93	93	95	95	2	2
Chlorobenzene										

VALIDATION FINDINGS WORKSHEET **Sample Results Verification**

METHOD: GC/MS VOA (EPA SW 846 Method 8260D)

Compound results for all Level IV samples reported with a positive detect were recalculated and verified using the following equation:

$$\text{Concentration} = \frac{(A_x)(C_i)(V_p)(D_f)}{(A_i)(RRF)(V_o)(\%S)}$$

Where:

A_x = Area or height of the peak for the compound to be measured

A_i = Area or height of internal standard

C_i = Concentration of internal standard

RRF = Average relative response factor

DF = Dilution factor

V_p = Volume purged

V_o = Volume or weight of sample

Sample #	Compound	A _x	A _i	C _i (ug/L)	RRF	DF	V _p (mL)	V _o (mL)	% Solids	Calculated Concentration (ug/L)	Reported Concentration (ug/L)	% Diff
LCS	Benzene	325321	418534	10.0	0.7800	1.00	10.00	10.00	NA	10.0	10.0	0
	(Samples ND)											



LABORATORY DATA CONSULTANTS, INC.

2701 Loker Ave. West, Suite 220, Carlsbad, CA 92010 Bus: 760-827-1100 Fax: 760-827-1099

Impact Environmental
170 Keyland Court Bohemia
New York, NY 11716
ATTN: Ms. Diana Posten
dposten@impactenvironmental.com

August 23, 2023

SUBJECT: 585 Union Street - Data Validation

Dear Ms. Posten,

Enclosed are the final validation reports for the fraction listed below. This SDG was received on July 19, 2023. Attachment 1 is a summary of the samples that were reviewed for each analysis.

LDC Project #57185:

SDG #

L2332652

Fraction

Volatiles

The data validation was performed under Category B guidelines. The analysis was validated using the following documents, as applicable to each method:

- USEPA Region 2 Standard Operating Procedure for Validating Volatile Organic Compounds By Gas Chromatography/Mass Spectrometry SW-Method 8260B and 8260C, SOP HW-24, Revision 4 (October 2014)
- USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review, EPA 540-R-20-005 (November 2020)
- EPA SW 846, Third Edition, Test Methods for Evaluating Solid Waste, update 1, July 1992; update IIA, August 1993; update II, September 1994; update IIB, January 1995; update III, December 1996; update IIIA, April 1998; IIIB, November 2004; update IV, February 2007; update V, July 2014; update VI, July 2018

Please feel free to contact us if you have any questions.

Sincerely,

Pei Geng
pgeng@lab-data.com
Project Manager/Senior Chemist

[illegible]

Site: 585 Union Street
Laboratory: Alpha Analytical, Inc., Westborough, MA
Report No.: L2332652
Reviewer: Felomina Tanguilig and Pei Geng/Laboratory Data Consultants for Impact Environmental - Bohemia, NY
Date: August 21, 2023

Samples Reviewed and Evaluation Summary

FIELD ID	LAB ID	FRACTIONS VALIDATED
MW-9	L2332652-01	VOC
MW-10	L2332652-02	VOC

Associated QC Samples(s):

Field/Trip Blanks: None Associated
Field Duplicate pair: None Associated

The above-listed soil samples were collected on June 9, 2023 and were analyzed for volatile organic compounds (VOC) by SW-846 method 8260D. The data validation was performed in accordance with the USEPA Region 2 *Standard Operating Procedure for Validating Volatile Organic Compounds By Gas Chromatography/Mass Spectrometry SW-Method 8260B and 8260C*, SOP HW-24, Revision 4 (October 2014) and the USEPA *Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review*, EPA 540-R-20-005 (November 2020), modified as necessary to accommodate the non-CLP methodologies used.

The organic data were evaluated based on the following parameters:

- Data Completeness
- Holding Times and Sample Preservation
- Gas Chromatography/Mass Spectrometry (GC/MS) Tunes
- Initial and Continuing Calibrations
- Blanks
- Surrogate Recoveries
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) Results
- Laboratory Control Sample (LCS) Results
- Internal Standards
- Field Duplicate Results
- Moisture Content
- Quantitation Limits and Data Assessment
- Sample Quantitation and Compound Identification

Overall Evaluation of Data and Potential Usability Issues

All results are usable as reported or usable with minor qualification due to laboratory quality control outliers.

The validation findings were based on the following information.

Data Completeness

The data package was complete as defined under the requirements for the NYSDEC ASP category B laboratory deliverables.

Holding Times and Sample Preservation

All criteria were met.

GC/MS Tunes

All criteria were met.

Initial and Continuing Calibrations

Initial calibration:

All criteria were met.

Continuing calibration:

Compounds that did not meet criteria are summarized in the following table.

Date	Standard ID	Compound	CC %D	Associated Samples		Validation Action
06/12/23	CCV-VOA122	Naphthalene	21.5	MW-9	XX	UJ nondetects
06/13/23	CCV-VOA122	Naphthalene	20.5	MW-10	XX	UJ nondetects

X = Initial calibration (IC) relative standard deviation (%RSD) > 20; estimate (J/UJ) positive and nondetect results.

XX = Continuing calibration (CC) percent difference (%D) > 20; estimate (J/UJ) positive and nondetect results.

SS = Second source verification percent difference (%D) > 30; estimate (J/UJ) positive and nondetect results.

+ = Response factor (RRF) < validation criteria; estimate (J/UJ) positive and nondetect results.

The naphthalene results were estimated due to continuing calibration exceedances. The bias cannot be determined. The results can be used for project objectives as nondetects with estimated quantitation limits (UJ) which may have a minor impact on the data usability.

Blanks

Contamination was not detected in the method blanks.

A field blank was not associated with this sample set. Validation action was not required on this basis.

Surrogate Recoveries

All criteria were met.

MS/MSD Results

MS/MSD analyses were not associated with this sample set. Validation action was not required on this basis.

LCS Results

All criteria were met.

Internal Standards

All criteria were met.

Field Duplicate Results

A field duplicate pair was not associated with this sample set. Validation action was not required on this basis.

Moisture Content

All criteria were met.

Quantitation Limits and Data Assessment

Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the VOC analysis. These results were qualified as estimated (J) by the laboratory.

Dilutions were not required for VOC analysis.

Sample Quantitation and Compound Identification

Calculations were spot-checked; no discrepancies were noted.

DATA VALIDATION QUALIFIERS

- U - The analyte was analyzed for, but due to blank contamination was flagged as nondetect (U). The result is usable as a nondetect.
- J - Data are flagged (J) when a QC analysis fails outside the primary acceptance limits. The qualified “J” data are not excluded from further review or consideration. However, only one flag (J) is applied to a sample result, even though several associated QC analyses may fail. The ‘J’ data may be biased high or low or the direction of the bias may be indeterminable.
- UJ - The analyte was not detected above the reported sample quantitation limit. Data are flagged (UJ) when a QC analysis fails outside the primary acceptance limits. The qualified “UJ” data are not excluded from further review or consideration. However, only one flag is applied to a sample result, even though several associated QC analyses may fail. The ‘UJ’ data may be biased low.
- JN - The analysis indicates the presence of a compound that has been “tentatively identified” (N) and the associated numerical value represents its approximate (J) concentration.
- R - Data rejected (R) on the basis of an unacceptable QC analysis should be excluded from further review or consideration. Data are rejected when associated QC analysis results exceed the expanded control limits of the QC criteria. The rejected data are known to contain significant errors based on documented information. The data user must not use the rejected data to make environmental decisions. The presence or absence of the analyte cannot be verified.

LDC #: 57185A1a **VALIDATION COMPLETENESS WORKSHEET**
SDG #: L2332652 Category B
Laboratory: Alpha Analytical, Inc., Westborough, MA

Date: 8/16/23
Page: 1 of 1
Reviewer: [Signature]
2nd Reviewer: [Signature]

METHOD: GC/MS Volatiles (EPA SW-846 Method 8260D)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A/D	
II.	GC/MS Instrument performance check	A	
III.	Initial calibration/ICV	A/D	% PSD ≤ 20 , ICV ≤ 30
IV.	Continuing calibration	SW	CCV ≤ 20
V.	Laboratory Blanks	A	
VI.	Field blanks	N	
VII.	Surrogate spikes	A	
VIII.	Matrix spike/Matrix spike duplicates	N	OK
IX.	Laboratory control samples	A	LCs 1/2
X.	Field duplicates	N	
XI.	Internal standards	A	
XII.	Target analyte quantitation	A	Results $< RL > MRL = Det$
XIII.	Target analyte identification	A	
XIV.	Overall assessment of data	A	

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet

ND = No compounds detected
R = Rinsate
FB = Field blank

D = Duplicate
TB = Trip blank
EB = Equipment blank

SB=Source blank
OTHER:

	Client ID	Lab ID	Matrix	Date
1	MW-9	L2332652-01	Water	06/09/23
2	MW-10	L2332652-02	Water	06/09/23
3				
4				
5				
6				
7				
8				
9				
10				

Notes:

1	WG1790520-5 Blank			
2	WG1790958-5 Blank			

LDC #: 57185 A1a

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: FTMethod: Volatiles (EPA SW 846 Method 8260 1)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	☒	☐	☐	
Was cooler temperature criteria met?	☒	☐	☐	
II. GC/MS Instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	☒	☐	☐	
Were all samples analyzed within the 12 hour clock criteria?	☒	☐	☐	
IIIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	☒	☐	☐	
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	☒	☐	☐	
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990 ?	☐	☐	☒	
Were all percent relative standard deviations (%RSD) $\leq 30\%/15\%$ and relative response factors (RRF) ≥ 0.05 ?	☒	☐	☐	
IIIb. Initial Calibration Verification				
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?	☒	☐	☐	
Were all percent differences (%D) $\leq 20\%$?	☒	☐	☐	
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	☒	☐	☐	
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	☒	☐	☐	
Were all percent differences (%D) $\leq 20\%$ and relative response factors (RRF) ≥ 0.05 ?	☐	☒	☐	
V. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	☒	☐	☐	
Was a laboratory blank analyzed at least once every 12 hours for each matrix and concentration?	☒	☐	☐	
Was there contamination in the laboratory blanks? If yes, please see the Blanks validation findings worksheet.	☐	☒	☐	
VI. Field blanks				
Were field blanks were identified in this SDG?	☐	☒	☐	
Were target analytes detected in the field blanks?	☐	☐	☒	
VII. Surrogate spikes				
Were all surrogate percent recovery (%R) within QC limits?	☒	☐	☐	
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?	☐	☐	☒	

LDC #: 5-1185A/a

VALIDATION FINDINGS CHECKLIST

Page: 2 of 2
Reviewer: FT

Validation Area	Yes	No	NA
VIII. Matrix spike/Matrix spike duplicates			
Were matrix spike (MS) and matrix spike duplicate (MSD) analyzed in this SDG?			✓
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓
IX. Laboratory control samples			
Was an LCS analyzed per analytical batch?	✓		
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓		
X. Field duplicates			
Were field duplicate pairs identified in this SDG?		✓	
Were target analytes detected in the field duplicates?			✓
XI. Internal standards			
Were internal standard area counts within -50% to +100% of the associated calibration standard?	✓		
Were retention times within + 30 seconds of the associated calibration standard?	✓		
XII. Target analyte quantitation			
Did the laboratory LOQs/RLs meet the QAPP LOQs/RLs?	✓		
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the target analyte?	✓		
Were target analyte quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓		
XIII. Target analyte identification			
Were relative retention times (RRT's) within + 0.06 RRT units of the standard?	✓		
Did analyte spectra meet specified EPA "Functional Guidelines" criteria?	✓		
Were chromatogram peaks verified and accounted for?	✓		
Were manual integrations reviewed and found acceptable?	✓		
Did the laboratory provide before and after integration printouts?			✓
XIV. System performance			
System performance was found to be acceptable.	✓		
XV. Overall assessment of data			
Overall assessment of data was found to be acceptable.	✓		

TARGET COMPOUND WORKSHEET

METHOD: VOA

A. Chloromethane	AA. Tetrachloroethene	AAA. 1,3,5-Trimethylbenzene	AAAA. Ethyl tert-butyl ether	A1. 1,3-Butadiene
B. Bromomethane	BB. 1,1,2,2-Tetrachloroethane	BBB. 4-Chlorotoluene	BBBB. tert-Amyl methyl ether	B1. Hexane
C. Vinyl chloride	CC. Toluene	CCC. tert-Butylbenzene	CCCC. 1-Chlorohexane	C1. Heptane
D. Chloroethane	DD. Chlorobenzene	DDD. 1,2,4-Trimethylbenzene	DDDD. Isopropyl alcohol	D1. Propylene
E. Methylene chloride	EE. Ethylbenzene	EEE. sec-Butylbenzene	EEEE. Acetonitrile	E1. Freon 11
F. Acetone	FF. Styrene	FFF. 1,3-Dichlorobenzene	FFFF. Acrolein	F1. Freon 12
G. Carbon disulfide	GG. Xylenes, total	GGG. p-Isopropyltoluene	GGGG. Acrylonitrile	G1. Freon 113
H. 1,1-Dichloroethene	HH. Vinyl acetate	HHH. 1,4-Dichlorobenzene	HHHH. 1,4-Dioxane	H1. Freon 114
I. 1,1-Dichloroethane	II. 2-Chloroethylvinyl ether	III. n-Butylbenzene	IIII. Isobutyl alcohol	I1. 2-Nitropropane
J. 1,2-Dichloroethene, total	JJ. Dichlorodifluoromethane	JJJ. 1,2-Dichlorobenzene	JJJJ. Methacrylonitrile	J1. Dimethyl disulfide
K. Chloroform	KK. Trichlorofluoromethane	KKK. 1,2,4-Trichlorobenzene	KKKK. Propionitrile	K1. 2,3-Dimethyl pentane
L. 1,2-Dichloroethane	LL. Methyl-tert-butyl ether	LLL. Hexachlorobutadiene	LLLL. Ethyl ether	L1. 2,4-Dimethyl pentane
M. 2-Butanone	MM. 1,2-Dibromo-3-chloropropane	MMM. Naphthalene	MMMM. Benzyl chloride	M1. 3,3-Dimethyl pentane
N. 1,1,1-Trichloroethane	NN. Methyl ethyl ketone	NNN. 1,2,3-Trichlorobenzene	NNNN. Iodomethane	N1. 2-Methylpentane
O. Carbon tetrachloride	OO. 2,2-Dichloropropane	OOO. 1,3,5-Trichlorobenzene	OOOO. 1,1-Difluoroethane	O1. 3-Methylpentane
P. Bromodichloromethane	PP. Bromochloromethane	PPP. trans-1,2-Dichloroethene	PPPP. Tetrahydrofuran	P1. 3-Ethylpentane
Q. 1,2-Dichloropropane	QQ. 1,1-Dichloropropene	QQQ. cis-1,2-Dichloroethene	QQQQ. Methyl acetate	Q1. 2,2-Dimethylpentane
R. cis-1,3-Dichloropropene	RR. Dibromomethane	RRR. m,p-Xylenes	RRRR. Ethyl acetate	R1. 2,2,3-Trimethylbutane
S. Trichloroethene	SS. 1,3-Dichloropropane	SSS. o-Xylene	SSSS. Cyclohexane	S1. 2,2,4-Trimethylpentane
T. Dibromochloromethane	TT. 1,2-Dibromoethane	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	TTTT. Methyl cyclohexane	T1. 2-Methylhexane
U. 1,1,2-Trichloroethane	UU. 1,1,1,2-Tetrachloroethane	UUU. 1,2-Dichlorotetrafluoroethane	UUUU. Allyl chloride	U1. Nonanal
V. Benzene	VV. Isopropylbenzene	VVV. 4-Ethyltoluene	VVVV. Methyl methacrylate	V1. 2-Methylnaphthalene
W. trans-1,3-Dichloropropene	WW. Bromobenzene	WWW. Ethanol	WWWW. Ethyl methacrylate	W1. Methanol
X. Bromoform	XX. 1,2,3-Trichloropropane	XXX. Di-isopropyl ether	XXXX. cis-1,4-Dichloro-2-butene	X1. 1,2,3-Trimethylbenzene
Y. 4-Methyl-2-pentanone	YY. n-Propylbenzene	YYY. tert-Butanol	YYYY. trans-1,4-Dichloro-2-butene	Y1. 2-Propanol
Z. 2-Hexanone	ZZ. 2-Chlorotoluene	ZZZ. tert-Butyl alcohol	ZZZZ. Pentachloroethane	Z1.

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

METHOD: GCMS 8260C

The calibration factors (RRFF), average RRFF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

$$\text{RRF} = (\text{Ax})(\text{Cis})/(\text{Ais})(\text{Cx})$$

average RRF = sum of the RRFs/number of standards

$$\% \text{RSD} = 100 * (\text{S}/\text{X})$$

Where:

Ax = Area of compound

Cx = Concentration of compound

S = Standard deviation of the RRFs

X = Mean of the RRFs

Ais = Area of associated internal standard

Cis = Concentration of internal Standard

#	Standard ID	Calibration Date	Compound	Reported (RRF 10ug/L std)	Recalculated (RRF 10ug/L std)	Reported AverageRRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
	ICAL	4/5/2023	V	0.542	0.542	0.530	0.530	4.15	4.15
	VOA122		CC	0.397	0.397	0.394	0.394	3.82	3.82
			MMM	0.929	0.929	0.906	0.906	2.83	2.83

LDC #: 57185A/a

VALIDATION FINDINGS WORKSHEET **Continuing Calibration Results Verification**

 Page: 1 of 1
 Reviewer: FT
METHOD: GC/MS VOA (EPA SW 846 Method 8260 *P*)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the analytes identified below using the following calculation:

$$\% \text{ Difference} = 100 * (\text{ave. RRF} - \text{RRF}) / \text{ave. RRF}$$

$$\text{RRF} = (A_x)(C_{is}) / (A_{is})(C_x)$$

Where: ave. RRF = initial calibration average RRF

RRF = continuing calibration RRF

 A_x = Area of compound,

 C_x = Concentration of compound,

 A_{is} = Area of associated internal standard

 C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1 <i>B1</i>	CCV VOA-122	6/12/23 1008	<i>Y</i> (1st internal standard)	0.530	0.583	0.583	10	10
			CC (2nd internal standard)	0.394	0.413	0.413	4.8	4.8
			MMM (3rd internal standard)	0.906	0.711	0.711	21.5	2.5
			(4th internal standard)					
2 <i>B2</i>	CCV VOA 122	6/13/23 0709	<i>Y</i> (1st internal standard)	↓	0.59	0.59	11.3	11.3
			CC (2nd internal standard)		0.418	0.418	6.1	6.1
			MMM (3rd internal standard)		0.72	0.72	20.5	20.5
			(4th internal standard)					
3			(1st internal standard)					
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					
4			(1st internal standard)					
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 57185A/a**VALIDATION FINDINGS WORKSHEET**
Surrogate Results VerificationPage: 1 of 1
Reviewer: FT
2nd reviewer: _____**METHOD:** GC/MS VOA (EPA SW 846 Method 8260B)

The percent recoveries (%R) of surrogates were recalculated for the analytes identified below using the following calculation:

% Recovery: $SF/SS \times 100$ Where: SF = Surrogate Found
SS = Surrogate SpikedSample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane	10.0	8.692	87	87	0
1,2-Dichloroethane-d4		10.396	104	104	
Toluene-d8	↓	10.198	102	102	↓
Bromofluorobenzene	↓	10.302	103	103	↓

Sample ID: _____

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID: _____

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID: _____

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID: _____

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

LDC #: 57185A/a

VALIDATION FINDINGS WORKSHEET **Laboratory Control Sample Results Verification**

 Page: 1 of 1
 Reviewer: FT
METHOD: GC/MS VOA (EPA Method 8260 17)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate (if applicable) were recalculated for the analytes identified below using the following calculation:

 $\% \text{ Recovery} = 100 * \text{SSC} / \text{SA}$

 Where: SSC = Spiked sample concentration
 SA = Spike added

 $\text{RPD} = | \text{LCSC} - \text{LCSDC} | * 2 / (\text{LCSC} + \text{LCSDC})$

LCSC = Laboratory control sample concentration LCSDC = Laboratory control sample duplicate concentration

 LCS ID: W91790520-2/4

Compound	Spike Added (<u>ug/L</u>)		Spiked Sample Concentration (<u>ug/L</u>)		LCS		LCSD		LCS/LCSD	
					Percent Recovery		Percent Recovery		RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
1,1-Dichloroethene	ND									
Trichloroethene	↓									
Benzene	10.0	10.0	11008	11.068	110	110	110	111	0	1
Toluene		↓	10.494	10.427	100	105	100	104	0	1
~~Chlorobenzene~~ ^{BE}	↓	↓	10.332	10.323	100	103	100	103	0	0

Comments: Refer to Laboratory Control Sample findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 57185 A/a

VALIDATION FINDINGS WORKSHEET

Sample Calculation Verification

Page: 1 of 1
Reviewer: FT

METHOD: GC/MS VOA (EPA SW 846 Method 8260) *B*

✓ Y2 N N/A

Were all reported results recalculated and verified for all level IV samples?

Y	N	N/A

Were all recalculated results for detected target analytes agree within 10.0% of the reported results?

$$\text{Concentration} = \frac{(A_s)(I_s)(DF)}{(A_{is})(RRF)(V_o)(\%S)}$$

A_x = Area of the characteristic ion (EICP) for the compound to be measured

A_{is} = Area of the characteristic ion (EICP) for the specific internal standard

I_s = Amount of internal standard added in nanograms (ng)

RRF = Relative response factor of the calibration standard.

V_o = Volume or weight of sample pruged in milliliters (ml) or grams (g).

Df = Dilution factor.

%S = Percent solids, applicable to soils and solid matrices only.

Example:

Sample I.D. #1, V:

$$\text{Conc.} = \frac{(197921)(10.0)}{(280043)(0.530)}$$

13.33

[illegible]



LABORATORY DATA CONSULTANTS, INC.

2701 Loker Ave. West, Suite 220, Carlsbad, CA 92010 Bus: 760-827-1100 Fax: 760-827-1099

Impact Environmental
170 Keyland Court Bohemia
New York, NY 11716
ATTN: Ms. Diana Posten
dposten@impactenvironmental.com

September 11, 2023

SUBJECT: 585 Union Street - Data Validation

Dear Ms. Posten,

Enclosed are the final validation reports for the fractions listed below. This SDG was received on August 29, 2023. Attachment 1 is a summary of the samples that were reviewed for each analysis.

LDC Project #57351:

SDG #

L2346073

Fraction

VOC

The data validation was performed under Category B guidelines. The analysis was validated using the following documents, as applicable to each method:

- USEPA Region 2 Standard Operating Procedure for Validating Volatile Organic Compounds By Gas Chromatography/Mass Spectrometry SW-Method 8260B and 8260C, SOP HW-24, Revision 4 (October 2014)
- USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review, EPA 540-R-20-005 (November 2020)
- EPA SW 846, Third Edition, Test Methods for Evaluating Solid Waste, update 1, July 1992; update IIA, August 1993; update II, September 1994; update IIB, January 1995; update III, December 1996; update IIIA, April 1998; IIIB, November 2004; update IV, February 2007; update V, July 2014; update VI, July 2018

Please feel free to contact us if you have any questions.

Sincerely,

Pei Geng

pgeng@lab-data.com

Project Manager/Senior Chemist

Site: 585 Union Street
Laboratory: Alpha Analytical, Inc., Westborough, MA
Report No.: L2346073
Reviewer: Felomina Tanguilig, Sabrina Canto, and Pei Geng/Laboratory Data Consultants for Impact Environmental - Bohemia, NY
Date: September 11, 2023

Samples Reviewed and Evaluation Summary

FIELD ID	LAB ID	FRACTIONS VALIDATED
MW-9	L2346073-01	VOC
MW-10	L2346073-02	VOC
DUP	L2346073-03	VOC
EQUIPMENT BLANK	L2346073-04	VOC
TRIP BLANK	L2346073-05	VOC
MW-10MS	L2346073-02MS	VOC
MW-10MSD	L2346073-02MSD	VOC

Associated QC Samples(s):

Field/Trip Blanks: TRIP BLANK, EQUIPMENT BLANK
Field Duplicate pair: MW-10 and DUP

The above-listed water samples were collected on August 9, 2023 and were analyzed for volatile organic compounds (VOC) by SW-846 method 8260D. The data validation was performed in accordance with the USEPA Region 2 *Standard Operating Procedure for Validating Volatile Organic Compounds By Gas Chromatography/Mass Spectrometry SW-Method 8260B and 8260C*, SOP HW-24, Revision 4 (October 2014) and the USEPA *Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review*, EPA 540-R-20-005 (November 2020), modified as necessary to accommodate the non-CLP methodologies used.

The organic data were evaluated based on the following parameters:

- Data Completeness
- Holding Times and Sample Preservation
- Gas Chromatography/Mass Spectrometry (GC/MS) Tunes
- Initial and Continuing Calibrations
- Blanks
- Surrogate Recoveries
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) Results
- Laboratory Control Sample (LCS) Results
- Internal Standards
- Field Duplicate Results
- Quantitation Limits and Data Assessment
- Sample Quantitation and Compound Identification

Overall Evaluation of Data and Potential Usability Issues

All results are usable as reported.

The validation findings were based on the following information.

Data Completeness

The data package was complete as defined under the requirements for the NYSDEC ASP category B laboratory deliverables.

Holding Times and Sample Preservation

All criteria were met.

GC/MS Tunes

All criteria were met.

Initial and Continuing Calibrations

All criteria were met.

Blanks

Contamination was not detected in the method blanks.

No positive results were found in the trip blank sample TRIP BLANK and equipment blank sample EQUIPMENT BLANK for VOC analysis.

Surrogate Recoveries

All criteria were met.

MS/MSD Results

MS/MSD analyses were performed on sample MW-10 for VOA analysis. All criteria were met.

LCS Results

All criteria were met.

Internal Standards

All criteria were met.

Field Duplicate Results

Samples LT-XT-002-2-4 and DUP025 were submitted as the field duplicate pair with this sample group. The following table summarizes the concentrations.

Compound	Concentration (ug/L)		RPD
	MW-10	DUP	
Benzene	5.3	5.4	2
Isopropylbenzene	1.1	1.2	9
Naphthalene	1.4	1.5	7

Quantitation Limits and Data Assessment

Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the VOC analysis. These results were qualified as estimated (J) by the laboratory.

Dilutions were not required for VOC analysis.

Sample Quantitation and Compound Identification

Calculations were spot-checked; no discrepancies were noted.

DATA VALIDATION QUALIFIERS

- U - The analyte was analyzed for, but due to blank contamination was flagged as nondetect (U). The result is usable as a nondetect.
- J - Data are flagged (J) when a QC analysis fails outside the primary acceptance limits. The qualified “J” data are not excluded from further review or consideration. However, only one flag (J) is applied to a sample result, even though several associated QC analyses may fail. The ‘J’ data may be biased high or low or the direction of the bias may be indeterminable.
- UJ - The analyte was not detected above the reported sample quantitation limit. Data are flagged (UJ) when a QC analysis fails outside the primary acceptance limits. The qualified “UJ” data are not excluded from further review or consideration. However, only one flag is applied to a sample result, even though several associated QC analyses may fail. The ‘UJ’ data may be biased low.
- JN - The analysis indicates the presence of a compound that has been “tentatively identified” (N) and the associated numerical value represents its approximate (J) concentration.
- R - Data rejected (R) on the basis of an unacceptable QC analysis should be excluded from further review or consideration. Data are rejected when associated QC analysis results exceed the expanded control limits of the QC criteria. The rejected data are known to contain significant errors based on documented information. The data user must not use the rejected data to make environmental decisions. The presence or absence of the analyte cannot be verified.

LDC #: 57351A1a **VALIDATION COMPLETENESS WORKSHEET**
SDG #: L2346073 Category B
Laboratory: Alpha Analytical, Inc., Westborough, MA

Date: 9/8/23
Page: 1 of 1
Reviewer: [Signature]
2nd Reviewer: [Signature]

METHOD: GC/MS Volatiles (EPA SW-846 Method 8260D)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A/A	
II.	GC/MS Instrument performance check	A	
III.	Initial calibration/ICV	A/D	% PSD ≤ 20 CV ≤ 30
IV.	Continuing calibration	A	CCV ≤ 20
V.	Laboratory Blanks	A	
VI.	Field blanks	ND	EB = 4 TB = 5
VII.	Surrogate spikes	A	
VIII.	Matrix spike/Matrix spike duplicates	A	
IX.	Laboratory control samples	A	low ID
X.	Field duplicates	SW	D = 2, 3
XI.	Internal standards	A	
XII.	Target analyte quantitation	A	Results < RL > MDL = Sat
XIII.	Target analyte identification	A	
XIV.	Overall assessment of data	A	

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet

ND = No compounds detected
R = Rinsate
FB = Field blank

D = Duplicate
TB = Trip blank
EB = Equipment blank

SB=Source blank
OTHER:

	Client ID	Lab ID	Matrix	Date
1	MW-9	L2346073-01	Water	08/09/23
2	MW-10	L2346073-02	Water	08/09/23
3	DUP	L2346073-03	Water	08/09/23
4	EQUIPMENT BLANK	L2346073-04	Water	08/09/23
5	TRIP BLANK	L2346073-05	Water	08/09/23
6	MW-10MS	L2346073-02MS	Water	08/09/23
7	MW-10MSD	L2346073-02MSD	Water	08/09/23
8				
9				
10				

Notes:

WG1814675-SB/blank				

LDC #: 57351 A1a

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: FT

Method: Volatiles (EPA SW 846 Method 8260 D)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	✓			
Was cooler temperature criteria met?	✓			
II. GC/MS Instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
IIIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit acceptance criteria of > 0.990 ?	✓			
Were all percent relative standard deviations (%RSD) $\leq 30\%/15\%$ and relative response factors (RRF) ≥ 0.05 ?	✓			20%
IIIb. Initial Calibration Verification				
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?	✓			
Were all percent differences (%D) $< 20\%$?	✓			30%
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) $\leq 20\%$ and relative response factors (RRF) ≥ 0.05 ?	✓			
V. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	✓			
Was a laboratory blank analyzed at least once every 12 hours for each matrix and concentration?	✓			
Was there contamination in the laboratory blanks? If yes, please see the Blanks validation findings worksheet.		✓		
VI. Field blanks				
Were field blanks were identified in this SDG?	✓			
Were target analytes detected in the field blanks?		✓		
VII. Surrogate spikes				
Were all surrogate percent recovery (%R) within QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	

LDC #: 57351 A/a

VALIDATION FINDINGS CHECKLIST

Page: 2 of 2
Reviewer: FT

Validation Area	Yes	No	NA
VIII. Matrix spike/Matrix spike duplicates			
Were matrix spike (MS) and matrix spike duplicate (MSD) analyzed in this SDG?	☒	☐	☐
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	☒	☐	☐
IX. Laboratory control samples			
Was an LCS analyzed per analytical batch?	☒	☐	☐
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	☒	☐	☐
X. Field duplicates			
Were field duplicate pairs identified in this SDG?	☒	☐	☐
Were target analytes detected in the field duplicates?	☒	☐	☐
XI. Internal standards			
Were internal standard area counts within -50% to +100% of the associated calibration standard?	☒	☐	☐
Were retention times within + 30 seconds of the associated calibration standard?	☒	☐	☐
XII. Target analyte quantitation			
Did the laboratory LOQs/RLs meet the QAPP LOQs/RLs?	☒	☐	☐
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the target analyte?	☒	☐	☐
Were target analyte quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	☒	☐	☐
XIII. Target analyte identification			
Were relative retention times (RRT's) within + 0.06 RRT units of the standard?	☒	☐	☐
Did analyte spectra meet specified EPA "Functional Guidelines" criteria?	☒	☐	☐
Were chromatogram peaks verified and accounted for?	☒	☐	☐
Were manual integrations reviewed and found acceptable?	☐	☐	☒
Did the laboratory provide before and after integration printouts?	☐	☐	☒
XIV. System performance			
System performance was found to be acceptable.	☒	☐	☐
XV. Overall assessment of data			
Overall assessment of data was found to be acceptable.	☒	☐	☐

TARGET COMPOUND WORKSHEET

METHOD: VOA

A. Chloromethane	AA. Tetrachloroethene	AAA. 1,3,5-Trimethylbenzene	AAAA. Ethyl tert-butyl ether	A1. 1,3-Butadiene
B. Bromomethane	BB. 1,1,2,2-Tetrachloroethane	BBB. 4-Chlorotoluene	BBBB. tert-Amyl methyl ether	B1. Hexane
C. Vinyl chloride	CC. Toluene	CCC. tert-Butylbenzene	CCCC. 1-Chlorohexane	C1. Heptane
D. Chloroethane	DD. Chlorobenzene	DDD. 1,2,4-Trimethylbenzene	DDDD. Isopropyl alcohol	D1. Propylene
E. Methylene chloride	EE. Ethylbenzene	EEE. sec-Butylbenzene	EEEE. Acetonitrile	E1. Freon 11
F. Acetone	FF. Styrene	FFF. 1,3-Dichlorobenzene	FFFF. Acrolein	F1. Freon 12
G. Carbon disulfide	GG. Xylenes, total	GGG. p-Isopropyltoluene	GGGG. Acrylonitrile	G1. Freon 113
H. 1,1-Dichloroethene	HH. Vinyl acetate	HHH. 1,4-Dichlorobenzene	HHHH. 1,4-Dioxane	H1. Freon 114
I. 1,1-Dichloroethane	II. 2-Chloroethylvinyl ether	III. n-Butylbenzene	IIII. Isobutyl alcohol	I1. 2-Nitropropane
J. 1,2-Dichloroethene, total	JJ. Dichlorodifluoromethane	JJJ. 1,2-Dichlorobenzene	JJJJ. Methacrylonitrile	J1. Dimethyl disulfide
K. Chloroform	KK. Trichlorofluoromethane	KKK. 1,2,4-Trichlorobenzene	KKKK. Propionitrile	K1. 2,3-Dimethyl pentane
L. 1,2-Dichloroethane	LL. Methyl-tert-butyl ether	LLL. Hexachlorobutadiene	LLLL. Ethyl ether	L1. 2,4-Dimethyl pentane
M. 2-Butanone	MM. 1,2-Dibromo-3-chloropropane	MMM. Naphthalene	MMMM. Benzyl chloride	M1. 3,3-Dimethyl pentane
N. 1,1,1-Trichloroethane	NN. Methyl ethyl ketone	NNN. 1,2,3-Trichlorobenzene	NNNN. Iodomethane	N1. 2-Methylpentane
O. Carbon tetrachloride	OO. 2,2-Dichloropropane	OOO. 1,3,5-Trichlorobenzene	OOOO. 1,1-Difluoroethane	O1. 3-Methylpentane
P. Bromodichloromethane	PP. Bromochloromethane	PPP. trans-1,2-Dichloroethene	PPPP. Tetrahydrofuran	P1. 3-Ethylpentane
Q. 1,2-Dichloropropane	QQ. 1,1-Dichloropropene	QQQ. cis-1,2-Dichloroethene	QQQQ. Methyl acetate	Q1. 2,2-Dimethylpentane
R. cis-1,3-Dichloropropene	RR. Dibromomethane	RRR. m,p-Xylenes	RRRR. Ethyl acetate	R1. 2,2,3-Trimethylbutane
S. Trichloroethene	SS. 1,3-Dichloropropane	SSS. o-Xylene	SSSS. Cyclohexane	S1. 2,2,4-Trimethylpentane
T. Dibromochloromethane	TT. 1,2-Dibromoethane	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	TTTT. Methyl cyclohexane	T1. 2-Methylhexane
U. 1,1,2-Trichloroethane	UU. 1,1,1,2-Tetrachloroethane	UUU. 1,2-Dichlorotetrafluoroethane	UUUU. Allyl chloride	U1. Nonanal
V. Benzene	VV. Isopropylbenzene	VVV. 4-Ethyltoluene	VVVV. Methyl methacrylate	V1. 2-Methylnaphthalene
W. trans-1,3-Dichloropropene	WW. Bromobenzene	WWW. Ethanol	WWWW. Ethyl methacrylate	W1. Methanol
X. Bromoform	XX. 1,2,3-Trichloropropane	XXX. Di-isopropyl ether	XXXX. cis-1,4-Dichloro-2-butene	X1. 1,2,3-Trimethylbenzene
Y. 4-Methyl-2-pentanone	YY. n-Propylbenzene	YYY. tert-Butanol	YYYY. trans-1,4-Dichloro-2-butene	Y1. 2-Propanol
Z. 2-Hexanone	ZZ. 2-Chlorotoluene	ZZZ. tert-Butyl alcohol	ZZZZ. Pentachloroethane	Z1.

LDC #: 57351A/a**VALIDATION FINDINGS WORKSHEET**
Field DuplicatesPage: 1 of 1
Reviewer: FT**METHOD:** GCMS VOA (EPA Method 8260) DY N N/A
Y N N/A

Were field duplicate pairs identified in this SDG?

Were target compounds detected in the field duplicate pairs?

Compound	Concentration (<u>ug/L</u>)		RPD (<u>≤</u> %)	QUAL
	<u>2</u>	<u>3</u>		
<u>V</u>	<u>5.3</u>	<u>5.4</u>	<u>2</u>	
<u>VV</u>	<u>1.1</u>	<u>1.2</u>	<u>9</u>	
<u>MMM</u>	<u>1.4</u>	<u>1.5</u>	<u>7</u>	

Compound	Concentration ()		RPD (<u>≤</u> %)	QUAL

Compound	Concentration ()		RPD (<u>≤</u> %)	QUAL

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

METHOD: GCMS 8260C

The calibration factors (RRFF), average RRFF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

$$\text{RRF} = (\text{Ax})(\text{Cis})/(\text{Ais})(\text{Cx})$$

average RRF = sum of the RRFs/number of standards

$$\% \text{RSD} = 100 * (\text{S}/\text{X})$$

Where:

Ax = Area of compound

Cx = Concentration of compound

S = Standard deviation of the RRFs

X = Mean of the RRFs

Ais = Area of associated internal standard

Cis = Concentration of internal Standard

#	Standard ID	Calibration Date	Compound	Reported (RRF 10ug/L std)	Recalculated (RRF 10ug/L std)	Reported AverageRRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
	ICAL	7/26/2023	V	0.585	0.585	0.546	0.546	7.87	7.87
	VOA122		CC	0.403	0.403	0.380	0.380	8.28	8.28
			MMM	0.722	0.722	0.690	0.690	19.71	19.71

LDC #: 57351A1a**VALIDATION FINDINGS WORKSHEET**
Continuing Calibration Results VerificationPage: 1 of 1
Reviewer: FT**METHOD:** GC/MS VOA (EPA SW 846 Method 8260 D)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the analytes identified below using the following calculation:

$$\% \text{ Difference} = 100 * (\text{ave. RRF} - \text{RRF}) / \text{ave. RRF}$$
$$\text{RRF} = (A_x)(C_{is}) / (A_{is})(C_x)$$

Where: ave. RRF = initial calibration average RRF

RRF = continuing calibration RRF

 A_x = Area of compound, A_{is} = Area of associated internal standard C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	ICAL VOA122	07/26/23	V (1st internal standard)	0.546	0.188	0.188	7.8	7.8
			CC (2nd internal standard)	0.380	0.413	0.413	8.7	8.7
			MMM (3rd internal standard)	0.690	0.706	0.706	2.3	2.3
			(4th internal standard)					
2			(1st internal standard)					
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					
3			(1st internal standard)					
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					
4			(1st internal standard)					
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 57351A1a**VALIDATION FINDINGS WORKSHEET**
Surrogate Results VerificationPage: 1 of 1
Reviewer: FT
2nd reviewer: _____**METHOD:** GC/MS VOA (EPA SW 846 Method 8260B)

The percent recoveries (%R) of surrogates were recalculated for the analytes identified below using the following calculation:

% Recovery: $SF/SS * 100$ Where: SF = Surrogate Found
SS = Surrogate Spiked**Sample ID:** #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane	10.0	10.425	104	104	0
1,2-Dichloroethane-d4		10.799	108	108	
Toluene-d8		10.250	103	103	
Bromofluorobenzene		10.438	104	104	

Sample ID: _____

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID: _____

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID: _____

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID: _____

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

LDC #: 57351 A | a

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Page: 1 of 1
Reviewer: FT

D

METHOD: GC/MS VOA (EPA Method 8260B)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the analytes identified below using the following calculation:

% Recovery = $100 * (SSC - SC) / SA$ Where: SSC = Spiked sample concentration
SA = Spike added

SC = Sample concentration

RPD = $|MSC - MSC| * 2 / (MSC + MSDC)$

MSC = Matrix spike concentration

MSDC = Matrix spike duplicate concentration

MS/MSD sample: 6 + 7

Compound	Spike Added (ug/L)		Sample Concentration (ug/L)	Spiked Sample Concentration (ug/L)		Matrix Spike		Matrix Spike Duplicate		MS/MSD	
						Percent Recovery		Percent Recovery		RPD	
	MS	MSD	-----	MS	MSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
1,1-Dichloroethene											
Trichloroethene											
Benzene	10.0	10.0	~~10.9~~ 5.3	16.699	16.646	~~117~~	114	~~117~~	113	0	0.03
Toluene	↓	↓	ND	11.038	11.126	110	110	110	111	0	0.079
Chlorobenzene											

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 57351A/a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Page: 1 of 1
Reviewer: FT**METHOD:** GC/MS VOA (EPA Method 8260 D)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate (if applicable) were recalculated for the analytes identified below using the following calculation:

% Recovery = $100 * SSC/SA$ Where: SSC = Spiked sample concentration
SA = Spike addedRPD = $|LCSC - LCSDC| * 2 / (LCSC + LCSDC)$

LCSC = Laboratory control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS ID: W 91814675-3/4

Compound	Spike Added (ug/L)		Spiked Sample Concentration (ug/L)		LCS		LCSD		LCS/LCSD	
					Percent Recovery		Percent Recovery		RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
1,1-Dichloroethene	NA									
Trichloroethene	↓									
Benzene	10.0	10.0	10.857	11.061	110	109	110	111	0	1.9
Toluene	10.0	10.0	10.883	10.751	110	109	110	108	0	1.2
Chlorobenzene	NA									

Comments: Refer to Laboratory Control Sample findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 57351A/a

VALIDATION FINDINGS WORKSHEET

Sample Calculation Verification

Page: 1 of 1
Reviewer: FT

METHOD: GC/MS VOA (EPA SW 846 Method 8260 17)

Y	N	N/A

Were all reported results recalculated and verified for all level IV samples?

Y	N	N/A

Were all recalculated results for detected target analytes agree within 10.0% of the reported results?

$$\text{Concentration} = \frac{(A_s)(I_s)(DF)}{(A_{is})(RRF)(V_o)(\%S)}$$

A_x = Area of the characteristic ion (EICP) for the compound to be measured

A_{is} = Area of the characteristic ion (EICP) for the specific internal standard

I_s = Amount of internal standard added in nanograms (ng)

RRF = Relative response factor of the calibration standard.

V_o = Volume or weight of sample pruged in milliliters (ml) or grams (g).

Df = Dilution factor.

%S = Percent solids, applicable to soils and solid matrices only.

Example:

Sample I.D. #2, ✓:

$$\text{Conc.} = \frac{(95130)(10.0)}{(325807)(0.546)}$$
$$= 5.348 \text{ ng} \checkmark$$
[illegible]



LABORATORY DATA CONSULTANTS, INC.

2701 Loker Ave. West, Suite 220, Carlsbad, CA 92010 Bus: 760-827-1100 Fax: 760-827-1099

Impact Environmental
170 Keyland Court Bohemia
New York, NY 11716
ATTN: Ms. Diana Posten
dposten@impactenvironmental.com

September 19, 2024

SUBJECT: 585 Union Street - Data Validation

Dear Ms. Posten,

Enclosed are the final validation reports for the fraction listed below. This SDG was received on September 9, 2024. Attachment 1 is a summary of the samples that were reviewed for each analysis.

LDC Project #59653:

SDG #

L2446277

Fraction

VOC

The data validation was performed under Category B guidelines. The analysis was validated using the following documents, as applicable to each method:

- USEPA Region 2 Standard Operating Procedure for Validating Volatile Organic Compounds By Gas Chromatography/Mass Spectrometry, SOP HW-24, Revision 4 (October 2014)
- USEPA National Functional Guidelines for Organic Superfund Methods Data Review, EPA 540-R-20-005 (November 2020)
- EPA SW 846, Third Edition, Test Methods for Evaluating Solid Waste, update 1, July 1992; update IIA, August 1993; update II, September 1994; update IIB, January 1995; update III, December 1996; update IIIA, April 1998; IIIB, November 2004; update IV, February 2007; update V, July 2014; update VI, July 2018

Please feel free to contact us if you have any questions.

Sincerely,

Pei Geng

pgeng@lab-data.com

Project Manager/Senior Chemist

Site: 585 Union Street
Laboratory: Alpha Analytical, Inc., Westborough, MA
SDG: L2446277
Reviewer: Felomina Tanguilig and Pei Geng/Laboratory Data Consultants for Impact
Environmental - Bohemia, NY
Date: September 19, 2024

Samples Reviewed and Evaluation Summary

FIELD ID	LAB ID	FRACTIONS VALIDATED
MW-9	L2446277-01	VOC
MW-10	L2446277-02	VOC
TRIP BLANK	L2446277-03	VOC

Associated QC Samples(s):

Field/Trip Blanks: TRIP BLANK
Field Duplicate pair: None Associated

The above-listed water samples were collected on August 14, 2024 and were analyzed for volatile organic compounds (VOC) by SW-846 method 8260D. The data validation was performed in accordance with the USEPA Region 2 *Standard Operating Procedure for Validating Volatile Organic Compounds By Gas Chromatography/Mass Spectrometry*, SOP HW-24, Revision 4 (October 2014) and the USEPA *National Functional Guidelines for Organic Superfund Methods Data Review*, EPA 540-R-20-005 (November 2020), modified as necessary to accommodate the non-CLP methodologies used.

The organic data were evaluated based on the following parameters:

- Overall Evaluation of Data and Potential Usability Issues
- Data Completeness
- Holding Times and Sample Preservation
- Gas Chromatography/Mass Spectrometry (GC/MS) Tunes
- Initial and Continuing Calibrations
- Blank Analysis Results
- Surrogate Recoveries
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) Results
- Laboratory Control Sample (LCS) Results
- Internal Standards
- Field Duplicate Results
- Quantitation Limits and Data Assessment
- Sample Quantitation and Target Analyte Identification

Overall Evaluation of Data and Potential Usability Issues

All results are usable as reported or usable with minor qualification due to laboratory quality control outliers.

The validation findings were based on the following information.

Data Completeness

The data package was complete as defined under the requirements for the NYSDEC ASP category B laboratory deliverables.

Holding Times and Sample Preservation

All criteria were met.

GC/MS Tunes

All criteria were met.

Initial and Continuing Calibrations

Initial calibration:

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all analytes.

Average relative response factors (RRF) for all analytes were within validation criteria.

The percent differences (%D) of the initial calibration verification (ICV) standard were less than or equal to 30.0% for all analytes.

Continuing calibration:

The percent differences (%D) were less than or equal to 20.0% for all analytes with the following exceptions:

Date	Standard ID	Analyte	%D	Associated Samples	Validation Action
08/16/24	WG1960272-2CCV	Naphthalene	23	MW-9 MW-10 TRIP BLANK	UJ (all non-detects)

All of the continuing calibration relative response factors (RRF) were within validation criteria.

Blanks

Contamination was not detected in the method blanks.

No positive results were found in the trip blank sample TRIP BLANK for VOC analysis.

Surrogate Recoveries

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

MS/MSD Results

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

LCS Results

Laboratory control samples (LCS) and laboratory control samples duplicates (LCSD) were analyzed as required by the method. Percent recoveries (%R) were within QC limits. Relative percent differences (RPD) were within QC limits.

Internal Standards

All internal standard areas and retention times were within QC limits.

Field Duplicate Results

No field duplicates were identified in this SDG.

Quantitation Limits and Data Assessment

No results were reported below the reporting limit (RL) and above the method detection limit (MDL) in the VOC analysis.

Dilutions were not required for VOC analysis.

Sample Quantitation and Target Analyte Identification

Calculations were spot-checked; no discrepancies were noted.

DATA VALIDATION QUALIFIERS

- U - The analyte was analyzed for, but due to blank contamination was flagged as nondetect (U). The result is usable as a nondetect.
- J - Data are flagged (J) when a QC analysis fails outside the primary acceptance limits. The qualified “J” data are not excluded from further review or consideration. However, only one flag (J) is applied to a sample result, even though several associated QC analyses may fail. The ‘J’ data may be biased high or low or the direction of the bias may be indeterminable.
- UJ - The analyte was not detected above the reported sample quantitation limit. Data are flagged (UJ) when a QC analysis fails outside the primary acceptance limits. The qualified “UJ” data are not excluded from further review or consideration. However, only one flag is applied to a sample result, even though several associated QC analyses may fail. The ‘UJ’ data may be biased low.
- JN - The analysis indicates the presence of an analyte that has been “tentatively identified” (N) and the associated numerical value represents its approximate (J) concentration.
- R - Data rejected (R) on the basis of an unacceptable QC analysis should be excluded from further review or consideration. Data are rejected when associated QC analysis results exceed the expanded control limits of the QC criteria. The rejected data are known to contain significant errors based on documented information. The data user must not use the rejected data to make environmental decisions. The presence or absence of the analyte cannot be verified.

LDC #: 59653A1a **VALIDATION COMPLETENESS WORKSHEET**

SDG #: L2446277

Category B

Laboratory: Alpha Analytical, Inc., Westborough, MA

Date: 9/18/24

Page: 1 of 1

Reviewer: [Signature]

2nd Reviewer: [Signature]

METHOD: GC/MS Volatiles (EPA SW-846 Method 8260D)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A / A	
II.	GC/MS Instrument performance check	A	
III.	Initial calibration/ICV	A / A	% PSD ≤ 20 ICV ≤ 30
IV.	Continuing calibration	SW	CCV ≤ 20
V.	Laboratory Blanks	A	
VI.	Field blanks	ND	TB = 3
VII.	Surrogate spikes	A	
VIII.	Matrix spike/Matrix spike duplicates	N	CS
IX.	Laboratory control samples	A	LCS IP
X.	Field duplicates	N	
XI.	Internal standards	A	
XII.	Target analyte quantitation	A	No Result < RL > MDL
XIII.	Target analyte identification	A	
XIV.	Overall assessment of data	A	

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet

ND = No compounds detected
R = Rinsate
FB = Field blank

D = Duplicate
TB = Trip blank
EB = Equipment blank

SB = Source blank
OTHER:

	Client ID	Lab ID	Matrix	Date
1	MW-9	L2446277-01	Water	08/14/24
2	MW-10	L2446277-02	Water	08/14/24
3	TRIP BLANK	L2446277-03	Water	08/14/24
4				
5				
6				
7				
8				
9				
10				

Notes:

WG1960272-					

Method: Volatiles (EPA SW 846 Method 8260 D)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	✓			
Was cooler temperature criteria met?	✓			
II. GC/MS Instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
IIIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) $\leq 20\%$ 15/30% and relative response factors (RRF) within method criteria?	✓			
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990 ?			✓	
IIIb. Initial Calibration Verification				
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?	✓			
Were all percent differences (%D) $\leq 20\%$ <u>30%</u>	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) $\leq 20\%$ and relative response factors (RRF) within method criteria?	✓			
V. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	✓			
Was a laboratory blank analyzed at least once every 12 hours for each matrix and concentration?	✓			
Was there contamination in the laboratory blanks? If yes, please see the Blanks validation findings worksheet.		✓		
VI. Field blanks				
Were field blanks were identified in this SDG?	✓			
Were target analytes detected in the field blanks?		✓		
VII. Surrogate spikes				
Were all surrogate percent recovery (%R) within QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VIII. Matrix spike/Matrix spike duplicates				
Were matrix spike (MS) and matrix spike duplicate (MSD) analyzed in this SDG?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	

LDC #: 59653A/a

VALIDATION FINDINGS CHECKLIST

Page: 2 of 2
Reviewer: FT

Validation Area	Yes	No	NA	Findings/Comments
IX. Laboratory control samples				
Was an LCS analyzed for this SDG?	☒	☐	☐	
Was an LCS analyzed per analytical batch?	☒	☐	☐	
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	☒	☐	☐	
X. Field duplicates				
Were field duplicate pairs identified in this SDG?	☐	☒	☐	
Were target analytes detected in the field duplicates?	☐	☐	☒	
XI. Internal standards				
Were internal standard area counts within -50% to +100% of the associated calibration standard?	☒	☐	☐	
Were retention times within + 30 seconds of the associated calibration standard?	☒	☐	☐	
XII. Target analyte quantitation				
Did the laboratory LOQs/RLs meet the QAPP LOQs/RLs?	☒	☐	☐	
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the target analyte?	☒	☐	☐	
Were target analyte quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	☒	☐	☐	
XIII. Target analyte identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	☒	☐	☐	
Did analyte spectra meet specified EPA "Functional Guidelines" criteria?	☒	☐	☐	
Were chromatogram peaks verified and accounted for?	☒	☐	☐	
Were manual integrations reviewed and found acceptable?	☒	☐	☐	
Did the laboratory provide before and after integration printouts?	☐	☐	☒	
XIV. System performance				
System performance was found to be acceptable.	☒	☐	☐	
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	☒	☐	☐	

TARGET COMPOUND WORKSHEET

METHOD: VOA

A. Chloromethane	AA. Tetrachloroethene	AAA. 1,3,5-Trimethylbenzene	AAAA. Ethyl tert-butyl ether	A1. 1,3-Butadiene	A2. 1,2,4,5-Tetramethylbenzene
B. Bromomethane	BB. 1,1,2,2-Tetrachloroethane	BBB. 4-Chlorotoluene	BBBB. tert-Amyl methyl ether	B1. Hexane	B2. n-Octane
C. Vinyl chloride	CC. Toluene	CCC. tert-Butylbenzene	CCCC. 1-Chlorohexane	C1. Heptane	C2. n-Propyl alcohol
D. Chloroethane	DD. Chlorobenzene	DDD. 1,2,4-Trimethylbenzene	DDDD. Isopropyl alcohol	D1. Propylene	D2. n-Pentane
E. Methylene chloride	EE. Ethylbenzene	EEE. sec-Butylbenzene	EEEE. Acetonitrile	E1. Freon 11	E2. n-Decane
F. Acetone	FF. Styrene	FFF. 1,3-Dichlorobenzene	FFFF. Acrolein	F1. Freon 12	F2. Chlorodifluoromethane
G. Carbon disulfide	GG. Xylenes, total	GGG. p-Isopropyltoluene	GGGG. Acrylonitrile	G1. Freon 113	G2. cis-Decahydronaphthalene
H. 1,1-Dichloroethene	HH. Vinyl acetate	HHH. 1,4-Dichlorobenzene	HHHH. 1,4-Dioxane	H1. Freon 114	H2. trans-Decahydronaphthalene
I. 1,1-Dichloroethane	II. 2-Chloroethylvinyl ether	III. n-Butylbenzene	IIII. Isobutyl alcohol	I1. 2-Nitropropane	I2. n-Nonane
J. 1,2-Dichloroethene, total	JJ. Dichlorodifluoromethane	JJJ. 1,2-Dichlorobenzene	JJJJ. Methacrylonitrile	J1. Dimethyl disulfide	J2. n-Undecane
K. Chloroform	KK. Trichlorofluoromethane	KKK. 1,2,4-Trichlorobenzene	KKKK. Propionitrile	K1. 2,3-Dimethyl pentane	K2. Chloroprene
L. 1,2-Dichloroethane	LL. Methyl-tert-butyl ether	LLL. Hexachlorobutadiene	LLLL. Ethyl ether	L1. 2,4-Dimethyl pentane	L2. n-Butanol
M. 2-Butanone	MM. 1,2-Dibromo-3-chloropropane	MMM. Naphthalene	MMMM. Benzyl chloride	M1. 3,3-Dimethyl pentane	M2. n-Butyl acetate
N. 1,1,1-Trichloroethane	NN. Methyl ethyl ketone	NNN. 1,2,3-Trichlorobenzene	NNNN. Iodomethane	N1. 2-Methylpentane	N2. Nitrobenzene
O. Carbon tetrachloride	OO. 2,2-Dichloropropane	OOO. 1,3,5-Trichlorobenzene	OOOO. 1,1-Difluoroethane	O1. 3-Methylpentane	O2. Methyl bromide
P. Bromodichloromethane	PP. Bromochloromethane	PPP. trans-1,2-Dichloroethene	PPPP. Tetrahydrofuran	P1. 3-Ethylpentane	P2. Methyl chloride
Q. 1,2-Dichloropropane	QQ. 1,1-Dichloropropene	QQQ. cis-1,2-Dichloroethene	QQQQ. Methyl acetate	Q1. 2,2-Dimethylpentane	Q2. Methyl iodide
R. cis-1,3-Dichloropropene	RR. Dibromomethane	RRR. m,p-Xylene	RRRR. Ethyl acetate	R1. 2,2,3-Trimethylbutane	R2. Methylene bromide
S. Trichloroethene	SS. 1,3-Dichloropropane	SSS. o-Xylene	SSSS. Cyclohexane	S1. 2,2,4-Trimethylpentane	S2.
T. Dibromochloromethane	TT. 1,2-Dibromoethane	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	TTTT. Methylcyclohexane	T1. 2-Methylhexane	T2.
U. 1,1,2-Trichloroethane	UU. 1,1,1,2-Tetrachloroethane	UUU. 1,2-Dichlorotetrafluoroethane	UUUU. Allyl chloride	U1. Nonanal	U2.
V. Benzene	VV. Isopropylbenzene	VVV. 4-Ethyltoluene	VVVV. Methyl methacrylate	V1. 2-Methylnaphthalene	V2.
W. trans-1,3-Dichloropropene	WW. Bromobenzene	WWW. Ethanol	WWWW. Ethyl methacrylate	W1. Methanol	W2.
X. Bromoform	XX. 1,2,3-Trichloropropane	XXX. Di-isopropyl ether	XXXX. cis-1,4-Dichloro-2-butene	X1. 1,2,3-Trimethylbenzene	X2.
Y. 4-Methyl-2-pentanone	YY. n-Propylbenzene	YYY. tert-Butanol	YYYY. trans-1,4-Dichloro-2-butene	Y1. 2-Propanol	Y2.
Z. 2-Hexanone	ZZ. 2-Chlorotoluene	ZZZ. tert-Butyl alcohol	ZZZZ. Pentachloroethane	Z1. p-Diethylbenzene	Z2.

LDC #:

VALIDATION FINDINGS WORKSHEET

Reviewer: FT

METHOD: GC/MS VOA (EPA SW 846 Method 8260 *D*)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?

Y N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?

Y N/A Were all %D and RRFs within the validation criteria of ≤ 20 %D and ≥ 0.05 RRF ?

[illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

METHOD: GCMS 8260C

The calibration factors (RRFF), average RRFF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

$$\text{RRF} = (\text{Ax})(\text{Cis})/(\text{Ais})(\text{Cx})$$

average RRF = sum of the RRFs/number of standards

$$\% \text{RSD} = 100 * (\text{S}/\text{X})$$

Where:

Ax = Area of compound

Cx = Concentration of compound

S = Standard deviation of the RRFs

X = Mean of the RRFs

Ais = Area of associated internal standard

Cis = Concentration of internal Standard

#	Standard ID	Calibration Date	Compound	Reported (RRF 30ug/L std)	Recalculated (RRF 30ug/L std)	Reported AverageRRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
	ICAL	7/31/2024	V	0.839	0.839	0.792	0.792	8.59	8.59
	Elaine		CC	0.711	0.711	0.689	0.689	5.96	5.96
			MMM	1.747	1.747	1.697	1.697	9.67	9.67

LDC #: 59653 A/a**VALIDATION FINDINGS WORKSHEET**
Continuing Calibration Results VerificationPage: 1 of 1
Reviewer: FT**METHOD:** GC/MS VOA (EPA SW 846 Method 8260 D)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the target analytes identified below using the following calculation:

$$\% \text{ Difference} = 100 * (\text{ave. RRF} - \text{RRF}) / \text{ave. RRF}$$

$$\text{RRF} = (A_x)(C_{is}) / (A_{is})(C_x)$$

Where:

ave. RRF = initial calibration average RRF

 A_x = Area of target analyte C_x = Concentration of target analyte

RRF = continuing calibration RRF

 A_{is} = Area of associated internal standard C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Target Analyte (Internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	ccv	8/16/24 0649	v	0.792	0.881	0.881	11.2	11.2
			cc	0.689	0.77	0.77	11.8	11.8
			MMM	1.697	1.306	1.306	23	23
2								
3								
4								

LDC #: 59653 A 1a**VALIDATION FINDINGS WORKSHEET**
Surrogate Results VerificationPage: 1 of 1
Reviewer: FT**METHOD:** GC/MS VOA (EPA SW 846 Method 8260 D)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: $SF/SS * 100$ Where: SF = Surrogate Found
SS = Surrogate SpikedSample ID: A 1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane	10.0	10.697	107	107	0
1,2-Dichloroethane-d4	↓	9.830	98	98	↓
Toluene-d8	↓	10.110	101	101	↓
Bromofluorobenzene	↓	9.239	92	92	↓

Comments: _____

LDC #: 5965 3A/a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Page: 1 of 1
Reviewer: FT**METHOD:** GC/MS VOA (EPA SW 846 Method 8260 *D*)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate (if applicable) were recalculated for the target analytes identified below using the following calculation:

% Recovery = $100 * SSC/SA$

Where: SSC = Spiked sample concentration

SA = Spike added

RPD = $|LCSC - LCSDC| * 2 / (LCSC + LCSDC)$

LCSC = Laboratory control sample concentration

LCSDC = Laboratory control sample duplicate concentration

LCS ID: WQ1960272 - LCS 10

Compound	Spike Added (ug/L)		Spiked Sample Concentration (ug/L)		LCS		LCSD		LCS/LCSD	
					Percent Recovery		Percent Recovery		RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
1,1-Dichloroethene										
Trichloroethene										
Benzene	10	10	11.118	11.236	110	111	110	112	0	1.1
Toluene	↓	↓	11.179	11.184	110	112	110	112	0	0
Chlorobenzene										

Comments: _____

LDC #: 59653 A/a

VALIDATION FINDINGS WORKSHEET

Sample Calculation Verification

Page: 1 of 1
Reviewer: FT

METHOD: GC/MS VOA (EPA SW 846 Method 8260) *B*

Y	N	N/A

Were all reported results recalculated and verified for all level IV samples?

Y/N N/A

Were all recalculated results for detected target analytes agree within 10.0% of the reported results?

$$\text{Concentration} = \frac{(A_s)(I_s)(DF)}{(A_{is})(RRF)(V_o)(\%S)}$$

A_x = Area of the characteristic ion (EICP) for the compound to be measured

A_{is} = Area of the characteristic ion (EICP) for the specific internal standard

I_s = Amount of internal standard added in nanograms (ng)

RRF = Relative response factor of the calibration standard.

V_o = Volume or weight of sample pruged in milliliters (ml)
or grams (g).

Df = Dilution factor.

%S = Percent solids, applicable to soils and solid matrices only.

Example:

Sample I.D. WG1960272-LCS ✓

$$\text{Conc.} = \frac{(162716) (10.0)}{(184749) (0.792)}$$
$$= 11.12 \text{ ug/L}$$
[illegible]

Appendix C

EDD Proof of Submission

Post Remediation Groundwater Monitoring Summary
Report and Monitoring Well Decommissioning Work Plan

NYSDEC BCP #C224329



IMPACT ENVIRONMENTAL
170 Keyland Court
Bohemia, New York 11716
TEL: (631) 268-8800
FAX: (631) 269-1599

From: [Alex Keenan](#)
To: [Diana Posten](#)
Subject: FW: Successfully loaded EDD (20241001 1425.C224329.NYSDEC_v5_MERGE.zip)
Date: Wednesday, October 2, 2024 4:48:37 PM
Attachments: [image870076.png](#)
[20241001 1425.C224329.NYSDEC v5 MERGE.Commit.zip](#)

FYI we are good to go with the Union EDD



ALEX KEENAN | Project Geologist 1

O: 631-269-8800 x161 C: 631-209-7190
170 Keyland Court, Bohemia, NY 11716

[Our email policies](#)

-----Original Message-----

From: NYENVDATA@dec.ny.gov <NYENVDATA@dec.ny.gov>
Sent: Wednesday, October 2, 2024 3:15 AM
To: Alex Keenan <akeenan@impactenvironmental.com>
Subject: Successfully loaded EDD (20241001 1425.C224329.NYSDEC_v5_MERGE.zip)

Data from '20241001 1425.C224329.NYSDEC_v5_MERGE.zip' has been successfully loaded into the database.

585 Union Street (C224329) GW data EDD

From Tyler Bistline <tbistline@impactenvironmental.com>

Date Thu 9/11/2025 3:44 PM

To NYENVEDD@dec.ny.gov <NYENVEDD@dec.ny.gov>

Cc Diana Posten <dposten@impactenvironmental.com>

 1 attachment (9 KB)

20250911 1538.C224329.NYSDEC_v5_MERGE.zip;

Hello,
Please see attached EDD file for 585 Union Street annual groundwater sampling data.

Thanks,
Tyler



TYLER BISTLINE | Environmental Geologist 1

O: 631-269-8800

170 Keyland Court, Bohemia, NY 11716

[Our email policies](#)

FW: Successfully loaded EDD (20250911 1538.C224329.NYSDEC_v5_MERGE.zip)

From Tyler Bistline <tbistline@impactenvironmental.com>

Date Fri 10/3/2025 2:23 PM

To Diana Posten <dposten@impactenvironmental.com>

 1 attachment (988 bytes)

20250911 1538.C224329.NYSDEC_v5_MERGE.Commit.zip;

This is the File that I got back saying it was loaded into the database.



TYLER BISTLINE | Environmental Geologist 1

O: 631-269-8800

170 Keyland Court, Bohemia, NY 11716

[Our email policies](#)

-----Original Message-----

From: NYENVDATA@dec.ny.gov <NYENVDATA@dec.ny.gov>

Sent: Thursday, September 11, 2025 8:08 PM

To: Tyler Bistline <tbistline@impactenvironmental.com>

Subject: Successfully loaded EDD (20250911 1538.C224329.NYSDEC_v5_MERGE.zip)

Data from '20250911 1538.C224329.NYSDEC_v5_MERGE.zip' has been successfully loaded into the database.

Appendix D

Monitoring Well Decommissioning Procedures

Post Remediation Groundwater Monitoring Summary Report and Monitoring Well Decommissioning Work Plan

NYSDEC BCP #C224329



IMPACT ENVIRONMENTAL
170 Keyland Court
Bohemia, New York 11716
TEL: (631) 268-8800
FAX: (631) 269-1599

CP-43:Groundwater Monitoring Well Decommissioning Policy

New York State Department of Environmental Conservation

DEC POLICY

Issuing Authority: Commissioner Alexander B. Grannis

Date Issued: November 3, 2009

Latest Date Revised:

I. Summary:

Groundwater monitoring wells provide essential access to the subsurface for scientific and engineering investigations (including monitoring wells installed for leak detection purposes). To a degree, every monitoring well is an environmental liability because of the potential to act as a conduit for pollution to reach the groundwater. To limit the environmental risk, a groundwater monitoring well must be properly decommissioned when its effective life has been reached. This document provides procedures to satisfactorily decommission groundwater monitoring wells in New York State. This policy also pertains to other temporary wells such as observation wells, test wells, de-watering wells and other small diameter, non-potable water wells. It does not pertain to water supply wells.

II. Policy:

Environmental monitoring wells should be decommissioned when:

1. they are no longer needed and re-use by another program is not an option; or
2. the well's integrity is suspect or compromised.

The method for decommissioning will be determined based upon well construction and environmental parameters. The method selected must be designed to protect groundwater and implemented according to current best engineering practices while following all applicable federal, state and local regulations. *Groundwater Monitoring Well Decommissioning Procedures* shall be maintained as an addendum to this policy.

This policy is applicable to all New York State Department of Environmental Conservation (DEC) programs that install, utilize and maintain monitoring wells for the study of groundwater, except monitoring wells for landfills regulated under 6 NYCRR Part 360 decommissioned in accordance with those regulations [see 6 NYCRR 360-2.11(a)(8)(vi)] and wells installed under the Oil, Gas and Solution Mining Law, Environmental Conservation Law Article 23. There is no specific time frame to dictate when to decommission a well; timing is dependent upon the use and condition of the well

and shall be determined on an individual basis. Best professional judgment must be exercised when using the decommissioning procedures. Outside of DEC use, this policy is mandatory when incorporated into the specifications of a state contract, an Order on Consent or a permit. In all other situations, it shall serve as guidance.

III. Purpose and Background:

This document establishes a monitoring well decommissioning policy and provides technical guidance. Synonyms for well decommissioning include “plugging,” “capping” and “abandoning. For consistency, only the term “decommissioning” is used within this document.

Unprotected, neglected and improperly abandoned monitoring wells are a serious environmental liability. They can function as a pollution conduit for surface contaminants to reach the subsurface and pollute our groundwater. They also can cause unwanted mixing of groundwater, which degrades the overall water quality within an aquifer. Improperly constructed, poorly maintained or damaged monitoring wells can yield anomalous poor data that can compromise the findings of an environmental investigation or remediation project. Unneeded or compromised monitoring wells should be properly decommissioned in order to prevent harm to our groundwater.

Since 1980, the DEC has installed, directed or overseen the installation of thousands of monitoring wells throughout New York for various state and federal programs, such as Superfund, solid waste, Resource Conservation and Recovery Act (RCRA), spill response, petroleum bulk storage and chemical bulk storage. This guidance addresses the environmental liability associated with this aging network of wells.

Within its boring zone, a successfully decommissioned well prevents the following:

1. Migration of existing or future contaminants into an aquifer or between aquifers;
2. Migration of existing or future contaminants within the vadose zone;
3. Potential for vertical or horizontal migration of fluids in the well or adjacent to the well; and
4. Any change in the aquifer yield and hydrostatic head, unless due to natural conditions.

Monitoring well construction in New York varies considerably with factors such as age of the well, local geology and either the presence or absence of contamination. The predominant type of monitoring well in New York is the shallow, watertable monitoring well constructed of polyvinyl chloride plastic (PVC). The best method for decommissioning should be selected to suit the conditions and circumstances. Each decommissioning situation is to be evaluated separately using this guidance before a method is chosen and implemented.

IV. Responsibility:

The Division of Environmental Remediation (DER) is responsible for updating this policy and the *Groundwater Monitoring Well Decommissioning Procedures* (addendum) in consultation with the Division of Solid and Hazardous Materials (DSHM) and the Division of Water (DOW). Compliance with the guidance does not relieve any party of the obligation to properly decommission a monitoring well. Oversight responsibility will be carried out by the DEC Regional Engineer.

V. Procedure:

Groundwater Monitoring Well Decommissioning Procedures, the addendum to this policy, provides guidance on proper decommissioning of monitoring wells in New York State.

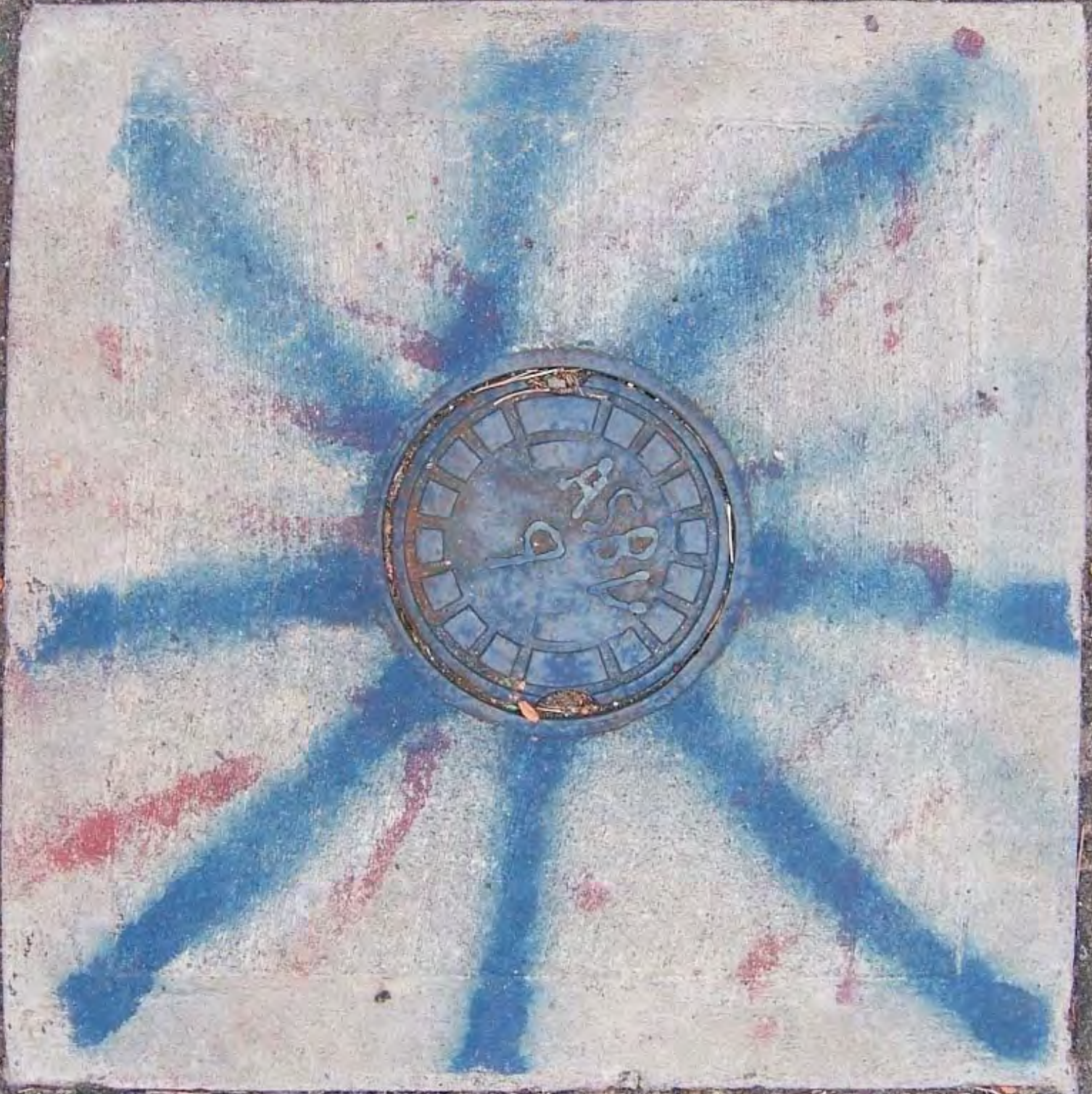
VI. Related References:

- Groundwater Monitoring Well Decommissioning Procedures, October 1986. Prepared by Malcolm Pirnie, Inc. for the New York State Department of Environmental Conservation, Division of Environmental Remediation.
- Standard Guide for the Decommissioning of Ground Water Wells, Vadose Zone Monitoring Devices, Boreholes, and Other Devices for Environmental Activities, ASTM D 5299-99. American Society for Testing and Materials (ASTM). Philadelphia. 2005.
- 6 NYCRR Part 360 Solid Waste Management Facilities, New York State Department of Environmental Conservation, Division of Solid and Hazardous Materials.
- Specifications for Abandoning Wells and Boreholes in Unconsolidated Materials, New York State Department of Environmental Conservation, Region 1 - Water Unit, undated.
- Handbook of Suggested Practices for the Design and Installation of Groundwater Monitoring Wells, EPA 600/4-89/034, United States Environmental Protection Agency (EPA).

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Final - August 2009

GROUNDWATER MONITORING WELL DECOMMISSIONING PROCEDURES



**New York State Department of Environmental Conservation
Division of Environmental Remediation**

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FIGURES

FIGURE 1 - MONITORING WELL FIELD INSPECTION LOG

FIGURE 2 - DECOMMISSIONING PROCEDURE SELECTION

FIGURE 3 - WELL DECOMMISSIONING RECORD

APPENDICES

APPENDIX A - REPORTS

APPENDIX A1 - INSPECTOR'S DAILY REPORT

APPENDIX A2 - PROBLEM IDENTIFICATION REPORT

APPENDIX A3 - CORRECTIVE MEASURES REPORT

INTRODUCTION

This document, *Groundwater Monitoring Well Decommissioning Procedures*, is the addendum to CP-43, Groundwater Monitoring Well Decommissioning Policy, which provides acceptable procedures to be used as guidance when decommissioning monitoring wells in New York State. Please note that this document does not address some site-specific special situations that may be encountered in the field. Compliance with the procedures set forth in this document does not relieve any party of the obligation to properly decommission a monitoring well.

Unprotected, neglected and improperly abandoned monitoring wells are a serious environmental liability. They can function as a pollution conduit for surface contaminants to reach the subsurface and pollute our groundwater. They also can cause unwanted mixing of groundwater, which degrades the overall water quality within an aquifer. Improperly constructed, poorly maintained or damaged monitoring wells can yield anomalous poor data that can compromise the findings of an environmental investigation or remediation project. Unneeded or compromised monitoring wells should be properly decommissioned in order to prevent harm to our groundwater.

Previous versions of this guidance have been issued since 1995. Originally developed as a specification for well decommissioning at Love Canal, the procedures were rewritten to make them applicable across the state. From an engineering standpoint, the guidance has changed very little. Most situations do not require a complex procedure.

If you have any questions, please contact Will Welling at (518) 402-9814.

Sincerely,



Gerald J. Rider, Jr., P.E.
Chief, Remedial Section D
Remedial Bureau E
Division of Environmental Remediation

1.0 PREPARATION

If an unneeded monitoring well remains in good usable condition, an alternative to decommissioning might be the reuse by another agency program. DEC encourages reuse in situations where a well will continue to be used and cared for responsibly.

When reuse is not an option, the first step in the well decommissioning process is to review all pertinent well construction information. One must know the well depth and construction details. GPS coordinates and permanent labeling (if available) will be useful in confirming the well to be decommissioned. An inspection must be performed prior to decommissioning in order to verify the construction and condition of each well. Specific details and subsurface conditions form the basis for decisions throughout the decommissioning process.

Well Details

1. Is the well a single stem riser (all one diameter)?
2. Is the well a simple overburden well (no penetration into bedrock)?
3. Does the well riser consist of telescoping diameters of pipe which decrease with depth?
4. Is the well seal compromised (leaking, inadequate or damaged)?
5. If the well is PVC, is it 25 feet or shallower and not grouted into rock?
6. Can the riser be pulled and is removal of the well desired?
7. Is the well a bedrock well?
8. If the monitoring well is a bedrock well, does it have an open hole?
9. Is there a well assembly (riser and screen) installed within the bedrock hole?

Subsurface Conditions

10. Is the soil contaminated?
11. Does the well penetrate a confining layer?
12. If the well penetrates a confining layer, might overdrilling or casing pulling cause contamination to travel up or down through a break in the confining layer?
13. Does the screened interval cross multiple water-bearing zones?

For additional collection and verification of information, the "Monitoring Well Field Inspection Log" (Figure 1) can be used during a field inspection. After the well has been located and the information gathered, one is ready to select the decommissioning procedure in accordance with Section 2.

Special conditions, such as access problems, well extensions through capped and covered non-Part 360 landfills and seasonal weather patterns affecting construction, should be assessed in the planning stage. Decommissioning work requiring the use of heavy vehicular equipment on landfill caps should be scheduled during dry weather (if possible) so as to minimize damage to the cover. If work must be performed during the spring, winter or inclement weather, special measures to reduce ruts should be employed to maintain the integrity of a completed landfill cover system. As an example, placement of plywood under vehicular equipment can eliminate deep ruts that would require repair.

2.0 DECOMMISSIONING METHODS

The primary rationale for well decommissioning is to remove any potential groundwater pathway. A secondary rationale, often important to the property owner or owner of the well, is to physically remove the well. Removed well materials may be recycled and will not interfere with future construction excavation. The previous versions of these decommissioning procedures have stressed that physical removal of the well by pulling is preferable to leaving casing in the ground. Due to the added effort, expense and risk involved with pulling, the decision of whether to pull or not should be a separate consideration aside from selecting the sealing procedure.

One should select a decommissioning procedure that takes into account the geologic and hydrogeologic conditions at the well site; the presence or absence of contamination in the groundwater; and original well construction details. The selection process for well decommissioning procedures is provided by the flow chart, Figure 2. Answers to the questions

in the preceding section are the input for this flow chart. The four primary well decommissioning methods are:

1. Grouting in-place;
2. Perforating the casing followed by grouting in-place;
3. Grouting in-place followed by casing pulling;
4. Over-drilling and grouting with or without a temporary casing.

In a complex situation, one or more decommissioning procedures may be used for different intervals of the same well.

The remainder of Section 2 discusses the well decommissioning methods and the selection process. Refer to Figure 2 for a flow chart diagram of the complete procedure selection process. The DEC Project Manager has the discretion to deviate from the flow chart, (Figure 2), based on site conditions and professional judgment.

2.1 Grouting In-Place

Grouting in-place is the simplest and most frequently used well decommissioning method and grouting itself is the essential component of all the decommissioning methods. The grout seals the borehole and any portion of the monitoring well that may be left in the ground. Because dirt and foreign objects can fall into an open well, whenever possible a well should be sealed first with grout before attempting subsequent decommissioning steps.

For the purpose of these decommissioning procedures, the well seal is defined as the bentonite seal above the sand pack. Aside from obvious channeling by in-flowing surface water around the well, an indication of the well seal integrity may be obtained through review of the boring logs and/or a comparison of groundwater elevations if the well is part of a cluster. Any problems noted on the boring logs pertaining to the well seal, such as bridging of bentonite pellets or running sands, or disparities between field notes (if available) and the well log would indicate the potential for a poor (compromised) well seal.

If the well seal is not compromised and there is no confining layer present, a single-stem, 2-inch PVC, monitoring well can be satisfactorily decommissioned by grouting it in-place. If the seal is compromised, casing perforation may be called for as discussed in Section 2.2.

As discussed in Section 2.4 and its sub-sections, this method is specified for the bedrock portion of a well, and is used for decommissioning small diameter cased wells. Grouting in-place involves filling the casing with grout to a level of five feet below the land surface, cutting the well casing at the five-foot depth, and removing the top portion of the casing and associated well materials from the ground. The casing must be grouted according to the procedures in Section 6. In addition, the upper five feet of the borehole is filled to land surface and restored according to the procedures described in Section 7.

For open-hole bedrock wells, the procedure involves filling the opening with grout to the top of rock according to the procedures in Section 5. A thicker grout may be required to fill any bedrock voids. If excessive grout is being lost down-hole, consider grouting in stages to reduce the pressure caused by the height of the grout column.

The standard mix with the maximum amount of allowable water will be required to penetrate the well screen and sand pack when a well assembly has been installed within a bedrock hole. For an assembly such as this, the grout should be mixed thinly enough to penetrate the slots and sand pack. The grout mixes are discussed in Sections 6.1 and 6.2.

2.2 Casing Perforating/Grouting In-Place

Casing perforation followed by grouting in-place is the preferred method to use if there is poor documentation of the grouting of the well annulus, or the annulus was allowed to be back-filled with cuttings. The grout will squeeze through the perforations to seal any porous zones along the outside of the casing. The procedure involves puncturing, cutting or splitting the well casing and screen followed by grouting the well. A variety of commercial equipment is available for perforating casings and screens in wells with four-inch or larger inside diameters. Due to the diversity of applications, experienced contractors must recommend a specific technique based on site-specific conditions. A minimum of four rows of perforations several inches long around the circumference of the pipe and a minimum of five perforations per linear foot of casing or screen is recommended (American Society for Testing and Materials, Standard D 5299-99, 1999). After the perforating is complete, the borehole must be grouted according to the procedures in Section 6 and the upper five feet of borehole restored according to the procedures in Section 7.

2.3 Casing Pulling

Casing pulling should be used in cases where the materials of the well assembly are to be recycled, or the well assembly must be removed to clear the site for future excavation or re-development. Casing pulling is an acceptable method to use when no contamination is present; contamination is present but the well does not penetrate a confining layer; and when both contamination and a confining layer are present but the contamination cannot cross the confining layer. Additionally, the well construction materials and well depth must be such that pulling will not break the riser. When contamination is likely to cross the confining layer during pulling, a temporary casing can be used. See Section 2.4.

Casing pulling involves removing the well casing by lifting. Grout is to be added during pulling; the grout will fill the space once occupied by the material being withdrawn. An acceptable procedure to remove casing involves puncturing the bottom of the well or using a casing cutter to cut away the screen, grouting, using jacks to free casing from the hole, and lifting the casing out by using a drill rig, backhoe, crane, or other suitable equipment. Additional grout must be added to the casing as it is withdrawn. Grout mixing and placement procedures are provided in Section 6. In wells or well points in which the bottom cannot be punctured, the casing or screened interval will be perforated or cut away prior to being filled with grout. This procedure should be followed for wells installed in collapsible formations or for highly contaminated wells.

At sites in which well casings have been grouted into the top of bedrock, the casing pulling procedure should not be attempted unless the casing can be first cut or freed from the rock.

2.4 Over-Drilling

Over-drilling is the technique used to physically remove an entire monitoring well, its sand pack and the old grout column and fill. In situations where PVC screens and risers are expected to sever and removal of all well materials is required, over-drilling will be required. Over-drilling is called for when a riser can't be pulled and it penetrates a confining layer. Compared to the other procedures, over-drilling is the least common method of well decommissioning.

A "temporary casing" may be necessary when extraordinary conditions are present, such as a high concentration of mobile contaminants in the overburden, depth to water is shallow, there is poor construction documentation or shoddy construction practices. The approach involves installing a large diameter steel casing around the outside of the well followed by drilling / pulling / grouting within this casing. The casing is withdrawn at the end of pulling, grouting and (perhaps) drilling. If the confining layer is less than 5 feet thick, the casing should be installed to the top of the confining layer. Otherwise, it is installed to a depth of 2 feet below the top of the confining layer. After the outer casing has been set, the well can be removed and grouted through pulling if possible or removed and grouted by drilling inside the casing.

Over-drilling is used where casing pulling is determined to be unfeasible, or where installation of a temporary casing is necessary to prevent cross-contamination, such as when a confining layer is present and contamination in the deeper aquifer could migrate to the upper aquifer as the well is pulled. The over-drilling method should:

- Follow the original well bore;
- Create a borehole of the same or greater diameter than the original boring; and
- Remove all of the well construction materials.

In over-drilling the difficulty lies in keeping the augers centered on the old well as the bit is lowered; it will tend to wander off. As a precaution, the well column should be filled with grout before over-drilling. Then without allowing the grout to dry, the driller proceeds with over-drilling the well. Grouting first guarantees that if the drill wanders off the old well and the effort is less than 100% successful, the remaining well portion will at least have been grouted. There are many methods for over-drilling. Please note that the following methods are not suitable for all types of casing, and the advice of an experienced driller should be sought.

- Conventional augering (i.e., a hollow stem auger fitted with a pilot bit). The pilot bit will grind the well construction materials, which will be brought to the well surface by the auger.
- A conventional cable tool rig to advance "temporary" casing having a larger diameter than the original boring. The cable tool kit is advanced within the casing to grind the well construction materials and soils, which are periodically removed with large diameter bailer. This method is not applicable to bedrock wells.

- An over-reaming tool with a pilot bit nearly the same size as the inside diameter of the casing and a reaming bit slightly larger than the original borehole diameter. This method can be used for wells with steel casings.
- A hollow-stem auger with outward facing carbide cutting teeth having a diameter two to four inches larger than the casing.

Prior to over-drilling, the bottom of the well should be perforated or cut away, and the casing filled with grout as with casing removal by pulling.

In all cases above, over-drilling should advance beyond the original bore depth by a distance of half a foot to ensure complete removal of the construction materials. Oversight attention should be focused on the drill cuttings, looking for fragments of well materials. Absence of these indicators is a sign that the drill has wandered off the well. If wandering is suspected, having previously filled the well with grout, the remaining portion which cannot be over-drilled can be considered grouted in-place. When the over-drilling is complete, grout should be tremied within the annular space between the augers and well casings. The grout level in the borehole should be maintained as the drilling equipment and well materials are sequentially removed. As with all the other methods, the upper five feet of borehole should be restored according to the procedures in Section 7.

3.0 SELECTION PROCESS AND IMPLEMENTATION

The decommissioning procedure selection flow chart, Figure 2, is to be used to select decommissioning methods. The selection process first identifies the basic monitoring well type. There are only two types of monitoring wells described in this guidance, overburden wells and bedrock wells. Bedrock wells typically have an overburden portion which in the selection process is to be treated as an overburden well. Techniques are specified for wells based upon their type and the other physical conditions present. Decommissioning techniques called for by the selection process have their practical limits; construction details dictate when a well stem can be pulled without breaking and when it cannot be pulled. The DEC project manager has the discretion to deviate from the flow chart, (Figure 2), based on site conditions, budgetary concerns and professional judgment. The remainder of this section will discuss types of monitoring wells in various settings along with recommended decommissioning techniques.

3.1 Bedrock Wells

Referring to Figure 2 and Section 2.1, if the well extends into bedrock, the rock hole portion of the well is to be grouted in-place to the top of the rock. The grout mix, however, may vary according to the conditions. A thicker grout may be required to fill voids and a thinner grout may be necessary to penetrate well screen and sand pack. Refer to the grout mixture specifications given in Section 6.1 and 6.2.

Prior to grouting, the depth of the well will be measured to determine if any silt or debris has plugged the well. If plugging has occurred, all reasonable attempts to clear it should be made before grouting. The borehole will then be tremie grouted according to Section 6.4 from the bottom of the well to the top of bedrock to ensure a continuous grout column.

After the rock hole is grouted, the overburden portion of the well is decommissioned using appropriate techniques described below. If the bedrock extends to the ground surface, grouting can extend to the ground surface or to slightly below so that the site can be restored as appropriate in accordance with Section 7.

3.2 Uncontaminated Overburden Wells

For overburden wells and the overburden portion of bedrock wells, the first factor in determining the decommissioning method is whether the overburden portion of the well exhibits contamination, as determined through historical groundwater and/or soil sampling results. If the overburden is uncontaminated, the next criteria considers whether the well penetrates a confining layer. In the case that the overburden portion of the well does not penetrate a confining layer, the casing can either be tremie-grouted and pulled or tremie grouted and left in place. As a general rule, PVC wells greater than 25-feet deep should not be pulled unless site-specific conditions or other factors indicate that the well can be pulled without breaking. If the well cannot be pulled, the well should be grouted in-place as accordance with Sections 2.1 and 2.2.

If a non-telescoped overburden well penetrates a confining layer, the casing should be removed by pulling (if possible) in accordance with Section 2.3. If the casing cannot be removed by pulling, the well should be grouted in-place or where complete removal is required, removed by over-drilling. Over-drilling will be based upon the site-specific conditions and requirements. If pulling is attempted and fails (i.e., a portion of the riser breaks) the remaining portion of the well should be removed by using the conventional augering procedure identified in Section 2.4. Note that if the riser is broken during pulling, it is highly unlikely that the driller will be able to target it to over-drill it. This is the reason why all wells should be grouted first. In all cases, after the well construction materials have been removed to the extent possible, the borehole will be grouted in accordance with Section 6 and the upper five feet will be restored in accordance with Section 7.

3.3 Contaminated Overburden Monitoring Wells/Piezometers

Contamination in the overburden plays a role in the selection process. Any contamination present in the overburden must not be allowed to spread as a result of the decommissioning construction. For wells and piezometers suspected or known to be contaminated with light non-aqueous phase liquid (LNAPL) and/or dense non-aqueous phase liquid (DNAPL), often referred to as “product,” the decision to decommission the well should be reviewed. Such gross contamination is a special condition and requires design of the decommissioning procedure. If decommissioning is determined to be the proper course of action, measurement of the non-aqueous phase liquid volume will be determined and this liquid will be removed.

If an overburden well (or the overburden portion of a bedrock well) is contaminated with LNAPL, DNAPL and /or dissolved fractions as indicated by historical sampling results, one must evaluate the potential for contamination to cross an overburden confining layer (if one exists) during decommissioning. A rock or soil horizon of very low permeability is known as a confining layer. Contamination in the overburden lying above a confining layer is a significant condition to recognize. To prevent mobile contaminants from crossing a confining layer during pulling or over-drilling, a temporary casing should be installed to isolate the work zone. One should follow the procedure selection flow chart. Some contaminated conditions call for over-

drilling or a specially designed procedure.

A well in contaminated overburden may be grouted in-place as long as the grout fully seals the well and boring zone. If a well in contaminated overburden was constructed allowing formation collapse as annular backfill or if the well has a compromised well seal, one must either physically remove the well or thoroughly perforate the riser and grout it in-place.

If physical removal of the well is required and the overburden contaminants are likely to be dragged upward or downward during decommissioning, a temporary casing should be used to seal off the construction work zone. Casing pulling and overdrilling can be safely accomplished within the temporary casing. Section 2.4 discusses the temporary casing technique.

3.4 Telescoped Riser

If the riser is telescoped in one or more outer casings, the decommissioning approach depends upon the integrity of the well seal. If there is no evidence that the well seal integrity is compromised, the riser should be grouted in-place in accordance with Sections 2.1 or 2.2 and the upper 5 feet of the well surface should be restored in accordance with Section 7. If indications are that the well seal is not competent, it will be necessary to design and implement a special procedure to perforate and grout or remove the well construction materials. The presence and configuration of the outer casing(s) will be specific in the individual wells and will be a key factor in the decommissioning approach. The special procedure must mitigate the potential for cross-contamination during removal of the well construction materials.

4.0 LOCATING AND SETTING-UP ON THE WELL

Prior to mobilizing to decommission a monitoring well, one should notify the property owner and/or other interested parties including the governing regulatory agency. It is advisable that when at the well location, one should review the proposed well decommissioning procedure. Verify well locations and identification by their identifying markers and GPS coordinates. Lastly, verify the depth of each well with respect to depth recorded on the well construction log.

5.0 REMOVING THE PROTECTIVE CASING

Most monitoring wells installed in non-traffic locations are finished with an elevated, protective casing (guard pipe) and a concrete rain pad. Wells at gasoline stations, usually being in high-traffic areas, are typically finished with a flush-mount, curb box and protective 8" dia steel inspection plate rather than a stick-up riser. The curb box is usually easily removed from around the flush-mount well before pulling or over-drilling. In the case of stick-up wells, the riser pipe may be bonded to the guard pipe and rain pad. When the protective casing and concrete pad of a stick-up monitoring well are "yanked out," a PVC riser will typically break off at the bottom of the guard pipe several feet below grade. Once this happens, it may become impossible to center a drill rig upon the well. The riser may become splintered and structurally unstable for pulling. Unless grouted first, the well may fill with dirt. Before pulling a casing or over-drilling a well, a method must be devised for removing these protective surface pieces without jeopardizing the remaining decommissioning effort.

Generally, unless the protective casing is loose and can be safely lifted off by hand, *one*

should fill the monitoring well with grout before removing the outer protective casing. This will ensure that the well is properly sealed regardless of any problems later when removing the protective casing. Remove the protective casing or road box vault initially only if the stick-up or vault will interfere with subsequent down-hole work which must be done before grouting. This down-hole work may include puncturing, perforating or cutting the screen or riser. But as a general procedure don't remove the protective casing or road box until after initial grouting is complete.

The procedure for removing the protective casing of a well depends upon the decommissioning method specified for the monitoring well. The variety of protective casings available preclude developing a specific removal procedure but often one can simply break up the concrete seal surrounding the casing and jack or hoist the protective casing out of the ground. A check should be made during pulling to ensure that the inner well casing is not being hoisted with the protective casing. If this occurs, the well casing should be cut off after the base of the protective casing is lifted above the land surface. At well locations where the riser has been extended, the burial of a previous concrete pad may require the excavation of soil to the top of the concrete pad to remove the well.

Steel well casing should be removed approximately five feet below the land surface so as to be below the frost line and out of the way of any subsequent shallow digging. The upper five feet of casing and the protective casing can be removed in one operation if a casing cutter is used.

Waste handling and disposal must be consistent with the methods used for the other well materials unless an alternate disposal method can be employed (i.e., steam cleaning followed by disposal as non-hazardous waste).

6.0 SELECTING, MIXING, AND PLACING GROUT

This section gives recipes for the “standard grout mixture” and the thicker “special grout mixture.” Mixing and placing grout is also discussed in this section. The goal of well decommissioning is to eliminate the capability of water to travel up or down within the volume of the former well and its boring. Success depends upon the correct grout mixture and placement where it is needed. There are two types of grout mixes that may be used to seal monitoring wells: a standard mix and a special mix. Both mixes use Type 1 Portland cement and four percent bentonite by weight. However, the special mix uses a smaller volume of water and is used in situations where excessive loss of the standard grout mix is possible (e.g., highly-fractured bedrock or coarse gravels).

6.1 Standard Grout Mixture

For most boreholes, the following standard mixture will be used:

- One 94-pound bag Type I Portland cement;
- 3.9 pounds powdered bentonite; and
- 7.8 gallons potable water.

Slightly more water may be used in order to penetrate a sand pack when a well screen transects multiple flow zones. This mixture results in a grout with a bentonite content of four percent by weight and will be used in all cases except in boreholes where excessive use of grout is anticipated. In these cases a special thicker mixture will be used.

6.2 Special Mixture

In cases where excessive use of grout is anticipated, such as high permeability formations and highly fractured or cavernous bedrock formations, the following special mixture will be used:

- one 94-pound bag type I Portland cement;
- 3.9 pounds powdered bentonite;
- 1 pound calcium chloride; and
- 6.0-7.8 gallons potable water (depending on desired thickness).

The special mixture results in a grout with a bentonite content of four percent by dry weight. It is thicker than the standard mixture because it contains less water. This grout is expected to set faster than the Standard Grout Mixture due to the added calcium chloride. The least amount of water that can be added for the mixture to be readily pumpable is 6 gallons per 94-pound bag of cement.

6.3 Grout Mixing Procedure

To begin the grout-mixing procedure, calculate the volume of grout required to fill the borehole. If possible, the mixing basin should be large enough to hold all of the grout necessary for the borehole.

Mix grout until a smooth, homogeneous mixture is achieved. Grout can be mixed manually or with a mechanized mixer. Colloidal mixers should not be used as they tend to excessively decrease the thickness of the grout for the above recipes.

6.4 Grout Placement

This guidance requires that grout be placed in the well from the bottom to the top by means of a "tremie." A tremie is a pipe, a hose or a tube extending from the grout supply to the bottom of the well. The tremie delivers the grout all the way down through the water column without its being diluted and mixed with the water that may be present in the well. The tremie pipe or tube is withdrawn as (or after) the well is filled with grout.

Using the tremie, grout is placed in the borehole filling from the bottom to the top. Two-inch and larger wells should use tremie tubing of not less than 1-inch diameter. Smaller diameter wells will call for a smaller tremie pipe. Grout will then be pumped in until the grout appears at the land surface (when grouting open holes in bedrock, the grout level only needs to reach above the bedrock surface). Any groundwater displaced during grout placement, if known to be contaminated, will be contained for proper disposal.

At this time the rate of settling should be observed. If grouting the well in place, the well

casing remains in the hole. But if the decommissioning method has involved down-hole tools such as hollow-stem augers or temporary casing for overdrilling, these will be removed from the hole. As each section is removed, grout will be added to keep the level between 0 and 5 feet below grade. If the grout level drops below the land surface to an excessive degree, an alternate grouting method must be used. One possibility is to grout in stages; i.e., the first batch of grout is allowed to partially cure before a second batch of grout is added.

As previously described in Section 5.0, the outer protective casing "stick-up" should be removed only after a well has been properly filled with grout. This will ensure that the well is properly sealed regardless of any breakage which may occur when removing the stick-up. It is important to reiterate that when either casing pulling or over-drilling are required, due to the uncertainty of successfully pulling a well or over-boring a well, we insist that the driller tremie grout the well first. Then without allowing the grout to dry, the driller proceeds with pulling the casing or over-drilling the well.

Upon completion of grouting, ensure that the final grout level is approximately five feet below land surface. A ferrous metal marker will be embedded in the top of the grout to indicate the location of the former monitoring well. Lastly, a fabric "utility" marking should be placed one foot above the grout so an excavator can see it clearly.

7.0 BACKFILLING AND SITE RESTORATION

The uppermost five feet of the borehole at the land surface should be filled with material physically similar to the natural soils. The surface of the borehole should be restored to the condition of the area surrounding the borehole. For example, concrete or asphalt will be patched with concrete or asphalt of the same type and thickness, grassed areas will be seeded, and topsoil will be used in other areas. All solid waste materials generated during the decommissioning process must be disposed of properly.

8.0 DOCUMENTATION

A form which may be used in the field to record the decommissioning construction is included as Figure 3. Additional documentation may be required by a DEC project manager and samples are included in Appendix A. Programs within the DEC that maintain geographic data on monitoring wells strive to keep that data up to date. Owners of these data sets must be notified when a well is decommissioned. Historical groundwater quality data is linked to monitoring well locations so when a well is decommissioned, existing GIS data must be updated to reflect that fact but the coordinate location in the GIS database should not be eliminated. A metal detector may not be able to detect a deeply buried marker so if this locator is important for future utility runs or foundations, a map should be submitted to the property owner and the town engineer showing the decommissioned well locations. Global Positioning System (GPS) coordinates should be indicated on this map. Lastly, whatever documentation is produced should be provided to the property owner, the DEC, and all other parties involved.

9.0 FIELD OVERSIGHT

Over-drilling requires careful observation to detect whether the drill has wandered off the well. Grout preparation and tremie work should be carefully observed. The successful implementation of a decommissioning work plan depends upon proper direction, observation and oversight. Methods to be employed must be clearly worked through and all parties must understand what they have to do before going into the field. Flexibility is allowed where necessary but the work effort must be thorough and effective to protect our groundwater.

10.0 RELATED REFERENCES

- *Groundwater Monitoring Well Decommissioning Procedures*, October 1986. Prepared by Malcolm Pirnie, Inc., for the New York State Department of Environmental Conservation, Division of Environmental Remediation.
- American Society for Testing and Materials, A.S.T.M. D 5299-99, Standard Guide for the Decommissioning of Ground Water Wells, Vadose Zone Monitoring Devices, Boreholes, and Other Devices for Environmental Activities. A.S.T.M.. Philadelphia. 2005.
- New York State Department of Environmental Conservation, Division of Solid and Hazardous Materials, 6 NYCRR Part 360, Solid Waste Management Facilities.
- New York State Department of Environmental Conservation, Region I - Water Unit, Specifications for Abandoning Wells and Boreholes in Unconsolidated Materials, undated.
- United States Environmental Protection Agency, The Handbook of Suggested Practices for the Design and Installation of Groundwater Monitoring Wells, EPA 600/4-89/034.

FIGURES

FIGURE 1 - MONITORING WELL FIELD INSPECTION LOG

FIGURE 2 - DECOMMISSIONING PROCEDURE SELECTION

FIGURE 3 - WELL DECOMMISSIONING RECORD

APPENDICES

APPENDIX A - REPORTS

APPENDIX A1 - INSPECTOR'S DAILY REPORT

APPENDIX A2 - PROBLEM IDENTIFICATION REPORT

APPENDIX A3 - CORRECTIVE MEASURES REPORT

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FIGURE 1

MONITORING WELL FIELD INSPECTION LOG

FIGURE 1

SITE NAME:

MONITORING WELL FIELD INSPECTION LOG
NYSDEC WELL DECOMMISSIONING PROGRAM

SITE ID.: _____
INSPECTOR: _____
DATE/TIME: _____
WELL ID.: _____

	YES	NO
WELL VISIBLE? (If not, provide directions below)		
WELL I.D. VISIBLE?		
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back).....		

	YES	NO
WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL:		
SURFACE SEAL PRESENT?		
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)		
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)		

HEADSPACE READING (ppm) AND INSTRUMENT USED.....
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)
PROTECTIVE CASING MATERIAL TYPE:
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):

	YES	NO
LOCK PRESENT?		
LOCK FUNCTIONAL?		
DID YOU REPLACE THE LOCK?		
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		
WELL MEASURING POINT VISIBLE?		

MEASURE WELL DEPTH FROM MEASURING POINT (Feet):
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):
MEASURE WELL DIAMETER (Inches):
WELL CASING MATERIAL:
PHYSICAL CONDITION OF VISIBLE WELL CASING:
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES.....

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.)
AND ASSESS THE TYPE OF RESTORATION REQUIRED.

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT
(e.g. Gas station, salt pile, etc.):

REMARKS:

FIGURE 2

DECOMMISSIONING PROCEDURE SELECTION



NYSDEC Monitoring Well Decommissioning Procedure Selection

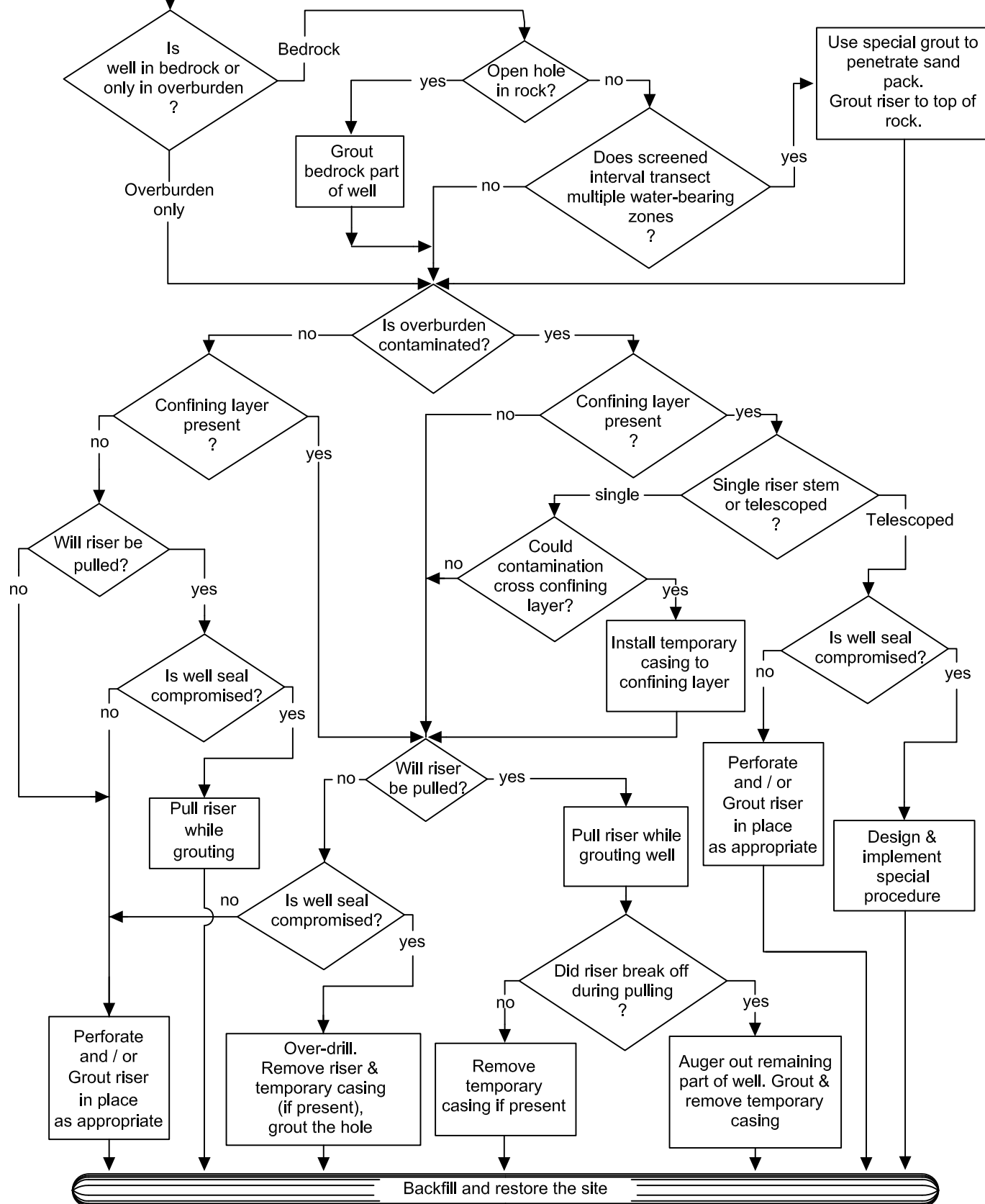


FIGURE 2

FIGURE 3

WELL DECOMMISSIONING RECORD

WELL DECOMMISSIONING RECORD

Site Name:	Well I.D.:
Site Location:	Driller:
Drilling Co.:	Inspector:
	Date:

DECOMMISSIONING DATA (Fill in all that apply)		WELL SCHEMATIC*		
<u>OVERDRILLING</u>		Depth (feet)		
Interval Drilled				
Drilling Method(s)				
Borehole Dia. (in.)				
Temporary Casing Installed? (y/n)				
Depth temporary casing installed				
Casing type/dia. (in.)				
Method of installing				
<u>CASING PULLING</u>				
Method employed				
Casing retrieved (feet)				
Casing type/dia. (in)				
<u>CASING PERFORATING</u>				
Equipment used				
Number of perforations/foot				
Size of perforations				
Interval perforated				
<u>GROUTING</u>				
Interval grouted (FBLS)				
# of batches prepared				
For each batch record:				
Quantity of water used (gal.)				
Quantity of cement used (lbs.)				
Cement type				
Quantity of bentonite used (lbs.)				
Quantity of calcium chloride used (lbs.)				
Volume of grout prepared (gal.)				
Volume of grout used (gal.)				

COMMENTS:

* Sketch in all relevant decommissioning data, including:
interval overdrilled, interval grouted, casing left in hole,
well stickup, etc.

APPENDIX A - REPORTS

APPENDIX A1 - INSPECTOR'S DAILY REPORT

APPENDIX A2 - PROBLEM IDENTIFICATION REPORT

APPENDIX A3 - CORRECTIVE MEASURES REPORT

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Inspector's Daily Report

CONTRACTOR:
ADDRESS:

TELEPHONE:

LOCATION

FROM

TO

WEATHER

TEMP

A.M.

P.M.

DATE

CONTRACTOR'S WORK FORCE AND EQUIPMENT											
DESCRIPTION	H	#	DESCRIPTION	H	#	DESCRIPTION	H	#	DESCRIPTION	H	#
Field Engineer						Equipment			Front Loader Ton		
Superintendent			Ironworker			Generators			Bulldozer		
						Welding Equip.					
Laborer Foreman			Carpenter								
Laborer									Backhoe		
Operating Engineer			Concrete Finisher								
Carpenter						Paving Equip. & Roller					
						Air compressor					

SEE REVERSE SIDE FOR SKETCH YES ☐ NO ☐

WORK PERFORMED:

PAY ITEMS

CONTRACT		STA		DESCRIPTION	QUANTITY	REMARKS
Number	ITEM	FROM	TO			

TEST PERFORMED:

PICTURES TAKEN:

QA PERSONNEL

SIGNATURE

VISITORS:

REPORT NUMBER

SHEET _____ Of _____

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PROBLEM IDENTIFICATION REPORT

Date _____

Project _____ Job Number _____

Contractor _____

Subject _____

Day

Su	M	T	W	Th	F	Sa

Sky/Precip.	Clear	Partly Cloudy	Cloudy	Rainy	Snow
TEMP.	<32F	32-40F	40-70F	70-80F	80-90F
WIND	No	Light	Strong		
HUMIDITY	Dry	Mod.	Humid		

PROBLEM DESCRIPTION Reference Daily Report Number 1: _____

PROBLEM LOCATION - REFERENCE TEST RESULTS AND LOCATION (Note: Use sketches on back of form as appropriate):

PROBABLE CAUSES: _____

SUGGESTED CORRECTIVE MEASURES: _____

APPROVALS:

QA ENGINEER: _____

PROJECT MANAGER: _____

Distribution: 1. Project Manager
2. Field Office
3. File
4. Owner

QA Personnel
Signature: _____

MEETINGS HELD AND RESULTS

This image shows a single sheet of white paper with horizontal blue or grey ruling lines, typical of notebook paper. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

REMARKS

REFERENCES TO OTHER FORMS

SKETCHES

[illegible]

SAMPLE LOG

SAMPLE NUMBER

APPROXIMATE LOCATION OF STOCKPILE

NUMBER OF STOCKPILE

DATE OF COLLECTION

CLIMATIC CONDITIONS

FIELD OBSERVATION

CORRECTIVE MEASURES REPORT

Date _____

Project _____ Job Number _____

Contractor _____

Subject _____

Day

Su	M	T	W	Th	F	Sa

Sky/Precip.	Clear	Partly Cloudy	Cloudy	Rainy	Snow
TEMP.	<32F	32-40F	40-70F	70-80F	80-90F
WIND	No	Light	Strong		
HUMIDITY	Dry	Mod.	Humid		

CORRECTIVE MEASURES TAKEN (Reference Problem Identification Report No.): _____

RETESTING LOCATION: _____

SUGGESTED METHOD OF MINIMIZING RE-OCCURRENCE: _____

SUGGESTED CORRECTIVE MEASURES: _____

APPROVALS:

QA ENGINEER: _____

PROJECT MANAGER: _____

Distribution:

1. Project Manager
2. Field Office
3. File
4. Owner

QA Personnel

Signature: _____