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Alpha Analytical

Laboratory Code: 11148

SDG Number: L2373323

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Project Name: TROY BELTING
Project Number: 2011-31

Lab Number: L2373323
Report Date: 12/19/23

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2373323-01	MW-8S	WATER	COLONIE, NY	12/12/23 09:50	12/12/23
L2373323-02	MW-6D'	WATER	COLONIE, NY	12/12/23 10:55	12/12/23
L2373323-03	MW-6S	WATER	COLONIE, NY	12/12/23 11:25	12/12/23
L2373323-04	MW-6D	WATER	COLONIE, NY	12/12/23 13:20	12/12/23
L2373323-05	MW-4S	WATER	COLONIE, NY	12/12/23 14:25	12/12/23
L2373323-06	DUP12122023	WATER	COLONIE, NY	12/12/23 00:00	12/12/23
L2373323-07	TB12122023	WATER	COLONIE, NY	12/12/23 00:00	12/12/23

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.

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.

Volatile Organics

The WG1865859-6/-7 MS/MSD recoveries, performed on L2373323-04, are outside the acceptance criteria for vinyl chloride (0%/0%). The unacceptable percent recoveries are attributed to the elevated concentration of target compounds present in the native sample.

Dissolved Gases

L2373323-01, -03, -04, -05 and -06: The samples were collected in pre-preserved vials; however, the pH of the samples was determined to be greater than two.

The WG1865332-4/-5 MS/MSD recoveries, performed on L2373323-04, are outside the acceptance criteria for methane (0%/0%), The unacceptable percent recoveries are attributed to the elevated concentration of target compounds present in the native sample.

Total Metals

The WG1863929-7 MS recovery, performed on L2373323-04, is outside the acceptance criteria for iron (132%). A post digestion spike was performed and was within acceptance criteria.

Dissolved Metals

The WG1863597-4 MSD recovery, performed on L2373323-04, is outside the acceptance criteria for iron (152%). A post digestion spike was performed and was within acceptance criteria.

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: Tiffani Morrissey Report Date: 12/19/23

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

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.

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

Alpha Job Number : L2373323

Received : 12-DEC-2023
Reviewer : Julie DeCenzo

Account Name : Sterling Environmental Engineering
Project Number : 2011-31
Project Name : TROY BELTING

Delivery Information

Samples Delivered By : Alpha Courier

Chain of Custody : Present

Cooler Information

Cooler	Seal/Seal#	Preservation	Temperature(°C)	Additional Information
A	Absent/	Ice	2.4	

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? **NO**
Following containers were received with headspace: -02B, -04E2, -05E, -06E

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
Dec 19 2023, 08:26 pm

Login Number: L2373323
Account: STERLINGENV Sterling Environmental EngineeringProject: 2011-31
Received: 12DEC23 Due Date: 19DEC23

Sample #	Client ID	Mat	PR	Collected
L2373323-01	MW-8S	1	S0	12DEC23 09:50
DISSGAS - MEE only 8260 - List built ASP-B Package Due Date: 12/19/23				
ASP-B,DISSGAS,E&I-FEE,FE-6020S,FE-6020T,NYTCL-8260-R2,PREPS,PREPT,SO4-300				
L2373323-02	MW-6D'	1	S0	12DEC23 10:55
8260 - List built Package Due Date: 12/19/23				
NYTCL-8260-R2				
L2373323-03	MW-6S	1	S0	12DEC23 11:25
DISSGAS - MEE only 8260 - List built Package Due Date: 12/19/23				
DISSGAS,FE-6020S,FE-6020T,NYTCL-8260-R2,PREPS,PREPT,SO4-300				
L2373323-04	MW-6D	1	S0	12DEC23 13:20
L2373323-04 MSD DISSGAS - MEE only L2373323-04 MS 8260 - List built Package Due Date: 12/19/23				
DISSGAS,FE-6020S,FE-6020T,MS/MSD,NYTCL-8260-R2,PREPS,PREPT,SO4-300				
L2373323-05	MW-4S	1	S0	12DEC23 14:25
DISSGAS - MEE only 8260 - List built Package Due Date: 12/19/23				
DISSGAS,FE-6020S,FE-6020T,NYTCL-8260-R2,PREPS,PREPT,SO4-300				
L2373323-06	DUP12122023	1	S0	12DEC23 00:00
DISSGAS - MEE only 8260 - List built Package Due Date: 12/19/23				
DISSGAS,FE-6020S,FE-6020T,NYTCL-8260-R2,PREPS,PREPT,SO4-300				
L2373323-07	TB12122023	1	S0	12DEC23 00:00
8260 - List built Package Due Date: 12/19/23				

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Dec 19 2023, 08:26 pm

Login Number: L2373323

Account: STERLINGENV Sterling Environmental EngineeringProject: 2011-31

Received: 12DEC23 Due Date: 19DEC23

Sample #	Client ID	Mat	PR	Collected

NYTCL-8260-R2

Logged By: Melissa Deyo

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

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Date Rec'd in Lab: 12/13/23

ALPHA Job #: L2373323

Client Information
Client: Sterling Env. Eng.
Address: 24 Wade Road
Latham NY 12110
Phone: (518) 456-4900
Fax:
Email:

Project Information
Project Name: Troy Belting
Project Location: Colonie, NY
Project # 2011-31 ~~Task 011~~
(Use Project name as Project #) ☐
Project Manager: Andrew Millspaugh
ALPHAQuote #:

Turn-Around Time
Standard ☒ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables
☒ ASP-A ☒ ASP-B
☐ EQuIS (1 File) ☒ EQuIS (4 File)
☐ Other

Regulatory Requirement
☒ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information
☒ Same as Client Info
PO #

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:
Andrew.Millspaugh@sterlingenvironmental.com
Paul.Scholar@sterlingenvironmental.com

Please specify Metals or TAL.

ANALYSIS

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	Diss Gas - Ethane Ethene, Methane	SOH	Total Fe	Dissolved Fe	NYTCL-8260				Sample Specific Comments	Total Bottle
73303-01	MW-6S	12/12/23	0950	GW	PWS	X	X	X	X	X					8
02	MW-6D		1055	GW	PWS					X					3
03	MW-6S		1125	GW	PWS	X	X	X	X	X					8
04	MW-6D		1320	GW	PWS	X	X	X	X	X					8
	MW-6D MS		1325	GW	PWS	X	X	X	X	X					8
	MW-6D MSD		1330	GW	PWS	X	X	X	X	X					8
05	MW-4S		1425	GW	PWS	X	X	X	X	X					8
06	DUP12122023		—	GW	PWS	X	X	X	X	X					8
07	TB12122023		—	LW	PWS					X					2
Container Type						V	P	P	P	V					
Preservative						B	A	C	A	B					

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
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

Relinquished By:	Date/Time	Received By:	Date/Time
	12/12/23 1500		12/12/23 1540
	12-12-23 1505	Mouraud	12/13/23 0020

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)

Organics

GC VOA
Air Analysis

Volatiles QC Summary

Laboratory Control Sample Summary
Form 3
Volatiles

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Matrix (Level)	: WATER (LOW)		
LCS Sample ID	: WG1865332-2 **Analysis Date** : 12/18/23 15:02	**File ID**	: R0951756
LCSD Sample ID	: **Analysis Date** :	**File ID**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R	RPD	Recovery Limits	RPD Limit
Methane	54.6	54.0	99				-	80-120	25
Ethene	95.5	86.2	90				-	80-120	25
Ethane	102	91.6	89				-	80-120	25

Matrix Spike Sample Summary
Form 3
Volatiles

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Client Sample ID	: MW-6D	**Matrix (Level)**	: WATER (LOW)
Lab Sample ID	: L2373323-04	**Analysis Date**	: 12/18/23 15:53
Matrix Spike	: WG1865332-4	**MS Analysis Date**	: 12/18/23 18:53
Matrix Spike Dup	: WG1865332-5	**MSD Analysis Date**	: 12/18/23 19:14

		Matrix Spike Sample				Matrix Spike Duplicate						
Parameter	**Sample Conc. (ug/l)**	**Spike Added (ug/l)**	**Spike Conc. (ug/l)**	**%R**		**Spike Added (ug/l)**	**Spike Conc. (ug/l)**	**%R**		**RPD**	**Recovery Limits**	**RPD Limit**
Methane	5880	54.6	5840	0	Q	54.6	5770	0	Q	1	80-120	25
Ethene	1920	95.5	1960	42	Q	95.5	1960	42	Q	0	80-120	25
Ethane	37.8	102	101	62	Q	102	100	61	Q	1	80-120	25

Method Blank Summary
Form 4
Volatiles

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Lab Sample ID	: WG1865332-3	**Lab File ID**	: R0951757
Instrument ID	: AIRLAB9		
Matrix	: WATER	**Analysis Date**	: 12/18/23 15:26

Client Sample No.	Lab Sample ID	Analysis Date
WG1865332-2LCS	WG1865332-2	12/18/23 15:02
MW-6D	L2373323-04	12/18/23 15:53
MW-8S	L2373323-01	12/18/23 16:10
MW-6S	L2373323-03	12/18/23 16:28
MW-4S	L2373323-05	12/18/23 16:46
DUP12122023	L2373323-06	12/18/23 17:04
MW-6DMS	WG1865332-4	12/18/23 18:53
MW-6DMSD	WG1865332-5	12/18/23 19:14

Date Created: 03/24/23
Created By: Jason Hebert
File: PM14161-1
Page: 1

Dissolved Gases (WATER)

Holding Time: 14 days
Container/Sample Preservation: 2 - 20ml Vial HCl preserved

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
Methane	74-82-8	2	2	ug/l	80-120	25	80-120	25	25			
Ethene	74-85-1	0.5	0.5	ug/l	80-120	25	80-120	25	25			
Ethane	74-84-0	0.5	0.5	ug/l	80-120	25	80-120	25	25			
Carbon Dioxide	124-38-9	3	3	ug/l	80-120		80-120	25	25			

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.

Volatiles Sample Data

Results Summary
Form 1
Dissolved Gases by GC

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Lab ID	: L2373323-01	**Date Collected**	: 12/12/23 09:50
Client ID	: MW-8S	**Date Received**	: 12/12/23
Sample Location	: COLONIE, NY	**Date Analyzed**	: 12/18/23 16:10
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 117,-	**Analyst**	: SRO
Lab File ID	: R0951759	**Instrument ID**	: AIRLAB9
Sample Amount	: 0.5 ml	**GC Column**	:
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
74-82-8	Methane	2340	2.00	2.00	
74-85-1	Ethene	34.4	0.500	0.500	
74-84-0	Ethane	4.99	0.500	0.500	

Results Summary
Form 1
Dissolved Gases by GC

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Lab ID	: L2373323-03	**Date Collected**	: 12/12/23 11:25
Client ID	: MW-6S	**Date Received**	: 12/12/23
Sample Location	: COLONIE, NY	**Date Analyzed**	: 12/18/23 16:28
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 117,-	**Analyst**	: SRO
Lab File ID	: R0951760	**Instrument ID**	: AIRLAB9
Sample Amount	: 0.5 ml	**GC Column**	:
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
74-82-8	Methane	10600	2.00	2.00	
74-85-1	Ethene	409	0.500	0.500	
74-84-0	Ethane	32.4	0.500	0.500	

Results Summary
Form 1
Dissolved Gases by GC

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Lab ID	: L2373323-04	**Date Collected**	: 12/12/23 13:20
Client ID	: MW-6D	**Date Received**	: 12/12/23
Sample Location	: COLONIE, NY	**Date Analyzed**	: 12/18/23 15:53
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 117,-	**Analyst**	: SRO
Lab File ID	: R0951758	**Instrument ID**	: AIRLAB9
Sample Amount	: 0.5 ml	**GC Column**	:
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
74-82-8	Methane	5880	2.00	2.00	
74-85-1	Ethene	1920	0.500	0.500	
74-84-0	Ethane	37.8	0.500	0.500	

Results Summary
Form 1
Dissolved Gases by GC

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Lab ID	: L2373323-05	**Date Collected**	: 12/12/23 14:25
Client ID	: MW-4S	**Date Received**	: 12/12/23
Sample Location	: COLONIE, NY	**Date Analyzed**	: 12/18/23 16:46
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 117,-	**Analyst**	: SRO
Lab File ID	: R0951761	**Instrument ID**	: AIRLAB9
Sample Amount	: 0.5 ml	**GC Column**	:
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
74-82-8	Methane	4920	2.00	2.00	
74-85-1	Ethene	180	0.500	0.500	
74-84-0	Ethane	19.7	0.500	0.500	

Results Summary
Form 1
Dissolved Gases by GC

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Lab ID	: L2373323-06	**Date Collected**	: 12/12/23 00:00
Client ID	: DUP12122023	**Date Received**	: 12/12/23
Sample Location	: COLONIE, NY	**Date Analyzed**	: 12/18/23 17:04
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 117,-	**Analyst**	: SRO
Lab File ID	: R0951762	**Instrument ID**	: AIRLAB9
Sample Amount	: 0.5 ml	**GC Column**	:
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
74-82-8	Methane	9120	2.00	2.00	
74-85-1	Ethene	346	0.500	0.500	
74-84-0	Ethane	27.9	0.500	0.500	

Results Summary
Form 1
Dissolved Gases by GC

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Lab ID	: WG1865332-3	**Date Collected**	: NA
Client ID	: WG1865332-3BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 12/18/23 15:26
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 117,-	**Analyst**	: SRO
Lab File ID	: R0951757	**Instrument ID**	: AIRLAB9
Sample Amount	: 0.5 ml	**GC Column**	:
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
74-82-8	Methane	ND	2.00	2.00	U
74-85-1	Ethene	ND	0.500	0.500	U
74-84-0	Ethane	ND	0.500	0.500	U

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\airlab9\2023\12\1218DG_PM\
Data File : R0951758.D
Signal(s) : FID1A.ch
Acq On : 18 Dec 2023 3:53 pm
Operator : AIRLAB9:SRO
Sample : L2373323-04,4,0.5,0.5

Misc : WG1865332,ICAL16772
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 19 10:04:35 2023
Quant Method : O:\Forensics\Data\airlab9\2023\12\1218DG_PM\DG9_200511.M
Quant Title : Dissolved Gases
QLast Update : Tue May 12 07:13:18 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Sub List : MEE - All compounds listed

	Compound	R.T.	Response	Conc	Units	
Target Compounds						
1)	methane	1.170	823618628	5885.601	ug/L	M4
2)	ethene	4.255	273176027	1916.262	ug/L	
4)	ethane	5.127	5955116	37.832	ug/L	M4

(f)=RT Delta > 1/2 Window (m)=manual int.

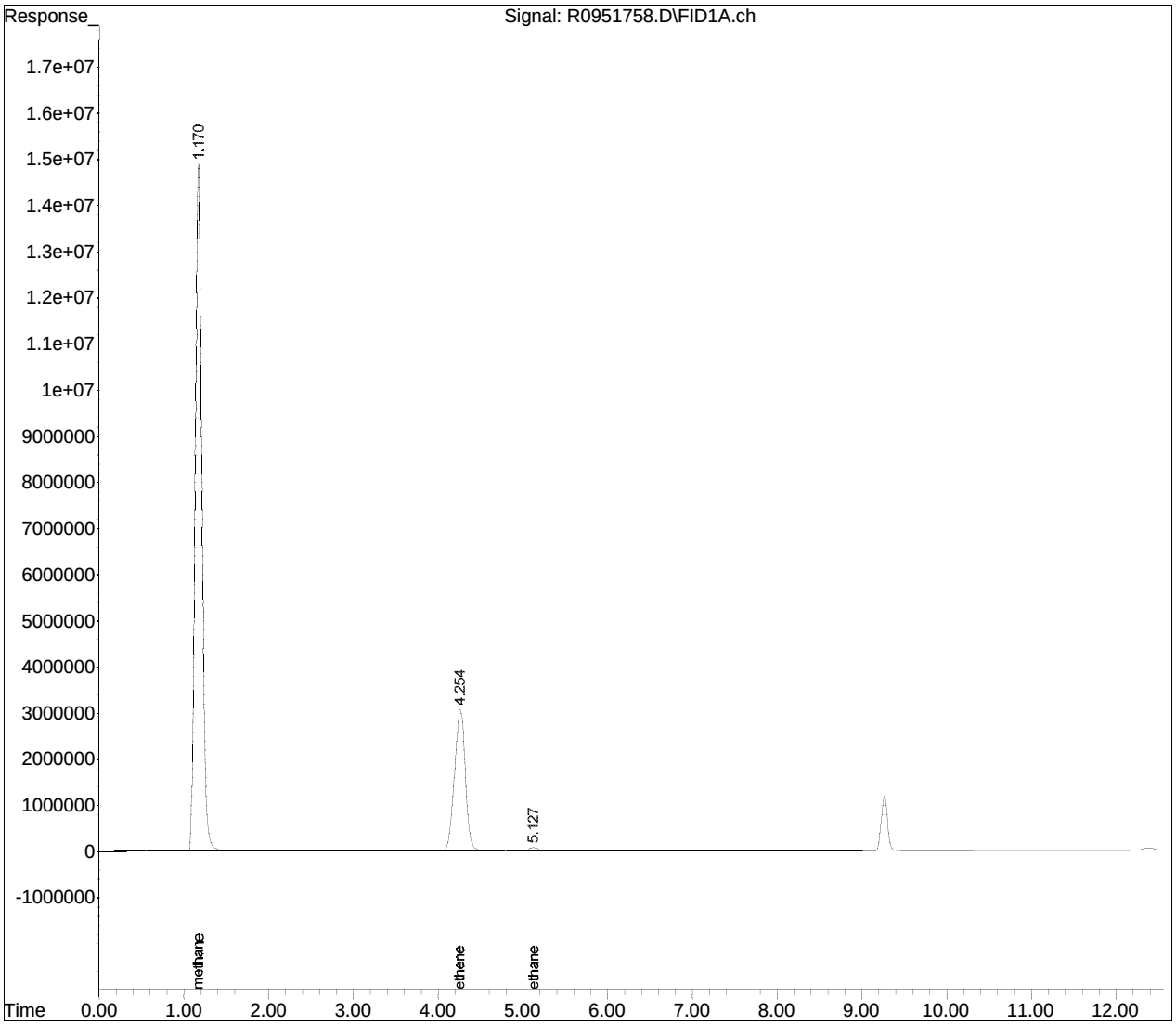
Quantitation Report (QT Reviewed)

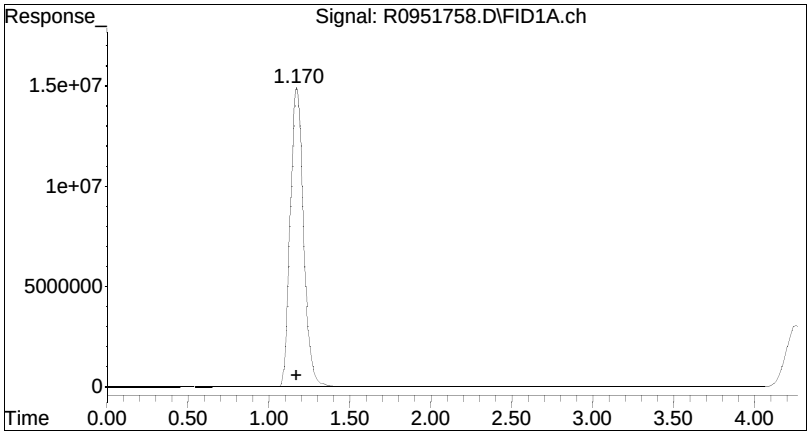
Data Path : O:\Forensics\Data\airlab9\2023\12\1218DG_PM\
Data File : R0951758.D
Signal(s) : FID1A.ch
Acq On : 18 Dec 2023 3:53 pm
Operator : AIRLAB9:SRO
Sample : L2373323-04,4,0.5,0.5••
Misc : WG1865332,ICAL16772
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 19 10:04:35 2023
Quant Method : O:\Forensics\Data\airlab9\2023\12\1218DG_PM\DG9_200511.M
Quant Title : Dissolved Gases
QLast Update : Tue May 12 07:13:18 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

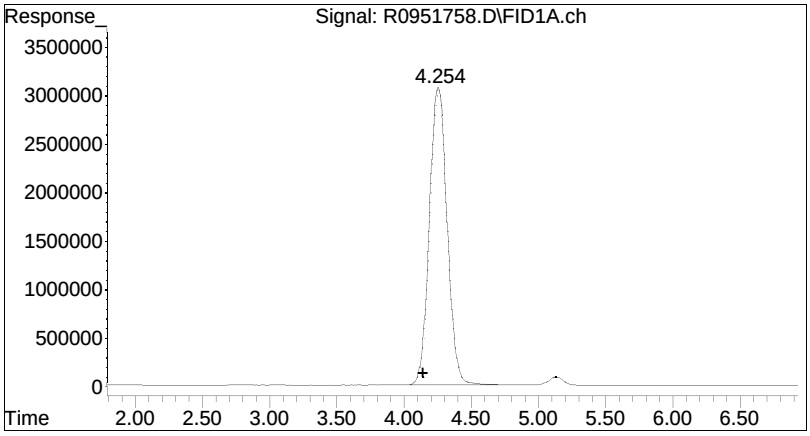
Sub List : MEE - All compounds listed





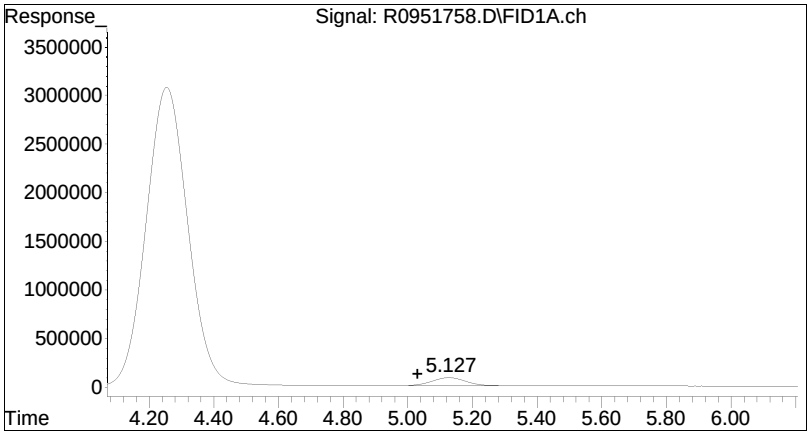
#1 methane

R.T.: 1.170 min
Delta R.T.: 0.000 min
Response: 823618628
Conc: 5885.60 ug/L M4



#2 ethene

R.T.: 4.255 min
Delta R.T.: 0.108 min
Response: 273176027
Conc: 1916.26 ug/L



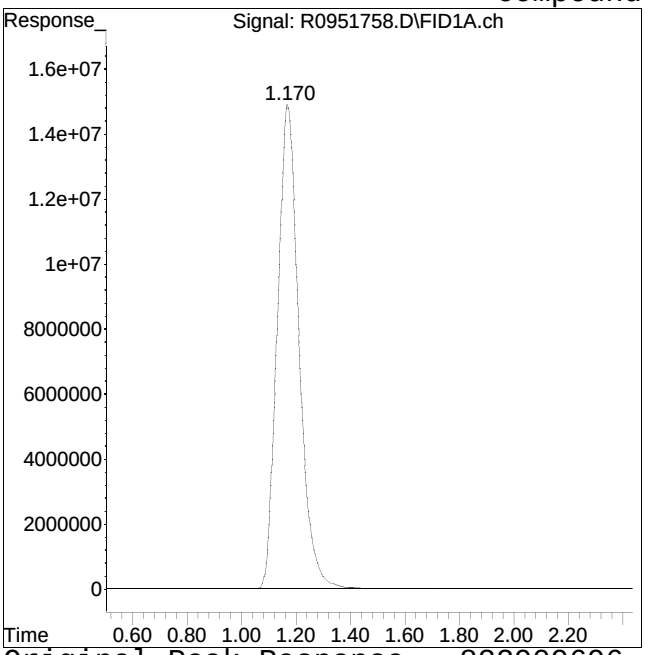
#4 ethane

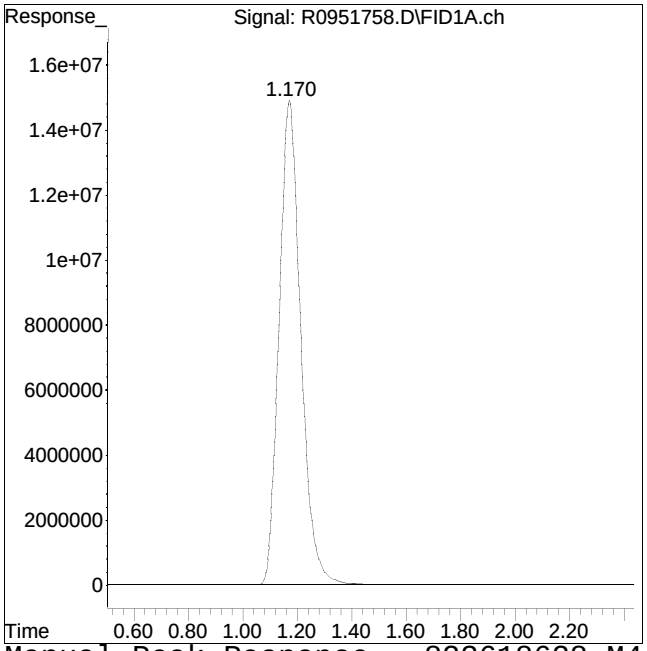
R.T.:	5.127 min
Delta R.T.:	0.095 min
Response:	5955116
Conc:	37.83 ug/L M4

Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0951758.D Operator : AIRLAB9:SRO
Date Inj'd : 12/18/2023 3:53 pm Instrument : Airlab 9
Sample : L2373323-04,4,0.5,0.5•• Quant Date : 12/19/2023 10:04 am

Compound #1: methane



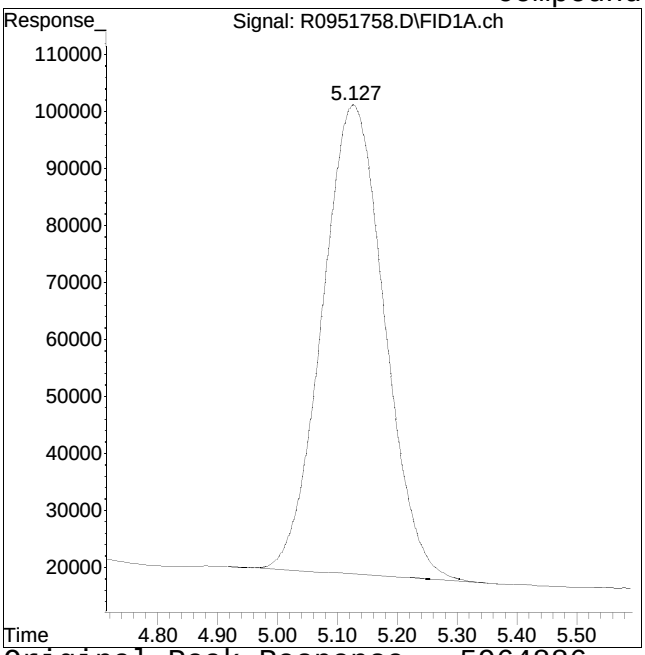


Original Peak Response = 822909696 Manual Peak Response = 823618628 M4
M4 = Poor automated baseline construction.

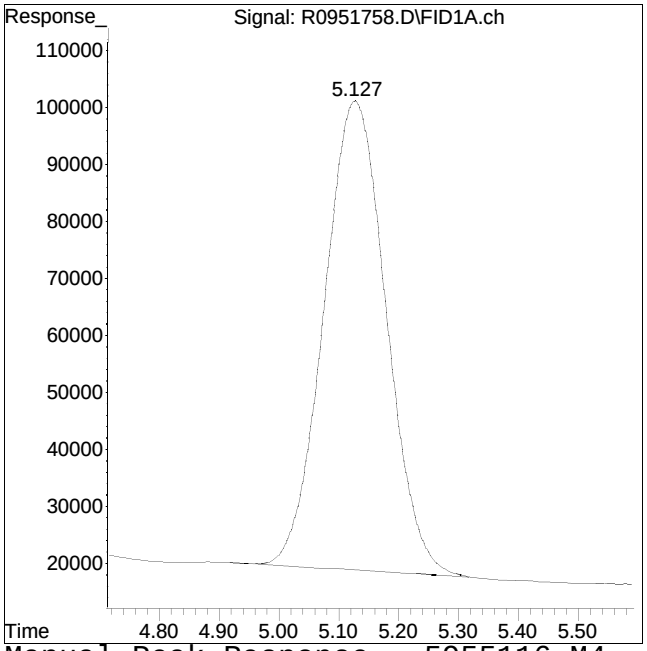
Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0951758.D Operator : AIRLAB9:SRO
Date Inj'd : 12/18/2023 3:53 pm Instrument : Airlab 9
Sample : L2373323-04,4,0.5,0.5•• Quant Date : 12/19/2023 10:04 am

Compound #4: ethane



Original Peak Response = 5964886



Manual Peak Response = 5955116 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\airlab9\2023\12\1218DG_PM\
Data File : R0951759.D
Signal(s) : FID1A.ch
Acq On : 18 Dec 2023 4:10 pm
Operator : AIRLAB9:SRO
Sample : L2373323-01,4,0.5,0.5
Misc : WG1865332,ICAL16772
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 19 10:04:37 2023
Quant Method : O:\Forensics\Data\airlab9\2023\12\1218DG_PM\DG9_200511.M
Quant Title : Dissolved Gases
QLast Update : Tue May 12 07:13:18 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Sub List : MEE - All compounds listed

	Compound	R.T.	Response	Conc	Units	
Target Compounds						
1)	methane	1.176	326889678	2335.963	ug/L	M4
2)	ethene	4.264	4898404	34.361	ug/L	M4
4)	ethane	5.130	785963	4.993	ug/L	M4

(f)=RT Delta > 1/2 Window (m)=manual int.

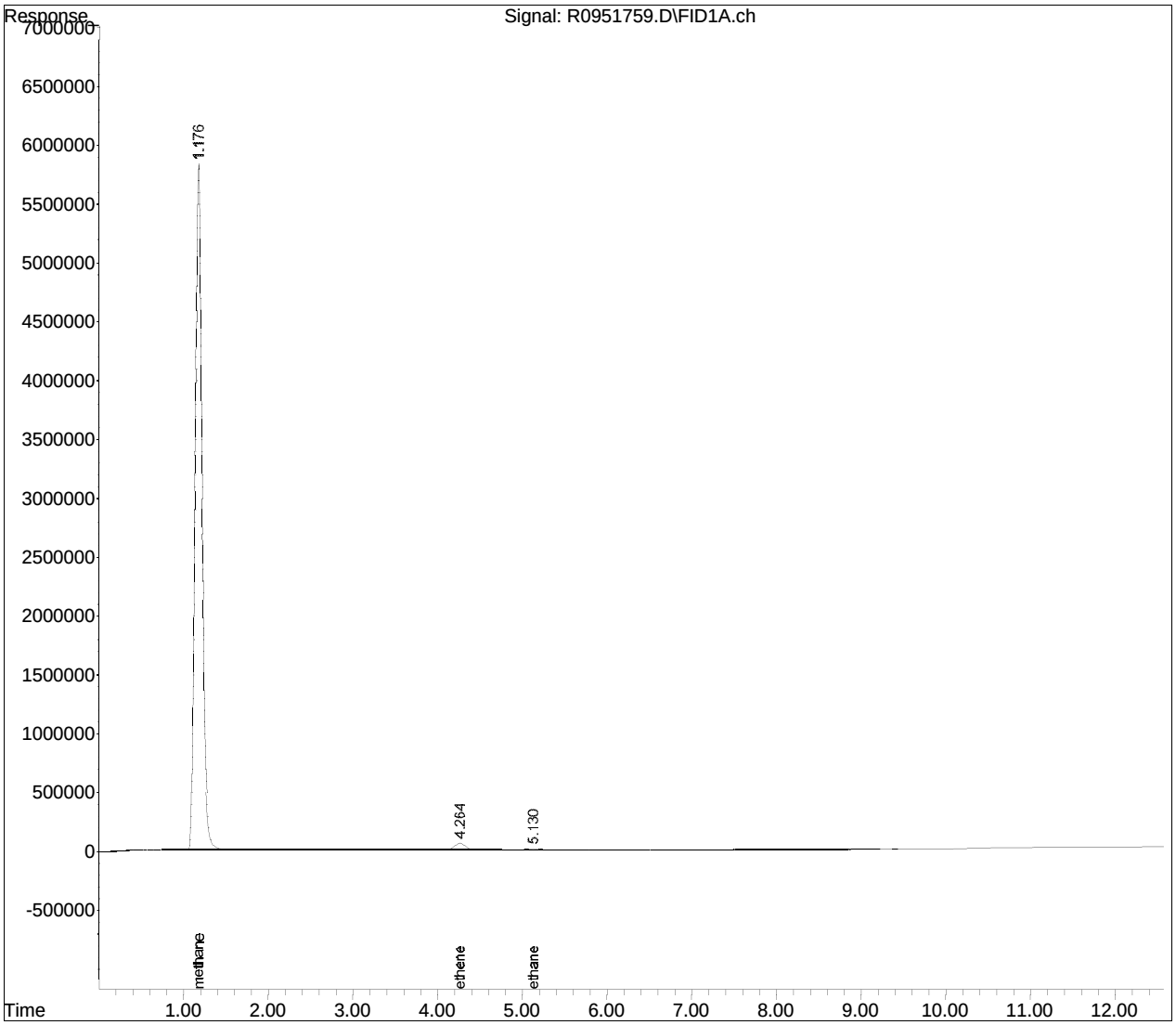
Quantitation Report (QT Reviewed)

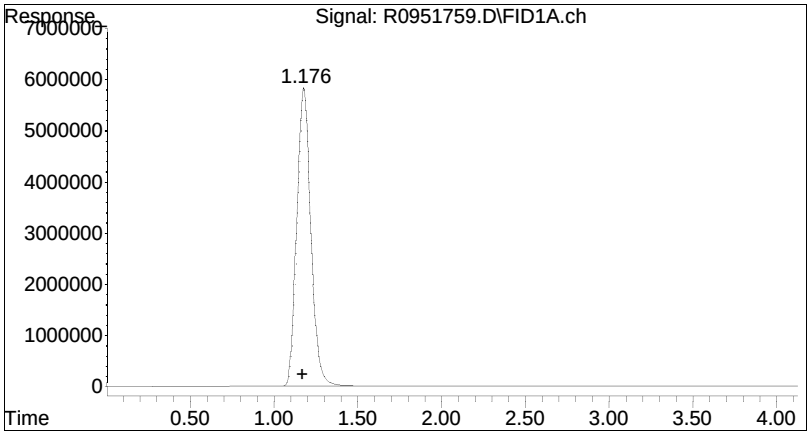
Data Path : O:\Forensics\Data\airlab9\2023\12\1218DG_PM\
Data File : R0951759.D
Signal(s) : FID1A.ch
Acq On : 18 Dec 2023 4:10 pm
Operator : AIRLAB9:SRO
Sample : L2373323-01,4,0.5,0.5
Misc : WG1865332,ICAL16772
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 19 10:04:37 2023
Quant Method : O:\Forensics\Data\airlab9\2023\12\1218DG_PM\DG9_200511.M
Quant Title : Dissolved Gases
QLast Update : Tue May 12 07:13:18 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

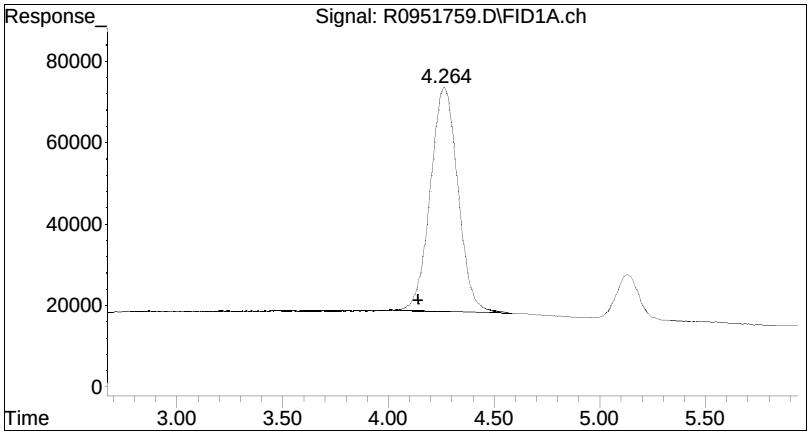
Sub List : MEE - All compounds listed





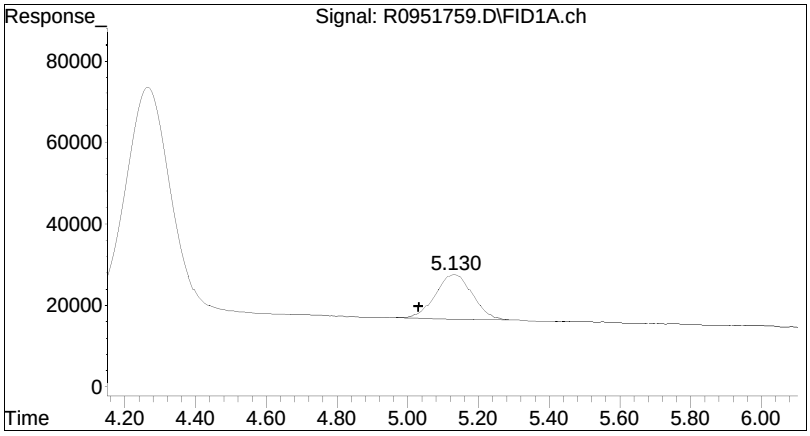
#1 methane

R.T.: 1.176 min
Delta R.T.: 0.006 min
Response: 326889678
Conc: 2335.96 ug/L M4



#2 ethene

R.T.:	4.264 min
Delta R.T.:	0.118 min
Response:	4898404
Conc:	34.36 ug/L M4



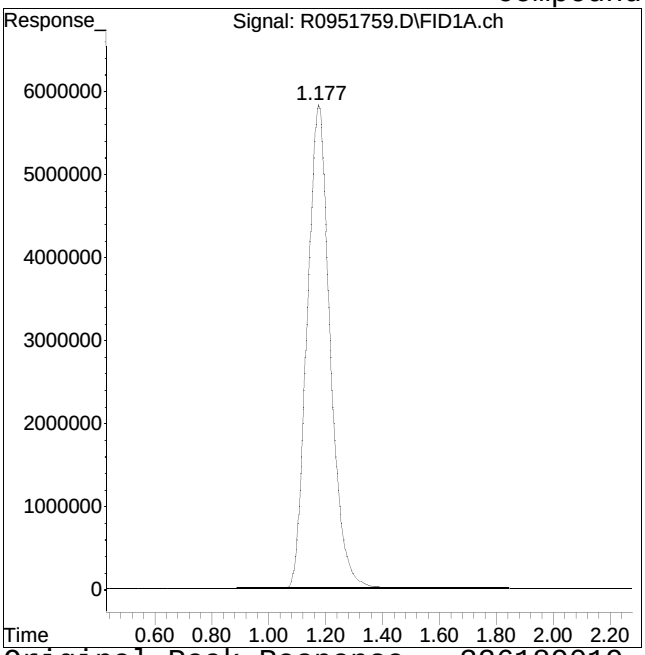
#4 ethane

R.T.:	5.130 min
Delta R.T.:	0.099 min
Response:	785963
Conc:	4.99 ug/L M4

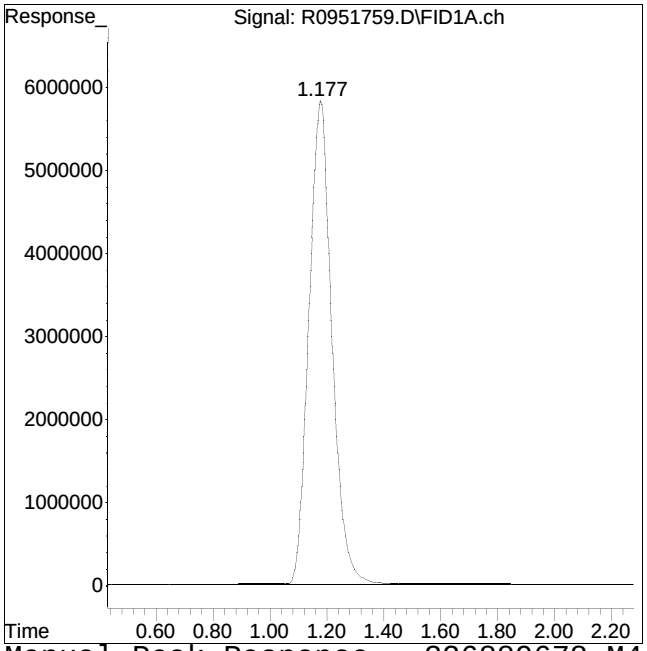
Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0951759.D Operator : AIRLAB9:SRO
Date Inj'd : 12/18/2023 4:10 pm Instrument : Airlab 9
Sample : L2373323-01,4,0.5,0.5 Quant Date : 12/19/2023 10:04 am

Compound #1: methane



Original Peak Response = 326189019



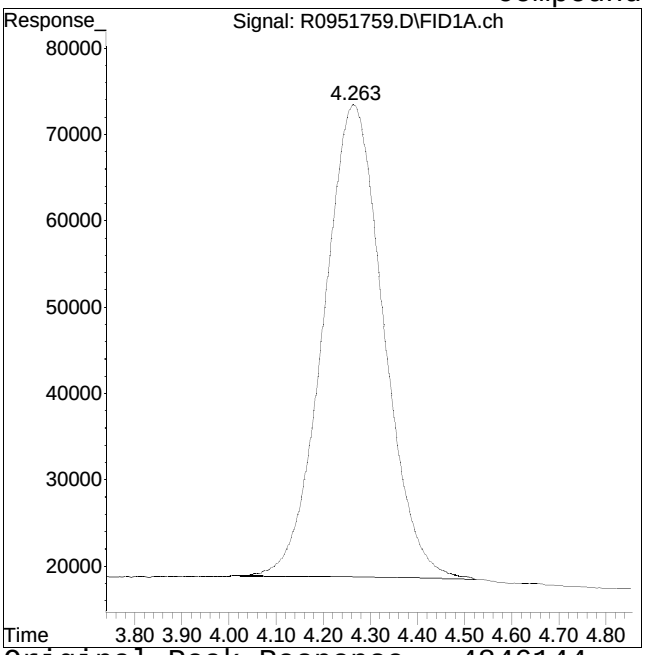
Manual Peak Response = 326889678 M4

M4 = Poor automated baseline construction.

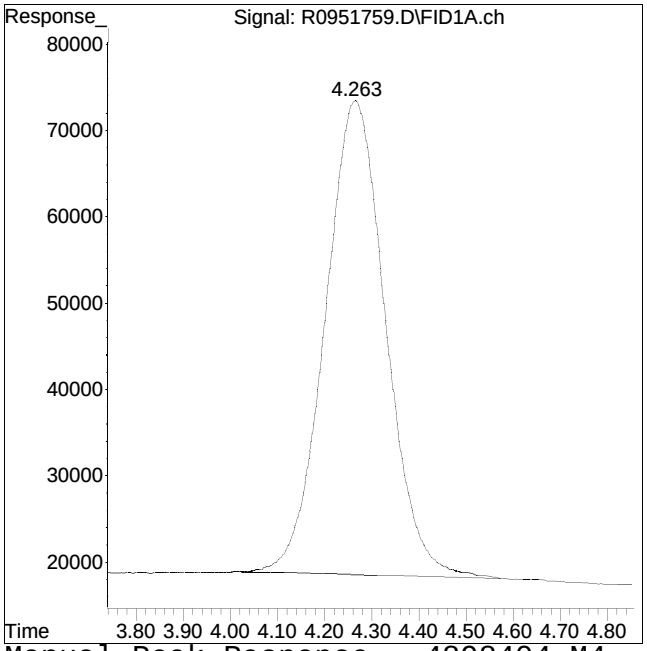
Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0951759.D Operator : AIRLAB9:SRO
Date Inj'd : 12/18/2023 4:10 pm Instrument : Airlab 9
Sample : L2373323-01,4,0.5,0.5 Quant Date : 12/19/2023 10:04 am

Compound #2: ethene



Original Peak Response = 4846144



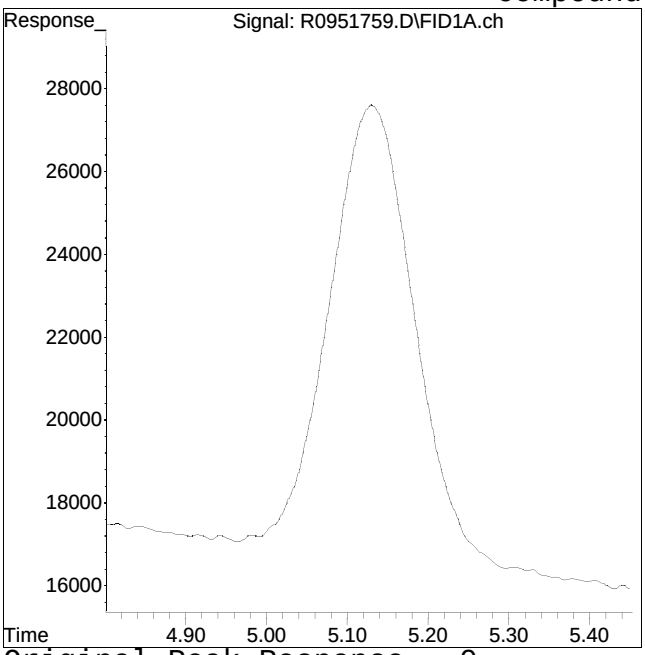
Manual Peak Response = 4898404 M4

M4 = Poor automated baseline construction.

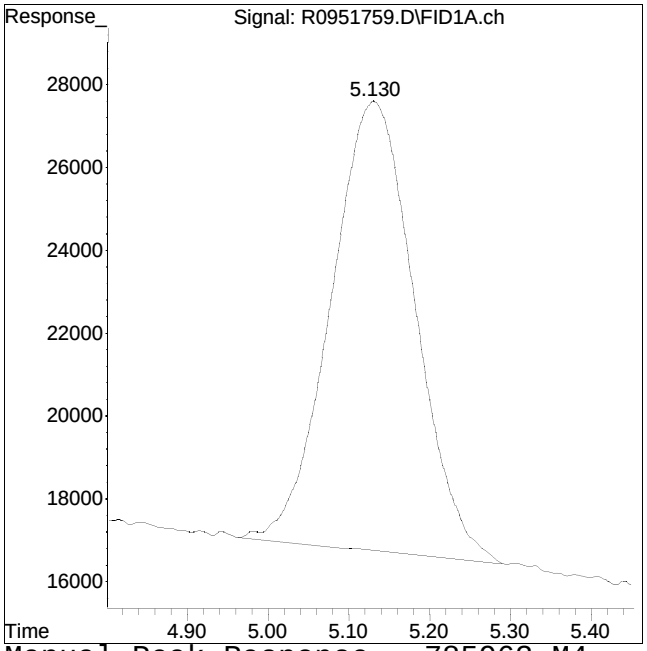
Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0951759.D Operator : AIRLAB9:SRO
Date Inj'd : 12/18/2023 4:10 pm Instrument : Airlab 9
Sample : L2373323-01,4,0.5,0.5 Quant Date : 12/19/2023 10:04 am

Compound #4: ethane



Original Peak Response = 0



Manual Peak Response = 785963 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\airlab9\2023\12\1218DG_PM\
Data File : R0951760.D
Signal(s) : FID1A.ch
Acq On : 18 Dec 2023 4:28 pm
Operator : AIRLAB9:SRO
Sample : L2373323-03,4,0.5,0.5
Misc : WG1865332,ICAL16772
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 19 10:04:39 2023
Quant Method : O:\Forensics\Data\airlab9\2023\12\1218DG_PM\DG9_200511.M
Quant Title : Dissolved Gases
QLast Update : Tue May 12 07:13:18 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Sub List : MEE - All compounds listed

	Compound	R.T.	Response	Conc	Units	
Target Compounds						
1)	methane	1.167	1490931419	10654.236	ug/L	M4
2)	ethene	4.263	58358558	409.371	ug/L	M4
4)	ethane	5.129	5096183	32.375	ug/L	M4

(f)=RT Delta > 1/2 Window (m)=manual int.

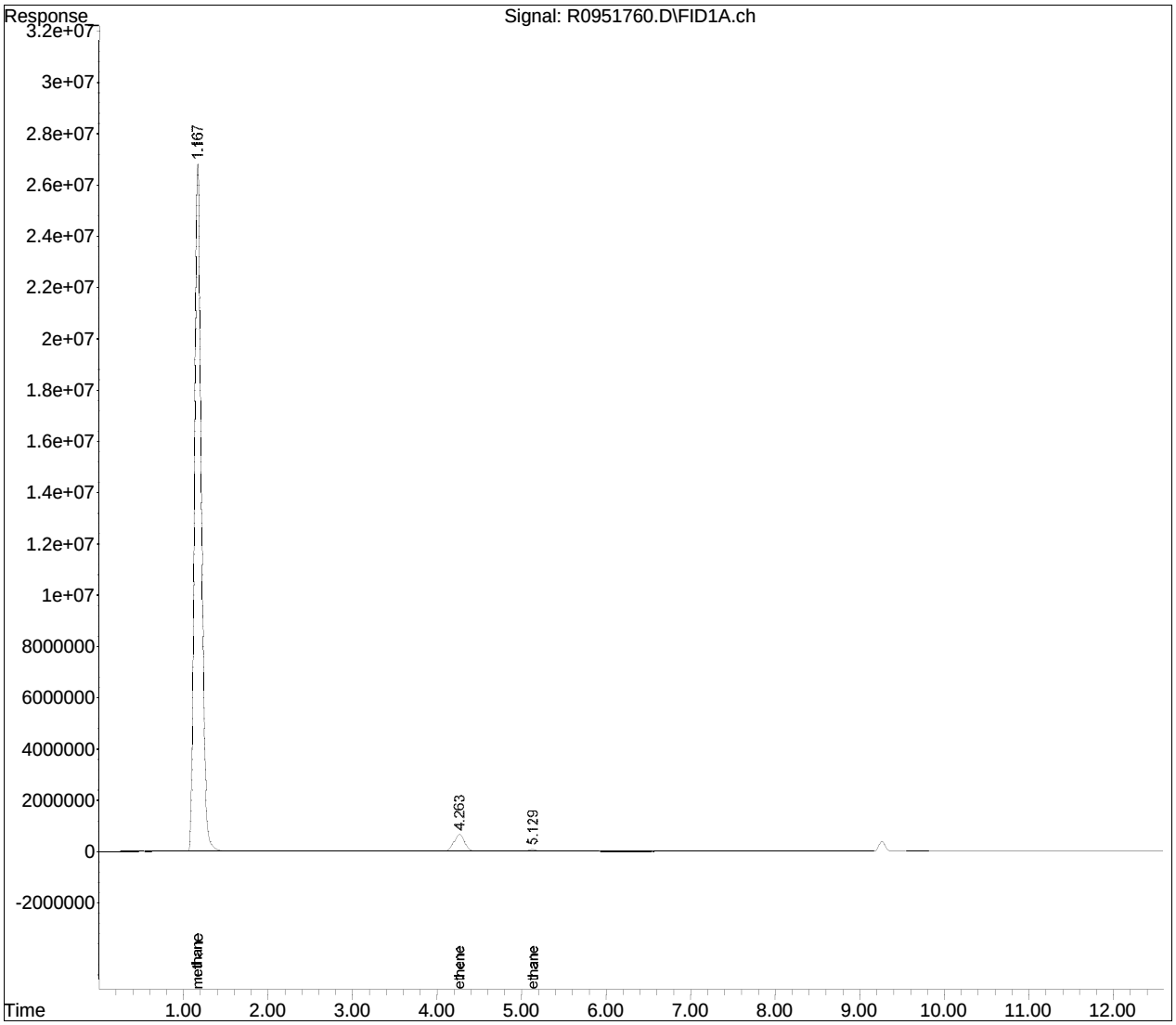
Quantitation Report (QT Reviewed)

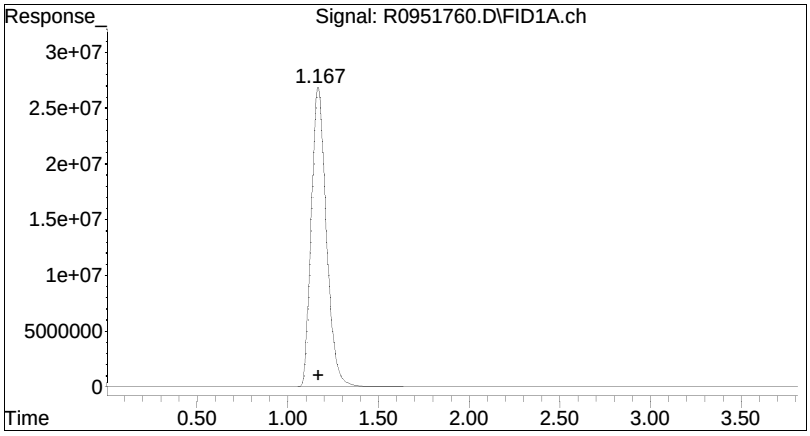
Data Path : O:\Forensics\Data\airlab9\2023\12\1218DG_PM\
Data File : R0951760.D
Signal(s) : FID1A.ch
Acq On : 18 Dec 2023 4:28 pm
Operator : AIRLAB9:SRO
Sample : L2373323-03,4,0.5,0.5
Misc : WG1865332,ICAL16772
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 19 10:04:39 2023
Quant Method : O:\Forensics\Data\airlab9\2023\12\1218DG_PM\DG9_200511.M
Quant Title : Dissolved Gases
QLast Update : Tue May 12 07:13:18 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

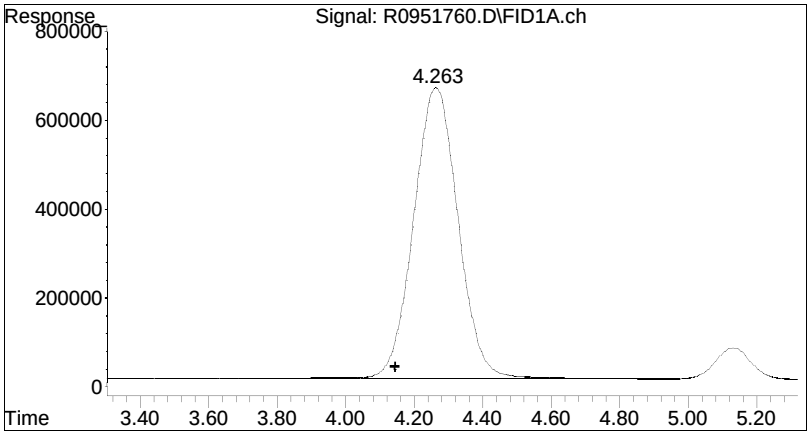
Sub List : MEE - All compounds listed





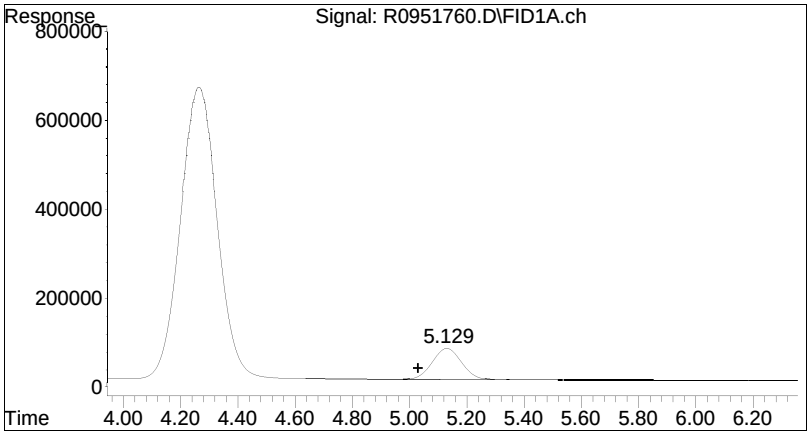
#1 methane

R.T.: 1.167 min
Delta R.T.: -0.003 min
Response: 1490931419
Conc: 10654.24 ug/L M4



#2 ethene

R.T.: 4.263 min
Delta R.T.: 0.117 min
Response: 58358558
Conc: 409.37 ug/L M4



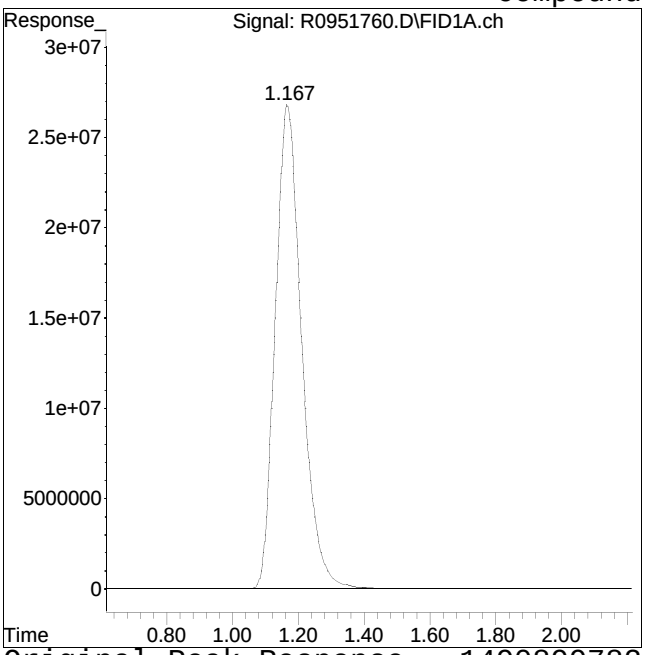
#4 ethane

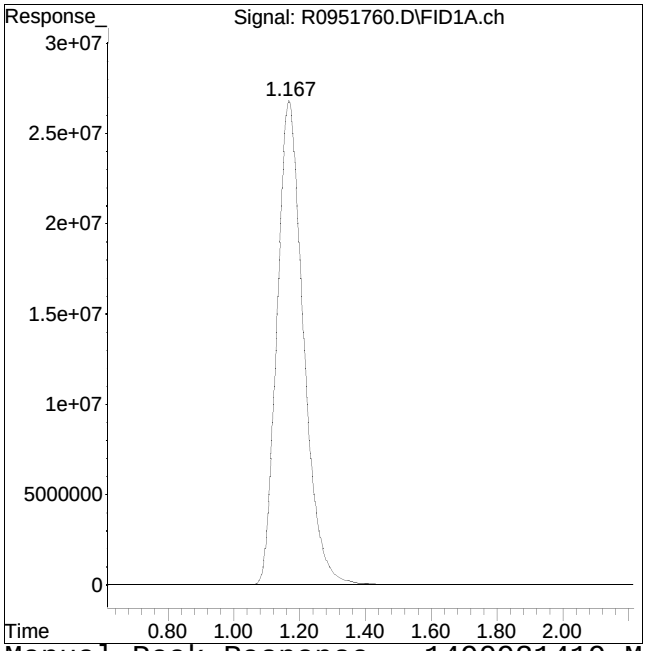
R.T.:	5.129 min
Delta R.T.:	0.098 min
Response:	5096183
Conc:	32.38 ug/L M4

Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0951760.D Operator : AIRLAB9:SRO
Date Inj'd : 12/18/2023 4:28 pm Instrument : Airlab 9
Sample : L2373323-03,4,0.5,0.5 Quant Date : 12/19/2023 10:04 am

Compound #1: methane



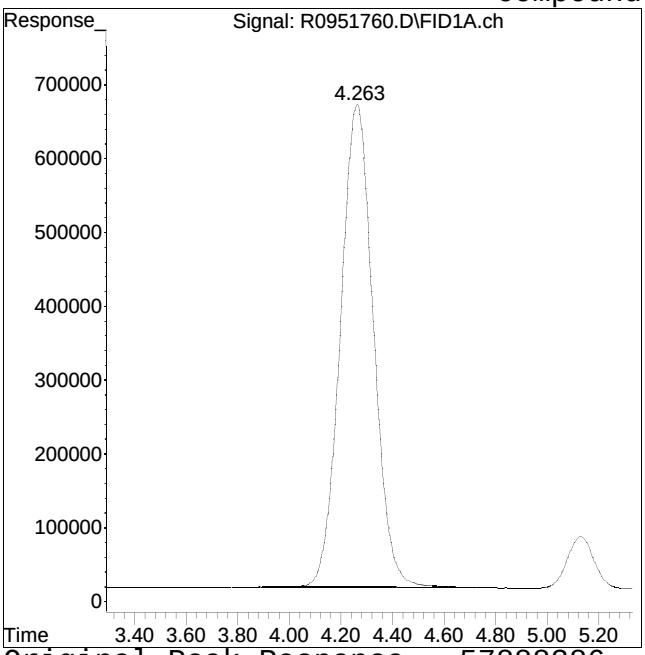


Original Peak Response = 1490899782 Manual Peak Response = 1490931419 M4
M4 = Poor automated baseline construction.

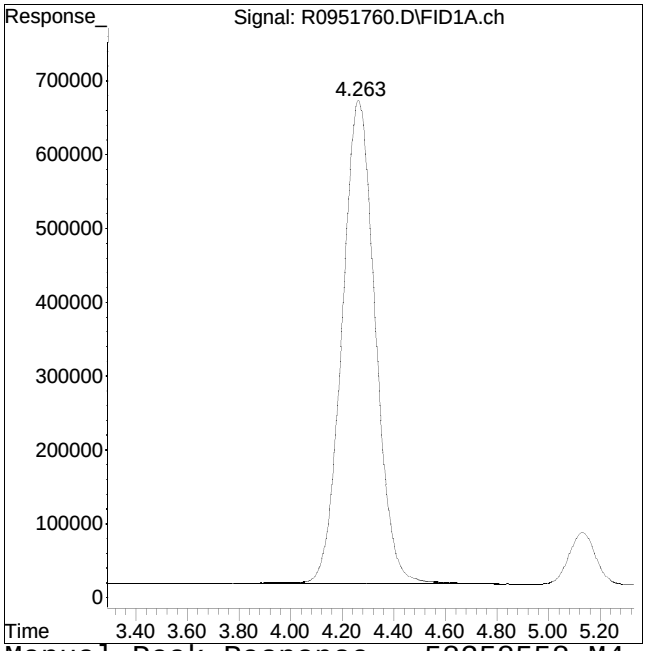
Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0951760.D Operator : AIRLAB9:SRO
Date Inj'd : 12/18/2023 4:28 pm Instrument : Airlab 9
Sample : L2373323-03,4,0.5,0.5 Quant Date : 12/19/2023 10:04 am

Compound #2: ethene



Original Peak Response = 57888386



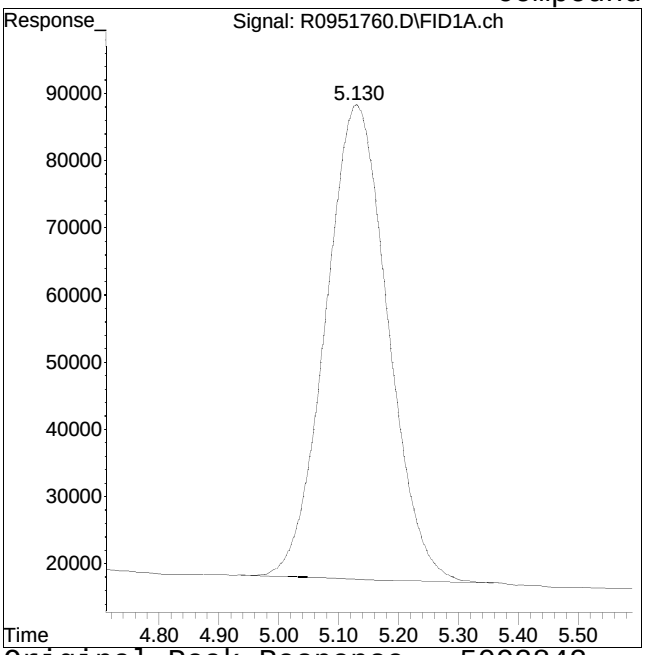
Manual Peak Response = 58358558 M4

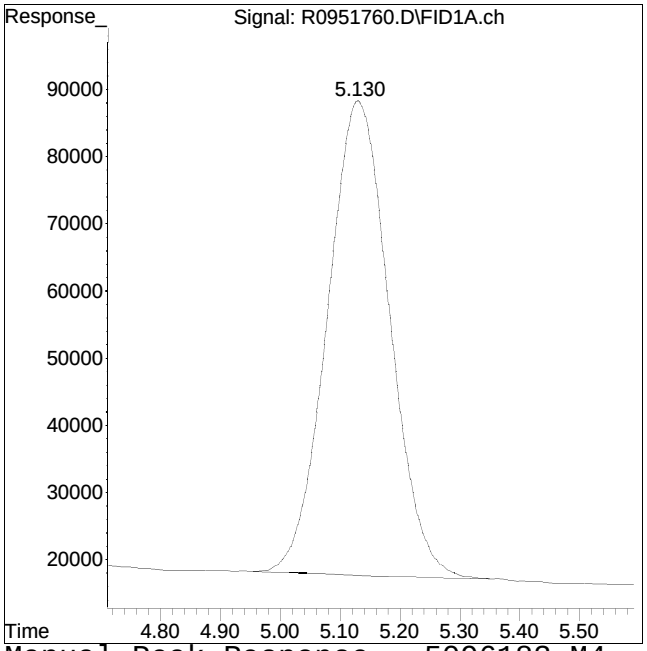
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0951760.D Operator : AIRLAB9:SRO
Date Inj'd : 12/18/2023 4:28 pm Instrument : Airlab 9
Sample : L2373323-03,4,0.5,0.5 Quant Date : 12/19/2023 10:04 am

Compound #4: ethane





Original Peak Response = 5092842 Manual Peak Response = 5096183 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\airlab9\2023\12\1218DG_PM\
Data File : R0951761.D
Signal(s) : FID1A.ch
Acq On : 18 Dec 2023 4:46 pm
Operator : AIRLAB9:SRO
Sample : L2373323-05,4,0.5,0.5
Misc : WG1865332,ICAL16772
ALS Vial : 4 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 19 10:04:41 2023
Quant Method : O:\Forensics\Data\airlab9\2023\12\1218DG_PM\DG9_200511.M
Quant Title : Dissolved Gases
QLast Update : Tue May 12 07:13:18 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Sub List : MEE - All compounds listed

	Compound	R.T.	Response	Conc	Units	
Target Compounds						
1)	methane	1.173	688077803	4917.023	ug/L	M2
2)	ethene	4.263	25680657	180.143	ug/L	M4
4)	ethane	5.130	3099788	19.692	ug/L	M4

(f)=RT Delta > 1/2 Window (m)=manual int.

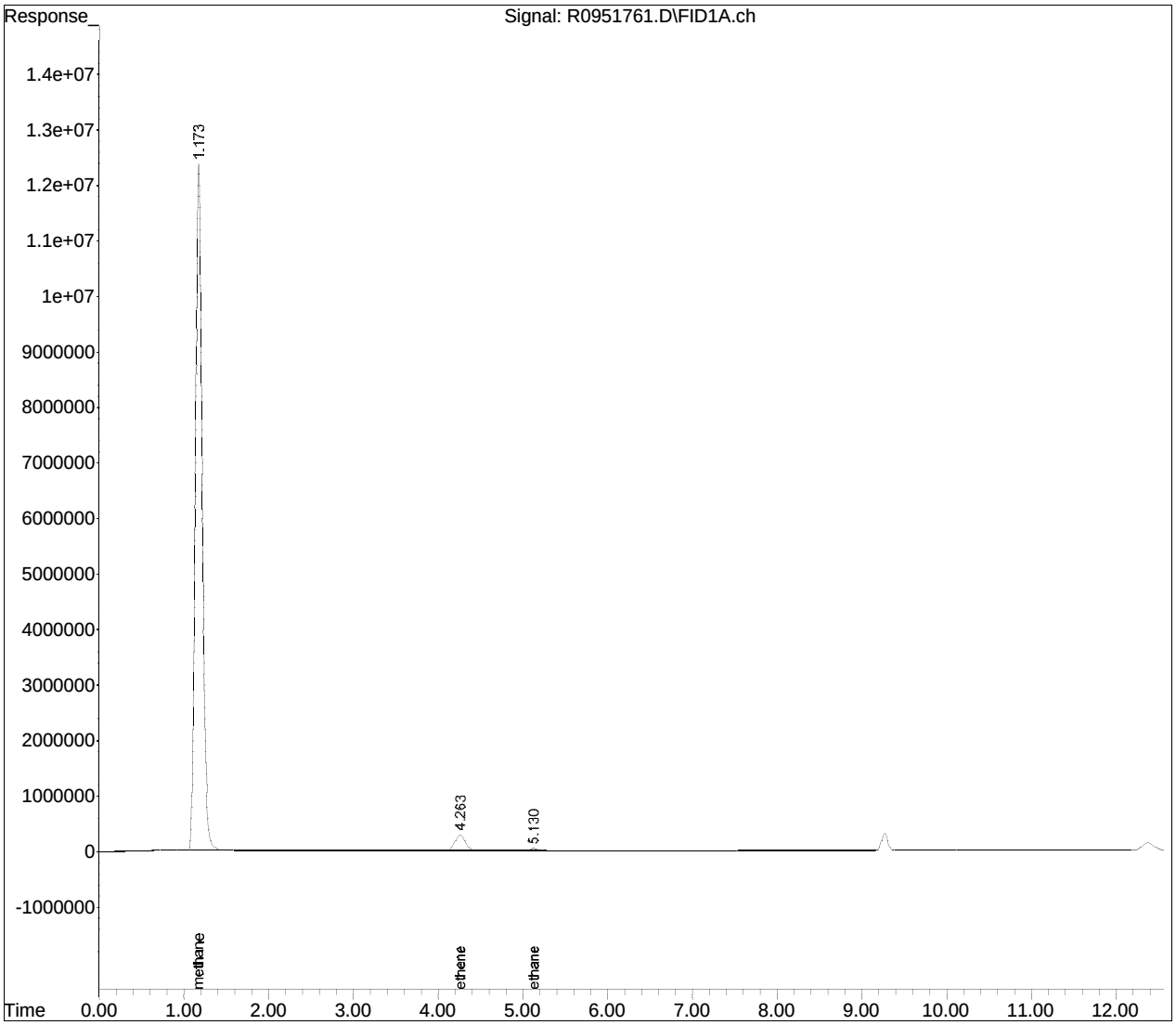
Quantitation Report (QT Reviewed)

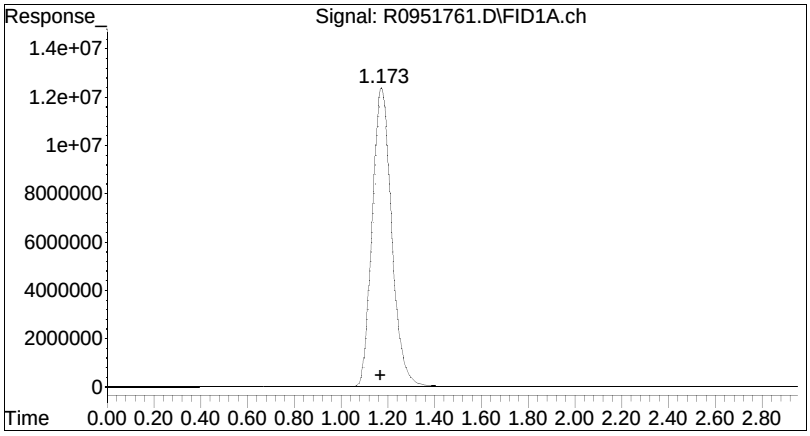
Data Path : O:\Forensics\Data\airlab9\2023\12\1218DG_PM\
Data File : R0951761.D
Signal(s) : FID1A.ch
Acq On : 18 Dec 2023 4:46 pm
Operator : AIRLAB9:SRO
Sample : L2373323-05,4,0.5,0.5
Misc : WG1865332,ICAL16772
ALS Vial : 4 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 19 10:04:41 2023
Quant Method : O:\Forensics\Data\airlab9\2023\12\1218DG_PM\DG9_200511.M
Quant Title : Dissolved Gases
QLast Update : Tue May 12 07:13:18 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

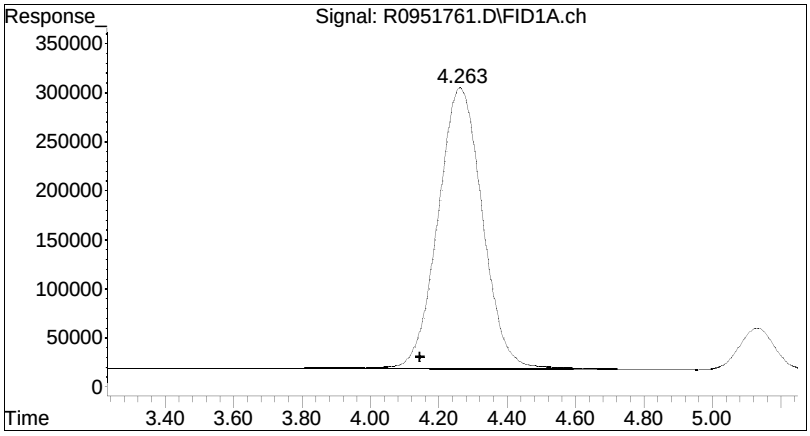
Sub List : MEE - All compounds listed





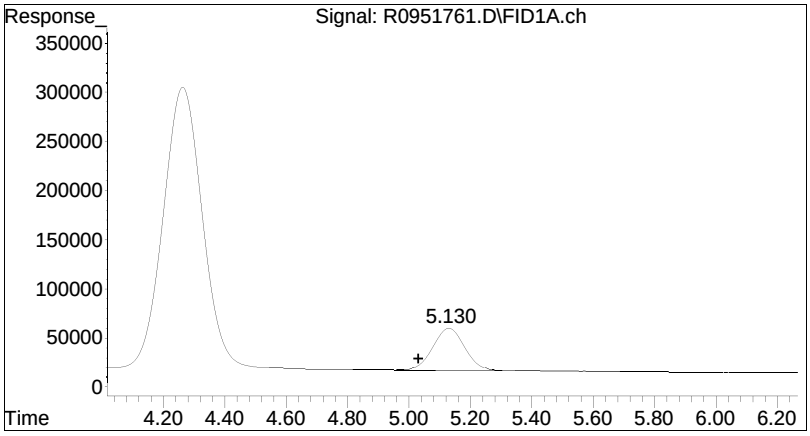
#1 methane

R.T.: 1.173 min
Delta R.T.: 0.003 min
Response: 688077803
Conc: 4917.02 ug/L M2



#2 ethene

R.T.: 4.263 min
Delta R.T.: 0.116 min
Response: 25680657
Conc: 180.14 ug/L M4



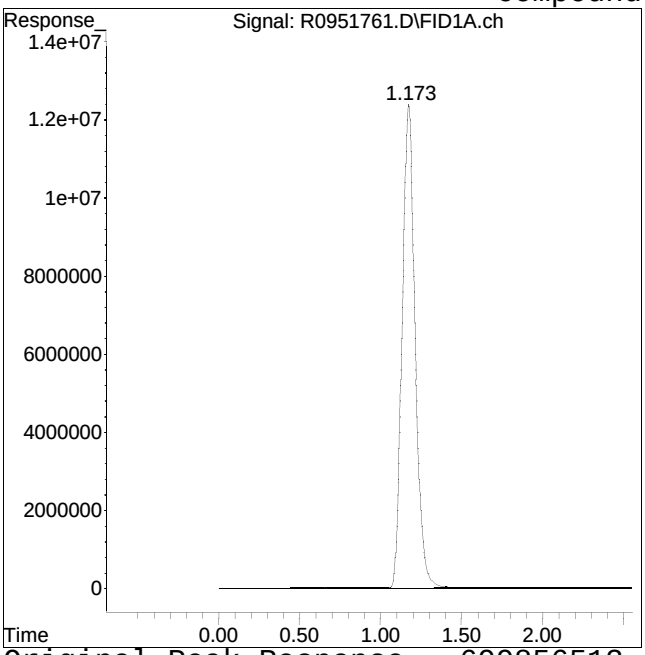
#4 ethane

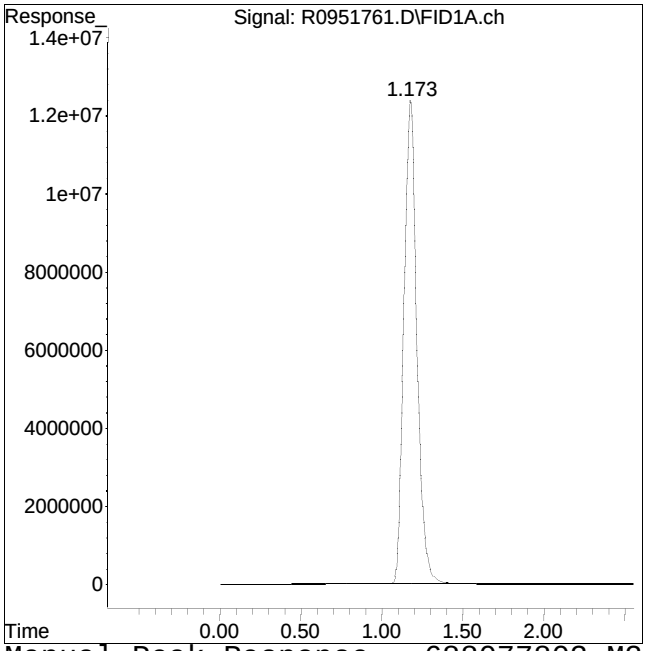
R.T.:	5.130 min
Delta R.T.:	0.098 min
Response:	3099788
Conc:	19.69 ug/L M4

Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0951761.D Operator : AIRLAB9:SRO
Date Inj'd : 12/18/2023 4:46 pm Instrument : Airlab 9
Sample : L2373323-05,4,0.5,0.5 Quant Date : 12/19/2023 10:04 am

Compound #1: methane



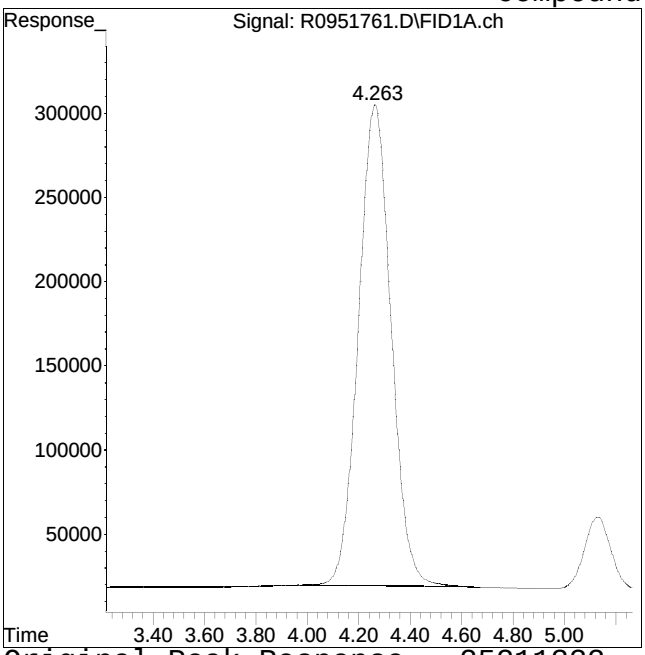


Original Peak Response = 699856513 Manual Peak Response = 688077803 M2
M2 = Peak not found by automatic integration algorithm.

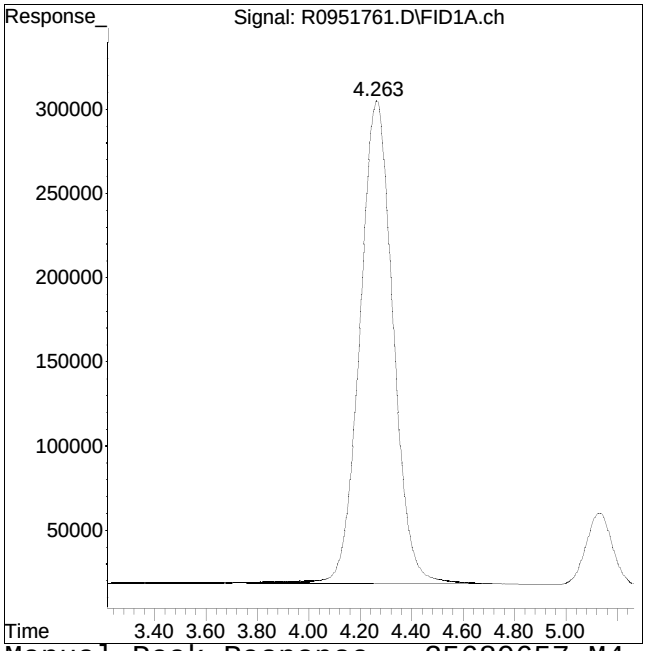
Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0951761.D Operator : AIRLAB9:SRO
Date Inj'd : 12/18/2023 4:46 pm Instrument : Airlab 9
Sample : L2373323-05,4,0.5,0.5 Quant Date : 12/19/2023 10:04 am

Compound #2: ethene



Original Peak Response = 25211332



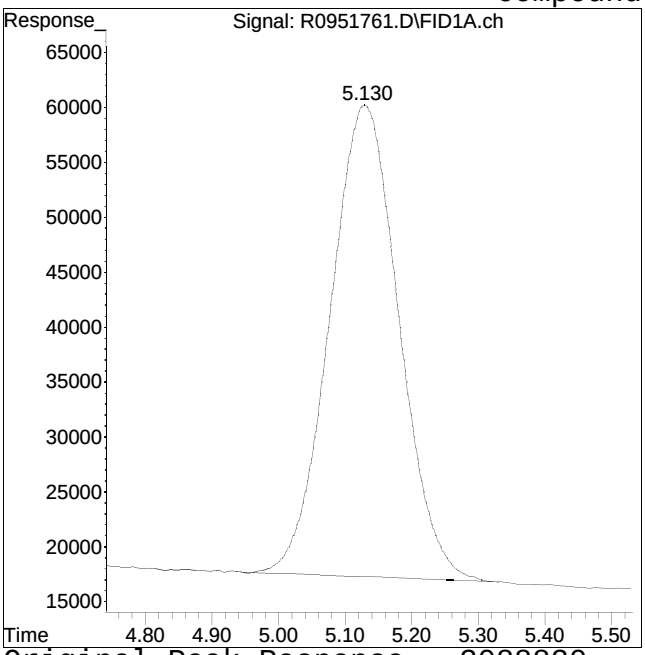
Manual Peak Response = 25680657 M4

M4 = Poor automated baseline construction.

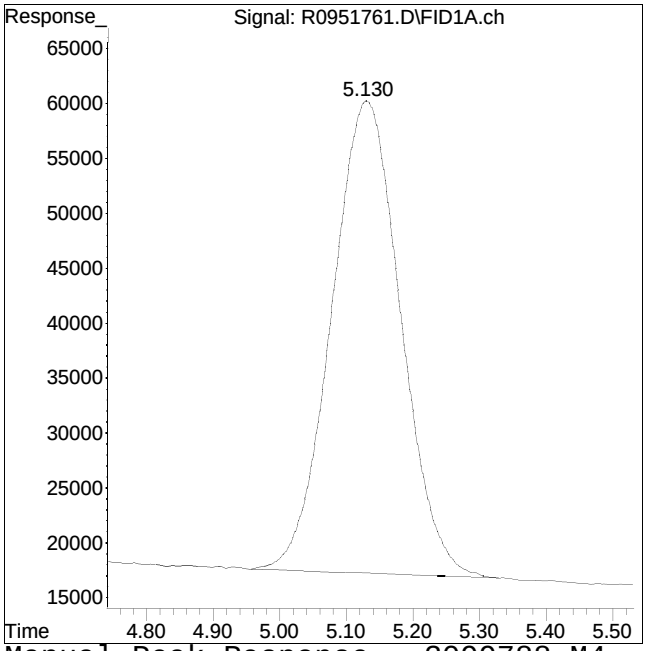
Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0951761.D Operator : AIRLAB9:SRO
Date Inj'd : 12/18/2023 4:46 pm Instrument : Airlab 9
Sample : L2373323-05,4,0.5,0.5 Quant Date : 12/19/2023 10:04 am

Compound #4: ethane



Original Peak Response = 3088820



Manual Peak Response = 3099788 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\airlab9\2023\12\1218DG_PM\
Data File : R0951762.D
Signal(s) : FID1A.ch
Acq On : 18 Dec 2023 5:04 pm
Operator : AIRLAB9:SRO
Sample : L2373323-06,4,0.5,0.5
Misc : WG1865332,ICAL16772
ALS Vial : 5 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 19 10:04:43 2023
Quant Method : O:\Forensics\Data\airlab9\2023\12\1218DG_PM\DG9_200511.M
Quant Title : Dissolved Gases
QLast Update : Tue May 12 07:13:18 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Sub List : MEE - All compounds listed

	Compound	R.T.	Response	Conc	Units	
Target Compounds						
1)	methane	1.168	1275735646	9116.442	ug/L	M4
2)	ethene	4.263	49336284	346.082	ug/L	M4
4)	ethane	5.129	4385738	27.862	ug/L	M4

(f)=RT Delta > 1/2 Window (m)=manual int.

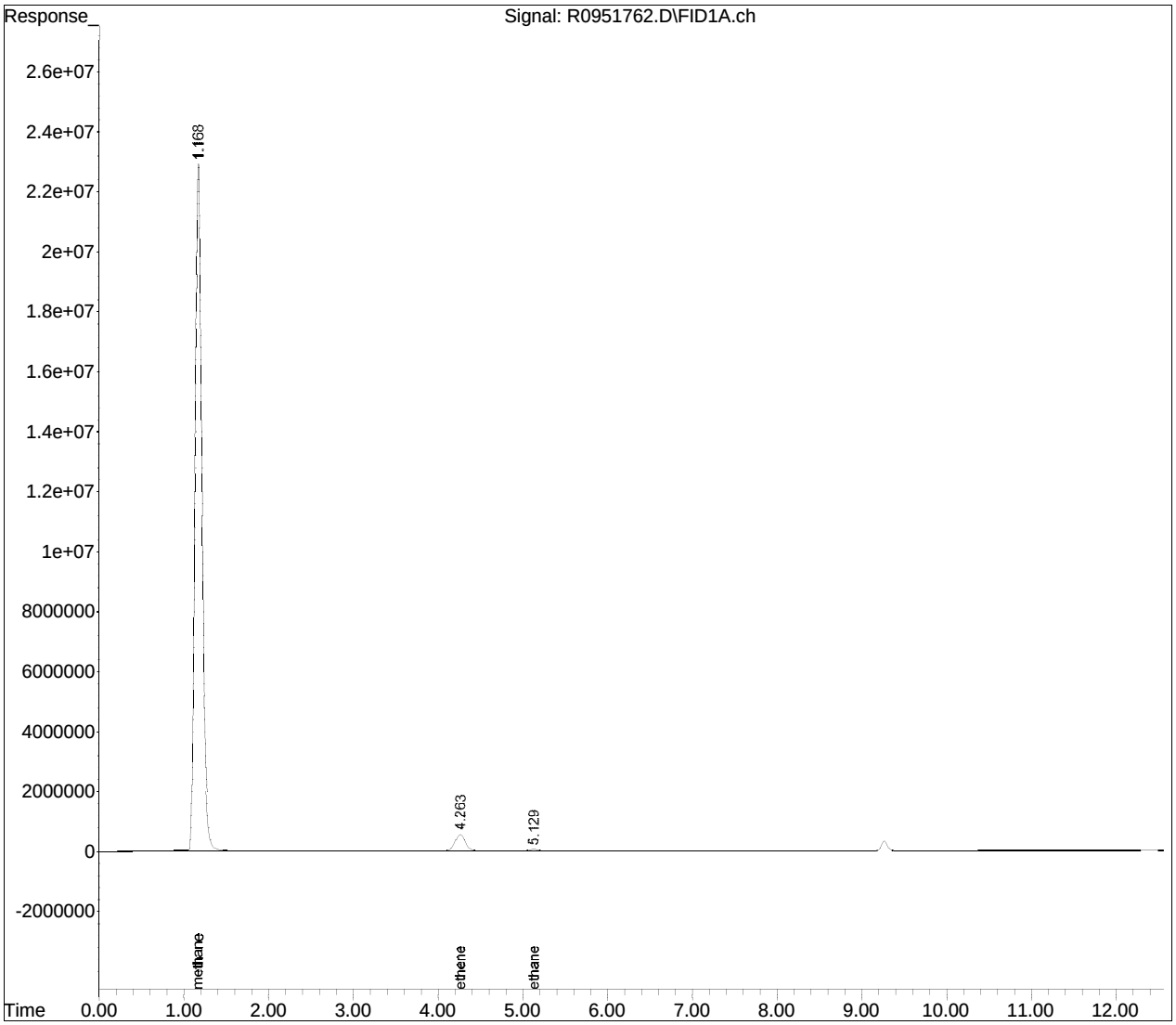
Quantitation Report (QT Reviewed)

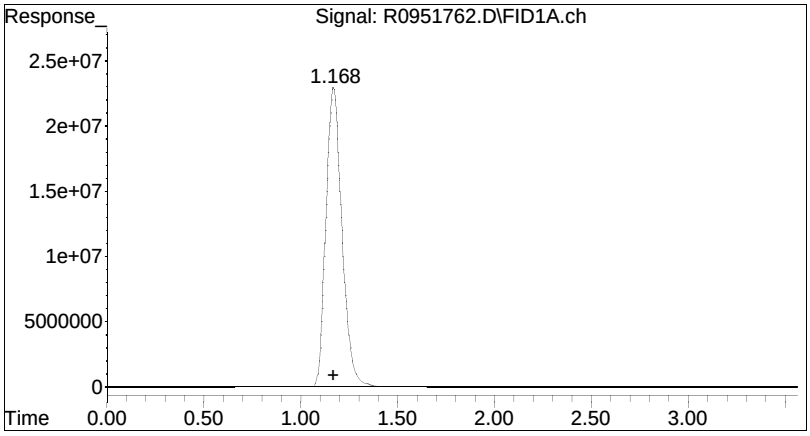
Data Path : O:\Forensics\Data\airlab9\2023\12\1218DG_PM\
Data File : R0951762.D
Signal(s) : FID1A.ch
Acq On : 18 Dec 2023 5:04 pm
Operator : AIRLAB9:SRO
Sample : L2373323-06,4,0.5,0.5
Misc : WG1865332,ICAL16772
ALS Vial : 5 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 19 10:04:43 2023
Quant Method : O:\Forensics\Data\airlab9\2023\12\1218DG_PM\DG9_200511.M
Quant Title : Dissolved Gases
QLast Update : Tue May 12 07:13:18 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

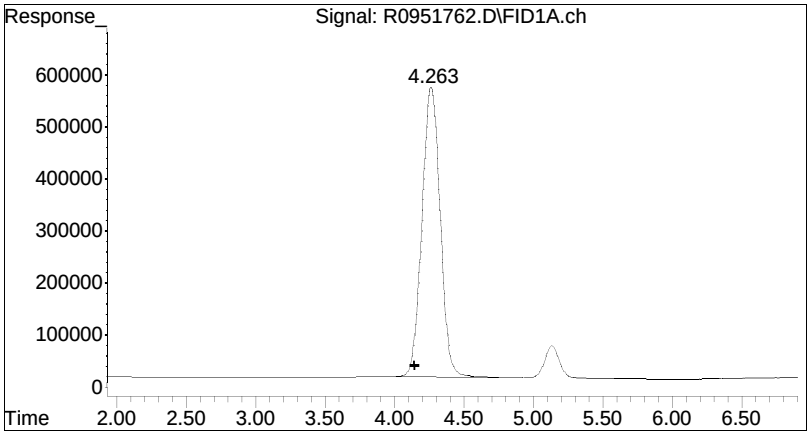
Sub List : MEE - All compounds listed





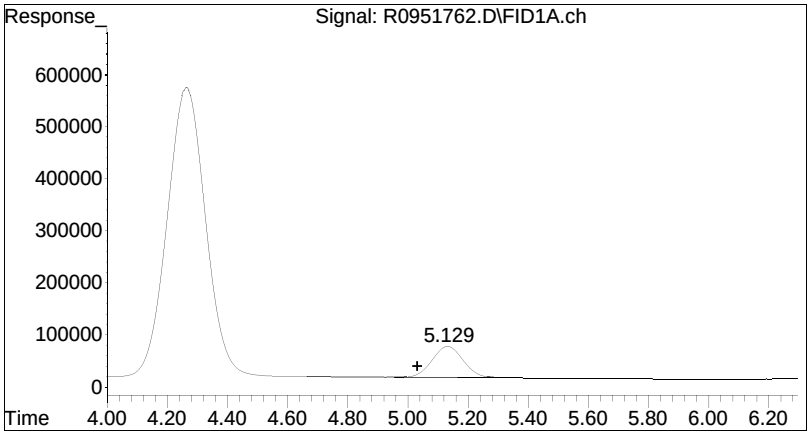
#1 methane

R.T.: 1.168 min
Delta R.T.: -0.002 min
Response: 1275735646
Conc: 9116.44 ug/L M4



#2 ethene

R.T.: 4.263 min
Delta R.T.: 0.117 min
Response: 49336284
Conc: 346.08 ug/L M4



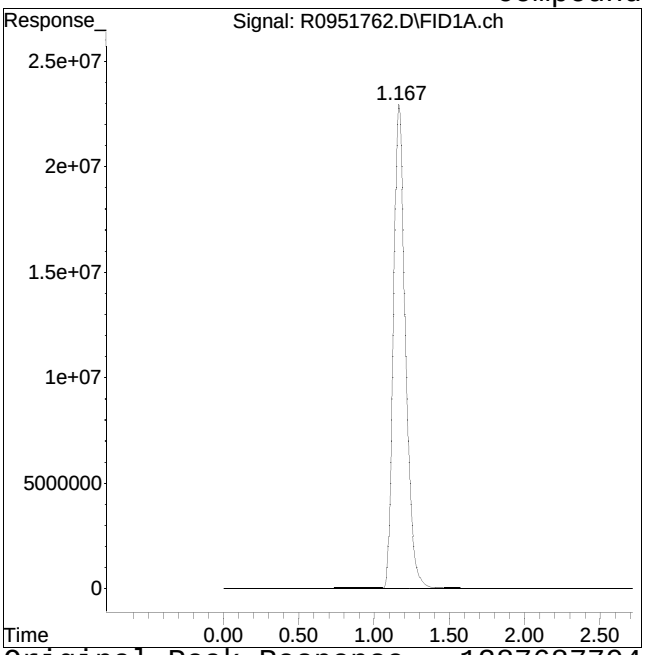
#4 ethane

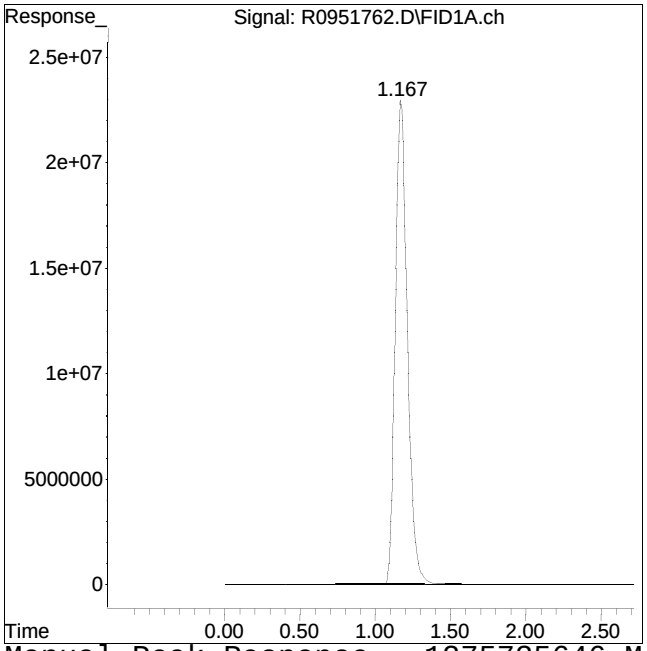
R.T.:	5.129 min
Delta R.T.:	0.098 min
Response:	4385738
Conc:	27.86 ug/L M4

Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0951762.D Operator : AIRLAB9:SRO
Date Inj'd : 12/18/2023 5:04 pm Instrument : Airlab 9
Sample : L2373323-06,4,0.5,0.5 Quant Date : 12/19/2023 10:04 am

Compound #1: methane



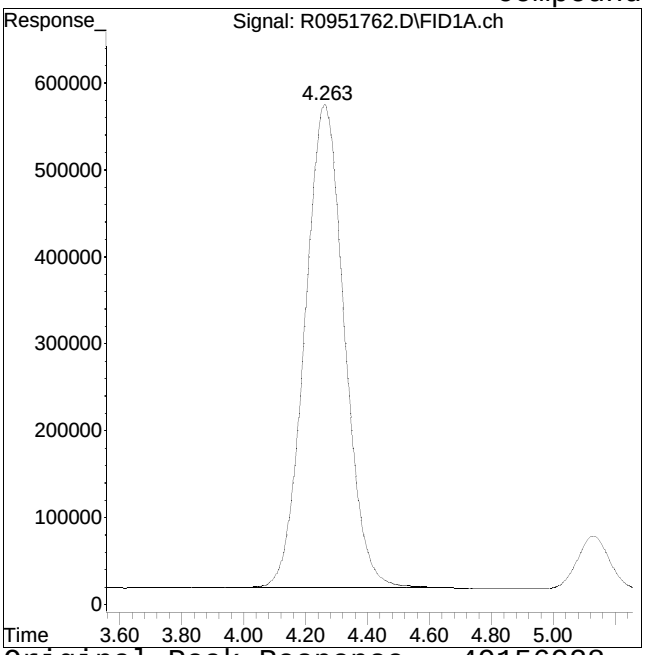


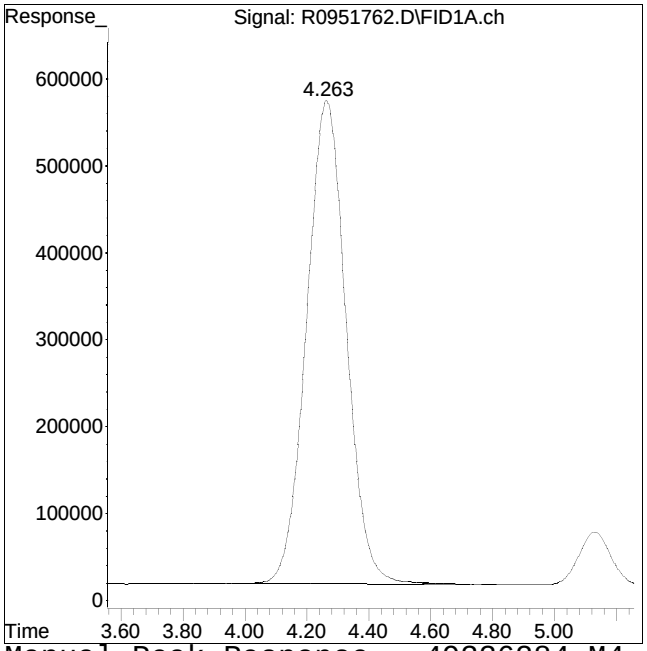
Original Peak Response = 1287687704 Manual Peak Response = 1275735646 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0951762.D Operator : AIRLAB9:SRO
Date Inj'd : 12/18/2023 5:04 pm Instrument : Airlab 9
Sample : L2373323-06,4,0.5,0.5 Quant Date : 12/19/2023 10:04 am

Compound #2: ethene



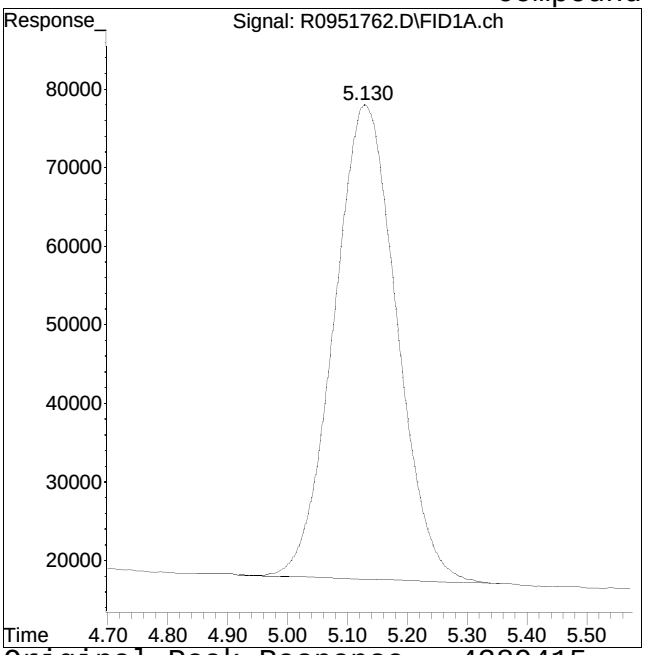


Original Peak Response = 49156928 Manual Peak Response = 49336284 M4
M4 = Poor automated baseline construction.

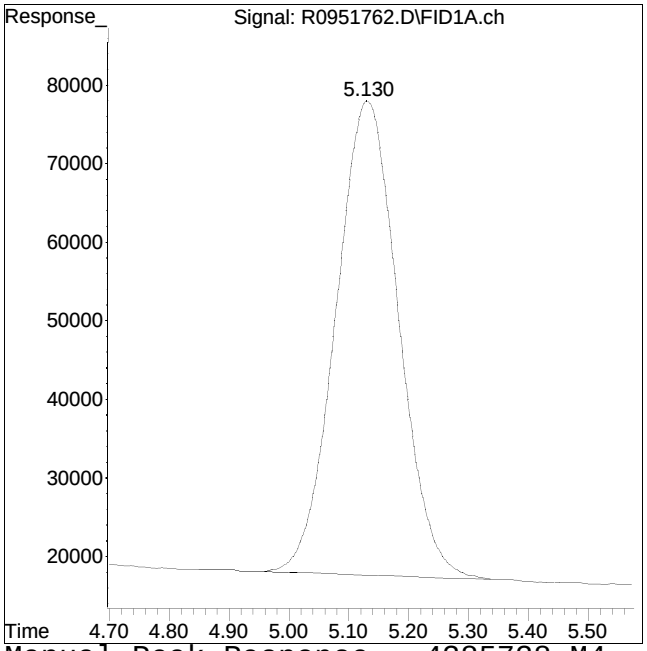
Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0951762.D Operator : AIRLAB9:SRO
Date Inj'd : 12/18/2023 5:04 pm Instrument : Airlab 9
Sample : L2373323-06,4,0.5,0.5 Quant Date : 12/19/2023 10:04 am

Compound #4: ethane



Original Peak Response = 4389415



Manual Peak Response = 4385738 M4

M4 = Poor automated baseline construction.

Volatiles Standards Data

Initial Calibration

Initial Calibration Summary
Form 6
Volatiles

Client	**: Sterling Environmental Engineering**	**Lab Number**	**: L2373323**
Project Name	**: TROY BELTING**	**Project Number**	**: 2011-31**
Instrument ID	**: AIRLAB9**	**Ical Ref**	**: ICAL16772**
Calibration dates	**: 05/11/20 15:46 05/11/20 18:04**		

Calibration Files

L1 =R0932150.d L2 =R0932151.d L3 =R0932152.d L4 =R0932153.d L5 =R0932154.d L6 =R0932155.d

L7 =R0932156.d L8Me=R0932157.d

	Compound	L1	L2	L3	L4	L5	L6	L7	L8Me	Avg	%RSD
1)	methane	1.616	1.559	1.225	1.421	1.279	1.350	1.552	1.398	*LFE5	0.9999
2)	ethene	1.044	1.285	1.157	1.313	1.232	1.278	1.470		*LFE5	0.9957
3)	acetylene		2.377	2.256	2.872	2.677	3.021			*LFE4	0.9979
4)	ethane	0.848	1.216	1.254	1.439	1.371	1.407	1.624		*LFE5	0.9956
5)	propene	0.892	0.949	0.992	1.099	1.121	1.156	1.303		*LFE5	0.9969
6)	propane	1.009	1.123	1.176	1.314	1.341	1.375	1.526		*LFE5	0.9976
7)	butane	1.248	1.052	1.133	1.230	1.349	1.370	1.479		*LFE5	0.9987

Response Factor Report Airlab9

Method Path : O:\Forensics\Data\airlab9\2020\200511DG_I\
Method File : DG9_200511.M
Title : Dissolved Gases
Last Update : Tue May 12 07:13:18 2020
Response Via : Initial Calibration

Calibration Files
L1 =R0932150.d L2 =R0932151.d L3 =R0932152.d L4 =R0932153.d L5 =R0932154.d L6 =R0932155.d
L7 =R0932156.d L8Me=R0932157.d

	Compound	L1	L2	L3	L4	L5	L6	L7	L8Me	Avg	%RSD
1)	methane	1.616	1.559	1.225	1.421	1.279	1.350	1.552	1.398	*LFE5	0.9999
2)	ethene	1.044	1.285	1.157	1.313	1.232	1.278	1.470		*LFE5	0.9957
3)	acetylene		2.377	2.256	2.872	2.677	3.021			*LFE4	0.9979
4)	ethane	0.848	1.216	1.254	1.439	1.371	1.407	1.624		*LFE5	0.9956
5)	propene	0.892	0.949	0.992	1.099	1.121	1.156	1.303		*LFE5	0.9969
6)	propane	1.009	1.123	1.176	1.314	1.341	1.375	1.526		*LFE5	0.9976
7)	butane	1.248	1.052	1.133	1.230	1.349	1.370	1.479		*LFE5	0.9987

(#) = Out of Range ### Number of calibration levels exceeded format ###

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\airlab9\2020\200511DG_I\
Data File : R0932150.d
Signal(s) : FID1A.ch
Acq On : 11 May 2020 3:46 pm
Operator : AIRLAB9:AR
Sample : IDISSGASSTD01
Misc : WG1369720
ALS Vial : 2 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 12 07:04:31 2020
Quant Method : O:\Forensics\Data\airlab9\2020\200511DG_I\DG9_200511.M
Quant Title : Dissolved Gases
QLast Update : Tue May 12 07:01:27 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Sub List : Default - All compounds listed

	Compound	R.T.	Response	Conc	Units	
Target Compounds						
1)	methane	1.150	50096	0.360	ug/L	M4
2)	ethene	4.130	55354	0.428	ug/L	M4
3)	acetylene	0.000	0	N.D.	ug/L	d
4)	ethane	5.027	48353	0.339	ug/L	M4
5)	propene	7.865	69567	0.623	ug/L	m
6)	propane	8.013	84771	0.645	ug/L	
7)	butane	9.810	138481	1.126	ug/L	M4

(f)=RT Delta > 1/2 Window (m)=manual int.

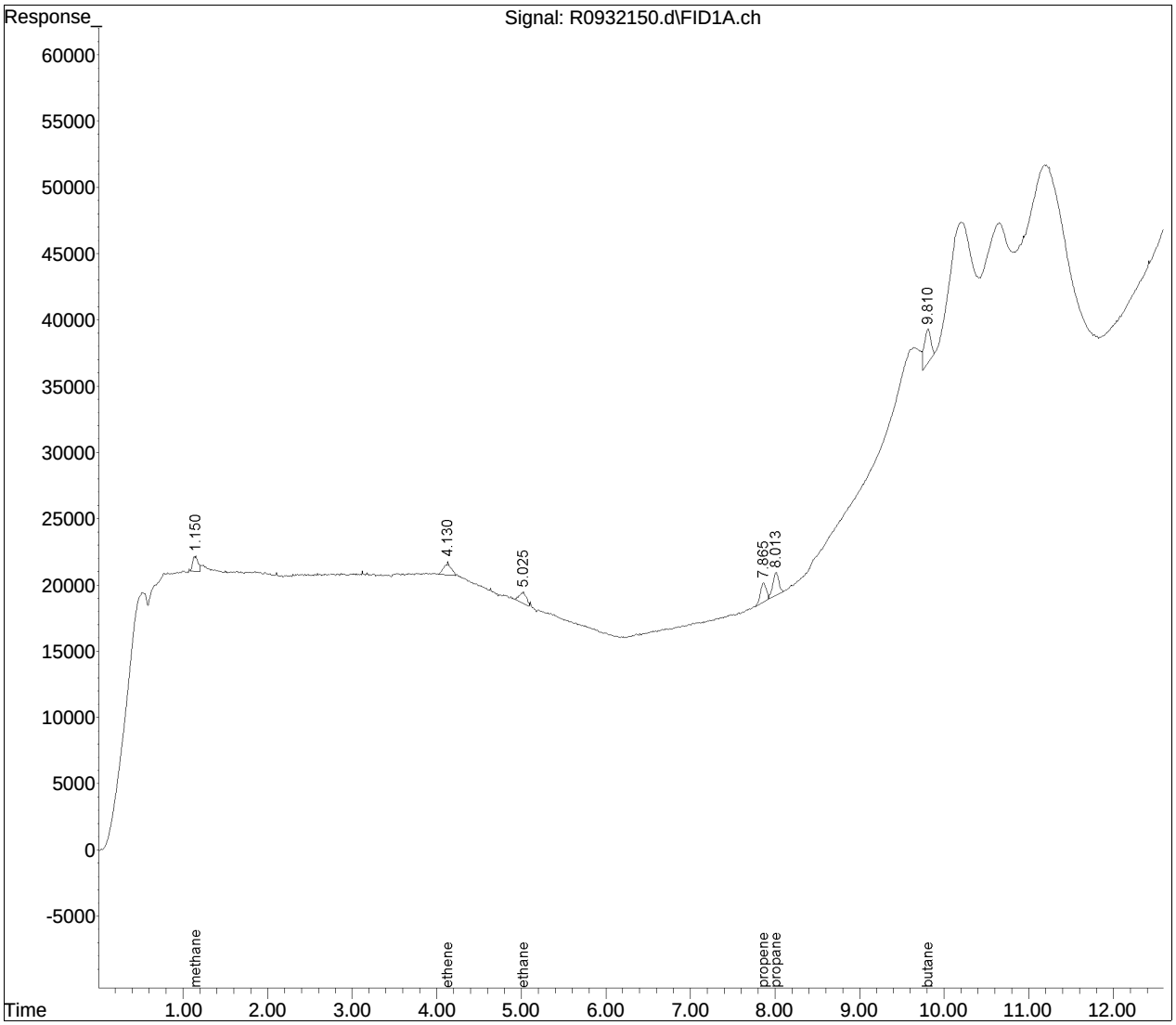
Quantitation Report (QT Reviewed)

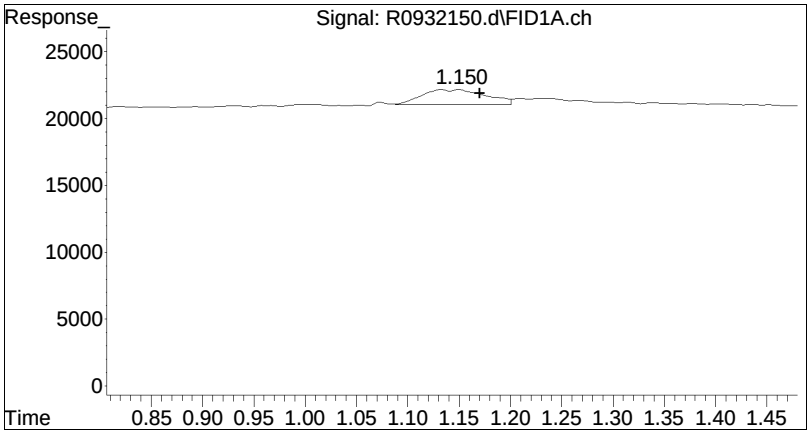
Data Path : O:\Forensics\Data\airlab9\2020\200511DG_I\
Data File : R0932150.d
Signal(s) : FID1A.ch
Acq On : 11 May 2020 3:46 pm
Operator : AIRLAB9:AR
Sample : IDISSGASSTD01
Misc : WG1369720
ALS Vial : 2 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 12 07:04:31 2020
Quant Method : O:\Forensics\Data\airlab9\2020\200511DG_I\DG9_200511.M
Quant Title : Dissolved Gases
QLast Update : Tue May 12 07:01:27 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

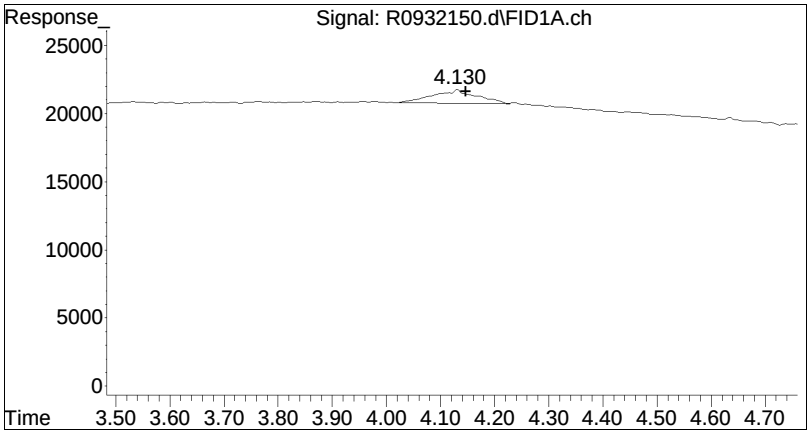
Sub List : Default - All compounds listed





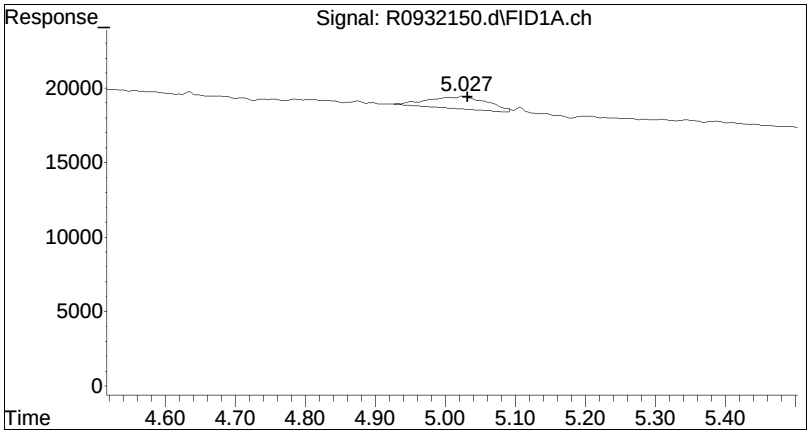
#1 methane

R.T.:	1.150 min
Delta R.T.:	-0.020 min
Response:	50096
Conc:	0.36 ug/L M4



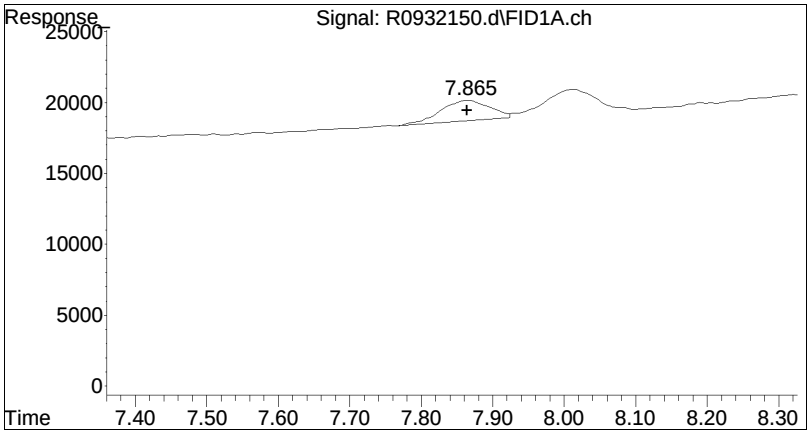
#2 ethene

R.T.:	4.130 min
Delta R.T.:	-0.016 min
Response:	55354
Conc:	0.43 ug/L M4



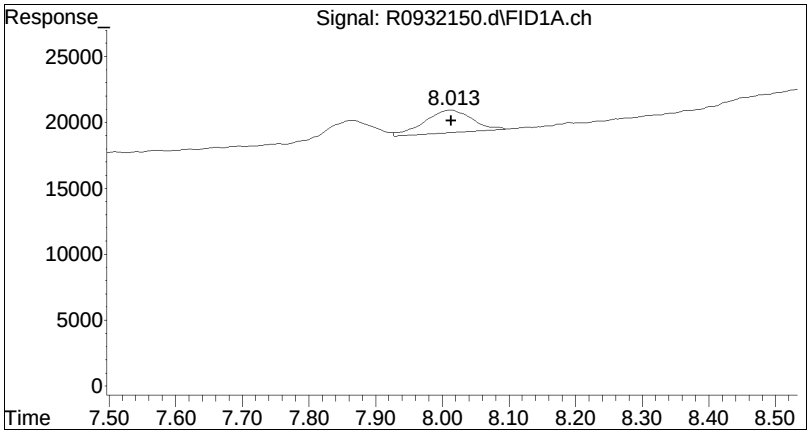
#4 ethane

R.T.:	5.027 min
Delta R.T.:	-0.005 min
Response:	48353
Conc:	0.34 ug/L M4



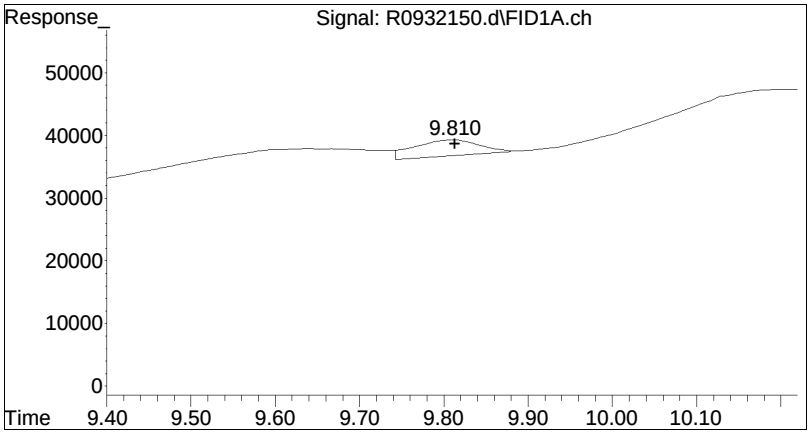
#5 propene

R.T.:	7.865 min
Delta R.T.:	0.001 min
Response:	69567
Conc:	0.62 ug/L m



#6 propane

R.T.:	8.013 min
Delta R.T.:	0.000 min
Response:	84771
Conc:	0.64 ug/L



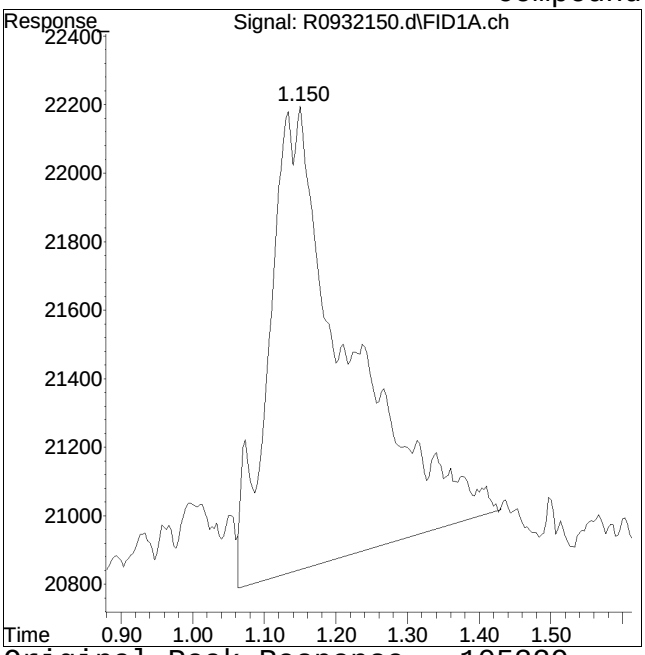
#7 butane

R.T.:	9.810 min
Delta R.T.:	-0.003 min
Response:	138481
Conc:	1.13 ug/L M4

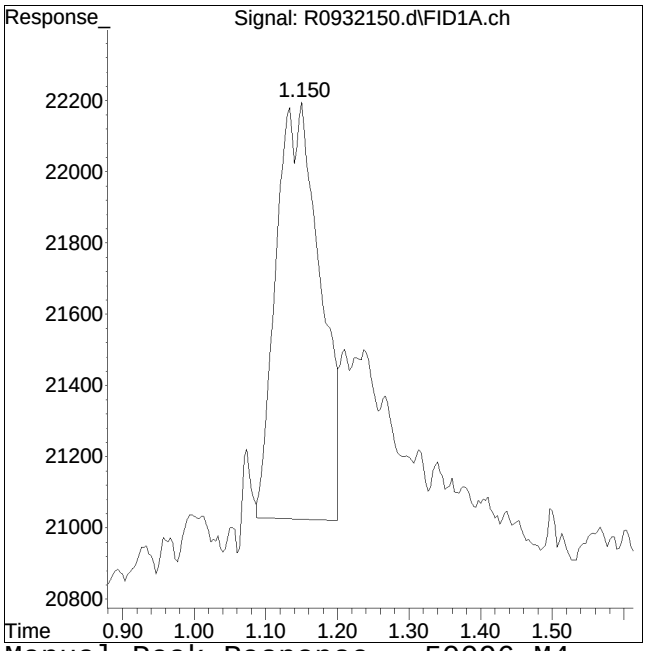
Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0932150.d Operator : AIRLAB9:AR
Date Inj'd : 5/11/2020 0:3: 6 Instrument : Airlab9
Sample : IDISSGASSTD01 Quant Date : 5/12/2020 7:02 am

Compound #1: methane



Original Peak Response = 105329



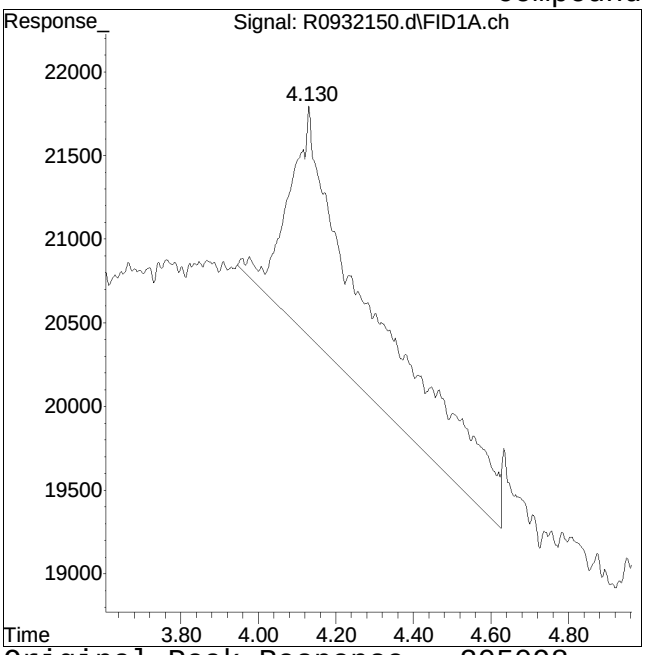
Manual Peak Response = 50096 M4

M4 = Poor automated baseline construction.

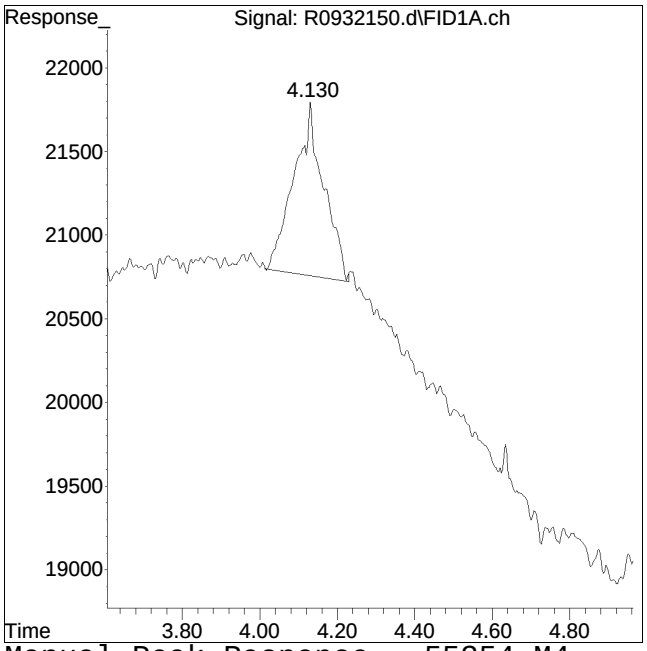
Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0932150.d Operator : AIRLAB9:AR
Date Inj'd : 5/11/2020 0:3: 6 Instrument : Airlab9
Sample : IDISSGASSTD01 Quant Date : 5/12/2020 7:02 am

Compound #2: ethene



Original Peak Response = 205098



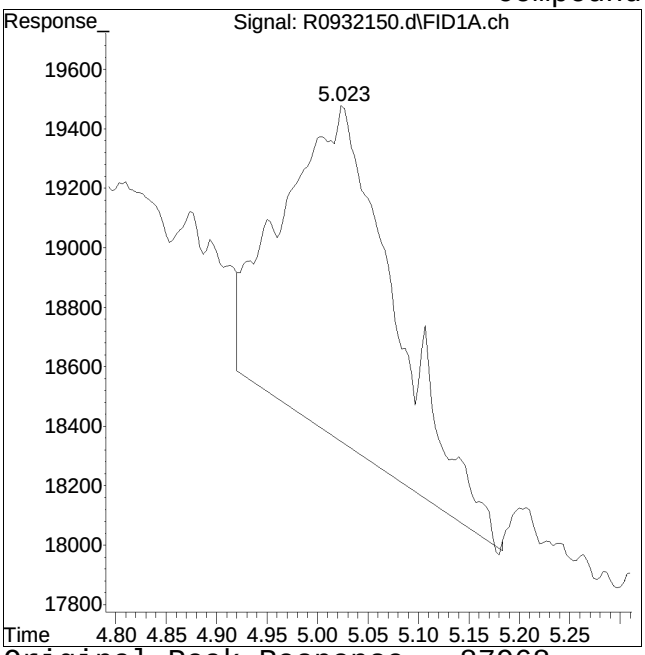
Manual Peak Response = 55354 M4

M4 = Poor automated baseline construction.

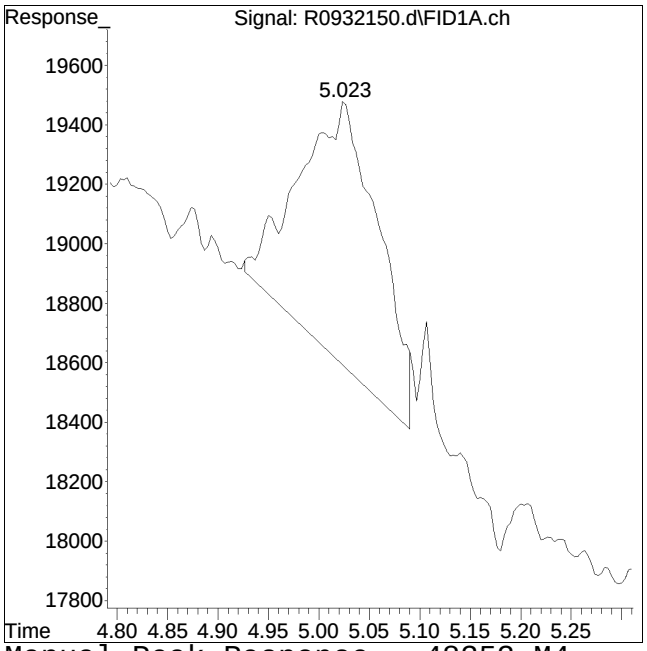
Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0932150.d Operator : AIRLAB9:AR
Date Inj'd : 5/11/2020 0:3: 6 Instrument : Airlab9
Sample : IDISSGASSTD01 Quant Date : 5/12/2020 7:02 am

Compound #4: ethane



Original Peak Response = 87968



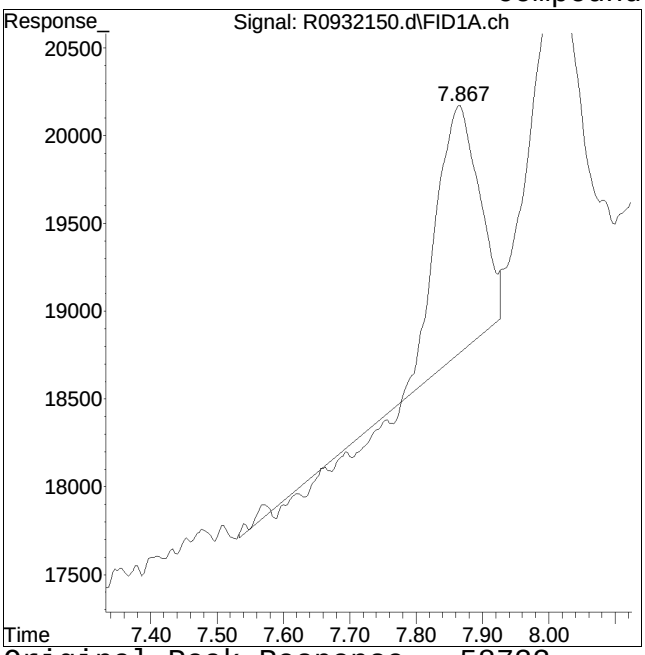
Manual Peak Response = 48353 M4

M4 = Poor automated baseline construction.

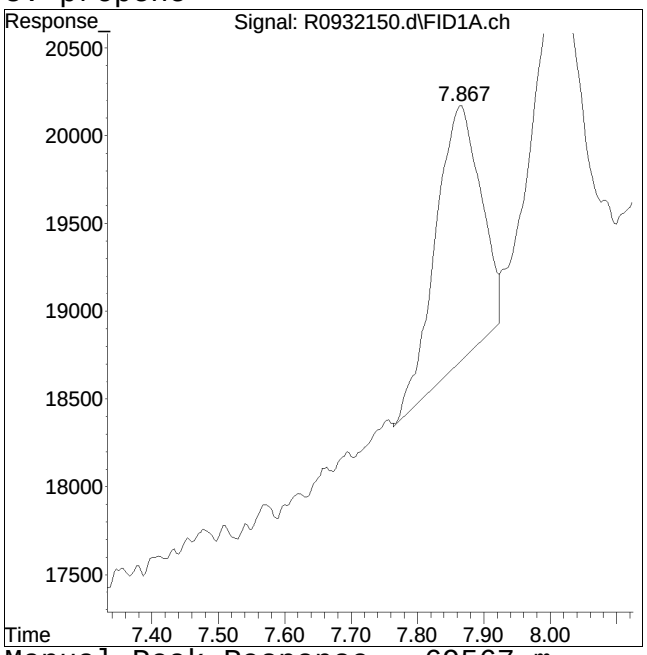
Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0932150.d Operator : AIRLAB9:AR
Date Inj'd : 5/11/2020 0:3: 6 Instrument : Airlab9
Sample : IDISSGASSTD01 Quant Date : 5/12/2020 7:02 am

Compound #5: propene



Original Peak Response = 58733

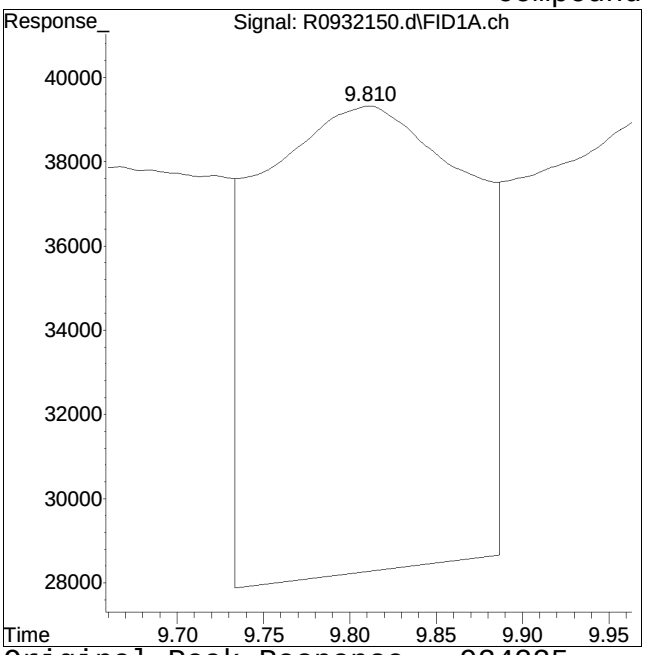


Manual Peak Response = 69567 m

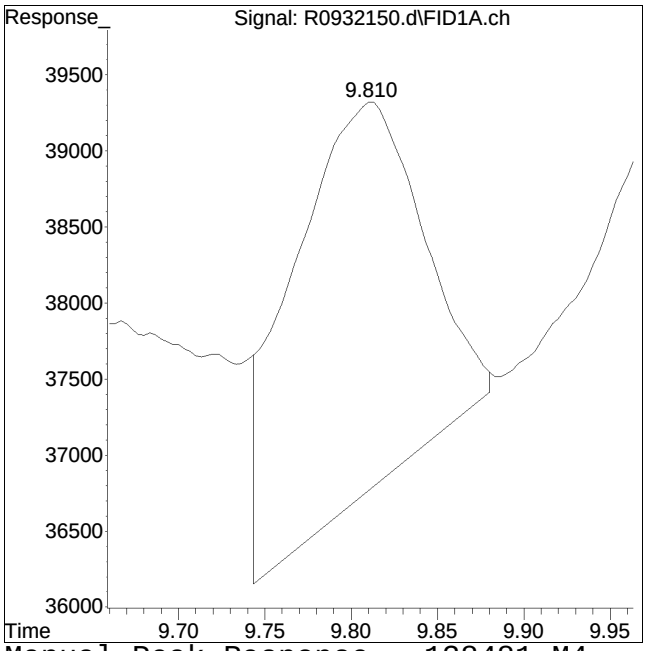
Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0932150.d Operator : AIRLAB9:AR
Date Inj'd : 5/11/2020 0:3: 6 Instrument : Airlab9
Sample : IDISSGASSTD01 Quant Date : 5/12/2020 7:02 am

Compound #7: butane



Original Peak Response = 924225



Manual Peak Response = 138481 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\airlab9\2020\200511DG_I\
Data File : R0932151.d
Signal(s) : FID1A.ch
Acq On : 11 May 2020 4:06 pm
Operator : AIRLAB9:AR
Sample : IDISSGASSTD02
Misc : WG1369720
ALS Vial : 2 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 12 07:06:02 2020
Quant Method : O:\Forensics\Data\airlab9\2020\200511DG_I\DG9_200511.M
Quant Title : Dissolved Gases
QLast Update : Tue May 12 07:01:27 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Sub List : Default - All compounds listed

	Compound	R.T.	Response	Conc	Units	
Target Compounds						
1)	methane	1.171	238574	1.715	ug/L	M4
2)	ethene	4.141	343031	2.652	ug/L	M4
3)	acetylene	4.875	58955	2.063	ug/L	M4
4)	ethane	5.057	348987	2.449	ug/L	M4
5)	propene	7.866	380697	3.408	ug/L	
6)	propane	8.013	471549	3.588	ug/L	
7)	butane	9.812	582655	4.738	ug/L	M4

(f)=RT Delta > 1/2 Window (m)=manual int.

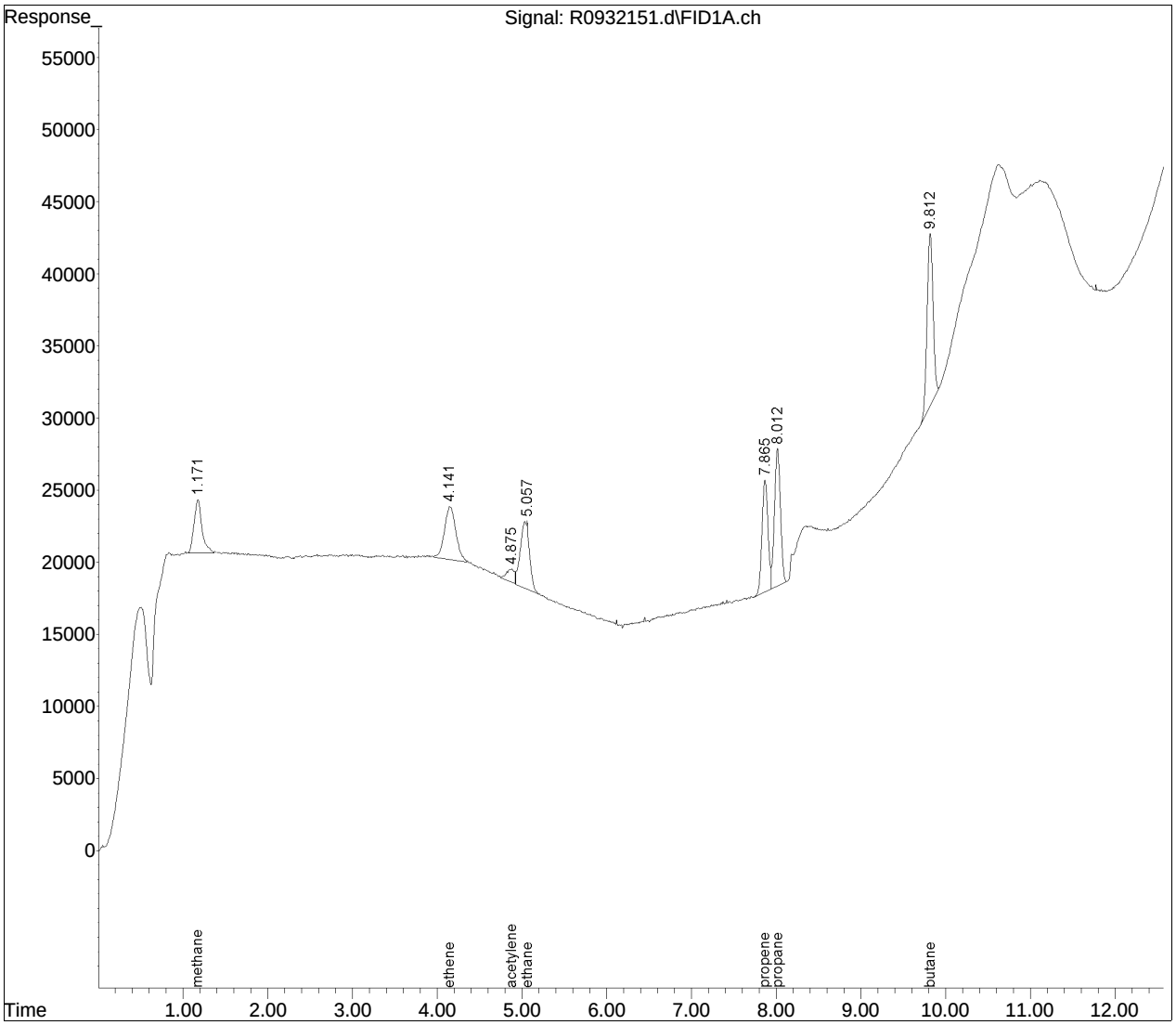
Quantitation Report (QT Reviewed)

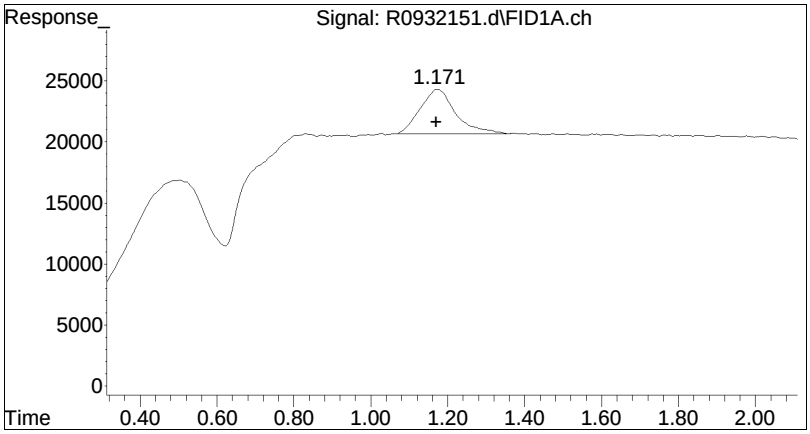
Data Path : O:\Forensics\Data\airlab9\2020\200511DG_I\
Data File : R0932151.d
Signal(s) : FID1A.ch
Acq On : 11 May 2020 4:06 pm
Operator : AIRLAB9:AR
Sample : IDISSGASSTD02
Misc : WG1369720
ALS Vial : 2 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 12 07:06:02 2020
Quant Method : O:\Forensics\Data\airlab9\2020\200511DG_I\DG9_200511.M
Quant Title : Dissolved Gases
QLast Update : Tue May 12 07:01:27 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

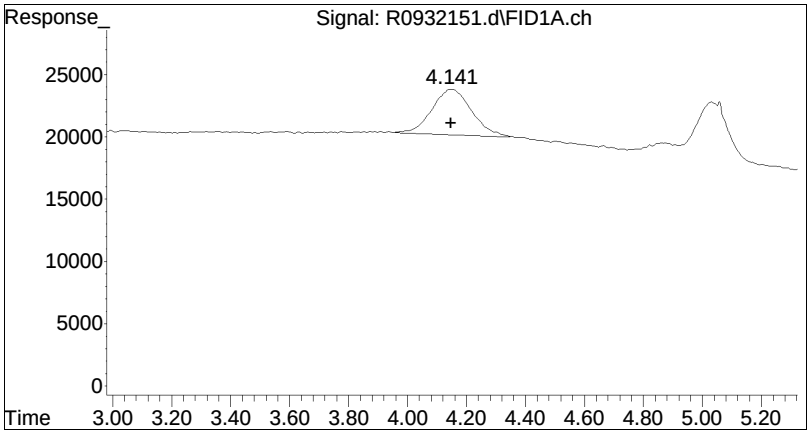
Sub List : Default - All compounds listed





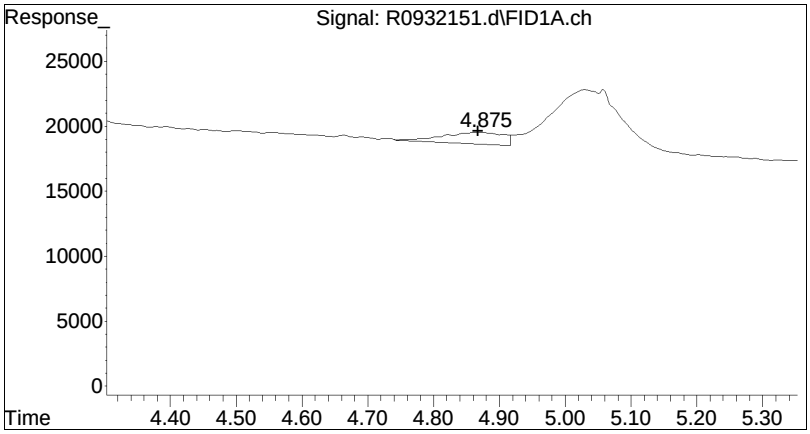
#1 methane

R.T.:	1.171 min
Delta R.T.:	0.001 min
Response:	238574
Conc:	1.72 ug/L M4



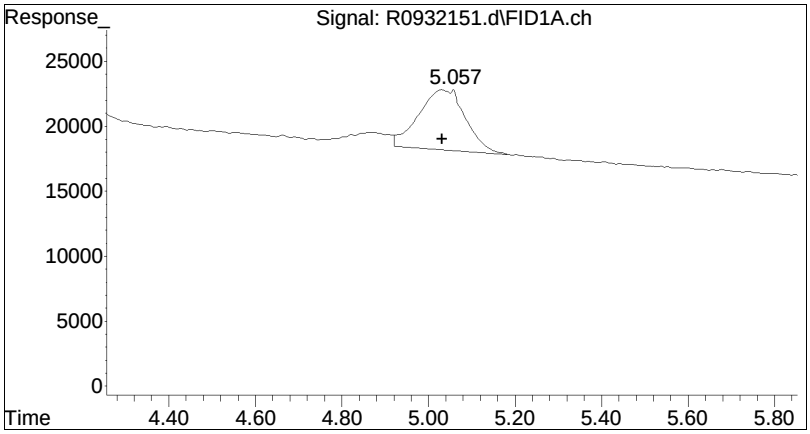
#2 ethene

R.T.:	4.141 min
Delta R.T.:	-0.006 min
Response:	343031
Conc:	2.65 ug/L M4



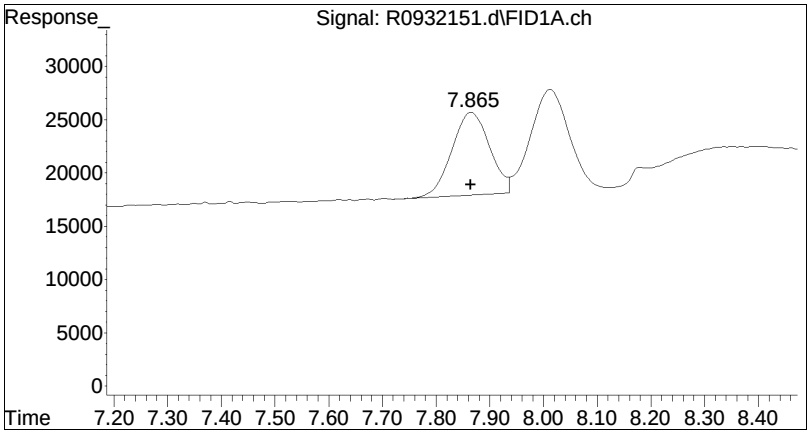
#3 acetylene

R.T.:	4.875 min
Delta R.T.:	0.008 min
Response:	58955
Conc:	2.06 ug/L M4



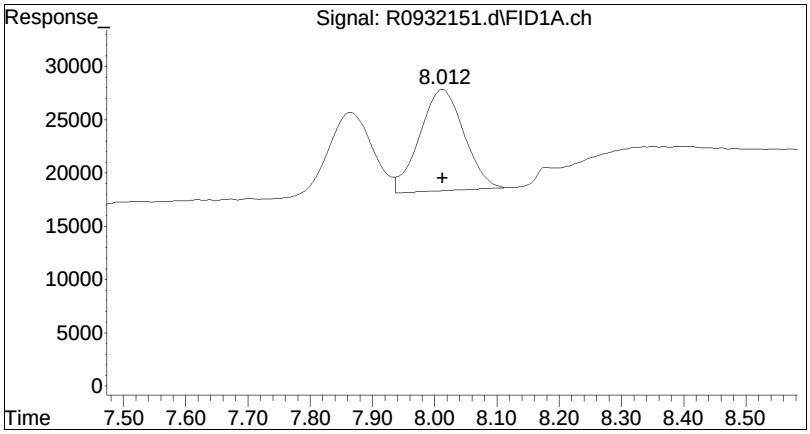
#4 ethane

R.T.:	5.057 min
Delta R.T.:	0.025 min
Response:	348987
Conc:	2.45 ug/L M4



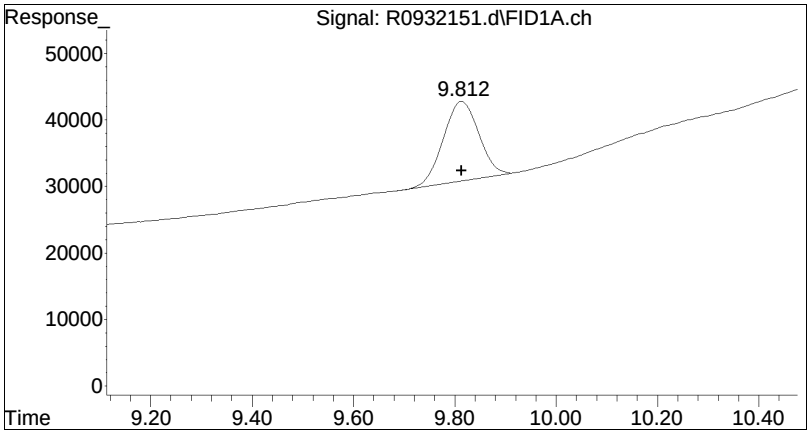
#5 propene

R.T.:	7.866 min
Delta R.T.:	0.002 min
Response:	380697
Conc:	3.41 ug/L



#6 propane

R.T.:	8.013 min
Delta R.T.:	0.000 min
Response:	471549
Conc:	3.59 ug/L



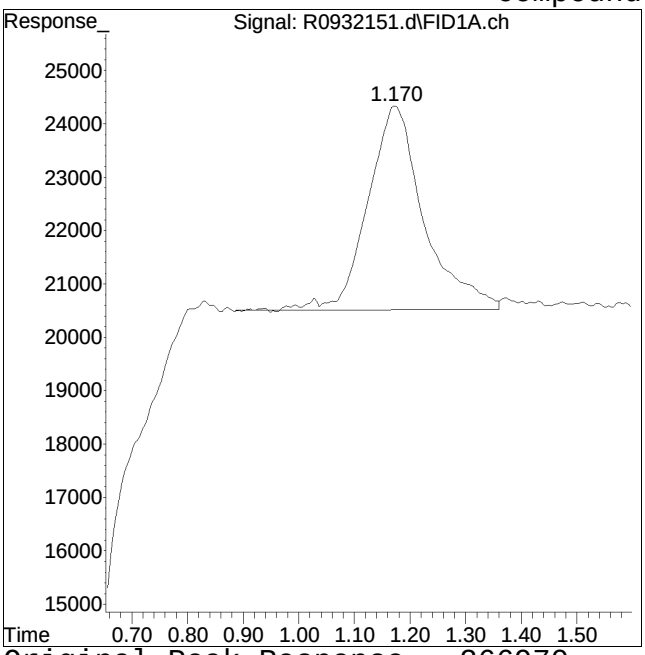
#7 butane

R.T.:	9.812 min
Delta R.T.:	0.000 min
Response:	582655
Conc:	4.74 ug/L M4

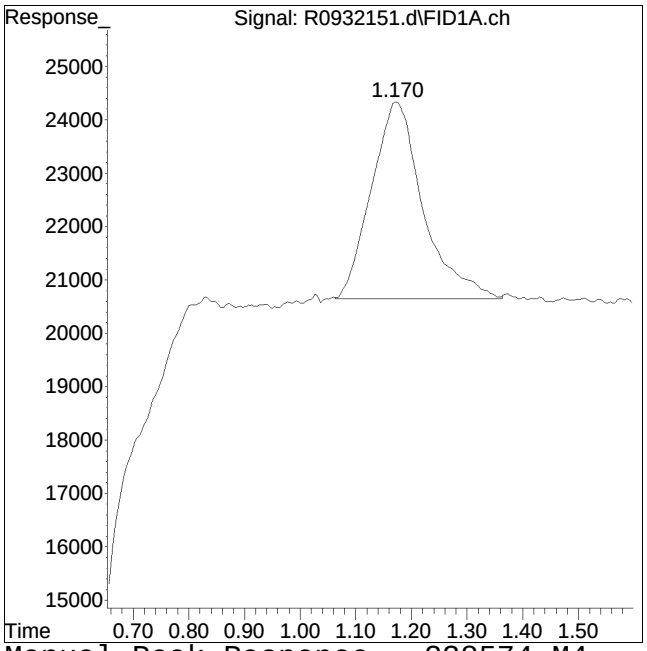
Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0932151.d Operator : AIRLAB9:AR
Date Inj'd : 5/11/2020 0:4: 6 Instrument : Airlab9
Sample : IDISSGASSTD02 Quant Date : 5/12/2020 7:02 am

Compound #1: methane



Original Peak Response = 266970



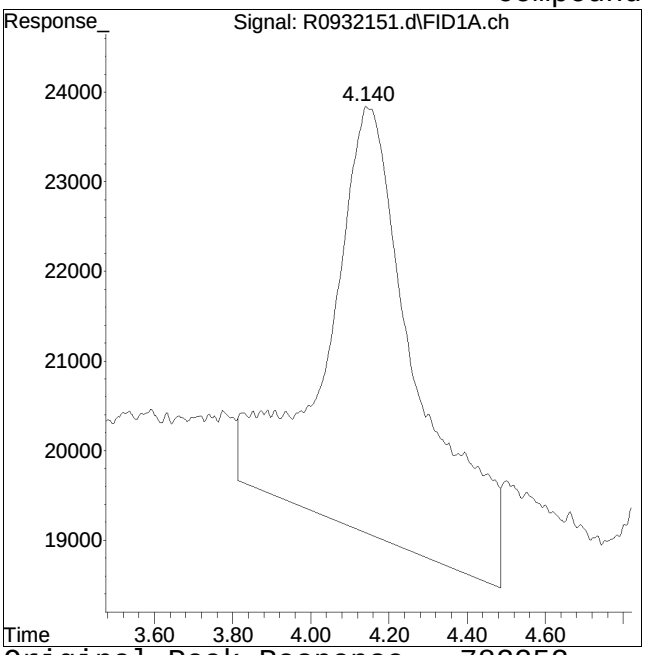
Manual Peak Response = 238574 M4

M4 = Poor automated baseline construction.

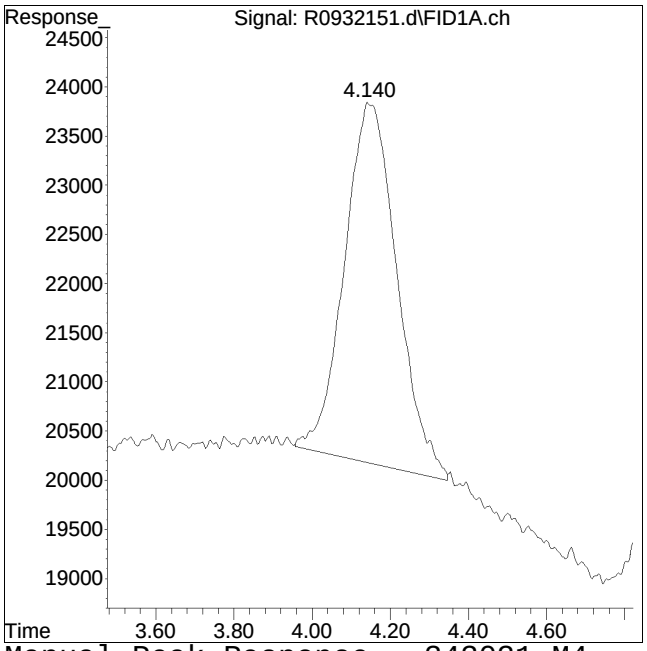
Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0932151.d Operator : AIRLAB9:AR
Date Inj'd : 5/11/2020 0:4: 6 Instrument : Airlab9
Sample : IDISSGASSTD02 Quant Date : 5/12/2020 7:02 am

Compound #2: ethene



Original Peak Response = 782252



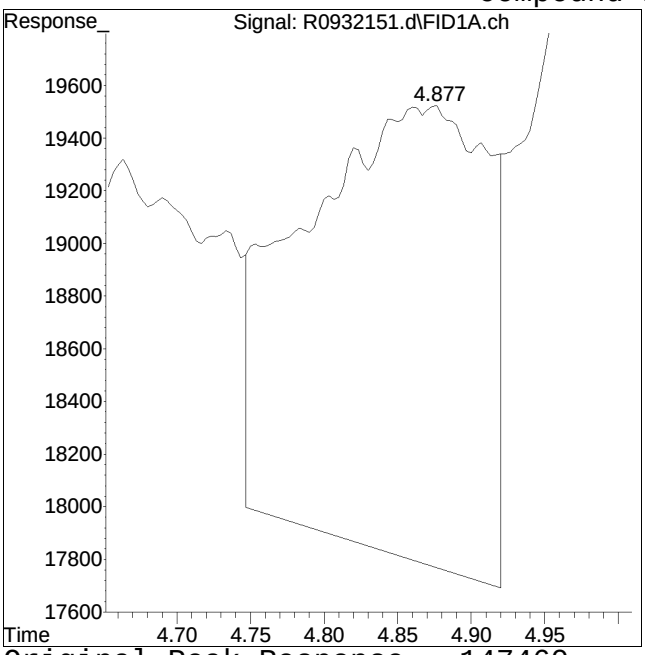
Manual Peak Response = 343031 M4

M4 = Poor automated baseline construction.

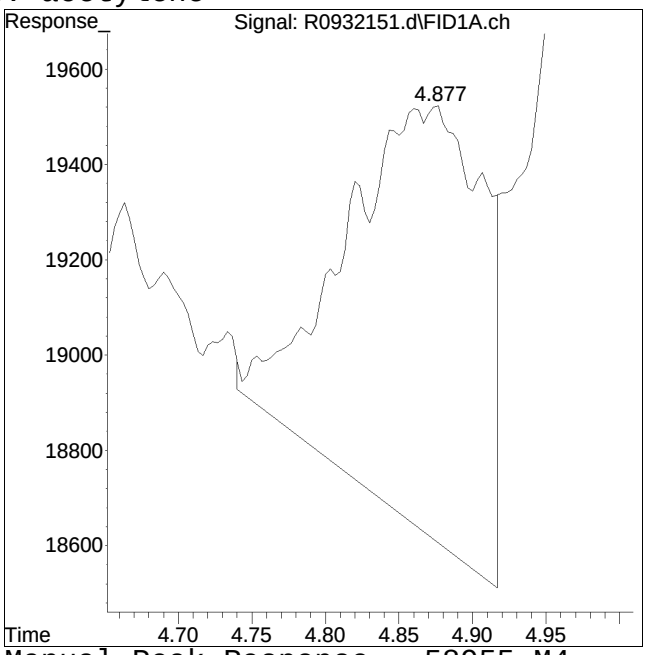
Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0932151.d Operator : AIRLAB9:AR
Date Inj'd : 5/11/2020 0:4: 6 Instrument : Airlab9
Sample : IDISSGASSTD02 Quant Date : 5/12/2020 7:02 am

Compound #3: acetylene



Original Peak Response = 147460



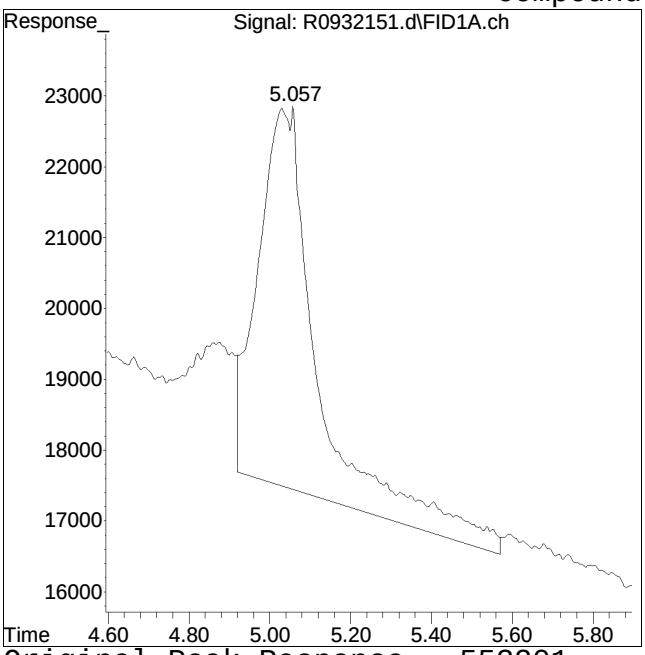
Manual Peak Response = 58955 M4

M4 = Poor automated baseline construction.

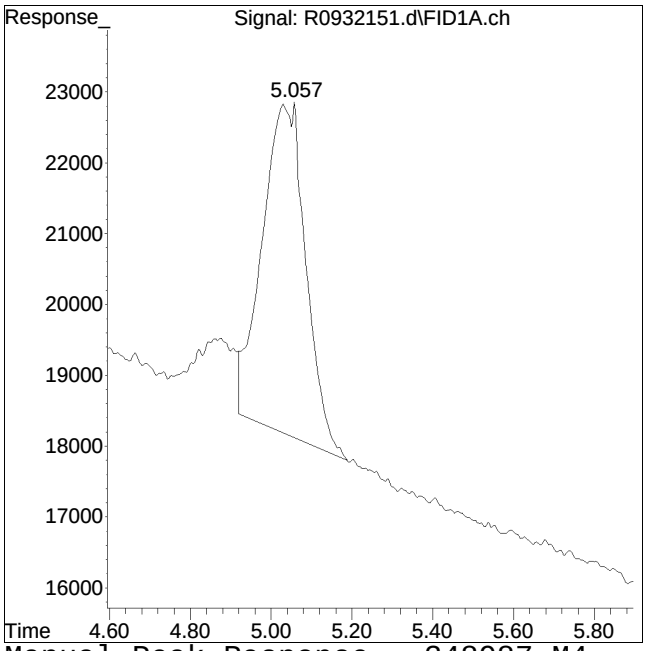
Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0932151.d Operator : AIRLAB9:AR
Date Inj'd : 5/11/2020 0:4: 6 Instrument : Airlab9
Sample : IDISSGASSTD02 Quant Date : 5/12/2020 7:02 am

Compound #4: ethane



Original Peak Response = 553201



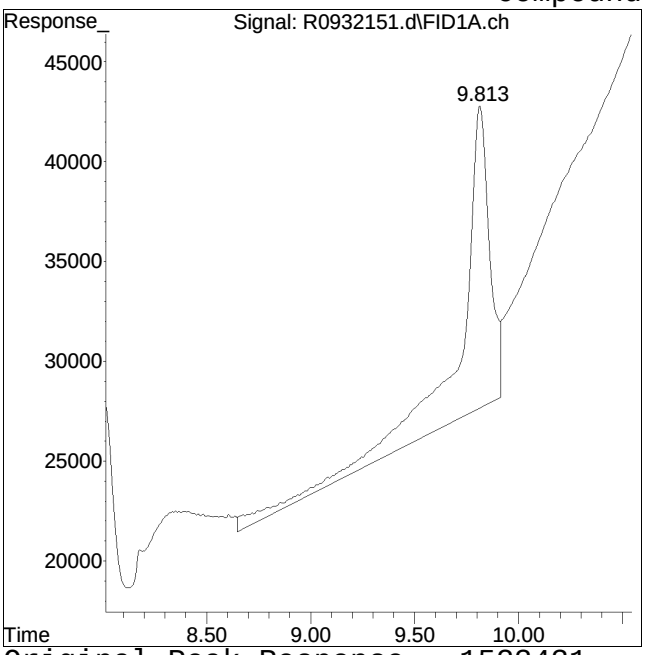
Manual Peak Response = 348987 M4

M4 = Poor automated baseline construction.

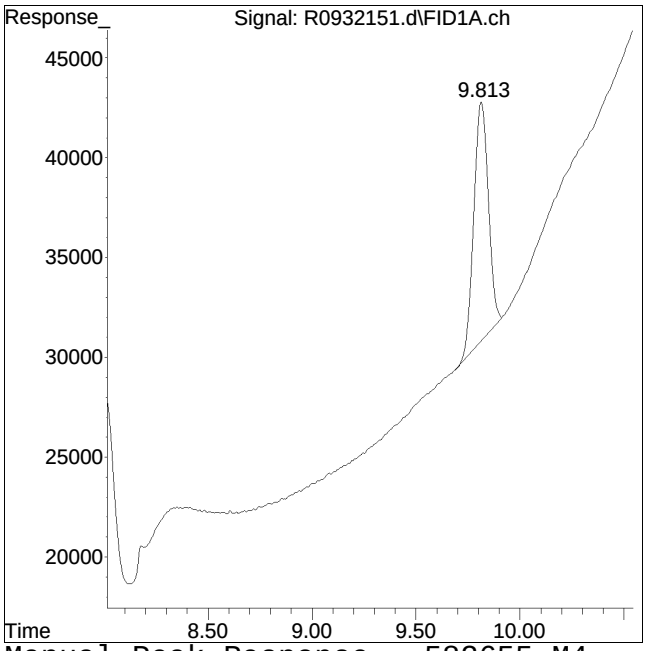
Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0932151.d Operator : AIRLAB9:AR
Date Inj'd : 5/11/2020 0:4: 6 Instrument : Airlab9
Sample : IDISSGASSTD02 Quant Date : 5/12/2020 7:02 am

Compound #7: butane



Original Peak Response = 1523431



Manual Peak Response = 582655 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\airlab9\2020\200511DG_I\
Data File : R0932152.d
Signal(s) : FID1A.ch
Acq On : 11 May 2020 4:25 pm
Operator : AIRLAB9:AR
Sample : IDISSGASSTD03
Misc : WG1369720
ALS Vial : 3 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 12 07:07:27 2020
Quant Method : O:\Forensics\Data\airlab9\2020\200511DG_I\DG9_200511.M
Quant Title : Dissolved Gases
QLast Update : Tue May 12 07:01:27 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Sub List : Default - All compounds listed

	Compound	R.T.	Response	Conc	Units	
Target Compounds						
1)	methane	1.152	3343625	24.039	ug/L	M4
2)	ethene	4.139	5529095	42.753	ug/L	M4
3)	acetylene	4.862	999328	34.966	ug/L	M4
4)	ethane	5.026	6418752	45.047	ug/L	M4
5)	propene	7.863	7113582	63.678	ug/L	M4
6)	propane	8.012	8828763	67.171	ug/L	
7)	butane	9.811	11220258	91.247	ug/L	M4

(f)=RT Delta > 1/2 Window (m)=manual int.

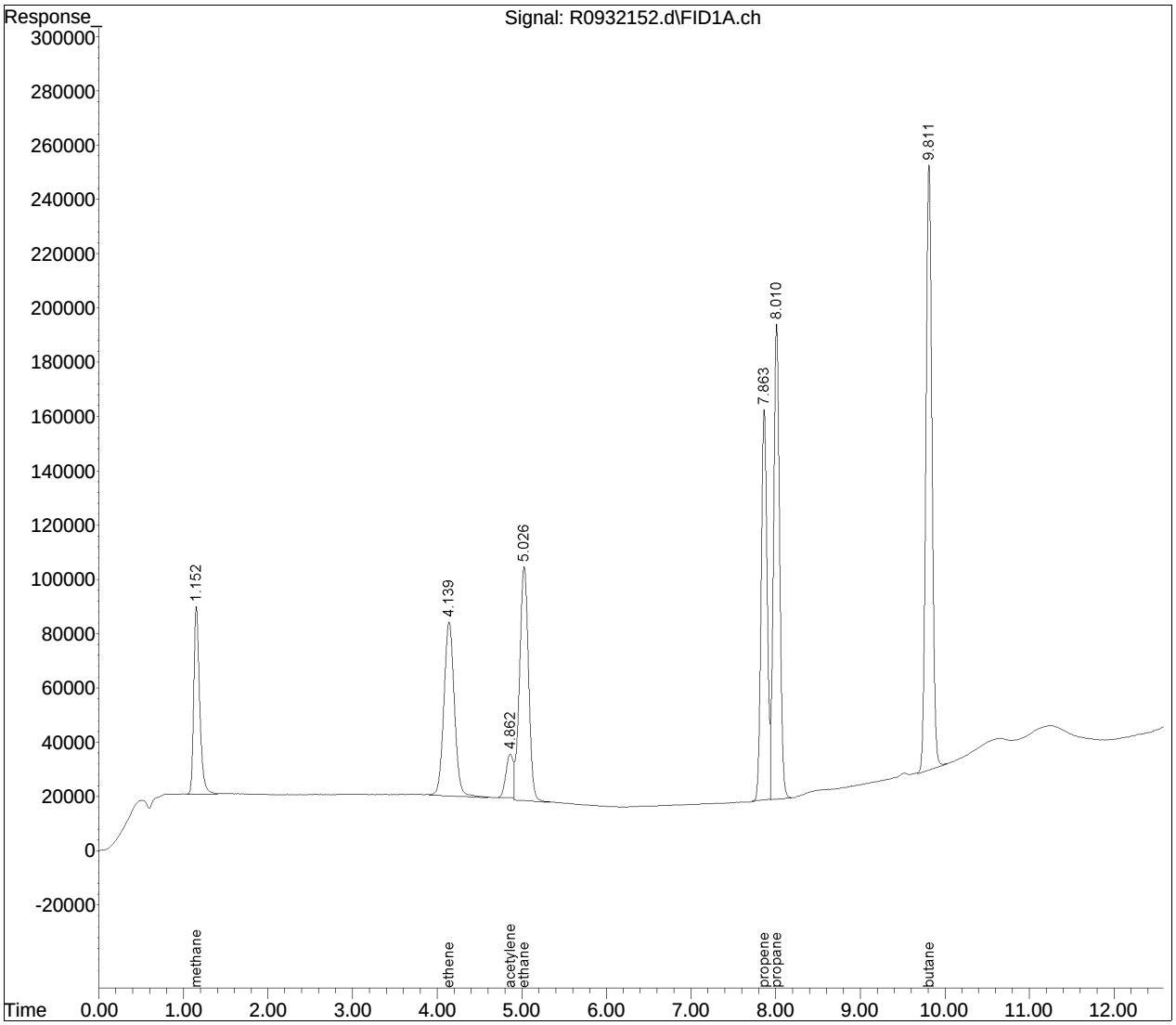
Quantitation Report (QT Reviewed)

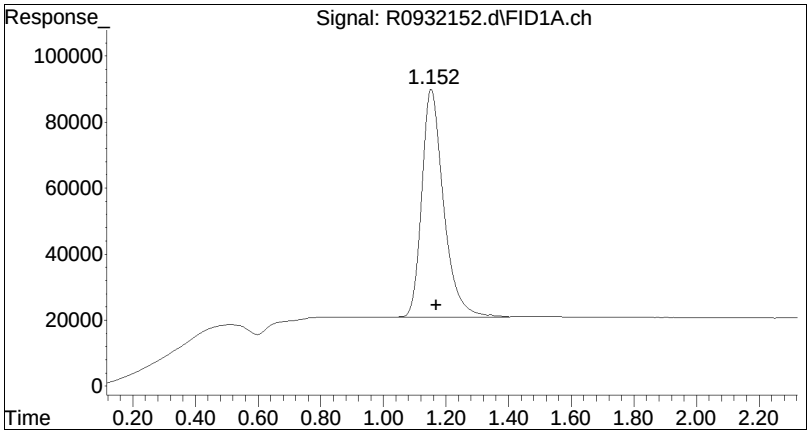
Data Path : O:\Forensics\Data\airlab9\2020\200511DG_I\
Data File : R0932152.d
Signal(s) : FID1A.ch
Acq On : 11 May 2020 4:25 pm
Operator : AIRLAB9:AR
Sample : IDISSGASSTD03
Misc : WG1369720
ALS Vial : 3 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 12 07:07:27 2020
Quant Method : O:\Forensics\Data\airlab9\2020\200511DG_I\DG9_200511.M
Quant Title : Dissolved Gases
QLast Update : Tue May 12 07:01:27 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

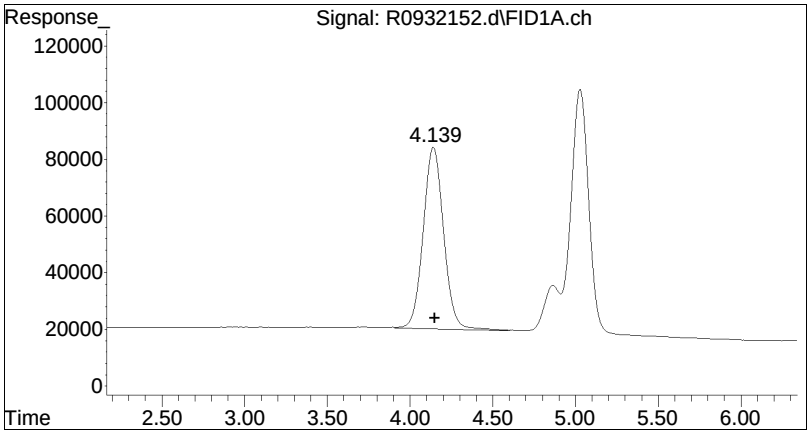
Sub List : Default - All compounds listed





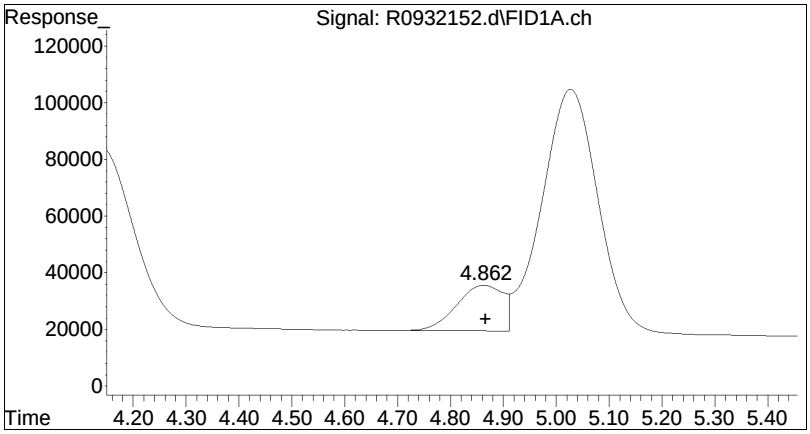
#1 methane

R.T.:	1.152 min
Delta R.T.:	-0.018 min
Response:	3343625
Conc:	24.04 ug/L M4



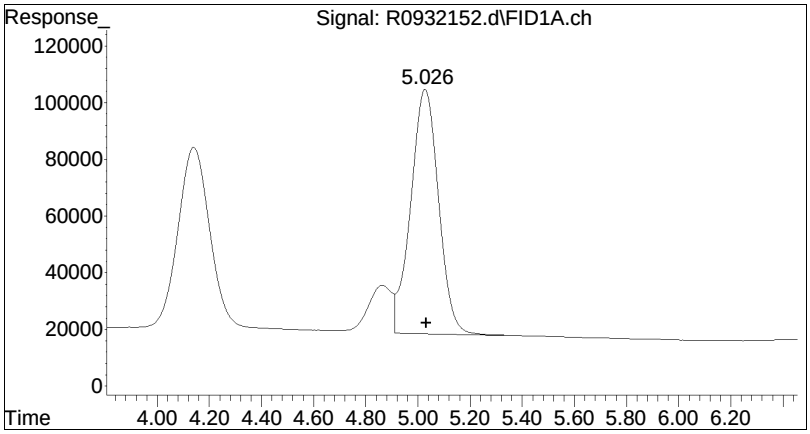
#2 ethene

R.T.:	4.139 min
Delta R.T.:	-0.008 min
Response:	5529095
Conc:	42.75 ug/L M4



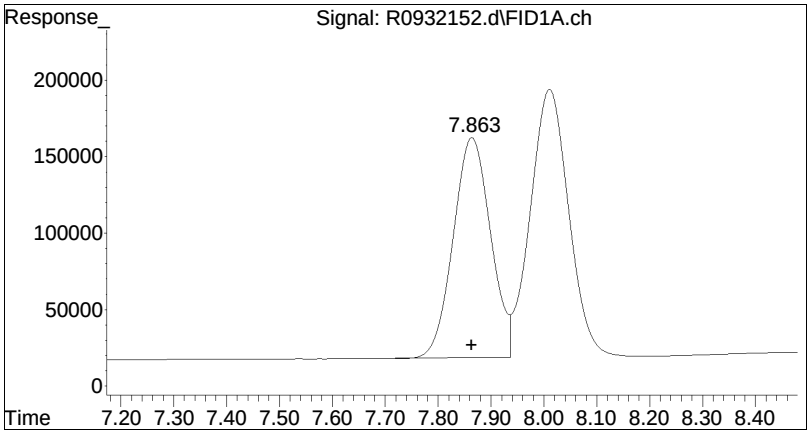
#3 acetylene

R.T.:	4.862 min
Delta R.T.:	-0.005 min
Response:	999328
Conc:	34.97 ug/L M4



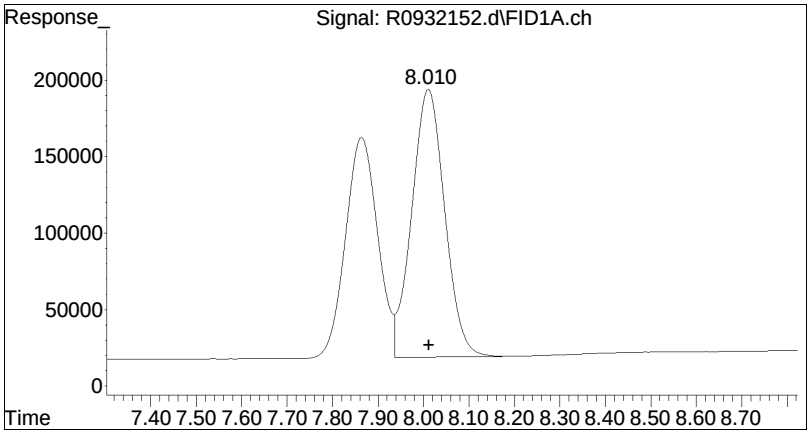
#4 ethane

R.T.:	5.026 min
Delta R.T.:	-0.005 min
Response:	6418752
Conc:	45.05 ug/L M4



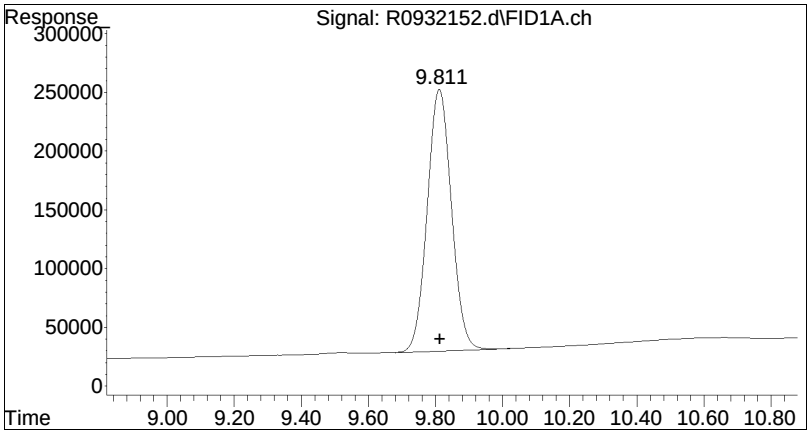
#5 propene

R.T.:	7.863 min
Delta R.T.:	0.000 min
Response:	7113582
Conc:	63.68 ug/L M4



#6 propane

R.T.:	8.012 min
Delta R.T.:	-0.001 min
Response:	8828763
Conc:	67.17 ug/L



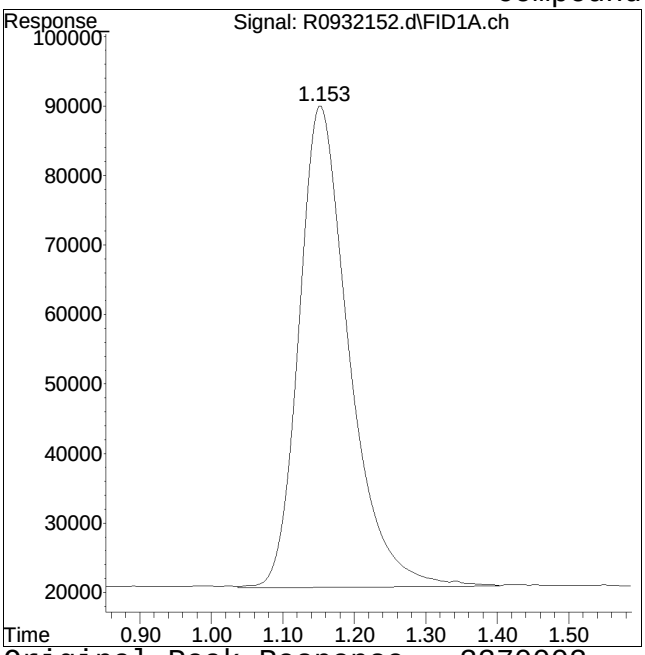
#7 butane

R.T.:	9.811 min
Delta R.T.:	-0.002 min
Response:	11220258
Conc:	91.25 ug/L M4

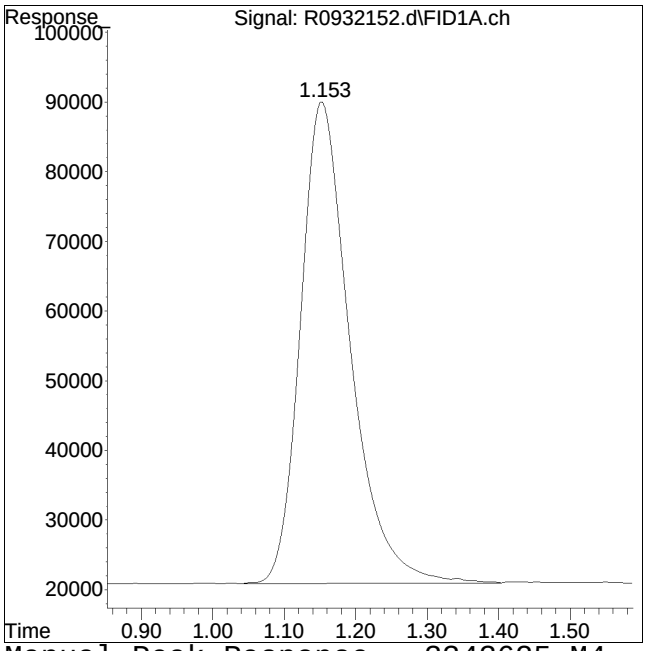
Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0932152.d Operator : AIRLAB9:AR
Date Inj'd : 5/11/2020 0:4: 5 Instrument : Airlab9
Sample : IDISSGASSTD03 Quant Date : 5/12/2020 7:02 am

Compound #1: methane



Original Peak Response = 3370003



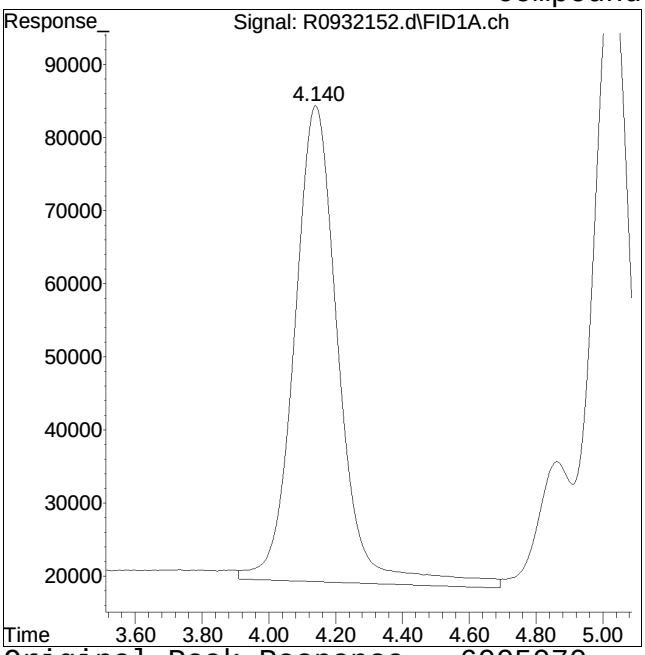
Manual Peak Response = 3343625 M4

M4 = Poor automated baseline construction.

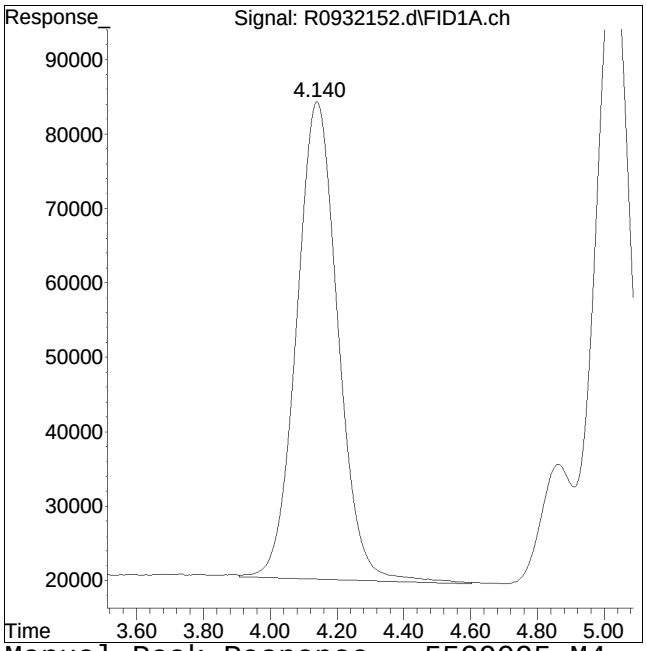
Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0932152.d Operator : AIRLAB9:AR
Date Inj'd : 5/11/2020 0:4: 5 Instrument : Airlab9
Sample : IDISSGASSTD03 Quant Date : 5/12/2020 7:02 am

Compound #2: ethene



Original Peak Response = 6005070



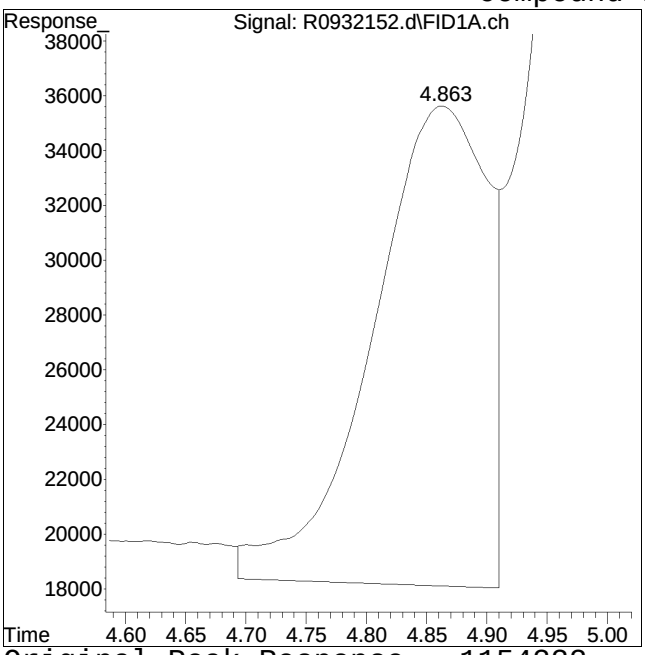
Manual Peak Response = 5529095 M4

M4 = Poor automated baseline construction.

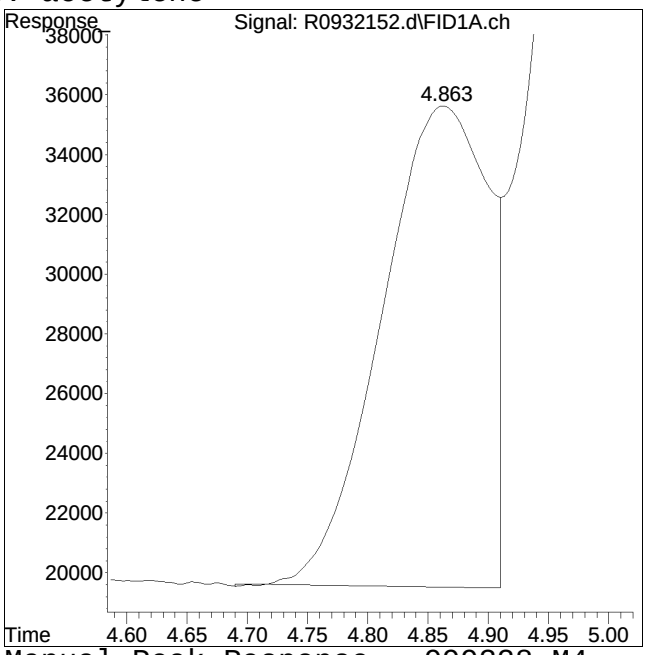
Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0932152.d Operator : AIRLAB9:AR
Date Inj'd : 5/11/2020 0:4: 5 Instrument : Airlab9
Sample : IDISSGASSTD03 Quant Date : 5/12/2020 7:02 am

Compound #3: acetylene



Original Peak Response = 1154222



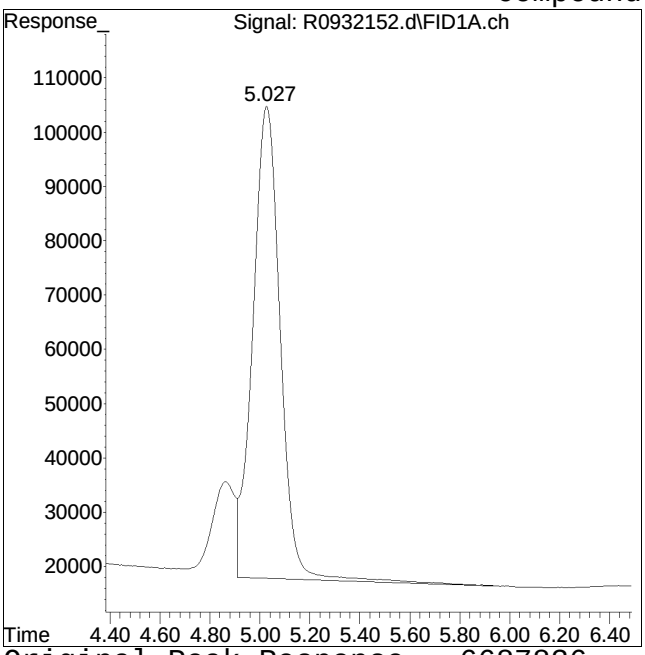
Manual Peak Response = 999328 M4

M4 = Poor automated baseline construction.

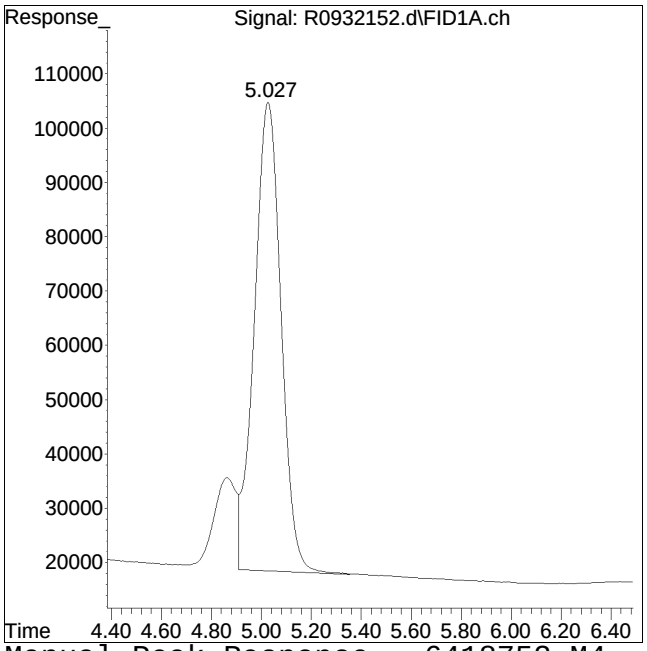
Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0932152.d Operator : AIRLAB9:AR
Date Inj'd : 5/11/2020 0:4: 5 Instrument : Airlab9
Sample : IDISSGASSTD03 Quant Date : 5/12/2020 7:02 am

Compound #4: ethane



Original Peak Response = 6687836



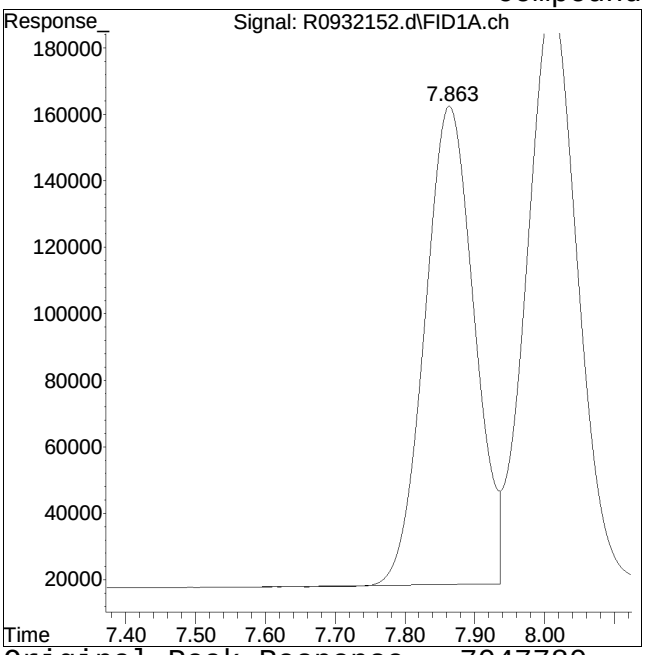
Manual Peak Response = 6418752 M4

M4 = Poor automated baseline construction.

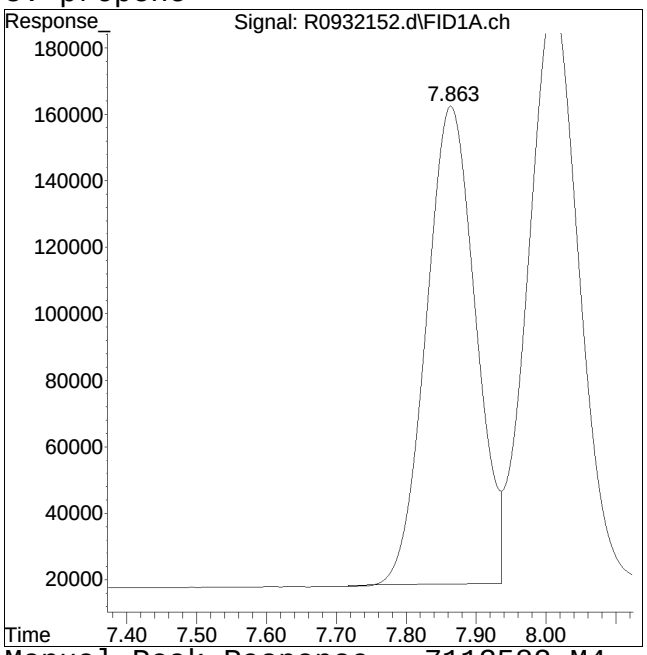
Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0932152.d Operator : AIRLAB9:AR
Date Inj'd : 5/11/2020 0:4: 5 Instrument : Airlab9
Sample : IDISSGASSTD03 Quant Date : 5/12/2020 7:02 am

Compound #5: propene



Original Peak Response = 7047780



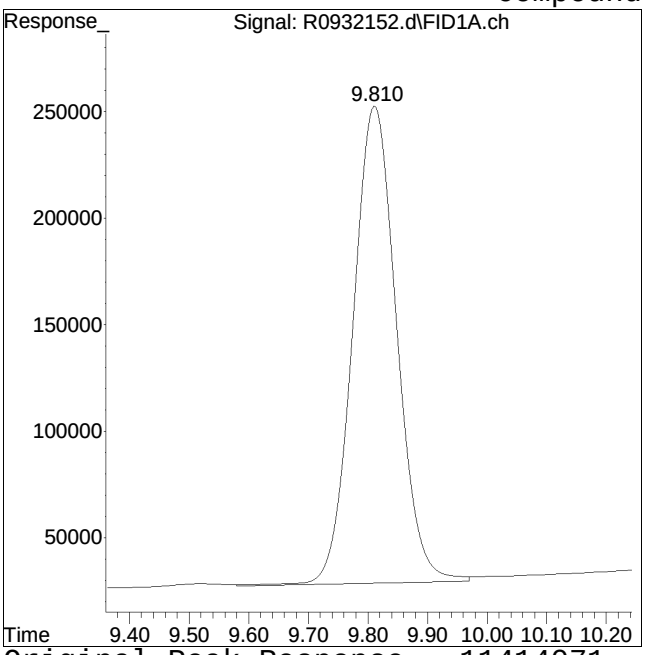
Manual Peak Response = 7113582 M4

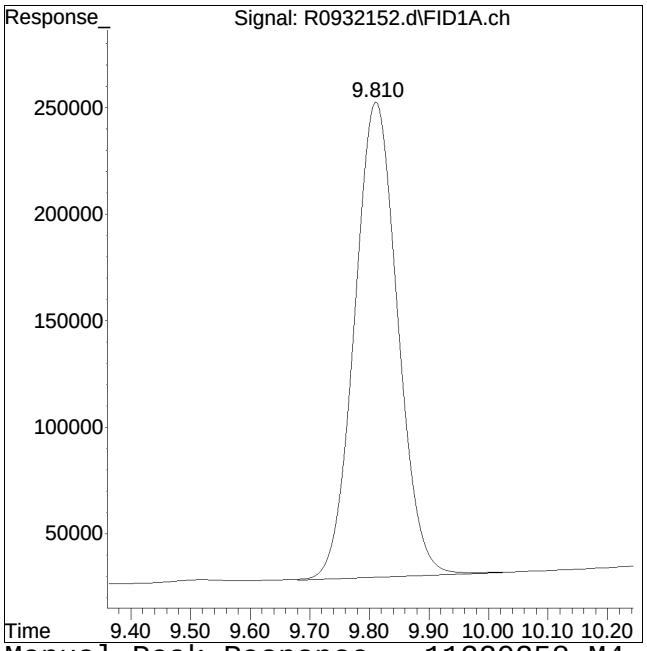
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0932152.d Operator : AIRLAB9:AR
Date Inj'd : 5/11/2020 0:4: 5 Instrument : Airlab9
Sample : IDISSGASSTD03 Quant Date : 5/12/2020 7:02 am

Compound #7: butane





Original Peak Response = 11414071 Manual Peak Response = 11220258 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\airlab9\2020\200511DG_I\
Data File : R0932153.d
Signal(s) : FID1A.ch
Acq On : 11 May 2020 4:45 pm
Operator : AIRLAB9:AR
Sample : IDISSGASSTD04
Misc : WG1369720
ALS Vial : 3 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 12 07:02:10 2020
Quant Method : O:\Forensics\Data\airlab9\2020\200511DG_I\DG9_200511.M
Quant Title : Dissolved Gases
QLast Update : Tue May 12 07:01:27 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Sub List : Default - All compounds listed

	Compound	R.T.	Response	Conc	Units
Target Compounds					
1)	methane	1.172	7757599	55.774	ug/L
2)	ethene	4.148	12540561	96.969	ug/L
3)	acetylene	4.868	2547342	89.130	ug/L
4)	ethane	5.033	14679106	103.018	ug/L
5)	propene	7.866	15720300	140.723	ug/L
6)	propane	8.013	19715625	150.000	ug/L
7)	butane	9.813	24347224	198.000	ug/L

(f)=RT Delta > 1/2 Window (m)=manual int.

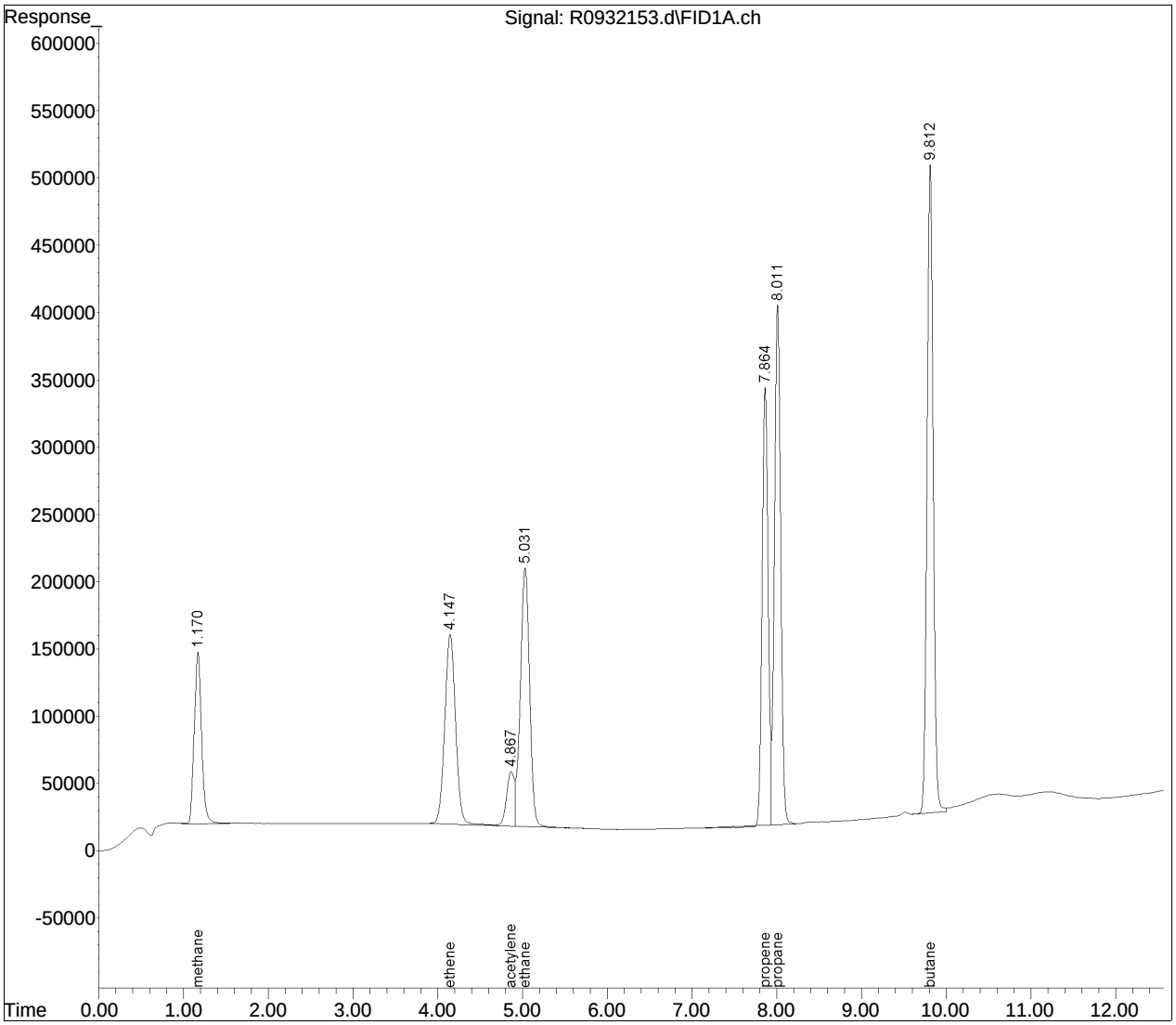
Quantitation Report (QT Reviewed)

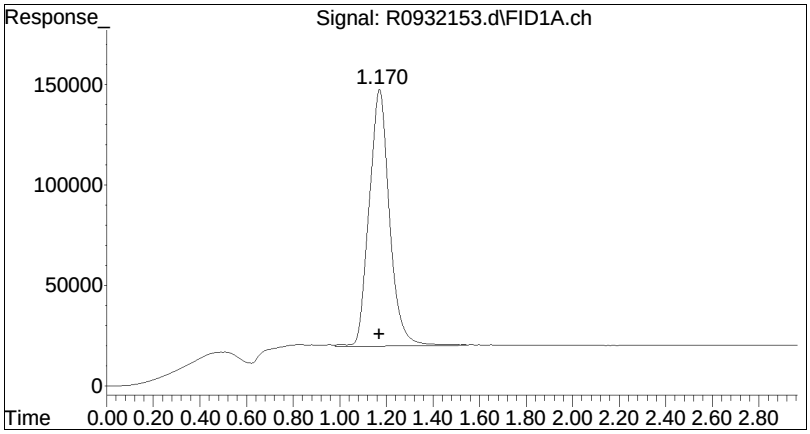
Data Path : O:\Forensics\Data\airlab9\2020\200511DG_I\
Data File : R0932153.d
Signal(s) : FID1A.ch
Acq On : 11 May 2020 4:45 pm
Operator : AIRLAB9:AR
Sample : IDISSGASSTD04
Misc : WG1369720
ALS Vial : 3 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 12 07:02:10 2020
Quant Method : O:\Forensics\Data\airlab9\2020\200511DG_I\DG9_200511.M
Quant Title : Dissolved Gases
QLast Update : Tue May 12 07:01:27 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

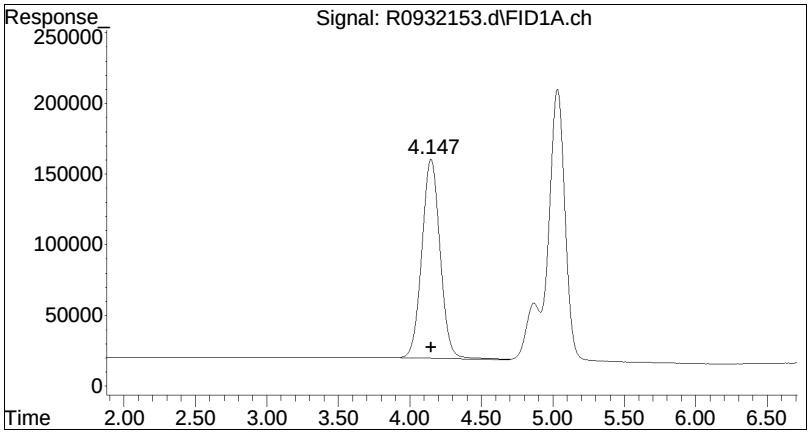
Sub List : Default - All compounds listed





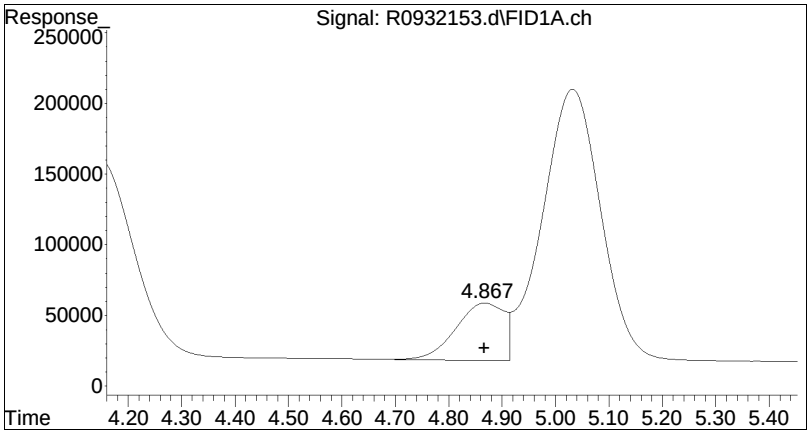
#1 methane

R.T.:	1.172 min
Delta R.T.:	0.002 min
Response:	7757599
Conc:	55.77 ug/L



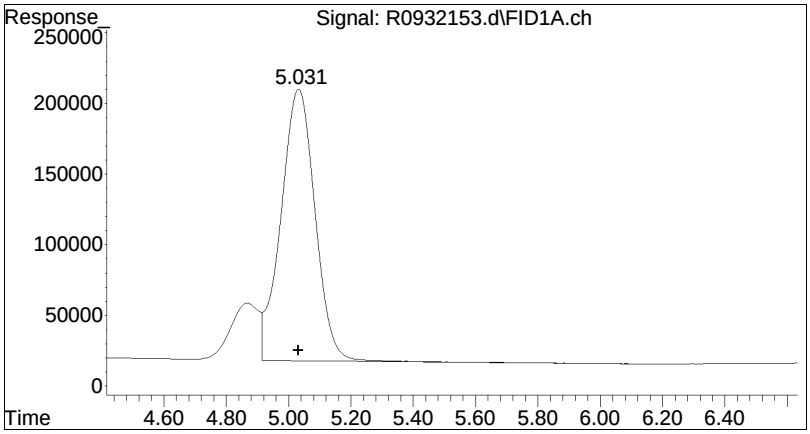
#2 ethene

R.T.:	4.148 min
Delta R.T.:	0.001 min
Response:	12540561
Conc:	96.97 ug/L



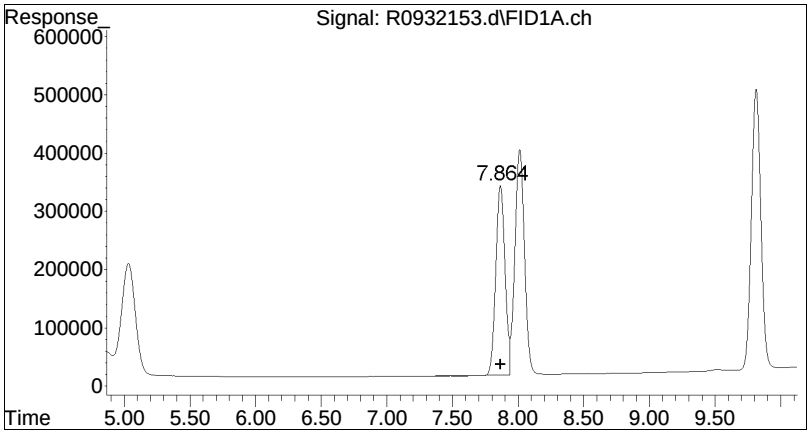
#3 acetylene

R.T.:	4.868 min
Delta R.T.:	0.001 min
Response:	2547342
Conc:	89.13 ug/L



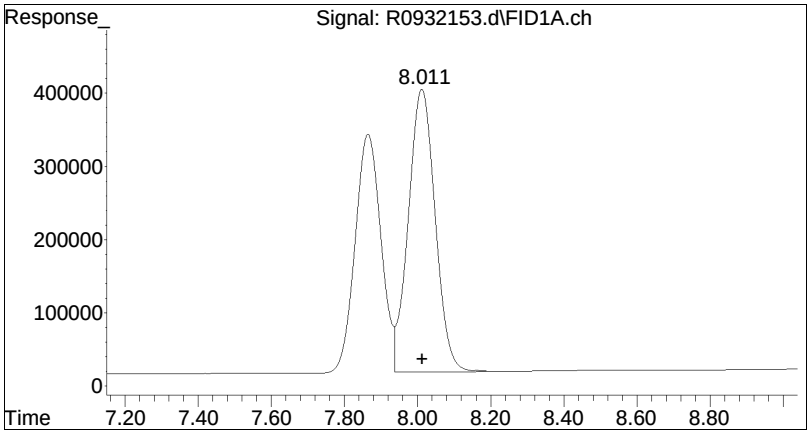
#4 ethane

R.T.: 5.033 min
Delta R.T.: 0.001 min
Response: 14679106
Conc: 103.02 ug/L



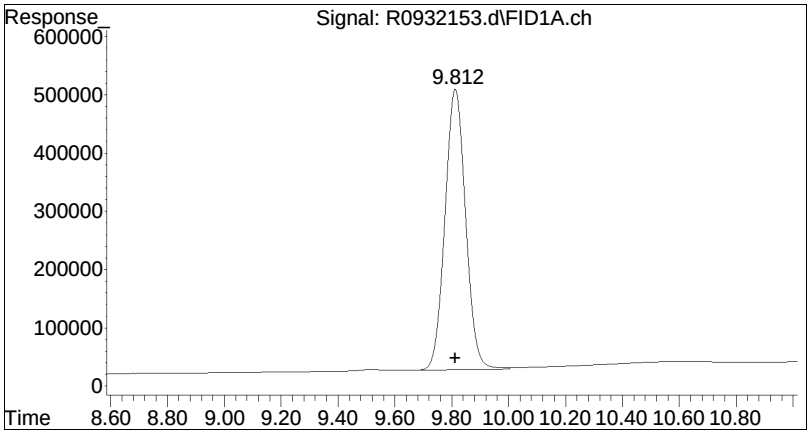
#5 propene

R.T.: 7.866 min
Delta R.T.: 0.002 min
Response: 15720300
Conc: 140.72 ug/L



#6 propane

R.T.: 8.013 min
Delta R.T.: 0.000 min
Response: 19715625
Conc: 150.00 ug/L



#7 butane

R.T.: 9.813 min
Delta R.T.: 0.000 min
Response: 24347224
Conc: 198.00 ug/L

Manual Integration Report

Data Path	: O:\Forensics\Data\airlab9\	QMethod	: DG9_200511.M
Data File	: R0932153.d	Operator	: AIRLAB9:AR
Date Inj'd	: 5/11/2020 0:4: 5	Instrument	: Airlab9
Sample	: IDISSGASSTD04	Quant Date	: 5/12/2020 7:02 am

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\airlab9\2020\200511DG_I\
Data File : R0932154.d
Signal(s) : FID1A.ch
Acq On : 11 May 2020 5:05 pm
Operator : AIRLAB9:AR
Sample : IDISSGASSTD05
Misc : WG1369720
ALS Vial : 4 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 12 07:08:13 2020
Quant Method : O:\Forensics\Data\airlab9\2020\200511DG_I\DG9_200511.M
Quant Title : Dissolved Gases
QLast Update : Tue May 12 07:01:27 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Sub List : Default - All compounds listed

	Compound	R.T.	Response	Conc	Units	
Target Compounds						
1)	methane	1.140	55902656	401.920	ug/L	
2)	ethene	4.130	94118346	727.761	ug/L	
3)	acetylene	4.856	18978388	664.044	ug/L	
4)	ethane	5.018	112273154	787.935	ug/L	M4
5)	propene	7.860	128495538	1150.248	ug/L	
6)	propane	8.006	161032025	1225.160	ug/L	
7)	butane	9.809	213519381	1736.413	ug/L	

(f)=RT Delta > 1/2 Window (m)=manual int.

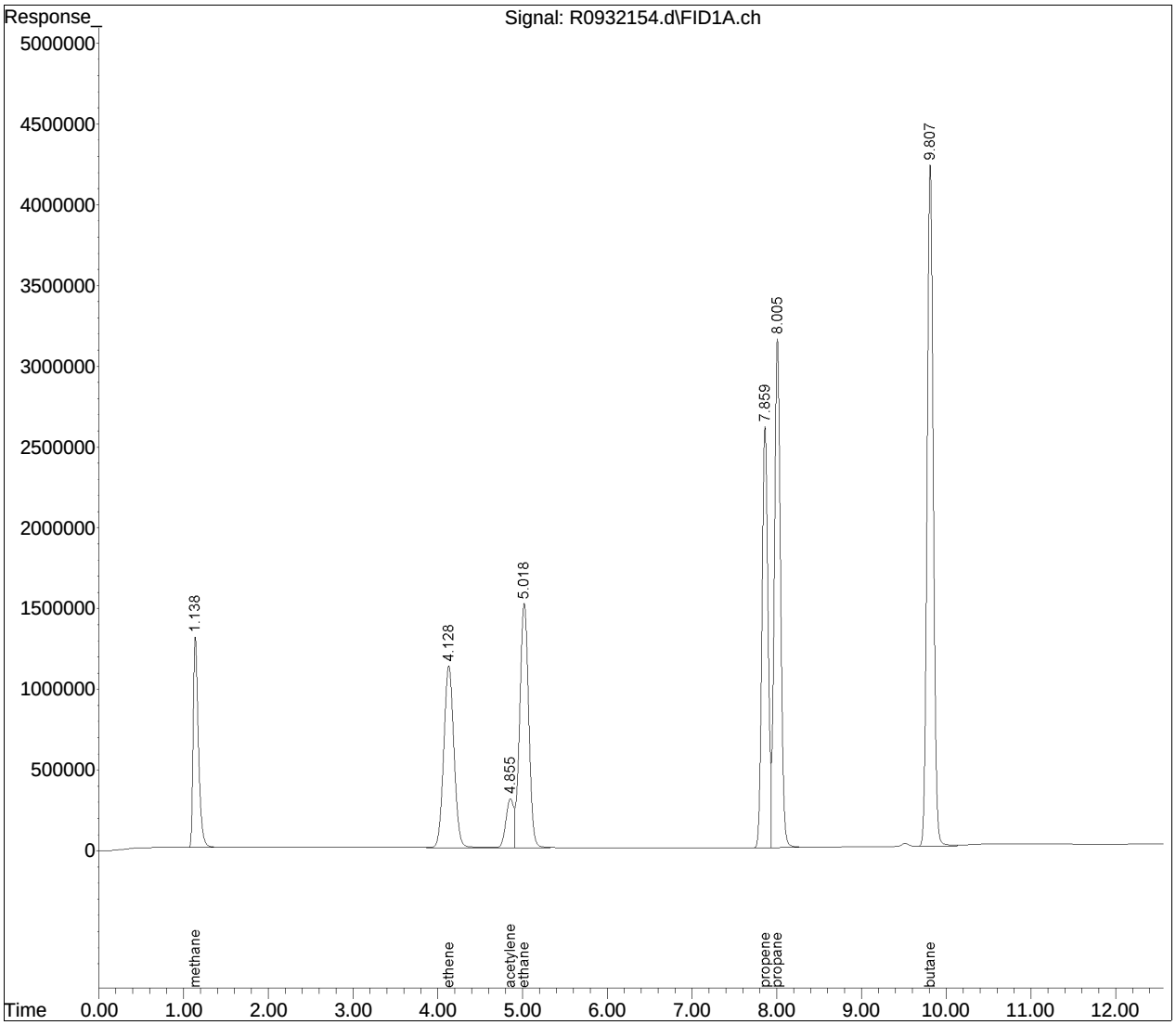
Quantitation Report (QT Reviewed)

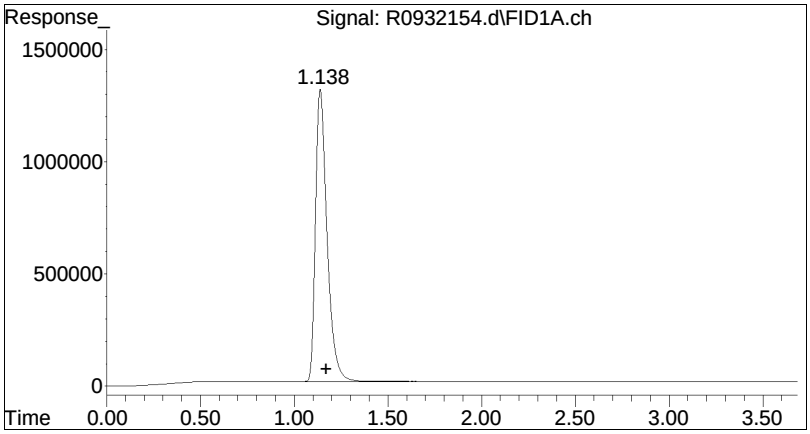
Data Path : O:\Forensics\Data\airlab9\2020\200511DG_I\
Data File : R0932154.d
Signal(s) : FID1A.ch
Acq On : 11 May 2020 5:05 pm
Operator : AIRLAB9:AR
Sample : IDISSGASSTD05
Misc : WG1369720
ALS Vial : 4 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 12 07:08:13 2020
Quant Method : O:\Forensics\Data\airlab9\2020\200511DG_I\DG9_200511.M
Quant Title : Dissolved Gases
QLast Update : Tue May 12 07:01:27 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

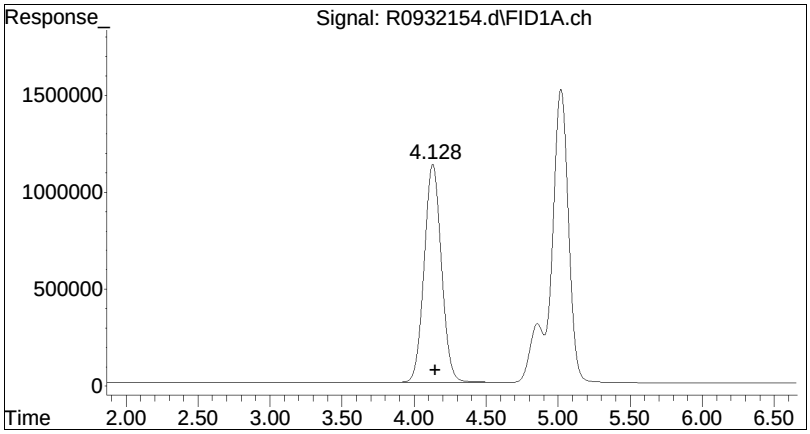
Sub List : Default - All compounds listed





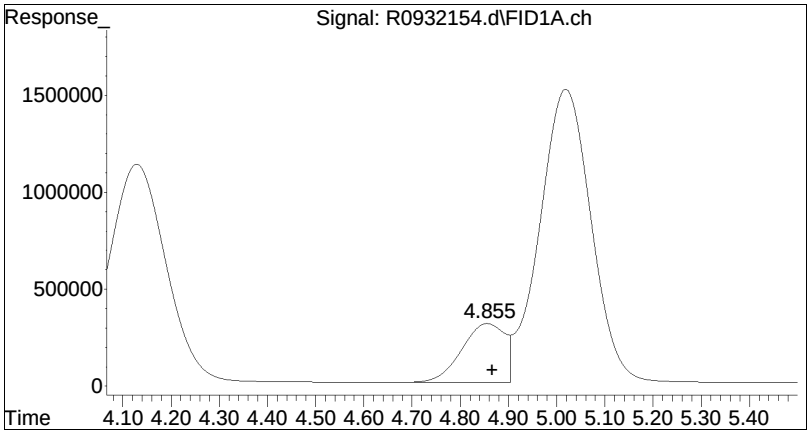
#1 methane

R.T.: 1.140 min
Delta R.T.: -0.030 min
Response: 55902656
Conc: 401.92 ug/L



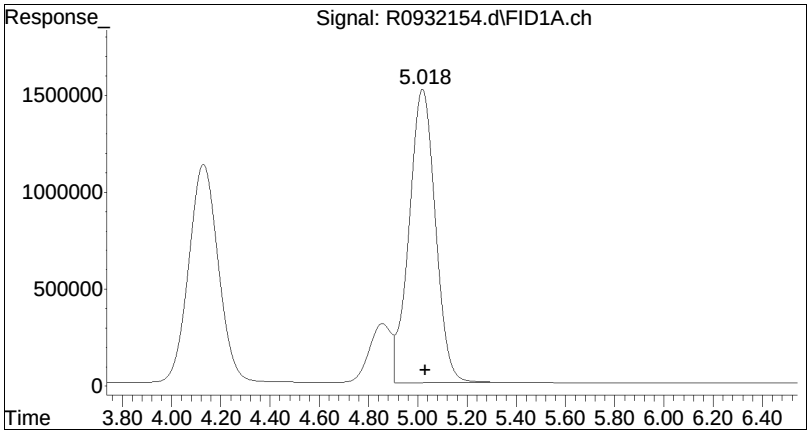
#2 ethene

R.T.: 4.130 min
Delta R.T.: -0.017 min
Response: 94118346
Conc: 727.76 ug/L



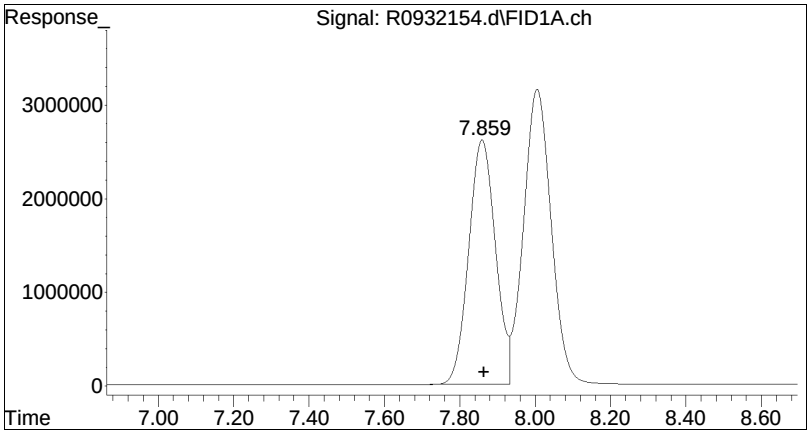
#3 acetylene

R.T.: 4.856 min
Delta R.T.: -0.011 min
Response: 18978388
Conc: 664.04 ug/L



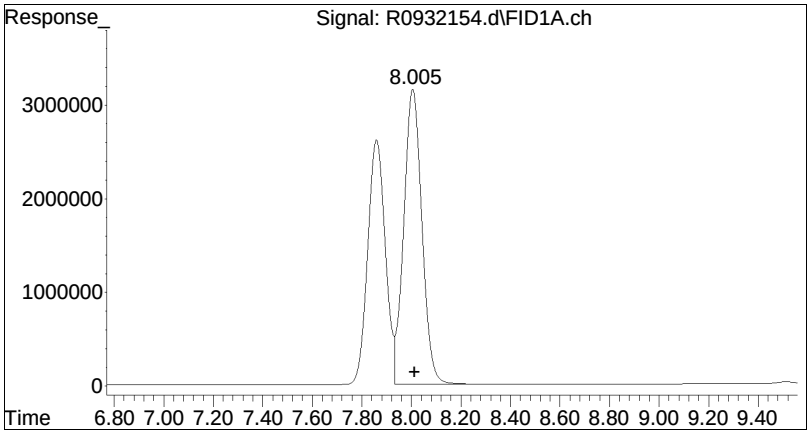
#4 ethane

R.T.: 5.018 min
Delta R.T.: -0.013 min
Response: 112273154
Conc: 787.94 ug/L M4



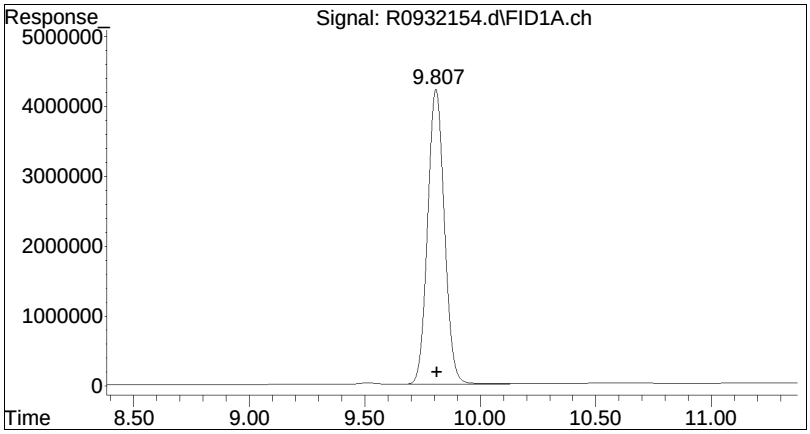
#5 propene

R.T.: 7.860 min
Delta R.T.: -0.004 min
Response: 128495538
Conc: 1150.25 ug/L



#6 propane

R.T.: 8.006 min
Delta R.T.: -0.006 min
Response: 161032025
Conc: 1225.16 ug/L



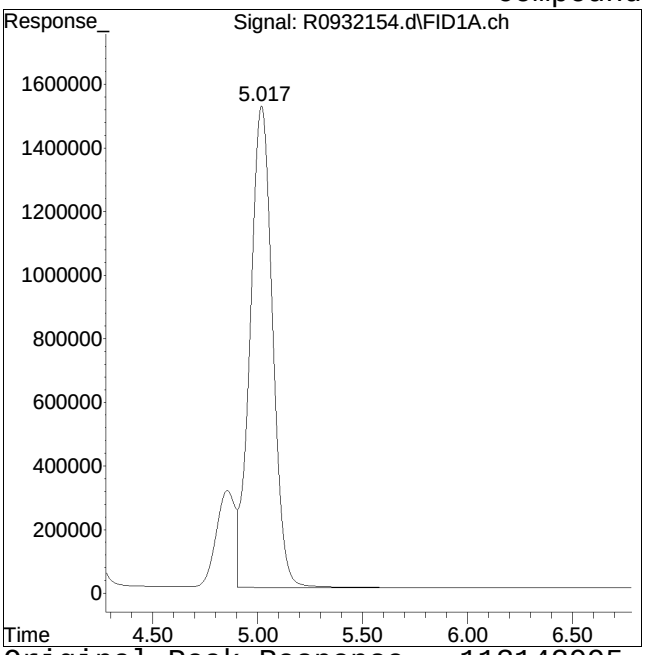
#7 butane

R.T.: 9.809 min
Delta R.T.: -0.005 min
Response: 213519381
Conc: 1736.41 ug/L

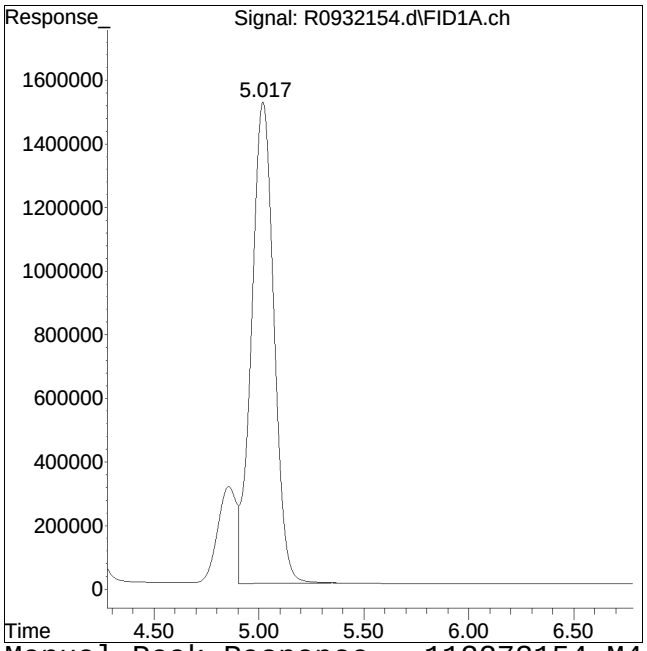
Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0932154.d Operator : AIRLAB9:AR
Date Inj'd : 5/11/2020 0:5: 5 Instrument : Airlab9
Sample : IDISSGASSTD05 Quant Date : 5/12/2020 7:02 am

Compound #4: ethane



Original Peak Response = 113142995



Manual Peak Response = 112273154 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\airlab9\2020\200511DG_I\
Data File : R0932155.d
Signal(s) : FID1A.ch
Acq On : 11 May 2020 5:25 pm
Operator : AIRLAB9:AR
Sample : IDISSGASSTD06
Misc : WG1369720
ALS Vial : 4 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 12 07:09:02 2020
Quant Method : O:\Forensics\Data\airlab9\2020\200511DG_I\DG9_200511.M
Quant Title : Dissolved Gases
QLast Update : Tue May 12 07:01:27 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Sub List : Default - All compounds listed

	Compound	R.T.	Response	Conc	Units	
Target Compounds						
1)	methane	1.152	147425175	1059.935	ug/L	
2)	ethene	4.134	244234564	1888.521	ug/L	M4
3)	acetylene	4.858	53565952	1874.244	ug/L	
4)	ethane	5.020	288247321	2022.925	ug/L	M4
5)	propene	7.857	331409617	2966.667	ug/L	
6)	propane	8.003	413051233	3142.568	ug/L	
7)	butane	9.802	542433567	4411.256	ug/L	

(f)=RT Delta > 1/2 Window (m)=manual int.

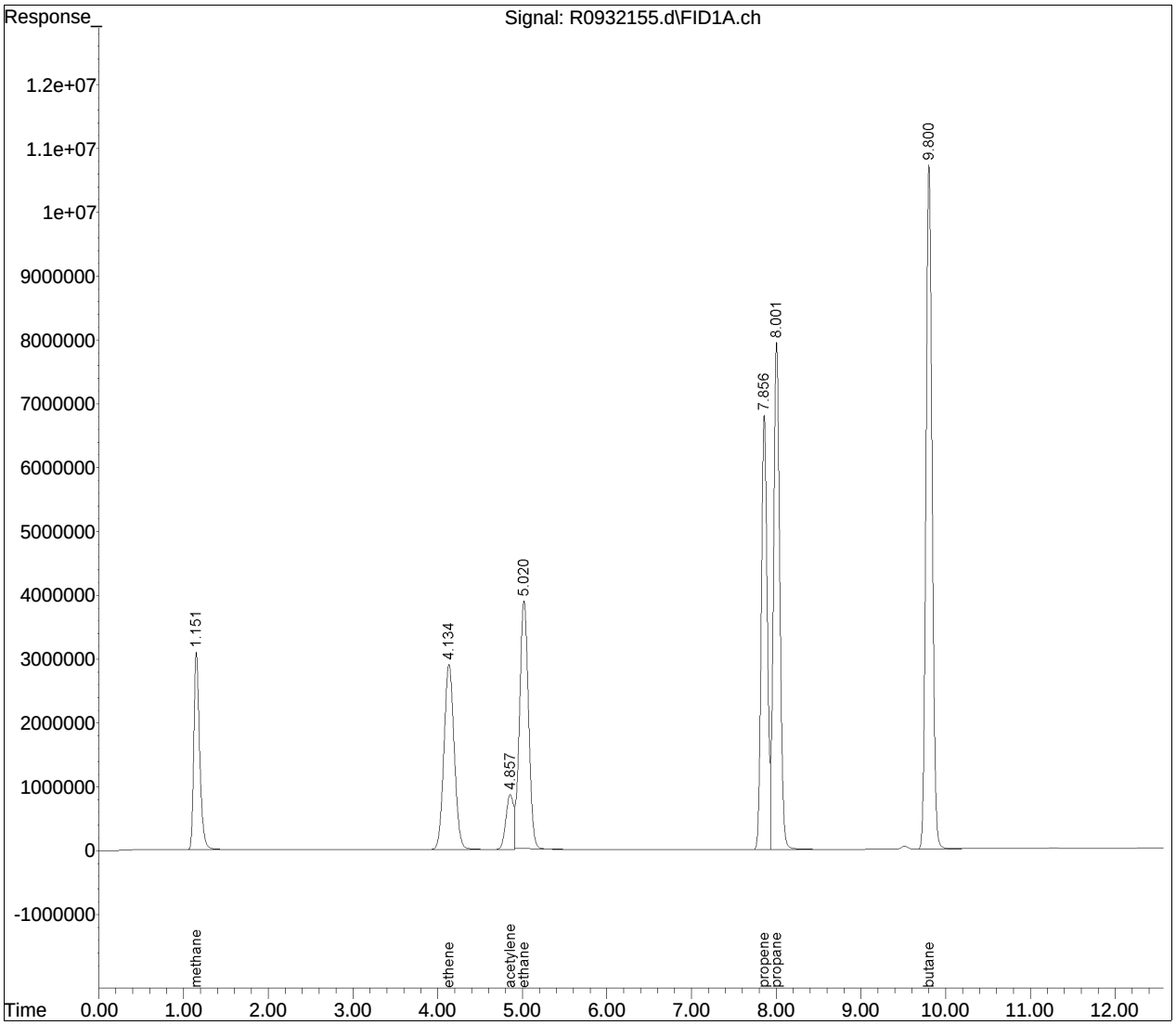
Quantitation Report (QT Reviewed)

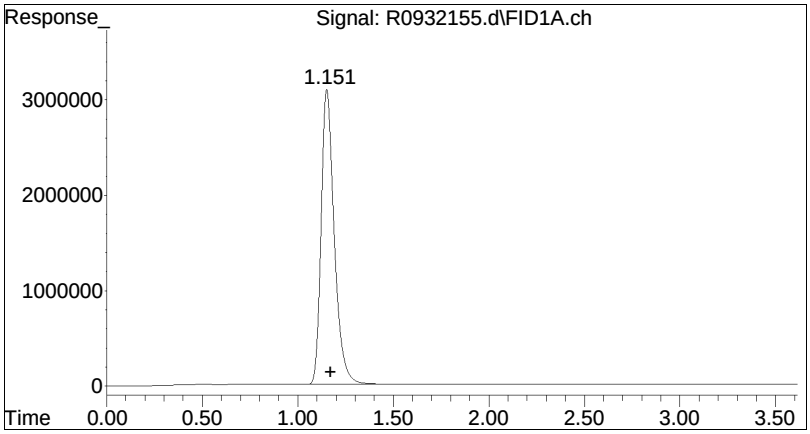
Data Path : O:\Forensics\Data\airlab9\2020\200511DG_I\
Data File : R0932155.d
Signal(s) : FID1A.ch
Acq On : 11 May 2020 5:25 pm
Operator : AIRLAB9:AR
Sample : IDISSGASSTD06
Misc : WG1369720
ALS Vial : 4 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 12 07:09:02 2020
Quant Method : O:\Forensics\Data\airlab9\2020\200511DG_I\DG9_200511.M
Quant Title : Dissolved Gases
QLast Update : Tue May 12 07:01:27 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

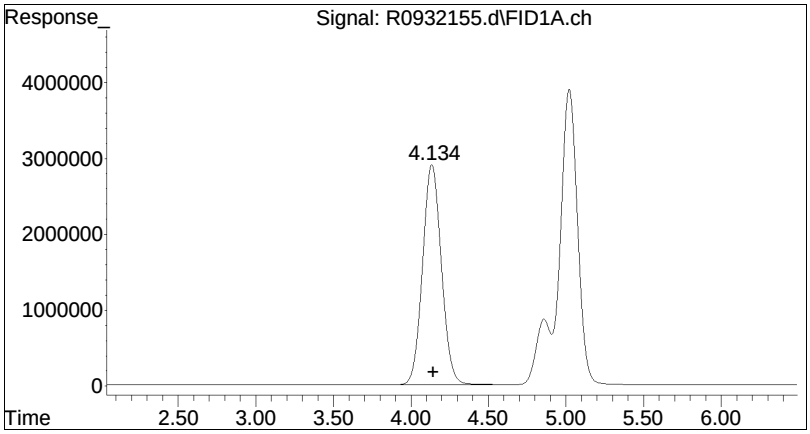
Sub List : Default - All compounds listed





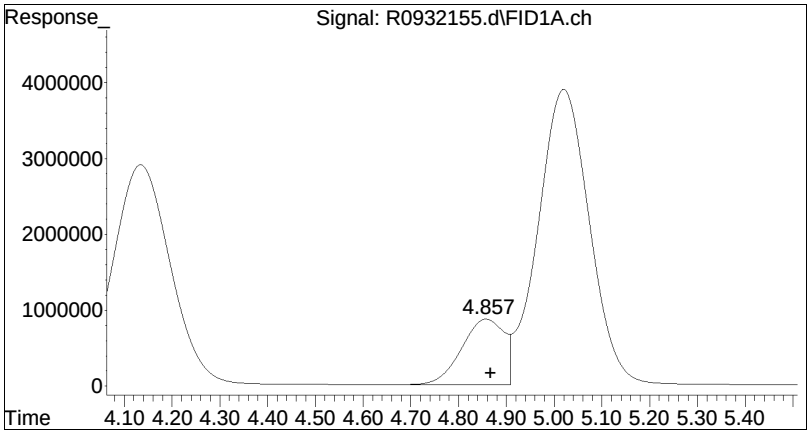
#1 methane

R.T.: 1.152 min
Delta R.T.: -0.018 min
Response: 147425175
Conc: 1059.93 ug/L



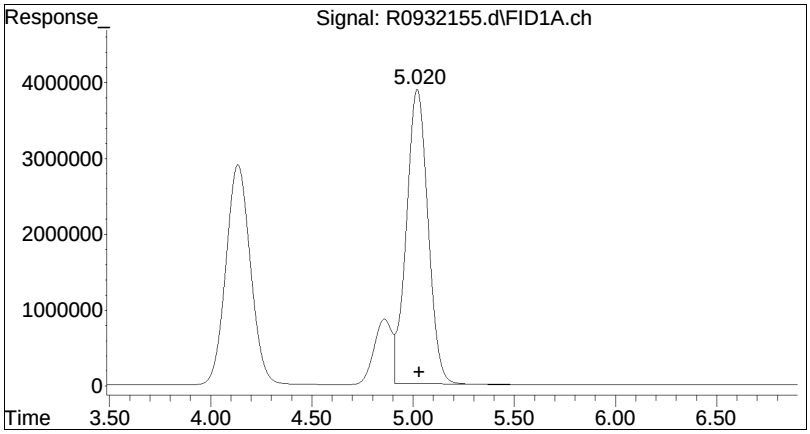
#2 ethene

R.T.: 4.134 min
Delta R.T.: -0.013 min
Response: 244234564
Conc: 1888.52 ug/L M4



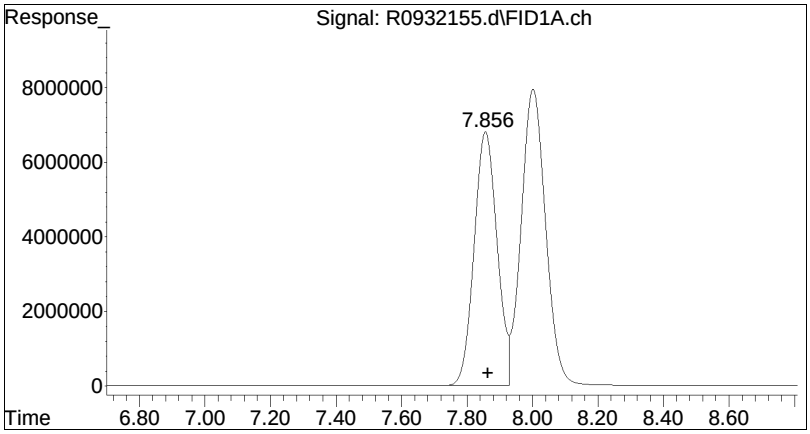
#3 acetylene

R.T.: 4.858 min
Delta R.T.: -0.009 min
Response: 53565952
Conc: 1874.24 ug/L



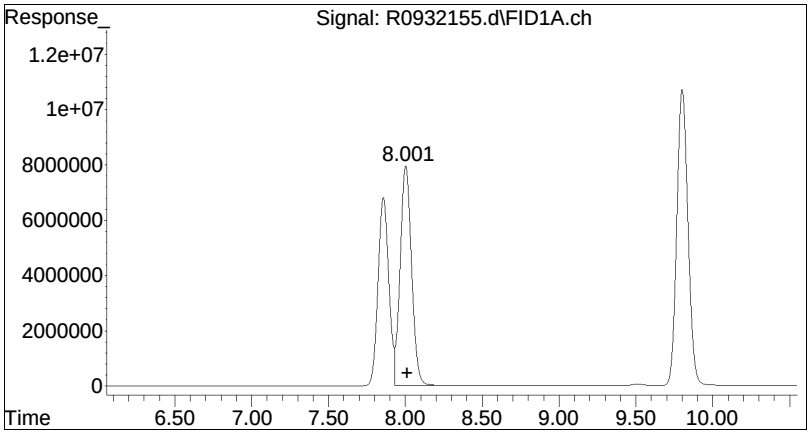
#4 ethane

R.T.: 5.020 min
Delta R.T.: -0.012 min
Response: 288247321
Conc: 2022.93 ug/L M4



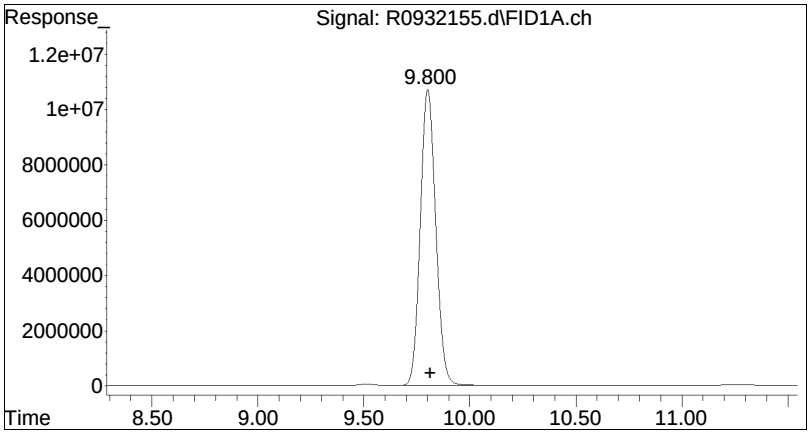
#5 propene

R.T.: 7.857 min
Delta R.T.: -0.007 min
Response: 331409617
Conc: 2966.67 ug/L



#6 propane

R.T.: 8.003 min
Delta R.T.: -0.010 min
Response: 413051233
Conc: 3142.57 ug/L



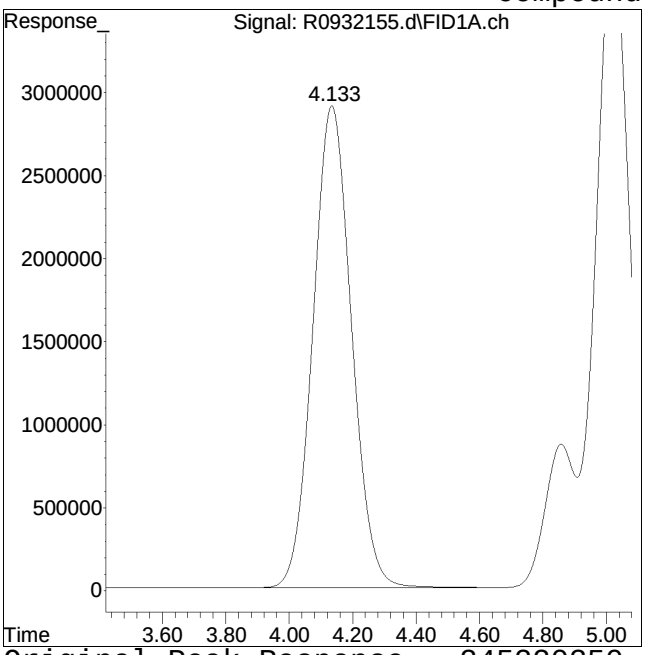
#7 butane

R.T.: 9.802 min
Delta R.T.: -0.011 min
Response: 542433567
Conc: 4411.26 ug/L

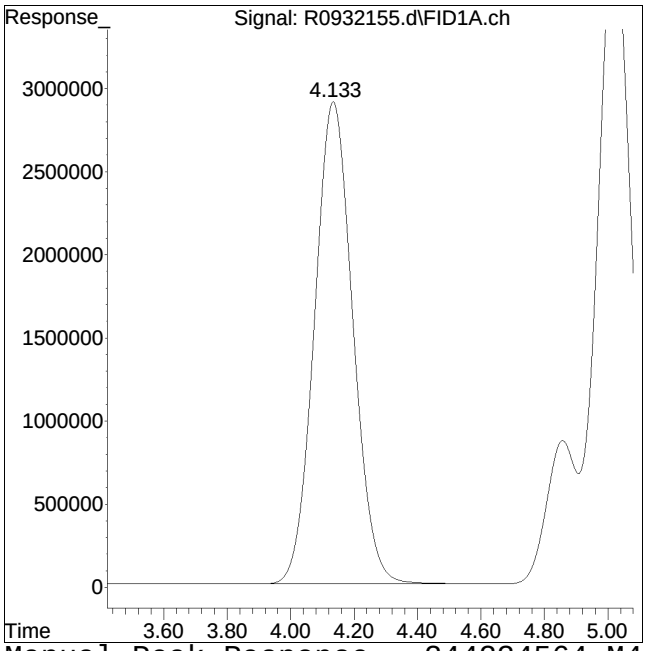
Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0932155.d Operator : AIRLAB9:AR
Date Inj'd : 5/11/2020 0:5: 5 Instrument : Airlab9
Sample : IDISSGASSTD06 Quant Date : 5/12/2020 7:02 am

Compound #2: ethene



Original Peak Response = 245220350



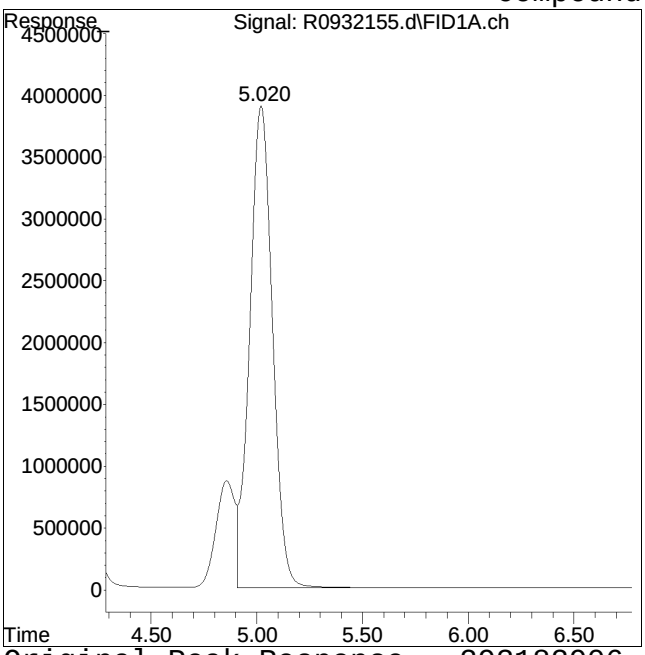
Manual Peak Response = 244234564 M4

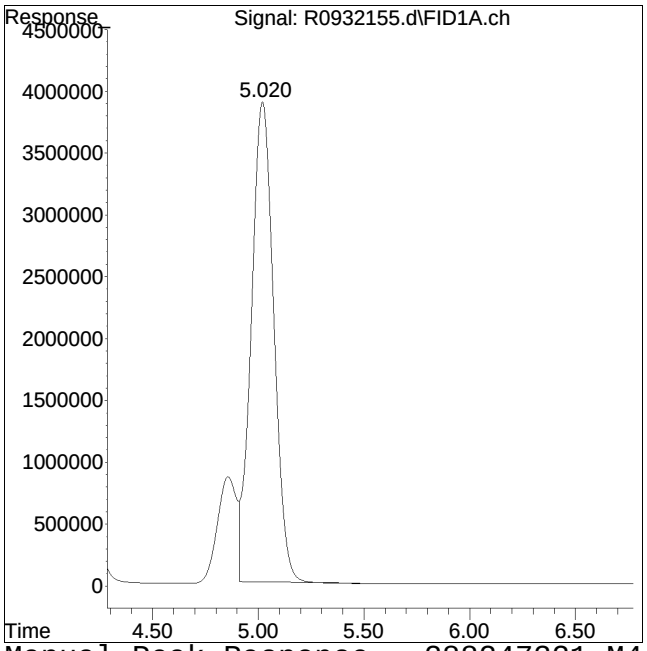
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0932155.d Operator : AIRLAB9:AR
Date Inj'd : 5/11/2020 0:5: 5 Instrument : Airlab9
Sample : IDISSGASSTD06 Quant Date : 5/12/2020 7:02 am

Compound #4: ethane





Original Peak Response = 293182906 Manual Peak Response = 288247321 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\airlab9\2020\200511DG_I\
Data File : R0932156.d
Signal(s) : FID1A.ch
Acq On : 11 May 2020 5:44 pm
Operator : AIRLAB9:AR
Sample : IDISSGASSTD07
Misc : WG1369720
ALS Vial : 4 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 12 07:10:30 2020
Quant Method : O:\Forensics\Data\airlab9\2020\200511DG_I\DG9_200511.M
Quant Title : Dissolved Gases
QLast Update : Tue May 12 07:01:27 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Sub List : Default - All compounds listed

	Compound	R.T.	Response	Conc	Units	
Target Compounds						
1)	methane	1.169	339117932	2438.138	ug/L	
2)	ethene	4.132	561809865	4344.142	ug/L	M4
3)	acetylene	4.855	142335258	4980.234	ug/L	
4)	ethane	5.014	665202592	4668.405	ug/L	M4
5)	propene	7.846	746622895	6683.515	ug/L	
6)	propane	7.990	916853641	6975.587	ug/L	M4
7)	butane	9.790	1170617248	9519.862	ug/L	

(f)=RT Delta > 1/2 Window (m)=manual int.

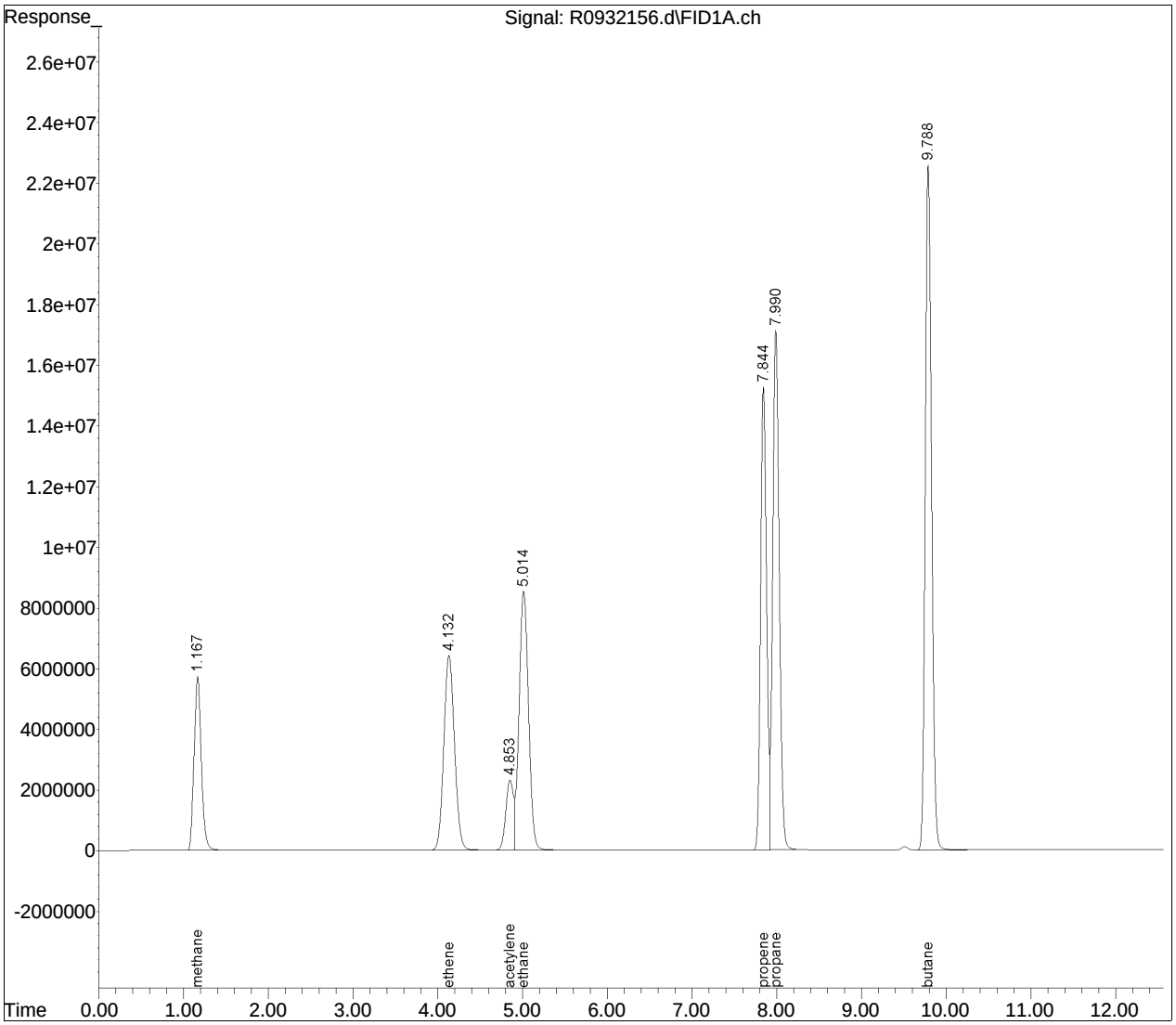
Quantitation Report (QT Reviewed)

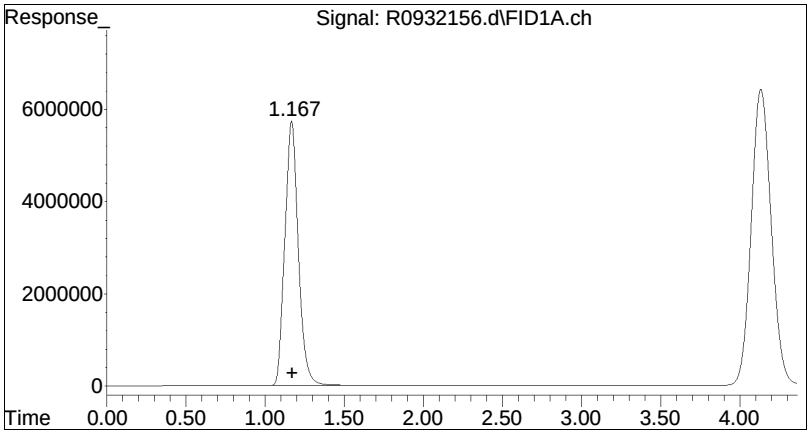
Data Path : O:\Forensics\Data\airlab9\2020\200511DG_I\
Data File : R0932156.d
Signal(s) : FID1A.ch
Acq On : 11 May 2020 5:44 pm
Operator : AIRLAB9:AR
Sample : IDISSGASSTD07
Misc : WG1369720
ALS Vial : 4 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 12 07:10:30 2020
Quant Method : O:\Forensics\Data\airlab9\2020\200511DG_I\DG9_200511.M
Quant Title : Dissolved Gases
QLast Update : Tue May 12 07:01:27 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

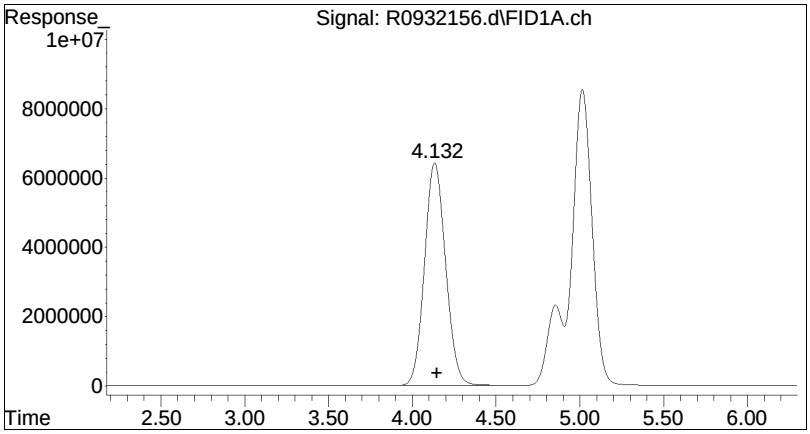
Sub List : Default - All compounds listed





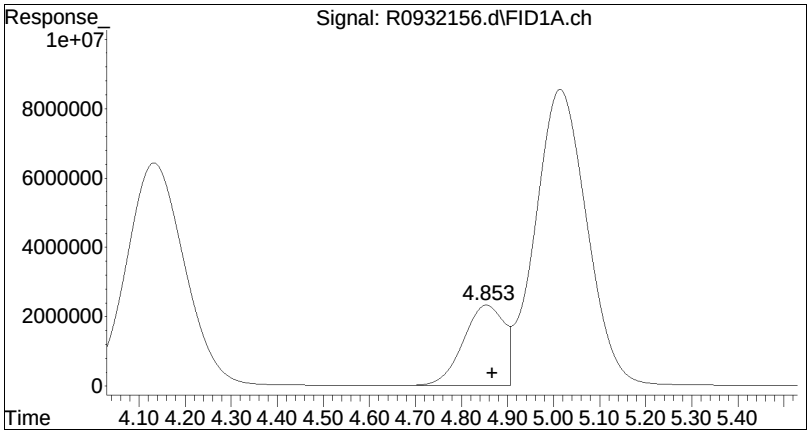
#1 methane

R.T.: 1.169 min
Delta R.T.: -0.001 min
Response: 339117932
Conc: 2438.14 ug/L



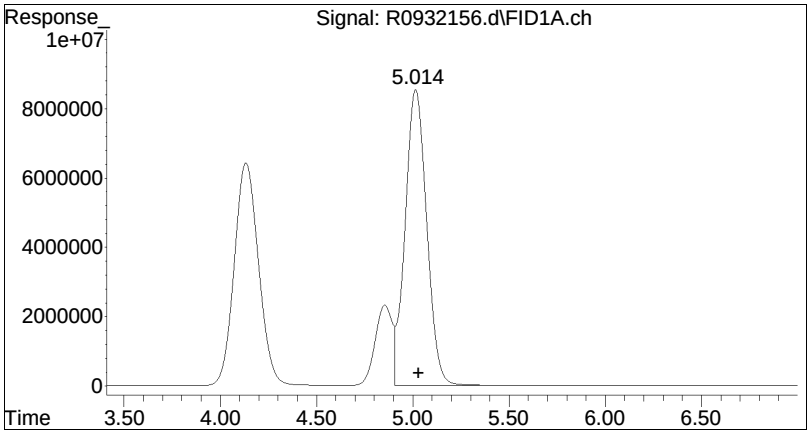
#2 ethene

R.T.: 4.132 min
Delta R.T.: -0.014 min
Response: 561809865
Conc: 4344.14 ug/L M4



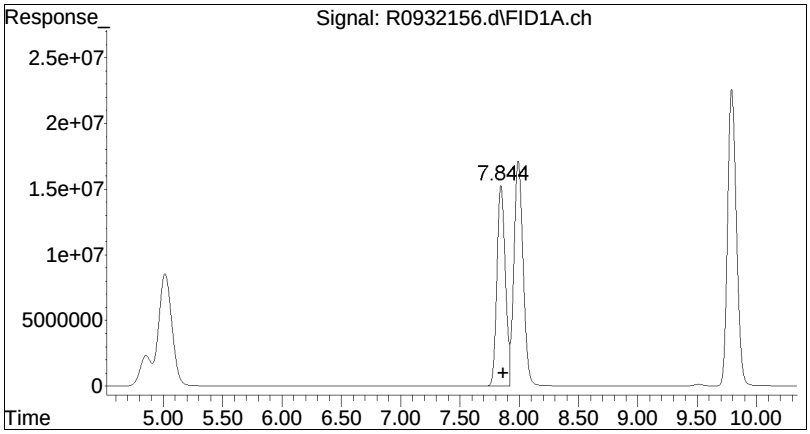
#3 acetylene

R.T.: 4.855 min
Delta R.T.: -0.012 min
Response: 142335258
Conc: 4980.23 ug/L



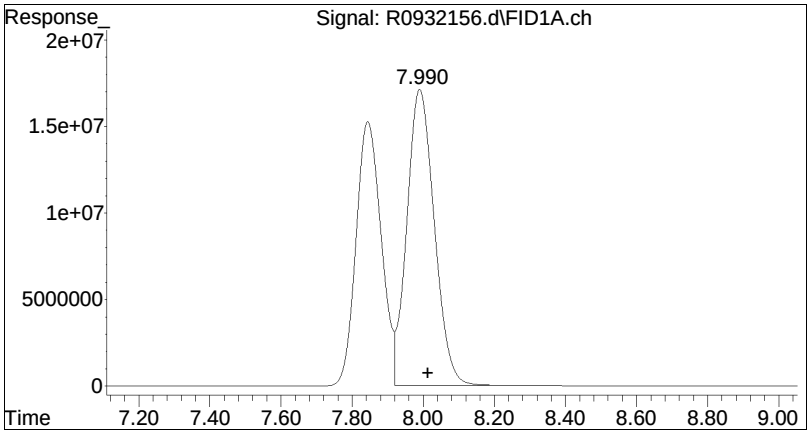
#4 ethane

R.T.: 5.014 min
Delta R.T.: -0.018 min
Response: 665202592
Conc: 4668.40 ug/L M4



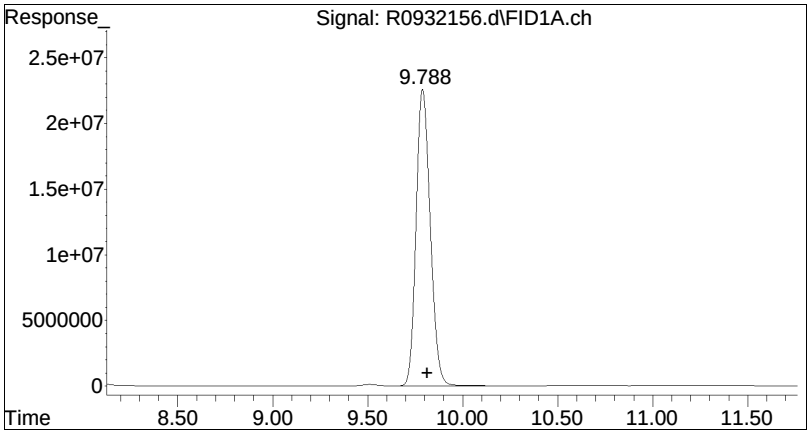
#5 propene

R.T.: 7.846 min
Delta R.T.: -0.018 min
Response: 746622895
Conc: 6683.52 ug/L



#6 propane

R.T.: 7.990 min
Delta R.T.: -0.023 min
Response: 916853641
Conc: 6975.59 ug/L M4



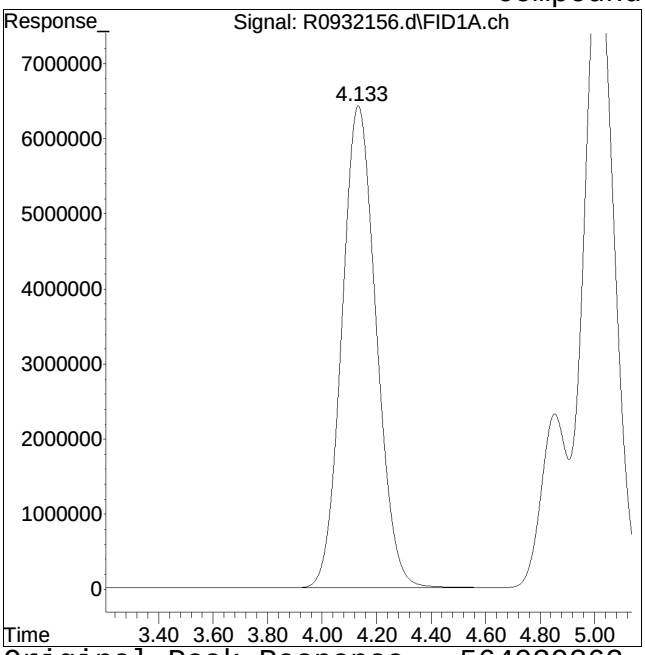
#7 butane

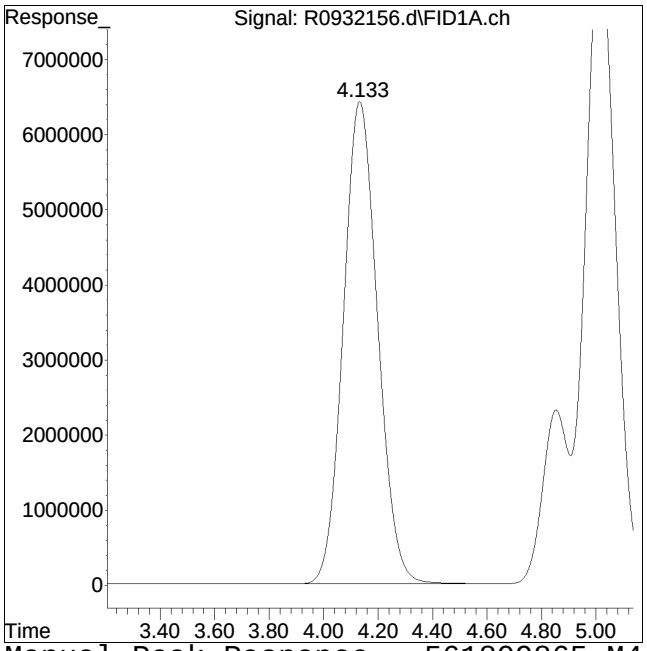
R.T.: 9.790 min
Delta R.T.: -0.023 min
Response: 1170617248
Conc: 9519.86 ug/L

Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0932156.d Operator : AIRLAB9:AR
Date Inj'd : 5/11/2020 0:5: 4 Instrument : Airlab9
Sample : IDISSGASSTD07 Quant Date : 5/12/2020 7:02 am

Compound #2: ethene



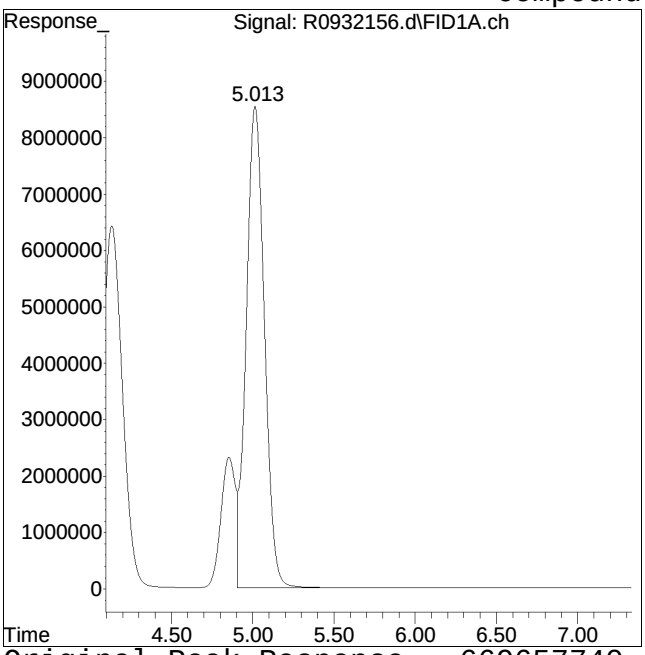


Original Peak Response = 564039362 Manual Peak Response = 561809865 M4
M4 = Poor automated baseline construction.

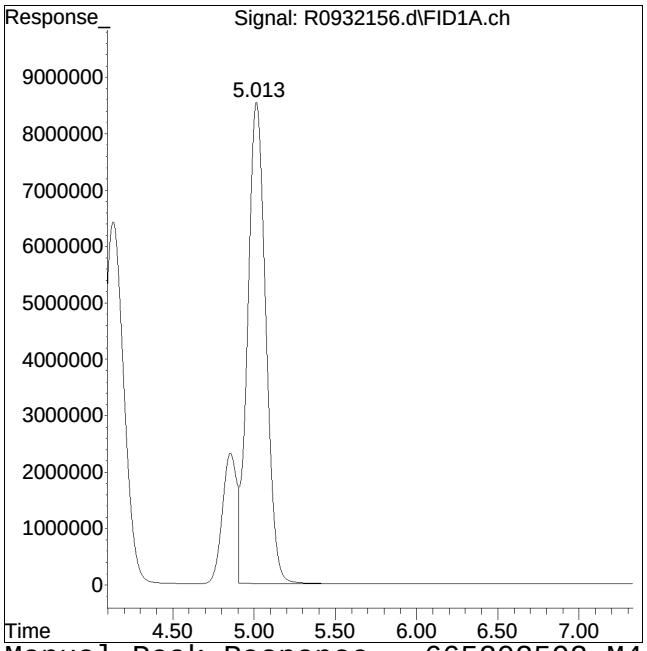
Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0932156.d Operator : AIRLAB9:AR
Date Inj'd : 5/11/2020 0:5: 4 Instrument : Airlab9
Sample : IDISSGASSTD07 Quant Date : 5/12/2020 7:02 am

Compound #4: ethane



Original Peak Response = 669657740



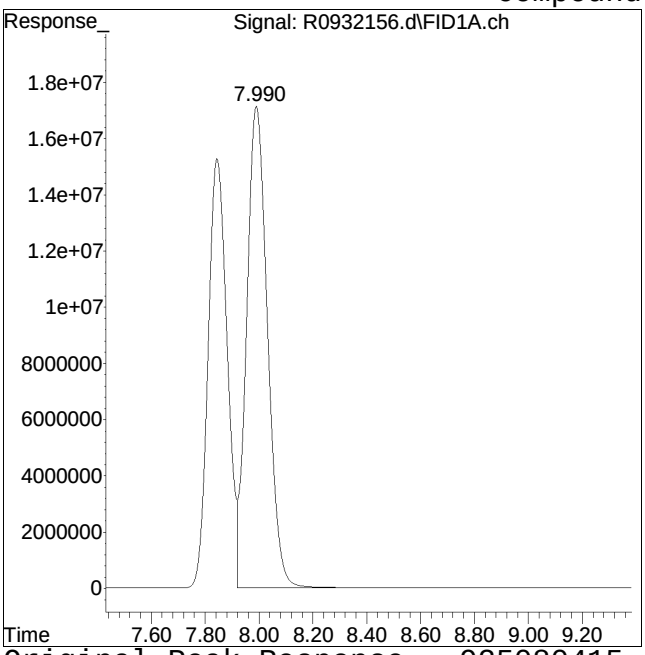
Manual Peak Response = 665202592 M4

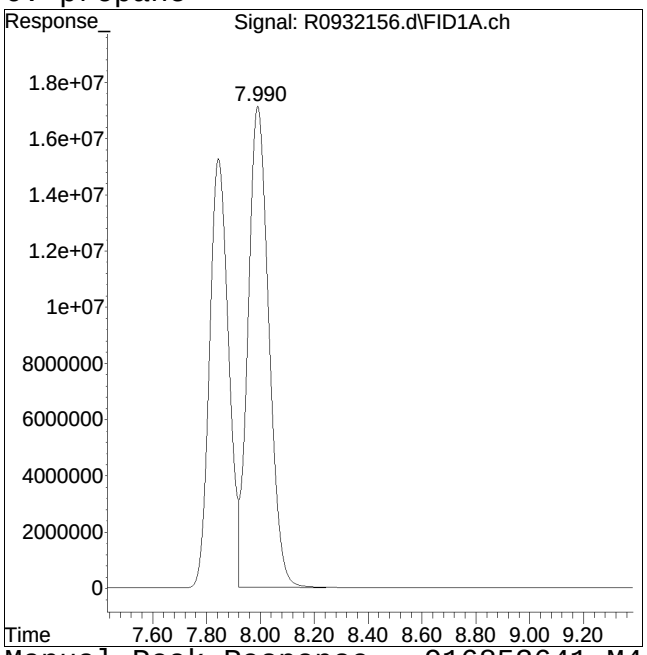
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0932156.d Operator : AIRLAB9:AR
Date Inj'd : 5/11/2020 0:5: 4 Instrument : Airlab9
Sample : IDISSGASSTD07 Quant Date : 5/12/2020 7:02 am

Compound #6: propane





Original Peak Response = 925080415 Manual Peak Response = 916853641 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\airlab9\2020\200511DG_I\
Data File : R0932157.d
Signal(s) : FID1A.ch
Acq On : 11 May 2020 6:04 pm
Operator : AIRLAB9:AR
Sample : IDISSGASSTD08
Misc : WG1369720
ALS Vial : 5 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 12 07:11:41 2020
Quant Method : O:\Forensics\Data\airlab9\2020\200511DG_I\DG9_200511.M
Quant Title : Dissolved Gases
QLast Update : Tue May 12 07:01:27 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Sub List : methane_only - All compounds listed

Compound	R.T.	Response	Conc Units
Target Compounds			
1) methane	1.155	3054682180	21962.081 ug/L

(f)=RT Delta > 1/2 Window (m)=manual int.

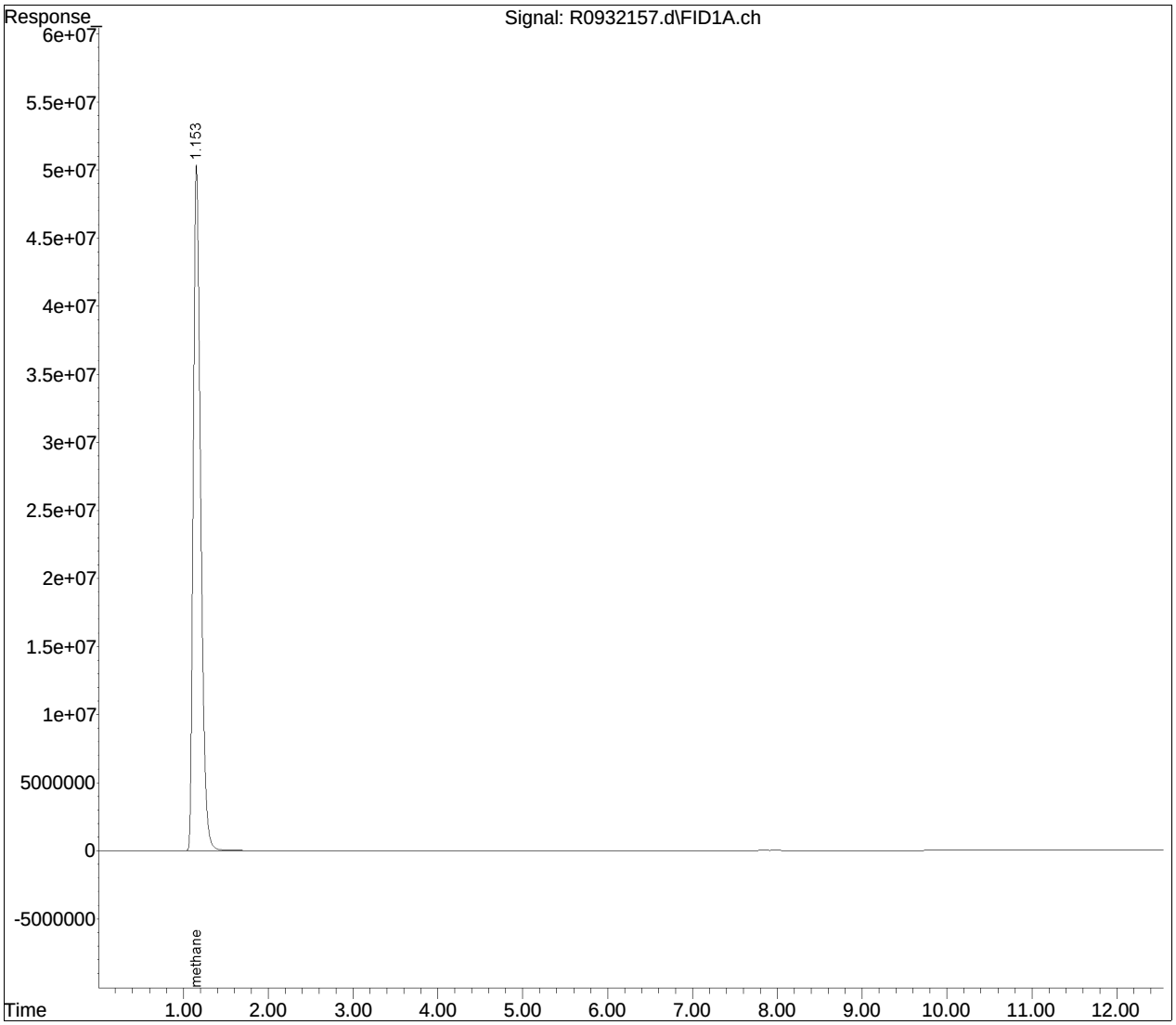
Quantitation Report (QT Reviewed)

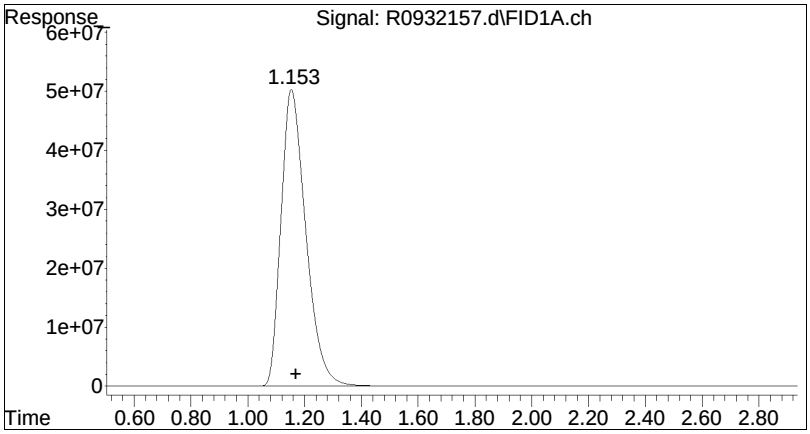
Data Path : O:\Forensics\Data\airlab9\2020\200511DG_I\
Data File : R0932157.d
Signal(s) : FID1A.ch
Acq On : 11 May 2020 6:04 pm
Operator : AIRLAB9:AR
Sample : IDISSGASSTD08
Misc : WG1369720
ALS Vial : 5 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 12 07:11:41 2020
Quant Method : O:\Forensics\Data\airlab9\2020\200511DG_I\DG9_200511.M
Quant Title : Dissolved Gases
QLast Update : Tue May 12 07:01:27 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Sub List : methane_only - All compounds listed





#1 methane

R.T.: 1.155 min
Delta R.T.: -0.015 min
Response: 3054682180
Conc: 21962.08 ug/L

Manual Integration Report

Data Path	: O:\Forensics\Data\airlab9\	QMethod	: DG9_200511.M
Data File	: R0932157.d	Operator	: AIRLAB9:AR
Date Inj'd	: 5/11/2020 0:6: 4	Instrument	: Airlab9
Sample	: IDISSGASSTD08	Quant Date	: 5/12/2020 7:02 am

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

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\airlab9\2020\200511DG_I\
Data File : R0932159.d
Signal(s) : FID1A.ch
Acq On : 11 May 2020 6:38 pm
Operator : AIRLAB9:AR
Sample : CDISSGASTD04
Misc : WG1369720
ALS Vial : 7 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 12 07:15:18 2020
Quant Method : O:\Forensics\Data\airlab9\2020\200511DG_I\DG9_200511.M
Quant Title : Dissolved Gases
QLast Update : Tue May 12 07:13:18 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Min. RRF : 0.000 Min. Rel. Area : 80% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 120%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	methane	* 54.600	56.625	-3.7	102	0.00
2	ethene	* 95.500	91.078	4.6	104	0.00
3	acetylene	* 88.700	90.556	-2.1	106	0.00
4	ethane	*102.000	100.449	1.5	108	0.00
5	propene	*143.000	141.616	1.0	114	0.00
6	propane	*150.000	152.280	-1.5	115	0.00
7	butane	*198.000	192.957	2.5	115	0.00

Evaluate Continuing Calibration Report - Not Founds

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\airlab9\2020\200511DG_I\
Data File : R0932159.d
Signal(s) : FID1A.ch
Acq On : 11 May 2020 6:38 pm
Operator : AIRLAB9:AR
Sample : CDISSGASTD04
Misc : WG1369720
ALS Vial : 7 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 12 07:15:18 2020
Quant Method : O:\Forensics\Data\airlab9\2020\200511DG_I\DG9_200511.M
Quant Title : Dissolved Gases
QLast Update : Tue May 12 07:13:18 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Sub List : Default - All compounds listed

	Compound	R.T.	Response	Conc	Units	
Target Compounds						
1)	methane	1.171	7923957	56.625	ug/L	M4
2)	ethene	4.148	12983783	91.078	ug/L	M4
3)	acetylene	4.868	2692330	90.556	ug/L	M4
4)	ethane	5.034	15811807	100.449	ug/L	
5)	propene	7.866	17963803	141.616	ug/L	
6)	propane	8.012	22708071	152.280	ug/L	
7)	butane	9.811	28044598	192.957	ug/L	M4

(f)=RT Delta > 1/2 Window (m)=manual int.

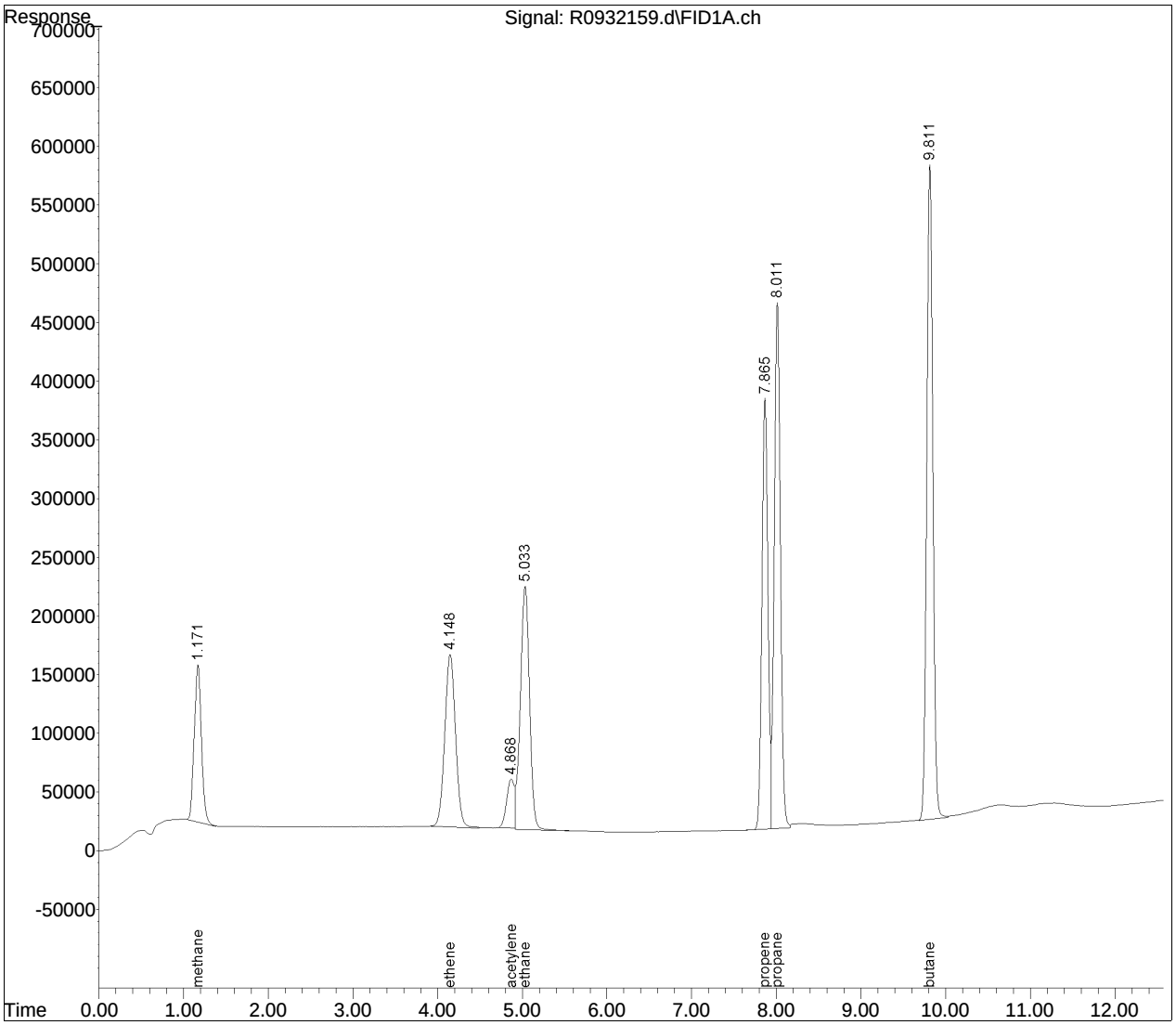
Quantitation Report (QT Reviewed)

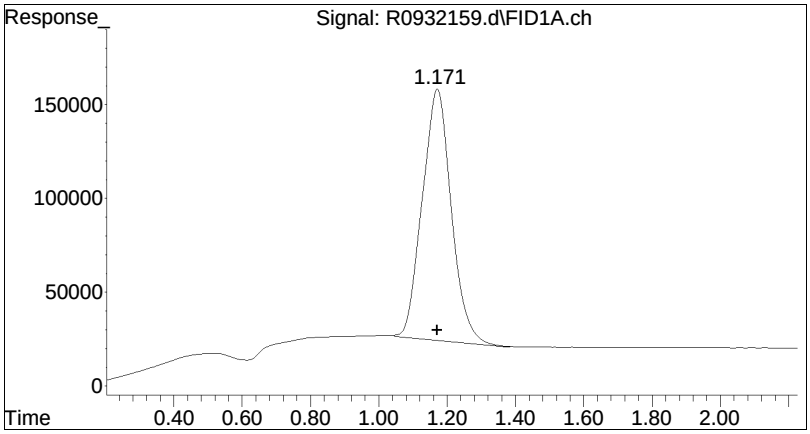
Data Path : O:\Forensics\Data\airlab9\2020\200511DG_I\
Data File : R0932159.d
Signal(s) : FID1A.ch
Acq On : 11 May 2020 6:38 pm
Operator : AIRLAB9:AR
Sample : CDISSGASTD04
Misc : WG1369720
ALS Vial : 7 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 12 07:15:18 2020
Quant Method : O:\Forensics\Data\airlab9\2020\200511DG_I\DG9_200511.M
Quant Title : Dissolved Gases
QLast Update : Tue May 12 07:13:18 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

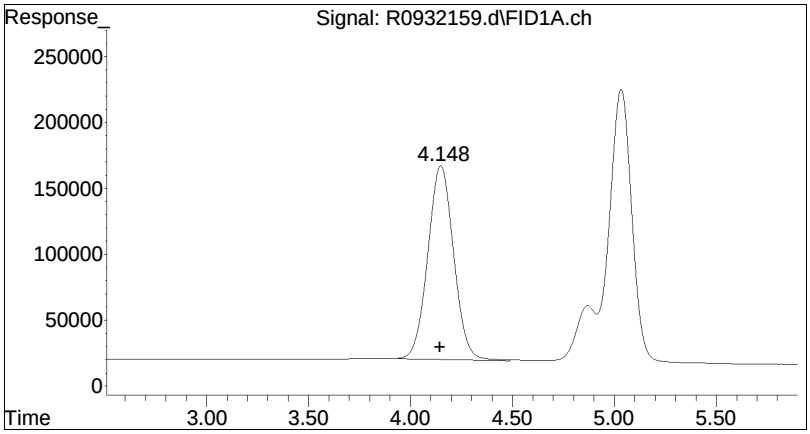
Sub List : Default - All compounds listed





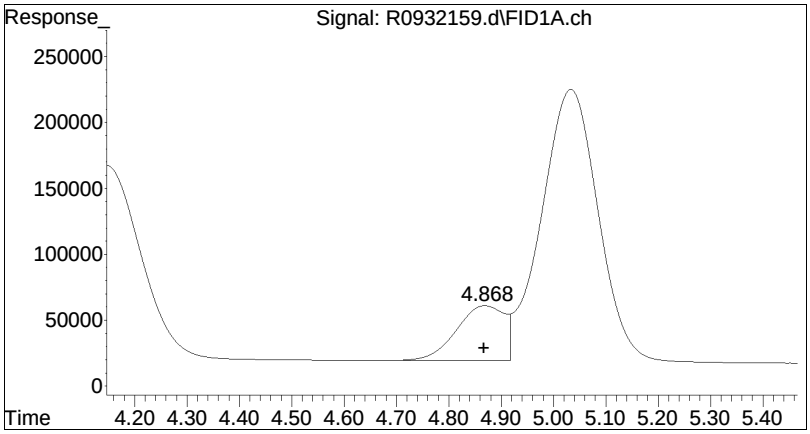
#1 methane

R.T.:	1.171 min
Delta R.T.:	0.000 min
Response:	7923957
Conc:	56.62 ug/L M4



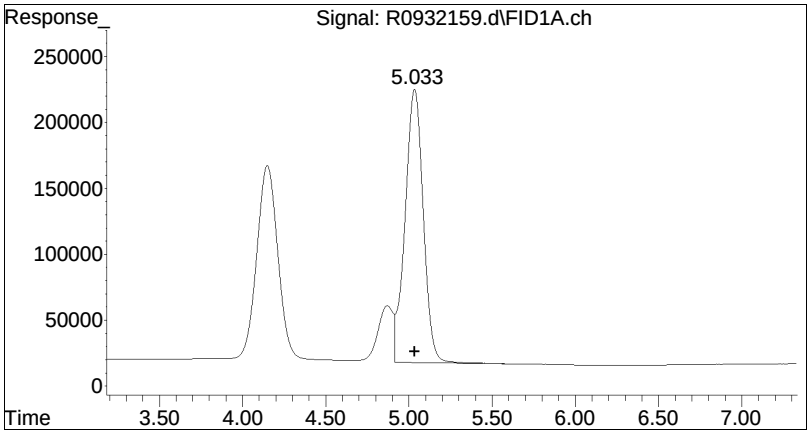
#2 ethene

R.T.:	4.148 min
Delta R.T.:	0.000 min
Response:	12983783
Conc:	91.08 ug/L M4



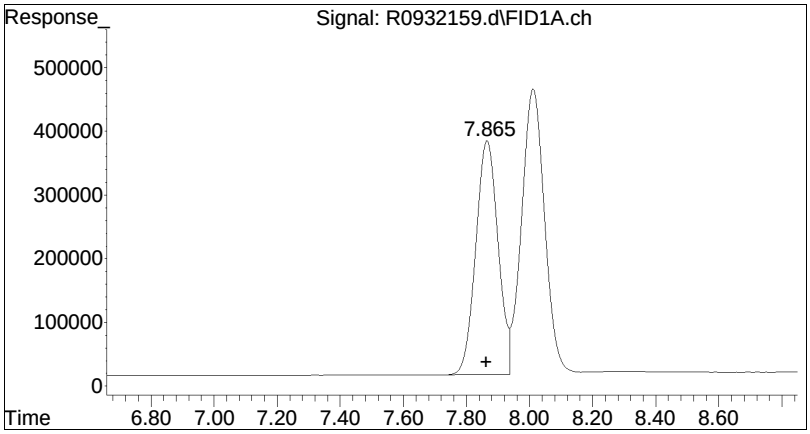
#3 acetylene

R.T.:	4.868 min
Delta R.T.:	0.001 min
Response:	2692330
Conc:	90.56 ug/L M4



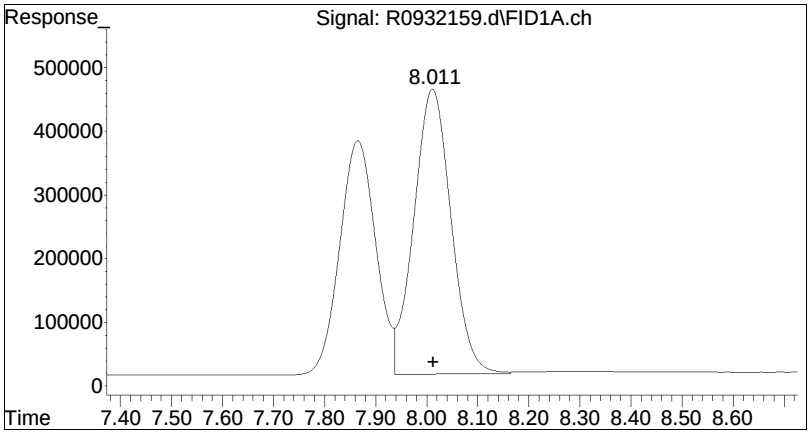
#4 ethane

R.T.: 5.034 min
Delta R.T.: 0.003 min
Response: 15811807
Conc: 100.45 ug/L



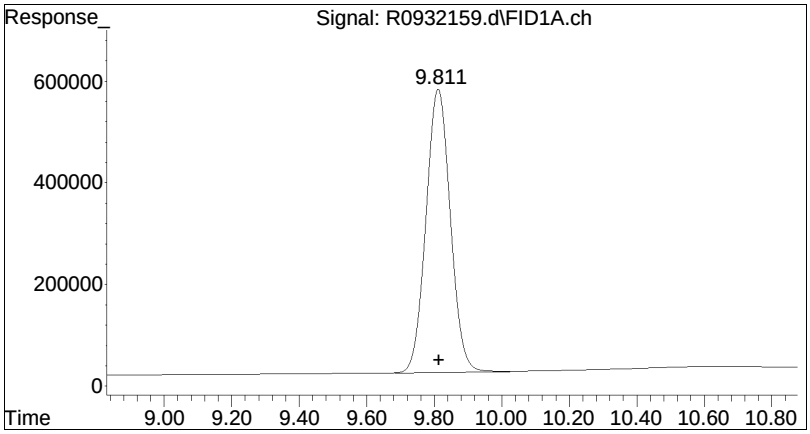
#5 propene

R.T.: 7.866 min
Delta R.T.: 0.002 min
Response: 17963803
Conc: 141.62 ug/L



#6 propane

R.T.: 8.012 min
Delta R.T.: 0.000 min
Response: 22708071
Conc: 152.28 ug/L



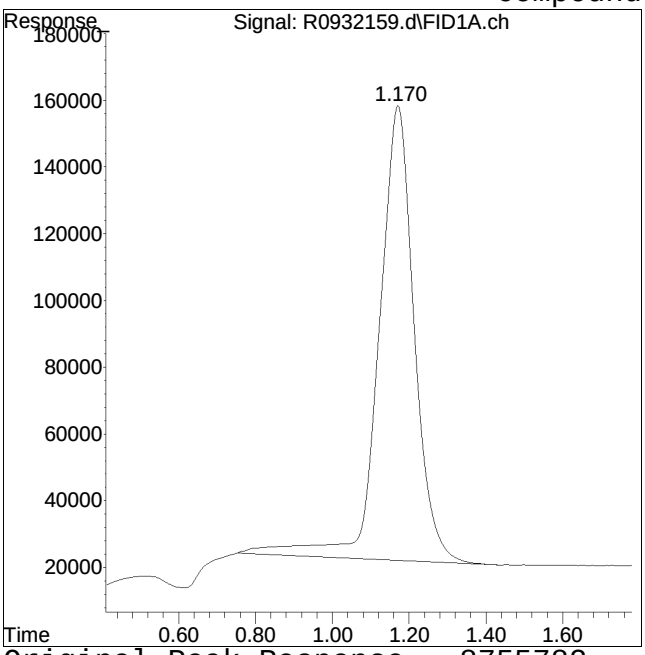
#7 butane

R.T.: 9.811 min
Delta R.T.: -0.002 min
Response: 28044598
Conc: 192.96 ug/L M4

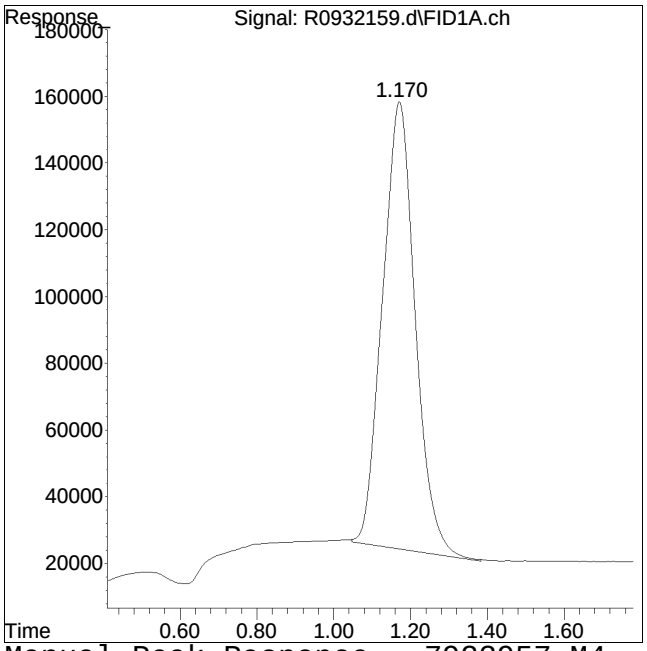
Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0932159.d Operator : AIRLAB9:AR
Date Inj'd : 5/11/2020 0:6: 8 Instrument : Airlab9
Sample : CDISSGASTD04 Quant Date : 5/12/2020 7:14 am

Compound #1: methane



Original Peak Response = 8755782



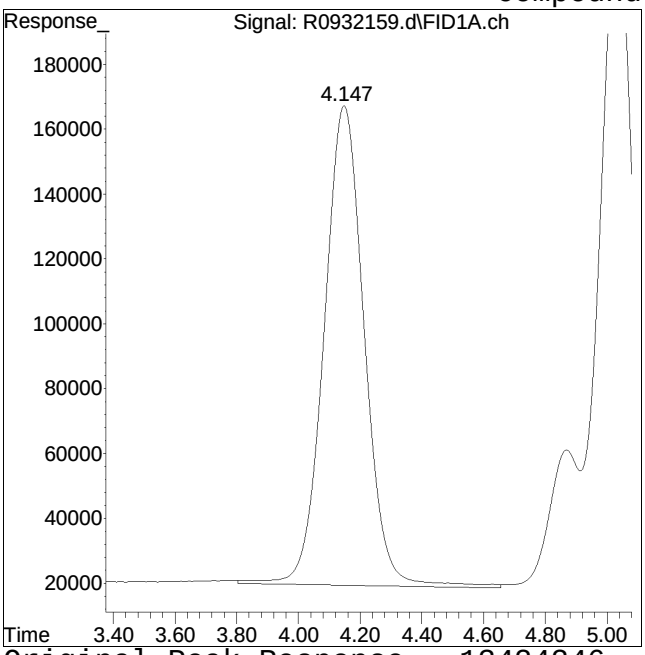
Manual Peak Response = 7923957 M4

M4 = Poor automated baseline construction.

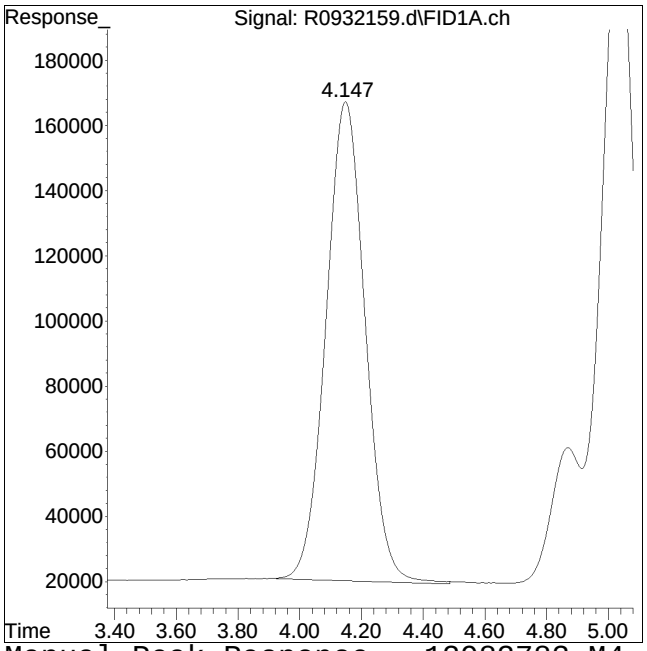
Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0932159.d Operator : AIRLAB9:AR
Date Inj'd : 5/11/2020 0:6: 8 Instrument : Airlab9
Sample : CDISSGASTD04 Quant Date : 5/12/2020 7:14 am

Compound #2: ethene



Original Peak Response = 13424246



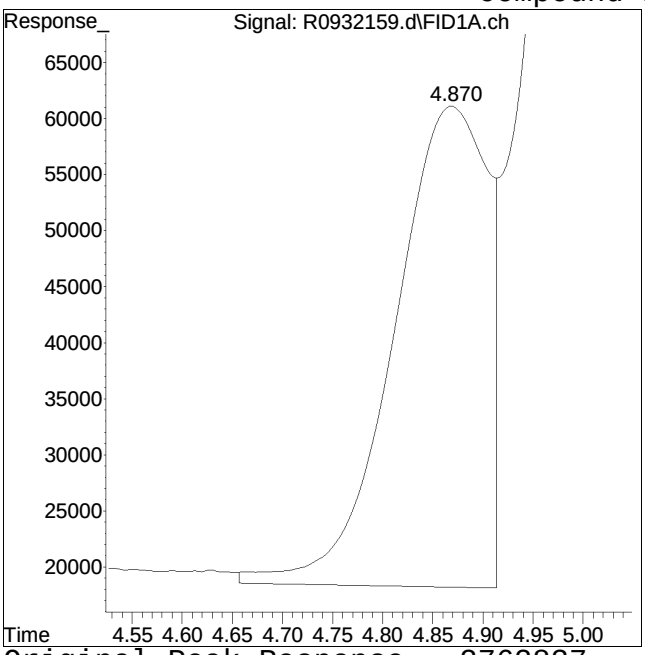
Manual Peak Response = 12983783 M4

M4 = Poor automated baseline construction.

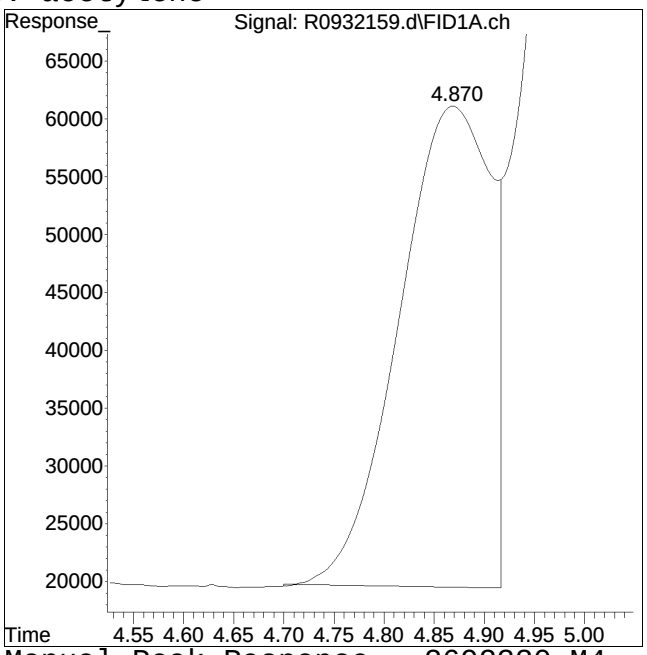
Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0932159.d Operator : AIRLAB9:AR
Date Inj'd : 5/11/2020 0:6: 8 Instrument : Airlab9
Sample : CDISSGASTD04 Quant Date : 5/12/2020 7:14 am

Compound #3: acetylene



Original Peak Response = 2762837



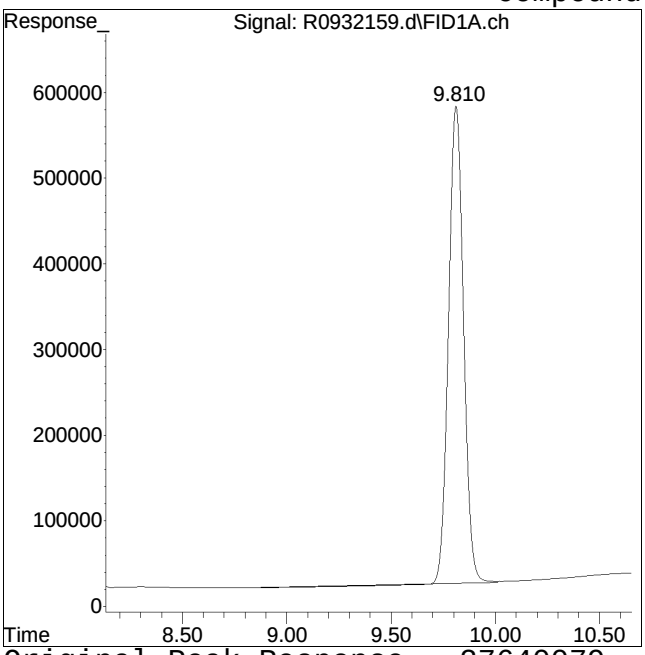
Manual Peak Response = 2692330 M4

M4 = Poor automated baseline construction.

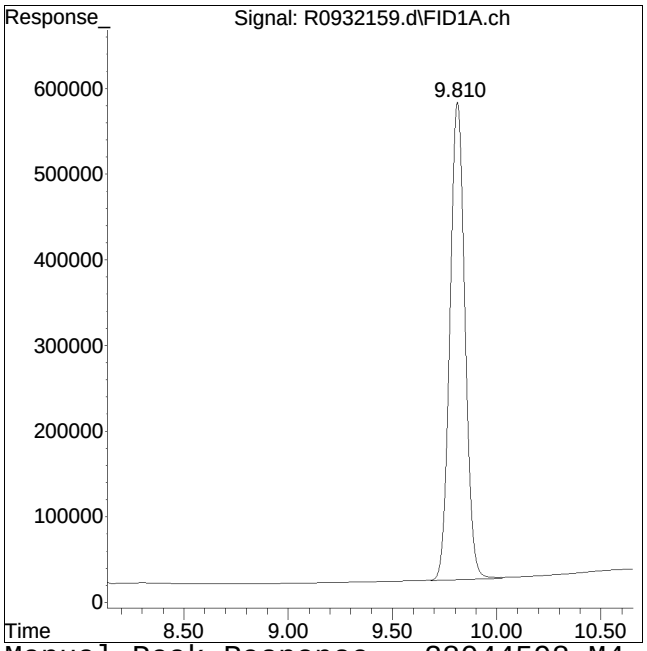
Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0932159.d Operator : AIRLAB9:AR
Date Inj'd : 5/11/2020 0:6: 8 Instrument : Airlab9
Sample : CDISSGASTD04 Quant Date : 5/12/2020 7:14 am

Compound #7: butane



Original Peak Response = 27640079



Manual Peak Response = 28044598 M4

M4 = Poor automated baseline construction.

Continuing Calibration

Calibration Verification Summary
Form 7
Volatiles

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323	
Project Name	: TROY BELTING	**Project Number**	: 2011-31	
Instrument ID	: AIRLAB9	**Calibration Date**	: 12/18/23 15:02	
Lab File ID	: R0951756	**Init. Calib. Date(s)**	: 05/11/20	05/11/20
Sample No	: WG1865332-1	**Init. Calib. Times**	: 15:46	18:04
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
methane	54.6	53.954	-	1.2	20	97	0
ethene	95.5	86.222	-	9.7	20	98	.11
acetylene	88.7	71.097	-	19.8	20	83	.11
ethane	102	91.602	-	10.2	20	98	.09
propene	143	121.778	-	14.8	20	98	.06
propane	150	133.28	-	11.1	20	101	.05
butane	198	154.874	-	21.8*	20	92	.04

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Volatiles

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323	
Project Name	: TROY BELTING	**Project Number**	: 2011-31	
Instrument ID	: AIRLAB9	**Calibration Date**	: 12/18/23 20:07	
Lab File ID	: R0951772	**Init. Calib. Date(s)**	: 05/11/20	05/11/20
Sample No	: WG1865332-6	**Init. Calib. Times**	: 15:46	18:04
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
methane	54.6	56.422	-	-3.3	20	102	0
ethene	95.5	93.629	-	2	20	106	.1
acetylene	88.7	80.562	-	9.2	20	94	.11
ethane	102	96.52	-	5.4	20	104	.09
propene	143	126.937	-	11.2	20	102	.05
propane	150	141.391	-	5.7	20	107	.04
butane	198	167.08	-	15.6	20	100	.03

* Value outside of QC limits.

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\airlab9\2023\12\1218DG_PM\
Data File : R0951756.D
Signal(s) : FID1A.ch
Acq On : 18 Dec 2023 3:02 pm
Operator : AIRLAB9:SRO
Sample : WG1865332-1,4,0.5,0.5
Misc : WG1865332,ICAL16772
ALS Vial : 16 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 19 11:16:18 2023
Quant Method : O:\Forensics\Data\airlab9\2023\12\1218DG_PM\DG9_200511.M
Quant Title : Dissolved Gases
QLast Update : Tue May 12 07:13:18 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Min. RRF : 0.000 Min. Rel. Area : 80% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 120%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	methane	* 54.600	53.954	1.2	97	0.00
2	ethene	* 95.500	86.222	9.7	98	0.11
3	acetylene	* 88.700	71.097	19.8	83	0.11
4	ethane	*102.000	91.602	10.2	98	0.09
5	propene	*143.000	121.778	14.8	98	0.06
6	propane	*150.000	133.280	11.1	101	0.05
7	butane	*198.000	154.874	21.8#	92	0.04

Evaluate Continuing Calibration Report - Not Founds

---

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\airlab9\2023\12\1218DG_PM\
Data File : R0951756.D
Signal(s) : FID1A.ch
Acq On : 18 Dec 2023 3:02 pm
Operator : AIRLAB9:SRO
Sample : WG1865332-1,4,0.5,0.5
Misc : WG1865332,ICAL16772
ALS Vial : 16 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 19 11:16:18 2023
Quant Method : O:\Forensics\Data\airlab9\2023\12\1218DG_PM\DG9_200511.M
Quant Title : Dissolved Gases
QLast Update : Tue May 12 07:13:18 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Sub List : Default - All compounds listed

	Compound	R.T.	Response	Conc	Units	
Target Compounds						
1)	methane	1.180	7550256	53.954	ug/L	M4
2)	ethene	4.252	12291470	86.222	ug/L	M4
3)	acetylene	4.976	2113782	71.097	ug/L	M2
4)	ethane	5.119	14419175	91.602	ug/L	M6
5)	propene	7.923	15447371	121.778	ug/L	
6)	propane	8.066	19874882	133.280	ug/L	
7)	butane	9.858	22509533	154.874	ug/L	

(f)=RT Delta > 1/2 Window (m)=manual int.

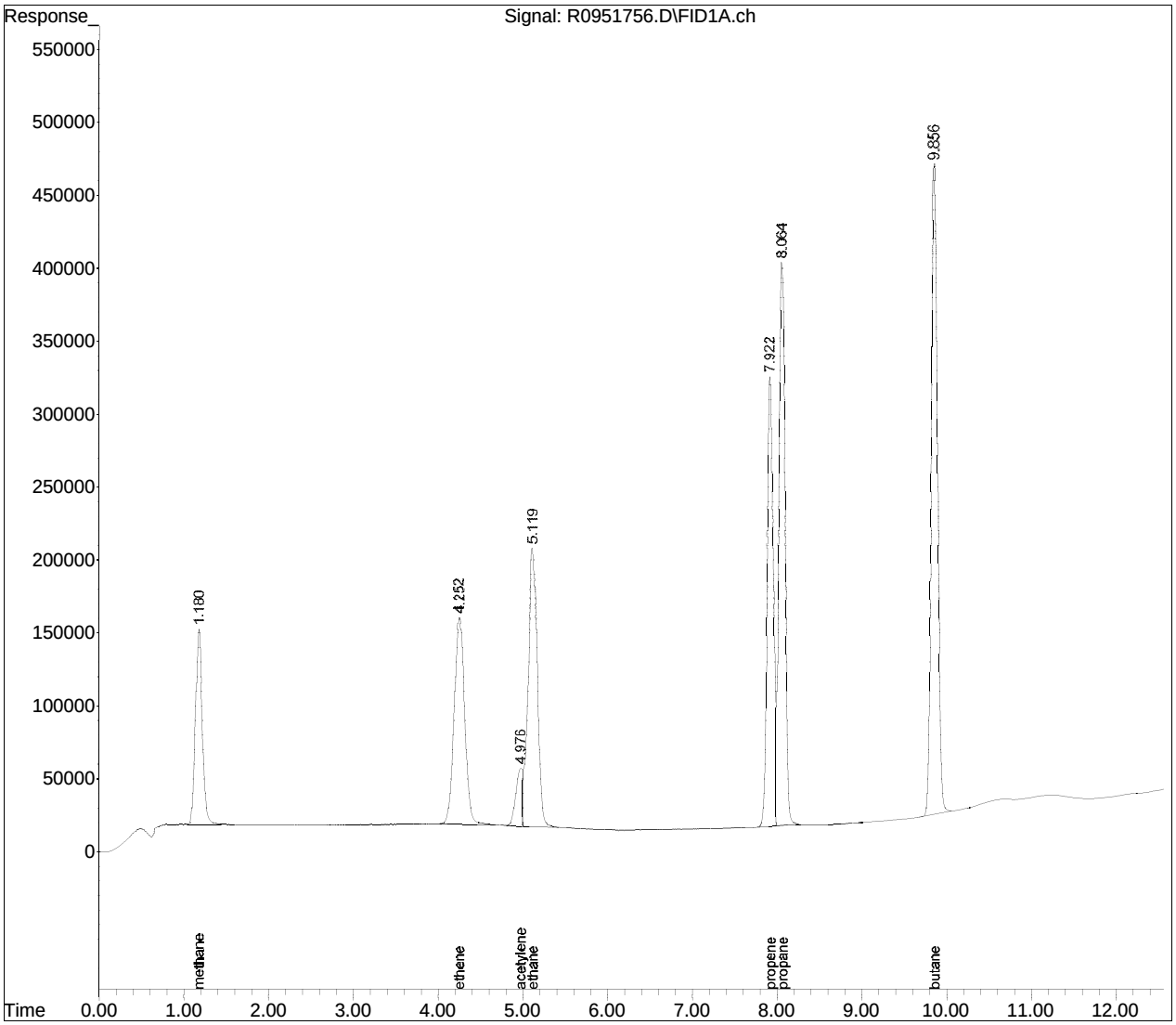
Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\airlab9\2023\12\1218DG_PM\
Data File : R0951756.D
Signal(s) : FID1A.ch
Acq On : 18 Dec 2023 3:02 pm
Operator : AIRLAB9:SRO
Sample : WG1865332-1,4,0.5,0.5
Misc : WG1865332,ICAL16772
ALS Vial : 16 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 19 11:16:18 2023
Quant Method : O:\Forensics\Data\airlab9\2023\12\1218DG_PM\DG9_200511.M
Quant Title : Dissolved Gases
QLast Update : Tue May 12 07:13:18 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

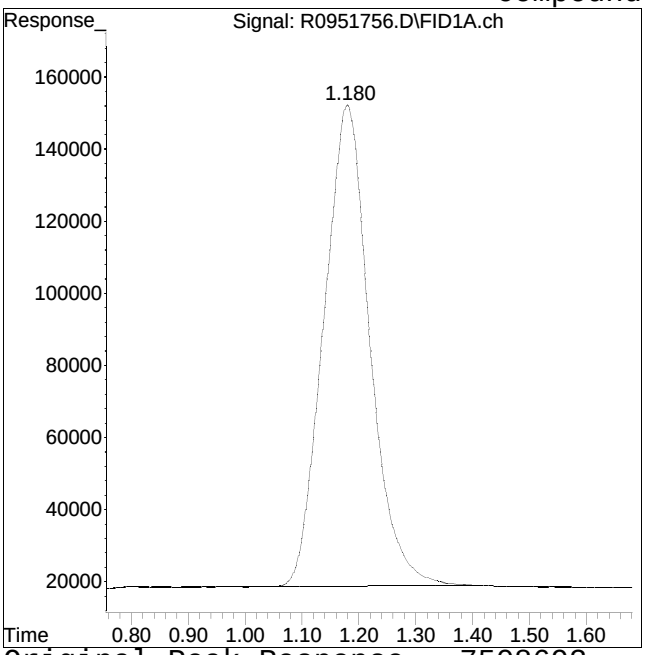
Sub List : Default - All compounds listed



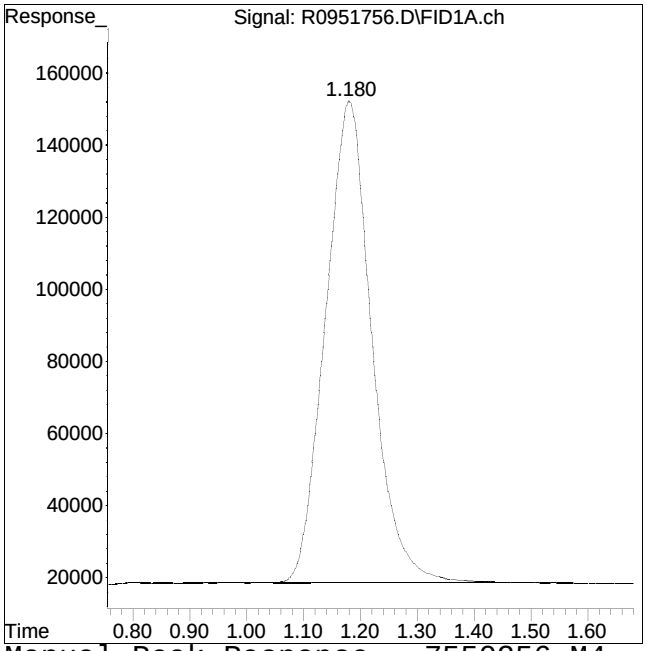
Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0951756.D Operator : AIRLAB9:SRO
Date Inj'd : 12/18/2023 3:02 pm Instrument : Airlab 9
Sample : WG1865332-1,4,0.5,0.5 Quant Date : 12/19/2023 11:16 am

Compound #1: methane



Original Peak Response = 7508693



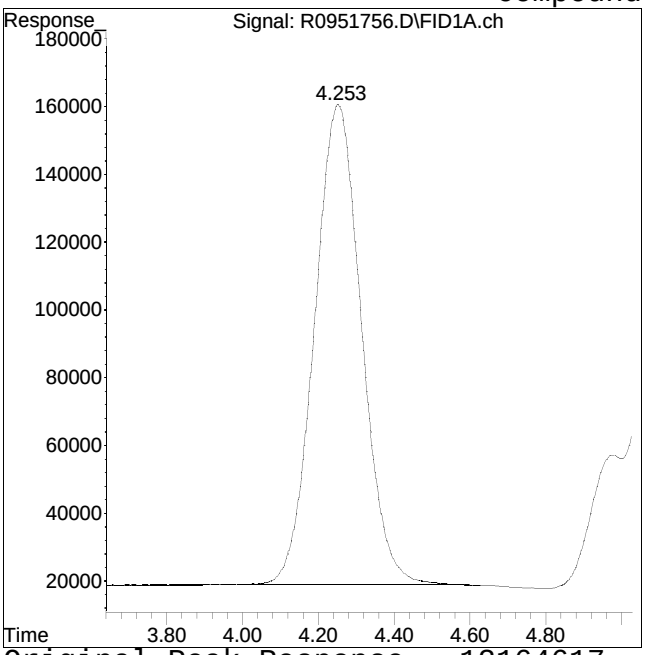
Manual Peak Response = 7550256 M4

M4 = Poor automated baseline construction.

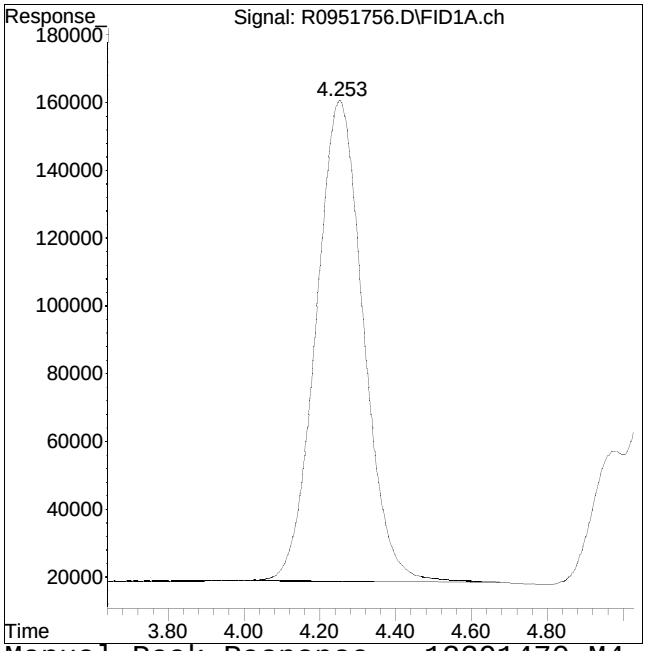
Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0951756.D Operator : AIRLAB9:SRO
Date Inj'd : 12/18/2023 3:02 pm Instrument : Airlab 9
Sample : WG1865332-1,4,0.5,0.5 Quant Date : 12/19/2023 11:16 am

Compound #2: ethene



Original Peak Response = 12164617



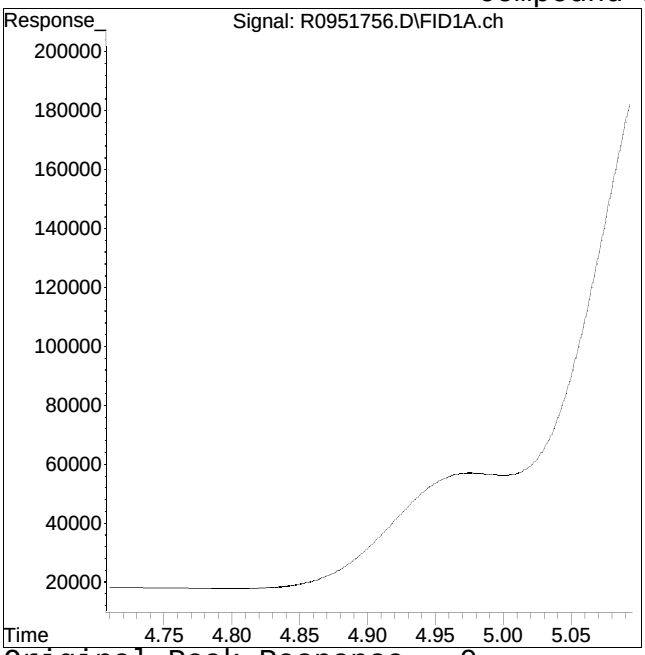
Manual Peak Response = 12291470 M4

M4 = Poor automated baseline construction.

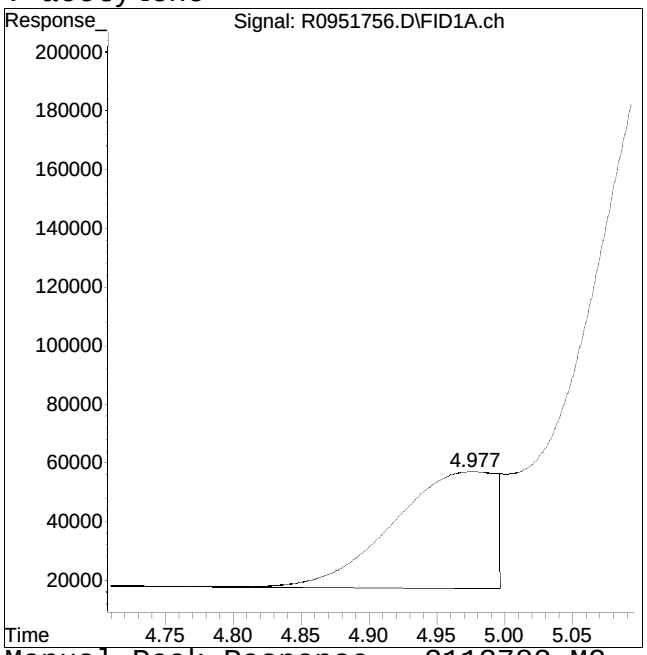
Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0951756.D Operator : AIRLAB9:SRO
Date Inj'd : 12/18/2023 3:02 pm Instrument : Airlab 9
Sample : WG1865332-1,4,0.5,0.5 Quant Date : 12/19/2023 11:16 am

Compound #3: acetylene



Original Peak Response = 0



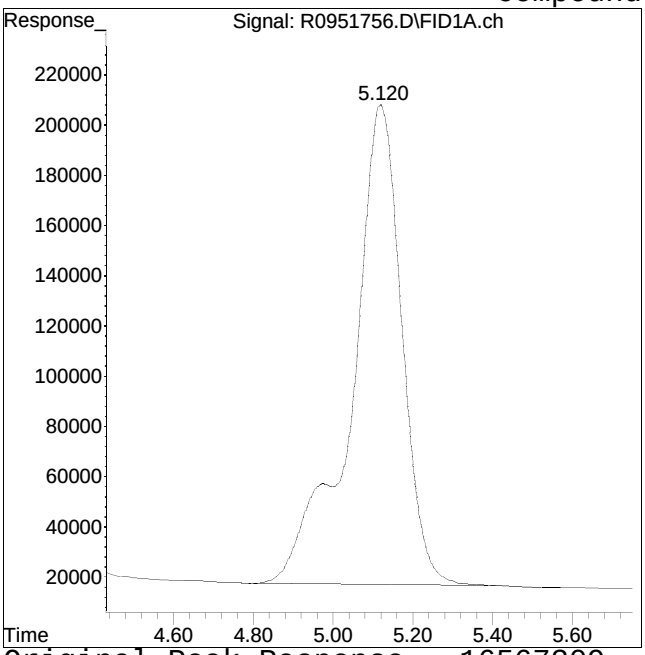
Manual Peak Response = 2113782 M2

M2 = Peak not found by automatic integration algorithm.

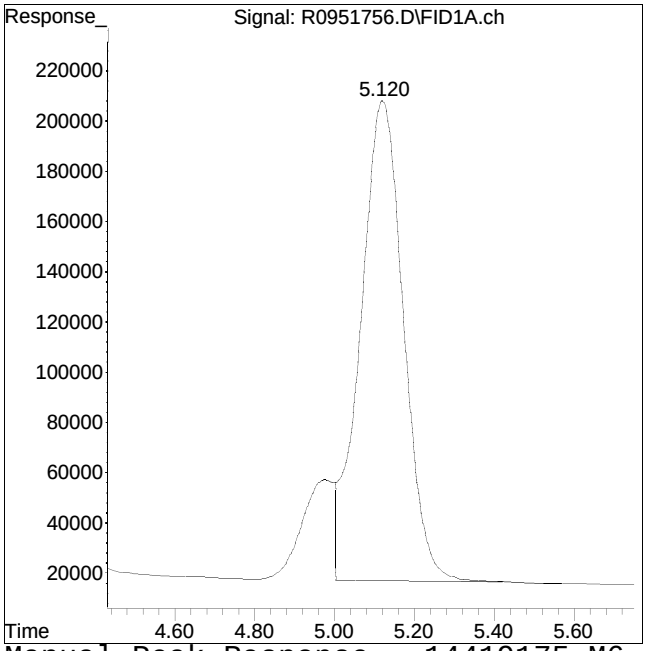
Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0951756.D Operator : AIRLAB9:SRO
Date Inj'd : 12/18/2023 3:02 pm Instrument : Airlab 9
Sample : WG1865332-1,4,0.5,0.5 Quant Date : 12/19/2023 11:16 am

Compound #4: ethane



Original Peak Response = 16567309



Manual Peak Response = 14419175 M6

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

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\airlab9\2023\12\1218DG_PM\
Data File : R0951772.D
Signal(s) : FID1A.ch
Acq On : 18 Dec 2023 8:07 pm
Operator : AIRLAB9:SRO
Sample : WG1865332-6,4,0.5,0.5
Misc : WG1865332,ICAL16772
ALS Vial : 15 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 19 10:05:04 2023
Quant Method : O:\Forensics\Data\airlab9\2023\12\1218DG_PM\DG9_200511.M
Quant Title : Dissolved Gases
QLast Update : Tue May 12 07:13:18 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Min. RRF : 0.000 Min. Rel. Area : 80% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 120%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	methane	* 54.600	56.422	-3.3	102	0.00
2	ethene	* 95.500	93.629	2.0	106	0.10
3	acetylene	* 88.700	80.562	9.2	94	0.11
4	ethane	*102.000	96.520	5.4	104	0.09
5	propene	*143.000	126.937	11.2	102	0.05
6	propane	*150.000	141.391	5.7	107	0.04
7	butane	*198.000	167.080	15.6	100	0.03

Evaluate Continuing Calibration Report - Not Founds

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\airlab9\2023\12\1218DG_PM\
Data File : R0951772.D
Signal(s) : FID1A.ch
Acq On : 18 Dec 2023 8:07 pm
Operator : AIRLAB9:SRO
Sample : WG1865332-6,4,0.5,0.5
Misc : WG1865332,ICAL16772
ALS Vial : 15 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 19 10:05:04 2023
Quant Method : O:\Forensics\Data\airlab9\2023\12\1218DG_PM\DG9_200511.M
Quant Title : Dissolved Gases
QLast Update : Tue May 12 07:13:18 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Sub List : Default - All compounds listed

	Compound	R.T.	Response	Conc	Units	
Target Compounds						
1)	methane	1.178	7895532	56.422	ug/L	M4
2)	ethene	4.251	13347454	93.629	ug/L	M4
3)	acetylene	4.978	2395213	80.562	ug/L	M2
4)	ethane	5.120	15193230	96.520	ug/L	M6
5)	propene	7.918	16101765	126.937	ug/L	
6)	propane	8.058	21084399	141.391	ug/L	
7)	butane	9.846	24283650	167.080	ug/L	M4

(f)=RT Delta > 1/2 Window (m)=manual int.

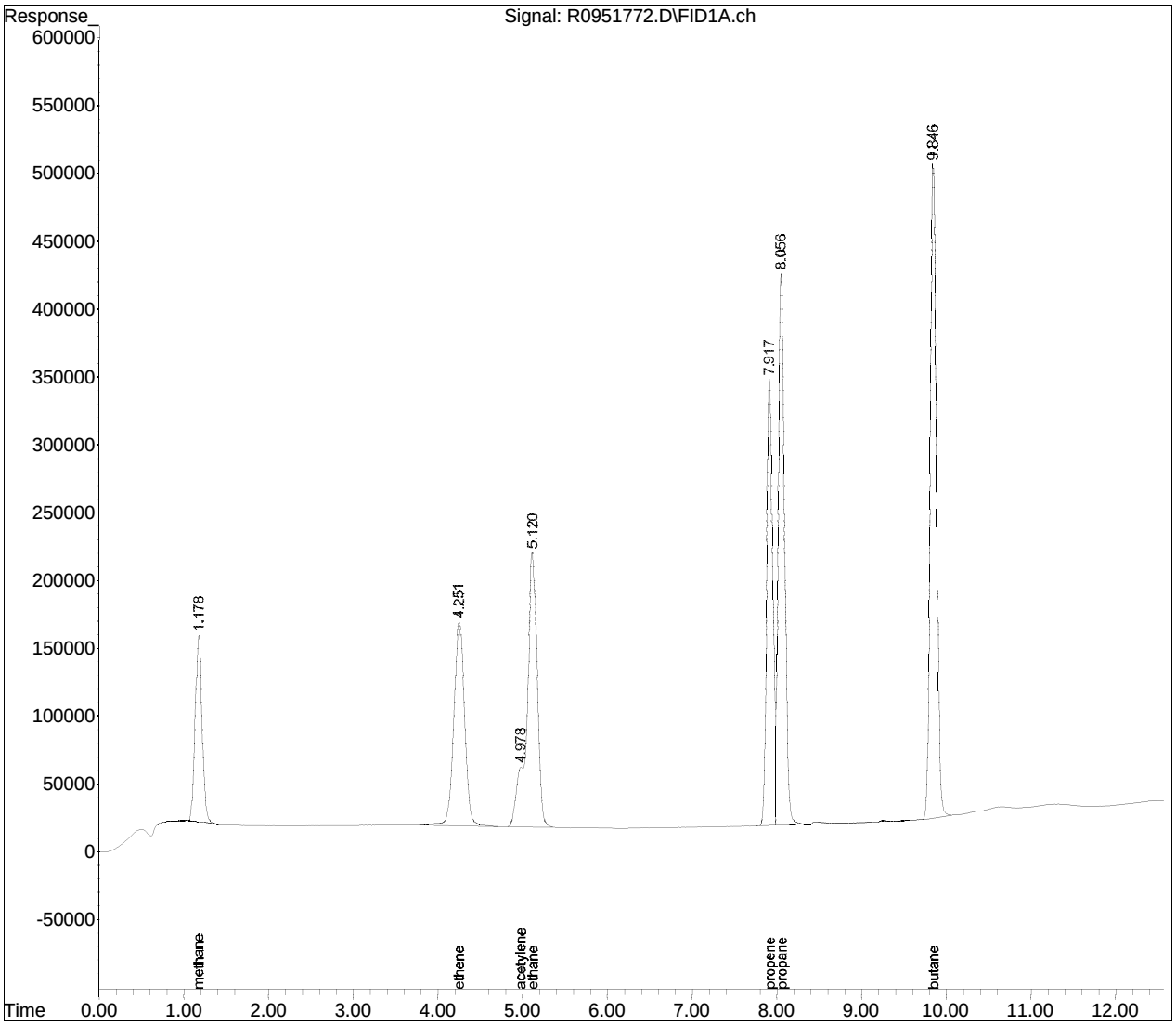
Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\airlab9\2023\12\1218DG_PM\
Data File : R0951772.D
Signal(s) : FID1A.ch
Acq On : 18 Dec 2023 8:07 pm
Operator : AIRLAB9:SRO
Sample : WG1865332-6,4,0.5,0.5
Misc : WG1865332,ICAL16772
ALS Vial : 15 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 19 10:05:04 2023
Quant Method : O:\Forensics\Data\airlab9\2023\12\1218DG_PM\DG9_200511.M
Quant Title : Dissolved Gases
QLast Update : Tue May 12 07:13:18 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

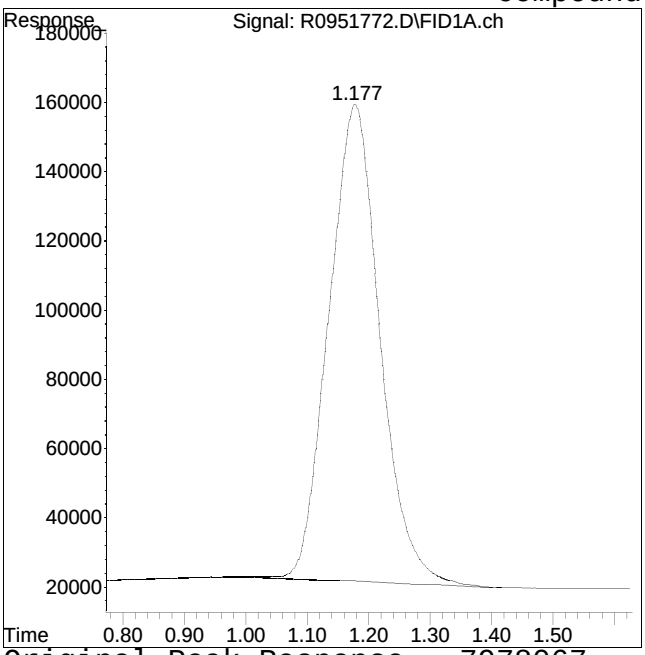
Sub List : Default - All compounds listed



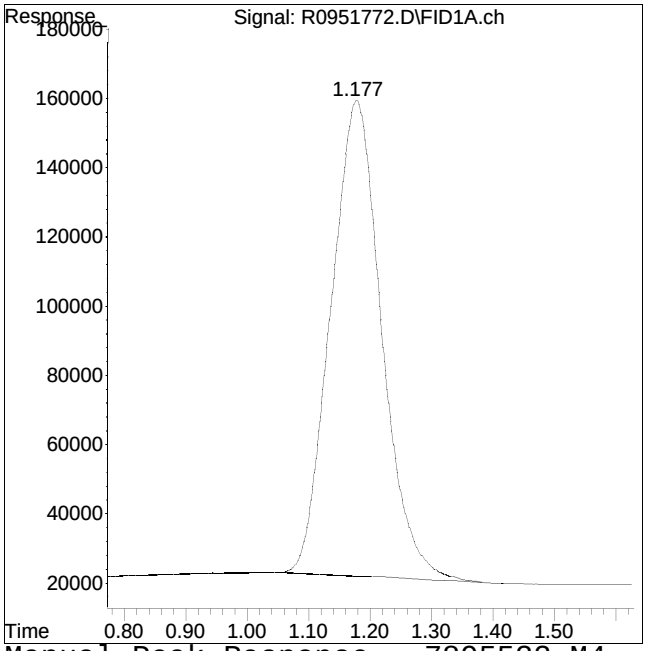
Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0951772.D Operator : AIRLAB9:SRO
Date Inj'd : 12/18/2023 8:07 pm Instrument : Airlab 9
Sample : WG1865332-6,4,0.5,0.5 Quant Date : 12/19/2023 10:05 am

Compound #1: methane



Original Peak Response = 7978067



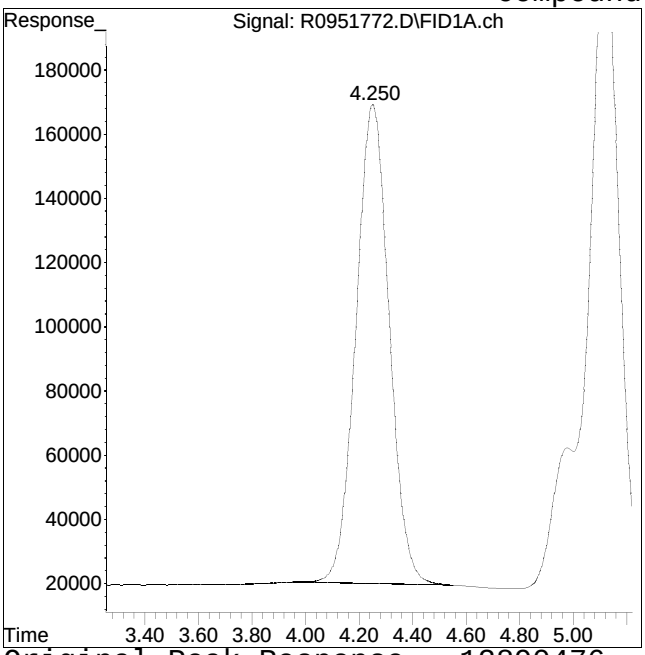
Manual Peak Response = 7895532 M4

M4 = Poor automated baseline construction.

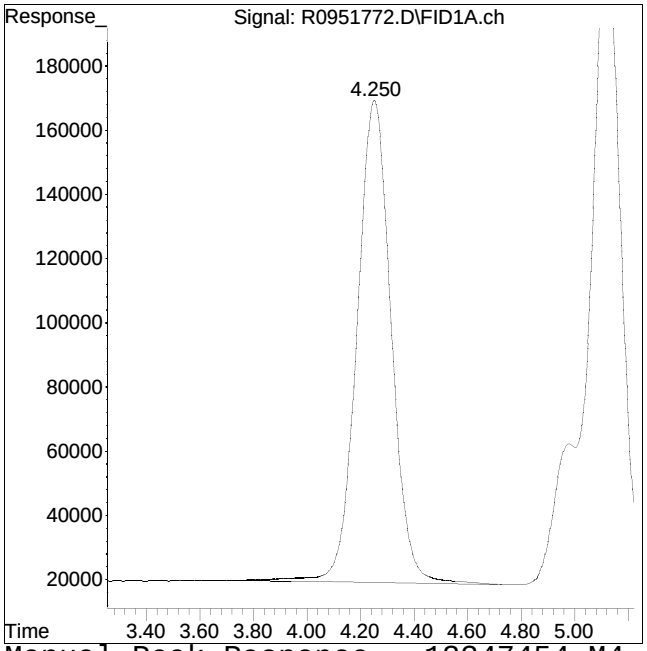
Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0951772.D Operator : AIRLAB9:SRO
Date Inj'd : 12/18/2023 8:07 pm Instrument : Airlab 9
Sample : WG1865332-6,4,0.5,0.5 Quant Date : 12/19/2023 10:05 am

Compound #2: ethene



Original Peak Response = 12890476



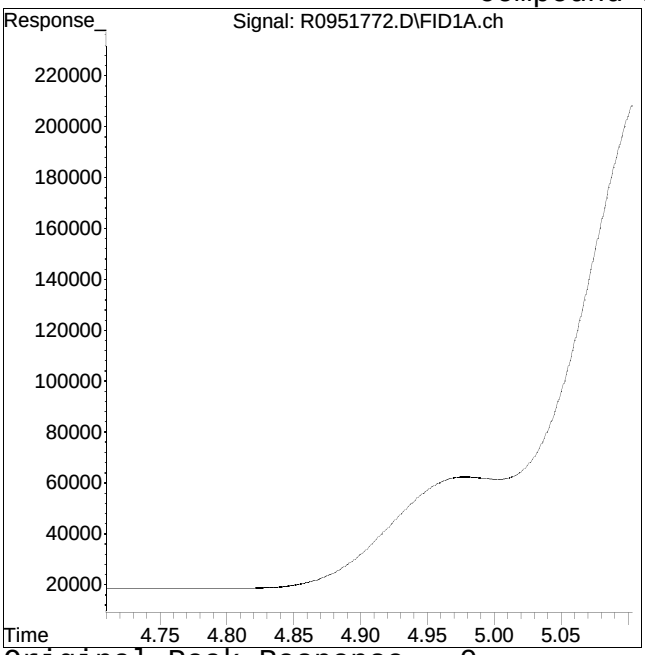
Manual Peak Response = 13347454 M4

M4 = Poor automated baseline construction.

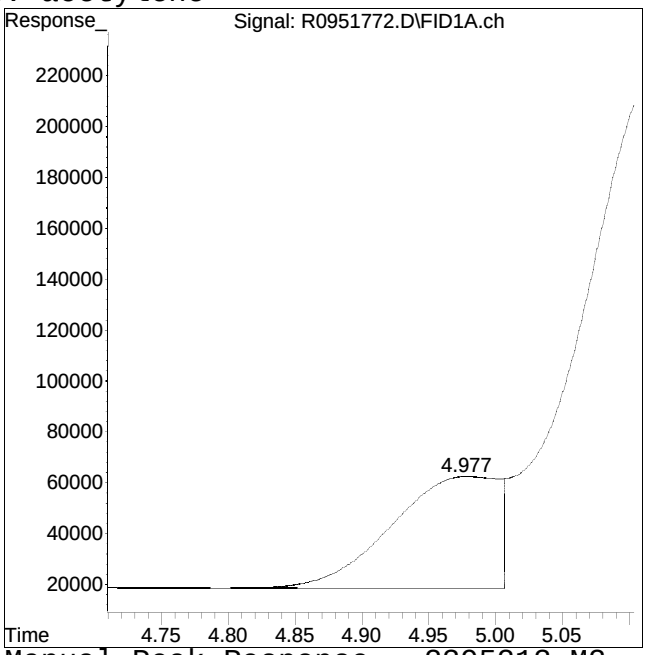
Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0951772.D Operator : AIRLAB9:SRO
Date Inj'd : 12/18/2023 8:07 pm Instrument : Airlab 9
Sample : WG1865332-6,4,0.5,0.5 Quant Date : 12/19/2023 10:05 am

Compound #3: acetylene



Original Peak Response = 0



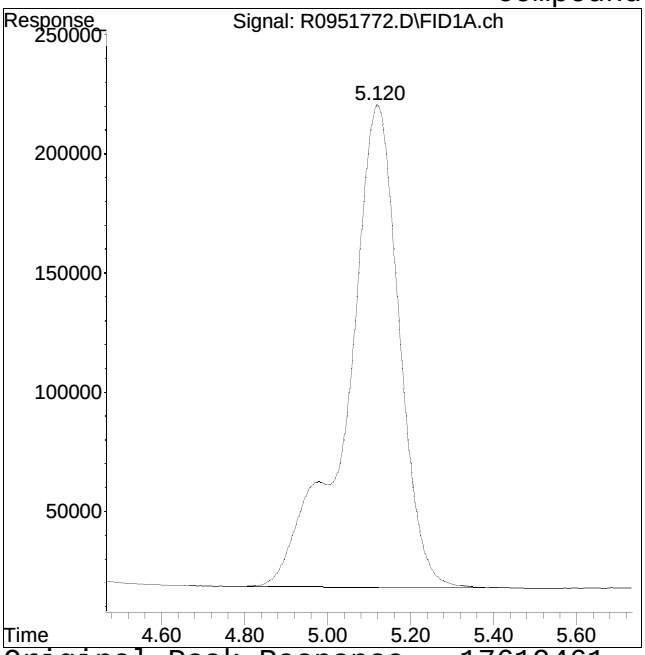
Manual Peak Response = 2395213 M2

M2 = Peak not found by automatic integration algorithm.

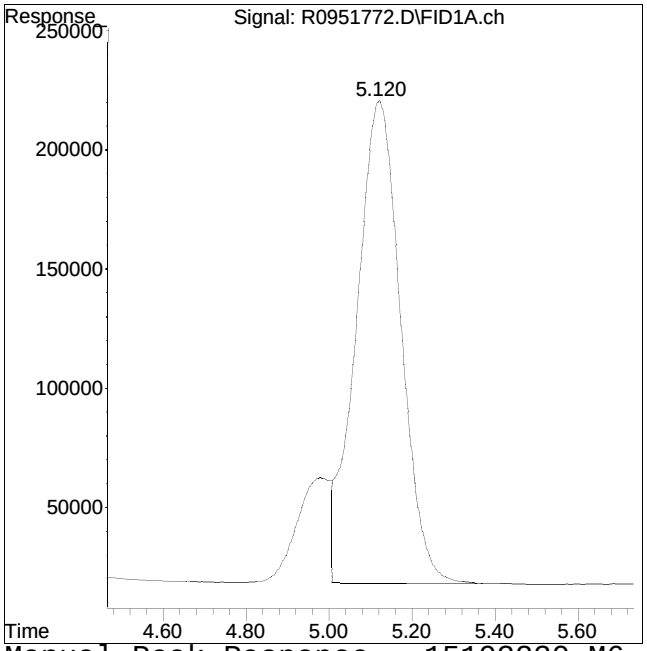
Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0951772.D Operator : AIRLAB9:SRO
Date Inj'd : 12/18/2023 8:07 pm Instrument : Airlab 9
Sample : WG1865332-6,4,0.5,0.5 Quant Date : 12/19/2023 10:05 am

Compound #4: ethane



Original Peak Response = 17619461



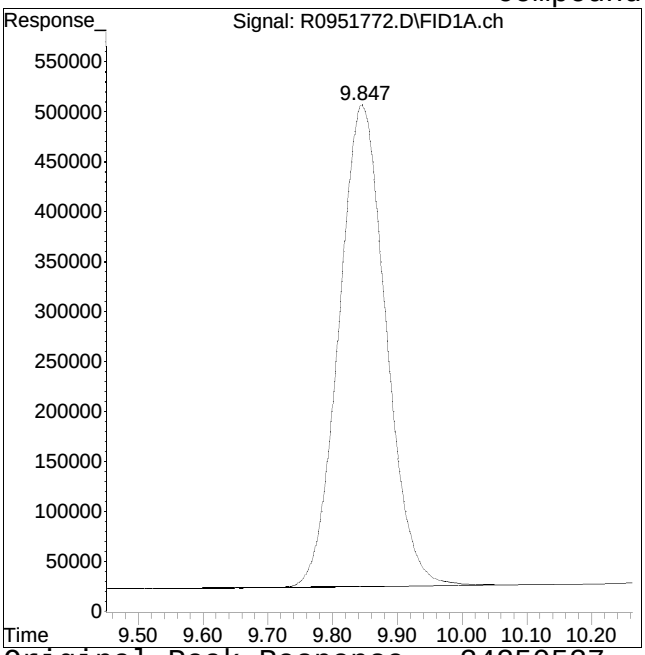
Manual Peak Response = 15193230 M6

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

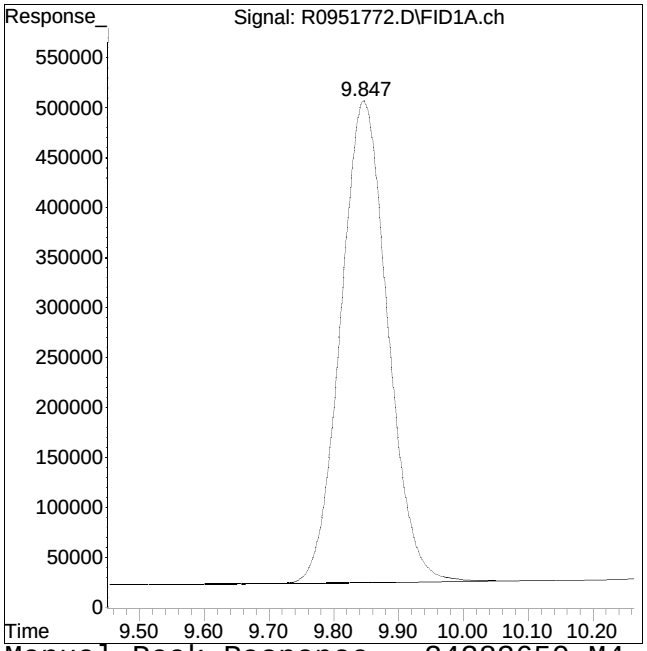
Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0951772.D Operator : AIRLAB9:SRO
Date Inj'd : 12/18/2023 8:07 pm Instrument : Airlab 9
Sample : WG1865332-6,4,0.5,0.5 Quant Date : 12/19/2023 10:05 am

Compound #7: butane



Original Peak Response = 24250537



Manual Peak Response = 24283650 M4

M4 = Poor automated baseline construction.

Volatiles Raw QC Data

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\airlab9\2023\12\1218DG_PM\
Data File : R0951757.D
Signal(s) : FID1A.ch
Acq On : 18 Dec 2023 3:26 pm
Operator : AIRLAB9:SRO
Sample : WG1865332-3,4,0.5,0.5
Misc : WG1865332,ICAL16772
ALS Vial : 17 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 19 10:04:33 2023
Quant Method : O:\Forensics\Data\airlab9\2023\12\1218DG_PM\DG9_200511.M
Quant Title : Dissolved Gases
QLast Update : Tue May 12 07:13:18 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Sub List : Default - All compounds listed

	Compound	R.T.	Response	Conc	Units	
Target Compounds						
1)	methane	1.180	171493	1.225	ug/L	M2
2)	ethene	0.000	0	N.D.	ug/L	
3)	acetylene	0.000	0	N.D.	ug/L	
4)	ethane	0.000	0	N.D.	ug/L	
5)	propene	7.887	135715	1.070	ug/L	M2
6)	propane	8.018	187002	1.254	ug/L	M2
7)	butane	9.847	151393	1.042	ug/L	M4

(f)=RT Delta > 1/2 Window (m)=manual int.

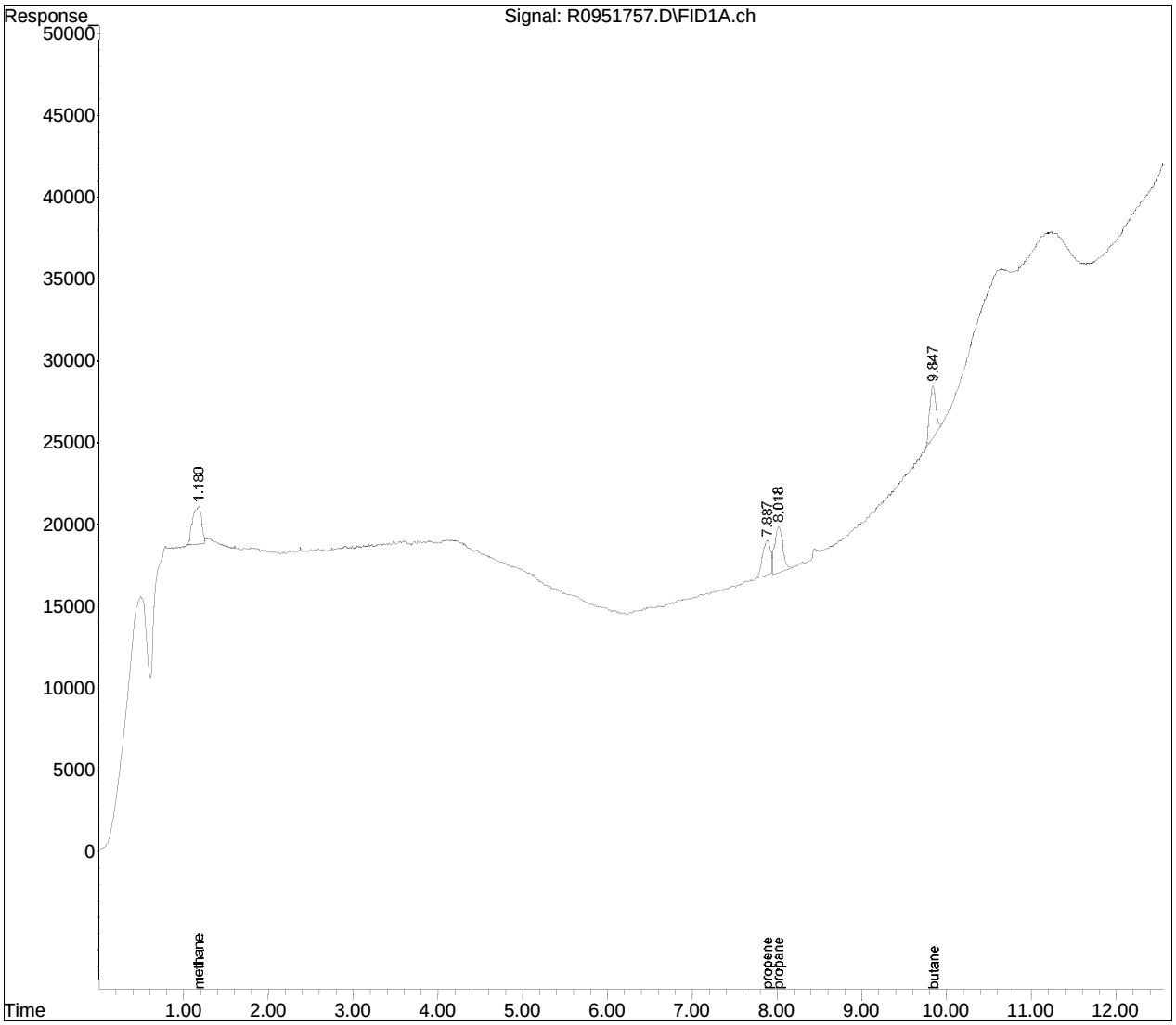
Quantitation Report (QT Reviewed)

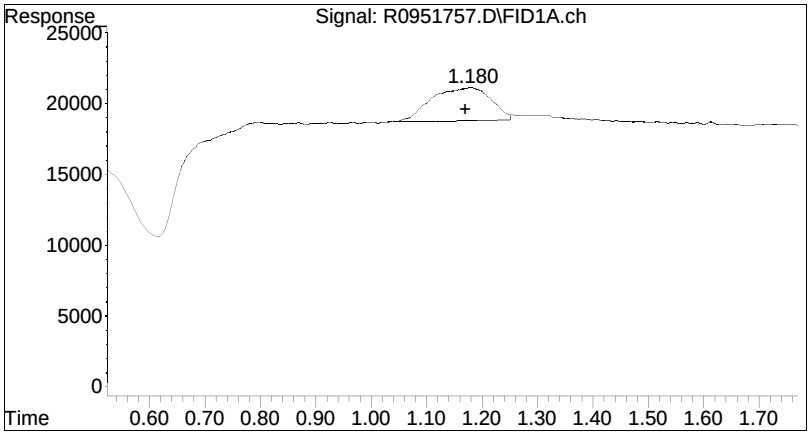
Data Path : O:\Forensics\Data\airlab9\2023\12\1218DG_PM\
Data File : R0951757.D
Signal(s) : FID1A.ch
Acq On : 18 Dec 2023 3:26 pm
Operator : AIRLAB9:SRO
Sample : WG1865332-3,4,0.5,0.5
Misc : WG1865332,ICAL16772
ALS Vial : 17 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 19 10:04:33 2023
Quant Method : O:\Forensics\Data\airlab9\2023\12\1218DG_PM\DG9_200511.M
Quant Title : Dissolved Gases
QLast Update : Tue May 12 07:13:18 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

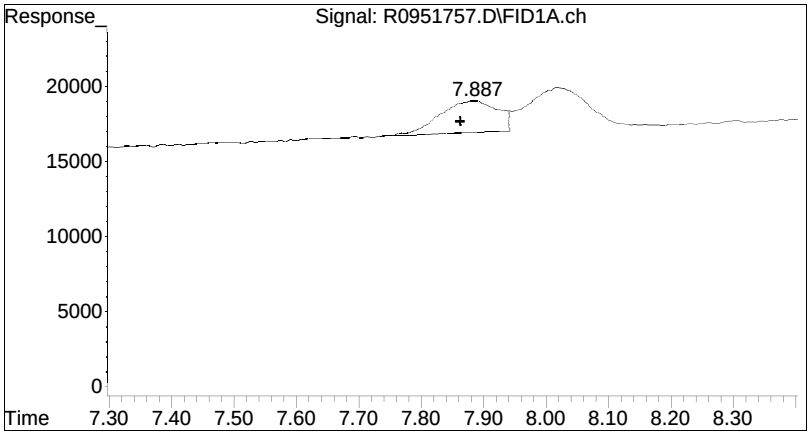
Sub List : Default - All compounds listed





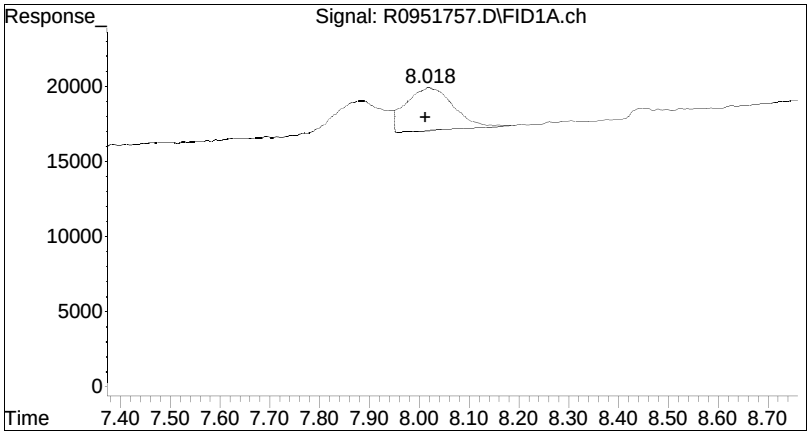
#1 methane

R.T.:	1.180 min
Delta R.T.:	0.010 min
Response:	171493
Conc:	1.23 ug/L M2



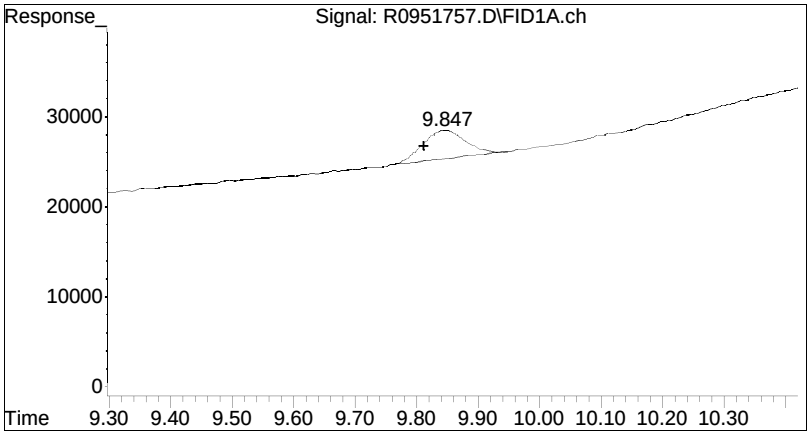
#5 propene

R.T.:	7.887 min
Delta R.T.:	0.023 min
Response:	135715
Conc:	1.07 ug/L M2



#6 propane

R.T.:	8.018 min
Delta R.T.:	0.005 min
Response:	187002
Conc:	1.25 ug/L M2



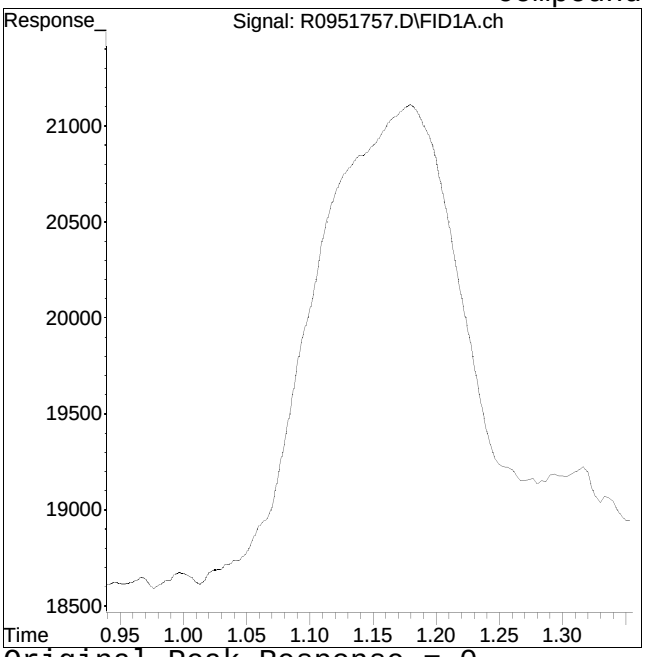
#7 butane

R.T.:	9.847 min
Delta R.T.:	0.033 min
Response:	151393
Conc:	1.04 ug/L M4

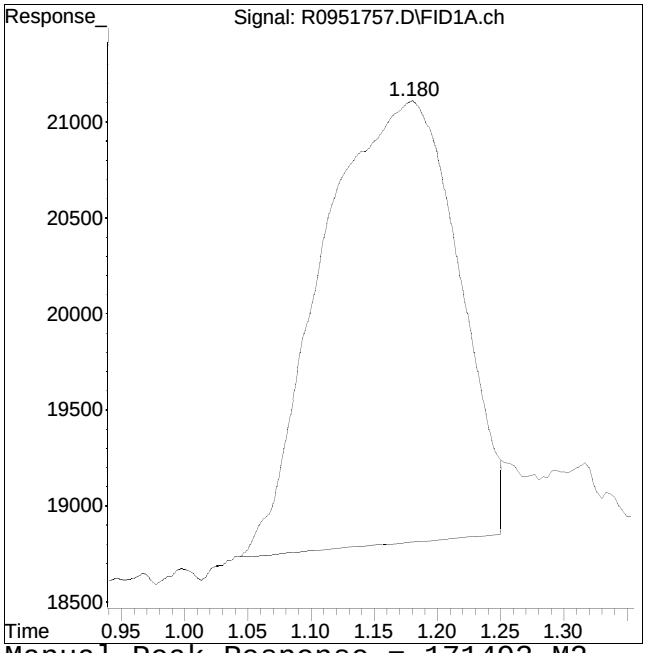
Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0951757.D Operator : AIRLAB9:SRO
Date Inj'd : 12/18/2023 3:26 pm Instrument : Airlab 9
Sample : WG1865332-3,4,0.5,0.5 Quant Date : 12/19/2023 10:04 am

Compound #1: methane



Original Peak Response = 0



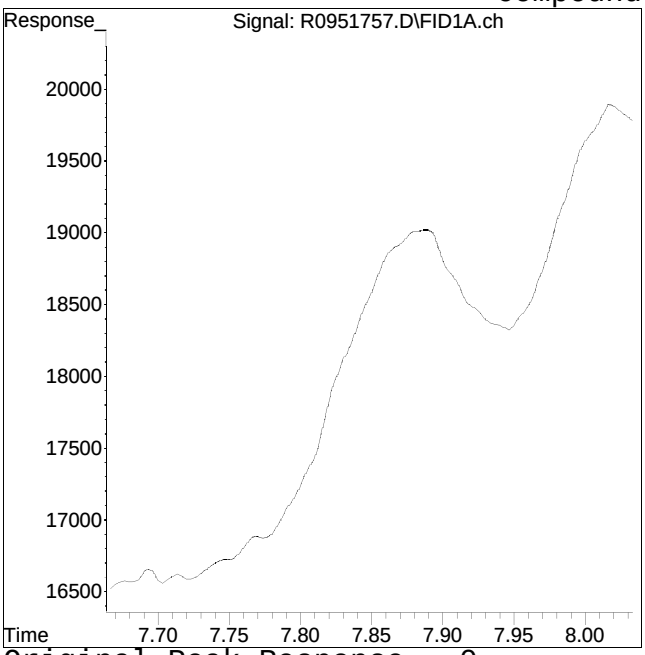
Manual Peak Response = 171493 M2

M2 = Peak not found by automatic integration algorithm.

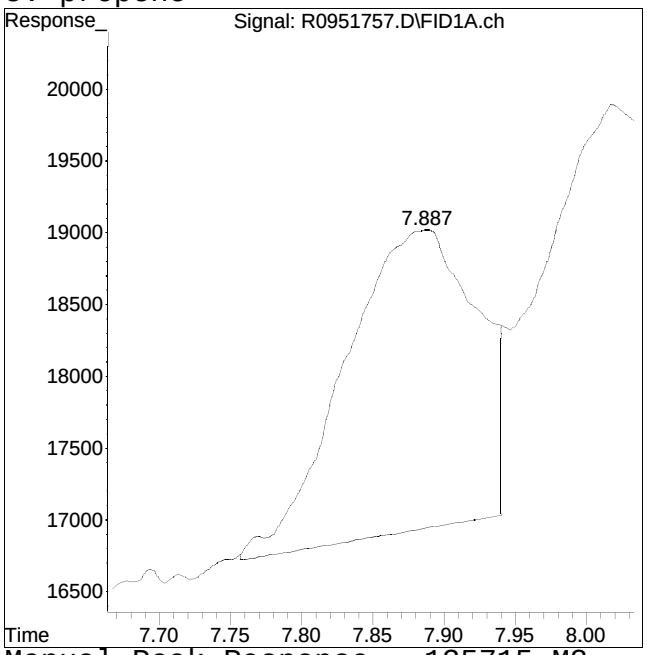
Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0951757.D Operator : AIRLAB9:SRO
Date Inj'd : 12/18/2023 3:26 pm Instrument : Airlab 9
Sample : WG1865332-3,4,0.5,0.5 Quant Date : 12/19/2023 10:04 am

Compound #5: propene



Original Peak Response = 0



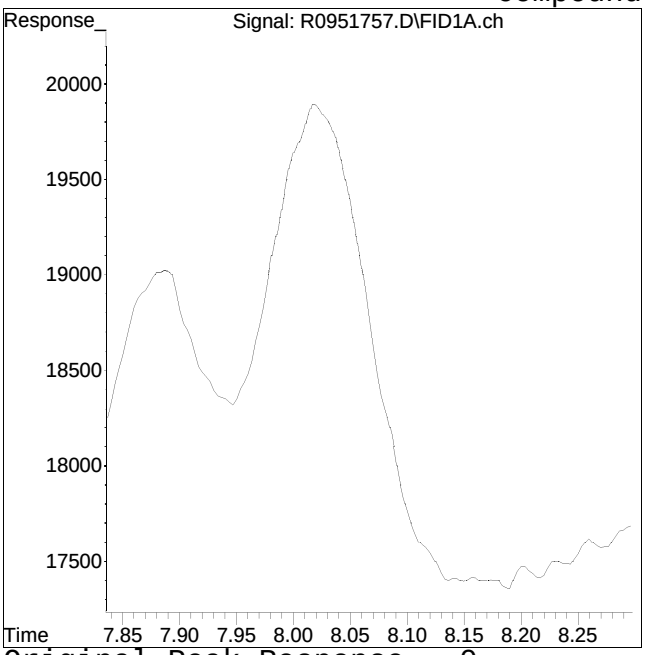
Manual Peak Response = 135715 M2

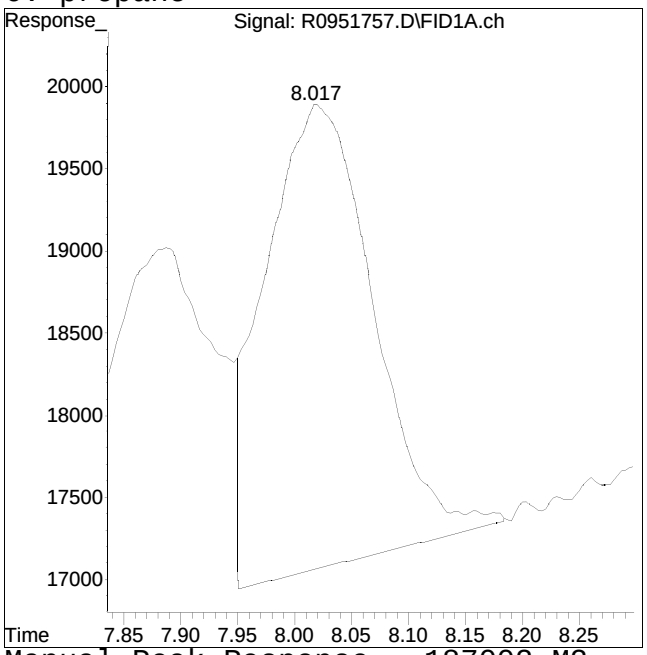
M2 = Peak not found by automatic integration algorithm.

Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0951757.D Operator : AIRLAB9:SRO
Date Inj'd : 12/18/2023 3:26 pm Instrument : Airlab 9
Sample : WG1865332-3,4,0.5,0.5 Quant Date : 12/19/2023 10:04 am

Compound #6: propane



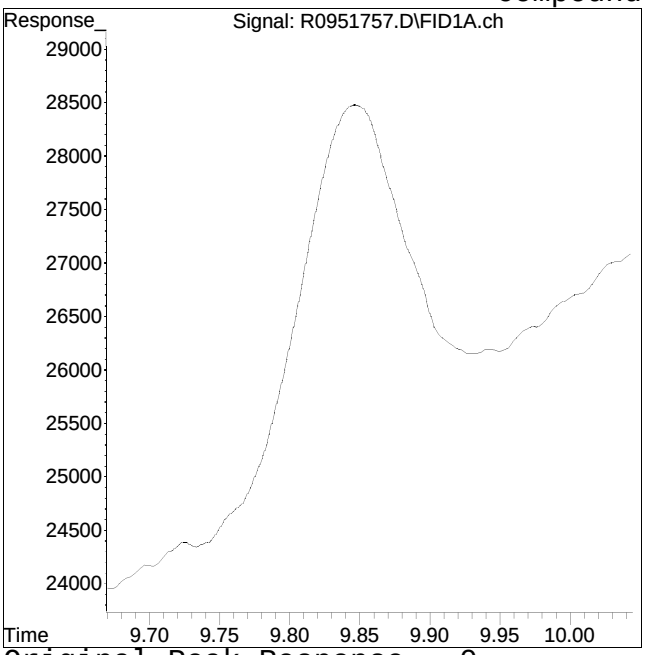


Original Peak Response = 0 Manual Peak Response = 187002 M2
M2 = Peak not found by automatic integration algorithm.

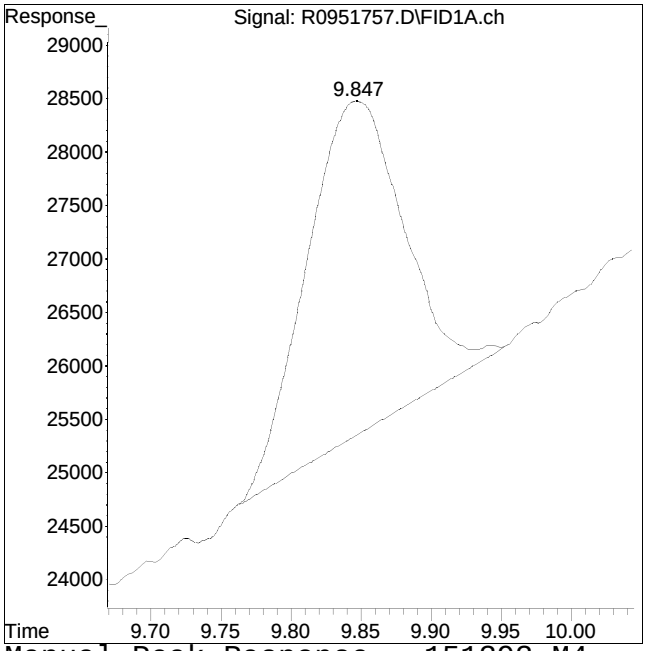
Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0951757.D Operator : AIRLAB9:SRO
Date Inj'd : 12/18/2023 3:26 pm Instrument : Airlab 9
Sample : WG1865332-3,4,0.5,0.5 Quant Date : 12/19/2023 10:04 am

Compound #7: butane



Original Peak Response = 0



Manual Peak Response = 151393 M4

M4 = Poor automated baseline construction.

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\airlab9\2023\12\1218DG_PM\
Data File : R0951756.D
Signal(s) : FID1A.ch
Acq On : 18 Dec 2023 3:02 pm
Operator : AIRLAB9:SRO
Sample : WG1865332-2,4,0.5,0.5
Misc : WG1865332,ICAL16772
ALS Vial : 16 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 19 11:16:18 2023
Quant Method : O:\Forensics\Data\airlab9\2023\12\1218DG_PM\DG9_200511.M
Quant Title : Dissolved Gases
QLast Update : Tue May 12 07:13:18 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Min. RRF : 0.000 Min. Rel. Area : 80% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 120%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1	methane	54.600	53.954	1.2	97	0.00
2	ethene	95.500	86.222	9.7	98	0.11
3	acetylene	88.700	71.097	19.8	83	0.11
4	ethane	102.000	91.602	10.2	98	0.09
5	propene	143.000	121.778	14.8	98	0.06
6	propane	150.000	133.280	11.1	101	0.05
7	butane	198.000	154.874	21.8#	92	0.04

Evaluate Continuing Calibration Report - Not Founds

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\airlab9\2023\12\1218DG_PM\
Data File : R0951756.D
Signal(s) : FID1A.ch
Acq On : 18 Dec 2023 3:02 pm
Operator : AIRLAB9:SRO
Sample : WG1865332-2,4,0.5,0.5
Misc : WG1865332,ICAL16772
ALS Vial : 16 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 19 11:16:18 2023
Quant Method : O:\Forensics\Data\airlab9\2023\12\1218DG_PM\DG9_200511.M
Quant Title : Dissolved Gases
QLast Update : Tue May 12 07:13:18 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Sub List : Default - All compounds listed

	Compound	R.T.	Response	Conc	Units	
Target Compounds						
1)	methane	1.180	7550256	53.954	ug/L	M4
2)	ethene	4.252	12291470	86.222	ug/L	M4
3)	acetylene	4.976	2113782	71.097	ug/L	M2
4)	ethane	5.119	14419175	91.602	ug/L	M6
5)	propene	7.923	15447371	121.778	ug/L	
6)	propane	8.066	19874882	133.280	ug/L	
7)	butane	9.858	22509533	154.874	ug/L	

(f)=RT Delta > 1/2 Window (m)=manual int.

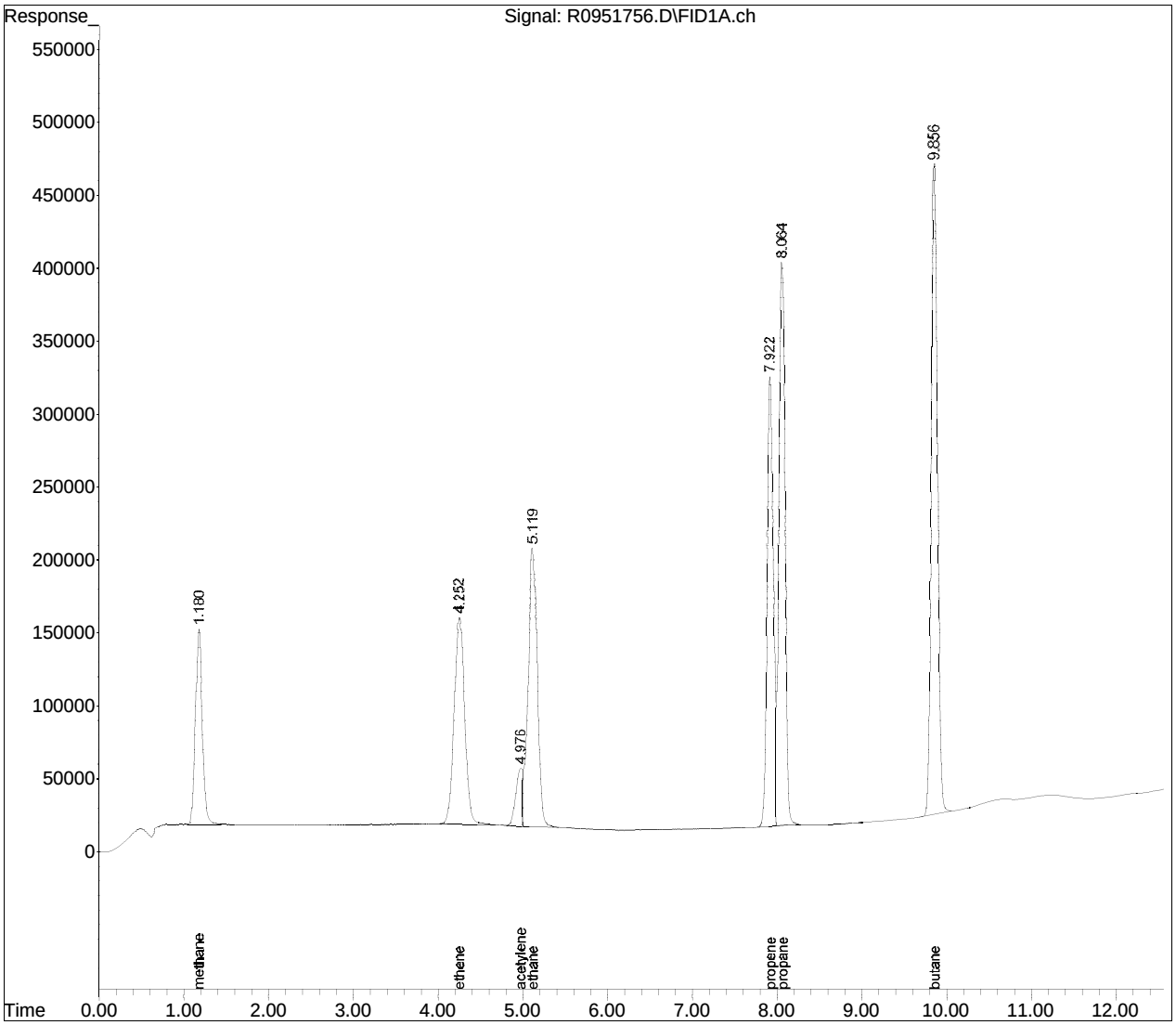
Quantitation Report (QT Reviewed)

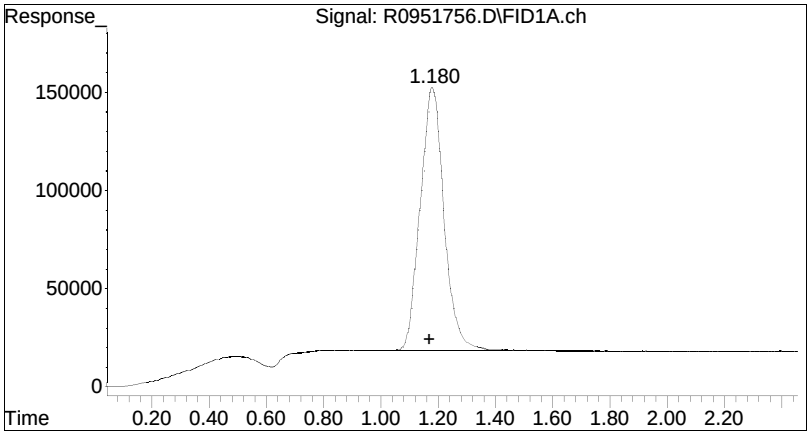
Data Path : O:\Forensics\Data\airlab9\2023\12\1218DG_PM\
Data File : R0951756.D
Signal(s) : FID1A.ch
Acq On : 18 Dec 2023 3:02 pm
Operator : AIRLAB9:SRO
Sample : WG1865332-2,4,0.5,0.5
Misc : WG1865332,ICAL16772
ALS Vial : 16 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 19 11:16:18 2023
Quant Method : O:\Forensics\Data\airlab9\2023\12\1218DG_PM\DG9_200511.M
Quant Title : Dissolved Gases
QLast Update : Tue May 12 07:13:18 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

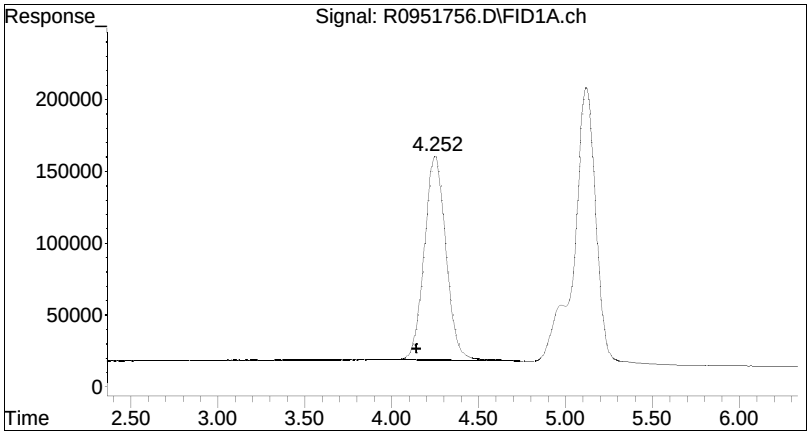
Sub List : Default - All compounds listed





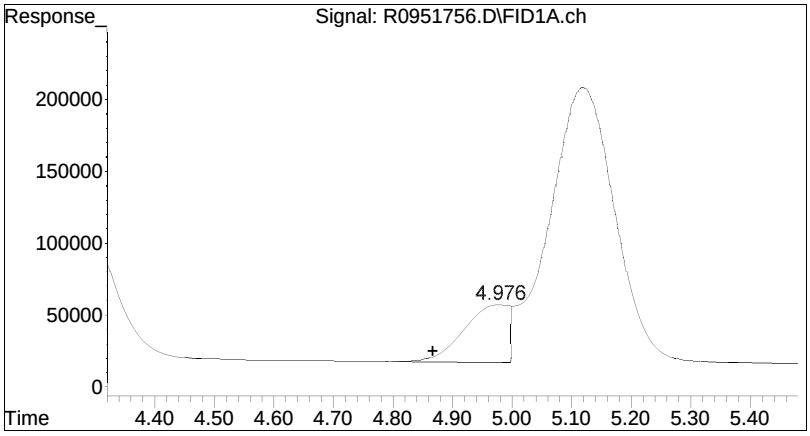
#1 methane

R.T.:	1.180 min
Delta R.T.:	0.010 min
Response:	7550256
Conc:	53.95 ug/L M4



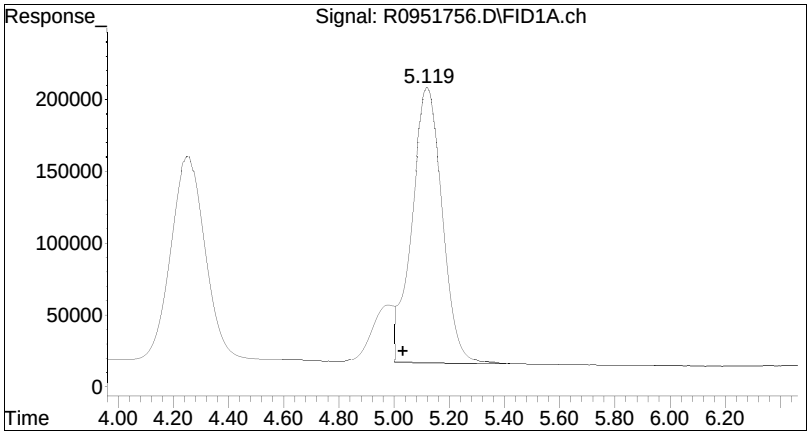
#2 ethene

R.T.:	4.252 min
Delta R.T.:	0.105 min
Response:	12291470
Conc:	86.22 ug/L M4



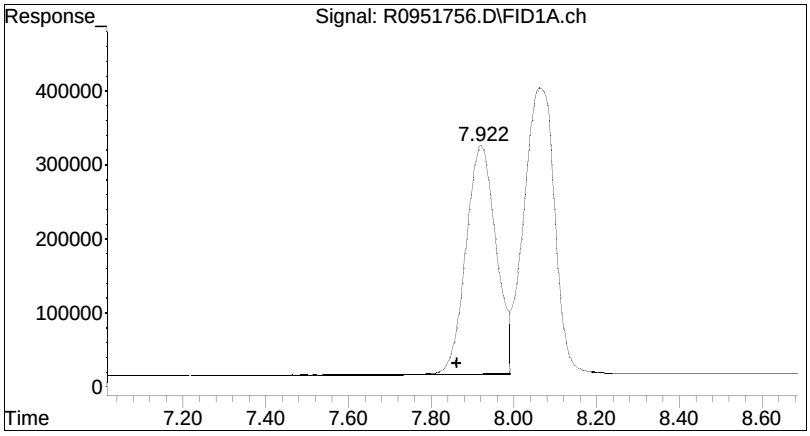
#3 acetylene

R.T.:	4.976 min
Delta R.T.:	0.109 min
Response:	2113782
Conc:	71.10 ug/L M2



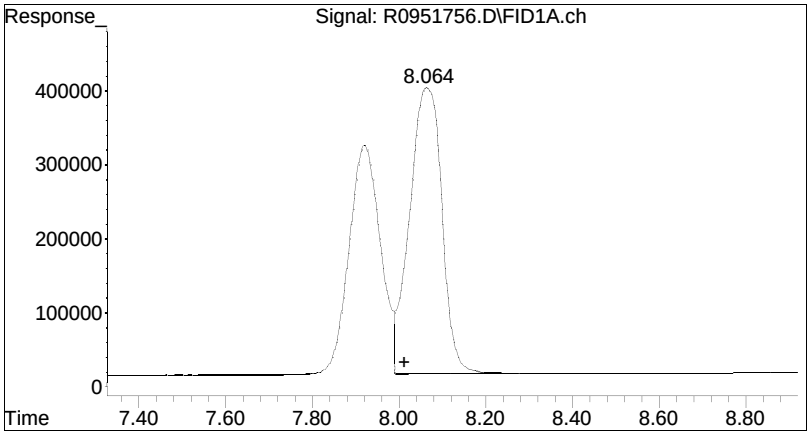
#4 ethane

R.T.:	5.119 min
Delta R.T.:	0.088 min
Response:	14419175
Conc:	91.60 ug/L M6



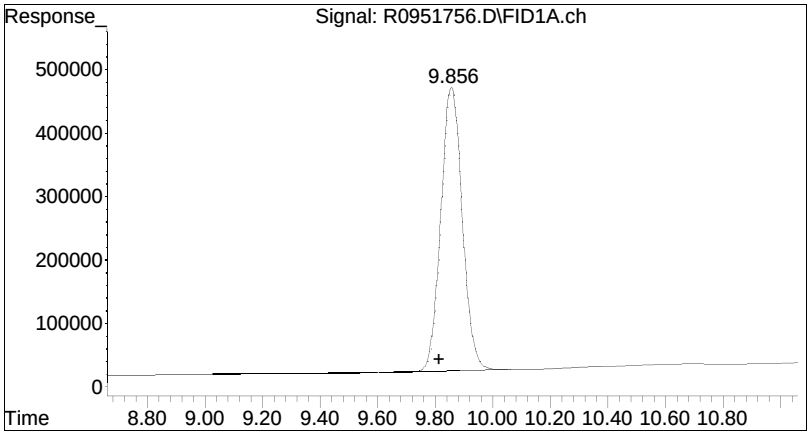
#5 propene

R.T.: 7.923 min
Delta R.T.: 0.059 min
Response: 15447371
Conc: 121.78 ug/L



#6 propane

R.T.: 8.066 min
Delta R.T.: 0.053 min
Response: 19874882
Conc: 133.28 ug/L



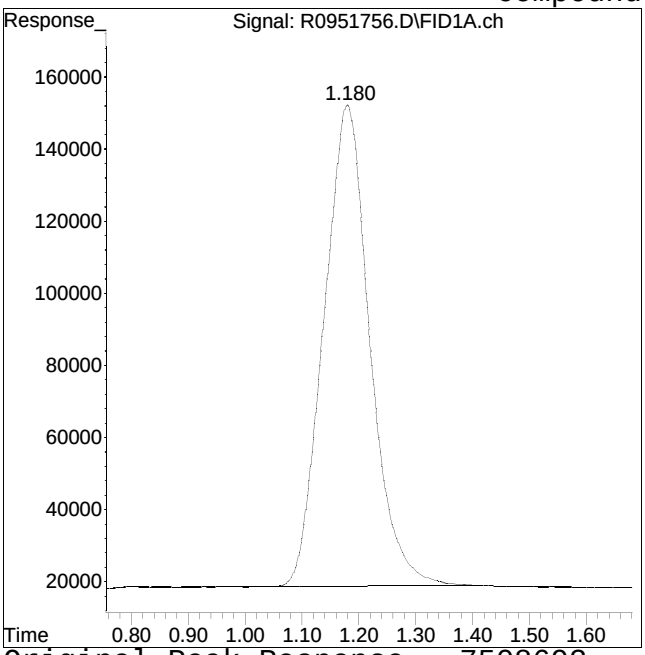
#7 butane

R.T.: 9.858 min
Delta R.T.: 0.045 min
Response: 22509533
Conc: 154.87 ug/L

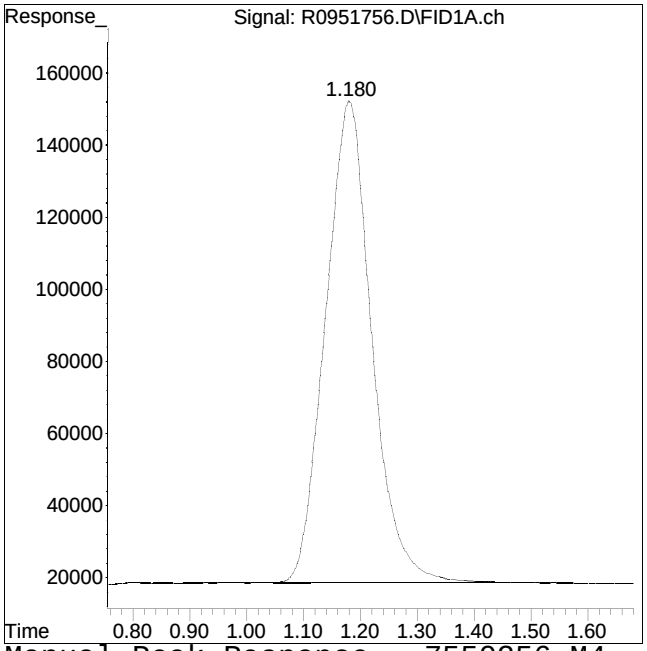
Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0951756.D Operator : AIRLAB9:SRO
Date Inj'd : 12/18/2023 3:02 pm Instrument : Airlab 9
Sample : WG1865332-2,4,0.5,0.5 Quant Date : 12/19/2023 11:16 am

Compound #1: methane



Original Peak Response = 7508693



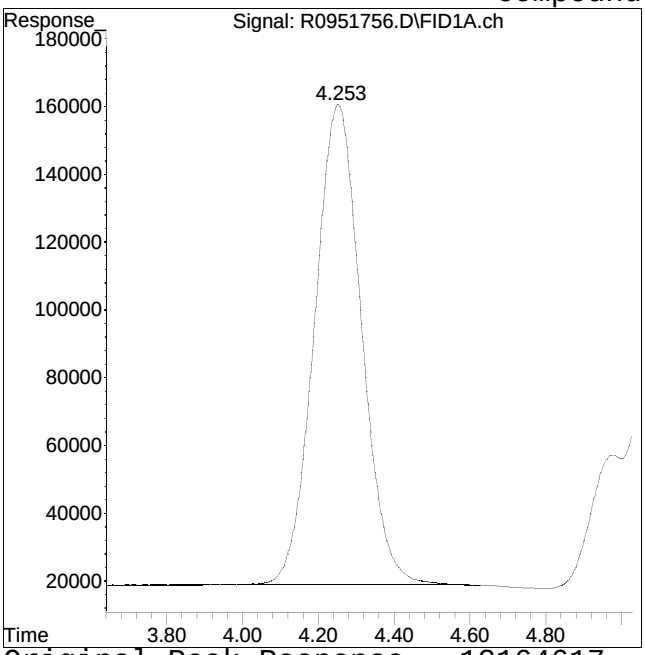
Manual Peak Response = 7550256 M4

M4 = Poor automated baseline construction.

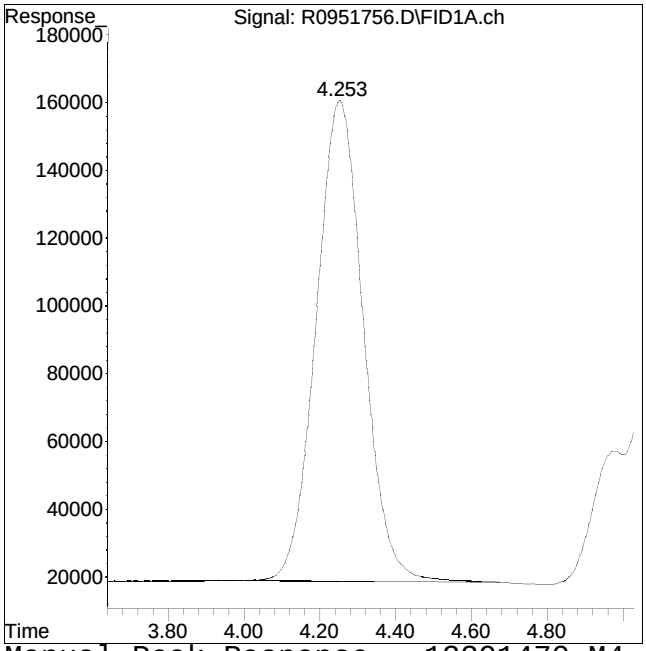
Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0951756.D Operator : AIRLAB9:SRO
Date Inj'd : 12/18/2023 3:02 pm Instrument : Airlab 9
Sample : WG1865332-2,4,0.5,0.5 Quant Date : 12/19/2023 11:16 am

Compound #2: ethene



Original Peak Response = 12164617



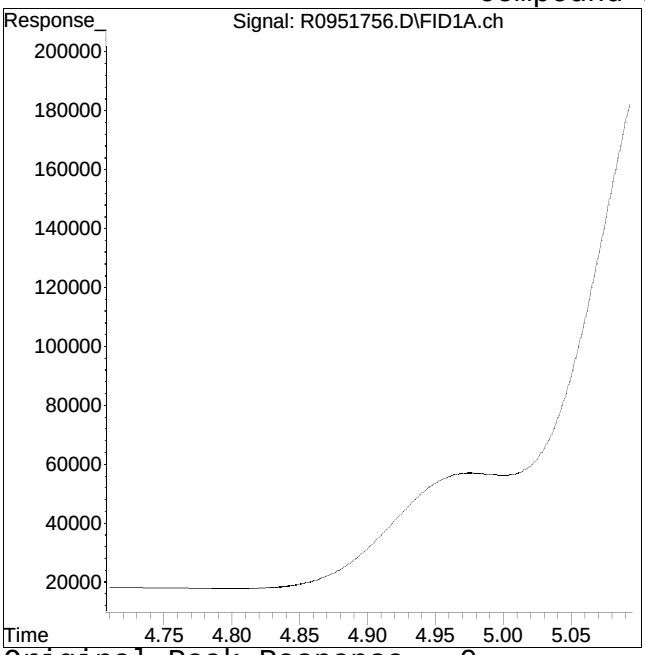
Manual Peak Response = 12291470 M4

M4 = Poor automated baseline construction.

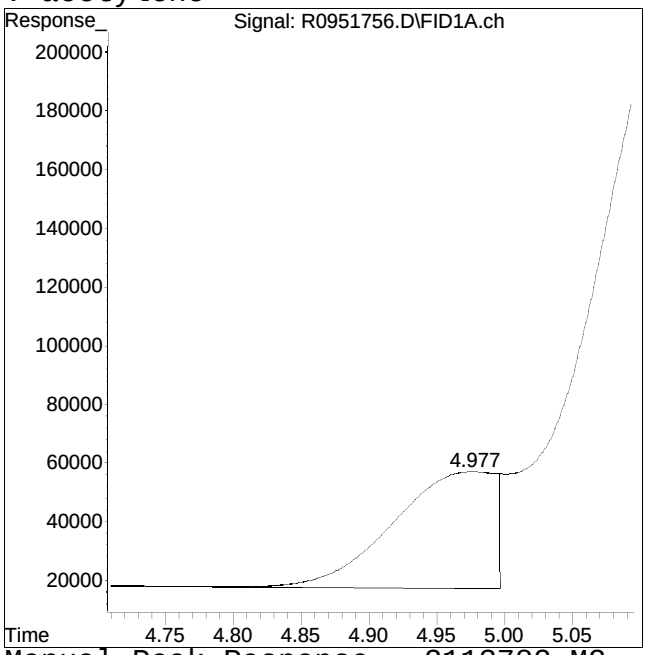
Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0951756.D Operator : AIRLAB9:SRO
Date Inj'd : 12/18/2023 3:02 pm Instrument : Airlab 9
Sample : WG1865332-2,4,0.5,0.5 Quant Date : 12/19/2023 11:16 am

Compound #3: acetylene



Original Peak Response = 0



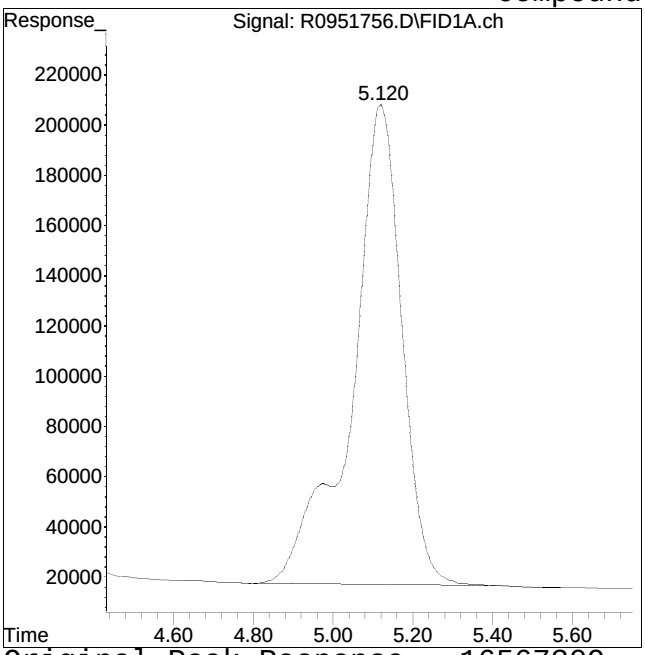
Manual Peak Response = 2113782 M2

M2 = Peak not found by automatic integration algorithm.

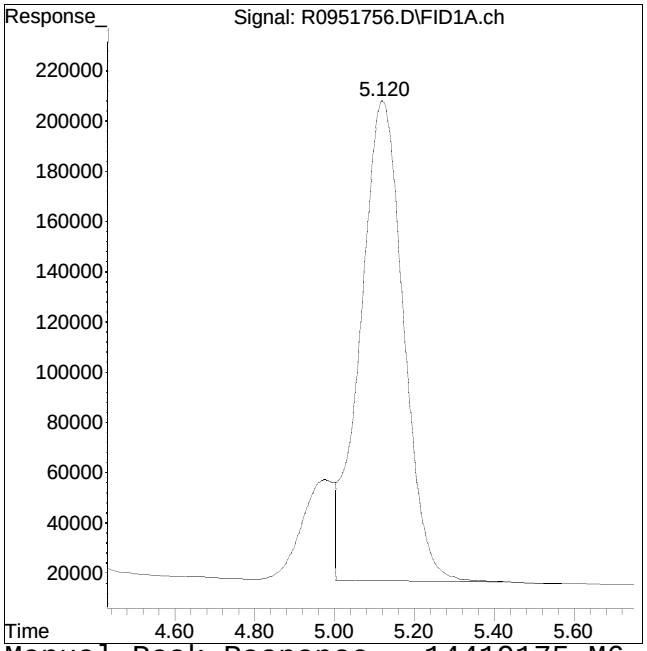
Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0951756.D Operator : AIRLAB9:SRO
Date Inj'd : 12/18/2023 3:02 pm Instrument : Airlab 9
Sample : WG1865332-2,4,0.5,0.5 Quant Date : 12/19/2023 11:16 am

Compound #4: ethane



Original Peak Response = 16567309



Manual Peak Response = 14419175 M6

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\airlab9\2023\12\1218DG_PM\
Data File : R0951768.D
Signal(s) : FID1A.ch
Acq On : 18 Dec 2023 6:53 pm
Operator : AIRLAB9:SRO
Sample : WG1865332-4,4,0.5,0.5
Misc : WG1865332,ICAL16772
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 19 10:04:56 2023
Quant Method : O:\Forensics\Data\airlab9\2023\12\1218DG_PM\DG9_200511.M
Quant Title : Dissolved Gases
QLast Update : Tue May 12 07:13:18 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Sub List : MEE - All compounds listed

	Compound	R.T.	Response	Conc	Units	
Target Compounds						
1)	methane	1.172	817542716	5842.182	ug/L	M4
2)	ethene	4.256	280010566	1964.204	ug/L	M4
4)	ethane	5.127	15871982	100.832	ug/L	M6

(f)=RT Delta > 1/2 Window (m)=manual int.

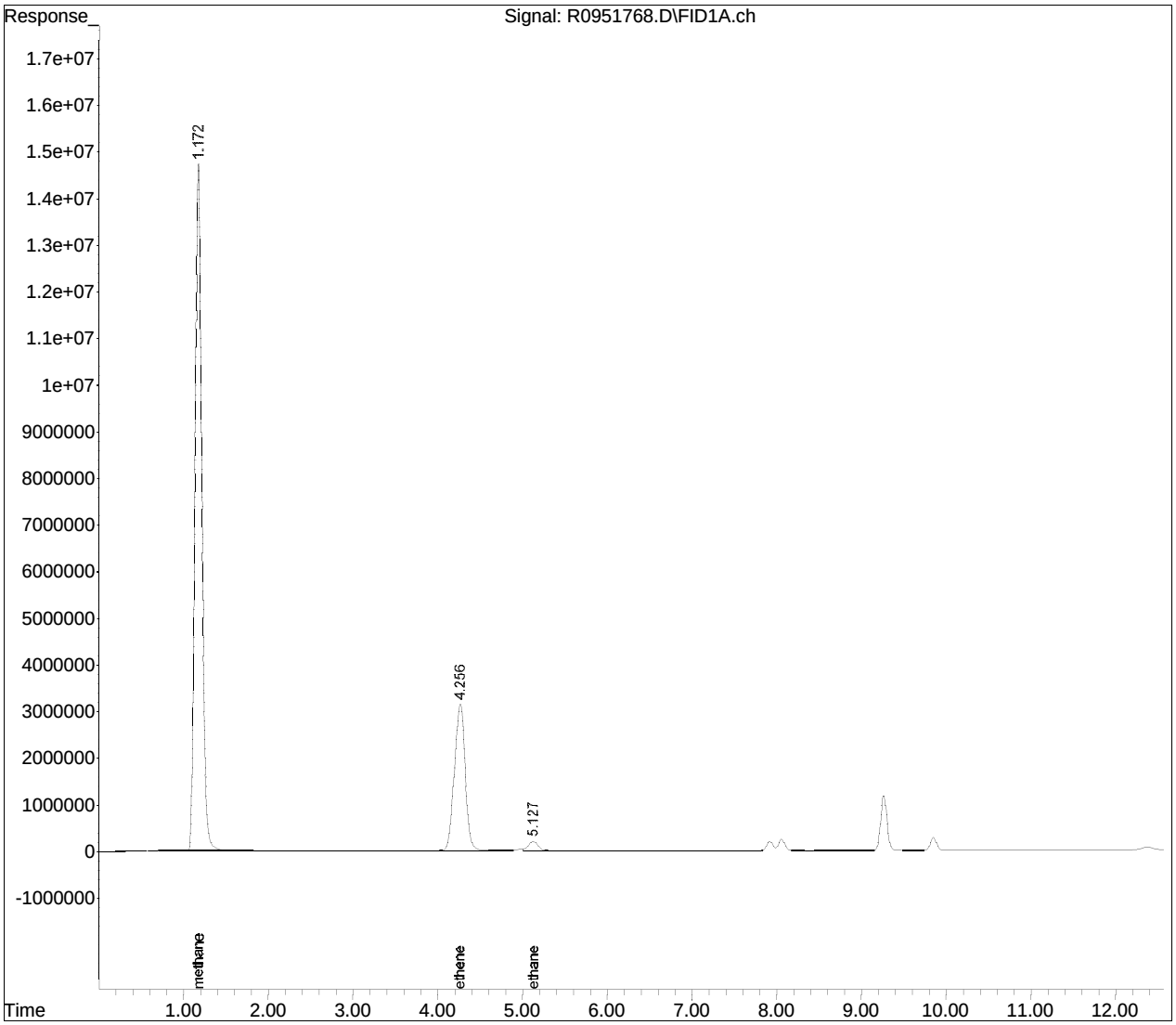
Quantitation Report (QT Reviewed)

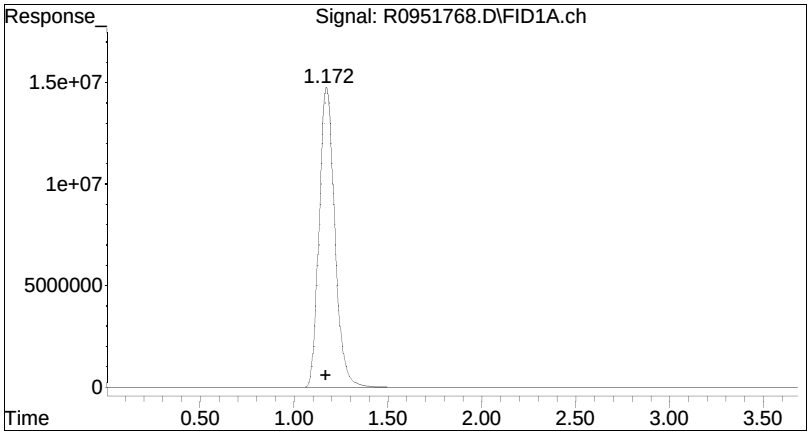
Data Path : O:\Forensics\Data\airlab9\2023\12\1218DG_PM\
Data File : R0951768.D
Signal(s) : FID1A.ch
Acq On : 18 Dec 2023 6:53 pm
Operator : AIRLAB9:SRO
Sample : WG1865332-4,4,0.5,0.5
Misc : WG1865332,ICAL16772
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 19 10:04:56 2023
Quant Method : O:\Forensics\Data\airlab9\2023\12\1218DG_PM\DG9_200511.M
Quant Title : Dissolved Gases
QLast Update : Tue May 12 07:13:18 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

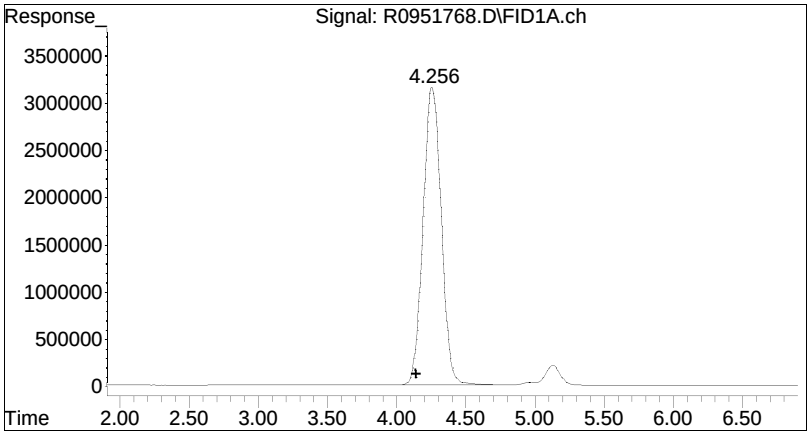
Sub List : MEE - All compounds listed





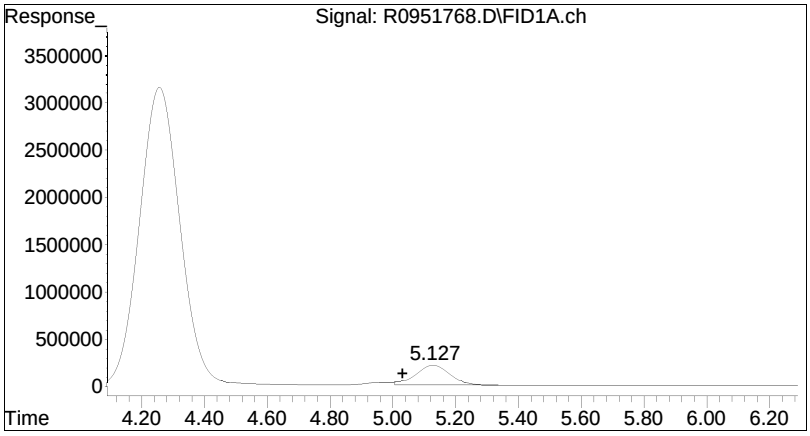
#1 methane

R.T.: 1.172 min
Delta R.T.: 0.002 min
Response: 817542716
Conc: 5842.18 ug/L M4



#2 ethene

R.T.: 4.256 min
Delta R.T.: 0.109 min
Response: 280010566
Conc: 1964.20 ug/L M4



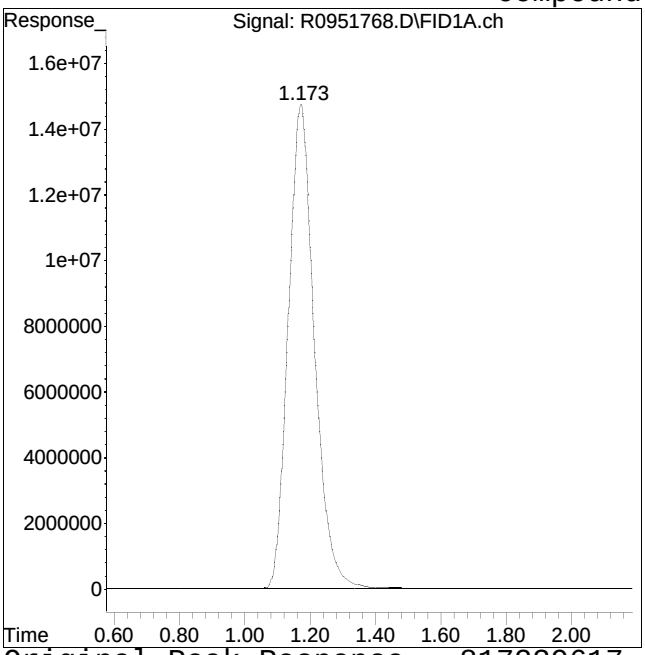
#4 ethane

R.T.: 5.127 min
Delta R.T.: 0.096 min
Response: 15871982
Conc: 100.83 ug/L M6

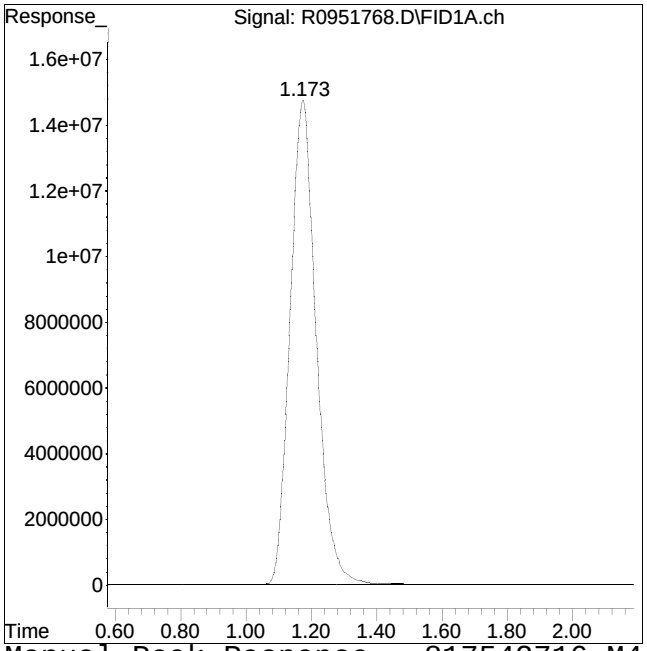
Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0951768.D Operator : AIRLAB9:SRO
Date Inj'd : 12/18/2023 6:53 pm Instrument : Airlab 9
Sample : WG1865332-4,4,0.5,0.5 Quant Date : 12/19/2023 10:04 am

Compound #1: methane



Original Peak Response = 817239617



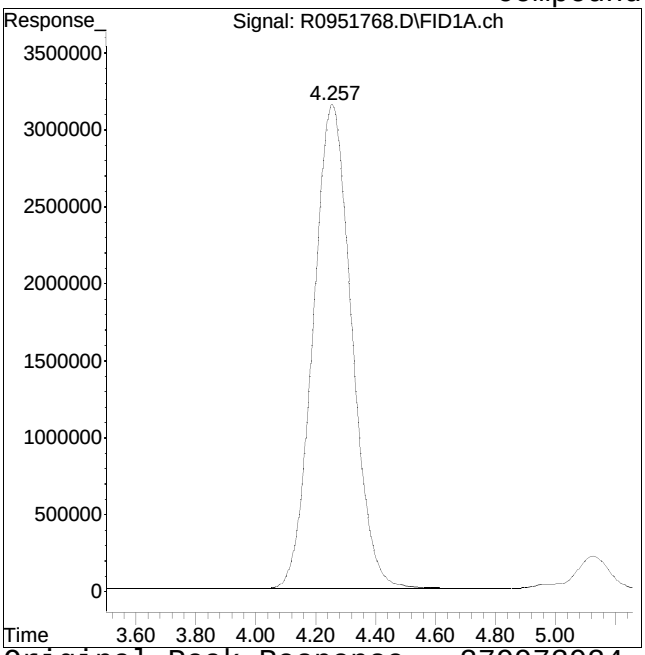
Manual Peak Response = 817542716 M4

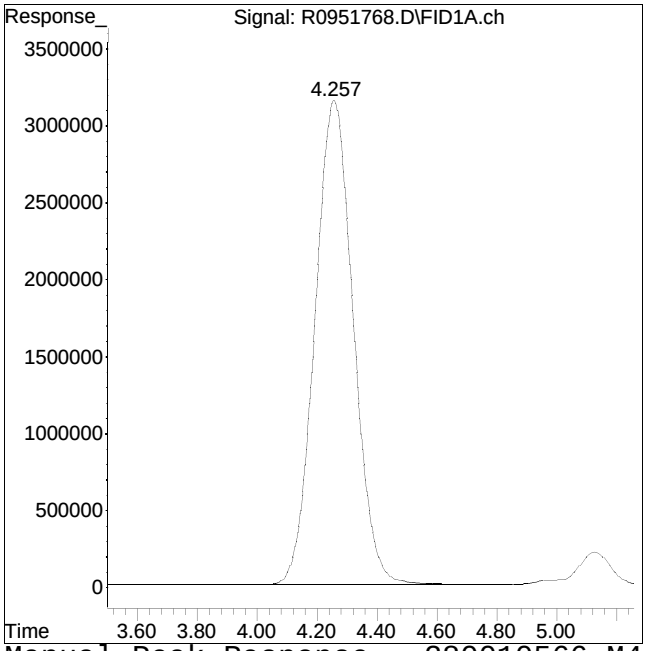
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0951768.D Operator : AIRLAB9:SRO
Date Inj'd : 12/18/2023 6:53 pm Instrument : Airlab 9
Sample : WG1865332-4,4,0.5,0.5 Quant Date : 12/19/2023 10:04 am

Compound #2: ethene



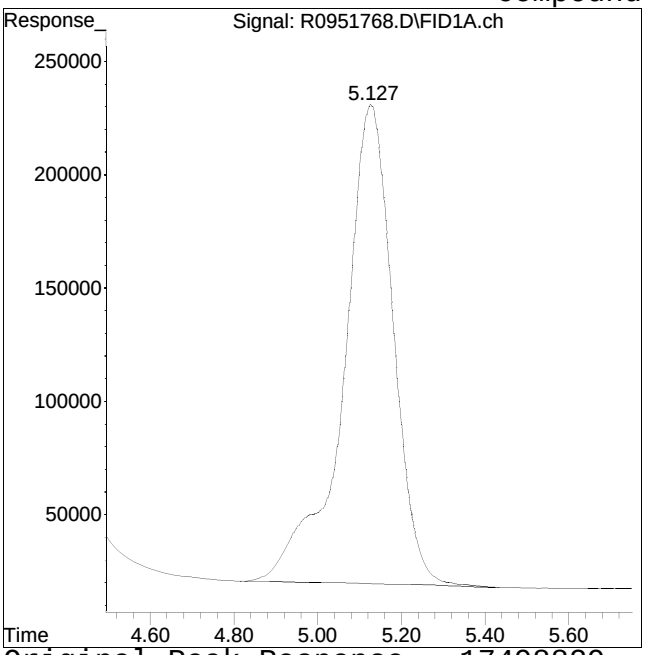


Original Peak Response = 279973924 Manual Peak Response = 280010566 M4
M4 = Poor automated baseline construction.

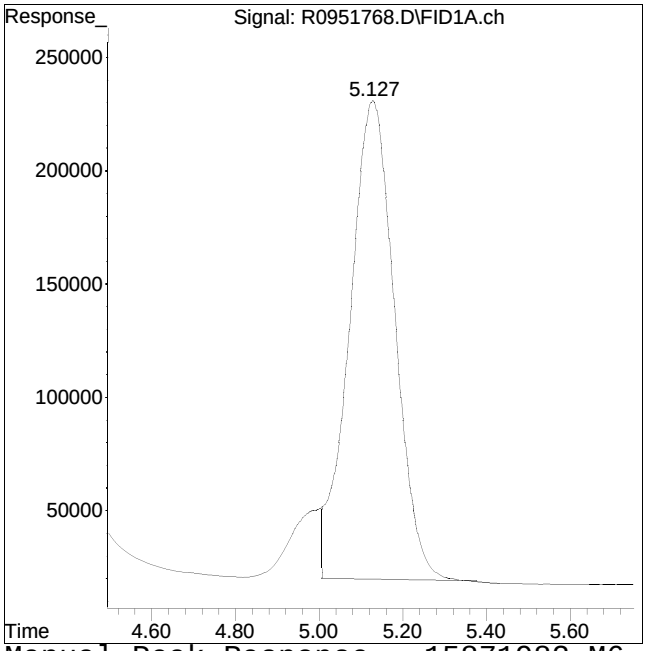
Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0951768.D Operator : AIRLAB9:SRO
Date Inj'd : 12/18/2023 6:53 pm Instrument : Airlab 9
Sample : WG1865332-4,4,0.5,0.5 Quant Date : 12/19/2023 10:04 am

Compound #4: ethane



Original Peak Response = 17498829



Manual Peak Response = 15871982 M6

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\airlab9\2023\12\1218DG_PM\
Data File : R0951769.D
Signal(s) : FID1A.ch
Acq On : 18 Dec 2023 7:14 pm
Operator : AIRLAB9:SRO
Sample : WG1865332-5,4,0.5,0.5
Misc : WG1865332,ICAL16772
ALS Vial : 12 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 19 10:04:58 2023
Quant Method : O:\Forensics\Data\airlab9\2023\12\1218DG_PM\DG9_200511.M
Quant Title : Dissolved Gases
QLast Update : Tue May 12 07:13:18 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

Sub List : MEE - All compounds listed

	Compound	R.T.	Response	Conc	Units	
Target Compounds						
1)	methane	1.172	807610178	5771.204	ug/L	M4
2)	ethene	4.255	279767711	1962.501	ug/L	M4
4)	ethane	5.126	15737148	99.975	ug/L	M6

(f)=RT Delta > 1/2 Window (m)=manual int.

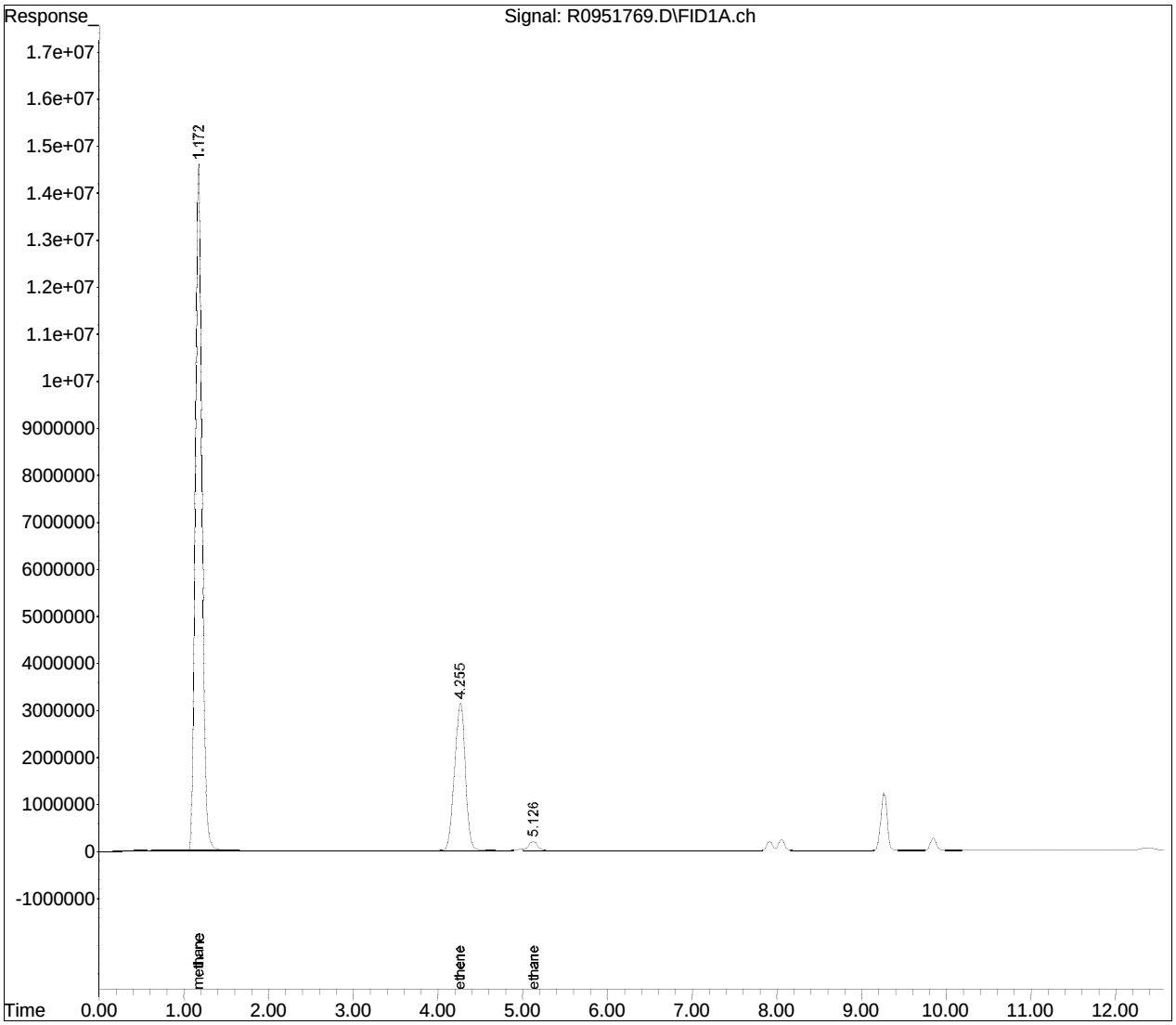
Quantitation Report (QT Reviewed)

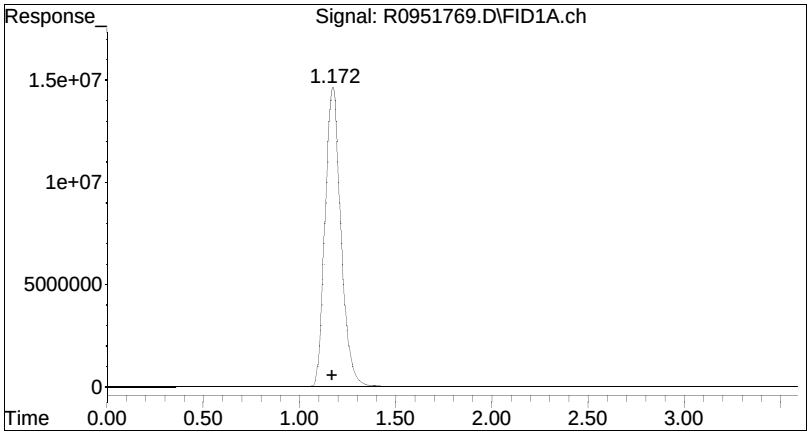
Data Path : O:\Forensics\Data\airlab9\2023\12\1218DG_PM\
Data File : R0951769.D
Signal(s) : FID1A.ch
Acq On : 18 Dec 2023 7:14 pm
Operator : AIRLAB9:SRO
Sample : WG1865332-5,4,0.5,0.5
Misc : WG1865332,ICAL16772
ALS Vial : 12 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 19 10:04:58 2023
Quant Method : O:\Forensics\Data\airlab9\2023\12\1218DG_PM\DG9_200511.M
Quant Title : Dissolved Gases
QLast Update : Tue May 12 07:13:18 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal Phase :
Signal Info :

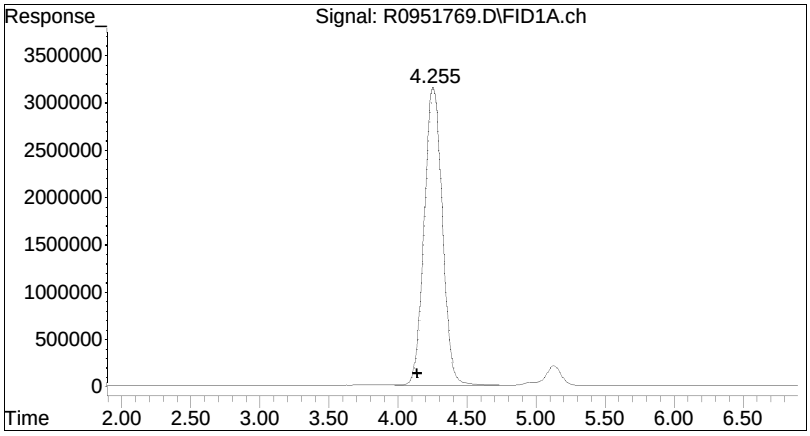
Sub List : MEE - All compounds listed





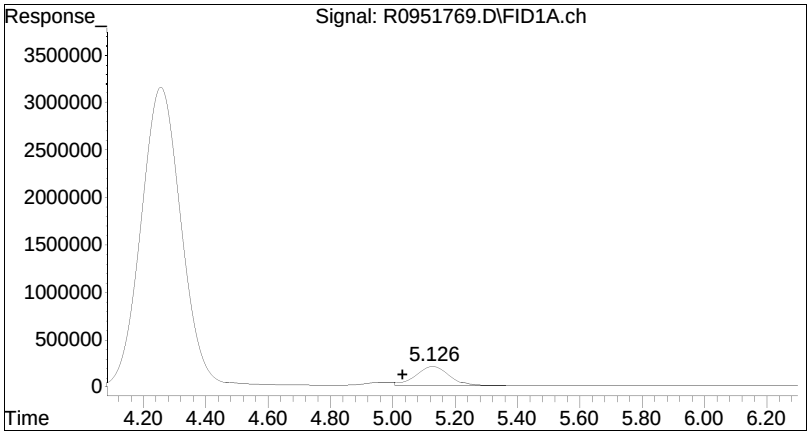
#1 methane

R.T.: 1.172 min
Delta R.T.: 0.002 min
Response: 807610178
Conc: 5771.20 ug/L M4



#2 ethene

R.T.: 4.255 min
Delta R.T.: 0.108 min
Response: 279767711
Conc: 1962.50 ug/L M4



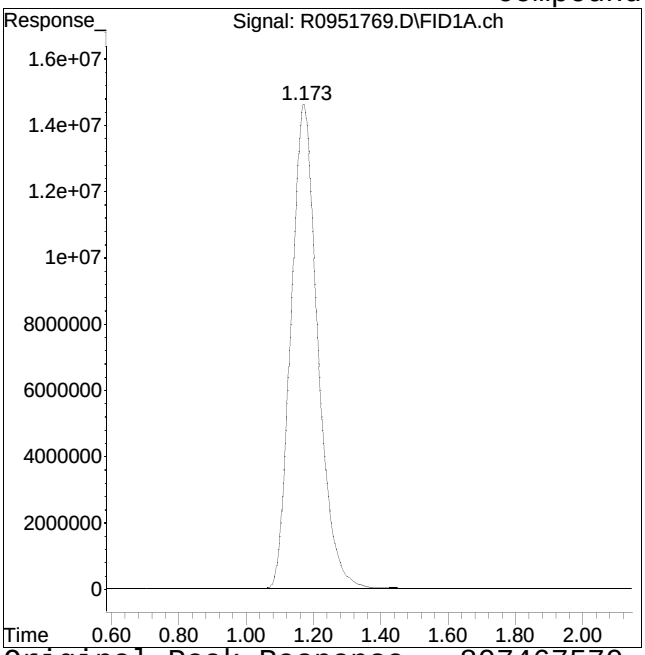
#4 ethane

R.T.:	5.126 min
Delta R.T.:	0.095 min
Response:	15737148
Conc:	99.98 ug/L M6

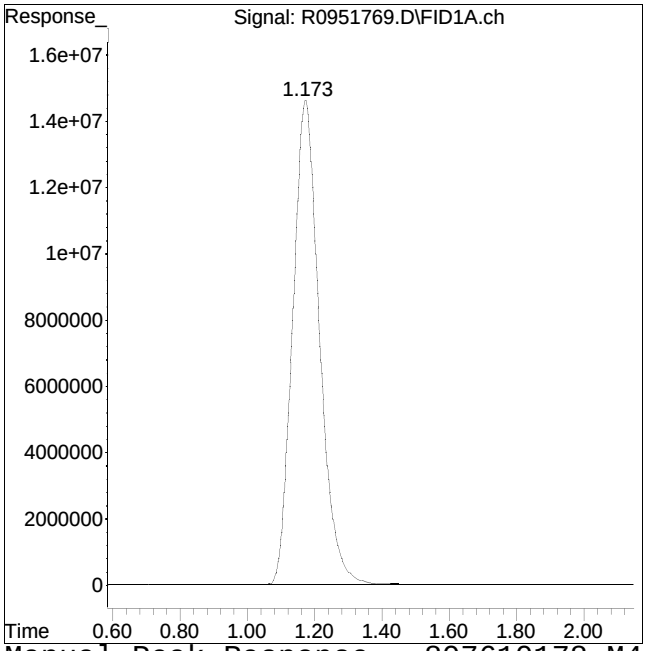
Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0951769.D Operator : AIRLAB9:SRO
Date Inj'd : 12/18/2023 7:14 pm Instrument : Airlab 9
Sample : WG1865332-5,4,0.5,0.5 Quant Date : 12/19/2023 10:04 am

Compound #1: methane



Original Peak Response = 807467570



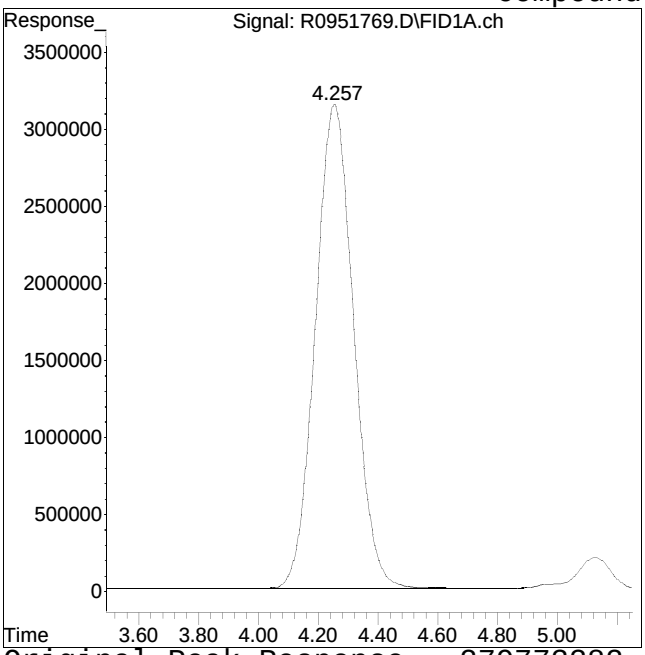
Manual Peak Response = 807610178 M4

M4 = Poor automated baseline construction.

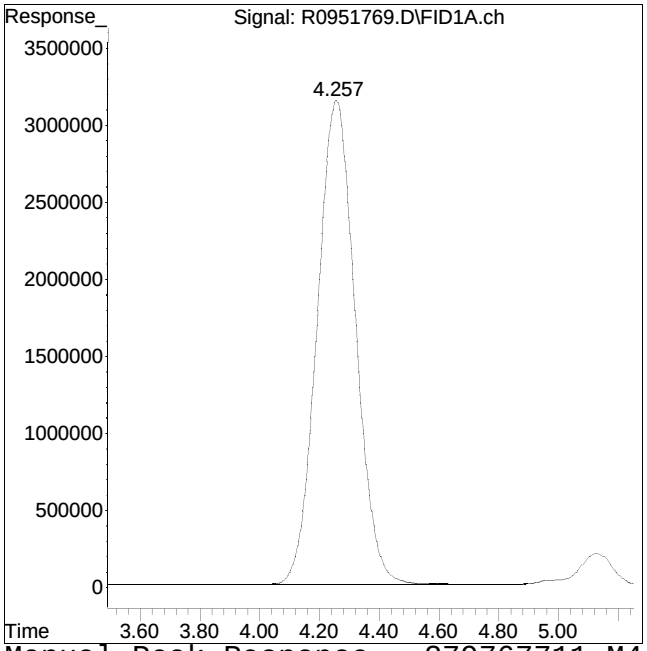
Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0951769.D Operator : AIRLAB9:SRO
Date Inj'd : 12/18/2023 7:14 pm Instrument : Airlab 9
Sample : WG1865332-5,4,0.5,0.5 Quant Date : 12/19/2023 10:04 am

Compound #2: ethene



Original Peak Response = 279773382



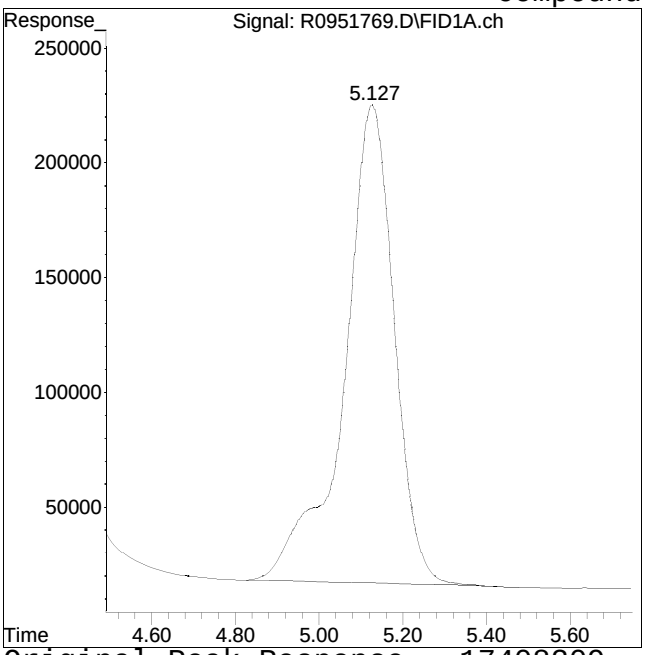
Manual Peak Response = 279767711 M4

M4 = Poor automated baseline construction.

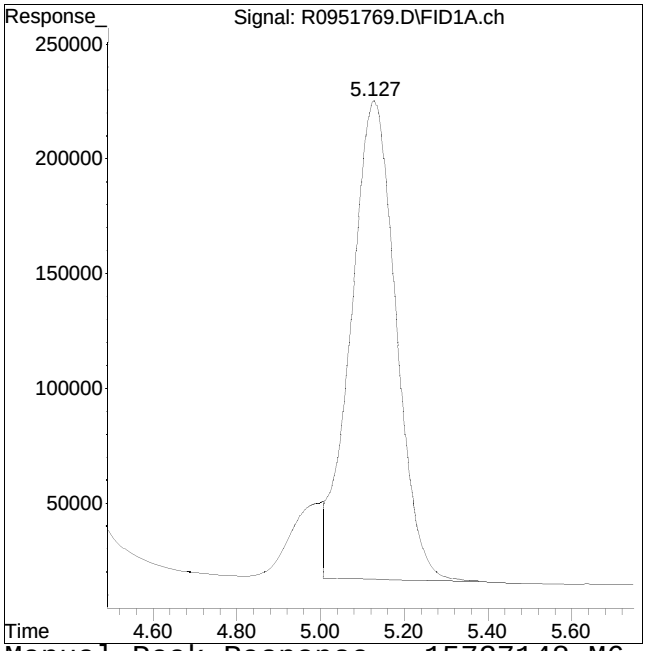
Manual Integration Report

Data Path : O:\Forensics\Data\airlab9\QMethod : DG9_200511.M
Data File : R0951769.D Operator : AIRLAB9:SRO
Date Inj'd : 12/18/2023 7:14 pm Instrument : Airlab 9
Sample : WG1865332-5,4,0.5,0.5 Quant Date : 12/19/2023 10:04 am

Compound #4: ethane



Original Peak Response = 17408209



Manual Peak Response = 15737148 M6

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

Calculation of Volatile Organic Compounds in Air

The instrument will calculate the concentration (ppbv). If the sample is diluted (DF), the result is multiplied by the DF to generate the final result.

Result, ppbv = C_s x DF
Where:
C_s = Concentration of sample (ppbv)
DF = Dilution Factor

Calculation of Instrument Dilution Factor

For dilutions, smaller sample volumes (< 250mL) are analyzed. The smallest volume that can be analyzed with accuracy is 10 mL.

Samples that arrive at the laboratory with pressures below -15 inches Hg must be pressurized with zero air to greater than -15 inches Hg. This pressurization results in a dilution factor.

Calculation of Dilution Factor
$DF = V_{cf} / V_{ci}$
Where:
V_{ci} = volume of air in canister prior to pressurization, L
P =

Conversion of ppbv to ug/m^3
ug/m^3 = (ppbv) * MW / 24.47
Where:
24.47 = molar gas constant (g/g-mole)
MW = molecular weight of the compound of interest

Dilution Factor for Pressurization of Subatmospheric Samples: Three Steps

Step 1: Calculate the volume in the canister prior to pressurization (Assume a 2.7 liter canister is used).

Dilution Factor for Pressurization of Subatmospheric Samples: Three Steps

Step 1: Calculate the volume in the canister prior to pressurization (Assume a 2.7 liter canister is used).

$V_{ci} = 2.7 * Pl/14.696$

Step 2: Calculate the volume in the canister after pressurization.

$V_{cf} = 2.7 * PF/14.696$

Step 3: Calculate the dilution factor.

$DF = V_{cf} / V_{ci}$

Where:

V_{ci} = volume of air in canister prior to pressurization, L
PI = pressure reading of canister prior to pressurization (psia)
V_{cf} = volume of air in canister after pressurization, L
PF = pressure reading of canister after pressurization (psia)
DF = dilution factor
14.696 = atmospheric pressure (psia)

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Dec 19 2023, 01:36 pm

Work Group: WG1865332 for Department: 4 Gas Chromatography

Created: 18-DEC-23 Due: Operator: SRO

Sample	Client ID	C	Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L2372189-02	CP61157	S	DISSGAS	WATER	DONE	U	1220	1221	S0	Vial-B-20
L2372189-03	CP61158	S	DISSGAS	WATER	DONE	U	1220	1221	S0	Vial-B-20
L2372189-05	CP61160	S	DISSGAS	WATER	DONE	U	1220	1221	S0	Vial-B-20
L2373323-01	MW-8S	S	DISSGAS	WATER	DONE	U	1226	1219	S0	Vial-B-20
L2373323-03	MW-6S	S	DISSGAS	WATER	DONE	U	1226	1219	S0	Vial-B-20
L2373323-04	MW-6D	S	DISSGAS	WATER	DONE	U	1226	1219	S0	Vial-B-20
L2373323-05	MW-4S	S	DISSGAS	WATER	DONE	U	1226	1219	S0	Vial-B-20
L2373323-06	DUP12122023	S	DISSGAS	WATER	DONE	U	1226	1219	S0	Vial-B-20
L2373685-05	MWP1-32B-48.1-20231213	S	DISSGAS	WATER	DONE	U	1227	1220	S0	Vial-B-20
L2373685-06	MWP1-32C-57.9-20231213	S	DISSGAS	WATER	DONE	U	1227	1220	S0	Vial-B-20
L2373685-07	MWP1-32D-68.0-20231213	S	DISSGAS	WATER	DONE	U	1227	1220	S0	Vial-B-20
L2373685-08	MWP1-33-47.6-20231213	S	DISSGAS	WATER	DONE	U	1227	1220	S0	Vial-B-20
L2373727-01	RXMW-26	S	DISSGAS	WATER	DONE	U	1227	1220	S0	Vial-B-20
L2373727-02	RXMW-13	S	DISSGAS	WATER	DONE	U	1227	1220	S0	Vial-B-20
L2373727-03	GT-14R	S	DISSGAS	WATER	DONE	U	1227	1220	S0	Vial-B-20
L2373727-06	RXMW-11R	S	DISSGAS	WATER	DONE	U	1227	1220	S0	Vial-B-20
WG1865332-1	Continuing Calibrati	S	DISSGAS	WATER	DONE	U				
WG1865332-2	Laboratory Control S	S	DISSGAS	WATER	DONE	U				
WG1865332-3	Laboratory Method Bl	S	DISSGAS	WATER	DONE	U				
WG1865332-4	Matrix Spike	S	DISSGAS	WATER	DONE	U				
WG1865332-5	Matrix Spike Duplica	S	DISSGAS	WATER	DONE	U				
WG1865332-6	Continuing Calibrati	S	DISSGAS	WATER	DONE	U				
WG1865332-7	Continuing Calibrati	S	DISSGAS	WATER	DONE	U				

Comments:

WG1865332-4 L2373323-04
WG1865332-5 L2373323-04

Alpha Analytical Air Lab
Instrument Run Log

Instrument ID: Airlab9

Date: 05/11/2020_I

Analyst Initials: AW/AR

ICAL LOT #: CSS20-001

LCS LOT #: CSS19-009

EM Voltage: NA

pH LOT#: 10BDH5291

DISSGAS ICAL#: 16682

DISSGAS-CO2 ICAL#: 14290

Position #	Sample ID	Acquisition Method	Data File ID	Misc Info	Comment
1	BLANK	DISSGAS	R0932149	BLANK	
2	IDISSGASSTD01	DISSGAS	R0932150	5X OF STD02	
2	IDISSGASSTD02	DISSGAS	R0932151	350 uL of SS20-016B	
3	IDISSGASSTD03	DISSGAS	R0932152	2X OF STD04	
3	IDISSGASSTD04	DISSGAS	R0932153	125 uL of SS20-016A	
4	IDISSGASSTD05	DISSGAS	R0932154	5X OF STD07	
4	IDISSGASSTD06	DISSGAS	R0932155	2X OF STD07	
4	IDISSGASSTD07	DISSGAS	R0932156	5000 uL of SS20-016A	
5	IDISSGASSTD08	DISSGAS	R0932157	500 uL of CSS18-008	
6	BLANK	DISSGAS	R0932158	BLANK	
7	CDISSGASTD04	DISSGAS	R0932159	125 uL of CSS19-019	

Alpha Analytical Air Lab
Instrument Run Log

Alpha Analytical Air Lab
Instrument Run Log

Instrument ID: Airlab9 | CCAL LOT #: SS21-026A

Date: 12/18/2023 PM | LCS LOT #: CSS21-013

Analyst Initials: SRO | EM Voltage: NA

pH LOT#: 10BDH2631

DISSGAS ICAL#: 16772 | DISSGAS-CO2 ICAL#: 16789

AS Position #	Sample ID	Acquisition Method	Data File ID	Misc Info	Comment
16	ccal	DISSGAS	R0951756	WG1865332,ICAL16772	ccal
17	blank	DISSGAS	R0951757	WG1865332,ICAL16772	blank
1	L2373323-04,4,0.5,0.5	DISSGAS	R0951758	WG1865332,ICAL16772	ph greater than 2
2	L2373323-01,4,0.5,0.5	DISSGAS	R0951759	WG1865332,ICAL16772	ph greater than 2
3	L2373323-03,4,0.5,0.5	DISSGAS	R0951760	WG1865332,ICAL16772	ph greater than 2
4	L2373323-05,4,0.5,0.5	DISSGAS	R0951761	WG1865332,ICAL16772	ph greater than 2
5	L2373323-06,4,0.5,0.5	DISSGAS	R0951762	WG1865332,ICAL16772	ph greater than 2
6	L2373685-04,4,0.5,0.5	DISSGAS	R0951763	WG1865332,ICAL16772	rerun bad injection
7	L2373685-05,4,0.5,0.5	DISSGAS	R0951764	WG1865332,ICAL16772	ph<2
8	L2373685-06,4,0.5,0.5	DISSGAS	R0951765	WG1865332,ICAL16772	ph<2
9	L2373685-07,4,0.5,0.5	DISSGAS	R0951766	WG1865332,ICAL16772	ph<2
10	L2373685-08,4,0.5,0.5	DISSGAS	R0951767	WG1865332,ICAL16772	ph<2
11	L2373323-04MS,4,0.5,0.5	DISSGAS	R0951768	WG1865332,ICAL16772	ms
12	L2373323-04MSD,4,0.5,0.5	DISSGAS	R0951769	WG1865332,ICAL16772	msd
13	blank	DISSGAS	R0951770	WG1865332,ICAL16772	blank
14	blank	DISSGAS	R0951771	WG1865332,ICAL16772	blank
15	ccal	DISSGAS	R0951772	WG1865332,ICAL16772	ccal
16	L2372189-02,4,0.5,0.5	DISSGAS	R0951773	WG1865332,ICAL16772	ph<2
17	L2372189-03,4,0.5,0.5	DISSGAS	R0951774	WG1865332,ICAL16772	ph<2
18	L2372189-04,4,0.5,0.5	DISSGAS	R0951775	WG1865332,ICAL16772	rerun bad injection
19	L2372189-05,4,0.5,0.5	DISSGAS	R0951776	WG1865332,ICAL16772	ph greater than 2
20	L2373727-01,4,0.5,0.5	DISSGAS	R0951777	WG1865332,ICAL16772	ph<2
21	L2373727-02,4,0.5,0.5	DISSGAS	R0951778	WG1865332,ICAL16772	ph<2
22	L2373727-03,4,0.5,0.5	DISSGAS	R0951779	WG1865332,ICAL16772	ph<2
23	L2373727-04,4,0.5,0.5	DISSGAS	R0951780	WG1865332,ICAL16772	ph<2
24	L2373727-05,4,0.5,0.5	DISSGAS	R0951781	WG1865332,ICAL16772	ph<2
25	L2373727-06,4,0.5,0.5	DISSGAS	R0951782	WG1865332,ICAL16772	ph<2
26	blank	DISSGAS	R0951783	WG1865332,ICAL16772	blank

Alpha Analytical Air Lab
Instrument Run Log

27	blank	DISSGAS	R0951784	WG1865332,ICAL16772	blank
28	ccal	DISSGAS	R0951785	WG1865332,ICAL16772	ccal
29	ccal	DISSGAS	R0951786	WG1865332,ICAL16772	ccal

GC/MS 8260
Analysis

Volatiles QC Summary

Surrogate Recovery Summary
Form 2
Volatiles

Client: Sterling Environmental Engineering
Project Name: TROY BELTING

Lab Number: L2373323
Project Number: 2011-31
Matrix: Water

CLIENT ID (LAB SAMPLE NO.)	SMC1 DCA	SMC2 TOL	SMC3 BFB	SMC4 DBFM	TOT OUT
MW-8S (L2373323-01)	120	101	102	111	0
MW-6D' (L2373323-02D)	118	103	103	110	0
MW-6S (L2373323-03D)	98	98	99	99	0
MW-6D (L2373323-04D)	98	99	98	99	0
MW-4S (L2373323-05D)	119	103	101	111	0
DUP12122023 (L2373323-06D)	98	98	99	100	0
TB12122023 (L2373323-07)	121	106	106	112	0
WG1865366-3LCS	117	109	103	107	0
WG1865366-4LCSD	113	105	105	106	0
WG1865366-5BLANK	116	102	104	109	0
WG1865859-3LCS	97	98	99	100	0
WG1865859-4LCSD	97	98	99	101	0
WG1865859-5BLANK	99	100	100	99	0
MW-6DMS	99	98	99	102	0
MW-6DMSD	96	98	99	101	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-R2

Laboratory Control Sample Summary
Form 3
Volatiles

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Matrix (Level)	: WATER (LOW)		
LCS Sample ID	: WG1865366-3 **Analysis Date** : 12/18/23 06:51	**File ID**	: V08231218A01
LCSD Sample ID	: WG1865366-4 **Analysis Date** : 12/18/23 07:14	**File ID**	: V08231218A02

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R	RPD	Recovery Limits	RPD Limit
Methylene chloride	10	10	100	10	10	100	0	70-130	20
1,1-Dichloroethane	10	10	100	10	10	100	0	70-130	20
Chloroform	10	10	100	10	11	110	10	70-130	20
Carbon tetrachloride	10	11	110	10	11	110	0	63-132	20
1,2-Dichloropropane	10	9.8	98	10	10	100	2	70-130	20
Dibromochloromethane	10	11	110	10	11	110	0	63-130	20
1,1,2-Trichloroethane	10	12	120	10	12	120	0	70-130	20
Tetrachloroethene	10	11	110	10	10	100	10	70-130	20
Chlorobenzene	10	11	110	10	10	100	10	75-130	20
Trichlorofluoromethane	10	12	120	10	12	120	0	62-150	20
1,2-Dichloroethane	10	11	110	10	11	110	0	70-130	20
1,1,1-Trichloroethane	10	10	100	10	11	110	10	67-130	20
Bromodichloromethane	10	10	100	10	11	110	10	67-130	20
trans-1,3-Dichloropropene	10	11	110	10	11	110	0	70-130	20
cis-1,3-Dichloropropene	10	10	100	10	11	110	10	70-130	20
Bromoform	10	11	110	10	12	120	9	54-136	20
1,1,2,2-Tetrachloroethane	10	12	120	10	12	120	0	67-130	20
Benzene	10	10	100	10	10	100	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
Chloromethane	10	9.3	93	10	9.5	95	2	64-130	20
Bromomethane	10	12	120	10	12	120	0	39-139	20
Vinyl chloride	10	11	110	10	11	110	0	55-140	20
Chloroethane	10	13	130	10	13	130	0	55-138	20
1,1-Dichloroethene	10	10	100	10	10	100	0	61-145	20
trans-1,2-Dichloroethene	10	10	100	10	10	100	0	70-130	20

Laboratory Control Sample Summary
Form 3
Volatiles

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Matrix (Level)	: WATER (LOW)		
LCS Sample ID	: WG1865366-3 **Analysis Date** : 12/18/23 06:51	**File ID**	: V08231218A01
LCSD Sample ID	: WG1865366-4 **Analysis Date** : 12/18/23 07:14	**File ID**	: V08231218A02

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R	RPD	Recovery Limits	RPD Limit
Trichloroethene	10	11	110	10	11	110	0	70-130	20
1,2-Dichlorobenzene	10	12	120	10	11	110	9	70-130	20
1,3-Dichlorobenzene	10	12	120	10	12	120	0	70-130	20
1,4-Dichlorobenzene	10	12	120	10	12	120	0	70-130	20
Methyl tert butyl ether	10	9.2	92	10	10	100	8	63-130	20
p/m-Xylene	20	22	110	20	22	110	0	70-130	20
o-Xylene	20	22	110	20	22	110	0	70-130	20
cis-1,2-Dichloroethene	10	10	100	10	10	100	0	70-130	20
Styrene	20	22	110	20	22	110	0	70-130	20
Dichlorodifluoromethane	10	7.7	77	10	8.1	81	5	36-147	20
Acetone	10	10	100	10	11	110	10	58-148	20
Carbon disulfide	10	10	100	10	10	100	0	51-130	20
2-Butanone	10	10	100	10	12	120	18	63-138	20
4-Methyl-2-pentanone	10	8.7	87	10	9.3	93	7	59-130	20
2-Hexanone	10	9.8	98	10	11	110	12	57-130	20
Bromochloromethane	10	11	110	10	11	110	0	70-130	20
1,2-Dibromoethane	10	11	110	10	11	110	0	70-130	20
1,2-Dibromo-3-chloropropane	10	10	100	10	10	100	0	41-144	20
Isopropylbenzene	10	11	110	10	11	110	0	70-130	20
1,2,3-Trichlorobenzene	10	11	110	10	11	110	0	70-130	20
1,2,4-Trichlorobenzene	10	11	110	10	11	110	0	70-130	20
Methyl Acetate	10	10	100	10	11	110	10	70-130	20
Cyclohexane	10	9.6	96	10	9.9	99	3	70-130	20
1,4-Dioxane	500	800	160	500	830	166 Q	4	56-162	20
Freon-113	10	11	110	10	11	110	0	70-130	20
Methyl cyclohexane	10	9.9	99	10	10	100	1	70-130	20

Laboratory Control Sample Summary
Form 3
Volatiles

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Matrix (Level)	: WATER (LOW)		
LCS Sample ID	: WG1865859-3 **Analysis Date** : 12/19/23 05:30	**File ID**	: V01231219A01
LCSD Sample ID	: WG1865859-4 **Analysis Date** : 12/19/23 05:56	**File ID**	: V01231219A02

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R	RPD	Recovery Limits	RPD Limit
Methylene chloride	10	9.6	96	10	9.8	98	2	70-130	20
1,1-Dichloroethane	10	9.8	98	10	9.8	98	0	70-130	20
Chloroform	10	9.9	99	10	10	100	1	70-130	20
Carbon tetrachloride	10	10	100	10	10	100	0	63-132	20
1,2-Dichloropropane	10	9.8	98	10	9.8	98	0	70-130	20
Dibromochloromethane	10	8.8	88	10	8.8	88	0	63-130	20
1,1,2-Trichloroethane	10	9.3	93	10	9.3	93	0	70-130	20
Tetrachloroethene	10	10	100	10	9.9	99	1	70-130	20
Chlorobenzene	10	9.6	96	10	9.5	95	1	75-130	20
Trichlorofluoromethane	10	11	110	10	11	110	0	62-150	20
1,2-Dichloroethane	10	9.7	97	10	9.6	96	1	70-130	20
1,1,1-Trichloroethane	10	10	100	10	10	100	0	67-130	20
Bromodichloromethane	10	9.8	98	10	9.6	96	2	67-130	20
trans-1,3-Dichloropropene	10	9.2	92	10	9.1	91	1	70-130	20
cis-1,3-Dichloropropene	10	9.7	97	10	9.7	97	0	70-130	20
Bromoform	10	8.2	82	10	8.1	81	1	54-136	20
1,1,2,2-Tetrachloroethane	10	8.8	88	10	9.1	91	3	67-130	20
Benzene	10	10	100	10	10	100	0	70-130	20
Toluene	10	9.6	96	10	9.6	96	0	70-130	20
Ethylbenzene	10	9.9	99	10	9.8	98	1	70-130	20
Chloromethane	10	9.5	95	10	9.5	95	0	64-130	20
Bromomethane	10	6.4	64	10	6.6	66	3	39-139	20
Vinyl chloride	10	10	100	10	10	100	0	55-140	20
Chloroethane	10	11	110	10	11	110	0	55-138	20
1,1-Dichloroethene	10	10	100	10	10	100	0	61-145	20
trans-1,2-Dichloroethene	10	10	100	10	10	100	0	70-130	20

Laboratory Control Sample Summary
Form 3
Volatiles

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Matrix (Level)	: WATER (LOW)		
LCS Sample ID	: WG1865859-3 **Analysis Date** : 12/19/23 05:30	**File ID**	: V01231219A01
LCSD Sample ID	: WG1865859-4 **Analysis Date** : 12/19/23 05:56	**File ID**	: V01231219A02

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R	RPD	Recovery Limits	RPD Limit
Trichloroethene	10	10	100	10	10	100	0	70-130	20
1,2-Dichlorobenzene	10	9.2	92	10	9.4	94	2	70-130	20
1,3-Dichlorobenzene	10	9.4	94	10	9.4	94	0	70-130	20
1,4-Dichlorobenzene	10	9.3	93	10	9.4	94	1	70-130	20
Methyl tert butyl ether	10	9.0	90	10	9.1	91	1	63-130	20
p/m-Xylene	20	20	100	20	20	100	0	70-130	20
o-Xylene	20	19	95	20	19	95	0	70-130	20
cis-1,2-Dichloroethene	10	9.8	98	10	9.9	99	1	70-130	20
Styrene	20	19	95	20	19	95	0	70-130	20
Dichlorodifluoromethane	10	10	100	10	10	100	0	36-147	20
Acetone	10	9.1	91	10	9.9	99	8	58-148	20
Carbon disulfide	10	10	100	10	10	100	0	51-130	20
2-Butanone	10	8.6	86	10	8.9	89	3	63-138	20
4-Methyl-2-pentanone	10	8.5	85	10	8.8	88	3	59-130	20
2-Hexanone	10	7.6	76	10	8.0	80	5	57-130	20
Bromochloromethane	10	9.6	96	10	9.5	95	1	70-130	20
1,2-Dibromoethane	10	9.2	92	10	9.3	93	1	70-130	20
1,2-Dibromo-3-chloropropane	10	8.0	80	10	8.3	83	4	41-144	20
Isopropylbenzene	10	9.7	97	10	9.7	97	0	70-130	20
1,2,3-Trichlorobenzene	10	8.1	81	10	8.8	88	8	70-130	20
1,2,4-Trichlorobenzene	10	8.6	86	10	8.9	89	3	70-130	20
Methyl Acetate	10	8.6	86	10	8.7	87	1	70-130	20
Cyclohexane	10	10	100	10	10	100	0	70-130	20
1,4-Dioxane	500	420	84	500	490	98	15	56-162	20
Freon-113	10	11	110	10	11	110	0	70-130	20
Methyl cyclohexane	10	10	100	10	10	100	0	70-130	20

Matrix Spike Sample Summary
Form 3
Volatiles

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Client Sample ID	: MW-6D	**Matrix (Level)**	: WATER (LOW)
Lab Sample ID	: L2373323-04	**Analysis Date**	: 12/19/23 11:35
Matrix Spike	: WG1865859-6	**MS Analysis Date**	: 12/19/23 12:53
Matrix Spike Dup	: WG1865859-7	**MSD Analysis Date**	: 12/19/23 13:19

		Matrix Spike Sample				Matrix Spike Duplicate					
Parameter	Sample Conc. (ug/l)	Spike Added (ug/l)	Spike Conc. (ug/l)	%R		Spike Added (ug/l)	Spike Conc. (ug/l)	%R		RPD	Recovery Limits	RPD Limit
Methylene chloride	ND	250	320	128		250	320	128		0	70-130	20
1,1-Dichloroethane	57J	250	390	156	Q	250	380	152	Q	3	70-130	20
Chloroform	ND	250	340	136	Q	250	330	132	Q	3	70-130	20
Carbon tetrachloride	ND	250	350	140	Q	250	350	140	Q	0	63-132	20
1,2-Dichloropropane	ND	250	330	132	Q	250	320	128		3	70-130	20
Dibromochloromethane	ND	250	290	116		250	290	116		0	63-130	20
1,1,2-Trichloroethane	ND	250	310	124		250	300	120		3	70-130	20
Tetrachloroethene	ND	250	320	128		250	320	128		0	70-130	20
Chlorobenzene	ND	250	310	124		250	310	124		0	75-130	20
Trichlorofluoromethane	ND	250	360	144		250	360	144		0	62-150	20
1,2-Dichloroethane	ND	250	320	128		250	320	128		0	70-130	20
1,1,1-Trichloroethane	ND	250	350	140	Q	250	350	140	Q	0	67-130	20
Bromodichloromethane	ND	250	320	128		250	320	128		0	67-130	20
trans-1,3-Dichloropropene	ND	250	300	120		250	300	120		0	70-130	20
cis-1,3-Dichloropropene	ND	250	320	128		250	320	128		0	70-130	20
Bromoform	ND	250	260	104		250	260	104		0	54-136	20
1,1,2,2-Tetrachloroethane	ND	250	290	116		250	290	116		0	67-130	20
Benzene	ND	250	340	136	Q	250	340	136	Q	0	70-130	20
Toluene	ND	250	310	124		250	310	124		0	70-130	20
Ethylbenzene	ND	250	320	128		250	320	128		0	70-130	20
Chloromethane	ND	250	320	128		250	310	124		3	64-130	20
Bromomethane	ND	250	120	48		250	130	52		8	39-139	20

Matrix Spike Sample Summary
Form 3
Volatiles

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Client Sample ID	: MW-6D	**Matrix (Level)**	: WATER (LOW)
Lab Sample ID	: L2373323-04	**Analysis Date**	: 12/19/23 11:35
Matrix Spike	: WG1865859-6	**MS Analysis Date**	: 12/19/23 12:53
Matrix Spike Dup	: WG1865859-7	**MSD Analysis Date**	: 12/19/23 13:19

		Matrix Spike Sample				Matrix Spike Duplicate						
Parameter	Sample Conc. (ug/l)	Spike Added (ug/l)	Spike Conc. (ug/l)	%R		Spike Added (ug/l)	Spike Conc. (ug/l)	%R		RPD	Recovery Limits	RPD Limit
Vinyl chloride	4200	250	4200	0	Q	250	3900	0	Q	7	55-140	20
Chloroethane	ND	250	360	144	Q	250	370	148	Q	3	55-138	20
1,1-Dichloroethene	5.4J	250	360	144		250	360	144		0	61-145	20
trans-1,2-Dichloroethene	ND	250	350	140	Q	250	350	140	Q	0	70-130	20
Trichloroethene	ND	250	340	136	Q	250	330	132	Q	3	70-130	20
1,2-Dichlorobenzene	ND	250	290	116		250	290	116		0	70-130	20
1,3-Dichlorobenzene	ND	250	290	116		250	290	116		0	70-130	20
1,4-Dichlorobenzene	ND	250	290	116		250	290	116		0	70-130	20
Methyl tert butyl ether	ND	250	300	120		250	300	120		0	63-130	20
p/m-Xylene	ND	500	630	126		500	630	126		0	70-130	20
o-Xylene	ND	500	620	124		500	620	124		0	70-130	20
cis-1,2-Dichloroethene	1700	250	2000	120		250	1800	40	Q	11	70-130	20
Styrene	ND	500	620	124		500	630	126		2	70-130	20
Dichlorodifluoromethane	ND	250	320	128		250	320	128		0	36-147	20
Acetone	140	250	410	108		250	380	96		8	58-148	20
Carbon disulfide	ND	250	350	140	Q	250	350	140	Q	0	51-130	20
2-Butanone	ND	250	300	120		250	290	116		3	63-138	20
4-Methyl-2-pentanone	ND	250	300	120		250	280	112		7	59-130	20
2-Hexanone	ND	250	260	104		250	260	104		0	57-130	20
Bromochloromethane	ND	250	310	124		250	320	128		3	70-130	20
1,2-Dibromoethane	ND	250	300	120		250	290	116		3	70-130	20
1,2-Dibromo-3-chloropropane	ND	250	270	108		250	260	104		4	41-144	20

Matrix Spike Sample Summary
Form 3
Volatiles

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Client Sample ID	: MW-6D	**Matrix (Level)**	: WATER (LOW)
Lab Sample ID	: L2373323-04	**Analysis Date**	: 12/19/23 11:35
Matrix Spike	: WG1865859-6	**MS Analysis Date**	: 12/19/23 12:53
Matrix Spike Dup	: WG1865859-7	**MSD Analysis Date**	: 12/19/23 13:19

		Matrix Spike Sample			Matrix Spike Duplicate					
Parameter	Sample Conc. (ug/l)	Spike Added (ug/l)	Spike Conc. (ug/l)	%R	Spike Added (ug/l)	Spike Conc. (ug/l)	%R	RPD	Recovery Limits	RPD Limit
Isopropylbenzene	ND	250	310	124	250	310	124	0	70-130	20
1,2,3-Trichlorobenzene	ND	250	260	104	250	250	100	4	70-130	20
1,2,4-Trichlorobenzene	ND	250	270	108	250	260	104	4	70-130	20
Methyl Acetate	ND	250	290	116	250	290	116	0	70-130	20
Cyclohexane	ND	250	320	128	250	330	132 Q	3	70-130	20
1,4-Dioxane	ND	12500	12000	96	12500	14000	112	15	56-162	20
Freon-113	ND	250	350	140 Q	250	350	140 Q	0	70-130	20
Methyl cyclohexane	ND	250	310	124	250	310	124	0	70-130	20

Method Blank Summary
Form 4
Volatiles

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Lab Sample ID	: WG1865366-5	**Lab File ID**	: V08231218A05
Instrument ID	: VOA108		
Matrix	: WATER	**Analysis Date**	: 12/18/23 08:21

Client Sample No.	Lab Sample ID	Analysis Date
WG1865366-3LCS	WG1865366-3	12/18/23 06:51
WG1865366-4LCSD	WG1865366-4	12/18/23 07:14
MW-8S	L2373323-01	12/18/23 11:43
MW-6D'	L2373323-02D	12/18/23 12:06
MW-4S	L2373323-05D	12/18/23 13:13
TB12122023	L2373323-07	12/18/23 13:58

Method Blank Summary
Form 4
Volatiles

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Lab Sample ID	: WG1865859-5	**Lab File ID**	: V01231219A04
Instrument ID	: VOA101		
Matrix	: WATER	**Analysis Date**	: 12/19/23 06:48

Client Sample No.	Lab Sample ID	Analysis Date
WG1865859-3LCS	WG1865859-3	12/19/23 05:30
WG1865859-4LCSD	WG1865859-4	12/19/23 05:56
MW-6D	L2373323-04D	12/19/23 11:35
MW-6S	L2373323-03D	12/19/23 12:01
DUP12122023	L2373323-06D	12/19/23 12:27
MW-6DMS	WG1865859-6	12/19/23 12:53
MW-6DMSD	WG1865859-7	12/19/23 13:19

Instrument Performance Check (Tune) Summary
Form 5
Volatiles
Bromofluorobenzene (BFB)

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Instrument ID	: VOA108	**Analysis Date**	: 12/06/23 10:17
Tune Standard	: WG1860686-1	**Tune File ID**	: V08231206ABF1_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	24.5
75	30.0 - 80.0% of mass 95	50.7
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	0.8 (1.1)1
174	Greater than 50.0% of mass 95	78.4
175	5.0 - 9.0% of mass 174	5.6 (7.1)1
176	Greater than 95.0% but less than 101% of mass	74.9 (95.5)1
177	5.0 - 9.0% of mass 176	5.1 (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	R1771862-1	V08231206A03	12/06/23 11:22
STD0.5PPB	R1771862-2	V08231206A06	12/06/23 12:29
STD2PPB	R1771862-3	V08231206A07	12/06/23 12:51
STD10PPB	R1771862-4	V08231206A09	12/06/23 13:35
STD30PPB	R1771862-5	V08231206A10	12/06/23 13:58
STD80PPB	R1771862-6	V08231206A11	12/06/23 14:20
STD120PPB	R1771862-7	V08231206A12	12/06/23 14:42
STD200PPB	R1771862-8	V08231206A13	12/06/23 15:04
ICV QUANT REPORT	R1771862-9	V08231206A19	12/06/23 17:18

Instrument Performance Check (Tune) Summary
Form 5
Volatiles
Bromofluorobenzene (BFB)

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Instrument ID	: VOA108	**Analysis Date**	: 12/18/23 06:36
Tune Standard	: WG1865366-1	**Tune File ID**	: V08231218ABF1_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	28.8
75	30.0 - 80.0% of mass 95	53.8
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	0.7 (.9)1
174	Greater than 50.0% of mass 95	76.7
175	5.0 - 9.0% of mass 174	6 (7.9)1
176	Greater than 95.0% but less than 101% of mass	74.7 (97.3)1
177	5.0 - 9.0% of mass 176	4.7 (6.3)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
WG1865366-2CCAL	WG1865366-2	V08231218A01	12/18/23 06:51
WG1865366-3LCS	WG1865366-3	V08231218A01	12/18/23 06:51
WG1865366-4LCSD	WG1865366-4	V08231218A02	12/18/23 07:14
WG1865366-5BLANK	WG1865366-5	V08231218A05	12/18/23 08:21
MW-8S	L2373323-01	V08231218A14	12/18/23 11:43
MW-6D'	L2373323-02D	V08231218A15	12/18/23 12:06
MW-4S	L2373323-05D	V08231218A18	12/18/23 13:13
TB12122023	L2373323-07	V08231218A20	12/18/23 13:58

Instrument Performance Check (Tune) Summary
Form 5
Volatiles
Bromofluorobenzene (BFB)

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Instrument ID	: VOA101	**Analysis Date**	: 12/15/23 11:27
Tune Standard	: WG1864802-1	**Tune File ID**	: V01231215ABF1_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	23.1
75	30.0 - 80.0% of mass 95	48.2
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0 (0)1
174	Greater than 50.0% of mass 95	77.6
175	5.0 - 9.0% of mass 174	5.9 (7.6)1
176	Greater than 95.0% but less than 101% of mass	74.8 (96.5)1
177	5.0 - 9.0% of mass 176	5 (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
STD0.19PPB	R1775743-1	V01231215A03	12/15/23 12:34
STD0.5PPB	R1775743-2	V01231215A04	12/15/23 13:00
STD2PPB	R1775743-3	V01231215A06	12/15/23 13:52
STD10PPB	R1775743-4	V01231215A08	12/15/23 14:44
STD30PPB	R1775743-5	V01231215A09	12/15/23 15:10
STD80PPB	R1775743-7	V01231215A10	12/15/23 15:36
STD120PPB	R1775743-6	V01231215A11	12/15/23 16:03
STD200PPB	R1775743-9	V01231215A12	12/15/23 16:29
ICV Quant Report	R1775743-8	V01231215A17	12/15/23 18:39

Instrument Performance Check (Tune) Summary
Form 5
Volatiles
Bromofluorobenzene (BFB)

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Instrument ID	: VOA101	**Analysis Date**	: 12/19/23 05:11
Tune Standard	: WG1865859-1	**Tune File ID**	: V01231219ABF1_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	21.8
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	6.7
173	Less than 2.0% of mass 174	0 (0)1
174	Greater than 50.0% of mass 95	81.2
175	5.0 - 9.0% of mass 174	5.9 (7.2)1
176	Greater than 95.0% but less than 101% of mass	78.1 (96.2)1
177	5.0 - 9.0% of mass 176	5.2 (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
WG1865859-2CCAL	WG1865859-2	V01231219A01	12/19/23 05:30
WG1865859-3LCS	WG1865859-3	V01231219A01	12/19/23 05:30
WG1865859-4LCSD	WG1865859-4	V01231219A02	12/19/23 05:56
WG1865859-5BLANK	WG1865859-5	V01231219A04	12/19/23 06:48
MW-6D	L2373323-04D	V01231219A15	12/19/23 11:35
MW-6S	L2373323-03D	V01231219A16	12/19/23 12:01
DUP12122023	L2373323-06D	V01231219A17	12/19/23 12:27
WG1865859-6MS	WG1865859-6	V01231219A18	12/19/23 12:53
WG1865859-7MSD	WG1865859-7	V01231219A19	12/19/23 13:19

Internal Standard Area and RT Summary
Form 8a
Volatiles

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Instrument ID	: VOA108	**Analysis Date**	: 12/18/23 06:51:00
Sample No	: WG1865366-2	**Lab File ID**	: V08231218A01

	Fluorobenzene (IS)		Chlorobenzene-d5		1,4-Dichlorobenzene-D4	
	Area	RT	Area	RT	Area	RT
WG1865366-2	142386	6.12	96600	9.65	46518	12.33
Upper Limit	284772	6.62	193200	10.15	93036	12.83
Lower Limit	71193	5.62	48300	9.15	23259	11.83
Sample ID						
WG1865366-3 LCS	142386	6.12	96600	9.65	46518	12.33
WG1865366-4 LCSD	138344	6.11	98164	9.65	47692	12.33
WG1865366-5 BLANK	140342	6.12	101675	9.65	48132	12.33
MW-8S	122325	6.12	89591	9.65	42093	12.33
MW-6D'	129706	6.12	92139	9.65	42561	12.33
MW-4S	121470	6.12	87070	9.65	39365	12.33
TB12122023	132182	6.12	91666	9.65	39819	12.33

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	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Instrument ID	: VOA101	**Analysis Date**	: 12/19/23 05:30:00
Sample No	: WG1865859-2	**Lab File ID**	: V01231219A01

	Fluorobenzene (IS)		Chlorobenzene-d5		1,4-Dichlorobenzene-D4	
	Area	RT	Area	RT	Area	RT
WG1865859-2	442958	5.96	387518	9.48	216528	12.19
Upper Limit	885916	6.46	775036	9.98	433056	12.69
Lower Limit	221479	5.46	193759	8.98	108264	11.69
Sample ID						
WG1865859-3 LCS	442958	5.96	387518	9.48	216528	12.19
WG1865859-4 LCSD	441614	5.96	385869	9.48	215994	12.20
WG1865859-5 BLANK	424551	5.96	365244	9.48	198302	12.20
MW-6D	422898	5.96	361587	9.48	198598	12.20
MW-6S	427652	5.96	367107	9.49	198172	12.20
DUP12122023	415832	5.96	359487	9.48	194438	12.20
MW-6D MS	423251	5.96	375264	9.48	211481	12.19
MW-6D MSD	457222	5.96	405164	9.48	226187	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: 03/15/23
Created By: Jason Hebert
File: PM14094-1
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 Alpha Analytical, Inc.

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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Date Created: 03/15/23
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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)***
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Volatiles Sample Data

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Lab ID	: L2373323-01	**Date Collected**	: 12/12/23 09:50
Client ID	: MW-8S	**Date Received**	: 12/12/23
Sample Location	: COLONIE, NY	**Date Analyzed**	: 12/18/23 11:43
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: MKS
Lab File ID	: V08231218A14	**Instrument ID**	: VOA108
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
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
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	5.9	1.0	0.07	
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Sterling Environmental Engineering	Lab Number	: L2373323
Project Name	: TROY BELTING	Project Number	: 2011-31
Lab ID	: L2373323-01	Date Collected	: 12/12/23 09:50
Client ID	: MW-8S	Date Received	: 12/12/23
Sample Location	: COLONIE, NY	Date Analyzed	: 12/18/23 11:43
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260D	Analyst	: MKS
Lab File ID	: V08231218A14	Instrument ID	: VOA108
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	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
156-59-2	cis-1,2-Dichloroethene	1.4	2.5	0.70	J
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	ND	5.0	1.5	U
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
79-20-9	Methyl Acetate	ND	2.0	0.23	U
110-82-7	Cyclohexane	ND	10	0.27	U
123-91-1	1,4-Dioxane	ND	250	61.	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Lab ID	: L2373323-01	**Date Collected**	: 12/12/23 09:50
Client ID	: MW-8S	**Date Received**	: 12/12/23
Sample Location	: COLONIE, NY	**Date Analyzed**	: 12/18/23 11:43
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: MKS
Lab File ID	: V08231218A14	**Instrument ID**	: VOA108
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
76-13-1	Freon-113	ND	2.5	0.70	U
108-87-2	Methyl cyclohexane	ND	10	0.40	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Lab ID	: L2373323-02D	**Date Collected**	: 12/12/23 10:55
Client ID	: MW-6D'	**Date Received**	: 12/12/23
Sample Location	: COLONIE, NY	**Date Analyzed**	: 12/18/23 12:06
Sample Matrix	: WATER	**Dilution Factor**	: 4
Analytical Method	: 1,8260D	**Analyst**	: MKS
Lab File ID	: V08231218A15	**Instrument ID**	: VOA108
Sample Amount	: 2.5 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
75-09-2	Methylene chloride	ND	10	2.8	U
75-34-3	1,1-Dichloroethane	4.3	10	2.8	J
67-66-3	Chloroform	ND	10	2.8	U
56-23-5	Carbon tetrachloride	ND	2.0	0.54	U
78-87-5	1,2-Dichloropropane	ND	4.0	0.55	U
124-48-1	Dibromochloromethane	ND	2.0	0.60	U
79-00-5	1,1,2-Trichloroethane	ND	6.0	2.0	U
127-18-4	Tetrachloroethene	ND	2.0	0.72	U
108-90-7	Chlorobenzene	ND	10	2.8	U
75-69-4	Trichlorofluoromethane	ND	10	2.8	U
107-06-2	1,2-Dichloroethane	ND	2.0	0.53	U
71-55-6	1,1,1-Trichloroethane	ND	10	2.8	U
75-27-4	Bromodichloromethane	ND	2.0	0.77	U
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.66	U
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.58	U
75-25-2	Bromoform	ND	8.0	2.6	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.67	U
71-43-2	Benzene	ND	2.0	0.64	U
108-88-3	Toluene	ND	10	2.8	U
100-41-4	Ethylbenzene	ND	10	2.8	U
74-87-3	Chloromethane	ND	10	2.8	U
74-83-9	Bromomethane	ND	10	2.8	U
75-01-4	Vinyl chloride	220	4.0	0.28	
75-00-3	Chloroethane	ND	10	2.8	U
75-35-4	1,1-Dichloroethene	ND	2.0	0.68	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Lab ID	: L2373323-02D	**Date Collected**	: 12/12/23 10:55
Client ID	: MW-6D'	**Date Received**	: 12/12/23
Sample Location	: COLONIE, NY	**Date Analyzed**	: 12/18/23 12:06
Sample Matrix	: WATER	**Dilution Factor**	: 4
Analytical Method	: 1,8260D	**Analyst**	: MKS
Lab File ID	: V08231218A15	**Instrument ID**	: VOA108
Sample Amount	: 2.5 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
156-60-5	trans-1,2-Dichloroethene	ND	10	2.8	U
79-01-6	Trichloroethene	ND	2.0	0.70	U
95-50-1	1,2-Dichlorobenzene	ND	10	2.8	U
541-73-1	1,3-Dichlorobenzene	ND	10	2.8	U
106-46-7	1,4-Dichlorobenzene	ND	10	2.8	U
1634-04-4	Methyl tert butyl ether	ND	10	2.8	U
179601-23-1	p/m-Xylene	ND	10	2.8	U
95-47-6	o-Xylene	ND	10	2.8	U
156-59-2	cis-1,2-Dichloroethene	430	10	2.8	
100-42-5	Styrene	ND	10	2.8	U
75-71-8	Dichlorodifluoromethane	ND	20	4.0	U
67-64-1	Acetone	ND	20	5.8	U
75-15-0	Carbon disulfide	ND	20	4.0	U
78-93-3	2-Butanone	ND	20	7.8	U
108-10-1	4-Methyl-2-pentanone	ND	20	4.0	U
591-78-6	2-Hexanone	ND	20	4.0	U
74-97-5	Bromochloromethane	ND	10	2.8	U
106-93-4	1,2-Dibromoethane	ND	8.0	2.6	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	2.8	U
98-82-8	Isopropylbenzene	ND	10	2.8	U
87-61-6	1,2,3-Trichlorobenzene	ND	10	2.8	U
120-82-1	1,2,4-Trichlorobenzene	ND	10	2.8	U
79-20-9	Methyl Acetate	ND	8.0	0.94	U
110-82-7	Cyclohexane	ND	40	1.1	U
123-91-1	1,4-Dioxane	ND	1000	240	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Lab ID	: L2373323-02D	**Date Collected**	: 12/12/23 10:55
Client ID	: MW-6D'	**Date Received**	: 12/12/23
Sample Location	: COLONIE, NY	**Date Analyzed**	: 12/18/23 12:06
Sample Matrix	: WATER	**Dilution Factor**	: 4
Analytical Method	: 1,8260D	**Analyst**	: MKS
Lab File ID	: V08231218A15	**Instrument ID**	: VOA108
Sample Amount	: 2.5 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
76-13-1	Freon-113	ND	10	2.8	U
108-87-2	Methyl cyclohexane	ND	40	1.6	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Lab ID	: L2373323-03D	**Date Collected**	: 12/12/23 11:25
Client ID	: MW-6S	**Date Received**	: 12/12/23
Sample Location	: COLONIE, NY	**Date Analyzed**	: 12/19/23 12:01
Sample Matrix	: WATER	**Dilution Factor**	: 10
Analytical Method	: 1,8260D	**Analyst**	: MKS
Lab File ID	: V01231219A16	**Instrument ID**	: VOA101
Sample Amount	: 1 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
75-09-2	Methylene chloride	ND	25	7.0	U
75-34-3	1,1-Dichloroethane	38	25	7.0	
67-66-3	Chloroform	ND	25	7.0	U
56-23-5	Carbon tetrachloride	ND	5.0	1.3	U
78-87-5	1,2-Dichloropropane	ND	10	1.4	U
124-48-1	Dibromochloromethane	ND	5.0	1.5	U
79-00-5	1,1,2-Trichloroethane	ND	15	5.0	U
127-18-4	Tetrachloroethene	ND	5.0	1.8	U
108-90-7	Chlorobenzene	ND	25	7.0	U
75-69-4	Trichlorofluoromethane	ND	25	7.0	U
107-06-2	1,2-Dichloroethane	ND	5.0	1.3	U
71-55-6	1,1,1-Trichloroethane	ND	25	7.0	U
75-27-4	Bromodichloromethane	ND	5.0	1.9	U
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.6	U
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.4	U
75-25-2	Bromoform	ND	20	6.5	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.7	U
71-43-2	Benzene	ND	5.0	1.6	U
108-88-3	Toluene	ND	25	7.0	U
100-41-4	Ethylbenzene	ND	25	7.0	U
74-87-3	Chloromethane	ND	25	7.0	U
74-83-9	Bromomethane	ND	25	7.0	U
75-01-4	Vinyl chloride	1300	10	0.71	
75-00-3	Chloroethane	ND	25	7.0	U
75-35-4	1,1-Dichloroethene	ND	5.0	1.7	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Lab ID	: L2373323-03D	**Date Collected**	: 12/12/23 11:25
Client ID	: MW-6S	**Date Received**	: 12/12/23
Sample Location	: COLONIE, NY	**Date Analyzed**	: 12/19/23 12:01
Sample Matrix	: WATER	**Dilution Factor**	: 10
Analytical Method	: 1,8260D	**Analyst**	: MKS
Lab File ID	: V01231219A16	**Instrument ID**	: VOA101
Sample Amount	: 1 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
156-60-5	trans-1,2-Dichloroethene	ND	25	7.0	U
79-01-6	Trichloroethene	ND	5.0	1.8	U
95-50-1	1,2-Dichlorobenzene	ND	25	7.0	U
541-73-1	1,3-Dichlorobenzene	ND	25	7.0	U
106-46-7	1,4-Dichlorobenzene	ND	25	7.0	U
1634-04-4	Methyl tert butyl ether	ND	25	7.0	U
179601-23-1	p/m-Xylene	ND	25	7.0	U
95-47-6	o-Xylene	ND	25	7.0	U
156-59-2	cis-1,2-Dichloroethene	340	25	7.0	
100-42-5	Styrene	ND	25	7.0	U
75-71-8	Dichlorodifluoromethane	ND	50	10.	U
67-64-1	Acetone	30	50	15.	J
75-15-0	Carbon disulfide	ND	50	10.	U
78-93-3	2-Butanone	ND	50	19.	U
108-10-1	4-Methyl-2-pentanone	ND	50	10.	U
591-78-6	2-Hexanone	ND	50	10.	U
74-97-5	Bromochloromethane	ND	25	7.0	U
106-93-4	1,2-Dibromoethane	ND	20	6.5	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	25	7.0	U
98-82-8	Isopropylbenzene	ND	25	7.0	U
87-61-6	1,2,3-Trichlorobenzene	ND	25	7.0	U
120-82-1	1,2,4-Trichlorobenzene	ND	25	7.0	U
79-20-9	Methyl Acetate	ND	20	2.3	U
110-82-7	Cyclohexane	ND	100	2.7	U
123-91-1	1,4-Dioxane	ND	2500	610	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Lab ID	: L2373323-03D	**Date Collected**	: 12/12/23 11:25
Client ID	: MW-6S	**Date Received**	: 12/12/23
Sample Location	: COLONIE, NY	**Date Analyzed**	: 12/19/23 12:01
Sample Matrix	: WATER	**Dilution Factor**	: 10
Analytical Method	: 1,8260D	**Analyst**	: MKS
Lab File ID	: V01231219A16	**Instrument ID**	: VOA101
Sample Amount	: 1 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
76-13-1	Freon-113	ND	25	7.0	U
108-87-2	Methyl cyclohexane	ND	100	4.0	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Lab ID	: L2373323-04D	**Date Collected**	: 12/12/23 13:20
Client ID	: MW-6D	**Date Received**	: 12/12/23
Sample Location	: COLONIE, NY	**Date Analyzed**	: 12/19/23 11:35
Sample Matrix	: WATER	**Dilution Factor**	: 25
Analytical Method	: 1,8260D	**Analyst**	: MKS
Lab File ID	: V01231219A15	**Instrument ID**	: VOA101
Sample Amount	: 0.4 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
75-09-2	Methylene chloride	ND	62	18.	U
75-34-3	1,1-Dichloroethane	57	62	18.	J
67-66-3	Chloroform	ND	62	18.	U
56-23-5	Carbon tetrachloride	ND	12	3.4	U
78-87-5	1,2-Dichloropropane	ND	25	3.4	U
124-48-1	Dibromochloromethane	ND	12	3.7	U
79-00-5	1,1,2-Trichloroethane	ND	38	12.	U
127-18-4	Tetrachloroethene	ND	12	4.5	U
108-90-7	Chlorobenzene	ND	62	18.	U
75-69-4	Trichlorofluoromethane	ND	62	18.	U
107-06-2	1,2-Dichloroethane	ND	12	3.3	U
71-55-6	1,1,1-Trichloroethane	ND	62	18.	U
75-27-4	Bromodichloromethane	ND	12	4.8	U
10061-02-6	trans-1,3-Dichloropropene	ND	12	4.1	U
10061-01-5	cis-1,3-Dichloropropene	ND	12	3.6	U
75-25-2	Bromoform	ND	50	16.	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	12	4.2	U
71-43-2	Benzene	ND	12	4.0	U
108-88-3	Toluene	ND	62	18.	U
100-41-4	Ethylbenzene	ND	62	18.	U
74-87-3	Chloromethane	ND	62	18.	U
74-83-9	Bromomethane	ND	62	18.	U
75-01-4	Vinyl chloride	4200	25	1.8	
75-00-3	Chloroethane	ND	62	18.	U
75-35-4	1,1-Dichloroethene	5.4	12	4.2	J

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Lab ID	: L2373323-04D	**Date Collected**	: 12/12/23 13:20
Client ID	: MW-6D	**Date Received**	: 12/12/23
Sample Location	: COLONIE, NY	**Date Analyzed**	: 12/19/23 11:35
Sample Matrix	: WATER	**Dilution Factor**	: 25
Analytical Method	: 1,8260D	**Analyst**	: MKS
Lab File ID	: V01231219A15	**Instrument ID**	: VOA101
Sample Amount	: 0.4 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
156-60-5	trans-1,2-Dichloroethene	ND	62	18.	U
79-01-6	Trichloroethene	ND	12	4.4	U
95-50-1	1,2-Dichlorobenzene	ND	62	18.	U
541-73-1	1,3-Dichlorobenzene	ND	62	18.	U
106-46-7	1,4-Dichlorobenzene	ND	62	18.	U
1634-04-4	Methyl tert butyl ether	ND	62	18.	U
179601-23-1	p/m-Xylene	ND	62	18.	U
95-47-6	o-Xylene	ND	62	18.	U
156-59-2	cis-1,2-Dichloroethene	1700	62	18.	
100-42-5	Styrene	ND	62	18.	U
75-71-8	Dichlorodifluoromethane	ND	120	25.	U
67-64-1	Acetone	140	120	36.	
75-15-0	Carbon disulfide	ND	120	25.	U
78-93-3	2-Butanone	ND	120	48.	U
108-10-1	4-Methyl-2-pentanone	ND	120	25.	U
591-78-6	2-Hexanone	ND	120	25.	U
74-97-5	Bromochloromethane	ND	62	18.	U
106-93-4	1,2-Dibromoethane	ND	50	16.	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	62	18.	U
98-82-8	Isopropylbenzene	ND	62	18.	U
87-61-6	1,2,3-Trichlorobenzene	ND	62	18.	U
120-82-1	1,2,4-Trichlorobenzene	ND	62	18.	U
79-20-9	Methyl Acetate	ND	50	5.8	U
110-82-7	Cyclohexane	ND	250	6.8	U
123-91-1	1,4-Dioxane	ND	6200	1500	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Lab ID	: L2373323-04D	**Date Collected**	: 12/12/23 13:20
Client ID	: MW-6D	**Date Received**	: 12/12/23
Sample Location	: COLONIE, NY	**Date Analyzed**	: 12/19/23 11:35
Sample Matrix	: WATER	**Dilution Factor**	: 25
Analytical Method	: 1,8260D	**Analyst**	: MKS
Lab File ID	: V01231219A15	**Instrument ID**	: VOA101
Sample Amount	: 0.4 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
76-13-1	Freon-113	ND	62	18.	U
108-87-2	Methyl cyclohexane	ND	250	9.9	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Lab ID	: L2373323-05D	**Date Collected**	: 12/12/23 14:25
Client ID	: MW-4S	**Date Received**	: 12/12/23
Sample Location	: COLONIE, NY	**Date Analyzed**	: 12/18/23 13:13
Sample Matrix	: WATER	**Dilution Factor**	: 50
Analytical Method	: 1,8260D	**Analyst**	: MKS
Lab File ID	: V08231218A18	**Instrument ID**	: VOA108
Sample Amount	: 0.2 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
75-09-2	Methylene chloride	ND	120	35.	U
75-34-3	1,1-Dichloroethane	55	120	35.	J
67-66-3	Chloroform	ND	120	35.	U
56-23-5	Carbon tetrachloride	ND	25	6.7	U
78-87-5	1,2-Dichloropropane	ND	50	6.8	U
124-48-1	Dibromochloromethane	ND	25	7.4	U
79-00-5	1,1,2-Trichloroethane	ND	75	25.	U
127-18-4	Tetrachloroethene	ND	25	9.0	U
108-90-7	Chlorobenzene	ND	120	35.	U
75-69-4	Trichlorofluoromethane	ND	120	35.	U
107-06-2	1,2-Dichloroethane	ND	25	6.6	U
71-55-6	1,1,1-Trichloroethane	ND	120	35.	U
75-27-4	Bromodichloromethane	ND	25	9.6	U
10061-02-6	trans-1,3-Dichloropropene	ND	25	8.2	U
10061-01-5	cis-1,3-Dichloropropene	ND	25	7.2	U
75-25-2	Bromoform	ND	100	32.	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	25	8.4	U
71-43-2	Benzene	ND	25	8.0	U
108-88-3	Toluene	ND	120	35.	U
100-41-4	Ethylbenzene	ND	120	35.	U
74-87-3	Chloromethane	ND	120	35.	U
74-83-9	Bromomethane	ND	120	35.	U
75-01-4	Vinyl chloride	1200	50	3.6	
75-00-3	Chloroethane	ND	120	35.	U
75-35-4	1,1-Dichloroethene	ND	25	8.4	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Lab ID	: L2373323-05D	**Date Collected**	: 12/12/23 14:25
Client ID	: MW-4S	**Date Received**	: 12/12/23
Sample Location	: COLONIE, NY	**Date Analyzed**	: 12/18/23 13:13
Sample Matrix	: WATER	**Dilution Factor**	: 50
Analytical Method	: 1,8260D	**Analyst**	: MKS
Lab File ID	: V08231218A18	**Instrument ID**	: VOA108
Sample Amount	: 0.2 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
156-60-5	trans-1,2-Dichloroethene	ND	120	35.	U
79-01-6	Trichloroethene	ND	25	8.8	U
95-50-1	1,2-Dichlorobenzene	ND	120	35.	U
541-73-1	1,3-Dichlorobenzene	ND	120	35.	U
106-46-7	1,4-Dichlorobenzene	ND	120	35.	U
1634-04-4	Methyl tert butyl ether	ND	120	35.	U
179601-23-1	p/m-Xylene	ND	120	35.	U
95-47-6	o-Xylene	ND	120	35.	U
156-59-2	cis-1,2-Dichloroethene	5300	120	35.	
100-42-5	Styrene	ND	120	35.	U
75-71-8	Dichlorodifluoromethane	ND	250	50.	U
67-64-1	Acetone	ND	250	73.	U
75-15-0	Carbon disulfide	ND	250	50.	U
78-93-3	2-Butanone	ND	250	97.	U
108-10-1	4-Methyl-2-pentanone	ND	250	50.	U
591-78-6	2-Hexanone	ND	250	50.	U
74-97-5	Bromochloromethane	ND	120	35.	U
106-93-4	1,2-Dibromoethane	ND	100	32.	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	120	35.	U
98-82-8	Isopropylbenzene	ND	120	35.	U
87-61-6	1,2,3-Trichlorobenzene	ND	120	35.	U
120-82-1	1,2,4-Trichlorobenzene	ND	120	35.	U
79-20-9	Methyl Acetate	ND	100	12.	U
110-82-7	Cyclohexane	ND	500	14.	U
123-91-1	1,4-Dioxane	ND	12000	3000	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Lab ID	: L2373323-05D	**Date Collected**	: 12/12/23 14:25
Client ID	: MW-4S	**Date Received**	: 12/12/23
Sample Location	: COLONIE, NY	**Date Analyzed**	: 12/18/23 13:13
Sample Matrix	: WATER	**Dilution Factor**	: 50
Analytical Method	: 1,8260D	**Analyst**	: MKS
Lab File ID	: V08231218A18	**Instrument ID**	: VOA108
Sample Amount	: 0.2 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
76-13-1	Freon-113	ND	120	35.	U
108-87-2	Methyl cyclohexane	ND	500	20.	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Lab ID	: L2373323-06D	**Date Collected**	: 12/12/23 00:00
Client ID	: DUP12122023	**Date Received**	: 12/12/23
Sample Location	: COLONIE, NY	**Date Analyzed**	: 12/19/23 12:27
Sample Matrix	: WATER	**Dilution Factor**	: 10
Analytical Method	: 1,8260D	**Analyst**	: MKS
Lab File ID	: V01231219A17	**Instrument ID**	: VOA101
Sample Amount	: 1 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
75-09-2	Methylene chloride	ND	25	7.0	U
75-34-3	1,1-Dichloroethane	39	25	7.0	
67-66-3	Chloroform	ND	25	7.0	U
56-23-5	Carbon tetrachloride	ND	5.0	1.3	U
78-87-5	1,2-Dichloropropane	ND	10	1.4	U
124-48-1	Dibromochloromethane	ND	5.0	1.5	U
79-00-5	1,1,2-Trichloroethane	ND	15	5.0	U
127-18-4	Tetrachloroethene	ND	5.0	1.8	U
108-90-7	Chlorobenzene	ND	25	7.0	U
75-69-4	Trichlorofluoromethane	ND	25	7.0	U
107-06-2	1,2-Dichloroethane	ND	5.0	1.3	U
71-55-6	1,1,1-Trichloroethane	ND	25	7.0	U
75-27-4	Bromodichloromethane	ND	5.0	1.9	U
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.6	U
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.4	U
75-25-2	Bromoform	ND	20	6.5	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.7	U
71-43-2	Benzene	ND	5.0	1.6	U
108-88-3	Toluene	ND	25	7.0	U
100-41-4	Ethylbenzene	ND	25	7.0	U
74-87-3	Chloromethane	ND	25	7.0	U
74-83-9	Bromomethane	ND	25	7.0	U
75-01-4	Vinyl chloride	1300	10	0.71	
75-00-3	Chloroethane	ND	25	7.0	U
75-35-4	1,1-Dichloroethene	ND	5.0	1.7	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Lab ID	: L2373323-06D	**Date Collected**	: 12/12/23 00:00
Client ID	: DUP12122023	**Date Received**	: 12/12/23
Sample Location	: COLONIE, NY	**Date Analyzed**	: 12/19/23 12:27
Sample Matrix	: WATER	**Dilution Factor**	: 10
Analytical Method	: 1,8260D	**Analyst**	: MKS
Lab File ID	: V01231219A17	**Instrument ID**	: VOA101
Sample Amount	: 1 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
156-60-5	trans-1,2-Dichloroethene	ND	25	7.0	U
79-01-6	Trichloroethene	ND	5.0	1.8	U
95-50-1	1,2-Dichlorobenzene	ND	25	7.0	U
541-73-1	1,3-Dichlorobenzene	ND	25	7.0	U
106-46-7	1,4-Dichlorobenzene	ND	25	7.0	U
1634-04-4	Methyl tert butyl ether	ND	25	7.0	U
179601-23-1	p/m-Xylene	ND	25	7.0	U
95-47-6	o-Xylene	ND	25	7.0	U
156-59-2	cis-1,2-Dichloroethene	340	25	7.0	
100-42-5	Styrene	ND	25	7.0	U
75-71-8	Dichlorodifluoromethane	ND	50	10.	U
67-64-1	Acetone	27	50	15.	J
75-15-0	Carbon disulfide	ND	50	10.	U
78-93-3	2-Butanone	ND	50	19.	U
108-10-1	4-Methyl-2-pentanone	ND	50	10.	U
591-78-6	2-Hexanone	ND	50	10.	U
74-97-5	Bromochloromethane	ND	25	7.0	U
106-93-4	1,2-Dibromoethane	ND	20	6.5	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	25	7.0	U
98-82-8	Isopropylbenzene	ND	25	7.0	U
87-61-6	1,2,3-Trichlorobenzene	ND	25	7.0	U
120-82-1	1,2,4-Trichlorobenzene	ND	25	7.0	U
79-20-9	Methyl Acetate	ND	20	2.3	U
110-82-7	Cyclohexane	ND	100	2.7	U
123-91-1	1,4-Dioxane	ND	2500	610	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Lab ID	: L2373323-06D	**Date Collected**	: 12/12/23 00:00
Client ID	: DUP12122023	**Date Received**	: 12/12/23
Sample Location	: COLONIE, NY	**Date Analyzed**	: 12/19/23 12:27
Sample Matrix	: WATER	**Dilution Factor**	: 10
Analytical Method	: 1,8260D	**Analyst**	: MKS
Lab File ID	: V01231219A17	**Instrument ID**	: VOA101
Sample Amount	: 1 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
76-13-1	Freon-113	ND	25	7.0	U
108-87-2	Methyl cyclohexane	ND	100	4.0	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Lab ID	: L2373323-07	**Date Collected**	: 12/12/23 00:00
Client ID	: TB12122023	**Date Received**	: 12/12/23
Sample Location	: COLONIE, NY	**Date Analyzed**	: 12/18/23 13:58
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: MKS
Lab File ID	: V08231218A20	**Instrument ID**	: VOA108
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
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
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Lab ID	: L2373323-07	**Date Collected**	: 12/12/23 00:00
Client ID	: TB12122023	**Date Received**	: 12/12/23
Sample Location	: COLONIE, NY	**Date Analyzed**	: 12/18/23 13:58
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: MKS
Lab File ID	: V08231218A20	**Instrument ID**	: VOA108
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	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
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	3.3	5.0	1.5	J
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
79-20-9	Methyl Acetate	ND	2.0	0.23	U
110-82-7	Cyclohexane	ND	10	0.27	U
123-91-1	1,4-Dioxane	ND	250	61.	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Lab ID	: L2373323-07	**Date Collected**	: 12/12/23 00:00
Client ID	: TB12122023	**Date Received**	: 12/12/23
Sample Location	: COLONIE, NY	**Date Analyzed**	: 12/18/23 13:58
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: MKS
Lab File ID	: V08231218A20	**Instrument ID**	: VOA108
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
76-13-1	Freon-113	ND	2.5	0.70	U
108-87-2	Methyl cyclohexane	ND	10	0.40	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Lab ID	: WG1865366-5	**Date Collected**	: NA
Client ID	: WG1865366-5BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 12/18/23 08:21
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: PID
Lab File ID	: V08231218A05	**Instrument ID**	: VOA108
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
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
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Lab ID	: WG1865366-5	**Date Collected**	: NA
Client ID	: WG1865366-5BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 12/18/23 08:21
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: PID
Lab File ID	: V08231218A05	**Instrument ID**	: VOA108
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	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
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	ND	5.0	1.5	U
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
79-20-9	Methyl Acetate	ND	2.0	0.23	U
110-82-7	Cyclohexane	ND	10	0.27	U
123-91-1	1,4-Dioxane	ND	250	61.	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Lab ID	: WG1865366-5	**Date Collected**	: NA
Client ID	: WG1865366-5BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 12/18/23 08:21
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: PID
Lab File ID	: V08231218A05	**Instrument ID**	: VOA108
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
76-13-1	Freon-113	ND	2.5	0.70	U
108-87-2	Methyl cyclohexane	ND	10	0.40	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Lab ID	: WG1865859-5	**Date Collected**	: NA
Client ID	: WG1865859-5BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 12/19/23 06:48
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: MJV
Lab File ID	: V01231219A04	**Instrument ID**	: VOA101
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
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
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Lab ID	: WG1865859-5	**Date Collected**	: NA
Client ID	: WG1865859-5BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 12/19/23 06:48
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: MJV
Lab File ID	: V01231219A04	**Instrument ID**	: VOA101
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	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
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	ND	5.0	1.5	U
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
79-20-9	Methyl Acetate	ND	2.0	0.23	U
110-82-7	Cyclohexane	ND	10	0.27	U
123-91-1	1,4-Dioxane	ND	250	61.	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Lab ID	: WG1865859-5	**Date Collected**	: NA
Client ID	: WG1865859-5BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 12/19/23 06:48
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: MJV
Lab File ID	: V01231219A04	**Instrument ID**	: VOA101
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
76-13-1	Freon-113	ND	2.5	0.70	U
108-87-2	Methyl cyclohexane	ND	10	0.40	U

Quantitation Report (QT Reviewed)

Data Path : K:\VOA108\2023\231218A\
Data File : V08231218A14.d
Acq On : 18 Dec 2023 11:43 am
Operator : VOA108:MKS
Sample : L2373323-01,31,10,10,,A
Misc : WG1865366,ICAL20635
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 19 09:09:11 2023
Quant Method : K:\VOA108\2023\231218A\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 17:09:55 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA108\2023\231218A\V08231218A01.d
Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.120	96	122325	10.000	ug/L	0.00
Standard Area 1 = 142386			Recovery = 85.91%			
59) Chlorobenzene-d5	9.653	117	89591	10.000	ug/L	0.00
Standard Area 1 = 96600			Recovery = 92.74%			
79) 1,4-Dichlorobenzene-d4	12.327	152	42093	10.000	ug/L	0.00
Standard Area 1 = 46518			Recovery = 90.49%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.302	113	34957	11.134	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 111.34%			
43) 1,2-Dichloroethane-d4	5.831	65	46213	11.953	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 119.53%			
60) Toluene-d8	7.808	98	117535	10.110	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.10%			
83) 4-Bromofluorobenzene	11.127	95	40530	10.203	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 102.03%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.		
3) Chloromethane	0.000		0	N.D.		
4) Vinyl chloride	1.978	62	21610	5.890	ug/L	99
5) Bromomethane	0.000		0	N.D.		
6) Chloroethane	0.000		0	N.D.	d	
7) Trichlorofluoromethane	0.000		0	N.D.		
10) 1,1-Dichloroethene	0.000		0	N.D.		
11) Carbon disulfide	3.079	76	661	0.079	ug/L #	76
12) Freon-113	0.000		0	N.D.		
15) Methylene chloride	0.000		0	N.D.		
17) Acetone	0.000		0	N.D.	d	
18) trans-1,2-Dichloroethene	0.000		0	N.D.		
19) Methyl acetate	3.771	43	61	N.D.		
20) Methyl tert-butyl ether	0.000		0	N.D.		
23) 1,1-Dichloroethane	4.348	63	1945	0.334	ug/L #	79
28) cis-1,2-Dichloroethene	4.872	96	4061	1.455	ug/L	83
30) Bromochloromethane	0.000		0	N.D.		
31) Cyclohexane	0.000		0	N.D.		
32) Chloroform	0.000		0	N.D.		
34) Carbon tetrachloride	0.000		0	N.D.		

Data Path : K:\VOA108\2023\231218A\
Data File : V08231218A14.d
Acq On : 18 Dec 2023 11:43 am
Operator : VOA108:MKS
Sample : L2373323-01,31,10,10,,A
Misc : WG1865366,ICAL20635
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 19 09:09:11 2023
Quant Method : K:\VOA108\2023\231218A\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 17:09:55 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA108\2023\231218A\V08231218A01.d
Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) 1,1,1-Trichloroethane	0.000		0		N.D.	
39) 2-Butanone	0.000		0		N.D.	
41) Benzene	0.000		0		N.D.	
44) 1,2-Dichloroethane	0.000		0		N.D.	
47) Methyl cyclohexane	0.000		0		N.D.	
48) Trichloroethene	0.000		0		N.D.	
51) 1,2-Dichloropropane	0.000		0		N.D.	
54) Bromodichloromethane	0.000		0		N.D.	
57) 1,4-Dioxane	0.000		0		N.D.	
58) cis-1,3-Dichloropropene	0.000		0		N.D.	
61) Toluene	0.000		0		N.D.	
62) 4-Methyl-2-pentanone	0.000		0		N.D.	
63) Tetrachloroethene	0.000		0		N.D.	
65) trans-1,3-Dichloropropene	0.000		0		N.D.	
68) 1,1,2-Trichloroethane	0.000		0		N.D.	
69) Chlorodibromomethane	0.000		0		N.D.	
71) 1,2-Dibromoethane	0.000		0		N.D.	
72) 2-Hexanone	0.000		0		N.D.	
73) Chlorobenzene	0.000		0		N.D.	
74) Ethylbenzene	0.000		0		N.D.	
76) p/m Xylene	0.000		0		N.D.	
77) o Xylene	0.000		0		N.D.	
78) Styrene	0.000		0		N.D.	
80) Bromoform	0.000		0		N.D.	
82) Isopropylbenzene	0.000		0		N.D.	
87) 1,1,2,2-Tetrachloroethane	0.000		0		N.D.	
100) 1,3-Dichlorobenzene	0.000		0		N.D.	
101) 1,4-Dichlorobenzene	0.000		0		N.D.	
104) 1,2-Dichlorobenzene	0.000		0		N.D.	
106) 1,2-Dibromo-3-chloropr...	0.000		0		N.D.	
109) 1,2,4-Trichlorobenzene	0.000		0		N.D.	
111) 1,2,3-Trichlorobenzene	0.000		0		N.D.	

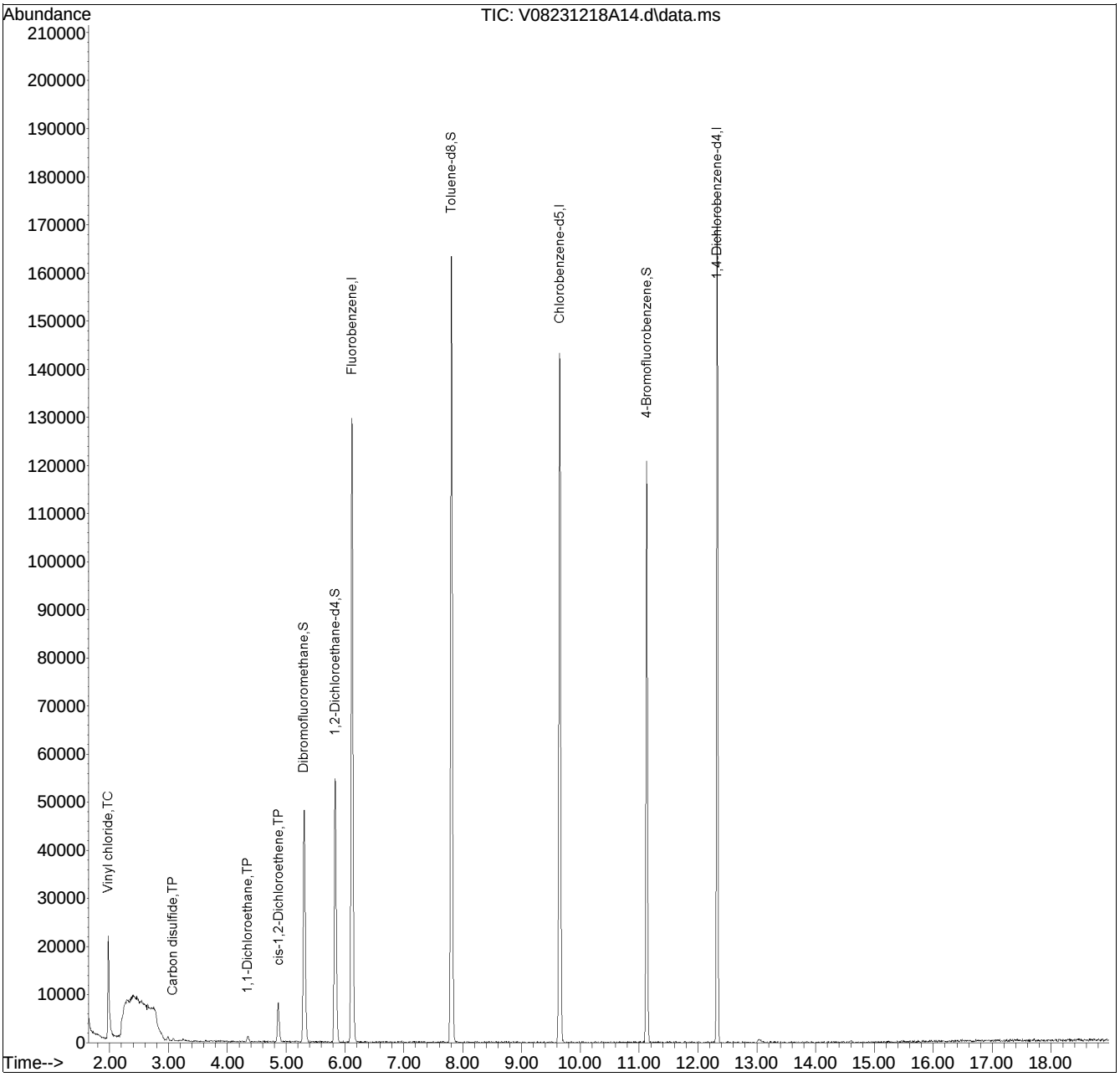
(#) = qualifier out of range (m) = manual integration (+) = signals summed

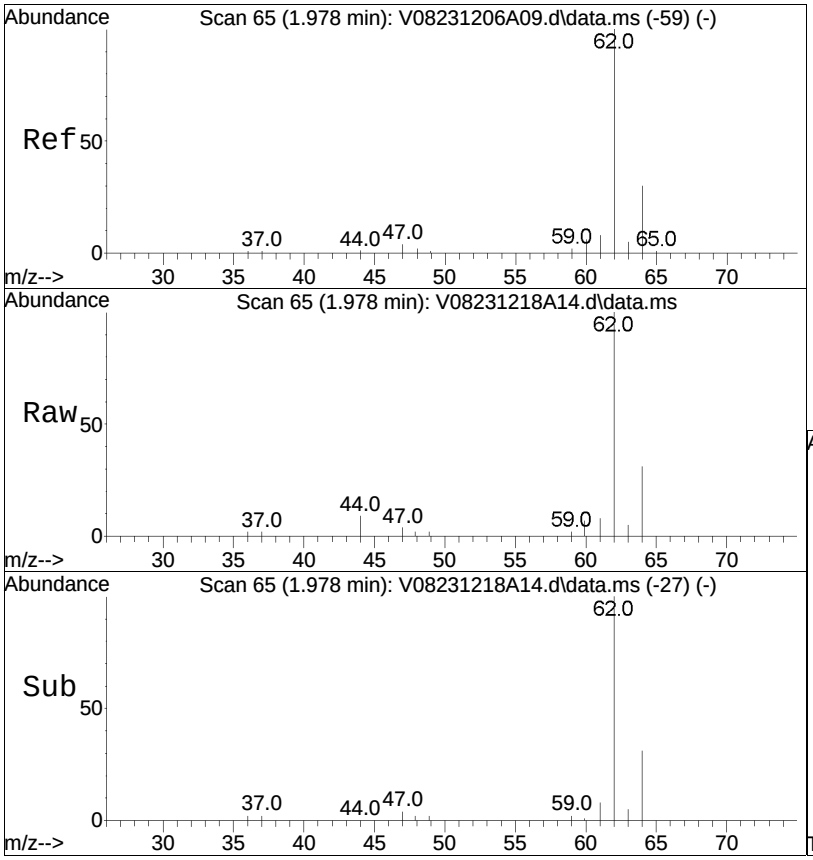
Quantitation Report (QT Reviewed)

Data Path : K:\VOA108\2023\231218A\
Data File : V08231218A14.d
Acq On : 18 Dec 2023 11:43 am
Operator : VOA108:MKS
Sample : L2373323-01,31,10,10,,A
Misc : WG1865366,ICAL20635
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 19 09:09:11 2023
Quant Method : K:\VOA108\2023\231218A\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 17:09:55 2023
Response via : Initial Calibration

Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE01.d•

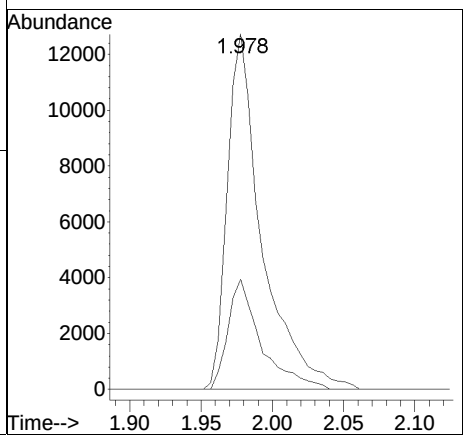


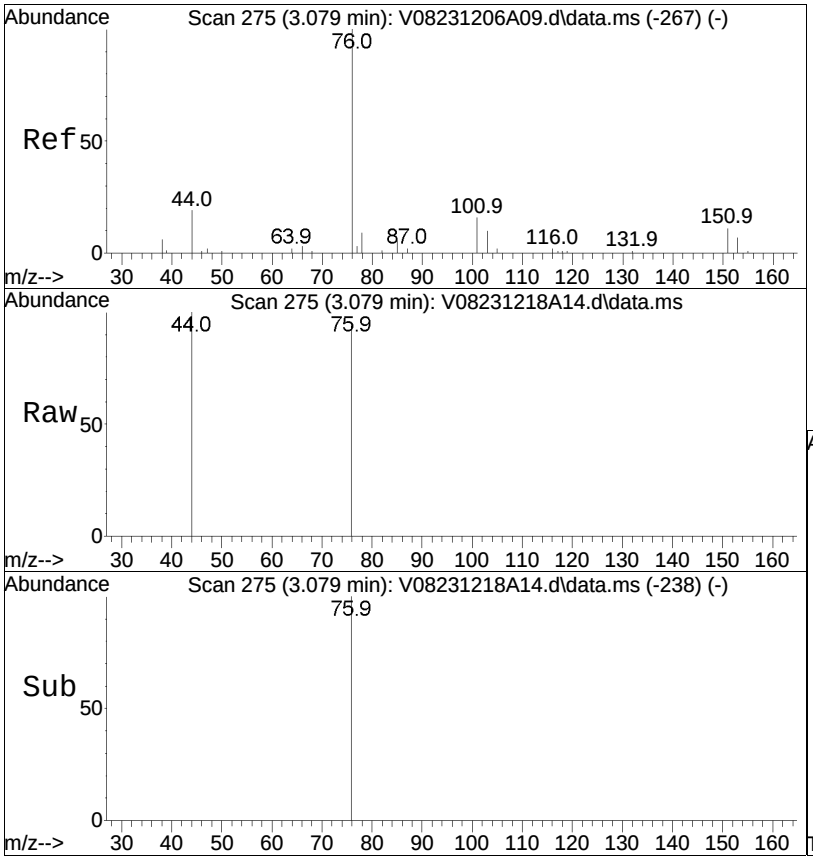


#4
Vinyl chloride
Concen: 5.89 ug/L
RT: 1.978 min Scan# 65
Delta R.T. -0.000 min
Lab File: V08231218A14.d
Acq: 18 Dec 2023 11:43 am

Tgt Ion: 62 Resp: 21610

Ion	Ratio	Lower	Upper
62	100		
64	29.7	9.1	49.1

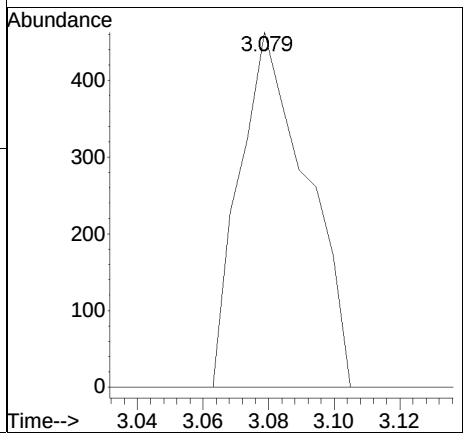


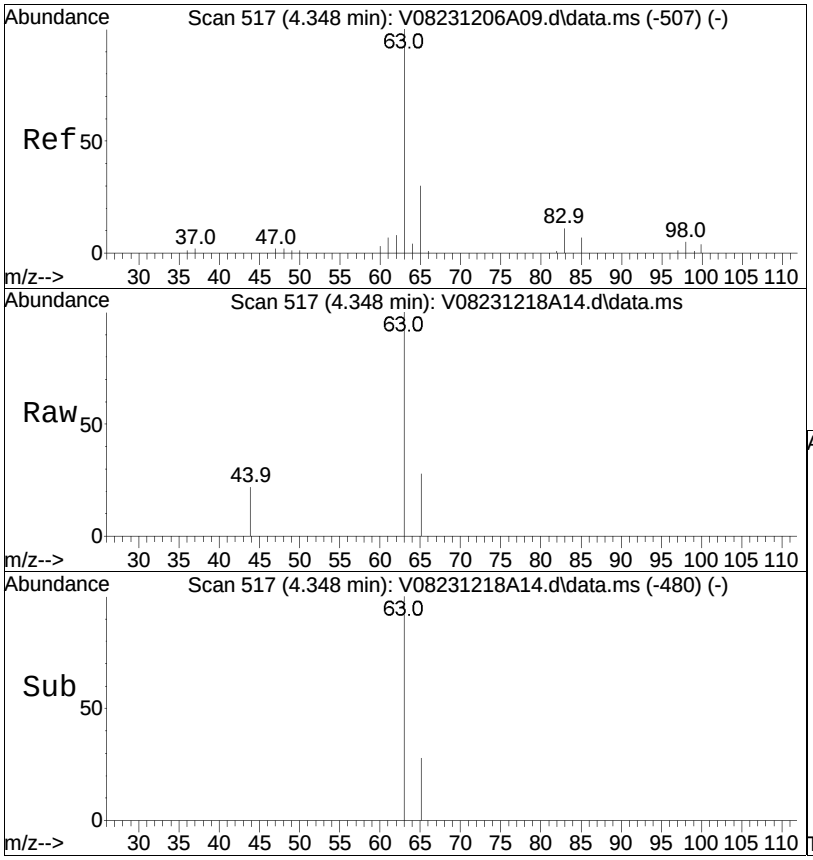


#11
Carbon disulfide
Concen: 0.08 ug/L
RT: 3.079 min Scan# 275
Delta R.T. -0.005 min
Lab File: V08231218A14.d
Acq: 18 Dec 2023 11:43 am

Tgt Ion: 76 Resp: 661

Ion	Ratio	Lower	Upper
76	100		
78	0.0	5.7	11.7#

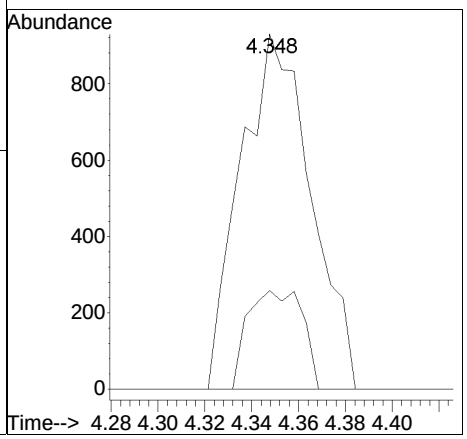


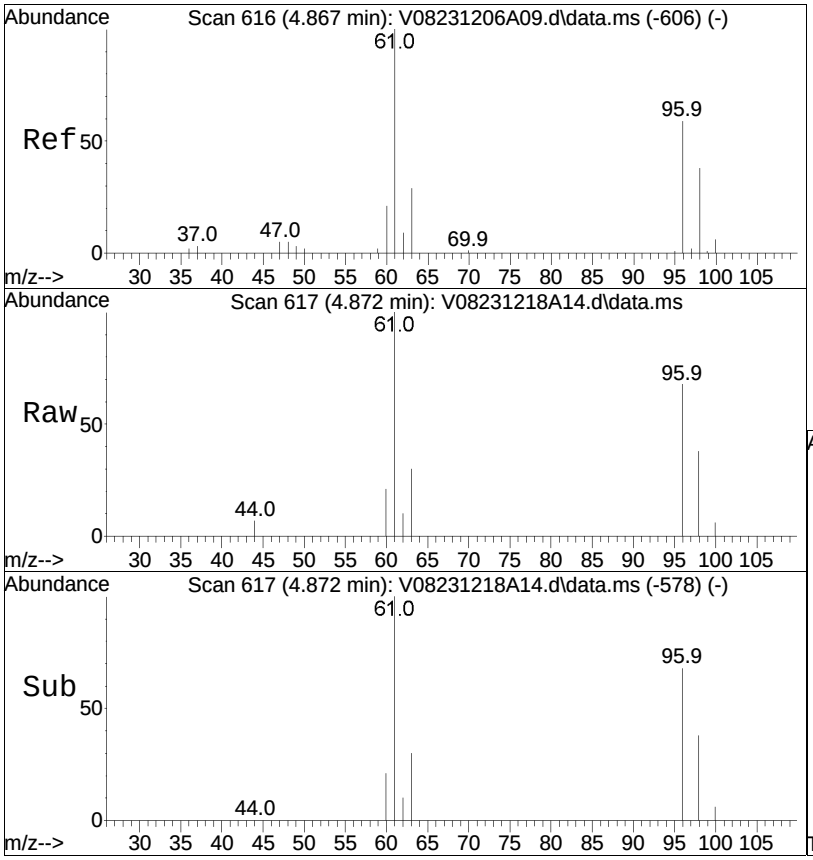


#23
1,1-Dichloroethane
Concen: 0.33 ug/L
RT: 4.348 min Scan# 517
Delta R.T. -0.005 min
Lab File: V08231218A14.d
Acq: 18 Dec 2023 11:43 am

Tgt Ion: 63 Resp: 1945

Ion	Ratio	Lower	Upper
63	100		
65	21.6	11.0	51.0
83	0.0	0.0	31.8

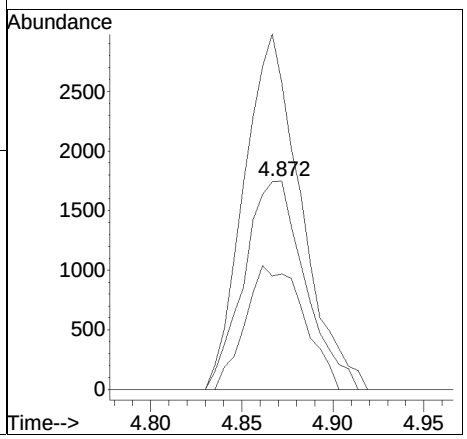




#28
cis-1,2-Dichloroethene
Concen: 1.46 ug/L
RT: 4.872 min Scan# 617
Delta R.T. 0.005 min
Lab File: V08231218A14.d
Acq: 18 Dec 2023 11:43 am

Tgt Ion: 96 Resp: 4061

Ion	Ratio	Lower	Upper
96	100		
61	159.5	149.4	224.2
98	57.0	53.4	80.2



Manual Integration Report

Data Path	: K:\VOA108\2023\231218A\	QMethod	: V108_231206A_8260.m
Data File	: V08231218A14.d	Operator	: VOA108:MKS
Date Inj'd	: 12/18/2023 11:43 am	Instrument	: VOA 108
Sample	: L2373323-01,31,10,10,,A	Quant Date	: 12/19/2023 8:59 am

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

Quantitation Report (QT Reviewed)

Data Path : K:\VOA108\2023\231218A\
Data File : V08231218A15.d
Acq On : 18 Dec 2023 12:06 pm
Operator : VOA108:MKS
Sample : L2373323-02D,31,2.5,10,,A
Misc : WG1865366,ICAL20635
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Dec 19 09:09:35 2023
Quant Method : K:\VOA108\2023\231218A\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 17:09:55 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA108\2023\231218A\V08231218A01.d
Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	6.120	96	129706	10.000 ug/L	0.00
Standard Area 1 = 142386			Recovery = 91.09%		
59) Chlorobenzene-d5	9.648	117	92139	10.000 ug/L	0.00
Standard Area 1 = 96600			Recovery = 95.38%		
79) 1,4-Dichlorobenzene-d4	12.327	152	42561	10.000 ug/L	0.00
Standard Area 1 = 46518			Recovery = 91.49%		
System Monitoring Compounds					
36) Dibromofluoromethane	5.307	113	36493	10.962 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 109.62%		
43) 1,2-Dichloroethane-d4	5.831	65	48239	11.767 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 117.67%		
60) Toluene-d8	7.808	98	122746	10.266 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 102.66%		
83) 4-Bromofluorobenzene	11.127	95	41354	10.296 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 102.96%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.	
3) Chloromethane	0.000		0	N.D. d	
4) Vinyl chloride	1.978	62	224118	56.461 ug/L	98
5) Bromomethane	0.000		0	N.D.	
6) Chloroethane	0.000		0	N.D. d	
7) Trichlorofluoromethane	0.000		0	N.D.	
10) 1,1-Dichloroethene	3.047	96	353	0.148 ug/L #	67
11) Carbon disulfide	3.079	76	61	N.D.	
12) Freon-113	0.000		0	N.D.	
15) Methylene chloride	0.000		0	N.D.	
17) Acetone	0.000		0	N.D. d	
18) trans-1,2-Dichloroethene	3.760	96	557	0.209 ug/L #	87
19) Methyl acetate	3.655	43	51	N.D.	
20) Methyl tert-butyl ether	0.000		0	N.D.	
23) 1,1-Dichloroethane	4.347	63	6577	1.066 ug/L	95
28) cis-1,2-Dichloroethene	4.866	96	316606	107.009 ug/L	91
30) Bromochloromethane	0.000		0	N.D.	
31) Cyclohexane	0.000		0	N.D.	
32) Chloroform	0.000		0	N.D.	
34) Carbon tetrachloride	0.000		0	N.D.	

Data Path : K:\VOA108\2023\231218A\
Data File : V08231218A15.d
Acq On : 18 Dec 2023 12:06 pm
Operator : VOA108:MKS
Sample : L2373323-02D,31,2.5,10,,A
Misc : WG1865366,ICAL20635
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Dec 19 09:09:35 2023
Quant Method : K:\VOA108\2023\231218A\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 17:09:55 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA108\2023\231218A\V08231218A01.d
Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) 1,1,1-Trichloroethane	0.000		0		N.D.	
39) 2-Butanone	0.000		0		N.D.	
41) Benzene	5.690	78	164		N.D.	
44) 1,2-Dichloroethane	0.000		0		N.D.	
47) Methyl cyclohexane	0.000		0		N.D.	
48) Trichloroethene	0.000		0		N.D.	
51) 1,2-Dichloropropane	0.000		0		N.D.	
54) Bromodichloromethane	0.000		0		N.D.	
57) 1,4-Dioxane	0.000		0		N.D.	
58) cis-1,3-Dichloropropene	0.000		0		N.D.	
61) Toluene	0.000		0		N.D.	
62) 4-Methyl-2-pentanone	0.000		0		N.D.	
63) Tetrachloroethene	0.000		0		N.D.	
65) trans-1,3-Dichloropropene	0.000		0		N.D.	
68) 1,1,2-Trichloroethane	0.000		0		N.D.	
69) Chlorodibromomethane	0.000		0		N.D.	
71) 1,2-Dibromoethane	0.000		0		N.D.	
72) 2-Hexanone	0.000		0		N.D.	
73) Chlorobenzene	0.000		0		N.D.	
74) Ethylbenzene	0.000		0		N.D.	
76) p/m Xylene	0.000		0		N.D.	
77) o Xylene	0.000		0		N.D.	
78) Styrene	0.000		0		N.D.	
80) Bromoform	0.000		0		N.D.	
82) Isopropylbenzene	0.000		0		N.D.	
87) 1,1,2,2-Tetrachloroethane	0.000		0		N.D.	
100) 1,3-Dichlorobenzene	0.000		0		N.D.	
101) 1,4-Dichlorobenzene	0.000		0		N.D.	
104) 1,2-Dichlorobenzene	0.000		0		N.D.	
106) 1,2-Dibromo-3-chloropr...	0.000		0		N.D.	
109) 1,2,4-Trichlorobenzene	0.000		0		N.D.	
111) 1,2,3-Trichlorobenzene	0.000		0		N.D.	

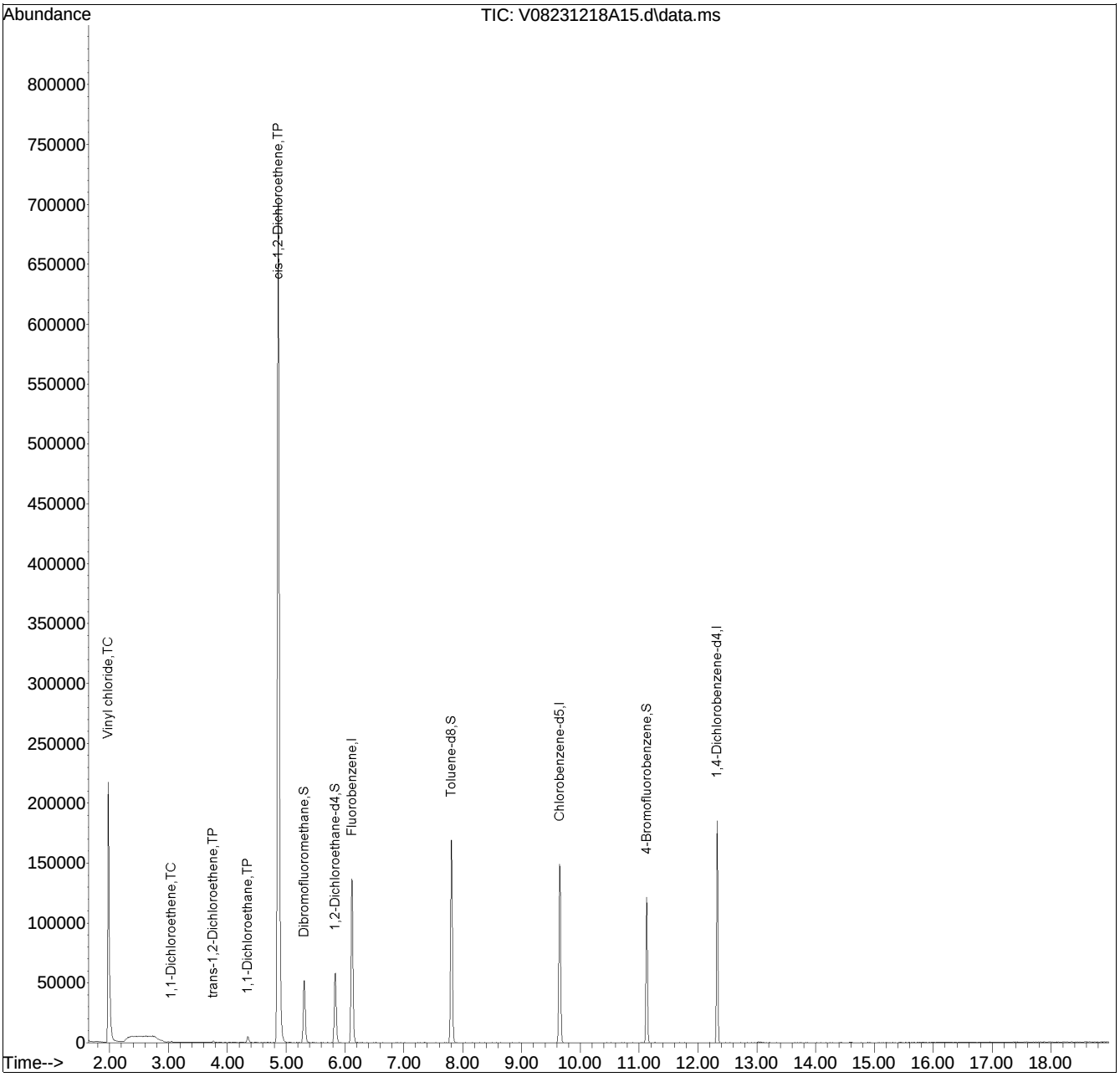
(#) = qualifier out of range (m) = manual integration (+) = signals summed

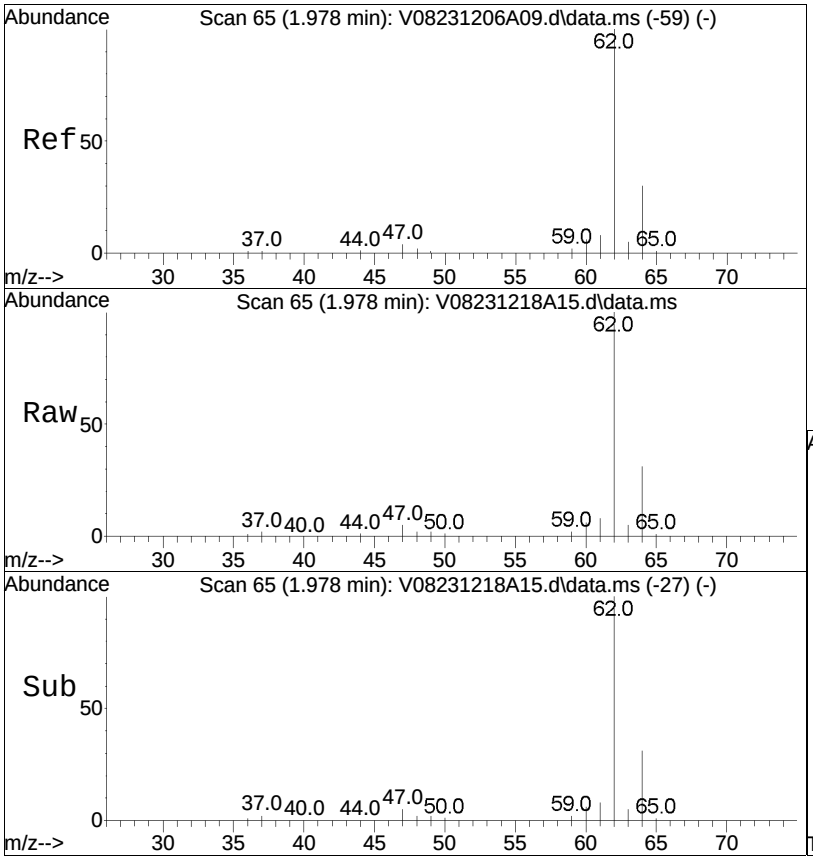
Quantitation Report (QT Reviewed)

Data Path : K:\VOA108\2023\231218A\
Data File : V08231218A15.d
Acq On : 18 Dec 2023 12:06 pm
Operator : VOA108:MKS
Sample : L2373323-02D,31,2.5,10,,A
Misc : WG1865366,ICAL20635
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Dec 19 09:09:35 2023
Quant Method : K:\VOA108\2023\231218A\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 17:09:55 2023
Response via : Initial Calibration

Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE01.d•

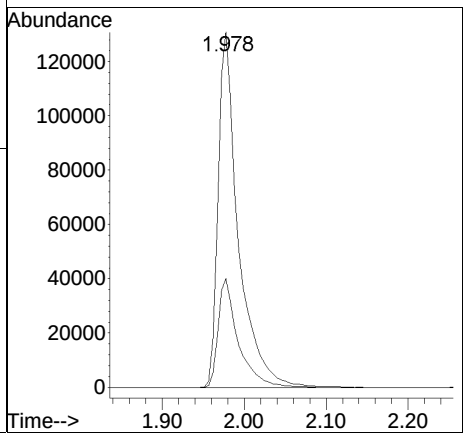


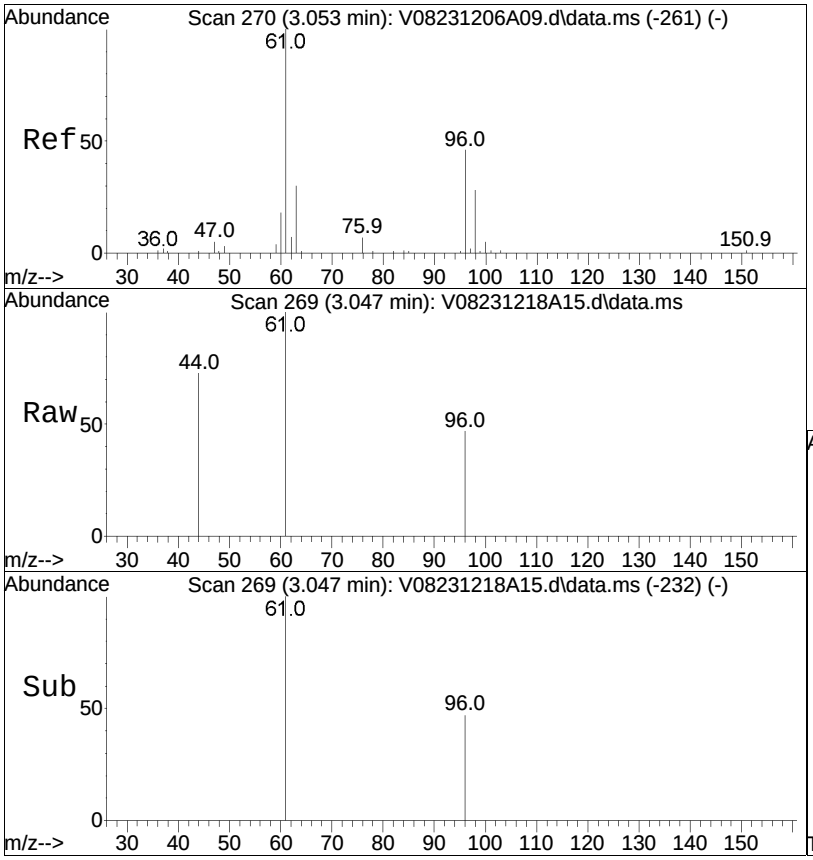


#4
Vinyl chloride
Concen: 56.46 ug/L
RT: 1.978 min Scan# 65
Delta R.T. -0.000 min
Lab File: V08231218A15.d
Acq: 18 Dec 2023 12:06 pm

Tgt Ion: 62 Resp: 224118

Ion	Ratio	Lower	Upper
62	100		
64	30.4	9.1	49.1

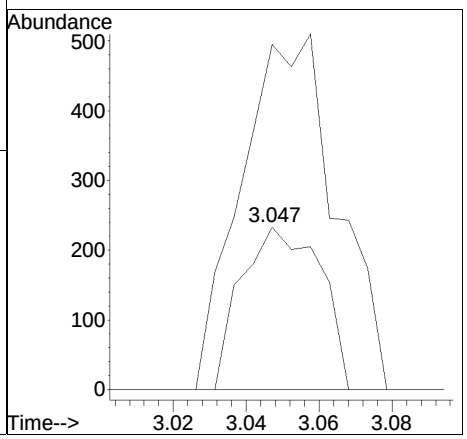


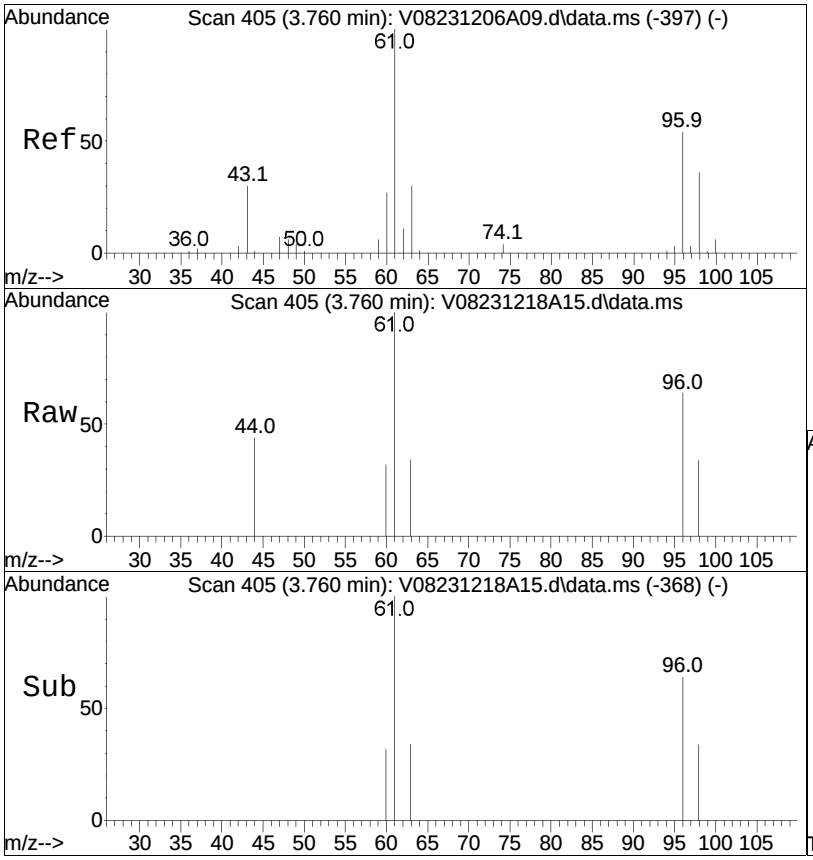


#10
1,1-Dichloroethene
Concen: 0.15 ug/L
RT: 3.047 min Scan# 269
Delta R.T. -0.005 min
Lab File: V08231218A15.d
Acq: 18 Dec 2023 12:06 pm

Tgt Ion: 96 Resp: 353

Ion	Ratio	Lower	Upper
96	100		
61	259.8	186.1	279.1
63	0.0	57.6	86.4#

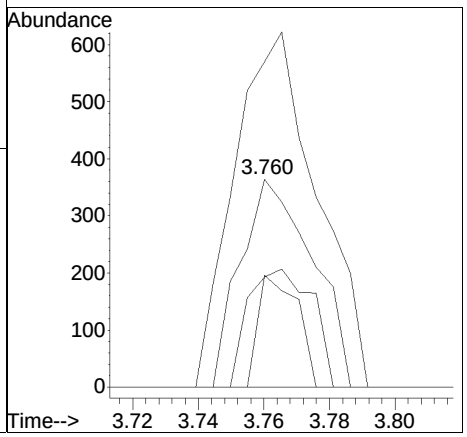


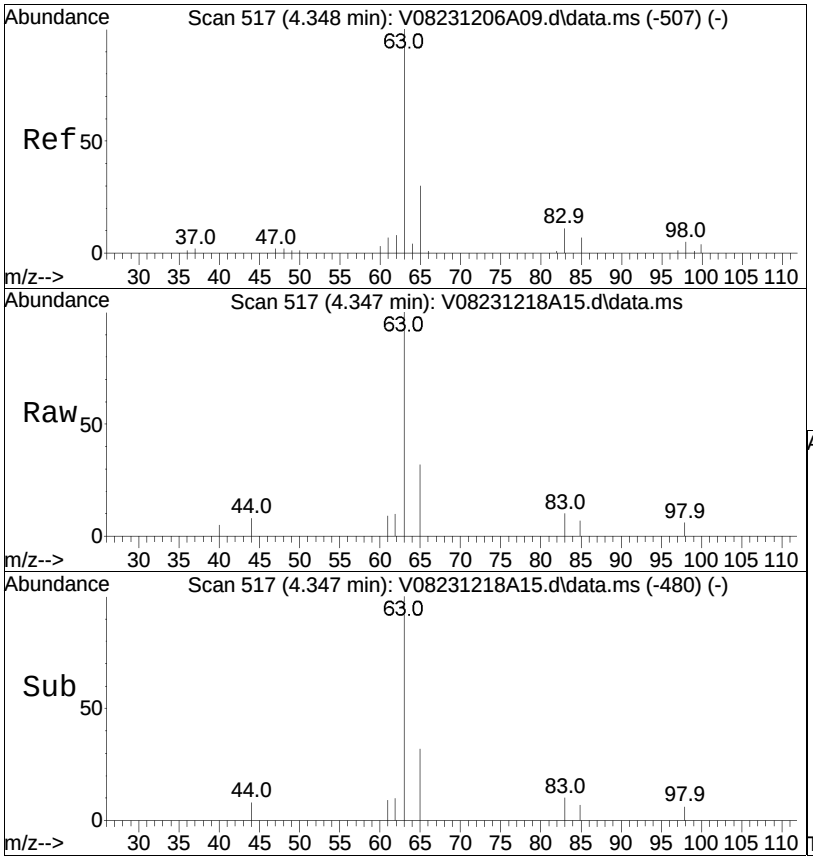


#18
trans-1,2-Dichloroethene
Concen: 0.21 ug/L
RT: 3.760 min Scan# 405
Delta R.T. -0.006 min
Lab File: V08231218A15.d
Acq: 18 Dec 2023 12:06 pm

Tgt Ion: 96 Resp: 557

Ion	Ratio	Lower	Upper
96	100		
61	196.1	124.0	257.6
98	50.1	41.2	85.6
63	29.3	38.4	79.7#

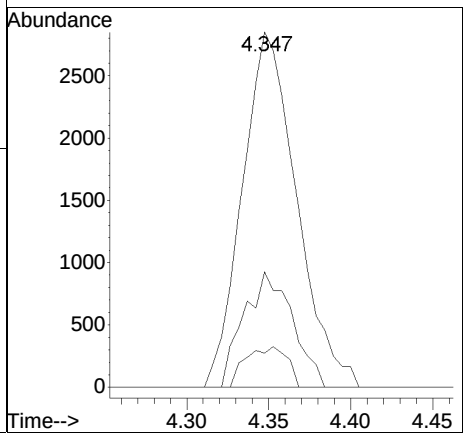


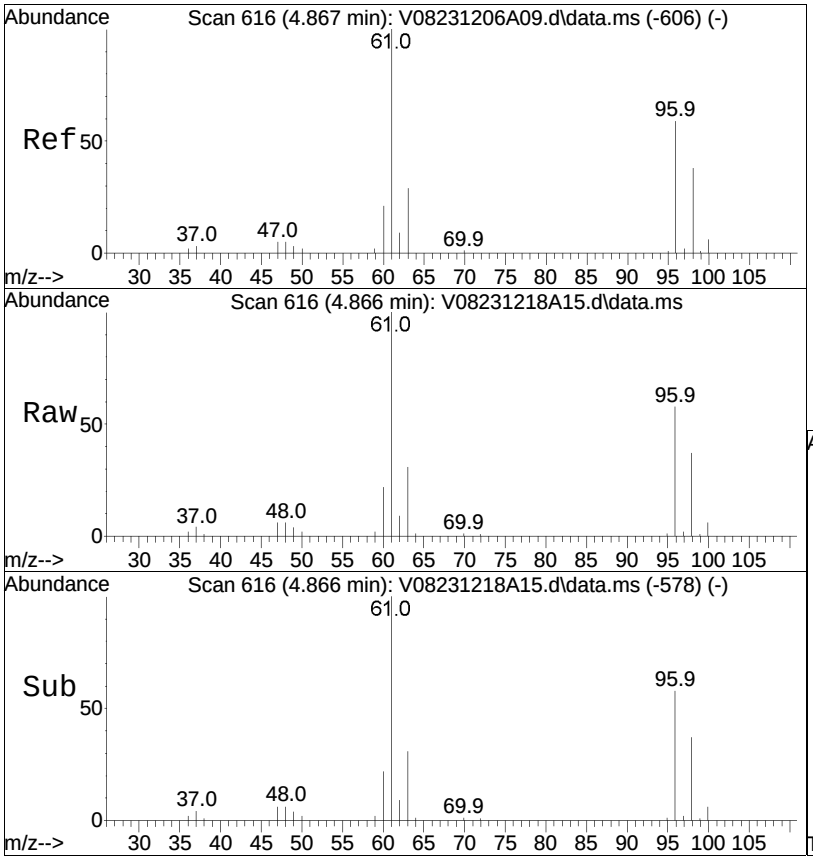


#23
1,1-Dichloroethane
Concen: 1.07 ug/L
RT: 4.347 min Scan# 517
Delta R.T. -0.006 min
Lab File: V08231218A15.d
Acq: 18 Dec 2023 12:06 pm

Tgt Ion: 63 Resp: 6577

Ion	Ratio	Lower	Upper
63	100		
65	29.0	11.0	51.0
83	8.8	0.0	31.8

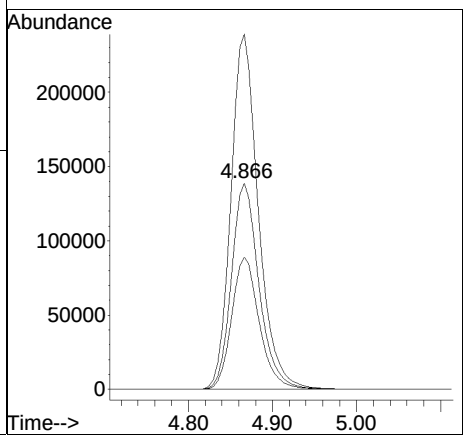




#28
cis-1,2-Dichloroethene
Concen: 107.01 ug/L
RT: 4.866 min Scan# 616
Delta R.T. -0.001 min
Lab File: V08231218A15.d
Acq: 18 Dec 2023 12:06 pm

Tgt Ion: 96 Resp: 316606

Ion	Ratio	Lower	Upper
96	100		
61	171.4	149.4	224.2
98	64.4	53.4	80.2



Manual Integration Report

Data Path	: K:\VOA108\2023\231218A\	QMethod	: V108_231206A_8260.m
Data File	: V08231218A15.d	Operator	: VOA108:MKS
Date Inj'd	: 12/18/2023 12:06 pm	Instrument	: VOA 108
Sample	: L2373323-02D,31,2.5,10,,A	Quant Date	: 12/19/2023 8:59 am

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

Quantitation Report (QT Reviewed)

Data Path : K:\VOA108\2023\231218A\
Data File : V08231218A18.d
Acq On : 18 Dec 2023 1:13 pm
Operator : VOA108:MKS
Sample : L2373323-05D,31,0.2,10,,A
Misc : WG1865366,ICAL20635
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 19 09:10:45 2023
Quant Method : K:\VOA108\2023\231218A\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 17:09:55 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA108\2023\231218A\V08231218A01.d
Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.120	96	121470	10.000	ug/L	0.00
Standard Area 1 = 142386			Recovery = 85.31%			
59) Chlorobenzene-d5	9.648	117	87070	10.000	ug/L	0.00
Standard Area 1 = 96600			Recovery = 90.13%			
79) 1,4-Dichlorobenzene-d4	12.327	152	39365	10.000	ug/L	0.00
Standard Area 1 = 46518			Recovery = 84.62%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.302	113	34733	11.140	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 111.40%			
43) 1,2-Dichloroethane-d4	5.831	65	45512	11.854	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 118.54%			
60) Toluene-d8	7.808	98	116935	10.349	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 103.49%			
83) 4-Bromofluorobenzene	11.127	95	37636	10.131	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.31%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.		
3) Chloromethane	0.000		0	N.D. d		
4) Vinyl chloride	1.978	62	88837	23.973	ug/L	98
5) Bromomethane	0.000		0	N.D.		
6) Chloroethane	0.000		0	N.D. d		
7) Trichlorofluoromethane	0.000		0	N.D.		
10) 1,1-Dichloroethene	3.053	96	251	0.113	ug/L #	22
11) Carbon disulfide	3.079	76	49	N.D.		
12) Freon-113	0.000		0	N.D.		
15) Methylene chloride	0.000		0	N.D.		
17) Acetone	0.000		0	N.D. d		
18) trans-1,2-Dichloroethene	3.766	96	428	0.171	ug/L #	59
19) Methyl acetate	0.000		0	N.D. d		
20) Methyl tert-butyl ether	0.000		0	N.D.		
23) 1,1-Dichloroethane	4.353	63	6337	1.096	ug/L	93
28) cis-1,2-Dichloroethene	4.867	96	293660	105.983	ug/L	90
30) Bromochloromethane	0.000		0	N.D.		
31) Cyclohexane	0.000		0	N.D.		
32) Chloroform	0.000		0	N.D.		
34) Carbon tetrachloride	0.000		0	N.D.		

Data Path : K:\VOA108\2023\231218A\
Data File : V08231218A18.d
Acq On : 18 Dec 2023 1:13 pm
Operator : VOA108:MKS
Sample : L2373323-05D,31,0.2,10,,A
Misc : WG1865366,ICAL20635
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 19 09:10:45 2023
Quant Method : K:\VOA108\2023\231218A\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 17:09:55 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA108\2023\231218A\V08231218A01.d
Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) 1,1,1-Trichloroethane	0.000		0		N.D.	
39) 2-Butanone	0.000		0		N.D.	
41) Benzene	0.000		0		N.D.	
44) 1,2-Dichloroethane	0.000		0		N.D.	
47) Methyl cyclohexane	0.000		0		N.D.	
48) Trichloroethene	0.000		0		N.D.	
51) 1,2-Dichloropropane	0.000		0		N.D.	
54) Bromodichloromethane	0.000		0		N.D.	
57) 1,4-Dioxane	0.000		0		N.D.	
58) cis-1,3-Dichloropropene	0.000		0		N.D.	
61) Toluene	0.000		0		N.D.	
62) 4-Methyl-2-pentanone	0.000		0		N.D.	
63) Tetrachloroethene	0.000		0		N.D.	
65) trans-1,3-Dichloropropene	0.000		0		N.D.	
68) 1,1,2-Trichloroethane	0.000		0		N.D.	
69) Chlorodibromomethane	0.000		0		N.D.	
71) 1,2-Dibromoethane	0.000		0		N.D.	
72) 2-Hexanone	0.000		0		N.D.	
73) Chlorobenzene	0.000		0		N.D.	
74) Ethylbenzene	0.000		0		N.D.	
76) p/m Xylene	0.000		0		N.D.	
77) o Xylene	0.000		0		N.D.	
78) Styrene	0.000		0		N.D.	
80) Bromoform	0.000		0		N.D.	
82) Isopropylbenzene	0.000		0		N.D.	
87) 1,1,2,2-Tetrachloroethane	0.000		0		N.D.	
100) 1,3-Dichlorobenzene	0.000		0		N.D.	
101) 1,4-Dichlorobenzene	0.000		0		N.D.	
104) 1,2-Dichlorobenzene	0.000		0		N.D.	
106) 1,2-Dibromo-3-chloropr...	0.000		0		N.D.	
109) 1,2,4-Trichlorobenzene	0.000		0		N.D.	
111) 1,2,3-Trichlorobenzene	0.000		0		N.D.	

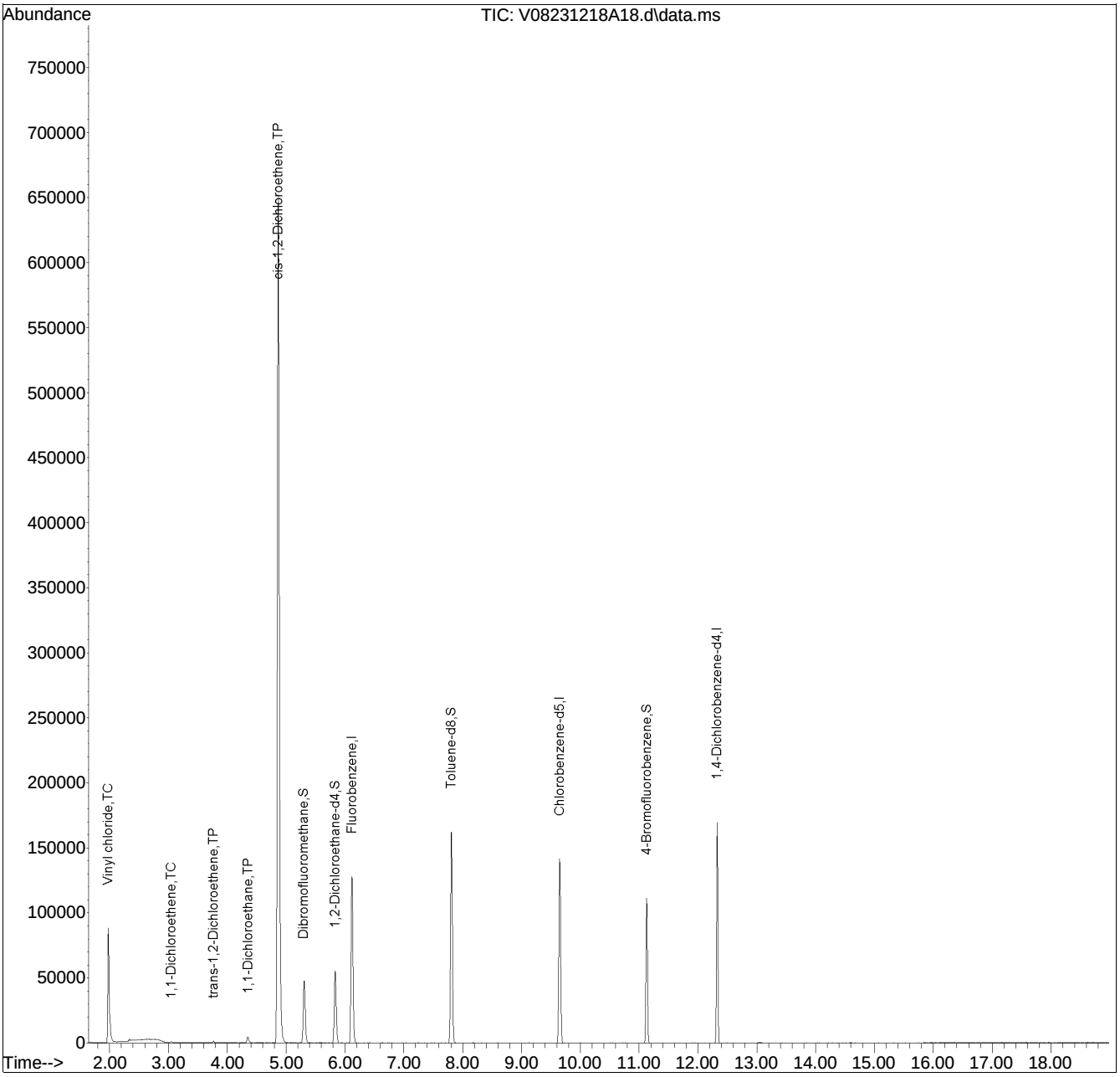
(#) = qualifier out of range (m) = manual integration (+) = signals summed

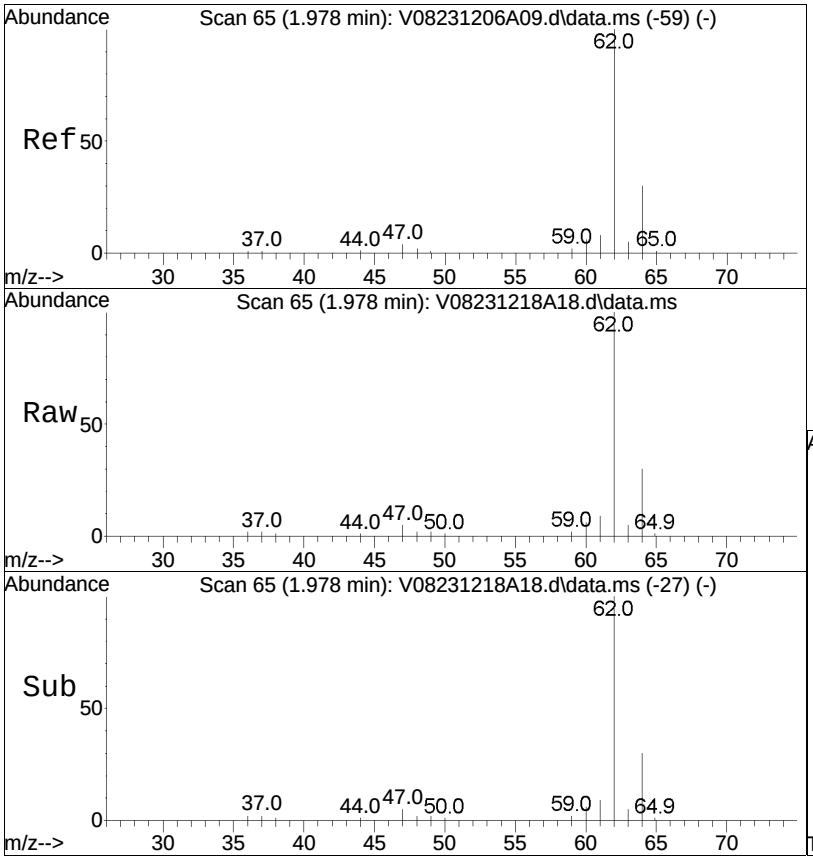
Quantitation Report (QT Reviewed)

Data Path : K:\VOA108\2023\231218A\
Data File : V08231218A18.d
Acq On : 18 Dec 2023 1:13 pm
Operator : VOA108:MKS
Sample : L2373323-05D,31,0.2,10,,A
Misc : WG1865366,ICAL20635
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 19 09:10:45 2023
Quant Method : K:\VOA108\2023\231218A\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 17:09:55 2023
Response via : Initial Calibration

Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE01.d•

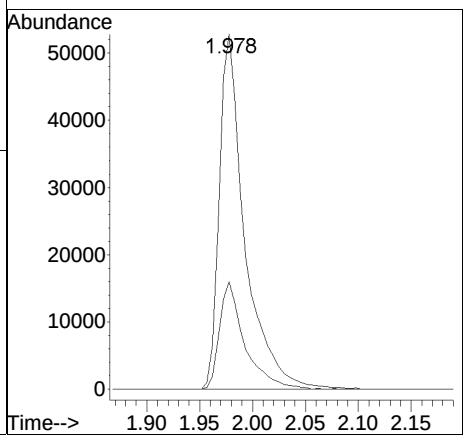


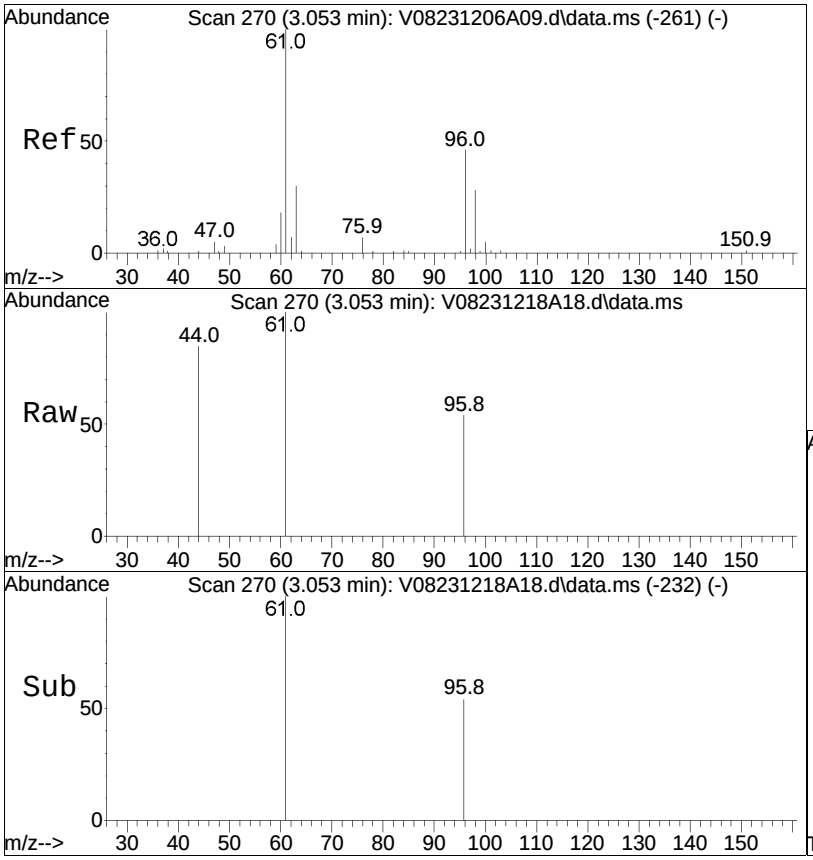


#4
Vinyl chloride
Concen: 23.97 ug/L
RT: 1.978 min Scan# 65
Delta R.T. -0.000 min
Lab File: V08231218A18.d
Acq: 18 Dec 2023 1:13 pm

Tgt Ion: 62 Resp: 88837

Ion	Ratio	Lower	Upper
62	100		
64	30.0	9.1	49.1

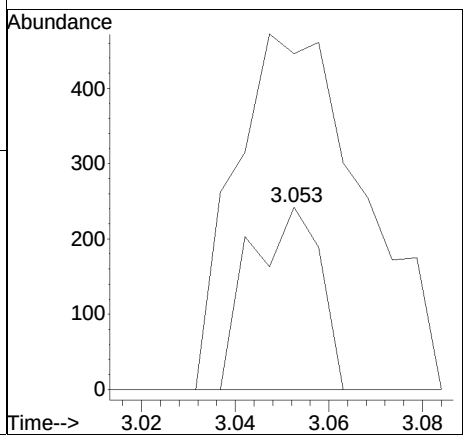


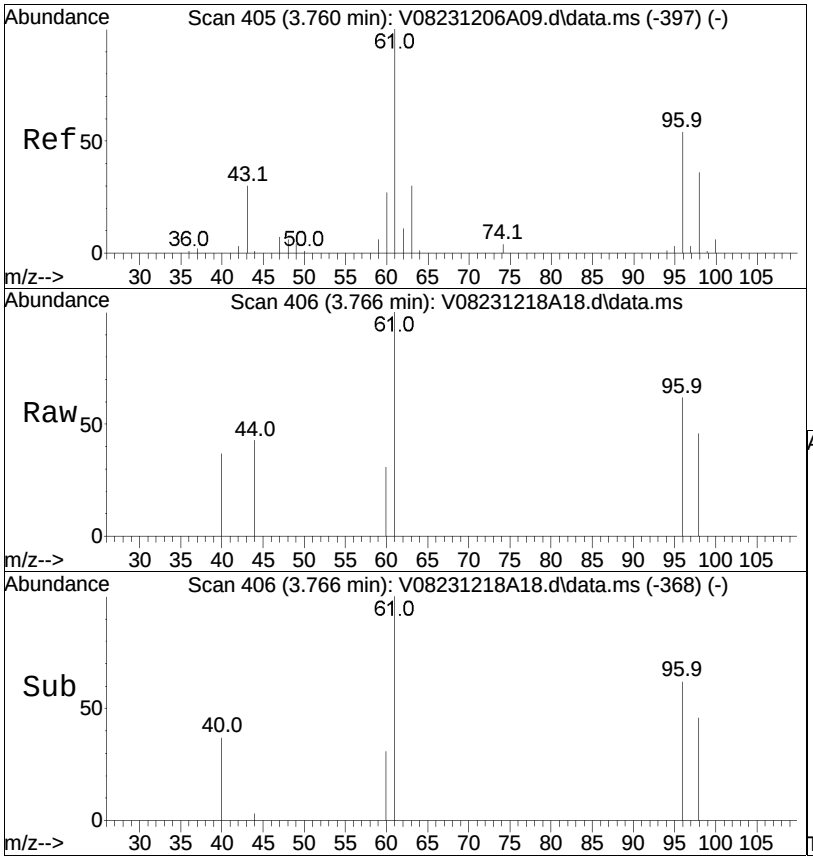


#10
1,1-Dichloroethene
Concen: 0.11 ug/L
RT: 3.053 min Scan# 270
Delta R.T. 0.001 min
Lab File: V08231218A18.d
Acq: 18 Dec 2023 1:13 pm

Tgt Ion: 96 Resp: 251

Ion	Ratio	Lower	Upper
96	100		
61	358.2	186.1	279.1#
63	0.0	57.6	86.4#

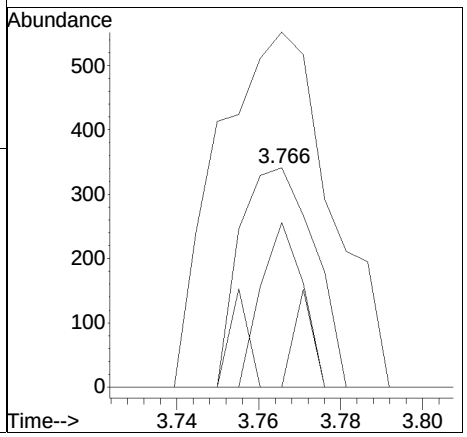


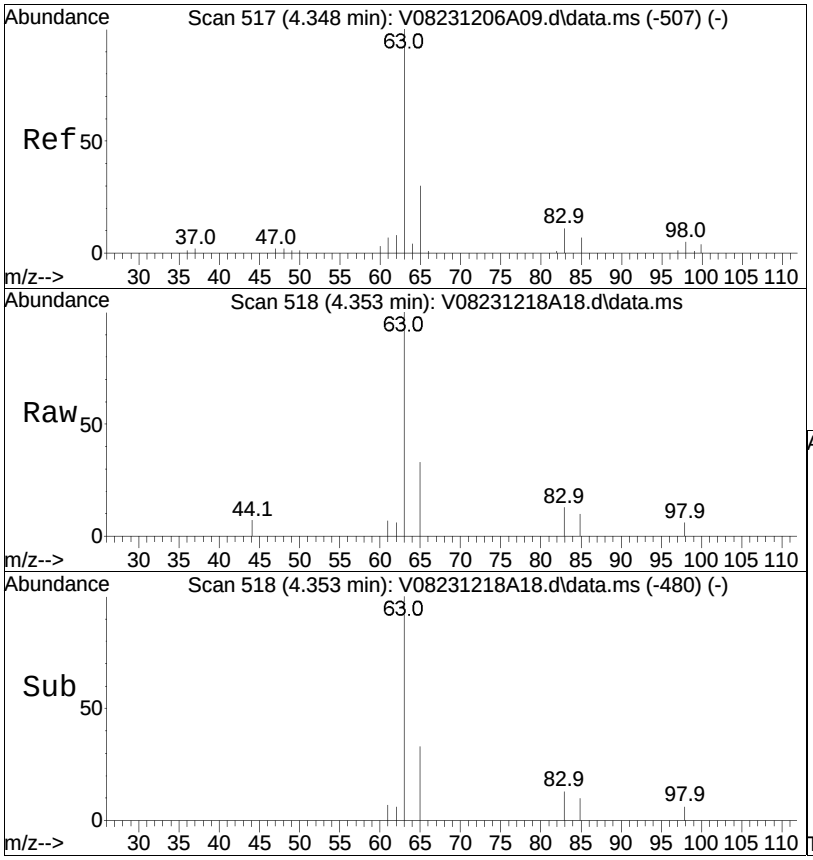


#18
trans-1,2-Dichloroethene
Concen: 0.17 ug/L
RT: 3.766 min Scan# 406
Delta R.T. -0.000 min
Lab File: V08231218A18.d
Acq: 18 Dec 2023 1:13 pm

Tgt Ion: 96 Resp: 428

Ion	Ratio	Lower	Upper
96	100		
61	246.5	124.0	257.6
98	42.3	41.2	85.6
63	11.2	38.4	79.7#

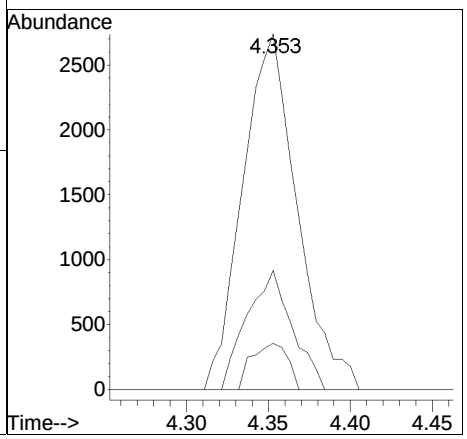


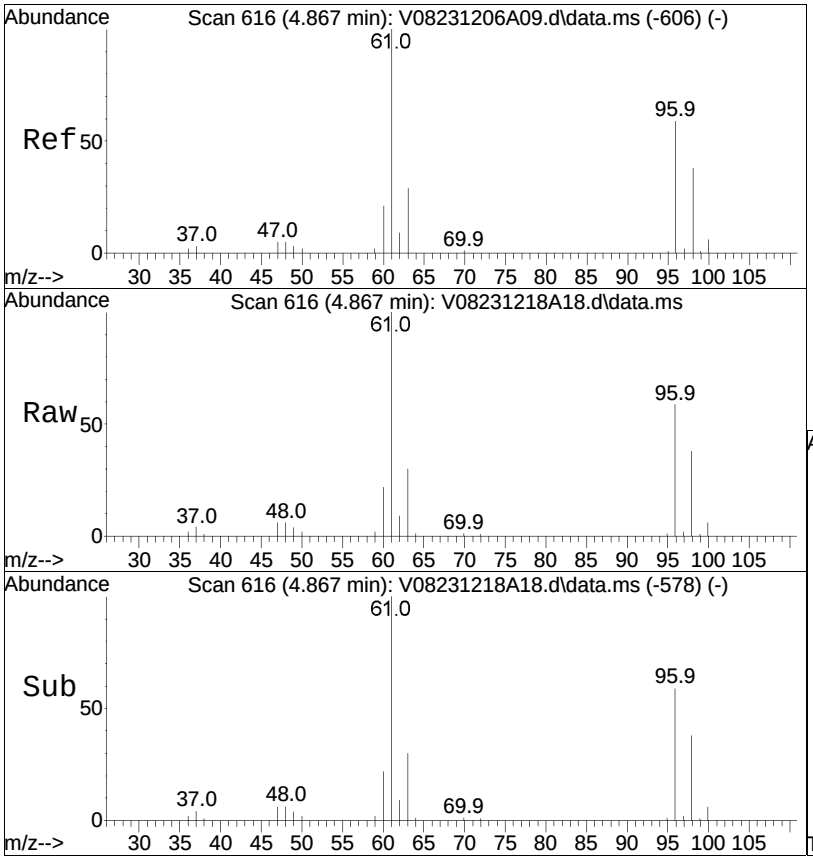


#23
1,1-Dichloroethane
Concen: 1.10 ug/L
RT: 4.353 min Scan# 518
Delta R.T. -0.000 min
Lab File: V08231218A18.d
Acq: 18 Dec 2023 1:13 pm

Tgt Ion: 63 Resp: 6337

Ion	Ratio	Lower	Upper
63	100		
65	27.8	11.0	51.0
83	8.6	0.0	31.8

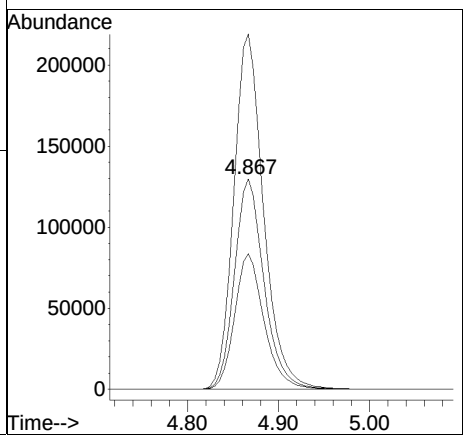




#28
cis-1,2-Dichloroethene
Concen: 105.98 ug/L
RT: 4.867 min Scan# 616
Delta R.T. -0.000 min
Lab File: V08231218A18.d
Acq: 18 Dec 2023 1:13 pm

Tgt Ion: 96 Resp: 293660

Ion	Ratio	Lower	Upper
96	100		
61	169.7	149.4	224.2
98	64.2	53.4	80.2



Manual Integration Report

Data Path	: K:\VOA108\2023\231218A\	QMethod	: V108_231206A_8260.m
Data File	: V08231218A18.d	Operator	: VOA108:MKS
Date Inj'd	: 12/18/2023 1:13 pm	Instrument	: VOA 108
Sample	: L2373323-05D,31,0.2,10,,A	Quant Date	: 12/19/2023 9:00 am

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

Quantitation Report (QT Reviewed)

Data Path : K:\VOA108\2023\231218A\
Data File : V08231218A20.d
Acq On : 18 Dec 2023 1:58 pm
Operator : VOA108:MKS
Sample : L2373323-07,31,10,10,,A
Misc : WG1865366,ICAL20635
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Dec 19 09:11:31 2023
Quant Method : K:\VOA108\2023\231218A\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 17:09:55 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA108\2023\231218A\V08231218A01.d
Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.120	96	132182	10.000	ug/L	0.00
Standard Area 1 = 142386			Recovery = 92.83%			
59) Chlorobenzene-d5	9.648	117	91666	10.000	ug/L	0.00
Standard Area 1 = 96600			Recovery = 94.89%			
79) 1,4-Dichlorobenzene-d4	12.327	152	39819	10.000	ug/L	0.00
Standard Area 1 = 46518			Recovery = 85.60%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.307	113	38149	11.244	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 112.44%			
43) 1,2-Dichloroethane-d4	5.831	65	50423	12.069	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 120.69%			
60) Toluene-d8	7.808	98	125869	10.581	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 105.81%			
83) 4-Bromofluorobenzene	11.127	95	39973	10.638	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 106.38%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.		
3) Chloromethane	0.000		0	N.D.		
4) Vinyl chloride	0.000		0	N.D.		
5) Bromomethane	0.000		0	N.D.		
6) Chloroethane	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000		0	N.D.		
10) 1,1-Dichloroethene	0.000		0	N.D.		
11) Carbon disulfide	0.000		0	N.D.		
12) Freon-113	0.000		0	N.D.		
15) Methylene chloride	0.000		0	N.D.		
17) Acetone	3.650	43	2365	3.343	ug/L #	81
18) trans-1,2-Dichloroethene	0.000		0	N.D.		
19) Methyl acetate	0.000		0	N.D.	d	
20) Methyl tert-butyl ether	0.000		0	N.D.		
23) 1,1-Dichloroethane	0.000		0	N.D.		
28) cis-1,2-Dichloroethene	0.000		0	N.D.		
30) Bromochloromethane	0.000		0	N.D.		
31) Cyclohexane	0.000		0	N.D.		
32) Chloroform	0.000		0	N.D.		
34) Carbon tetrachloride	0.000		0	N.D.		

Data Path : K:\VOA108\2023\231218A\
Data File : V08231218A20.d
Acq On : 18 Dec 2023 1:58 pm
Operator : VOA108:MKS
Sample : L2373323-07,31,10,10,,A
Misc : WG1865366,ICAL20635
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Dec 19 09:11:31 2023
Quant Method : K:\VOA108\2023\231218A\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 17:09:55 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA108\2023\231218A\V08231218A01.d
Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) 1,1,1-Trichloroethane	0.000		0		N.D.	
39) 2-Butanone	0.000		0		N.D.	
41) Benzene	0.000		0		N.D.	
44) 1,2-Dichloroethane	0.000		0		N.D.	
47) Methyl cyclohexane	0.000		0		N.D.	
48) Trichloroethene	0.000		0		N.D.	
51) 1,2-Dichloropropane	0.000		0		N.D.	
54) Bromodichloromethane	0.000		0		N.D.	
57) 1,4-Dioxane	0.000		0		N.D.	
58) cis-1,3-Dichloropropene	0.000		0		N.D.	
61) Toluene	0.000		0		N.D.	
62) 4-Methyl-2-pentanone	0.000		0		N.D.	
63) Tetrachloroethene	0.000		0		N.D.	
65) trans-1,3-Dichloropropene	0.000		0		N.D.	
68) 1,1,2-Trichloroethane	0.000		0		N.D.	
69) Chlorodibromomethane	0.000		0		N.D.	
71) 1,2-Dibromoethane	0.000		0		N.D.	
72) 2-Hexanone	0.000		0		N.D.	
73) Chlorobenzene	0.000		0		N.D.	
74) Ethylbenzene	0.000		0		N.D.	
76) p/m Xylene	0.000		0		N.D.	
77) o Xylene	0.000		0		N.D.	
78) Styrene	0.000		0		N.D.	
80) Bromoform	0.000		0		N.D.	
82) Isopropylbenzene	0.000		0		N.D.	
87) 1,1,2,2-Tetrachloroethane	0.000		0		N.D.	
100) 1,3-Dichlorobenzene	0.000		0		N.D.	
101) 1,4-Dichlorobenzene	0.000		0		N.D.	
104) 1,2-Dichlorobenzene	0.000		0		N.D.	
106) 1,2-Dibromo-3-chloropr...	0.000		0		N.D.	
109) 1,2,4-Trichlorobenzene	0.000		0		N.D.	
111) 1,2,3-Trichlorobenzene	0.000		0		N.D.	

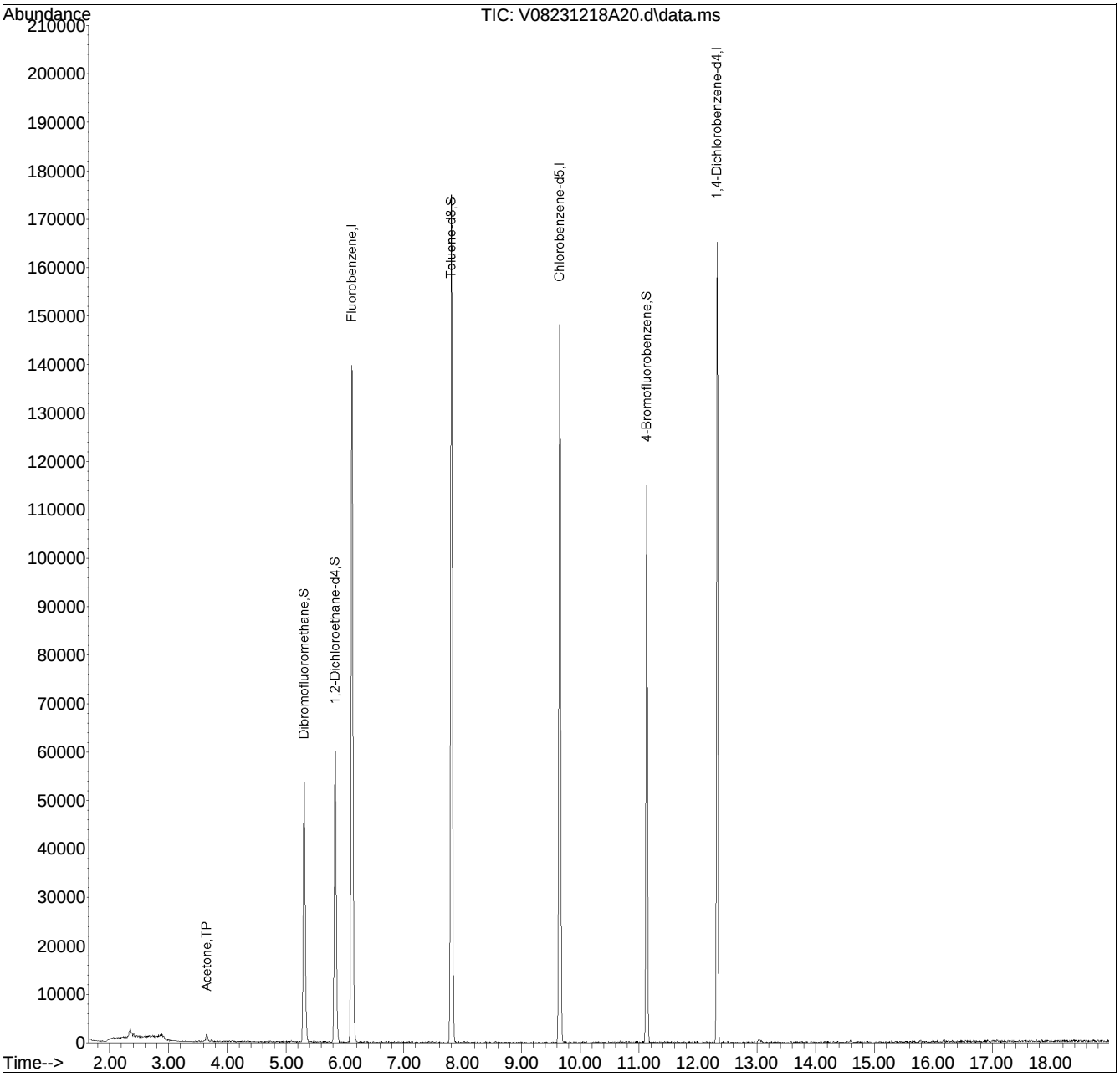
(#) = qualifier out of range (m) = manual integration (+) = signals summed

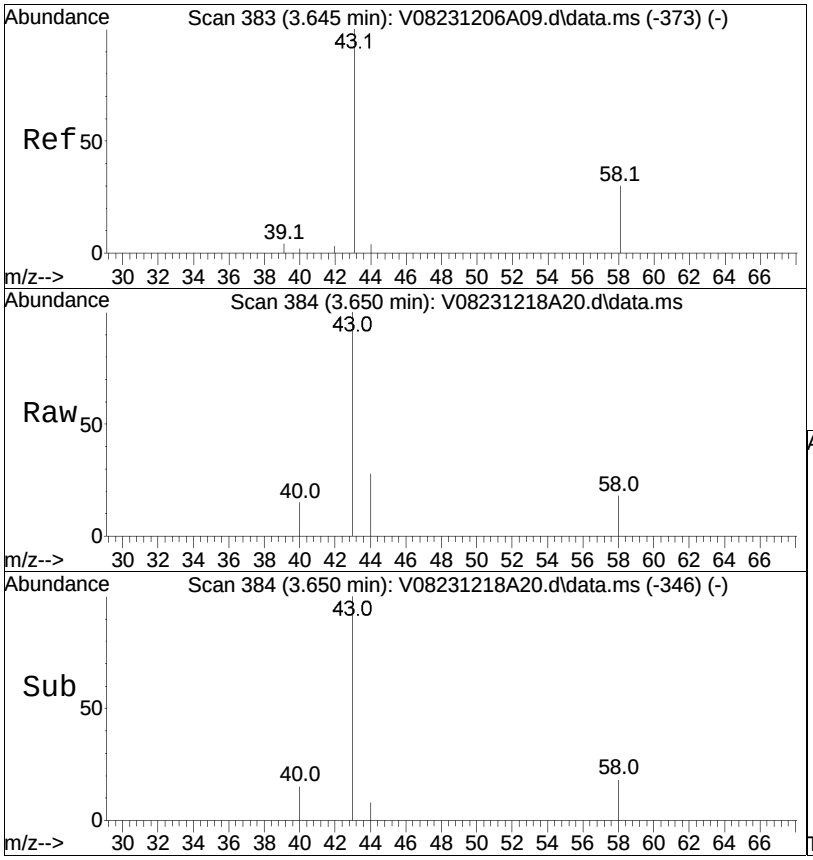
Quantitation Report (QT Reviewed)

Data Path : K:\VOA108\2023\231218A\
Data File : V08231218A20.d
Acq On : 18 Dec 2023 1:58 pm
Operator : VOA108:MKS
Sample : L2373323-07,31,10,10,,A
Misc : WG1865366,ICAL20635
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Dec 19 09:11:31 2023
Quant Method : K:\VOA108\2023\231218A\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 17:09:55 2023
Response via : Initial Calibration

Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE01.d•

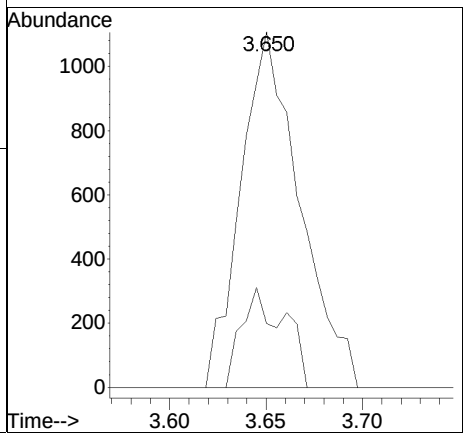




#17
Acetone
Concen: 3.34 ug/L
RT: 3.650 min Scan# 384
Delta R.T. 0.000 min
Lab File: V08231218A20.d
Acq: 18 Dec 2023 1:58 pm

Tgt Ion: 43 Resp: 2365

Ion	Ratio	Lower	Upper
43	100		
58	20.1	24.2	36.4#



Manual Integration Report

Data Path	: K:\VOA108\2023\231218A\	QMethod	: V108_231206A_8260.m
Data File	: V08231218A20.d	Operator	: VOA108:MKS
Date Inj'd	: 12/18/2023 1:58 pm	Instrument	: VOA 108
Sample	: L2373323-07,31,10,10,,A	Quant Date	: 12/19/2023 9:00 am

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

Quantitation Report (QT Reviewed)

Data Path : K:\VOA101\2023\231219A\
Data File : V01231219A15.D
Acq On : 19 Dec 2023 11:35 am
Operator : VOA101:MKS
Sample : L2373323-04D,31,0.4,10,,C
Misc : WG1865859,ICAL20680
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Dec 19 13:45:11 2023
Quant Method : K:\VOA101\2023\231219A\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 10:14:14 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA101\2023\231219A\V01231219A01.D
Sub List : 8260-Curve-2CEVE-IODO - Curve-2CEVE-IODO

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.963	96	422898	10.000	ug/L	0.00
Standard Area 1 = 442958			Recovery = 95.47%			
59) Chlorobenzene-d5	9.482	117	361587	10.000	ug/L	0.00
Standard Area 1 = 387518			Recovery = 93.31%			
79) 1,4-Dichlorobenzene-d4	12.195	152	198598	10.000	ug/L	0.00
Standard Area 1 = 216528			Recovery = 91.72%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.159	113	107236	9.922	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.22%			
43) 1,2-Dichloroethane-d4	5.681	65	119776	9.786	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 97.86%			
60) Toluene-d8	7.641	98	422019	9.908	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.08%			
83) 4-Bromofluorobenzene	10.982	95	165658	9.793	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 97.93%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.		
3) Chloromethane	0.000		0	N.D. d		
4) Vinyl chloride	1.908	62	2260246	167.030	ug/L	100
5) Bromomethane	2.215	94	341	N.D.		
6) Chloroethane	2.326	64	309	N.D.		
7) Trichlorofluoromethane	0.000		0	N.D.		
10) 1,1-Dichloroethene	2.940	96	1990	0.215	ug/L #	85
11) Carbon disulfide	2.976	76	848	N.D.		
12) Freon-113	0.000		0	N.D.		
15) Methylene chloride	3.495	84	150	N.D.		
17) Acetone	3.545	43	11391	5.646	ug/L	90
18) trans-1,2-Dichloroethene	3.642	96	6021	0.578	ug/L	99
19) Methyl acetate	0.000		0	N.D. d		
20) Methyl tert-butyl ether	0.000		0	N.D.		
23) 1,1-Dichloroethane	4.211	63	46875	2.282	ug/L	99
28) cis-1,2-Dichloroethene	4.724	96	777864	67.428	ug/L	96
30) Bromochloromethane	0.000		0	N.D.		
31) Cyclohexane	0.000		0	N.D.		
32) Chloroform	0.000		0	N.D.		
34) Carbon tetrachloride	5.171	117	25	N.D.		

Data Path : K:\VOA101\2023\231219A\
Data File : V01231219A15.D
Acq On : 19 Dec 2023 11:35 am
Operator : VOA101:MKS
Sample : L2373323-04D,31,0.4,10,,C
Misc : WG1865859,ICAL20680
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Dec 19 13:45:11 2023
Quant Method : K:\VOA101\2023\231219A\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 10:14:14 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA101\2023\231219A\V01231219A01.D
Sub List : 8260-Curve-2CEVE-IODO - Curve-2CEVE-IODO

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) 1,1,1-Trichloroethane	5.179	97	2508	0.154	ug/L #	38
39) 2-Butanone	0.000		0	N.D.	d	
41) Benzene	5.544	78	29	N.D.		
44) 1,2-Dichloroethane	0.000		0	N.D.		
47) Methyl cyclohexane	0.000		0	N.D.		
48) Trichloroethene	6.163	95	104	N.D.		
51) 1,2-Dichloropropane	0.000		0	N.D.		
54) Bromodichloromethane	0.000		0	N.D.		
57) 1,4-Dioxane	0.000		0	N.D.		
58) cis-1,3-Dichloropropene	0.000		0	N.D.		
61) Toluene	7.703	92	203	N.D.		
62) 4-Methyl-2-pentanone	0.000		0	N.D.		
63) Tetrachloroethene	0.000		0	N.D.		
65) trans-1,3-Dichloropropene	0.000		0	N.D.		
68) 1,1,2-Trichloroethane	0.000		0	N.D.		
69) Chlorodibromomethane	0.000		0	N.D.		
71) 1,2-Dibromoethane	0.000		0	N.D.		
72) 2-Hexanone	0.000		0	N.D.		
73) Chlorobenzene	0.000		0	N.D.		
74) Ethylbenzene	9.482	91	545	N.D.		
76) p/m Xylene	0.000		0	N.D.		
77) o Xylene	0.000		0	N.D.		
78) Styrene	0.000		0	N.D.		
80) Bromoform	0.000		0	N.D.		
82) Isopropylbenzene	0.000		0	N.D.		
87) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.		
100) 1,3-Dichlorobenzene	12.204	146	28	N.D.		
101) 1,4-Dichlorobenzene	12.212	146	25	N.D.		
104) 1,2-Dichlorobenzene	0.000		0	N.D.		
106) 1,2-Dibromo-3-chloropr...	0.000		0	N.D.		
109) 1,2,4-Trichlorobenzene	0.000		0	N.D.		
111) 1,2,3-Trichlorobenzene	0.000		0	N.D.		

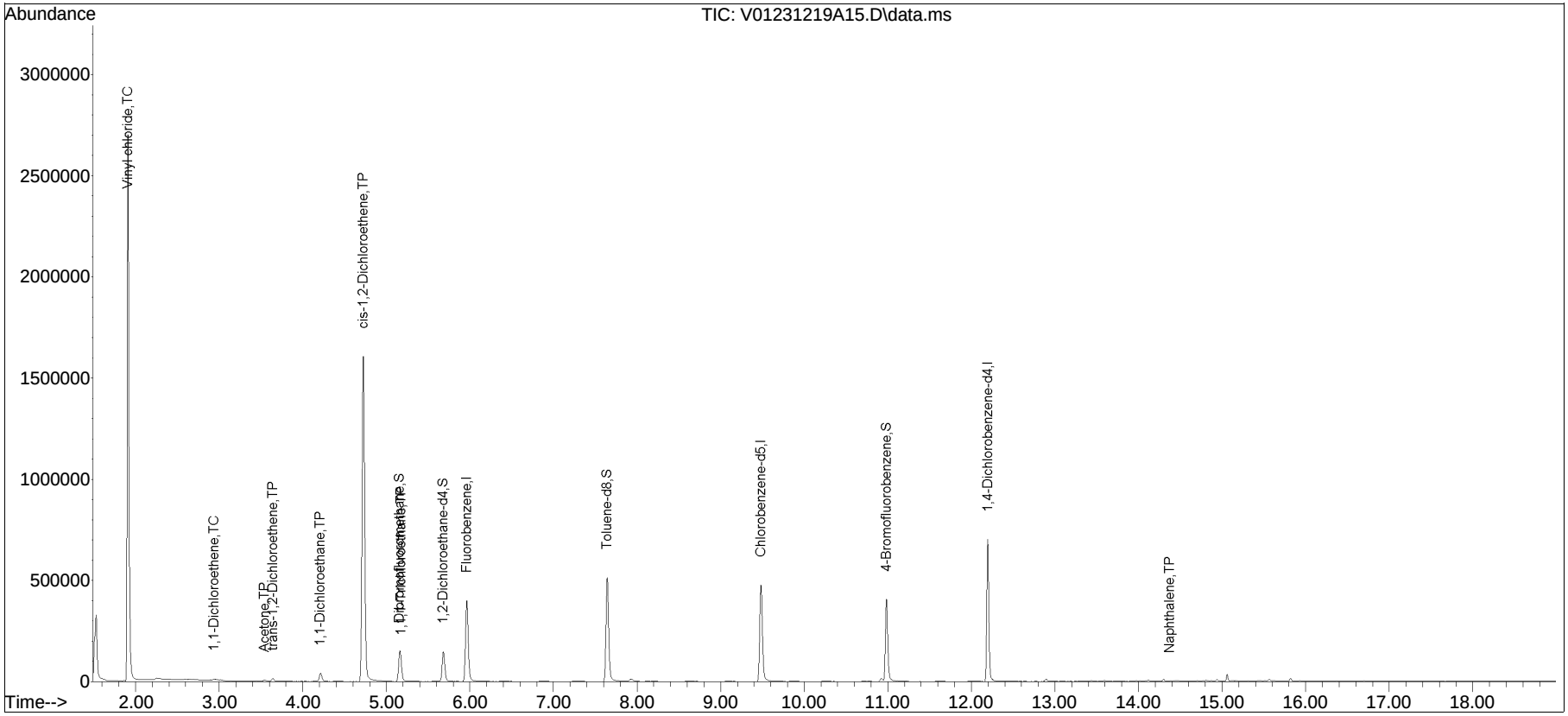
(#) = qualifier out of range (m) = manual integration (+) = signals summed

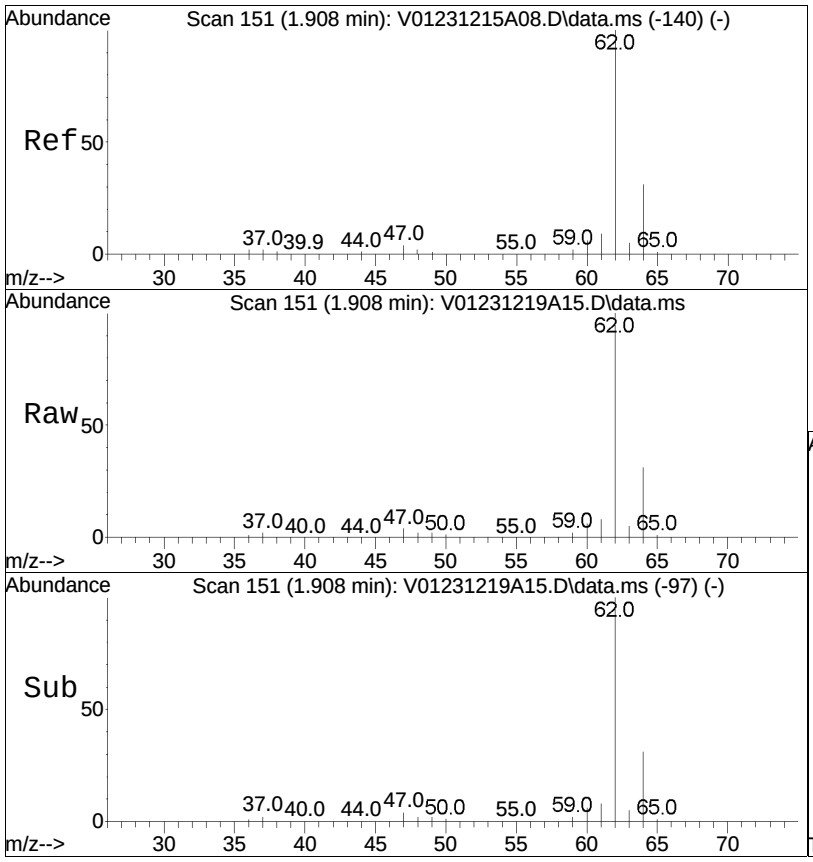
Quantitation Report (QT Reviewed)

Data Path : K:\VOA101\2023\231219A\
Data File : V01231219A15.D
Acq On : 19 Dec 2023 11:35 am
Operator : VOA101:MKS
Sample : L2373323-04D,31,0.4,10,,C
Misc : WG1865859,ICAL20680
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Dec 19 13:45:11 2023
Quant Method : K:\VOA101\2023\231219A\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 10:14:14 2023
Response via : Initial Calibration

Sub List : 8260-Curve-2CEVE-IODO - Curve-2CEVE-IODOD•

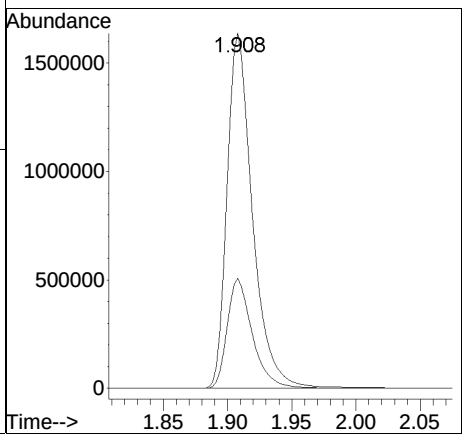


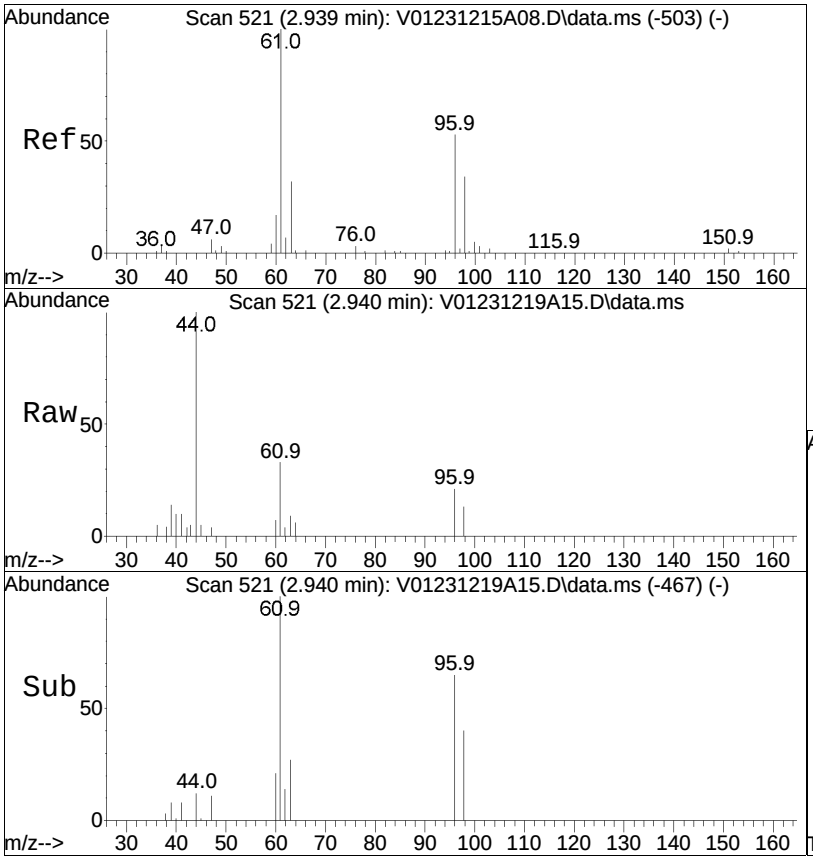


#4
Vinyl chloride
Concen: 167.03 ug/L
RT: 1.908 min Scan# 151
Delta R.T. 0.000 min
Lab File: V01231219A15.D
Acq: 19 Dec 2023 11:35 am

Tgt Ion: 62 Resp: 2260246

Ion	Ratio	Lower	Upper
62	100		
64	30.8	10.8	50.8

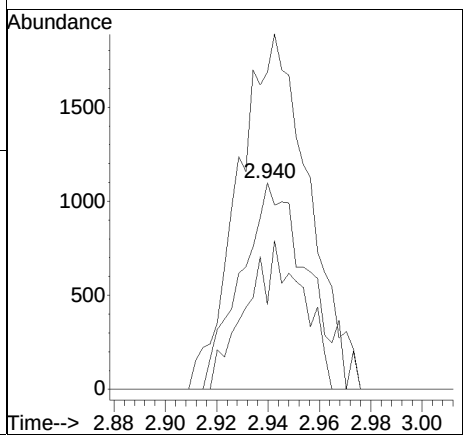


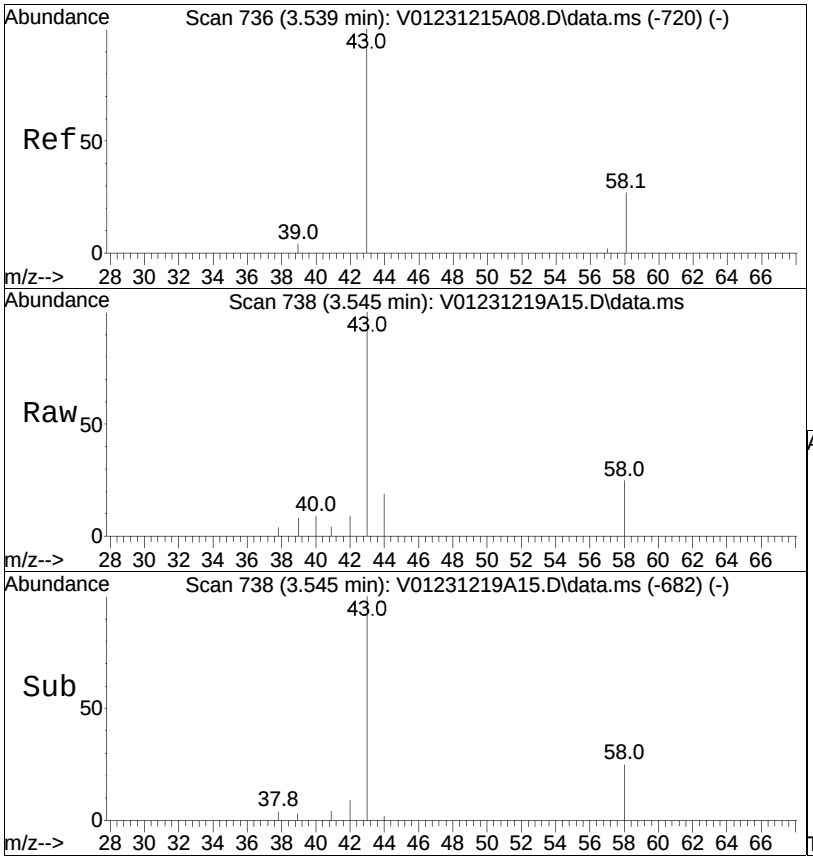


#10
1,1-Dichloroethene
Concen: 0.21 ug/L
RT: 2.940 min Scan# 521
Delta R.T. 0.000 min
Lab File: V01231219A15.D
Acq: 19 Dec 2023 11:35 am

Tgt Ion: 96 Resp: 1990

Ion	Ratio	Lower	Upper
96	100		
61	181.5	136.8	205.2
63	26.3	43.6	65.4#

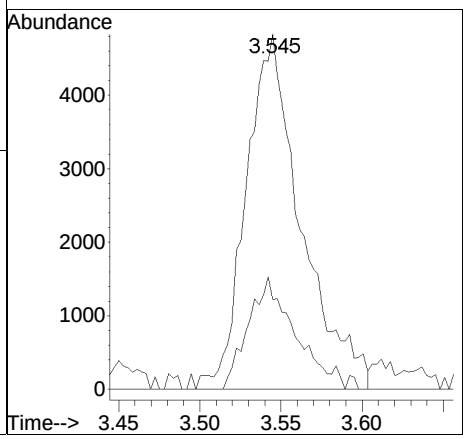


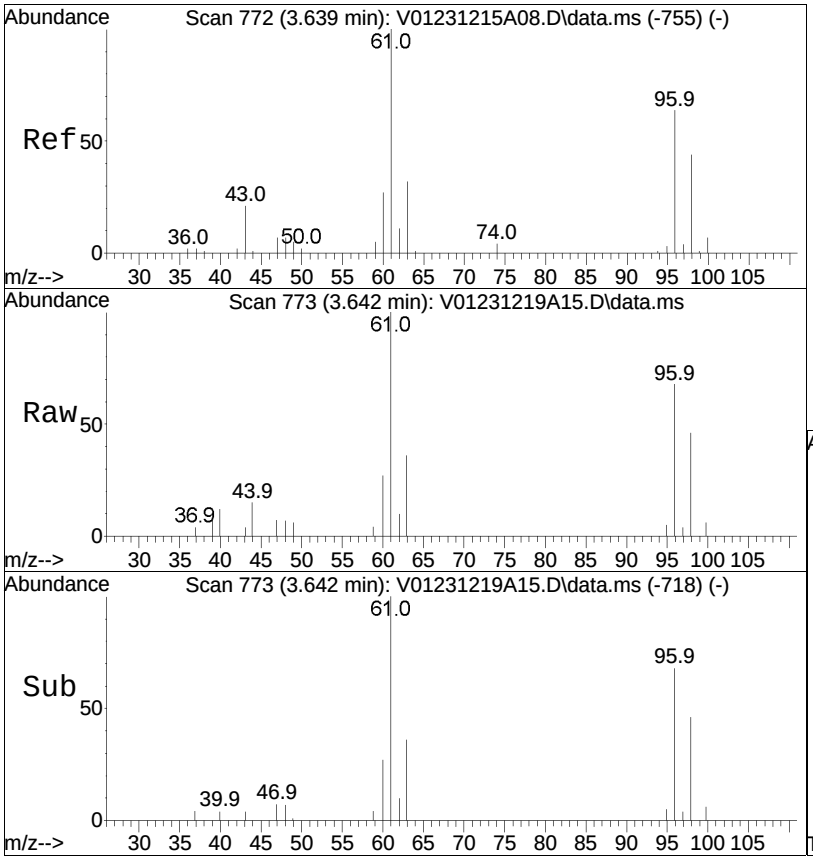


#17
Acetone
Concen: 5.65 ug/L
RT: 3.545 min Scan# 738
Delta R.T. 0.006 min
Lab File: V01231219A15.D
Acq: 19 Dec 2023 11:35 am

Tgt Ion: 43 Resp: 11391

Ion	Ratio	Lower	Upper
43	100		
58	27.0	25.9	38.9

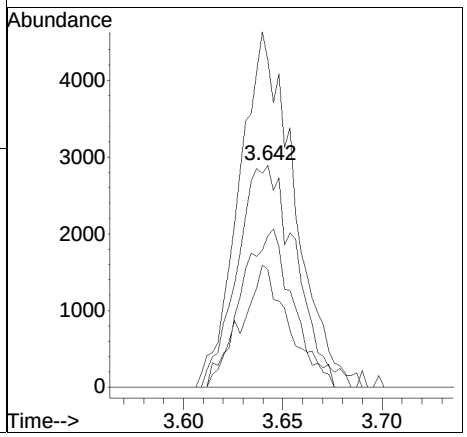


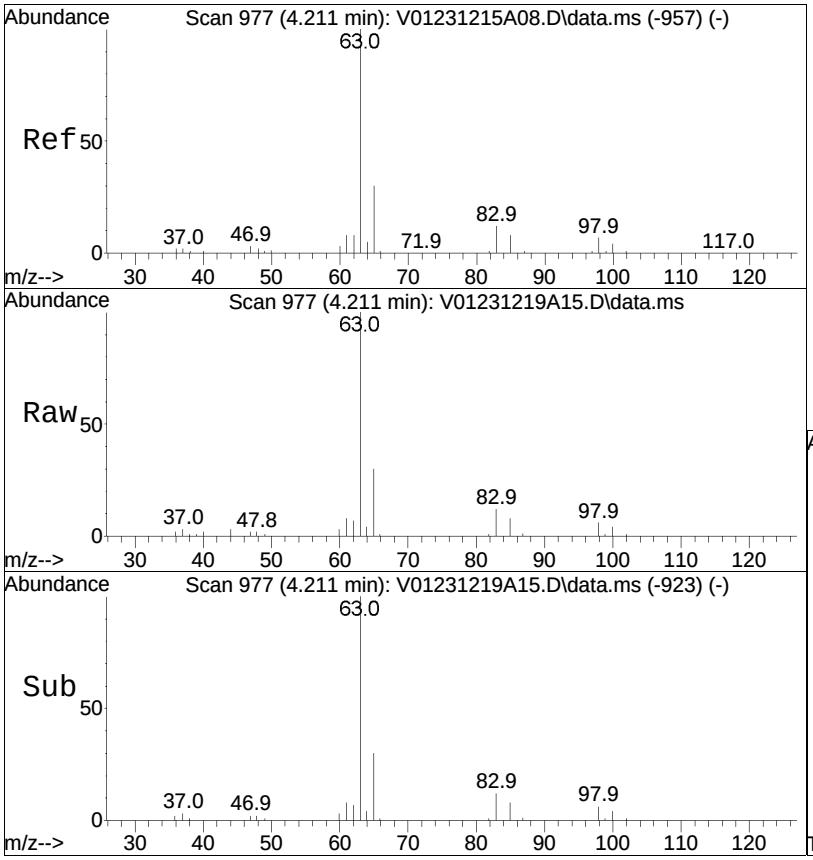


#18
trans-1,2-Dichloroethene
Concen: 0.58 ug/L
RT: 3.642 min Scan# 773
Delta R.T. 0.003 min
Lab File: V01231219A15.D
Acq: 19 Dec 2023 11:35 am

Tgt Ion: 96 Resp: 6021

Ion	Ratio	Lower	Upper
96	100		
61	148.1	95.3	197.9
98	62.6	41.0	85.2
63	44.3	30.2	62.6

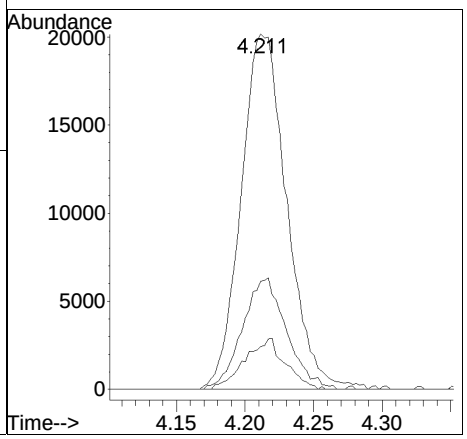


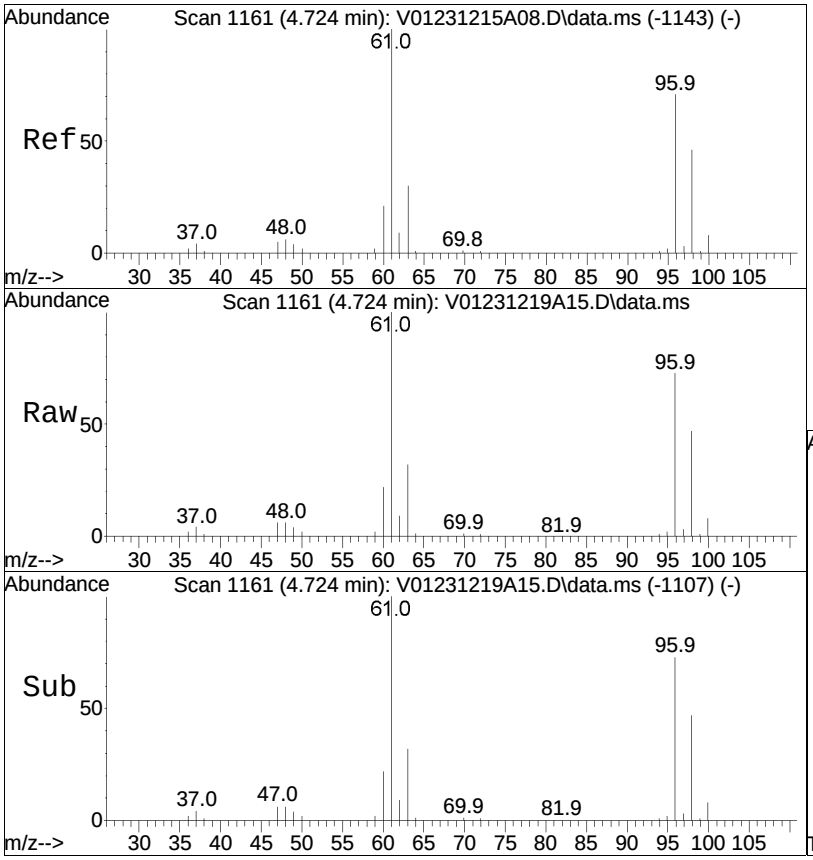


#23
1,1-Dichloroethane
Concen: 2.28 ug/L
RT: 4.211 min Scan# 977
Delta R.T. 0.000 min
Lab File: V01231219A15.D
Acq: 19 Dec 2023 11:35 am

Tgt Ion: 63 Resp: 46875

Ion	Ratio	Lower	Upper
63	100		
65	30.3	10.9	50.9
83	12.8	0.0	33.0

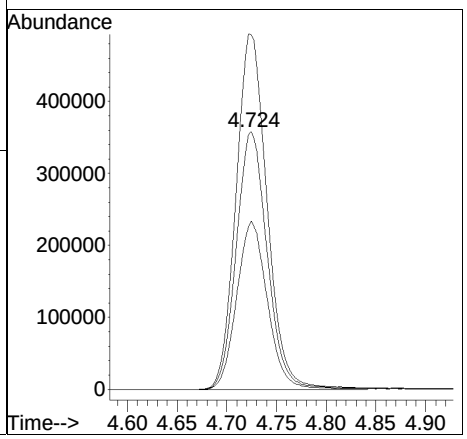


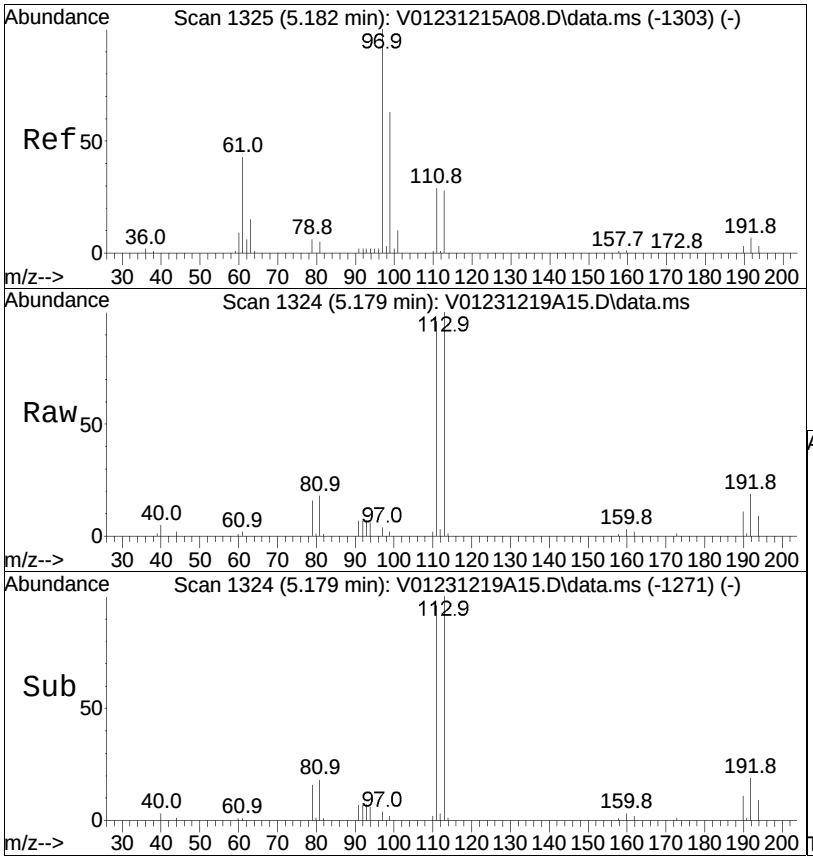


#28
cis-1,2-Dichloroethene
Concen: 67.43 ug/L
RT: 4.724 min Scan# 1161
Delta R.T. 0.000 min
Lab File: V01231219A15.D
Acq: 19 Dec 2023 11:35 am

Tgt Ion: 96 Resp: 777864

Ion	Ratio	Lower	Upper
96	100		
61	138.5	105.8	158.6
98	64.7	51.1	76.7

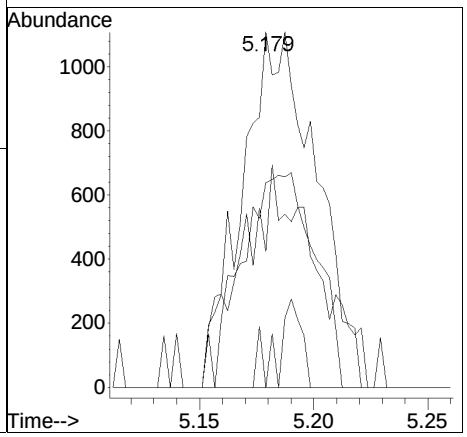




#37
1,1,1-Trichloroethane
Concen: 0.15 ug/L
RT: 5.179 min Scan# 1324
Delta R.T. -0.003 min
Lab File: V01231219A15.D
Acq: 19 Dec 2023 11:35 am

Tgt Ion: 97 Resp: 2508

Ion	Ratio	Lower	Upper
97	100		
99	0.0	41.7	86.7#
61	17.5	29.4	61.2#
63	1.3	9.4	19.4#



Manual Integration Report

Data Path	: K:\VOA101\2023\231219A\	QMethod	: V101_231215A_8260.m
Data File	: V01231219A15.D	Operator	: VOA101:MKS
Date Inj'd	: 12/19/2023 11:35 am	Instrument	: VOA 101
Sample	: L2373323-04D,31,0.4,10,,C	Quant Date	: 12/19/2023 1:43 pm

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

Quantitation Report (QT Reviewed)

Data Path : K:\VOA101\2023\231219A\
Data File : V01231219A16.D
Acq On : 19 Dec 2023 12:01 pm
Operator : VOA101:MKS
Sample : L2373323-03D,31,1.0,10,,C
Misc : WG1865859,ICAL20680
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 19 13:45:38 2023
Quant Method : K:\VOA101\2023\231219A\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 10:14:14 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA101\2023\231219A\V01231219A01.D
Sub List : 8260-Curve-2CEVE-IODO - Curve-2CEVE-IODO

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.963	96	427652	10.000	ug/L	0.00
Standard Area 1 = 442958			Recovery = 96.54%			
59) Chlorobenzene-d5	9.485	117	367107	10.000	ug/L	0.00
Standard Area 1 = 387518			Recovery = 94.73%			
79) 1,4-Dichlorobenzene-d4	12.195	152	198172	10.000	ug/L	0.00
Standard Area 1 = 216528			Recovery = 91.52%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.162	113	108476	9.925	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.25%			
43) 1,2-Dichloroethane-d4	5.684	65	121110	9.785	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 97.85%			
60) Toluene-d8	7.644	98	423552	9.794	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 97.94%			
83) 4-Bromofluorobenzene	10.985	95	167402	9.918	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.18%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.		
3) Chloromethane	0.000		0	N.D.	d	
4) Vinyl chloride	1.908	62	1802696	131.737	ug/L	100
5) Bromomethane	2.212	94	254	N.D.		
6) Chloroethane	2.349	64	355	N.D.		
7) Trichlorofluoromethane	0.000		0	N.D.		
10) 1,1-Dichloroethene	2.942	96	705	0.075	ug/L	95
11) Carbon disulfide	2.970	76	1581	N.D.		
12) Freon-113	0.000		0	N.D.		
15) Methylene chloride	3.492	84	158	N.D.		
17) Acetone	3.539	43	6195M1	3.036	ug/L	
18) trans-1,2-Dichloroethene	3.645	96	542	N.D.		
19) Methyl acetate	3.648	43	138	N.D.		
20) Methyl tert-butyl ether	0.000		0	N.D.		
23) 1,1-Dichloroethane	4.214	63	79535	3.829	ug/L	100
28) cis-1,2-Dichloroethene	4.724	96	396227	33.964	ug/L	96
30) Bromochloromethane	0.000		0	N.D.		
31) Cyclohexane	0.000		0	N.D.		
32) Chloroform	0.000		0	N.D.		
34) Carbon tetrachloride	0.000		0	N.D.		

Data Path : K:\VOA101\2023\231219A\
Data File : V01231219A16.D
Acq On : 19 Dec 2023 12:01 pm
Operator : VOA101:MKS
Sample : L2373323-03D,31,1.0,10,,C
Misc : WG1865859,ICAL20680
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 19 13:45:38 2023
Quant Method : K:\VOA101\2023\231219A\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 10:14:14 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA101\2023\231219A\V01231219A01.D
Sub List : 8260-Curve-2CEVE-IODO - Curve-2CEVE-IODO

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) 1,1,1-Trichloroethane	0.000		0	N.D.		
39) 2-Butanone	0.000		0	N.D.	d	
41) Benzene	5.569	78	215	N.D.		
44) 1,2-Dichloroethane	0.000		0	N.D.		
47) Methyl cyclohexane	0.000		0	N.D.		
48) Trichloroethene	6.046	95	161	N.D.		
51) 1,2-Dichloropropane	0.000		0	N.D.		
54) Bromodichloromethane	0.000		0	N.D.		
57) 1,4-Dioxane	0.000		0	N.D.		
58) cis-1,3-Dichloropropene	0.000		0	N.D.		
61) Toluene	0.000		0	N.D.		
62) 4-Methyl-2-pentanone	0.000		0	N.D.		
63) Tetrachloroethene	0.000		0	N.D.		
65) trans-1,3-Dichloropropene	0.000		0	N.D.		
68) 1,1,2-Trichloroethane	0.000		0	N.D.		
69) Chlorodibromomethane	0.000		0	N.D.		
71) 1,2-Dibromoethane	0.000		0	N.D.		
72) 2-Hexanone	0.000		0	N.D.		
73) Chlorobenzene	0.000		0	N.D.		
74) Ethylbenzene	9.479	91	275	N.D.		
76) p/m Xylene	0.000		0	N.D.		
77) o Xylene	0.000		0	N.D.		
78) Styrene	0.000		0	N.D.		
80) Bromoform	0.000		0	N.D.		
82) Isopropylbenzene	0.000		0	N.D.		
87) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.		
100) 1,3-Dichlorobenzene	12.198	146	28	N.D.		
101) 1,4-Dichlorobenzene	12.217	146	27	N.D.		
104) 1,2-Dichlorobenzene	0.000		0	N.D.		
106) 1,2-Dibromo-3-chloropr...	0.000		0	N.D.		
109) 1,2,4-Trichlorobenzene	0.000		0	N.D.		
111) 1,2,3-Trichlorobenzene	0.000		0	N.D.		

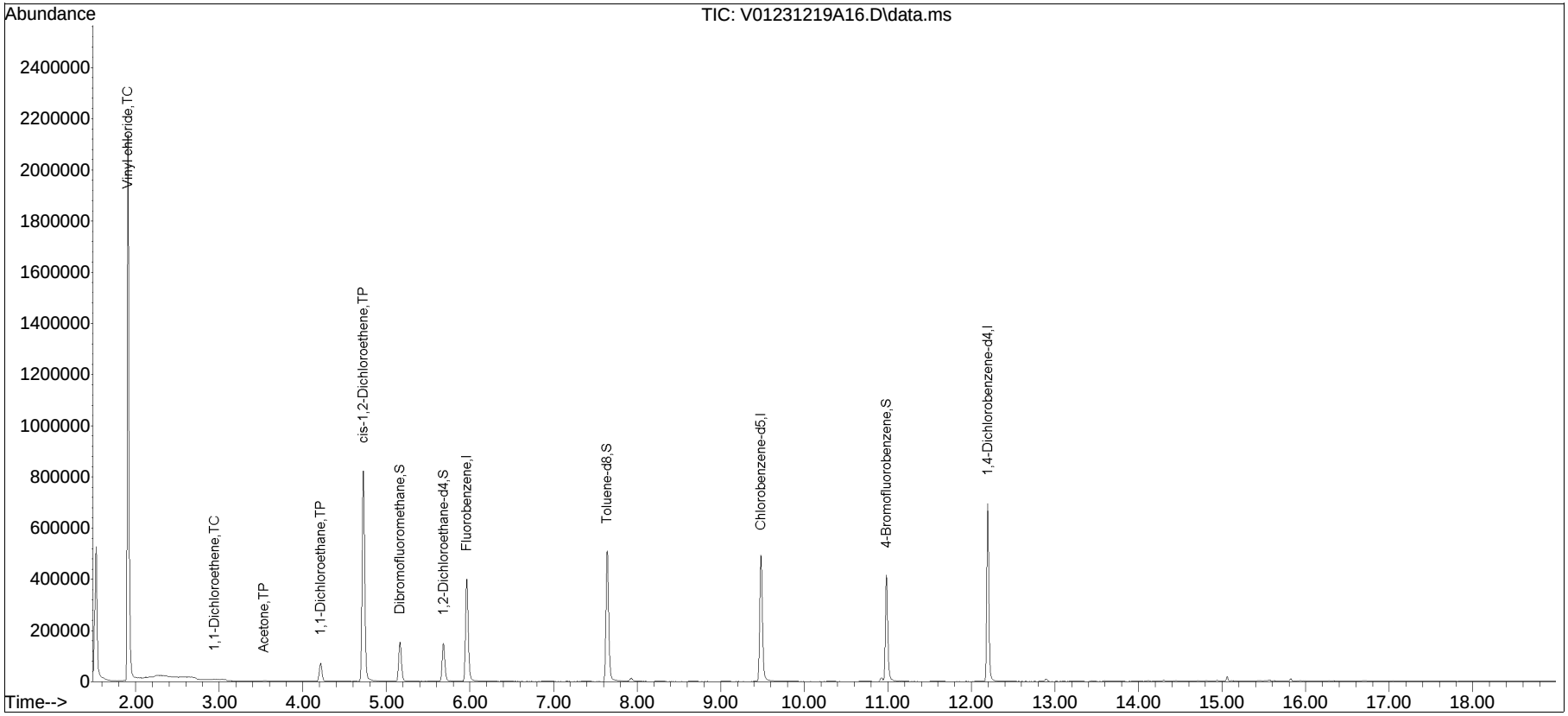
(#) = qualifier out of range (m) = manual integration (+) = signals summed

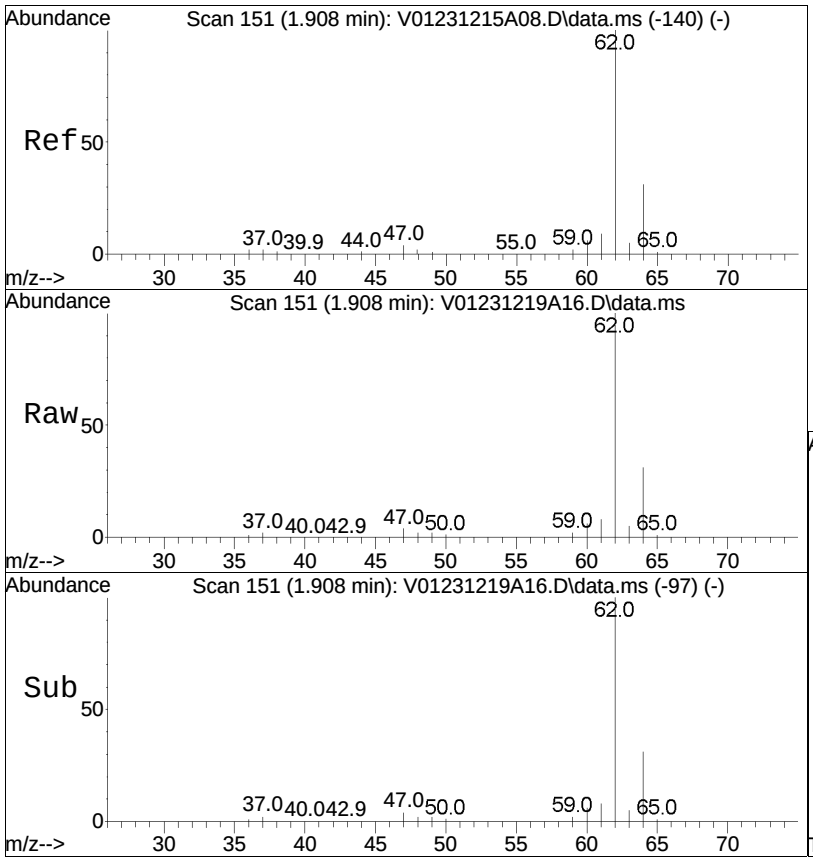
Quantitation Report (QT Reviewed)

Data Path : K:\VOA101\2023\231219A\
Data File : V01231219A16.D
Acq On : 19 Dec 2023 12:01 pm
Operator : VOA101:MKS
Sample : L2373323-03D,31,1.0,10,,C
Misc : WG1865859,ICAL20680
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 19 13:45:38 2023
Quant Method : K:\VOA101\2023\231219A\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 10:14:14 2023
Response via : Initial Calibration

Sub List : 8260-Curve-2CEVE-IODO - Curve-2CEVE-IODOD•

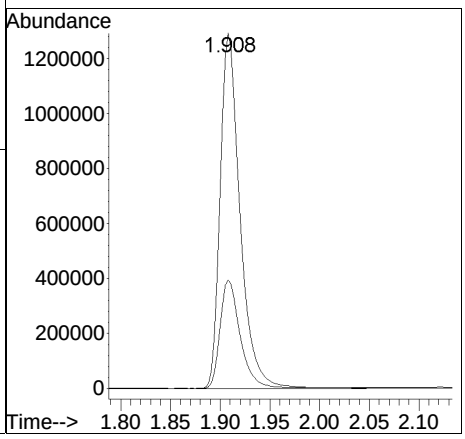


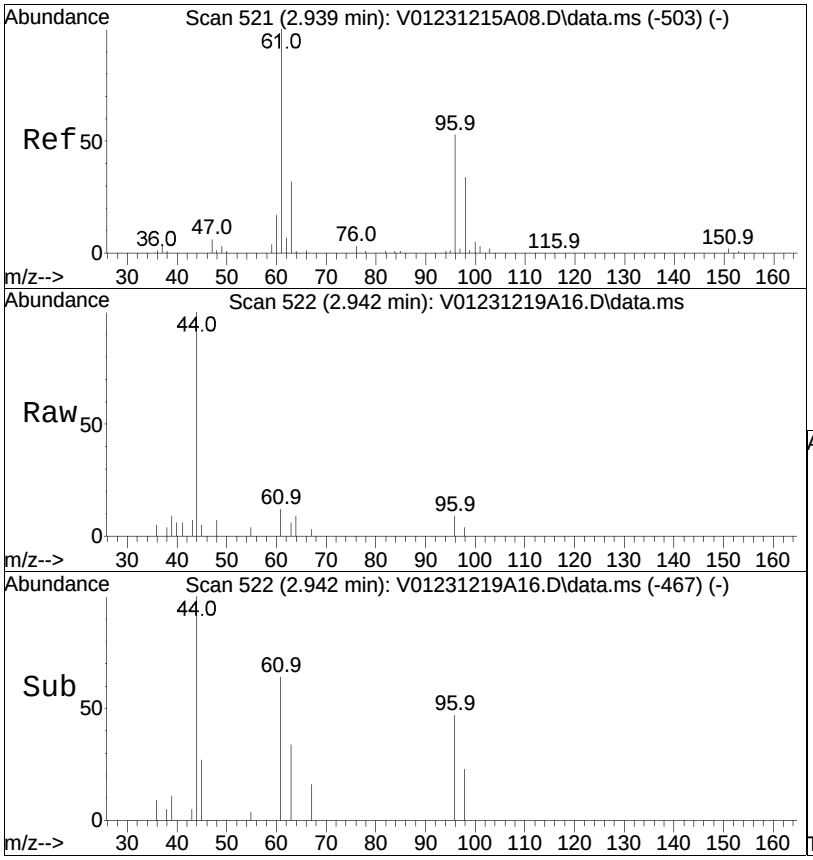


#4
Vinyl chloride
Concen: 131.74 ug/L
RT: 1.908 min Scan# 151
Delta R.T. 0.000 min
Lab File: V01231219A16.D
Acq: 19 Dec 2023 12:01 pm

Tgt Ion: 62 Resp: 1802696

Ion	Ratio	Lower	Upper
62	100		
64	30.9	10.8	50.8

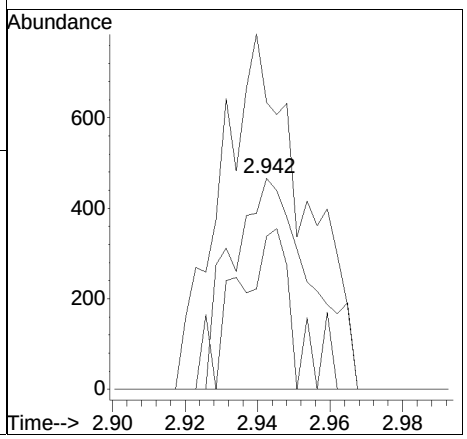


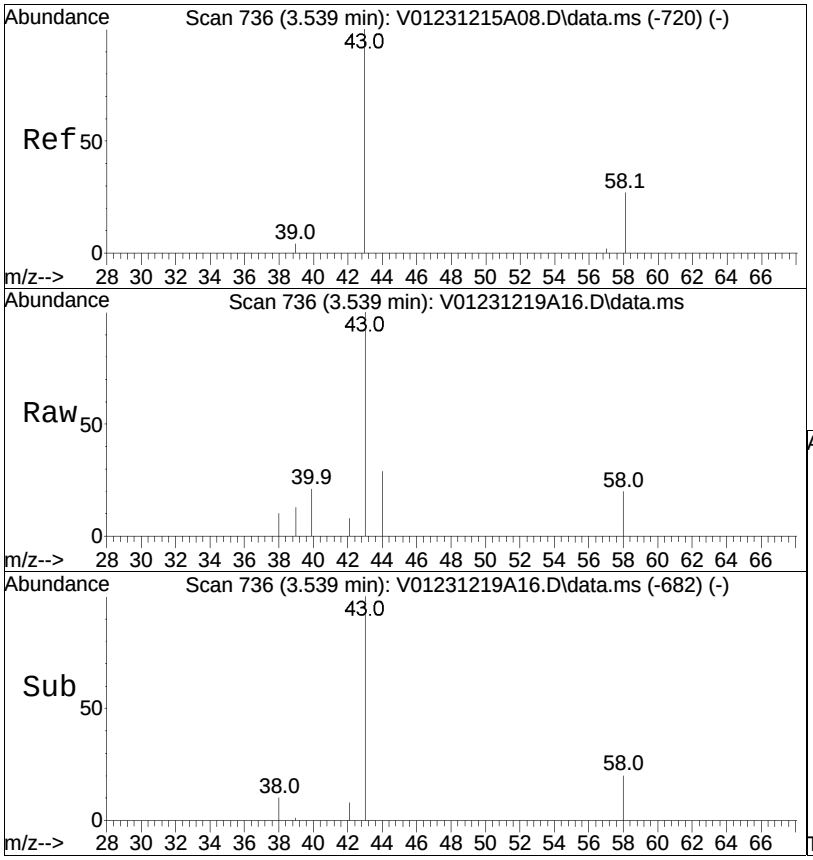


#10
1,1-Dichloroethene
Concen: 0.08 ug/L
RT: 2.942 min Scan# 522
Delta R.T. 0.003 min
Lab File: V01231219A16.D
Acq: 19 Dec 2023 12:01 pm

Tgt Ion: 96 Resp: 705

Ion	Ratio	Lower	Upper
96	100		
61	178.0	136.8	205.2
63	56.6	43.6	65.4

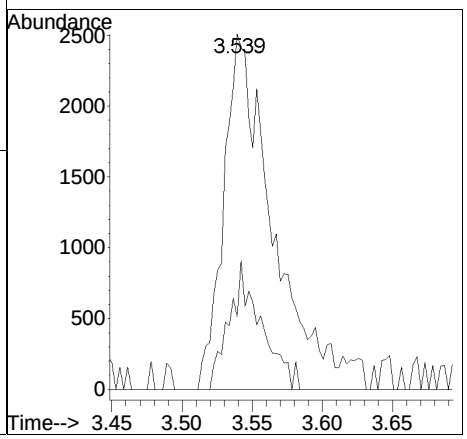


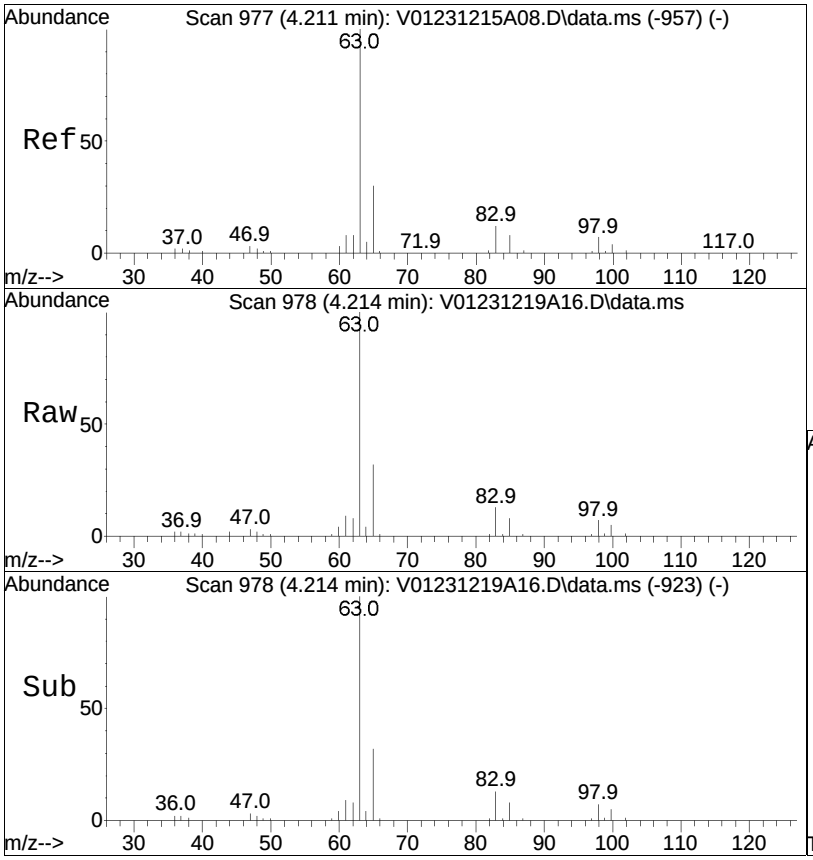


#17
Acetone
Concen: 3.04 ug/L M1
RT: 3.539 min Scan# 736
Delta R.T. 0.000 min
Lab File: V01231219A16.D
Acq: 19 Dec 2023 12:01 pm

Tgt Ion: 43 Resp: 6195

Ion	Ratio	Lower	Upper
43	100		
58	23.2	25.9	38.9#

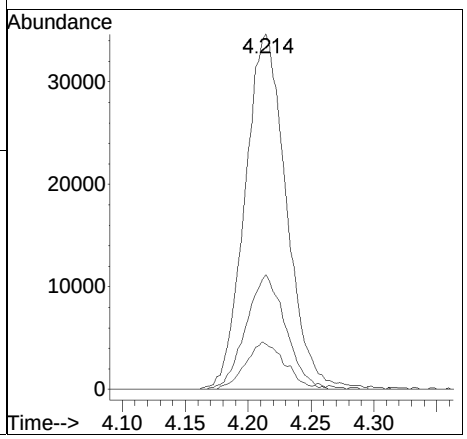


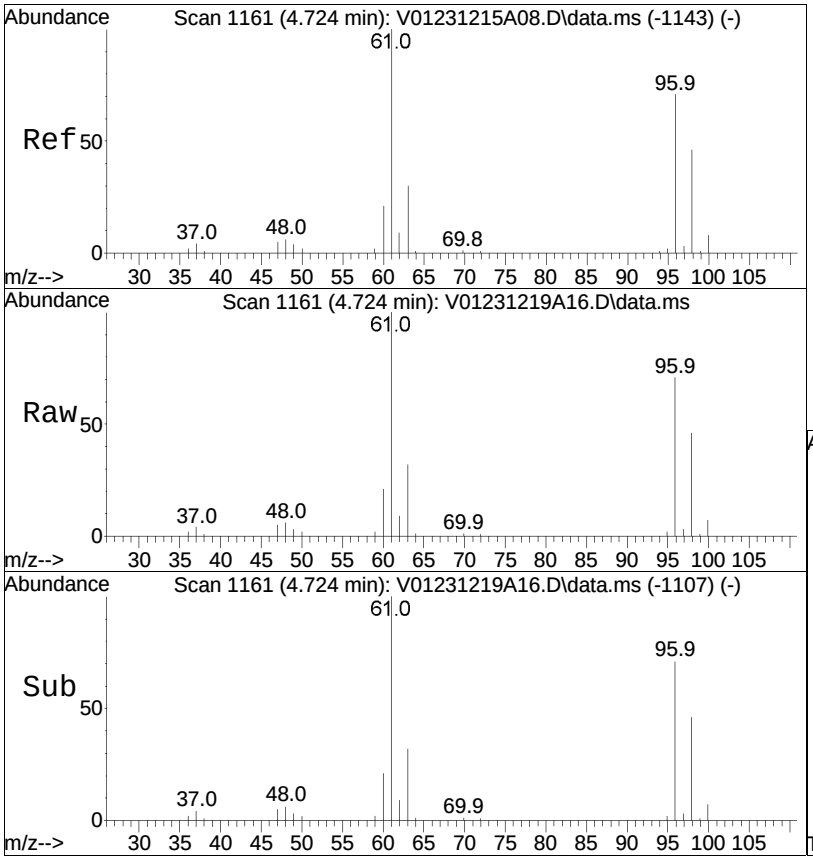


#23
1,1-Dichloroethane
Concen: 3.83 ug/L
RT: 4.214 min Scan# 978
Delta R.T. 0.003 min
Lab File: V01231219A16.D
Acq: 19 Dec 2023 12:01 pm

Tgt Ion: 63 Resp: 79535

Ion	Ratio	Lower	Upper
63	100		
65	30.9	10.9	50.9
83	12.8	0.0	33.0

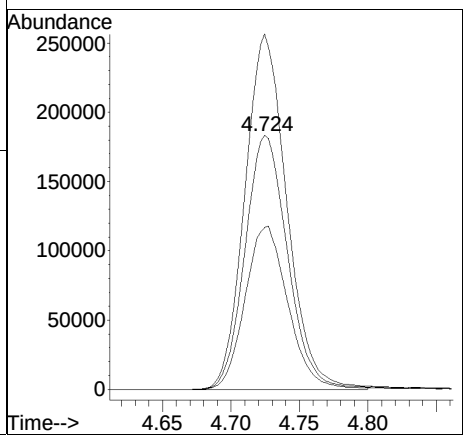




#28
cis-1,2-Dichloroethene
Concen: 33.96 ug/L
RT: 4.724 min Scan# 1161
Delta R.T. 0.000 min
Lab File: V01231219A16.D
Acq: 19 Dec 2023 12:01 pm

Tgt Ion: 96 Resp: 396227

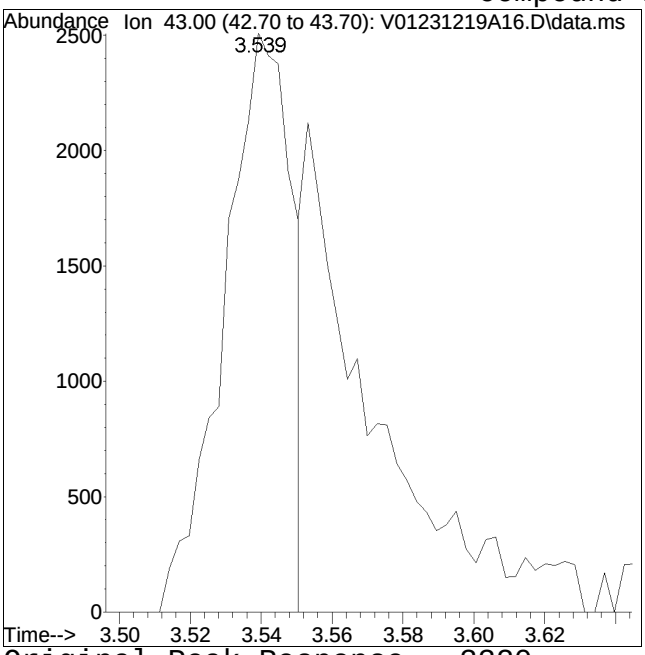
Ion	Ratio	Lower	Upper
96	100		
61	138.7	105.8	158.6
98	65.0	51.1	76.7



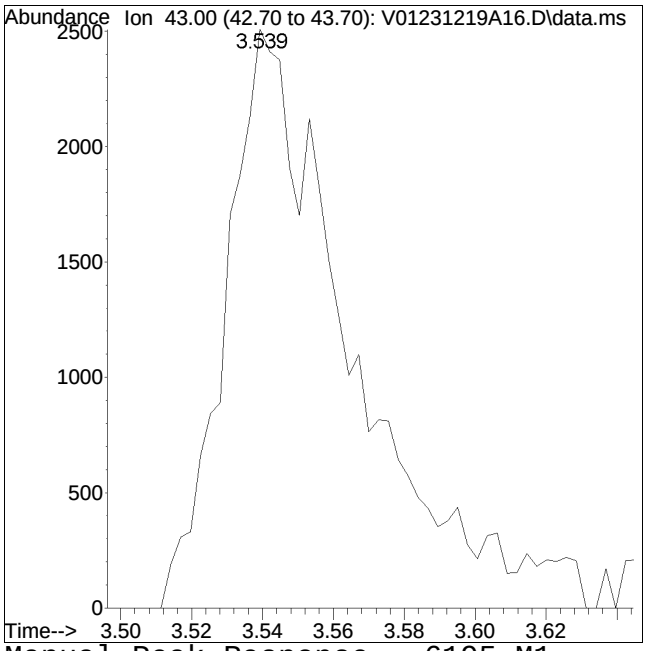
Manual Integration Report

Data Path : K:\VOA101\2023\231219A\ QMethod : V101_231215A_8260.m
Data File : V01231219A16.D Operator : VOA101:MKS
Date Inj'd : 12/19/2023 12:01 pm Instrument : VOA 101
Sample : L2373323-03D,31,1.0,10,,C Quant Date : 12/19/2023 1:43 pm

Compound #17: Acetone



Original Peak Response = 3320



Manual Peak Response = 6195 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Quantitation Report (QT Reviewed)

Data Path : K:\VOA101\2023\231219A\
Data File : V01231219A17.D
Acq On : 19 Dec 2023 12:27 pm
Operator : VOA101:MKS
Sample : L2373323-06D,31,1.0,10,,C
Misc : WG1865859,ICAL20680
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 19 13:43:34 2023
Quant Method : K:\VOA101\2023\231219A\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 10:14:14 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA101\2023\231219A\V01231219A01.D
Sub List : 8260-Curve-2CEVE-IODO - Curve-2CEVE-IODO

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.963	96	415832	10.000	ug/L	0.00
Standard Area 1 = 442958			Recovery = 93.88%			
59) Chlorobenzene-d5	9.482	117	359487	10.000	ug/L	0.00
Standard Area 1 = 387518			Recovery = 92.77%			
79) 1,4-Dichlorobenzene-d4	12.195	152	194438	10.000	ug/L	0.00
Standard Area 1 = 216528			Recovery = 89.80%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.162	113	106438	10.016	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.16%			
43) 1,2-Dichloroethane-d4	5.681	65	117865	9.794	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 97.94%			
60) Toluene-d8	7.644	98	414935	9.798	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 97.98%			
83) 4-Bromofluorobenzene	10.985	95	163591	9.878	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 98.78%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.		
3) Chloromethane	1.799	50	394	N.D.		
4) Vinyl chloride	1.908	62	1779258	133.720	ug/L	99
5) Bromomethane	2.215	94	532	0.082	ug/L	96
6) Chloroethane	2.421	64	178	N.D.		
7) Trichlorofluoromethane	0.000		0	N.D.		
10) 1,1-Dichloroethene	2.940	96	555	N.D.		
11) Carbon disulfide	2.965	76	538	N.D.		
12) Freon-113	0.000		0	N.D.		
15) Methylene chloride	3.484	84	61	N.D.		
17) Acetone	3.545	43	5392	2.718	ug/L #	68
18) trans-1,2-Dichloroethene	3.640	96	122	N.D.		
19) Methyl acetate	3.626	43	227	N.D.		
20) Methyl tert-butyl ether	0.000		0	N.D.		
23) 1,1-Dichloroethane	4.211	63	78270	3.875	ug/L	99
28) cis-1,2-Dichloroethene	4.724	96	383918	33.845	ug/L	96
30) Bromochloromethane	0.000		0	N.D.		
31) Cyclohexane	0.000		0	N.D.		
32) Chloroform	0.000		0	N.D.		
34) Carbon tetrachloride	0.000		0	N.D.		

Data Path : K:\VOA101\2023\231219A\
Data File : V01231219A17.D
Acq On : 19 Dec 2023 12:27 pm
Operator : VOA101:MKS
Sample : L2373323-06D,31,1.0,10,,C
Misc : WG1865859,ICAL20680
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 19 13:43:34 2023
Quant Method : K:\VOA101\2023\231219A\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 10:14:14 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA101\2023\231219A\V01231219A01.D
Sub List : 8260-Curve-2CEVE-IODO - Curve-2CEVE-IODO

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) 1,1,1-Trichloroethane	0.000		0		N.D.	
39) 2-Butanone	5.302	43	75		N.D.	
41) Benzene	5.550	78	69		N.D.	
44) 1,2-Dichloroethane	0.000		0		N.D.	
47) Methyl cyclohexane	0.000		0		N.D.	
48) Trichloroethene	0.000		0		N.D.	
51) 1,2-Dichloropropane	0.000		0		N.D.	
54) Bromodichloromethane	0.000		0		N.D.	
57) 1,4-Dioxane	0.000		0		N.D.	
58) cis-1,3-Dichloropropene	0.000		0		N.D.	
61) Toluene	7.706	92	34		N.D.	
62) 4-Methyl-2-pentanone	0.000		0		N.D.	
63) Tetrachloroethene	0.000		0		N.D.	
65) trans-1,3-Dichloropropene	0.000		0		N.D.	
68) 1,1,2-Trichloroethane	0.000		0		N.D.	
69) Chlorodibromomethane	0.000		0		N.D.	
71) 1,2-Dibromoethane	0.000		0		N.D.	
72) 2-Hexanone	0.000		0		N.D.	
73) Chlorobenzene	0.000		0		N.D.	
74) Ethylbenzene	9.485	91	422		N.D.	
76) p/m Xylene	0.000		0		N.D.	
77) o Xylene	0.000		0		N.D.	
78) Styrene	0.000		0		N.D.	
80) Bromoform	0.000		0		N.D.	
82) Isopropylbenzene	0.000		0		N.D.	
87) 1,1,2,2-Tetrachloroethane	0.000		0		N.D.	
100) 1,3-Dichlorobenzene	0.000		0		N.D.	
101) 1,4-Dichlorobenzene	0.000		0		N.D.	
104) 1,2-Dichlorobenzene	0.000		0		N.D.	
106) 1,2-Dibromo-3-chloropr...	0.000		0		N.D.	
109) 1,2,4-Trichlorobenzene	0.000		0		N.D.	
111) 1,2,3-Trichlorobenzene	0.000		0		N.D.	

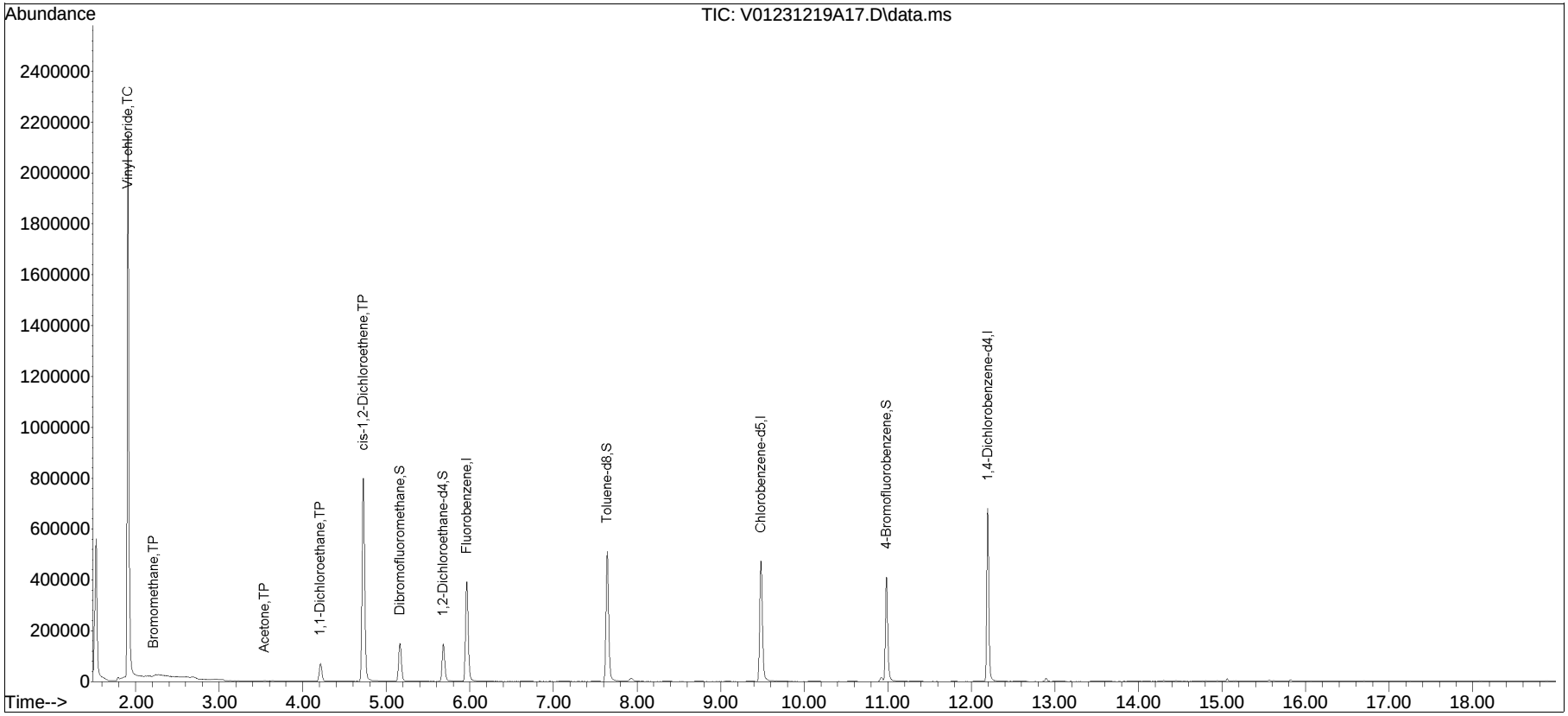
(#) = qualifier out of range (m) = manual integration (+) = signals summed

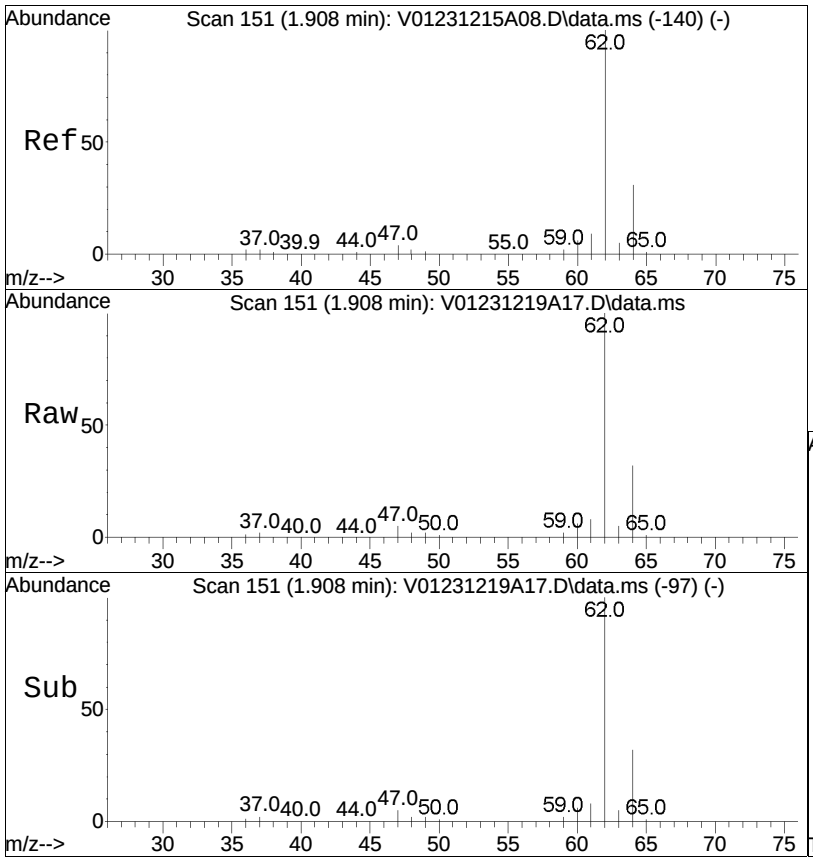
Quantitation Report (QT Reviewed)

Data Path : K:\VOA101\2023\231219A\
Data File : V01231219A17.D
Acq On : 19 Dec 2023 12:27 pm
Operator : VOA101:MKS
Sample : L2373323-06D,31,1.0,10,,C
Misc : WG1865859,ICAL20680
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 19 13:43:34 2023
Quant Method : K:\VOA101\2023\231219A\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 10:14:14 2023
Response via : Initial Calibration

Sub List : 8260-Curve-2CEVE-IODO - Curve-2CEVE-IODOD•

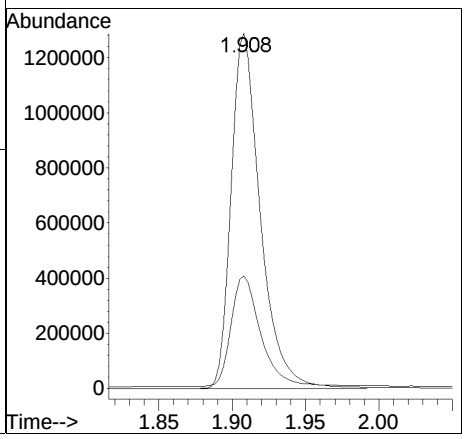


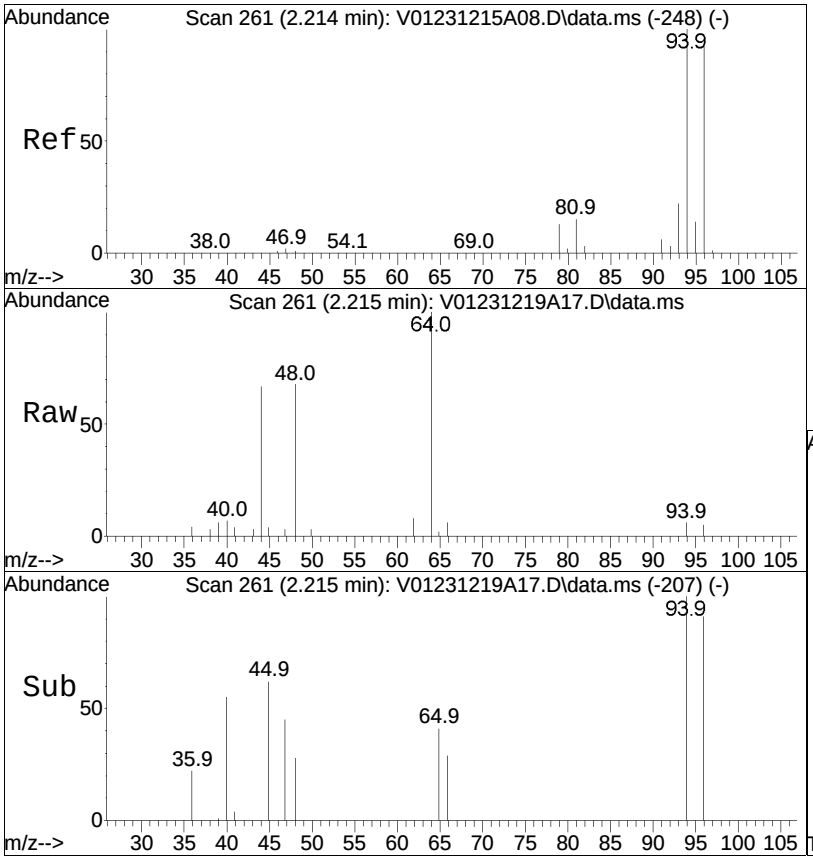


#4
Vinyl chloride
Concen: 133.72 ug/L
RT: 1.908 min Scan# 151
Delta R.T. 0.000 min
Lab File: V01231219A17.D
Acq: 19 Dec 2023 12:27 pm

Tgt Ion: 62 Resp: 1779258

Ion	Ratio	Lower	Upper
62	100		
64	31.4	10.8	50.8

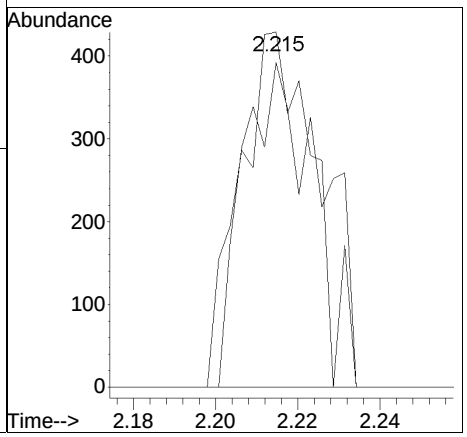


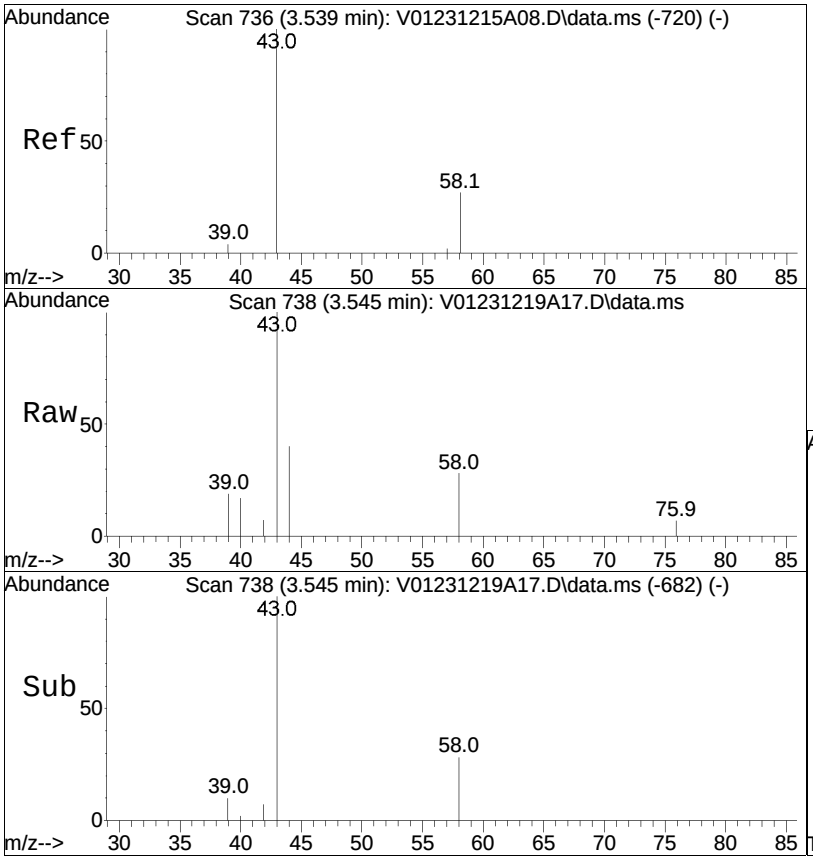


#5
Bromomethane
Concen: 0.08 ug/L
RT: 2.215 min Scan# 261
Delta R.T. 0.000 min
Lab File: V01231219A17.D
Acq: 19 Dec 2023 12:27 pm

Tgt Ion: 94 Resp: 532

Ion	Ratio	Lower	Upper
94	100		
96	97.7	73.6	113.6

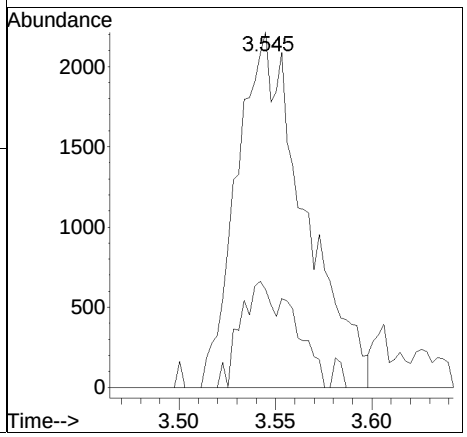


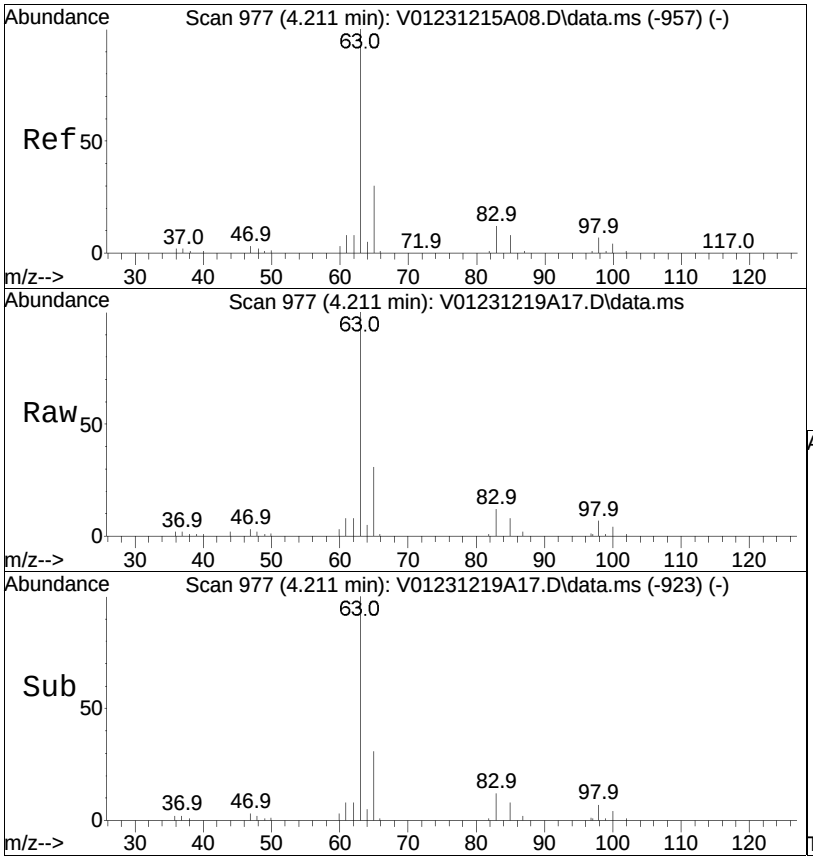


#17
Acetone
Concen: 2.72 ug/L
RT: 3.545 min Scan# 738
Delta R.T. 0.006 min
Lab File: V01231219A17.D
Acq: 19 Dec 2023 12:27 pm

Tgt Ion: 43 Resp: 5392

Ion	Ratio	Lower	Upper
43	100		
58	14.7	25.9	38.9#

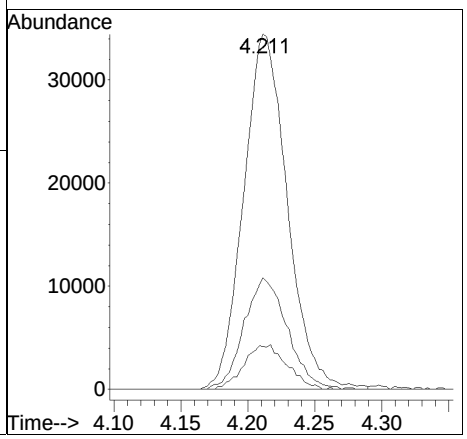


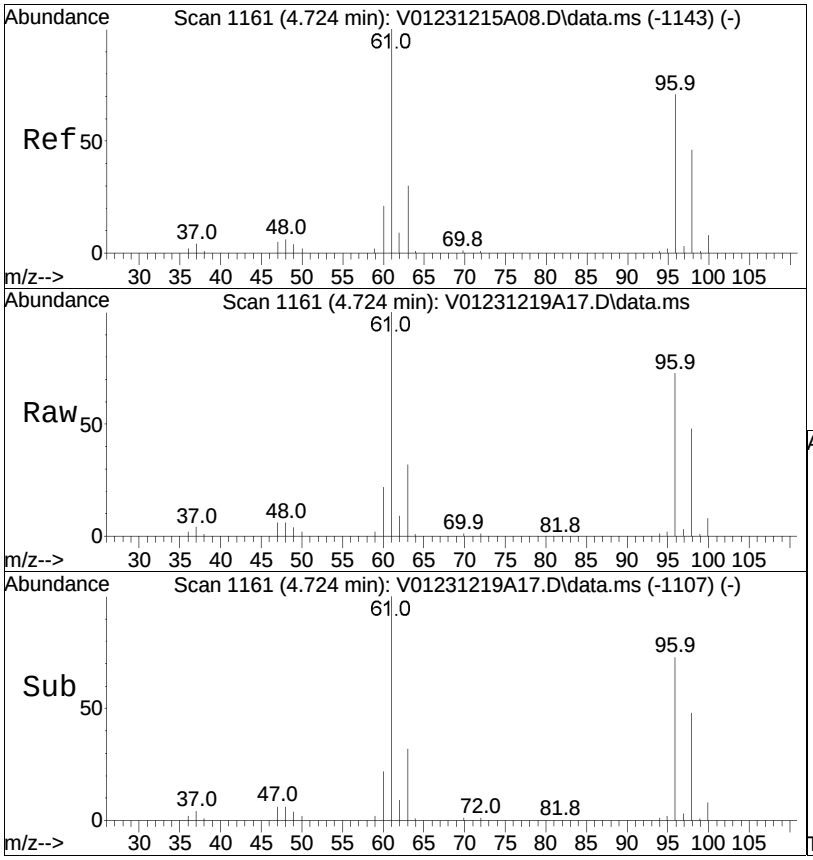


#23
1,1-Dichloroethane
Concen: 3.87 ug/L
RT: 4.211 min Scan# 977
Delta R.T. 0.000 min
Lab File: V01231219A17.D
Acq: 19 Dec 2023 12:27 pm

Tgt Ion: 63 Resp: 78270

Ion	Ratio	Lower	Upper
63	100		
65	31.1	10.9	50.9
83	12.3	0.0	33.0

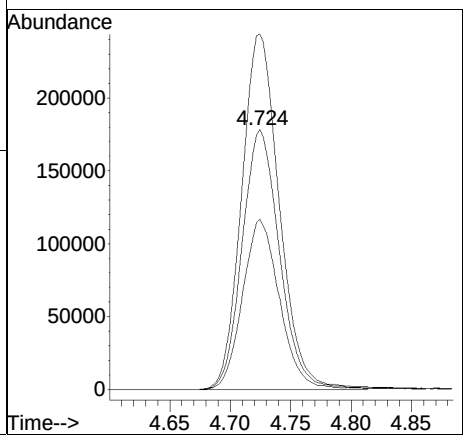




#28
cis-1,2-Dichloroethene
Concen: 33.84 ug/L
RT: 4.724 min Scan# 1161
Delta R.T. 0.000 min
Lab File: V01231219A17.D
Acq: 19 Dec 2023 12:27 pm

Tgt Ion: 96 Resp: 383918

Ion	Ratio	Lower	Upper
96	100		
61	138.2	105.8	158.6
98	64.6	51.1	76.7



Manual Integration Report

Data Path	: K:\VOA101\2023\231219A\	QMethod	: V101_231215A_8260.m
Data File	: V01231219A17.D	Operator	: VOA101:MKS
Date Inj'd	: 12/19/2023 12:27 pm	Instrument	: VOA 101
Sample	: L2373323-06D,31,1.0,10,,C	Quant Date	: 12/19/2023 1:43 pm

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

Volatiles Standards Data

Initial Calibration

Initial Calibration Summary
Form 6
Volatiles

Client	**: Sterling Environmental Engineering**	**Lab Number**	**: L2373323**
Project Name	**: TROY BELTING**	**Project Number**	**: 2011-31**
Instrument ID	**: VOA108**	**Ical Ref**	**: ICAL20635**
Calibration dates	**: 12/06/23 11:22 12/06/23 15:04**		

Calibration Files
L11 =V08231206A03.d L1 =V08231206A06.d L2 =V08231206A07.d L3 =V08231206A09.d L4 =V08231206A10.d
L6 =V08231206A11.d L8 =V08231206A12.d L10 =V08231206A13.d

		Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
1)	I	Fluorobenzene	----------ISTD----------									
2)	TP	Dichlorodifluo		0.241	0.295	0.291	0.260	0.291	0.291	0.289	0.280	7.39
3)	TP	Chloromethane		0.419	0.495	0.483	0.438	0.472	0.475	0.462	0.464	5.68
4)	TC	Vinyl chloride	0.145	0.243	0.287	0.283	0.260	0.288	0.313	0.318	*L	0.9970
5)	TP	Bromomethane		0.061	0.094	0.102	0.103	0.125	0.130	0.134	*Q	0.9988
6)	TP	Chloroethane		0.115	0.150	0.146	0.133	0.146	0.148	0.144	0.141	8.77
7)	TP	Trichlorofluor		0.212	0.273	0.274	0.246	0.274	0.278	0.273	0.262	9.37
8)	TP	Ethyl ether		0.054	0.066	0.077	0.073	0.083	0.084	0.083	0.074	14.75
10)	TC	1,1-Dichloroet		0.145	0.191	0.189	0.175	0.193	0.197	0.194	0.184	9.98
11)	TP	Carbon disulfide		0.634	0.706	0.689	0.630	0.699	0.711	0.698	0.681	4.99
12)	TP	Freon-113		0.159	0.193	0.200	0.180	0.199	0.201	0.198	0.190	8.09
13)	TP	Iodomethane			0.138	0.192	0.218	0.266	0.277	0.264	*L	0.9970
14)	TP	Acrolein			0.024	0.033	0.031	0.036	0.037	0.038	0.033	15.78
15)	TP	Methylene chlo		0.199	0.225	0.218	0.199	0.218	0.220	0.217	0.214	4.92
17)	TP	Acetone			0.058	0.055	0.048	0.055	0.053	0.052	0.054	6.33
18)	TP	trans-1,2-Dich		0.168	0.213	0.214	0.196	0.216	0.219	0.215	0.206	8.78
19)	TP	Methyl acetate			0.147	0.148	0.131	0.148	0.148	0.145	0.144	4.70
20)	TP	Methyl tert butyl ether		0.431	0.474	0.499	0.474	0.543	0.548	0.543	0.502	8.91
21)	TP	tert-Butyl alc			0.008	0.010	0.009	0.012	0.012	0.013	0.011	18.01
22)	TP	Diisopropyl ether		0.960	1.053	1.104	1.047	1.164	1.161	1.122	1.087	6.69
23)	TP	1,1-Dichloroet		0.422	0.497	0.492	0.449	0.491	0.496	0.483	0.476	6.06
24)	TP	Halothane		0.120	0.162	0.158	0.146	0.160	0.162	0.160	0.153	10.10
25)	TP	Acrylonitrile		0.039	0.064	0.067	0.062	0.070	0.070	0.070	0.063	17.95
26)	TP	Ethyl tert-but		0.699	0.770	0.830	0.795	0.888	0.895	0.877	0.822	8.81
27)	TP	Vinyl acetate		0.522	0.567	0.579	0.539	0.603	0.653	0.636	0.585	8.29
28)	TP	cis-1,2-Dichlo		0.206	0.232	0.236	0.214	0.236	0.238	0.234	0.228	5.53
29)	TP	2,2-Dichloropr		0.299	0.340	0.342	0.310	0.338	0.340	0.332	0.329	5.21
30)	TP	Bromochloromet		0.075	0.103	0.102	0.094	0.103	0.104	0.097	0.097#	10.64
31)	TP	Cyclohexane		0.433	0.518	0.532	0.484	0.537	0.541	0.527	0.510	7.61
32)	TC	Chloroform		0.375	0.404	0.392	0.359	0.388	0.393	0.383	0.385	3.80
33)	TP	Ethyl acetate			0.193	0.203	0.192	0.220	0.220	0.217	0.208	6.39
34)	TP	Carbon tetrachloride	0.183	0.257	0.305	0.308	0.279	0.308	0.314	0.307	0.282	15.80
35)	TP	Tetrahydrofuran			0.056	0.053	0.050	0.060	0.059	0.058	0.056	7.15
36)	S	Dibromofluoromethane	0.259	0.263	0.258	0.257	0.256	0.257	0.252	0.252	0.257	1.34
37)	TP	1,1,1-Trichlor		0.283	0.340	0.342	0.314	0.344	0.350	0.343	0.331	7.28
39)	TP	2-Butanone			0.076	0.085	0.079	0.092	0.090	0.089	0.085	7.39

Initial Calibration Summary
Form 6
Volatiles

Client	**: Sterling Environmental Engineering**	**Lab Number**	**: L2373323**
Project Name	**: TROY BELTING**	**Project Number**	**: 2011-31**
Instrument ID	**: VOA108**	**Ical Ref**	**: ICAL20635**
Calibration dates	**: 12/06/23 11:22 12/06/23 15:04**		

Calibration Files
L11 =V08231206A03.d L1 =V08231206A06.d L2 =V08231206A07.d L3 =V08231206A09.d L4 =V08231206A10.d
L6 =V08231206A11.d L8 =V08231206A12.d L10 =V08231206A13.d

	Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
40) TP	1,1-Dichloropr		0.237	0.297	0.301	0.279	0.310	0.313	0.309	0.292	9.21
41) TP	Benzene	0.697	0.762	0.845	0.853	0.784	0.859	0.875	0.854	0.816	7.60
42) TP	Tertiary-Amyl Methyl Ether		0.434	0.499	0.531	0.508	0.582	0.591	0.587	0.533	10.93
43) S	1,2-Dichloroethane-d4	0.311	0.318	0.317	0.329	0.312	0.318	0.311	0.313	0.316	1.90
44) TP	1,2-Dichloroet		0.267	0.316	0.315	0.289	0.321	0.321	0.313	0.306	6.65
47) TP	Methyl cyclohe		0.285	0.339	0.355	0.324	0.365	0.368	0.366	0.343	8.79
48) TP	Trichloroethene	0.158	0.178	0.221	0.227	0.208	0.229	0.228	0.223	0.209	12.71
50) TP	Dibromomethane		0.088	0.115	0.114	0.105	0.119	0.121	0.120	0.112	10.47
51) TC	1,2-Dichloropr		0.246	0.274	0.273	0.251	0.278	0.281	0.277	0.269	5.28
53) TP	2-Chloroethyl			0.108	0.119	0.119	0.139	0.141	0.140	0.128	11.04
54) TP	Bromodichlorom		0.256	0.291	0.295	0.272	0.306	0.313	0.309	0.292#	7.17
57) TP	1,4-Dioxane		0.001	0.000	0.001	0.001	0.001	0.001	0.001	0.001#	16.85
58) TP	cis-1,3-Dichloropropene	0.248	0.280	0.326	0.345	0.329	0.369	0.374	0.371	0.330	13.82
59) I	Chlorobenzene-d5	----------ISTD----------									
60) S	Toluene-d8	1.292	1.278	1.298	1.293	1.317	1.298	1.300	1.306	1.298	0.88
61) TC	Toluene		0.648	0.710	0.694	0.664	0.720	0.727	0.718	0.697	4.32
62) TP	4-Methyl-2-pen		0.054	0.073	0.086	0.087	0.101	0.102	0.103	*L	0.9982
63) TP	Tetrachloroethene		0.253	0.294	0.294	0.277	0.296	0.298	0.297	0.287	5.73
65) TP	trans-1,3-Dichloropropene	0.333	0.337	0.369	0.398	0.389	0.431	0.431	0.427	0.390	10.27
67) TP	Ethyl methacry		0.188	0.216	0.244	0.249	0.284	0.287	0.290	0.251	15.51
68) TP	1,1,2-Trichlor		0.146	0.186	0.185	0.176	0.189	0.190	0.187	0.180#	8.67
69) TP	Chlorodibromom		0.224	0.248	0.253	0.251	0.280	0.285	0.285	0.261	8.88
70) TP	1,3-Dichloropr		0.344	0.374	0.386	0.369	0.402	0.403	0.399	0.382	5.66
71) TP	1,2-Dibromoethane		0.174	0.195	0.206	0.200	0.219	0.221	0.219	0.205	8.31
72) TP	2-Hexanone		0.111	0.142	0.159	0.159	0.187	0.185	0.187	0.161	17.57
73) TP	Chlorobenzene		0.727	0.776	0.762	0.726	0.780	0.790	0.780	0.763	3.45
74) TC	Ethylbenzene		1.166	1.304	1.327	1.278	1.367	1.385	1.364	1.313	5.73
75) TP	1,1,1,2-Tetrac		0.239	0.275	0.284	0.273	0.297	0.299	0.295	0.280	7.55
76) TP	p/m Xylene		0.413	0.494	0.508	0.487	0.518	0.517	0.502	0.491	7.37
77) TP	o Xylene		0.396	0.478	0.498	0.473	0.506	0.504	0.486	0.477	7.94
78) TP	Styrene		0.618	0.762	0.812	0.775	0.832	0.828	0.796	0.775	9.52
79) I	1,4-Dichlorobenzene-d4	----------ISTD----------									
80) TP	Bromoform		0.239	0.270	0.273	0.278	0.312	0.311	0.317	0.286	10.05
82) TP	Isopropylbenzene		2.049	2.355	2.424	2.439	2.619	2.596	2.609	2.442	8.28
83) S	4-Bromofluorobenzene	0.955	0.935	0.920	0.930	0.952	0.951	0.938	0.969	0.944	1.66
84) TP	Bromobenzene		0.553	0.603	0.591	0.585	0.628	0.624	0.628	0.602	4.61

Initial Calibration Summary
Form 6
Volatiles

Client	**: Sterling Environmental Engineering**	**Lab Number**	**: L2373323**
Project Name	**: TROY BELTING**	**Project Number**	**: 2011-31**
Instrument ID	**: VOA108**	**Ical Ref**	**: ICAL20635**
Calibration dates	**: 12/06/23 11:22 12/06/23 15:04**		

Calibration Files
L11 =V08231206A03.d L1 =V08231206A06.d L2 =V08231206A07.d L3 =V08231206A09.d L4 =V08231206A10.d
L6 =V08231206A11.d L8 =V08231206A12.d L10 =V08231206A13.d

	Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
85) TP	n-Propylbenzene		2.556	2.916	2.917	2.940	3.121	3.071	3.050	2.939	6.38
86) TP	1,4-Dichlorobu		0.880	0.921	0.908	0.912	0.987	0.965	0.965	0.934	4.14
87) TP	1,1,2,2-Tetrac		0.447	0.485	0.459	0.461	0.503	0.502	0.513	0.481	5.37
88) TP	4-Ethyltoluene		1.955	2.365	2.425	2.455	2.621	2.575	2.569	2.424	9.33
89) TP	2-Chlorotoluene		1.613	1.816	1.781	1.771	1.894	1.822	1.844	1.792	4.94
90) TP	1,3,5-Trimethy		1.772	2.054	2.112	2.129	2.269	2.219	2.203	2.108	7.84
91) TP	1,2,3-Trichlor		0.335	0.383	0.361	0.365	0.401	0.394	0.393	0.376	6.29
92) TP	trans-1,4-Dich		0.147	0.174	0.179	0.179	0.200	0.199	0.198	0.183	10.46
93) TP	4-Chlorotoluene		1.674	1.888	1.840	1.835	1.960	1.939	1.940	1.868	5.30
94) TP	tert-Butylbenzene		1.442	1.746	1.772	1.783	1.899	1.860	1.851	1.765	8.64
97) TP	1,2,4-Trimethy		1.667	2.009	2.057	2.102	2.234	2.192	2.197	2.065	9.37
98) TP	sec-Butylbenzene		2.156	2.636	2.614	2.630	2.805	2.724	2.710	2.611	8.10
99) TP	p-Isopropyltol		1.694	2.156	2.221	2.281	2.443	2.362	2.367	2.218	11.28
100) TP	1,3-Dichlorobe		1.067	1.191	1.149	1.143	1.214	1.183	1.183	1.161	4.15
101) TP	1,4-Dichlorobe		1.151	1.199	1.141	1.144	1.209	1.182	1.182	1.172	2.33
102) TP	p-Diethylbenzene		1.062	1.256	1.327	1.365	1.471	1.424	1.443	1.335	10.59
103) TP	n-Butylbenzene		1.667	1.963	1.994	1.988	2.136	2.067	2.085	1.986	7.73
104) TP	1,2-Dichlorobe		1.028	1.108	1.067	1.058	1.122	1.089	1.093	1.081	2.97
105) TP	1,2,4,5-Tetram		1.496	1.874	2.116	2.202	2.354	2.295	2.332	2.096	14.87
106) TP	1,2-Dibromo-3-		0.016	0.057	0.060	0.063	0.071	0.073	0.075	*L	0.9981
107) TP	1,3,5-Trichlor		0.793	0.891	0.859	0.873	0.918	0.897	0.903	0.876	4.73
108) TP	Hexachlorobuta		0.311	0.348	0.351	0.352	0.377	0.359	0.377	0.354	6.36
109) TP	1,2,4-Trichlor		0.682	0.701	0.715	0.750	0.808	0.793	0.800	0.750	6.89
110) TP	Naphthalene		1.080	1.104	1.273	1.357	1.530	1.516	1.559	1.346	14.96
111) TP	1,2,3-Trichlor		0.560	0.609	0.634	0.654	0.710	0.694	0.706	0.653	8.57

Initial Calibration Summary
Form 6
Volatiles

Client	**: Sterling Environmental Engineering**	**Lab Number**	**: L2373323**
Project Name	**: TROY BELTING**	**Project Number**	**: 2011-31**
Instrument ID	**: VOA101**	**Ical Ref**	**: ICAL20680**
Calibration dates	**: 12/15/23 12:34 12/15/23 16:29**		

Calibration Files

L11 =V01231215A03.D L1 =V01231215A04.D L2 =V01231215A06.D L3 =V01231215A08.D L4 =V01231215A09.D

L6 =V01231215A10.D L8 =V01231215A11.D L10 =V01231215A12.D

		Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
1)	I	Fluorobenzene	----------ISTD----------									
2)	TP	Dichlorodifluo		0.221	0.310	0.271	0.260	0.298	0.292	0.303	0.279	11.16
3)	TP	Chloromethane		0.333	0.378	0.365	0.352	0.367	0.359	0.376	0.361	4.28
4)	TC	Vinyl chloride	0.274	0.273	0.354	0.324	0.316	0.340	0.332	0.347	0.320	9.76
5)	TP	Bromomethane		0.123	0.149	0.146	0.149	0.166	0.170	0.188	0.156	13.37
6)	TP	Chloroethane		0.217	0.209	0.195	0.188	0.189	0.176	0.171	0.192	8.59
7)	TP	Trichlorofluor		0.273	0.374	0.337	0.325	0.371	0.358	0.367	0.343	10.56
8)	TP	Ethyl ether		0.120	0.106	0.110	0.104	0.107	0.104	0.103	0.108	5.51
10)	TC	1,1-Dichloroet		0.202	0.235	0.213	0.208	0.225	0.221	0.230	0.219	5.51
11)	TP	Carbon disulfide		0.615	0.712	0.669	0.647	0.689	0.685	0.718	0.676	5.39
12)	TP	Freon-113		0.164	0.254	0.224	0.220	0.252	0.244	0.248	0.229	13.80
13)	TP	Iodomethane		0.212	0.278	0.344	0.363	0.373	0.349	0.353	0.325	18.02
14)	TP	Acrolein		0.042	0.033	0.035	0.032	0.035	0.033	0.034	0.035	9.73
15)	TP	Methylene chlo		0.247	0.244	0.242	0.231	0.237	0.231	0.238	0.239	2.56
17)	TP	Acetone			0.053	0.050	0.044	0.047	0.046	0.046	0.048	6.93
18)	TP	trans-1,2-Dich		0.221	0.253	0.247	0.244	0.252	0.246	0.260	0.246	5.01
19)	TP	Methyl acetate		0.120	0.123	0.129	0.123	0.133	0.128	0.124	0.126	3.62
20)	TP	Methyl tert butyl ether		0.545	0.565	0.572	0.545	0.577	0.563	0.565	0.562	2.18
21)	TP	tert-Butyl alc		0.012	0.015	0.016	0.016	0.017	0.017	0.017	0.016	10.00
22)	TP	Diisopropyl ether		0.895	0.931	0.939	0.918	0.949	0.927	0.947	0.929	2.02
23)	TP	1,1-Dichloroet		0.445	0.510	0.490	0.480	0.494	0.479	0.502	0.486	4.37
24)	TP	Halothane		0.165	0.192	0.188	0.184	0.199	0.196	0.205	0.190	6.79
25)	TP	Acrylonitrile		0.050	0.057	0.061	0.057	0.063	0.062	0.062	0.059	7.88
26)	TP	Ethyl tert-but		0.740	0.776	0.790	0.771	0.803	0.785	0.800	0.781	2.74
27)	TP	Vinyl acetate		0.481	0.499	0.497	0.451	0.455	0.455	0.447	0.469	4.81
28)	TP	cis-1,2-Dichlo		0.246	0.283	0.280	0.272	0.277	0.270	0.282	0.273	4.73
29)	TP	2,2-Dichloropr		0.331	0.392	0.369	0.361	0.379	0.361	0.371	0.366	5.21
30)	TP	Bromochloromet		0.122	0.125	0.126	0.122	0.124	0.118	0.117	0.122	2.76
31)	TP	Cyclohexane		0.353	0.522	0.476	0.474	0.550	0.538	0.566	0.497	14.64
32)	TC	Chloroform		0.409	0.428	0.431	0.424	0.432	0.422	0.436	0.426	2.11
33)	TP	Ethyl acetate		0.163	0.194	0.194	0.184	0.198	0.192	0.190	0.188	6.32
34)	TP	Carbon tetrachloride	0.284	0.264	0.358	0.333	0.329	0.366	0.358	0.375	0.333	11.97
35)	TP	Tetrahydrofuran		0.075	0.059	0.054	0.051	0.052	0.050	0.050	0.056	16.00
36)	S	Dibromofluoromethane	0.253	0.253	0.253	0.255	0.258	0.257	0.258	0.257	0.256	0.93
37)	TP	1,1,1-Trichlor		0.329	0.407	0.383	0.378	0.402	0.391	0.406	0.385	7.07
39)	TP	2-Butanone			0.070	0.075	0.073	0.081	0.078	0.079	0.076	5.27

Initial Calibration Summary
Form 6
Volatiles

Client	**: Sterling Environmental Engineering**	**Lab Number**	**: L2373323**
Project Name	**: TROY BELTING**	**Project Number**	**: 2011-31**
Instrument ID	**: VOA101**	**Ical Ref**	**: ICAL20680**
Calibration dates	**: 12/15/23 12:34 12/15/23 16:29**		

Calibration Files
L11 =V01231215A03.D L1 =V01231215A04.D L2 =V01231215A06.D L3 =V01231215A08.D L4 =V01231215A09.D
L6 =V01231215A10.D L8 =V01231215A11.D L10 =V01231215A12.D

		Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
40)	TP	1,1-Dichloropr		0.270	0.350	0.336	0.328	0.359	0.348	0.363	0.336	9.41
41)	TP	Benzene	0.878	0.877	0.992	0.981	0.959	0.981	0.951	0.986	0.951	4.96
42)	TP	Tertiary-Amyl Methyl Ether		0.576	0.610	0.625	0.606	0.638	0.620	0.628	0.615	3.30
43)	S	1,2-Dichloroethane-d4	0.286	0.284	0.285	0.285	0.285	0.296	0.294	0.300	0.289	2.16
44)	TP	1,2-Dichloroet		0.305	0.329	0.326	0.312	0.324	0.313	0.316	0.318	2.74
47)	TP	Methyl cyclohe		0.272	0.435	0.404	0.403	0.467	0.462	0.491	0.419	17.37
48)	TP	Trichloroethene	0.256	0.249	0.274	0.266	0.262	0.277	0.269	0.286	0.267	4.42
50)	TP	Dibromomethane		0.126	0.133	0.136	0.132	0.140	0.137	0.139	0.135	3.64
51)	TC	1,2-Dichloropr		0.234	0.267	0.272	0.264	0.271	0.265	0.274	0.264	5.12
53)	TP	2-Chloroethyl			0.063	0.079	0.068	0.078	0.079	0.081	0.075	9.83
54)	TP	Bromodichlorom		0.286	0.324	0.332	0.322	0.334	0.326	0.337	0.323	5.35
57)	TP	1,4-Dioxane		0.001	0.001	0.002	0.002	0.002	0.002	0.002	0.002#	14.31
58)	TP	cis-1,3-Dichlo		0.312	0.368	0.390	0.386	0.401	0.391	0.401	0.379	8.23
59)	I	Chlorobenzene-d5	----------ISTD----------									
60)	S	Toluene-d8	1.201	1.189	1.184	1.184	1.172	1.174	1.167	1.154	1.178	1.23
61)	TC	Toluene		0.686	0.749	0.757	0.735	0.751	0.728	0.759	0.738	3.46
62)	TP	4-Methyl-2-pen		0.050	0.070	0.082	0.078	0.086	0.084	0.084	0.076	16.77
63)	TP	Tetrachloroethene		0.252	0.345	0.333	0.323	0.346	0.338	0.352	0.327	10.61
65)	TP	trans-1,3-Dich		0.332	0.368	0.398	0.394	0.412	0.401	0.407	0.387	7.30
67)	TP	Ethyl methacry		0.198	0.236	0.275	0.272	0.292	0.286	0.286	0.264	13.02
68)	TP	1,1,2-Trichlor		0.180	0.186	0.195	0.186	0.193	0.187	0.189	0.188#	2.56
69)	TP	Chlorodibromom		0.240	0.267	0.281	0.270	0.286	0.281	0.287	0.273	6.02
70)	TP	1,3-Dichloropr		0.326	0.379	0.389	0.372	0.384	0.372	0.374	0.371	5.59
71)	TP	1,2-Dibromoethane		0.202	0.219	0.232	0.222	0.235	0.228	0.229	0.224	4.99
72)	TP	2-Hexanone			0.123	0.142	0.140	0.153	0.151	0.148	0.143	7.64
73)	TP	Chlorobenzene		0.781	0.851	0.859	0.830	0.849	0.830	0.857	0.837	3.25
74)	TC	Ethylbenzene		1.158	1.431	1.473	1.437	1.489	1.446	1.499	1.419	8.31
75)	TP	1,1,1,2-Tetrac		0.260	0.305	0.311	0.301	0.311	0.306	0.314	0.301	6.14
76)	TP	p/m Xylene		0.456	0.555	0.571	0.561	0.583	0.569	0.584	0.554	8.05
77)	TP	o Xylene		0.465	0.543	0.559	0.542	0.558	0.546	0.559	0.539	6.17
78)	TP	Styrene		0.724	0.855	0.917	0.910	0.937	0.915	0.919	0.882	8.45
79)	I	1,4-Dichlorobenzene-d4	----------ISTD----------									
80)	TP	Bromoform		0.265	0.284	0.298	0.299	0.320	0.317	0.318	0.300	6.79
82)	TP	Isopropylbenzene		2.099	2.669	2.595	2.593	2.681	2.628	2.714	2.569	8.25
83)	S	4-Bromofluorobenzene	0.867	0.860	0.862	0.853	0.856	0.848	0.838	0.831	0.852	1.45
84)	TP	Bromobenzene		0.551	0.633	0.629	0.620	0.626	0.613	0.626	0.614	4.62

Initial Calibration Summary
Form 6
Volatiles

Client	**: Sterling Environmental Engineering**	**Lab Number**	**: L2373323**
Project Name	**: TROY BELTING**	**Project Number**	**: 2011-31**
Instrument ID	**: VOA101**	**Ical Ref**	**: ICAL20680**
Calibration dates	**: 12/15/23 12:34 12/15/23 16:29**		

Calibration Files
L11 =V01231215A03.D L1 =V01231215A04.D L2 =V01231215A06.D L3 =V01231215A08.D L4 =V01231215A09.D
L6 =V01231215A10.D L8 =V01231215A11.D L10 =V01231215A12.D

	Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
85) TP	n-Propylbenzene		2.405	3.020	2.982	3.019	3.117	3.045	3.128	2.960	8.45
86) TP	1,4-Dichlorobu		0.697	0.729	0.741	0.716	0.749	0.737	0.739	0.730	2.44
87) TP	1,1,2,2-Tetrac		0.442	0.488	0.495	0.471	0.492	0.480	0.475	0.478	3.79
88) TP	4-Ethyltoluene		2.018	2.535	2.519	2.554	2.623	2.569	2.661	2.497	8.68
89) TP	2-Chlorotoluene		1.564	1.780	1.788	1.782	1.788	1.756	1.817	1.754	4.88
90) TP	1,3,5-Trimethy		1.682	2.108	2.116	2.135	2.191	2.172	2.255	2.094	9.01
91) TP	1,2,3-Trichlor		0.332	0.370	0.373	0.358	0.381	0.371	0.376	0.366	4.49
92) TP	trans-1,4-Dich		0.131	0.135	0.153	0.148	0.156	0.152	0.149	0.146	6.46
93) TP	4-Chlorotoluene		1.537	1.752	1.838	1.828	1.849	1.810	1.869	1.783	6.44
94) TP	tert-Butylbenzene		1.397	1.789	1.754	1.770	1.846	1.827	1.906	1.756	9.47
97) TP	1,2,4-Trimethy		1.665	2.049	2.074	2.084	2.117	2.088	2.178	2.037	8.29
98) TP	sec-Butylbenzene		1.981	2.542	2.464	2.517	2.677	2.650	2.766	2.514	10.22
99) TP	p-Isopropyltol		1.643	2.126	2.121	2.169	2.280	2.277	2.378	2.142	11.16
100) TP	1,3-Dichlorobe		0.978	1.133	1.162	1.167	1.184	1.163	1.196	1.141	6.52
101) TP	1,4-Dichlorobe		1.077	1.173	1.165	1.168	1.179	1.163	1.197	1.160	3.31
102) TP	p-Diethylbenzene		0.907	1.202	1.214	1.259	1.319	1.325	1.402	1.233	12.93
103) TP	n-Butylbenzene		1.210	1.642	1.669	1.727	1.827	1.828	1.936	1.691	13.92
104) TP	1,2-Dichlorobe		0.909	1.046	1.063	1.053	1.070	1.055	1.077	1.039	5.61
105) TP	1,2,4,5-Tetram		1.377	1.649	1.722	1.781	1.850	1.884	1.931	1.742	10.77
106) TP	1,2-Dibromo-3-		0.053	0.063	0.068	0.066	0.073	0.072	0.072	0.067	10.86
107) TP	1,3,5-Trichlor		0.560	0.642	0.655	0.680	0.698	0.717	0.731	0.669	8.60
108) TP	Hexachlorobuta		0.163	0.220	0.216	0.225	0.243	0.253	0.265	0.226	14.73
109) TP	1,2,4-Trichlor		0.461	0.525	0.556	0.566	0.594	0.606	0.604	0.559	9.29
110) TP	Naphthalene		0.940	1.097	1.203	1.188	1.266	1.261	1.202	1.165	9.80
111) TP	1,2,3-Trichlor		0.363	0.429	0.450	0.451	0.473	0.479	0.477	0.446	9.17

Response Factor Report VOA 108

Method Path : K:\VOA108\2023\231206A-ICAL\
Method File : V108_231206A_8260.m
Title : VOLATILES BY GC/MS
Last Update : Wed Dec 06 17:09:55 2023
Response Via : Initial Calibration

Calibration Files
L11 =V08231206A03.d L1 =V08231206A06.d L2 =V08231206A07.d L3 =V08231206A09.d L4 =V08231206A10.d
L6 =V08231206A11.d L8 =V08231206A12.d L10 =V08231206A13.d

		Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
1)	I	Fluorobenzene	----------ISTD----------									
2)	TP	Dichlorodifluo...		0.241	0.295	0.291	0.260	0.291	0.291	0.289	0.280	7.39
3)	TP	Chloromethane		0.419	0.495	0.483	0.438	0.472	0.475	0.462	0.464	5.68
4)	TC	Vinyl chloride	0.145	0.243	0.287	0.283	0.260	0.288	0.313	0.318 *L		0.9970
5)	TP	Bromomethane		0.061	0.094	0.102	0.103	0.125	0.130	0.134 *Q		0.9988
6)	TP	Chloroethane		0.115	0.150	0.146	0.133	0.146	0.148	0.144	0.141	8.77
7)	TP	Trichlorofluor...		0.212	0.273	0.274	0.246	0.274	0.278	0.273	0.262	9.37
8)	TP	Ethyl ether		0.054	0.066	0.077	0.073	0.083	0.084	0.083	0.074	14.75
10)	TC	1,1-Dichloroet...		0.145	0.191	0.189	0.175	0.193	0.197	0.194	0.184	9.98
11)	TP	Carbon disulfide		0.634	0.706	0.689	0.630	0.699	0.711	0.698	0.681	4.99
12)	TP	Freon-113		0.159	0.193	0.200	0.180	0.199	0.201	0.198	0.190	8.09
13)	TP	Iodomethane			0.138	0.192	0.218	0.266	0.277	0.264 *L		0.9970
14)	TP	Acrolein			0.024	0.033	0.031	0.036	0.037	0.038	0.033	15.78
15)	TP	Methylene chlo...		0.199	0.225	0.218	0.199	0.218	0.220	0.217	0.214	4.92
17)	TP	Acetone			0.058	0.055	0.048	0.055	0.053	0.052	0.054	6.33
18)	TP	trans-1,2-Dich...		0.168	0.213	0.214	0.196	0.216	0.219	0.215	0.206	8.78
19)	TP	Methyl acetate			0.147	0.148	0.131	0.148	0.148	0.145	0.144	4.70
20)	TP	Methyl tert-bu...		0.431	0.474	0.499	0.474	0.543	0.548	0.543	0.502	8.91
21)	TP	tert-Butyl alc...			0.008	0.010	0.009	0.012	0.012	0.013	0.011	18.01
22)	TP	Diisopropyl ether		0.960	1.053	1.104	1.047	1.164	1.161	1.122	1.087	6.69
23)	TP	1,1-Dichloroet...		0.422	0.497	0.492	0.449	0.491	0.496	0.483	0.476	6.06
24)	TP	Halothane		0.120	0.162	0.158	0.146	0.160	0.162	0.160	0.153	10.10
25)	TP	Acrylonitrile		0.039	0.064	0.067	0.062	0.070	0.070	0.070	0.063	17.95
26)	TP	Ethyl tert-but...		0.699	0.770	0.830	0.795	0.888	0.895	0.877	0.822	8.81
27)	TP	Vinyl acetate		0.522	0.567	0.579	0.539	0.603	0.653	0.636	0.585	8.29
28)	TP	cis-1,2-Dichlo...		0.206	0.232	0.236	0.214	0.236	0.238	0.234	0.228	5.53
29)	TP	2,2-Dichloropr...		0.299	0.340	0.342	0.310	0.338	0.340	0.332	0.329	5.21
30)	TP	Bromochloromet...		0.075	0.103	0.102	0.094	0.103	0.104	0.097	0.097#	10.64
31)	TP	Cyclohexane		0.433	0.518	0.532	0.484	0.537	0.541	0.527	0.510	7.61
32)	TC	Chloroform		0.375	0.404	0.392	0.359	0.388	0.393	0.383	0.385	3.80
33)	TP	Ethyl acetate			0.193	0.203	0.192	0.220	0.220	0.217	0.208	6.39

Method Path : K:\VOA108\2023\231206A-ICAL\
Method File : V108_231206A_8260.m
Title : VOLATILES BY GC/MS
Last Update : Wed Dec 06 17:09:55 2023
Response Via : Initial Calibration

Calibration Files
L11 =V08231206A03.d L1 =V08231206A06.d L2 =V08231206A07.d L3 =V08231206A09.d L4 =V08231206A10.d
L6 =V08231206A11.d L8 =V08231206A12.d L10 =V08231206A13.d

		Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
34)	TP	Carbon tetrach...	0.183	0.257	0.305	0.308	0.279	0.308	0.314	0.307	0.282	15.80
35)	TP	Tetrahydrofuran			0.056	0.053	0.050	0.060	0.059	0.058	0.056	7.15
36)	S	Dibromofluorom...	0.259	0.263	0.258	0.257	0.256	0.257	0.252	0.252	0.257	1.34
37)	TP	1,1,1-Trichlor...		0.283	0.340	0.342	0.314	0.344	0.350	0.343	0.331	7.28
39)	TP	2-Butanone			0.076	0.085	0.079	0.092	0.090	0.089	0.085	7.39
40)	TP	1,1-Dichloropr...		0.237	0.297	0.301	0.279	0.310	0.313	0.309	0.292	9.21
41)	TP	Benzene	0.697	0.762	0.845	0.853	0.784	0.859	0.875	0.854	0.816	7.60
42)	TP	tert-Amyl meth...		0.434	0.499	0.531	0.508	0.582	0.591	0.587	0.533	10.93
43)	S	1,2-Dichloroet...	0.311	0.318	0.317	0.329	0.312	0.318	0.311	0.313	0.316	1.90
44)	TP	1,2-Dichloroet...		0.267	0.316	0.315	0.289	0.321	0.321	0.313	0.306	6.65
47)	TP	Methyl cyclohe...		0.285	0.339	0.355	0.324	0.365	0.368	0.366	0.343	8.79
48)	TP	Trichloroethene	0.158	0.178	0.221	0.227	0.208	0.229	0.228	0.223	0.209	12.71
50)	TP	Dibromomethane		0.088	0.115	0.114	0.105	0.119	0.121	0.120	0.112	10.47
51)	TC	1,2-Dichloropr...		0.246	0.274	0.273	0.251	0.278	0.281	0.277	0.269	5.28
53)	TP	2-Chloroethyl ...			0.108	0.119	0.119	0.139	0.141	0.140	0.128	11.04
54)	TP	Bromodichlorom...		0.256	0.291	0.295	0.272	0.306	0.313	0.309	0.292#	7.17
57)	TP	1,4-Dioxane		0.001	0.000	0.001	0.001	0.001	0.001	0.001	0.001#	16.85
58)	TP	cis-1,3-Dichlo...	0.248	0.280	0.326	0.345	0.329	0.369	0.374	0.371	0.330	13.82
59)	I	Chlorobenzene-d5	----------ISTD----------									
60)	S	Toluene-d8	1.292	1.278	1.298	1.293	1.317	1.298	1.300	1.306	1.298	0.88
61)	TC	Toluene		0.648	0.710	0.694	0.664	0.720	0.727	0.718	0.697	4.32
62)	TP	4-Methyl-2-pen...		0.054	0.073	0.086	0.087	0.101	0.102	0.103	*L	0.9982
63)	TP	Tetrachloroethene		0.253	0.294	0.294	0.277	0.296	0.298	0.297	0.287	5.73
65)	TP	trans-1,3-Dich...	0.333	0.337	0.369	0.398	0.389	0.431	0.431	0.427	0.390	10.27
67)	TP	Ethyl methacry...		0.188	0.216	0.244	0.249	0.284	0.287	0.290	0.251	15.51
68)	TP	1,1,2-Trichlor...		0.146	0.186	0.185	0.176	0.189	0.190	0.187	0.180#	8.67
69)	TP	Chlorodibromom...		0.224	0.248	0.253	0.251	0.280	0.285	0.285	0.261	8.88
70)	TP	1,3-Dichloropr...		0.344	0.374	0.386	0.369	0.402	0.403	0.399	0.382	5.66
71)	TP	1,2-Dibromoethane		0.174	0.195	0.206	0.200	0.219	0.221	0.219	0.205	8.31
72)	TP	2-Hexanone		0.111	0.142	0.159	0.159	0.187	0.185	0.187	0.161	17.57
73)	TP	Chlorobenzene		0.727	0.776	0.762	0.726	0.780	0.790	0.780	0.763	3.45

Method Path : K:\VOA108\2023\231206A-ICAL\
Method File : V108_231206A_8260.m
Title : VOLATILES BY GC/MS
Last Update : Wed Dec 06 17:09:55 2023
Response Via : Initial Calibration

Calibration Files
L11 =V08231206A03.d L1 =V08231206A06.d L2 =V08231206A07.d L3 =V08231206A09.d L4 =V08231206A10.d
L6 =V08231206A11.d L8 =V08231206A12.d L10 =V08231206A13.d

		Compound		L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
74)	TC	Ethylbenzene		1.166	1.304	1.327	1.278	1.367	1.385	1.364	1.313	5.73	
75)	TP	1,1,1,2-Tetrac...		0.239	0.275	0.284	0.273	0.297	0.299	0.295	0.280	7.55	
76)	TP	p/m Xylene		0.413	0.494	0.508	0.487	0.518	0.517	0.502	0.491	7.37	
77)	TP	o Xylene		0.396	0.478	0.498	0.473	0.506	0.504	0.486	0.477	7.94	
78)	TP	Styrene		0.618	0.762	0.812	0.775	0.832	0.828	0.796	0.775	9.52	
79)	I	1,4-Dichlorobenzene-d4	----------ISTD----------										
80)	TP	Bromoform		0.239	0.270	0.273	0.278	0.312	0.311	0.317	0.286	10.05	
82)	TP	Isopropylbenzene		2.049	2.355	2.424	2.439	2.619	2.596	2.609	2.442	8.28	
83)	S	4-Bromofluorob...	0.955	0.935	0.920	0.930	0.952	0.951	0.938	0.969	0.944	1.66	
84)	TP	Bromobenzene		0.553	0.603	0.591	0.585	0.628	0.624	0.628	0.602	4.61	
85)	TP	n-Propylbenzene		2.556	2.916	2.917	2.940	3.121	3.071	3.050	2.939	6.38	
86)	TP	1,4-Dichlorobu...		0.880	0.921	0.908	0.912	0.987	0.965	0.965	0.934	4.14	
87)	TP	1,1,2,2-Tetrac...		0.447	0.485	0.459	0.461	0.503	0.502	0.513	0.481	5.37	
88)	TP	4-Ethyltoluene		1.955	2.365	2.425	2.455	2.621	2.575	2.569	2.424	9.33	
89)	TP	2-Chlorotoluene		1.613	1.816	1.781	1.771	1.894	1.822	1.844	1.792	4.94	
90)	TP	1,3,5-Trimethy...		1.772	2.054	2.112	2.129	2.269	2.219	2.203	2.108	7.84	
91)	TP	1,2,3-Trichlor...		0.335	0.383	0.361	0.365	0.401	0.394	0.393	0.376	6.29	
92)	TP	trans-1,4-Dich...		0.147	0.174	0.179	0.179	0.200	0.199	0.198	0.183	10.46	
93)	TP	4-Chlorotoluene		1.674	1.888	1.840	1.835	1.960	1.939	1.940	1.868	5.30	
94)	TP	tert-Butylbenzene		1.442	1.746	1.772	1.783	1.899	1.860	1.851	1.765	8.64	
97)	TP	1,2,4-Trimethy...		1.667	2.009	2.057	2.102	2.234	2.192	2.197	2.065	9.37	
98)	TP	sec-Butylbenzene		2.156	2.636	2.614	2.630	2.805	2.724	2.710	2.611	8.10	
99)	TP	p-Isopropyltol...		1.694	2.156	2.221	2.281	2.443	2.362	2.367	2.218	11.28	
100)	TP	1,3-Dichlorobe...		1.067	1.191	1.149	1.143	1.214	1.183	1.183	1.161	4.15	
101)	TP	1,4-Dichlorobe...		1.151	1.199	1.141	1.144	1.209	1.182	1.182	1.172	2.33	
102)	TP	p-Diethylbenzene		1.062	1.256	1.327	1.365	1.471	1.424	1.443	1.335	10.59	
103)	TP	n-Butylbenzene		1.667	1.963	1.994	1.988	2.136	2.067	2.085	1.986	7.73	
104)	TP	1,2-Dichlorobe...		1.028	1.108	1.067	1.058	1.122	1.089	1.093	1.081	2.97	
105)	TP	1,2,4,5-Tetram...		1.496	1.874	2.116	2.202	2.354	2.295	2.332	2.096	14.87	
106)	TP	1,2-Dibromo-3-...		0.016	0.057	0.060	0.063	0.071	0.073	0.075	*L	0.9981	
107)	TP	1,3,5-Trichlor...		0.793	0.891	0.859	0.873	0.918	0.897	0.903	0.876	4.73	

Method Path : K:\VOA108\2023\231206A-ICAL\
Method File : V108_231206A_8260.m
Title : VOLATILES BY GC/MS
Last Update : Wed Dec 06 17:09:55 2023
Response Via : Initial Calibration

Calibration Files
L11 =V08231206A03.d L1 =V08231206A06.d L2 =V08231206A07.d L3 =V08231206A09.d L4 =V08231206A10.d
L6 =V08231206A11.d L8 =V08231206A12.d L10 =V08231206A13.d

	Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
108)	TP Hexachlorobuta...	0.311	0.348	0.351	0.352	0.377	0.359	0.377	0.354	6.36	
109)	TP 1,2,4-Trichlor...	0.682	0.701	0.715	0.750	0.808	0.793	0.800	0.750	6.89	
110)	TP Naphthalene	1.080	1.104	1.273	1.357	1.530	1.516	1.559	1.346	14.96	
111)	TP 1,2,3-Trichlor...	0.560	0.609	0.634	0.654	0.710	0.694	0.706	0.653	8.57	

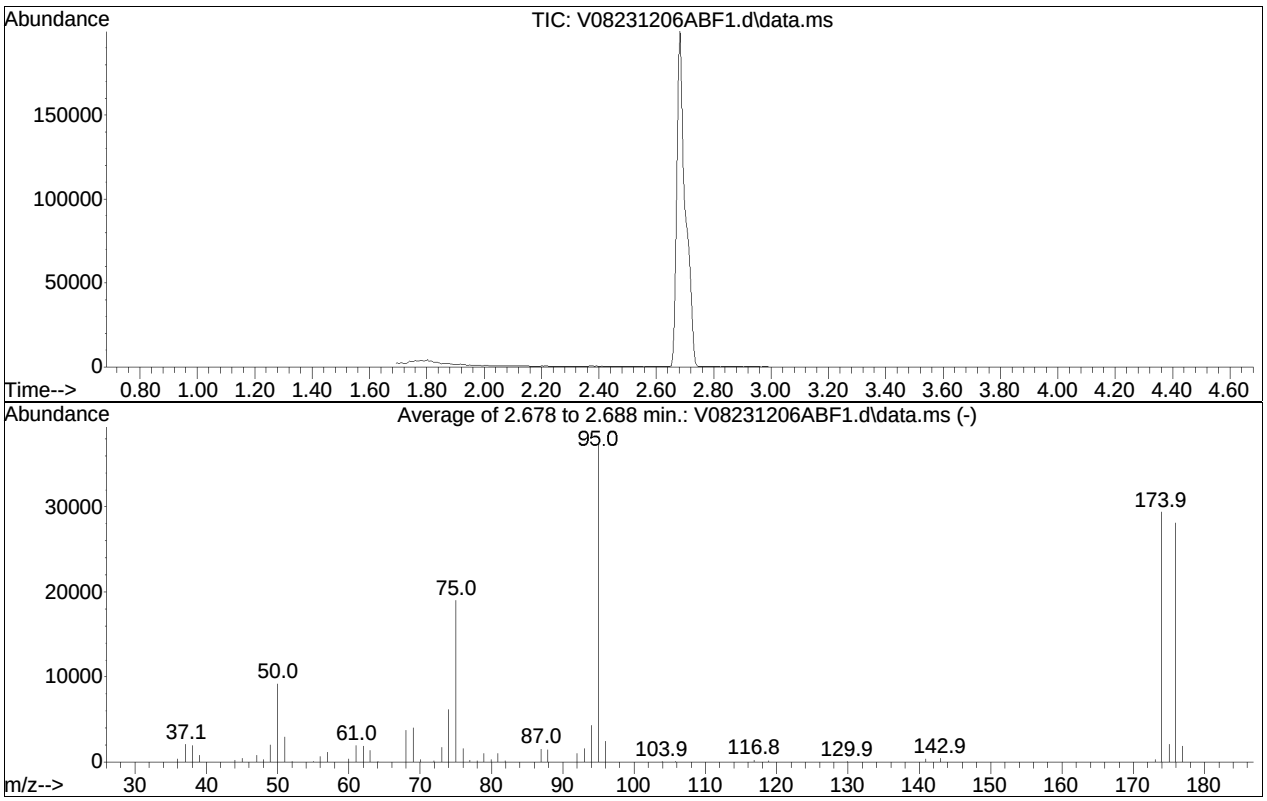
(#) = Out of Range

BFB

Data Path : K:\VOA108\2023\231206A-ICAL\
Data File : V08231206ABF1.d
Acq On : 6 Dec 2023 10:17 am
Operator : VOA108:MKS
Sample : WG1860686-1
Misc : WG1860686
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : K:\VOA108\2023\231206A-ICAL\V108_231206A_8260.m
Title : VOLATILES BY GC/MS
Last Update : Wed Dec 06 17:09:55 2023



AutoFind: Scans 189, 190, 191; Background Corrected with Scan 181

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	24.5	9203	PASS
75	95	30	60	50.7	19036	PASS
95	95	100	100	100.0	37547	PASS
96	95	5	9	6.5	2459	PASS
173	174	0.00	2	1.1	318	PASS
174	95	50	100	78.4	29445	PASS
175	174	5	9	7.1	2100	PASS
176	174	95	101	95.5	28123	PASS
177	176	5	9	6.8	1902	PASS

Quantitation Report (QT Reviewed)

Data Path : K:\VOA108\2023\231206A-ICAL\
Data File : V08231206A03.d
Acq On : 6 Dec 2023 11:22 am
Operator : VOA108:LAC
Sample : I8260STD0.19PPB
Misc : WG1860686
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 06 16:14:00 2023
Quant Method : K:\VOA108\2023\231206A-ICAL\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 15:51:11 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA108\2023\231206A-ICAL\V08231206A09.d
Sub List : 8260-L11_MCP - L11 MCP

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	6.114	96	166384	10.000 ug/L	0.00
Standard Area 1 = 168549			Recovery =	98.72%	
59) Chlorobenzene-d5	9.648	117	122483	10.000 ug/L	0.00
Standard Area 1 = 124890			Recovery =	98.07%	
79) 1,4-Dichlorobenzene-d4	12.322	152	61010	10.000 ug/L	0.00
Standard Area 1 = 65924			Recovery =	92.55%	
System Monitoring Compounds					
36) Dibromofluoromethane	5.302	113	43059	10.080 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	100.80%	
43) 1,2-Dichloroethane-d4	5.831	65	51707	9.451 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	94.51%	
60) Toluene-d8	7.808	98	158188	9.991 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	99.91%	
83) 4-Bromofluorobenzene	11.127	95	58276	10.265 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	102.65%	
Target Compounds					Qvalue
4) Vinyl chloride	1.972	62	458	0.097 ug/L	65
34) Carbon tetrachloride	5.260	117	578	0.113 ug/L #	72
41) Benzene	5.700	78	2205	0.155 ug/L #	73
48) Trichloroethene	6.293	95	500	0.133 ug/L #	82
58) cis-1,3-Dichloropropene	7.593	75	785	0.137 ug/L #	84
65) trans-1,3-Dichloropropene	8.343	75	776	0.159 ug/L #	74

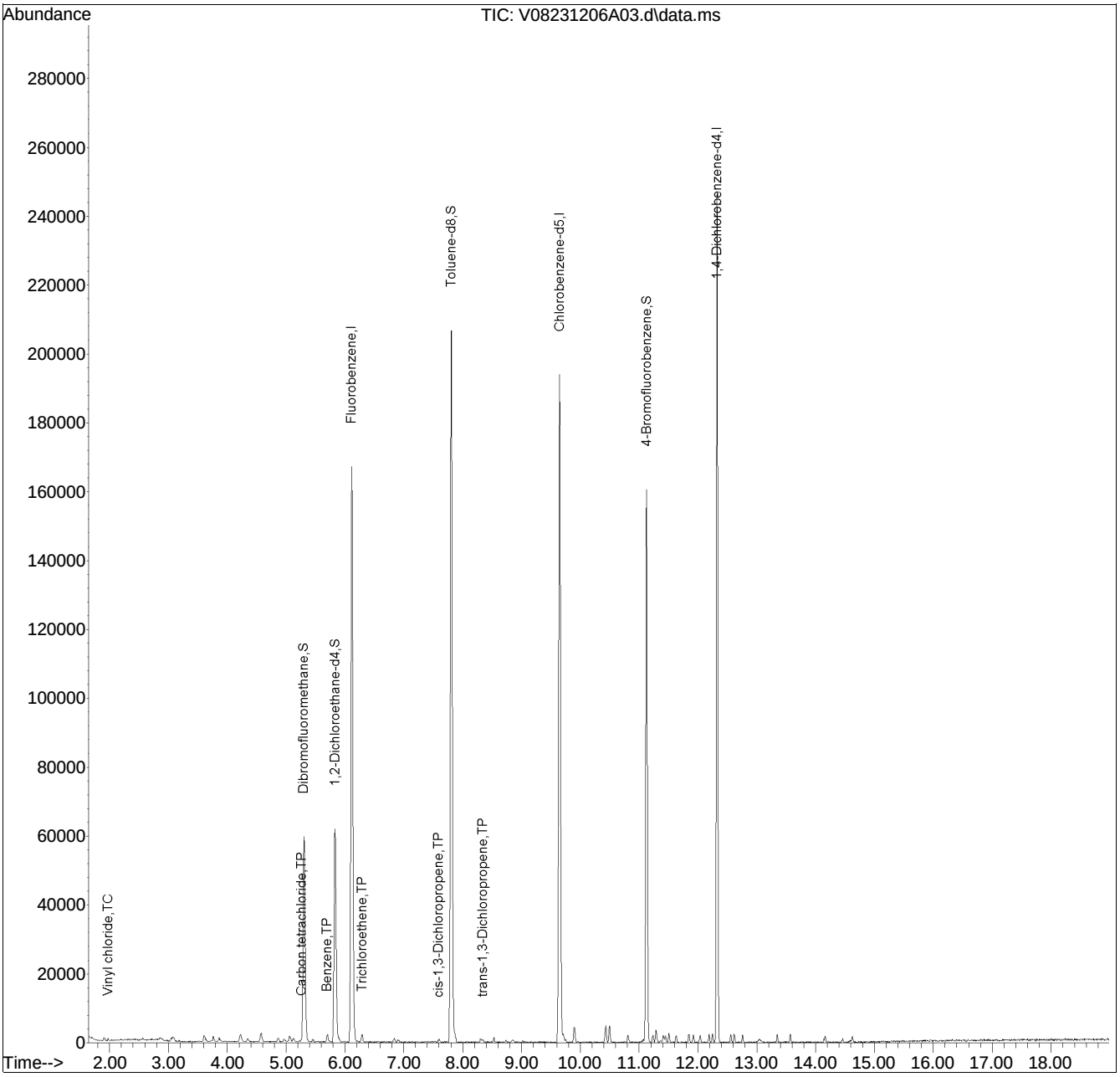
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\VOA108\2023\231206A-ICAL\
Data File : V08231206A03.d
Acq On : 6 Dec 2023 11:22 am
Operator : VOA108:LAC
Sample : I8260STD0.19PPB
Misc : WG1860686
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 06 16:14:00 2023
Quant Method : K:\VOA108\2023\231206A-ICAL\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 15:51:11 2023
Response via : Initial Calibration

Sub List : 8260-L11_MCP - L11 MCP206A-ICAL\V08231206A09.d•



Manual Integration Report

Data Path	: K:\VOA108\2023\231206A-ICAQ	Method	: V108_231206A_8260.m
Data File	: V08231206A03.d	Operator	: VOA108:LAC
Date Inj'd	: 12/6/2023 11:22 am	Instrument	: VOA 108
Sample	: I8260STD0.19PPB	Quant Date	: 12/6/2023 3:52 pm

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

Quantitation Report (QT Reviewed)

Data Path : K:\VOA108\2023\231206A-ICAL\
Data File : V08231206A06.d
Acq On : 6 Dec 2023 12:29 pm
Operator : VOA108:LAC
Sample : I8260STD0.5PPB
Misc : WG1860686
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 06 16:08:05 2023
Quant Method : K:\VOA108\2023\231206A-ICAL\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 15:51:11 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA108\2023\231206A-ICAL\V08231206A09.d
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	6.114	96	161913	10.000 ug/L	0.00
Standard Area 1 = 168549			Recovery = 96.06%		
59) Chlorobenzene-d5	9.648	117	120634	10.000 ug/L	0.00
Standard Area 1 = 124890			Recovery = 96.59%		
79) 1,4-Dichlorobenzene-d4	12.327	152	62213	10.000 ug/L	0.00
Standard Area 1 = 65924			Recovery = 94.37%		
System Monitoring Compounds					
36) Dibromofluoromethane	5.307	113	42529	10.231 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 102.31%		
43) 1,2-Dichloroethane-d4	5.831	65	51542	9.681 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 96.81%		
60) Toluene-d8	7.808	98	154145	9.885 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 98.85%		
83) 4-Bromofluorobenzene	11.127	95	58176	10.050 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.50%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.705	85	1955	0.415 ug/L #	91
3) Chloromethane	1.899	50	3396	0.434 ug/L #	90
4) Vinyl chloride	1.978	62	1968	0.430 ug/L	92
5) Bromomethane	2.297	94	495	0.299 ug/L #	77
6) Chloroethane	2.418	64	934	0.396 ug/L #	56
7) Trichlorofluoromethane	2.565	101	1713	0.386 ug/L	94
8) Ethyl ether	2.858	74	438	0.351 ug/L #	41
10) 1,1-Dichloroethene	3.047	96	1176	0.384 ug/L	91
11) Carbon disulfide	3.079	76	5133	0.460 ug/L	92
12) Freon-113	3.089	101	1291	0.399 ug/L	93
13) Iodomethane	3.194	142	661	0.213 ug/L #	67
14) Acrolein	0.000		0	N.D. d	
15) Methylene chloride	3.608	84	1608	0.455 ug/L	76
17) Acetone	0.000		0	N.D. d	
18) trans-1,2-Dichloroethene	3.760	96	1362	0.393 ug/L	92
19) Methyl acetate	0.000		0	N.D. d	
20) Methyl tert-butyl ether	3.865	73	3493	0.432 ug/L	91
21) tert-Butyl alcohol	0.000		0	N.D. d	
22) Diisopropyl ether	4.227	45	7771	0.435 ug/L	97
23) 1,1-Dichloroethane	4.342	63	3418	0.429 ug/L	89
24) Halothane	4.395	117	972	0.381 ug/L #	62

Data Path : K:\VOA108\2023\231206A-ICAL\
Data File : V08231206A06.d
Acq On : 6 Dec 2023 12:29 pm
Operator : VOA108:LAC
Sample : I8260STD0.5PPB
Misc : WG1860686
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 06 16:08:05 2023
Quant Method : K:\VOA108\2023\231206A-ICAL\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 15:51:11 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA108\2023\231206A-ICAL\V08231206A09.d
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) Acrylonitrile	4.384	53	313	0.289	ug/L	#	49
26) Ethyl tert-butyl ether	4.578	59	5656	0.421	ug/L		89
27) Vinyl acetate	4.583	43	4222	0.450	ug/L	#	81
28) cis-1,2-Dichloroethene	4.872	96	1670	0.438	ug/L		87
29) 2,2-Dichloropropane	4.971	77	2421	0.437	ug/L		87
30) Bromochloromethane	5.050	128	607	0.366	ug/L	#	72
31) Cyclohexane	5.066	56	3506	0.407	ug/L		92
32) Chloroform	5.129	83	3032	0.477	ug/L		96
33) Ethyl acetate	0.000		0	N.D.	d		
34) Carbon tetrachloride	5.270	117	2079	0.417	ug/L		95
35) Tetrahydrofuran	0.000		0	N.D.	d		
37) 1,1,1-Trichloroethane	5.333	97	2288	0.414	ug/L	#	95
39) 2-Butanone	0.000		0	N.D.	d		
40) 1,1-Dichloropropene	5.448	75	1916	0.393	ug/L		89
41) Benzene	5.700	78	6167	0.446	ug/L		97
42) tert-Amyl methyl ether	5.810	73	3510	0.409	ug/L		90
44) 1,2-Dichloroethane	5.905	62	2159	0.423	ug/L	#	92
47) Methyl cyclohexane	6.293	83	2311	0.402	ug/L		92
48) Trichloroethene	6.293	95	1445	0.394	ug/L		93
50) Dibromomethane	6.728	93	714	0.386	ug/L		92
51) 1,2-Dichloropropane	6.838	63	1992	0.450	ug/L	#	81
53) 2-Chloroethyl vinyl ether	0.000		0	N.D.			
54) Bromodichloromethane	6.901	83	2076	0.435	ug/L	#	97
57) 1,4-Dioxane	7.121	88	937	86.733	ug/L	#	17
58) cis-1,3-Dichloropropene	7.598	75	2265	0.405	ug/L		96
61) Toluene	7.865	92	3911	0.467	ug/L		95
62) 4-Methyl-2-pentanone	8.301	58	324	0.313	ug/L	#	20
63) Tetrachloroethene	8.316	166	1529	0.431	ug/L		84
65) trans-1,3-Dichloropropene	8.343	75	2035	0.424	ug/L		91
67) Ethyl methacrylate	8.526	69	1134	0.386	ug/L	#	22
68) 1,1,2-Trichloroethane	8.531	83	881	0.395	ug/L		89
69) Chlorodibromomethane	8.741	129	1350	0.442	ug/L	#	86
70) 1,3-Dichloropropane	8.856	76	2074	0.445	ug/L		91
71) 1,2-Dibromoethane	9.024	107	1049	0.422	ug/L		96
72) 2-Hexanone	9.302	43	669	0.349	ug/L	#	78
73) Chlorobenzene	9.674	112	4386	0.477	ug/L	#	86
74) Ethylbenzene	9.716	91	7031	0.439	ug/L		97
75) 1,1,1,2-Tetrachloroethane	9.753	131	1440	0.421	ug/L	#	69
76) p/m Xylene	9.900	106	4988	0.813	ug/L		99
77) o Xylene	10.435	106	4782	0.795	ug/L		97

Quantitation Report (QT Reviewed)

Data Path : K:\VOA108\2023\231206A-ICAL\
Data File : V08231206A06.d
Acq On : 6 Dec 2023 12:29 pm
Operator : VOA108:LAC
Sample : I8260STD0.5PPB
Misc : WG1860686
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 06 16:08:05 2023
Quant Method : K:\VOA108\2023\231206A-ICAL\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 15:51:11 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA108\2023\231206A-ICAL\V08231206A09.d
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
78) Styrene	10.497	104	7454	0.761	ug/L		94
80) Bromoform	10.513	173	743	0.437	ug/L		85
82) Isopropylbenzene	10.812	105	6374	0.423	ug/L		99
84) Bromobenzene	11.237	156	1721	0.468	ug/L		99
85) n-Propylbenzene	11.284	91	7950	0.438	ug/L		98
86) 1,4-Dichlorobutane	11.294	55	2736	0.484	ug/L	#	84
87) 1,1,2,2-Tetrachloroethane	11.363	83	1392	0.488	ug/L	#	92
88) 4-Ethyltoluene	11.410	105	6082	0.403	ug/L		98
89) 2-Chlorotoluene	11.452	91	5019M6	0.453	ug/L		
90) 1,3,5-Trimethylbenzene	11.509	105	5511	0.419	ug/L		92
91) 1,2,3-Trichloropropane	11.504	75	1041	0.463	ug/L	#	69
92) trans-1,4-Dichloro-2-b...	11.551	53	458	0.410	ug/L	#	85
93) 4-Chlorotoluene	11.630	91	5207	0.455	ug/L		98
94) tert-Butylbenzene	11.845	119	4485	0.407	ug/L		93
97) 1,2,4-Trimethylbenzene	11.924	105	5187	0.405	ug/L		96
98) sec-Butylbenzene	12.034	105	6707	0.412	ug/L		99
99) p-Isopropyltoluene	12.191	119	5270	0.381	ug/L		95
100) 1,3-Dichlorobenzene	12.249	146	3319	0.464	ug/L		97
101) 1,4-Dichlorobenzene	12.338	146	3581	0.505	ug/L	#	85
102) p-Diethylbenzene	12.558	119	3303	0.400	ug/L		97
103) n-Butylbenzene	12.610	91	5186	0.418	ug/L		99
104) 1,2-Dichlorobenzene	12.762	146	3198	0.482	ug/L		96
105) 1,2,4,5-Tetramethylben...	13.344	119	4655	0.354	ug/L		97
106) 1,2-Dibromo-3-chloropr...	13.533	155	50	0.134	ug/L	#	19
107) 1,3,5-Trichlorobenzene	13.570	180	2468	0.462	ug/L		91
108) Hexachlorobutadiene	14.141	225	966	0.442	ug/L		89
109) 1,2,4-Trichlorobenzene	14.162	180	2123	0.477	ug/L		93
110) Naphthalene	14.456	128	3359	0.424	ug/L		100
111) 1,2,3-Trichlorobenzene	14.624	180	1741	0.441	ug/L		99

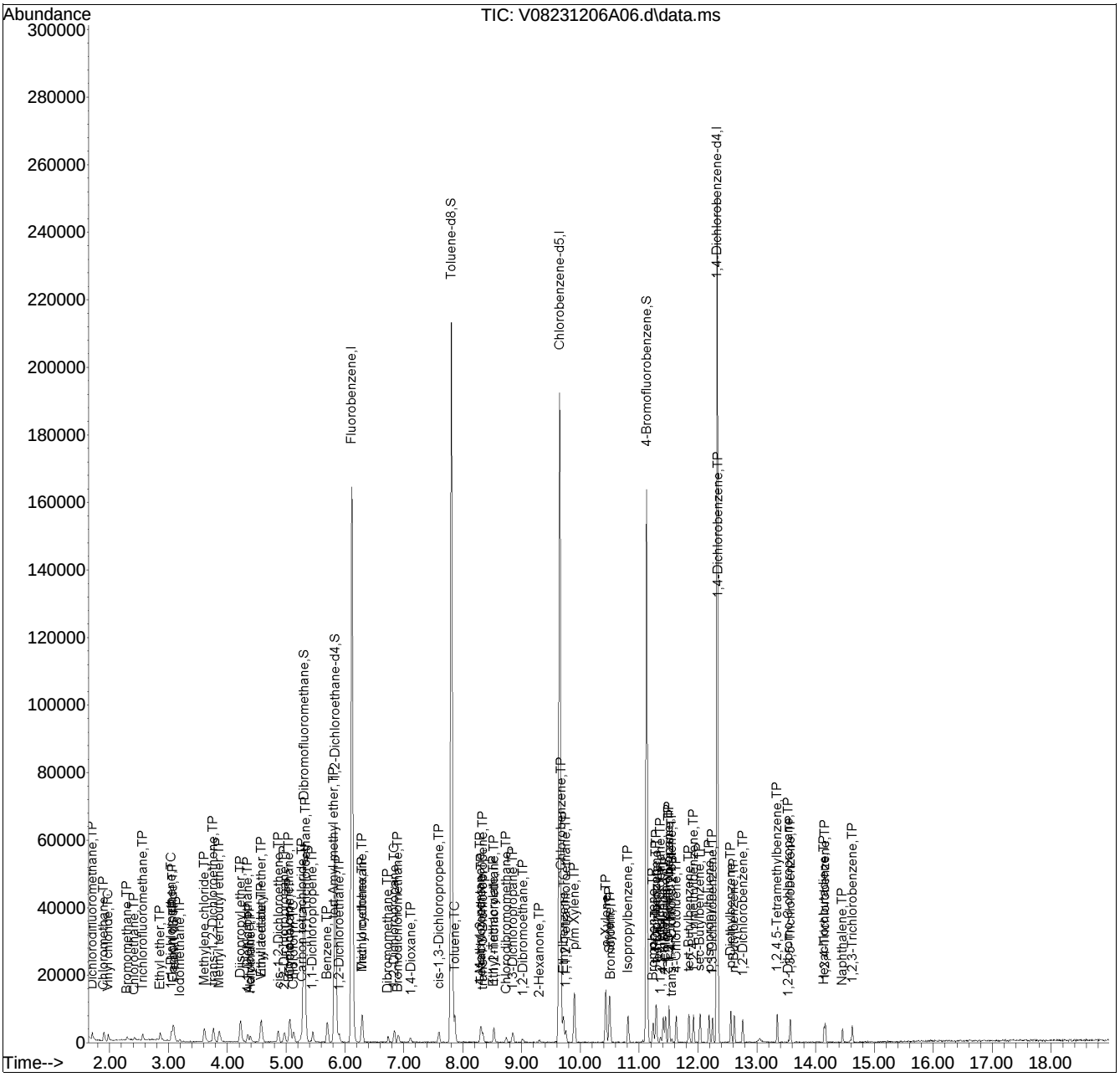
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\VOA108\2023\231206A-ICAL\
Data File : V08231206A06.d
Acq On : 6 Dec 2023 12:29 pm
Operator : VOA108:LAC
Sample : I8260STD0.5PPB
Misc : WG1860686
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 06 16:08:05 2023
Quant Method : K:\VOA108\2023\231206A-ICAL\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 15:51:11 2023
Response via : Initial Calibration

Sub List : 8260-Curve - Megamix plus DioxL\V08231206A09.d•

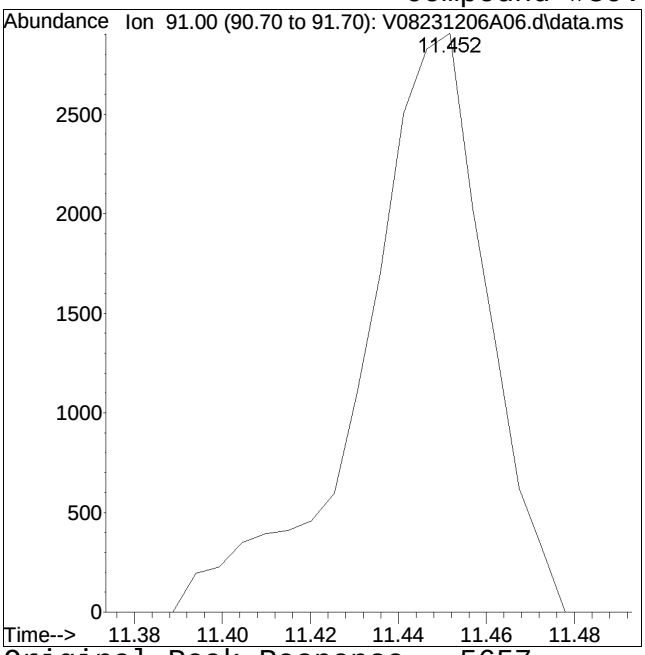


Manual Integration Report

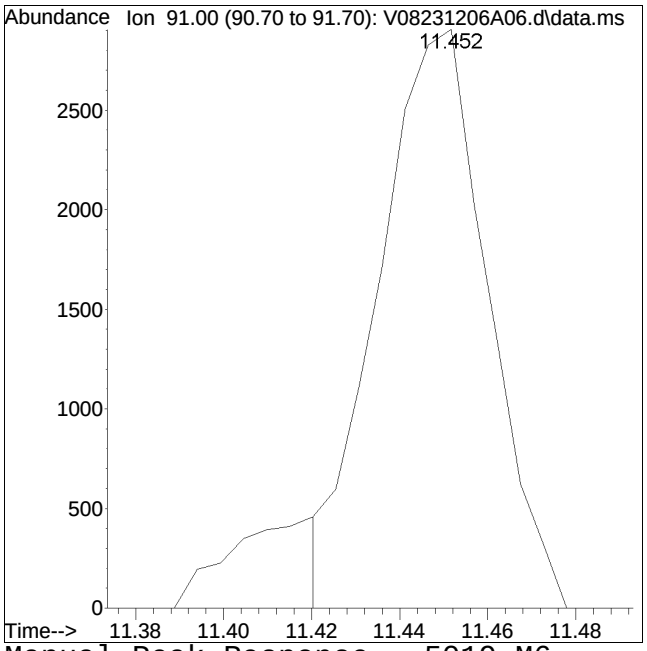
Data Path : K:\VOA108\2023\231206A-ICAQ
Data File : V08231206A06.d
Date Inj'd : 12/6/2023 12:29 pm
Sample : I8260STD0.5PPB

Method : V108_231206A_8260.m
Operator : VOA108:LAC
Instrument : VOA 108
Quant Date : 12/6/2023 3:52 pm

Compound #89: 2-Chlorotoluene



Original Peak Response = 5657



Manual Peak Response = 5019 M6

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

Quantitation Report (QT Reviewed)

Data Path : K:\VOA108\2023\231206A-ICAL\
Data File : V08231206A07.d
Acq On : 6 Dec 2023 12:51 pm
Operator : VOA108:LAC
Sample : I8260STD2PPB
Misc : WG1860686
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 06 16:09:44 2023
Quant Method : K:\VOA108\2023\231206A-ICAL\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 15:51:11 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA108\2023\231206A-ICAL\V08231206A09.d
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	6.114	96	163067	10.000 ug/L	0.00
Standard Area 1 = 168549			Recovery = 96.75%		
59) Chlorobenzene-d5	9.648	117	120102	10.000 ug/L	0.00
Standard Area 1 = 124890			Recovery = 96.17%		
79) 1,4-Dichlorobenzene-d4	12.327	152	63126	10.000 ug/L	0.00
Standard Area 1 = 65924			Recovery = 95.76%		
System Monitoring Compounds					
36) Dibromofluoromethane	5.307	113	42023	10.038 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.38%		
43) 1,2-Dichloroethane-d4	5.831	65	51614	9.626 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 96.26%		
60) Toluene-d8	7.808	98	155844	10.038 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.38%		
83) 4-Bromofluorobenzene	11.127	95	58067	9.886 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 98.86%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.705	85	9637	2.033 ug/L	97
3) Chloromethane	1.904	50	16134	2.047 ug/L	96
4) Vinyl chloride	1.972	62	9373	2.032 ug/L	97
5) Bromomethane	2.292	94	3051	1.827 ug/L	96
6) Chloroethane	2.423	64	4899	2.061 ug/L	95
7) Trichlorofluoromethane	2.560	101	8913	1.995 ug/L	96
8) Ethyl ether	2.859	74	2161	1.719 ug/L #	48
10) 1,1-Dichloroethene	3.053	96	6226	2.017 ug/L	91
11) Carbon disulfide	3.084	76	23009	2.047 ug/L	98
12) Freon-113	3.094	101	6299	1.935 ug/L	94
13) Iodomethane	3.189	142	4485	1.433 ug/L #	82
14) Acrolein	3.372	56	790	1.483 ug/L	93
15) Methylene chloride	3.608	84	7328	2.059 ug/L	86
17) Acetone	3.645	43	1876	2.076 ug/L #	82
18) trans-1,2-Dichloroethene	3.766	96	6945	1.988 ug/L	98
19) Methyl acetate	3.771	43	4778	1.978 ug/L #	81
20) Methyl tert-butyl ether	3.865	73	15460	1.899 ug/L #	87
21) tert-Butyl alcohol	3.939	59	1323	8.327 ug/L #	71
22) Diisopropyl ether	4.222	45	34344	1.907 ug/L	97
23) 1,1-Dichloroethane	4.348	63	16212	2.019 ug/L	95
24) Halothane	4.400	117	5281	2.055 ug/L	92

Quantitation Report (QT Reviewed)

Data Path : K:\VOA108\2023\231206A-ICAL\
Data File : V08231206A07.d
Acq On : 6 Dec 2023 12:51 pm
Operator : VOA108:LAC
Sample : I8260STD2PPB
Misc : WG1860686
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 06 16:09:44 2023
Quant Method : K:\VOA108\2023\231206A-ICAL\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 15:51:11 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA108\2023\231206A-ICAL\V08231206A09.d
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) Acrylonitrile	4.390	53	2090	1.914	ug/L	#	87
26) Ethyl tert-butyl ether	4.573	59	25100	1.855	ug/L		89
27) Vinyl acetate	4.578	43	18477	1.956	ug/L	#	95
28) cis-1,2-Dichloroethene	4.861	96	7568	1.970	ug/L		92
29) 2,2-Dichloropropane	4.966	77	11083	1.987	ug/L		85
30) Bromochloromethane	5.055	128	3348	2.007	ug/L		95
31) Cyclohexane	5.071	56	16903	1.950	ug/L		99
32) Chloroform	5.124	83	13183	2.061	ug/L		98
33) Ethyl acetate	5.239	43	6288	1.895	ug/L	#	92
34) Carbon tetrachloride	5.270	117	9944	1.980	ug/L		98
35) Tetrahydrofuran	5.276	42	1839	2.136	ug/L	#	65
37) 1,1,1-Trichloroethane	5.328	97	11097	1.992	ug/L	#	96
39) 2-Butanone	5.417	43	2468	1.783	ug/L	#	93
40) 1,1-Dichloropropene	5.454	75	9678	1.973	ug/L		97
41) Benzene	5.700	78	27558	1.980	ug/L		97
42) tert-Amyl methyl ether	5.810	73	16281	1.882	ug/L		91
44) 1,2-Dichloroethane	5.905	62	10302	2.006	ug/L		99
47) Methyl cyclohexane	6.287	83	11068	1.912	ug/L		93
48) Trichloroethene	6.293	95	7201	1.949	ug/L		97
50) Dibromomethane	6.738	93	3736	2.006	ug/L		97
51) 1,2-Dichloropropane	6.838	63	8946	2.008	ug/L	#	92
53) 2-Chloroethyl vinyl ether	7.530	63	3522	1.808	ug/L	#	90
54) Bromodichloromethane	6.906	83	9495	1.977	ug/L		97
57) 1,4-Dioxane	7.116	88	3188	293.009	ug/L		91
58) cis-1,3-Dichloropropene	7.598	75	10631	1.887	ug/L		95
61) Toluene	7.866	92	17063	2.048	ug/L		96
62) 4-Methyl-2-pentanone	8.296	58	1762	1.710	ug/L	#	65
63) Tetrachloroethene	8.311	166	7067	2.002	ug/L		90
65) trans-1,3-Dichloropropene	8.343	75	8875	1.859	ug/L		93
67) Ethyl methacrylate	8.532	69	5191	1.774	ug/L	#	28
68) 1,1,2-Trichloroethane	8.526	83	4464	2.011	ug/L		97
69) Chlorodibromomethane	8.741	129	5947	1.957	ug/L		95
70) 1,3-Dichloropropane	8.857	76	8983	1.936	ug/L		99
71) 1,2-Dibromoethane	9.019	107	4689	1.896	ug/L		99
72) 2-Hexanone	9.297	43	3404	1.784	ug/L	#	91
73) Chlorobenzene	9.675	112	18638	2.036	ug/L	#	88
74) Ethylbenzene	9.711	91	31317	1.965	ug/L		100
75) 1,1,1,2-Tetrachloroethane	9.753	131	6608	1.940	ug/L		95
76) p/m Xylene	9.900	106	23746	3.888	ug/L		99
77) o Xylene	10.430	106	22944	3.833	ug/L		93

Quantitation Report (QT Reviewed)

Data Path : K:\VOA108\2023\231206A-ICAL\
Data File : V08231206A07.d
Acq On : 6 Dec 2023 12:51 pm
Operator : VOA108:LAC
Sample : I8260STD2PPB
Misc : WG1860686
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 06 16:09:44 2023
Quant Method : K:\VOA108\2023\231206A-ICAL\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 15:51:11 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA108\2023\231206A-ICAL\V08231206A09.d
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
78) Styrene	10.498	104	36626	3.757	ug/L		93
80) Bromoform	10.519	173	3408	1.976	ug/L		95
82) Isopropylbenzene	10.812	105	29730	1.943	ug/L		95
84) Bromobenzene	11.237	156	7617	2.041	ug/L		99
85) n-Propylbenzene	11.284	91	36819	1.999	ug/L		97
86) 1,4-Dichlorobutane	11.295	55	11632	2.030	ug/L	#	89
87) 1,1,2,2-Tetrachloroethane	11.363	83	6124	2.116	ug/L		98
88) 4-Ethyltoluene	11.410	105	29859	1.950	ug/L		98
89) 2-Chlorotoluene	11.447	91	22932M6	2.040	ug/L		
90) 1,3,5-Trimethylbenzene	11.510	105	25926	1.945	ug/L		91
91) 1,2,3-Trichloropropane	11.504	75	4838	2.121	ug/L		92
92) trans-1,4-Dichloro-2-b...	11.557	53	2199	1.941	ug/L	#	89
93) 4-Chlorotoluene	11.630	91	23840	2.053	ug/L		97
94) tert-Butylbenzene	11.845	119	22049	1.971	ug/L		95
97) 1,2,4-Trimethylbenzene	11.924	105	25361	1.953	ug/L		94
98) sec-Butylbenzene	12.034	105	33285	2.017	ug/L		97
99) p-Isopropyltoluene	12.191	119	27223	1.942	ug/L		96
100) 1,3-Dichlorobenzene	12.249	146	15036	2.073	ug/L		99
101) 1,4-Dichlorobenzene	12.343	146	15132	2.101	ug/L		95
102) p-Diethylbenzene	12.558	119	15857	1.893	ug/L		96
103) n-Butylbenzene	12.616	91	24784	1.969	ug/L		99
104) 1,2-Dichlorobenzene	12.763	146	13995	2.078	ug/L		97
105) 1,2,4,5-Tetramethylben...	13.350	119	23660	1.771	ug/L		97
106) 1,2-Dibromo-3-chloropr...	13.533	155	718	1.898	ug/L		89
107) 1,3,5-Trichlorobenzene	13.570	180	11248	2.075	ug/L		95
108) Hexachlorobutadiene	14.142	225	4399	1.983	ug/L		95
109) 1,2,4-Trichlorobenzene	14.163	180	8845	1.960	ug/L		99
110) Naphthalene	14.456	128	13936	1.734	ug/L		100
111) 1,2,3-Trichlorobenzene	14.624	180	7690	1.920	ug/L		99

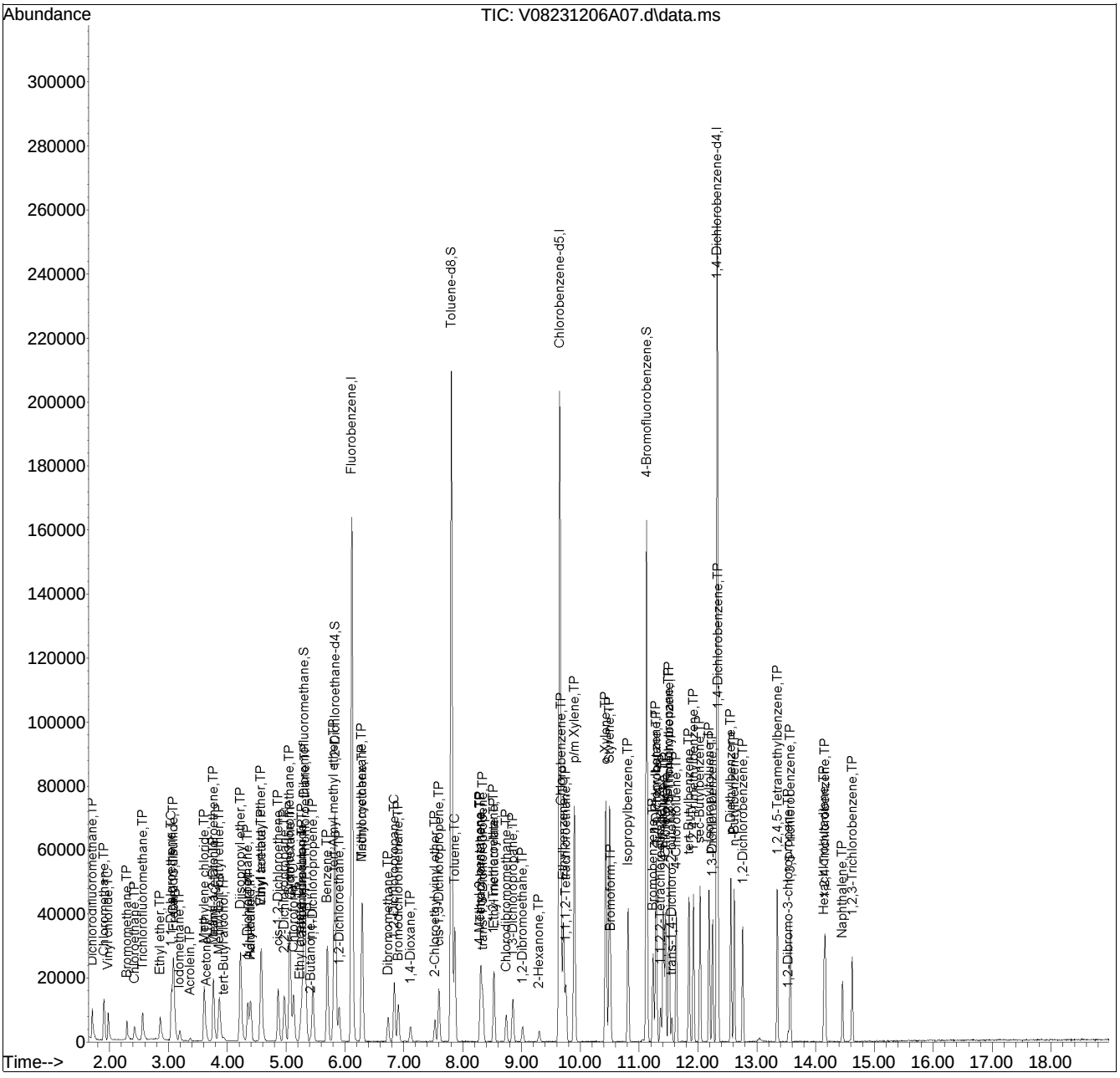
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\VOA108\2023\231206A-ICAL\
Data File : V08231206A07.d
Acq On : 6 Dec 2023 12:51 pm
Operator : VOA108:LAC
Sample : I8260STD2PPB
Misc : WG1860686
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 06 16:09:44 2023
Quant Method : K:\VOA108\2023\231206A-ICAL\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 15:51:11 2023
Response via : Initial Calibration

Sub List : 8260-Curve - Megamix plus DioxL\V08231206A09.d•

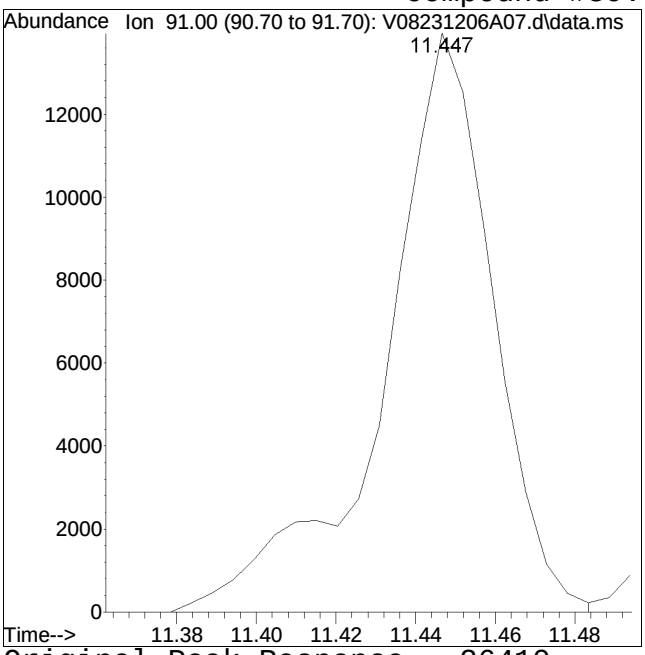


Manual Integration Report

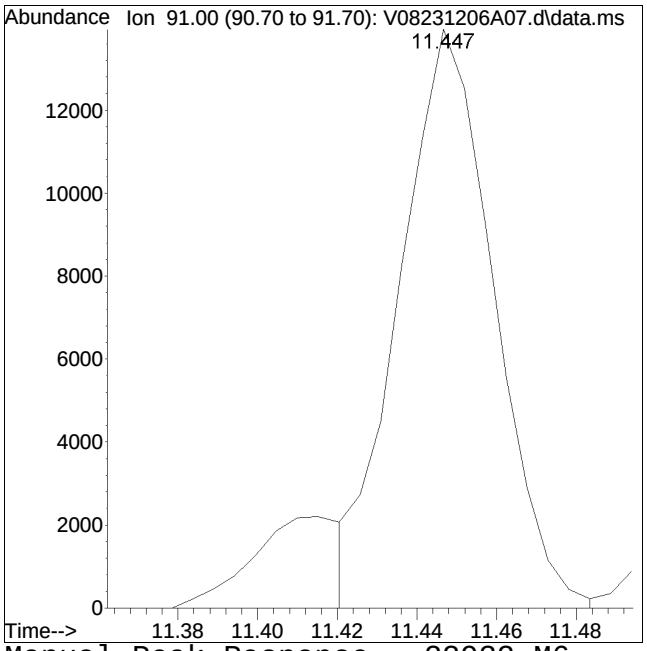
Data Path : K:\VOA108\2023\231206A-ICAQ
Data File : V08231206A07.d
Date Inj'd : 12/6/2023 12:51 pm
Sample : I8260STD2PPB

Method : V108_231206A_8260.m
Operator : VOA108:LAC
Instrument : VOA 108
Quant Date : 12/6/2023 3:52 pm

Compound #89: 2-Chlorotoluene



Original Peak Response = 26410



Manual Peak Response = 22932 M6

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

Quantitation Report (QT Reviewed)

Data Path : K:\VOA108\2023\231206A-ICAL\
Data File : V08231206A09.d
Acq On : 6 Dec 2023 1:35 pm
Operator : VOA108:LAC
Sample : I8260STD10PPB
Misc : WG1860686
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Dec 06 15:46:26 2023
Quant Method : K:\VOA108\2023\231206A-ICAL\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Nov 22 22:19:54 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA108\2023\231206A-ICAL\V08231206A09.d
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.114	96	168549	10.000	ug/L	0.00
Standard Area 1 = 168549			Recovery = 100.00%			
59) Chlorobenzene-d5	9.648	117	124890	10.000	ug/L	0.00
Standard Area 1 = 124890			Recovery = 100.00%			
79) 1,4-Dichlorobenzene-d4	12.327	152	65924	10.000	ug/L	0.00
Standard Area 1 = 65924			Recovery = 100.00%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.307	113	43271	9.405	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 94.05%			
43) 1,2-Dichloroethane-d4	5.831	65	55424	10.629	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 106.29%			
60) Toluene-d8	7.808	98	161444	11.550	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 115.50%			
83) 4-Bromofluorobenzene	11.127	95	61342	11.064	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 110.64%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.705	85	49006	12.200	ug/L	98
3) Chloromethane	1.904	50	81477	12.722	ug/L	97
4) Vinyl chloride	1.978	62	47682	11.587	ug/L	97
5) Bromomethane	2.298	94	17262	8.804	ug/L	99
6) Chloroethane	2.423	64	24572	12.651	ug/L	98
7) Trichlorofluoromethane	2.560	101	46175	11.438	ug/L	96
8) Ethyl ether	2.859	74	12992	10.721	ug/L	85
10) 1,1-Dichloroethene	3.053	96	31898	11.769	ug/L	90
11) Carbon disulfide	3.079	76	116178	12.112	ug/L	97
12) Freon-113	3.094	101	33651	12.050	ug/L	99
13) Iodomethane	3.189	142	32353	7.005	ug/L	87
14) Acrolein	3.367	56	5506	15.091	ug/L	95
15) Methylene chloride	3.608	84	36786	11.771	ug/L	87
17) Acetone	3.645	43	9340	11.727	ug/L	95
18) trans-1,2-Dichloroethene	3.760	96	36100	11.611	ug/L	97
19) Methyl acetate	3.766	43	24966	11.424	ug/L #	87
20) Methyl tert-butyl ether	3.865	73	84162	10.947	ug/L #	89
21) tert-Butyl alcohol	3.944	59	8211	38.097	ug/L #	78
22) Diisopropyl ether	4.227	45	186116	12.240	ug/L	98
23) 1,1-Dichloroethane	4.348	63	83002	12.347	ug/L	97
24) Halothane	4.400	117	26561	11.129	ug/L	100

Data Path : K:\VOA108\2023\231206A-ICAL\
Data File : V08231206A09.d
Acq On : 6 Dec 2023 1:35 pm
Operator : VOA108:LAC
Sample : I8260STD10PPB
Misc : WG1860686
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Dec 06 15:46:26 2023
Quant Method : K:\VOA108\2023\231206A-ICAL\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Nov 22 22:19:54 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA108\2023\231206A-ICAL\V08231206A09.d
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) Acrylonitrile	4.389	53	11288	11.862	ug/L	#	89
26) Ethyl tert-butyl ether	4.573	59	139883	11.972	ug/L		92
27) Vinyl acetate	4.578	43	97648	10.932	ug/L		97
28) cis-1,2-Dichloroethene	4.867	96	39712	11.610	ug/L		89
29) 2,2-Dichloropropane	4.971	77	57644	12.566	ug/L		88
30) Bromochloromethane	5.055	128	17244	10.819	ug/L		94
31) Cyclohexane	5.066	56	89593	13.146	ug/L		98
32) Chloroform	5.129	83	66114	11.876	ug/L		96
33) Ethyl acetate	5.239	43	34297	11.003	ug/L	#	97
34) Carbon tetrachloride	5.265	117	51923	12.027	ug/L		99
35) Tetrahydrofuran	5.281	42	8901M1	10.169	ug/L		
37) 1,1,1-Trichloroethane	5.333	97	57577	11.749	ug/L	#	97
39) 2-Butanone	5.417	43	14307	10.917	ug/L		99
40) 1,1-Dichloropropene	5.454	75	50692	11.932	ug/L		98
41) Benzene	5.700	78	143840	11.820	ug/L		97
42) tert-Amyl methyl ether	5.810	73	89417	10.912	ug/L		94
44) 1,2-Dichloroethane	5.899	62	53089	11.972	ug/L		99
47) Methyl cyclohexane	6.293	83	59831	12.090	ug/L		94
48) Trichloroethene	6.293	95	38184	12.113	ug/L		96
50) Dibromomethane	6.733	93	19248	10.877	ug/L		98
51) 1,2-Dichloropropane	6.838	63	46043	11.986	ug/L	#	93
53) 2-Chloroethyl vinyl ether	7.530	63	20139	10.244	ug/L		89
54) Bromodichloromethane	6.906	83	49649	11.577	ug/L		98
57) 1,4-Dioxane	7.111	88	5623	313.245	ug/L		92
58) cis-1,3-Dichloropropene	7.598	75	58219	11.327	ug/L		97
61) Toluene	7.866	92	86649	13.527	ug/L		97
62) 4-Methyl-2-pentanone	8.296	58	10713	12.345	ug/L		79
63) Tetrachloroethene	8.311	166	36713	14.270	ug/L		91
65) trans-1,3-Dichloropropene	8.343	75	49651	13.688	ug/L		95
67) Ethyl methacrylate	8.531	69	30425	12.294	ug/L	#	36
68) 1,1,2-Trichloroethane	8.531	83	23084	14.078	ug/L		96
69) Chlorodibromomethane	8.741	129	31596	12.347	ug/L		97
70) 1,3-Dichloropropane	8.857	76	48262	13.686	ug/L		99
71) 1,2-Dibromoethane	9.019	107	25718	13.120	ug/L		98
72) 2-Hexanone	9.302	43	19840	12.399	ug/L	#	93
73) Chlorobenzene	9.669	112	95177	13.059	ug/L		93
74) Ethylbenzene	9.711	91	165769	13.609	ug/L		100
75) 1,1,1,2-Tetrachloroethane	9.753	131	35427	13.202	ug/L		95
76) p/m Xylene	9.900	106	127013	27.758	ug/L		98
77) o Xylene	10.435	106	124493	27.982	ug/L		94

Data Path : K:\VOA108\2023\231206A-ICAL\
Data File : V08231206A09.d
Acq On : 6 Dec 2023 1:35 pm
Operator : VOA108:LAC
Sample : I8260STD10PPB
Misc : WG1860686
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Dec 06 15:46:26 2023
Quant Method : K:\VOA108\2023\231206A-ICAL\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Nov 22 22:19:54 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA108\2023\231206A-ICAL\V08231206A09.d
Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
78)	Styrene	10.498	104	202745	27.739	ug/L		92
80)	Bromoform	10.519	173	18013	12.268	ug/L		94
82)	Isopropylbenzene	10.812	105	159812	13.160	ug/L		97
84)	Bromobenzene	11.237	156	38979	12.873	ug/L		99
85)	n-Propylbenzene	11.284	91	192308	13.174	ug/L		97
86)	1,4-Dichlorobutane	11.295	55	59846	13.653	ug/L	#	90
87)	1,1,2,2-Tetrachloroethane	11.363	83	30228	12.709	ug/L		98
88)	4-Ethyltoluene	11.410	105	159877	13.317	ug/L		96
89)	2-Chlorotoluene	11.447	91	117393M1	13.010	ug/L		
90)	1,3,5-Trimethylbenzene	11.510	105	139222	13.304	ug/L		92
91)	1,2,3-Trichloropropane	11.504	75	23825	12.340	ug/L		97
92)	trans-1,4-Dichloro-2-b...	11.557	53	11831	13.282	ug/L	#	93
93)	4-Chlorotoluene	11.630	91	121289	13.030	ug/L		97
94)	tert-Butylbenzene	11.845	119	116800	12.780	ug/L		95
97)	1,2,4-Trimethylbenzene	11.924	105	135627	13.152	ug/L		93
98)	sec-Butylbenzene	12.034	105	172320	13.381	ug/L		98
99)	p-Isopropyltoluene	12.186	119	146420	12.564	ug/L		96
100)	1,3-Dichlorobenzene	12.249	146	75765	12.628	ug/L		99
101)	1,4-Dichlorobenzene	12.343	146	75208	12.373	ug/L		99
102)	p-Diethylbenzene	12.558	119	87474	12.495	ug/L		95
103)	n-Butylbenzene	12.616	91	131481	13.274	ug/L		99
104)	1,2-Dichlorobenzene	12.763	146	70322	12.438	ug/L		98
105)	1,2,4,5-Tetramethylben...	13.345	119	139496	12.469	ug/L		98
106)	1,2-Dibromo-3-chloropr...	13.539	155	3950	10.840	ug/L		87
107)	1,3,5-Trichlorobenzene	13.570	180	56618	13.212	ug/L		95
108)	Hexachlorobutadiene	14.142	225	23171	13.613	ug/L		96
109)	1,2,4-Trichlorobenzene	14.163	180	47124	12.302	ug/L		99
110)	Naphthalene	14.456	128	83930	10.298	ug/L		100
111)	1,2,3-Trichlorobenzene	14.624	180	41825	12.084	ug/L		100

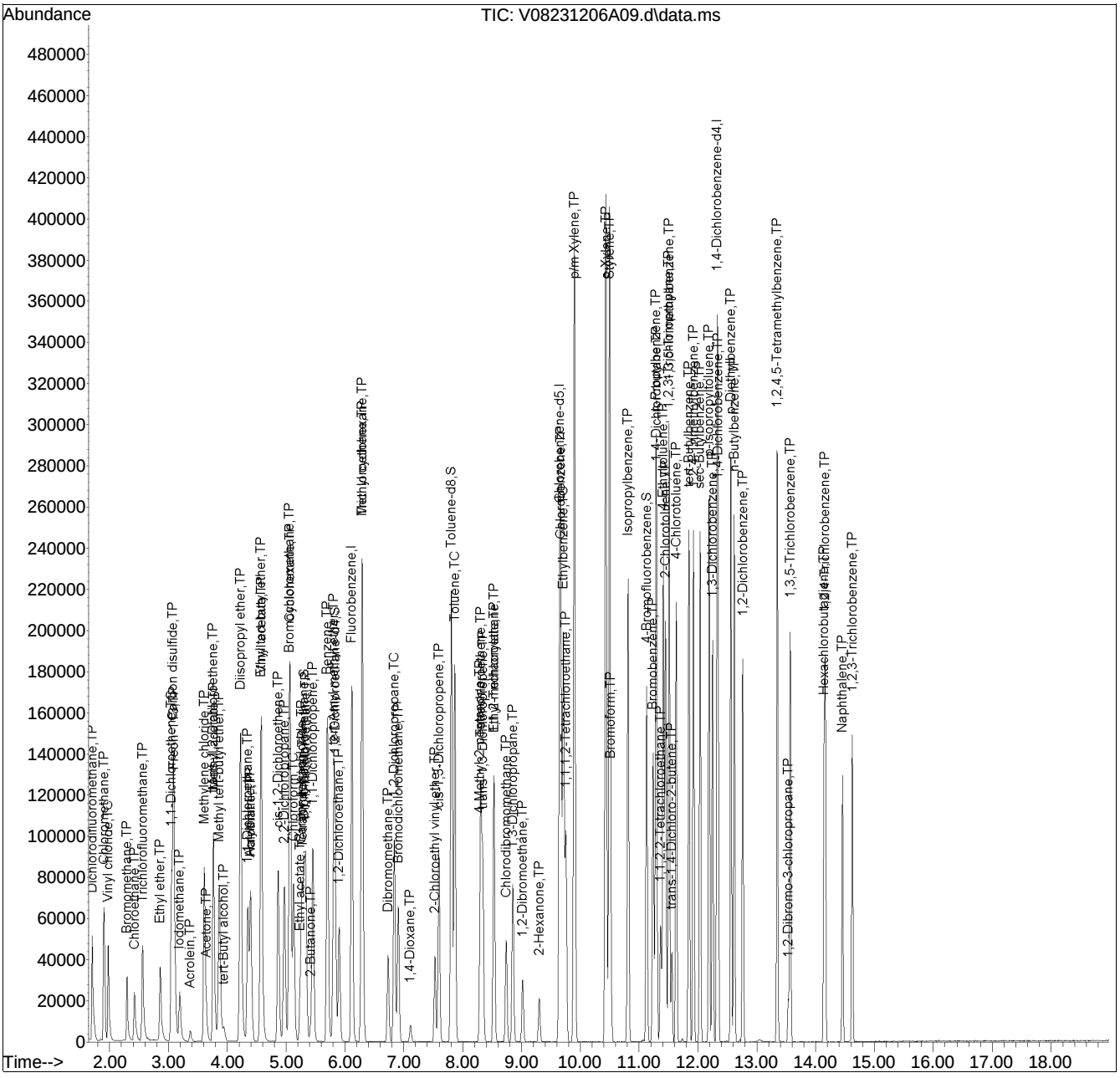
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\VOA108\2023\231206A-ICAL\
Data File : V08231206A09.d
Acq On : 6 Dec 2023 1:35 pm
Operator : VOA108:LAC
Sample : I8260STD10PPB
Misc : WG1860686
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Dec 06 15:46:26 2023
Quant Method : K:\VOA108\2023\231206A-ICAL\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Nov 22 22:19:54 2023
Response via : Initial Calibration

Sub List : 8260-Curve - Megamix plus DioxL\V08231206A09.d•

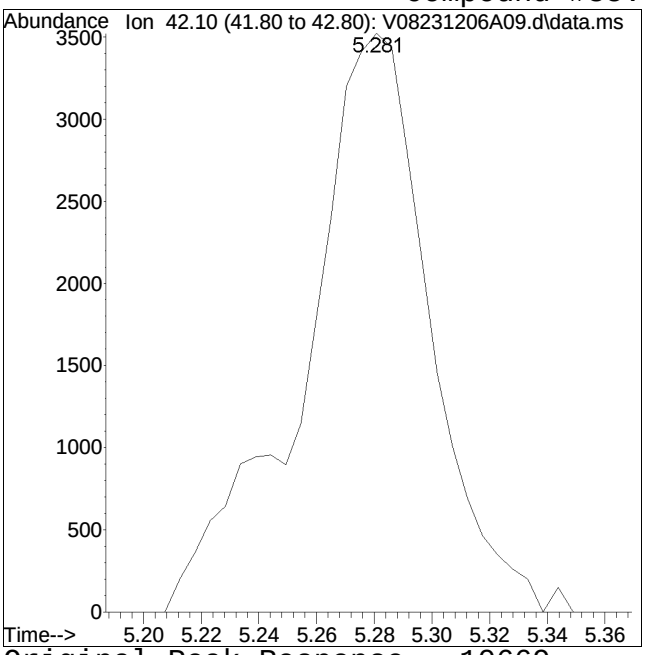


Manual Integration Report

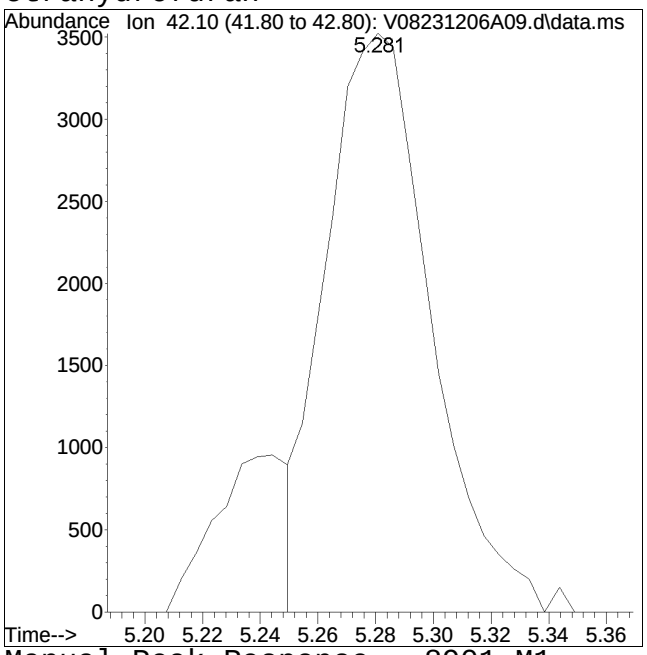
Data Path : K:\VOA108\2023\231206A-ICAQ
Data File : V08231206A09.d
Date Inj'd : 12/6/2023 1:35 pm
Sample : I8260STD10PPB

Method : V108_231206A_8260.m
Operator : VOA108:LAC
Instrument : VOA 108
Quant Date : 12/6/2023 3:41 pm

Compound #35: Tetrahydrofuran



Original Peak Response = 10669



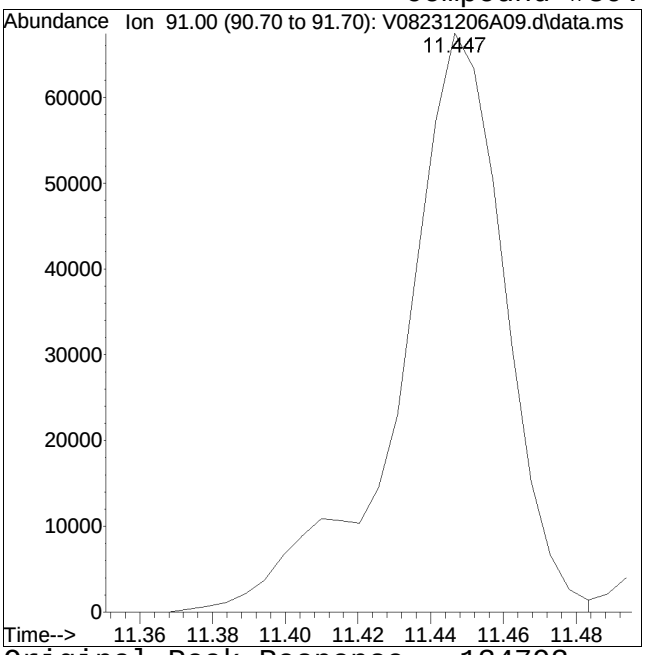
Manual Peak Response = 8901 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

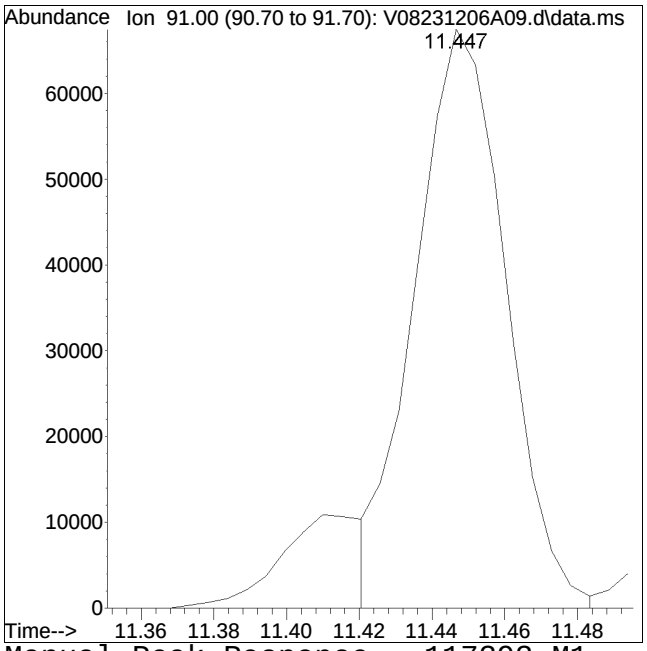
Manual Integration Report

Data Path : K:\VOA108\2023\231206A-ICAQMethod : V108_231206A_8260.m
Data File : V08231206A09.d Operator : VOA108:LAC
Date Inj'd : 12/6/2023 1:35 pm Instrument : VOA 108
Sample : I8260STD10PPB Quant Date : 12/6/2023 3:41 pm

Compound #89: 2-Chlorotoluene



Original Peak Response = 134793



Manual Peak Response = 117393 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Quantitation Report (QT Reviewed)

Data Path : K:\VOA108\2023\231206A-ICAL\
Data File : V08231206A10.d
Acq On : 6 Dec 2023 1:58 pm
Operator : VOA108:LAC
Sample : I8260STD30PPB
Misc : WG1860686
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 06 16:11:11 2023
Quant Method : K:\VOA108\2023\231206A-ICAL\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 15:51:11 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA108\2023\231206A-ICAL\V08231206A09.d
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	6.120	96	177779	10.000 ug/L	0.00
Standard Area 1 = 168549			Recovery = 105.48%		
59) Chlorobenzene-d5	9.648	117	128097	10.000 ug/L	0.00
Standard Area 1 = 124890			Recovery = 102.57%		
79) 1,4-Dichlorobenzene-d4	12.327	152	64273	10.000 ug/L	0.00
Standard Area 1 = 65924			Recovery = 97.50%		
System Monitoring Compounds					
36) Dibromofluoromethane	5.307	113	45467	9.962 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.62%		
43) 1,2-Dichloroethane-d4	5.831	65	55523	9.498 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 94.98%		
60) Toluene-d8	7.808	98	168737	10.190 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.90%		
83) 4-Bromofluorobenzene	11.127	95	61163	10.227 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 102.27%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.705	85	138535	26.801 ug/L	98
3) Chloromethane	1.904	50	233665	27.190 ug/L	98
4) Vinyl chloride	1.978	62	138414	27.521 ug/L	98
5) Bromomethane	2.297	94	54725	30.057 ug/L	99
6) Chloroethane	2.423	64	71164	27.458 ug/L	100
7) Trichlorofluoromethane	2.560	101	131361	26.972 ug/L	98
8) Ethyl ether	2.858	74	38782	28.301 ug/L	89
10) 1,1-Dichloroethene	3.052	96	93339	27.742 ug/L	89
11) Carbon disulfide	3.079	76	336240	27.439 ug/L	97
12) Freon-113	3.089	101	95760	26.979 ug/L	98
13) Iodomethane	3.194	142	116326	34.089 ug/L	87
14) Acrolein	3.367	56	16340	28.136 ug/L	97
15) Methylene chloride	3.608	84	105991	27.317 ug/L	88
17) Acetone	3.645	43	25570	25.956 ug/L	98
18) trans-1,2-Dichloroethene	3.766	96	104778	27.517 ug/L	98
19) Methyl acetate	3.766	43	69796	26.505 ug/L #	87
20) Methyl tert-butyl ether	3.865	73	253022	28.503 ug/L	90
21) tert-Butyl alcohol	3.944	59	24184	139.620 ug/L #	78
22) Diisopropyl ether	4.227	45	558404	28.445 ug/L	98
23) 1,1-Dichloroethane	4.348	63	239722	27.382 ug/L	98
24) Halothane	4.400	117	77705	27.736 ug/L	100

Data Path : K:\VOA108\2023\231206A-ICAL\
Data File : V08231206A10.d
Acq On : 6 Dec 2023 1:58 pm
Operator : VOA108:LAC
Sample : I8260STD30PPB
Misc : WG1860686
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 06 16:11:11 2023
Quant Method : K:\VOA108\2023\231206A-ICAL\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 15:51:11 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA108\2023\231206A-ICAL\V08231206A09.d
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) Acrylonitrile	4.389	53	33016	27.730	ug/L	#	88
26) Ethyl tert-butyl ether	4.573	59	424042	28.740	ug/L		93
27) Vinyl acetate	4.578	43	287210	27.886	ug/L		97
28) cis-1,2-Dichloroethene	4.867	96	114136	27.249	ug/L		91
29) 2,2-Dichloropropane	4.971	77	165305	27.188	ug/L		89
30) Bromochloromethane	5.055	128	50310	27.661	ug/L		96
31) Cyclohexane	5.066	56	258306	27.334	ug/L		98
32) Chloroform	5.129	83	191432	27.452	ug/L		97
33) Ethyl acetate	5.234	43	102402	28.307	ug/L	#	95
34) Carbon tetrachloride	5.270	117	148959	27.199	ug/L		99
35) Tetrahydrofuran	5.281	42	26422M6	28.143	ug/L		
37) 1,1,1-Trichloroethane	5.333	97	167603	27.598	ug/L	#	96
39) 2-Butanone	5.417	43	42329	28.050	ug/L		94
40) 1,1-Dichloropropene	5.454	75	148902	27.849	ug/L		98
41) Benzene	5.700	78	418401	27.578	ug/L		97
42) tert-Amyl methyl ether	5.810	73	270907	28.724	ug/L		97
44) 1,2-Dichloroethane	5.899	62	154245	27.546	ug/L		99
47) Methyl cyclohexane	6.293	83	173044	27.421	ug/L		95
48) Trichloroethene	6.293	95	111160	27.600	ug/L		96
50) Dibromomethane	6.733	93	55864	27.516	ug/L		97
51) 1,2-Dichloropropane	6.838	63	133763	27.543	ug/L	#	93
53) 2-Chloroethyl vinyl ether	7.530	63	63449	29.870	ug/L		91
54) Bromodichloromethane	6.906	83	145138	27.715	ug/L		98
57) 1,4-Dioxane	7.116	88	7043	593.752	ug/L		94
58) cis-1,3-Dichloropropene	7.598	75	175270	28.542	ug/L		98
61) Toluene	7.866	92	255340	28.731	ug/L		95
62) 4-Methyl-2-pentanone	8.296	58	33455	30.447	ug/L		82
63) Tetrachloroethene	8.311	166	106604	28.310	ug/L		91
65) trans-1,3-Dichloropropene	8.343	75	149442	29.345	ug/L		95
67) Ethyl methacrylate	8.537	69	95669	30.657	ug/L	#	41
68) 1,1,2-Trichloroethane	8.531	83	67697	28.592	ug/L		96
69) Chlorodibromomethane	8.741	129	96497	29.776	ug/L		97
70) 1,3-Dichloropropane	8.851	76	141976	28.681	ug/L		100
71) 1,2-Dibromoethane	9.019	107	76948	29.171	ug/L		99
72) 2-Hexanone	9.302	43	61116	30.033	ug/L	#	95
73) Chlorobenzene	9.669	112	279020	28.582	ug/L		95
74) Ethylbenzene	9.711	91	490949	28.875	ug/L		100
75) 1,1,1,2-Tetrachloroethane	9.753	131	104916	28.873	ug/L		95
76) p/m Xylene	9.900	106	374096	57.432	ug/L		99
77) o Xylene	10.435	106	363885	56.995	ug/L		94

Quantitation Report (QT Reviewed)

Data Path : K:\VOA108\2023\231206A-ICAL\
Data File : V08231206A10.d
Acq On : 6 Dec 2023 1:58 pm
Operator : VOA108:LAC
Sample : I8260STD30PPB
Misc : WG1860686
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 06 16:11:11 2023
Quant Method : K:\VOA108\2023\231206A-ICAL\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 15:51:11 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA108\2023\231206A-ICAL\V08231206A09.d
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
78) Styrene	10.498	104	595558	57.279	ug/L	93
80) Bromoform	10.519	173	53695	30.575	ug/L	95
82) Isopropylbenzene	10.812	105	470315	30.185	ug/L	97
84) Bromobenzene	11.237	156	112765	29.673	ug/L	98
85) n-Propylbenzene	11.289	91	566912	30.237	ug/L	97
86) 1,4-Dichlorobutane	11.295	55	175927	30.152	ug/L	90
87) 1,1,2,2-Tetrachloroethane	11.363	83	88806	30.133	ug/L	98
88) 4-Ethyltoluene	11.410	105	473331	30.366	ug/L	97
89) 2-Chlorotoluene	11.447	91	341465M6	29.835	ug/L	
90) 1,3,5-Trimethylbenzene	11.509	105	410418	30.237	ug/L	92
91) 1,2,3-Trichloropropane	11.504	75	70384	30.301	ug/L	96
92) trans-1,4-Dichloro-2-b...	11.557	53	34505	29.914	ug/L	88
93) 4-Chlorotoluene	11.630	91	353805	29.920	ug/L	97
94) tert-Butylbenzene	11.845	119	343723	30.184	ug/L	95
97) 1,2,4-Trimethylbenzene	11.924	105	405338	30.654	ug/L	94
98) sec-Butylbenzene	12.034	105	507210	30.190	ug/L	98
99) p-Isopropyltoluene	12.191	119	439843	30.811	ug/L	96
100) 1,3-Dichlorobenzene	12.249	146	220453	29.844	ug/L	99
101) 1,4-Dichlorobenzene	12.343	146	220540	30.077	ug/L	99
102) p-Diethylbenzene	12.558	119	263182	30.860	ug/L	95
103) n-Butylbenzene	12.616	91	383267	29.899	ug/L	98
104) 1,2-Dichlorobenzene	12.763	146	204005	29.755	ug/L	98
105) 1,2,4,5-Tetramethylben...	13.345	119	424636	31.223	ug/L	98
106) 1,2-Dibromo-3-chloropr...	13.533	155	12159	31.573	ug/L	89
107) 1,3,5-Trichlorobenzene	13.570	180	168278	30.485	ug/L	95
108) Hexachlorobutadiene	14.142	225	67863	30.040	ug/L	94
109) 1,2,4-Trichlorobenzene	14.162	180	144621	31.478	ug/L	98
110) Naphthalene	14.456	128	261732	31.986	ug/L	100
111) 1,2,3-Trichlorobenzene	14.624	180	126160	30.939	ug/L	100

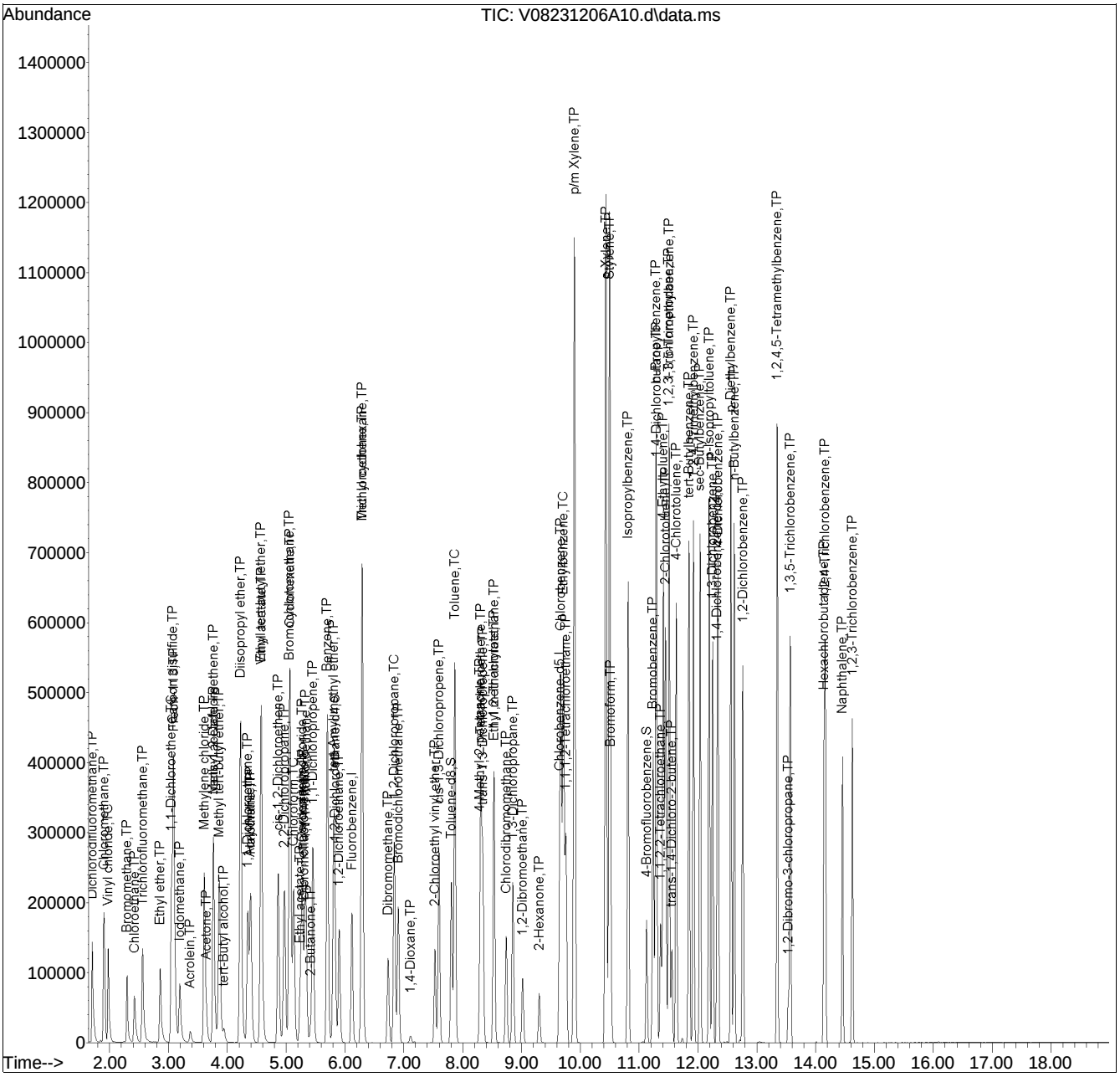
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\VOA108\2023\231206A-ICAL\
Data File : V08231206A10.d
Acq On : 6 Dec 2023 1:58 pm
Operator : VOA108:LAC
Sample : I8260STD30PPB
Misc : WG1860686
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 06 16:11:11 2023
Quant Method : K:\VOA108\2023\231206A-ICAL\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 15:51:11 2023
Response via : Initial Calibration

Sub List : 8260-Curve - Megamix plus DioxL\V08231206A09.d•

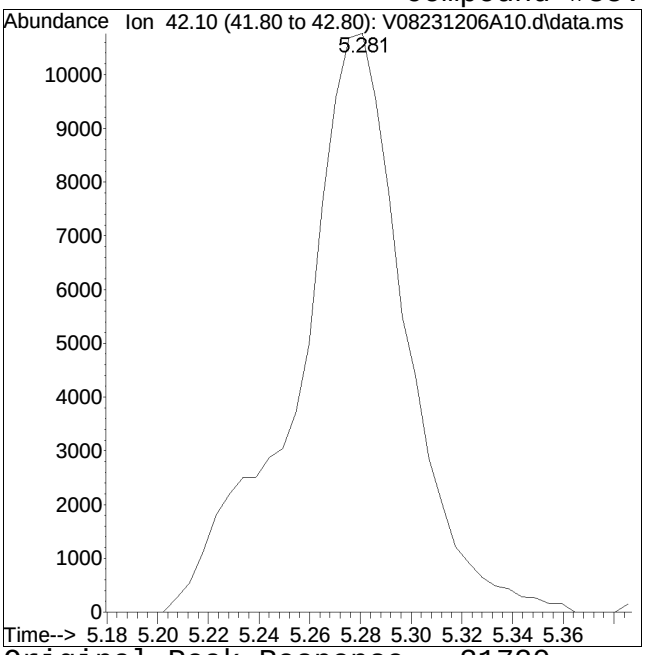


Manual Integration Report

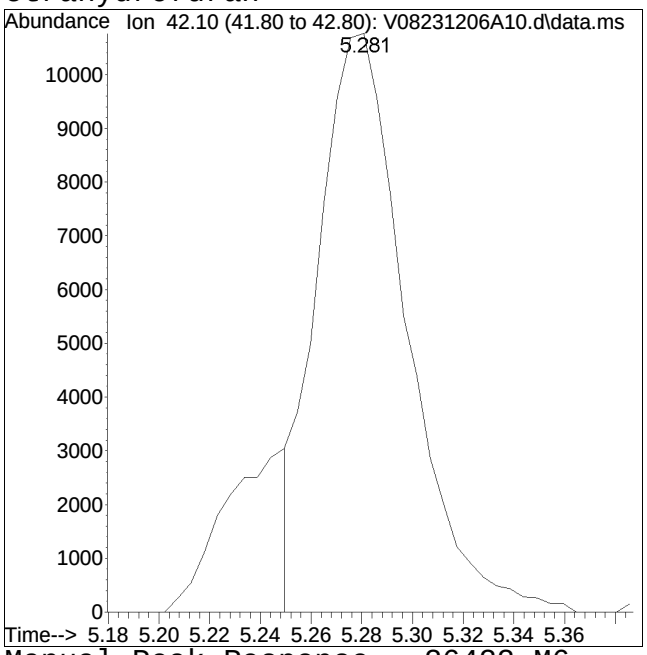
Data Path : K:\VOA108\2023\231206A-ICAQ
Data File : V08231206A10.d
Date Inj'd : 12/6/2023 1:58 pm
Sample : I8260STD30PPB

Method : V108_231206A_8260.m
Operator : VOA108:LAC
Instrument : VOA 108
Quant Date : 12/6/2023 3:52 pm

Compound #35: Tetrahydrofuran



Original Peak Response = 31720



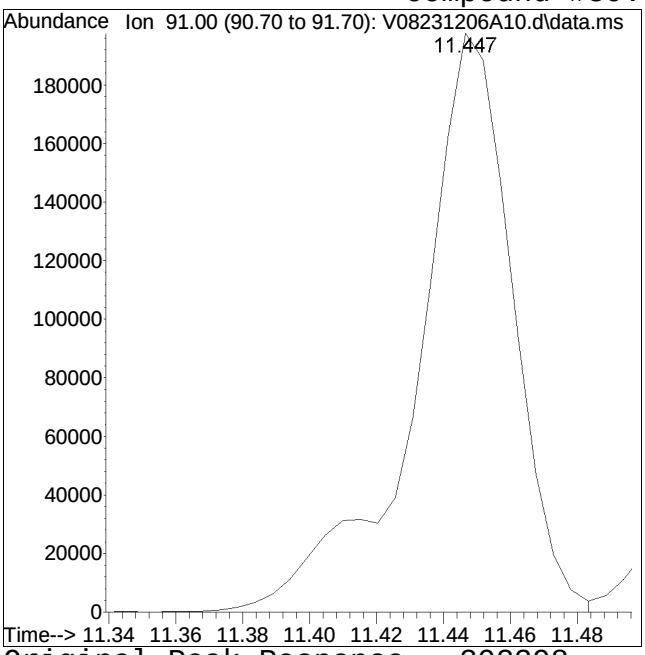
Manual Peak Response = 26422 M6

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

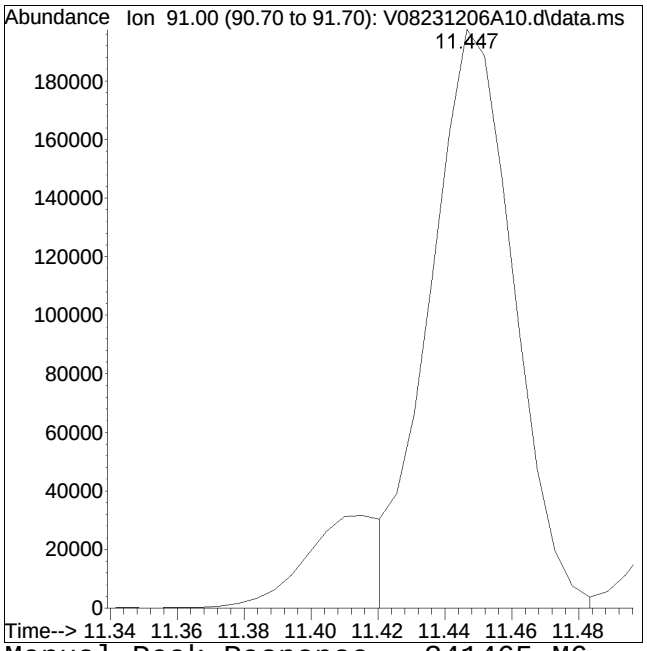
Manual Integration Report

Data Path : K:\VOA108\2023\231206A-ICAQMethod : V108_231206A_8260.m
Data File : V08231206A10.d Operator : VOA108:LAC
Date Inj'd : 12/6/2023 1:58 pm Instrument : VOA 108
Sample : I8260STD30PPB Quant Date : 12/6/2023 3:52 pm

Compound #89: 2-Chlorotoluene



Original Peak Response = 392398



Manual Peak Response = 341465 M6

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

Quantitation Report (QT Reviewed)

Data Path : K:\VOA108\2023\231206A-ICAL\
Data File : V08231206A11.d
Acq On : 6 Dec 2023 2:20 pm
Operator : VOA108:LAC
Sample : I8260STD80PPB
Misc : WG1860686
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 06 16:12:57 2023
Quant Method : K:\VOA108\2023\231206A-ICAL\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 15:51:11 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA108\2023\231206A-ICAL\V08231206A09.d
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.119	96	172400	10.000	ug/L	0.00
Standard Area 1 = 168549			Recovery = 102.28%			
59) Chlorobenzene-d5	9.648	117	128187	10.000	ug/L	0.00
Standard Area 1 = 124890			Recovery = 102.64%			
79) 1,4-Dichlorobenzene-d4	12.327	152	64657	10.000	ug/L	0.00
Standard Area 1 = 65924			Recovery = 98.08%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.302	113	44371	10.025	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.25%			
43) 1,2-Dichloroethane-d4	5.836	65	54822	9.670	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 96.70%			
60) Toluene-d8	7.808	98	166447	10.045	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.45%			
83) 4-Bromofluorobenzene	11.127	95	61482	10.219	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 102.19%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.705	85	400795	79.958	ug/L	99
3) Chloromethane	1.899	50	651102	78.127	ug/L	98
4) Vinyl chloride	1.977	62	397835	81.571	ug/L	97
5) Bromomethane	2.297	94	172559	97.732	ug/L	98
6) Chloroethane	2.418	64	201985	80.365	ug/L	99
7) Trichlorofluoromethane	2.559	101	378464	80.132	ug/L	97
8) Ethyl ether	2.858	74	113961	85.757	ug/L	92
10) 1,1-Dichloroethene	3.052	96	266729	81.751	ug/L	90
11) Carbon disulfide	3.084	76	963901	81.114	ug/L	97
12) Freon-113	3.094	101	273787	79.543	ug/L	97
13) Iodomethane	3.194	142	367191	110.960	ug/L	88
14) Acrolein	3.367	56	49913	88.627	ug/L	95
15) Methylene chloride	3.608	84	300762	79.934	ug/L	88
17) Acetone	3.645	43	76271	79.836	ug/L	98
18) trans-1,2-Dichloroethene	3.760	96	297269	80.507	ug/L	98
19) Methyl acetate	3.765	43	204734	80.173	ug/L #	87
20) Methyl tert-butyl ether	3.865	73	748679	86.970	ug/L	92
21) tert-Butyl alcohol	3.944	59	79819	475.192	ug/L #	78
22) Diisopropyl ether	4.227	45	1604771	84.298	ug/L	98
23) 1,1-Dichloroethane	4.347	63	677411	79.791	ug/L	98
24) Halothane	4.394	117	220121	81.023	ug/L	99

Data Path : K:\VOA108\2023\231206A-ICAL\
Data File : V08231206A11.d
Acq On : 6 Dec 2023 2:20 pm
Operator : VOA108:LAC
Sample : I8260STD80PPB
Misc : WG1860686
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 06 16:12:57 2023
Quant Method : K:\VOA108\2023\231206A-ICAL\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 15:51:11 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA108\2023\231206A-ICAL\V08231206A09.d
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) Acrylonitrile	4.389	53	97088	84.089	ug/L	#	88
26) Ethyl tert-butyl ether	4.573	59	1225329	85.640	ug/L		93
27) Vinyl acetate	4.578	43	831582	83.259	ug/L		98
28) cis-1,2-Dichloroethene	4.866	96	325781	80.203	ug/L		90
29) 2,2-Dichloropropane	4.971	77	466649	79.145	ug/L		90
30) Bromochloromethane	5.055	128	142302	80.679	ug/L		97
31) Cyclohexane	5.066	56	740027	80.754	ug/L		98
32) Chloroform	5.129	83	534987	79.111	ug/L		97
33) Ethyl acetate	5.233	43	302918	86.349	ug/L	#	96
34) Carbon tetrachloride	5.270	117	424261	79.884	ug/L		98
35) Tetrahydrofuran	5.275	42	82394M1	90.499	ug/L		
37) 1,1,1-Trichloroethane	5.333	97	474224	80.524	ug/L	#	96
39) 2-Butanone	5.417	43	126388	86.367	ug/L		98
40) 1,1-Dichloropropene	5.454	75	426919	82.337	ug/L		98
41) Benzene	5.700	78	1185188	80.556	ug/L		97
42) tert-Amyl methyl ether	5.810	73	803001	87.798	ug/L		98
44) 1,2-Dichloroethane	5.899	62	442155	81.425	ug/L		98
47) Methyl cyclohexane	6.287	83	503079	82.205	ug/L		95
48) Trichloroethene	6.292	95	316348	80.998	ug/L		96
50) Dibromomethane	6.733	93	164173	83.388	ug/L		97
51) 1,2-Dichloropropane	6.838	63	384075	81.553	ug/L	#	93
53) 2-Chloroethyl vinyl ether	7.530	63	192025	93.220	ug/L		90
54) Bromodichloromethane	6.906	83	422351	83.167	ug/L		98
57) 1,4-Dioxane	7.116	88	10732	932.978	ug/L		97
58) cis-1,3-Dichloropropene	7.598	75	508895	85.458	ug/L		98
61) Toluene	7.871	92	738269	83.011	ug/L		95
62) 4-Methyl-2-pentanone	8.295	58	103784	94.385	ug/L		84
63) Tetrachloroethene	8.311	166	303831	80.630	ug/L		92
65) trans-1,3-Dichloropropene	8.343	75	442103	86.752	ug/L		96
67) Ethyl methacrylate	8.537	69	291223	93.256	ug/L	#	44
68) 1,1,2-Trichloroethane	8.531	83	194230	81.976	ug/L		96
69) Chlorodibromomethane	8.741	129	286928	88.476	ug/L		96
70) 1,3-Dichloropropane	8.856	76	411832	83.138	ug/L		100
71) 1,2-Dibromoethane	9.019	107	224131	84.908	ug/L		98
72) 2-Hexanone	9.302	43	192089	94.329	ug/L		97
73) Chlorobenzene	9.669	112	800045	81.897	ug/L		94
74) Ethylbenzene	9.716	91	1401909	82.395	ug/L		99
75) 1,1,1,2-Tetrachloroethane	9.758	131	304739	83.806	ug/L		95
76) p/m Xylene	9.900	106	1062524	163.006	ug/L		99
77) o Xylene	10.434	106	1037433	162.379	ug/L		94

Data Path : K:\VOA108\2023\231206A-ICAL\
Data File : V08231206A11.d
Acq On : 6 Dec 2023 2:20 pm
Operator : VOA108:LAC
Sample : I8260STD80PPB
Misc : WG1860686
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 06 16:12:57 2023
Quant Method : K:\VOA108\2023\231206A-ICAL\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 15:51:11 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA108\2023\231206A-ICAL\V08231206A09.d
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
78) Styrene	10.497	104	1706419	164.002	ug/L		94
80) Bromoform	10.518	173	161406	91.361	ug/L		96
82) Isopropylbenzene	10.812	105	1354648	86.426	ug/L		97
84) Bromobenzene	11.237	156	324952	85.000	ug/L		98
85) n-Propylbenzene	11.289	91	1614118	85.579	ug/L		98
86) 1,4-Dichlorobutane	11.300	55	510546	86.982	ug/L	#	90
87) 1,1,2,2-Tetrachloroethane	11.368	83	259998	87.698	ug/L		99
88) 4-Ethyltoluene	11.410	105	1355559	86.449	ug/L		97
89) 2-Chlorotoluene	11.452	91	979771M6	85.096	ug/L		
90) 1,3,5-Trimethylbenzene	11.509	105	1173469	85.939	ug/L		92
91) 1,2,3-Trichloropropane	11.504	75	207632	88.857	ug/L		95
92) trans-1,4-Dichloro-2-b...	11.557	53	103631	89.309	ug/L		90
93) 4-Chlorotoluene	11.630	91	1013974	85.238	ug/L		96
94) tert-Butylbenzene	11.850	119	982460	85.763	ug/L		95
97) 1,2,4-Trimethylbenzene	11.924	105	1155507	86.867	ug/L		94
98) sec-Butylbenzene	12.039	105	1450842	85.844	ug/L		98
99) p-Isopropyltoluene	12.191	119	1263495	87.983	ug/L		97
100) 1,3-Dichlorobenzene	12.249	146	627974	84.509	ug/L		99
101) 1,4-Dichlorobenzene	12.343	146	625314	84.774	ug/L		99
102) p-Diethylbenzene	12.558	119	760863	88.686	ug/L		95
103) n-Butylbenzene	12.616	91	1105104	85.698	ug/L		98
104) 1,2-Dichlorobenzene	12.762	146	580554	84.174	ug/L		99
105) 1,2,4,5-Tetramethylben...	13.350	119	1217741	89.006	ug/L		98
106) 1,2-Dibromo-3-chloropr...	13.538	155	36966	95.419	ug/L		90
107) 1,3,5-Trichlorobenzene	13.570	180	475081	85.554	ug/L		95
108) Hexachlorobutadiene	14.141	225	195048	85.827	ug/L		96
109) 1,2,4-Trichlorobenzene	14.162	180	418161	90.475	ug/L		99
110) Naphthalene	14.456	128	791593	96.164	ug/L		100
111) 1,2,3-Trichlorobenzene	14.624	180	367093	89.489	ug/L		100

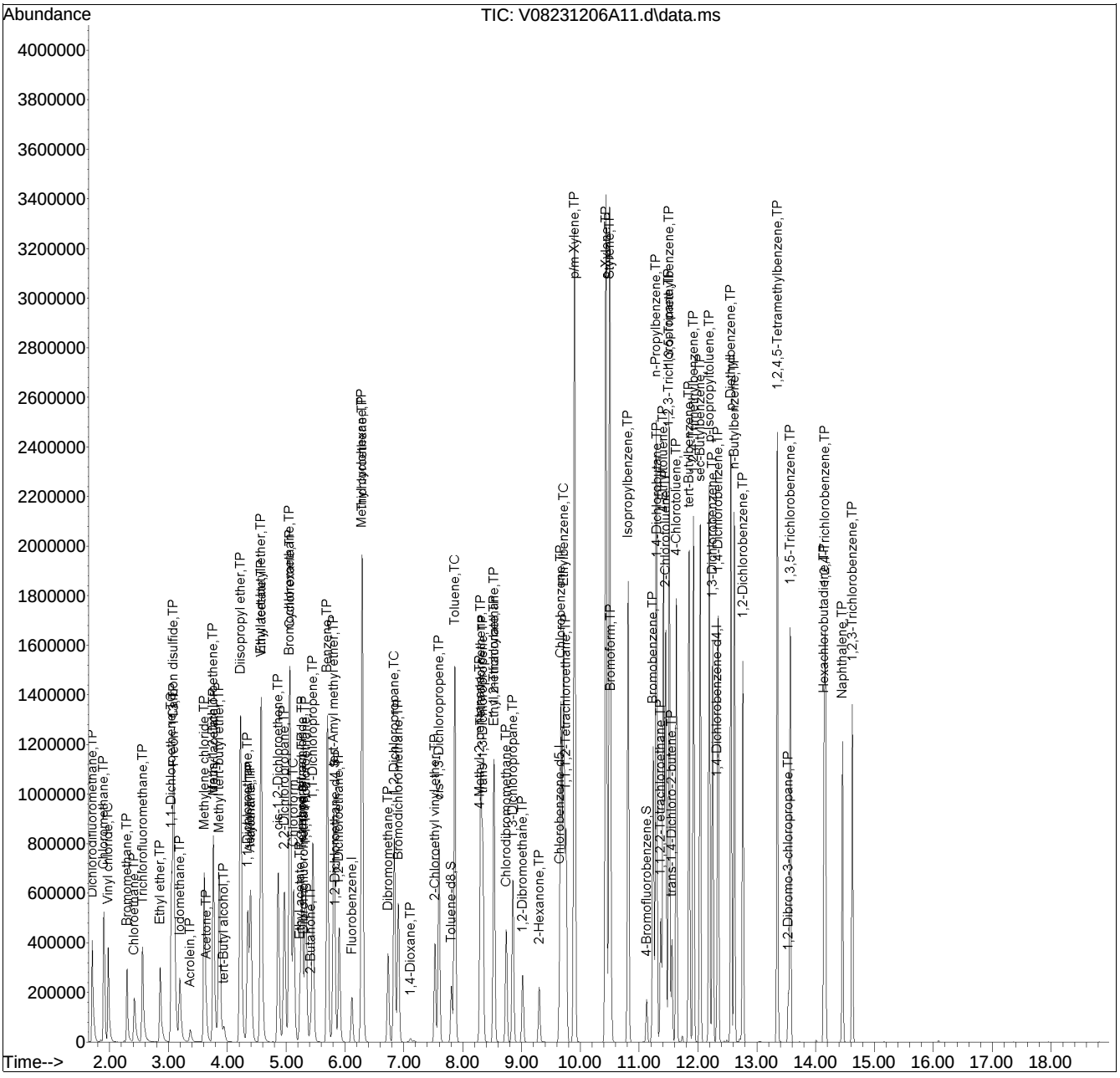
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\VOA108\2023\231206A-ICAL\
Data File : V08231206A11.d
Acq On : 6 Dec 2023 2:20 pm
Operator : VOA108:LAC
Sample : I8260STD80PPB
Misc : WG1860686
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 06 16:12:57 2023
Quant Method : K:\VOA108\2023\231206A-ICAL\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 15:51:11 2023
Response via : Initial Calibration

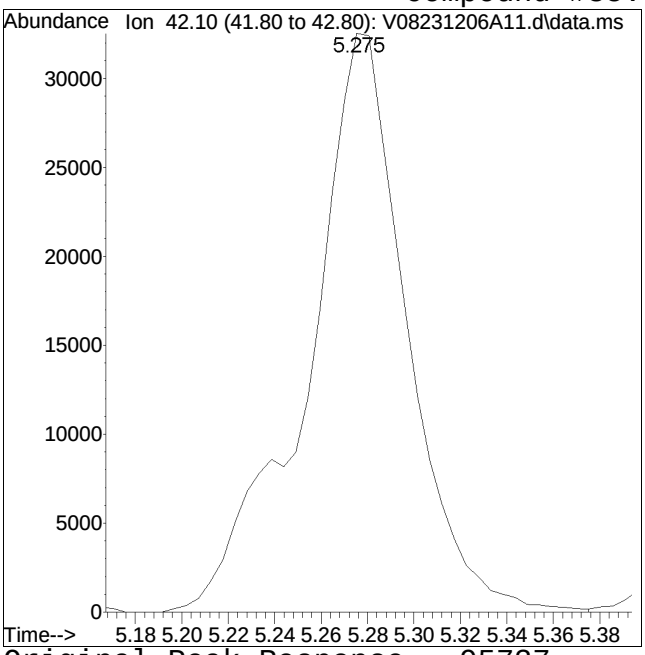
Sub List : 8260-Curve - Megamix plus DioxL\V08231206A09.d•



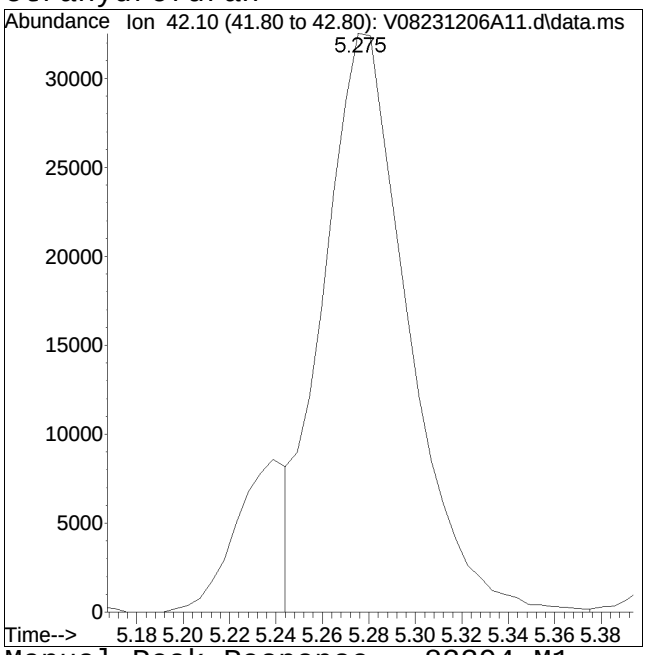
Manual Integration Report

Data Path : K:\VOA108\2023\231206A-ICAQMethod : V108_231206A_8260.m
Data File : V08231206A11.d Operator : VOA108:LAC
Date Inj'd : 12/6/2023 2:20 pm Instrument : VOA 108
Sample : I8260STD80PPB Quant Date : 12/6/2023 3:52 pm

Compound #35: Tetrahydrofuran



Original Peak Response = 95737



Manual Peak Response = 82394 M1

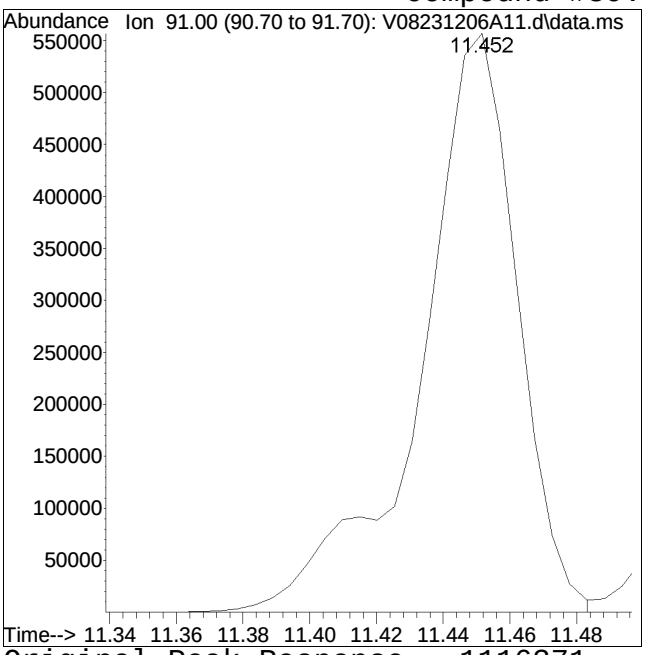
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

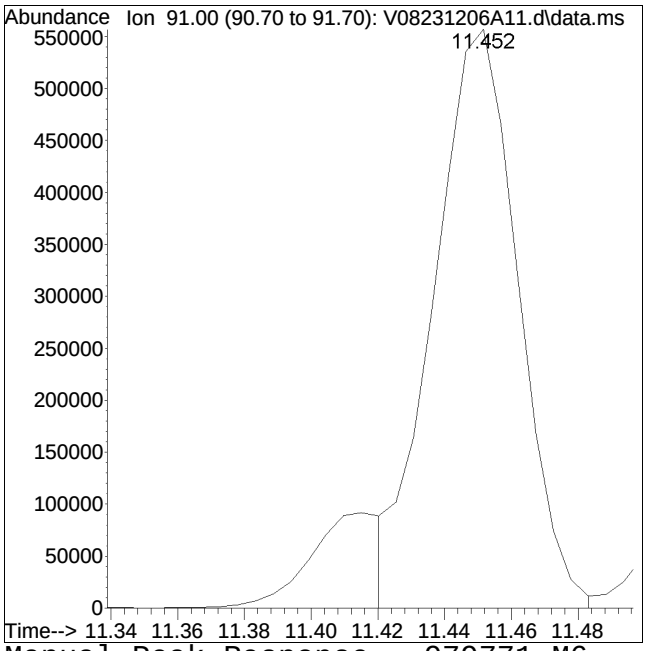
Data Path : K:\VOA108\2023\231206A-ICAQ
Data File : V08231206A11.d
Date Inj'd : 12/6/2023 2:20 pm
Sample : I8260STD80PPB

Method : V108_231206A_8260.m
Operator : VOA108:LAC
Instrument : VOA 108
Quant Date : 12/6/2023 3:52 pm

Compound #89: 2-Chlorotoluene



Original Peak Response = 1116371



Manual Peak Response = 979771 M6

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

Quantitation Report (QT Reviewed)

Data Path : K:\VOA108\2023\231206A-ICAL\
Data File : V08231206A12.d
Acq On : 6 Dec 2023 2:42 pm
Operator : VOA108:LAC
Sample : I8260STD120PPB
Misc : WG1860686
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 06 16:16:33 2023
Quant Method : K:\VOA108\2023\231206A-ICAL\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 15:51:11 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA108\2023\231206A-ICAL\V08231206A09.d
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	6.119	96	173622	10.000 ug/L	0.00
Standard Area 1 = 168549			Recovery = 103.01%		
59) Chlorobenzene-d5	9.648	117	130130	10.000 ug/L	0.00
Standard Area 1 = 124890			Recovery = 104.20%		
79) 1,4-Dichlorobenzene-d4	12.327	152	66426	10.000 ug/L	0.00
Standard Area 1 = 65924			Recovery = 100.76%		
System Monitoring Compounds					
36) Dibromofluoromethane	5.307	113	43829	9.833 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 98.33%		
43) 1,2-Dichloroethane-d4	5.831	65	53932	9.446 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 94.46%		
60) Toluene-d8	7.808	98	169157	10.056 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.56%		
83) 4-Bromofluorobenzene	11.127	95	62293	10.078 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.78%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.705	85	606463	120.137 ug/L	99
3) Chloromethane	1.904	50	990193	117.979 ug/L	98
4) Vinyl chloride	1.977	62	651787	132.701 ug/L	97
5) Bromomethane	2.297	94	270238	151.977 ug/L	99
6) Chloroethane	2.418	64	308774	121.989 ug/L	100
7) Trichlorofluoromethane	2.559	101	580095	121.959 ug/L	97
8) Ethyl ether	2.858	74	174425	130.333 ug/L	93
10) 1,1-Dichloroethene	3.052	96	411204	125.146 ug/L	89
11) Carbon disulfide	3.084	76	1481585	123.801 ug/L	97
12) Freon-113	3.094	101	419644	121.061 ug/L	99
13) Iodomethane	3.194	142	577897	173.403 ug/L	87
14) Acrolein	3.367	56	77705	137.004 ug/L	95
15) Methylene chloride	3.608	84	458732	121.059 ug/L	90
17) Acetone	3.645	43	111016	115.388 ug/L	100
18) trans-1,2-Dichloroethene	3.760	96	455375	122.457 ug/L	98
19) Methyl acetate	3.765	43	308118	119.809 ug/L #	88
20) Methyl tert-butyl ether	3.865	73	1142079	131.735 ug/L	92
21) tert-Butyl alcohol	3.944	59	129087	763.094 ug/L #	73
22) Diisopropyl ether	4.227	45	2419322	126.192 ug/L	98
23) 1,1-Dichloroethane	4.347	63	1032922	120.809 ug/L	98
24) Halothane	4.400	117	338551	123.737 ug/L	99

Data Path : K:\VOA108\2023\231206A-ICAL\
Data File : V08231206A12.d
Acq On : 6 Dec 2023 2:42 pm
Operator : VOA108:LAC
Sample : I8260STD120PPB
Misc : WG1860686
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 06 16:16:33 2023
Quant Method : K:\VOA108\2023\231206A-ICAL\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 15:51:11 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA108\2023\231206A-ICAL\V08231206A09.d
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) Acrylonitrile	4.389	53	146623	126.098	ug/L	#	88
26) Ethyl tert-butyl ether	4.573	59	1864043	129.364	ug/L		90
27) Vinyl acetate	4.578	43	1360377	135.244	ug/L		98
28) cis-1,2-Dichloroethene	4.866	96	496502	121.373	ug/L		91
29) 2,2-Dichloropropane	4.971	77	708516	119.321	ug/L		91
30) Bromochloromethane	5.055	128	216312	121.777	ug/L		96
31) Cyclohexane	5.066	56	1126215	122.031	ug/L		98
32) Chloroform	5.129	83	818493	120.183	ug/L		98
33) Ethyl acetate	5.239	43	459213	129.981	ug/L	#	96
34) Carbon tetrachloride	5.270	117	653354	122.155	ug/L		99
35) Tetrahydrofuran	5.275	42	123010M6	134.160	ug/L		
37) 1,1,1-Trichloroethane	5.333	97	728898	122.896	ug/L	#	96
39) 2-Butanone	5.417	43	186627	126.633	ug/L		98
40) 1,1-Dichloropropene	5.454	75	651498	124.766	ug/L		98
41) Benzene	5.700	78	1822209	122.982	ug/L		98
42) tert-Amyl methyl ether	5.810	73	1231532	133.705	ug/L		97
44) 1,2-Dichloroethane	5.899	62	667806	122.114	ug/L		99
47) Methyl cyclohexane	6.293	83	767346	124.505	ug/L		95
48) Trichloroethene	6.293	95	475817	120.971	ug/L		97
50) Dibromomethane	6.733	93	251636	126.914	ug/L		97
51) 1,2-Dichloropropane	6.838	63	586394	123.637	ug/L	#	93
53) 2-Chloroethyl vinyl ether	7.530	63	294404	141.915	ug/L		91
54) Bromodichloromethane	6.906	83	652820	127.645	ug/L		98
57) 1,4-Dioxane	7.116	88	16254	1403.084	ug/L		96
58) cis-1,3-Dichloropropene	7.598	75	780043	130.069	ug/L		99
61) Toluene	7.871	92	1134493	125.658	ug/L		95
62) 4-Methyl-2-pentanone	8.295	58	159317	142.725	ug/L		86
63) Tetrachloroethene	8.311	166	466058	121.835	ug/L		92
65) trans-1,3-Dichloropropene	8.343	75	673198	130.126	ug/L		96
67) Ethyl methacrylate	8.537	69	447699	141.223	ug/L	#	44
68) 1,1,2-Trichloroethane	8.531	83	296103	123.107	ug/L		95
69) Chlorodibromomethane	8.741	129	444972	135.161	ug/L		96
70) 1,3-Dichloropropane	8.856	76	629181	125.118	ug/L		100
71) 1,2-Dibromoethane	9.019	107	345849	129.062	ug/L		99
72) 2-Hexanone	9.302	43	288721	139.665	ug/L		97
73) Chlorobenzene	9.674	112	1234178	124.450	ug/L		96
74) Ethylbenzene	9.716	91	2162917	125.224	ug/L		100
75) 1,1,1,2-Tetrachloroethane	9.758	131	467624	126.681	ug/L		95
76) p/m Xylene	9.905	106	1615212	244.097	ug/L		100
77) o Xylene	10.435	106	1574244	242.721	ug/L		95

Quantitation Report (QT Reviewed)

Data Path : K:\VOA108\2023\231206A-ICAL\
Data File : V08231206A12.d
Acq On : 6 Dec 2023 2:42 pm
Operator : VOA108:LAC
Sample : I8260STD120PPB
Misc : WG1860686
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 06 16:16:33 2023
Quant Method : K:\VOA108\2023\231206A-ICAL\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 15:51:11 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA108\2023\231206A-ICAL\V08231206A09.d
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
78) Styrene	10.503	104	2584867	244.719	ug/L	94
80) Bromoform	10.524	173	247757	136.504	ug/L	96
82) Isopropylbenzene	10.812	105	2069555	128.521	ug/L	97
84) Bromobenzene	11.242	156	497161	126.582	ug/L	98
85) n-Propylbenzene	11.289	91	2447918	126.330	ug/L	98
86) 1,4-Dichlorobutane	11.300	55	768933	127.514	ug/L	90
87) 1,1,2,2-Tetrachloroethane	11.368	83	400501	131.492	ug/L	99
88) 4-Ethyltoluene	11.415	105	2052887	127.434	ug/L	97
89) 2-Chlorotoluene	11.452	91	1452258M6	122.774	ug/L	
90) 1,3,5-Trimethylbenzene	11.515	105	1768809	126.089	ug/L	92
91) 1,2,3-Trichloropropane	11.504	75	313813	130.720	ug/L	95
92) trans-1,4-Dichloro-2-b...	11.557	53	158950	133.335	ug/L	89
93) 4-Chlorotoluene	11.635	91	1545563	126.465	ug/L	97
94) tert-Butylbenzene	11.850	119	1482371	125.956	ug/L	95
97) 1,2,4-Trimethylbenzene	11.924	105	1747146	127.846	ug/L	95
98) sec-Butylbenzene	12.039	105	2171542	125.066	ug/L	98
99) p-Isopropyltoluene	12.191	119	1882688	127.610	ug/L	97
100) 1,3-Dichlorobenzene	12.254	146	943182	123.547	ug/L	99
101) 1,4-Dichlorobenzene	12.343	146	942305	124.346	ug/L	99
102) p-Diethylbenzene	12.563	119	1135392	128.817	ug/L	95
103) n-Butylbenzene	12.616	91	1647625	124.366	ug/L	98
104) 1,2-Dichlorobenzene	12.762	146	868226	122.531	ug/L	99
105) 1,2,4,5-Tetramethylben...	13.350	119	1829759	130.178	ug/L	98
106) 1,2-Dibromo-3-chloropr...	13.538	155	57822	145.279	ug/L	92
107) 1,3,5-Trichlorobenzene	13.570	180	714791	125.294	ug/L	95
108) Hexachlorobutadiene	14.141	225	286234	122.598	ug/L	96
109) 1,2,4-Trichlorobenzene	14.162	180	631802	133.059	ug/L	99
110) Naphthalene	14.456	128	1208805	142.937	ug/L	100
111) 1,2,3-Trichlorobenzene	14.624	180	553400	131.313	ug/L	99

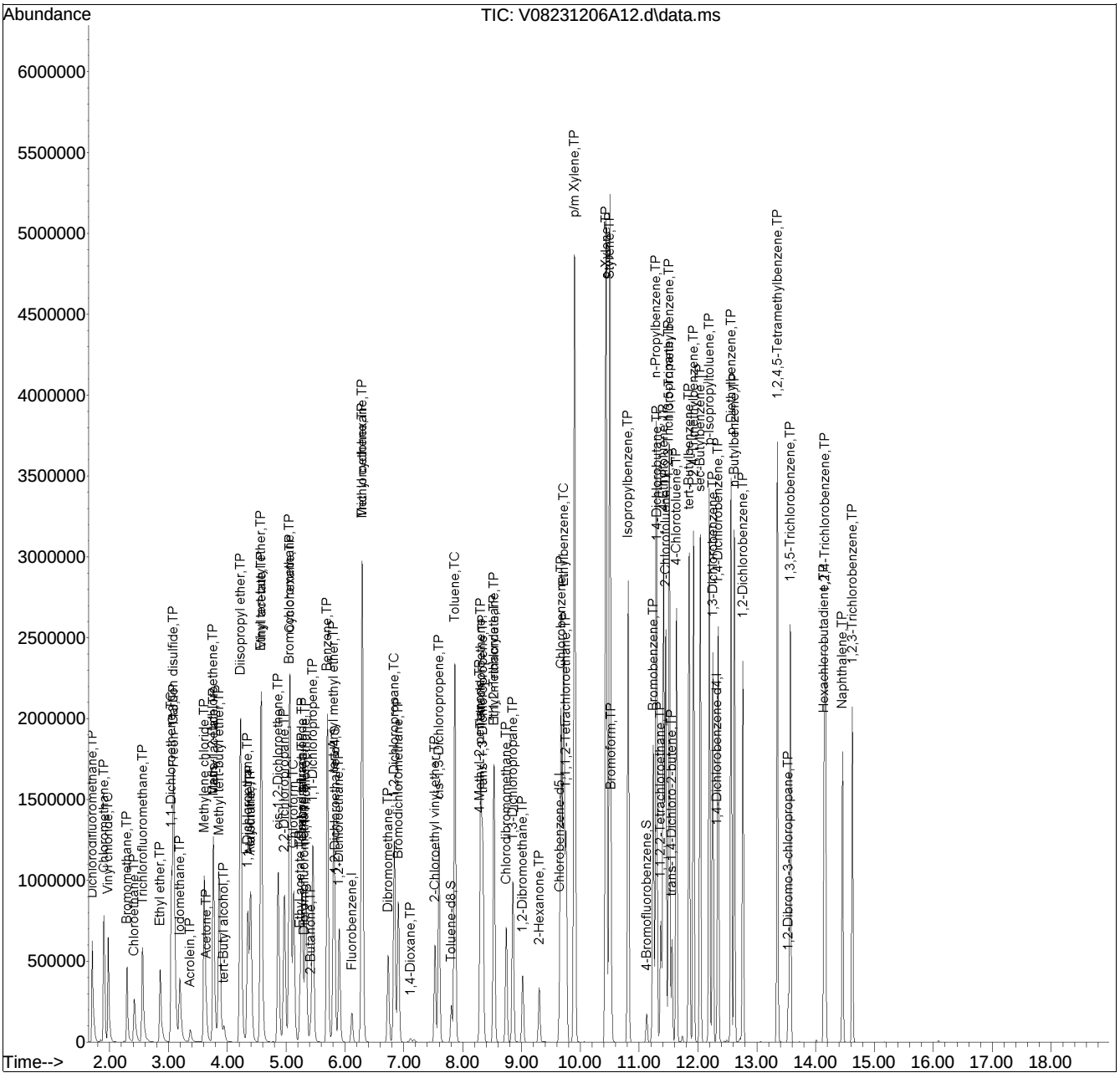
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\VOA108\2023\231206A-ICAL\
Data File : V08231206A12.d
Acq On : 6 Dec 2023 2:42 pm
Operator : VOA108:LAC
Sample : I8260STD120PPB
Misc : WG1860686
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 06 16:16:33 2023
Quant Method : K:\VOA108\2023\231206A-ICAL\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 15:51:11 2023
Response via : Initial Calibration

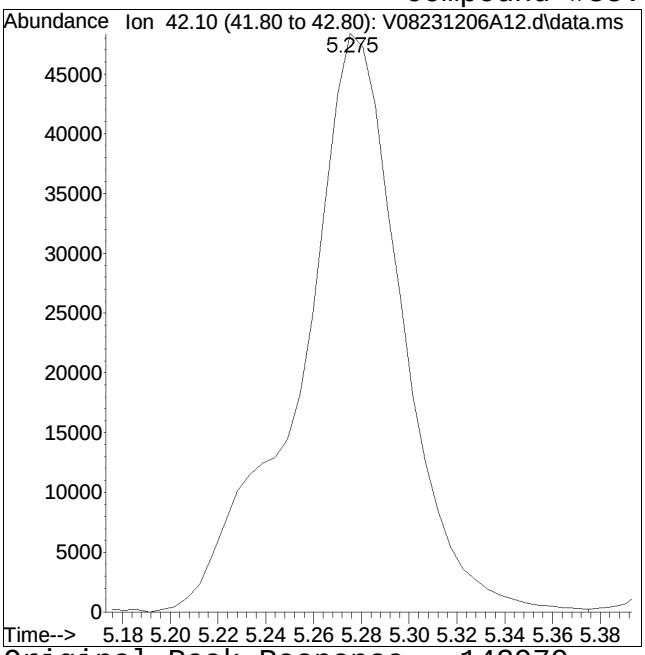
Sub List : 8260-Curve - Megamix plus DioxL\V08231206A09.d•



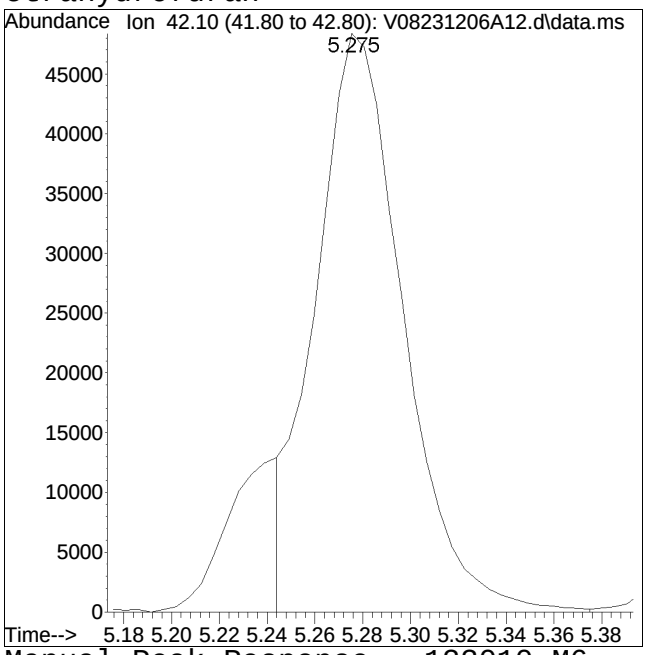
Manual Integration Report

Data Path : K:\VOA108\2023\231206A-ICAQMethod : V108_231206A_8260.m
Data File : V08231206A12.d Operator : VOA108:LAC
Date Inj'd : 12/6/2023 2:42 pm Instrument : VOA 108
Sample : I8260STD120PPB Quant Date : 12/6/2023 3:53 pm

Compound #35: Tetrahydrofuran



Original Peak Response = 142979



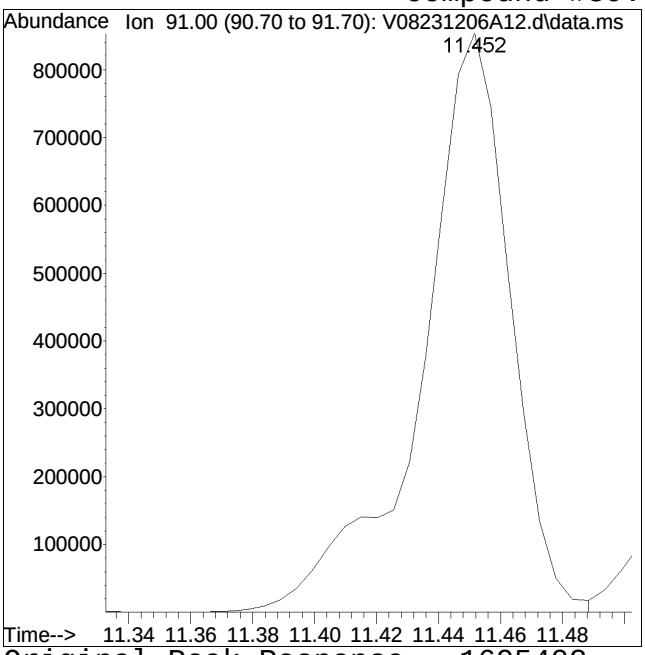
Manual Peak Response = 123010 M6

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

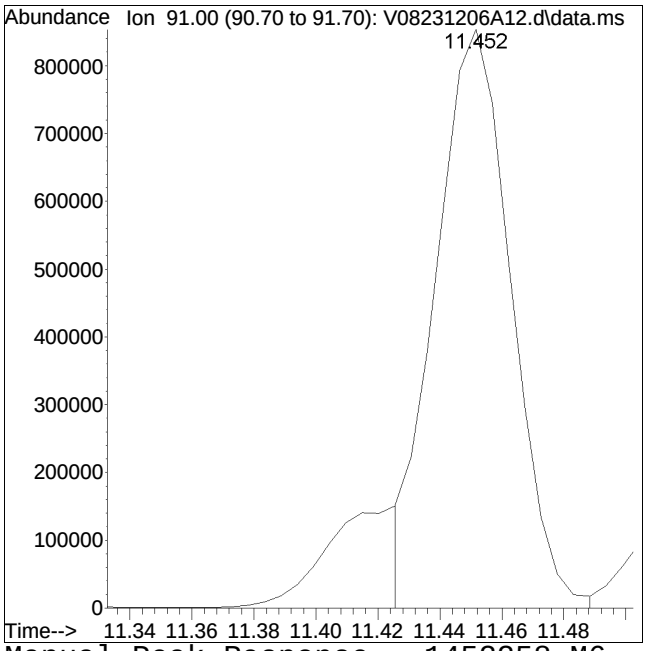
Manual Integration Report

Data Path : K:\VOA108\2023\231206A-ICAQMethod : V108_231206A_8260.m
Data File : V08231206A12.d Operator : VOA108:LAC
Date Inj'd : 12/6/2023 2:42 pm Instrument : VOA 108
Sample : I8260STD120PPB Quant Date : 12/6/2023 3:53 pm

Compound #89: 2-Chlorotoluene



Original Peak Response = 1695402



Manual Peak Response = 1452258 M6

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

Quantitation Report (QT Reviewed)

Data Path : K:\VOA108\2023\231206A-ICAL\
Data File : V08231206A13.d
Acq On : 6 Dec 2023 3:04 pm
Operator : VOA108:LAC
Sample : I8260STD200PPB
Misc : WG1860686
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Dec 06 16:17:33 2023
Quant Method : K:\VOA108\2023\231206A-ICAL\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 15:51:11 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA108\2023\231206A-ICAL\V08231206A09.d
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	6.120	96	179227	10.000 ug/L	0.00
Standard Area 1 = 168549			Recovery = 106.34%		
59) Chlorobenzene-d5	9.653	117	133785	10.000 ug/L	0.00
Standard Area 1 = 124890			Recovery = 107.12%		
79) 1,4-Dichlorobenzene-d4	12.327	152	66063	10.000 ug/L	0.00
Standard Area 1 = 65924			Recovery = 100.21%		
System Monitoring Compounds					
36) Dibromofluoromethane	5.307	113	45150	9.813 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 98.13%		
43) 1,2-Dichloroethane-d4	5.831	65	56119	9.522 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 95.22%		
60) Toluene-d8	7.808	98	174745	10.104 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.04%		
83) 4-Bromofluorobenzene	11.127	95	63984	10.409 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 104.09%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.705	85	1036276	198.861 ug/L	99
3) Chloromethane	1.904	50	1657772	191.343 ug/L	98
4) Vinyl chloride	1.972	62	1138392	224.523 ug/L	98
5) Bromomethane	2.292	94	480844	261.961 ug/L	99
6) Chloroethane	2.418	64	516347	197.617 ug/L	100
7) Trichlorofluoromethane	2.560	101	979566	199.503 ug/L	97
8) Ethyl ether	2.859	74	298167	215.827 ug/L	95
10) 1,1-Dichloroethene	3.053	96	693733	204.527 ug/L	89
11) Carbon disulfide	3.084	76	2501442	202.483 ug/L	97
12) Freon-113	3.089	101	711235	198.764 ug/L	98
13) Iodomethane	3.194	142	946112	275.011 ug/L	87
14) Acrolein	3.372	56	136546	233.220 ug/L	94
15) Methylene chloride	3.608	84	777260	198.704 ug/L	92
17) Acetone	3.645	43	185205	186.478 ug/L	100
18) trans-1,2-Dichloroethene	3.760	96	770483	200.714 ug/L	97
19) Methyl acetate	3.766	43	518476	195.300 ug/L #	88
20) Methyl tert-butyl ether	3.865	73	1946195	217.467 ug/L	93
21) tert-Butyl alcohol	3.944	59	229526	1314.403 ug/L #	74
22) Diisopropyl ether	4.227	45	4021565	203.205 ug/L	98
23) 1,1-Dichloroethane	4.348	63	1731690	196.202 ug/L	98
24) Halothane	4.400	117	574521	203.416 ug/L	99

Data Path : K:\VOA108\2023\231206A-ICAL\
Data File : V08231206A13.d
Acq On : 6 Dec 2023 3:04 pm
Operator : VOA108:LAC
Sample : I8260STD200PPB
Misc : WG1860686
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Dec 06 16:17:33 2023
Quant Method : K:\VOA108\2023\231206A-ICAL\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 15:51:11 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA108\2023\231206A-ICAL\V08231206A09.d
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) Acrylonitrile	4.389	53	252167	210.084	ug/L	#	89
26) Ethyl tert-butyl ether	4.573	59	3144388	211.395	ug/L		90
27) Vinyl acetate	4.578	43	2280403	219.620	ug/L		98
28) cis-1,2-Dichloroethene	4.867	96	839815	198.877	ug/L		90
29) 2,2-Dichloropropane	4.971	77	1188816	193.947	ug/L		92
30) Bromochloromethane	5.061	128	346921	189.197	ug/L		93
31) Cyclohexane	5.066	56	1888564	198.235	ug/L		97
32) Chloroform	5.129	83	1373863	195.422	ug/L		98
33) Ethyl acetate	5.239	43	778388	213.434	ug/L	#	96
34) Carbon tetrachloride	5.270	117	1099163	199.079	ug/L		98
35) Tetrahydrofuran	5.276	42	208443M6	220.227	ug/L		
37) 1,1,1-Trichloroethane	5.333	97	1229502	200.818	ug/L	#	96
39) 2-Butanone	5.417	43	317868	208.940	ug/L	#	93
40) 1,1-Dichloropropene	5.454	75	1106402	205.256	ug/L		98
41) Benzene	5.700	78	3060029	200.064	ug/L		98
42) tert-Amyl methyl ether	5.810	73	2103308	221.210	ug/L		97
44) 1,2-Dichloroethane	5.905	62	1123615	199.038	ug/L		98
47) Methyl cyclohexane	6.293	83	1312414	206.285	ug/L		97
48) Trichloroethene	6.293	95	798922	196.764	ug/L		97
50) Dibromomethane	6.733	93	430210	210.193	ug/L		97
51) 1,2-Dichloropropane	6.838	63	991643	202.542	ug/L	#	93
53) 2-Chloroethyl vinyl ether	7.530	63	500780	233.847	ug/L		93
54) Bromodichloromethane	6.906	83	1108886	210.039	ug/L		98
57) 1,4-Dioxane	7.116	88	28154	2354.316	ug/L		96
58) cis-1,3-Dichloropropene	7.598	75	1328380	214.576	ug/L		100
61) Toluene	7.871	92	1921860	207.052	ug/L		95
62) 4-Methyl-2-pentanone	8.301	58	276135	240.619	ug/L		88
63) Tetrachloroethene	8.311	166	793617	201.795	ug/L		91
65) trans-1,3-Dichloropropene	8.343	75	1143191	214.937	ug/L		97
67) Ethyl methacrylate	8.537	69	774847	237.742	ug/L	#	46
68) 1,1,2-Trichloroethane	8.531	83	501565	202.832	ug/L		95
69) Chlorodibromomethane	8.741	129	762070	225.156	ug/L		96
70) 1,3-Dichloropropane	8.851	76	1068007	206.580	ug/L		99
71) 1,2-Dibromoethane	9.024	107	586110	212.746	ug/L		99
72) 2-Hexanone	9.302	43	500035	235.277	ug/L		98
73) Chlorobenzene	9.674	112	2088160	204.810	ug/L		96
74) Ethylbenzene	9.716	91	3649890	205.540	ug/L		100
75) 1,1,1,2-Tetrachloroethane	9.758	131	789623	208.068	ug/L		95
76) p/m Xylene	9.905	106	2686609	394.918	ug/L		100
77) o Xylene	10.440	106	2600918	390.060	ug/L		96

Quantitation Report (QT Reviewed)

Data Path : K:\VOA108\2023\231206A-ICAL\
Data File : V08231206A13.d
Acq On : 6 Dec 2023 3:04 pm
Operator : VOA108:LAC
Sample : I8260STD200PPB
Misc : WG1860686
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Dec 06 16:17:33 2023
Quant Method : K:\VOA108\2023\231206A-ICAL\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 15:51:11 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA108\2023\231206A-ICAL\V08231206A09.d
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
78) Styrene	10.503	104	4262096	392.485	ug/L	96
80) Bromoform	10.524	173	418734	231.973	ug/L	96
82) Isopropylbenzene	10.817	105	3447129	215.245	ug/L	97
84) Bromobenzene	11.242	156	829686	212.407	ug/L	98
85) n-Propylbenzene	11.289	91	4030193	209.129	ug/L	97
86) 1,4-Dichlorobutane	11.300	55	1274396	212.498	ug/L	91
87) 1,1,2,2-Tetrachloroethane	11.368	83	677860	223.777	ug/L	99
88) 4-Ethyltoluene	11.415	105	3394049	211.845	ug/L	97
89) 2-Chlorotoluene	11.452	91	2436262M6	207.094	ug/L	
90) 1,3,5-Trimethylbenzene	11.515	105	2911282	208.671	ug/L	93
91) 1,2,3-Trichloropropane	11.510	75	519787	217.710	ug/L	96
92) trans-1,4-Dichloro-2-b...	11.562	53	262038	221.018	ug/L	87
93) 4-Chlorotoluene	11.635	91	2563366	210.899	ug/L	97
94) tert-Butylbenzene	11.850	119	2446105	208.986	ug/L	94
97) 1,2,4-Trimethylbenzene	11.924	105	2902258	213.538	ug/L	95
98) sec-Butylbenzene	12.039	105	3580334	207.335	ug/L	98
99) p-Isopropyltoluene	12.191	119	3127446	213.145	ug/L	97
100) 1,3-Dichlorobenzene	12.254	146	1562543	205.802	ug/L	100
101) 1,4-Dichlorobenzene	12.343	146	1561708	207.215	ug/L	99
102) p-Diethylbenzene	12.563	119	1906747	217.520	ug/L	95
103) n-Butylbenzene	12.621	91	2755039	209.098	ug/L	98
104) 1,2-Dichlorobenzene	12.768	146	1443530	204.842	ug/L	99
105) 1,2,4,5-Tetramethylben...	13.350	119	3080830	220.390	ug/L	98
106) 1,2-Dibromo-3-chloropr...	13.539	155	98948	249.974	ug/L	91
107) 1,3,5-Trichlorobenzene	13.570	180	1192545	210.187	ug/L	95
108) Hexachlorobutadiene	14.147	225	498593	214.727	ug/L	96
109) 1,2,4-Trichlorobenzene	14.168	180	1057602	223.957	ug/L	98
110) Naphthalene	14.456	128	2059273	244.840	ug/L	100
111) 1,2,3-Trichlorobenzene	14.624	180	933366	222.690	ug/L	99

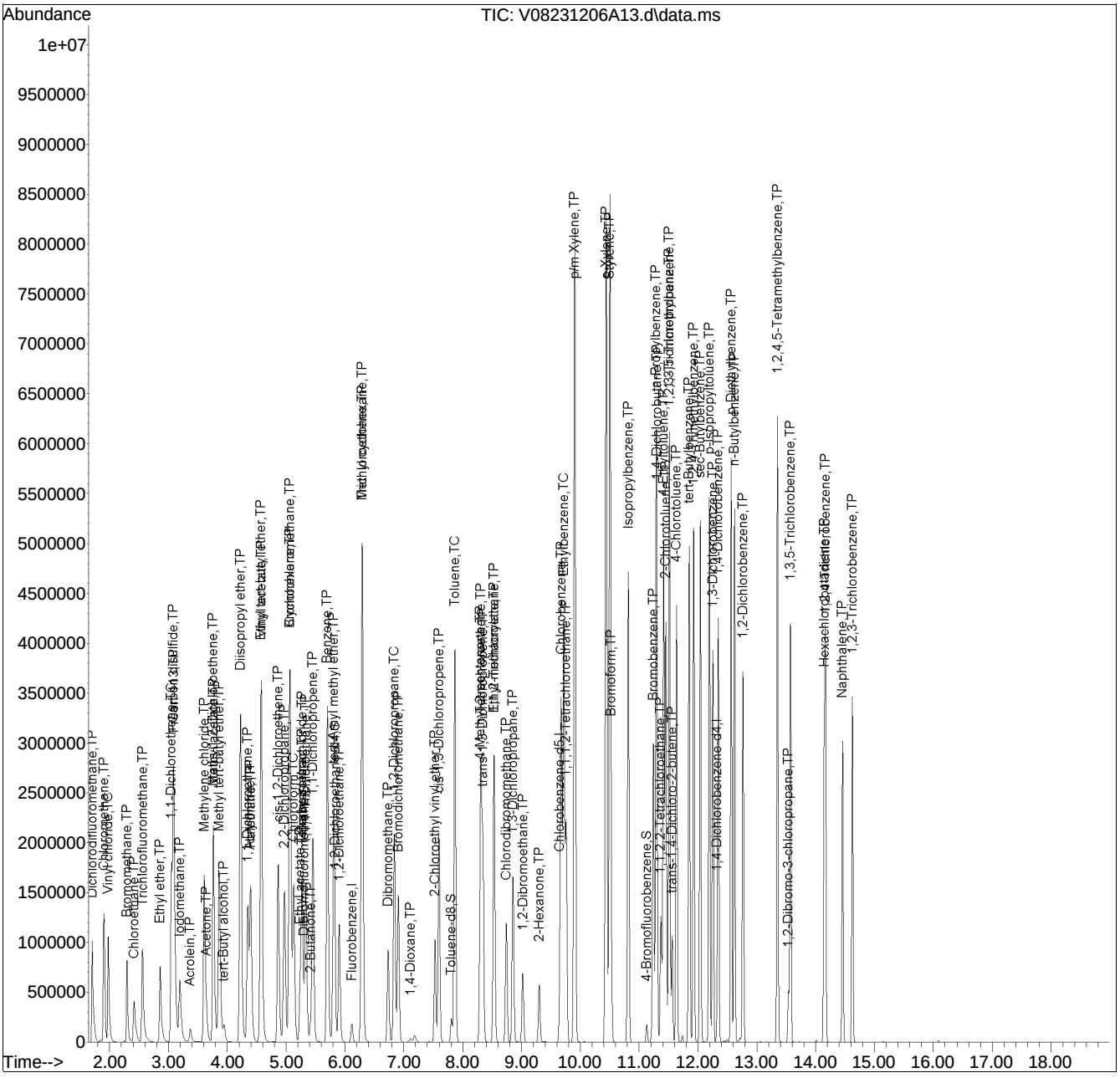
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\VOA108\2023\231206A-ICAL\
Data File : V08231206A13.d
Acq On : 6 Dec 2023 3:04 pm
Operator : VOA108:LAC
Sample : I8260STD200PPB
Misc : WG1860686
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Dec 06 16:17:33 2023
Quant Method : K:\VOA108\2023\231206A-ICAL\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 15:51:11 2023
Response via : Initial Calibration

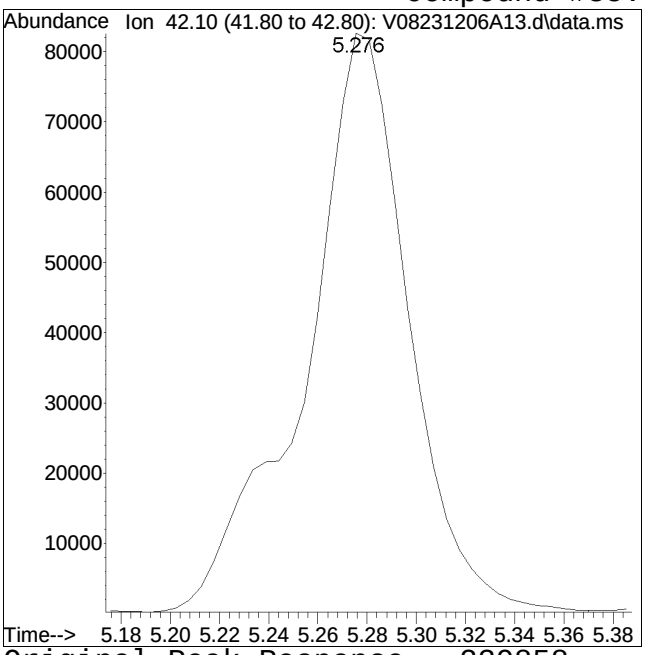
Sub List : 8260-Curve - Megamix plus DioxL\V08231206A09.d•



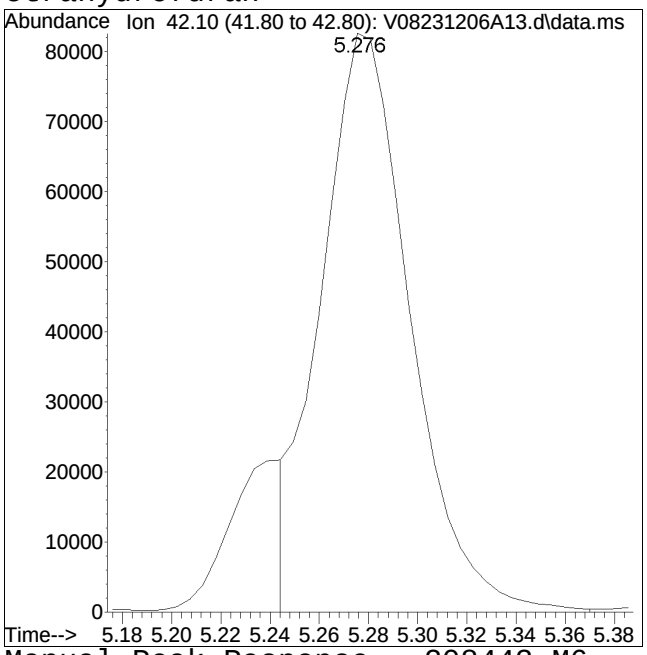
Manual Integration Report

Data Path : K:\VOA108\2023\231206A-ICAQMethod : V108_231206A_8260.m
Data File : V08231206A13.d Operator : VOA108:LAC
Date Inj'd : 12/6/2023 3:04 pm Instrument : VOA 108
Sample : I8260STD200PPB Quant Date : 12/6/2023 3:53 pm

Compound #35: Tetrahydrofuran



Original Peak Response = 239858



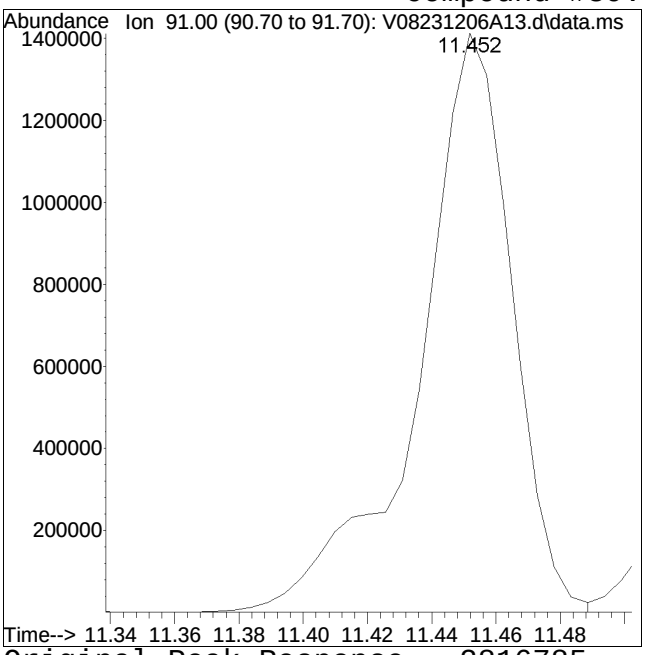
Manual Peak Response = 208443 M6

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

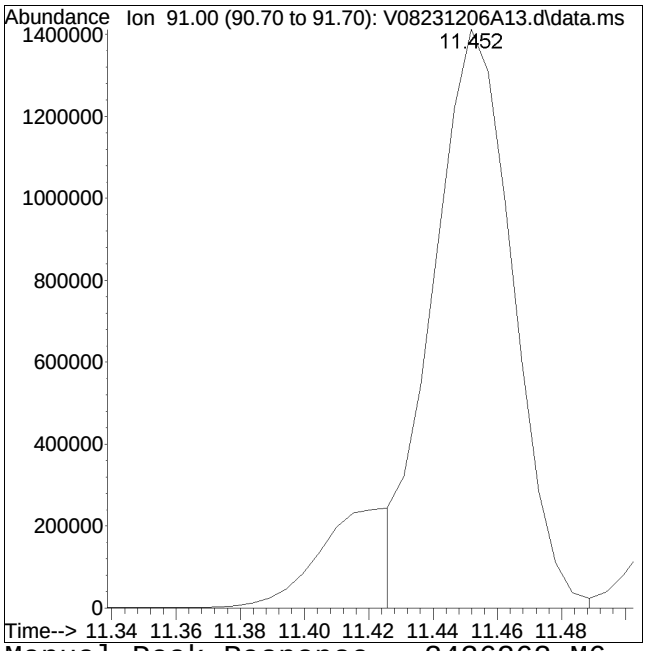
Manual Integration Report

Data Path : K:\VOA108\2023\231206A-ICAQMethod : V108_231206A_8260.m
Data File : V08231206A13.d Operator : VOA108:LAC
Date Inj'd : 12/6/2023 3:04 pm Instrument : VOA 108
Sample : I8260STD200PPB Quant Date : 12/6/2023 3:53 pm

Compound #89: 2-Chlorotoluene



Original Peak Response = 2816785



Manual Peak Response = 2436262 M6

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

Evaluate Continuing Calibration Report

Data Path : K:\VOA108\2023\231206A-ICAL\
Data File : V08231206A19.d
Acq On : 6 Dec 2023 5:18 pm
Operator : VOA108:LAC
Sample : C8260STD10PPB
Misc : WG1860686
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Dec 06 17:52:57 2023
Quant Method : K:\VOA108\2023\231206A-ICAL\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 17:09:55 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	110	0.00
2	TP	Dichlorodifluoromethane	0.280	0.271	3.2	103	0.00
3	TP	Chloromethane	0.464	0.483	-4.1	110	0.00
4	TC	Vinyl chloride	* 10.000	9.246	7.5	109	0.00
5	TP	Bromomethane	* 10.000	9.618	3.8	114	0.00
6	TP	Chloroethane	0.141	0.143	-1.4	108	0.00
7	TP	Trichlorofluoromethane	0.262	0.271	-3.4	109	0.00
8	TP	Ethyl ether	0.074	0.102	-37.8#	146	0.00
10	TC	1,1-Dichloroethene	0.184	0.177	3.8	103	0.00
11	TP	Carbon disulfide	0.681	0.486	28.6#	78	0.00
12	TP	Freon-113	0.190	0.193	-1.6	107	0.00
13	TP	Iodomethane	* 10.000	7.229	27.7#	89	0.00
14	TP	Acrolein	0.033	0.030	9.1	100	0.00
15	TP	Methylene chloride	0.214	0.218	-1.9	110	0.00
17	TP	Acetone	0.054	0.047	13.0	93	0.00
18	TP	trans-1,2-Dichloroethene	0.206	0.209	-1.5	108	0.00
19	TP	Methyl acetate	0.144	0.159	-10.4	119	0.00
20	TP	Methyl tert-butyl ether	0.502	0.561	-11.8	124	0.00
21	TP	tert-Butyl alcohol	0.011	0.015	-36.4#	171	0.00
22	TP	Diisopropyl ether	1.087	1.203	-10.7	120	0.00
23	TP	1,1-Dichloroethane	0.476	0.492	-3.4	110	0.00
24	TP	Halothane	0.153	0.175	-14.4	122	0.00
25	TP	Acrylonitrile	0.063	0.080	-27.0#	132	0.00
26	TP	Ethyl tert-butyl ether	0.822	0.934	-13.6	124	0.00
27	TP	Vinyl acetate	0.585	0.534	8.7	102	0.00
28	TP	cis-1,2-Dichloroethene	0.228	0.238	-4.4	111	0.00
29	TP	2,2-Dichloropropane	0.329	0.309	6.1	100	0.00
30	TP	Bromochloromethane	0.097	0.107	-10.3	115	0.00
31	TP	Cyclohexane	0.510	0.506	0.8	105	0.00
32	TC	Chloroform	0.385	0.420	-9.1	118	0.00
33	TP	Ethyl acetate	0.208	0.236	-13.5	128	0.00
34	TP	Carbon tetrachloride	0.282	0.299	-6.0	107	0.00
35	TP	Tetrahydrofuran	0.056	0.074	-32.1#	155	0.00
36	S	Dibromofluoromethane	0.257	0.252	1.9	108	0.00
37	TP	1,1,1-Trichloroethane	0.331	0.343	-3.6	111	0.00
39	TP	2-Butanone	0.085	0.077	9.4	100	0.00
40	TP	1,1-Dichloropropene	0.292	0.300	-2.7	110	0.00
41	TP	Benzene	0.816	0.886	-8.6	114	0.00
42	TP	tert-Amyl methyl ether	0.533	0.624	-17.1	130	0.00

Data Path : K:\VOA108\2023\231206A-ICAL\
Data File : V08231206A19.d
Acq On : 6 Dec 2023 5:18 pm
Operator : VOA108:LAC
Sample : C8260STD10PPB
Misc : WG1860686
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Dec 06 17:52:57 2023
Quant Method : K:\VOA108\2023\231206A-ICAL\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 17:09:55 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)
43	S	1,2-Dichloroethane-d4	0.316	0.309	2.2	104	0.00
44	TP	1,2-Dichloroethane	0.306	0.328	-7.2	115	0.00
47	TP	Methyl cyclohexane	0.343	0.345	-0.6	107	0.00
48	TP	Trichloroethene	0.209	0.235	-12.4	115	0.00
50	TP	Dibromomethane	0.112	0.129	-15.2	124	0.00
51	TC	1,2-Dichloropropane	0.269	0.298	-10.8	120	0.00
53	TP	2-Chloroethyl vinyl ether	0.128	0.115	10.2	106	0.00
54	TP	Bromodichloromethane	0.292	0.322	-10.3	120	0.00
57	TP	1,4-Dioxane	0.00068	0.00089#	-30.9#	147	0.00
58	TP	cis-1,3-Dichloropropene	0.330	0.394	-19.4	126	0.00
59	I	Chlorobenzene-d5	1.000	1.000	0.0	109	0.00
60	S	Toluene-d8	1.298	1.302	-0.3	109	0.00
61	TC	Toluene	0.697	0.776	-11.3	121	0.00
62	TP	4-Methyl-2-pentanone	* 10.000	8.576	14.2	105	0.00
63	TP	Tetrachloroethene	0.287	0.309	-7.7	114	0.00
65	TP	trans-1,3-Dichloropropene	0.390	0.466	-19.5	127	0.00
67	TP	Ethyl methacrylate	0.251	0.413	-64.5#	184	0.00
68	TP	1,1,2-Trichloroethane	0.180	0.211	-17.2	124	0.00
69	TP	Chlorodibromomethane	0.261	0.305	-16.9	131	0.00
70	TP	1,3-Dichloropropane	0.382	0.448	-17.3	126	0.00
71	TP	1,2-Dibromoethane	0.205	0.234	-14.1	124	0.00
72	TP	2-Hexanone	0.161	0.148	8.1	101	0.00
73	TP	Chlorobenzene	0.763	0.880	-15.3	125	0.00
74	TC	Ethylbenzene	1.313	1.508	-14.9	123	0.00
75	TP	1,1,1,2-Tetrachloroethane	0.280	0.324	-15.7	124	0.00
76	TP	p/m Xylene	0.491	0.576	-17.3	123	0.00
77	TP	o Xylene	0.477	0.635	-33.1#	138	0.00
78	TP	Styrene	0.775	1.062	-37.0#	142	0.00
79	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	107	0.00
80	TP	Bromoform	0.286	0.326	-14.0	127	0.00
82	TP	Isopropylbenzene	2.442	2.572	-5.3	113	0.00
83	S	4-Bromofluorobenzene	0.944	0.932	1.3	107	0.00
84	TP	Bromobenzene	0.602	0.688	-14.3	124	0.00
85	TP	n-Propylbenzene	2.939	3.291	-12.0	120	0.00
86	TP	1,4-Dichlorobutane	0.934	1.480	-58.5#	174	0.00
87	TP	1,1,2,2-Tetrachloroethane	0.481	0.528	-9.8	123	0.00
88	TP	4-Ethyltoluene	2.424	3.110	-28.3#	137	0.00

Evaluate Continuing Calibration Report

Data Path : K:\VOA108\2023\231206A-ICAL\
Data File : V08231206A19.d
Acq On : 6 Dec 2023 5:18 pm
Operator : VOA108:LAC
Sample : C8260STD10PPB
Misc : WG1860686
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Dec 06 17:52:57 2023
Quant Method : K:\VOA108\2023\231206A-ICAL\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 17:09:55 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)
89 TP	2-Chlorotoluene	1.792	2.055	-14.7	123	0.00
90 TP	1,3,5-Trimethylbenzene	2.108	2.310	-9.6	117	0.00
91 TP	1,2,3-Trichloropropane	0.376	0.429	-14.1	127	0.00
92 TP	trans-1,4-Dichloro-2-butene	0.183	0.271	-48.1#	161	0.00
93 TP	4-Chlorotoluene	1.868	2.120	-13.5	123	0.00
94 TP	tert-Butylbenzene	1.765	1.990	-12.7	120	0.00
97 TP	1,2,4-Trimethylbenzene	2.065	2.370	-14.8	123	0.00
98 TP	sec-Butylbenzene	2.611	2.873	-10.0	117	0.00
99 TP	p-Isopropyltoluene	2.218	2.488	-12.2	119	0.00
100 TP	1,3-Dichlorobenzene	1.161	1.336	-15.1	124	0.00
101 TP	1,4-Dichlorobenzene	1.172	1.335	-13.9	125	0.00
102 TP	p-Diethylbenzene	1.335	1.586	-18.8	128	0.00
103 TP	n-Butylbenzene	1.986	2.274	-14.5	122	0.00
104 TP	1,2-Dichlorobenzene	1.081	1.215	-12.4	121	0.00
105 TP	1,2,4,5-Tetramethylbenzene	2.096	2.632	-25.6#	133	0.00
106 TP	1,2-Dibromo-3-chloropropane *	10.000	11.016	-10.2	137	0.00
107 TP	1,3,5-Trichlorobenzene	0.876	1.033	-17.9	128	0.00
108 TP	Hexachlorobutadiene	0.354	0.362	-2.3	110	0.00
109 TP	1,2,4-Trichlorobenzene	0.750	0.823	-9.7	123	0.00
110 TP	Naphthalene	1.346	1.493	-10.9	125	0.00
111 TP	1,2,3-Trichlorobenzene	0.653	0.723	-10.7	122	0.00

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 1 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : K:\VOA108\2023\231206A-ICAL\
Data File : V08231206A19.d
Acq On : 6 Dec 2023 5:18 pm
Operator : VOA108:LAC
Sample : C8260STD10PPB
Misc : WG1860686
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Dec 06 17:52:57 2023
Quant Method : K:\VOA108\2023\231206A-ICAL\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 17:09:55 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA108\2023\231206A-ICAL\V08231206A09.d
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	6.120	96	185885	10.000 ug/L	0.00
Standard Area 1 = 168549			Recovery = 110.29%		
59) Chlorobenzene-d5	9.648	117	135571	10.000 ug/L	0.00
Standard Area 1 = 124890			Recovery = 108.55%		
79) 1,4-Dichlorobenzene-d4	12.327	152	70326	10.000 ug/L	0.00
Standard Area 1 = 65924			Recovery = 106.68%		
System Monitoring Compounds					
36) Dibromofluoromethane	5.307	113	46878	9.825 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 98.25%		
43) 1,2-Dichloroethane-d4	5.831	65	57449	9.778 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 97.78%		
60) Toluene-d8	7.808	98	176493	10.032 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.32%		
83) 4-Bromofluorobenzene	11.127	95	65555	9.878 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 98.78%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.705	85	50448	9.701 ug/L	98
3) Chloromethane	1.904	50	89785	10.418 ug/L	98
4) Vinyl chloride	1.978	62	51974	9.246 ug/L	97
5) Bromomethane	2.298	94	19597	9.618 ug/L	99
6) Chloroethane	2.418	64	26548	10.165 ug/L	99
7) Trichlorofluoromethane	2.560	101	50362	10.356 ug/L	97
8) Ethyl ether	2.864	74	18911	13.703 ug/L	91
10) 1,1-Dichloroethene	3.053	96	32940	9.655 ug/L	88
11) Carbon disulfide	3.079	76	90358	7.138 ug/L	96
12) Freon-113	3.094	101	35868	10.155 ug/L	100
13) Iodomethane	3.194	142	28887	7.229 ug/L	86
14) Acrolein	3.367	56	5526	8.958 ug/L	90
15) Methylene chloride	3.608	84	40585	10.220 ug/L	90
17) Acetone	3.645	43	8668	8.712 ug/L	94
18) trans-1,2-Dichloroethene	3.760	96	38831	10.149 ug/L	97
19) Methyl acetate	3.771	43	29624	11.036 ug/L #	88
20) Methyl tert-butyl ether	3.865	73	104194	11.168 ug/L	93
21) tert-Butyl alcohol	3.944	59	14058	71.237 ug/L #	62
22) Diisopropyl ether	4.227	45	223637	11.065 ug/L	99
23) 1,1-Dichloroethane	4.348	63	91536	10.348 ug/L	98
24) Halothane	4.400	117	32509	11.466 ug/L	99

Data Path : K:\VOA108\2023\231206A-ICAL\
Data File : V08231206A19.d
Acq On : 6 Dec 2023 5:18 pm
Operator : VOA108:LAC
Sample : C8260STD10PPB
Misc : WG1860686
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Dec 06 17:52:57 2023
Quant Method : K:\VOA108\2023\231206A-ICAL\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 17:09:55 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA108\2023\231206A-ICAL\V08231206A09.d
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) Acrylonitrile	4.384	53	14928	12.697	ug/L	#	89
26) Ethyl tert-butyl ether	4.573	59	173569	11.360	ug/L		97
27) Vinyl acetate	4.578	43	99324	9.127	ug/L		97
28) cis-1,2-Dichloroethene	4.867	96	44274	10.442	ug/L		89
29) 2,2-Dichloropropane	4.966	77	57425	9.399	ug/L		90
30) Bromochloromethane	5.055	128	19808	11.001	ug/L		93
31) Cyclohexane	5.066	56	94138	9.927	ug/L		96
32) Chloroform	5.129	83	78150	10.924	ug/L		97
33) Ethyl acetate	5.234	43	43958	11.392	ug/L	#	95
34) Carbon tetrachloride	5.270	117	55663	10.601	ug/L		99
35) Tetrahydrofuran	5.281	42	13791M6	13.261	ug/L		
37) 1,1,1-Trichloroethane	5.333	97	63799	10.376	ug/L	#	96
39) 2-Butanone	5.417	43	14251	9.023	ug/L		99
40) 1,1-Dichloropropene	5.454	75	55836	10.286	ug/L		97
41) Benzene	5.700	78	164641	10.851	ug/L		98
42) tert-Amyl methyl ether	5.810	73	115969	11.704	ug/L		96
44) 1,2-Dichloroethane	5.899	62	61005	10.728	ug/L		98
47) Methyl cyclohexane	6.293	83	64217	10.062	ug/L		96
48) Trichloroethene	6.293	95	43729	11.249	ug/L		96
50) Dibromomethane	6.728	93	23893	11.513	ug/L		98
51) 1,2-Dichloropropane	6.838	63	55304	11.072	ug/L	#	92
53) 2-Chloroethyl vinyl ether	7.530	63	21439	9.026	ug/L		92
54) Bromodichloromethane	6.906	83	59813	11.024	ug/L		98
57) 1,4-Dioxane	7.111	88	8251	655.698	ug/L		94
58) cis-1,3-Dichloropropene	7.598	75	73211	11.926	ug/L		99
61) Toluene	7.866	92	105270	11.134	ug/L		96
62) 4-Methyl-2-pentanone	8.301	58	11266	8.576	ug/L		87
63) Tetrachloroethene	8.311	166	41862	10.751	ug/L		91
65) trans-1,3-Dichloropropene	8.343	75	63123	11.953	ug/L		97
67) Ethyl methacrylate	8.531	69	56030	16.466	ug/L	#	58
68) 1,1,2-Trichloroethane	8.526	83	28610	11.730	ug/L		95
69) Chlorodibromomethane	8.741	129	41415	11.717	ug/L		96
70) 1,3-Dichloropropane	8.851	76	60722	11.710	ug/L		99
71) 1,2-Dibromoethane	9.019	107	31773	11.437	ug/L		99
72) 2-Hexanone	9.302	43	20084	9.180	ug/L	#	94
73) Chlorobenzene	9.669	112	119235	11.524	ug/L		94
74) Ethylbenzene	9.711	91	204377	11.482	ug/L		99
75) 1,1,1,2-Tetrachloroethane	9.753	131	43885	11.548	ug/L		94
76) p/m Xylene	9.900	106	156294	23.457	ug/L		98
77) o Xylene	10.435	106	172193	26.605	ug/L		93

Quantitation Report (QT Reviewed)

Data Path : K:\VOA108\2023\231206A-ICAL\
Data File : V08231206A19.d
Acq On : 6 Dec 2023 5:18 pm
Operator : VOA108:LAC
Sample : C8260STD10PPB
Misc : WG1860686
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Dec 06 17:52:57 2023
Quant Method : K:\VOA108\2023\231206A-ICAL\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 17:09:55 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA108\2023\231206A-ICAL\V08231206A09.d
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
78) Styrene	10.498	104	288088	27.430	ug/L		92
80) Bromoform	10.513	173	22941	11.416	ug/L		97
82) Isopropylbenzene	10.812	105	180875	10.534	ug/L		98
84) Bromobenzene	11.237	156	48415	11.440	ug/L		98
85) n-Propylbenzene	11.284	91	231467	11.200	ug/L		97
86) 1,4-Dichlorobutane	11.300	55	104049	15.842	ug/L	#	89
87) 1,1,2,2-Tetrachloroethane	11.363	83	37158	10.976	ug/L		99
88) 4-Ethyltoluene	11.410	105	218708	12.832	ug/L		98
89) 2-Chlorotoluene	11.447	91	144493M6	11.468	ug/L		
90) 1,3,5-Trimethylbenzene	11.510	105	162420	10.956	ug/L		92
91) 1,2,3-Trichloropropane	11.504	75	30166	11.405	ug/L		95
92) trans-1,4-Dichloro-2-b...	11.557	53	19077	14.859	ug/L	#	89
93) 4-Chlorotoluene	11.630	91	149072	11.347	ug/L		96
94) tert-Butylbenzene	11.850	119	139916	11.274	ug/L		96
97) 1,2,4-Trimethylbenzene	11.924	105	166640	11.472	ug/L		95
98) sec-Butylbenzene	12.034	105	202046	11.004	ug/L		97
99) p-Isopropyltoluene	12.191	119	174962	11.218	ug/L		96
100) 1,3-Dichlorobenzene	12.249	146	93926	11.499	ug/L		99
101) 1,4-Dichlorobenzene	12.343	146	93892	11.387	ug/L		99
102) p-Diethylbenzene	12.558	119	111541	11.877	ug/L		95
103) n-Butylbenzene	12.616	91	159950	11.453	ug/L		99
104) 1,2-Dichlorobenzene	12.763	146	85415	11.238	ug/L		99
105) 1,2,4,5-Tetramethylben...	13.350	119	185065	12.557	ug/L		98
106) 1,2-Dibromo-3-chloropr...	13.539	155	5396	11.016	ug/L		94
107) 1,3,5-Trichlorobenzene	13.570	180	72632	11.787	ug/L		94
108) Hexachlorobutadiene	14.142	225	25489	10.247	ug/L		98
109) 1,2,4-Trichlorobenzene	14.163	180	57846	10.968	ug/L		99
110) Naphthalene	14.456	128	104973	11.092	ug/L		100
111) 1,2,3-Trichlorobenzene	14.624	180	50872	11.085	ug/L		100

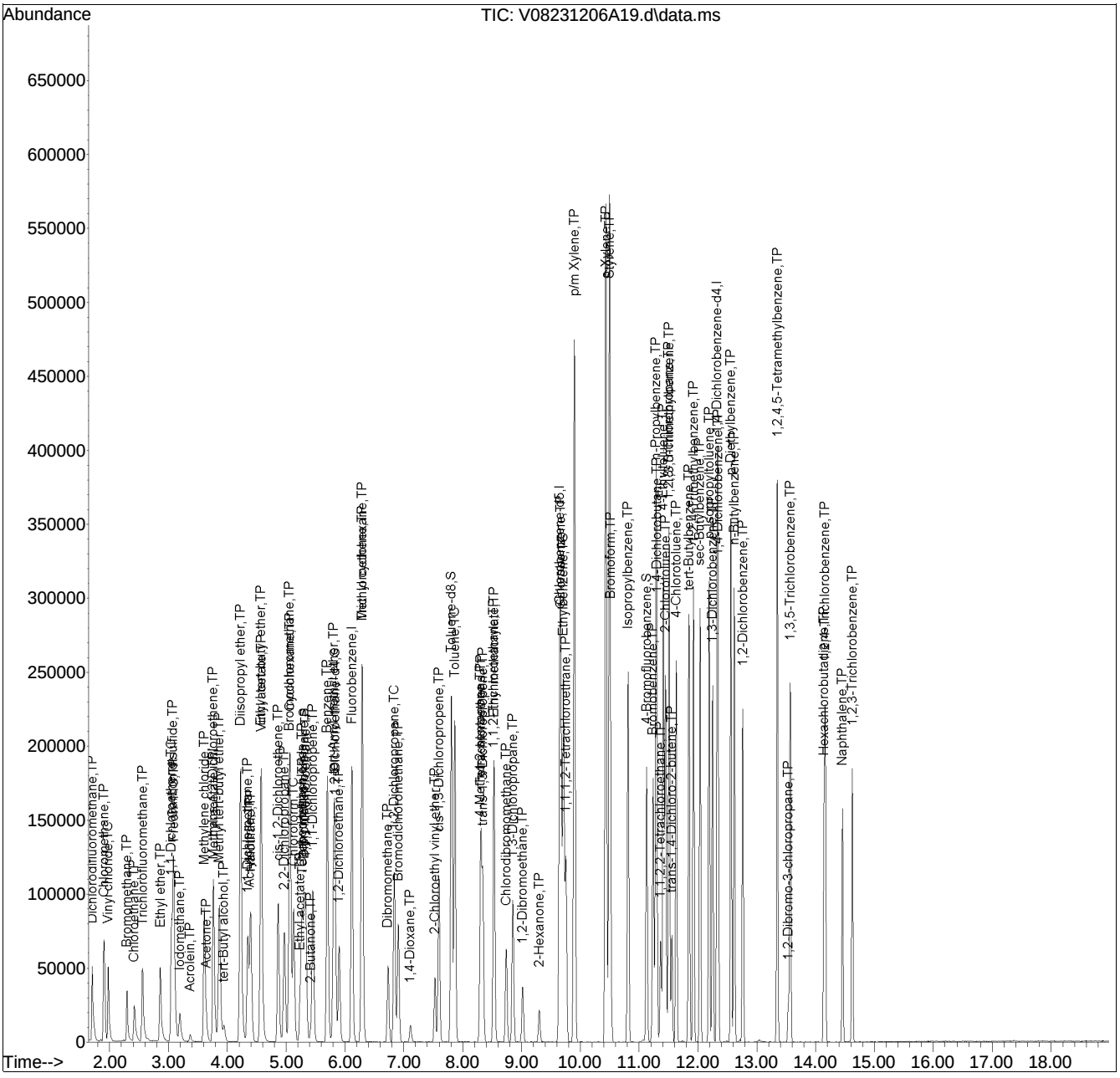
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\VOA108\2023\231206A-ICAL\
Data File : V08231206A19.d
Acq On : 6 Dec 2023 5:18 pm
Operator : VOA108:LAC
Sample : C8260STD10PPB
Misc : WG1860686
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Dec 06 17:52:57 2023
Quant Method : K:\VOA108\2023\231206A-ICAL\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 17:09:55 2023
Response via : Initial Calibration

Sub List : 8260-Curve - Megamix plus DioxL\V08231206A09.d•

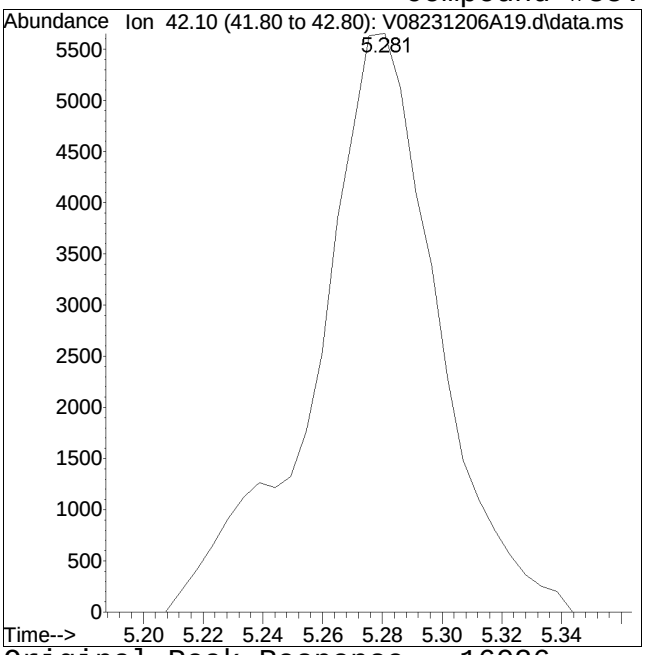


Manual Integration Report

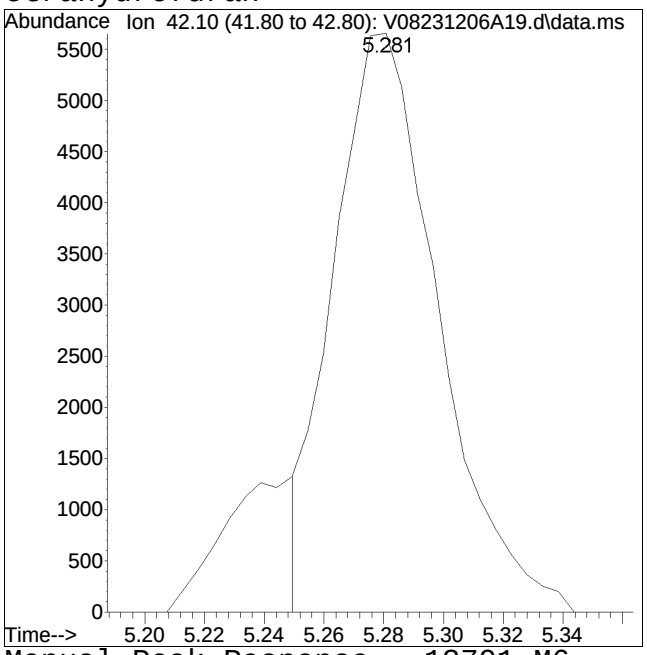
Data Path : K:\VOA108\2023\231206A-ICAQ
Data File : V08231206A19.d
Date Inj'd : 12/6/2023 5:18 pm
Sample : C8260STD10PPB

Method : V108_231206A_8260.m
Operator : VOA108:LAC
Instrument : VOA 108
Quant Date : 12/6/2023 5:52 pm

Compound #35: Tetrahydrofuran



Original Peak Response = 16026



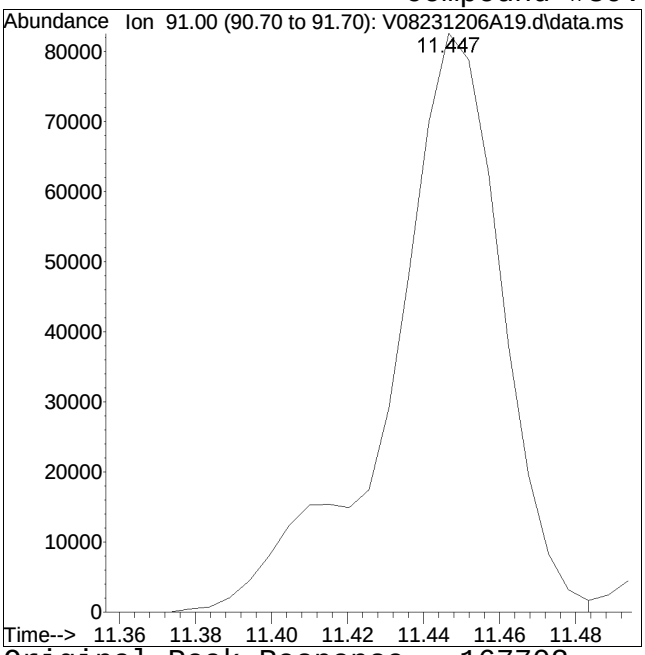
Manual Peak Response = 13791 M6

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

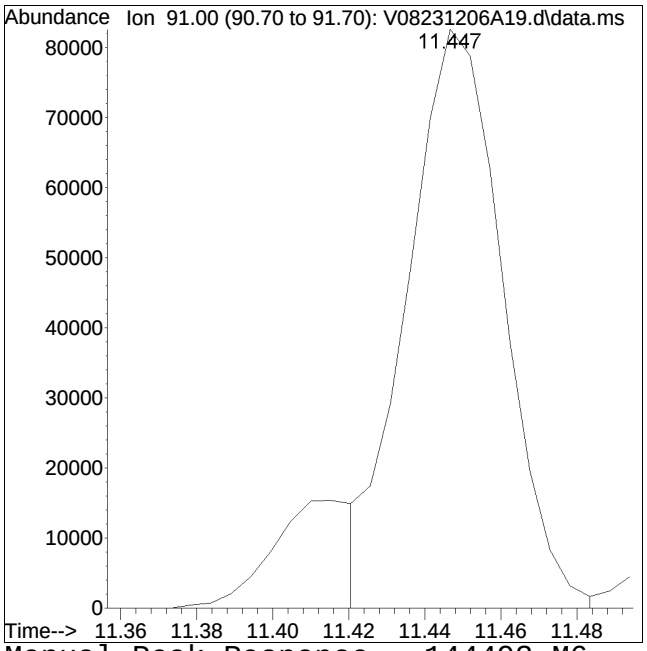
Manual Integration Report

Data Path : K:\VOA108\2023\231206A-ICAQMethod : V108_231206A_8260.m
Data File : V08231206A19.d Operator : VOA108:LAC
Date Inj'd : 12/6/2023 5:18 pm Instrument : VOA 108
Sample : C8260STD10PPB Quant Date : 12/6/2023 5:52 pm

Compound #89: 2-Chlorotoluene



Original Peak Response = 167702



Manual Peak Response = 144493 M6

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

Evaluate Relative Error Report VOA 108

Method Path : K:\VOA108\2023\231206A-ICAL\
Method File : V108_231206A_8260.m
Title : VOLATILES BY GC/MS
Last Update : Wed Dec 06 17:09:55 2023

	COMPOUND	CalFit	Units	TrueMid	MidConc	%RE	TrueLow	LowConc	%RE
4	TC Vinyl chloride	L	ug/L	10.0	9.353	-6.5	0.19	0.220	15.8
5	TP Bromomethane	Q	ug/L	10.0	9.355	-6.4	0.50	0.568	13.6
13	TP Iodomethane	L	ug/L	10.0	8.594	-14.1	2.00	2.455	22.8
62	TP 4-Methyl-2-pentanone	L	ug/L	10.0	8.840	-11.6	0.50	0.650	30.0
106	TP 1,2-Dibromo-3-chloropropane	L	ug/L	10.0	8.711	-12.9	0.50	0.603	20.6

Calibration Correlation Report

	COMPOUND	CalFit	CoefOfDet	QuadTerm	LinTerm	Constant
4	TC Vinyl chloride	Linear	0.997017	0.000000	0.306744	-0.004005
5	TP Bromomethane	Quadratic	0.998835	0.001205	0.111884	-0.00330217
13	TP Iodomethane	Linear	0.997001	0.000000	0.267885	-0.0382577
62	TP 4-Methyl-2-pentanone	Linear	0.998172	0.000000	0.10146	-0.00390659
106	TP 1,2-Dibromo-3-chloropropane	Linear	0.998113	0.000000	0.0729133	-0.00359428

Response Factor Report VOA 101

Method Path : K:\VOA101\2023\231215AICAL\
Method File : V101_231215A_8260.m
Title : VOLATILES BY GC/MS
Last Update : Sat Dec 16 10:14:14 2023
Response Via : Initial Calibration

Calibration Files
L11 =V01231215A03.D L1 =V01231215A04.D L2 =V01231215A06.D L3 =V01231215A08.D L4 =V01231215A09.D
L6 =V01231215A10.D L8 =V01231215A11.D L10 =V01231215A12.D

		Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
1)	I	Fluorobenzene	----------ISTD----------									
2)	TP	Dichlorodifluo...		0.221	0.310	0.271	0.260	0.298	0.292	0.303	0.279	11.16
3)	TP	Chloromethane		0.333	0.378	0.365	0.352	0.367	0.359	0.376	0.361	4.28
4)	TC	Vinyl chloride	0.274	0.273	0.354	0.324	0.316	0.340	0.332	0.347	0.320	9.76
5)	TP	Bromomethane		0.123	0.149	0.146	0.149	0.166	0.170	0.188	0.156	13.37
6)	TP	Chloroethane		0.217	0.209	0.195	0.188	0.189	0.176	0.171	0.192	8.59
7)	TP	Trichlorofluor...		0.273	0.374	0.337	0.325	0.371	0.358	0.367	0.343	10.56
8)	TP	Ethyl ether		0.120	0.106	0.110	0.104	0.107	0.104	0.103	0.108	5.51
10)	TC	1,1-Dichloroet...		0.202	0.235	0.213	0.208	0.225	0.221	0.230	0.219	5.51
11)	TP	Carbon disulfide		0.615	0.712	0.669	0.647	0.689	0.685	0.718	0.676	5.39
12)	TP	Freon-113		0.164	0.254	0.224	0.220	0.252	0.244	0.248	0.229	13.80
13)	TP	Iodomethane		0.212	0.278	0.344	0.363	0.373	0.349	0.353	0.325	18.02
14)	TP	Acrolein		0.042	0.033	0.035	0.032	0.035	0.033	0.034	0.035	9.73
15)	TP	Methylene chlo...		0.247	0.244	0.242	0.231	0.237	0.231	0.238	0.239	2.56
17)	TP	Acetone			0.053	0.050	0.044	0.047	0.046	0.046	0.048	6.93
18)	TP	trans-1,2-Dich...		0.221	0.253	0.247	0.244	0.252	0.246	0.260	0.246	5.01
19)	TP	Methyl acetate		0.120	0.123	0.129	0.123	0.133	0.128	0.124	0.126	3.62
20)	TP	Methyl tert-bu...		0.545	0.565	0.572	0.545	0.577	0.563	0.565	0.562	2.18
21)	TP	tert-Butyl alc...		0.012	0.015	0.016	0.016	0.017	0.017	0.017	0.016	10.00
22)	TP	Diisopropyl ether		0.895	0.931	0.939	0.918	0.949	0.927	0.947	0.929	2.02
23)	TP	1,1-Dichloroet...		0.445	0.510	0.490	0.480	0.494	0.479	0.502	0.486	4.37
24)	TP	Halothane		0.165	0.192	0.188	0.184	0.199	0.196	0.205	0.190	6.79
25)	TP	Acrylonitrile		0.050	0.057	0.061	0.057	0.063	0.062	0.062	0.059	7.88
26)	TP	Ethyl tert-but...		0.740	0.776	0.790	0.771	0.803	0.785	0.800	0.781	2.74
27)	TP	Vinyl acetate		0.481	0.499	0.497	0.451	0.455	0.455	0.447	0.469	4.81
28)	TP	cis-1,2-Dichlo...		0.246	0.283	0.280	0.272	0.277	0.270	0.282	0.273	4.73
29)	TP	2,2-Dichloropr...		0.331	0.392	0.369	0.361	0.379	0.361	0.371	0.366	5.21
30)	TP	Bromochloromet...		0.122	0.125	0.126	0.122	0.124	0.118	0.117	0.122	2.76
31)	TP	Cyclohexane		0.353	0.522	0.476	0.474	0.550	0.538	0.566	0.497	14.64
32)	TC	Chloroform		0.409	0.428	0.431	0.424	0.432	0.422	0.436	0.426	2.11
33)	TP	Ethyl acetate		0.163	0.194	0.194	0.184	0.198	0.192	0.190	0.188	6.32

Response Factor Report VOA 101

Method Path : K:\VOA101\2023\231215AICAL\
Method File : V101_231215A_8260.m
Title : VOLATILES BY GC/MS
Last Update : Sat Dec 16 10:14:14 2023
Response Via : Initial Calibration

Calibration Files
L11 =V01231215A03.D L1 =V01231215A04.D L2 =V01231215A06.D L3 =V01231215A08.D L4 =V01231215A09.D
L6 =V01231215A10.D L8 =V01231215A11.D L10 =V01231215A12.D

		Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
34)	TP	Carbon tetrach...	0.284	0.264	0.358	0.333	0.329	0.366	0.358	0.375	0.333	11.97
35)	TP	Tetrahydrofuran		0.075	0.059	0.054	0.051	0.052	0.050	0.050	0.056	16.00
36)	S	Dibromofluorom...	0.253	0.253	0.253	0.255	0.258	0.257	0.258	0.257	0.256	0.93
37)	TP	1,1,1-Trichlor...		0.329	0.407	0.383	0.378	0.402	0.391	0.406	0.385	7.07
39)	TP	2-Butanone			0.070	0.075	0.073	0.081	0.078	0.079	0.076	5.27
40)	TP	1,1-Dichloropr...		0.270	0.350	0.336	0.328	0.359	0.348	0.363	0.336	9.41
41)	TP	Benzene	0.878	0.877	0.992	0.981	0.959	0.981	0.951	0.986	0.951	4.96
42)	TP	tert-Amyl meth...		0.576	0.610	0.625	0.606	0.638	0.620	0.628	0.615	3.30
43)	S	1,2-Dichloroet...	0.286	0.284	0.285	0.285	0.285	0.296	0.294	0.300	0.289	2.16
44)	TP	1,2-Dichloroet...		0.305	0.329	0.326	0.312	0.324	0.313	0.316	0.318	2.74
47)	TP	Methyl cyclohe...		0.272	0.435	0.404	0.403	0.467	0.462	0.491	0.419	17.37
48)	TP	Trichloroethene	0.256	0.249	0.274	0.266	0.262	0.277	0.269	0.286	0.267	4.42
50)	TP	Dibromomethane		0.126	0.133	0.136	0.132	0.140	0.137	0.139	0.135	3.64
51)	TC	1,2-Dichloropr...		0.234	0.267	0.272	0.264	0.271	0.265	0.274	0.264	5.12
53)	TP	2-Chloroethyl ...			0.063	0.079	0.068	0.078	0.079	0.081	0.075	9.83
54)	TP	Bromodichlorom...		0.286	0.324	0.332	0.322	0.334	0.326	0.337	0.323	5.35
57)	TP	1,4-Dioxane		0.001	0.001	0.002	0.002	0.002	0.002	0.002	0.002#	14.31
58)	TP	cis-1,3-Dichlo...		0.312	0.368	0.390	0.386	0.401	0.391	0.401	0.379	8.23
59)	I	Chlorobenzene-d5	----------ISTD----------									
60)	S	Toluene-d8	1.201	1.189	1.184	1.184	1.172	1.174	1.167	1.154	1.178	1.23
61)	TC	Toluene		0.686	0.749	0.757	0.735	0.751	0.728	0.759	0.738	3.46
62)	TP	4-Methyl-2-pen...		0.050	0.070	0.082	0.078	0.086	0.084	0.084	0.076	16.77
63)	TP	Tetrachloroethene		0.252	0.345	0.333	0.323	0.346	0.338	0.352	0.327	10.61
65)	TP	trans-1,3-Dich...		0.332	0.368	0.398	0.394	0.412	0.401	0.407	0.387	7.30
67)	TP	Ethyl methacry...		0.198	0.236	0.275	0.272	0.292	0.286	0.286	0.264	13.02
68)	TP	1,1,2-Trichlor...		0.180	0.186	0.195	0.186	0.193	0.187	0.189	0.188#	2.56
69)	TP	Chlorodibromom...		0.240	0.267	0.281	0.270	0.286	0.281	0.287	0.273	6.02
70)	TP	1,3-Dichloropr...		0.326	0.379	0.389	0.372	0.384	0.372	0.374	0.371	5.59
71)	TP	1,2-Dibromoethane		0.202	0.219	0.232	0.222	0.235	0.228	0.229	0.224	4.99
72)	TP	2-Hexanone			0.123	0.142	0.140	0.153	0.151	0.148	0.143	7.64
73)	TP	Chlorobenzene		0.781	0.851	0.859	0.830	0.849	0.830	0.857	0.837	3.25

Method Path : K:\VOA101\2023\231215AICAL\
Method File : V101_231215A_8260.m
Title : VOLATILES BY GC/MS
Last Update : Sat Dec 16 10:14:14 2023
Response Via : Initial Calibration

Calibration Files
L11 =V01231215A03.D L1 =V01231215A04.D L2 =V01231215A06.D L3 =V01231215A08.D L4 =V01231215A09.D
L6 =V01231215A10.D L8 =V01231215A11.D L10 =V01231215A12.D

		Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
74)	TC	Ethylbenzene		1.158	1.431	1.473	1.437	1.489	1.446	1.499	1.419	8.31
75)	TP	1,1,1,2-Tetrac...		0.260	0.305	0.311	0.301	0.311	0.306	0.314	0.301	6.14
76)	TP	p/m Xylene		0.456	0.555	0.571	0.561	0.583	0.569	0.584	0.554	8.05
77)	TP	o Xylene		0.465	0.543	0.559	0.542	0.558	0.546	0.559	0.539	6.17
78)	TP	Styrene		0.724	0.855	0.917	0.910	0.937	0.915	0.919	0.882	8.45
79)	I	1,4-Dichlorobenzene-d4	----------ISTD----------									
80)	TP	Bromoform		0.265	0.284	0.298	0.299	0.320	0.317	0.318	0.300	6.79
82)	TP	Isopropylbenzene		2.099	2.669	2.595	2.593	2.681	2.628	2.714	2.569	8.25
83)	S	4-Bromofluorob...	0.867	0.860	0.862	0.853	0.856	0.848	0.838	0.831	0.852	1.45
84)	TP	Bromobenzene		0.551	0.633	0.629	0.620	0.626	0.613	0.626	0.614	4.62
85)	TP	n-Propylbenzene		2.405	3.020	2.982	3.019	3.117	3.045	3.128	2.960	8.45
86)	TP	1,4-Dichlorobu...		0.697	0.729	0.741	0.716	0.749	0.737	0.739	0.730	2.44
87)	TP	1,1,2,2-Tetrac...		0.442	0.488	0.495	0.471	0.492	0.480	0.475	0.478	3.79
88)	TP	4-Ethyltoluene		2.018	2.535	2.519	2.554	2.623	2.569	2.661	2.497	8.68
89)	TP	2-Chlorotoluene		1.564	1.780	1.788	1.782	1.788	1.756	1.817	1.754	4.88
90)	TP	1,3,5-Trimethy...		1.682	2.108	2.116	2.135	2.191	2.172	2.255	2.094	9.01
91)	TP	1,2,3-Trichlor...		0.332	0.370	0.373	0.358	0.381	0.371	0.376	0.366	4.49
92)	TP	trans-1,4-Dich...		0.131	0.135	0.153	0.148	0.156	0.152	0.149	0.146	6.46
93)	TP	4-Chlorotoluene		1.537	1.752	1.838	1.828	1.849	1.810	1.869	1.783	6.44
94)	TP	tert-Butylbenzene		1.397	1.789	1.754	1.770	1.846	1.827	1.906	1.756	9.47
97)	TP	1,2,4-Trimethy...		1.665	2.049	2.074	2.084	2.117	2.088	2.178	2.037	8.29
98)	TP	sec-Butylbenzene		1.981	2.542	2.464	2.517	2.677	2.650	2.766	2.514	10.22
99)	TP	p-Isopropyltol...		1.643	2.126	2.121	2.169	2.280	2.277	2.378	2.142	11.16
100)	TP	1,3-Dichlorobe...		0.978	1.133	1.162	1.167	1.184	1.163	1.196	1.141	6.52
101)	TP	1,4-Dichlorobe...		1.077	1.173	1.165	1.168	1.179	1.163	1.197	1.160	3.31
102)	TP	p-Diethylbenzene		0.907	1.202	1.214	1.259	1.319	1.325	1.402	1.233	12.93
103)	TP	n-Butylbenzene		1.210	1.642	1.669	1.727	1.827	1.828	1.936	1.691	13.92
104)	TP	1,2-Dichlorobe...		0.909	1.046	1.063	1.053	1.070	1.055	1.077	1.039	5.61
105)	TP	1,2,4,5-Tetram...		1.377	1.649	1.722	1.781	1.850	1.884	1.931	1.742	10.77
106)	TP	1,2-Dibromo-3-...		0.053	0.063	0.068	0.066	0.073	0.072	0.072	0.067	10.86
107)	TP	1,3,5-Trichlor...		0.560	0.642	0.655	0.680	0.698	0.717	0.731	0.669	8.60

Method Path : K:\VOA101\2023\231215AICAL\
Method File : V101_231215A_8260.m
Title : VOLATILES BY GC/MS
Last Update : Sat Dec 16 10:14:14 2023
Response Via : Initial Calibration

Calibration Files
L11 =V01231215A03.D L1 =V01231215A04.D L2 =V01231215A06.D L3 =V01231215A08.D L4 =V01231215A09.D
L6 =V01231215A10.D L8 =V01231215A11.D L10 =V01231215A12.D

	Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
108)	TP Hexachlorobuta...	0.163	0.220	0.216	0.225	0.243	0.253	0.265	0.226	14.73	
109)	TP 1,2,4-Trichlor...	0.461	0.525	0.556	0.566	0.594	0.606	0.604	0.559	9.29	
110)	TP Naphthalene	0.940	1.097	1.203	1.188	1.266	1.261	1.202	1.165	9.80	
111)	TP 1,2,3-Trichlor...	0.363	0.429	0.450	0.451	0.473	0.479	0.477	0.446	9.17	

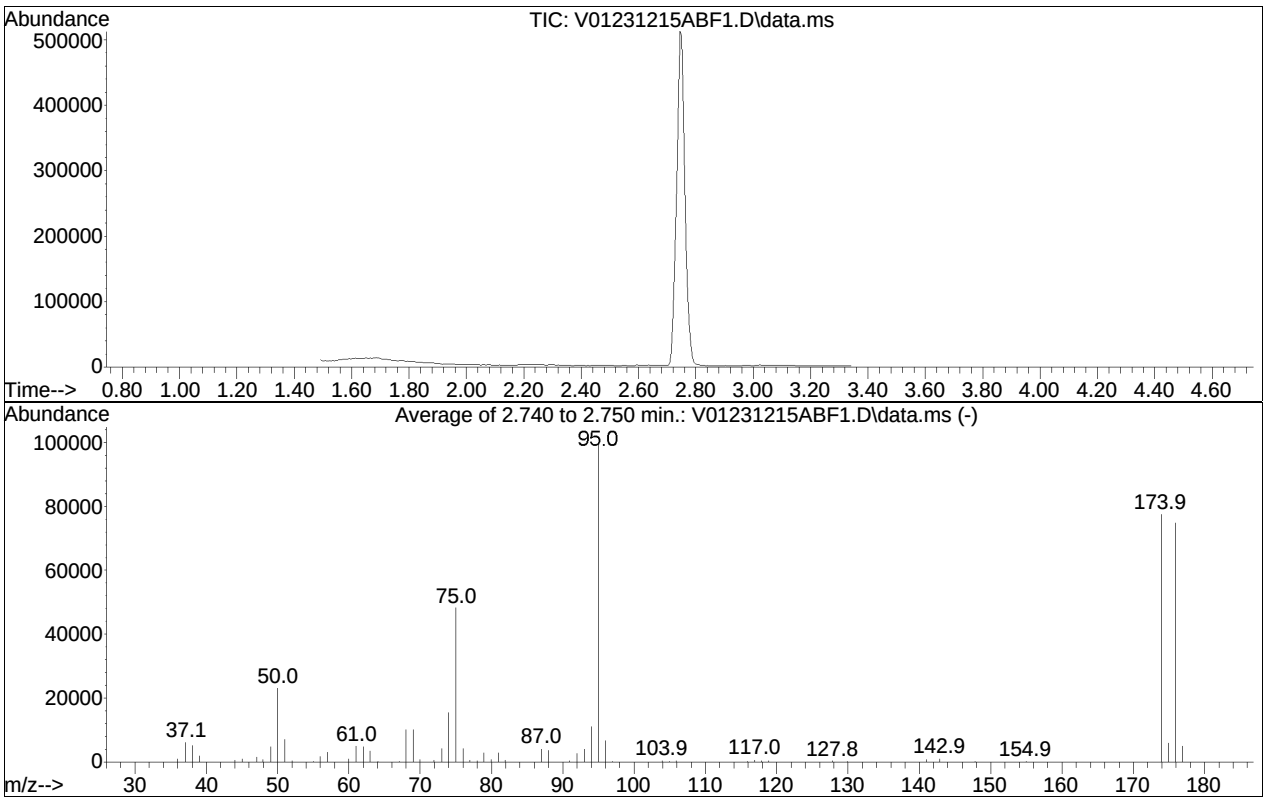
(#) = Out of Range

BFB

Data Path : K:\VOA101\2023\231215AICAL\
Data File : V01231215ABF1.D
Acq On : 15 Dec 2023 11:27 am
Operator : VOA101:PID
Sample : WG1864802-1
Misc : WG1864802
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : K:\VOA101\2023\231215AICAL\V101_231215A_8260.m
Title : VOLATILES BY GC/MS
Last Update : Sat Dec 16 10:14:14 2023



AutoFind: Scans 239, 240, 241; Background Corrected with Scan 230

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	23.1	23056	PASS
75	95	30	60	48.2	48208	PASS
95	95	100	100	100.0	99941	PASS
96	95	5	9	6.7	6689	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	77.6	77531	PASS
175	174	5	9	7.6	5913	PASS
176	174	95	101	96.5	74805	PASS
177	176	5	9	6.6	4953	PASS

Quantitation Report (QT Reviewed)

Data Path : K:\VOA101\2023\231215AICAL\
Data File : V01231215A03.D
Acq On : 15 Dec 2023 12:34 pm
Operator : VOA101:MKS
Sample : I8260STD0.19PPB
Misc : WG1864802
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 16 10:02:45 2023
Quant Method : K:\VOA101\2023\231215AICAL\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 09:55:15 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA101\2023\231215AICAL\V01231215A08.D
Sub List : 8260-L11 - Level 11 for 8260-LRR product

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.963	96	458205	10.000	ug/L	0.00
Standard Area 1 = 440479			Recovery = 104.02%			
59) Chlorobenzene-d5	9.482	117	376028	10.000	ug/L	0.00
Standard Area 1 = 367736			Recovery = 102.25%			
79) 1,4-Dichlorobenzene-d4	12.195	152	201539	10.000	ug/L	0.00
Standard Area 1 = 202447			Recovery = 99.55%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.162	113	115845	9.902	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.02%			
43) 1,2-Dichloroethane-d4	5.681	65	131271	10.037	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.37%			
60) Toluene-d8	7.644	98	451642	10.145	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.45%			
83) 4-Bromofluorobenzene	10.985	95	174661	10.164	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.64%			
Target Compounds						Qvalue
4) Vinyl chloride	1.908	62	2384	0.160	ug/L	97
34) Carbon tetrachloride	5.123	117	2474M1	0.162	ug/L	
41) Benzene	5.550	78	7646	0.170	ug/L #	79
48) Trichloroethene	6.152	95	2225M1	0.183	ug/L	

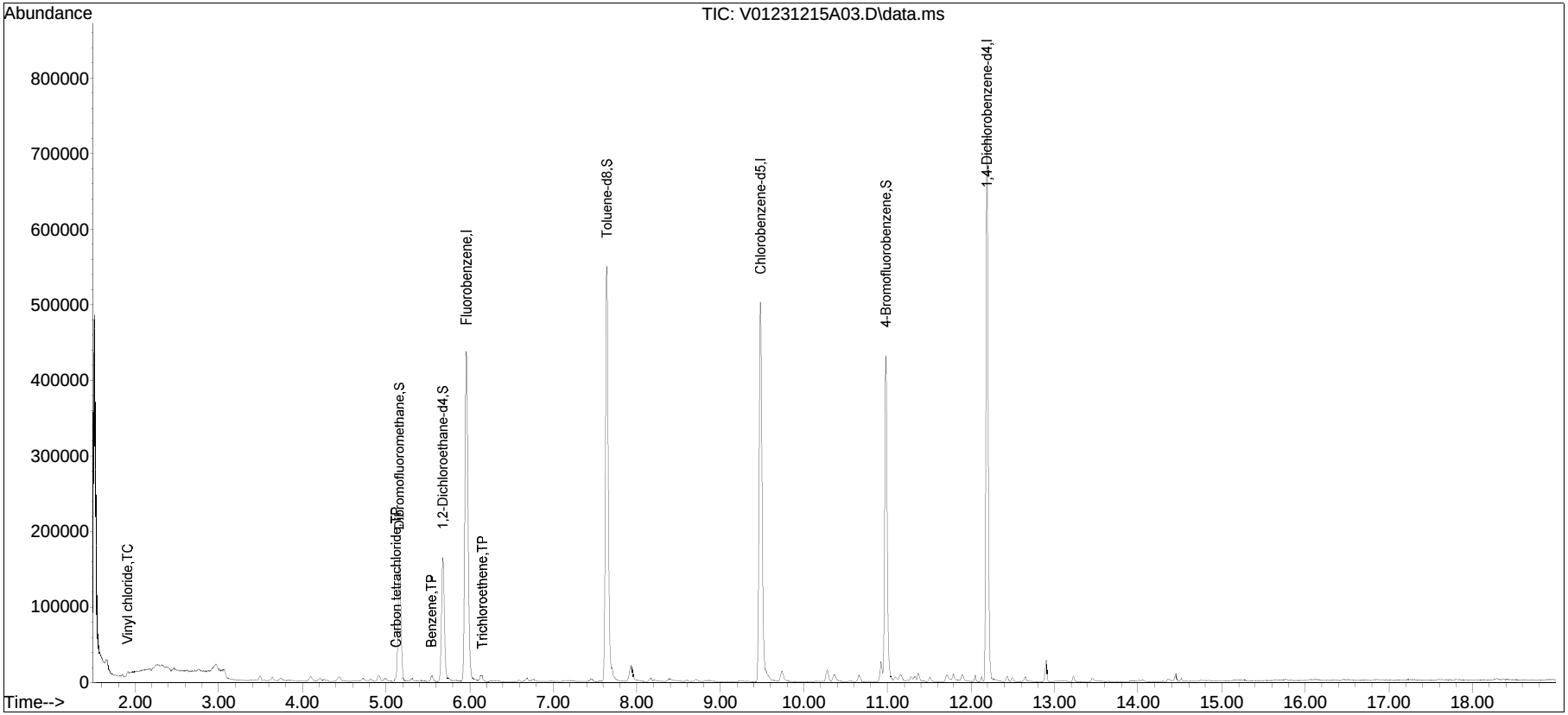
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\VOA101\2023\231215AICAL\
Data File : V01231215A03.D
Acq On : 15 Dec 2023 12:34 pm
Operator : VOA101:MKS
Sample : I8260STD0.19PPB
Misc : WG1864802
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 16 10:02:45 2023
Quant Method : K:\VOA101\2023\231215AICAL\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 09:55:15 2023
Response via : Initial Calibration

Sub List : 8260-L11 - Level 11 for 8260-LRR productA08.D•

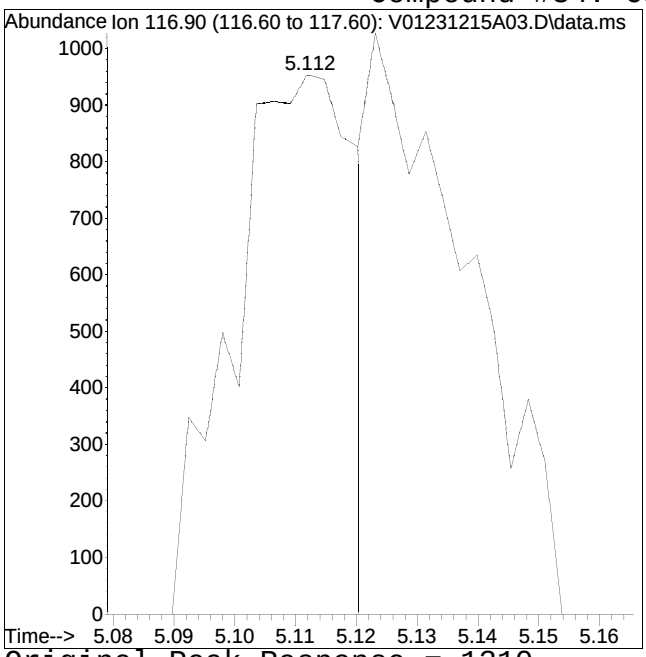


Manual Integration Report

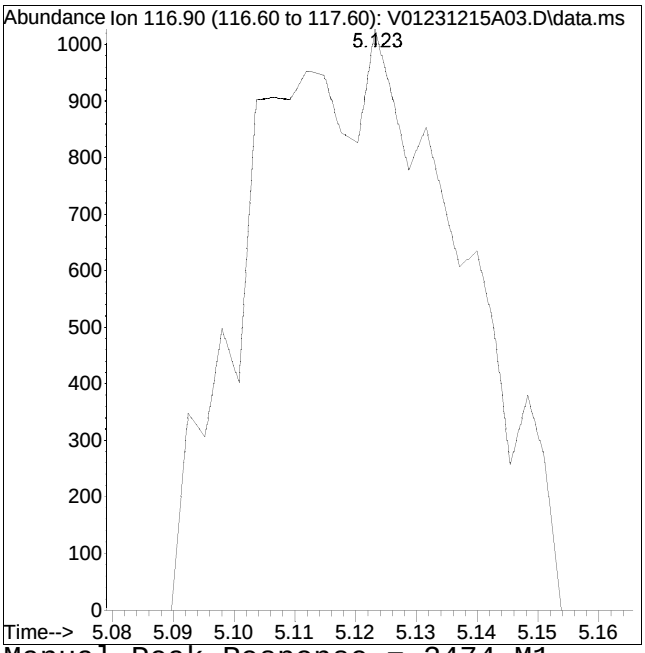
Data Path : K:\VOA101\2023\231215AICALQ
Data File : V01231215A03.D
Date Inj'd : 12/15/2023 12:34 pm
Sample : I8260STD0.19PPB

Method : V101_231215A_8260.m
Operator : VOA101:MKS
Instrument : VOA 101
Quant Date : 12/16/2023 9:55 am

Compound #34: Carbon tetrachloride



Original Peak Response = 1310



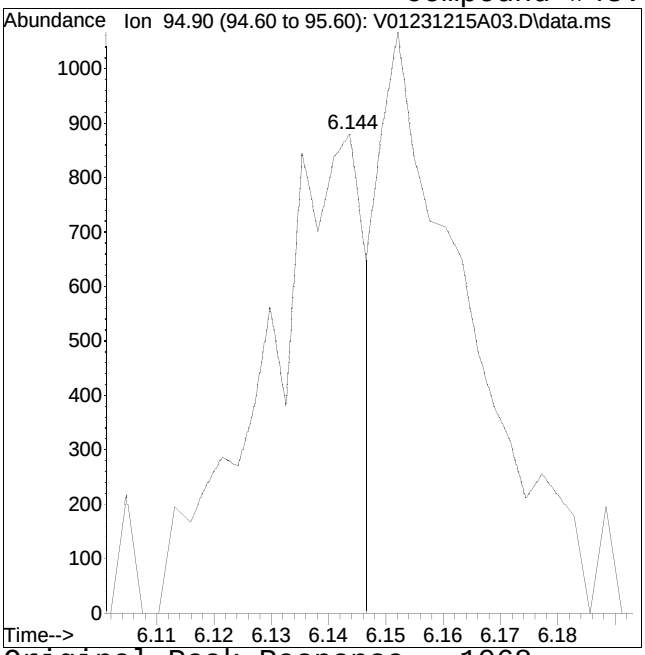
Manual Peak Response = 2474 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

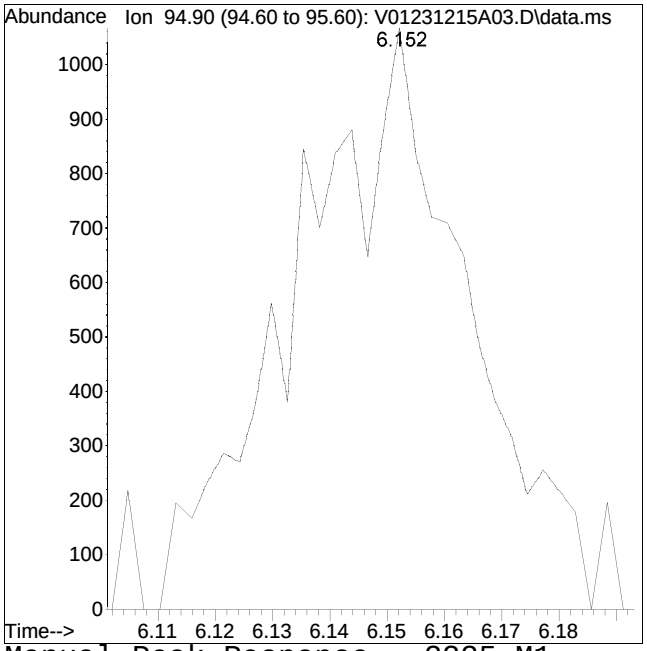
Manual Integration Report

Data Path : K:\VOA101\2023\231215AICALQMethod : V101_231215A_8260.m
Data File : V01231215A03.D Operator : VOA101:MKS
Date Inj'd : 12/15/2023 12:34 pm Instrument : VOA 101
Sample : I8260STD0.19PPB Quant Date : 12/16/2023 9:55 am

Compound #48: Trichloroethene



Original Peak Response = 1068



Manual Peak Response = 2225 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Quantitation Report (QT Reviewed)

Data Path : K:\VOA101\2023\231215AICAL\
Data File : V01231215A04.D
Acq On : 15 Dec 2023 1:00 pm
Operator : VOA101:MKS
Sample : I8260STD0.5PPB
Misc : WG1864802
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 16 10:05:37 2023
Quant Method : K:\VOA101\2023\231215AICAL\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 09:55:15 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA101\2023\231215AICAL\V01231215A08.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.963	96	444326	10.000	ug/L	0.00
Standard Area 1 = 440479			Recovery = 100.87%			
59) Chlorobenzene-d5	9.482	117	365137	10.000	ug/L	0.00
Standard Area 1 = 367736			Recovery = 99.29%			
79) 1,4-Dichlorobenzene-d4	12.195	152	196746	10.000	ug/L	0.00
Standard Area 1 = 202447			Recovery = 97.18%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.162	113	112230	9.893	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 98.93%			
43) 1,2-Dichloroethane-d4	5.678	65	126175	9.949	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.49%			
60) Toluene-d8	7.641	98	434112	10.042	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.42%			
83) 4-Bromofluorobenzene	10.982	95	169108	10.081	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.81%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.654	85	4911	0.408	ug/L #	89
3) Chloromethane	1.844	50	7404	0.456	ug/L	95
4) Vinyl chloride	1.905	62	6062	0.421	ug/L	95
5) Bromomethane	2.215	94	2740	0.423	ug/L	96
6) Chloroethane	2.332	64	4827M1	0.558	ug/L	
7) Trichlorofluoromethane	2.460	101	6056	0.405	ug/L	96
8) Ethyl ether	2.758	74	2676	0.549	ug/L #	88
10) 1,1-Dichloroethene	2.945	96	4487	0.473	ug/L	95
11) Carbon disulfide	2.970	76	13657	0.460	ug/L	97
12) Freon-113	2.976	101	3653	0.366	ug/L #	41
13) Iodomethane	3.074	142	4707	0.308	ug/L	94
14) Acrolein	3.263	56	938M3	0.610	ug/L	
15) Methylene chloride	3.489	84	5491	0.512	ug/L	88
17) Acetone	3.539	43	2120	0.949	ug/L #	77
18) trans-1,2-Dichloroethene	3.642	96	4910	0.448	ug/L	99
19) Methyl acetate	3.656	43	2656	0.463	ug/L #	73
20) Methyl tert-butyl ether	3.746	73	12106	0.477	ug/L #	88
21) tert-Butyl alcohol	3.846	59	1380M1	1.884	ug/L	
22) Diisopropyl ether	4.094	45	19891	0.477	ug/L	92
23) 1,1-Dichloroethane	4.217	63	9885	0.454	ug/L	94
24) Halothane	4.264	117	3669	0.439	ug/L	80

Data Path : K:\VOA101\2023\231215AICAL\
Data File : V01231215A04.D
Acq On : 15 Dec 2023 1:00 pm
Operator : VOA101:MKS
Sample : I8260STD0.5PPB
Misc : WG1864802
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 16 10:05:37 2023
Quant Method : K:\VOA101\2023\231215AICAL\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 09:55:15 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA101\2023\231215AICAL\V01231215A08.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) Acrylonitrile	4.267	53	1108	0.408	ug/L	#	76
26) Ethyl tert-butyl ether	4.434	59	16434	0.468	ug/L		93
27) Vinyl acetate	4.454	43	10688M1	0.484	ug/L		
28) cis-1,2-Dichloroethene	4.724	96	5463	0.438	ug/L		96
29) 2,2-Dichloropropane	4.825	77	7348	0.448	ug/L		83
30) Bromochloromethane	4.922	128	2711M1	0.485	ug/L		
31) Cyclohexane	4.914	56	7834	0.371	ug/L	#	40
32) Chloroform	4.987	83	9090	0.475	ug/L	#	75
33) Ethyl acetate	5.104	43	3617M1	0.419	ug/L		
34) Carbon tetrachloride	5.126	117	5875	0.397	ug/L	#	26
35) Tetrahydrofuran	5.154	42	1662M1	0.693	ug/L		
37) 1,1,1-Trichloroethane	5.190	97	7310	0.429	ug/L	#	64
39) 2-Butanone	0.000		0	N.D.	d		
40) 1,1-Dichloropropene	5.310	75	5996	0.402	ug/L		98
41) Benzene	5.550	78	19481	0.447	ug/L		95
42) tert-Amyl methyl ether	5.661	73	12794	0.460	ug/L	#	66
44) 1,2-Dichloroethane	5.753	62	6782	0.468	ug/L		95
47) Methyl cyclohexane	6.124	83	6034M1	0.337	ug/L		
48) Trichloroethene	6.144	95	5541	0.469	ug/L		93
50) Dibromomethane	6.587	93	2794M1	0.463	ug/L		
51) 1,2-Dichloropropane	6.688	63	5207M1	0.431	ug/L		
53) 2-Chloroethyl vinyl ether	7.396	63	845M1	0.242	ug/L		
54) Bromodichloromethane	6.757	83	6349	0.431	ug/L	#	97
57) 1,4-Dioxane	6.972	88	4785M1	66.232	ug/L		
58) cis-1,3-Dichloropropene	7.449	75	6940	0.400	ug/L	#	73
61) Toluene	7.705	92	12524	0.453	ug/L		97
62) 4-Methyl-2-pentanone	8.157	58	908M1	0.304	ug/L		
63) Tetrachloroethene	8.157	166	4592	0.378	ug/L		99
65) trans-1,3-Dichloropropene	8.205	75	6058M1	0.417	ug/L		
67) Ethyl methacrylate	8.392	69	3617M1	0.360	ug/L		
68) 1,1,2-Trichloroethane	8.380	83	3291M1	0.463	ug/L		
69) Chlorodibromomethane	8.587	129	4381	0.427	ug/L		92
70) 1,3-Dichloropropane	8.698	76	5951	0.419	ug/L	#	73
71) 1,2-Dibromoethane	8.868	107	3682	0.434	ug/L		99
72) 2-Hexanone	0.000		0	N.D.	d		
73) Chlorobenzene	9.504	112	14261	0.455	ug/L		93
74) Ethylbenzene	9.549	91	21145	0.393	ug/L		98
75) 1,1,1,2-Tetrachloroethane	9.591	131	4755	0.419	ug/L	#	66
76) p/m Xylene	9.733	106	16645	0.798	ug/L		97
77) o Xylene	10.271	106	16992	0.833	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : K:\VOA101\2023\231215AICAL\
Data File : V01231215A04.D
Acq On : 15 Dec 2023 1:00 pm
Operator : VOA101:MKS
Sample : I8260STD0.5PPB
Misc : WG1864802
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 16 10:05:37 2023
Quant Method : K:\VOA101\2023\231215AICAL\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 09:55:15 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA101\2023\231215AICAL\V01231215A08.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
78) Styrene	10.349	104	26418	0.789	ug/L		94
80) Bromoform	10.369	173	2609	0.444	ug/L	#	57
82) Isopropylbenzene	10.659	105	20651	0.405	ug/L		100
84) Bromobenzene	11.102	156	5424	0.438	ug/L		100
85) n-Propylbenzene	11.144	91	23662	0.403	ug/L		100
86) 1,4-Dichlorobutane	11.163	55	6858	0.470	ug/L		96
87) 1,1,2,2-Tetrachloroethane	11.225	83	4346	0.446	ug/L		92
88) 4-Ethyltoluene	11.272	105	19856	0.401	ug/L		100
89) 2-Chlorotoluene	11.311	91	15387M1	0.437	ug/L		
90) 1,3,5-Trimethylbenzene	11.367	105	16548	0.398	ug/L		98
91) 1,2,3-Trichloropropane	11.375	75	3269	0.445	ug/L		91
92) trans-1,4-Dichloro-2-b...	11.448	53	1291M1	0.428	ug/L		
93) 4-Chlorotoluene	11.501	91	15120	0.418	ug/L		97
94) tert-Butylbenzene	11.702	119	13745	0.398	ug/L		98
97) 1,2,4-Trimethylbenzene	11.791	105	16382	0.401	ug/L		98
98) sec-Butylbenzene	11.897	105	19486	0.402	ug/L		94
99) p-Isopropyltoluene	12.053	119	16166	0.387	ug/L		99
100) 1,3-Dichlorobenzene	12.125	146	9622	0.421	ug/L		98
101) 1,4-Dichlorobenzene	12.215	146	10599M3	0.462	ug/L		
102) p-Diethylbenzene	12.427	119	8926	0.374	ug/L		96
103) n-Butylbenzene	12.485	91	11903M1	0.362	ug/L		
104) 1,2-Dichlorobenzene	12.639	146	8942	0.427	ug/L		98
105) 1,2,4,5-Tetramethylben...	13.221	119	13549	0.400	ug/L		100
106) 1,2-Dibromo-3-chloropr...	13.419	155	517	0.389	ug/L		92
107) 1,3,5-Trichlorobenzene	13.453	180	5507	0.427	ug/L		95
108) Hexachlorobutadiene	14.022	225	1600	0.376	ug/L	#	90
109) 1,2,4-Trichlorobenzene	14.058	180	4538	0.415	ug/L		97
110) Naphthalene	14.345	128	9247	0.391	ug/L		100
111) 1,2,3-Trichlorobenzene	14.513	180	3572	0.403	ug/L		98

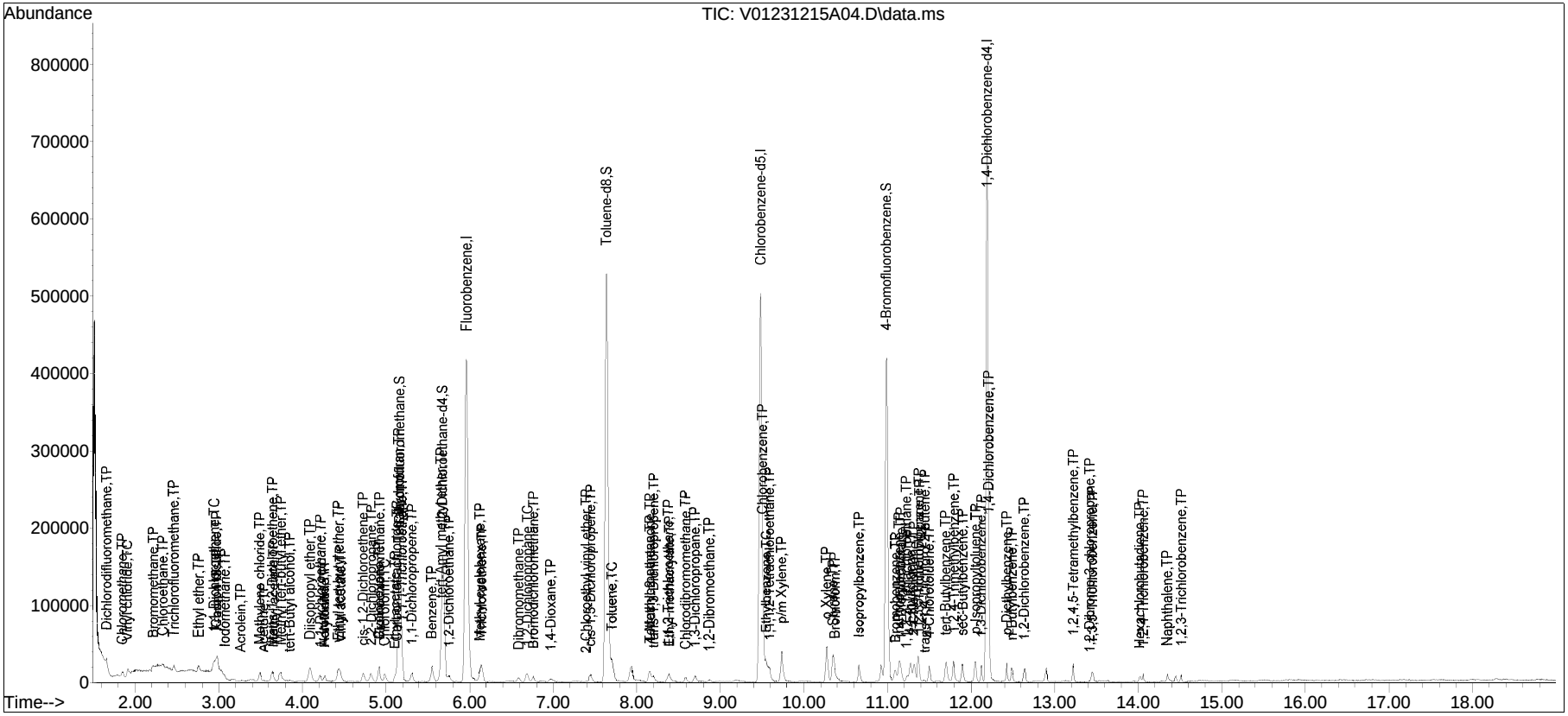
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\VOA101\2023\231215AICAL\
Data File : V01231215A04.D
Acq On : 15 Dec 2023 1:00 pm
Operator : VOA101:MKS
Sample : I8260STD0.5PPB
Misc : WG1864802
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 16 10:05:37 2023
Quant Method : K:\VOA101\2023\231215AICAL\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 09:55:15 2023
Response via : Initial Calibration

Sub List : 8260-Curve - Megamix plus Diox\V01231215A08.D•

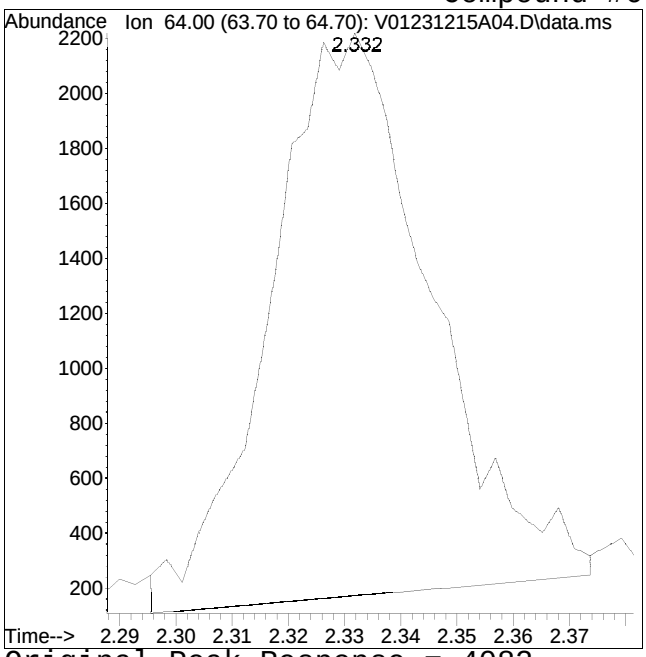


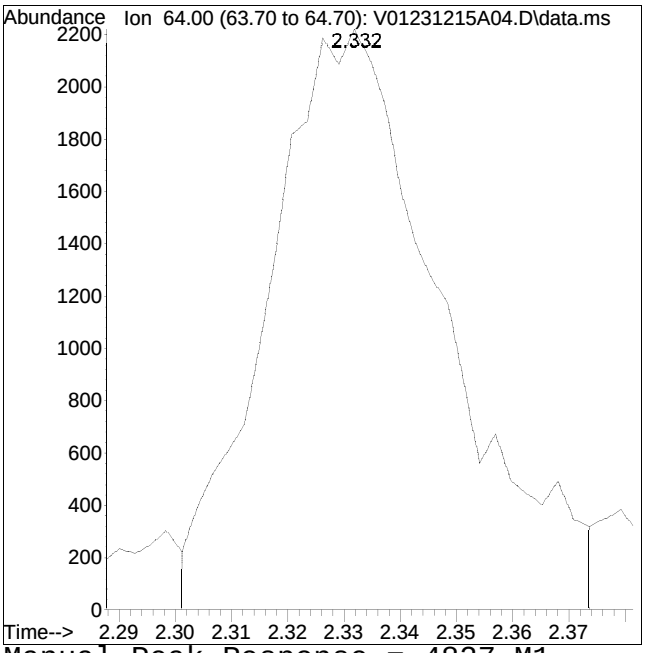
Manual Integration Report

Data Path : K:\VOA101\2023\231215AICALQ
Data File : V01231215A04.D
Date Inj'd : 12/15/2023 1:00 pm
Sample : I8260STD0.5PPB

Method : V101_231215A_8260.m
Operator : VOA101:MKS
Instrument : VOA 101
Quant Date : 12/16/2023 9:55 am

Compound #6: Chloroethane





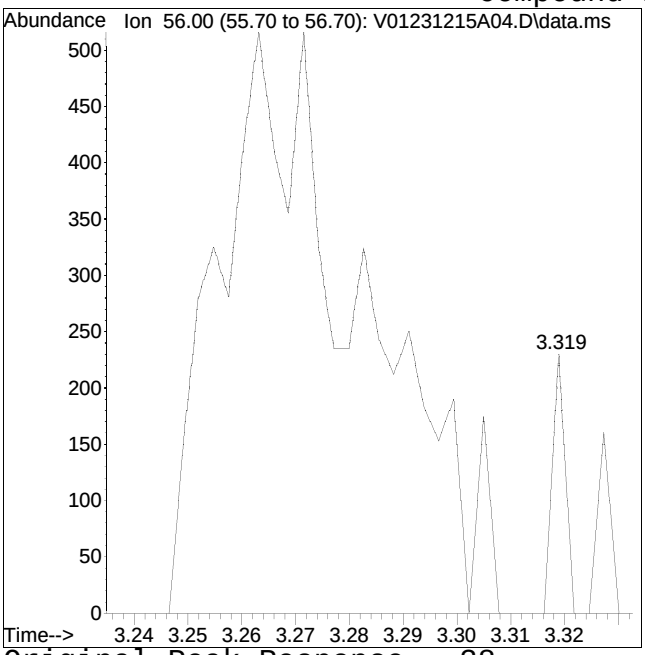
Original Peak Response = 4082 Manual Peak Response = 4827 M1

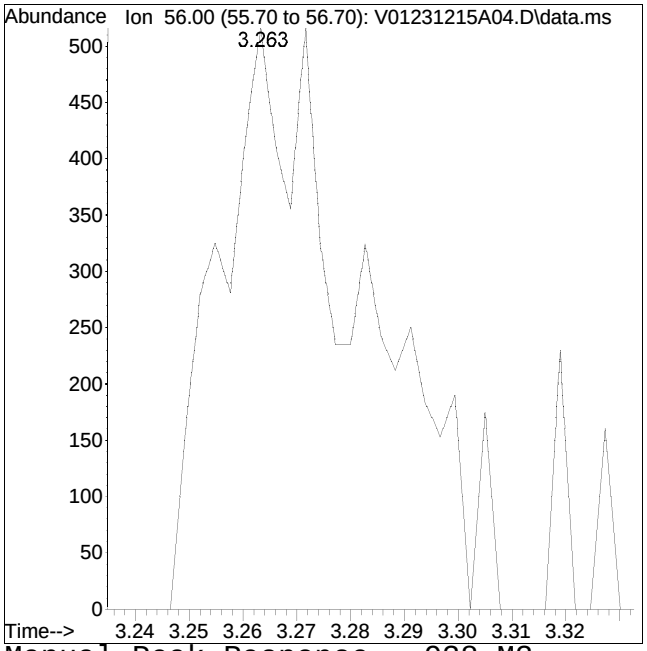
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

Data Path : K:\VOA101\2023\231215AICALQMethod : V101_231215A_8260.m
Data File : V01231215A04.D Operator : VOA101:MKS
Date Inj'd : 12/15/2023 1:00 pm Instrument : VOA 101
Sample : I8260STD0.5PPB Quant Date : 12/16/2023 9:55 am

Compound #14: Acrolein





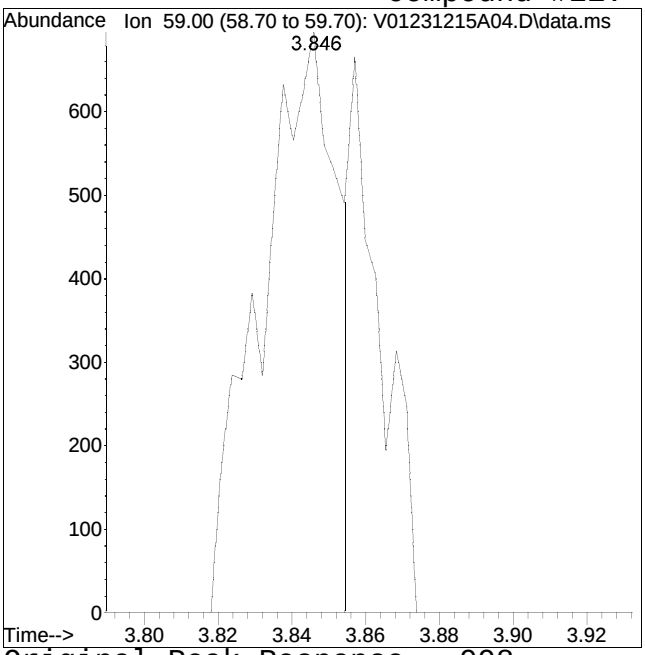
Original Peak Response = 38 Manual Peak Response = 938 M3

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.

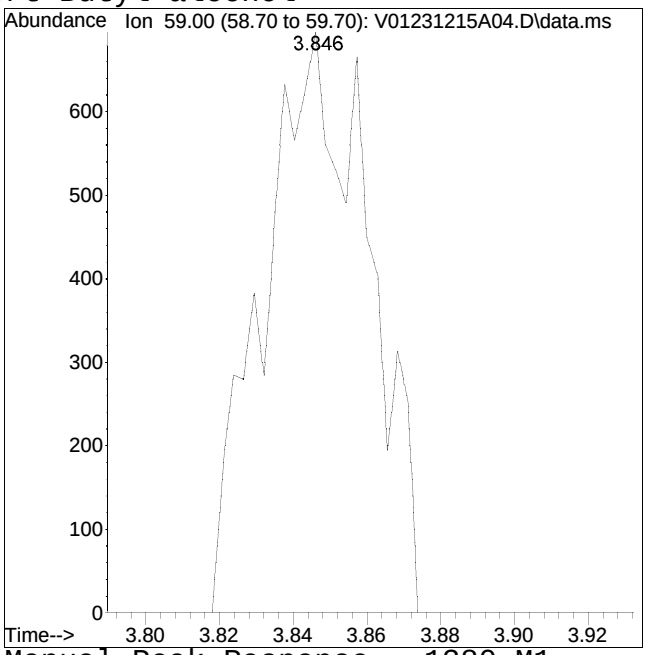
Manual Integration Report

Data Path : K:\VOA101\2023\231215AICALQMethod : V101_231215A_8260.m
Data File : V01231215A04.D Operator : VOA101:MKS
Date Inj'd : 12/15/2023 1:00 pm Instrument : VOA 101
Sample : I8260STD0.5PPB Quant Date : 12/16/2023 9:55 am

Compound #21: tert-Butyl alcohol



Original Peak Response = 998



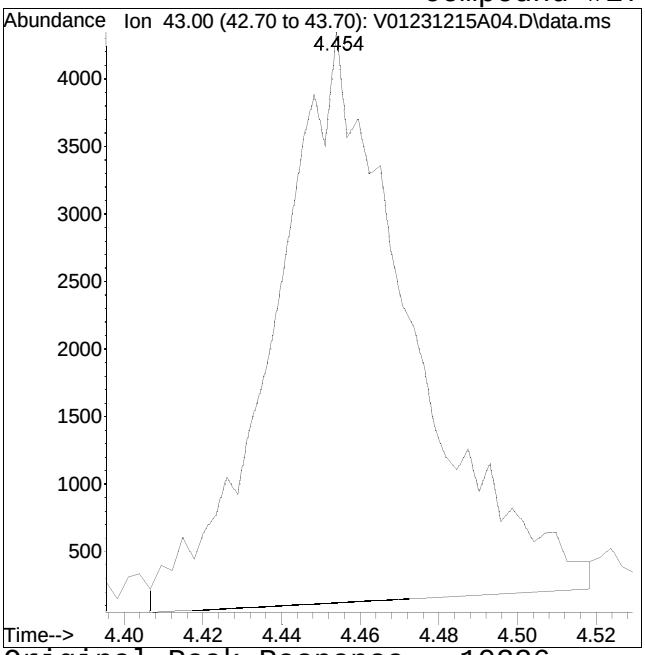
Manual Peak Response = 1380 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

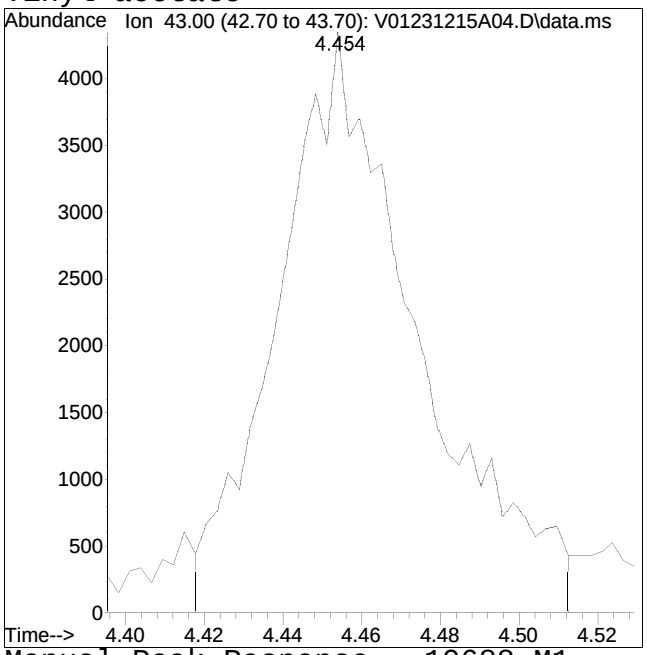
Manual Integration Report

Data Path : K:\VOA101\2023\231215AICALQMethod : V101_231215A_8260.m
Data File : V01231215A04.D Operator : VOA101:MKS
Date Inj'd : 12/15/2023 1:00 pm Instrument : VOA 101
Sample : I8260STD0.5PPB Quant Date : 12/16/2023 9:55 am

Compound #27: Vinyl acetate



Original Peak Response = 10226



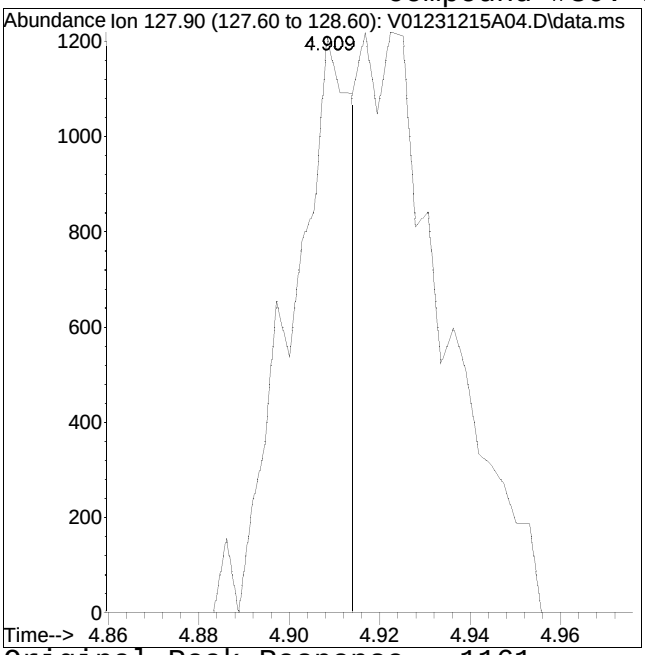
Manual Peak Response = 10688 M1

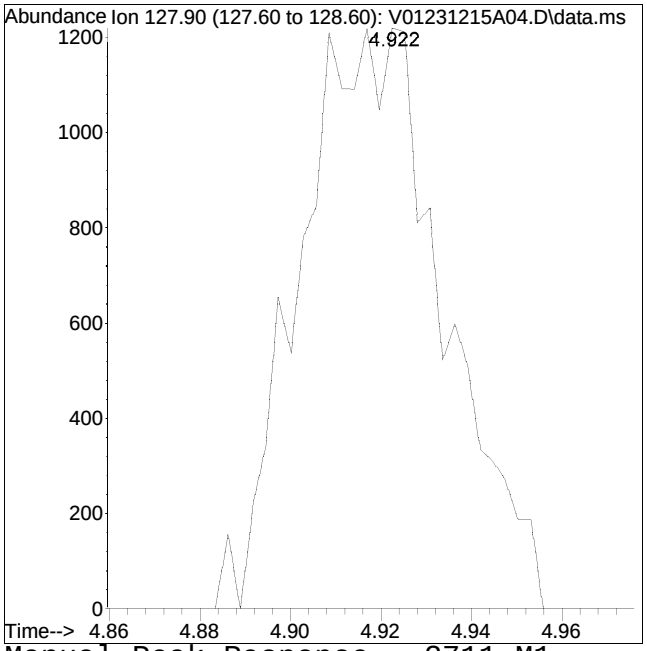
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

Data Path : K:\VOA101\2023\231215AICALQMethod : V101_231215A_8260.m
Data File : V01231215A04.D Operator : VOA101:MKS
Date Inj'd : 12/15/2023 1:00 pm Instrument : VOA 101
Sample : I8260STD0.5PPB Quant Date : 12/16/2023 9:55 am

Compound #30: Bromochloromethane





Original Peak Response = 1161 Manual Peak Response = 2711 M1

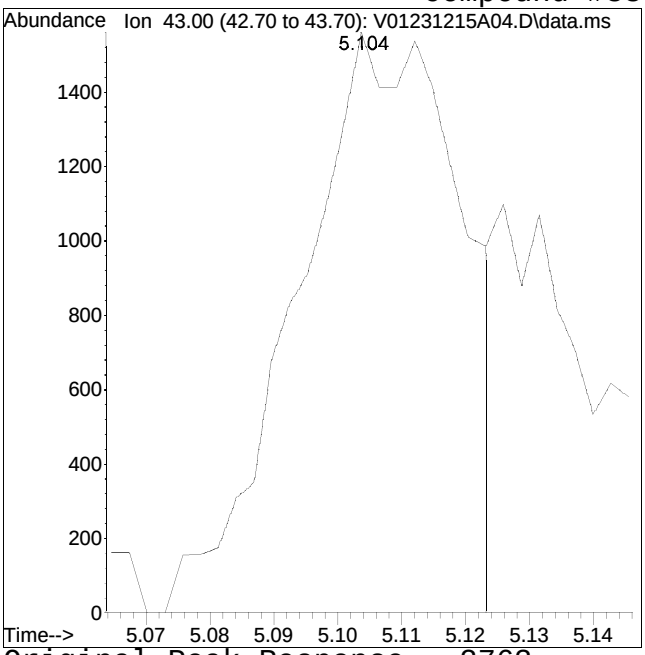
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

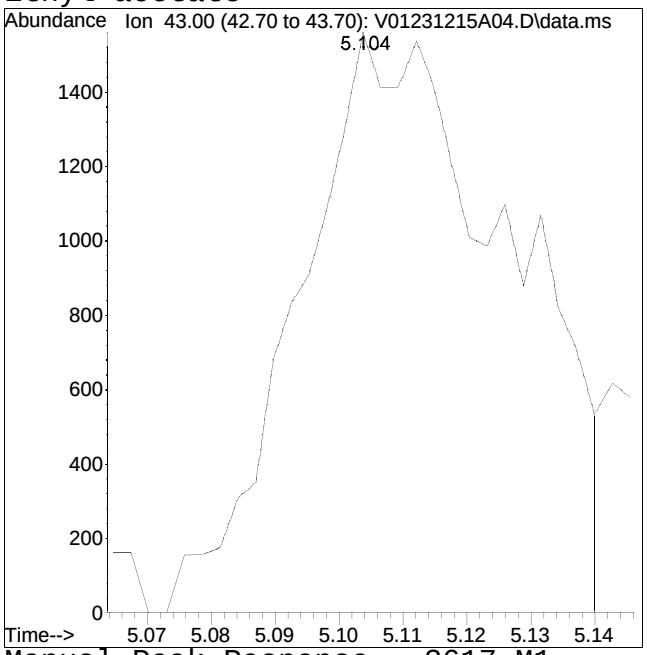
Data Path : K:\VOA101\2023\231215AICALQ
Data File : V01231215A04.D
Date Inj'd : 12/15/2023 1:00 pm
Sample : I8260STD0.5PPB

Method : V101_231215A_8260.m
Operator : VOA101:MKS
Instrument : VOA 101
Quant Date : 12/16/2023 9:55 am

Compound #33: Ethyl acetate



Original Peak Response = 2763



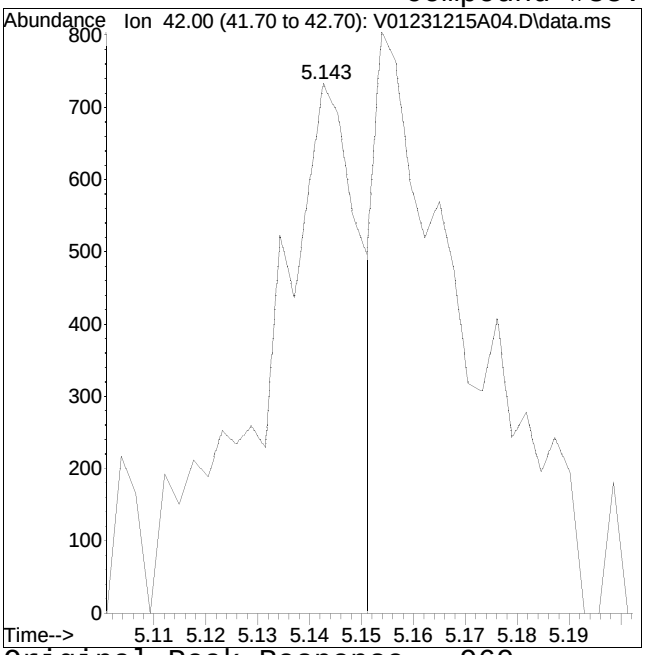
Manual Peak Response = 3617 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

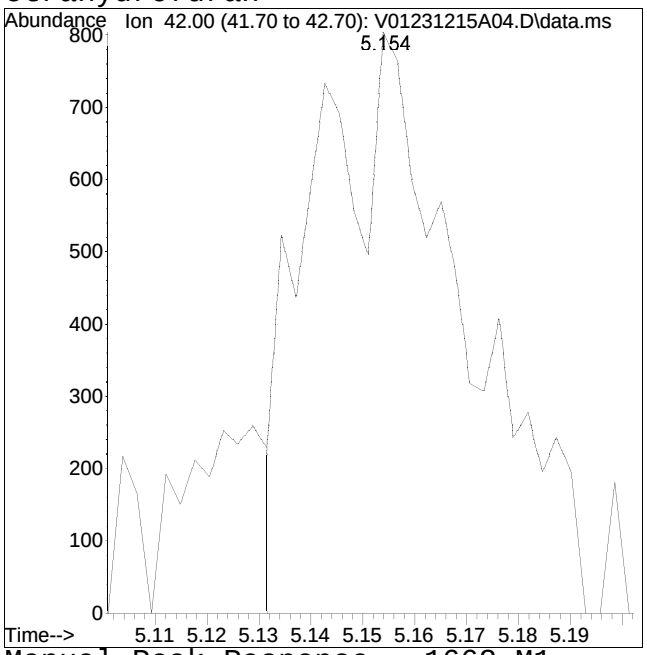
Manual Integration Report

Data Path : K:\VOA101\2023\231215AICALQMethod : V101_231215A_8260.m
Data File : V01231215A04.D Operator : VOA101:MKS
Date Inj'd : 12/15/2023 1:00 pm Instrument : VOA 101
Sample : I8260STD0.5PPB Quant Date : 12/16/2023 9:55 am

Compound #35: Tetrahydrofuran



Original Peak Response = 960



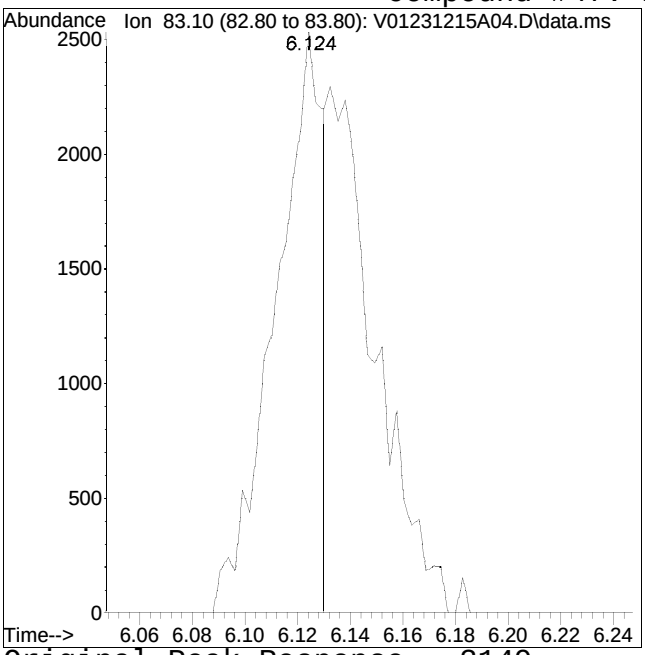
Manual Peak Response = 1662 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

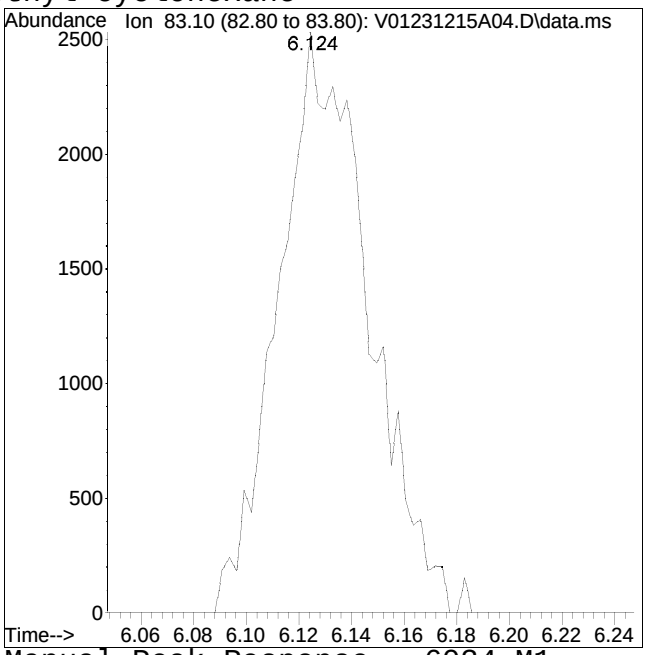
Manual Integration Report

Data Path : K:\VOA101\2023\231215AICALQMethod : V101_231215A_8260.m
Data File : V01231215A04.D Operator : VOA101:MKS
Date Inj'd : 12/15/2023 1:00 pm Instrument : VOA 101
Sample : I8260STD0.5PPB Quant Date : 12/16/2023 9:55 am

Compound #47: Methyl cyclohexane



Original Peak Response = 3149



Manual Peak Response = 6034 M1

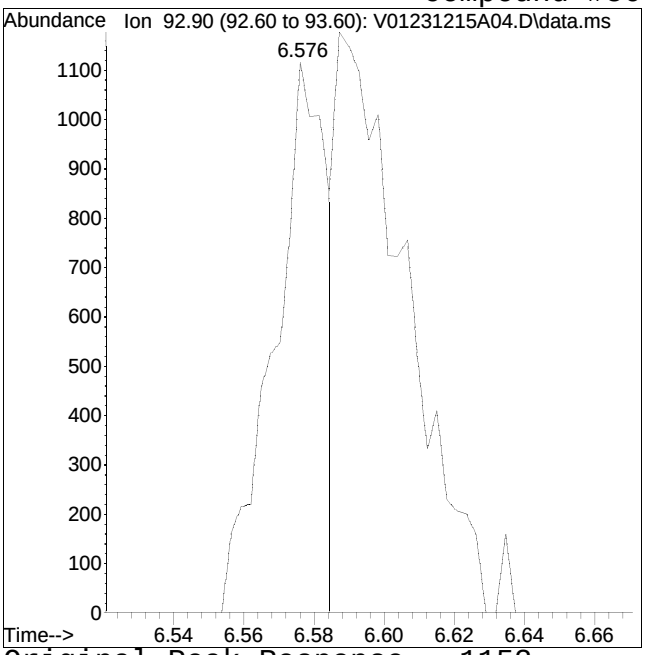
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

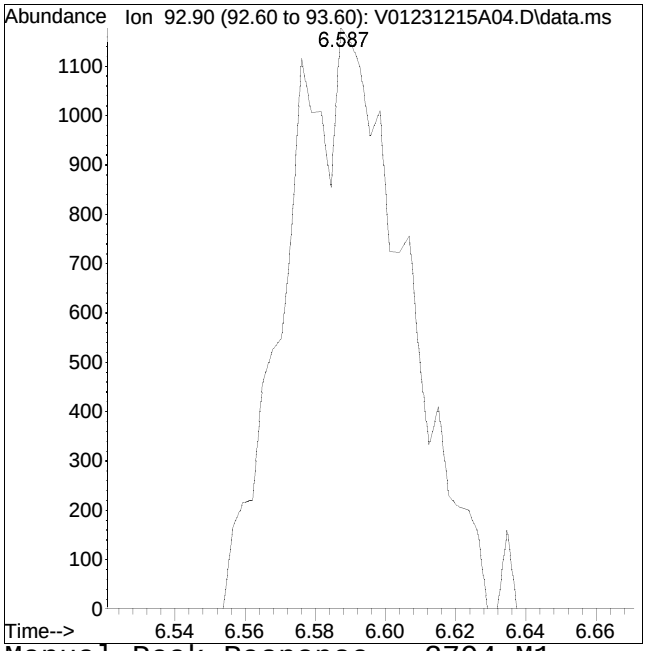
Data Path : K:\VOA101\2023\231215AICALQ
Data File : V01231215A04.D
Date Inj'd : 12/15/2023 1:00 pm
Sample : I8260STD0.5PPB

Method : V101_231215A_8260.m
Operator : VOA101:MKS
Instrument : VOA 101
Quant Date : 12/16/2023 9:55 am

Compound #50: Dibromomethane



Original Peak Response = 1152



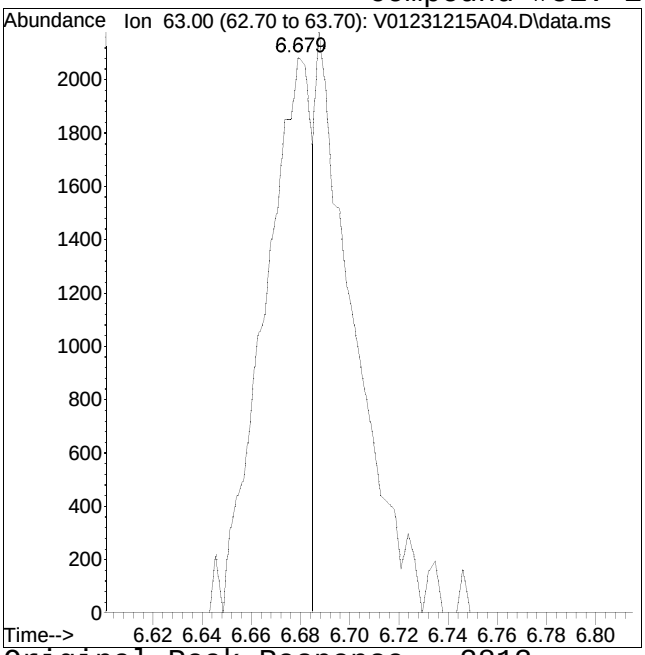
Manual Peak Response = 2794 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

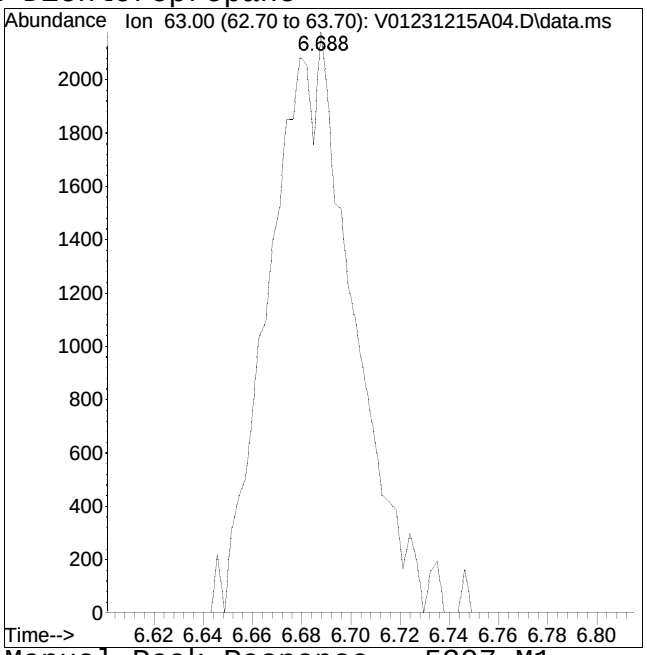
Manual Integration Report

Data Path : K:\VOA101\2023\231215AICALQMethod : V101_231215A_8260.m
Data File : V01231215A04.D Operator : VOA101:MKS
Date Inj'd : 12/15/2023 1:00 pm Instrument : VOA 101
Sample : I8260STD0.5PPB Quant Date : 12/16/2023 9:55 am

Compound #51: 1,2-Dichloropropane



Original Peak Response = 2813



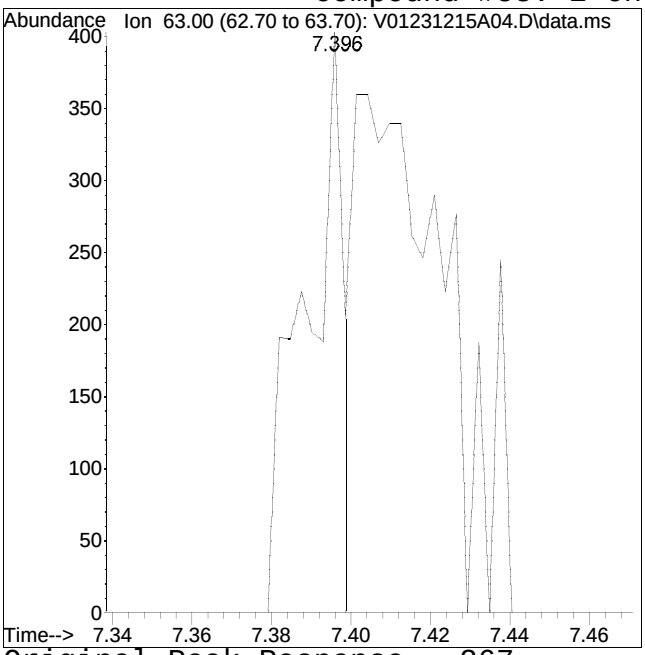
Manual Peak Response = 5207 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

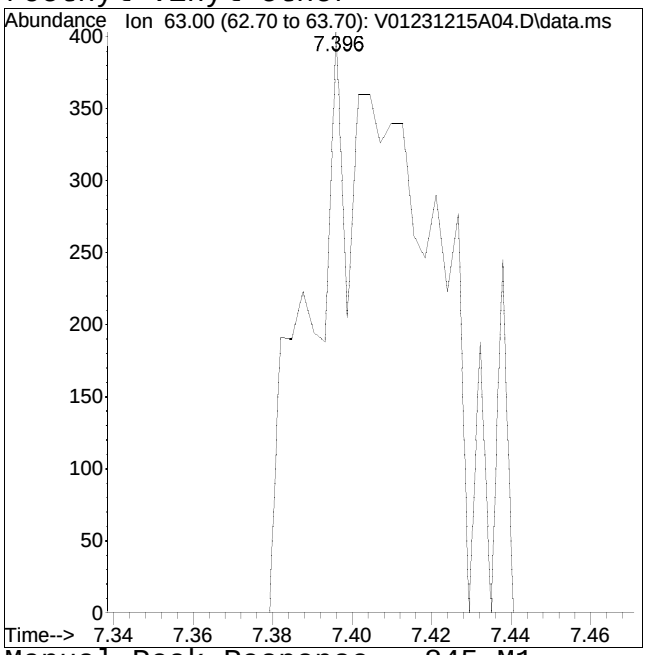
Manual Integration Report

Data Path : K:\VOA101\2023\231215AICALQMethod : V101_231215A_8260.m
Data File : V01231215A04.D Operator : VOA101:MKS
Date Inj'd : 12/15/2023 1:00 pm Instrument : VOA 101
Sample : I8260STD0.5PPB Quant Date : 12/16/2023 9:55 am

Compound #53: 2-Chloroethyl vinyl ether



Original Peak Response = 267



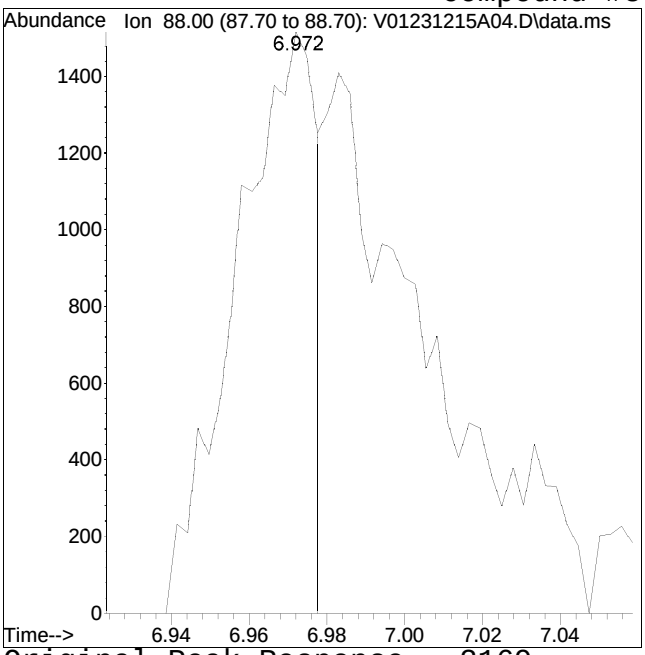
Manual Peak Response = 845 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

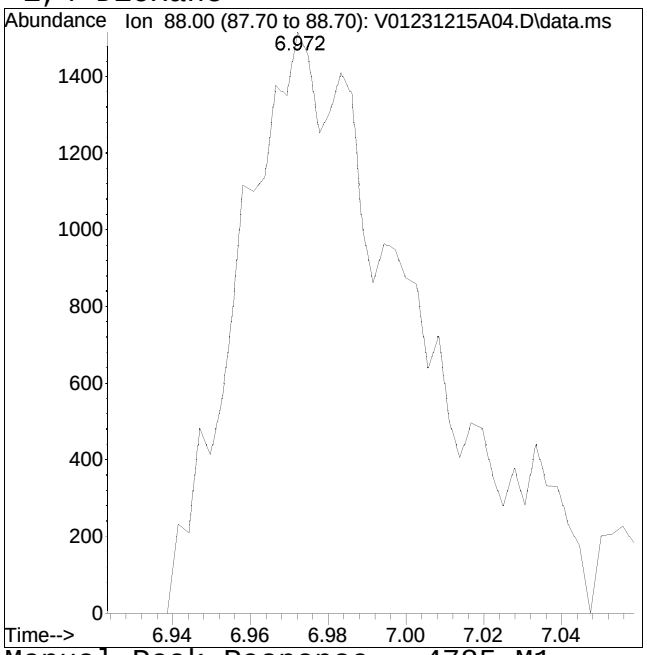
Manual Integration Report

Data Path : K:\VOA101\2023\231215AICALQMethod : V101_231215A_8260.m
Data File : V01231215A04.D Operator : VOA101:MKS
Date Inj'd : 12/15/2023 1:00 pm Instrument : VOA 101
Sample : I8260STD0.5PPB Quant Date : 12/16/2023 9:55 am

Compound #57: 1,4-Dioxane



Original Peak Response = 2169



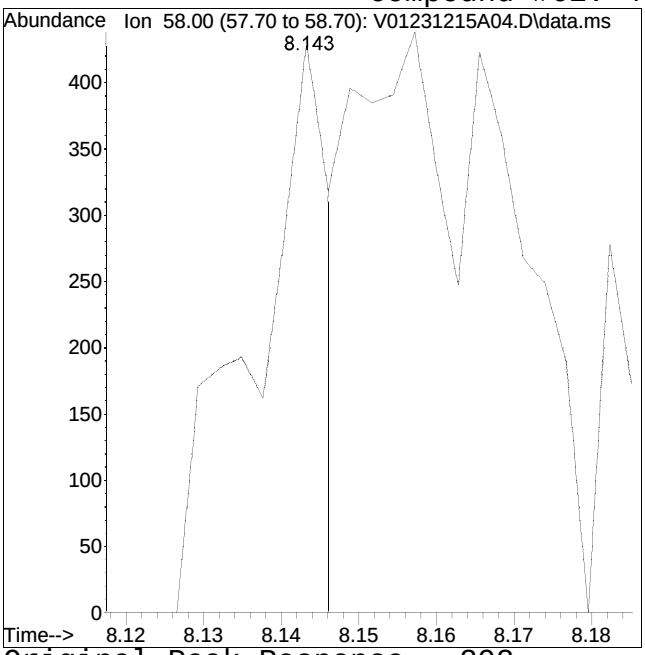
Manual Peak Response = 4785 M1

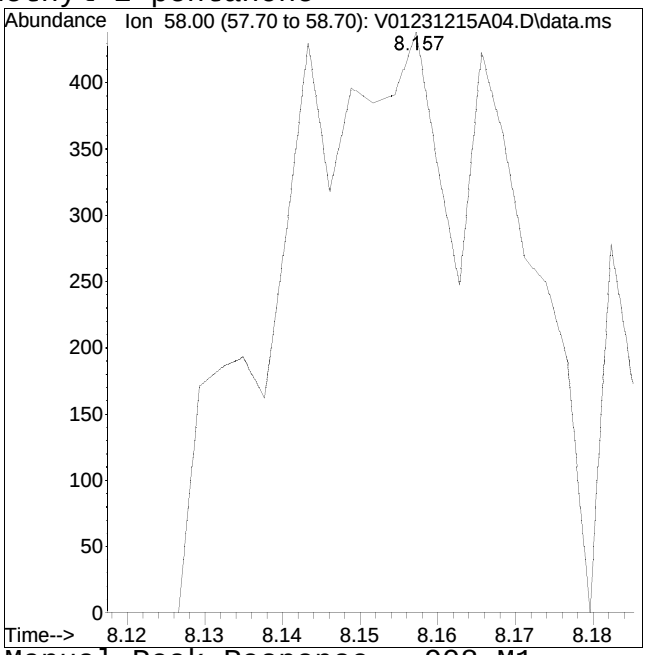
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

Data Path : K:\VOA101\2023\231215AICALQMethod : V101_231215A_8260.m
Data File : V01231215A04.D Operator : VOA101:MKS
Date Inj'd : 12/15/2023 1:00 pm Instrument : VOA 101
Sample : I8260STD0.5PPB Quant Date : 12/16/2023 9:55 am

Compound #62: 4-Methyl-2-pentanone





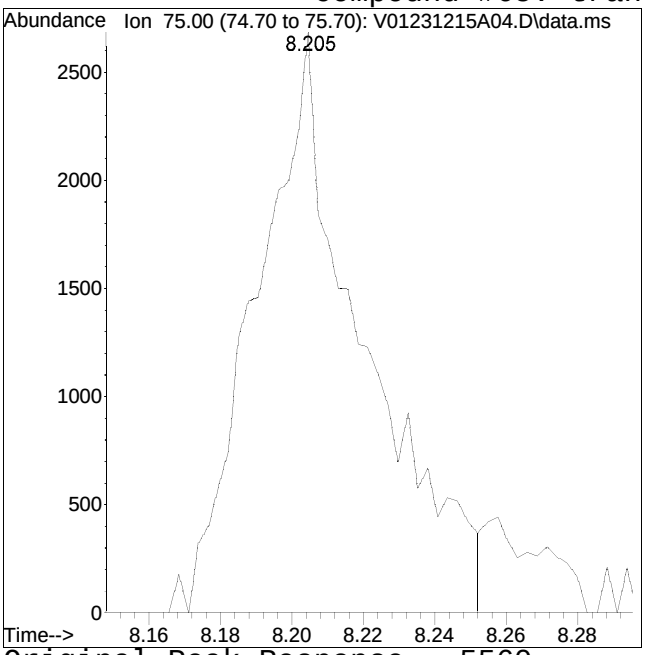
Original Peak Response = 292 Manual Peak Response = 908 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

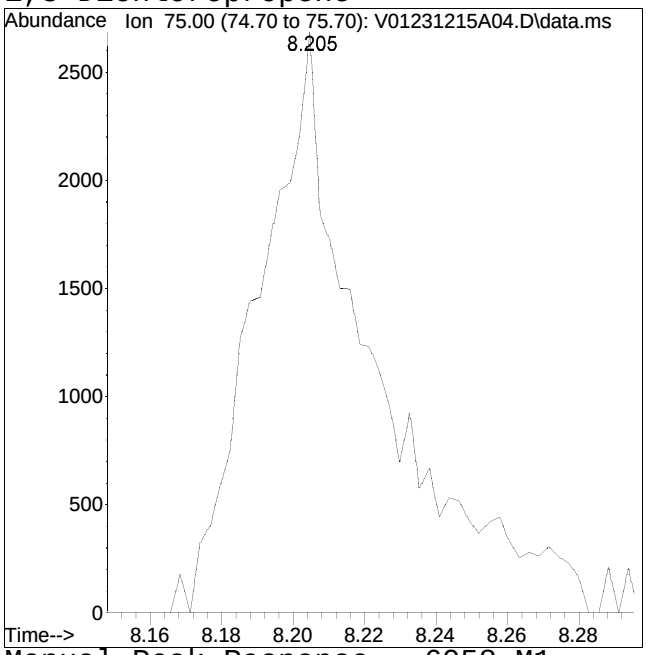
Manual Integration Report

Data Path : K:\VOA101\2023\231215AICALQ
Data File : V01231215A04.D
Date Inj'd : 12/15/2023 1:00 pm
Sample : I8260STD0.5PPB

Method : V101_231215A_8260.m
Operator : VOA101:MKS
Instrument : VOA 101
Quant Date : 12/16/2023 9:55 am

Compound #65: trans-1,3-Dichloropropene





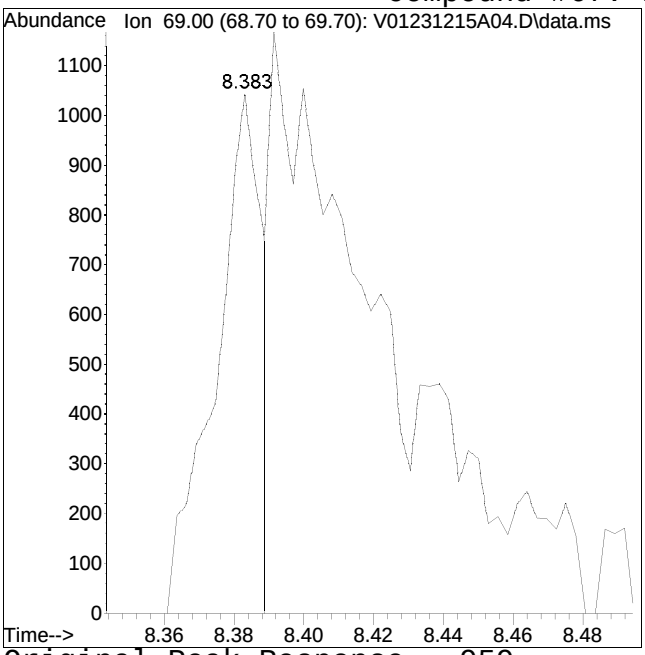
Original Peak Response = 5560 Manual Peak Response = 6058 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

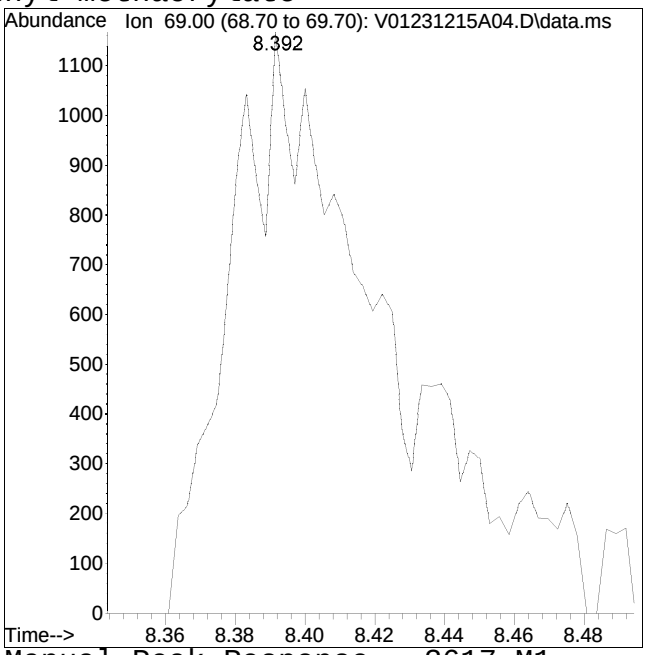
Manual Integration Report

Data Path : K:\VOA101\2023\231215AICALQMethod : V101_231215A_8260.m
Data File : V01231215A04.D Operator : VOA101:MKS
Date Inj'd : 12/15/2023 1:00 pm Instrument : VOA 101
Sample : I8260STD0.5PPB Quant Date : 12/16/2023 9:55 am

Compound #67: Ethyl methacrylate



Original Peak Response = 959



Manual Peak Response = 3617 M1

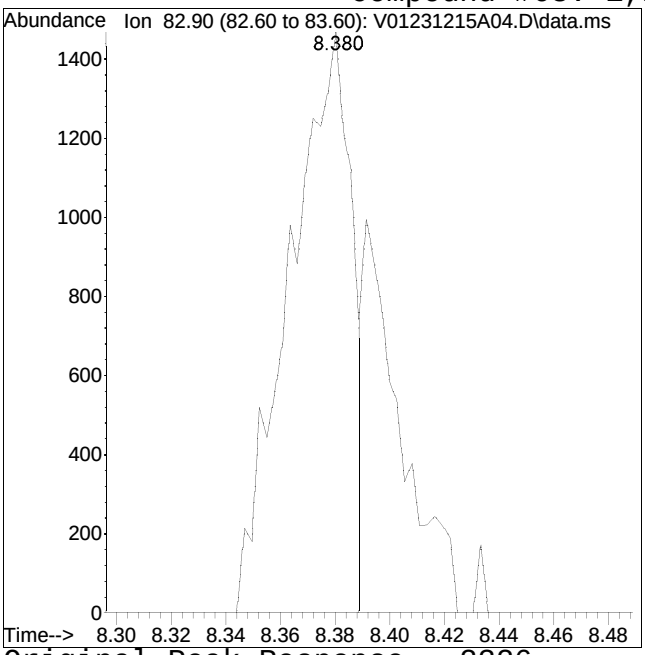
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

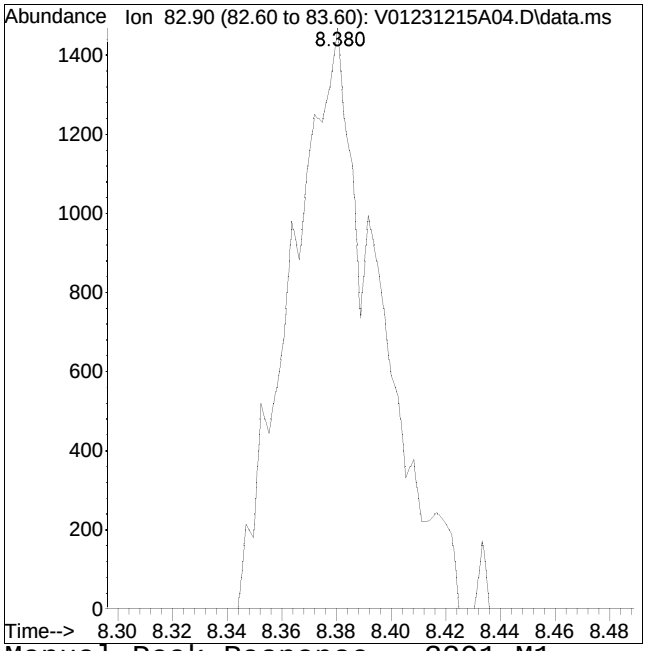
Data Path : K:\VOA101\2023\231215AICALQ
Data File : V01231215A04.D
Date Inj'd : 12/15/2023 1:00 pm
Sample : I8260STD0.5PPB

Method : V101_231215A_8260.m
Operator : VOA101:MKS
Instrument : VOA 101
Quant Date : 12/16/2023 9:55 am

Compound #68: 1,1,2-Trichloroethane



Original Peak Response = 2326



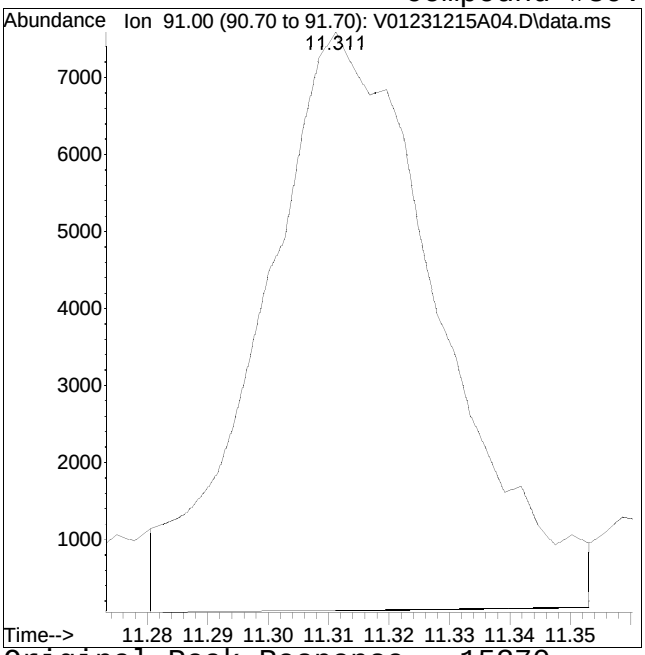
Manual Peak Response = 3291 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

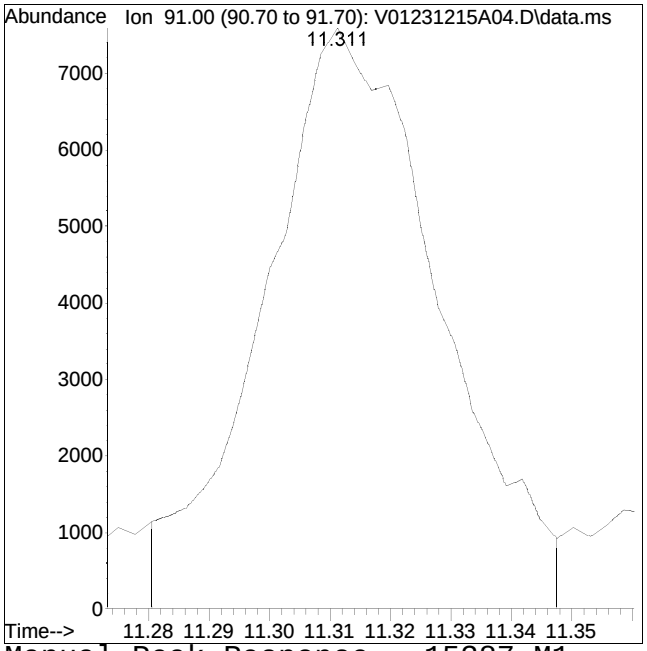
Manual Integration Report

Data Path : K:\VOA101\2023\231215AICALQMethod : V101_231215A_8260.m
Data File : V01231215A04.D Operator : VOA101:MKS
Date Inj'd : 12/15/2023 1:00 pm Instrument : VOA 101
Sample : I8260STD0.5PPB Quant Date : 12/16/2023 9:55 am

Compound #89: 2-Chlorotoluene



Original Peak Response = 15370



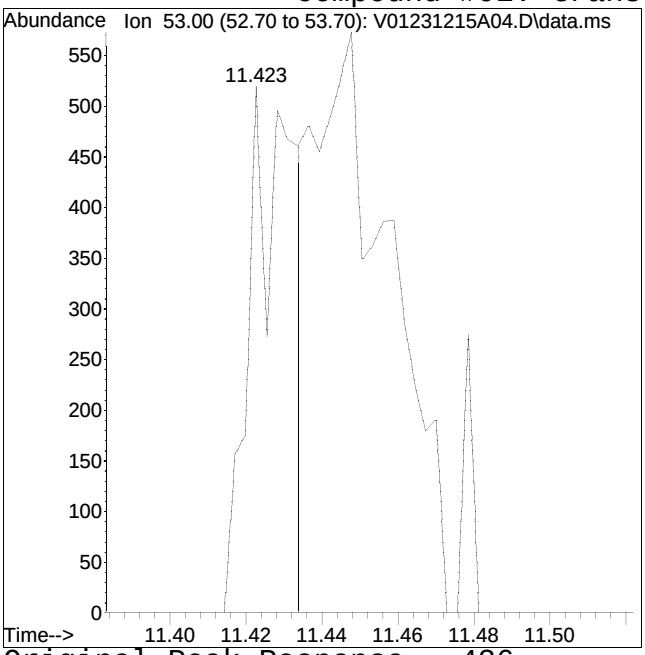
Manual Peak Response = 15387 M1

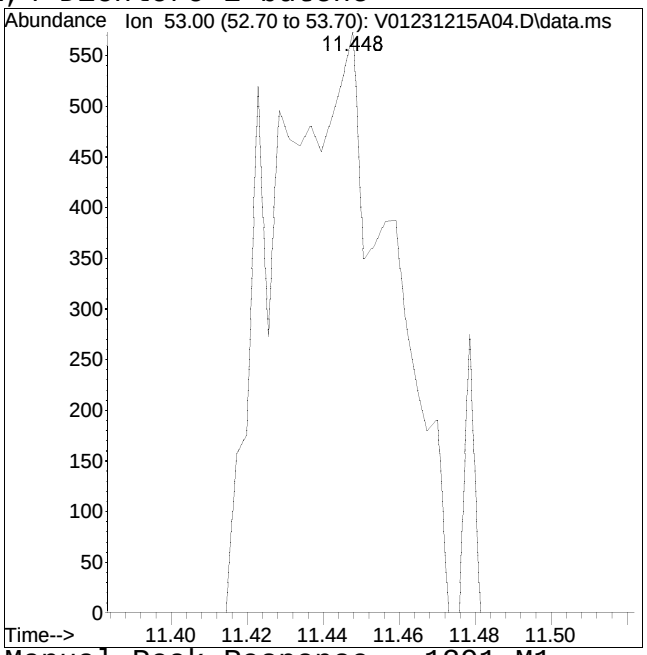
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

Data Path : K:\VOA101\2023\231215AICALQMethod : V101_231215A_8260.m
Data File : V01231215A04.D Operator : VOA101:MKS
Date Inj'd : 12/15/2023 1:00 pm Instrument : VOA 101
Sample : I8260STD0.5PPB Quant Date : 12/16/2023 9:55 am

Compound #92: trans-1,4-Dichloro-2-butene



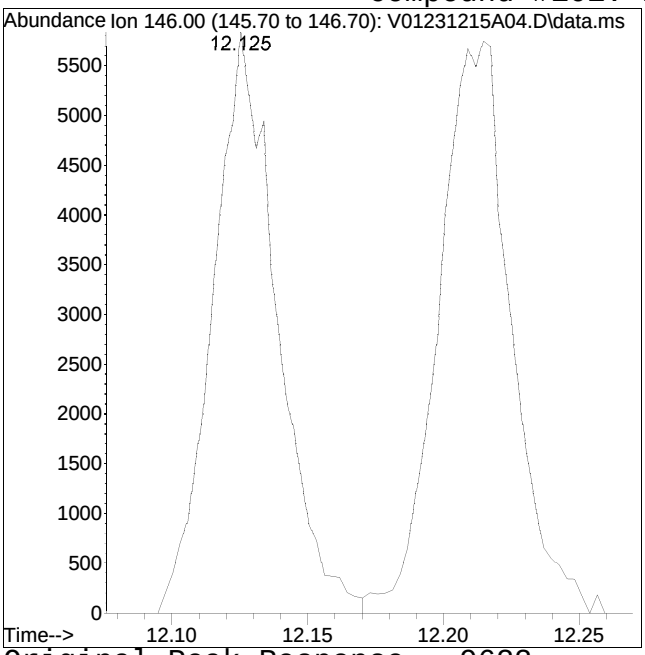


Original Peak Response = 426 Manual Peak Response = 1291 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

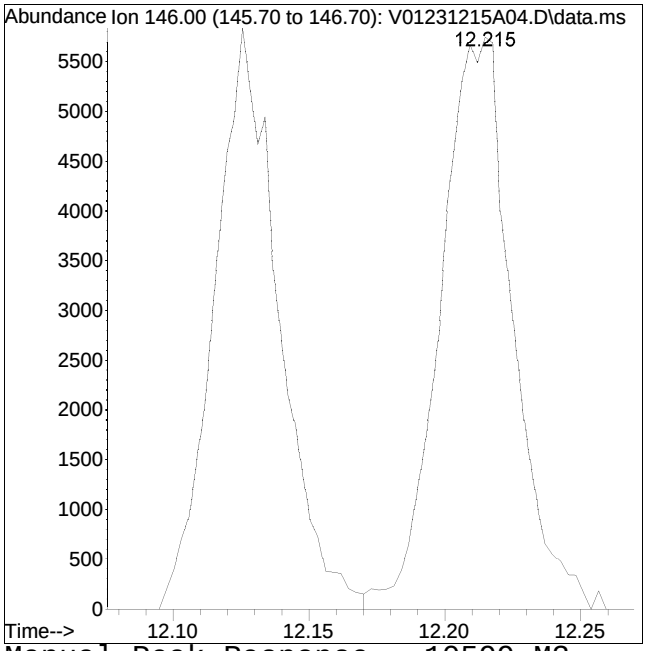
Manual Integration Report

Data Path : K:\VOA101\2023\231215AICALQMethod : V101_231215A_8260.m
Data File : V01231215A04.D Operator : VOA101:MKS
Date Inj'd : 12/15/2023 1:00 pm Instrument : VOA 101
Sample : I8260STD0.5PPB Quant Date : 12/16/2023 9:55 am

Compound #101: 1,4-Dichlorobenzene



Original Peak Response = 9622



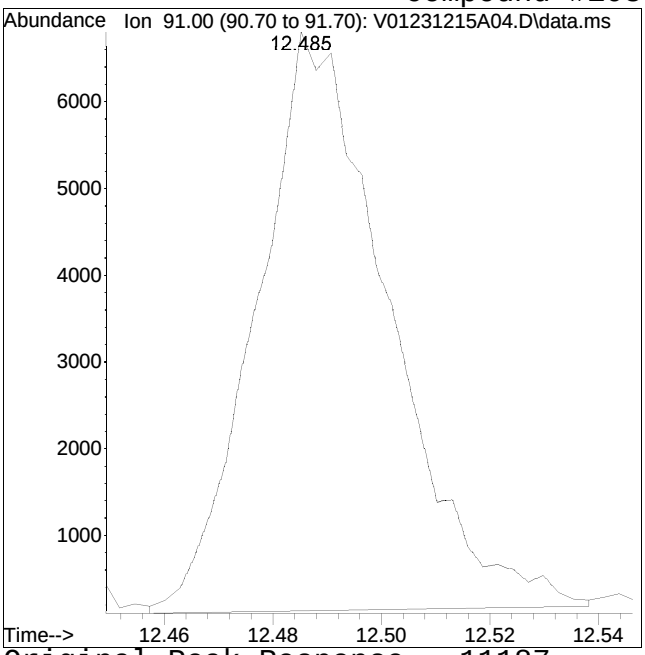
Manual Peak Response = 10599 M3

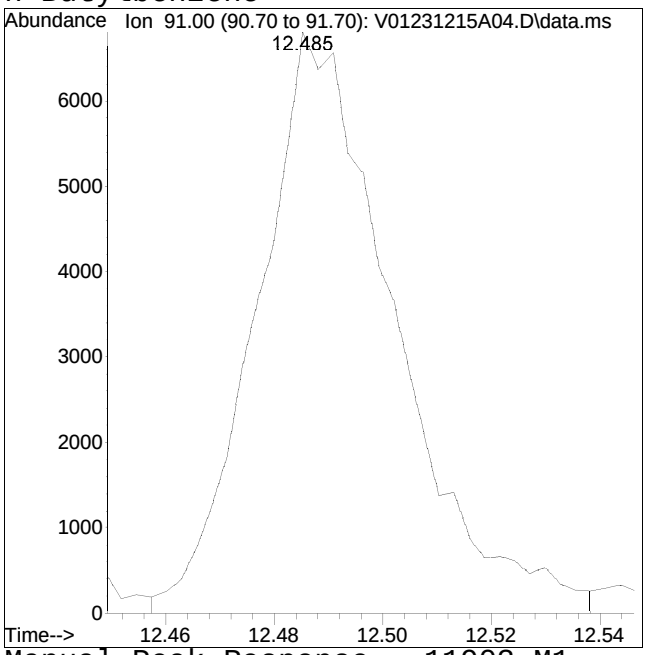
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : K:\VOA101\2023\231215AICALQMethod : V101_231215A_8260.m
Data File : V01231215A04.D Operator : VOA101:MKS
Date Inj'd : 12/15/2023 1:00 pm Instrument : VOA 101
Sample : I8260STD0.5PPB Quant Date : 12/16/2023 9:55 am

Compound #103: n-Butylbenzene





Original Peak Response = 11187 Manual Peak Response = 11903 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Quantitation Report (QT Reviewed)

Data Path : K:\VOA101\2023\231215AICAL\
Data File : V01231215A06.D
Acq On : 15 Dec 2023 1:52 pm
Operator : VOA101:MKS
Sample : I8260STD2PPB
Misc : WG1864802
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 16 10:07:08 2023
Quant Method : K:\VOA101\2023\231215AICAL\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 09:55:15 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA101\2023\231215AICAL\V01231215A08.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.963	96	442980	10.000	ug/L	0.00
Standard Area 1 = 440479			Recovery = 100.57%			
59) Chlorobenzene-d5	9.482	117	369645	10.000	ug/L	0.00
Standard Area 1 = 367736			Recovery = 100.52%			
79) 1,4-Dichlorobenzene-d4	12.195	152	198084	10.000	ug/L	0.00
Standard Area 1 = 202447			Recovery = 97.84%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.159	113	112190	9.920	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.20%			
43) 1,2-Dichloroethane-d4	5.681	65	126083	9.972	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.72%			
60) Toluene-d8	7.644	98	437613	10.000	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.00%			
83) 4-Bromofluorobenzene	10.982	95	170805	10.113	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.13%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.657	85	27440	2.288	ug/L	99
3) Chloromethane	1.849	50	33530	2.072	ug/L	99
4) Vinyl chloride	1.908	62	31385	2.185	ug/L	98
5) Bromomethane	2.215	94	13162	2.040	ug/L	99
6) Chloroethane	2.329	64	18545	2.149	ug/L	99
7) Trichlorofluoromethane	2.463	101	33127	2.222	ug/L	99
8) Ethyl ether	2.761	74	9352	1.924	ug/L #	65
10) 1,1-Dichloroethene	2.940	96	20858	2.206	ug/L	91
11) Carbon disulfide	2.970	76	63102	2.130	ug/L	97
12) Freon-113	2.979	101	22531	2.266	ug/L	83
13) Iodomethane	3.076	142	24627	1.617	ug/L	99
14) Acrolein	3.260	56	2962	1.933	ug/L	87
15) Methylene chloride	3.486	84	21652	2.023	ug/L	86
17) Acetone	3.539	43	4695	2.107	ug/L #	68
18) trans-1,2-Dichloroethene	3.642	96	22439	2.051	ug/L	95
19) Methyl acetate	3.654	43	10923	1.908	ug/L #	84
20) Methyl tert-butyl ether	3.743	73	50030	1.976	ug/L	92
21) tert-Butyl alcohol	3.843	59	6733	9.222	ug/L #	78
22) Diisopropyl ether	4.091	45	82482	1.982	ug/L	96
23) 1,1-Dichloroethane	4.211	63	45192	2.083	ug/L	97
24) Halothane	4.264	117	17037	2.043	ug/L	99

Data Path : K:\VOA101\2023\231215AICAL\
Data File : V01231215A06.D
Acq On : 15 Dec 2023 1:52 pm
Operator : VOA101:MKS
Sample : I8260STD2PPB
Misc : WG1864802
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 16 10:07:08 2023
Quant Method : K:\VOA101\2023\231215AICAL\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 09:55:15 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA101\2023\231215AICAL\V01231215A08.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) Acrylonitrile	4.264	53	5079	1.878	ug/L		88
26) Ethyl tert-butyl ether	4.432	59	68733	1.964	ug/L		96
27) Vinyl acetate	4.448	43	44203	2.007	ug/L		96
28) cis-1,2-Dichloroethene	4.724	96	25060	2.017	ug/L		97
29) 2,2-Dichloropropane	4.825	77	34756	2.123	ug/L		90
30) Bromochloromethane	4.914	128	11084	1.991	ug/L		90
31) Cyclohexane	4.917	56	46268	2.196	ug/L		90
32) Chloroform	4.989	83	37948	1.989	ug/L		96
33) Ethyl acetate	5.101	43	17189	1.997	ug/L	#	89
34) Carbon tetrachloride	5.118	117	31743	2.152	ug/L	#	94
35) Tetrahydrofuran	5.151	42	5209M1	2.179	ug/L		
37) 1,1,1-Trichloroethane	5.182	97	36031	2.122	ug/L		98
39) 2-Butanone	5.288	43	6203	1.863	ug/L	#	55
40) 1,1-Dichloropropene	5.304	75	31051	2.089	ug/L		97
41) Benzene	5.547	78	87848	2.021	ug/L		97
42) tert-Amyl methyl ether	5.659	73	54015	1.949	ug/L	#	91
44) 1,2-Dichloroethane	5.753	62	29173	2.020	ug/L		95
47) Methyl cyclohexane	6.133	83	38576	2.158	ug/L		87
48) Trichloroethene	6.144	95	24289	2.062	ug/L		97
50) Dibromomethane	6.582	93	11739	1.949	ug/L		97
51) 1,2-Dichloropropane	6.679	63	23683	1.964	ug/L		98
53) 2-Chloroethyl vinyl ether	7.382	63	5611M1	1.609	ug/L		
54) Bromodichloromethane	6.755	83	28725M1	1.955	ug/L		
57) 1,4-Dioxane	6.964	88	24802M1	344.345	ug/L		
58) cis-1,3-Dichloropropene	7.441	75	32627	1.888	ug/L	#	87
61) Toluene	7.703	92	55396	1.979	ug/L		99
62) 4-Methyl-2-pentanone	8.140	58	5201	1.717	ug/L		83
63) Tetrachloroethene	8.152	166	25540	2.075	ug/L		98
65) trans-1,3-Dichloropropene	8.191	75	27225	1.852	ug/L		97
67) Ethyl methacrylate	8.377	69	17465M1	1.715	ug/L		
68) 1,1,2-Trichloroethane	8.372	83	13746	1.912	ug/L		95
69) Chlorodibromomethane	8.581	129	19742	1.902	ug/L		99
70) 1,3-Dichloropropane	8.690	76	28005	1.950	ug/L		100
71) 1,2-Dibromoethane	8.866	107	16217M1	1.889	ug/L		
72) 2-Hexanone	9.161	43	9087M1	1.730	ug/L		
73) Chlorobenzene	9.501	112	62933	1.982	ug/L		99
74) Ethylbenzene	9.543	91	105781	1.942	ug/L		97
75) 1,1,1,2-Tetrachloroethane	9.588	131	22543	1.963	ug/L		98
76) p/m Xylene	9.727	106	82038	3.885	ug/L		99
77) o Xylene	10.268	106	80307	3.888	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : K:\VOA101\2023\231215AICAL\
Data File : V01231215A06.D
Acq On : 15 Dec 2023 1:52 pm
Operator : VOA101:MKS
Sample : I8260STD2PPB
Misc : WG1864802
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 16 10:07:08 2023
Quant Method : K:\VOA101\2023\231215AICAL\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 09:55:15 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA101\2023\231215AICAL\V01231215A08.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
78) Styrene	10.341	104	126346	3.727	ug/L		97
80) Bromoform	10.360	173	11238	1.901	ug/L		99
82) Isopropylbenzene	10.659	105	105728	2.057	ug/L		99
84) Bromobenzene	11.096	156	25078	2.011	ug/L		100
85) n-Propylbenzene	11.138	91	119624	2.025	ug/L		100
86) 1,4-Dichlorobutane	11.158	55	28887	1.967	ug/L		99
87) 1,1,2,2-Tetrachloroethane	11.227	83	19323	1.969	ug/L		98
88) 4-Ethyltoluene	11.267	105	100446	2.013	ug/L		100
89) 2-Chlorotoluene	11.308	91	70526	1.991	ug/L		98
90) 1,3,5-Trimethylbenzene	11.361	105	83524	1.993	ug/L		99
91) 1,2,3-Trichloropropane	11.367	75	14669M1	1.983	ug/L		
92) trans-1,4-Dichloro-2-b...	11.425	53	5367	1.767	ug/L	#	61
93) 4-Chlorotoluene	11.495	91	69400	1.906	ug/L		97
94) tert-Butylbenzene	11.704	119	70864	2.040	ug/L		99
97) 1,2,4-Trimethylbenzene	11.785	105	81176	1.976	ug/L		99
98) sec-Butylbenzene	11.894	105	100721	2.064	ug/L		99
99) p-Isopropyltoluene	12.050	119	84210	2.004	ug/L		98
100) 1,3-Dichlorobenzene	12.120	146	44889	1.950	ug/L		100
101) 1,4-Dichlorobenzene	12.212	146	46481	2.014	ug/L		99
102) p-Diethylbenzene	12.424	119	47616	1.980	ug/L		98
103) n-Butylbenzene	12.482	91	65037	1.967	ug/L		99
104) 1,2-Dichlorobenzene	12.636	146	41425	1.967	ug/L		99
105) 1,2,4,5-Tetramethylben...	13.219	119	65319	1.915	ug/L		99
106) 1,2-Dibromo-3-chloropr...	13.414	155	2506	1.874	ug/L		94
107) 1,3,5-Trichlorobenzene	13.447	180	25437	1.959	ug/L		99
108) Hexachlorobutadiene	14.022	225	8720	2.036	ug/L		96
109) 1,2,4-Trichlorobenzene	14.052	180	20804	1.889	ug/L		98
110) Naphthalene	14.340	128	43440	1.823	ug/L		100
111) 1,2,3-Trichlorobenzene	14.512	180	16976	1.904	ug/L		98

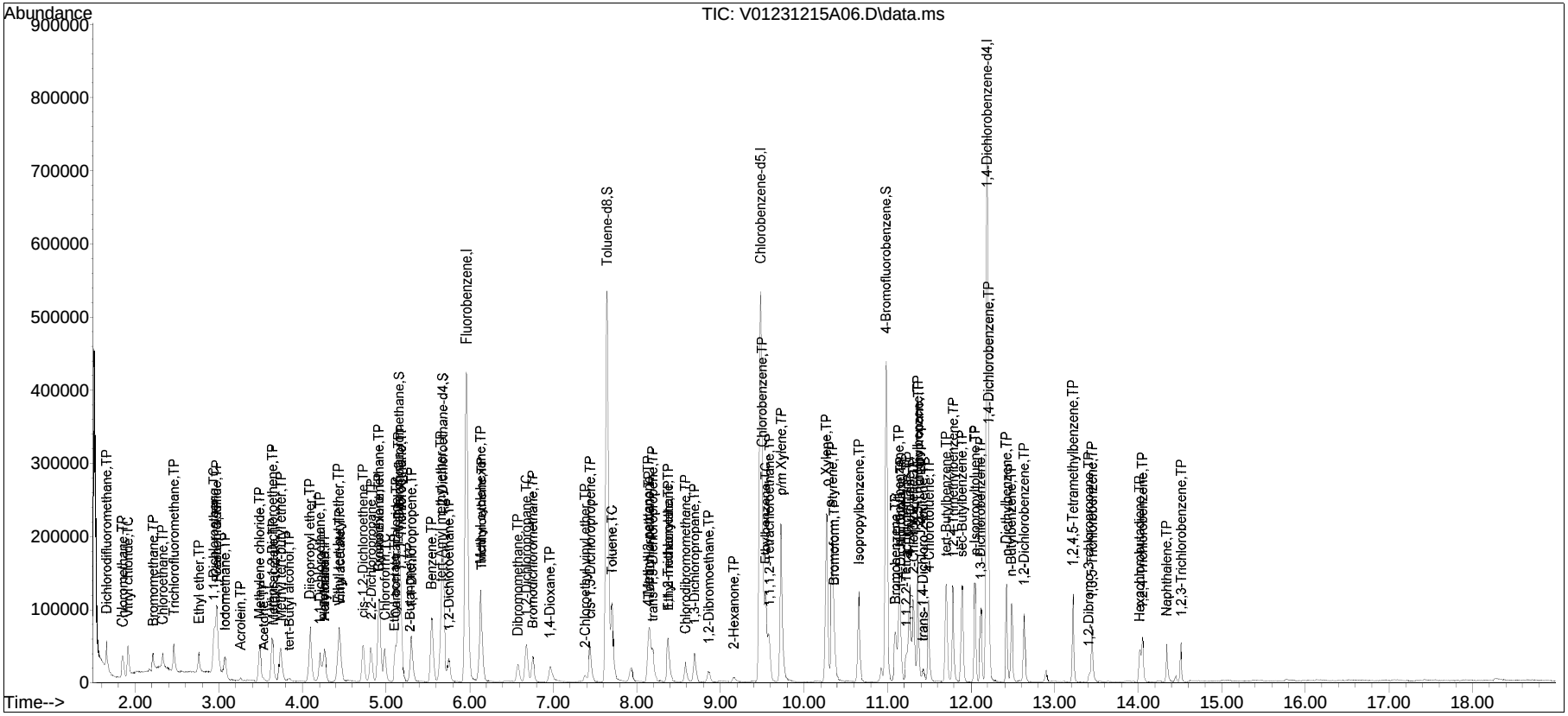
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\VOA101\2023\231215AICAL\
Data File : V01231215A06.D
Acq On : 15 Dec 2023 1:52 pm
Operator : VOA101:MKS
Sample : I8260STD2PPB
Misc : WG1864802
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 16 10:07:08 2023
Quant Method : K:\VOA101\2023\231215AICAL\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 09:55:15 2023
Response via : Initial Calibration

Sub List : 8260-Curve - Megamix plus Diox\V01231215A08.D•

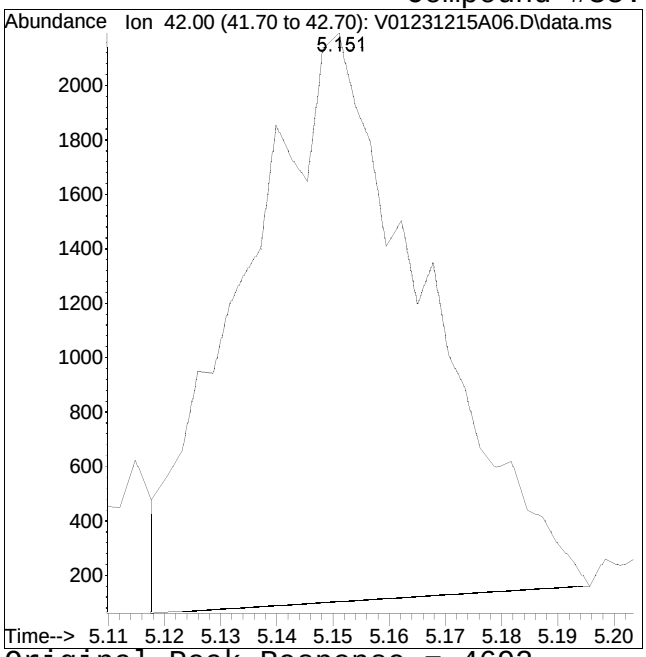


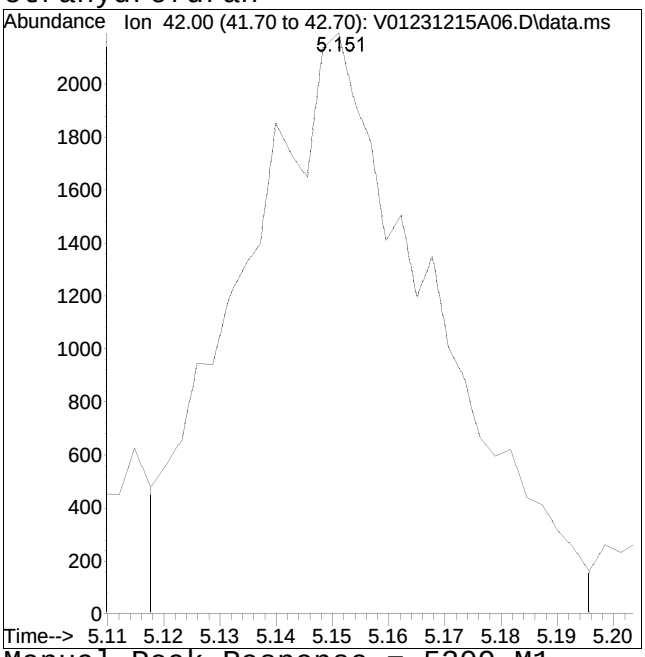
Manual Integration Report

Data Path : K:\VOA101\2023\231215AICALQ
Data File : V01231215A06.D
Date Inj'd : 12/15/2023 1:52 pm
Sample : I8260STD2PPB

Method : V101_231215A_8260.m
Operator : VOA101:MKS
Instrument : VOA 101
Quant Date : 12/16/2023 9:55 am

Compound #35: Tetrahydrofuran





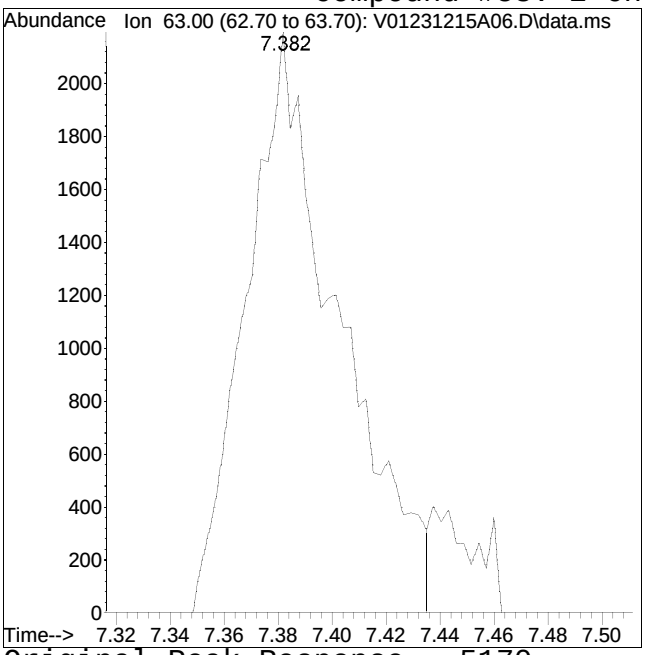
Original Peak Response = 4692 Manual Peak Response = 5209 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

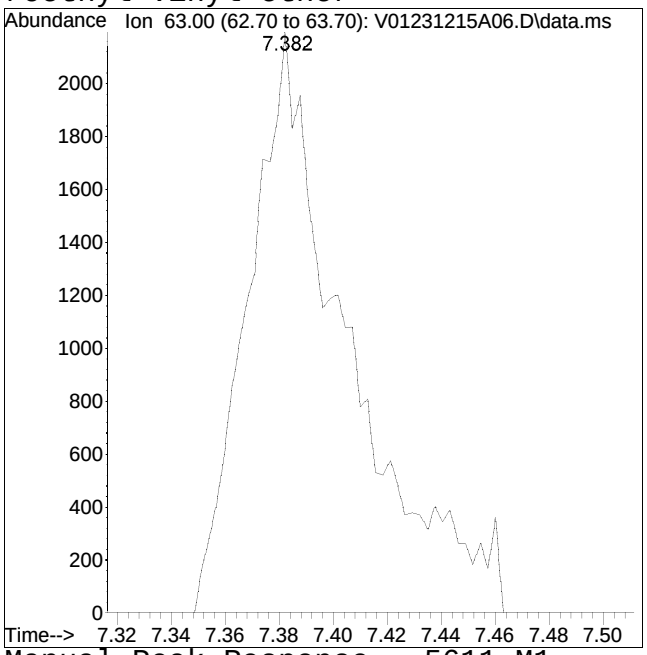
Manual Integration Report

Data Path : K:\VOA101\2023\231215AICALQMethod : V101_231215A_8260.m
Data File : V01231215A06.D Operator : VOA101:MKS
Date Inj'd : 12/15/2023 1:52 pm Instrument : VOA 101
Sample : I8260STD2PPB Quant Date : 12/16/2023 9:55 am

Compound #53: 2-Chloroethyl vinyl ether



Original Peak Response = 5170



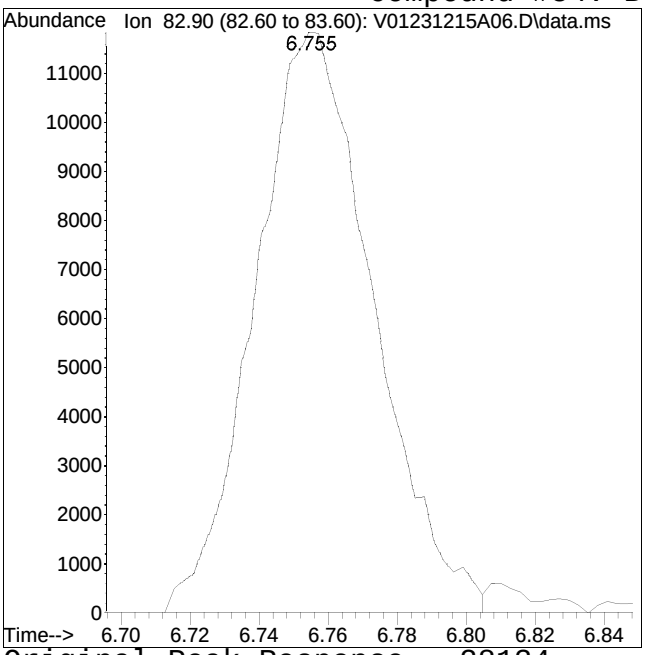
Manual Peak Response = 5611 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

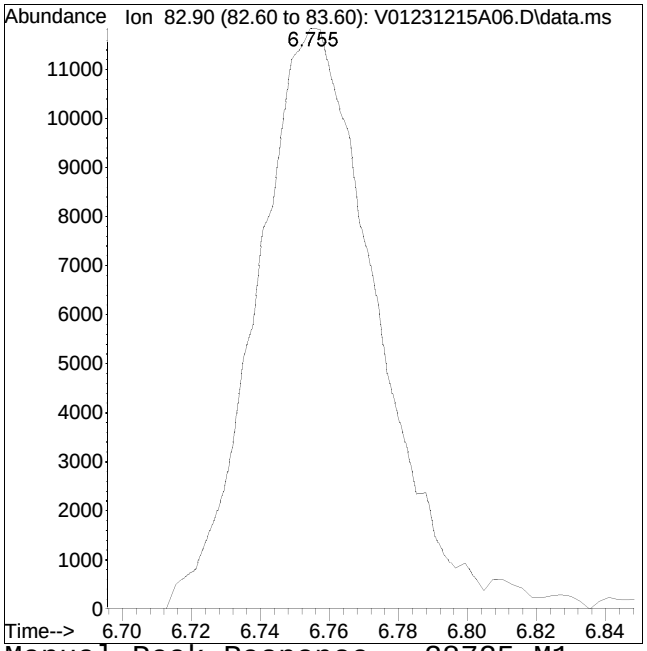
Manual Integration Report

Data Path : K:\VOA101\2023\231215AICALQMethod : V101_231215A_8260.m
Data File : V01231215A06.D Operator : VOA101:MKS
Date Inj'd : 12/15/2023 1:52 pm Instrument : VOA 101
Sample : I8260STD2PPB Quant Date : 12/16/2023 9:55 am

Compound #54: Bromodichloromethane



Original Peak Response = 28134



Manual Peak Response = 28725 M1

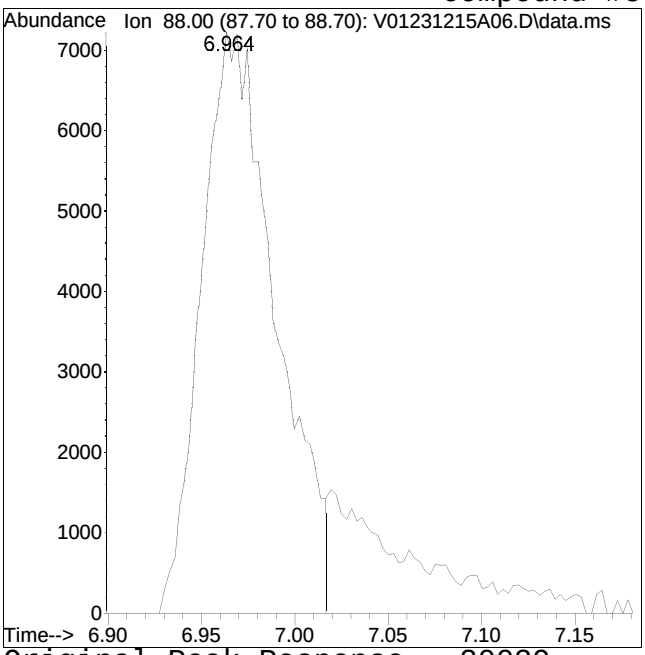
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

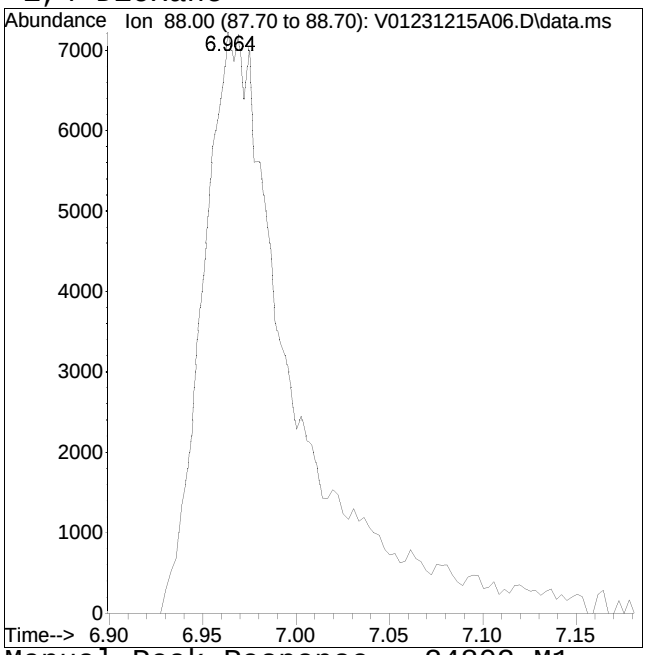
Manual Integration Report

Data Path : K:\VOA101\2023\231215AICALQ
Data File : V01231215A06.D
Date Inj'd : 12/15/2023 1:52 pm
Sample : I8260STD2PPB

Method : V101_231215A_8260.m
Operator : VOA101:MKS
Instrument : VOA 101
Quant Date : 12/16/2023 9:55 am

Compound #57: 1,4-Dioxane





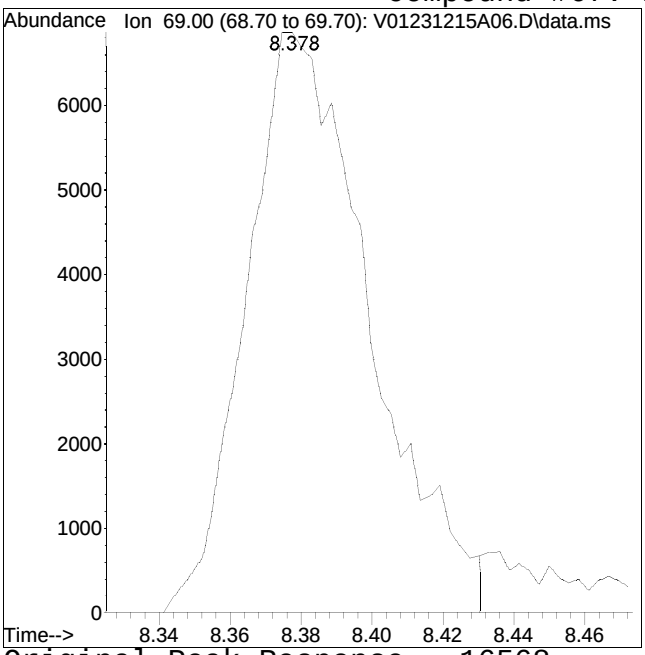
Original Peak Response = 20039 Manual Peak Response = 24802 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

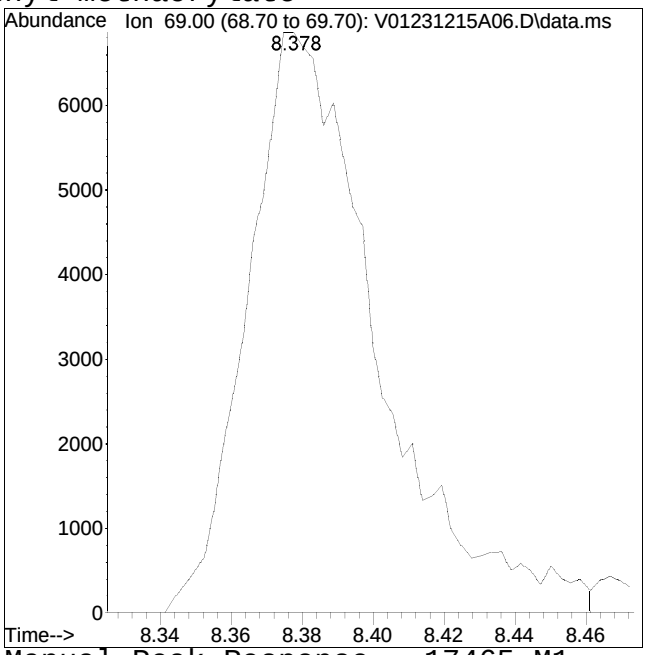
Manual Integration Report

Data Path : K:\VOA101\2023\231215AICALQMethod : V101_231215A_8260.m
Data File : V01231215A06.D Operator : VOA101:MKS
Date Inj'd : 12/15/2023 1:52 pm Instrument : VOA 101
Sample : I8260STD2PPB Quant Date : 12/16/2023 9:55 am

Compound #67: Ethyl methacrylate



Original Peak Response = 16568



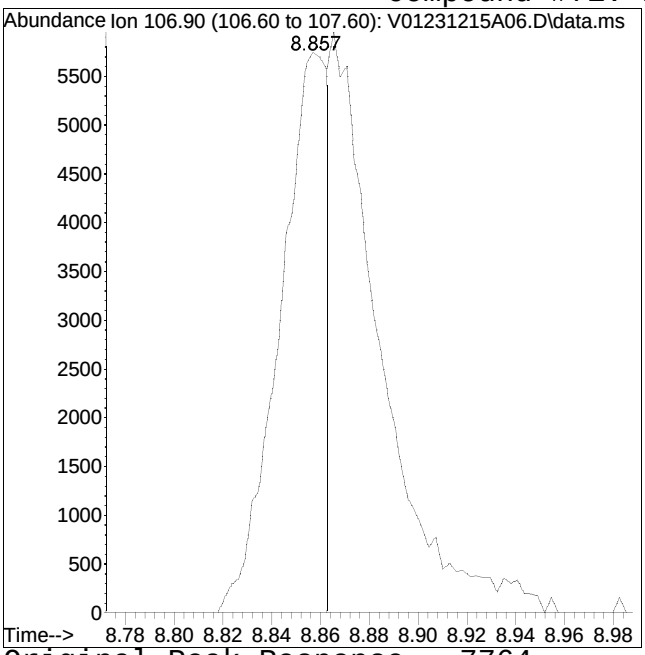
Manual Peak Response = 17465 M1

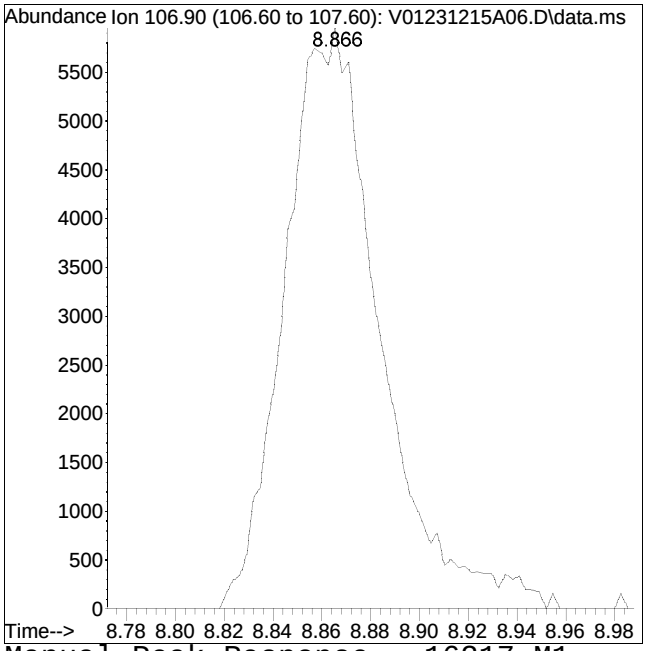
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

Data Path : K:\VOA101\2023\231215AICALQMethod : V101_231215A_8260.m
Data File : V01231215A06.D Operator : VOA101:MKS
Date Inj'd : 12/15/2023 1:52 pm Instrument : VOA 101
Sample : I8260STD2PPB Quant Date : 12/16/2023 9:55 am

Compound #71: 1,2-Dibromoethane



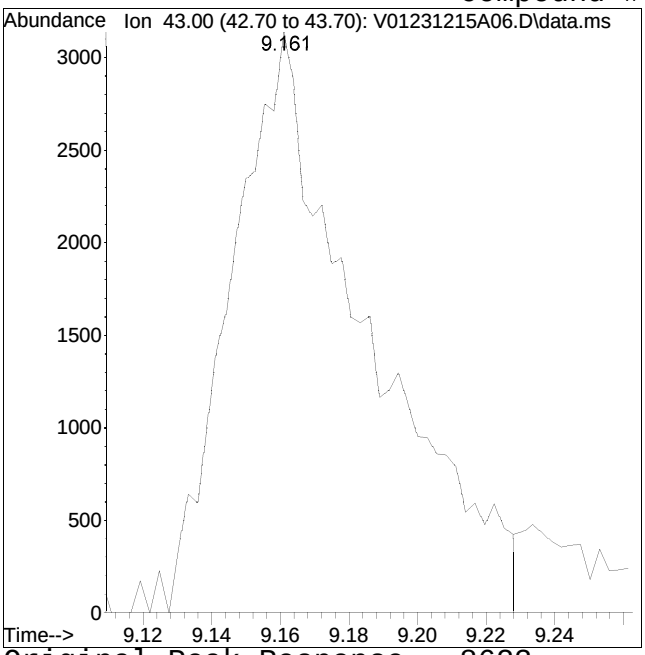


Original Peak Response = 7764 Manual Peak Response = 16217 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

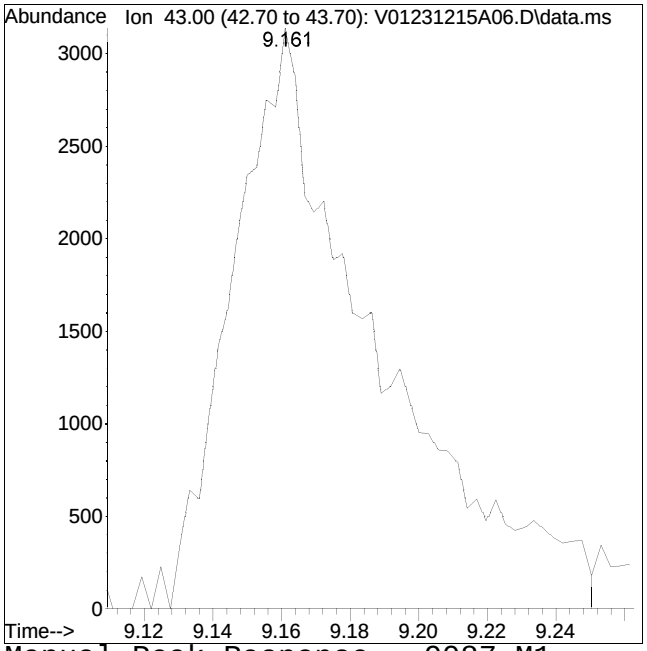
Manual Integration Report

Data Path : K:\VOA101\2023\231215AICALQMethod : V101_231215A_8260.m
Data File : V01231215A06.D Operator : VOA101:MKS
Date Inj'd : 12/15/2023 1:52 pm Instrument : VOA 101
Sample : I8260STD2PPB Quant Date : 12/16/2023 9:55 am

Compound #72: 2-Hexanone



Original Peak Response = 8623



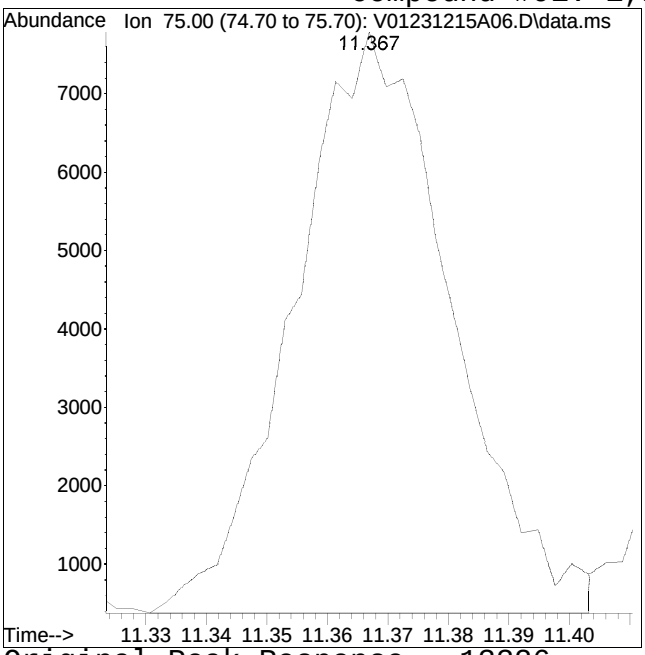
Manual Peak Response = 9087 M1

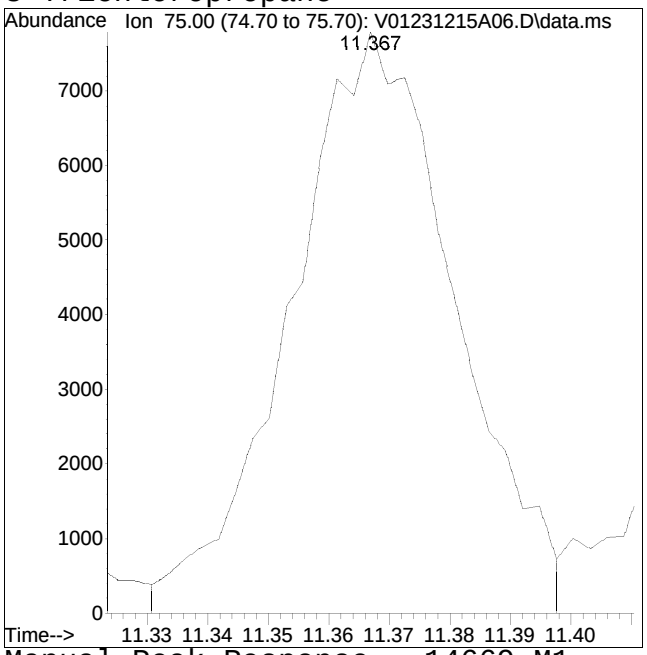
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

Data Path : K:\VOA101\2023\231215AICALQMethod : V101_231215A_8260.m
Data File : V01231215A06.D Operator : VOA101:MKS
Date Inj'd : 12/15/2023 1:52 pm Instrument : VOA 101
Sample : I8260STD2PPB Quant Date : 12/16/2023 9:55 am

Compound #91: 1,2,3-Trichloropropane





Original Peak Response = 13326 Manual Peak Response = 14669 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Quantitation Report (QT Reviewed)

Data Path : K:\VOA101\2023\231215AICAL\
Data File : V01231215A08.D
Acq On : 15 Dec 2023 2:44 pm
Operator : VOA101:MKS
Sample : I8260STD10PPB
Misc : WG1864802
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 16 09:54:57 2023
Quant Method : K:\VOA101\2023\231215AICAL\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sun Dec 10 18:32:44 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA101\2023\231215AICAL\V01231215A08.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.962	96	440479	10.000	ug/L	0.00
Standard Area 1 = 440479			Recovery = 100.00%			
59) Chlorobenzene-d5	9.479	117	367736	10.000	ug/L	0.00
Standard Area 1 = 367736			Recovery = 100.00%			
79) 1,4-Dichlorobenzene-d4	12.195	152	202447	10.000	ug/L	0.00
Standard Area 1 = 202447			Recovery = 100.00%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.162	113	112460	8.714	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 87.14%			
43) 1,2-Dichloroethane-d4	5.681	65	125729	7.868	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 78.68%			
60) Toluene-d8	7.641	98	435370	10.615	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 106.15%			
83) 4-Bromofluorobenzene	10.985	95	172616	11.536	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 115.36%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.654	85	119262	8.079	ug/L	99
3) Chloromethane	1.846	50	160890	12.817	ug/L	99
4) Vinyl chloride	1.908	62	142809	9.106	ug/L	100
5) Bromomethane	2.214	94	64150	17.155	ug/L	99
6) Chloroethane	2.329	64	85799	8.177	ug/L	98
7) Trichlorofluoromethane	2.463	101	148257	7.478	ug/L	97
8) Ethyl ether	2.758	74	48337	8.037	ug/L	74
10) 1,1-Dichloroethene	2.939	96	94036	7.821	ug/L	88
11) Carbon disulfide	2.970	76	294519	7.603	ug/L	99
12) Freon-113	2.976	101	98854	7.680	ug/L #	75
13) Iodomethane	3.076	142	151402	12.450	ug/L	98
14) Acrolein	3.263	56	15237M1	8.482	ug/L	
15) Methylene chloride	3.489	84	106401	10.455	ug/L	89
17) Acetone	3.539	43	22154	9.804	ug/L	93
18) trans-1,2-Dichloroethene	3.639	96	108764	10.318	ug/L	97
19) Methyl acetate	3.653	43	56912	10.409	ug/L #	90
20) Methyl tert-butyl ether	3.743	73	251765	10.304	ug/L	94
21) tert-Butyl alcohol	3.840	59	36299	57.202	ug/L	92
22) Diisopropyl ether	4.091	45	413774	10.630	ug/L	95
23) 1,1-Dichloroethane	4.211	63	215774	10.021	ug/L	99
24) Halothane	4.267	117	82901	10.384	ug/L	98

Data Path : K:\VOA101\2023\231215AICAL\
Data File : V01231215A08.D
Acq On : 15 Dec 2023 2:44 pm
Operator : VOA101:MKS
Sample : I8260STD10PPB
Misc : WG1864802
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 16 09:54:57 2023
Quant Method : K:\VOA101\2023\231215AICAL\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sun Dec 10 18:32:44 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA101\2023\231215AICAL\V01231215A08.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) Acrylonitrile	4.264	53	26897	11.307	ug/L		90
26) Ethyl tert-butyl ether	4.431	59	347953	10.614	ug/L		94
27) Vinyl acetate	4.445	43	219005	9.550	ug/L		97
28) cis-1,2-Dichloroethene	4.724	96	123538	10.679	ug/L		97
29) 2,2-Dichloropropane	4.822	77	162754	9.463	ug/L		93
30) Bromochloromethane	4.914	128	55360	10.897	ug/L		92
31) Cyclohexane	4.919	56	209530	9.426	ug/L		91
32) Chloroform	4.986	83	189753	9.516	ug/L		97
33) Ethyl acetate	5.098	43	85604	10.977	ug/L		95
34) Carbon tetrachloride	5.120	117	146704	8.877	ug/L		99
35) Tetrahydrofuran	5.145	42	23767M1	10.959	ug/L		
37) 1,1,1-Trichloroethane	5.182	97	168871	9.222	ug/L		99
39) 2-Butanone	5.285	43	33109	10.423	ug/L	#	77
40) 1,1-Dichloropropene	5.304	75	147804	9.624	ug/L		98
41) Benzene	5.544	78	432173	10.434	ug/L		96
42) tert-Amyl methyl ether	5.658	73	275516	10.752	ug/L		95
44) 1,2-Dichloroethane	5.750	62	143586	9.352	ug/L		98
47) Methyl cyclohexane	6.127	83	177738	9.253	ug/L		89
48) Trichloroethene	6.141	95	117141	9.558	ug/L		98
50) Dibromomethane	6.579	93	59883	9.938	ug/L		97
51) 1,2-Dichloropropane	6.676	63	119902	10.721	ug/L		97
53) 2-Chloroethyl vinyl ether	7.371	63	34672M1	11.565	ug/L		
54) Bromodichloromethane	6.752	83	146132	9.820	ug/L		99
57) 1,4-Dioxane	6.963	88	35810M1	906.557	ug/L		
58) cis-1,3-Dichloropropene	7.438	75	171846	10.440	ug/L		92
61) Toluene	7.700	92	278431	11.429	ug/L		99
62) 4-Methyl-2-pentanone	8.132	58	30126	12.624	ug/L		95
63) Tetrachloroethene	8.151	166	122431	10.699	ug/L		99
65) trans-1,3-Dichloropropene	8.179	75	146236	11.305	ug/L		91
67) Ethyl methacrylate	8.372	69	101306	11.458	ug/L		100
68) 1,1,2-Trichloroethane	8.366	83	71537	11.650	ug/L		98
69) Chlorodibromomethane	8.578	129	103241	11.438	ug/L		99
70) 1,3-Dichloropropane	8.687	76	142880	11.554	ug/L		100
71) 1,2-Dibromoethane	8.854	107	85401	12.290	ug/L		99
72) 2-Hexanone	9.144	43	52243	12.214	ug/L		100
73) Chlorobenzene	9.501	112	315867	11.482	ug/L		97
74) Ethylbenzene	9.537	91	541791	11.175	ug/L		99
75) 1,1,1,2-Tetrachloroethane	9.588	131	114241	11.106	ug/L		99
76) p/m Xylene	9.724	106	420172	20.844	ug/L		98
77) o Xylene	10.268	106	410944	20.987	ug/L		97

Quantitation Report (QT Reviewed)

Data Path : K:\VOA101\2023\231215AICAL\
Data File : V01231215A08.D
Acq On : 15 Dec 2023 2:44 pm
Operator : VOA101:MKS
Sample : I8260STD10PPB
Misc : WG1864802
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 16 09:54:57 2023
Quant Method : K:\VOA101\2023\231215AICAL\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sun Dec 10 18:32:44 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA101\2023\231215AICAL\V01231215A08.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
78) Styrene	10.338	104	674462	21.701	ug/L	97
80) Bromoform	10.366	173	60407	10.447	ug/L	100
82) Isopropylbenzene	10.653	105	525283	11.243	ug/L	99
84) Bromobenzene	11.096	156	127440	12.046	ug/L	100
85) n-Propylbenzene	11.135	91	603630	10.484	ug/L	99
86) 1,4-Dichlorobutane	11.152	55	150083	12.758	ug/L	99
87) 1,1,2,2-Tetrachloroethane	11.227	83	100284	13.156	ug/L	100
88) 4-Ethyltoluene	11.264	105	510057	11.629	ug/L	100
89) 2-Chlorotoluene	11.305	91	362059	11.962	ug/L	98
90) 1,3,5-Trimethylbenzene	11.361	105	428333	10.941	ug/L	100
91) 1,2,3-Trichloropropane	11.364	75	75594M1	12.452	ug/L	
92) trans-1,4-Dichloro-2-b...	11.417	53	31039M1	12.301	ug/L	
93) 4-Chlorotoluene	11.489	91	372135	12.009	ug/L	99
94) tert-Butylbenzene	11.704	119	355027	10.947	ug/L	99
97) 1,2,4-Trimethylbenzene	11.782	105	419904	11.202	ug/L	99
98) sec-Butylbenzene	11.894	105	498747	11.535	ug/L	99
99) p-Isopropyltoluene	12.047	119	429421	11.568	ug/L	98
100) 1,3-Dichlorobenzene	12.117	146	235231	11.770	ug/L	99
101) 1,4-Dichlorobenzene	12.209	146	235870	11.627	ug/L	99
102) p-Diethylbenzene	12.421	119	245819	11.169	ug/L	98
103) n-Butylbenzene	12.482	91	337970	10.868	ug/L	100
104) 1,2-Dichlorobenzene	12.636	146	215263	12.117	ug/L	99
105) 1,2,4,5-Tetramethylben...	13.218	119	348608	12.180	ug/L	99
106) 1,2-Dibromo-3-chloropr...	13.414	155	13668	12.234	ug/L	100
107) 1,3,5-Trichlorobenzene	13.447	180	132683	11.083	ug/L	99
108) Hexachlorobutadiene	14.022	225	43780	9.218	ug/L	99
109) 1,2,4-Trichlorobenzene	14.044	180	112541	11.864	ug/L	99
110) Naphthalene	14.337	128	243519	13.999	ug/L	100
111) 1,2,3-Trichlorobenzene	14.507	180	91135	11.892	ug/L	99

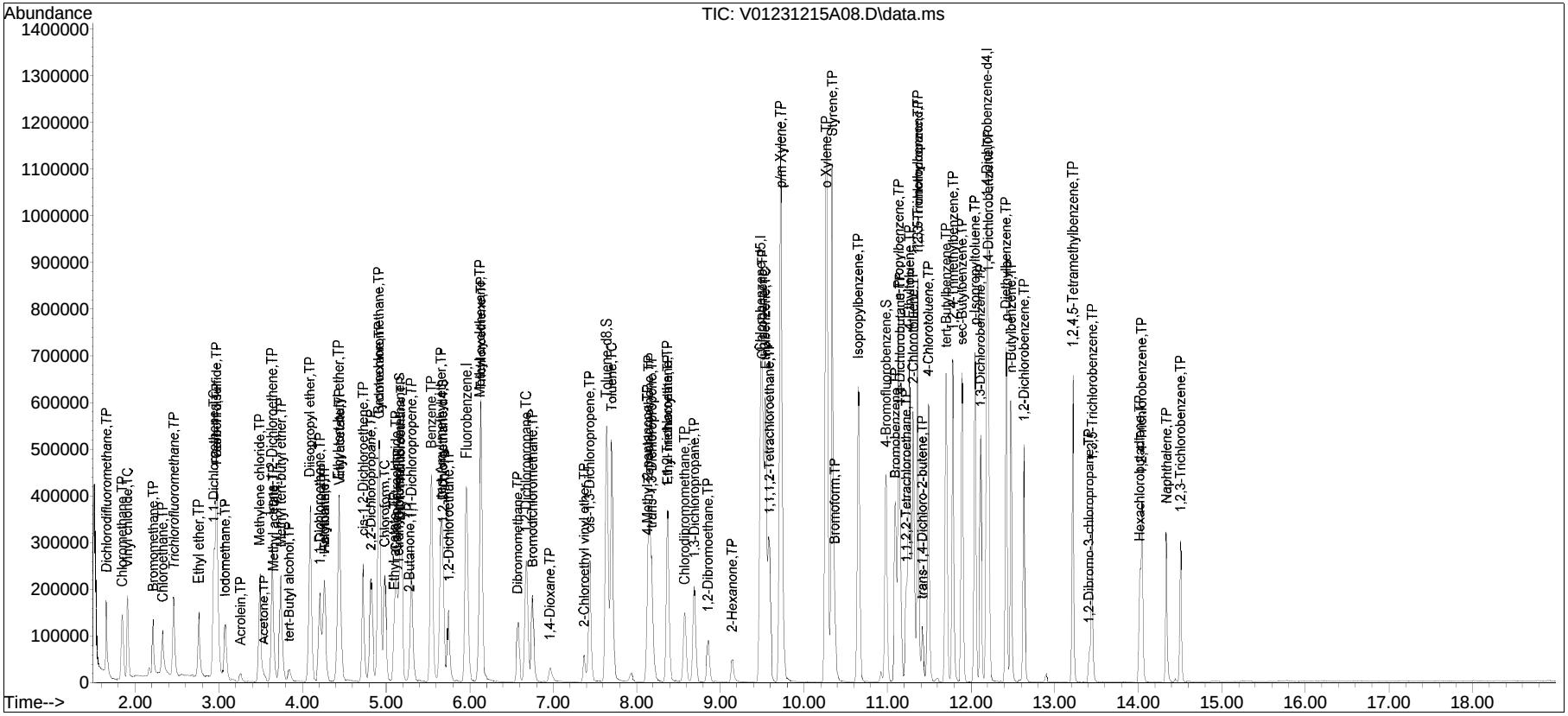
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\VOA101\2023\231215AICAL\
Data File : V01231215A08.D
Acq On : 15 Dec 2023 2:44 pm
Operator : VOA101:MKS
Sample : I8260STD10PPB
Misc : WG1864802
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 16 09:54:57 2023
Quant Method : K:\VOA101\2023\231215AICAL\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sun Dec 10 18:32:44 2023
Response via : Initial Calibration

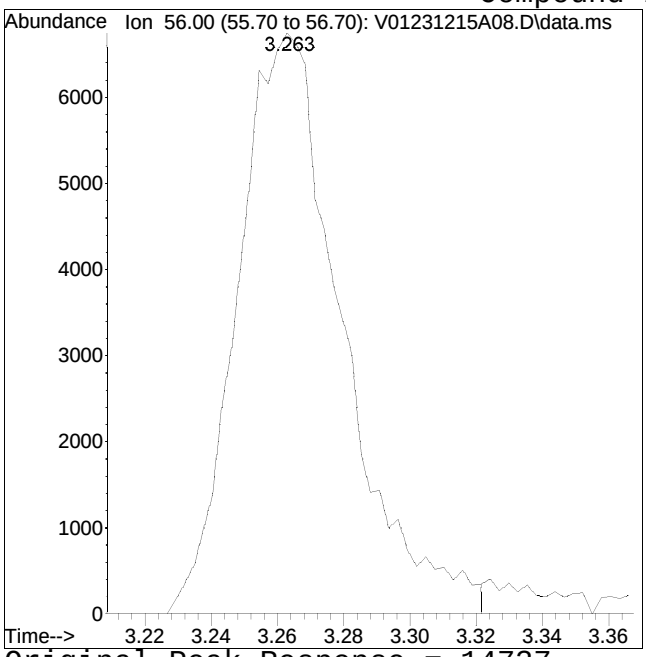
Sub List : 8260-Curve - Megamix plus Diox\V01231215A08.D•

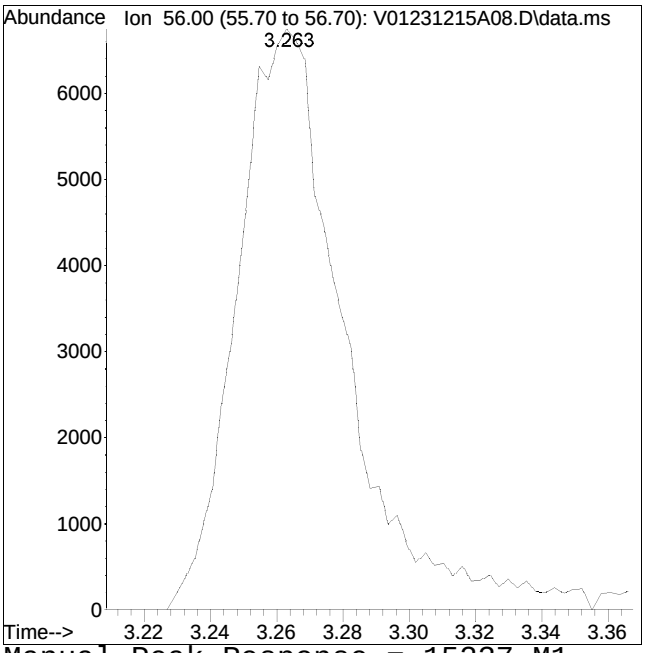


Manual Integration Report

Data Path : K:\VOA101\2023\231215AICALQMethod : V101_231215A_8260.m
Data File : V01231215A08.D Operator : VOA101:MKS
Date Inj'd : 12/15/2023 2:44 pm Instrument : VOA 101
Sample : I8260STD10PPB Quant Date : 12/16/2023 9:53 am

Compound #14: Acrolein



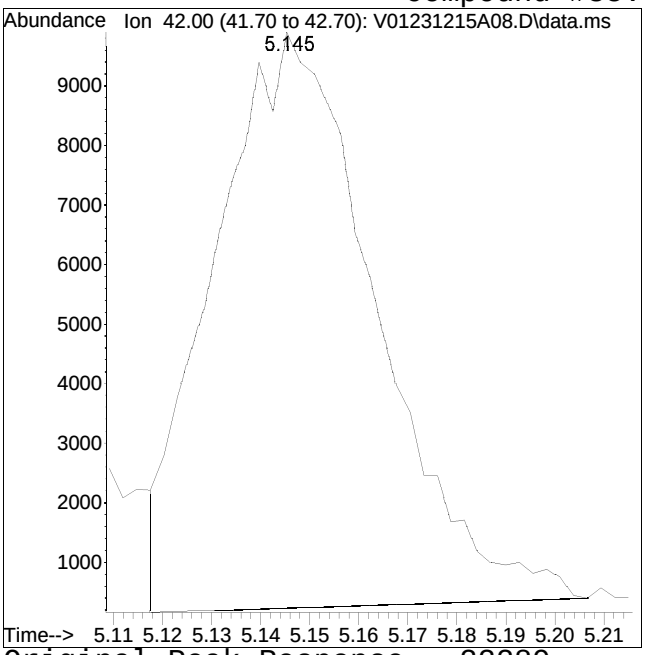


Original Peak Response = 14737 Manual Peak Response = 15237 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

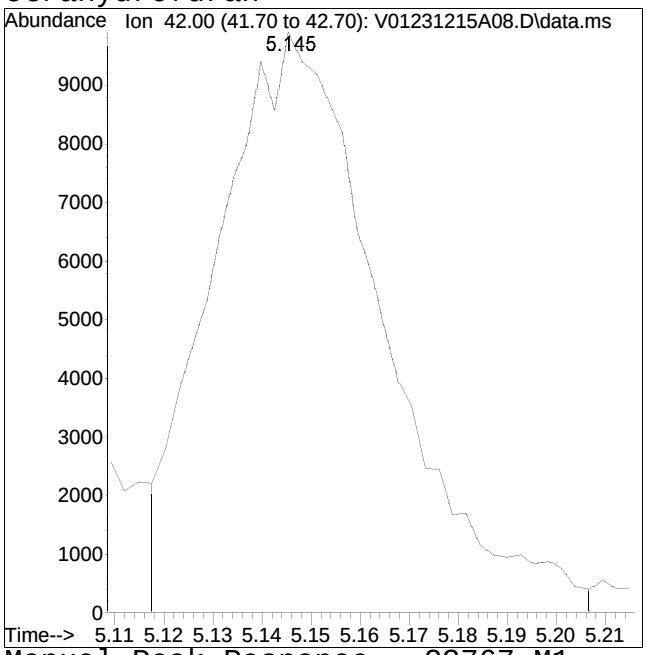
Manual Integration Report

Data Path : K:\VOA101\2023\231215AICALQMethod : V101_231215A_8260.m
Data File : V01231215A08.D Operator : VOA101:MKS
Date Inj'd : 12/15/2023 2:44 pm Instrument : VOA 101
Sample : I8260STD10PPB Quant Date : 12/16/2023 9:53 am

Compound #35: Tetrahydrofuran



Original Peak Response = 22289



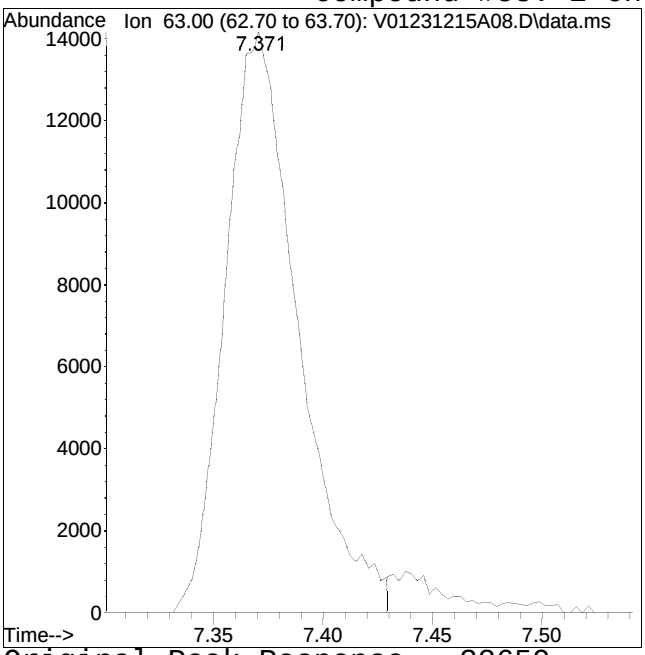
Manual Peak Response = 23767 M1

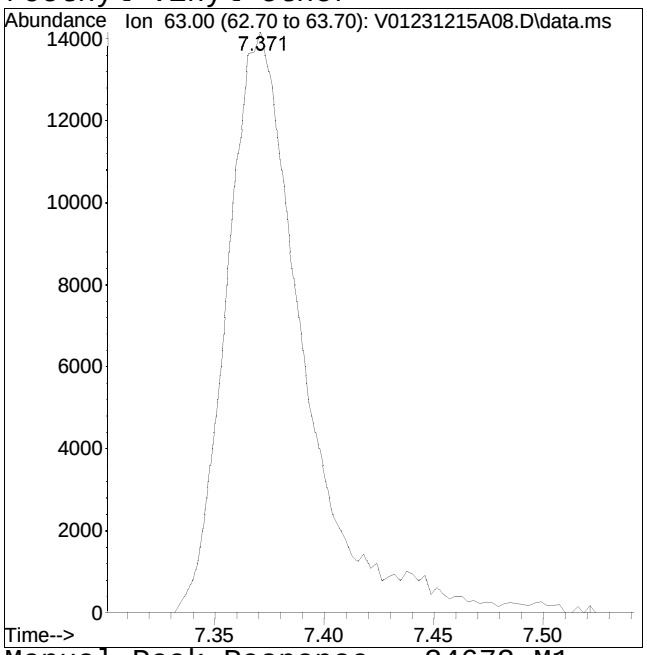
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

Data Path : K:\VOA101\2023\231215AICALQMethod : V101_231215A_8260.m
Data File : V01231215A08.D Operator : VOA101:MKS
Date Inj'd : 12/15/2023 2:44 pm Instrument : VOA 101
Sample : I8260STD10PPB Quant Date : 12/16/2023 9:53 am

Compound #53: 2-Chloroethyl vinyl ether



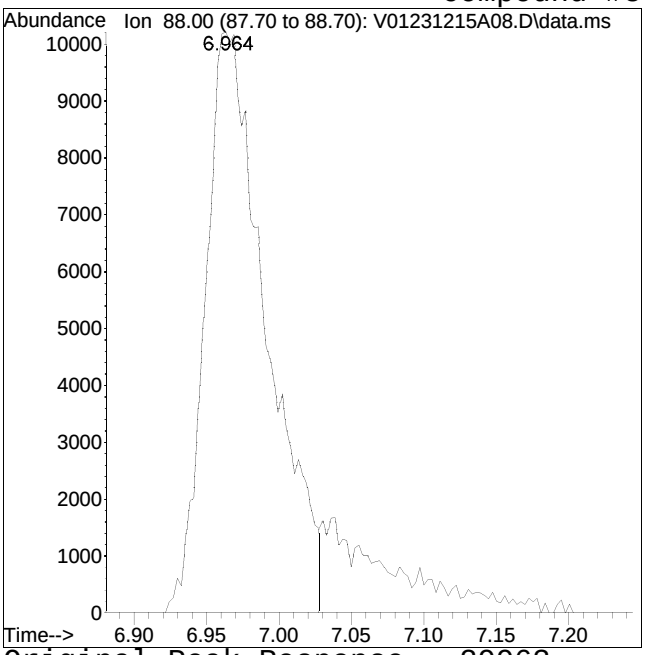


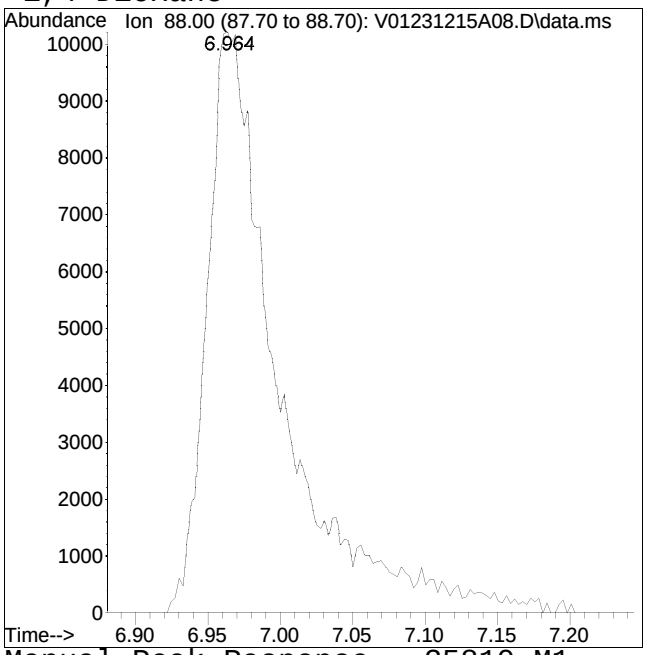
Original Peak Response = 32659 Manual Peak Response = 34672 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

Data Path : K:\VOA101\2023\231215AICALQMethod : V101_231215A_8260.m
Data File : V01231215A08.D Operator : VOA101:MKS
Date Inj'd : 12/15/2023 2:44 pm Instrument : VOA 101
Sample : I8260STD10PPB Quant Date : 12/16/2023 9:53 am

Compound #57: 1,4-Dioxane



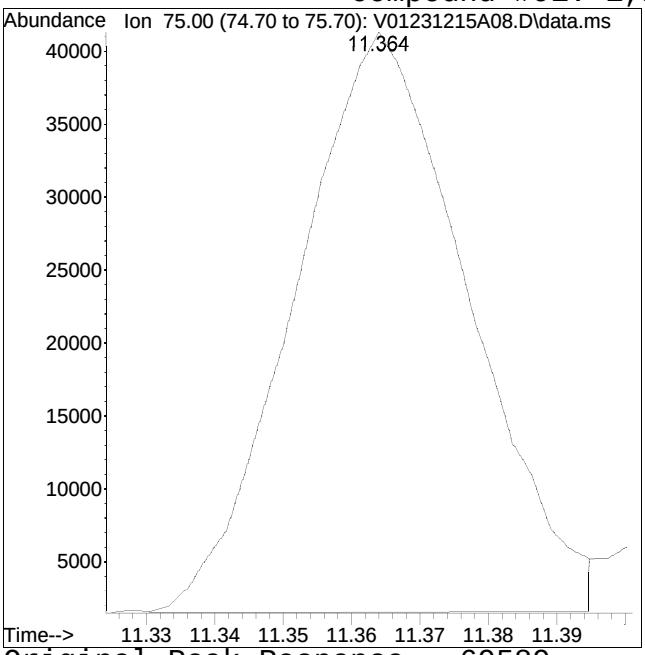


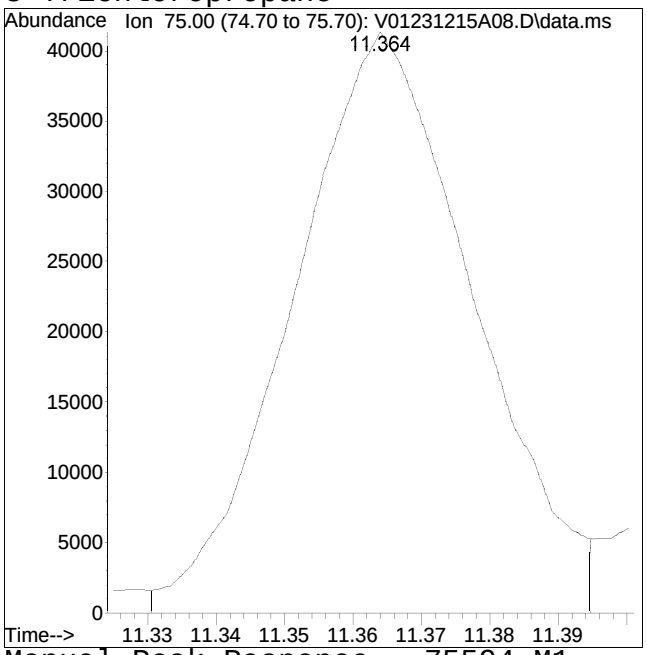
Original Peak Response = 29963 Manual Peak Response = 35810 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

Data Path : K:\VOA101\2023\231215AICALQMethod : V101_231215A_8260.m
Data File : V01231215A08.D Operator : VOA101:MKS
Date Inj'd : 12/15/2023 2:44 pm Instrument : VOA 101
Sample : I8260STD10PPB Quant Date : 12/16/2023 9:53 am

Compound #91: 1,2,3-Trichloropropane



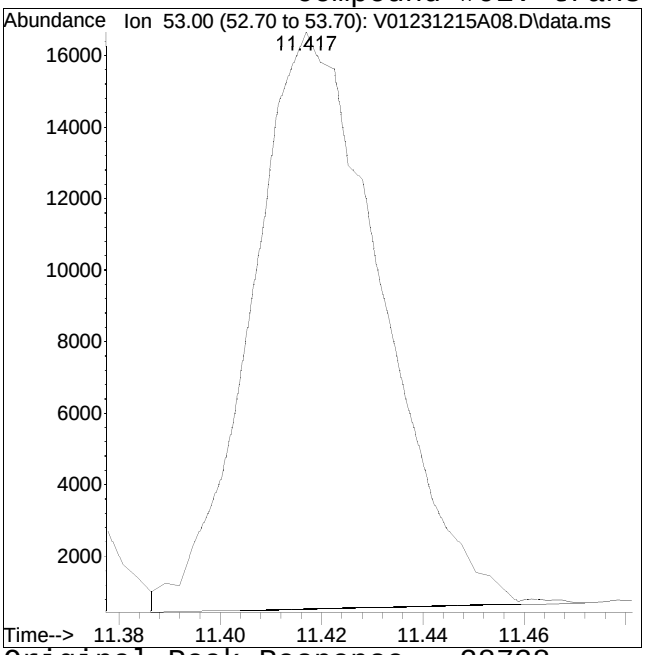


Original Peak Response = 69589 Manual Peak Response = 75594 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

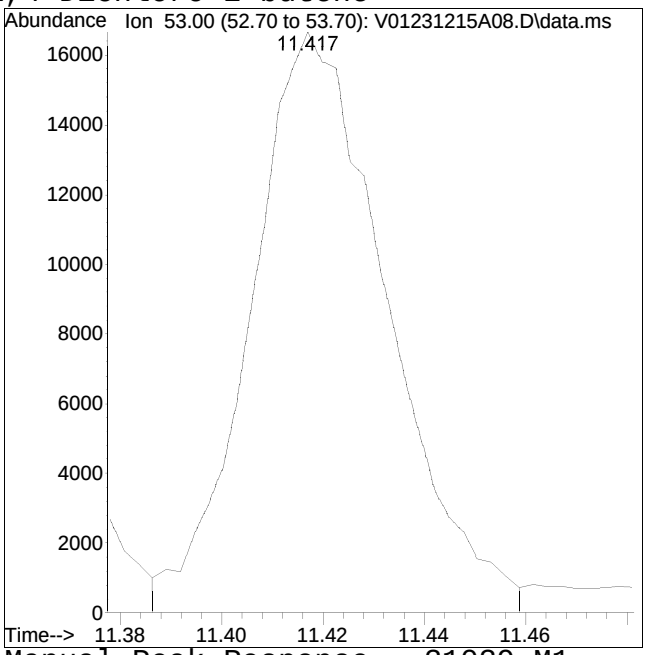
Manual Integration Report

Data Path : K:\VOA101\2023\231215AICALQMethod : V101_231215A_8260.m
Data File : V01231215A08.D Operator : VOA101:MKS
Date Inj'd : 12/15/2023 2:44 pm Instrument : VOA 101
Sample : I8260STD10PPB Quant Date : 12/16/2023 9:53 am

Compound #92: trans-1,4-Dichloro-2-butene



Original Peak Response = 28738



Manual Peak Response = 31039 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Quantitation Report (QT Reviewed)

Data Path : K:\VOA101\2023\231215AICAL\
Data File : V01231215A09.D
Acq On : 15 Dec 2023 3:10 pm
Operator : VOA101:MKS
Sample : I8260STD30PPB
Misc : WG1864802
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Dec 16 10:08:13 2023
Quant Method : K:\VOA101\2023\231215AICAL\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 09:55:15 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA101\2023\231215AICAL\V01231215A08.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.963	96	447899	10.000	ug/L	0.00
Standard Area 1 = 440479			Recovery = 101.68%			
59) Chlorobenzene-d5	9.482	117	379531	10.000	ug/L	0.00
Standard Area 1 = 367736			Recovery = 103.21%			
79) 1,4-Dichlorobenzene-d4	12.192	152	206935	10.000	ug/L	0.00
Standard Area 1 = 202447			Recovery = 102.22%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.162	113	115543	10.104	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.04%			
43) 1,2-Dichloroethane-d4	5.681	65	127647	9.984	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.84%			
60) Toluene-d8	7.641	98	444756	9.898	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 98.98%			
83) 4-Bromofluorobenzene	10.982	95	177142	10.040	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.40%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.654	85	349952	28.857	ug/L	100
3) Chloromethane	1.846	50	472583	28.886	ug/L	99
4) Vinyl chloride	1.908	62	424301	29.219	ug/L	100
5) Bromomethane	2.215	94	200591	30.751	ug/L	99
6) Chloroethane	2.326	64	252249	28.913	ug/L	96
7) Trichlorofluoromethane	2.463	101	436190	28.934	ug/L	99
8) Ethyl ether	2.756	74	140313	28.547	ug/L #	74
10) 1,1-Dichloroethene	2.940	96	279228	29.202	ug/L	88
11) Carbon disulfide	2.970	76	869376	29.029	ug/L	100
12) Freon-113	2.976	101	294982	29.346	ug/L #	77
13) Iodomethane	3.076	142	488099	31.705	ug/L	99
14) Acrolein	3.258	56	42654	27.530	ug/L	97
15) Methylene chloride	3.486	84	310711	28.718	ug/L	87
17) Acetone	3.534	43	59340	26.342	ug/L	97
18) trans-1,2-Dichloroethene	3.637	96	328197	29.675	ug/L	98
19) Methyl acetate	3.648	43	164651	28.452	ug/L #	91
20) Methyl tert-butyl ether	3.740	73	732834	28.626	ug/L	94
21) tert-Butyl alcohol	3.838	59	105062	142.320	ug/L	94
22) Diisopropyl ether	4.091	45	1233123	29.308	ug/L	95
23) 1,1-Dichloroethane	4.211	63	644802	29.388	ug/L	99
24) Halothane	4.264	117	246583	29.252	ug/L	100

Data Path : K:\VOA101\2023\231215AICAL\
Data File : V01231215A09.D
Acq On : 15 Dec 2023 3:10 pm
Operator : VOA101:MKS
Sample : I8260STD30PPB
Misc : WG1864802
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Dec 16 10:08:13 2023
Quant Method : K:\VOA101\2023\231215AICAL\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 09:55:15 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA101\2023\231215AICAL\V01231215A08.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) Acrylonitrile	4.256	53	77206	28.229	ug/L		94
26) Ethyl tert-butyl ether	4.434	59	1035802	29.275	ug/L		92
27) Vinyl acetate	4.443	43	605340	27.183	ug/L		97
28) cis-1,2-Dichloroethene	4.724	96	365044	29.060	ug/L		96
29) 2,2-Dichloropropane	4.822	77	484513	29.276	ug/L		94
30) Bromochloromethane	4.911	128	164254	29.179	ug/L		92
31) Cyclohexane	4.920	56	636562	29.877	ug/L		90
32) Chloroform	4.984	83	570088	29.546	ug/L		98
33) Ethyl acetate	5.095	43	247117	28.389	ug/L		95
34) Carbon tetrachloride	5.118	117	442112	29.637	ug/L		99
35) Tetrahydrofuran	5.143	42	68065M1	28.164	ug/L		
37) 1,1,1-Trichloroethane	5.182	97	507335	29.545	ug/L		99
39) 2-Butanone	5.274	43	98203	29.169	ug/L	#	75
40) 1,1-Dichloropropene	5.302	75	441148	29.352	ug/L		97
41) Benzene	5.547	78	1288004	29.309	ug/L		96
42) tert-Amyl methyl ether	5.659	73	814229	29.063	ug/L		96
44) 1,2-Dichloroethane	5.748	62	418823	28.686	ug/L		98
47) Methyl cyclohexane	6.127	83	541588	29.966	ug/L		89
48) Trichloroethene	6.138	95	352091	29.559	ug/L		97
50) Dibromomethane	6.576	93	177822	29.203	ug/L		97
51) 1,2-Dichloropropane	6.674	63	355015	29.118	ug/L		97
53) 2-Chloroethyl vinyl ether	7.365	63	91028	25.819	ug/L		93
54) Bromodichloromethane	6.752	83	433161	29.151	ug/L		100
57) 1,4-Dioxane	6.964	88	42614M1	585.144	ug/L		
58) cis-1,3-Dichloropropene	7.432	75	518959	29.699	ug/L		92
61) Toluene	7.700	92	837422	29.142	ug/L		99
62) 4-Methyl-2-pentanone	8.129	58	89243	28.703	ug/L		96
63) Tetrachloroethene	8.149	166	367277	29.066	ug/L		99
65) trans-1,3-Dichloropropene	8.179	75	448866	29.741	ug/L		92
67) Ethyl methacrylate	8.366	69	310217	29.670	ug/L		98
68) 1,1,2-Trichloroethane	8.366	83	211361	28.627	ug/L		97
69) Chlorodibromomethane	8.578	129	307942	28.901	ug/L		99
70) 1,3-Dichloropropane	8.687	76	423635	28.728	ug/L		100
71) 1,2-Dibromoethane	8.857	107	252728	28.673	ug/L		99
72) 2-Hexanone	9.139	43	159448	29.572	ug/L		98
73) Chlorobenzene	9.501	112	945581	29.006	ug/L		97
74) Ethylbenzene	9.538	91	1636725	29.271	ug/L		99
75) 1,1,1,2-Tetrachloroethane	9.585	131	342910	29.084	ug/L		99
76) p/m Xylene	9.724	106	1277326	58.911	ug/L		97
77) o Xylene	10.268	106	1234720	58.224	ug/L		98

Data Path : K:\VOA101\2023\231215AICAL\
Data File : V01231215A09.D
Acq On : 15 Dec 2023 3:10 pm
Operator : VOA101:MKS
Sample : I8260STD30PPB
Misc : WG1864802
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Dec 16 10:08:13 2023
Quant Method : K:\VOA101\2023\231215AICAL\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 09:55:15 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA101\2023\231215AICAL\V01231215A08.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
78) Styrene	10.335	104	2072584	59.549	ug/L	98
80) Bromoform	10.366	173	185757	30.084	ug/L	99
82) Isopropylbenzene	10.653	105	1610017	29.986	ug/L	100
84) Bromobenzene	11.094	156	384605	29.525	ug/L	100
85) n-Propylbenzene	11.135	91	1874459	30.380	ug/L	99
86) 1,4-Dichlorobutane	11.152	55	444693	28.987	ug/L	100
87) 1,1,2,2-Tetrachloroethane	11.227	83	292489	28.534	ug/L	99
88) 4-Ethyltoluene	11.264	105	1585226	30.405	ug/L	99
89) 2-Chlorotoluene	11.306	91	1106352M1	29.895	ug/L	
90) 1,3,5-Trimethylbenzene	11.361	105	1325553	30.276	ug/L	99
91) 1,2,3-Trichloropropane	11.364	75	222159M1	28.751	ug/L	
92) trans-1,4-Dichloro-2-b...	11.417	53	91679	28.896	ug/L	80
93) 4-Chlorotoluene	11.490	91	1135113	29.841	ug/L	100
94) tert-Butylbenzene	11.702	119	1098587	30.273	ug/L	99
97) 1,2,4-Trimethylbenzene	11.780	105	1293816	30.144	ug/L	99
98) sec-Butylbenzene	11.894	105	1562519	30.649	ug/L	99
99) p-Isopropyltoluene	12.047	119	1346433	30.675	ug/L	98
100) 1,3-Dichlorobenzene	12.117	146	724605	30.136	ug/L	99
101) 1,4-Dichlorobenzene	12.212	146	724914	30.067	ug/L	98
102) p-Diethylbenzene	12.424	119	781684	31.110	ug/L	99
103) n-Butylbenzene	12.480	91	1072343	31.041	ug/L	100
104) 1,2-Dichlorobenzene	12.633	146	653793	29.713	ug/L	99
105) 1,2,4,5-Tetramethylben...	13.219	119	1105389	31.021	ug/L	99
106) 1,2-Dibromo-3-chloropr...	13.414	155	41181	29.476	ug/L	98
107) 1,3,5-Trichlorobenzene	13.444	180	421864	31.105	ug/L	99
108) Hexachlorobutadiene	14.019	225	139669	31.211	ug/L	99
109) 1,2,4-Trichlorobenzene	14.044	180	351559	30.561	ug/L	99
110) Naphthalene	14.337	128	737437	29.626	ug/L	100
111) 1,2,3-Trichlorobenzene	14.504	180	279700	30.025	ug/L	99

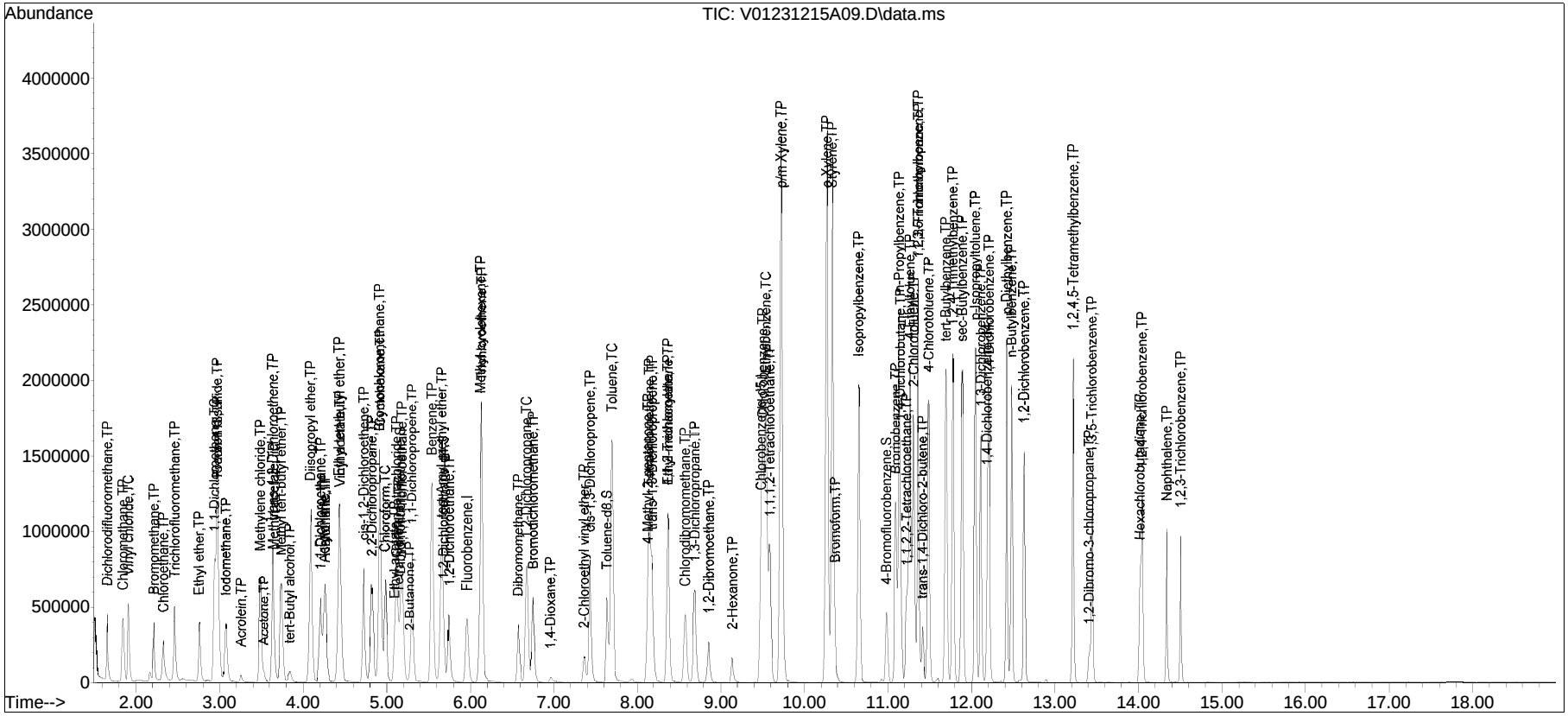
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\VOA101\2023\231215AICAL\
Data File : V01231215A09.D
Acq On : 15 Dec 2023 3:10 pm
Operator : VOA101:MKS
Sample : I8260STD30PPB
Misc : WG1864802
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Dec 16 10:08:13 2023
Quant Method : K:\VOA101\2023\231215AICAL\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 09:55:15 2023
Response via : Initial Calibration

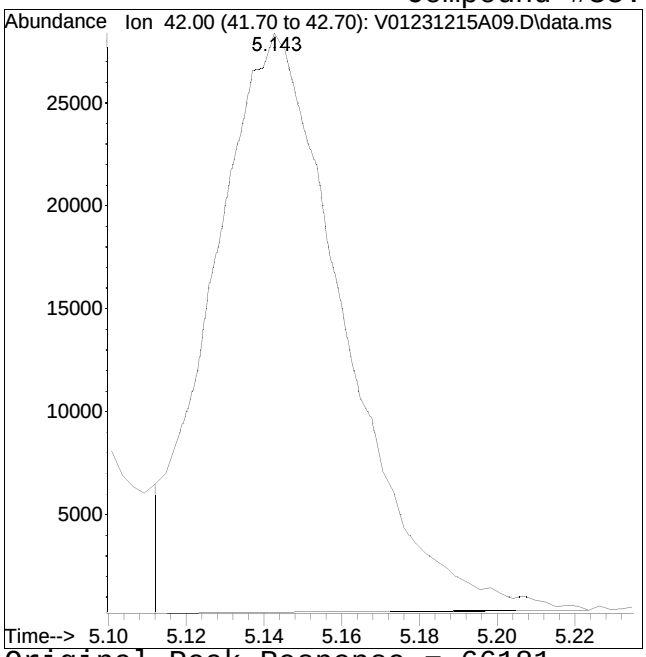
Sub List : 8260-Curve - Megamix plus Diox\V01231215A08.D•

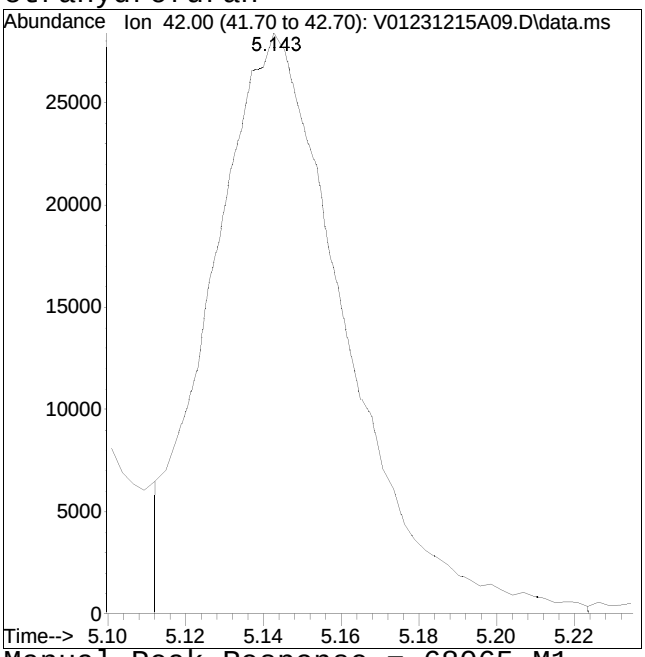


Manual Integration Report

Data Path : K:\VOA101\2023\231215AICALQMethod : V101_231215A_8260.m
Data File : V01231215A09.D Operator : VOA101:MKS
Date Inj'd : 12/15/2023 3:10 pm Instrument : VOA 101
Sample : I8260STD30PPB Quant Date : 12/16/2023 9:56 am

Compound #35: Tetrahydrofuran





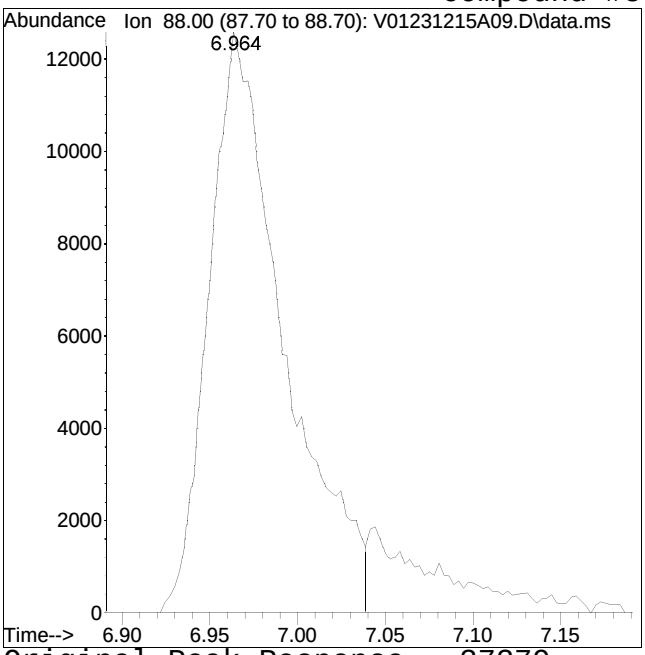
Original Peak Response = 66181 Manual Peak Response = 68065 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

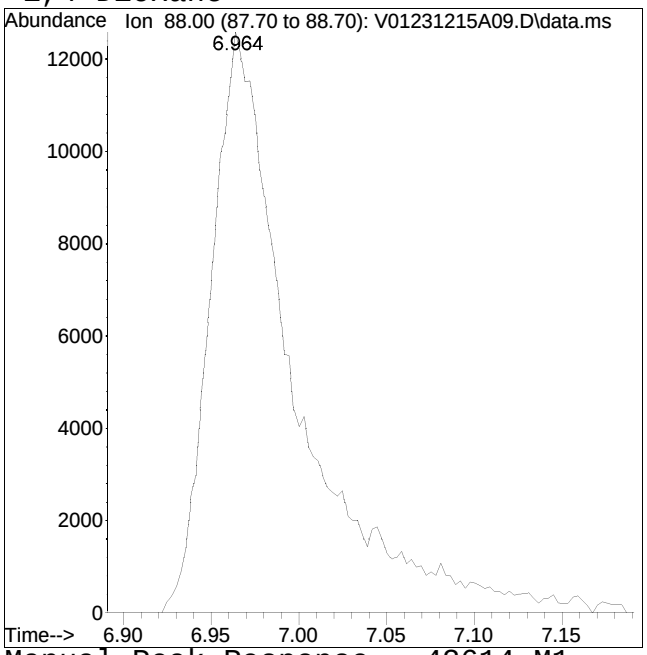
Data Path : K:\VOA101\2023\231215AICALQ
Data File : V01231215A09.D
Date Inj'd : 12/15/2023 3:10 pm
Sample : I8260STD30PPB

Method : V101_231215A_8260.m
Operator : VOA101:MKS
Instrument : VOA 101
Quant Date : 12/16/2023 9:56 am

Compound #57: 1,4-Dioxane



Original Peak Response = 37379



Manual Peak Response = 42614 M1

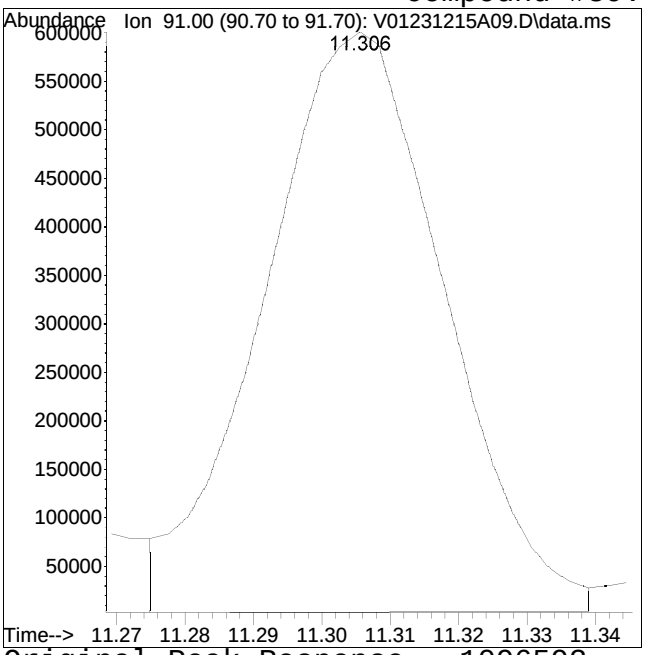
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

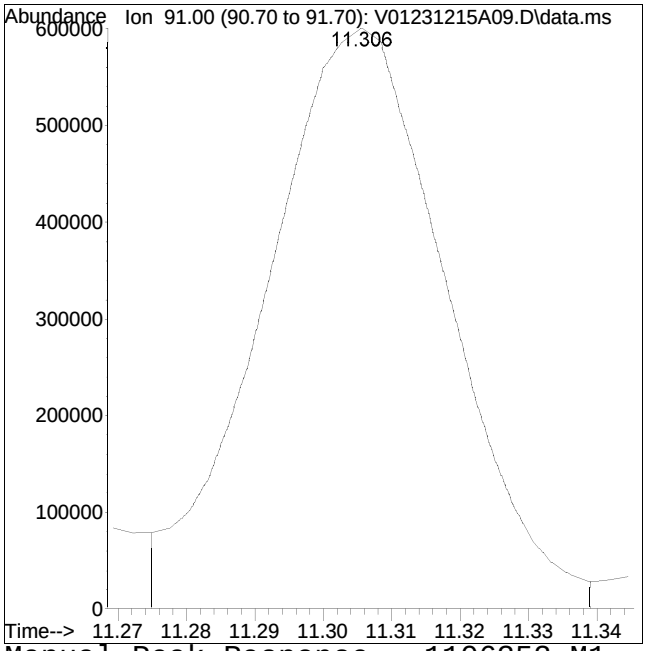
Manual Integration Report

Data Path : K:\VOA101\2023\231215AICALQ
Data File : V01231215A09.D
Date Inj'd : 12/15/2023 3:10 pm
Sample : I8260STD30PPB

Method : V101_231215A_8260.m
Operator : VOA101:MKS
Instrument : VOA 101
Quant Date : 12/16/2023 9:56 am

Compound #89: 2-Chlorotoluene





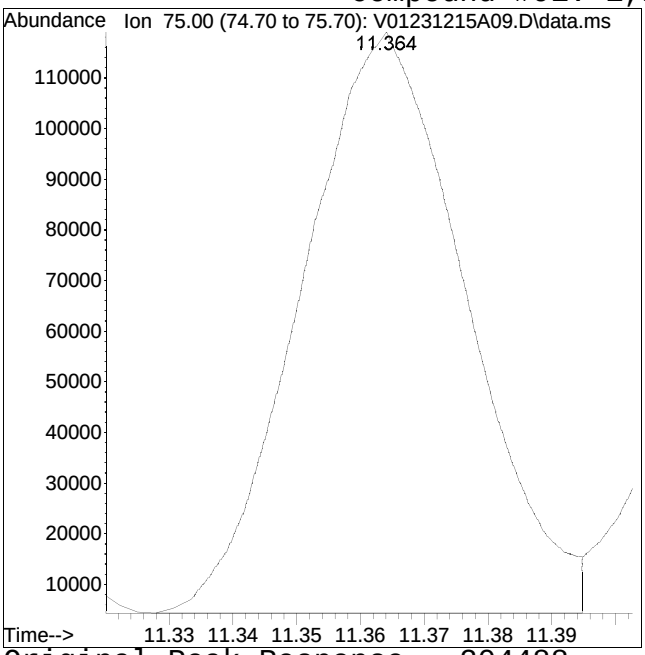
Original Peak Response = 1096593 Manual Peak Response = 1106352 M1

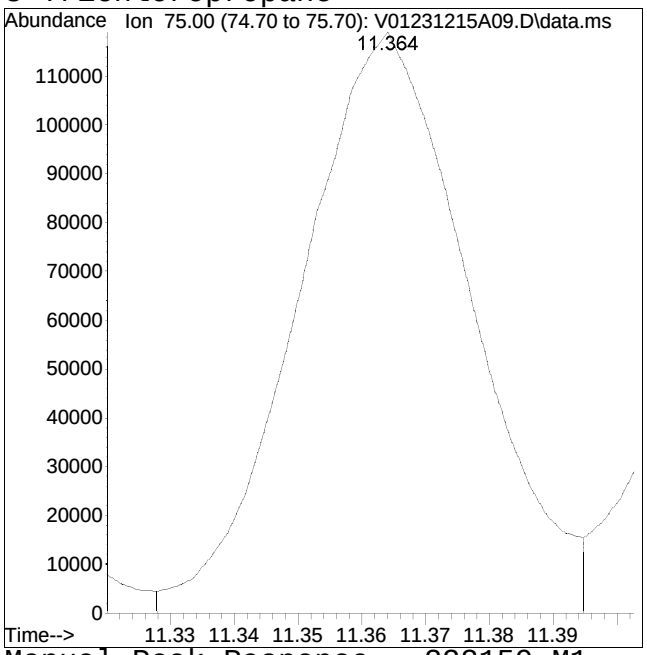
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

Data Path : K:\VOA101\2023\231215AICALQMethod : V101_231215A_8260.m
Data File : V01231215A09.D Operator : VOA101:MKS
Date Inj'd : 12/15/2023 3:10 pm Instrument : VOA 101
Sample : I8260STD30PPB Quant Date : 12/16/2023 9:56 am

Compound #91: 1,2,3-Trichloropropane





Original Peak Response = 204488 Manual Peak Response = 222159 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Quantitation Report (QT Reviewed)

Data Path : K:\VOA101\2023\231215AICAL\
Data File : V01231215A10.D
Acq On : 15 Dec 2023 3:36 pm
Operator : VOA101:MKS
Sample : I8260STD80PPB
Misc : WG1864802
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 16 10:09:09 2023
Quant Method : K:\VOA101\2023\231215AICAL\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 09:55:15 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA101\2023\231215AICAL\V01231215A08.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.962	96	451218	10.000	ug/L	0.00
Standard Area 1 = 440479			Recovery = 102.44%			
59) Chlorobenzene-d5	9.482	117	387409	10.000	ug/L	0.00
Standard Area 1 = 367736			Recovery = 105.35%			
79) 1,4-Dichlorobenzene-d4	12.195	152	215322	10.000	ug/L	0.00
Standard Area 1 = 202447			Recovery = 106.36%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.159	113	116115	10.079	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.79%			
43) 1,2-Dichloroethane-d4	5.684	65	133395	10.357	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 103.57%			
60) Toluene-d8	7.644	98	454654	9.913	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.13%			
83) 4-Bromofluorobenzene	10.982	95	182630	9.948	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.48%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.654	85	1077308	88.181	ug/L	99
3) Chloromethane	1.846	50	1325659	80.434	ug/L	99
4) Vinyl chloride	1.908	62	1225602	83.779	ug/L	100
5) Bromomethane	2.217	94	597663	90.949	ug/L	99
6) Chloroethane	2.323	64	683620	77.781	ug/L	96
7) Trichlorofluoromethane	2.466	101	1340313	88.253	ug/L	98
8) Ethyl ether	2.758	74	386707	78.098	ug/L	73
10) 1,1-Dichloroethene	2.940	96	812772	84.375	ug/L	87
11) Carbon disulfide	2.970	76	2486178	82.406	ug/L	100
12) Freon-113	2.976	101	909362	89.801	ug/L	86
13) Iodomethane	3.076	142	1347797	86.902	ug/L	98
14) Acrolein	3.257	56	126434	81.003	ug/L	94
15) Methylene chloride	3.489	84	856050	78.540	ug/L	88
17) Acetone	3.536	43	170056	74.934	ug/L	96
18) trans-1,2-Dichloroethene	3.637	96	910850	81.752	ug/L	97
19) Methyl acetate	3.648	43	479676	82.278	ug/L #	90
20) Methyl tert-butyl ether	3.740	73	2082714	80.756	ug/L	95
21) tert-Butyl alcohol	3.840	59	302914	407.318	ug/L	93
22) Diisopropyl ether	4.091	45	3425285	80.811	ug/L	95
23) 1,1-Dichloroethane	4.211	63	1784006	80.712	ug/L	99
24) Halothane	4.261	117	718135	84.564	ug/L	99

Data Path : K:\VOA101\2023\231215AICAL\
Data File : V01231215A10.D
Acq On : 15 Dec 2023 3:36 pm
Operator : VOA101:MKS
Sample : I8260STD80PPB
Misc : WG1864802
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 16 10:09:09 2023
Quant Method : K:\VOA101\2023\231215AICAL\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 09:55:15 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA101\2023\231215AICAL\V01231215A08.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) Acrylonitrile	4.256	53	227873	82.704	ug/L		94
26) Ethyl tert-butyl ether	4.434	59	2897562	81.293	ug/L		91
27) Vinyl acetate	4.443	43	1643868	73.274	ug/L		97
28) cis-1,2-Dichloroethene	4.724	96	998739	78.921	ug/L		96
29) 2,2-Dichloropropane	4.822	77	1366731	81.977	ug/L		95
30) Bromochloromethane	4.914	128	446763	78.781	ug/L		92
31) Cyclohexane	4.920	56	1984592	92.462	ug/L		90
32) Chloroform	4.986	83	1560856	80.300	ug/L		98
33) Ethyl acetate	5.092	43	714074	81.431	ug/L		95
34) Carbon tetrachloride	5.120	117	1320120	87.844	ug/L		99
35) Tetrahydrofuran	5.140	42	188347	77.361	ug/L		100
37) 1,1,1-Trichloroethane	5.182	97	1452741	83.979	ug/L		99
39) 2-Butanone	5.274	43	291768	86.026	ug/L	#	74
40) 1,1-Dichloropropene	5.304	75	1294130	85.473	ug/L		98
41) Benzene	5.547	78	3541669	80.000	ug/L		96
42) tert-Amyl methyl ether	5.656	73	2302379	81.577	ug/L		97
44) 1,2-Dichloroethane	5.748	62	1170967	79.611	ug/L		99
47) Methyl cyclohexane	6.127	83	1685363	92.566	ug/L		89
48) Trichloroethene	6.138	95	1000532	83.380	ug/L		98
50) Dibromomethane	6.576	93	505437	82.395	ug/L		97
51) 1,2-Dichloropropane	6.676	63	978320	79.651	ug/L		97
53) 2-Chloroethyl vinyl ether	7.365	63	281945	79.382	ug/L		97
54) Bromodichloromethane	6.752	83	1205452	80.527	ug/L		100
57) 1,4-Dioxane	6.964	88	59207M1	807.007	ug/L		
58) cis-1,3-Dichloropropene	7.435	75	1446395	82.165	ug/L		93
61) Toluene	7.700	92	2326631	79.319	ug/L		98
62) 4-Methyl-2-pentanone	8.129	58	265744	83.731	ug/L		97
63) Tetrachloroethene	8.149	166	1072808	83.176	ug/L		99
65) trans-1,3-Dichloropropene	8.179	75	1277626	82.931	ug/L		92
67) Ethyl methacrylate	8.366	69	906040	84.894	ug/L		96
68) 1,1,2-Trichloroethane	8.366	83	598011	79.350	ug/L		98
69) Chlorodibromomethane	8.578	129	884970	81.366	ug/L		98
70) 1,3-Dichloropropane	8.684	76	1190708	79.104	ug/L		99
71) 1,2-Dibromoethane	8.851	107	727997	80.916	ug/L		99
72) 2-Hexanone	9.133	43	474127	86.146	ug/L		100
73) Chlorobenzene	9.498	112	2631919	79.092	ug/L		97
74) Ethylbenzene	9.537	91	4614420	80.845	ug/L		99
75) 1,1,1,2-Tetrachloroethane	9.585	131	964487	80.138	ug/L		99
76) p/m Xylene	9.724	106	3612362	163.215	ug/L		97
77) o Xylene	10.268	106	3459390	159.813	ug/L		98

Data Path : K:\VOA101\2023\231215AICAL\
Data File : V01231215A10.D
Acq On : 15 Dec 2023 3:36 pm
Operator : VOA101:MKS
Sample : I8260STD80PPB
Misc : WG1864802
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 16 10:09:09 2023
Quant Method : K:\VOA101\2023\231215AICAL\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 09:55:15 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA101\2023\231215AICAL\V01231215A08.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
78) Styrene	10.338	104	5807544	163.468	ug/L	99
80) Bromoform	10.366	173	550875	85.741	ug/L	100
82) Isopropylbenzene	10.653	105	4618286	82.663	ug/L	100
84) Bromobenzene	11.094	156	1078054	79.535	ug/L	100
85) n-Propylbenzene	11.138	91	5369847	83.640	ug/L	99
86) 1,4-Dichlorobutane	11.152	55	1290313	80.833	ug/L	100
87) 1,1,2,2-Tetrachloroethane	11.227	83	847260	79.434	ug/L	100
88) 4-Ethyltoluene	11.264	105	4518777	83.296	ug/L	100
89) 2-Chlorotoluene	11.306	91	3079447M1	79.968	ug/L	
90) 1,3,5-Trimethylbenzene	11.364	105	3774634	82.855	ug/L	100
91) 1,2,3-Trichloropropane	11.364	75	656488M1	81.651	ug/L	
92) trans-1,4-Dichloro-2-b...	11.417	53	269158	81.531	ug/L	84
93) 4-Chlorotoluene	11.490	91	3184979	80.469	ug/L	99
94) tert-Butylbenzene	11.704	119	3179878	84.212	ug/L	99
97) 1,2,4-Trimethylbenzene	11.782	105	3647430	81.669	ug/L	100
98) sec-Butylbenzene	11.894	105	4610899	86.922	ug/L	99
99) p-Isopropyltoluene	12.047	119	3928062	86.004	ug/L	99
100) 1,3-Dichlorobenzene	12.117	146	2040054	81.540	ug/L	100
101) 1,4-Dichlorobenzene	12.212	146	2031130	80.963	ug/L	99
102) p-Diethylbenzene	12.424	119	2272324	86.912	ug/L	98
103) n-Butylbenzene	12.482	91	3147152	87.551	ug/L	100
104) 1,2-Dichlorobenzene	12.633	146	1843091	80.501	ug/L	99
105) 1,2,4,5-Tetramethylben...	13.219	119	3186248	85.934	ug/L	99
106) 1,2-Dibromo-3-chloropr...	13.411	155	126248	86.845	ug/L	99
107) 1,3,5-Trichlorobenzene	13.447	180	1202721	85.226	ug/L	99
108) Hexachlorobutadiene	14.022	225	418980	89.979	ug/L	99
109) 1,2,4-Trichlorobenzene	14.044	180	1023950	85.544	ug/L	99
110) Naphthalene	14.337	128	2181436	84.223	ug/L	100
111) 1,2,3-Trichlorobenzene	14.507	180	815243	84.106	ug/L	99

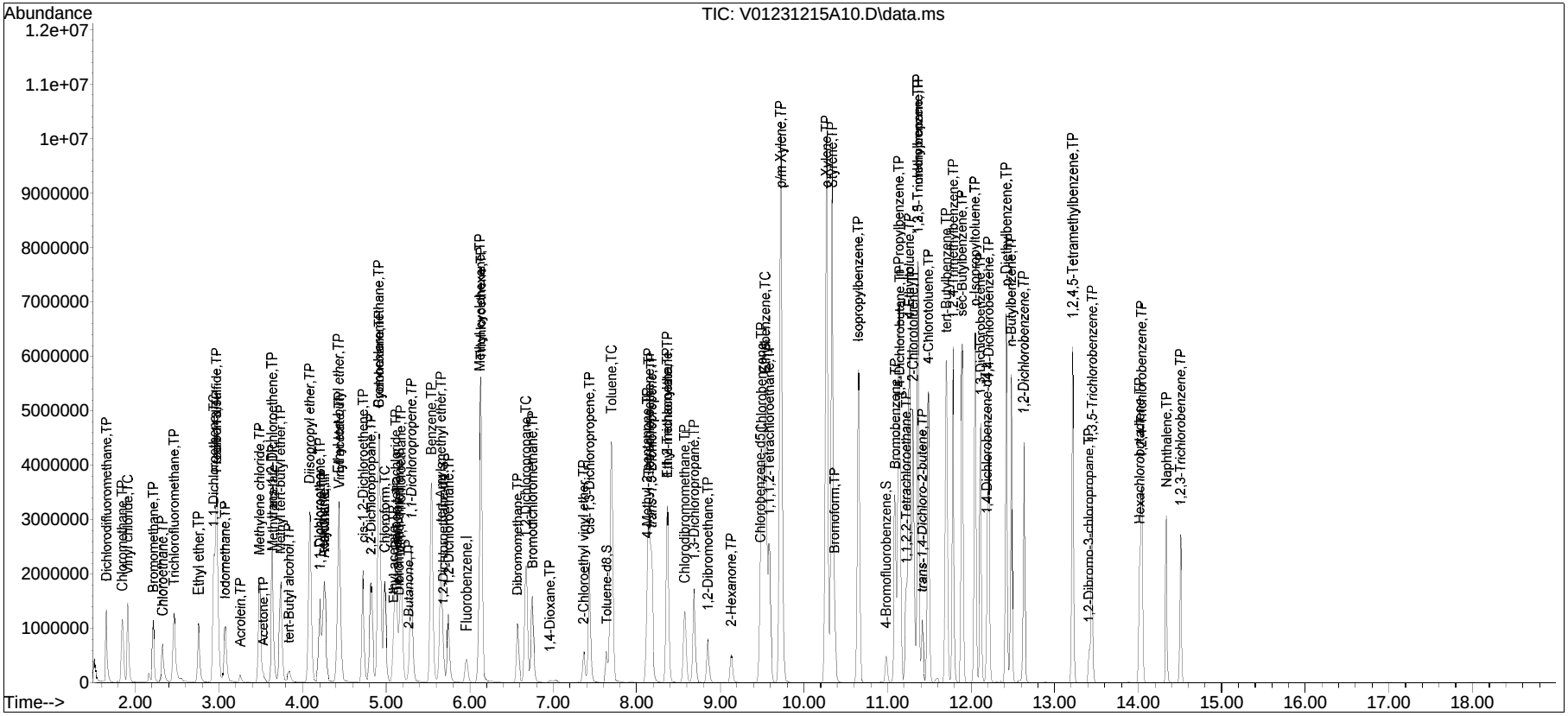
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\VOA101\2023\231215AICAL\
Data File : V01231215A10.D
Acq On : 15 Dec 2023 3:36 pm
Operator : VOA101:MKS
Sample : I8260STD80PPB
Misc : WG1864802
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 16 10:09:09 2023
Quant Method : K:\VOA101\2023\231215AICAL\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 09:55:15 2023
Response via : Initial Calibration

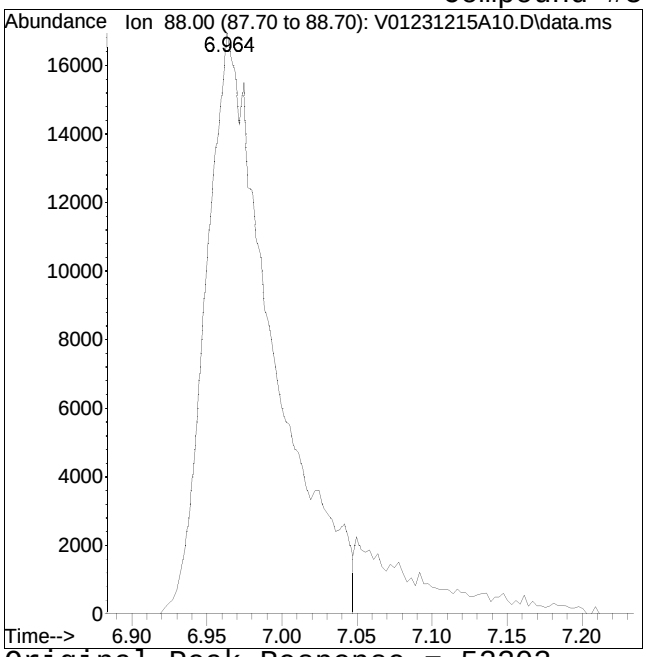
Sub List : 8260-Curve - Megamix plus Diox\V01231215A08.D•

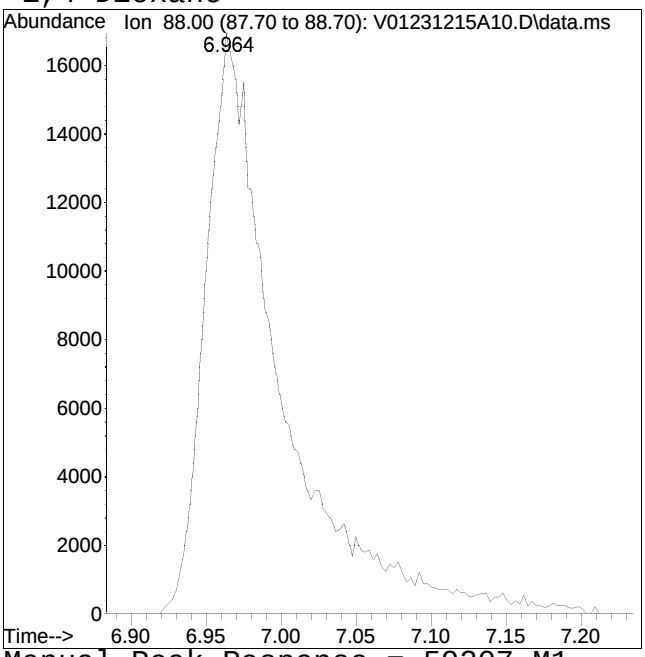


Manual Integration Report

Data Path : K:\VOA101\2023\231215AICALQMethod : V101_231215A_8260.m
Data File : V01231215A10.D Operator : VOA101:MKS
Date Inj'd : 12/15/2023 3:36 pm Instrument : VOA 101
Sample : I8260STD80PPB Quant Date : 12/16/2023 9:56 am

Compound #57: 1,4-Dioxane



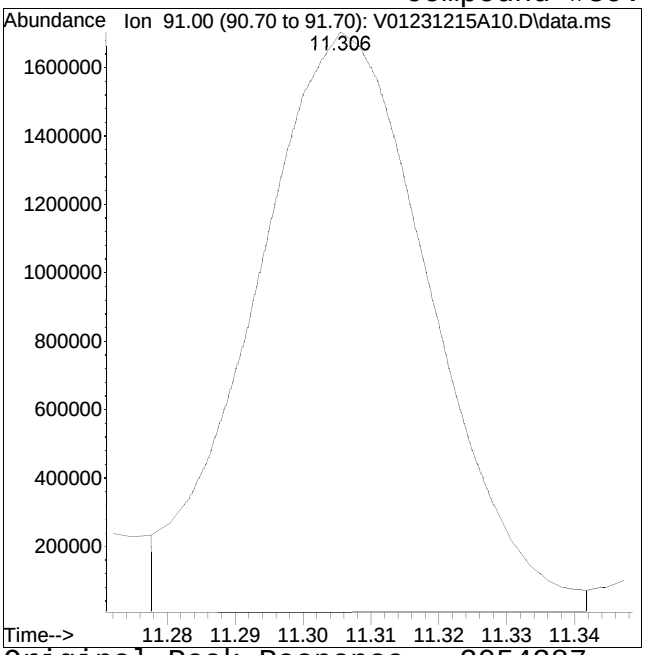


Original Peak Response = 52303 Manual Peak Response = 59207 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

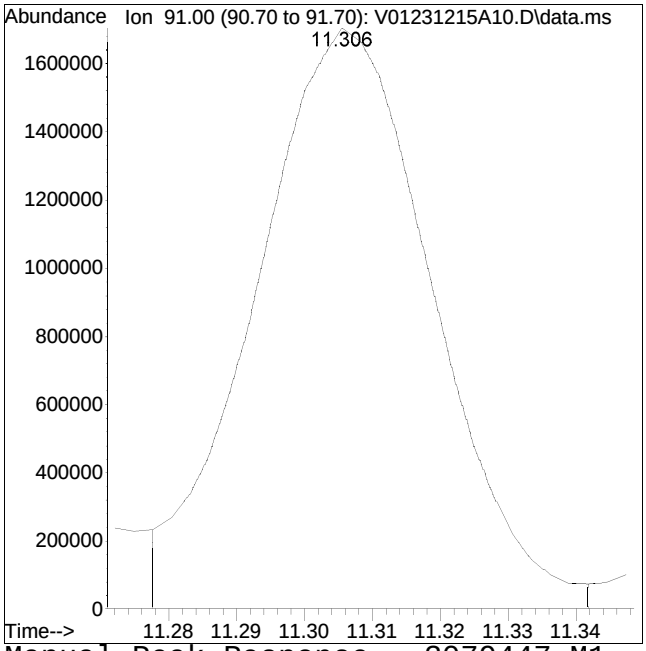
Manual Integration Report

Data Path : K:\VOA101\2023\231215AICALQMethod : V101_231215A_8260.m
Data File : V01231215A10.D Operator : VOA101:MKS
Date Inj'd : 12/15/2023 3:36 pm Instrument : VOA 101
Sample : I8260STD80PPB Quant Date : 12/16/2023 9:56 am

Compound #89: 2-Chlorotoluene



Original Peak Response = 3054387



Manual Peak Response = 3079447 M1

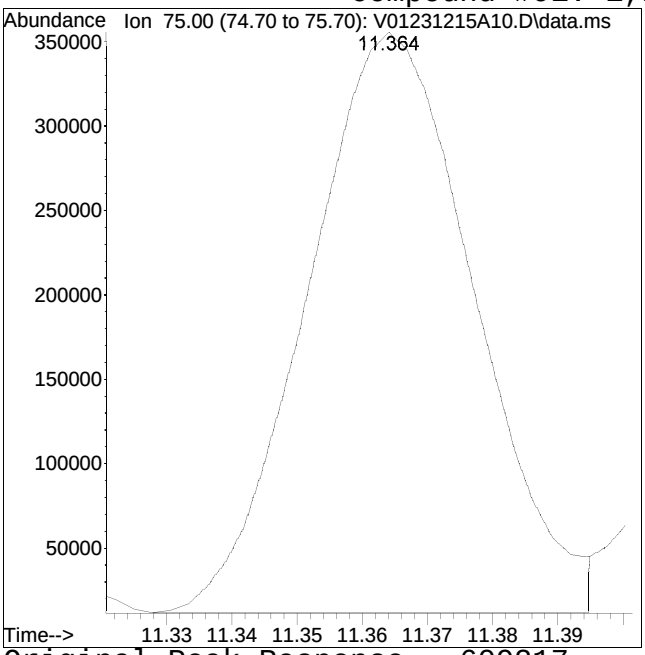
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

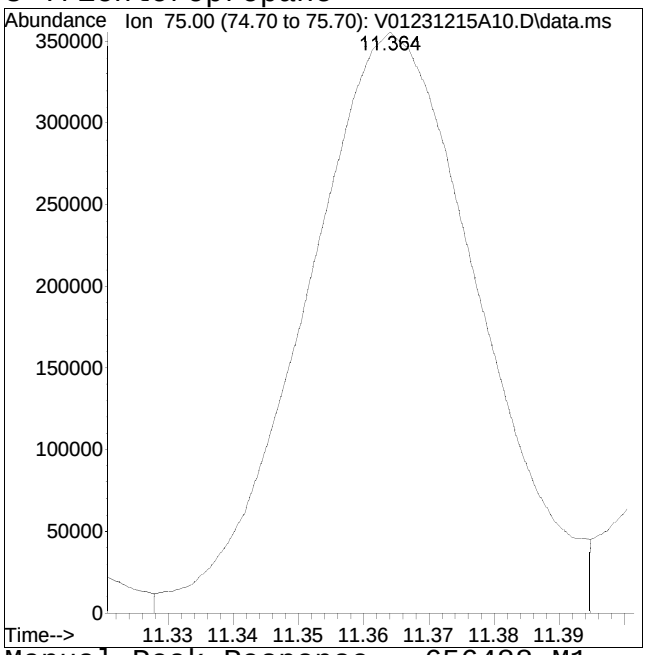
Data Path : K:\VOA101\2023\231215AICALQ
Data File : V01231215A10.D
Date Inj'd : 12/15/2023 3:36 pm
Sample : I8260STD80PPB

Method : V101_231215A_8260.m
Operator : VOA101:MKS
Instrument : VOA 101
Quant Date : 12/16/2023 9:56 am

Compound #91: 1,2,3-Trichloropropane



Original Peak Response = 609217



Manual Peak Response = 656488 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Quantitation Report (QT Reviewed)

Data Path : K:\VOA101\2023\231215AICAL\
Data File : V01231215A11.D
Acq On : 15 Dec 2023 4:03 pm
Operator : VOA101:MKS
Sample : I8260STD120PPB
Misc : WG1864802
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 16 10:10:07 2023
Quant Method : K:\VOA101\2023\231215AICAL\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 09:55:15 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA101\2023\231215AICAL\V01231215A08.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.962	96	462845	10.000	ug/L	0.00
Standard Area 1 = 440479			Recovery = 105.08%			
59) Chlorobenzene-d5	9.479	117	398027	10.000	ug/L	0.00
Standard Area 1 = 367736			Recovery = 108.24%			
79) 1,4-Dichlorobenzene-d4	12.195	152	221005	10.000	ug/L	0.00
Standard Area 1 = 202447			Recovery = 109.17%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.162	113	119413	10.105	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.05%			
43) 1,2-Dichloroethane-d4	5.681	65	135984	10.293	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 102.93%			
60) Toluene-d8	7.641	98	464338	9.854	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 98.54%			
83) 4-Bromofluorobenzene	10.982	95	185226	9.829	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 98.29%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.654	85	1624099	129.599	ug/L	99
3) Chloromethane	1.846	50	1991385	117.792	ug/L	99
4) Vinyl chloride	1.908	62	1846252	123.034	ug/L	100
5) Bromomethane	2.215	94	944293	140.088	ug/L	100
6) Chloroethane	2.323	64	979999	108.701	ug/L	96
7) Trichlorofluoromethane	2.463	101	1987011	127.548	ug/L	99
8) Ethyl ether	2.758	74	578976	113.991	ug/L	74
10) 1,1-Dichloroethene	2.940	96	1227421	124.219	ug/L	87
11) Carbon disulfide	2.970	76	3802385	122.866	ug/L	100
12) Freon-113	2.973	101	1354492	130.398	ug/L	83
13) Iodomethane	3.076	142	1938619	121.857	ug/L	99
14) Acrolein	3.260	56	185227	115.690	ug/L	96
15) Methylene chloride	3.486	84	1285387	114.968	ug/L	88
17) Acetone	3.536	43	256094	110.011	ug/L	99
18) trans-1,2-Dichloroethene	3.637	96	1365963	119.521	ug/L	96
19) Methyl acetate	3.648	43	708866	118.536	ug/L #	91
20) Methyl tert-butyl ether	3.737	73	3125331	118.138	ug/L	95
21) tert-Butyl alcohol	3.840	59	466283	611.244	ug/L	95
22) Diisopropyl ether	4.091	45	5147915	118.402	ug/L	95
23) 1,1-Dichloroethane	4.208	63	2660162	117.327	ug/L	99
24) Halothane	4.261	117	1086547	124.732	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : K:\VOA101\2023\231215AICAL\
Data File : V01231215A11.D
Acq On : 15 Dec 2023 4:03 pm
Operator : VOA101:MKS
Sample : I8260STD120PPB
Misc : WG1864802
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 16 10:10:07 2023
Quant Method : K:\VOA101\2023\231215AICAL\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 09:55:15 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA101\2023\231215AICAL\V01231215A08.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) Acrylonitrile	4.256	53	344203	121.787	ug/L		94
26) Ethyl tert-butyl ether	4.431	59	4361634	119.294	ug/L		91
27) Vinyl acetate	4.440	43	2525442	109.742	ug/L		97
28) cis-1,2-Dichloroethene	4.722	96	1497803	115.384	ug/L		96
29) 2,2-Dichloropropane	4.822	77	2006848	117.347	ug/L		95
30) Bromochloromethane	4.914	128	653145	112.280	ug/L		93
31) Cyclohexane	4.917	56	2987583	135.695	ug/L		89
32) Chloroform	4.984	83	2342554	117.487	ug/L		98
33) Ethyl acetate	5.092	43	1067820	118.712	ug/L		95
34) Carbon tetrachloride	5.117	117	1986133	128.842	ug/L		99
35) Tetrahydrofuran	5.140	42	279663	111.983	ug/L		98
37) 1,1,1-Trichloroethane	5.182	97	2171575	122.380	ug/L		99
39) 2-Butanone	5.274	43	433431	124.584	ug/L	#	45
40) 1,1-Dichloropropene	5.304	75	1934676	124.569	ug/L		98
41) Benzene	5.544	78	5284061	116.359	ug/L		96
42) tert-Amyl methyl ether	5.656	73	3444457	118.977	ug/L		97
44) 1,2-Dichloroethane	5.748	62	1741049	115.395	ug/L		99
47) Methyl cyclohexane	6.130	83	2565273	137.355	ug/L		88
48) Trichloroethene	6.141	95	1495256	121.478	ug/L		98
50) Dibromomethane	6.576	93	762049	121.107	ug/L		96
51) 1,2-Dichloropropane	6.676	63	1470348	116.703	ug/L		97
53) 2-Chloroethyl vinyl ether	7.362	63	440451	120.895	ug/L		95
54) Bromodichloromethane	6.752	83	1813267	118.088	ug/L		100
57) 1,4-Dioxane	6.969	88	94224M1	1252.036	ug/L		
58) cis-1,3-Dichloropropene	7.435	75	2172421	120.308	ug/L		93
61) Toluene	7.700	92	3478701	115.431	ug/L		98
62) 4-Methyl-2-pentanone	8.129	58	402274	123.368	ug/L		98
63) Tetrachloroethene	8.146	166	1615887	121.939	ug/L		99
65) trans-1,3-Dichloropropene	8.179	75	1917230	121.128	ug/L		92
67) Ethyl methacrylate	8.369	69	1365106	124.496	ug/L		97
68) 1,1,2-Trichloroethane	8.363	83	895468	115.649	ug/L		98
69) Chlorodibromomethane	8.578	129	1344085	120.281	ug/L		98
70) 1,3-Dichloropropane	8.684	76	1776663	114.883	ug/L		99
71) 1,2-Dibromoethane	8.851	107	1086971	117.592	ug/L		99
72) 2-Hexanone	9.133	43	720238	127.371	ug/L		100
73) Chlorobenzene	9.501	112	3966001	116.004	ug/L		97
74) Ethylbenzene	9.540	91	6908849	117.814	ug/L		99
75) 1,1,1,2-Tetrachloroethane	9.585	131	1459978	118.072	ug/L		99
76) p/m Xylene	9.727	106	5435743	239.048	ug/L		97
77) o Xylene	10.271	106	5217283	234.593	ug/L		98

Data Path : K:\VOA101\2023\231215AICAL\
Data File : V01231215A11.D
Acq On : 15 Dec 2023 4:03 pm
Operator : VOA101:MKS
Sample : I8260STD120PPB
Misc : WG1864802
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 16 10:10:07 2023
Quant Method : K:\VOA101\2023\231215AICAL\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 09:55:15 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA101\2023\231215AICAL\V01231215A08.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
78) Styrene	10.338	104	8738301	239.399	ug/L	99
80) Bromoform	10.366	173	840976	127.528	ug/L	100
82) Isopropylbenzene	10.653	105	6970607	121.559	ug/L	100
84) Bromobenzene	11.094	156	1626274	116.895	ug/L	100
85) n-Propylbenzene	11.138	91	8075455	122.548	ug/L	99
86) 1,4-Dichlorobutane	11.152	55	1955321	119.343	ug/L	99
87) 1,1,2,2-Tetrachloroethane	11.227	83	1274289	116.398	ug/L	100
88) 4-Ethyltoluene	11.266	105	6812747	122.352	ug/L	100
89) 2-Chlorotoluene	11.305	91	4656147M1	117.803	ug/L	
90) 1,3,5-Trimethylbenzene	11.364	105	5759880	123.180	ug/L	99
91) 1,2,3-Trichloropropane	11.364	75	984961M1	119.355	ug/L	
92) trans-1,4-Dichloro-2-b...	11.417	53	403199	118.993	ug/L	86
93) 4-Chlorotoluene	11.492	91	4799153	118.134	ug/L	100
94) tert-Butylbenzene	11.704	119	4845726	125.028	ug/L	99
97) 1,2,4-Trimethylbenzene	11.782	105	5537434	120.800	ug/L	100
98) sec-Butylbenzene	11.897	105	7028308	129.086	ug/L	99
99) p-Isopropyltoluene	12.050	119	6037551	128.791	ug/L	99
100) 1,3-Dichlorobenzene	12.117	146	3084598	120.119	ug/L	100
101) 1,4-Dichlorobenzene	12.212	146	3083185	119.739	ug/L	99
102) p-Diethylbenzene	12.424	119	3514325	130.959	ug/L	98
103) n-Butylbenzene	12.482	91	4848485	131.413	ug/L	100
104) 1,2-Dichlorobenzene	12.633	146	2797481	119.044	ug/L	99
105) 1,2,4,5-Tetramethylben...	13.219	119	4997494	131.318	ug/L	99
106) 1,2-Dibromo-3-chloropr...	13.414	155	192267	128.857	ug/L	98
107) 1,3,5-Trichlorobenzene	13.447	180	1900405	131.202	ug/L	99
108) Hexachlorobutadiene	14.022	225	670288	140.247	ug/L	98
109) 1,2,4-Trichlorobenzene	14.044	180	1606006	130.721	ug/L	99
110) Naphthalene	14.334	128	3345550	125.847	ug/L	100
111) 1,2,3-Trichlorobenzene	14.504	180	1270040	127.656	ug/L	99

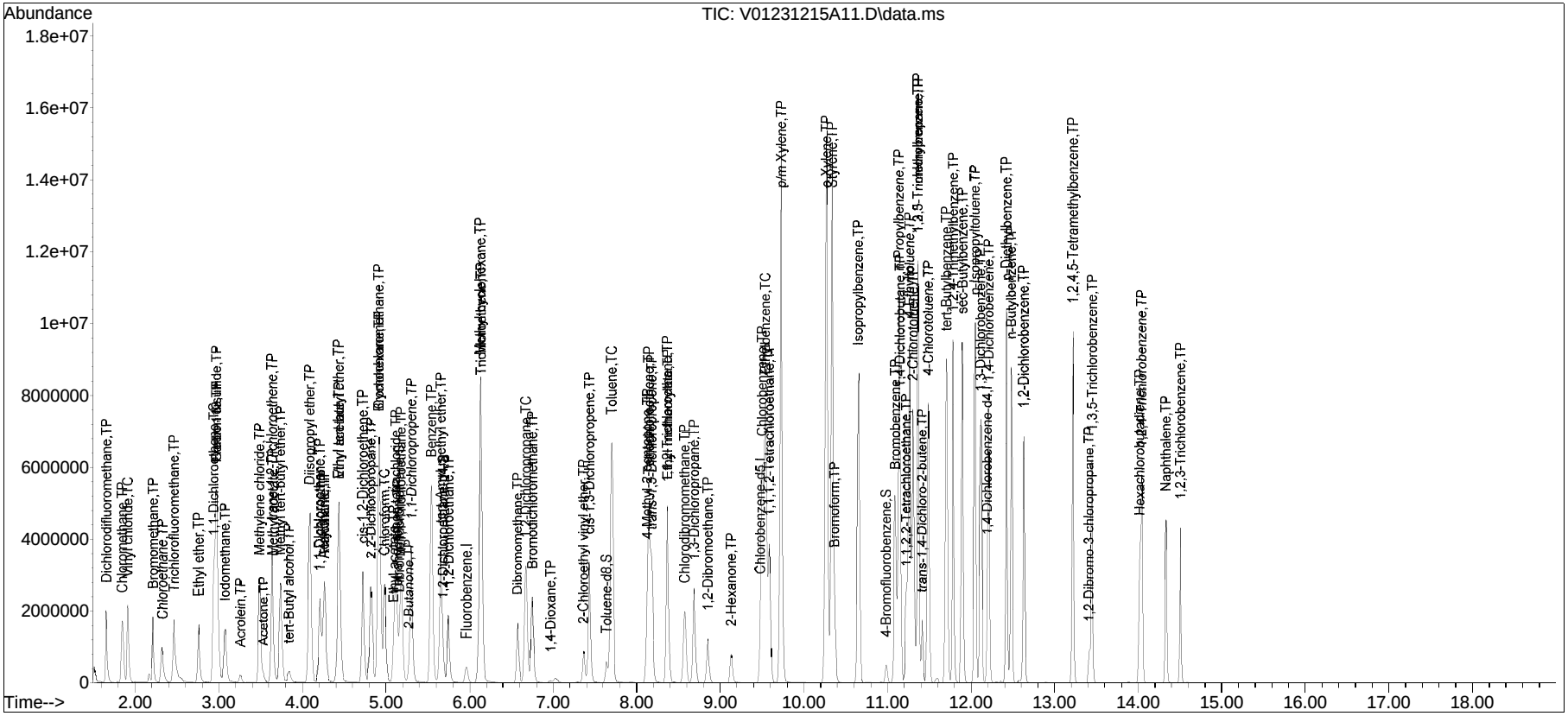
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\VOA101\2023\231215AICAL\
Data File : V01231215A11.D
Acq On : 15 Dec 2023 4:03 pm
Operator : VOA101:MKS
Sample : I8260STD120PPB
Misc : WG1864802
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 16 10:10:07 2023
Quant Method : K:\VOA101\2023\231215AICAL\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 09:55:15 2023
Response via : Initial Calibration

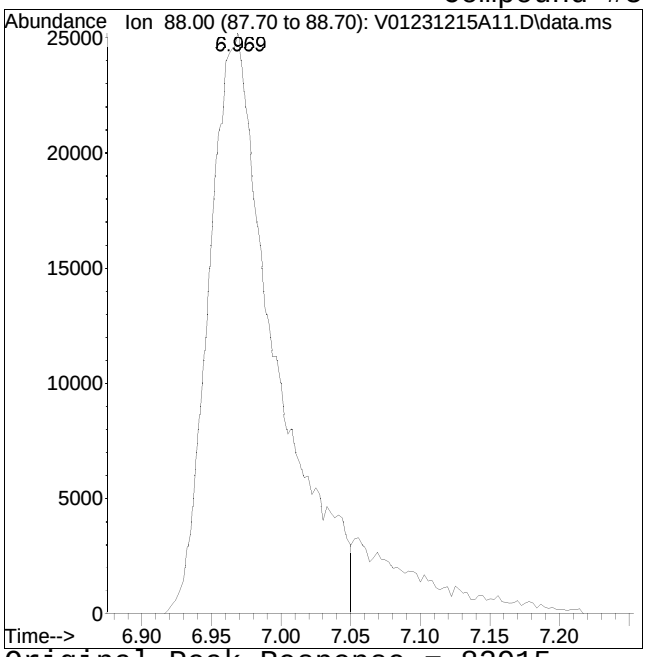
Sub List : 8260-Curve - Megamix plus Diox\V01231215A08.D•

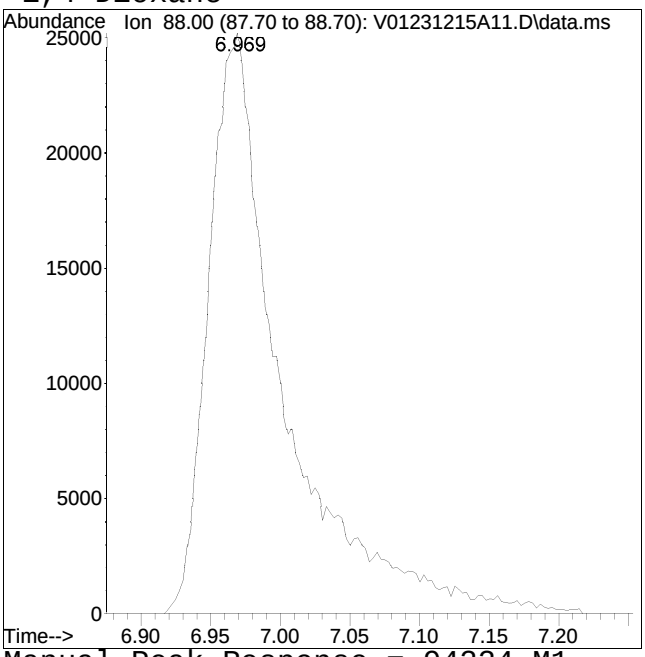


Manual Integration Report

Data Path : K:\VOA101\2023\231215AICALQMethod : V101_231215A_8260.m
Data File : V01231215A11.D Operator : VOA101:MKS
Date Inj'd : 12/15/2023 4:03 pm Instrument : VOA 101
Sample : I8260STD120PPB Quant Date : 12/16/2023 9:56 am

Compound #57: 1,4-Dioxane



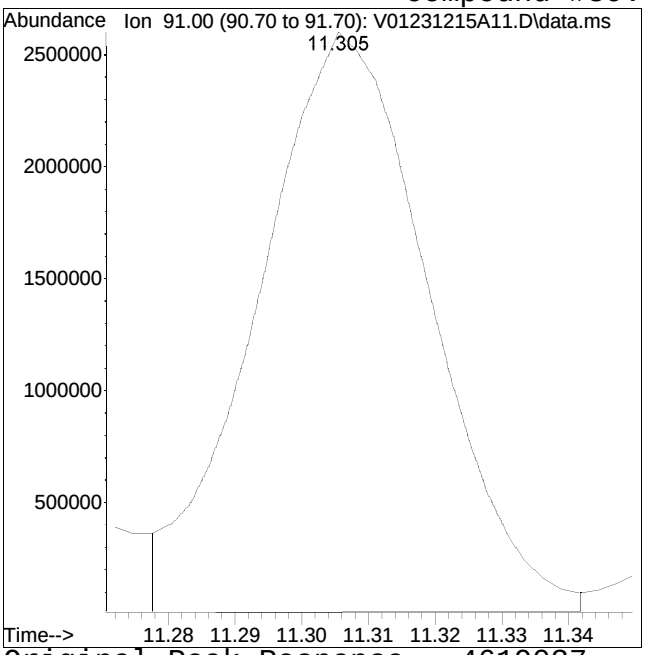


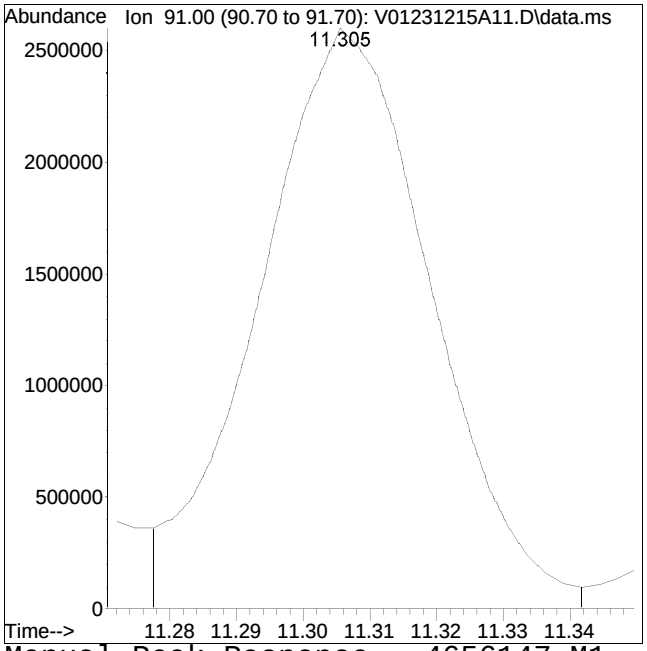
Original Peak Response = 82915 Manual Peak Response = 94224 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

Data Path : K:\VOA101\2023\231215AICALQMethod : V101_231215A_8260.m
Data File : V01231215A11.D Operator : VOA101:MKS
Date Inj'd : 12/15/2023 4:03 pm Instrument : VOA 101
Sample : I8260STD120PPB Quant Date : 12/16/2023 9:56 am

Compound #89: 2-Chlorotoluene





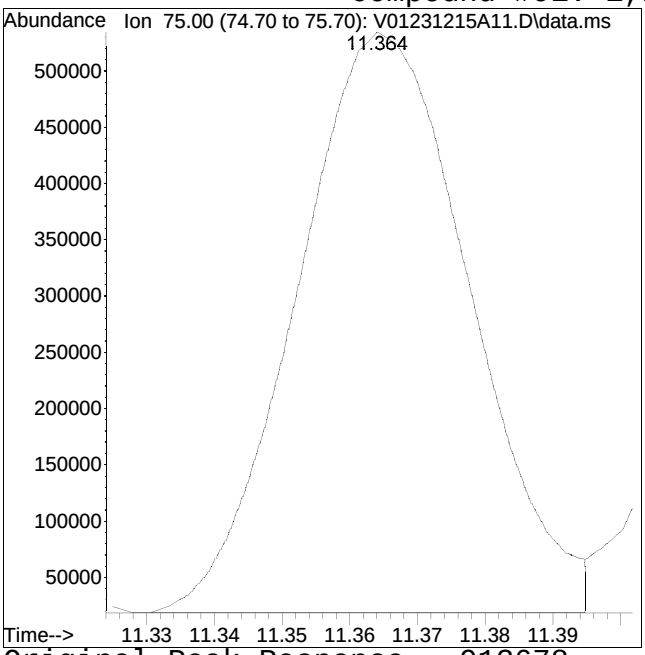
Original Peak Response = 4619037 Manual Peak Response = 4656147 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

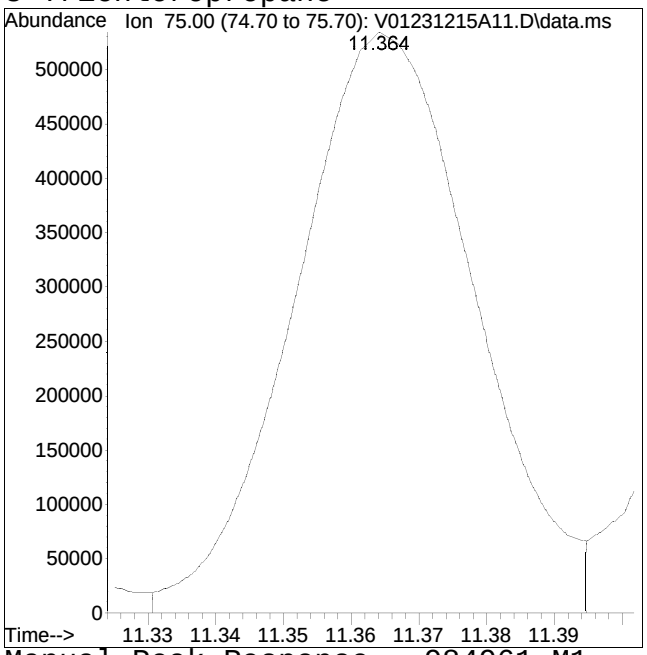
Manual Integration Report

Data Path : K:\VOA101\2023\231215AICALQMethod : V101_231215A_8260.m
Data File : V01231215A11.D Operator : VOA101:MKS
Date Inj'd : 12/15/2023 4:03 pm Instrument : VOA 101
Sample : I8260STD120PPB Quant Date : 12/16/2023 9:56 am

Compound #91: 1,2,3-Trichloropropane



Original Peak Response = 913678



Manual Peak Response = 984961 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Quantitation Report (QT Reviewed)

Data Path : K:\VOA101\2023\231215AICAL\
Data File : V01231215A12.D
Acq On : 15 Dec 2023 4:29 pm
Operator : VOA101:MKS
Sample : I8260STD200PPB
Misc : WG1864802
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 16 10:11:08 2023
Quant Method : K:\VOA101\2023\231215AICAL\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 09:55:15 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA101\2023\231215AICAL\V01231215A08.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.963	96	467512	10.000	ug/L	0.00
Standard Area 1 = 440479			Recovery = 106.14%			
59) Chlorobenzene-d5	9.485	117	405504	10.000	ug/L	0.00
Standard Area 1 = 367736			Recovery = 110.27%			
79) 1,4-Dichlorobenzene-d4	12.198	152	226153	10.000	ug/L	0.00
Standard Area 1 = 202447			Recovery = 111.71%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.159	113	120263	10.075	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.75%			
43) 1,2-Dichloroethane-d4	5.681	65	140418	10.523	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 105.23%			
60) Toluene-d8	7.644	98	468076	9.750	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 97.50%			
83) 4-Bromofluorobenzene	10.982	95	187826	9.741	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 97.41%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.651	85	2830731	223.629	ug/L	100
3) Chloromethane	1.847	50	3512629	205.701	ug/L	99
4) Vinyl chloride	1.905	62	3244424	214.050	ug/L	100
5) Bromomethane	2.212	94	1760503	258.567	ug/L	100
6) Chloroethane	2.315	64	1602118	175.932	ug/L	96
7) Trichlorofluoromethane	2.460	101	3431724	218.087	ug/L	98
8) Ethyl ether	2.756	74	967447	188.573	ug/L #	73
10) 1,1-Dichloroethene	2.940	96	2148792	215.294	ug/L	86
11) Carbon disulfide	2.968	76	6713899	214.780	ug/L	100
12) Freon-113	2.970	101	2315065	220.649	ug/L	79
13) Iodomethane	3.074	142	3299266	205.314	ug/L	99
14) Acrolein	3.258	56	317386	196.255	ug/L	94
15) Methylene chloride	3.483	84	2223783	196.915	ug/L	88
17) Acetone	3.534	43	426146	181.234	ug/L	98
18) trans-1,2-Dichloroethene	3.634	96	2429352	210.445	ug/L	96
19) Methyl acetate	3.648	43	1160133	192.060	ug/L	92
20) Methyl tert-butyl ether	3.737	73	5279306	197.567	ug/L	95
21) tert-Butyl alcohol	3.840	59	776957	1008.335	ug/L	94
22) Diisopropyl ether	4.091	45	8857191	201.681	ug/L	95
23) 1,1-Dichloroethane	4.211	63	4697572	205.119	ug/L	99
24) Halothane	4.262	117	1914561	217.591	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : K:\VOA101\2023\231215AICAL\
Data File : V01231215A12.D
Acq On : 15 Dec 2023 4:29 pm
Operator : VOA101:MKS
Sample : I8260STD200PPB
Misc : WG1864802
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 16 10:11:08 2023
Quant Method : K:\VOA101\2023\231215AICAL\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 09:55:15 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA101\2023\231215AICAL\V01231215A08.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) Acrylonitrile	4.256	53	583194	204.287	ug/L		94
26) Ethyl tert-butyl ether	4.432	59	7478160	202.491	ug/L		90
27) Vinyl acetate	4.440	43	4177423	179.716	ug/L		97
28) cis-1,2-Dichloroethene	4.724	96	2639522	201.306	ug/L		96
29) 2,2-Dichloropropane	4.819	77	3470681	200.916	ug/L		95
30) Bromochloromethane	4.914	128	1096438	186.604	ug/L		93
31) Cyclohexane	4.917	56	5294918	238.092	ug/L		89
32) Chloroform	4.987	83	4081271	202.647	ug/L		98
33) Ethyl acetate	5.093	43	1774402	195.295	ug/L		95
34) Carbon tetrachloride	5.118	117	3502215	224.923	ug/L		99
35) Tetrahydrofuran	5.140	42	466036	184.747	ug/L		95
37) 1,1,1-Trichloroethane	5.182	97	3797531	211.875	ug/L		99
39) 2-Butanone	5.274	43	736338	209.538	ug/L	#	46
40) 1,1-Dichloropropene	5.302	75	3391010	216.160	ug/L		98
41) Benzene	5.544	78	9220444	201.014	ug/L		96
42) tert-Amyl methyl ether	5.656	73	5873101	200.841	ug/L		97
44) 1,2-Dichloroethane	5.748	62	2958404	194.123	ug/L		99
47) Methyl cyclohexane	6.127	83	4588544	243.236	ug/L		88
48) Trichloroethene	6.138	95	2672702	214.968	ug/L		98
50) Dibromomethane	6.576	93	1299036	204.386	ug/L		96
51) 1,2-Dichloropropane	6.676	63	2557776	200.987	ug/L		97
53) 2-Chloroethyl vinyl ether	7.365	63	760294	206.602	ug/L		95
54) Bromodichloromethane	6.752	83	3150343	203.116	ug/L		100
57) 1,4-Dioxane	6.967	88	152699M1	2008.789	ug/L		
58) cis-1,3-Dichloropropene	7.435	75	3747055	205.439	ug/L		93
61) Toluene	7.700	92	6157342	200.547	ug/L		97
62) 4-Methyl-2-pentanone	8.129	58	677354	203.899	ug/L		99
63) Tetrachloroethene	8.149	166	2857645	211.669	ug/L		99
65) trans-1,3-Dichloropropene	8.180	75	3299506	204.614	ug/L		92
67) Ethyl methacrylate	8.366	69	2320690	207.741	ug/L		97
68) 1,1,2-Trichloroethane	8.366	83	1535532	194.657	ug/L		98
69) Chlorodibromomethane	8.578	129	2328789	204.559	ug/L		98
70) 1,3-Dichloropropane	8.687	76	3029419	192.278	ug/L		99
71) 1,2-Dibromoethane	8.852	107	1858733	197.376	ug/L		99
72) 2-Hexanone	9.133	43	1196964	207.775	ug/L		99
73) Chlorobenzene	9.501	112	6949555	199.523	ug/L		98
74) Ethylbenzene	9.540	91	12154575	203.446	ug/L		98
75) 1,1,1,2-Tetrachloroethane	9.588	131	2548542	202.307	ug/L		99
76) p/m Xylene	9.730	106	9473832	408.949	ug/L		96
77) o Xylene	10.274	106	9059943	399.865	ug/L		97

Data Path : K:\VOA101\2023\231215AICAL\
Data File : V01231215A12.D
Acq On : 15 Dec 2023 4:29 pm
Operator : VOA101:MKS
Sample : I8260STD200PPB
Misc : WG1864802
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 16 10:11:08 2023
Quant Method : K:\VOA101\2023\231215AICAL\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 09:55:15 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA101\2023\231215AICAL\V01231215A08.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
78) Styrene	10.341	104	14901158	400.713	ug/L	99
80) Bromoform	10.371	173	1439467	213.316	ug/L	100
82) Isopropylbenzene	10.659	105	12277730	209.235	ug/L	100
84) Bromobenzene	11.094	156	2830964	198.855	ug/L	100
85) n-Propylbenzene	11.141	91	14149857	209.841	ug/L	98
86) 1,4-Dichlorobutane	11.155	55	3343553	199.428	ug/L	99
87) 1,1,2,2-Tetrachloroethane	11.230	83	2147693	191.712	ug/L	99
88) 4-Ethyltoluene	11.269	105	12036004	211.238	ug/L	100
89) 2-Chlorotoluene	11.311	91	8220356M1	203.245	ug/L	
90) 1,3,5-Trimethylbenzene	11.367	105	10200216	213.175	ug/L	99
91) 1,2,3-Trichloropropane	11.367	75	1698530M1	201.138	ug/L	
92) trans-1,4-Dichloro-2-b...	11.420	53	675575	194.839	ug/L	86
93) 4-Chlorotoluene	11.492	91	8454441	203.373	ug/L	100
94) tert-Butylbenzene	11.707	119	8621961	217.397	ug/L	100
97) 1,2,4-Trimethylbenzene	11.785	105	9851350	210.017	ug/L	99
98) sec-Butylbenzene	11.897	105	12513003	224.590	ug/L	99
99) p-Isopropyltoluene	12.053	119	10755536	224.211	ug/L	99
100) 1,3-Dichlorobenzene	12.120	146	5411475	205.935	ug/L	100
101) 1,4-Dichlorobenzene	12.215	146	5416252	205.558	ug/L	99
102) p-Diethylbenzene	12.427	119	6339368	230.855	ug/L	97
103) n-Butylbenzene	12.482	91	8754694	231.885	ug/L	99
104) 1,2-Dichlorobenzene	12.636	146	4871326	202.575	ug/L	99
105) 1,2,4,5-Tetramethylben...	13.219	119	8734652	224.294	ug/L	99
106) 1,2-Dibromo-3-chloropr...	13.414	155	324549	212.561	ug/L	98
107) 1,3,5-Trichlorobenzene	13.447	180	3304961	222.977	ug/L	99
108) Hexachlorobutadiene	14.022	225	1198390	245.037	ug/L	99
109) 1,2,4-Trichlorobenzene	14.044	180	2731393	217.261	ug/L	99
110) Naphthalene	14.337	128	5437083	199.867	ug/L	100
111) 1,2,3-Trichlorobenzene	14.507	180	2159302	212.098	ug/L	99

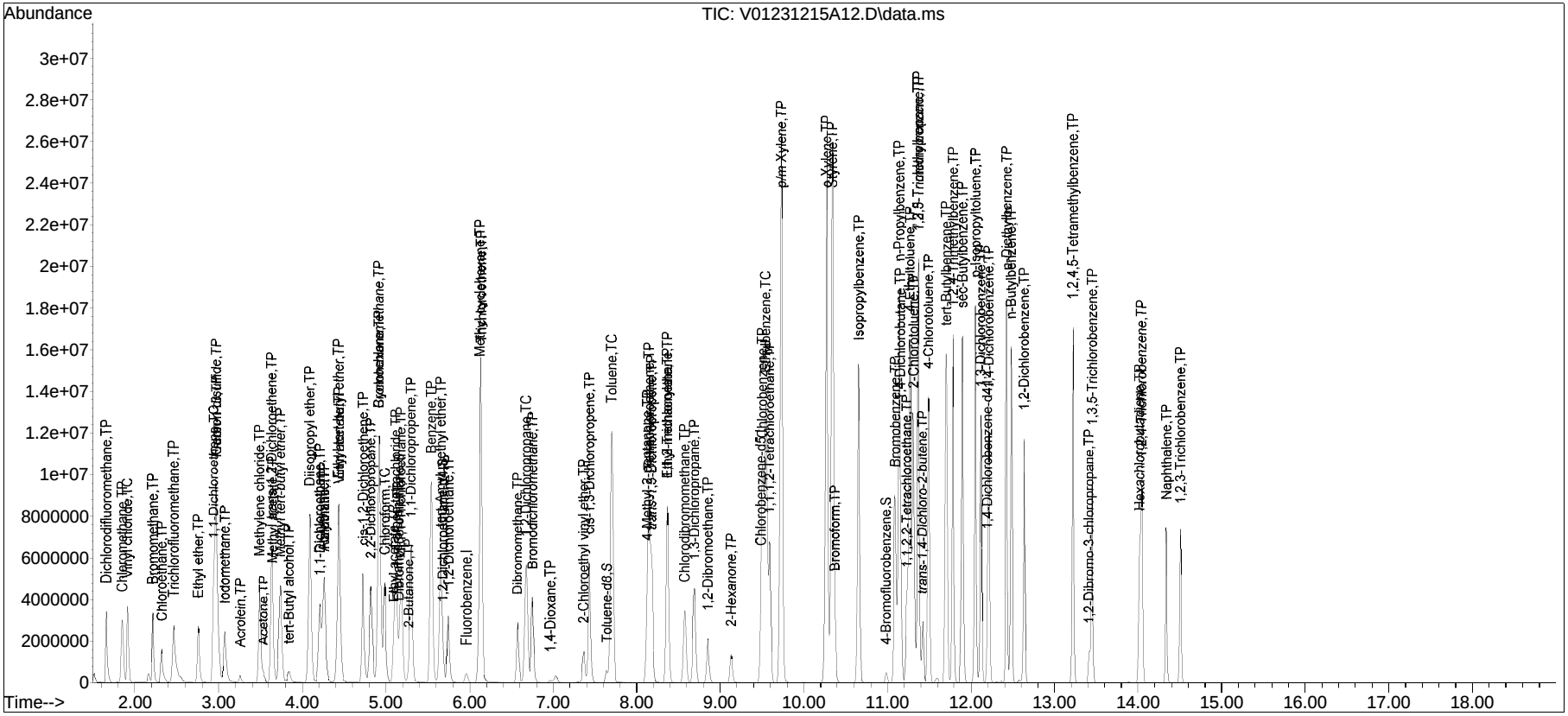
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\VOA101\2023\231215AICAL\
Data File : V01231215A12.D
Acq On : 15 Dec 2023 4:29 pm
Operator : VOA101:MKS
Sample : I8260STD200PPB
Misc : WG1864802
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 16 10:11:08 2023
Quant Method : K:\VOA101\2023\231215AICAL\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 09:55:15 2023
Response via : Initial Calibration

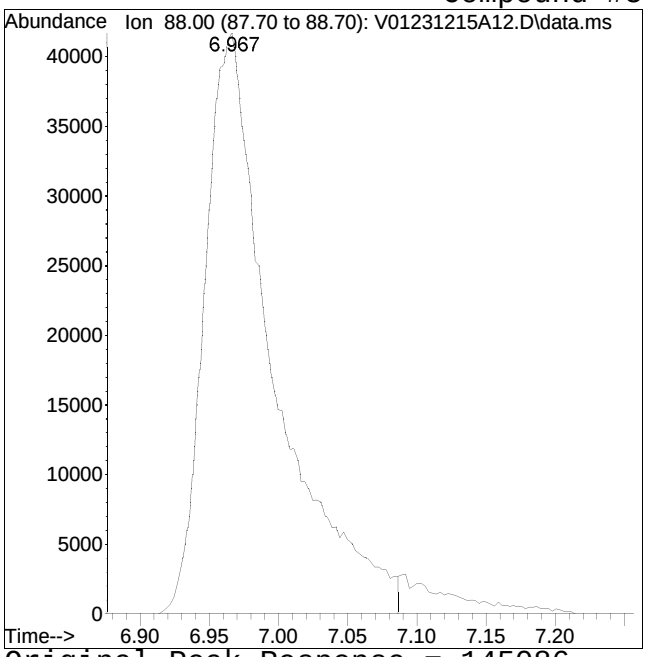
Sub List : 8260-Curve - Megamix plus Diox\V01231215A08.D•

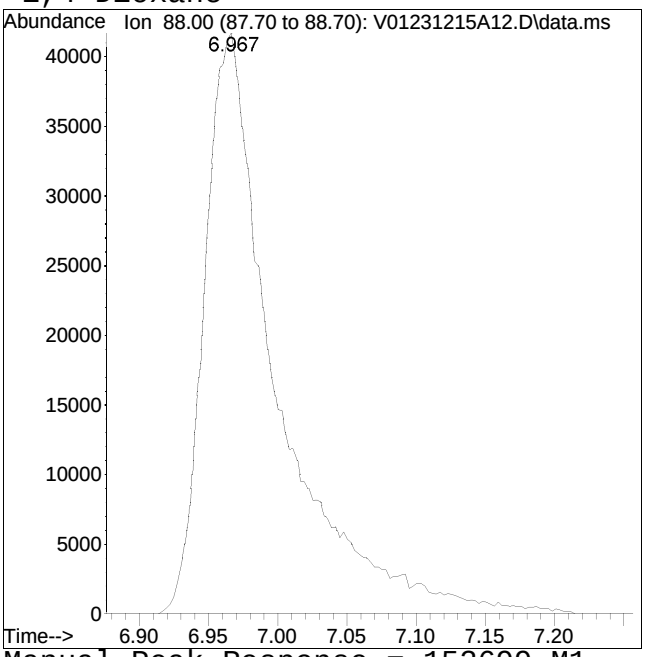


Manual Integration Report

Data Path : K:\VOA101\2023\231215AICALQMethod : V101_231215A_8260.m
Data File : V01231215A12.D Operator : VOA101:MKS
Date Inj'd : 12/15/2023 4:29 pm Instrument : VOA 101
Sample : I8260STD200PPB Quant Date : 12/16/2023 9:56 am

Compound #57: 1,4-Dioxane



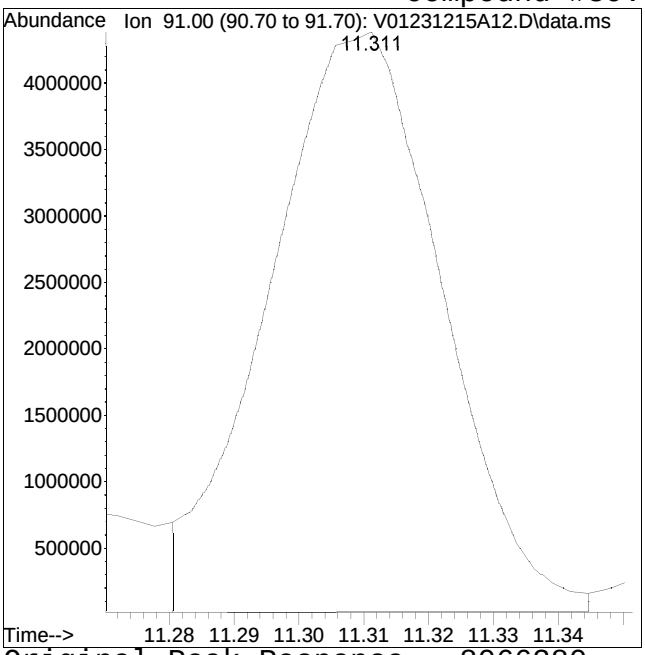


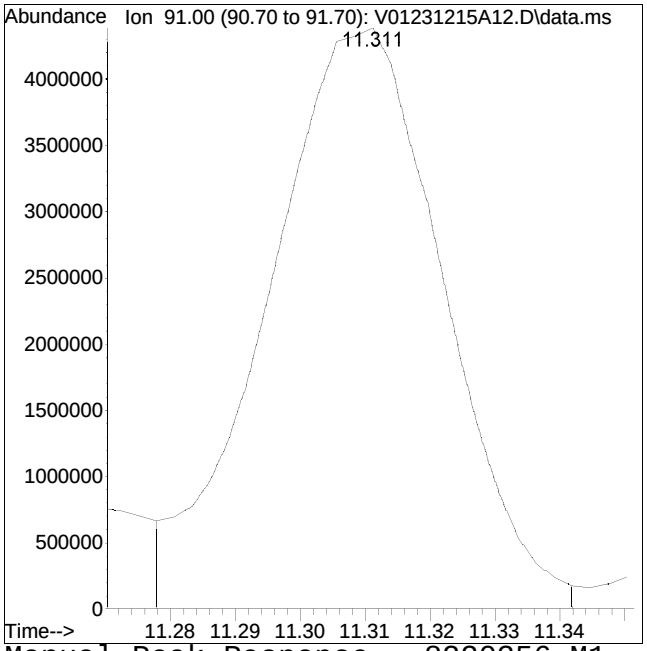
Original Peak Response = 145086 Manual Peak Response = 152699 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

Data Path : K:\VOA101\2023\231215AICALQMethod : V101_231215A_8260.m
Data File : V01231215A12.D Operator : VOA101:MKS
Date Inj'd : 12/15/2023 4:29 pm Instrument : VOA 101
Sample : I8260STD200PPB Quant Date : 12/16/2023 9:56 am

Compound #89: 2-Chlorotoluene



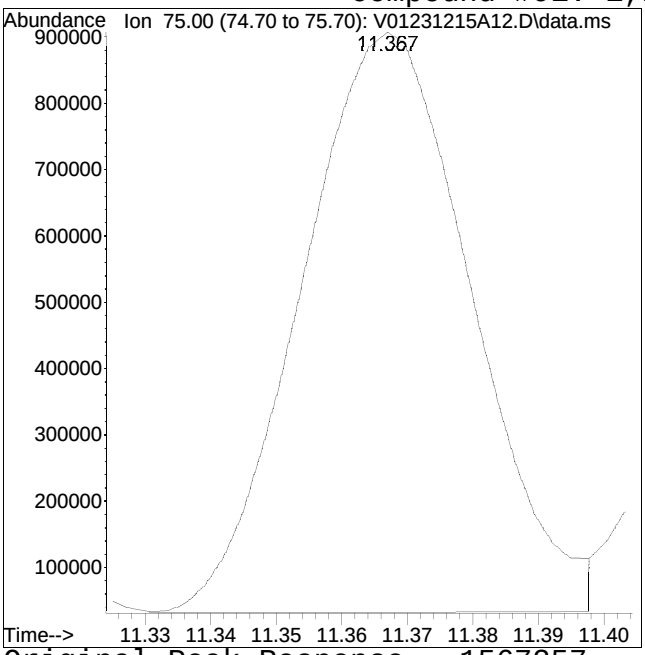


Original Peak Response = 8066380 Manual Peak Response = 8220356 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

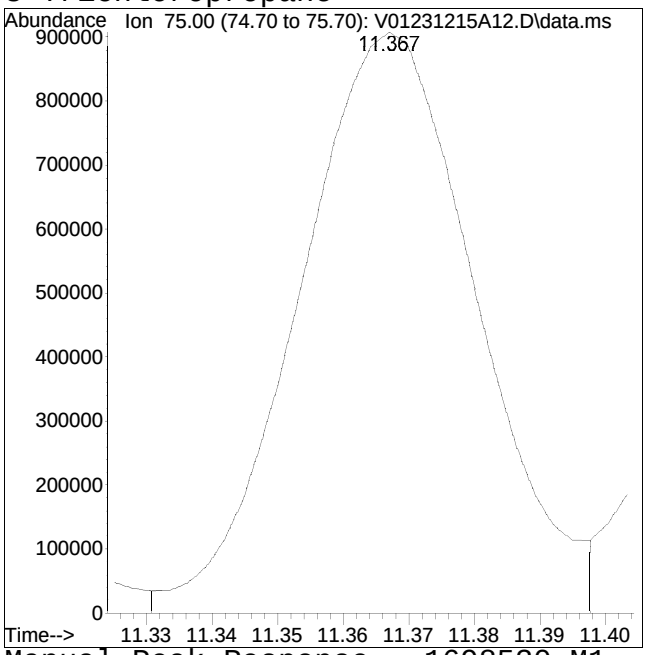
Manual Integration Report

Data Path : K:\VOA101\2023\231215AICALQMethod : V101_231215A_8260.m
Data File : V01231215A12.D Operator : VOA101:MKS
Date Inj'd : 12/15/2023 4:29 pm Instrument : VOA 101
Sample : I8260STD200PPB Quant Date : 12/16/2023 9:56 am

Compound #91: 1,2,3-Trichloropropane



Original Peak Response = 1567257



Manual Peak Response = 1698530 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Evaluate Continuing Calibration Report

Data Path : K:\VOA101\2023\231215AICAL\
Data File : V01231215A17.D
Acq On : 15 Dec 2023 6:39 pm
Operator : VOA101:MKS
Sample : C8260STD10PPB
Misc : WG1864802
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 16 10:16:04 2023
Quant Method : K:\VOA101\2023\231215AICAL\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 10:14:14 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	104	0.00
2	TP	Dichlorodifluoromethane	0.279	0.252	9.7	97	0.00
3	TP	Chloromethane	0.361	0.353	2.2	101	0.00
4	TC	Vinyl chloride	0.320	0.313	2.2	101	0.00
5	TP	Bromomethane	0.156	0.193	-23.7#	138	0.00
6	TP	Chloroethane	0.192	0.188	2.1	101	0.00
7	TP	Trichlorofluoromethane	0.343	0.350	-2.0	109	0.00
8	TP	Ethyl ether	0.108	0.137	-26.9#	131	0.00
10	TC	1,1-Dichloroethene	0.219	0.200	8.7	98	0.00
11	TP	Carbon disulfide	0.676	0.530	21.6#	83	0.00
12	TP	Freon-113	0.229	0.189	17.5	88	0.00
13	TP	Iodomethane	0.325	0.251	22.8#	76	0.00
14	TP	Acrolein	0.035	0.026	25.7#	77	0.00
15	TP	Methylene chloride	0.239	0.228	4.6	99	0.00
17	TP	Acetone	0.048	0.045	6.3	94	0.00
18	TP	trans-1,2-Dichloroethene	0.246	0.229	6.9	97	0.00
19	TP	Methyl acetate	0.126	0.123	2.4	99	0.00
20	TP	Methyl tert-butyl ether	0.562	0.584	-3.9	107	0.00
21	TP	tert-Butyl alcohol	0.016	0.017	-6.3	110	0.00
22	TP	Diisopropyl ether	0.929	0.939	-1.1	104	0.00
23	TP	1,1-Dichloroethane	0.486	0.459	5.6	98	0.00
24	TP	Halothane	0.190	0.162	14.7	90	0.00
25	TP	Acrylonitrile	0.059	0.063	-6.8	108	0.00
26	TP	Ethyl tert-butyl ether	0.781	0.787	-0.8	104	0.00
27	TP	Vinyl acetate	0.469	0.512	-9.2	108	0.00
28	TP	cis-1,2-Dichloroethene	0.273	0.253	7.3	94	0.00
29	TP	2,2-Dichloropropane	0.366	0.315	13.9	89	0.00
30	TP	Bromochloromethane	0.122	0.115	5.7	95	0.00
31	TP	Cyclohexane	0.497	0.390	21.5#	86	0.00
32	TC	Chloroform	0.426	0.412	3.3	100	0.00
33	TP	Ethyl acetate	0.188	0.184	2.1	99	0.00
34	TP	Carbon tetrachloride	0.333	0.329	1.2	103	0.00
35	TP	Tetrahydrofuran	0.056	0.067	-19.6	129	0.00
36	S	Dibromofluoromethane	0.256	0.255	0.4	104	0.00
37	TP	1,1,1-Trichloroethane	0.385	0.370	3.9	101	0.00
39	TP	2-Butanone	0.076	0.069	9.2	95	0.00
40	TP	1,1-Dichloropropene	0.336	0.322	4.2	100	0.00
41	TP	Benzene	0.951	0.918	3.5	98	0.00
42	TP	tert-Amyl methyl ether	0.615	0.612	0.5	102	0.00

Evaluate Continuing Calibration Report

Data Path : K:\VOA101\2023\231215AICAL\
Data File : V01231215A17.D
Acq On : 15 Dec 2023 6:39 pm
Operator : VOA101:MKS
Sample : C8260STD10PPB
Misc : WG1864802
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 16 10:16:04 2023
Quant Method : K:\VOA101\2023\231215AICAL\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 10:14:14 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)
43	S	1,2-Dichloroethane-d4	0.289	0.283	2.1	103	0.00
44	TP	1,2-Dichloroethane	0.318	0.303	4.7	97	0.00
47	TP	Methyl cyclohexane	0.419	0.336	19.8	87	0.00
48	TP	Trichloroethene	0.267	0.250	6.4	98	0.00
50	TP	Dibromomethane	0.135	0.129	4.4	99	0.00
51	TC	1,2-Dichloropropane	0.264	0.255	3.4	98	0.00
53	TP	2-Chloroethyl vinyl ether	0.075	0.074	1.3	99	0.00
54	TP	Bromodichloromethane	0.323	0.308	4.6	97	0.00
57	TP	1,4-Dioxane	0.00152	0.00151#	0.7	97	0.00
58	TP	cis-1,3-Dichloropropene	0.379	0.369	2.6	99	0.00
59	I	Chlorobenzene-d5	1.000	1.000	0.0	105	0.00
60	S	Toluene-d8	1.178	1.184	-0.5	105	0.00
61	TC	Toluene	0.738	0.714	3.3	99	0.00
62	TP	4-Methyl-2-pentanone	0.076	0.073	3.9	93	0.00
63	TP	Tetrachloroethene	0.327	0.311	4.9	98	0.00
65	TP	trans-1,3-Dichloropropene	0.387	0.374	3.4	99	0.00
67	TP	Ethyl methacrylate	0.264	0.348	-31.8#	132	0.00
68	TP	1,1,2-Trichloroethane	0.188	0.180#	4.3	97	0.00
69	TP	Chlorodibromomethane	0.273	0.266	2.6	99	0.00
70	TP	1,3-Dichloropropane	0.371	0.365	1.6	98	0.00
71	TP	1,2-Dibromoethane	0.224	0.216	3.6	97	0.00
72	TP	2-Hexanone	0.143	0.134	6.3	99	0.00
73	TP	Chlorobenzene	0.837	0.811	3.1	99	0.00
74	TC	Ethylbenzene	1.419	1.397	1.6	99	0.00
75	TP	1,1,1,2-Tetrachloroethane	0.301	0.285	5.3	96	0.00
76	TP	p/m Xylene	0.554	0.540	2.5	99	0.00
77	TP	o Xylene	0.539	0.572	-6.1	107	0.00
78	TP	Styrene	0.882	0.972	-10.2	111	0.00
79	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	104	0.00
80	TP	Bromoform	0.300	0.288	4.0	100	0.00
82	TP	Isopropylbenzene	2.569	2.359	8.2	94	0.00
83	S	4-Bromofluorobenzene	0.852	0.862	-1.2	105	0.00
84	TP	Bromobenzene	0.614	0.604	1.6	99	0.00
85	TP	n-Propylbenzene	2.960	2.904	1.9	101	0.00
86	TP	1,4-Dichlorobutane	0.730	0.945	-29.5#	132	0.00
87	TP	1,1,2,2-Tetrachloroethane	0.478	0.448	6.3	94	0.00
88	TP	4-Ethyltoluene	2.497	2.684	-7.5	110	0.00

Evaluate Continuing Calibration Report

Data Path : K:\VOA101\2023\231215AICAL\
Data File : V01231215A17.D
Acq On : 15 Dec 2023 6:39 pm
Operator : VOA101:MKS
Sample : C8260STD10PPB
Misc : WG1864802
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 16 10:16:04 2023
Quant Method : K:\VOA101\2023\231215AICAL\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 10:14:14 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)
89	TP	2-Chlorotoluene	1.754	1.719	2.0	100	0.00
90	TP	1,3,5-Trimethylbenzene	2.094	2.010	4.0	98	0.00
91	TP	1,2,3-Trichloropropane	0.366	0.357	2.5	99	0.00
92	TP	trans-1,4-Dichloro-2-butene	0.146	0.180	-23.3#	122	0.00
93	TP	4-Chlorotoluene	1.783	1.725	3.3	97	0.00
94	TP	tert-Butylbenzene	1.756	1.720	2.1	102	0.00
97	TP	1,2,4-Trimethylbenzene	2.037	2.000	1.8	100	0.00
98	TP	sec-Butylbenzene	2.514	2.450	2.5	103	0.00
99	TP	p-Isopropyltoluene	2.142	2.065	3.6	101	0.00
100	TP	1,3-Dichlorobenzene	1.141	1.117	2.1	100	0.00
101	TP	1,4-Dichlorobenzene	1.160	1.121	3.4	100	0.00
102	TP	p-Diethylbenzene	1.233	1.214	1.5	104	0.00
103	TP	n-Butylbenzene	1.691	1.692	-0.1	105	0.00
104	TP	1,2-Dichlorobenzene	1.039	1.024	1.4	100	0.00
105	TP	1,2,4,5-Tetramethylbenzene	1.742	1.757	-0.9	106	0.00
106	TP	1,2-Dibromo-3-chloropropane	0.067	0.067	0.0	103	0.00
107	TP	1,3,5-Trichlorobenzene	0.669	0.568	15.1	90	0.00
108	TP	Hexachlorobutadiene	0.226	0.203	10.2	97	0.00
109	TP	1,2,4-Trichlorobenzene	0.559	0.526	5.9	98	0.00
110	TP	Naphthalene	1.165	1.155	0.9	100	0.00
111	TP	1,2,3-Trichlorobenzene	0.446	0.435	2.5	100	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:\VOA101\2023\231215AICAL\
Data File : V01231215A17.D
Acq On : 15 Dec 2023 6:39 pm
Operator : VOA101:MKS
Sample : C8260STD10PPB
Misc : WG1864802
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 16 10:16:04 2023
Quant Method : K:\VOA101\2023\231215AICAL\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 10:14:14 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA101\2023\231215AICAL\V01231215A08.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.963	96	460171	10.000	ug/L	0.00
Standard Area 1 = 440479			Recovery = 104.47%			
59) Chlorobenzene-d5	9.479	117	385035	10.000	ug/L	0.00
Standard Area 1 = 367736			Recovery = 104.70%			
79) 1,4-Dichlorobenzene-d4	12.192	152	209884	10.000	ug/L	0.00
Standard Area 1 = 202447			Recovery = 103.67%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.162	113	117194	9.965	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.65%			
43) 1,2-Dichloroethane-d4	5.684	65	130078	9.767	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 97.67%			
60) Toluene-d8	7.641	98	455907	10.051	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.51%			
83) 4-Bromofluorobenzene	10.982	95	181004	10.125	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.25%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.654	85	115735	9.003	ug/L	99
3) Chloromethane	1.849	50	162396	9.764	ug/L	99
4) Vinyl chloride	1.908	62	143849	9.769	ug/L	99
5) Bromomethane	2.215	94	88828	12.389	ug/L	100
6) Chloroethane	2.332	64	86467	9.770	ug/L	98
7) Trichlorofluoromethane	2.463	101	160879	10.181	ug/L	99
8) Ethyl ether	2.758	74	63138	12.721	ug/L	75
10) 1,1-Dichloroethene	2.942	96	92058	9.125	ug/L	89
11) Carbon disulfide	2.973	76	244081	7.843	ug/L	99
12) Freon-113	2.976	101	86861	8.227	ug/L	83
13) Iodomethane	3.079	142	115610	7.740	ug/L	98
14) Acrolein	3.260	56	11799M1	7.347	ug/L	
15) Methylene chloride	3.489	84	105102	9.569	ug/L	88
17) Acetone	3.542	43	20861	9.502	ug/L	94
18) trans-1,2-Dichloroethene	3.637	96	105257	9.290	ug/L	96
19) Methyl acetate	3.654	43	56465	9.770	ug/L #	90
20) Methyl tert-butyl ether	3.740	73	268898	10.406	ug/L	94
21) tert-Butyl alcohol	3.843	59	40009M1	55.361	ug/L	
22) Diisopropyl ether	4.091	45	432298	10.107	ug/L	95
23) 1,1-Dichloroethane	4.211	63	211228	9.449	ug/L	99
24) Halothane	4.264	117	74518	8.533	ug/L	100

Data Path : K:\VOA101\2023\231215AICAL\
Data File : V01231215A17.D
Acq On : 15 Dec 2023 6:39 pm
Operator : VOA101:MKS
Sample : C8260STD10PPB
Misc : WG1864802
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 16 10:16:04 2023
Quant Method : K:\VOA101\2023\231215AICAL\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 10:14:14 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA101\2023\231215AICAL\V01231215A08.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) Acrylonitrile	4.262	53	28996	10.675	ug/L	#	90
26) Ethyl tert-butyl ether	4.434	59	362003	10.078	ug/L		96
27) Vinyl acetate	4.446	43	235470	10.905	ug/L		97
28) cis-1,2-Dichloroethene	4.727	96	116446	9.276	ug/L		97
29) 2,2-Dichloropropane	4.822	77	145181	8.612	ug/L		94
30) Bromochloromethane	4.917	128	52818	9.412	ug/L		94
31) Cyclohexane	4.917	56	179587	7.854	ug/L		91
32) Chloroform	4.987	83	189406	9.658	ug/L		97
33) Ethyl acetate	5.098	43	84490	9.774	ug/L	#	95
34) Carbon tetrachloride	5.123	117	151606	9.883	ug/L		100
35) Tetrahydrofuran	5.146	42	30650M1	11.937	ug/L		
37) 1,1,1-Trichloroethane	5.185	97	170147	9.599	ug/L		99
39) 2-Butanone	5.285	43	31612	9.041	ug/L	#	78
40) 1,1-Dichloropropene	5.304	75	148375	9.589	ug/L		98
41) Benzene	5.547	78	422432	9.657	ug/L		96
42) tert-Amyl methyl ether	5.659	73	281639	9.956	ug/L		94
44) 1,2-Dichloroethane	5.751	62	139501	9.531	ug/L		98
47) Methyl cyclohexane	6.127	83	154750	8.026	ug/L		89
48) Trichloroethene	6.144	95	114940	9.340	ug/L		98
50) Dibromomethane	6.579	93	59459	9.594	ug/L		96
51) 1,2-Dichloropropane	6.679	63	117357	9.663	ug/L		98
53) 2-Chloroethyl vinyl ether	7.368	63	34186	9.938	ug/L		98
54) Bromodichloromethane	6.752	83	141602	9.525	ug/L		100
57) 1,4-Dioxane	6.961	88	34647M1	494.500	ug/L		
58) cis-1,3-Dichloropropene	7.435	75	169995	9.760	ug/L		92
61) Toluene	7.700	92	274962	9.676	ug/L		98
62) 4-Methyl-2-pentanone	8.132	58	28133	9.580	ug/L		94
63) Tetrachloroethene	8.152	166	119691	9.505	ug/L		99
65) trans-1,3-Dichloropropene	8.185	75	144142	9.661	ug/L		91
67) Ethyl methacrylate	8.369	69	133808	13.174	ug/L		87
68) 1,1,2-Trichloroethane	8.366	83	69411	9.588	ug/L		97
69) Chlorodibromomethane	8.578	129	102607	9.755	ug/L		99
70) 1,3-Dichloropropane	8.687	76	140722	9.858	ug/L		99
71) 1,2-Dibromoethane	8.854	107	83112	9.643	ug/L		100
72) 2-Hexanone	9.144	43	51783	9.423	ug/L		96
73) Chlorobenzene	9.501	112	312399	9.695	ug/L		97
74) Ethylbenzene	9.538	91	537766	9.842	ug/L		99
75) 1,1,1,2-Tetrachloroethane	9.585	131	109703	9.460	ug/L		100
76) p/m Xylene	9.727	106	415817	19.490	ug/L		98
77) o Xylene	10.268	106	440624	21.236	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : K:\VOA101\2023\231215AICAL\
Data File : V01231215A17.D
Acq On : 15 Dec 2023 6:39 pm
Operator : VOA101:MKS
Sample : C8260STD10PPB
Misc : WG1864802
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 16 10:16:04 2023
Quant Method : K:\VOA101\2023\231215AICAL\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 10:14:14 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA101\2023\231215AICAL\V01231215A08.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
78) Styrene	10.335	104	748815	22.044	ug/L	98
80) Bromoform	10.363	173	60395	9.584	ug/L	100
82) Isopropylbenzene	10.653	105	495171	9.185	ug/L	100
84) Bromobenzene	11.094	156	126775	9.837	ug/L	100
85) n-Propylbenzene	11.138	91	609428	9.811	ug/L	99
86) 1,4-Dichlorobutane	11.152	55	198335	12.946	ug/L	100
87) 1,1,2,2-Tetrachloroethane	11.228	83	94071	9.384	ug/L	99
88) 4-Ethyltoluene	11.264	105	563246	10.747	ug/L	99
89) 2-Chlorotoluene	11.303	91	360870	9.804	ug/L	98
90) 1,3,5-Trimethylbenzene	11.361	105	421824	9.597	ug/L	99
91) 1,2,3-Trichloropropane	11.364	75	74921M1	9.754	ug/L	
92) trans-1,4-Dichloro-2-b...	11.417	53	37742M1	12.276	ug/L	
93) 4-Chlorotoluene	11.490	91	361945	9.670	ug/L	100
94) tert-Butylbenzene	11.702	119	361081	9.800	ug/L	100
97) 1,2,4-Trimethylbenzene	11.782	105	419727	9.819	ug/L	100
98) sec-Butylbenzene	11.894	105	514239	9.746	ug/L	99
99) p-Isopropyltoluene	12.047	119	433374	9.640	ug/L	99
100) 1,3-Dichlorobenzene	12.117	146	234431	9.793	ug/L	99
101) 1,4-Dichlorobenzene	12.212	146	235317	9.662	ug/L	99
102) p-Diethylbenzene	12.424	119	254859	9.851	ug/L	98
103) n-Butylbenzene	12.482	91	355180	10.006	ug/L	100
104) 1,2-Dichlorobenzene	12.633	146	214883	9.854	ug/L	99
105) 1,2,4,5-Tetramethylben...	13.219	119	368670	10.084	ug/L	99
106) 1,2-Dibromo-3-chloropr...	13.414	155	14032	10.017	ug/L	100
107) 1,3,5-Trichlorobenzene	13.447	180	119186	8.490	ug/L	99
108) Hexachlorobutadiene	14.019	225	42562	8.956	ug/L	99
109) 1,2,4-Trichlorobenzene	14.047	180	110413	9.412	ug/L	99
110) Naphthalene	14.340	128	242471	9.914	ug/L	100
111) 1,2,3-Trichlorobenzene	14.507	180	91273	9.751	ug/L	100

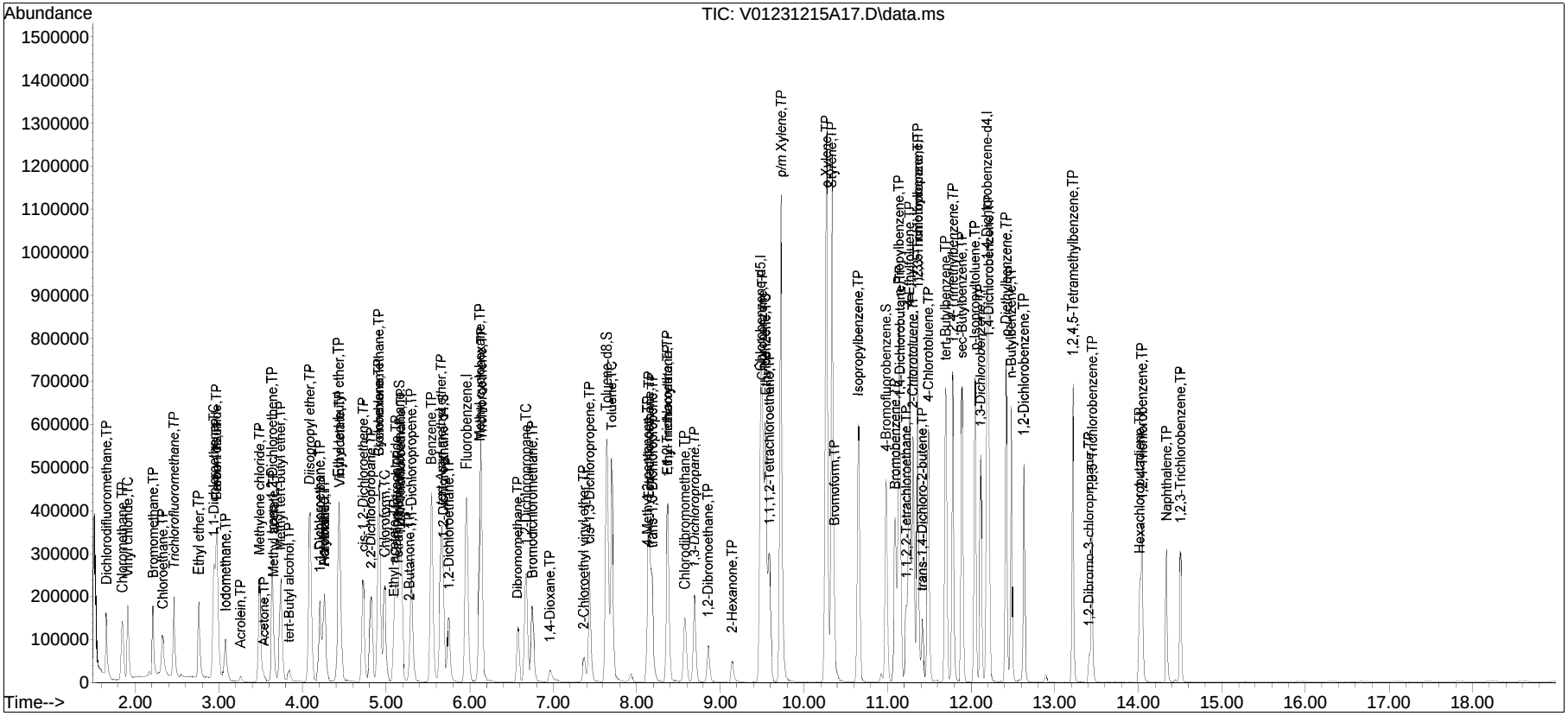
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\VOA101\2023\231215AICAL\
Data File : V01231215A17.D
Acq On : 15 Dec 2023 6:39 pm
Operator : VOA101:MKS
Sample : C8260STD10PPB
Misc : WG1864802
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 16 10:16:04 2023
Quant Method : K:\VOA101\2023\231215AICAL\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 10:14:14 2023
Response via : Initial Calibration

Sub List : 8260-Curve - Megamix plus Diox\V01231215A08.D•

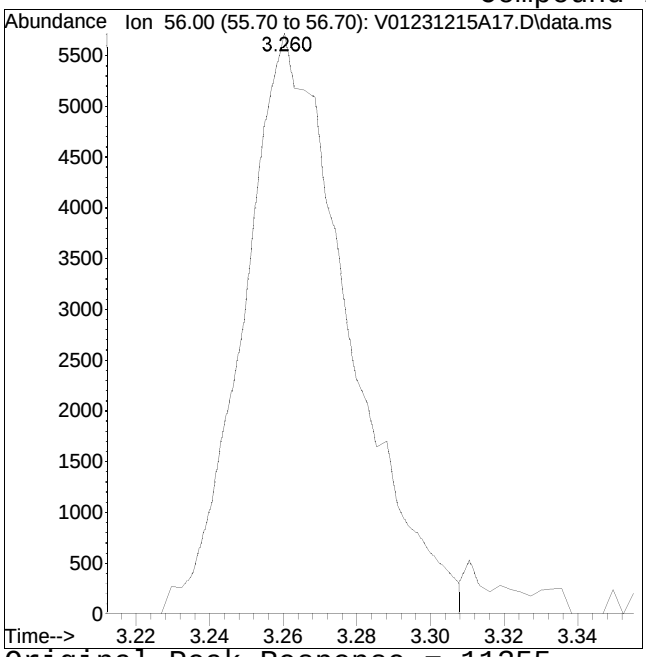


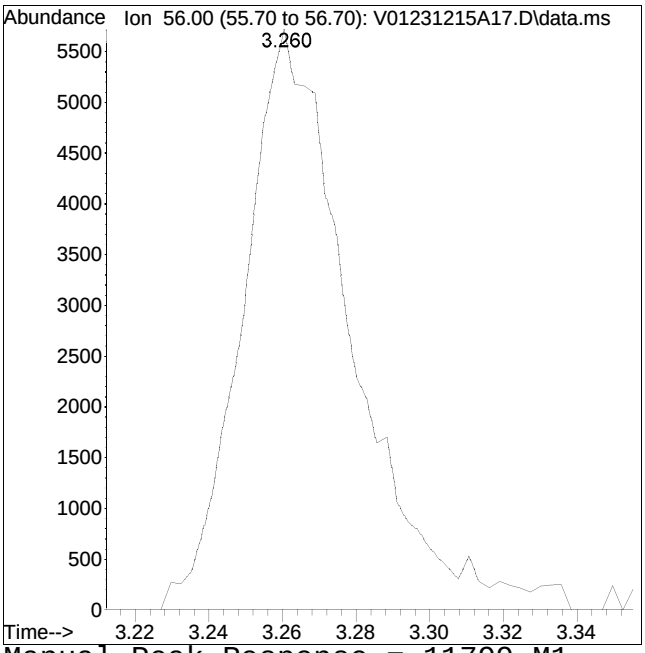
Manual Integration Report

Data Path : K:\VOA101\2023\231215AICALQ
Data File : V01231215A17.D
Date Inj'd : 12/15/2023 6:39 pm
Sample : C8260STD10PPB

Method : V101_231215A_8260.m
Operator : VOA101:MKS
Instrument : VOA 101
Quant Date : 12/16/2023 10:14 am

Compound #14: Acrolein





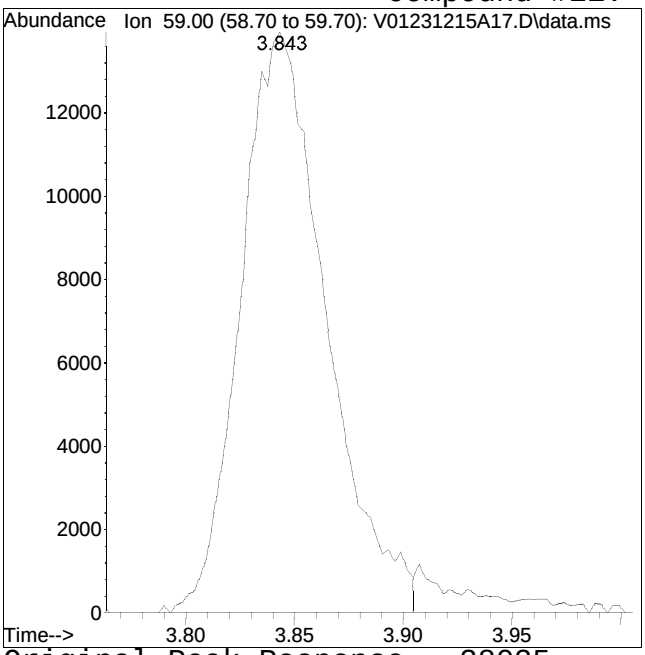
Original Peak Response = 11355 Manual Peak Response = 11799 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

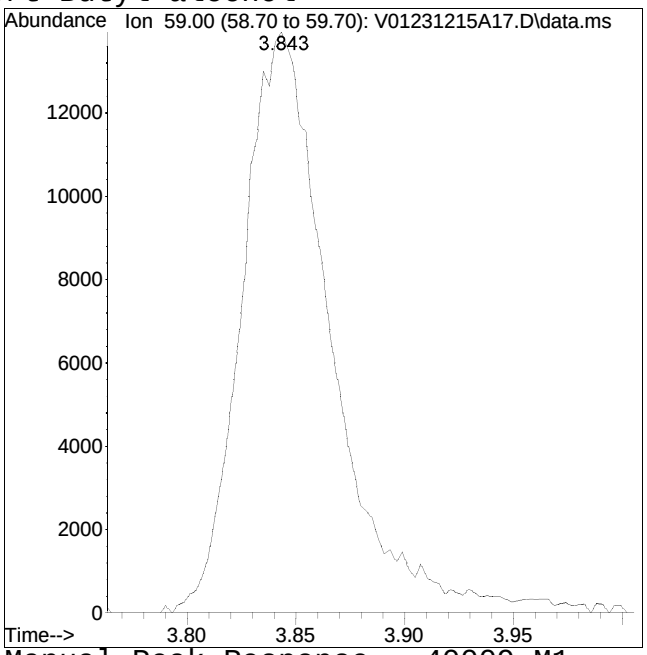
Manual Integration Report

Data Path : K:\VOA101\2023\231215AICALQMethod : V101_231215A_8260.m
Data File : V01231215A17.D Operator : VOA101:MKS
Date Inj'd : 12/15/2023 6:39 pm Instrument : VOA 101
Sample : C8260STD10PPB Quant Date : 12/16/2023 10:14 am

Compound #21: tert-Butyl alcohol



Original Peak Response = 38035



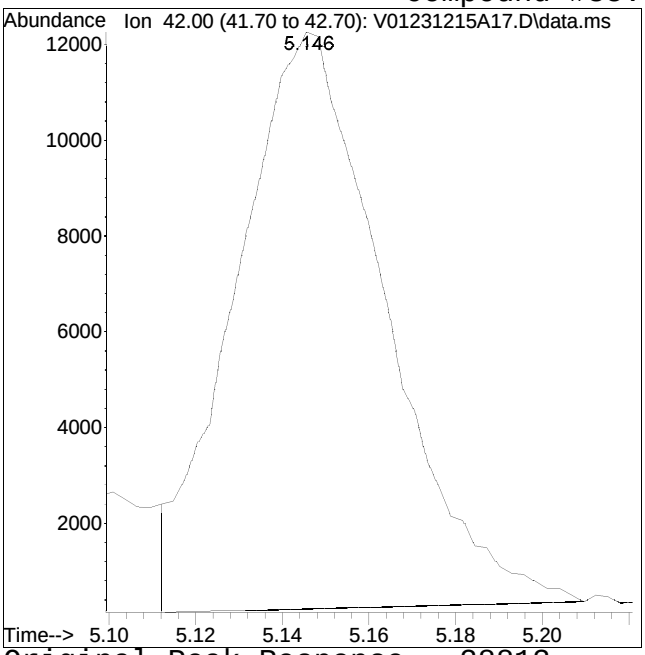
Manual Peak Response = 40009 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

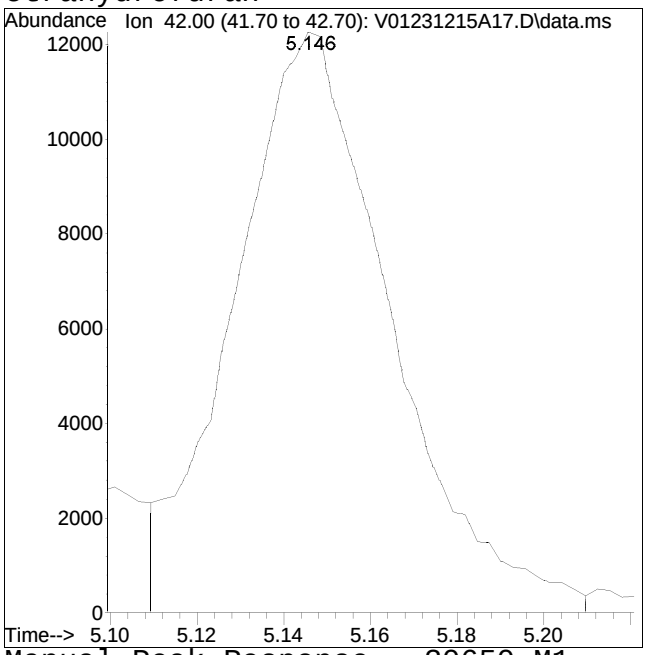
Manual Integration Report

Data Path : K:\VOA101\2023\231215AICALQMethod : V101_231215A_8260.m
Data File : V01231215A17.D Operator : VOA101:MKS
Date Inj'd : 12/15/2023 6:39 pm Instrument : VOA 101
Sample : C8260STD10PPB Quant Date : 12/16/2023 10:14 am

Compound #35: Tetrahydrofuran



Original Peak Response = 28813



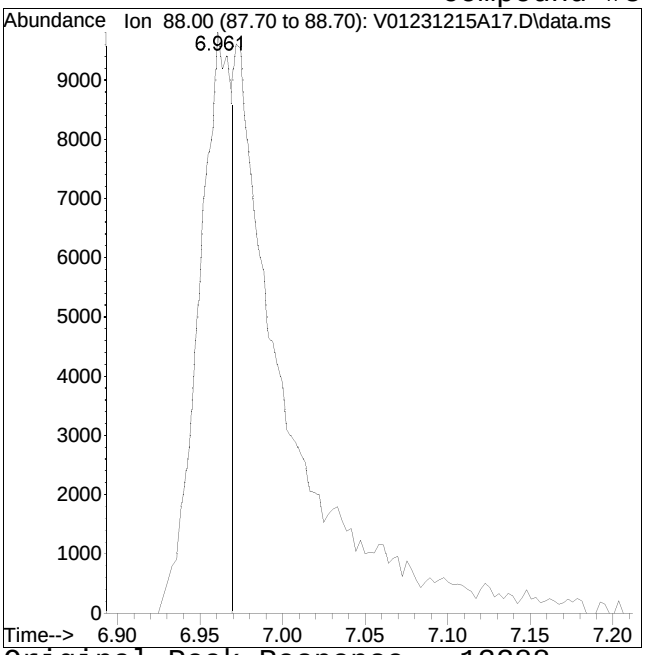
Manual Peak Response = 30650 M1

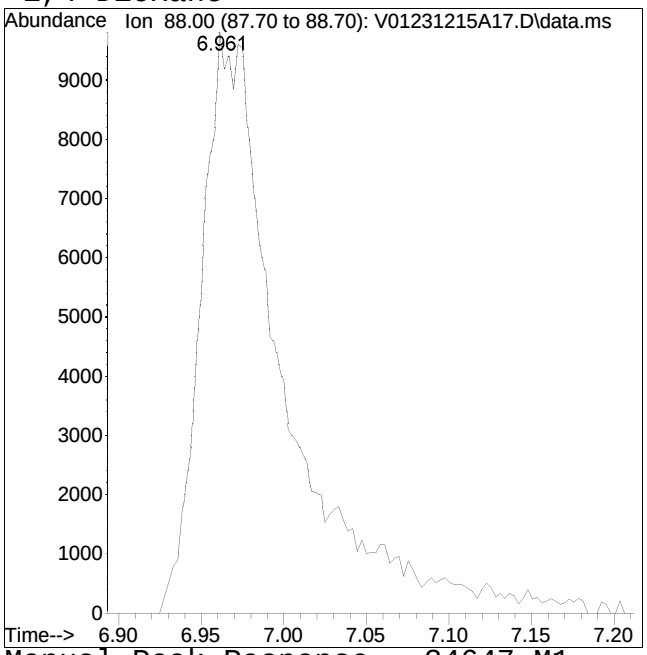
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

Data Path : K:\VOA101\2023\231215AICALQMethod : V101_231215A_8260.m
Data File : V01231215A17.D Operator : VOA101:MKS
Date Inj'd : 12/15/2023 6:39 pm Instrument : VOA 101
Sample : C8260STD10PPB Quant Date : 12/16/2023 10:14 am

Compound #57: 1,4-Dioxane



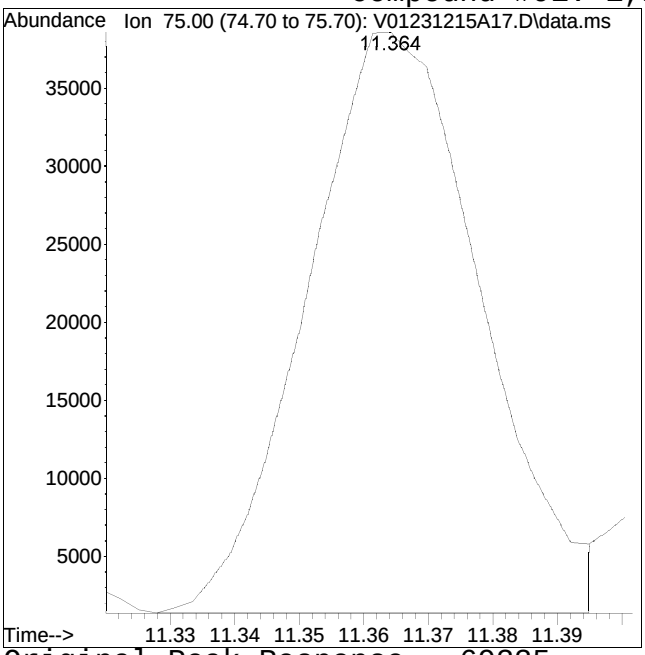


Original Peak Response = 13288 Manual Peak Response = 34647 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

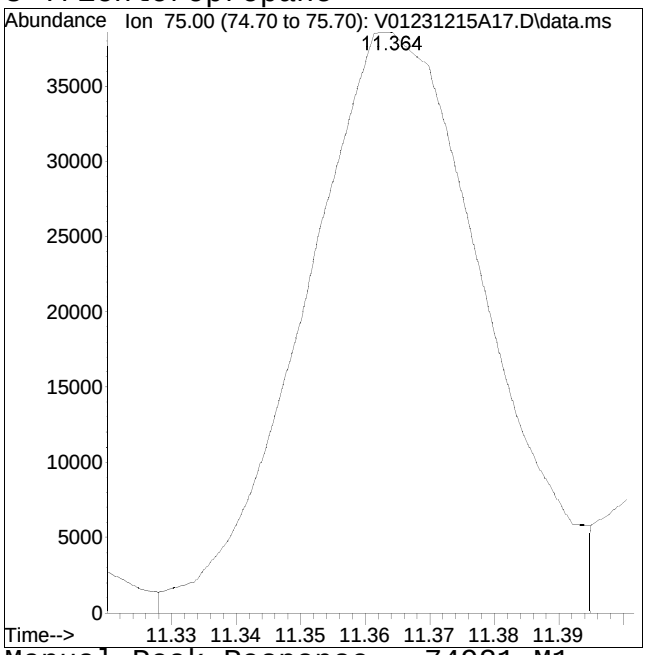
Manual Integration Report

Data Path : K:\VOA101\2023\231215AICALQMethod : V101_231215A_8260.m
Data File : V01231215A17.D Operator : VOA101:MKS
Date Inj'd : 12/15/2023 6:39 pm Instrument : VOA 101
Sample : C8260STD10PPB Quant Date : 12/16/2023 10:14 am

Compound #91: 1,2,3-Trichloropropane



Original Peak Response = 69335



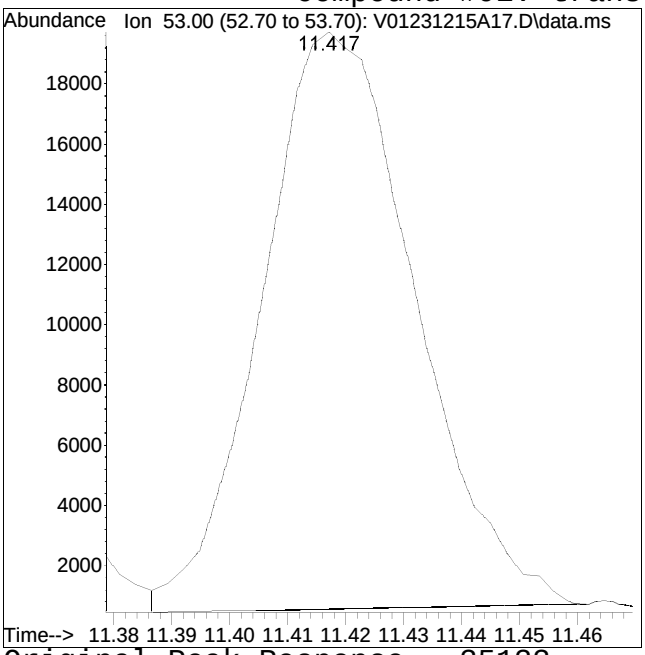
Manual Peak Response = 74921 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

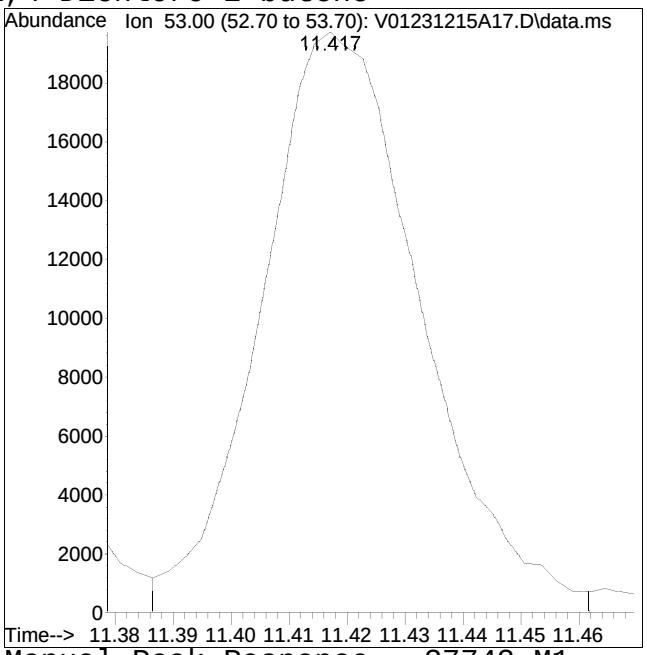
Manual Integration Report

Data Path : K:\VOA101\2023\231215AICALQMethod : V101_231215A_8260.m
Data File : V01231215A17.D Operator : VOA101:MKS
Date Inj'd : 12/15/2023 6:39 pm Instrument : VOA 101
Sample : C8260STD10PPB Quant Date : 12/16/2023 10:14 am

Compound #92: trans-1,4-Dichloro-2-butene



Original Peak Response = 35133



Manual Peak Response = 37742 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Continuing Calibration

Calibration Verification Summary
Form 7
Volatiles

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323	
Project Name	: TROY BELTING	**Project Number**	: 2011-31	
Instrument ID	: VOA108	**Calibration Date**	: 12/18/23 06:51	
Lab File ID	: V08231218A01	**Init. Calib. Date(s)**	: 12/06/23	12/06/23
Sample No	: WG1865366-2	**Init. Calib. Times**	: 11:22	15:04
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	84	0
Dichlorodifluoromethane	0.28	0.215	-	23.2*	20	62	0
Chloromethane	0.464	0.433	-	6.7	20	76	0
Vinyl chloride	10	10.879	-	-8.8	20	98	0
Bromomethane	10	11.774	-	-17.7	20	107	0
Chloroethane	0.141	0.18	-	-27.7*	20	104	0
Trichlorofluoromethane	0.262	0.322	-	-22.9*	20	99	0
Ethyl ether	0.074	0.095	-	-28.4*	20	104	0
1,1-Dichloroethene	0.184	0.189	-	-2.7	20	84	0
Carbon disulfide	0.681	0.695	-	-2.1	20	85	0
Freon-113	0.19	0.206	-	-8.4	20	87	0
Iodomethane	10	9.115	-	8.8	20	91	0
Acrolein	0.033	0.031	-	6.1	20	80	0
Methylene chloride	0.214	0.217	-	-1.4	20	84	0
Acetone	0.054	0.055	-	-1.9	20	84	0
trans-1,2-Dichloroethene	0.206	0.206	-	0	20	81	0
Methyl acetate	0.144	0.146	-	-1.4	20	83	0
Methyl tert-butyl ether	0.502	0.463	-	7.8	20	78	0
tert-Butyl alcohol	0.011	0.014	-	-27.3*	20	120	0
Diisopropyl ether	1.087	1.026	-	5.6	20	78	0
1,1-Dichloroethane	0.476	0.495	-	-4	20	85	0
Halothane	0.153	0.157	-	-2.6	20	84	0
Acrylonitrile	0.063	0.065	-	-3.2	20	82	0
Ethyl tert-butyl ether	0.822	0.774	-	5.8	20	79	0
Vinyl acetate	0.585	0.611	-	-4.4	20	89	0
cis-1,2-Dichloroethene	0.228	0.229	-	-0.4	20	82	0
2,2-Dichloropropane	0.329	0.362	-	-10	20	89	0
Bromochloromethane	0.097	0.103	-	-6.2	20	85	0
Cyclohexane	0.51	0.492	-	3.5	20	78	0
Chloroform	0.385	0.404	-	-4.9	20	87	0
Ethyl acetate	0.208	0.205	-	1.4	20	85	0
Carbon tetrachloride	0.282	0.316	-	-12.1	20	87	0
Tetrahydrofuran	0.056	0.055	-	1.8	20	87	0
Dibromofluoromethane	0.257	0.275	-	-7	20	90	0
1,1,1-Trichloroethane	0.331	0.348	-	-5.1	20	86	0
2-Butanone	0.085	0.085	-	0	20	85	0
1,1-Dichloropropene	0.292	0.289	-	1	20	81	0
Benzene	0.816	0.843	-	-3.3	20	83	0
tert-Amyl methyl ether	0.533	0.494	-	7.3	20	79	0
1,2-Dichloroethane-d4	0.316	0.37	-	-17.1	20	95	0
1,2-Dichloroethane	0.306	0.334	-	-9.2	20	90	0
Methyl cyclohexane	0.343	0.339	-	1.2	20	81	0
Trichloroethene	0.209	0.229	-	-9.6	20	85	0

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Volatiles

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323		
Project Name	: TROY BELTING	**Project Number**	: 2011-31		
Instrument ID	: VOA108	**Calibration Date**	: 12/18/23 06:51		
Lab File ID	: V08231218A01	**Init. Calib. Date(s)**	: 12/06/23	12/06/23	
Sample No	: WG1865366-2	**Init. Calib. Times**	: 11:22	15:04	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Dibromomethane	0.112	0.118	-	-5.4	20	87	0
1,2-Dichloropropane	0.269	0.264	-	1.9	20	82	0
Bromodichloromethane	0.292	0.298*	-	-2.1	20	85	0
1,4-Dioxane	0.00068	0.00109*	-	-60.3*	20	138	0
cis-1,3-Dichloropropene	0.33	0.339	-	-2.7	20	83	0
Chlorobenzene-d5	1	1	-	0	20	77	0
Toluene-d8	1.298	1.416	-	-9.1	20	85	0
Toluene	0.697	0.751	-	-7.7	20	84	0
4-Methyl-2-pentanone	10	8.68	-	13.2	20	76	0
Tetrachloroethene	0.287	0.313	-	-9.1	20	82	0
trans-1,3-Dichloropropene	0.39	0.43	-	-10.3	20	84	0
Ethyl methacrylate	0.251	0.235	-	6.4	20	74	0
1,1,2-Trichloroethane	0.18	0.207	-	-15	20	87	0
Chlorodibromomethane	0.261	0.282	-	-8	20	86	0
1,3-Dichloropropane	0.382	0.412	-	-7.9	20	83	0
1,2-Dibromoethane	0.205	0.223	-	-8.8	20	84	0
2-Hexanone	0.161	0.158	-	1.9	20	77	0
Chlorobenzene	0.763	0.829	-	-8.7	20	84	0
Ethylbenzene	1.313	1.405	-	-7	20	82	0
1,1,1,2-Tetrachloroethane	0.28	0.314	-	-12.1	20	86	0
p/m Xylene	0.491	0.545	-	-11	20	83	0
o Xylene	0.477	0.53	-	-11.1	20	82	0
Styrene	0.775	0.875	-	-12.9	20	83	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	71	0
Bromoform	0.286	0.328	-	-14.7	20	85	0
Isopropylbenzene	2.442	2.779	-	-13.8	20	81	0
4-Bromofluorobenzene	0.944	0.97	-	-2.8	20	74	0
Bromobenzene	0.602	0.692	-	-15	20	83	0
n-Propylbenzene	2.939	3.504	-	-19.2	20	85	0
1,4-Dichlorobutane	0.934	1.087	-	-16.4	20	85	0
1,1,2,2-Tetrachloroethane	0.481	0.569	-	-18.3	20	88	0
4-Ethyltoluene	2.424	2.841	-	-17.2	20	83	0
2-Chlorotoluene	1.792	2.147	-	-19.8	20	85	0
1,3,5-Trimethylbenzene	2.108	2.511	-	-19.1	20	84	0
1,2,3-Trichloropropane	0.376	0.46	-	-22.3*	20	90	0
trans-1,4-Dichloro-2-buten	0.183	0.219	-	-19.7	20	86	0
4-Chlorotoluene	1.868	2.195	-	-17.5	20	84	0
tert-Butylbenzene	1.765	2.023	-	-14.6	20	81	0
1,2,4-Trimethylbenzene	2.065	2.434	-	-17.9	20	83	0
sec-Butylbenzene	2.611	3.095	-	-18.5	20	84	0
p-Isopropyltoluene	2.218	2.591	-	-16.8	20	82	0
1,3-Dichlorobenzene	1.161	1.367	-	-17.7	20	84	0
1,4-Dichlorobenzene	1.172	1.371	-	-17	20	85	0

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Volatiles

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323	
Project Name	: TROY BELTING	**Project Number**	: 2011-31	
Instrument ID	: VOA108	**Calibration Date**	: 12/18/23 06:51	
Lab File ID	: V08231218A01	**Init. Calib. Date(s)**	: 12/06/23	12/06/23
Sample No	: WG1865366-2	**Init. Calib. Times**	: 11:22	15:04
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
p-Diethylbenzene	1.335	1.535	-	-15	20	82	0
n-Butylbenzene	1.986	2.447	-	-23.2*	20	87	0
1,2-Dichlorobenzene	1.081	1.259	-	-16.5	20	83	0
1,2,4,5-Tetramethylbenzene	2.096	2.312	-	-10.3	20	77	0
1,2-Dibromo-3-chloropropan	10	9.978	-	0.2	20	81	0
1,3,5-Trichlorobenzene	0.876	1.029	-	-17.5	20	85	0
Hexachlorobutadiene	0.354	0.415	-	-17.2	20	83	0
1,2,4-Trichlorobenzene	0.75	0.813	-	-8.4	20	80	0
Naphthalene	1.346	1.358	-	-0.9	20	75	0
1,2,3-Trichlorobenzene	0.653	0.722	-	-10.6	20	80	0

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Volatiles

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323		
Project Name	: TROY BELTING	**Project Number**	: 2011-31		
Instrument ID	: VOA101	**Calibration Date**	: 12/19/23 05:30		
Lab File ID	: V01231219A01	**Init. Calib. Date(s)**	: 12/15/23	12/15/23	
Sample No	: WG1865859-2	**Init. Calib. Times**	: 12:34	16:29	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	101	0
Dichlorodifluoromethane	0.279	0.28	-	-0.4	20	104	0
Chloromethane	0.361	0.343	-	5	20	94	0
Vinyl chloride	0.32	0.324	-	-1.3	20	101	0
Bromomethane	0.156	0.1	-	35.9*	20	69	0
Chloroethane	0.192	0.214	-	-11.5	20	110	0
Trichlorofluoromethane	0.343	0.375	-	-9.3	20	112	0
Ethyl ether	0.108	0.102	-	5.6	20	93	0
1,1-Dichloroethene	0.219	0.231	-	-5.5	20	109	0
Carbon disulfide	0.676	0.71	-	-5	20	107	0
Freon-113	0.229	0.257	-	-12.2	20	115	0
Acrolein	0.035	0.03	-	14.3	20	88	0
Methylene chloride	0.239	0.23	-	3.8	20	96	0
Acetone	0.048	0.043	-	10.4	20	86	0
trans-1,2-Dichloroethene	0.246	0.246	-	0	20	100	0
Methyl acetate	0.126	0.108	-	14.3	20	84	0
Methyl tert-butyl ether	0.562	0.503	-	10.5	20	89	0
tert-Butyl alcohol	0.016	0.013	-	18.8	20	80	0
Diisopropyl ether	0.929	0.855	-	8	20	91	0
1,1-Dichloroethane	0.486	0.477	-	1.9	20	98	0
Halothane	0.19	0.188	-	1.1	20	101	0
Acrylonitrile	0.059	0.051	-	13.6	20	83	0
Ethyl tert-butyl ether	0.781	0.714	-	8.6	20	91	0
Vinyl acetate	0.469	0.506	-	-7.9	20	102	0
cis-1,2-Dichloroethene	0.273	0.269	-	1.5	20	96	0
2,2-Dichloropropane	0.366	0.392	-	-7.1	20	107	0
Bromochloromethane	0.122	0.117	-	4.1	20	94	0
Cyclohexane	0.497	0.508	-	-2.2	20	107	0
Chloroform	0.426	0.423	-	0.7	20	99	0
Ethyl acetate	0.188	0.166	-	11.7	20	86	0
Carbon tetrachloride	0.333	0.345	-	-3.6	20	104	0
Tetrahydrofuran	0.056	0.045	-	19.6	20	84	0
Dibromofluoromethane	0.256	0.256	-	0	20	101	0
1,1,1-Trichloroethane	0.385	0.393	-	-2.1	20	103	0
2-Butanone	0.076	0.065	-	14.5	20	88	0
1,1-Dichloropropene	0.336	0.346	-	-3	20	104	0
Benzene	0.951	0.956	-	-0.5	20	98	0
tert-Amyl methyl ether	0.615	0.554	-	9.9	20	89	0
1,2-Dichloroethane-d4	0.289	0.282	-	2.4	20	99	0
1,2-Dichloroethane	0.318	0.308	-	3.1	20	95	0
Methyl cyclohexane	0.419	0.433	-	-3.3	20	108	0
Trichloroethene	0.267	0.269	-	-0.7	20	102	0
Dibromomethane	0.135	0.128	-	5.2	20	95	0

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Volatiles

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323		
Project Name	: TROY BELTING	**Project Number**	: 2011-31		
Instrument ID	: VOA101	**Calibration Date**	: 12/19/23 05:30		
Lab File ID	: V01231219A01	**Init. Calib. Date(s)**	: 12/15/23	12/15/23	
Sample No	: WG1865859-2	**Init. Calib. Times**	: 12:34	16:29	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,2-Dichloropropane	0.264	0.258	-	2.3	20	95	0
Bromodichloromethane	0.323	0.317	-	1.9	20	96	0
1,4-Dioxane	0.00152	0.00127*	-	16.4	20	79	0
cis-1,3-Dichloropropene	0.379	0.367	-	3.2	20	95	0
Chlorobenzene-d5	1	1	-	0	20	105	0
Toluene-d8	1.178	1.153	-	2.1	20	103	0
Toluene	0.738	0.71	-	3.8	20	99	0
4-Methyl-2-pentanone	0.076	0.065	-	14.5	20	83	0
Tetrachloroethene	0.327	0.328	-	-0.3	20	104	0
trans-1,3-Dichloropropene	0.387	0.357	-	7.8	20	95	0
Ethyl methacrylate	0.264	0.227	-	14	20	87	0
1,1,2-Trichloroethane	0.188	0.174*	-	7.4	20	94	0
Chlorodibromomethane	0.273	0.24	-	12.1	20	90	0
1,3-Dichloropropane	0.371	0.349	-	5.9	20	95	0
1,2-Dibromoethane	0.224	0.205	-	8.5	20	93	0
2-Hexanone	0.143	0.109	-	23.8*	20	81	0
Chlorobenzene	0.837	0.802	-	4.2	20	98	0
Ethylbenzene	1.419	1.4	-	1.3	20	100	0
1,1,1,2-Tetrachloroethane	0.301	0.283	-	6	20	96	0
p/m Xylene	0.554	0.545	-	1.6	20	100	0
o Xylene	0.539	0.518	-	3.9	20	98	0
Styrene	0.882	0.854	-	3.2	20	98	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	107	0
Bromoform	0.3	0.245	-	18.3	20	88	0
Isopropylbenzene	2.569	2.49	-	3.1	20	103	0
4-Bromofluorobenzene	0.852	0.846	-	0.7	20	106	0
Bromobenzene	0.614	0.573	-	6.7	20	97	0
n-Propylbenzene	2.96	2.891	-	2.3	20	104	0
1,4-Dichlorobutane	0.73	0.643	-	11.9	20	93	0
1,1,2,2-Tetrachloroethane	0.478	0.422	-	11.7	20	91	0
4-Ethyltoluene	2.497	2.415	-	3.3	20	103	0
2-Chlorotoluene	1.754	1.662	-	5.2	20	99	0
1,3,5-Trimethylbenzene	2.094	2.01	-	4	20	102	0
1,2,3-Trichloropropane	0.366	0.3	-	18	20	86	0
trans-1,4-Dichloro-2-buten	0.146	0.13	-	11	20	91	0
4-Chlorotoluene	1.783	1.701	-	4.6	20	99	0
tert-Butylbenzene	1.756	1.676	-	4.6	20	102	0
1,2,4-Trimethylbenzene	2.037	1.922	-	5.6	20	99	0
sec-Butylbenzene	2.514	2.418	-	3.8	20	105	0
p-Isopropyltoluene	2.142	2.028	-	5.3	20	102	0
1,3-Dichlorobenzene	1.141	1.075	-	5.8	20	99	0
1,4-Dichlorobenzene	1.16	1.075	-	7.3	20	99	0
p-Diethylbenzene	1.233	1.155	-	6.3	20	102	0

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Volatiles

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323		
Project Name	: TROY BELTING	**Project Number**	: 2011-31		
Instrument ID	: VOA101	**Calibration Date**	: 12/19/23 05:30		
Lab File ID	: V01231219A01	**Init. Calib. Date(s)**	: 12/15/23	12/15/23	
Sample No	: WG1865859-2	**Init. Calib. Times**	: 12:34	16:29	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
n-Butylbenzene	1.691	1.634	-	3.4	20	105	0
1,2-Dichlorobenzene	1.039	0.958	-	7.8	20	96	0
1,2,4,5-Tetramethylbenzene	1.742	1.577	-	9.5	20	98	0
1,2-Dibromo-3-chloropropan	0.067	0.053	-	20.9*	20	84	0
1,3,5-Trichlorobenzene	0.669	0.611	-	8.7	20	100	0
Hexachlorobutadiene	0.226	0.216	-	4.4	20	107	0
1,2,4-Trichlorobenzene	0.559	0.48	-	14.1	20	92	0
Naphthalene	1.165	0.936	-	19.7	20	83	0
1,2,3-Trichlorobenzene	0.446	0.362*	-	18.8	20	86	0

* Value outside of QC limits.

Evaluate Continuing Calibration Report

Data Path : K:\VOA108\2023\231218A\
Data File : V08231218A01.d
Acq On : 18 Dec 2023 6:51 am
Operator : VOA108:PID
Sample : WG1865366-2
Misc : WG1865366,ICAL20635
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Dec 18 07:36:44 2023
Quant Method : K:\VOA108\2023\231218A\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 17:09:55 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	84	0.00
2	TP	Dichlorodifluoromethane		0.280	0.215	23.2#	62	0.00
3	TP	Chloromethane		0.464	0.433	6.7	76	0.00
4	TC	Vinyl chloride	*	10.000	10.879	-8.8	98	0.00
5	TP	Bromomethane	*	10.000	11.774	-17.7	107	0.00
6	TP	Chloroethane		0.141	0.180	-27.7#	104	0.00
7	TP	Trichlorofluoromethane		0.262	0.322	-22.9#	99	0.00
8	TP	Ethyl ether		0.074	0.095	-28.4#	104	0.00
10	TC	1,1-Dichloroethene		0.184	0.189	-2.7	84	0.00
11	TP	Carbon disulfide		0.681	0.695	-2.1	85	0.00
12	TP	Freon-113		0.190	0.206	-8.4	87	0.00
13	TP	Iodomethane	*	10.000	9.115	8.8	91	0.00
14	TP	Acrolein		0.033	0.031	6.1	80	0.00
15	TP	Methylene chloride		0.214	0.217	-1.4	84	0.00
17	TP	Acetone		0.054	0.055	-1.9	84	0.00
18	TP	trans-1,2-Dichloroethene		0.206	0.206	0.0	81	0.00
19	TP	Methyl acetate		0.144	0.146	-1.4	83	0.00
20	TP	Methyl tert-butyl ether		0.502	0.463	7.8	78	0.00
21	TP	tert-Butyl alcohol		0.011	0.014	-27.3#	120	0.00
22	TP	Diisopropyl ether		1.087	1.026	5.6	78	0.00
23	TP	1,1-Dichloroethane		0.476	0.495	-4.0	85	0.00
24	TP	Halothane		0.153	0.157	-2.6	84	0.00
25	TP	Acrylonitrile		0.063	0.065	-3.2	82	0.00
26	TP	Ethyl tert-butyl ether		0.822	0.774	5.8	79	0.00
27	TP	Vinyl acetate		0.585	0.611	-4.4	89	0.00
28	TP	cis-1,2-Dichloroethene		0.228	0.229	-0.4	82	0.00
29	TP	2,2-Dichloropropane		0.329	0.362	-10.0	89	0.00
30	TP	Bromochloromethane		0.097	0.103	-6.2	85	0.00
31	TP	Cyclohexane		0.510	0.492	3.5	78	0.00
32	TC	Chloroform		0.385	0.404	-4.9	87	0.00
33	TP	Ethyl acetate		0.208	0.205	1.4	85	0.00
34	TP	Carbon tetrachloride		0.282	0.316	-12.1	87	0.00
35	TP	Tetrahydrofuran		0.056	0.055	1.8	87	0.00
36	S	Dibromofluoromethane		0.257	0.275	-7.0	90	0.00
37	TP	1,1,1-Trichloroethane		0.331	0.348	-5.1	86	0.00
39	TP	2-Butanone		0.085	0.085	0.0	85	0.00
40	TP	1,1-Dichloropropene		0.292	0.289	1.0	81	0.00
41	TP	Benzene		0.816	0.843	-3.3	83	0.00
42	TP	tert-Amyl methyl ether		0.533	0.494	7.3	79	0.00

Data Path : K:\VOA108\2023\231218A\
Data File : V08231218A01.d
Acq On : 18 Dec 2023 6:51 am
Operator : VOA108:PID
Sample : WG1865366-2
Misc : WG1865366,ICAL20635
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Dec 18 07:36:44 2023
Quant Method : K:\VOA108\2023\231218A\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 17:09:55 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)
43	S	1,2-Dichloroethane-d4	0.316	0.370	-17.1	95	0.00
44	TP	1,2-Dichloroethane	0.306	0.334	-9.2	90	0.00
47	TP	Methyl cyclohexane	0.343	0.339	1.2	81	0.00
48	TP	Trichloroethene	0.209	0.229	-9.6	85	0.00
50	TP	Dibromomethane	0.112	0.118	-5.4	87	0.00
51	TC	1,2-Dichloropropane	0.269	0.264	1.9	82	0.00
54	TP	Bromodichloromethane	0.292	0.298#	-2.1	85	0.00
57	TP	1,4-Dioxane	0.00068	0.00109#	-60.3#	138	0.00
58	TP	cis-1,3-Dichloropropene	0.330	0.339	-2.7	83	0.00
59	I	Chlorobenzene-d5	1.000	1.000	0.0	77	0.00
60	S	Toluene-d8	1.298	1.416	-9.1	85	0.00
61	TC	Toluene	0.697	0.751	-7.7	84	0.00
62	TP	4-Methyl-2-pentanone	* 10.000	8.680	13.2	76	0.00
63	TP	Tetrachloroethene	0.287	0.313	-9.1	82	0.00
65	TP	trans-1,3-Dichloropropene	0.390	0.430	-10.3	84	0.00
67	TP	Ethyl methacrylate	0.251	0.235	6.4	74	0.00
68	TP	1,1,2-Trichloroethane	0.180	0.207	-15.0	87	0.00
69	TP	Chlorodibromomethane	0.261	0.282	-8.0	86	0.00
70	TP	1,3-Dichloropropane	0.382	0.412	-7.9	83	0.00
71	TP	1,2-Dibromoethane	0.205	0.223	-8.8	84	0.00
72	TP	2-Hexanone	0.161	0.158	1.9	77	0.00
73	TP	Chlorobenzene	0.763	0.829	-8.7	84	0.00
74	TC	Ethylbenzene	1.313	1.405	-7.0	82	0.00
75	TP	1,1,1,2-Tetrachloroethane	0.280	0.314	-12.1	86	0.00
76	TP	p/m Xylene	0.491	0.545	-11.0	83	0.00
77	TP	o Xylene	0.477	0.530	-11.1	82	0.00
78	TP	Styrene	0.775	0.875	-12.9	83	0.00
79	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	71	0.00
80	TP	Bromoform	0.286	0.328	-14.7	85	0.00
82	TP	Isopropylbenzene	2.442	2.779	-13.8	81	0.00
83	S	4-Bromofluorobenzene	0.944	0.970	-2.8	74	0.00
84	TP	Bromobenzene	0.602	0.692	-15.0	83	0.00
85	TP	n-Propylbenzene	2.939	3.504	-19.2	85	0.00
86	TP	1,4-Dichlorobutane	0.934	1.087	-16.4	85	0.00
87	TP	1,1,2,2-Tetrachloroethane	0.481	0.569	-18.3	88	0.00
88	TP	4-Ethyltoluene	2.424	2.841	-17.2	83	0.00
89	TP	2-Chlorotoluene	1.792	2.147	-19.8	85	0.00

Data Path : K:\VOA108\2023\231218A\
Data File : V08231218A01.d
Acq On : 18 Dec 2023 6:51 am
Operator : VOA108:PID
Sample : WG1865366-2
Misc : WG1865366,ICAL20635
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Dec 18 07:36:44 2023
Quant Method : K:\VOA108\2023\231218A\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 17:09:55 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)
90 TP	1,3,5-Trimethylbenzene	2.108	2.511	-19.1	84	0.00
91 TP	1,2,3-Trichloropropane	0.376	0.460	-22.3#	90	0.00
92 TP	trans-1,4-Dichloro-2-butene	0.183	0.219	-19.7	86	0.00
93 TP	4-Chlorotoluene	1.868	2.195	-17.5	84	0.00
94 TP	tert-Butylbenzene	1.765	2.023	-14.6	81	0.00
97 TP	1,2,4-Trimethylbenzene	2.065	2.434	-17.9	83	0.00
98 TP	sec-Butylbenzene	2.611	3.095	-18.5	84	0.00
99 TP	p-Isopropyltoluene	2.218	2.591	-16.8	82	0.00
100 TP	1,3-Dichlorobenzene	1.161	1.367	-17.7	84	0.00
101 TP	1,4-Dichlorobenzene	1.172	1.371	-17.0	85	0.00
102 TP	p-Diethylbenzene	1.335	1.535	-15.0	82	0.00
103 TP	n-Butylbenzene	1.986	2.447	-23.2#	87	0.00
104 TP	1,2-Dichlorobenzene	1.081	1.259	-16.5	83	0.00
105 TP	1,2,4,5-Tetramethylbenzene	2.096	2.312	-10.3	77	0.00
106 TP	1,2-Dibromo-3-chloropropane *	10.000	9.978	0.2	81	0.00
107 TP	1,3,5-Trichlorobenzene	0.876	1.029	-17.5	85	0.00
108 TP	Hexachlorobutadiene	0.354	0.415	-17.2	83	0.00
109 TP	1,2,4-Trichlorobenzene	0.750	0.813	-8.4	80	0.00
110 TP	Naphthalene	1.346	1.358	-0.9	75	0.00
111 TP	1,2,3-Trichlorobenzene	0.653	0.722	-10.6	80	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:\VOA108\2023\231218A\
Data File : V08231218A01.d
Acq On : 18 Dec 2023 6:51 am
Operator : VOA108:PID
Sample : WG1865366-2
Misc : WG1865366,ICAL20635
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Dec 18 07:36:44 2023
Quant Method : K:\VOA108\2023\231218A\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 17:09:55 2023
Response via : Initial Calibration

Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Fluorobenzene	6.120	96	142386	10.000	ug/L		0.00
59) Chlorobenzene-d5	9.648	117	96600	10.000	ug/L		0.00
79) 1,4-Dichlorobenzene-d4	12.327	152	46518	10.000	ug/L		0.00
System Monitoring Compounds							
36) Dibromofluoromethane	5.302	113	39107	10.701	ug/L		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 107.01%				
43) 1,2-Dichloroethane-d4	5.831	65	52722	11.715	ug/L		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 117.15%				
60) Toluene-d8	7.808	98	136742	10.908	ug/L		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 109.08%				
83) 4-Bromofluorobenzene	11.127	95	45125	10.279	ug/L		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 102.79%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.705	85	30553	7.670	ug/L		97
3) Chloromethane	1.904	50	61647	9.338	ug/L		98
4) Vinyl chloride	1.978	62	46944	10.879	ug/L		98
5) Bromomethane	2.292	94	18524	11.774	ug/L		100
6) Chloroethane	2.413	64	25630	12.812	ug/L		99
7) Trichlorofluoromethane	2.554	101	45787	12.292	ug/L		95
8) Ethyl ether	2.858	74	13541	12.810	ug/L	#	84
10) 1,1-Dichloroethene	3.052	96	26937	10.308	ug/L		90
11) Carbon disulfide	3.079	76	98944	10.204	ug/L		97
12) Freon-113	3.094	101	29277	10.821	ug/L		99
13) Iodomethane	3.189	142	29322	9.115	ug/L		88
14) Acrolein	3.372	56	4406	9.325	ug/L		98
15) Methylene chloride	3.608	84	30849	10.142	ug/L		86
17) Acetone	3.645	43	7858	10.311	ug/L		91
18) trans-1,2-Dichloroethene	3.760	96	29402	10.032	ug/L		97
19) Methyl acetate	3.765	43	20729	10.081	ug/L	#	87
20) Methyl tert-butyl ether	3.865	73	65910	9.223	ug/L	#	86
21) tert-Butyl alcohol	3.949	59	9864	65.255	ug/L	#	54
22) Diisopropyl ether	4.227	45	146029	9.433	ug/L		93
23) 1,1-Dichloroethane	4.347	63	70433	10.394	ug/L		97
24) Halothane	4.400	117	22298	10.268	ug/L		100
25) Acrylonitrile	4.389	53	9302	10.329	ug/L	#	85
26) Ethyl tert-butyl ether	4.573	59	110146	9.412	ug/L		85
27) Vinyl acetate	4.578	43	87044	10.442	ug/L		97
28) cis-1,2-Dichloroethene	4.866	96	32618	10.043	ug/L		89

Quantitation Report (QT Reviewed)

Data Path : K:\VOA108\2023\231218A\
Data File : V08231218A01.d
Acq On : 18 Dec 2023 6:51 am
Operator : VOA108:PID
Sample : WG1865366-2
Misc : WG1865366,ICAL20635
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Dec 18 07:36:44 2023
Quant Method : K:\VOA108\2023\231218A\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 17:09:55 2023
Response via : Initial Calibration

Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
29) 2,2-Dichloropropane	4.971	77	51529	11.010	ug/L		83
30) Bromochloromethane	5.055	128	14655	10.626	ug/L		95
31) Cyclohexane	5.066	56	70095	9.649	ug/L		95
32) Chloroform	5.123	83	57514	10.496	ug/L		95
33) Ethyl acetate	5.239	43	29205	9.881	ug/L	#	94
34) Carbon tetrachloride	5.265	117	45043	11.199	ug/L		99
35) Tetrahydrofuran	5.275	42	7786M6	9.774	ug/L		
37) 1,1,1-Trichloroethane	5.333	97	49559	10.523	ug/L	#	97
39) 2-Butanone	5.417	43	12112	10.011	ug/L		99
40) 1,1-Dichloropropene	5.454	75	41162	9.899	ug/L		97
41) Benzene	5.700	78	120057	10.330	ug/L		97
42) tert-Amyl methyl ether	5.810	73	70335	9.267	ug/L		91
44) 1,2-Dichloroethane	5.899	62	47529	10.912	ug/L		99
47) Methyl cyclohexane	6.287	83	48213	9.862	ug/L		93
48) Trichloroethene	6.293	95	32647	10.964	ug/L		98
50) Dibromomethane	6.728	93	16737	10.529	ug/L		99
51) 1,2-Dichloropropane	6.838	63	37570	9.820	ug/L		95
54) Bromodichloromethane	6.906	83	42380	10.197	ug/L		99
57) 1,4-Dioxane	7.110	88	7764	805.490	ug/L		94
58) cis-1,3-Dichloropropene	7.598	75	48257	10.262	ug/L		92
61) Toluene	7.865	92	72568	10.772	ug/L		96
62) 4-Methyl-2-pentanone	8.295	58	8130	8.680	ug/L	#	71
63) Tetrachloroethene	8.311	166	30283	10.915	ug/L		94
65) trans-1,3-Dichloropropene	8.343	75	41576	11.049	ug/L		89
67) Ethyl methacrylate	8.537	69	22656	9.344	ug/L	#	28
68) 1,1,2-Trichloroethane	8.531	83	19995	11.505	ug/L		97
69) Chlorodibromomethane	8.741	129	27212	10.805	ug/L		96
70) 1,3-Dichloropropane	8.851	76	39835	10.781	ug/L		99
71) 1,2-Dibromoethane	9.019	107	21524	10.874	ug/L		100
72) 2-Hexanone	9.297	43	15227	9.768	ug/L	#	89
73) Chlorobenzene	9.669	112	80117	10.867	ug/L		93
74) Ethylbenzene	9.711	91	135715	10.701	ug/L		99
75) 1,1,1,2-Tetrachloroethane	9.753	131	30376	11.218	ug/L		95
76) p/m Xylene	9.900	106	105284	22.176	ug/L		100
77) o Xylene	10.429	106	102320	22.187	ug/L		94
78) Styrene	10.497	104	169071	22.592	ug/L		92
80) Bromoform	10.518	173	15246	11.469	ug/L		97
82) Isopropylbenzene	10.812	105	129265	11.381	ug/L		97
84) Bromobenzene	11.237	156	32190	11.499	ug/L		97
85) n-Propylbenzene	11.284	91	163007	11.924	ug/L		98
86) 1,4-Dichlorobutane	11.294	55	50581	11.643	ug/L		93

Quantitation Report (QT Reviewed)

Data Path : K:\VOA108\2023\231218A\
Data File : V08231218A01.d
Acq On : 18 Dec 2023 6:51 am
Operator : VOA108:PID
Sample : WG1865366-2
Misc : WG1865366,ICAL20635
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Dec 18 07:36:44 2023
Quant Method : K:\VOA108\2023\231218A\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 17:09:55 2023
Response via : Initial Calibration

Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
87) 1,1,2,2-Tetrachloroethane	11.363	83	26492	11.830	ug/L	99
88) 4-Ethyltoluene	11.410	105	132167	11.723	ug/L	96
89) 2-Chlorotoluene	11.446	91	99894M6	11.986	ug/L	
90) 1,3,5-Trimethylbenzene	11.509	105	116817	11.912	ug/L	92
91) 1,2,3-Trichloropropane	11.504	75	21417	12.241	ug/L	95
92) trans-1,4-Dichloro-2-b...	11.551	53	10196	12.006	ug/L	92
93) 4-Chlorotoluene	11.630	91	102090	11.748	ug/L	97
94) tert-Butylbenzene	11.845	119	94098	11.463	ug/L	94
97) 1,2,4-Trimethylbenzene	11.924	105	113237	11.786	ug/L	94
98) sec-Butylbenzene	12.034	105	143954	11.853	ug/L	98
99) p-Isopropyltoluene	12.186	119	120516	11.682	ug/L	97
100) 1,3-Dichlorobenzene	12.249	146	63571	11.766	ug/L	100
101) 1,4-Dichlorobenzene	12.343	146	63782	11.694	ug/L	98
102) p-Diethylbenzene	12.558	119	71422	11.497	ug/L	96
103) n-Butylbenzene	12.616	91	113816	12.321	ug/L	99
104) 1,2-Dichlorobenzene	12.762	146	58578	11.651	ug/L	99
105) 1,2,4,5-Tetramethylben...	13.350	119	107528	11.030	ug/L	98
106) 1,2-Dibromo-3-chloropr...	13.533	155	3217	9.978	ug/L	82
107) 1,3,5-Trichlorobenzene	13.570	180	47883	11.747	ug/L	94
108) Hexachlorobutadiene	14.141	225	19315	11.739	ug/L	95
109) 1,2,4-Trichlorobenzene	14.162	180	37818	10.841	ug/L	99
110) Naphthalene	14.456	128	63181	10.093	ug/L	100
111) 1,2,3-Trichlorobenzene	14.624	180	33591	11.066	ug/L	99

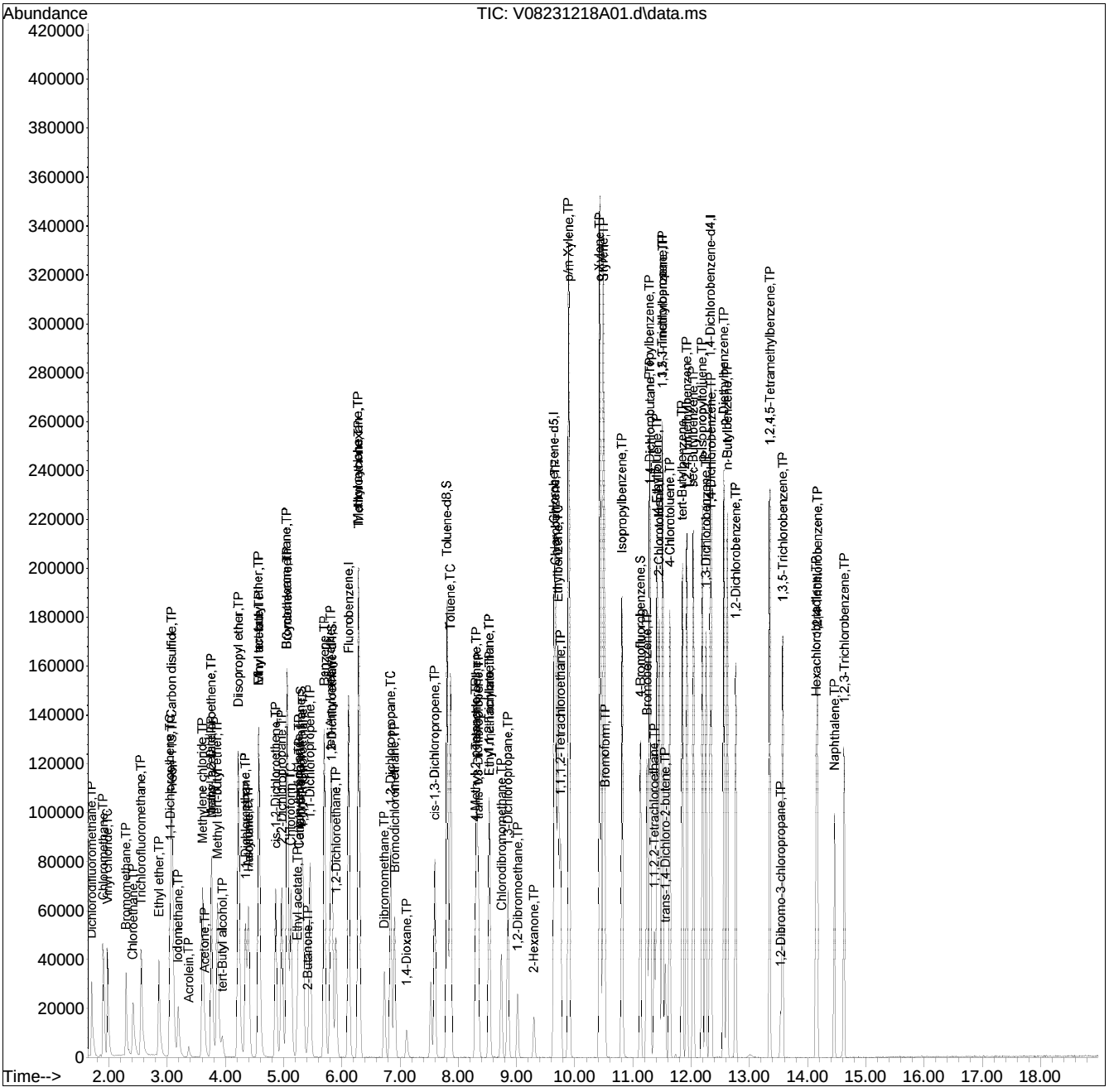
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\VOA108\2023\231218A\
Data File : V08231218A01.d
Acq On : 18 Dec 2023 6:51 am
Operator : VOA108:PID
Sample : WG1865366-2
Misc : WG1865366,ICAL20635
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Dec 18 07:36:44 2023
Quant Method : K:\VOA108\2023\231218A\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 17:09:55 2023
Response via : Initial Calibration

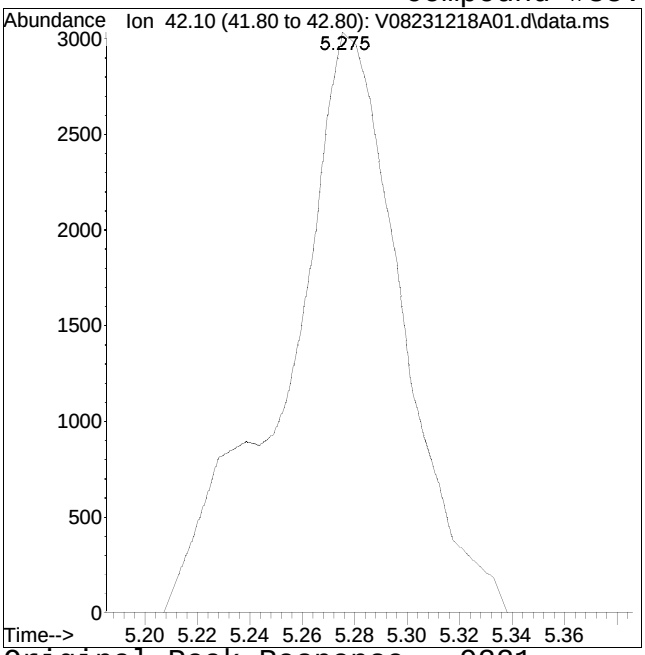
Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE



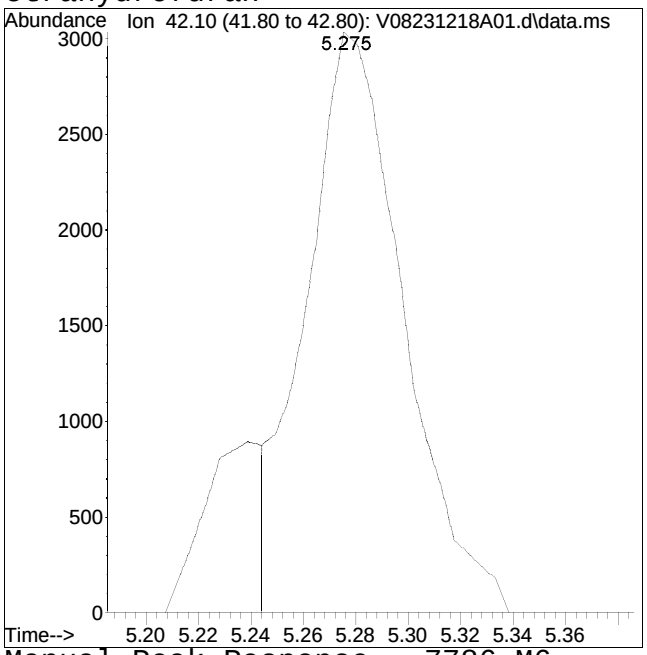
Manual Integration Report

Data Path	: K:\VOA108\2023\231218A\	QMethod	: V108_231206A_8260.m
Data File	: V08231218A01.d	Operator	: VOA108:PID
Date Inj'd	: 12/18/2023 6:51 am	Instrument	: VOA 108
Sample	: WG1865366-2	Quant Date	: 12/18/2023 7:36 am

Compound #35: Tetrahydrofuran



Original Peak Response = 9221



Manual Peak Response = 7786 M6

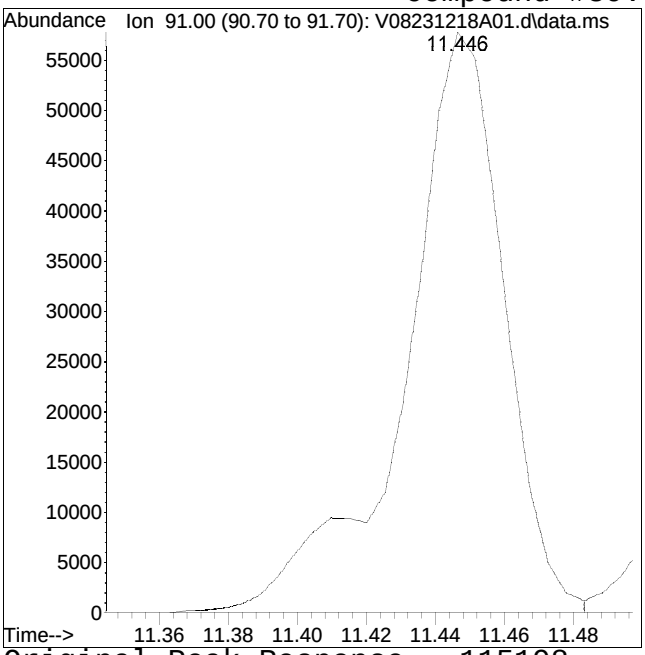
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration Report

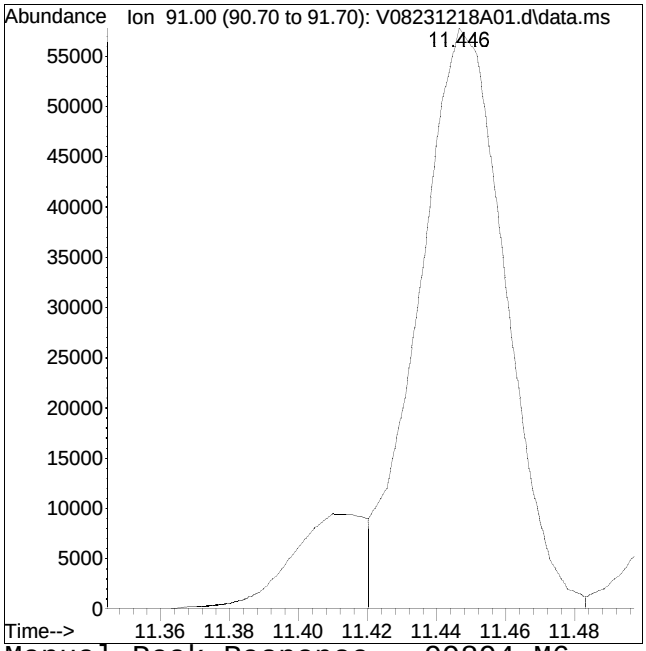
Data Path : K:\VOA108\2023\231218A\
Data File : V08231218A01.d
Date Inj'd : 12/18/2023 6:51 am
Sample : WG1865366-2

QMethod : V108_231206A_8260.m
Operator : VOA108:PID
Instrument : VOA 108
Quant Date : 12/18/2023 7:36 am

Compound #89: 2-Chlorotoluene



Original Peak Response = 115198



Manual Peak Response = 99894 M6

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

Evaluate Continuing Calibration Report

Data Path : K:\VOA101\2023\231219A\
Data File : V01231219A01.D
Acq On : 19 Dec 2023 5:30 am
Operator : VOA101:MJV
Sample : WG1865859-2
Misc : WG1865859,ICAL20680
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Dec 19 05:49:50 2023
Quant Method : K:\VOA101\2023\231219A\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 10:14:14 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	101	0.00
2	TP	Dichlorodifluoromethane	0.279	0.280	-0.4	104	0.00
3	TP	Chloromethane	0.361	0.343	5.0	94	0.00
4	TC	Vinyl chloride	0.320	0.324	-1.3	101	0.00
5	TP	Bromomethane	0.156	0.100	35.9#	69	0.00
6	TP	Chloroethane	0.192	0.214	-11.5	110	0.00
7	TP	Trichlorofluoromethane	0.343	0.375	-9.3	112	0.00
8	TP	Ethyl ether	0.108	0.102	5.6	93	0.00
10	TC	1,1-Dichloroethene	0.219	0.231	-5.5	109	0.00
11	TP	Carbon disulfide	0.676	0.710	-5.0	107	0.00
12	TP	Freon-113	0.229	0.257	-12.2	115	0.00
14	TP	Acrolein	0.035	0.030	14.3	88	0.00
15	TP	Methylene chloride	0.239	0.230	3.8	96	0.00
17	TP	Acetone	0.048	0.043	10.4	86	0.00
18	TP	trans-1,2-Dichloroethene	0.246	0.246	0.0	100	0.00
19	TP	Methyl acetate	0.126	0.108	14.3	84	0.00
20	TP	Methyl tert-butyl ether	0.562	0.503	10.5	89	0.00
21	TP	tert-Butyl alcohol	0.016	0.013	18.8	80	0.00
22	TP	Diisopropyl ether	0.929	0.855	8.0	91	0.00
23	TP	1,1-Dichloroethane	0.486	0.477	1.9	98	0.00
24	TP	Halothane	0.190	0.188	1.1	101	0.00
25	TP	Acrylonitrile	0.059	0.051	13.6	83	0.00
26	TP	Ethyl tert-butyl ether	0.781	0.714	8.6	91	0.00
27	TP	Vinyl acetate	0.469	0.506	-7.9	102	0.00
28	TP	cis-1,2-Dichloroethene	0.273	0.269	1.5	96	0.00
29	TP	2,2-Dichloropropane	0.366	0.392	-7.1	107	0.00
30	TP	Bromochloromethane	0.122	0.117	4.1	94	0.00
31	TP	Cyclohexane	0.497	0.508	-2.2	107	0.00
32	TC	Chloroform	0.426	0.423	0.7	99	0.00
33	TP	Ethyl acetate	0.188	0.166	11.7	86	0.00
34	TP	Carbon tetrachloride	0.333	0.345	-3.6	104	0.00
35	TP	Tetrahydrofuran	0.056	0.045	19.6	84	0.00
36	S	Dibromofluoromethane	0.256	0.256	0.0	101	0.00
37	TP	1,1,1-Trichloroethane	0.385	0.393	-2.1	103	0.00
39	TP	2-Butanone	0.076	0.065	14.5	88	0.00
40	TP	1,1-Dichloropropene	0.336	0.346	-3.0	104	0.00
41	TP	Benzene	0.951	0.956	-0.5	98	0.00
42	TP	tert-Amyl methyl ether	0.615	0.554	9.9	89	0.00
43	S	1,2-Dichloroethane-d4	0.289	0.282	2.4	99	0.00

Data Path : K:\VOA101\2023\231219A\
Data File : V01231219A01.D
Acq On : 19 Dec 2023 5:30 am
Operator : VOA101:MJV
Sample : WG1865859-2
Misc : WG1865859,ICAL20680
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Dec 19 05:49:50 2023
Quant Method : K:\VOA101\2023\231219A\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 10:14:14 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)
44	TP	1,2-Dichloroethane	0.318	0.308	3.1	95	0.00
47	TP	Methyl cyclohexane	0.419	0.433	-3.3	108	0.00
48	TP	Trichloroethene	0.267	0.269	-0.7	102	0.00
50	TP	Dibromomethane	0.135	0.128	5.2	95	0.00
51	TC	1,2-Dichloropropane	0.264	0.258	2.3	95	0.00
54	TP	Bromodichloromethane	0.323	0.317	1.9	96	0.00
57	TP	1,4-Dioxane	0.00152	0.00127#	16.4	79	0.00
58	TP	cis-1,3-Dichloropropene	0.379	0.367	3.2	95	0.00
59	I	Chlorobenzene-d5	1.000	1.000	0.0	105	0.00
60	S	Toluene-d8	1.178	1.153	2.1	103	0.00
61	TC	Toluene	0.738	0.710	3.8	99	0.00
62	TP	4-Methyl-2-pentanone	0.076	0.065	14.5	83	0.00
63	TP	Tetrachloroethene	0.327	0.328	-0.3	104	0.00
65	TP	trans-1,3-Dichloropropene	0.387	0.357	7.8	95	0.00
67	TP	Ethyl methacrylate	0.264	0.227	14.0	87	0.00
68	TP	1,1,2-Trichloroethane	0.188	0.174#	7.4	94	0.00
69	TP	Chlorodibromomethane	0.273	0.240	12.1	90	0.00
70	TP	1,3-Dichloropropane	0.371	0.349	5.9	95	0.00
71	TP	1,2-Dibromoethane	0.224	0.205	8.5	93	0.00
72	TP	2-Hexanone	0.143	0.109	23.8#	81	0.00
73	TP	Chlorobenzene	0.837	0.802	4.2	98	0.00
74	TC	Ethylbenzene	1.419	1.400	1.3	100	0.00
75	TP	1,1,1,2-Tetrachloroethane	0.301	0.283	6.0	96	0.00
76	TP	p/m Xylene	0.554	0.545	1.6	100	0.00
77	TP	o Xylene	0.539	0.518	3.9	98	0.00
78	TP	Styrene	0.882	0.854	3.2	98	0.00
79	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	107	0.00
80	TP	Bromoform	0.300	0.245	18.3	88	0.00
82	TP	Isopropylbenzene	2.569	2.490	3.1	103	0.00
83	S	4-Bromofluorobenzene	0.852	0.846	0.7	106	0.00
84	TP	Bromobenzene	0.614	0.573	6.7	97	0.00
85	TP	n-Propylbenzene	2.960	2.891	2.3	104	0.00
86	TP	1,4-Dichlorobutane	0.730	0.643	11.9	93	0.00
87	TP	1,1,2,2-Tetrachloroethane	0.478	0.422	11.7	91	0.00
88	TP	4-Ethyltoluene	2.497	2.415	3.3	103	0.00
89	TP	2-Chlorotoluene	1.754	1.662	5.2	99	0.00
90	TP	1,3,5-Trimethylbenzene	2.094	2.010	4.0	102	0.00

Data Path : K:\VOA101\2023\231219A\
Data File : V01231219A01.D
Acq On : 19 Dec 2023 5:30 am
Operator : VOA101:MJV
Sample : WG1865859-2
Misc : WG1865859,ICAL20680
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Dec 19 05:49:50 2023
Quant Method : K:\VOA101\2023\231219A\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 10:14:14 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)
91 TP	1,2,3-Trichloropropane	0.366	0.300	18.0	86	0.00
92 TP	trans-1,4-Dichloro-2-butene	0.146	0.130	11.0	91	0.00
93 TP	4-Chlorotoluene	1.783	1.701	4.6	99	0.00
94 TP	tert-Butylbenzene	1.756	1.676	4.6	102	0.00
97 TP	1,2,4-Trimethylbenzene	2.037	1.922	5.6	99	0.00
98 TP	sec-Butylbenzene	2.514	2.418	3.8	105	0.00
99 TP	p-Isopropyltoluene	2.142	2.028	5.3	102	0.00
100 TP	1,3-Dichlorobenzene	1.141	1.075	5.8	99	0.00
101 TP	1,4-Dichlorobenzene	1.160	1.075	7.3	99	0.00
102 TP	p-Diethylbenzene	1.233	1.155	6.3	102	0.00
103 TP	n-Butylbenzene	1.691	1.634	3.4	105	0.00
104 TP	1,2-Dichlorobenzene	1.039	0.958	7.8	96	0.00
105 TP	1,2,4,5-Tetramethylbenzene	1.742	1.577	9.5	98	0.00
106 TP	1,2-Dibromo-3-chloropropane	0.067	0.053	20.9#	84	0.00
107 TP	1,3,5-Trichlorobenzene	0.669	0.611	8.7	100	0.00
108 TP	Hexachlorobutadiene	0.226	0.216	4.4	107	0.00
109 TP	1,2,4-Trichlorobenzene	0.559	0.480	14.1	92	0.00
110 TP	Naphthalene	1.165	0.936	19.7	83	0.00
111 TP	1,2,3-Trichlorobenzene	0.446	0.362#	18.8	86	0.00

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 3 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : K:\VOA101\2023\231219A\
Data File : V01231219A01.D
Acq On : 19 Dec 2023 5:30 am
Operator : VOA101:MJV
Sample : WG1865859-2
Misc : WG1865859,ICAL20680
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Dec 19 05:49:50 2023
Quant Method : K:\VOA101\2023\231219A\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 10:14:14 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA101\2023\231219A\V01231219A01.D
Sub List : 8260-Curve-2CEVE-IODO - Curve-2CEVE-IODO

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.960	96	442958	10.000	ug/L	0.00
Standard Area 1 = 442958			Recovery = 100.00%			
59) Chlorobenzene-d5	9.479	117	387518	10.000	ug/L	0.00
Standard Area 1 = 387518			Recovery = 100.00%			
79) 1,4-Dichlorobenzene-d4	12.192	152	216528	10.000	ug/L	0.00
Standard Area 1 = 216528			Recovery = 100.00%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.159	113	113469	10.023	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.23%			
43) 1,2-Dichloroethane-d4	5.681	65	124724	9.729	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 97.29%			
60) Toluene-d8	7.638	98	446918	9.790	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 97.90%			
83) 4-Bromofluorobenzene	10.985	95	183128	9.930	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.30%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.654	85	124067	10.026	ug/L	99
3) Chloromethane	1.849	50	151778	9.480	ug/L	99
4) Vinyl chloride	1.908	62	143657	10.135	ug/L	99
5) Bromomethane	2.215	94	44378	6.430	ug/L	99
6) Chloroethane	2.329	64	94599	11.104	ug/L	96
7) Trichlorofluoromethane	2.466	101	165949	10.910	ug/L	99
8) Ethyl ether	2.758	74	45022	9.423	ug/L	75
10) 1,1-Dichloroethene	2.945	96	102421	10.547	ug/L	91
11) Carbon disulfide	2.973	76	314300	10.492	ug/L	99
12) Freon-113	2.979	101	113910	11.208	ug/L	85
14) Acrolein	3.260	56	13412	8.675	ug/L	94
15) Methylene chloride	3.489	84	101801	9.629	ug/L	89
17) Acetone	3.539	43	19150	9.062	ug/L	94
18) trans-1,2-Dichloroethene	3.637	96	108990	9.993	ug/L	98
19) Methyl acetate	3.653	43	47752	8.583	ug/L	93
20) Methyl tert-butyl ether	3.740	73	222914	8.962	ug/L	93
21) tert-Butyl alcohol	3.840	59	28983	41.662	ug/L	94
22) Diisopropyl ether	4.091	45	378566	9.195	ug/L	96
23) 1,1-Dichloroethane	4.211	63	211112	9.811	ug/L	98
24) Halothane	4.264	117	83397	9.920	ug/L	99
25) Acrylonitrile	4.259	53	22394	8.565	ug/L	98

Data Path : K:\VOA101\2023\231219A\
Data File : V01231219A01.D
Acq On : 19 Dec 2023 5:30 am
Operator : VOA101:MJV
Sample : WG1865859-2
Misc : WG1865859,ICAL20680
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Dec 19 05:49:50 2023
Quant Method : K:\VOA101\2023\231219A\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 10:14:14 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA101\2023\231219A\V01231219A01.D
Sub List : 8260-Curve-2CEVE-IODO - Curve-2CEVE-IODO

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
26) Ethyl tert-butyl ether	4.434	59	316327	9.149	ug/L		97
27) Vinyl acetate	4.445	43	224238	10.789	ug/L		97
28) cis-1,2-Dichloroethene	4.724	96	118953	9.844	ug/L		96
29) 2,2-Dichloropropane	4.822	77	173815	10.712	ug/L		93
30) Bromochloromethane	4.914	128	51867	9.601	ug/L		95
31) Cyclohexane	4.920	56	224816	10.214	ug/L		92
32) Chloroform	4.986	83	187250	9.919	ug/L		98
33) Ethyl acetate	5.095	43	73402	8.822	ug/L	#	94
34) Carbon tetrachloride	5.115	117	152974	10.360	ug/L		100
35) Tetrahydrofuran	5.148	42	19930	8.063	ug/L		98
37) 1,1,1-Trichloroethane	5.182	97	174122	10.205	ug/L		99
39) 2-Butanone	5.282	43	28982	8.611	ug/L	#	37
40) 1,1-Dichloropropene	5.304	75	153475	10.304	ug/L		97
41) Benzene	5.547	78	423299	10.053	ug/L		96
42) tert-Amyl methyl ether	5.659	73	245498	9.016	ug/L		94
44) 1,2-Dichloroethane	5.748	62	136596	9.695	ug/L		97
47) Methyl cyclohexane	6.127	83	191880	10.338	ug/L		88
48) Trichloroethene	6.141	95	118936	10.041	ug/L		97
50) Dibromomethane	6.579	93	56729	9.510	ug/L		96
51) 1,2-Dichloropropane	6.676	63	114175	9.767	ug/L		97
54) Bromodichloromethane	6.752	83	140318	9.805	ug/L		99
57) 1,4-Dioxane	6.966	88	28144	417.295	ug/L	#	79
58) cis-1,3-Dichloropropene	7.435	75	162502	9.692	ug/L		93
61) Toluene	7.700	92	275178	9.622	ug/L		100
62) 4-Methyl-2-pentanone	8.129	58	25030	8.469	ug/L	#	90
63) Tetrachloroethene	8.149	166	127216	10.038	ug/L		99
65) trans-1,3-Dichloropropene	8.185	75	138507	9.224	ug/L		94
67) Ethyl methacrylate	8.372	69	88025	8.611	ug/L		96
68) 1,1,2-Trichloroethane	8.369	83	67524	9.268	ug/L		98
69) Chlorodibromomethane	8.578	129	93170	8.801	ug/L		98
70) 1,3-Dichloropropane	8.687	76	135177	9.409	ug/L		99
71) 1,2-Dibromoethane	8.860	107	79451	9.159	ug/L		98
72) 2-Hexanone	9.147	43	42325	7.652	ug/L		100
73) Chlorobenzene	9.501	112	310598	9.577	ug/L		98
74) Ethylbenzene	9.537	91	542494	9.865	ug/L		99
75) 1,1,1,2-Tetrachloroethane	9.585	131	109809	9.408	ug/L		99
76) p/m Xylene	9.724	106	422052	19.655	ug/L		98
77) o Xylene	10.268	106	401263	19.215	ug/L		100
78) Styrene	10.335	104	661798	19.358	ug/L		97
80) Bromoform	10.363	173	53001	8.153	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : K:\VOA101\2023\231219A\
Data File : V01231219A01.D
Acq On : 19 Dec 2023 5:30 am
Operator : VOA101:MJV
Sample : WG1865859-2
Misc : WG1865859,ICAL20680
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Dec 19 05:49:50 2023
Quant Method : K:\VOA101\2023\231219A\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 10:14:14 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA101\2023\231219A\V01231219A01.D
Sub List : 8260-Curve-2CEVE-IODO - Curve-2CEVE-IODO

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
82) Isopropylbenzene	10.653	105	539075	9.693	ug/L		99
84) Bromobenzene	11.096	156	124124	9.335	ug/L		99
85) n-Propylbenzene	11.138	91	626035	9.769	ug/L		100
86) 1,4-Dichlorobutane	11.152	55	139195	8.807	ug/L		100
87) 1,1,2,2-Tetrachloroethane	11.225	83	91461	8.844	ug/L		99
88) 4-Ethyltoluene	11.264	105	522867	9.670	ug/L		99
89) 2-Chlorotoluene	11.305	91	359768	9.475	ug/L		98
90) 1,3,5-Trimethylbenzene	11.361	105	435130	9.596	ug/L		99
91) 1,2,3-Trichloropropane	11.364	75	65015	8.204	ug/L		99
92) trans-1,4-Dichloro-2-b...	11.420	53	28110	8.863	ug/L	#	76
93) 4-Chlorotoluene	11.490	91	368221	9.536	ug/L		99
94) tert-Butylbenzene	11.701	119	362940	9.548	ug/L		99
97) 1,2,4-Trimethylbenzene	11.782	105	416178	9.438	ug/L		99
98) sec-Butylbenzene	11.894	105	523653	9.620	ug/L		98
99) p-Isopropyltoluene	12.047	119	439029	9.466	ug/L		99
100) 1,3-Dichlorobenzene	12.117	146	232817	9.427	ug/L		99
101) 1,4-Dichlorobenzene	12.212	146	232816	9.266	ug/L		99
102) p-Diethylbenzene	12.421	119	250064	9.369	ug/L		98
103) n-Butylbenzene	12.480	91	353900	9.664	ug/L		100
104) 1,2-Dichlorobenzene	12.633	146	207436	9.221	ug/L		99
105) 1,2,4,5-Tetramethylben...	13.218	119	341427	9.052	ug/L		100
106) 1,2-Dibromo-3-chloropr...	13.416	155	11491	7.951	ug/L		97
107) 1,3,5-Trichlorobenzene	13.447	180	132194	9.127	ug/L		99
108) Hexachlorobutadiene	14.022	225	46666	9.519	ug/L		99
109) 1,2,4-Trichlorobenzene	14.047	180	104013	8.594	ug/L		99
110) Naphthalene	14.340	128	202718	8.034	ug/L		100
111) 1,2,3-Trichlorobenzene	14.510	180	78487	8.128	ug/L		99

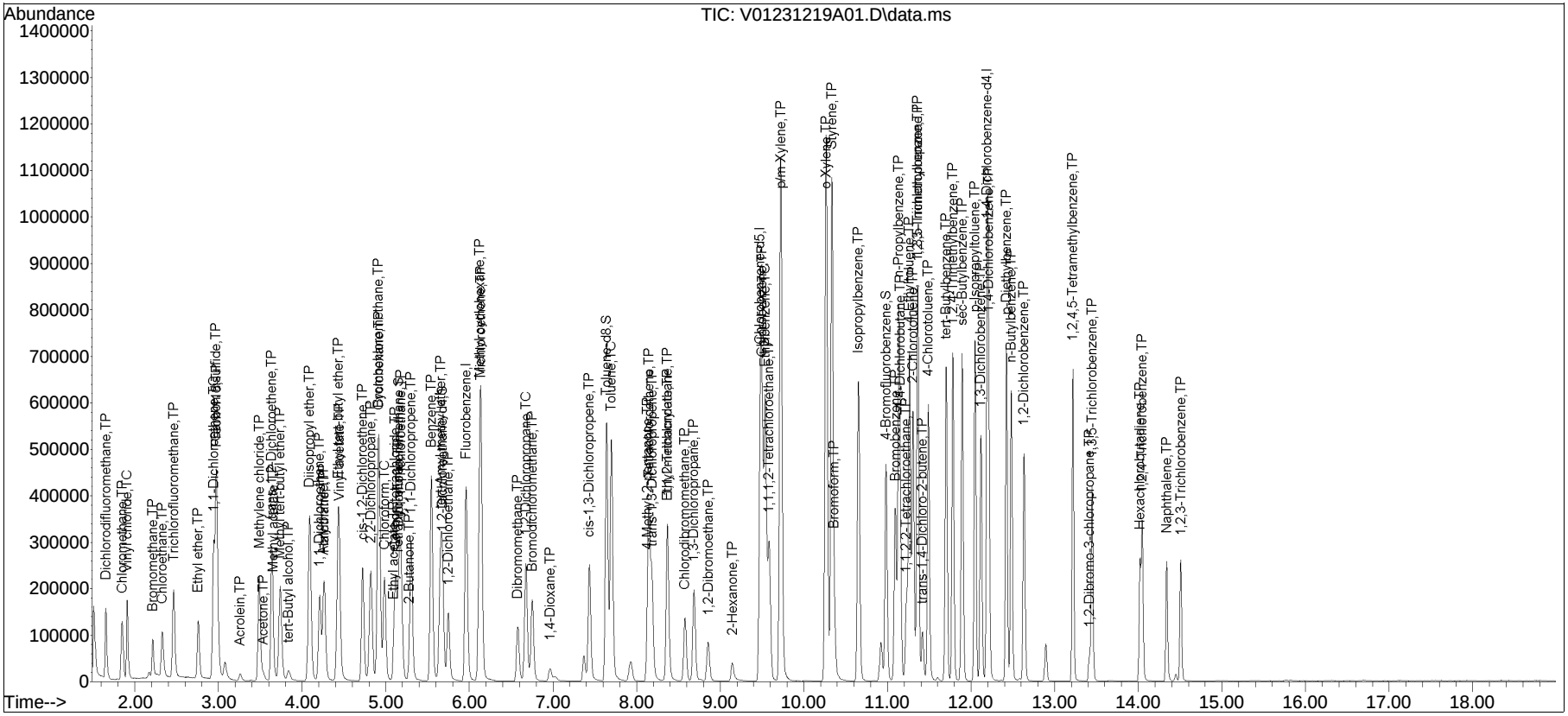
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\VOA101\2023\231219A\
Data File : V01231219A01.D
Acq On : 19 Dec 2023 5:30 am
Operator : VOA101:MJV
Sample : WG1865859-2
Misc : WG1865859,ICAL20680
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Dec 19 05:49:50 2023
Quant Method : K:\VOA101\2023\231219A\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 10:14:14 2023
Response via : Initial Calibration

Sub List : 8260-Curve-2CEVE-IODO - Curve-2CEVE-IODOD•



Manual Integration Report

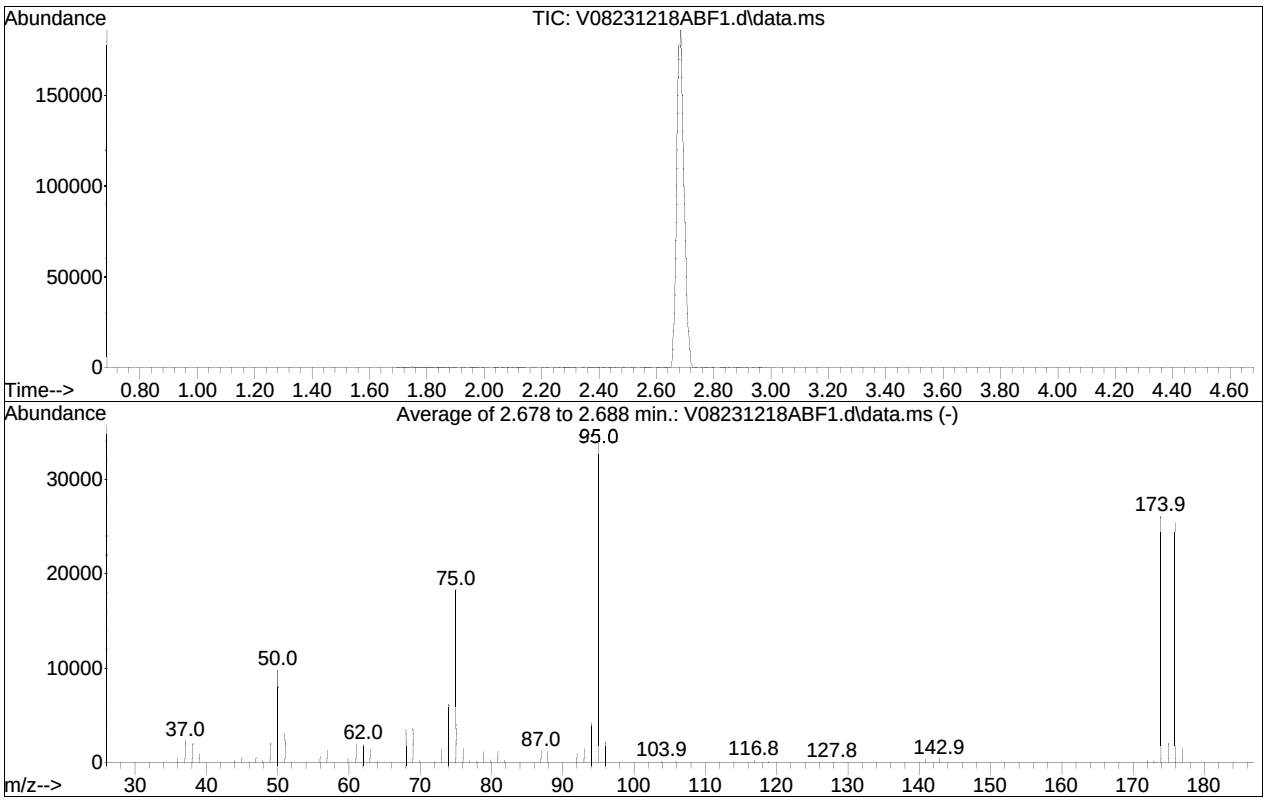
Data Path	: K:\VOA101\2023\231219A\	QMethod	: V101_231215A_8260.m
Data File	: V01231219A01.D	Operator	: VOA101:MJV
Date Inj'd	: 12/19/2023 5:30 am	Instrument	: VOA 101
Sample	: WG1865859-2	Quant Date	: 12/19/2023 5:49 am

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

Data Path : K:\VOA108\2023\231218A\
Data File : V08231218ABF1.d
Acq On : 18 Dec 2023 6:36 am
Operator : VOA108:PID
Sample : WG1865366-1
Misc : WG1865366
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : K:\VOA108\2023\231218A\V108_231206A_8260.m
Title : VOLATILES BY GC/MS
Last Update : Wed Dec 06 17:09:55 2023



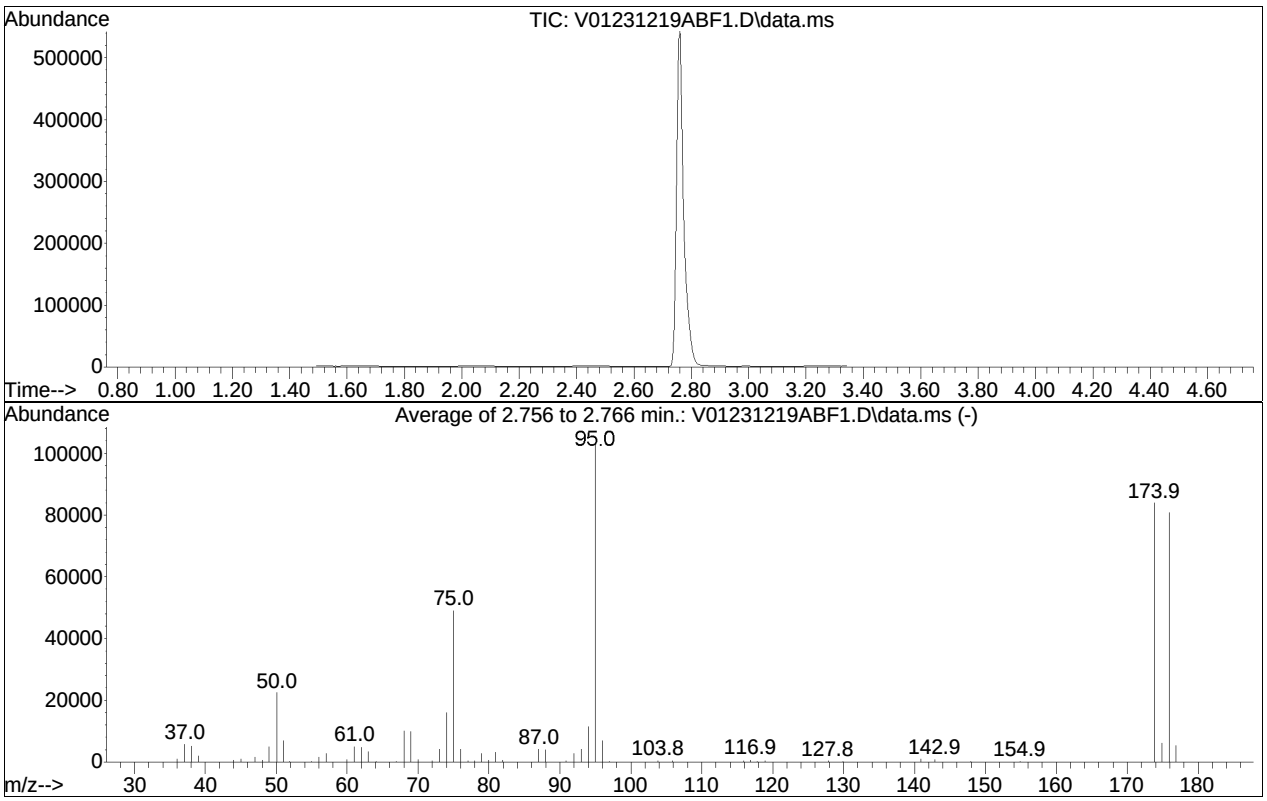
AutoFind: Scans 189, 190, 191; Background Corrected with Scan 181

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	28.8	9795	PASS
75	95	30	60	53.8	18280	PASS
95	95	100	100	100.0	34008	PASS
96	95	5	9	6.5	2210	PASS
173	174	0.00	2	0.9	229	PASS
174	95	50	100	76.7	26096	PASS
175	174	5	9	7.9	2056	PASS
176	174	95	101	97.3	25387	PASS
177	176	5	9	6.3	1610	PASS

Data Path : K:\VOA101\2023\231219A\
Data File : V01231219ABF1.D
Acq On : 19 Dec 2023 5:11 am
Operator : VOA101:MJV
Sample : WG1865859-1
Misc : WG1865859
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : K:\VOA101\2023\231219A\V101_231215A_8260.m
Title : VOLATILES BY GC/MS
Last Update : Sat Dec 16 10:14:14 2023



AutoFind: Scans 242, 243, 244; Background Corrected with Scan 234

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.8	22509	PASS
75	95	30	60	47.5	49112	PASS
95	95	100	100	100.0	103445	PASS
96	95	5	9	6.7	6955	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	81.2	83963	PASS
175	174	5	9	7.2	6062	PASS
176	174	95	101	96.2	80763	PASS
177	176	5	9	6.7	5398	PASS

Volatiles Raw QC Data

Quantitation Report (QT Reviewed)

Data Path : K:\VOA108\2023\231218A\
Data File : V08231218A05.d
Acq On : 18 Dec 2023 8:21 am
Operator : VOA108:PID
Sample : WG1865366-5,31,10,10
Misc : WG1865366,ICAL20635
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 18 09:02:37 2023
Quant Method : K:\VOA108\2023\231218A\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 17:09:55 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA108\2023\231218A\V08231218A01.d
Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.120	96	140342	10.000	ug/L	0.00
Standard Area 1 = 142386			Recovery = 98.56%			
59) Chlorobenzene-d5	9.648	117	101675	10.000	ug/L	0.00
Standard Area 1 = 96600			Recovery = 105.25%			
79) 1,4-Dichlorobenzene-d4	12.327	152	48132	10.000	ug/L	0.00
Standard Area 1 = 46518			Recovery = 103.47%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.307	113	39388	10.935	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 109.35%			
43) 1,2-Dichloroethane-d4	5.831	65	51525	11.616	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 116.16%			
60) Toluene-d8	7.808	98	134131	10.166	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.66%			
83) 4-Bromofluorobenzene	11.127	95	47127	10.376	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 103.76%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.000		0		N.D.	
3) Chloromethane	0.000		0		N.D.	
4) Vinyl chloride	0.000		0		N.D.	
5) Bromomethane	0.000		0		N.D.	
6) Chloroethane	0.000		0		N.D.	
7) Trichlorofluoromethane	0.000		0		N.D.	
10) 1,1-Dichloroethene	0.000		0		N.D.	
11) Carbon disulfide	3.084	76	241		N.D.	
12) Freon-113	0.000		0		N.D.	
15) Methylene chloride	0.000		0		N.D.	
17) Acetone	0.000		0		N.D.	
18) trans-1,2-Dichloroethene	0.000		0		N.D.	
19) Methyl acetate	0.000		0		N.D.	
20) Methyl tert-butyl ether	0.000		0		N.D.	
23) 1,1-Dichloroethane	0.000		0		N.D.	
28) cis-1,2-Dichloroethene	0.000		0		N.D.	
30) Bromochloromethane	0.000		0		N.D.	
31) Cyclohexane	0.000		0		N.D.	
32) Chloroform	0.000		0		N.D.	
34) Carbon tetrachloride	0.000		0		N.D.	

Data Path : K:\VOA108\2023\231218A\
Data File : V08231218A05.d
Acq On : 18 Dec 2023 8:21 am
Operator : VOA108:PID
Sample : WG1865366-5,31,10,10
Misc : WG1865366,ICAL20635
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 18 09:02:37 2023
Quant Method : K:\VOA108\2023\231218A\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 17:09:55 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA108\2023\231218A\V08231218A01.d
Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) 1,1,1-Trichloroethane	0.000		0		N.D.	
39) 2-Butanone	0.000		0		N.D.	
41) Benzene	0.000		0		N.D.	
44) 1,2-Dichloroethane	0.000		0		N.D.	
47) Methyl cyclohexane	0.000		0		N.D.	
48) Trichloroethene	0.000		0		N.D.	
51) 1,2-Dichloropropane	0.000		0		N.D.	
54) Bromodichloromethane	0.000		0		N.D.	
57) 1,4-Dioxane	0.000		0		N.D.	
58) cis-1,3-Dichloropropene	0.000		0		N.D.	
61) Toluene	0.000		0		N.D.	
62) 4-Methyl-2-pentanone	0.000		0		N.D.	
63) Tetrachloroethene	0.000		0		N.D.	
65) trans-1,3-Dichloropropene	0.000		0		N.D.	
68) 1,1,2-Trichloroethane	0.000		0		N.D.	
69) Chlorodibromomethane	0.000		0		N.D.	
71) 1,2-Dibromoethane	0.000		0		N.D.	
72) 2-Hexanone	0.000		0		N.D.	
73) Chlorobenzene	0.000		0		N.D.	
74) Ethylbenzene	0.000		0		N.D.	
76) p/m Xylene	0.000		0		N.D.	
77) o Xylene	0.000		0		N.D.	
78) Styrene	0.000		0		N.D.	
80) Bromoform	0.000		0		N.D.	
82) Isopropylbenzene	0.000		0		N.D.	
87) 1,1,2,2-Tetrachloroethane	0.000		0		N.D.	
100) 1,3-Dichlorobenzene	12.243	146	64		N.D.	
101) 1,4-Dichlorobenzene	12.338	146	201		N.D.	
104) 1,2-Dichlorobenzene	0.000		0		N.D.	
106) 1,2-Dibromo-3-chloropr...	0.000		0		N.D.	
109) 1,2,4-Trichlorobenzene	14.168	180	107		N.D.	
111) 1,2,3-Trichlorobenzene	14.624	180	51		N.D.	

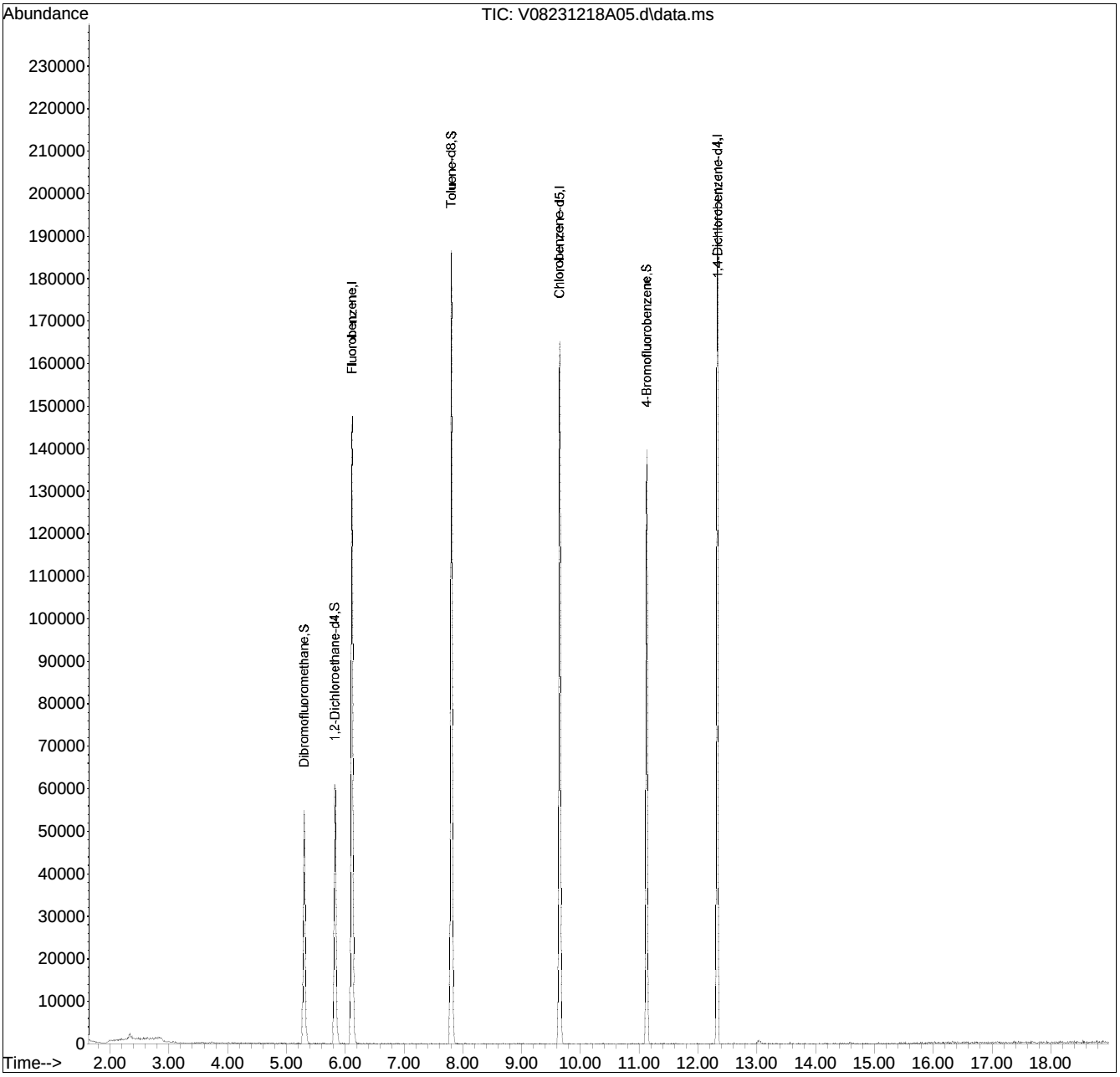
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\VOA108\2023\231218A\
Data File : V08231218A05.d
Acq On : 18 Dec 2023 8:21 am
Operator : VOA108:PID
Sample : WG1865366-5,31,10,10
Misc : WG1865366,ICAL20635
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 18 09:02:37 2023
Quant Method : K:\VOA108\2023\231218A\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 17:09:55 2023
Response via : Initial Calibration

Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE01.d•



Manual Integration Report

Data Path	: K:\VOA108\2023\231218A\	QMethod	: V108_231206A_8260.m
Data File	: V08231218A05.d	Operator	: VOA108:PID
Date Inj'd	: 12/18/2023 8:21 am	Instrument	: VOA 108
Sample	: WG1865366-5,31,10,10	Quant Date	: 12/18/2023 9:02 am

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

Quantitation Report (QT Reviewed)

Data Path : K:\VOA101\2023\231219A\
Data File : V01231219A04.D
Acq On : 19 Dec 2023 6:48 am
Operator : VOA101:MJV
Sample : WG1865859-5,31,10,10
Misc : WG1865859,ICAL20680
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 19 07:42:23 2023
Quant Method : K:\VOA101\2023\231219A\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 10:14:14 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA101\2023\231219A\V01231219A01.D
Sub List : 8260-Curve-2CEVE-IODO - Curve-2CEVE-IODO

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.963	96	424551	10.000	ug/L	0.00
Standard Area 1 = 442958			Recovery = 95.84%			
59) Chlorobenzene-d5	9.482	117	365244	10.000	ug/L	0.00
Standard Area 1 = 387518			Recovery = 94.25%			
79) 1,4-Dichlorobenzene-d4	12.195	152	198302	10.000	ug/L	0.00
Standard Area 1 = 216528			Recovery = 91.58%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.162	113	107807	9.936	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.36%			
43) 1,2-Dichloroethane-d4	5.678	65	121068	9.853	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 98.53%			
60) Toluene-d8	7.641	98	429629	9.985	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.85%			
83) 4-Bromofluorobenzene	10.985	95	168245	9.961	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.61%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.		
3) Chloromethane	0.000		0	N.D.		
4) Vinyl chloride	0.000		0	N.D.		
5) Bromomethane	2.217	94	417	N.D.		
6) Chloroethane	2.265	64	172	N.D.		
7) Trichlorofluoromethane	0.000		0	N.D.		
10) 1,1-Dichloroethene	0.000		0	N.D.		
11) Carbon disulfide	2.976	76	962	N.D.		
12) Freon-113	0.000		0	N.D.		
15) Methylene chloride	3.481	84	27	N.D.		
17) Acetone	0.000		0	N.D.	d	
18) trans-1,2-Dichloroethene	0.000		0	N.D.		
19) Methyl acetate	3.642	43	28	N.D.		
20) Methyl tert-butyl ether	0.000		0	N.D.		
23) 1,1-Dichloroethane	0.000		0	N.D.		
28) cis-1,2-Dichloroethene	0.000		0	N.D.		
30) Bromochloromethane	0.000		0	N.D.		
31) Cyclohexane	0.000		0	N.D.		
32) Chloroform	0.000		0	N.D.		
34) Carbon tetrachloride	0.000		0	N.D.		

Data Path : K:\VOA101\2023\231219A\
Data File : V01231219A04.D
Acq On : 19 Dec 2023 6:48 am
Operator : VOA101:MJV
Sample : WG1865859-5,31,10,10
Misc : WG1865859,ICAL20680
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 19 07:42:23 2023
Quant Method : K:\VOA101\2023\231219A\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 10:14:14 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA101\2023\231219A\V01231219A01.D
Sub List : 8260-Curve-2CEVE-IODO - Curve-2CEVE-IODO

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) 1,1,1-Trichloroethane	0.000		0	N.D.		
39) 2-Butanone	0.000		0	N.D.	d	
41) Benzene	0.000		0	N.D.		
44) 1,2-Dichloroethane	0.000		0	N.D.		
47) Methyl cyclohexane	0.000		0	N.D.		
48) Trichloroethene	6.080	95	172	N.D.		
51) 1,2-Dichloropropane	0.000		0	N.D.		
54) Bromodichloromethane	0.000		0	N.D.		
57) 1,4-Dioxane	0.000		0	N.D.		
58) cis-1,3-Dichloropropene	0.000		0	N.D.		
61) Toluene	0.000		0	N.D.		
62) 4-Methyl-2-pentanone	0.000		0	N.D.		
63) Tetrachloroethene	0.000		0	N.D.		
65) trans-1,3-Dichloropropene	0.000		0	N.D.		
68) 1,1,2-Trichloroethane	0.000		0	N.D.		
69) Chlorodibromomethane	0.000		0	N.D.		
71) 1,2-Dibromoethane	0.000		0	N.D.		
72) 2-Hexanone	0.000		0	N.D.		
73) Chlorobenzene	9.504	112	36	N.D.		
74) Ethylbenzene	9.482	91	403	N.D.		
76) p/m Xylene	0.000		0	N.D.		
77) o Xylene	0.000		0	N.D.		
78) Styrene	0.000		0	N.D.		
80) Bromoform	0.000		0	N.D.		
82) Isopropylbenzene	0.000		0	N.D.		
87) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.		
100) 1,3-Dichlorobenzene	12.137	146	86	N.D.		
101) 1,4-Dichlorobenzene	12.206	146	412	N.D.		
104) 1,2-Dichlorobenzene	12.666	146	25	N.D.		
106) 1,2-Dibromo-3-chloropr...	0.000		0	N.D.		
109) 1,2,4-Trichlorobenzene	14.069	180	120	N.D.		
111) 1,2,3-Trichlorobenzene	14.521	180	486	N.D.		

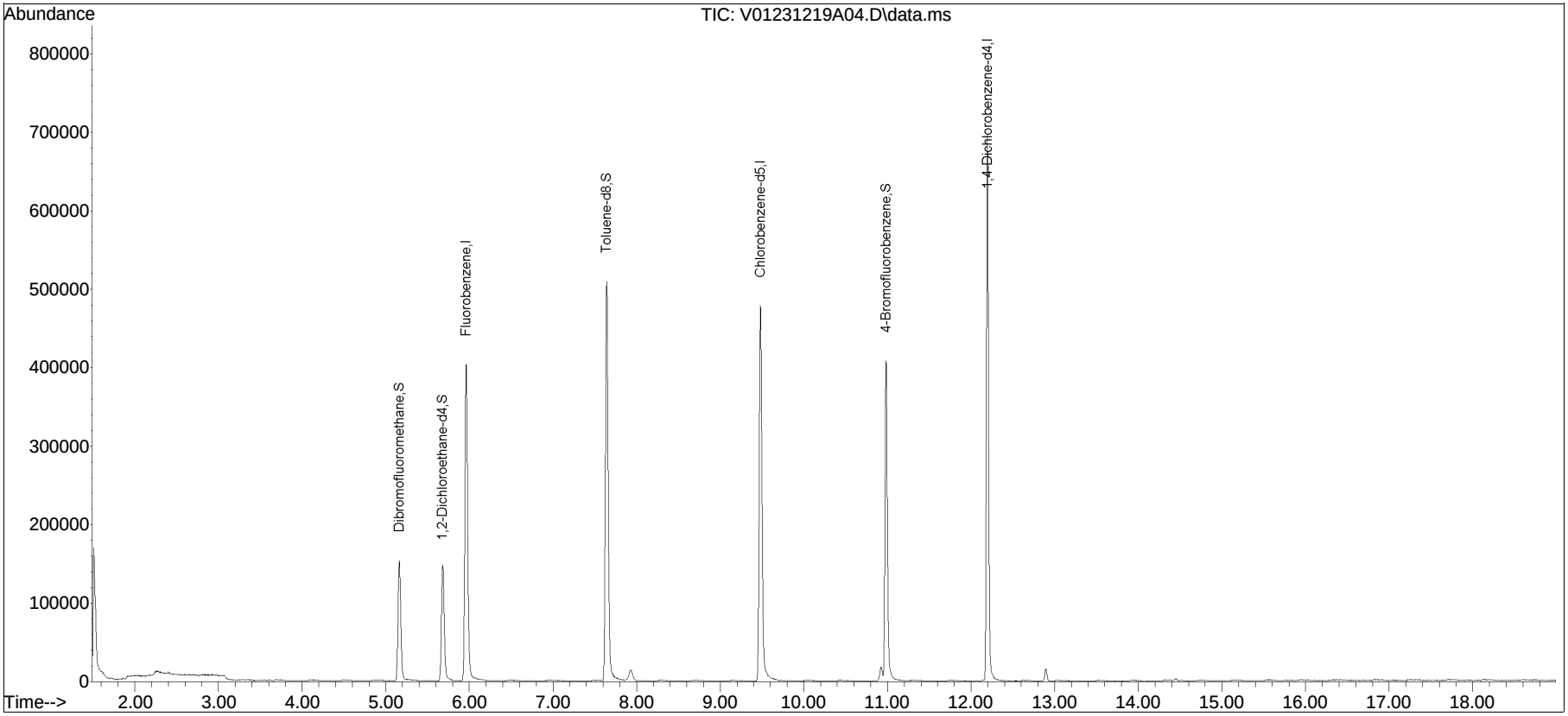
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\VOA101\2023\231219A\
Data File : V01231219A04.D
Acq On : 19 Dec 2023 6:48 am
Operator : VOA101:MJV
Sample : WG1865859-5,31,10,10
Misc : WG1865859,ICAL20680
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 19 07:42:23 2023
Quant Method : K:\VOA101\2023\231219A\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 10:14:14 2023
Response via : Initial Calibration

Sub List : 8260-Curve-2CEVE-IODO - Curve-2CEVE-IODOD•



Manual Integration Report

Data Path	: K:\VOA101\2023\231219A\	QMethod	: V101_231215A_8260.m
Data File	: V01231219A04.D	Operator	: VOA101:MJV
Date Inj'd	: 12/19/2023 6:48 am	Instrument	: VOA 101
Sample	: WG1865859-5,31,10,10	Quant Date	: 12/19/2023 7:39 am

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

Quantitation Report (QT Reviewed)

Data Path : K:\VOA101\2023\231219A\
Data File : V01231219A01.D
Acq On : 19 Dec 2023 5:30 am
Operator : VOA101:MJV
Sample : WG1865859-3,31,10,10
Misc : WG1865859,ICAL20680
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Dec 19 05:49:50 2023
Quant Method : K:\VOA101\2023\231219A\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 10:14:14 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA101\2023\231219A\V01231219A01.D
Sub List : 8260-Curve-2CEVE-IODO - Curve-2CEVE-IODO

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.960	96	442958	10.000	ug/L	0.00
Standard Area 1 = 442958			Recovery = 100.00%			
59) Chlorobenzene-d5	9.479	117	387518	10.000	ug/L	0.00
Standard Area 1 = 387518			Recovery = 100.00%			
79) 1,4-Dichlorobenzene-d4	12.192	152	216528	10.000	ug/L	0.00
Standard Area 1 = 216528			Recovery = 100.00%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.159	113	113469	10.023	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.23%			
43) 1,2-Dichloroethane-d4	5.681	65	124724	9.729	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 97.29%			
60) Toluene-d8	7.638	98	446918	9.790	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 97.90%			
83) 4-Bromofluorobenzene	10.985	95	183128	9.930	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.30%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.654	85	124067	10.026	ug/L	99
3) Chloromethane	1.849	50	151778	9.480	ug/L	99
4) Vinyl chloride	1.908	62	143657	10.135	ug/L	99
5) Bromomethane	2.215	94	44378	6.430	ug/L	99
6) Chloroethane	2.329	64	94599	11.104	ug/L	96
7) Trichlorofluoromethane	2.466	101	165949	10.910	ug/L	99
10) 1,1-Dichloroethene	2.945	96	102421	10.547	ug/L	91
11) Carbon disulfide	2.973	76	314300	10.492	ug/L	99
12) Freon-113	2.979	101	113910	11.208	ug/L	85
15) Methylene chloride	3.489	84	101801	9.629	ug/L	89
17) Acetone	3.539	43	19150	9.062	ug/L	94
18) trans-1,2-Dichloroethene	3.637	96	108990	9.993	ug/L	98
19) Methyl acetate	3.653	43	47752	8.583	ug/L	93
20) Methyl tert-butyl ether	3.740	73	222914	8.962	ug/L	93
23) 1,1-Dichloroethane	4.211	63	211112	9.811	ug/L	98
28) cis-1,2-Dichloroethene	4.724	96	118953	9.844	ug/L	96
30) Bromochloromethane	4.914	128	51867	9.601	ug/L	95
31) Cyclohexane	4.920	56	224816	10.214	ug/L	92
32) Chloroform	4.986	83	187250	9.919	ug/L	98
34) Carbon tetrachloride	5.115	117	152974	10.360	ug/L	100

Data Path : K:\VOA101\2023\231219A\
Data File : V01231219A01.D
Acq On : 19 Dec 2023 5:30 am
Operator : VOA101:MJV
Sample : WG1865859-3,31,10,10
Misc : WG1865859,ICAL20680
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Dec 19 05:49:50 2023
Quant Method : K:\VOA101\2023\231219A\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 10:14:14 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA101\2023\231219A\V01231219A01.D
Sub List : 8260-Curve-2CEVE-IODO - Curve-2CEVE-IODO

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
37) 1,1,1-Trichloroethane	5.182	97	174122	10.205	ug/L		99
39) 2-Butanone	5.282	43	28982	8.611	ug/L	#	37
41) Benzene	5.547	78	423299	10.053	ug/L		96
44) 1,2-Dichloroethane	5.748	62	136596	9.695	ug/L		97
47) Methyl cyclohexane	6.127	83	191880	10.338	ug/L		88
48) Trichloroethene	6.141	95	118936	10.041	ug/L		97
51) 1,2-Dichloropropane	6.676	63	114175	9.767	ug/L		97
54) Bromodichloromethane	6.752	83	140318	9.805	ug/L		99
57) 1,4-Dioxane	6.966	88	28144	417.295	ug/L	#	79
58) cis-1,3-Dichloropropene	7.435	75	162502	9.692	ug/L		93
61) Toluene	7.700	92	275178	9.622	ug/L		100
62) 4-Methyl-2-pentanone	8.129	58	25030	8.469	ug/L	#	90
63) Tetrachloroethene	8.149	166	127216	10.038	ug/L		99
65) trans-1,3-Dichloropropene	8.185	75	138507	9.224	ug/L		94
68) 1,1,2-Trichloroethane	8.369	83	67524	9.268	ug/L		98
69) Chlorodibromomethane	8.578	129	93170	8.801	ug/L		98
71) 1,2-Dibromoethane	8.860	107	79451	9.159	ug/L		98
72) 2-Hexanone	9.147	43	42325	7.652	ug/L		100
73) Chlorobenzene	9.501	112	310598	9.577	ug/L		98
74) Ethylbenzene	9.537	91	542494	9.865	ug/L		99
76) p/m Xylene	9.724	106	422052	19.655	ug/L		98
77) o Xylene	10.268	106	401263	19.215	ug/L		100
78) Styrene	10.335	104	661798	19.358	ug/L		97
80) Bromoform	10.363	173	53001	8.153	ug/L		98
82) Isopropylbenzene	10.653	105	539075	9.693	ug/L		99
87) 1,1,2,2-Tetrachloroethane	11.225	83	91461	8.844	ug/L		99
100) 1,3-Dichlorobenzene	12.117	146	232817	9.427	ug/L		99
101) 1,4-Dichlorobenzene	12.212	146	232816	9.266	ug/L		99
104) 1,2-Dichlorobenzene	12.633	146	207436	9.221	ug/L		99
106) 1,2-Dibromo-3-chloropr...	13.416	155	11491	7.951	ug/L		97
109) 1,2,4-Trichlorobenzene	14.047	180	104013	8.594	ug/L		99
111) 1,2,3-Trichlorobenzene	14.510	180	78487	8.128	ug/L		99

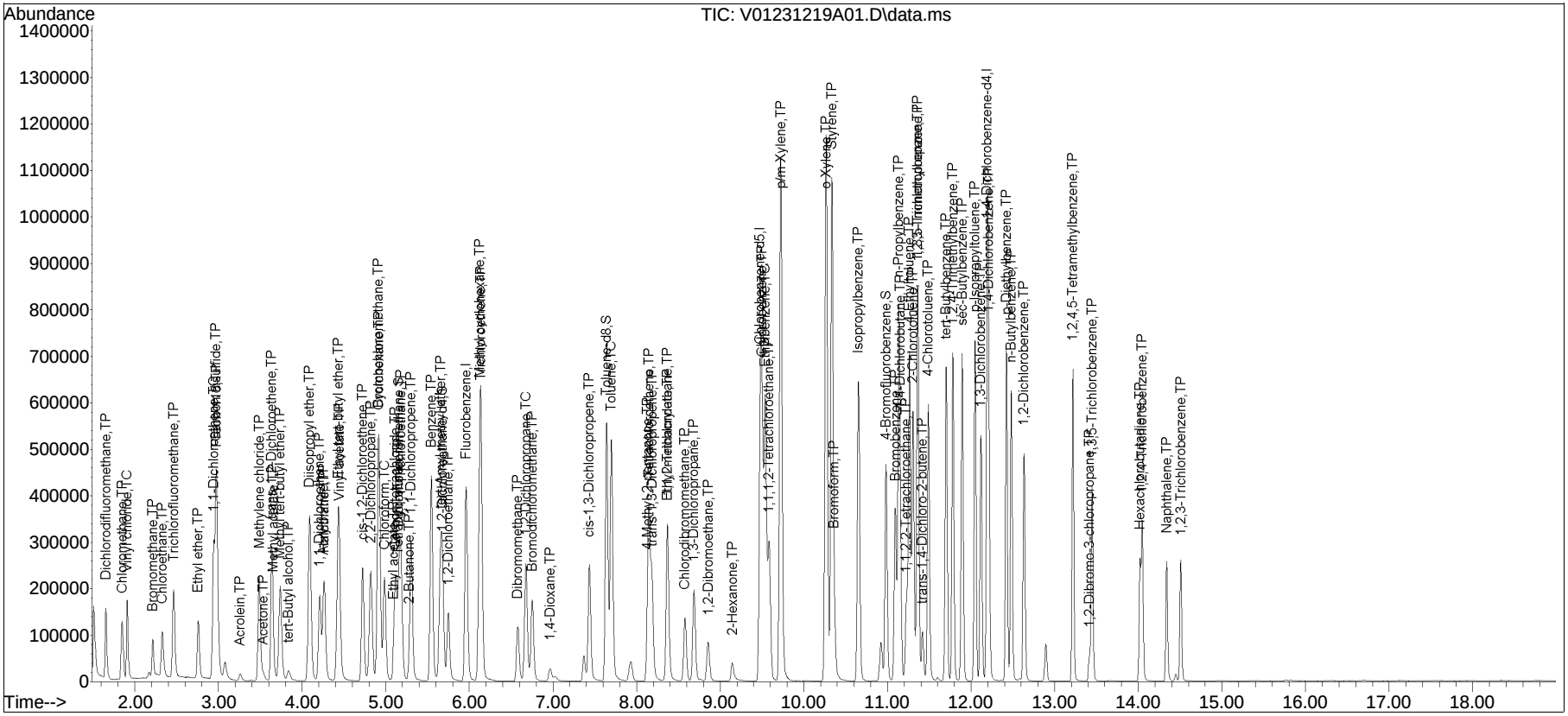
(#) = qualifier out of range (m) = manual integration (+) = signals summed

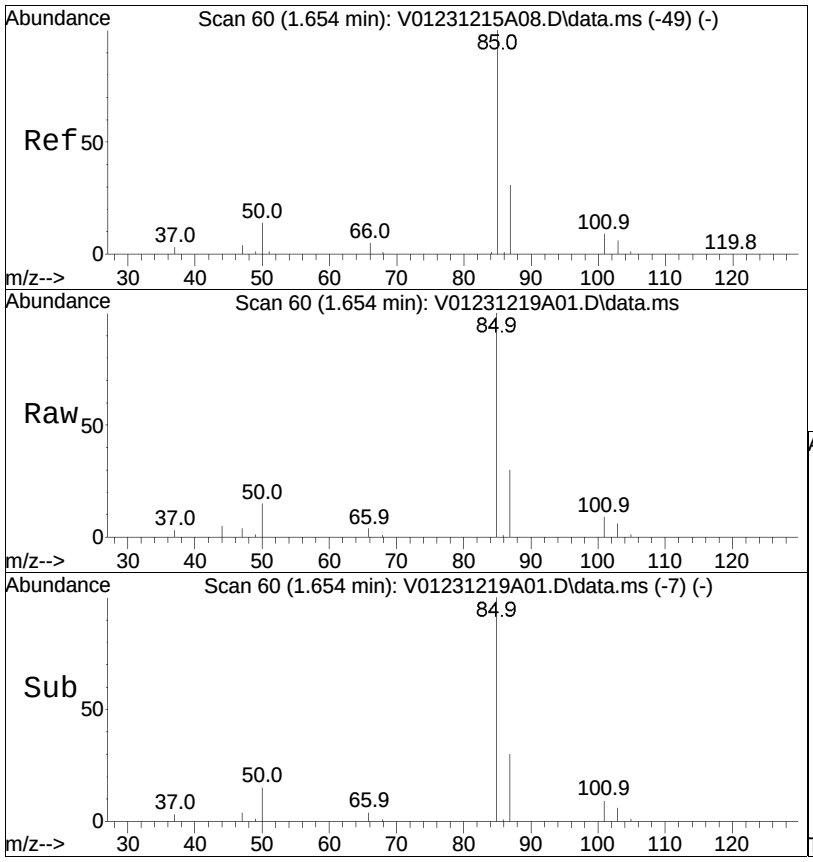
Quantitation Report (QT Reviewed)

Data Path : K:\VOA101\2023\231219A\
Data File : V01231219A01.D
Acq On : 19 Dec 2023 5:30 am
Operator : VOA101:MJV
Sample : WG1865859-3,31,10,10
Misc : WG1865859,ICAL20680
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Dec 19 05:49:50 2023
Quant Method : K:\VOA101\2023\231219A\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 10:14:14 2023
Response via : Initial Calibration

Sub List : 8260-Curve-2CEVE-IODO - Curve-2CEVE-IODOD•

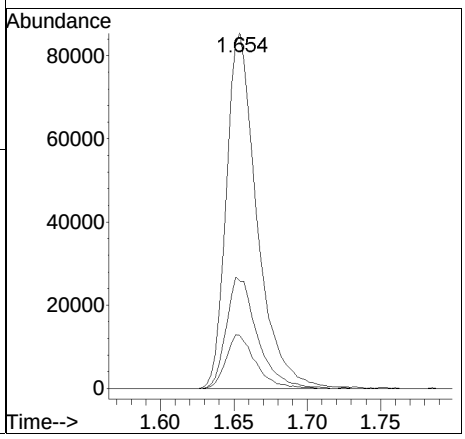


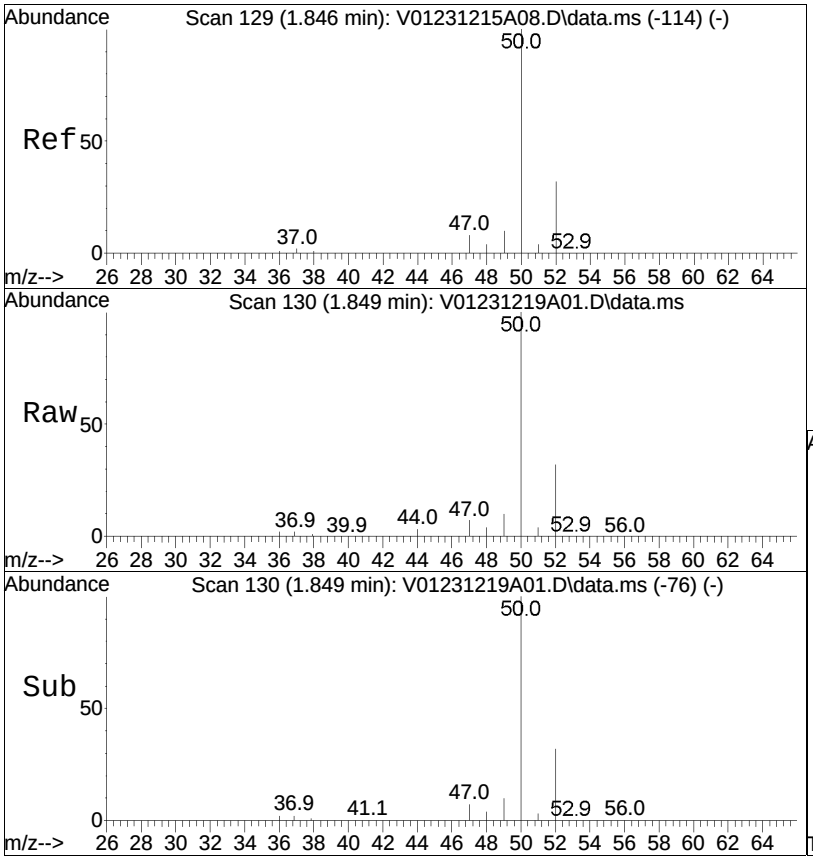


#2
Dichlorodifluoromethane
Concen: 10.03 ug/L
RT: 1.654 min Scan# 60
Delta R.T. 0.000 min
Lab File: V01231219A01.D
Acq: 19 Dec 2023 5:30 am

Tgt Ion: 85 Resp: 124067

Ion	Ratio	Lower	Upper
85	100		
87	31.7	20.9	43.5
50	14.5	9.1	18.9

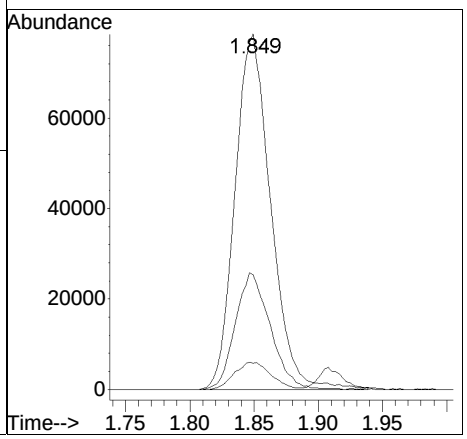


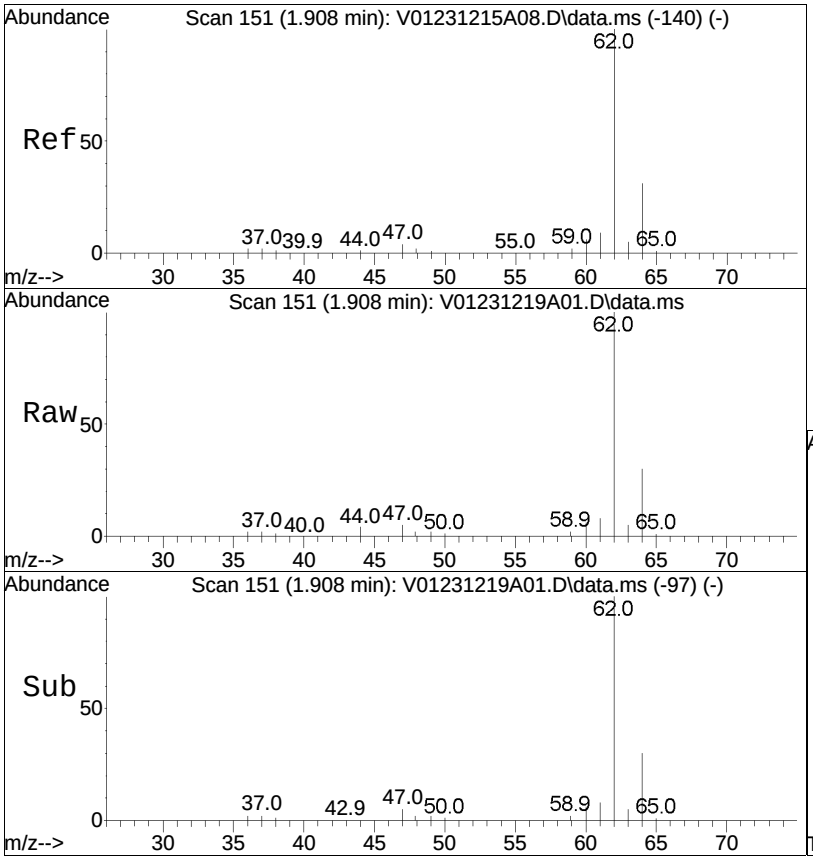


#3
Chloromethane
Concen: 9.48 ug/L
RT: 1.849 min Scan# 130
Delta R.T. 0.003 min
Lab File: V01231219A01.D
Acq: 19 Dec 2023 5:30 am

Tgt Ion: 50 Resp: 151778

Ion	Ratio	Lower	Upper
50	100		
52	32.0	12.8	52.8
47	7.9	0.0	28.3

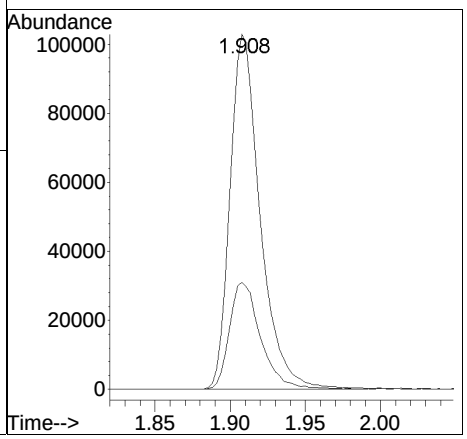


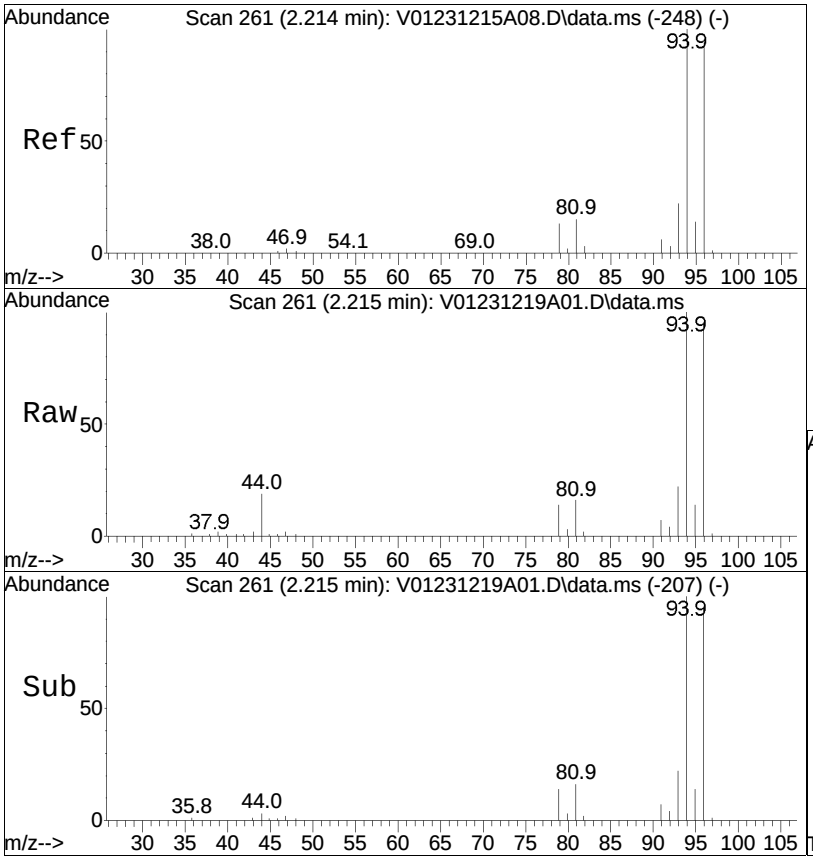


#4
Vinyl chloride
Concen: 10.14 ug/L
RT: 1.908 min Scan# 151
Delta R.T. 0.000 min
Lab File: V01231219A01.D
Acq: 19 Dec 2023 5:30 am

Tgt Ion: 62 Resp: 143657

Ion	Ratio	Lower	Upper
62	100		
64	31.3	10.8	50.8

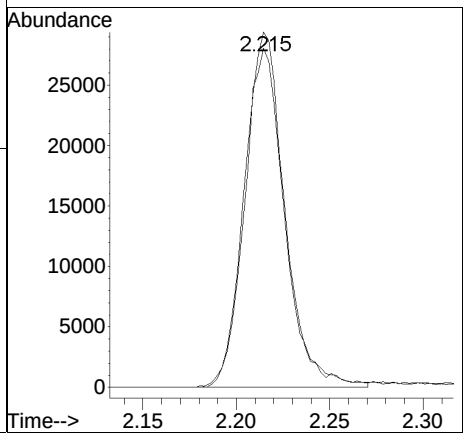


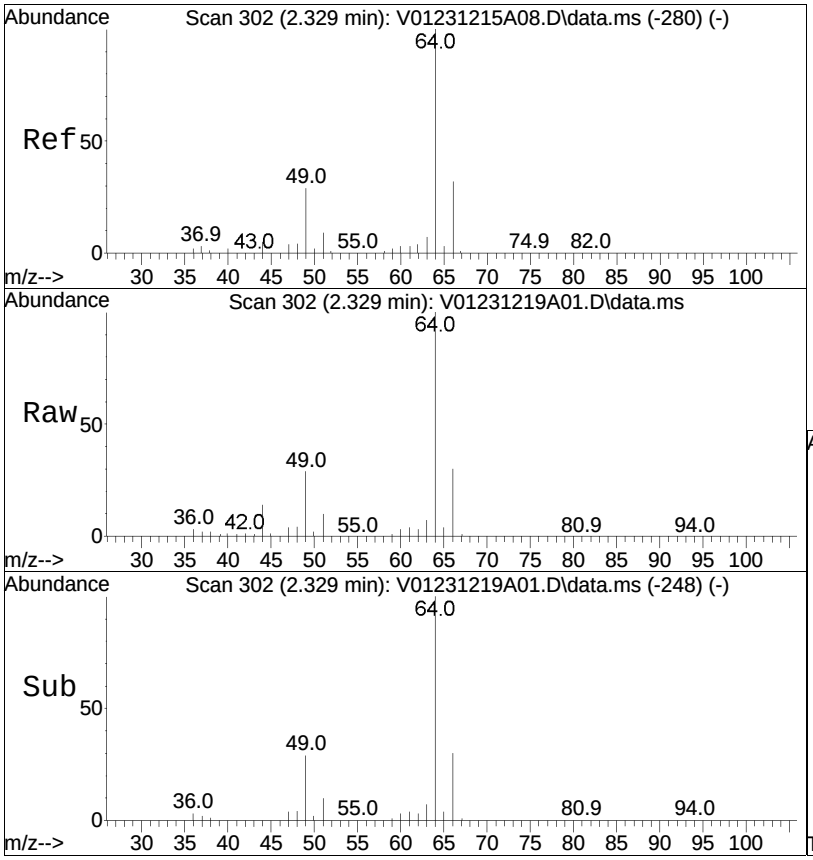


#5
Bromomethane
Concen: 6.43 ug/L
RT: 2.215 min Scan# 261
Delta R.T. 0.000 min
Lab File: V01231219A01.D
Acq: 19 Dec 2023 5:30 am

Tgt Ion: 94 Resp: 44378

Ion	Ratio	Lower	Upper
94	100		
96	94.2	73.6	113.6

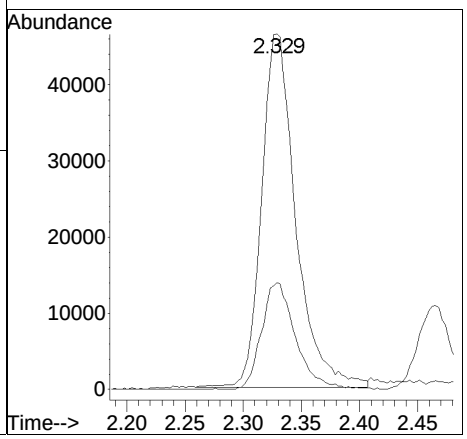


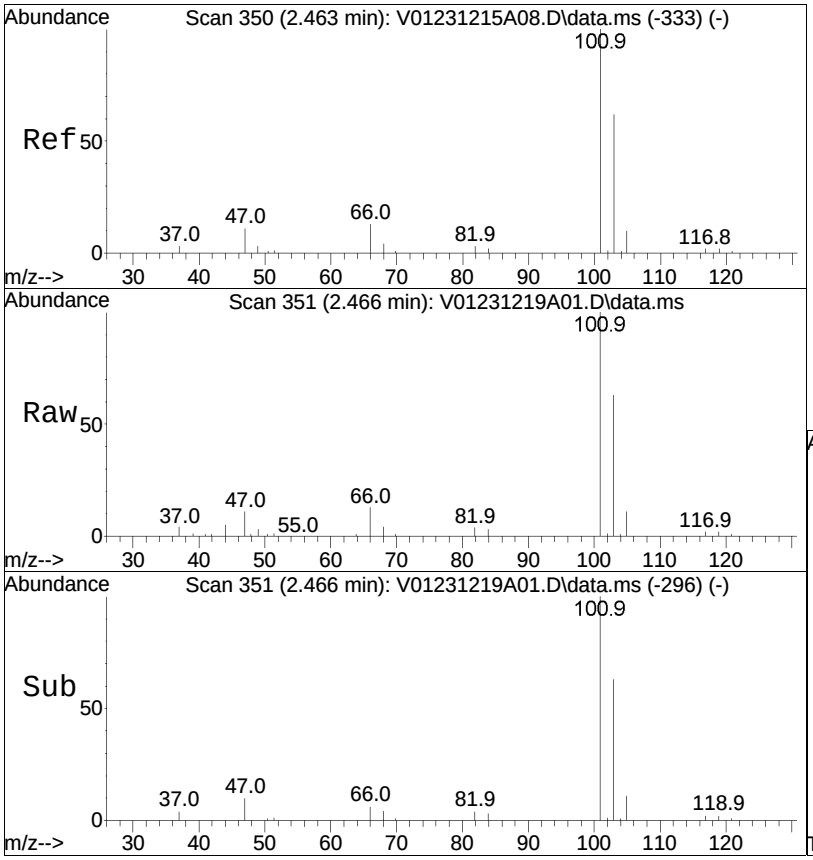


#6
Chloroethane
Concen: 11.10 ug/L
RT: 2.329 min Scan# 302
Delta R.T. 0.000 min
Lab File: V01231219A01.D
Acq: 19 Dec 2023 5:30 am

Tgt Ion: 64 Resp: 94599

Ion	Ratio	Lower	Upper
64	100		
66	30.2	12.7	52.7

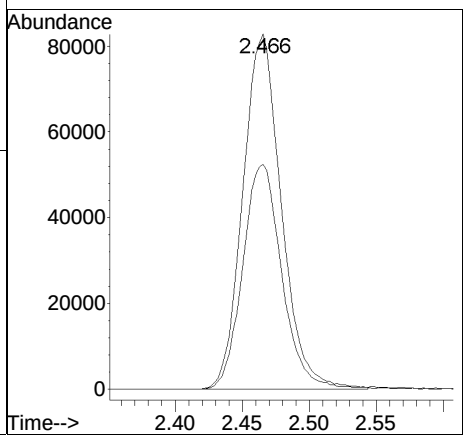


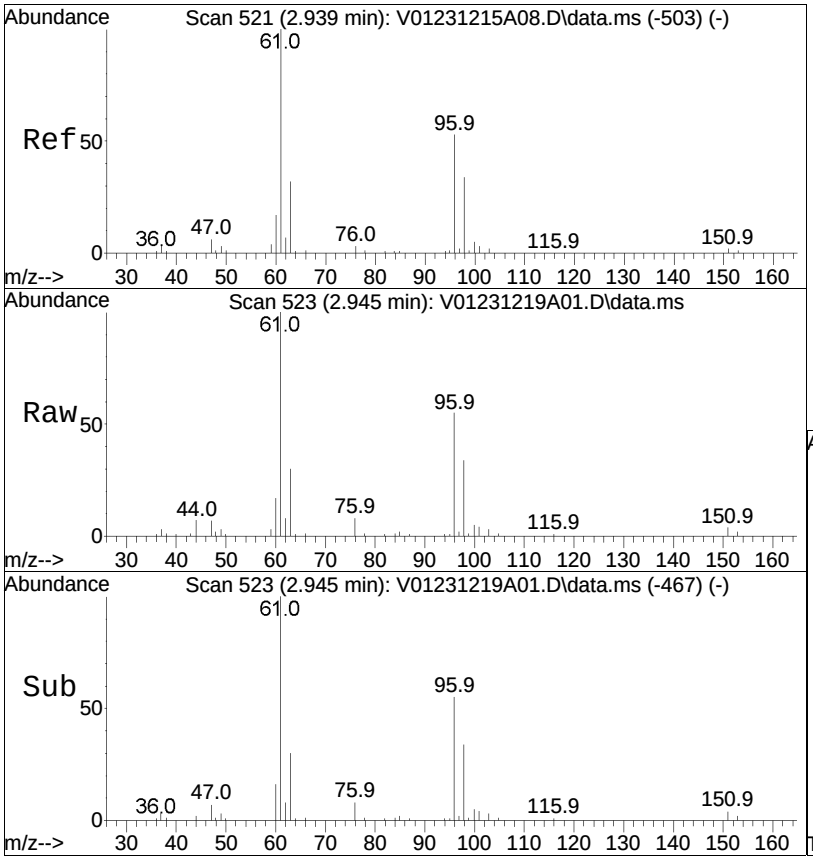


#7
Trichlorofluoromethane
Concen: 10.91 ug/L
RT: 2.466 min Scan# 351
Delta R.T. 0.003 min
Lab File: V01231219A01.D
Acq: 19 Dec 2023 5:30 am

Tgt Ion:101 Resp: 165949

Ion	Ratio	Lower	Upper
101	100		
103	64.4	52.3	78.5

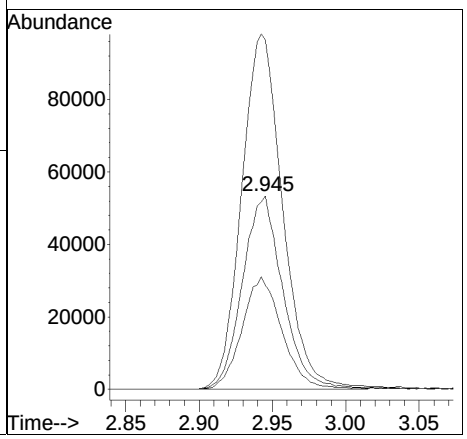


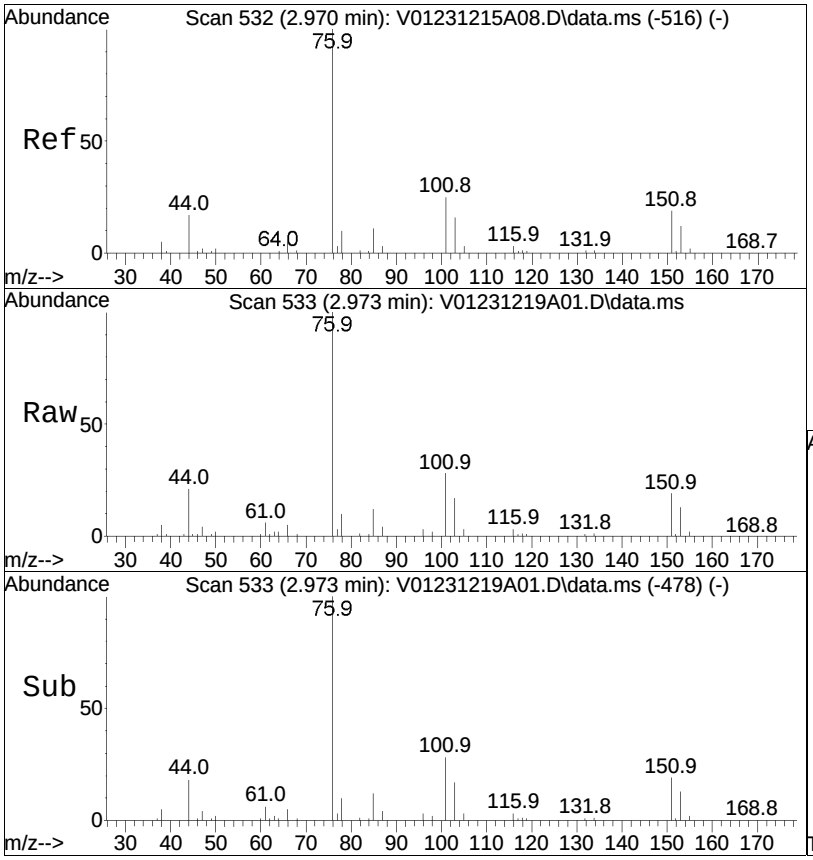


#10
1,1-Dichloroethene
Concen: 10.55 ug/L
RT: 2.945 min Scan# 523
Delta R.T. 0.006 min
Lab File: V01231219A01.D
Acq: 19 Dec 2023 5:30 am

Tgt Ion: 96 Resp: 102421

Ion	Ratio	Lower	Upper
96	100		
61	186.3	136.8	205.2
63	57.7	43.6	65.4

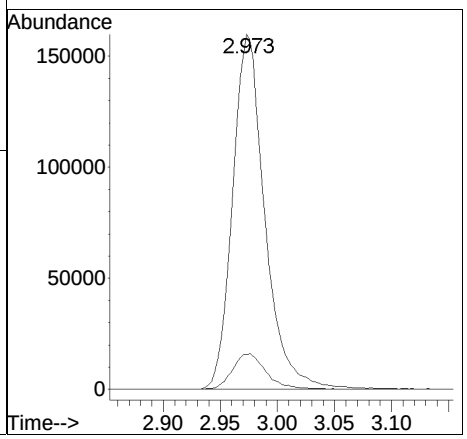


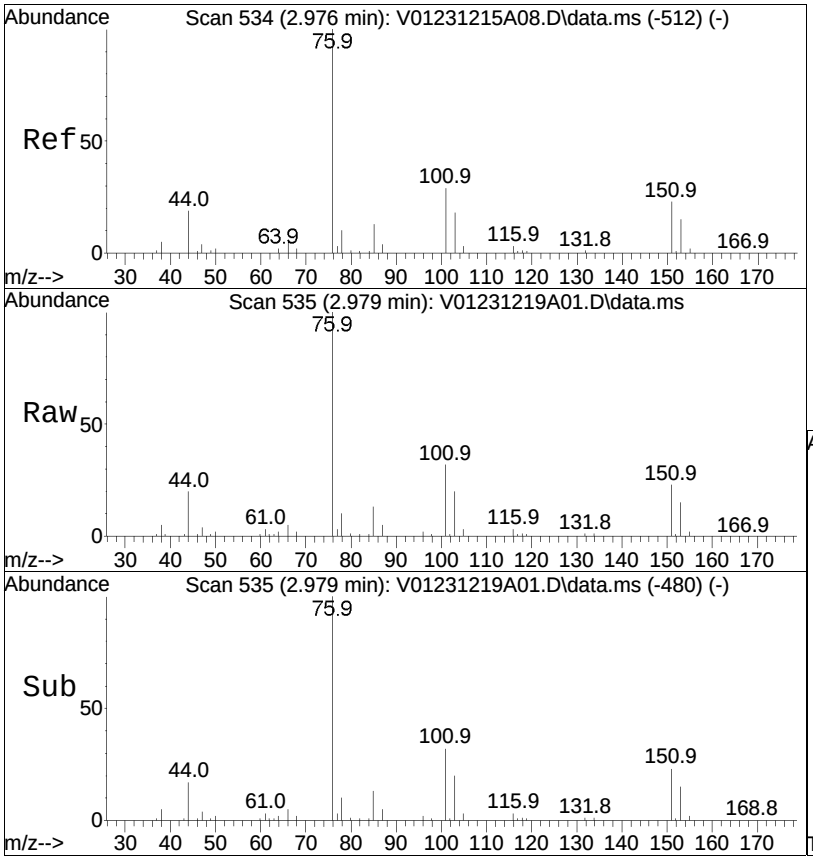


#11
Carbon disulfide
Concen: 10.49 ug/L
RT: 2.973 min Scan# 533
Delta R.T. 0.003 min
Lab File: V01231219A01.D
Acq: 19 Dec 2023 5:30 am

Tgt Ion: 76 Resp: 314300

Ion	Ratio	Lower	Upper
76	100		
78	10.5	6.6	13.8

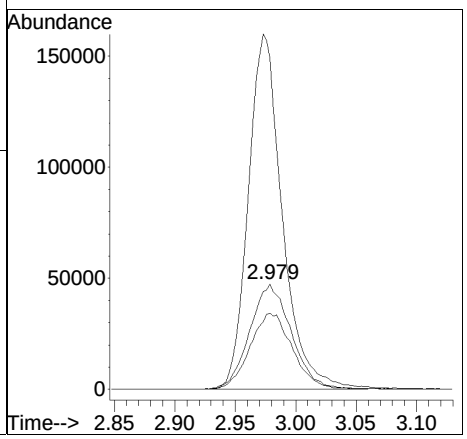


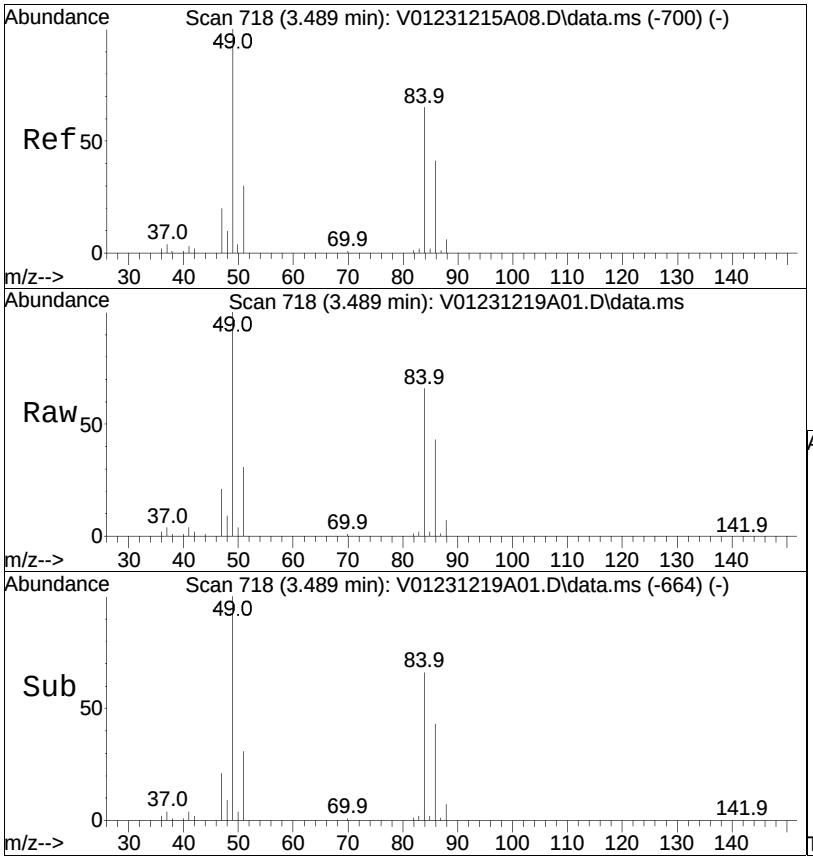


#12
Freon-113
Concen: 11.21 ug/L
RT: 2.979 min Scan# 535
Delta R.T. 0.003 min
Lab File: V01231219A01.D
Acq: 19 Dec 2023 5:30 am

Tgt Ion:101 Resp: 113910

Ion	Ratio	Lower	Upper
101	100		
151	73.6	61.2	91.8
76	275.9	194.8	292.2

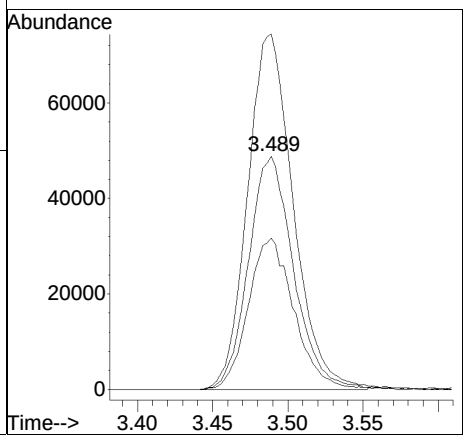


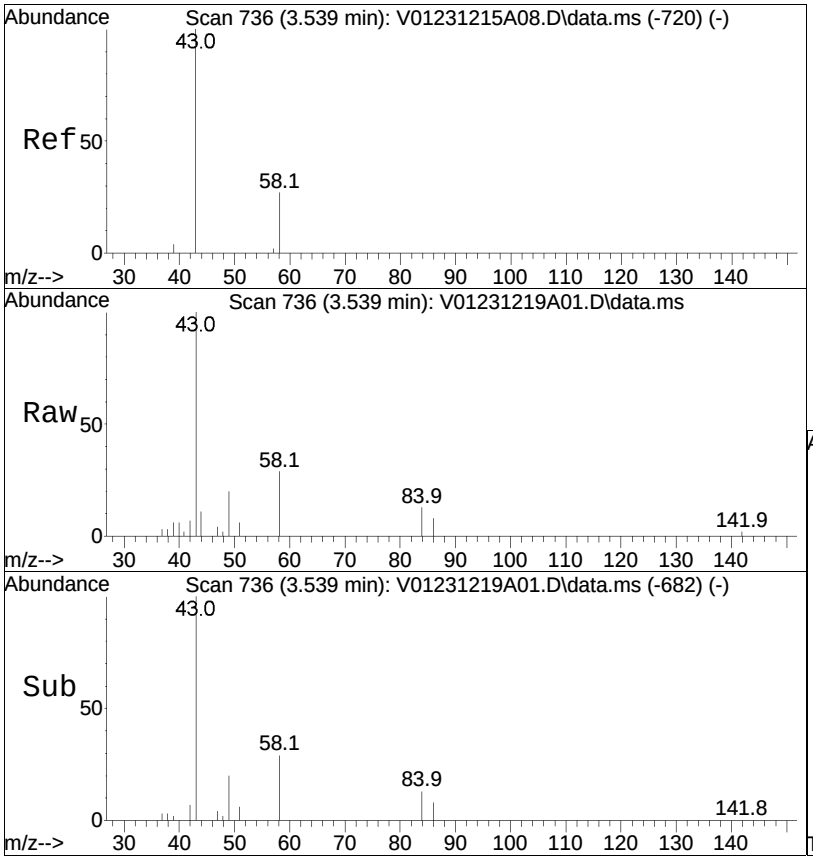


#15
Methylene chloride
Concen: 9.63 ug/L
RT: 3.489 min Scan# 718
Delta R.T. 0.000 min
Lab File: V01231219A01.D
Acq: 19 Dec 2023 5:30 am

Tgt Ion: 84 Resp: 101801

Ion	Ratio	Lower	Upper
84	100		
86	65.9	41.7	86.7
49	155.2	89.1	185.1

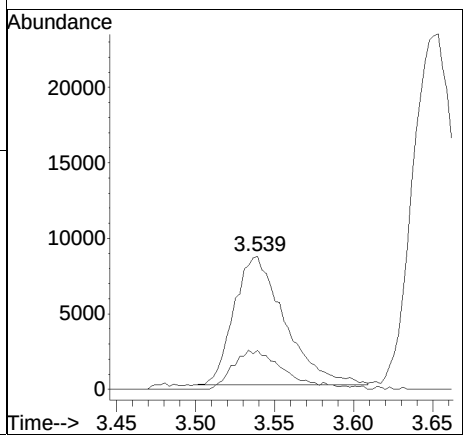


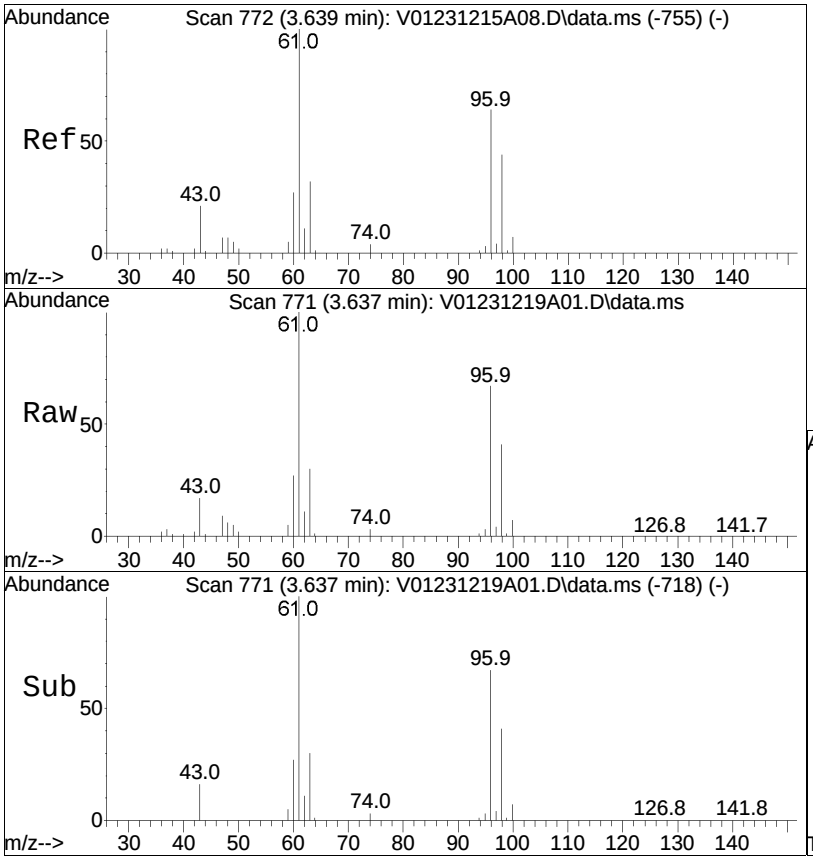


#17
Acetone
Concen: 9.06 ug/L
RT: 3.539 min Scan# 736
Delta R.T. 0.000 min
Lab File: V01231219A01.D
Acq: 19 Dec 2023 5:30 am

Tgt Ion: 43 Resp: 19150

Ion	Ratio	Lower	Upper
43	100		
58	29.2	25.9	38.9

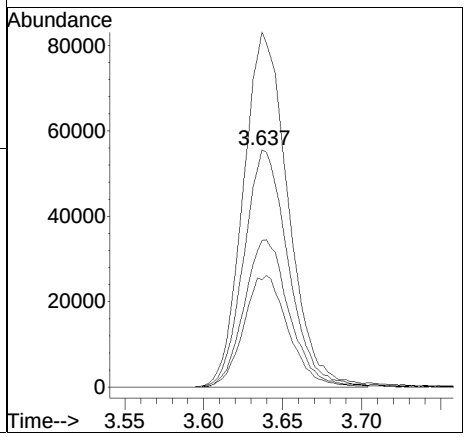


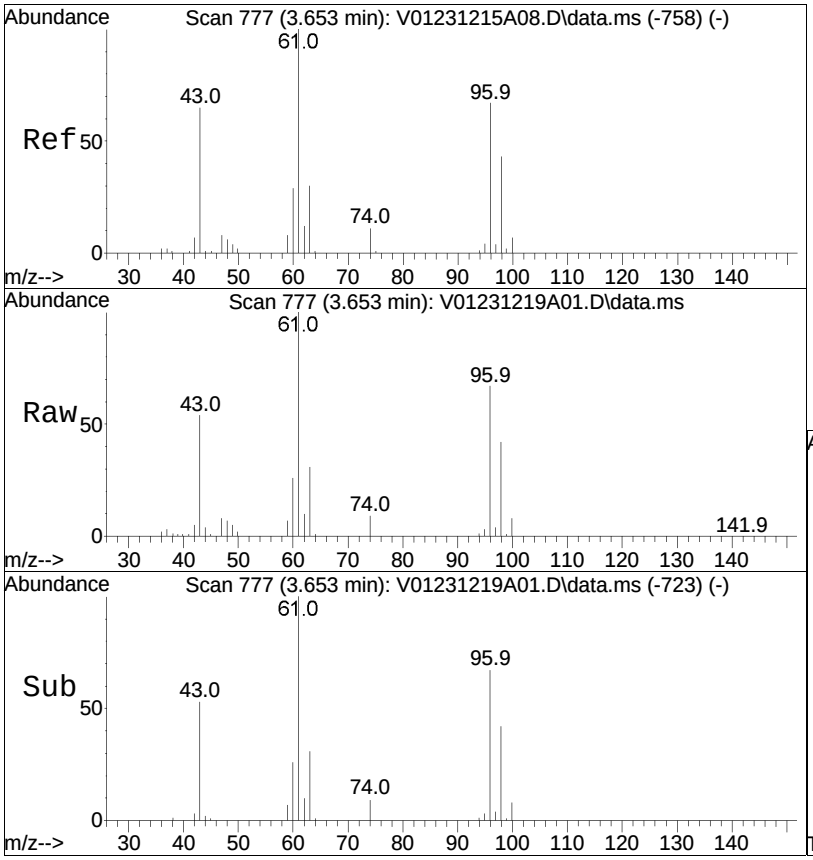


#18
trans-1,2-Dichloroethene
Concen: 9.99 ug/L
RT: 3.637 min Scan# 771
Delta R.T. -0.003 min
Lab File: V01231219A01.D
Acq: 19 Dec 2023 5:30 am

Tgt Ion: 96 Resp: 108990

Ion	Ratio	Lower	Upper
96	100		
61	150.4	95.3	197.9
98	63.6	41.0	85.2
63	47.6	30.2	62.6

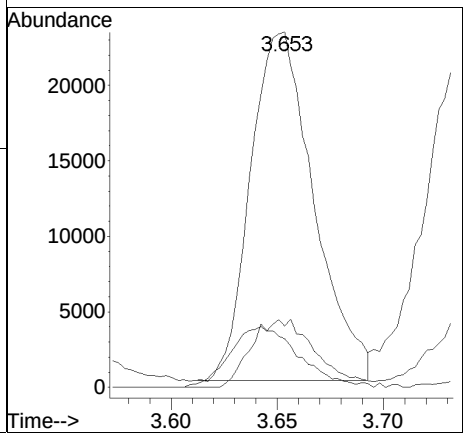


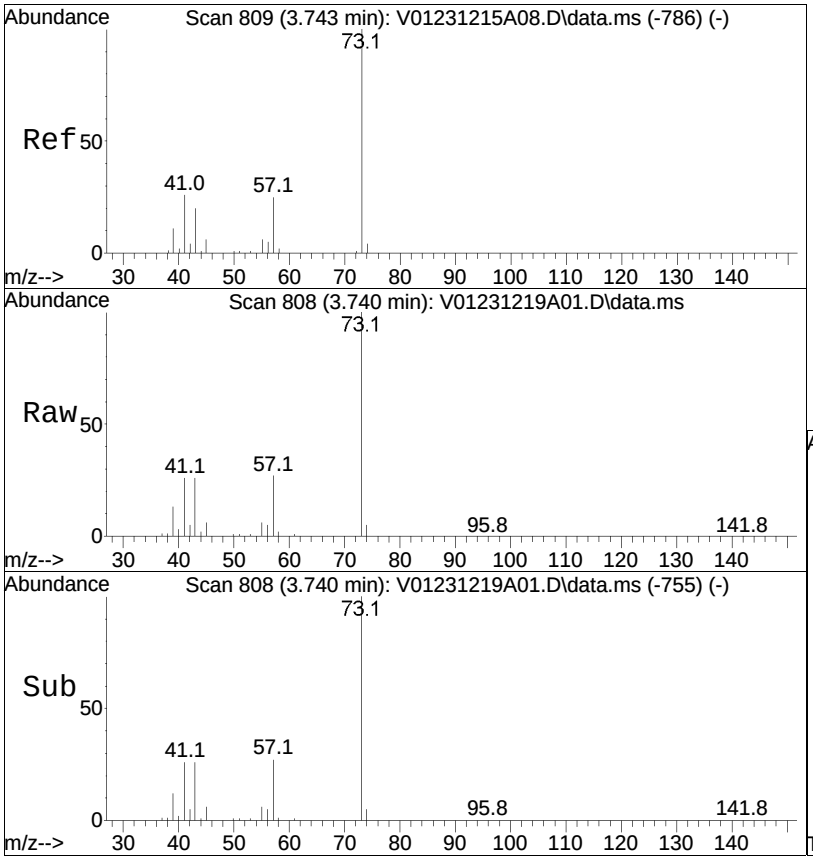


#19
Methyl acetate
Concen: 8.58 ug/L
RT: 3.653 min Scan# 777
Delta R.T. 0.000 min
Lab File: V01231219A01.D
Acq: 19 Dec 2023 5:30 am

Tgt Ion: 43 Resp: 47752

Ion	Ratio	Lower	Upper
43	100		
74	19.9	18.2	27.2
59	19.1	18.2	27.2

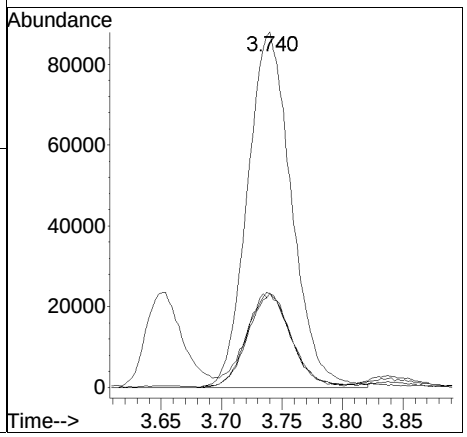


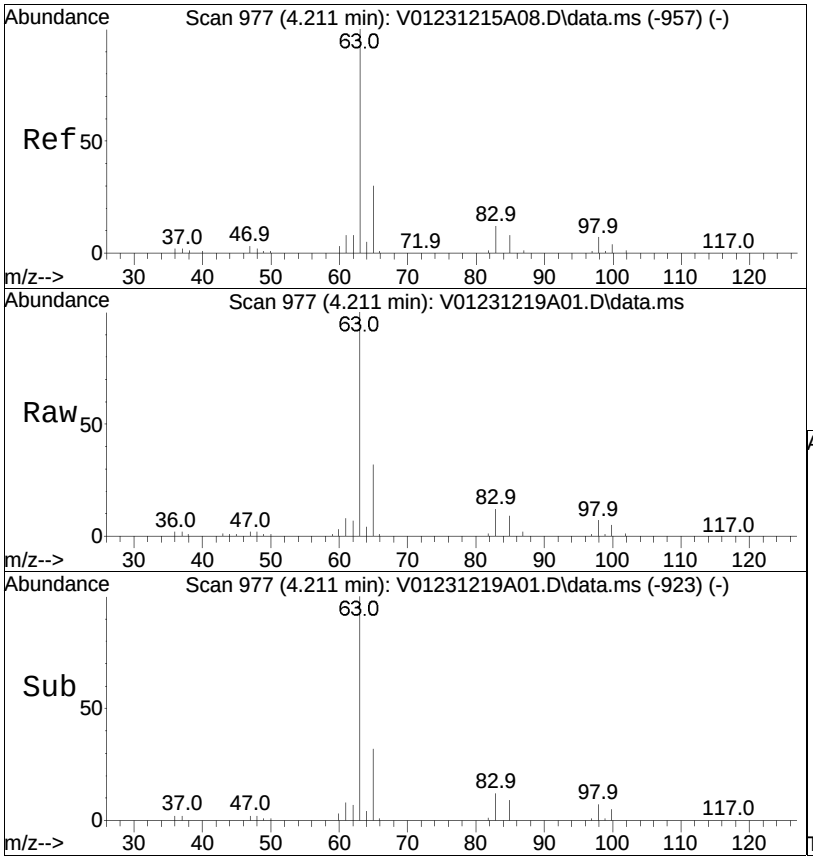


#20
Methyl tert-butyl ether
Concen: 8.96 ug/L
RT: 3.740 min Scan# 808
Delta R.T. -0.003 min
Lab File: V01231219A01.D
Acq: 19 Dec 2023 5:30 am

Tgt Ion: 73 Resp: 222914

Ion	Ratio	Lower	Upper
73	100		
57	25.7	14.8	30.6
43	26.0	15.5	32.3
41	27.0	14.1	29.3

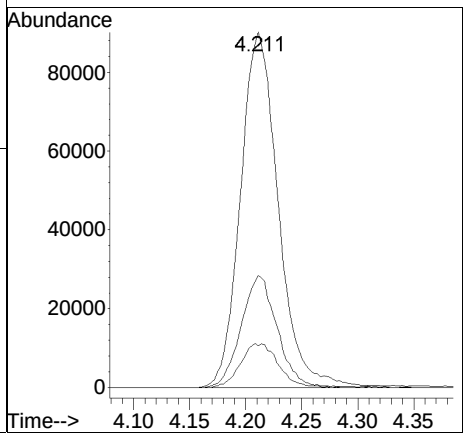


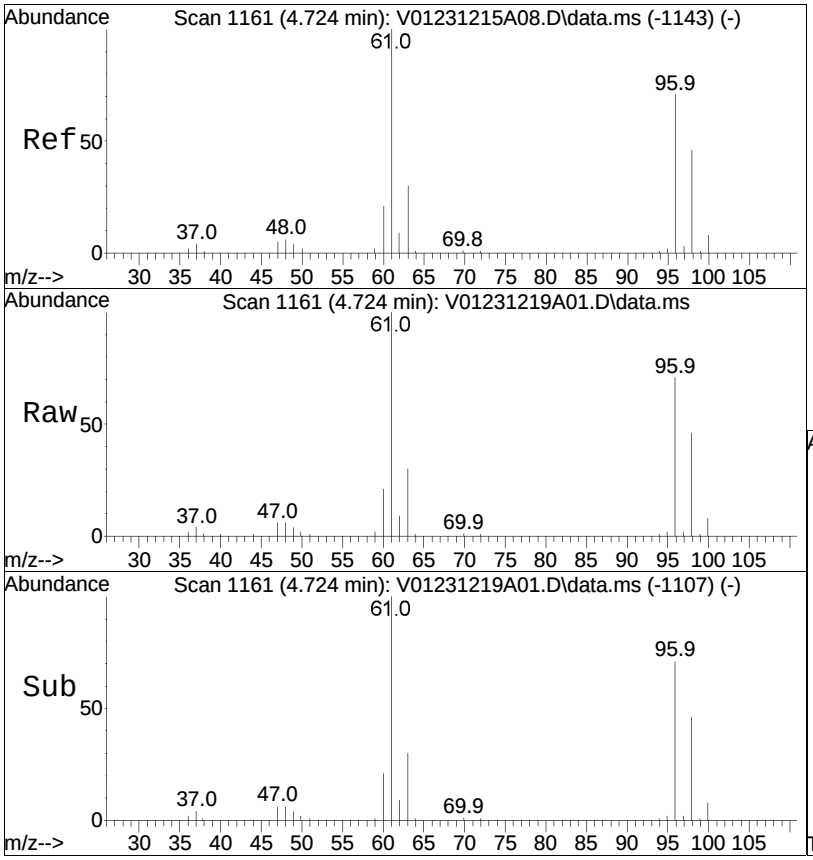


#23
1,1-Dichloroethane
Concen: 9.81 ug/L
RT: 4.211 min Scan# 977
Delta R.T. 0.000 min
Lab File: V01231219A01.D
Acq: 19 Dec 2023 5:30 am

Tgt Ion: 63 Resp: 211112

Ion	Ratio	Lower	Upper
63	100		
65	30.0	10.9	50.9
83	12.2	0.0	33.0

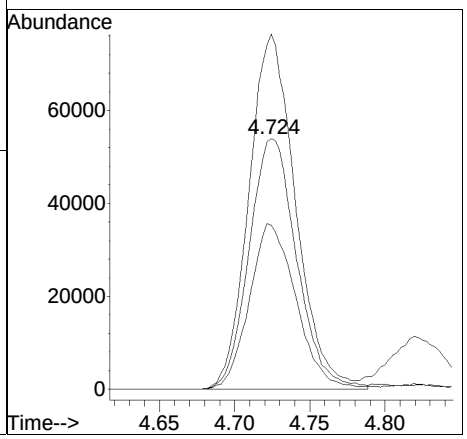


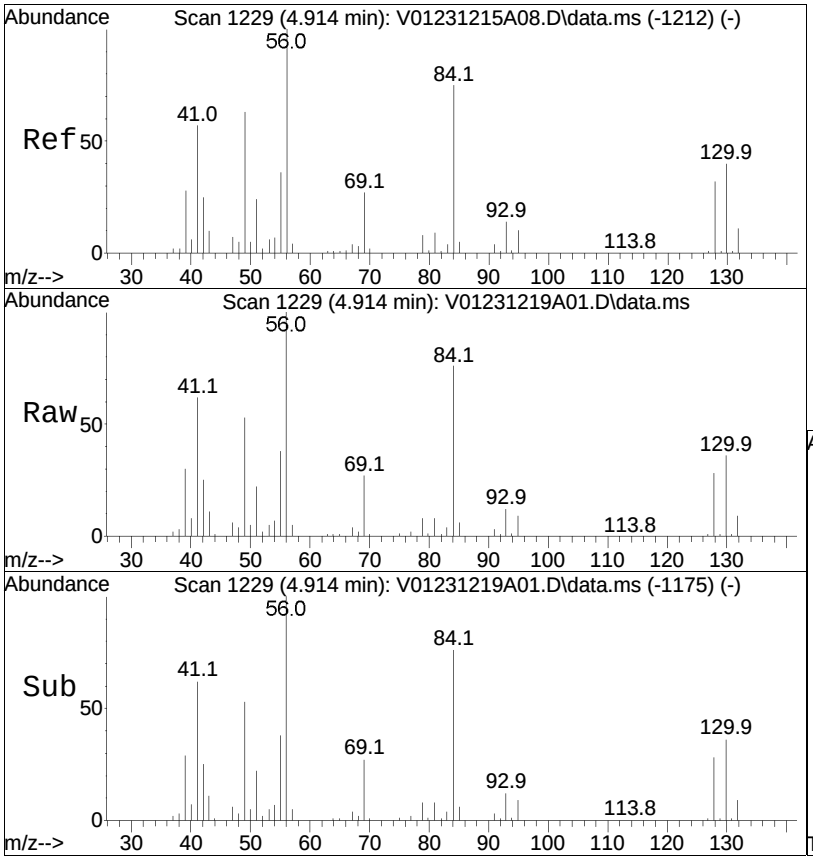


#28
cis-1,2-Dichloroethene
Concen: 9.84 ug/L
RT: 4.724 min Scan# 1161
Delta R.T. 0.000 min
Lab File: V01231219A01.D
Acq: 19 Dec 2023 5:30 am

Tgt Ion: 96 Resp: 118953

Ion	Ratio	Lower	Upper
96	100		
61	138.2	105.8	158.6
98	64.8	51.1	76.7

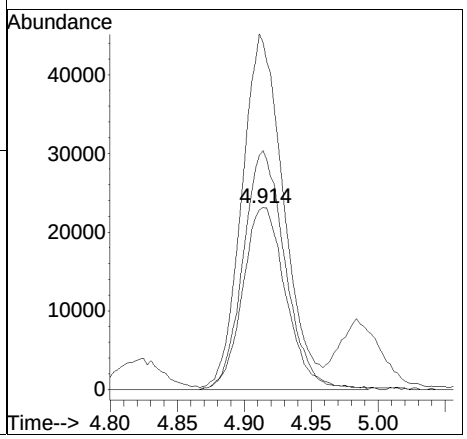


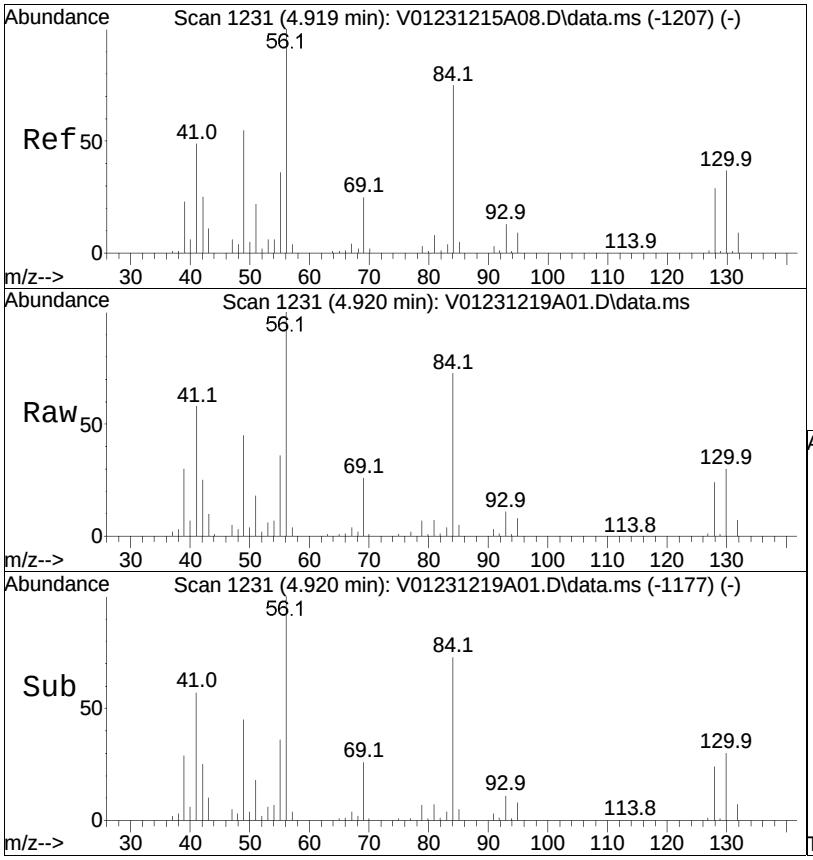


#30
Bromochloromethane
Concen: 9.60 ug/L
RT: 4.914 min Scan# 1229
Delta R.T. 0.000 min
Lab File: V01231219A01.D
Acq: 19 Dec 2023 5:30 am

Tgt Ion:128 Resp: 51867

Ion	Ratio	Lower	Upper
128	100		
49	187.1	140.4	210.6
130	127.6	103.1	154.7

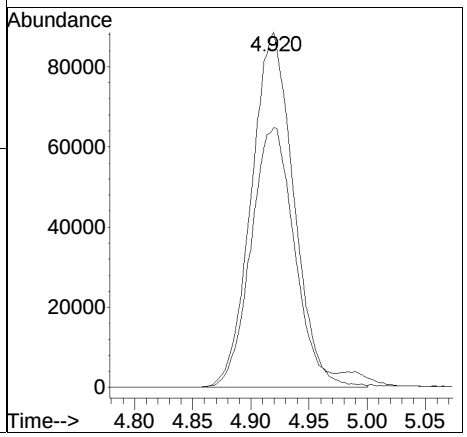


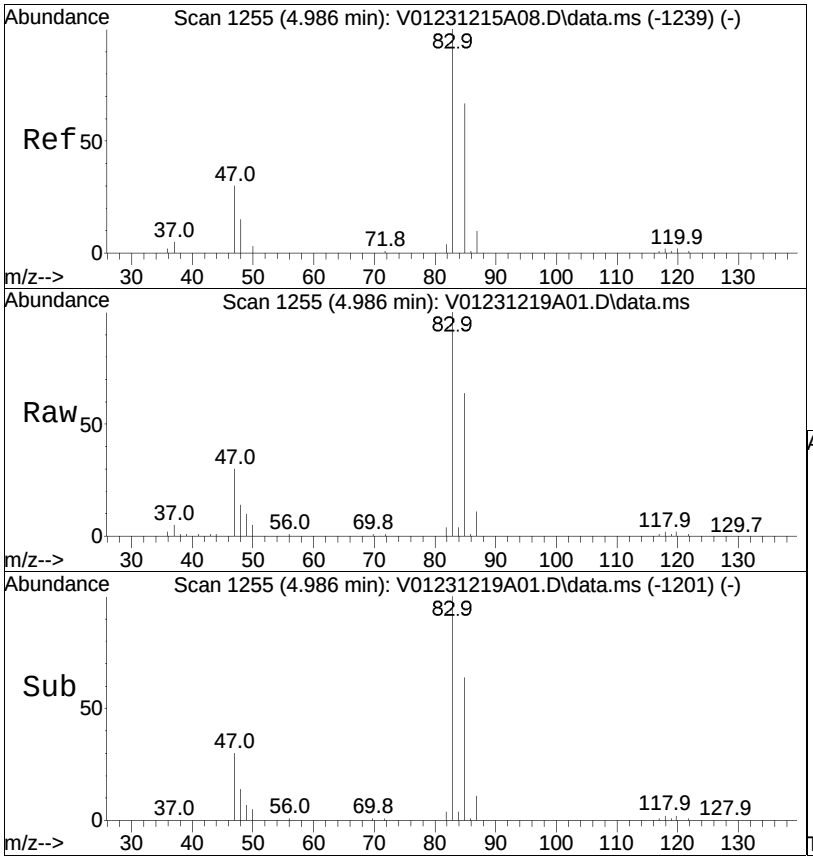


#31
Cyclohexane
Concen: 10.21 ug/L
RT: 4.920 min Scan# 1231
Delta R.T. 0.000 min
Lab File: V01231219A01.D
Acq: 19 Dec 2023 5:30 am

Tgt Ion: 56 Resp: 224816

Ion	Ratio	Lower	Upper
56	100		
84	75.1	53.6	111.4

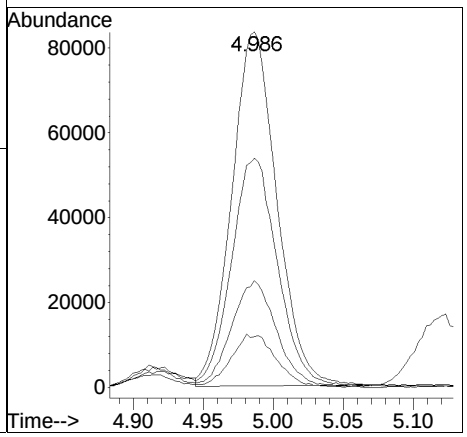


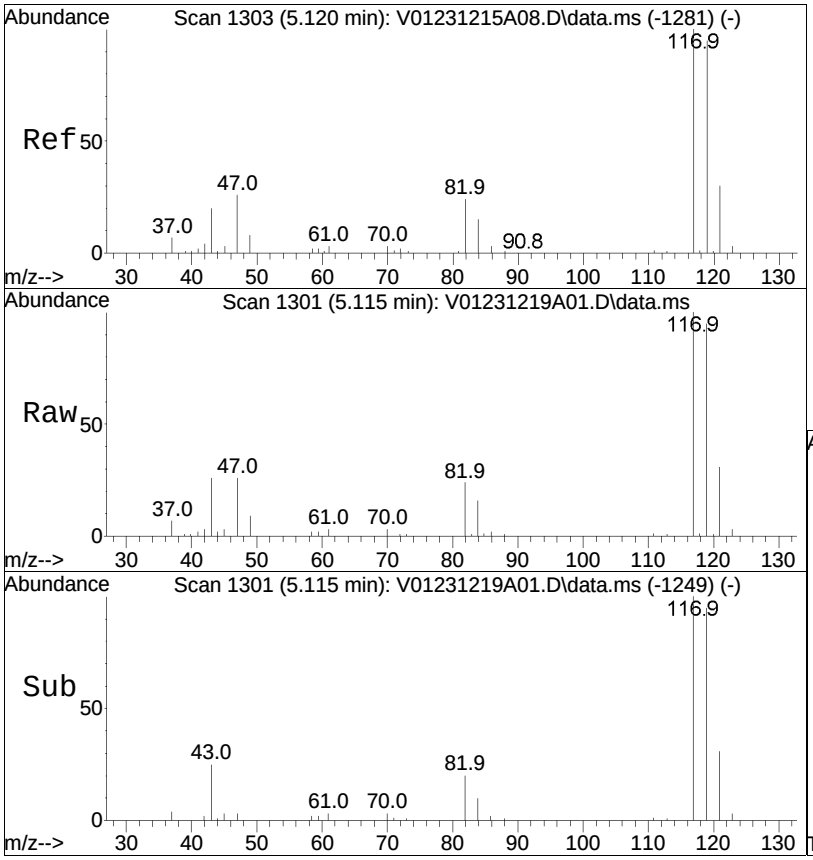


#32
Chloroform
Concen: 9.92 ug/L
RT: 4.986 min Scan# 1255
Delta R.T. 0.000 min
Lab File: V01231219A01.D
Acq: 19 Dec 2023 5:30 am

Tgt Ion: 83 Resp: 187250

Ion	Ratio	Lower	Upper
83	100		
85	65.7	42.3	87.8
47	30.0	17.8	37.0
48	15.1	9.3	19.3

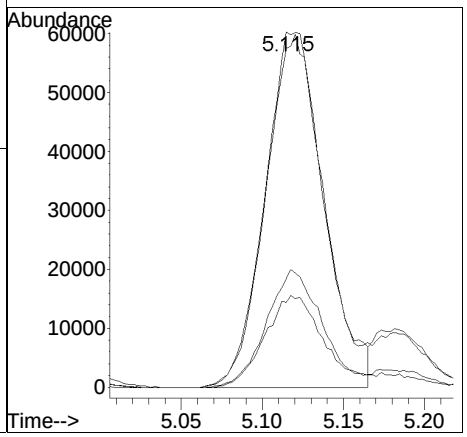


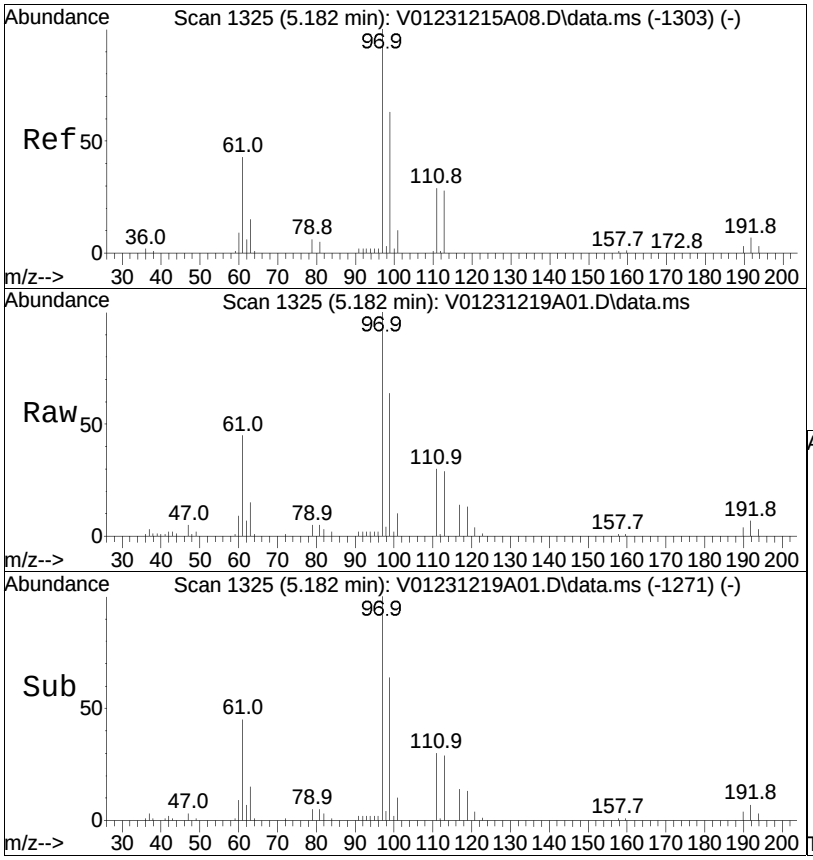


#34
Carbon tetrachloride
Concen: 10.36 ug/L
RT: 5.115 min Scan# 1301
Delta R.T. -0.006 min
Lab File: V01231219A01.D
Acq: 19 Dec 2023 5:30 am

Tgt Ion:117 Resp: 152974

Ion	Ratio	Lower	Upper
117	100		
119	95.3	62.1	128.9
121	31.1	19.8	41.0
82	26.1	17.1	35.5

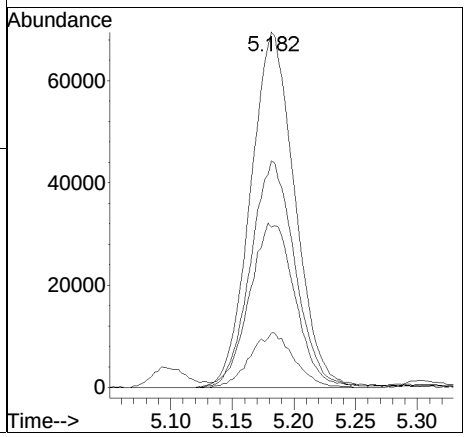


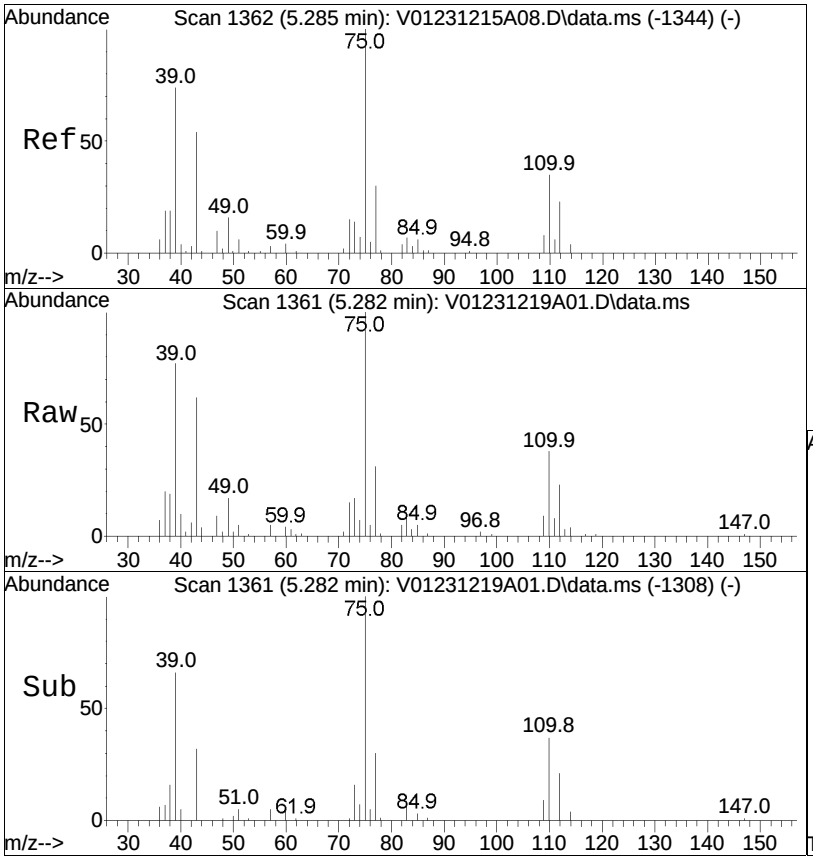


#37
1,1,1-Trichloroethane
Concen: 10.21 ug/L
RT: 5.182 min Scan# 1325
Delta R.T. 0.000 min
Lab File: V01231219A01.D
Acq: 19 Dec 2023 5:30 am

Tgt Ion: 97 Resp: 174122

Ion	Ratio	Lower	Upper
97	100		
99	64.0	41.7	86.7
61	47.2	29.4	61.2
63	15.3	9.4	19.4

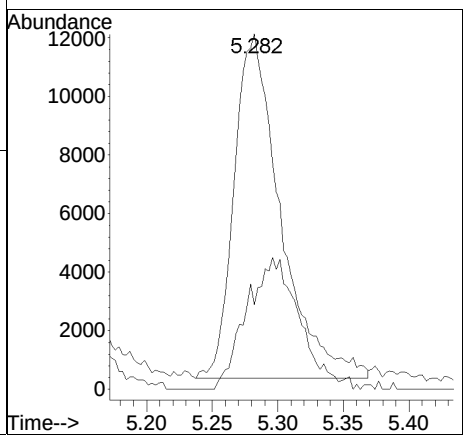


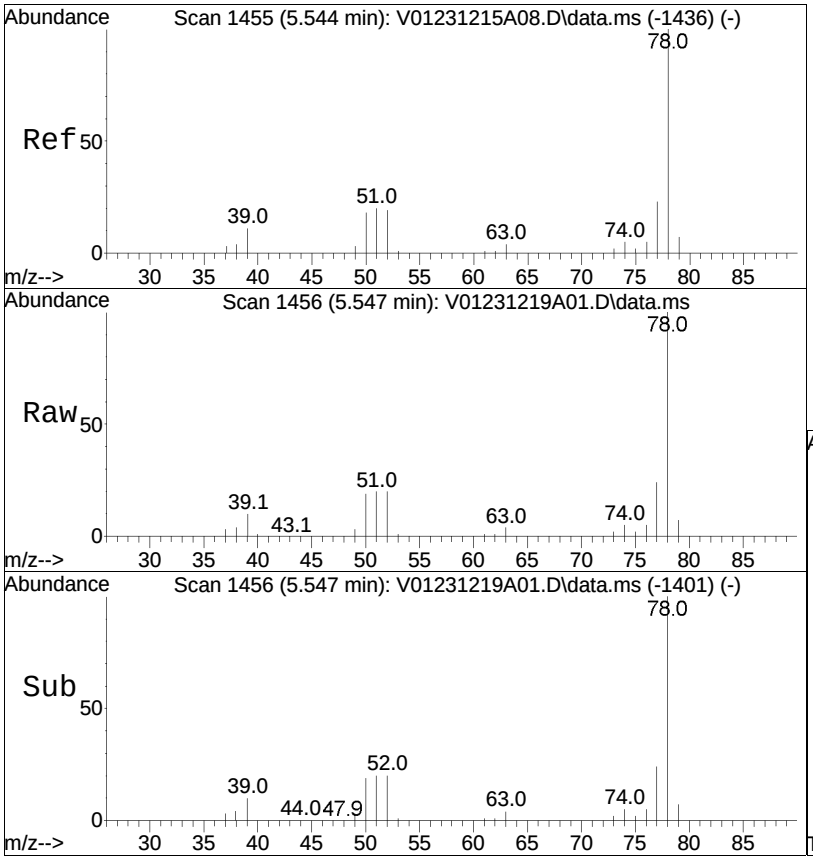


#39
2-Butanone
Concen: 8.61 ug/L
RT: 5.282 min Scan# 1361
Delta R.T. -0.003 min
Lab File: V01231219A01.D
Acq: 19 Dec 2023 5:30 am

Tgt Ion: 43 Resp: 28982

Ion	Ratio	Lower	Upper
43	100		
72	10.9	45.8	68.6#

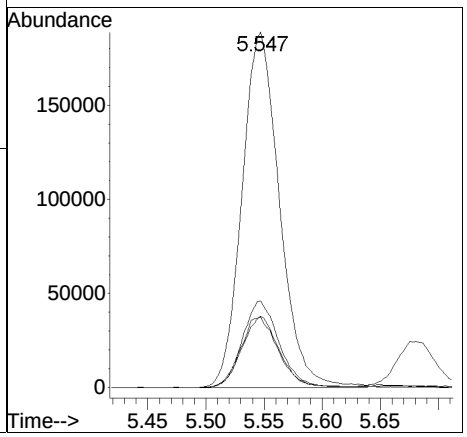


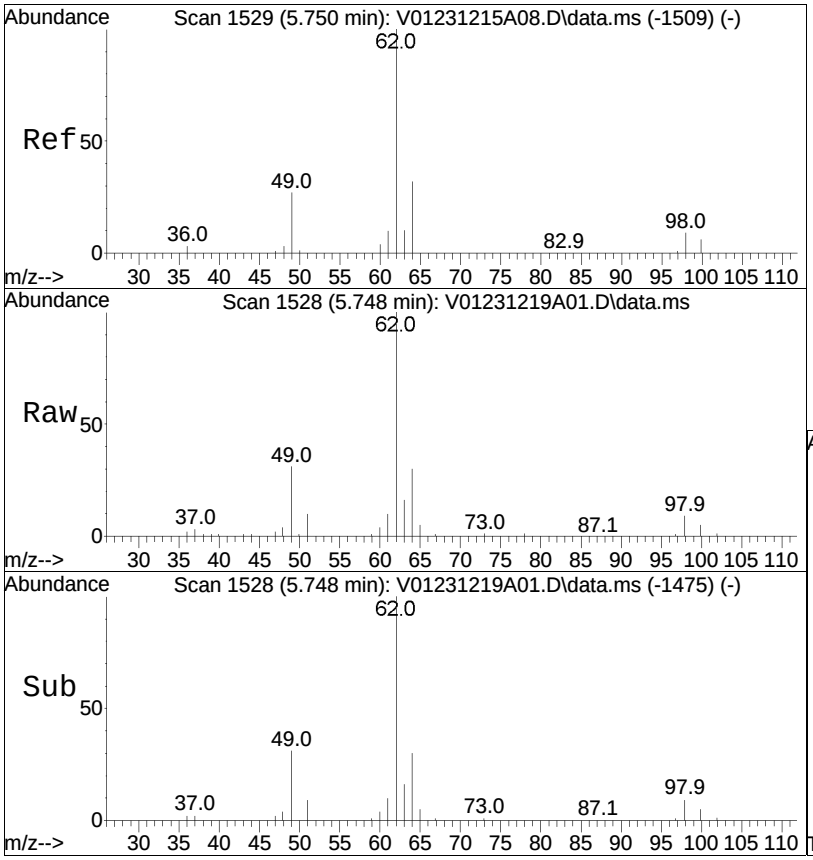


#41
Benzene
Concen: 10.05 ug/L
RT: 5.547 min Scan# 1456
Delta R.T. 0.003 min
Lab File: V01231219A01.D
Acq: 19 Dec 2023 5:30 am

Tgt Ion: 78 Resp: 423299

Ion	Ratio	Lower	Upper
78	100		
77	23.9	15.7	32.5
51	20.3	11.6	24.2
52	19.2	10.9	22.5

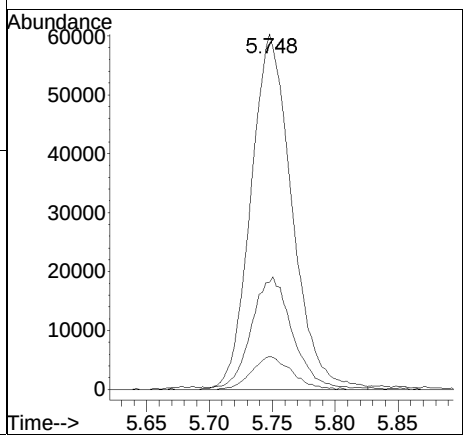


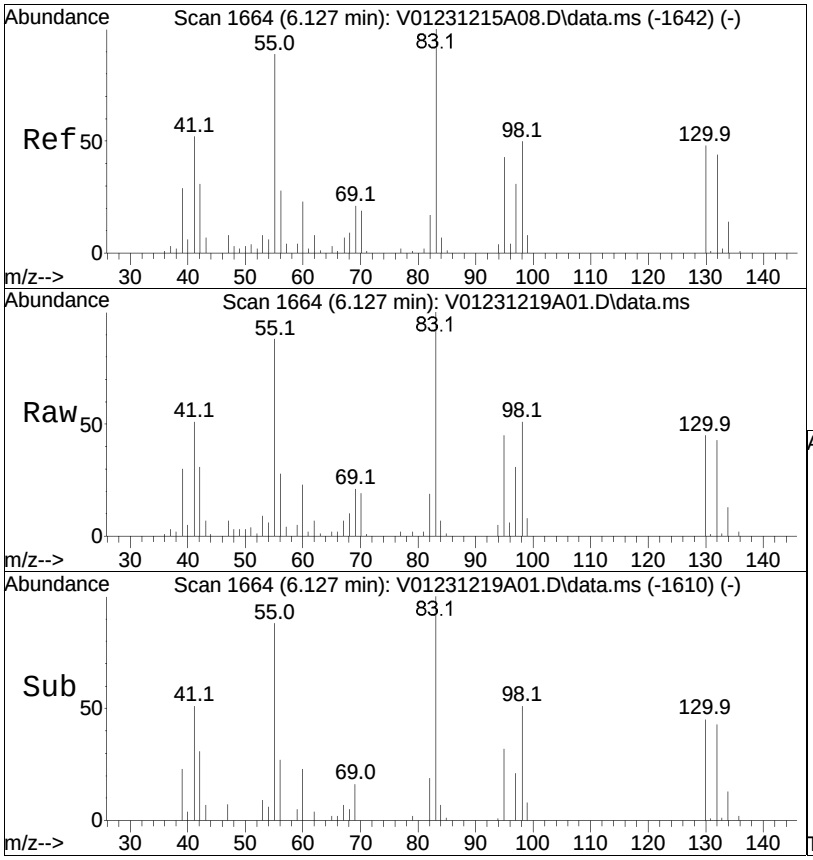


#44
1,2-Dichloroethane
Concen: 9.70 ug/L
RT: 5.748 min Scan# 1528
Delta R.T. -0.003 min
Lab File: V01231219A01.D
Acq: 19 Dec 2023 5:30 am

Tgt Ion: 62 Resp: 136596

Ion	Ratio	Lower	Upper
62	100		
64	30.1	12.1	52.1
98	9.0	0.0	28.8

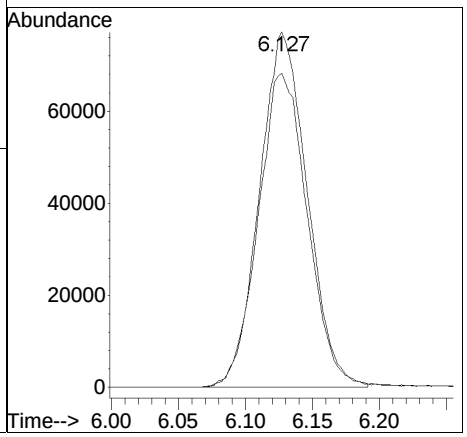


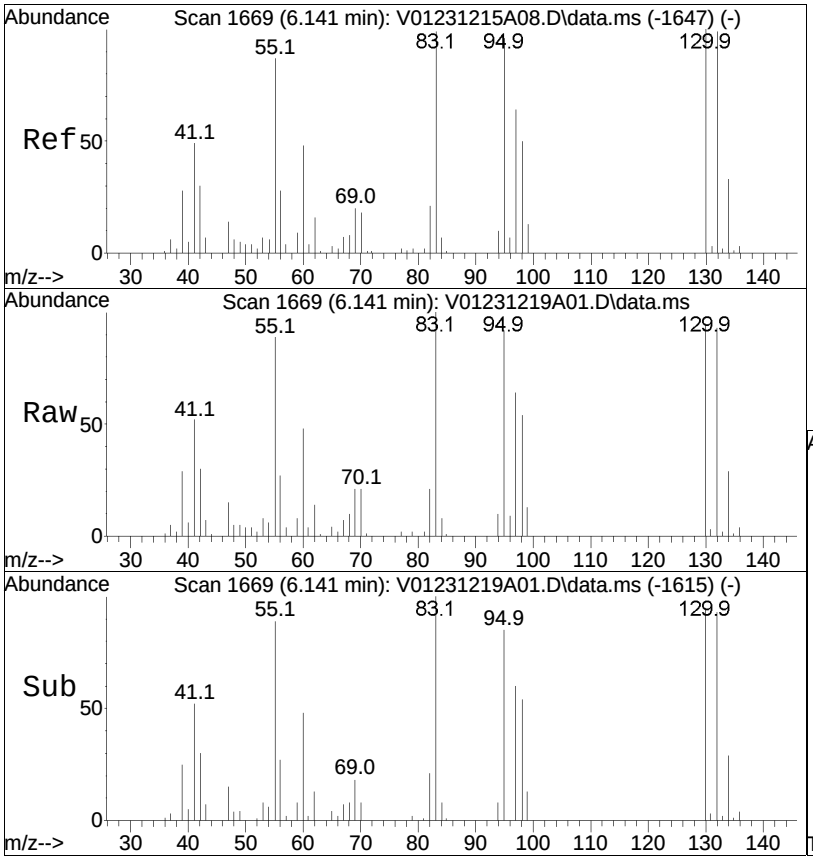


#47
Methyl cyclohexane
Concen: 10.34 ug/L
RT: 6.127 min Scan# 1664
Delta R.T. 0.000 min
Lab File: V01231219A01.D
Acq: 19 Dec 2023 5:30 am

Tgt Ion: 83 Resp: 191880

Ion	Ratio	Lower	Upper
83	100		
55	90.9	64.6	96.8

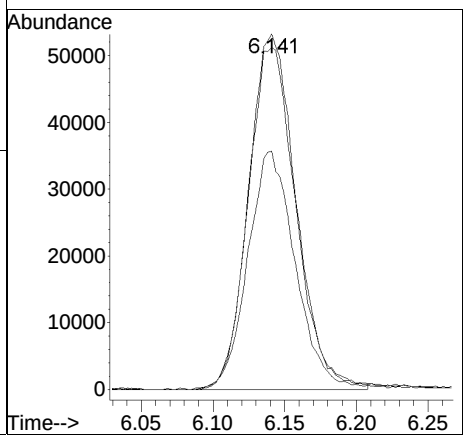


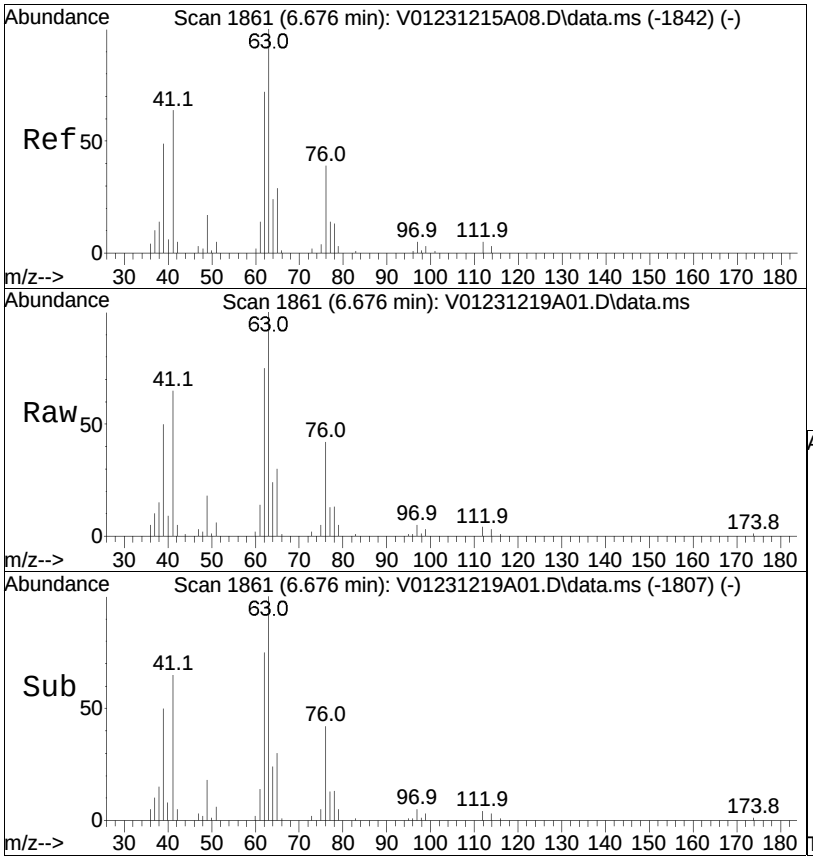


#48
Trichloroethene
Concen: 10.04 ug/L
RT: 6.141 min Scan# 1669
Delta R.T. 0.000 min
Lab File: V01231219A01.D
Acq: 19 Dec 2023 5:30 am

Tgt Ion: 95 Resp: 118936

Ion	Ratio	Lower	Upper
95	100		
97	69.4	54.4	81.6
130	103.8	80.6	120.8

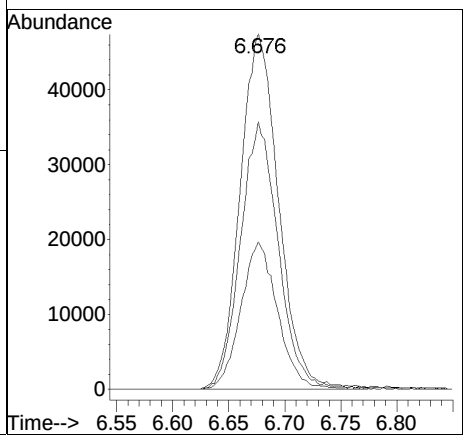


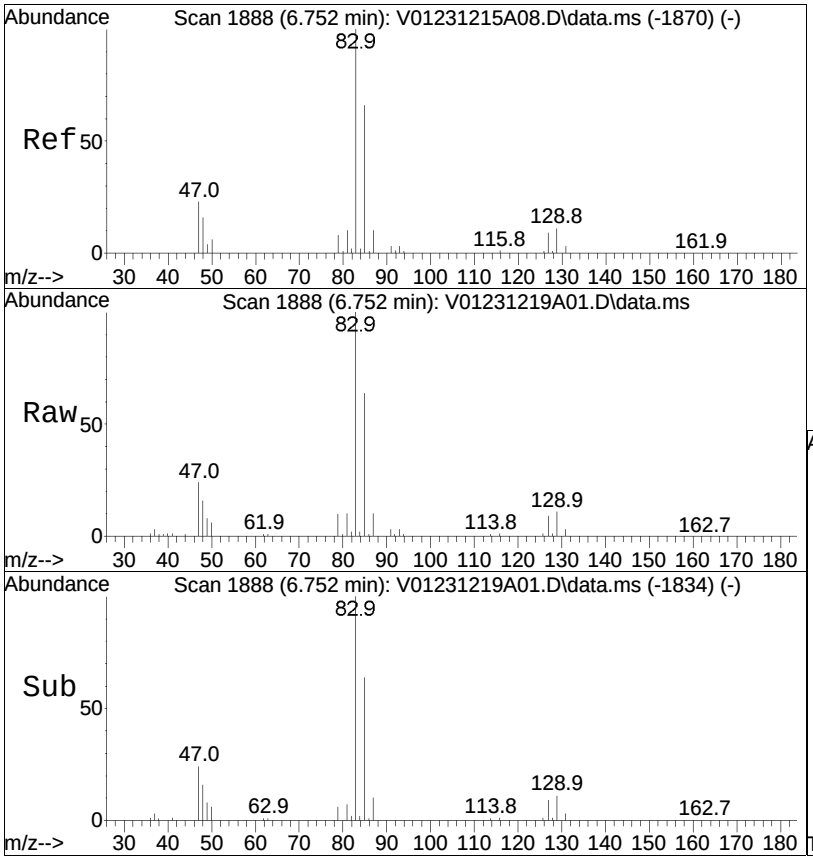


#51
1,2-Dichloropropane
Concen: 9.77 ug/L
RT: 6.676 min Scan# 1861
Delta R.T. 0.000 min
Lab File: V01231219A01.D
Acq: 19 Dec 2023 5:30 am

Tgt Ion: 63 Resp: 114175

Ion	Ratio	Lower	Upper
63	100		
62	72.9	57.2	85.8
76	39.5	33.6	50.4

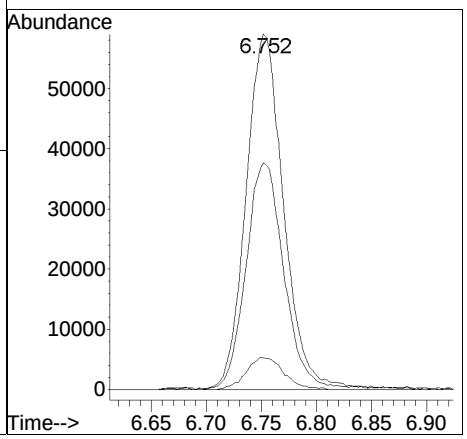


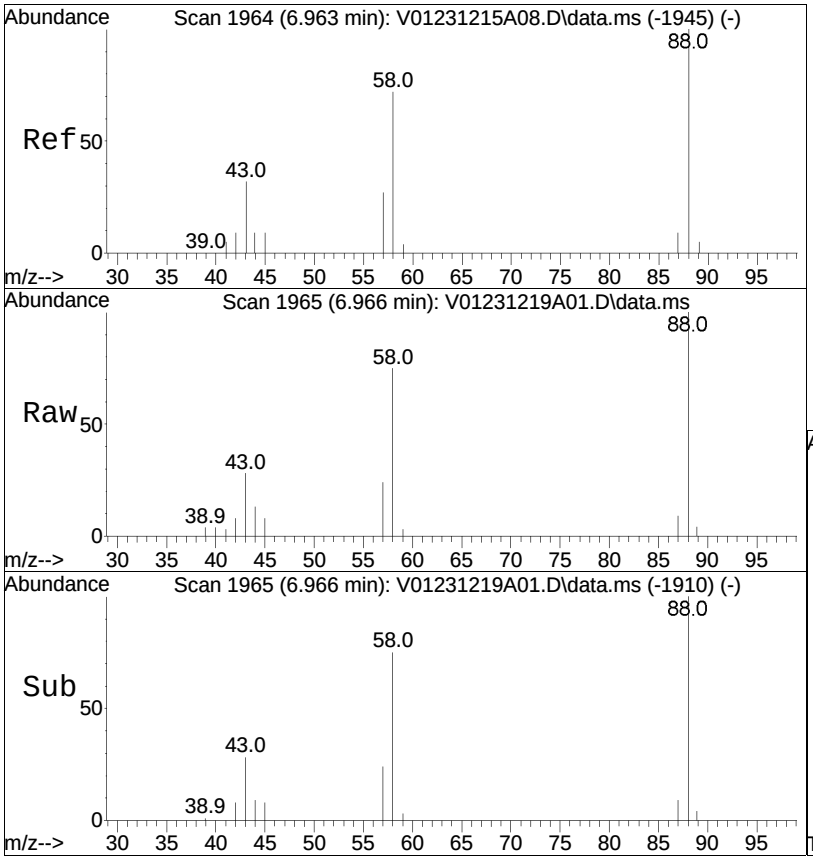


#54
Bromodichloromethane
Concen: 9.81 ug/L
RT: 6.752 min Scan# 1888
Delta R.T. 0.000 min
Lab File: V01231219A01.D
Acq: 19 Dec 2023 5:30 am

Tgt Ion: 83 Resp: 140318

Ion	Ratio	Lower	Upper
83	100		
85	64.2	52.2	78.4
127	9.0	6.9	10.3

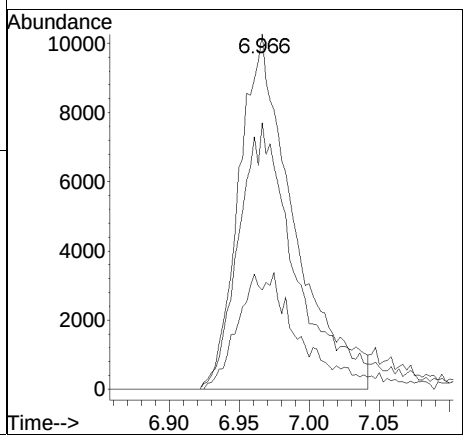


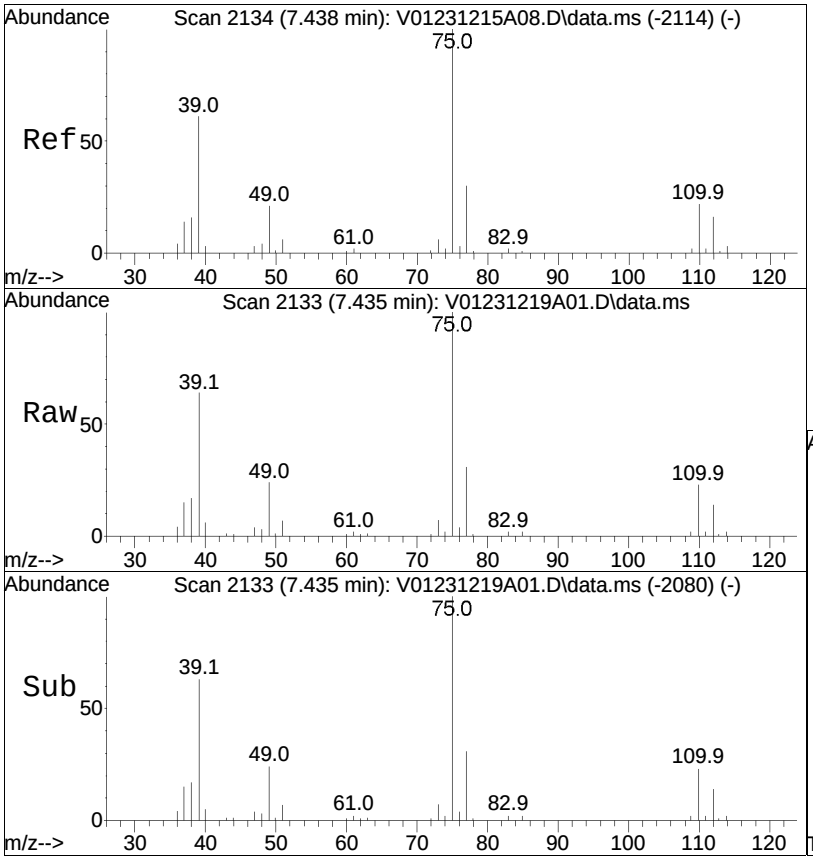


#57
1,4-Dioxane
Concen: 417.29 ug/L
RT: 6.966 min Scan# 1965
Delta R.T. 0.003 min
Lab File: V01231219A01.D
Acq: 19 Dec 2023 5:30 am

Tgt Ion: 88 Resp: 28144

Ion	Ratio	Lower	Upper
88	100		
58	79.4	54.8	82.2
43	15.0	29.3	43.9#

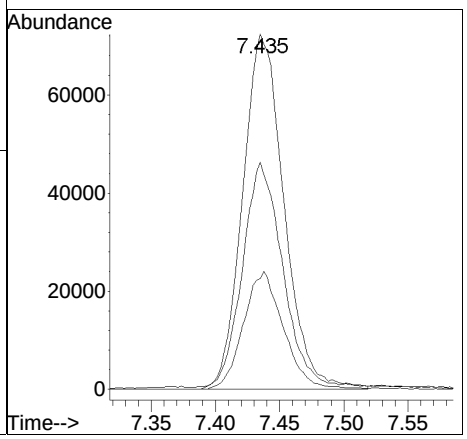


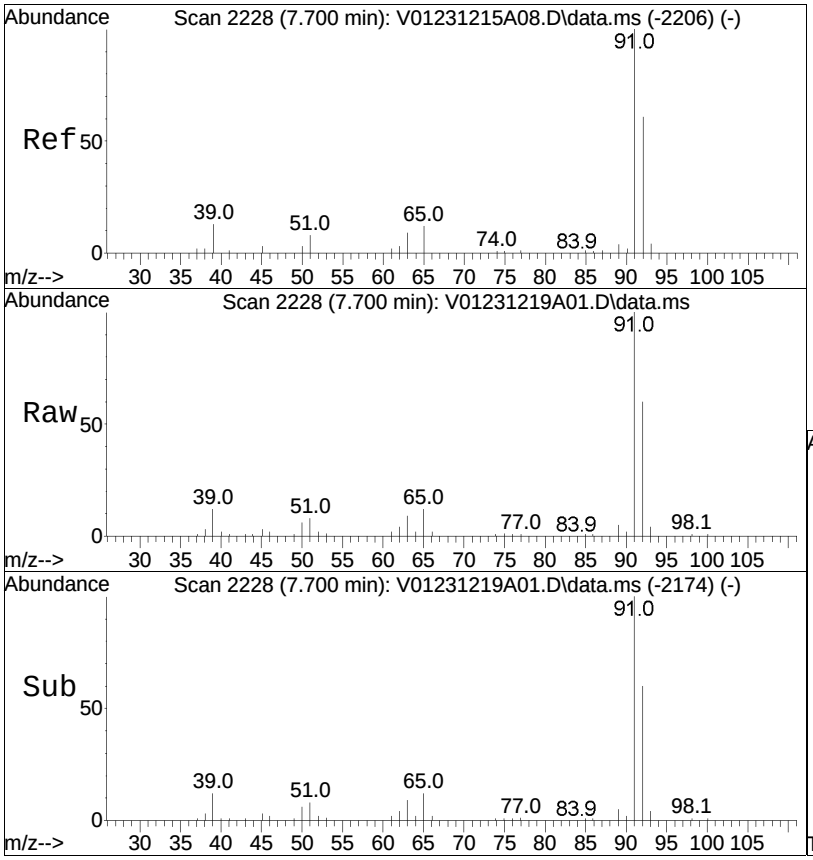


#58
cis-1,3-Dichloropropene
Concen: 9.69 ug/L
RT: 7.435 min Scan# 2133
Delta R.T. -0.003 min
Lab File: V01231219A01.D
Acq: 19 Dec 2023 5:30 am

Tgt Ion: 75 Resp: 162502

Ion	Ratio	Lower	Upper
75	100		
77	32.1	25.1	37.7
39	60.6	42.6	63.8

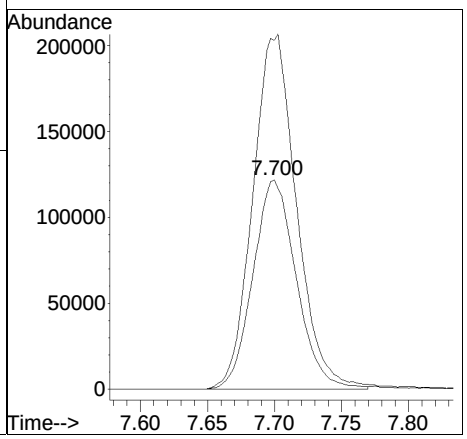


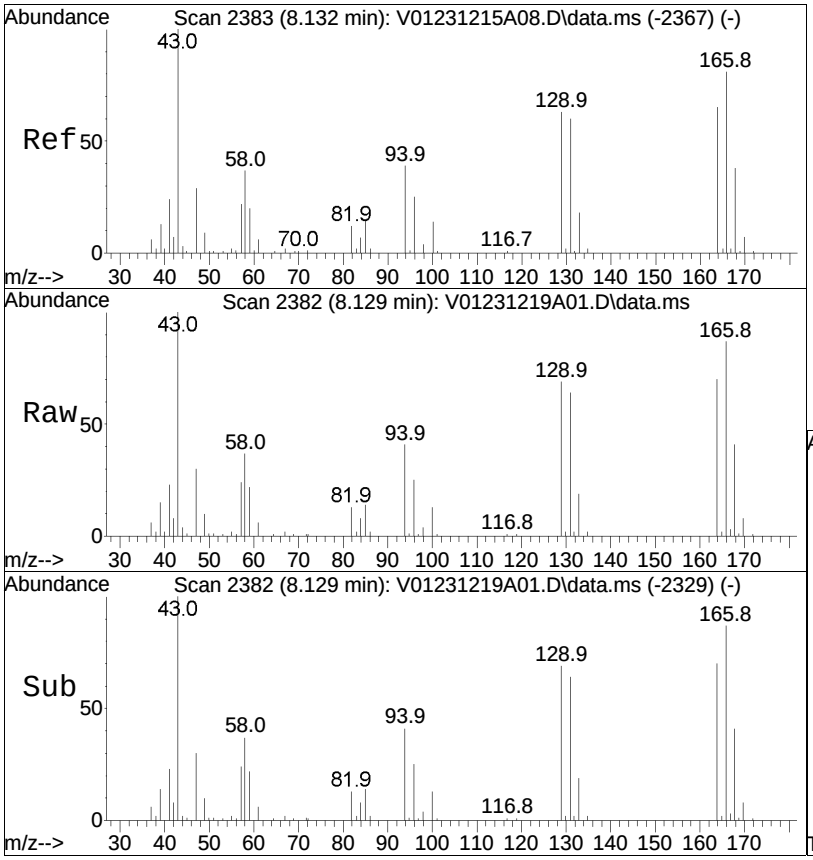


#61
Toluene
Concen: 9.62 ug/L
RT: 7.700 min Scan# 2228
Delta R.T. 0.000 min
Lab File: V01231219A01.D
Acq: 19 Dec 2023 5:30 am

Tgt Ion: 92 Resp: 275178

Ion	Ratio	Lower	Upper
92	100		
91	171.3	137.5	206.3

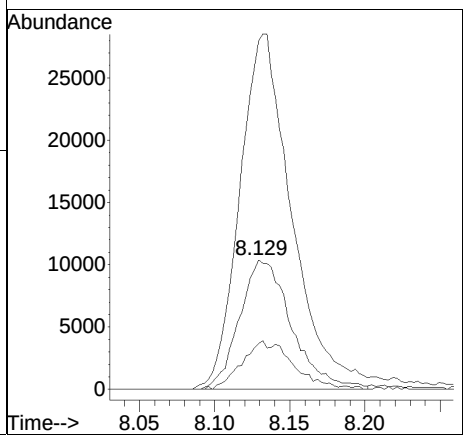


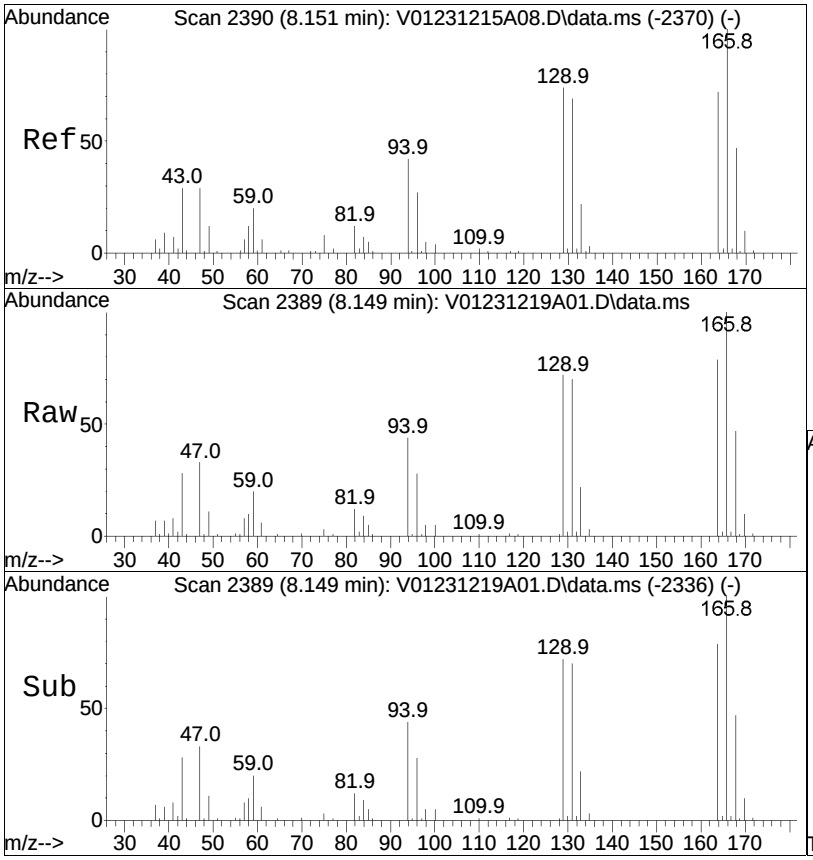


#62
4-Methyl-2-pentanone
Concen: 8.47 ug/L
RT: 8.129 min Scan# 2382
Delta R.T. -0.003 min
Lab File: V01231219A01.D
Acq: 19 Dec 2023 5:30 am

Tgt Ion: 58 Resp: 25030

Ion	Ratio	Lower	Upper
58	100		
100	20.9	31.8	47.6#
43	277.2	212.5	318.7

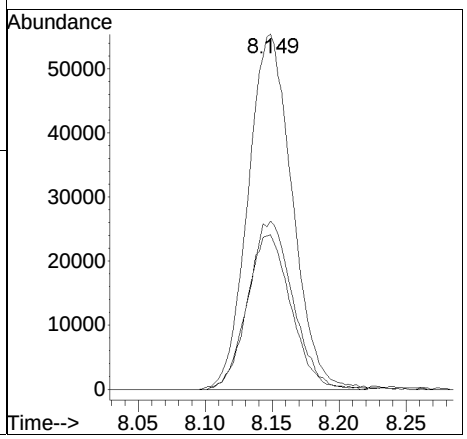


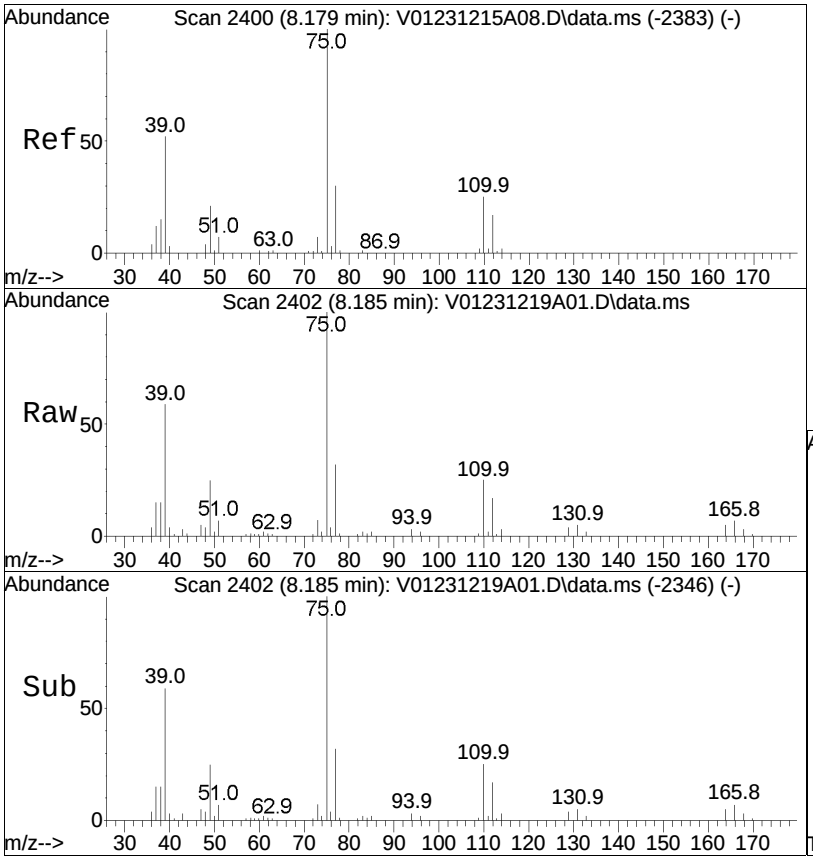


#63
Tetrachloroethene
Concen: 10.04 ug/L
RT: 8.149 min Scan# 2389
Delta R.T. -0.003 min
Lab File: V01231219A01.D
Acq: 19 Dec 2023 5:30 am

Tgt Ion:166 Resp: 127216

Ion	Ratio	Lower	Upper
166	100		
168	47.6	27.4	67.4
94	43.7	24.8	64.8

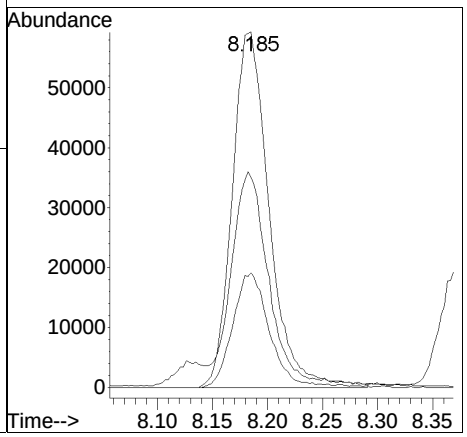


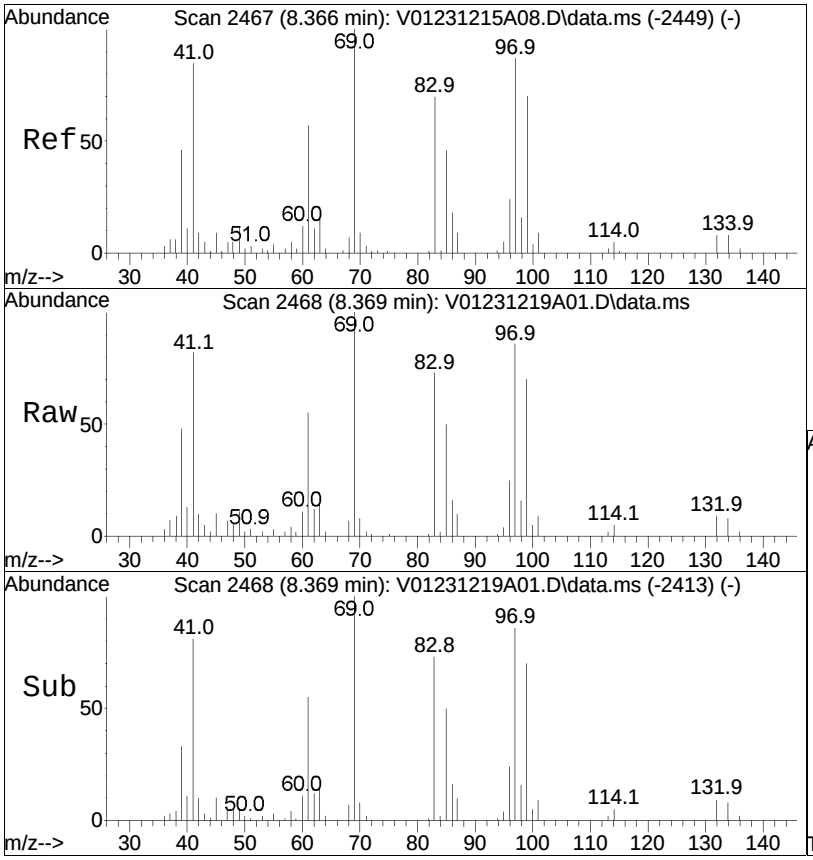


#65
trans-1,3-Dichloropropene
Concen: 9.22 ug/L
RT: 8.185 min Scan# 2402
Delta R.T. 0.006 min
Lab File: V01231219A01.D
Acq: 19 Dec 2023 5:30 am

Tgt Ion: 75 Resp: 138507

Ion	Ratio	Lower	Upper
75	100		
77	31.6	11.8	51.8
39	57.1	30.2	70.2

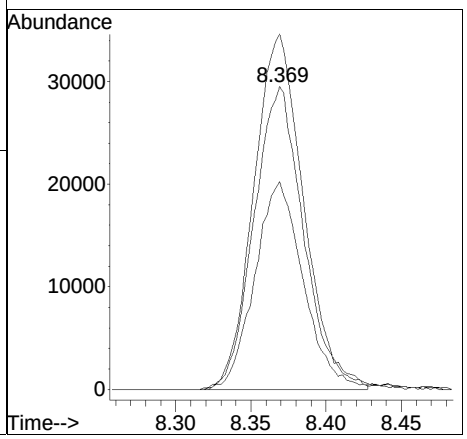


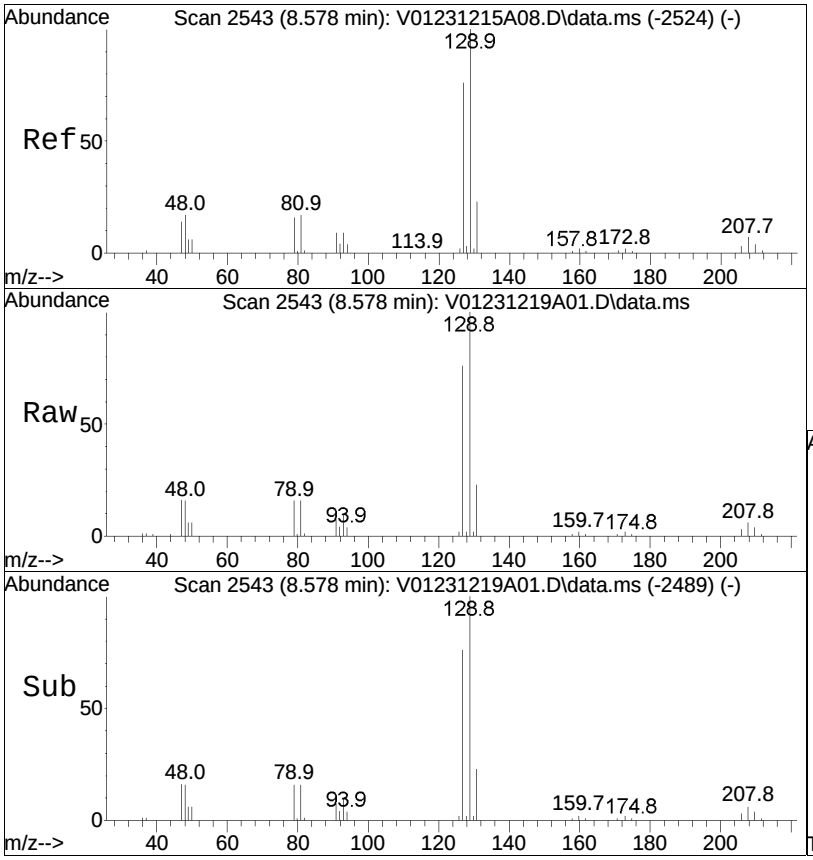


#68
1,1,2-Trichloroethane
Concen: 9.27 ug/L
RT: 8.369 min Scan# 2468
Delta R.T. 0.003 min
Lab File: V01231219A01.D
Acq: 19 Dec 2023 5:30 am

Tgt Ion: 83 Resp: 67524

Ion	Ratio	Lower	Upper
83	100		
97	118.6	96.7	136.7
85	67.5	45.3	85.3

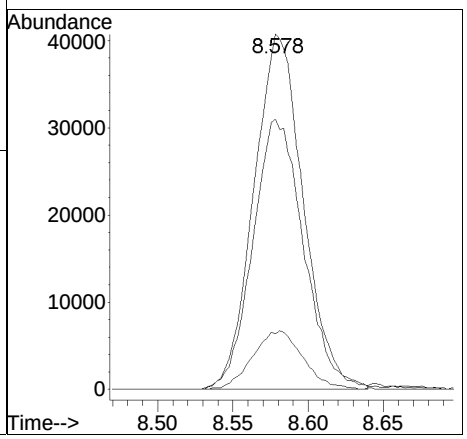


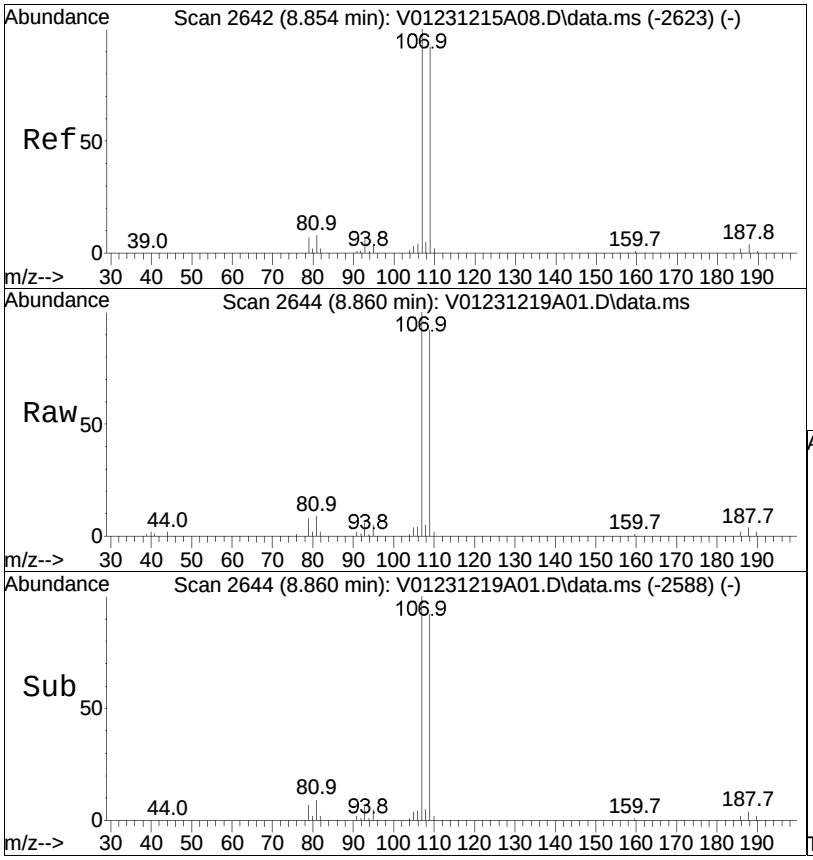


#69
Chlorodibromomethane
Concen: 8.80 ug/L
RT: 8.578 min Scan# 2543
Delta R.T. 0.000 min
Lab File: V01231219A01.D
Acq: 19 Dec 2023 5:30 am

Tgt Ion:129 Resp: 93170

Ion	Ratio	Lower	Upper
129	100		
81	16.8	0.0	37.9
127	78.2	56.6	96.6

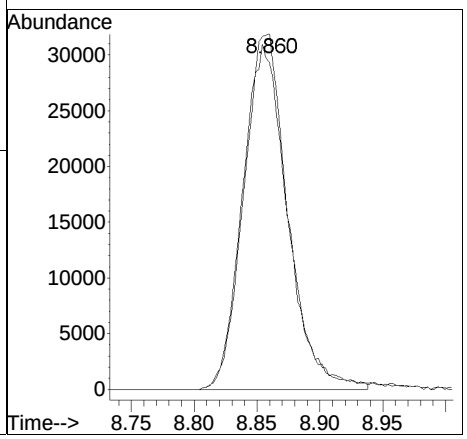


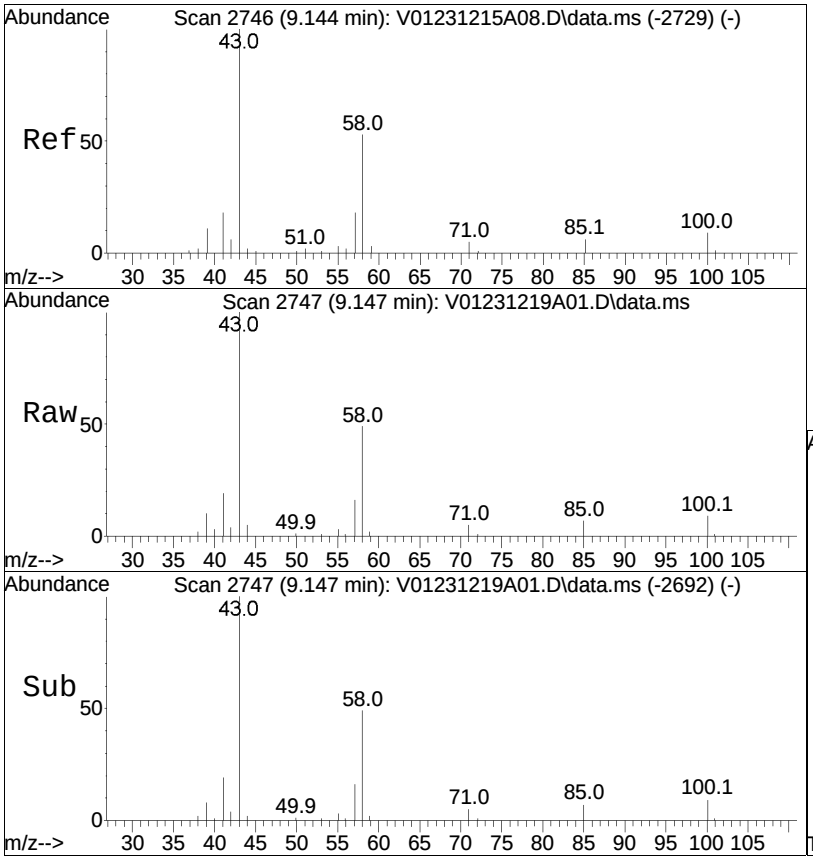


#71
1,2-Dibromoethane
Concen: 9.16 ug/L
RT: 8.860 min Scan# 2644
Delta R.T. 0.006 min
Lab File: V01231219A01.D
Acq: 19 Dec 2023 5:30 am

Tgt Ion:107 Resp: 79451

Ion	Ratio	Lower	Upper
107	100		
109	96.0	75.6	113.4

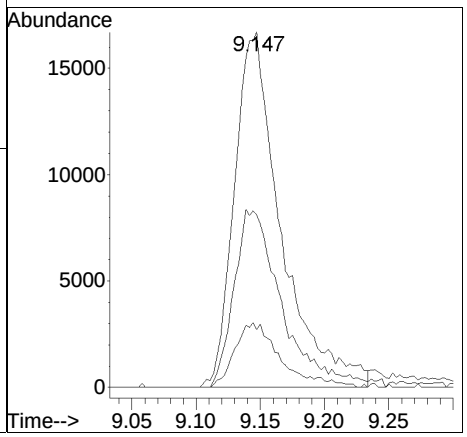


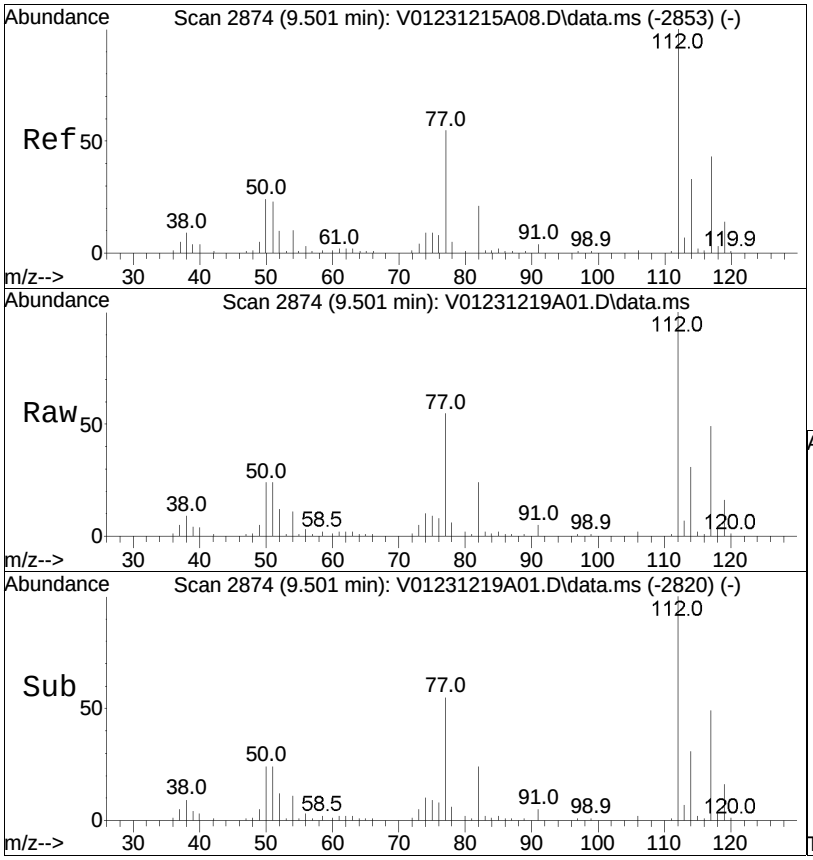


#72
2-Hexanone
Concen: 7.65 ug/L
RT: 9.147 min Scan# 2747
Delta R.T. 0.003 min
Lab File: V01231219A01.D
Acq: 19 Dec 2023 5:30 am

Tgt Ion: 43 Resp: 42325

Ion	Ratio	Lower	Upper
43	100		
58	51.0	40.8	61.2
57	17.9	14.2	21.4

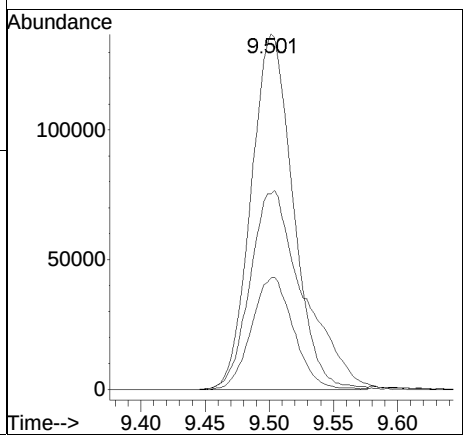


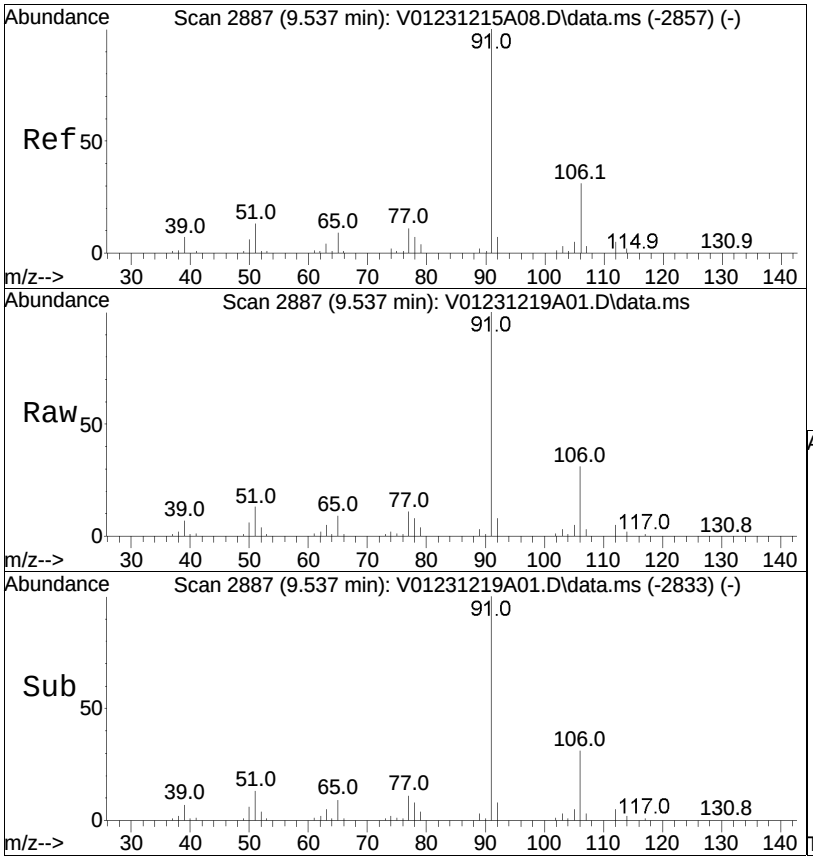


#73
Chlorobenzene
Concen: 9.58 ug/L
RT: 9.501 min Scan# 2874
Delta R.T. 0.000 min
Lab File: V01231219A01.D
Acq: 19 Dec 2023 5:30 am

Tgt Ion:112 Resp: 310598

Ion	Ratio	Lower	Upper
112	100		
77	72.3	59.8	89.6
114	31.7	25.4	38.2

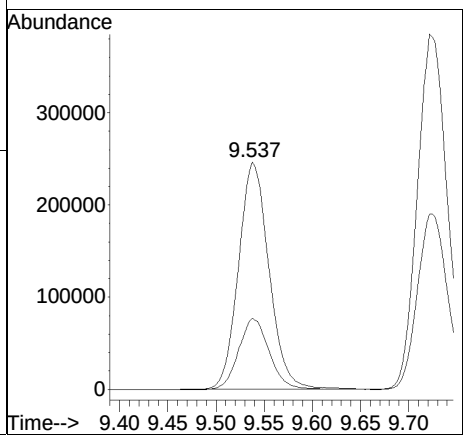


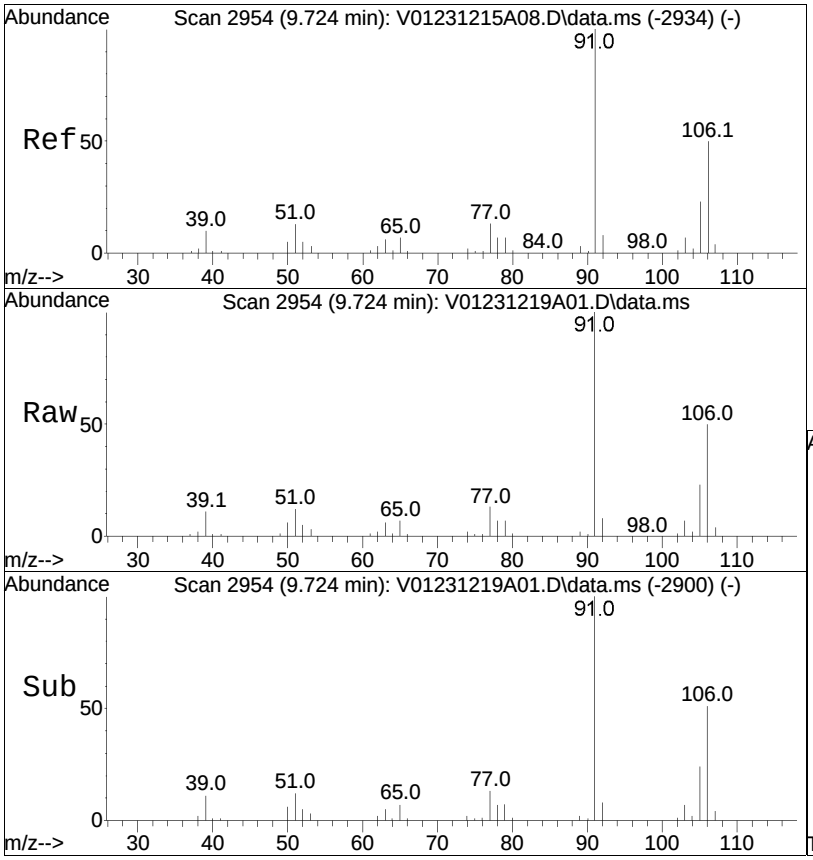


#74
Ethylbenzene
Concen: 9.86 ug/L
RT: 9.537 min Scan# 2887
Delta R.T. 0.000 min
Lab File: V01231219A01.D
Acq: 19 Dec 2023 5:30 am

Tgt Ion: 91 Resp: 542494

Ion	Ratio	Lower	Upper
91	100		
106	31.4	24.7	37.1

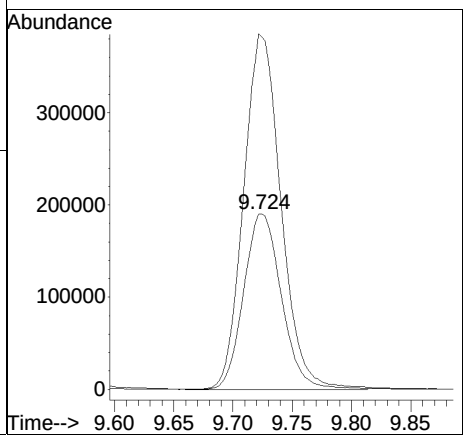


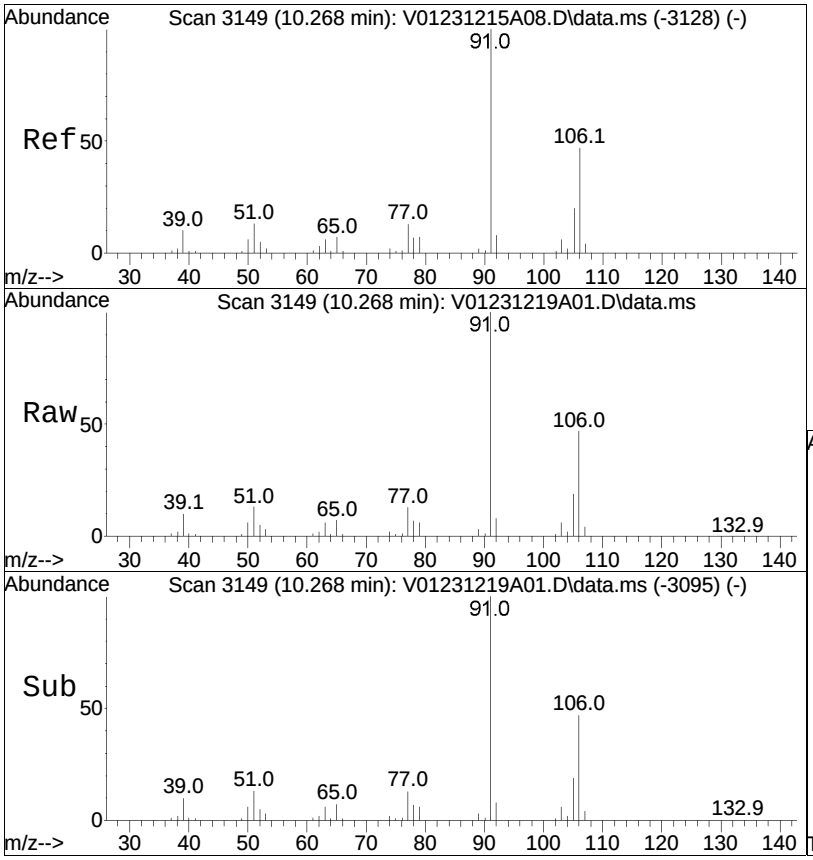


#76
p/m Xylene
Concen: 19.66 ug/L
RT: 9.724 min Scan# 2954
Delta R.T. 0.000 min
Lab File: V01231219A01.D
Acq: 19 Dec 2023 5:30 am

Tgt Ion:106 Resp: 422052

Ion	Ratio	Lower	Upper
106	100		
91	199.9	162.9	244.3

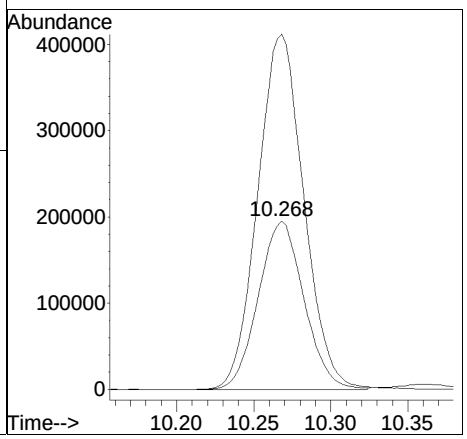


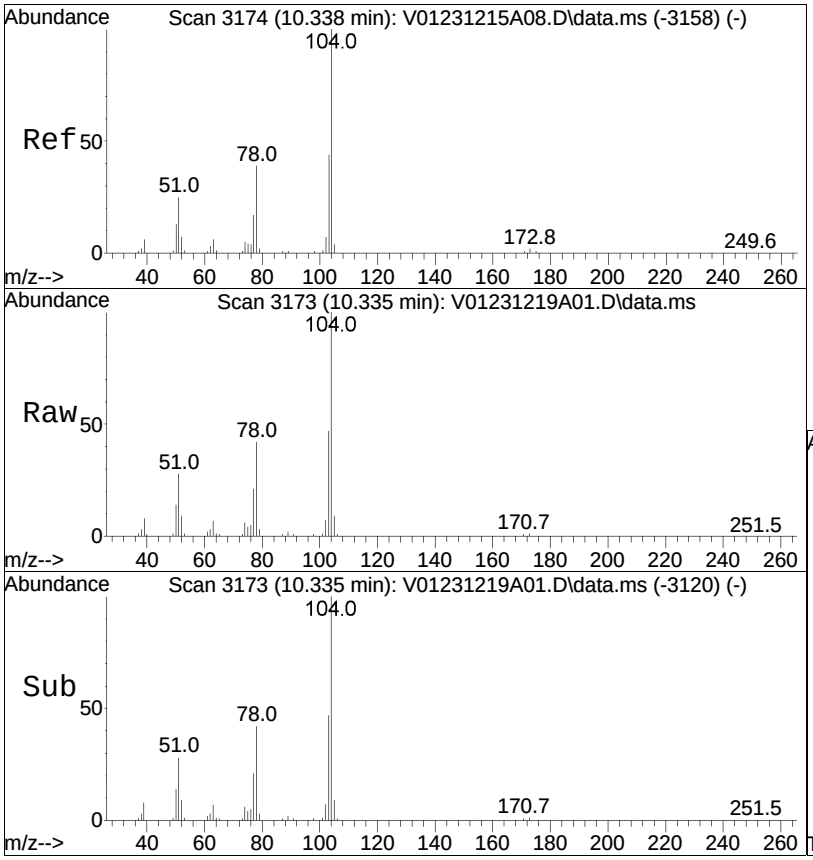


#77
o Xylene
Concen: 19.21 ug/L
RT: 10.268 min Scan# 3149
Delta R.T. 0.000 min
Lab File: V01231219A01.D
Acq: 19 Dec 2023 5:30 am

Tgt Ion:106 Resp: 401263

Ion	Ratio	Lower	Upper
106	100		
91	213.2	171.2	256.8

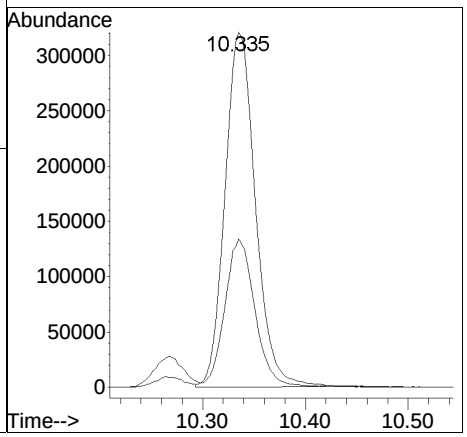


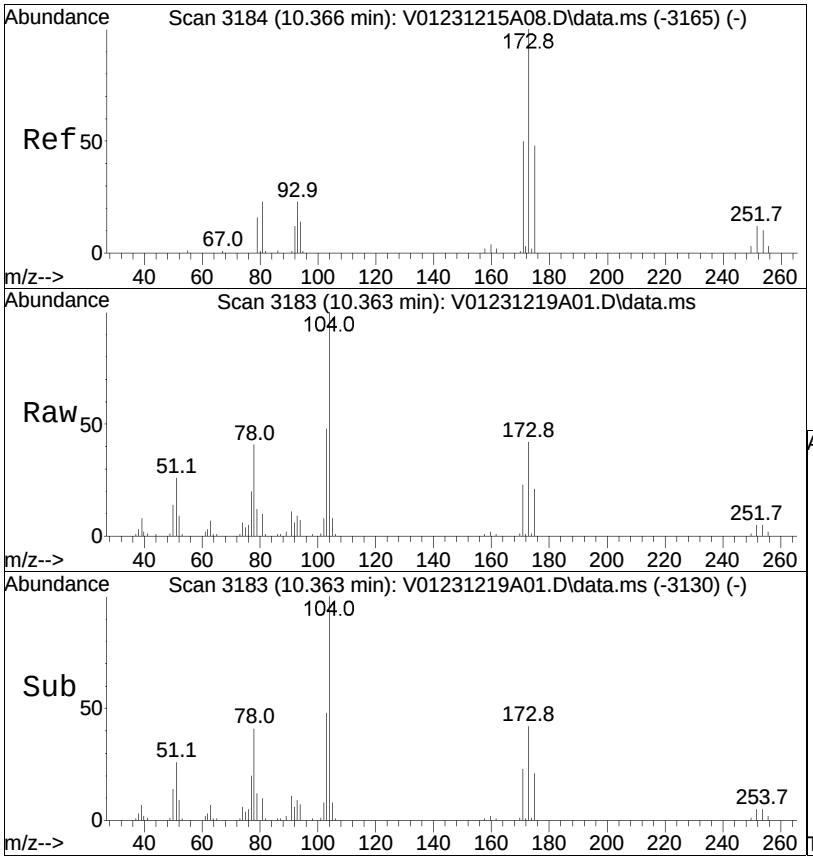


#78
Styrene
Concen: 19.36 ug/L
RT: 10.335 min Scan# 3173
Delta R.T. -0.003 min
Lab File: V01231219A01.D
Acq: 19 Dec 2023 5:30 am

Tgt Ion:104 Resp: 661798

Ion	Ratio	Lower	Upper
104	100		
78	41.1	34.2	51.4

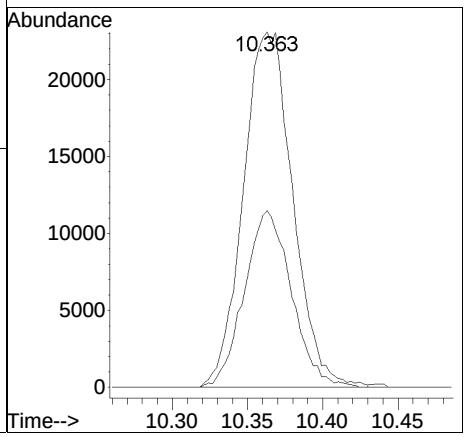


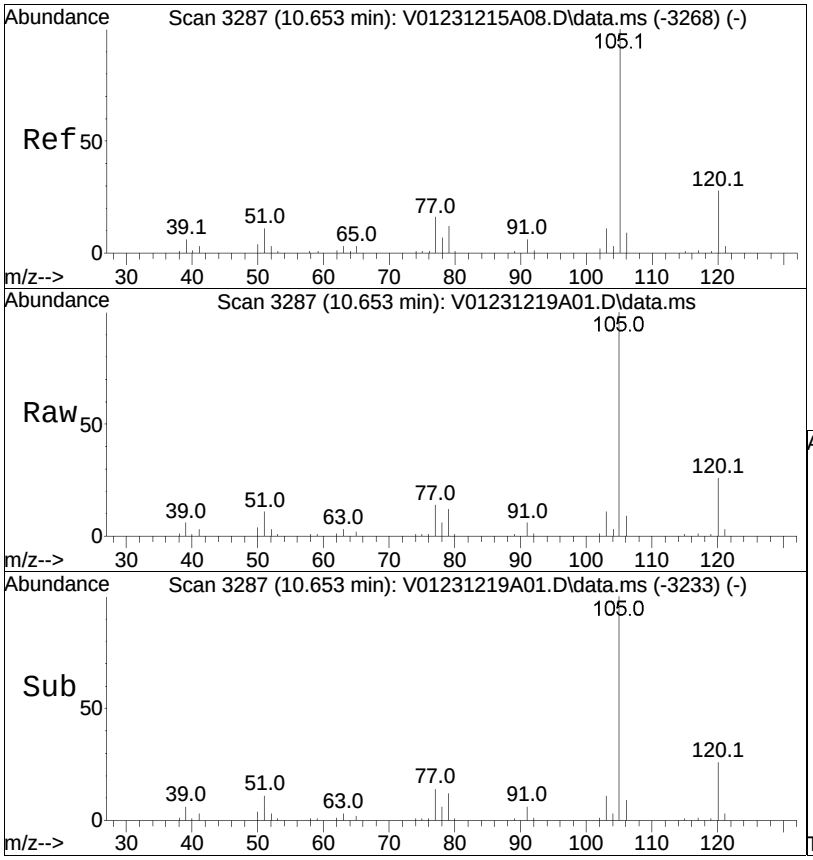


#80
Bromoform
Concen: 8.15 ug/L
RT: 10.363 min Scan# 3183
Delta R.T. -0.003 min
Lab File: V01231219A01.D
Acq: 19 Dec 2023 5:30 am

Tgt Ion:173 Resp: 53001

Ion	Ratio	Lower	Upper
173	100		
175	47.3	28.6	68.6

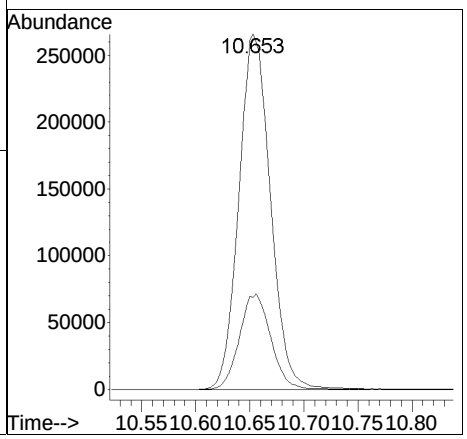


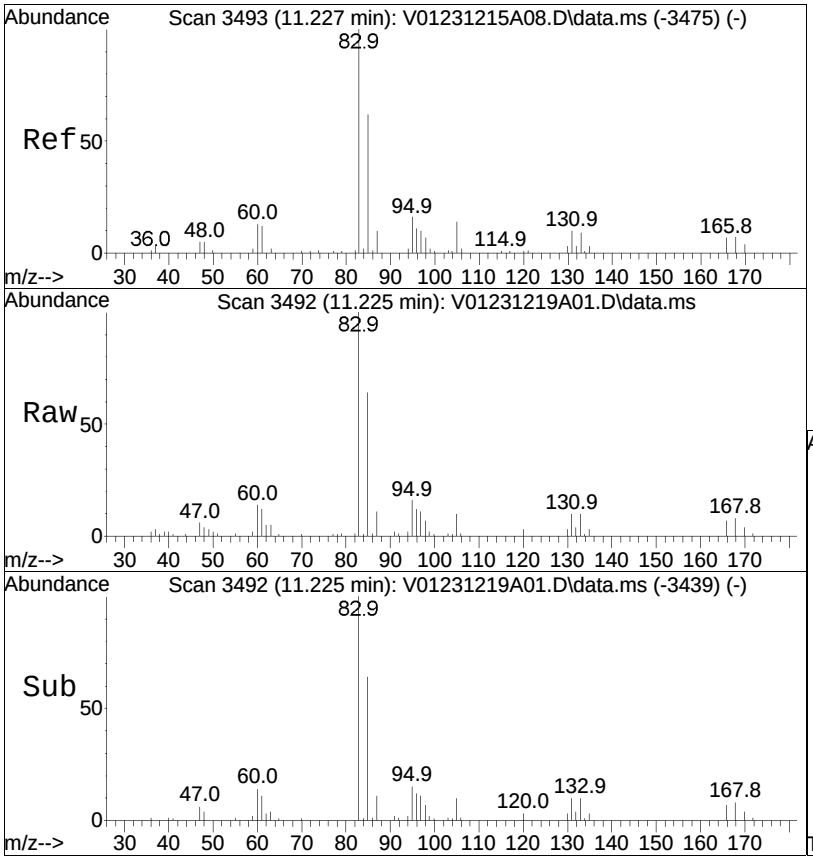


#82
Isopropylbenzene
Concen: 9.69 ug/L
RT: 10.653 min Scan# 3287
Delta R.T. 0.000 min
Lab File: V01231219A01.D
Acq: 19 Dec 2023 5:30 am

Tgt Ion:105 Resp: 539075

Ion	Ratio	Lower	Upper
105	100		
120	26.7	7.3	47.3

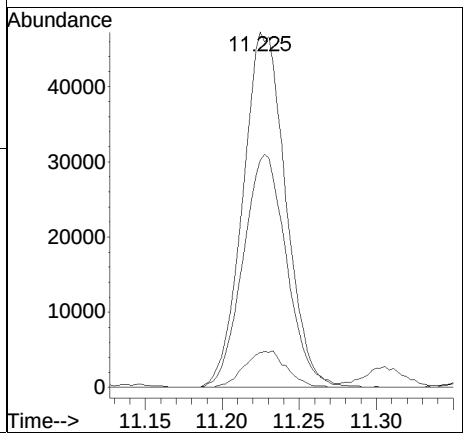


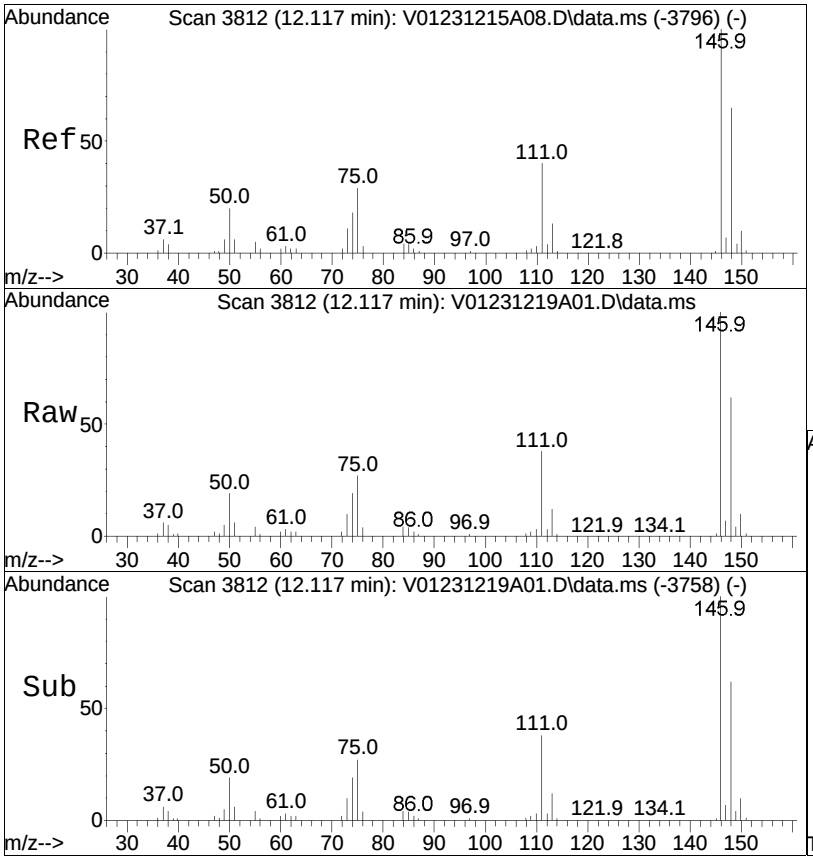


#87
1,1,2,2-Tetrachloroethane
Concen: 8.84 ug/L
RT: 11.225 min Scan# 3492
Delta R.T. -0.003 min
Lab File: V01231219A01.D
Acq: 19 Dec 2023 5:30 am

Tgt Ion: 83 Resp: 91461

Ion	Ratio	Lower	Upper
83	100		
131	10.1	0.0	30.1
85	66.6	45.8	85.8

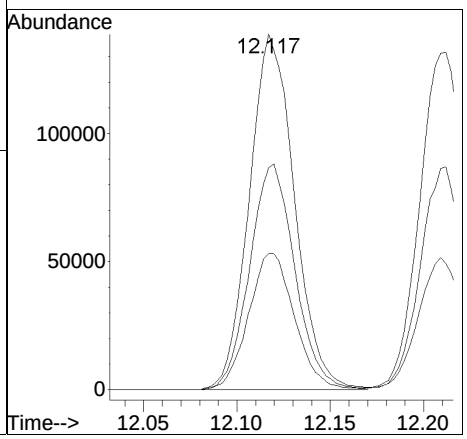


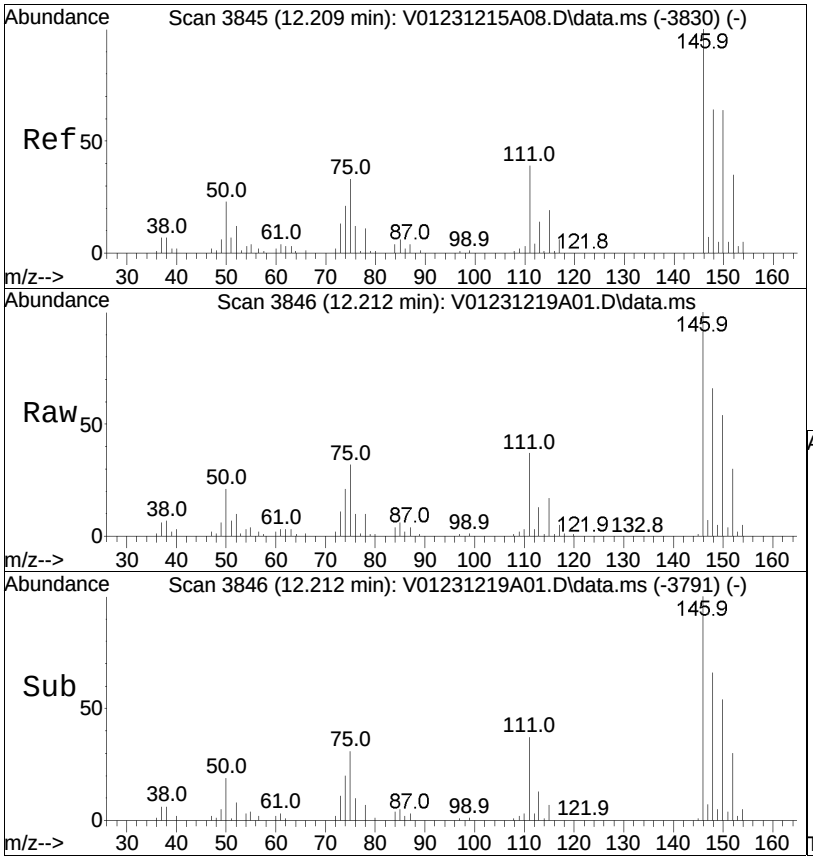


#100
1,3-Dichlorobenzene
Concen: 9.43 ug/L
RT: 12.117 min Scan# 3812
Delta R.T. 0.000 min
Lab File: V01231219A01.D
Acq: 19 Dec 2023 5:30 am

Tgt Ion:146 Resp: 232817

Ion	Ratio	Lower	Upper
146	100		
111	38.9	25.9	53.9
148	63.4	41.5	86.3

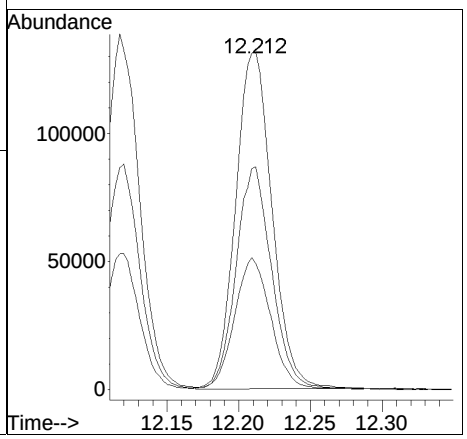


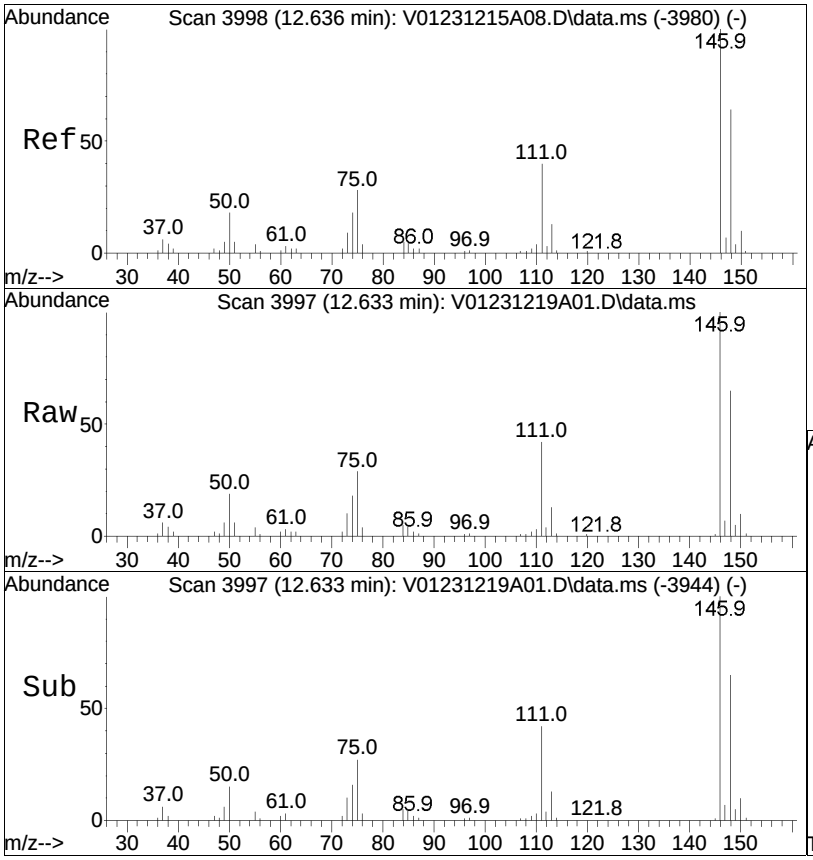


#101
1,4-Dichlorobenzene
Concen: 9.27 ug/L
RT: 12.212 min Scan# 3846
Delta R.T. 0.003 min
Lab File: V01231219A01.D
Acq: 19 Dec 2023 5:30 am

Tgt Ion:146 Resp: 232816

Ion	Ratio	Lower	Upper
146	100		
111	38.9	31.7	47.5
148	64.1	51.5	77.3

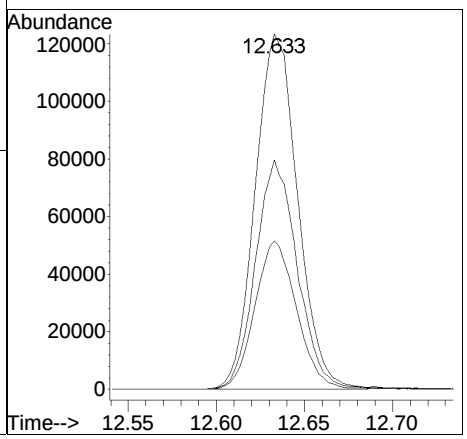


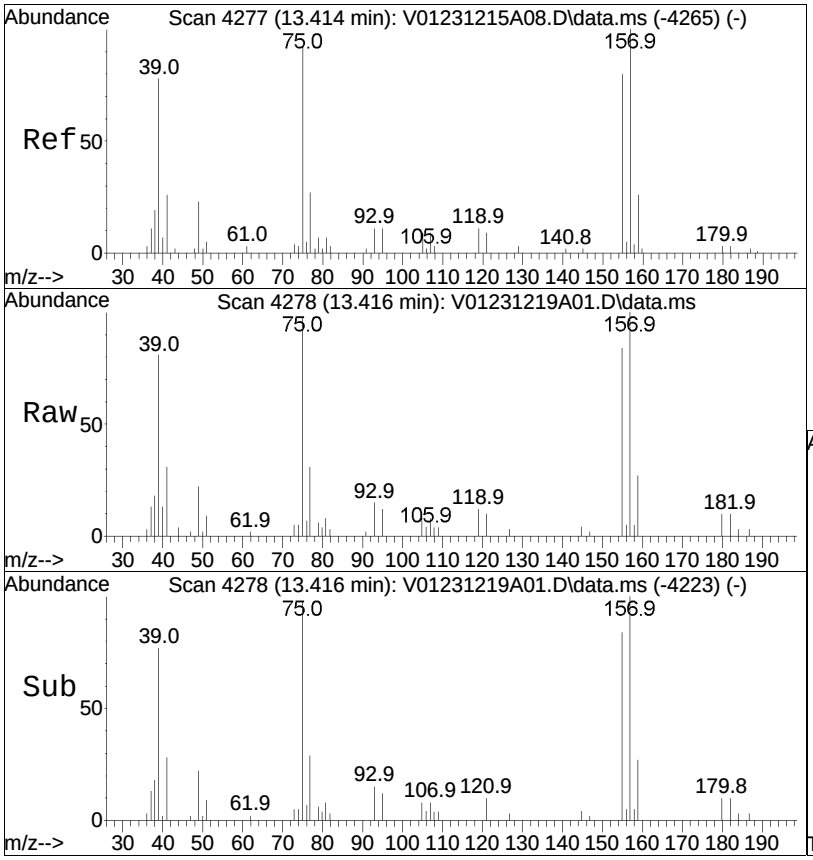


#104
1,2-Dichlorobenzene
Concen: 9.22 ug/L
RT: 12.633 min Scan# 3997
Delta R.T. -0.003 min
Lab File: V01231219A01.D
Acq: 19 Dec 2023 5:30 am

Tgt Ion:146 Resp: 207436

Ion	Ratio	Lower	Upper
146	100		
111	41.1	26.8	55.8
148	63.3	41.6	86.4

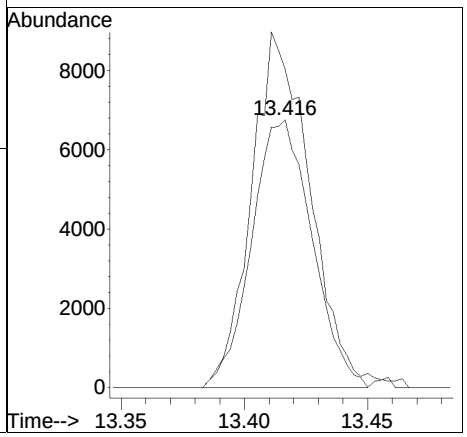


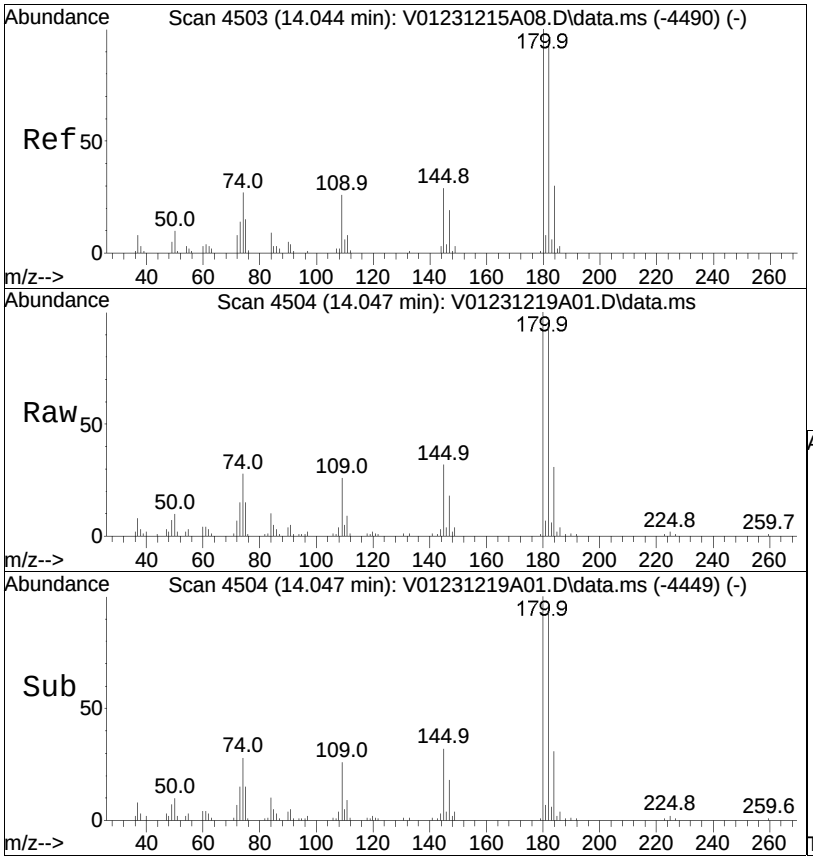


#106
1,2-Dibromo-3-chloropropane
Concen: 7.95 ug/L
RT: 13.416 min Scan# 4278
Delta R.T. 0.003 min
Lab File: V01231219A01.D
Acq: 19 Dec 2023 5:30 am

Tgt Ion:155 Resp: 11491

Ion	Ratio	Lower	Upper
155	100		
157	129.4	101.1	151.7

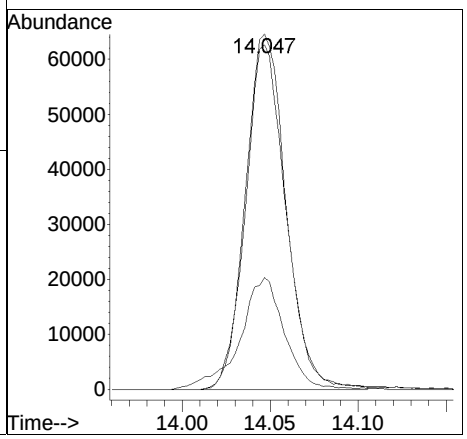


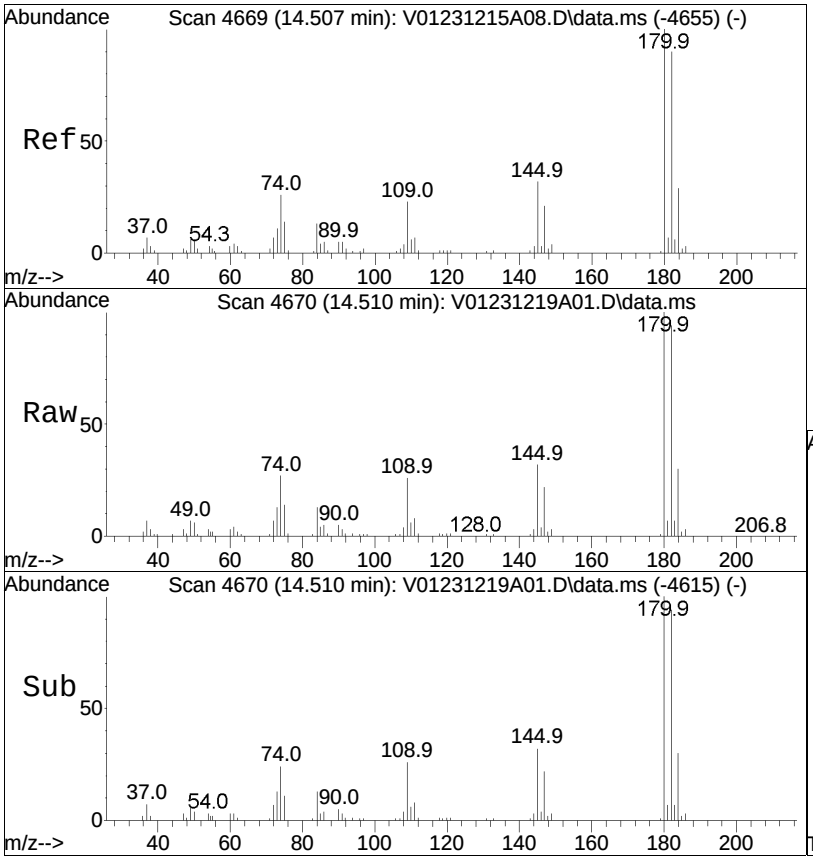


#109
1,2,4-Trichlorobenzene
Concen: 8.59 ug/L
RT: 14.047 min Scan# 4504
Delta R.T. 0.003 min
Lab File: V01231219A01.D
Acq: 19 Dec 2023 5:30 am

Tgt Ion:180 Resp: 104013

Ion	Ratio	Lower	Upper
180	100		
182	95.5	75.8	113.8
145	34.4	26.1	39.1

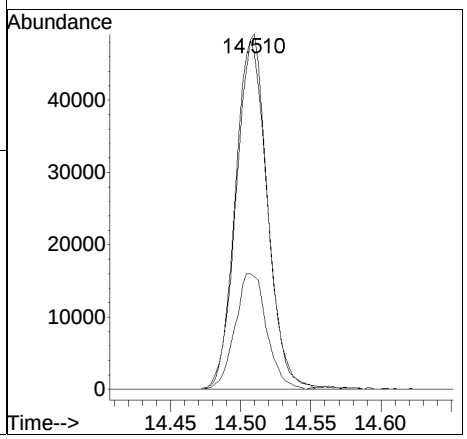




#111
1,2,3-Trichlorobenzene
Concen: 8.13 ug/L
RT: 14.510 min Scan# 4670
Delta R.T. 0.003 min
Lab File: V01231219A01.D
Acq: 19 Dec 2023 5:30 am

Tgt Ion:180 Resp: 78487

Ion	Ratio	Lower	Upper
180	100		
182	95.0	75.4	113.0
145	32.1	25.0	37.6



Manual Integration Report

Data Path	: K:\VOA101\2023\231219A\	QMethod	: V101_231215A_8260.m
Data File	: V01231219A01.D	Operator	: VOA101:MJV
Date Inj'd	: 12/19/2023 5:30 am	Instrument	: VOA 101
Sample	: WG1865859-3,31,10,10	Quant Date	: 12/19/2023 5:49 am

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

Quantitation Report (QT Reviewed)

Data Path : K:\VOA108\2023\231218A\
Data File : V08231218A01.d
Acq On : 18 Dec 2023 6:51 am
Operator : VOA108:PID
Sample : WG1865366-3,31,10,10
Misc : WG1865366,ICAL20635
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Dec 18 07:36:44 2023
Quant Method : K:\VOA108\2023\231218A\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 17:09:55 2023
Response via : Initial Calibration

Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.120	96	142386	10.000	ug/L	0.00
59) Chlorobenzene-d5	9.648	117	96600	10.000	ug/L	0.00
79) 1,4-Dichlorobenzene-d4	12.327	152	46518	10.000	ug/L	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	5.302	113	39107	10.701	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 107.01%			
43) 1,2-Dichloroethane-d4	5.831	65	52722	11.715	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 117.15%			
60) Toluene-d8	7.808	98	136742	10.908	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 109.08%			
83) 4-Bromofluorobenzene	11.127	95	45125	10.279	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 102.79%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.705	85	30553	7.670	ug/L	97
3) Chloromethane	1.904	50	61647	9.338	ug/L	98
4) Vinyl chloride	1.978	62	46944	10.879	ug/L	98
5) Bromomethane	2.292	94	18524	11.774	ug/L	100
6) Chloroethane	2.413	64	25630	12.812	ug/L	99
7) Trichlorofluoromethane	2.554	101	45787	12.292	ug/L	95
10) 1,1-Dichloroethene	3.052	96	26937	10.308	ug/L	90
11) Carbon disulfide	3.079	76	98944	10.204	ug/L	97
12) Freon-113	3.094	101	29277	10.821	ug/L	99
15) Methylene chloride	3.608	84	30849	10.142	ug/L	86
17) Acetone	3.645	43	7858	10.311	ug/L	91
18) trans-1,2-Dichloroethene	3.760	96	29402	10.032	ug/L	97
19) Methyl acetate	3.765	43	20729	10.081	ug/L #	87
20) Methyl tert-butyl ether	3.865	73	65910	9.223	ug/L #	86
23) 1,1-Dichloroethane	4.347	63	70433	10.394	ug/L	97
28) cis-1,2-Dichloroethene	4.866	96	32618	10.043	ug/L	89
30) Bromochloromethane	5.055	128	14655	10.626	ug/L	95
31) Cyclohexane	5.066	56	70095	9.649	ug/L	95
32) Chloroform	5.123	83	57514	10.496	ug/L	95
34) Carbon tetrachloride	5.265	117	45043	11.199	ug/L	99
37) 1,1,1-Trichloroethane	5.333	97	49559	10.523	ug/L #	97
39) 2-Butanone	5.417	43	12112	10.011	ug/L	99
41) Benzene	5.700	78	120057	10.330	ug/L	97
44) 1,2-Dichloroethane	5.899	62	47529	10.912	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : K:\VOA108\2023\231218A\
Data File : V08231218A01.d
Acq On : 18 Dec 2023 6:51 am
Operator : VOA108:PID
Sample : WG1865366-3,31,10,10
Misc : WG1865366,ICAL20635
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Dec 18 07:36:44 2023
Quant Method : K:\VOA108\2023\231218A\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 17:09:55 2023
Response via : Initial Calibration

Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
47)	Methyl cyclohexane	6.287	83	48213	9.862	ug/L		93
48)	Trichloroethene	6.293	95	32647	10.964	ug/L		98
51)	1,2-Dichloropropane	6.838	63	37570	9.820	ug/L		95
54)	Bromodichloromethane	6.906	83	42380	10.197	ug/L		99
57)	1,4-Dioxane	7.110	88	7764	805.490	ug/L		94
58)	cis-1,3-Dichloropropene	7.598	75	48257	10.262	ug/L		92
61)	Toluene	7.865	92	72568	10.772	ug/L		96
62)	4-Methyl-2-pentanone	8.295	58	8130	8.680	ug/L	#	71
63)	Tetrachloroethene	8.311	166	30283	10.915	ug/L		94
65)	trans-1,3-Dichloropropene	8.343	75	41576	11.049	ug/L		89
68)	1,1,2-Trichloroethane	8.531	83	19995	11.505	ug/L		97
69)	Chlorodibromomethane	8.741	129	27212	10.805	ug/L		96
71)	1,2-Dibromoethane	9.019	107	21524	10.874	ug/L		100
72)	2-Hexanone	9.297	43	15227	9.768	ug/L	#	89
73)	Chlorobenzene	9.669	112	80117	10.867	ug/L		93
74)	Ethylbenzene	9.711	91	135715	10.701	ug/L		99
76)	p/m Xylene	9.900	106	105284	22.176	ug/L		100
77)	o Xylene	10.429	106	102320	22.187	ug/L		94
78)	Styrene	10.497	104	169071	22.592	ug/L		92
80)	Bromoform	10.518	173	15246	11.469	ug/L		97
82)	Isopropylbenzene	10.812	105	129265	11.381	ug/L		97
87)	1,1,2,2-Tetrachloroethane	11.363	83	26492	11.830	ug/L		99
100)	1,3-Dichlorobenzene	12.249	146	63571	11.766	ug/L		100
101)	1,4-Dichlorobenzene	12.343	146	63782	11.694	ug/L		98
104)	1,2-Dichlorobenzene	12.762	146	58578	11.651	ug/L		99
106)	1,2-Dibromo-3-chloropr...	13.533	155	3217	9.978	ug/L		82
109)	1,2,4-Trichlorobenzene	14.162	180	37818	10.841	ug/L		99
111)	1,2,3-Trichlorobenzene	14.624	180	33591	11.066	ug/L		99

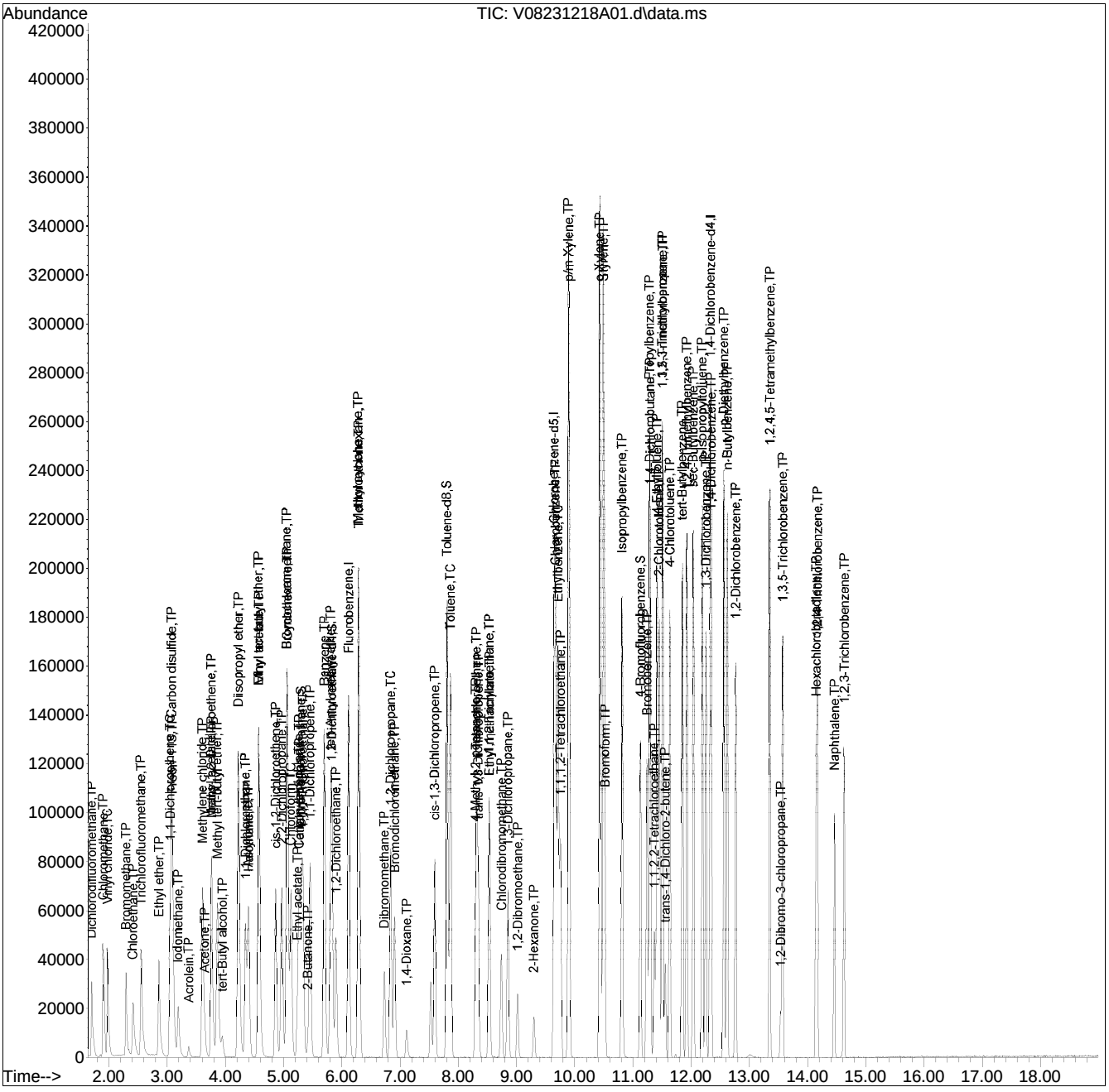
(#) = qualifier out of range (m) = manual integration (+) = signals summed

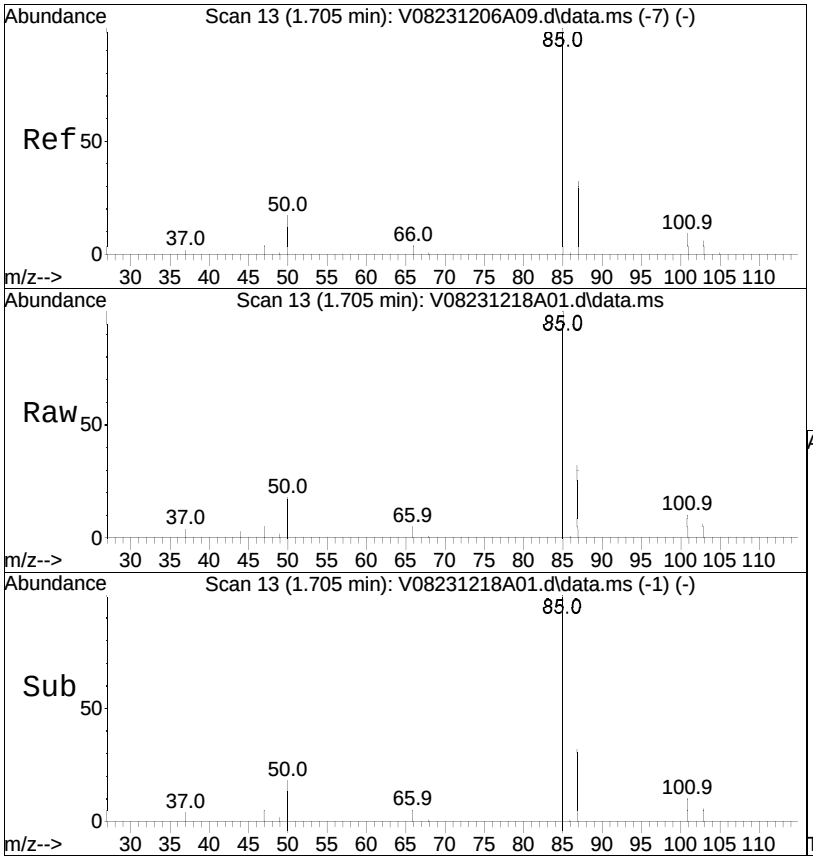
Quantitation Report (QT Reviewed)

Data Path : K:\VOA108\2023\231218A\
Data File : V08231218A01.d
Acq On : 18 Dec 2023 6:51 am
Operator : VOA108:PID
Sample : WG1865366-3,31,10,10
Misc : WG1865366,ICAL20635
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Dec 18 07:36:44 2023
Quant Method : K:\VOA108\2023\231218A\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 17:09:55 2023
Response via : Initial Calibration

Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE

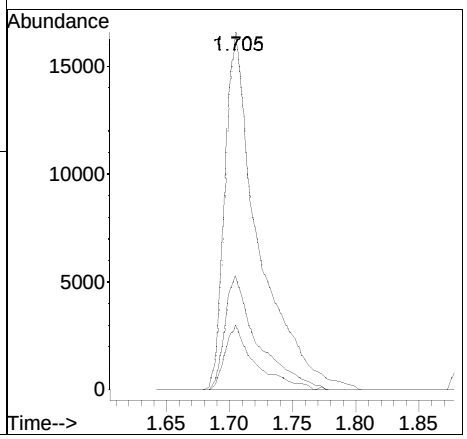


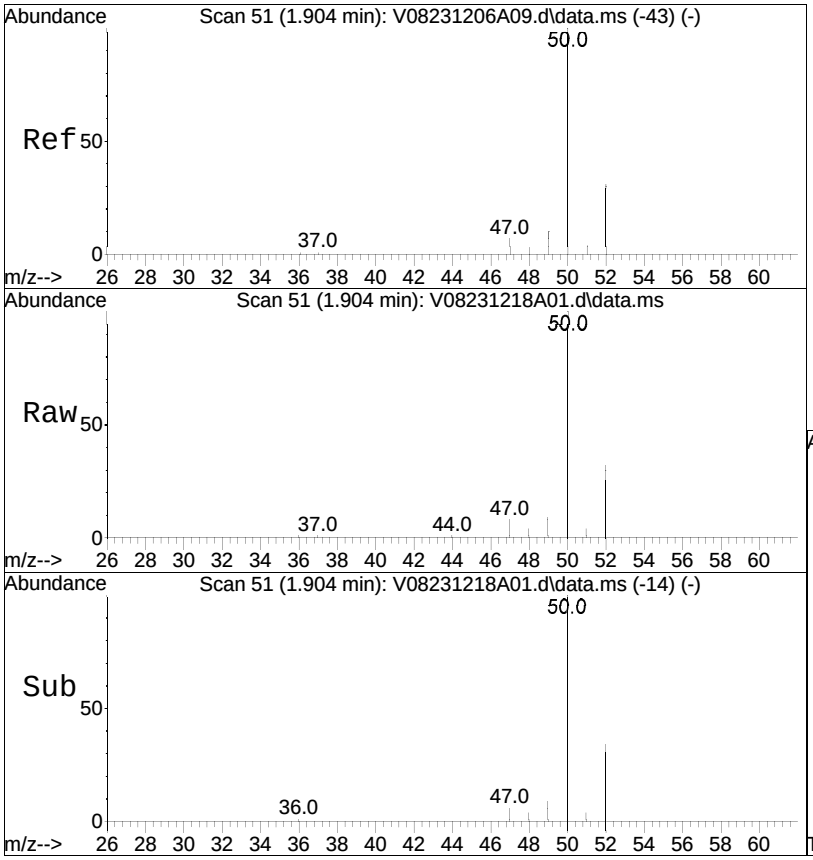


#2
Dichlorodifluoromethane
Concen: 7.67 ug/L
RT: 1.705 min Scan# 13
Delta R.T. -0.000 min
Lab File: V08231218A01.d
Acq: 18 Dec 2023 6:51 am

Tgt Ion: 85 Resp: 30553

Ion	Ratio	Lower	Upper
85	100		
87	31.5	21.0	43.6
50	16.7	8.9	18.5

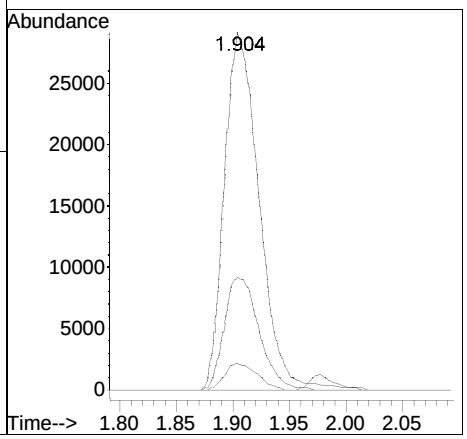


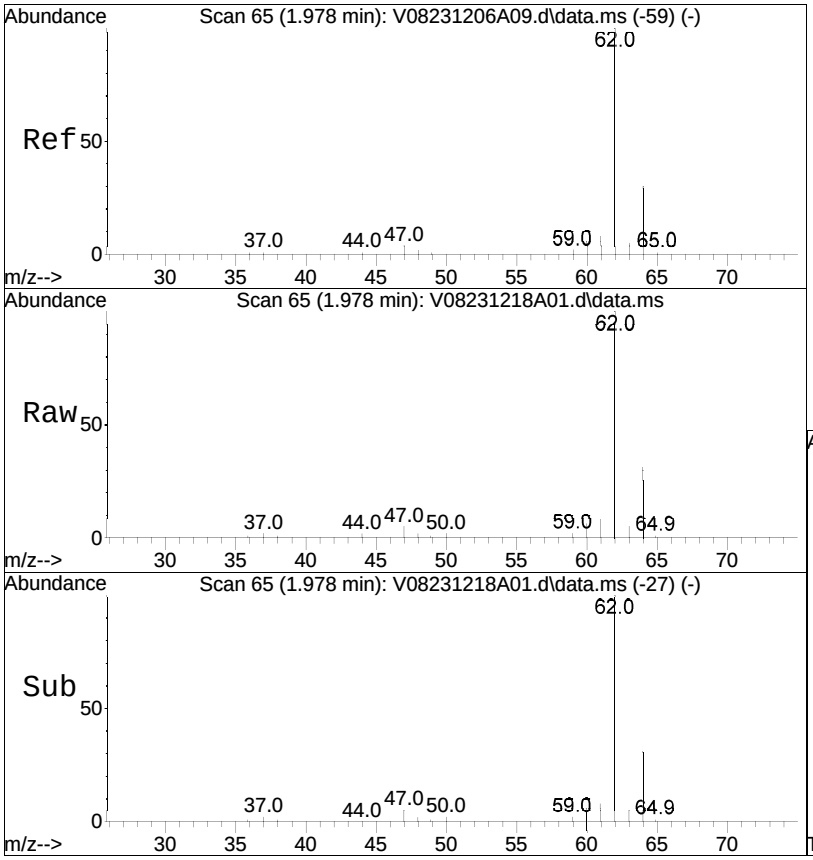


#3
Chloromethane
Concen: 9.34 ug/L
RT: 1.904 min Scan# 51
Delta R.T. -0.005 min
Lab File: V08231218A01.d
Acq: 18 Dec 2023 6:51 am

Tgt Ion: 50 Resp: 61647

Ion	Ratio	Lower	Upper
50	100		
52	31.6	12.9	52.9
47	7.1	0.0	28.3

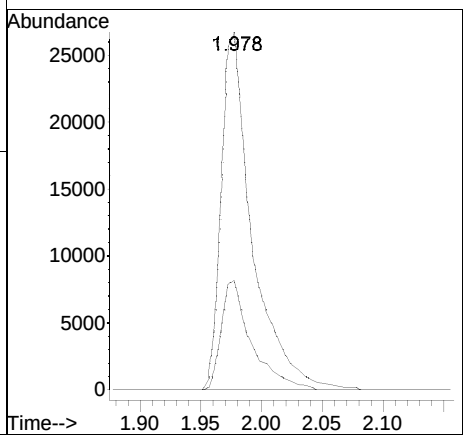


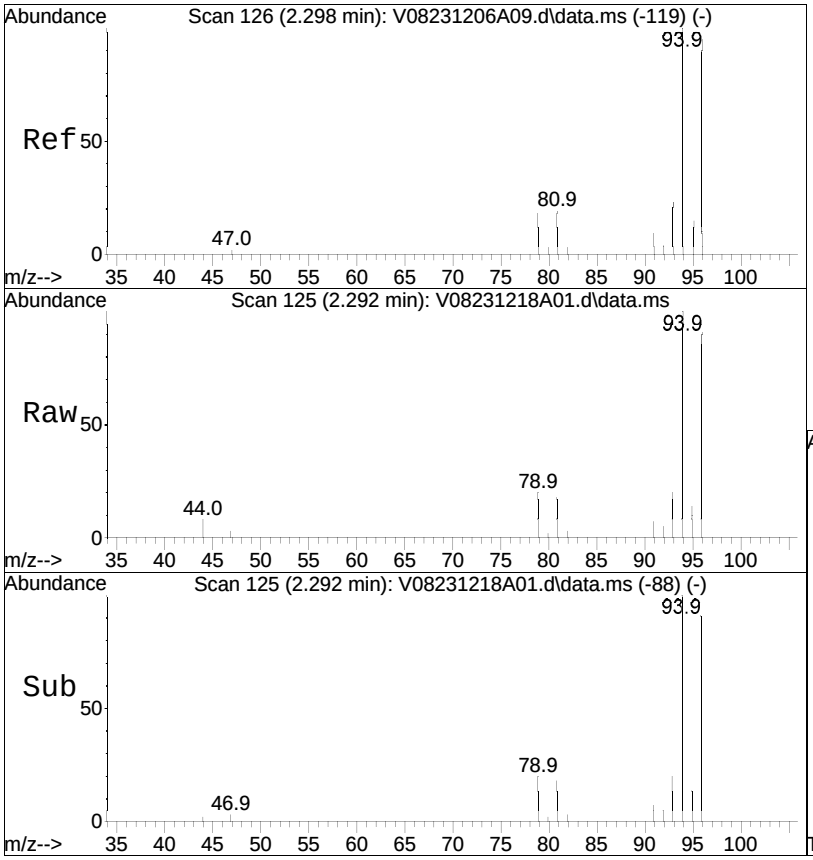


#4
Vinyl chloride
Concen: 10.88 ug/L
RT: 1.978 min Scan# 65
Delta R.T. -0.000 min
Lab File: V08231218A01.d
Acq: 18 Dec 2023 6:51 am

Tgt Ion: 62 Resp: 46944

Ion	Ratio	Lower	Upper
62	100		
64	30.0	9.1	49.1

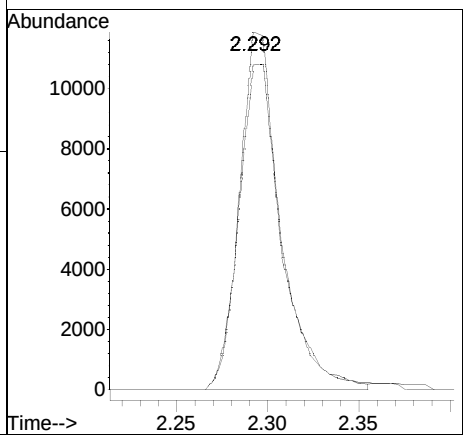


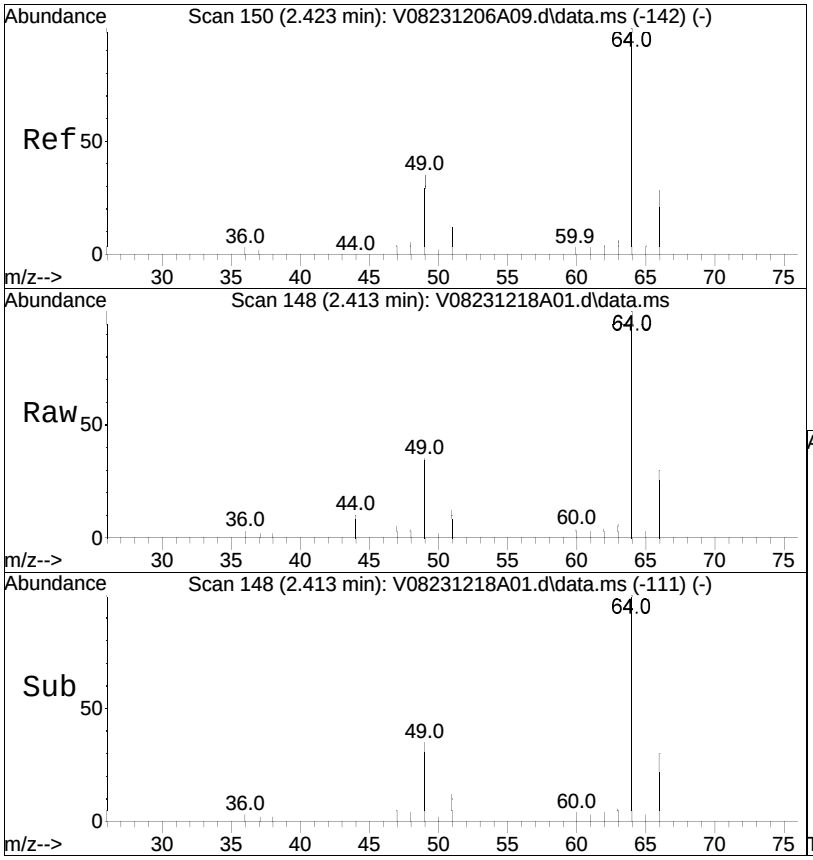


#5
Bromomethane
Concen: 11.77 ug/L
RT: 2.292 min Scan# 125
Delta R.T. -0.005 min
Lab File: V08231218A01.d
Acq: 18 Dec 2023 6:51 am

Tgt Ion: 94 Resp: 18524

Ion	Ratio	Lower	Upper
94	100		
96	95.8	75.6	115.6

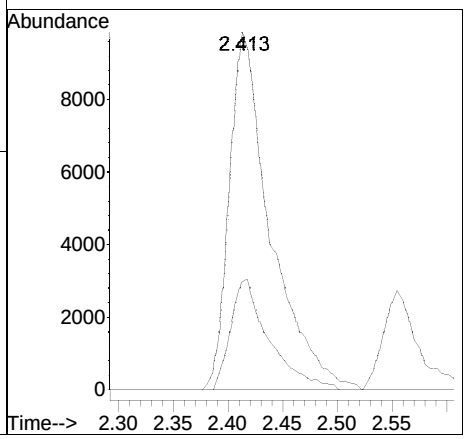


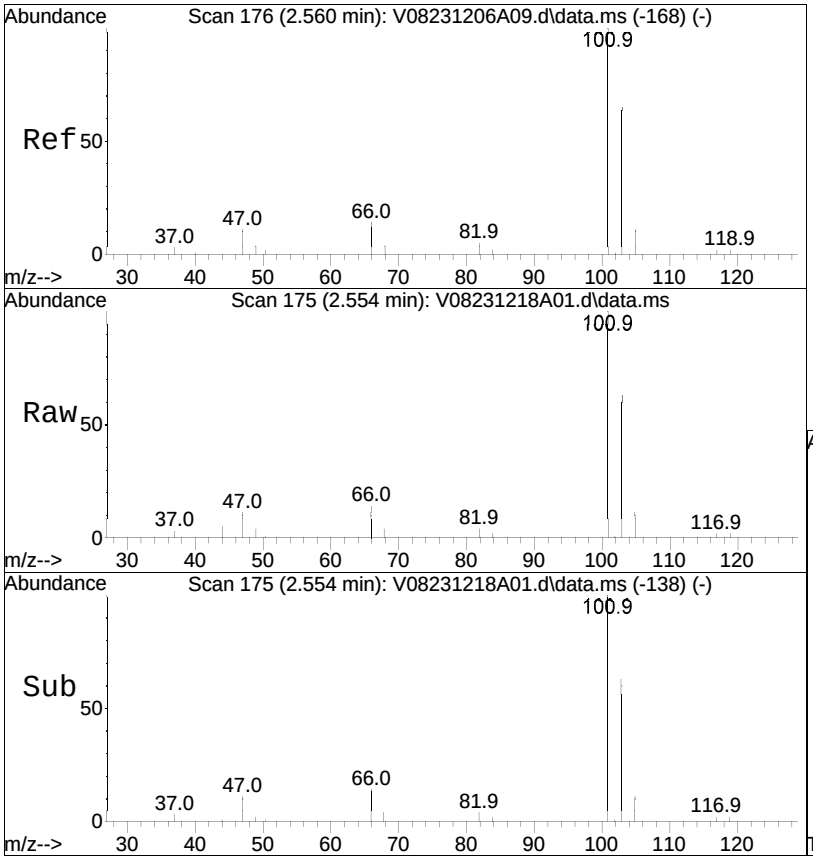


#6
Chloroethane
Concen: 12.81 ug/L
RT: 2.413 min Scan# 148
Delta R.T. -0.005 min
Lab File: V08231218A01.d
Acq: 18 Dec 2023 6:51 am

Tgt Ion: 64 Resp: 25630

Ion	Ratio	Lower	Upper
64	100		
66	29.1	9.8	49.8

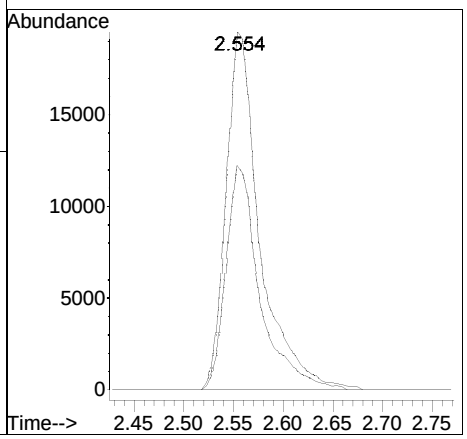


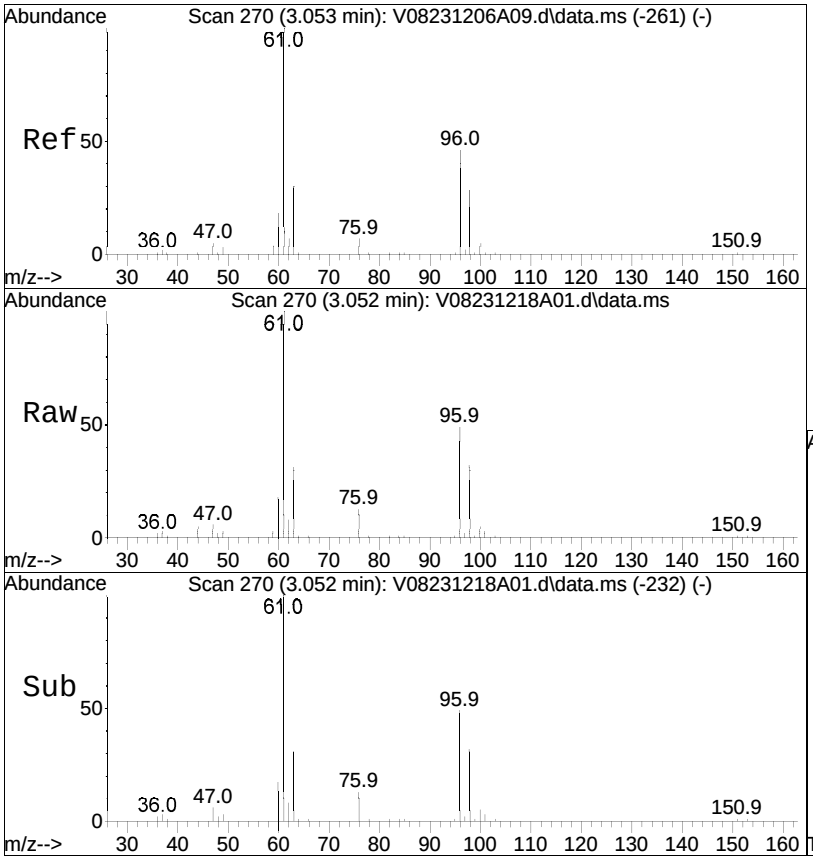


#7
Trichlorofluoromethane
Concen: 12.29 ug/L
RT: 2.554 min Scan# 175
Delta R.T. -0.006 min
Lab File: V08231218A01.d
Acq: 18 Dec 2023 6:51 am

Tgt Ion:101 Resp: 45787

Ion	Ratio	Lower	Upper
101	100		
103	62.9	53.8	80.6

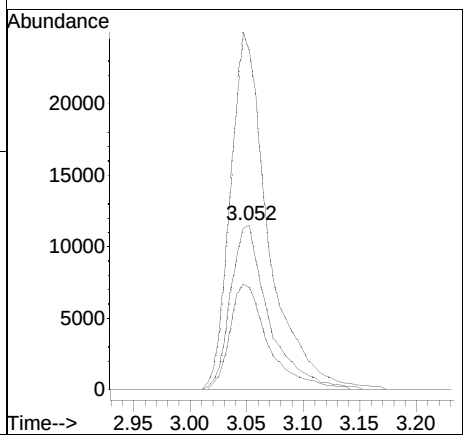


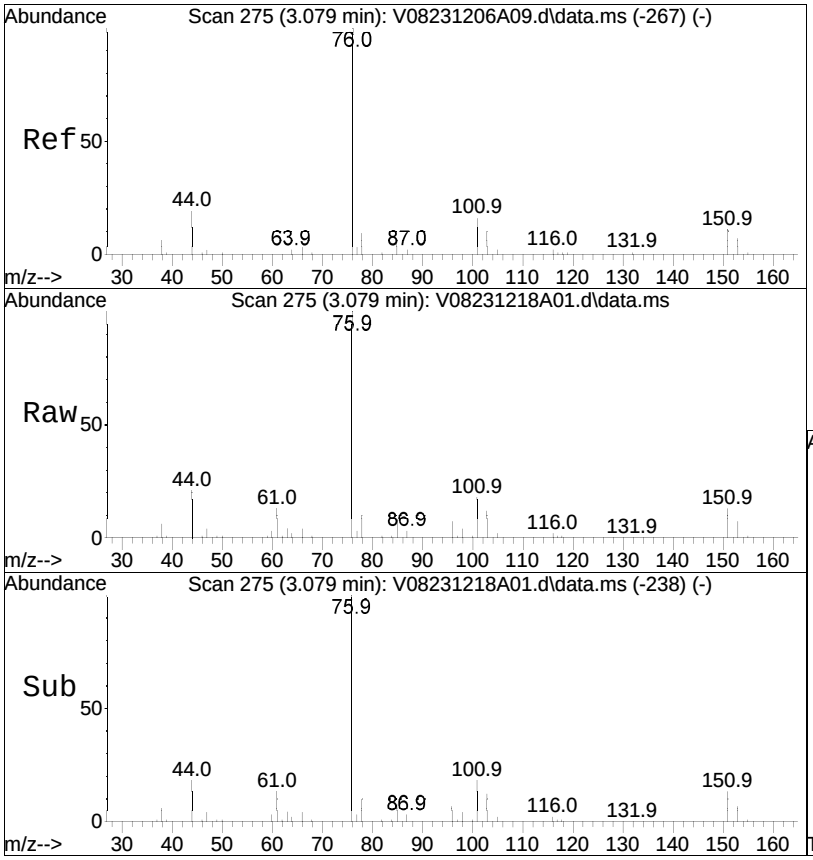


#10
1,1-Dichloroethene
Concen: 10.31 ug/L
RT: 3.052 min Scan# 270
Delta R.T. 0.000 min
Lab File: V08231218A01.d
Acq: 18 Dec 2023 6:51 am

Tgt Ion: 96 Resp: 26937

Ion	Ratio	Lower	Upper
96	100		
61	215.0	186.1	279.1
63	64.4	57.6	86.4

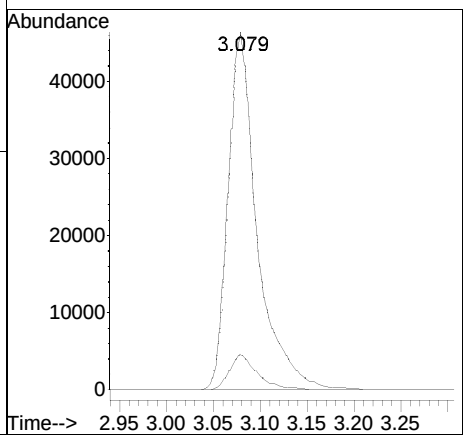


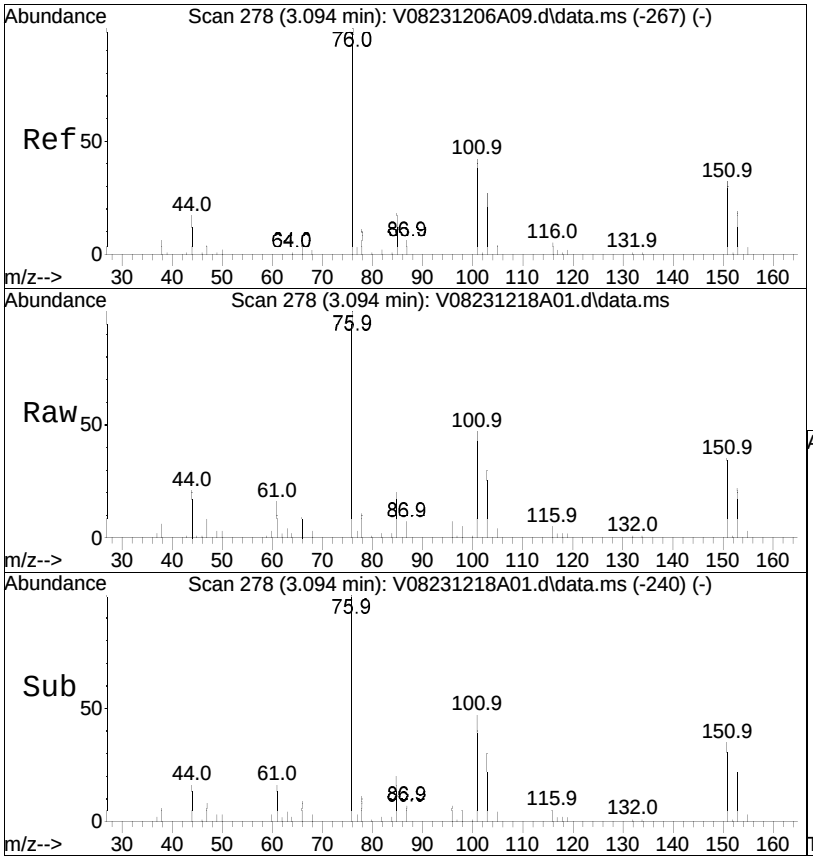


#11
Carbon disulfide
Concen: 10.20 ug/L
RT: 3.079 min Scan# 275
Delta R.T. -0.005 min
Lab File: V08231218A01.d
Acq: 18 Dec 2023 6:51 am

Tgt Ion: 76 Resp: 98944

Ion	Ratio	Lower	Upper
76	100		
78	9.7	5.7	11.7

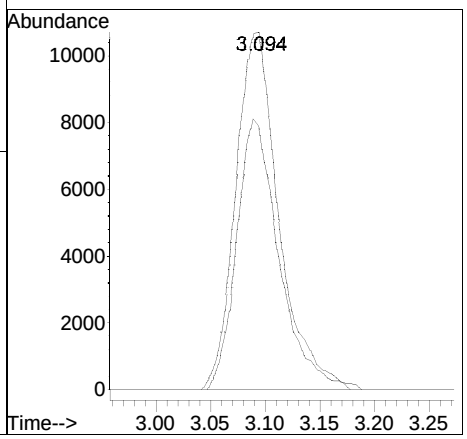


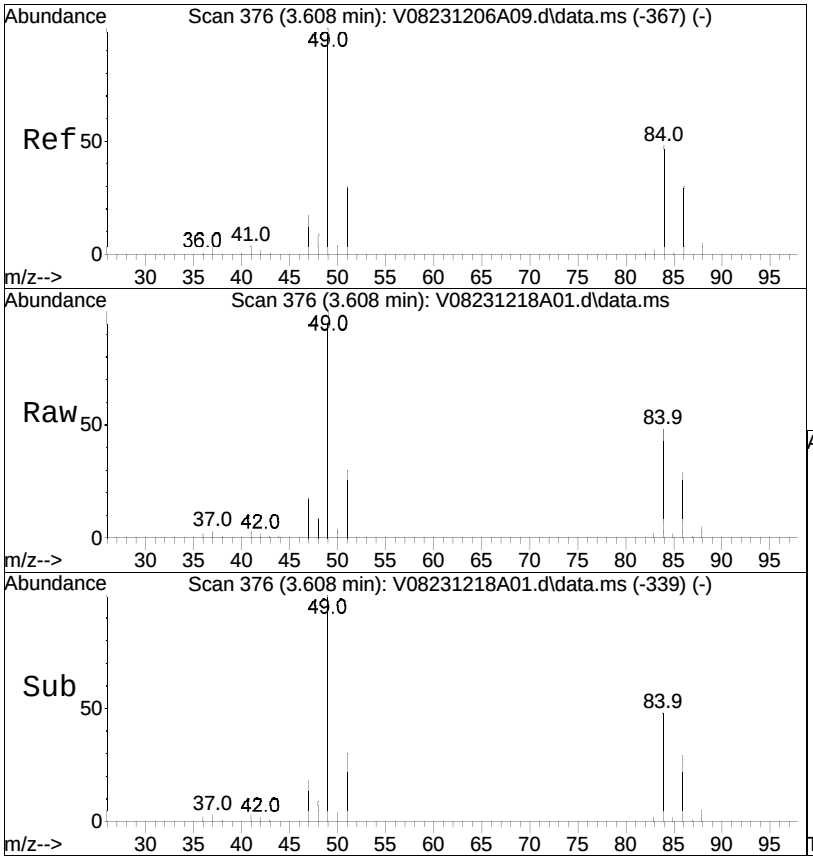


#12
Freon-113
Concen: 10.82 ug/L
RT: 3.094 min Scan# 278
Delta R.T. 0.000 min
Lab File: V08231218A01.d
Acq: 18 Dec 2023 6:51 am

Tgt Ion:101 Resp: 29277

Ion	Ratio	Lower	Upper
101	100		
151	73.9	59.8	89.8

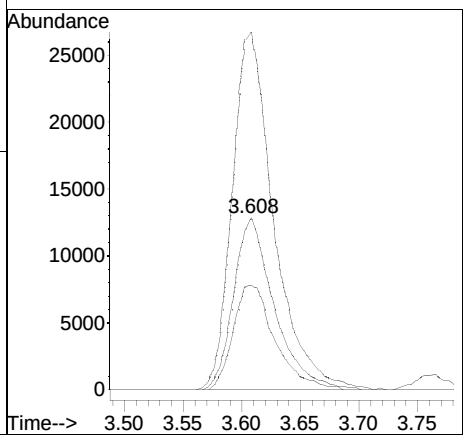


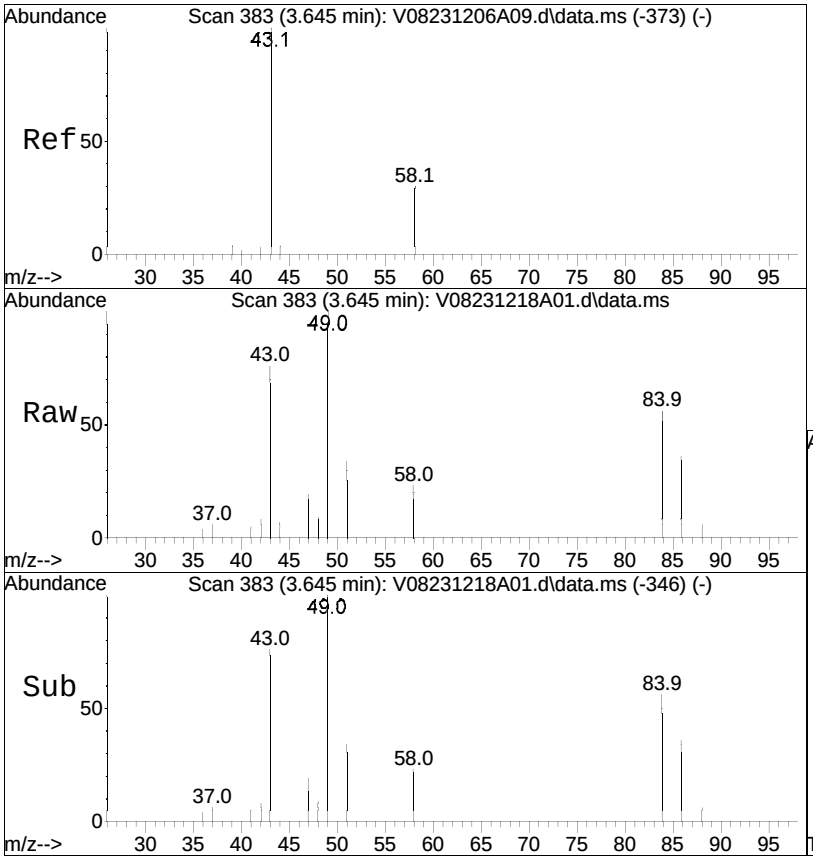


#15
Methylene chloride
Concen: 10.14 ug/L
RT: 3.608 min Scan# 376
Delta R.T. -0.005 min
Lab File: V08231218A01.d
Acq: 18 Dec 2023 6:51 am

Tgt Ion: 84 Resp: 30849

Ion	Ratio	Lower	Upper
84	100		
86	62.7	40.4	83.8
49	211.1	120.0	249.2

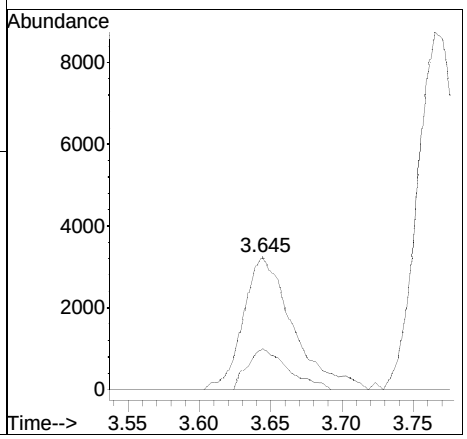


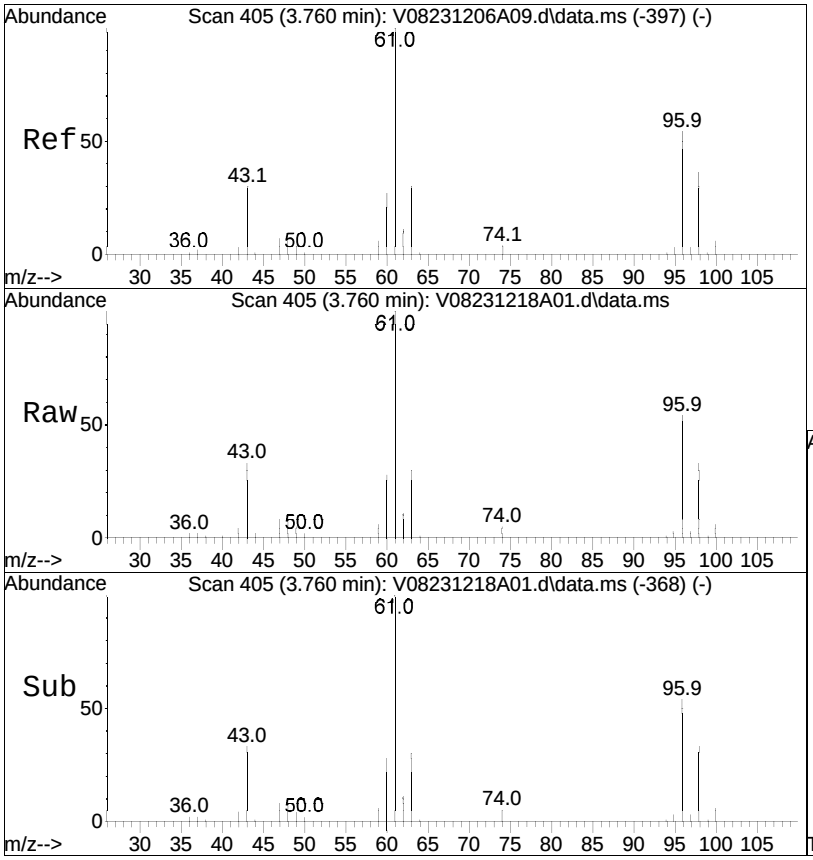


#17
Acetone
Concen: 10.31 ug/L
RT: 3.645 min Scan# 383
Delta R.T. -0.005 min
Lab File: V08231218A01.d
Acq: 18 Dec 2023 6:51 am

Tgt Ion: 43 Resp: 7858

Ion	Ratio	Lower	Upper
43	100		
58	25.5	24.2	36.4

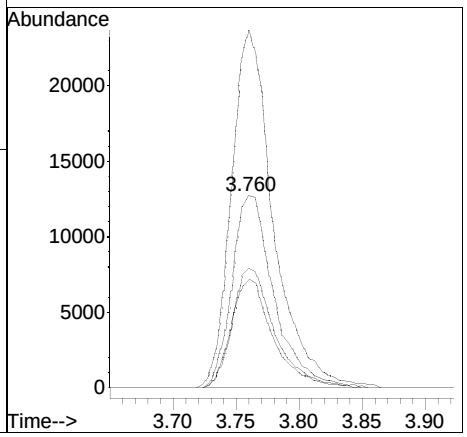


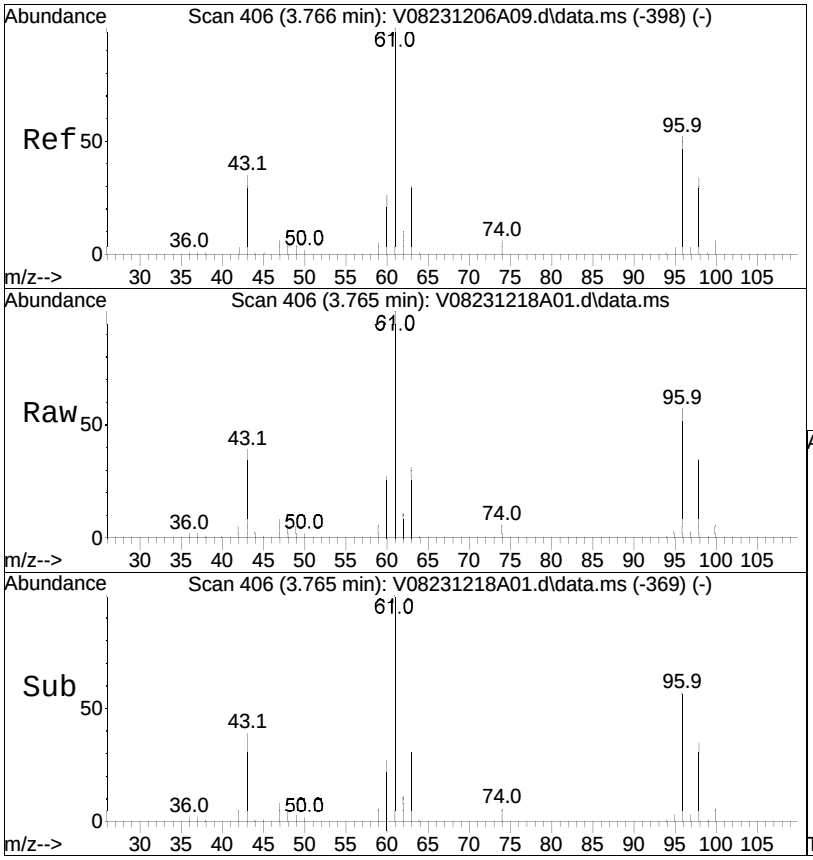


#18
trans-1,2-Dichloroethene
Concen: 10.03 ug/L
RT: 3.760 min Scan# 405
Delta R.T. -0.006 min
Lab File: V08231218A01.d
Acq: 18 Dec 2023 6:51 am

Tgt Ion: 96 Resp: 29402

Ion	Ratio	Lower	Upper
96	100		
61	185.5	124.0	257.6
98	63.3	41.2	85.6
63	56.0	38.4	79.7

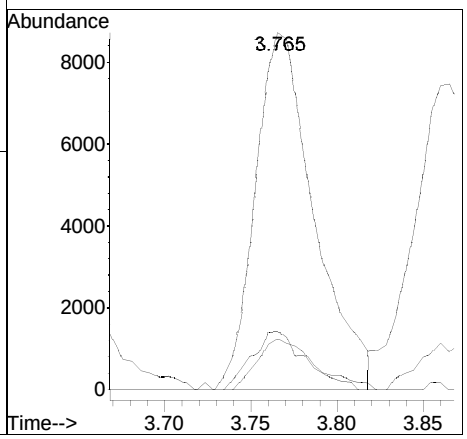


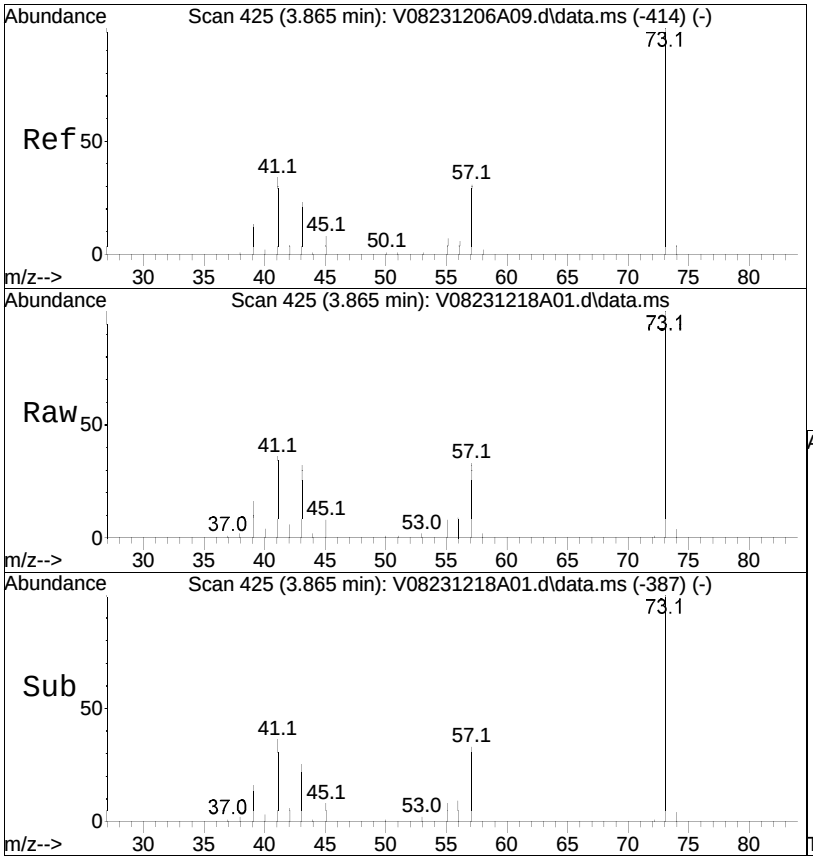


#19
Methyl acetate
Concen: 10.08 ug/L
RT: 3.765 min Scan# 406
Delta R.T. -0.006 min
Lab File: V08231218A01.d
Acq: 18 Dec 2023 6:51 am

Tgt Ion: 43 Resp: 20729

Ion	Ratio	Lower	Upper
43	100		
74	14.0	14.2	21.4#
59	15.0	5.0	7.6#

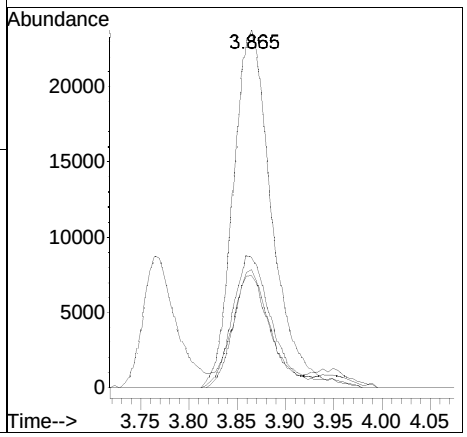


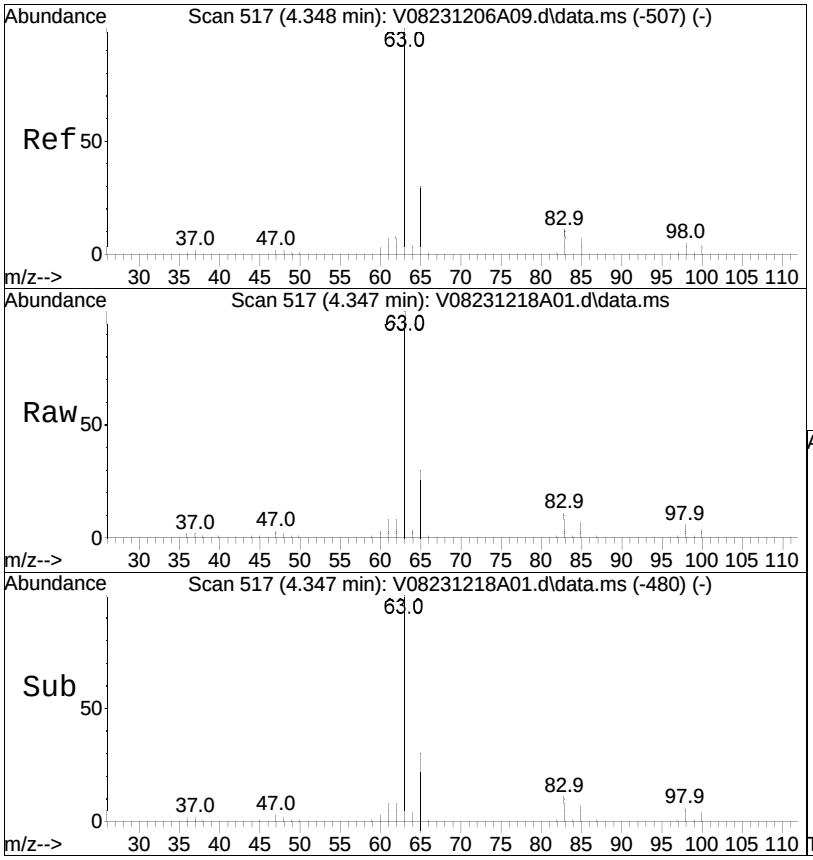


#20
Methyl tert-butyl ether
Concen: 9.22 ug/L
RT: 3.865 min Scan# 425
Delta R.T. 0.000 min
Lab File: V08231218A01.d
Acq: 18 Dec 2023 6:51 am

Tgt Ion: 73 Resp: 65910

Ion	Ratio	Lower	Upper
73	100		
57	32.2	17.5	36.3
43	26.8	15.3	31.9
41	36.8	15.3	31.7#

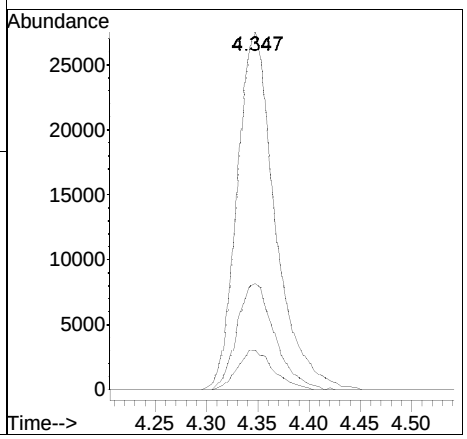


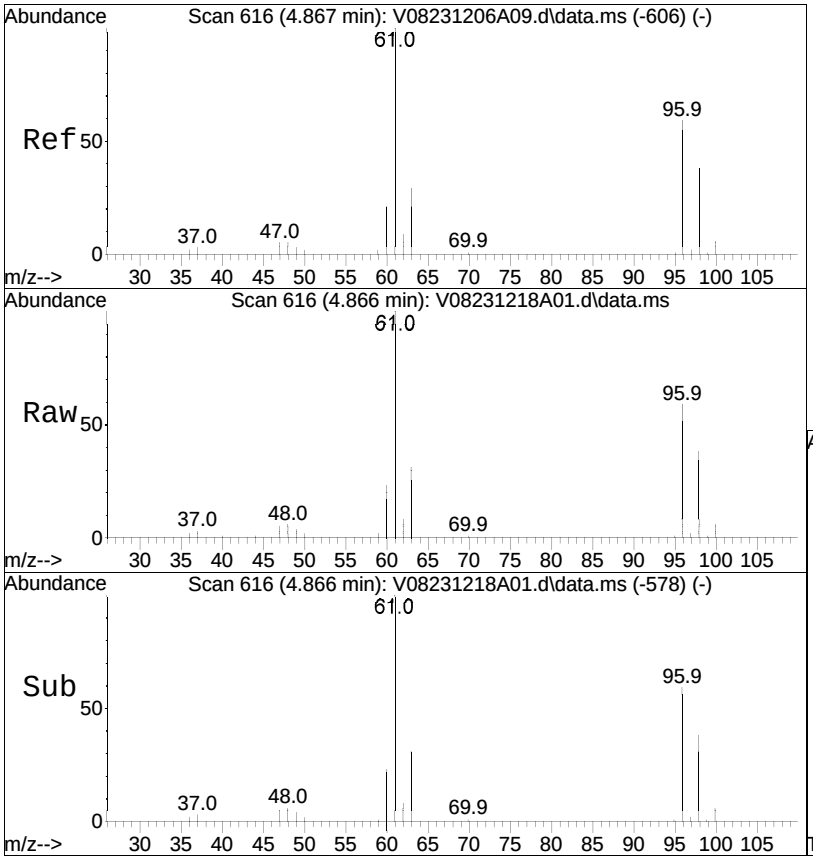


#23
1,1-Dichloroethane
Concen: 10.39 ug/L
RT: 4.347 min Scan# 517
Delta R.T. -0.006 min
Lab File: V08231218A01.d
Acq: 18 Dec 2023 6:51 am

Tgt Ion: 63 Resp: 70433

Ion	Ratio	Lower	Upper
63	100		
65	29.7	11.0	51.0
83	10.6	0.0	31.8

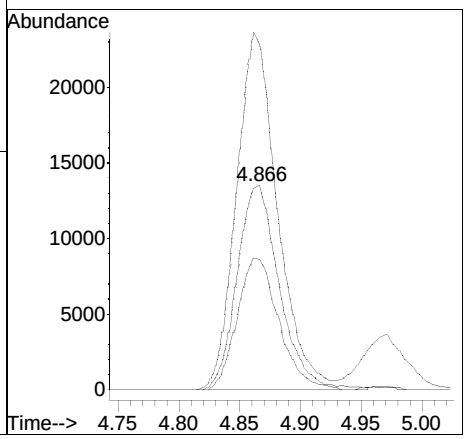


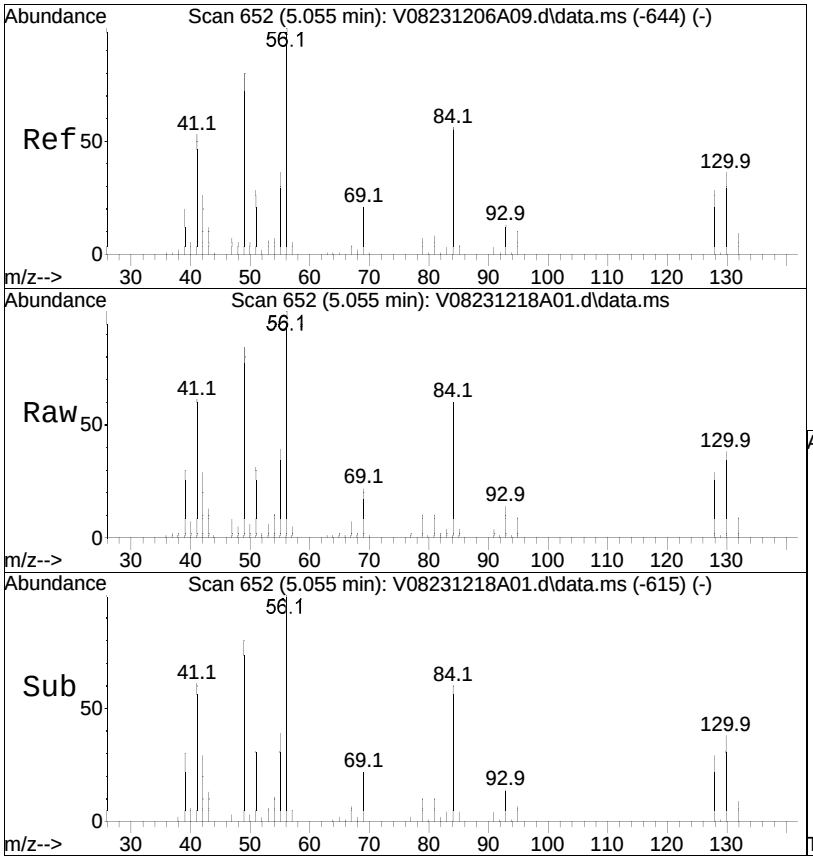


#28
cis-1,2-Dichloroethene
Concen: 10.04 ug/L
RT: 4.866 min Scan# 616
Delta R.T. -0.001 min
Lab File: V08231218A01.d
Acq: 18 Dec 2023 6:51 am

Tgt Ion: 96 Resp: 32618

Ion	Ratio	Lower	Upper
96	100		
61	168.0	149.4	224.2
98	63.4	53.4	80.2

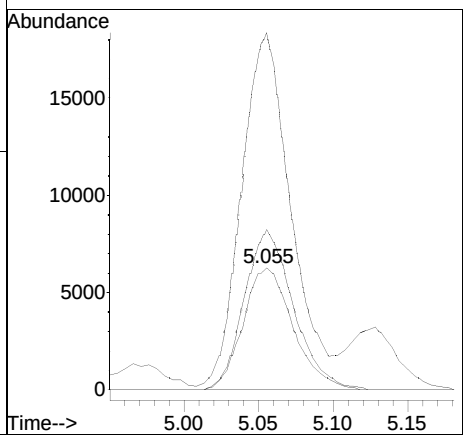


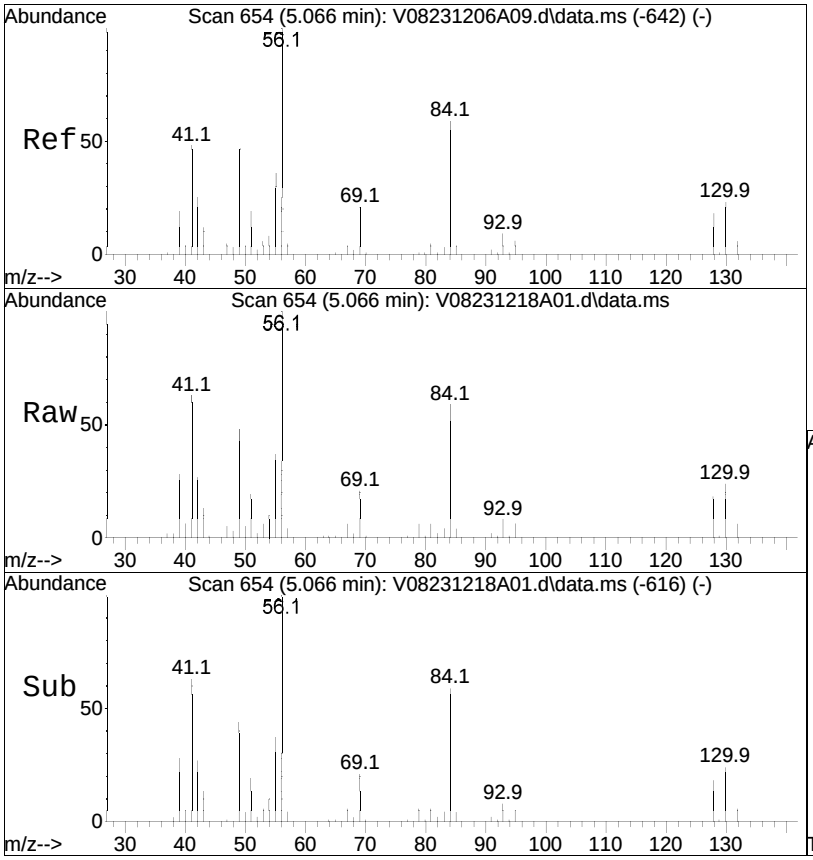


#30
Bromochloromethane
Concen: 10.63 ug/L
RT: 5.055 min Scan# 652
Delta R.T. -0.006 min
Lab File: V08231218A01.d
Acq: 18 Dec 2023 6:51 am

Tgt Ion:128 Resp: 14655

Ion	Ratio	Lower	Upper
128	100		
49	285.3	223.0	334.4
130	129.1	111.4	167.0

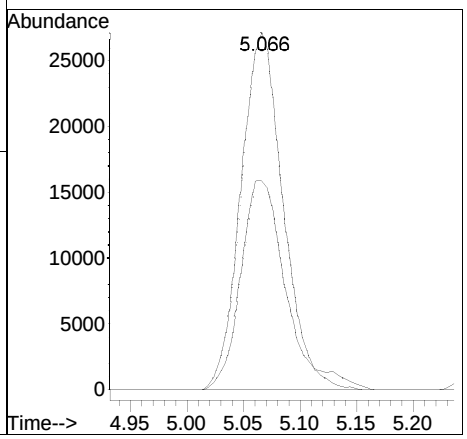


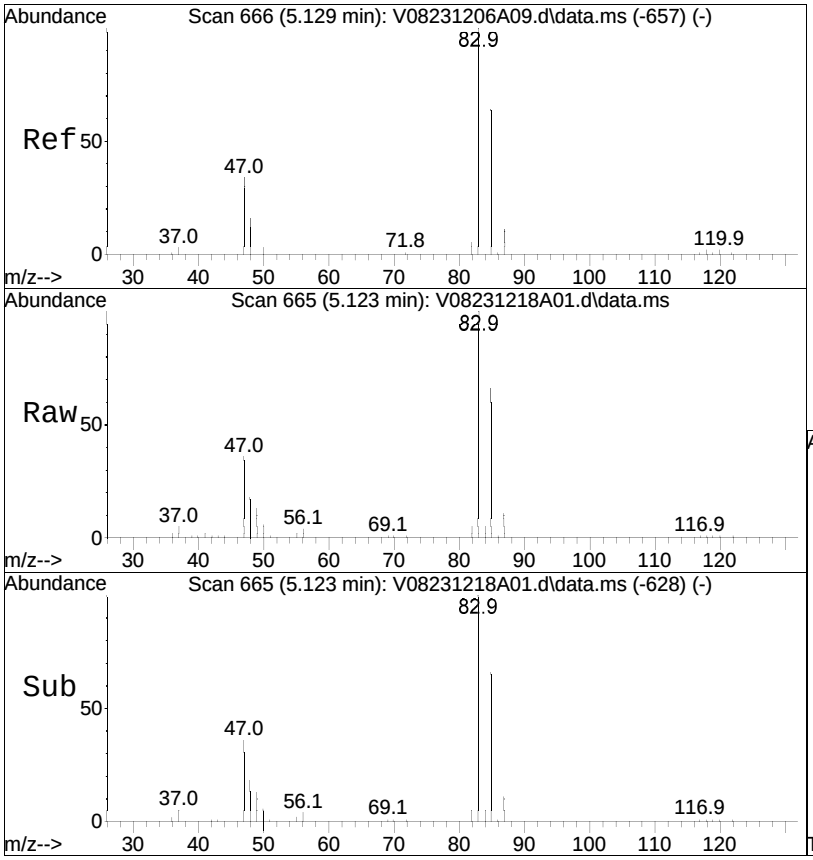


#31
Cyclohexane
Concen: 9.65 ug/L
RT: 5.066 min Scan# 654
Delta R.T. -0.000 min
Lab File: V08231218A01.d
Acq: 18 Dec 2023 6:51 am

Tgt Ion: 56 Resp: 70095

Ion	Ratio	Lower	Upper
56	100		
84	63.1	38.4	79.8

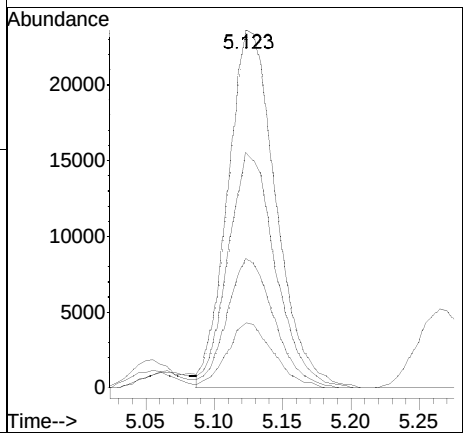


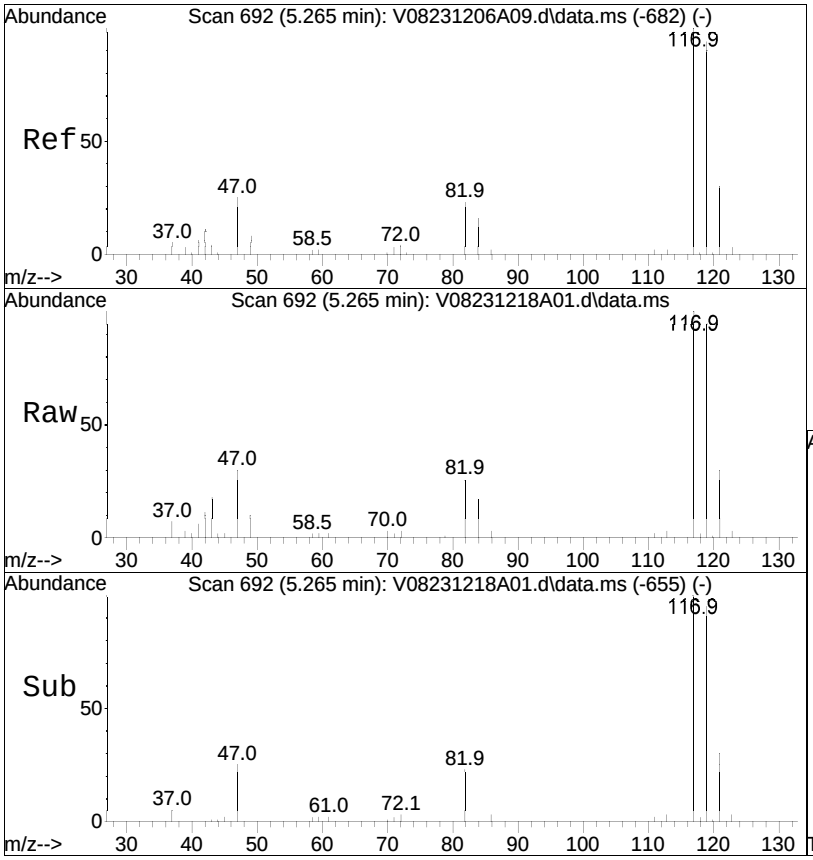


#32
Chloroform
Concen: 10.50 ug/L
RT: 5.123 min Scan# 665
Delta R.T. -0.006 min
Lab File: V08231218A01.d
Acq: 18 Dec 2023 6:51 am

Tgt Ion: 83 Resp: 57514

Ion	Ratio	Lower	Upper
83	100		
85	65.1	41.5	86.1
47	35.8	19.0	39.4
48	17.8	9.9	20.5

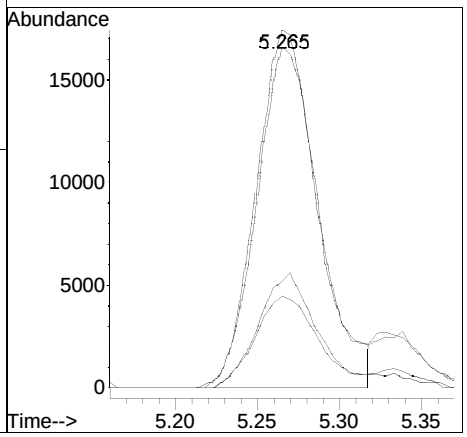


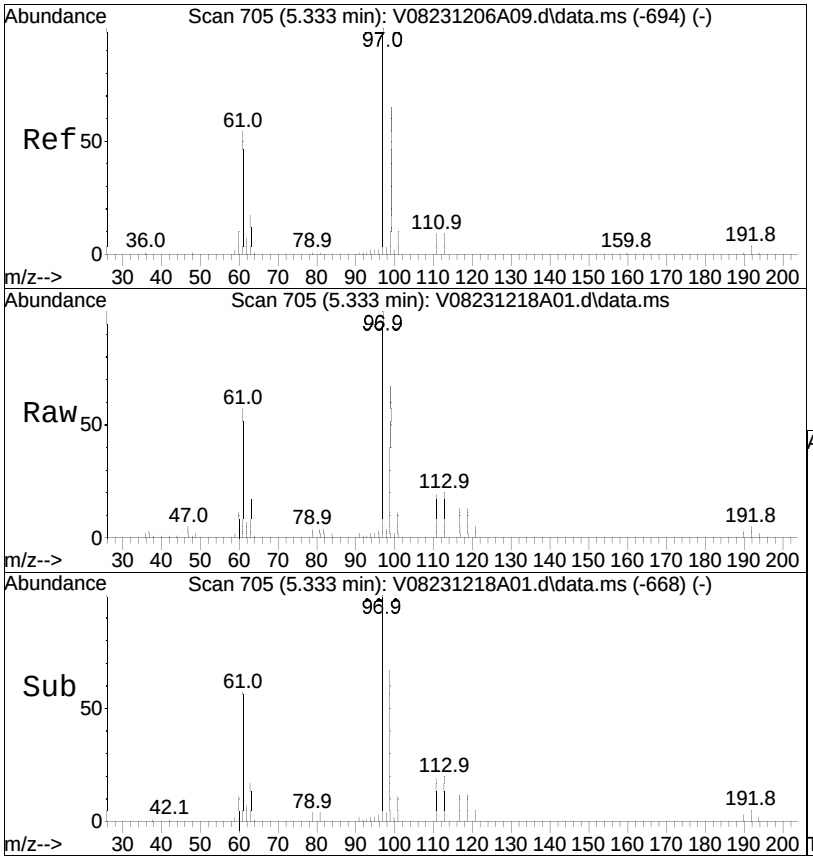


#34
Carbon tetrachloride
Concen: 11.20 ug/L
RT: 5.265 min Scan# 692
Delta R.T. -0.005 min
Lab File: V08231218A01.d
Acq: 18 Dec 2023 6:51 am

Tgt Ion:117 Resp: 45043

Ion	Ratio	Lower	Upper
117	100		
119	95.9	62.4	129.6
121	30.3	19.5	40.5
82	29.4	17.0	35.4

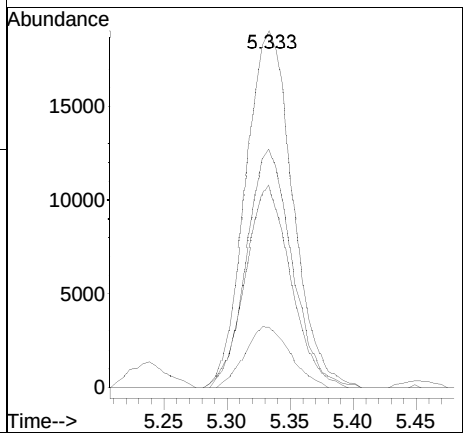


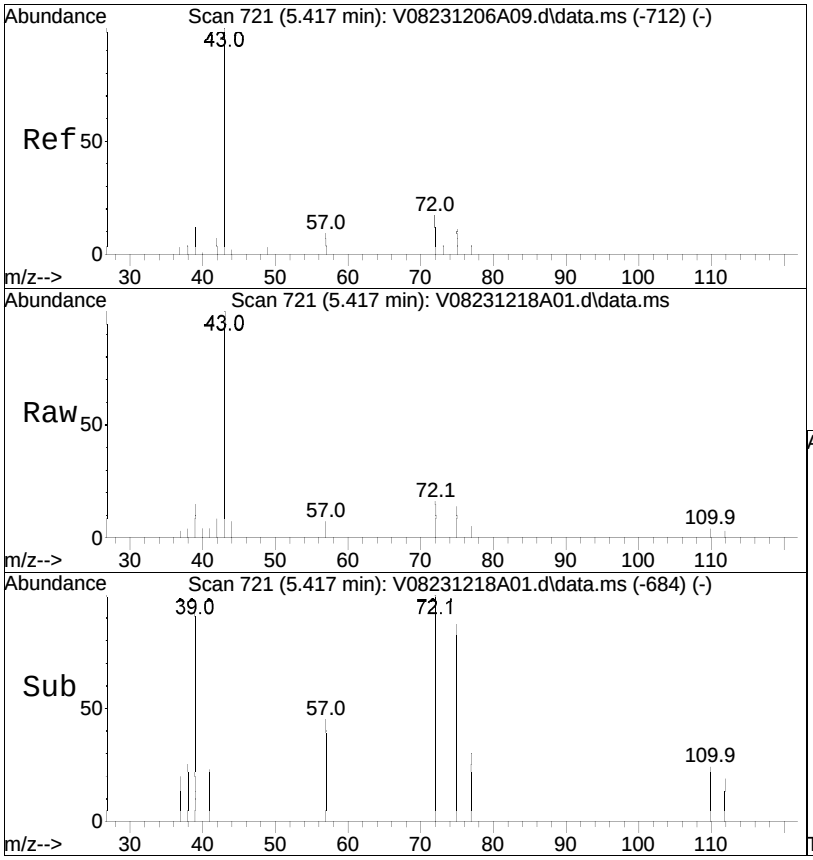


#37
1,1,1-Trichloroethane
Concen: 10.52 ug/L
RT: 5.333 min Scan# 705
Delta R.T. -0.005 min
Lab File: V08231218A01.d
Acq: 18 Dec 2023 6:51 am

Tgt Ion: 97 Resp: 49559

Ion	Ratio	Lower	Upper
97	100		
99	64.2	40.7	84.5
61	54.8	35.4	73.4
63	16.6	5.0	10.4#

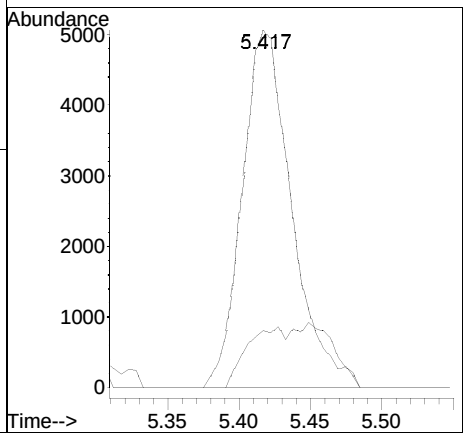


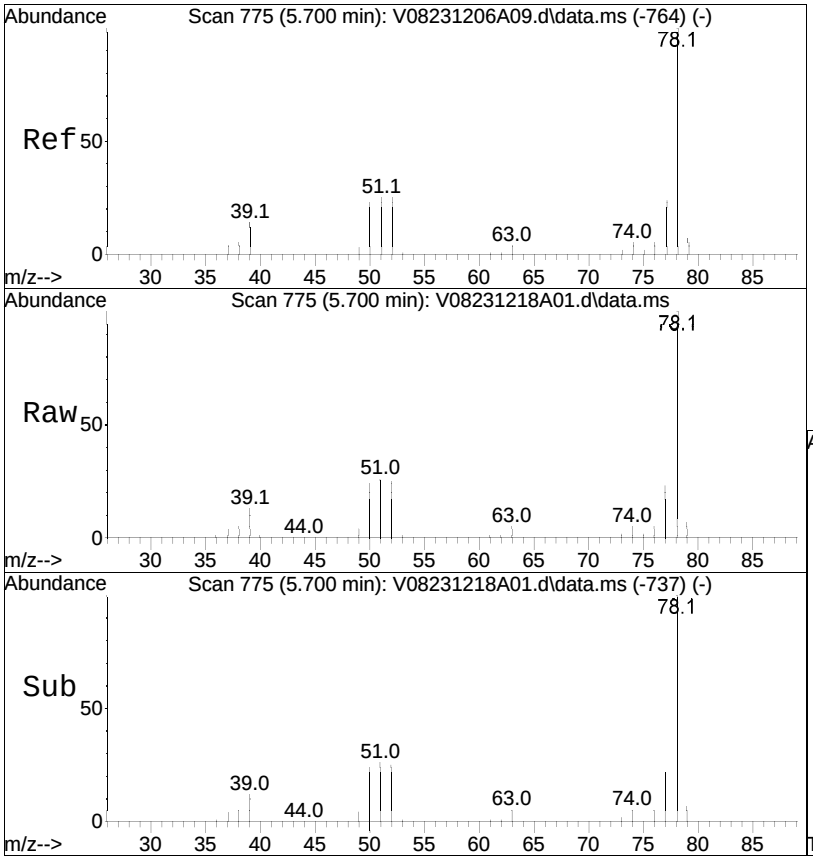


#39
2-Butanone
Concen: 10.01 ug/L
RT: 5.417 min Scan# 721
Delta R.T. -0.005 min
Lab File: V08231218A01.d
Acq: 18 Dec 2023 6:51 am

Tgt Ion: 43 Resp: 12112

Ion	Ratio	Lower	Upper
43	100		
72	13.4	10.9	16.3

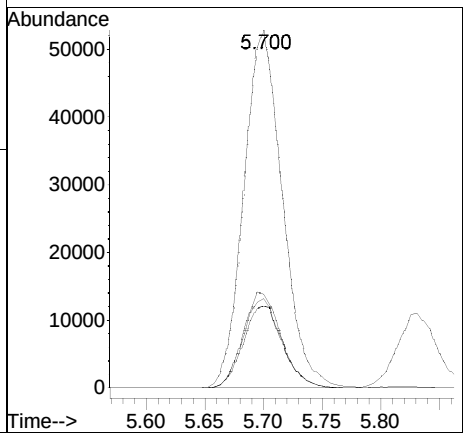


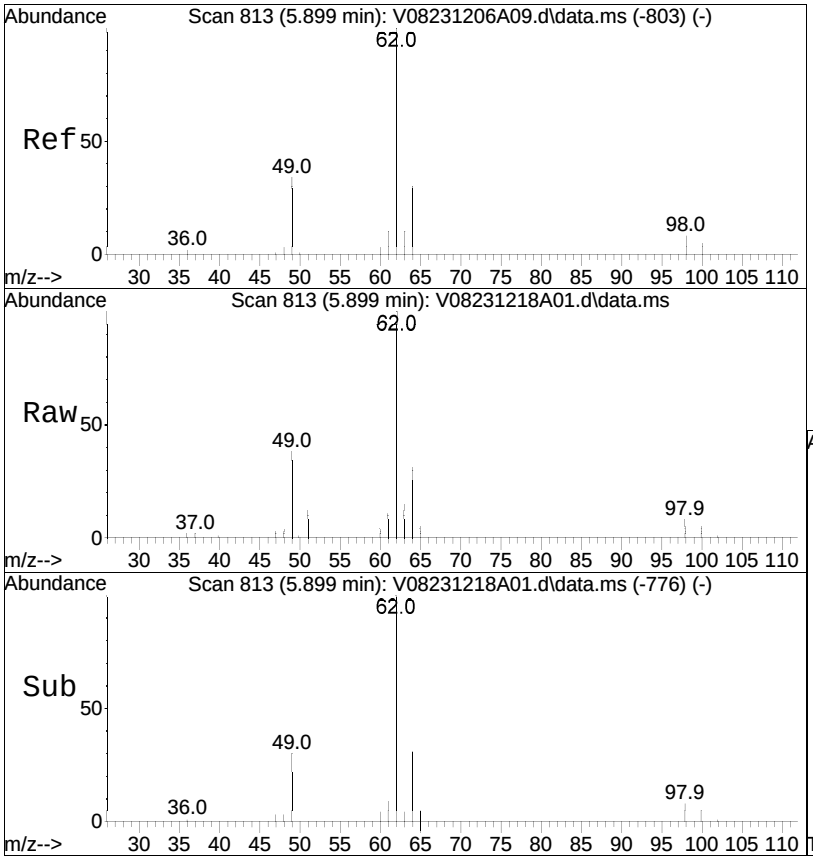


#41
Benzene
Concen: 10.33 ug/L
RT: 5.700 min Scan# 775
Delta R.T. 0.000 min
Lab File: V08231218A01.d
Acq: 18 Dec 2023 6:51 am

Tgt Ion: 78 Resp: 120057

Ion	Ratio	Lower	Upper
78	100		
77	23.6	15.7	32.7
51	26.8	16.0	33.2
52	25.4	15.3	31.9

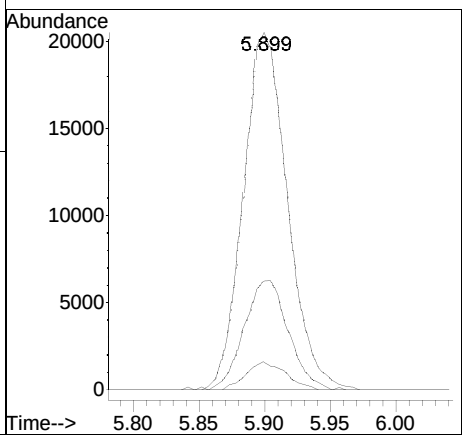


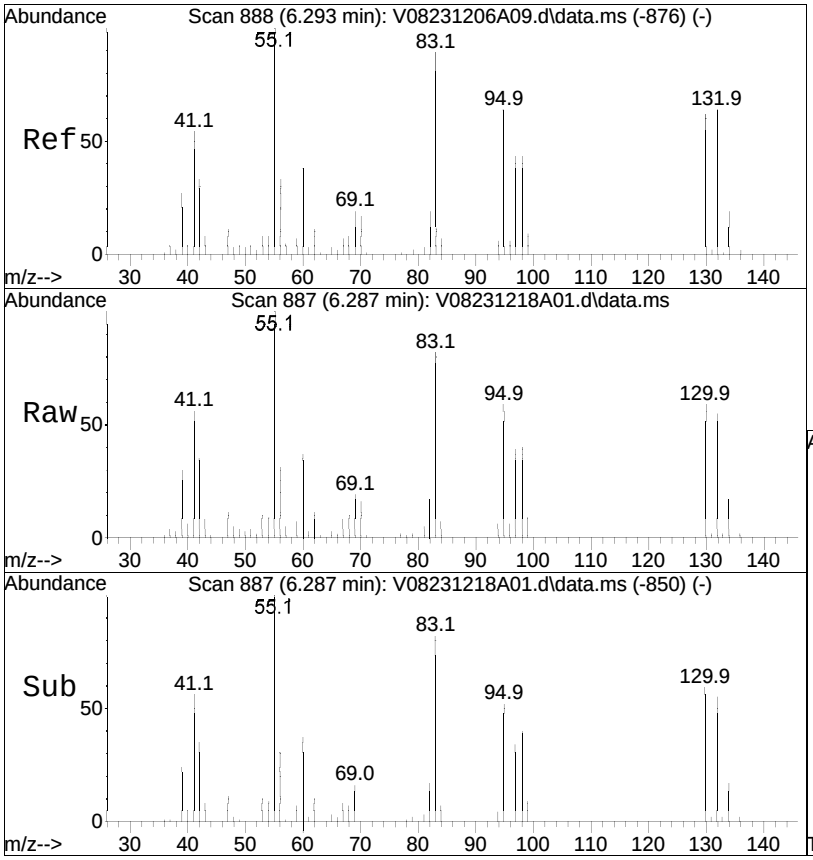


#44
1,2-Dichloroethane
Concen: 10.91 ug/L
RT: 5.899 min Scan# 813
Delta R.T. -0.006 min
Lab File: V08231218A01.d
Acq: 18 Dec 2023 6:51 am

Tgt Ion: 62 Resp: 47529

Ion	Ratio	Lower	Upper
62	100		
64	30.9	11.2	51.2
98	7.2	0.0	26.1

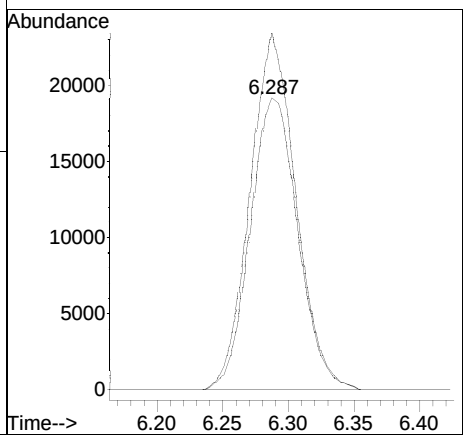


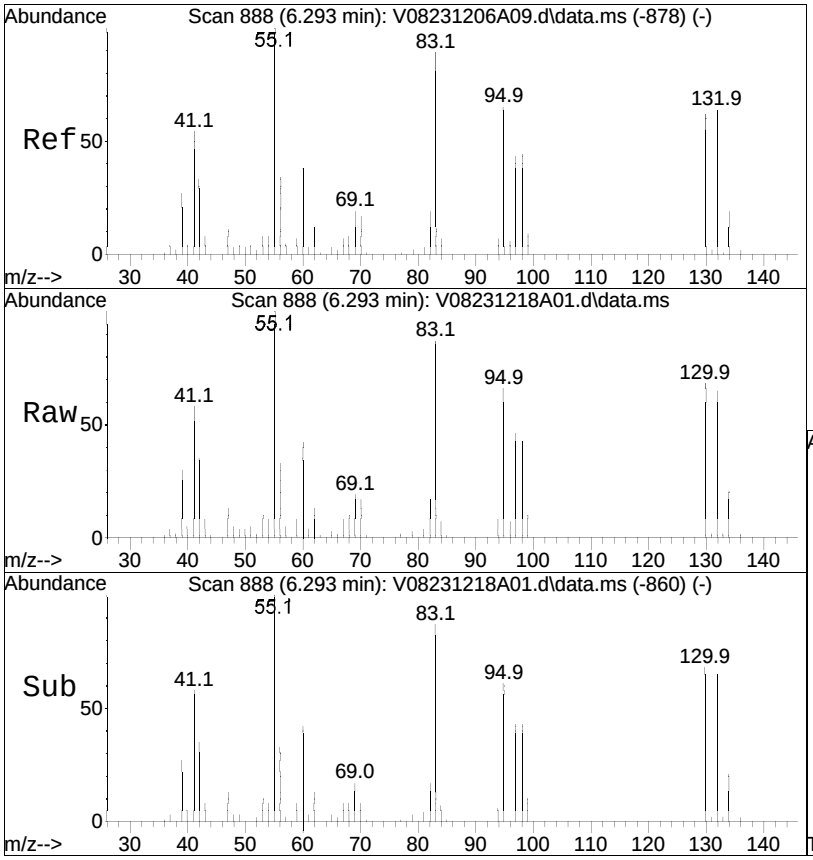


#47
Methyl cyclohexane
Concen: 9.86 ug/L
RT: 6.287 min Scan# 887
Delta R.T. -0.006 min
Lab File: V08231218A01.d
Acq: 18 Dec 2023 6:51 am

Tgt Ion: 83 Resp: 48213

Ion	Ratio	Lower	Upper
83	100		
55	117.7	88.3	132.5

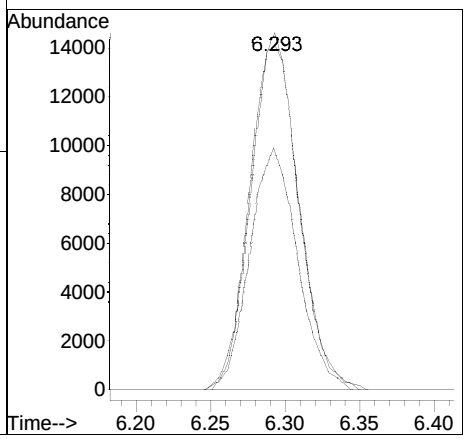


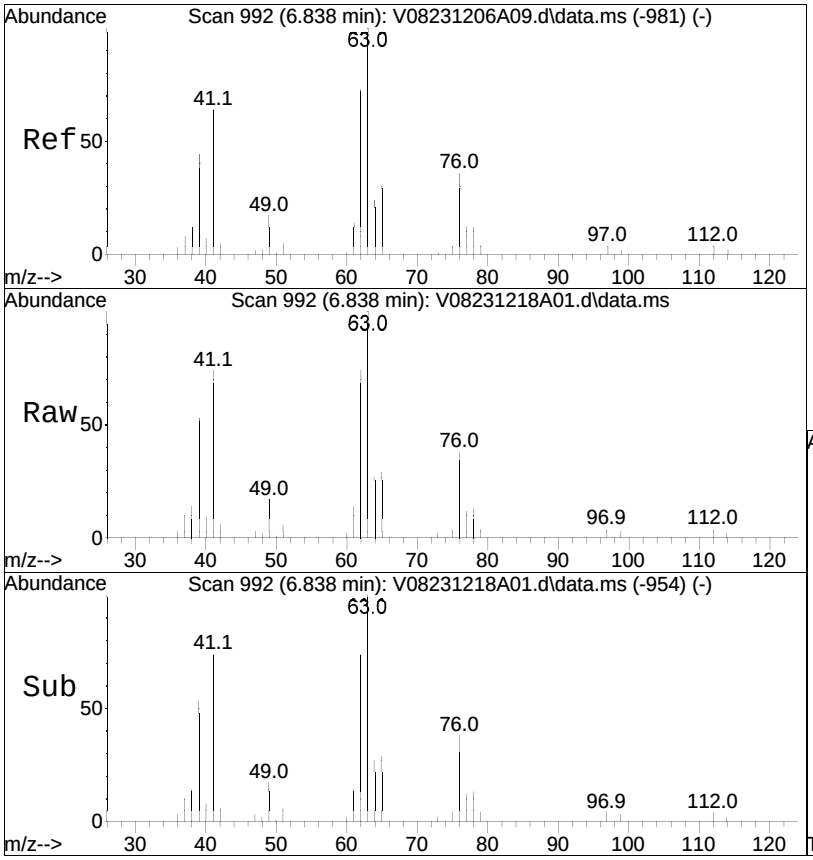


#48
Trichloroethene
Concen: 10.96 ug/L
RT: 6.293 min Scan# 888
Delta R.T. -0.005 min
Lab File: V08231218A01.d
Acq: 18 Dec 2023 6:51 am

Tgt Ion: 95 Resp: 32647

Ion	Ratio	Lower	Upper
95	100		
97	67.6	55.5	83.3
130	98.4	76.6	115.0

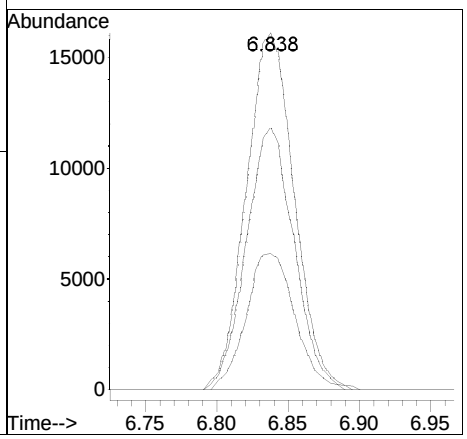


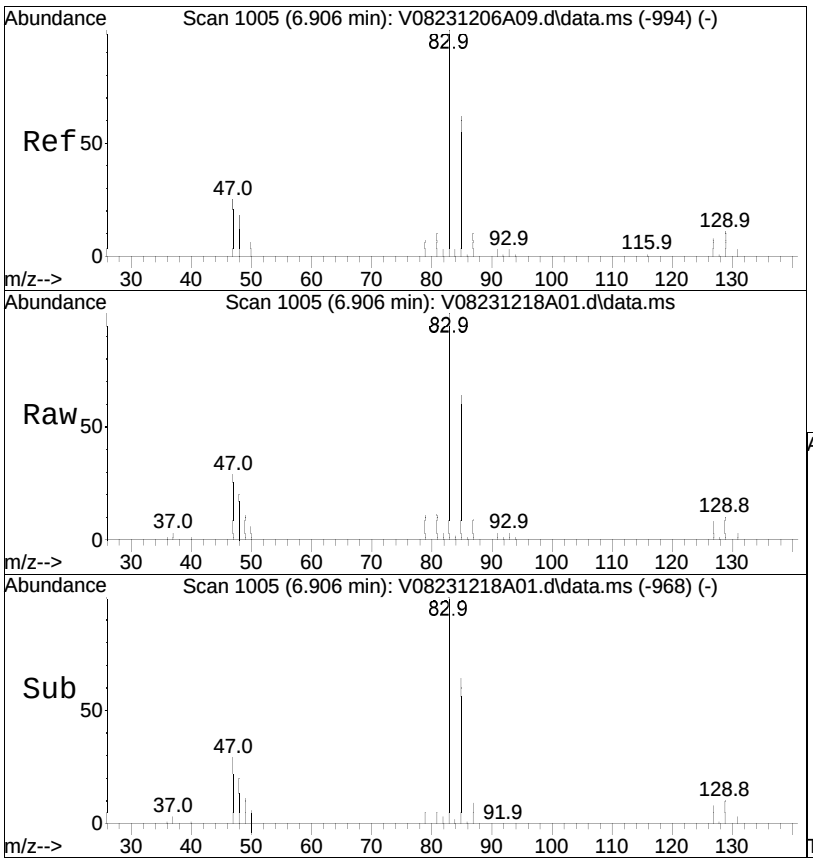


#51
1,2-Dichloropropane
Concen: 9.82 ug/L
RT: 6.838 min Scan# 992
Delta R.T. -0.000 min
Lab File: V08231218A01.d
Acq: 18 Dec 2023 6:51 am

Tgt Ion: 63 Resp: 37570

Ion	Ratio	Lower	Upper
63	100		
62	73.0	58.6	87.8
76	38.8	38.0	57.0

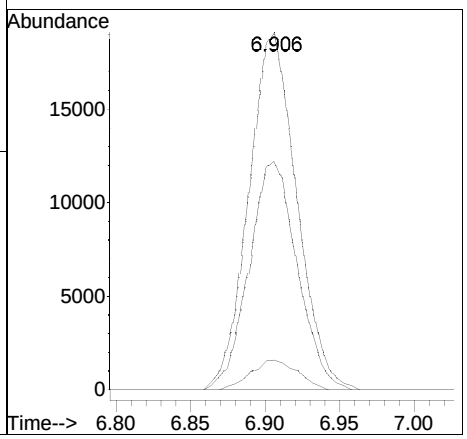


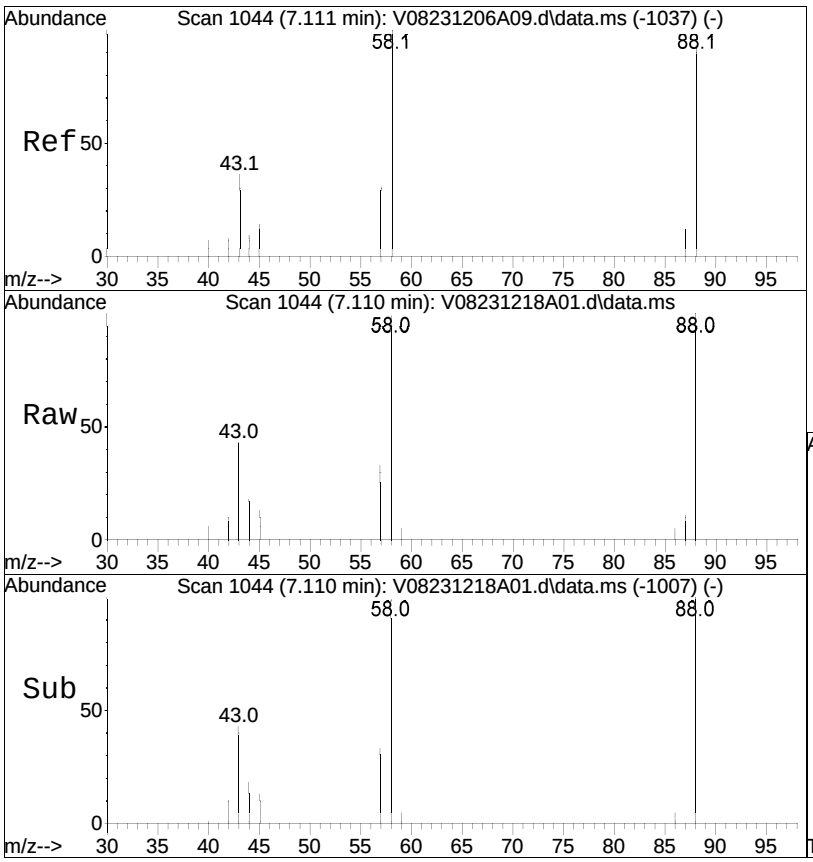


#54
Bromodichloromethane
Concen: 10.20 ug/L
RT: 6.906 min Scan# 1005
Delta R.T. -0.005 min
Lab File: V08231218A01.d
Acq: 18 Dec 2023 6:51 am

Tgt Ion: 83 Resp: 42380

Ion	Ratio	Lower	Upper
83	100		
85	64.3	52.3	78.5
127	8.3	6.2	9.4

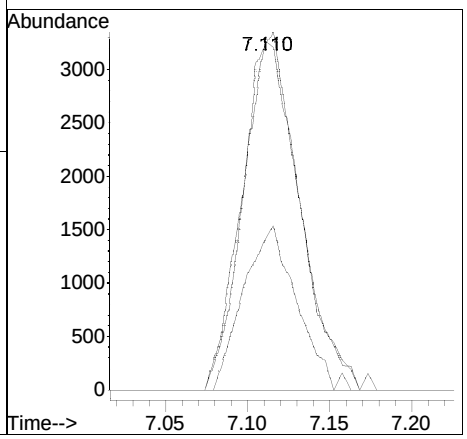


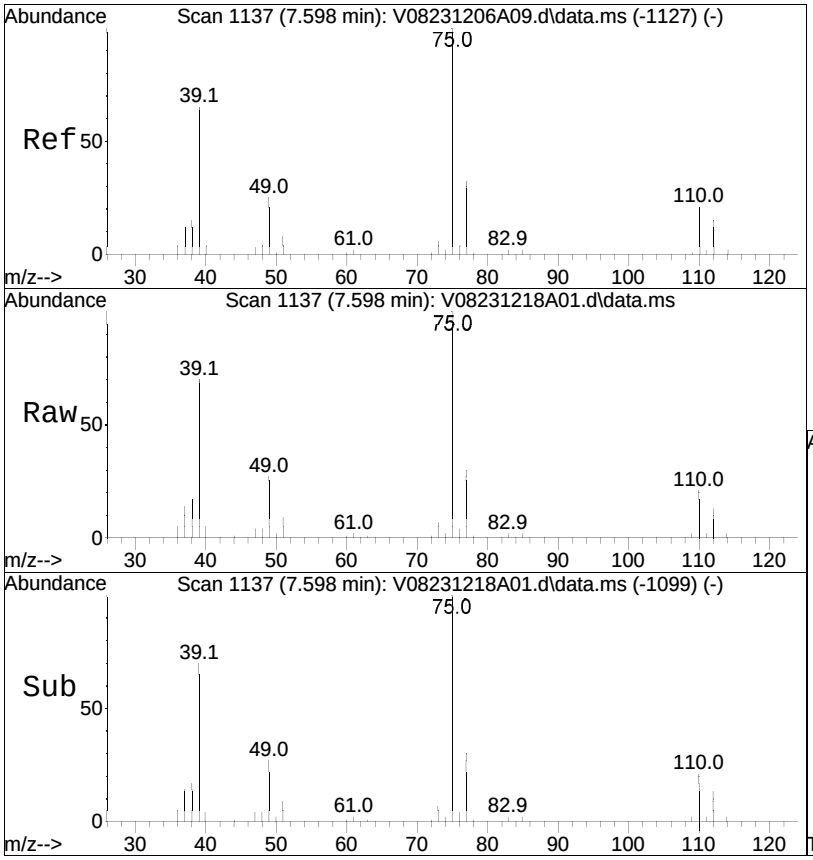


#57
1,4-Dioxane
Concen: 805.49 ug/L
RT: 7.110 min Scan# 1044
Delta R.T. -0.006 min
Lab File: V08231218A01.d
Acq: 18 Dec 2023 6:51 am

Tgt Ion: 88 Resp: 7764

Ion	Ratio	Lower	Upper
88	100		
58	103.8	76.7	115.1
43	44.6	36.2	54.2

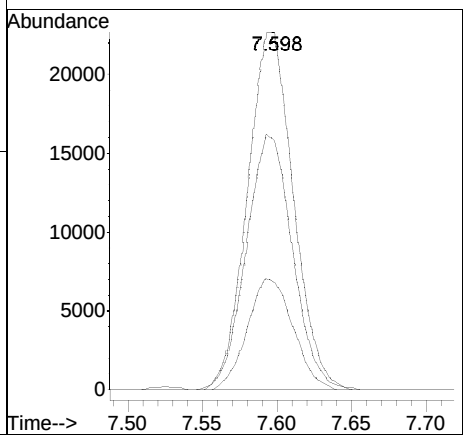


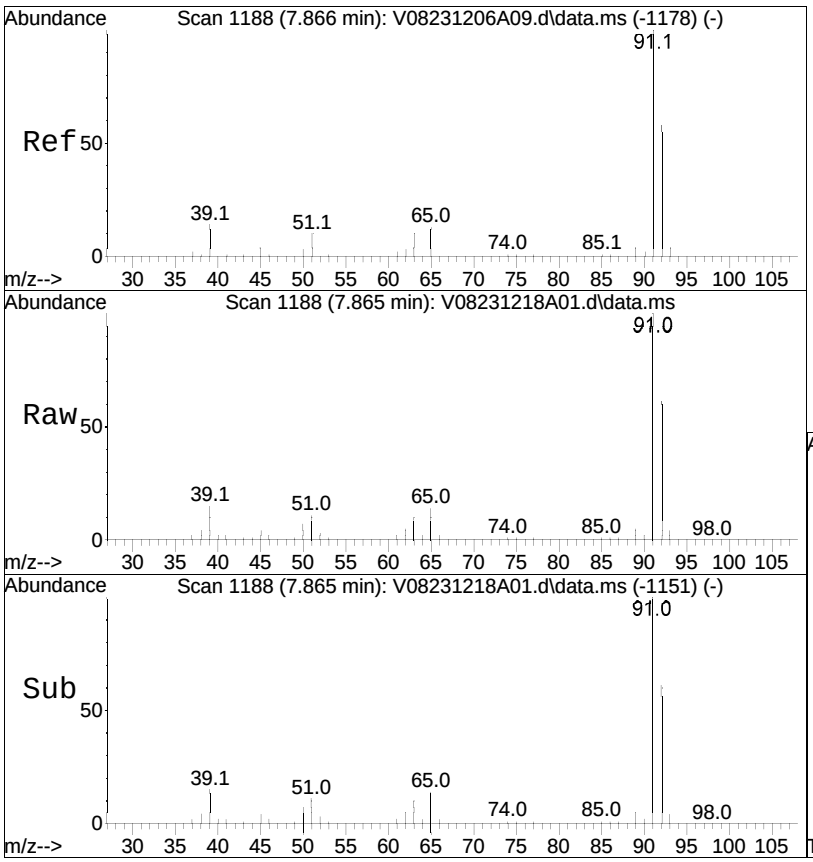


#58
cis-1,3-Dichloropropene
Concen: 10.26 ug/L
RT: 7.598 min Scan# 1137
Delta R.T. 0.000 min
Lab File: V08231218A01.d
Acq: 18 Dec 2023 6:51 am

Tgt Ion: 75 Resp: 48257

Ion	Ratio	Lower	Upper
75	100		
77	31.1	25.0	37.4
39	72.1	50.1	75.1

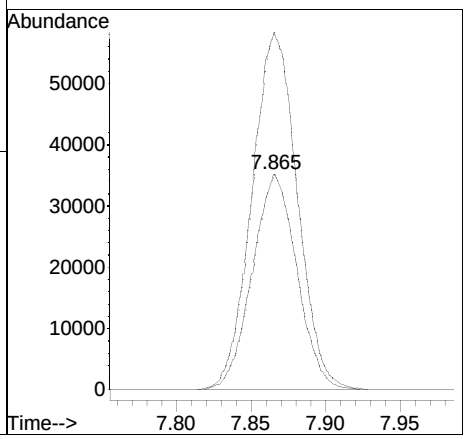


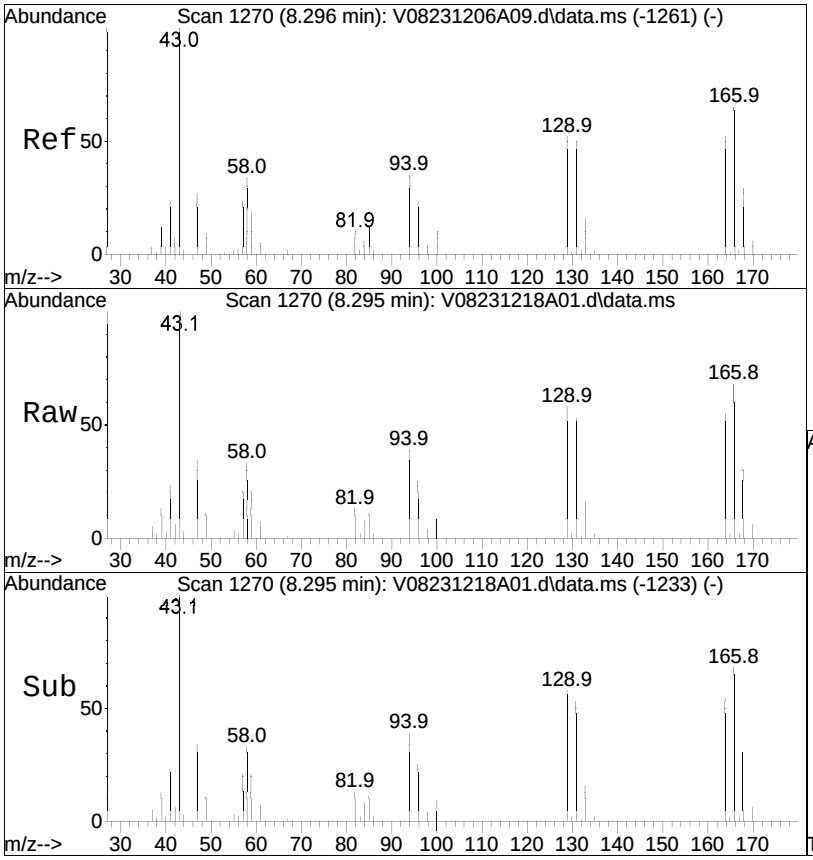


#61
Toluene
Concen: 10.77 ug/L
RT: 7.865 min Scan# 1188
Delta R.T. -0.006 min
Lab File: V08231218A01.d
Acq: 18 Dec 2023 6:51 am

Tgt Ion: 92 Resp: 72568

Ion	Ratio	Lower	Upper
92	100		
91	168.5	139.8	209.6

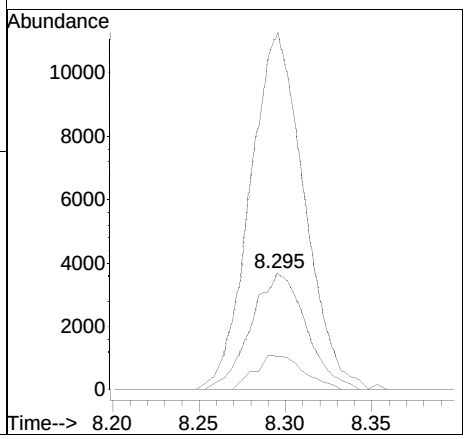


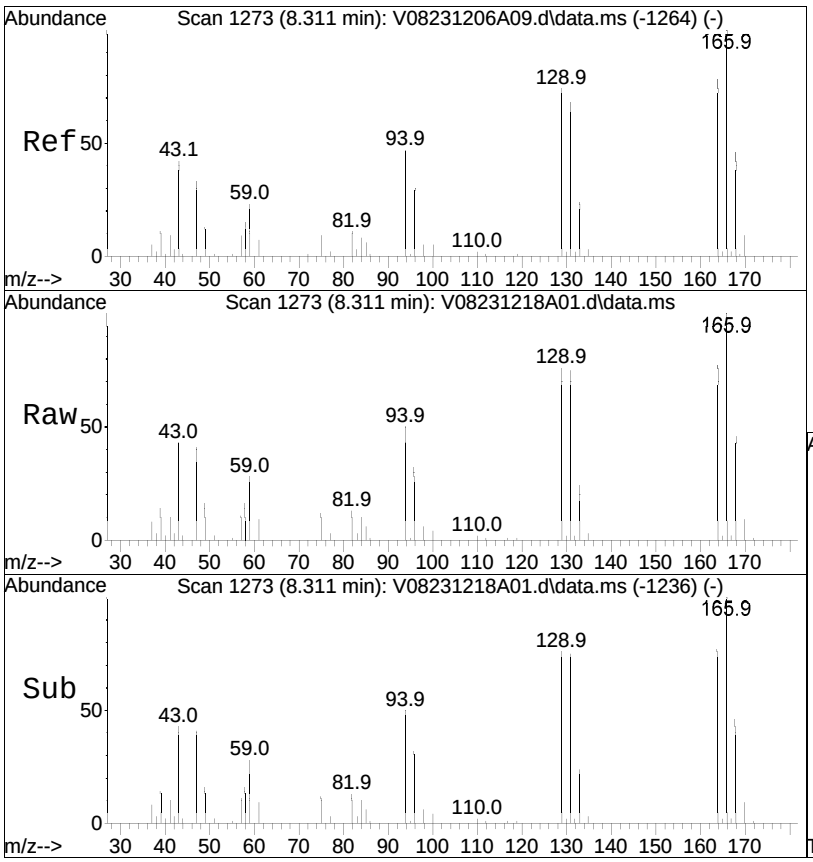


#62
4-Methyl-2-pentanone
Concen: 8.68 ug/L
RT: 8.295 min Scan# 1270
Delta R.T. -0.006 min
Lab File: V08231218A01.d
Acq: 18 Dec 2023 6:51 am

Tgt Ion: 58 Resp: 8130

Ion	Ratio	Lower	Upper
58	100		
100	26.1	20.2	30.2
43	301.3	196.6	295.0#

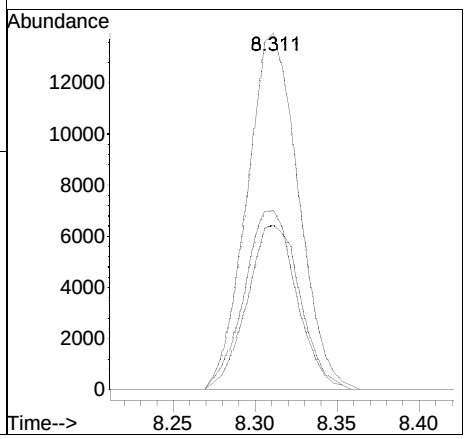


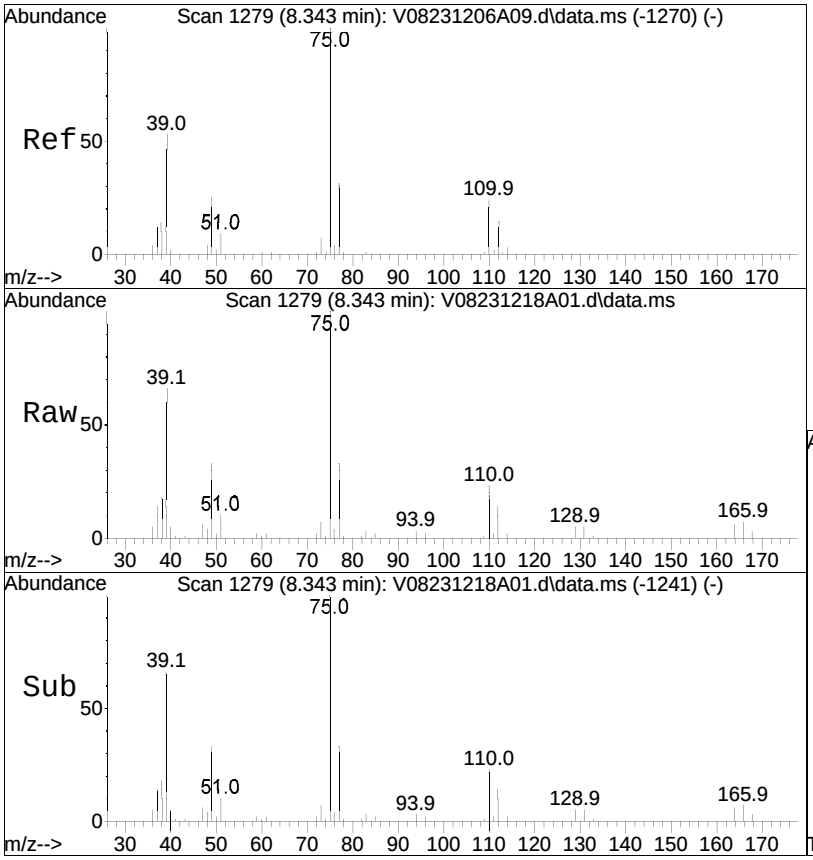


#63
Tetrachloroethene
Concen: 10.92 ug/L
RT: 8.311 min Scan# 1273
Delta R.T. -0.005 min
Lab File: V08231218A01.d
Acq: 18 Dec 2023 6:51 am

Tgt Ion:166 Resp: 30283

Ion	Ratio	Lower	Upper
166	100		
168	47.7	28.2	68.2
94	50.6	38.4	78.4

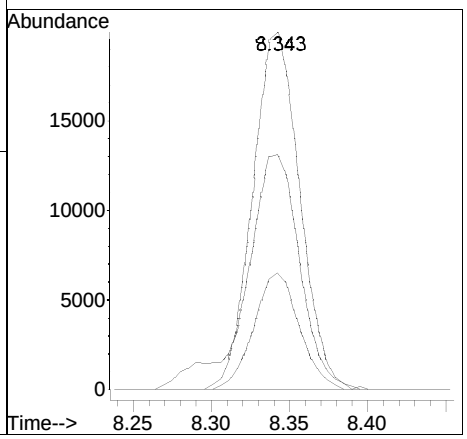


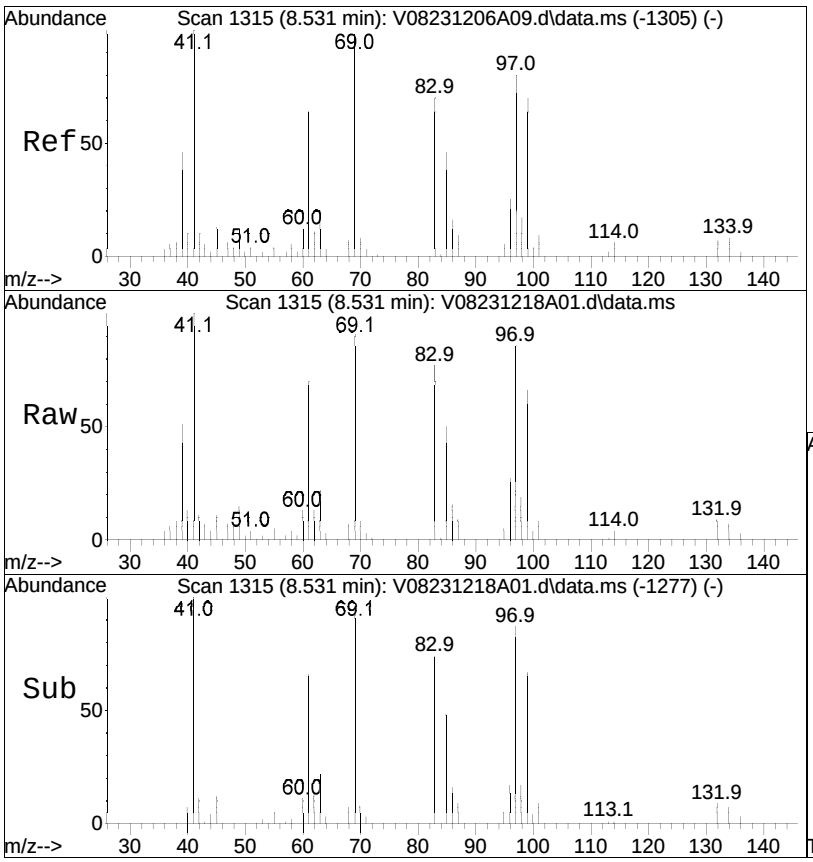


#65
trans-1,3-Dichloropropene
Concen: 11.05 ug/L
RT: 8.343 min Scan# 1279
Delta R.T. -0.000 min
Lab File: V08231218A01.d
Acq: 18 Dec 2023 6:51 am

Tgt Ion: 75 Resp: 41576

Ion	Ratio	Lower	Upper
75	100		
77	31.6	12.4	52.4
39	75.0	42.8	82.8

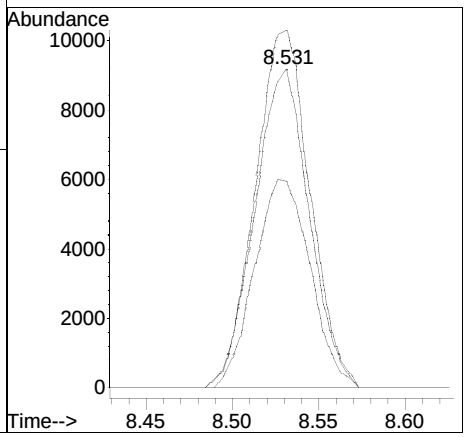


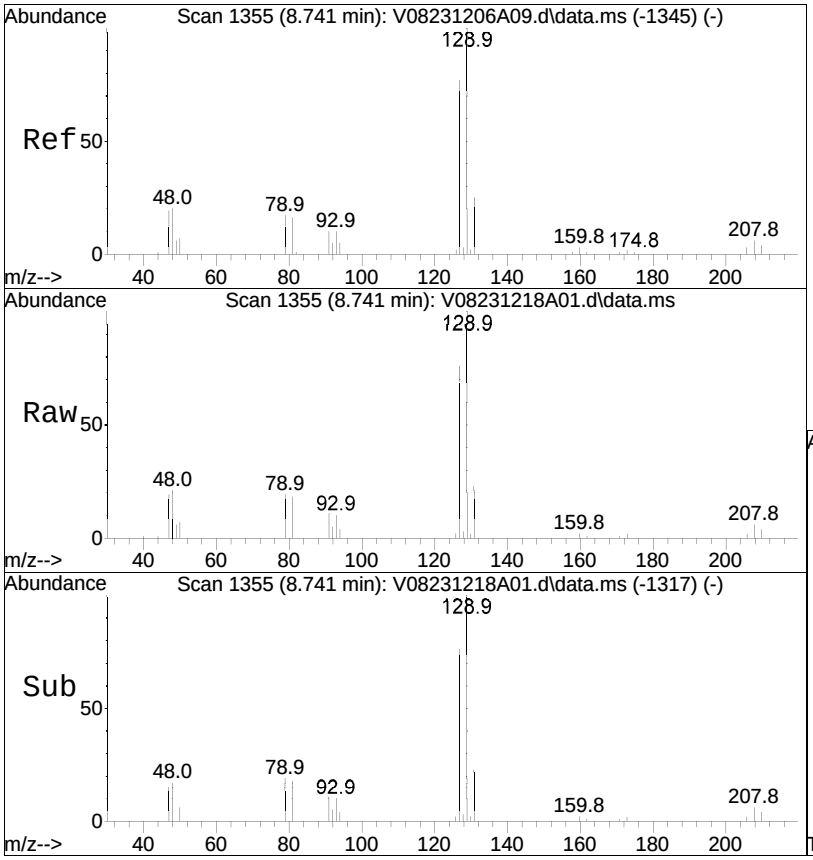


#68
1,1,2-Trichloroethane
Concen: 11.51 ug/L
RT: 8.531 min Scan# 1315
Delta R.T. 0.000 min
Lab File: V08231218A01.d
Acq: 18 Dec 2023 6:51 am

Tgt Ion: 83 Resp: 19995

Ion	Ratio	Lower	Upper
83	100		
97	113.2	89.8	129.8
85	67.0	44.4	84.4

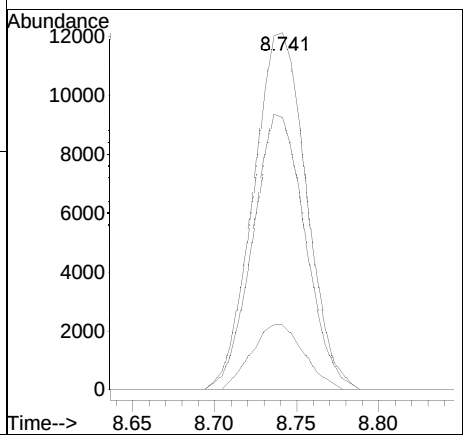


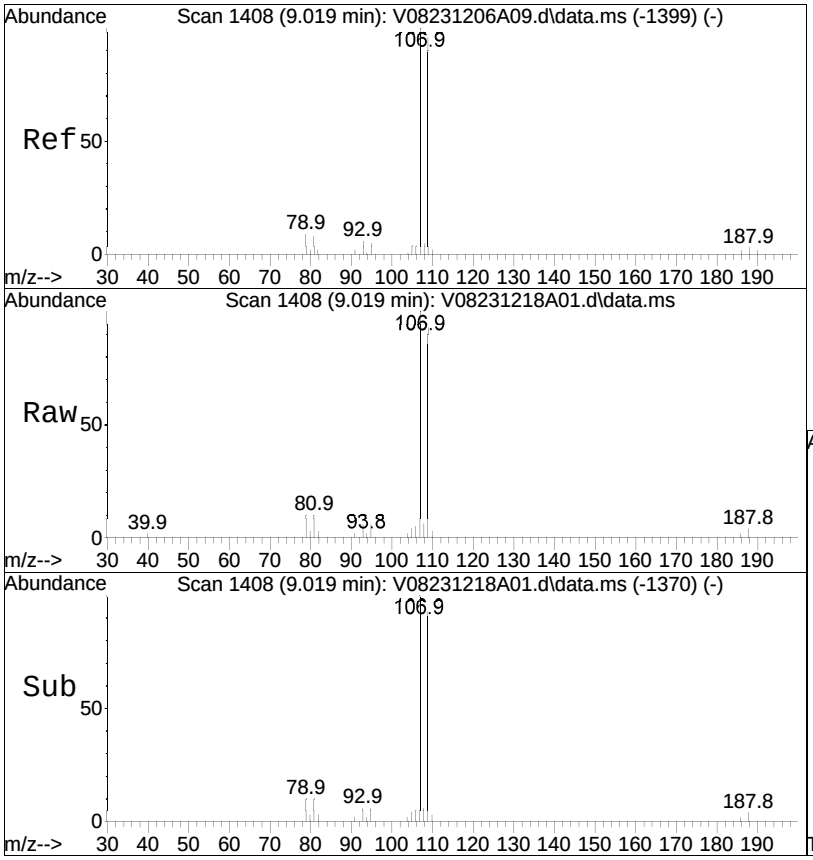


#69
Chlorodibromomethane
Concen: 10.80 ug/L
RT: 8.741 min Scan# 1355
Delta R.T. 0.000 min
Lab File: V08231218A01.d
Acq: 18 Dec 2023 6:51 am

Tgt Ion:129 Resp: 27212

Ion	Ratio	Lower	Upper
129	100		
81	18.1	2.9	42.9
127	76.4	57.8	97.8

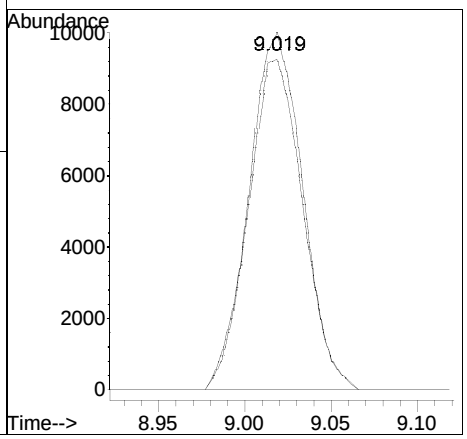


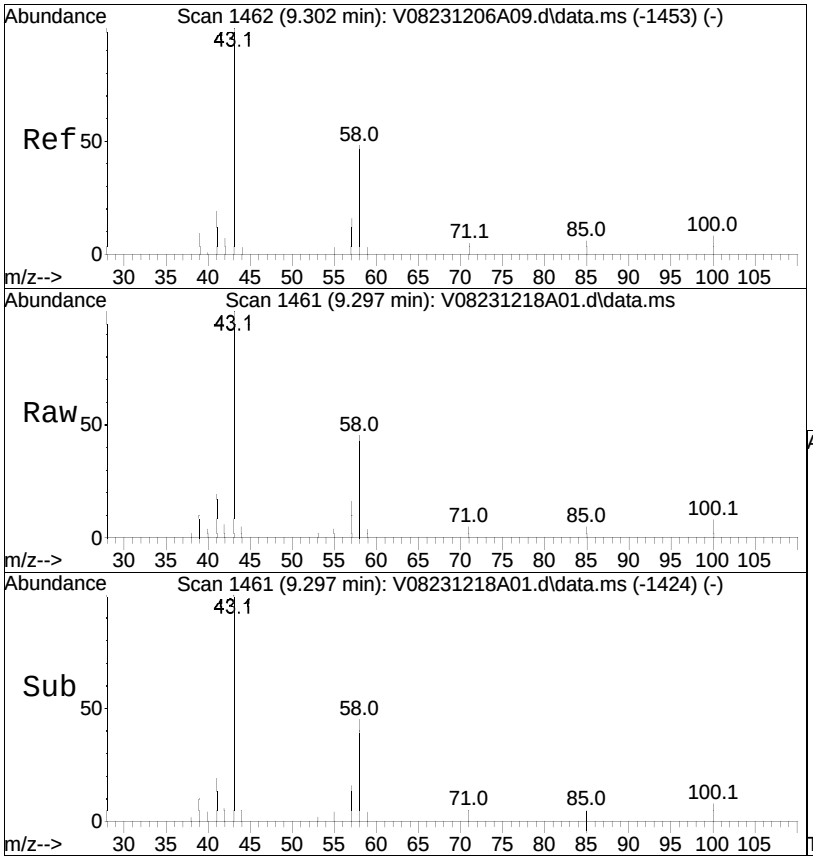


#71
1,2-Dibromoethane
Concen: 10.87 ug/L
RT: 9.019 min Scan# 1408
Delta R.T. -0.000 min
Lab File: V08231218A01.d
Acq: 18 Dec 2023 6:51 am

Tgt Ion:107 Resp: 21524

Ion	Ratio	Lower	Upper
107	100		
109	93.3	74.3	111.5

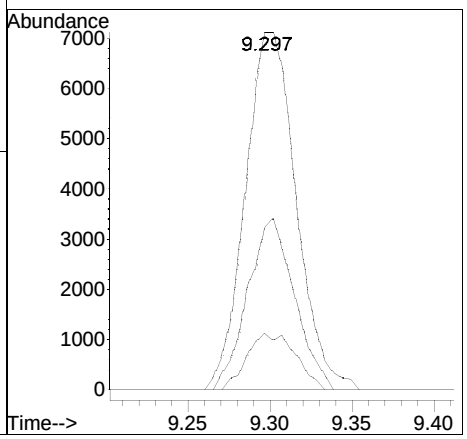


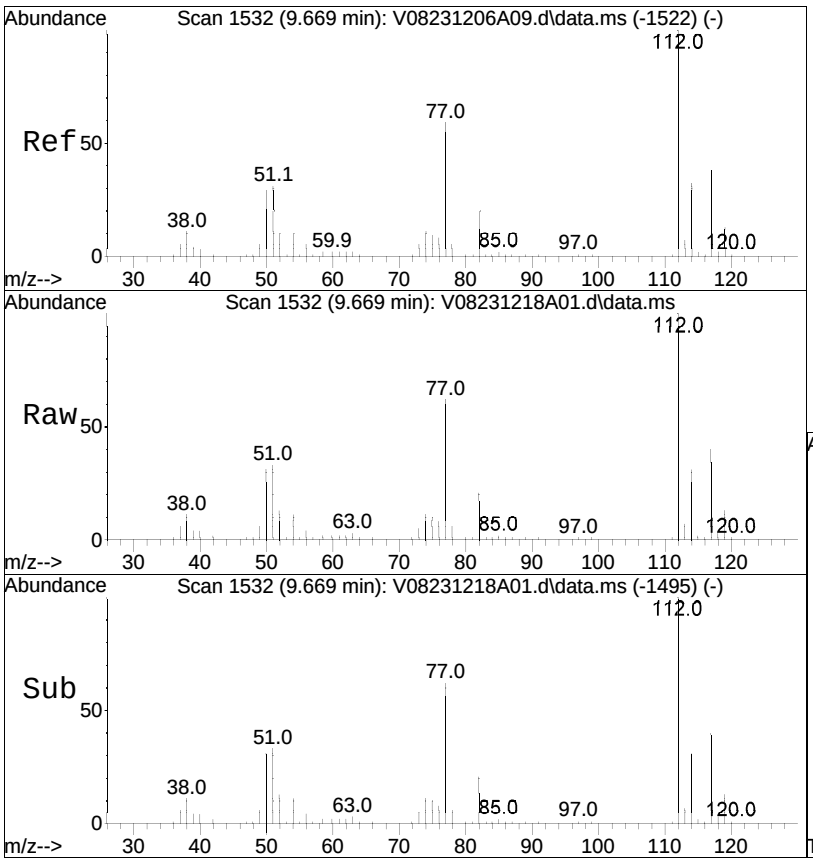


#72
2-Hexanone
Concen: 9.77 ug/L
RT: 9.297 min Scan# 1461
Delta R.T. -0.005 min
Lab File: V08231218A01.d
Acq: 18 Dec 2023 6:51 am

Tgt Ion: 43 Resp: 15227

Ion	Ratio	Lower	Upper
43	100		
58	44.1	41.2	61.8
57	15.1	17.2	25.8#

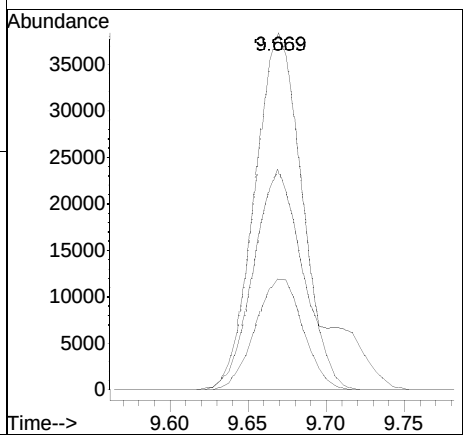


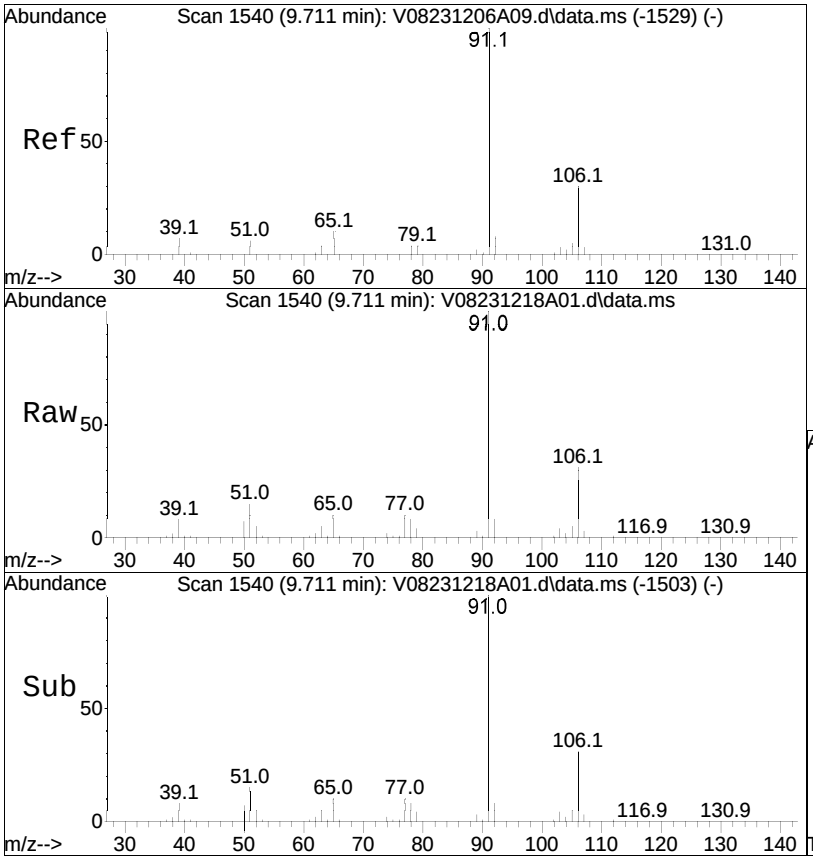


#73
Chlorobenzene
Concen: 10.87 ug/L
RT: 9.669 min Scan# 1532
Delta R.T. -0.005 min
Lab File: V08231218A01.d
Acq: 18 Dec 2023 6:51 am

Tgt Ion:112 Resp: 80117

Ion	Ratio	Lower	Upper
112	100		
77	77.5	55.4	83.0
114	31.7	25.4	38.2

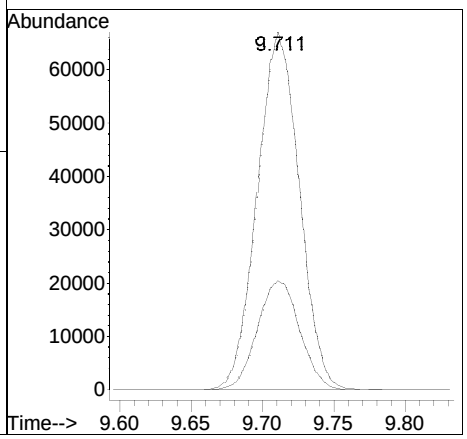


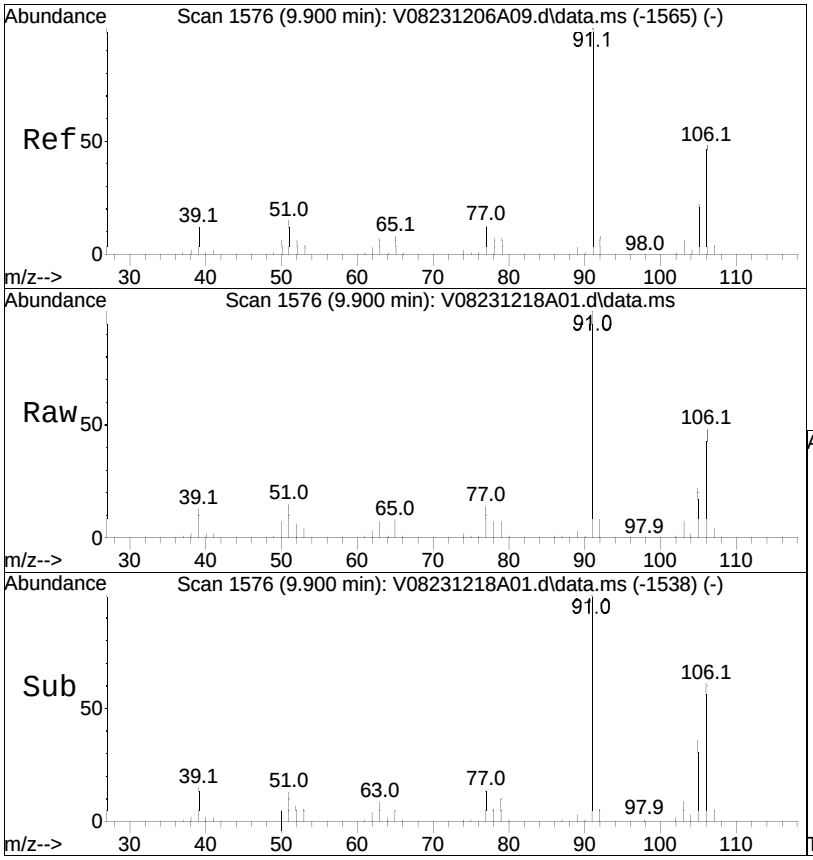


#74
Ethylbenzene
Concen: 10.70 ug/L
RT: 9.711 min Scan# 1540
Delta R.T. -0.005 min
Lab File: V08231218A01.d
Acq: 18 Dec 2023 6:51 am

Tgt Ion: 91 Resp: 135715

Ion	Ratio	Lower	Upper
91	100		
106	30.9	24.3	36.5

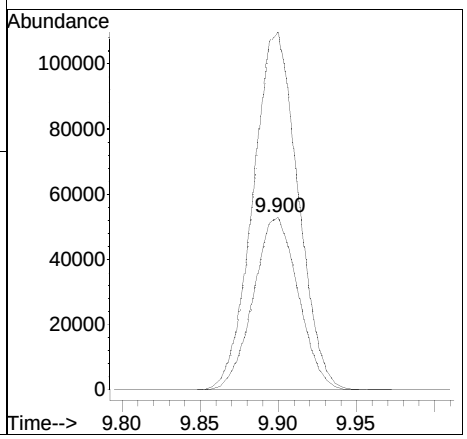


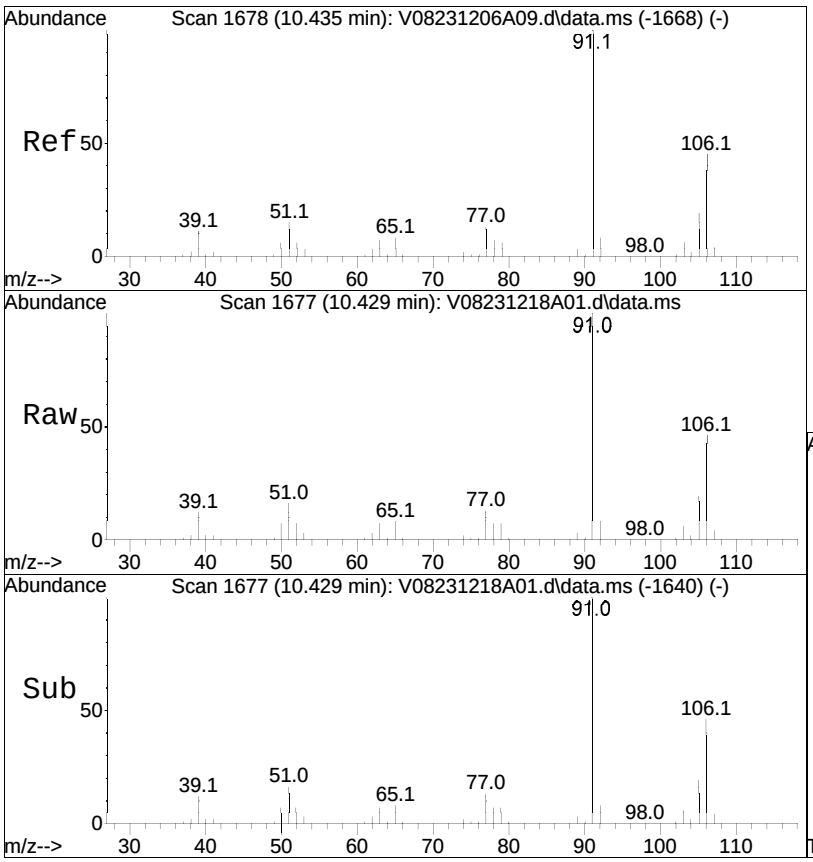


#76
p/m Xylene
Concen: 22.18 ug/L
RT: 9.900 min Scan# 1576
Delta R.T. -0.000 min
Lab File: V08231218A01.d
Acq: 18 Dec 2023 6:51 am

Tgt Ion:106 Resp: 105284

Ion	Ratio	Lower	Upper
106	100		
91	207.8	166.4	249.6

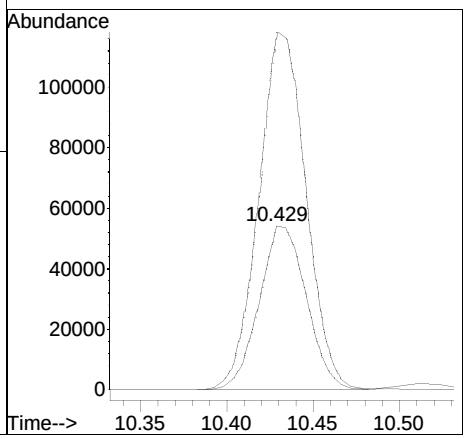


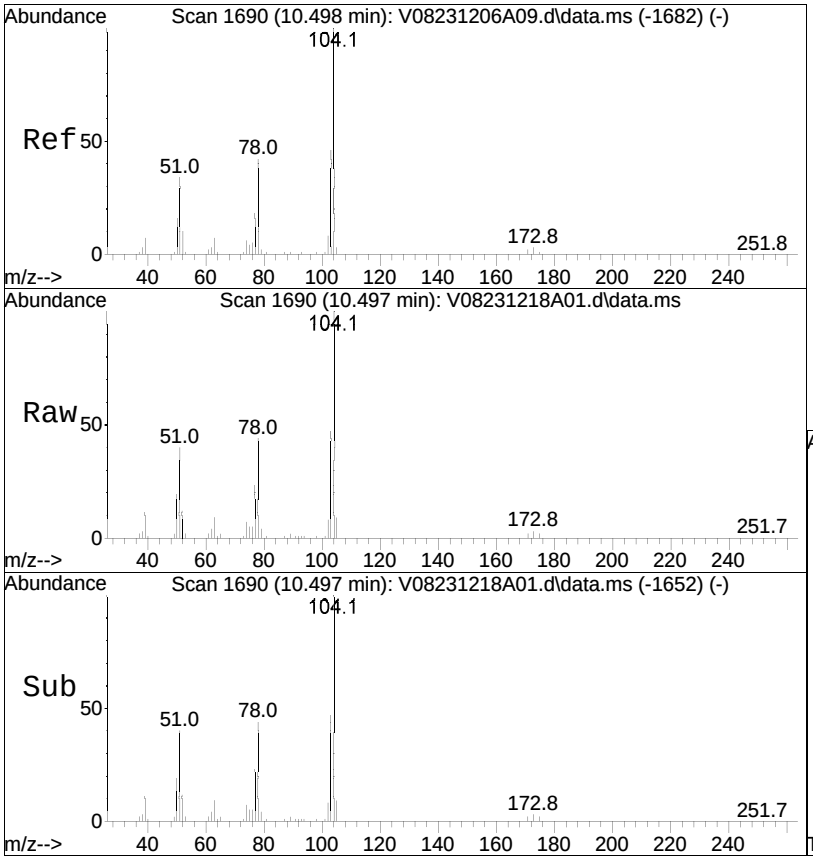


#77
o Xylene
Concen: 22.19 ug/L
RT: 10.429 min Scan# 1677
Delta R.T. -0.006 min
Lab File: V08231218A01.d
Acq: 18 Dec 2023 6:51 am

Tgt Ion:106 Resp: 102320

Ion	Ratio	Lower	Upper
106	100		
91	217.7	182.6	273.8

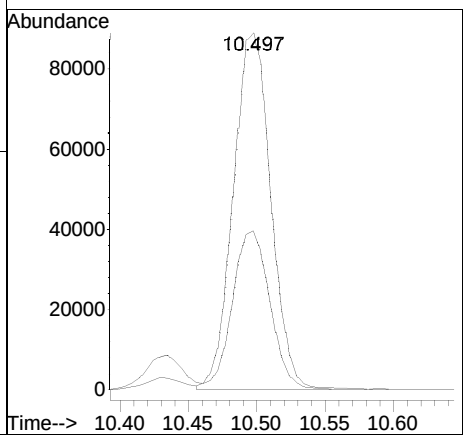


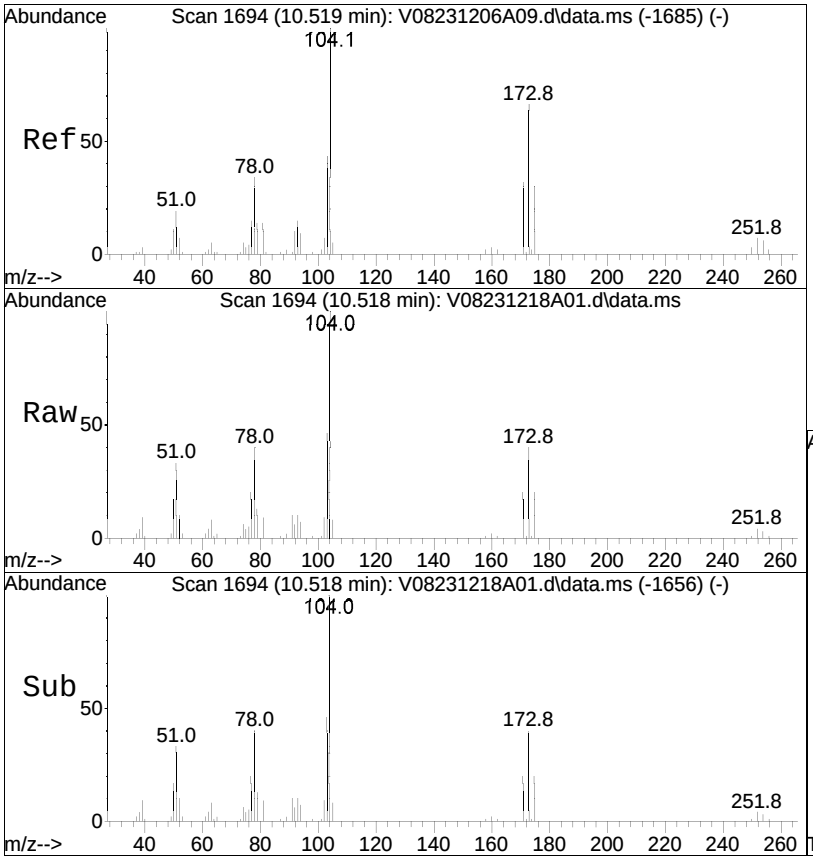


#78
Styrene
Concen: 22.59 ug/L
RT: 10.497 min Scan# 1690
Delta R.T. -0.001 min
Lab File: V08231218A01.d
Acq: 18 Dec 2023 6:51 am

Tgt Ion:104 Resp: 169071

Ion	Ratio	Lower	Upper
104	100		
78	44.4	39.8	59.6

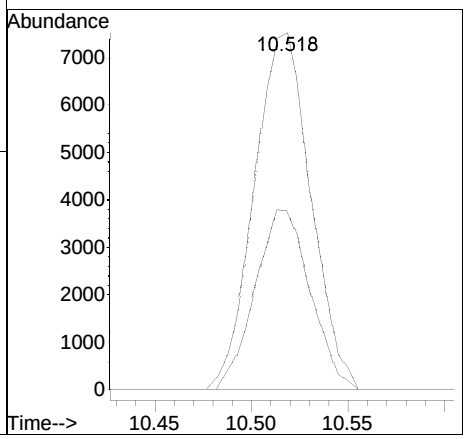


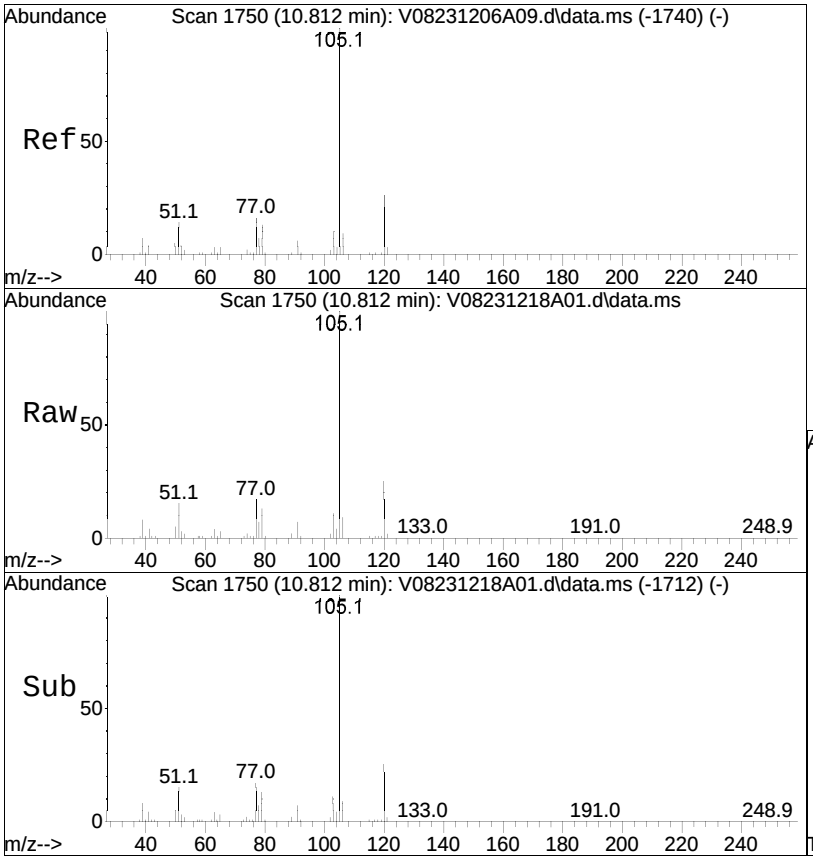


#80
Bromoform
Concen: 11.47 ug/L
RT: 10.518 min Scan# 1694
Delta R.T. -0.001 min
Lab File: V08231218A01.d
Acq: 18 Dec 2023 6:51 am

Tgt Ion:173 Resp: 15246

Ion	Ratio	Lower	Upper
173	100		
175	49.3	31.5	71.5

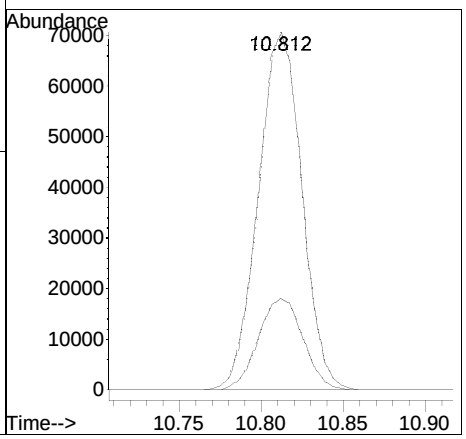


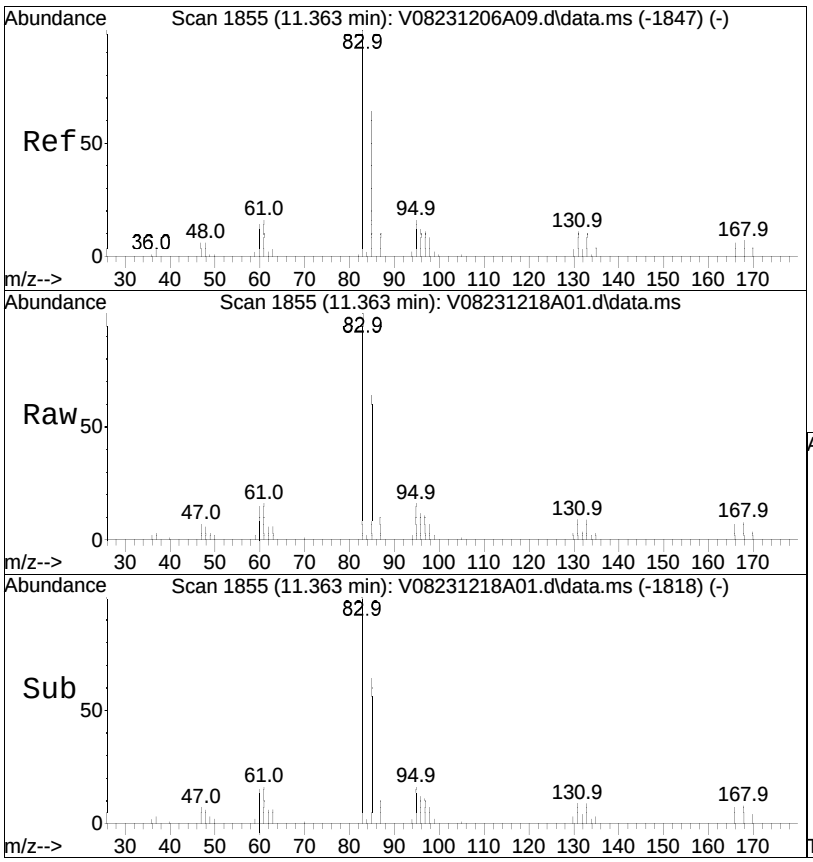


#82
Isopropylbenzene
Concen: 11.38 ug/L
RT: 10.812 min Scan# 1750
Delta R.T. 0.000 min
Lab File: V08231218A01.d
Acq: 18 Dec 2023 6:51 am

Tgt Ion:105 Resp: 129265

Ion	Ratio	Lower	Upper
105	100		
120	26.3	4.8	44.8

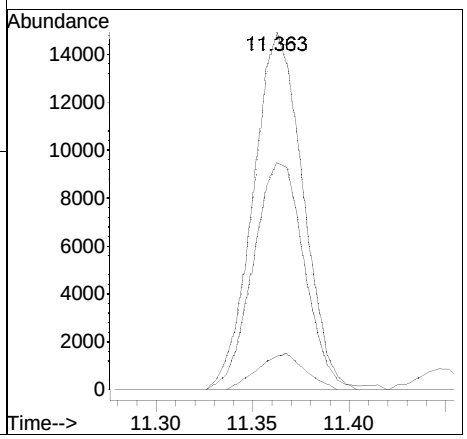


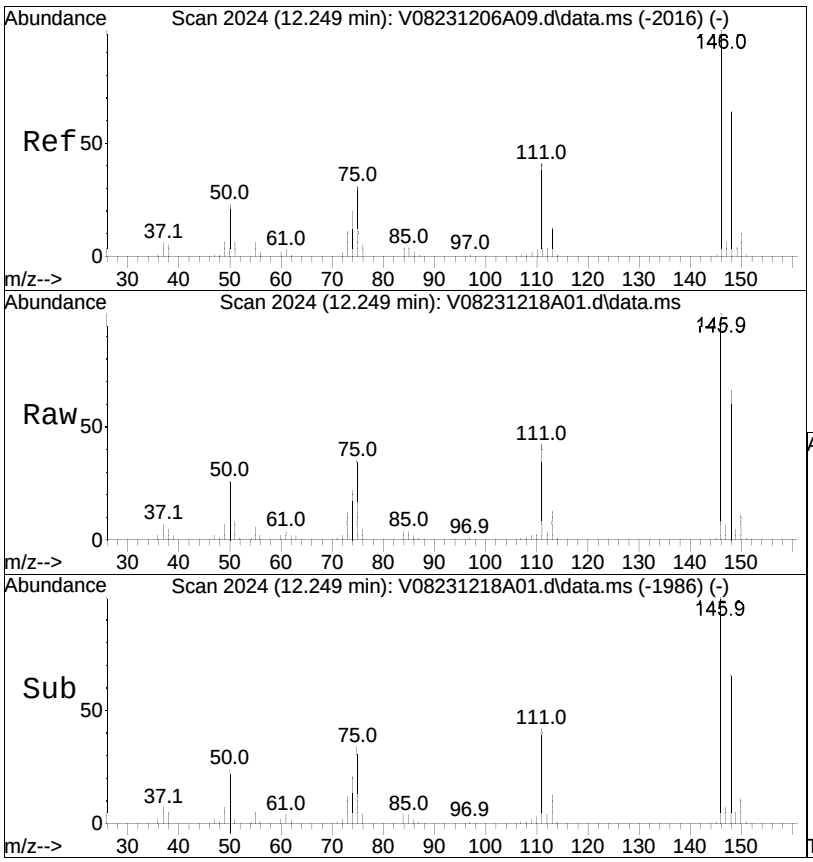


#87
1,1,2,2-Tetrachloroethane
Concen: 11.83 ug/L
RT: 11.363 min Scan# 1855
Delta R.T. -0.005 min
Lab File: V08231218A01.d
Acq: 18 Dec 2023 6:51 am

Tgt Ion: 83 Resp: 26492

Ion	Ratio	Lower	Upper
83	100		
131	9.7	0.0	30.4
85	66.1	45.4	85.4

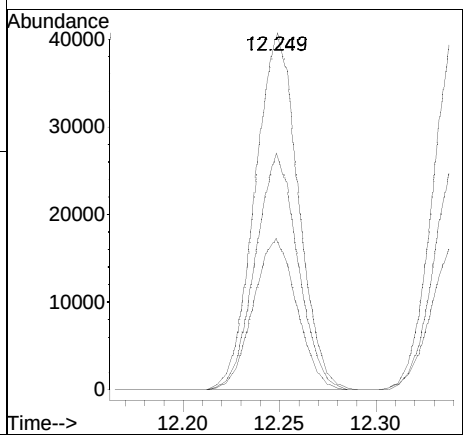


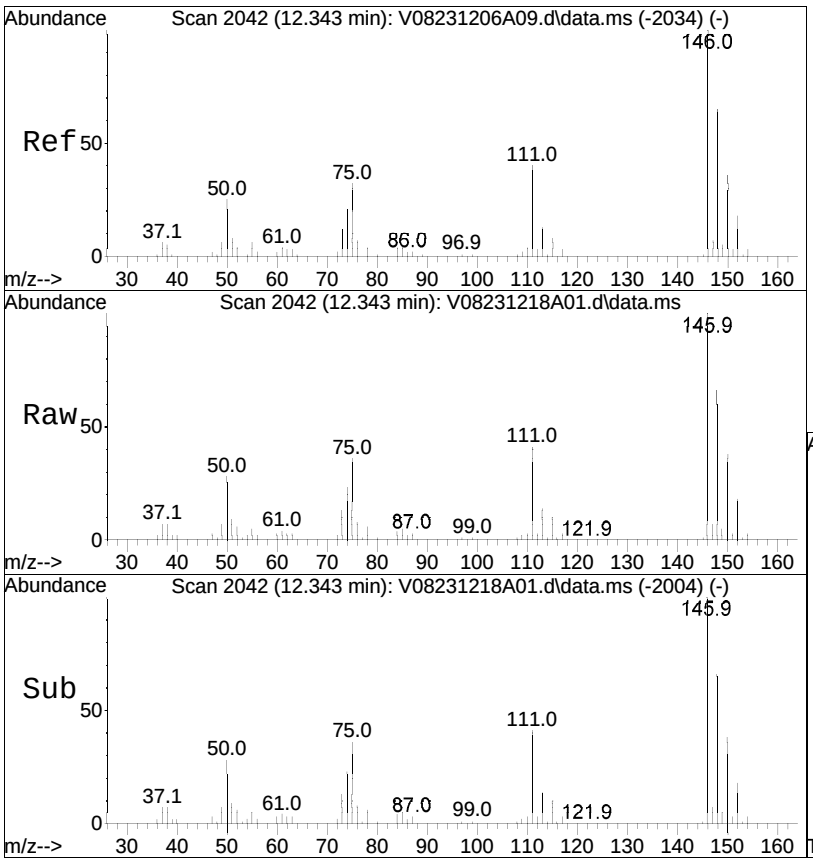


#100
1,3-Dichlorobenzene
Concen: 11.77 ug/L
RT: 12.249 min Scan# 2024
Delta R.T. -0.000 min
Lab File: V08231218A01.d
Acq: 18 Dec 2023 6:51 am

Tgt Ion:146 Resp: 63571

Ion	Ratio	Lower	Upper
146	100		
111	42.5	27.5	57.1
148	64.8	41.9	86.9

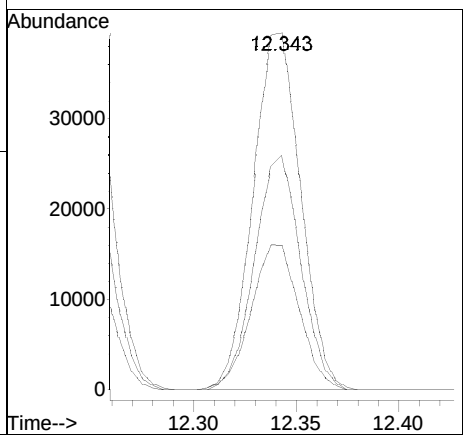


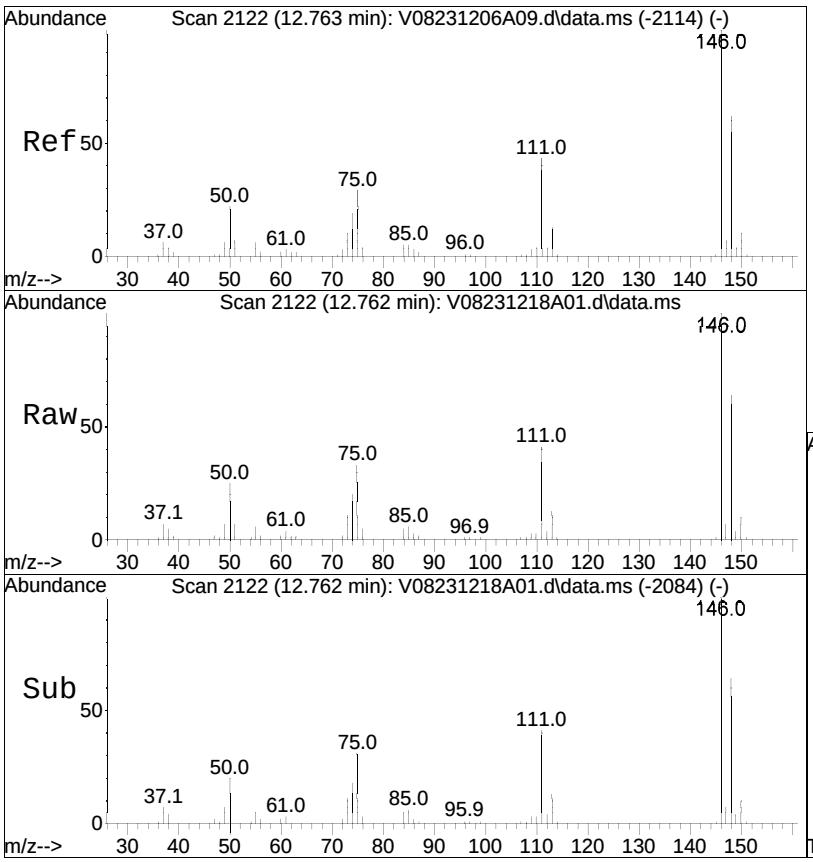


#101
1,4-Dichlorobenzene
Concen: 11.69 ug/L
RT: 12.343 min Scan# 2042
Delta R.T. 0.000 min
Lab File: V08231218A01.d
Acq: 18 Dec 2023 6:51 am

Tgt Ion:146 Resp: 63782

Ion	Ratio	Lower	Upper
146	100		
111	41.3	32.3	48.5
148	63.7	49.9	74.9

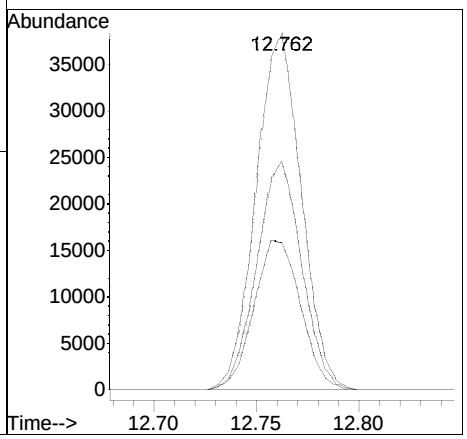


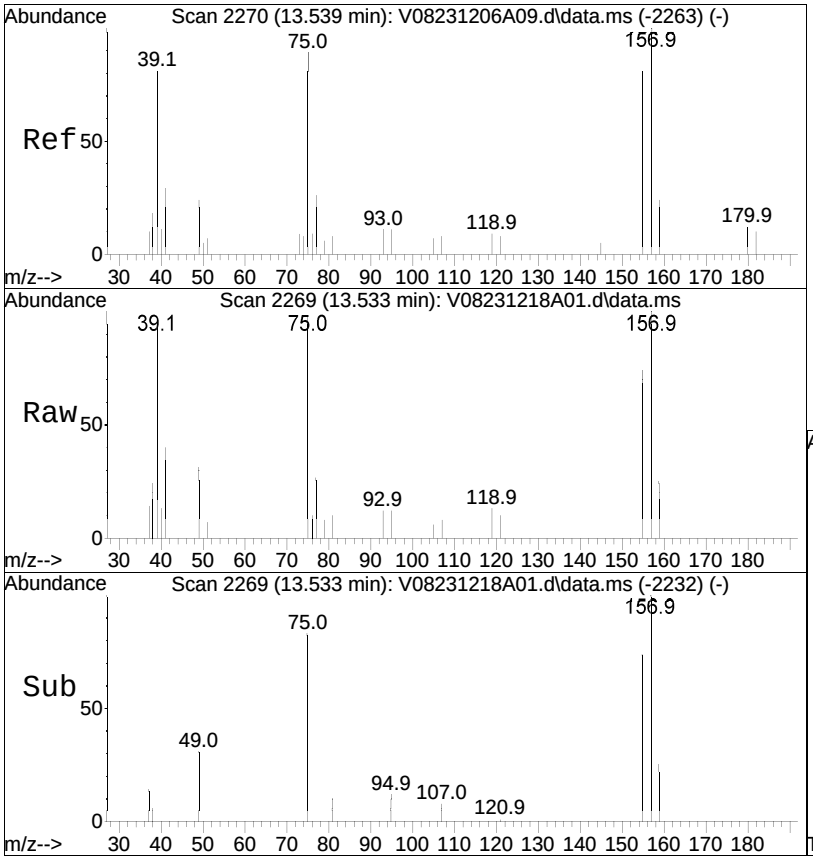


#104
1,2-Dichlorobenzene
Concen: 11.65 ug/L
RT: 12.762 min Scan# 2122
Delta R.T. -0.001 min
Lab File: V08231218A01.d
Acq: 18 Dec 2023 6:51 am

Tgt Ion:146 Resp: 58578

Ion	Ratio	Lower	Upper
146	100		
111	43.2	28.3	58.7
148	63.6	42.3	87.8

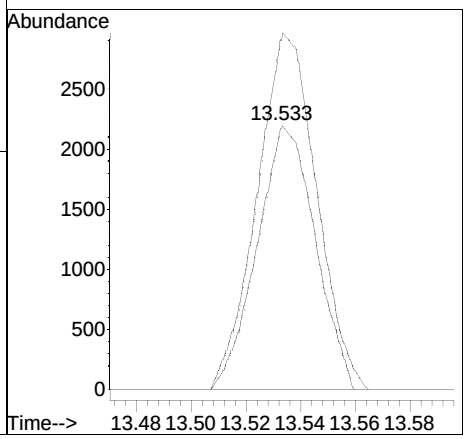


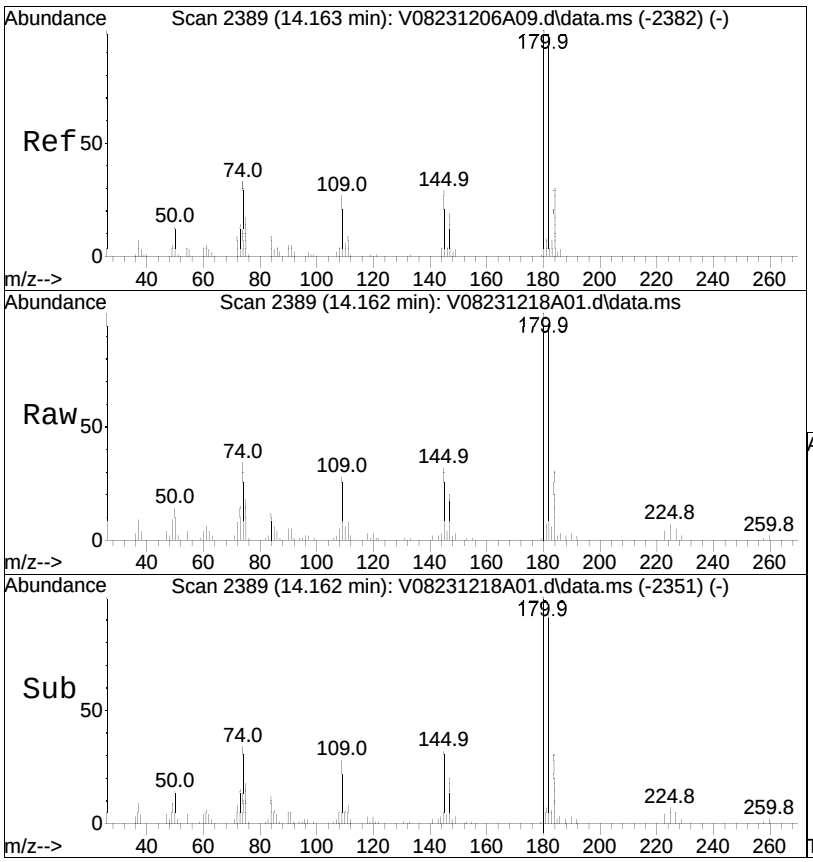


#106
1,2-Dibromo-3-chloropropane
Concen: 9.98 ug/L
RT: 13.533 min Scan# 2269
Delta R.T. -0.006 min
Lab File: V08231218A01.d
Acq: 18 Dec 2023 6:51 am

Tgt Ion:155 Resp: 3217

Ion	Ratio	Lower	Upper
155	100		
157	138.4	94.8	142.2

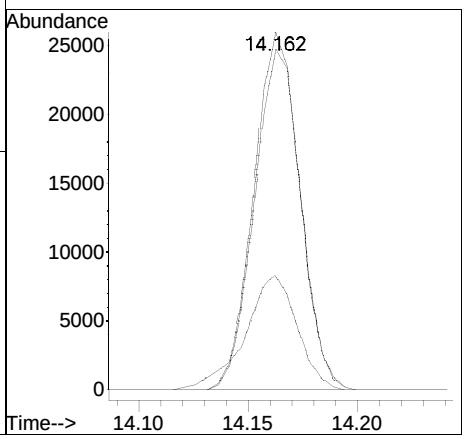


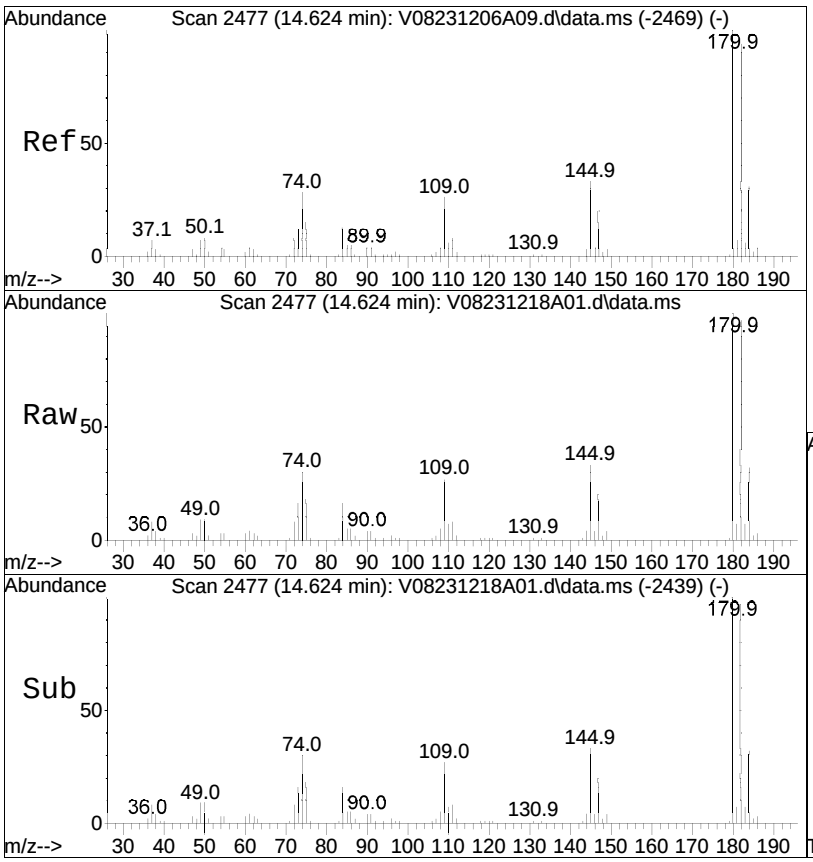


#109
1,2,4-Trichlorobenzene
Concen: 10.84 ug/L
RT: 14.162 min Scan# 2389
Delta R.T. 0.000 min
Lab File: V08231218A01.d
Acq: 18 Dec 2023 6:51 am

Tgt Ion:180 Resp: 37818

Ion	Ratio	Lower	Upper
180	100		
182	95.5	77.3	115.9
145	36.2	28.1	42.1

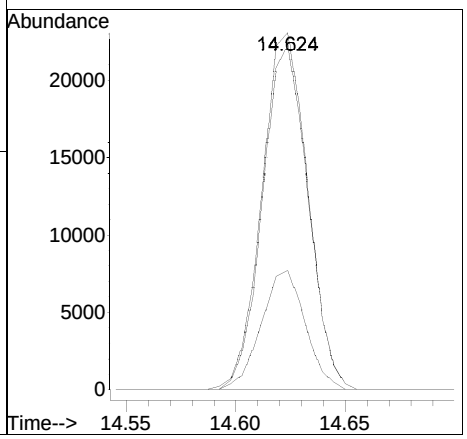




#111
1,2,3-Trichlorobenzene
Concen: 11.07 ug/L
RT: 14.624 min Scan# 2477
Delta R.T. -0.000 min
Lab File: V08231218A01.d
Acq: 18 Dec 2023 6:51 am

Tgt Ion:180 Resp: 33591

Ion	Ratio	Lower	Upper
180	100		
182	95.1	76.4	114.6
145	32.2	26.4	39.6



Quantitation Report (QT Reviewed)

Data Path : K:\VOA101\2023\231219A\
Data File : V01231219A02.D
Acq On : 19 Dec 2023 5:56 am
Operator : VOA101:MJV
Sample : WG1865859-4,31,10,10
Misc : WG1865859,ICAL20680
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 19 06:56:58 2023
Quant Method : K:\VOA101\2023\231219A\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 10:14:14 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA101\2023\231219A\V01231219A01.D
Sub List : 8260-Curve-2CEVE-IODO - Curve-2CEVE-IODO

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.963	96	441614	10.000	ug/L	0.00
Standard Area 1 = 442958			Recovery = 99.70%			
59) Chlorobenzene-d5	9.482	117	385869	10.000	ug/L	0.00
Standard Area 1 = 387518			Recovery = 99.57%			
79) 1,4-Dichlorobenzene-d4	12.195	152	215994	10.000	ug/L	0.00
Standard Area 1 = 216528			Recovery = 99.75%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.162	113	113502	10.057	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.57%			
43) 1,2-Dichloroethane-d4	5.681	65	124312	9.726	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 97.26%			
60) Toluene-d8	7.644	98	444912	9.788	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 97.88%			
83) 4-Bromofluorobenzene	10.982	95	182628	9.927	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.27%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.654	85	123770	10.032	ug/L	99
3) Chloromethane	1.849	50	151010	9.461	ug/L	99
4) Vinyl chloride	1.908	62	144300	10.212	ug/L	99
5) Bromomethane	2.218	94	45405	6.599	ug/L	98
6) Chloroethane	2.332	64	93096	10.961	ug/L	96
7) Trichlorofluoromethane	2.466	101	164431	10.843	ug/L	99
10) 1,1-Dichloroethene	2.945	96	102302	10.566	ug/L	92
11) Carbon disulfide	2.976	76	312405	10.460	ug/L	100
12) Freon-113	2.979	101	112766	11.129	ug/L	85
15) Methylene chloride	3.489	84	102887	9.761	ug/L	91
17) Acetone	3.537	43	20881	9.911	ug/L	97
18) trans-1,2-Dichloroethene	3.640	96	108235	9.954	ug/L	98
19) Methyl acetate	3.654	43	48220	8.694	ug/L	94
20) Methyl tert-butyl ether	3.743	73	225213	9.082	ug/L	93
23) 1,1-Dichloroethane	4.211	63	210960	9.834	ug/L	98
28) cis-1,2-Dichloroethene	4.724	96	119077	9.885	ug/L	96
30) Bromochloromethane	4.914	128	51146	9.497	ug/L	94
31) Cyclohexane	4.920	56	224970	10.252	ug/L	91
32) Chloroform	4.987	83	188103	9.995	ug/L	98
34) Carbon tetrachloride	5.120	117	153151	10.403	ug/L	100

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Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 10:14:14 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA101\2023\231219A\V01231219A01.D
Sub List : 8260-Curve-2CEVE-IODO - Curve-2CEVE-IODO

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
37) 1,1,1-Trichloroethane	5.182	97	172946	10.167	ug/L		98
39) 2-Butanone	5.279	43	30014	8.945	ug/L	#	78
41) Benzene	5.547	78	421273	10.035	ug/L		96
44) 1,2-Dichloroethane	5.751	62	134798	9.597	ug/L		98
47) Methyl cyclohexane	6.130	83	193431	10.453	ug/L		91
48) Trichloroethene	6.141	95	118972	10.074	ug/L		98
51) 1,2-Dichloropropane	6.679	63	113729	9.758	ug/L		97
54) Bromodichloromethane	6.752	83	136999	9.602	ug/L		98
57) 1,4-Dioxane	6.964	88	32792	487.691	ug/L		92
58) cis-1,3-Dichloropropene	7.435	75	161811	9.680	ug/L		92
61) Toluene	7.700	92	274255	9.630	ug/L		99
62) 4-Methyl-2-pentanone	8.135	58	25946	8.816	ug/L		99
63) Tetrachloroethene	8.149	166	125529	9.947	ug/L		99
65) trans-1,3-Dichloropropene	8.182	75	135958	9.093	ug/L		91
68) 1,1,2-Trichloroethane	8.366	83	67529	9.308	ug/L		96
69) Chlorodibromomethane	8.581	129	93075	8.829	ug/L		99
71) 1,2-Dibromoethane	8.857	107	80099	9.274	ug/L		99
72) 2-Hexanone	9.142	43	43998	7.989	ug/L		99
73) Chlorobenzene	9.499	112	306871	9.503	ug/L		98
74) Ethylbenzene	9.538	91	536577	9.799	ug/L		98
76) p/m Xylene	9.725	106	419280	19.609	ug/L		98
77) o Xylene	10.268	106	402106	19.337	ug/L		98
78) Styrene	10.335	104	662906	19.473	ug/L		96
80) Bromoform	10.363	173	52666	8.121	ug/L		100
82) Isopropylbenzene	10.653	105	537861	9.695	ug/L		99
87) 1,1,2,2-Tetrachloroethane	11.228	83	93506	9.064	ug/L		100
100) 1,3-Dichlorobenzene	12.117	146	232219	9.426	ug/L		99
101) 1,4-Dichlorobenzene	12.209	146	234366	9.351	ug/L		99
104) 1,2-Dichlorobenzene	12.633	146	210887	9.397	ug/L		99
106) 1,2-Dibromo-3-chloropr...	13.414	155	11936	8.280	ug/L		98
109) 1,2,4-Trichlorobenzene	14.047	180	107981	8.944	ug/L		99
111) 1,2,3-Trichlorobenzene	14.507	180	84525	8.775	ug/L		99

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

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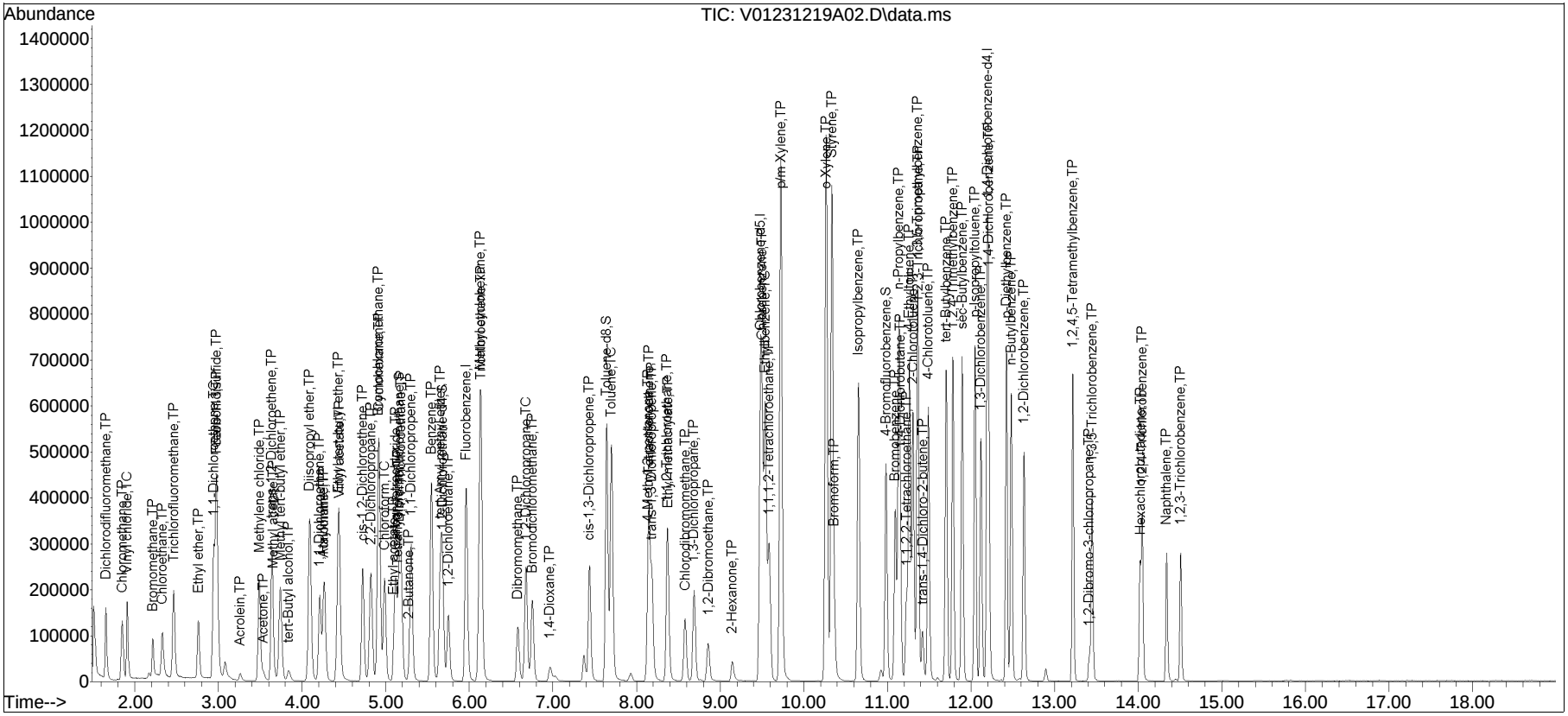
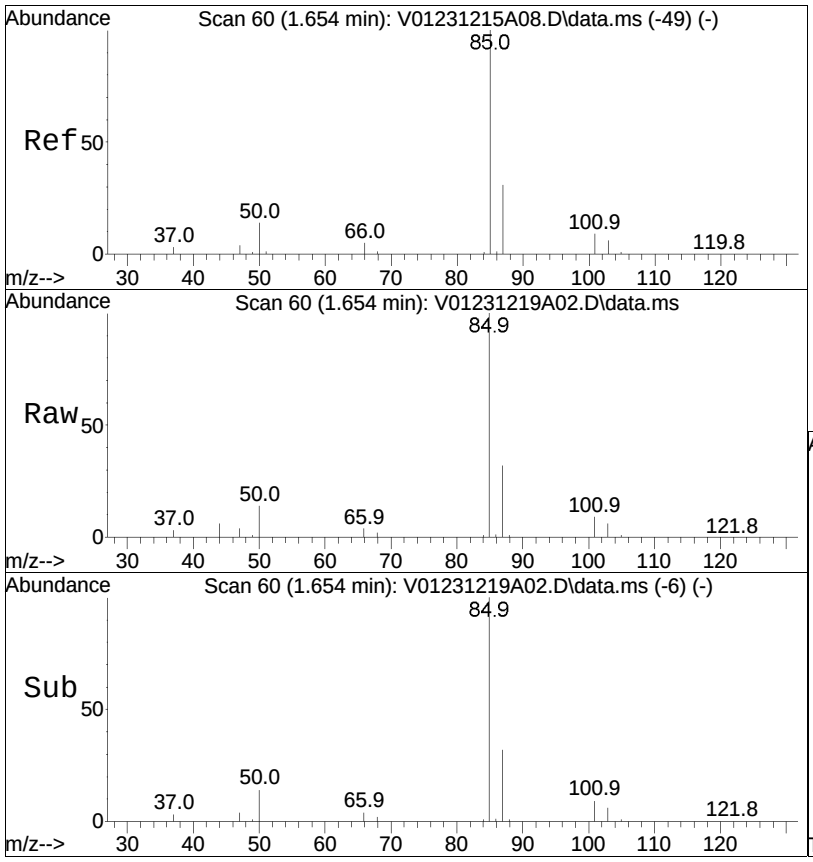
Sub List : 8260-Curve-2CEVE-IODO - Curve-2CEVE-IODOD•

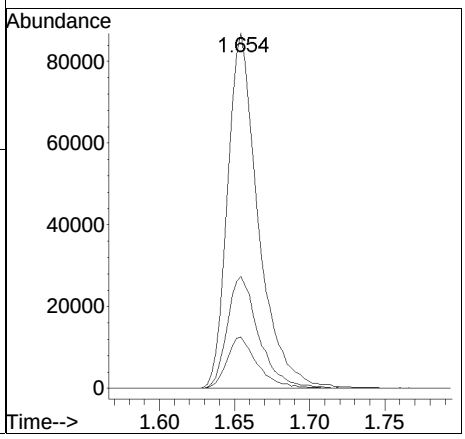


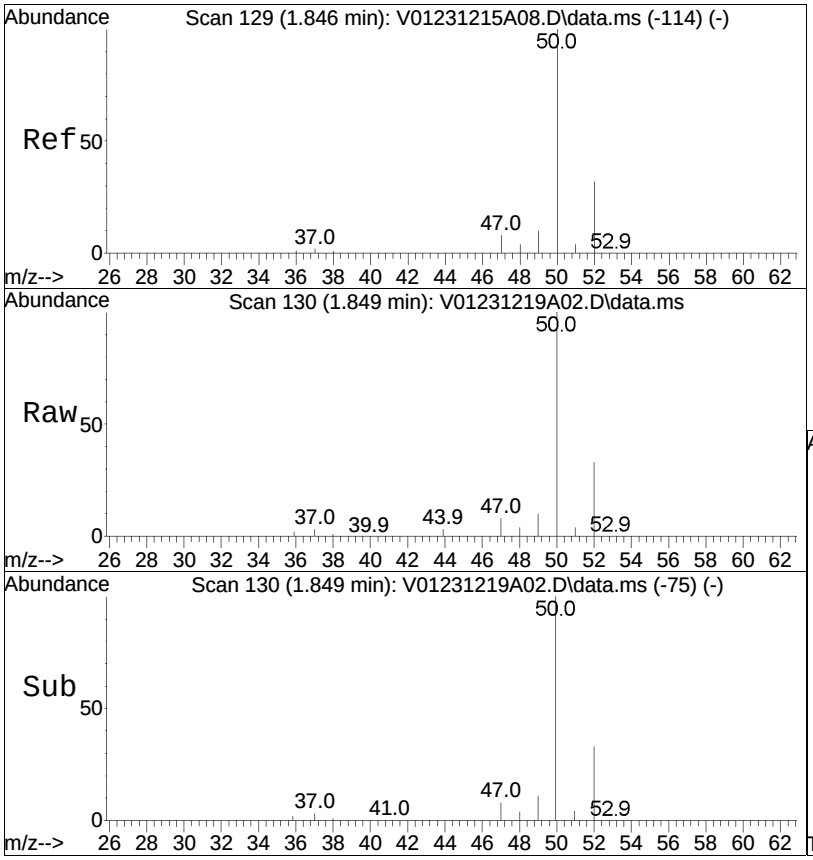


#2
Dichlorodifluoromethane
Concen: 10.03 ug/L
RT: 1.654 min Scan# 60
Delta R.T. 0.000 min
Lab File: V01231219A02.D
Acq: 19 Dec 2023 5:56 am

Tgt Ion: 85 Resp: 123770

Ion	Ratio	Lower	Upper
85	100		
87	32.4	20.9	43.5
50	14.4	9.1	18.9

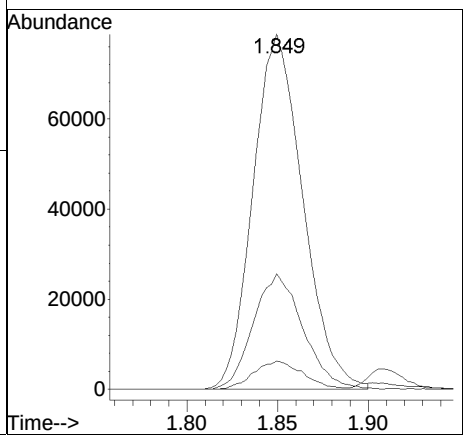


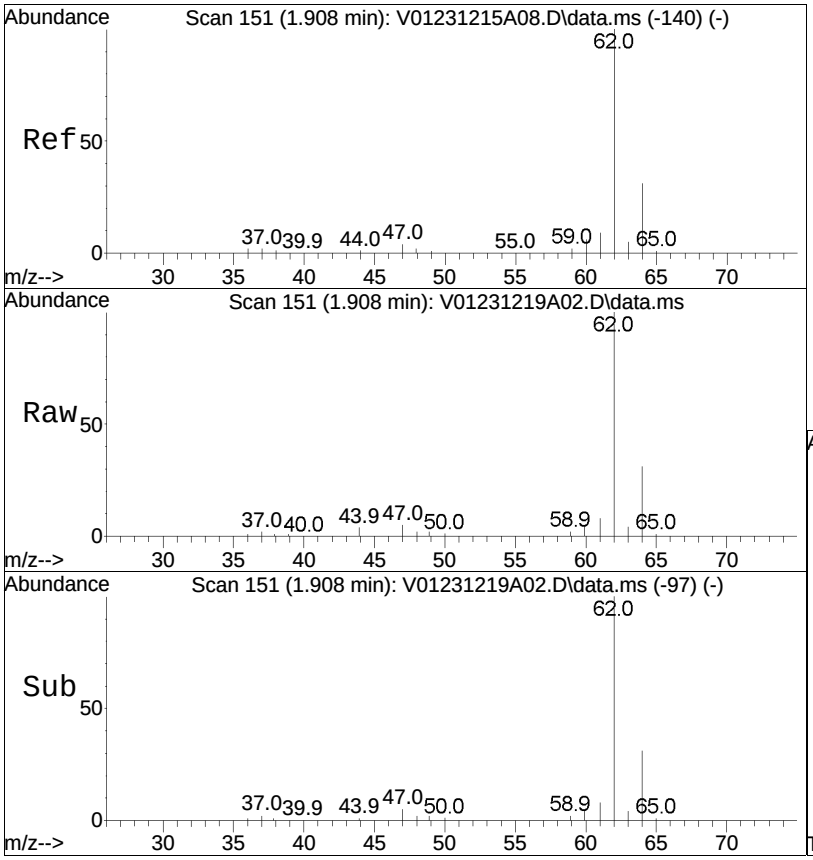


#3
Chloromethane
Concen: 9.46 ug/L
RT: 1.849 min Scan# 130
Delta R.T. 0.003 min
Lab File: V01231219A02.D
Acq: 19 Dec 2023 5:56 am

Tgt Ion: 50 Resp: 151010

Ion	Ratio	Lower	Upper
50	100		
52	32.4	12.8	52.8
47	7.9	0.0	28.3

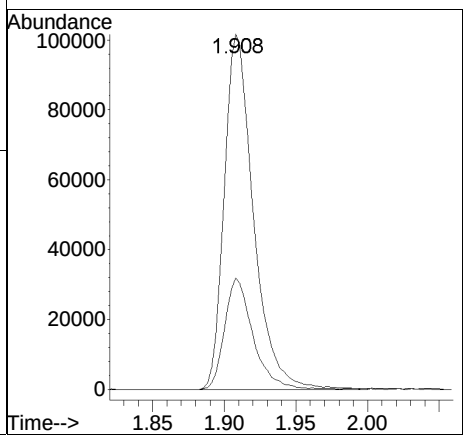


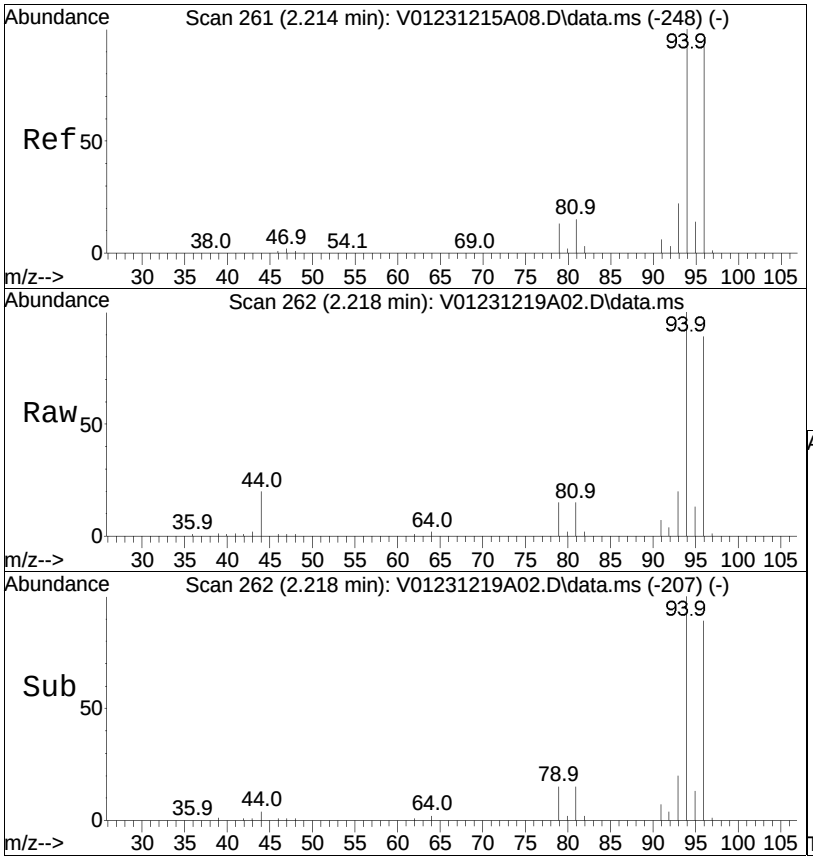


#4
Vinyl chloride
Concen: 10.21 ug/L
RT: 1.908 min Scan# 151
Delta R.T. 0.000 min
Lab File: V01231219A02.D
Acq: 19 Dec 2023 5:56 am

Tgt Ion: 62 Resp: 144300

Ion	Ratio	Lower	Upper
62	100		
64	30.5	10.8	50.8

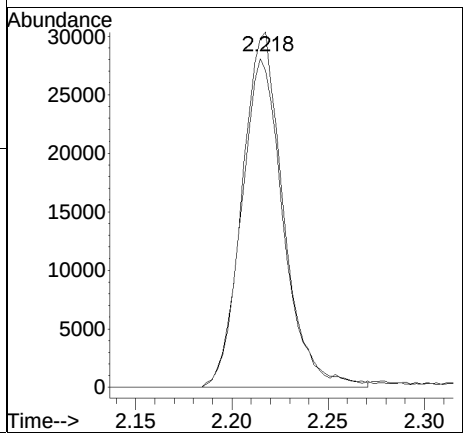


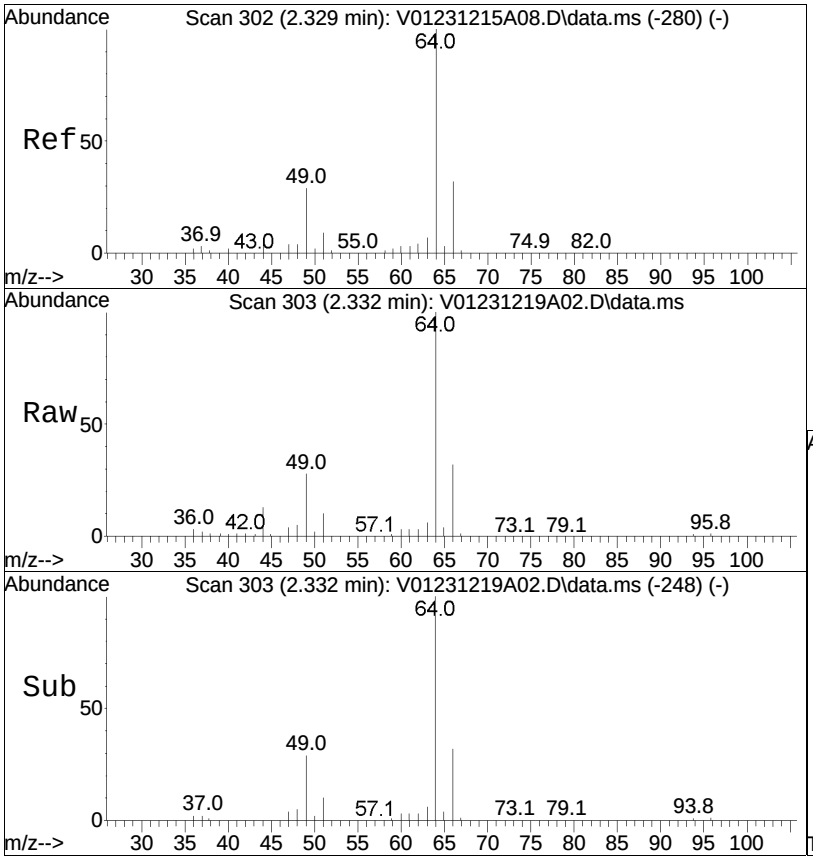


#5
Bromomethane
Concen: 6.60 ug/L
RT: 2.218 min Scan# 262
Delta R.T. 0.003 min
Lab File: V01231219A02.D
Acq: 19 Dec 2023 5:56 am

Tgt Ion: 94 Resp: 45405

Ion	Ratio	Lower	Upper
94	100		
96	92.2	73.6	113.6

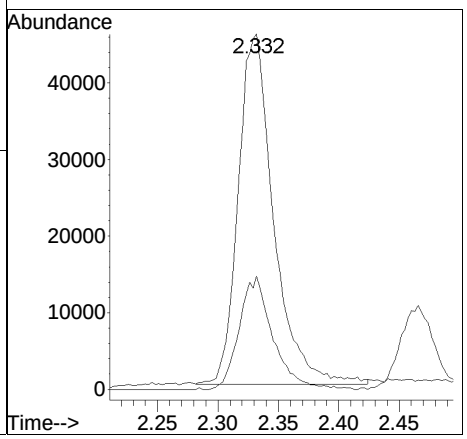


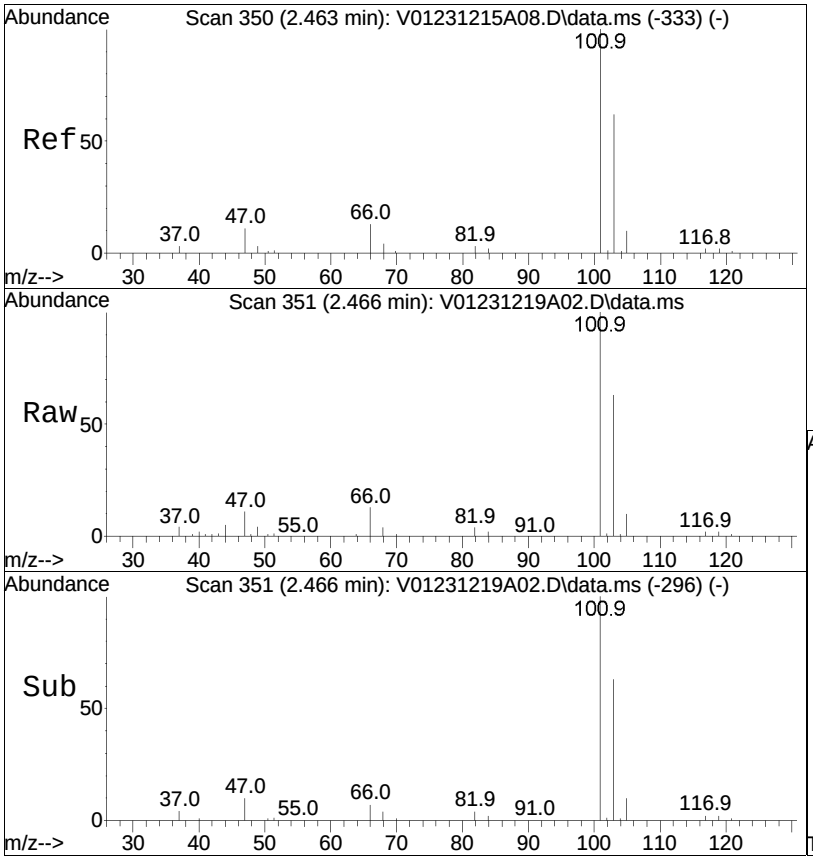


#6
Chloroethane
Concen: 10.96 ug/L
RT: 2.332 min Scan# 303
Delta R.T. 0.003 min
Lab File: V01231219A02.D
Acq: 19 Dec 2023 5:56 am

Tgt Ion: 64 Resp: 93096

Ion	Ratio	Lower	Upper
64	100		
66	30.6	12.7	52.7

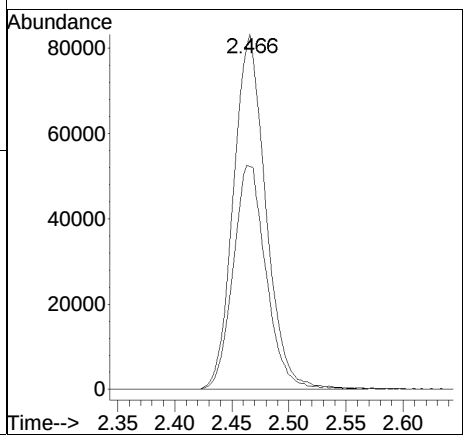


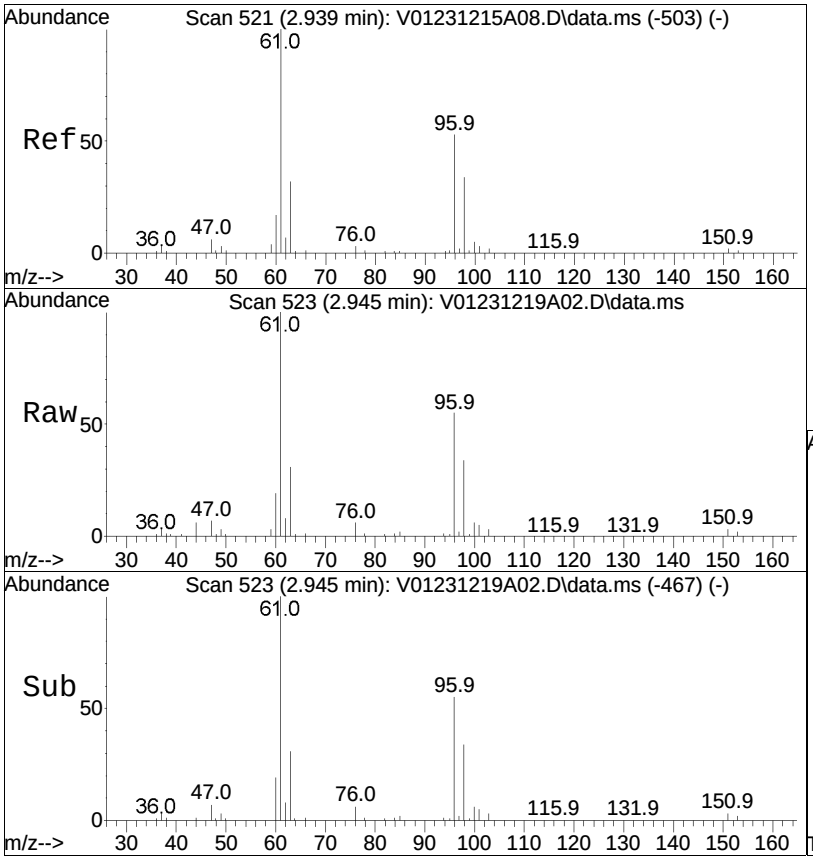


#7
Trichlorofluoromethane
Concen: 10.84 ug/L
RT: 2.466 min Scan# 351
Delta R.T. 0.003 min
Lab File: V01231219A02.D
Acq: 19 Dec 2023 5:56 am

Tgt Ion:101 Resp: 164431

Ion	Ratio	Lower	Upper
101	100		
103	64.3	52.3	78.5

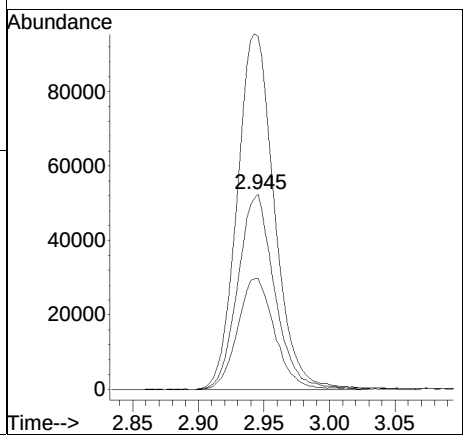


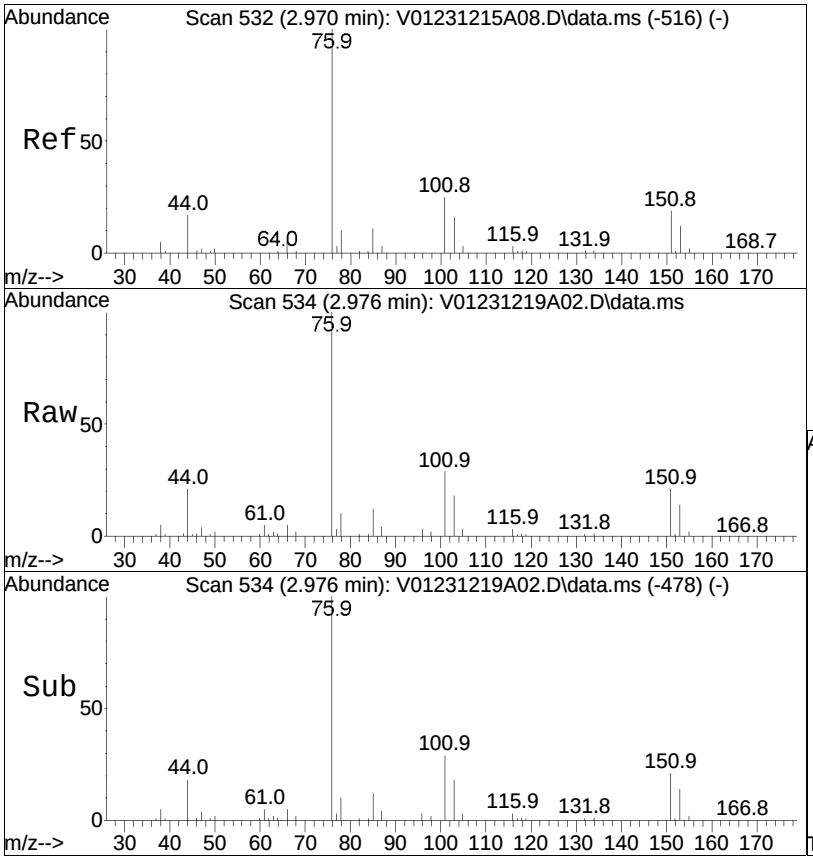


#10
1,1-Dichloroethene
Concen: 10.57 ug/L
RT: 2.945 min Scan# 523
Delta R.T. 0.006 min
Lab File: V01231219A02.D
Acq: 19 Dec 2023 5:56 am

Tgt Ion: 96 Resp: 102302

Ion	Ratio	Lower	Upper
96	100		
61	184.2	136.8	205.2
63	57.1	43.6	65.4

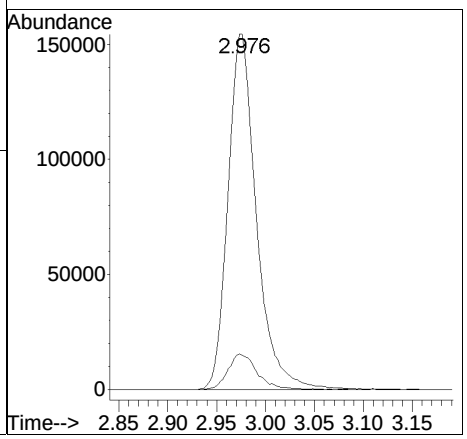


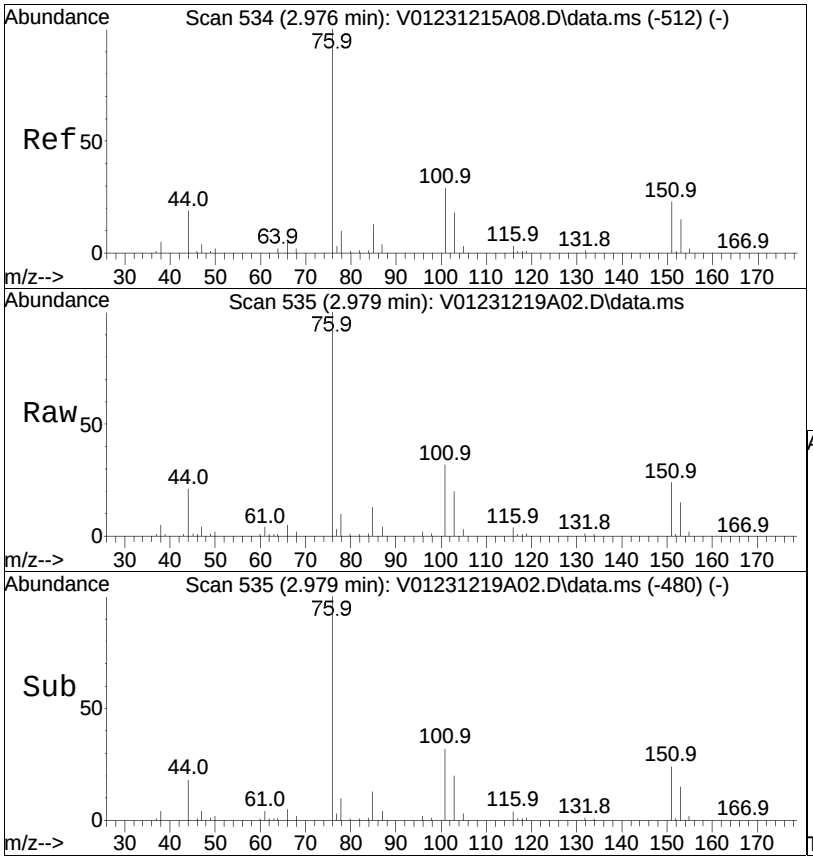


#11
Carbon disulfide
Concen: 10.46 ug/L
RT: 2.976 min Scan# 534
Delta R.T. 0.006 min
Lab File: V01231219A02.D
Acq: 19 Dec 2023 5:56 am

Tgt Ion: 76 Resp: 312405

Ion	Ratio	Lower	Upper
76	100		
78	10.2	6.6	13.8

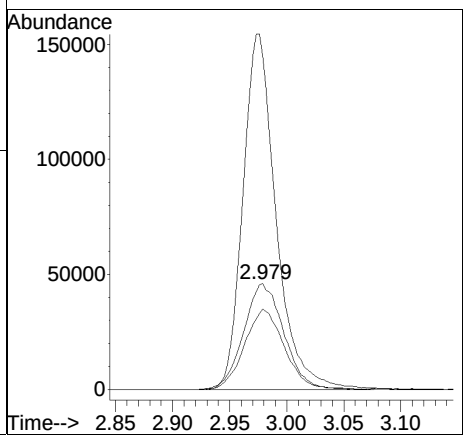


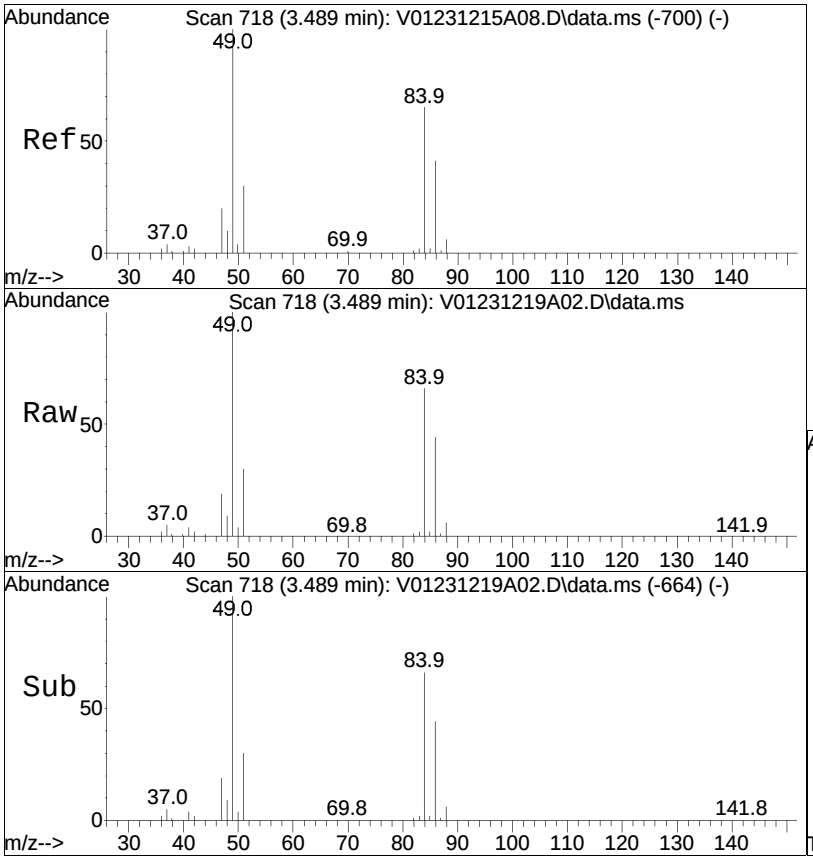


#12
Freon-113
Concen: 11.13 ug/L
RT: 2.979 min Scan# 535
Delta R.T. 0.003 min
Lab File: V01231219A02.D
Acq: 19 Dec 2023 5:56 am

Tgt Ion:101 Resp: 112766

Ion	Ratio	Lower	Upper
101	100		
151	74.8	61.2	91.8
76	277.0	194.8	292.2

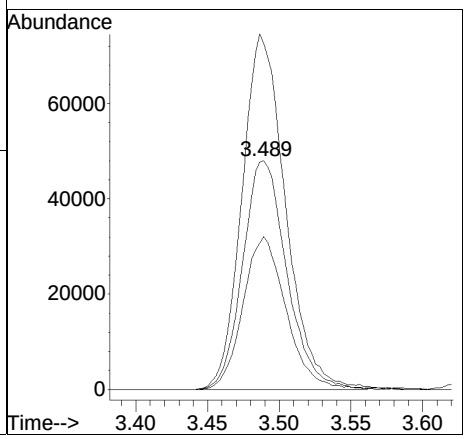


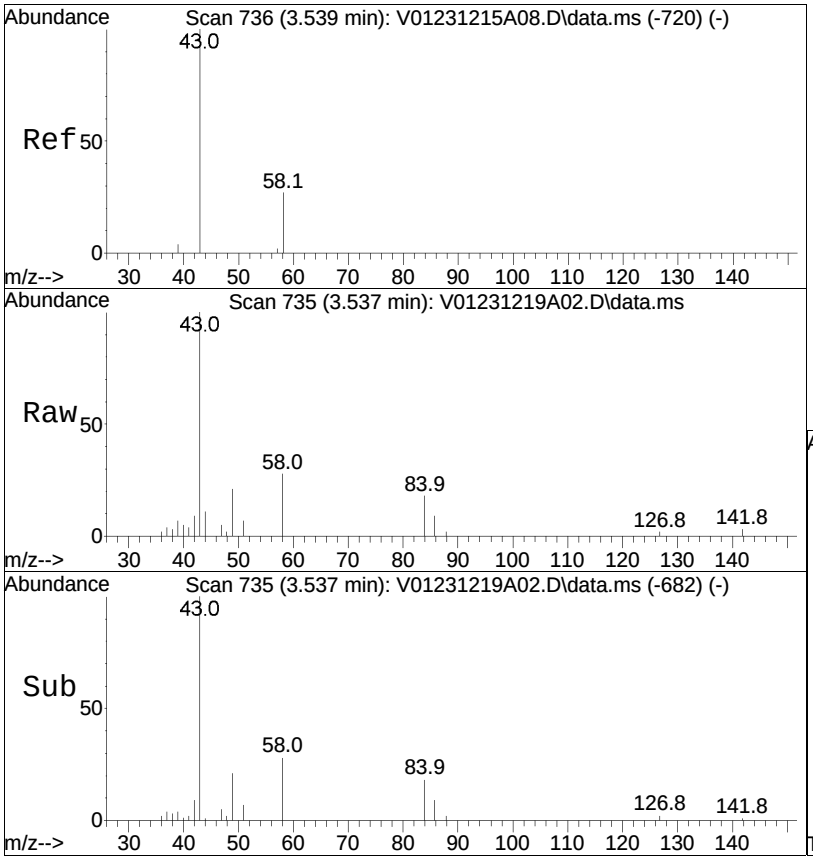


#15
Methylene chloride
Concen: 9.76 ug/L
RT: 3.489 min Scan# 718
Delta R.T. 0.000 min
Lab File: V01231219A02.D
Acq: 19 Dec 2023 5:56 am

Tgt Ion: 84 Resp: 102887

Ion	Ratio	Lower	Upper
84	100		
86	65.2	41.7	86.7
49	153.1	89.1	185.1

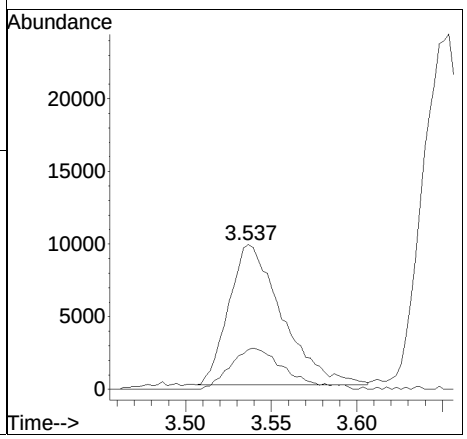


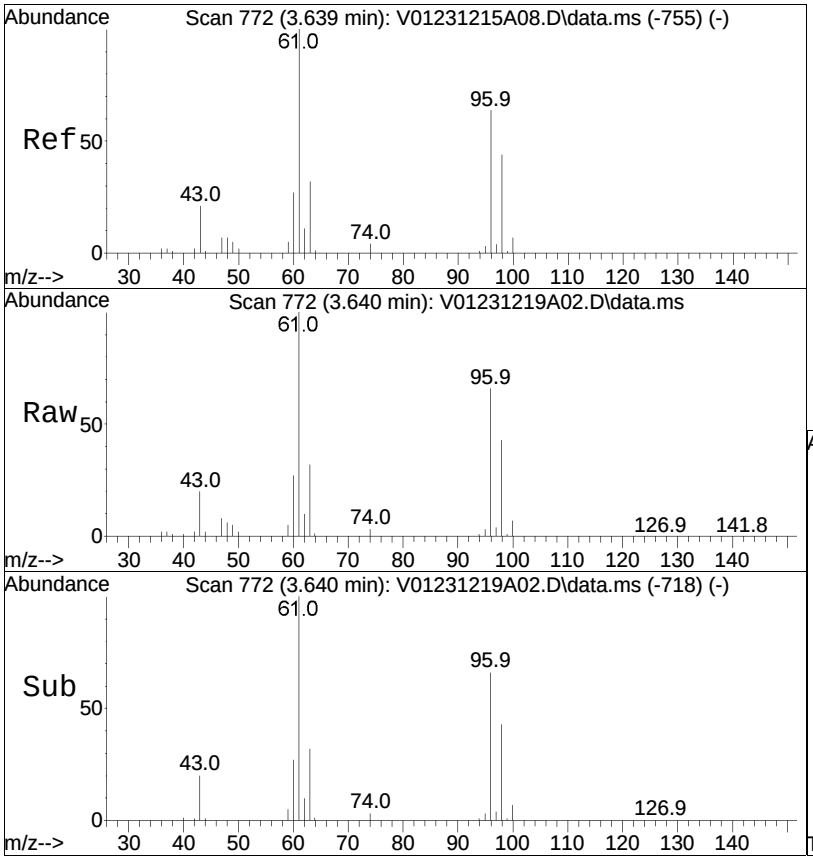


#17
Acetone
Concen: 9.91 ug/L
RT: 3.537 min Scan# 735
Delta R.T. -0.002 min
Lab File: V01231219A02.D
Acq: 19 Dec 2023 5:56 am

Tgt Ion: 43 Resp: 20881

Ion	Ratio	Lower	Upper
43	100		
58	30.6	25.9	38.9

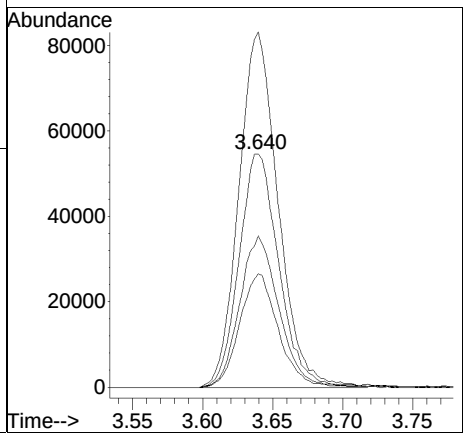


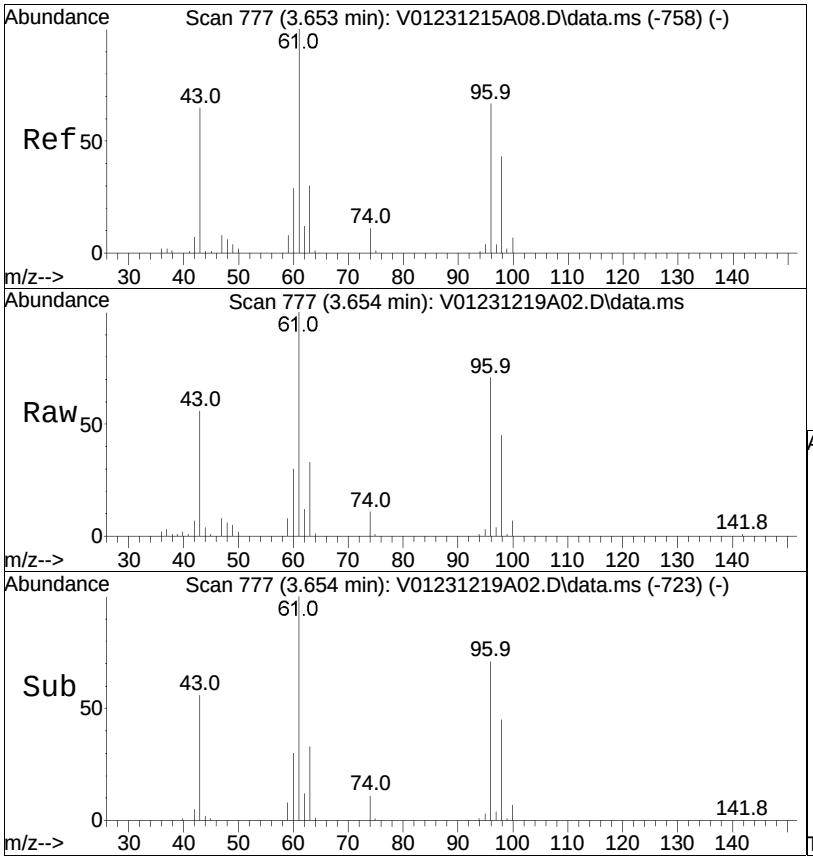


#18
trans-1,2-Dichloroethene
Concen: 9.95 ug/L
RT: 3.640 min Scan# 772
Delta R.T. 0.000 min
Lab File: V01231219A02.D
Acq: 19 Dec 2023 5:56 am

Tgt Ion: 96 Resp: 108235

Ion	Ratio	Lower	Upper
96	100		
61	150.0	95.3	197.9
98	63.9	41.0	85.2
63	47.0	30.2	62.6

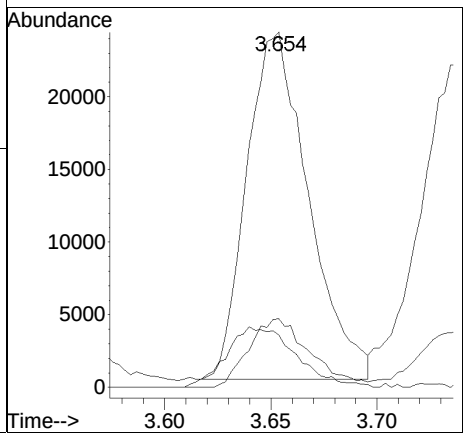


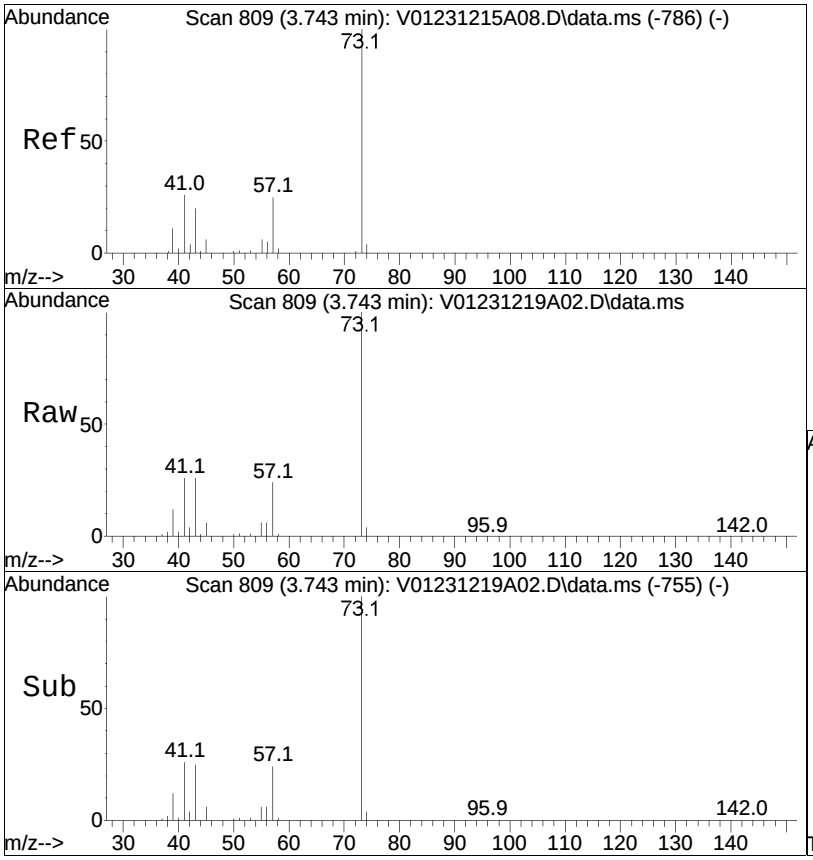


#19
Methyl acetate
Concen: 8.69 ug/L
RT: 3.654 min Scan# 777
Delta R.T. 0.000 min
Lab File: V01231219A02.D
Acq: 19 Dec 2023 5:56 am

Tgt Ion: 43 Resp: 48220

Ion	Ratio	Lower	Upper
43	100		
74	19.6	18.2	27.2
59	19.6	18.2	27.2

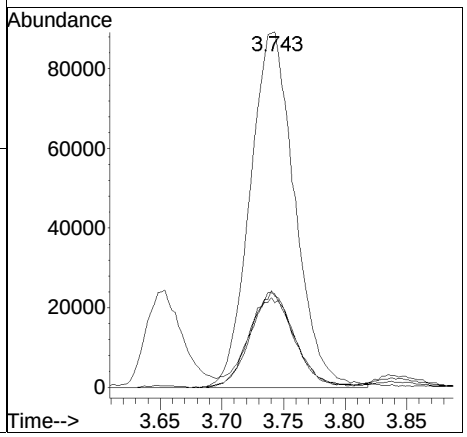


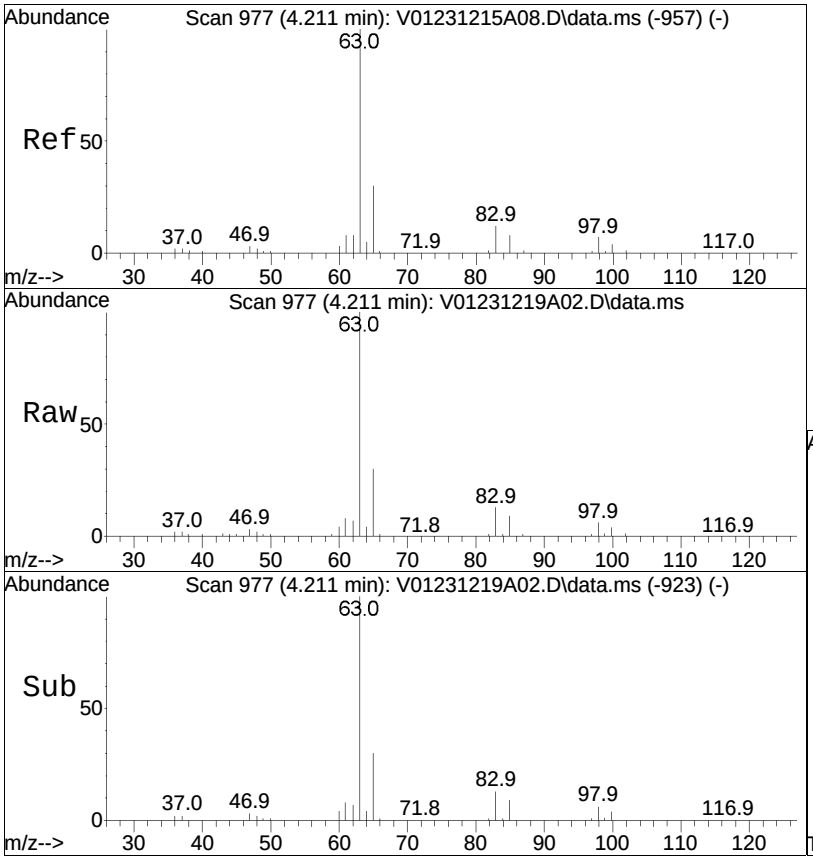


#20
Methyl tert-butyl ether
Concen: 9.08 ug/L
RT: 3.743 min Scan# 809
Delta R.T. 0.000 min
Lab File: V01231219A02.D
Acq: 19 Dec 2023 5:56 am

Tgt Ion: 73 Resp: 225213

Ion	Ratio	Lower	Upper
73	100		
57	25.4	14.8	30.6
43	26.2	15.5	32.3
41	27.0	14.1	29.3

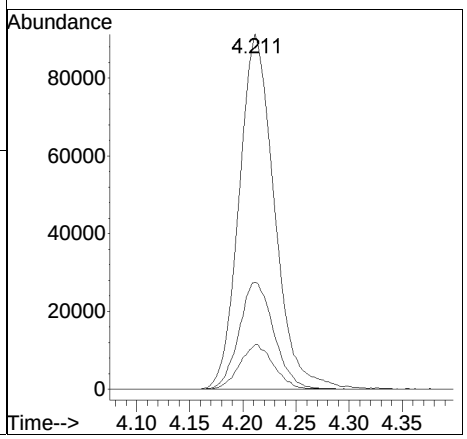


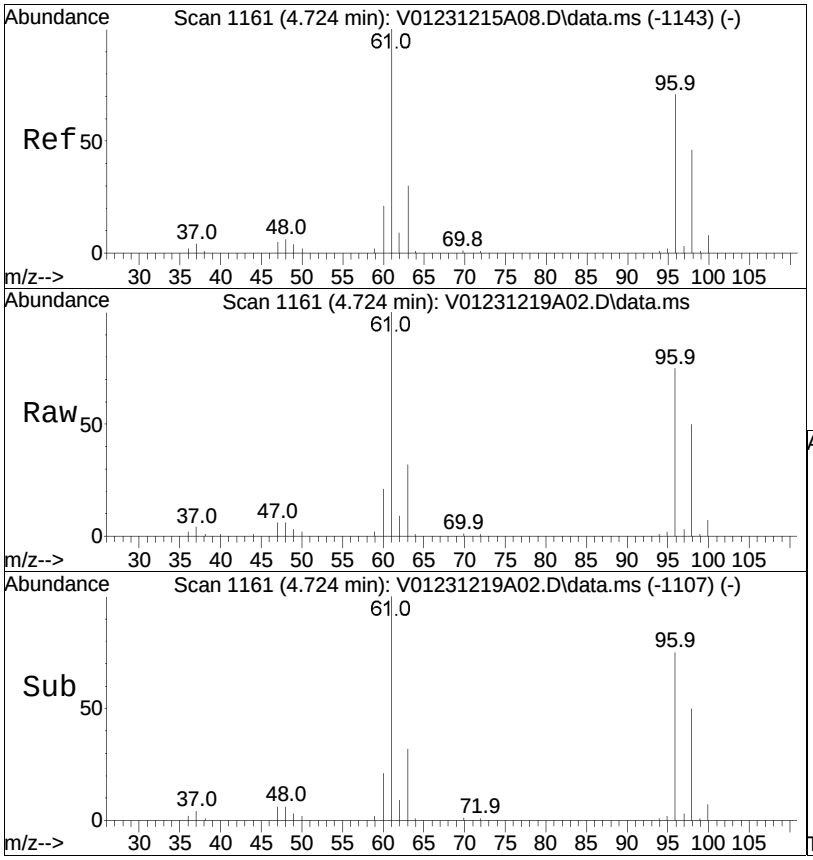


#23
1,1-Dichloroethane
Concen: 9.83 ug/L
RT: 4.211 min Scan# 977
Delta R.T. 0.000 min
Lab File: V01231219A02.D
Acq: 19 Dec 2023 5:56 am

Tgt Ion: 63 Resp: 210960

Ion	Ratio	Lower	Upper
63	100		
65	29.9	10.9	50.9
83	12.3	0.0	33.0

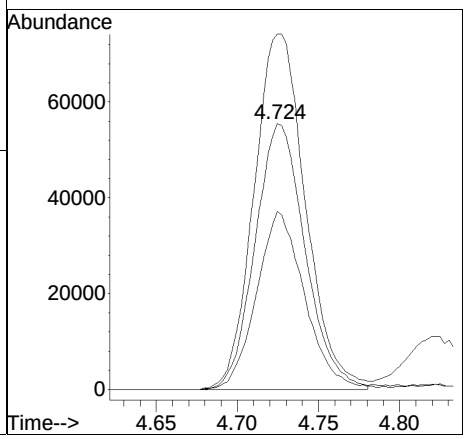


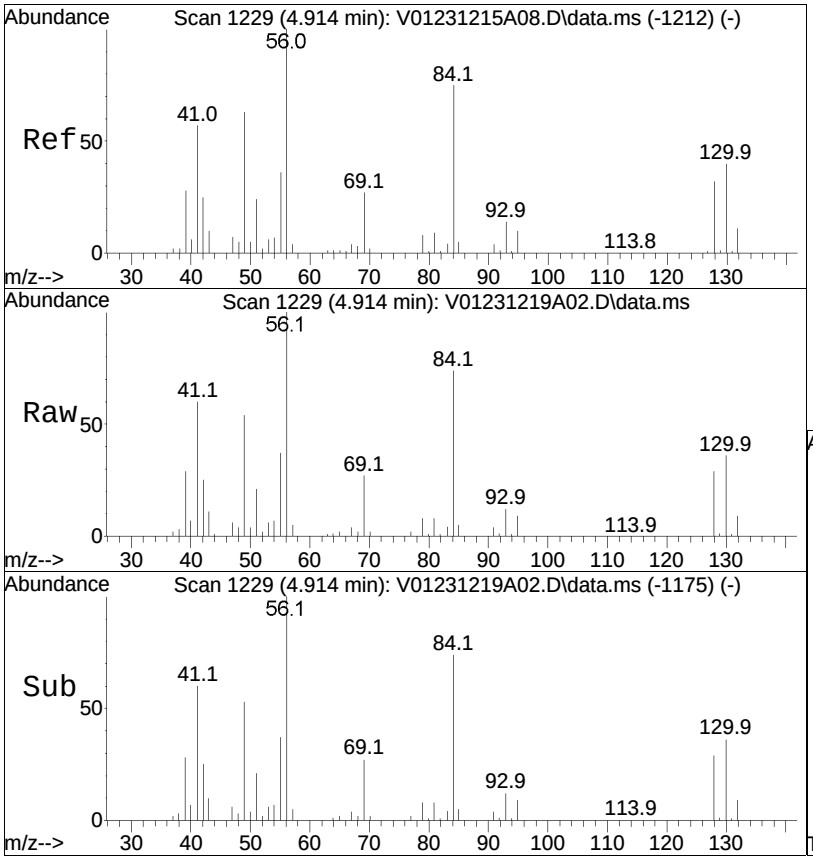


#28
cis-1,2-Dichloroethene
Concen: 9.88 ug/L
RT: 4.724 min Scan# 1161
Delta R.T. 0.000 min
Lab File: V01231219A02.D
Acq: 19 Dec 2023 5:56 am

Tgt Ion: 96 Resp: 119077

Ion	Ratio	Lower	Upper
96	100		
61	138.0	105.8	158.6
98	64.4	51.1	76.7

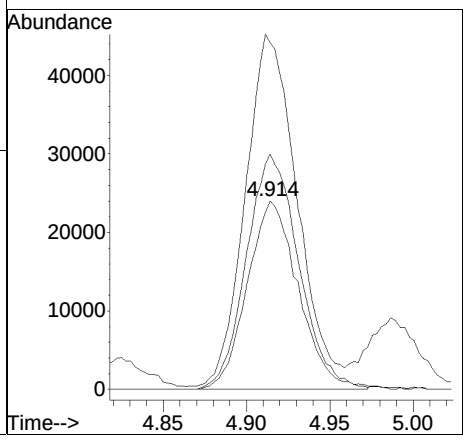


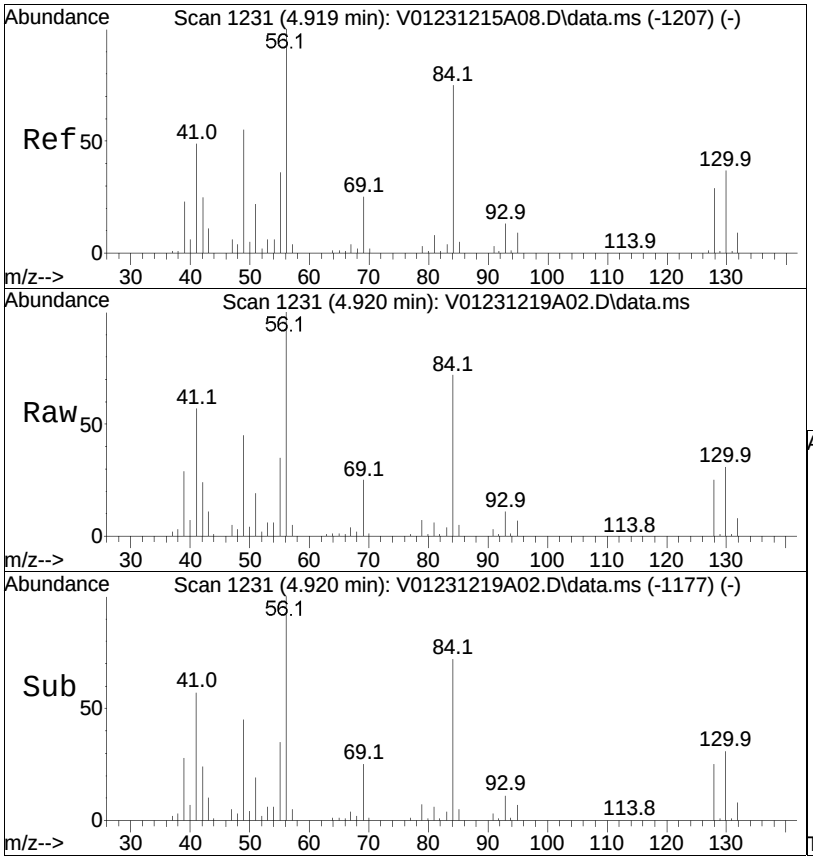


#30
Bromochloromethane
Concen: 9.50 ug/L
RT: 4.914 min Scan# 1229
Delta R.T. 0.000 min
Lab File: V01231219A02.D
Acq: 19 Dec 2023 5:56 am

Tgt Ion:128 Resp: 51146

Ion	Ratio	Lower	Upper
128	100		
49	190.8	140.4	210.6
130	128.9	103.1	154.7

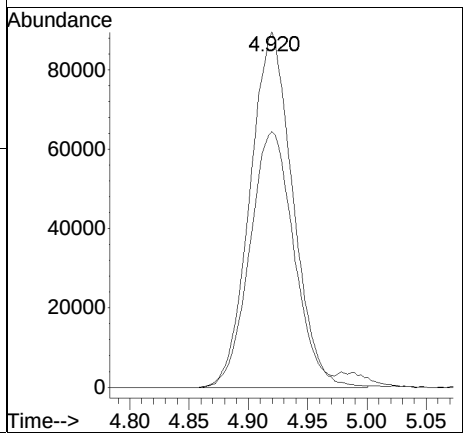


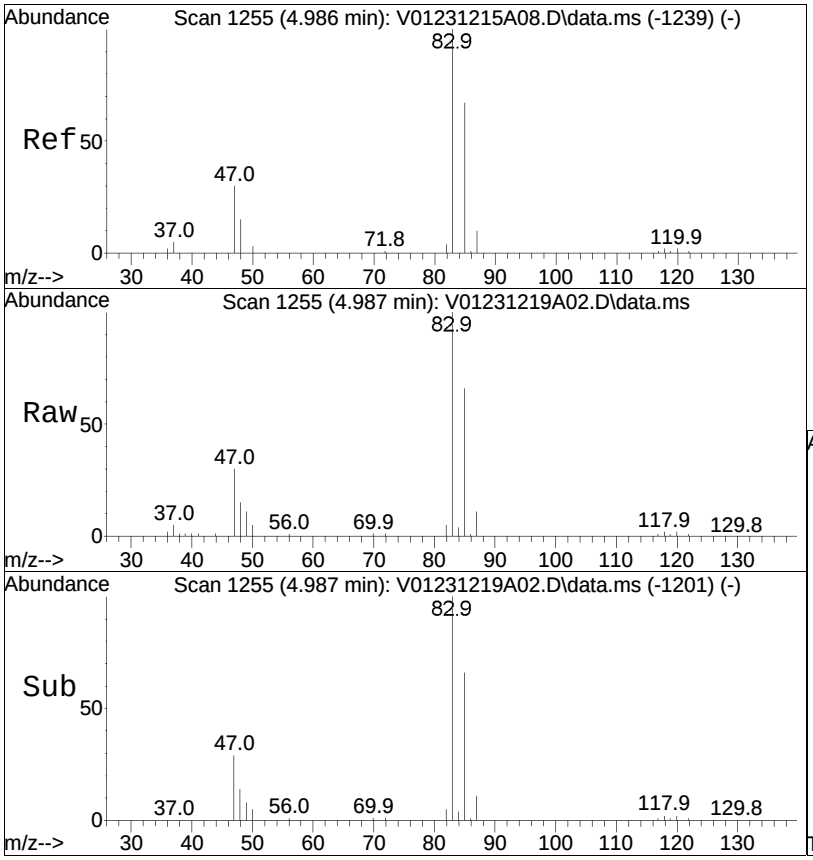


#31
Cyclohexane
Concen: 10.25 ug/L
RT: 4.920 min Scan# 1231
Delta R.T. 0.000 min
Lab File: V01231219A02.D
Acq: 19 Dec 2023 5:56 am

Tgt Ion: 56 Resp: 224970

Ion	Ratio	Lower	Upper
56	100		
84	74.2	53.6	111.4

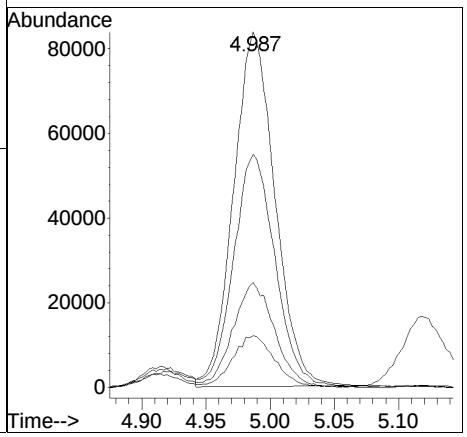


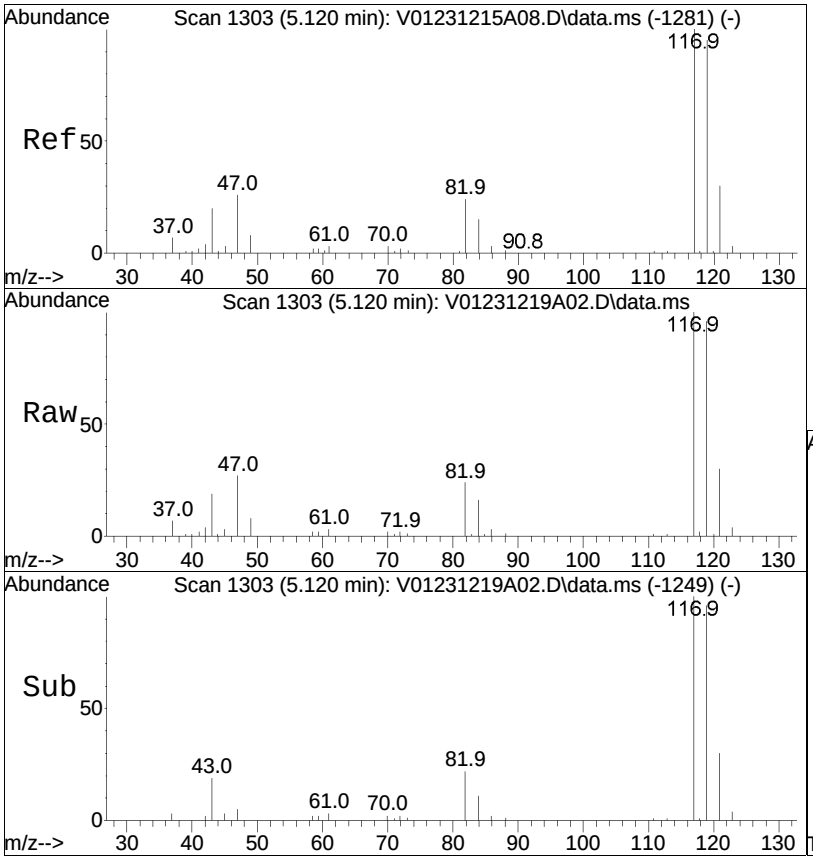


#32
Chloroform
Concen: 9.99 ug/L
RT: 4.987 min Scan# 1255
Delta R.T. 0.000 min
Lab File: V01231219A02.D
Acq: 19 Dec 2023 5:56 am

Tgt Ion: 83 Resp: 188103

Ion	Ratio	Lower	Upper
83	100		
85	65.7	42.3	87.8
47	29.3	17.8	37.0
48	15.0	9.3	19.3

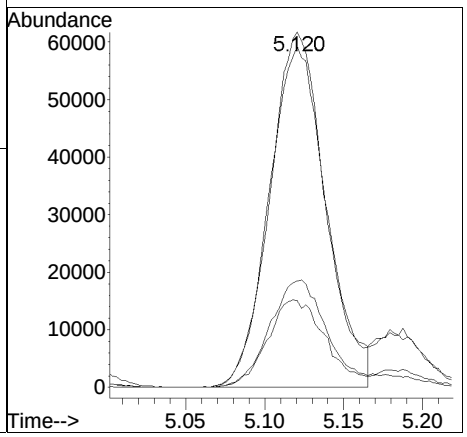


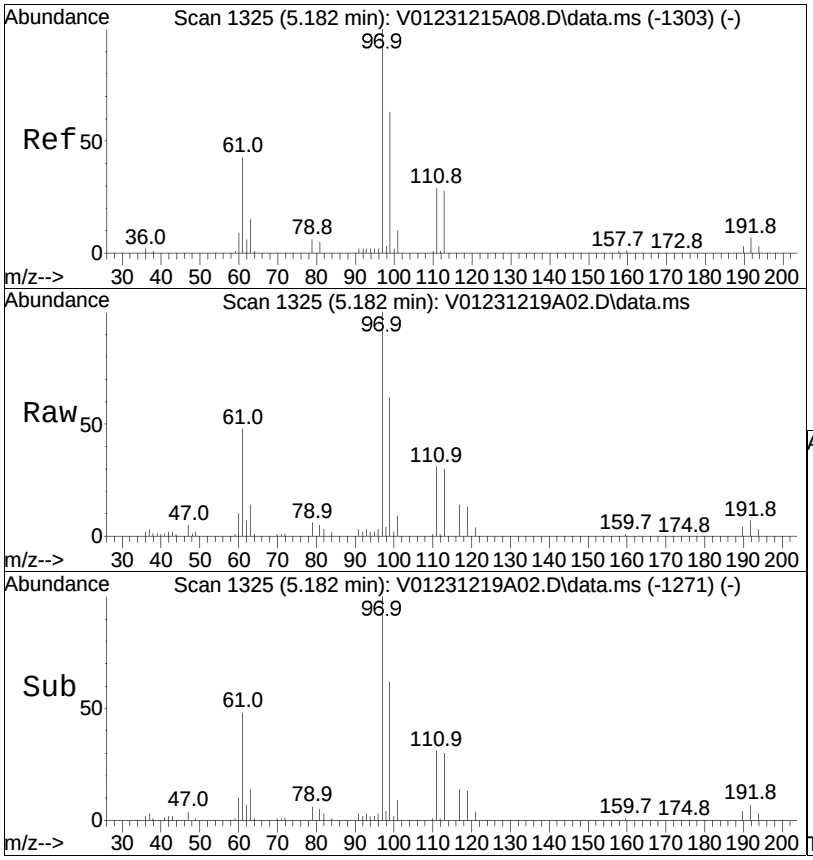


#34
Carbon tetrachloride
Concen: 10.40 ug/L
RT: 5.120 min Scan# 1303
Delta R.T. 0.000 min
Lab File: V01231219A02.D
Acq: 19 Dec 2023 5:56 am

Tgt Ion:117 Resp: 153151

Ion	Ratio	Lower	Upper
117	100		
119	95.4	62.1	128.9
121	30.7	19.8	41.0
82	25.6	17.1	35.5

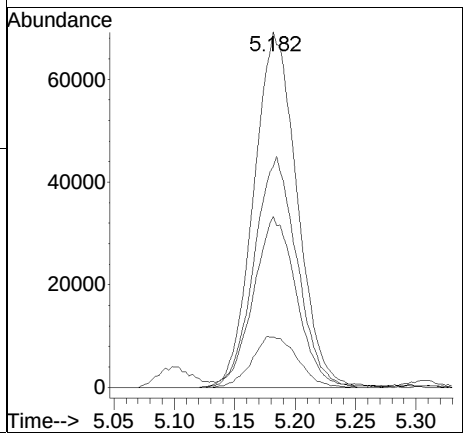


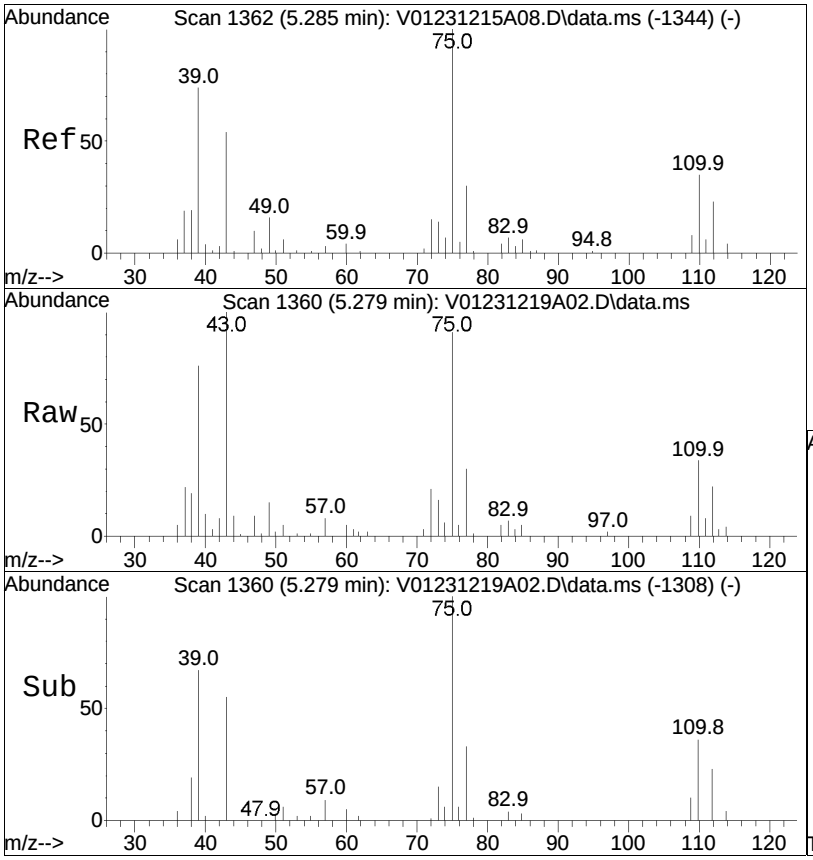


#37
1,1,1-Trichloroethane
Concen: 10.17 ug/L
RT: 5.182 min Scan# 1325
Delta R.T. 0.000 min
Lab File: V01231219A02.D
Acq: 19 Dec 2023 5:56 am

Tgt Ion: 97 Resp: 172946

Ion	Ratio	Lower	Upper
97	100		
99	64.2	41.7	86.7
61	48.1	29.4	61.2
63	15.0	9.4	19.4

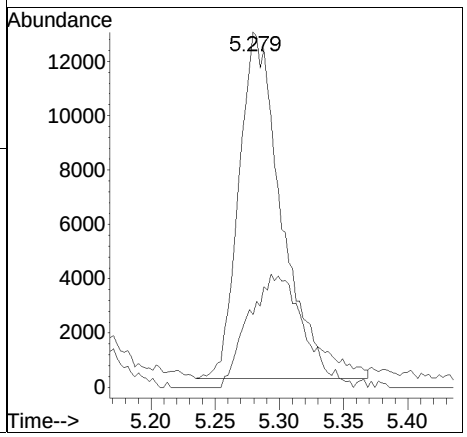


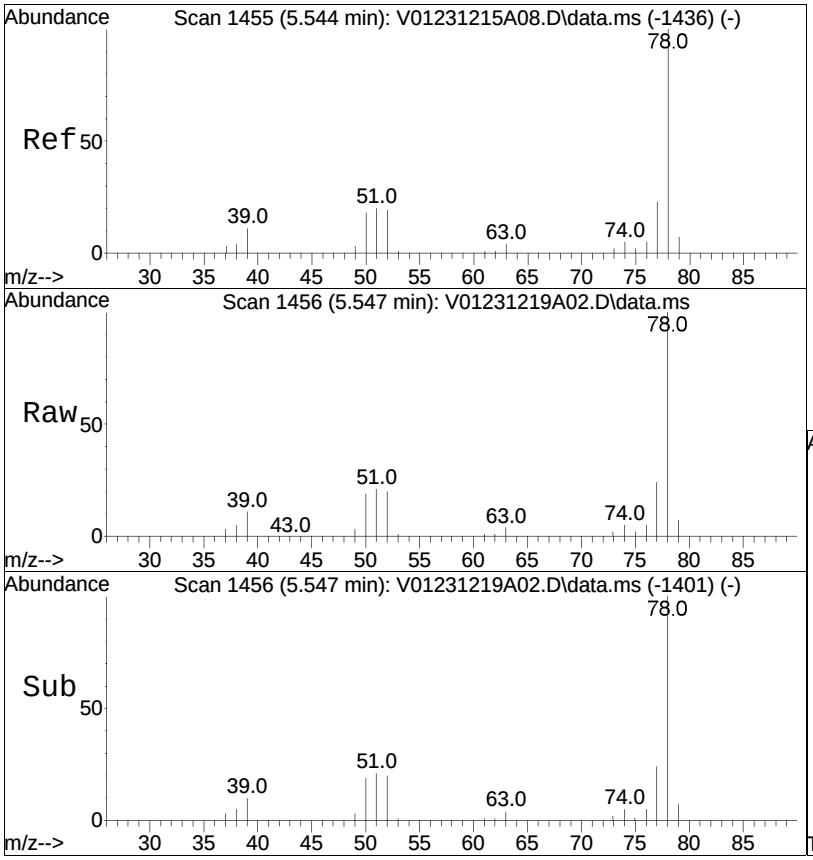


#39
2-Butanone
Concen: 8.95 ug/L
RT: 5.279 min Scan# 1360
Delta R.T. -0.006 min
Lab File: V01231219A02.D
Acq: 19 Dec 2023 5:56 am

Tgt Ion: 43 Resp: 30014

Ion	Ratio	Lower	Upper
43	100		
72	41.2	45.8	68.6#

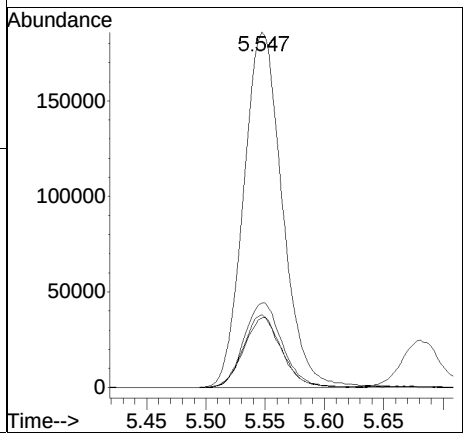


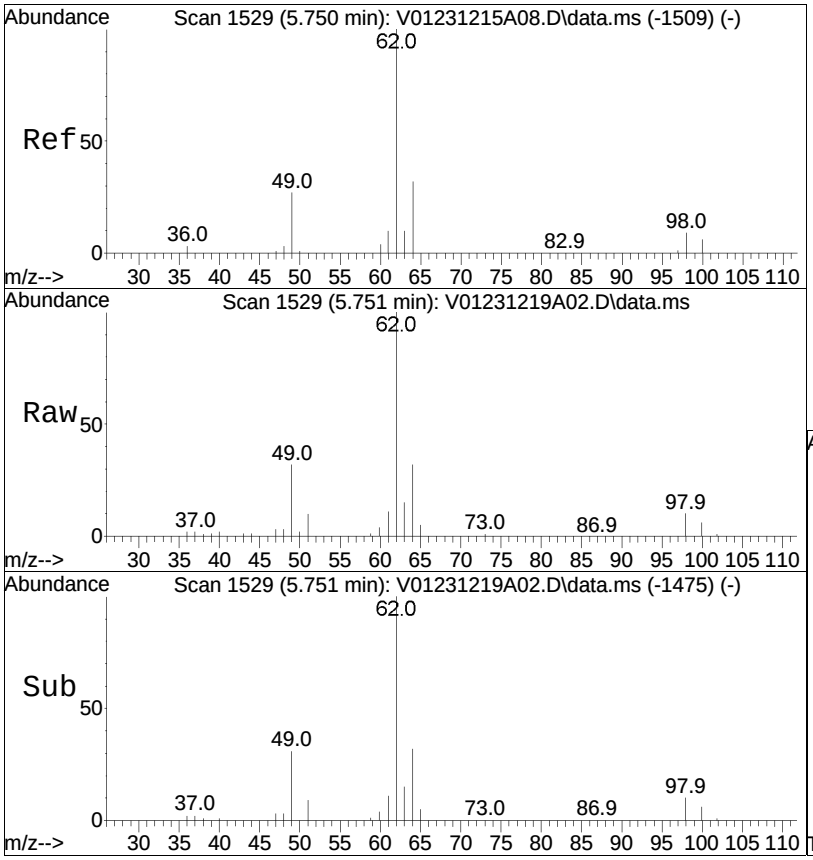


#41
Benzene
Concen: 10.03 ug/L
RT: 5.547 min Scan# 1456
Delta R.T. 0.003 min
Lab File: V01231219A02.D
Acq: 19 Dec 2023 5:56 am

Tgt Ion: 78 Resp: 421273

Ion	Ratio	Lower	Upper
78	100		
77	23.7	15.7	32.5
51	20.1	11.6	24.2
52	19.3	10.9	22.5

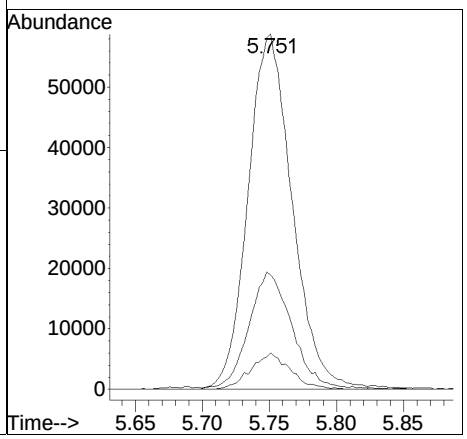


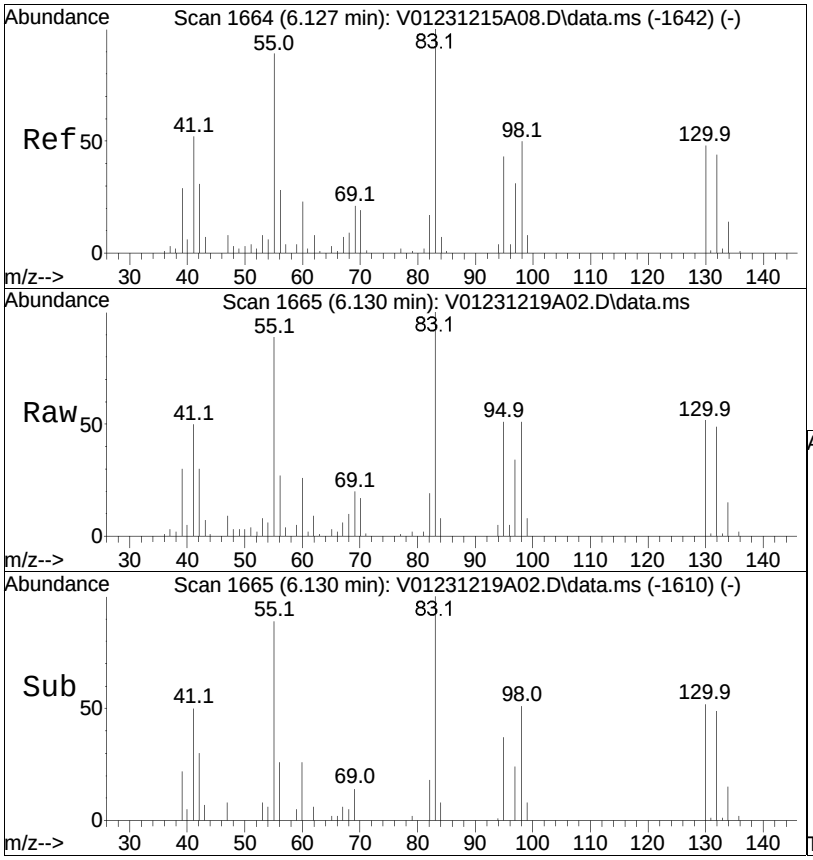


#44
1,2-Dichloroethane
Concen: 9.60 ug/L
RT: 5.751 min Scan# 1529
Delta R.T. 0.000 min
Lab File: V01231219A02.D
Acq: 19 Dec 2023 5:56 am

Tgt Ion: 62 Resp: 134798

Ion	Ratio	Lower	Upper
62	100		
64	30.7	12.1	52.1
98	9.3	0.0	28.8

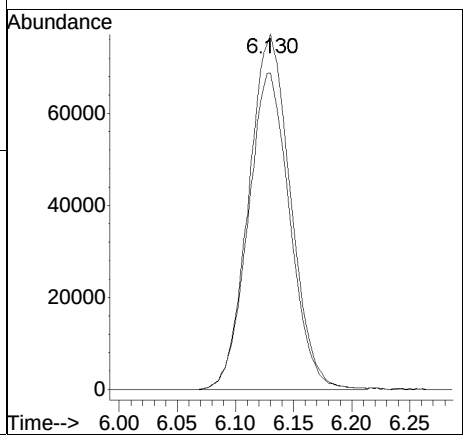


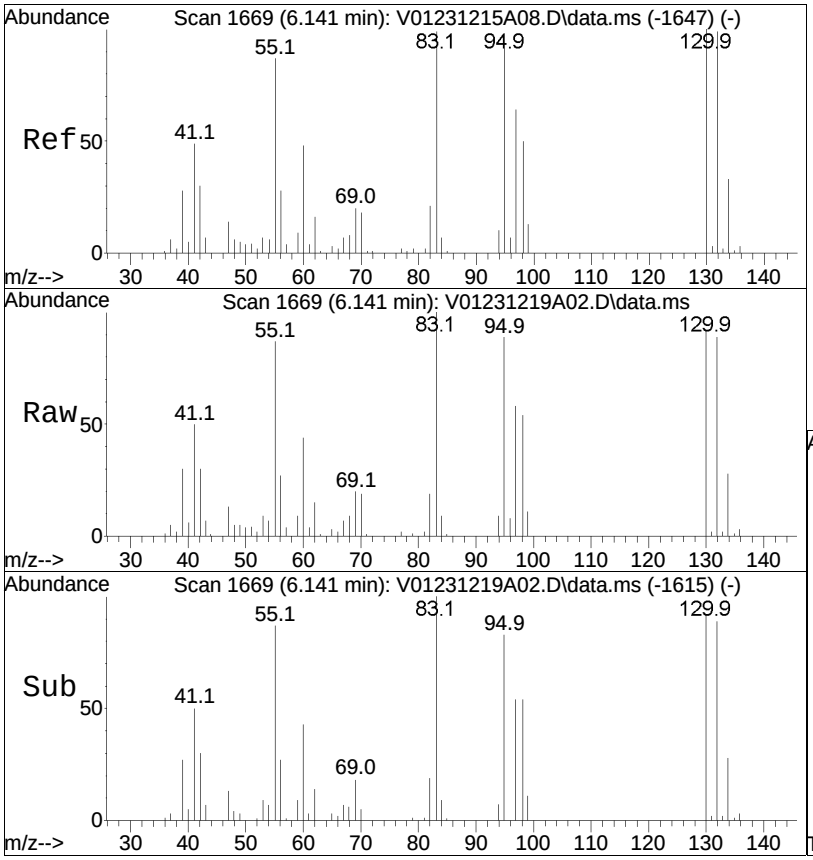


#47
Methyl cyclohexane
Concen: 10.45 ug/L
RT: 6.130 min Scan# 1665
Delta R.T. 0.003 min
Lab File: V01231219A02.D
Acq: 19 Dec 2023 5:56 am

Tgt Ion: 83 Resp: 193431

Ion	Ratio	Lower	Upper
83	100		
55	88.7	64.6	96.8

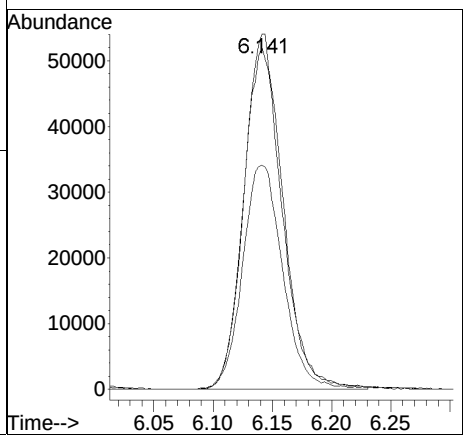


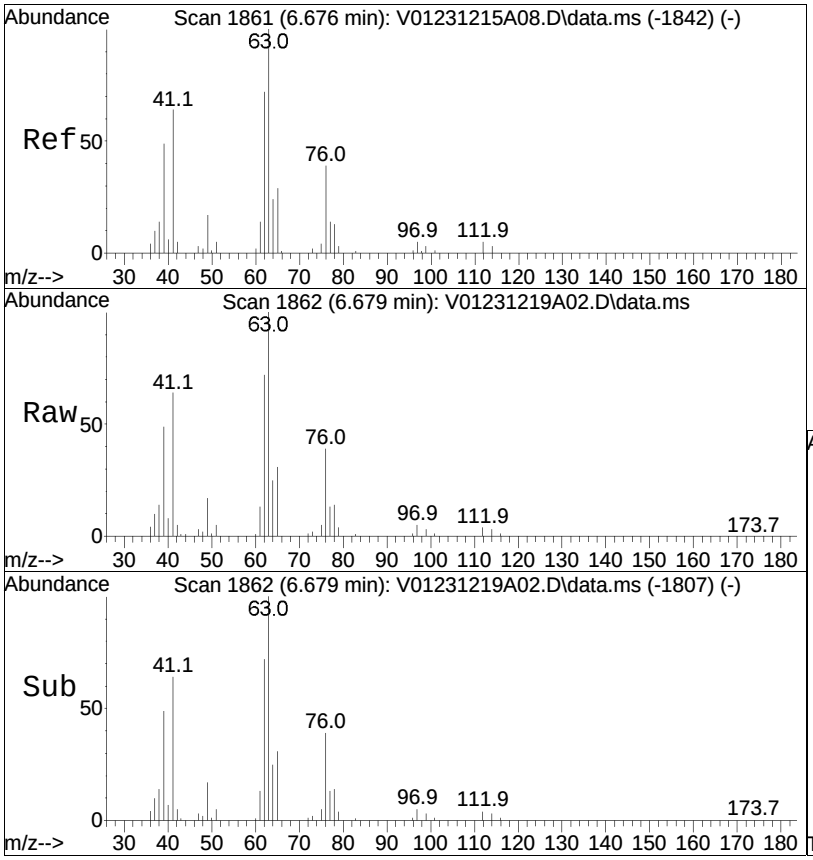


#48
Trichloroethene
Concen: 10.07 ug/L
RT: 6.141 min Scan# 1669
Delta R.T. 0.000 min
Lab File: V01231219A02.D
Acq: 19 Dec 2023 5:56 am

Tgt Ion: 95 Resp: 118972

Ion	Ratio	Lower	Upper
95	100		
97	67.8	54.4	81.6
130	103.5	80.6	120.8

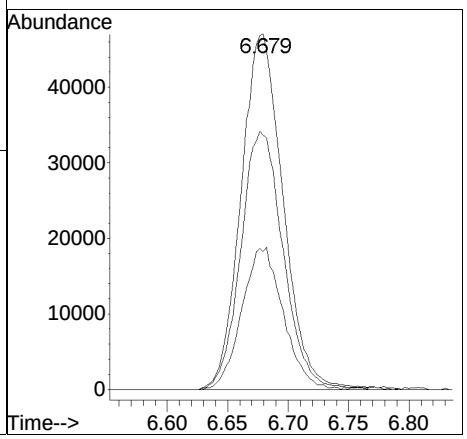


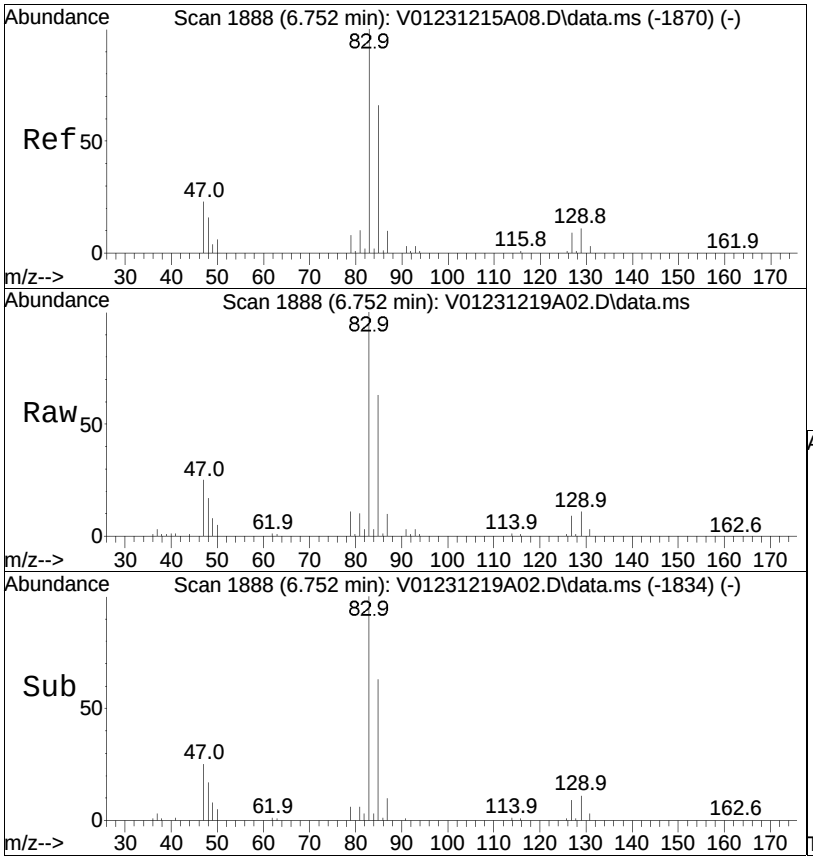


#51
1,2-Dichloropropane
Concen: 9.76 ug/L
RT: 6.679 min Scan# 1862
Delta R.T. 0.003 min
Lab File: V01231219A02.D
Acq: 19 Dec 2023 5:56 am

Tgt Ion: 63 Resp: 113729

Ion	Ratio	Lower	Upper
63	100		
62	73.3	57.2	85.8
76	39.3	33.6	50.4

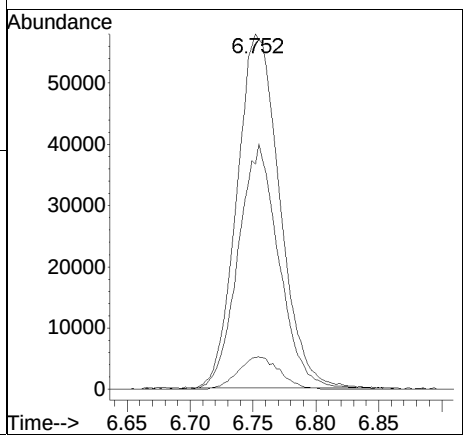


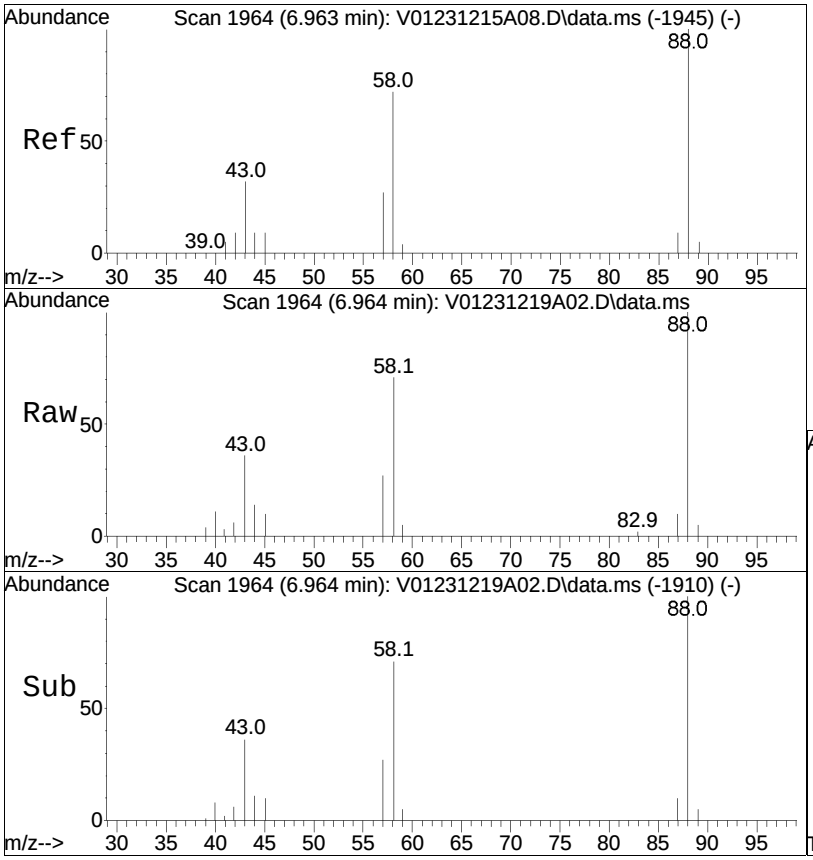


#54
Bromodichloromethane
Concen: 9.60 ug/L
RT: 6.752 min Scan# 1888
Delta R.T. 0.000 min
Lab File: V01231219A02.D
Acq: 19 Dec 2023 5:56 am

Tgt Ion: 83 Resp: 136999

Ion	Ratio	Lower	Upper
83	100		
85	66.6	52.2	78.4
127	9.0	6.9	10.3

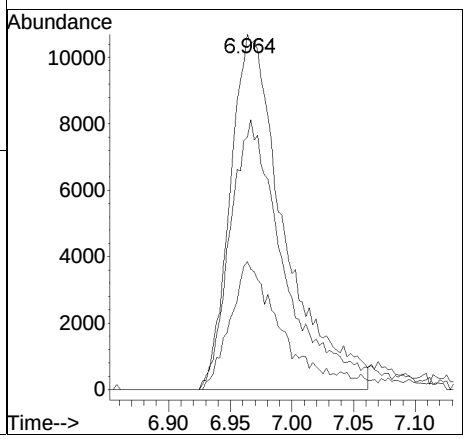


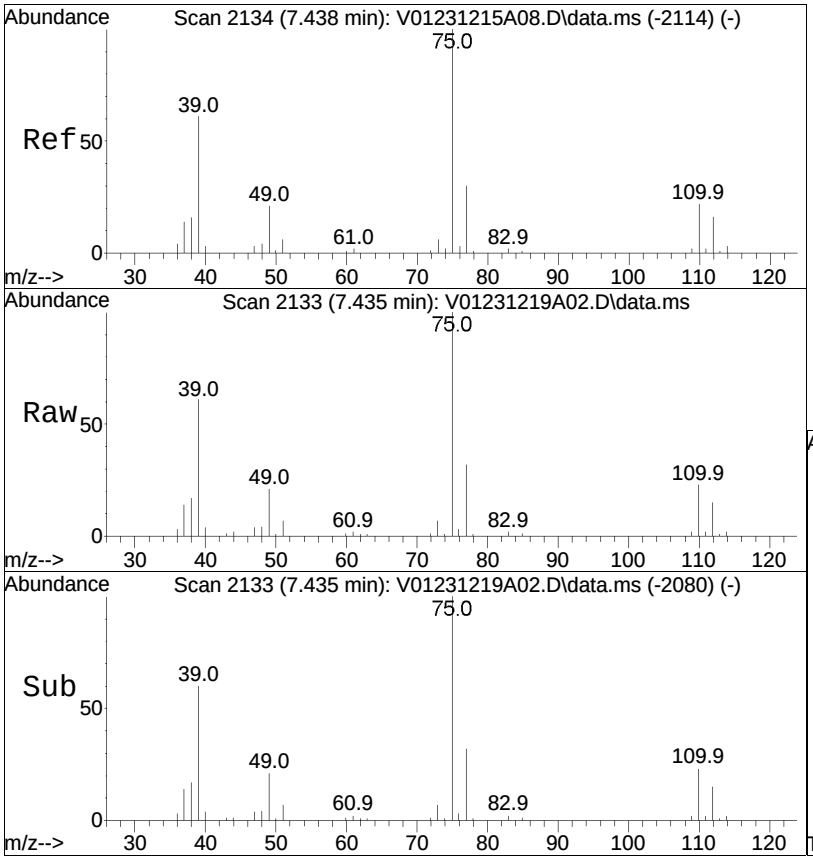


#57
1,4-Dioxane
Concen: 487.69 ug/L
RT: 6.964 min Scan# 1964
Delta R.T. 0.000 min
Lab File: V01231219A02.D
Acq: 19 Dec 2023 5:56 am

Tgt Ion: 88 Resp: 32792

Ion	Ratio	Lower	Upper
88	100		
58	75.6	54.8	82.2
43	32.1	29.3	43.9

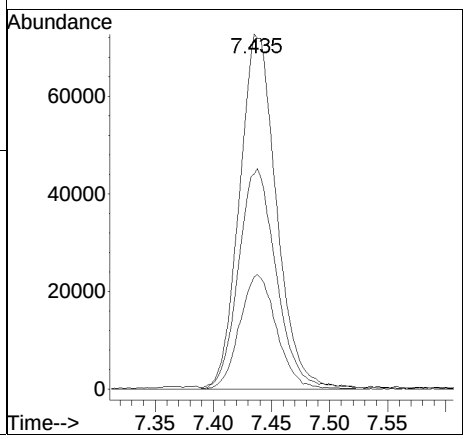


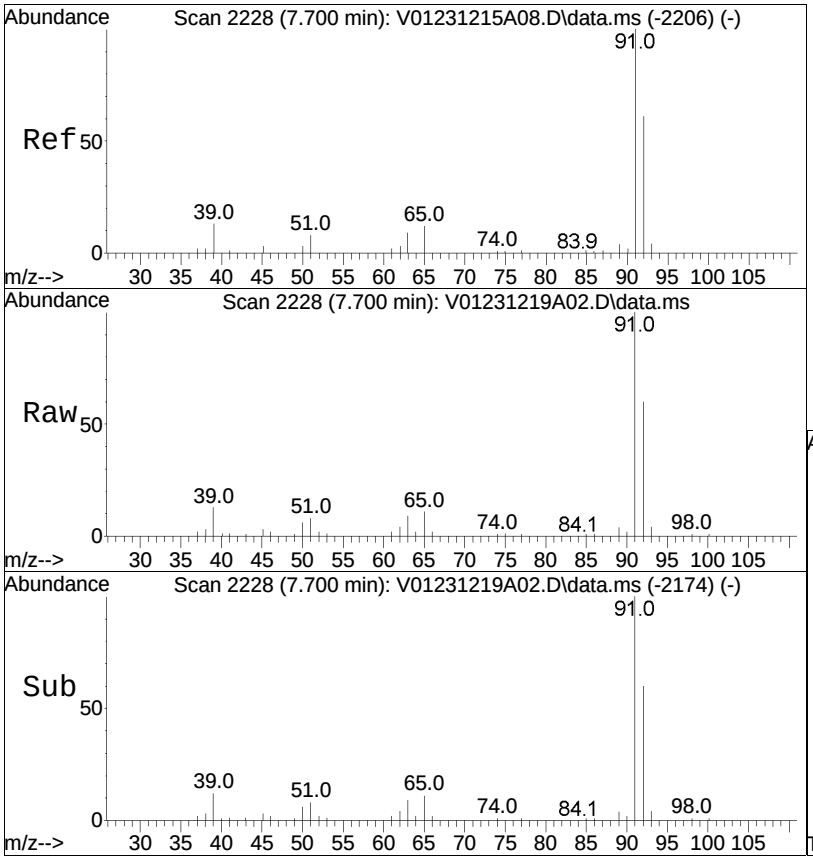


#58
cis-1,3-Dichloropropene
Concen: 9.68 ug/L
RT: 7.435 min Scan# 2133
Delta R.T. -0.003 min
Lab File: V01231219A02.D
Acq: 19 Dec 2023 5:56 am

Tgt Ion: 75 Resp: 161811

Ion	Ratio	Lower	Upper
75	100		
77	32.4	25.1	37.7
39	61.6	42.6	63.8

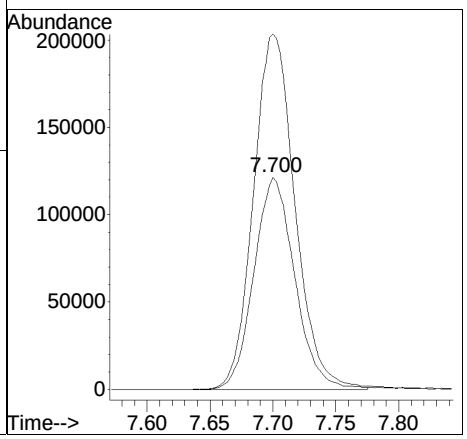


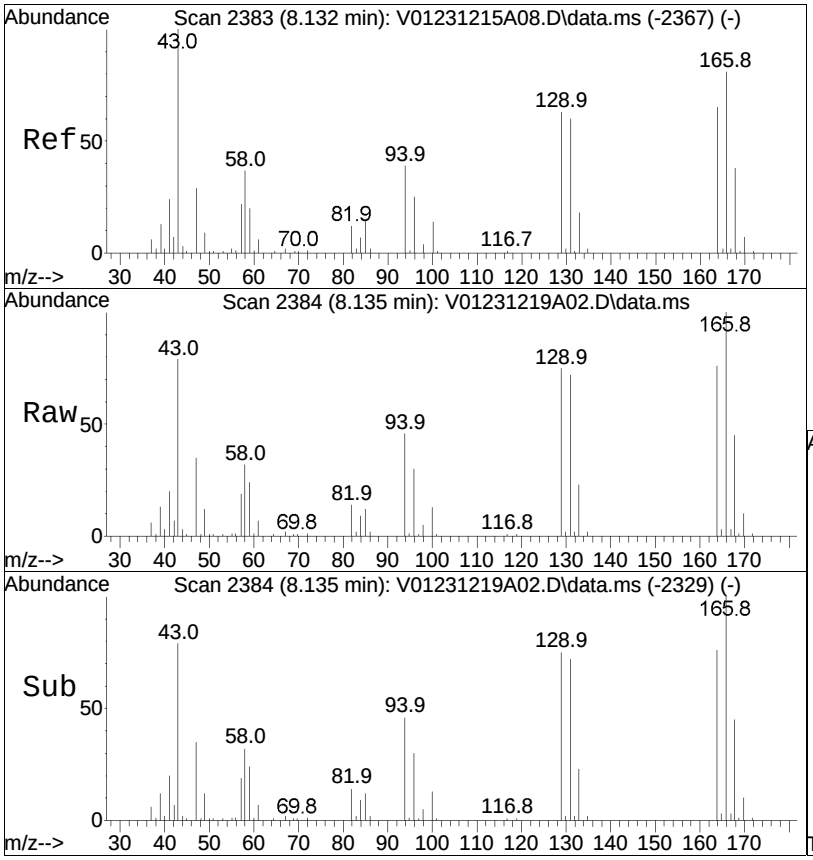


#61
Toluene
Concen: 9.63 ug/L
RT: 7.700 min Scan# 2228
Delta R.T. 0.000 min
Lab File: V01231219A02.D
Acq: 19 Dec 2023 5:56 am

Tgt Ion: 92 Resp: 274255

Ion	Ratio	Lower	Upper
92	100		
91	171.0	137.5	206.3

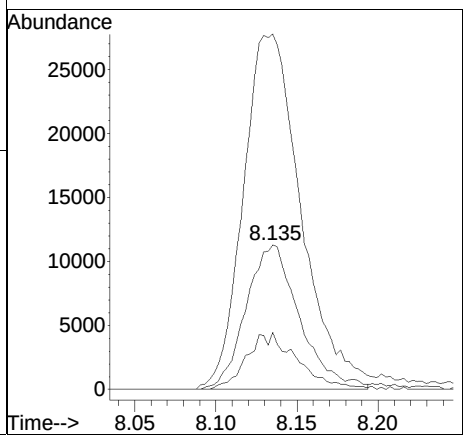


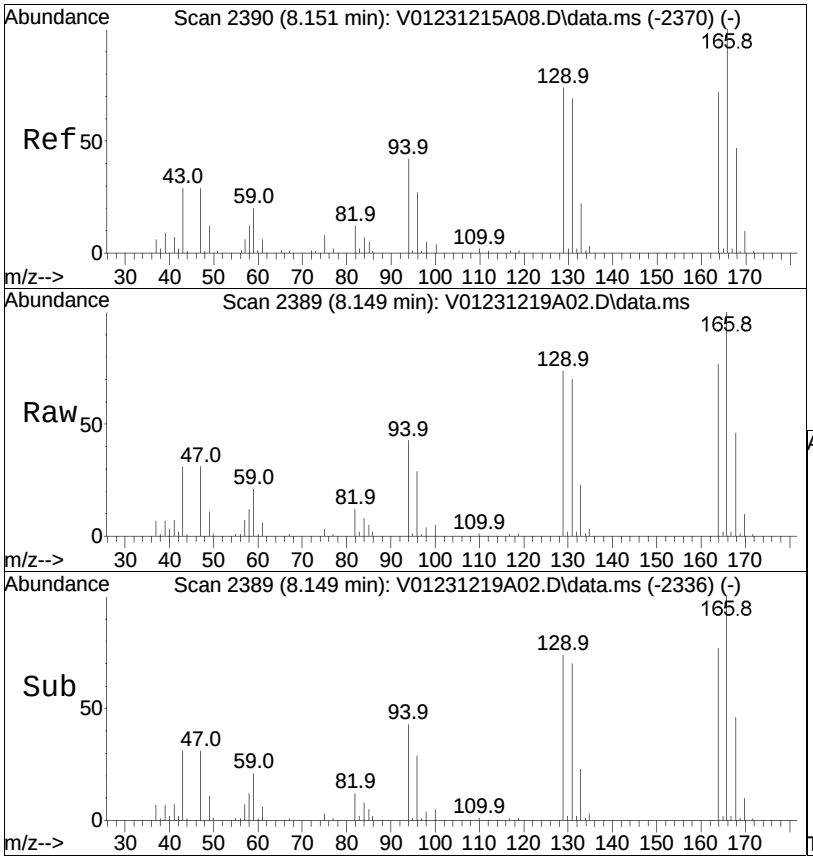


#62
4-Methyl-2-pentanone
Concen: 8.82 ug/L
RT: 8.135 min Scan# 2384
Delta R.T. 0.003 min
Lab File: V01231219A02.D
Acq: 19 Dec 2023 5:56 am

Tgt Ion: 58 Resp: 25946

Ion	Ratio	Lower	Upper
58	100		
100	37.3	31.8	47.6
43	266.1	212.5	318.7

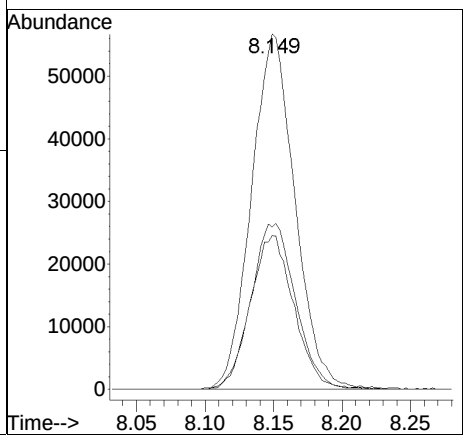


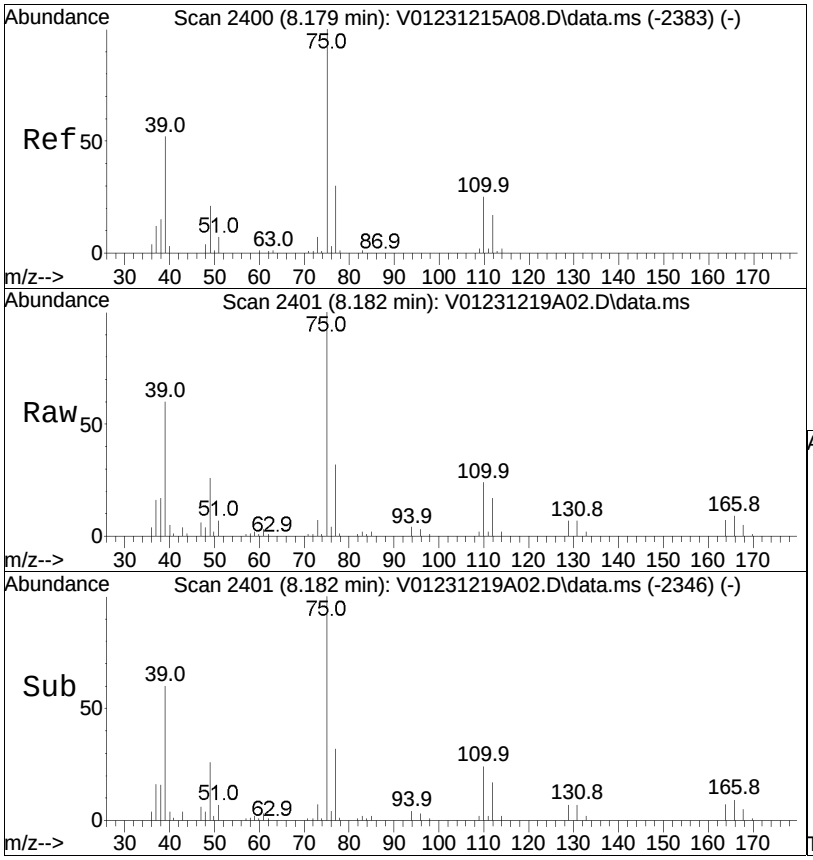


#63
Tetrachloroethene
Concen: 9.95 ug/L
RT: 8.149 min Scan# 2389
Delta R.T. -0.003 min
Lab File: V01231219A02.D
Acq: 19 Dec 2023 5:56 am

Tgt Ion:166 Resp: 125529

Ion	Ratio	Lower	Upper
166	100		
168	47.8	27.4	67.4
94	43.4	24.8	64.8

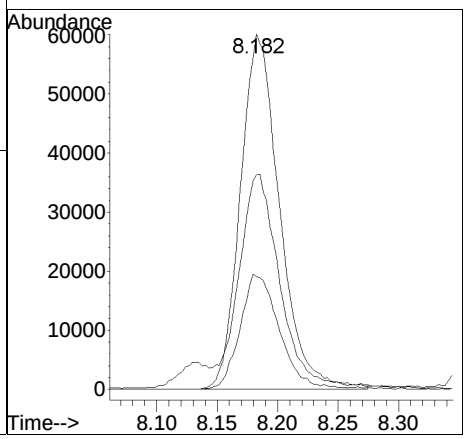


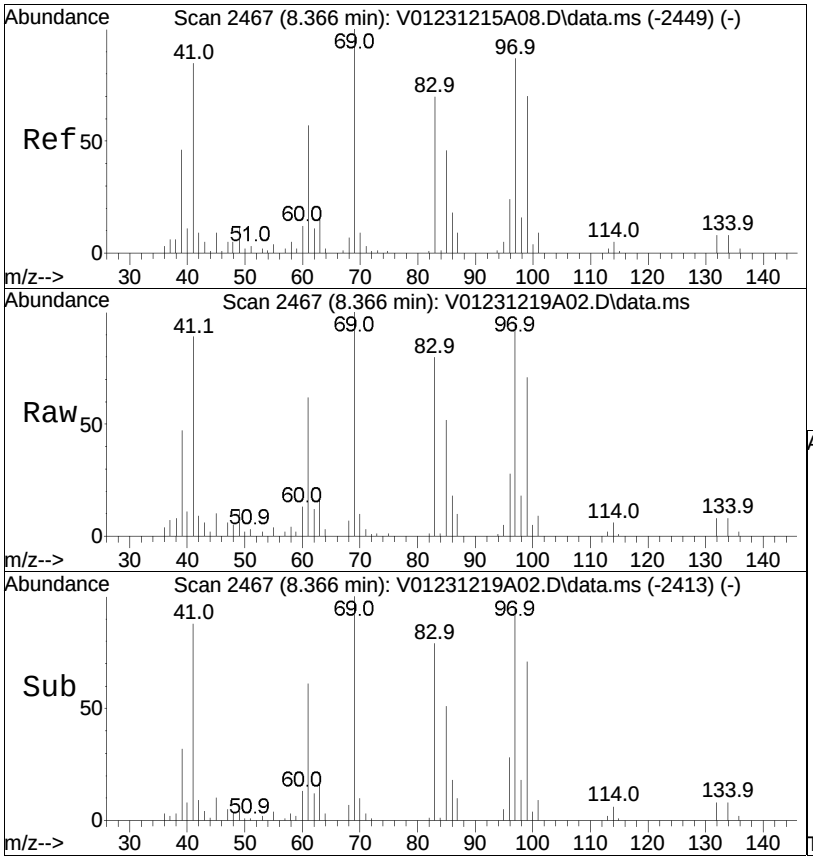


#65
trans-1,3-Dichloropropene
Concen: 9.09 ug/L
RT: 8.182 min Scan# 2401
Delta R.T. 0.003 min
Lab File: V01231219A02.D
Acq: 19 Dec 2023 5:56 am

Tgt Ion: 75 Resp: 135958

Ion	Ratio	Lower	Upper
75	100		
77	32.4	11.8	51.8
39	60.3	30.2	70.2

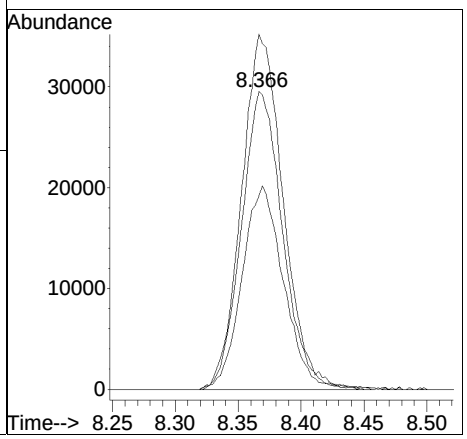


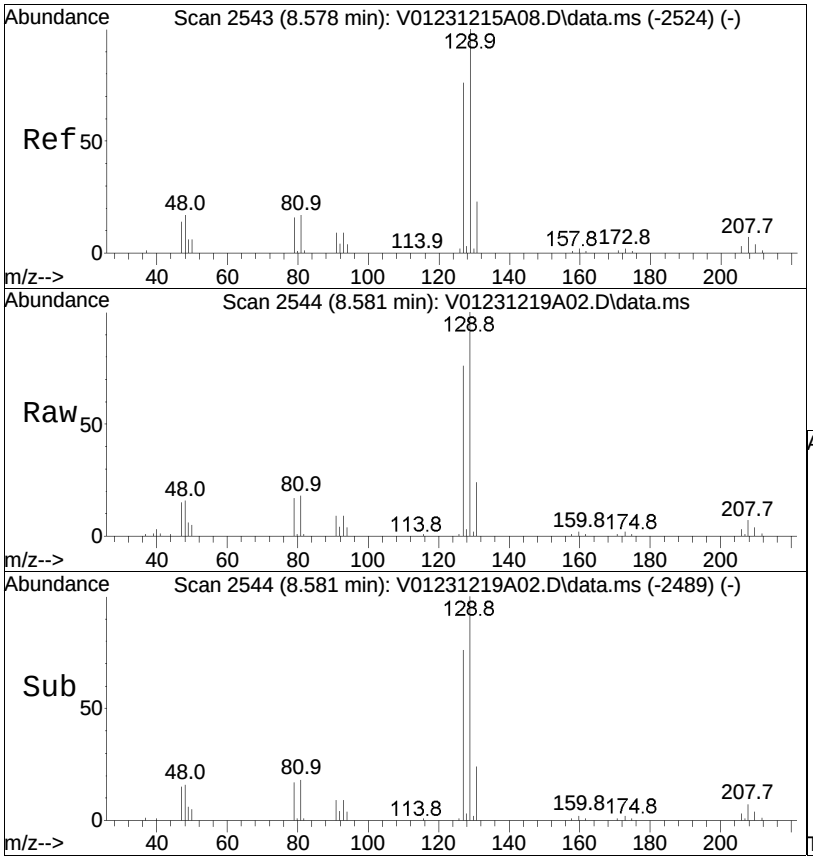


#68
1,1,2-Trichloroethane
Concen: 9.31 ug/L
RT: 8.366 min Scan# 2467
Delta R.T. 0.000 min
Lab File: V01231219A02.D
Acq: 19 Dec 2023 5:56 am

Tgt Ion: 83 Resp: 67529

Ion	Ratio	Lower	Upper
83	100		
97	120.7	96.7	136.7
85	68.6	45.3	85.3

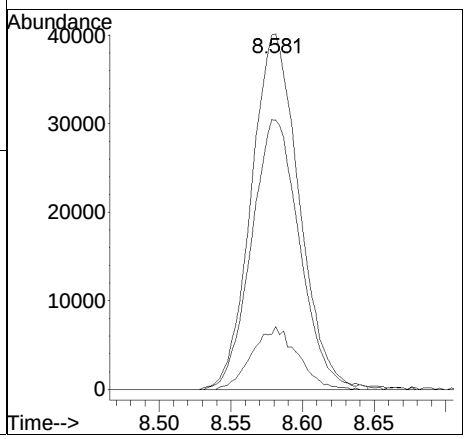


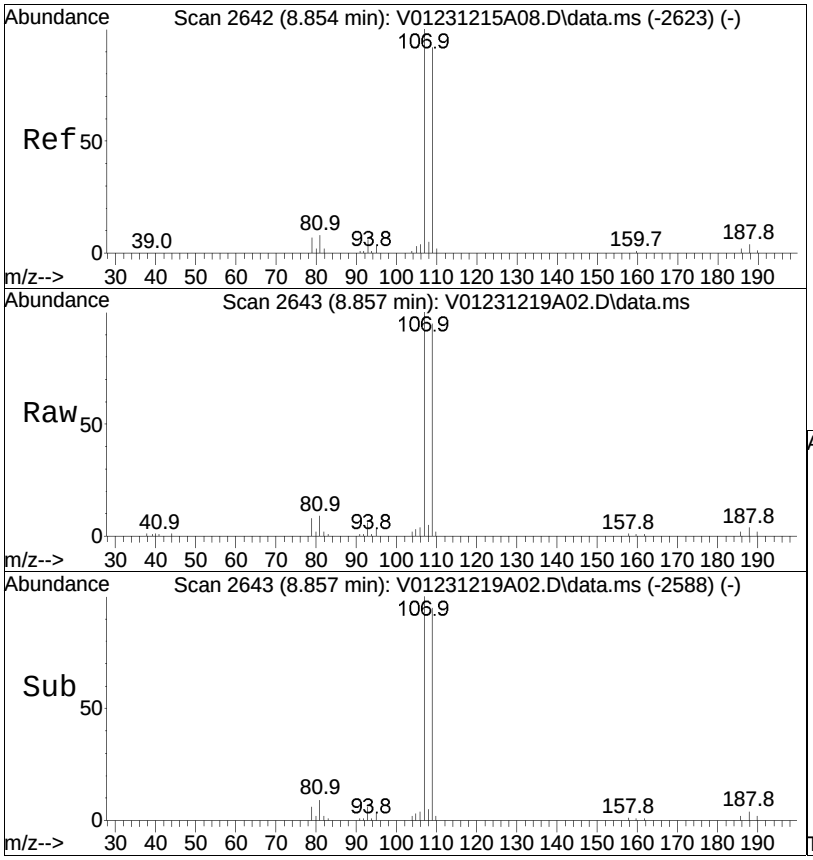


#69
Chlorodibromomethane
Concen: 8.83 ug/L
RT: 8.581 min Scan# 2544
Delta R.T. 0.003 min
Lab File: V01231219A02.D
Acq: 19 Dec 2023 5:56 am

Tgt Ion:129 Resp: 93075

Ion	Ratio	Lower	Upper
129	100		
81	16.7	0.0	37.9
127	76.3	56.6	96.6

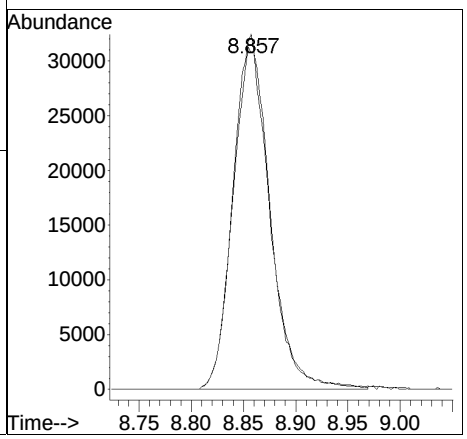


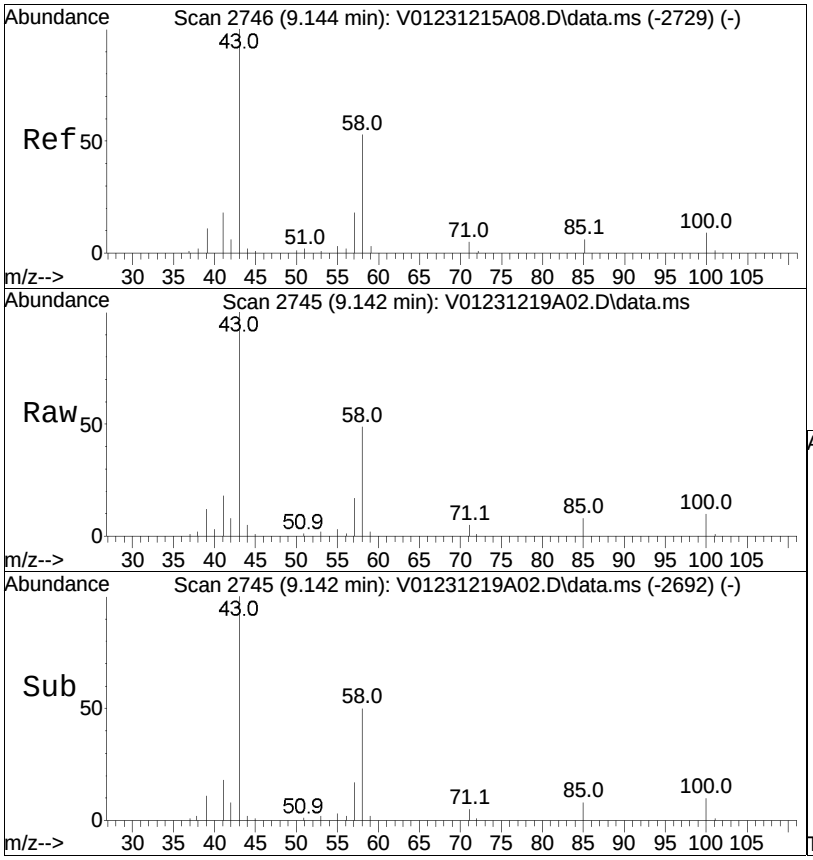


#71
1,2-Dibromoethane
Concen: 9.27 ug/L
RT: 8.857 min Scan# 2643
Delta R.T. 0.003 min
Lab File: V01231219A02.D
Acq: 19 Dec 2023 5:56 am

Tgt Ion:107 Resp: 80099

Ion	Ratio	Lower	Upper
107	100		
109	95.4	75.6	113.4

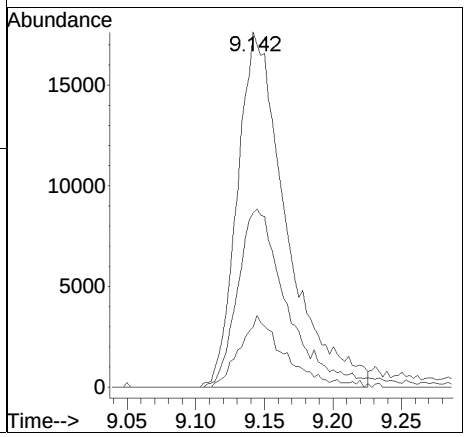


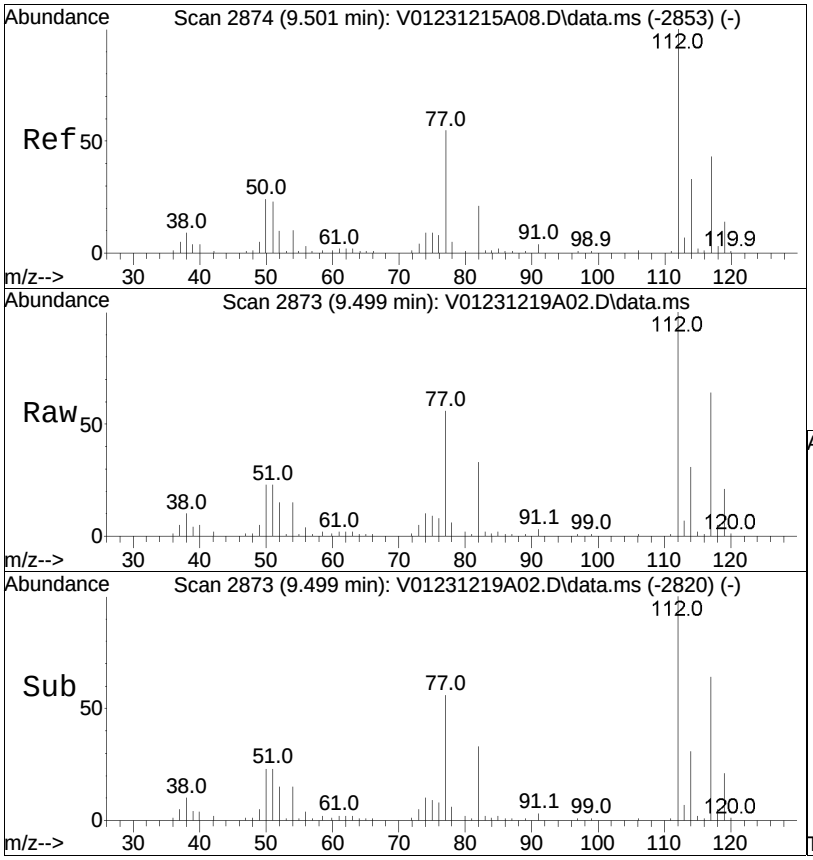


#72
2-Hexanone
Concen: 7.99 ug/L
RT: 9.142 min Scan# 2745
Delta R.T. -0.003 min
Lab File: V01231219A02.D
Acq: 19 Dec 2023 5:56 am

Tgt Ion: 43 Resp: 43998

Ion	Ratio	Lower	Upper
43	100		
58	51.8	40.8	61.2
57	17.9	14.2	21.4

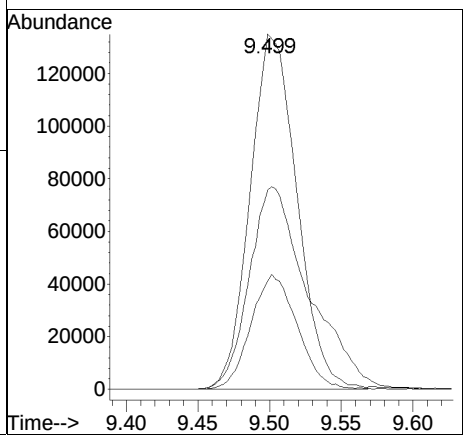


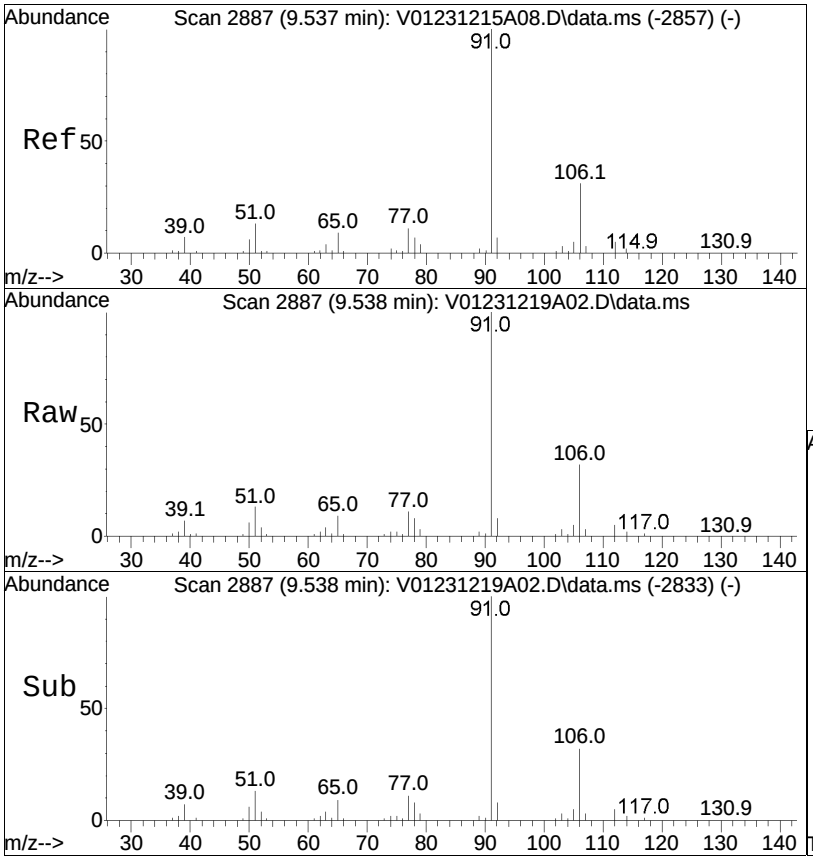


#73
Chlorobenzene
Concen: 9.50 ug/L
RT: 9.499 min Scan# 2873
Delta R.T. -0.003 min
Lab File: V01231219A02.D
Acq: 19 Dec 2023 5:56 am

Tgt Ion:112 Resp: 306871

Ion	Ratio	Lower	Upper
112	100		
77	72.9	59.8	89.6
114	32.1	25.4	38.2

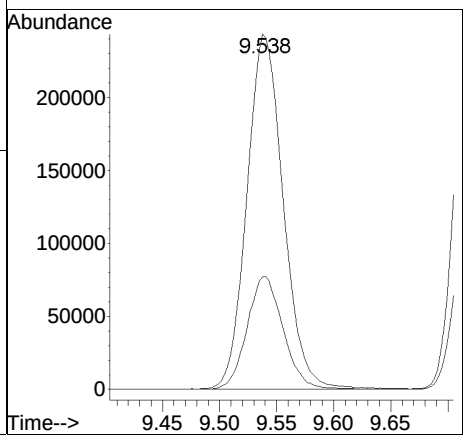


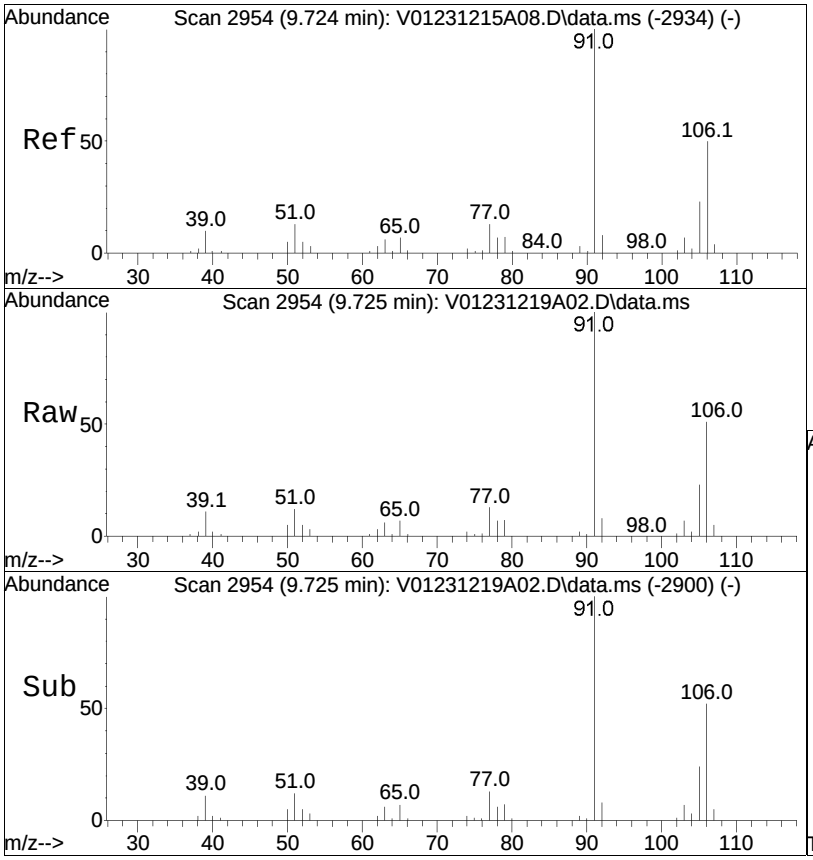


#74
Ethylbenzene
Concen: 9.80 ug/L
RT: 9.538 min Scan# 2887
Delta R.T. 0.000 min
Lab File: V01231219A02.D
Acq: 19 Dec 2023 5:56 am

Tgt Ion: 91 Resp: 536577

Ion	Ratio	Lower	Upper
91	100		
106	31.7	24.7	37.1

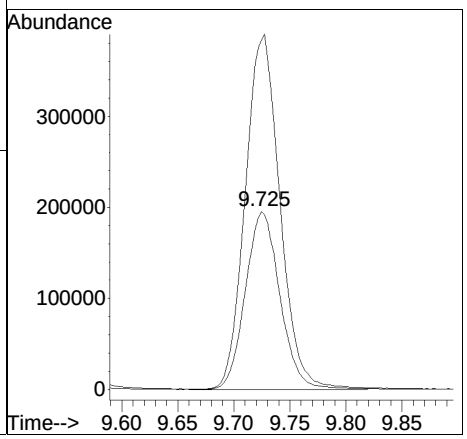


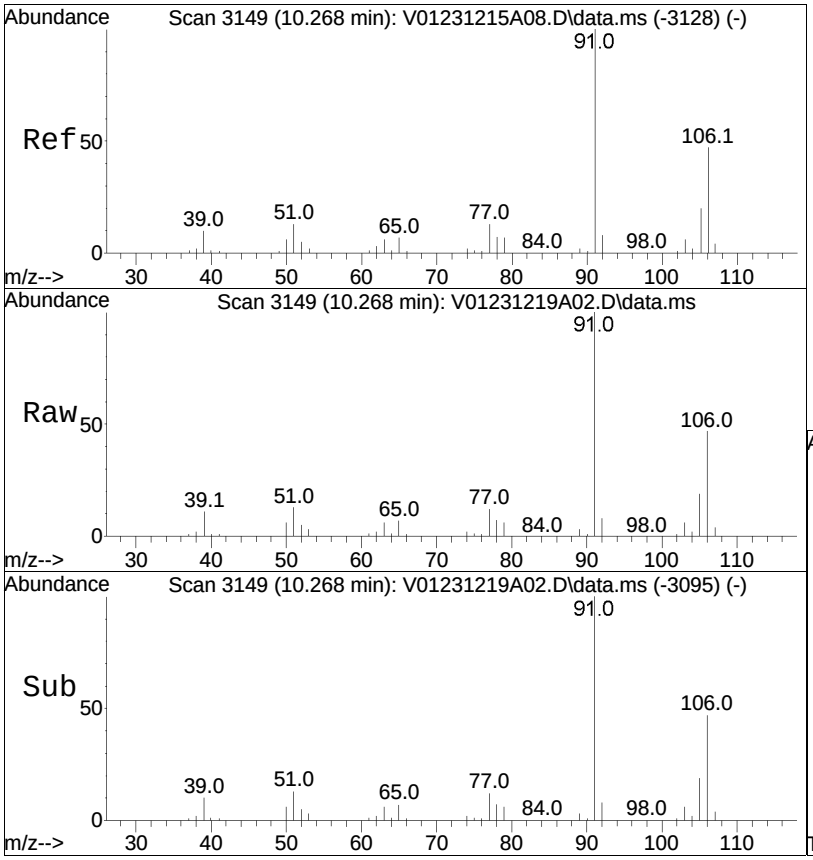


#76
p/m Xylene
Concen: 19.61 ug/L
RT: 9.725 min Scan# 2954
Delta R.T. 0.000 min
Lab File: V01231219A02.D
Acq: 19 Dec 2023 5:56 am

Tgt Ion:106 Resp: 419280

Ion	Ratio	Lower	Upper
106	100		
91	199.8	162.9	244.3

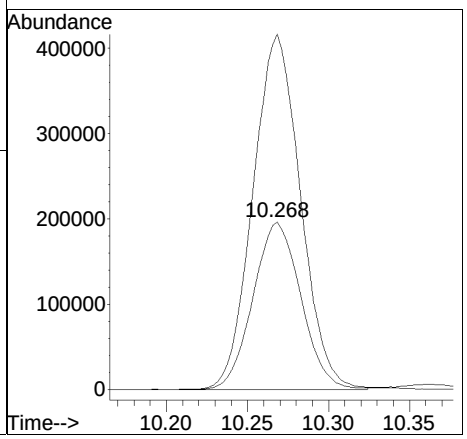


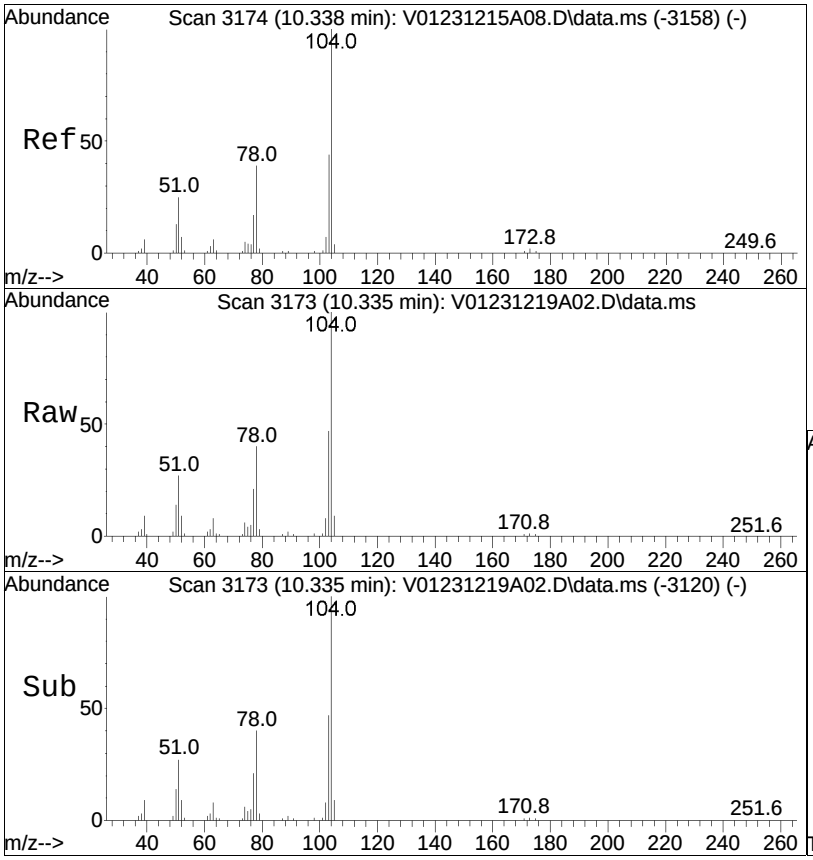


#77
o Xylene
Concen: 19.34 ug/L
RT: 10.268 min Scan# 3149
Delta R.T. 0.000 min
Lab File: V01231219A02.D
Acq: 19 Dec 2023 5:56 am

Tgt Ion:106 Resp: 402106

Ion	Ratio	Lower	Upper
106	100		
91	211.3	171.2	256.8

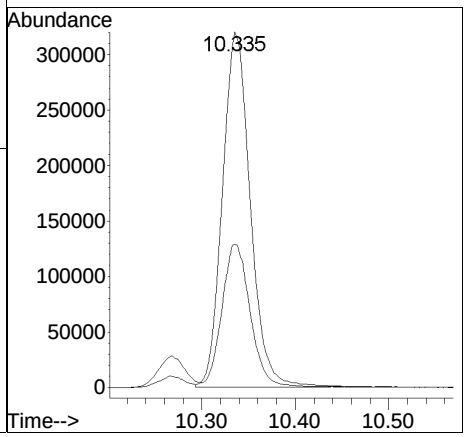


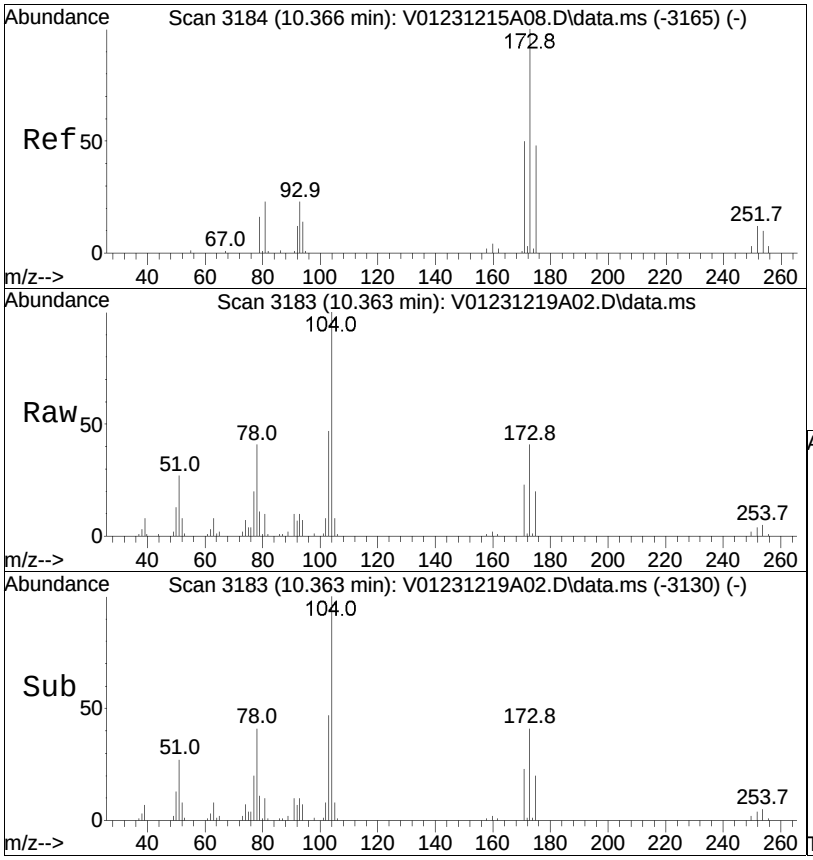


#78
Styrene
Concen: 19.47 ug/L
RT: 10.335 min Scan# 3173
Delta R.T. -0.003 min
Lab File: V01231219A02.D
Acq: 19 Dec 2023 5:56 am

Tgt Ion:104 Resp: 662906

Ion	Ratio	Lower	Upper
104	100		
78	40.4	34.2	51.4

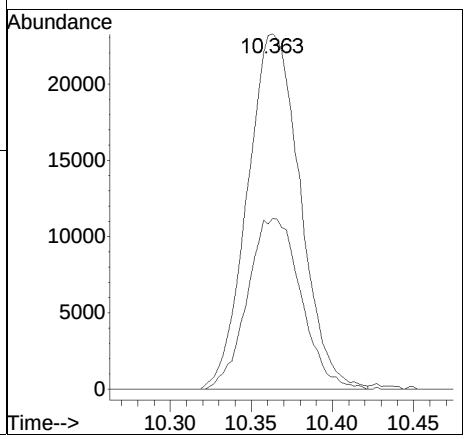


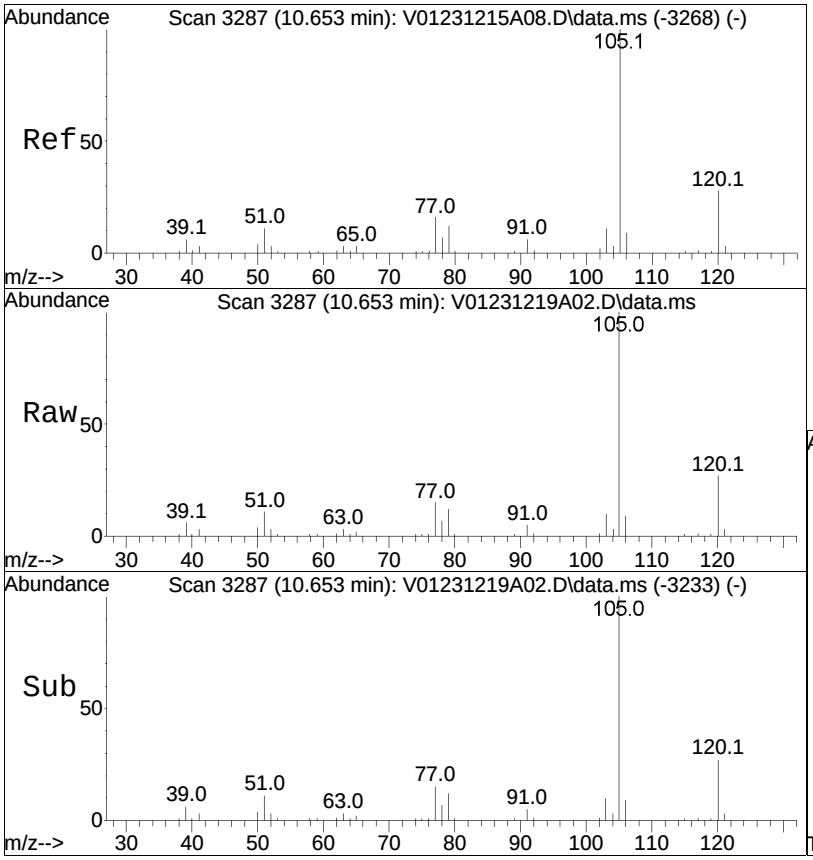


#80
Bromoform
Concen: 8.12 ug/L
RT: 10.363 min Scan# 3183
Delta R.T. -0.003 min
Lab File: V01231219A02.D
Acq: 19 Dec 2023 5:56 am

Tgt Ion:173 Resp: 52666

Ion	Ratio	Lower	Upper
173	100		
175	48.8	28.6	68.6

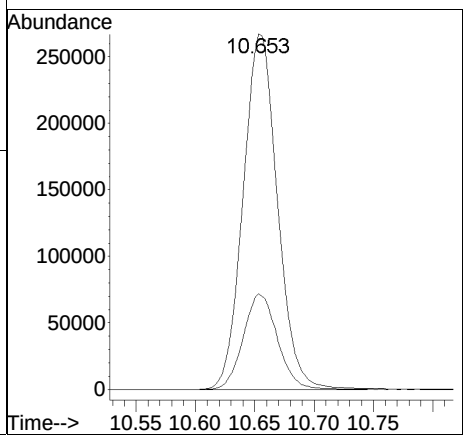


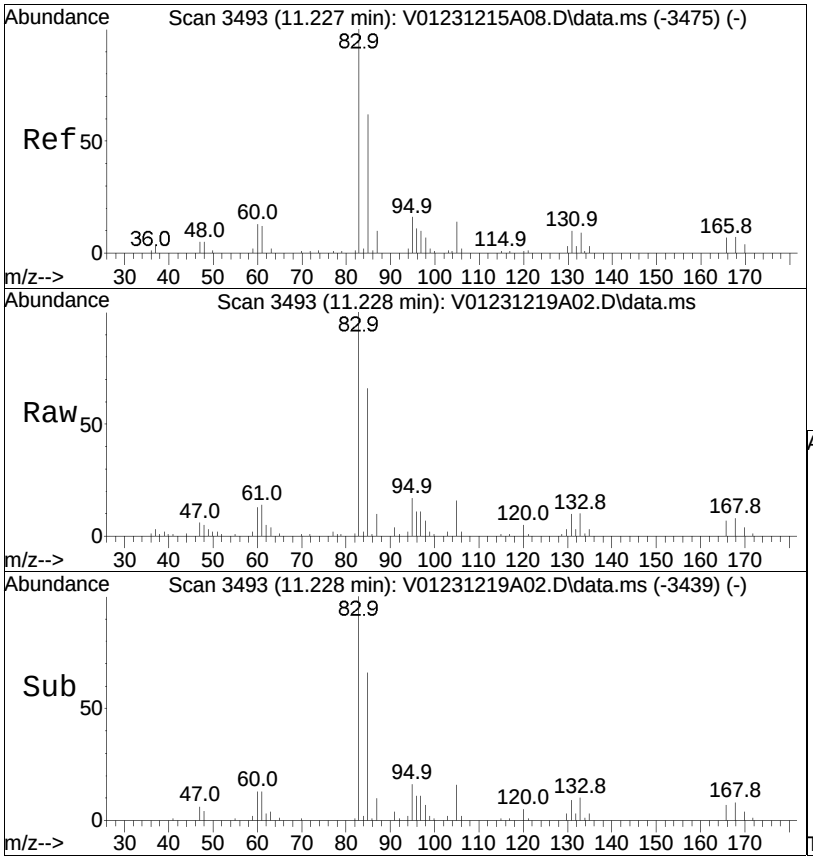


#82
Isopropylbenzene
Concen: 9.69 ug/L
RT: 10.653 min Scan# 3287
Delta R.T. 0.000 min
Lab File: V01231219A02.D
Acq: 19 Dec 2023 5:56 am

Tgt Ion:105 Resp: 537861

Ion	Ratio	Lower	Upper
105	100		
120	26.8	7.3	47.3

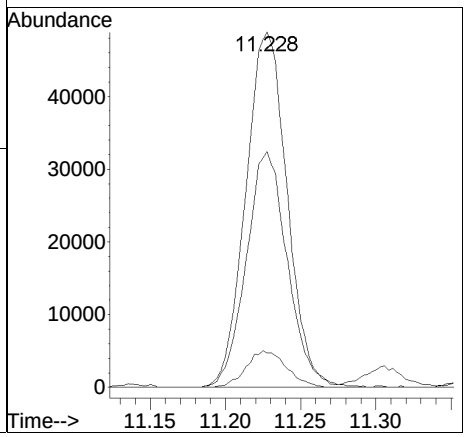


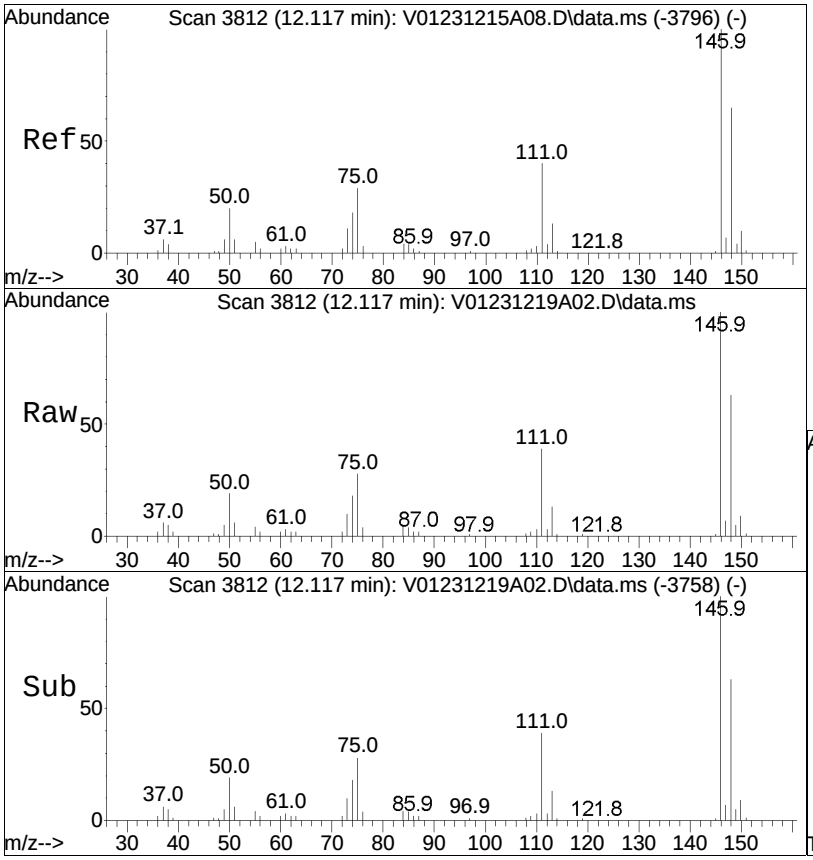


#87
1,1,2,2-Tetrachloroethane
Concen: 9.06 ug/L
RT: 11.228 min Scan# 3493
Delta R.T. 0.000 min
Lab File: V01231219A02.D
Acq: 19 Dec 2023 5:56 am

Tgt Ion: 83 Resp: 93506

Ion	Ratio	Lower	Upper
83	100		
131	10.1	0.0	30.1
85	66.0	45.8	85.8

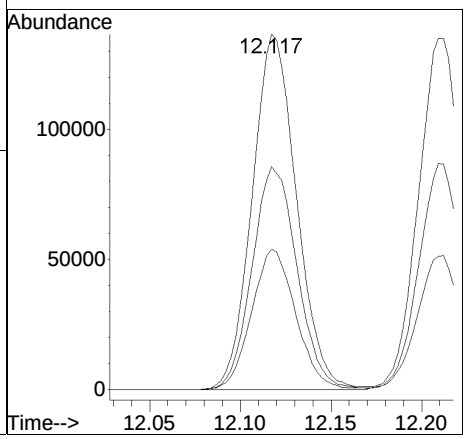


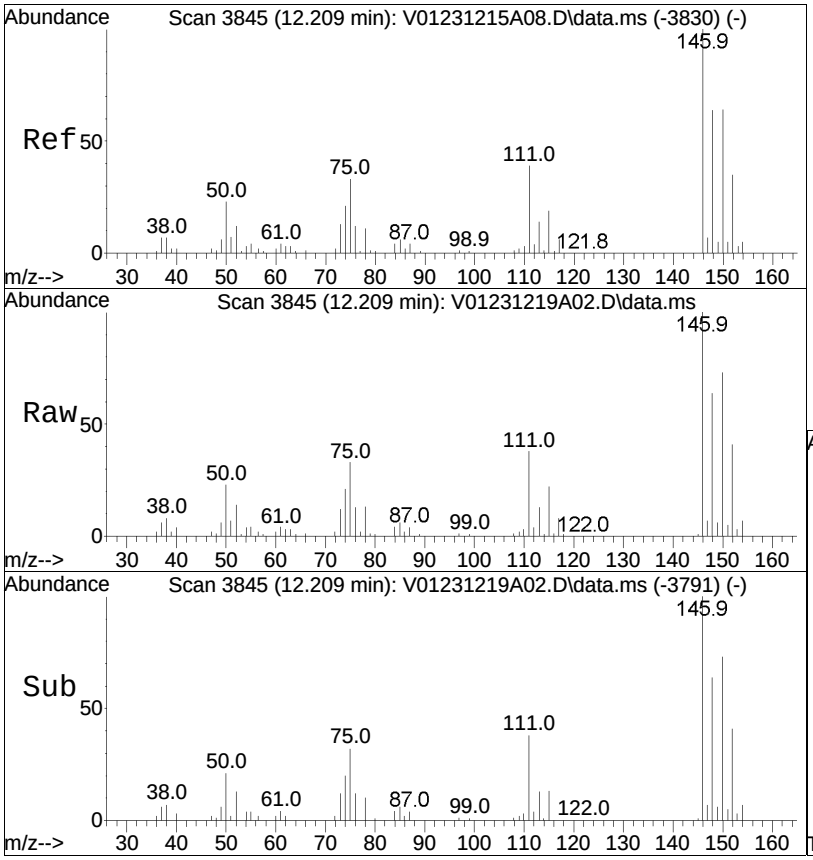


#100
1,3-Dichlorobenzene
Concen: 9.43 ug/L
RT: 12.117 min Scan# 3812
Delta R.T. 0.000 min
Lab File: V01231219A02.D
Acq: 19 Dec 2023 5:56 am

Tgt Ion:146 Resp: 232219

Ion	Ratio	Lower	Upper
146	100		
111	39.3	25.9	53.9
148	63.6	41.5	86.3

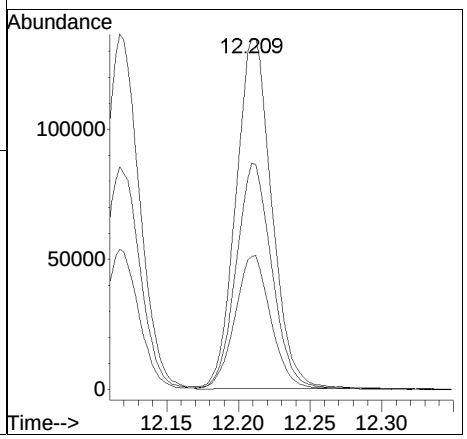


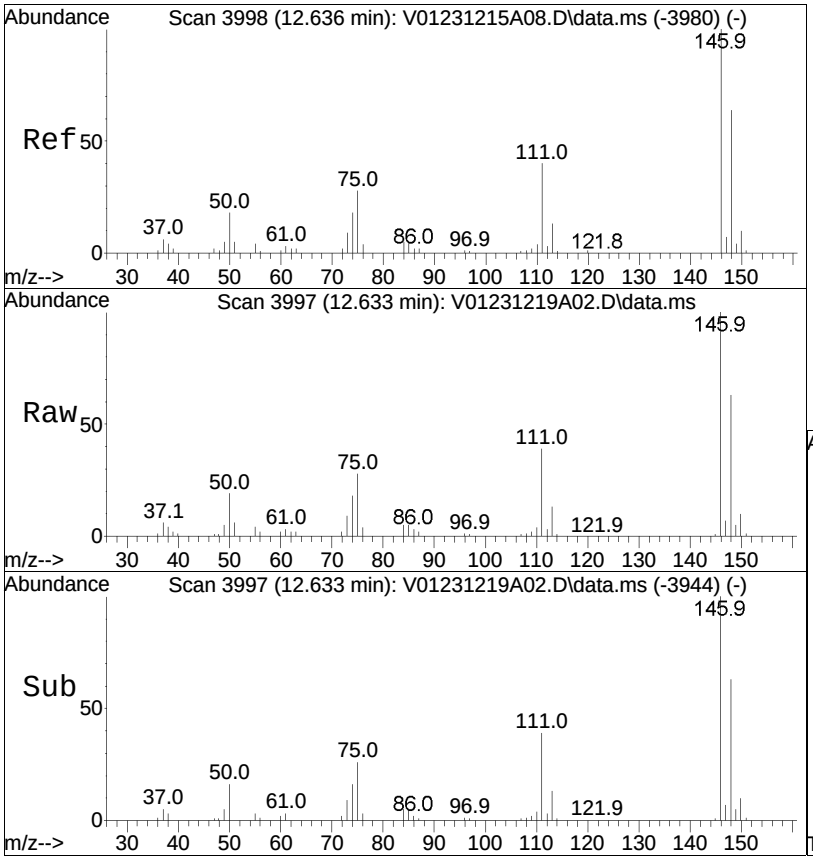


#101
1,4-Dichlorobenzene
Concen: 9.35 ug/L
RT: 12.209 min Scan# 3845
Delta R.T. 0.000 min
Lab File: V01231219A02.D
Acq: 19 Dec 2023 5:56 am

Tgt Ion:146 Resp: 234366

Ion	Ratio	Lower	Upper
146	100		
111	38.0	31.7	47.5
148	64.1	51.5	77.3

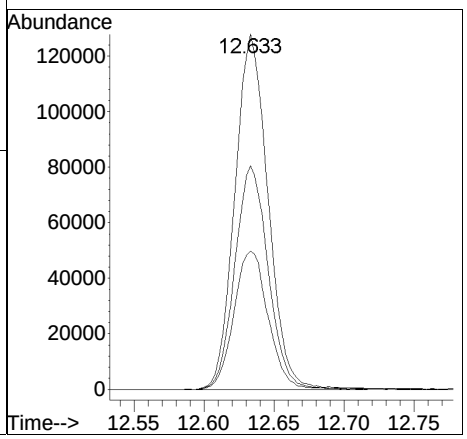


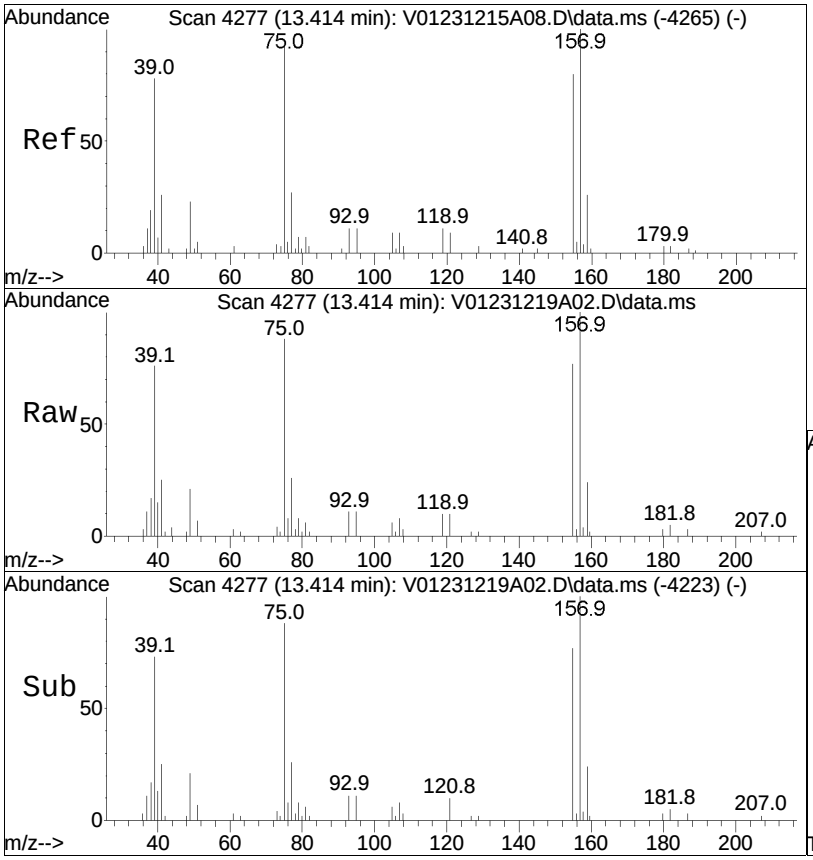


#104
1,2-Dichlorobenzene
Concen: 9.40 ug/L
RT: 12.633 min Scan# 3997
Delta R.T. -0.003 min
Lab File: V01231219A02.D
Acq: 19 Dec 2023 5:56 am

Tgt Ion:146 Resp: 210887

Ion	Ratio	Lower	Upper
146	100		
111	40.2	26.8	55.8
148	63.1	41.6	86.4

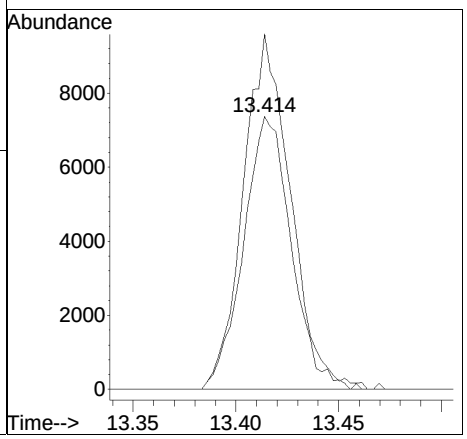


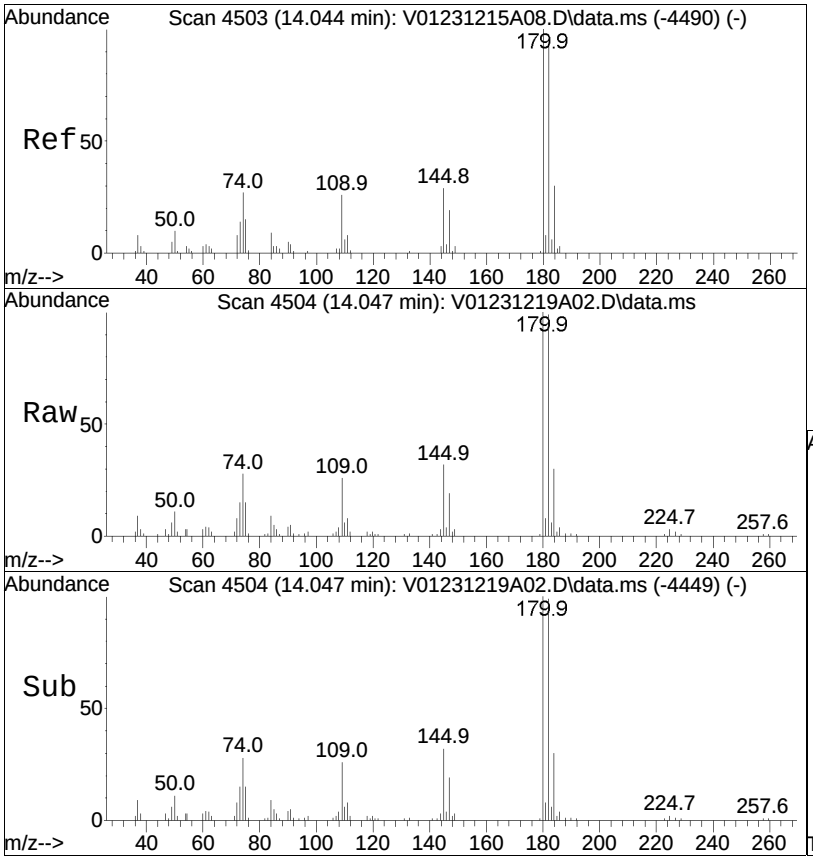


#106
1,2-Dibromo-3-chloropropane
Concen: 8.28 ug/L
RT: 13.414 min Scan# 4277
Delta R.T. 0.000 min
Lab File: V01231219A02.D
Acq: 19 Dec 2023 5:56 am

Tgt Ion:155 Resp: 11936

Ion	Ratio	Lower	Upper
155	100		
157	128.5	101.1	151.7

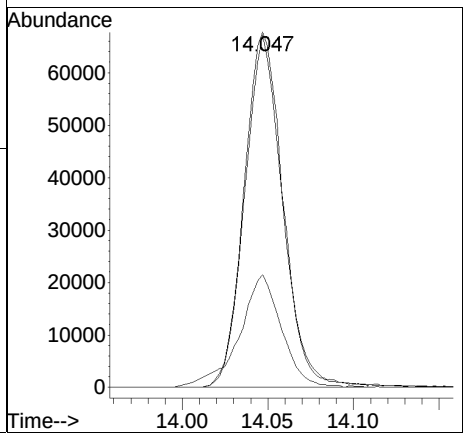


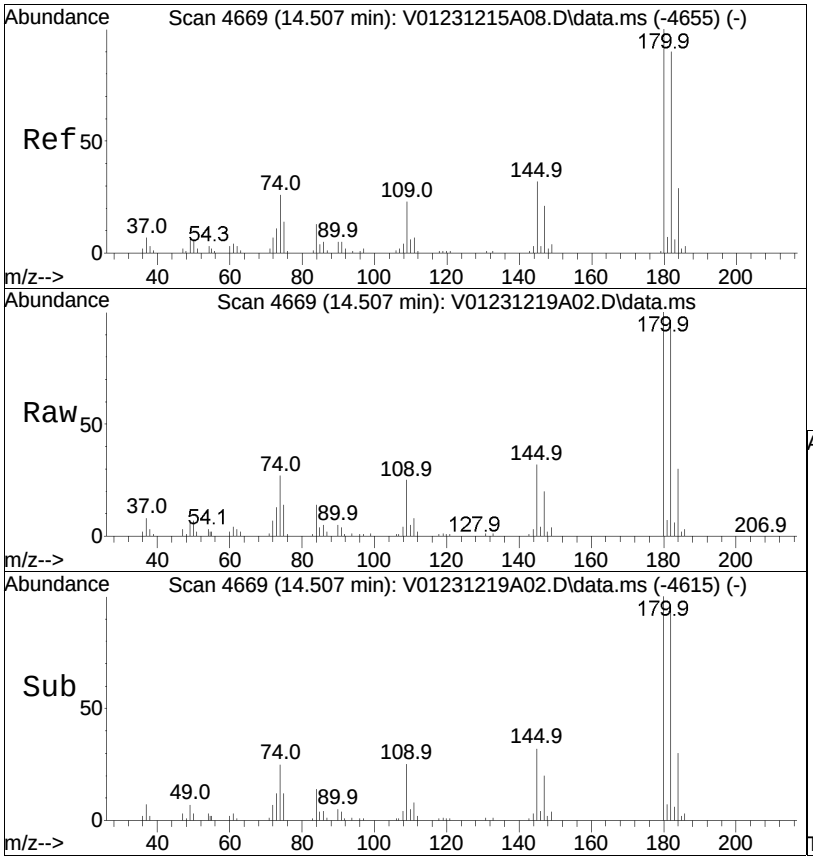


#109
1,2,4-Trichlorobenzene
Concen: 8.94 ug/L
RT: 14.047 min Scan# 4504
Delta R.T. 0.003 min
Lab File: V01231219A02.D
Acq: 19 Dec 2023 5:56 am

Tgt Ion:180 Resp: 107981

Ion	Ratio	Lower	Upper
180	100		
182	95.3	75.8	113.8
145	34.1	26.1	39.1

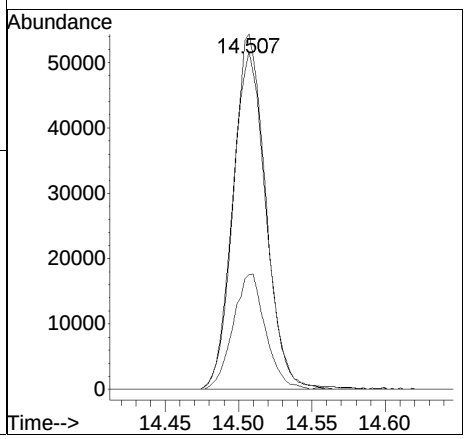




#111
1,2,3-Trichlorobenzene
Concen: 8.77 ug/L
RT: 14.507 min Scan# 4669
Delta R.T. 0.000 min
Lab File: V01231219A02.D
Acq: 19 Dec 2023 5:56 am

Tgt Ion:180 Resp: 84525

Ion	Ratio	Lower	Upper
180	100		
182	94.9	75.4	113.0
145	32.2	25.0	37.6



Manual Integration Report

Data Path	: K:\VOA101\2023\231219A\	QMethod	: V101_231215A_8260.m
Data File	: V01231219A02.D	Operator	: VOA101:MJV
Date Inj'd	: 12/19/2023 5:56 am	Instrument	: VOA 101
Sample	: WG1865859-4,31,10,10	Quant Date	: 12/19/2023 6:56 am

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

Quantitation Report (QT Reviewed)

Data Path : K:\VOA108\2023\231218A\
Data File : V08231218A02.d
Acq On : 18 Dec 2023 7:14 am
Operator : VOA108:PID
Sample : WG1865366-4,31,10,10
Misc : WG1865366,ICAL20635
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 18 07:38:04 2023
Quant Method : K:\VOA108\2023\231218A\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 17:09:55 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA108\2023\231218A\V08231218A01.d
Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.114	96	138344	10.000	ug/L	0.00
Standard Area 1 = 142386			Recovery = 97.16%			
59) Chlorobenzene-d5	9.648	117	98164	10.000	ug/L	0.00
Standard Area 1 = 96600			Recovery = 101.62%			
79) 1,4-Dichlorobenzene-d4	12.327	152	47692	10.000	ug/L	0.00
Standard Area 1 = 46518			Recovery = 102.52%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.307	113	37705	10.618	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 106.18%			
43) 1,2-Dichloroethane-d4	5.831	65	49446	11.308	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 113.08%			
60) Toluene-d8	7.808	98	133146	10.452	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 104.52%			
83) 4-Bromofluorobenzene	11.127	95	47248	10.498	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 104.98%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.705	85	31279	8.082	ug/L	97
3) Chloromethane	1.904	50	61091	9.524	ug/L	98
4) Vinyl chloride	1.978	62	44841	10.697	ug/L	98
5) Bromomethane	2.297	94	18282	11.953	ug/L	98
6) Chloroethane	2.413	64	25180	12.954	ug/L	98
7) Trichlorofluoromethane	2.554	101	43836	12.112	ug/L	96
10) 1,1-Dichloroethene	3.047	96	26332	10.371	ug/L	93
11) Carbon disulfide	3.079	76	97979	10.400	ug/L	97
12) Freon-113	3.089	101	29030	11.043	ug/L	98
15) Methylene chloride	3.608	84	30689	10.384	ug/L	85
17) Acetone	3.645	43	8492	11.469	ug/L	90
18) trans-1,2-Dichloroethene	3.760	96	29497	10.358	ug/L	98
19) Methyl acetate	3.771	43	22725	11.375	ug/L #	86
20) Methyl tert-butyl ether	3.865	73	70126	10.100	ug/L #	84
23) 1,1-Dichloroethane	4.347	63	69624	10.575	ug/L	99
28) cis-1,2-Dichloroethene	4.861	96	32493	10.296	ug/L	90
30) Bromochloromethane	5.055	128	14945	11.152	ug/L	95
31) Cyclohexane	5.066	56	70176	9.943	ug/L	96
32) Chloroform	5.129	83	57562	10.811	ug/L	96
34) Carbon tetrachloride	5.270	117	43519	11.137	ug/L	98

Data Path : K:\VOA108\2023\231218A\
Data File : V08231218A02.d
Acq On : 18 Dec 2023 7:14 am
Operator : VOA108:PID
Sample : WG1865366-4,31,10,10
Misc : WG1865366,ICAL20635
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 18 07:38:04 2023
Quant Method : K:\VOA108\2023\231218A\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 17:09:55 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA108\2023\231218A\V08231218A01.d
Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
37) 1,1,1-Trichloroethane	5.333	97	49502	10.818	ug/L	#	97
39) 2-Butanone	5.417	43	13564	11.539	ug/L		94
41) Benzene	5.700	78	118817	10.522	ug/L		97
44) 1,2-Dichloroethane	5.899	62	48128	11.372	ug/L		99
47) Methyl cyclohexane	6.287	83	48132	10.133	ug/L		94
48) Trichloroethene	6.293	95	32432	11.210	ug/L		98
51) 1,2-Dichloropropane	6.838	63	37644	10.127	ug/L	#	94
54) Bromodichloromethane	6.901	83	42812	10.602	ug/L		98
57) 1,4-Dioxane	7.110	88	7742	826.675	ug/L		96
58) cis-1,3-Dichloropropene	7.593	75	49603	10.857	ug/L		92
61) Toluene	7.865	92	71774	10.484	ug/L		96
62) 4-Methyl-2-pentanone	8.295	58	8841	9.262	ug/L	#	70
63) Tetrachloroethene	8.311	166	29636	10.512	ug/L		94
65) trans-1,3-Dichloropropene	8.343	75	43311	11.327	ug/L		88
68) 1,1,2-Trichloroethane	8.531	83	20372	11.535	ug/L		96
69) Chlorodibromomethane	8.741	129	27493	10.742	ug/L		98
71) 1,2-Dibromoethane	9.019	107	22403	11.138	ug/L		98
72) 2-Hexanone	9.297	43	17052	10.764	ug/L	#	88
73) Chlorobenzene	9.669	112	78842	10.524	ug/L		97
74) Ethylbenzene	9.711	91	135697	10.529	ug/L		99
76) p/m Xylene	9.900	106	106487	22.072	ug/L		97
77) o Xylene	10.435	106	102669	21.908	ug/L		93
78) Styrene	10.497	104	169100	22.236	ug/L		93
80) Bromoform	10.518	173	15938	11.695	ug/L		96
82) Isopropylbenzene	10.812	105	127986	10.991	ug/L		97
87) 1,1,2,2-Tetrachloroethane	11.363	83	27756	12.089	ug/L		98
100) 1,3-Dichlorobenzene	12.249	146	64279	11.604	ug/L		100
101) 1,4-Dichlorobenzene	12.338	146	64408	11.518	ug/L		99
104) 1,2-Dichlorobenzene	12.762	146	58993	11.445	ug/L		99
106) 1,2-Dibromo-3-chloropr...	13.533	155	3496	10.547	ug/L		86
109) 1,2,4-Trichlorobenzene	14.162	180	39297	10.988	ug/L		98
111) 1,2,3-Trichlorobenzene	14.618	180	35461	11.394	ug/L		98

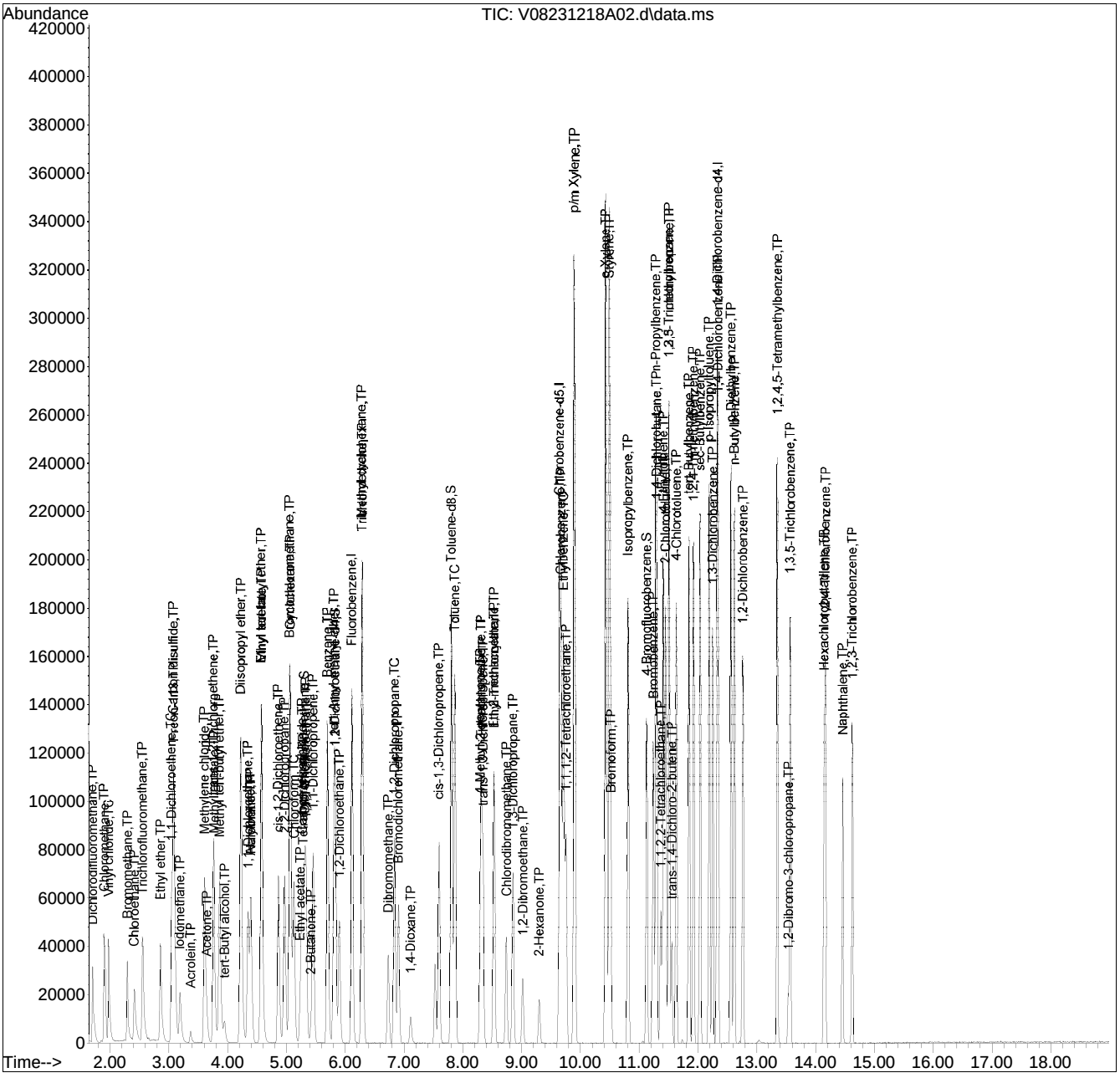
(#) = qualifier out of range (m) = manual integration (+) = signals summed

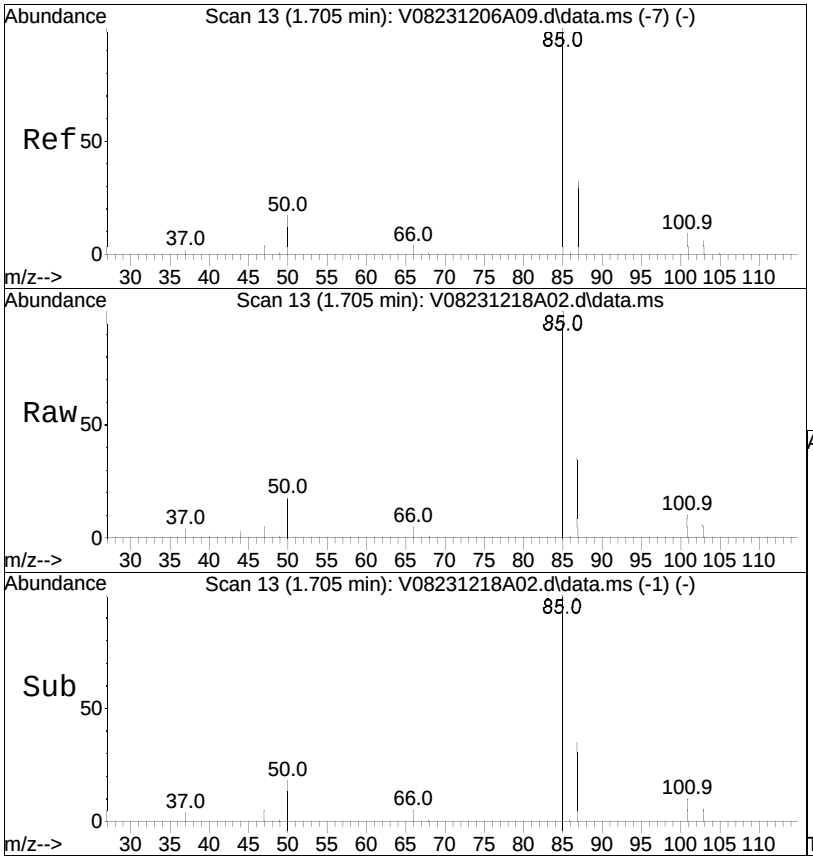
Quantitation Report (QT Reviewed)

Data Path : K:\VOA108\2023\231218A\
Data File : V08231218A02.d
Acq On : 18 Dec 2023 7:14 am
Operator : VOA108:PID
Sample : WG1865366-4,31,10,10
Misc : WG1865366,ICAL20635
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 18 07:38:04 2023
Quant Method : K:\VOA108\2023\231218A\V108_231206A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Dec 06 17:09:55 2023
Response via : Initial Calibration

Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE01.d•

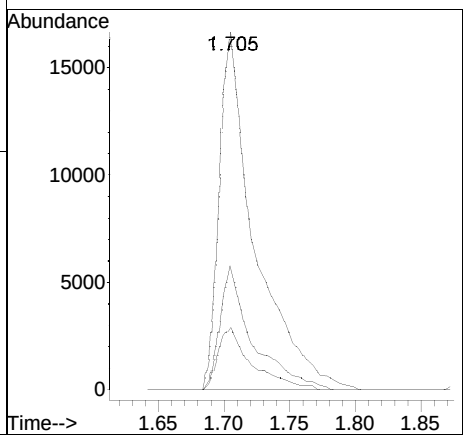


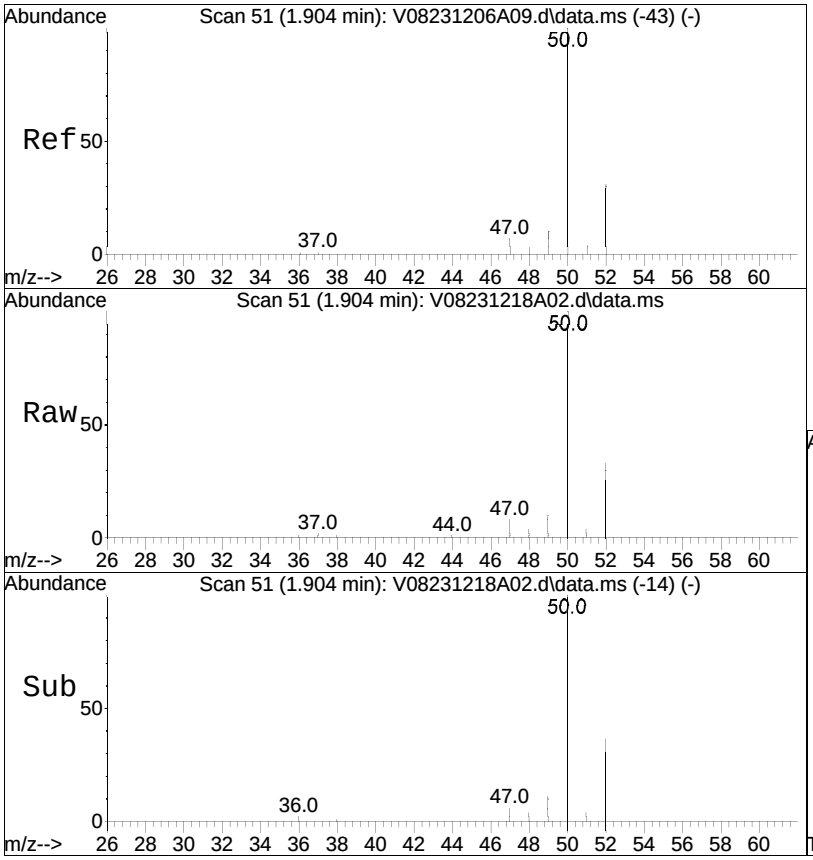


#2
Dichlorodifluoromethane
Concen: 8.08 ug/L
RT: 1.705 min Scan# 13
Delta R.T. -0.000 min
Lab File: V08231218A02.d
Acq: 18 Dec 2023 7:14 am

Tgt Ion: 85 Resp: 31279

Ion	Ratio	Lower	Upper
85	100		
87	31.9	21.0	43.6
50	16.8	8.9	18.5

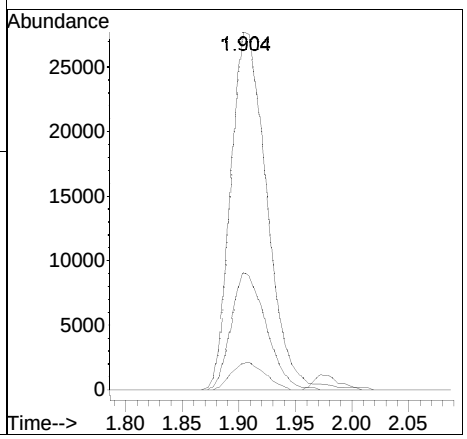


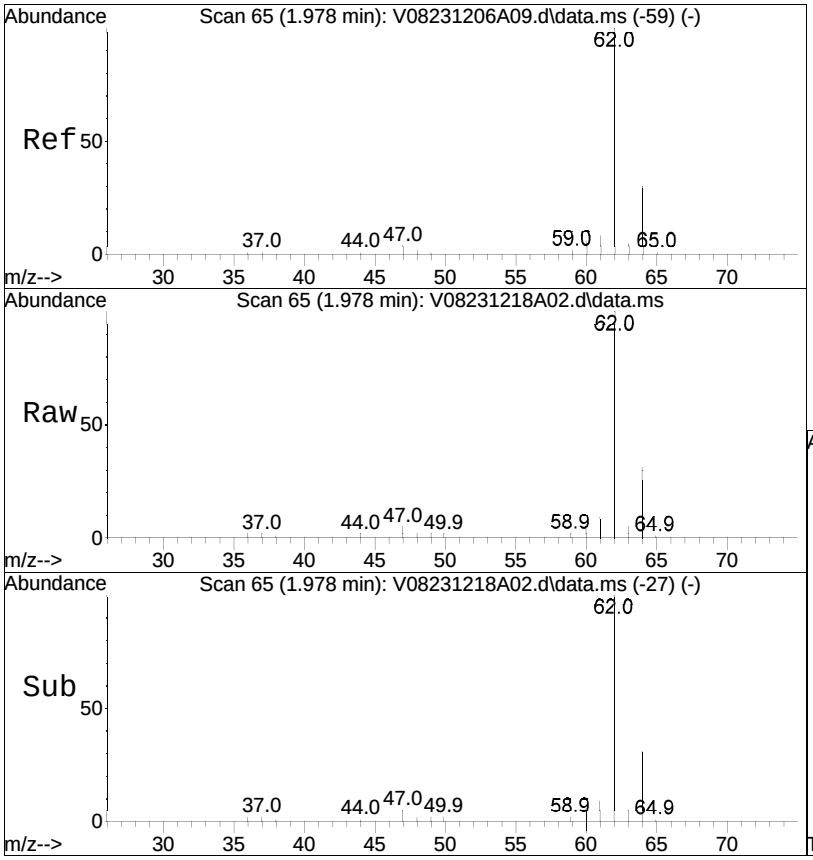


#3
Chloromethane
Concen: 9.52 ug/L
RT: 1.904 min Scan# 51
Delta R.T. -0.005 min
Lab File: V08231218A02.d
Acq: 18 Dec 2023 7:14 am

Tgt Ion: 50 Resp: 61091

Ion	Ratio	Lower	Upper
50	100		
52	31.8	12.9	52.9
47	7.3	0.0	28.3

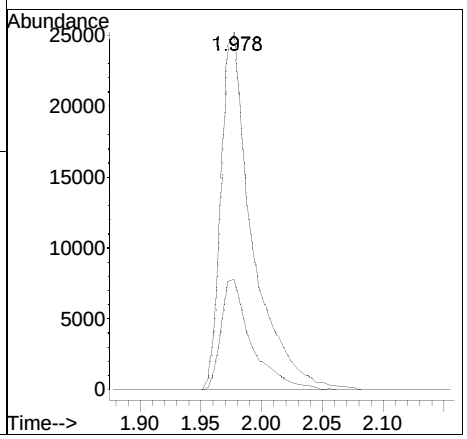


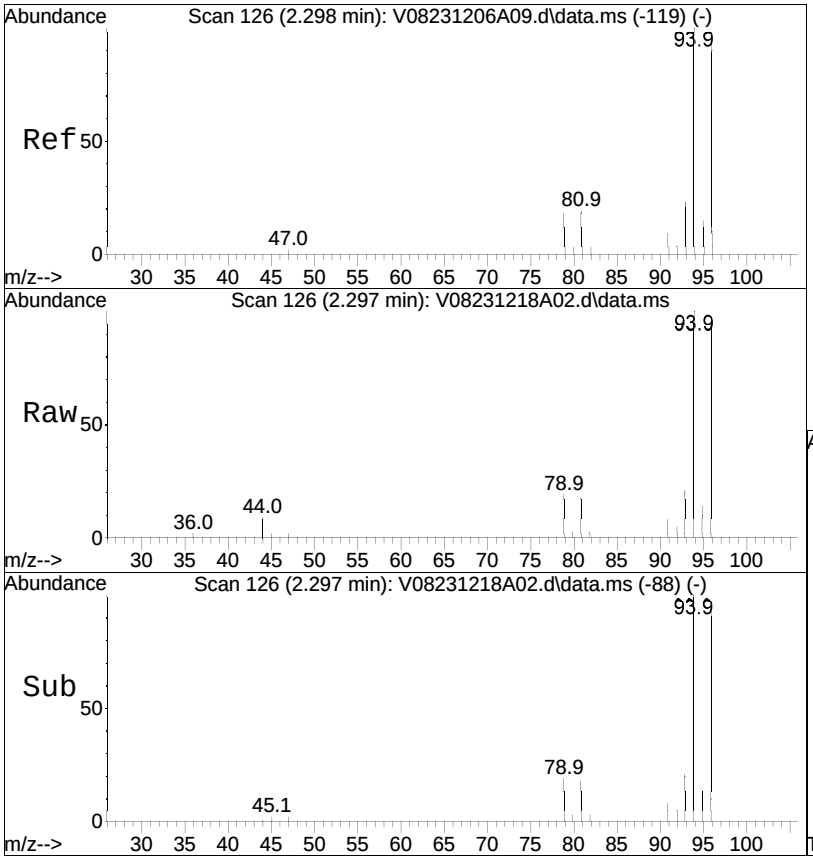


#4
Vinyl chloride
Concen: 10.70 ug/L
RT: 1.978 min Scan# 65
Delta R.T. -0.000 min
Lab File: V08231218A02.d
Acq: 18 Dec 2023 7:14 am

Tgt Ion: 62 Resp: 44841

Ion	Ratio	Lower	Upper
62	100		
64	30.4	9.1	49.1

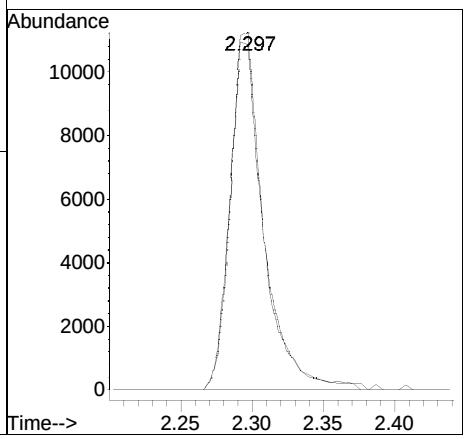


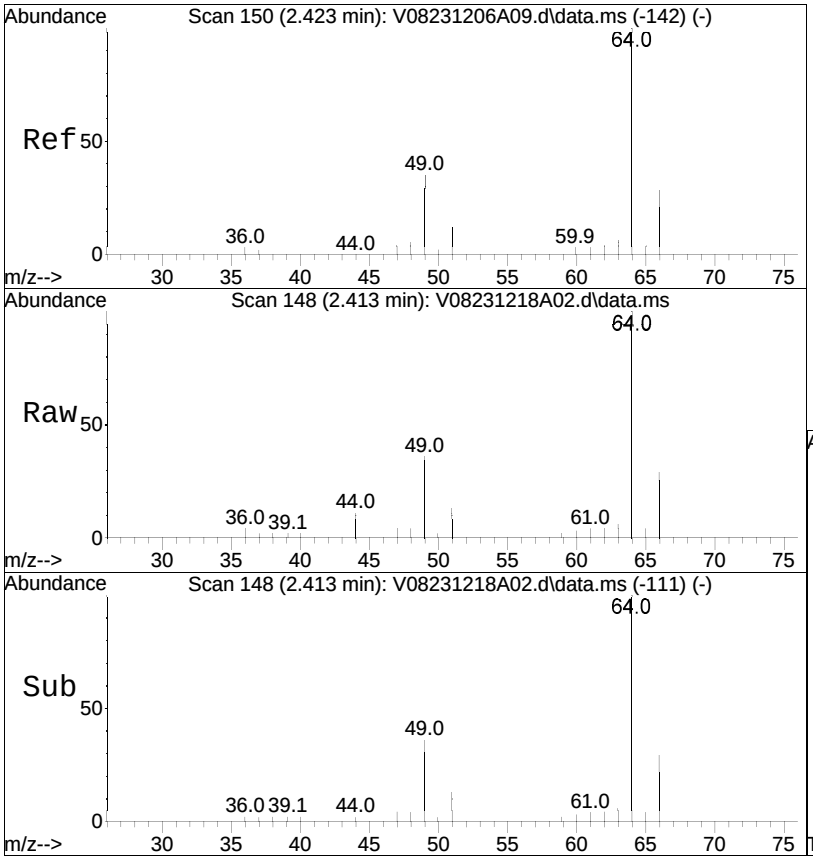


#5
Bromomethane
Concen: 11.95 ug/L
RT: 2.297 min Scan# 126
Delta R.T. 0.000 min
Lab File: V08231218A02.d
Acq: 18 Dec 2023 7:14 am

Tgt Ion: 94 Resp: 18282

Ion	Ratio	Lower	Upper
94	100		
96	97.3	75.6	115.6

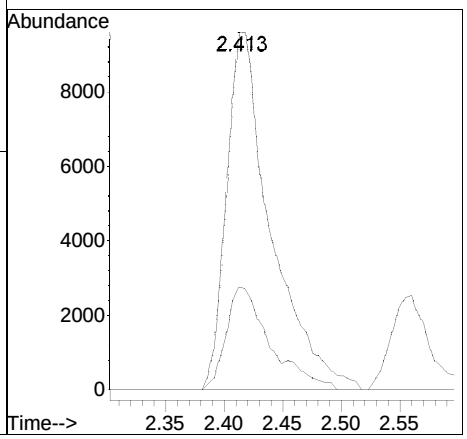


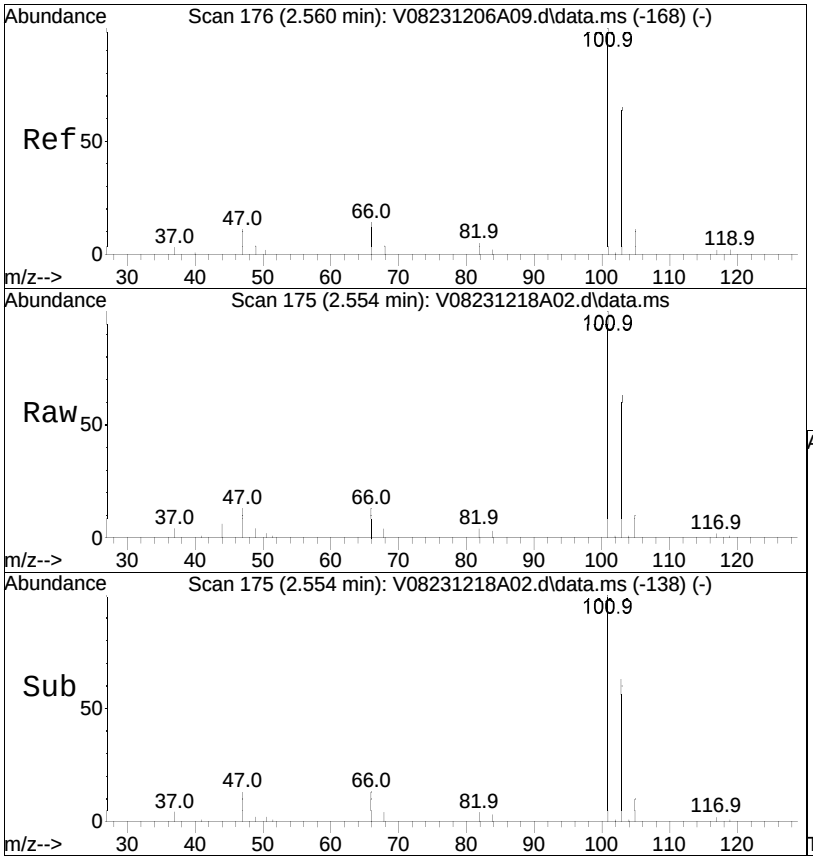


#6
Chloroethane
Concen: 12.95 ug/L
RT: 2.413 min Scan# 148
Delta R.T. -0.005 min
Lab File: V08231218A02.d
Acq: 18 Dec 2023 7:14 am

Tgt Ion: 64 Resp: 25180

Ion	Ratio	Lower	Upper
64	100		
66	28.7	9.8	49.8

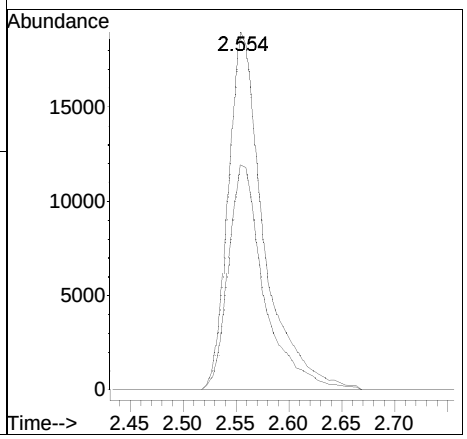


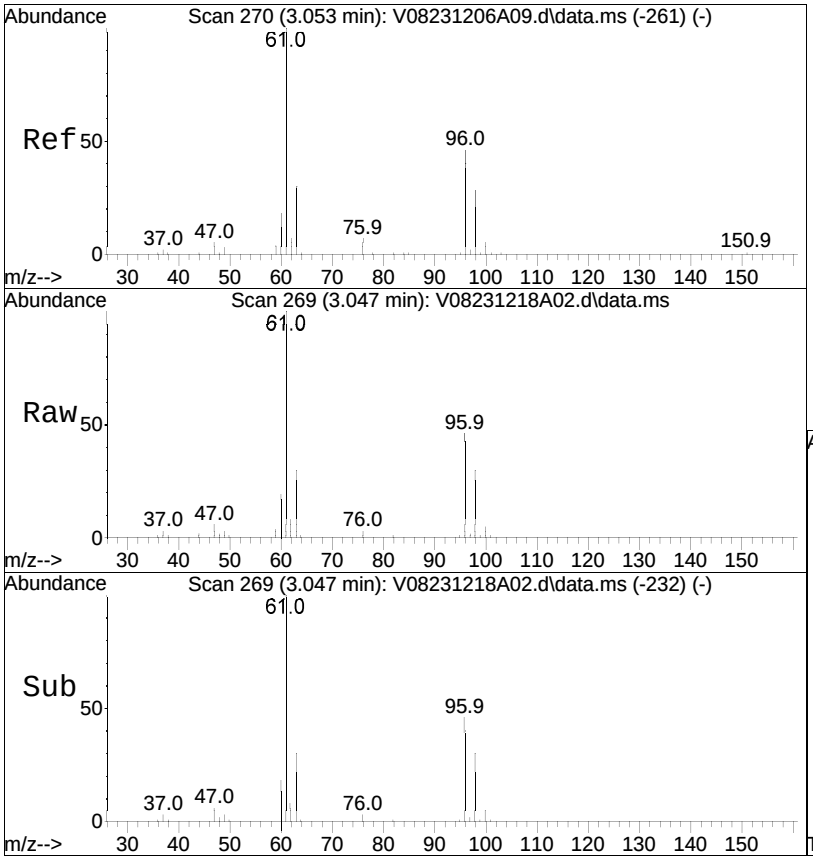


#7
Trichlorofluoromethane
Concen: 12.11 ug/L
RT: 2.554 min Scan# 175
Delta R.T. -0.006 min
Lab File: V08231218A02.d
Acq: 18 Dec 2023 7:14 am

Tgt Ion:101 Resp: 43836

Ion	Ratio	Lower	Upper
101	100		
103	63.9	53.8	80.6

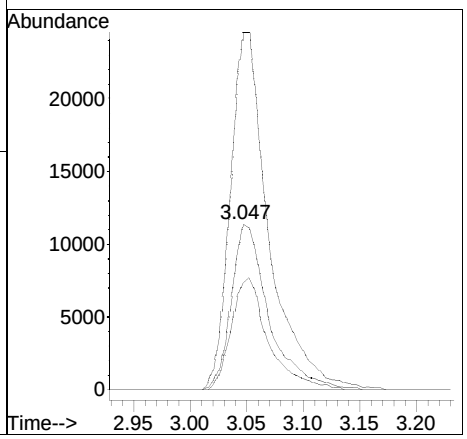


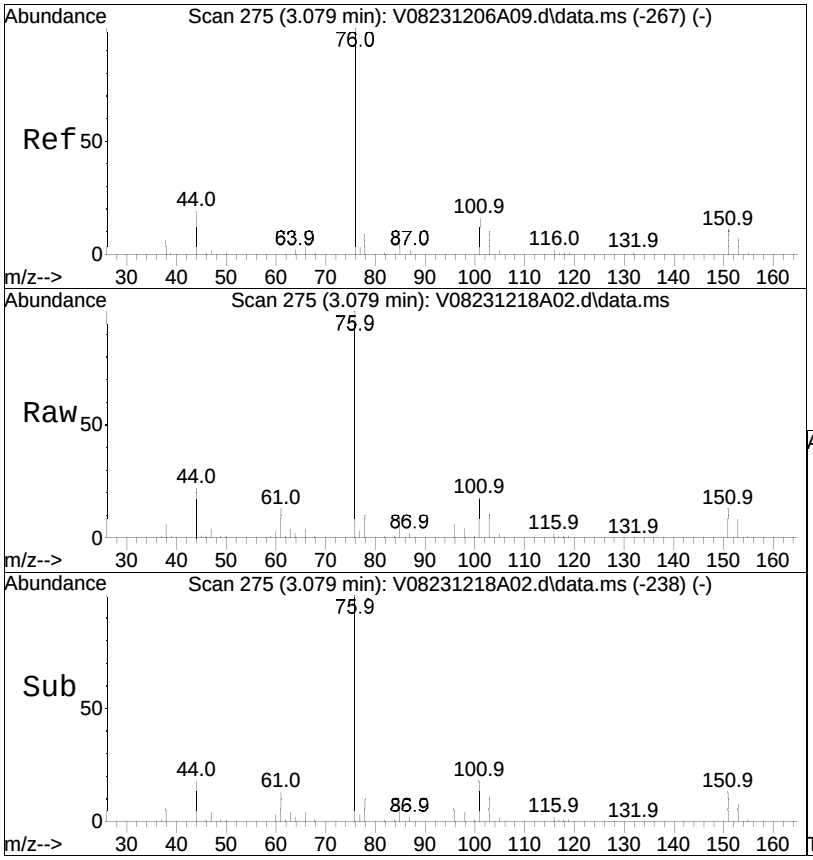


#10
1,1-Dichloroethene
Concen: 10.37 ug/L
RT: 3.047 min Scan# 269
Delta R.T. -0.005 min
Lab File: V08231218A02.d
Acq: 18 Dec 2023 7:14 am

Tgt Ion: 96 Resp: 26332

Ion	Ratio	Lower	Upper
96	100		
61	220.4	186.1	279.1
63	66.8	57.6	86.4

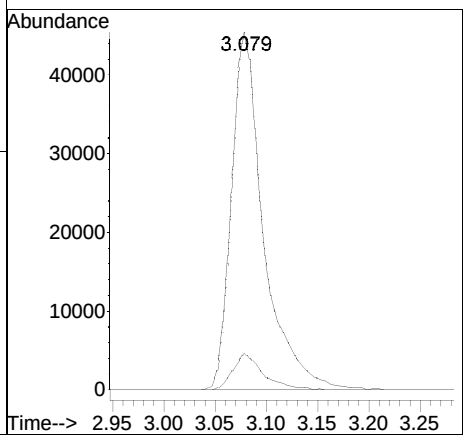


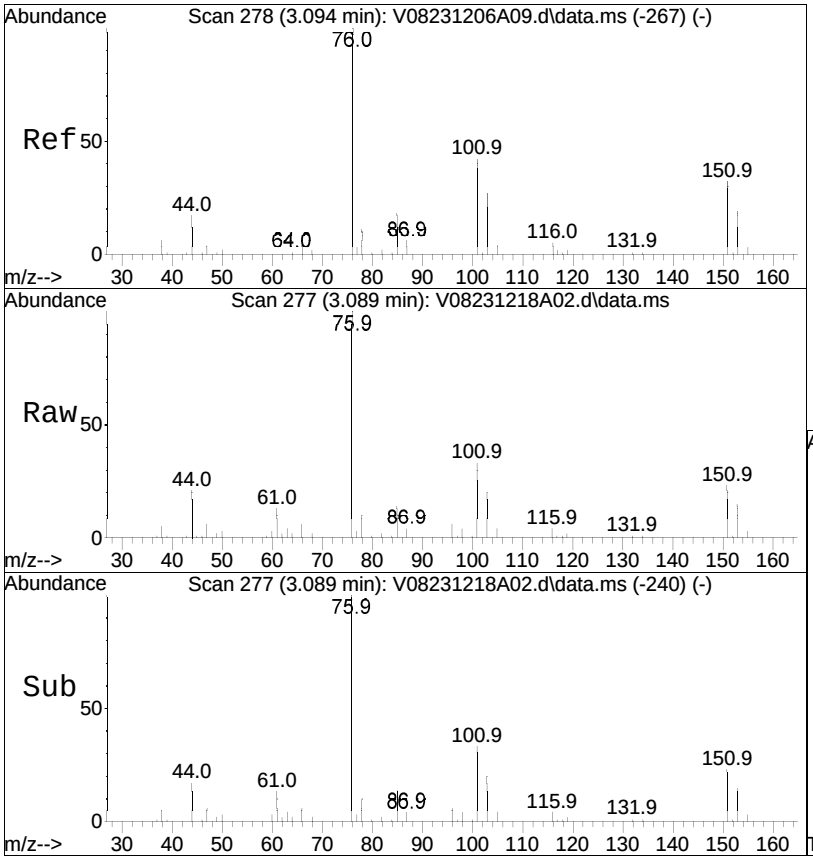


#11
Carbon disulfide
Concen: 10.40 ug/L
RT: 3.079 min Scan# 275
Delta R.T. -0.005 min
Lab File: V08231218A02.d
Acq: 18 Dec 2023 7:14 am

Tgt Ion: 76 Resp: 97979

Ion	Ratio	Lower	Upper
76	100		
78	9.9	5.7	11.7

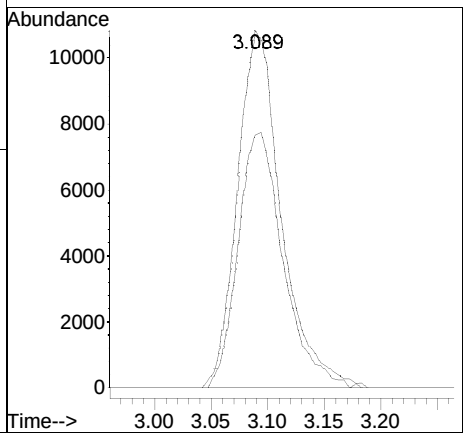


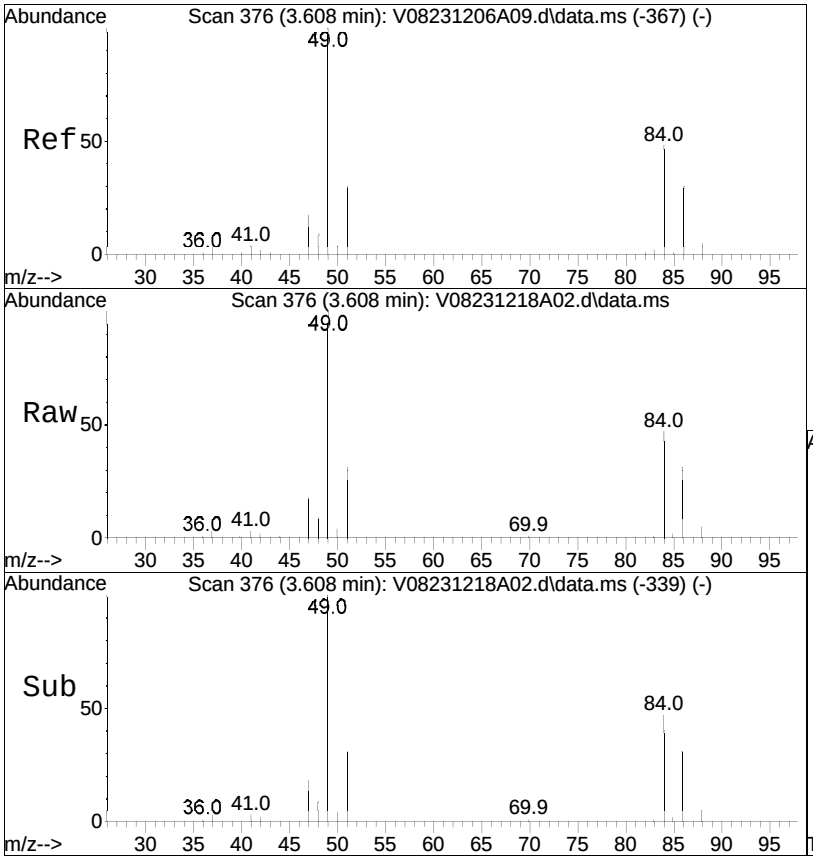


#12
Freon-113
Concen: 11.04 ug/L
RT: 3.089 min Scan# 277
Delta R.T. -0.005 min
Lab File: V08231218A02.d
Acq: 18 Dec 2023 7:14 am

Tgt Ion:101 Resp: 29030

Ion	Ratio	Lower	Upper
101	100		
151	73.4	59.8	89.8

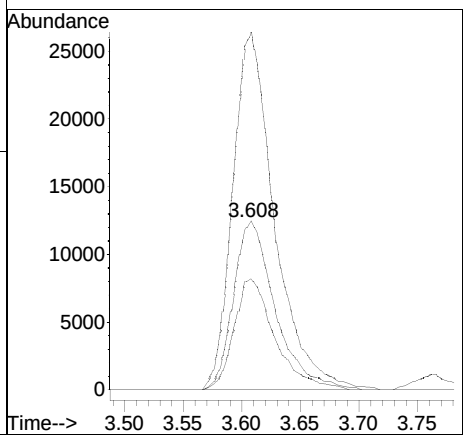


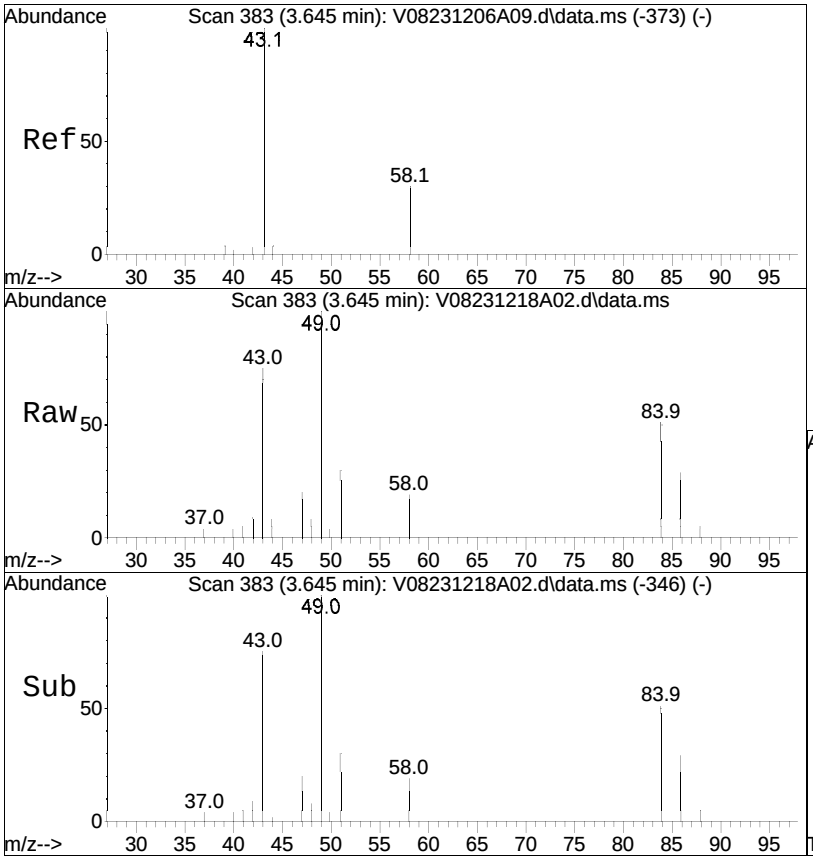


#15
Methylene chloride
Concen: 10.38 ug/L
RT: 3.608 min Scan# 376
Delta R.T. -0.005 min
Lab File: V08231218A02.d
Acq: 18 Dec 2023 7:14 am

Tgt Ion: 84 Resp: 30689

Ion	Ratio	Lower	Upper
84	100		
86	64.5	40.4	83.8
49	211.3	120.0	249.2

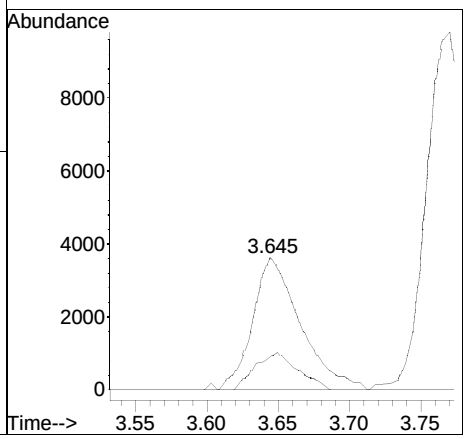


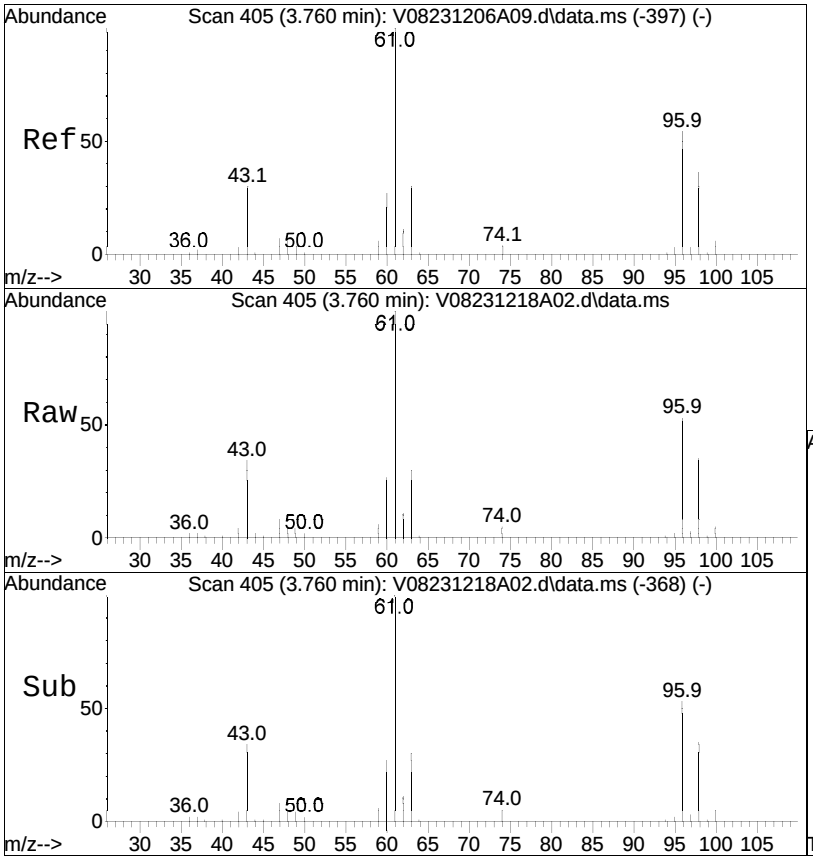


#17
Acetone
Concen: 11.47 ug/L
RT: 3.645 min Scan# 383
Delta R.T. -0.005 min
Lab File: V08231218A02.d
Acq: 18 Dec 2023 7:14 am

Tgt Ion: 43 Resp: 8492

Ion	Ratio	Lower	Upper
43	100		
58	25.1	24.2	36.4

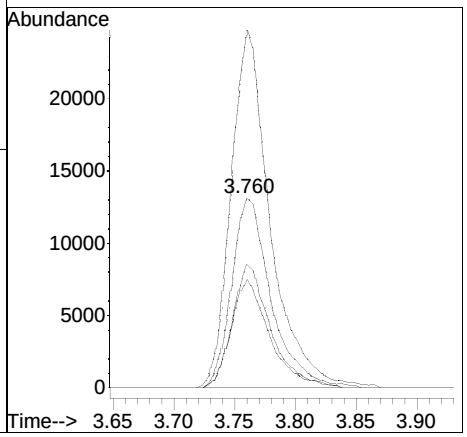


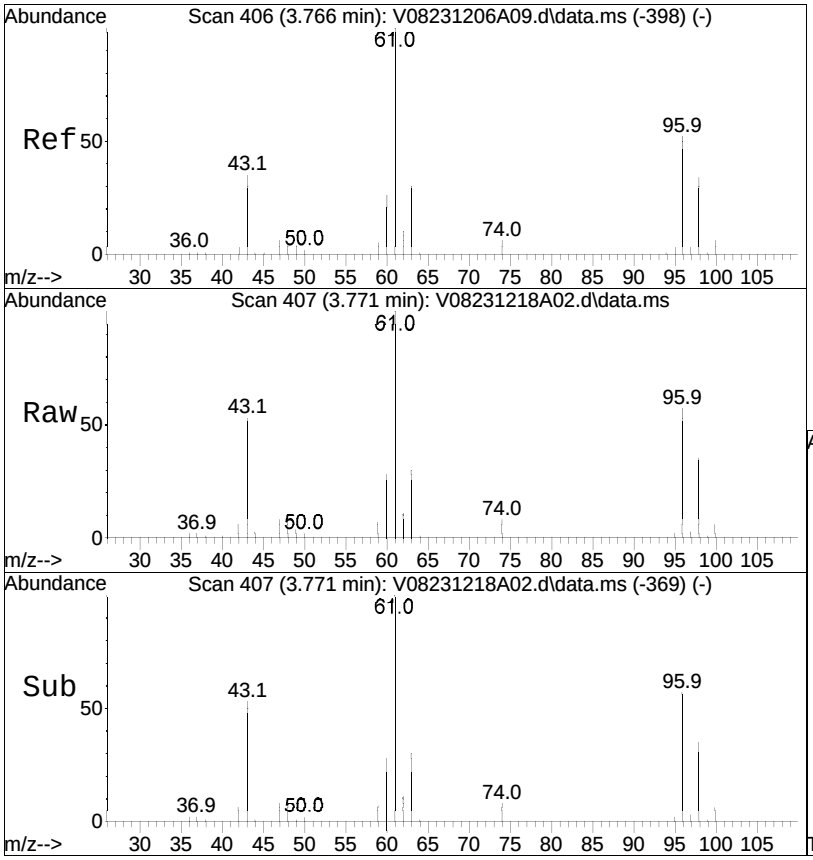


#18
trans-1,2-Dichloroethene
Concen: 10.36 ug/L
RT: 3.760 min Scan# 405
Delta R.T. -0.006 min
Lab File: V08231218A02.d
Acq: 18 Dec 2023 7:14 am

Tgt Ion: 96 Resp: 29497

Ion	Ratio	Lower	Upper
96	100		
61	187.1	124.0	257.6
98	63.0	41.2	85.6
63	55.9	38.4	79.7

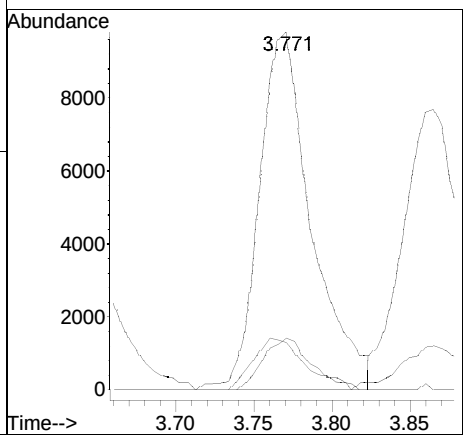


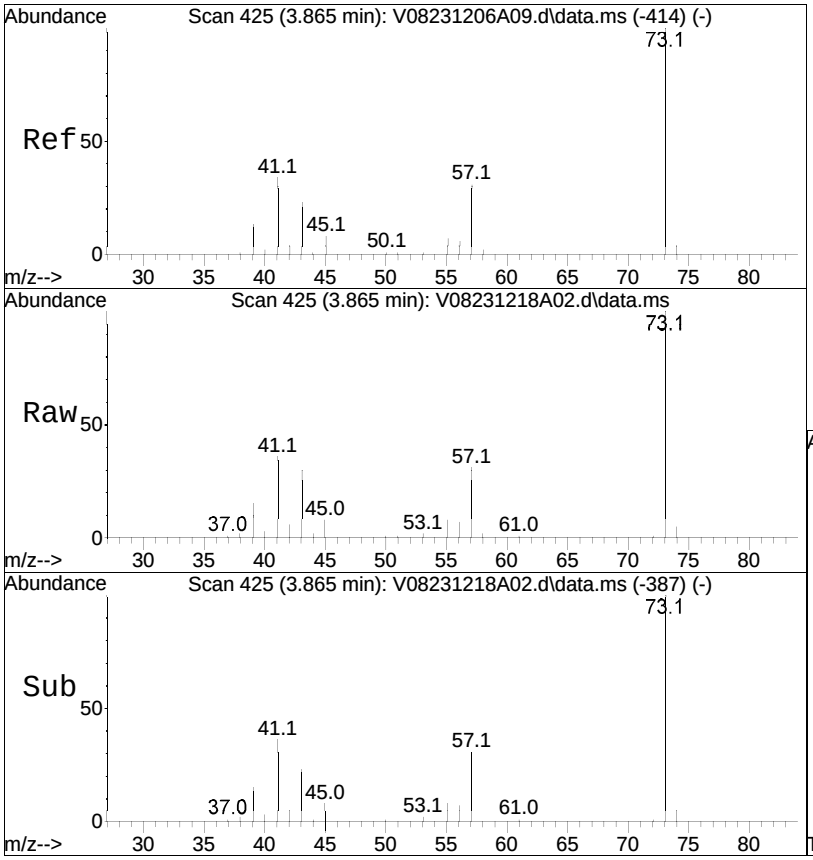


#19
Methyl acetate
Concen: 11.37 ug/L
RT: 3.771 min Scan# 407
Delta R.T. -0.000 min
Lab File: V08231218A02.d
Acq: 18 Dec 2023 7:14 am

Tgt Ion: 43 Resp: 22725

Ion	Ratio	Lower	Upper
43	100		
74	13.3	14.2	21.4#
59	14.4	5.0	7.6#

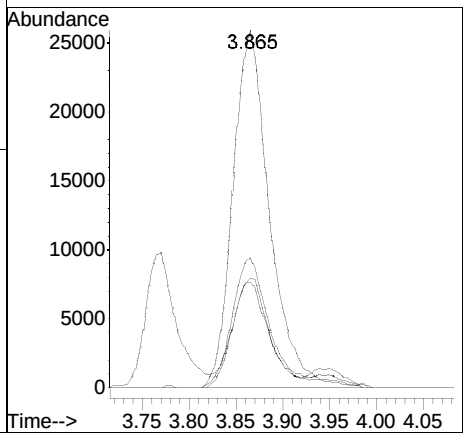


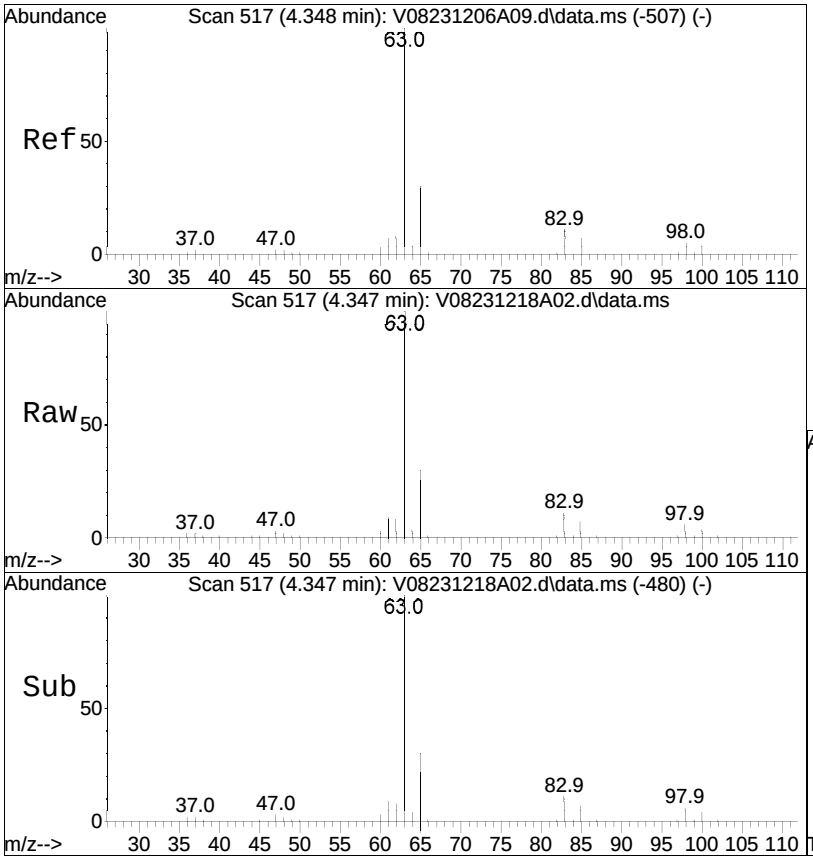


#20
Methyl tert-butyl ether
Concen: 10.10 ug/L
RT: 3.865 min Scan# 425
Delta R.T. 0.000 min
Lab File: V08231218A02.d
Acq: 18 Dec 2023 7:14 am

Tgt Ion: 73 Resp: 70126

Ion	Ratio	Lower	Upper
73	100		
57	31.5	17.5	36.3
43	30.5	15.3	31.9
41	36.4	15.3	31.7#

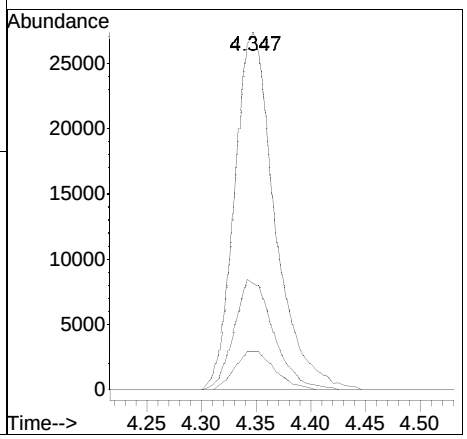


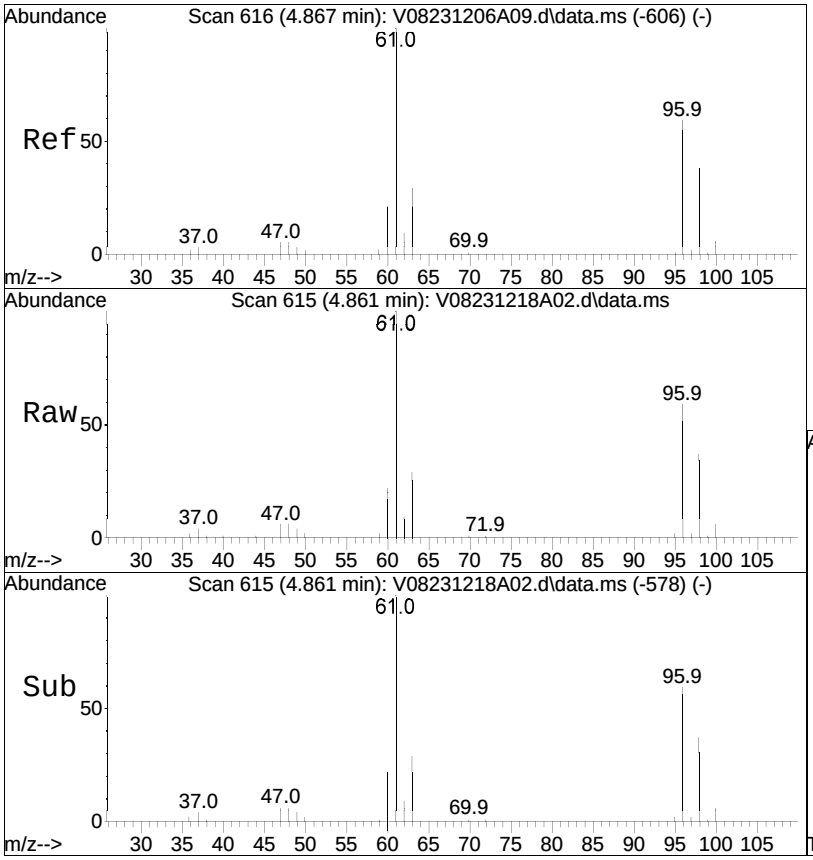


#23
1,1-Dichloroethane
Concen: 10.58 ug/L
RT: 4.347 min Scan# 517
Delta R.T. -0.006 min
Lab File: V08231218A02.d
Acq: 18 Dec 2023 7:14 am

Tgt Ion: 63 Resp: 69624

Ion	Ratio	Lower	Upper
63	100		
65	30.5	11.0	51.0
83	10.7	0.0	31.8

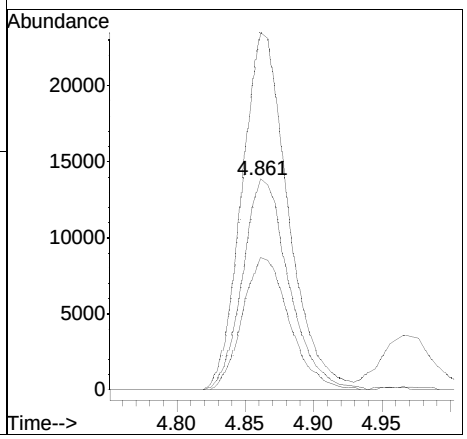


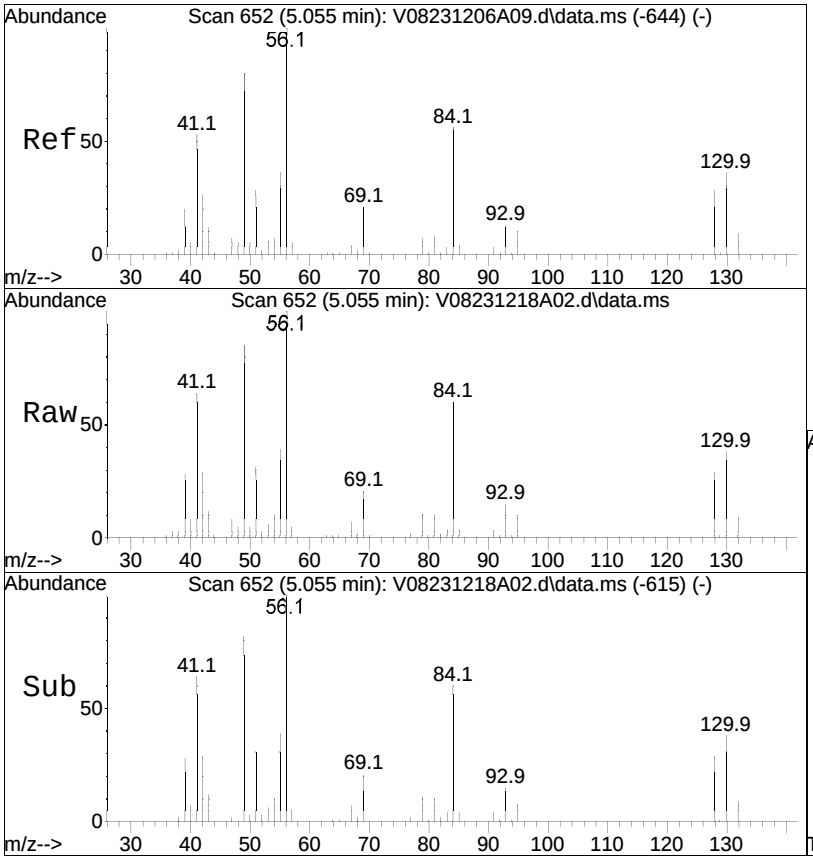


#28
cis-1,2-Dichloroethene
Concen: 10.30 ug/L
RT: 4.861 min Scan# 615
Delta R.T. -0.006 min
Lab File: V08231218A02.d
Acq: 18 Dec 2023 7:14 am

Tgt Ion: 96 Resp: 32493

Ion	Ratio	Lower	Upper
96	100		
61	169.1	149.4	224.2
98	64.0	53.4	80.2

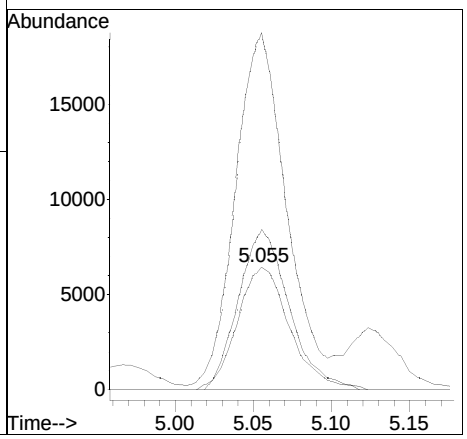


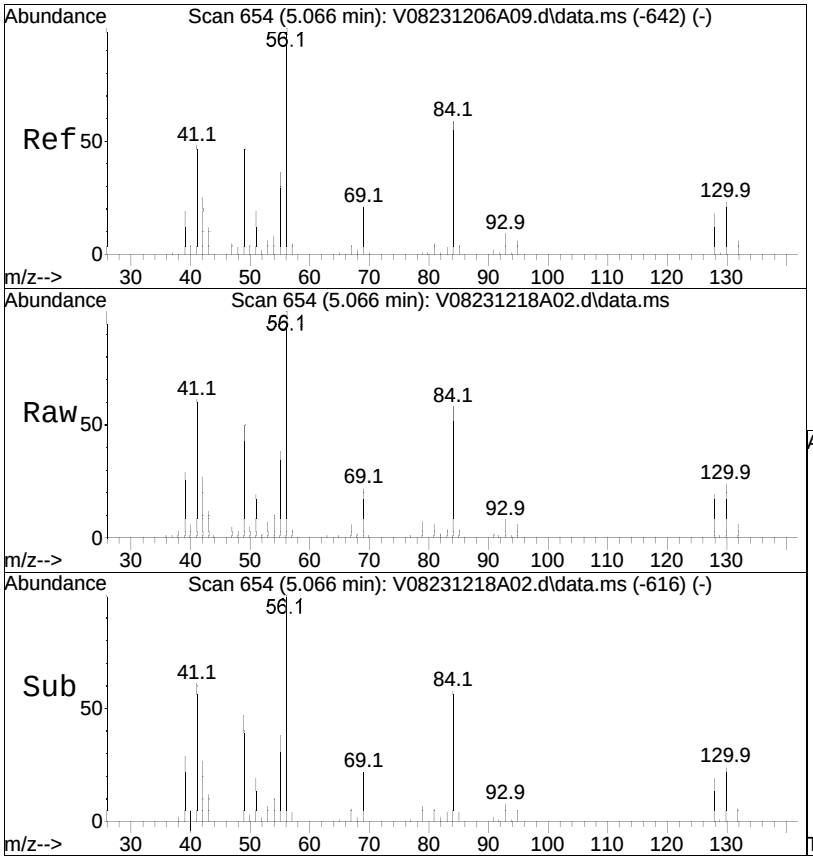


#30
Bromochloromethane
Concen: 11.15 ug/L
RT: 5.055 min Scan# 652
Delta R.T. -0.006 min
Lab File: V08231218A02.d
Acq: 18 Dec 2023 7:14 am

Tgt Ion:128 Resp: 14945

Ion	Ratio	Lower	Upper
128	100		
49	284.1	223.0	334.4
130	128.0	111.4	167.0

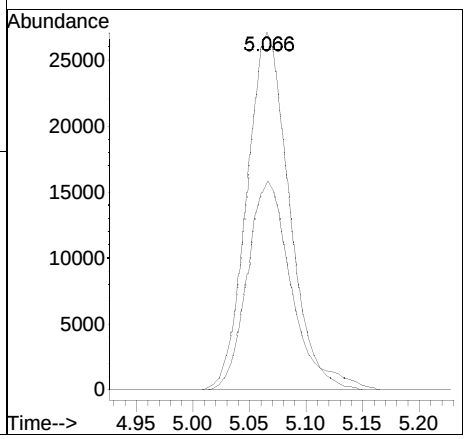


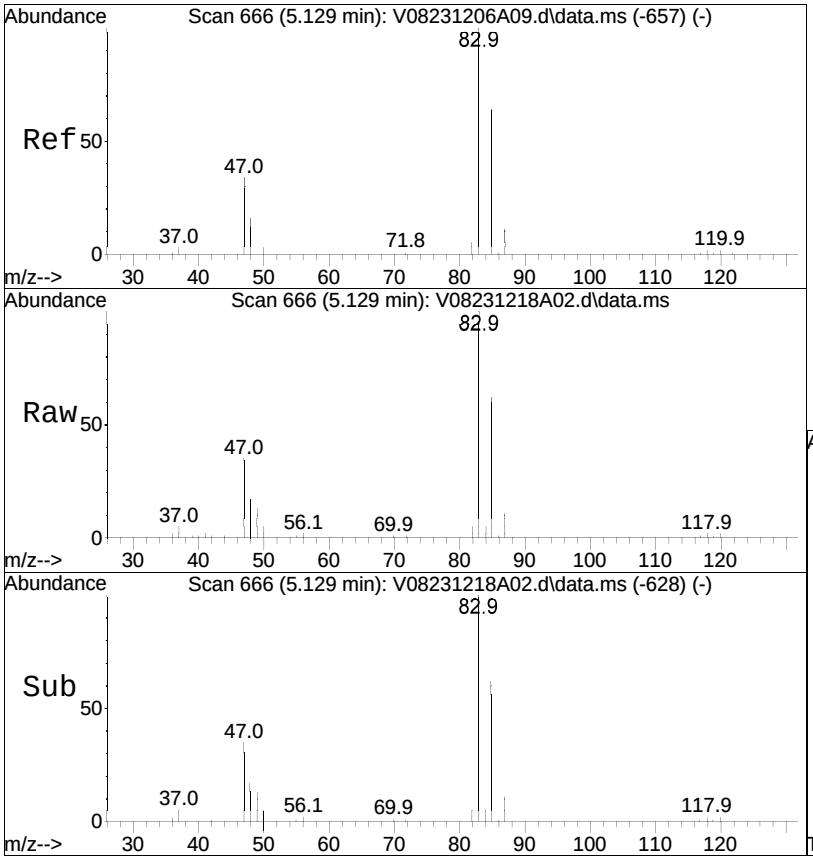


#31
Cyclohexane
Concen: 9.94 ug/L
RT: 5.066 min Scan# 654
Delta R.T. -0.000 min
Lab File: V08231218A02.d
Acq: 18 Dec 2023 7:14 am

Tgt Ion: 56 Resp: 70176

Ion	Ratio	Lower	Upper
56	100		
84	61.8	38.4	79.8

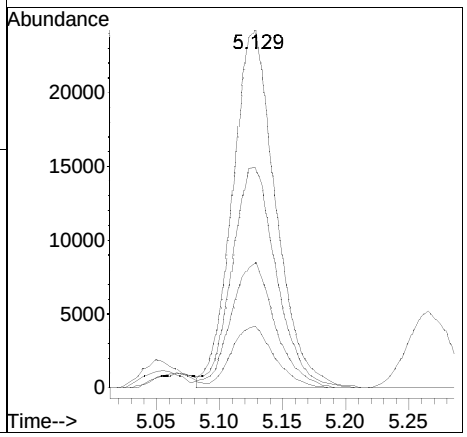


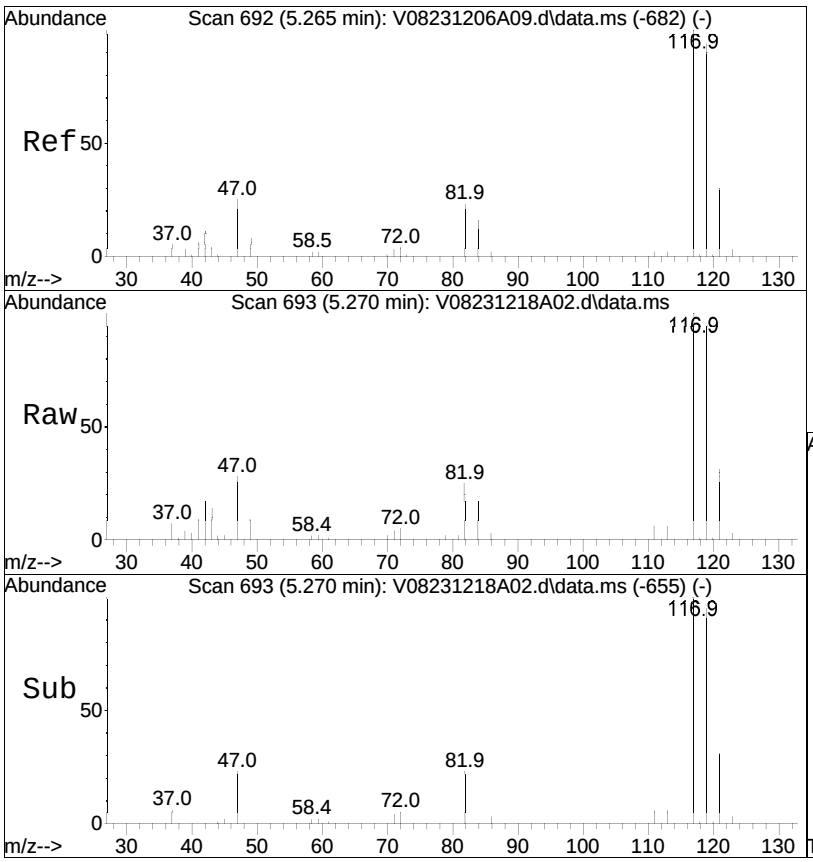


#32
Chloroform
Concen: 10.81 ug/L
RT: 5.129 min Scan# 666
Delta R.T. -0.000 min
Lab File: V08231218A02.d
Acq: 18 Dec 2023 7:14 am

Tgt Ion: 83 Resp: 57562

Ion	Ratio	Lower	Upper
83	100		
85	63.4	41.5	86.1
47	36.1	19.0	39.4
48	17.2	9.9	20.5

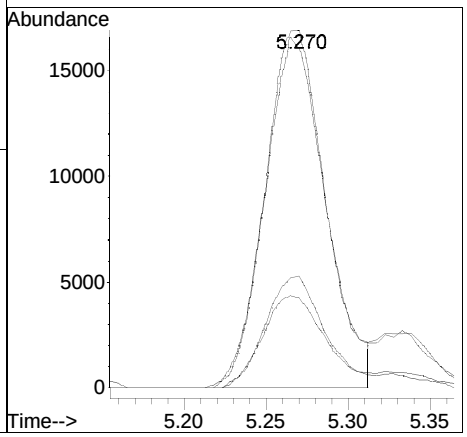


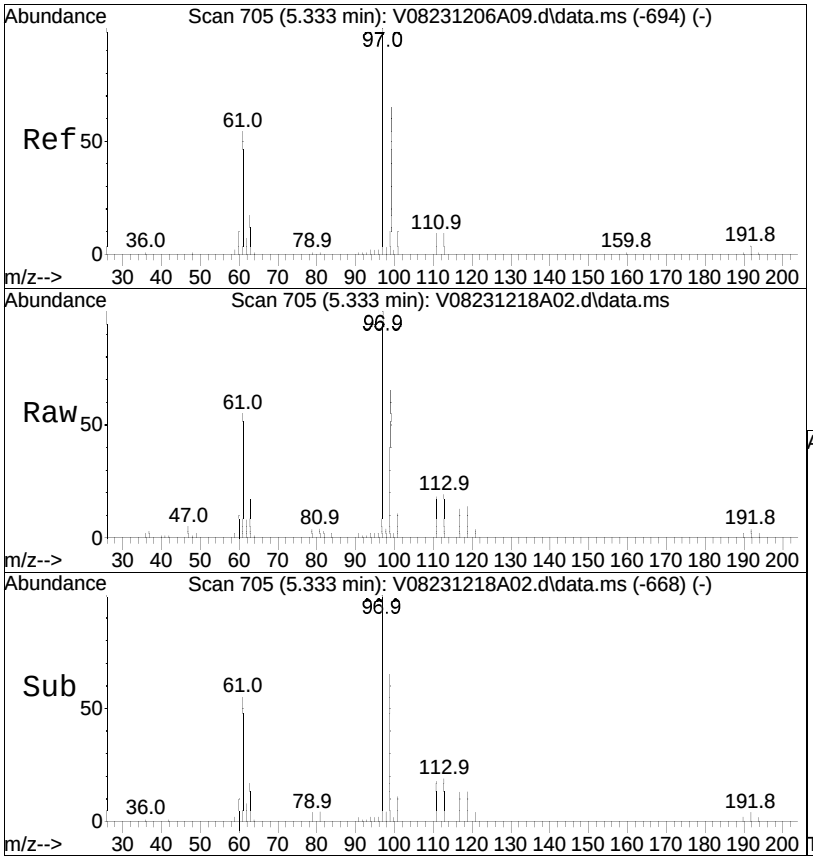


#34
Carbon tetrachloride
Concen: 11.14 ug/L
RT: 5.270 min Scan# 693
Delta R.T. 0.000 min
Lab File: V08231218A02.d
Acq: 18 Dec 2023 7:14 am

Tgt Ion:117 Resp: 43519

Ion	Ratio	Lower	Upper
117	100		
119	98.1	62.4	129.6
121	31.1	19.5	40.5
82	27.3	17.0	35.4

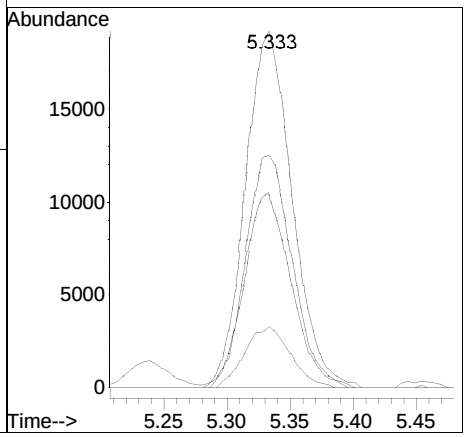


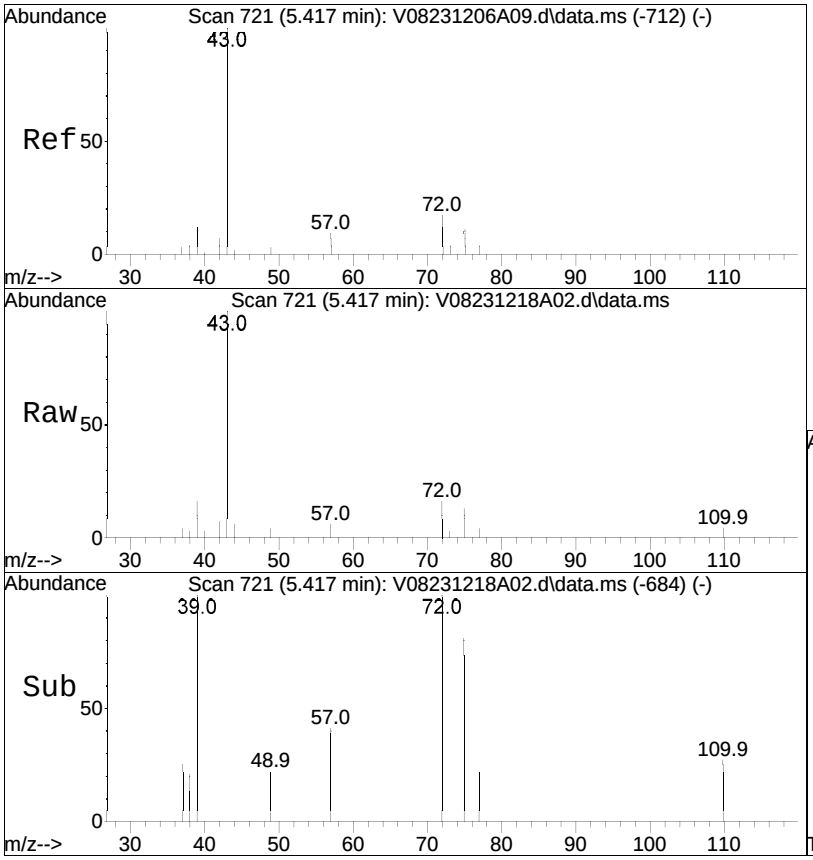


#37
1,1,1-Trichloroethane
Concen: 10.82 ug/L
RT: 5.333 min Scan# 705
Delta R.T. -0.005 min
Lab File: V08231218A02.d
Acq: 18 Dec 2023 7:14 am

Tgt Ion: 97 Resp: 49502

Ion	Ratio	Lower	Upper
97	100		
99	65.3	40.7	84.5
61	54.6	35.4	73.4
63	16.8	5.0	10.4#

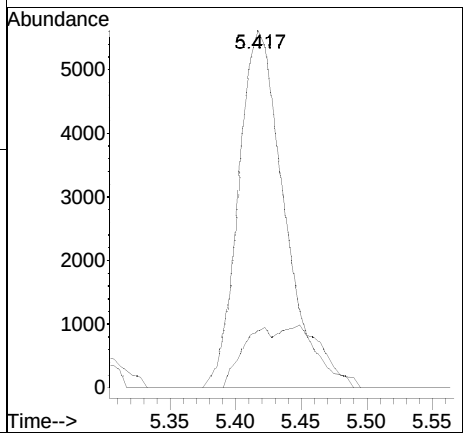


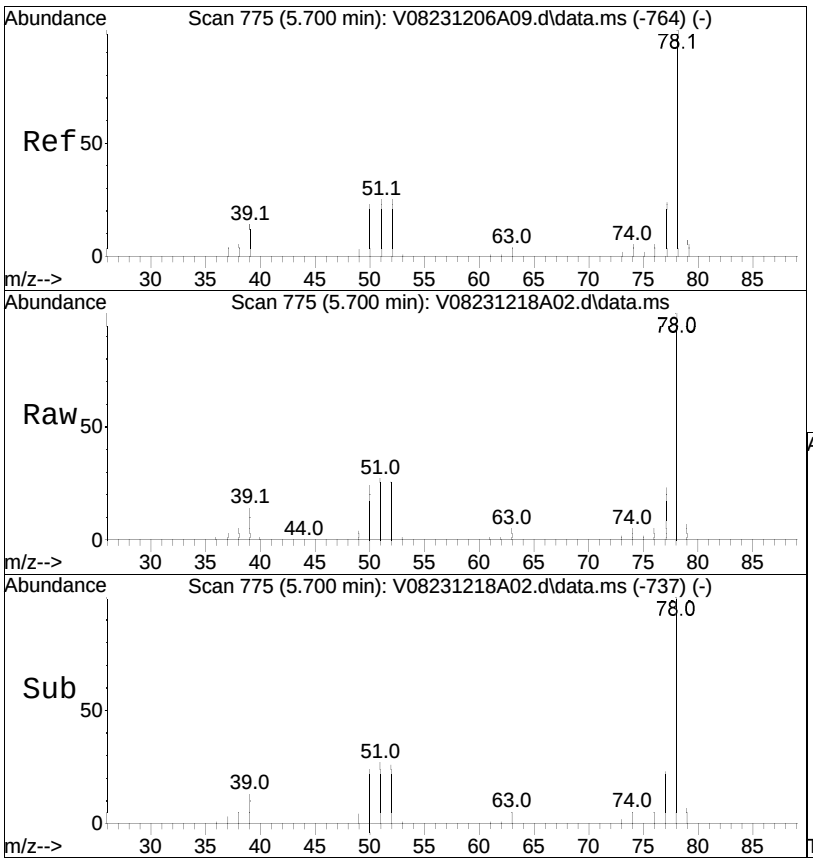


#39
2-Butanone
Concen: 11.54 ug/L
RT: 5.417 min Scan# 721
Delta R.T. -0.005 min
Lab File: V08231218A02.d
Acq: 18 Dec 2023 7:14 am

Tgt Ion: 43 Resp: 13564

Ion	Ratio	Lower	Upper
43	100		
72	11.4	10.9	16.3

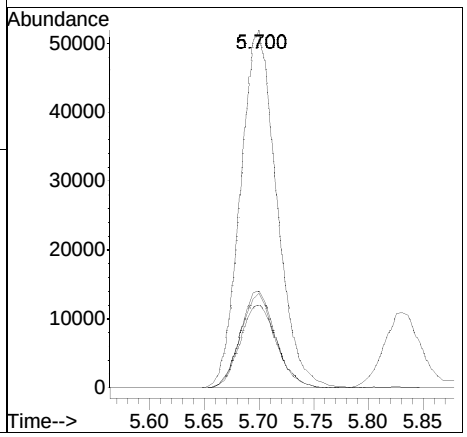


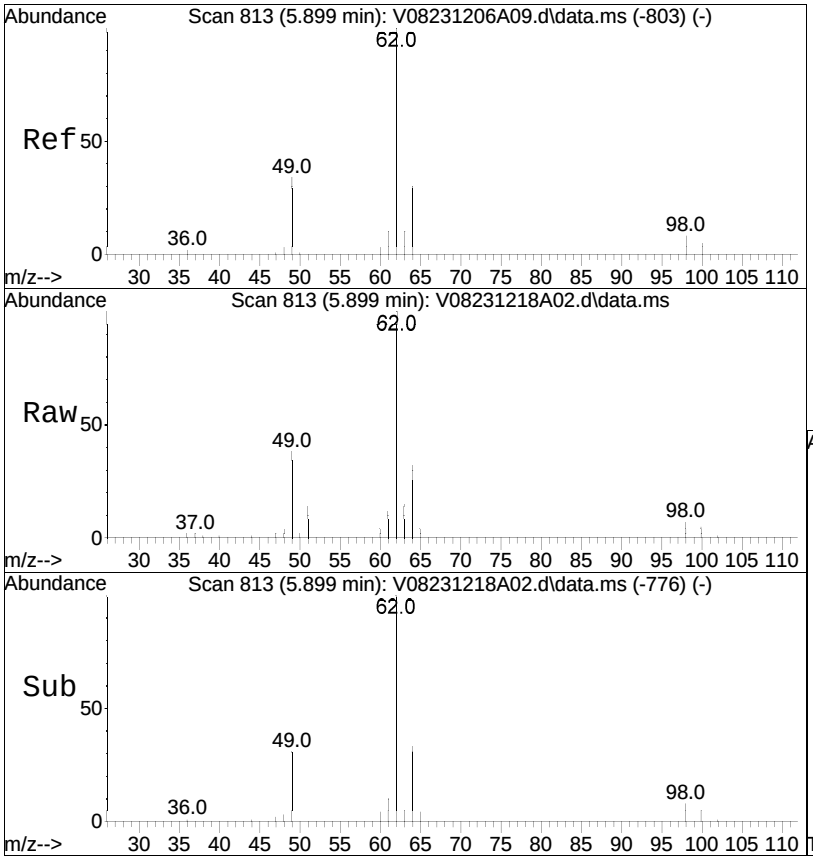


#41
Benzene
Concen: 10.52 ug/L
RT: 5.700 min Scan# 775
Delta R.T. 0.000 min
Lab File: V08231218A02.d
Acq: 18 Dec 2023 7:14 am

Tgt Ion: 78 Resp: 118817

Ion	Ratio	Lower	Upper
78	100		
77	23.6	15.7	32.7
51	26.7	16.0	33.2
52	25.7	15.3	31.9

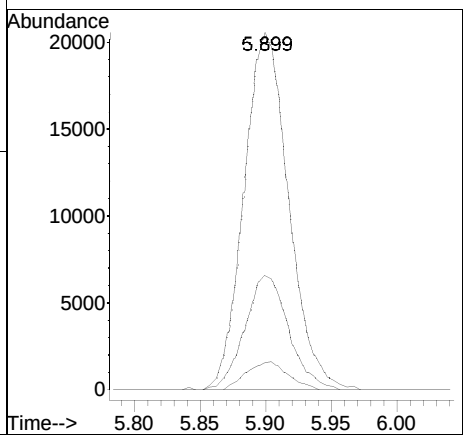


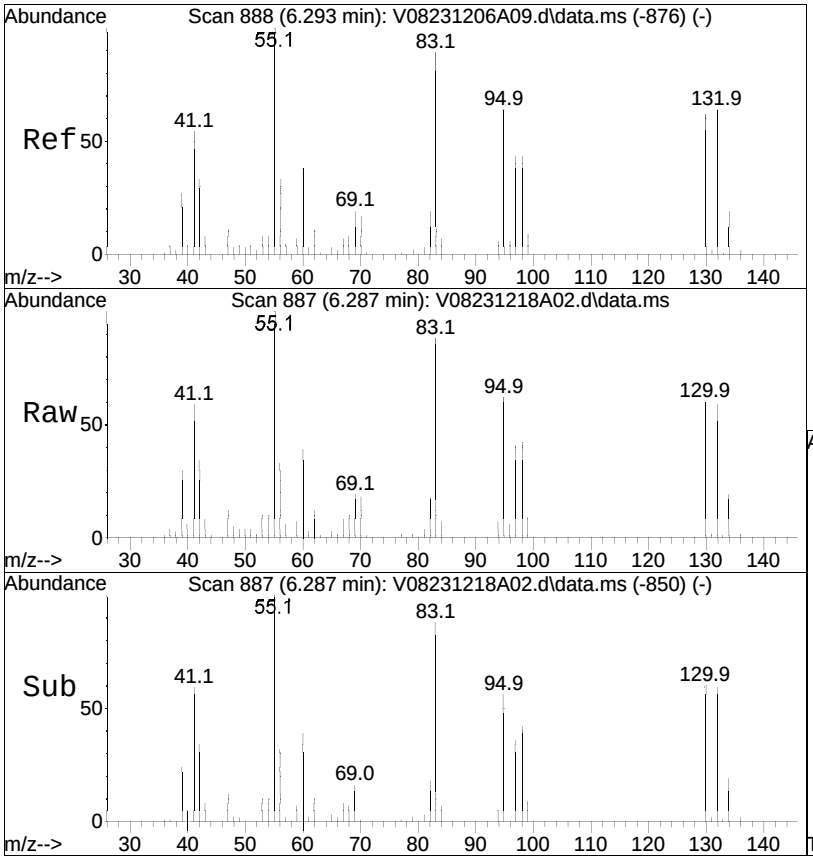


#44
1,2-Dichloroethane
Concen: 11.37 ug/L
RT: 5.899 min Scan# 813
Delta R.T. -0.006 min
Lab File: V08231218A02.d
Acq: 18 Dec 2023 7:14 am

Tgt Ion: 62 Resp: 48128

Ion	Ratio	Lower	Upper
62	100		
64	31.5	11.2	51.2
98	7.4	0.0	26.1

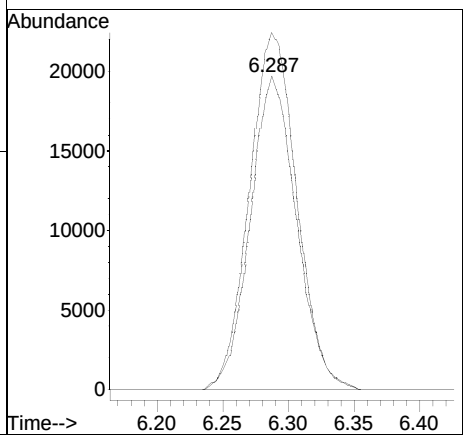


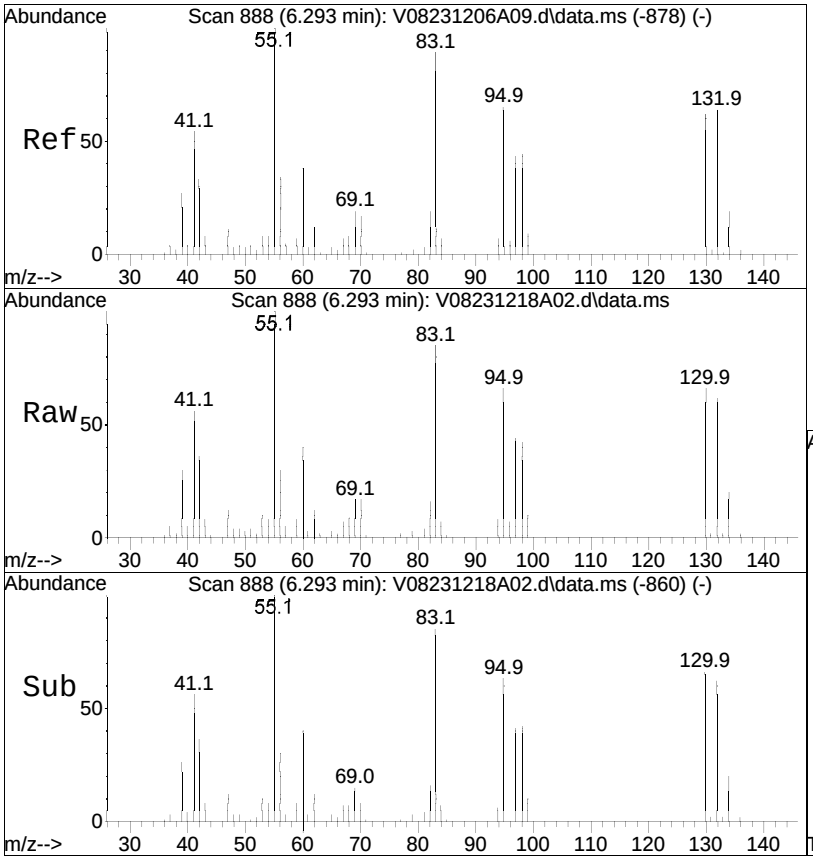


#47
Methyl cyclohexane
Concen: 10.13 ug/L
RT: 6.287 min Scan# 887
Delta R.T. -0.006 min
Lab File: V08231218A02.d
Acq: 18 Dec 2023 7:14 am

Tgt Ion: 83 Resp: 48132

Ion	Ratio	Lower	Upper
83	100		
55	117.0	88.3	132.5

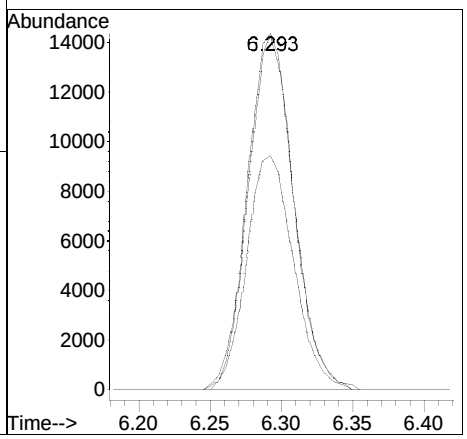


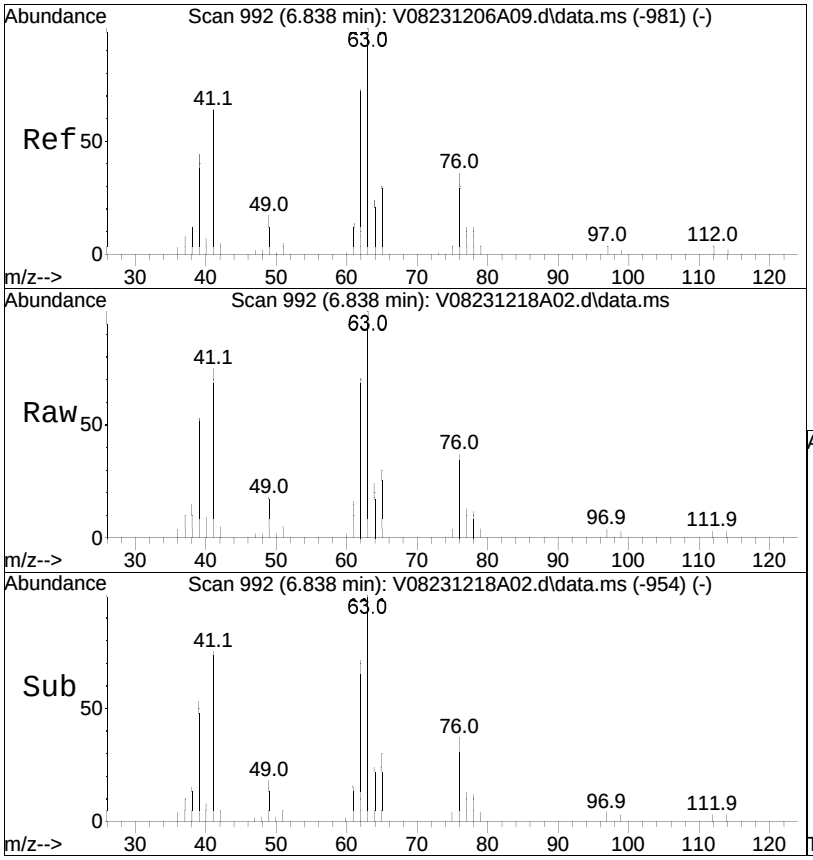


#48
Trichloroethene
Concen: 11.21 ug/L
RT: 6.293 min Scan# 888
Delta R.T. -0.005 min
Lab File: V08231218A02.d
Acq: 18 Dec 2023 7:14 am

Tgt Ion: 95 Resp: 32432

Ion	Ratio	Lower	Upper
95	100		
97	66.5	55.5	83.3
130	97.1	76.6	115.0

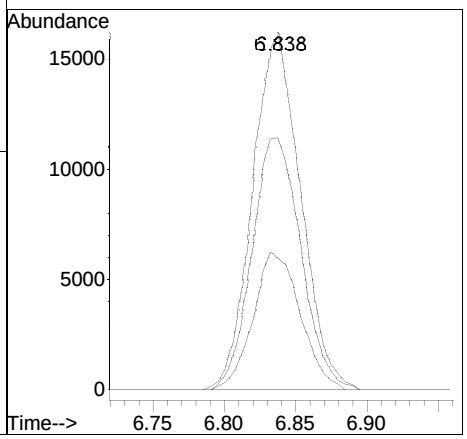


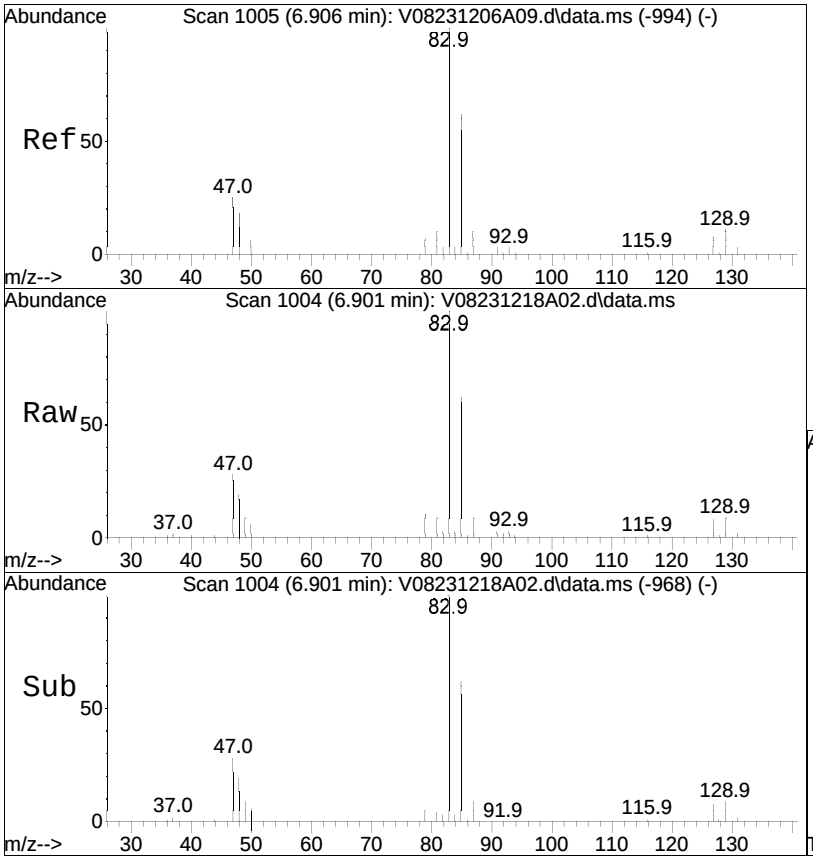


#51
1,2-Dichloropropane
Concen: 10.13 ug/L
RT: 6.838 min Scan# 992
Delta R.T. -0.000 min
Lab File: V08231218A02.d
Acq: 18 Dec 2023 7:14 am

Tgt Ion: 63 Resp: 37644

Ion	Ratio	Lower	Upper
63	100		
62	72.0	58.6	87.8
76	37.9	38.0	57.0#

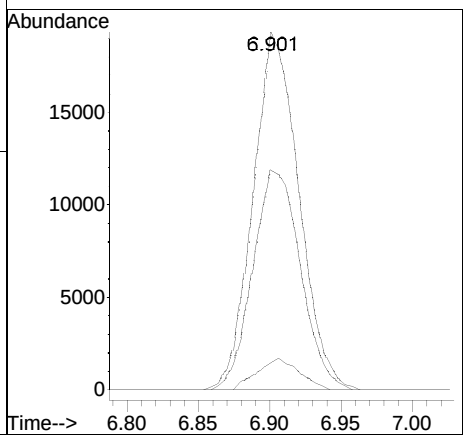


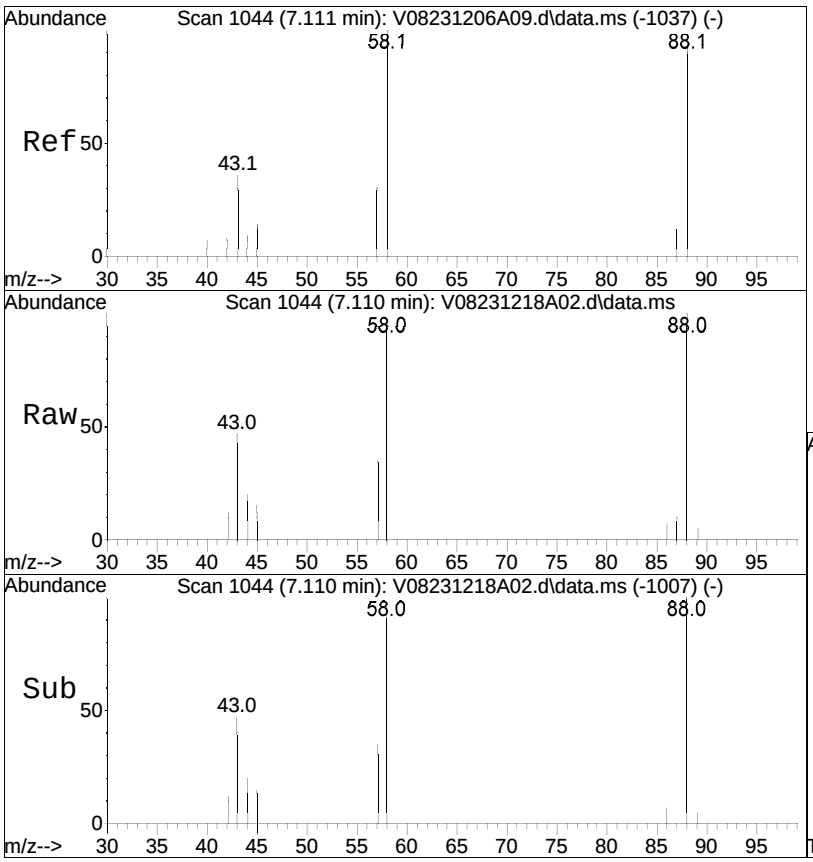


#54
Bromodichloromethane
Concen: 10.60 ug/L
RT: 6.901 min Scan# 1004
Delta R.T. -0.010 min
Lab File: V08231218A02.d
Acq: 18 Dec 2023 7:14 am

Tgt Ion: 83 Resp: 42812

Ion	Ratio	Lower	Upper
83	100		
85	64.1	52.3	78.5
127	8.1	6.2	9.4

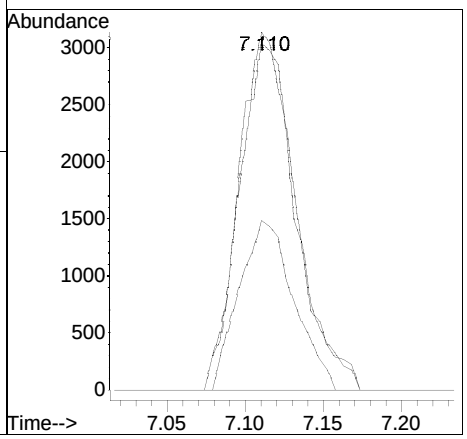


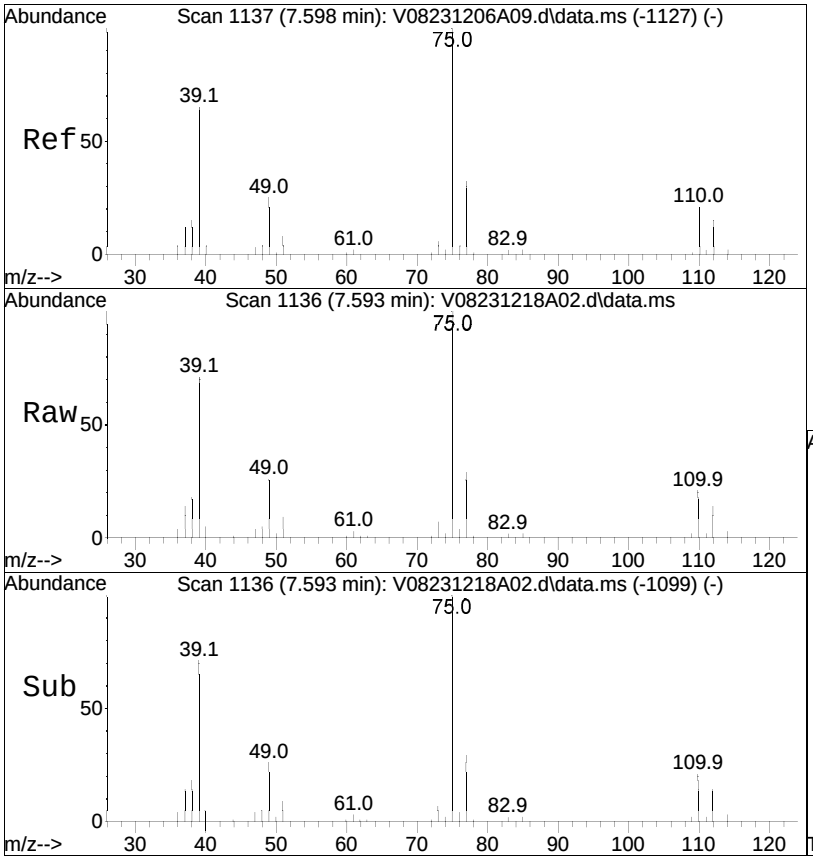


#57
1,4-Dioxane
Concen: 826.67 ug/L
RT: 7.110 min Scan# 1044
Delta R.T. -0.006 min
Lab File: V08231218A02.d
Acq: 18 Dec 2023 7:14 am

Tgt Ion: 88 Resp: 7742

Ion	Ratio	Lower	Upper
88	100		
58	100.2	76.7	115.1
43	46.4	36.2	54.2

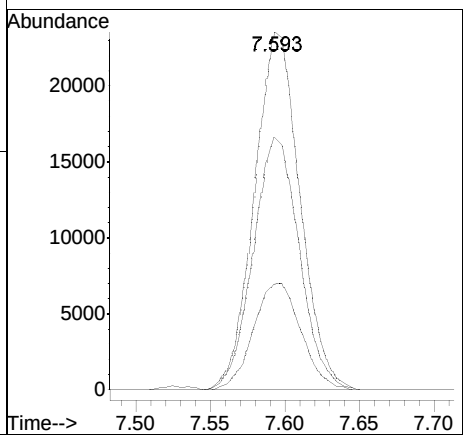


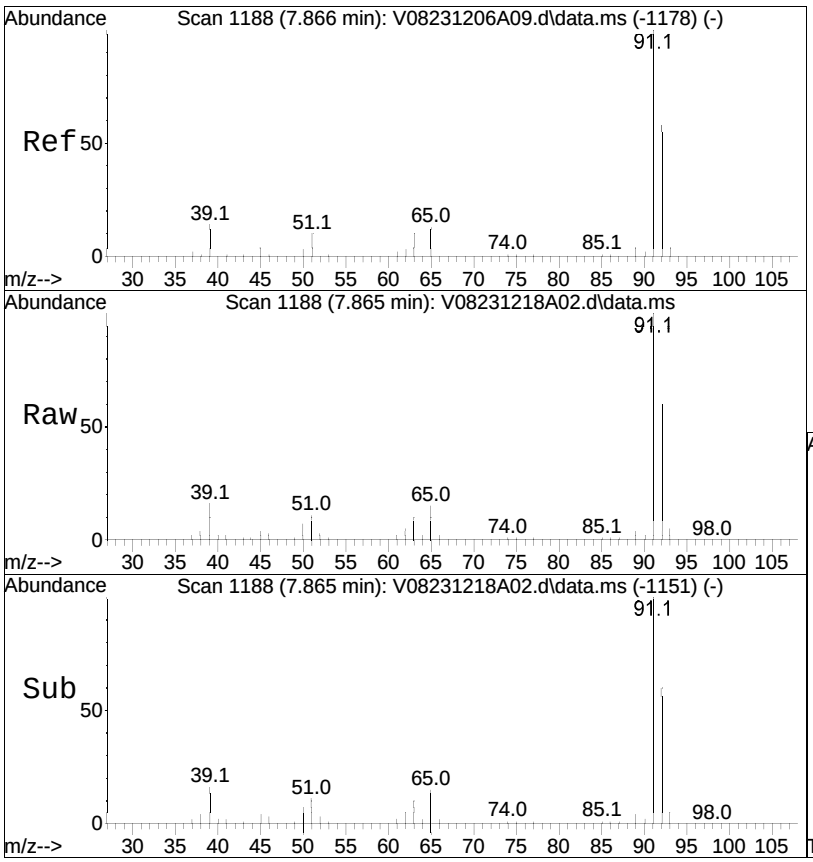


#58
cis-1,3-Dichloropropene
Concen: 10.86 ug/L
RT: 7.593 min Scan# 1136
Delta R.T. -0.005 min
Lab File: V08231218A02.d
Acq: 18 Dec 2023 7:14 am

Tgt Ion: 75 Resp: 49603

Ion	Ratio	Lower	Upper
75	100		
77	31.3	25.0	37.4
39	71.6	50.1	75.1

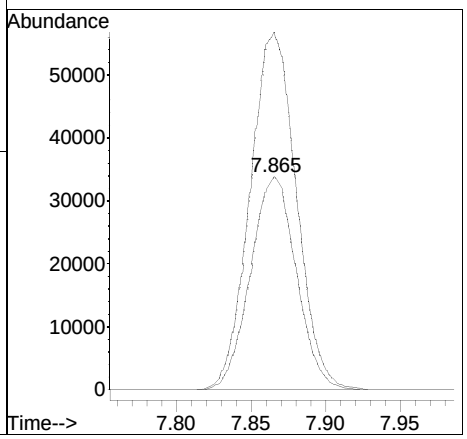


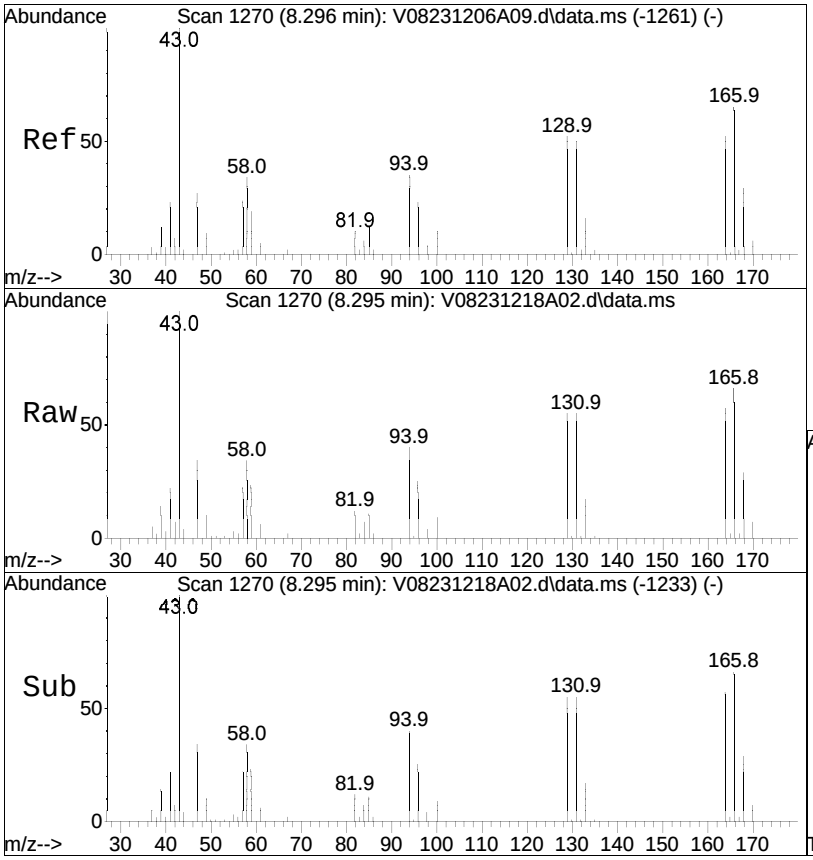


#61
Toluene
Concen: 10.48 ug/L
RT: 7.865 min Scan# 1188
Delta R.T. -0.006 min
Lab File: V08231218A02.d
Acq: 18 Dec 2023 7:14 am

Tgt Ion: 92 Resp: 71774

Ion	Ratio	Lower	Upper
92	100		
91	169.1	139.8	209.6

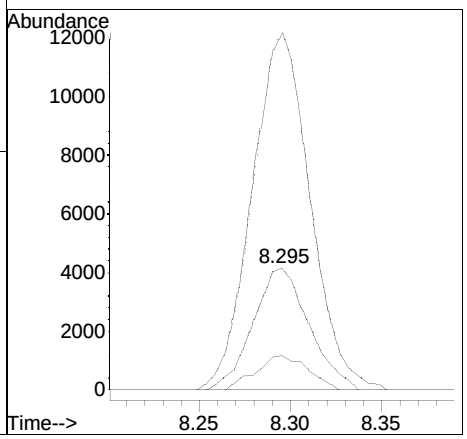


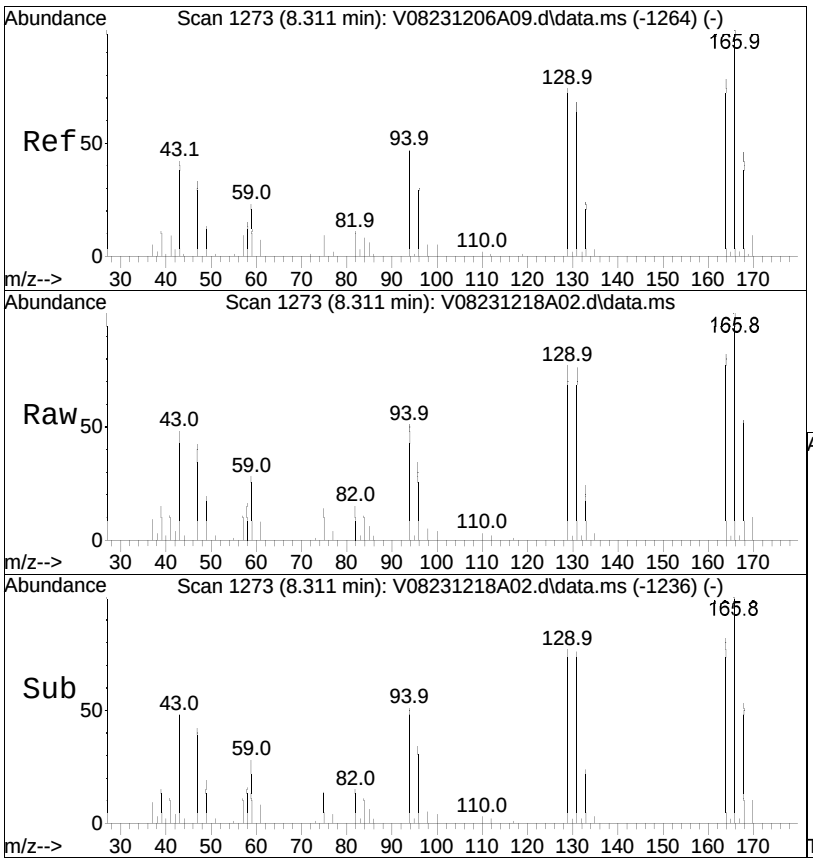


#62
4-Methyl-2-pentanone
Concen: 9.26 ug/L
RT: 8.295 min Scan# 1270
Delta R.T. -0.006 min
Lab File: V08231218A02.d
Acq: 18 Dec 2023 7:14 am

Tgt Ion: 58 Resp: 8841

Ion	Ratio	Lower	Upper
58	100		
100	26.1	20.2	30.2
43	303.1	196.6	295.0#

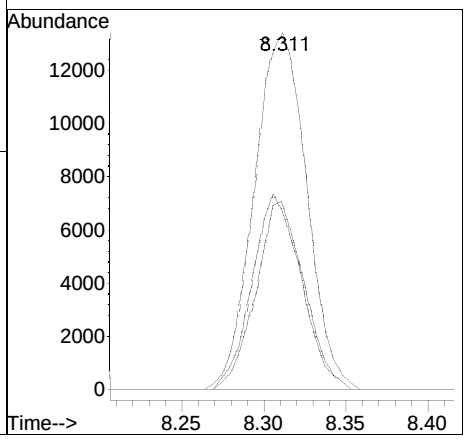


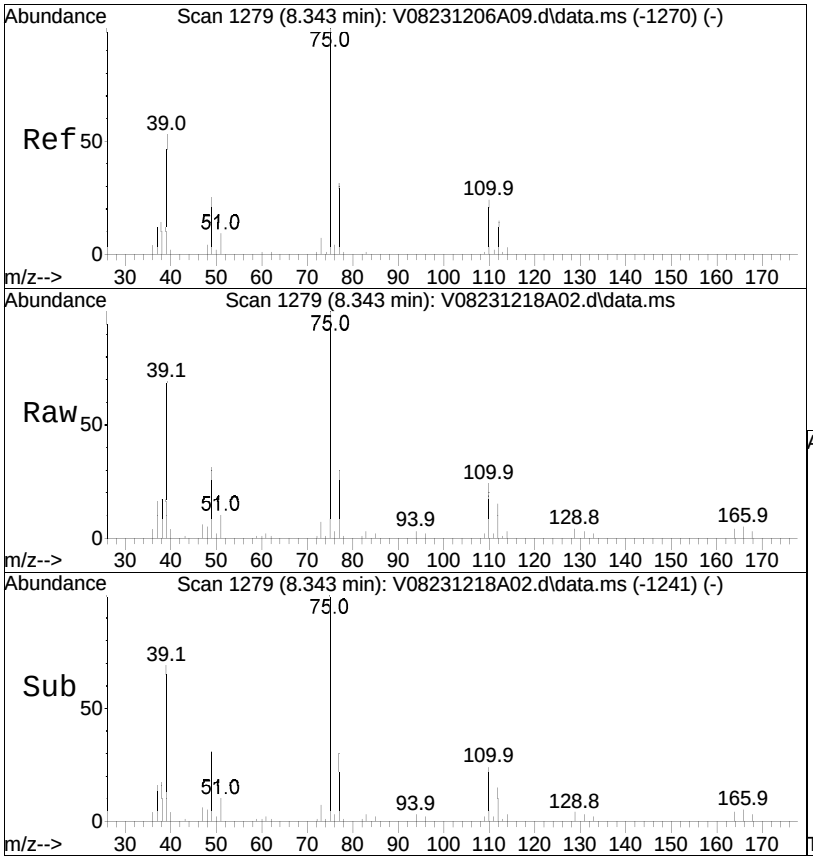


#63
Tetrachloroethene
Concen: 10.51 ug/L
RT: 8.311 min Scan# 1273
Delta R.T. -0.005 min
Lab File: V08231218A02.d
Acq: 18 Dec 2023 7:14 am

Tgt Ion:166 Resp: 29636

Ion	Ratio	Lower	Upper
166	100		
168	48.6	28.2	68.2
94	51.3	38.4	78.4

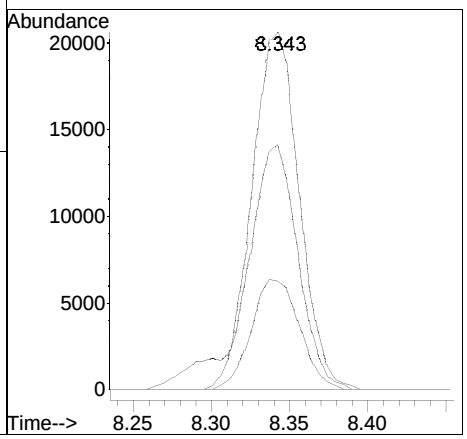


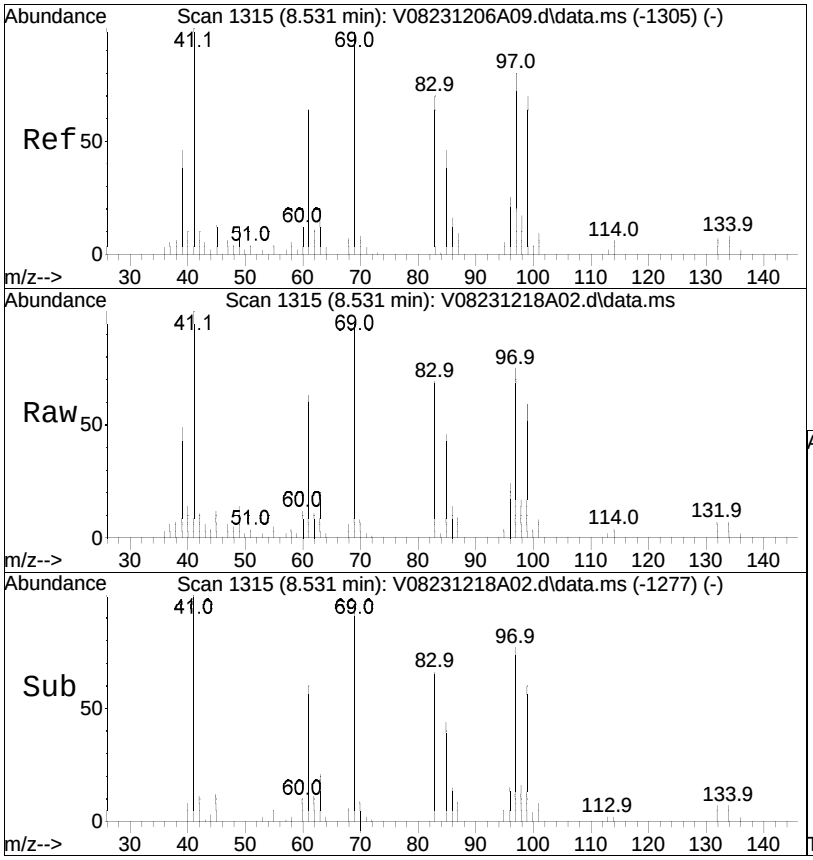


#65
trans-1,3-Dichloropropene
Concen: 11.33 ug/L
RT: 8.343 min Scan# 1279
Delta R.T. -0.000 min
Lab File: V08231218A02.d
Acq: 18 Dec 2023 7:14 am

Tgt Ion: 75 Resp: 43311

Ion	Ratio	Lower	Upper
75	100		
77	31.4	12.4	52.4
39	75.9	42.8	82.8

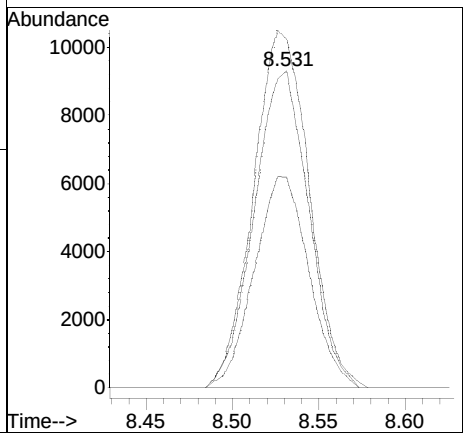


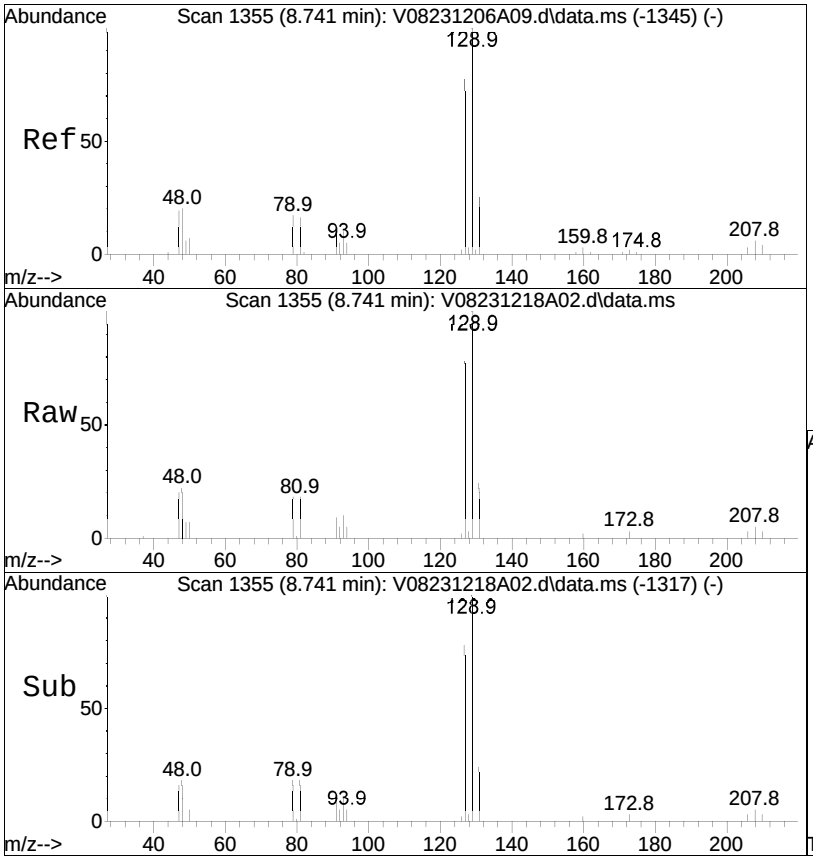


#68
1,1,2-Trichloroethane
Concen: 11.54 ug/L
RT: 8.531 min Scan# 1315
Delta R.T. 0.000 min
Lab File: V08231218A02.d
Acq: 18 Dec 2023 7:14 am

Tgt Ion: 83 Resp: 20372

Ion	Ratio	Lower	Upper
83	100		
97	114.8	89.8	129.8
85	66.8	44.4	84.4

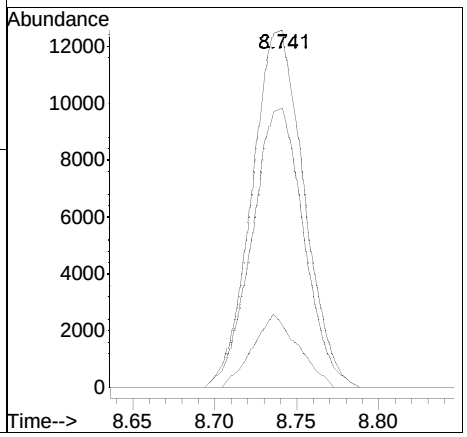


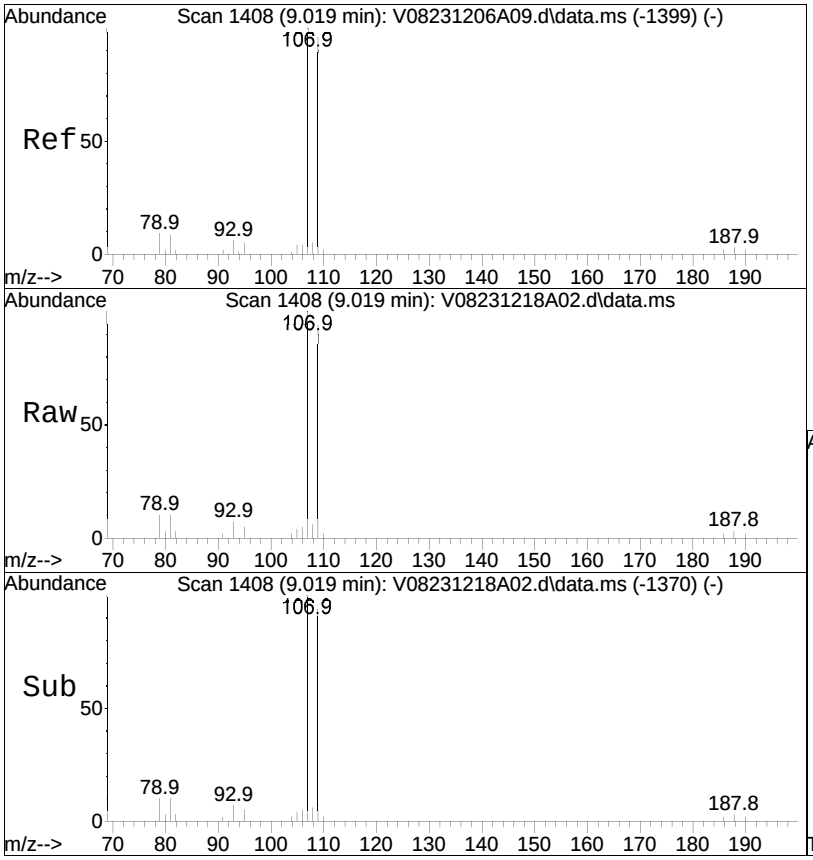


#69
Chlorodibromomethane
Concen: 10.74 ug/L
RT: 8.741 min Scan# 1355
Delta R.T. 0.000 min
Lab File: V08231218A02.d
Acq: 18 Dec 2023 7:14 am

Tgt Ion:129 Resp: 27493

Ion	Ratio	Lower	Upper
129	100		
81	18.1	2.9	42.9
127	78.0	57.8	97.8

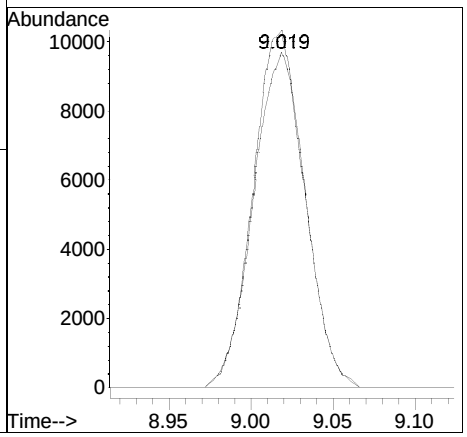


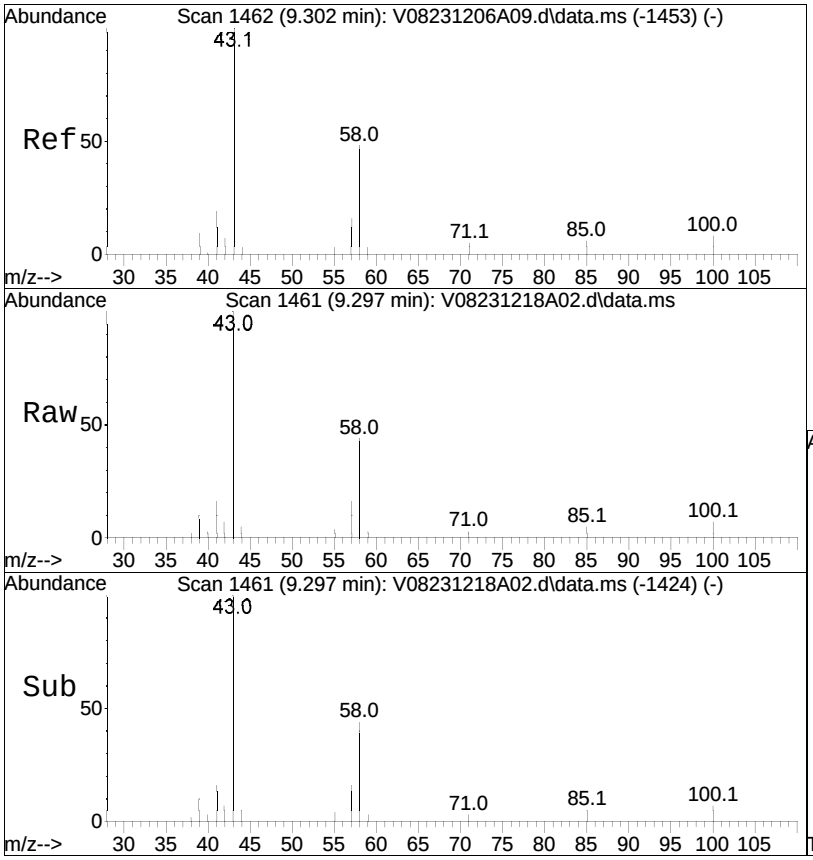


#71
1,2-Dibromoethane
Concen: 11.14 ug/L
RT: 9.019 min Scan# 1408
Delta R.T. -0.000 min
Lab File: V08231218A02.d
Acq: 18 Dec 2023 7:14 am

Tgt Ion:107 Resp: 22403

Ion	Ratio	Lower	Upper
107	100		
109	95.0	74.3	111.5

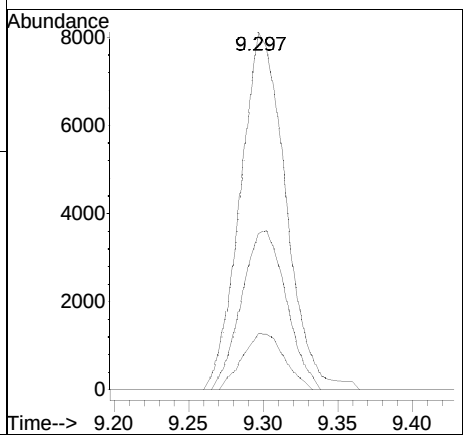


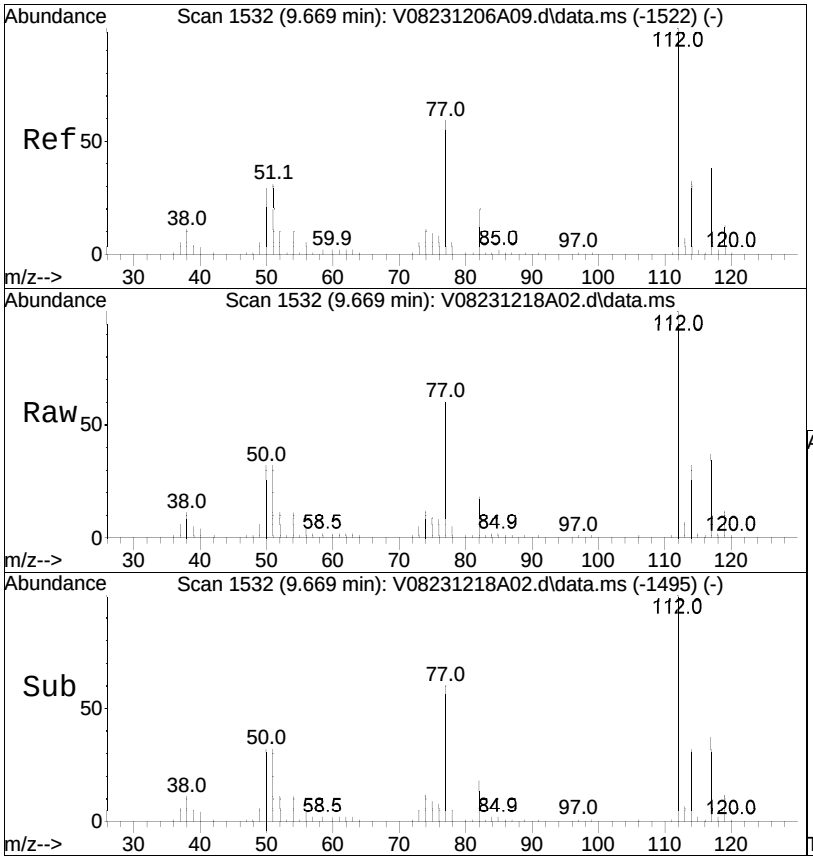


#72
2-Hexanone
Concen: 10.76 ug/L
RT: 9.297 min Scan# 1461
Delta R.T. -0.005 min
Lab File: V08231218A02.d
Acq: 18 Dec 2023 7:14 am

Tgt Ion: 43 Resp: 17052

Ion	Ratio	Lower	Upper
43	100		
58	44.1	41.2	61.8
57	14.7	17.2	25.8#

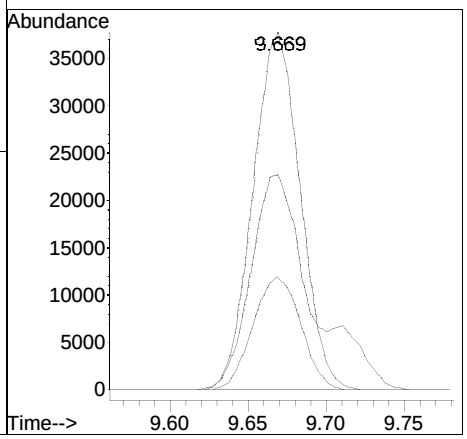


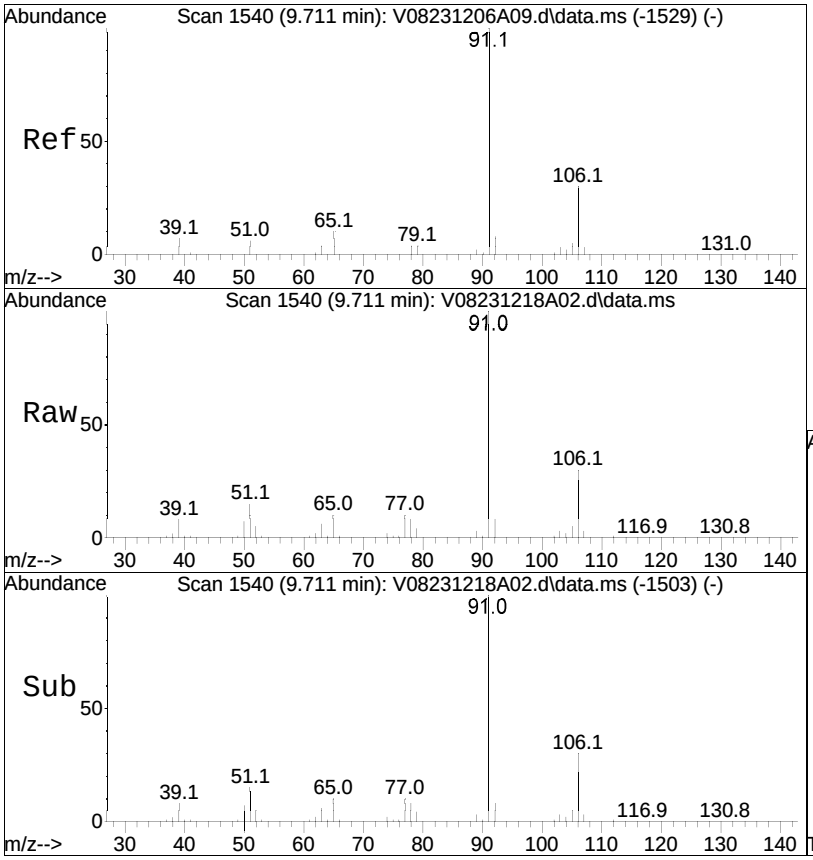


#73
Chlorobenzene
Concen: 10.52 ug/L
RT: 9.669 min Scan# 1532
Delta R.T. -0.005 min
Lab File: V08231218A02.d
Acq: 18 Dec 2023 7:14 am

Tgt Ion:112 Resp: 78842

Ion	Ratio	Lower	Upper
112	100		
77	66.1	55.4	83.0
114	32.2	25.4	38.2

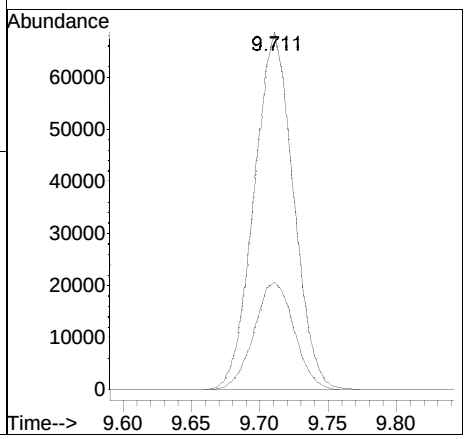


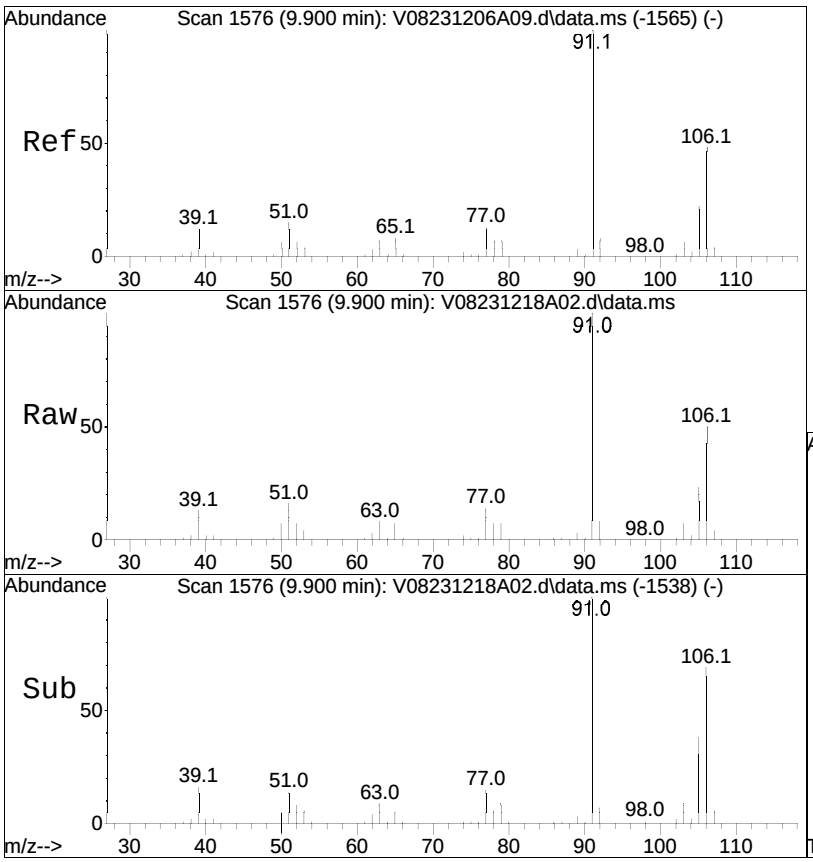


#74
Ethylbenzene
Concen: 10.53 ug/L
RT: 9.711 min Scan# 1540
Delta R.T. -0.005 min
Lab File: V08231218A02.d
Acq: 18 Dec 2023 7:14 am

Tgt Ion: 91 Resp: 135697

Ion	Ratio	Lower	Upper
91	100		
106	30.9	24.3	36.5

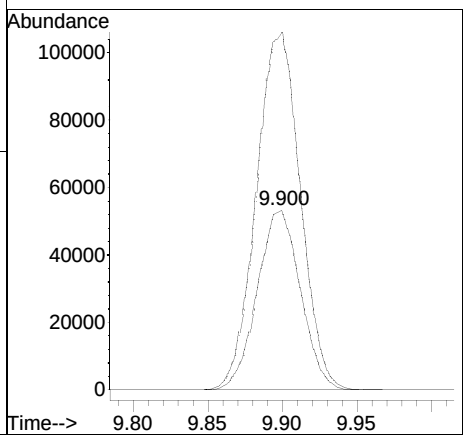


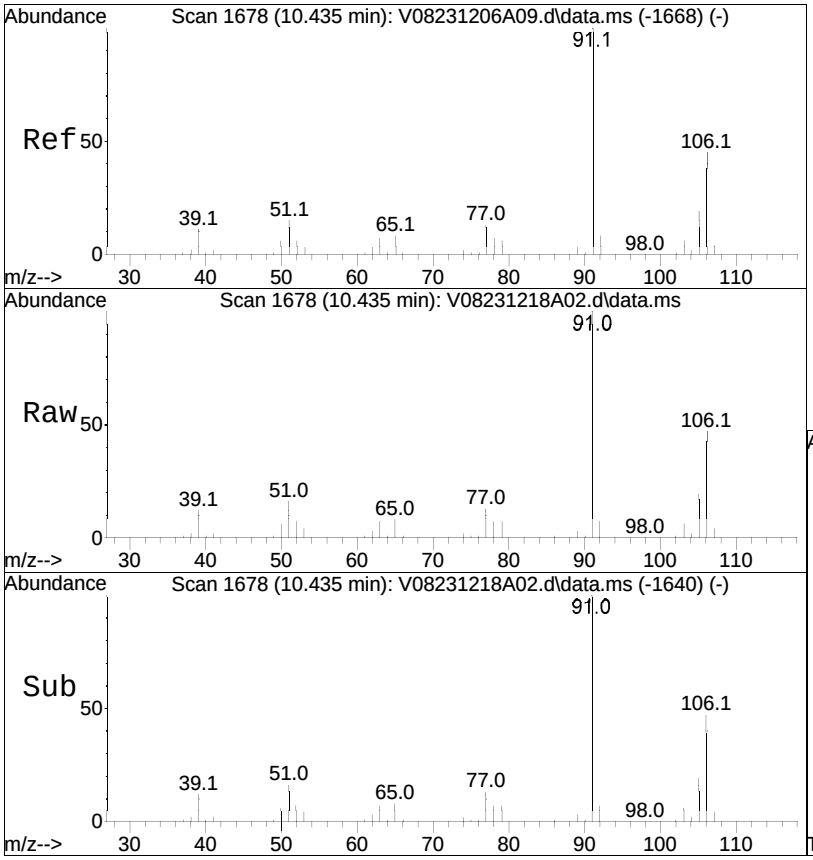


#76
p/m Xylene
Concen: 22.07 ug/L
RT: 9.900 min Scan# 1576
Delta R.T. -0.000 min
Lab File: V08231218A02.d
Acq: 18 Dec 2023 7:14 am

Tgt Ion:106 Resp: 106487

Ion	Ratio	Lower	Upper
106	100		
91	202.6	166.4	249.6

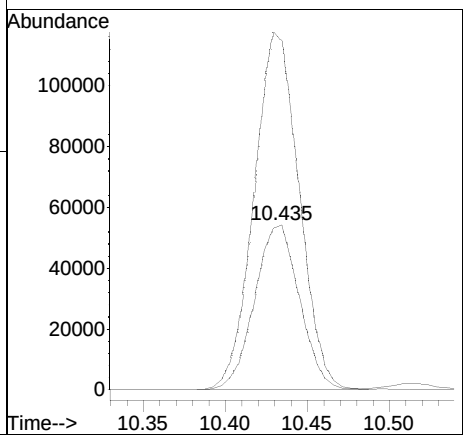


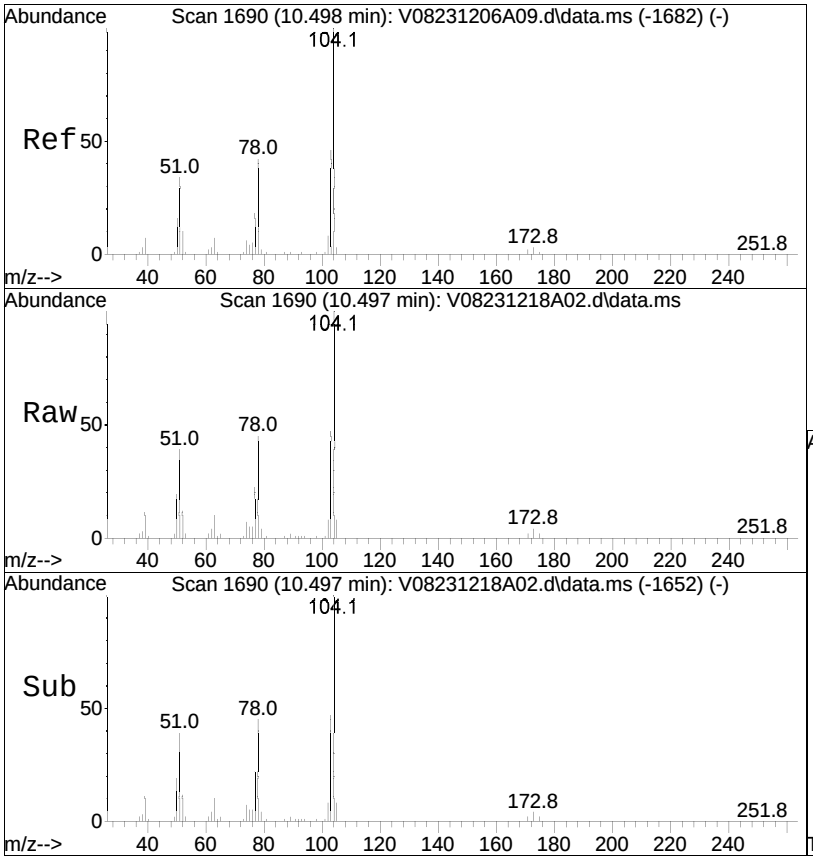


#77
o Xylene
Concen: 21.91 ug/L
RT: 10.435 min Scan# 1678
Delta R.T. -0.000 min
Lab File: V08231218A02.d
Acq: 18 Dec 2023 7:14 am

Tgt Ion:106 Resp: 102669

Ion	Ratio	Lower	Upper
106	100		
91	216.6	182.6	273.8

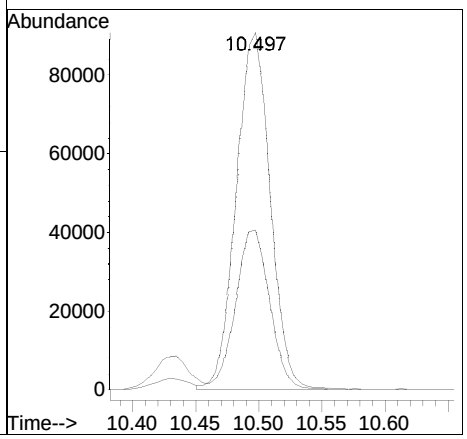


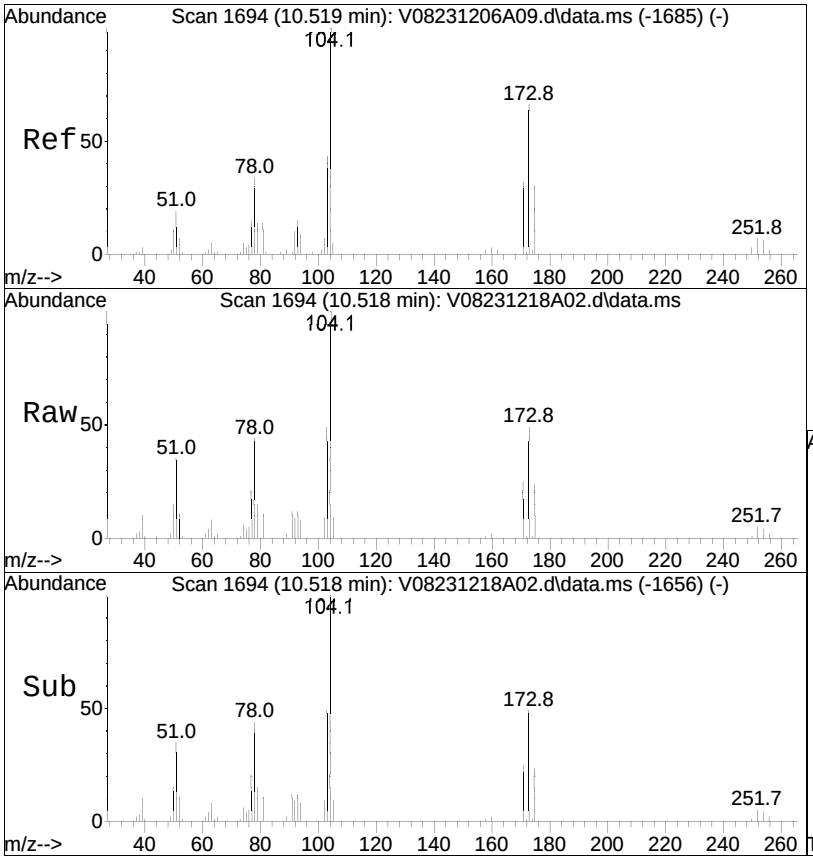


#78
Styrene
Concen: 22.24 ug/L
RT: 10.497 min Scan# 1690
Delta R.T. -0.001 min
Lab File: V08231218A02.d
Acq: 18 Dec 2023 7:14 am

Tgt Ion:104 Resp: 169100

Ion	Ratio	Lower	Upper
104	100		
78	44.9	39.8	59.6

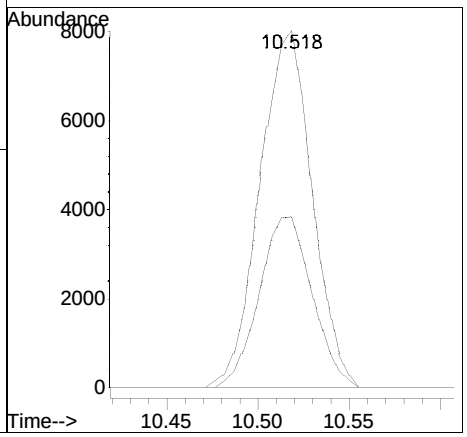


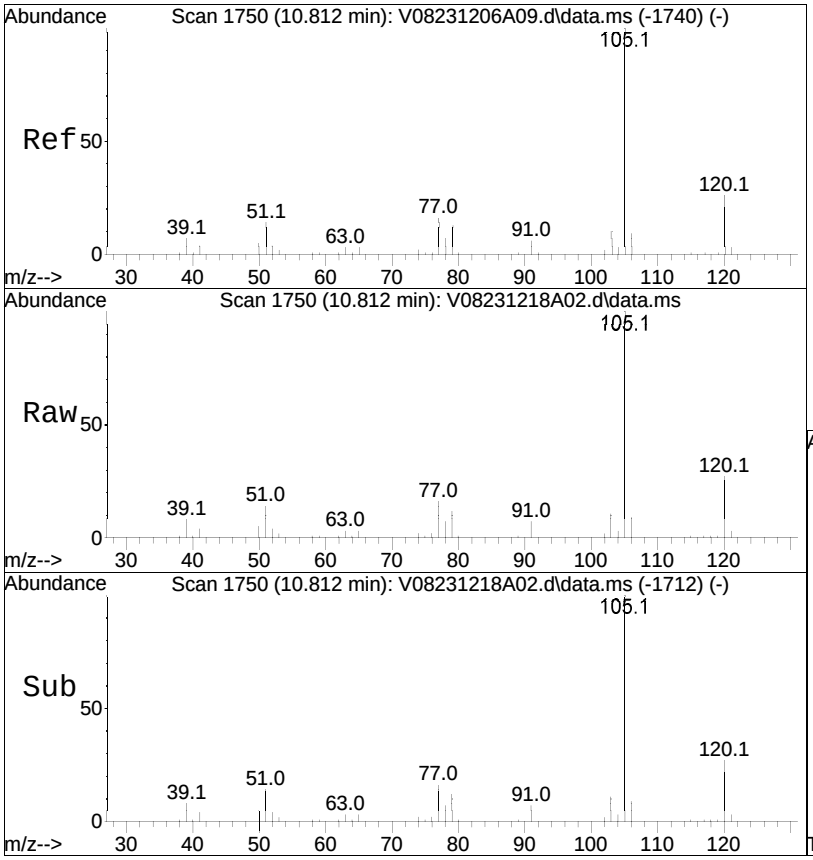


#80
Bromoform
Concen: 11.69 ug/L
RT: 10.518 min Scan# 1694
Delta R.T. -0.001 min
Lab File: V08231218A02.d
Acq: 18 Dec 2023 7:14 am

Tgt Ion:173 Resp: 15938

Ion	Ratio	Lower	Upper
173	100		
175	48.5	31.5	71.5

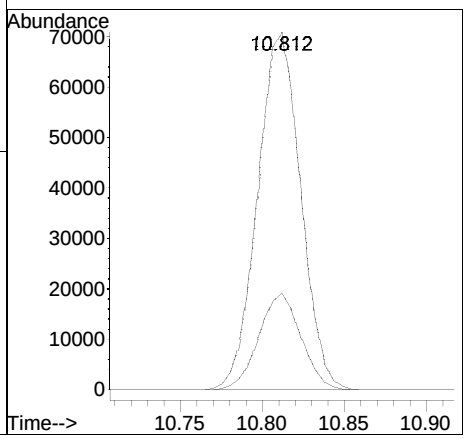


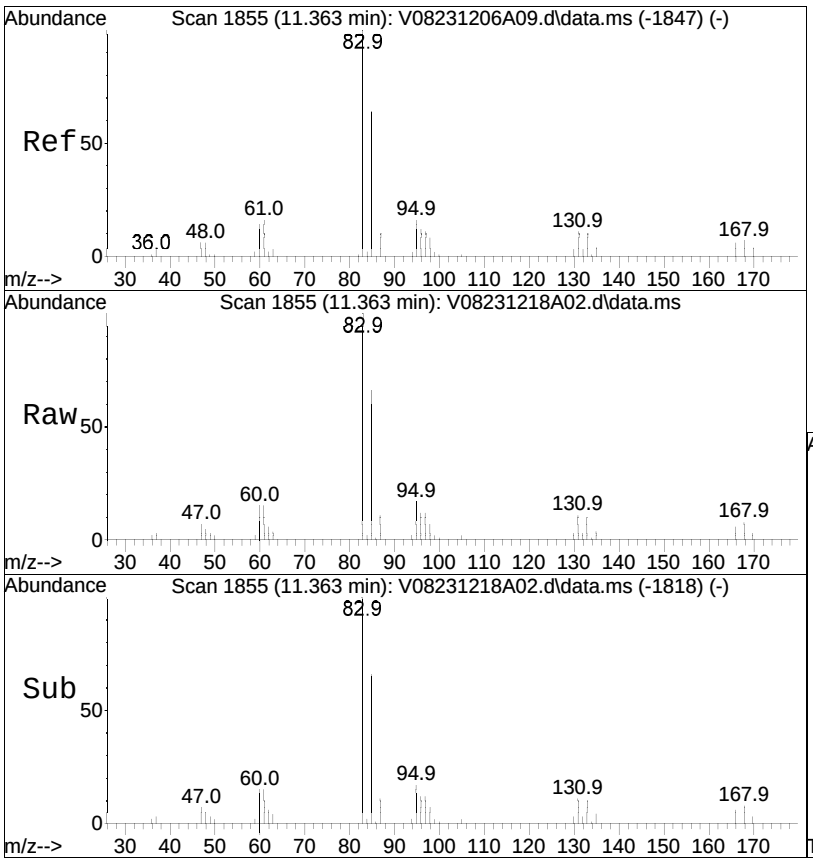


#82
Isopropylbenzene
Concen: 10.99 ug/L
RT: 10.812 min Scan# 1750
Delta R.T. 0.000 min
Lab File: V08231218A02.d
Acq: 18 Dec 2023 7:14 am

Tgt Ion:105 Resp: 127986

Ion	Ratio	Lower	Upper
105	100		
120	26.5	4.8	44.8

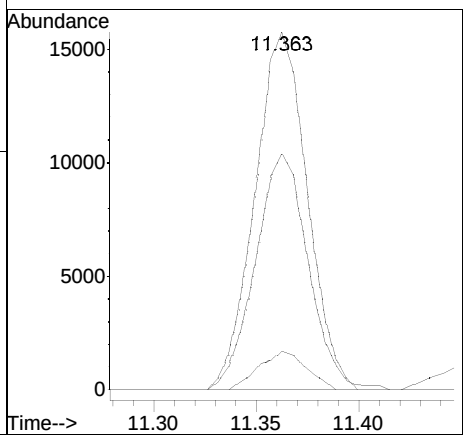


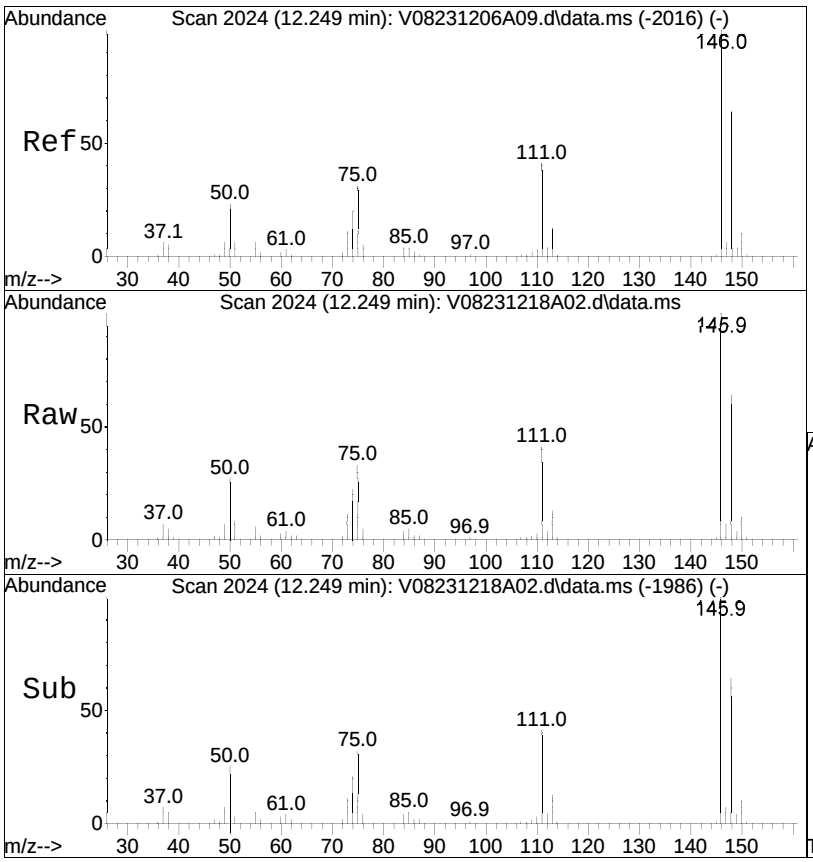


#87
1,1,2,2-Tetrachloroethane
Concen: 12.09 ug/L
RT: 11.363 min Scan# 1855
Delta R.T. -0.005 min
Lab File: V08231218A02.d
Acq: 18 Dec 2023 7:14 am

Tgt Ion: 83 Resp: 27756

Ion	Ratio	Lower	Upper
83	100		
131	9.9	0.0	30.4
85	66.7	45.4	85.4

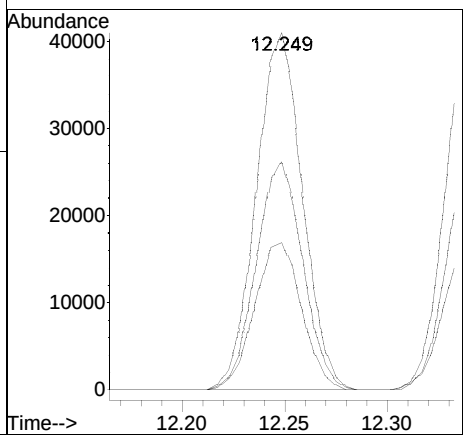


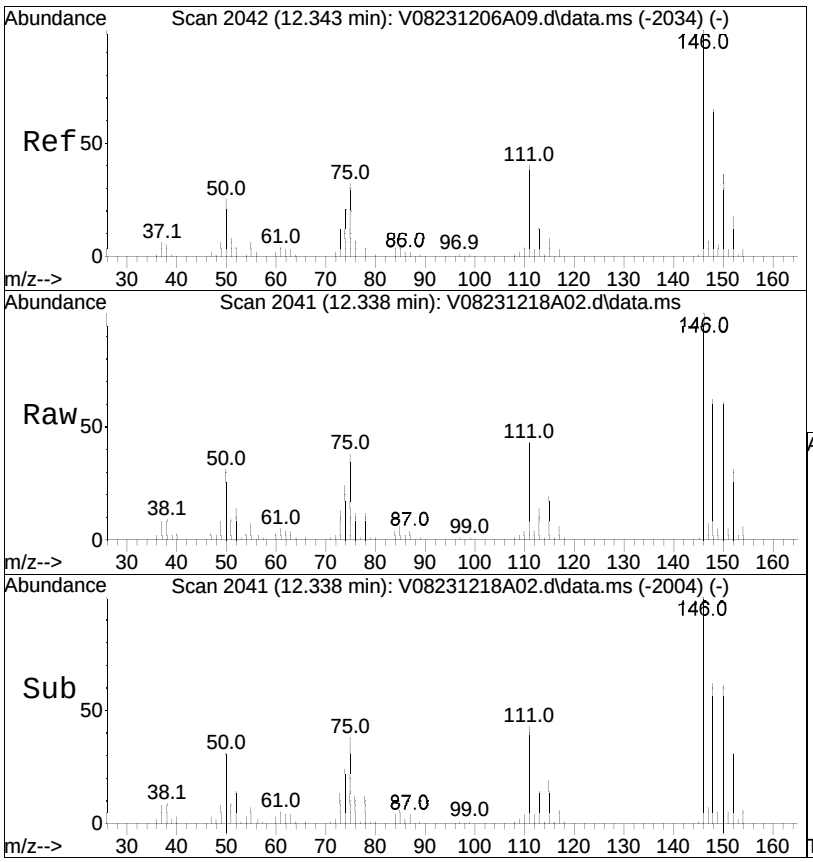


#100
1,3-Dichlorobenzene
Concen: 11.60 ug/L
RT: 12.249 min Scan# 2024
Delta R.T. -0.000 min
Lab File: V08231218A02.d
Acq: 18 Dec 2023 7:14 am

Tgt Ion:146 Resp: 64279

Ion	Ratio	Lower	Upper
146	100		
111	42.0	27.5	57.1
148	64.3	41.9	86.9

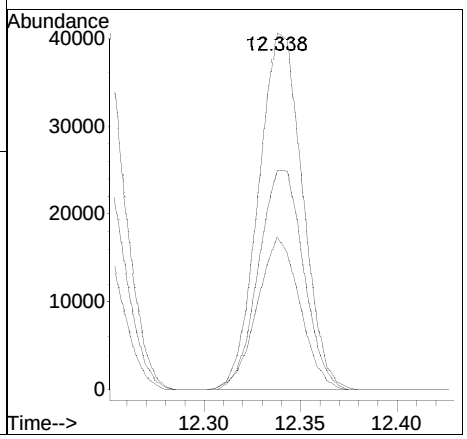


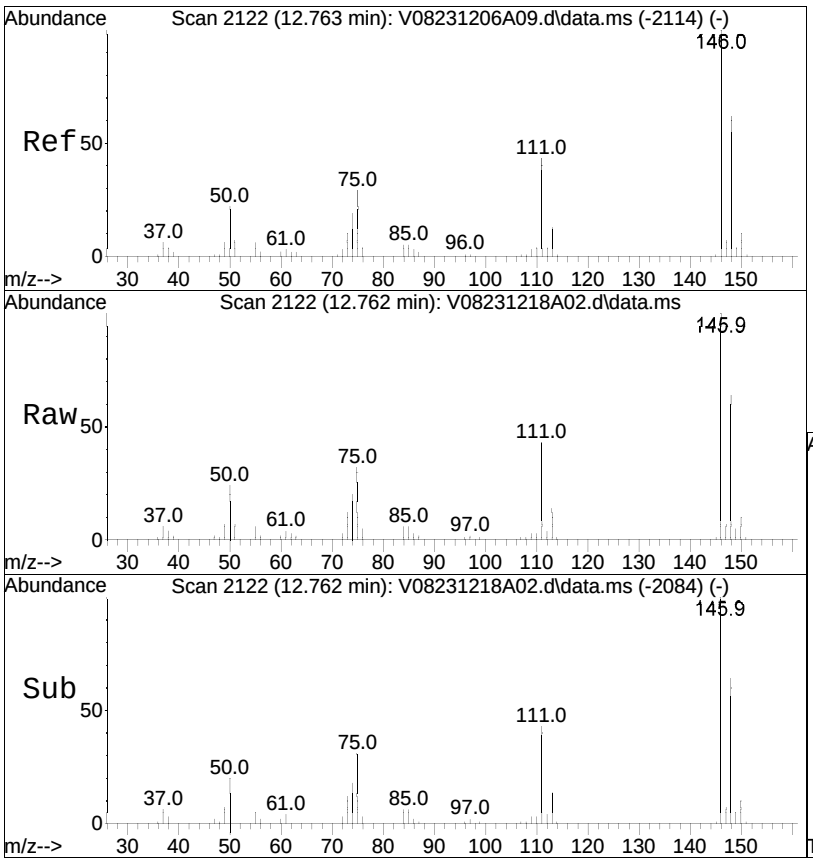


#101
1,4-Dichlorobenzene
Concen: 11.52 ug/L
RT: 12.338 min Scan# 2041
Delta R.T. -0.005 min
Lab File: V08231218A02.d
Acq: 18 Dec 2023 7:14 am

Tgt Ion:146 Resp: 64408

Ion	Ratio	Lower	Upper
146	100		
111	41.7	32.3	48.5
148	62.8	49.9	74.9

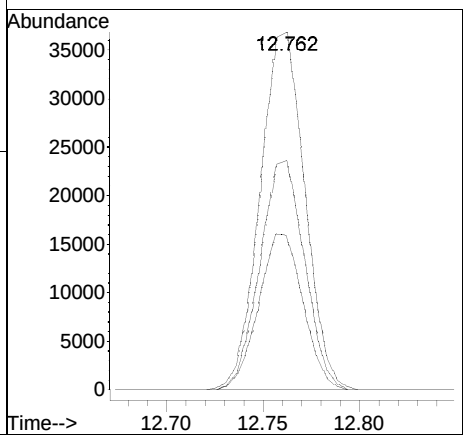


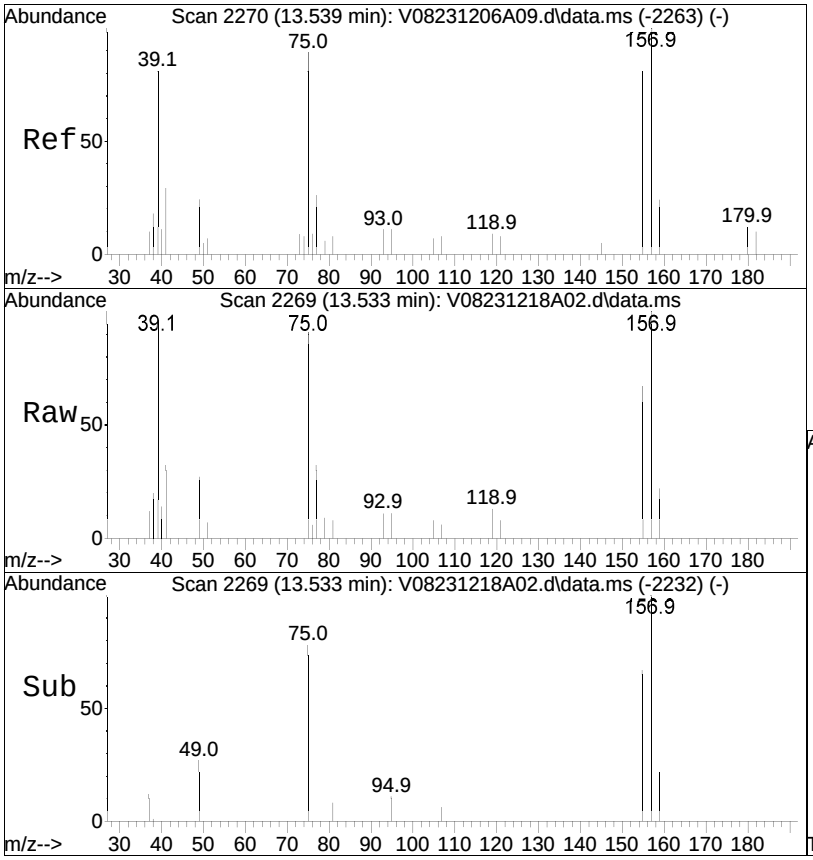


#104
1,2-Dichlorobenzene
Concen: 11.45 ug/L
RT: 12.762 min Scan# 2122
Delta R.T. -0.001 min
Lab File: V08231218A02.d
Acq: 18 Dec 2023 7:14 am

Tgt Ion:146 Resp: 58993

Ion	Ratio	Lower	Upper
146	100		
111	43.4	28.3	58.7
148	63.9	42.3	87.8

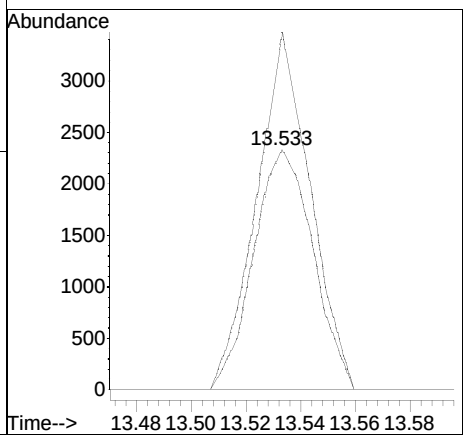


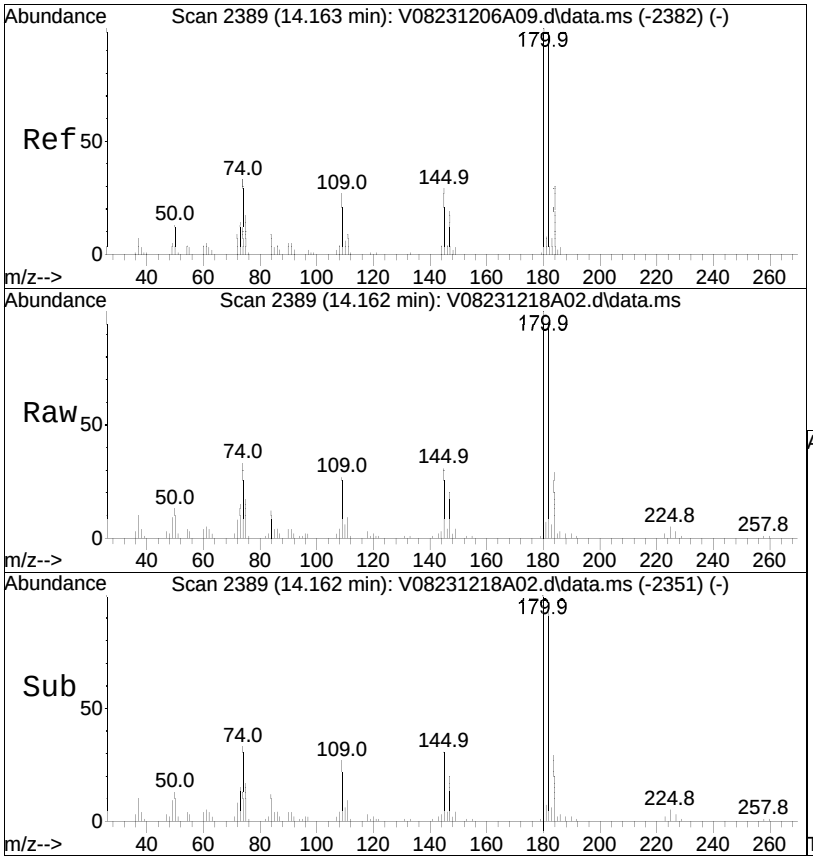


#106
1,2-Dibromo-3-chloropropane
Concen: 10.55 ug/L
RT: 13.533 min Scan# 2269
Delta R.T. -0.006 min
Lab File: V08231218A02.d
Acq: 18 Dec 2023 7:14 am

Tgt Ion:155 Resp: 3496

Ion	Ratio	Lower	Upper
155	100		
157	134.5	94.8	142.2

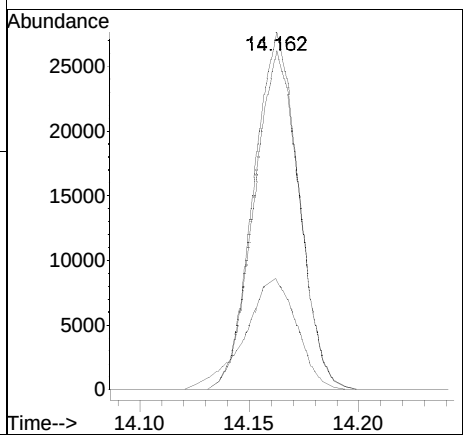


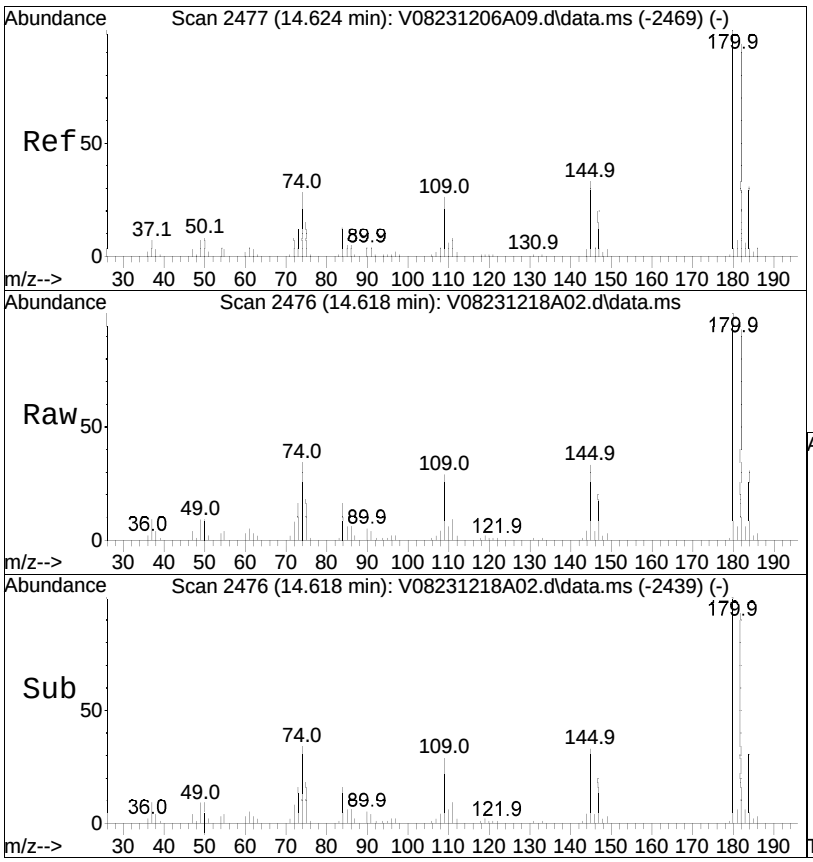


#109
1,2,4-Trichlorobenzene
Concen: 10.99 ug/L
RT: 14.162 min Scan# 2389
Delta R.T. 0.000 min
Lab File: V08231218A02.d
Acq: 18 Dec 2023 7:14 am

Tgt Ion:180 Resp: 39297

Ion	Ratio	Lower	Upper
180	100		
182	95.2	77.3	115.9
145	36.2	28.1	42.1

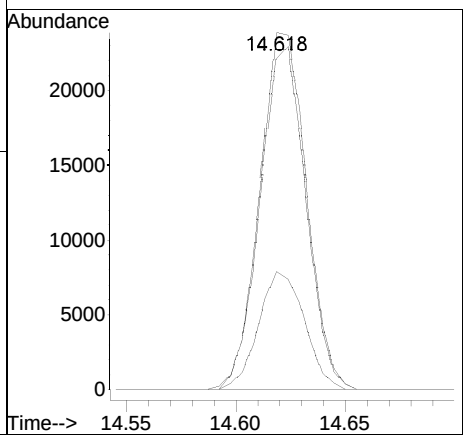




#111
1,2,3-Trichlorobenzene
Concen: 11.39 ug/L
RT: 14.618 min Scan# 2476
Delta R.T. -0.006 min
Lab File: V08231218A02.d
Acq: 18 Dec 2023 7:14 am

Tgt Ion:180 Resp: 35461

Ion	Ratio	Lower	Upper
180	100		
182	93.8	76.4	114.6
145	32.4	26.4	39.6



Quantitation Report (QT Reviewed)

Data Path : K:\VOA101\2023\231219A\
Data File : V01231219A18.D
Acq On : 19 Dec 2023 12:53 pm
Operator : VOA101:MKS
Sample : WG1865859-6,31,0.4,10,,C
Misc : WG1865859,ICAL20680
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 19 13:46:46 2023
Quant Method : K:\VOA101\2023\231219A\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 10:14:14 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA101\2023\231219A\V01231219A01.D
Sub List : 8260-Curve-2CEVE-IODO - Curve-2CEVE-IODO

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.962	96	423251	10.000	ug/L	0.00
Standard Area 1 = 442958			Recovery = 95.55%			
59) Chlorobenzene-d5	9.482	117	375264	10.000	ug/L	0.00
Standard Area 1 = 387518			Recovery = 96.84%			
79) 1,4-Dichlorobenzene-d4	12.192	152	211481	10.000	ug/L	0.00
Standard Area 1 = 216528			Recovery = 97.67%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.162	113	110284	10.196	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.96%			
43) 1,2-Dichloroethane-d4	5.681	65	121578	9.925	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.25%			
60) Toluene-d8	7.641	98	432422	9.782	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 97.82%			
83) 4-Bromofluorobenzene	10.985	95	177488	9.853	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 98.53%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.654	85	149773	12.667	ug/L	99
3) Chloromethane	1.849	50	192944	12.612	ug/L	100
4) Vinyl chloride	1.908	62	2299557	169.793	ug/L	100
5) Bromomethane	2.214	94	30485	4.623	ug/L	98
6) Chloroethane	2.329	64	117986	14.494	ug/L	98
7) Trichlorofluoromethane	2.463	101	211464	14.549	ug/L	99
10) 1,1-Dichloroethene	2.940	96	133600	14.398	ug/L	88
11) Carbon disulfide	2.973	76	402422	14.059	ug/L	100
12) Freon-113	2.979	101	136953	14.103	ug/L #	77
15) Methylene chloride	3.486	84	130367	12.905	ug/L	89
17) Acetone	3.536	43	33453	16.567	ug/L	97
18) trans-1,2-Dichloroethene	3.639	96	145632	13.974	ug/L	98
19) Methyl acetate	3.653	43	62431	11.744	ug/L	93
20) Methyl tert-butyl ether	3.740	73	290636	12.228	ug/L	94
23) 1,1-Dichloroethane	4.214	63	318179	15.476	ug/L	99
28) cis-1,2-Dichloroethene	4.724	96	909871	78.805	ug/L	96
30) Bromochloromethane	4.914	128	64982	12.589	ug/L	92
31) Cyclohexane	4.919	56	271924	12.930	ug/L	92
32) Chloroform	4.986	83	242326	13.434	ug/L	98
34) Carbon tetrachloride	5.120	117	199107	14.112	ug/L	99

Data Path : K:\VOA101\2023\231219A\
Data File : V01231219A18.D
Acq On : 19 Dec 2023 12:53 pm
Operator : VOA101:MKS
Sample : WG1865859-6,31,0.4,10,,C
Misc : WG1865859,ICAL20680
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 19 13:46:46 2023
Quant Method : K:\VOA101\2023\231219A\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 10:14:14 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA101\2023\231219A\V01231219A01.D
Sub List : 8260-Curve-2CEVE-IODO - Curve-2CEVE-IODO

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
37) 1,1,1-Trichloroethane	5.182	97	230353	14.130	ug/L		98
39) 2-Butanone	5.279	43	38867	12.086	ug/L	#	82
41) Benzene	5.547	78	543225	13.501	ug/L		96
44) 1,2-Dichloroethane	5.750	62	174394	12.954	ug/L		97
47) Methyl cyclohexane	6.130	83	220442	12.430	ug/L		90
48) Trichloroethene	6.141	95	153044	13.522	ug/L		99
51) 1,2-Dichloropropane	6.679	63	145671	13.041	ug/L		98
54) Bromodichloromethane	6.752	83	174036	12.728	ug/L		99
57) 1,4-Dioxane	6.966	88	30456M1	472.601	ug/L		
58) cis-1,3-Dichloropropene	7.435	75	203410	12.697	ug/L		92
61) Toluene	7.700	92	347853	12.560	ug/L		99
62) 4-Methyl-2-pentanone	8.135	58	33786	11.805	ug/L		98
63) Tetrachloroethene	8.149	166	156085	12.718	ug/L		99
65) trans-1,3-Dichloropropene	8.182	75	172152	11.839	ug/L		93
68) 1,1,2-Trichloroethane	8.366	83	86738	12.293	ug/L		98
69) Chlorodibromomethane	8.581	129	118560	11.565	ug/L		99
71) 1,2-Dibromoethane	8.854	107	100344	11.946	ug/L		98
72) 2-Hexanone	9.141	43	56561	10.560	ug/L		99
73) Chlorobenzene	9.501	112	384507	12.243	ug/L		98
74) Ethylbenzene	9.540	91	676043	12.694	ug/L		100
76) p/m Xylene	9.724	106	525961	25.294	ug/L		97
77) o Xylene	10.265	106	501651	24.806	ug/L		99
78) Styrene	10.338	104	824834	24.914	ug/L		96
80) Bromoform	10.366	173	67377	10.612	ug/L		99
82) Isopropylbenzene	10.653	105	669746	12.330	ug/L		99
87) 1,1,2,2-Tetrachloroethane	11.227	83	118527	11.735	ug/L		99
100) 1,3-Dichlorobenzene	12.117	146	282360	11.706	ug/L		99
101) 1,4-Dichlorobenzene	12.209	146	282672	11.519	ug/L		99
104) 1,2-Dichlorobenzene	12.633	146	253668	11.545	ug/L		99
106) 1,2-Dibromo-3-chloropr...	13.414	155	15074	10.679	ug/L		99
109) 1,2,4-Trichlorobenzene	14.047	180	127438	10.781	ug/L		99
111) 1,2,3-Trichlorobenzene	14.507	180	98585	10.453	ug/L		99

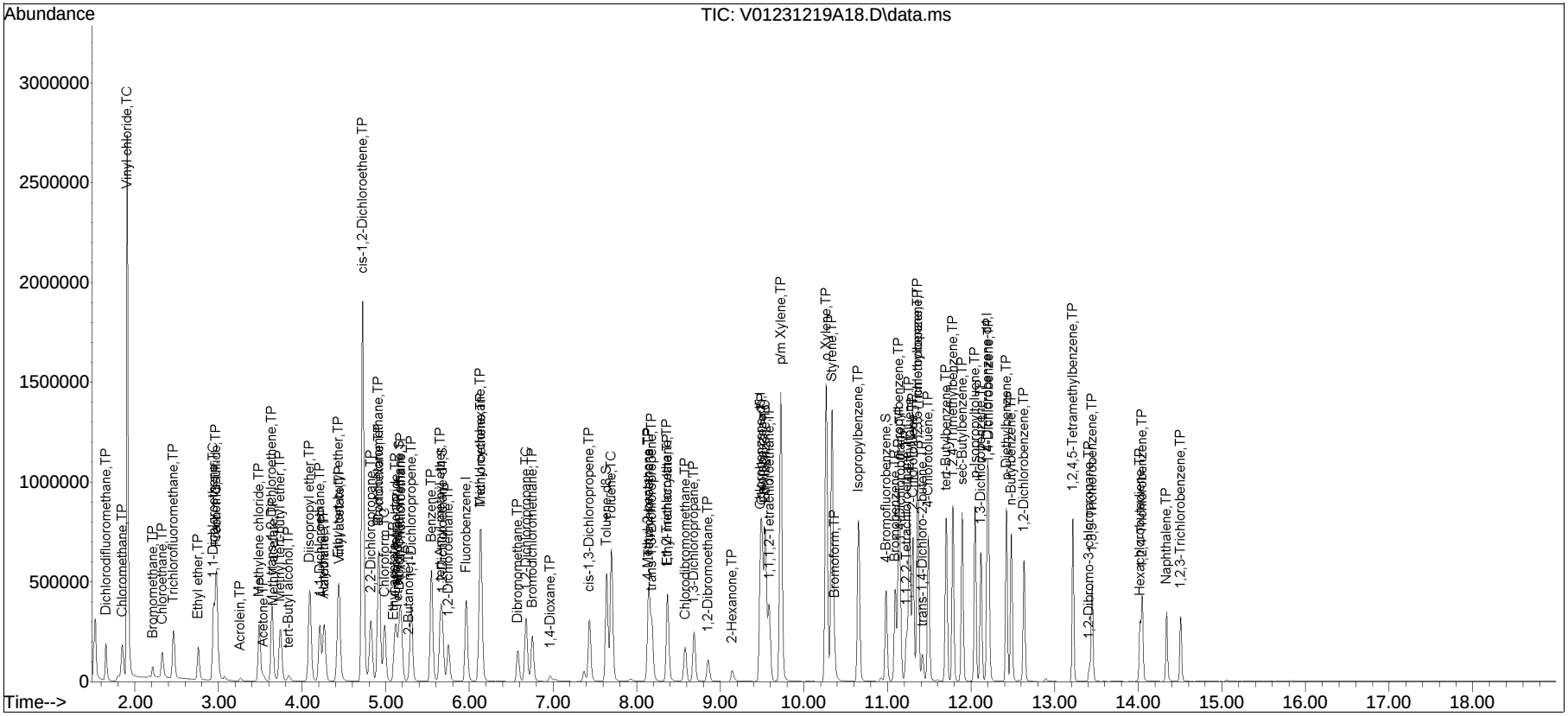
(#) = qualifier out of range (m) = manual integration (+) = signals summed

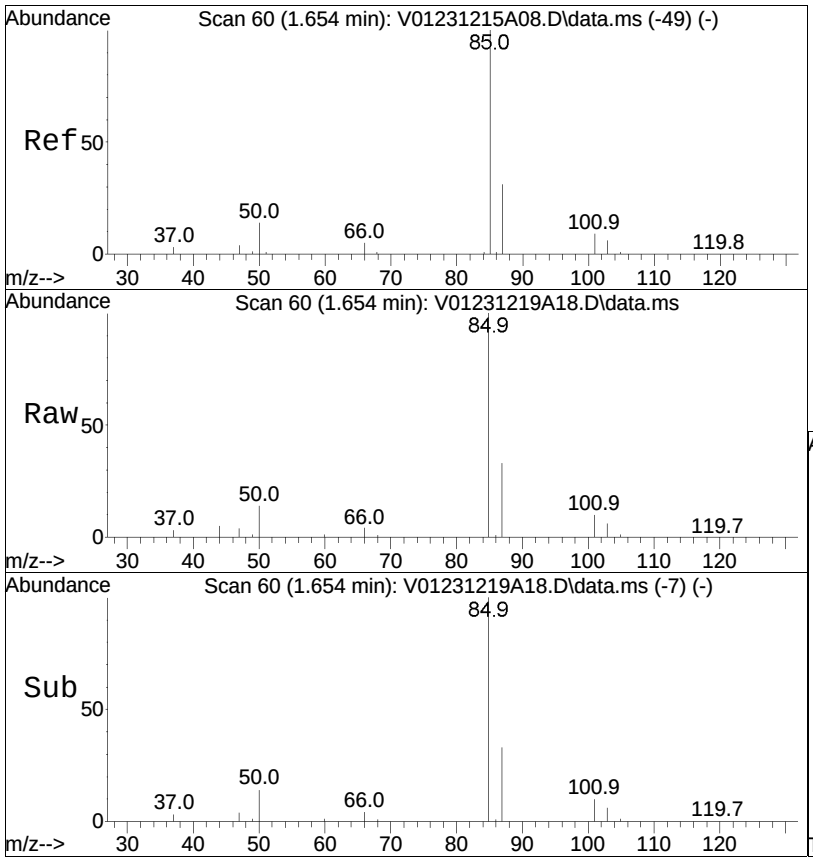
Quantitation Report (QT Reviewed)

Data Path : K:\VOA101\2023\231219A\
Data File : V01231219A18.D
Acq On : 19 Dec 2023 12:53 pm
Operator : VOA101:MKS
Sample : WG1865859-6,31,0.4,10,,C
Misc : WG1865859,ICAL20680
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 19 13:46:46 2023
Quant Method : K:\VOA101\2023\231219A\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 10:14:14 2023
Response via : Initial Calibration

Sub List : 8260-Curve-2CEVE-IODO - Curve-2CEVE-IODOD•

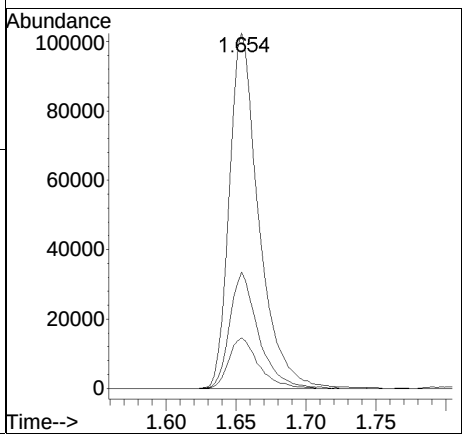


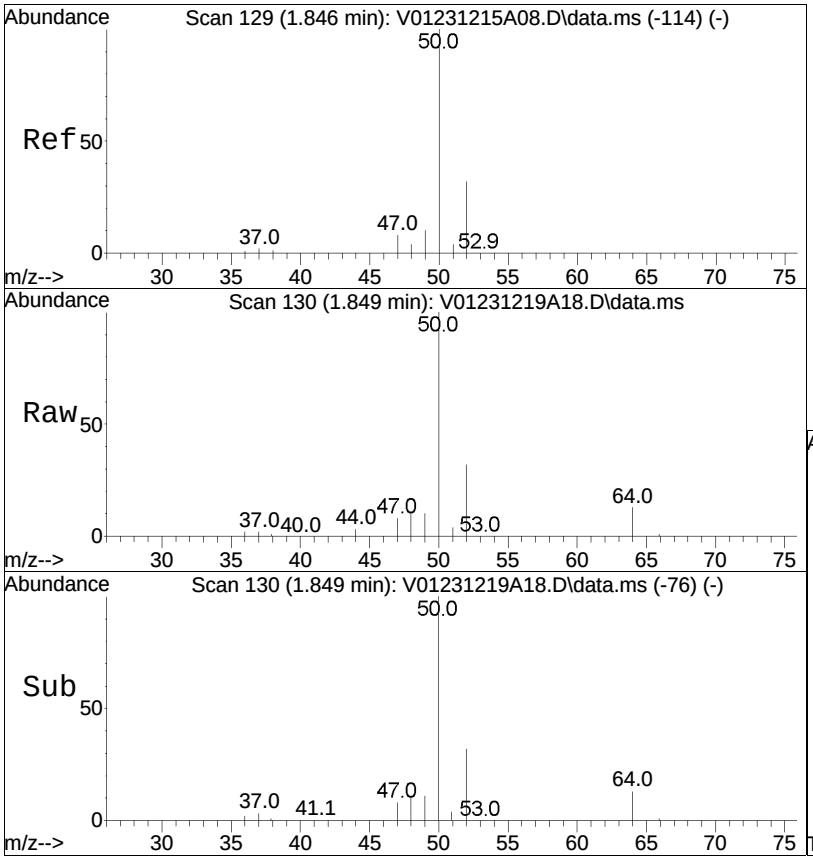


#2
Dichlorodifluoromethane
Concen: 12.67 ug/L
RT: 1.654 min Scan# 60
Delta R.T. 0.000 min
Lab File: V01231219A18.D
Acq: 19 Dec 2023 12:53 pm

Tgt Ion: 85 Resp: 149773

Ion	Ratio	Lower	Upper
85	100		
87	31.9	20.9	43.5
50	14.4	9.1	18.9

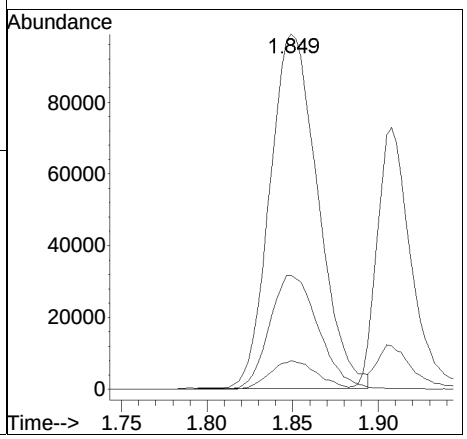


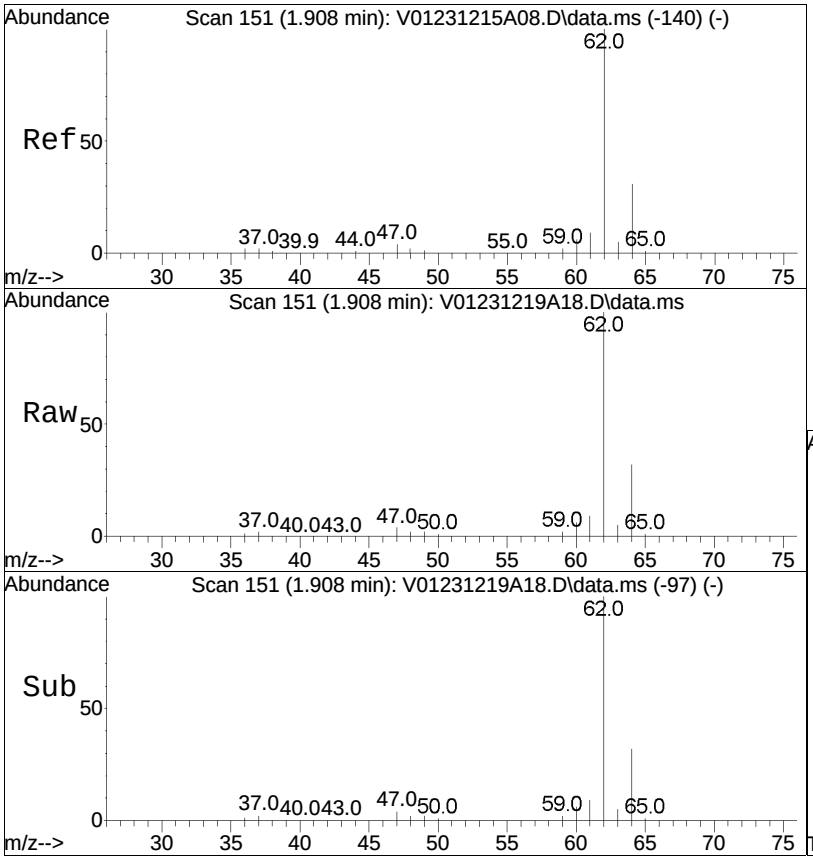


#3
Chloromethane
Concen: 12.61 ug/L
RT: 1.849 min Scan# 130
Delta R.T. 0.003 min
Lab File: V01231219A18.D
Acq: 19 Dec 2023 12:53 pm

Tgt Ion: 50 Resp: 192944

Ion	Ratio	Lower	Upper
50	100		
52	32.8	12.8	52.8
47	8.0	0.0	28.3

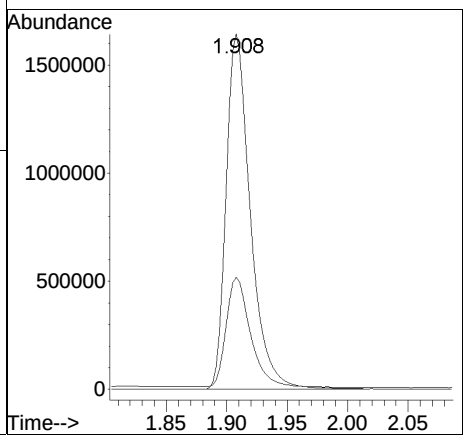


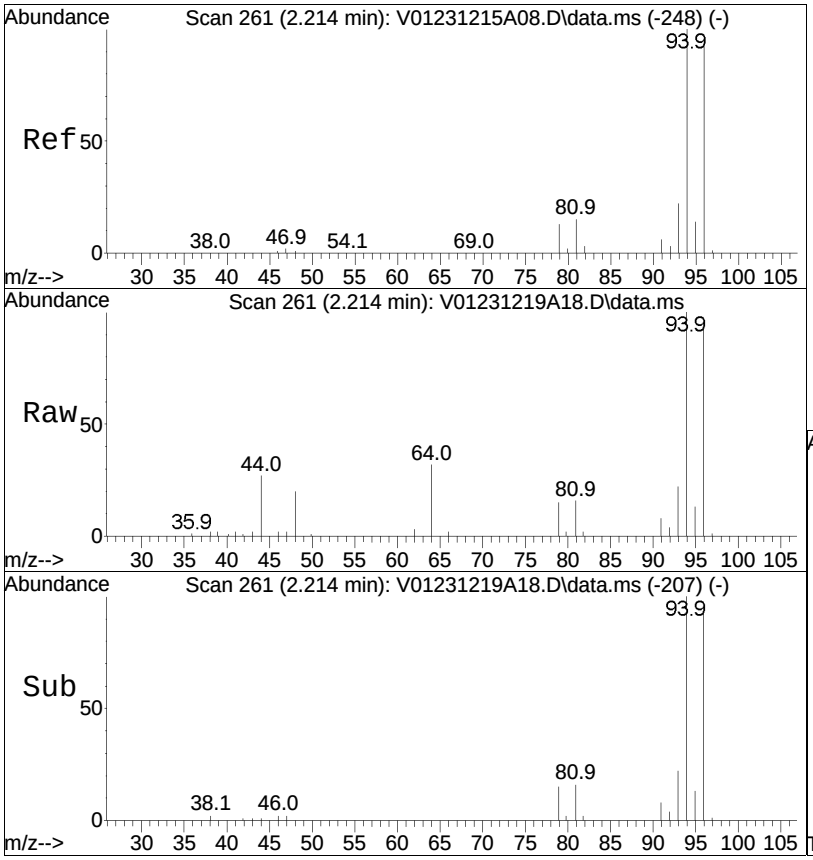


#4
Vinyl chloride
Concen: 169.79 ug/L
RT: 1.908 min Scan# 151
Delta R.T. 0.000 min
Lab File: V01231219A18.D
Acq: 19 Dec 2023 12:53 pm

Tgt Ion: 62 Resp: 2299557

Ion	Ratio	Lower	Upper
62	100		
64	30.6	10.8	50.8

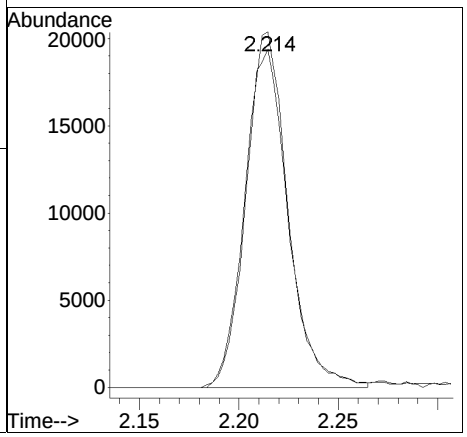


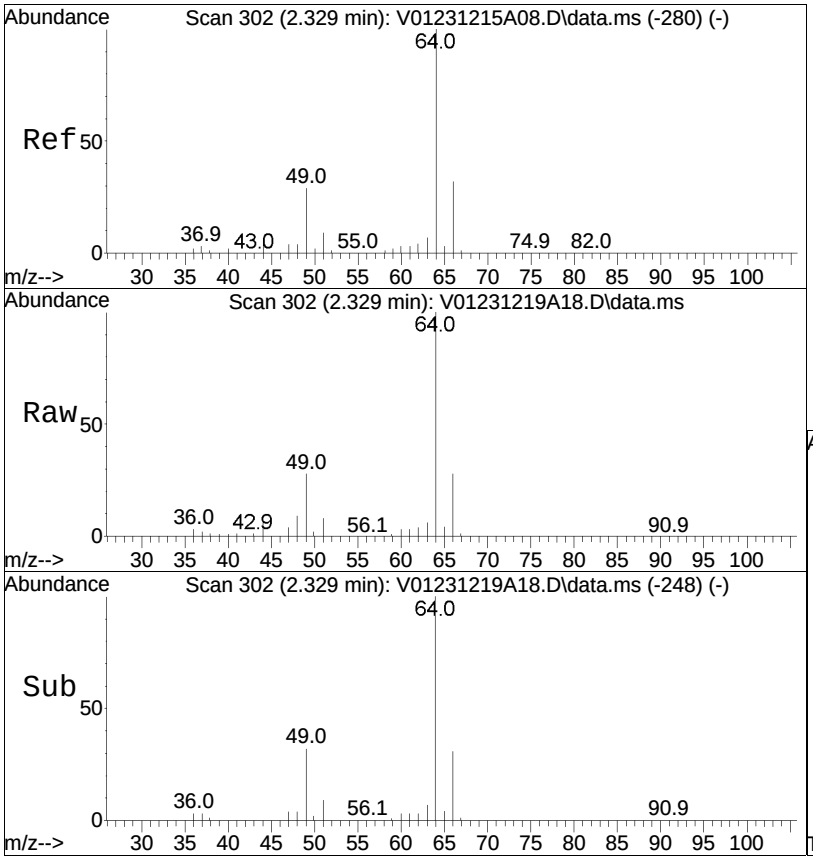


#5
Bromomethane
Concen: 4.62 ug/L
RT: 2.214 min Scan# 261
Delta R.T. 0.000 min
Lab File: V01231219A18.D
Acq: 19 Dec 2023 12:53 pm

Tgt Ion: 94 Resp: 30485

Ion	Ratio	Lower	Upper
94	100		
96	95.3	73.6	113.6

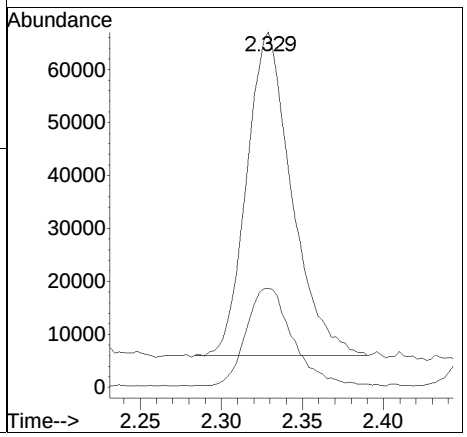


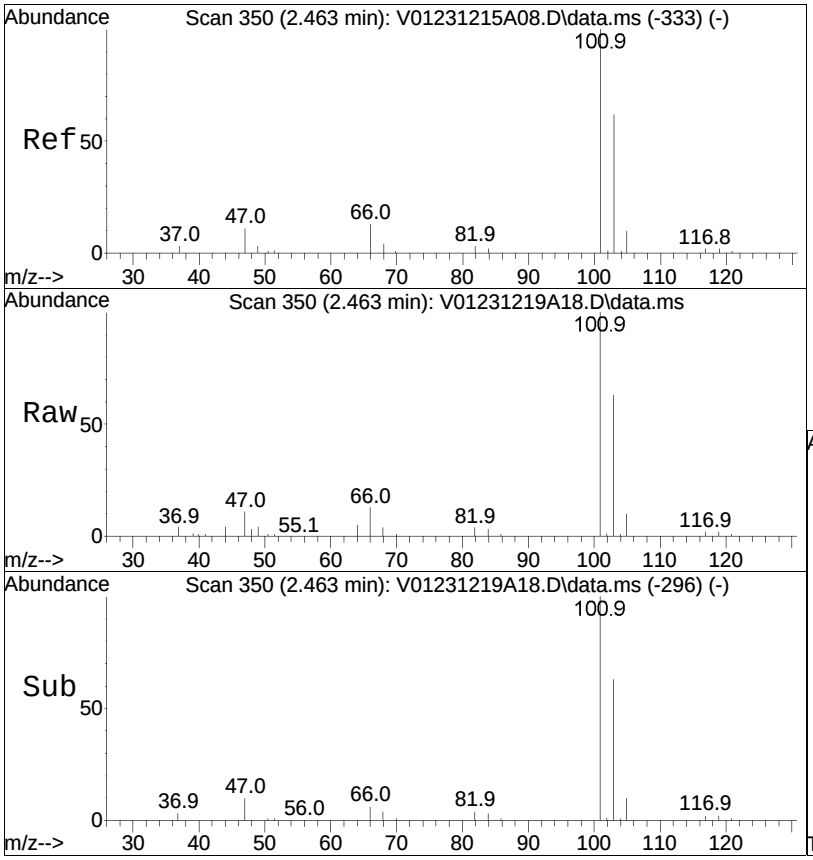


#6
Chloroethane
Concen: 14.49 ug/L
RT: 2.329 min Scan# 302
Delta R.T. 0.000 min
Lab File: V01231219A18.D
Acq: 19 Dec 2023 12:53 pm

Tgt Ion: 64 Resp: 117986

Ion	Ratio	Lower	Upper
64	100		
66	31.5	12.7	52.7

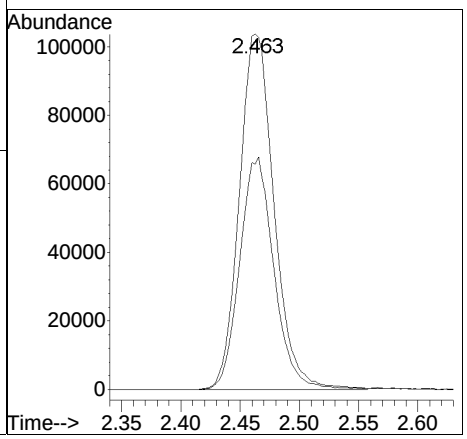


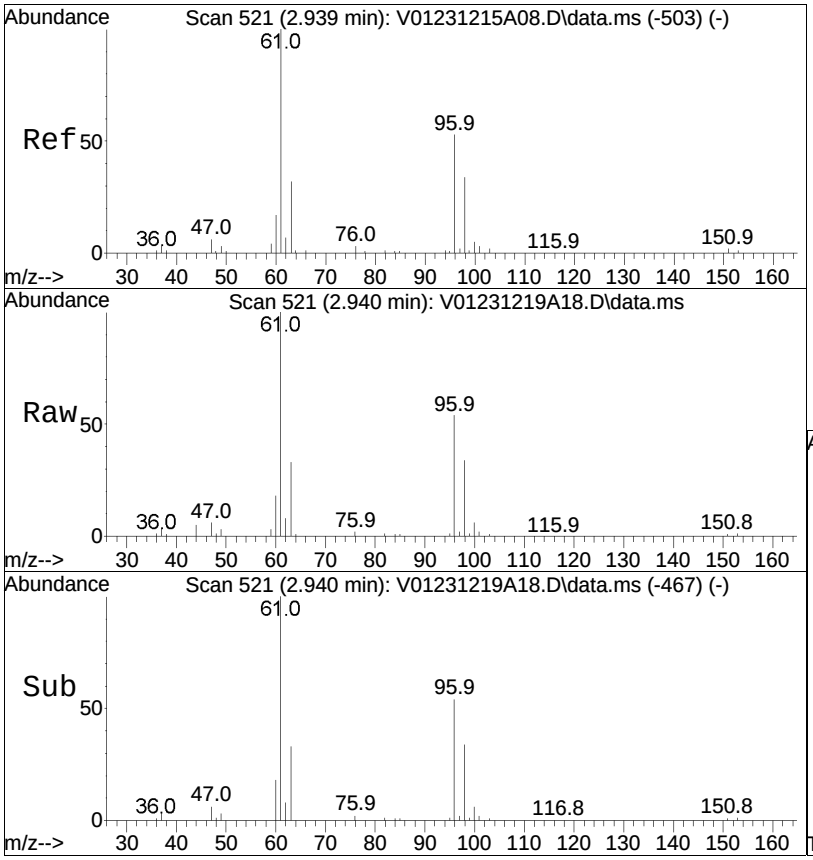


#7
Trichlorofluoromethane
Concen: 14.55 ug/L
RT: 2.463 min Scan# 350
Delta R.T. 0.000 min
Lab File: V01231219A18.D
Acq: 19 Dec 2023 12:53 pm

Tgt Ion:101 Resp: 211464

Ion	Ratio	Lower	Upper
101	100		
103	64.3	52.3	78.5

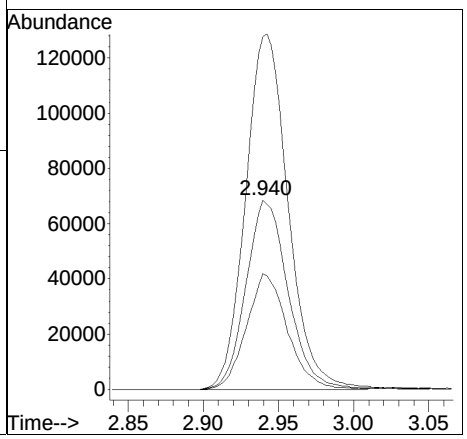


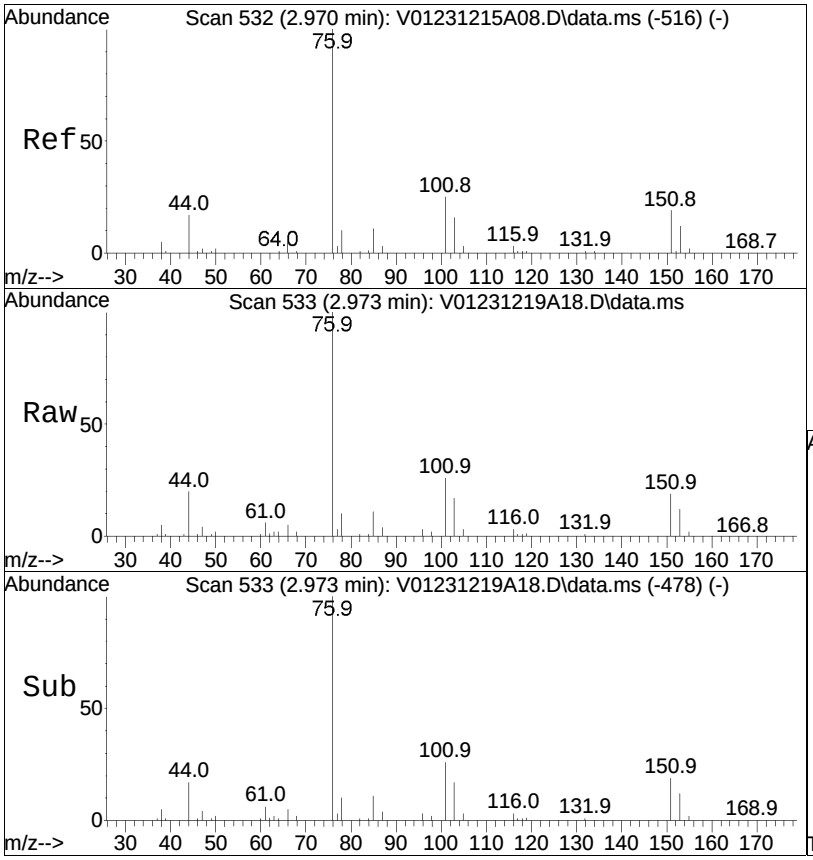


#10
1,1-Dichloroethene
Concen: 14.40 ug/L
RT: 2.940 min Scan# 521
Delta R.T. 0.000 min
Lab File: V01231219A18.D
Acq: 19 Dec 2023 12:53 pm

Tgt Ion: 96 Resp: 133600

Ion	Ratio	Lower	Upper
96	100		
61	189.8	136.8	205.2
63	60.0	43.6	65.4

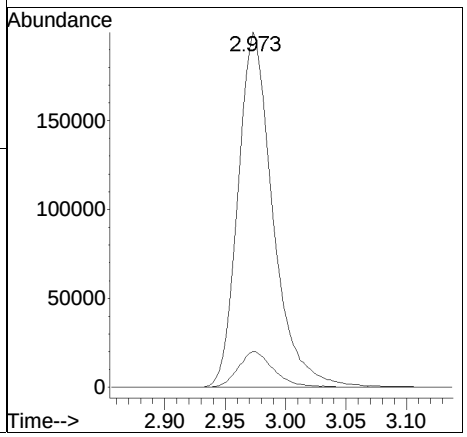


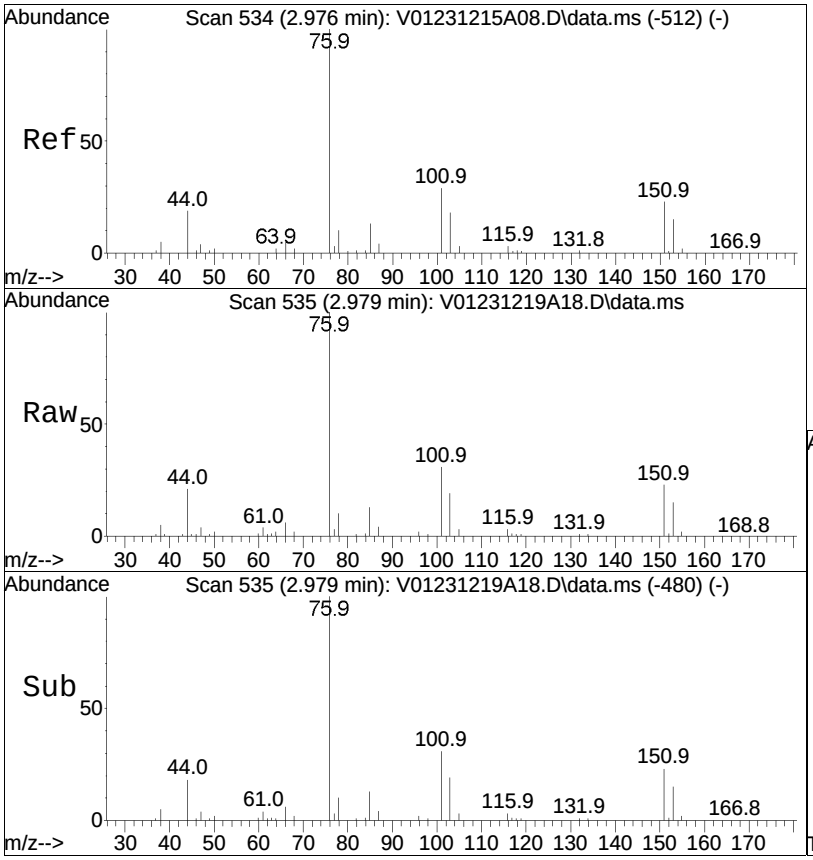


#11
Carbon disulfide
Concen: 14.06 ug/L
RT: 2.973 min Scan# 533
Delta R.T. 0.003 min
Lab File: V01231219A18.D
Acq: 19 Dec 2023 12:53 pm

Tgt Ion: 76 Resp: 402422

Ion	Ratio	Lower	Upper
76	100		
78	10.4	6.6	13.8

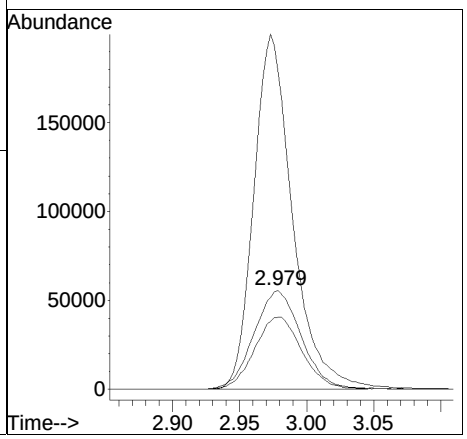


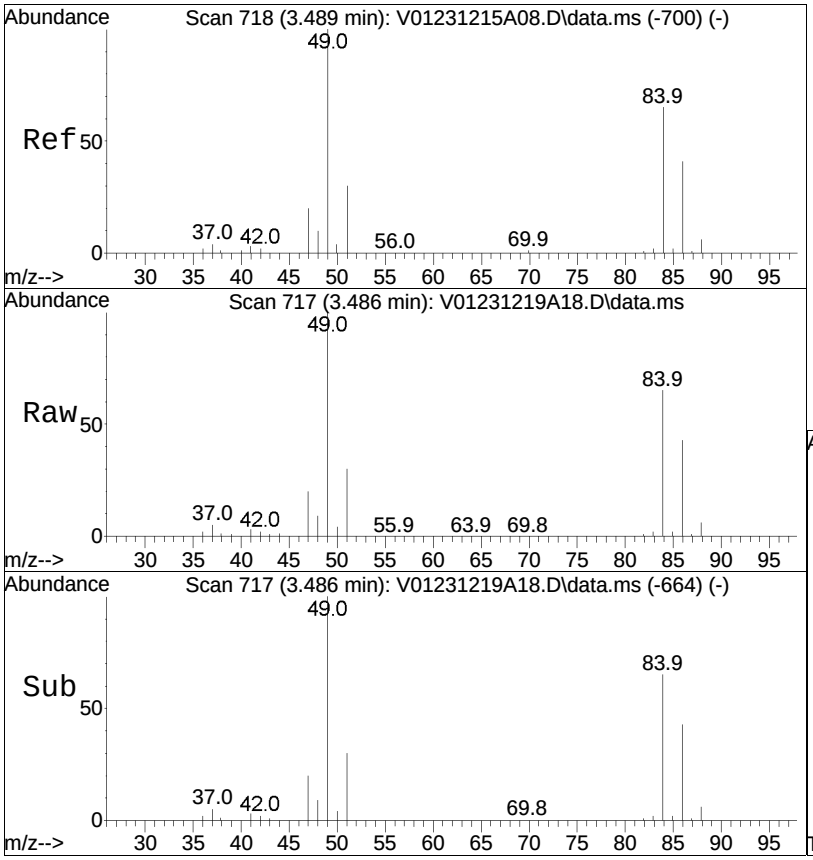


#12
Freon-113
Concen: 14.10 ug/L
RT: 2.979 min Scan# 535
Delta R.T. 0.003 min
Lab File: V01231219A18.D
Acq: 19 Dec 2023 12:53 pm

Tgt Ion:101 Resp: 136953

Ion	Ratio	Lower	Upper
101	100		
151	73.3	61.2	91.8
76	293.8	194.8	292.2#

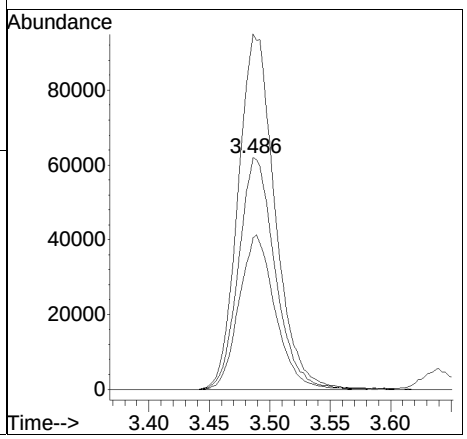


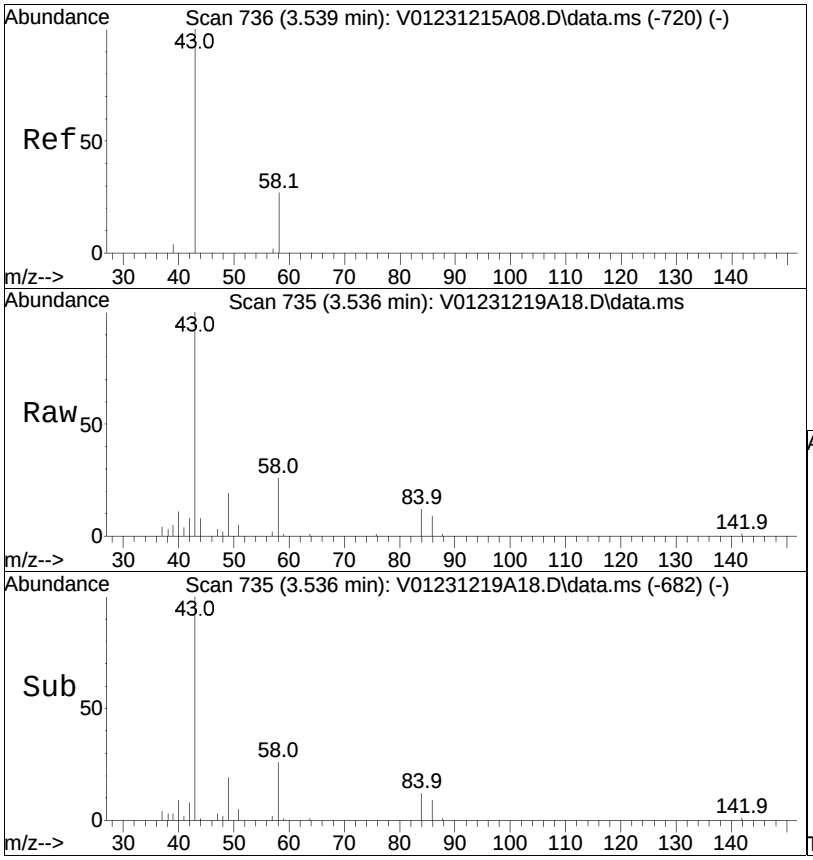


#15
Methylene chloride
Concen: 12.90 ug/L
RT: 3.486 min Scan# 717
Delta R.T. -0.003 min
Lab File: V01231219A18.D
Acq: 19 Dec 2023 12:53 pm

Tgt Ion: 84 Resp: 130367

Ion	Ratio	Lower	Upper
84	100		
86	66.0	41.7	86.7
49	154.4	89.1	185.1

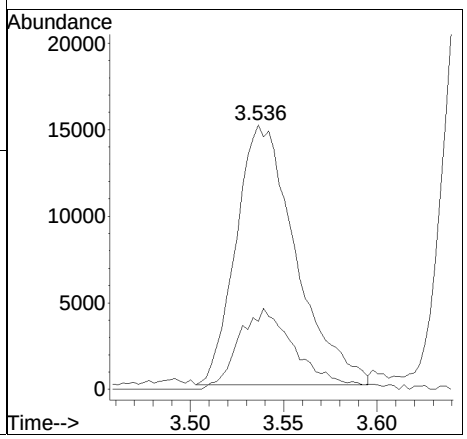


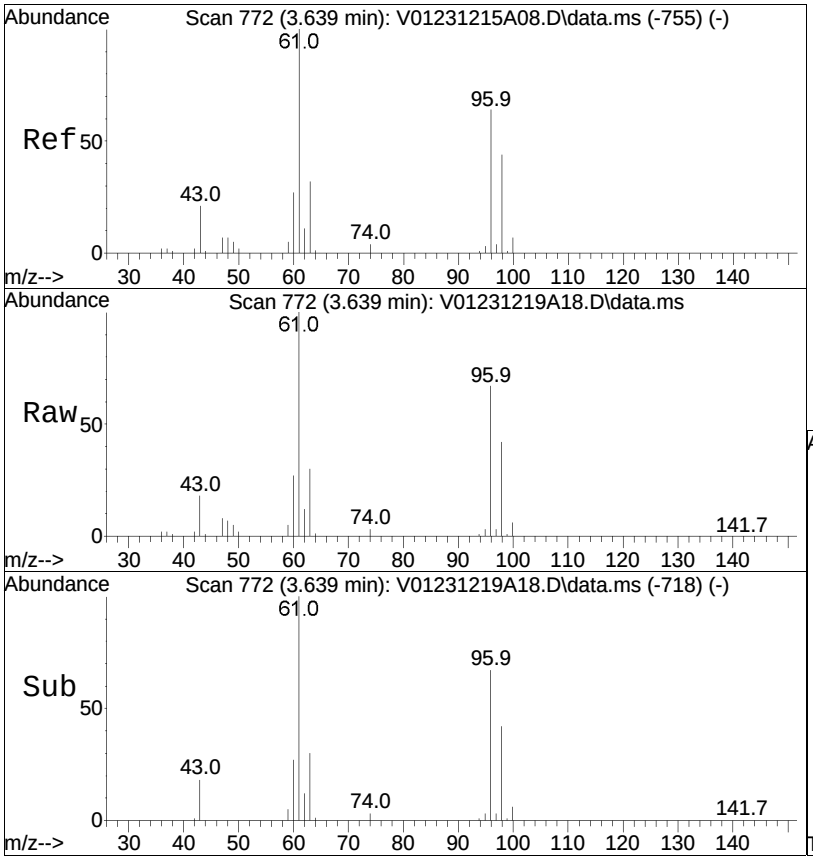


#17
Acetone
Concen: 16.57 ug/L
RT: 3.536 min Scan# 735
Delta R.T. -0.003 min
Lab File: V01231219A18.D
Acq: 19 Dec 2023 12:53 pm

Tgt Ion: 43 Resp: 33453

Ion	Ratio	Lower	Upper
43	100		
58	30.5	25.9	38.9

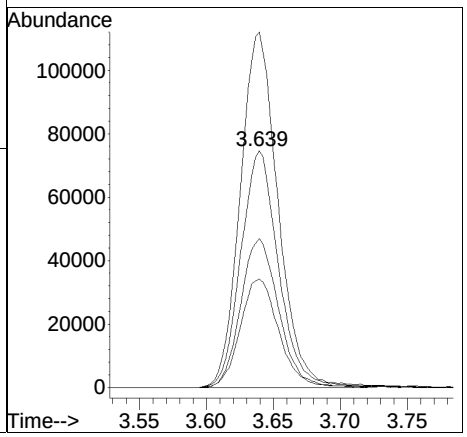


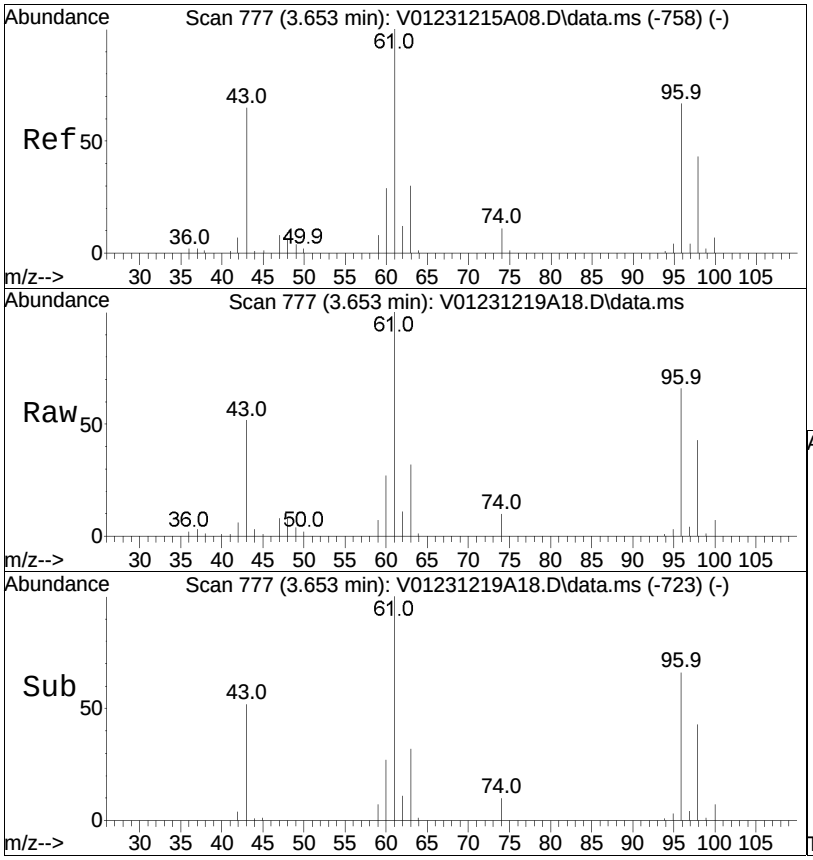


#18
trans-1,2-Dichloroethene
Concen: 13.97 ug/L
RT: 3.639 min Scan# 772
Delta R.T. 0.000 min
Lab File: V01231219A18.D
Acq: 19 Dec 2023 12:53 pm

Tgt Ion: 96 Resp: 145632

Ion	Ratio	Lower	Upper
96	100		
61	150.4	95.3	197.9
98	63.2	41.0	85.2
63	47.0	30.2	62.6

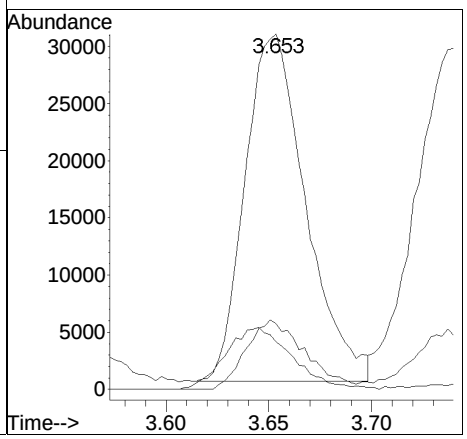


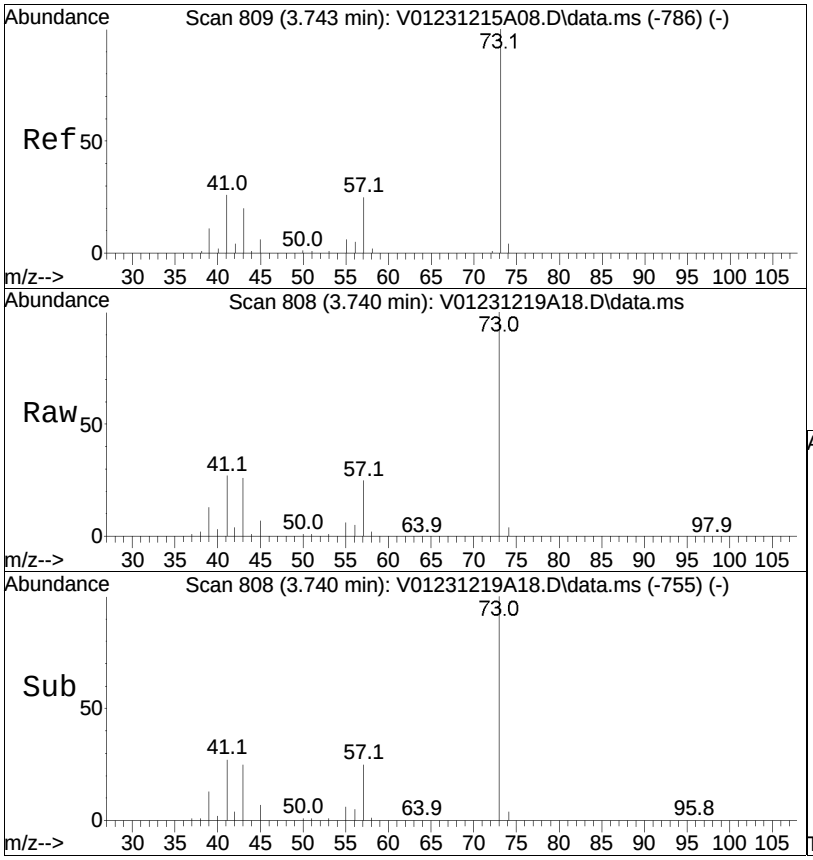


#19
Methyl acetate
Concen: 11.74 ug/L
RT: 3.653 min Scan# 777
Delta R.T. 0.000 min
Lab File: V01231219A18.D
Acq: 19 Dec 2023 12:53 pm

Tgt Ion: 43 Resp: 62431

Ion	Ratio	Lower	Upper
43	100		
74	19.4	18.2	27.2
59	19.5	18.2	27.2

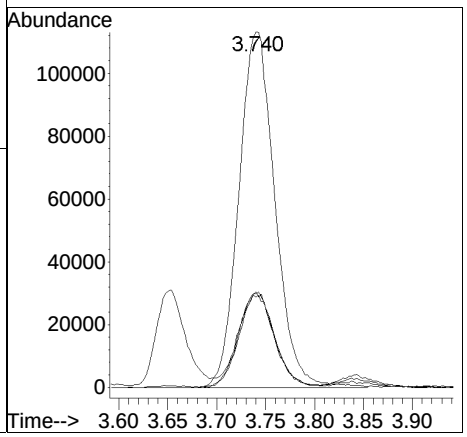


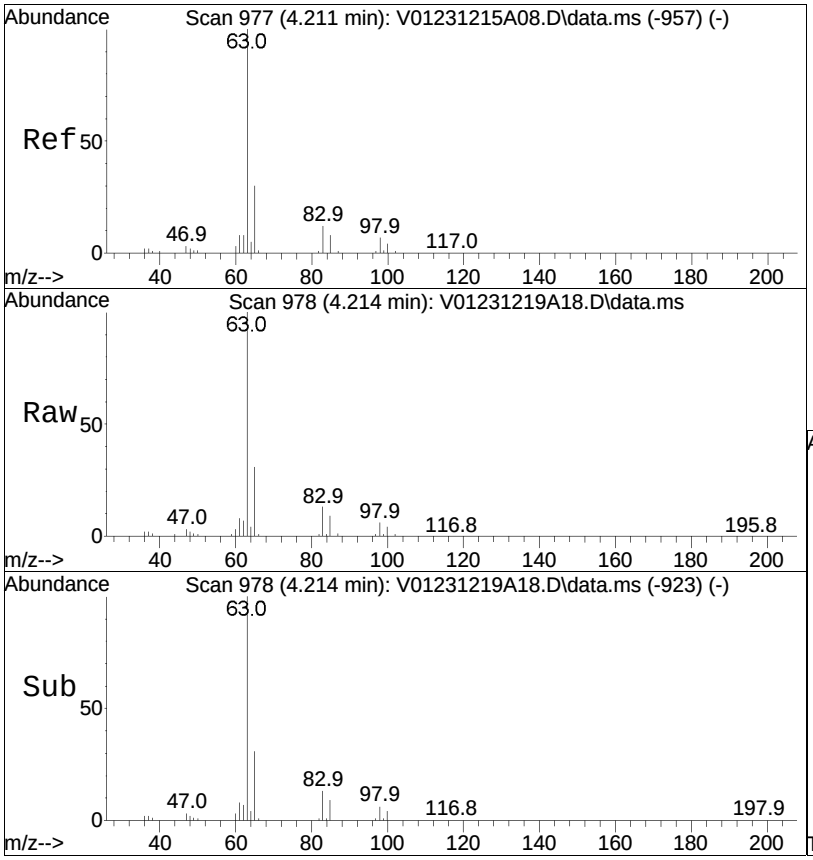


#20
Methyl tert-butyl ether
Concen: 12.23 ug/L
RT: 3.740 min Scan# 808
Delta R.T. -0.003 min
Lab File: V01231219A18.D
Acq: 19 Dec 2023 12:53 pm

Tgt Ion: 73 Resp: 290636

Ion	Ratio	Lower	Upper
73	100		
57	25.7	14.8	30.6
43	25.5	15.5	32.3
41	26.4	14.1	29.3

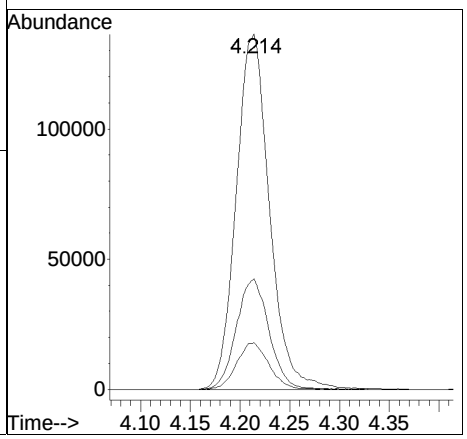


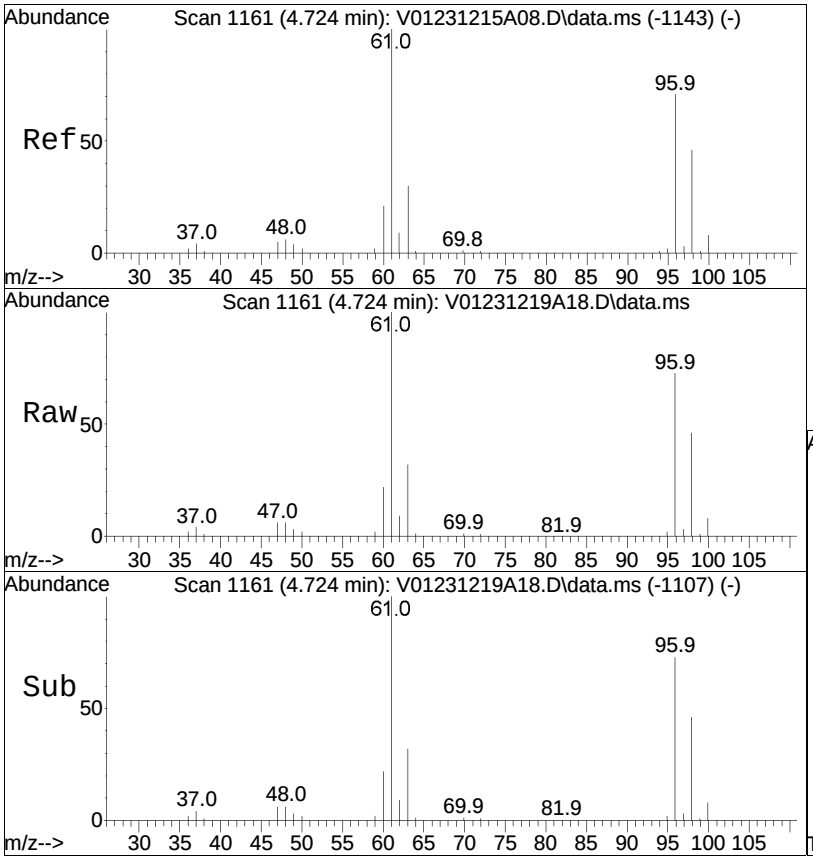


#23
1,1-Dichloroethane
Concen: 15.48 ug/L
RT: 4.214 min Scan# 978
Delta R.T. 0.003 min
Lab File: V01231219A18.D
Acq: 19 Dec 2023 12:53 pm

Tgt Ion: 63 Resp: 318179

Ion	Ratio	Lower	Upper
63	100		
65	30.5	10.9	50.9
83	12.7	0.0	33.0

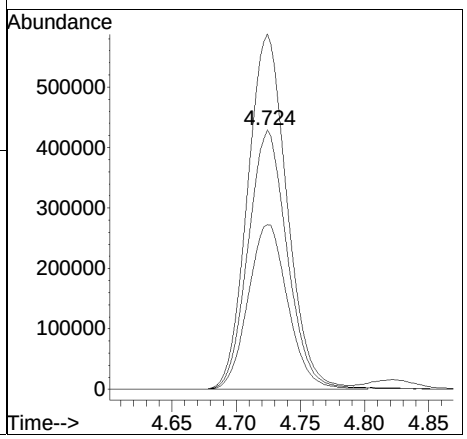


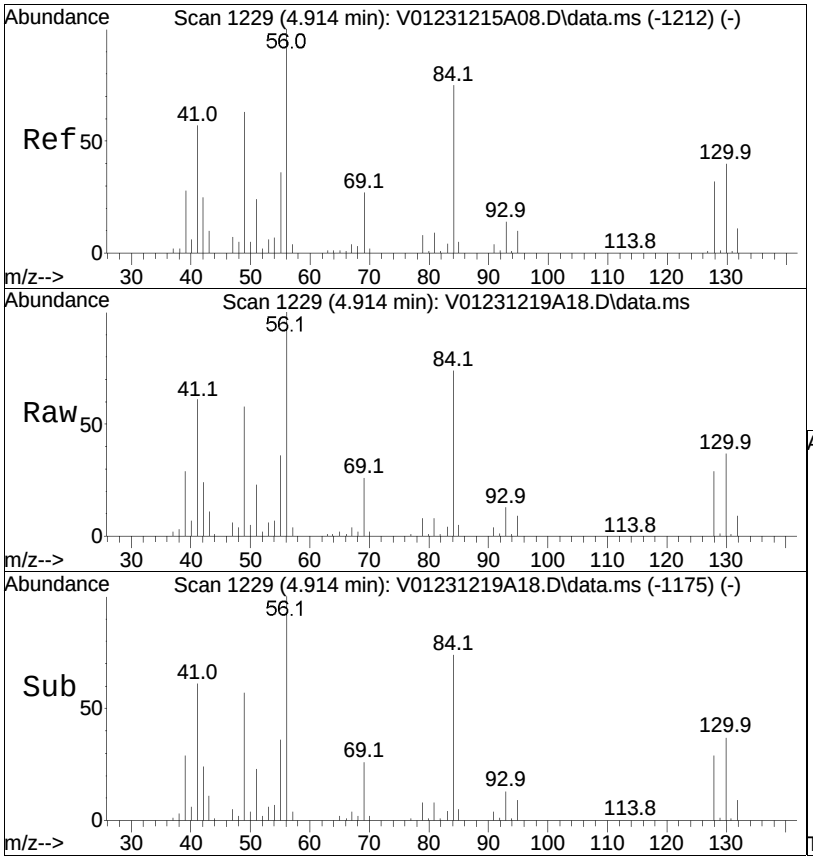


#28
cis-1,2-Dichloroethene
Concen: 78.80 ug/L
RT: 4.724 min Scan# 1161
Delta R.T. 0.000 min
Lab File: V01231219A18.D
Acq: 19 Dec 2023 12:53 pm

Tgt Ion: 96 Resp: 909871

Ion	Ratio	Lower	Upper
96	100		
61	138.1	105.8	158.6
98	64.5	51.1	76.7

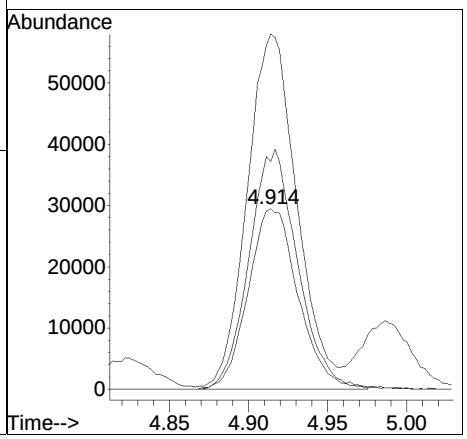


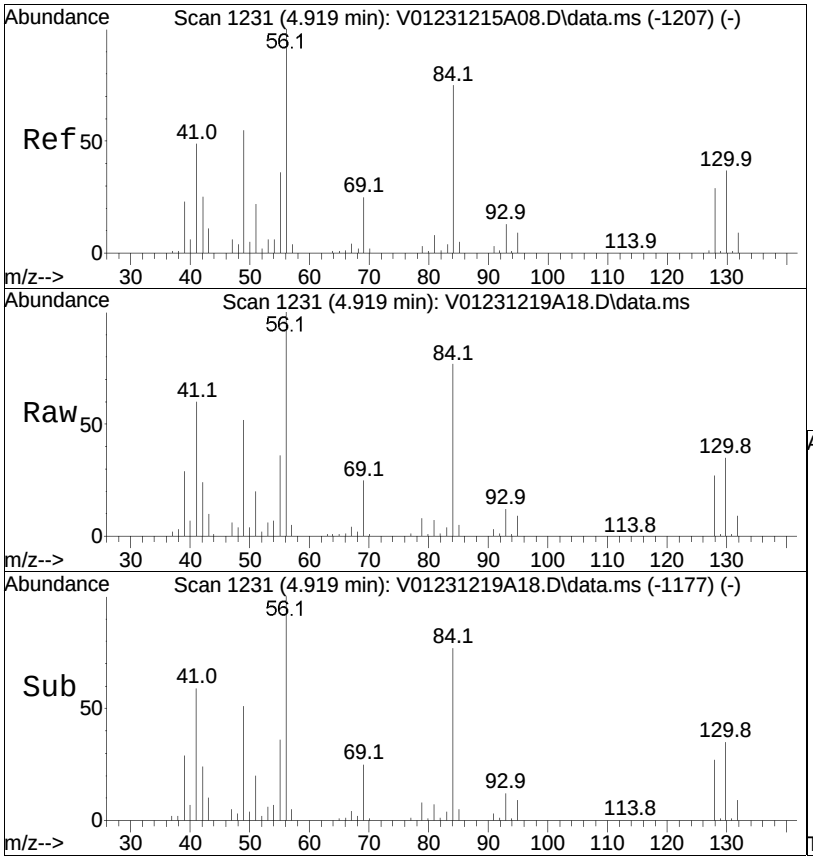


#30
Bromochloromethane
Concen: 12.59 ug/L
RT: 4.914 min Scan# 1229
Delta R.T. 0.000 min
Lab File: V01231219A18.D
Acq: 19 Dec 2023 12:53 pm

Tgt Ion:128 Resp: 64982

Ion	Ratio	Lower	Upper
128	100		
49	193.6	140.4	210.6
130	129.5	103.1	154.7

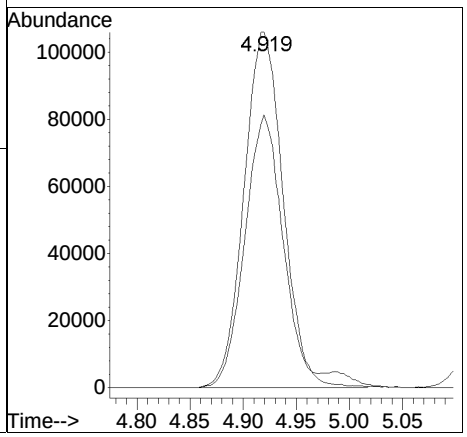


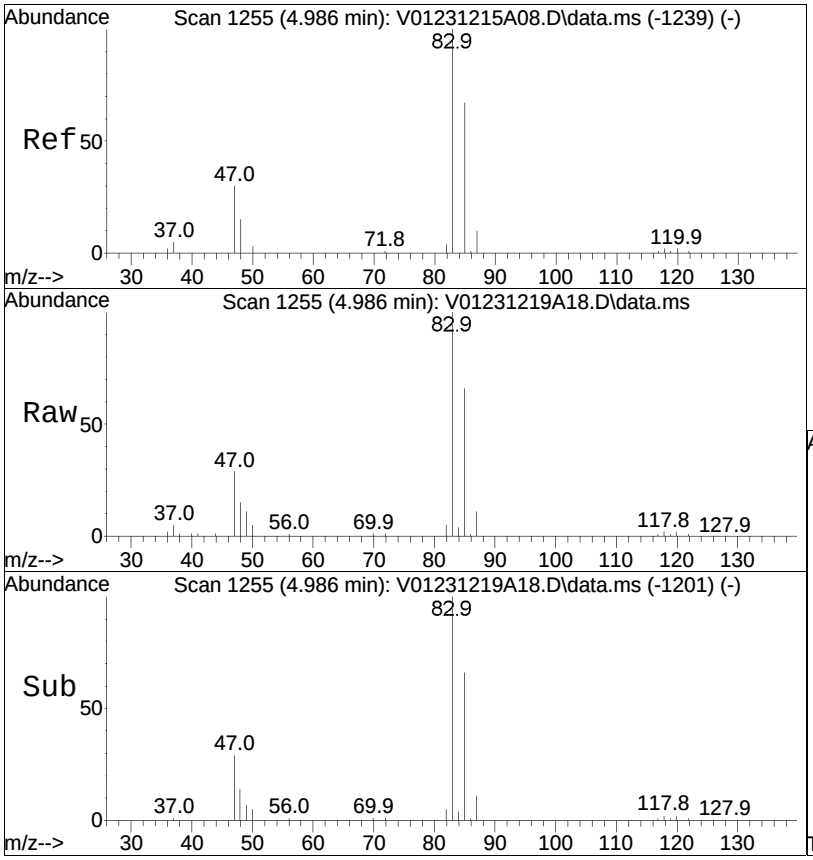


#31
Cyclohexane
Concen: 12.93 ug/L
RT: 4.919 min Scan# 1231
Delta R.T. 0.000 min
Lab File: V01231219A18.D
Acq: 19 Dec 2023 12:53 pm

Tgt Ion: 56 Resp: 271924

Ion	Ratio	Lower	Upper
56	100		
84	75.0	53.6	111.4

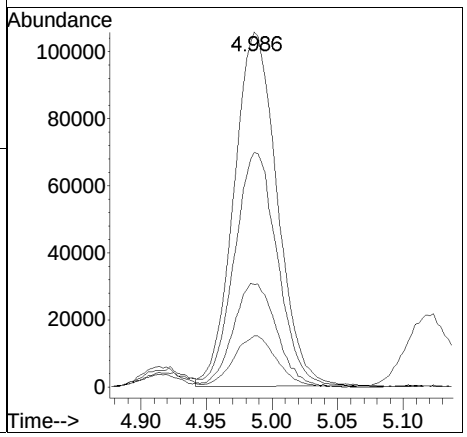


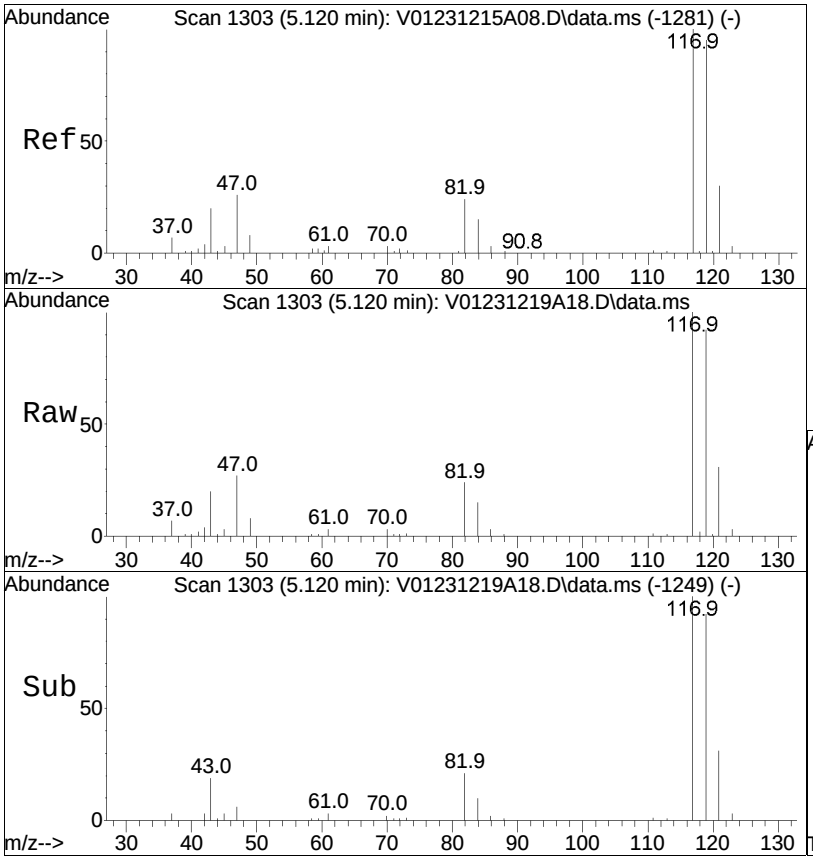


#32
Chloroform
Concen: 13.43 ug/L
RT: 4.986 min Scan# 1255
Delta R.T. 0.000 min
Lab File: V01231219A18.D
Acq: 19 Dec 2023 12:53 pm

Tgt Ion: 83 Resp: 242326

Ion	Ratio	Lower	Upper
83	100		
85	66.5	42.3	87.8
47	29.4	17.8	37.0
48	14.8	9.3	19.3

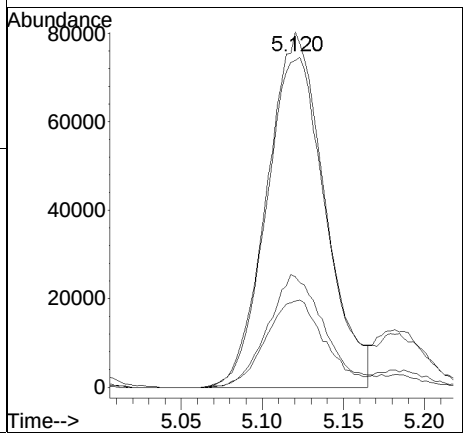


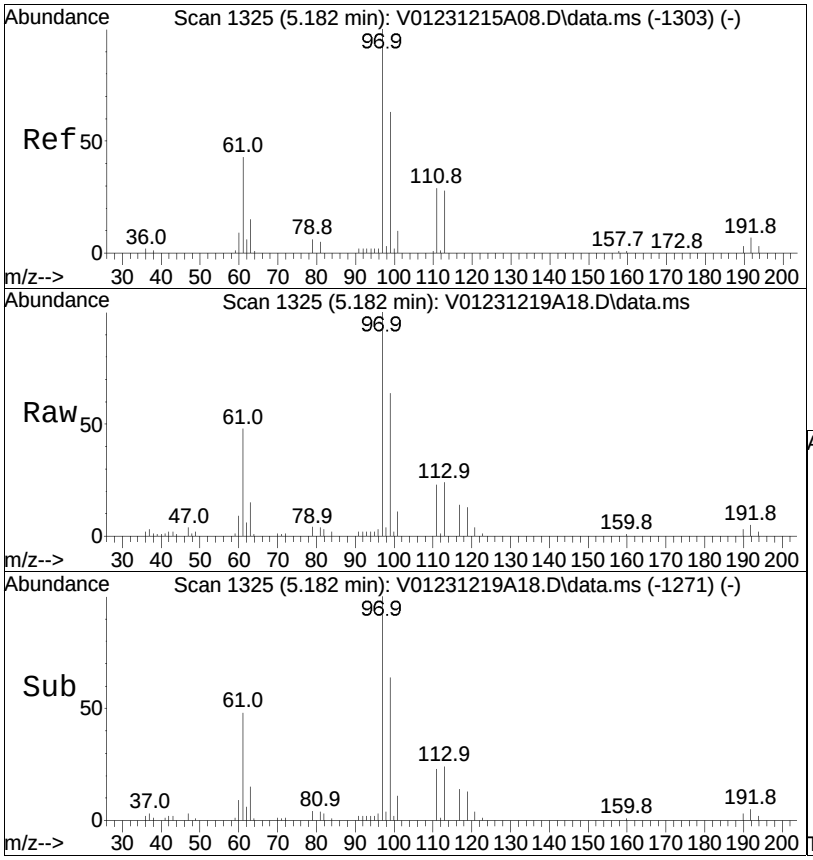


#34
Carbon tetrachloride
Concen: 14.11 ug/L
RT: 5.120 min Scan# 1303
Delta R.T. 0.000 min
Lab File: V01231219A18.D
Acq: 19 Dec 2023 12:53 pm

Tgt Ion:117 Resp: 199107

Ion	Ratio	Lower	Upper
117	100		
119	96.2	62.1	128.9
121	31.1	19.8	41.0
82	25.3	17.1	35.5

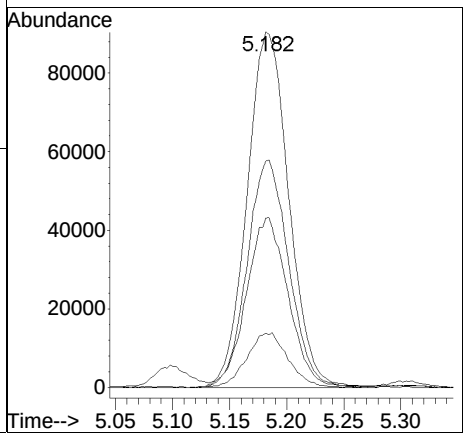


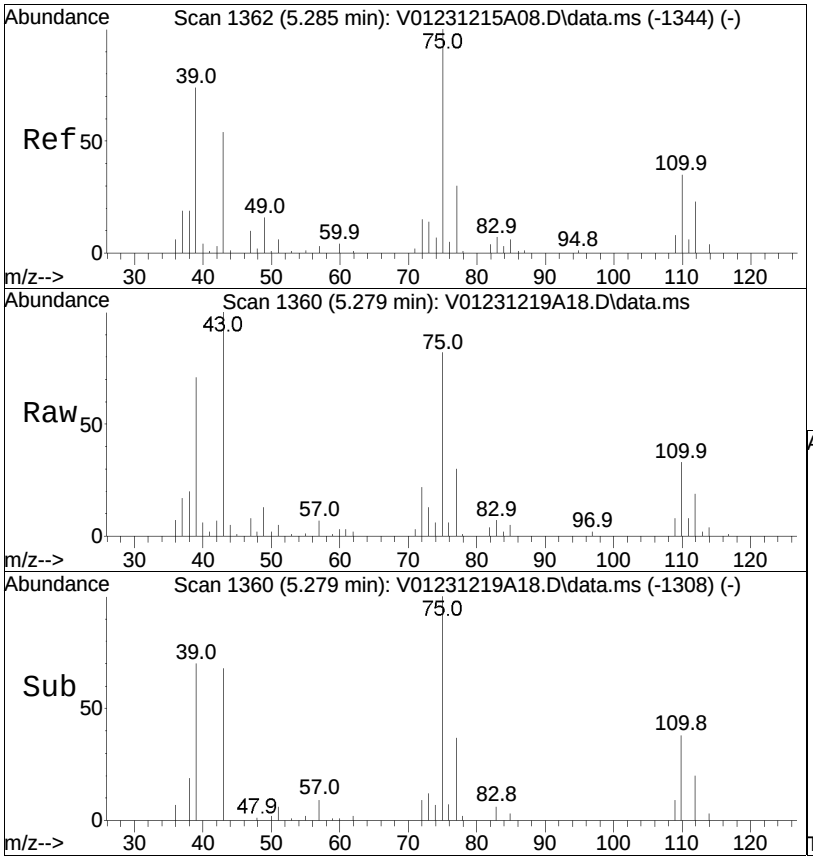


#37
1,1,1-Trichloroethane
Concen: 14.13 ug/L
RT: 5.182 min Scan# 1325
Delta R.T. 0.000 min
Lab File: V01231219A18.D
Acq: 19 Dec 2023 12:53 pm

Tgt Ion: 97 Resp: 230353

Ion	Ratio	Lower	Upper
97	100		
99	63.8	41.7	86.7
61	47.3	29.4	61.2
63	15.2	9.4	19.4

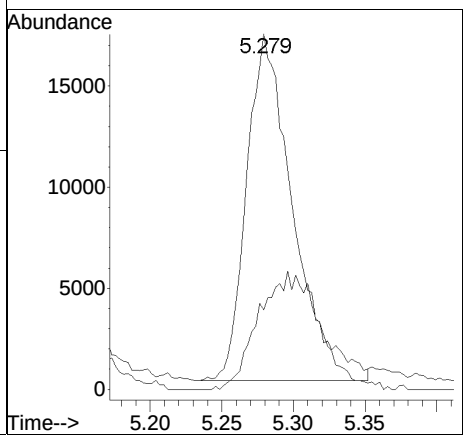


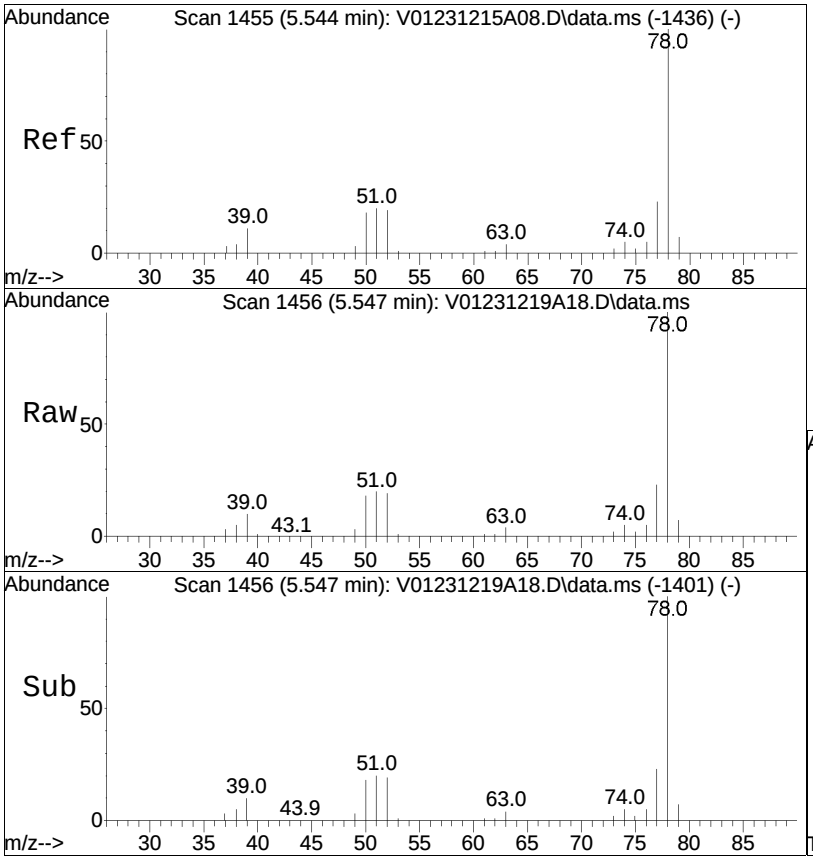


#39
2-Butanone
Concen: 12.09 ug/L
RT: 5.279 min Scan# 1360
Delta R.T. -0.006 min
Lab File: V01231219A18.D
Acq: 19 Dec 2023 12:53 pm

Tgt Ion: 43 Resp: 38867

Ion	Ratio	Lower	Upper
43	100		
72	43.9	45.8	68.6#

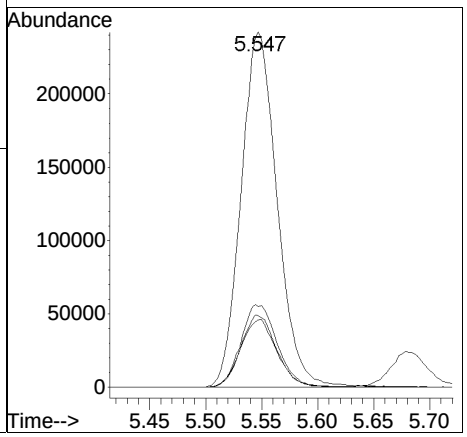


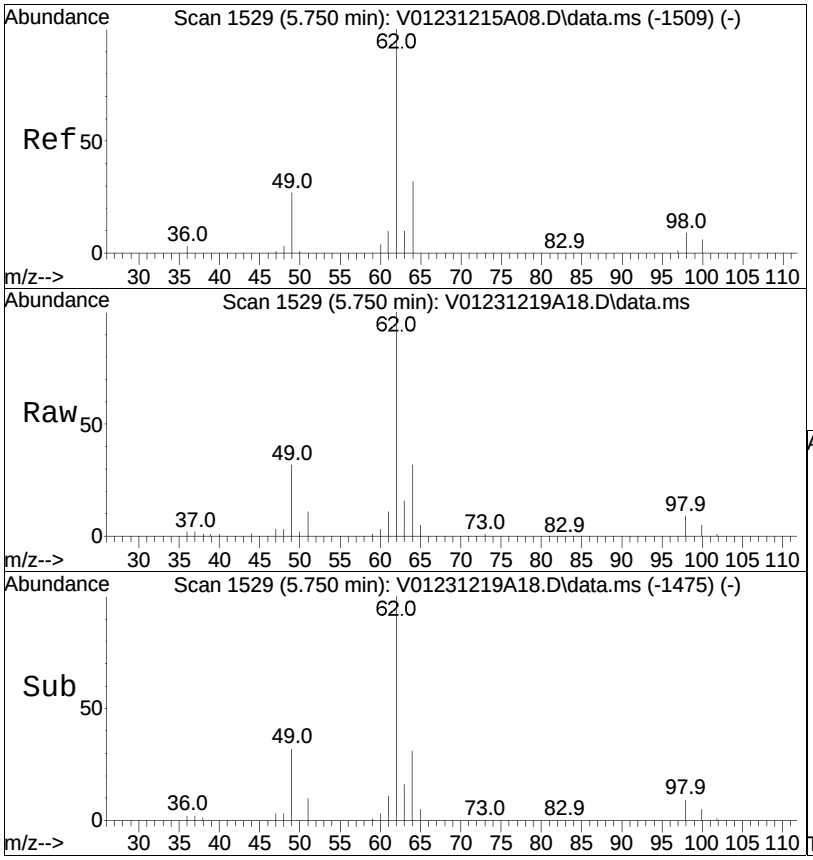


#41
Benzene
Concen: 13.50 ug/L
RT: 5.547 min Scan# 1456
Delta R.T. 0.003 min
Lab File: V01231219A18.D
Acq: 19 Dec 2023 12:53 pm

Tgt Ion: 78 Resp: 543225

Ion	Ratio	Lower	Upper
78	100		
77	23.6	15.7	32.5
51	20.3	11.6	24.2
52	19.2	10.9	22.5

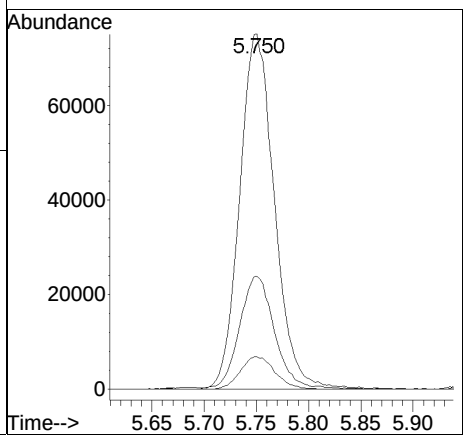


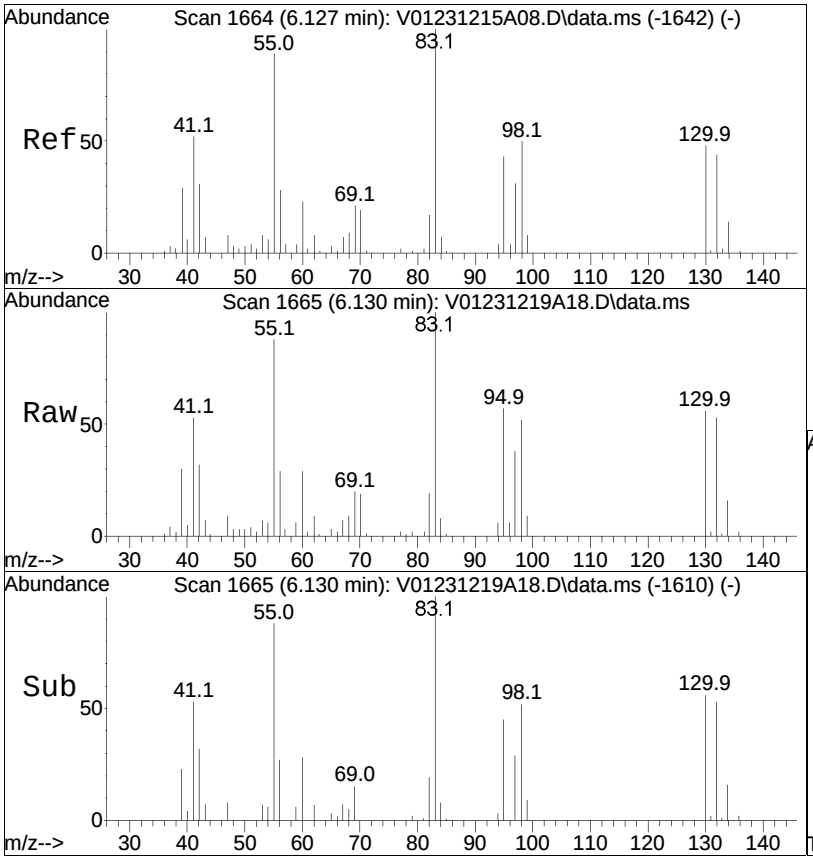


#44
1,2-Dichloroethane
Concen: 12.95 ug/L
RT: 5.750 min Scan# 1529
Delta R.T. 0.000 min
Lab File: V01231219A18.D
Acq: 19 Dec 2023 12:53 pm

Tgt Ion: 62 Resp: 174394

Ion	Ratio	Lower	Upper
62	100		
64	30.4	12.1	52.1
98	9.2	0.0	28.8

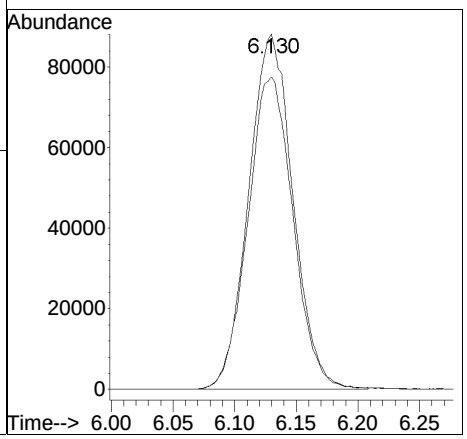


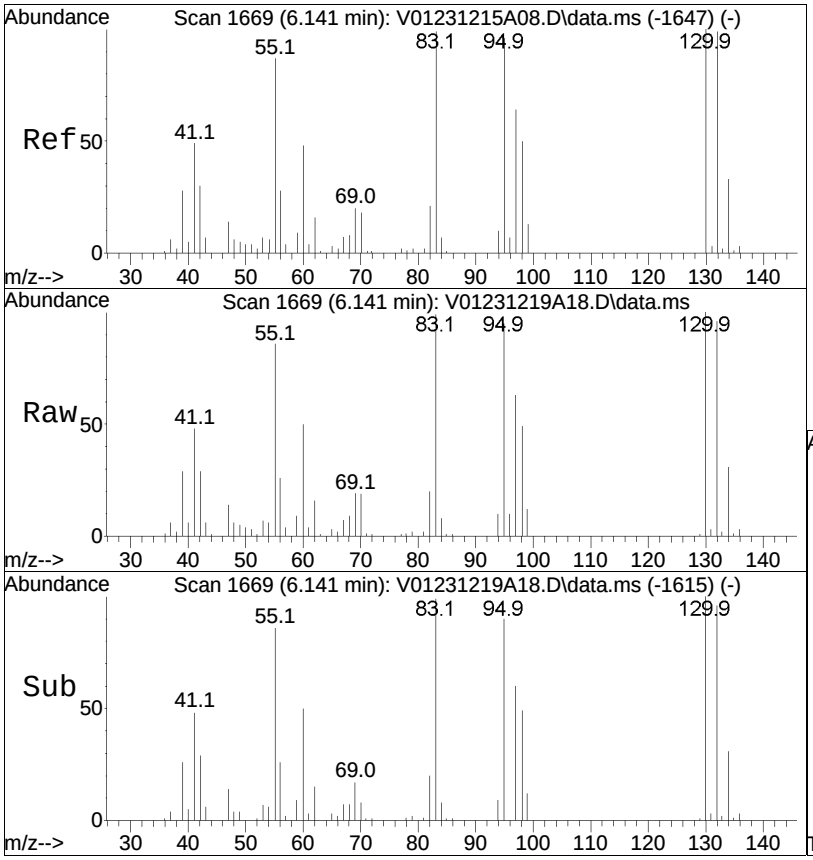


#47
Methyl cyclohexane
Concen: 12.43 ug/L
RT: 6.130 min Scan# 1665
Delta R.T. 0.003 min
Lab File: V01231219A18.D
Acq: 19 Dec 2023 12:53 pm

Tgt Ion: 83 Resp: 220442

Ion	Ratio	Lower	Upper
83	100		
55	89.6	64.6	96.8

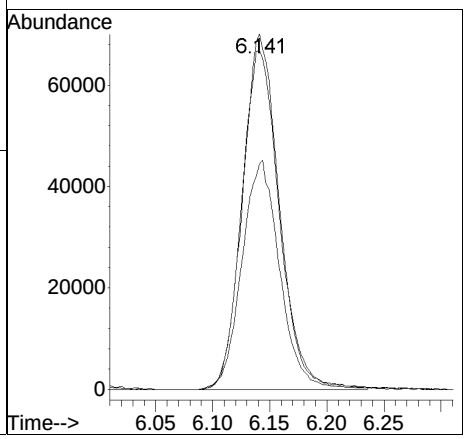


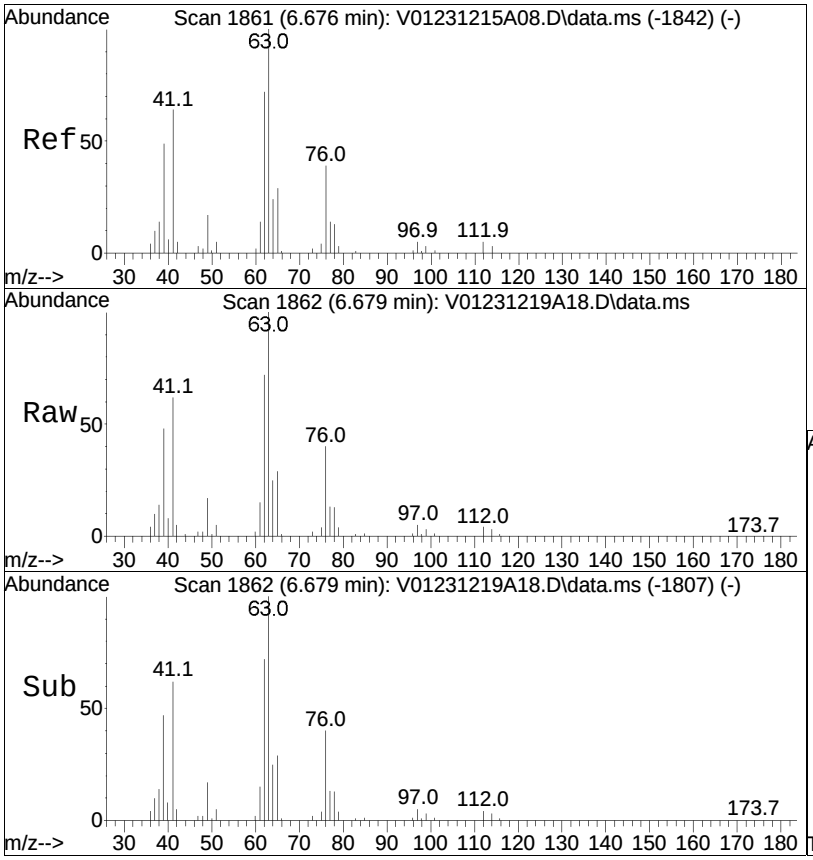


#48
Trichloroethene
Concen: 13.52 ug/L
RT: 6.141 min Scan# 1669
Delta R.T. 0.000 min
Lab File: V01231219A18.D
Acq: 19 Dec 2023 12:53 pm

Tgt Ion: 95 Resp: 153044

Ion	Ratio	Lower	Upper
95	100		
97	68.0	54.4	81.6
130	102.6	80.6	120.8

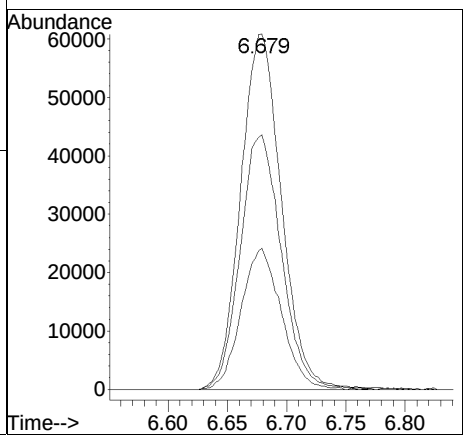


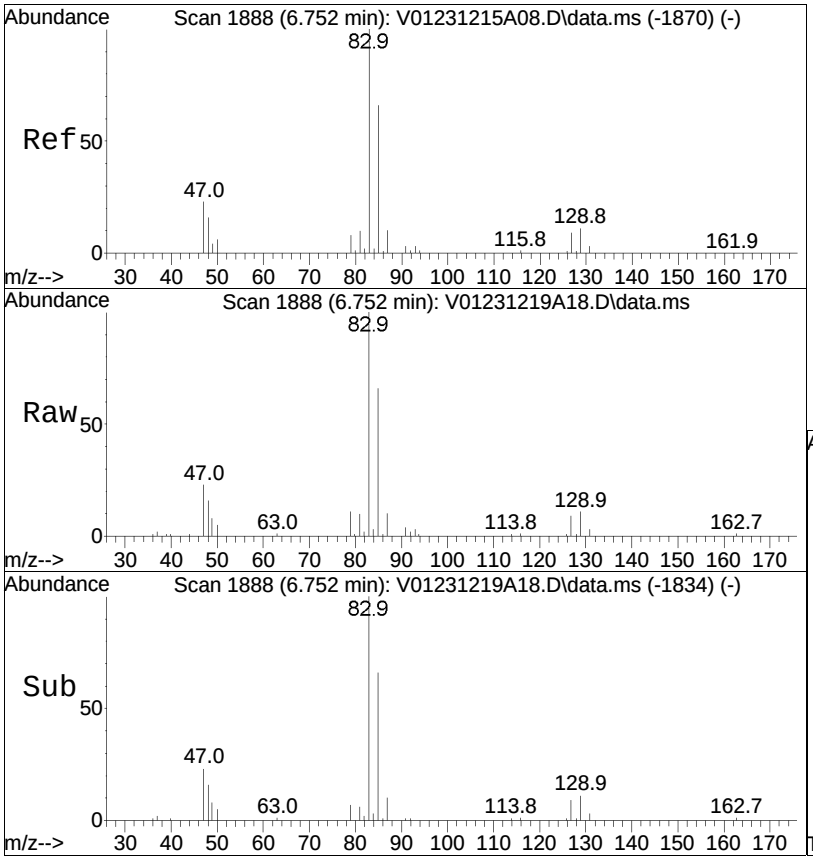


#51
1,2-Dichloropropane
Concen: 13.04 ug/L
RT: 6.679 min Scan# 1862
Delta R.T. 0.003 min
Lab File: V01231219A18.D
Acq: 19 Dec 2023 12:53 pm

Tgt Ion: 63 Resp: 145671

Ion	Ratio	Lower	Upper
63	100		
62	72.2	57.2	85.8
76	39.1	33.6	50.4

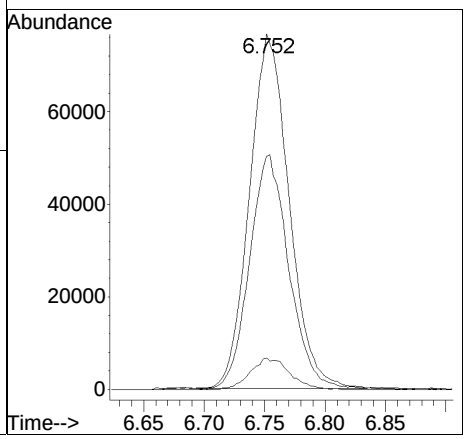


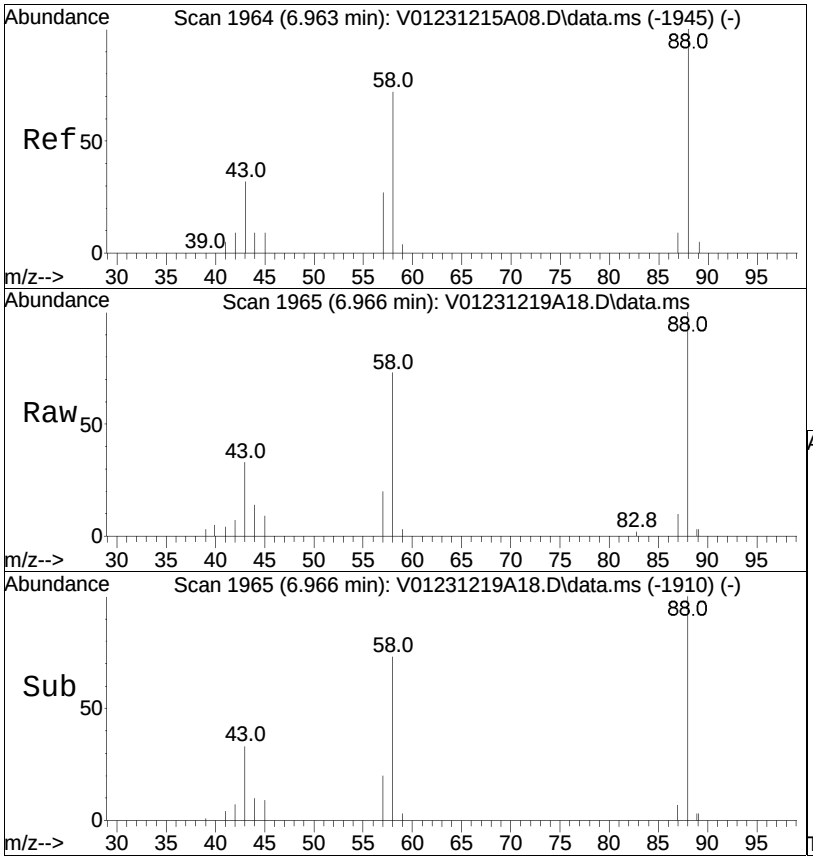


#54
Bromodichloromethane
Concen: 12.73 ug/L
RT: 6.752 min Scan# 1888
Delta R.T. 0.000 min
Lab File: V01231219A18.D
Acq: 19 Dec 2023 12:53 pm

Tgt Ion: 83 Resp: 174036

Ion	Ratio	Lower	Upper
83	100		
85	66.4	52.2	78.4
127	8.7	6.9	10.3

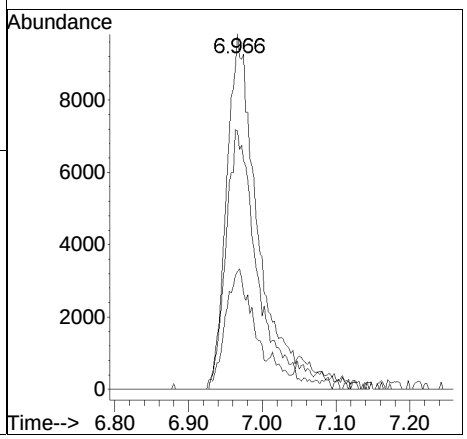


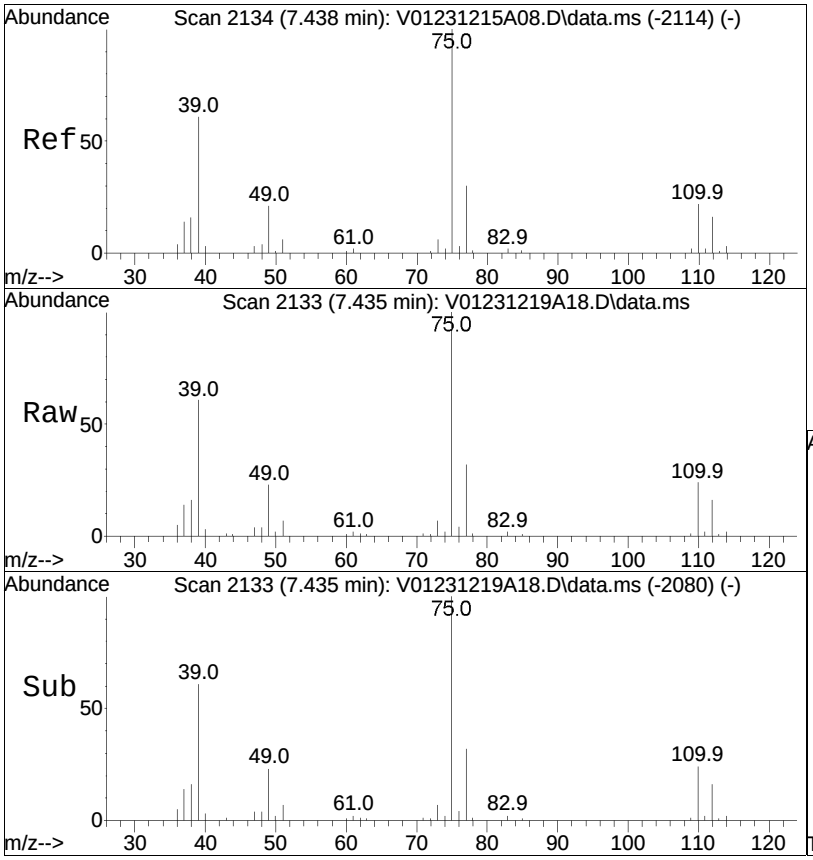


#57
1,4-Dioxane
Concen: 472.60 ug/L M1
RT: 6.966 min Scan# 1965
Delta R.T. 0.003 min
Lab File: V01231219A18.D
Acq: 19 Dec 2023 12:53 pm

Tgt Ion: 88 Resp: 30456

Ion	Ratio	Lower	Upper
88	100		
58	68.5	54.8	82.2
43	28.1	29.3	43.9#

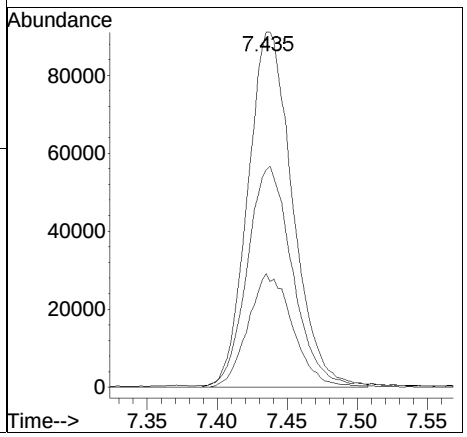


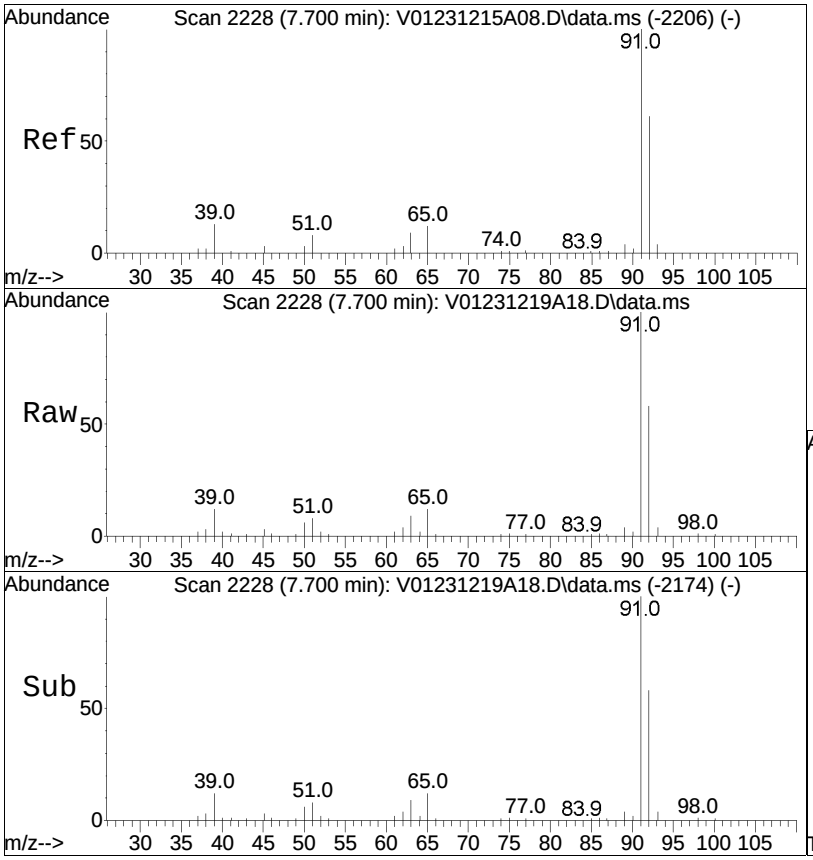


#58
cis-1,3-Dichloropropene
Concen: 12.70 ug/L
RT: 7.435 min Scan# 2133
Delta R.T. -0.003 min
Lab File: V01231219A18.D
Acq: 19 Dec 2023 12:53 pm

Tgt Ion: 75 Resp: 203410

Ion	Ratio	Lower	Upper
75	100		
77	32.0	25.1	37.7
39	61.4	42.6	63.8

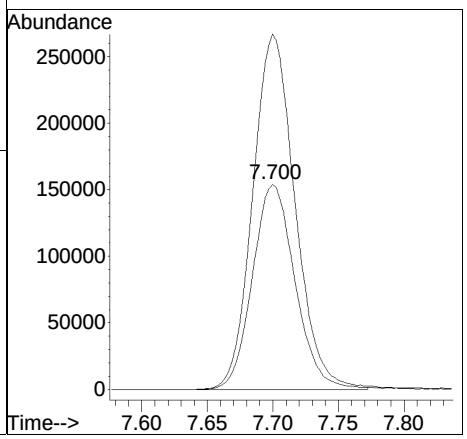


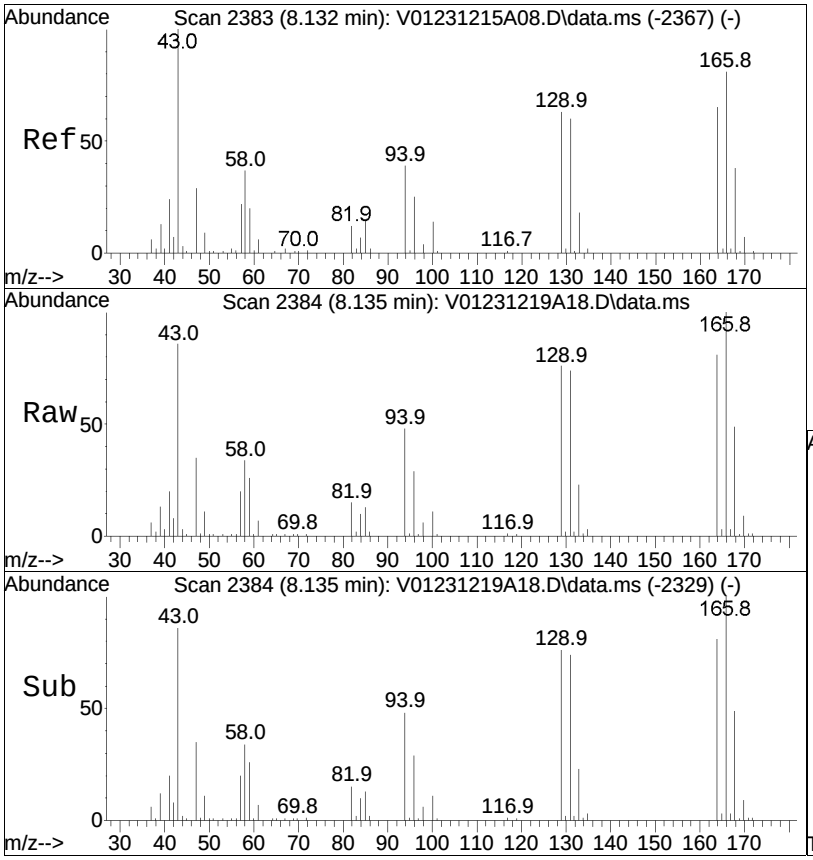


#61
Toluene
Concen: 12.56 ug/L
RT: 7.700 min Scan# 2228
Delta R.T. 0.000 min
Lab File: V01231219A18.D
Acq: 19 Dec 2023 12:53 pm

Tgt Ion: 92 Resp: 347853

Ion	Ratio	Lower	Upper
92	100		
91	173.0	137.5	206.3

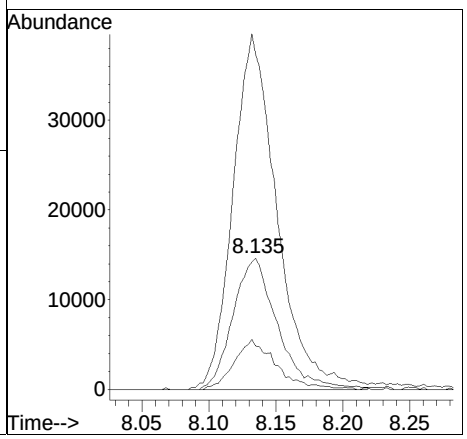


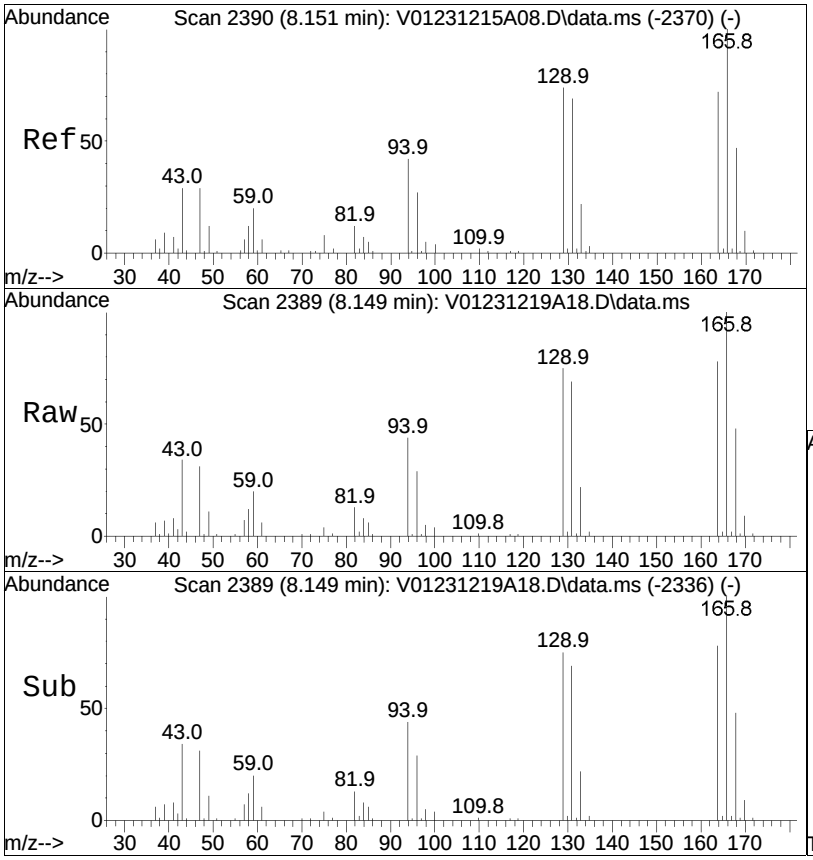


#62
4-Methyl-2-pentanone
Concen: 11.80 ug/L
RT: 8.135 min Scan# 2384
Delta R.T. 0.003 min
Lab File: V01231219A18.D
Acq: 19 Dec 2023 12:53 pm

Tgt Ion: 58 Resp: 33786

Ion	Ratio	Lower	Upper
58	100		
100	35.6	31.8	47.6
43	268.9	212.5	318.7

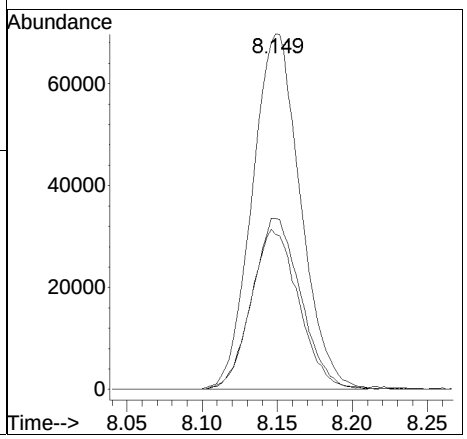


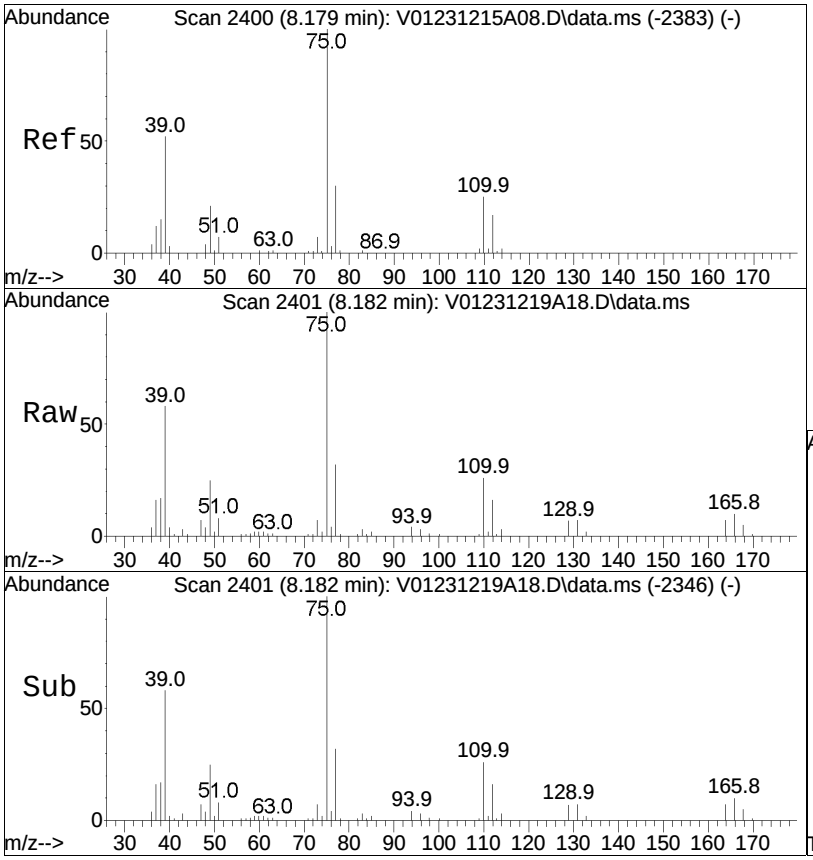


#63
Tetrachloroethene
Concen: 12.72 ug/L
RT: 8.149 min Scan# 2389
Delta R.T. -0.003 min
Lab File: V01231219A18.D
Acq: 19 Dec 2023 12:53 pm

Tgt Ion:166 Resp: 156085

Ion	Ratio	Lower	Upper
166	100		
168	48.2	27.4	67.4
94	44.5	24.8	64.8

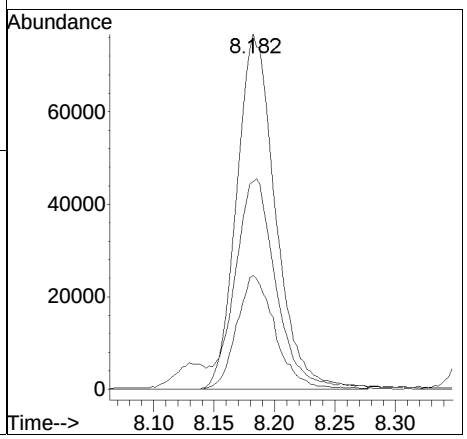


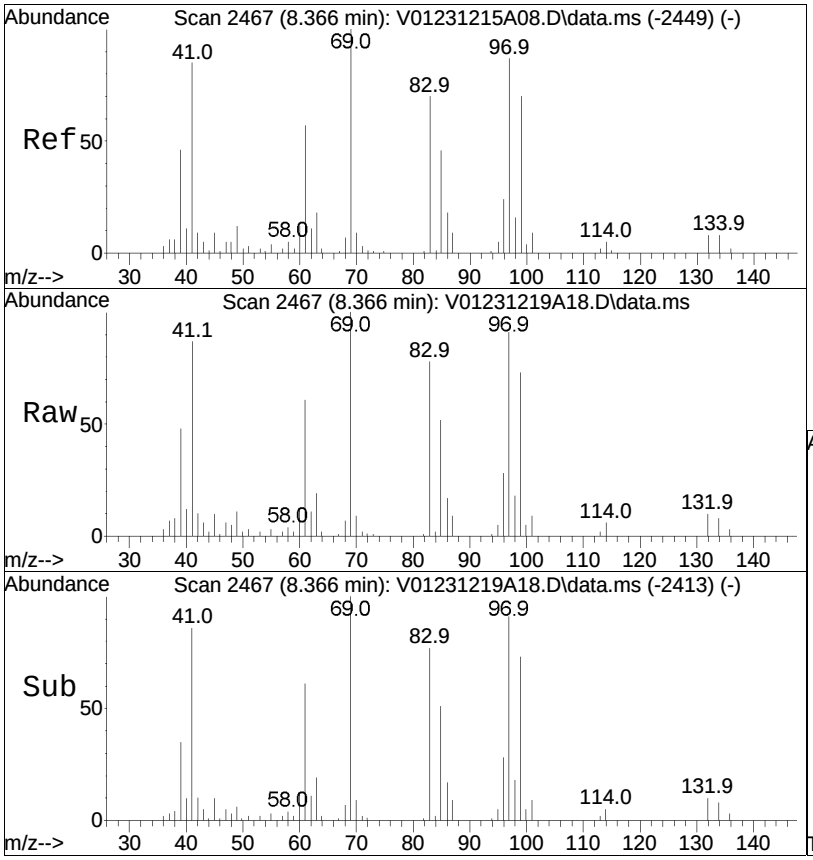


#65
trans-1,3-Dichloropropene
Concen: 11.84 ug/L
RT: 8.182 min Scan# 2401
Delta R.T. 0.003 min
Lab File: V01231219A18.D
Acq: 19 Dec 2023 12:53 pm

Tgt Ion: 75 Resp: 172152

Ion	Ratio	Lower	Upper
75	100		
77	31.7	11.8	51.8
39	58.6	30.2	70.2

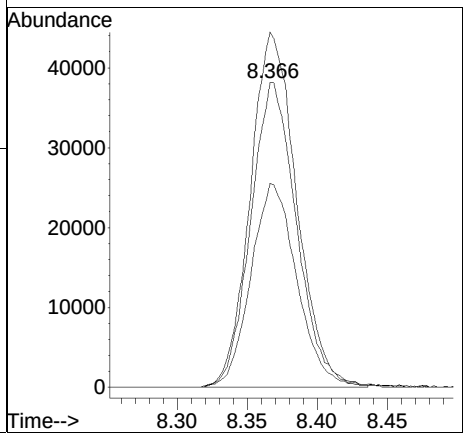


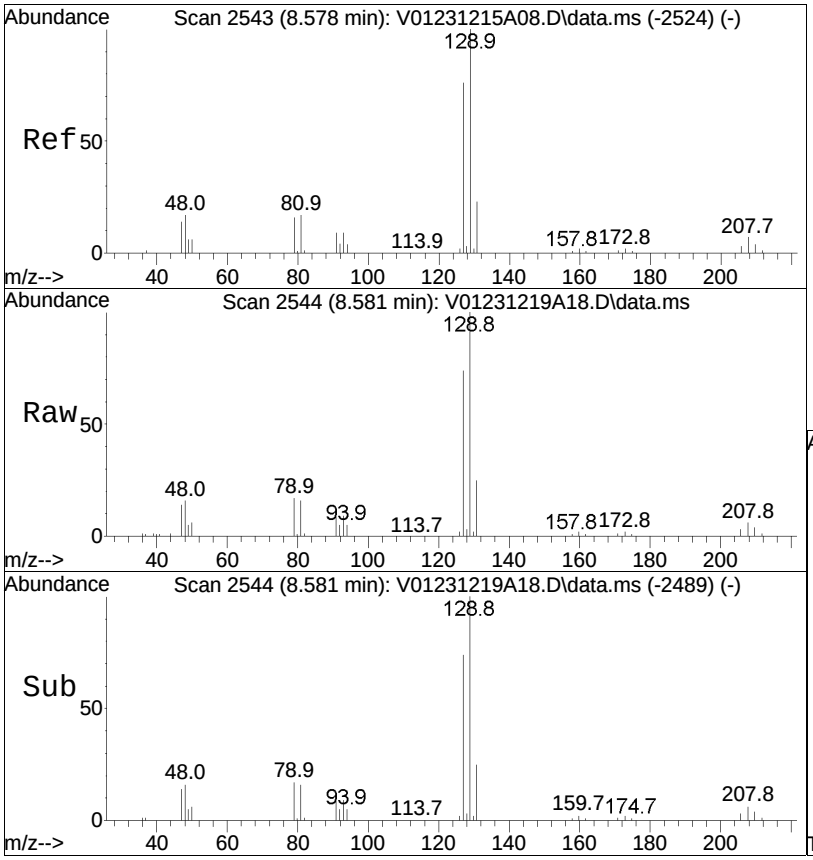


#68
1,1,2-Trichloroethane
Concen: 12.29 ug/L
RT: 8.366 min Scan# 2467
Delta R.T. 0.000 min
Lab File: V01231219A18.D
Acq: 19 Dec 2023 12:53 pm

Tgt Ion: 83 Resp: 86738

Ion	Ratio	Lower	Upper
83	100		
97	118.8	96.7	136.7
85	67.5	45.3	85.3

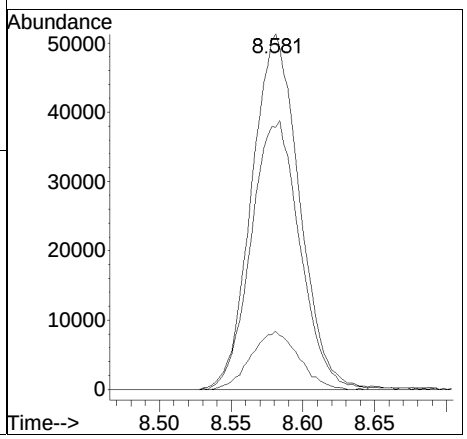


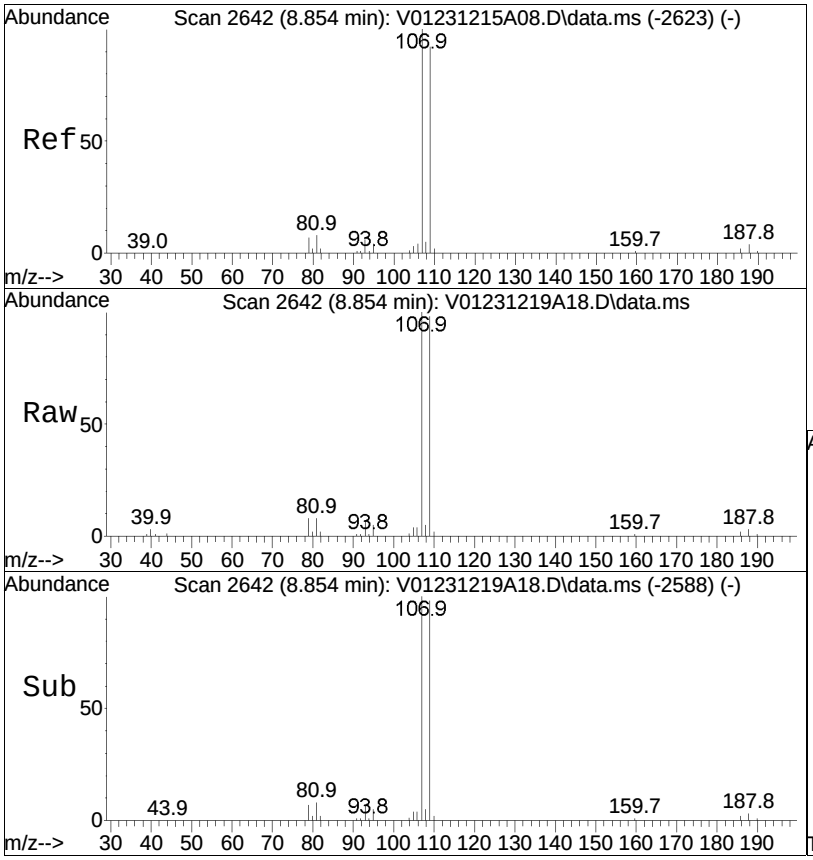


#69
Chlorodibromomethane
Concen: 11.56 ug/L
RT: 8.581 min Scan# 2544
Delta R.T. 0.003 min
Lab File: V01231219A18.D
Acq: 19 Dec 2023 12:53 pm

Tgt Ion:129 Resp: 118560

Ion	Ratio	Lower	Upper
129	100		
81	16.4	0.0	37.9
127	77.5	56.6	96.6

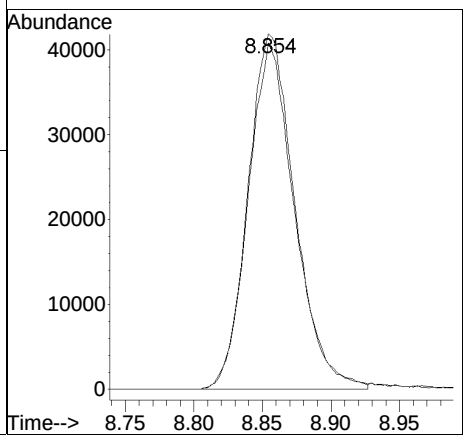


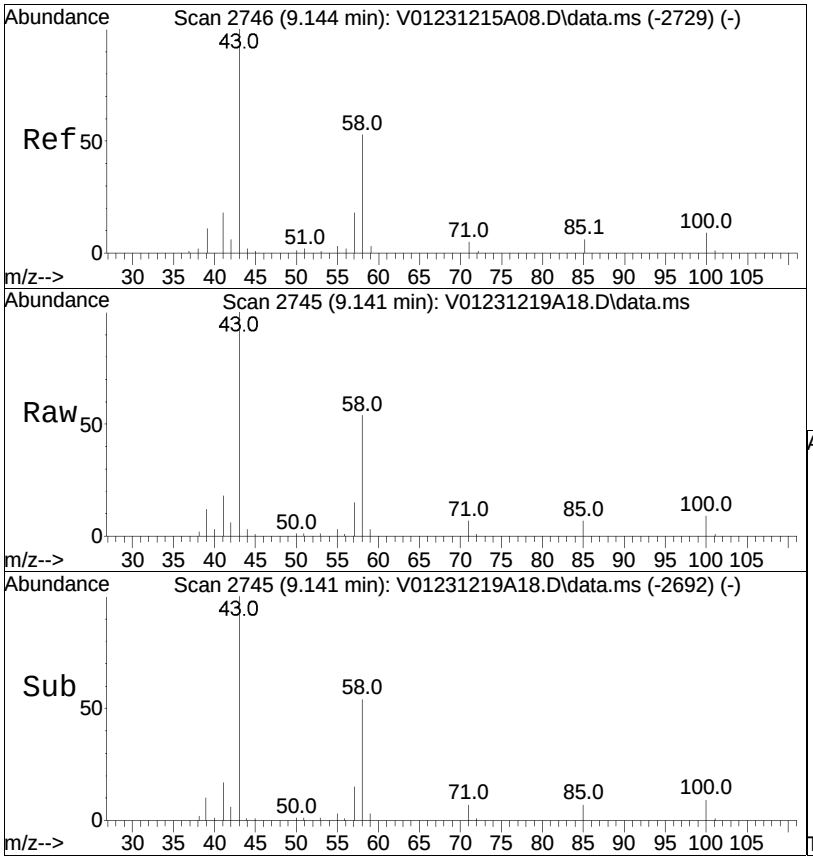


#71
1,2-Dibromoethane
Concen: 11.95 ug/L
RT: 8.854 min Scan# 2642
Delta R.T. 0.000 min
Lab File: V01231219A18.D
Acq: 19 Dec 2023 12:53 pm

Tgt Ion:107 Resp: 100344

Ion	Ratio	Lower	Upper
107	100		
109	96.2	75.6	113.4

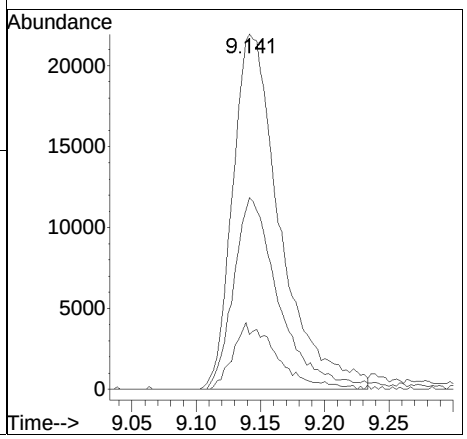


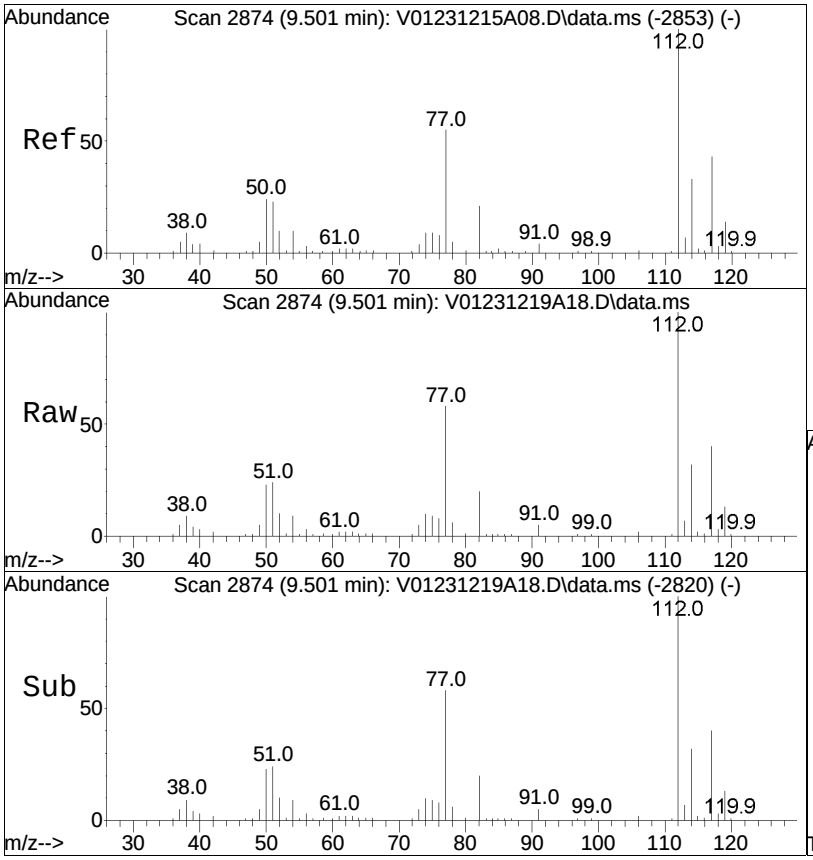


#72
2-Hexanone
Concen: 10.56 ug/L
RT: 9.141 min Scan# 2745
Delta R.T. -0.003 min
Lab File: V01231219A18.D
Acq: 19 Dec 2023 12:53 pm

Tgt Ion: 43 Resp: 56561

Ion	Ratio	Lower	Upper
43	100		
58	50.5	40.8	61.2
57	17.3	14.2	21.4

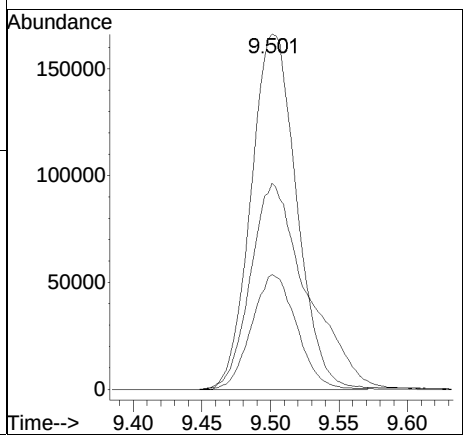


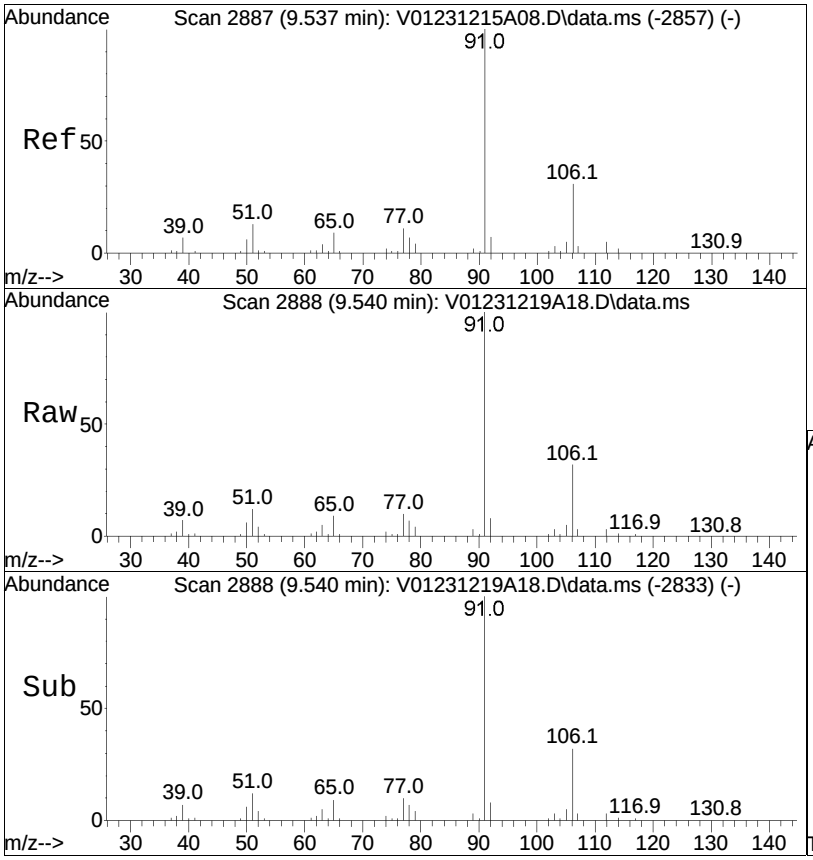


#73
Chlorobenzene
Concen: 12.24 ug/L
RT: 9.501 min Scan# 2874
Delta R.T. 0.000 min
Lab File: V01231219A18.D
Acq: 19 Dec 2023 12:53 pm

Tgt Ion:112 Resp: 384507

Ion	Ratio	Lower	Upper
112	100		
77	72.3	59.8	89.6
114	32.0	25.4	38.2

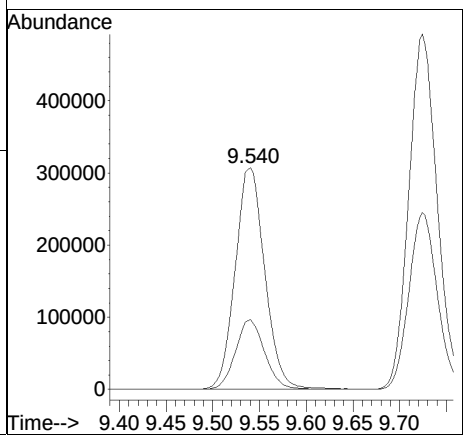


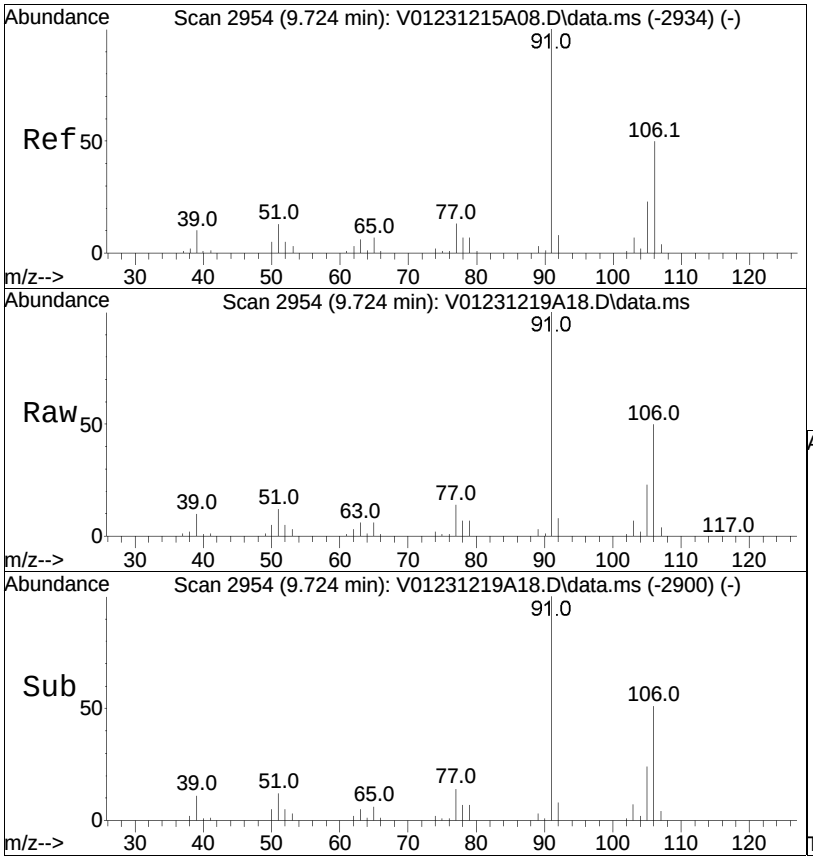


#74
Ethylbenzene
Concen: 12.69 ug/L
RT: 9.540 min Scan# 2888
Delta R.T. 0.003 min
Lab File: V01231219A18.D
Acq: 19 Dec 2023 12:53 pm

Tgt Ion: 91 Resp: 676043

Ion	Ratio	Lower	Upper
91	100		
106	31.2	24.7	37.1

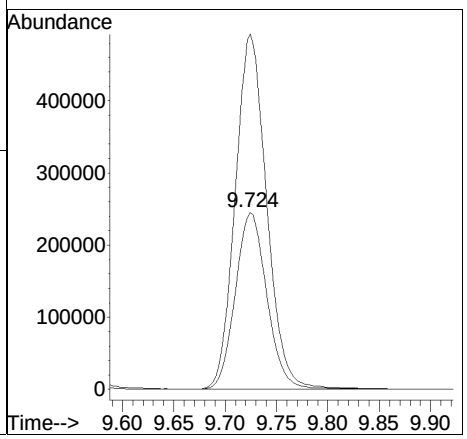


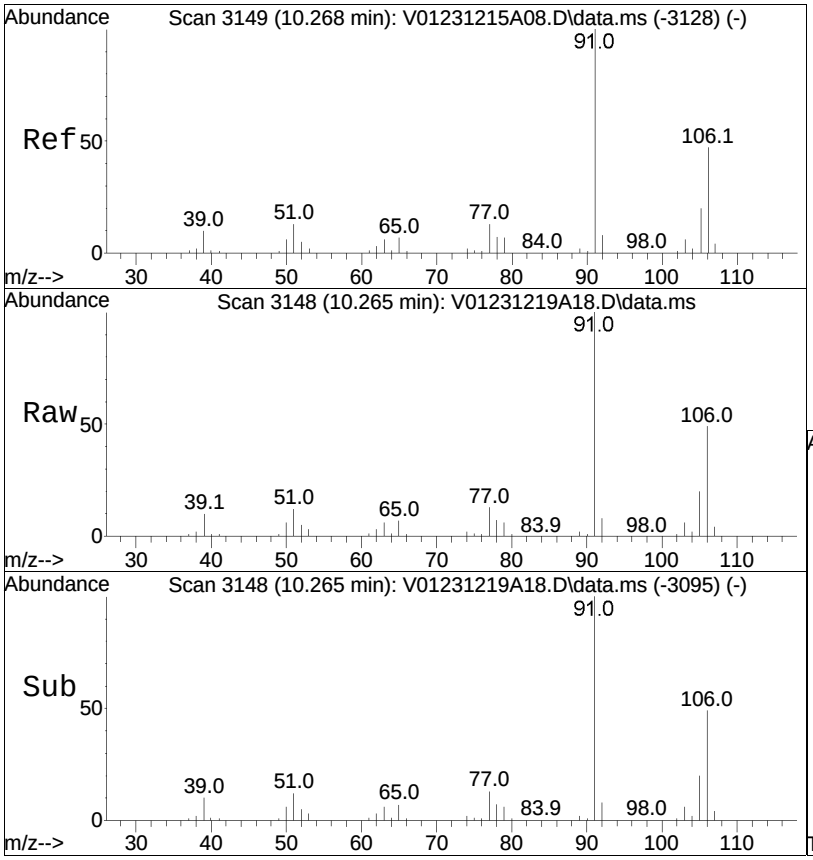


#76
p/m Xylene
Concen: 25.29 ug/L
RT: 9.724 min Scan# 2954
Delta R.T. 0.000 min
Lab File: V01231219A18.D
Acq: 19 Dec 2023 12:53 pm

Tgt Ion:106 Resp: 525961

Ion	Ratio	Lower	Upper
106	100		
91	198.7	162.9	244.3

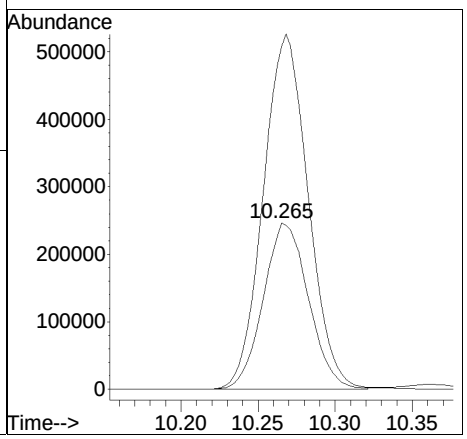


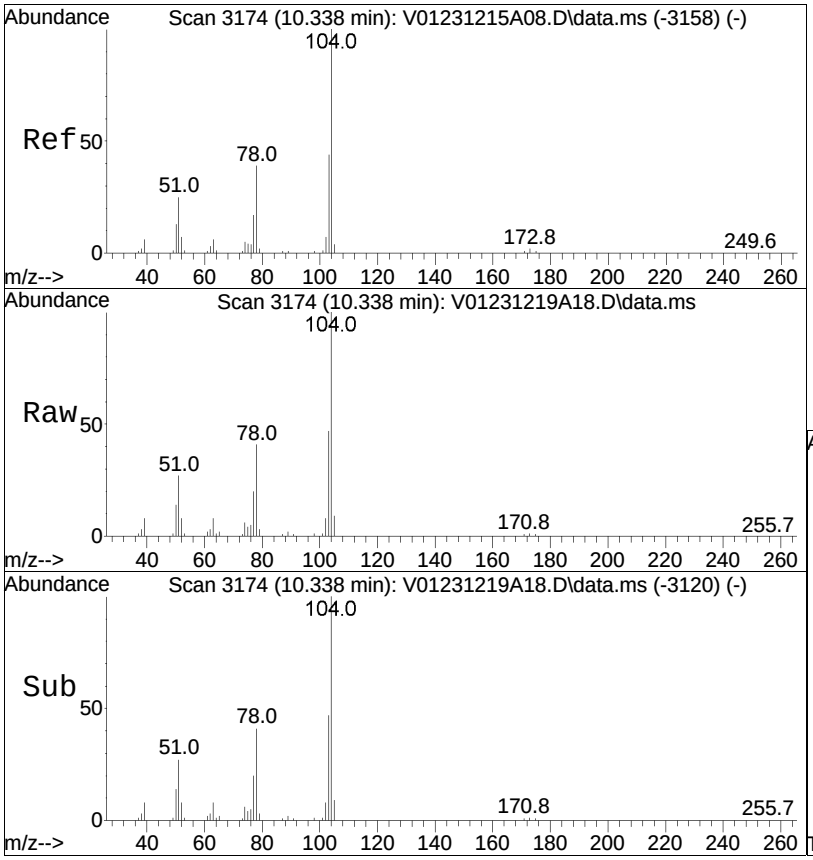


#77
o Xylene
Concen: 24.81 ug/L
RT: 10.265 min Scan# 3148
Delta R.T. -0.003 min
Lab File: V01231219A18.D
Acq: 19 Dec 2023 12:53 pm

Tgt Ion:106 Resp: 501651

Ion	Ratio	Lower	Upper
106	100		
91	212.6	171.2	256.8

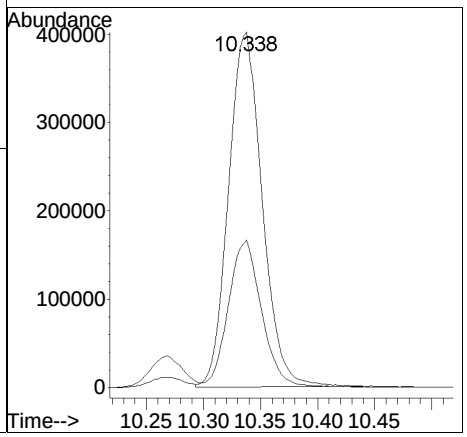


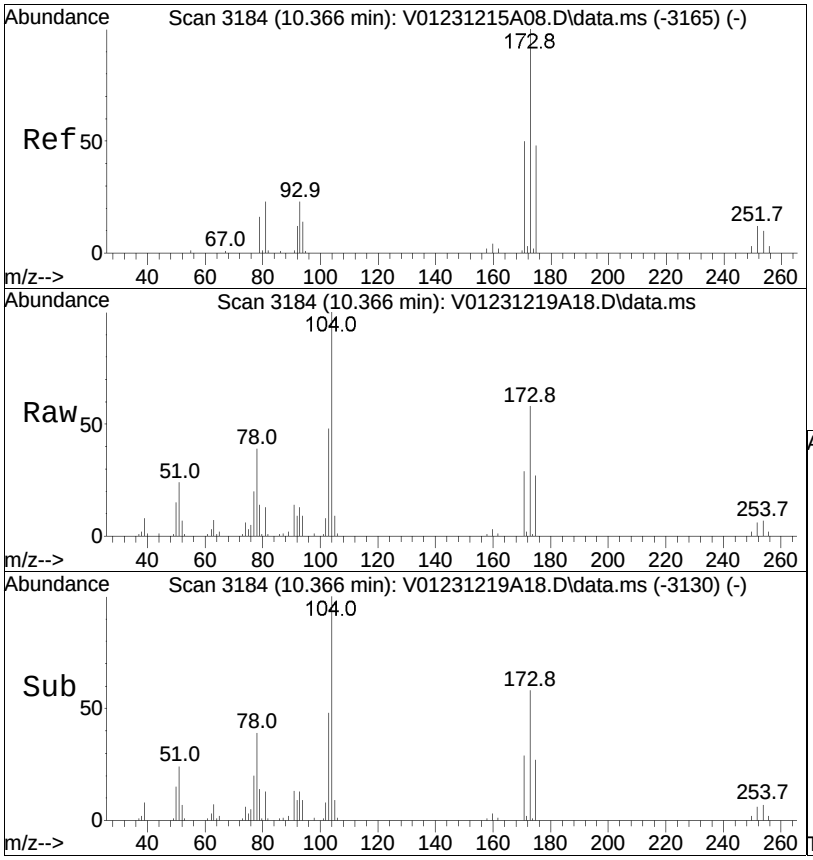


#78
Styrene
Concen: 24.91 ug/L
RT: 10.338 min Scan# 3174
Delta R.T. 0.000 min
Lab File: V01231219A18.D
Acq: 19 Dec 2023 12:53 pm

Tgt Ion:104 Resp: 824834

Ion	Ratio	Lower	Upper
104	100		
78	40.4	34.2	51.4

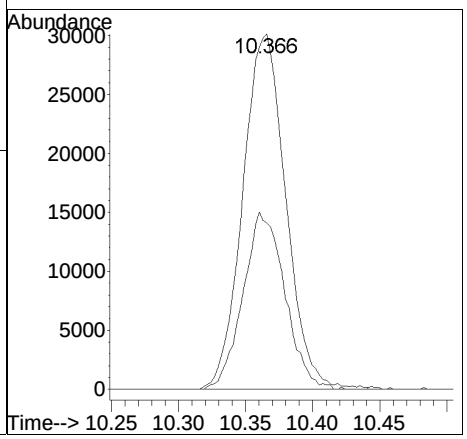


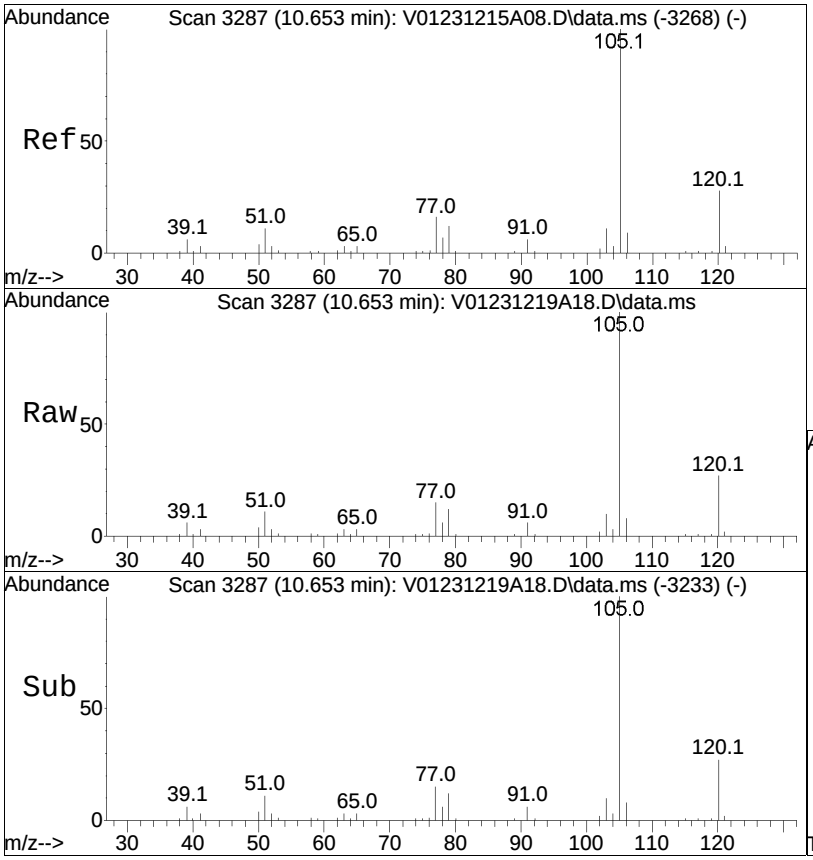


#80
Bromoform
Concen: 10.61 ug/L
RT: 10.366 min Scan# 3184
Delta R.T. 0.000 min
Lab File: V01231219A18.D
Acq: 19 Dec 2023 12:53 pm

Tgt Ion:173 Resp: 67377

Ion	Ratio	Lower	Upper
173	100		
175	48.2	28.6	68.6

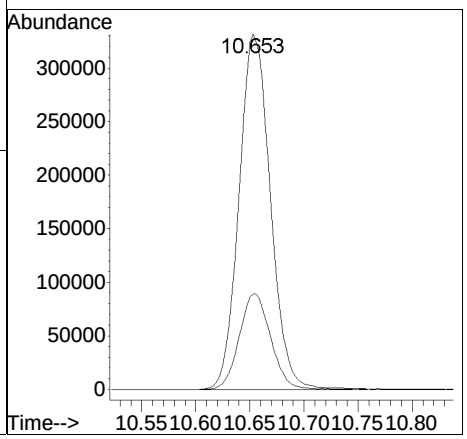


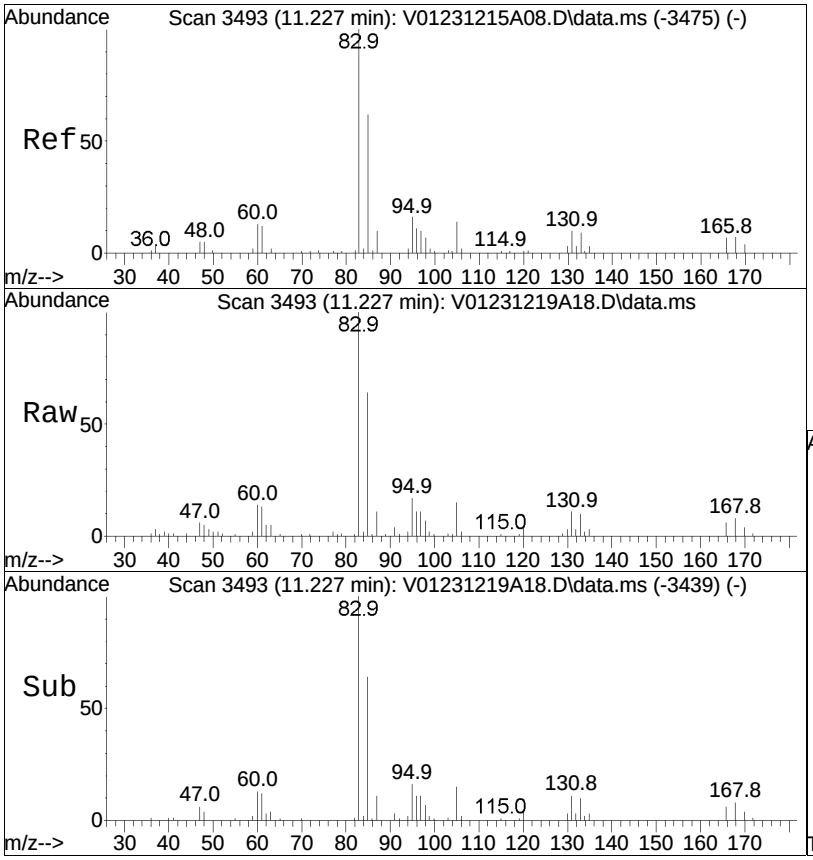


#82
Isopropylbenzene
Concen: 12.33 ug/L
RT: 10.653 min Scan# 3287
Delta R.T. 0.000 min
Lab File: V01231219A18.D
Acq: 19 Dec 2023 12:53 pm

Tgt Ion:105 Resp: 669746

Ion	Ratio	Lower	Upper
105	100		
120	26.8	7.3	47.3

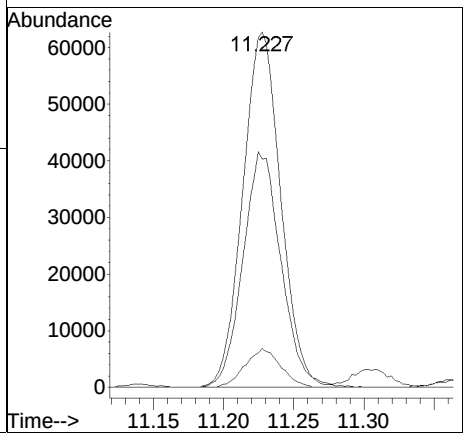


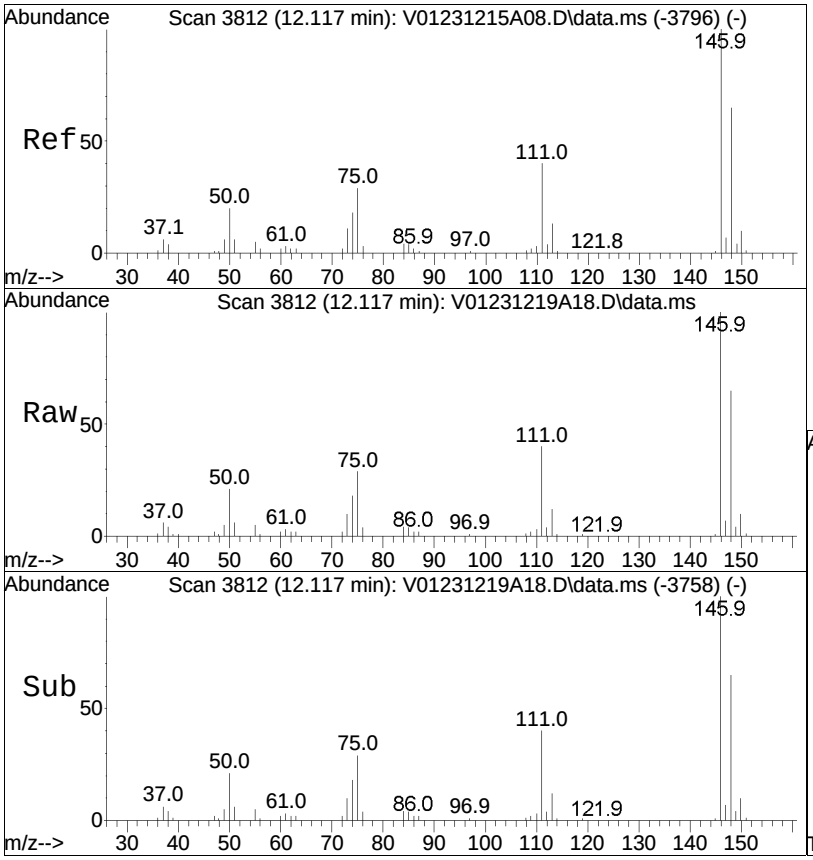


#87
1,1,2,2-Tetrachloroethane
Concen: 11.73 ug/L
RT: 11.227 min Scan# 3493
Delta R.T. 0.000 min
Lab File: V01231219A18.D
Acq: 19 Dec 2023 12:53 pm

Tgt Ion: 83 Resp: 118527

Ion	Ratio	Lower	Upper
83	100		
131	10.2	0.0	30.1
85	66.3	45.8	85.8

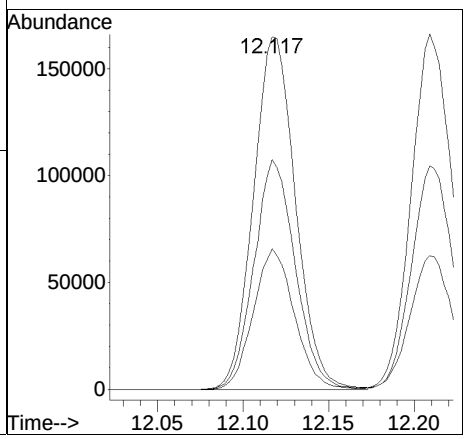


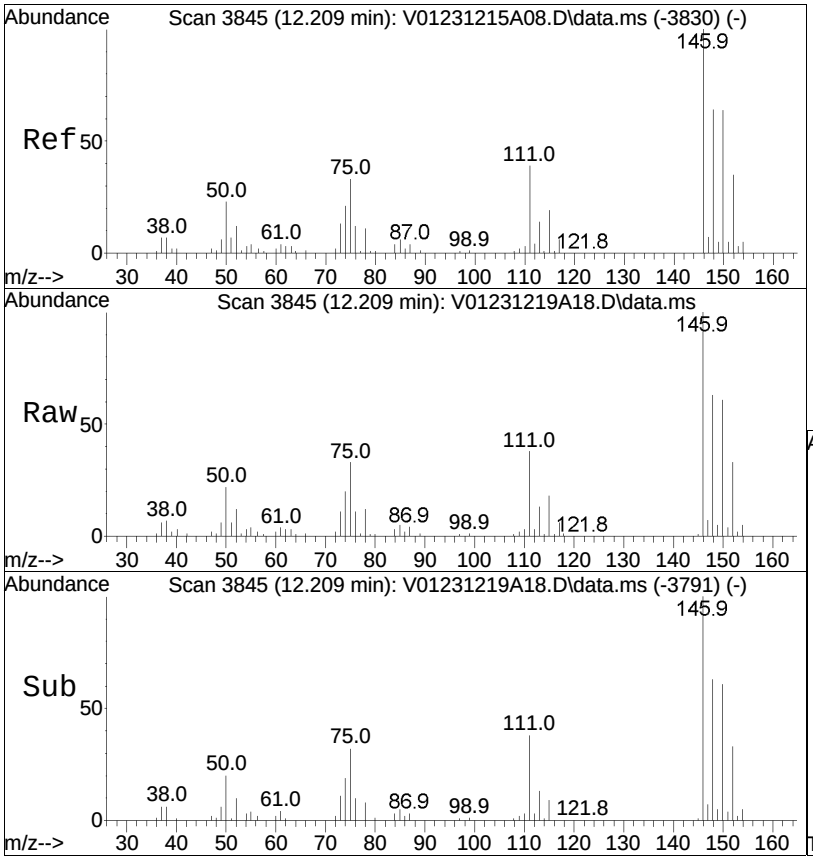


#100
1,3-Dichlorobenzene
Concen: 11.71 ug/L
RT: 12.117 min Scan# 3812
Delta R.T. 0.000 min
Lab File: V01231219A18.D
Acq: 19 Dec 2023 12:53 pm

Tgt Ion:146 Resp: 282360

Ion	Ratio	Lower	Upper
146	100		
111	38.8	25.9	53.9
148	63.8	41.5	86.3

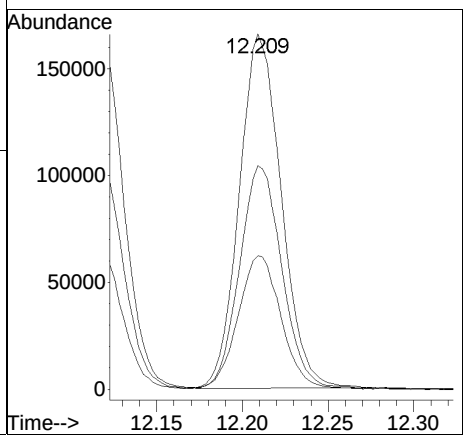


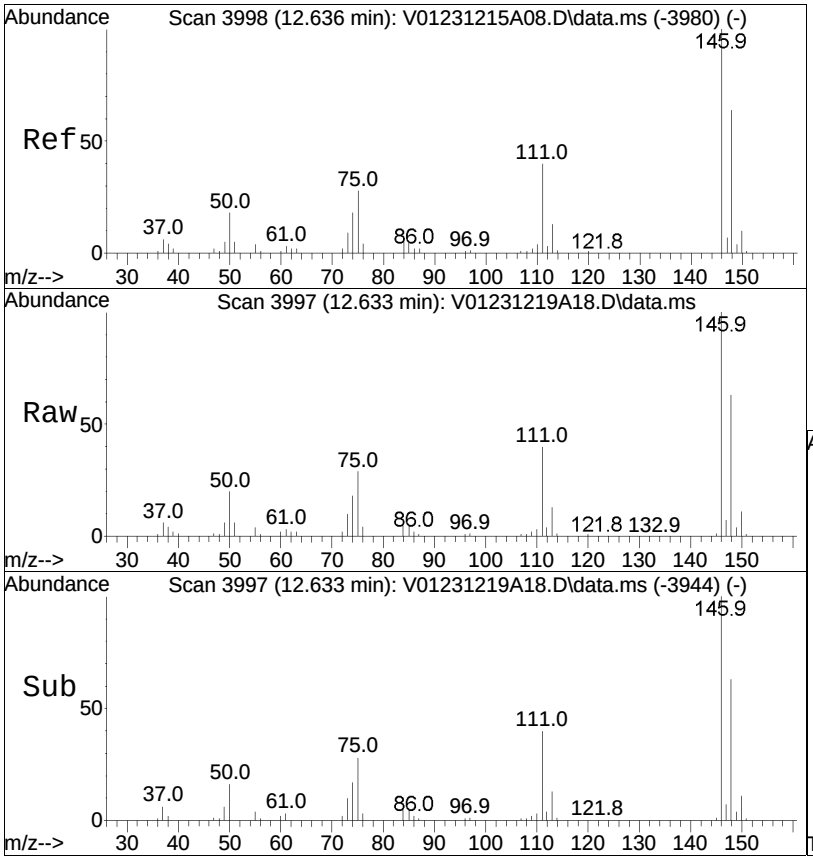


#101
1,4-Dichlorobenzene
Concen: 11.52 ug/L
RT: 12.209 min Scan# 3845
Delta R.T. 0.000 min
Lab File: V01231219A18.D
Acq: 19 Dec 2023 12:53 pm

Tgt Ion:146 Resp: 282672

Ion	Ratio	Lower	Upper
146	100		
111	38.6	31.7	47.5
148	63.5	51.5	77.3

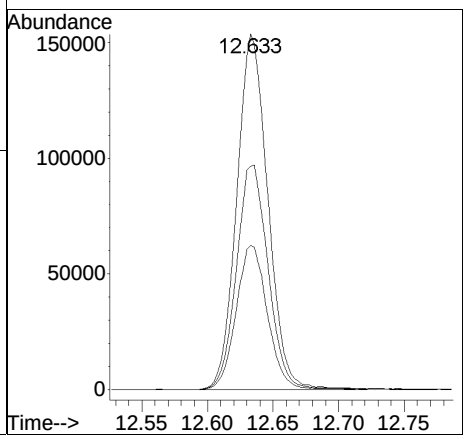


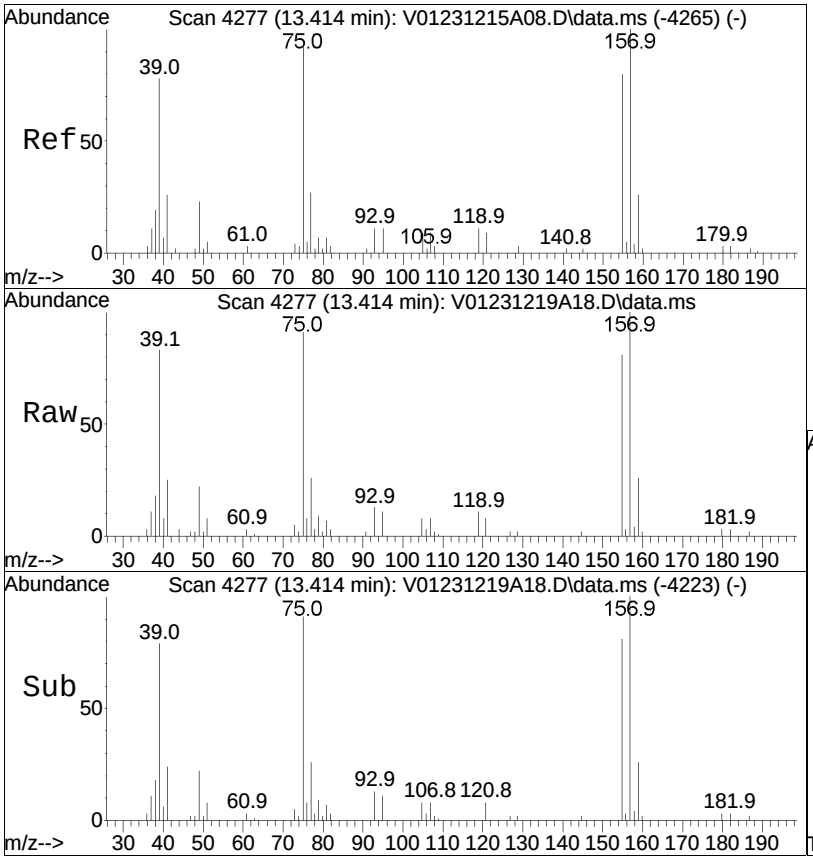


#104
1,2-Dichlorobenzene
Concen: 11.54 ug/L
RT: 12.633 min Scan# 3997
Delta R.T. -0.003 min
Lab File: V01231219A18.D
Acq: 19 Dec 2023 12:53 pm

Tgt Ion:146 Resp: 253668

Ion	Ratio	Lower	Upper
146	100		
111	40.6	26.8	55.8
148	64.3	41.6	86.4

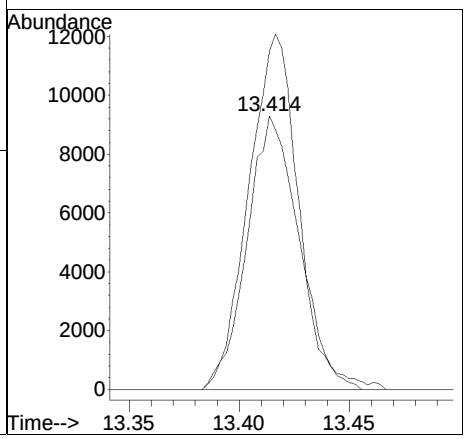


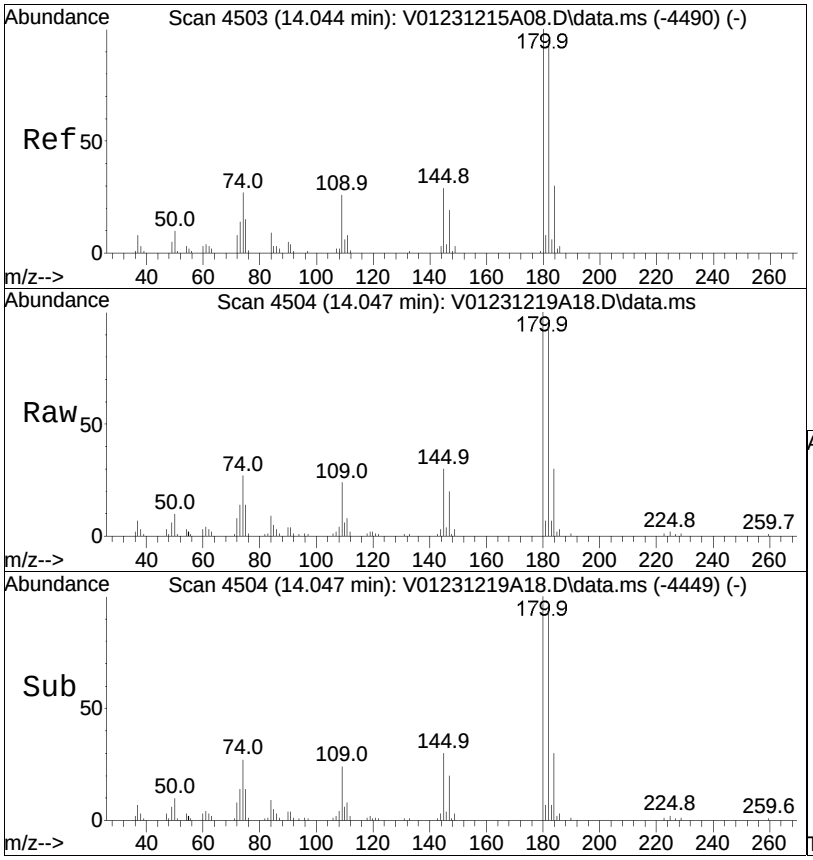


#106
1,2-Dibromo-3-chloropropane
Concen: 10.68 ug/L
RT: 13.414 min Scan# 4277
Delta R.T. 0.000 min
Lab File: V01231219A18.D
Acq: 19 Dec 2023 12:53 pm

Tgt Ion:155 Resp: 15074

Ion	Ratio	Lower	Upper
155	100		
157	128.0	101.1	151.7

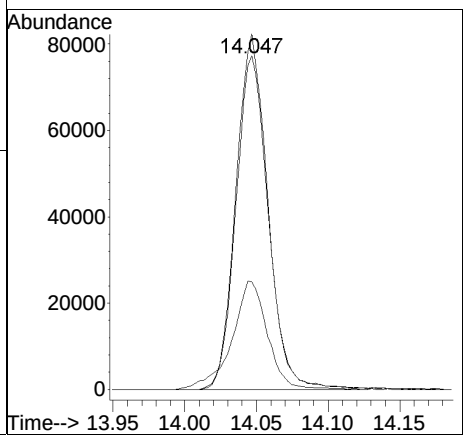


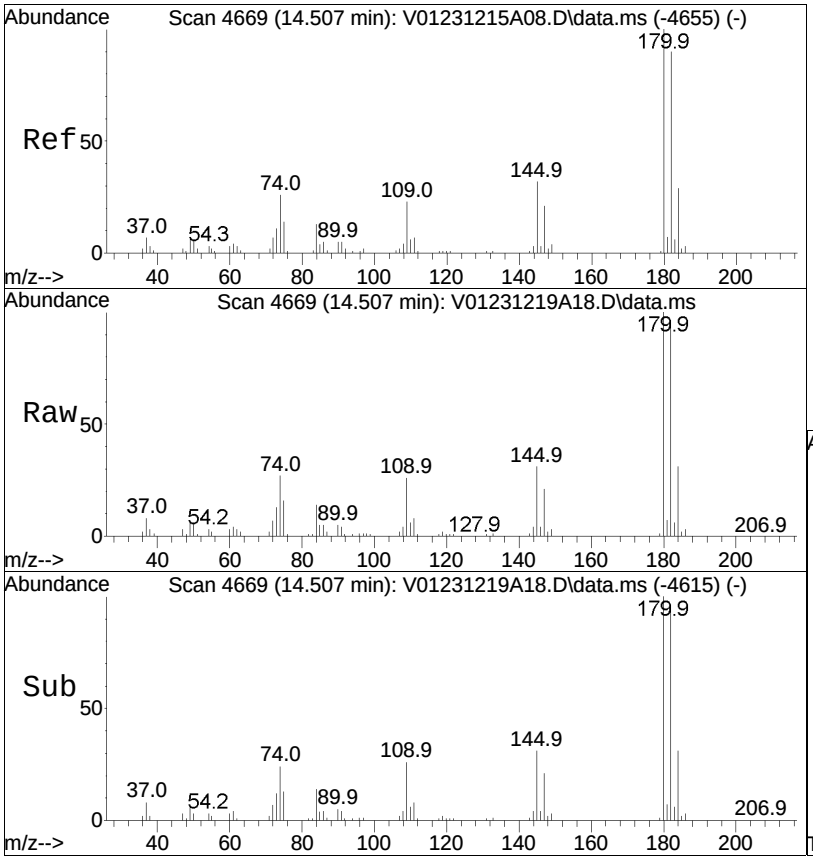


#109
1,2,4-Trichlorobenzene
Concen: 10.78 ug/L
RT: 14.047 min Scan# 4504
Delta R.T. 0.003 min
Lab File: V01231219A18.D
Acq: 19 Dec 2023 12:53 pm

Tgt Ion:180 Resp: 127438

Ion	Ratio	Lower	Upper
180	100		
182	95.0	75.8	113.8
145	33.9	26.1	39.1

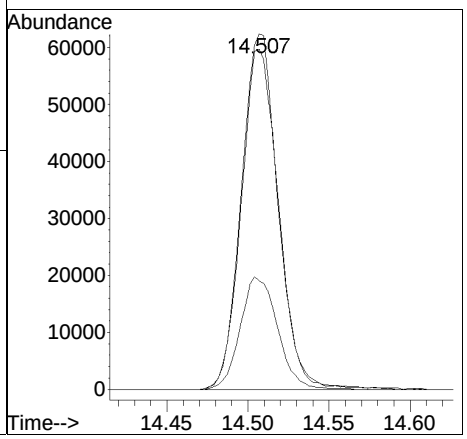




#111
1,2,3-Trichlorobenzene
Concen: 10.45 ug/L
RT: 14.507 min Scan# 4669
Delta R.T. 0.000 min
Lab File: V01231219A18.D
Acq: 19 Dec 2023 12:53 pm

Tgt Ion:180 Resp: 98585

Ion	Ratio	Lower	Upper
180	100		
182	95.4	75.4	113.0
145	32.1	25.0	37.6

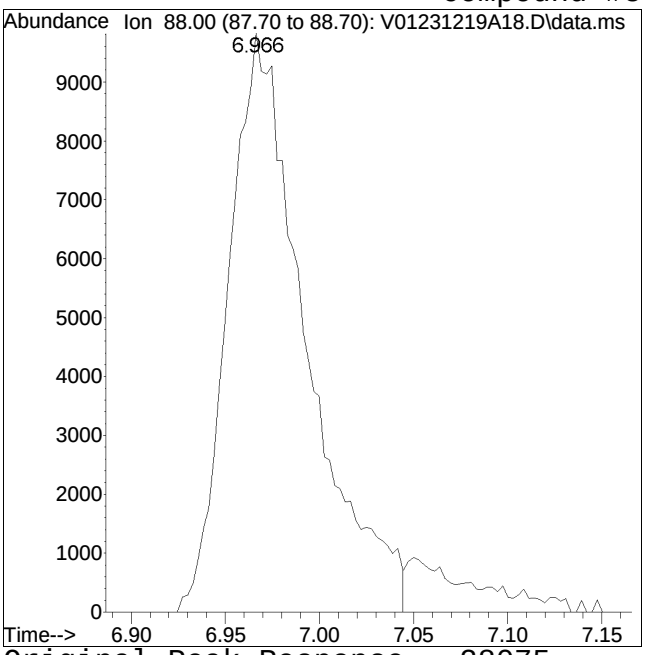


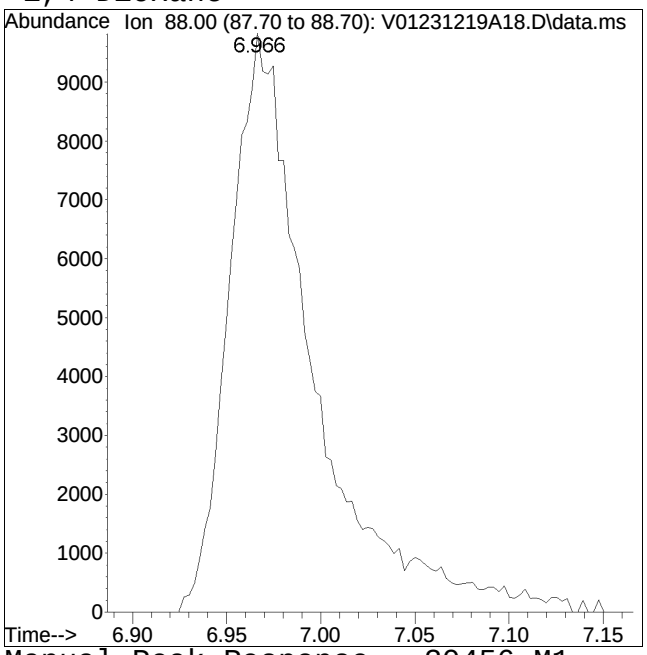
Manual Integration Report

Data Path : K:\VOA101\2023\231219A\
Data File : V01231219A18.D
Date Inj'd : 12/19/2023 12:53 pm
Sample : WG1865859-6,31,0.4,10,,C

QMethod : V101_231215A_8260.m
Operator : VOA101:MKS
Instrument : VOA 101
Quant Date : 12/19/2023 1:43 pm

Compound #57: 1,4-Dioxane





Original Peak Response = 28075 Manual Peak Response = 30456 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Quantitation Report (QT Reviewed)

Data Path : K:\VOA101\2023\231219A\
Data File : V01231219A19.D
Acq On : 19 Dec 2023 1:19 pm
Operator : VOA101:MKS
Sample : WG1865859-7,31,0.4,10,,C
Misc : WG1865859,ICAL20680
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Dec 19 13:47:12 2023
Quant Method : K:\VOA101\2023\231219A\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 10:14:14 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA101\2023\231219A\V01231219A01.D
Sub List : 8260-Curve-2CEVE-IODO - Curve-2CEVE-IODO

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.960	96	457222	10.000	ug/L	0.00
Standard Area 1 = 442958			Recovery = 103.22%			
59) Chlorobenzene-d5	9.479	117	405164	10.000	ug/L	0.00
Standard Area 1 = 387518			Recovery = 104.55%			
79) 1,4-Dichlorobenzene-d4	12.195	152	226187	10.000	ug/L	0.00
Standard Area 1 = 216528			Recovery = 104.46%			
System Monitoring Compounds						
36) Dibromofluoromethane	5.162	113	117504	10.056	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.56%			
43) 1,2-Dichloroethane-d4	5.681	65	127540	9.638	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 96.38%			
60) Toluene-d8	7.641	98	465645	9.756	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 97.56%			
83) 4-Bromofluorobenzene	10.985	95	191324	9.931	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.31%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.654	85	162774	12.743	ug/L	99
3) Chloromethane	1.847	50	208173	12.596	ug/L	100
4) Vinyl chloride	1.908	62	2304090	157.488	ug/L	100
5) Bromomethane	2.212	94	38325	5.380	ug/L	100
6) Chloroethane	2.326	64	131508	14.955	ug/L	93
7) Trichlorofluoromethane	2.460	101	227826	14.510	ug/L	98
10) 1,1-Dichloroethene	2.940	96	143078	14.274	ug/L	88
11) Carbon disulfide	2.973	76	430116	13.910	ug/L	100
12) Freon-113	2.976	101	146847	13.998	ug/L #	77
15) Methylene chloride	3.486	84	139344	12.769	ug/L	89
17) Acetone	3.536	43	33424	15.323	ug/L	97
18) trans-1,2-Dichloroethene	3.640	96	156840	13.932	ug/L	98
19) Methyl acetate	3.651	43	65718	11.444	ug/L	94
20) Methyl tert-butyl ether	3.740	73	305715	11.907	ug/L	94
23) 1,1-Dichloroethane	4.208	63	335772	15.118	ug/L	99
28) cis-1,2-Dichloroethene	4.724	96	899703	72.134	ug/L	96
30) Bromochloromethane	4.917	128	70379	12.622	ug/L	95
31) Cyclohexane	4.917	56	296292	13.042	ug/L	92
32) Chloroform	4.987	83	260175	13.352	ug/L	98
34) Carbon tetrachloride	5.120	117	215547	14.142	ug/L	99

Data Path : K:\VOA101\2023\231219A\
Data File : V01231219A19.D
Acq On : 19 Dec 2023 1:19 pm
Operator : VOA101:MKS
Sample : WG1865859-7,31,0.4,10,,C
Misc : WG1865859,ICAL20680
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Dec 19 13:47:12 2023
Quant Method : K:\VOA101\2023\231219A\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 10:14:14 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA101\2023\231219A\V01231219A01.D
Sub List : 8260-Curve-2CEVE-IODO - Curve-2CEVE-IODO

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
37) 1,1,1-Trichloroethane	5.182	97	244738	13.897	ug/L		99
39) 2-Butanone	5.282	43	40635	11.697	ug/L	#	55
41) Benzene	5.547	78	584289	13.443	ug/L		96
44) 1,2-Dichloroethane	5.748	62	185005	12.721	ug/L		99
47) Methyl cyclohexane	6.127	83	240793	12.569	ug/L		90
48) Trichloroethene	6.138	95	161934	13.244	ug/L		98
51) 1,2-Dichloropropane	6.676	63	157135	13.022	ug/L		98
54) Bromodichloromethane	6.752	83	187063	12.664	ug/L		99
57) 1,4-Dioxane	6.969	88	38518M1	553.295	ug/L		
58) cis-1,3-Dichloropropene	7.438	75	219803	12.701	ug/L		93
61) Toluene	7.700	92	374990	12.541	ug/L		99
62) 4-Methyl-2-pentanone	8.135	58	34151	11.052	ug/L		94
63) Tetrachloroethene	8.149	166	167242	12.621	ug/L		100
65) trans-1,3-Dichloropropene	8.182	75	186385	11.872	ug/L		94
68) 1,1,2-Trichloroethane	8.372	83	91181	11.969	ug/L		97
69) Chlorodibromomethane	8.581	129	128767	11.634	ug/L		99
71) 1,2-Dibromoethane	8.857	107	106849	11.781	ug/L		100
72) 2-Hexanone	9.142	43	59326	10.259	ug/L		99
73) Chlorobenzene	9.501	112	418181	12.333	ug/L		97
74) Ethylbenzene	9.538	91	730365	12.702	ug/L		99
76) p/m Xylene	9.724	106	565242	25.177	ug/L		97
77) o Xylene	10.265	106	542385	24.841	ug/L		98
78) Styrene	10.338	104	895335	25.048	ug/L		96
80) Bromoform	10.366	173	71805	10.574	ug/L		99
82) Isopropylbenzene	10.653	105	721027	12.411	ug/L		99
87) 1,1,2,2-Tetrachloroethane	11.227	83	125080	11.579	ug/L		100
100) 1,3-Dichlorobenzene	12.117	146	300260	11.639	ug/L		99
101) 1,4-Dichlorobenzene	12.209	146	301573	11.490	ug/L		99
104) 1,2-Dichlorobenzene	12.633	146	274015	11.660	ug/L		99
106) 1,2-Dibromo-3-chloropr...	13.414	155	15959	10.571	ug/L		98
109) 1,2,4-Trichlorobenzene	14.047	180	131490	10.401	ug/L		98
111) 1,2,3-Trichlorobenzene	14.507	180	101825	10.094	ug/L		99

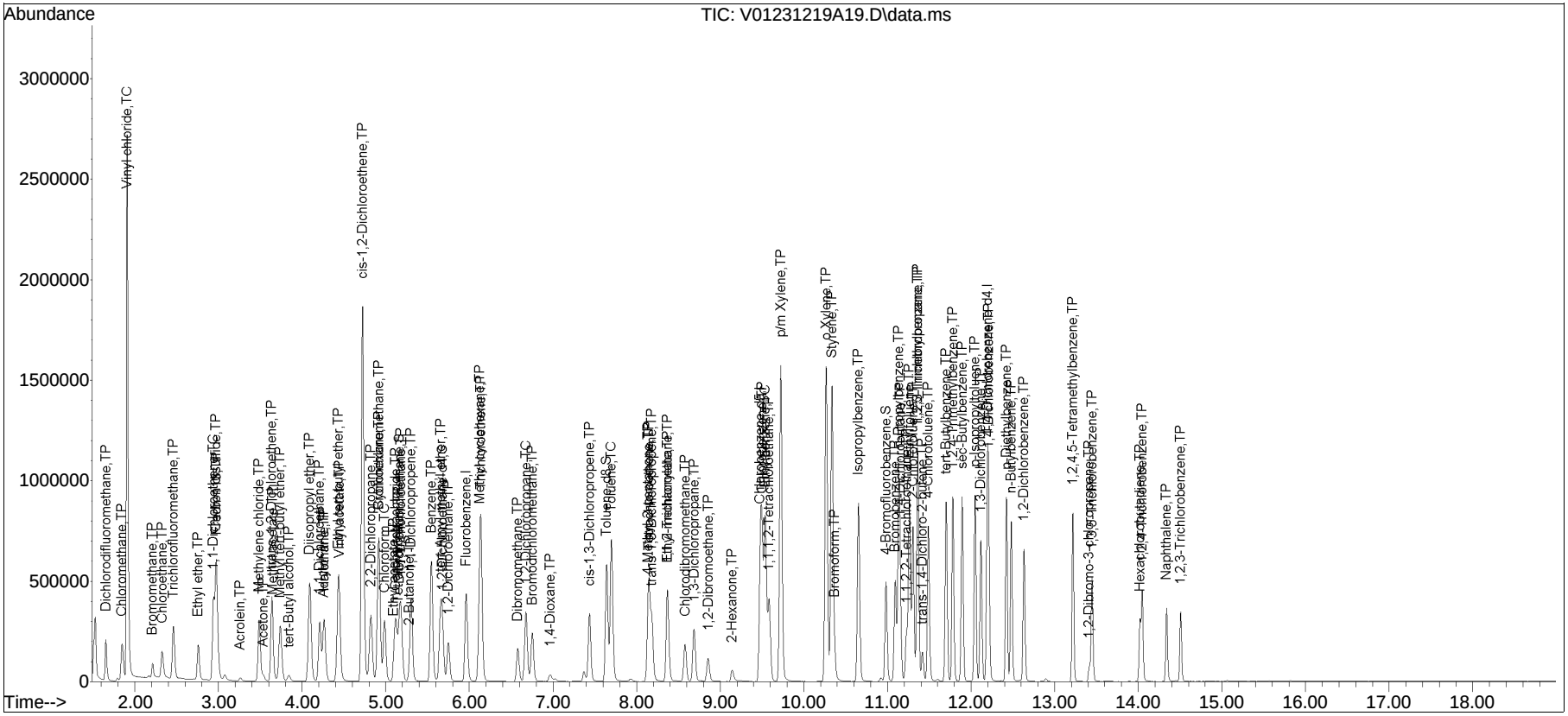
(#) = qualifier out of range (m) = manual integration (+) = signals summed

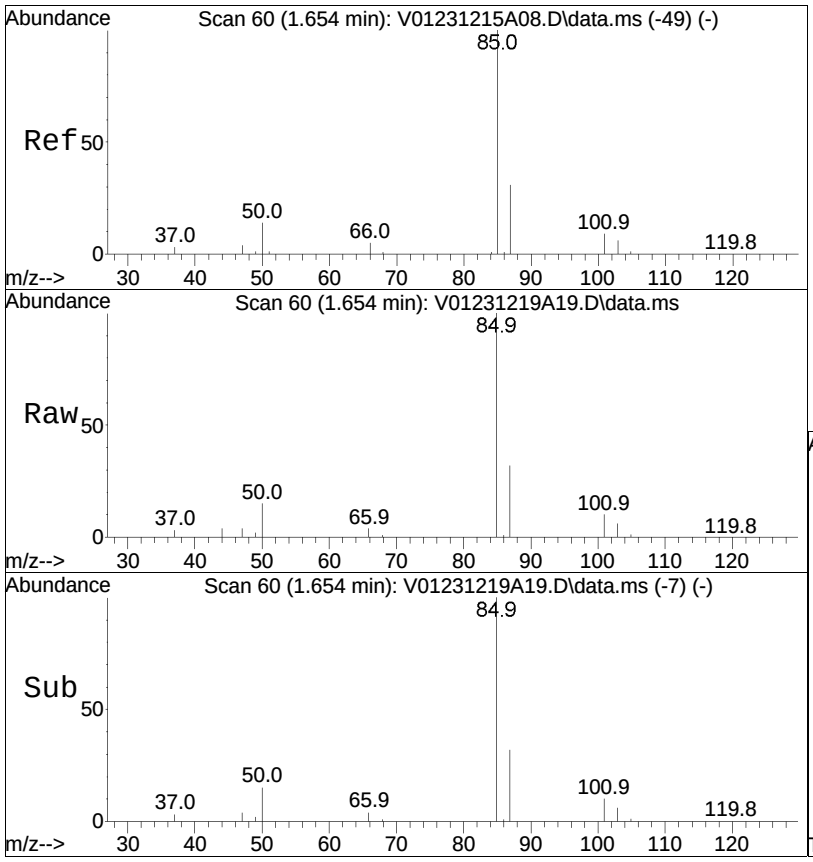
Quantitation Report (QT Reviewed)

Data Path : K:\VOA101\2023\231219A\
Data File : V01231219A19.D
Acq On : 19 Dec 2023 1:19 pm
Operator : VOA101:MKS
Sample : WG1865859-7,31,0.4,10,,C
Misc : WG1865859,ICAL20680
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Dec 19 13:47:12 2023
Quant Method : K:\VOA101\2023\231219A\V101_231215A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Sat Dec 16 10:14:14 2023
Response via : Initial Calibration

Sub List : 8260-Curve-2CEVE-IODO - Curve-2CEVE-IODOD•

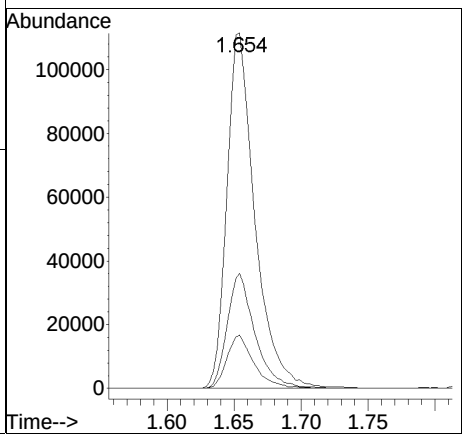


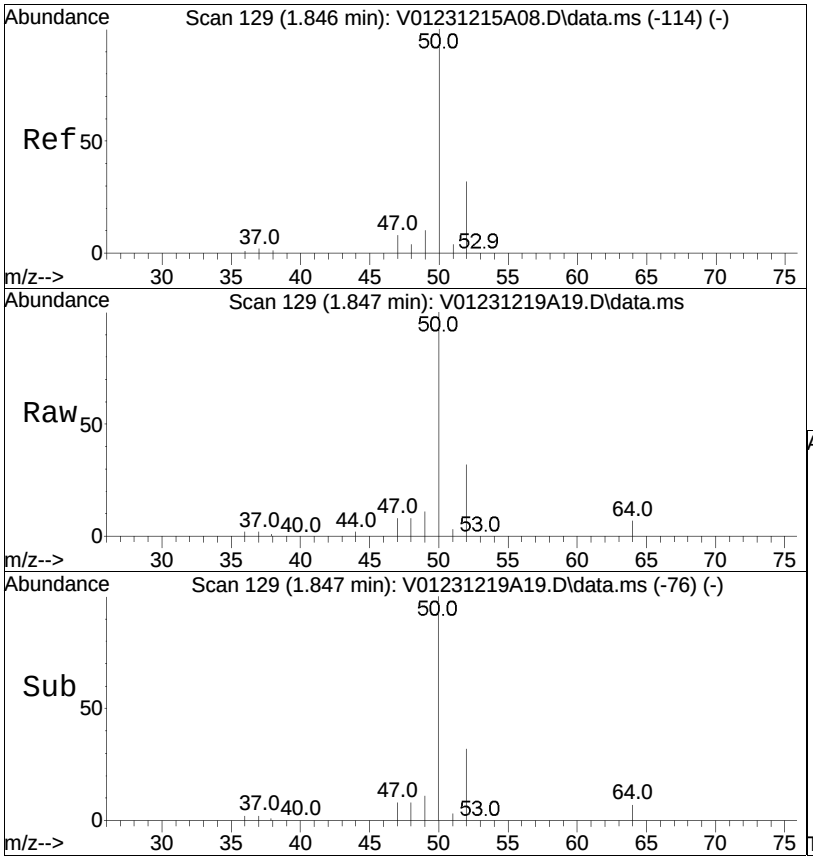


#2
Dichlorodifluoromethane
Concen: 12.74 ug/L
RT: 1.654 min Scan# 60
Delta R.T. 0.000 min
Lab File: V01231219A19.D
Acq: 19 Dec 2023 1:19 pm

Tgt Ion: 85 Resp: 162774

Ion	Ratio	Lower	Upper
85	100		
87	31.9	20.9	43.5
50	14.5	9.1	18.9

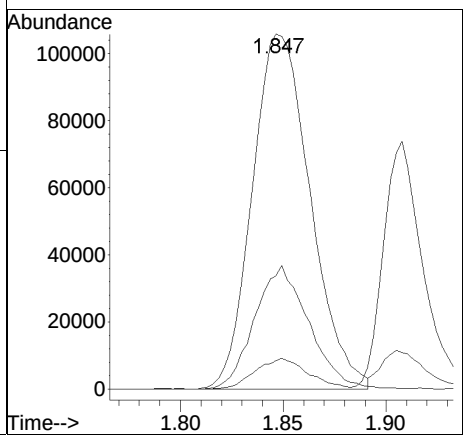


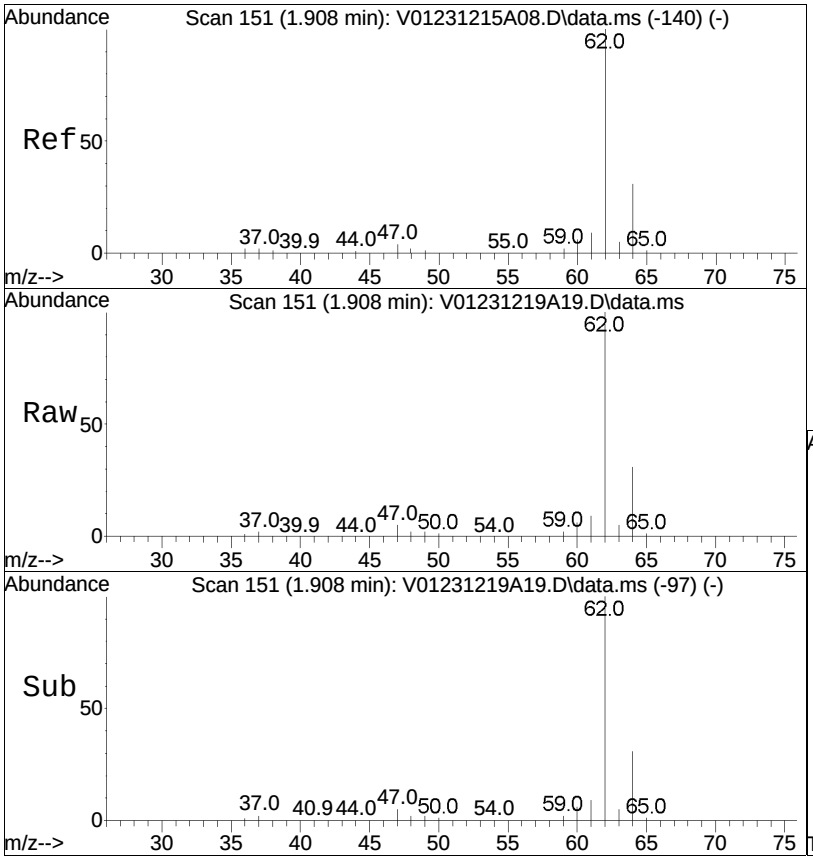


#3
Chloromethane
Concen: 12.60 ug/L
RT: 1.847 min Scan# 129
Delta R.T. 0.000 min
Lab File: V01231219A19.D
Acq: 19 Dec 2023 1:19 pm

Tgt Ion: 50 Resp: 208173

Ion	Ratio	Lower	Upper
50	100		
52	32.7	12.8	52.8
47	8.1	0.0	28.3

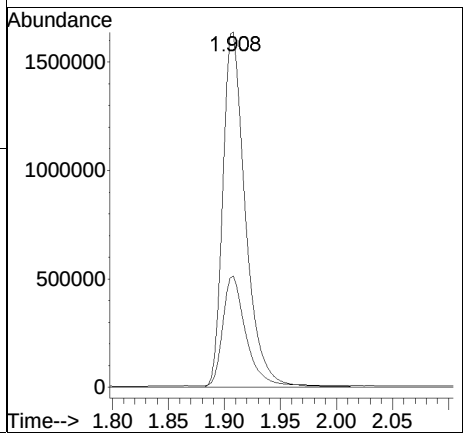


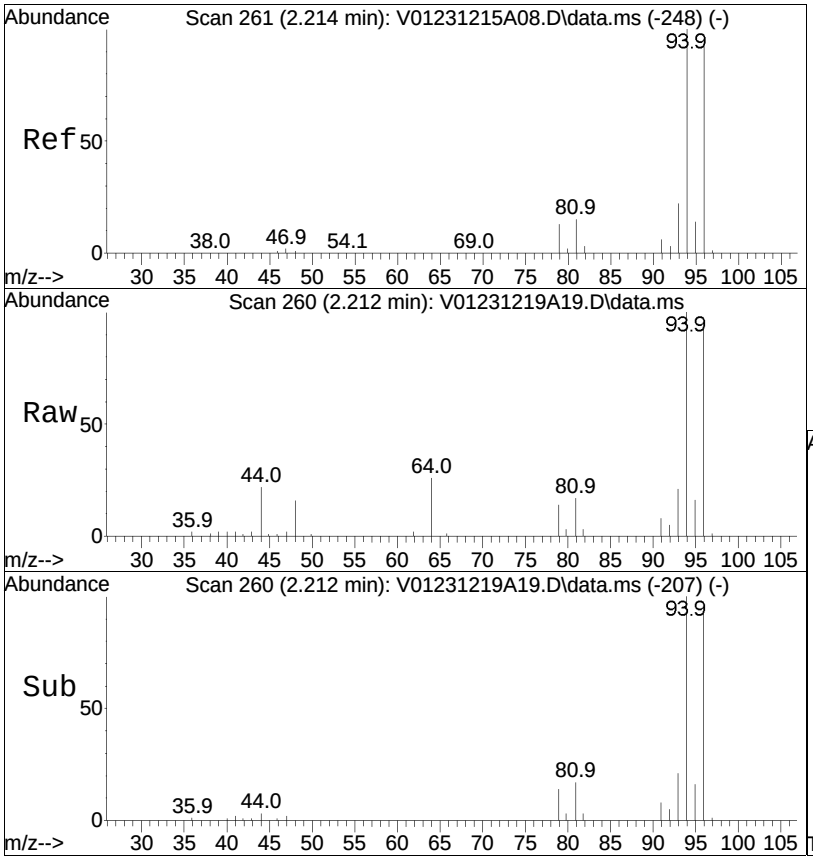


#4
Vinyl chloride
Concen: 157.49 ug/L
RT: 1.908 min Scan# 151
Delta R.T. 0.000 min
Lab File: V01231219A19.D
Acq: 19 Dec 2023 1:19 pm

Tgt Ion: 62 Resp: 2304090

Ion	Ratio	Lower	Upper
62	100		
64	30.8	10.8	50.8

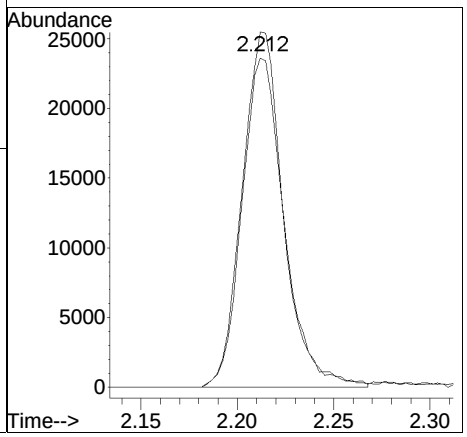


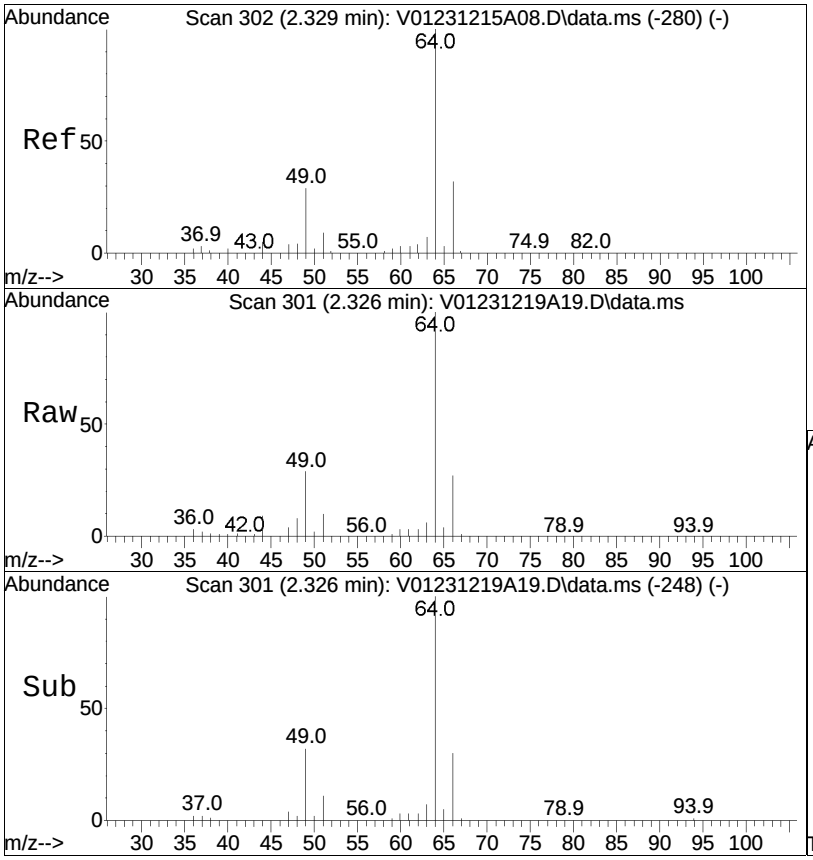


#5
Bromomethane
Concen: 5.38 ug/L
RT: 2.212 min Scan# 260
Delta R.T. -0.003 min
Lab File: V01231219A19.D
Acq: 19 Dec 2023 1:19 pm

Tgt Ion: 94 Resp: 38325

Ion	Ratio	Lower	Upper
94	100		
96	93.5	73.6	113.6

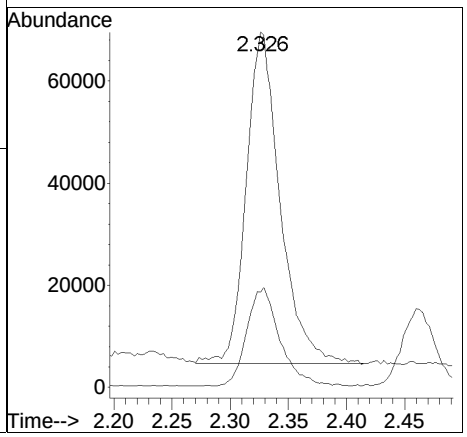


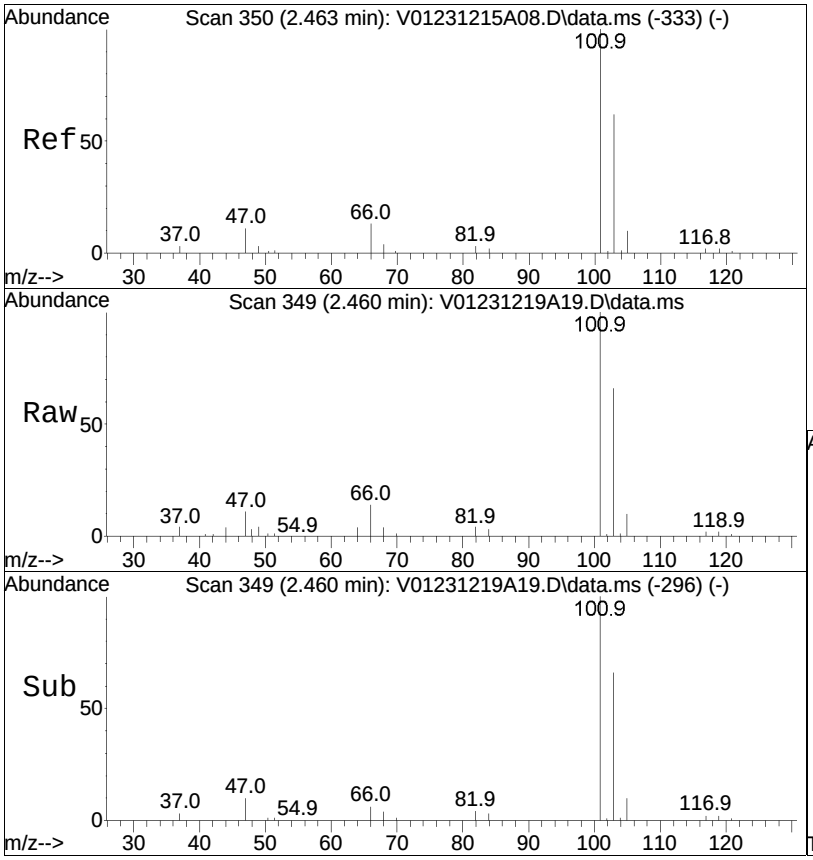


#6
Chloroethane
Concen: 14.96 ug/L
RT: 2.326 min Scan# 301
Delta R.T. -0.003 min
Lab File: V01231219A19.D
Acq: 19 Dec 2023 1:19 pm

Tgt Ion: 64 Resp: 131508

Ion	Ratio	Lower	Upper
64	100		
66	28.9	12.7	52.7

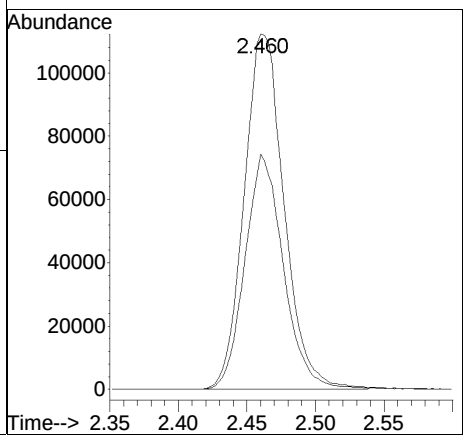


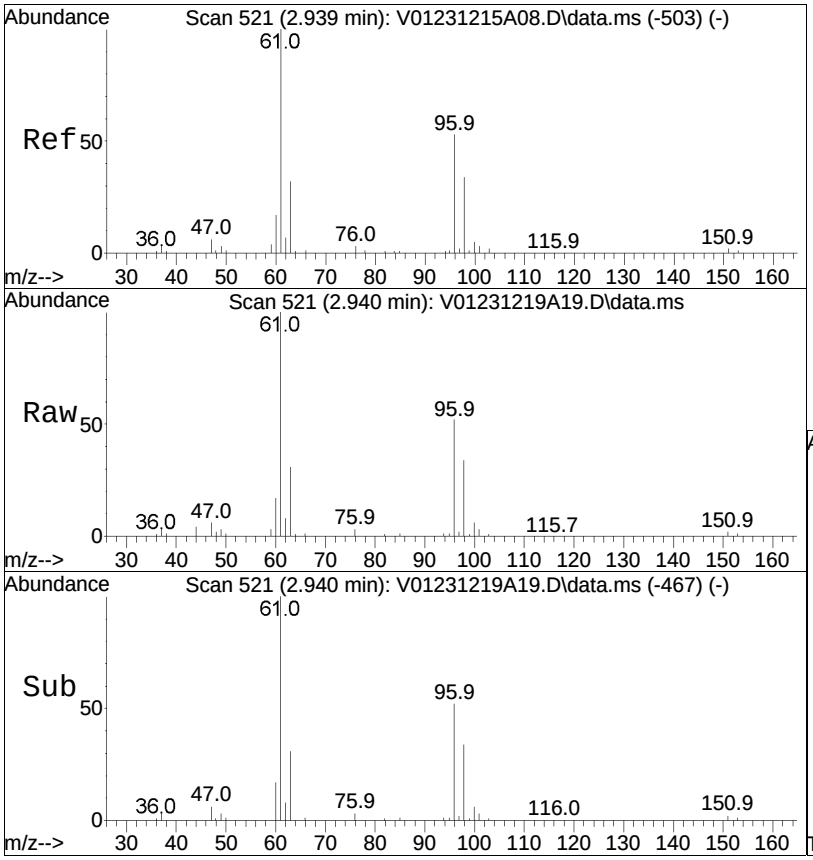


#7
Trichlorofluoromethane
Concen: 14.51 ug/L
RT: 2.460 min Scan# 349
Delta R.T. -0.003 min
Lab File: V01231219A19.D
Acq: 19 Dec 2023 1:19 pm

Tgt Ion:101 Resp: 227826

Ion	Ratio	Lower	Upper
101	100		
103	63.9	52.3	78.5

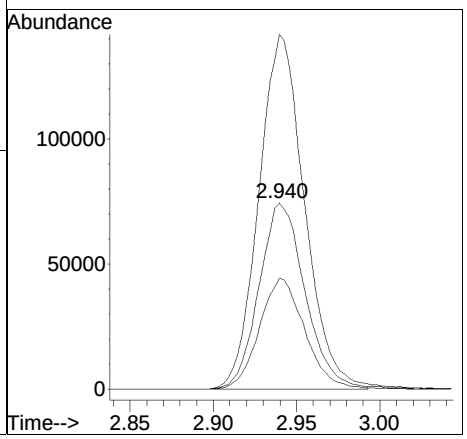


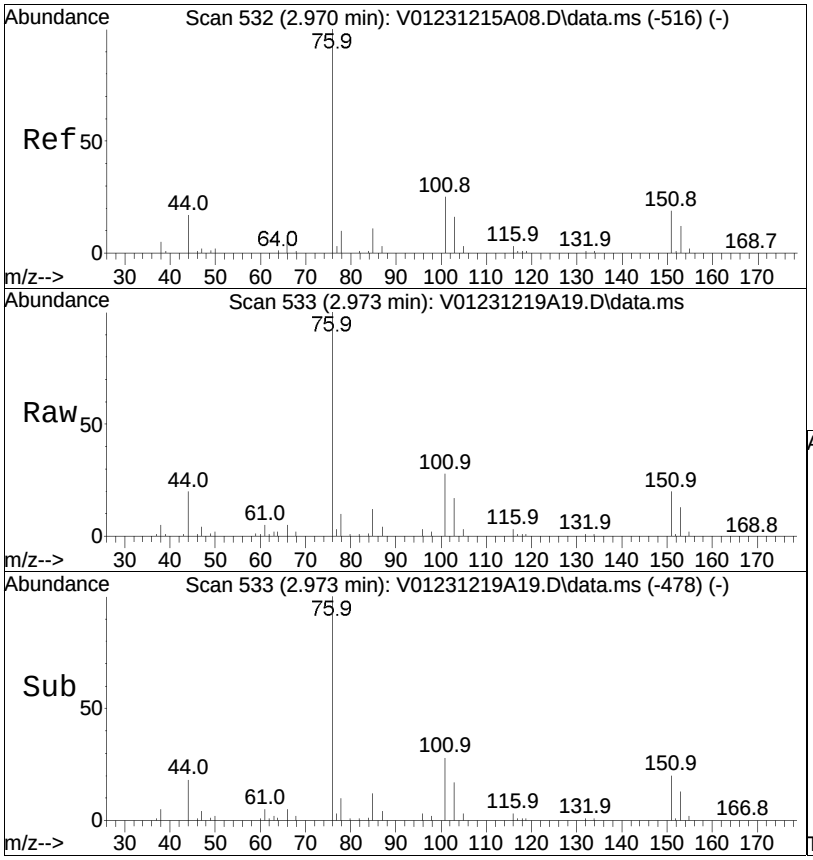


#10
1,1-Dichloroethene
Concen: 14.27 ug/L
RT: 2.940 min Scan# 521
Delta R.T. 0.000 min
Lab File: V01231219A19.D
Acq: 19 Dec 2023 1:19 pm

Tgt Ion: 96 Resp: 143078

Ion	Ratio	Lower	Upper
96	100		
61	190.6	136.8	205.2
63	59.3	43.6	65.4

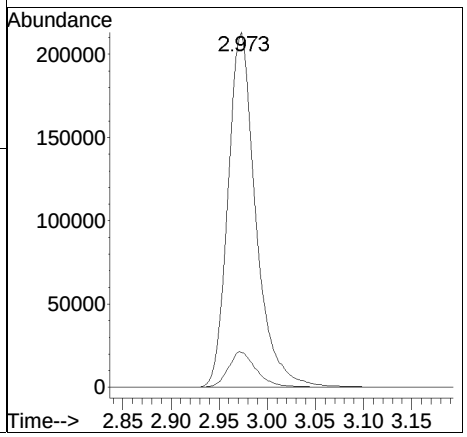


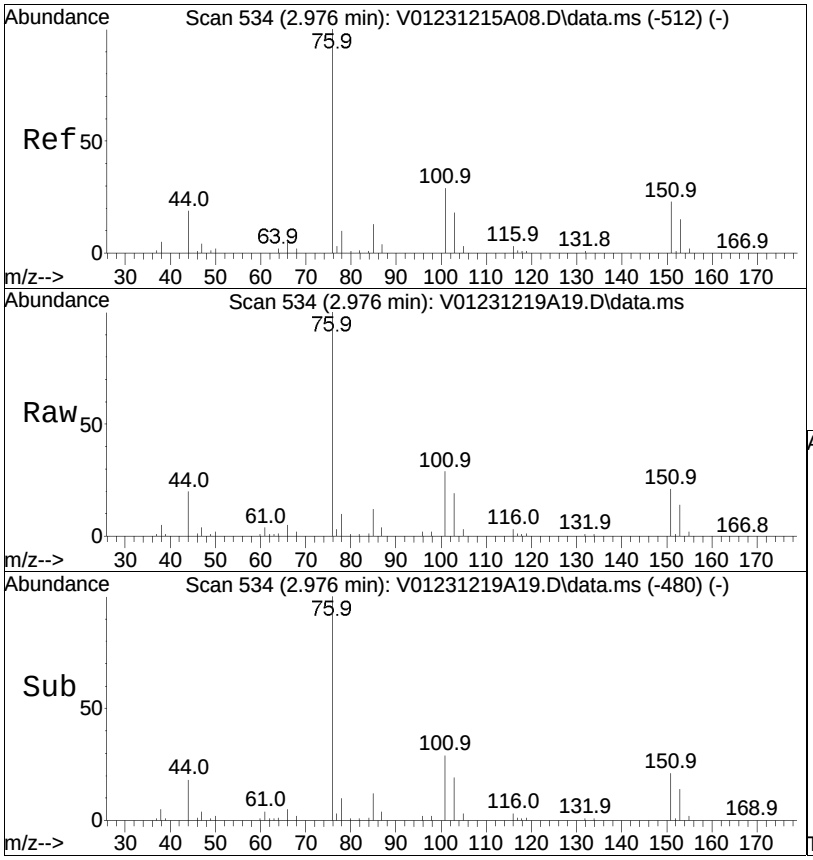


#11
Carbon disulfide
Concen: 13.91 ug/L
RT: 2.973 min Scan# 533
Delta R.T. 0.003 min
Lab File: V01231219A19.D
Acq: 19 Dec 2023 1:19 pm

Tgt Ion: 76 Resp: 430116

Ion	Ratio	Lower	Upper
76	100		
78	10.3	6.6	13.8

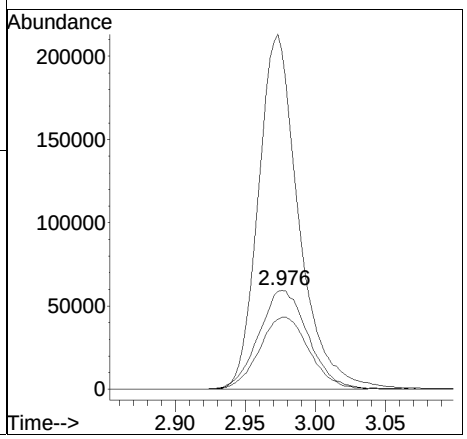


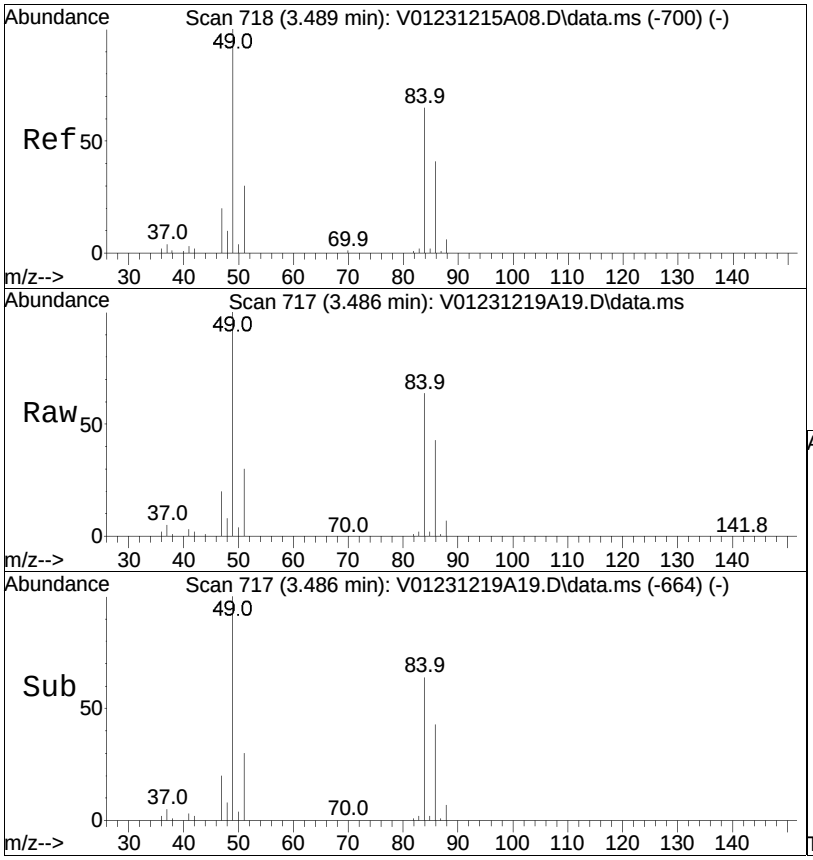


#12
Freon-113
Concen: 14.00 ug/L
RT: 2.976 min Scan# 534
Delta R.T. 0.000 min
Lab File: V01231219A19.D
Acq: 19 Dec 2023 1:19 pm

Tgt Ion:101 Resp: 146847

Ion	Ratio	Lower	Upper
101	100		
151	73.8	61.2	91.8
76	293.0	194.8	292.2#

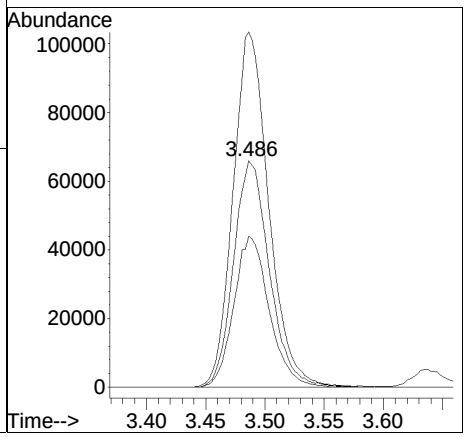


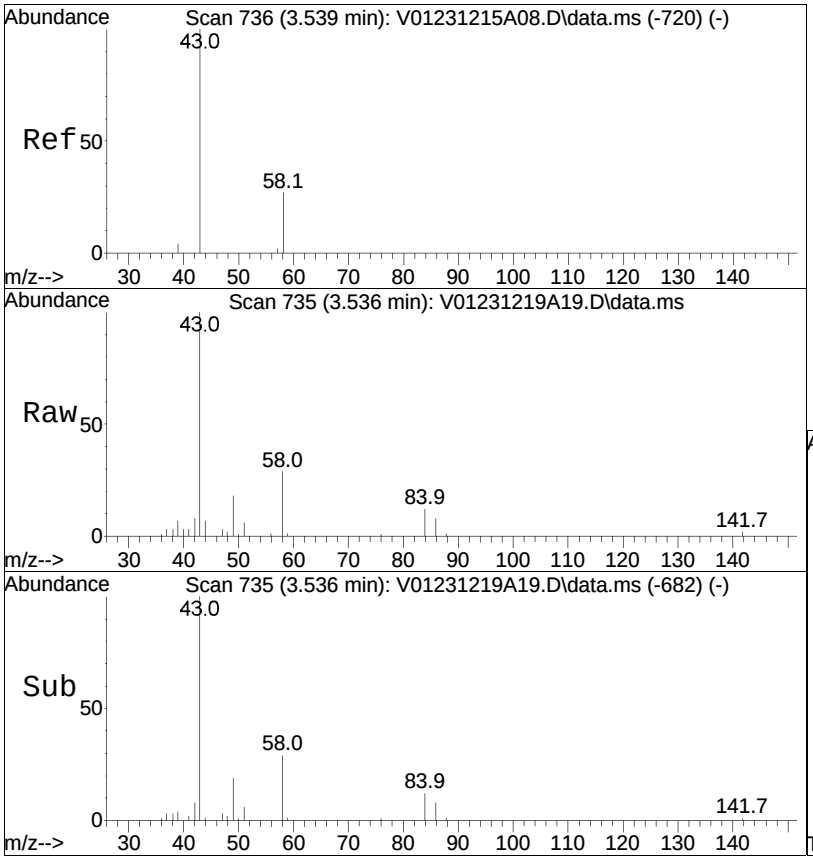


#15
Methylene chloride
Concen: 12.77 ug/L
RT: 3.486 min Scan# 717
Delta R.T. -0.003 min
Lab File: V01231219A19.D
Acq: 19 Dec 2023 1:19 pm

Tgt Ion: 84 Resp: 139344

Ion	Ratio	Lower	Upper
84	100		
86	65.8	41.7	86.7
49	155.7	89.1	185.1

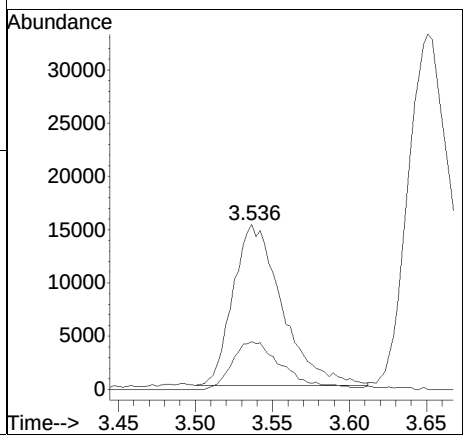


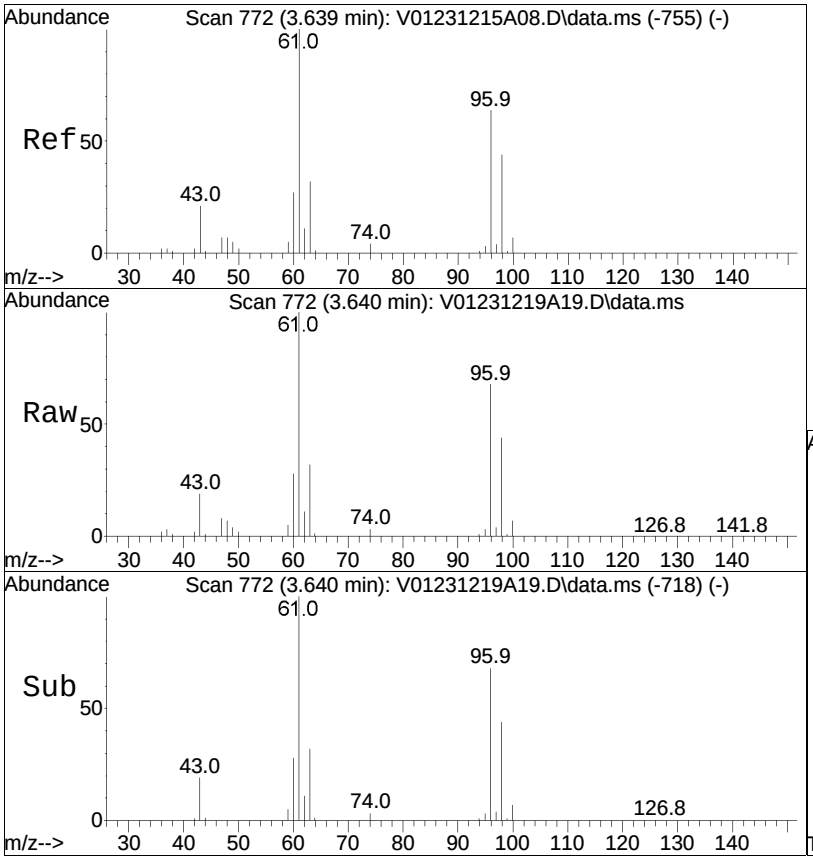


#17
Acetone
Concen: 15.32 ug/L
RT: 3.536 min Scan# 735
Delta R.T. -0.003 min
Lab File: V01231219A19.D
Acq: 19 Dec 2023 1:19 pm

Tgt Ion: 43 Resp: 33424

Ion	Ratio	Lower	Upper
43	100		
58	30.7	25.9	38.9

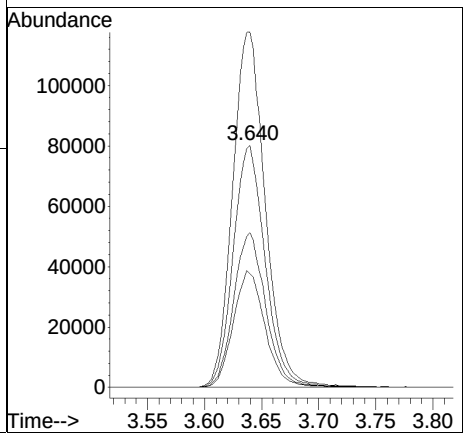


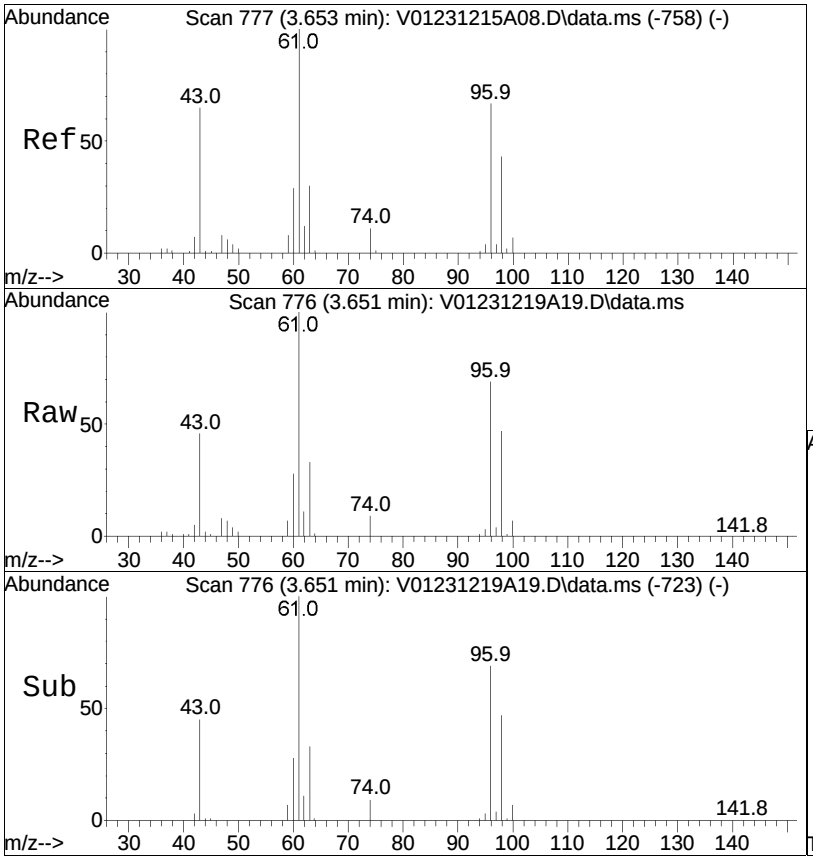


#18
trans-1,2-Dichloroethene
Concen: 13.93 ug/L
RT: 3.640 min Scan# 772
Delta R.T. 0.000 min
Lab File: V01231219A19.D
Acq: 19 Dec 2023 1:19 pm

Tgt Ion: 96 Resp: 156840

Ion	Ratio	Lower	Upper
96	100		
61	149.7	95.3	197.9
98	63.9	41.0	85.2
63	47.8	30.2	62.6

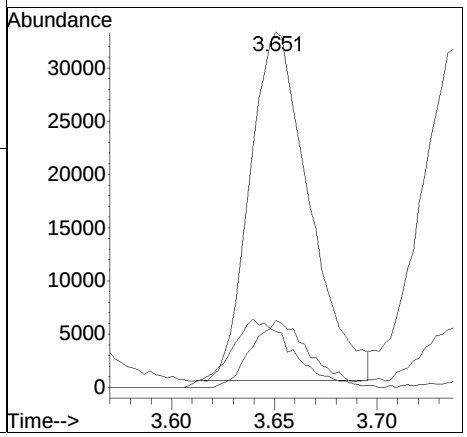


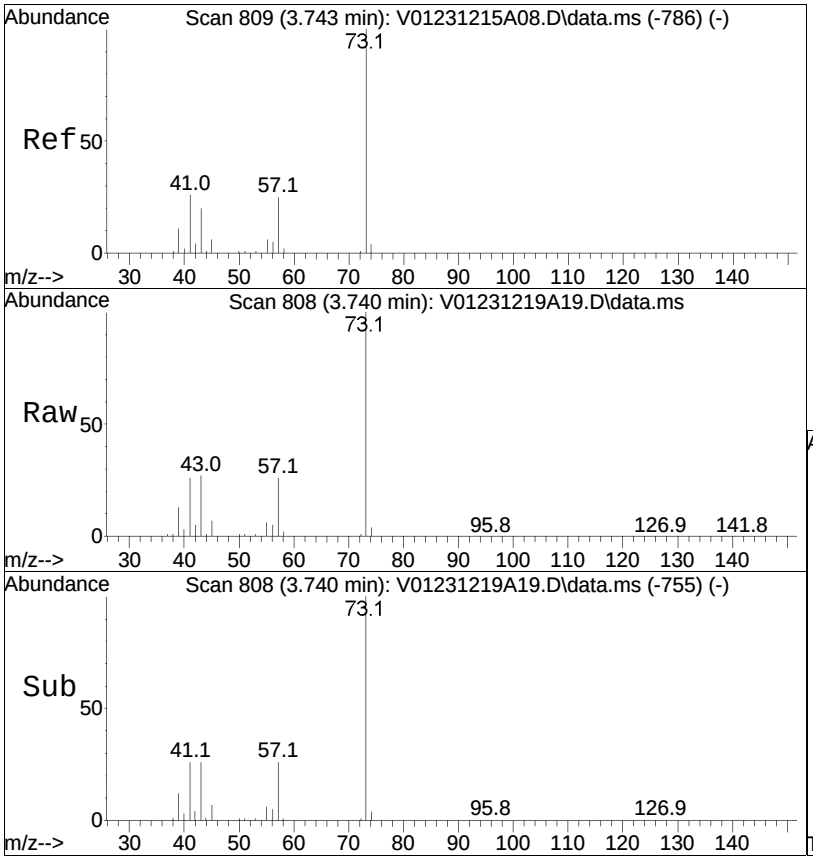


#19
Methyl acetate
Concen: 11.44 ug/L
RT: 3.651 min Scan# 776
Delta R.T. -0.003 min
Lab File: V01231219A19.D
Acq: 19 Dec 2023 1:19 pm

Tgt Ion: 43 Resp: 65718

Ion	Ratio	Lower	Upper
43	100		
74	18.7	18.2	27.2
59	20.7	18.2	27.2

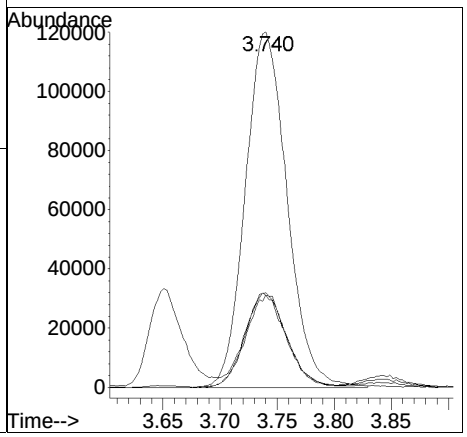


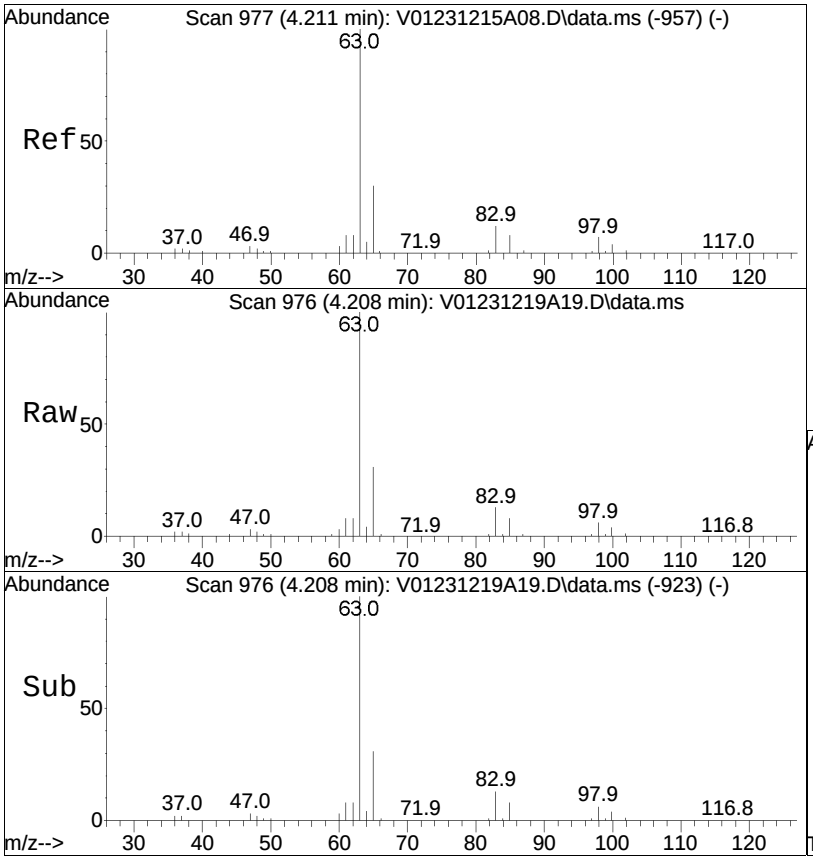


#20
Methyl tert-butyl ether
Concen: 11.91 ug/L
RT: 3.740 min Scan# 808
Delta R.T. -0.003 min
Lab File: V01231219A19.D
Acq: 19 Dec 2023 1:19 pm

Tgt Ion: 73 Resp: 305715

Ion	Ratio	Lower	Upper
73	100		
57	25.4	14.8	30.6
43	25.5	15.5	32.3
41	26.6	14.1	29.3

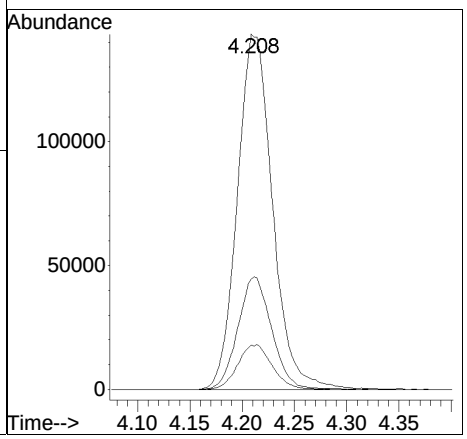


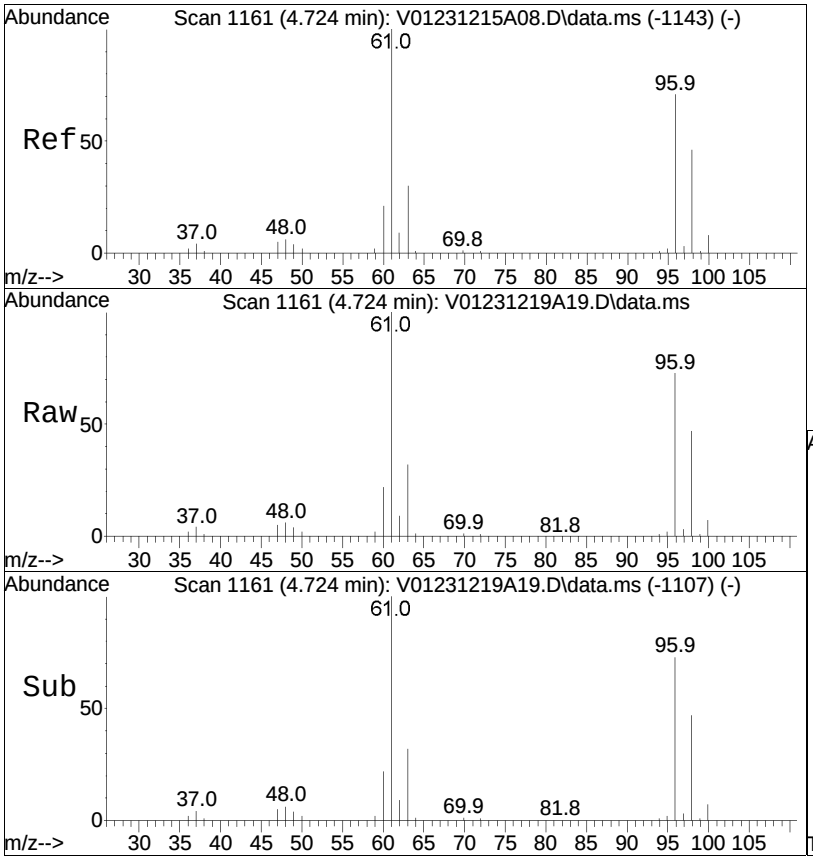


#23
1,1-Dichloroethane
Concen: 15.12 ug/L
RT: 4.208 min Scan# 976
Delta R.T. -0.003 min
Lab File: V01231219A19.D
Acq: 19 Dec 2023 1:19 pm

Tgt Ion: 63 Resp: 335772

Ion	Ratio	Lower	Upper
63	100		
65	30.3	10.9	50.9
83	12.3	0.0	33.0

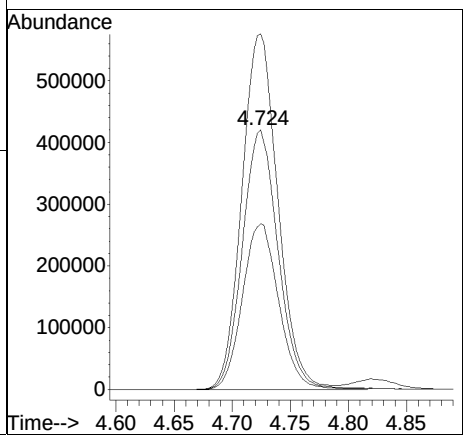


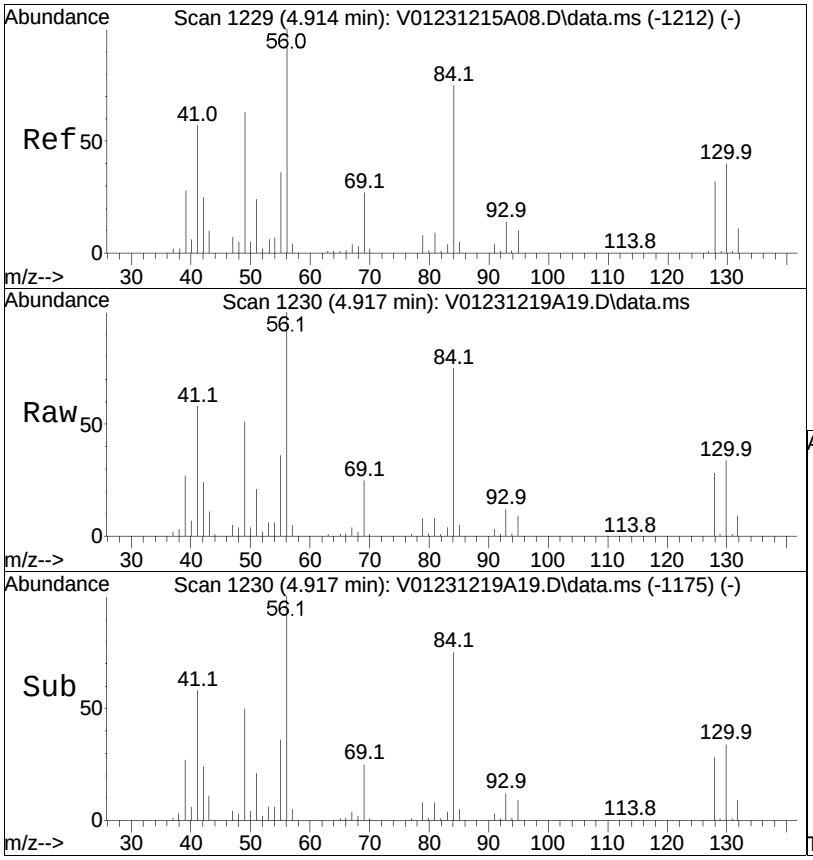


#28
cis-1,2-Dichloroethene
Concen: 72.13 ug/L
RT: 4.724 min Scan# 1161
Delta R.T. 0.000 min
Lab File: V01231219A19.D
Acq: 19 Dec 2023 1:19 pm

Tgt Ion: 96 Resp: 899703

Ion	Ratio	Lower	Upper
96	100		
61	137.9	105.8	158.6
98	64.7	51.1	76.7

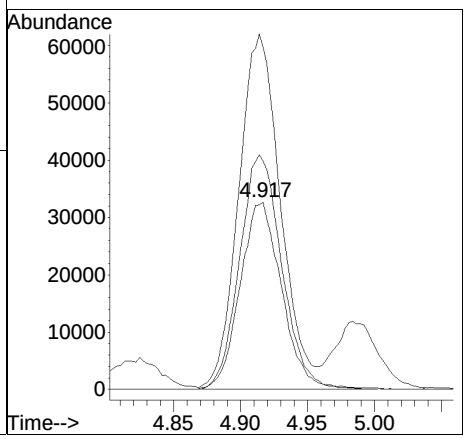


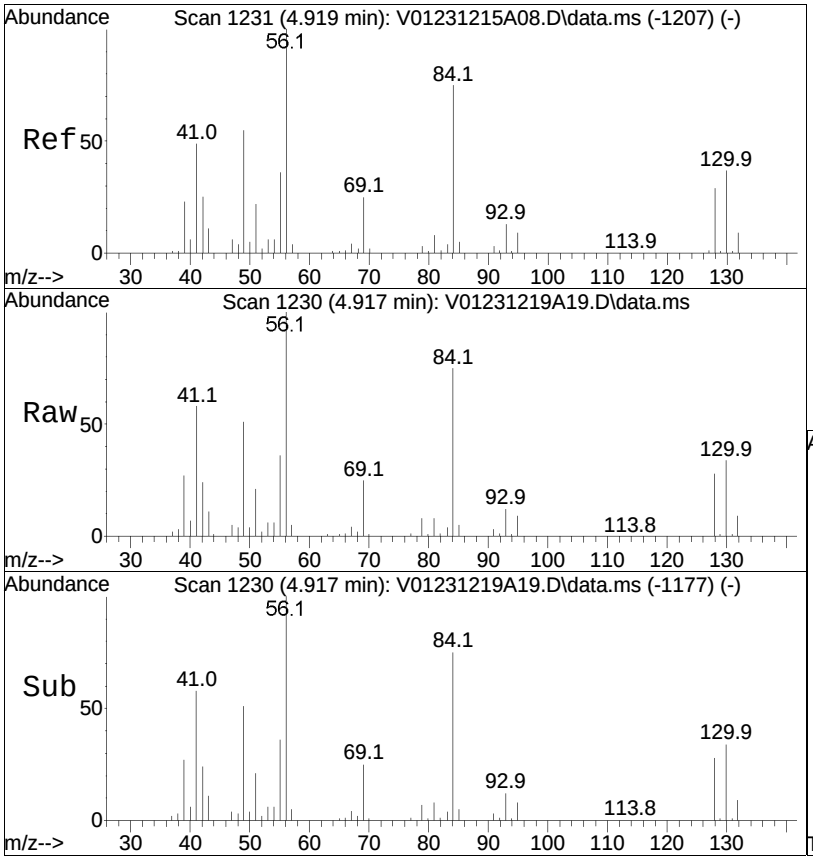


#30
Bromochloromethane
Concen: 12.62 ug/L
RT: 4.917 min Scan# 1230
Delta R.T. 0.003 min
Lab File: V01231219A19.D
Acq: 19 Dec 2023 1:19 pm

Tgt Ion:128 Resp: 70379

Ion	Ratio	Lower	Upper
128	100		
49	187.8	140.4	210.6
130	127.9	103.1	154.7

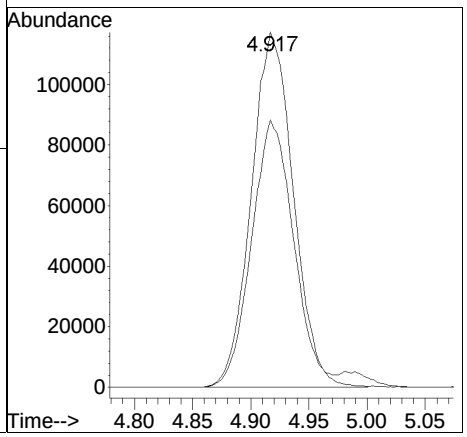


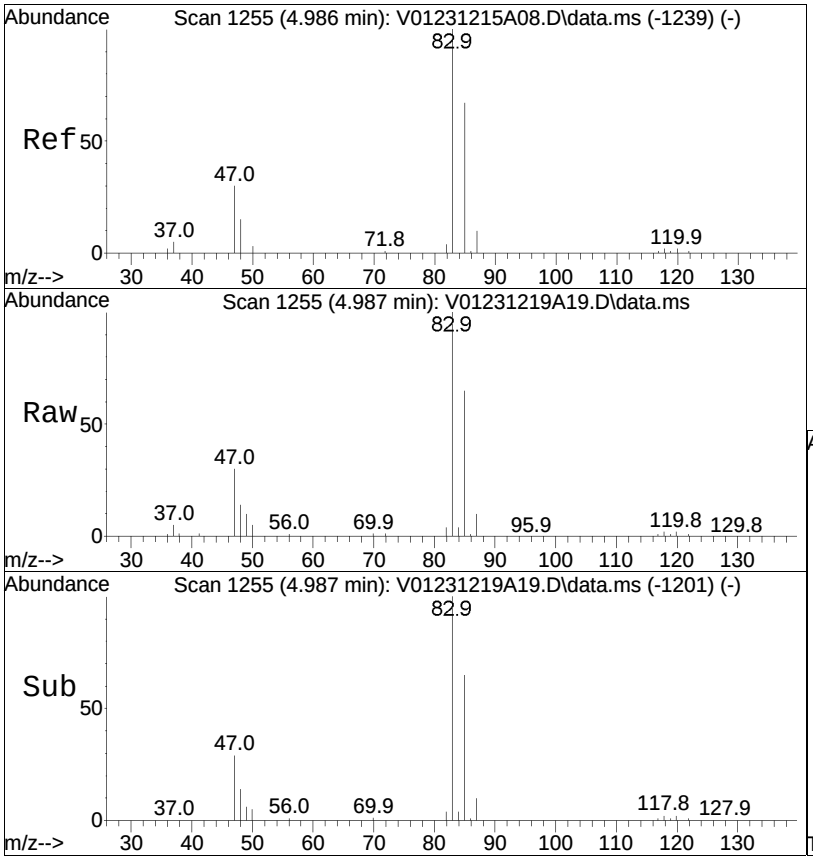


#31
Cyclohexane
Concen: 13.04 ug/L
RT: 4.917 min Scan# 1230
Delta R.T. -0.003 min
Lab File: V01231219A19.D
Acq: 19 Dec 2023 1:19 pm

Tgt Ion: 56 Resp: 296292

Ion	Ratio	Lower	Upper
56	100		
84	75.5	53.6	111.4

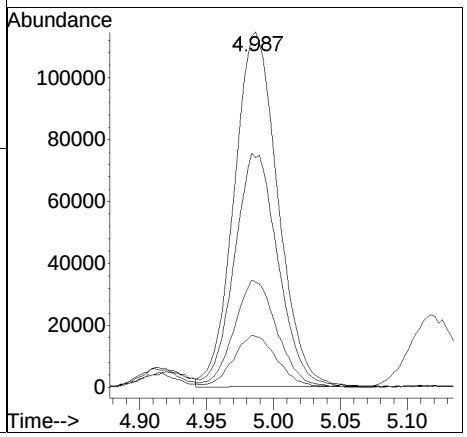


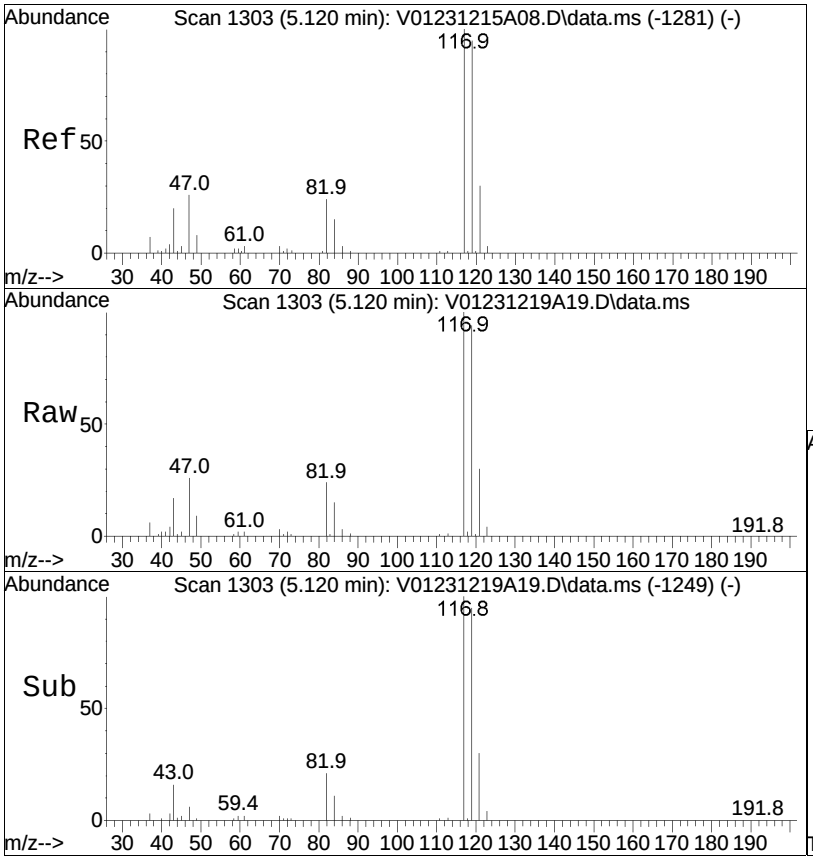


#32
Chloroform
Concen: 13.35 ug/L
RT: 4.987 min Scan# 1255
Delta R.T. 0.000 min
Lab File: V01231219A19.D
Acq: 19 Dec 2023 1:19 pm

Tgt Ion: 83 Resp: 260175

Ion	Ratio	Lower	Upper
83	100		
85	66.0	42.3	87.8
47	29.4	17.8	37.0
48	14.8	9.3	19.3

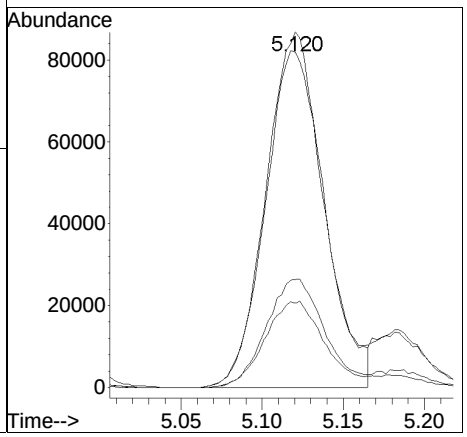


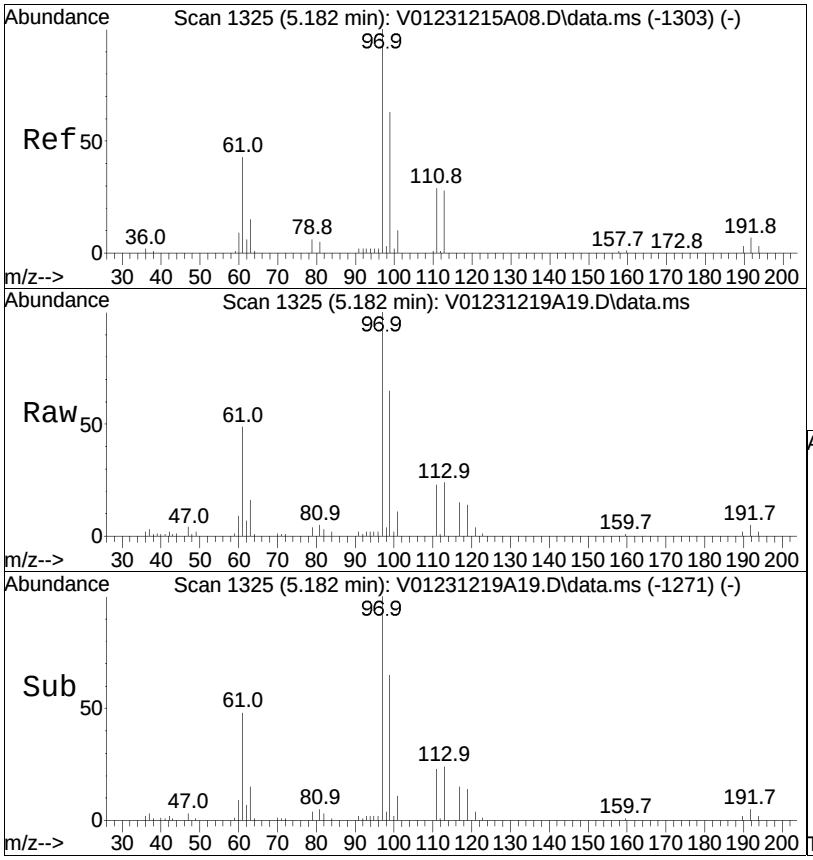


#34
Carbon tetrachloride
Concen: 14.14 ug/L
RT: 5.120 min Scan# 1303
Delta R.T. 0.000 min
Lab File: V01231219A19.D
Acq: 19 Dec 2023 1:19 pm

Tgt Ion:117 Resp: 215547

Ion	Ratio	Lower	Upper
117	100		
119	95.7	62.1	128.9
121	30.8	19.8	41.0
82	24.9	17.1	35.5

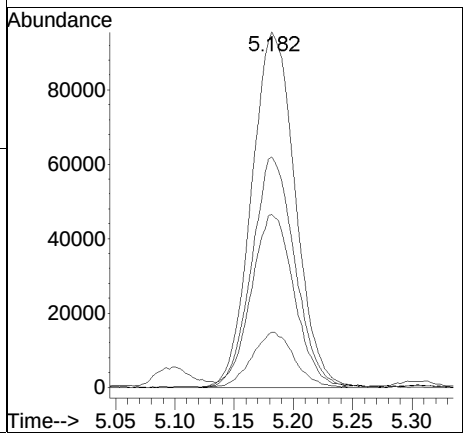


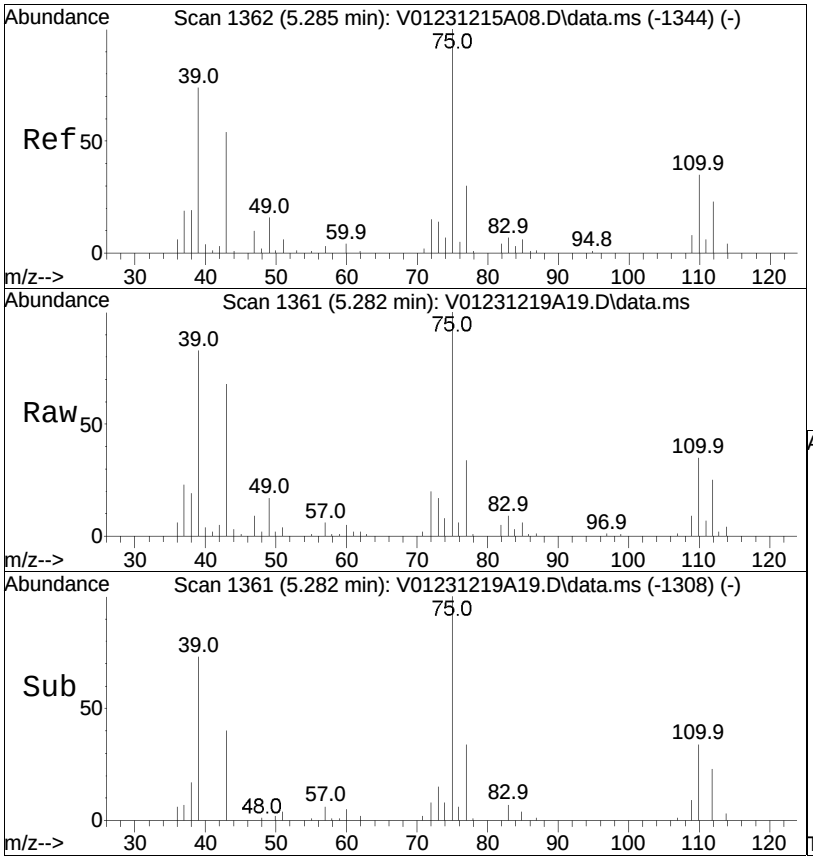


#37
1,1,1-Trichloroethane
Concen: 13.90 ug/L
RT: 5.182 min Scan# 1325
Delta R.T. 0.000 min
Lab File: V01231219A19.D
Acq: 19 Dec 2023 1:19 pm

Tgt Ion: 97 Resp: 244738

Ion	Ratio	Lower	Upper
97	100		
99	63.9	41.7	86.7
61	47.2	29.4	61.2
63	15.1	9.4	19.4

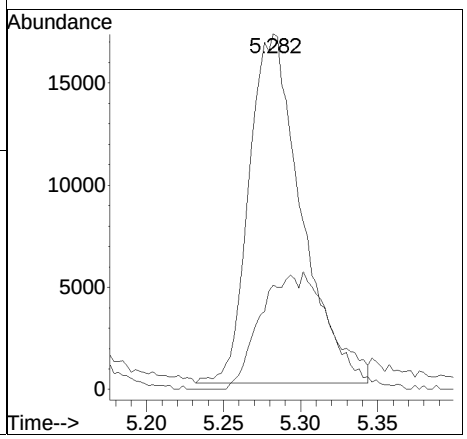


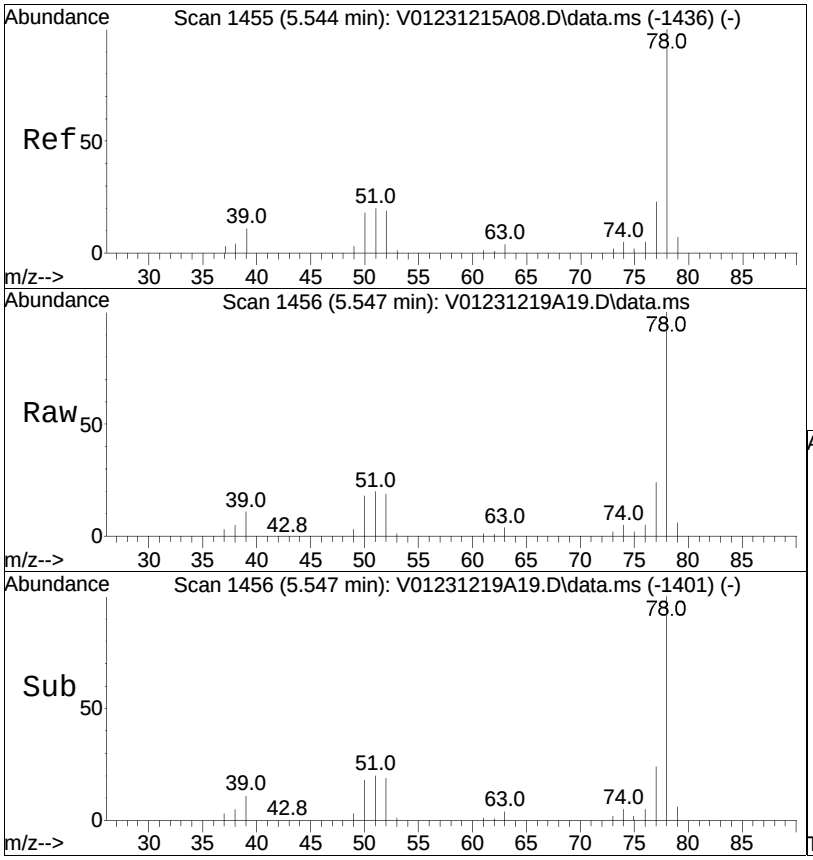


#39
2-Butanone
Concen: 11.70 ug/L
RT: 5.282 min Scan# 1361
Delta R.T. -0.003 min
Lab File: V01231219A19.D
Acq: 19 Dec 2023 1:19 pm

Tgt Ion: 43 Resp: 40635

Ion	Ratio	Lower	Upper
43	100		
72	24.3	45.8	68.6#

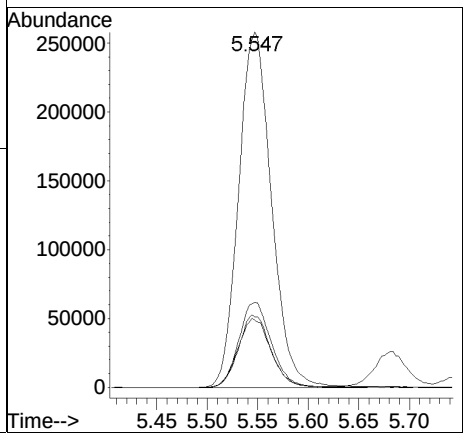


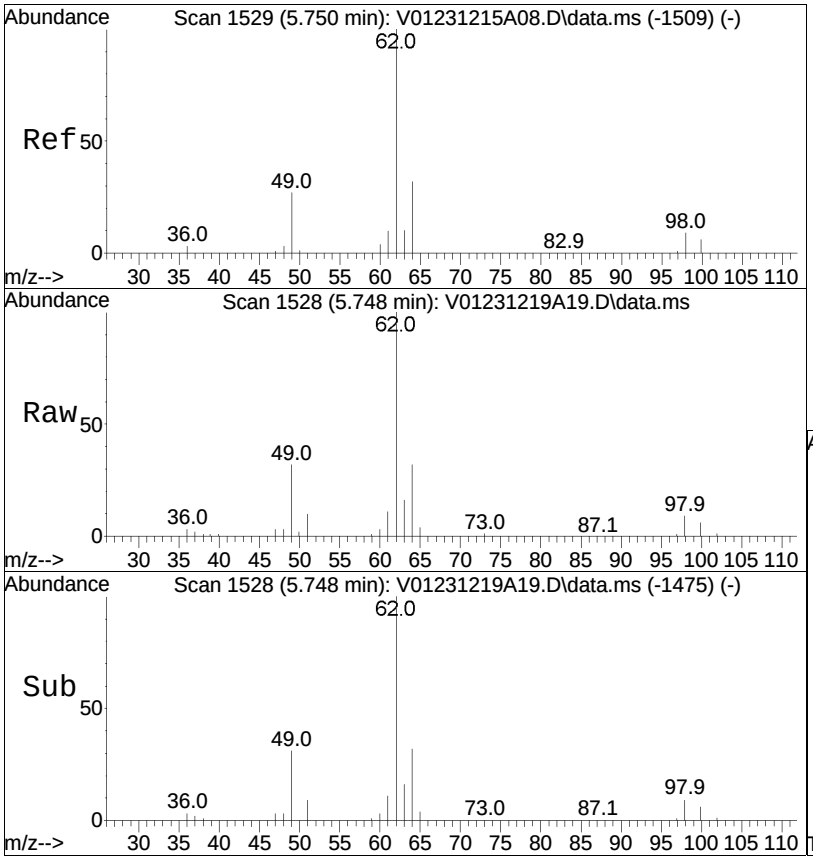


#41
Benzene
Concen: 13.44 ug/L
RT: 5.547 min Scan# 1456
Delta R.T. 0.003 min
Lab File: V01231219A19.D
Acq: 19 Dec 2023 1:19 pm

Tgt Ion: 78 Resp: 584289

Ion	Ratio	Lower	Upper
78	100		
77	23.8	15.7	32.5
51	20.3	11.6	24.2
52	19.3	10.9	22.5

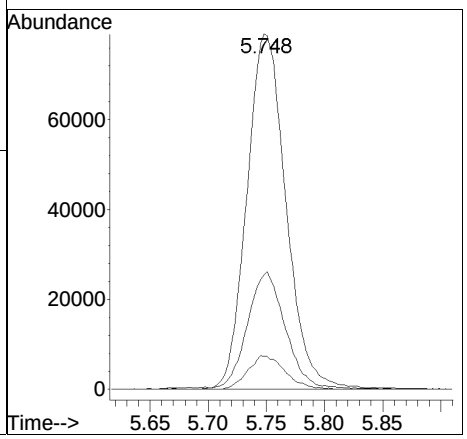


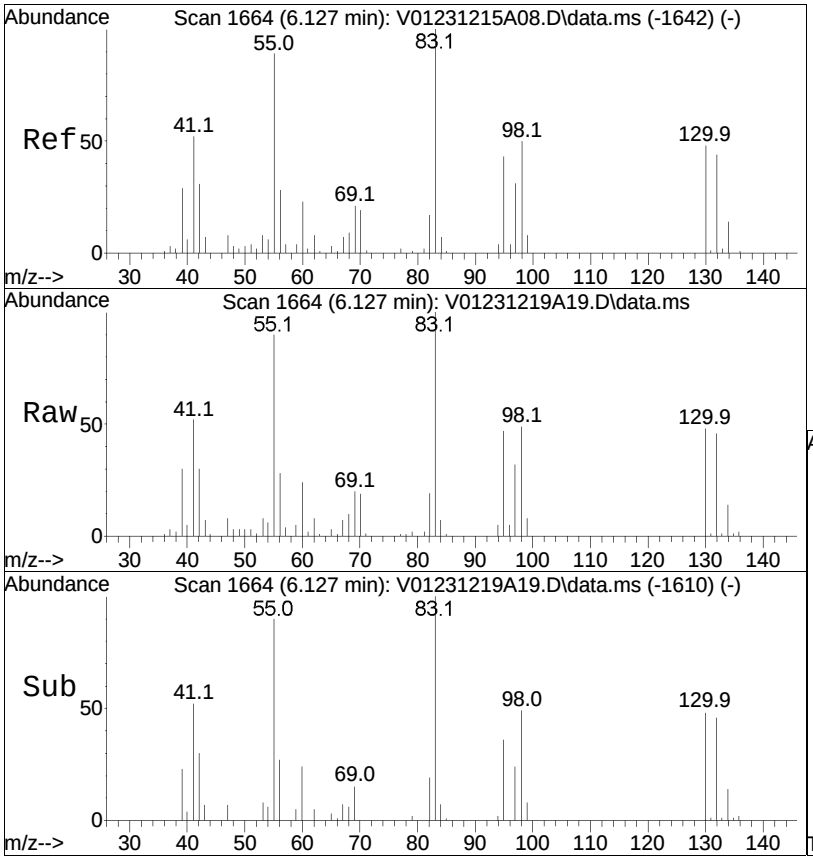


#44
1,2-Dichloroethane
Concen: 12.72 ug/L
RT: 5.748 min Scan# 1528
Delta R.T. -0.003 min
Lab File: V01231219A19.D
Acq: 19 Dec 2023 1:19 pm

Tgt Ion: 62 Resp: 185005

Ion	Ratio	Lower	Upper
62	100		
64	31.6	12.1	52.1
98	9.1	0.0	28.8

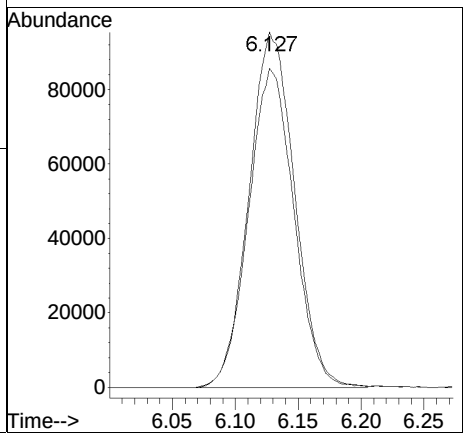


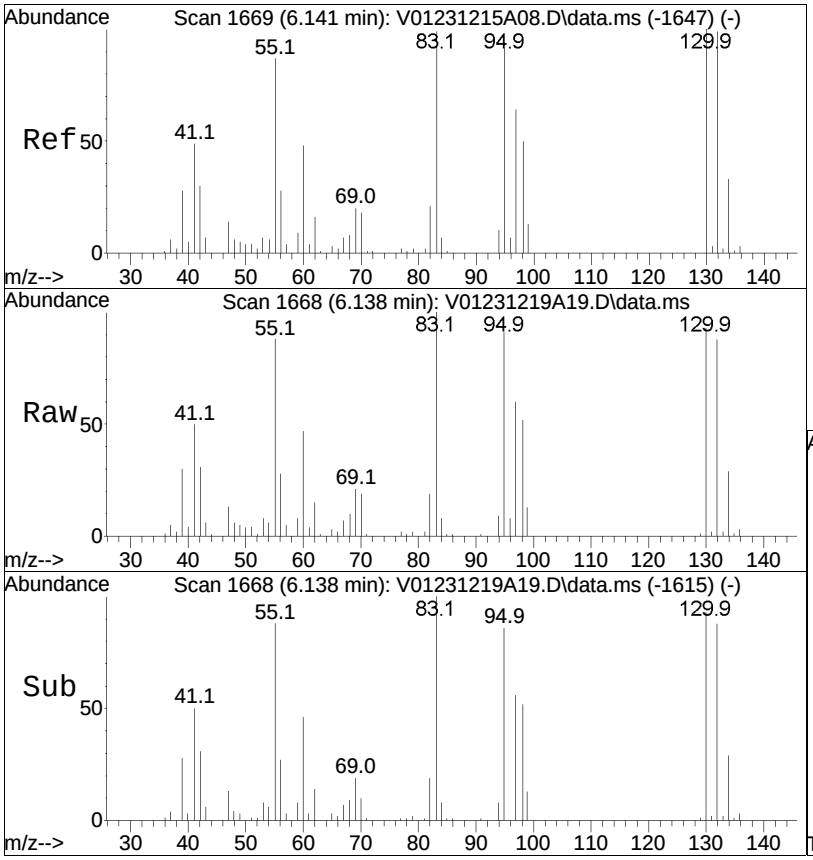


#47
Methyl cyclohexane
Concen: 12.57 ug/L
RT: 6.127 min Scan# 1664
Delta R.T. 0.000 min
Lab File: V01231219A19.D
Acq: 19 Dec 2023 1:19 pm

Tgt Ion: 83 Resp: 240793

Ion	Ratio	Lower	Upper
83	100		
55	89.4	64.6	96.8

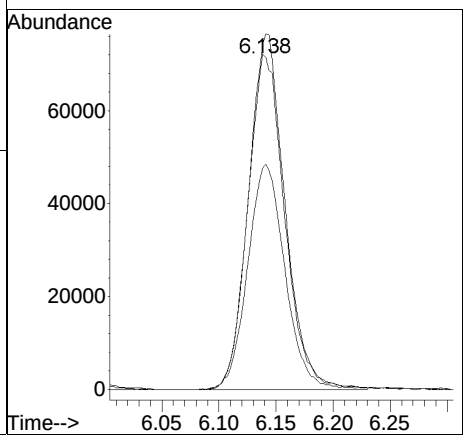


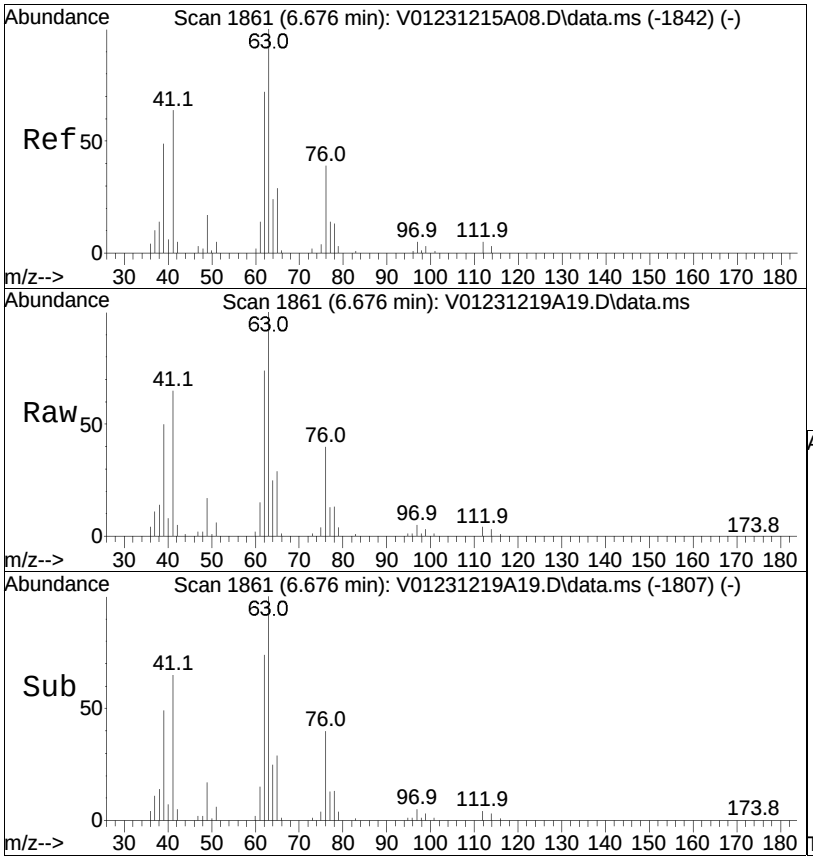


#48
Trichloroethene
Concen: 13.24 ug/L
RT: 6.138 min Scan# 1668
Delta R.T. -0.003 min
Lab File: V01231219A19.D
Acq: 19 Dec 2023 1:19 pm

Tgt Ion: 95 Resp: 161934

Ion	Ratio	Lower	Upper
95	100		
97	68.0	54.4	81.6
130	104.6	80.6	120.8

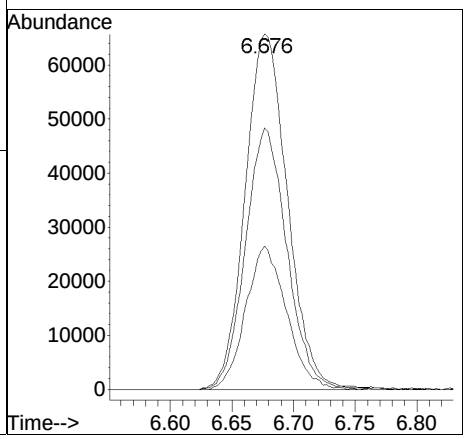


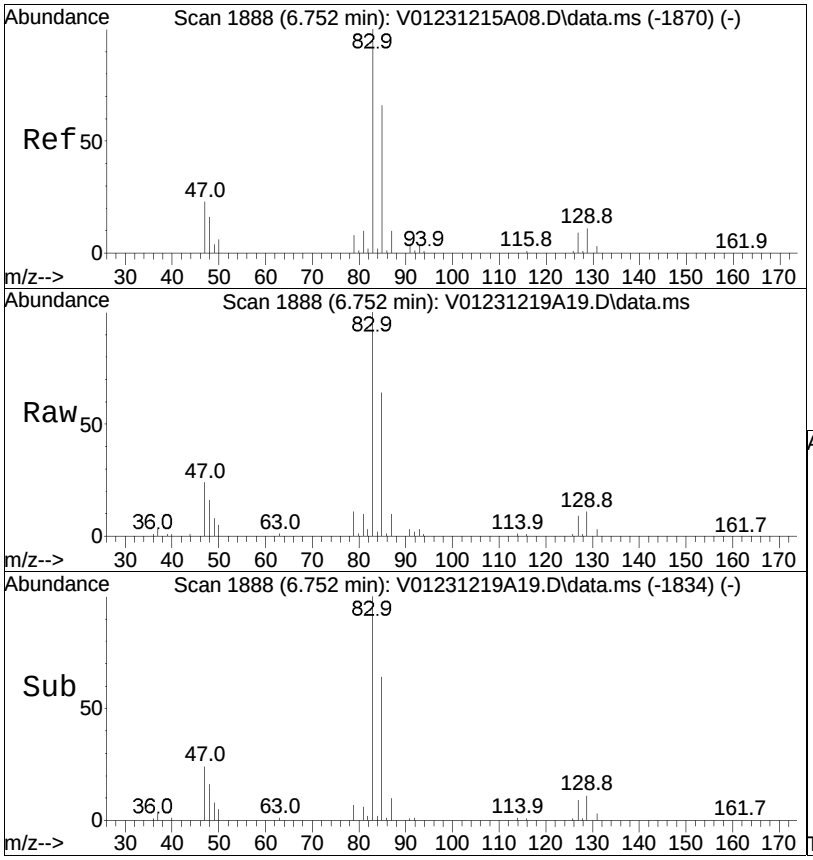


#51
1,2-Dichloropropane
Concen: 13.02 ug/L
RT: 6.676 min Scan# 1861
Delta R.T. 0.000 min
Lab File: V01231219A19.D
Acq: 19 Dec 2023 1:19 pm

Tgt Ion: 63 Resp: 157135

Ion	Ratio	Lower	Upper
63	100		
62	72.2	57.2	85.8
76	38.9	33.6	50.4

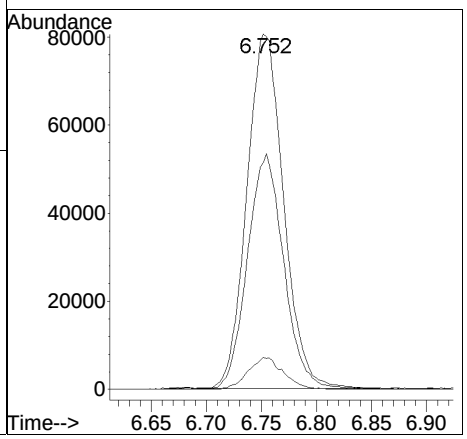


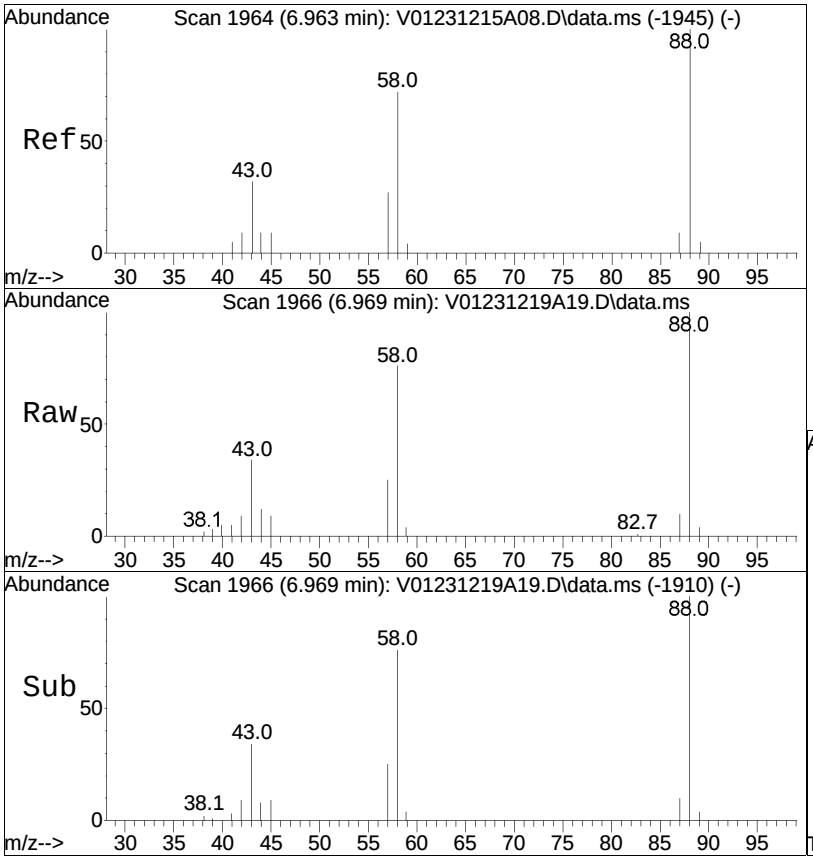


#54
Bromodichloromethane
Concen: 12.66 ug/L
RT: 6.752 min Scan# 1888
Delta R.T. 0.000 min
Lab File: V01231219A19.D
Acq: 19 Dec 2023 1:19 pm

Tgt Ion: 83 Resp: 187063

Ion	Ratio	Lower	Upper
83	100		
85	66.0	52.2	78.4
127	8.7	6.9	10.3

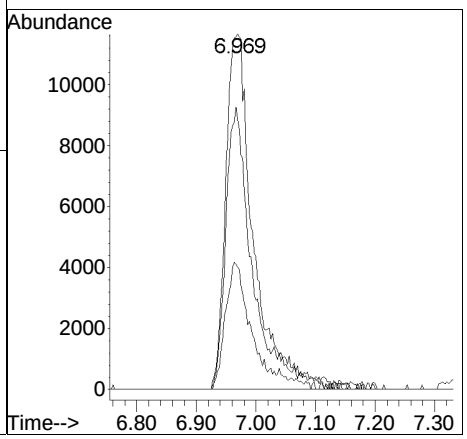


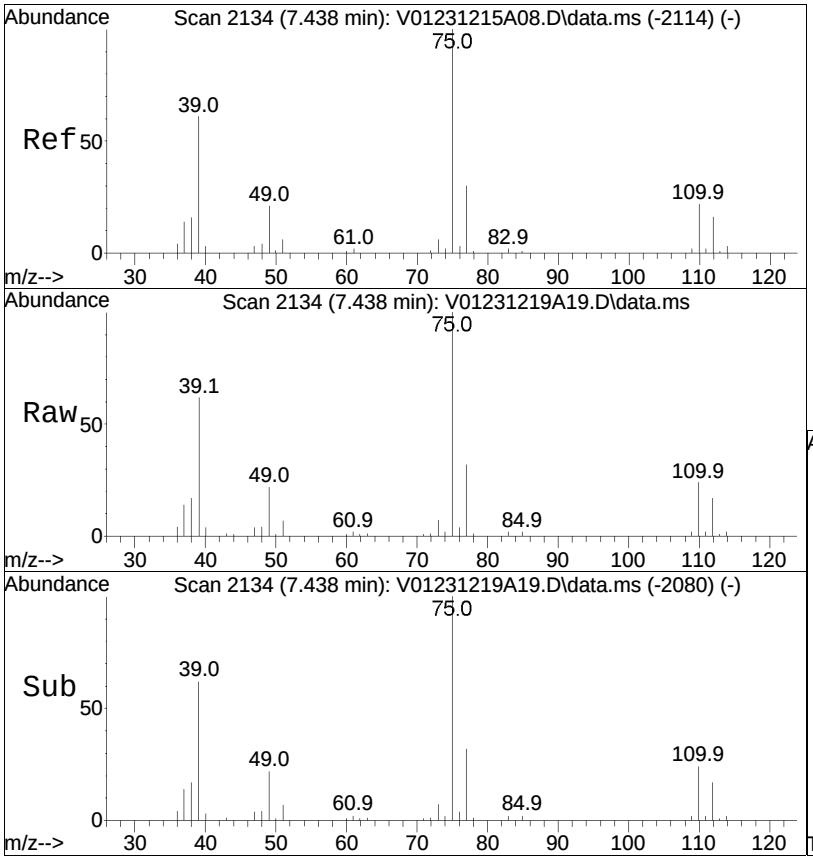


#57
1,4-Dioxane
Concen: 553.29 ug/L M1
RT: 6.969 min Scan# 1966
Delta R.T. 0.006 min
Lab File: V01231219A19.D
Acq: 19 Dec 2023 1:19 pm

Tgt Ion: 88 Resp: 38518

Ion	Ratio	Lower	Upper
88	100		
58	66.6	54.8	82.2
43	30.3	29.3	43.9

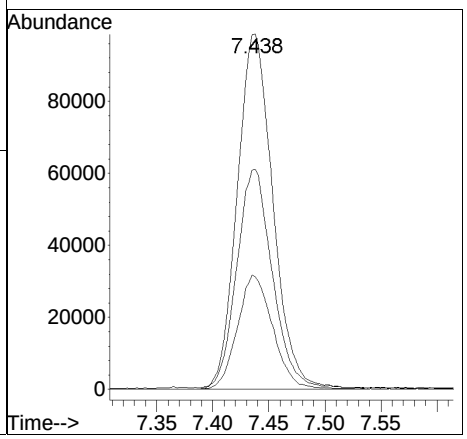


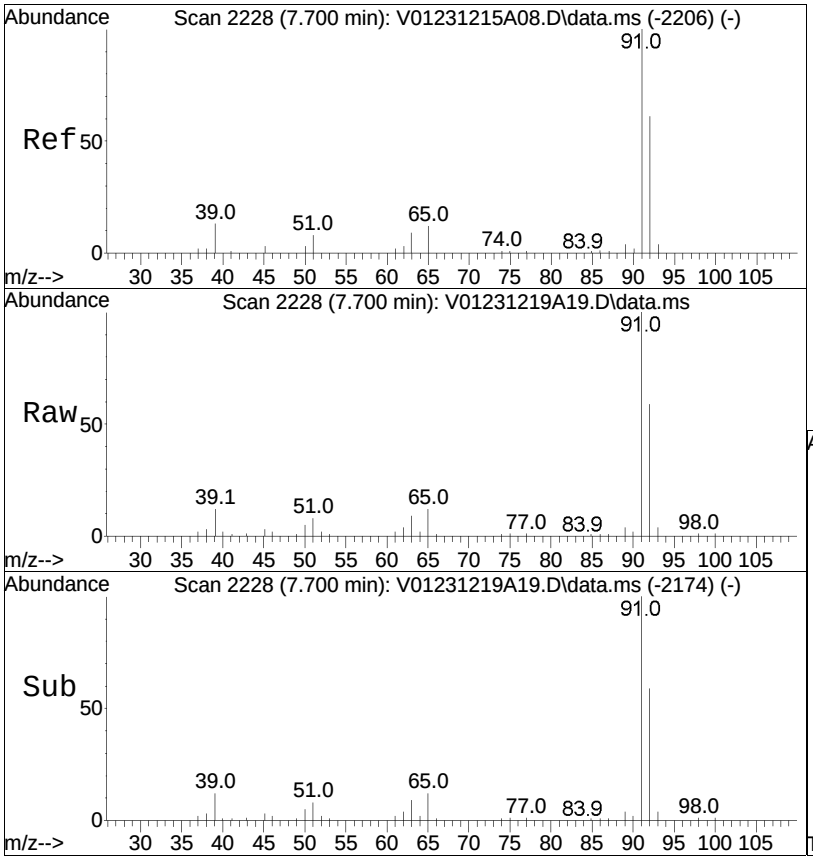


#58
cis-1,3-Dichloropropene
Concen: 12.70 ug/L
RT: 7.438 min Scan# 2134
Delta R.T. 0.000 min
Lab File: V01231219A19.D
Acq: 19 Dec 2023 1:19 pm

Tgt Ion: 75 Resp: 219803

Ion	Ratio	Lower	Upper
75	100		
77	31.8	25.1	37.7
39	60.9	42.6	63.8

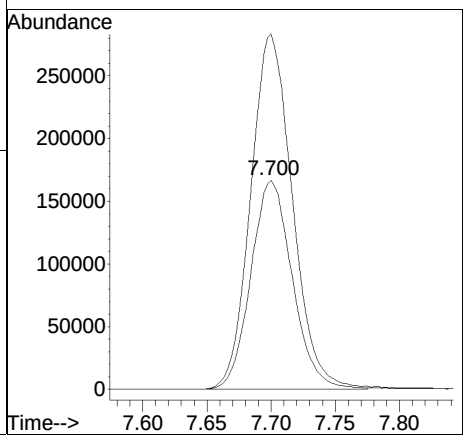


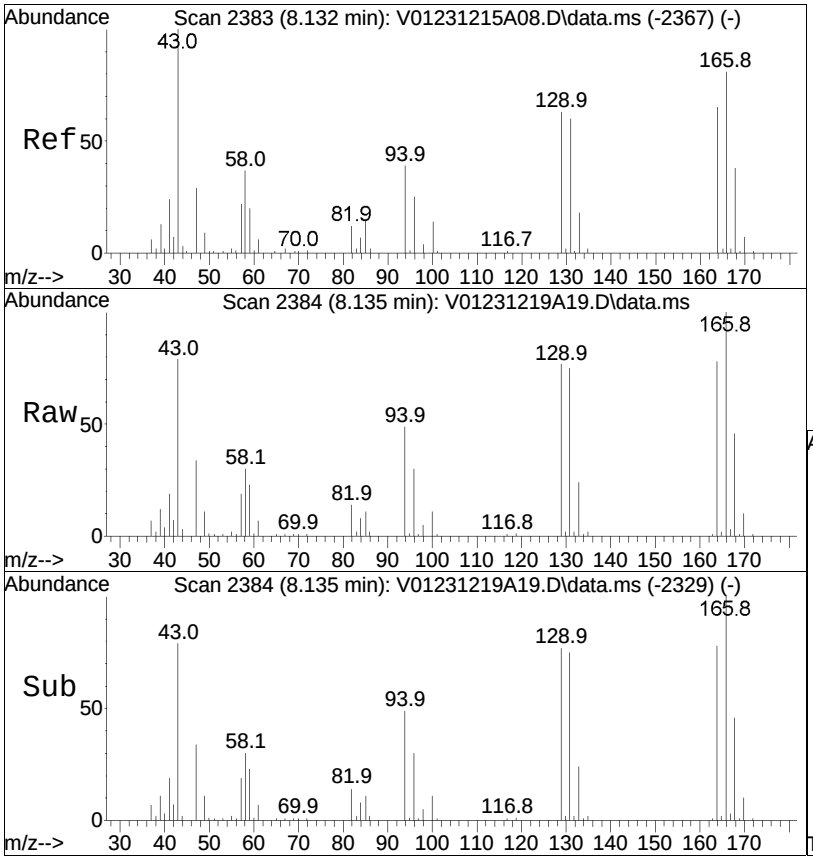


#61
Toluene
Concen: 12.54 ug/L
RT: 7.700 min Scan# 2228
Delta R.T. 0.000 min
Lab File: V01231219A19.D
Acq: 19 Dec 2023 1:19 pm

Tgt Ion: 92 Resp: 374990

Ion	Ratio	Lower	Upper
92	100		
91	170.7	137.5	206.3

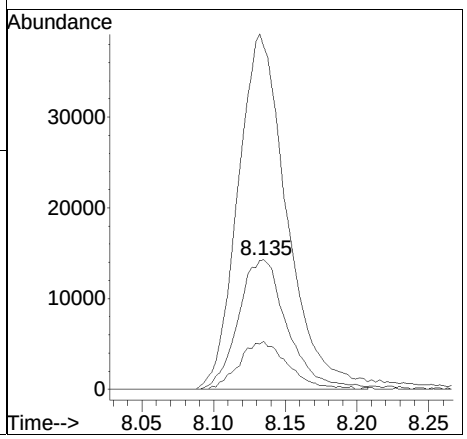


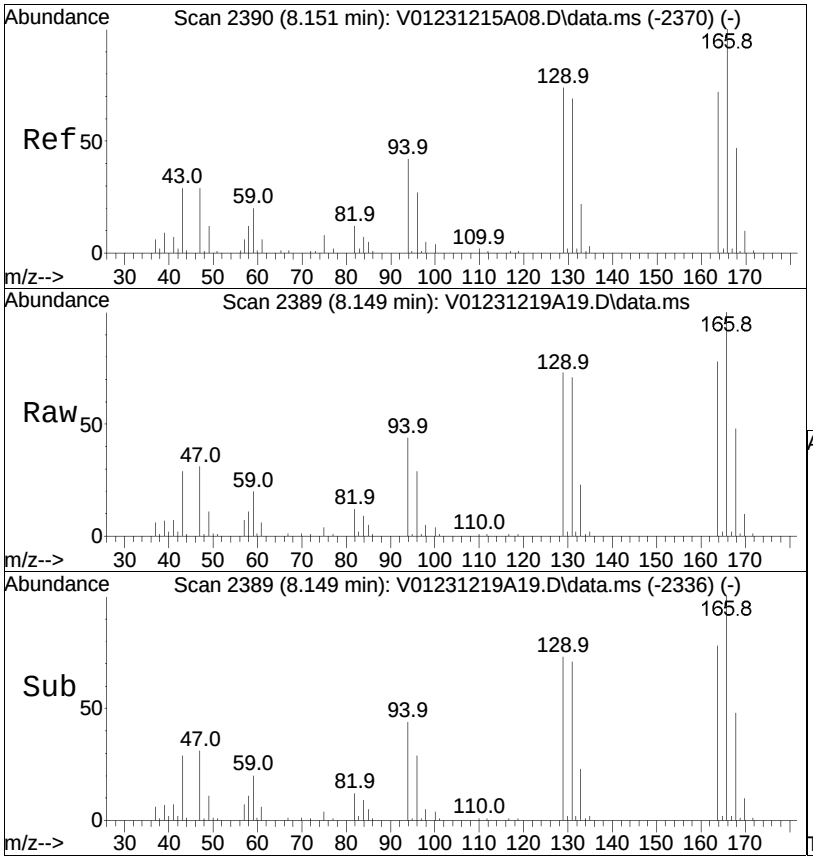


#62
4-Methyl-2-pentanone
Concen: 11.05 ug/L
RT: 8.135 min Scan# 2384
Delta R.T. 0.003 min
Lab File: V01231219A19.D
Acq: 19 Dec 2023 1:19 pm

Tgt Ion: 58 Resp: 34151

Ion	Ratio	Lower	Upper
58	100		
100	36.9	31.8	47.6
43	277.6	212.5	318.7

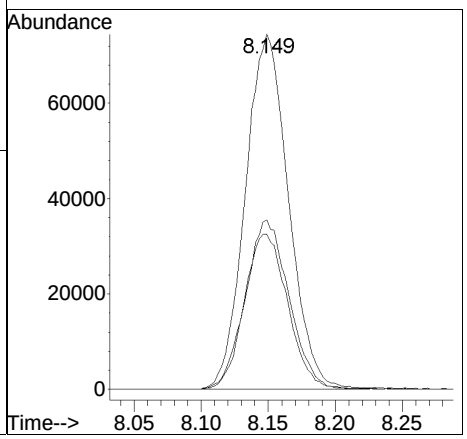


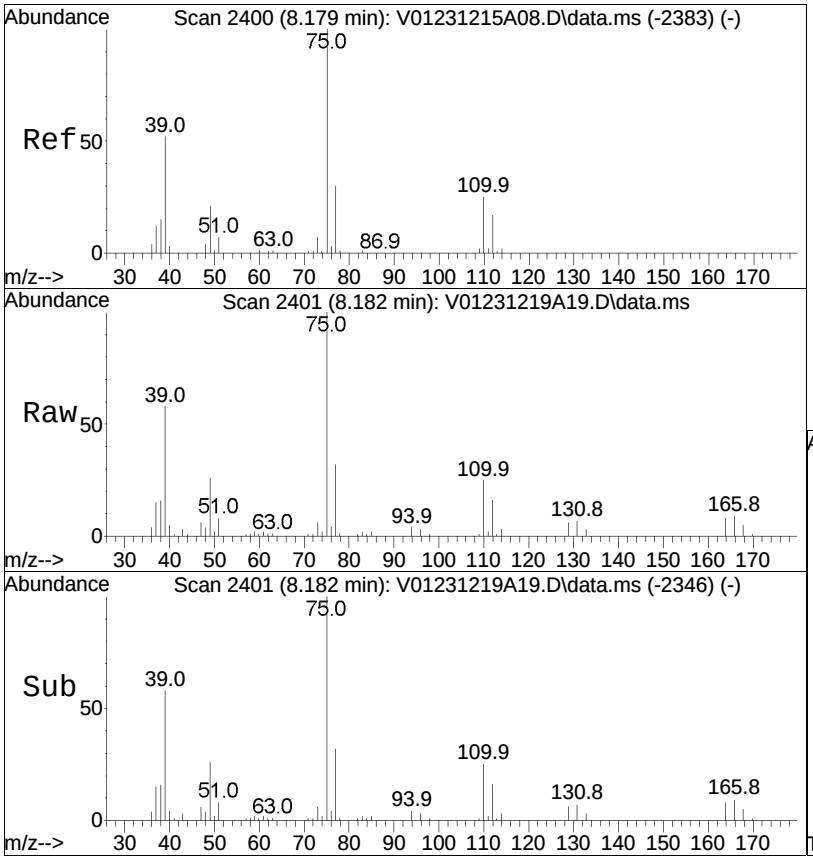


#63
Tetrachloroethene
Concen: 12.62 ug/L
RT: 8.149 min Scan# 2389
Delta R.T. -0.003 min
Lab File: V01231219A19.D
Acq: 19 Dec 2023 1:19 pm

Tgt Ion:166 Resp: 167242

Ion	Ratio	Lower	Upper
166	100		
168	47.6	27.4	67.4
94	44.6	24.8	64.8

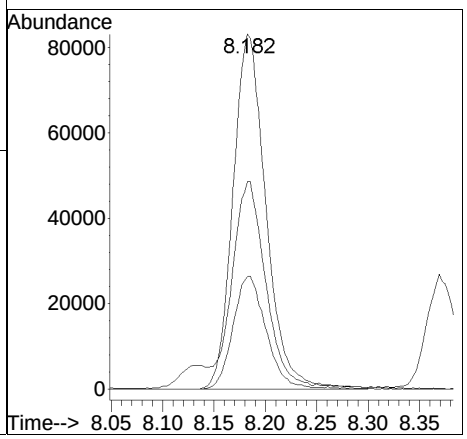


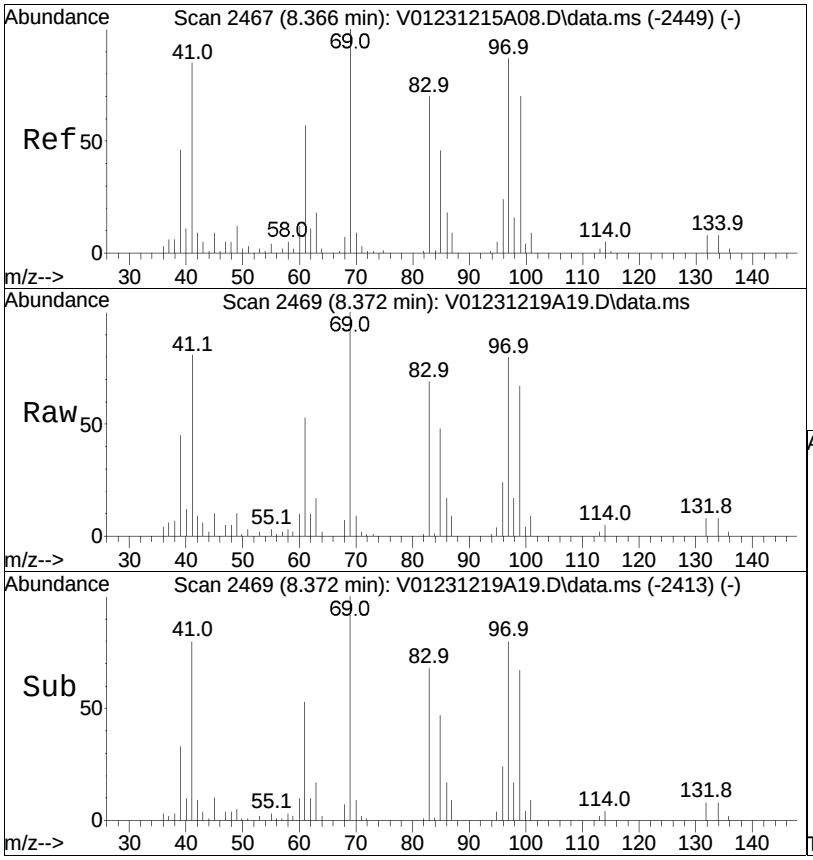


#65
trans-1,3-Dichloropropene
Concen: 11.87 ug/L
RT: 8.182 min Scan# 2401
Delta R.T. 0.003 min
Lab File: V01231219A19.D
Acq: 19 Dec 2023 1:19 pm

Tgt Ion: 75 Resp: 186385

Ion	Ratio	Lower	Upper
75	100		
77	32.0	11.8	51.8
39	57.3	30.2	70.2

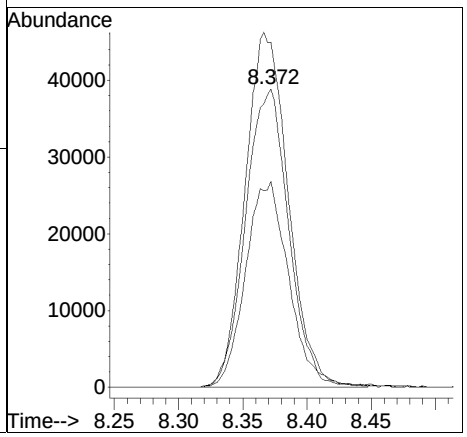


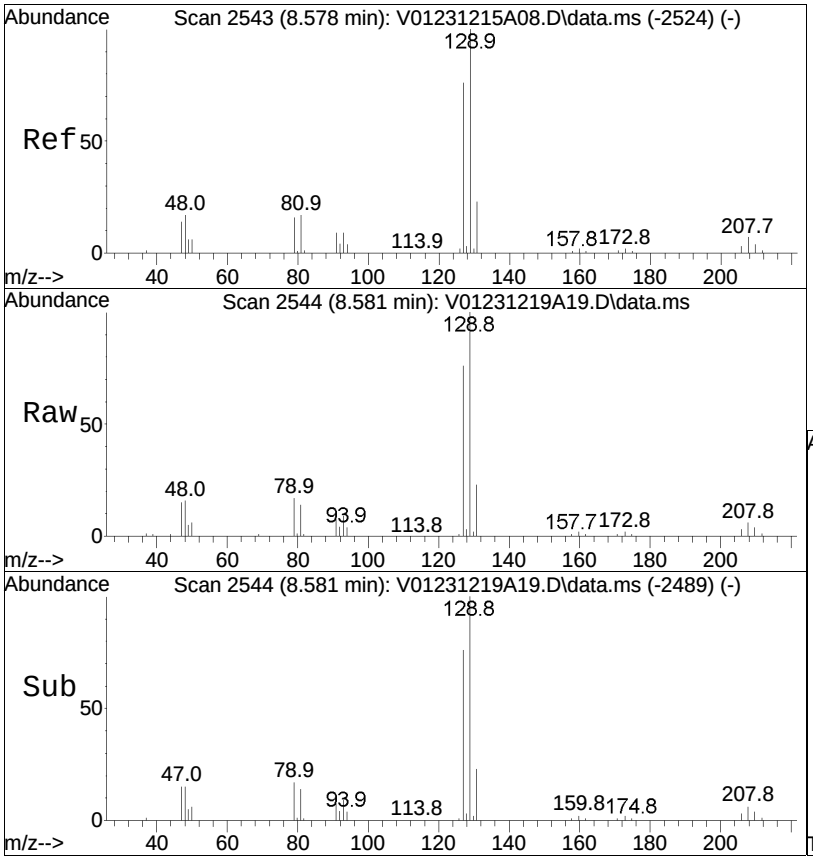


#68
1,1,2-Trichloroethane
Concen: 11.97 ug/L
RT: 8.372 min Scan# 2469
Delta R.T. 0.006 min
Lab File: V01231219A19.D
Acq: 19 Dec 2023 1:19 pm

Tgt Ion: 83 Resp: 91181

Ion	Ratio	Lower	Upper
83	100		
97	118.9	96.7	136.7
85	68.6	45.3	85.3

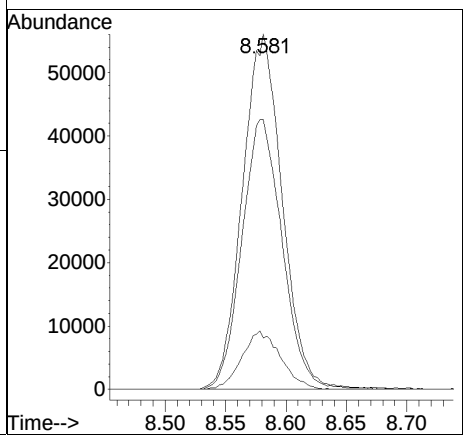


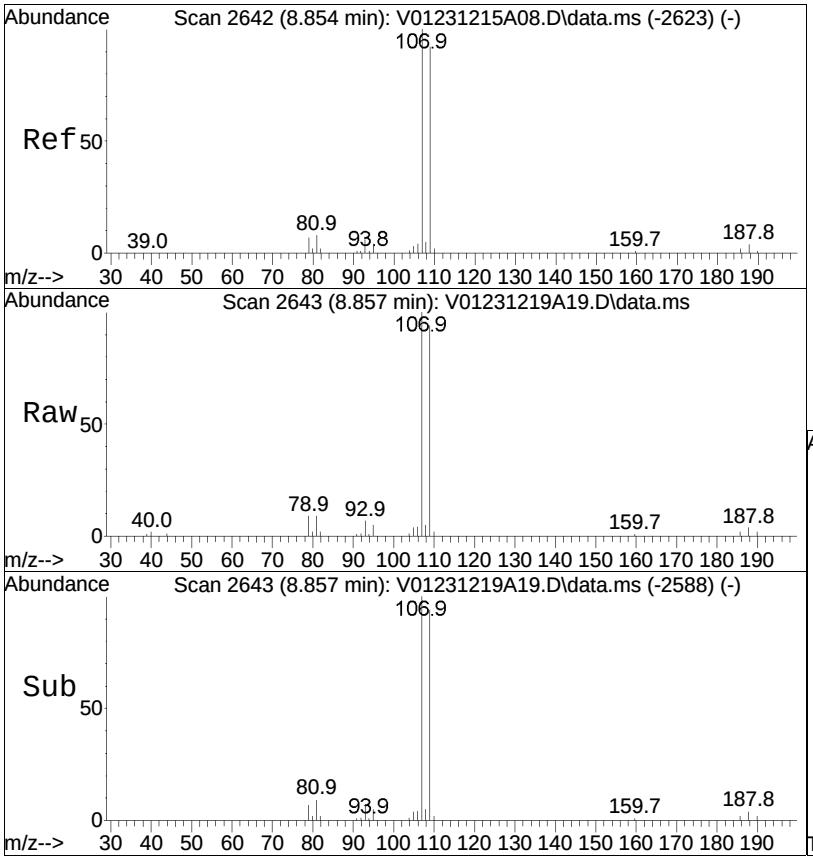


#69
Chlorodibromomethane
Concen: 11.63 ug/L
RT: 8.581 min Scan# 2544
Delta R.T. 0.003 min
Lab File: V01231219A19.D
Acq: 19 Dec 2023 1:19 pm

Tgt Ion:129 Resp: 128767

Ion	Ratio	Lower	Upper
129	100		
81	16.0	0.0	37.9
127	76.6	56.6	96.6

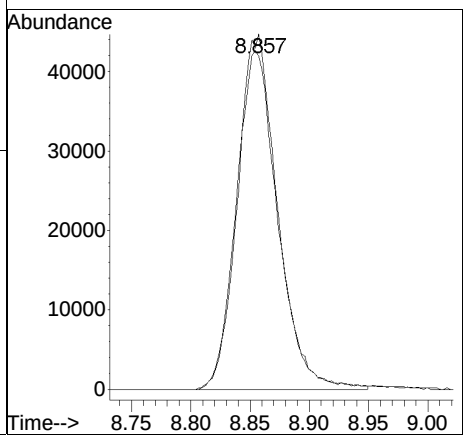


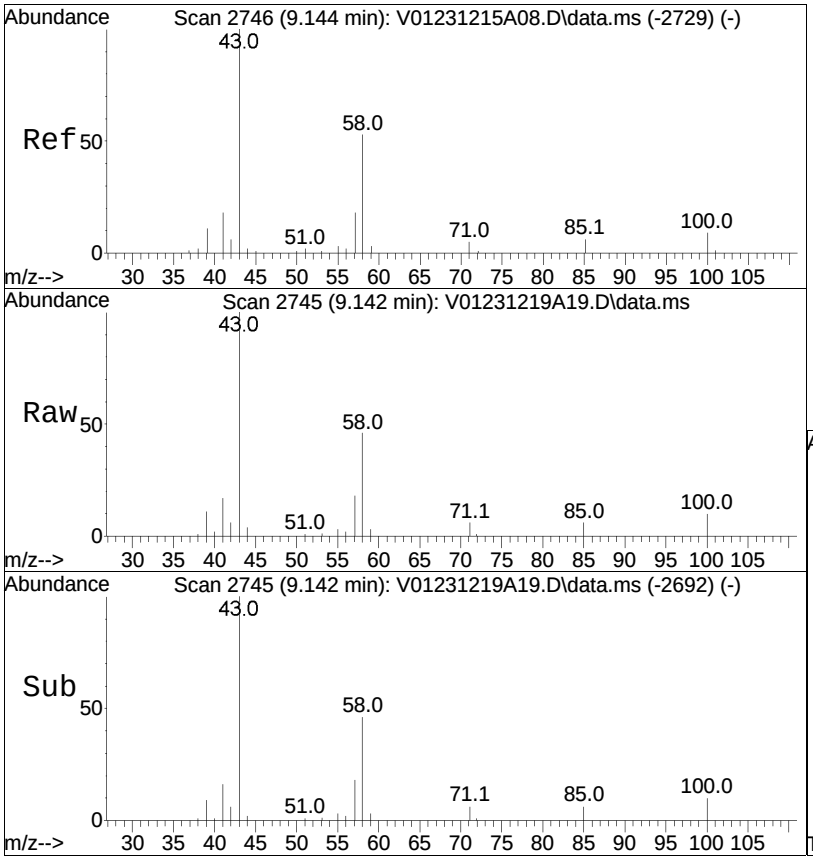


#71
1,2-Dibromoethane
Concen: 11.78 ug/L
RT: 8.857 min Scan# 2643
Delta R.T. 0.003 min
Lab File: V01231219A19.D
Acq: 19 Dec 2023 1:19 pm

Tgt Ion:107 Resp: 106849

Ion	Ratio	Lower	Upper
107	100		
109	94.7	75.6	113.4

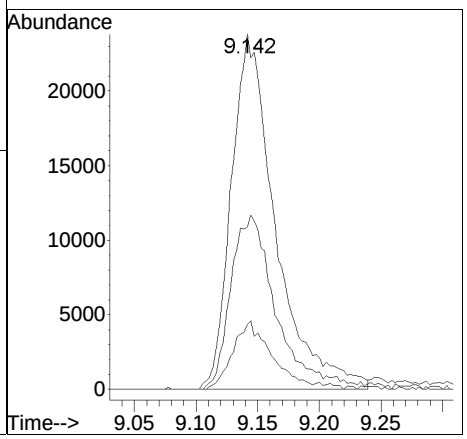


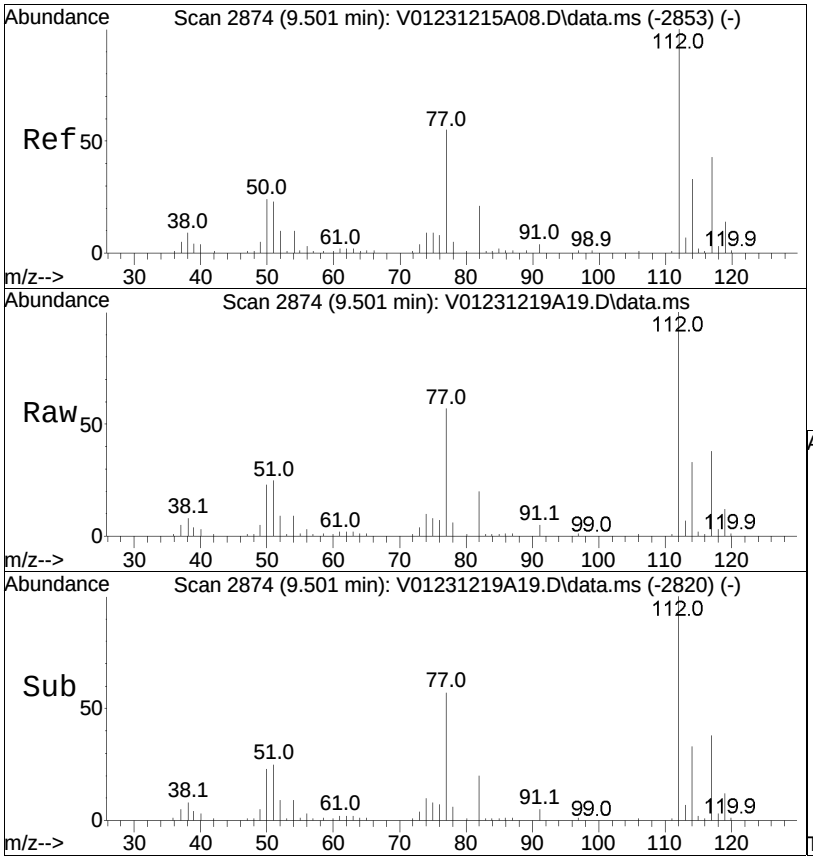


#72
2-Hexanone
Concen: 10.26 ug/L
RT: 9.142 min Scan# 2745
Delta R.T. -0.003 min
Lab File: V01231219A19.D
Acq: 19 Dec 2023 1:19 pm

Tgt Ion: 43 Resp: 59326

Ion	Ratio	Lower	Upper
43	100		
58	50.2	40.8	61.2
57	16.9	14.2	21.4

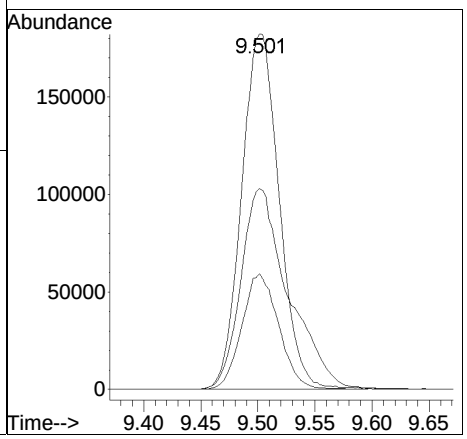


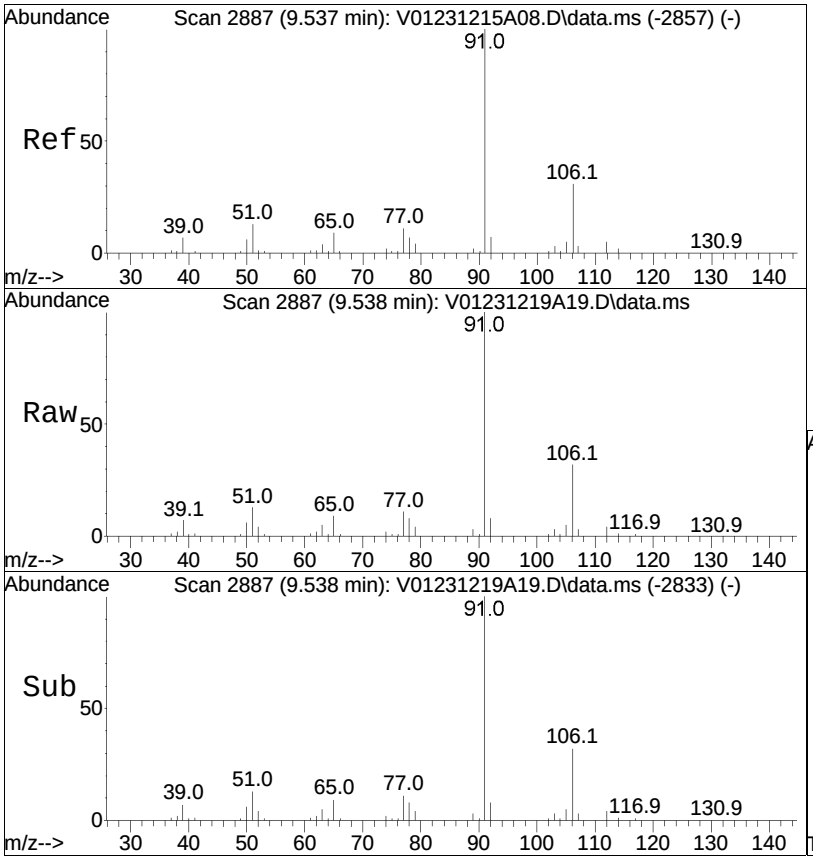


#73
Chlorobenzene
Concen: 12.33 ug/L
RT: 9.501 min Scan# 2874
Delta R.T. 0.000 min
Lab File: V01231219A19.D
Acq: 19 Dec 2023 1:19 pm

Tgt Ion:112 Resp: 418181

Ion	Ratio	Lower	Upper
112	100		
77	71.4	59.8	89.6
114	31.9	25.4	38.2

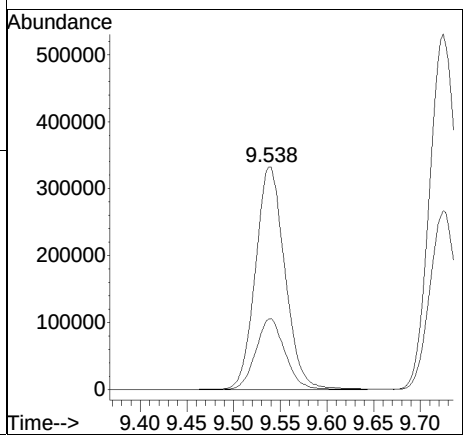


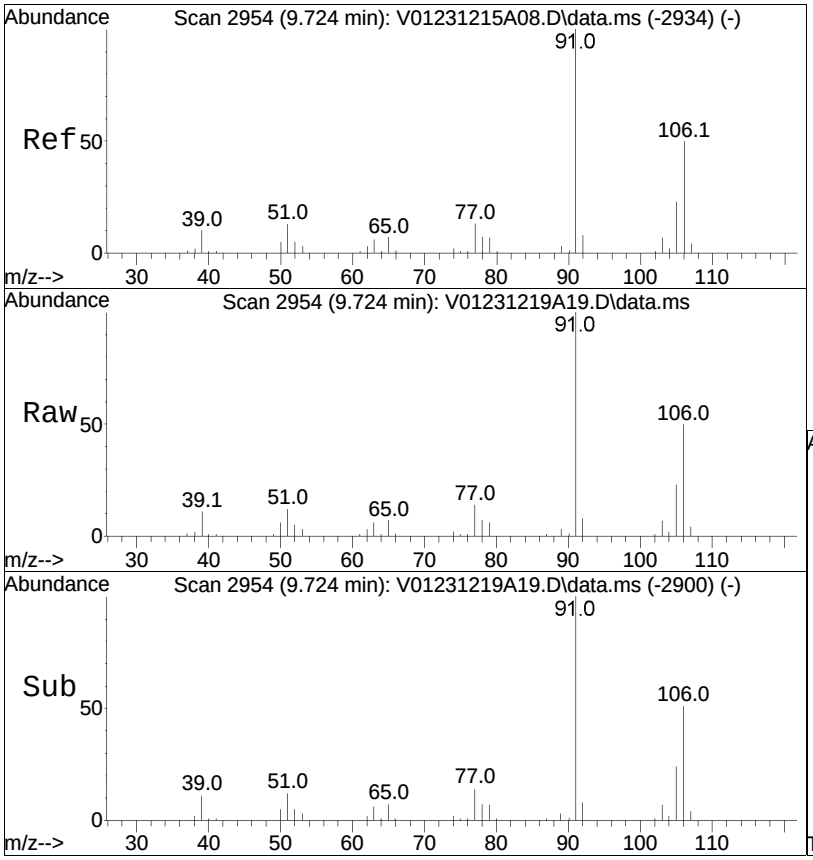


#74
Ethylbenzene
Concen: 12.70 ug/L
RT: 9.538 min Scan# 2887
Delta R.T. 0.000 min
Lab File: V01231219A19.D
Acq: 19 Dec 2023 1:19 pm

Tgt Ion: 91 Resp: 730365

Ion	Ratio	Lower	Upper
91	100		
106	31.3	24.7	37.1

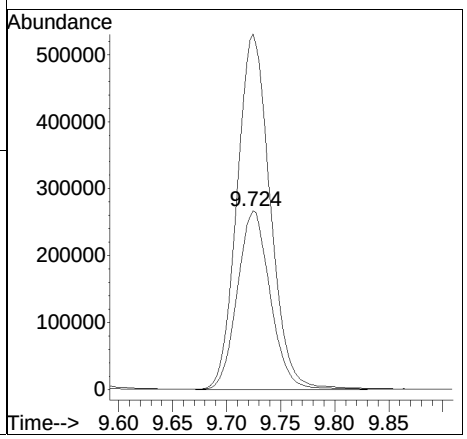


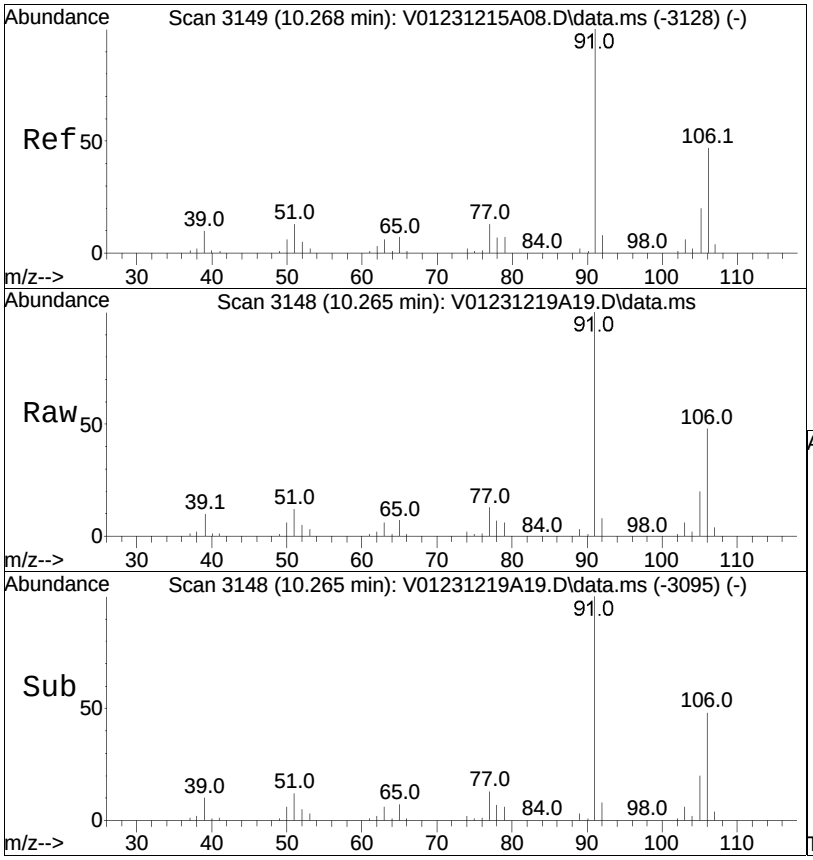


#76
p/m Xylene
Concen: 25.18 ug/L
RT: 9.724 min Scan# 2954
Delta R.T. 0.000 min
Lab File: V01231219A19.D
Acq: 19 Dec 2023 1:19 pm

Tgt Ion:106 Resp: 565242

Ion	Ratio	Lower	Upper
106	100		
91	199.4	162.9	244.3

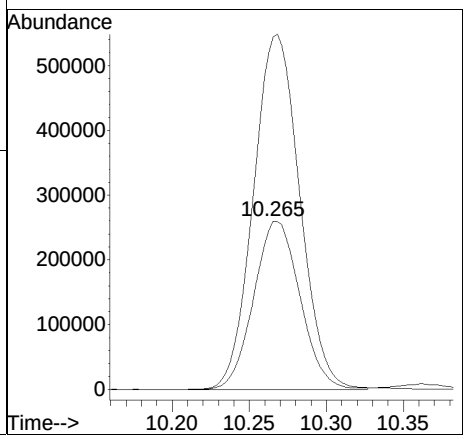


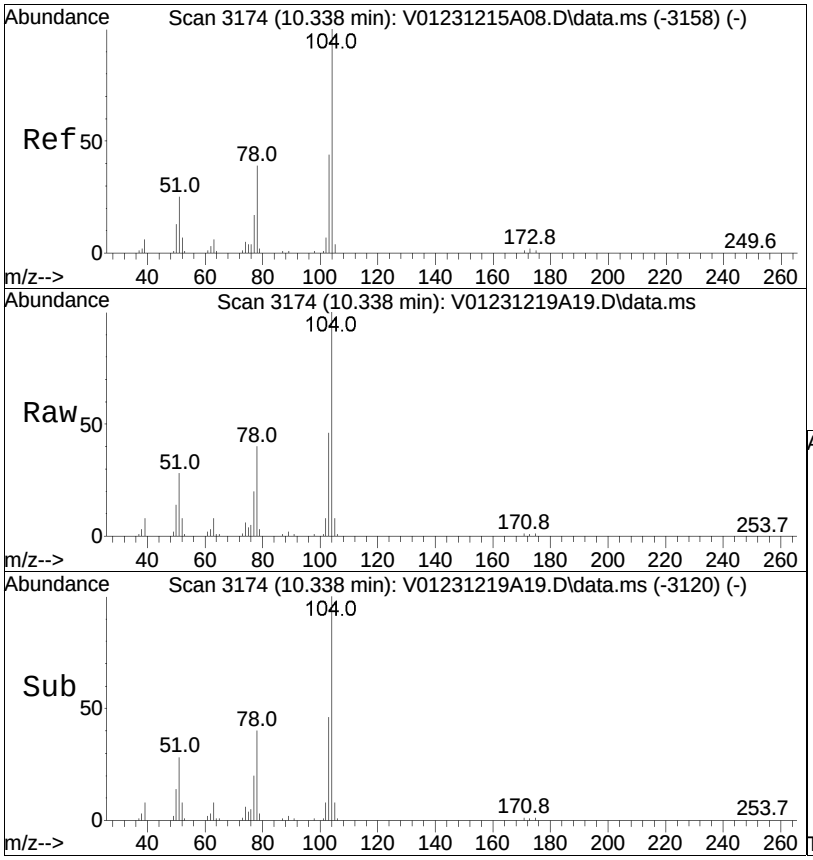


#77
o Xylene
Concen: 24.84 ug/L
RT: 10.265 min Scan# 3148
Delta R.T. -0.003 min
Lab File: V01231219A19.D
Acq: 19 Dec 2023 1:19 pm

Tgt Ion:106 Resp: 542385

Ion	Ratio	Lower	Upper
106	100		
91	211.4	171.2	256.8

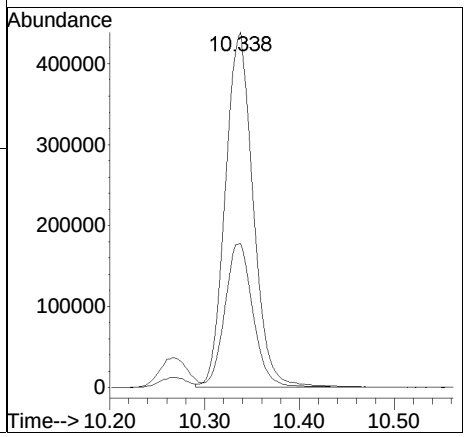


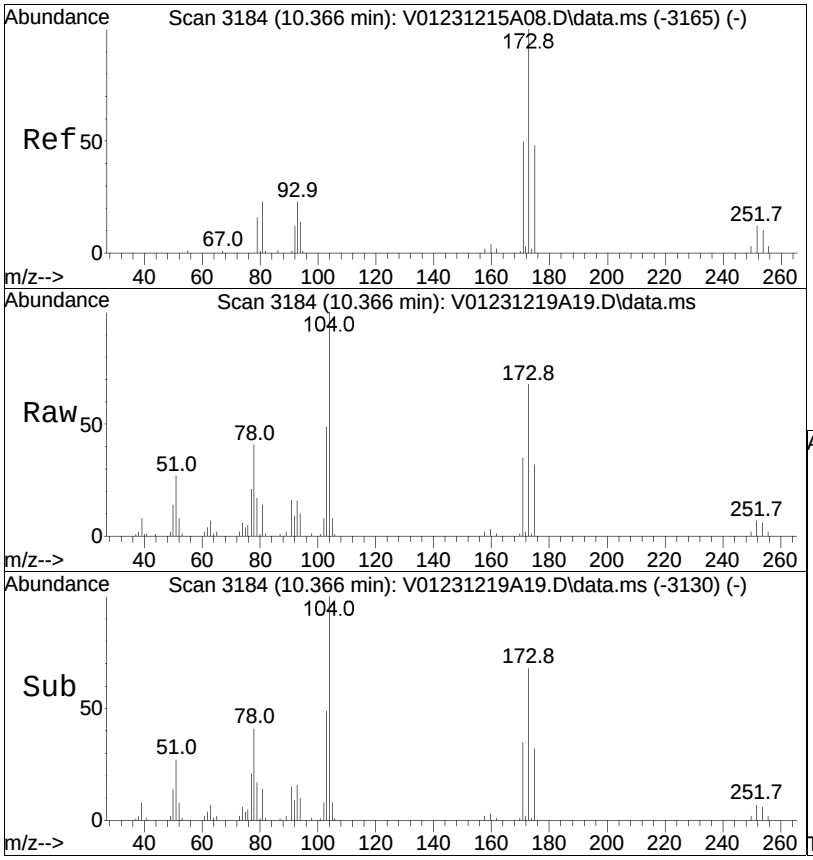


#78
Styrene
Concen: 25.05 ug/L
RT: 10.338 min Scan# 3174
Delta R.T. 0.000 min
Lab File: V01231219A19.D
Acq: 19 Dec 2023 1:19 pm

Tgt Ion:104 Resp: 895335

Ion	Ratio	Lower	Upper
104	100		
78	40.5	34.2	51.4

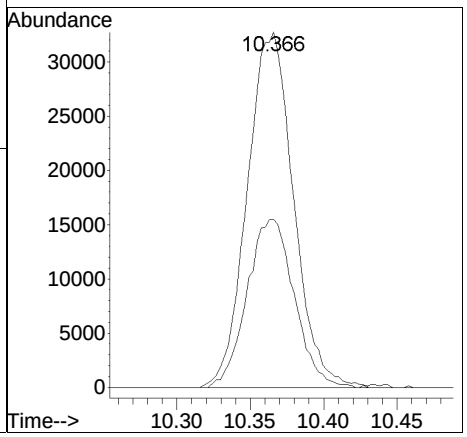


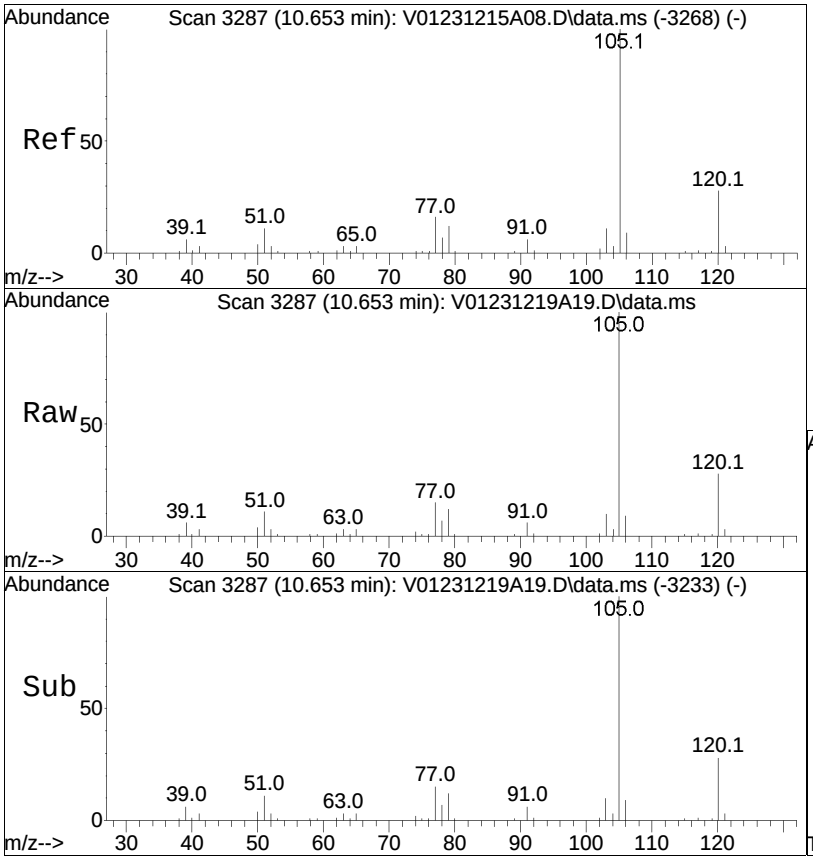


#80
Bromoform
Concen: 10.57 ug/L
RT: 10.366 min Scan# 3184
Delta R.T. 0.000 min
Lab File: V01231219A19.D
Acq: 19 Dec 2023 1:19 pm

Tgt Ion:173 Resp: 71805

Ion	Ratio	Lower	Upper
173	100		
175	48.3	28.6	68.6

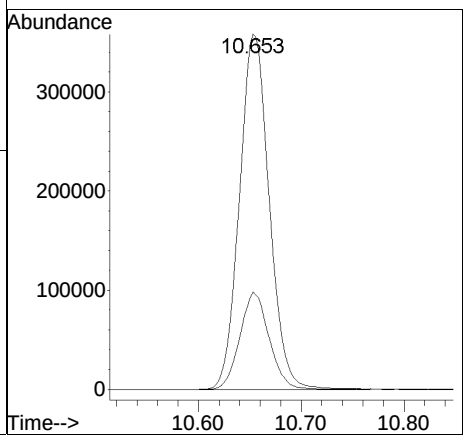


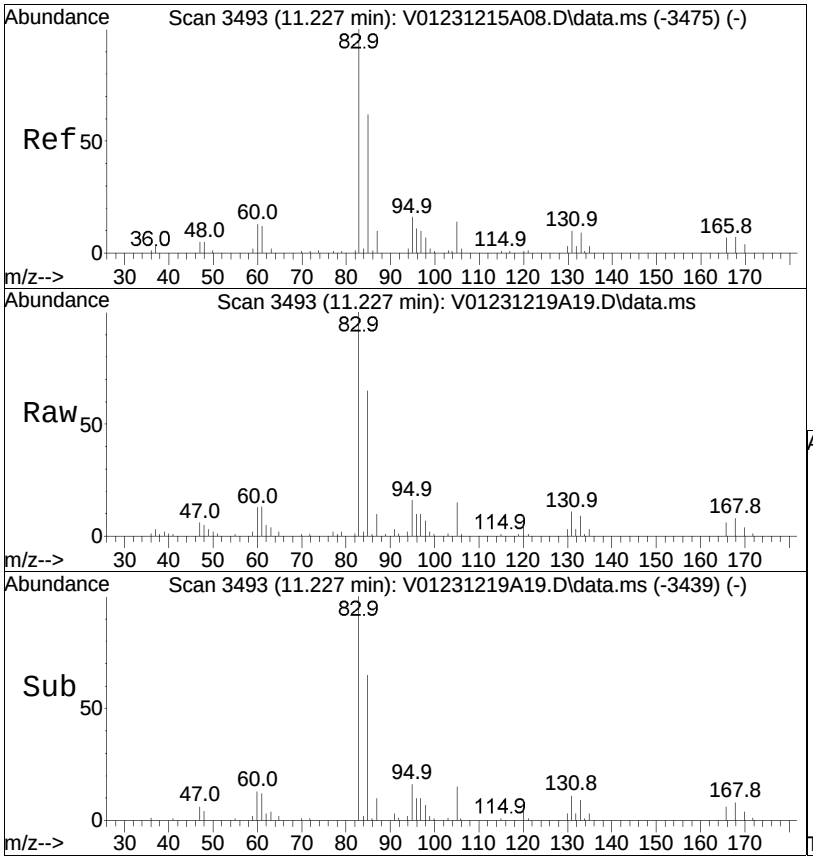


#82
Isopropylbenzene
Concen: 12.41 ug/L
RT: 10.653 min Scan# 3287
Delta R.T. 0.000 min
Lab File: V01231219A19.D
Acq: 19 Dec 2023 1:19 pm

Tgt Ion:105 Resp: 721027

Ion	Ratio	Lower	Upper
105	100		
120	26.8	7.3	47.3

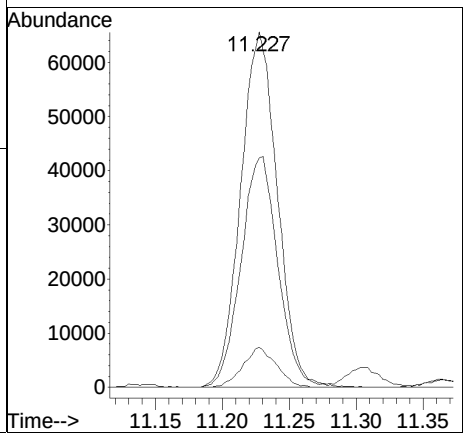


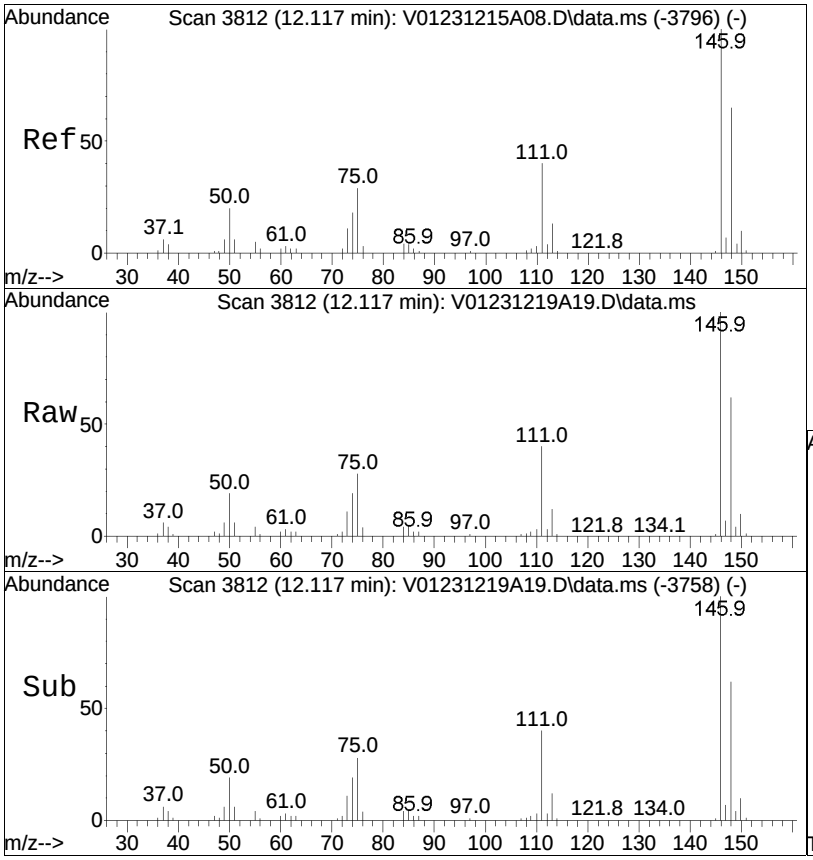


#87
1,1,2,2-Tetrachloroethane
Concen: 11.58 ug/L
RT: 11.227 min Scan# 3493
Delta R.T. 0.000 min
Lab File: V01231219A19.D
Acq: 19 Dec 2023 1:19 pm

Tgt Ion: 83 Resp: 125080

Ion	Ratio	Lower	Upper
83	100		
131	10.3	0.0	30.1
85	65.5	45.8	85.8

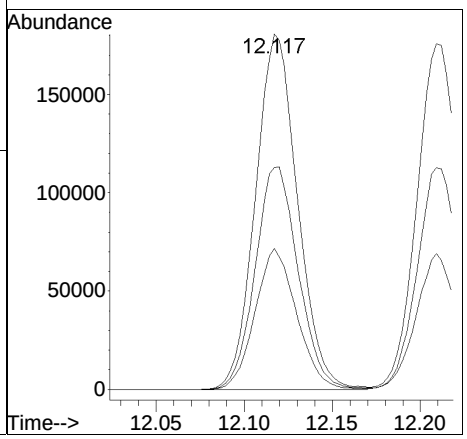


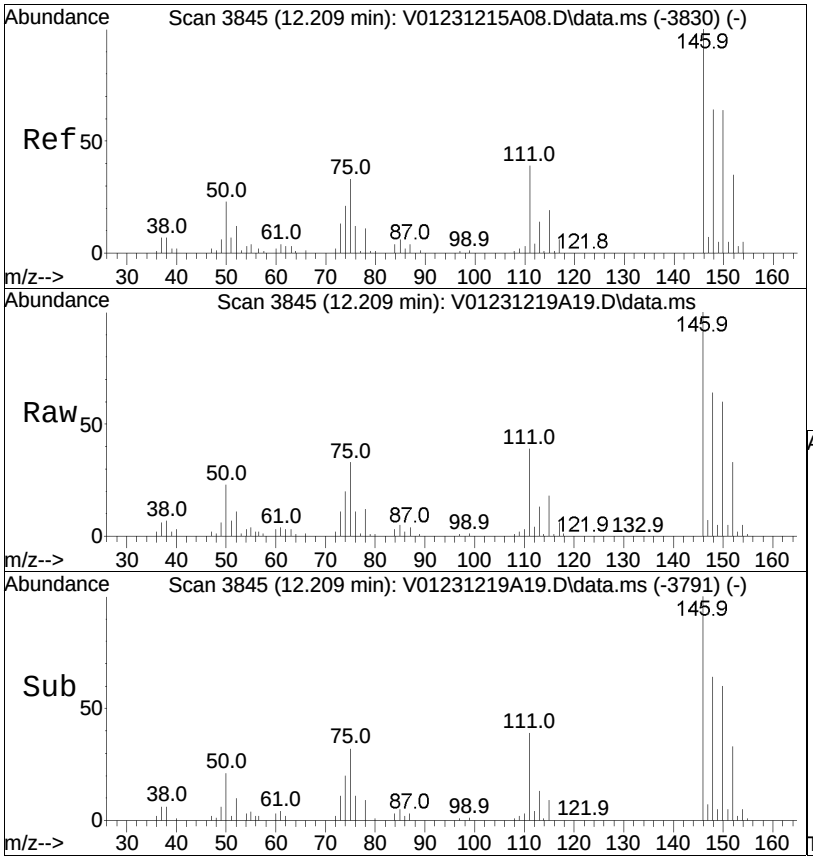


#100
1,3-Dichlorobenzene
Concen: 11.64 ug/L
RT: 12.117 min Scan# 3812
Delta R.T. 0.000 min
Lab File: V01231219A19.D
Acq: 19 Dec 2023 1:19 pm

Tgt Ion:146 Resp: 300260

Ion	Ratio	Lower	Upper
146	100		
111	39.1	25.9	53.9
148	64.0	41.5	86.3

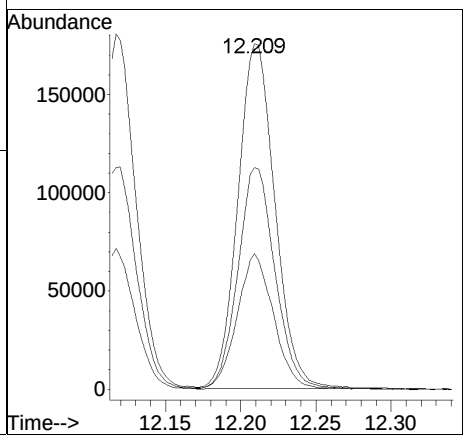


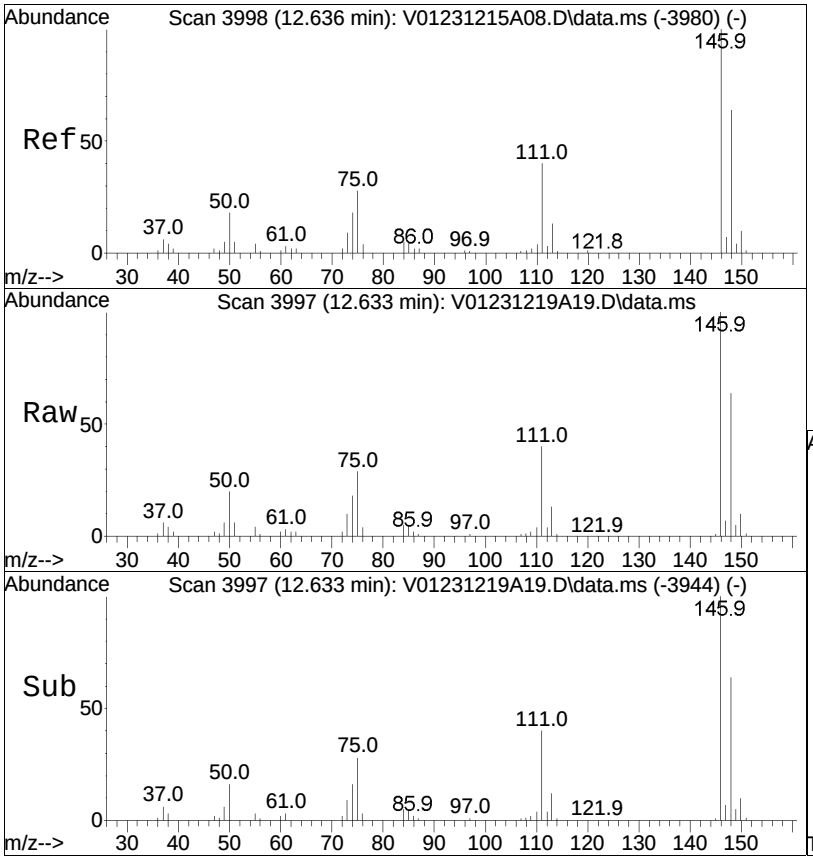


#101
1,4-Dichlorobenzene
Concen: 11.49 ug/L
RT: 12.209 min Scan# 3845
Delta R.T. 0.000 min
Lab File: V01231219A19.D
Acq: 19 Dec 2023 1:19 pm

Tgt Ion:146 Resp: 301573

Ion	Ratio	Lower	Upper
146	100		
111	38.3	31.7	47.5
148	63.8	51.5	77.3

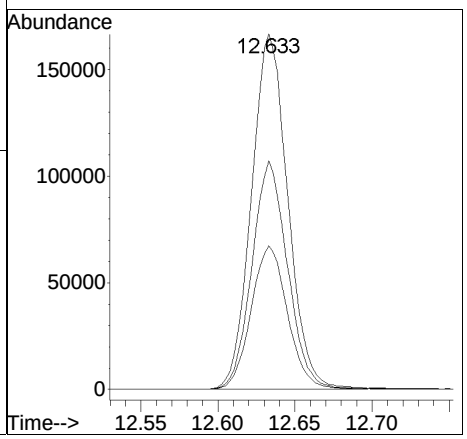


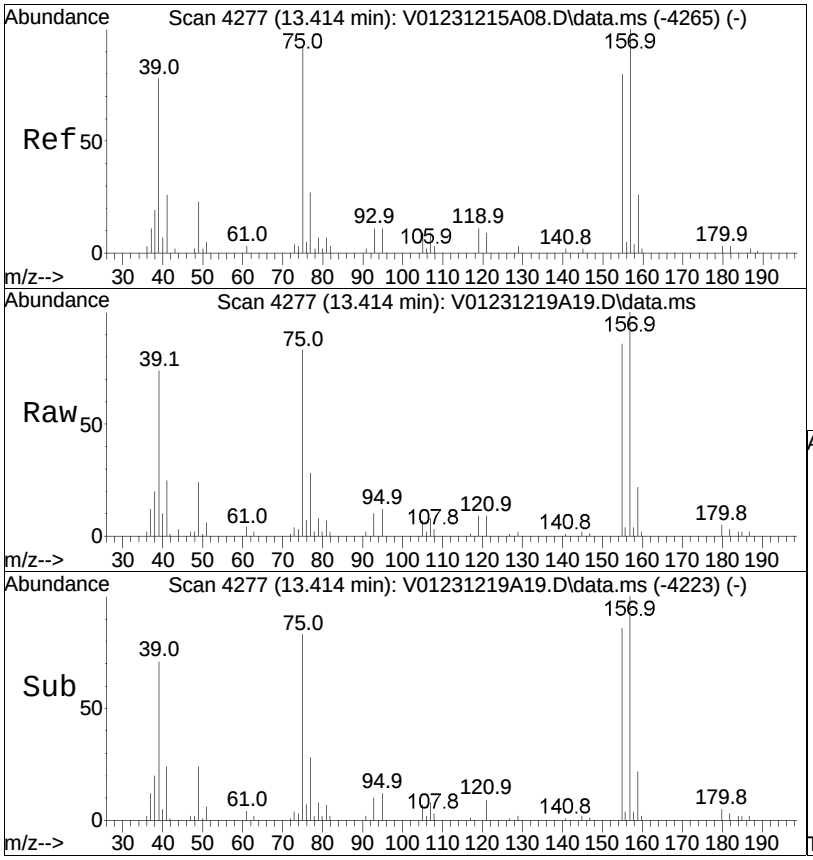


#104
1,2-Dichlorobenzene
Concen: 11.66 ug/L
RT: 12.633 min Scan# 3997
Delta R.T. -0.003 min
Lab File: V01231219A19.D
Acq: 19 Dec 2023 1:19 pm

Tgt Ion:146 Resp: 274015

Ion	Ratio	Lower	Upper
146	100		
111	40.4	26.8	55.8
148	63.0	41.6	86.4

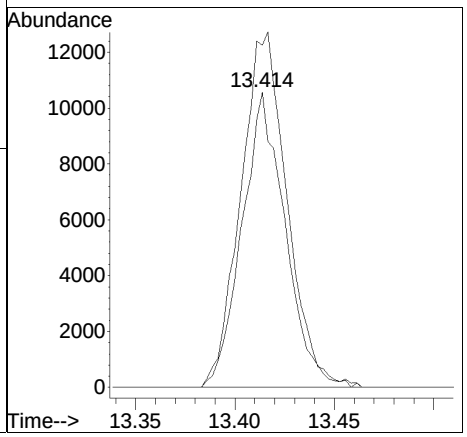


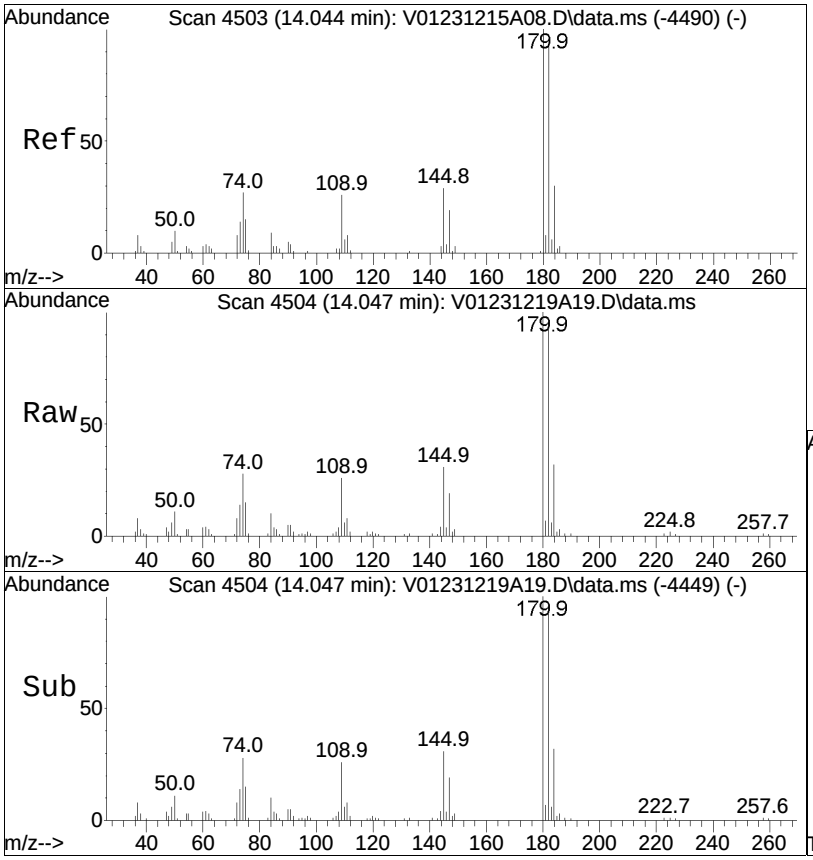


#106
1,2-Dibromo-3-chloropropane
Concen: 10.57 ug/L
RT: 13.414 min Scan# 4277
Delta R.T. 0.000 min
Lab File: V01231219A19.D
Acq: 19 Dec 2023 1:19 pm

Tgt Ion:155 Resp: 15959

Ion	Ratio	Lower	Upper
155	100		
157	129.1	101.1	151.7

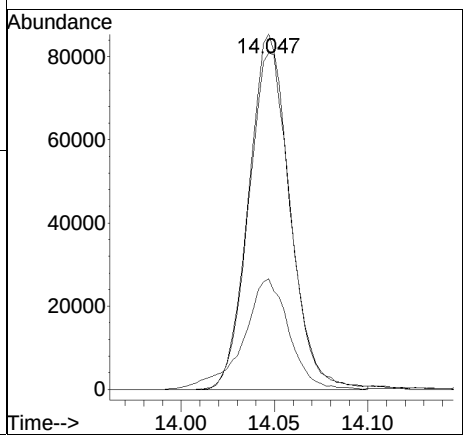


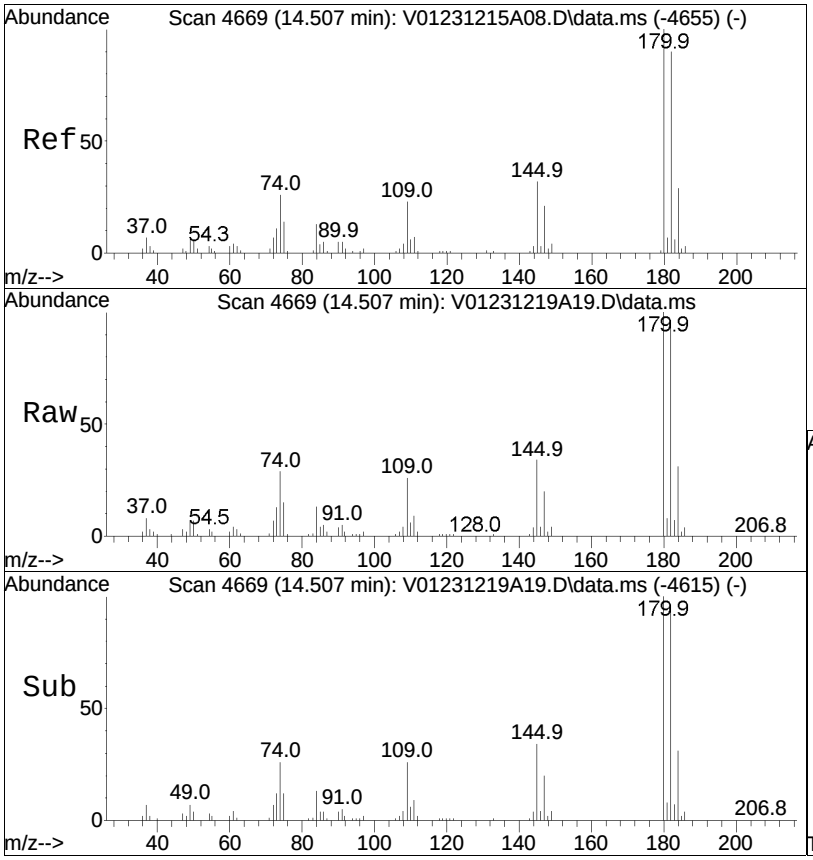


#109
1,2,4-Trichlorobenzene
Concen: 10.40 ug/L
RT: 14.047 min Scan# 4504
Delta R.T. 0.003 min
Lab File: V01231219A19.D
Acq: 19 Dec 2023 1:19 pm

Tgt Ion:180 Resp: 131490

Ion	Ratio	Lower	Upper
180	100		
182	96.0	75.8	113.8
145	34.5	26.1	39.1

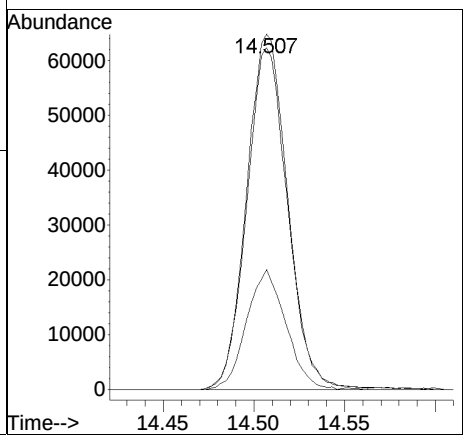




#111
1,2,3-Trichlorobenzene
Concen: 10.09 ug/L
RT: 14.507 min Scan# 4669
Delta R.T. 0.000 min
Lab File: V01231219A19.D
Acq: 19 Dec 2023 1:19 pm

Tgt Ion:180 Resp: 101825

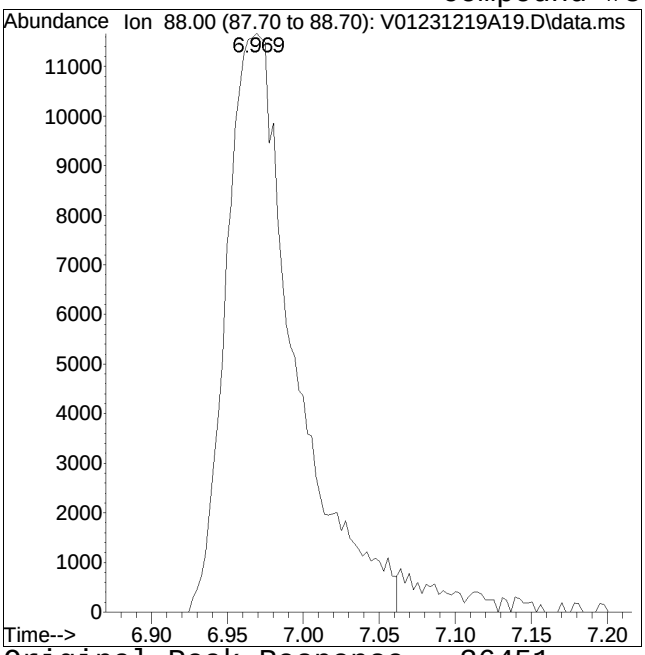
Ion	Ratio	Lower	Upper
180	100		
182	95.5	75.4	113.0
145	32.3	25.0	37.6

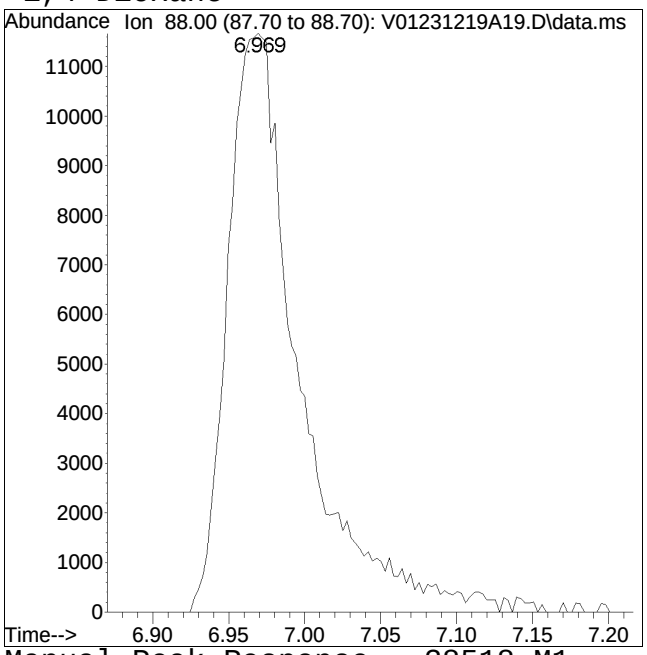


Manual Integration Report

Data Path	: K:\VOA101\2023\231219A\	QMethod	: V101_231215A_8260.m
Data File	: V01231219A19.D	Operator	: VOA101:MKS
Date Inj'd	: 12/19/2023 1:19 pm	Instrument	: VOA 101
Sample	: WG1865859-7,31,0.4,10,,C	Quant Date	: 12/19/2023 1:43 pm

Compound #57: 1,4-Dioxane





Original Peak Response = 36451 Manual Peak Response = 38518 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

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)

Dec 19 2023, 02:29 pm

Work Group: WG1865366 for Department: 31 GC/MS - Volatiles

Created: 18-DEC-23 Due: Operator: PID

Sample	Client ID	C	Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L2371965-07	GAS CONDENSATE	C	NYTCL-8260	WATER	DONE	U	1220	1218	S0	Vial-B
L2373215-01	MW-1	S	NYCP51-8260-G	WATER	DONE	U	1225	1219	S0	Vial-B
L2373215-02	MW-2	S	NYCP51-8260-G	WATER	DONE	U	1225	1219	S0	Vial-B
L2373215-03	MW-4	S	NYCP51-8260-G	WATER	DONE	U	1225	1219	S0	Vial-B
L2373278-01	MW-3	S	NYCP51-8260-G	WATER	DONE	U	1226	1219	S0	Vial-B
L2373278-02	MW-9	S	NYCP51-8260-G	WATER	DONE	U	1226	1219	S0	Vial-B
L2373278-03	MW-6	S	NYCP51-8260-G	WATER	DONE	U	1226	1219	S0	Vial-B
L2373323-01	MW-8S	S	NYTCL-8260-R2	WATER	DONE	U	1226	1219	S0	Vial-B
L2373323-02	MW-6D'	S	NYTCL-8260-R2	WATER	DONE	U	1226	1219	S0	Vial-B
L2373323-05	MW-4S	S	NYTCL-8260-R2	WATER	DONE	U	1226	1219	S0	Vial-B
L2373323-07	TB12122023	S	NYTCL-8260-R2	WATER	DONE	U	1226	1219	S0	Vial-B
WG1865366-1	MS BFB Tune Standard	S	NYTCL-8260	WATER	DONE	U				
WG1865366-1	MS BFB Tune Standard	S	NYCP51-8260-G	WATER	DACQ	U				
WG1865366-1	MS BFB Tune Standard	S	NYTCL-8260-R2	WATER	DACQ	U				
WG1865366-2	Continuing Calibrati	S	NYCP51-8260-G	WATER	DACQ	U				
WG1865366-2	Continuing Calibrati	S	NYTCL-8260-R2	WATER	DACQ	U				
WG1865366-2	Continuing Calibrati	S	NYTCL-8260	WATER	DONE	U				
WG1865366-3	Laboratory Control S	S	NYTCL-8260-R2	WATER	DACQ	U				
WG1865366-3	Laboratory Control S	S	NYTCL-8260	WATER	DONE	U				
WG1865366-3	Laboratory Control S	S	NYCP51-8260-G	WATER	DACQ	U				
WG1865366-4	LCS Duplicate	S	NYCP51-8260-G	WATER	DACQ	U				
WG1865366-4	LCS Duplicate	S	NYTCL-8260-R2	WATER	DACQ	U				
WG1865366-4	LCS Duplicate	S	NYTCL-8260	WATER	DONE	U				
WG1865366-5	Laboratory Method Bl	S	NYCP51-8260-G	WATER	DACQ	U				
WG1865366-5	Laboratory Method Bl	S	NYTCL-8260-R2	WATER	DACQ	U				
WG1865366-5	Laboratory Method Bl	S	NYTCL-8260	WATER	DONE	U				
WG1865366-6	Matrix Spike	S	NYTCL-8260	WATER	SENT	U				
WG1865366-6	Matrix Spike	S	NYTCL-8260-R2	WATER	DACQ	U				
WG1865366-6	Matrix Spike	S	NYCP51-8260-G	WATER	DACQ	U				
WG1865366-7	Matrix Spike Duplica	S	NYCP51-8260-G	WATER	DACQ	U				
WG1865366-7	Matrix Spike Duplica	S	NYTCL-8260	WATER	SENT	U				
WG1865366-7	Matrix Spike Duplica	S	NYTCL-8260-R2	WATER	DACQ	U				

Comments:

WG1865366-4	WG1865366-3
WG1865366-6	L2373323-04
WG1865366-7	L2373323-04

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Dec 19 2023, 02:29 pm

Work Group: WG1865859 for Department: 31 GC/MS - Volatiles

Created: 19-DEC-23 Due: Operator: MKS

Sample	Client ID	C	Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L2373215-13	IW-1	S	NYCP51-8260-G	WATER	DONE	U	1225	1219	S0	Vial-B
L2373323-03	MW-6S	S	NYTCL-8260-R2	WATER	DONE	U	1226	1219	S0	Vial-B
L2373323-04	MW-6D	S	NYTCL-8260-R2	WATER	DONE	U	1226	1219	S0	Vial-B
L2373323-06	DUP12122023	S	NYTCL-8260-R2	WATER	DONE	U	1226	1219	S0	Vial-B
WG1865859-1	MS BFB Tune Standard	S	NYCP51-8260-G	WATER	DONE	U				
WG1865859-1	MS BFB Tune Standard	S	NYTCL-8260-R2	WATER	DONE	U				
WG1865859-2	Continuing Calibrati	S	NYCP51-8260-G	WATER	DONE	U				
WG1865859-2	Continuing Calibrati	S	NYTCL-8260-R2	WATER	DONE	U				
WG1865859-3	Laboratory Control S	S	NYTCL-8260-R2	WATER	DACQ	U				
WG1865859-3	Laboratory Control S	S	NYCP51-8260-G	WATER	DONE	U				
WG1865859-4	LCS Duplicate	S	NYCP51-8260-G	WATER	DONE	U				
WG1865859-4	LCS Duplicate	S	NYTCL-8260-R2	WATER	DACQ	U				
WG1865859-5	Laboratory Method Bl	S	NYTCL-8260-R2	WATER	DACQ	U				
WG1865859-5	Laboratory Method Bl	S	NYCP51-8260-G	WATER	DONE	U				
WG1865859-6	Matrix Spike	S	NYCP51-8260-G	WATER	DONE	U				
WG1865859-6	Matrix Spike	S	NYTCL-8260-R2	WATER	DACQ	U				
WG1865859-7	Matrix Spike Duplica	S	NYCP51-8260-G	WATER	DONE	U				
WG1865859-7	Matrix Spike Duplica	S	NYTCL-8260-R2	WATER	DACQ	U				

Comments:

WG1865859-4	WG1865859-3
WG1865859-6	L2373323-04
WG1865859-7	L2373323-04

Method

Inst: VOA108 BFB: V10060 GC: 8260-ATOMX

Initials: MKS IS/SS: V10102 Autosampler: 8260

Date **12/06/23** ICAL: V10112A,V10111 Concentrator: 8260

Run **A** ICV: V10064, V10095, V10096, V10083, V10081, V10113 QC: Seq:

Vial	DATAFILE	SAMPLE	pH<2
1	V08231206ABF1	BFB TUNE	
1	V08231206A01	BLK	
2	V08231206A02	BLK	
3	V08231206A03	I8260STD0.19PPB	
4	V08231206A04	I8260STD0.19PPB	
5	V08231206A05	I8260STD0.5PPB	
6	V08231206A06	I8260STD0.5PPB	
7	V08231206A07	I8260STD2PPB	
8	V08231206A08	I8260STD2PPB	
9	V08231206A09	I8260STD10PPB	
10	V08231206A10	I8260STD30PPB	
11	V08231206A11	I8260STD80PPB	
12	V08231206A12	I8260STD120PPB	
13	V08231206A13	I8260STD200PPB	
14	V08231206A14	BLK	
15	V08231206A15	BLK	
16	V08231206A16	BLK	
17	V08231206A17	BLK	
18	V08231206A18	C8260STD10PPB	
19	V08231206A19	C8260STD10PPB	
20	V08231206A20	BLK	

Method

Inst: VOA101 BFB: V10121 GC: 8260

Initials: PID IS/SS: V10102 Autosampler: 8260water

Date: **12/15/23** ICAL: V10112D,V10128 Concentrator: 8260water

Run: **A** ICV: V10125,V10095,V10096,V10083,V10081,V10113 QC: _____ Seq:

Vial	DATA FILE	SAMPLE	pH<2
1	V01231215ABF1	BFB TUNE 11:27	
1	V01231215A01	BLK	
2	V01231215A02	BLK	
3	V01231215A03	I8260STD0.19PPB	
4	V01231215A04	I8260STD0.5PPB	
5	V01231215A05	I8260STD0.5PPB	
6	V01231215A06	I8260STD2PPB	
7	V01231215A07	I8260STD2PPB	
8	V01231215A08	I8260STD10PPB	
9	V01231215A09	I8260STD30PPB	
10	V01231215A10	I8260STD80PPB	
11	V01231215A11	I8260STD120PPB	
12	V01231215A12	I8260STD200PPB	
13	V01231215A13	BLK	
14	V01231215A14	BLK	
15	V01231215A15	BLK	
16	V01231215A16	BLK	
17	V01231215A17	C8260STD10PPB	
18	V01231215A18	C8260STD10PPB	
19	V01231215A19	BLK	
20	V01231215A20	BLK	
21	V01231215A21	MDL METHOD BLK	
22	V01231215A22	MDL L1	
23	V01231215A23	MDL L1	
24	V01231215A24	BLK	
25	V01231215A25	BLK	

Inst: VOA108 BFB: V10121 Method GC: 8260-ATOMX
Initials: MJV IS/SS: V10120 Autosampler: 8260
Date **12/18/23** ICAL: V10112B,V10128 Concentrator: 8260
Run **A** QC: Seq:

Vial	DATAFILE	SAMPLE			pH<2
1	V08231218ABF1	BFB TUNE	06:36		
1	V08231218A01	8260 CCAL	LCS		
2	V08231218A02	8260 CCAL	LCSD		
3	V08231218A03	8260 CCAL			
4	V08231218A04	BLK			
5	V08231218A05	METHOD BLK			
6	V08231218A06	L2373007-09D,31,0.1,10,,C	8260		pH<2
7	V08231218A07	L2371965-07D2,31,0.05,10,,C	NY/ACE/2BUT,4M2P		pH<2
8	V08231218A08	L2371965-07D3,31,0.2,10,,C	NY/ACE/2BUT,4M2P		pH<2
9	V08231218A09	d STD BENZ			
10	V08231218A10	L2373312-01,31,10,10,,A	8260 NH		pH<2
11	V08231218A11	L2373312-02,31,10,10,,A	8260 NH		pH<2
12	V08231218A12	L2373312-03,31,10,10,,A	8260 NH	TB	pH<2
13	V08231218A13	L2373315-01,31,10,10,,A	8260 NH		pH<2
14	V08231218A14	L2373323-01,31,10,10,,A	NY/R2		pH<2
15	V08231218A15	L2373323-02D,31,2.5,10,,A	NY/R2		pH<2
16	V08231218A16	L2373323-03D,31,0.5,10,,A	NY/R2		pH<2
17	V08231218A17	L2373323-04D,31,0.1,10,,A	NY/R2		pH<2
18	V08231218A18	L2373323-05D,31,0.2,10,,A	NY/R2		pH<2
19	V08231218A19	L2373323-06D,31,0.5,10,,A	NY/R2		pH<2
20	V08231218A20	L2373323-07,31,10,10,,A	NY/R2	TB	pH<2
21	V08231218A21	L2373278-01D,31,2.5,10,,A	NY STARS		pH<2
22	V08231218A22	L2373278-02,31,10,10,,A	NY STARS		pH<2
23	V08231218A23	L2373278-03,31,10,10,,A	NY STARS		pH<2
24	V08231218A24	L2373215-01,31,10,10,,A	NY STARS		pH<2
25	V08231218A25	L2373215-02,31,10,10,,A	NY STARS		pH<2
26	V08231218A26	L2373215-03,31,10,10,,A	NY STARS		pH<2
27	V08231218A27	L2373323-04MS,31,0.1,10,,A	NY/R2		pH<2
28	V08231218A28	L2373323-04MSD,31,0.1,10,,A	NY/R2		pH<2

Inst: VOA101 BFB: V10121 Method GC: 8260
Initials: MJV IS/SS: V10102 Autosampler: 8260water
Date: **12/19/23** ICAL: V10112D,V10128,V1093 Concentrator: 8260water
Run: **A** QC: _____ Seq:

Vial	DATA FILE	SAMPLE			pH<2
1	V01231219ABF1	BFB TUNE	05:11		
1	V01231219A01	8260 CCAL			
2	V01231219A02	8260 CCAL			
3	V01231219A03	BLK			
4	V01231219A04	METHOD BLK			
5	V01231219A05	L2373285-06,31,10,10,,C	NJ/15		pH<2
6	V01231219A06	L2373215-13,31,10,10,,C	NY/CP-51		pH<2
7	V01231219A07	L2373285-06MS,31,10,10,,C1	NJ/15		pH<2
8	V01231219A08	L2373285-06MSD,31,10,10,,C2	NJ/15		pH<2
9	V01231219A09	AA CCAL			
10	V01231219A10	AA CCAL			
11	V01231219A11	BLNK			
12	V01231219A12	METHOD BLNK			
13	V01231219A13	L2373273-02D2,31,5.0,10,,C,R3E	8260/IPA		pH<2
14	V01231219A14	L2373772-02D,31,2.0,10,,C	NY/1124TMB		pH>2
15	V01231219A15	L2373323-04D,31,0.4,10,,C	NY CURVE		pH<2
16	V01231219A16	L2373323-03D,31,1.0,10,,C	NY CURVE		pH<2
17	V01231219A17	L2373323-06D,31,1.0,10,,C	NY CURVE		pH<2
18	V01231219A18	L2373323-04MS,31,0.4,10,,C	NY CURVE		pH<2
19	V01231219A19	L2373323-04MSD,31,0.4,10,,C	NY CURVE		pH<2
20	V01231219A20	L2373580-02D2,31,0.05,10,,C,R3E	8260 IPA		pH<2
21	V01231219A21	d STD BENZ			
22	V01231219A22	L2373104-02,31,10,10,,A	NY CURVE	TB	
23	V01231219A23	L2373622-04,31,10,10,,A	NJ/15	FB	
24	V01231219A24	L2373622-05,31,10,10,,A	NJ/15	TB	
25	V01231219A25	L2373622-01,31,10,10,,A	NJ/15		
26	V01231219A26	L2373622-03,31,10,10,,A	NJ/15		
27	V01231219A27	L2373622-02D,31,5.0,10,,A	NJ/15		pH>2
28	V01231219A28	H STD			
29	V01231219A29	BLK			
30	V01231219A30	BLK			

Metals

Inorganic Data
(ICPMS Analysis)

Form 1
METALS

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Lab ID	: L2373323-01	**Date Collected**	: 12/12/23 09:50
Client ID	: MW-8S	**Date Received**	: 12/12/23
Sample Location	: COLONIE, NY	**Date Analyzed**	: 12/15/23 08:53
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: EJF
Lab File ID	: WG1864274.pdf	**Instrument ID**	: ICPMSRQ
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 12/15/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-89-6	Iron, Dissolved	0.100	0.0500	0.0191	

Form 1
METALS

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Lab ID	: L2373323-03	**Date Collected**	: 12/12/23 11:25
Client ID	: MW-6S	**Date Received**	: 12/12/23
Sample Location	: COLONIE, NY	**Date Analyzed**	: 12/15/23 08:58
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: EJF
Lab File ID	: WG1864274.pdf	**Instrument ID**	: ICPMSRQ
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 12/15/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-89-6	Iron, Dissolved	0.199	0.0500	0.0191	

Form 1
METALS

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Lab ID	: L2373323-04	**Date Collected**	: 12/12/23 13:20
Client ID	: MW-6D	**Date Received**	: 12/12/23
Sample Location	: COLONIE, NY	**Date Analyzed**	: 12/15/23 07:47
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: EJF
Lab File ID	: WG1864274.pdf	**Instrument ID**	: ICPMSRQ
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 12/15/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-89-6	Iron, Dissolved	0.886	0.0500	0.0191	

Form 1
METALS

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Lab ID	: L2373323-05	**Date Collected**	: 12/12/23 14:25
Client ID	: MW-4S	**Date Received**	: 12/12/23
Sample Location	: COLONIE, NY	**Date Analyzed**	: 12/15/23 09:02
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: EJF
Lab File ID	: WG1864274.pdf	**Instrument ID**	: ICPMSRQ
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 12/15/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-89-6	Iron, Dissolved	0.705	0.0500	0.0191	

Form 1
METALS

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Lab ID	: L2373323-06	**Date Collected**	: 12/12/23 00:00
Client ID	: DUP12122023	**Date Received**	: 12/12/23
Sample Location	: COLONIE, NY	**Date Analyzed**	: 12/15/23 09:07
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: EJF
Lab File ID	: WG1864274.pdf	**Instrument ID**	: ICPMSRQ
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 12/15/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-89-6	Iron, Dissolved	0.194	0.0500	0.0191	

Form 1
METALS

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Lab ID	: WG1863597-1	**Date Collected**	: NA
Client ID	: WG1863597-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 12/15/23 07:23
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: EJF
Lab File ID	: WG1864274.pdf	**Instrument ID**	: ICPMSRQ
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 12/15/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-89-6	Iron, Dissolved	ND	0.0500	0.0191	U

Form 1
METALS

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Lab ID	: L2373323-01	**Date Collected**	: 12/12/23 09:50
Client ID	: MW-8S	**Date Received**	: 12/12/23
Sample Location	: COLONIE, NY	**Date Analyzed**	: 12/15/23 14:18
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: EJF
Lab File ID	: WG1864274.pdf	**Instrument ID**	: ICPMSRQ
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 12/14/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-89-6	Iron, Total	1.46	0.0500	0.0191	

Form 1
METALS

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Lab ID	: L2373323-03	**Date Collected**	: 12/12/23 11:25
Client ID	: MW-6S	**Date Received**	: 12/12/23
Sample Location	: COLONIE, NY	**Date Analyzed**	: 12/15/23 14:46
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: EJF
Lab File ID	: WG1864274.pdf	**Instrument ID**	: ICPMSRQ
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 12/14/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-89-6	Iron, Total	3.05	0.0500	0.0191	

Form 1
METALS

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Lab ID	: L2373323-04	**Date Collected**	: 12/12/23 13:20
Client ID	: MW-6D	**Date Received**	: 12/12/23
Sample Location	: COLONIE, NY	**Date Analyzed**	: 12/15/23 14:04
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: EJF
Lab File ID	: WG1864274.pdf	**Instrument ID**	: ICPMSRQ
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 12/14/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-89-6	Iron, Total	1.67	0.0500	0.0191	

Form 1
METALS

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Lab ID	: L2373323-05	**Date Collected**	: 12/12/23 14:25
Client ID	: MW-4S	**Date Received**	: 12/12/23
Sample Location	: COLONIE, NY	**Date Analyzed**	: 12/15/23 14:51
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: EJF
Lab File ID	: WG1864274.pdf	**Instrument ID**	: ICPMSRQ
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 12/14/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-89-6	Iron, Total	5.85	0.0500	0.0191	

Form 1
METALS

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Lab ID	: L2373323-06	**Date Collected**	: 12/12/23 00:00
Client ID	: DUP12122023	**Date Received**	: 12/12/23
Sample Location	: COLONIE, NY	**Date Analyzed**	: 12/15/23 14:55
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: EJF
Lab File ID	: WG1864274.pdf	**Instrument ID**	: ICPMSRQ
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 12/14/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-89-6	Iron, Total	3.10	0.0500	0.0191	

Form 1
METALS

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Lab ID	: WG1863929-1	**Date Collected**	: NA
Client ID	: WG1863929-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 12/15/23 12:30
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: EJF
Lab File ID	: WG1864274.pdf	**Instrument ID**	: ICPMSRQ
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 12/14/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-89-6	Iron, Total	ND	0.0500	0.0191	U

Form 1
METALS

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Lab ID	: WG1863929-10	**Date Collected**	:
Client ID	: Serial Dilution	**Date Received**	:
Sample Location	:	**Date Analyzed**	: 12/15/23 13:55
Sample Matrix	: WATER	**Dilution Factor**	: 5
Analytical Method	: 1,6020B	**Analyst**	: EJF
Lab File ID	: WG1864274.pdf	**Instrument ID**	: ICPMSRQ
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 12/14/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-89-6	Iron, Total	1.72	0.250	0.096	

Form 2A
Initial and Continuing Calibration Verification

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Instrument ID	: ICPMSRQ	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :	R1775340-1			R1775340-4			R1775340-6		R1775340-9	
Date Analyzed :	12/15/23 06:28			12/15/23 06:54			12/15/23 08:10		12/15/23 09:12	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Iron	5000	5360.0000	107	6000.0000	6500	108	6280	105	6360	106

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Instrument ID	: ICPMSRQ	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :	R1775340-1			R1775340-4			R1775340-6		R1775340-9	
Date Analyzed :	12/15/23 06:28			12/15/23 06:54			12/15/23 08:10		12/15/23 09:12	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Iron	5000	5360.0000	107	6000.0000	6500	108	6280	105	6360	106

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Instrument ID	: ICPMSRQ	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R1775340-11			R1775340-13		R1775340-15	
Date Analyzed :				12/15/23 09:36			12/15/23 10:32		12/15/23 10:47	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Iron				6000.0000	6300	105	6270	104	5840	97

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Instrument ID	: ICPMSRQ	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R1775340-17			R1775340-19		R1775340-21	
Date Analyzed :				12/15/23 11:54			12/15/23 12:17		12/15/23 13:17	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Iron				6000.0000	6340	106	5880	98	6310	105

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Instrument ID	: ICPMSRQ	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R1775340-23			R1775340-25			
Date Analyzed :				12/15/23 14:23			12/15/23 15:08			
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Iron				6000.0000	6190	103	5980	100		

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 3
Blanks

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Instrument ID	: ICPMSRQ		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :	R1775340-2		R1775340-5		R1775340-7		R1775340-10		WG1863597-1	
Date Analyzed :	12/15/23 06:33		12/15/23 06:59		12/15/23 08:15		12/15/23 09:16		12/15/23 07:23	
Parameter	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q	mg/l	Q
Iron	19.1	U	19.1	U	19.1	U	19.1	U	0.0191	U

Form 3
Blanks

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Instrument ID	: ICPMSRQ		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :	R1775340-2		R1775340-5		R1775340-7		R1775340-10		WG1863929-1	
Date Analyzed :	12/15/23 06:33		12/15/23 06:59		12/15/23 08:15		12/15/23 09:16		12/15/23 12:30	
Parameter	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q	mg/l	Q
Iron	19.1	U	19.1	U	19.1	U	19.1	U	0.0191	U

Form 3
Blanks

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Instrument ID	: ICPMSRQ		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R1775340-12		R1775340-14		R1775340-16			
Date Analyzed :			12/15/23 09:41		12/15/23 10:37		12/15/23 10:52			
Parameter	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q		Q
Iron			19.1	U	19.1	U	19.1	U		

Form 3
Blanks

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Instrument ID	: ICPMSRQ		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R1775340-18		R1775340-20		R1775340-22			
Date Analyzed :			12/15/23 11:59		12/15/23 12:22		12/15/23 13:21			
Parameter	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q		Q
Iron			19.1	U	19.1	U	19.1	U		

Form 3
Blanks

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Instrument ID	: ICPMSRQ		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R1775340-24		R1775340-26					
Date Analyzed :			12/15/23 14:27		12/15/23 15:13					
Parameter	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q		Q
Iron			19.1	U	19.1	U				

Form 4a
Interference Check Sample

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Instrument ID	: ICPMSRQ	**Concentration Units**	: ug/l

		Initial Found				Final Found			
Lab ID	:	R1775340-3							
Analysis Date	:	12/15/23 06:45							

Analyte	True Sol. A	True Sol. AB	Initial Found Sol. A	Initial Found %R	Initial Found Sol. AB	Initial Found %R	Final Found Sol. A	Final Found %R	Final Found Sol. AB	Final Found %R
Iron	50000		50400	101						

Acceptance Criteria: Methods 200.7, 200.8, 6010, 6020

ICSA: 80-120%

ICSAB: 80-120%

Form 4a
Interference Check Sample

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Instrument ID	: ICPMSRQ	**Concentration Units**	: ug/l

		Initial Found				Final Found			
Lab ID	:	R1775340-3							
Analysis Date	:	12/15/23 06:45							

Analyte	True Sol. A	True Sol. AB	Initial Found Sol. A	Initial Found %R	Initial Found Sol. AB	Initial Found %R	Final Found Sol. A	Final Found %R	Final Found Sol. AB	Final Found %R
Iron	50000		50400	101						

Acceptance Criteria: Methods 200.7, 200.8, 6010, 6020

ICSA: 80-120%

ICSAB: 80-120%

Form 5a
Matrix Spike

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Client Sample ID	: MW-6D	**Matrix**	: WATER
Lab Sample ID	: L2373323-04		
Matrix Spike	: WG1863597-3	**MS Analysis Date**	: 12/15/23 07:33
Matrix Spike Dup	: WG1863597-4	**MSD Analysis Date**	: 12/15/23 07:37

		Matrix Spike Sample			Matrix Spike Duplicate						
Parameter	Sample Conc. (mg/l)	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	Spike Added (mg/l)	Spike Conc. (mg/l)	%R		RPD	Recovery Limits	RPD Limit
Iron, Dissolved	0.886	1	2.08	119	1	2.41	152	Q	15	75-125	20

Form 5a
Matrix Spike

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: L2369416-19		
Matrix Spike	: WG1863929-3	**MS Analysis Date**	: 12/15/23 12:39
Matrix Spike Dup	: WG1863929-4	**MSD Analysis Date**	: 12/15/23 12:44

		Matrix Spike Sample			Matrix Spike Duplicate					
Parameter	Sample Conc. (mg/l)	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	RPD	Recovery Limits	RPD Limit
Iron, Total	0.666	1	1.81	114	1	1.82	115	1	75-125	20

Form 5a
Matrix Spike

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Client Sample ID	: MW-6D	**Matrix**	: WATER
Lab Sample ID	: L2373323-04		
Matrix Spike	: WG1863929-7	**MS Analysis Date**	: 12/15/23 13:33
Matrix Spike Dup	: WG1863929-8	**MSD Analysis Date**	: 12/15/23 13:38

		Matrix Spike Sample				Matrix Spike Duplicate					
Parameter	Sample Conc. (mg/l)	Spike Added (mg/l)	Spike Conc. (mg/l)	%R		Spike Added (mg/l)	Spike Conc. (mg/l)	%R	RPD	Recovery Limits	RPD Limit
Iron, Total	1.67	1	2.99	132	Q	1	2.62	95	13	75-125	20

Form 5b
Post Digest Spike Recovery

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Client Sample ID	: MW-6D	**Matrix**	: WATER
Lab Sample ID	: L2373323-04		
Post Spike	: WG1863597-5	**PS Analysis Date**	: 12/15/23 07:42

		Post Spike Sample			
	Sample	Spike	Spike		
	Conc.	Added	Conc.	%R	Recovery
Parameter	(mg/l)	(mg/l)	(mg/l)		Limits
Iron, Dissolved	0.886	50	54.5	107	75-125

Form 5b
Post Digest Spike Recovery

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Client Sample ID	: MW-6D	**Matrix**	: WATER
Lab Sample ID	: L2373323-04		
Post Spike	: WG1863929-9	**PS Analysis Date**	: 12/15/23 13:50

		Post Spike Sample			
	Sample	Spike	Spike		
	Conc.	Added	Conc.	%R	Recovery
Parameter	(mg/l)	(mg/l)	(mg/l)		Limits
Iron, Total	1.67	50	51.0	99	75-125

Form 7
Laboratory Control Sample

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: WG1863597-2	**LCS Analysis Date**	: 12/15/23 07:28
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	**True (mg/l)**	**Found (mg/l)**	**%R**	**True (mg/l)**	**Found (mg/l)**	**%R**	**RPD**	**Recovery Limits**	**RPD Limit**
Iron, Dissolved	**1.00**	**1.14**	**114.**					**80-120**	**20**

Form 7
Laboratory Control Sample

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: WG1863929-2	**LCS Analysis Date**	: 12/15/23 12:34
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	**True (mg/l)**	**Found (mg/l)**	**%R**	**True (mg/l)**	**Found (mg/l)**	**%R**	**RPD**	**Recovery Limits**	**RPD Limit**
Iron, Total	**1.00**	**1.15**	**115.**					**80-120**	**20**

Form 8
Serial Dilutions

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Client Sample ID	: MW-6D	**Matrix**	: WATER
Lab Sample ID	: L2373323-04	**Analysis Date**	: 12/15/23 14:04
Serial Dilution ID	: WG1863929-10	**Analysis Date**	: 12/15/23 13:55

Parameter	Initial Sample Result (mg/l)	Serial Dilution Result (mg/l)	% Difference	%D Limit
Iron, Total	1.67	1.72	3	20

Form 12
Preparation Log

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Matrix	: WATER	**Prep Method**	: EPA 3005A

Sample Number	Preparation Date	Weight (gram)	Volume (mL)
L2373323-01	12/15/23 01:19	-	50
L2373323-03	12/15/23 01:19	-	50
L2373323-04	12/15/23 01:19	-	50
L2373323-05	12/15/23 01:19	-	50
L2373323-06	12/15/23 01:19	-	50
WG1863597-1	12/15/23 01:19	-	50
WG1863597-2	12/15/23 01:19	-	50
WG1863597-3	12/15/23 01:19	-	50
WG1863597-4	12/15/23 01:19	-	50
WG1863597-5	12/15/23 01:19	-	50

Form 12
Preparation Log

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Matrix	: WATER	**Prep Method**	: EPA 3005A

Sample Number	Preparation Date	Weight (gram)	Volume (mL)
L2373323-01	12/14/23 23:40	-	50
L2373323-03	12/14/23 23:40	-	50
L2373323-04	12/14/23 23:40	-	50
L2373323-05	12/14/23 23:40	-	50
L2373323-06	12/14/23 23:40	-	50
WG1863929-1	12/14/23 23:40	-	50
WG1863929-2	12/14/23 23:40	-	50
WG1863929-3	12/14/23 23:40	-	50
WG1863929-4	12/14/23 23:40	-	50
WG1863929-7	12/14/23 23:40	-	50
WG1863929-8	12/14/23 23:40	-	50
WG1863929-9	12/14/23 23:40	-	50
WG1863929-10	12/14/23 23:40	-	50

Form 13
Analysis Run Log

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Instrument ID	: ICPMSRQ	**Analysis Method**	: 1,6020B
Start Date	: 12/15/23 05:14	**End Date**	: 12/15/23 09:16

Sample Number	Dilution Factor	Analysis Time	Iron, Dissolved
R1775340-8 TUNE		05:14:00	
R1775340-1 ICV	1	06:28:33	X
R1775340-2 ICB	1	06:33:16	X
R1775340-3 ICSA	1	06:45:26	X
R1775340-4 CCV	1	06:54:50	X
R1775340-5 CCB	1	06:59:34	X
WG1863597-1 BLANK	1	07:23:51	X
WG1863597-2 LCS	10	07:28:31	X
WG1863597-3 MS	10	07:33:11	X
WG1863597-4 MSD	10	07:37:52	X
WG1863597-5 PS	10	07:42:32	X
L2373323-04	1	07:47:14	X
R1775340-6 CCV	1	08:10:42	X
R1775340-7 CCB	1	08:15:26	X
L2373323-01	1	08:53:29	X
L2373323-03	1	08:58:09	X
L2373323-05	1	09:02:50	X
L2373323-06	1	09:07:30	X
R1775340-9 CCV	1	09:12:11	X
R1775340-10 CCB	1	09:16:56	X

Form 13
Analysis Run Log

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Instrument ID	: ICPMSRQ	**Analysis Method**	: 1,6020B
Start Date	: 12/15/23 05:14	**End Date**	: 12/15/23 15:13

Sample Number	Dilution Factor	Analysis Time	Iron, Total
R1775340-8 TUNE		05:14:00	
R1775340-1 ICV	1	06:28:33	X
R1775340-2 ICB	1	06:33:16	X
R1775340-3 ICSA	1	06:45:26	X
R1775340-4 CCV	1	06:54:50	X
R1775340-5 CCB	1	06:59:34	X
R1775340-6 CCV	1	08:10:42	X
R1775340-7 CCB	1	08:15:26	X
R1775340-9 CCV	1	09:12:11	X
R1775340-10 CCB	1	09:16:56	X
R1775340-11 CCV	1	09:36:18	X
R1775340-12 CCB	1	09:41:03	X
R1775340-13 CCV	1	10:32:27	X
R1775340-14 CCB	1	10:37:12	X
R1775340-15 CCV	1	10:47:54	X
R1775340-16 CCB	1	10:52:38	X
R1775340-17 CCV	1	11:54:54	X
R1775340-18 CCB	1	11:59:39	X
R1775340-19 CCV	1	12:17:26	X
R1775340-20 CCB	1	12:22:10	X
WG1863929-1 BLANK	1	12:30:17	X
WG1863929-2 LCS	10	12:34:57	X
WG1863929-3 MS	10	12:39:38	X
WG1863929-4 MSD	10	12:44:20	X
R1775340-21 CCV	1	13:17:06	X
R1775340-22 CCB	1	13:21:51	X
WG1863929-7 MS	10	13:33:33	X

Form 13
Analysis Run Log

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Instrument ID	: ICPMSRQ	**Analysis Method**	: 1,6020B
Start Date	: 12/15/23 05:14	**End Date**	: 12/15/23 15:13

Sample Number	Dilution Factor	Analysis Time	Iron, Total
WG1863929-8 MSD	10	13:38:14	X
WG1863929-9 PS	10	13:50:21	X
WG1863929-10 SERDIL	5	13:55:00	X
L2373323-04	1	14:04:23	X
L2373323-01	1	14:18:25	X
R1775340-23 CCV	1	14:23:07	X
R1775340-24 CCB	1	14:27:52	X
L2373323-03	1	14:46:28	X
L2373323-05	1	14:51:09	X
L2373323-06	1	14:55:51	X
R1775340-25 CCV	1	15:08:24	X
R1775340-26 CCB	1	15:13:09	X

Form 14
ICP-MS Tune

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Lab Sample ID	: R1775340-8	**Analysis Date**	: 12/15/23 05:14
ICP-MS Instrument	: iCAP RQ		

Mass Element	Avg Measured Mass (amu)	Avg. Peak Width at 10% Peak Height (amu)	%RSD
59 Co	58.8964	0.715	0.7
115 In	114.8554	0.72	0.8
7 Li	7.0372	0.662	0.2
238 U	238.0108	0.713	0.6

Form 14
ICP-MS Tune

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Lab Sample ID	: R1775340-8	**Analysis Date**	: 12/15/23 05:14
ICP-MS Instrument	: iCAP RQ		

Mass Element	Avg Measured Mass (amu)	Avg. Peak Width at 10% Peak Height (amu)	%RSD
59 Co	58.8964	0.715	0.7
115 In	114.8554	0.72	0.8
7 Li	7.0372	0.662	0.2
238 U	238.0108	0.713	0.6

Form 15
ICP-MS Internal Standards Relative Intensity Summary

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Instrument ID	: ICPMSRQ	**Analysis Method**	: 1,6020B
Start Date	: 12/15/23	**End Date**	: 12/15/23

Sample #	Time	Internal Standards %RI For:				
		Lithium	Scandium	Ge	In	Bismuth
R1775340-1 ICV	06:28:33	97	100	100	99	96
R1775340-2 ICB	06:33:16	96	97	97	97	95
R1775340-3 ICSA	06:45:26	93	103	102	97	95
R1775340-4 CCV	06:54:50	98	108	104	102	101
R1775340-5 CCB	06:59:34	99	101	102	103	99
WG1863597-1 BLANK	07:23:51	98	102	100	100	98
WG1863597-2 LCS	07:28:31	98	102	99	101	97
WG1863597-3 MS	07:33:11	102	105	103	100	94
WG1863597-4 MSD	07:37:52	103	104	101	98	93
WG1863597-5 PS	07:42:32	102	103	102	97	93
L2373323-04	07:47:14	153	105	96	86	83
R1775340-6 CCV	08:10:42	92	95	94	93	92
R1775340-7 CCB	08:15:26	93	92	93	93	94
L2373323-01	08:53:29	156	94	95	86	86
L2373323-03	08:58:09	128	90	91	82	82
L2373323-05	09:02:50	139	88	85	77	79
L2373323-06	09:07:30	116	86	83	75	77
R1775340-9 CCV	09:12:11	79	82	80	79	84
R1775340-10 CCB	09:16:56	82	80	81	81	86

Form 15
ICP-MS Internal Standards Relative Intensity Summary

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Instrument ID	: ICPMSRQ	**Analysis Method**	: 1,6020B
Start Date	: 12/15/23	**End Date**	: 12/15/23

Sample #	Time	Internal Standards %RI For:				
		Lithium	Scandium	Ge	In	Bismuth
R1775340-1 ICV	06:28:33	97	100	100	99	96
R1775340-2 ICB	06:33:16	96	97	97	97	95
R1775340-3 ICSA	06:45:26	93	103	102	97	95
R1775340-4 CCV	06:54:50	98	108	104	102	101
R1775340-5 CCB	06:59:34	99	101	102	103	99
R1775340-6 CCV	08:10:42	92	95	94	93	92
R1775340-7 CCB	08:15:26	93	92	93	93	94
R1775340-9 CCV	09:12:11	79	82	80	79	84
R1775340-10 CCB	09:16:56	82	80	81	81	86
R1775340-11 CCV	09:36:18	85	88	87	86	86
R1775340-12 CCB	09:41:03	87	86	87	86	90
R1775340-13 CCV	10:32:27	89	91	90	88	90
R1775340-14 CCB	10:37:12	90	87	88	88	91
R1775340-15 CCV	10:47:54	89	93	91	89	91
R1775340-16 CCB	10:52:38	90	87	89	89	91
R1775340-17 CCV	11:54:54	94	105	103	98	96
R1775340-18 CCB	11:59:39	98	104	103	100	97
R1775340-19 CCV	12:17:26	95	105	100	96	94
R1775340-20 CCB	12:22:10	97	99	98	97	96
WG1863929-1 BLANK	12:30:17	98	102	100	98	96
WG1863929-2 LCS	12:34:57	97	100	100	100	95
WG1863929-3 MS	12:39:38	99	103	101	100	96
WG1863929-4 MSD	12:44:20	100	102	101	100	97
R1775340-21 CCV	13:17:06	94	102	102	100	98
R1775340-22 CCB	13:21:51	97	101	101	101	98
WG1863929-7 MS	13:33:33	102	101	102	101	95
WG1863929-8 MSD	13:38:14	102	104	103	99	94

Form 15
ICP-MS Internal Standards Relative Intensity Summary

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Instrument ID	: ICPMSRQ	**Analysis Method**	: 1,6020B
Start Date	: 12/15/23	**End Date**	: 12/15/23

Sample #	Time	Internal Standards %RI For:				
		Lithium	Scandium	Ge	In	Bismuth
WG1863929-9 PS	13:50:21	102	105	101	96	94
WG1863929-10 SERDIL	13:55:00	108	103	99	94	92
L2373323-04	14:04:23	156	100	95	84	82
L2373323-01	14:18:25	158	100	98	88	85
R1775340-23 CCV	14:23:07	92	96	94	91	92
R1775340-24 CCB	14:27:52	94	92	93	91	91
L2373323-03	14:46:28	141	103	97	88	89
L2373323-05	14:51:09	155	96	91	84	83
L2373323-06	14:55:51	131	92	91	81	82
R1775340-25 CCV	15:08:24	90	90	90	89	90
R1775340-26 CCB	15:13:09	92	88	88	88	90

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METALS by 6020B (WATER)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria	Holding Time	Container/Sample Preservation
Aluminum, Total	7429-90-5	0.01	0.00327	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Antimony, Total	7440-36-0	0.004	0.000429	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Arsenic, Total	7440-38-2	0.0005	0.000165	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Barium, Total	7440-39-3	0.0005	0.000173	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Beryllium, Total	7440-41-7	0.0005	0.000107	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Cadmium, Total	7440-43-9	0.0002	0.0000599	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Calcium, Total	7440-70-2	0.1	0.0394	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Chromium, Total	7440-47-3	0.001	0.000178	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Cobalt, Total	7440-48-4	0.0005	0.000163	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Copper, Total	7440-50-8	0.001	0.000384	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Lithium, Total	7439-93-2	0.001	0.000083	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Iron, Total	7439-89-6	0.05	0.0191	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Lead, Total	7439-92-1	0.001	0.000343	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Magnesium, Total	7439-95-4	0.07	0.0242	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Manganese, Total	7439-96-5	0.001	0.00044	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Nickel, Total	7440-02-0	0.002	0.000556	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Potassium, Total	7440-09-7	0.1	0.0309	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Selenium, Total	7782-49-2	0.005	0.00173	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Silver, Total	7440-22-4	0.0004	0.000163	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Sodium, Total	7440-23-5	0.1	0.0293	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Thallium, Total	7440-28-0	0.0005	0.000143	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Vanadium, Total	7440-62-2	0.005	0.00157	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Zinc, Total	7440-66-6	0.01	0.00341	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved

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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METALS by 6020B (SOIL)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria	Holding Time	Container/Sample Preservation
Aluminum, Total	7429-90-5	10	1.48	mg/kg	48-151	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Antimony, Total	7440-36-0	0.16	0.01352	mg/kg	1-208	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Arsenic, Total	7440-38-2	0.05	0.0066	mg/kg	79-121	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Barium, Total	7440-39-3	0.3	0.02112	mg/kg	83-117	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Beryllium, Total	7440-41-7	0.03	0.00872	mg/kg	83-117	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Cadmium, Total	7440-43-9	0.02	0.00264	mg/kg	83-117	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Calcium, Total	7440-70-2	50	6.08	mg/kg	81-119	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Chromium, Total	7440-47-3	0.2	0.0468	mg/kg	80-120	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Cobalt, Total	7440-48-4	0.05	0.00532	mg/kg	84-115	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Copper, Total	7440-50-8	0.2	0.0194	mg/kg	81-118	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Iron, Total	7439-89-6	20	2.06	mg/kg	45-155	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Lead, Total	7439-92-1	0.06	0.0146	mg/kg	81-117	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Magnesium, Total	7439-95-4	10	1.232	mg/kg	76-124	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Manganese, Total	7439-96-5	0.2	0.0444	mg/kg	81-117	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Nickel, Total	7440-02-0	0.1	0.02672	mg/kg	83-117	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Potassium, Total	7440-09-7	10	1.588	mg/kg	71-129	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Selenium, Total	7782-49-2	0.2	0.0756	mg/kg	78-122	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Silver, Total	7440-22-4	0.05	0.00488	mg/kg	75-124	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Sodium, Total	7440-23-5	15	1.172	mg/kg	72-127	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Thallium, Total	7440-28-0	0.02	0.00516	mg/kg	80-120	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Vanadium, Total	7440-62-2	0.1	0.03792	mg/kg	78-122	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Zinc, Total	7440-66-6	1	0.26	mg/kg	82-118	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv

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.

System

Start time:	12/15/2023 5:14:13 AM
Instrument:	iCAP RQ
Operator:	ALPHALAB\ICPMSRQ
Template:	STD_DEF
Instrument Serial Number:	RQ01904
Last Autotune:	Autotune-SourceTune High Matrix-20231010-074832067.imatdat
Solution:	No solution specified

Sensitivity & Stability Test

Result	Runs	Sweeps
Passed	5	10

Sensitivity

Analyte	Result	Value	Condition	Limit
7Li	Passed	54,022.0 CPS	Greater than	10,000.0 CPS
59Co	Passed	142,264.0 CPS	Greater than	1,000.0 CPS
238U	Passed	114,522.0 CPS	Greater than	20,000.0 CPS
140Ce.16O/140Ce	Passed	0.022	Less than	0.025
137Ba++/137Ba	Passed	0.0155	Less than	0.034
115In	Passed	120,345.0 CPS	Greater than	5,000.0 CPS

Stability

Analyte	Value	Limit
7Li	0.2%	5
59Co	0.7%	5
238U	0.6%	5
115In	0.8%	5

Mass Calibration Test

Result	Channels	Dwell	MeasureWidth	PointSpacing	Sweeps
Passed	75	0.04	1.5	0.02	10

Analyte	Result	Centroid Mass [u]	Offset	Peak width [u]	Peak width min [u]	Peak width max [u]
7Li	Passed	7.0372	0.0212	0.662	0.600	0.900
59Co	Passed	58.8964	0.0368	0.715	0.600	0.900
115In	Passed	114.8554	0.0485	0.720	0.600	0.900
238U	Passed	238.0108	0.0400	0.713	0.600	0.900

Tune Settings

Parameter	Value
Additional Gas Flow 1	0.00
Additional Gas Flow 2	0.00
Additional Gas Flow 3	0.00
Angular Deflection	-382.40
Auxilliary Flow	0.80
CCT Bias	-3.50
CCT Entry Lens	-102.01
CCT Exit Lens	-160.01
CCT Focus Lens	-2.50
CCT1 Flow	0.00
CCT1 Shut-Off Valve	0.00
CCT2 Flow	0.00
CCT2 Shut-Off Valve	0.00
Cool Flow	14.00
D1 Lens	-210.01
D2 Lens	-80.00
Deflection Entry Lens	-35.01
Dry Pump Speed	100.00
Extraction Lens 1 Negative	0.00
Extraction Lens 1 Polarity	0.00
Extraction Lens 1 Positive	0.00
Extraction Lens 2	-125.00
Focus Lens	21.00
Nebulizer Flow	0.90
Peristaltic Pump Speed	20.00
Plasma Power	1549.58
Pole Bias	-0.93
Quad Entry Lens	-30.79
Sampling Depth	5.00
Spray Chamber Temperature	2.68
Torch Horizontal Position	-0.18
Torch Vertical Position	-1.04
Virtual CCT Mass Maximum Dac Limit Set	4095.00
Virtual CCT Mass parameter b	0.65
Virtual CCT Mass to Dac Factor	130.00
Virtual CCT Mass to Dac Offset	-45.00

Vacuum Check

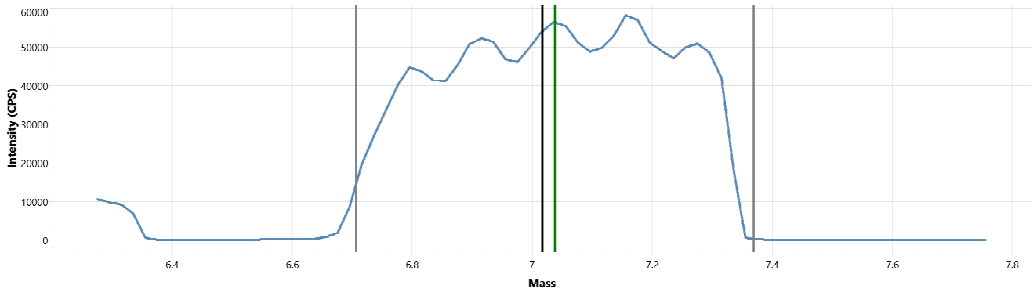
Parameter	Result	Value
Analyzer Pressure	Vacuum ok	1.876e-7
Interface Pressure		1.691e+0

Detector Voltages

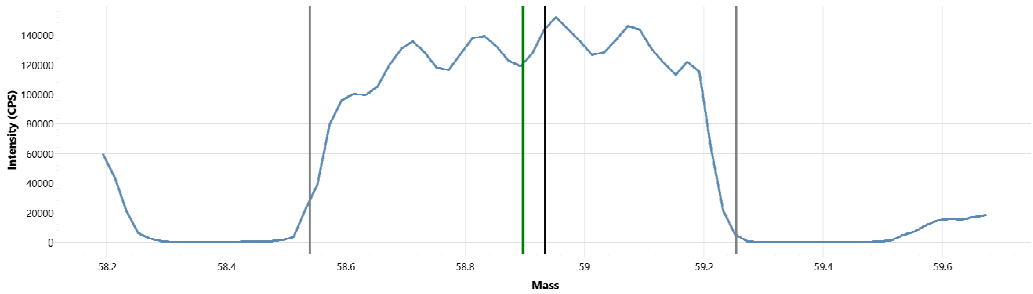
Analog	Counting
-2200.00	1375.00

Mass Calibration Peaks

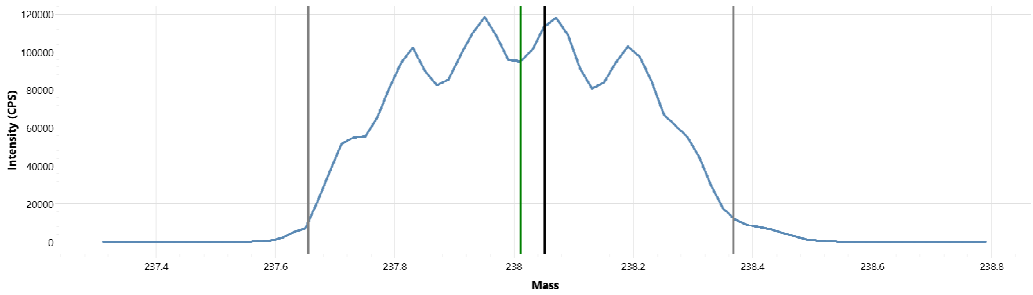
Analyte: 7Li



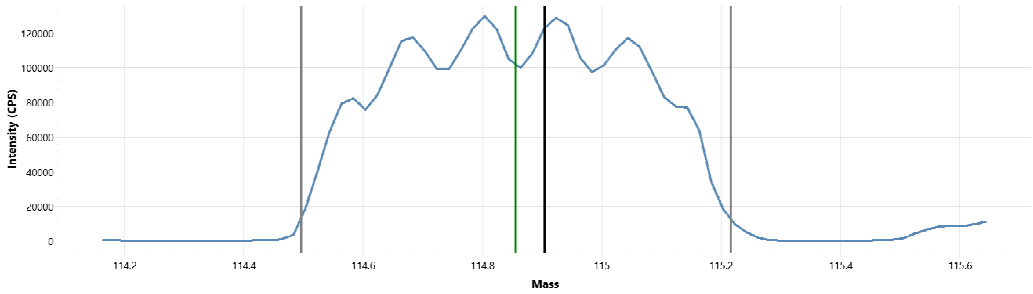
Analyte: 59Co



Analyte: 238U

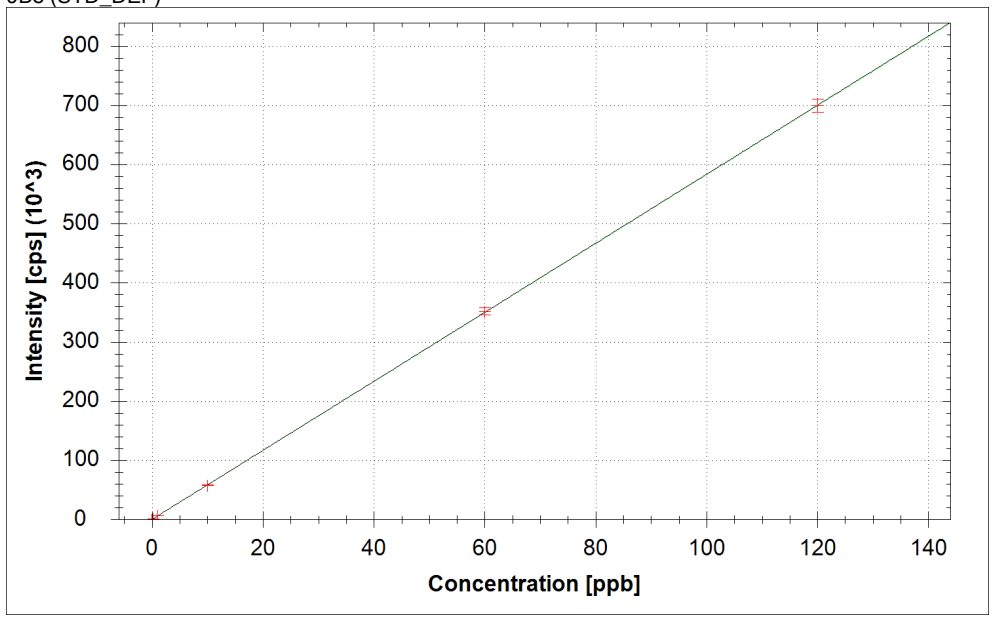


Analyte: 115In



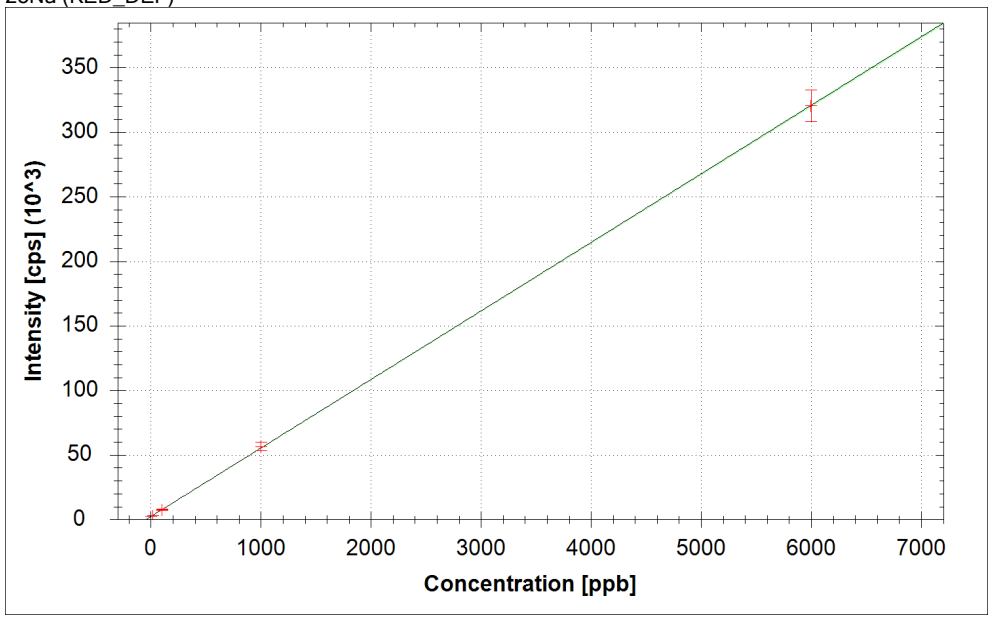
Calibration Curves:

9Be (STD_DEF)



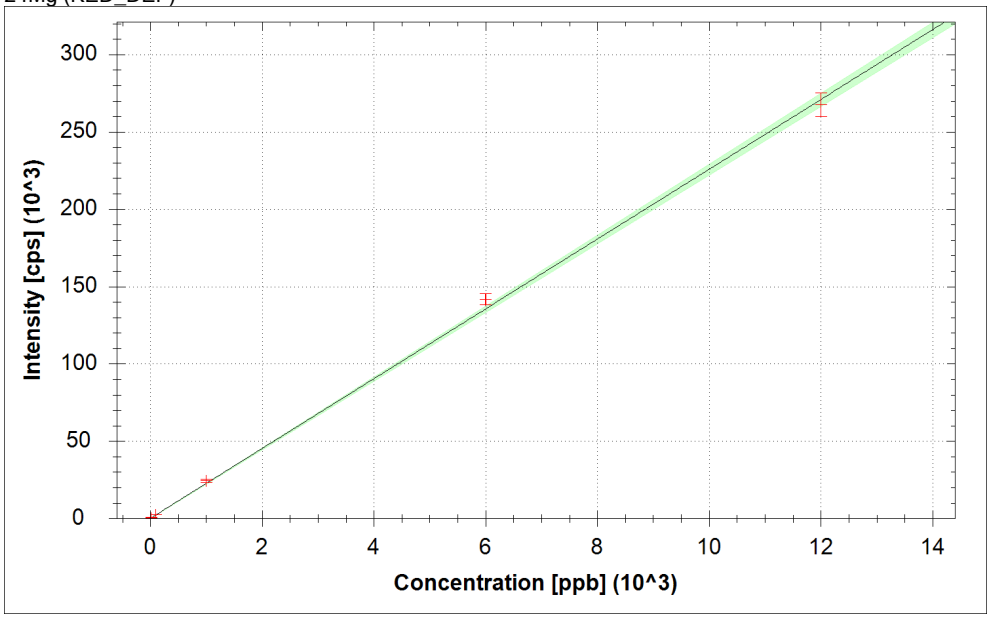
f(x) = 5832.4000*x + 108.8511
R² = 1.0000
BEC = 0.019 ppb
LoD = 0.0064 ppb

23Na (KED_DEF)



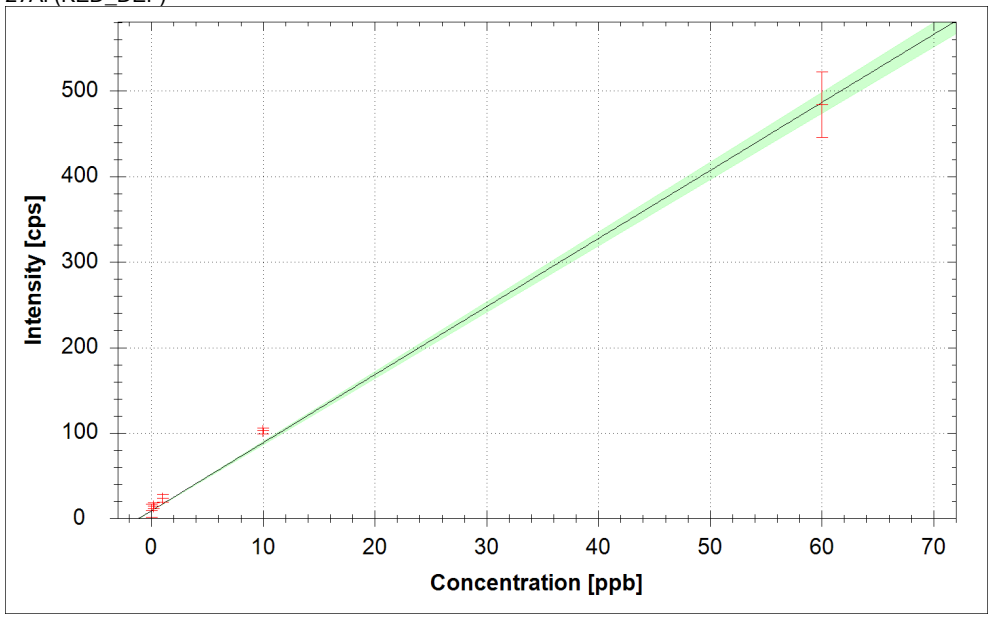
f(x) = 53.0793*x + 2225.1525
R² = 1.0000
BEC = 41.921 ppb
LoD = 4.3119 ppb

24Mg (KED_DEF)



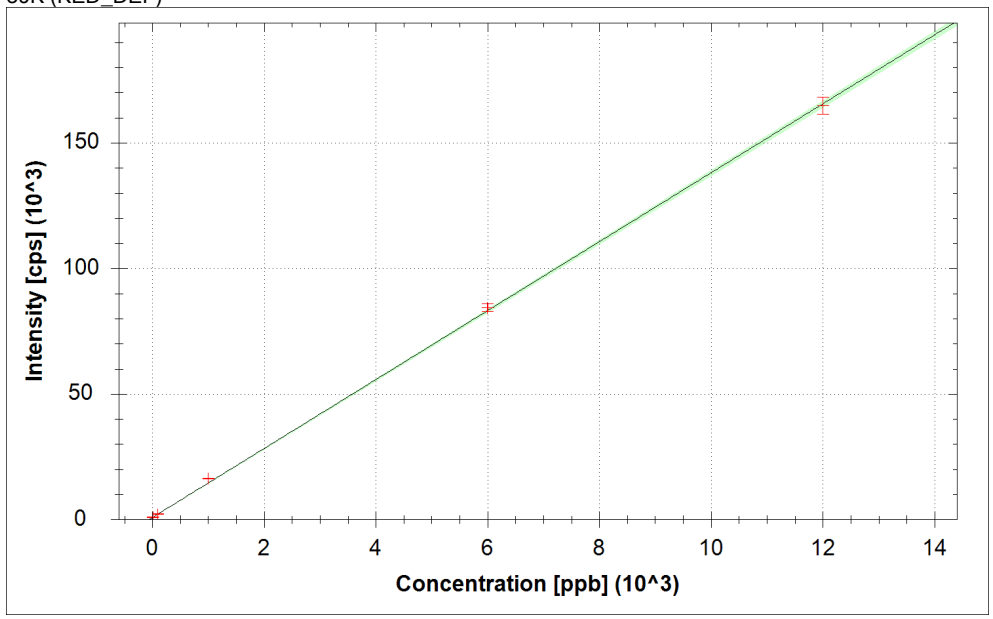
f(x) = 22.5671*x + 40.0128
R² = 0.9991
BEC = 1.773 ppb
LoD = 1.5422 ppb

27Al (KED_DEF)



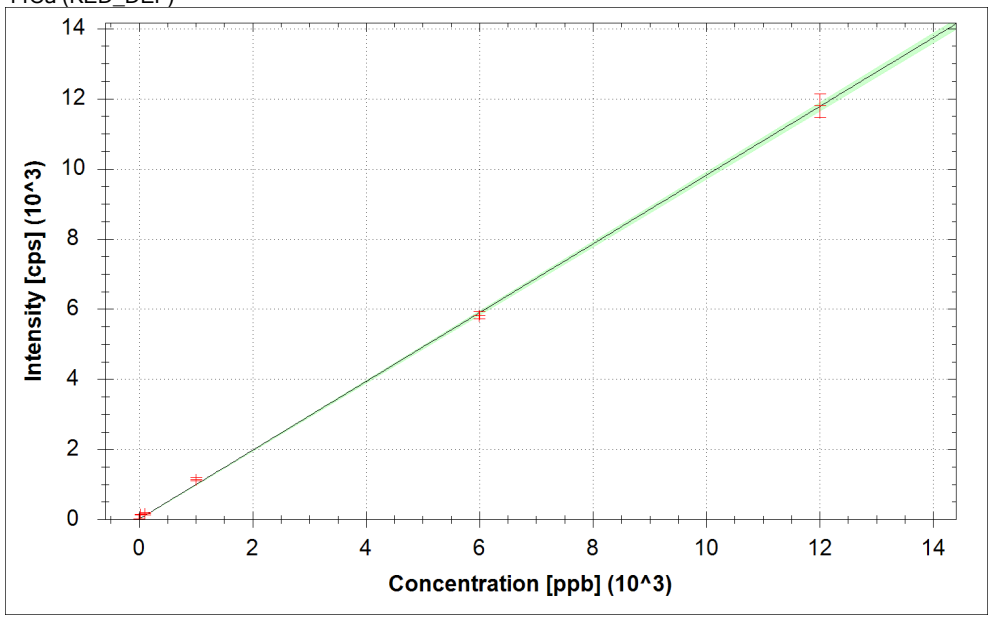
f(x) = 7.9597*x + 8.8918
R² = 0.9984
BEC = 1.117 ppb
LoD = 2.9024 ppb

39K (KED_DEF)



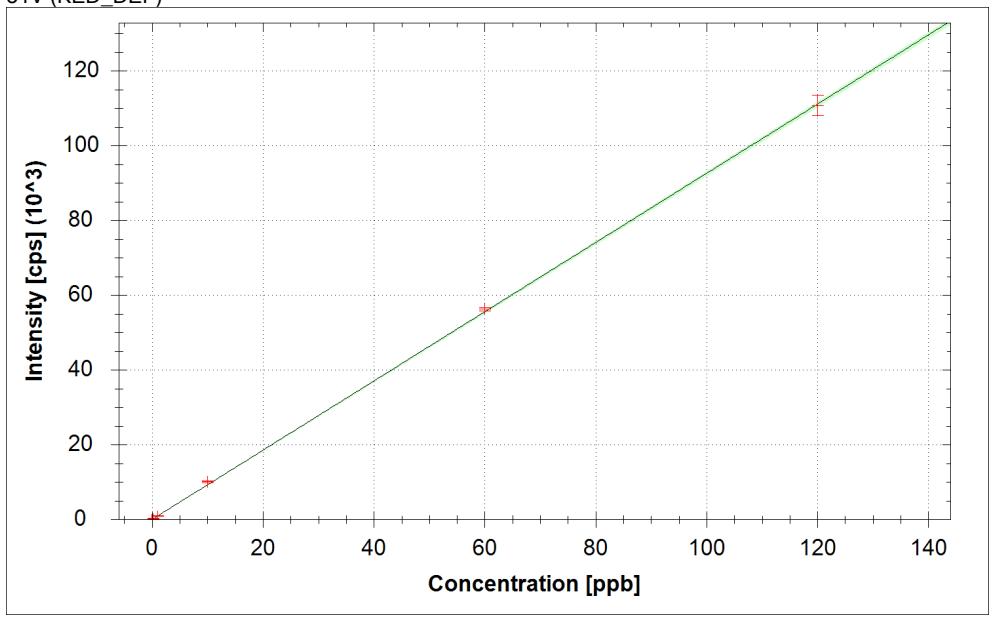
f(x) = 13.7270*x + 786.2108
R² = 0.9998
BEC = 57.275 ppb
LoD = 13.2687 ppb

44Ca (KED_DEF)



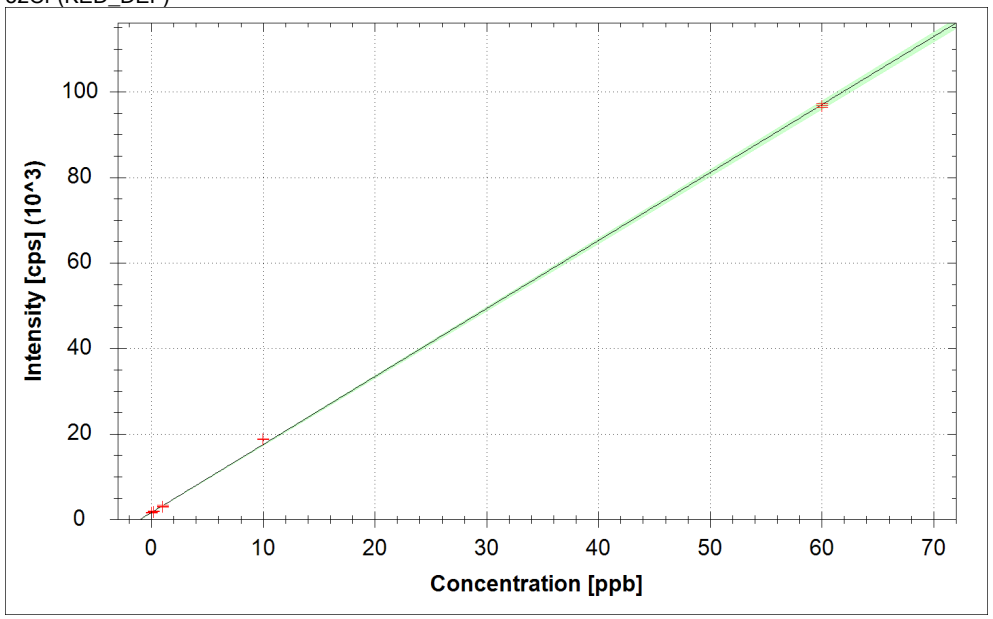
f(x) = 0.9805*x + 10.5973
R² = 0.9996
BEC = 10.808 ppb
LoD = 31.3916 ppb

51V (KED_DEF)



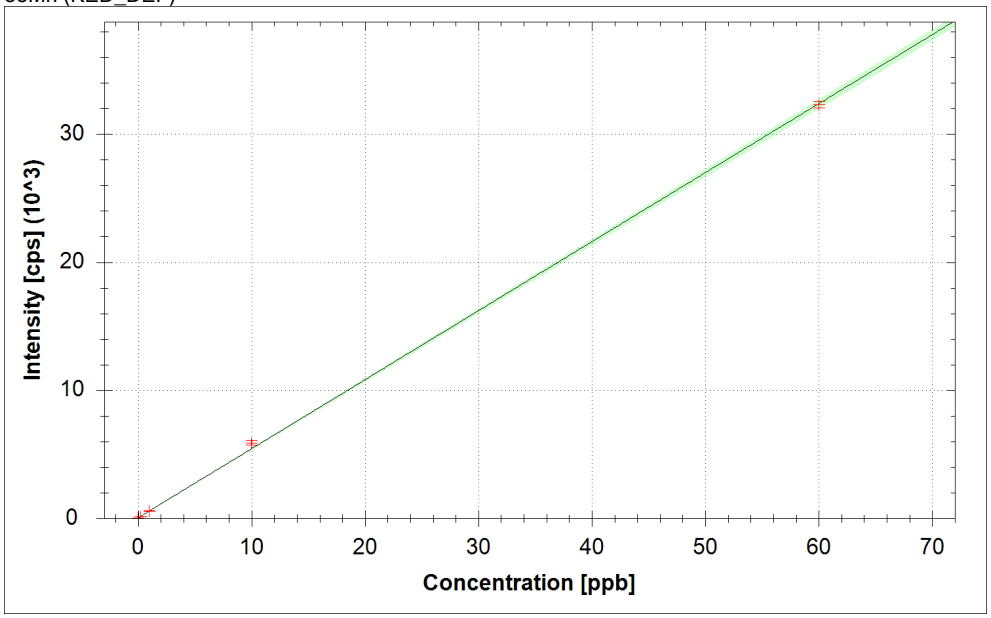
f(x) = 925.4332*x + 17.8766
R² = 0.9999
BEC = 0.019 ppb
LoD = 0.0339 ppb

52Cr (KED_DEF)



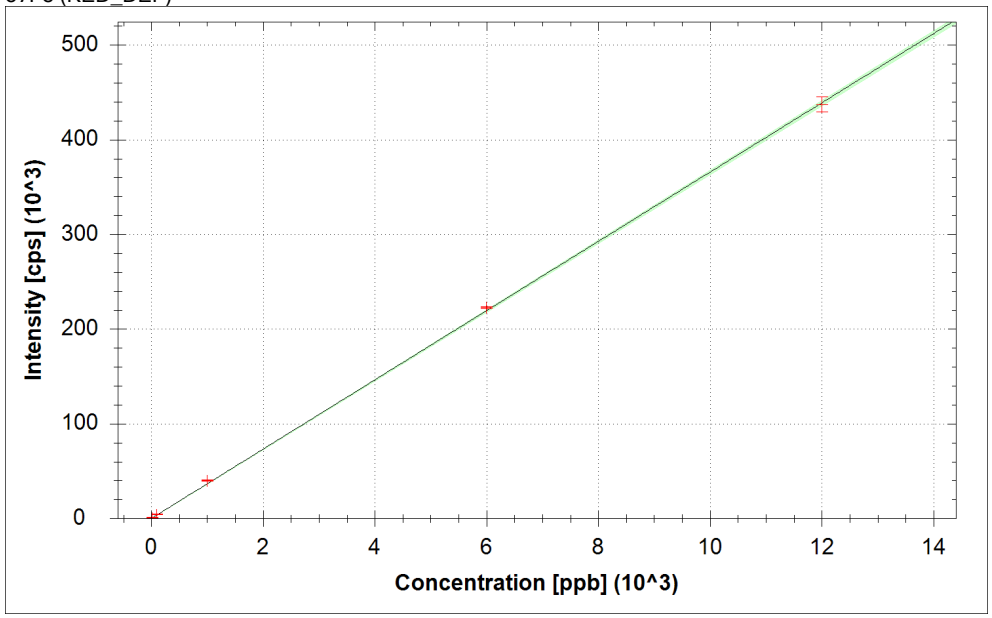
f(x) = 1589.5162*x + 1599.6773
R² = 0.9998
BEC = 1.006 ppb
LoD = 0.1180 ppb

55Mn (KED_DEF)



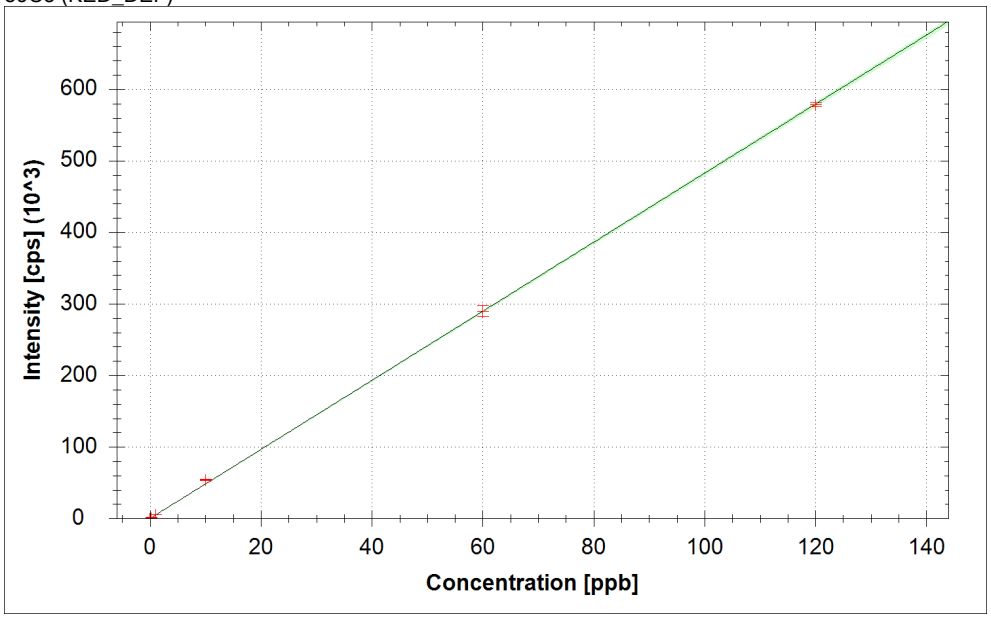
f(x) = 538.5551*x + 55.3310
R² = 0.9997
BEC = 0.103 ppb
LoD = 0.0250 ppb

57Fe (KED_DEF)



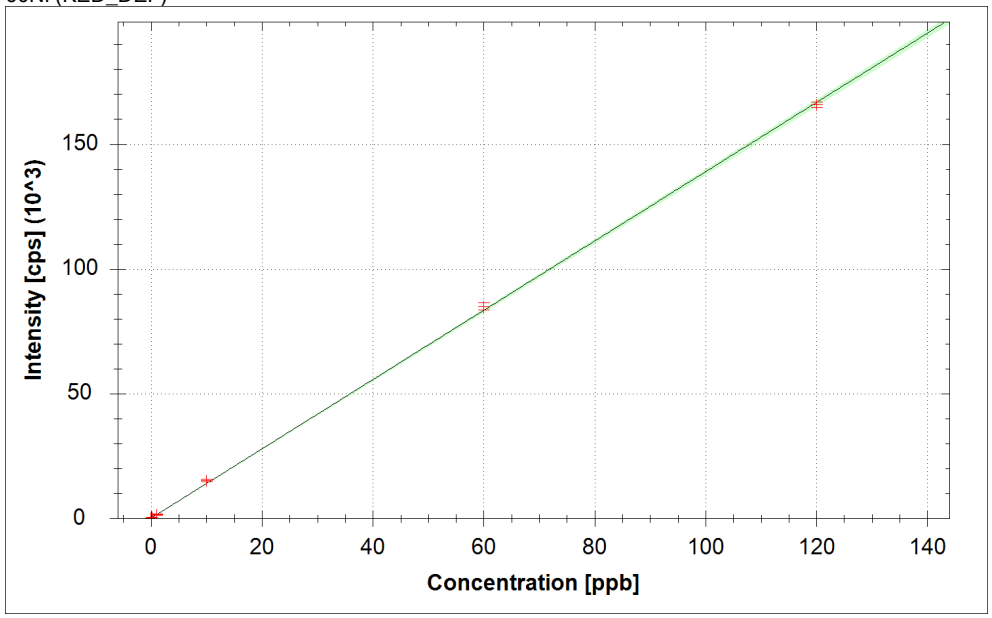
f(x) = 36.5661*x + 28.9110
R² = 0.9998
BEC = 0.791 ppb
LoD = 0.8360 ppb

59Co (KED_DEF)



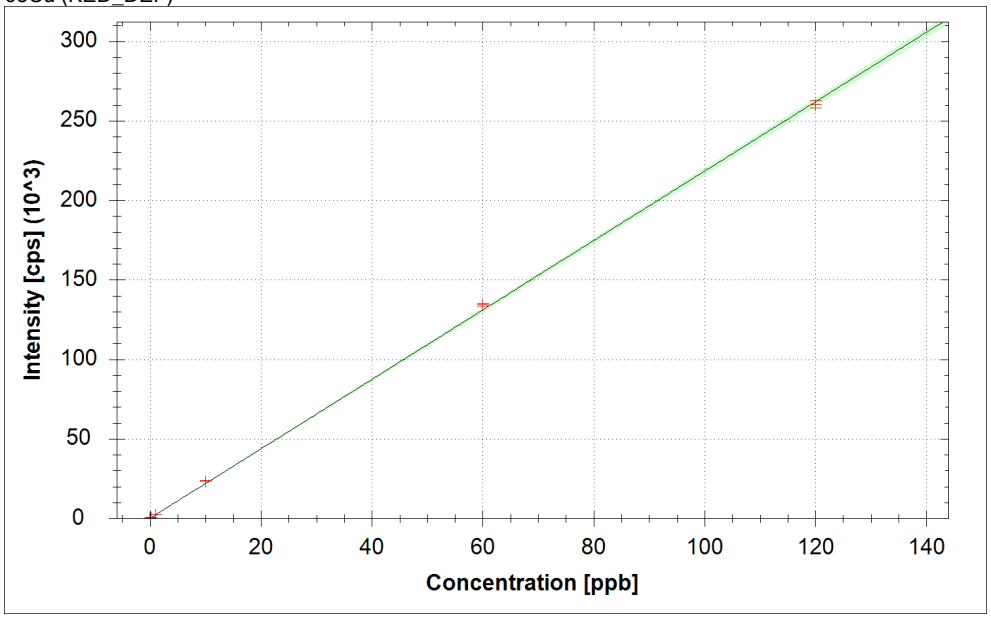
f(x) = 4826.1886*x + 2.2624
R² = 0.9999
BEC = 0.000 ppb
LoD = 0.0024 ppb

60Ni (KED_DEF)



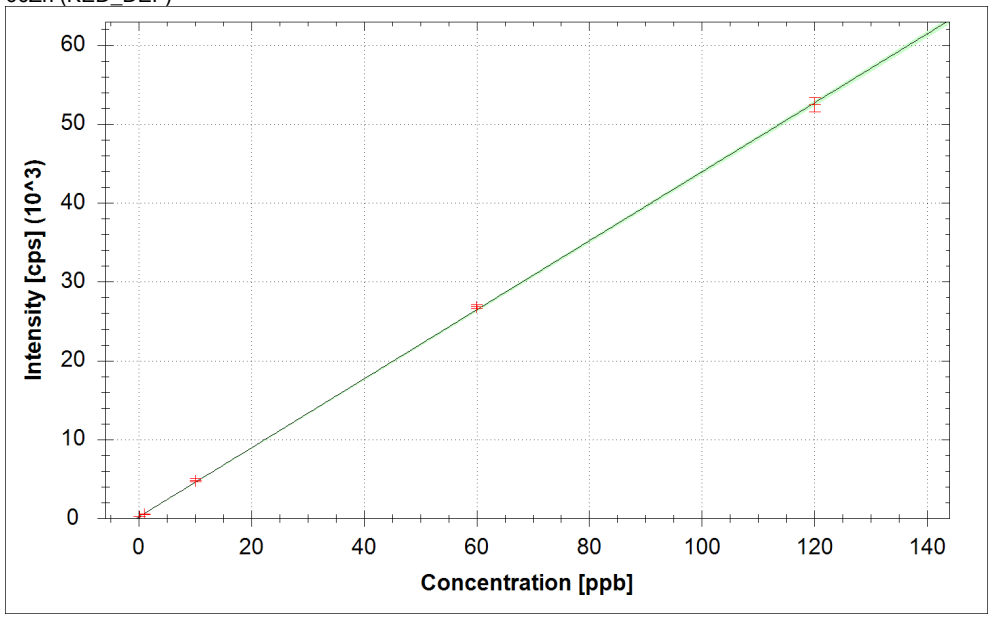
f(x) = 1388.0651*x + 126.7841
R² = 0.9998
BEC = 0.091 ppb
LoD = 0.0540 ppb

65Cu (KED_DEF)



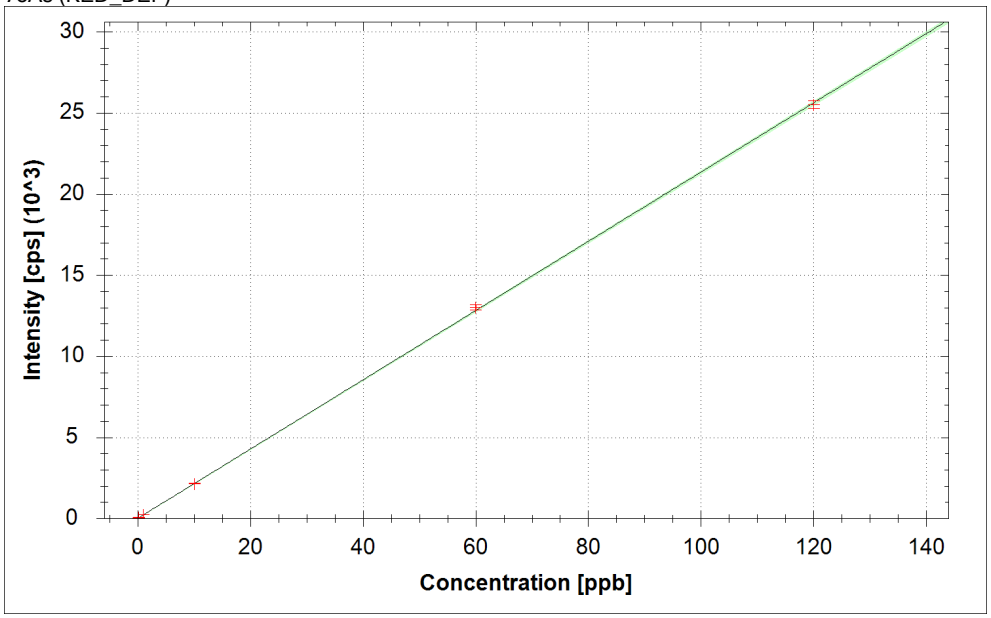
f(x) = 2181.2765*x + 135.4156
R² = 0.9997
BEC = 0.062 ppb
LoD = 0.0179 ppb

66Zn (KED_DEF)



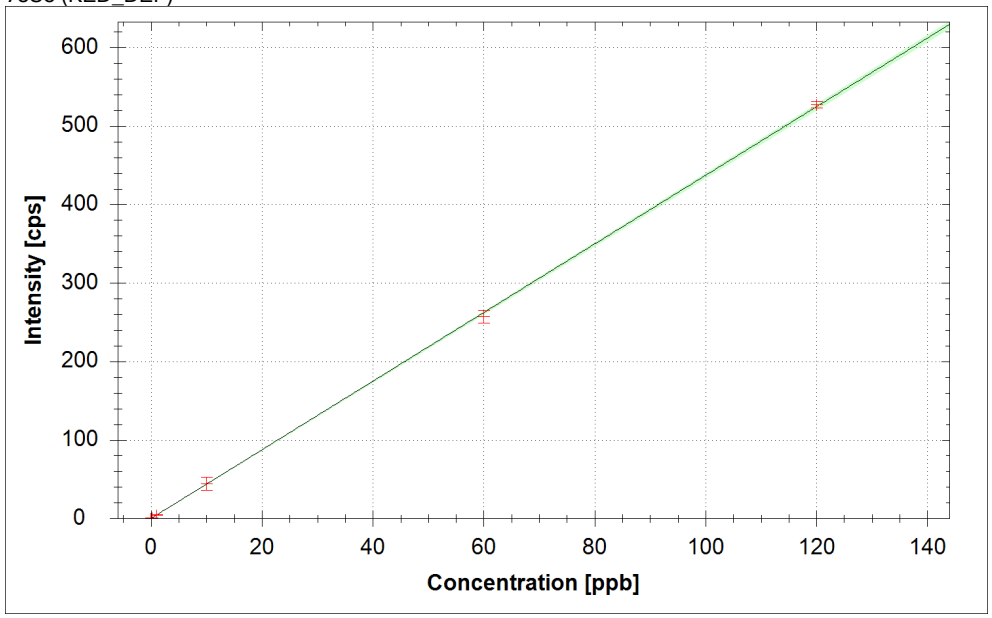
f(x) = 437.1566*x + 207.1232
R² = 0.9999
BEC = 0.474 ppb
LoD = 0.0182 ppb

75As (KED_DEF)



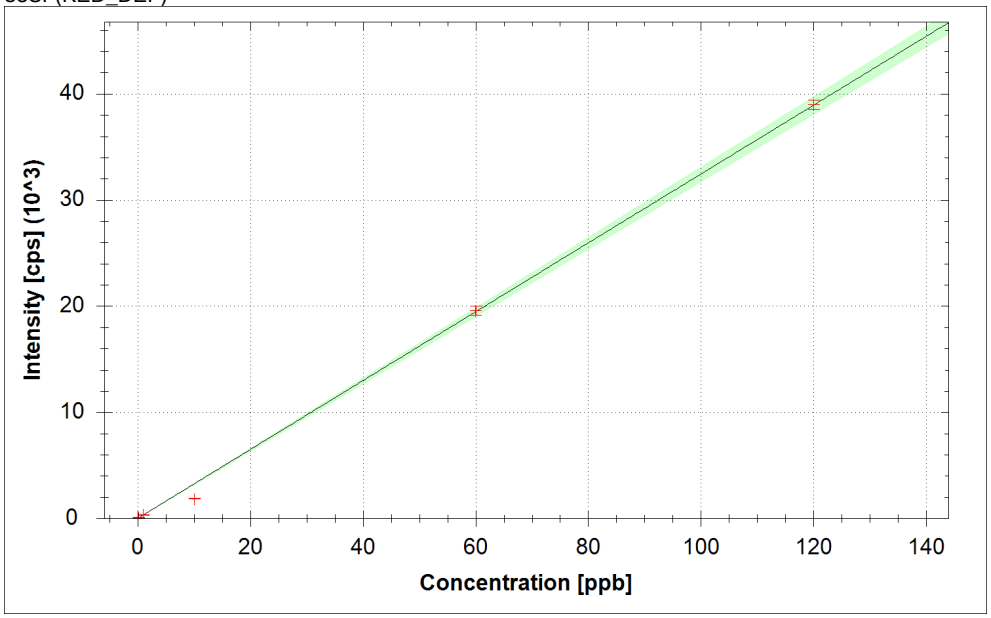
f(x) = 213.3274*x + 11.8785
R² = 0.9999
BEC = 0.056 ppb
LoD = 0.0291 ppb

78Se (KED_DEF)



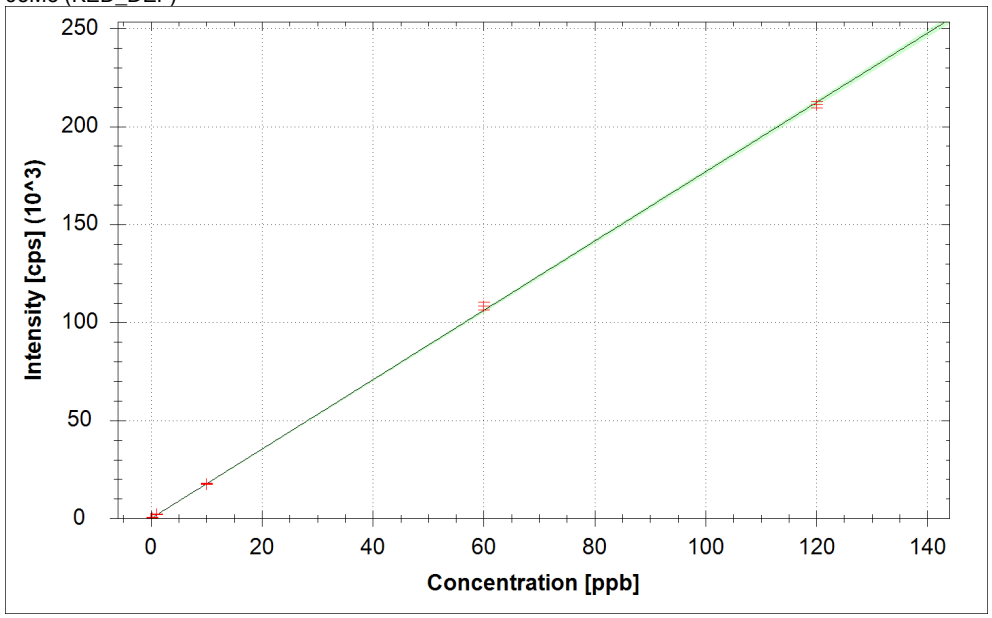
f(x) = 4.3696*x + 0.0750
R² = 0.9998
BEC = 0.017 ppb
LoD = 0.1260 ppb

88Sr (KED_DEF)



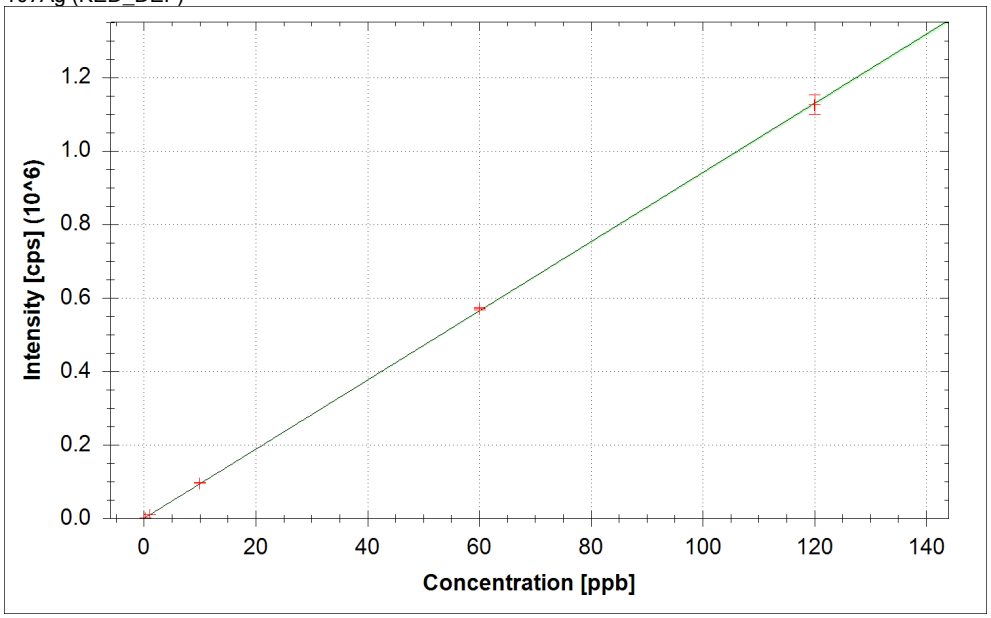
f(x) = 324.1376*x + 19.5125
R² = 0.9984
BEC = 0.060 ppb
LoD = 0.0474 ppb

95Mo (KED_DEF)



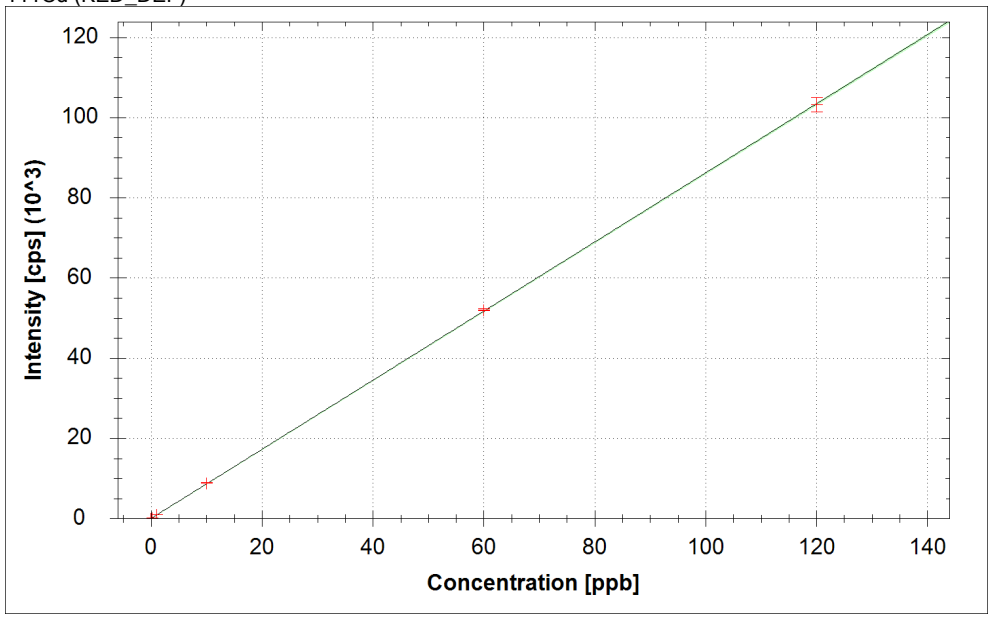
f(x) = 1768.4464*x + 13.3570
R² = 0.9998
BEC = 0.008 ppb
LoD = 0.0115 ppb

107Ag (KED_DEF)



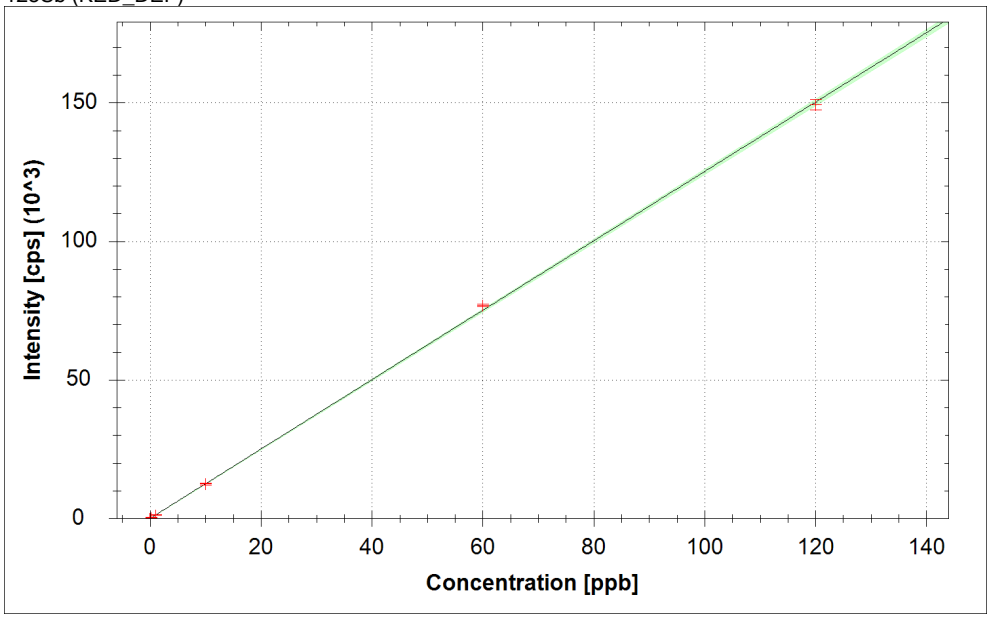
f(x) = 9410.1837*x + 31.1137
R² = 1.0000
BEC = 0.003 ppb
LoD = 0.0016 ppb

111Cd (KED_DEF)



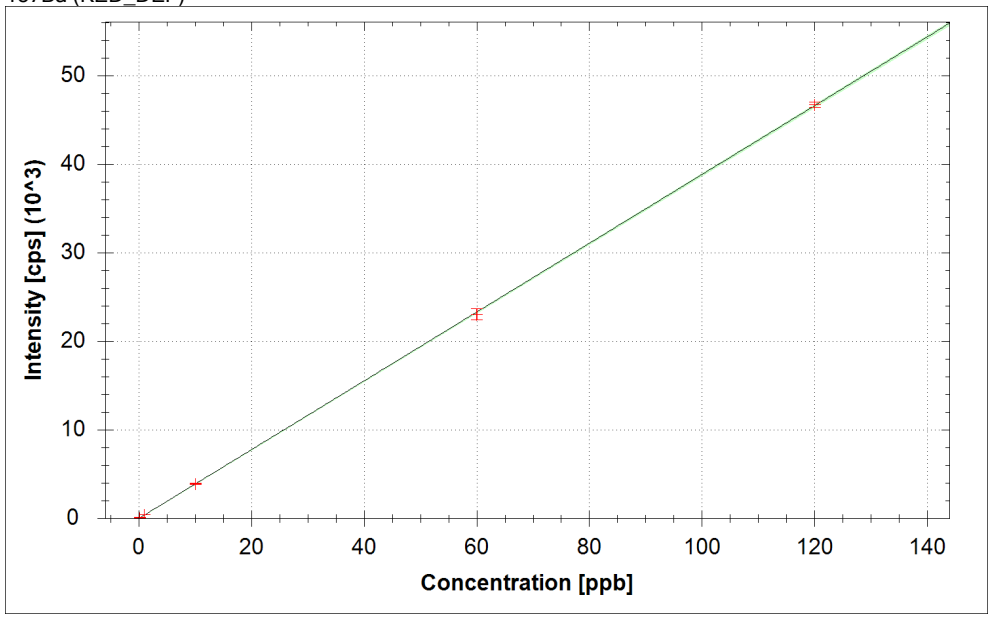
f(x) = 861.5758*x + 0.4436
R² = 1.0000
BEC = 0.001 ppb
LoD = 0.0027 ppb

123Sb (KED_DEF)



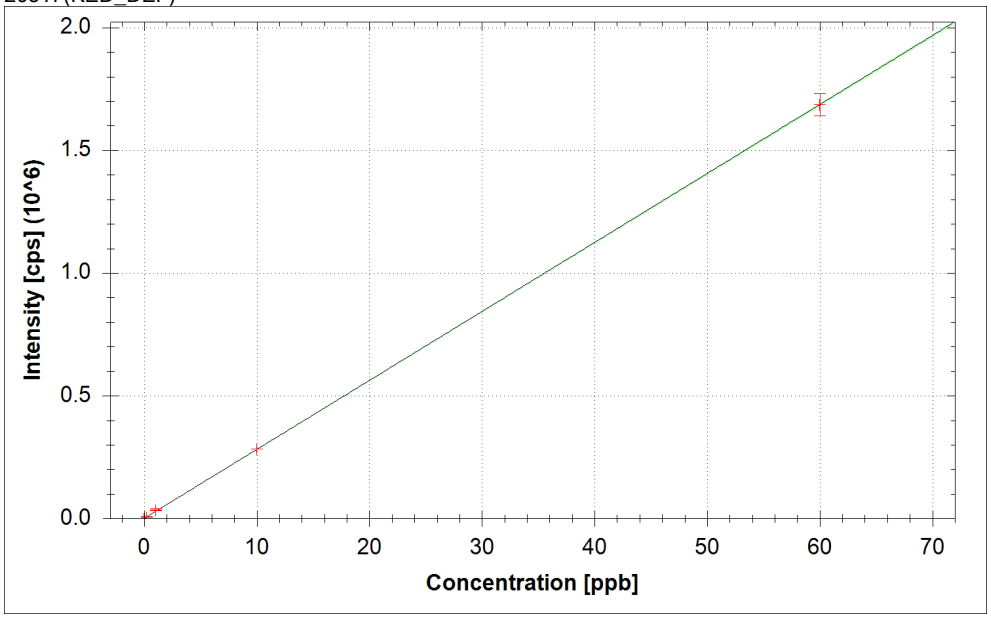
f(x) = 1251.3509*x + 9.7816
R² = 0.9998
BEC = 0.008 ppb
LoD = 0.0074 ppb

137Ba (KED_DEF)



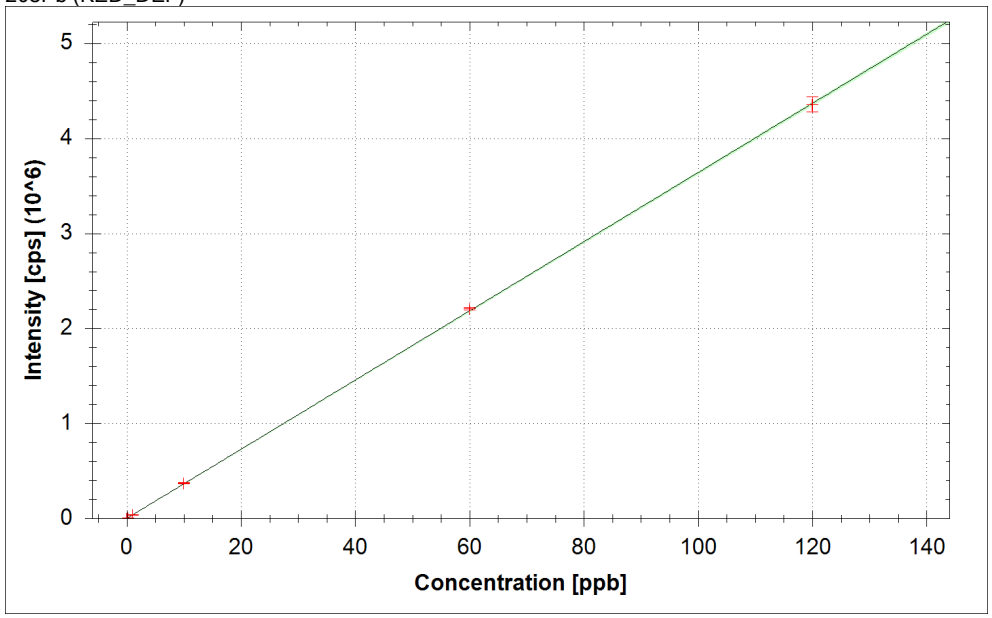
f(x) = 388.3435*x + 3.3422
R² = 1.0000
BEC = 0.009 ppb
LoD = 0.0258 ppb

205Tl (KED_DEF)



f(x) = 28100.3750*x + 342.2933
R² = 1.0000
BEC = 0.012 ppb
LoD = 0.0122 ppb

208Pb (KED_DEF)



f(x) = 36392.9352*x + 216.5997
R² = 0.9999
BEC = 0.006 ppb
LoD = 0.0027 ppb

Standards:

Analysis Index: 4
Analysis Name: 0.2/20 Cal
Analysis Type: STD
Analysis Started at: 12/15/2023 5:50:04 AM
Total Dilution Factor 50000
Rack 0
Vial 2

Category	Concentration average	Concentration RSD	Standard Concentration
6Li (STD_DEF)	100.160 %	1.3 %	
6Li (KED_DEF)	110.318 %	3.5 %	
9Be (STD_DEF)	0.192 ppb	4.5 %	0.200 ppb
23Na (KED_DEF)	14.140 ppb	21.8 %	20.000 ppb
24Mg (KED_DEF)	20.546 ppb	2.6 %	20.000 ppb
27Al (KED_DEF)	0.734 ppb	63.6 %	0.200 ppb
39K (KED_DEF)	16.310 ppb	14.2 %	20.000 ppb
44Ca (KED_DEF)	131.888 ppb	8.8 %	20.000 ppb
45Sc (STD_DEF)	102.102 %	1.9 %	
45Sc (KED_DEF)	101.653 %	1.7 %	
51V (KED_DEF)	0.184 ppb	28.6 %	0.200 ppb
52Cr (KED_DEF)	0.153 ppb	37.4 %	0.200 ppb
55Mn (KED_DEF)	0.175 ppb	8.4 %	0.200 ppb
57Fe (KED_DEF)	20.644 ppb	10.6 %	20.000 ppb
59Co (KED_DEF)	0.229 ppb	14.8 %	0.200 ppb
60Ni (KED_DEF)	0.191 ppb	15.4 %	0.200 ppb
65Cu (KED_DEF)	0.198 ppb	11.6 %	0.200 ppb
66Zn (KED_DEF)	0.072 ppb	73.0 %	0.200 ppb
74Ge (STD_DEF)	98.986 %	0.7 %	
74Ge (KED_DEF)	100.453 %	1.5 %	
75As (KED_DEF)	0.186 ppb	50.6 %	0.200 ppb
78Se (KED_DEF)	0.146 ppb	29.6 %	0.200 ppb
88Sr (KED_DEF)	0.130 ppb	46.3 %	0.200 ppb
95Mo (KED_DEF)	0.205 ppb	22.1 %	0.200 ppb
103Rh (STD_DEF)	98.961 %	1.8 %	
103Rh (KED_DEF)	100.551 %	2.9 %	
107Ag (KED_DEF)	0.194 ppb	3.5 %	0.200 ppb
111Cd (KED_DEF)	0.211 ppb	0.8 %	0.200 ppb
115In (STD_DEF)	99.761 %	3.1 %	
115In (KED_DEF)	99.781 %	1.9 %	
123Sb (KED_DEF)	0.205 ppb	11.2 %	0.200 ppb
137Ba (KED_DEF)	0.204 ppb	38.5 %	0.200 ppb
159Tb (STD_DEF)	101.477 %	1.3 %	
159Tb (KED_DEF)	102.047 %	2.1 %	
175Lu (STD_DEF)	99.493 %	2.8 %	
175Lu (KED_DEF)	99.295 %	3.7 %	
205Tl (KED_DEF)	0.198 ppb	9.5 %	0.200 ppb
208Pb (KED_DEF)	0.203 ppb	5.5 %	0.200 ppb
209Bi (STD_DEF)	99.424 %	1.3 %	
209Bi (KED_DEF)	99.096 %	5.8 %	

Standards:

Analysis Index:	5
Analysis Name:	x1/100 Cal
Analysis Type:	STD
Analysis Started at:	12/15/2023 5:54:44 AM
Total Dilution Factor	10000
Rack	0
Vial	3

Standards:

Analysis Index: 6
Analysis Name: 10/10000 Cal
Analysis Type: STD
Analysis Started at: 12/15/2023 5:59:25 AM
Total Dilution Factor 1000
Rack 0
Vial 4

Category	Concentration average	Concentration RSD	Standard Concentration
6Li (STD_DEF)	98.133 %	0.8 %	
6Li (KED_DEF)	107.407 %	8.8 %	
9Be (STD_DEF)	9.854 ppb	0.9 %	10.000 ppb
23Na (KED_DEF)	1,021.529 ppb	6.2 %	1,000.000 ppb
24Mg (KED_DEF)	1,081.460 ppb	4.3 %	1,000.000 ppb
27Al (KED_DEF)	11.750 ppb	3.7 %	10.000 ppb
39K (KED_DEF)	1,128.359 ppb	1.5 %	1,000.000 ppb
44Ca (KED_DEF)	1,150.856 ppb	4.0 %	1,000.000 ppb
45Sc (STD_DEF)	99.869 %	1.8 %	
45Sc (KED_DEF)	97.411 %	2.0 %	
51V (KED_DEF)	10.883 ppb	2.7 %	10.000 ppb
52Cr (KED_DEF)	10.795 ppb	0.8 %	10.000 ppb
55Mn (KED_DEF)	10.815 ppb	2.9 %	10.000 ppb
57Fe (KED_DEF)	1,092.203 ppb	1.4 %	1,000.000 ppb
59Co (KED_DEF)	11.159 ppb	1.2 %	10.000 ppb
60Ni (KED_DEF)	10.898 ppb	3.2 %	10.000 ppb
65Cu (KED_DEF)	10.711 ppb	0.9 %	10.000 ppb
66Zn (KED_DEF)	10.556 ppb	4.7 %	10.000 ppb
74Ge (STD_DEF)	99.414 %	0.6 %	
74Ge (KED_DEF)	96.674 %	2.3 %	
75As (KED_DEF)	9.971 ppb	1.0 %	10.000 ppb
78Se (KED_DEF)	10.092 ppb	19.0 %	10.000 ppb
88Sr (KED_DEF)	5.646 ppb	1.3 %	10.000 ppb
95Mo (KED_DEF)	9.962 ppb	1.8 %	10.000 ppb
103Rh (STD_DEF)	98.730 %	1.1 %	
103Rh (KED_DEF)	98.037 %	0.5 %	
107Ag (KED_DEF)	10.266 ppb	1.6 %	10.000 ppb
111Cd (KED_DEF)	10.291 ppb	1.6 %	10.000 ppb
115In (STD_DEF)	99.693 %	2.5 %	
115In (KED_DEF)	98.664 %	2.0 %	
123Sb (KED_DEF)	9.940 ppb	2.7 %	10.000 ppb
137Ba (KED_DEF)	10.040 ppb	2.0 %	10.000 ppb
159Tb (STD_DEF)	102.514 %	1.8 %	
159Tb (KED_DEF)	99.060 %	1.1 %	
175Lu (STD_DEF)	100.553 %	2.1 %	
175Lu (KED_DEF)	97.298 %	1.6 %	
205Tl (KED_DEF)	10.057 ppb	0.3 %	10.000 ppb
208Pb (KED_DEF)	10.190 ppb	1.8 %	10.000 ppb
209Bi (STD_DEF)	99.802 %	1.1 %	
209Bi (KED_DEF)	96.661 %	2.0 %	

Standards:

Analysis Index: 7
Analysis Name: 60/6000 Cal
Analysis Type: STD
Analysis Started at: 12/15/2023 6:04:07 AM
Total Dilution Factor 166.66666666
Rack 0
Vial 5

Category	Concentration average	Concentration RSD	Standard Concentration
6Li (STD_DEF)	95.524 %	1.6 %	
6Li (KED_DEF)	100.397 %	6.4 %	
9Be (STD_DEF)	60.232 ppb	1.7 %	60.000 ppb
23Na (KED_DEF)	5,996.454 ppb	3.9 %	6,000.000 ppb
24Mg (KED_DEF)	6,277.234 ppb	2.5 %	6,000.000 ppb
27Al (KED_DEF)	59.692 ppb	8.0 %	60.000 ppb
39K (KED_DEF)	6,082.243 ppb	1.9 %	6,000.000 ppb
44Ca (KED_DEF)	5,924.025 ppb	1.9 %	6,000.000 ppb
45Sc (STD_DEF)	102.988 %	1.7 %	
45Sc (KED_DEF)	105.049 %	1.7 %	
51V (KED_DEF)	60.712 ppb	0.7 %	60.000 ppb
52Cr (KED_DEF)	59.869 ppb	0.5 %	60.000 ppb
55Mn (KED_DEF)	59.865 ppb	0.8 %	60.000 ppb
57Fe (KED_DEF)	6,085.819 ppb	0.6 %	6,000.000 ppb
59Co (KED_DEF)	60.063 ppb	2.6 %	60.000 ppb
60Ni (KED_DEF)	61.098 ppb	1.7 %	60.000 ppb
65Cu (KED_DEF)	61.501 ppb	0.7 %	60.000 ppb
66Zn (KED_DEF)	60.885 ppb	1.1 %	60.000 ppb
74Ge (STD_DEF)	99.481 %	2.6 %	
74Ge (KED_DEF)	96.110 %	1.6 %	
75As (KED_DEF)	60.963 ppb	1.2 %	60.000 ppb
78Se (KED_DEF)	58.741 ppb	3.0 %	60.000 ppb
88Sr (KED_DEF)	60.342 ppb	2.2 %	60.000 ppb
95Mo (KED_DEF)	61.238 ppb	1.9 %	60.000 ppb
103Rh (STD_DEF)	96.754 %	2.6 %	
103Rh (KED_DEF)	95.661 %	0.7 %	
107Ag (KED_DEF)	60.634 ppb	0.7 %	60.000 ppb
111Cd (KED_DEF)	60.409 ppb	0.6 %	60.000 ppb
115In (STD_DEF)	97.714 %	2.1 %	
115In (KED_DEF)	96.297 %	1.0 %	
123Sb (KED_DEF)	61.422 ppb	0.6 %	60.000 ppb
137Ba (KED_DEF)	59.313 ppb	2.7 %	60.000 ppb
159Tb (STD_DEF)	102.360 %	0.9 %	
159Tb (KED_DEF)	99.362 %	0.8 %	
175Lu (STD_DEF)	102.342 %	0.3 %	
175Lu (KED_DEF)	100.373 %	2.5 %	
205Tl (KED_DEF)	59.987 ppb	2.6 %	60.000 ppb
208Pb (KED_DEF)	60.676 ppb	0.7 %	60.000 ppb
209Bi (STD_DEF)	97.693 %	1.3 %	
209Bi (KED_DEF)	95.747 %	2.2 %	

Standards:

Analysis Index: 8
Analysis Name: 120/120000 Cal
Analysis Type: STD
Analysis Started at: 12/15/2023 6:08:49 AM
Total Dilution Factor 83.33333333
Rack 0
Vial 6

Category	Concentration average	Concentration RSD	Standard Concentration
6Li (STD_DEF)	94.014 %	0.9 %	
6Li (KED_DEF)	105.291 %	2.9 %	
9Be (STD_DEF)	119.896 ppb	1.6 %	120.000 ppb
23Na (KED_DEF)	11,436.548 ppb	1.9 %	12,000.000 ppb
24Mg (KED_DEF)	11,854.580 ppb	2.8 %	12,000.000 ppb
27Al (KED_DEF)	114.975 ppb	5.5 %	120.000 ppb
39K (KED_DEF)	11,948.231 ppb	2.1 %	12,000.000 ppb
44Ca (KED_DEF)	12,024.726 ppb	2.9 %	12,000.000 ppb
45Sc (STD_DEF)	104.170 %	2.0 %	
45Sc (KED_DEF)	106.305 %	2.6 %	
51V (KED_DEF)	119.571 ppb	2.5 %	120.000 ppb
52Cr (KED_DEF)	114.367 ppb	1.2 %	120.000 ppb
55Mn (KED_DEF)	116.622 ppb	1.9 %	120.000 ppb
57Fe (KED_DEF)	11,949.324 ppb	1.8 %	12,000.000 ppb
59Co (KED_DEF)	119.871 ppb	0.5 %	120.000 ppb
60Ni (KED_DEF)	119.376 ppb	0.6 %	120.000 ppb
65Cu (KED_DEF)	119.190 ppb	0.9 %	120.000 ppb
66Zn (KED_DEF)	119.514 ppb	1.7 %	120.000 ppb
74Ge (STD_DEF)	99.924 %	0.8 %	
74Ge (KED_DEF)	96.631 %	0.5 %	
75As (KED_DEF)	119.521 ppb	0.9 %	120.000 ppb
78Se (KED_DEF)	120.622 ppb	0.8 %	120.000 ppb
88Sr (KED_DEF)	120.192 ppb	1.1 %	120.000 ppb
95Mo (KED_DEF)	119.383 ppb	0.8 %	120.000 ppb
103Rh (STD_DEF)	95.813 %	2.1 %	
103Rh (KED_DEF)	94.387 %	0.7 %	
107Ag (KED_DEF)	119.661 ppb	2.4 %	120.000 ppb
111Cd (KED_DEF)	119.771 ppb	1.7 %	120.000 ppb
115In (STD_DEF)	98.194 %	0.9 %	
115In (KED_DEF)	97.174 %	1.3 %	
123Sb (KED_DEF)	119.294 ppb	1.2 %	120.000 ppb
137Ba (KED_DEF)	120.340 ppb	0.6 %	120.000 ppb
159Tb (STD_DEF)	100.201 %	1.1 %	
159Tb (KED_DEF)	98.885 %	0.3 %	
175Lu (STD_DEF)	103.172 %	1.4 %	
175Lu (KED_DEF)	99.406 %	2.6 %	
205Tl (KED_DEF)	147.576 ppb	1.3 %	120.000 ppb
208Pb (KED_DEF)	119.646 ppb	1.8 %	120.000 ppb
209Bi (STD_DEF)	95.995 %	1.4 %	
209Bi (KED_DEF)	95.427 %	0.4 %	

Standards:

Analysis Index: 9
Analysis Name: 1/100 Cal
Analysis Type: STD
Analysis Started at: 12/15/2023 6:15:48 AM
Total Dilution Factor 10000
Rack 0
Vial 3

Category	Concentration average	Concentration RSD	Standard Concentration
6Li (STD_DEF)	99.349 %	2.2 %	
6Li (KED_DEF)	103.704 %	6.0 %	
9Be (STD_DEF)	1.051 ppb	7.1 %	1.000 ppb
23Na (KED_DEF)	98.621 ppb	6.3 %	100.000 ppb
24Mg (KED_DEF)	101.612 ppb	4.6 %	100.000 ppb
27Al (KED_DEF)	1.841 ppb	31.9 %	1.000 ppb
39K (KED_DEF)	94.774 ppb	14.3 %	100.000 ppb
44Ca (KED_DEF)	160.449 ppb	22.5 %	100.000 ppb
45Sc (STD_DEF)	102.442 %	3.1 %	
45Sc (KED_DEF)	105.114 %	4.6 %	
51V (KED_DEF)	0.967 ppb	13.4 %	1.000 ppb
52Cr (KED_DEF)	0.927 ppb	15.5 %	1.000 ppb
55Mn (KED_DEF)	0.973 ppb	3.7 %	1.000 ppb
57Fe (KED_DEF)	109.775 ppb	6.7 %	100.000 ppb
59Co (KED_DEF)	1.071 ppb	4.7 %	1.000 ppb
60Ni (KED_DEF)	0.992 ppb	15.8 %	1.000 ppb
65Cu (KED_DEF)	1.035 ppb	2.2 %	1.000 ppb
66Zn (KED_DEF)	0.747 ppb	9.5 %	1.000 ppb
74Ge (STD_DEF)	101.436 %	1.7 %	
74Ge (KED_DEF)	102.411 %	1.5 %	
75As (KED_DEF)	0.979 ppb	4.3 %	1.000 ppb
78Se (KED_DEF)	0.945 ppb	13.0 %	1.000 ppb
88Sr (KED_DEF)	0.980 ppb	13.6 %	1.000 ppb
95Mo (KED_DEF)	1.170 ppb	6.0 %	1.000 ppb
103Rh (STD_DEF)	101.064 %	1.4 %	
103Rh (KED_DEF)	100.902 %	2.0 %	
107Ag (KED_DEF)	1.031 ppb	0.9 %	1.000 ppb
111Cd (KED_DEF)	1.010 ppb	0.9 %	1.000 ppb
115In (STD_DEF)	100.885 %	0.6 %	
115In (KED_DEF)	100.900 %	0.7 %	
123Sb (KED_DEF)	0.964 ppb	1.7 %	1.000 ppb
137Ba (KED_DEF)	1.063 ppb	4.9 %	1.000 ppb
159Tb (STD_DEF)	102.919 %	1.8 %	
159Tb (KED_DEF)	101.933 %	1.3 %	
175Lu (STD_DEF)	102.656 %	0.9 %	
175Lu (KED_DEF)	101.400 %	2.4 %	
205Tl (KED_DEF)	1.234 ppb	8.8 %	1.000 ppb
208Pb (KED_DEF)	0.992 ppb	3.5 %	1.000 ppb
209Bi (STD_DEF)	100.603 %	0.8 %	
209Bi (KED_DEF)	103.492 %	3.3 %	

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index: 1
Analysis label: Rinse
Analysis started at: 12/15/2023 5:36:01 AM
User name ALPHALAB\ICPMSRQ
Rack 0
Vial 1
Comment <Comment>

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	103.310 %	114.550 %	-0.002 ppb	-3.814 ppb	0.572 ppb	2.014 ppb	-2.041 ppb	-5.442 ppb	103.819 %
Concentration per Run 1	105.514 %	120.238 %	-0.002 ppb	-5.753 ppb	-0.050 ppb	3.770 ppb	-6.204 ppb	-11.706 ppb	106.121 %
Concentration per Run 2	103.122 %	113.889 %	-0.001 ppb	-1.594 ppb	0.062 ppb	1.117 ppb	-1.180 ppb	-5.514 ppb	105.227 %
Concentration per Run 3	101.295 %	109.524 %	-0.003 ppb	-4.094 ppb	1.705 ppb	1.155 ppb	1.261 ppb	0.893 ppb	100.109 %
Concentration RSD	2.0 %	4.7 %	48.1 %	54.9 %	171.7 %	75.5 %	186.5 %	115.8 %	3.1 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	114.175 %	-0.015 ppb	-0.283 ppb	0.072 ppb	8.698 ppb	0.002 ppb	0.093 ppb	0.029 ppb	0.326 ppb
Concentration per Run 1	119.750 %	-0.019 ppb	-0.323 ppb	0.077 ppb	5.993 ppb	0.002 ppb	0.051 ppb	0.022 ppb	0.327 ppb
Concentration per Run 2	111.291 %	-0.013 ppb	-0.291 ppb	0.061 ppb	11.581 ppb	0.000 ppb	0.113 ppb	0.024 ppb	0.336 ppb
Concentration per Run 3	111.483 %	-0.013 ppb	-0.235 ppb	0.079 ppb	8.521 ppb	0.003 ppb	0.115 ppb	0.042 ppb	0.315 ppb
Concentration RSD	4.2 %	25.1 %	15.8 %	13.9 %	32.2 %	120.1 %	39.0 %	37.9 %	3.3 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	101.726 %	108.716 %	-0.042 ppb	0.018 ppb	0.014 ppb	0.006 ppb	102.633 %	108.901 %	0.003 ppb
Concentration per Run 1	103.451 %	109.633 %	-0.084 ppb	0.027 ppb	0.033 ppb	0.003 ppb	106.644 %	110.875 %	0.001 ppb
Concentration per Run 2	101.869 %	109.458 %	0.010 ppb	0.048 ppb	0.019 ppb	0.006 ppb	101.419 %	107.440 %	0.004 ppb
Concentration per Run 3	99.857 %	107.059 %	-0.053 ppb	-0.021 ppb	-0.011 ppb	0.010 ppb	99.836 %	108.388 %	0.003 ppb
Concentration RSD	1.8 %	1.3 %	112.6 %	199.5 %	159.5 %	57.0 %	3.5 %	1.6 %	46.0 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.000 ppb	102.072 %	111.770 %	0.002 ppb	0.038 ppb	103.143 %	110.594 %	101.920 %	109.822 %
Concentration per Run 1	-0.001 ppb	102.570 %	114.919 %	0.001 ppb	0.060 ppb	104.102 %	111.921 %	103.215 %	109.947 %
Concentration per Run 2	-0.001 ppb	100.858 %	108.100 %	0.002 ppb	0.047 ppb	103.400 %	108.791 %	102.616 %	109.498 %
Concentration per Run 3	0.001 ppb	102.789 %	112.291 %	0.004 ppb	0.007 ppb	101.926 %	111.070 %	99.929 %	110.020 %
Concentration RSD	1,608.1 %	1.0 %	3.1 %	45.9 %	73.0 %	1.1 %	1.5 %	1.7 %	0.3 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.000 ppb	0.007 ppb	99.949 %	107.175 %
Concentration per Run 1	-0.005 ppb	0.006 ppb	101.192 %	109.841 %
Concentration per Run 2	0.003 ppb	0.008 ppb	99.163 %	105.875 %
Concentration per Run 3	0.003 ppb	0.008 ppb	99.491 %	105.809 %
Concentration RSD	2,235.7 %	13.1 %	1.1 %	2.2 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index:	2	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	CAL LOT #M22-1040	Rack	0		
Analysis started at:	12/15/2023 5:40:40 AM	Vial	1		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	100.450 %	104.497 %	0.000 ppb	-2.227 ppb	0.805 ppb	1.376 ppb	-6.802 ppb	-4.945 ppb	102.558 %
Concentration per Run 1	99.625 %	89.286 %	0.000 ppb	-0.062 ppb	1.674 ppb	3.287 ppb	-8.907 ppb	2.561 ppb	102.576 %
Concentration per Run 2	100.269 %	105.556 %	-0.002 ppb	-0.452 ppb	0.424 ppb	1.211 ppb	-4.826 ppb	-12.023 ppb	101.797 %
Concentration per Run 3	101.456 %	118.651 %	0.002 ppb	-6.165 ppb	0.317 ppb	-0.370 ppb	-6.672 ppb	-5.374 ppb	103.301 %
Concentration RSD	0.9 %	14.1 %	2,249.5 %	153.4 %	93.8 %	133.3 %	30.0 %	147.6 %	0.7 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	105.536 %	-0.010 ppb	-0.326 ppb	0.060 ppb	8.415 ppb	0.003 ppb	0.084 ppb	0.022 ppb	0.325 ppb
Concentration per Run 1	100.064 %	-0.019 ppb	-0.255 ppb	0.086 ppb	6.889 ppb	0.002 ppb	0.117 ppb	0.015 ppb	0.400 ppb
Concentration per Run 2	109.945 %	-0.013 ppb	-0.359 ppb	0.032 ppb	11.161 ppb	0.003 ppb	0.101 ppb	-0.004 ppb	0.290 ppb
Concentration per Run 3	106.600 %	0.001 ppb	-0.363 ppb	0.063 ppb	7.196 ppb	0.003 ppb	0.033 ppb	0.056 ppb	0.284 ppb
Concentration RSD	4.8 %	101.0 %	18.9 %	44.3 %	28.3 %	19.4 %	53.7 %	136.3 %	20.1 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	100.279 %	101.968 %	-0.051 ppb	-0.025 ppb	0.018 ppb	0.001 ppb	99.544 %	102.448 %	0.002 ppb
Concentration per Run 1	99.132 %	93.465 %	-0.033 ppb	-0.017 ppb	-0.034 ppb	0.000 ppb	97.674 %	97.504 %	0.001 ppb
Concentration per Run 2	100.322 %	109.677 %	-0.069 ppb	-0.026 ppb	0.057 ppb	-0.004 ppb	100.130 %	108.083 %	0.005 ppb
Concentration per Run 3	101.382 %	102.764 %	-0.051 ppb	-0.031 ppb	0.032 ppb	0.007 ppb	100.829 %	101.758 %	-0.001 ppb
Concentration RSD	1.1 %	8.0 %	35.9 %	28.0 %	258.1 %	500.9 %	1.7 %	5.2 %	157.3 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.001 ppb	99.416 %	100.034 %	0.004 ppb	0.008 ppb	101.414 %	103.338 %	101.523 %	102.167 %
Concentration per Run 1	0.004 ppb	100.089 %	94.032 %	0.007 ppb	0.009 ppb	99.595 %	96.812 %	101.394 %	95.658 %
Concentration per Run 2	-0.001 ppb	100.196 %	106.355 %	0.003 ppb	0.007 ppb	102.125 %	108.131 %	102.093 %	108.642 %
Concentration per Run 3	-0.001 ppb	97.964 %	99.715 %	0.003 ppb	0.008 ppb	102.523 %	105.070 %	101.081 %	102.201 %
Concentration RSD	253.5 %	1.3 %	6.2 %	52.7 %	12.0 %	1.6 %	5.7 %	0.5 %	6.4 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.000 ppb	0.007 ppb	98.312 %	98.979 %
Concentration per Run 1	-0.004 ppb	0.007 ppb	100.184 %	90.941 %
Concentration per Run 2	0.004 ppb	0.007 ppb	96.584 %	103.982 %
Concentration per Run 3	0.001 ppb	0.006 ppb	98.169 %	102.015 %
Concentration RSD	9,082.4 %	6.2 %	1.8 %	7.1 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index:	3	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	Blank EJF ICPMSRQ	Rack	4		
Analysis started at:	12/15/2023 5:45:20 AM	Vial	49		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	100.000 %	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration per Run	100.000 %	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration RSD	0.0 %	0.0 %	0.1 %	0.0 %	0.3 %	0.9 %	0.1 %	1.0 %	0.0 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb
Concentration per Run	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb
Concentration RSD	0.0 %	0.6 %	0.0 %	0.1 %	0.4 %	1.7 %	0.2 %	0.1 %	0.0 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	100.000 %	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %	100.000 %	0.000 ppb
Concentration per Run	100.000 %	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %	100.000 %	0.000 ppb
Concentration RSD	0.0 %	0.0 %	0.2 %	2.4 %	0.3 %	0.5 %	0.0 %	0.0 %	0.2 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.000 ppb	100.000 %	100.000 %	0.000 ppb	0.000 ppb	100.000 %	100.000 %	100.000 %	100.000 %
Concentration per Run	0.000 ppb	100.000 %	100.000 %	0.000 ppb	0.000 ppb	100.000 %	100.000 %	100.000 %	100.000 %
Concentration RSD	1.7 %	0.0 %	0.0 %	0.3 %	1.0 %	0.0 %	0.0 %	0.0 %	0.0 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.000 ppb	0.000 ppb	100.000 %	100.000 %
Concentration per Run	0.000 ppb	0.000 ppb	100.000 %	100.000 %
Concentration RSD	0.3 %	0.2 %	0.0 %	0.0 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index: 4
Analysis label: 0.2/20 Cal
Analysis started at: 12/15/2023 5:50:04 AM
User name ALPHALAB\ICPMSRQ
Rack 0
Vial 2
Comment <Comment>

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	100.160 %	110.318 %	0.192 ppb	14.140 ppb	20.546 ppb	0.734 ppb	16.310 ppb	131.888 ppb	102.102 %
Concentration per Run 1	100.889 %	113.492 %	0.197 ppb	12.050 ppb	20.583 ppb	0.441 ppb	13.653 ppb	140.021 ppb	103.237 %
Concentration per Run 2	100.967 %	111.508 %	0.182 ppb	12.693 ppb	21.070 ppb	1.273 ppb	17.851 ppb	137.081 ppb	99.803 %
Concentration per Run 3	98.623 %	105.952 %	0.197 ppb	17.677 ppb	19.985 ppb	0.489 ppb	17.426 ppb	118.561 ppb	103.265 %
Concentration RSD	1.3 %	3.5 %	4.5 %	21.8 %	2.6 %	63.6 %	14.2 %	8.8 %	1.9 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	101.653 %	0.184 ppb	0.153 ppb	0.175 ppb	20.644 ppb	0.229 ppb	0.191 ppb	0.198 ppb	0.072 ppb
Concentration per Run 1	102.371 %	0.200 ppb	0.173 ppb	0.191 ppb	18.717 ppb	0.267 ppb	0.224 ppb	0.182 ppb	0.018 ppb
Concentration per Run 2	99.680 %	0.125 ppb	0.197 ppb	0.162 ppb	20.178 ppb	0.219 ppb	0.168 ppb	0.188 ppb	0.123 ppb
Concentration per Run 3	102.909 %	0.226 ppb	0.088 ppb	0.171 ppb	23.037 ppb	0.202 ppb	0.181 ppb	0.225 ppb	0.075 ppb
Concentration RSD	1.7 %	28.6 %	37.4 %	8.4 %	10.6 %	14.8 %	15.4 %	11.6 %	73.0 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	98.986 %	100.453 %	0.186 ppb	0.146 ppb	0.130 ppb	0.205 ppb	98.961 %	100.551 %	0.194 ppb
Concentration per Run 1	98.323 %	98.908 %	0.291 ppb	0.123 ppb	0.090 ppb	0.165 ppb	100.625 %	97.729 %	0.200 ppb
Concentration per Run 2	99.756 %	100.441 %	0.156 ppb	0.196 ppb	0.101 ppb	0.194 ppb	99.214 %	103.566 %	0.187 ppb
Concentration per Run 3	98.879 %	102.009 %	0.110 ppb	0.119 ppb	0.200 ppb	0.254 ppb	97.045 %	100.357 %	0.194 ppb
Concentration RSD	0.7 %	1.5 %	50.6 %	29.6 %	46.3 %	22.1 %	1.8 %	2.9 %	3.5 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.211 ppb	99.761 %	99.781 %	0.205 ppb	0.204 ppb	101.477 %	102.047 %	99.493 %	99.295 %
Concentration per Run 1	0.213 ppb	102.829 %	97.643 %	0.232 ppb	0.285 ppb	101.229 %	101.204 %	100.616 %	95.486 %
Concentration per Run 2	0.211 ppb	96.549 %	100.840 %	0.188 ppb	0.200 ppb	102.953 %	104.460 %	101.555 %	102.806 %
Concentration per Run 3	0.210 ppb	99.904 %	100.860 %	0.196 ppb	0.128 ppb	100.251 %	100.478 %	96.308 %	99.593 %
Concentration RSD	0.8 %	3.1 %	1.9 %	11.2 %	38.5 %	1.3 %	2.1 %	2.8 %	3.7 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.198 ppb	0.203 ppb	99.424 %	99.096 %
Concentration per Run 1	0.219 ppb	0.211 ppb	100.751 %	93.273 %
Concentration per Run 2	0.183 ppb	0.190 ppb	99.366 %	104.725 %
Concentration per Run 3	0.192 ppb	0.207 ppb	98.156 %	99.290 %
Concentration RSD	9.5 %	5.5 %	1.3 %	5.8 %

Analysis index:	5	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	x1/100 Cal	Rack	0		
Analysis started at:	12/15/2023 5:54:44 AM	Vial	3		

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index: 6
Analysis label: 10/10000 Cal
Analysis started at: 12/15/2023 5:59:25 AM
User name ALPHALAB\ICPMSRQ
Rack 0
Vial 4
Comment <Comment>

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	98.133 %	107.407 %	9.854 ppb	1,021.529 ppb	1,081.460 ppb	11.750 ppb	1,128.359 ppb	1,150.856 ppb	99.869 %
Concentration per Run 1	98.647 %	102.778 %	9.870 ppb	1,069.118 ppb	1,105.948 ppb	11.576 ppb	1,117.916 ppb	1,204.471 ppb	100.592 %
Concentration per Run 2	98.512 %	118.254 %	9.753 ppb	949.617 ppb	1,027.391 ppb	11.430 ppb	1,147.260 ppb	1,121.676 ppb	101.146 %
Concentration per Run 3	97.241 %	101.190 %	9.938 ppb	1,045.852 ppb	1,111.041 ppb	12.245 ppb	1,119.900 ppb	1,126.422 ppb	97.871 %
Concentration RSD	0.8 %	8.8 %	0.9 %	6.2 %	4.3 %	3.7 %	1.5 %	4.0 %	1.8 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	97.411 %	10.883 ppb	10.795 ppb	10.815 ppb	1,092.203 ppb	11.159 ppb	10.898 ppb	10.711 ppb	10.556 ppb
Concentration per Run 1	95.720 %	11.121 ppb	10.697 ppb	10.651 ppb	1,109.730 ppb	11.053 ppb	10.877 ppb	10.708 ppb	10.811 ppb
Concentration per Run 2	96.988 %	10.982 ppb	10.850 ppb	11.182 ppb	1,083.383 ppb	11.306 ppb	11.261 ppb	10.616 ppb	10.869 ppb
Concentration per Run 3	99.526 %	10.548 ppb	10.838 ppb	10.612 ppb	1,083.497 ppb	11.116 ppb	10.557 ppb	10.808 ppb	9.989 ppb
Concentration RSD	2.0 %	2.7 %	0.8 %	2.9 %	1.4 %	1.2 %	3.2 %	0.9 %	4.7 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	99.414 %	96.674 %	9.971 ppb	10.092 ppb	5.646 ppb	9.962 ppb	98.730 %	98.037 %	10.266 ppb
Concentration per Run 1	99.537 %	98.975 %	9.985 ppb	10.294 ppb	5.602 ppb	9.918 ppb	99.910 %	98.497 %	10.185 ppb
Concentration per Run 2	98.803 %	94.603 %	10.064 ppb	8.082 ppb	5.732 ppb	10.159 ppb	97.781 %	97.556 %	10.456 ppb
Concentration per Run 3	99.903 %	96.444 %	9.863 ppb	11.899 ppb	5.606 ppb	9.809 ppb	98.500 %	98.057 %	10.156 ppb
Concentration RSD	0.6 %	2.3 %	1.0 %	19.0 %	1.3 %	1.8 %	1.1 %	0.5 %	1.6 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	10.291 ppb	99.693 %	98.664 %	9.940 ppb	10.040 ppb	102.514 %	99.060 %	100.553 %	97.298 %
Concentration per Run 1	10.322 ppb	102.542 %	97.244 %	10.248 ppb	9.809 ppb	101.240 %	97.930 %	98.196 %	95.688 %
Concentration per Run 2	10.437 ppb	98.134 %	97.822 %	9.766 ppb	10.175 ppb	101.699 %	99.266 %	101.376 %	98.820 %
Concentration per Run 3	10.115 ppb	98.402 %	100.927 %	9.807 ppb	10.135 ppb	104.604 %	99.985 %	102.088 %	97.387 %
Concentration RSD	1.6 %	2.5 %	2.0 %	2.7 %	2.0 %	1.8 %	1.1 %	2.1 %	1.6 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	10.057 ppb	10.190 ppb	99.802 %	96.661 %
Concentration per Run 1	10.050 ppb	10.001 ppb	101.079 %	98.087 %
Concentration per Run 2	10.033 ppb	10.356 ppb	99.444 %	94.512 %
Concentration per Run 3	10.088 ppb	10.214 ppb	98.884 %	97.385 %
Concentration RSD	0.3 %	1.8 %	1.1 %	2.0 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index: 7
Analysis label: 60/6000 Cal
Analysis started at: 12/15/2023 6:04:07 AM
User name ALPHALAB\ICPMSRQ
Rack 0
Vial 5
Comment <Comment>

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	95.524 %	100.397 %	60.232 ppb	5,996.454 ppb	6,277.234 ppb	59.692 ppb	6,082.243 ppb	5,924.025 ppb	102.988 %
Concentration per Run 1	97.207 %	107.540 %	59.332 ppb	5,765.149 ppb	6,172.360 ppb	55.139 ppb	5,964.795 ppb	5,820.154 ppb	103.860 %
Concentration per Run 2	95.211 %	95.238 %	59.980 ppb	6,227.851 ppb	6,456.741 ppb	59.232 ppb	6,198.435 ppb	6,039.232 ppb	100.937 %
Concentration per Run 3	94.155 %	98.413 %	61.384 ppb	5,996.363 ppb	6,202.602 ppb	64.706 ppb	6,083.500 ppb	5,912.690 ppb	104.167 %
Concentration RSD	1.6 %	6.4 %	1.7 %	3.9 %	2.5 %	8.0 %	1.9 %	1.9 %	1.7 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	105.049 %	60.712 ppb	59.869 ppb	59.865 ppb	6,085.819 ppb	60.063 ppb	61.098 ppb	61.501 ppb	60.885 ppb
Concentration per Run 1	104.139 %	60.253 ppb	59.516 ppb	59.912 ppb	6,073.696 ppb	59.513 ppb	62.175 ppb	61.912 ppb	60.646 ppb
Concentration per Run 2	103.947 %	61.117 ppb	60.035 ppb	60.306 ppb	6,124.761 ppb	61.822 ppb	60.154 ppb	61.065 ppb	60.392 ppb
Concentration per Run 3	107.061 %	60.765 ppb	60.055 ppb	59.376 ppb	6,059.000 ppb	58.856 ppb	60.965 ppb	61.525 ppb	61.616 ppb
Concentration RSD	1.7 %	0.7 %	0.5 %	0.8 %	0.6 %	2.6 %	1.7 %	0.7 %	1.1 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	99.481 %	96.110 %	60.963 ppb	58.741 ppb	60.342 ppb	61.238 ppb	96.754 %	95.661 %	60.634 ppb
Concentration per Run 1	102.317 %	97.131 %	60.554 ppb	57.855 ppb	59.400 ppb	60.023 ppb	99.471 %	96.187 %	60.648 ppb
Concentration per Run 2	98.943 %	96.910 %	60.515 ppb	57.602 ppb	59.778 ppb	61.351 ppb	94.421 %	94.959 %	61.077 ppb
Concentration per Run 3	97.184 %	94.289 %	61.820 ppb	60.767 ppb	61.848 ppb	62.340 ppb	96.368 %	95.836 %	60.176 ppb
Concentration RSD	2.6 %	1.6 %	1.2 %	3.0 %	2.2 %	1.9 %	2.6 %	0.7 %	0.7 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	60.409 ppb	97.714 %	96.297 %	61.422 ppb	59.313 ppb	102.360 %	99.362 %	102.342 %	100.373 %
Concentration per Run 1	60.535 ppb	95.703 %	95.211 %	61.703 ppb	57.598 ppb	103.282 %	100.243 %	102.745 %	99.075 %
Concentration per Run 2	60.025 ppb	97.557 %	96.577 %	61.032 ppb	60.749 ppb	101.375 %	98.931 %	102.113 %	103.265 %
Concentration per Run 3	60.665 ppb	99.882 %	97.103 %	61.530 ppb	59.592 ppb	102.421 %	98.911 %	102.169 %	98.780 %
Concentration RSD	0.6 %	2.1 %	1.0 %	0.6 %	2.7 %	0.9 %	0.8 %	0.3 %	2.5 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	59.987 ppb	60.676 ppb	97.693 %	95.747 %
Concentration per Run 1	61.123 ppb	61.145 ppb	98.480 %	93.476 %
Concentration per Run 2	58.172 ppb	60.314 ppb	98.360 %	97.514 %
Concentration per Run 3	60.665 ppb	60.571 ppb	96.239 %	96.249 %
Concentration RSD	2.6 %	0.7 %	1.3 %	2.2 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index:	8	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	120/120000 Cal	Rack	0		
Analysis started at:	12/15/2023 6:08:49 AM	Vial	6		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	94.014 %	105.291 %	119.896 ppb	11,335.648 ppb	11,854.580 ppb	114.975 ppb	11,948.231 ppb	12,024.726 ppb	104.170 %
Concentration per Run 1	94.953 %	107.937 %	117.861 ppb	11,341.285 ppb	11,742.871 ppb	108.338 ppb	11,942.736 ppb	**11,826.378 ppb**	104.869 %
Concentration per Run 2	93.645 %	101.984 %	121.664 ppb	11,689.703 ppb	12,230.766 ppb	120.968 ppb	12,196.933 ppb	**11,821.711 ppb**	101.830 %
Concentration per Run 3	93.444 %	105.952 %	120.161 ppb	11,278.655 ppb	11,590.103 ppb	115.619 ppb	11,705.025 ppb	**12,426.089 ppb**	105.809 %
Concentration RSD	0.9 %	2.9 %	1.6 %	1.9 %	2.8 %	5.6 %	2.1 %	2.9 %	2.0 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	106.305 %	119.571 ppb	114.367 ppb	116.622 ppb	11,949.324 ppb	119.871 ppb	119.376 ppb	119.190 ppb	119.514 ppb
Concentration per Run 1	103.601 %	122.336 ppb	115.656 ppb	118.892 ppb	12,184.498 ppb	120.301 ppb	118.701 ppb	119.544 ppb	121.029 ppb
Concentration per Run 2	106.254 %	119.878 ppb	114.452 ppb	116.559 ppb	11,916.782 ppb	120.107 ppb	120.117 ppb	118.013 ppb	120.326 ppb
Concentration per Run 3	109.061 %	116.499 ppb	112.993 ppb	114.416 ppb	11,746.693 ppb	119.205 ppb	119.311 ppb	120.013 ppb	117.186 ppb
Concentration RSD	2.6 %	2.5 %	1.2 %	1.9 %	1.8 %	0.5 %	0.6 %	0.9 %	1.7 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	99.924 %	96.631 %	119.521 ppb	120.622 ppb	120.192 ppb	119.383 ppb	95.813 %	94.387 %	119.661 ppb
Concentration per Run 1	**99.112 %**	**97.111 %**	**118.475 ppb**	**121.695 ppb**	119.252 ppb	118.352 ppb	96.362 %	95.123 %	116.593 ppb
Concentration per Run 2	**100.685 %**	**96.116 %**	**119.418 ppb**	**120.441 ppb**	119.576 ppb	120.039 ppb	93.600 %	93.897 %	122.140 ppb
Concentration per Run 3	**99.975 %**	**96.666 %**	**120.671 ppb**	**119.731 ppb**	121.748 ppb	119.758 ppb	97.475 %	94.140 %	120.249 ppb
Concentration RSD	0.8 %	0.5 %	0.9 %	0.8 %	1.1 %	0.8 %	2.1 %	0.7 %	2.4 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	119.771 ppb	98.194 %	97.174 %	119.294 ppb	120.340 ppb	100.201 %	98.885 %	103.172 %	99.406 %
Concentration per Run 1	117.864 ppb	97.193 %	97.587 %	117.665 ppb	119.857 ppb	100.576 %	98.969 %	104.606 %	101.753 %
Concentration per Run 2	121.991 ppb	98.676 %	95.723 %	119.648 ppb	120.011 ppb	98.961 %	99.147 %	103.088 %	96.582 %
Concentration per Run 3	119.460 ppb	98.712 %	98.212 %	120.571 ppb	121.150 ppb	101.064 %	98.538 %	101.823 %	99.884 %
Concentration RSD	1.7 %	0.9 %	1.3 %	1.2 %	0.6 %	1.1 %	0.3 %	1.4 %	2.6 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	147.576 ppb	119.646 ppb	95.995 %	95.427 %
Concentration per Run 1	145.721 ppb	**117.477 ppb**	94.918 %	95.813 %
Concentration per Run 2	147.450 ppb	**119.575 ppb**	97.490 %	95.323 %
Concentration per Run 3	149.556 ppb	**121.886 ppb**	95.578 %	95.144 %
Concentration RSD	1.3 %	1.8 %	1.4 %	0.4 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index: 9
Analysis label: 1/100 Cal
Analysis started at: 12/15/2023 6:15:48 AM
User name ALPHALAB\ICPMSRQ
Rack 0
Vial 3
Comment <Comment>

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	99.349 %	103.704 %	1.051 ppb	98.621 ppb	101.612 ppb	1.841 ppb	94.774 ppb	160.449 ppb	102.442 %
Concentration per Run 1	101.828 %	109.524 %	0.968 ppb	93.138 ppb	104.838 ppb	1.165 ppb	94.023 ppb	133.469 ppb	104.544 %
Concentration per Run 2	97.763 %	104.365 %	1.112 ppb	97.385 ppb	96.190 ppb	2.137 ppb	81.599 ppb	146.388 ppb	104.023 %
Concentration per Run 3	98.457 %	97.222 %	1.074 ppb	105.340 ppb	103.807 ppb	2.222 ppb	108.699 ppb	201.489 ppb	98.760 %
Concentration RSD	2.2 %	6.0 %	7.1 %	6.3 %	4.6 %	31.9 %	14.3 %	22.5 %	3.1 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	105.114 %	0.967 ppb	0.927 ppb	0.973 ppb	109.775 ppb	1.071 ppb	0.992 ppb	1.035 ppb	0.747 ppb
Concentration per Run 1	110.599 %	1.056 ppb	0.765 ppb	0.934 ppb	103.259 ppb	1.036 ppb	0.887 ppb	1.012 ppb	0.693 ppb
Concentration per Run 2	101.717 %	1.027 ppb	1.037 ppb	1.004 ppb	117.799 ppb	1.048 ppb	1.173 ppb	1.037 ppb	0.721 ppb
Concentration per Run 3	103.025 %	0.819 ppb	0.979 ppb	0.981 ppb	108.265 ppb	1.129 ppb	0.917 ppb	1.057 ppb	0.828 ppb
Concentration RSD	4.6 %	13.4 %	15.5 %	3.7 %	6.7 %	4.7 %	15.8 %	2.2 %	9.5 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	101.436 %	102.411 %	0.979 ppb	0.945 ppb	0.980 ppb	1.170 ppb	101.064 %	100.902 %	1.031 ppb
Concentration per Run 1	102.239 %	100.815 %	1.020 ppb	0.804 ppb	0.922 ppb	1.091 ppb	102.286 %	102.846 %	1.039 ppb
Concentration per Run 2	102.634 %	102.645 %	0.983 ppb	1.029 ppb	0.886 ppb	1.226 ppb	99.469 %	98.907 %	1.032 ppb
Concentration per Run 3	99.436 %	103.773 %	0.936 ppb	1.002 ppb	1.133 ppb	1.193 ppb	101.436 %	100.953 %	1.021 ppb
Concentration RSD	1.7 %	1.5 %	4.3 %	13.0 %	13.6 %	6.0 %	1.4 %	2.0 %	0.9 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	1.010 ppb	100.885 %	100.900 %	0.964 ppb	1.063 ppb	102.919 %	101.933 %	102.656 %	101.400 %
Concentration per Run 1	1.021 ppb	100.135 %	101.304 %	0.982 ppb	1.008 ppb	104.845 %	101.277 %	102.744 %	103.418 %
Concentration per Run 2	1.004 ppb	101.206 %	101.285 %	0.951 ppb	1.111 ppb	102.665 %	101.099 %	103.492 %	98.755 %
Concentration per Run 3	1.006 ppb	101.314 %	100.112 %	0.960 ppb	1.071 ppb	101.247 %	103.422 %	101.732 %	102.026 %
Concentration RSD	0.9 %	0.6 %	0.7 %	1.7 %	4.9 %	1.8 %	1.3 %	0.9 %	2.4 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	1.234 ppb	0.992 ppb	100.603 %	103.492 %
Concentration per Run 1	1.109 ppb	0.952 ppb	99.714 %	107.452 %
Concentration per Run 2	1.287 ppb	1.009 ppb	101.110 %	101.916 %
Concentration per Run 3	1.306 ppb	1.014 ppb	100.984 %	101.109 %
Concentration RSD	8.8 %	3.5 %	0.8 %	3.3 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index:	10	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	Sr 200ppb	Rack	4		
Analysis started at:	12/15/2023 6:23:50 AM	Vial	55		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	100.053 %	109.127 %	0.015 ppb	-5.130 ppb	0.879 ppb	4.280 ppb	-7.396 ppb	0.184 ppb	102.693 %
Concentration per Run 1	101.673 %	104.762 %	0.018 ppb	-5.356 ppb	1.284 ppb	3.599 ppb	-4.909 ppb	61.475 ppb	106.129 %
Concentration per Run 2	99.500 %	123.413 %	0.012 ppb	-7.371 ppb	0.786 ppb	6.221 ppb	-12.648 ppb	-340.982 ppb	101.130 %
Concentration per Run 3	98.987 %	99.206 %	0.016 ppb	-2.665 ppb	0.568 ppb	3.019 ppb	-4.630 ppb	280.058 ppb	100.822 %
Concentration RSD	1.4 %	11.6 %	19.7 %	46.0 %	41.7 %	39.9 %	61.5 %	171,627.6 %	2.9 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	105.754 %	-0.001 ppb	-0.905 ppb	0.368 ppb	16.715 ppb	0.006 ppb	0.029 ppb	0.015 ppb	0.726 ppb
Concentration per Run 1	108.100 %	0.001 ppb	-0.903 ppb	0.349 ppb	17.400 ppb	0.005 ppb	0.027 ppb	0.019 ppb	0.768 ppb
Concentration per Run 2	106.177 %	0.001 ppb	-0.913 ppb	0.352 ppb	15.309 ppb	0.005 ppb	0.048 ppb	0.021 ppb	0.682 ppb
Concentration per Run 3	102.986 %	-0.005 ppb	-0.898 ppb	0.403 ppb	17.436 ppb	0.008 ppb	0.011 ppb	0.003 ppb	0.728 ppb
Concentration RSD	2.4 %	339.7 %	0.8 %	8.2 %	7.3 %	28.0 %	64.1 %	68.1 %	6.0 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	100.992 %	102.692 %	-0.053 ppb	0.023 ppb	194.470 ppb	0.036 ppb	100.855 %	102.138 %	0.009 ppb
Concentration per Run 1	103.653 %	103.609 %	-0.107 ppb	0.047 ppb	190.263 ppb	0.029 ppb	102.091 %	103.746 %	0.009 ppb
Concentration per Run 2	100.383 %	101.362 %	0.027 ppb	-0.017 ppb	199.096 ppb	0.045 ppb	100.414 %	100.853 %	0.005 ppb
Concentration per Run 3	98.939 %	103.104 %	-0.079 ppb	0.039 ppb	194.050 ppb	0.033 ppb	100.061 %	101.813 %	0.011 ppb
Concentration RSD	2.4 %	1.1 %	133.1 %	152.2 %	2.3 %	23.2 %	1.1 %	1.4 %	32.8 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.002 ppb	101.694 %	104.335 %	0.010 ppb	0.203 ppb	102.438 %	104.473 %	103.003 %	100.261 %
Concentration per Run 1	0.001 ppb	102.024 %	105.950 %	0.008 ppb	0.137 ppb	106.449 %	106.235 %	105.282 %	100.247 %
Concentration per Run 2	0.004 ppb	100.518 %	102.766 %	0.011 ppb	0.306 ppb	100.527 %	104.557 %	102.460 %	101.268 %
Concentration per Run 3	0.002 ppb	102.540 %	104.289 %	0.010 ppb	0.166 ppb	100.339 %	102.627 %	101.267 %	99.269 %
Concentration RSD	61.8 %	1.0 %	1.5 %	13.2 %	44.6 %	3.4 %	1.7 %	2.0 %	1.0 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.095 ppb	0.007 ppb	100.055 %	102.721 %
Concentration per Run 1	0.061 ppb	0.006 ppb	99.015 %	105.198 %
Concentration per Run 2	0.113 ppb	0.006 ppb	101.379 %	101.825 %
Concentration per Run 3	0.112 ppb	0.007 ppb	99.770 %	101.142 %
Concentration RSD	31.2 %	10.9 %	1.2 %	2.1 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index: 11 User name ALPHALAB\ICPMSRQ Comment <Comment>
Analysis label: ICV Rack 0
Analysis started at: 12/15/2023 6:28:33 AM Vial 7

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	96.754 %	99.206 %	51.192 ppb	5,392.881 ppb	5,325.465 ppb	52.316 ppb	5,354.231 ppb	5,232.794 ppb	100.319 %
Concentration per Run 1	98.187 %	103.175 %	50.371 ppb	5,356.969 ppb	5,440.380 ppb	58.358 ppb	5,432.877 ppb	5,179.619 ppb	102.185 %
Concentration per Run 2	96.458 %	94.444 %	51.295 ppb	5,572.608 ppb	5,286.145 ppb	54.013 ppb	5,329.821 ppb	5,307.511 ppb	99.027 %
Concentration per Run 3	95.615 %	100.000 %	51.909 ppb	5,249.065 ppb	5,249.871 ppb	44.576 ppb	5,299.995 ppb	5,211.250 ppb	99.746 %
Recovery Percentage 1			102.383 %	107.858 %	106.509 %	104.632 %	107.085 %	104.656 %	
Concentration RSD	1.4 %	4.5 %	1.5 %	3.1 %	1.9 %	13.5 %	1.3 %	1.3 %	1.7 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	98.244 %	52.962 ppb	53.102 ppb	54.724 ppb	5,355.683 ppb	52.771 ppb	54.960 ppb	54.213 ppb	54.448 ppb
Concentration per Run 1	96.835 %	53.569 ppb	53.961 ppb	56.010 ppb	5,553.064 ppb	53.370 ppb	56.435 ppb	54.535 ppb	56.147 ppb
Concentration per Run 2	97.911 %	51.432 ppb	52.591 ppb	54.102 ppb	5,217.441 ppb	51.870 ppb	54.096 ppb	53.492 ppb	53.609 ppb
Concentration per Run 3	99.987 %	53.884 ppb	52.756 ppb	54.058 ppb	5,296.542 ppb	53.075 ppb	54.348 ppb	54.613 ppb	53.589 ppb
Recovery Percentage 1		105.923 %	106.205 %	109.447 %	107.114 %	105.543 %	109.920 %	108.427 %	108.897 %
Concentration RSD	1.6 %	2.5 %	1.4 %	2.0 %	3.3 %	1.5 %	2.3 %	1.2 %	2.7 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	100.535 %	96.173 %	51.688 ppb	50.955 ppb	51.792 ppb	54.076 ppb	97.578 %	95.283 %	52.814 ppb
Concentration per Run 1	101.768 %	94.701 %	53.294 ppb	50.563 ppb	52.429 ppb	54.238 ppb	99.014 %	94.533 %	54.394 ppb
Concentration per Run 2	98.658 %	97.915 %	49.311 ppb	51.262 ppb	51.851 ppb	53.257 ppb	96.683 %	95.490 %	52.361 ppb
Concentration per Run 3	101.179 %	95.902 %	52.459 ppb	51.041 ppb	51.094 ppb	54.734 ppb	97.037 %	95.827 %	51.686 ppb
Recovery Percentage 1			103.376 %	101.911 %	103.583 %	108.152 %			105.627 %
Concentration RSD	1.6 %	1.7 %	4.1 %	0.7 %	1.3 %	1.4 %	1.3 %	0.7 %	2.7 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	52.698 ppb	98.643 %	96.673 %	53.585 ppb	50.391 ppb	102.328 %	98.149 %	102.414 %	97.528 %
Concentration per Run 1	54.052 ppb	97.464 %	95.223 %	54.647 ppb	51.632 ppb	104.685 %	96.372 %	104.427 %	94.812 %
Concentration per Run 2	52.414 ppb	100.631 %	96.611 %	53.094 ppb	50.274 ppb	101.097 %	99.442 %	98.519 %	99.153 %
Concentration per Run 3	51.626 ppb	97.835 %	98.186 %	53.013 ppb	49.266 ppb	101.201 %	98.633 %	104.296 %	98.617 %
Recovery Percentage 1	105.395 %			107.169 %	100.781 %				
Concentration RSD	2.3 %	1.8 %	1.5 %	1.7 %	2.4 %	2.0 %	1.6 %	3.3 %	2.4 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	54.611 ppb	53.875 ppb	96.351 %	90.311 %
Concentration per Run 1	55.983 ppb	55.458 ppb	95.154 %	90.117 %
Concentration per Run 2	53.763 ppb	52.996 ppb	96.517 %	88.962 %
Concentration per Run 3	54.087 ppb	53.171 ppb	97.381 %	91.855 %
Recovery Percentage 1	109.222 %	107.750 %		
Concentration RSD	2.2 %	2.6 %	1.2 %	1.6 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index: 12 User name ALPHALAB\ICPMSRQ Comment <Comment>
Analysis label: ICB Rack 0
Analysis started at: 12/15/2023 6:33:16 AM Vial 10

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	96.373 %	103.836 %	0.023 ppb	-3.563 ppb	1.398 ppb	0.797 ppb	-2.241 ppb	1.782 ppb	96.844 %
Concentration per Run 1	95.236 %	105.952 %	0.028 ppb	-4.109 ppb	1.907 ppb	2.102 ppb	-4.002 ppb	-5.018 ppb	94.806 %
Concentration per Run 2	97.117 %	103.175 %	0.020 ppb	-4.017 ppb	0.589 ppb	1.408 ppb	3.548 ppb	-11.967 ppb	97.296 %
Concentration per Run 3	96.767 %	102.381 %	0.019 ppb	-2.563 ppb	1.699 ppb	-1.117 ppb	-6.269 ppb	22.331 ppb	98.430 %
Recovery Percentage 1			4.510 %	-3.563 %	1.998 %	7.975 %	-2.241 %	1.782 %	
Concentration RSD	1.0 %	1.8 %	21.6 %	24.3 %	50.7 %	212.4 %	229.4 %	1,017.6 %	1.9 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	100.218 %	0.007 ppb	-0.139 ppb	0.012 ppb	8.188 ppb	0.011 ppb	0.451 ppb	0.075 ppb	0.277 ppb
Concentration per Run 1	102.486 %	0.016 ppb	-0.137 ppb	0.014 ppb	6.498 ppb	0.017 ppb	0.452 ppb	0.060 ppb	0.284 ppb
Concentration per Run 2	96.373 %	0.011 ppb	-0.121 ppb	0.035 ppb	9.083 ppb	0.012 ppb	0.419 ppb	0.097 ppb	0.275 ppb
Concentration per Run 3	101.794 %	-0.005 ppb	-0.158 ppb	-0.013 ppb	8.982 ppb	0.004 ppb	0.481 ppb	0.067 ppb	0.271 ppb
Recovery Percentage 1		0.143 %	-13.864 %	1.214 %	16.375 %	2.218 %	22.539 %	7.490 %	5.530 %
Concentration RSD	3.3 %	150.9 %	13.3 %	198.9 %	17.9 %	60.9 %	6.9 %	26.5 %	2.5 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	97.260 %	97.645 %	-0.033 ppb	0.154 ppb	0.012 ppb	0.173 ppb	96.817 %	98.862 %	0.029 ppb
Concentration per Run 1	93.896 %	102.676 %	0.027 ppb	0.347 ppb	0.021 ppb	0.116 ppb	95.987 %	99.960 %	0.031 ppb
Concentration per Run 2	100.186 %	95.524 %	-0.020 ppb	0.137 ppb	0.051 ppb	0.195 ppb	96.976 %	97.555 %	0.031 ppb
Concentration per Run 3	97.698 %	94.735 %	-0.105 ppb	-0.022 ppb	-0.035 ppb	0.208 ppb	97.487 %	99.070 %	0.024 ppb
Recovery Percentage 1			-6.526 %	3.079 %	2.459 %	8.645 %			7.171 %
Concentration RSD	3.3 %	4.5 %	204.5 %	120.1 %	352.4 %	28.8 %	0.8 %	1.2 %	12.7 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.010 ppb	97.013 %	99.131 %	0.040 ppb	0.029 ppb	98.860 %	98.358 %	98.089 %	98.576 %
Concentration per Run 1	0.007 ppb	96.042 %	98.483 %	0.036 ppb	0.026 ppb	97.649 %	100.472 %	97.149 %	100.172 %
Concentration per Run 2	0.009 ppb	97.174 %	98.738 %	0.046 ppb	0.026 ppb	100.345 %	97.484 %	98.707 %	96.519 %
Concentration per Run 3	0.013 ppb	97.822 %	100.173 %	0.038 ppb	0.035 ppb	98.586 %	97.118 %	98.412 %	99.037 %
Recovery Percentage 1				1.007 %	5.813 %				
Concentration RSD	32.2 %	0.9 %	0.9 %	13.1 %	17.4 %	1.4 %	1.9 %	0.8 %	1.9 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.331 ppb	0.018 ppb	94.765 %	99.309 %
Concentration per Run 1	0.206 ppb	0.020 ppb	93.639 %	100.182 %
Concentration per Run 2	0.390 ppb	0.017 ppb	92.682 %	99.957 %
Concentration per Run 3	0.396 ppb	0.016 ppb	97.974 %	97.789 %
Recovery Percentage 1	33.073 %	1.762 %		
Concentration RSD	32.7 %	14.3 %	3.0 %	1.3 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index:	13	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	LLCCV	Rack	4		
Analysis started at:	12/15/2023 6:40:42 AM	Vial	51		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	99.553 %	104.630 %	0.297 ppb	95.326 ppb	73.515 ppb	13.267 ppb	101.302 ppb	198.352 ppb	102.632 %
Concentration per Run 1	101.175 %	109.127 %	0.307 ppb	87.060 ppb	73.245 ppb	14.872 ppb	92.170 ppb	192.682 ppb	103.862 %
Concentration per Run 2	99.355 %	102.778 %	0.285 ppb	98.981 ppb	76.288 ppb	12.891 ppb	115.365 ppb	172.978 ppb	104.983 %
Concentration per Run 3	98.130 %	101.984 %	0.297 ppb	99.938 ppb	71.014 ppb	12.039 ppb	96.370 ppb	229.396 ppb	99.053 %
Recovery Percentage 1			59.307 %	95.326 %	105.022 %	132.674 %	101.302 %	198.352 %	
Concentration RSD	1.5 %	3.7 %	3.6 %	7.5 %	3.6 %	11.0 %	12.2 %	14.4 %	3.1 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	104.396 %	5.299 ppb	0.130 ppb	1.058 ppb	545.373 ppb	0.508 ppb	2.040 ppb	1.045 ppb	10.587 ppb
Concentration per Run 1	110.752 %	4.879 ppb	0.017 ppb	0.950 ppb	512.949 ppb	0.497 ppb	1.931 ppb	1.005 ppb	10.128 ppb
Concentration per Run 2	100.679 %	5.229 ppb	0.171 ppb	1.121 ppb	570.606 ppb	0.544 ppb	1.986 ppb	1.039 ppb	10.824 ppb
Concentration per Run 3	101.756 %	5.790 ppb	0.203 ppb	1.104 ppb	552.563 ppb	0.484 ppb	2.203 ppb	1.089 ppb	10.808 ppb
Recovery Percentage 1		105.989 %	13.044 %	105.822 %	1,090.745 %	101.649 %	102.010 %	104.463 %	105.869 %
Concentration RSD	5.3 %	8.7 %	76.0 %	8.9 %	5.4 %	6.3 %	7.0 %	4.1 %	3.8 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	100.383 %	101.308 %	0.470 ppb	4.755 ppb	0.515 ppb	1.940 ppb	99.560 %	101.567 %	0.220 ppb
Concentration per Run 1	101.601 %	105.065 %	0.636 ppb	4.117 ppb	0.478 ppb	1.915 ppb	100.946 %	104.332 %	0.207 ppb
Concentration per Run 2	101.129 %	99.161 %	0.317 ppb	5.578 ppb	0.440 ppb	1.862 ppb	100.698 %	101.775 %	0.219 ppb
Concentration per Run 3	98.420 %	99.697 %	0.457 ppb	4.571 ppb	0.628 ppb	2.043 ppb	97.036 %	98.594 %	0.234 ppb
Recovery Percentage 1			94.012 %	95.109 %	51.531 %	97.001 %			54.964 %
Concentration RSD	1.7 %	3.2 %	34.1 %	15.7 %	19.4 %	4.8 %	2.2 %	2.8 %	6.0 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.198 ppb	101.380 %	100.714 %	2.012 ppb	0.471 ppb	101.350 %	101.331 %	101.661 %	101.210 %
Concentration per Run 1	0.213 ppb	103.507 %	104.450 %	1.999 ppb	0.405 ppb	102.491 %	102.878 %	101.188 %	101.195 %
Concentration per Run 2	0.184 ppb	99.617 %	98.678 %	1.987 ppb	0.551 ppb	99.469 %	100.886 %	103.320 %	99.254 %
Concentration per Run 3	0.197 ppb	101.015 %	99.016 %	2.051 ppb	0.457 ppb	102.089 %	100.230 %	100.477 %	103.182 %
Recovery Percentage 1	98.966 %			50.311 %	94.174 %				
Concentration RSD	7.3 %	1.9 %	3.2 %	1.7 %	15.6 %	1.6 %	1.4 %	1.5 %	1.9 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.529 ppb	0.484 ppb	99.615 %	102.973 %
Concentration per Run 1	0.493 ppb	0.467 ppb	99.733 %	106.990 %
Concentration per Run 2	0.562 ppb	0.483 ppb	100.183 %	102.574 %
Concentration per Run 3	0.533 ppb	0.501 ppb	98.929 %	99.354 %
Recovery Percentage 1	105.816 %	96.710 %		
Concentration RSD	6.5 %	3.5 %	0.6 %	3.7 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index:	14	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	ICSA	Rack	4		
Analysis started at:	12/15/2023 6:45:26 AM	Vial	53		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	92.646 %	96.032 %	0.021 ppb	49,434.645 ppb	20,744.462 ppb	19,099.886 ppb	20,503.561 ppb	60,248.612 ppb	103.438 %
Concentration per Run 1	92.518 %	98.016 %	0.021 ppb	47,972.620 ppb	20,157.410 ppb	18,650.154 ppb	19,946.917 ppb	58,903.008 ppb	101.688 %
Concentration per Run 2	92.814 %	94.048 %	0.023 ppb	50,640.287 ppb	21,113.875 ppb	19,392.613 ppb	20,739.076 ppb	61,493.834 ppb	105.205 %
Concentration per Run 3	92.605 %	96.032 %	0.019 ppb	49,691.028 ppb	20,962.100 ppb	19,256.890 ppb	20,824.689 ppb	60,348.995 ppb	103.422 %
Recovery Percentage 1			4.207 %	49,434.645 %	29,634.945 %	190,998.855 %	20,503.561 %	60,248.612 %	
Concentration RSD	0.2 %	2.1 %	10.7 %	2.7 %	2.5 %	2.1 %	2.4 %	2.2 %	1.7 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	100.577 %	0.029 ppb	-0.616 ppb	0.918 ppb	50,399.937 ppb	0.448 ppb	0.672 ppb	0.738 ppb	1.045 ppb
Concentration per Run 1	102.140 %	0.030 ppb	-0.598 ppb	0.934 ppb	50,000.940 ppb	0.397 ppb	0.565 ppb	0.737 ppb	0.947 ppb
Concentration per Run 2	99.603 %	0.024 ppb	-0.635 ppb	0.915 ppb	50,328.368 ppb	0.476 ppb	0.767 ppb	0.735 ppb	1.102 ppb
Concentration per Run 3	99.987 %	0.031 ppb	-0.616 ppb	0.905 ppb	50,870.504 ppb	0.469 ppb	0.685 ppb	0.743 ppb	1.086 ppb
Recovery Percentage 1		0.571 %	-61.608 %	91.800 %	100,799.874 %	89.534 %	33.609 %	73.831 %	20.904 %
Concentration RSD	1.4 %	13.4 %	3.0 %	1.6 %	0.9 %	9.8 %	15.1 %	0.5 %	8.2 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	102.299 %	99.263 %	0.007 ppb	0.984 ppb	0.535 ppb	408.017 ppb	96.638 %	94.085 %	0.009 ppb
Concentration per Run 1	100.806 %	99.861 %	-0.031 ppb	1.209 ppb	0.595 ppb	406.070 ppb	94.063 %	94.643 %	0.012 ppb
Concentration per Run 2	102.692 %	98.601 %	0.038 ppb	0.991 ppb	0.487 ppb	408.747 ppb	97.586 %	93.709 %	0.010 ppb
Concentration per Run 3	103.398 %	99.325 %	0.015 ppb	0.752 ppb	0.523 ppb	409.235 ppb	98.266 %	93.904 %	0.006 ppb
Recovery Percentage 1			1.454 %	19.680 %	106.948 %	20,400.873 %			2.315 %
Concentration RSD	1.3 %	0.6 %	489.0 %	23.2 %	10.3 %	0.4 %	2.3 %	0.5 %	31.1 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.051 ppb	96.971 %	93.736 %	0.041 ppb	0.280 ppb	105.191 %	98.795 %	105.366 %	98.815 %
Concentration per Run 1	0.057 ppb	95.920 %	93.871 %	0.036 ppb	0.204 ppb	102.731 %	100.210 %	102.616 %	101.294 %
Concentration per Run 2	0.049 ppb	99.060 %	92.484 %	0.048 ppb	0.372 ppb	104.419 %	97.020 %	105.279 %	96.709 %
Concentration per Run 3	0.047 ppb	95.932 %	94.854 %	0.038 ppb	0.266 ppb	108.422 %	99.156 %	108.204 %	98.441 %
Recovery Percentage 1				1.016 %	56.084 %				
Concentration RSD	10.2 %	1.9 %	1.3 %	16.2 %	30.3 %	2.8 %	1.6 %	2.7 %	2.3 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.059 ppb	0.328 ppb	95.238 %	90.522 %
Concentration per Run 1	0.030 ppb	0.332 ppb	94.492 %	89.825 %
Concentration per Run 2	0.073 ppb	0.335 ppb	95.557 %	90.849 %
Concentration per Run 3	0.075 ppb	0.317 ppb	95.665 %	90.893 %
Recovery Percentage 1	5.895 %	32.773 %		
Concentration RSD	43.2 %	3.0 %	0.7 %	0.7 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index:	15	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	Rinse	Rack	0		
Analysis started at:	12/15/2023 6:50:10 AM	Vial	1		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	100.080 %	108.201 %	0.015 ppb	5.275 ppb	2.683 ppb	8.248 ppb	-0.857 ppb	14.226 ppb	104.382 %
Concentration per Run 1	101.166 %	97.222 %	0.017 ppb	11.988 ppb	3.731 ppb	11.900 ppb	3.869 ppb	17.000 ppb	104.479 %
Concentration per Run 2	100.143 %	107.937 %	0.014 ppb	4.396 ppb	3.407 ppb	5.467 ppb	9.954 ppb	23.518 ppb	103.182 %
Concentration per Run 3	98.931 %	119.445 %	0.014 ppb	-0.560 ppb	0.912 ppb	7.378 ppb	-16.393 ppb	2.160 ppb	105.484 %
Concentration RSD	1.1 %	10.3 %	10.9 %	119.8 %	57.5 %	40.1 %	1,610.2 %	76.9 %	1.1 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	97.142 %	-0.005 ppb	-0.193 ppb	0.081 ppb	26.981 ppb	0.004 ppb	0.081 ppb	0.051 ppb	0.312 ppb
Concentration per Run 1	95.912 %	0.018 ppb	-0.120 ppb	0.078 ppb	29.738 ppb	0.002 ppb	0.044 ppb	0.045 ppb	0.209 ppb
Concentration per Run 2	96.488 %	-0.019 ppb	-0.283 ppb	0.090 ppb	25.434 ppb	0.004 ppb	0.084 ppb	0.058 ppb	0.344 ppb
Concentration per Run 3	99.026 %	-0.012 ppb	-0.177 ppb	0.076 ppb	25.769 ppb	0.005 ppb	0.116 ppb	0.051 ppb	0.384 ppb
Concentration RSD	1.7 %	431.5 %	42.9 %	9.0 %	8.9 %	37.1 %	44.1 %	13.3 %	29.4 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	105.129 %	100.917 %	-0.054 ppb	0.022 ppb	0.002 ppb	1.045 ppb	102.298 %	102.556 %	0.006 ppb
Concentration per Run 1	105.000 %	102.272 %	-0.043 ppb	0.039 ppb	-0.011 ppb	1.015 ppb	103.791 %	99.998 %	0.001 ppb
Concentration per Run 2	105.324 %	100.212 %	-0.029 ppb	0.049 ppb	0.013 ppb	1.077 ppb	101.829 %	103.443 %	0.007 ppb
Concentration per Run 3	105.064 %	100.266 %	-0.091 ppb	-0.022 ppb	0.004 ppb	1.042 ppb	101.273 %	104.227 %	0.009 ppb
Concentration RSD	0.2 %	1.2 %	60.1 %	172.4 %	680.7 %	3.0 %	1.3 %	2.2 %	68.4 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.002 ppb	103.721 %	98.341 %	0.000 ppb	0.023 ppb	105.661 %	101.253 %	103.960 %	99.172 %
Concentration per Run 1	-0.001 ppb	105.351 %	97.439 %	0.002 ppb	0.018 ppb	104.896 %	98.087 %	103.880 %	97.575 %
Concentration per Run 2	0.003 ppb	101.535 %	98.442 %	0.000 ppb	0.025 ppb	107.010 %	104.164 %	105.643 %	99.634 %
Concentration per Run 3	0.004 ppb	104.277 %	99.142 %	-0.002 ppb	0.026 ppb	105.078 %	101.509 %	102.357 %	100.306 %
Concentration RSD	114.5 %	1.9 %	0.9 %	869.7 %	19.5 %	1.1 %	3.0 %	1.6 %	1.4 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.038 ppb	0.009 ppb	101.709 %	96.616 %
Concentration per Run 1	0.018 ppb	0.008 ppb	102.792 %	94.084 %
Concentration per Run 2	0.043 ppb	0.010 ppb	99.459 %	96.534 %
Concentration per Run 3	0.051 ppb	0.008 ppb	102.876 %	99.230 %
Concentration RSD	45.6 %	12.9 %	1.9 %	2.7 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index: 16 User name ALPHALAB\ICPMSRQ Comment <Comment>
Analysis label: CCV Rack 0
Analysis started at: 12/15/2023 6:54:50 AM Vial 9

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	97.697 %	107.804 %	63.407 ppb	6,535.970 ppb	6,517.535 ppb	58.656 ppb	6,534.742 ppb	6,289.087 ppb	108.309 %
Concentration per Run 1	99.494 %	109.127 %	61.830 ppb	6,490.246 ppb	6,734.969 ppb	66.106 ppb	6,570.404 ppb	6,603.352 ppb	109.647 %
Concentration per Run 2	96.891 %	106.746 %	64.623 ppb	6,564.345 ppb	6,361.412 ppb	56.687 ppb	6,357.428 ppb	5,665.303 ppb	107.265 %
Concentration per Run 3	96.705 %	107.540 %	63.769 ppb	6,553.317 ppb	6,456.225 ppb	53.177 ppb	6,676.394 ppb	6,598.606 ppb	108.014 %
Recovery Percentage 1			105.678 %	108.933 %	108.626 %	97.761 %	108.912 %	104.818 %	
Concentration RSD	1.6 %	1.1 %	2.3 %	0.6 %	3.0 %	11.4 %	2.5 %	8.6 %	1.1 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	101.012 %	63.445 ppb	65.088 ppb	64.647 ppb	6,504.995 ppb	63.919 ppb	64.850 ppb	64.931 ppb	64.943 ppb
Concentration per Run 1	100.833 %	65.856 ppb	65.408 ppb	63.550 ppb	6,447.860 ppb	62.638 ppb	64.851 ppb	62.583 ppb	63.312 ppb
Concentration per Run 2	99.564 %	60.082 ppb	65.015 ppb	66.480 ppb	6,709.475 ppb	64.453 ppb	65.587 ppb	66.469 ppb	66.612 ppb
Concentration per Run 3	102.640 %	64.396 ppb	64.841 ppb	63.911 ppb	6,357.649 ppb	64.664 ppb	64.111 ppb	65.740 ppb	64.906 ppb
Recovery Percentage 1		105.741 %	108.480 %	107.745 %	108.417 %	106.531 %	108.083 %	108.218 %	108.239 %
Concentration RSD	1.5 %	4.7 %	0.4 %	2.5 %	2.8 %	1.7 %	1.1 %	3.2 %	2.5 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	104.065 %	99.884 %	64.443 ppb	63.164 ppb	63.732 ppb	65.085 ppb	101.085 %	98.757 %	64.663 ppb
Concentration per Run 1	104.823 %	97.701 %	65.264 ppb	65.473 ppb	62.825 ppb	65.470 ppb	101.862 %	100.292 %	63.585 ppb
Concentration per Run 2	101.796 %	102.663 %	63.571 ppb	59.841 ppb	63.999 ppb	64.738 ppb	100.874 %	96.437 %	64.901 ppb
Concentration per Run 3	105.576 %	99.289 %	64.495 ppb	64.177 ppb	64.370 ppb	65.048 ppb	100.519 %	99.542 %	65.502 ppb
Recovery Percentage 1			107.406 %	105.273 %	106.220 %	108.476 %			107.771 %
Concentration RSD	1.9 %	2.5 %	1.3 %	4.7 %	1.3 %	0.6 %	0.7 %	2.1 %	1.5 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	64.656 ppb	101.714 %	98.761 %	64.377 ppb	62.966 ppb	103.769 %	100.225 %	104.675 %	98.879 %
Concentration per Run 1	64.841 ppb	102.113 %	98.045 %	64.739 ppb	63.141 ppb	106.218 %	99.372 %	107.175 %	98.286 %
Concentration per Run 2	64.082 ppb	102.704 %	100.145 %	64.146 ppb	62.743 ppb	101.638 %	98.716 %	102.919 %	99.153 %
Concentration per Run 3	65.044 ppb	100.326 %	98.092 %	64.246 ppb	63.015 ppb	103.451 %	102.587 %	103.932 %	99.198 %
Recovery Percentage 1	107.759 %			107.295 %	104.944 %				
Concentration RSD	0.8 %	1.2 %	1.2 %	0.5 %	0.3 %	2.2 %	2.1 %	2.1 %	0.5 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	64.828 ppb	65.041 ppb	100.646 %	95.060 %
Concentration per Run 1	64.426 ppb	64.722 ppb	102.394 %	94.914 %
Concentration per Run 2	66.357 ppb	66.122 ppb	101.757 %	94.049 %
Concentration per Run 3	63.700 ppb	64.277 ppb	97.788 %	96.217 %
Recovery Percentage 1	108.046 %	108.401 %		
Concentration RSD	2.1 %	1.5 %	2.5 %	1.1 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index: 17 User name ALPHALAB\ICPMSRQ Comment <Comment>
Analysis label: CCB Rack 0
Analysis started at: 12/15/2023 6:59:34 AM Vial 10

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	99.016 %	108.466 %	0.025 ppb	0.329 ppb	1.160 ppb	2.351 ppb	4.827 ppb	-11.536 ppb	101.119 %
Concentration per Run 1	99.208 %	114.286 %	0.031 ppb	2.229 ppb	1.524 ppb	4.394 ppb	4.233 ppb	-11.669 ppb	100.378 %
Concentration per Run 2	99.805 %	100.397 %	0.021 ppb	-0.709 ppb	0.954 ppb	0.610 ppb	7.603 ppb	-11.538 ppb	103.621 %
Concentration per Run 3	98.034 %	110.714 %	0.023 ppb	-0.533 ppb	1.001 ppb	2.050 ppb	2.646 ppb	-11.400 ppb	99.359 %
Recovery Percentage 1			4.966 %	0.329 %	1.657 %	23.514 %	4.827 %	-11.536 %	
Concentration RSD	0.9 %	6.6 %	21.3 %	501.2 %	27.3 %	81.2 %	52.4 %	1.2 %	2.2 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	98.411 %	0.012 ppb	0.007 ppb	0.024 ppb	12.264 ppb	0.013 ppb	0.473 ppb	0.074 ppb	0.271 ppb
Concentration per Run 1	99.603 %	0.038 ppb	0.137 ppb	0.029 ppb	13.988 ppb	0.015 ppb	0.399 ppb	0.072 ppb	0.296 ppb
Concentration per Run 2	94.105 %	-0.004 ppb	0.013 ppb	0.012 ppb	11.054 ppb	0.014 ppb	0.611 ppb	0.062 ppb	0.364 ppb
Concentration per Run 3	101.525 %	0.002 ppb	-0.128 ppb	0.030 ppb	11.750 ppb	0.011 ppb	0.410 ppb	0.087 ppb	0.153 ppb
Recovery Percentage 1		0.240 %	0.719 %	2.356 %	24.528 %	2.670 %	23.649 %	7.354 %	5.426 %
Concentration RSD	3.9 %	192.5 %	1,840.8 %	43.9 %	12.5 %	13.3 %	25.3 %	17.1 %	39.8 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	102.159 %	102.290 %	-0.006 ppb	0.095 ppb	0.007 ppb	0.257 ppb	102.943 %	102.392 %	0.031 ppb
Concentration per Run 1	103.397 %	100.398 %	0.016 ppb	0.116 ppb	0.022 ppb	0.192 ppb	102.264 %	99.851 %	0.031 ppb
Concentration per Run 2	101.857 %	97.320 %	0.028 ppb	0.207 ppb	0.006 ppb	0.305 ppb	105.136 %	102.822 %	0.034 ppb
Concentration per Run 3	101.224 %	109.151 %	-0.063 ppb	-0.039 ppb	-0.006 ppb	0.274 ppb	101.428 %	104.505 %	0.027 ppb
Recovery Percentage 1			-1.273 %	1.897 %	1.418 %	12.854 %			7.711 %
Concentration RSD	1.1 %	6.0 %	777.4 %	130.8 %	200.4 %	22.7 %	1.9 %	2.3 %	11.7 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.009 ppb	102.868 %	99.432 %	0.036 ppb	0.020 ppb	100.310 %	99.425 %	101.929 %	97.151 %
Concentration per Run 1	0.014 ppb	102.195 %	97.042 %	0.046 ppb	0.018 ppb	98.214 %	97.381 %	102.404 %	93.627 %
Concentration per Run 2	0.006 ppb	102.433 %	97.938 %	0.027 ppb	0.000 ppb	101.203 %	100.350 %	102.792 %	97.047 %
Concentration per Run 3	0.007 ppb	103.975 %	103.317 %	0.035 ppb	0.042 ppb	101.513 %	100.545 %	100.590 %	100.779 %
Recovery Percentage 1				0.896 %	3.990 %				
Concentration RSD	49.0 %	0.9 %	3.4 %	26.8 %	105.3 %	1.8 %	1.8 %	1.2 %	3.7 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.367 ppb	0.024 ppb	99.365 %	95.309 %
Concentration per Run 1	0.254 ppb	0.032 ppb	98.899 %	93.906 %
Concentration per Run 2	0.430 ppb	0.021 ppb	98.504 %	94.168 %
Concentration per Run 3	0.418 ppb	0.018 ppb	100.693 %	97.854 %
Recovery Percentage 1	36.720 %	2.362 %		
Concentration RSD	26.8 %	31.8 %	1.2 %	2.3 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index: 18 User name ALPHALAB\ICPMSRQ Comment <Comment>
Analysis label: WG1863597-1 6020SL Rack 1
Analysis started at: 12/15/2023 7:23:51 AM Vial 1

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	98.539 %	104.630 %	0.014 ppb	1.190 ppb	0.472 ppb	1.678 ppb	-12.668 ppb	-9.649 ppb	102.277 %
Concentration per Run 1	98.688 %	109.127 %	0.015 ppb	0.916 ppb	1.689 ppb	1.894 ppb	-12.790 ppb	-11.341 ppb	103.094 %
Concentration per Run 2	97.939 %	104.762 %	0.016 ppb	1.477 ppb	-0.144 ppb	0.413 ppb	-9.662 ppb	-11.871 ppb	99.364 %
Concentration per Run 3	98.990 %	100.000 %	0.011 ppb	1.178 ppb	-0.127 ppb	2.726 ppb	-15.551 ppb	-5.735 ppb	104.373 %
Concentration RSD	0.5 %	4.4 %	17.6 %	23.6 %	222.9 %	69.8 %	23.3 %	35.2 %	2.5 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	114.418 %	0.006 ppb	-0.848 ppb	-0.024 ppb	2.484 ppb	0.008 ppb	0.000 ppb	0.164 ppb	0.118 ppb
Concentration per Run 1	113.059 %	0.012 ppb	-0.868 ppb	-0.036 ppb	1.296 ppb	0.012 ppb	-0.007 ppb	0.134 ppb	0.107 ppb
Concentration per Run 2	113.559 %	-0.013 ppb	-0.835 ppb	-0.019 ppb	2.364 ppb	0.010 ppb	0.010 ppb	0.186 ppb	0.116 ppb
Concentration per Run 3	116.635 %	0.019 ppb	-0.840 ppb	-0.018 ppb	3.792 ppb	0.002 ppb	-0.004 ppb	0.173 ppb	0.131 ppb
Concentration RSD	1.7 %	275.0 %	2.1 %	42.8 %	50.4 %	65.3 %	3,292.0 %	16.5 %	10.3 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	99.519 %	107.606 %	-0.050 ppb	-0.002 ppb	0.022 ppb	0.055 ppb	98.661 %	104.846 %	0.007 ppb
Concentration per Run 1	99.726 %	114.400 %	-0.058 ppb	-0.025 ppb	-0.008 ppb	0.041 ppb	97.609 %	107.133 %	0.006 ppb
Concentration per Run 2	99.054 %	104.473 %	0.022 ppb	0.042 ppb	0.050 ppb	0.068 ppb	98.553 %	104.852 %	0.008 ppb
Concentration per Run 3	99.776 %	103.947 %	-0.115 ppb	-0.022 ppb	0.023 ppb	0.055 ppb	99.820 %	102.552 %	0.008 ppb
Concentration RSD	0.4 %	5.5 %	136.3 %	2,536.7 %	134.2 %	25.0 %	1.1 %	2.2 %	18.3 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.001 ppb	99.560 %	108.435 %	0.009 ppb	0.026 ppb	99.204 %	107.382 %	98.836 %	108.050 %
Concentration per Run 1	0.002 ppb	98.147 %	110.841 %	0.009 ppb	0.045 ppb	98.782 %	111.655 %	98.341 %	108.399 %
Concentration per Run 2	0.002 ppb	101.361 %	107.966 %	0.007 ppb	-0.001 ppb	98.631 %	106.154 %	98.003 %	108.683 %
Concentration per Run 3	-0.001 ppb	99.172 %	106.498 %	0.010 ppb	0.032 ppb	100.200 %	104.336 %	100.164 %	107.070 %
Concentration RSD	118.7 %	1.6 %	2.0 %	18.8 %	92.3 %	0.9 %	3.5 %	1.2 %	0.8 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.082 ppb	0.008 ppb	98.397 %	110.204 %
Concentration per Run 1	0.044 ppb	0.009 ppb	98.292 %	112.079 %
Concentration per Run 2	0.101 ppb	0.008 ppb	97.506 %	112.027 %
Concentration per Run 3	0.100 ppb	0.009 ppb	99.394 %	106.507 %
Concentration RSD	40.0 %	6.9 %	1.0 %	2.9 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index:	19	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	WG1863597-2d10 6020SL	Rack	1		
Analysis started at:	12/15/2023 7:28:31 AM	Vial	2		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	98.248 %	105.820 %	5.270 ppb	1,093.292 ppb	1,158.157 ppb	225.941 ppb	1,172.534 ppb	1,188.773 ppb	102.054 %
Concentration per Run 1	98.777 %	105.159 %	5.317 ppb	1,108.840 ppb	1,155.260 ppb	228.488 ppb	1,163.616 ppb	1,186.072 ppb	102.321 %
Concentration per Run 2	98.874 %	106.349 %	5.195 ppb	1,080.600 ppb	1,175.476 ppb	219.564 ppb	1,160.915 ppb	944.562 ppb	104.214 %
Concentration per Run 3	97.092 %	105.952 %	5.300 ppb	1,090.435 ppb	1,143.734 ppb	229.773 ppb	1,193.071 ppb	1,435.686 ppb	99.626 %
Concentration RSD	1.0 %	0.6 %	1.2 %	1.3 %	1.4 %	2.5 %	1.5 %	20.7 %	2.3 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	103.652 %	54.485 ppb	22.172 ppb	54.926 ppb	113.892 ppb	54.137 ppb	55.544 ppb	26.888 ppb	52.756 ppb
Concentration per Run 1	104.985 %	53.698 ppb	21.670 ppb	53.746 ppb	105.599 ppb	53.151 ppb	52.649 ppb	26.302 ppb	51.016 ppb
Concentration per Run 2	104.101 %	54.452 ppb	22.267 ppb	55.106 ppb	115.918 ppb	54.549 ppb	56.464 ppb	27.192 ppb	54.170 ppb
Concentration per Run 3	101.871 %	55.305 ppb	22.579 ppb	55.926 ppb	120.159 ppb	54.711 ppb	57.517 ppb	27.170 ppb	53.083 ppb
Concentration RSD	1.5 %	1.5 %	2.1 %	2.0 %	6.6 %	1.6 %	4.6 %	1.9 %	3.0 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	99.457 %	99.444 %	12.600 ppb	12.221 ppb	103.921 ppb	103.272 ppb	98.171 %	100.843 %	5.365 ppb
Concentration per Run 1	100.514 %	103.939 %	12.467 ppb	11.860 ppb	98.916 ppb	100.492 ppb	98.896 %	103.891 %	5.234 ppb
Concentration per Run 2	98.313 %	95.688 %	13.095 ppb	11.309 ppb	107.626 ppb	106.114 ppb	97.764 %	99.638 %	5.432 ppb
Concentration per Run 3	99.545 %	98.704 %	12.237 ppb	13.493 ppb	105.222 ppb	103.211 ppb	97.853 %	99.001 %	5.429 ppb
Concentration RSD	1.1 %	4.2 %	3.5 %	9.3 %	4.3 %	2.7 %	0.6 %	2.6 %	2.1 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	5.673 ppb	101.064 %	102.435 %	50.368 ppb	208.923 ppb	103.085 %	102.149 %	100.436 %	99.916 %
Concentration per Run 1	5.571 ppb	103.358 %	102.746 %	50.629 ppb	206.065 ppb	102.863 %	103.268 %	101.170 %	102.191 %
Concentration per Run 2	5.592 ppb	98.215 %	101.721 %	50.612 ppb	208.418 ppb	105.667 %	101.585 %	103.435 %	100.124 %
Concentration per Run 3	5.857 ppb	101.620 %	102.839 %	49.861 ppb	212.286 ppb	100.727 %	101.593 %	96.702 %	97.433 %
Concentration RSD	2.8 %	2.6 %	0.6 %	0.9 %	1.5 %	2.4 %	0.9 %	3.4 %	2.4 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	12.983 ppb	57.379 ppb	96.979 %	98.171 %
Concentration per Run 1	12.682 ppb	56.737 ppb	97.286 %	99.243 %
Concentration per Run 2	12.774 ppb	56.455 ppb	94.818 %	98.999 %
Concentration per Run 3	13.493 ppb	58.944 ppb	98.833 %	96.271 %
Concentration RSD	3.4 %	2.4 %	2.1 %	1.7 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index: 20
Analysis label: WG1863597-3d10 6020SL
Analysis started at: 12/15/2023 7:33:11 AM
User name ALPHALAB\ICPMSRQ
Rack 1
Vial 4
Comment <Comment>

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	102.481 %	105.159 %	5.195 ppb	23,946.099 ppb	7,919.128 ppb	229.094 ppb	3,578.460 ppb	25,528.577 ppb	104.857 %
Concentration per Run 1	105.152 %	101.984 %	5.048 ppb	24,534.045 ppb	8,276.838 ppb	246.738 ppb	3,531.345 ppb	24,795.854 ppb	105.812 %
Concentration per Run 2	100.813 %	101.587 %	5.173 ppb	24,563.513 ppb	7,951.361 ppb	224.480 ppb	3,599.578 ppb	26,187.641 ppb	103.154 %
Concentration per Run 3	101.477 %	111.905 %	5.366 ppb	22,740.739 ppb	7,529.186 ppb	216.062 ppb	3,604.457 ppb	25,602.237 ppb	105.606 %
Concentration RSD	2.3 %	5.6 %	3.1 %	4.4 %	4.7 %	6.9 %	1.1 %	2.7 %	1.4 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	99.962 %	56.660 ppb	21.726 ppb	446.633 ppb	207.964 ppb	54.090 ppb	54.324 ppb	26.995 ppb	53.698 ppb
Concentration per Run 1	98.988 %	56.599 ppb	21.380 ppb	441.562 ppb	202.008 ppb	53.191 ppb	53.499 ppb	27.069 ppb	52.041 ppb
Concentration per Run 2	98.411 %	58.409 ppb	22.340 ppb	454.591 ppb	225.897 ppb	54.102 ppb	56.010 ppb	27.745 ppb	55.792 ppb
Concentration per Run 3	102.486 %	54.970 ppb	21.458 ppb	443.746 ppb	195.988 ppb	54.977 ppb	53.464 ppb	26.171 ppb	53.261 ppb
Concentration RSD	2.2 %	3.0 %	2.5 %	1.6 %	7.6 %	1.7 %	2.7 %	2.9 %	3.6 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	102.644 %	99.622 %	12.731 ppb	13.782 ppb	1,787.648 ppb	110.296 ppb	97.728 %	94.816 %	5.443 ppb
Concentration per Run 1	106.160 %	102.524 %	12.427 ppb	12.618 ppb	1,752.628 ppb	109.174 ppb	100.351 %	94.299 %	5.480 ppb
Concentration per Run 2	99.877 %	97.400 %	13.038 ppb	12.974 ppb	1,819.523 ppb	112.645 ppb	95.687 %	93.165 %	5.435 ppb
Concentration per Run 3	101.896 %	98.941 %	12.727 ppb	15.754 ppb	1,790.792 ppb	109.070 ppb	97.147 %	96.983 %	5.415 ppb
Concentration RSD	3.1 %	2.6 %	2.4 %	12.5 %	1.9 %	1.8 %	2.4 %	2.1 %	0.6 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	5.598 ppb	100.182 %	98.388 %	55.008 ppb	2,695.800 ppb	102.719 %	98.945 %	102.869 %	98.996 %
Concentration per Run 1	5.624 ppb	99.614 %	97.998 %	53.922 ppb	2,681.457 ppb	103.921 %	98.242 %	103.807 %	98.640 %
Concentration per Run 2	5.602 ppb	100.166 %	99.735 %	55.500 ppb	2,679.465 ppb	101.076 %	97.726 %	103.092 %	98.640 %
Concentration per Run 3	5.568 ppb	100.765 %	97.433 %	55.602 ppb	2,726.478 ppb	103.159 %	100.867 %	101.708 %	99.708 %
Concentration RSD	0.5 %	0.6 %	1.2 %	1.7 %	1.0 %	1.4 %	1.7 %	1.0 %	0.6 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	13.335 ppb	59.502 ppb	94.245 %	89.959 %
Concentration per Run 1	13.441 ppb	59.144 ppb	94.847 %	89.980 %
Concentration per Run 2	13.757 ppb	59.888 ppb	94.277 %	89.497 %
Concentration per Run 3	12.805 ppb	59.473 ppb	93.610 %	90.399 %
Concentration RSD	3.6 %	0.6 %	0.7 %	0.5 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index: 21
Analysis label: WG1863597-4d10 6020SL
Analysis started at: 12/15/2023 7:37:52 AM
User name ALPHALAB\ICPMSRQ
Rack 1
Vial 5
Comment <Comment>

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	103.187 %	120.767 %	5.249 ppb	22,597.817 ppb	7,437.814 ppb	218.767 ppb	3,496.780 ppb	26,845.030 ppb	104.473 %
Concentration per Run 1	103.739 %	122.619 %	5.320 ppb	22,207.233 ppb	7,446.187 ppb	221.522 ppb	3,494.638 ppb	26,294.417 ppb	103.156 %
Concentration per Run 2	102.024 %	119.048 %	5.320 ppb	22,590.435 ppb	7,543.301 ppb	226.046 ppb	3,477.146 ppb	27,308.095 ppb	104.901 %
Concentration per Run 3	103.796 %	120.635 %	5.108 ppb	22,995.784 ppb	7,323.953 ppb	208.734 ppb	3,518.557 ppb	26,932.577 ppb	105.361 %
Concentration RSD	1.0 %	1.5 %	2.3 %	1.7 %	1.5 %	4.1 %	0.6 %	1.9 %	1.1 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	100.231 %	57.820 ppb	22.130 ppb	453.491 ppb	241.471 ppb	55.348 ppb	54.756 ppb	26.705 ppb	54.013 ppb
Concentration per Run 1	98.219 %	58.548 ppb	21.787 ppb	452.436 ppb	246.889 ppb	55.149 ppb	54.217 ppb	25.438 ppb	52.116 ppb
Concentration per Run 2	102.025 %	57.669 ppb	22.466 ppb	453.632 ppb	239.645 ppb	55.252 ppb	55.429 ppb	27.272 ppb	55.205 ppb
Concentration per Run 3	100.449 %	57.243 ppb	22.138 ppb	454.406 ppb	237.878 ppb	55.643 ppb	54.622 ppb	27.405 ppb	54.719 ppb
Concentration RSD	1.9 %	1.2 %	1.5 %	0.2 %	2.0 %	0.5 %	1.1 %	4.1 %	3.1 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	101.352 %	101.502 %	12.862 ppb	12.730 ppb	1,749.620 ppb	108.345 ppb	95.849 %	98.327 %	5.413 ppb
Concentration per Run 1	102.303 %	103.950 %	12.043 ppb	11.400 ppb	1,689.016 ppb	108.946 ppb	96.307 %	99.409 %	5.320 ppb
Concentration per Run 2	100.860 %	99.643 %	13.153 ppb	12.532 ppb	1,775.275 ppb	106.985 ppb	93.881 %	98.682 %	5.392 ppb
Concentration per Run 3	100.893 %	100.913 %	13.389 ppb	14.259 ppb	1,784.570 ppb	109.103 ppb	97.360 %	96.890 %	5.527 ppb
Concentration RSD	0.8 %	2.2 %	5.6 %	11.3 %	3.0 %	1.1 %	1.9 %	1.3 %	1.9 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	5.682 ppb	98.462 %	98.573 %	54.726 ppb	2,721.295 ppb	100.823 %	100.550 %	101.689 %	99.121 %
Concentration per Run 1	5.683 ppb	98.479 %	101.479 %	52.589 ppb	2,643.144 ppb	99.655 %	101.762 %	102.629 %	99.387 %
Concentration per Run 2	5.706 ppb	100.061 %	96.671 %	55.885 ppb	2,736.085 ppb	100.659 %	100.828 %	99.025 %	99.231 %
Concentration per Run 3	5.657 ppb	96.847 %	97.567 %	55.704 ppb	2,784.655 ppb	102.156 %	99.061 %	103.413 %	98.744 %
Concentration RSD	0.4 %	1.6 %	2.6 %	3.4 %	2.6 %	1.2 %	1.4 %	2.3 %	0.3 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	13.146 ppb	58.551 ppb	93.280 %	91.436 %
Concentration per Run 1	12.819 ppb	57.100 ppb	93.885 %	92.780 %
Concentration per Run 2	13.166 ppb	58.675 ppb	92.852 %	91.653 %
Concentration per Run 3	13.453 ppb	59.879 ppb	93.104 %	89.876 %
Concentration RSD	2.4 %	2.4 %	0.6 %	1.6 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index:	22	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	WG1863597-5d10 6020SL	Rack	1		
Analysis started at:	12/15/2023 7:42:32 AM	Vial	6		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	101.993 %	107.275 %	47.341 ppb	27,807.988 ppb	11,946.372 ppb	48.827 ppb	7,984.169 ppb	30,971.764 ppb	103.384 %
Concentration per Run 1	102.668 %	113.095 %	47.281 ppb	27,446.959 ppb	11,647.636 ppb	48.426 ppb	7,957.406 ppb	31,400.595 ppb	103.542 %
Concentration per Run 2	100.882 %	102.381 %	47.740 ppb	28,265.858 ppb	12,268.842 ppb	44.885 ppb	8,093.968 ppb	29,530.451 ppb	101.667 %
Concentration per Run 3	102.429 %	106.349 %	47.002 ppb	27,711.148 ppb	11,922.639 ppb	53.171 ppb	7,901.134 ppb	31,984.246 ppb	104.944 %
Concentration RSD	1.0 %	5.0 %	0.8 %	1.5 %	2.6 %	8.5 %	1.2 %	4.1 %	1.6 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	97.962 %	53.090 ppb	51.524 ppb	453.645 ppb	5,447.327 ppb	52.566 ppb	52.481 ppb	51.763 ppb	51.410 ppb
Concentration per Run 1	97.719 %	53.821 ppb	51.922 ppb	454.441 ppb	5,536.231 ppb	52.718 ppb	52.336 ppb	51.824 ppb	51.172 ppb
Concentration per Run 2	98.219 %	52.384 ppb	50.610 ppb	450.374 ppb	5,412.222 ppb	52.193 ppb	52.154 ppb	51.210 ppb	50.863 ppb
Concentration per Run 3	97.949 %	53.067 ppb	52.040 ppb	456.120 ppb	5,393.528 ppb	52.788 ppb	52.953 ppb	52.256 ppb	52.196 ppb
Concentration RSD	0.3 %	1.4 %	1.5 %	0.7 %	1.4 %	0.6 %	0.8 %	1.0 %	1.4 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	101.585 %	97.003 %	50.057 ppb	51.013 ppb	1,721.259 ppb	53.061 ppb	95.756 %	94.465 %	1.967 ppb
Concentration per Run 1	101.527 %	98.823 %	49.190 ppb	49.152 ppb	1,715.975 ppb	54.790 ppb	94.482 %	91.982 %	2.068 ppb
Concentration per Run 2	99.475 %	97.010 %	50.104 ppb	53.984 ppb	1,695.646 ppb	51.404 ppb	96.334 %	97.234 %	1.868 ppb
Concentration per Run 3	103.754 %	95.176 %	50.878 ppb	49.904 ppb	1,752.155 ppb	52.988 ppb	96.452 %	94.178 %	1.965 ppb
Concentration RSD	2.1 %	1.9 %	1.7 %	5.1 %	1.7 %	3.2 %	1.2 %	2.8 %	5.1 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	49.983 ppb	97.202 %	97.865 %	51.069 ppb	2,493.202 ppb	100.951 %	97.998 %	100.857 %	97.996 %
Concentration per Run 1	51.598 ppb	96.001 %	95.890 %	52.469 ppb	2,532.103 ppb	101.291 %	97.396 %	100.910 %	95.685 %
Concentration per Run 2	48.510 ppb	97.162 %	99.068 %	50.152 ppb	2,482.032 ppb	100.141 %	98.113 %	97.962 %	97.565 %
Concentration per Run 3	49.840 ppb	98.444 %	98.638 %	50.584 ppb	2,465.471 ppb	101.420 %	98.483 %	103.698 %	100.737 %
Concentration RSD	3.1 %	1.3 %	1.8 %	2.4 %	1.4 %	0.7 %	0.6 %	2.8 %	2.6 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	51.921 ppb	53.127 ppb	92.854 %	87.927 %
Concentration per Run 1	53.639 ppb	53.347 ppb	93.376 %	86.405 %
Concentration per Run 2	52.197 ppb	53.074 ppb	93.017 %	88.262 %
Concentration per Run 3	49.927 ppb	52.959 ppb	92.168 %	89.113 %
Concentration RSD	3.6 %	0.4 %	0.7 %	1.6 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index: 23 User name ALPHALAB\ICPMSRQ Comment <Comment>
Analysis label: L2373323-04 6020SL Rack 1
Analysis started at: 12/15/2023 7:47:14 AM Vial 3

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	153.232 %	170.636 %	0.023 ppb	161,800.557 ppb	48,016.136 ppb	0.812 ppb	21,401.901 ppb	221,262.280 ppb	104.830 %
Concentration per Run 1	154.362 %	168.652 %	0.024 ppb	162,139.908 ppb	47,747.214 ppb	2.077 ppb	20,650.581 ppb	221,288.733 ppb	104.967 %
Concentration per Run 2	153.993 %	175.001 %	0.024 ppb	160,240.509 ppb	47,373.092 ppb	-0.487 ppb	21,366.897 ppb	216,837.089 ppb	106.128 %
Concentration per Run 3	151.340 %	168.255 %	0.021 ppb	163,021.254 ppb	48,928.102 ppb	0.847 ppb	22,188.227 ppb	225,661.018 ppb	103.395 %
Concentration RSD	1.1 %	2.2 %	7.1 %	0.9 %	1.7 %	157.9 %	3.6 %	2.0 %	1.3 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	96.386 %	0.302 ppb	-0.735 ppb	3,765.895 ppb	885.716 ppb	0.125 ppb	0.879 ppb	0.976 ppb	5.052 ppb
Concentration per Run 1	98.949 %	0.331 ppb	-0.762 ppb	3,708.643 ppb	879.833 ppb	0.124 ppb	1.114 ppb	0.927 ppb	5.253 ppb
Concentration per Run 2	96.835 %	0.216 ppb	-0.714 ppb	3,744.649 ppb	882.258 ppb	0.112 ppb	0.729 ppb	0.977 ppb	5.015 ppb
Concentration per Run 3	93.374 %	0.359 ppb	-0.730 ppb	3,844.392 ppb	895.056 ppb	0.140 ppb	0.792 ppb	1.024 ppb	4.888 ppb
Concentration RSD	2.9 %	25.2 %	3.3 %	1.9 %	0.9 %	11.3 %	23.5 %	5.0 %	3.7 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	96.095 %	101.034 %	0.348 ppb	0.290 ppb	17,616.330 ppb	0.639 ppb	85.751 %	89.168 %	0.007 ppb
Concentration per Run 1	94.856 %	97.934 %	0.366 ppb	0.126 ppb	17,846.197 ppb	0.548 ppb	85.702 %	90.048 %	0.006 ppb
Concentration per Run 2	97.244 %	103.181 %	0.401 ppb	0.271 ppb	17,411.381 ppb	0.666 ppb	86.841 %	89.021 %	0.009 ppb
Concentration per Run 3	96.186 %	101.988 %	0.278 ppb	0.474 ppb	17,591.412 ppb	0.704 ppb	84.709 %	88.435 %	0.006 ppb
Concentration RSD	1.2 %	2.7 %	18.1 %	60.3 %	1.2 %	12.7 %	1.2 %	0.9 %	25.8 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.009 ppb	86.495 %	93.377 %	0.322 ppb	28,604.838 ppb	93.707 %	95.987 %	94.483 %	98.597 %
Concentration per Run 1	0.020 ppb	86.871 %	93.683 %	0.313 ppb	28,659.332 ppb	93.496 %	95.202 %	93.029 %	100.428 %
Concentration per Run 2	0.005 ppb	85.004 %	91.972 %	0.314 ppb	28,667.879 ppb	93.937 %	96.751 %	96.013 %	98.004 %
Concentration per Run 3	0.003 ppb	87.609 %	94.476 %	0.341 ppb	28,487.304 ppb	93.689 %	96.009 %	94.405 %	97.358 %
Concentration RSD	102.2 %	1.6 %	1.4 %	4.9 %	0.4 %	0.2 %	0.8 %	1.6 %	1.6 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.250 ppb	0.041 ppb	82.978 %	85.676 %
Concentration per Run 1	0.155 ppb	0.042 ppb	84.923 %	87.324 %
Concentration per Run 2	0.307 ppb	0.043 ppb	82.268 %	85.193 %
Concentration per Run 3	0.290 ppb	0.039 ppb	81.741 %	84.510 %
Concentration RSD	33.2 %	4.6 %	2.1 %	1.7 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index: 24 User name ALPHALAB\ICPMSRQ Comment <Comment>
Analysis label: L2372938-01 6020SL Rack 1
Analysis started at: 12/15/2023 7:51:54 AM Vial 8

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	98.008 %	95.238 %	0.046 ppb	18,805.466 ppb	52,074.995 ppb	5.004 ppb	4,900.199 ppb	171,124.159 ppb	103.654 %
Concentration per Run 1	99.241 %	94.841 %	0.078 ppb	18,856.120 ppb	53,042.019 ppb	4.104 ppb	4,884.521 ppb	167,659.043 ppb	105.005 %
Concentration per Run 2	97.612 %	92.857 %	0.034 ppb	19,327.995 ppb	53,794.368 ppb	6.126 ppb	5,071.587 ppb	178,445.425 ppb	102.259 %
Concentration per Run 3	97.169 %	98.016 %	0.025 ppb	18,232.285 ppb	49,388.599 ppb	4.781 ppb	4,744.490 ppb	167,268.010 ppb	103.698 %
Concentration RSD	1.1 %	2.7 %	61.9 %	2.9 %	4.5 %	20.6 %	3.3 %	3.7 %	1.3 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	96.758 %	0.080 ppb	-0.608 ppb	2,252.146 ppb	32.624 ppb	0.156 ppb	1.566 ppb	0.121 ppb	0.377 ppb
Concentration per Run 1	97.450 %	0.092 ppb	-0.558 ppb	2,259.787 ppb	31.611 ppb	0.159 ppb	1.566 ppb	0.085 ppb	0.371 ppb
Concentration per Run 2	92.221 %	0.081 ppb	-0.601 ppb	2,305.782 ppb	33.245 ppb	0.161 ppb	1.572 ppb	0.154 ppb	0.339 ppb
Concentration per Run 3	100.602 %	0.067 ppb	-0.664 ppb	2,190.870 ppb	33.016 ppb	0.147 ppb	1.560 ppb	0.124 ppb	0.421 ppb
Concentration RSD	4.4 %	15.7 %	8.8 %	2.6 %	2.7 %	4.8 %	0.4 %	28.4 %	10.9 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	98.098 %	95.897 %	26.000 ppb	2.436 ppb	335.797 ppb	0.437 ppb	90.558 %	90.444 %	0.005 ppb
Concentration per Run 1	98.178 %	94.482 %	26.177 ppb	2.578 ppb	337.453 ppb	0.438 ppb	91.068 %	90.133 %	0.004 ppb
Concentration per Run 2	97.172 %	95.908 %	25.509 ppb	2.381 ppb	333.183 ppb	0.445 ppb	90.362 %	91.134 %	0.004 ppb
Concentration per Run 3	98.943 %	97.299 %	26.315 ppb	2.350 ppb	336.755 ppb	0.427 ppb	90.245 %	90.063 %	0.006 ppb
Concentration RSD	0.9 %	1.5 %	1.7 %	5.1 %	0.7 %	2.1 %	0.5 %	0.7 %	20.1 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.002 ppb	93.483 %	92.556 %	1.006 ppb	493.196 ppb	98.746 %	96.370 %	100.467 %	97.725 %
Concentration per Run 1	0.003 ppb	94.608 %	90.559 %	0.956 ppb	500.373 ppb	99.566 %	96.477 %	99.833 %	95.442 %
Concentration per Run 2	0.003 ppb	92.746 %	92.201 %	1.019 ppb	497.189 ppb	97.592 %	96.304 %	100.579 %	98.044 %
Concentration per Run 3	0.001 ppb	93.096 %	94.908 %	1.044 ppb	482.025 ppb	99.080 %	96.329 %	100.991 %	99.689 %
Concentration RSD	43.6 %	1.1 %	2.4 %	4.5 %	2.0 %	1.0 %	0.1 %	0.6 %	2.2 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.079 ppb	3.223 ppb	90.732 %	86.977 %
Concentration per Run 1	0.049 ppb	3.243 ppb	92.971 %	86.012 %
Concentration per Run 2	0.093 ppb	3.250 ppb	89.557 %	86.299 %
Concentration per Run 3	0.094 ppb	3.176 ppb	89.667 %	88.621 %
Concentration RSD	32.6 %	1.3 %	2.1 %	1.6 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index: 25
Analysis label: L2372938-02 6020SL
Analysis started at: 12/15/2023 7:56:36 AM
User name ALPHALAB\ICPMSRQ
Rack 1
Vial 9
Comment <Comment>

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	97.082 %	103.968 %	0.020 ppb	19,817.268 ppb	69,256.511 ppb	8.553 ppb	4,730.365 ppb	272,184.682 ppb	104.008 %
Concentration per Run 1	97.815 %	97.619 %	0.026 ppb	20,860.407 ppb	72,104.878 ppb	0.603 ppb	4,761.815 ppb	270,550.582 ppb	103.829 %
Concentration per Run 2	97.522 %	103.571 %	0.016 ppb	19,742.474 ppb	70,060.136 ppb	15.606 ppb	4,732.648 ppb	276,333.762 ppb	106.615 %
Concentration per Run 3	95.909 %	110.714 %	0.019 ppb	18,848.922 ppb	65,604.518 ppb	9.451 ppb	4,696.633 ppb	269,669.701 ppb	101.581 %
Concentration RSD	1.1 %	6.3 %	24.6 %	5.1 %	4.8 %	88.2 %	0.7 %	1.3 %	2.4 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	96.976 %	0.344 ppb	-0.630 ppb	4,950.486 ppb	5,439.402 ppb	6.192 ppb	11.749 ppb	0.386 ppb	0.458 ppb
Concentration per Run 1	97.219 %	0.363 ppb	-0.633 ppb	4,989.873 ppb	5,528.876 ppb	6.356 ppb	11.878 ppb	0.386 ppb	0.431 ppb
Concentration per Run 2	97.257 %	0.319 ppb	-0.642 ppb	4,939.348 ppb	5,484.312 ppb	6.112 ppb	12.085 ppb	0.416 ppb	0.450 ppb
Concentration per Run 3	96.450 %	0.349 ppb	-0.617 ppb	4,922.236 ppb	5,305.017 ppb	6.108 ppb	11.284 ppb	0.357 ppb	0.493 ppb
Concentration RSD	0.5 %	6.5 %	2.0 %	0.7 %	2.2 %	2.3 %	3.5 %	7.6 %	6.8 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	97.053 %	91.843 %	23.670 ppb	5.304 ppb	749.039 ppb	0.847 ppb	88.961 %	88.372 %	0.008 ppb
Concentration per Run 1	96.731 %	91.843 %	23.890 ppb	5.316 ppb	743.599 ppb	0.892 ppb	88.775 %	87.772 %	0.004 ppb
Concentration per Run 2	98.028 %	89.686 %	23.582 ppb	4.325 ppb	764.257 ppb	0.732 ppb	89.915 %	88.277 %	0.010 ppb
Concentration per Run 3	96.401 %	94.001 %	23.539 ppb	6.272 ppb	739.260 ppb	0.918 ppb	88.193 %	89.067 %	0.009 ppb
Concentration RSD	0.9 %	2.3 %	0.8 %	18.4 %	1.8 %	11.9 %	1.0 %	0.7 %	46.1 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.009 ppb	91.970 %	89.902 %	0.645 ppb	360.783 ppb	99.616 %	96.202 %	99.449 %	96.857 %
Concentration per Run 1	0.007 ppb	92.711 %	86.709 %	0.662 ppb	367.824 ppb	98.308 %	96.237 %	98.694 %	95.988 %
Concentration per Run 2	0.005 ppb	91.375 %	92.990 %	0.611 ppb	353.656 ppb	101.711 %	96.345 %	102.468 %	97.045 %
Concentration per Run 3	0.015 ppb	91.824 %	90.007 %	0.662 ppb	360.870 ppb	98.829 %	96.022 %	97.186 %	97.536 %
Concentration RSD	63.5 %	0.7 %	3.5 %	4.5 %	2.0 %	1.8 %	0.2 %	2.7 %	0.8 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.053 ppb	15.899 ppb	89.455 %	85.150 %
Concentration per Run 1	0.028 ppb	15.896 ppb	91.635 %	85.672 %
Concentration per Run 2	0.066 ppb	15.978 ppb	87.164 %	84.353 %
Concentration per Run 3	0.066 ppb	15.823 ppb	89.565 %	85.425 %
Concentration RSD	40.8 %	0.5 %	2.5 %	0.8 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index: 26 User name ALPHALAB\ICPMSRQ Comment <Comment>
Analysis label: L2372938-03 6020SL Rack 1
Analysis started at: 12/15/2023 8:01:18 AM Vial 10

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	97.866 %	104.630 %	0.016 ppb	16,446.543 ppb	52,062.932 ppb	3.768 ppb	4,468.237 ppb	207,153.969 ppb	105.272 %
Concentration per Run 1	99.120 %	97.222 %	0.014 ppb	17,135.315 ppb	53,447.768 ppb	3.112 ppb	4,297.173 ppb	203,443.994 ppb	107.075 %
Concentration per Run 2	97.050 %	115.873 %	0.018 ppb	15,359.813 ppb	48,690.366 ppb	5.920 ppb	4,546.950 ppb	203,305.015 ppb	103.919 %
Concentration per Run 3	97.428 %	100.794 %	0.015 ppb	16,844.502 ppb	54,050.662 ppb	2.273 ppb	4,560.589 ppb	214,712.899 ppb	104.820 %
Concentration RSD	1.1 %	9.5 %	12.4 %	5.8 %	5.6 %	50.7 %	3.3 %	3.2 %	1.5 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	99.103 %	0.074 ppb	-0.799 ppb	3,587.351 ppb	2,115.295 ppb	2.074 ppb	3.516 ppb	0.271 ppb	0.459 ppb
Concentration per Run 1	100.564 %	0.082 ppb	-0.798 ppb	3,535.126 ppb	2,079.822 ppb	1.968 ppb	3.691 ppb	0.266 ppb	0.397 ppb
Concentration per Run 2	99.603 %	0.039 ppb	-0.807 ppb	3,623.517 ppb	2,134.312 ppb	2.117 ppb	3.357 ppb	0.303 ppb	0.480 ppb
Concentration per Run 3	97.142 %	0.100 ppb	-0.792 ppb	3,603.410 ppb	2,131.751 ppb	2.138 ppb	3.500 ppb	0.243 ppb	0.500 ppb
Concentration RSD	1.8 %	42.0 %	1.0 %	1.3 %	1.5 %	4.4 %	4.8 %	11.2 %	11.9 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	95.919 %	94.925 %	39.015 ppb	2.032 ppb	431.799 ppb	0.819 ppb	92.097 %	90.113 %	0.004 ppb
Concentration per Run 1	97.204 %	96.663 %	38.366 ppb	1.959 ppb	418.453 ppb	0.800 ppb	92.531 %	92.175 %	0.001 ppb
Concentration per Run 2	94.669 %	92.315 %	40.159 ppb	2.393 ppb	439.018 ppb	0.886 ppb	92.330 %	88.370 %	0.005 ppb
Concentration per Run 3	95.882 %	95.797 %	38.520 ppb	1.745 ppb	437.928 ppb	0.772 ppb	91.430 %	89.795 %	0.006 ppb
Concentration RSD	1.3 %	2.4 %	2.5 %	16.3 %	2.7 %	7.3 %	0.6 %	2.1 %	75.5 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.004 ppb	92.497 %	92.513 %	0.818 ppb	395.570 ppb	100.375 %	97.571 %	100.665 %	98.382 %
Concentration per Run 1	0.006 ppb	91.253 %	94.732 %	0.785 ppb	384.207 ppb	101.867 %	99.097 %	103.544 %	101.107 %
Concentration per Run 2	0.001 ppb	92.884 %	91.165 %	0.818 ppb	397.044 ppb	98.598 %	96.506 %	98.134 %	96.948 %
Concentration per Run 3	0.005 ppb	93.354 %	91.642 %	0.851 ppb	405.458 ppb	100.660 %	97.111 %	100.318 %	97.091 %
Concentration RSD	63.2 %	1.2 %	2.1 %	4.0 %	2.7 %	1.6 %	1.4 %	2.7 %	2.4 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.035 ppb	2.796 ppb	92.927 %	90.746 %
Concentration per Run 1	0.014 ppb	2.726 ppb	92.541 %	92.108 %
Concentration per Run 2	0.037 ppb	2.807 ppb	93.716 %	90.045 %
Concentration per Run 3	0.054 ppb	2.856 ppb	92.523 %	90.084 %
Concentration RSD	57.9 %	2.3 %	0.7 %	1.3 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index:	27	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	WG1863597-6d5 6020SL	Rack	1		
Analysis started at:	12/15/2023 8:06:00 AM	Vial	7		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	105.408 %	117.064 %	0.015 ppb	42,571.326 ppb	12,557.878 ppb	1.254 ppb	4,664.527 ppb	49,991.066 ppb	96.368 %
Concentration per Run 1	105.716 %	115.476 %	0.015 ppb	42,436.959 ppb	12,566.274 ppb	-0.336 ppb	4,515.925 ppb	49,553.704 ppb	98.989 %
Concentration per Run 2	104.875 %	122.222 %	0.018 ppb	42,370.753 ppb	12,618.084 ppb	1.244 ppb	4,836.947 ppb	51,483.672 ppb	93.479 %
Concentration per Run 3	105.634 %	113.492 %	0.013 ppb	42,906.266 ppb	12,489.277 ppb	2.856 ppb	4,640.708 ppb	48,935.821 ppb	96.636 %
Concentration RSD	0.4 %	3.9 %	16.9 %	0.7 %	0.5 %	127.2 %	3.5 %	2.7 %	2.9 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	97.168 %	0.062 ppb	-0.243 ppb	775.505 ppb	191.740 ppb	0.020 ppb	0.283 ppb	0.162 ppb	0.822 ppb
Concentration per Run 1	100.102 %	0.082 ppb	-0.259 ppb	764.983 ppb	189.592 ppb	0.018 ppb	0.297 ppb	0.158 ppb	0.798 ppb
Concentration per Run 2	92.913 %	0.066 ppb	-0.261 ppb	806.154 ppb	195.874 ppb	0.023 ppb	0.281 ppb	0.171 ppb	0.820 ppb
Concentration per Run 3	98.488 %	0.039 ppb	-0.208 ppb	755.379 ppb	189.752 ppb	0.019 ppb	0.272 ppb	0.156 ppb	0.848 ppb
Concentration RSD	3.9 %	35.1 %	12.3 %	3.5 %	1.9 %	13.6 %	4.4 %	4.9 %	3.0 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	96.582 %	96.911 %	0.042 ppb	0.106 ppb	3,421.454 ppb	0.090 ppb	90.614 %	90.839 %	0.004 ppb
Concentration per Run 1	97.976 %	95.699 %	0.010 ppb	0.058 ppb	3,327.549 ppb	0.080 ppb	91.276 %	93.957 %	0.002 ppb
Concentration per Run 2	95.258 %	95.163 %	0.072 ppb	0.049 ppb	3,505.449 ppb	0.092 ppb	89.392 %	89.731 %	0.008 ppb
Concentration per Run 3	96.511 %	99.872 %	0.045 ppb	0.211 ppb	3,431.363 ppb	0.099 ppb	91.173 %	88.829 %	0.001 ppb
Concentration RSD	1.4 %	2.7 %	73.7 %	86.0 %	2.6 %	10.5 %	1.2 %	3.0 %	100.4 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.001 ppb	91.455 %	93.970 %	0.072 ppb	5,114.343 ppb	97.082 %	96.898 %	97.105 %	100.123 %
Concentration per Run 1	0.001 ppb	89.798 %	96.779 %	0.061 ppb	4,938.206 ppb	97.850 %	98.288 %	96.808 %	103.064 %
Concentration per Run 2	0.001 ppb	91.594 %	92.923 %	0.083 ppb	5,156.921 ppb	95.631 %	95.816 %	96.072 %	98.039 %
Concentration per Run 3	-0.001 ppb	92.972 %	92.209 %	0.070 ppb	5,247.903 ppb	97.765 %	96.589 %	98.435 %	99.265 %
Concentration RSD	162.9 %	1.7 %	2.6 %	15.5 %	3.1 %	1.3 %	1.3 %	1.2 %	2.6 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.020 ppb	0.007 ppb	89.281 %	90.847 %
Concentration per Run 1	0.006 ppb	0.009 ppb	88.297 %	93.467 %
Concentration per Run 2	0.026 ppb	0.006 ppb	91.171 %	88.817 %
Concentration per Run 3	0.028 ppb	0.006 ppb	88.375 %	90.258 %
Concentration RSD	61.9 %	20.0 %	1.8 %	2.6 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index: 28 User name ALPHALAB\ICPMSRQ Comment <Comment>
Analysis label: CCV Rack 0
Analysis started at: 12/15/2023 8:10:42 AM Vial 9

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	91.795 %	96.296 %	62.268 ppb	6,253.827 ppb	6,537.530 ppb	65.730 ppb	6,406.953 ppb	6,491.490 ppb	95.119 %
Concentration per Run 1	91.841 %	100.000 %	62.827 ppb	5,982.499 ppb	6,266.075 ppb	63.979 ppb	6,246.085 ppb	6,410.221 ppb	94.274 %
Concentration per Run 2	91.794 %	98.016 %	62.569 ppb	6,237.125 ppb	6,497.979 ppb	67.456 ppb	6,308.678 ppb	6,436.281 ppb	95.182 %
Concentration per Run 3	91.749 %	90.873 %	61.407 ppb	6,541.857 ppb	6,848.537 ppb	65.754 ppb	6,666.095 ppb	6,627.967 ppb	95.903 %
Recovery Percentage 1			103.779 %	104.230 %	108.959 %	109.549 %	106.783 %	108.191 %	
Concentration RSD	0.1 %	5.0 %	1.2 %	4.5 %	4.5 %	2.6 %	3.5 %	1.8 %	0.9 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	100.782 %	64.227 ppb	60.545 ppb	62.360 ppb	6,276.686 ppb	62.825 ppb	63.730 ppb	61.534 ppb	62.071 ppb
Concentration per Run 1	104.639 %	62.233 ppb	58.544 ppb	60.695 ppb	6,175.843 ppb	61.261 ppb	62.529 ppb	61.013 ppb	61.315 ppb
Concentration per Run 2	99.526 %	63.030 ppb	60.697 ppb	62.928 ppb	6,291.358 ppb	63.080 ppb	64.661 ppb	61.642 ppb	61.943 ppb
Concentration per Run 3	98.180 %	67.417 ppb	62.395 ppb	63.458 ppb	6,362.858 ppb	64.135 ppb	63.998 ppb	61.948 ppb	62.954 ppb
Recovery Percentage 1		107.044 %	100.909 %	103.934 %	104.611 %	104.709 %	106.216 %	102.557 %	103.451 %
Concentration RSD	3.4 %	4.3 %	3.2 %	2.4 %	1.5 %	2.3 %	1.7 %	0.8 %	1.3 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	93.630 %	95.542 %	62.499 ppb	60.103 ppb	63.587 ppb	62.338 ppb	92.183 %	92.807 %	63.495 ppb
Concentration per Run 1	94.828 %	94.928 %	62.788 ppb	58.641 ppb	62.490 ppb	61.068 ppb	91.660 %	94.755 %	62.413 ppb
Concentration per Run 2	92.552 %	96.953 %	61.606 ppb	58.803 ppb	63.266 ppb	63.365 ppb	92.794 %	91.657 %	64.456 ppb
Concentration per Run 3	93.511 %	94.745 %	63.104 ppb	62.865 ppb	65.006 ppb	62.581 ppb	92.096 %	92.009 %	63.617 ppb
Recovery Percentage 1			104.165 %	100.172 %	105.979 %	103.897 %			105.826 %
Concentration RSD	1.2 %	1.3 %	1.3 %	4.0 %	2.0 %	1.9 %	0.6 %	1.8 %	1.6 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	63.004 ppb	92.713 %	95.496 %	63.054 ppb	62.788 ppb	97.567 %	97.986 %	97.558 %	97.767 %
Concentration per Run 1	61.587 ppb	93.065 %	96.954 %	62.368 ppb	62.723 ppb	96.659 %	96.073 %	97.269 %	98.831 %
Concentration per Run 2	63.708 ppb	93.522 %	94.557 %	63.409 ppb	62.494 ppb	96.953 %	99.761 %	96.655 %	98.308 %
Concentration per Run 3	63.717 ppb	91.554 %	94.975 %	63.385 ppb	63.146 ppb	99.090 %	98.124 %	98.749 %	96.163 %
Recovery Percentage 1	105.007 %			105.090 %	104.646 %				
Concentration RSD	1.9 %	1.1 %	1.3 %	0.9 %	0.5 %	1.4 %	1.9 %	1.1 %	1.4 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	62.227 ppb	63.165 ppb	92.261 %	94.367 %
Concentration per Run 1	60.577 ppb	61.282 ppb	94.170 %	96.497 %
Concentration per Run 2	63.463 ppb	64.571 ppb	91.438 %	92.283 %
Concentration per Run 3	62.641 ppb	63.641 ppb	91.174 %	94.321 %
Recovery Percentage 1	103.712 %	105.274 %		
Concentration RSD	2.4 %	2.7 %	1.8 %	2.2 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index: 29 User name ALPHALAB\ICPMSRQ Comment <Comment>
Analysis label: CCB Rack 0
Analysis started at: 12/15/2023 8:15:26 AM Vial 10

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	93.472 %	91.270 %	0.028 ppb	0.941 ppb	5.259 ppb	0.118 ppb	-7.876 ppb	5.208 ppb	91.551 %
Concentration per Run 1	94.892 %	95.635 %	0.030 ppb	2.051 ppb	6.488 ppb	0.693 ppb	-10.185 ppb	8.839 ppb	91.853 %
Concentration per Run 2	92.230 %	88.492 %	0.022 ppb	1.822 ppb	6.244 ppb	0.777 ppb	-9.473 ppb	18.505 ppb	90.237 %
Concentration per Run 3	93.294 %	89.682 %	0.033 ppb	-1.049 ppb	3.046 ppb	-1.117 ppb	-3.970 ppb	-11.719 ppb	92.562 %
Recovery Percentage 1			5.635 %	0.941 %	7.513 %	1.178 %	-7.876 %	5.208 %	
Concentration RSD	1.4 %	4.2 %	18.8 %	183.6 %	36.5 %	908.9 %	43.2 %	296.4 %	1.3 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	90.952 %	0.012 ppb	-0.094 ppb	0.107 ppb	12.311 ppb	0.010 ppb	0.486 ppb	0.088 ppb	0.270 ppb
Concentration per Run 1	89.876 %	0.028 ppb	-0.122 ppb	0.149 ppb	13.017 ppb	0.012 ppb	0.466 ppb	0.101 ppb	0.275 ppb
Concentration per Run 2	88.376 %	0.005 ppb	-0.039 ppb	0.112 ppb	12.019 ppb	0.009 ppb	0.500 ppb	0.043 ppb	0.240 ppb
Concentration per Run 3	94.605 %	0.004 ppb	-0.122 ppb	0.061 ppb	11.896 ppb	0.010 ppb	0.492 ppb	0.119 ppb	0.294 ppb
Recovery Percentage 1		0.246 %	-9.436 %	10.737 %	24.621 %	2.008 %	24.286 %	8.781 %	5.398 %
Concentration RSD	3.6 %	113.9 %	50.9 %	41.1 %	5.0 %	15.2 %	3.7 %	45.3 %	10.2 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	93.208 %	93.176 %	-0.052 ppb	0.167 ppb	0.106 ppb	0.201 ppb	93.422 %	92.825 %	0.026 ppb
Concentration per Run 1	93.706 %	92.861 %	-0.004 ppb	0.147 ppb	0.217 ppb	0.141 ppb	94.460 %	94.067 %	0.031 ppb
Concentration per Run 2	92.060 %	94.944 %	-0.100 ppb	0.215 ppb	0.072 ppb	0.279 ppb	91.650 %	91.062 %	0.021 ppb
Concentration per Run 3	93.859 %	91.722 %	-0.052 ppb	0.139 ppb	0.029 ppb	0.183 ppb	94.155 %	93.347 %	0.026 ppb
Recovery Percentage 1			-10.330 %	3.339 %	21.218 %	10.055 %			6.492 %
Concentration RSD	1.1 %	1.8 %	93.3 %	25.2 %	93.0 %	35.1 %	1.7 %	1.7 %	19.0 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.005 ppb	93.275 %	94.674 %	0.036 ppb	0.133 ppb	96.369 %	95.343 %	96.391 %	95.278 %
Concentration per Run 1	0.011 ppb	95.050 %	94.301 %	0.044 ppb	0.217 ppb	98.037 %	95.918 %	95.640 %	94.273 %
Concentration per Run 2	0.003 ppb	91.970 %	92.827 %	0.031 ppb	0.101 ppb	94.484 %	95.756 %	94.404 %	95.353 %
Concentration per Run 3	0.001 ppb	92.804 %	96.894 %	0.034 ppb	0.081 ppb	96.584 %	94.355 %	99.129 %	96.206 %
Recovery Percentage 1				0.910 %	26.587 %				
Concentration RSD	106.0 %	1.7 %	2.2 %	18.6 %	55.3 %	1.9 %	0.9 %	2.5 %	1.0 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.332 ppb	0.021 ppb	93.880 %	94.035 %
Concentration per Run 1	0.217 ppb	0.026 ppb	93.930 %	95.370 %
Concentration per Run 2	0.392 ppb	0.019 ppb	92.785 %	93.491 %
Concentration per Run 3	0.386 ppb	0.017 ppb	94.925 %	93.244 %
Recovery Percentage 1	33.186 %	2.089 %		
Concentration RSD	30.0 %	22.3 %	1.1 %	1.2 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index: 30
Analysis label: L2372938-04 6020SL
Analysis started at: 12/15/2023 8:25:26 AM
User name ALPHALAB\ICPMSRQ
Rack 1
Vial 11
Comment <Comment>

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	97.421 %	97.884 %	0.021 ppb	14,067.617 ppb	38,364.082 ppb	3.678 ppb	4,332.237 ppb	132,363.815 ppb	101.586 %
Concentration per Run 1	98.409 %	84.524 %	0.021 ppb	15,489.198 ppb	42,338.515 ppb	3.450 ppb	4,578.682 ppb	135,593.825 ppb	100.438 %
Concentration per Run 2	97.064 %	105.556 %	0.020 ppb	13,363.203 ppb	36,640.323 ppb	2.179 ppb	4,278.466 ppb	132,634.706 ppb	103.218 %
Concentration per Run 3	96.791 %	103.571 %	0.023 ppb	13,350.449 ppb	36,113.409 ppb	5.403 ppb	4,139.563 ppb	128,862.913 ppb	101.102 %
Concentration RSD	0.9 %	11.9 %	7.0 %	8.8 %	9.0 %	44.2 %	5.2 %	2.5 %	1.4 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	99.398 %	0.044 ppb	-0.623 ppb	3,395.421 ppb	181.444 ppb	0.087 ppb	2.243 ppb	0.065 ppb	0.485 ppb
Concentration per Run 1	97.834 %	0.056 ppb	-0.650 ppb	3,508.971 ppb	190.629 ppb	0.088 ppb	2.435 ppb	0.063 ppb	0.543 ppb
Concentration per Run 2	98.295 %	0.047 ppb	-0.643 ppb	3,365.433 ppb	176.362 ppb	0.091 ppb	2.308 ppb	0.056 ppb	0.504 ppb
Concentration per Run 3	102.063 %	0.031 ppb	-0.577 ppb	3,311.859 ppb	177.343 ppb	0.082 ppb	1.985 ppb	0.075 ppb	0.409 ppb
Concentration RSD	2.3 %	28.4 %	6.5 %	3.0 %	4.4 %	5.4 %	10.3 %	15.1 %	14.2 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	98.076 %	93.746 %	54.677 ppb	1.948 ppb	292.483 ppb	0.285 ppb	92.384 %	89.038 %	0.006 ppb
Concentration per Run 1	99.007 %	90.256 %	56.742 ppb	1.407 ppb	305.279 ppb	0.251 ppb	93.075 %	86.491 %	0.006 ppb
Concentration per Run 2	99.716 %	94.846 %	53.511 ppb	2.074 ppb	285.110 ppb	0.315 ppb	92.371 %	91.554 %	0.004 ppb
Concentration per Run 3	95.505 %	96.137 %	53.777 ppb	2.363 ppb	287.060 ppb	0.291 ppb	91.705 %	89.068 %	0.008 ppb
Concentration RSD	2.3 %	3.3 %	3.3 %	25.2 %	3.8 %	11.3 %	0.7 %	2.8 %	33.8 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.001 ppb	94.837 %	92.314 %	0.679 ppb	452.154 ppb	100.586 %	98.388 %	102.263 %	99.384 %
Concentration per Run 1	0.001 ppb	94.500 %	87.591 %	0.701 ppb	468.099 ppb	101.368 %	95.005 %	102.970 %	95.648 %
Concentration per Run 2	-0.001 ppb	93.633 %	95.177 %	0.655 ppb	445.380 ppb	101.261 %	100.054 %	102.294 %	101.409 %
Concentration per Run 3	0.003 ppb	96.378 %	94.175 %	0.680 ppb	442.985 ppb	99.130 %	100.104 %	101.524 %	101.095 %
Concentration RSD	140.5 %	1.5 %	4.5 %	3.4 %	3.1 %	1.3 %	3.0 %	0.7 %	3.3 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.060 ppb	2.687 ppb	93.107 %	90.020 %
Concentration per Run 1	0.031 ppb	2.712 ppb	92.236 %	88.989 %
Concentration per Run 2	0.073 ppb	2.685 ppb	93.104 %	89.969 %
Concentration per Run 3	0.077 ppb	2.665 ppb	93.981 %	91.102 %
Concentration RSD	41.8 %	0.9 %	0.9 %	1.2 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index: 31
Analysis label: L2372938-05 6020SL
Analysis started at: 12/15/2023 8:30:09 AM
User name ALPHALAB\ICPMSRQ
Rack 1
Vial 12
Comment <Comment>

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	96.871 %	104.630 %	0.019 ppb	14,045.307 ppb	27,732.811 ppb	36.308 ppb	3,455.821 ppb	94,666.796 ppb	106.803 %
Concentration per Run 1	97.505 %	107.143 %	0.021 ppb	13,794.051 ppb	27,229.341 ppb	39.274 ppb	3,442.577 ppb	93,798.711 ppb	105.198 %
Concentration per Run 2	97.068 %	108.730 %	0.021 ppb	13,786.523 ppb	27,201.393 ppb	28.249 ppb	3,414.395 ppb	94,985.956 ppb	108.065 %
Concentration per Run 3	96.039 %	98.016 %	0.015 ppb	14,555.348 ppb	28,767.701 ppb	41.400 ppb	3,510.492 ppb	95,215.721 ppb	107.145 %
Concentration RSD	0.8 %	5.5 %	18.2 %	3.1 %	3.2 %	19.4 %	1.4 %	0.8 %	1.4 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	99.039 %	0.152 ppb	0.331 ppb	919.654 ppb	1,720.396 ppb	0.238 ppb	1.861 ppb	0.601 ppb	0.954 ppb
Concentration per Run 1	100.718 %	0.137 ppb	0.191 ppb	895.599 ppb	1,707.181 ppb	0.241 ppb	1.975 ppb	0.578 ppb	0.884 ppb
Concentration per Run 2	97.488 %	0.216 ppb	0.584 ppb	930.404 ppb	1,727.494 ppb	0.220 ppb	1.768 ppb	0.633 ppb	0.980 ppb
Concentration per Run 3	98.911 %	0.105 ppb	0.218 ppb	932.959 ppb	1,726.515 ppb	0.254 ppb	1.839 ppb	0.591 ppb	0.999 ppb
Concentration RSD	1.6 %	37.4 %	66.3 %	2.3 %	0.7 %	7.2 %	5.7 %	4.8 %	6.5 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	97.799 %	100.771 %	10.136 ppb	0.478 ppb	204.541 ppb	0.730 ppb	93.889 %	92.724 %	0.004 ppb
Concentration per Run 1	98.242 %	102.808 %	9.571 ppb	0.344 ppb	197.764 ppb	0.715 ppb	92.167 %	95.645 %	0.003 ppb
Concentration per Run 2	97.591 %	100.782 %	10.232 ppb	0.501 ppb	207.723 ppb	0.733 ppb	95.397 %	91.711 %	0.004 ppb
Concentration per Run 3	97.563 %	98.722 %	10.606 ppb	0.589 ppb	208.135 ppb	0.742 ppb	94.103 %	90.817 %	0.004 ppb
Concentration RSD	0.4 %	2.0 %	5.2 %	26.0 %	2.9 %	1.9 %	1.7 %	2.8 %	18.4 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.006 ppb	96.265 %	93.550 %	1.160 ppb	136.643 ppb	103.026 %	100.279 %	102.814 %	98.978 %
Concentration per Run 1	0.009 ppb	96.604 %	93.291 %	1.141 ppb	136.610 ppb	102.683 %	100.344 %	103.534 %	99.900 %
Concentration per Run 2	-0.001 ppb	97.189 %	93.850 %	1.177 ppb	137.715 ppb	104.182 %	100.235 %	104.508 %	99.642 %
Concentration per Run 3	0.010 ppb	95.003 %	93.507 %	1.162 ppb	135.604 ppb	102.212 %	100.257 %	100.402 %	97.393 %
Concentration RSD	93.9 %	1.2 %	0.3 %	1.5 %	0.8 %	1.0 %	0.1 %	2.1 %	1.4 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.038 ppb	3.711 ppb	97.485 %	94.588 %
Concentration per Run 1	0.014 ppb	3.666 ppb	98.637 %	96.280 %
Concentration per Run 2	0.047 ppb	3.744 ppb	96.530 %	93.476 %
Concentration per Run 3	0.054 ppb	3.724 ppb	97.287 %	94.008 %
Concentration RSD	54.7 %	1.1 %	1.1 %	1.6 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index: 32 User name ALPHALAB\ICPMSRQ Comment <Comment>
Analysis label: L2372938-06 6020SL Rack 1
Analysis started at: 12/15/2023 8:34:52 AM Vial 13

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	95.871 %	100.397 %	0.017 ppb	18,347.369 ppb	36,921.062 ppb	1.808 ppb	4,172.011 ppb	141,120.428 ppb	102.762 %
Concentration per Run 1	96.542 %	115.476 %	0.017 ppb	16,847.522 ppb	34,131.129 ppb	-0.328 ppb	4,052.255 ppb	139,592.972 ppb	104.253 %
Concentration per Run 2	95.522 %	96.429 %	0.019 ppb	18,648.446 ppb	37,422.984 ppb	2.308 ppb	4,133.457 ppb	136,859.046 ppb	102.835 %
Concentration per Run 3	95.550 %	89.286 %	0.014 ppb	19,546.137 ppb	39,209.072 ppb	3.445 ppb	4,330.323 ppb	146,909.265 ppb	101.198 %
Concentration RSD	0.6 %	13.5 %	13.6 %	7.5 %	7.0 %	107.1 %	3.4 %	3.7 %	1.5 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	97.078 %	0.056 ppb	-0.841 ppb	1,534.680 ppb	1,546.353 ppb	2.302 ppb	3.167 ppb	0.129 ppb	0.233 ppb
Concentration per Run 1	98.257 %	0.055 ppb	-0.845 ppb	1,535.152 ppb	1,541.486 ppb	2.235 ppb	3.095 ppb	0.143 ppb	0.215 ppb
Concentration per Run 2	99.026 %	0.047 ppb	-0.870 ppb	1,496.550 ppb	1,530.645 ppb	2.323 ppb	3.130 ppb	0.141 ppb	0.291 ppb
Concentration per Run 3	93.951 %	0.065 ppb	-0.809 ppb	1,572.336 ppb	1,566.928 ppb	2.347 ppb	3.275 ppb	0.102 ppb	0.191 ppb
Concentration RSD	2.8 %	16.7 %	3.6 %	2.5 %	1.2 %	2.6 %	3.0 %	18.0 %	22.4 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	95.107 %	93.891 %	11.804 ppb	2.022 ppb	455.245 ppb	0.562 ppb	90.952 %	90.012 %	0.002 ppb
Concentration per Run 1	97.170 %	93.947 %	11.711 ppb	1.771 ppb	454.445 ppb	0.504 ppb	91.633 %	89.345 %	0.000 ppb
Concentration per Run 2	94.578 %	94.965 %	11.495 ppb	2.005 ppb	454.625 ppb	0.486 ppb	92.090 %	90.293 %	0.003 ppb
Concentration per Run 3	93.573 %	92.763 %	12.208 ppb	2.289 ppb	456.666 ppb	0.696 ppb	89.132 %	90.399 %	0.005 ppb
Concentration RSD	2.0 %	1.2 %	3.1 %	12.8 %	0.3 %	20.7 %	1.8 %	0.6 %	103.9 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.001 ppb	94.456 %	91.333 %	0.463 ppb	204.307 ppb	100.430 %	96.599 %	101.487 %	97.634 %
Concentration per Run 1	0.003 ppb	94.420 %	92.134 %	0.444 ppb	198.469 ppb	100.220 %	96.681 %	103.494 %	97.417 %
Concentration per Run 2	-0.001 ppb	93.448 %	89.973 %	0.476 ppb	210.287 ppb	101.585 %	96.732 %	100.476 %	97.143 %
Concentration per Run 3	0.001 ppb	95.500 %	91.892 %	0.470 ppb	204.167 ppb	99.484 %	96.385 %	100.492 %	98.342 %
Concentration RSD	143.7 %	1.1 %	1.3 %	3.7 %	2.9 %	1.1 %	0.2 %	1.7 %	0.6 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.030 ppb	4.792 ppb	93.352 %	91.923 %
Concentration per Run 1	0.009 ppb	4.662 ppb	91.456 %	93.906 %
Concentration per Run 2	0.036 ppb	4.790 ppb	93.845 %	91.713 %
Concentration per Run 3	0.046 ppb	4.925 ppb	94.756 %	90.151 %
Concentration RSD	62.4 %	2.7 %	1.8 %	2.1 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index: 33 User name ALPHALAB\ICPMSRQ Comment <Comment>
Analysis label: L2372938-07 6020SL Rack 1
Analysis started at: 12/15/2023 8:39:31 AM Vial 14

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	97.093 %	104.101 %	0.022 ppb	17,908.723 ppb	50,969.246 ppb	17.034 ppb	4,172.585 ppb	207,311.468 ppb	102.956 %
Concentration per Run 1	98.716 %	107.937 %	0.021 ppb	17,289.465 ppb	48,885.689 ppb	13.448 ppb	4,047.722 ppb	199,652.764 ppb	101.198 %
Concentration per Run 2	96.261 %	92.857 %	0.021 ppb	18,893.889 ppb	53,810.707 ppb	29.769 ppb	4,241.936 ppb	206,753.915 ppb	103.236 %
Concentration per Run 3	96.301 %	111.508 %	0.025 ppb	17,542.816 ppb	50,211.343 ppb	7.885 ppb	4,228.096 ppb	215,527.724 ppb	104.434 %
Concentration RSD	1.4 %	9.5 %	10.7 %	4.8 %	5.0 %	66.8 %	2.6 %	3.8 %	1.6 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	96.963 %	0.245 ppb	-0.773 ppb	3,239.854 ppb	293.791 ppb	4.893 ppb	6.437 ppb	0.323 ppb	2.107 ppb
Concentration per Run 1	99.718 %	0.228 ppb	-0.767 ppb	3,127.029 ppb	296.519 ppb	4.627 ppb	6.326 ppb	0.286 ppb	1.990 ppb
Concentration per Run 2	96.681 %	0.264 ppb	-0.783 ppb	3,232.945 ppb	287.929 ppb	4.844 ppb	6.167 ppb	0.354 ppb	2.112 ppb
Concentration per Run 3	94.489 %	0.243 ppb	-0.770 ppb	3,359.590 ppb	296.924 ppb	5.208 ppb	6.819 ppb	0.329 ppb	2.219 ppb
Concentration RSD	2.7 %	7.3 %	1.1 %	3.6 %	1.7 %	6.0 %	5.3 %	10.7 %	5.4 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	96.945 %	94.143 %	11.186 ppb	2.929 ppb	440.671 ppb	2.319 ppb	90.735 %	89.925 %	0.003 ppb
Concentration per Run 1	95.716 %	96.542 %	10.666 ppb	2.986 ppb	418.260 ppb	2.392 ppb	90.325 %	91.884 %	0.002 ppb
Concentration per Run 2	97.240 %	96.926 %	11.048 ppb	3.006 ppb	440.407 ppb	2.259 ppb	90.820 %	89.421 %	0.003 ppb
Concentration per Run 3	97.880 %	88.962 %	11.844 ppb	2.794 ppb	463.347 ppb	2.307 ppb	91.061 %	88.471 %	0.005 ppb
Concentration RSD	1.1 %	4.8 %	5.4 %	4.0 %	5.1 %	2.9 %	0.4 %	2.0 %	48.3 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.018 ppb	92.967 %	92.055 %	0.512 ppb	425.396 ppb	100.884 %	97.391 %	101.103 %	98.775 %
Concentration per Run 1	0.021 ppb	95.972 %	94.375 %	0.507 ppb	414.122 ppb	101.008 %	99.742 %	101.206 %	102.046 %
Concentration per Run 2	0.017 ppb	90.843 %	90.983 %	0.496 ppb	430.580 ppb	100.705 %	95.108 %	100.041 %	95.177 %
Concentration per Run 3	0.017 ppb	92.085 %	90.808 %	0.532 ppb	431.487 ppb	100.940 %	97.323 %	102.063 %	99.101 %
Concentration RSD	13.9 %	2.9 %	2.2 %	3.6 %	2.3 %	0.2 %	2.4 %	1.0 %	3.5 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.035 ppb	3.332 ppb	93.696 %	91.506 %
Concentration per Run 1	0.014 ppb	3.243 ppb	95.398 %	93.654 %
Concentration per Run 2	0.044 ppb	3.376 ppb	93.594 %	90.459 %
Concentration per Run 3	0.048 ppb	3.377 ppb	92.096 %	90.405 %
Concentration RSD	51.7 %	2.3 %	1.8 %	2.0 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index:	34	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	L2372938-08 6020SL	Rack	1		
Analysis started at:	12/15/2023 8:44:10 AM	Vial	15		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	95.844 %	101.191 %	0.017 ppb	21,433.314 ppb	69,476.274 ppb	6.153 ppb	4,665.950 ppb	267,462.139 ppb	100.672 %
Concentration per Run 1	96.854 %	105.556 %	0.018 ppb	20,457.779 ppb	65,945.209 ppb	6.912 ppb	4,390.650 ppb	254,301.643 ppb	100.889 %
Concentration per Run 2	95.759 %	98.810 %	0.015 ppb	21,580.446 ppb	70,419.865 ppb	5.648 ppb	4,681.967 ppb	264,515.144 ppb	101.825 %
Concentration per Run 3	94.918 %	99.206 %	0.016 ppb	22,261.716 ppb	72,063.747 ppb	5.899 ppb	4,925.233 ppb	283,569.630 ppb	99.301 %
Concentration RSD	1.0 %	3.7 %	9.2 %	4.3 %	4.6 %	10.9 %	5.7 %	5.6 %	1.3 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	98.283 %	0.109 ppb	-0.629 ppb	4,267.875 ppb	1,167.960 ppb	0.225 ppb	1.357 ppb	0.105 ppb	0.627 ppb
Concentration per Run 1	103.255 %	0.087 ppb	-0.637 ppb	4,106.149 ppb	1,132.868 ppb	0.208 ppb	1.315 ppb	0.127 ppb	0.614 ppb
Concentration per Run 2	99.257 %	0.135 ppb	-0.612 ppb	4,228.284 ppb	1,184.213 ppb	0.224 ppb	1.374 ppb	0.060 ppb	0.657 ppb
Concentration per Run 3	92.336 %	0.105 ppb	-0.637 ppb	4,469.192 ppb	1,186.801 ppb	0.244 ppb	1.382 ppb	0.129 ppb	0.611 ppb
Concentration RSD	5.6 %	22.1 %	2.3 %	4.3 %	2.6 %	8.0 %	2.7 %	37.6 %	4.1 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	95.177 %	94.269 %	30.791 ppb	4.139 ppb	525.862 ppb	0.820 ppb	89.256 %	88.749 %	0.005 ppb
Concentration per Run 1	95.696 %	93.838 %	30.406 ppb	3.150 ppb	512.654 ppb	0.743 ppb	90.191 %	91.268 %	0.001 ppb
Concentration per Run 2	95.714 %	93.650 %	31.561 ppb	5.324 ppb	531.167 ppb	0.857 ppb	90.345 %	87.124 %	0.004 ppb
Concentration per Run 3	94.120 %	95.318 %	30.406 ppb	3.942 ppb	533.766 ppb	0.860 ppb	87.231 %	87.855 %	0.008 ppb
Concentration RSD	1.0 %	1.0 %	2.2 %	26.6 %	2.2 %	8.2 %	2.0 %	2.5 %	74.5 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.004 ppb	90.494 %	90.305 %	0.516 ppb	748.103 ppb	98.097 %	96.105 %	99.526 %	97.005 %
Concentration per Run 1	0.005 ppb	90.006 %	91.118 %	0.466 ppb	724.351 ppb	96.466 %	98.347 %	99.564 %	99.584 %
Concentration per Run 2	0.006 ppb	89.606 %	89.408 %	0.572 ppb	764.945 ppb	96.451 %	93.899 %	101.045 %	95.111 %
Concentration per Run 3	-0.001 ppb	91.870 %	90.390 %	0.510 ppb	755.014 ppb	101.376 %	96.070 %	97.970 %	96.320 %
Concentration RSD	102.9 %	1.3 %	1.0 %	10.3 %	2.8 %	2.9 %	2.3 %	1.5 %	2.4 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.024 ppb	3.409 ppb	90.021 %	90.177 %
Concentration per Run 1	0.005 ppb	3.274 ppb	90.176 %	92.916 %
Concentration per Run 2	0.030 ppb	3.460 ppb	89.652 %	89.049 %
Concentration per Run 3	0.037 ppb	3.491 ppb	90.235 %	88.566 %
Concentration RSD	70.1 %	3.4 %	0.4 %	2.6 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index:	35	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	L2372938-09 6020SL	Rack	1		
Analysis started at:	12/15/2023 8:48:49 AM	Vial	16		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	95.733 %	104.365 %	0.016 ppb	15,164.599 ppb	43,635.187 ppb	19.439 ppb	5,578.705 ppb	168,922.397 ppb	101.224 %
Concentration per Run 1	95.631 %	113.492 %	0.014 ppb	14,274.351 ppb	41,878.650 ppb	18.245 ppb	5,441.114 ppb	165,921.035 ppb	100.334 %
Concentration per Run 2	95.617 %	98.016 %	0.015 ppb	15,812.998 ppb	45,389.010 ppb	19.051 ppb	5,572.527 ppb	172,396.510 ppb	101.503 %
Concentration per Run 3	95.951 %	101.587 %	0.017 ppb	15,406.447 ppb	43,637.901 ppb	21.021 ppb	5,722.475 ppb	168,449.645 ppb	101.835 %
Concentration RSD	0.2 %	7.8 %	11.0 %	5.3 %	4.0 %	7.3 %	2.5 %	1.9 %	0.8 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	94.835 %	0.163 ppb	0.155 ppb	941.597 ppb	2,779.374 ppb	0.254 ppb	1.834 ppb	0.202 ppb	0.535 ppb
Concentration per Run 1	95.527 %	0.163 ppb	0.072 ppb	938.368 ppb	2,757.858 ppb	0.260 ppb	1.770 ppb	0.192 ppb	0.660 ppb
Concentration per Run 2	93.374 %	0.096 ppb	0.448 ppb	958.936 ppb	2,828.331 ppb	0.284 ppb	1.720 ppb	0.190 ppb	0.527 ppb
Concentration per Run 3	95.604 %	0.229 ppb	-0.054 ppb	927.486 ppb	2,751.934 ppb	0.217 ppb	2.013 ppb	0.224 ppb	0.420 ppb
Concentration RSD	1.3 %	40.9 %	168.4 %	1.7 %	1.5 %	13.5 %	8.6 %	9.3 %	22.5 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	94.946 %	94.782 %	31.126 ppb	0.812 ppb	362.485 ppb	0.848 ppb	89.168 %	89.512 %	0.002 ppb
Concentration per Run 1	93.842 %	92.928 %	31.810 ppb	0.883 ppb	358.572 ppb	0.790 ppb	86.629 %	91.299 %	0.000 ppb
Concentration per Run 2	94.215 %	94.877 %	30.296 ppb	1.095 ppb	362.709 ppb	0.934 ppb	90.107 %	87.769 %	0.001 ppb
Concentration per Run 3	96.780 %	96.542 %	31.273 ppb	0.457 ppb	366.175 ppb	0.821 ppb	90.768 %	89.467 %	0.005 ppb
Concentration RSD	1.7 %	1.9 %	2.5 %	40.1 %	1.1 %	8.9 %	2.5 %	2.0 %	125.5 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.002 ppb	93.104 %	92.220 %	1.276 ppb	603.512 ppb	98.126 %	97.887 %	100.660 %	98.173 %
Concentration per Run 1	-0.001 ppb	92.850 %	93.629 %	1.183 ppb	586.884 ppb	97.093 %	97.986 %	98.421 %	97.872 %
Concentration per Run 2	0.003 ppb	93.143 %	90.155 %	1.339 ppb	612.122 ppb	97.100 %	97.451 %	101.644 %	97.637 %
Concentration per Run 3	0.003 ppb	93.319 %	92.875 %	1.306 ppb	611.530 ppb	100.186 %	98.225 %	101.916 %	99.011 %
Concentration RSD	111.9 %	0.3 %	2.0 %	6.4 %	2.4 %	1.8 %	0.4 %	1.9 %	0.7 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.019 ppb	10.955 ppb	91.842 %	89.937 %
Concentration per Run 1	0.008 ppb	10.781 ppb	91.785 %	91.447 %
Concentration per Run 2	0.022 ppb	11.087 ppb	92.210 %	88.758 %
Concentration per Run 3	0.026 ppb	10.996 ppb	91.531 %	89.607 %
Concentration RSD	51.5 %	1.4 %	0.4 %	1.5 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index: 36 User name ALPHALAB\ICPMSRQ Comment <Comment>
Analysis label: L2373323-01 6020SL Rack 1
Analysis started at: 12/15/2023 8:53:29 AM Vial 17

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	156.100 %	153.969 %	0.005 ppb	93,058.451 ppb	22,197.294 ppb	46.984 ppb	8,639.728 ppb	95,293.038 ppb	94.459 %
Concentration per Run 1	157.366 %	156.350 %	0.005 ppb	91,843.409 ppb	22,087.004 ppb	47.796 ppb	8,461.561 ppb	97,033.053 ppb	94.118 %
Concentration per Run 2	156.645 %	153.572 %	0.003 ppb	92,977.049 ppb	22,127.543 ppb	54.243 ppb	8,586.036 ppb	93,137.461 ppb	94.583 %
Concentration per Run 3	154.288 %	151.985 %	0.006 ppb	94,354.894 ppb	22,377.336 ppb	38.912 ppb	8,871.588 ppb	95,708.601 ppb	94.678 %
Concentration RSD	1.0 %	1.4 %	28.1 %	1.4 %	0.7 %	16.4 %	2.4 %	2.1 %	0.3 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	93.105 %	0.266 ppb	-0.760 ppb	461.020 ppb	100.582 ppb	0.112 ppb	0.568 ppb	0.378 ppb	1.885 ppb
Concentration per Run 1	94.951 %	0.274 ppb	-0.772 ppb	452.866 ppb	98.642 ppb	0.135 ppb	0.558 ppb	0.465 ppb	1.945 ppb
Concentration per Run 2	93.144 %	0.241 ppb	-0.802 ppb	461.557 ppb	108.873 ppb	0.094 ppb	0.532 ppb	0.337 ppb	1.863 ppb
Concentration per Run 3	91.221 %	0.284 ppb	-0.706 ppb	468.637 ppb	94.231 ppb	0.108 ppb	0.613 ppb	0.333 ppb	1.845 ppb
Concentration RSD	2.0 %	8.5 %	6.5 %	1.7 %	7.5 %	18.9 %	7.3 %	19.8 %	2.8 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	94.948 %	98.171 %	0.350 ppb	0.135 ppb	5,742.954 ppb	0.184 ppb	85.781 %	86.831 %	0.001 ppb
Concentration per Run 1	95.154 %	98.601 %	0.320 ppb	0.061 ppb	5,590.203 ppb	0.161 ppb	86.399 %	88.873 %	-0.001 ppb
Concentration per Run 2	94.893 %	97.900 %	0.380 ppb	0.137 ppb	5,798.107 ppb	0.187 ppb	86.324 %	85.774 %	0.001 ppb
Concentration per Run 3	94.797 %	98.011 %	0.350 ppb	0.206 ppb	5,840.553 ppb	0.204 ppb	84.619 %	85.846 %	0.002 ppb
Concentration RSD	0.2 %	0.4 %	8.5 %	53.8 %	2.3 %	11.6 %	1.2 %	2.0 %	277.1 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.003 ppb	85.963 %	88.892 %	0.103 ppb	7,436.362 ppb	94.394 %	95.911 %	95.799 %	96.989 %
Concentration per Run 1	0.008 ppb	85.661 %	90.963 %	0.089 ppb	7,517.952 ppb	94.356 %	97.316 %	95.089 %	97.846 %
Concentration per Run 2	-0.001 ppb	86.100 %	87.496 %	0.105 ppb	6,996.780 ppb	96.217 %	94.526 %	96.336 %	97.365 %
Concentration per Run 3	0.001 ppb	86.127 %	88.217 %	0.115 ppb	7,794.355 ppb	92.608 %	95.890 %	95.971 %	95.755 %
Concentration RSD	154.3 %	0.3 %	2.1 %	12.4 %	5.4 %	1.9 %	1.5 %	0.7 %	1.1 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.014 ppb	0.207 ppb	86.250 %	86.798 %
Concentration per Run 1	0.003 ppb	0.202 ppb	86.315 %	88.191 %
Concentration per Run 2	0.019 ppb	0.213 ppb	85.340 %	86.237 %
Concentration per Run 3	0.020 ppb	0.206 ppb	87.094 %	85.966 %
Concentration RSD	70.9 %	2.8 %	1.0 %	1.4 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index: 37 User name ALPHALAB\ICPMSRQ Comment <Comment>
Analysis label: L2373323-03 6020SL Rack 1
Analysis started at: 12/15/2023 8:58:09 AM Vial 18

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	127.926 %	129.365 %	0.008 ppb	125,793.005 ppb	31,459.161 ppb	16.408 ppb	15,126.950 ppb	120,517.121 ppb	90.574 %
Concentration per Run 1	130.536 %	128.175 %	0.004 ppb	127,665.274 ppb	32,026.946 ppb	19.832 ppb	15,205.261 ppb	120,046.225 ppb	92.470 %
Concentration per Run 2	127.769 %	122.619 %	0.010 ppb	131,715.427 ppb	32,685.612 ppb	22.855 ppb	15,471.863 ppb	124,543.463 ppb	90.239 %
Concentration per Run 3	125.473 %	137.302 %	0.011 ppb	117,998.313 ppb	29,664.925 ppb	6.537 ppb	14,703.727 ppb	116,961.676 ppb	89.013 %
Concentration RSD	2.0 %	5.7 %	42.2 %	5.6 %	5.0 %	52.9 %	2.6 %	3.2 %	1.9 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	83.929 %	1.158 ppb	-0.694 ppb	1,219.658 ppb	199.146 ppb	0.279 ppb	1.618 ppb	0.480 ppb	3.396 ppb
Concentration per Run 1	83.186 %	1.094 ppb	-0.685 ppb	1,238.230 ppb	214.447 ppb	0.292 ppb	1.717 ppb	0.427 ppb	3.505 ppb
Concentration per Run 2	83.071 %	1.173 ppb	-0.690 ppb	1,211.819 ppb	192.834 ppb	0.239 ppb	1.511 ppb	0.513 ppb	3.320 ppb
Concentration per Run 3	85.531 %	1.206 ppb	-0.706 ppb	1,208.925 ppb	190.159 ppb	0.307 ppb	1.628 ppb	0.501 ppb	3.364 ppb
Concentration RSD	1.7 %	5.0 %	1.6 %	1.3 %	6.7 %	12.9 %	6.4 %	9.7 %	2.8 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	90.630 %	89.369 %	1.634 ppb	0.345 ppb	13,337.207 ppb	0.302 ppb	81.535 %	81.827 %	0.001 ppb
Concentration per Run 1	92.525 %	87.736 %	1.906 ppb	0.276 ppb	13,494.912 ppb	0.293 ppb	84.073 %	80.942 %	0.001 ppb
Concentration per Run 2	90.451 %	90.586 %	1.594 ppb	0.367 ppb	13,080.483 ppb	0.316 ppb	80.608 %	83.028 %	0.001 ppb
Concentration per Run 3	88.914 %	89.784 %	1.401 ppb	0.392 ppb	13,436.227 ppb	0.298 ppb	79.924 %	81.510 %	0.001 ppb
Concentration RSD	2.0 %	1.6 %	15.6 %	17.8 %	1.7 %	4.0 %	2.7 %	1.3 %	52.7 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.001 ppb	82.496 %	86.402 %	0.203 ppb	12,893.337 ppb	90.128 %	90.573 %	91.428 %	93.950 %
Concentration per Run 1	0.003 ppb	83.681 %	84.219 %	0.220 ppb	13,064.170 ppb	91.233 %	88.512 %	91.992 %	92.809 %
Concentration per Run 2	0.001 ppb	81.800 %	88.755 %	0.194 ppb	12,739.199 ppb	90.249 %	90.581 %	91.155 %	95.036 %
Concentration per Run 3	-0.001 ppb	82.008 %	86.231 %	0.196 ppb	12,876.643 ppb	88.903 %	92.627 %	91.137 %	94.005 %
Concentration RSD	141.1 %	1.3 %	2.6 %	7.2 %	1.3 %	1.3 %	2.3 %	0.5 %	1.2 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.011 ppb	0.064 ppb	81.511 %	81.832 %
Concentration per Run 1	0.000 ppb	0.061 ppb	81.166 %	81.634 %
Concentration per Run 2	0.015 ppb	0.067 ppb	82.535 %	81.978 %
Concentration per Run 3	0.017 ppb	0.063 ppb	80.832 %	81.884 %
Concentration RSD	86.3 %	4.7 %	1.1 %	0.2 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index:	38	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	L2373323-05 6020SL	Rack	1		
Analysis started at:	12/15/2023 9:02:50 AM	Vial	19		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	138.923 %	145.900 %	0.004 ppb	151,983.461 ppb	29,222.483 ppb	37.018 ppb	9,698.290 ppb	113,632.980 ppb	88.547 %
Concentration per Run 1	139.894 %	153.572 %	0.005 ppb	147,174.406 ppb	28,528.764 ppb	31.319 ppb	9,393.430 ppb	119,726.922 ppb	89.655 %
Concentration per Run 2	139.541 %	146.429 %	0.004 ppb	151,968.388 ppb	29,216.566 ppb	45.181 ppb	9,772.774 ppb	113,289.653 ppb	86.836 %
Concentration per Run 3	137.334 %	137.699 %	0.003 ppb	156,807.587 ppb	29,922.118 ppb	34.555 ppb	9,928.667 ppb	107,882.365 ppb	89.152 %
Concentration RSD	1.0 %	5.4 %	31.0 %	3.2 %	2.4 %	19.6 %	2.8 %	5.2 %	1.7 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	87.338 %	0.289 ppb	-0.776 ppb	1,144.263 ppb	705.283 ppb	0.147 ppb	0.919 ppb	0.400 ppb	2.759 ppb
Concentration per Run 1	88.953 %	0.248 ppb	-0.780 ppb	1,121.488 ppb	678.938 ppb	0.123 ppb	0.963 ppb	0.382 ppb	2.733 ppb
Concentration per Run 2	86.146 %	0.392 ppb	-0.764 ppb	1,168.071 ppb	724.228 ppb	0.144 ppb	0.934 ppb	0.377 ppb	2.922 ppb
Concentration per Run 3	86.915 %	0.228 ppb	-0.784 ppb	1,143.230 ppb	712.684 ppb	0.175 ppb	0.860 ppb	0.440 ppb	2.622 ppb
Concentration RSD	1.7 %	31.1 %	1.3 %	2.0 %	3.3 %	17.6 %	5.8 %	8.7 %	5.5 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	84.818 %	87.910 %	3.258 ppb	0.173 ppb	8,853.614 ppb	4.253 ppb	77.446 %	80.874 %	0.001 ppb
Concentration per Run 1	83.812 %	89.575 %	3.311 ppb	0.220 ppb	8,127.157 ppb	4.418 ppb	76.885 %	82.828 %	0.000 ppb
Concentration per Run 2	85.785 %	84.405 %	3.081 ppb	0.068 ppb	9,383.675 ppb	4.370 ppb	78.307 %	80.368 %	-0.001 ppb
Concentration per Run 3	84.858 %	89.751 %	3.381 ppb	0.231 ppb	9,050.009 ppb	3.970 ppb	77.145 %	79.426 %	0.002 ppb
Concentration RSD	1.2 %	3.5 %	4.8 %	52.6 %	7.4 %	5.8 %	1.0 %	2.2 %	227.0 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	-0.001 ppb	77.426 %	84.361 %	0.311 ppb	10,400.817 ppb	86.513 %	90.017 %	86.623 %	93.469 %
Concentration per Run 1	-0.001 ppb	76.887 %	86.110 %	0.308 ppb	10,148.454 ppb	84.011 %	92.367 %	86.595 %	95.157 %
Concentration per Run 2	-0.001 ppb	78.096 %	83.264 %	0.326 ppb	10,571.284 ppb	88.178 %	89.254 %	88.761 %	93.732 %
Concentration per Run 3	-0.001 ppb	77.296 %	83.708 %	0.298 ppb	10,482.714 ppb	87.350 %	88.430 %	84.514 %	91.518 %
Concentration RSD	0.0 %	0.8 %	1.8 %	4.4 %	2.1 %	2.5 %	2.3 %	2.5 %	2.0 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.011 ppb	0.062 ppb	79.084 %	84.046 %
Concentration per Run 1	0.000 ppb	0.062 ppb	79.011 %	85.230 %
Concentration per Run 2	0.011 ppb	0.061 ppb	79.821 %	83.827 %
Concentration per Run 3	0.022 ppb	0.063 ppb	78.419 %	83.081 %
Concentration RSD	96.8 %	2.0 %	0.9 %	1.3 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index: 39
Analysis label: L2373323-06 6020SL
Analysis started at: 12/15/2023 9:07:30 AM
User name ALPHALAB\ICPMSRQ
Rack 1
Vial 20
Comment <Comment>

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	116.599 %	119.841 %	0.008 ppb	120,912.238 ppb	30,045.966 ppb	11.965 ppb	13,938.714 ppb	113,756.788 ppb	85.762 %
Concentration per Run 1	116.549 %	129.762 %	0.013 ppb	113,956.202 ppb	28,288.363 ppb	10.366 ppb	13,174.130 ppb	105,705.780 ppb	85.101 %
Concentration per Run 2	117.916 %	119.841 %	0.005 ppb	120,638.188 ppb	29,999.982 ppb	13.584 ppb	13,861.394 ppb	113,513.189 ppb	86.767 %
Concentration per Run 3	115.332 %	109.921 %	0.005 ppb	128,142.324 ppb	31,849.553 ppb	11.944 ppb	14,780.616 ppb	122,051.394 ppb	85.418 %
Concentration RSD	1.1 %	8.3 %	59.1 %	5.9 %	5.9 %	13.4 %	5.8 %	7.2 %	1.0 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	88.030 %	1.191 ppb	-0.693 ppb	1,110.172 ppb	194.145 ppb	0.238 ppb	1.466 ppb	0.512 ppb	4.322 ppb
Concentration per Run 1	91.952 %	1.065 ppb	-0.702 ppb	1,066.715 ppb	191.976 ppb	0.255 ppb	1.404 ppb	0.454 ppb	4.264 ppb
Concentration per Run 2	87.723 %	1.207 ppb	-0.649 ppb	1,103.129 ppb	189.287 ppb	0.213 ppb	1.456 ppb	0.528 ppb	4.474 ppb
Concentration per Run 3	84.416 %	1.301 ppb	-0.729 ppb	1,160.671 ppb	201.172 ppb	0.245 ppb	1.538 ppb	0.553 ppb	4.227 ppb
Concentration RSD	4.3 %	10.0 %	5.8 %	4.3 %	3.2 %	9.2 %	4.6 %	10.0 %	3.1 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	83.011 %	86.472 %	1.480 ppb	0.070 ppb	13,052.508 ppb	0.321 ppb	74.897 %	78.574 %	0.000 ppb
Concentration per Run 1	84.046 %	87.385 %	1.441 ppb	0.060 ppb	12,630.965 ppb	0.313 ppb	75.746 %	80.409 %	-0.001 ppb
Concentration per Run 2	83.397 %	86.717 %	1.526 ppb	-0.044 ppb	13,148.522 ppb	0.340 ppb	75.483 %	77.688 %	-0.001 ppb
Concentration per Run 3	81.589 %	85.315 %	1.472 ppb	0.194 ppb	13,378.037 ppb	0.309 ppb	73.464 %	77.625 %	0.002 ppb
Concentration RSD	1.5 %	1.2 %	2.9 %	170.6 %	2.9 %	5.3 %	1.7 %	2.0 %	1,925.4 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.002 ppb	74.960 %	85.000 %	0.221 ppb	12,454.939 ppb	83.804 %	89.840 %	84.674 %	95.203 %
Concentration per Run 1	0.001 ppb	75.224 %	86.891 %	0.202 ppb	11,968.651 ppb	83.365 %	92.498 %	85.193 %	98.270 %
Concentration per Run 2	0.005 ppb	75.347 %	85.202 %	0.237 ppb	12,399.169 ppb	83.126 %	88.666 %	84.725 %	92.275 %
Concentration per Run 3	-0.001 ppb	74.310 %	82.907 %	0.223 ppb	12,996.996 ppb	84.922 %	88.356 %	84.103 %	95.063 %
Concentration RSD	145.7 %	0.8 %	2.4 %	8.0 %	4.1 %	1.2 %	2.6 %	0.6 %	3.2 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.007 ppb	0.063 ppb	76.935 %	82.381 %
Concentration per Run 1	-0.001 ppb	0.060 ppb	77.564 %	84.708 %
Concentration per Run 2	0.011 ppb	0.066 ppb	76.164 %	82.654 %
Concentration per Run 3	0.011 ppb	0.063 ppb	77.076 %	79.781 %
Concentration RSD	97.8 %	5.4 %	0.9 %	3.0 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index: 40 User name ALPHALAB\ICPMSRQ Comment <Comment>
Analysis label: CCV Rack 0
Analysis started at: 12/15/2023 9:12:11 AM Vial 9

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	78.903 %	73.545 %	61.016 ppb	6,331.245 ppb	6,604.286 ppb	67.822 ppb	6,615.614 ppb	6,595.150 ppb	81.759 %
Concentration per Run 1	80.236 %	76.587 %	60.612 ppb	6,520.657 ppb	6,745.801 ppb	78.212 ppb	6,766.545 ppb	7,247.631 ppb	83.068 %
Concentration per Run 2	78.517 %	72.619 %	61.285 ppb	6,210.145 ppb	6,451.988 ppb	75.322 ppb	6,592.359 ppb	6,475.791 ppb	82.667 %
Concentration per Run 3	77.956 %	71.428 %	61.151 ppb	6,262.933 ppb	6,615.070 ppb	49.934 ppb	6,487.937 ppb	6,062.028 ppb	79.542 %
Recovery Percentage 1			101.693 %	105.521 %	110.071 %	113.037 %	110.260 %	109.919 %	
Concentration RSD	1.5 %	3.7 %	0.6 %	2.6 %	2.2 %	22.9 %	2.1 %	9.1 %	2.4 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	88.863 %	64.690 ppb	62.109 ppb	63.397 ppb	6,363.949 ppb	62.852 ppb	62.794 ppb	62.616 ppb	64.233 ppb
Concentration per Run 1	87.415 %	67.440 ppb	62.199 ppb	65.197 ppb	6,582.598 ppb	63.797 ppb	64.586 ppb	64.239 ppb	65.522 ppb
Concentration per Run 2	89.491 %	61.449 ppb	62.252 ppb	62.713 ppb	6,292.632 ppb	64.158 ppb	62.254 ppb	62.708 ppb	63.917 ppb
Concentration per Run 3	89.683 %	65.181 ppb	61.876 ppb	62.282 ppb	6,216.616 ppb	60.600 ppb	61.543 ppb	60.902 ppb	63.260 ppb
Recovery Percentage 1		107.816 %	103.515 %	105.662 %	106.066 %	104.753 %	104.657 %	104.360 %	107.055 %
Concentration RSD	1.4 %	4.7 %	0.3 %	2.5 %	3.0 %	3.1 %	2.5 %	2.7 %	1.8 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	80.371 %	84.861 %	63.180 ppb	64.566 ppb	72.952 ppb	63.886 ppb	78.272 %	81.134 %	64.041 ppb
Concentration per Run 1	80.832 %	82.812 %	64.156 ppb	63.185 ppb	70.208 ppb	62.813 ppb	78.575 %	80.923 %	64.726 ppb
Concentration per Run 2	80.129 %	85.946 %	62.759 ppb	65.010 ppb	68.267 ppb	64.531 ppb	78.456 %	81.158 %	64.332 ppb
Concentration per Run 3	80.152 %	85.825 %	62.625 ppb	65.504 ppb	80.381 ppb	64.314 ppb	77.786 %	81.322 %	63.064 ppb
Recovery Percentage 1			105.300 %	107.611 %	121.586 %	106.477 %			106.734 %
Concentration RSD	0.5 %	2.1 %	1.3 %	1.9 %	8.9 %	1.5 %	0.5 %	0.2 %	1.4 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	63.464 ppb	79.014 %	85.924 %	65.685 ppb	67.567 ppb	84.671 %	89.050 %	85.178 %	92.595 %
Concentration per Run 1	63.771 ppb	79.590 %	84.178 %	67.538 ppb	65.964 ppb	82.931 %	88.060 %	83.546 %	91.760 %
Concentration per Run 2	62.606 ppb	77.821 %	86.548 %	65.659 ppb	65.271 ppb	87.190 %	88.712 %	86.139 %	92.775 %
Concentration per Run 3	64.014 ppb	79.631 %	87.046 %	63.857 ppb	71.465 ppb	83.893 %	90.377 %	85.850 %	93.251 %
Recovery Percentage 1	105.773 %			109.474 %	112.611 %				
Concentration RSD	1.2 %	1.3 %	1.8 %	2.8 %	5.0 %	2.6 %	1.3 %	1.7 %	0.8 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	64.345 ppb	65.119 ppb	84.295 %	85.944 %
Concentration per Run 1	64.407 ppb	64.371 ppb	85.968 %	86.939 %
Concentration per Run 2	64.875 ppb	66.566 ppb	82.331 %	84.239 %
Concentration per Run 3	63.754 ppb	64.419 ppb	84.584 %	86.655 %
Recovery Percentage 1	107.242 %	108.531 %		
Concentration RSD	0.9 %	1.9 %	2.2 %	1.7 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index: 41 User name ALPHALAB\ICPMSRQ Comment <Comment>
Analysis label: CCB Rack 0
Analysis started at: 12/15/2023 9:16:56 AM Vial 10

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	82.287 %	82.407 %	0.020 ppb	7.251 ppb	3.135 ppb	1.802 ppb	-9.404 ppb	17.688 ppb	80.498 %
Concentration per Run 1	82.980 %	87.302 %	0.019 ppb	7.045 ppb	2.470 ppb	-0.204 ppb	-7.045 ppb	27.178 ppb	81.754 %
Concentration per Run 2	82.242 %	76.984 %	0.017 ppb	8.118 ppb	4.201 ppb	0.765 ppb	-3.003 ppb	15.834 ppb	79.171 %
Concentration per Run 3	81.639 %	82.936 %	0.025 ppb	6.589 ppb	2.733 ppb	4.844 ppb	-18.165 ppb	10.053 ppb	80.571 %
Recovery Percentage 1			4.062 %	7.251 %	4.478 %	18.019 %	-9.404 %	17.688 %	
Concentration RSD	0.8 %	6.3 %	21.8 %	10.8 %	29.8 %	148.7 %	83.5 %	49.3 %	1.6 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	88.658 %	0.005 ppb	-0.084 ppb	0.085 ppb	10.797 ppb	0.011 ppb	0.385 ppb	0.079 ppb	0.285 ppb
Concentration per Run 1	90.875 %	0.013 ppb	-0.167 ppb	0.099 ppb	11.875 ppb	0.017 ppb	0.341 ppb	0.077 ppb	0.216 ppb
Concentration per Run 2	89.491 %	-0.003 ppb	-0.095 ppb	0.094 ppb	11.030 ppb	0.011 ppb	0.430 ppb	0.096 ppb	0.314 ppb
Concentration per Run 3	85.608 %	0.006 ppb	0.011 ppb	0.063 ppb	9.485 ppb	0.006 ppb	0.383 ppb	0.064 ppb	0.324 ppb
Recovery Percentage 1		0.104 %	-8.358 %	8.526 %	21.594 %	2.213 %	19.237 %	7.894 %	5.694 %
Concentration RSD	3.1 %	152.1 %	106.9 %	23.0 %	11.2 %	48.0 %	11.6 %	20.6 %	21.1 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	81.000 %	85.716 %	-0.014 ppb	0.034 ppb	0.395 ppb	0.196 ppb	81.527 %	84.199 %	0.020 ppb
Concentration per Run 1	81.065 %	86.936 %	-0.011 ppb	-0.033 ppb	0.638 ppb	0.195 ppb	81.413 %	85.089 %	0.018 ppb
Concentration per Run 2	82.642 %	85.676 %	-0.060 ppb	-0.028 ppb	0.319 ppb	0.208 ppb	82.958 %	83.270 %	0.025 ppb
Concentration per Run 3	79.293 %	84.537 %	0.028 ppb	0.163 ppb	0.227 ppb	0.185 ppb	80.209 %	84.237 %	0.017 ppb
Recovery Percentage 1			-2.844 %	0.681 %	78.974 %	9.796 %			5.110 %
Concentration RSD	2.1 %	1.4 %	312.3 %	329.2 %	54.5 %	6.0 %	1.7 %	1.1 %	21.2 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.008 ppb	80.862 %	88.302 %	0.033 ppb	0.394 ppb	85.670 %	90.364 %	85.186 %	93.595 %
Concentration per Run 1	0.014 ppb	82.218 %	88.297 %	0.029 ppb	0.631 ppb	86.488 %	91.435 %	86.778 %	94.028 %
Concentration per Run 2	0.010 ppb	80.195 %	88.850 %	0.030 ppb	0.270 ppb	85.490 %	89.900 %	85.565 %	94.395 %
Concentration per Run 3	0.001 ppb	80.172 %	87.759 %	0.038 ppb	0.282 ppb	85.033 %	89.755 %	83.215 %	92.364 %
Recovery Percentage 1				0.816 %	78.852 %				
Concentration RSD	76.4 %	1.5 %	0.6 %	14.6 %	52.1 %	0.9 %	1.0 %	2.1 %	1.2 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.303 ppb	0.020 ppb	85.872 %	90.435 %
Concentration per Run 1	0.188 ppb	0.023 ppb	86.563 %	93.452 %
Concentration per Run 2	0.360 ppb	0.019 ppb	84.965 %	89.330 %
Concentration per Run 3	0.362 ppb	0.017 ppb	86.089 %	88.522 %
Recovery Percentage 1	30.317 %	1.969 %		
Concentration RSD	33.0 %	14.9 %	1.0 %	2.9 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index: 42 User name ALPHALAB\ICPMSRQ Comment <Comment>
Analysis label: CCV Rack 0
Analysis started at: 12/15/2023 9:36:18 AM Vial 9

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	84.993 %	90.212 %	62.478 ppb	6,178.872 ppb	6,574.934 ppb	65.343 ppb	6,517.530 ppb	6,205.122 ppb	88.443 %
Concentration per Run 1	85.117 %	94.444 %	63.247 ppb	5,988.961 ppb	6,378.344 ppb	64.089 ppb	6,226.322 ppb	5,532.903 ppb	87.546 %
Concentration per Run 2	85.425 %	87.302 %	61.684 ppb	6,251.247 ppb	6,723.325 ppb	63.091 ppb	6,556.019 ppb	6,510.951 ppb	89.491 %
Concentration per Run 3	84.437 %	88.889 %	62.503 ppb	6,296.409 ppb	6,623.133 ppb	68.849 ppb	6,770.250 ppb	6,571.512 ppb	88.290 %
Recovery Percentage 1			104.130 %	102.981 %	109.582 %	108.905 %	108.626 %	103.419 %	
Concentration RSD	0.6 %	4.2 %	1.3 %	2.7 %	2.7 %	4.7 %	4.2 %	9.4 %	1.1 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	103.755 %	64.924 ppb	60.700 ppb	62.029 ppb	6,305.693 ppb	60.912 ppb	61.690 ppb	61.077 ppb	63.278 ppb
Concentration per Run 1	107.408 %	63.233 ppb	59.568 ppb	59.521 ppb	6,142.802 ppb	59.470 ppb	61.391 ppb	60.073 ppb	61.186 ppb
Concentration per Run 2	103.755 %	65.369 ppb	59.867 ppb	62.337 ppb	6,303.002 ppb	61.258 ppb	61.678 ppb	62.118 ppb	64.185 ppb
Concentration per Run 3	100.102 %	66.171 ppb	62.667 ppb	64.227 ppb	6,471.276 ppb	62.009 ppb	62.001 ppb	61.039 ppb	64.464 ppb
Recovery Percentage 1		108.207 %	101.167 %	103.381 %	105.095 %	101.521 %	102.817 %	101.794 %	105.464 %
Concentration RSD	3.5 %	2.3 %	2.8 %	3.8 %	2.6 %	2.1 %	0.5 %	1.7 %	2.9 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	86.677 %	91.804 %	62.927 ppb	64.387 ppb	65.861 ppb	64.261 ppb	84.678 %	89.258 %	62.728 ppb
Concentration per Run 1	85.371 %	94.502 %	61.763 ppb	67.910 ppb	63.161 ppb	63.052 ppb	85.117 %	90.301 %	61.850 ppb
Concentration per Run 2	87.550 %	91.226 %	63.207 ppb	62.043 ppb	64.647 ppb	64.587 ppb	85.538 %	88.904 %	62.786 ppb
Concentration per Run 3	87.108 %	89.683 %	63.810 ppb	63.207 ppb	69.774 ppb	65.142 ppb	83.380 %	88.569 %	63.547 ppb
Recovery Percentage 1			104.878 %	107.311 %	109.768 %	107.101 %			104.546 %
Concentration RSD	1.3 %	2.7 %	1.7 %	4.8 %	5.3 %	1.7 %	1.4 %	1.0 %	1.4 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	62.932 ppb	86.029 %	96.739 %	64.526 ppb	64.645 ppb	90.389 %	99.224 %	89.711 %	102.058 %
Concentration per Run 1	61.659 ppb	86.286 %	98.692 %	63.302 ppb	63.467 ppb	87.839 %	102.103 %	88.848 %	102.981 %
Concentration per Run 2	63.415 ppb	85.852 %	96.880 %	64.249 ppb	64.230 ppb	91.392 %	98.290 %	90.488 %	101.201 %
Concentration per Run 3	63.723 ppb	85.948 %	94.645 %	66.026 ppb	66.240 ppb	91.936 %	97.279 %	89.798 %	101.993 %
Recovery Percentage 1	104.887 %			107.543 %	107.742 %				
Concentration RSD	1.8 %	0.3 %	2.1 %	2.1 %	2.2 %	2.5 %	2.6 %	0.9 %	0.9 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	61.540 ppb	62.252 ppb	86.152 %	96.449 %
Concentration per Run 1	61.392 ppb	60.861 ppb	85.298 %	98.534 %
Concentration per Run 2	60.168 ppb	61.762 ppb	86.668 %	97.481 %
Concentration per Run 3	63.060 ppb	64.133 ppb	86.490 %	93.333 %
Recovery Percentage 1	102.567 %	103.753 %		
Concentration RSD	2.4 %	2.7 %	0.9 %	2.9 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index:	43	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	12/15/2023 9:41:03 AM	Vial	10		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	87.402 %	91.534 %	0.023 ppb	-2.214 ppb	1.949 ppb	2.552 ppb	-2.257 ppb	5.530 ppb	86.460 %
Concentration per Run 1	88.908 %	103.968 %	0.022 ppb	-4.001 ppb	4.336 ppb	4.144 ppb	7.534 ppb	17.440 ppb	87.018 %
Concentration per Run 2	87.460 %	86.508 %	0.026 ppb	-1.618 ppb	1.236 ppb	0.772 ppb	-10.280 ppb	-4.383 ppb	86.731 %
Concentration per Run 3	85.838 %	84.127 %	0.021 ppb	-1.024 ppb	0.276 ppb	2.739 ppb	-4.025 ppb	3.532 ppb	85.632 %
Recovery Percentage 1			4.590 %	-2.214 %	2.785 %	25.517 %	-2.257 %	5.530 %	
Concentration RSD	1.8 %	11.8 %	12.1 %	71.2 %	108.8 %	66.4 %	400.4 %	199.8 %	0.8 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	89.350 %	0.005 ppb	-0.048 ppb	0.056 ppb	10.740 ppb	0.009 ppb	0.462 ppb	0.086 ppb	0.306 ppb
Concentration per Run 1	88.261 %	0.005 ppb	-0.102 ppb	0.072 ppb	10.290 ppb	0.015 ppb	0.489 ppb	0.076 ppb	0.296 ppb
Concentration per Run 2	90.529 %	0.005 ppb	-0.018 ppb	0.038 ppb	10.654 ppb	0.007 ppb	0.481 ppb	0.128 ppb	0.314 ppb
Concentration per Run 3	89.261 %	0.005 ppb	-0.024 ppb	0.058 ppb	11.275 ppb	0.006 ppb	0.415 ppb	0.055 ppb	0.307 ppb
Recovery Percentage 1		0.100 %	-4.787 %	5.608 %	21.479 %	1.895 %	23.090 %	8.617 %	6.113 %
Concentration RSD	1.3 %	6.0 %	98.0 %	29.7 %	4.6 %	54.8 %	8.8 %	44.0 %	3.1 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	87.191 %	87.352 %	-0.047 ppb	0.091 ppb	0.083 ppb	0.177 ppb	87.653 %	88.766 %	0.025 ppb
Concentration per Run 1	90.270 %	85.709 %	-0.016 ppb	0.154 ppb	0.175 ppb	0.163 ppb	88.763 %	89.259 %	0.023 ppb
Concentration per Run 2	86.326 %	87.341 %	-0.025 ppb	0.065 ppb	0.048 ppb	0.168 ppb	88.518 %	88.186 %	0.025 ppb
Concentration per Run 3	84.975 %	89.006 %	-0.098 ppb	0.053 ppb	0.028 ppb	0.200 ppb	85.678 %	88.853 %	0.028 ppb
Recovery Percentage 1			-9.304 %	1.814 %	16.692 %	8.861 %			6.348 %
Concentration RSD	3.2 %	1.9 %	96.4 %	61.2 %	95.8 %	11.3 %	2.0 %	0.6 %	9.2 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.011 ppb	86.047 %	92.848 %	0.028 ppb	0.087 ppb	91.227 %	92.806 %	90.346 %	93.543 %
Concentration per Run 1	0.011 ppb	85.769 %	94.551 %	0.032 ppb	0.101 ppb	93.592 %	92.933 %	92.483 %	92.409 %
Concentration per Run 2	0.008 ppb	85.935 %	91.825 %	0.032 ppb	0.103 ppb	91.065 %	92.397 %	89.226 %	93.256 %
Concentration per Run 3	0.015 ppb	86.438 %	92.168 %	0.021 ppb	0.056 ppb	89.022 %	93.089 %	89.330 %	94.964 %
Recovery Percentage 1				0.703 %	17.383 %				
Concentration RSD	29.9 %	0.4 %	1.6 %	21.8 %	30.6 %	2.5 %	0.4 %	2.0 %	1.4 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.321 ppb	0.022 ppb	89.658 %	91.470 %
Concentration per Run 1	0.206 ppb	0.029 ppb	89.487 %	92.134 %
Concentration per Run 2	0.374 ppb	0.019 ppb	89.882 %	91.898 %
Concentration per Run 3	0.383 ppb	0.017 ppb	89.604 %	90.379 %
Recovery Percentage 1	32.095 %	2.171 %		
Concentration RSD	31.2 %	27.8 %	0.2 %	1.0 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index:	44	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	WG1863563-1 2008SL	Rack	1		
Analysis started at:	12/15/2023 9:52:36 AM	Vial	21		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	90.146 %	100.529 %	0.014 ppb	0.907 ppb	0.718 ppb	4.440 ppb	-2.933 ppb	20.018 ppb	90.469 %
Concentration per Run 1	91.318 %	99.206 %	0.012 ppb	3.030 ppb	-0.304 ppb	5.531 ppb	-1.872 ppb	20.941 ppb	89.885 %
Concentration per Run 2	89.697 %	106.349 %	0.013 ppb	-0.168 ppb	0.813 ppb	6.257 ppb	-4.262 ppb	29.320 ppb	90.229 %
Concentration per Run 3	89.424 %	96.032 %	0.017 ppb	-0.142 ppb	1.645 ppb	1.530 ppb	-2.665 ppb	9.792 ppb	91.294 %
Concentration RSD	1.1 %	5.3 %	19.2 %	202.8 %	136.2 %	57.3 %	41.5 %	48.9 %	0.8 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	98.257 %	0.021 ppb	-0.748 ppb	0.183 ppb	2.764 ppb	0.028 ppb	0.042 ppb	0.055 ppb	0.164 ppb
Concentration per Run 1	102.140 %	0.002 ppb	-0.720 ppb	0.193 ppb	1.213 ppb	0.024 ppb	0.063 ppb	0.065 ppb	0.114 ppb
Concentration per Run 2	98.680 %	0.018 ppb	-0.761 ppb	0.188 ppb	3.439 ppb	0.032 ppb	0.037 ppb	0.067 ppb	0.186 ppb
Concentration per Run 3	93.951 %	0.042 ppb	-0.764 ppb	0.170 ppb	3.640 ppb	0.029 ppb	0.025 ppb	0.034 ppb	0.193 ppb
Concentration RSD	4.2 %	97.2 %	3.3 %	6.7 %	48.7 %	13.0 %	46.7 %	33.0 %	26.5 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	89.934 %	94.067 %	-0.078 ppb	0.000 ppb	0.067 ppb	0.528 ppb	89.610 %	93.125 %	0.003 ppb
Concentration per Run 1	91.622 %	97.189 %	-0.095 ppb	-0.027 ppb	0.097 ppb	0.504 ppb	89.592 %	96.347 %	0.002 ppb
Concentration per Run 2	90.047 %	89.390 %	-0.093 ppb	-0.038 ppb	0.058 ppb	0.529 ppb	89.009 %	92.075 %	0.003 ppb
Concentration per Run 3	88.134 %	95.622 %	-0.046 ppb	0.063 ppb	0.046 ppb	0.552 ppb	90.229 %	90.951 %	0.003 ppb
Concentration RSD	1.9 %	4.4 %	35.6 %	11,523.1 %	40.3 %	4.6 %	0.7 %	3.1 %	21.1 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.004 ppb	89.246 %	98.475 %	0.024 ppb	0.061 ppb	91.653 %	98.941 %	91.633 %	99.771 %
Concentration per Run 1	0.007 ppb	89.581 %	101.109 %	0.018 ppb	0.051 ppb	92.278 %	100.365 %	91.686 %	102.012 %
Concentration per Run 2	0.006 ppb	88.641 %	97.050 %	0.028 ppb	0.044 ppb	92.121 %	97.986 %	90.772 %	97.898 %
Concentration per Run 3	-0.001 ppb	89.517 %	97.264 %	0.027 ppb	0.088 ppb	90.559 %	98.471 %	92.441 %	99.403 %
Concentration RSD	98.3 %	0.6 %	2.3 %	24.4 %	38.5 %	1.0 %	1.3 %	0.9 %	2.1 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.048 ppb	0.008 ppb	91.325 %	98.217 %
Concentration per Run 1	0.024 ppb	0.007 ppb	91.154 %	99.789 %
Concentration per Run 2	0.058 ppb	0.008 ppb	89.865 %	98.174 %
Concentration per Run 3	0.062 ppb	0.009 ppb	92.958 %	96.688 %
Concentration RSD	43.7 %	14.3 %	1.7 %	1.6 %

Alpha ICPMSRQ Data

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Analysis index:	45	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	WG1863563-2d5 2008SL	Rack	1		
Analysis started at:	12/15/2023 9:57:17 AM	Vial	22		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	88.662 %	87.037 %	10.552 ppb	2,193.255 ppb	2,271.141 ppb	456.945 ppb	2,148.954 ppb	1,911.044 ppb	89.268 %
Concentration per Run 1	88.024 %	86.508 %	10.608 ppb	2,178.918 ppb	2,320.864 ppb	420.592 ppb	2,129.186 ppb	2,051.631 ppb	88.694 %
Concentration per Run 2	89.881 %	92.857 %	10.439 ppb	2,121.332 ppb	2,158.390 ppb	451.091 ppb	2,131.171 ppb	1,916.317 ppb	89.483 %
Concentration per Run 3	88.080 %	81.746 %	10.609 ppb	2,279.516 ppb	2,334.169 ppb	499.151 ppb	2,186.504 ppb	1,765.184 ppb	89.626 %
Concentration RSD	1.2 %	6.4 %	0.9 %	3.7 %	4.3 %	8.7 %	1.5 %	7.5 %	0.6 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	93.759 %	111.030 ppb	42.663 ppb	105.341 ppb	226.058 ppb	102.891 ppb	103.060 ppb	50.890 ppb	102.152 ppb
Concentration per Run 1	95.912 %	108.631 ppb	41.201 ppb	102.486 ppb	224.103 ppb	100.339 ppb	101.031 ppb	50.393 ppb	99.001 ppb
Concentration per Run 2	93.105 %	111.426 ppb	42.948 ppb	105.501 ppb	227.290 ppb	103.371 ppb	103.891 ppb	50.670 ppb	102.883 ppb
Concentration per Run 3	92.259 %	113.032 ppb	43.840 ppb	108.035 ppb	226.783 ppb	104.964 ppb	104.259 ppb	51.606 ppb	104.571 ppb
Concentration RSD	2.0 %	2.0 %	3.1 %	2.6 %	0.8 %	2.3 %	1.7 %	1.2 %	2.8 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	88.428 %	92.762 %	23.498 ppb	23.792 ppb	208.785 ppb	207.634 ppb	87.998 %	88.707 %	10.369 ppb
Concentration per Run 1	87.895 %	94.400 %	22.456 ppb	24.518 ppb	200.970 ppb	206.539 ppb	87.109 %	90.350 %	10.096 ppb
Concentration per Run 2	88.532 %	93.225 %	24.054 ppb	23.937 ppb	211.293 ppb	205.710 ppb	89.235 %	86.918 %	10.498 ppb
Concentration per Run 3	88.859 %	90.662 %	23.985 ppb	22.922 ppb	214.091 ppb	210.654 ppb	87.651 %	88.854 %	10.513 ppb
Concentration RSD	0.6 %	2.1 %	3.8 %	3.4 %	3.3 %	1.3 %	1.3 %	1.9 %	2.3 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	10.787 ppb	91.840 %	95.673 %	100.218 ppb	414.459 ppb	92.521 %	95.763 %	92.397 %	96.230 %
Concentration per Run 1	10.861 ppb	91.640 %	96.632 %	99.257 ppb	406.688 ppb	90.550 %	97.785 %	92.490 %	97.549 %
Concentration per Run 2	10.960 ppb	92.126 %	93.958 %	101.224 ppb	425.237 ppb	95.214 %	93.681 %	90.690 %	95.354 %
Concentration per Run 3	10.541 ppb	91.755 %	96.429 %	100.174 ppb	411.452 ppb	91.799 %	95.823 %	94.013 %	95.788 %
Concentration RSD	2.0 %	0.3 %	1.6 %	1.0 %	2.3 %	2.6 %	2.1 %	1.8 %	1.2 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	25.149 ppb	110.819 ppb	89.027 %	92.371 %
Concentration per Run 1	24.551 ppb	108.497 ppb	87.942 %	93.740 %
Concentration per Run 2	25.264 ppb	112.113 ppb	88.467 %	92.242 %
Concentration per Run 3	25.632 ppb	111.848 ppb	90.672 %	91.131 %
Concentration RSD	2.2 %	1.8 %	1.6 %	1.4 %

Alpha ICPMSRQ Data

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Analysis index:	46	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	WG1863563-3d10 2008SL	Rack	1		
Analysis started at:	12/15/2023 10:01:58 AM	Vial	24		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	88.698 %	87.698 %	5.280 ppb	7,486.019 ppb	1,291.315 ppb	222.734 ppb	1,238.735 ppb	2,671.795 ppb	90.274 %
Concentration per Run 1	90.253 %	88.492 %	5.176 ppb	7,485.169 ppb	1,301.221 ppb	236.314 ppb	1,230.810 ppb	2,853.544 ppb	90.862 %
Concentration per Run 2	87.588 %	81.746 %	5.441 ppb	7,615.944 ppb	1,311.897 ppb	218.326 ppb	1,240.154 ppb	2,250.247 ppb	89.828 %
Concentration per Run 3	88.253 %	92.857 %	5.221 ppb	7,356.943 ppb	1,260.828 ppb	213.562 ppb	1,245.240 ppb	2,911.593 ppb	90.133 %
Concentration RSD	1.6 %	6.4 %	2.7 %	1.7 %	2.1 %	5.4 %	0.6 %	13.7 %	0.6 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	92.541 %	54.978 ppb	21.193 ppb	57.714 ppb	121.288 ppb	51.821 ppb	52.359 ppb	25.772 ppb	52.863 ppb
Concentration per Run 1	92.529 %	54.714 ppb	21.194 ppb	57.562 ppb	116.820 ppb	50.629 ppb	52.782 ppb	25.101 ppb	52.126 ppb
Concentration per Run 2	93.682 %	53.756 ppb	20.686 ppb	56.757 ppb	119.136 ppb	51.231 ppb	51.914 ppb	25.604 ppb	51.924 ppb
Concentration per Run 3	91.414 %	56.463 ppb	21.701 ppb	58.824 ppb	127.907 ppb	53.602 ppb	52.382 ppb	26.612 ppb	54.540 ppb
Concentration RSD	1.2 %	2.5 %	2.4 %	1.8 %	4.8 %	3.0 %	0.8 %	3.0 %	2.8 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	91.050 %	92.209 %	12.540 ppb	12.227 ppb	109.111 ppb	105.480 ppb	88.132 %	88.829 %	5.151 ppb
Concentration per Run 1	92.822 %	92.982 %	12.241 ppb	11.528 ppb	106.703 ppb	103.286 ppb	86.463 %	89.205 %	5.139 ppb
Concentration per Run 2	90.197 %	94.003 %	12.154 ppb	12.487 ppb	109.111 ppb	106.591 ppb	87.630 %	88.664 %	5.145 ppb
Concentration per Run 3	90.130 %	89.642 %	13.225 ppb	12.667 ppb	111.518 ppb	106.563 ppb	90.303 %	88.617 %	5.168 ppb
Concentration RSD	1.7 %	2.5 %	4.7 %	5.0 %	2.2 %	1.8 %	2.2 %	0.4 %	0.3 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	5.418 ppb	91.305 %	95.747 %	51.086 ppb	202.980 ppb	94.141 %	95.542 %	92.790 %	97.014 %
Concentration per Run 1	5.279 ppb	90.371 %	95.600 %	50.819 ppb	199.250 ppb	95.069 %	96.835 %	90.404 %	97.777 %
Concentration per Run 2	5.542 ppb	91.990 %	96.301 %	50.948 ppb	208.103 ppb	92.666 %	94.608 %	93.744 %	97.303 %
Concentration per Run 3	5.434 ppb	91.554 %	95.338 %	51.490 ppb	201.586 ppb	94.689 %	95.184 %	94.221 %	95.961 %
Concentration RSD	2.4 %	0.9 %	0.5 %	0.7 %	2.3 %	1.4 %	1.2 %	2.2 %	1.0 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	12.467 ppb	56.221 ppb	90.830 %	91.521 %
Concentration per Run 1	12.122 ppb	55.139 ppb	90.575 %	93.361 %
Concentration per Run 2	12.486 ppb	56.324 ppb	93.362 %	90.385 %
Concentration per Run 3	12.794 ppb	57.200 ppb	88.553 %	90.818 %
Concentration RSD	2.7 %	1.8 %	2.7 %	1.8 %

Alpha ICPMSRQ Data

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Analysis index: 47
Analysis label: WG1863563-4 2008SL
Analysis started at: 12/15/2023 10:06:41 AM
User name ALPHALAB\ICPMSRQ
Rack 1
Vial 25
Comment <Comment>

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	85.208 %	78.571 %	0.030 ppb	66,244.898 ppb	1,658.720 ppb	11.800 ppb	1,222.116 ppb	15,274.762 ppb	92.361 %
Concentration per Run 1	85.794 %	76.984 %	0.046 ppb	67,614.718 ppb	1,689.488 ppb	9.638 ppb	1,240.457 ppb	15,013.521 ppb	90.781 %
Concentration per Run 2	85.434 %	79.365 %	0.023 ppb	66,391.518 ppb	1,652.990 ppb	17.419 ppb	1,227.657 ppb	16,070.442 ppb	94.840 %
Concentration per Run 3	84.396 %	79.365 %	0.020 ppb	64,728.457 ppb	1,633.683 ppb	8.342 ppb	1,198.235 ppb	14,740.322 ppb	91.461 %
Concentration RSD	0.9 %	1.7 %	48.8 %	2.2 %	1.7 %	41.6 %	1.8 %	4.6 %	2.4 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	93.643 %	0.043 ppb	-0.730 ppb	52.903 ppb	84.048 ppb	0.057 ppb	0.234 ppb	0.086 ppb	10.717 ppb
Concentration per Run 1	93.105 %	0.067 ppb	-0.673 ppb	52.727 ppb	82.955 ppb	0.068 ppb	0.243 ppb	0.119 ppb	11.246 ppb
Concentration per Run 2	91.414 %	0.035 ppb	-0.752 ppb	53.179 ppb	90.053 ppb	0.055 ppb	0.234 ppb	0.059 ppb	10.541 ppb
Concentration per Run 3	96.412 %	0.026 ppb	-0.766 ppb	52.802 ppb	79.136 ppb	0.050 ppb	0.227 ppb	0.080 ppb	10.364 ppb
Concentration RSD	2.7 %	49.9 %	6.8 %	0.5 %	6.6 %	16.7 %	3.5 %	35.5 %	4.4 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	92.341 %	91.252 %	1.865 ppb	0.075 ppb	64.919 ppb	24.911 ppb	88.194 %	86.553 %	0.006 ppb
Concentration per Run 1	91.859 %	88.042 %	1.830 ppb	0.049 ppb	66.265 ppb	25.297 ppb	87.842 %	86.447 %	0.004 ppb
Concentration per Run 2	92.897 %	94.604 %	1.814 ppb	0.136 ppb	64.402 ppb	24.392 ppb	89.082 %	85.868 %	0.006 ppb
Concentration per Run 3	92.266 %	91.109 %	1.950 ppb	0.041 ppb	64.090 ppb	25.044 ppb	87.659 %	87.345 %	0.008 ppb
Concentration RSD	0.6 %	3.6 %	4.0 %	70.0 %	1.8 %	1.9 %	0.9 %	0.9 %	26.8 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.015 ppb	88.038 %	88.780 %	0.831 ppb	0.519 ppb	94.407 %	93.315 %	96.172 %	95.223 %
Concentration per Run 1	0.013 ppb	89.045 %	89.650 %	0.663 ppb	0.581 ppb	94.108 %	93.820 %	95.660 %	93.776 %
Concentration per Run 2	0.026 ppb	86.572 %	86.696 %	0.960 ppb	0.412 ppb	92.979 %	92.878 %	95.608 %	96.069 %
Concentration per Run 3	0.005 ppb	88.497 %	89.994 %	0.870 ppb	0.563 ppb	96.135 %	93.248 %	97.249 %	95.824 %
Concentration RSD	73.4 %	1.5 %	2.0 %	18.4 %	17.9 %	1.7 %	0.5 %	1.0 %	1.3 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.033 ppb	0.031 ppb	89.072 %	89.631 %
Concentration per Run 1	0.020 ppb	0.037 ppb	89.413 %	90.016 %
Concentration per Run 2	0.039 ppb	0.028 ppb	87.385 %	90.318 %
Concentration per Run 3	0.042 ppb	0.029 ppb	90.419 %	88.560 %
Concentration RSD	36.3 %	16.6 %	1.7 %	1.0 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index:	48	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	L2372608-02 2008SL	Rack	1		
Analysis started at:	12/15/2023 10:11:20 AM	Vial	23		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	87.565 %	89.153 %	0.016 ppb	64,855.953 ppb	1,621.123 ppb	7.799 ppb	1,250.230 ppb	15,969.297 ppb	94.756 %
Concentration per Run 1	88.027 %	87.698 %	0.015 ppb	65,895.218 ppb	1,621.691 ppb	9.049 ppb	1,263.715 ppb	16,351.287 ppb	94.618 %
Concentration per Run 2	87.332 %	92.857 %	0.015 ppb	63,940.344 ppb	1,630.292 ppb	7.132 ppb	1,225.706 ppb	16,150.021 ppb	94.858 %
Concentration per Run 3	87.336 %	86.905 %	0.019 ppb	64,732.296 ppb	1,611.384 ppb	7.217 ppb	1,261.268 ppb	15,406.584 ppb	94.793 %
Concentration RSD	0.5 %	3.6 %	15.0 %	1.5 %	0.6 %	13.9 %	1.7 %	3.1 %	0.1 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	92.247 %	0.079 ppb	-0.689 ppb	55.159 ppb	89.076 ppb	0.042 ppb	0.188 ppb	0.065 ppb	10.862 ppb
Concentration per Run 1	93.144 %	0.082 ppb	-0.721 ppb	55.340 ppb	92.314 ppb	0.031 ppb	0.248 ppb	0.045 ppb	11.050 ppb
Concentration per Run 2	90.106 %	0.084 ppb	-0.664 ppb	55.967 ppb	87.677 ppb	0.051 ppb	0.145 ppb	0.061 ppb	11.075 ppb
Concentration per Run 3	93.490 %	0.073 ppb	-0.681 ppb	54.170 ppb	87.239 ppb	0.043 ppb	0.172 ppb	0.088 ppb	10.462 ppb
Concentration RSD	2.0 %	7.6 %	4.2 %	1.7 %	3.2 %	24.1 %	28.3 %	34.2 %	3.2 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	95.294 %	93.267 %	1.961 ppb	0.118 ppb	64.592 ppb	23.994 ppb	89.686 %	87.990 %	0.000 ppb
Concentration per Run 1	96.544 %	90.967 %	2.138 ppb	0.146 ppb	64.428 ppb	23.724 ppb	90.228 %	89.190 %	0.000 ppb
Concentration per Run 2	94.195 %	92.511 %	1.830 ppb	0.144 ppb	65.764 ppb	24.011 ppb	89.510 %	87.012 %	0.000 ppb
Concentration per Run 3	95.144 %	96.323 %	1.915 ppb	0.063 ppb	63.585 ppb	24.247 ppb	89.320 %	87.770 %	0.001 ppb
Concentration RSD	1.2 %	3.0 %	8.1 %	40.2 %	1.7 %	1.1 %	0.5 %	1.3 %	258.7 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.019 ppb	89.362 %	91.167 %	0.290 ppb	0.561 ppb	93.997 %	93.759 %	96.490 %	95.720 %
Concentration per Run 1	0.016 ppb	89.357 %	93.811 %	0.223 ppb	0.518 ppb	96.768 %	95.101 %	98.459 %	98.244 %
Concentration per Run 2	0.022 ppb	89.121 %	90.229 %	0.309 ppb	0.618 ppb	93.673 %	93.452 %	96.120 %	92.030 %
Concentration per Run 3	0.019 ppb	89.608 %	89.461 %	0.338 ppb	0.547 ppb	91.551 %	92.723 %	94.892 %	96.888 %
Concentration RSD	15.3 %	0.3 %	2.5 %	20.5 %	9.1 %	2.8 %	1.3 %	1.9 %	3.4 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.019 ppb	0.016 ppb	89.736 %	90.246 %
Concentration per Run 1	0.007 ppb	0.017 ppb	89.949 %	91.136 %
Concentration per Run 2	0.023 ppb	0.017 ppb	89.489 %	89.657 %
Concentration per Run 3	0.026 ppb	0.015 ppb	89.770 %	89.946 %
Concentration RSD	54.1 %	5.6 %	0.3 %	0.9 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index:	49	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	L2373005-01 2008SL	Rack	1		
Analysis started at:	12/15/2023 10:16:02 AM	Vial	26		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	87.635 %	88.492 %	0.017 ppb	57,984.783 ppb	2,376.997 ppb	29.205 ppb	1,504.886 ppb	16,820.411 ppb	96.674 %
Concentration per Run 1	87.943 %	86.905 %	0.018 ppb	58,738.858 ppb	2,378.811 ppb	29.034 ppb	1,480.241 ppb	16,898.904 ppb	98.615 %
Concentration per Run 2	87.121 %	88.492 %	0.016 ppb	57,667.987 ppb	2,301.730 ppb	31.551 ppb	1,485.089 ppb	16,505.431 ppb	95.807 %
Concentration per Run 3	87.842 %	90.079 %	0.018 ppb	57,547.505 ppb	2,450.449 ppb	27.030 ppb	1,549.327 ppb	17,056.897 ppb	95.599 %
Concentration RSD	0.5 %	1.8 %	7.3 %	1.1 %	3.1 %	7.8 %	2.6 %	1.7 %	1.7 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	95.143 %	0.185 ppb	-0.556 ppb	100.515 ppb	190.346 ppb	0.356 ppb	5.580 ppb	1.840 ppb	80.527 ppb
Concentration per Run 1	95.758 %	0.153 ppb	-0.573 ppb	98.099 ppb	189.349 ppb	0.339 ppb	5.238 ppb	1.902 ppb	79.456 ppb
Concentration per Run 2	95.566 %	0.162 ppb	-0.548 ppb	101.098 ppb	184.751 ppb	0.363 ppb	5.821 ppb	1.746 ppb	79.997 ppb
Concentration per Run 3	94.105 %	0.241 ppb	-0.548 ppb	102.350 ppb	196.938 ppb	0.364 ppb	5.681 ppb	1.872 ppb	82.128 ppb
Concentration RSD	1.0 %	26.1 %	2.6 %	2.2 %	3.2 %	4.0 %	5.5 %	4.5 %	1.8 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	93.913 %	95.593 %	0.251 ppb	0.218 ppb	80.983 ppb	0.641 ppb	89.334 %	88.937 %	0.004 ppb
Concentration per Run 1	94.031 %	97.988 %	0.238 ppb	0.057 ppb	79.021 ppb	0.533 ppb	87.494 %	88.860 %	0.002 ppb
Concentration per Run 2	93.317 %	94.307 %	0.238 ppb	0.222 ppb	81.599 ppb	0.644 ppb	89.943 %	89.582 %	0.003 ppb
Concentration per Run 3	94.392 %	94.483 %	0.277 ppb	0.375 ppb	82.329 ppb	0.746 ppb	90.564 %	88.368 %	0.006 ppb
Concentration RSD	0.6 %	2.2 %	8.9 %	73.0 %	2.1 %	16.6 %	1.8 %	0.7 %	52.2 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.033 ppb	88.515 %	90.995 %	0.566 ppb	47.104 ppb	95.016 %	95.632 %	97.343 %	97.549 %
Concentration per Run 1	0.039 ppb	87.501 %	89.791 %	0.551 ppb	47.103 ppb	93.154 %	97.201 %	96.100 %	95.782 %
Concentration per Run 2	0.033 ppb	89.784 %	92.654 %	0.552 ppb	46.598 ppb	96.035 %	94.665 %	97.069 %	97.521 %
Concentration per Run 3	0.027 ppb	88.259 %	90.539 %	0.594 ppb	47.612 ppb	95.860 %	95.031 %	98.859 %	99.344 %
Concentration RSD	18.4 %	1.3 %	1.6 %	4.3 %	1.1 %	1.7 %	1.4 %	1.4 %	1.8 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.023 ppb	0.378 ppb	90.804 %	92.063 %
Concentration per Run 1	0.011 ppb	0.368 ppb	90.994 %	92.705 %
Concentration per Run 2	0.028 ppb	0.378 ppb	92.163 %	92.655 %
Concentration per Run 3	0.031 ppb	0.390 ppb	89.254 %	90.830 %
Concentration RSD	46.3 %	2.9 %	1.6 %	1.2 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index:	50	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	L2373005-02 2008SL	Rack	1		
Analysis started at:	12/15/2023 10:20:41 AM	Vial	27		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	83.995 %	78.307 %	0.015 ppb	161,935.793 ppb	7,512.757 ppb	3.971 ppb	2,552.884 ppb	48,608.096 ppb	92.931 %
Concentration per Run 1	85.236 %	86.508 %	0.015 ppb	153,665.923 ppb	7,082.816 ppb	9.263 ppb	2,515.084 ppb	49,282.376 ppb	93.773 %
Concentration per Run 2	83.764 %	84.524 %	0.015 ppb	156,172.448 ppb	7,353.763 ppb	2.711 ppb	2,593.465 ppb	48,171.125 ppb	93.864 %
Concentration per Run 3	82.984 %	63.889 %	0.016 ppb	175,969.007 ppb	8,101.690 ppb	-0.061 ppb	2,550.103 ppb	48,370.786 ppb	91.155 %
Concentration RSD	1.4 %	16.0 %	6.1 %	7.5 %	7.0 %	120.6 %	1.5 %	1.2 %	1.7 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	91.093 %	0.129 ppb	2.868 ppb	65.534 ppb	235.710 ppb	1.131 ppb	39.137 ppb	0.520 ppb	125.068 ppb
Concentration per Run 1	90.683 %	0.147 ppb	2.718 ppb	66.064 ppb	226.672 ppb	1.162 ppb	39.031 ppb	0.554 ppb	123.948 ppb
Concentration per Run 2	90.068 %	0.044 ppb	2.945 ppb	66.945 ppb	244.289 ppb	1.156 ppb	39.440 ppb	0.505 ppb	128.400 ppb
Concentration per Run 3	92.529 %	0.197 ppb	2.940 ppb	63.593 ppb	236.170 ppb	1.077 ppb	38.940 ppb	0.502 ppb	122.855 ppb
Concentration RSD	1.4 %	60.1 %	4.5 %	2.7 %	3.7 %	4.2 %	0.7 %	5.6 %	2.3 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	89.044 %	93.473 %	0.230 ppb	0.080 ppb	244.309 ppb	0.653 ppb	84.334 %	84.055 %	0.007 ppb
Concentration per Run 1	90.481 %	92.230 %	0.117 ppb	-0.043 ppb	242.217 ppb	0.631 ppb	85.303 %	84.743 %	0.003 ppb
Concentration per Run 2	88.397 %	92.348 %	0.414 ppb	0.056 ppb	246.361 ppb	0.581 ppb	84.003 %	83.367 %	0.009 ppb
Concentration per Run 3	88.255 %	95.841 %	0.158 ppb	0.226 ppb	244.347 ppb	0.748 ppb	83.695 %	84.055 %	0.009 ppb
Concentration RSD	1.4 %	2.2 %	69.9 %	170.0 %	0.8 %	13.1 %	1.0 %	0.8 %	47.6 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.041 ppb	86.045 %	87.873 %	0.311 ppb	24.509 ppb	93.992 %	94.045 %	94.280 %	95.602 %
Concentration per Run 1	0.046 ppb	85.626 %	87.469 %	0.287 ppb	24.704 ppb	95.034 %	95.225 %	94.507 %	95.761 %
Concentration per Run 2	0.039 ppb	86.785 %	86.662 %	0.312 ppb	24.890 ppb	93.794 %	93.703 %	94.007 %	95.611 %
Concentration per Run 3	0.037 ppb	85.724 %	89.489 %	0.335 ppb	23.933 ppb	93.147 %	93.207 %	94.326 %	95.433 %
Concentration RSD	11.9 %	0.7 %	1.7 %	7.7 %	2.1 %	1.0 %	1.1 %	0.3 %	0.2 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.032 ppb	0.065 ppb	85.973 %	87.376 %
Concentration per Run 1	0.012 ppb	0.049 ppb	85.847 %	88.218 %
Concentration per Run 2	0.036 ppb	0.071 ppb	86.927 %	86.763 %
Concentration per Run 3	0.049 ppb	0.077 ppb	85.146 %	87.147 %
Concentration RSD	59.0 %	22.4 %	1.0 %	0.9 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index:	51	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	12/15/2023 10:32:27 AM	Vial	9		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	88.892 %	93.915 %	63.557 ppb	6,243.562 ppb	6,385.768 ppb	66.572 ppb	6,561.957 ppb	6,478.357 ppb	91.377 %
Concentration per Run 1	90.244 %	101.190 %	62.163 ppb	6,002.174 ppb	6,261.550 ppb	66.615 ppb	6,483.234 ppb	6,023.255 ppb	91.761 %
Concentration per Run 2	88.853 %	88.492 %	63.862 ppb	6,516.091 ppb	6,630.019 ppb	65.355 ppb	6,767.317 ppb	7,018.152 ppb	92.041 %
Concentration per Run 3	87.581 %	92.063 %	64.646 ppb	6,212.419 ppb	6,265.734 ppb	67.744 ppb	6,435.321 ppb	6,393.664 ppb	90.329 %
Recovery Percentage 1			105.928 %	104.059 %	106.429 %	110.953 %	109.366 %	107.973 %	
Concentration RSD	1.5 %	7.0 %	2.0 %	4.1 %	3.3 %	1.8 %	2.7 %	7.8 %	1.0 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	102.909 %	64.653 ppb	61.408 ppb	62.437 ppb	6,272.401 ppb	62.339 ppb	62.540 ppb	60.877 ppb	62.622 ppb
Concentration per Run 1	105.600 %	62.700 ppb	60.774 ppb	61.760 ppb	6,214.003 ppb	62.639 ppb	62.679 ppb	60.633 ppb	61.292 ppb
Concentration per Run 2	98.296 %	66.742 ppb	63.358 ppb	65.044 ppb	6,435.635 ppb	63.804 ppb	64.126 ppb	63.044 ppb	64.294 ppb
Concentration per Run 3	104.832 %	64.516 ppb	60.091 ppb	60.508 ppb	6,167.566 ppb	60.575 ppb	60.814 ppb	58.955 ppb	62.278 ppb
Recovery Percentage 1		107.755 %	102.346 %	104.062 %	104.540 %	103.899 %	104.233 %	101.462 %	104.369 %
Concentration RSD	3.9 %	3.1 %	2.8 %	3.8 %	2.3 %	2.6 %	2.7 %	3.4 %	2.4 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	89.742 %	97.038 %	62.443 ppb	65.200 ppb	65.290 ppb	64.561 ppb	88.272 %	91.792 %	63.481 ppb
Concentration per Run 1	90.030 %	98.158 %	63.151 ppb	64.572 ppb	64.875 ppb	65.697 ppb	88.841 %	92.843 %	63.494 ppb
Concentration per Run 2	90.204 %	94.137 %	62.820 ppb	64.701 ppb	66.005 ppb	63.588 ppb	88.800 %	90.875 %	64.020 ppb
Concentration per Run 3	88.992 %	98.819 %	61.358 ppb	66.326 ppb	64.991 ppb	64.397 ppb	87.174 %	91.658 %	62.929 ppb
Recovery Percentage 1			104.072 %	108.666 %	108.817 %	107.601 %			105.802 %
Concentration RSD	0.7 %	2.6 %	1.5 %	1.5 %	1.0 %	1.6 %	1.1 %	1.1 %	0.9 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	63.729 ppb	88.558 %	96.692 %	64.824 ppb	64.550 ppb	93.573 %	99.034 %	94.345 %	101.173 %
Concentration per Run 1	64.498 ppb	87.936 %	96.759 %	64.460 ppb	63.177 ppb	93.237 %	100.765 %	94.870 %	103.351 %
Concentration per Run 2	62.852 ppb	88.062 %	96.921 %	64.465 ppb	64.810 ppb	92.170 %	96.475 %	93.211 %	100.830 %
Concentration per Run 3	63.838 ppb	89.677 %	96.396 %	65.547 ppb	65.663 ppb	95.312 %	99.860 %	94.954 %	99.337 %
Recovery Percentage 1	106.215 %			108.040 %	107.583 %				
Concentration RSD	1.3 %	1.1 %	0.3 %	1.0 %	2.0 %	1.7 %	2.3 %	1.0 %	2.0 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	63.110 ppb	63.775 ppb	90.485 %	95.647 %
Concentration per Run 1	62.130 ppb	61.989 ppb	88.337 %	98.684 %
Concentration per Run 2	63.507 ppb	64.415 ppb	90.708 %	93.809 %
Concentration per Run 3	63.694 ppb	64.922 ppb	92.411 %	94.449 %
Recovery Percentage 1	105.184 %	106.292 %		
Concentration RSD	1.4 %	2.5 %	2.3 %	2.8 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index:	52	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	12/15/2023 10:37:12 AM	Vial	10		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	89.501 %	90.476 %	0.021 ppb	-2.268 ppb	0.587 ppb	2.475 ppb	-7.464 ppb	-4.173 ppb	86.830 %
Concentration per Run 1	90.525 %	92.460 %	0.018 ppb	-0.207 ppb	0.099 ppb	5.052 ppb	-9.975 ppb	-11.428 ppb	86.345 %
Concentration per Run 2	88.777 %	89.682 %	0.025 ppb	-3.680 ppb	1.158 ppb	3.491 ppb	-4.766 ppb	10.508 ppb	88.233 %
Concentration per Run 3	89.200 %	89.286 %	0.021 ppb	-2.916 ppb	0.505 ppb	-1.117 ppb	-7.650 ppb	-11.600 ppb	85.913 %
Recovery Percentage 1			4.259 %	-2.268 %	0.839 %	24.751 %	-7.464 %	-4.173 %	
Concentration RSD	1.0 %	1.9 %	16.5 %	80.5 %	90.9 %	129.6 %	35.0 %	304.7 %	1.4 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	93.887 %	0.012 ppb	-0.133 ppb	0.035 ppb	9.654 ppb	0.009 ppb	0.483 ppb	0.061 ppb	0.320 ppb
Concentration per Run 1	97.257 %	0.011 ppb	-0.220 ppb	0.039 ppb	9.707 ppb	0.010 ppb	0.472 ppb	0.112 ppb	0.279 ppb
Concentration per Run 2	91.913 %	0.020 ppb	-0.066 ppb	0.046 ppb	11.274 ppb	0.007 ppb	0.493 ppb	0.013 ppb	0.376 ppb
Concentration per Run 3	92.490 %	0.004 ppb	-0.114 ppb	0.022 ppb	7.983 ppb	0.010 ppb	0.483 ppb	0.059 ppb	0.307 ppb
Recovery Percentage 1		0.234 %	-13.331 %	3.541 %	19.309 %	1.813 %	24.137 %	6.120 %	6.410 %
Concentration RSD	3.1 %	68.4 %	59.3 %	35.2 %	17.1 %	18.2 %	2.2 %	80.9 %	15.6 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	88.359 %	89.247 %	0.009 ppb	0.061 ppb	0.016 ppb	0.256 ppb	89.588 %	91.076 %	0.022 ppb
Concentration per Run 1	89.002 %	88.874 %	0.090 ppb	-0.017 ppb	0.003 ppb	0.202 ppb	89.253 %	92.717 %	0.018 ppb
Concentration per Run 2	87.339 %	88.918 %	-0.023 ppb	-0.033 ppb	0.027 ppb	0.295 ppb	88.989 %	90.155 %	0.026 ppb
Concentration per Run 3	88.736 %	89.949 %	-0.039 ppb	0.232 ppb	0.017 ppb	0.272 ppb	90.521 %	90.356 %	0.022 ppb
Recovery Percentage 1			1.857 %	1.213 %	3.184 %	12.820 %			5.587 %
Concentration RSD	1.0 %	0.7 %	760.0 %	244.9 %	75.3 %	18.8 %	0.9 %	1.6 %	17.9 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.006 ppb	88.431 %	92.978 %	0.059 ppb	0.037 ppb	92.650 %	94.397 %	92.157 %	95.346 %
Concentration per Run 1	0.011 ppb	89.140 %	93.615 %	0.045 ppb	0.073 ppb	92.676 %	96.466 %	91.964 %	95.354 %
Concentration per Run 2	0.006 ppb	88.013 %	91.569 %	0.068 ppb	0.038 ppb	91.810 %	92.816 %	91.958 %	94.281 %
Concentration per Run 3	0.001 ppb	88.142 %	93.749 %	0.063 ppb	0.001 ppb	93.466 %	93.910 %	92.549 %	96.401 %
Recovery Percentage 1				1.464 %	7.411 %				
Concentration RSD	80.5 %	0.7 %	1.3 %	19.9 %	97.4 %	0.9 %	2.0 %	0.4 %	1.1 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.316 ppb	0.017 ppb	91.482 %	93.817 %
Concentration per Run 1	0.198 ppb	0.021 ppb	92.785 %	94.897 %
Concentration per Run 2	0.379 ppb	0.016 ppb	90.730 %	93.775 %
Concentration per Run 3	0.369 ppb	0.015 ppb	90.932 %	92.780 %
Recovery Percentage 1	31.563 %	1.725 %		
Concentration RSD	32.2 %	18.4 %	1.2 %	1.1 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index:	53	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	12/15/2023 10:47:54 AM	Vial	9		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	89.408 %	87.698 %	59.892 ppb	5,943.293 ppb	6,277.172 ppb	60.142 ppb	6,015.117 ppb	5,760.031 ppb	92.793 %
Concentration per Run 1	90.693 %	95.635 %	59.208 ppb	5,665.605 ppb	6,000.956 ppb	54.679 ppb	5,833.071 ppb	5,619.067 ppb	93.282 %
Concentration per Run 2	88.710 %	80.952 %	60.306 ppb	6,104.967 ppb	6,397.218 ppb	62.888 ppb	6,095.770 ppb	5,699.491 ppb	91.103 %
Concentration per Run 3	88.820 %	86.508 %	60.161 ppb	6,059.308 ppb	6,433.343 ppb	62.859 ppb	6,116.510 ppb	5,961.537 ppb	93.994 %
Recovery Percentage 1			99.819 %	99.055 %	104.620 %	100.237 %	100.252 %	96.001 %	
Concentration RSD	1.2 %	8.5 %	1.0 %	4.1 %	3.8 %	7.9 %	2.6 %	3.1 %	1.6 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	105.511 %	59.333 ppb	56.915 ppb	57.916 ppb	5,837.677 ppb	57.188 ppb	59.083 ppb	62.839 ppb	61.817 ppb
Concentration per Run 1	107.600 %	57.733 ppb	55.392 ppb	56.779 ppb	5,660.233 ppb	56.072 ppb	58.061 ppb	60.373 ppb	60.049 ppb
Concentration per Run 2	108.023 %	58.096 ppb	56.728 ppb	57.122 ppb	5,760.057 ppb	57.936 ppb	58.537 ppb	62.772 ppb	63.356 ppb
Concentration per Run 3	100.910 %	62.168 ppb	58.624 ppb	59.846 ppb	6,092.741 ppb	57.558 ppb	60.652 ppb	65.373 ppb	62.046 ppb
Recovery Percentage 1		98.888 %	94.858 %	96.526 %	97.295 %	95.314 %	98.472 %	104.732 %	103.028 %
Concentration RSD	3.8 %	4.2 %	2.9 %	2.9 %	3.9 %	1.7 %	2.3 %	4.0 %	2.7 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	90.863 %	94.985 %	59.704 ppb	59.961 ppb	61.803 ppb	61.297 ppb	88.708 %	91.180 %	59.448 ppb
Concentration per Run 1	92.733 %	98.070 %	58.128 ppb	59.210 ppb	61.044 ppb	58.472 ppb	87.300 %	92.963 %	58.550 ppb
Concentration per Run 2	89.684 %	91.992 %	61.542 ppb	63.449 ppb	62.177 ppb	62.677 ppb	88.294 %	91.592 %	59.218 ppb
Concentration per Run 3	90.171 %	94.894 %	59.441 ppb	57.224 ppb	62.187 ppb	62.741 ppb	90.530 %	88.985 %	60.577 ppb
Recovery Percentage 1			99.506 %	99.935 %	103.004 %	102.161 %			99.081 %
Concentration RSD	1.8 %	3.2 %	2.9 %	5.3 %	1.1 %	4.0 %	1.9 %	2.2 %	1.7 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	60.260 ppb	89.227 %	96.976 %	61.206 ppb	60.575 ppb	94.068 %	98.352 %	94.677 %	100.545 %
Concentration per Run 1	59.883 ppb	87.804 %	96.133 %	61.490 ppb	59.656 ppb	92.321 %	98.920 %	94.395 %	101.470 %
Concentration per Run 2	60.199 ppb	89.907 %	98.146 %	60.924 ppb	61.395 ppb	94.842 %	97.489 %	93.859 %	101.278 %
Concentration per Run 3	60.697 ppb	89.971 %	96.650 %	61.205 ppb	60.673 ppb	95.041 %	98.647 %	95.778 %	98.888 %
Recovery Percentage 1	100.433 %			102.011 %	100.958 %				
Concentration RSD	0.7 %	1.4 %	1.1 %	0.5 %	1.4 %	1.6 %	0.8 %	1.0 %	1.4 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	58.244 ppb	59.204 ppb	90.804 %	97.868 %
Concentration per Run 1	56.955 ppb	56.930 ppb	89.344 %	101.138 %
Concentration per Run 2	58.307 ppb	60.490 ppb	90.905 %	96.928 %
Concentration per Run 3	59.468 ppb	60.191 ppb	92.162 %	95.538 %
Recovery Percentage 1	97.073 %	98.673 %		
Concentration RSD	2.2 %	3.3 %	1.6 %	3.0 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index:	54	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	12/15/2023 10:52:38 AM	Vial	10		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	90.192 %	89.550 %	0.039 ppb	-4.372 ppb	0.700 ppb	2.373 ppb	-3.132 ppb	-4.238 ppb	86.915 %
Concentration per Run 1	89.810 %	96.032 %	0.054 ppb	-2.575 ppb	3.958 ppb	1.607 ppb	-3.356 ppb	3.525 ppb	88.101 %
Concentration per Run 2	90.574 %	85.714 %	0.036 ppb	-3.983 ppb	-1.084 ppb	4.748 ppb	2.827 ppb	-12.064 ppb	87.291 %
Concentration per Run 3	90.191 %	86.905 %	0.027 ppb	-6.557 ppb	-0.775 ppb	0.764 ppb	-8.867 ppb	-4.174 ppb	85.352 %
Recovery Percentage 1			7.759 %	-4.372 %	1.000 %	23.730 %	-3.132 %	-4.238 %	
Concentration RSD	0.4 %	6.3 %	35.0 %	46.2 %	403.7 %	88.5 %	186.8 %	183.9 %	1.6 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	88.517 %	-0.008 ppb	-0.095 ppb	0.047 ppb	10.831 ppb	0.013 ppb	0.386 ppb	0.068 ppb	0.290 ppb
Concentration per Run 1	88.991 %	-0.011 ppb	-0.078 ppb	0.033 ppb	11.249 ppb	0.010 ppb	0.387 ppb	0.088 ppb	0.221 ppb
Concentration per Run 2	85.647 %	-0.003 ppb	-0.106 ppb	0.047 ppb	10.988 ppb	0.015 ppb	0.449 ppb	0.036 ppb	0.335 ppb
Concentration per Run 3	90.914 %	-0.011 ppb	-0.101 ppb	0.062 ppb	10.256 ppb	0.015 ppb	0.322 ppb	0.079 ppb	0.313 ppb
Recovery Percentage 1		-0.169 %	-9.515 %	4.735 %	21.662 %	2.681 %	19.287 %	6.799 %	5.790 %
Concentration RSD	3.0 %	58.5 %	16.1 %	30.7 %	4.8 %	19.8 %	16.5 %	40.7 %	21.0 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	89.233 %	90.774 %	0.055 ppb	0.080 ppb	0.034 ppb	0.208 ppb	90.783 %	90.081 %	0.027 ppb
Concentration per Run 1	89.457 %	89.851 %	0.020 ppb	0.063 ppb	0.028 ppb	0.155 ppb	89.358 %	87.822 %	0.033 ppb
Concentration per Run 2	88.589 %	91.887 %	-0.016 ppb	0.046 ppb	0.052 ppb	0.227 ppb	92.408 %	91.275 %	0.027 ppb
Concentration per Run 3	89.653 %	90.583 %	0.162 ppb	0.131 ppb	0.021 ppb	0.241 ppb	90.584 %	91.145 %	0.019 ppb
Recovery Percentage 1			11.048 %	1.594 %	6.741 %	10.383 %			6.641 %
Concentration RSD	0.6 %	1.1 %	170.3 %	56.3 %	48.2 %	22.4 %	1.7 %	2.2 %	26.6 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.015 ppb	88.962 %	92.082 %	0.049 ppb	0.065 ppb	92.612 %	93.550 %	93.255 %	94.954 %
Concentration per Run 1	0.017 ppb	90.463 %	89.334 %	0.037 ppb	0.077 ppb	93.551 %	91.218 %	91.497 %	92.845 %
Concentration per Run 2	0.014 ppb	88.889 %	94.712 %	0.047 ppb	0.073 ppb	91.459 %	95.005 %	94.179 %	96.111 %
Concentration per Run 3	0.015 ppb	87.535 %	92.201 %	0.061 ppb	0.047 ppb	92.826 %	94.427 %	94.089 %	95.907 %
Recovery Percentage 1				1.215 %	13.092 %				
Concentration RSD	9.1 %	1.6 %	2.9 %	24.7 %	25.2 %	1.1 %	2.2 %	1.6 %	1.9 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.335 ppb	0.020 ppb	91.287 %	90.031 %
Concentration per Run 1	0.203 ppb	0.025 ppb	90.286 %	90.444 %
Concentration per Run 2	0.398 ppb	0.018 ppb	92.419 %	89.601 %
Concentration per Run 3	0.405 ppb	0.017 ppb	91.158 %	90.048 %
Recovery Percentage 1	33.504 %	2.008 %		
Concentration RSD	34.2 %	22.2 %	1.2 %	0.5 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index:	55	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	WG1863507-1d10 6020TS	Rack	1		
Analysis started at:	12/15/2023 11:08:05 AM	Vial	28		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	93.589 %	96.958 %	0.012 ppb	-6.934 ppb	0.685 ppb	1.525 ppb	-3.254 ppb	-0.142 ppb	92.194 %
Concentration per Run 1	95.780 %	97.222 %	0.011 ppb	-8.176 ppb	-0.259 ppb	0.599 ppb	-4.638 ppb	1.896 ppb	93.907 %
Concentration per Run 2	92.575 %	88.889 %	0.013 ppb	-6.534 ppb	2.048 ppb	4.261 ppb	-0.127 ppb	2.264 ppb	91.235 %
Concentration per Run 3	92.411 %	104.762 %	0.011 ppb	-6.091 ppb	0.268 ppb	-0.286 ppb	-4.997 ppb	-4.586 ppb	91.438 %
Concentration RSD	2.0 %	8.2 %	9.3 %	15.8 %	176.3 %	158.1 %	83.4 %	2,713.1 %	1.6 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	97.527 %	0.010 ppb	-0.093 ppb	-0.006 ppb	1.893 ppb	0.004 ppb	0.006 ppb	-0.023 ppb	-0.268 ppb
Concentration per Run 1	97.911 %	0.018 ppb	-0.140 ppb	-0.003 ppb	2.054 ppb	0.005 ppb	0.024 ppb	-0.036 ppb	-0.306 ppb
Concentration per Run 2	97.334 %	0.010 ppb	-0.102 ppb	-0.021 ppb	0.530 ppb	0.001 ppb	0.028 ppb	-0.021 ppb	-0.239 ppb
Concentration per Run 3	97.334 %	0.003 ppb	-0.038 ppb	0.004 ppb	3.094 ppb	0.005 ppb	-0.033 ppb	-0.013 ppb	-0.259 ppb
Concentration RSD	0.3 %	73.0 %	55.8 %	202.3 %	68.1 %	64.7 %	533.4 %	51.2 %	12.9 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	93.150 %	96.502 %	-0.111 ppb	0.072 ppb	0.032 ppb	0.031 ppb	94.242 %	96.521 %	0.006 ppb
Concentration per Run 1	95.636 %	93.606 %	-0.059 ppb	0.034 ppb	0.056 ppb	0.032 ppb	95.546 %	97.201 %	0.006 ppb
Concentration per Run 2	90.702 %	95.578 %	-0.152 ppb	-0.027 ppb	0.030 ppb	0.024 ppb	91.868 %	96.417 %	0.003 ppb
Concentration per Run 3	93.113 %	100.323 %	-0.122 ppb	0.208 ppb	0.011 ppb	0.039 ppb	95.312 %	95.945 %	0.009 ppb
Concentration RSD	2.6 %	3.6 %	42.7 %	169.7 %	70.3 %	24.2 %	2.2 %	0.7 %	46.9 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.001 ppb	93.417 %	99.318 %	0.015 ppb	0.029 ppb	96.229 %	100.233 %	95.828 %	101.285 %
Concentration per Run 1	-0.001 ppb	94.498 %	97.345 %	0.017 ppb	0.052 ppb	97.984 %	99.733 %	97.159 %	100.512 %
Concentration per Run 2	0.001 ppb	93.520 %	101.391 %	0.014 ppb	0.008 ppb	96.246 %	100.663 %	94.216 %	101.073 %
Concentration per Run 3	0.001 ppb	92.233 %	99.217 %	0.015 ppb	0.026 ppb	94.458 %	100.304 %	96.108 %	102.269 %
Concentration RSD	171.0 %	1.2 %	2.0 %	10.4 %	76.8 %	1.8 %	0.5 %	1.6 %	0.9 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.039 ppb	0.006 ppb	94.174 %	97.101 %
Concentration per Run 1	0.021 ppb	0.008 ppb	94.616 %	95.283 %
Concentration per Run 2	0.045 ppb	0.006 ppb	95.486 %	98.889 %
Concentration per Run 3	0.050 ppb	0.004 ppb	92.420 %	97.133 %
Concentration RSD	41.1 %	32.2 %	1.7 %	1.9 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index:	56	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	WG1863507-2d10 6020TS	Rack	1		
Analysis started at:	12/15/2023 11:12:45 AM	Vial	29		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	115.727 %	111.376 %	67.732 ppb	1,153.035 ppb	1,309.551 ppb	3,907.655 ppb	1,016.867 ppb	3,613.668 ppb	99.373 %
Concentration per Run 1	116.810 %	108.730 %	66.841 ppb	1,193.980 ppb	1,337.520 ppb	3,995.239 ppb	1,000.248 ppb	3,826.171 ppb	101.039 %
Concentration per Run 2	115.389 %	103.571 %	68.124 ppb	1,173.124 ppb	1,348.788 ppb	3,978.920 ppb	1,021.838 ppb	3,391.658 ppb	98.746 %
Concentration per Run 3	114.981 %	121.826 %	68.232 ppb	1,092.000 ppb	1,242.345 ppb	3,748.806 ppb	1,028.515 ppb	3,623.174 ppb	98.333 %
Concentration RSD	0.8 %	8.4 %	1.1 %	4.7 %	4.5 %	3.5 %	1.5 %	6.0 %	1.5 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	100.910 %	124.285 ppb	111.187 ppb	345.345 ppb	5,521.426 ppb	113.169 ppb	128.362 ppb	178.281 ppb	146.662 ppb
Concentration per Run 1	99.487 %	124.513 ppb	111.199 ppb	347.894 ppb	5,634.924 ppb	112.919 ppb	131.215 ppb	179.335 ppb	148.040 ppb
Concentration per Run 2	103.524 %	122.012 ppb	110.294 ppb	341.418 ppb	5,399.852 ppb	113.876 ppb	126.973 ppb	178.186 ppb	148.101 ppb
Concentration per Run 3	99.718 %	126.330 ppb	112.067 ppb	346.724 ppb	5,529.503 ppb	112.712 ppb	126.898 ppb	177.323 ppb	143.845 ppb
Concentration RSD	2.2 %	1.7 %	0.8 %	1.0 %	2.1 %	0.5 %	1.9 %	0.6 %	1.7 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	94.610 %	92.579 %	110.668 ppb	131.061 ppb	73.335 ppb	94.268 ppb	93.023 %	91.982 %	63.566 ppb
Concentration per Run 1	93.667 %	92.498 %	108.589 ppb	131.926 ppb	71.530 ppb	92.242 ppb	94.067 %	93.413 %	62.835 ppb
Concentration per Run 2	94.529 %	89.756 %	114.695 ppb	134.916 ppb	75.449 ppb	95.636 ppb	93.052 %	91.163 %	63.853 ppb
Concentration per Run 3	95.633 %	95.482 %	108.720 ppb	126.341 ppb	73.025 ppb	94.927 ppb	91.951 %	91.369 %	64.011 ppb
Concentration RSD	1.0 %	3.1 %	3.2 %	3.3 %	2.7 %	1.9 %	1.1 %	1.4 %	1.0 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	90.084 ppb	94.156 %	94.863 %	176.131 ppb	244.904 ppb	97.856 %	97.427 %	97.741 %	96.822 %
Concentration per Run 1	89.024 ppb	96.026 %	93.581 %	175.230 ppb	245.149 ppb	96.053 %	95.955 %	97.003 %	96.680 %
Concentration per Run 2	90.424 ppb	92.521 %	94.336 %	177.527 ppb	248.393 ppb	99.616 %	97.361 %	99.790 %	96.269 %
Concentration per Run 3	90.804 ppb	93.921 %	96.672 %	175.635 ppb	241.170 ppb	97.899 %	98.965 %	96.431 %	97.515 %
Concentration RSD	1.0 %	1.9 %	1.7 %	0.7 %	1.5 %	1.8 %	1.5 %	1.8 %	0.7 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	70.631 ppb	195.237 ppb	95.754 %	94.991 %
Concentration per Run 1	69.666 ppb	192.990 ppb	96.109 %	95.812 %
Concentration per Run 2	70.581 ppb	195.361 ppb	94.858 %	94.597 %
Concentration per Run 3	71.646 ppb	197.359 ppb	96.296 %	94.564 %
Concentration RSD	1.4 %	1.1 %	0.8 %	0.7 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index: 57
Analysis label: WG1863507-3d10 6020TS
Analysis started at: 12/15/2023 11:17:25 AM
User name ALPHALAB\ICPMSRQ
Rack 1
Vial 31
Comment <Comment>

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	93.551 %	90.344 %	10.473 ppb	3,442.148 ppb	2,596.191 ppb	767.687 ppb	2,636.138 ppb	3,028.044 ppb	96.584 %
Concentration per Run 1	95.652 %	91.667 %	10.126 ppb	3,323.193 ppb	2,450.970 ppb	747.447 ppb	2,459.477 ppb	2,845.979 ppb	98.664 %
Concentration per Run 2	92.742 %	92.857 %	10.698 ppb	3,425.942 ppb	2,585.744 ppb	732.717 ppb	2,630.463 ppb	3,055.619 ppb	94.427 %
Concentration per Run 3	92.259 %	86.508 %	10.595 ppb	3,577.310 ppb	2,751.858 ppb	822.896 ppb	2,818.474 ppb	3,182.535 ppb	96.663 %
Concentration RSD	2.0 %	3.7 %	2.9 %	3.7 %	5.8 %	6.3 %	6.8 %	5.6 %	2.2 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	95.040 %	187.544 ppb	50.736 ppb	118.789 ppb	5,706.323 ppb	101.998 ppb	105.868 ppb	57.401 ppb	100.590 ppb
Concentration per Run 1	99.756 %	174.553 ppb	47.323 ppb	110.669 ppb	5,357.754 ppb	98.134 ppb	100.428 ppb	53.593 ppb	93.121 ppb
Concentration per Run 2	94.681 %	192.975 ppb	51.646 ppb	122.645 ppb	5,878.960 ppb	104.211 ppb	108.783 ppb	59.685 ppb	105.042 ppb
Concentration per Run 3	90.683 %	195.103 ppb	53.240 ppb	123.054 ppb	5,882.256 ppb	103.649 ppb	108.392 ppb	58.924 ppb	103.606 ppb
Concentration RSD	4.8 %	6.0 %	6.0 %	5.9 %	5.3 %	3.3 %	4.5 %	5.8 %	6.5 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	108.459 %	101.719 %	29.159 ppb	24.251 ppb	239.734 ppb	208.832 ppb	94.639 %	90.796 %	10.748 ppb
Concentration per Run 1	109.822 %	106.754 %	27.118 ppb	22.648 ppb	225.751 ppb	202.196 ppb	96.153 %	93.663 %	10.302 ppb
Concentration per Run 2	107.522 %	97.126 %	30.036 ppb	24.599 ppb	247.409 ppb	215.360 ppb	92.713 %	88.751 %	11.146 ppb
Concentration per Run 3	108.034 %	101.276 %	30.325 ppb	25.506 ppb	246.042 ppb	208.942 ppb	95.051 %	89.973 %	10.795 ppb
Concentration RSD	1.1 %	4.7 %	6.1 %	6.0 %	5.1 %	3.2 %	1.9 %	2.8 %	3.9 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	10.893 ppb	98.348 %	97.042 %	96.820 ppb	423.756 ppb	99.164 %	95.364 %	98.514 %	94.881 %
Concentration per Run 1	10.560 ppb	99.783 %	98.321 %	95.229 ppb	410.917 ppb	99.661 %	98.326 %	100.063 %	97.876 %
Concentration per Run 2	11.100 ppb	98.326 %	95.056 %	98.384 ppb	433.709 ppb	98.086 %	93.721 %	96.868 %	92.307 %
Concentration per Run 3	11.020 ppb	96.936 %	97.749 %	96.847 ppb	426.643 ppb	99.746 %	94.045 %	98.610 %	94.459 %
Concentration RSD	2.7 %	1.4 %	1.8 %	1.6 %	2.8 %	0.9 %	2.7 %	1.6 %	3.0 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	24.783 ppb	140.118 ppb	93.788 %	89.644 %
Concentration per Run 1	23.585 ppb	132.252 ppb	93.671 %	94.290 %
Concentration per Run 2	25.459 ppb	143.989 ppb	95.447 %	87.740 %
Concentration per Run 3	25.306 ppb	144.114 ppb	92.246 %	86.902 %
Concentration RSD	4.2 %	4.9 %	1.7 %	4.5 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index:	58	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	WG1863507-5d10 6020TS	Rack	1		
Analysis started at:	12/15/2023 11:22:06 AM	Vial	33		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	94.189 %	93.651 %	48.324 ppb	5,945.518 ppb	5,882.866 ppb	2,024.862 ppb	5,409.115 ppb	6,688.994 ppb	105.913 %
Concentration per Run 1	96.614 %	86.111 %	46.805 ppb	6,093.647 ppb	5,946.816 ppb	2,089.058 ppb	5,328.841 ppb	6,859.249 ppb	109.362 %
Concentration per Run 2	93.278 %	99.603 %	49.017 ppb	5,835.577 ppb	5,842.540 ppb	1,998.141 ppb	5,483.373 ppb	6,648.733 ppb	102.894 %
Concentration per Run 3	92.675 %	95.238 %	49.149 ppb	5,907.329 ppb	5,859.241 ppb	1,987.386 ppb	5,415.131 ppb	6,559.000 ppb	105.482 %
Concentration RSD	2.3 %	7.4 %	2.7 %	2.2 %	1.0 %	2.8 %	1.4 %	2.3 %	3.1 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	109.266 %	268.290 ppb	71.254 ppb	90.290 ppb	25,131.781 ppb	46.632 ppb	62.993 ppb	105.819 ppb	64.977 ppb
Concentration per Run 1	112.214 %	257.509 ppb	67.715 ppb	86.954 ppb	24,252.424 ppb	45.302 ppb	61.591 ppb	102.116 ppb	63.380 ppb
Concentration per Run 2	105.600 %	277.842 ppb	74.067 ppb	92.932 ppb	25,663.272 ppb	48.023 ppb	64.092 ppb	110.627 ppb	67.381 ppb
Concentration per Run 3	109.984 %	269.519 ppb	71.981 ppb	90.984 ppb	25,479.646 ppb	46.571 ppb	63.294 ppb	104.713 ppb	64.168 ppb
Concentration RSD	3.1 %	3.8 %	4.5 %	3.4 %	3.1 %	2.9 %	2.0 %	4.1 %	3.3 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	109.404 %	108.968 %	55.289 ppb	47.172 ppb	127.746 ppb	52.726 ppb	94.210 %	91.684 %	1.975 ppb
Concentration per Run 1	109.871 %	111.261 %	54.057 ppb	46.862 ppb	124.660 ppb	51.229 ppb	95.420 %	92.862 %	1.937 ppb
Concentration per Run 2	109.988 %	107.866 %	55.965 ppb	46.014 ppb	127.872 ppb	53.896 ppb	94.684 %	90.313 %	1.980 ppb
Concentration per Run 3	108.353 %	107.776 %	55.846 ppb	48.640 ppb	130.707 ppb	53.053 ppb	92.526 %	91.877 %	2.007 ppb
Concentration RSD	0.8 %	1.8 %	1.9 %	2.8 %	2.4 %	2.6 %	1.6 %	1.4 %	1.8 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	49.127 ppb	95.334 %	95.370 %	51.806 ppb	114.772 ppb	98.975 %	97.225 %	98.456 %	97.982 %
Concentration per Run 1	48.352 ppb	94.154 %	96.819 %	49.737 ppb	112.911 ppb	99.928 %	99.486 %	100.962 %	97.967 %
Concentration per Run 2	49.844 ppb	95.310 %	96.018 %	51.931 ppb	116.434 ppb	101.207 %	95.277 %	97.200 %	96.444 %
Concentration per Run 3	49.183 ppb	96.539 %	93.272 %	53.749 ppb	114.970 ppb	95.791 %	96.913 %	97.205 %	99.536 %
Concentration RSD	1.5 %	1.3 %	2.0 %	3.9 %	1.5 %	2.9 %	2.2 %	2.2 %	1.6 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	50.555 ppb	114.178 ppb	93.383 %	92.749 %
Concentration per Run 1	49.629 ppb	120.148 ppb	95.047 %	94.310 %
Concentration per Run 2	51.860 ppb	112.454 ppb	93.104 %	91.118 %
Concentration per Run 3	50.177 ppb	109.932 ppb	91.997 %	92.818 %
Concentration RSD	2.3 %	4.7 %	1.7 %	1.7 %

Alpha ICPMSRQ Data

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Analysis index:	59	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	WG1863507-4d10 6020TS	Rack	1		
Analysis started at:	12/15/2023 11:26:47 AM	Vial	32		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	95.868 %	101.720 %	10.522 ppb	3,533.817 ppb	2,526.641 ppb	1,512.729 ppb	2,361.269 ppb	3,430.539 ppb	104.201 %
Concentration per Run 1	94.998 %	103.968 %	10.719 ppb	3,477.055 ppb	2,498.989 ppb	1,446.515 ppb	2,336.604 ppb	3,634.870 ppb	103.342 %
Concentration per Run 2	96.508 %	103.175 %	10.533 ppb	3,478.154 ppb	2,523.458 ppb	1,536.291 ppb	2,362.190 ppb	3,283.018 ppb	105.343 %
Concentration per Run 3	96.097 %	98.016 %	10.316 ppb	3,646.242 ppb	2,557.475 ppb	1,555.381 ppb	2,385.014 ppb	3,373.728 ppb	103.917 %
Concentration RSD	0.8 %	3.2 %	1.9 %	2.8 %	1.2 %	3.8 %	1.0 %	5.3 %	1.0 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	102.845 %	192.447 ppb	48.546 ppb	120.865 ppb	7,331.256 ppb	91.069 ppb	97.946 ppb	63.756 ppb	94.470 ppb
Concentration per Run 1	104.601 %	189.572 ppb	48.391 ppb	118.988 ppb	7,215.401 ppb	90.577 ppb	97.292 ppb	63.032 ppb	92.849 ppb
Concentration per Run 2	102.678 %	191.764 ppb	47.837 ppb	120.704 ppb	7,289.476 ppb	89.277 ppb	96.472 ppb	63.254 ppb	94.074 ppb
Concentration per Run 3	101.256 %	196.006 ppb	49.409 ppb	122.903 ppb	7,488.891 ppb	93.354 ppb	100.073 ppb	64.983 ppb	96.489 ppb
Concentration RSD	1.6 %	1.7 %	1.6 %	1.6 %	1.9 %	2.3 %	1.9 %	1.7 %	2.0 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	127.771 %	127.431 %	25.465 ppb	20.061 ppb	231.515 ppb	193.372 ppb	96.817 %	95.293 %	10.391 ppb
Concentration per Run 1	125.374 %	128.324 %	25.143 ppb	20.557 ppb	224.452 ppb	188.652 ppb	95.426 %	96.683 %	10.225 ppb
Concentration per Run 2	128.376 %	129.157 %	25.199 ppb	18.623 ppb	231.149 ppb	195.438 ppb	96.845 %	94.986 %	10.450 ppb
Concentration per Run 3	129.563 %	124.811 %	26.053 ppb	21.002 ppb	238.944 ppb	196.026 ppb	98.181 %	94.209 %	10.497 ppb
Concentration RSD	1.7 %	1.8 %	2.0 %	6.3 %	3.1 %	2.1 %	1.4 %	1.3 %	1.4 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	10.535 ppb	99.364 %	101.966 %	88.661 ppb	421.734 ppb	100.607 %	99.326 %	101.305 %	98.792 %
Concentration per Run 1	10.667 ppb	99.472 %	99.756 %	87.995 ppb	415.008 ppb	99.122 %	101.539 %	98.580 %	101.879 %
Concentration per Run 2	10.581 ppb	100.917 %	102.327 %	90.177 ppb	431.020 ppb	100.779 %	98.005 %	101.603 %	96.093 %
Concentration per Run 3	10.358 ppb	97.703 %	103.816 %	87.810 ppb	419.173 ppb	101.922 %	98.433 %	103.731 %	98.403 %
Concentration RSD	1.5 %	1.6 %	2.0 %	1.5 %	2.0 %	1.4 %	1.9 %	2.6 %	2.9 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	21.634 ppb	129.351 ppb	96.031 %	95.128 %
Concentration per Run 1	21.417 ppb	127.552 ppb	98.421 %	95.431 %
Concentration per Run 2	21.465 ppb	129.882 ppb	96.221 %	96.135 %
Concentration per Run 3	22.019 ppb	130.620 ppb	93.451 %	93.819 %
Concentration RSD	1.5 %	1.2 %	2.6 %	1.2 %

Alpha ICPMSRQ Data

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Analysis index:	60	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	I2373369-01d10 6020TS	Rack	1		
Analysis started at:	12/15/2023 11:31:28 AM	Vial	30		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	98.060 %	101.455 %	0.247 ppb	1,235.859 ppb	869.628 ppb	1,984.421 ppb	628.409 ppb	2,378.205 ppb	110.221 %
Concentration per Run 1	98.640 %	113.095 %	0.252 ppb	1,147.109 ppb	824.757 ppb	1,857.393 ppb	611.870 ppb	2,588.439 ppb	107.033 %
Concentration per Run 2	97.440 %	99.206 %	0.244 ppb	1,264.039 ppb	879.525 ppb	2,061.919 ppb	640.659 ppb	2,206.512 ppb	112.779 %
Concentration per Run 3	98.098 %	92.063 %	0.244 ppb	1,296.428 ppb	904.602 ppb	2,033.952 ppb	632.697 ppb	2,339.665 ppb	110.851 %
Concentration RSD	0.6 %	10.5 %	1.9 %	6.4 %	4.7 %	5.6 %	2.4 %	8.2 %	2.7 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	105.344 %	227.805 ppb	27.983 ppb	48.339 ppb	21,466.956 ppb	3.161 ppb	19.480 ppb	65.790 ppb	23.453 ppb
Concentration per Run 1	105.062 %	226.585 ppb	28.335 ppb	47.977 ppb	21,432.735 ppb	3.161 ppb	18.966 ppb	64.646 ppb	22.877 ppb
Concentration per Run 2	104.793 %	229.851 ppb	27.496 ppb	48.982 ppb	21,601.278 ppb	3.090 ppb	19.850 ppb	67.032 ppb	24.394 ppb
Concentration per Run 3	106.177 %	226.978 ppb	28.120 ppb	48.058 ppb	21,366.856 ppb	3.232 ppb	19.623 ppb	65.693 ppb	23.089 ppb
Concentration RSD	0.7 %	0.8 %	1.6 %	1.2 %	0.6 %	2.2 %	2.4 %	1.8 %	3.5 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	111.667 %	109.302 %	12.233 ppb	2.520 ppb	77.521 ppb	3.513 ppb	99.158 %	97.377 %	0.246 ppb
Concentration per Run 1	113.889 %	111.257 %	11.869 ppb	2.419 ppb	75.875 ppb	3.535 ppb	97.031 %	96.513 %	0.253 ppb
Concentration per Run 2	109.976 %	107.738 %	12.689 ppb	2.734 ppb	78.930 ppb	3.478 ppb	98.423 %	97.282 %	0.239 ppb
Concentration per Run 3	111.136 %	108.911 %	12.141 ppb	2.407 ppb	77.759 ppb	3.527 ppb	102.018 %	98.337 %	0.246 ppb
Concentration RSD	1.8 %	1.6 %	3.4 %	7.4 %	2.0 %	0.9 %	2.6 %	0.9 %	2.8 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.104 ppb	98.413 %	96.977 %	1.127 ppb	66.106 ppb	100.212 %	98.271 %	99.275 %	99.120 %
Concentration per Run 1	0.112 ppb	99.256 %	93.742 %	1.210 ppb	67.127 ppb	100.380 %	97.233 %	99.270 %	96.534 %
Concentration per Run 2	0.104 ppb	98.490 %	97.783 %	1.053 ppb	65.955 ppb	99.254 %	97.707 %	99.623 %	99.812 %
Concentration per Run 3	0.095 ppb	97.494 %	99.406 %	1.119 ppb	65.235 ppb	101.002 %	99.874 %	98.932 %	101.015 %
Concentration RSD	8.4 %	0.9 %	3.0 %	7.0 %	1.4 %	0.9 %	1.4 %	0.3 %	2.3 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.355 ppb	59.633 ppb	97.272 %	92.737 %
Concentration per Run 1	0.236 ppb	58.692 ppb	97.721 %	93.356 %
Concentration per Run 2	0.413 ppb	60.442 ppb	97.677 %	91.215 %
Concentration per Run 3	0.416 ppb	59.766 ppb	96.419 %	93.642 %
Concentration RSD	28.9 %	1.5 %	0.8 %	1.4 %

Alpha ICPMSRQ Data

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Analysis index:	61	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	I2373369-02d10 6020TS	Rack	1		
Analysis started at:	12/15/2023 11:36:09 AM	Vial	35		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	98.251 %	97.354 %	0.336 ppb	1,261.667 ppb	656.624 ppb	2,789.967 ppb	249.590 ppb	2,569.345 ppb	111.448 %
Concentration per Run 1	98.873 %	96.825 %	0.341 ppb	1,243.831 ppb	663.967 ppb	2,738.324 ppb	253.673 ppb	2,418.513 ppb	111.976 %
Concentration per Run 2	98.500 %	99.206 %	0.339 ppb	1,241.738 ppb	649.473 ppb	2,807.544 ppb	269.417 ppb	2,597.375 ppb	111.733 %
Concentration per Run 3	97.381 %	96.032 %	0.329 ppb	1,299.430 ppb	656.431 ppb	2,824.032 ppb	225.681 ppb	2,692.147 ppb	110.635 %
Concentration RSD	0.8 %	1.7 %	1.9 %	2.6 %	1.1 %	1.6 %	8.9 %	5.4 %	0.6 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	109.381 %	92.629 ppb	12.145 ppb	63.818 ppb	22,183.323 ppb	2.757 ppb	16.507 ppb	85.267 ppb	45.807 ppb
Concentration per Run 1	110.522 %	91.241 ppb	11.958 ppb	63.979 ppb	22,488.188 ppb	2.671 ppb	16.285 ppb	87.679 ppb	45.974 ppb
Concentration per Run 2	108.484 %	93.177 ppb	12.345 ppb	64.069 ppb	21,991.650 ppb	2.888 ppb	17.090 ppb	86.199 ppb	46.122 ppb
Concentration per Run 3	109.138 %	93.468 ppb	12.132 ppb	63.404 ppb	22,070.130 ppb	2.713 ppb	16.145 ppb	81.923 ppb	45.324 ppb
Concentration RSD	1.0 %	1.3 %	1.6 %	0.6 %	1.2 %	4.2 %	3.1 %	3.5 %	0.9 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	102.685 %	102.417 %	26.840 ppb	7.539 ppb	129.773 ppb	2.806 ppb	99.990 %	99.083 %	0.153 ppb
Concentration per Run 1	104.521 %	98.604 %	27.236 ppb	7.666 ppb	130.548 ppb	2.841 ppb	102.271 %	98.969 %	0.167 ppb
Concentration per Run 2	100.928 %	102.645 %	27.680 ppb	6.806 ppb	131.301 ppb	2.662 ppb	99.756 %	99.009 %	0.148 ppb
Concentration per Run 3	102.607 %	106.001 %	25.604 ppb	8.144 ppb	127.470 ppb	2.916 ppb	97.945 %	99.269 %	0.144 ppb
Concentration RSD	1.8 %	3.6 %	4.1 %	9.0 %	1.6 %	4.7 %	2.2 %	0.2 %	7.7 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.262 ppb	99.037 %	99.789 %	2.383 ppb	50.519 ppb	101.095 %	100.651 %	98.283 %	99.340 %
Concentration per Run 1	0.263 ppb	98.926 %	99.271 %	2.344 ppb	50.697 ppb	101.731 %	100.876 %	98.468 %	100.827 %
Concentration per Run 2	0.280 ppb	99.885 %	98.503 %	2.482 ppb	50.190 ppb	100.685 %	99.898 %	96.558 %	98.661 %
Concentration per Run 3	0.244 ppb	98.301 %	101.594 %	2.323 ppb	50.668 ppb	100.868 %	101.180 %	99.823 %	98.532 %
Concentration RSD	7.0 %	0.8 %	1.6 %	3.6 %	0.6 %	0.6 %	0.7 %	1.7 %	1.3 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.143 ppb	28.306 ppb	96.009 %	98.227 %
Concentration per Run 1	0.089 ppb	27.508 ppb	92.447 %	99.984 %
Concentration per Run 2	0.158 ppb	28.684 ppb	96.144 %	97.338 %
Concentration per Run 3	0.182 ppb	28.724 ppb	99.435 %	97.358 %
Concentration RSD	34.0 %	2.4 %	3.6 %	1.5 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index:	62	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	I2373369-03d10 6020TS	Rack	1		
Analysis started at:	12/15/2023 11:40:50 AM	Vial	36		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	104.971 %	118.651 %	1.209 ppb	96.072 ppb	2,609.831 ppb	9,641.082 ppb	736.901 ppb	1,385.117 ppb	164.020 %
Concentration per Run 1	106.957 %	115.873 %	1.209 ppb	97.778 ppb	2,626.128 ppb	9,513.234 ppb	717.644 ppb	1,384.268 ppb	168.475 %
Concentration per Run 2	104.309 %	108.730 %	1.208 ppb	99.475 ppb	2,724.435 ppb	10,166.706 ppb	780.858 ppb	1,390.911 ppb	161.260 %
Concentration per Run 3	103.648 %	131.350 %	1.211 ppb	90.963 ppb	2,478.929 ppb	9,243.308 ppb	712.202 ppb	1,380.171 ppb	162.324 %
Concentration RSD	1.7 %	9.7 %	0.1 %	4.7 %	4.7 %	4.9 %	5.2 %	0.4 %	2.4 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	158.675 %	46.193 ppb	27.543 ppb	149.864 ppb	28,715.431 ppb	9.510 ppb	18.129 ppb	57.554 ppb	63.234 ppb
Concentration per Run 1	163.930 %	45.664 ppb	26.262 ppb	143.909 ppb	27,267.250 ppb	9.505 ppb	18.282 ppb	57.030 ppb	61.496 ppb
Concentration per Run 2	155.048 %	46.751 ppb	27.899 ppb	153.375 ppb	29,990.933 ppb	9.597 ppb	17.754 ppb	57.913 ppb	63.857 ppb
Concentration per Run 3	157.047 %	46.164 ppb	28.468 ppb	152.307 ppb	28,888.110 ppb	9.428 ppb	18.350 ppb	57.719 ppb	64.349 ppb
Concentration RSD	2.9 %	1.2 %	4.2 %	3.5 %	4.8 %	0.9 %	1.8 %	0.8 %	2.4 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	103.557 %	107.937 %	14.905 ppb	20.299 ppb	23.324 ppb	1.738 ppb	100.740 %	99.709 %	0.296 ppb
Concentration per Run 1	106.381 %	110.186 %	14.282 ppb	21.432 ppb	22.740 ppb	1.786 ppb	102.164 %	101.749 %	0.298 ppb
Concentration per Run 2	103.581 %	107.170 %	15.478 ppb	19.426 ppb	23.794 ppb	1.756 ppb	102.330 %	98.807 %	0.309 ppb
Concentration per Run 3	100.709 %	106.455 %	14.954 ppb	20.039 ppb	23.438 ppb	1.673 ppb	97.726 %	98.572 %	0.281 ppb
Concentration RSD	2.7 %	1.8 %	4.0 %	5.1 %	2.3 %	3.4 %	2.6 %	1.8 %	4.8 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.304 ppb	97.702 %	98.407 %	4.543 ppb	106.633 ppb	105.671 %	106.509 %	100.230 %	100.541 %
Concentration per Run 1	0.324 ppb	98.575 %	98.072 %	4.635 ppb	105.522 ppb	106.187 %	107.590 %	101.946 %	100.350 %
Concentration per Run 2	0.284 ppb	95.205 %	98.234 %	4.457 ppb	108.235 ppb	107.067 %	105.807 %	99.794 %	101.307 %
Concentration per Run 3	0.303 ppb	99.327 %	98.914 %	4.536 ppb	106.142 ppb	103.758 %	106.131 %	98.950 %	99.967 %
Concentration RSD	6.5 %	2.2 %	0.5 %	2.0 %	1.3 %	1.6 %	0.9 %	1.5 %	0.7 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.380 ppb	49.464 ppb	98.806 %	97.941 %
Concentration per Run 1	0.326 ppb	48.027 ppb	97.200 %	100.176 %
Concentration per Run 2	0.389 ppb	49.446 ppb	96.721 %	98.213 %
Concentration per Run 3	0.424 ppb	50.918 ppb	102.496 %	95.435 %
Concentration RSD	13.0 %	2.9 %	3.2 %	2.4 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index:	63	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	I2373369-04d10 6020TS	Rack	1		
Analysis started at:	12/15/2023 11:45:32 AM	Vial	37		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	104.875 %	113.360 %	1.140 ppb	204.570 ppb	3,822.154 ppb	9,876.275 ppb	1,075.654 ppb	2,113.620 ppb	131.730 %
Concentration per Run 1	104.496 %	113.492 %	1.141 ppb	205.786 ppb	3,802.628 ppb	9,537.243 ppb	1,058.718 ppb	2,006.866 ppb	130.831 %
Concentration per Run 2	104.168 %	114.286 %	1.146 ppb	204.940 ppb	3,803.771 ppb	9,938.206 ppb	1,102.569 ppb	2,154.262 ppb	132.162 %
Concentration per Run 3	105.961 %	112.302 %	1.133 ppb	202.985 ppb	3,860.062 ppb	10,153.376 ppb	1,065.674 ppb	2,179.733 ppb	132.198 %
Concentration RSD	0.9 %	0.9 %	0.6 %	0.7 %	0.9 %	3.2 %	2.2 %	4.4 %	0.6 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	127.914 %	138.797 ppb	30.229 ppb	537.757 ppb	30,512.417 ppb	13.375 ppb	33.782 ppb	194.456 ppb	163.927 ppb
Concentration per Run 1	131.361 %	135.783 ppb	28.028 ppb	521.571 ppb	29,942.799 ppb	13.281 ppb	32.982 ppb	187.401 ppb	159.531 ppb
Concentration per Run 2	126.709 %	140.166 ppb	32.545 ppb	549.803 ppb	30,999.726 ppb	13.618 ppb	35.055 ppb	202.881 ppb	168.577 ppb
Concentration per Run 3	125.671 %	140.442 ppb	30.115 ppb	541.897 ppb	30,594.727 ppb	13.227 ppb	33.307 ppb	193.085 ppb	163.674 ppb
Concentration RSD	2.4 %	1.9 %	7.5 %	2.7 %	1.7 %	1.6 %	3.3 %	4.0 %	2.8 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	102.610 %	105.687 %	22.009 ppb	12.275 ppb	26.817 ppb	2.246 ppb	100.045 %	99.722 %	0.899 ppb
Concentration per Run 1	103.120 %	107.859 %	21.251 ppb	11.087 ppb	25.883 ppb	2.168 ppb	100.240 %	100.359 %	0.881 ppb
Concentration per Run 2	100.224 %	101.848 %	23.242 ppb	12.842 ppb	27.436 ppb	2.342 ppb	97.089 %	99.473 %	0.907 ppb
Concentration per Run 3	104.486 %	107.354 %	21.534 ppb	12.897 ppb	27.131 ppb	2.228 ppb	102.805 %	99.334 %	0.909 ppb
Concentration RSD	2.1 %	3.2 %	4.9 %	8.4 %	3.1 %	3.9 %	2.9 %	0.6 %	1.8 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	1.176 ppb	98.797 %	98.782 %	6.086 ppb	334.701 ppb	102.873 %	102.623 %	100.389 %	100.253 %
Concentration per Run 1	1.181 ppb	100.221 %	98.813 %	6.187 ppb	327.151 ppb	102.979 %	103.913 %	97.577 %	101.654 %
Concentration per Run 2	1.217 ppb	98.698 %	97.433 %	6.082 ppb	344.217 ppb	101.253 %	101.633 %	100.999 %	97.163 %
Concentration per Run 3	1.131 ppb	97.473 %	100.099 %	5.988 ppb	332.735 ppb	104.387 %	102.323 %	102.592 %	101.943 %
Concentration RSD	3.7 %	1.4 %	1.3 %	1.6 %	2.6 %	1.5 %	1.1 %	2.6 %	2.7 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.343 ppb	203.810 ppb	98.903 %	98.722 %
Concentration per Run 1	0.299 ppb	198.554 ppb	97.703 %	100.713 %
Concentration per Run 2	0.361 ppb	206.136 ppb	100.852 %	97.776 %
Concentration per Run 3	0.368 ppb	206.740 ppb	98.154 %	97.676 %
Concentration RSD	11.0 %	2.2 %	1.7 %	1.7 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index:	64	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	WG1863507-6d50 6020TS	Rack	1		
Analysis started at:	12/15/2023 11:50:12 AM	Vial	34		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	99.310 %	107.540 %	0.066 ppb	251.622 ppb	201.159 ppb	471.217 ppb	143.194 ppb	463.310 ppb	105.406 %
Concentration per Run 1	99.500 %	109.921 %	0.063 ppb	249.394 ppb	196.303 ppb	488.413 ppb	148.795 ppb	492.803 ppb	104.208 %
Concentration per Run 2	99.404 %	103.175 %	0.066 ppb	257.147 ppb	214.803 ppb	497.459 ppb	135.845 ppb	448.110 ppb	110.795 %
Concentration per Run 3	99.025 %	109.524 %	0.070 ppb	248.325 ppb	192.371 ppb	427.779 ppb	144.943 ppb	449.017 ppb	101.214 %
Concentration RSD	0.3 %	3.5 %	5.6 %	1.9 %	6.0 %	8.0 %	4.6 %	5.5 %	4.7 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	101.948 %	48.521 ppb	6.080 ppb	12.998 ppb	4,870.602 ppb	0.733 ppb	4.651 ppb	15.648 ppb	5.436 ppb
Concentration per Run 1	100.910 %	47.519 ppb	6.145 ppb	13.204 ppb	4,886.704 ppb	0.709 ppb	4.846 ppb	15.646 ppb	5.337 ppb
Concentration per Run 2	102.217 %	49.058 ppb	5.773 ppb	13.267 ppb	4,661.558 ppb	0.777 ppb	4.424 ppb	15.608 ppb	5.426 ppb
Concentration per Run 3	102.717 %	48.984 ppb	6.322 ppb	12.524 ppb	5,063.543 ppb	0.714 ppb	4.684 ppb	15.690 ppb	5.546 ppb
Concentration RSD	0.9 %	1.8 %	4.6 %	3.2 %	4.1 %	5.1 %	4.6 %	0.3 %	1.9 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	104.987 %	104.054 %	2.652 ppb	0.854 ppb	16.173 ppb	0.735 ppb	100.850 %	100.062 %	0.048 ppb
Concentration per Run 1	105.656 %	104.868 %	2.773 ppb	0.482 ppb	15.829 ppb	0.720 ppb	98.579 %	100.260 %	0.045 ppb
Concentration per Run 2	104.909 %	105.154 %	2.571 ppb	1.200 ppb	16.288 ppb	0.747 ppb	103.586 %	101.437 %	0.045 ppb
Concentration per Run 3	104.397 %	102.140 %	2.613 ppb	0.879 ppb	16.401 ppb	0.739 ppb	100.386 %	98.487 %	0.054 ppb
Concentration RSD	0.6 %	1.6 %	4.0 %	42.1 %	1.9 %	1.9 %	2.5 %	1.5 %	10.7 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.026 ppb	99.747 %	99.841 %	0.264 ppb	14.738 ppb	99.190 %	99.514 %	99.815 %	97.887 %
Concentration per Run 1	0.027 ppb	102.603 %	100.484 %	0.287 ppb	14.440 ppb	96.644 %	100.123 %	99.859 %	99.244 %
Concentration per Run 2	0.030 ppb	97.243 %	100.334 %	0.247 ppb	15.053 ppb	100.223 %	98.256 %	101.334 %	96.836 %
Concentration per Run 3	0.020 ppb	99.395 %	98.705 %	0.259 ppb	14.722 ppb	100.704 %	100.164 %	98.252 %	97.582 %
Concentration RSD	20.6 %	2.7 %	1.0 %	7.8 %	2.1 %	2.2 %	1.1 %	1.5 %	1.3 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.089 ppb	12.086 ppb	98.933 %	97.351 %
Concentration per Run 1	0.052 ppb	11.850 ppb	100.533 %	99.423 %
Concentration per Run 2	0.107 ppb	12.319 ppb	98.283 %	96.029 %
Concentration per Run 3	0.109 ppb	12.087 ppb	97.983 %	96.601 %
Concentration RSD	36.2 %	1.9 %	1.4 %	1.9 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index: 65 User name ALPHALAB\ICPMSRQ Comment <Comment>
Analysis label: CCV Rack 0
Analysis started at: 12/15/2023 11:54:54 AM Vial 9

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	94.418 %	99.206 %	63.453 ppb	6,210.719 ppb	6,409.146 ppb	51.343 ppb	6,492.099 ppb	6,362.850 ppb	104.701 %
Concentration per Run 1	94.724 %	103.571 %	62.799 ppb	6,007.839 ppb	6,245.912 ppb	49.352 ppb	6,357.855 ppb	6,291.550 ppb	106.347 %
Concentration per Run 2	93.985 %	96.825 %	64.160 ppb	6,318.964 ppb	6,451.870 ppb	54.552 ppb	6,386.856 ppb	6,196.107 ppb	103.016 %
Concentration per Run 3	94.545 %	97.222 %	63.400 ppb	6,305.355 ppb	6,529.658 ppb	50.127 ppb	6,731.584 ppb	6,600.893 ppb	104.740 %
Recovery Percentage 1			105.755 %	103.512 %	106.819 %	85.572 %	108.202 %	106.048 %	
Concentration RSD	0.4 %	3.8 %	1.1 %	2.8 %	2.3 %	5.5 %	3.2 %	3.3 %	1.6 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	104.960 %	62.682 ppb	60.467 ppb	61.834 ppb	6,343.500 ppb	62.447 ppb	64.719 ppb	66.259 ppb	64.949 ppb
Concentration per Run 1	106.023 %	62.244 ppb	60.044 ppb	60.913 ppb	6,276.310 ppb	61.751 ppb	62.323 ppb	64.845 ppb	64.026 ppb
Concentration per Run 2	106.446 %	61.596 ppb	59.378 ppb	60.807 ppb	6,188.588 ppb	62.235 ppb	64.006 ppb	65.458 ppb	63.865 ppb
Concentration per Run 3	102.409 %	64.206 ppb	61.978 ppb	63.783 ppb	6,565.601 ppb	63.354 ppb	67.828 ppb	68.474 ppb	66.957 ppb
Recovery Percentage 1		104.470 %	100.778 %	103.057 %	105.725 %	104.078 %	107.865 %	110.432 %	108.249 %
Concentration RSD	2.1 %	2.2 %	2.2 %	2.7 %	3.1 %	1.3 %	4.4 %	2.9 %	2.7 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	102.712 %	98.377 %	63.237 ppb	60.789 ppb	60.722 ppb	62.224 ppb	99.980 %	99.157 %	60.275 ppb
Concentration per Run 1	103.306 %	102.016 %	60.796 ppb	57.758 ppb	56.557 ppb	60.432 ppb	98.254 %	100.345 %	58.480 ppb
Concentration per Run 2	100.924 %	97.402 %	63.329 ppb	59.549 ppb	62.637 ppb	63.516 ppb	100.832 %	99.335 %	61.292 ppb
Concentration per Run 3	103.905 %	95.712 %	65.587 ppb	65.059 ppb	62.971 ppb	62.723 ppb	100.854 %	97.793 %	61.052 ppb
Recovery Percentage 1			105.396 %	101.315 %	101.203 %	103.707 %			100.458 %
Concentration RSD	1.5 %	3.3 %	3.8 %	6.3 %	5.9 %	2.6 %	1.5 %	1.3 %	2.6 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	60.232 ppb	97.997 %	98.781 %	60.958 ppb	59.650 ppb	99.125 %	99.411 %	100.334 %	98.435 %
Concentration per Run 1	58.613 ppb	96.745 %	100.012 %	60.519 ppb	59.103 ppb	100.328 %	99.223 %	99.762 %	97.896 %
Concentration per Run 2	60.985 ppb	99.208 %	98.381 %	60.647 ppb	59.968 ppb	97.919 %	100.133 %	99.718 %	98.362 %
Concentration per Run 3	61.098 ppb	98.038 %	97.951 %	61.707 ppb	59.879 ppb	99.128 %	98.875 %	101.522 %	99.046 %
Recovery Percentage 1	100.387 %			101.596 %	99.417 %				
Concentration RSD	2.3 %	1.3 %	1.1 %	1.1 %	0.8 %	1.2 %	0.7 %	1.0 %	0.6 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	61.122 ppb	61.238 ppb	95.894 %	95.586 %
Concentration per Run 1	59.448 ppb	59.582 ppb	94.438 %	98.065 %
Concentration per Run 2	62.467 ppb	62.134 ppb	98.108 %	94.085 %
Concentration per Run 3	61.452 ppb	61.998 ppb	95.135 %	94.609 %
Recovery Percentage 1	101.871 %	102.063 %		
Concentration RSD	2.5 %	2.3 %	2.0 %	2.3 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index:	66	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	12/15/2023 11:59:39 AM	Vial	10		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	97.675 %	104.630 %	0.038 ppb	-3.245 ppb	1.494 ppb	1.750 ppb	-9.388 ppb	-2.921 ppb	103.786 %
Concentration per Run 1	98.630 %	115.873 %	0.038 ppb	-3.390 ppb	-0.185 ppb	4.168 ppb	-16.849 ppb	1.223 ppb	105.510 %
Concentration per Run 2	97.117 %	100.397 %	0.039 ppb	-2.985 ppb	2.302 ppb	0.531 ppb	-13.162 ppb	-11.520 ppb	101.422 %
Concentration per Run 3	97.279 %	97.619 %	0.039 ppb	-3.361 ppb	2.365 ppb	0.553 ppb	1.846 ppb	1.534 ppb	104.426 %
Recovery Percentage 1			7.682 %	-3.245 %	2.134 %	17.503 %	-9.388 %	-2.921 %	
Concentration RSD	0.9 %	9.4 %	1.4 %	7.0 %	97.4 %	119.6 %	105.5 %	255.0 %	2.0 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	104.037 %	0.029 ppb	-0.107 ppb	0.033 ppb	14.042 ppb	0.019 ppb	0.371 ppb	0.090 ppb	0.313 ppb
Concentration per Run 1	106.715 %	0.041 ppb	-0.130 ppb	0.030 ppb	14.913 ppb	0.034 ppb	0.412 ppb	0.068 ppb	0.233 ppb
Concentration per Run 2	102.755 %	0.002 ppb	-0.130 ppb	0.026 ppb	14.490 ppb	0.009 ppb	0.405 ppb	0.084 ppb	0.309 ppb
Concentration per Run 3	102.640 %	0.044 ppb	-0.060 ppb	0.041 ppb	12.722 ppb	0.014 ppb	0.297 ppb	0.120 ppb	0.398 ppb
Recovery Percentage 1		0.576 %	-10.656 %	3.255 %	28.083 %	3.793 %	18.574 %	9.049 %	6.265 %
Concentration RSD	2.2 %	81.6 %	38.0 %	23.1 %	8.3 %	68.3 %	17.3 %	29.5 %	26.5 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	102.615 %	105.798 %	0.056 ppb	0.246 ppb	0.014 ppb	0.432 ppb	101.222 %	103.193 %	0.034 ppb
Concentration per Run 1	103.624 %	112.569 %	0.131 ppb	0.051 ppb	0.004 ppb	0.377 ppb	101.202 %	106.052 %	0.036 ppb
Concentration per Run 2	102.334 %	102.413 %	-0.022 ppb	0.500 ppb	0.008 ppb	0.500 ppb	102.523 %	102.474 %	0.037 ppb
Concentration per Run 3	101.886 %	102.413 %	0.059 ppb	0.189 ppb	0.029 ppb	0.420 ppb	99.941 %	101.052 %	0.028 ppb
Recovery Percentage 1			11.206 %	4.929 %	2.701 %	21.618 %			8.400 %
Concentration RSD	0.9 %	5.5 %	136.6 %	93.2 %	99.0 %	14.5 %	1.3 %	2.5 %	14.9 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.018 ppb	100.061 %	100.339 %	0.068 ppb	0.022 ppb	99.299 %	101.626 %	98.743 %	100.108 %
Concentration per Run 1	0.026 ppb	99.200 %	105.473 %	0.057 ppb	0.032 ppb	99.068 %	105.784 %	100.140 %	102.231 %
Concentration per Run 2	0.012 ppb	98.126 %	97.500 %	0.073 ppb	0.009 ppb	100.816 %	99.009 %	98.891 %	97.424 %
Concentration per Run 3	0.017 ppb	102.858 %	98.045 %	0.076 ppb	0.026 ppb	98.012 %	100.085 %	97.199 %	100.668 %
Recovery Percentage 1				1.710 %	4.463 %				
Concentration RSD	38.9 %	2.5 %	4.4 %	14.8 %	53.9 %	1.4 %	3.6 %	1.5 %	2.4 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.784 ppb	0.041 ppb	97.077 %	101.249 %
Concentration per Run 1	0.559 ppb	0.046 ppb	96.319 %	105.293 %
Concentration per Run 2	0.959 ppb	0.043 ppb	96.218 %	99.679 %
Concentration per Run 3	0.833 ppb	0.035 ppb	98.694 %	98.776 %
Recovery Percentage 1	78.378 %	4.149 %		
Concentration RSD	26.1 %	13.8 %	1.4 %	3.5 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index:	67	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	12/15/2023 12:17:26 PM	Vial	9		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	95.204 %	109.921 %	62.043 ppb	5,676.499 ppb	5,902.612 ppb	61.400 ppb	6,079.416 ppb	6,091.493 ppb	105.144 %
Concentration per Run 1	94.240 %	113.492 %	64.072 ppb	5,465.270 ppb	5,762.509 ppb	49.151 ppb	5,833.860 ppb	5,645.194 ppb	100.866 %
Concentration per Run 2	95.289 %	113.492 %	61.690 ppb	5,609.681 ppb	5,826.359 ppb	59.902 ppb	5,986.552 ppb	5,941.875 ppb	108.313 %
Concentration per Run 3	96.083 %	102.778 %	60.368 ppb	5,954.544 ppb	6,118.968 ppb	75.147 ppb	6,417.837 ppb	6,687.411 ppb	106.254 %
Recovery Percentage 1			103.406 %	94.608 %	98.377 %	102.334 %	101.324 %	101.525 %	
Concentration RSD	1.0 %	5.6 %	3.0 %	4.4 %	3.2 %	21.3 %	5.0 %	8.8 %	3.7 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	119.583 %	58.397 ppb	56.195 ppb	57.827 ppb	5,881.568 ppb	57.236 ppb	59.520 ppb	61.778 ppb	61.047 ppb
Concentration per Run 1	125.517 %	55.188 ppb	53.351 ppb	54.719 ppb	5,695.098 ppb	55.439 ppb	57.143 ppb	59.452 ppb	57.856 ppb
Concentration per Run 2	119.404 %	58.891 ppb	57.199 ppb	58.567 ppb	5,961.998 ppb	58.486 ppb	59.543 ppb	63.276 ppb	61.989 ppb
Concentration per Run 3	113.828 %	61.111 ppb	58.035 ppb	60.193 ppb	5,987.608 ppb	57.782 ppb	61.873 ppb	62.606 ppb	63.296 ppb
Recovery Percentage 1		97.328 %	93.658 %	96.378 %	98.026 %	95.393 %	99.199 %	102.963 %	101.745 %
Concentration RSD	4.9 %	5.1 %	4.4 %	4.9 %	2.8 %	2.8 %	4.0 %	3.3 %	4.7 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	99.558 %	107.621 %	59.097 ppb	60.319 ppb	60.366 ppb	61.302 ppb	96.824 %	101.666 %	60.014 ppb
Concentration per Run 1	100.556 %	112.236 %	55.616 ppb	57.091 ppb	58.642 ppb	58.222 ppb	94.077 %	104.103 %	58.687 ppb
Concentration per Run 2	98.747 %	104.547 %	61.271 ppb	63.243 ppb	60.864 ppb	62.109 ppb	97.847 %	100.868 %	60.749 ppb
Concentration per Run 3	99.369 %	106.080 %	60.404 ppb	60.625 ppb	61.590 ppb	63.576 ppb	98.548 %	100.025 %	60.607 ppb
Recovery Percentage 1			98.495 %	100.532 %	100.609 %	102.171 %			100.024 %
Concentration RSD	0.9 %	3.8 %	5.2 %	5.1 %	2.5 %	4.5 %	2.5 %	2.1 %	1.9 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	60.481 ppb	96.389 %	104.121 %	60.873 ppb	60.780 ppb	99.958 %	104.798 %	99.364 %	104.800 %
Concentration per Run 1	58.082 ppb	95.895 %	107.199 %	59.182 ppb	58.328 ppb	99.258 %	109.516 %	97.303 %	107.900 %
Concentration per Run 2	61.471 ppb	97.276 %	103.407 %	60.616 ppb	61.651 ppb	98.510 %	103.411 %	100.993 %	103.244 %
Concentration per Run 3	61.890 ppb	95.995 %	101.757 %	62.821 ppb	62.361 ppb	102.107 %	101.466 %	99.796 %	103.257 %
Recovery Percentage 1	100.801 %			101.455 %	101.300 %				
Concentration RSD	3.5 %	0.8 %	2.7 %	3.0 %	3.5 %	1.9 %	4.0 %	1.9 %	2.6 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	58.307 ppb	58.258 ppb	93.635 %	103.273 %
Concentration per Run 1	54.348 ppb	53.897 ppb	93.746 %	109.816 %
Concentration per Run 2	58.822 ppb	58.622 ppb	94.828 %	102.187 %
Concentration per Run 3	61.750 ppb	62.256 ppb	92.330 %	97.817 %
Recovery Percentage 1	97.178 %	97.097 %		
Concentration RSD	6.4 %	7.2 %	1.3 %	5.9 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index: 68
Analysis label: CCB
Analysis started at: 12/15/2023 12:22:10 PM
User name ALPHALAB\ICPMSRQ
Rack 0
Vial 10
Comment <Comment>

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	96.630 %	89.021 %	0.046 ppb	-0.845 ppb	1.688 ppb	0.994 ppb	0.582 ppb	11.424 ppb	99.051 %
Concentration per Run 1	97.482 %	95.635 %	0.055 ppb	-1.285 ppb	2.149 ppb	-1.117 ppb	5.479 ppb	8.680 ppb	101.690 %
Concentration per Run 2	95.517 %	84.127 %	0.042 ppb	1.134 ppb	2.439 ppb	0.697 ppb	1.772 ppb	2.404 ppb	97.554 %
Concentration per Run 3	96.892 %	87.302 %	0.042 ppb	-2.385 ppb	0.478 ppb	3.403 ppb	-5.506 ppb	23.188 ppb	97.908 %
Recovery Percentage 1			9.245 %	-0.845 %	2.412 %	9.943 %	0.582 %	11.424 %	
Concentration RSD	1.0 %	6.7 %	16.0 %	213.0 %	62.7 %	228.8 %	960.6 %	93.3 %	2.3 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	99.077 %	0.012 ppb	-0.095 ppb	0.050 ppb	11.777 ppb	0.018 ppb	0.466 ppb	0.096 ppb	0.341 ppb
Concentration per Run 1	100.602 %	0.009 ppb	-0.140 ppb	0.077 ppb	11.425 ppb	0.017 ppb	0.494 ppb	0.094 ppb	0.308 ppb
Concentration per Run 2	99.410 %	0.002 ppb	-0.088 ppb	0.034 ppb	12.390 ppb	0.019 ppb	0.424 ppb	0.091 ppb	0.352 ppb
Concentration per Run 3	97.219 %	0.025 ppb	-0.058 ppb	0.040 ppb	11.517 ppb	0.017 ppb	0.479 ppb	0.104 ppb	0.362 ppb
Recovery Percentage 1		0.246 %	-9.517 %	5.019 %	23.554 %	3.528 %	23.288 %	9.627 %	6.816 %
Concentration RSD	1.7 %	95.7 %	43.2 %	46.3 %	4.5 %	6.5 %	7.9 %	7.1 %	8.4 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	98.210 %	99.197 %	-0.008 ppb	0.044 ppb	0.016 ppb	0.194 ppb	98.591 %	98.890 %	0.029 ppb
Concentration per Run 1	98.653 %	102.764 %	0.042 ppb	0.053 ppb	0.017 ppb	0.195 ppb	99.017 %	99.744 %	0.028 ppb
Concentration per Run 2	98.471 %	99.861 %	-0.005 ppb	0.055 ppb	-0.011 ppb	0.197 ppb	97.498 %	99.097 %	0.031 ppb
Concentration per Run 3	97.506 %	94.965 %	-0.060 ppb	0.024 ppb	0.042 ppb	0.191 ppb	99.259 %	97.830 %	0.027 ppb
Recovery Percentage 1			-1.557 %	0.876 %	3.242 %	9.714 %			7.188 %
Concentration RSD	0.6 %	4.0 %	650.8 %	39.4 %	163.1 %	1.8 %	1.0 %	1.0 %	7.9 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.016 ppb	96.824 %	99.453 %	0.049 ppb	0.049 ppb	98.392 %	97.907 %	96.385 %	98.537 %
Concentration per Run 1	0.016 ppb	96.338 %	102.773 %	0.045 ppb	0.076 ppb	98.094 %	100.054 %	96.718 %	99.929 %
Concentration per Run 2	0.023 ppb	97.932 %	97.426 %	0.046 ppb	0.036 ppb	96.915 %	96.724 %	96.423 %	98.966 %
Concentration per Run 3	0.007 ppb	96.203 %	98.159 %	0.056 ppb	0.035 ppb	100.167 %	96.944 %	96.013 %	96.717 %
Recovery Percentage 1				1.229 %	9.802 %				
Concentration RSD	50.8 %	1.0 %	2.9 %	12.7 %	47.8 %	1.7 %	1.9 %	0.4 %	1.7 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.327 ppb	0.028 ppb	95.612 %	96.731 %
Concentration per Run 1	0.203 ppb	0.031 ppb	96.479 %	98.211 %
Concentration per Run 2	0.376 ppb	0.029 ppb	97.018 %	96.353 %
Concentration per Run 3	0.401 ppb	0.024 ppb	93.340 %	95.630 %
Recovery Percentage 1	32.653 %	2.821 %		
Concentration RSD	33.0 %	12.3 %	2.1 %	1.4 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index: 69
Analysis label: WG1863929-1 6020TL
Analysis started at: 12/15/2023 12:30:17 PM
User name ALPHALAB\ICPMSRQ
Rack 1
Vial 42
Comment <Comment>

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	97.986 %	103.704 %	0.025 ppb	-4.114 ppb	0.437 ppb	1.914 ppb	1.628 ppb	17.914 ppb	102.475 %
Concentration per Run 1	100.525 %	108.333 %	0.022 ppb	-7.436 ppb	0.740 ppb	0.473 ppb	12.078 ppb	15.070 ppb	104.749 %
Concentration per Run 2	96.296 %	100.794 %	0.027 ppb	-2.510 ppb	-0.020 ppb	3.022 ppb	2.609 ppb	1.703 ppb	101.185 %
Concentration per Run 3	97.136 %	101.984 %	0.027 ppb	-2.396 ppb	0.592 ppb	2.247 ppb	-9.801 ppb	36.968 ppb	101.491 %
Concentration RSD	2.3 %	3.9 %	9.6 %	69.9 %	92.2 %	68.3 %	673.8 %	99.4 %	1.9 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	100.602 %	-0.003 ppb	-0.923 ppb	0.316 ppb	2.128 ppb	0.005 ppb	-0.009 ppb	-0.007 ppb	0.073 ppb
Concentration per Run 1	102.794 %	-0.005 ppb	-0.925 ppb	0.296 ppb	2.380 ppb	0.008 ppb	-0.031 ppb	-0.003 ppb	0.066 ppb
Concentration per Run 2	101.487 %	-0.012 ppb	-0.924 ppb	0.292 ppb	2.772 ppb	0.002 ppb	-0.002 ppb	-0.003 ppb	0.044 ppb
Concentration per Run 3	97.527 %	0.010 ppb	-0.919 ppb	0.359 ppb	1.231 ppb	0.005 ppb	0.005 ppb	-0.016 ppb	0.109 ppb
Concentration RSD	2.7 %	448.1 %	0.4 %	11.9 %	37.6 %	53.7 %	202.1 %	103.8 %	45.3 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	99.944 %	103.202 %	-0.038 ppb	0.027 ppb	0.015 ppb	0.046 ppb	100.009 %	99.601 %	0.003 ppb
Concentration per Run 1	103.095 %	104.473 %	-0.078 ppb	0.052 ppb	-0.007 ppb	0.030 ppb	104.861 %	97.825 %	0.002 ppb
Concentration per Run 2	97.260 %	103.596 %	-0.052 ppb	0.052 ppb	0.024 ppb	0.022 ppb	96.308 %	101.310 %	0.002 ppb
Concentration per Run 3	99.476 %	101.537 %	0.015 ppb	-0.022 ppb	0.030 ppb	0.087 ppb	98.859 %	99.669 %	0.005 ppb
Concentration RSD	2.9 %	1.5 %	124.3 %	155.1 %	129.3 %	75.8 %	4.4 %	1.8 %	56.1 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.002 ppb	98.352 %	99.238 %	0.013 ppb	0.032 ppb	98.710 %	99.818 %	96.584 %	99.929 %
Concentration per Run 1	0.003 ppb	99.565 %	98.384 %	0.015 ppb	0.052 ppb	99.888 %	99.189 %	98.279 %	98.241 %
Concentration per Run 2	0.001 ppb	97.910 %	99.257 %	0.009 ppb	0.026 ppb	97.028 %	100.345 %	94.851 %	101.340 %
Concentration per Run 3	0.001 ppb	97.580 %	100.072 %	0.013 ppb	0.017 ppb	99.214 %	99.920 %	96.622 %	100.206 %
Concentration RSD	59.0 %	1.1 %	0.9 %	23.0 %	57.6 %	1.5 %	0.6 %	1.8 %	1.6 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.072 ppb	0.010 ppb	96.536 %	95.175 %
Concentration per Run 1	0.037 ppb	0.009 ppb	98.509 %	93.355 %
Concentration per Run 2	0.086 ppb	0.009 ppb	96.110 %	96.062 %
Concentration per Run 3	0.093 ppb	0.011 ppb	94.990 %	96.109 %
Concentration RSD	42.9 %	9.2 %	1.9 %	1.7 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index:	70	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	WG1863929-2d10 6020TL	Rack	1		
Analysis started at:	12/15/2023 12:34:57 PM	Vial	43		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	97.366 %	95.238 %	5.402 ppb	1,191.714 ppb	1,212.376 ppb	229.348 ppb	1,238.946 ppb	1,372.541 ppb	100.355 %
Concentration per Run 1	99.489 %	105.159 %	5.349 ppb	1,119.997 ppb	1,137.151 ppb	228.448 ppb	1,199.384 ppb	1,550.229 ppb	102.283 %
Concentration per Run 2	96.066 %	86.905 %	5.408 ppb	1,248.079 ppb	1,244.226 ppb	232.704 ppb	1,212.243 ppb	1,406.202 ppb	98.060 %
Concentration per Run 3	96.542 %	93.651 %	5.449 ppb	1,207.065 ppb	1,255.752 ppb	226.891 ppb	1,305.213 ppb	1,161.190 ppb	100.724 %
Concentration RSD	1.9 %	9.7 %	0.9 %	5.5 %	5.4 %	1.3 %	4.7 %	14.3 %	2.1 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	96.373 %	55.791 ppb	22.452 ppb	56.687 ppb	115.407 ppb	55.177 ppb	54.926 ppb	26.848 ppb	52.273 ppb
Concentration per Run 1	97.565 %	56.393 ppb	22.485 ppb	56.563 ppb	115.240 ppb	55.914 ppb	55.522 ppb	25.953 ppb	52.316 ppb
Concentration per Run 2	96.488 %	55.077 ppb	22.455 ppb	56.918 ppb	119.162 ppb	55.171 ppb	56.141 ppb	27.536 ppb	52.300 ppb
Concentration per Run 3	95.066 %	55.902 ppb	22.416 ppb	56.580 ppb	111.818 ppb	54.447 ppb	53.115 ppb	27.055 ppb	52.202 ppb
Concentration RSD	1.3 %	1.2 %	0.2 %	0.4 %	3.2 %	1.3 %	2.9 %	3.0 %	0.1 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	99.875 %	100.001 %	12.664 ppb	11.973 ppb	105.238 ppb	105.754 ppb	100.068 %	97.154 %	5.421 ppb
Concentration per Run 1	101.519 %	98.777 %	12.508 ppb	11.357 ppb	105.157 ppb	109.445 ppb	102.101 %	97.130 %	5.451 ppb
Concentration per Run 2	98.306 %	99.534 %	12.953 ppb	12.732 ppb	105.659 ppb	105.114 ppb	98.914 %	97.733 %	5.369 ppb
Concentration per Run 3	99.800 %	101.692 %	12.530 ppb	11.828 ppb	104.898 ppb	102.703 ppb	99.188 %	96.600 %	5.444 ppb
Concentration RSD	1.6 %	1.5 %	2.0 %	5.8 %	0.4 %	3.2 %	1.8 %	0.6 %	0.8 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	5.677 ppb	99.788 %	98.059 %	51.430 ppb	208.521 ppb	98.688 %	98.648 %	99.605 %	95.223 %
Concentration per Run 1	5.699 ppb	98.807 %	99.911 %	50.866 ppb	203.973 ppb	99.372 %	99.058 %	102.716 %	93.144 %
Concentration per Run 2	5.628 ppb	101.005 %	96.416 %	52.492 ppb	212.863 ppb	96.535 %	96.418 %	97.064 %	97.807 %
Concentration per Run 3	5.704 ppb	99.550 %	97.850 %	50.932 ppb	208.727 ppb	100.156 %	100.469 %	99.036 %	94.718 %
Concentration RSD	0.8 %	1.1 %	1.8 %	1.8 %	2.1 %	1.9 %	2.1 %	2.9 %	2.5 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	13.458 ppb	59.696 ppb	94.654 %	91.451 %
Concentration per Run 1	13.611 ppb	59.321 ppb	95.107 %	91.387 %
Concentration per Run 2	13.277 ppb	60.714 ppb	96.224 %	90.963 %
Concentration per Run 3	13.487 ppb	59.052 ppb	92.632 %	92.002 %
Concentration RSD	1.3 %	1.5 %	1.9 %	0.6 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index: 71
Analysis label: WG1863929-3d10 6020TL
Analysis started at: 12/15/2023 12:39:38 PM
User name ALPHALAB\ICPMSRQ
Rack 1
Vial 45
Comment <Comment>

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	99.285 %	108.333 %	5.229 ppb	4,306.212 ppb	1,193.219 ppb	197.633 ppb	3,270.635 ppb	6,125.408 ppb	102.629 %
Concentration per Run 1	99.783 %	114.286 %	5.165 ppb	4,088.225 ppb	1,126.556 ppb	186.077 ppb	3,086.428 ppb	5,852.429 ppb	105.128 %
Concentration per Run 2	99.285 %	102.778 %	5.286 ppb	4,467.021 ppb	1,234.544 ppb	184.069 ppb	3,332.405 ppb	6,050.904 ppb	100.816 %
Concentration per Run 3	98.787 %	107.937 %	5.236 ppb	4,363.392 ppb	1,218.557 ppb	222.754 ppb	3,393.072 ppb	6,472.892 ppb	101.943 %
Concentration RSD	0.5 %	5.3 %	1.2 %	4.5 %	4.9 %	11.0 %	5.0 %	5.2 %	2.2 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	100.359 %	54.715 ppb	21.391 ppb	81.451 ppb	180.745 ppb	53.242 ppb	52.636 ppb	26.540 ppb	52.431 ppb
Concentration per Run 1	103.140 %	52.699 ppb	20.690 ppb	79.245 ppb	172.872 ppb	51.522 ppb	52.344 ppb	25.926 ppb	50.956 ppb
Concentration per Run 2	100.064 %	56.372 ppb	21.502 ppb	82.757 ppb	188.065 ppb	54.355 ppb	53.563 ppb	26.956 ppb	54.584 ppb
Concentration per Run 3	97.873 %	55.073 ppb	21.979 ppb	82.350 ppb	181.298 ppb	53.849 ppb	52.002 ppb	26.740 ppb	51.754 ppb
Concentration RSD	2.6 %	3.4 %	3.0 %	2.4 %	4.2 %	2.8 %	1.6 %	2.0 %	3.6 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	101.377 %	99.494 %	12.675 ppb	11.075 ppb	172.537 ppb	104.163 ppb	97.572 %	98.832 %	5.248 ppb
Concentration per Run 1	101.782 %	100.050 %	12.371 ppb	11.609 ppb	167.022 ppb	101.192 ppb	98.478 %	101.926 %	5.008 ppb
Concentration per Run 2	100.814 %	96.740 %	13.367 ppb	11.064 ppb	173.981 ppb	105.932 ppb	96.609 %	98.783 %	5.470 ppb
Concentration per Run 3	101.535 %	101.692 %	12.286 ppb	10.551 ppb	176.608 ppb	105.365 ppb	97.629 %	95.787 %	5.267 ppb
Concentration RSD	0.5 %	2.5 %	4.7 %	4.8 %	2.9 %	2.5 %	1.0 %	3.1 %	4.4 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	5.488 ppb	99.905 %	99.331 %	51.806 ppb	213.893 ppb	100.359 %	100.118 %	100.682 %	99.288 %
Concentration per Run 1	5.390 ppb	101.540 %	101.857 %	50.140 ppb	206.037 ppb	101.166 %	102.188 %	100.157 %	102.083 %
Concentration per Run 2	5.598 ppb	99.603 %	97.210 %	52.806 ppb	219.120 ppb	99.089 %	100.190 %	100.191 %	97.089 %
Concentration per Run 3	5.477 ppb	98.571 %	98.927 %	52.471 ppb	216.521 ppb	100.823 %	97.975 %	101.697 %	98.691 %
Concentration RSD	1.9 %	1.5 %	2.4 %	2.8 %	3.2 %	1.1 %	2.1 %	0.9 %	2.6 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	12.645 ppb	56.809 ppb	95.595 %	94.841 %
Concentration per Run 1	12.026 ppb	55.107 ppb	97.382 %	97.474 %
Concentration per Run 2	12.647 ppb	56.254 ppb	96.153 %	94.124 %
Concentration per Run 3	13.262 ppb	59.067 ppb	93.250 %	92.925 %
Concentration RSD	4.9 %	3.6 %	2.2 %	2.5 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index: 72
Analysis label: WG1863929-4d10 6020TL
Analysis started at: 12/15/2023 12:44:20 PM
User name ALPHALAB\ICPMSRQ
Rack 1
Vial 46
Comment <Comment>

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	99.546 %	110.318 %	5.244 ppb	4,179.984 ppb	1,191.320 ppb	227.052 ppb	3,250.050 ppb	6,080.193 ppb	101.756 %
Concentration per Run 1	100.189 %	118.254 %	5.131 ppb	3,974.086 ppb	1,128.553 ppb	210.399 ppb	3,149.024 ppb	5,696.927 ppb	101.311 %
Concentration per Run 2	99.010 %	93.254 %	5.361 ppb	4,601.670 ppb	1,319.810 ppb	264.348 ppb	3,397.697 ppb	6,078.557 ppb	99.932 %
Concentration per Run 3	99.437 %	119.445 %	5.241 ppb	3,964.194 ppb	1,125.595 ppb	206.407 ppb	3,203.428 ppb	6,465.095 ppb	104.024 %
Concentration RSD	0.6 %	13.4 %	2.2 %	8.7 %	9.3 %	14.3 %	4.0 %	6.3 %	2.0 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	100.090 %	54.234 ppb	21.512 ppb	80.445 ppb	181.884 ppb	53.295 ppb	53.378 ppb	27.114 ppb	52.330 ppb
Concentration per Run 1	104.562 %	53.331 ppb	20.750 ppb	77.966 ppb	175.999 ppb	51.653 ppb	50.668 ppb	26.415 ppb	52.003 ppb
Concentration per Run 2	96.450 %	55.044 ppb	22.350 ppb	83.011 ppb	174.134 ppb	54.468 ppb	55.285 ppb	27.814 ppb	53.306 ppb
Concentration per Run 3	99.257 %	54.325 ppb	21.436 ppb	80.360 ppb	195.519 ppb	53.764 ppb	54.179 ppb	27.113 ppb	51.679 ppb
Concentration RSD	4.1 %	1.6 %	3.7 %	3.1 %	6.5 %	2.7 %	4.5 %	2.6 %	1.6 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	100.971 %	99.531 %	12.693 ppb	11.618 ppb	172.170 ppb	106.851 ppb	99.709 %	97.959 %	5.341 ppb
Concentration per Run 1	100.476 %	98.416 %	12.755 ppb	11.646 ppb	171.364 ppb	104.500 ppb	99.012 %	100.072 %	5.185 ppb
Concentration per Run 2	99.525 %	97.421 %	12.521 ppb	11.170 ppb	174.268 ppb	107.753 ppb	99.063 %	97.439 %	5.447 ppb
Concentration per Run 3	102.912 %	102.756 %	12.803 ppb	12.039 ppb	170.876 ppb	108.300 ppb	101.051 %	96.365 %	5.391 ppb
Concentration RSD	1.7 %	2.9 %	1.2 %	3.7 %	1.1 %	1.9 %	1.2 %	1.9 %	2.6 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	5.431 ppb	100.027 %	99.706 %	51.481 ppb	214.133 ppb	101.556 %	98.497 %	101.869 %	98.168 %
Concentration per Run 1	5.268 ppb	101.832 %	102.630 %	49.959 ppb	210.595 ppb	102.803 %	99.283 %	101.357 %	99.881 %
Concentration per Run 2	5.555 ppb	99.308 %	96.335 %	53.050 ppb	222.643 ppb	99.778 %	97.212 %	100.831 %	97.102 %
Concentration per Run 3	5.472 ppb	98.942 %	100.152 %	51.435 ppb	209.160 ppb	102.089 %	98.995 %	103.417 %	97.521 %
Concentration RSD	2.7 %	1.6 %	3.2 %	3.0 %	3.5 %	1.6 %	1.1 %	1.3 %	1.5 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	12.895 ppb	57.500 ppb	96.891 %	94.836 %
Concentration per Run 1	12.490 ppb	55.859 ppb	95.359 %	96.617 %
Concentration per Run 2	13.153 ppb	57.999 ppb	97.608 %	94.491 %
Concentration per Run 3	13.042 ppb	58.640 ppb	97.705 %	93.402 %
Concentration RSD	2.8 %	2.5 %	1.4 %	1.7 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index:	73	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	WG1863929-5d10 6020TL	Rack	1		
Analysis started at:	12/15/2023 12:49:02 PM	Vial	47		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	98.083 %	114.021 %	47.331 ppb	7,356.365 ppb	4,749.186 ppb	52.737 ppb	6,864.851 ppb	9,436.146 ppb	102.539 %
Concentration per Run 1	98.571 %	123.016 %	47.638 ppb	6,969.062 ppb	4,504.851 ppb	49.575 ppb	6,652.615 ppb	9,420.809 ppb	102.462 %
Concentration per Run 2	98.157 %	108.730 %	46.985 ppb	7,618.413 ppb	4,936.904 ppb	55.280 ppb	7,053.220 ppb	9,586.623 ppb	101.744 %
Concentration per Run 3	97.520 %	110.318 %	47.371 ppb	7,481.619 ppb	4,805.803 ppb	53.355 ppb	6,888.717 ppb	9,301.005 ppb	103.413 %
Concentration RSD	0.5 %	6.9 %	0.7 %	4.7 %	4.7 %	5.5 %	2.9 %	1.5 %	0.8 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	102.807 %	48.632 ppb	47.889 ppb	74.285 ppb	5,007.040 ppb	47.045 ppb	48.623 ppb	46.526 ppb	47.076 ppb
Concentration per Run 1	103.217 %	48.995 ppb	47.214 ppb	73.098 ppb	4,889.456 ppb	46.731 ppb	47.414 ppb	45.158 ppb	46.276 ppb
Concentration per Run 2	99.872 %	50.293 ppb	49.212 ppb	76.209 ppb	5,155.909 ppb	47.269 ppb	50.363 ppb	47.547 ppb	47.628 ppb
Concentration per Run 3	105.331 %	46.608 ppb	47.240 ppb	73.549 ppb	4,975.754 ppb	47.135 ppb	48.092 ppb	46.872 ppb	47.324 ppb
Concentration RSD	2.7 %	3.8 %	2.4 %	2.3 %	2.7 %	0.6 %	3.2 %	2.6 %	1.5 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	100.837 %	99.710 %	46.635 ppb	45.305 ppb	117.977 ppb	50.241 ppb	97.814 %	96.673 %	1.649 ppb
Concentration per Run 1	100.472 %	102.111 %	45.475 ppb	42.020 ppb	113.927 ppb	49.890 ppb	97.363 %	97.177 %	1.599 ppb
Concentration per Run 2	101.224 %	97.851 %	46.964 ppb	46.153 ppb	119.820 ppb	50.207 ppb	97.411 %	95.938 %	1.686 ppb
Concentration per Run 3	100.815 %	99.168 %	47.465 ppb	47.740 ppb	120.184 ppb	50.625 ppb	98.669 %	96.903 %	1.663 ppb
Concentration RSD	0.4 %	2.2 %	2.2 %	6.5 %	3.0 %	0.7 %	0.8 %	0.7 %	2.7 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	47.725 ppb	97.650 %	96.447 %	48.848 ppb	55.671 ppb	100.433 %	99.472 %	100.503 %	99.047 %
Concentration per Run 1	47.624 ppb	97.584 %	97.318 %	48.400 ppb	56.076 ppb	101.309 %	99.975 %	98.797 %	102.695 %
Concentration per Run 2	47.573 ppb	98.651 %	96.382 %	49.002 ppb	56.506 ppb	98.553 %	98.346 %	100.847 %	96.086 %
Concentration per Run 3	47.979 ppb	96.716 %	95.642 %	49.144 ppb	54.432 ppb	101.439 %	100.094 %	101.864 %	98.360 %
Concentration RSD	0.5 %	1.0 %	0.9 %	0.8 %	2.0 %	1.6 %	1.0 %	1.6 %	3.4 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	48.322 ppb	48.327 ppb	96.064 %	95.457 %
Concentration per Run 1	46.046 ppb	46.484 ppb	96.447 %	99.101 %
Concentration per Run 2	48.780 ppb	49.028 ppb	97.409 %	93.855 %
Concentration per Run 3	50.141 ppb	49.467 ppb	94.338 %	93.415 %
Concentration RSD	4.3 %	3.3 %	1.6 %	3.3 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index:	74	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	WG1863929-6d5 6020TL	Rack	1		
Analysis started at:	12/15/2023 12:53:44 PM	Vial	48		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	101.378 %	107.540 %	0.031 ppb	6,509.708 ppb	247.871 ppb	17.116 ppb	4,258.731 ppb	9,848.993 ppb	100.548 %
Concentration per Run 1	102.309 %	106.746 %	0.033 ppb	6,556.426 ppb	255.588 ppb	18.521 ppb	4,257.237 ppb	9,152.536 ppb	103.125 %
Concentration per Run 2	101.169 %	102.381 %	0.028 ppb	6,685.197 ppb	248.915 ppb	19.801 ppb	4,315.483 ppb	10,108.408 ppb	100.347 %
Concentration per Run 3	100.654 %	113.492 %	0.031 ppb	6,287.501 ppb	239.110 ppb	13.026 ppb	4,203.473 ppb	10,286.037 ppb	98.172 %
Concentration RSD	0.8 %	5.2 %	8.2 %	3.1 %	3.3 %	21.0 %	1.3 %	6.2 %	2.5 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	99.141 %	0.034 ppb	0.545 ppb	57.387 ppb	152.877 ppb	0.100 ppb	1.049 ppb	0.439 ppb	1.429 ppb
Concentration per Run 1	98.603 %	0.054 ppb	0.604 ppb	57.151 ppb	155.457 ppb	0.092 ppb	1.013 ppb	0.416 ppb	1.369 ppb
Concentration per Run 2	98.142 %	0.010 ppb	0.560 ppb	59.001 ppb	157.822 ppb	0.100 ppb	1.134 ppb	0.443 ppb	1.478 ppb
Concentration per Run 3	100.679 %	0.038 ppb	0.472 ppb	56.010 ppb	145.351 ppb	0.107 ppb	0.999 ppb	0.459 ppb	1.440 ppb
Concentration RSD	1.4 %	64.3 %	12.3 %	2.6 %	4.3 %	7.8 %	7.1 %	4.9 %	3.9 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	99.872 %	94.739 %	0.121 ppb	0.080 ppb	148.446 ppb	0.486 ppb	98.837 %	95.790 %	0.056 ppb
Concentration per Run 1	102.089 %	96.390 %	0.235 ppb	0.141 ppb	146.257 ppb	0.431 ppb	101.794 %	97.315 %	0.049 ppb
Concentration per Run 2	98.382 %	91.021 %	0.078 ppb	0.139 ppb	150.688 ppb	0.498 ppb	99.715 %	94.994 %	0.062 ppb
Concentration per Run 3	99.145 %	96.805 %	0.048 ppb	-0.041 ppb	148.392 ppb	0.529 ppb	95.001 %	95.062 %	0.057 ppb
Concentration RSD	2.0 %	3.4 %	83.3 %	131.4 %	1.5 %	10.3 %	3.5 %	1.4 %	11.6 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.104 ppb	97.839 %	96.234 %	0.243 ppb	18.407 ppb	100.566 %	97.766 %	99.517 %	97.007 %
Concentration per Run 1	0.102 ppb	98.328 %	99.122 %	0.227 ppb	17.655 ppb	101.085 %	98.714 %	99.197 %	97.528 %
Concentration per Run 2	0.089 ppb	97.706 %	95.117 %	0.264 ppb	18.308 ppb	100.168 %	96.786 %	98.948 %	96.095 %
Concentration per Run 3	0.122 ppb	97.484 %	94.464 %	0.239 ppb	19.257 ppb	100.446 %	97.798 %	100.407 %	97.398 %
Concentration RSD	16.0 %	0.4 %	2.6 %	7.7 %	4.4 %	0.5 %	1.0 %	0.8 %	0.8 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.295 ppb	0.062 ppb	95.597 %	95.725 %
Concentration per Run 1	0.188 ppb	0.063 ppb	94.157 %	96.837 %
Concentration per Run 2	0.344 ppb	0.062 ppb	95.459 %	96.480 %
Concentration per Run 3	0.354 ppb	0.060 ppb	97.173 %	93.857 %
Concentration RSD	31.5 %	2.8 %	1.6 %	1.7 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index:	75	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	I2373369-05d10 6020TS	Rack	1		
Analysis started at:	12/15/2023 12:58:26 PM	Vial	38		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	105.771 %	109.524 %	1.257 ppb	150.970 ppb	5,491.432 ppb	15,597.188 ppb	1,461.236 ppb	5,792.023 ppb	135.228 %
Concentration per Run 1	105.758 %	108.333 %	1.240 ppb	152.718 ppb	5,409.008 ppb	15,263.914 ppb	1,431.538 ppb	5,517.265 ppb	135.287 %
Concentration per Run 2	105.694 %	109.524 %	1.269 ppb	148.234 ppb	5,440.329 ppb	15,116.526 ppb	1,423.968 ppb	5,541.384 ppb	135.145 %
Concentration per Run 3	105.862 %	110.714 %	1.261 ppb	151.957 ppb	5,624.959 ppb	16,411.125 ppb	1,528.201 ppb	6,317.419 ppb	135.251 %
Concentration RSD	0.1 %	1.1 %	1.2 %	1.6 %	2.1 %	4.5 %	4.0 %	7.9 %	0.1 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	131.541 %	53.870 ppb	37.330 ppb	775.562 ppb	41,750.397 ppb	17.570 ppb	32.291 ppb	57.339 ppb	104.802 ppb
Concentration per Run 1	132.976 %	51.253 ppb	36.055 ppb	745.428 ppb	40,614.430 ppb	16.814 ppb	30.899 ppb	54.471 ppb	100.583 ppb
Concentration per Run 2	134.784 %	53.264 ppb	36.134 ppb	758.965 ppb	40,321.057 ppb	17.171 ppb	31.594 ppb	55.132 ppb	102.454 ppb
Concentration per Run 3	126.863 %	57.093 ppb	39.801 ppb	822.295 ppb	44,315.704 ppb	18.725 ppb	34.380 ppb	62.413 ppb	111.369 ppb
Concentration RSD	3.2 %	5.5 %	5.7 %	5.3 %	5.3 %	5.8 %	5.7 %	7.7 %	5.5 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	101.447 %	103.943 %	10.563 ppb	11.953 ppb	22.349 ppb	5.870 ppb	99.023 %	97.176 %	0.189 ppb
Concentration per Run 1	100.644 %	108.634 %	9.899 ppb	9.679 ppb	21.247 ppb	5.527 ppb	98.077 %	100.612 %	0.178 ppb
Concentration per Run 2	100.849 %	105.809 %	10.955 ppb	13.000 ppb	21.649 ppb	5.849 ppb	99.669 %	97.698 %	0.178 ppb
Concentration per Run 3	102.847 %	97.384 %	10.834 ppb	13.181 ppb	24.152 ppb	6.235 ppb	99.323 %	93.219 %	0.211 ppb
Concentration RSD	1.2 %	5.6 %	5.5 %	16.5 %	7.0 %	6.0 %	0.8 %	3.8 %	10.2 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.337 ppb	97.576 %	97.689 %	1.969 ppb	118.069 ppb	102.768 %	103.156 %	98.787 %	98.184 %
Concentration per Run 1	0.306 ppb	97.643 %	99.641 %	1.838 ppb	109.937 ppb	103.294 %	106.286 %	97.448 %	99.433 %
Concentration per Run 2	0.357 ppb	97.698 %	97.918 %	1.935 ppb	115.167 ppb	102.080 %	104.865 %	98.397 %	99.498 %
Concentration per Run 3	0.349 ppb	97.386 %	95.508 %	2.134 ppb	129.104 ppb	102.929 %	98.317 %	100.517 %	95.621 %
Concentration RSD	8.1 %	0.2 %	2.1 %	7.7 %	8.4 %	0.6 %	4.1 %	1.6 %	2.3 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.392 ppb	47.291 ppb	94.960 %	93.858 %
Concentration per Run 1	0.327 ppb	45.048 ppb	93.823 %	97.303 %
Concentration per Run 2	0.399 ppb	45.855 ppb	96.748 %	95.558 %
Concentration per Run 3	0.449 ppb	50.969 ppb	94.308 %	88.713 %
Concentration RSD	15.7 %	6.8 %	1.7 %	4.8 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index:	76	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	I2373369-06d10 6020TS	Rack	1		
Analysis started at:	12/15/2023 1:03:06 PM	Vial	39		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	106.551 %	111.640 %	1.069 ppb	187.707 ppb	5,706.659 ppb	11,087.763 ppb	1,573.197 ppb	2,306.427 ppb	132.457 %
Concentration per Run 1	107.175 %	120.238 %	1.049 ppb	180.128 ppb	5,715.931 ppb	10,862.468 ppb	1,588.656 ppb	2,240.790 ppb	134.976 %
Concentration per Run 2	105.870 %	118.651 %	1.102 ppb	183.732 ppb	5,449.826 ppb	10,776.889 ppb	1,565.787 ppb	2,316.955 ppb	133.692 %
Concentration per Run 3	106.608 %	96.032 %	1.057 ppb	199.260 ppb	5,954.220 ppb	11,623.931 ppb	1,565.149 ppb	2,361.536 ppb	128.703 %
Concentration RSD	0.6 %	12.1 %	2.6 %	5.4 %	4.4 %	4.2 %	0.9 %	2.6 %	2.5 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	123.838 %	128.960 ppb	30.807 ppb	592.155 ppb	36,745.270 ppb	17.542 ppb	41.449 ppb	247.098 ppb	142.882 ppb
Concentration per Run 1	122.249 %	132.633 ppb	31.777 ppb	615.128 ppb	38,135.328 ppb	18.348 ppb	44.149 ppb	260.428 ppb	152.092 ppb
Concentration per Run 2	120.172 %	129.705 ppb	30.979 ppb	595.611 ppb	36,661.104 ppb	17.120 ppb	40.602 ppb	237.525 ppb	136.299 ppb
Concentration per Run 3	129.093 %	124.543 ppb	29.666 ppb	565.725 ppb	35,439.377 ppb	17.157 ppb	39.595 ppb	243.342 ppb	140.256 ppb
Concentration RSD	3.8 %	3.2 %	3.5 %	4.2 %	3.7 %	4.0 %	5.8 %	4.8 %	5.8 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	102.166 %	104.373 %	13.443 ppb	12.132 ppb	20.074 ppb	1.892 ppb	101.023 %	97.446 %	0.814 ppb
Concentration per Run 1	101.328 %	97.399 %	13.800 ppb	13.072 ppb	20.980 ppb	1.827 ppb	101.087 %	96.568 %	0.845 ppb
Concentration per Run 2	103.008 %	109.706 %	13.170 ppb	10.152 ppb	19.187 ppb	1.873 ppb	100.143 %	97.747 %	0.799 ppb
Concentration per Run 3	102.160 %	106.013 %	13.358 ppb	13.174 ppb	20.054 ppb	1.975 ppb	101.840 %	98.022 %	0.799 ppb
Concentration RSD	0.8 %	6.1 %	2.4 %	14.1 %	4.5 %	4.0 %	0.8 %	0.8 %	3.2 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.506 ppb	97.708 %	96.775 %	6.149 ppb	162.103 ppb	101.214 %	99.330 %	97.318 %	97.898 %
Concentration per Run 1	0.495 ppb	97.973 %	93.797 %	6.313 ppb	164.847 ppb	101.669 %	97.741 %	96.856 %	95.495 %
Concentration per Run 2	0.516 ppb	97.468 %	97.621 %	6.173 ppb	159.440 ppb	101.967 %	100.574 %	97.549 %	98.894 %
Concentration per Run 3	0.508 ppb	97.684 %	98.906 %	5.960 ppb	162.022 ppb	100.007 %	99.675 %	97.549 %	99.305 %
Concentration RSD	2.1 %	0.3 %	2.7 %	2.9 %	1.7 %	1.0 %	1.5 %	0.4 %	2.1 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.399 ppb	208.482 ppb	95.541 %	91.437 %
Concentration per Run 1	0.379 ppb	209.526 ppb	92.697 %	91.139 %
Concentration per Run 2	0.403 ppb	212.850 ppb	96.938 %	90.535 %
Concentration per Run 3	0.415 ppb	203.070 ppb	96.988 %	92.636 %
Concentration RSD	4.6 %	2.4 %	2.6 %	1.2 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index:	77	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	I2373369-09d10 6020TS	Rack	1		
Analysis started at:	12/15/2023 1:07:46 PM	Vial	40		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	102.467 %	105.688 %	1.071 ppb	362.361 ppb	25,949.631 ppb	13,430.788 ppb	1,147.219 ppb	41,296.901 ppb	121.408 %
Concentration per Run 1	103.648 %	104.365 %	1.091 ppb	365.411 ppb	26,074.478 ppb	13,321.673 ppb	1,152.827 ppb	40,194.681 ppb	123.285 %
Concentration per Run 2	102.421 %	110.714 %	1.061 ppb	345.994 ppb	25,257.122 ppb	13,257.738 ppb	1,097.906 ppb	41,825.085 ppb	118.514 %
Concentration per Run 3	101.332 %	101.984 %	1.060 ppb	375.677 ppb	26,517.294 ppb	13,712.953 ppb	1,190.925 ppb	41,870.938 ppb	122.424 %
Concentration RSD	1.1 %	4.3 %	1.6 %	4.2 %	2.5 %	1.8 %	4.1 %	2.3 %	2.1 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	117.135 %	139.773 ppb	127.700 ppb	1,384.667 ppb	44,614.276 ppb	17.411 ppb	71.132 ppb	155.153 ppb	265.587 ppb
Concentration per Run 1	117.827 %	136.441 ppb	125.137 ppb	1,360.029 ppb	44,229.271 ppb	17.650 ppb	70.851 ppb	151.572 ppb	255.278 ppb
Concentration per Run 2	118.250 %	140.524 ppb	127.762 ppb	1,377.133 ppb	44,513.680 ppb	17.616 ppb	72.008 ppb	158.687 ppb	271.851 ppb
Concentration per Run 3	115.328 %	142.353 ppb	130.203 ppb	1,416.839 ppb	45,099.877 ppb	16.967 ppb	70.538 ppb	155.200 ppb	269.631 ppb
Concentration RSD	1.3 %	2.2 %	2.0 %	2.1 %	1.0 %	2.2 %	1.1 %	2.3 %	3.4 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	102.095 %	100.620 %	21.792 ppb	8.365 ppb	84.834 ppb	3.414 ppb	99.764 %	95.039 %	0.551 ppb
Concentration per Run 1	100.158 %	105.392 %	21.040 ppb	9.216 ppb	81.011 ppb	3.219 ppb	101.650 %	97.189 %	0.542 ppb
Concentration per Run 2	103.031 %	97.538 %	22.209 ppb	8.425 ppb	87.586 ppb	3.676 ppb	99.622 %	91.608 %	0.563 ppb
Concentration per Run 3	103.095 %	98.928 %	22.126 ppb	7.454 ppb	85.905 ppb	3.346 ppb	98.019 %	96.320 %	0.547 ppb
Concentration RSD	1.6 %	4.2 %	3.0 %	10.6 %	4.0 %	6.9 %	1.8 %	3.2 %	2.0 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.672 ppb	98.981 %	92.422 %	4.745 ppb	204.824 ppb	105.606 %	100.378 %	104.150 %	97.604 %
Concentration per Run 1	0.701 ppb	100.480 %	93.038 %	4.817 ppb	201.931 ppb	103.553 %	99.854 %	103.817 %	96.454 %
Concentration per Run 2	0.651 ppb	96.427 %	90.593 %	4.729 ppb	207.404 ppb	107.516 %	99.658 %	104.090 %	95.934 %
Concentration per Run 3	0.663 ppb	100.036 %	93.636 %	4.690 ppb	205.138 ppb	105.748 %	101.622 %	104.541 %	100.423 %
Concentration RSD	3.9 %	2.2 %	1.7 %	1.4 %	1.3 %	1.9 %	1.1 %	0.4 %	2.5 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.246 ppb	363.448 ppb	99.726 %	92.461 %
Concentration per Run 1	0.229 ppb	337.121 ppb	101.186 %	93.983 %
Concentration per Run 2	0.253 ppb	383.320 ppb	98.608 %	89.701 %
Concentration per Run 3	0.257 ppb	369.902 ppb	99.385 %	93.699 %
Concentration RSD	6.1 %	6.5 %	1.3 %	2.6 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index:	78	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	I2373369-10d10 6020TS	Rack	1		
Analysis started at:	12/15/2023 1:12:26 PM	Vial	41		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	101.754 %	110.053 %	1.071 ppb	90.351 ppb	4,673.634 ppb	6,305.176 ppb	1,492.177 ppb	2,143.536 ppb	130.506 %
Concentration per Run 1	102.919 %	111.508 %	1.062 ppb	89.710 ppb	4,628.303 ppb	6,245.136 ppb	1,514.367 ppb	2,110.653 ppb	129.642 %
Concentration per Run 2	101.417 %	107.540 %	1.074 ppb	90.702 ppb	4,658.340 ppb	6,348.002 ppb	1,454.340 ppb	2,187.586 ppb	131.180 %
Concentration per Run 3	100.927 %	111.111 %	1.076 ppb	90.641 ppb	4,734.260 ppb	6,322.391 ppb	1,507.823 ppb	2,132.369 ppb	130.696 %
Concentration RSD	1.0 %	2.0 %	0.7 %	0.6 %	1.2 %	0.8 %	2.2 %	1.9 %	0.6 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	130.054 %	32.442 ppb	22.168 ppb	951.420 ppb	33,064.818 ppb	18.543 ppb	28.814 ppb	30.731 ppb	59.429 ppb
Concentration per Run 1	128.708 %	31.221 ppb	22.086 ppb	958.723 ppb	32,615.314 ppb	18.612 ppb	28.745 ppb	30.580 ppb	59.008 ppb
Concentration per Run 2	130.323 %	33.023 ppb	22.174 ppb	951.475 ppb	33,443.511 ppb	18.611 ppb	28.905 ppb	31.360 ppb	59.902 ppb
Concentration per Run 3	131.131 %	33.081 ppb	22.243 ppb	944.060 ppb	33,135.629 ppb	18.405 ppb	28.793 ppb	30.254 ppb	59.378 ppb
Concentration RSD	0.9 %	3.3 %	0.4 %	0.8 %	1.3 %	0.6 %	0.3 %	1.8 %	0.8 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	103.125 %	107.445 %	6.963 ppb	11.173 ppb	11.016 ppb	2.425 ppb	98.726 %	98.701 %	0.027 ppb
Concentration per Run 1	103.532 %	107.866 %	7.575 ppb	11.212 ppb	10.464 ppb	2.541 ppb	99.181 %	99.889 %	0.034 ppb
Concentration per Run 2	103.195 %	105.250 %	6.478 ppb	11.117 ppb	11.230 ppb	2.392 ppb	98.001 %	96.845 %	0.021 ppb
Concentration per Run 3	102.648 %	109.219 %	6.837 ppb	11.191 ppb	11.353 ppb	2.341 ppb	98.995 %	99.369 %	0.027 ppb
Concentration RSD	0.4 %	1.9 %	8.0 %	0.4 %	4.4 %	4.3 %	0.6 %	1.6 %	23.7 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.134 ppb	97.002 %	97.450 %	0.418 ppb	111.952 ppb	100.312 %	101.820 %	97.628 %	97.831 %
Concentration per Run 1	0.144 ppb	95.980 %	99.250 %	0.362 ppb	108.082 ppb	101.549 %	101.412 %	98.085 %	97.982 %
Concentration per Run 2	0.131 ppb	96.760 %	96.112 %	0.456 ppb	114.921 ppb	99.683 %	101.559 %	97.191 %	96.623 %
Concentration per Run 3	0.128 ppb	98.268 %	96.988 %	0.435 ppb	112.853 ppb	99.703 %	102.489 %	97.609 %	98.889 %
Concentration RSD	6.5 %	1.2 %	1.7 %	11.8 %	3.1 %	1.1 %	0.6 %	0.5 %	1.2 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.359 ppb	17.671 ppb	93.864 %	94.327 %
Concentration per Run 1	0.332 ppb	17.388 ppb	91.921 %	94.548 %
Concentration per Run 2	0.356 ppb	17.716 ppb	93.023 %	94.313 %
Concentration per Run 3	0.390 ppb	17.909 ppb	96.646 %	94.120 %
Concentration RSD	8.1 %	1.5 %	2.6 %	0.2 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index: 79
Analysis label: CCV
Analysis started at: 12/15/2023 1:17:06 PM
User name ALPHALAB\ICPMSRQ
Rack 0
Vial 9
Comment <Comment>

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	94.410 %	97.751 %	63.416 ppb	6,287.177 ppb	6,463.067 ppb	64.969 ppb	6,563.736 ppb	6,591.257 ppb	101.942 %
Concentration per Run 1	95.016 %	94.444 %	62.225 ppb	6,337.299 ppb	6,516.968 ppb	60.837 ppb	6,515.445 ppb	6,595.318 ppb	101.685 %
Concentration per Run 2	93.618 %	104.762 %	64.943 ppb	6,032.625 ppb	6,162.352 ppb	64.580 ppb	6,464.885 ppb	6,488.562 ppb	101.846 %
Concentration per Run 3	94.595 %	94.048 %	63.081 ppb	6,491.607 ppb	6,709.881 ppb	69.490 ppb	6,710.879 ppb	6,689.892 ppb	102.296 %
Recovery Percentage 1			105.694 %	104.786 %	107.718 %	108.281 %	109.396 %	109.854 %	
Concentration RSD	0.8 %	6.2 %	2.2 %	3.7 %	4.3 %	6.7 %	2.0 %	1.5 %	0.3 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	100.718 %	63.074 ppb	61.315 ppb	62.277 ppb	6,308.954 ppb	61.993 ppb	64.696 ppb	65.121 ppb	65.884 ppb
Concentration per Run 1	102.332 %	61.269 ppb	60.911 ppb	61.965 ppb	6,188.868 ppb	61.138 ppb	63.219 ppb	64.403 ppb	64.530 ppb
Concentration per Run 2	101.986 %	63.565 ppb	60.218 ppb	60.543 ppb	6,203.361 ppb	60.712 ppb	64.111 ppb	61.340 ppb	64.115 ppb
Concentration per Run 3	97.834 %	64.388 ppb	62.817 ppb	64.322 ppb	6,534.633 ppb	64.130 ppb	66.759 ppb	69.619 ppb	69.008 ppb
Recovery Percentage 1		105.123 %	102.192 %	103.795 %	105.149 %	103.322 %	107.827 %	108.535 %	109.807 %
Concentration RSD	2.5 %	2.6 %	2.2 %	3.1 %	3.1 %	3.0 %	2.8 %	6.4 %	4.1 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	101.991 %	100.164 %	60.563 ppb	59.010 ppb	58.608 ppb	62.046 ppb	100.566 %	98.500 %	60.685 ppb
Concentration per Run 1	101.629 %	100.908 %	60.222 ppb	61.679 ppb	56.518 ppb	59.898 ppb	100.758 %	99.023 %	60.595 ppb
Concentration per Run 2	102.143 %	103.032 %	59.199 ppb	56.006 ppb	57.832 ppb	61.682 ppb	99.955 %	98.367 %	60.784 ppb
Concentration per Run 3	102.201 %	96.554 %	62.268 ppb	59.344 ppb	61.472 ppb	64.558 ppb	100.984 %	98.109 %	60.677 ppb
Recovery Percentage 1			100.938 %	98.350 %	97.680 %	103.410 %			101.142 %
Concentration RSD	0.3 %	3.3 %	2.6 %	4.8 %	4.4 %	3.8 %	0.5 %	0.5 %	0.2 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	59.787 ppb	99.509 %	97.529 %	60.559 ppb	60.463 ppb	100.372 %	98.839 %	101.400 %	95.977 %
Concentration per Run 1	58.947 ppb	99.593 %	96.934 %	60.150 ppb	59.758 ppb	101.763 %	98.736 %	103.189 %	95.764 %
Concentration per Run 2	60.401 ppb	99.396 %	96.887 %	61.158 ppb	61.661 ppb	99.021 %	99.358 %	98.314 %	97.577 %
Concentration per Run 3	60.012 ppb	99.538 %	98.767 %	60.369 ppb	59.969 ppb	100.331 %	98.424 %	102.695 %	94.590 %
Recovery Percentage 1	99.644 %			100.932 %	100.771 %				
Concentration RSD	1.3 %	0.1 %	1.1 %	0.9 %	1.7 %	1.4 %	0.5 %	2.6 %	1.6 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	63.246 ppb	62.520 ppb	97.532 %	92.019 %
Concentration per Run 1	62.469 ppb	61.756 ppb	98.239 %	92.312 %
Concentration per Run 2	63.638 ppb	63.067 ppb	98.401 %	91.312 %
Concentration per Run 3	63.632 ppb	62.737 ppb	95.957 %	92.433 %
Recovery Percentage 1	105.410 %	104.200 %		
Concentration RSD	1.1 %	1.1 %	1.4 %	0.7 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index:	80	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	12/15/2023 1:21:51 PM	Vial	10		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	96.725 %	96.825 %	0.041 ppb	-2.972 ppb	1.533 ppb	0.865 ppb	-2.213 ppb	-9.733 ppb	101.343 %
Concentration per Run 1	97.485 %	105.556 %	0.046 ppb	-4.499 ppb	2.277 ppb	1.357 ppb	1.447 ppb	-5.116 ppb	100.396 %
Concentration per Run 2	95.659 %	93.254 %	0.038 ppb	-2.070 ppb	0.376 ppb	1.480 ppb	0.776 ppb	-11.889 ppb	102.487 %
Concentration per Run 3	97.032 %	91.667 %	0.039 ppb	-2.347 ppb	1.947 ppb	-0.244 ppb	-8.864 ppb	-12.194 ppb	101.145 %
Recovery Percentage 1			8.180 %	-2.972 %	2.190 %	8.647 %	-2.213 %	-9.733 %	
Concentration RSD	1.0 %	7.9 %	10.6 %	44.7 %	66.3 %	111.2 %	260.7 %	41.1 %	1.0 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	99.116 %	0.014 ppb	-0.078 ppb	0.034 ppb	9.003 ppb	0.016 ppb	0.217 ppb	0.040 ppb	0.097 ppb
Concentration per Run 1	98.103 %	0.002 ppb	-0.044 ppb	0.062 ppb	9.310 ppb	0.021 ppb	0.244 ppb	0.039 ppb	0.123 ppb
Concentration per Run 2	99.718 %	0.024 ppb	-0.068 ppb	0.026 ppb	7.296 ppb	0.015 ppb	0.224 ppb	0.003 ppb	0.103 ppb
Concentration per Run 3	99.526 %	0.017 ppb	-0.123 ppb	0.014 ppb	10.402 ppb	0.013 ppb	0.183 ppb	0.079 ppb	0.064 ppb
Recovery Percentage 1		0.288 %	-7.820 %	3.395 %	18.006 %	3.289 %	10.847 %	4.013 %	1.933 %
Concentration RSD	0.9 %	76.9 %	51.4 %	74.0 %	17.5 %	26.0 %	14.1 %	94.7 %	30.9 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	100.721 %	102.278 %	-0.021 ppb	0.071 ppb	0.054 ppb	0.184 ppb	102.631 %	101.590 %	0.024 ppb
Concentration per Run 1	102.104 %	105.305 %	0.025 ppb	0.120 ppb	0.051 ppb	0.173 ppb	103.711 %	100.861 %	0.028 ppb
Concentration per Run 2	100.138 %	98.459 %	-0.024 ppb	0.051 ppb	0.043 ppb	0.177 ppb	99.425 %	100.785 %	0.023 ppb
Concentration per Run 3	99.920 %	103.071 %	-0.065 ppb	0.043 ppb	0.067 ppb	0.201 ppb	104.758 %	103.125 %	0.022 ppb
Recovery Percentage 1			-4.292 %	1.425 %	10.800 %	9.186 %			6.090 %
Concentration RSD	1.2 %	3.4 %	210.5 %	59.2 %	23.0 %	8.1 %	2.8 %	1.3 %	12.6 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.012 ppb	100.751 %	97.828 %	0.049 ppb	0.056 ppb	100.621 %	98.084 %	98.664 %	97.286 %
Concentration per Run 1	0.025 ppb	100.276 %	97.843 %	0.049 ppb	0.044 ppb	103.220 %	97.902 %	99.487 %	98.941 %
Concentration per Run 2	0.006 ppb	101.654 %	96.618 %	0.050 ppb	0.080 ppb	98.813 %	97.926 %	97.412 %	95.730 %
Concentration per Run 3	0.006 ppb	100.324 %	99.021 %	0.047 ppb	0.044 ppb	99.828 %	98.425 %	99.092 %	97.188 %
Recovery Percentage 1				1.220 %	11.147 %				
Concentration RSD	90.5 %	0.8 %	1.2 %	3.4 %	37.1 %	2.3 %	0.3 %	1.1 %	1.7 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.332 ppb	0.032 ppb	97.669 %	96.602 %
Concentration per Run 1	0.202 ppb	0.040 ppb	95.853 %	96.400 %
Concentration per Run 2	0.394 ppb	0.028 ppb	98.153 %	96.302 %
Concentration per Run 3	0.401 ppb	0.027 ppb	99.001 %	97.105 %
Recovery Percentage 1	33.228 %	3.191 %		
Concentration RSD	34.0 %	22.2 %	1.7 %	0.5 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index: 81
Analysis label: L2373217-07 6020TL
Analysis started at: 12/15/2023 1:28:53 PM
User name ALPHALAB\ICPMSRQ
Rack 1
Vial 56
Comment FB

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	96.442 %	103.175 %	0.024 ppb	32.583 ppb	2.689 ppb	7.741 ppb	-3.385 ppb	46.723 ppb	102.624 %
Concentration per Run 1	95.817 %	106.746 %	0.027 ppb	30.488 ppb	2.314 ppb	7.359 ppb	-6.412 ppb	43.398 ppb	101.278 %
Concentration per Run 2	96.847 %	102.778 %	0.022 ppb	32.546 ppb	2.527 ppb	7.819 ppb	0.567 ppb	61.392 ppb	103.045 %
Concentration per Run 3	96.664 %	100.000 %	0.023 ppb	34.716 ppb	3.225 ppb	8.045 ppb	-4.310 ppb	35.380 ppb	103.549 %
Concentration RSD	0.6 %	3.3 %	11.8 %	6.5 %	17.7 %	4.5 %	105.8 %	28.5 %	1.2 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	104.921 %	0.024 ppb	-0.748 ppb	0.077 ppb	7.577 ppb	0.009 ppb	-0.005 ppb	0.014 ppb	1.310 ppb
Concentration per Run 1	110.368 %	0.053 ppb	-0.774 ppb	0.103 ppb	7.273 ppb	0.007 ppb	-0.020 ppb	0.018 ppb	1.135 ppb
Concentration per Run 2	103.370 %	-0.005 ppb	-0.785 ppb	0.064 ppb	9.814 ppb	0.016 ppb	0.004 ppb	0.014 ppb	1.445 ppb
Concentration per Run 3	101.025 %	0.023 ppb	-0.684 ppb	0.063 ppb	5.644 ppb	0.004 ppb	0.003 ppb	0.009 ppb	1.349 ppb
Concentration RSD	4.6 %	123.1 %	7.4 %	30.1 %	27.7 %	71.3 %	294.5 %	30.3 %	12.1 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	102.101 %	102.658 %	-0.012 ppb	0.047 ppb	0.651 ppb	0.060 ppb	101.427 %	102.711 %	0.004 ppb
Concentration per Run 1	102.542 %	105.908 %	-0.017 ppb	0.037 ppb	0.686 ppb	0.021 ppb	100.131 %	104.682 %	0.006 ppb
Concentration per Run 2	101.740 %	98.689 %	-0.010 ppb	0.055 ppb	0.604 ppb	0.071 ppb	103.321 %	102.112 %	0.002 ppb
Concentration per Run 3	102.020 %	103.377 %	-0.010 ppb	0.048 ppb	0.663 ppb	0.089 ppb	100.828 %	101.338 %	0.005 ppb
Concentration RSD	0.4 %	3.6 %	34.4 %	19.0 %	6.5 %	58.1 %	1.7 %	1.7 %	56.3 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.007 ppb	97.229 %	101.455 %	0.027 ppb	0.861 ppb	98.175 %	101.941 %	96.821 %	101.159 %
Concentration per Run 1	0.002 ppb	97.682 %	103.318 %	0.037 ppb	0.881 ppb	98.411 %	103.205 %	94.758 %	102.009 %
Concentration per Run 2	0.004 ppb	98.312 %	100.402 %	0.015 ppb	0.757 ppb	98.703 %	101.445 %	98.427 %	99.002 %
Concentration per Run 3	0.013 ppb	95.693 %	100.645 %	0.030 ppb	0.944 ppb	97.410 %	101.175 %	97.279 %	102.466 %
Concentration RSD	88.3 %	1.4 %	1.6 %	39.4 %	11.1 %	0.7 %	1.1 %	1.9 %	1.9 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.103 ppb	0.029 ppb	96.520 %	101.406 %
Concentration per Run 1	0.059 ppb	0.034 ppb	97.157 %	103.467 %
Concentration per Run 2	0.126 ppb	0.029 ppb	97.538 %	100.954 %
Concentration per Run 3	0.125 ppb	0.025 ppb	94.864 %	99.797 %
Concentration RSD	37.1 %	16.6 %	1.5 %	1.9 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index: 82
Analysis label: WG1863929-7d10 6020TL
Analysis started at: 12/15/2023 1:33:33 PM
User name ALPHALAB\ICPMSRQ
Rack 1
Vial 50
Comment <Comment>

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	102.269 %	110.582 %	5.185 ppb	23,592.243 ppb	7,330.888 ppb	217.428 ppb	3,618.851 ppb	25,400.981 ppb	101.038 %
Concentration per Run 1	103.155 %	103.175 %	5.185 ppb	24,480.809 ppb	7,529.077 ppb	237.940 ppb	3,648.160 ppb	24,804.031 ppb	100.253 %
Concentration per Run 2	101.966 %	111.111 %	5.260 ppb	23,421.869 ppb	7,312.928 ppb	206.187 ppb	3,604.715 ppb	25,791.638 ppb	102.038 %
Concentration per Run 3	101.687 %	117.461 %	5.111 ppb	22,874.052 ppb	7,150.659 ppb	208.158 ppb	3,603.679 ppb	25,607.275 ppb	100.824 %
Concentration RSD	0.8 %	6.5 %	1.4 %	3.5 %	2.6 %	8.2 %	0.7 %	2.1 %	0.9 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	92.836 %	58.361 ppb	22.735 ppb	431.202 ppb	298.685 ppb	54.997 ppb	54.038 ppb	26.752 ppb	52.636 ppb
Concentration per Run 1	95.066 %	57.915 ppb	22.288 ppb	426.581 ppb	296.218 ppb	55.263 ppb	53.677 ppb	26.702 ppb	51.946 ppb
Concentration per Run 2	91.606 %	57.498 ppb	22.950 ppb	434.001 ppb	287.192 ppb	56.010 ppb	53.839 ppb	27.187 ppb	52.711 ppb
Concentration per Run 3	91.836 %	59.670 ppb	22.967 ppb	433.025 ppb	312.646 ppb	53.719 ppb	54.598 ppb	26.366 ppb	53.250 ppb
Concentration RSD	2.1 %	2.0 %	1.7 %	0.9 %	4.3 %	2.1 %	0.9 %	1.5 %	1.2 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	102.213 %	98.964 %	12.833 ppb	2.579 ppb	1,784.470 ppb	110.068 ppb	99.807 %	94.421 %	5.388 ppb
Concentration per Run 1	103.174 %	99.369 %	12.988 ppb	2.439 ppb	1,783.305 ppb	110.310 ppb	99.071 %	93.991 %	5.489 ppb
Concentration per Run 2	99.326 %	97.825 %	12.912 ppb	2.865 ppb	1,781.368 ppb	109.910 ppb	98.859 %	93.959 %	5.356 ppb
Concentration per Run 3	104.138 %	99.697 %	12.600 ppb	2.432 ppb	1,788.737 ppb	109.983 ppb	101.492 %	95.313 %	5.318 ppb
Concentration RSD	2.5 %	1.0 %	1.6 %	9.6 %	0.2 %	0.2 %	1.5 %	0.8 %	1.7 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	5.579 ppb	101.095 %	96.995 %	53.307 ppb	2,679.246 ppb	101.965 %	99.181 %	103.627 %	98.610 %
Concentration per Run 1	5.657 ppb	100.719 %	94.066 %	54.284 ppb	2,724.610 ppb	101.872 %	98.062 %	102.188 %	97.615 %
Concentration per Run 2	5.436 ppb	102.759 %	98.772 %	52.466 ppb	2,619.146 ppb	102.239 %	99.467 %	103.897 %	99.399 %
Concentration per Run 3	5.643 ppb	99.806 %	98.147 %	53.172 ppb	2,693.982 ppb	101.785 %	100.013 %	104.796 %	98.815 %
Concentration RSD	2.2 %	1.5 %	2.6 %	1.7 %	2.0 %	0.2 %	1.0 %	1.3 %	0.9 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	13.344 ppb	59.230 ppb	94.740 %	89.319 %
Concentration per Run 1	13.558 ppb	60.217 ppb	93.196 %	87.335 %
Concentration per Run 2	13.049 ppb	59.127 ppb	97.669 %	90.107 %
Concentration per Run 3	13.426 ppb	58.345 ppb	93.356 %	90.515 %
Concentration RSD	2.0 %	1.6 %	2.7 %	1.9 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index: 83
Analysis label: WG1863929-8d10 6020TL
Analysis started at: 12/15/2023 1:38:14 PM
User name ALPHALAB\ICPMSRQ
Rack 1
Vial 51
Comment <Comment>

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	101.724 %	111.111 %	5.203 ppb	22,467.953 ppb	7,019.409 ppb	206.183 ppb	3,350.365 ppb	24,281.601 ppb	104.188 %
Concentration per Run 1	102.895 %	98.810 %	5.121 ppb	23,626.203 ppb	7,399.385 ppb	208.789 ppb	3,245.614 ppb	24,697.393 ppb	104.423 %
Concentration per Run 2	100.660 %	117.064 %	5.273 ppb	21,765.279 ppb	6,713.901 ppb	201.898 ppb	3,267.772 ppb	23,435.443 ppb	104.879 %
Concentration per Run 3	101.617 %	117.460 %	5.216 ppb	22,012.377 ppb	6,944.942 ppb	207.862 ppb	3,537.707 ppb	24,711.966 ppb	103.263 %
Concentration RSD	1.1 %	9.6 %	1.5 %	4.5 %	5.0 %	1.8 %	4.9 %	3.0 %	0.8 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	101.423 %	53.387 ppb	20.648 ppb	393.645 ppb	261.866 ppb	50.220 ppb	50.360 ppb	25.391 ppb	49.630 ppb
Concentration per Run 1	105.024 %	52.072 ppb	20.111 ppb	389.684 ppb	256.313 ppb	49.693 ppb	49.500 ppb	26.554 ppb	49.600 ppb
Concentration per Run 2	101.179 %	52.111 ppb	20.812 ppb	389.284 ppb	262.200 ppb	50.260 ppb	50.430 ppb	23.791 ppb	48.624 ppb
Concentration per Run 3	98.065 %	55.978 ppb	21.021 ppb	401.965 ppb	267.086 ppb	50.707 ppb	51.151 ppb	25.828 ppb	50.666 ppb
Concentration RSD	3.4 %	4.2 %	2.3 %	1.8 %	2.1 %	1.0 %	1.6 %	5.6 %	2.1 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	103.172 %	103.433 %	12.271 ppb	2.523 ppb	1,674.115 ppb	105.894 ppb	99.231 %	97.997 %	5.104 ppb
Concentration per Run 1	104.191 %	99.457 %	12.681 ppb	1.816 ppb	1,677.438 ppb	103.414 ppb	99.315 %	98.787 %	5.101 ppb
Concentration per Run 2	101.376 %	106.730 %	11.800 ppb	2.077 ppb	1,664.854 ppb	105.950 ppb	97.988 %	97.380 %	5.076 ppb
Concentration per Run 3	103.947 %	104.112 %	12.332 ppb	3.677 ppb	1,680.053 ppb	108.318 ppb	100.390 %	97.824 %	5.135 ppb
Concentration RSD	1.5 %	3.6 %	3.6 %	39.9 %	0.5 %	2.3 %	1.2 %	0.7 %	0.6 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	5.371 ppb	99.118 %	98.115 %	52.105 ppb	2,591.313 ppb	101.830 %	100.463 %	102.825 %	99.178 %
Concentration per Run 1	5.265 ppb	98.225 %	99.567 %	50.797 ppb	2,507.504 ppb	103.745 %	101.832 %	102.904 %	100.630 %
Concentration per Run 2	5.311 ppb	99.884 %	98.671 %	52.090 ppb	2,616.955 ppb	101.627 %	99.064 %	102.401 %	99.484 %
Concentration per Run 3	5.537 ppb	99.245 %	96.106 %	53.427 ppb	2,649.480 ppb	100.117 %	100.492 %	103.172 %	97.419 %
Concentration RSD	2.7 %	0.8 %	1.8 %	2.5 %	2.9 %	1.8 %	1.4 %	0.4 %	1.6 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	12.581 ppb	56.093 ppb	93.767 %	93.357 %
Concentration per Run 1	11.950 ppb	54.277 ppb	91.097 %	96.291 %
Concentration per Run 2	12.810 ppb	56.822 ppb	96.814 %	92.772 %
Concentration per Run 3	12.982 ppb	57.182 ppb	93.390 %	91.008 %
Concentration RSD	4.4 %	2.8 %	3.1 %	2.9 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index:	84	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	WG1863929-9d10 6020TL	Rack	1		
Analysis started at:	12/15/2023 1:50:21 PM	Vial	52		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	102.377 %	104.630 %	47.990 ppb	26,353.508 ppb	10,991.923 ppb	61.179 ppb	7,168.775 ppb	26,132.794 ppb	105.453 %
Concentration per Run 1	102.793 %	107.143 %	48.472 ppb	26,157.764 ppb	10,899.030 ppb	72.884 ppb	7,168.997 ppb	25,973.291 ppb	104.991 %
Concentration per Run 2	102.441 %	110.714 %	47.894 ppb	25,335.229 ppb	10,550.443 ppb	55.783 ppb	7,055.489 ppb	26,012.259 ppb	105.630 %
Concentration per Run 3	101.896 %	96.032 %	47.604 ppb	27,567.532 ppb	11,526.296 ppb	54.869 ppb	7,281.839 ppb	26,412.832 ppb	105.738 %
Concentration RSD	0.4 %	7.3 %	0.9 %	4.3 %	4.5 %	16.6 %	1.6 %	0.9 %	0.4 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	112.367 %	49.609 ppb	47.438 ppb	383.602 ppb	5,098.844 ppb	47.212 ppb	47.925 ppb	46.486 ppb	47.025 ppb
Concentration per Run 1	112.060 %	50.062 ppb	48.375 ppb	384.818 ppb	5,029.088 ppb	47.983 ppb	47.724 ppb	45.382 ppb	46.326 ppb
Concentration per Run 2	112.867 %	49.365 ppb	46.806 ppb	375.780 ppb	5,010.646 ppb	45.644 ppb	46.580 ppb	46.011 ppb	46.162 ppb
Concentration per Run 3	112.175 %	49.400 ppb	47.131 ppb	390.209 ppb	5,256.797 ppb	48.008 ppb	49.472 ppb	48.067 ppb	48.587 ppb
Concentration RSD	0.4 %	0.8 %	1.7 %	1.9 %	2.7 %	2.9 %	3.0 %	3.0 %	2.9 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	101.147 %	104.346 %	49.303 ppb	50.746 ppb	1,712.989 ppb	52.495 ppb	97.773 %	99.065 %	1.775 ppb
Concentration per Run 1	99.349 %	106.318 %	47.920 ppb	47.226 ppb	1,678.823 ppb	52.267 ppb	96.532 %	99.611 %	1.765 ppb
Concentration per Run 2	102.648 %	106.970 %	47.736 ppb	52.655 ppb	1,693.749 ppb	51.927 ppb	98.276 %	98.872 %	1.741 ppb
Concentration per Run 3	101.445 %	99.750 %	52.252 ppb	52.358 ppb	1,766.394 ppb	53.292 ppb	98.513 %	98.713 %	1.818 ppb
Concentration RSD	1.7 %	3.8 %	5.2 %	6.0 %	2.7 %	1.4 %	1.1 %	0.5 %	2.2 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	49.856 ppb	95.975 %	100.415 %	51.544 ppb	2,515.204 ppb	101.821 %	104.836 %	101.960 %	105.078 %
Concentration per Run 1	49.291 ppb	96.372 %	102.361 %	49.929 ppb	2,494.695 ppb	100.356 %	106.584 %	100.293 %	104.763 %
Concentration per Run 2	49.796 ppb	96.794 %	99.587 %	52.142 ppb	2,515.202 ppb	103.279 %	103.812 %	102.696 %	105.798 %
Concentration per Run 3	50.480 ppb	94.760 %	99.299 %	52.561 ppb	2,535.716 ppb	101.827 %	104.113 %	102.891 %	104.672 %
Concentration RSD	1.2 %	1.1 %	1.7 %	2.7 %	0.8 %	1.4 %	1.5 %	1.4 %	0.6 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	49.405 ppb	49.867 ppb	93.674 %	98.331 %
Concentration per Run 1	49.101 ppb	48.581 ppb	95.966 %	101.026 %
Concentration per Run 2	48.392 ppb	49.747 ppb	93.095 %	98.844 %
Concentration per Run 3	50.721 ppb	51.272 ppb	91.963 %	95.123 %
Concentration RSD	2.4 %	2.7 %	2.2 %	3.0 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index:	85	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	WG1863929-10d5 6020TL	Rack	1		
Analysis started at:	12/15/2023 1:55:00 PM	Vial	53		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	107.628 %	116.005 %	0.035 ppb	42,800.192 ppb	11,794.511 ppb	13.402 ppb	4,563.388 ppb	47,398.377 ppb	103.388 %
Concentration per Run 1	108.178 %	111.508 %	0.035 ppb	43,942.462 ppb	12,048.013 ppb	14.073 ppb	4,518.159 ppb	46,540.804 ppb	104.011 %
Concentration per Run 2	107.778 %	108.333 %	0.033 ppb	44,659.718 ppb	12,047.525 ppb	15.180 ppb	4,592.165 ppb	47,099.996 ppb	103.886 %
Concentration per Run 3	106.928 %	128.175 %	0.038 ppb	39,798.395 ppb	11,287.995 ppb	10.952 ppb	4,579.841 ppb	48,554.331 ppb	102.266 %
Concentration RSD	0.6 %	9.2 %	7.6 %	6.1 %	3.7 %	16.4 %	0.9 %	2.2 %	0.9 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	97.783 %	0.171 ppb	-0.202 ppb	711.418 ppb	345.103 ppb	0.036 ppb	0.170 ppb	0.334 ppb	1.095 ppb
Concentration per Run 1	98.987 %	0.162 ppb	-0.234 ppb	694.792 ppb	337.967 ppb	0.030 ppb	0.143 ppb	0.338 ppb	1.045 ppb
Concentration per Run 2	98.026 %	0.193 ppb	-0.174 ppb	710.964 ppb	360.156 ppb	0.036 ppb	0.131 ppb	0.291 ppb	1.161 ppb
Concentration per Run 3	96.335 %	0.159 ppb	-0.198 ppb	728.498 ppb	337.185 ppb	0.043 ppb	0.236 ppb	0.373 ppb	1.081 ppb
Concentration RSD	1.4 %	11.1 %	14.7 %	2.4 %	3.8 %	18.3 %	33.5 %	12.3 %	5.4 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	99.426 %	100.735 %	0.019 ppb	0.166 ppb	3,305.649 ppb	0.326 ppb	96.753 %	94.508 %	0.004 ppb
Concentration per Run 1	100.039 %	101.550 %	0.001 ppb	-0.031 ppb	3,271.519 ppb	0.298 ppb	97.068 %	95.951 %	0.001 ppb
Concentration per Run 2	98.581 %	100.266 %	0.029 ppb	0.041 ppb	3,290.055 ppb	0.348 ppb	96.262 %	94.935 %	0.004 ppb
Concentration per Run 3	99.657 %	100.387 %	0.027 ppb	0.488 ppb	3,355.374 ppb	0.331 ppb	96.929 %	92.639 %	0.007 ppb
Concentration RSD	0.8 %	0.7 %	83.3 %	169.5 %	1.3 %	7.8 %	0.4 %	1.8 %	70.1 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.007 ppb	94.586 %	94.086 %	0.125 ppb	4,982.508 ppb	98.817 %	98.900 %	100.478 %	98.785 %
Concentration per Run 1	0.011 ppb	96.416 %	93.891 %	0.109 ppb	4,937.754 ppb	100.149 %	99.496 %	99.680 %	100.343 %
Concentration per Run 2	0.011 ppb	94.567 %	93.211 %	0.141 ppb	4,966.691 ppb	97.131 %	100.320 %	99.147 %	97.626 %
Concentration per Run 3	-0.001 ppb	92.776 %	95.157 %	0.124 ppb	5,043.080 ppb	99.170 %	96.883 %	102.606 %	98.386 %
Concentration RSD	92.8 %	1.9 %	1.0 %	12.9 %	1.1 %	1.6 %	1.8 %	1.9 %	1.4 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.283 ppb	0.065 ppb	91.957 %	89.183 %
Concentration per Run 1	0.173 ppb	0.069 ppb	93.091 %	91.428 %
Concentration per Run 2	0.340 ppb	0.062 ppb	92.610 %	88.178 %
Concentration per Run 3	0.338 ppb	0.063 ppb	90.169 %	87.942 %
Concentration RSD	33.8 %	6.6 %	1.7 %	2.2 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index:	86	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	L2369416-19 6020TL	Rack	1		
Analysis started at:	12/15/2023 1:59:41 PM	Vial	44		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	122.958 %	129.498 %	0.017 ppb	28,042.533 ppb	1,046.956 ppb	63.480 ppb	20,018.339 ppb	46,690.230 ppb	100.752 %
Concentration per Run 1	124.461 %	129.365 %	0.019 ppb	28,008.789 ppb	1,019.197 ppb	59.806 ppb	19,259.773 ppb	46,377.156 ppb	102.394 %
Concentration per Run 2	121.748 %	128.969 %	0.014 ppb	28,483.008 ppb	1,039.421 ppb	65.589 ppb	20,756.690 ppb	47,892.882 ppb	102.042 %
Concentration per Run 3	122.664 %	130.159 %	0.017 ppb	27,635.800 ppb	1,082.249 ppb	65.046 ppb	20,038.555 ppb	45,800.652 ppb	97.820 %
Concentration RSD	1.1 %	0.5 %	14.7 %	1.5 %	3.1 %	5.0 %	3.7 %	2.3 %	2.5 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	101.051 %	0.246 ppb	2.242 ppb	271.269 ppb	665.645 ppb	0.433 ppb	4.863 ppb	1.961 ppb	7.487 ppb
Concentration per Run 1	106.139 %	0.275 ppb	2.224 ppb	261.935 ppb	640.008 ppb	0.407 ppb	4.546 ppb	1.974 ppb	7.266 ppb
Concentration per Run 2	96.988 %	0.254 ppb	2.313 ppb	277.832 ppb	683.630 ppb	0.435 ppb	5.197 ppb	2.007 ppb	7.793 ppb
Concentration per Run 3	100.026 %	0.210 ppb	2.190 ppb	274.039 ppb	673.297 ppb	0.456 ppb	4.845 ppb	1.902 ppb	7.401 ppb
Concentration RSD	4.6 %	13.4 %	2.8 %	3.1 %	3.4 %	5.7 %	6.7 %	2.7 %	3.7 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	98.454 %	101.421 %	0.392 ppb	0.118 ppb	707.743 ppb	1.090 ppb	94.459 %	93.824 %	0.256 ppb
Concentration per Run 1	99.716 %	102.436 %	0.310 ppb	0.119 ppb	692.467 ppb	0.971 ppb	96.448 %	96.083 %	0.236 ppb
Concentration per Run 2	97.740 %	99.676 %	0.454 ppb	0.109 ppb	711.250 ppb	1.195 ppb	91.931 %	93.654 %	0.265 ppb
Concentration per Run 3	97.907 %	102.150 %	0.411 ppb	0.125 ppb	719.513 ppb	1.104 ppb	94.997 %	91.735 %	0.268 ppb
Concentration RSD	1.1 %	1.5 %	18.9 %	6.9 %	2.0 %	10.3 %	2.4 %	2.3 %	6.9 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.524 ppb	92.842 %	92.448 %	0.370 ppb	90.983 ppb	96.921 %	98.010 %	98.237 %	98.088 %
Concentration per Run 1	0.527 ppb	92.540 %	94.934 %	0.352 ppb	90.014 ppb	96.824 %	98.276 %	99.195 %	99.001 %
Concentration per Run 2	0.519 ppb	92.507 %	90.478 %	0.361 ppb	90.818 ppb	96.785 %	96.551 %	98.736 %	97.167 %
Concentration per Run 3	0.527 ppb	93.479 %	91.932 %	0.397 ppb	92.118 ppb	97.153 %	99.203 %	96.781 %	98.096 %
Concentration RSD	0.9 %	0.6 %	2.5 %	6.3 %	1.2 %	0.2 %	1.4 %	1.3 %	0.9 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.112 ppb	0.233 ppb	91.182 %	89.365 %
Concentration per Run 1	0.068 ppb	0.232 ppb	88.273 %	90.262 %
Concentration per Run 2	0.125 ppb	0.232 ppb	92.931 %	88.050 %
Concentration per Run 3	0.143 ppb	0.236 ppb	92.342 %	89.782 %
Concentration RSD	35.0 %	1.1 %	2.8 %	1.3 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index:	87	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	L2373323-04 6020TL	Rack	1		
Analysis started at:	12/15/2023 2:04:23 PM	Vial	49		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	156.406 %	167.461 %	0.023 ppb	163,671.586 ppb	45,738.130 ppb	43.608 ppb	21,806.709 ppb	212,134.887 ppb	100.483 %
Concentration per Run 1	159.125 %	176.985 %	0.018 ppb	156,912.812 ppb	44,070.599 ppb	44.077 ppb	20,780.304 ppb	203,935.181 ppb	103.432 %
Concentration per Run 2	154.796 %	162.302 %	0.027 ppb	169,144.688 ppb	47,345.067 ppb	44.124 ppb	22,792.088 ppb	219,066.961 ppb	98.025 %
Concentration per Run 3	155.298 %	163.096 %	0.023 ppb	164,957.259 ppb	45,798.724 ppb	42.622 ppb	21,847.736 ppb	213,402.521 ppb	99.991 %
Concentration RSD	1.5 %	4.9 %	21.9 %	3.8 %	3.6 %	2.0 %	4.6 %	3.6 %	2.7 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	92.939 %	0.618 ppb	-0.557 ppb	3,544.628 ppb	1,670.057 ppb	0.171 ppb	0.891 ppb	1.604 ppb	6.356 ppb
Concentration per Run 1	96.104 %	0.512 ppb	-0.549 ppb	3,457.696 ppb	1,637.698 ppb	0.184 ppb	0.789 ppb	1.553 ppb	6.222 ppb
Concentration per Run 2	87.800 %	0.765 ppb	-0.575 ppb	3,691.540 ppb	1,731.915 ppb	0.169 ppb	0.914 ppb	1.614 ppb	6.442 ppb
Concentration per Run 3	94.912 %	0.575 ppb	-0.547 ppb	3,484.648 ppb	1,640.557 ppb	0.161 ppb	0.969 ppb	1.646 ppb	6.402 ppb
Concentration RSD	4.8 %	21.4 %	2.8 %	3.6 %	3.2 %	6.9 %	10.4 %	2.9 %	1.8 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	94.973 %	97.996 %	0.291 ppb	0.471 ppb	18,381.009 ppb	0.362 ppb	86.498 %	86.899 %	0.004 ppb
Concentration per Run 1	97.732 %	97.003 %	0.263 ppb	0.342 ppb	17,993.505 ppb	0.366 ppb	90.347 %	88.561 %	0.003 ppb
Concentration per Run 2	93.309 %	98.240 %	0.308 ppb	0.577 ppb	18,643.167 ppb	0.307 ppb	85.364 %	84.948 %	0.004 ppb
Concentration per Run 3	93.878 %	98.745 %	0.302 ppb	0.494 ppb	18,506.355 ppb	0.414 ppb	83.783 %	87.186 %	0.005 ppb
Concentration RSD	2.5 %	0.9 %	8.4 %	25.3 %	1.9 %	14.7 %	4.0 %	2.1 %	31.2 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.003 ppb	84.207 %	90.754 %	0.138 ppb	28,680.143 ppb	91.467 %	94.607 %	92.880 %	96.678 %
Concentration per Run 1	0.005 ppb	86.260 %	90.525 %	0.131 ppb	28,266.427 ppb	92.623 %	96.563 %	95.244 %	96.952 %
Concentration per Run 2	0.001 ppb	82.875 %	90.478 %	0.134 ppb	28,550.690 ppb	91.762 %	93.635 %	92.987 %	96.795 %
Concentration per Run 3	0.003 ppb	83.486 %	91.259 %	0.150 ppb	29,223.312 ppb	90.016 %	93.624 %	90.410 %	96.286 %
Concentration RSD	58.2 %	2.1 %	0.5 %	7.6 %	1.7 %	1.5 %	1.8 %	2.6 %	0.4 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.050 ppb	0.261 ppb	81.629 %	81.921 %
Concentration per Run 1	0.026 ppb	0.251 ppb	81.588 %	82.926 %
Concentration per Run 2	0.062 ppb	0.269 ppb	81.583 %	80.863 %
Concentration per Run 3	0.063 ppb	0.263 ppb	81.716 %	81.975 %
Concentration RSD	42.2 %	3.5 %	0.1 %	1.3 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index:	88	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	L2373121-01 6020TL	Rack	1		
Analysis started at:	12/15/2023 2:09:03 PM	Vial	54		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	92.099 %	97.487 %	0.037 ppb	3,467.768 ppb	5,678.927 ppb	242.213 ppb	3,029.979 ppb	19,911.721 ppb	98.278 %
Concentration per Run 1	92.534 %	102.381 %	0.037 ppb	3,420.057 ppb	5,538.422 ppb	234.054 ppb	3,023.315 ppb	19,533.396 ppb	98.374 %
Concentration per Run 2	92.085 %	93.651 %	0.035 ppb	3,551.338 ppb	5,815.820 ppb	220.240 ppb	3,015.782 ppb	20,050.393 ppb	100.377 %
Concentration per Run 3	91.679 %	96.429 %	0.038 ppb	3,431.909 ppb	5,682.540 ppb	272.346 ppb	3,050.841 ppb	20,151.373 ppb	96.082 %
Concentration RSD	0.5 %	4.6 %	4.8 %	2.1 %	2.4 %	11.1 %	0.6 %	1.7 %	2.2 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	100.128 %	2.030 ppb	-0.524 ppb	433.551 ppb	3,358.854 ppb	0.344 ppb	0.846 ppb	0.957 ppb	1.735 ppb
Concentration per Run 1	100.102 %	2.000 ppb	-0.513 ppb	431.747 ppb	3,328.324 ppb	0.378 ppb	0.793 ppb	0.986 ppb	1.796 ppb
Concentration per Run 2	100.333 %	2.107 ppb	-0.557 ppb	437.943 ppb	3,380.405 ppb	0.352 ppb	0.903 ppb	1.014 ppb	1.773 ppb
Concentration per Run 3	99.949 %	1.983 ppb	-0.503 ppb	430.964 ppb	3,367.833 ppb	0.303 ppb	0.843 ppb	0.871 ppb	1.636 ppb
Concentration RSD	0.2 %	3.3 %	5.5 %	0.9 %	0.8 %	11.0 %	6.5 %	7.9 %	5.0 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	94.976 %	98.748 %	3.282 ppb	0.573 ppb	58.702 ppb	1.128 ppb	93.145 %	93.535 %	0.006 ppb
Concentration per Run 1	93.928 %	100.859 %	3.118 ppb	0.430 ppb	58.135 ppb	1.098 ppb	93.628 %	96.265 %	0.004 ppb
Concentration per Run 2	95.420 %	96.916 %	3.565 ppb	0.608 ppb	59.301 ppb	1.157 ppb	92.950 %	91.790 %	0.009 ppb
Concentration per Run 3	95.580 %	98.470 %	3.162 ppb	0.681 ppb	58.669 ppb	1.129 ppb	92.857 %	92.551 %	0.005 ppb
Concentration RSD	1.0 %	2.0 %	7.5 %	22.5 %	1.0 %	2.6 %	0.5 %	2.6 %	41.8 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.007 ppb	90.948 %	93.415 %	0.156 ppb	7.912 ppb	95.803 %	97.872 %	96.222 %	99.177 %
Concentration per Run 1	0.004 ppb	92.445 %	95.804 %	0.149 ppb	10.306 ppb	95.453 %	98.457 %	95.550 %	100.126 %
Concentration per Run 2	0.009 ppb	90.103 %	93.487 %	0.146 ppb	7.053 ppb	96.082 %	97.619 %	97.931 %	98.461 %
Concentration per Run 3	0.006 ppb	90.298 %	90.955 %	0.174 ppb	6.376 ppb	95.873 %	97.539 %	95.186 %	98.945 %
Concentration RSD	39.0 %	1.4 %	2.6 %	9.7 %	26.6 %	0.3 %	0.5 %	1.5 %	0.9 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.039 ppb	1.591 ppb	92.615 %	94.598 %
Concentration per Run 1	0.015 ppb	1.570 ppb	92.359 %	94.855 %
Concentration per Run 2	0.048 ppb	1.586 ppb	92.643 %	95.095 %
Concentration per Run 3	0.054 ppb	1.616 ppb	92.843 %	93.843 %
Concentration RSD	53.8 %	1.5 %	0.3 %	0.7 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index:	89	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	L2373121-02 6020TL	Rack	1		
Analysis started at:	12/15/2023 2:13:44 PM	Vial	55		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	92.013 %	96.825 %	0.033 ppb	4,958.224 ppb	6,682.300 ppb	221.409 ppb	3,312.057 ppb	19,031.439 ppb	96.833 %
Concentration per Run 1	92.919 %	95.238 %	0.030 ppb	5,015.499 ppb	6,725.030 ppb	224.249 ppb	3,327.498 ppb	18,294.423 ppb	99.762 %
Concentration per Run 2	91.499 %	107.937 %	0.035 ppb	4,700.473 ppb	6,374.132 ppb	207.822 ppb	3,323.636 ppb	20,390.618 ppb	94.178 %
Concentration per Run 3	91.622 %	87.302 %	0.035 ppb	5,158.701 ppb	6,947.739 ppb	232.156 ppb	3,285.036 ppb	18,409.277 ppb	96.559 %
Concentration RSD	0.9 %	10.7 %	9.1 %	4.7 %	4.3 %	5.6 %	0.7 %	6.2 %	2.9 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	95.681 %	0.803 ppb	-0.281 ppb	59.350 ppb	949.631 ppb	0.325 ppb	1.067 ppb	0.895 ppb	2.693 ppb
Concentration per Run 1	96.450 %	0.838 ppb	-0.285 ppb	59.493 ppb	967.531 ppb	0.319 ppb	1.166 ppb	0.932 ppb	2.764 ppb
Concentration per Run 2	91.375 %	0.857 ppb	-0.245 ppb	61.475 ppb	953.959 ppb	0.317 ppb	1.055 ppb	0.817 ppb	2.671 ppb
Concentration per Run 3	99.218 %	0.713 ppb	-0.312 ppb	57.081 ppb	927.404 ppb	0.338 ppb	0.979 ppb	0.937 ppb	2.645 ppb
Concentration RSD	4.2 %	9.8 %	12.0 %	3.7 %	2.1 %	3.6 %	8.8 %	7.6 %	2.3 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	95.309 %	97.218 %	1.092 ppb	0.307 ppb	63.819 ppb	0.232 ppb	91.143 %	92.812 %	0.001 ppb
Concentration per Run 1	96.560 %	93.093 %	1.245 ppb	0.459 ppb	65.619 ppb	0.211 ppb	92.287 %	93.248 %	0.001 ppb
Concentration per Run 2	95.370 %	98.601 %	0.881 ppb	0.511 ppb	63.129 ppb	0.242 ppb	89.870 %	91.880 %	-0.001 ppb
Concentration per Run 3	93.998 %	99.960 %	1.150 ppb	-0.050 ppb	62.710 ppb	0.242 ppb	91.272 %	93.308 %	0.003 ppb
Concentration RSD	1.3 %	3.7 %	17.3 %	101.1 %	2.5 %	7.7 %	1.3 %	0.9 %	338.2 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.010 ppb	90.783 %	94.198 %	0.073 ppb	12.729 ppb	93.735 %	96.820 %	94.798 %	96.990 %
Concentration per Run 1	0.008 ppb	89.162 %	92.605 %	0.076 ppb	13.374 ppb	93.503 %	98.062 %	96.213 %	98.122 %
Concentration per Run 2	0.009 ppb	91.787 %	96.085 %	0.060 ppb	12.496 ppb	94.347 %	96.145 %	92.932 %	96.331 %
Concentration per Run 3	0.013 ppb	91.399 %	93.905 %	0.083 ppb	12.317 ppb	93.353 %	96.253 %	95.250 %	96.518 %
Concentration RSD	25.2 %	1.6 %	1.9 %	16.1 %	4.4 %	0.6 %	1.1 %	1.8 %	1.0 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.032 ppb	0.898 ppb	89.678 %	91.586 %
Concentration per Run 1	0.018 ppb	0.887 ppb	87.403 %	91.562 %
Concentration per Run 2	0.035 ppb	0.888 ppb	89.177 %	91.523 %
Concentration per Run 3	0.042 ppb	0.918 ppb	92.453 %	91.672 %
Concentration RSD	38.8 %	2.0 %	2.9 %	0.1 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index: 90
Analysis label: L2373323-01 6020TL
Analysis started at: 12/15/2023 2:18:25 PM
User name ALPHALAB\ICPMSRQ
Rack 1
Vial 57
Comment <Comment>

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	158.430 %	168.387 %	0.032 ppb	89,898.997 ppb	21,748.365 ppb	483.914 ppb	9,221.236 ppb	100,252.991 ppb	100.142 %
Concentration per Run 1	159.733 %	163.096 %	0.032 ppb	91,305.185 ppb	21,992.489 ppb	477.341 ppb	8,873.195 ppb	94,641.376 ppb	102.630 %
Concentration per Run 2	160.054 %	182.541 %	0.032 ppb	86,099.831 ppb	20,774.266 ppb	446.265 ppb	9,513.269 ppb	108,146.223 ppb	99.938 %
Concentration per Run 3	155.503 %	159.525 %	0.033 ppb	92,291.975 ppb	22,478.340 ppb	528.137 ppb	9,277.246 ppb	97,971.374 ppb	97.859 %
Concentration RSD	1.6 %	7.4 %	1.8 %	3.7 %	4.0 %	8.5 %	3.5 %	7.0 %	2.4 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	92.259 %	1.395 ppb	0.447 ppb	484.138 ppb	1,460.766 ppb	0.370 ppb	1.468 ppb	1.640 ppb	8.005 ppb
Concentration per Run 1	93.989 %	1.418 ppb	0.470 ppb	483.705 ppb	1,487.383 ppb	0.383 ppb	1.412 ppb	1.592 ppb	8.294 ppb
Concentration per Run 2	87.300 %	1.499 ppb	0.493 ppb	494.418 ppb	1,470.969 ppb	0.371 ppb	1.561 ppb	1.767 ppb	8.008 ppb
Concentration per Run 3	95.489 %	1.270 ppb	0.379 ppb	474.291 ppb	1,423.946 ppb	0.355 ppb	1.430 ppb	1.562 ppb	7.714 ppb
Concentration RSD	4.7 %	8.3 %	13.5 %	2.1 %	2.3 %	3.8 %	5.6 %	6.8 %	3.6 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	97.561 %	100.800 %	0.543 ppb	0.461 ppb	5,703.905 ppb	0.207 ppb	88.146 %	86.151 %	0.003 ppb
Concentration per Run 1	99.026 %	97.617 %	0.580 ppb	0.424 ppb	5,729.979 ppb	0.175 ppb	89.982 %	88.017 %	0.001 ppb
Concentration per Run 2	96.202 %	103.421 %	0.540 ppb	0.476 ppb	5,618.630 ppb	0.249 ppb	87.777 %	84.414 %	0.005 ppb
Concentration per Run 3	97.454 %	101.362 %	0.510 ppb	0.483 ppb	5,763.106 ppb	0.197 ppb	86.680 %	86.022 %	0.003 ppb
Concentration RSD	1.5 %	2.9 %	6.4 %	7.0 %	1.3 %	18.2 %	1.9 %	2.1 %	58.5 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.009 ppb	88.270 %	89.195 %	0.063 ppb	7,283.146 ppb	93.422 %	93.126 %	94.198 %	95.787 %
Concentration per Run 1	0.008 ppb	90.202 %	90.525 %	0.047 ppb	7,765.401 ppb	95.077 %	95.073 %	97.272 %	95.415 %
Concentration per Run 2	0.012 ppb	86.500 %	87.639 %	0.073 ppb	7,024.027 ppb	92.985 %	92.034 %	92.609 %	97.095 %
Concentration per Run 3	0.008 ppb	88.107 %	89.421 %	0.069 ppb	7,060.010 ppb	92.204 %	92.270 %	92.714 %	94.851 %
Concentration RSD	23.3 %	2.1 %	1.6 %	22.2 %	5.7 %	1.6 %	1.8 %	2.8 %	1.2 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.025 ppb	2.389 ppb	85.056 %	85.156 %
Concentration per Run 1	0.010 ppb	2.367 ppb	85.507 %	86.528 %
Concentration per Run 2	0.030 ppb	2.374 ppb	84.821 %	84.590 %
Concentration per Run 3	0.036 ppb	2.427 ppb	84.841 %	84.350 %
Concentration RSD	54.3 %	1.4 %	0.5 %	1.4 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index: 91 User name ALPHALAB\ICPMSRQ Comment <Comment>
Analysis label: CCV Rack 0
Analysis started at: 12/15/2023 2:23:07 PM Vial 9

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	91.781 %	94.577 %	60.665 ppb	6,183.649 ppb	6,499.521 ppb	61.842 ppb	6,069.791 ppb	6,017.424 ppb	95.662 %
Concentration per Run 1	93.305 %	96.032 %	60.633 ppb	6,173.069 ppb	6,368.139 ppb	58.002 ppb	5,945.729 ppb	5,947.211 ppb	96.404 %
Concentration per Run 2	91.198 %	90.476 %	60.267 ppb	6,313.117 ppb	6,628.318 ppb	69.273 ppb	6,080.200 ppb	6,114.350 ppb	96.396 %
Concentration per Run 3	90.841 %	97.222 %	61.095 ppb	6,064.761 ppb	6,502.106 ppb	58.250 ppb	6,183.444 ppb	5,990.711 ppb	94.186 %
Recovery Percentage 1			101.108 %	103.061 %	108.325 %	103.069 %	101.163 %	100.290 %	
Concentration RSD	1.5 %	3.8 %	0.7 %	2.0 %	2.0 %	10.4 %	2.0 %	1.4 %	1.3 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	96.155 %	64.613 ppb	59.477 ppb	61.615 ppb	6,193.958 ppb	61.347 ppb	62.739 ppb	64.337 ppb	64.189 ppb
Concentration per Run 1	96.604 %	64.581 ppb	58.126 ppb	61.748 ppb	6,189.520 ppb	60.416 ppb	60.974 ppb	63.131 ppb	63.331 ppb
Concentration per Run 2	97.027 %	65.215 ppb	59.585 ppb	61.399 ppb	6,130.911 ppb	61.456 ppb	63.086 ppb	64.671 ppb	63.822 ppb
Concentration per Run 3	94.835 %	64.042 ppb	60.719 ppb	61.697 ppb	6,261.442 ppb	62.168 ppb	64.157 ppb	65.209 ppb	65.414 ppb
Recovery Percentage 1		107.688 %	99.128 %	102.691 %	103.233 %	102.245 %	104.565 %	107.228 %	106.982 %
Concentration RSD	1.2 %	0.9 %	2.2 %	0.3 %	1.1 %	1.4 %	2.6 %	1.7 %	1.7 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	94.028 %	96.581 %	60.994 ppb	61.236 ppb	61.262 ppb	60.657 ppb	92.886 %	92.837 %	59.684 ppb
Concentration per Run 1	95.902 %	97.642 %	59.522 ppb	63.172 ppb	60.337 ppb	59.344 ppb	95.701 %	93.281 %	58.366 ppb
Concentration per Run 2	92.440 %	96.250 %	61.297 ppb	61.298 ppb	62.204 ppb	60.401 ppb	91.768 %	91.907 %	60.988 ppb
Concentration per Run 3	93.741 %	95.852 %	62.163 ppb	59.237 ppb	61.246 ppb	62.226 ppb	91.190 %	93.323 %	59.698 ppb
Recovery Percentage 1			101.656 %	102.059 %	102.104 %	101.095 %			99.473 %
Concentration RSD	1.9 %	1.0 %	2.2 %	3.2 %	1.5 %	2.4 %	2.6 %	0.9 %	2.2 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	60.573 ppb	91.016 %	93.772 %	61.980 ppb	62.024 ppb	95.183 %	96.581 %	95.536 %	96.670 %
Concentration per Run 1	59.981 ppb	92.286 %	95.446 %	60.495 ppb	61.589 ppb	92.626 %	96.782 %	99.240 %	97.593 %
Concentration per Run 2	60.753 ppb	90.869 %	93.238 %	62.432 ppb	61.451 ppb	98.135 %	96.372 %	95.537 %	96.360 %
Concentration per Run 3	60.985 ppb	89.892 %	92.632 %	63.013 ppb	63.032 ppb	94.788 %	96.589 %	91.831 %	96.058 %
Recovery Percentage 1	100.956 %			103.299 %	103.373 %				
Concentration RSD	0.9 %	1.3 %	1.6 %	2.1 %	1.4 %	2.9 %	0.2 %	3.9 %	0.8 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	61.465 ppb	61.596 ppb	91.980 %	91.921 %
Concentration per Run 1	61.361 ppb	60.546 ppb	93.341 %	92.735 %
Concentration per Run 2	61.989 ppb	62.635 ppb	90.228 %	90.788 %
Concentration per Run 3	61.045 ppb	61.607 ppb	92.370 %	92.241 %
Recovery Percentage 1	102.442 %	102.660 %		
Concentration RSD	0.8 %	1.7 %	1.7 %	1.1 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index: 92 User name ALPHALAB\ICPMSRQ Comment <Comment>
Analysis label: CCB Rack 0
Analysis started at: 12/15/2023 2:27:52 PM Vial 10

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	93.627 %	93.915 %	0.031 ppb	4.436 ppb	2.679 ppb	2.047 ppb	5.237 ppb	1.320 ppb	92.412 %
Concentration per Run 1	94.070 %	108.333 %	0.029 ppb	3.844 ppb	4.229 ppb	3.784 ppb	4.890 ppb	-7.201 ppb	94.229 %
Concentration per Run 2	93.936 %	90.079 %	0.028 ppb	5.067 ppb	1.147 ppb	3.474 ppb	6.701 ppb	8.484 ppb	92.724 %
Concentration per Run 3	92.876 %	83.333 %	0.035 ppb	4.398 ppb	2.660 ppb	-1.117 ppb	4.121 ppb	2.678 ppb	90.283 %
Recovery Percentage 1			6.129 %	4.436 %	3.826 %	20.470 %	5.237 %	1.320 %	
Concentration RSD	0.7 %	13.8 %	11.5 %	13.8 %	57.5 %	134.1 %	25.3 %	600.7 %	2.2 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	93.413 %	0.019 ppb	-0.034 ppb	0.038 ppb	8.981 ppb	0.015 ppb	0.211 ppb	0.048 ppb	0.060 ppb
Concentration per Run 1	97.565 %	0.010 ppb	-0.096 ppb	0.056 ppb	7.708 ppb	0.022 ppb	0.143 ppb	0.101 ppb	0.017 ppb
Concentration per Run 2	92.182 %	0.043 ppb	-0.049 ppb	0.050 ppb	9.395 ppb	0.008 ppb	0.295 ppb	0.052 ppb	0.037 ppb
Concentration per Run 3	90.491 %	0.004 ppb	0.043 ppb	0.008 ppb	9.842 ppb	0.013 ppb	0.196 ppb	-0.008 ppb	0.126 ppb
Recovery Percentage 1		0.382 %	-3.407 %	3.823 %	17.963 %	2.901 %	10.564 %	4.806 %	1.195 %
Concentration RSD	4.0 %	109.0 %	207.7 %	68.3 %	12.5 %	49.7 %	36.4 %	113.6 %	97.0 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	92.889 %	96.392 %	-0.051 ppb	0.079 ppb	0.184 ppb	0.184 ppb	94.706 %	95.629 %	0.018 ppb
Concentration per Run 1	92.288 %	95.096 %	-0.074 ppb	-0.032 ppb	0.268 ppb	0.194 ppb	96.340 %	95.510 %	0.017 ppb
Concentration per Run 2	94.285 %	94.351 %	-0.005 ppb	0.211 ppb	0.205 ppb	0.164 ppb	95.865 %	94.611 %	0.019 ppb
Concentration per Run 3	92.092 %	99.730 %	-0.075 ppb	0.060 ppb	0.078 ppb	0.193 ppb	91.913 %	96.765 %	0.018 ppb
Recovery Percentage 1			-10.254 %	1.589 %	36.743 %	9.187 %			4.454 %
Concentration RSD	1.3 %	3.0 %	78.4 %	154.0 %	52.7 %	9.3 %	2.6 %	1.1 %	3.8 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.010 ppb	90.742 %	93.880 %	0.040 ppb	0.248 ppb	93.642 %	95.814 %	92.165 %	96.370 %
Concentration per Run 1	0.019 ppb	90.475 %	94.261 %	0.041 ppb	0.260 ppb	93.301 %	97.249 %	92.247 %	96.991 %
Concentration per Run 2	0.004 ppb	89.192 %	92.895 %	0.036 ppb	0.266 ppb	93.922 %	94.649 %	93.031 %	94.912 %
Concentration per Run 3	0.006 ppb	92.558 %	94.483 %	0.044 ppb	0.217 ppb	93.702 %	95.542 %	91.216 %	97.205 %
Recovery Percentage 1				1.001 %	49.571 %				
Concentration RSD	81.8 %	1.9 %	0.9 %	10.5 %	10.8 %	0.3 %	1.4 %	1.0 %	1.3 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.316 ppb	0.018 ppb	91.474 %	95.299 %
Concentration per Run 1	0.200 ppb	0.023 ppb	91.210 %	95.841 %
Concentration per Run 2	0.364 ppb	0.016 ppb	90.602 %	96.406 %
Concentration per Run 3	0.385 ppb	0.016 ppb	92.610 %	93.650 %
Recovery Percentage 1	31.646 %	1.840 %		
Concentration RSD	32.1 %	22.1 %	1.1 %	1.5 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index: 93
Analysis label: L2373323-03 6020TL
Analysis started at: 12/15/2023 2:46:28 PM
User name ALPHALAB\ICPMSRQ
Rack 1
Vial 58
Comment <Comment>

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	141.213 %	143.387 %	0.095 ppb	115,682.196 ppb	29,180.066 ppb	1,360.047 ppb	13,972.080 ppb	112,876.887 ppb	102.961 %
Concentration per Run 1	142.572 %	141.667 %	0.091 ppb	114,904.267 ppb	28,579.897 ppb	1,290.723 ppb	13,265.147 ppb	106,724.524 ppb	104.262 %
Concentration per Run 2	141.189 %	149.207 %	0.089 ppb	113,176.989 ppb	28,666.082 ppb	1,355.712 ppb	14,164.352 ppb	113,037.758 ppb	103.004 %
Concentration per Run 3	139.878 %	139.286 %	0.104 ppb	118,965.333 ppb	30,294.218 ppb	1,433.706 ppb	14,486.740 ppb	118,868.378 ppb	101.618 %
Concentration RSD	1.0 %	3.6 %	8.6 %	2.6 %	3.3 %	5.3 %	4.5 %	5.4 %	1.3 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	105.934 %	4.569 ppb	2.024 ppb	1,147.231 ppb	3,050.894 ppb	1.214 ppb	3.976 ppb	9.229 ppb	47.646 ppb
Concentration per Run 1	110.714 %	4.181 ppb	1.906 ppb	1,104.415 ppb	2,858.077 ppb	1.177 ppb	4.053 ppb	8.997 ppb	46.064 ppb
Concentration per Run 2	105.639 %	4.690 ppb	2.170 ppb	1,151.930 ppb	3,149.996 ppb	1.211 ppb	3.995 ppb	9.417 ppb	48.885 ppb
Concentration per Run 3	101.448 %	4.836 ppb	1.997 ppb	1,185.347 ppb	3,144.607 ppb	1.253 ppb	3.880 ppb	9.274 ppb	47.990 ppb
Concentration RSD	4.4 %	7.5 %	6.6 %	3.5 %	5.5 %	3.1 %	2.2 %	2.3 %	3.0 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	96.897 %	103.909 %	3.130 ppb	0.870 ppb	13,058.380 ppb	0.549 ppb	88.549 %	91.539 %	0.024 ppb
Concentration per Run 1	96.539 %	106.228 %	3.084 ppb	1.180 ppb	12,553.063 ppb	0.447 ppb	90.336 %	95.858 %	0.026 ppb
Concentration per Run 2	98.347 %	101.637 %	3.292 ppb	0.596 ppb	13,425.011 ppb	0.627 ppb	89.030 %	88.357 %	0.021 ppb
Concentration per Run 3	95.804 %	103.862 %	3.015 ppb	0.835 ppb	13,197.065 ppb	0.573 ppb	86.282 %	90.403 %	0.026 ppb
Concentration RSD	1.4 %	2.2 %	4.6 %	33.7 %	3.5 %	16.9 %	2.3 %	4.2 %	12.7 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.022 ppb	87.619 %	95.483 %	0.198 ppb	12,632.580 ppb	94.794 %	101.773 %	95.846 %	105.287 %
Concentration per Run 1	0.034 ppb	87.096 %	98.753 %	0.184 ppb	12,192.734 ppb	95.064 %	104.135 %	95.307 %	109.349 %
Concentration per Run 2	0.018 ppb	87.684 %	93.043 %	0.190 ppb	12,595.394 ppb	96.230 %	101.438 %	98.622 %	103.848 %
Concentration per Run 3	0.014 ppb	88.078 %	94.652 %	0.220 ppb	13,109.611 ppb	93.086 %	99.747 %	93.608 %	102.665 %
Concentration RSD	47.5 %	0.6 %	3.1 %	9.5 %	3.6 %	1.7 %	2.2 %	2.7 %	3.4 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.054 ppb	6.890 ppb	88.688 %	94.938 %
Concentration per Run 1	0.031 ppb	6.693 ppb	87.660 %	97.858 %
Concentration per Run 2	0.066 ppb	6.982 ppb	88.721 %	93.322 %
Concentration per Run 3	0.064 ppb	6.996 ppb	89.681 %	93.635 %
Concentration RSD	36.8 %	2.5 %	1.1 %	2.7 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index:	94	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	L2373323-05 6020TL	Rack	1		
Analysis started at:	12/15/2023 2:51:09 PM	Vial	59		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	155.079 %	167.990 %	0.076 ppb	137,430.121 ppb	28,636.632 ppb	1,402.086 ppb	9,895.477 ppb	118,531.849 ppb	95.913 %
Concentration per Run 1	158.191 %	165.080 %	0.075 ppb	139,178.906 ppb	28,259.015 ppb	1,371.335 ppb	9,778.120 ppb	117,583.388 ppb	97.366 %
Concentration per Run 2	153.615 %	164.683 %	0.082 ppb	140,297.802 ppb	29,679.405 ppb	1,436.809 ppb	10,129.632 ppb	121,404.662 ppb	94.308 %
Concentration per Run 3	153.430 %	174.207 %	0.072 ppb	132,813.654 ppb	27,971.475 ppb	1,398.115 ppb	9,778.679 ppb	116,607.497 ppb	96.064 %
Concentration RSD	1.7 %	3.2 %	6.6 %	2.9 %	3.2 %	2.3 %	2.0 %	2.1 %	1.6 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	92.439 %	4.191 ppb	2.348 ppb	1,227.295 ppb	5,852.801 ppb	1.541 ppb	4.464 ppb	3.235 ppb	12.074 ppb
Concentration per Run 1	93.797 %	4.274 ppb	2.402 ppb	1,208.264 ppb	5,663.320 ppb	1.595 ppb	4.531 ppb	3.138 ppb	12.004 ppb
Concentration per Run 2	90.029 %	4.444 ppb	2.406 ppb	1,246.207 ppb	5,989.121 ppb	1.544 ppb	4.521 ppb	3.330 ppb	12.287 ppb
Concentration per Run 3	93.490 %	3.854 ppb	2.237 ppb	1,227.413 ppb	5,905.962 ppb	1.484 ppb	4.341 ppb	3.236 ppb	11.932 ppb
Concentration RSD	2.3 %	7.2 %	4.1 %	1.5 %	2.9 %	3.6 %	2.4 %	3.0 %	1.6 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	90.661 %	95.035 %	3.536 ppb	1.026 ppb	9,202.146 ppb	4.713 ppb	84.805 %	86.443 %	0.007 ppb
Concentration per Run 1	92.876 %	96.313 %	3.487 ppb	1.000 ppb	8,976.030 ppb	4.772 ppb	85.368 %	88.496 %	0.007 ppb
Concentration per Run 2	89.225 %	94.988 %	3.784 ppb	0.992 ppb	9,349.276 ppb	4.662 ppb	84.690 %	85.369 %	0.007 ppb
Concentration per Run 3	89.881 %	93.804 %	3.338 ppb	1.085 ppb	9,281.131 ppb	4.706 ppb	84.357 %	85.465 %	0.007 ppb
Concentration RSD	2.1 %	1.3 %	6.4 %	5.0 %	2.2 %	1.2 %	0.6 %	2.1 %	3.3 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.008 ppb	83.860 %	88.600 %	0.276 ppb	10,934.553 ppb	92.433 %	94.116 %	94.443 %	98.113 %
Concentration per Run 1	0.015 ppb	81.770 %	90.706 %	0.248 ppb	10,579.977 ppb	93.199 %	95.578 %	95.036 %	99.852 %
Concentration per Run 2	0.007 ppb	84.416 %	87.900 %	0.284 ppb	11,091.945 ppb	92.102 %	93.999 %	94.043 %	97.156 %
Concentration per Run 3	0.003 ppb	85.395 %	87.193 %	0.294 ppb	11,131.738 ppb	91.999 %	92.770 %	94.252 %	97.332 %
Concentration RSD	74.5 %	2.2 %	2.1 %	8.8 %	2.8 %	0.7 %	1.5 %	0.6 %	1.5 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.034 ppb	3.219 ppb	83.458 %	85.680 %
Concentration per Run 1	0.022 ppb	3.130 ppb	82.786 %	87.011 %
Concentration per Run 2	0.041 ppb	3.328 ppb	83.502 %	83.132 %
Concentration per Run 3	0.040 ppb	3.198 ppb	84.085 %	86.895 %
Concentration RSD	31.6 %	3.1 %	0.8 %	2.6 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index: 95
Analysis label: L2373323-06 6020TL
Analysis started at: 12/15/2023 2:55:51 PM
User name ALPHALAB\ICPMSRQ
Rack 1
Vial 60
Comment <Comment>

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	130.940 %	134.127 %	0.081 ppb	119,725.748 ppb	30,599.053 ppb	1,347.789 ppb	14,817.933 ppb	121,106.869 ppb	91.935 %
Concentration per Run 1	133.310 %	136.905 %	0.083 ppb	117,842.016 ppb	30,228.375 ppb	1,343.699 ppb	14,268.029 ppb	118,145.377 ppb	94.270 %
Concentration per Run 2	130.087 %	142.461 %	0.082 ppb	114,761.376 ppb	29,073.871 ppb	1,319.387 ppb	14,707.778 ppb	123,386.778 ppb	90.875 %
Concentration per Run 3	129.423 %	123.016 %	0.080 ppb	126,573.851 ppb	32,494.912 ppb	1,380.280 ppb	15,477.993 ppb	121,788.453 ppb	90.660 %
Concentration RSD	1.6 %	7.5 %	2.3 %	5.1 %	5.7 %	2.3 %	4.1 %	2.2 %	2.2 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	88.645 %	4.745 ppb	2.261 ppb	1,224.414 ppb	3,100.527 ppb	1.231 ppb	4.234 ppb	8.954 ppb	48.972 ppb
Concentration per Run 1	93.028 %	4.742 ppb	2.275 ppb	1,216.857 ppb	3,131.056 ppb	1.253 ppb	4.346 ppb	9.213 ppb	49.220 ppb
Concentration per Run 2	87.069 %	4.782 ppb	2.265 ppb	1,235.897 ppb	3,047.584 ppb	1.240 ppb	4.143 ppb	8.763 ppb	49.005 ppb
Concentration per Run 3	85.839 %	4.709 ppb	2.242 ppb	1,220.486 ppb	3,122.940 ppb	1.200 ppb	4.214 ppb	8.885 ppb	48.692 ppb
Concentration RSD	4.3 %	0.8 %	0.8 %	0.8 %	1.5 %	2.3 %	2.4 %	2.6 %	0.5 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	90.649 %	93.674 %	3.252 ppb	0.820 ppb	13,245.444 ppb	0.601 ppb	82.357 %	83.132 %	0.022 ppb
Concentration per Run 1	92.728 %	90.245 %	3.413 ppb	1.010 ppb	13,505.735 ppb	0.543 ppb	83.323 %	83.729 %	0.026 ppb
Concentration per Run 2	91.631 %	92.688 %	3.169 ppb	0.914 ppb	13,263.963 ppb	0.624 ppb	81.528 %	82.555 %	0.019 ppb
Concentration per Run 3	87.586 %	98.088 %	3.174 ppb	0.536 ppb	12,966.634 ppb	0.636 ppb	82.220 %	83.112 %	0.022 ppb
Concentration RSD	3.0 %	4.3 %	4.3 %	30.5 %	2.0 %	8.4 %	1.1 %	0.7 %	14.7 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.028 ppb	81.449 %	87.829 %	0.195 ppb	12,925.070 ppb	90.314 %	92.454 %	92.230 %	96.523 %
Concentration per Run 1	0.037 ppb	81.582 %	86.884 %	0.187 ppb	13,108.505 ppb	88.568 %	90.847 %	92.677 %	94.644 %
Concentration per Run 2	0.030 ppb	80.072 %	87.288 %	0.202 ppb	12,919.350 ppb	91.533 %	92.150 %	92.695 %	95.928 %
Concentration per Run 3	0.017 ppb	82.693 %	89.314 %	0.195 ppb	12,747.356 ppb	90.841 %	94.364 %	91.317 %	98.996 %
Concentration RSD	36.1 %	1.6 %	1.5 %	4.0 %	1.4 %	1.7 %	1.9 %	0.9 %	2.3 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.032 ppb	7.092 ppb	82.097 %	82.325 %
Concentration per Run 1	0.024 ppb	7.033 ppb	82.875 %	83.031 %
Concentration per Run 2	0.035 ppb	7.124 ppb	81.486 %	81.478 %
Concentration per Run 3	0.038 ppb	7.118 ppb	81.930 %	82.467 %
Concentration RSD	22.8 %	0.7 %	0.9 %	1.0 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index:	96	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	12/15/2023 3:08:24 PM	Vial	9		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	89.947 %	93.783 %	59.344 ppb	5,918.142 ppb	6,219.505 ppb	56.777 ppb	6,353.089 ppb	6,013.020 ppb	90.208 %
Concentration per Run 1	90.702 %	94.048 %	59.048 ppb	5,819.331 ppb	6,135.920 ppb	59.277 ppb	6,197.341 ppb	5,495.300 ppb	89.768 %
Concentration per Run 2	88.858 %	97.619 %	60.734 ppb	5,834.048 ppb	6,114.882 ppb	53.940 ppb	6,368.300 ppb	6,619.531 ppb	90.074 %
Concentration per Run 3	90.280 %	89.683 %	58.250 ppb	6,101.048 ppb	6,407.713 ppb	57.115 ppb	6,493.625 ppb	5,924.228 ppb	90.782 %
Recovery Percentage 1			98.907 %	98.636 %	103.658 %	94.629 %	105.885 %	100.217 %	
Concentration RSD	1.1 %	4.2 %	2.1 %	2.7 %	2.6 %	4.7 %	2.3 %	9.4 %	0.6 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	99.577 %	63.263 ppb	59.299 ppb	59.436 ppb	5,977.144 ppb	58.898 ppb	61.519 ppb	62.619 ppb	61.161 ppb
Concentration per Run 1	104.831 %	61.468 ppb	56.886 ppb	57.496 ppb	5,733.910 ppb	57.599 ppb	58.925 ppb	60.520 ppb	59.692 ppb
Concentration per Run 2	97.142 %	63.166 ppb	61.385 ppb	59.711 ppb	6,014.712 ppb	58.667 ppb	62.908 ppb	63.729 ppb	60.593 ppb
Concentration per Run 3	96.758 %	65.156 ppb	59.628 ppb	61.099 ppb	6,182.811 ppb	60.428 ppb	62.723 ppb	63.609 ppb	63.198 ppb
Recovery Percentage 1		105.439 %	98.832 %	99.059 %	99.619 %	98.164 %	102.531 %	104.365 %	101.935 %
Concentration RSD	4.6 %	2.9 %	3.8 %	3.1 %	3.8 %	2.4 %	3.7 %	2.9 %	3.0 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	90.370 %	98.221 %	59.217 ppb	62.163 ppb	61.338 ppb	60.758 ppb	90.601 %	92.862 %	58.942 ppb
Concentration per Run 1	91.315 %	100.539 %	57.815 ppb	58.127 ppb	59.294 ppb	59.898 ppb	89.393 %	95.438 %	57.072 ppb
Concentration per Run 2	88.487 %	99.967 %	58.057 ppb	61.450 ppb	60.106 ppb	60.155 ppb	89.872 %	94.073 %	59.884 ppb
Concentration per Run 3	91.307 %	94.157 %	61.780 ppb	66.911 ppb	64.614 ppb	62.221 ppb	92.537 %	89.074 %	59.868 ppb
Recovery Percentage 1			98.695 %	103.604 %	102.230 %	101.263 %			98.236 %
Concentration RSD	1.8 %	3.6 %	3.8 %	7.1 %	4.7 %	2.1 %	1.9 %	3.6 %	2.7 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	59.769 ppb	88.885 %	96.822 %	61.085 ppb	61.834 ppb	92.743 %	98.134 %	93.915 %	100.110 %
Concentration per Run 1	57.731 ppb	88.185 %	100.455 %	59.880 ppb	59.883 ppb	93.095 %	99.601 %	92.728 %	103.420 %
Concentration per Run 2	60.368 ppb	89.655 %	94.173 %	61.379 ppb	63.110 ppb	90.421 %	96.201 %	93.932 %	97.731 %
Concentration per Run 3	61.206 ppb	88.815 %	95.837 %	61.994 ppb	62.508 ppb	94.712 %	98.600 %	95.084 %	99.180 %
Recovery Percentage 1	99.614 %			101.808 %	103.056 %				
Concentration RSD	3.0 %	0.8 %	3.4 %	1.8 %	2.8 %	2.3 %	1.8 %	1.3 %	3.0 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	61.028 ppb	62.016 ppb	90.418 %	92.833 %
Concentration per Run 1	59.341 ppb	60.677 ppb	89.956 %	94.816 %
Concentration per Run 2	61.709 ppb	62.098 ppb	90.895 %	92.179 %
Concentration per Run 3	62.032 ppb	63.274 ppb	90.402 %	91.504 %
Recovery Percentage 1	101.713 %	103.360 %		
Concentration RSD	2.4 %	2.1 %	0.5 %	1.9 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index: 97 User name ALPHALAB\ICPMSRQ Comment <Comment>
Analysis label: CCB Rack 0
Analysis started at: 12/15/2023 3:13:09 PM Vial 10

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	91.644 %	91.138 %	0.033 ppb	3.368 ppb	1.054 ppb	0.108 ppb	4.286 ppb	12.088 ppb	87.578 %
Concentration per Run 1	92.347 %	92.460 %	0.036 ppb	6.508 ppb	1.213 ppb	-0.170 ppb	7.539 ppb	9.391 ppb	87.878 %
Concentration per Run 2	92.069 %	84.524 %	0.028 ppb	1.096 ppb	0.889 ppb	-0.181 ppb	-2.554 ppb	16.490 ppb	88.474 %
Concentration per Run 3	90.515 %	96.429 %	0.035 ppb	2.501 ppb	1.060 ppb	0.676 ppb	7.873 ppb	10.382 ppb	86.382 %
Recovery Percentage 1			6.599 %	3.368 %	1.506 %	1.082 %	4.286 %	12.088 %	
Concentration RSD	1.1 %	6.7 %	12.7 %	83.4 %	15.4 %	454.3 %	138.3 %	31.8 %	1.2 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	89.863 %	0.012 ppb	-0.051 ppb	0.024 ppb	9.324 ppb	0.016 ppb	0.235 ppb	0.051 ppb	0.026 ppb
Concentration per Run 1	85.032 %	-0.003 ppb	0.085 ppb	0.052 ppb	7.424 ppb	0.030 ppb	0.312 ppb	0.053 ppb	-0.018 ppb
Concentration per Run 2	93.720 %	0.034 ppb	-0.149 ppb	0.021 ppb	9.859 ppb	0.010 ppb	0.199 ppb	0.035 ppb	0.010 ppb
Concentration per Run 3	90.837 %	0.004 ppb	-0.088 ppb	0.000 ppb	10.690 ppb	0.010 ppb	0.194 ppb	0.066 ppb	0.086 ppb
Recovery Percentage 1		0.240 %	-5.102 %	2.420 %	18.648 %	3.290 %	11.742 %	5.129 %	0.522 %
Concentration RSD	4.9 %	164.1 %	238.0 %	109.4 %	18.2 %	70.1 %	28.5 %	30.2 %	206.8 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	88.182 %	93.760 %	-0.010 ppb	0.113 ppb	0.147 ppb	0.185 ppb	91.223 %	92.749 %	0.022 ppb
Concentration per Run 1	89.194 %	88.732 %	0.037 ppb	0.069 ppb	0.283 ppb	0.201 ppb	92.372 %	88.584 %	0.024 ppb
Concentration per Run 2	87.932 %	94.789 %	-0.045 ppb	0.138 ppb	0.106 ppb	0.212 ppb	92.342 %	98.911 %	0.019 ppb
Concentration per Run 3	87.421 %	97.758 %	-0.024 ppb	0.131 ppb	0.053 ppb	0.143 ppb	88.956 %	90.752 %	0.022 ppb
Recovery Percentage 1			-2.066 %	2.251 %	29.455 %	9.267 %			5.459 %
Concentration RSD	1.0 %	4.9 %	412.2 %	33.8 %	81.8 %	20.0 %	2.2 %	5.9 %	10.5 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.010 ppb	88.114 %	92.991 %	0.038 ppb	0.231 ppb	91.789 %	95.201 %	92.014 %	96.758 %
Concentration per Run 1	0.015 ppb	88.476 %	89.024 %	0.041 ppb	0.338 ppb	90.990 %	89.376 %	92.793 %	92.336 %
Concentration per Run 2	0.006 ppb	87.827 %	97.689 %	0.028 ppb	0.207 ppb	93.345 %	100.971 %	91.559 %	101.759 %
Concentration per Run 3	0.010 ppb	88.039 %	92.261 %	0.046 ppb	0.147 ppb	91.031 %	95.257 %	91.690 %	96.179 %
Recovery Percentage 1				0.961 %	46.151 %				
Concentration RSD	46.2 %	0.4 %	4.7 %	24.5 %	42.3 %	1.5 %	6.1 %	0.7 %	4.9 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.301 ppb	0.019 ppb	89.942 %	91.929 %
Concentration per Run 1	0.202 ppb	0.025 ppb	91.321 %	89.212 %
Concentration per Run 2	0.330 ppb	0.016 ppb	88.299 %	96.210 %
Concentration per Run 3	0.372 ppb	0.017 ppb	90.205 %	90.366 %
Recovery Percentage 1	30.133 %	1.921 %		
Concentration RSD	29.4 %	25.3 %	1.7 %	4.1 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index:	98	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	LLCCV	Rack	4		
Analysis started at:	12/15/2023 5:06:25 PM	Vial	51		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	101.449 %	97.751 %	0.283 ppb	99.972 ppb	72.292 ppb	9.254 ppb	108.744 ppb	181.448 ppb	96.914 %
Concentration per Run 1	102.773 %	89.286 %	0.280 ppb	109.345 ppb	75.919 ppb	11.933 ppb	100.308 ppb	185.876 ppb	98.148 %
Concentration per Run 2	100.675 %	105.952 %	0.276 ppb	94.728 ppb	73.111 ppb	7.414 ppb	123.810 ppb	198.643 ppb	95.383 %
Concentration per Run 3	100.900 %	98.016 %	0.295 ppb	95.843 ppb	67.848 ppb	8.414 ppb	102.114 ppb	159.825 ppb	97.211 %
Recovery Percentage 1			56.694 %	99.972 %	103.275 %	92.537 %	108.744 %	181.448 %	
Concentration RSD	1.1 %	8.5 %	3.6 %	8.1 %	5.7 %	25.7 %	12.0 %	10.9 %	1.5 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	111.919 %	5.302 ppb	0.213 ppb	1.071 ppb	526.770 ppb	0.513 ppb	1.944 ppb	0.970 ppb	10.390 ppb
Concentration per Run 1	114.174 %	5.168 ppb	0.240 ppb	1.042 ppb	516.272 ppb	0.531 ppb	1.842 ppb	0.977 ppb	10.245 ppb
Concentration per Run 2	109.753 %	5.371 ppb	0.204 ppb	1.067 ppb	540.275 ppb	0.475 ppb	1.975 ppb	0.944 ppb	10.507 ppb
Concentration per Run 3	111.829 %	5.366 ppb	0.195 ppb	1.103 ppb	523.761 ppb	0.534 ppb	2.015 ppb	0.988 ppb	10.418 ppb
Recovery Percentage 1		106.030 %	21.307 %	107.069 %	1,053.539 %	102.660 %	97.193 %	96.951 %	103.899 %
Concentration RSD	2.0 %	2.2 %	11.2 %	2.9 %	2.3 %	6.5 %	4.7 %	2.3 %	1.3 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	97.679 %	106.292 %	0.496 ppb	5.060 ppb	0.634 ppb	2.095 ppb	100.129 %	106.423 %	0.222 ppb
Concentration per Run 1	98.712 %	108.176 %	0.456 ppb	5.525 ppb	0.636 ppb	2.010 ppb	101.308 %	107.985 %	0.212 ppb
Concentration per Run 2	96.695 %	105.241 %	0.524 ppb	4.335 ppb	0.696 ppb	2.107 ppb	98.656 %	104.724 %	0.236 ppb
Concentration per Run 3	97.630 %	105.460 %	0.510 ppb	5.319 ppb	0.569 ppb	2.168 ppb	100.423 %	106.559 %	0.217 ppb
Recovery Percentage 1			99.278 %	101.194 %	63.359 %	104.730 %			55.500 %
Concentration RSD	1.0 %	1.5 %	7.2 %	12.6 %	10.1 %	3.8 %	1.3 %	1.5 %	5.7 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.205 ppb	98.147 %	109.540 %	2.021 ppb	0.529 ppb	100.698 %	108.453 %	98.985 %	111.157 %
Concentration per Run 1	0.225 ppb	98.286 %	112.520 %	1.990 ppb	0.563 ppb	101.293 %	109.892 %	100.038 %	113.646 %
Concentration per Run 2	0.192 ppb	99.297 %	107.130 %	1.936 ppb	0.488 ppb	99.531 %	107.023 %	95.743 %	109.253 %
Concentration per Run 3	0.198 ppb	96.858 %	108.969 %	2.138 ppb	0.536 ppb	101.269 %	108.444 %	101.175 %	110.570 %
Recovery Percentage 1	102.549 %			50.536 %	105.813 %				
Concentration RSD	8.7 %	1.2 %	2.5 %	5.2 %	7.1 %	1.0 %	1.3 %	2.9 %	2.0 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.462 ppb	0.496 ppb	96.079 %	107.717 %
Concentration per Run 1	0.459 ppb	0.497 ppb	94.667 %	109.891 %
Concentration per Run 2	0.455 ppb	0.489 ppb	97.230 %	106.825 %
Concentration per Run 3	0.472 ppb	0.501 ppb	96.340 %	106.434 %
Recovery Percentage 1	92.447 %	99.140 %		
Concentration RSD	1.9 %	1.2 %	1.4 %	1.8 %

Alpha ICPMSRQ Data

12/15/2023 6:27:06 PM

Analysis index: 99
Analysis label: CCB
Analysis started at: 12/15/2023 5:11:10 PM
User name ALPHALAB\ICPMSRQ
Rack 0
Vial 10
Comment <Comment>

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (KED_DEF)	39K (KED_DEF)	44Ca (KED_DEF)	45Sc (STD_DEF)
Concentration average	98.702 %	101.720 %	0.012 ppb	-4.992 ppb	-0.364 ppb	0.599 ppb	-3.643 ppb	6.757 ppb	96.334 %
Concentration per Run 1	99.249 %	101.191 %	0.014 ppb	-4.707 ppb	-0.598 ppb	0.551 ppb	-3.370 ppb	1.736 ppb	94.327 %
Concentration per Run 2	98.608 %	113.492 %	0.012 ppb	-8.308 ppb	-0.946 ppb	-0.327 ppb	-9.091 ppb	-5.431 ppb	95.987 %
Concentration per Run 3	98.247 %	90.476 %	0.011 ppb	-1.963 ppb	0.452 ppb	1.575 ppb	1.531 ppb	23.966 ppb	98.688 %
Recovery Percentage 1			2.455 %	-4.992 %	-0.520 %	5.994 %	-3.643 %	6.757 %	
Concentration RSD	0.5 %	11.3 %	10.3 %	63.7 %	200.0 %	158.8 %	145.9 %	226.8 %	2.3 %

Category	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)	66Zn (KED_DEF)
Concentration average	98.424 %	0.005 ppb	-0.032 ppb	-0.008 ppb	5.499 ppb	0.009 ppb	0.228 ppb	0.047 ppb	0.035 ppb
Concentration per Run 1	99.795 %	0.010 ppb	0.029 ppb	-0.020 ppb	4.357 ppb	0.012 ppb	0.311 ppb	0.046 ppb	0.021 ppb
Concentration per Run 2	99.680 %	-0.005 ppb	-0.109 ppb	0.002 ppb	5.834 ppb	0.009 ppb	0.176 ppb	0.059 ppb	0.061 ppb
Concentration per Run 3	95.796 %	0.010 ppb	-0.015 ppb	-0.005 ppb	6.305 ppb	0.007 ppb	0.198 ppb	0.037 ppb	0.022 ppb
Recovery Percentage 1		0.102 %	-3.156 %	-0.772 %	10.998 %	1.864 %	11.408 %	4.727 %	0.693 %
Concentration RSD	2.3 %	168.6 %	223.8 %	149.8 %	18.5 %	29.5 %	31.9 %	23.2 %	66.6 %

Category	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)	107Ag (KED_DEF)
Concentration average	97.061 %	98.919 %	-0.026 ppb	0.025 ppb	0.043 ppb	0.010 ppb	98.842 %	99.767 %	0.005 ppb
Concentration per Run 1	95.872 %	98.295 %	-0.036 ppb	0.051 ppb	0.043 ppb	0.008 ppb	98.203 %	100.743 %	0.003 ppb
Concentration per Run 2	96.417 %	98.207 %	-0.002 ppb	0.056 ppb	0.077 ppb	0.015 ppb	98.721 %	100.111 %	0.007 ppb
Concentration per Run 3	98.893 %	100.256 %	-0.039 ppb	-0.031 ppb	0.010 ppb	0.008 ppb	99.603 %	98.446 %	0.004 ppb
Recovery Percentage 1			-5.131 %	0.502 %	8.673 %	0.506 %			1.261 %
Concentration RSD	1.7 %	1.2 %	78.9 %	194.2 %	76.8 %	43.1 %	0.7 %	1.2 %	41.5 %

Category	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)	175Lu (KED_DEF)
Concentration average	0.005 ppb	96.489 %	97.477 %	0.007 ppb	0.070 ppb	97.440 %	98.675 %	96.742 %	98.718 %
Concentration per Run 1	0.010 ppb	95.646 %	98.792 %	0.006 ppb	0.096 ppb	97.928 %	98.057 %	96.783 %	98.902 %
Concentration per Run 2	0.003 ppb	98.225 %	97.446 %	0.006 ppb	0.071 ppb	97.054 %	97.410 %	96.523 %	97.546 %
Concentration per Run 3	0.003 ppb	95.596 %	96.194 %	0.008 ppb	0.044 ppb	97.339 %	100.558 %	96.920 %	99.706 %
Recovery Percentage 1				0.168 %	14.032 %				
Concentration RSD	85.3 %	1.6 %	1.3 %	10.8 %	37.3 %	0.5 %	1.7 %	0.2 %	1.1 %

Category	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	0.011 ppb	0.006 ppb	95.247 %	97.977 %
Concentration per Run 1	0.004 ppb	0.006 ppb	94.796 %	99.099 %
Concentration per Run 2	0.016 ppb	0.006 ppb	95.696 %	98.208 %
Concentration per Run 3	0.014 ppb	0.005 ppb	95.250 %	96.623 %
Recovery Percentage 1	1.120 %	0.557 %		
Concentration RSD	53.6 %	8.4 %	0.5 %	1.3 %

Interference Check Solutions
(ICP-MS)

Solution Component	Solution A Concentration (ug/L)	Solution AB Concentration (ug/L)
Al	20,000	20,000
Ca	60,000	60,000
Fe	50,000	50,000
Mg	20,000	20,000
Na	50,000	50,000
K	20,000	20,000
Mo	400	400
As	0.0	20
Cd	0.0	20
Cr	0.0	40
Co	0.0	40
Cu	0.0	40
Mn	0.0	40
Ni	0.0	40
Se	0.0	20
Ag	0.0	10
V	0.0	40
Zn	0.0	20

LCS & MS Concentrations
(ICP-MS)

Element	Liquid Concentration (mg/L)
Aluminum	2.00
Antimony	0.5
Arsenic	0.12
Barium	2.00
Beryllium	0.05
Cadmium	0.051
Calcium	10.0
Chromium	0.20
Cobalt	0.50
Copper	0.25
Iron	1.00
Lead	0.51
Magnesium	10.0
Manganese	0.50
Molybdenum	1.00
Nickel	0.50
Potassium	10.0
Selenium	0.12
Silver	0.05
Sodium	10.0
Thallium	0.12
Vanadium	0.50
Zinc	0.50

▪ Certificate of Analysis ▪

Product: Metals in Soil
Catalog Number: 540
Lot No. D102-540
Certificate Issue Date: June 22, 2018
Expiration Date: January 31, 2022
Revision Number: Original

Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #540 revision 030512.

CERTIFICATION

Parameter	Certified Value[1]	Reference Value	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Aluminum	10100	8160	6.36	3960 - 12400	4080 - 12200
Antimony	120	60.9	9.42	0.822 - 121	12.0 - 166
Arsenic	144	135	5.08	112 - 158	94.6 - 176
Barium	469	443	6.77	366 - 521	332 - 554
Beryllium	207	197	5.86	164 - 229	148 - 246
Boron	213	174	12.6	127 - 221	105 - 244
Cadmium	224	204	6.65	169 - 240	153 - 256
Calcium	5190	4830	9.12	3950 - 5700	3510 - 6150
Chromium	138	132	8.56	109 - 155	92.2 - 171
Cobalt	182	179	7.93	151 - 207	134 - 224
Copper	191	184	6.72	155 - 213	138 - 230
Iron	15000	14400	10.7	8770 - 20000	5120 - 23600
Lead	225	216	7.72	178 - 254	159 - 274
Magnesium	2570	2340	6.13	1780 - 2900	1460 - 3230
Manganese	331	323	6.71	266 - 380	242 - 404
Mercury	16.8	13.2	16.0	8.64 - 17.7	7.89 - 18.5
Molybdenum	193	175	2.39	141 - 209	125 - 226
Nickel	163	152	5.95	126 - 178	106 - 197
Potassium	2420	2050	6.31	1440 - 2660	1210 - 2890
Selenium	81.9	74.9	4.13	59.3 - 90.5	47.0 - 103
Silver	57.6	53.9	9.00	43.0 - 64.8	37.8 - 70.0
Sodium	161	149	12.1	111 - 188	57.7 - 241
Strontium	100	96.2	4.04	78.1 - 114	69.0 - 123
Thallium	253	232	3.54	188 - 276	168 - 296

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Parameter	Certified Value[1]	Reference Value	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Tin	146	134	10.8	106 - 163	79.5 - 189
Titanium	449	340	7.20	70.2 - 609	44.9 - 711
Uranium	114	113	7.10	85.5 - 140	71.9 - 153
Vanadium	180	172	8.85	137 - 207	126 - 218
Zinc	217	211	6.58	171 - 250	147 - 274

ANALYTICAL VERIFICATION

Parameter	Certified Value[1]	Proficiency Testing Study			NIST Traceability	
		Mean	Recovery[5]	n	SRM Number	Recovery
	mg/kg	mg/kg	%			%
Aluminum	10100	8160	80.8	138	-	-
Antimony	120	60.9	50.8	135	-	-
Arsenic	144	135	93.8	184	-	-
Barium	469	443	94.5	158	-	-
Beryllium	207	197	95.0	148	-	-
Boron	213	174	81.8	107	-	-
Cadmium	224	204	91.3	199	-	-
Calcium	5190	4830	93.0	122	-	-
Chromium	138	132	95.5	172	-	-
Cobalt	182	179	98.4	140	-	-
Copper	191	184	96.3	183	-	-
Iron	15000	14400	95.6	133	-	-
Lead	225	216	96.2	204	-	-
Magnesium	2570	2340	91.2	122	-	-
Manganese	331	323	97.6	147	-	-
Mercury	16.8	13.2	78.3	128	-	-
Molybdenum	193	175	90.8	143	-	-
Nickel	163	152	93.1	185	-	-
Potassium	2420	2050	84.7	121	-	-
Selenium	81.9	74.9	91.5	163	-	-

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Parameter	Certified Value[1]	Proficiency Testing Study			NIST Traceability	
		Mean	Recovery[5]	n	SRM Number	Recovery
	mg/kg	mg/kg	%			%
Silver	57.6	53.9	93.6	150	-	-
Sodium	161	149	92.8	105	-	-
Strontium	100	96.2	96.2	90	-	-
Thallium	253	232	91.6	147	-	-
Tin	146	134	92.0	100	-	-
Titanium	449	340	75.6	93	-	-
Uranium	114	113	98.8	35	-	-
Vanadium	180	172	95.4	139	-	-
Zinc	217	211	97.0	180	-	-

1. The **Certified Values** are the actual "made-to" concentrations confirmed by ERA analytical verification. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this certified reference material during the period of validity of this certificate.

2. The **Uncertainty** is the total propagated uncertainty at the 95% confidence interval. The uncertainty is based on the preparation and internal analytical verification of the product by ERA, multiplied by a coverage factor. The uncertainty applies to the product as supplied and does not take into account any required or optional dilution and/or preparations the laboratory may perform while using this product.

3. The **QC Performance Acceptance Limits (QC PALs™)**are based on actual historical data collected in ERA's Proficiency Testing program. The QC PALs™ reflect any inherent biases in the methods used to establish the limits and closely approximate a 95% confidence interval of the performance that experienced laboratories should achieve using accepted environmental methods. Use the QC PALs™ to realistically evaluate your performance against your peers.

4. The **PT Performance Acceptance Limits (PT PALs™)** are calculated using the regression equations and fixed acceptance criteria specified in the NELAC proficiency testing requirements. Use the PT PALs™ when analyzing this QC standard alongside USEPA and NELAC compliant PT standards. Please note that many PT study acceptance limits are concentration dependent (some non-linearly) and, therefore, the acceptance limits of this QC standard and any PT standard may differ relative to their difference in concentrations.

5. The **PT Data/Traceability** data include the mean value, percent recovery and number of data points reported by the laboratories in our Proficiency Testing study compared to the Certified Values. In addition, where NIST Standard Reference Materials (SRMs) are available, each analyte has been analytically traced to the NIST SRM listed. This product is traceable to the lot numbers of its starting materials. All gravimetric and volumetric measurements related to its manufacture are traceable to NIST through an unbroken chain of comparisons.
Traceability Recovery (%) = [(% recovery certified standard)/(% recovery NIST SRM)]*100
The traceability data shown were compiled by analyzing the ERA standards or their associated stock solutions against the applicable NIST SRMs.

6. For additional information on this product such as intended use, instructions for use, level of homogeneity, and safety information, please refer to the provided Instruction Sheet

If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to info@eraqc.com.

Certifying Officer

Brian Miller

Quality Officer

Matthew Seebeck

ISO/IEC GUIDE 34:2009 ACCREDITED REFERENCE MATERIAL PRODUCER CERTIFICATE NO. 1539.03

ISO/IEC 17025:2005 ACCREDITED CHEMICAL TESTING LABORATORY CERTIFICATE NO. 1539.02

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ERA
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Reference Material

▪ Certificate of Analysis ▪

Product: Metals in Soil
Catalog Number: 540
Lot No. D105-540
Certificate Issue Date: March 19, 2019
Expiration Date: October 12, 2022
Revision Number: Original

Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #540 revision 030512.

CERTIFICATION

Parameter	Certified Value[1]	Reference Value	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Aluminum	10100	8800	8.32	4600 - 13000	4470 - 13100
Antimony	282	147	7.70	6.17 - 289	28.2 - 366
Arsenic	155	143	6.34	119 - 168	100 - 186
Barium	439	415	5.37	343 - 488	311 - 519
Beryllium	192	179	2.78	149 - 210	134 - 224
Boron	216	160	7.08	113 - 208	96.1 - 238
Cadmium	61.5	56.2	0.528	46.6 - 65.9	42.2 - 70.3
Calcium	5190	4960	6.64	4090 - 5840	3610 - 6310
Chromium	104	101	4.75	83.2 - 118	70.5 - 131
Cobalt	196	189	0.500	158 - 219	141 - 236
Copper	65.0	63.1	2.65	53.1 - 73.1	47.3 - 78.9
Iron	15000	15700	8.94	10100 - 21300	6000 - 25400
Lead	126	125	4.77	103 - 146	89.3 - 160
Magnesium	2570	2410	6.26	1860 - 2970	1520 - 3310
Manganese	387	382	5.37	315 - 449	290 - 474
Mercury	7.76	7.61	13.7	5.53 - 9.69	4.57 - 10.7
Molybdenum	120	107	0.500	86.0 - 128	75.5 - 139
Nickel	117	108	0.514	89.5 - 127	75.7 - 141
Potassium	2420	2110	5.62	1500 - 2720	1260 - 2960
Selenium	84.6	77.9	7.10	61.8 - 94.0	49.2 - 107
Silver	34.6	34.3	8.34	27.8 - 40.9	23.6 - 45.1
Sodium	161	145	6.72	106 - 183	54.3 - 235
Strontium	104	104	3.95	85.1 - 123	74.8 - 133
Thallium	123	113	0.500	91.3 - 134	77.1 - 149

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Parameter	Certified Value[1]	Reference Value	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Tin	118	107	0.500	83.5 - 130	61.2 - 152
Titanium	512	421	5.80	114 - 728	0.00 - 854
Uranium	103	104	6.18	79.1 - 128	71.9 - 135
Vanadium	87.3	83.7	8.55	66.8 - 101	54.2 - 113
Zinc	251	240	3.98	194 - 285	168 - 312

ANALYTICAL VERIFICATION

Parameter	Certified Value[1]	Proficiency Testing Study			NIST Traceability	
		Mean	Recovery[5]	n	SRM Number	Recovery
	mg/kg	mg/kg	%			%
Aluminum	10100	8800	87.1	193	-	-
Antimony	282	147	52.3	216	-	-
Arsenic	155	143	92.5	240	-	-
Barium	439	415	94.6	222	-	-
Beryllium	192	179	93.4	220	-	-
Boron	216	160	74.2	152	-	-
Cadmium	61.5	56.2	91.5	239	-	-
Calcium	5190	4960	95.6	175	-	-
Chromium	104	101	96.8	237	-	-
Cobalt	196	189	96.2	215	-	-
Copper	65.0	63.1	97.1	237	-	-
Iron	15000	15700	105	195	-	-
Lead	126	125	99.0	243	-	-
Magnesium	2570	2410	93.9	177	-	-
Manganese	387	382	98.7	215	-	-
Mercury	7.76	7.61	98.0	157	-	-
Molybdenum	120	107	89.4	216	-	-
Nickel	117	108	92.5	235	-	-
Potassium	2420	2110	87.2	181	-	-
Selenium	84.6	77.9	92.1	231	-	-

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Parameter	Certified Value[1]	Proficiency Testing Study			NIST Traceability	
		Mean	Recovery[5]	n	SRM Number	Recovery
	mg/kg	mg/kg	%			%
Silver	34.6	34.3	99.3	216	-	-
Sodium	161	145	89.8	166	-	-
Strontium	104	104	99.9	148	-	-
Thallium	123	113	91.8	215	-	-
Tin	118	107	90.4	164	-	-
Titanium	512	421	82.2	157	-	-
Uranium	103	104	101	61	-	-
Vanadium	87.3	83.7	95.9	214	-	-
Zinc	251	240	95.5	234	-	-

1. The **Certified Values** are the actual "made-to" concentrations confirmed by ERA analytical verification. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this reference material during the period of validity of this certificate.

2. The **Uncertainty** is the total propagated uncertainty at the 95% confidence interval. The uncertainty is based on the preparation and internal analytical verification of the product by ERA, multiplied by a coverage factor. The uncertainty applies to the product as supplied and does not take into account any required or optional dilution and/or preparations the laboratory may perform while using this product.

3. The **QC Performance Acceptance Limits (QC PALs™)**are based on actual historical data collected in ERA's Proficiency Testing program. The QC PALs™ reflect any inherent biases in the methods used to establish the limits and closely approximate a 95% confidence interval of the performance that experienced laboratories should achieve using accepted environmental methods. Use the QC PALs™ to realistically evaluate your performance against your peers.

4. The **PT Performance Acceptance Limits (PT PALs™)** are calculated using the regression equations and fixed acceptance criteria specified in the NELAC proficiency testing requirements. Use the PT PALs™ when analyzing this QC standard alongside USEPA and NELAC compliant PT standards. Please note that many PT study acceptance limits are concentration dependent (some non-linearly) and, therefore, the acceptance limits of this QC standard and any PT standard may differ relative to their difference in concentrations.

5. The **PT Data/Traceability** data include the mean value, percent recovery and number of data points reported by the laboratories in our Proficiency Testing study compared to the Certified Values. In addition, where NIST Standard Reference Materials (SRMs) are available, each analyte has been analytically traced to the NIST SRM listed. This product is traceable to the lot numbers of its starting materials. All gravimetric and volumetric measurements related to its manufacture are traceable to NIST through an unbroken chain of comparisons.
Traceability Recovery (%) = [(% recovery certified standard)/(% recovery NIST SRM)]*100
The traceability data shown were compiled by analyzing the ERA standards or their associated stock solutions against the applicable NIST SRMs.

6. For additional information on this product such as intended use, instructions for use, level of homogeneity, and safety information, please refer to the provided Instruction Sheet

If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to info@eraqc.com.

Certifying Officer

Brian Miller

Brian Miller

Quality Officer

Matthew Seebeck

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Certified Reference Material

▪ Certificate of Analysis ▪

Product: Metals in Soil
Catalog Number: 540
Lot No. D109-540
Certificate Issue Date: March 24, 2020
Expiration Date: October 03, 2023
Revision Number: Original

Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #540 revision 090119.

CERTIFICATION

Parameter	Certified Value[1]	Reference Value[7]	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Aluminum	10100	8130	2.54	3920 - 12300	4060 - 12200
Antimony	259	134	5.03	4.56 - 264	25.9 - 335
Arsenic	171	156	3.38	129 - 183	109 - 203
Barium	253	239	4.81	197 - 280	179 - 298
Beryllium	179	169	6.59	141 - 198	127 - 212
Boron	114	87.5	10.3	62.5 - 113	52.5 - 125
Cadmium	149	137	5.43	113 - 160	103 - 171
Calcium	5190	4760	3.48	3890 - 5640	3460 - 6070
Chromium	163	154	3.79	126 - 181	108 - 200
Cobalt	127	121	5.07	101 - 141	90.8 - 151
Copper	57.0	54.9	4.13	46.1 - 63.6	41.1 - 68.6
Iron	15000	14100	6.27	8470 - 19700	4920 - 23200
Lead	133	130	3.00	107 - 152	93.3 - 167
Magnesium	2570	2320	3.32	1760 - 2880	1440 - 3200
Manganese	277	269	2.67	221 - 317	199 - 340
Mercury	21.6	20.5	7.72	14.7 - 26.3	12.3 - 28.6
Molybdenum	108	95.4	2.61	76.4 - 114	66.9 - 124
Nickel	58.7	53.9	4.97	44.5 - 63.3	37.7 - 70.0
Potassium	2420	2020	3.06	1410 - 2630	1190 - 2850
Selenium	181	167	5.63	132 - 201	113 - 221
Silver	35.5	33.6	5.20	26.8 - 40.3	23.0 - 44.1
Sodium	161	133	2.76	95.1 - 171	46.5 - 220
Strontium	89.7	87.9	4.59	71.7 - 104	62.8 - 113
Thallium	121	112	5.19	90.3 - 133	76.1 - 147

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Parameter	Certified Value[1]	Reference Value[7]	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Tin	83.5	74.0	5.42	57.6 - 90.4	39.7 - 108
Titanium	474	333	7.17	48.6 - 617	46.3 - 620
Uranium	51.9	51.9	3.36	39.6 - 64.3	35.9 - 68.0
Vanadium	68.1	62.6	6.00	49.4 - 75.8	37.0 - 88.3
Zinc	165	158	2.34	128 - 188	111 - 205

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ANALYTICAL VERIFICATION

Parameter	Certified Value[1]	Proficiency Testing Study			NIST Traceability	
		Mean	Recovery[5]	n	SRM Number[6]	Recovery
	mg/kg	mg/kg	%			%
Aluminum	10100	8130	80.5	196	-	-
Antimony	259	134	51.8	217	-	-
Arsenic	171	156	91.3	243	-	-
Barium	253	239	94.3	230	-	-
Beryllium	179	169	94.6	223	-	-
Boron	114	87.5	76.7	150	-	-
Cadmium	149	137	91.8	249	-	-
Calcium	5190	4760	91.8	184	-	-
Chromium	163	154	94.4	245	-	-
Cobalt	127	121	95.3	221	-	-
Copper	57.0	54.9	96.2	243	-	-
Iron	15000	14100	93.9	199	-	-
Lead	133	130	97.7	251	-	-
Magnesium	2570	2320	90.1	182	-	-
Manganese	277	269	97.2	220	-	-
Mercury	21.6	20.5	94.7	172	-	-
Molybdenum	108	95.4	88.3	218	-	-
Nickel	58.7	53.9	91.8	242	-	-
Potassium	2420	2020	83.5	187	-	-
Selenium	181	167	92.2	235	-	-
Silver	35.5	33.6	94.5	222	-	-
Sodium	161	133	82.7	177	-	-
Strontium	89.7	87.9	98.0	151	-	-
Thallium	121	112	92.2	219	-	-
Tin	83.5	74.0	88.6	170	-	-
Titanium	474	333	70.3	157	-	-
Uranium	51.9	51.9	100	60	-	-
Vanadium	68.1	62.6	91.9	213	-	-
Zinc	165	158	95.8	238	-	-

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▪ Certificate of Analysis ▪

1. The **Certified Values** are the actual gravimetric/volumetric "made-to" concentrations confirmed by ERA analytical verification. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this certified reference material during the period of validity of this certificate.

2. The **Uncertainty** represents an expanded uncertainty and approximates a 95% confidence interval. The uncertainty is based on the characterization, homogeneity and stability characteristics of the product, multiplied by a coverage factor (k=2). The uncertainty applies to the product as supplied and does not take into account any required or optional dilution and/or preparations the laboratory may perform while using this product. The formula used to calculate the expanded uncertainty is:
$U_{expanded} = k * SQRT((U_{char}^2) + (U_{homogen}^2) + (U_{LTS}^2) + (U_{STS}^2) + (U_{RSS}^2))$

Where:

$U_{expanded}$ = Expanded uncertainty.
k = Coverage factor.
U_{char} = Combined standard uncertainty of the manufacturing and/or analytical verification assessment.
$U_{homogen}$ = Standard uncertainty of the homogeneity assessment.
U_{LTS} = Standard uncertainty associated with long-term stability.
U_{STS} = Standard uncertainty associated with short-term (transport) stability.
U_{RSS} = Standard uncertainty associated with repeated sampling of the product (where permitted by product use instructions).

3. The **QC Performance Acceptance Limits (QC PALs™)** are based on actual historical data collected in ERA's Proficiency Testing program. The QC PALs™ reflect any inherent biases in the methods used to establish the limits and closely approximate a 95% confidence interval of the performance that experienced laboratories should achieve using accepted environmental methods. Use the QC PALs™ to realistically evaluate your performance against your peers.

4. The **PT Performance Acceptance Limits (PT PALs™)** are calculated using the regression equations and fixed acceptance criteria specified in the NELAC proficiency testing requirements. Use the PT PALs™ when analyzing this certified reference material alongside USEPA and NELAC compliant PT study materials. Please note that many PT study acceptance limits are concentration dependent (some non-linearly) and therefore, the acceptance limits of this certified reference material and any PT study material may differ relative to their difference in concentrations.

5. The **PT Performance Data** include the mean value, percent recovery and number of data points reported by laboratories in our Proficiency Testing study compared to the Certified Values. In the event this lot was not used in a proficiency testing scheme, the data displayed was generated internally by ERA.

6. Where NIST Standard Reference Materials (SRMs) are available, each analyte has been analytically traced to the NIST SRM listed. **Analytical Traceability Recovery (%)** = [(% recovery ERA certified reference material)/(% recovery NIST SRM)]*100
The traceability data shown were compiled by analyzing this ERA certified reference material and/or it's associated stock solution(s) against the applicable NIST SRMs.

7. The **Reference Values** are equal to the mean recoveries for the parameters as determined in an interlaboratory round robin study. The **Reference Values** represent the expected performance for the analytes in this standard. ERA recommends using the **Reference Values** when assessing or evaluating your results.

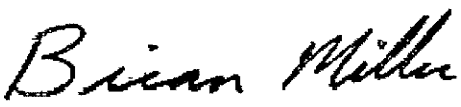
8. **Metrological Traceability**. This certified reference material is metrologically traceable to NIST mass reference materials through an unbroken chain of comparisons.

9. For additional information on this product such as intended use, storage information, instructions for use, minimum sample size, and safety information, please refer to the Product Use Instructions provided.

If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to info@eraqc.com.

Certifying Officer

Brian Miller



Quality Officer

Matthew Seebeck

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Certified Reference Material

▪ Certificate of Analysis ▪

Product: Metals in Soil
Catalog Number: 540
Lot No. D113-540
Certificate Issue Date: March 23, 2021
Expiration Date: October 13, 2024
Revision Number: Original

Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #540 revision 090119.

CERTIFICATION

Parameter	Certified Value[1]	Reference Value	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Aluminum	10100	8630	12.0	4420 - 12800	4370 - 12900
Antimony	256	129	16.8	0.742 - 257	25.6 - 323
Arsenic	91.6	84.5	15.1	70.0 - 99.0	59.2 - 110
Barium	259	249	9.94	206 - 292	187 - 311
Beryllium	175	163	3.89	135 - 191	122 - 204
Boron	95.7	76.7	12.8	55.7 - 97.7	48.0 - 107
Cadmium	107	99.0	11.5	82.2 - 116	74.2 - 124
Calcium	5190	4760	11.8	3890 - 5640	3460 - 6070
Chromium	129	122	14.6	101 - 144	85.7 - 159
Cobalt	63.6	61.7	11.5	51.9 - 71.6	46.3 - 77.2
Copper	62.3	61.5	12.3	51.9 - 71.0	46.1 - 76.8
Iron	15000	14500	15.7	8860 - 20100	5190 - 23800
Lead	122	123	13.9	103 - 144	88.3 - 158
Lithium	6.42	7.30	18.7	5.13 - 9.48	3.20 - 11.4
Magnesium	2570	2360	8.87	1810 - 2920	1480 - 3250
Manganese	470	456	13.4	375 - 538	350 - 563
Mercury	22.1	18.9	14.5	13.0 - 24.8	11.3 - 26.4
Molybdenum	80.1	72.8	11.0	58.7 - 87.0	50.5 - 95.2
Nickel	143	135	14.2	112 - 158	94.7 - 176
Potassium	2420	2090	8.21	1480 - 2700	1240 - 2940
Selenium	128	121	11.7	96.9 - 146	80.4 - 162
Silver	45.4	44.1	6.69	35.5 - 52.8	30.7 - 57.6
Sodium	161	136	9.34	97.4 - 174	48.1 - 223
Strontium	82.2	82.3	8.42	67.4 - 97.1	58.6 - 106

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Parameter	Certified Value[1]	Reference Value	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Thallium	154	144	7.54	117 - 171	101 - 187
Tin	89.7	79.8	14.0	62.2 - 97.4	43.5 - 116
Titanium	705	546	10.3	123 - 969	118 - 974
Uranium	29.5	30.9	3.38	23.9 - 37.9	21.3 - 40.5
Vanadium	196	186	14.2	148 - 224	138 - 235
Zinc	307	295	10.4	240 - 351	207 - 384

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Calculation of Method 6020 Metals

Aqueous Samples

The instrument will calculate the concentration (µg/L). This value is divided by 1000 to convert the units to mg/L. If the sample is diluted (DF), the result is multiplied by the DF to generate the final result.

$$\text{Result, mg/L} = C_s \times (1\text{mg}/1000\mu\text{g}) \times (DF)$$

Where:

C_s = Concentration of sample (µg/L)

DF = Dilution Factor

Alpha ICPMSRQ Seq

12/15/2023 6:27:32 PM

Sample List Summary:

Instrument ID: iCAP RQ

Index:	Label:	Rack	Vial	Main Runs:	Survey Runs:	Start Time:
1	Rinse	0	1	3	1	12/15/2023 5:36:01 AM
2	CAL LOT #M22-1040	0	1	3	1	12/15/2023 5:40:40 AM
3	Blank EJF ICPMSRQ	4	49	3	1	12/15/2023 5:45:20 AM
4	0.2/20 Cal	0	2	3	1	12/15/2023 5:50:04 AM
5	x1/100 Cal	0	3	3	1	12/15/2023 5:54:44 AM
6	10/10000 Cal	0	4	3	1	12/15/2023 5:59:25 AM
7	60/6000 Cal	0	5	3	1	12/15/2023 6:04:07 AM
8	120/120000 Cal	0	6	3	1	12/15/2023 6:08:49 AM
9	1/100 Cal	0	3	3	1	12/15/2023 6:15:48 AM
10	Sr 200ppb	4	55	3	1	12/15/2023 6:23:50 AM
11	ICV	0	7	3	1	12/15/2023 6:28:33 AM
12	ICB	0	10	3	1	12/15/2023 6:33:16 AM
13	LLCCV	4	51	3	1	12/15/2023 6:40:42 AM
14	ICSA	4	53	3	1	12/15/2023 6:45:26 AM
15	Rinse	0	1	3	1	12/15/2023 6:50:10 AM
16	CCV	0	9	3	1	12/15/2023 6:54:50 AM
17	CCB	0	10	3	1	12/15/2023 6:59:34 AM
18	WG1863597-1 6020SL	1	1	3	1	12/15/2023 7:23:51 AM
19	WG1863597-2d10 6020SL	1	2	3	1	12/15/2023 7:28:31 AM
20	WG1863597-3d10 6020SL	1	4	3	1	12/15/2023 7:33:11 AM
21	WG1863597-4d10 6020SL	1	5	3	1	12/15/2023 7:37:52 AM
22	WG1863597-5d10 6020SL	1	6	3	1	12/15/2023 7:42:32 AM
23	L2373323-04 6020SL	1	3	3	1	12/15/2023 7:47:14 AM
24	L2372938-01 6020SL	1	8	3	1	12/15/2023 7:51:54 AM
25	L2372938-02 6020SL	1	9	3	1	12/15/2023 7:56:36 AM
26	L2372938-03 6020SL	1	10	3	1	12/15/2023 8:01:18 AM
27	WG1863597-6d5 6020SL	1	7	3	1	12/15/2023 8:06:00 AM
28	CCV	0	9	3	1	12/15/2023 8:10:42 AM
29	CCB	0	10	3	1	12/15/2023 8:15:26 AM
30	L2372938-04 6020SL	1	11	3	1	12/15/2023 8:25:26 AM
31	L2372938-05 6020SL	1	12	3	1	12/15/2023 8:30:09 AM
32	L2372938-06 6020SL	1	13	3	1	12/15/2023 8:34:52 AM
33	L2372938-07 6020SL	1	14	3	1	12/15/2023 8:39:31 AM
34	L2372938-08 6020SL	1	15	3	1	12/15/2023 8:44:10 AM
35	L2372938-09 6020SL	1	16	3	1	12/15/2023 8:48:49 AM
36	L2373323-01 6020SL	1	17	3	1	12/15/2023 8:53:29 AM
37	L2373323-03 6020SL	1	18	3	1	12/15/2023 8:58:09 AM
38	L2373323-05 6020SL	1	19	3	1	12/15/2023 9:02:50 AM
39	L2373323-06 6020SL	1	20	3	1	12/15/2023 9:07:30 AM
40	CCV	0	9	3	1	12/15/2023 9:12:11 AM
41	CCB	0	10	3	1	12/15/2023 9:16:56 AM
42	CCV	0	9	3	1	12/15/2023 9:36:18 AM
43	CCB	0	10	3	1	12/15/2023 9:41:03 AM
44	WG1863563-1 2008SL	1	21	3	1	12/15/2023 9:52:36 AM
45	WG1863563-2d5 2008SL	1	22	3	1	12/15/2023 9:57:17 AM
46	WG1863563-3d10 2008SL	1	24	3	1	12/15/2023 10:01:58 AM
47	WG1863563-4 2008SL	1	25	3	1	12/15/2023 10:06:41 AM
48	L2372608-02 2008SL	1	23	3	1	12/15/2023 10:11:20 AM
49	L2373005-01 2008SL	1	26	3	1	12/15/2023 10:16:02 AM
50	L2373005-02 2008SL	1	27	3	1	12/15/2023 10:20:41 AM
51	CCV	0	9	3	1	12/15/2023 10:32:27 AM

Alpha ICPMSRQ Seq

12/15/2023 6:27:32 PM

Index:	Label:	Rack	Vial	Main Runs:	Survey Runs:	Start Time:
52	CCB	0	10	3	1	12/15/2023 10:37:12 AM
53	CCV	0	9	3	1	12/15/2023 10:47:54 AM
54	CCB	0	10	3	1	12/15/2023 10:52:38 AM
55	WG1863507-1d10 6020TS	1	28	3	1	12/15/2023 11:08:05 AM
56	WG1863507-2d10 6020TS	1	29	3	1	12/15/2023 11:12:45 AM
57	WG1863507-3d10 6020TS	1	31	3	1	12/15/2023 11:17:25 AM
58	WG1863507-5d10 6020TS	1	33	3	1	12/15/2023 11:22:06 AM
59	WG1863507-4d10 6020TS	1	32	3	1	12/15/2023 11:26:47 AM
60	I2373369-01d10 6020TS	1	30	3	1	12/15/2023 11:31:28 AM
61	I2373369-02d10 6020TS	1	35	3	1	12/15/2023 11:36:09 AM
62	I2373369-03d10 6020TS	1	36	3	1	12/15/2023 11:40:50 AM
63	I2373369-04d10 6020TS	1	37	3	1	12/15/2023 11:45:32 AM
64	WG1863507-6d50 6020TS	1	34	3	1	12/15/2023 11:50:12 AM
65	CCV	0	9	3	1	12/15/2023 11:54:54 AM
66	CCB	0	10	3	1	12/15/2023 11:59:39 AM
67	CCV	0	9	3	1	12/15/2023 12:17:26 PM
68	CCB	0	10	3	1	12/15/2023 12:22:10 PM
69	WG1863929-1 6020TL	1	42	3	1	12/15/2023 12:30:17 PM
70	WG1863929-2d10 6020TL	1	43	3	1	12/15/2023 12:34:57 PM
71	WG1863929-3d10 6020TL	1	45	3	1	12/15/2023 12:39:38 PM
72	WG1863929-4d10 6020TL	1	46	3	1	12/15/2023 12:44:20 PM
73	WG1863929-5d10 6020TL	1	47	3	1	12/15/2023 12:49:02 PM
74	WG1863929-6d5 6020TL	1	48	3	1	12/15/2023 12:53:44 PM
75	I2373369-05d10 6020TS	1	38	3	1	12/15/2023 12:58:26 PM
76	I2373369-06d10 6020TS	1	39	3	1	12/15/2023 1:03:06 PM
77	I2373369-09d10 6020TS	1	40	3	1	12/15/2023 1:07:46 PM
78	I2373369-10d10 6020TS	1	41	3	1	12/15/2023 1:12:26 PM
79	CCV	0	9	3	1	12/15/2023 1:17:06 PM
80	CCB	0	10	3	1	12/15/2023 1:21:51 PM
81	L2373217-07 6020TL	1	56	3	1	12/15/2023 1:28:53 PM
82	WG1863929-7d10 6020TL	1	50	3	1	12/15/2023 1:33:33 PM
83	WG1863929-8d10 6020TL	1	51	3	1	12/15/2023 1:38:14 PM
84	WG1863929-9d10 6020TL	1	52	3	1	12/15/2023 1:50:21 PM
85	WG1863929-10d5 6020TL	1	53	3	1	12/15/2023 1:55:00 PM
86	L2369416-19 6020TL	1	44	3	1	12/15/2023 1:59:41 PM
87	L2373323-04 6020TL	1	49	3	1	12/15/2023 2:04:23 PM
88	L2373121-01 6020TL	1	54	3	1	12/15/2023 2:09:03 PM
89	L2373121-02 6020TL	1	55	3	1	12/15/2023 2:13:44 PM
90	L2373323-01 6020TL	1	57	3	1	12/15/2023 2:18:25 PM
91	CCV	0	9	3	1	12/15/2023 2:23:07 PM
92	CCB	0	10	3	1	12/15/2023 2:27:52 PM
93	L2373323-03 6020TL	1	58	3	1	12/15/2023 2:46:28 PM
94	L2373323-05 6020TL	1	59	3	1	12/15/2023 2:51:09 PM
95	L2373323-06 6020TL	1	60	3	1	12/15/2023 2:55:51 PM
96	CCV	0	9	3	1	12/15/2023 3:08:24 PM
97	CCB	0	10	3	1	12/15/2023 3:13:09 PM
98	LLCCV	4	51	3	1	12/15/2023 5:06:25 PM
99	CCB	0	10	3	1	12/15/2023 5:11:10 PM

METALS ELN REPORT

Workgroup: WG1863597

Digestion

Prep Method	Acid Type 1	Acid 1 Lot	Acid Type 2	Acid 2 Lot	Spike Type	Lims Spike Lot	Spike Lot	Post Spike Spikelot	Spike Lot	Pipette Id
EPA 3005A	1:1 HNO3	tHNO323490 51816HCR	1:1 HCl	tHCL234905 1830HCR	METALS	METSPIKE2	IPS, FPS, MIX	METPSMS	IPS, FPS, MIX	140, 326

Additional Reagent/Std

Sample/ Type	Digestion Date	Analyst	Lab Filtration Date	Sample Vol	Ph	Spike Amt ml	Start Date/Time	Hot Block Unit	Temperature (C)	Stop Date/Time	Final Vol ml	Comments
L2372938-01 SAMP	12/15/23 01:19	Christine Hamor	12-12-23 22:36	50	<2		12/15/23 01:19	7	94.6	12/15/23 04:19	50	ALL X CONTAINERS
L2372938-02 SAMP	12/15/23 01:19	Christine Hamor	12-12-23 22:36	50	<2		12/15/23 01:19	7	94.6	12/15/23 04:19	50	
L2372938-03 SAMP	12/15/23 01:19	Christine Hamor	12-12-23 22:36	50	<2		12/15/23 01:19	7	94.6	12/15/23 04:19	50	
L2372938-04 SAMP	12/15/23 01:19	Christine Hamor	12-12-23 22:36	50	<2		12/15/23 01:19	7	94.6	12/15/23 04:19	50	
L2372938-05 SAMP	12/15/23 01:19	Christine Hamor	12-12-23 22:36	50	<2		12/15/23 01:19	7	94.6	12/15/23 04:19	50	
L2372938-06 SAMP	12/15/23 01:19	Christine Hamor	12-12-23 22:36	50	<2		12/15/23 01:19	7	94.6	12/15/23 04:19	50	
L2372938-07 SAMP	12/15/23 01:19	Christine Hamor	12-12-23 22:36	50	<2		12/15/23 01:19	7	94.6	12/15/23 04:19	50	
L2372938-08 SAMP	12/15/23 01:19	Christine Hamor	12-12-23 22:36	50	<2		12/15/23 01:19	7	94.6	12/15/23 04:19	50	
L2372938-09 SAMP	12/15/23 01:19	Christine Hamor	12-12-23 22:36	50	<2		12/15/23 01:19	7	94.6	12/15/23 04:19	50	
L2373323-01 SAMP	12/15/23 01:19	Christine Hamor	12-13-23 09:23	50	<2		12/15/23 01:19	7	94.6	12/15/23 04:19	50	
L2373323-03 SAMP	12/15/23 01:19	Christine Hamor	12-13-23 09:23	50	<2		12/15/23 01:19	7	94.6	12/15/23 04:19	50	
L2373323-04 SAMP	12/15/23 01:19	Christine Hamor	12-13-23 09:23	50	<2		12/15/23 01:19	7	94.6	12/15/23 04:19	50	
L2373323-05 SAMP	12/15/23 01:19	Christine Hamor	12-13-23 09:23	50	<2		12/15/23 01:19	7	94.6	12/15/23 04:19	50	
L2373323-06 SAMP	12/15/23 01:19	Christine Hamor	12-13-23 09:23	50	<2		12/15/23 01:19	7	94.6	12/15/23 04:19	50	

Reported: 18-DEC-23 02:21 PM

METALS ELN REPORT

Workgroup: WG1863597

Sample/ Type	Digestion Date	Analyst	Lab Filtration Date	Sample Vol	Ph	Spike Amt ml	Start Date/Time	Hot Block Unit	Temperature (C)	Stop Date/Time	Final Vol ml	Comments
WG1863597-1 BLANK	12/15/23 01:19	Christine Hamor	12/13/23 09:23	50	<2		12/15/23 01:19	7	94.6	12/15/23 04:19	50	FM2349061257 JDH
WG1863597-2 LCS	12/15/23 01:19	Christine Hamor	NA	50	<2	.5	12/15/23 01:19	7	94.6	12/15/23 04:19	50	IPS2348280120 CLH
WG1863597-3 MS	12/15/23 01:19	Christine Hamor	NA	50	<2	.5	12/15/23 01:19	7	94.6	12/15/23 04:19	50	
WG1863597-4 MSD	12/15/23 01:19	Christine Hamor	NA	50	<2	.5	12/15/23 01:19	7	94.6	12/15/23 04:19	50	ELN check:: MMM
WG1863597-5 PS	12/15/23 01:19	Christine Hamor	NA	50	<2		12/15/23 01:19	7	94.6	12/15/23 04:19	50	
WG1863597-6 SERDIL	12/15/23 01:19	Christine Hamor	NA	50	<2		12/15/23 01:19	7	94.6	12/15/23 04:19	50	

Reagent	Actual Volume	Units
1:1 Hydrochloric Acid (H	.5	ml
1:1 Nitric Acid (HNO3)	1	ml

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METALS ELN REPORT

Workgroup: WG1863929

Digestion

Prep Method	Acid Type 1	Acid 1 Lot	Acid Type 2	Acid 2 Lot	Spike Type	Lims Spike Lot	Spike Lot	Post Spike Spikelot	Spike Lot	Pipette Id
EPA 3005A	1:1 HNO3	tHNO323490 51816HCR	1:1 HCl	tHCL234905 1830HCR	METALS	METSPIKE2	IPS, FPS, MIX	METPSMS	IPS, FPS, MIX	140, 326

Additional Reagent/Std

Sample/ Type	Digestion Date	Analyst	Sample Vol ml	Ph	Spike Amt ml	Start Date/Time	Hot Block Unit	Temperature (C)	Stop Date/Time	Final Vol	Comments
L2369416-19 SAMP	12/14/23 23:40	Christine Hamor	50	<2		12/14/23 23:40	7	95.1	12/15/23 02:40	50	
L2373121-01 WATER	12/14/23 23:40	Christine Hamor	50	<2		12/14/23 23:40	7	95.1	12/15/23 02:40	50	
L2373121-02 WATER	12/14/23 23:40	Christine Hamor	50	<2		12/14/23 23:40	7	95.1	12/15/23 02:40	50	
L2373217-07 SAMP	12/14/23 23:40	Christine Hamor	50	<2		12/14/23 23:40	7	95.1	12/15/23 02:40	50	
L2373323-01 SAMP	12/14/23 23:40	Christine Hamor	50	<2		12/14/23 23:40	7	95.1	12/15/23 02:40	50	
L2373323-03 SAMP	12/14/23 23:40	Christine Hamor	50	<2		12/14/23 23:40	7	95.1	12/15/23 02:40	50	
L2373323-04 SAMP	12/14/23 23:40	Christine Hamor	50	<2		12/14/23 23:40	7	95.1	12/15/23 02:40	50	
L2373323-05 SAMP	12/14/23 23:40	Christine Hamor	50	<2		12/14/23 23:40	7	95.1	12/15/23 02:40	50	
L2373323-06 SAMP	12/14/23 23:40	Christine Hamor	50	<2		12/14/23 23:40	7	95.1	12/15/23 02:40	50	
WG1863929-1 BLANK	12/14/23 23:40	Christine Hamor	50	<2		12/14/23 23:40	7	95.1	12/15/23 02:40	50	FM2349061257 JDH
WG1863929-2 LCS	12/14/23 23:40	Christine Hamor	50	<2	.5	12/14/23 23:40	7	95.1	12/15/23 02:40	50	
WG1863929-3 MS	12/14/23 23:40	Christine Hamor	50	<2	.5	12/14/23 23:40	7	95.1	12/15/23 02:40	50	ELN check: HCR
WG1863929-4 MSD	12/14/23 23:40	Christine Hamor	50	<2	.5	12/14/23 23:40	7	95.1	12/15/23 02:40	50	

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METALS ELN REPORT

Workgroup: WG1863929

Sample/ Type	Digestion Date	Analyst	Sample Vol ml	Ph	Spike Amt ml	Start Date/Time	Hot Block Unit	Temperature (C)	Stop Date/Time	Final Vol	Comments
WG1863929-5 PS	12/14/23 23:40	Christine Hamor	50	<2		12/14/23 23:40	7	95.1	12/15/23 02:40	50	
WG1863929-6 SERDIL	12/14/23 23:40	Christine Hamor	50	<2		12/14/23 23:40	7	95.1	12/15/23 02:40	50	
WG1863929-7 MS	12/14/23 23:40	Christine Hamor	50	<2	.5	12/14/23 23:40	7	95.1	12/15/23 02:40	50	
WG1863929-8 MSD	12/14/23 23:40	Christine Hamor	50	<2	.5	12/14/23 23:40	7	95.1	12/15/23 02:40	50	
WG1863929-9 PS	12/14/23 23:40	Christine Hamor	50	<2		12/14/23 23:40	7	95.1	12/15/23 02:40	50	
WG1863929-10 SERDIL	12/14/23 23:40	Christine Hamor	50	<2		12/14/23 23:40	7	95.1	12/15/23 02:40	50	IPS2348280120CLH

Reagent	Actual Volume	Units
1:1 Hydrochloric Acid (H	.5	ml
1:1 Nitric Acid (HNO3)	1	ml

Reported: 18-DEC-23 02:21 PM

Wet Chemistry

Wet Chemistry
By
IC Methods

Results

Form 1
WETCHEM

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Lab ID	: L2373323-01	**Date Collected**	: 12/12/23 09:50
Client ID	: MW-8S	**Date Received**	: 12/12/23
Sample Location	: COLONIE, NY	**Date Analyzed**	: 12/17/23 00:08
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,300.0	**Analyst**	: CVN,
Lab File ID	: WG1864841-4842	**Instrument ID**	: IC3
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
14808-79-8	Sulfate	2.17	1.00	0.454	

Form 1
WETCHEM

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Lab ID	: L2373323-03	**Date Collected**	: 12/12/23 11:25
Client ID	: MW-6S	**Date Received**	: 12/12/23
Sample Location	: COLONIE, NY	**Date Analyzed**	: 12/17/23 00:21
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,300.0	**Analyst**	: CVN,
Lab File ID	: WG1864841-4842	**Instrument ID**	: IC3
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
14808-79-8	Sulfate	5.12	1.00	0.454	

Form 1
WETCHEM

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Lab ID	: L2373323-04	**Date Collected**	: 12/12/23 13:20
Client ID	: MW-6D	**Date Received**	: 12/12/23
Sample Location	: COLONIE, NY	**Date Analyzed**	: 12/17/23 00:57
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,300.0	**Analyst**	: CVN,
Lab File ID	: WG1864841-4842	**Instrument ID**	: IC3
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
14808-79-8	Sulfate	5.50	1.00	0.454	

Form 1
WETCHEM

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Lab ID	: L2373323-05	**Date Collected**	: 12/12/23 14:25
Client ID	: MW-4S	**Date Received**	: 12/12/23
Sample Location	: COLONIE, NY	**Date Analyzed**	: 12/17/23 01:09
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,300.0	**Analyst**	: CVN,
Lab File ID	: WG1864841-4842	**Instrument ID**	: IC3
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
14808-79-8	Sulfate	1.38	1.00	0.454	

Form 1
WETCHEM

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Lab ID	: L2373323-06	**Date Collected**	: 12/12/23 00:00
Client ID	: DUP12122023	**Date Received**	: 12/12/23
Sample Location	: COLONIE, NY	**Date Analyzed**	: 12/17/23 01:21
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,300.0	**Analyst**	: CVN,
Lab File ID	: WG1864841-4842	**Instrument ID**	: IC3
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
14808-79-8	Sulfate	5.24	1.00	0.454	

Form 1
WETCHEM

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Lab ID	: WG1864842-1	**Date Collected**	: NA
Client ID	: WG1864842-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 12/16/23 09:57
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,300.0	**Analyst**	: CVN,
Lab File ID	: WG1864841-4842	**Instrument ID**	: IC3
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

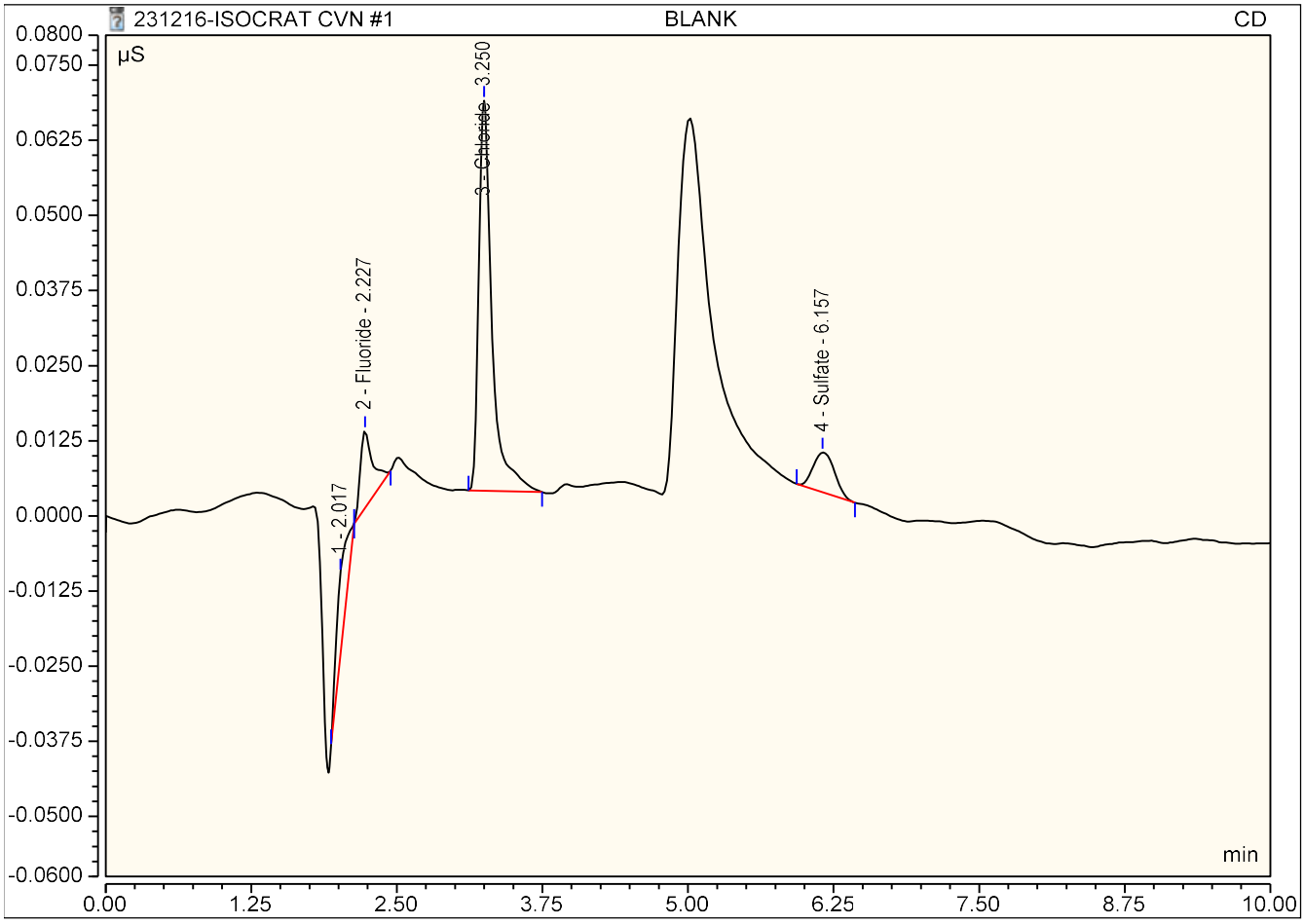
		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
14808-79-8	Sulfate	ND	1.00	0.454	U

Sample Raw Data

Peak Integration Report

Sample Name:	**BLANK**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**28-Nov-2023 / 17:33**	*Run Time:*	**10.00**

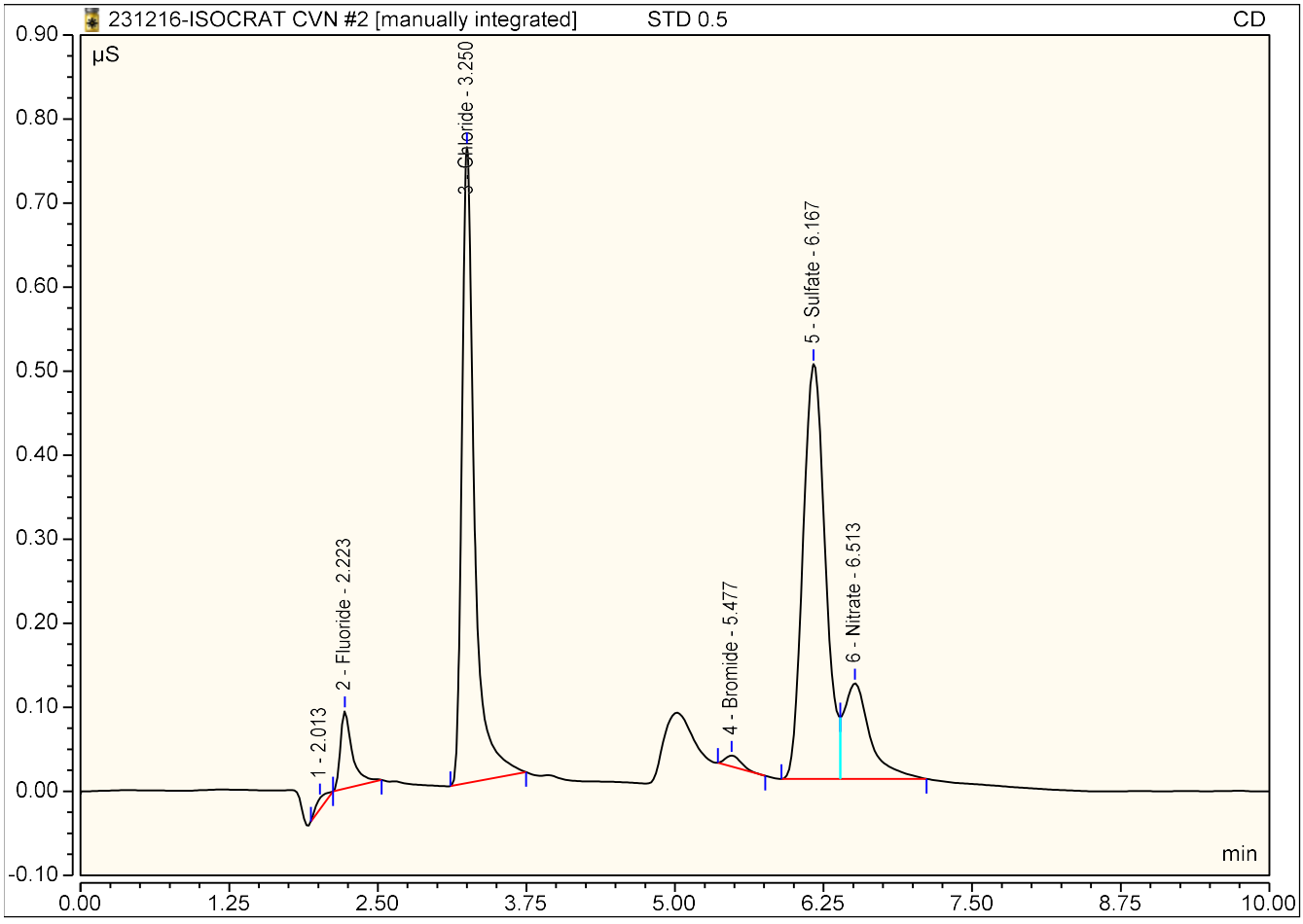
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.23	**Fluoride**	BMB	0.002	0.013	0.0499
3	3.25	**Chloride**	BMB	0.008	0.065	0.1978
4	6.16	**Sulfate**	BMB	0.001	0.007	0.2930
TOTAL:				0.01	0.08	0.54



Peak Integration Report

Sample Name:	**STD 0.5**	*Inj. Vol.:*	**25.00**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**28-Nov-2023 / 17:45**	*Run Time:*	**10.00**

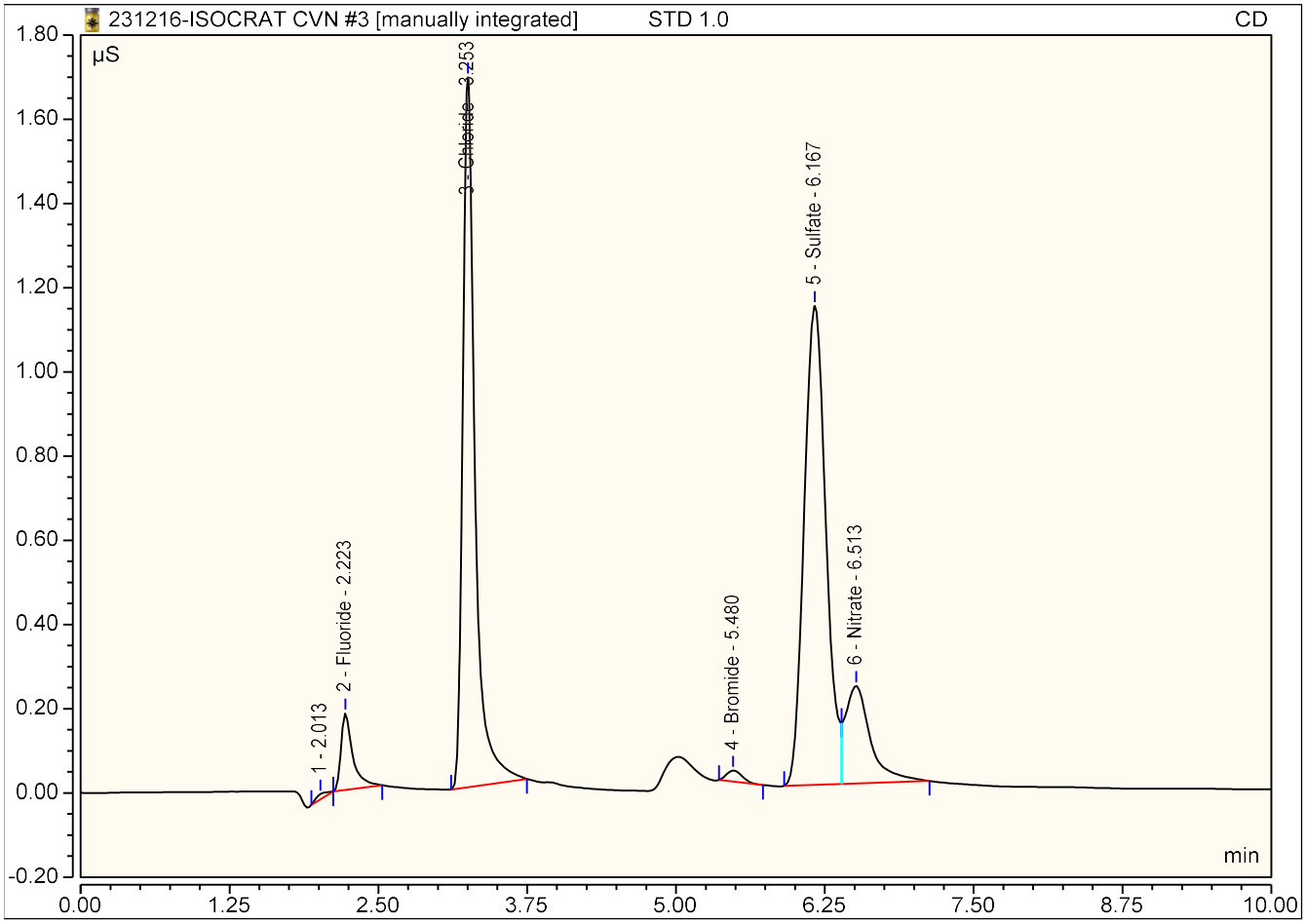
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.22	**Fluoride**	BMB	0.011	0.092	0.0646
3	3.25	**Chloride**	BMB	0.094	0.757	0.3853
4	5.48	**Bromide**	BMB	0.002	0.013	0.0697
5	6.17	**Sulfate**	BM *	0.107	0.494	0.6290
6	6.51	**Nitrate**	MB*	0.029	0.114	0.1062
TOTAL:				0.24	1.47	1.25



Peak Integration Report

Sample Name:	**STD 1.0**	*Inj. Vol.:*	**25.00**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**28-Nov-2023 / 17:57**	*Run Time:*	**10.00**

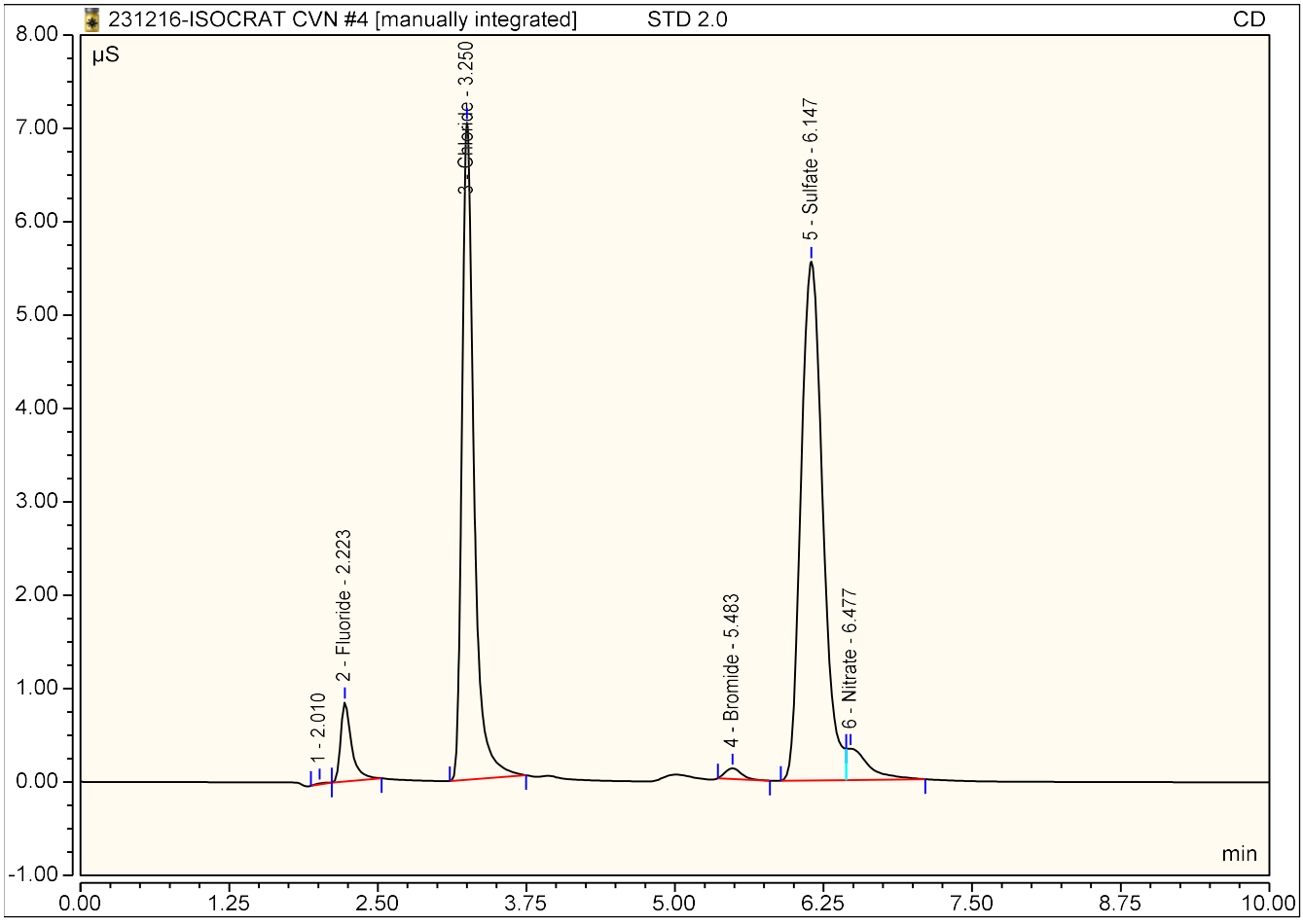
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.22	**Fluoride**	BMB	0.021	0.183	0.0808
3	3.25	**Chloride**	BMB	0.203	1.686	0.6248
4	5.48	**Bromide**	BMB	0.004	0.027	0.0849
5	6.17	**Sulfate**	BM *	0.240	1.137	1.0529
6	6.51	**Nitrate**	MB*	0.057	0.232	0.1253
TOTAL:				0.53	3.26	1.97



Peak Integration Report

Sample Name:	**STD 2.0**	*Inj. Vol.:*	**25.00**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**28-Nov-2023 / 18:09**	*Run Time:*	**10.00**

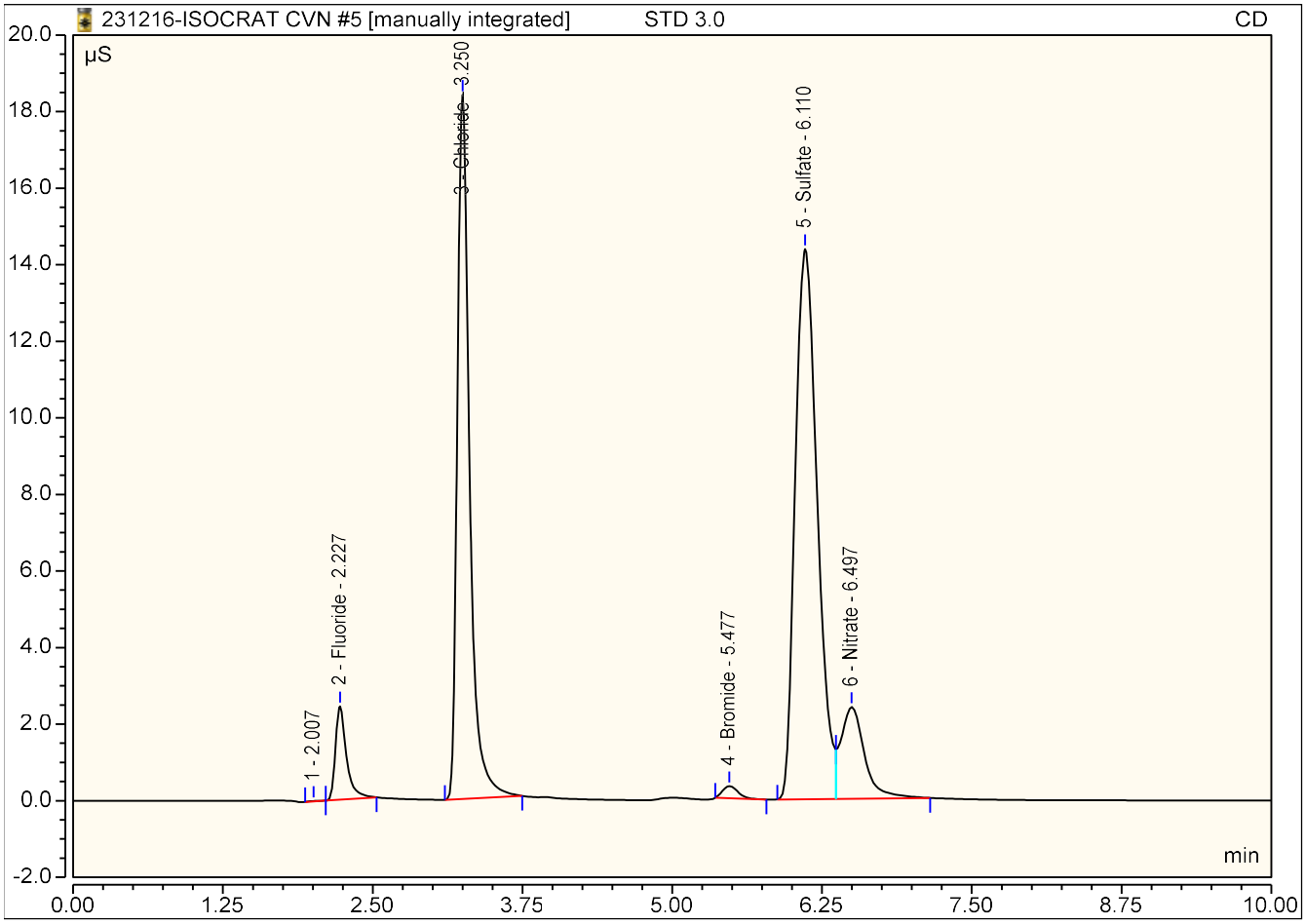
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.22	**Fluoride**	BMB	0.091	0.848	0.1920
3	3.25	**Chloride**	BMB	0.832	7.038	2.0081
4	5.48	**Bromide**	BMB	0.018	0.115	0.1886
5	6.15	**Sulfate**	BM *	1.180	5.554	4.0400
6	6.48	**Nitrate**	MB*	0.073	0.334	0.1368
TOTAL:				2.19	13.89	6.57



Peak Integration Report

Sample Name:	**STD 3.0**	*Inj. Vol.:*	**25.00**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**28-Nov-2023 / 18:21**	*Run Time:*	**10.00**

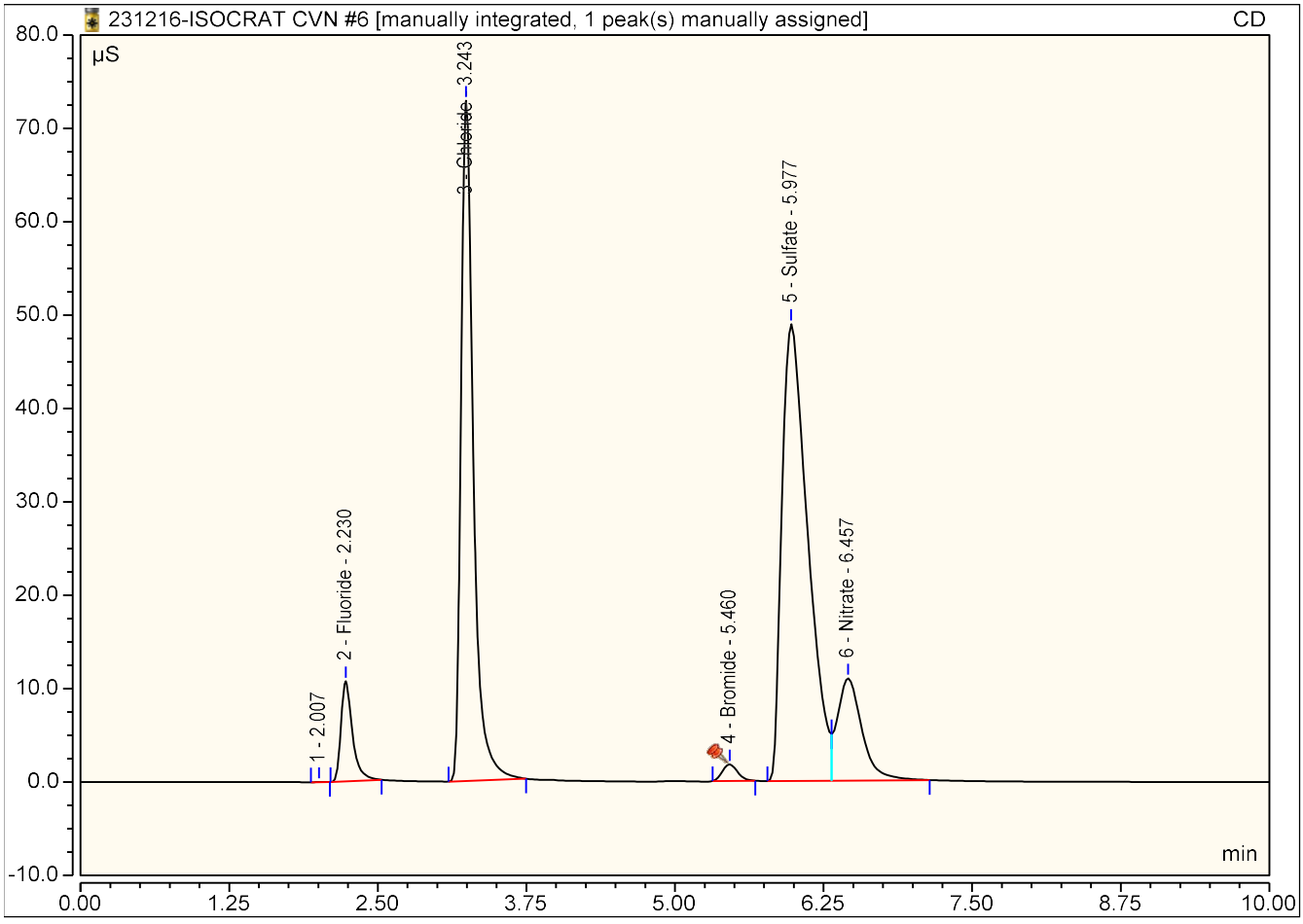
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.23	**Fluoride**	BMB	0.260	2.441	0.4601
3	3.25	**Chloride**	BMB	2.189	18.392	4.9912
4	5.48	**Bromide**	BMB	0.047	0.318	0.4094
5	6.11	**Sulfate**	BM *	3.071	14.370	10.0526
6	6.50	**Nitrate**	MB*	0.549	2.395	0.4633
TOTAL:				6.12	37.92	16.38



Peak Integration Report

Sample Name:	**STD 4.0**	*Inj. Vol.:*	**25.00**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**28-Nov-2023 / 18:33**	*Run Time:*	**10.00**

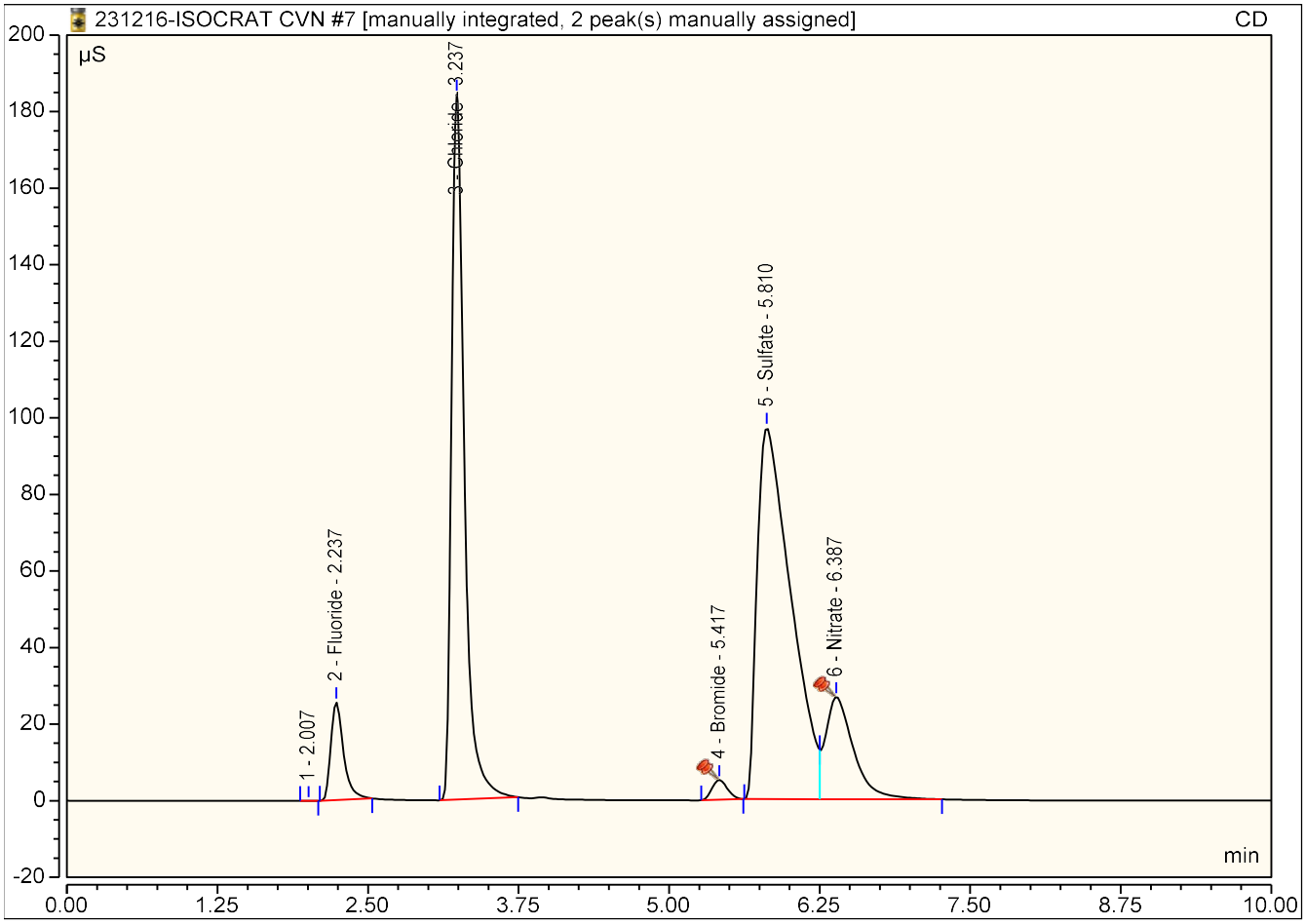
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.23	**Fluoride**	BMB	1.204	10.710	1.9562
3	3.24	**Chloride**	BMB	8.822	72.839	19.5699
4	5.46	**Bromide**	BMB*^	0.260	1.768	2.0224
5	5.98	**Sulfate**	BM *	12.350	48.930	39.5560
6	6.46	**Nitrate**	MB*	2.635	10.945	1.8972
TOTAL:				25.27	145.19	65.00



Peak Integration Report

Sample Name:	**STD 5.0**	*Inj. Vol.:*	**25.00**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**28-Nov-2023 / 18:45**	*Run Time:*	**10.00**

No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.24	**Fluoride**	BMB	3.137	25.571	5.0213
3	3.24	**Chloride**	BMB	22.744	184.215	50.1707
4	5.42	**Bromide**	BMB*^	0.764	5.189	5.8291
5	5.81	**Sulfate**	BM *	31.413	97.052	100.1696
6	6.39	**Nitrate**	MB*^	7.218	26.701	5.0462
TOTAL:				65.28	338.73	166.24



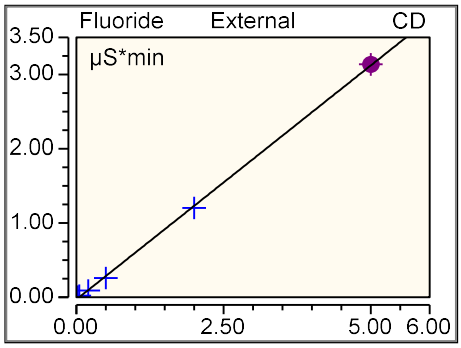
Calibration Batch Report

Sequence:	**231216-ISOCRAT CVN**	*Injection Volume:*	**25.00**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**28-Nov-2023 / 18:45**	*Run Time:*	**10**

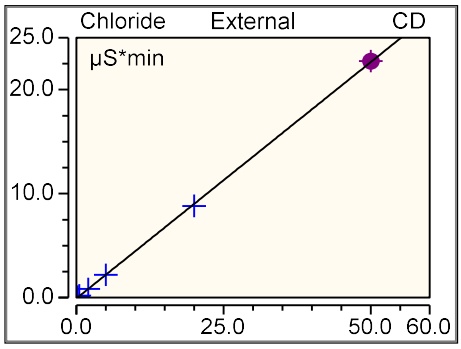
Calibration Summary

Peak Name	Eval.Type	Cal.Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Coeff.Det. %
Fluoride	Area	in, WithOffse	6.000	-0.030	0.631	0.000	99.9659
Chloride	Area	in, WithOffse	6.000	-0.081	0.455	0.000	99.9871
Bromide	Area	in, WithOffse	5.000	-0.007	0.132	0.000	99.5638
Sulfate	Area	in, WithOffse	6.000	-0.091	0.315	0.000	99.9968
Nitrate	Area	in, WithOffse	6.000	-0.126	1.455	0.000	99.8425
		AVERAGE:		-0.0670	0.5975	0.0000	99.8712

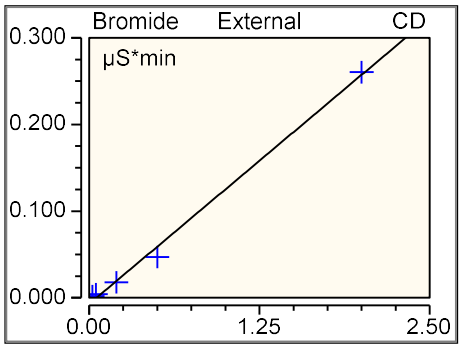
Injection Name	Ret.Time min CD	Area µS*min CD	Height µS CD	Amount CD
	Fluoride	Fluoride	Fluoride	Fluoride
STD 0.5	2.223	0.0108	0.092	0.065
STD 1.0	2.223	0.0210	0.183	0.081
STD 2.0	2.223	0.0911	0.848	0.192
STD 3.0	2.227	0.2602	2.441	0.460
STD 4.0	2.230	1.2037	10.710	1.956
STD 5.0	2.237	3.1366	25.571	5.021
Average	2.227			
Rel. Std. Dev.	0.240 %			



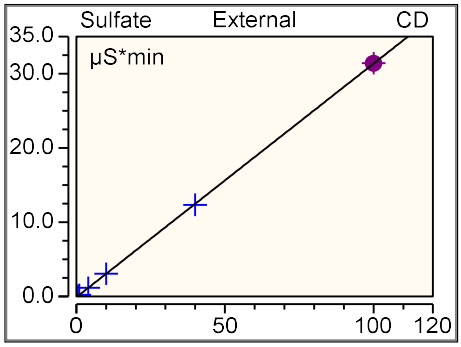
Injection Name	Ret.Time min CD	Area µS*min CD	Height µS CD	Amount CD
	Chloride	Chloride	Chloride	Chloride
STD 0.5	3.250	0.0938	0.757	0.385
STD 1.0	3.253	0.2028	1.686	0.625
STD 2.0	3.250	0.8321	7.038	2.008
STD 3.0	3.250	2.1893	18.392	4.991
STD 4.0	3.243	8.8219	72.839	19.570
STD 5.0	3.237	22.7438	184.215	50.171
Average	3.247			
Rel. Std. Dev.	0.188 %			



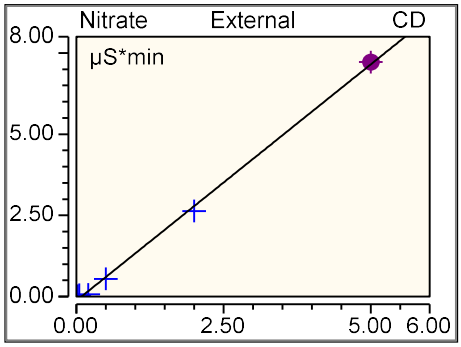
Injection Name	Ret.Time min CD	Area µS*min CD	Height µS CD	Amount CD
	Bromide	Bromide	Bromide	Bromide
STD 0.5	5.477	0.0021	0.013	0.070
STD 1.0	5.480	0.0041	0.027	0.085
STD 2.0	5.483	0.0178	0.115	0.189
STD 3.0	5.477	0.0470	0.318	0.409
STD 4.0	5.460	0.2603	1.768	2.022
STD 5.0	5.417	0.7638	5.189	5.829
Average	5.466			
Rel. Std. Dev.	0.462 %			



Injection Name	Ret.Time min CD	Area µS*min CD	Height µS CD	Amount CD
	Sulfate	Sulfate	Sulfate	Sulfate
STD 0.5	6.167	0.1071	0.494	0.629
STD 1.0	6.167	0.2404	1.137	1.053
STD 2.0	6.147	1.1799	5.554	4.040
STD 3.0	6.110	3.0709	14.370	10.053
STD 4.0	5.977	12.3499	48.930	39.556
STD 5.0	5.810	31.4132	97.052	100.170
Average	6.063			
Rel. Std. Dev.	2.358 %			



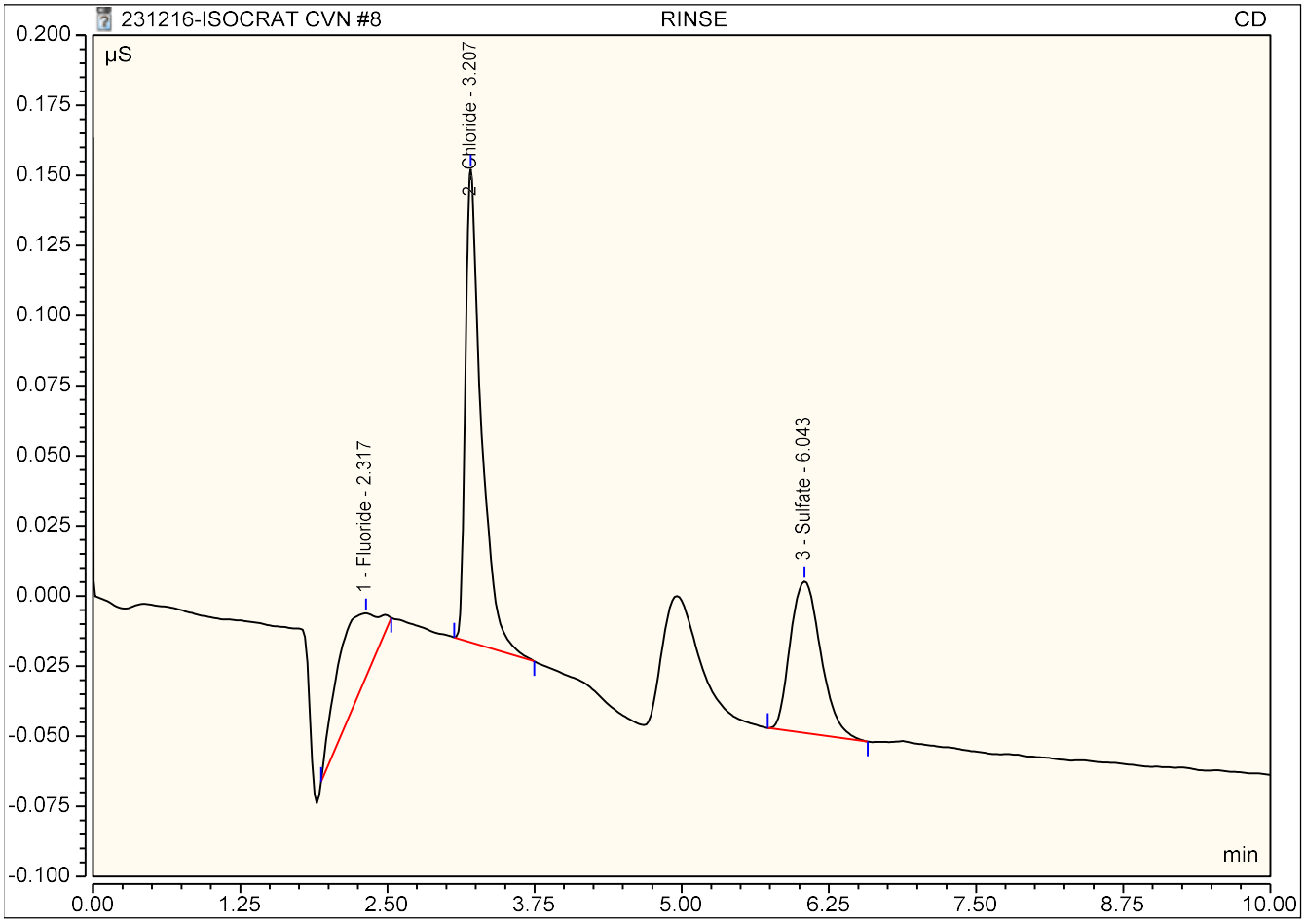
Injection Name	Ret.Time min CD	Area µS*min CD	Height µS CD	Amount CD
	Nitrate	Nitrate	Nitrate	Nitrate
STD 0.5	6.513	0.0290	0.114	0.106
STD 1.0	6.513	0.0568	0.232	0.125
STD 2.0	6.477	0.0735	0.334	0.137
STD 3.0	6.497	0.5487	2.395	0.463
STD 4.0	6.457	2.6354	10.945	1.897
STD 5.0	6.387	7.2183	26.701	5.046
Average	6.474			
Rel. Std. Dev.	0.742 %			



Peak Integration Report

Sample Name:	**RINSE**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 08:33**	*Run Time:*	**10.00**

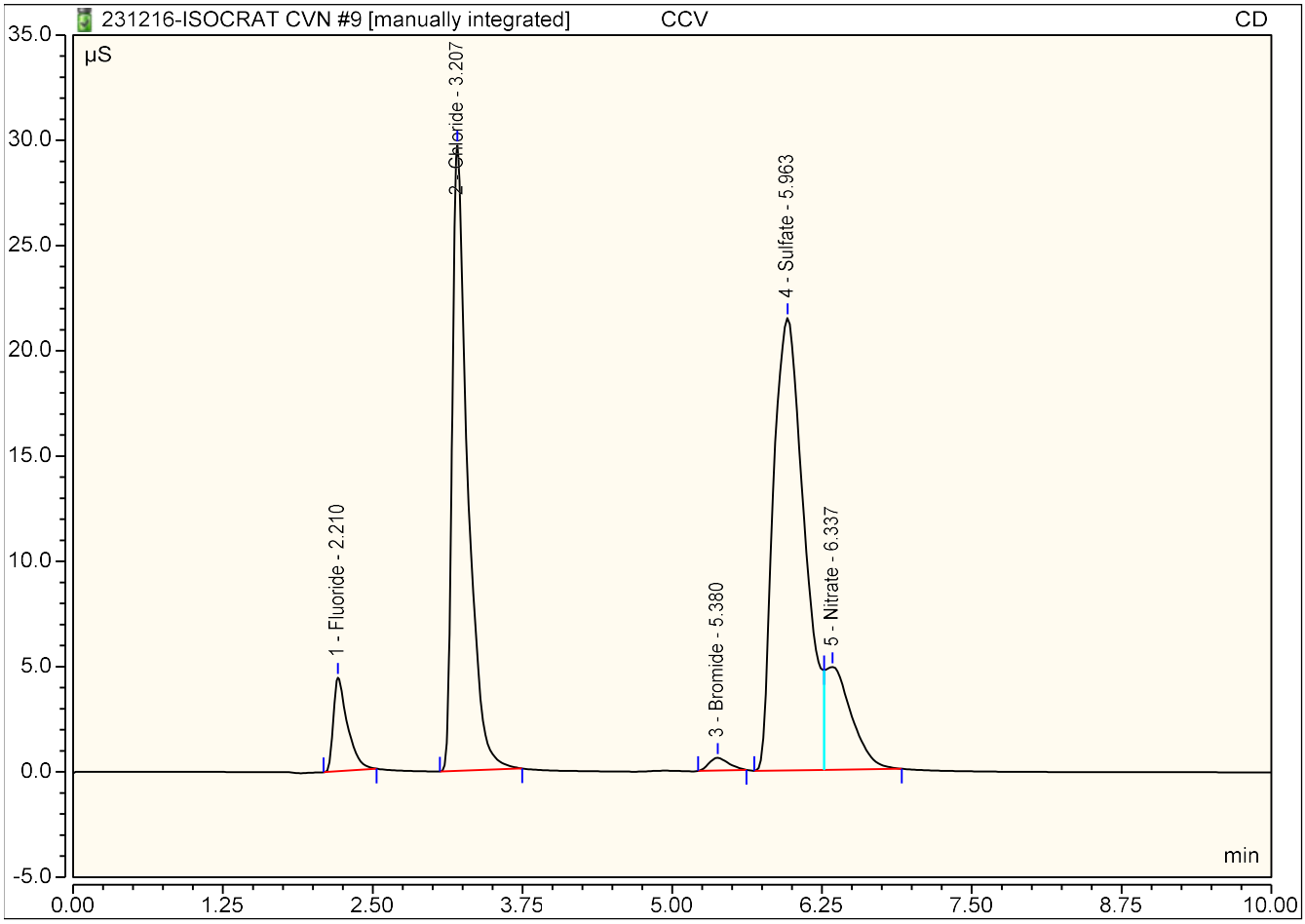
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.32	**Fluoride**	BMB	0.012	0.023	0.0659
2	3.21	**Chloride**	BMB	0.026	0.169	0.2372
3	6.04	**Sulfate**	BMB	0.016	0.054	0.3404
TOTAL:				0.05	0.25	0.64



Peak Integration Report

Sample Name:	**CCV**	*Inj. Vol.:*	**25.00**
Injection Type:	**Check Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 08:45**	*Run Time:*	**10.00**

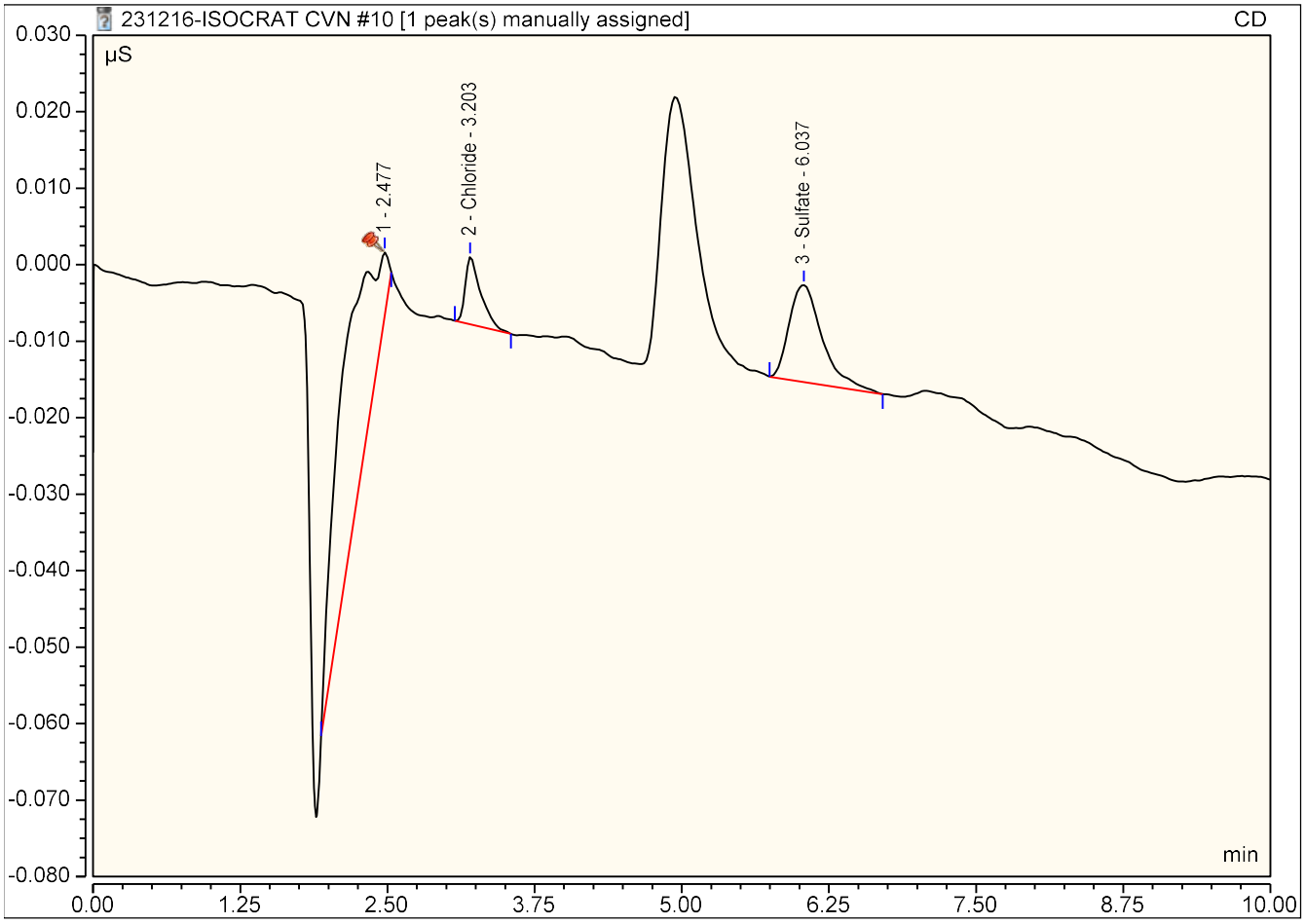
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.21	**Fluoride**	BMB	0.607	4.449	1.0101
2	3.21	**Chloride**	BMB	4.443	29.715	9.9452
3	5.38	**Bromide**	BMB*	0.117	0.605	0.9381
4	5.96	**Sulfate**	BM *	6.425	21.480	20.7185
5	6.34	**Nitrate**	MB*	1.250	4.883	0.9454
TOTAL:				12.84	61.13	33.56



Peak Integration Report

Sample Name:	**CCB**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 08:57**	*Run Time:*	**10.00**

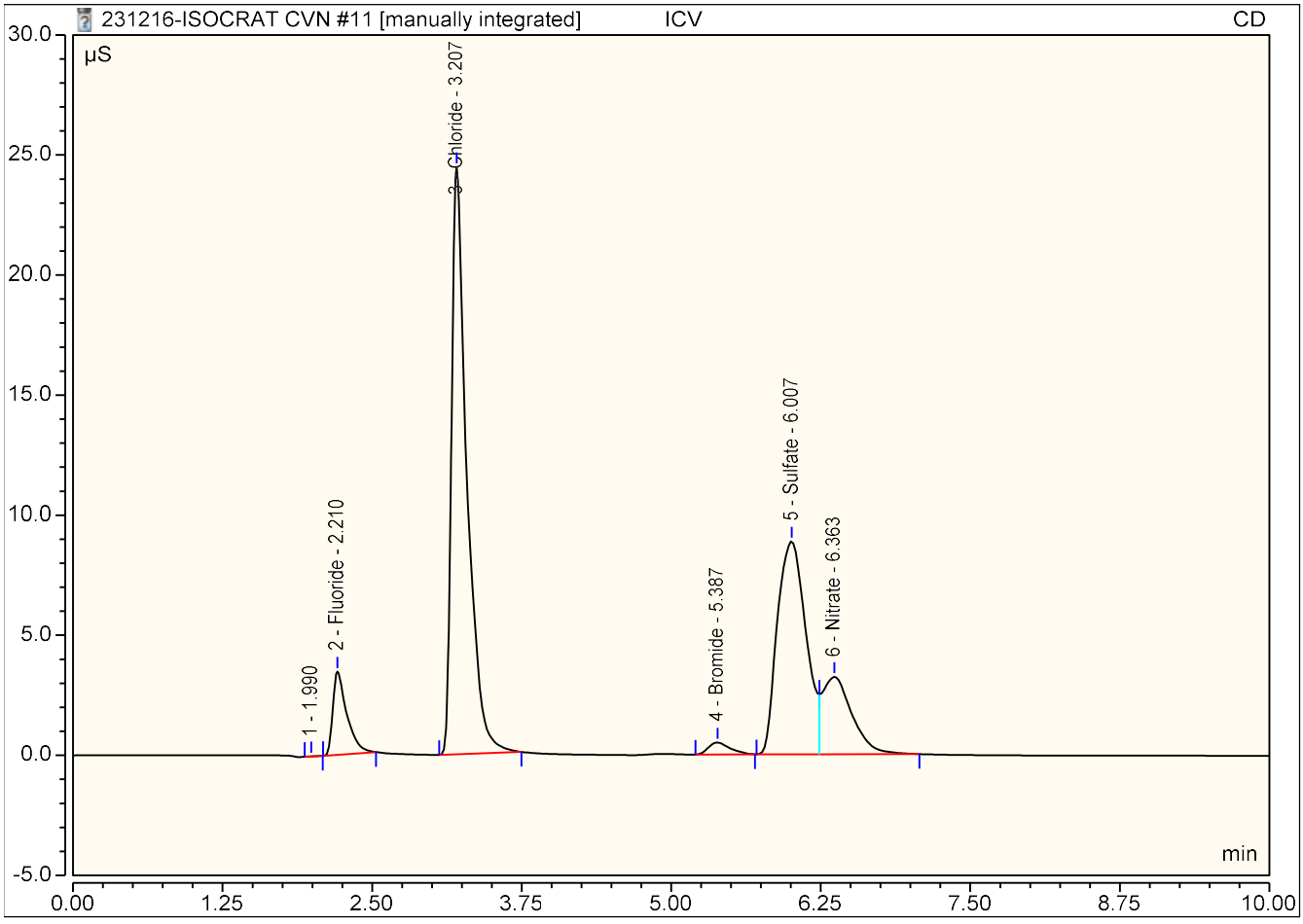
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	3.20	**Chloride**	BMB	0.001	0.009	0.1821
3	6.04	**Sulfate**	BMB	0.004	0.013	0.3016
TOTAL:				0.01	0.02	0.48



Peak Integration Report

Sample Name:	**ICV**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 09:09**	*Run Time:*	**10.00**

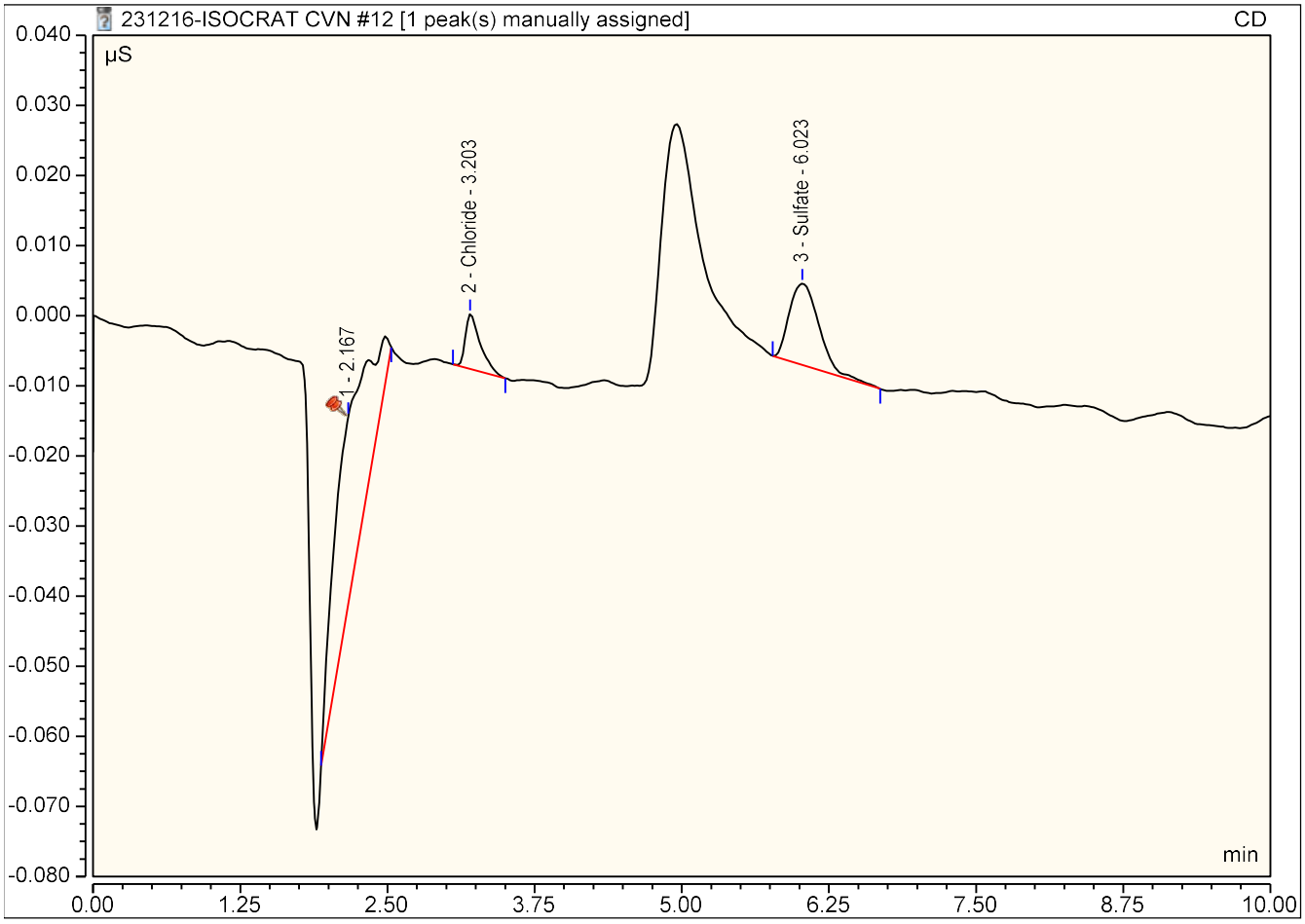
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.21	**Fluoride**	BMB	0.469	3.463	0.7904
3	3.21	**Chloride**	BMB	3.644	24.461	8.1890
4	5.39	**Bromide**	BMB*	0.105	0.503	0.8493
5	6.01	**Sulfate**	BM *	2.466	8.867	8.1278
6	6.36	**Nitrate**	MB*	0.920	3.220	0.7182
TOTAL:				7.60	40.51	18.67



Peak Integration Report

Sample Name:	**ICB**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 09:21**	*Run Time:*	**10.00**

No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	3.20	**Chloride**	BMB	0.001	0.008	0.1817
3	6.02	**Sulfate**	BMB	0.003	0.012	0.2994
TOTAL:				0.00	0.02	0.48



Peak Integration Report

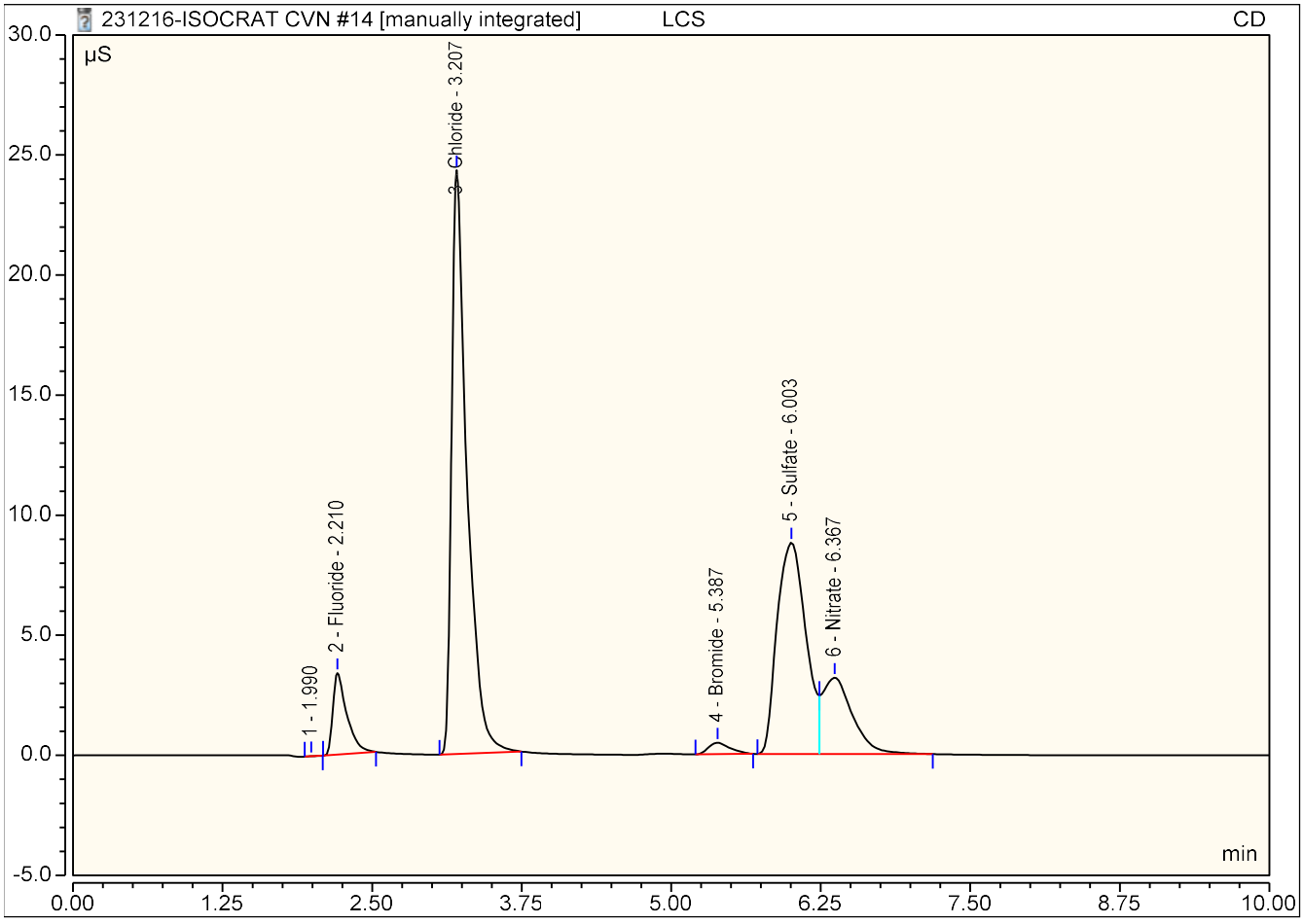
Sample Name:	**BLK**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 09:33**	*Run Time:*	**10.00**

No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	3.21	**Chloride**	BMB	0.003	0.014	0.1846
3	6.02	**Sulfate**	BMB	0.004	0.013	0.3007
TOTAL:				0.01	0.03	0.49

Peak Integration Report

Sample Name:	**LCS**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 09:45**	*Run Time:*	**10.00**

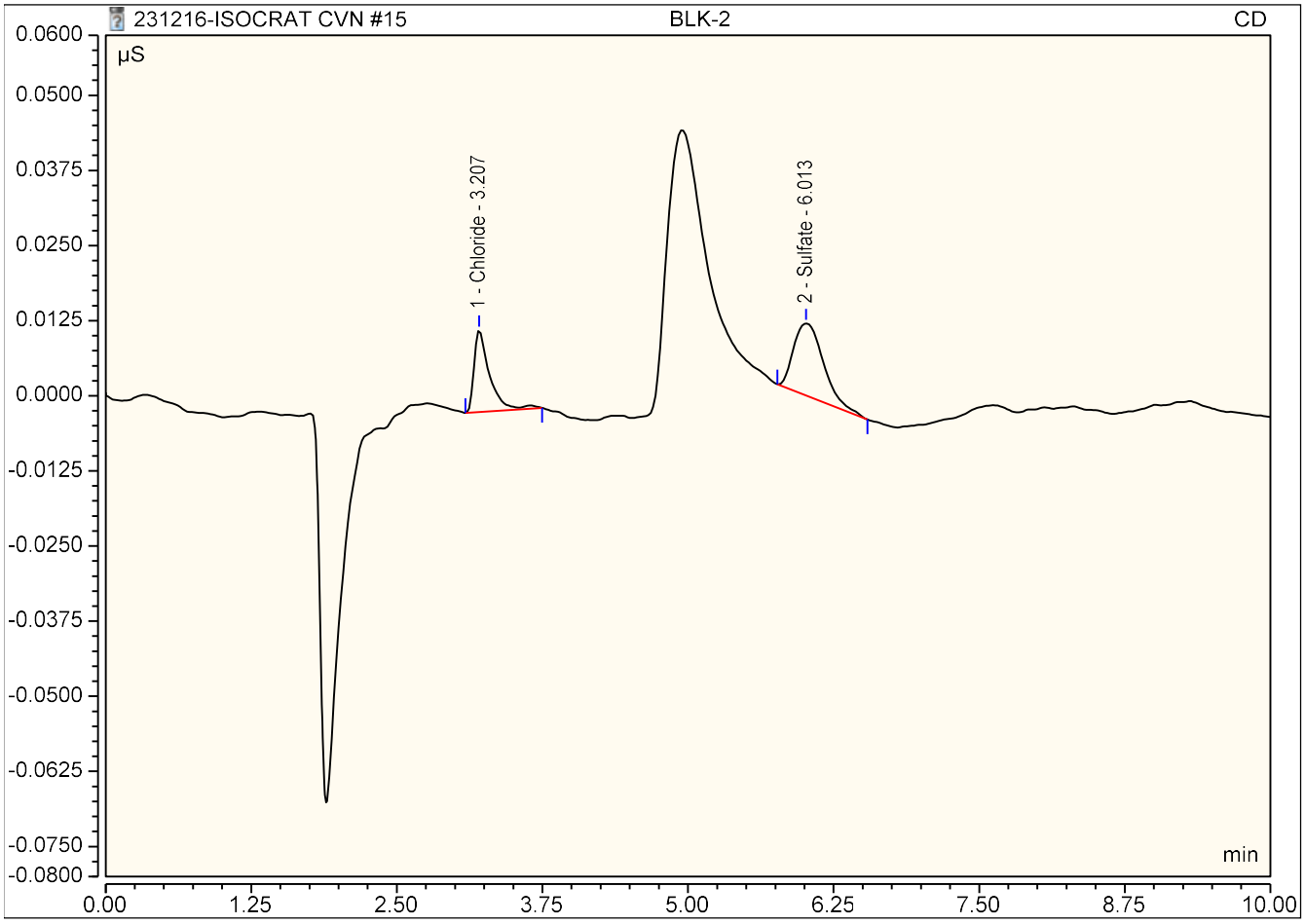
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.21	**Fluoride**	BMB	0.459	3.395	0.7756
3	3.21	**Chloride**	BMB	3.628	24.313	8.1538
4	5.39	**Bromide**	BMB*	0.100	0.480	0.8104
5	6.00	**Sulfate**	BM *	2.456	8.805	8.0966
6	6.37	**Nitrate**	MB*	0.923	3.180	0.7202
TOTAL:				7.57	40.17	18.56



Peak Integration Report

Sample Name:	**BLK-2**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 09:57**	*Run Time:*	**10.00**

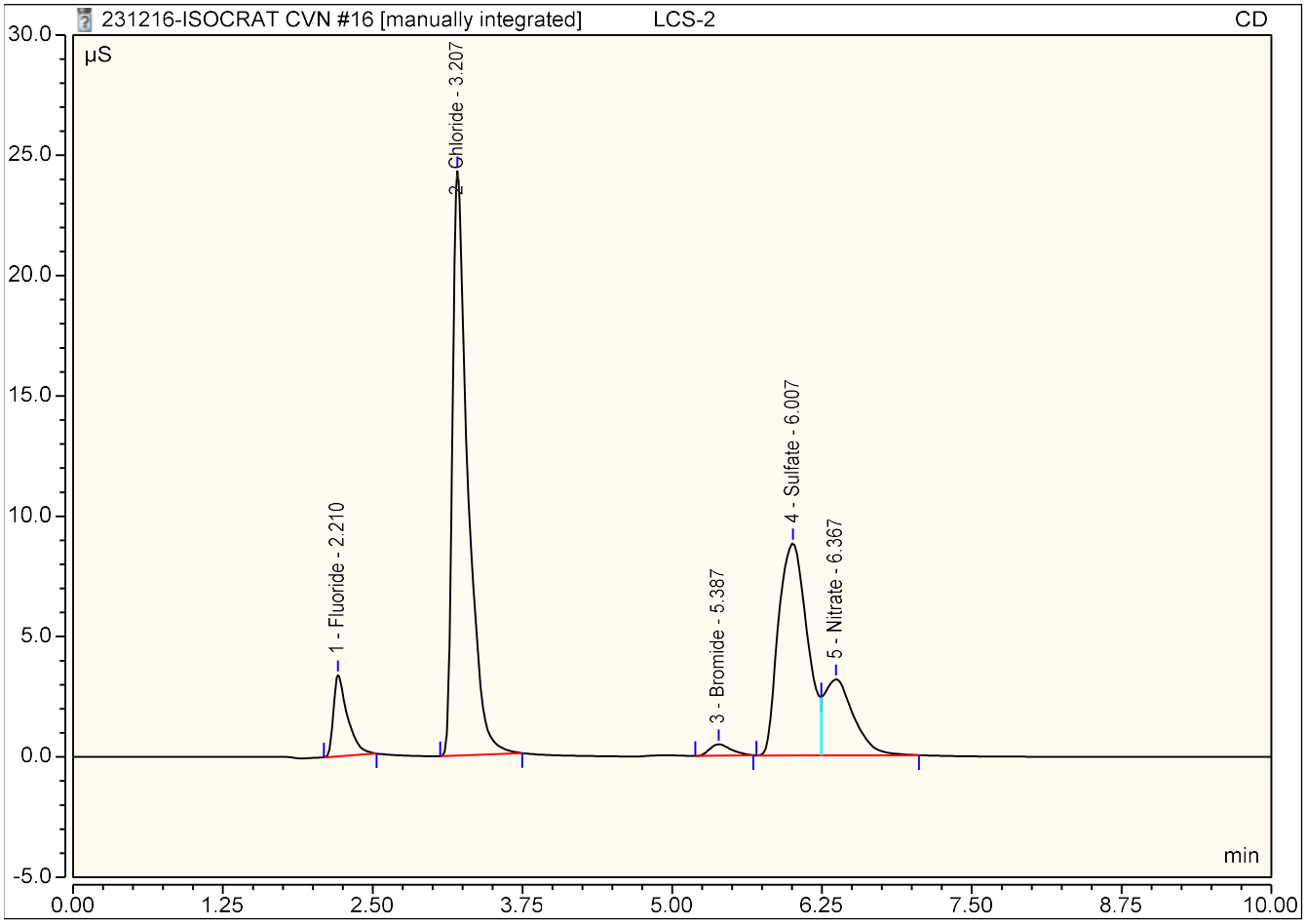
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	3.21	**Chloride**	BMB	0.002	0.014	0.1837
2	6.01	**Sulfate**	BMB	0.004	0.012	0.3000
TOTAL:				0.01	0.03	0.48



Peak Integration Report

Sample Name:	**LCS-2**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 10:09**	*Run Time:*	**10.00**

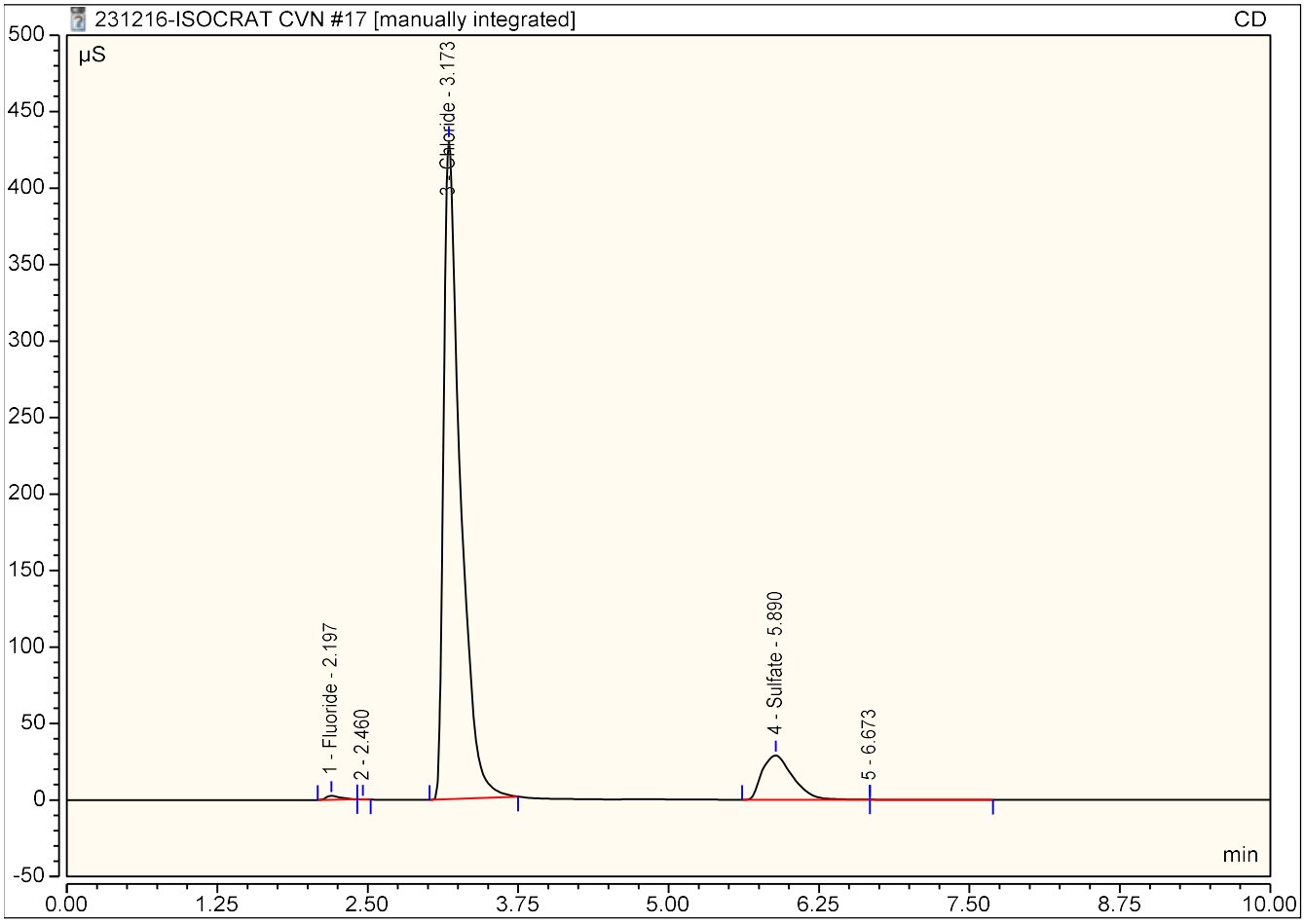
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.21	**Fluoride**	BMB	0.456	3.377	0.7711
2	3.21	**Chloride**	BMB	3.621	24.290	8.1375
3	5.39	**Bromide**	BMB*	0.099	0.479	0.8055
4	6.01	**Sulfate**	BM *	2.463	8.813	8.1203
5	6.37	**Nitrate**	MB*	0.901	3.163	0.7054
TOTAL:				7.54	40.12	18.54



Peak Integration Report

Sample Name:	**XL2374268-01 BR CL F SO4 NO3**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 10:22**	*Run Time:*	**10.00**

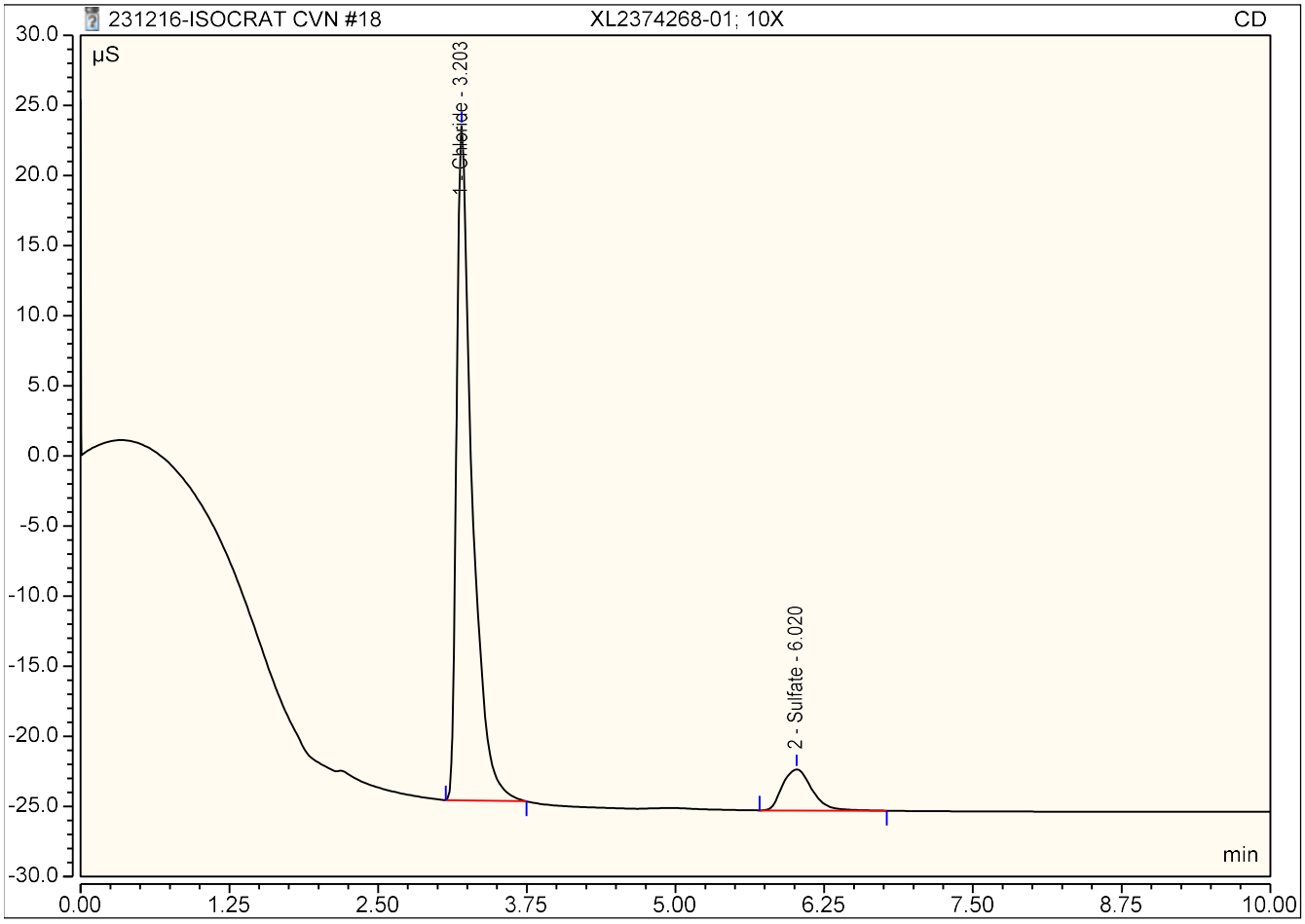
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.20	**Fluoride**	BMB	0.354	2.570	0.6086
3	3.17	**Chloride**	BMB*	69.317	430.368	152.5406
4	5.89	**Sulfate**	BM *	8.636	29.109	27.7478
TOTAL:				78.31	462.05	180.90



Peak Integration Report

Sample Name:	**XL2374268-01; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 10:34**	*Run Time:*	**10.00**

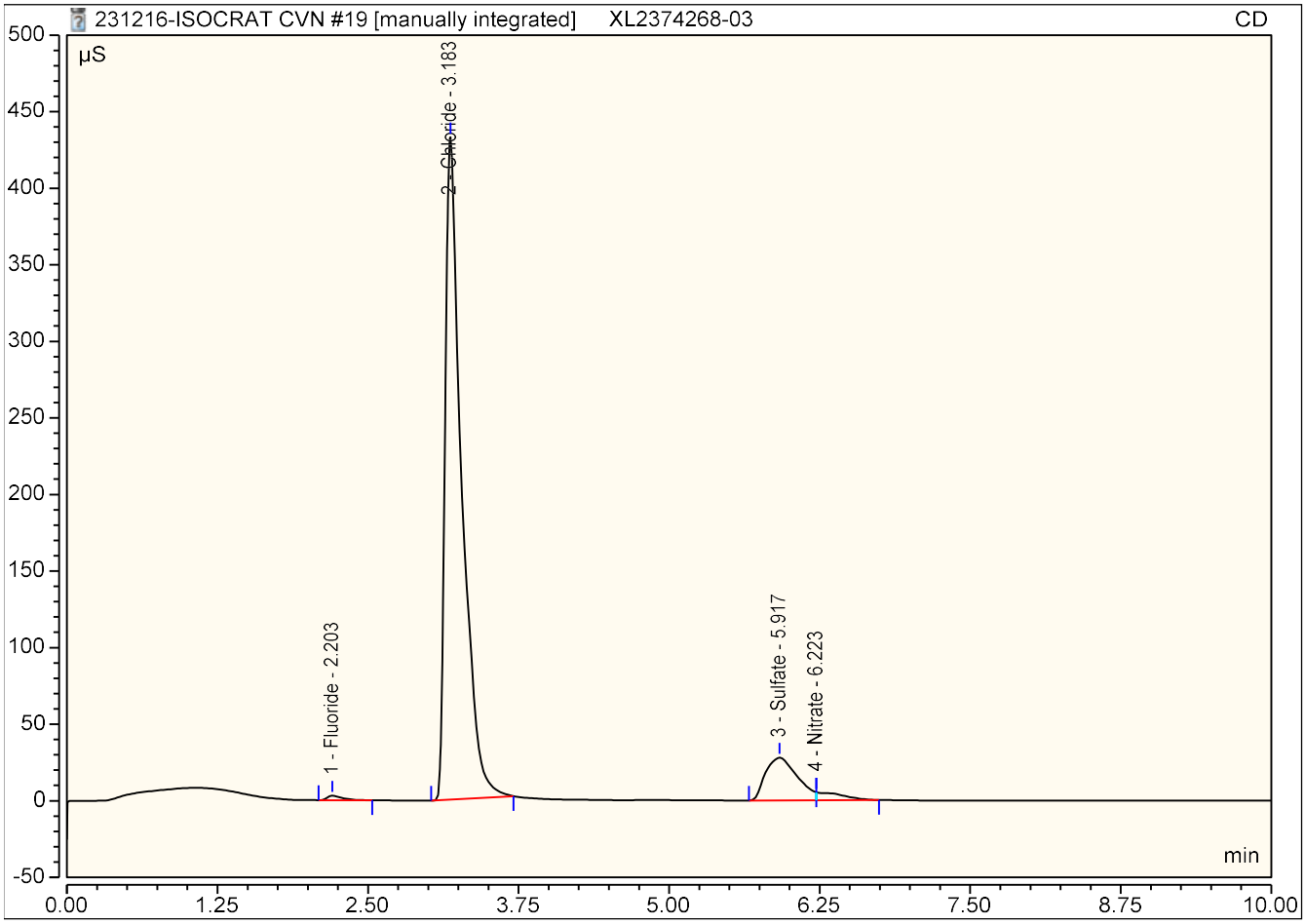
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	3.20	**Chloride**	BMB	7.308	48.067	162.4196
2	6.02	**Sulfate**	BMB	0.841	2.921	29.6263
TOTAL:				8.15	50.99	192.05



Peak Integration Report

Sample Name:	**XL2374268-03**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 10:46**	*Run Time:*	**10.00**

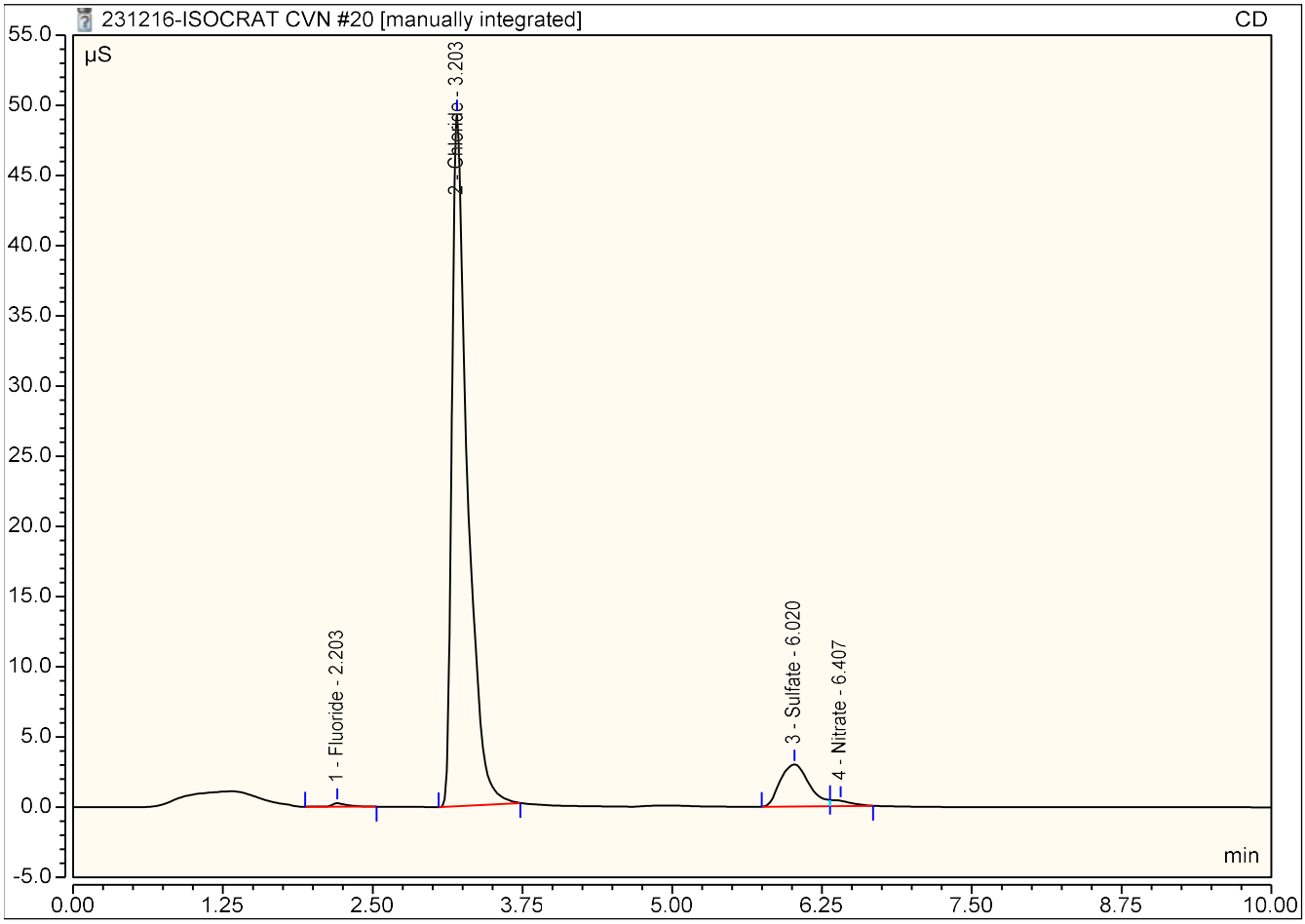
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.20	**Fluoride**	BMB	0.420	2.955	0.7135
2	3.18	**Chloride**	BMB*	68.808	432.466	151.4212
3	5.92	**Sulfate**	BM *	8.512	27.923	27.3531
4	6.22	**Nitrate**	MB*	1.246	5.087	0.9426
TOTAL:				78.99	468.43	180.43



Peak Integration Report

Sample Name:	**XL2374268-03; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 10:58**	*Run Time:*	**10.00**

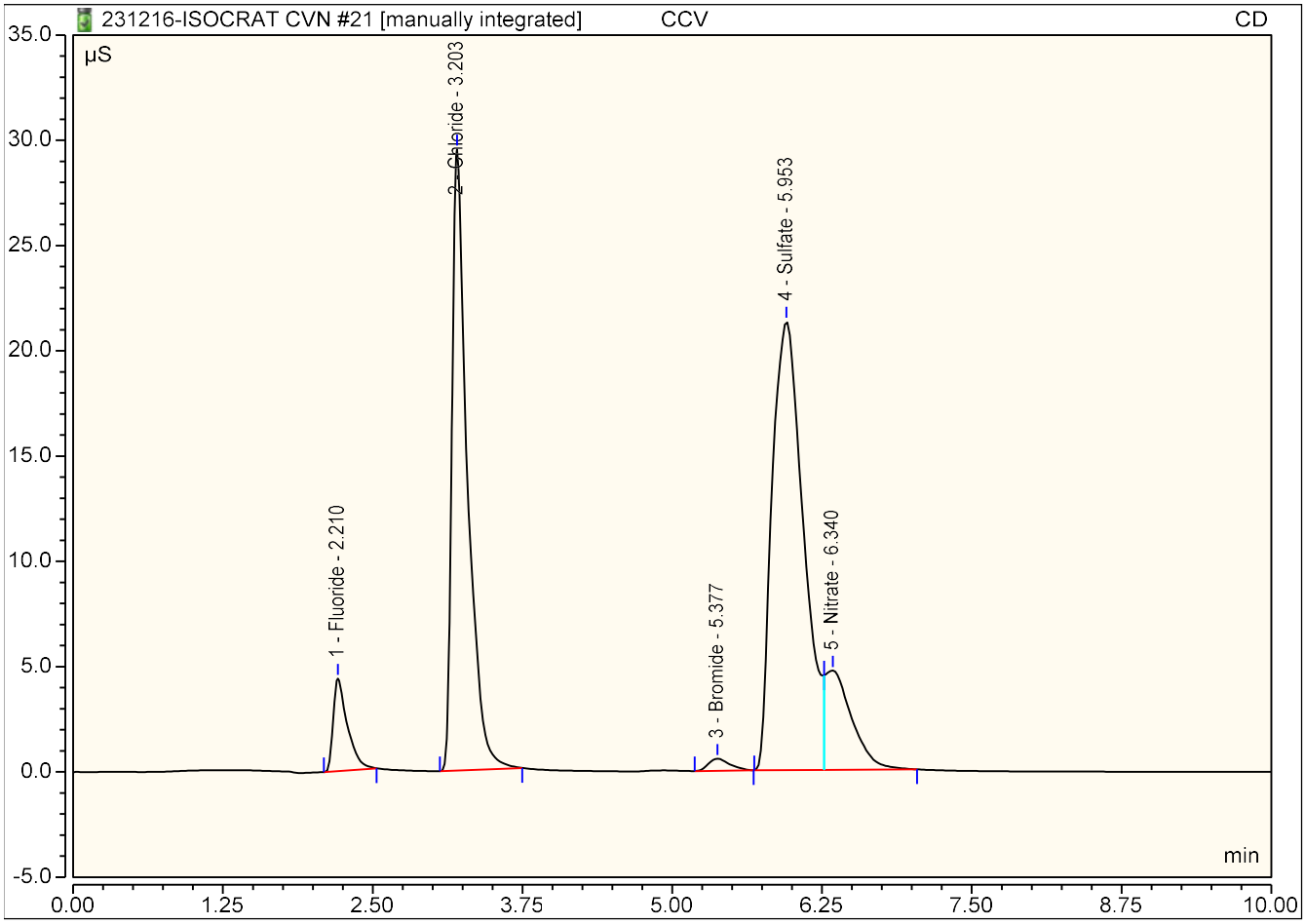
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.20	**Fluoride**	BMB	0.037	0.253	1.0596
2	3.20	**Chloride**	BMB*	7.436	49.272	165.2259
3	6.02	**Sulfate**	BM *	0.841	2.986	29.6146
4	6.41	**Nitrate**	MB*	0.079	0.374	1.4082
TOTAL:				8.39	52.89	197.31



Peak Integration Report

Sample Name:	**CCV**	*Inj. Vol.:*	**25.00**
Injection Type:	**Check Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 11:10**	*Run Time:*	**10.00**

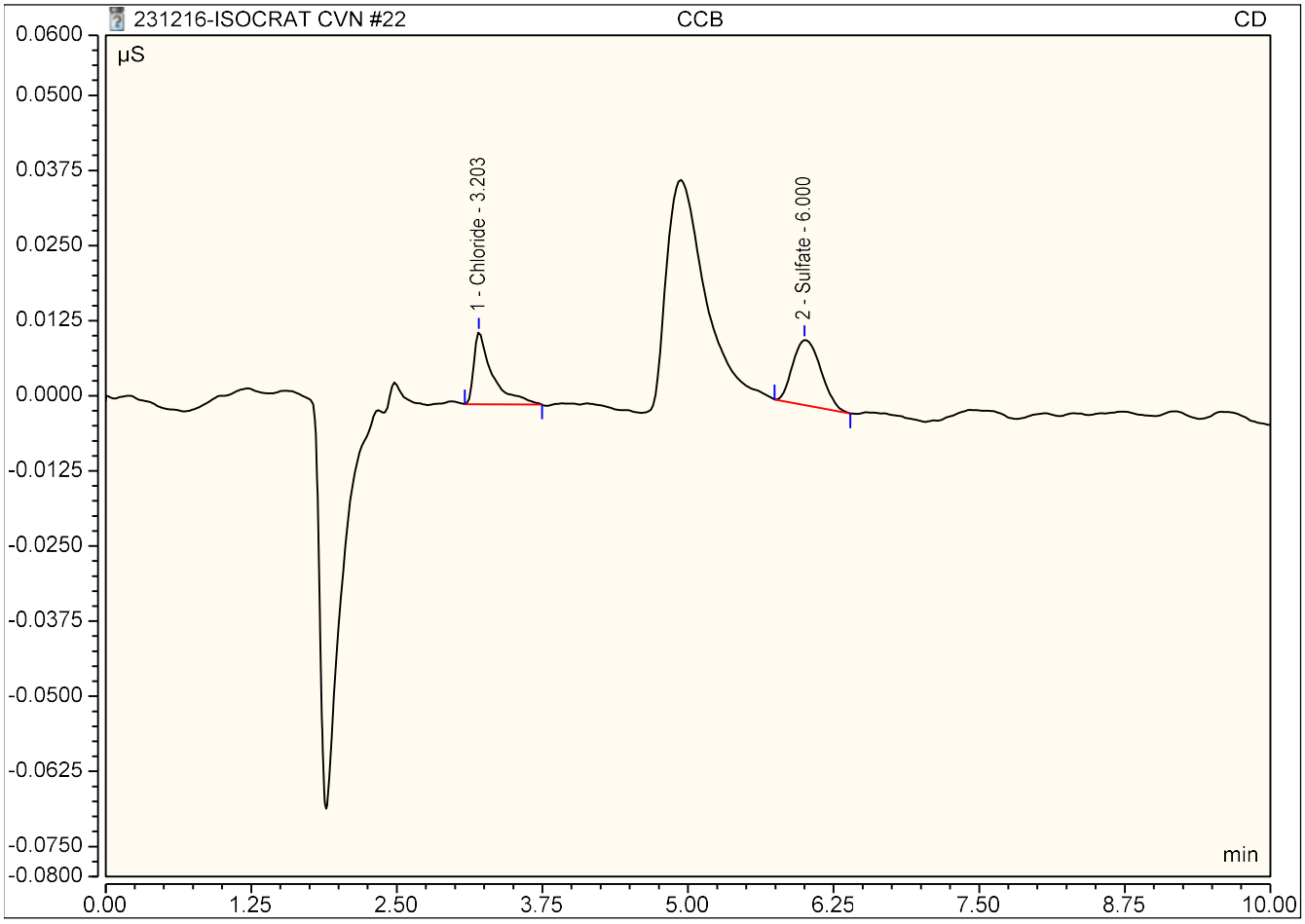
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.21	**Fluoride**	BMB	0.600	4.398	0.9991
2	3.20	**Chloride**	BMB	4.418	29.504	9.8905
3	5.38	**Bromide**	BMB*	0.118	0.574	0.9447
4	5.95	**Sulfate**	BM *	6.451	21.304	20.8003
5	6.34	**Nitrate**	MB*	1.222	4.711	0.9260
TOTAL:				12.81	60.49	33.56



Peak Integration Report

Sample Name:	**CCB**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 11:22**	*Run Time:*	**10.00**

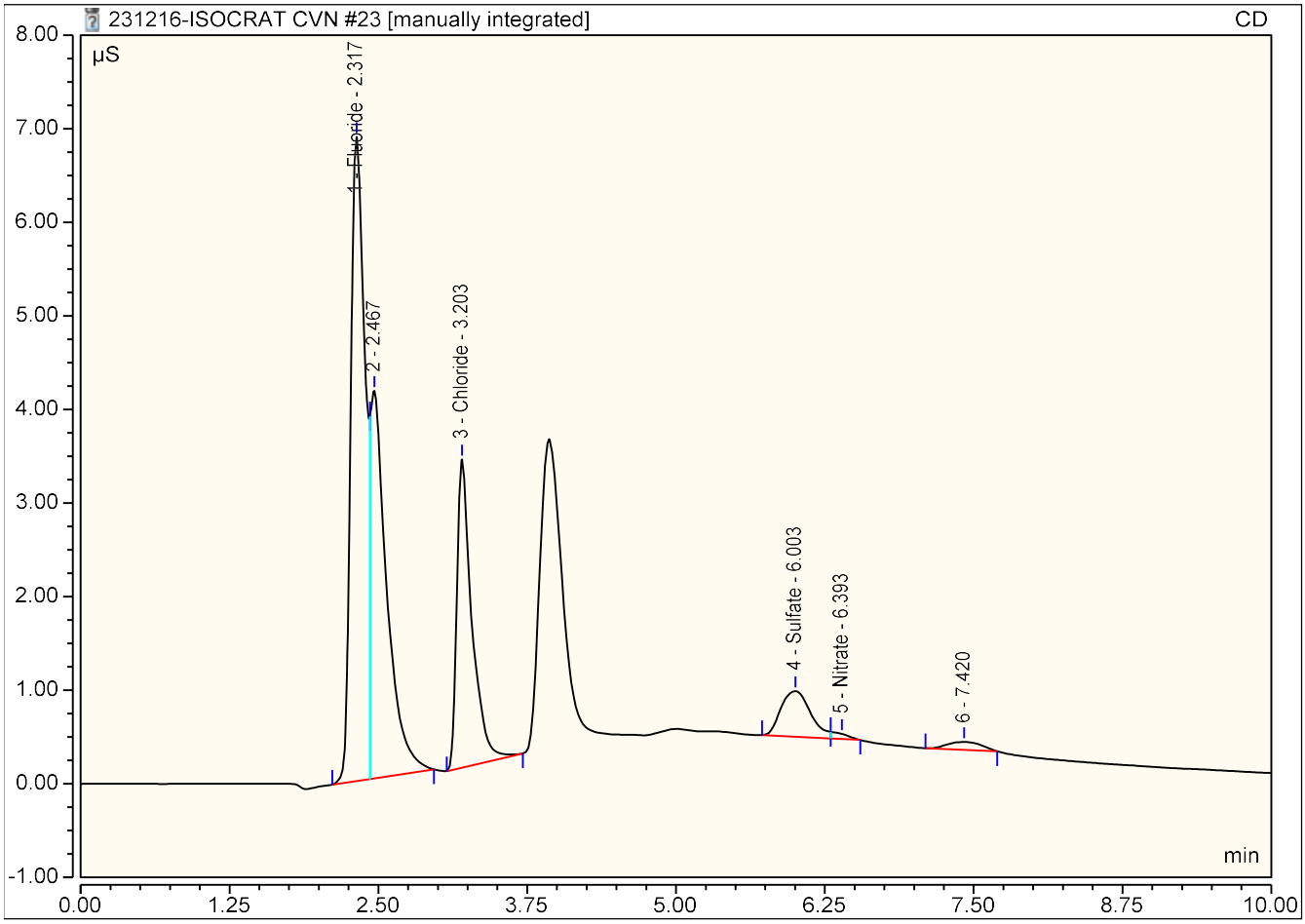
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	3.20	**Chloride**	BMB	0.002	0.012	0.1840
2	6.00	**Sulfate**	BMB	0.003	0.011	0.2982
TOTAL:				0.01	0.02	0.48



Peak Integration Report

Sample Name:	**XL2374268-02; 25X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**25.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 11:34**	*Run Time:*	**10.00**

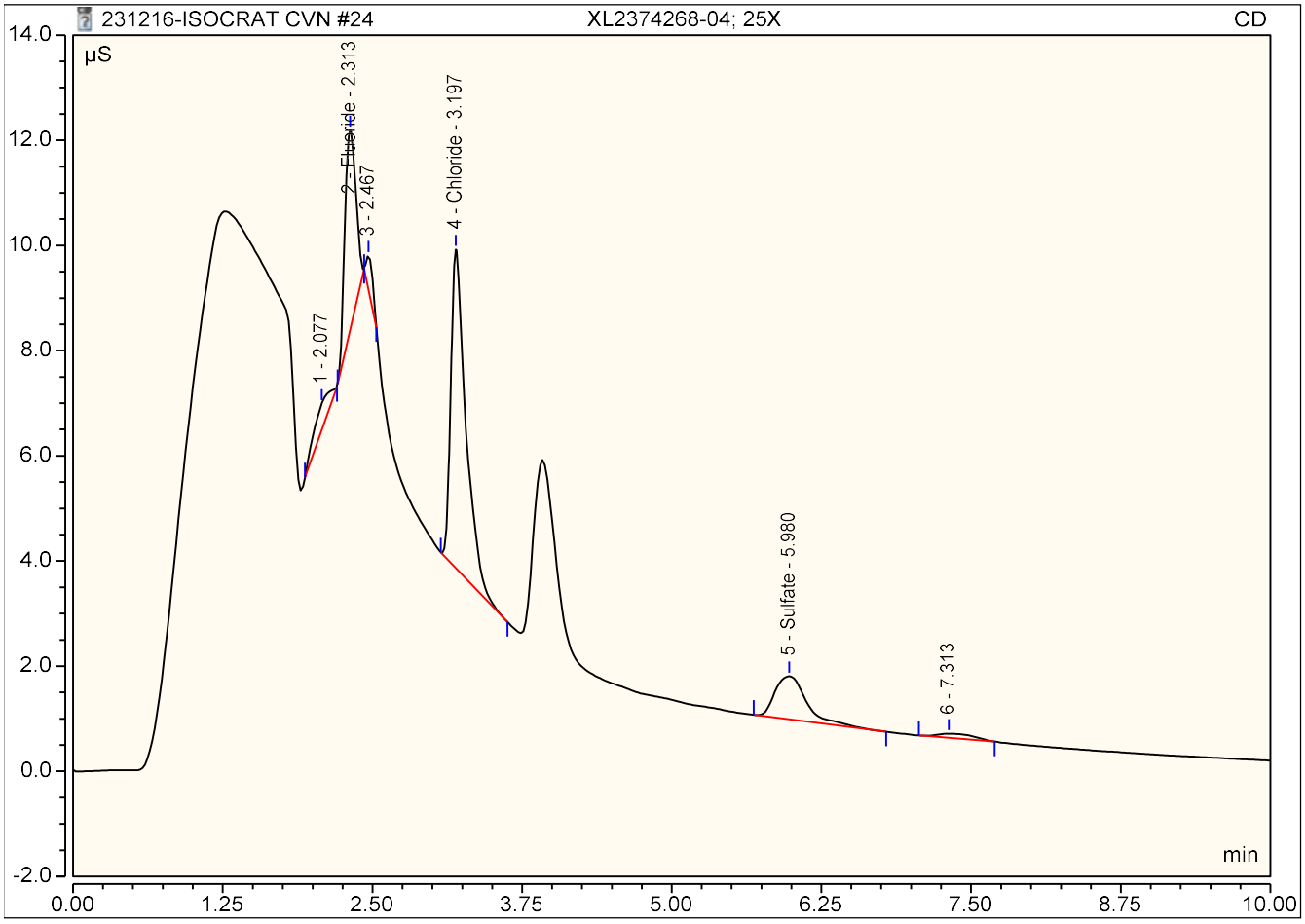
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.32	**Fluoride**	BM *	0.973	6.883	39.7504
3	3.20	**Chloride**	BMB	0.483	3.294	31.0111
4	6.00	**Sulfate**	BM *	0.140	0.489	18.3535
5	6.39	**Nitrate**	MB*	0.010	0.054	2.3291
TOTAL:				1.61	10.72	91.44



Peak Integration Report

Sample Name:	**XL2374268-04; 25X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**25.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 11:46**	*Run Time:*	**10.00**

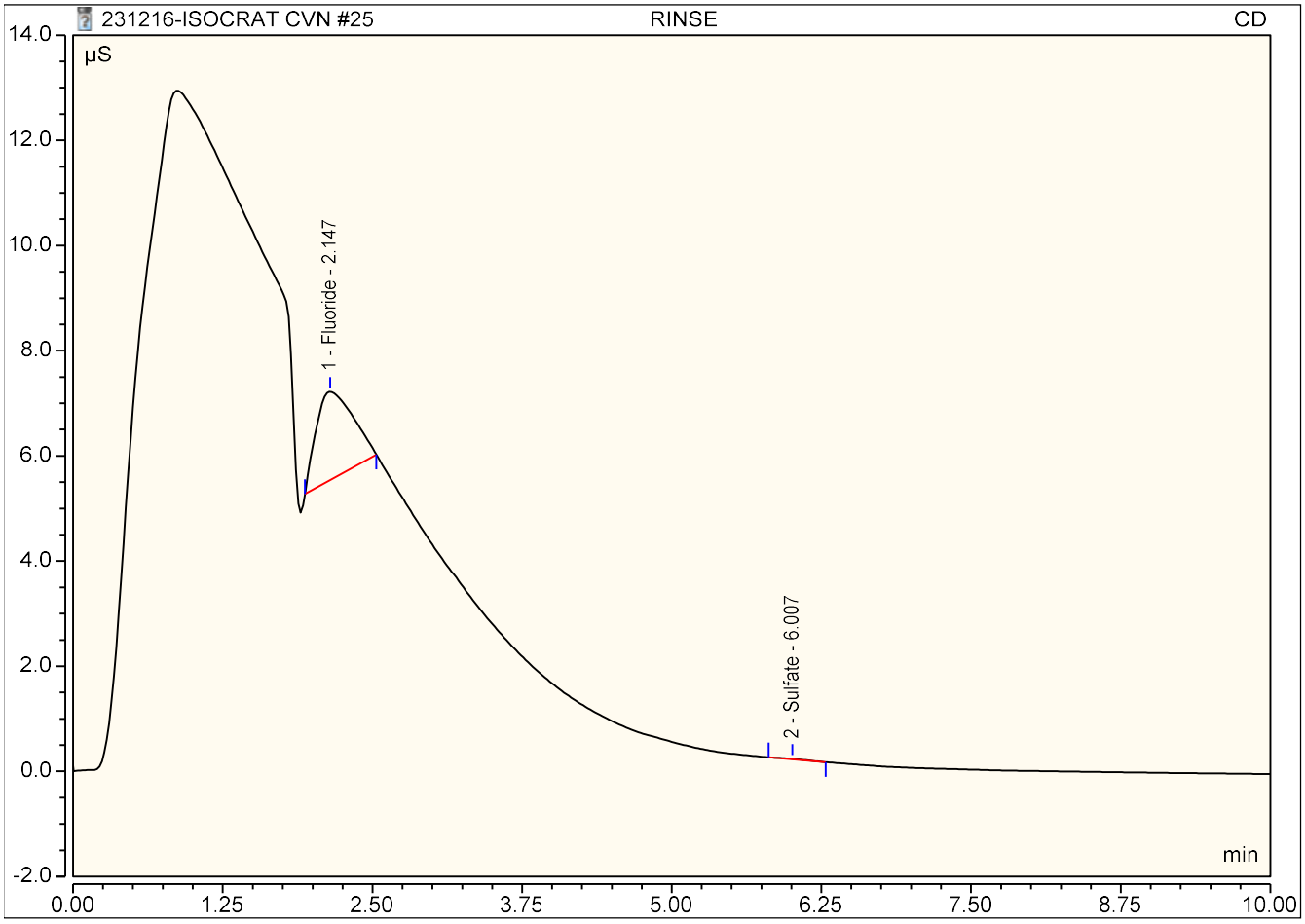
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.31	**Fluoride**	BMB	0.404	3.801	17.2064
4	3.20	**Chloride**	BMB	0.881	6.060	52.8836
5	5.98	**Sulfate**	BMB	0.248	0.819	26.8938
TOTAL:				1.53	10.68	96.98



Peak Integration Report

Sample Name:	**RINSE**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 11:58**	*Run Time:*	**10.00**

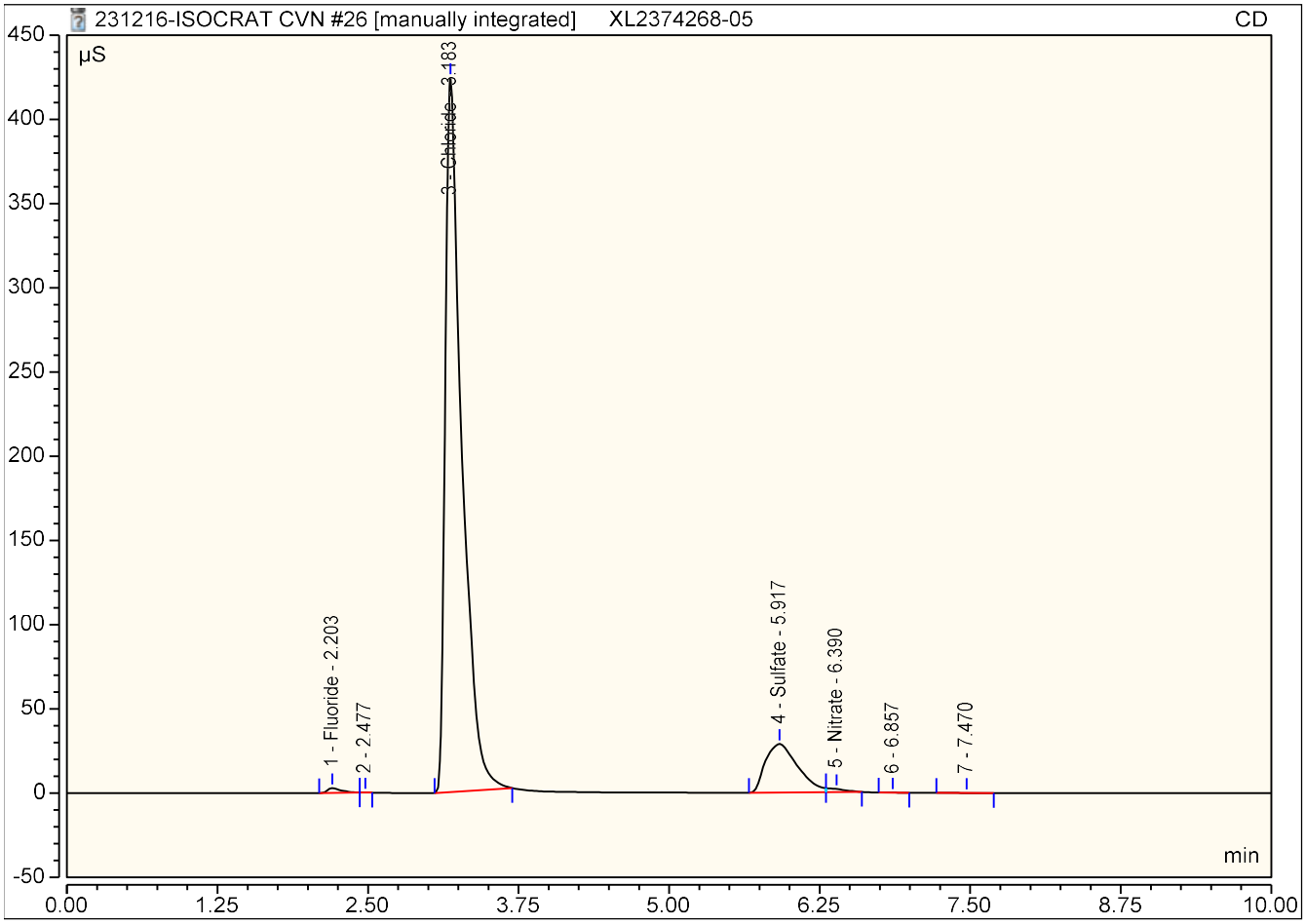
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.15	**Fluoride**	BMB	0.590	1.679	0.9838
2	6.01	**Sulfate**	BMB	0.002	0.009	0.2954
TOTAL:				0.59	1.69	1.28



Peak Integration Report

Sample Name:	**XL2374268-05**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 12:10**	*Run Time:*	**10.00**

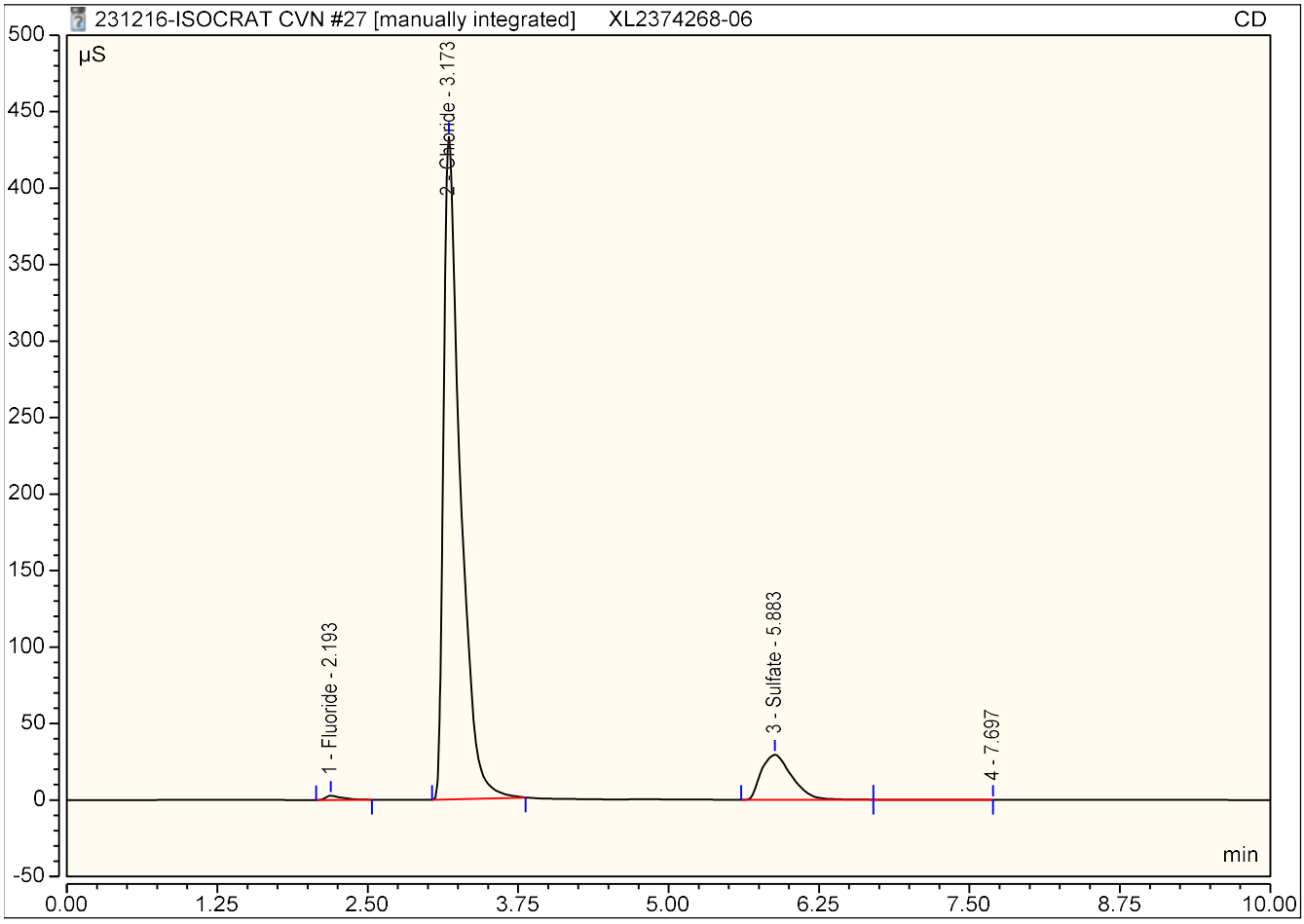
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.20	**Fluoride**	BMB	0.372	2.859	0.6371
3	3.18	**Chloride**	BMB*	67.566	423.899	148.6920
4	5.92	**Sulfate**	BM *	8.991	28.898	28.8767
5	6.39	**Nitrate**	MB*	0.356	1.830	0.3308
TOTAL:				77.29	457.49	178.54



Peak Integration Report

Sample Name:	**XL2374268-06**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 12:23**	*Run Time:*	**10.00**

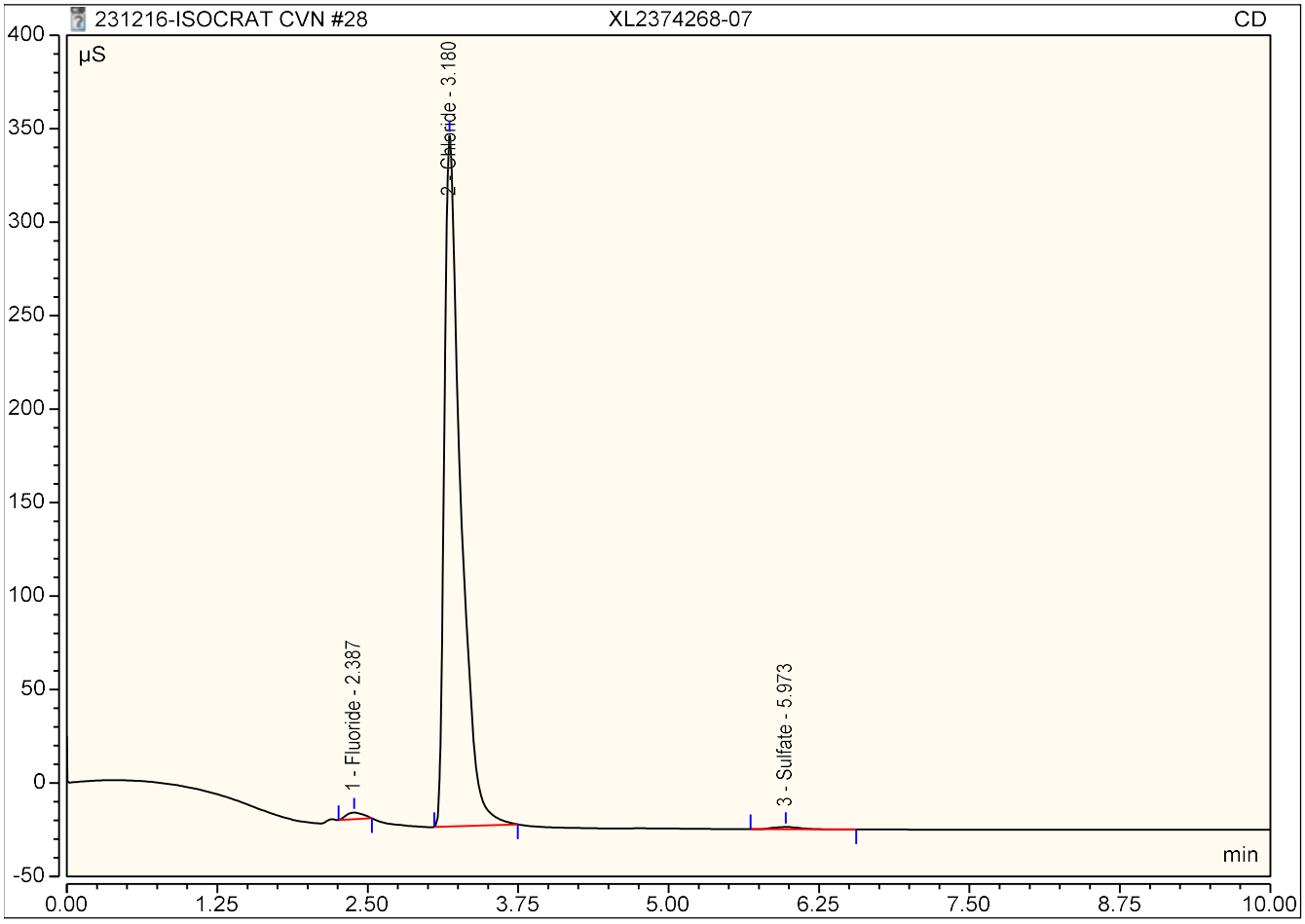
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.19	**Fluoride**	BMB	0.429	2.759	0.7273
2	3.17	**Chloride**	BMB*	69.914	433.213	153.8523
3	5.88	**Sulfate**	BMb*	8.633	29.510	27.7363
TOTAL:				78.98	465.48	182.32



Peak Integration Report

Sample Name:	**XL2374268-07**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 12:35**	*Run Time:*	**10.00**

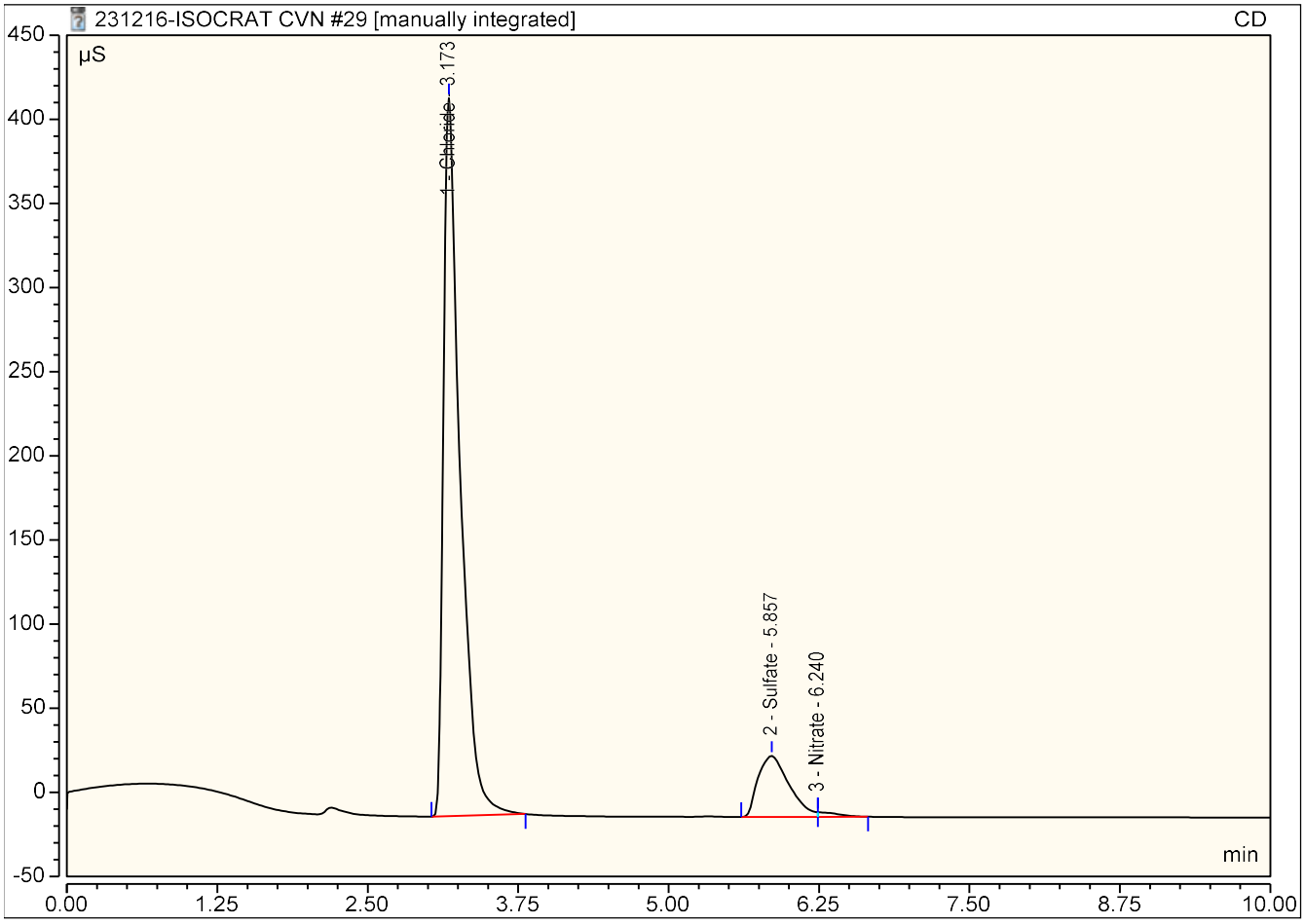
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.39	**Fluoride**	BMB	0.572	3.480	0.9552
2	3.18	**Chloride**	BMB	58.069	369.557	127.8152
3	5.97	**Sulfate**	BMB	0.343	1.235	1.3784
TOTAL:				58.98	374.27	130.15



Peak Integration Report

Sample Name:	**XL2374268-01 MS**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 12:47**	*Run Time:*	**10.00**

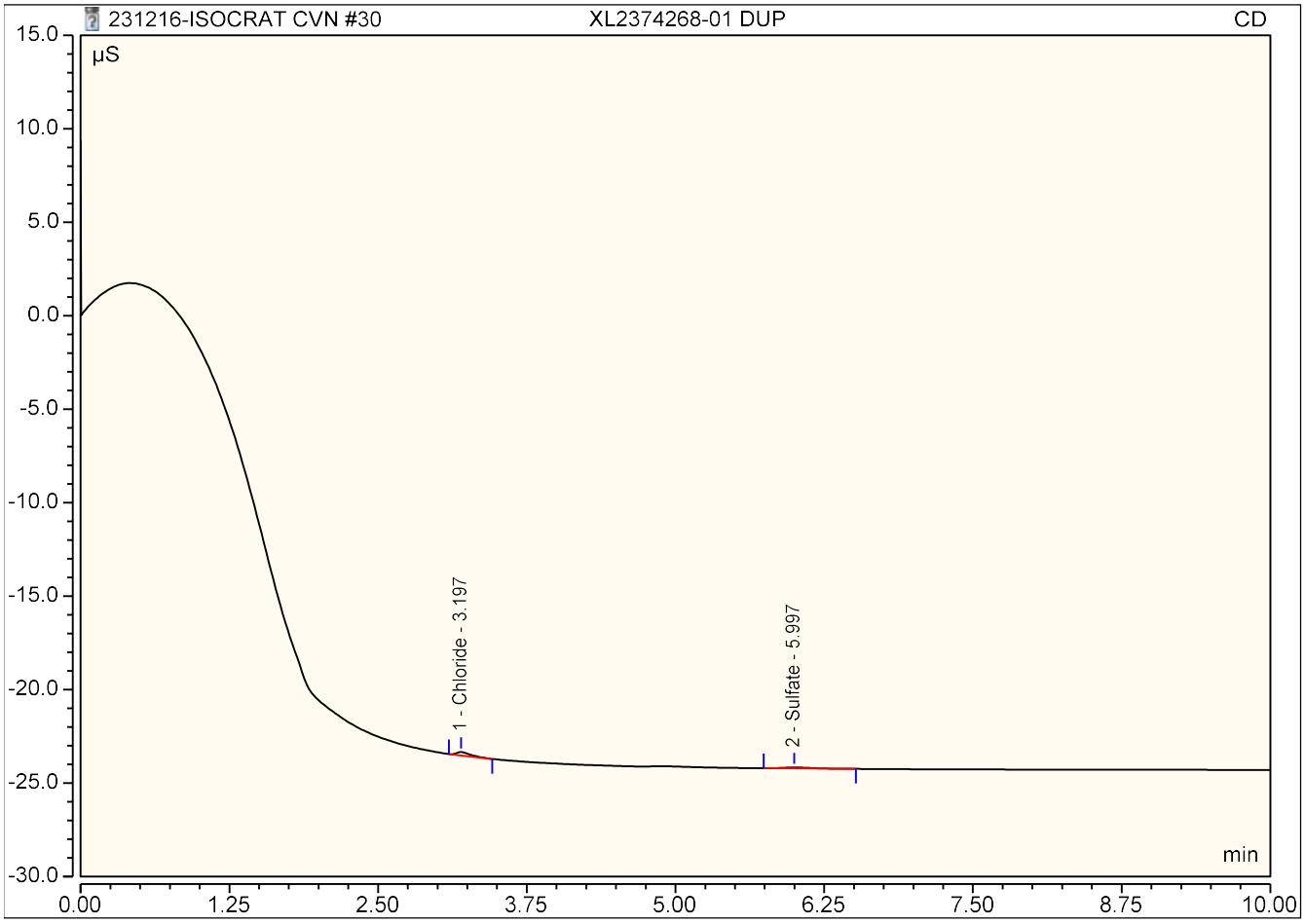
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	3.17	**Chloride**	BMB*	68.597	426.700	150.9578
2	5.86	**Sulfate**	BM *	10.821	36.299	34.6941
3	6.24	**Nitrate**	MB*	0.526	2.772	0.4478
TOTAL:				79.94	465.77	186.10



Peak Integration Report

Sample Name:	**XL2374268-01 DUP**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 12:59**	*Run Time:*	**10.00**

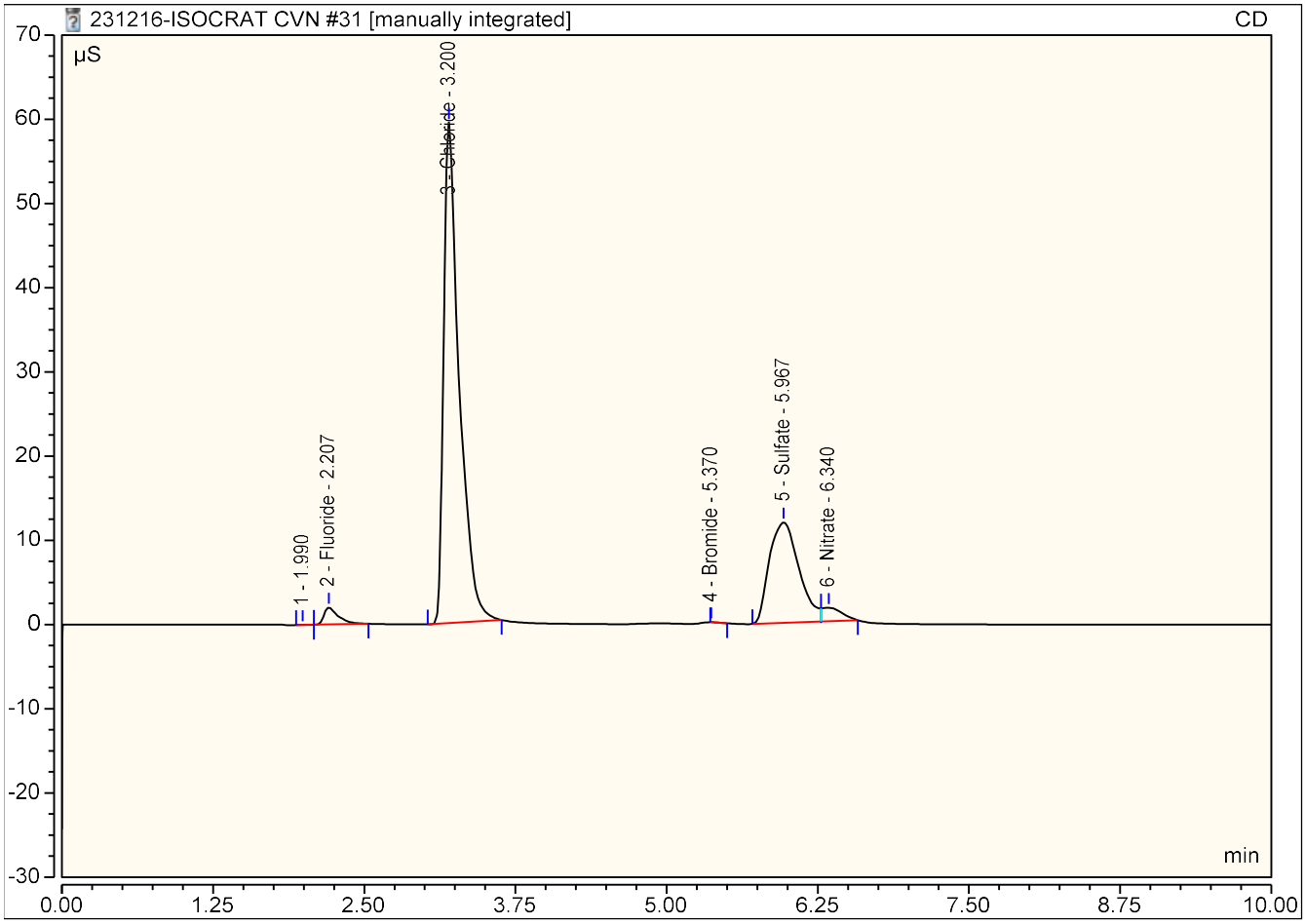
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	3.20	**Chloride**	BMB	0.025	0.182	0.2339
2	6.00	**Sulfate**	BMB	0.014	0.049	0.3334
TOTAL:				0.04	0.23	0.57



Peak Integration Report

Sample Name:	**XL2374268-01 MS; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 13:11**	*Run Time:*	**10.00**

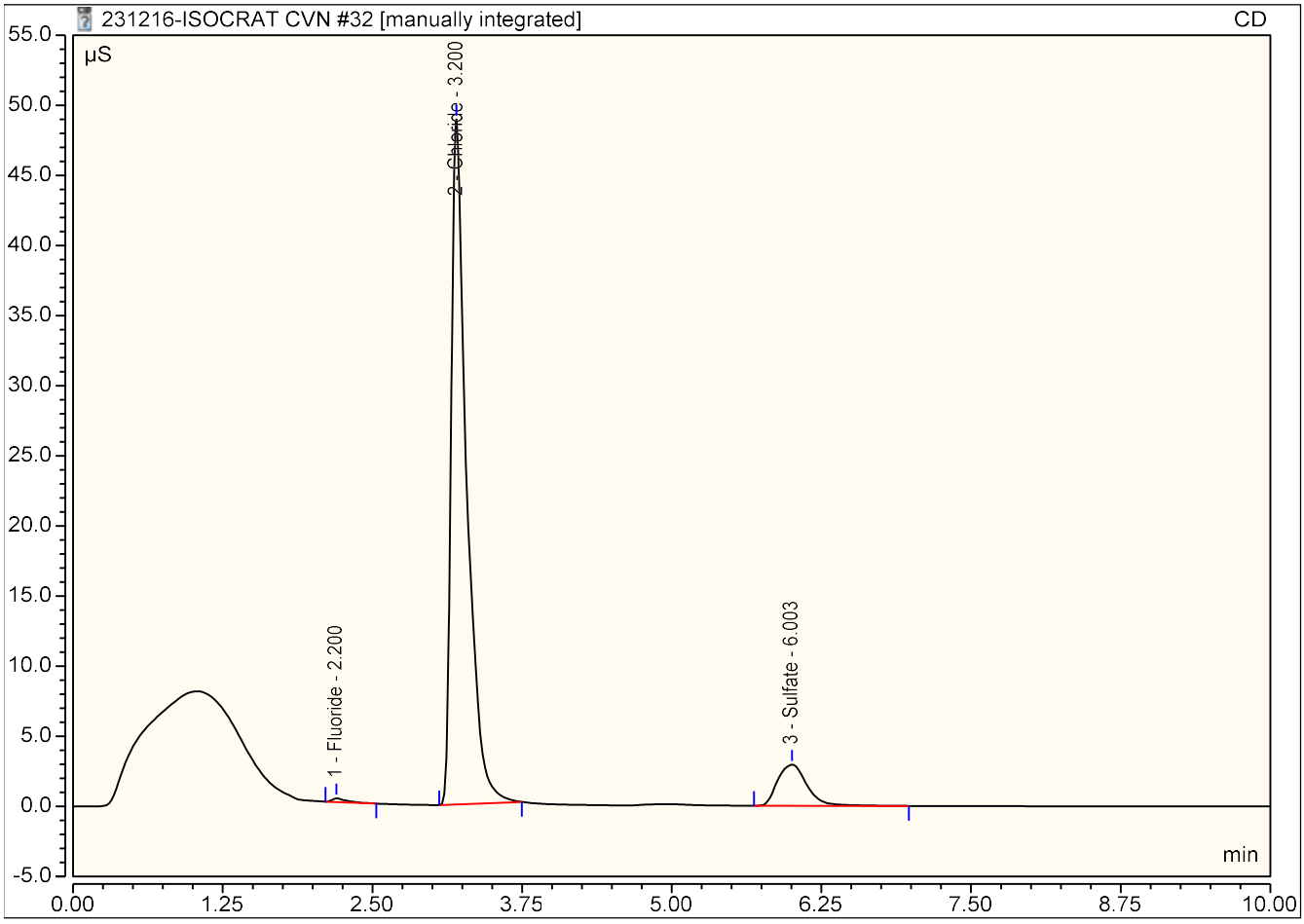
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.21	**Fluoride**	BMB	0.276	2.022	4.8481
3	3.20	**Chloride**	BMB*	8.841	59.439	196.1093
4	5.37	**Bromide**	BMB	0.002	0.011	0.6686
5	5.97	**Sulfate**	BM *	3.381	11.921	110.4015
6	6.34	**Nitrate**	MB*	0.300	1.590	2.9248
TOTAL:				12.80	74.98	314.95



Peak Integration Report

Sample Name:	**XL2374268-01 DUP; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 13:23**	*Run Time:*	**10.00**

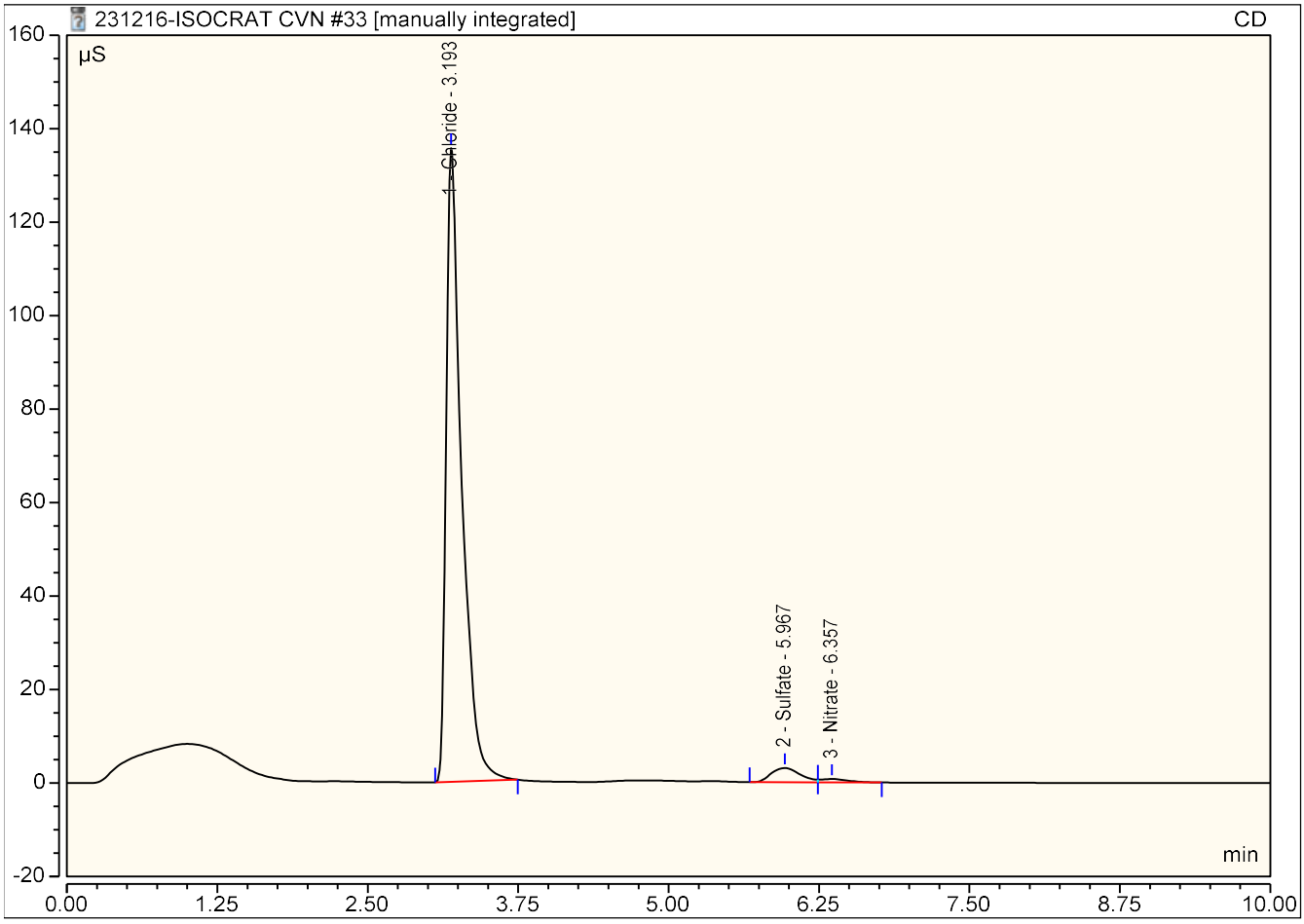
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.20	**Fluoride**	BMB	0.036	0.265	1.0511
2	3.20	**Chloride**	BMB	7.334	48.850	162.9969
3	6.00	**Sulfate**	BMB*	0.839	2.940	29.5545
TOTAL:				8.21	52.05	193.60



Peak Integration Report

Sample Name:	**XL2373375-01 BR CL SO4; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 13:35**	*Run Time:*	**10.00**

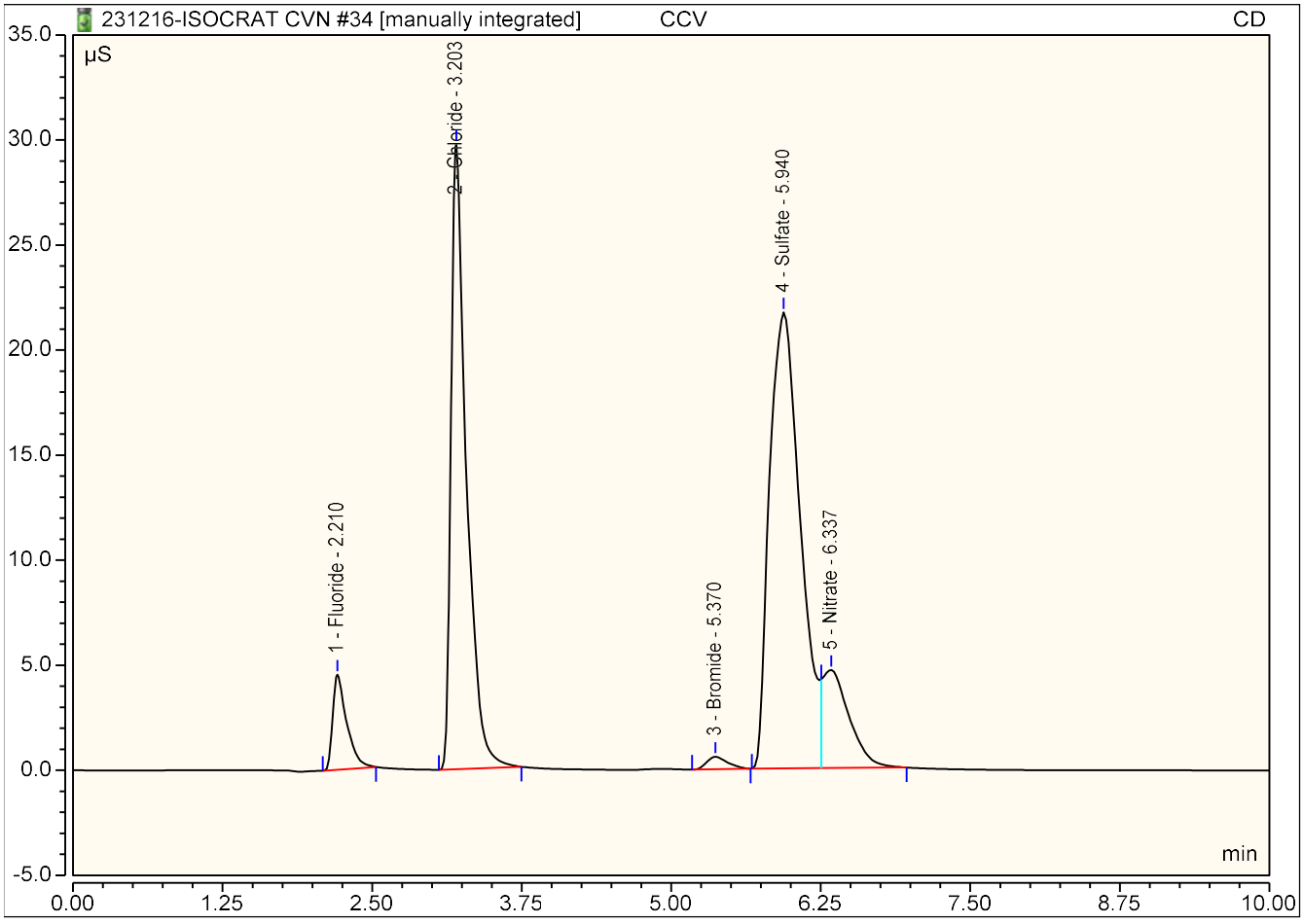
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	3.19	**Chloride**	BMB	20.310	135.600	448.2073
2	5.97	**Sulfate**	BM *	0.849	3.036	29.8833
3	6.36	**Nitrate**	MB*	0.188	0.718	2.1578
TOTAL:				21.35	139.35	480.25



Peak Integration Report

Sample Name:	**CCV**	*Inj. Vol.:*	**25.00**
Injection Type:	**Check Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 13:47**	*Run Time:*	**10.00**

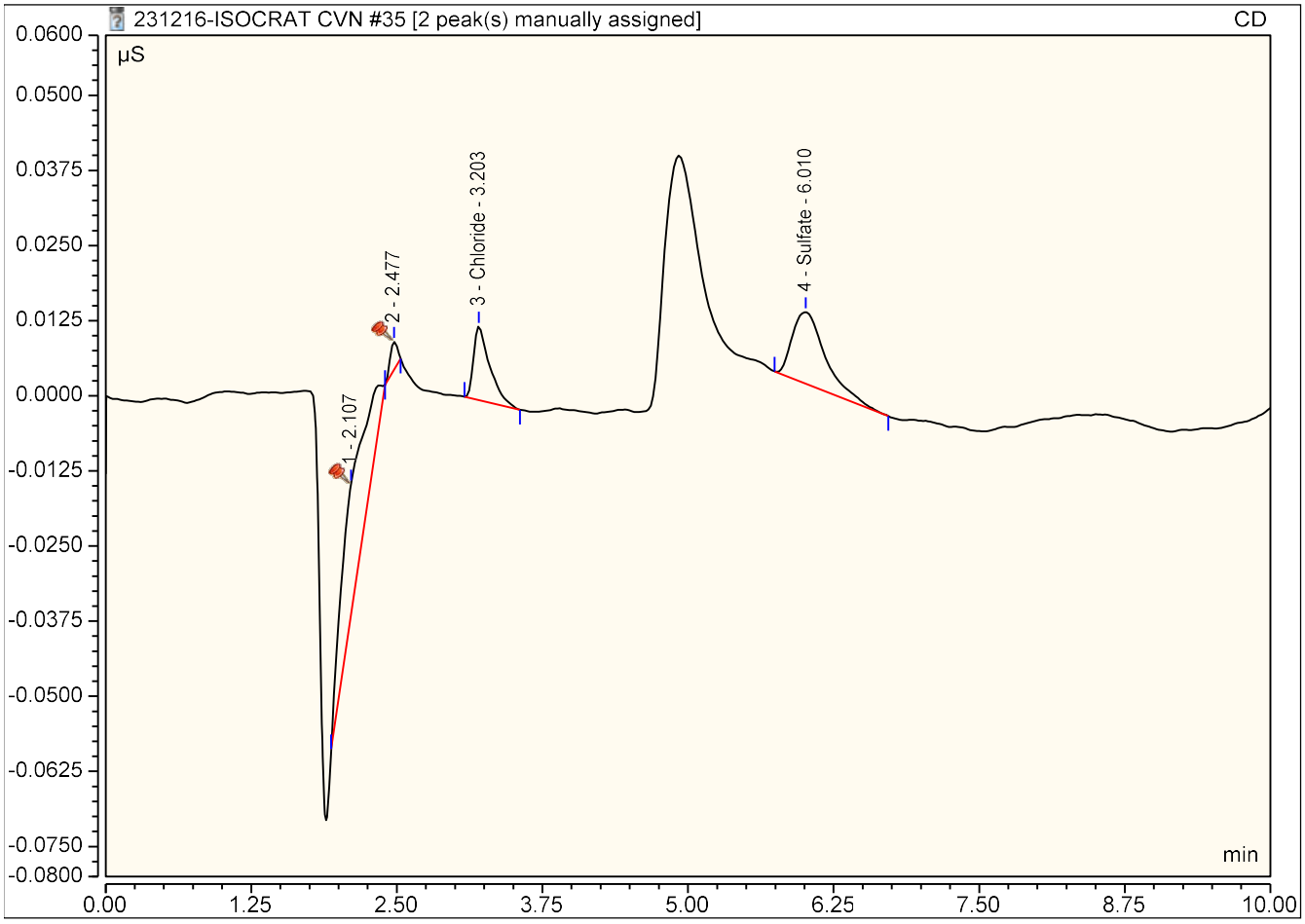
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.21	**Fluoride**	BMB	0.613	4.519	1.0191
2	3.20	**Chloride**	BMB	4.426	29.758	9.9080
3	5.37	**Bromide**	BMB*	0.121	0.595	0.9707
4	5.94	**Sulfate**	BM *	6.477	21.698	20.8832
5	6.34	**Nitrate**	MB*	1.204	4.664	0.9139
TOTAL:				12.84	61.23	33.69



Peak Integration Report

Sample Name:	**CCB**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 14:04**	*Run Time:*	**10.00**

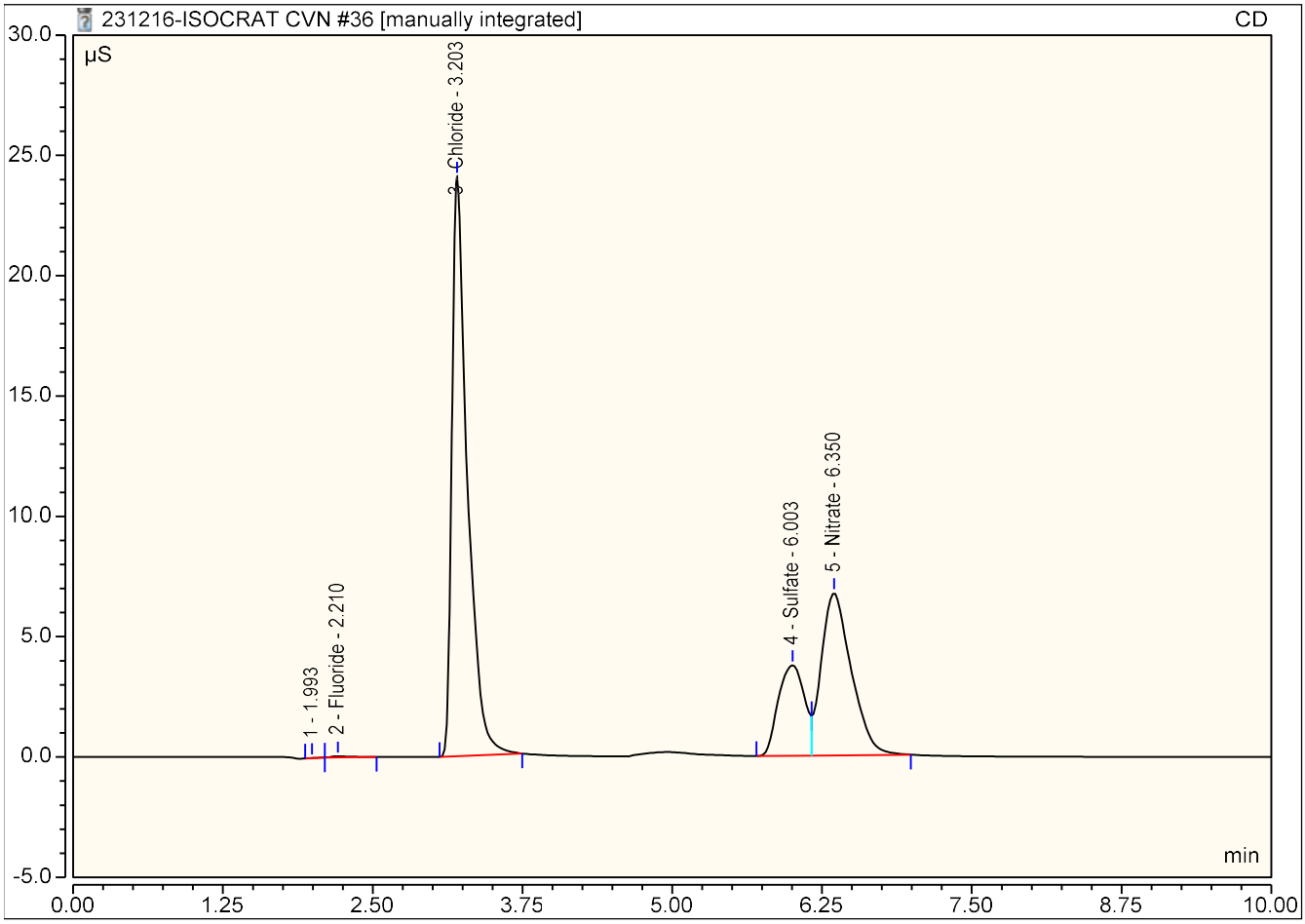
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
3	3.20	**Chloride**	BMB	0.002	0.012	0.1835
4	6.01	**Sulfate**	BMB	0.004	0.012	0.3011
TOTAL:				0.01	0.02	0.48



Peak Integration Report

Sample Name:	**XL2373375-02; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 14:16**	*Run Time:*	**10.00**

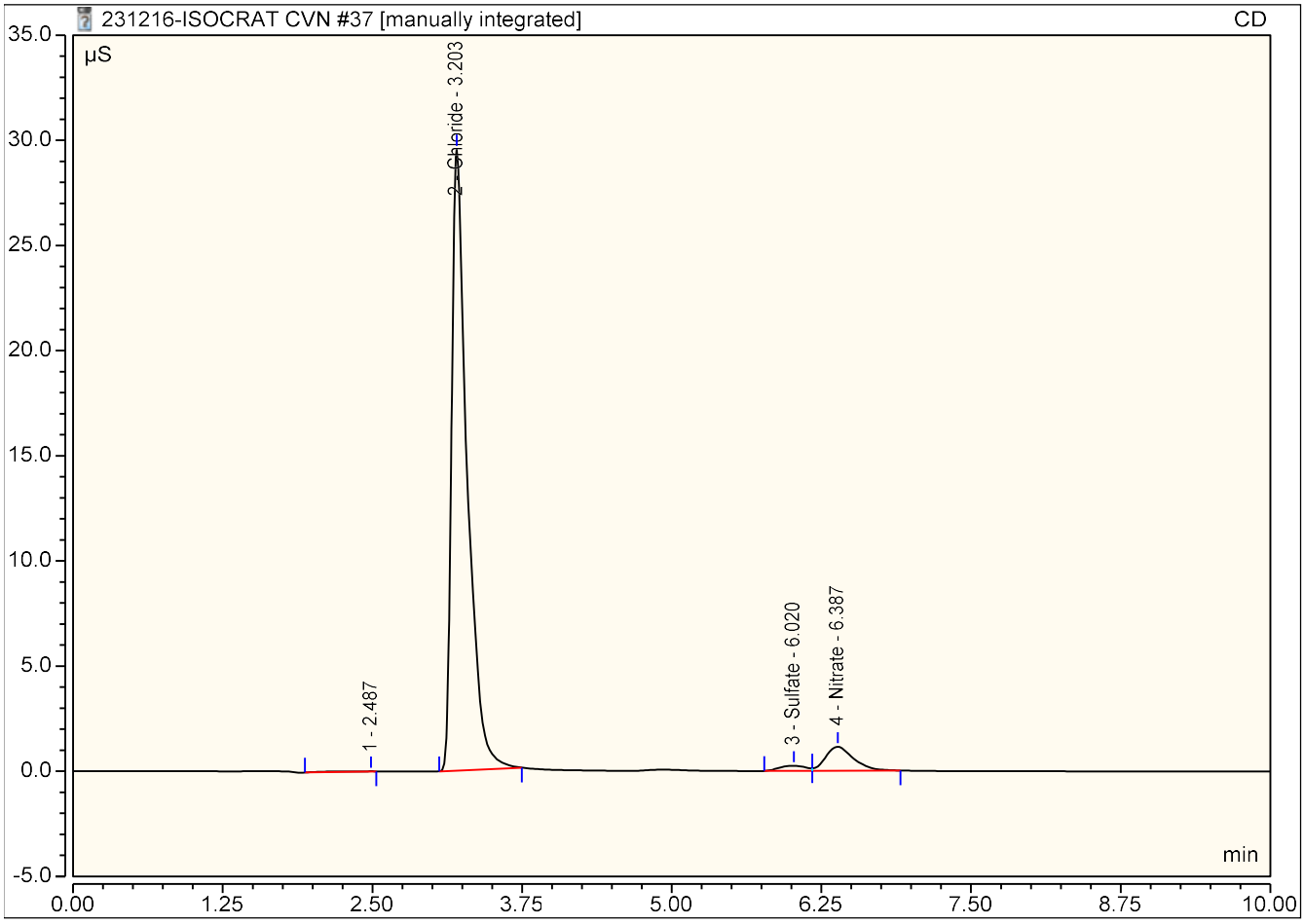
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.21	**Fluoride**	BMB	0.008	0.047	0.6058
3	3.20	**Chloride**	BMB	3.611	24.094	81.1582
4	6.00	**Sulfate**	BM *	0.951	3.768	33.1297
5	6.35	**Nitrate**	MB*	1.948	6.750	14.2501
TOTAL:				6.52	34.66	129.14



Peak Integration Report

Sample Name:	**XL2373375-03; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 14:28**	*Run Time:*	**10.00**

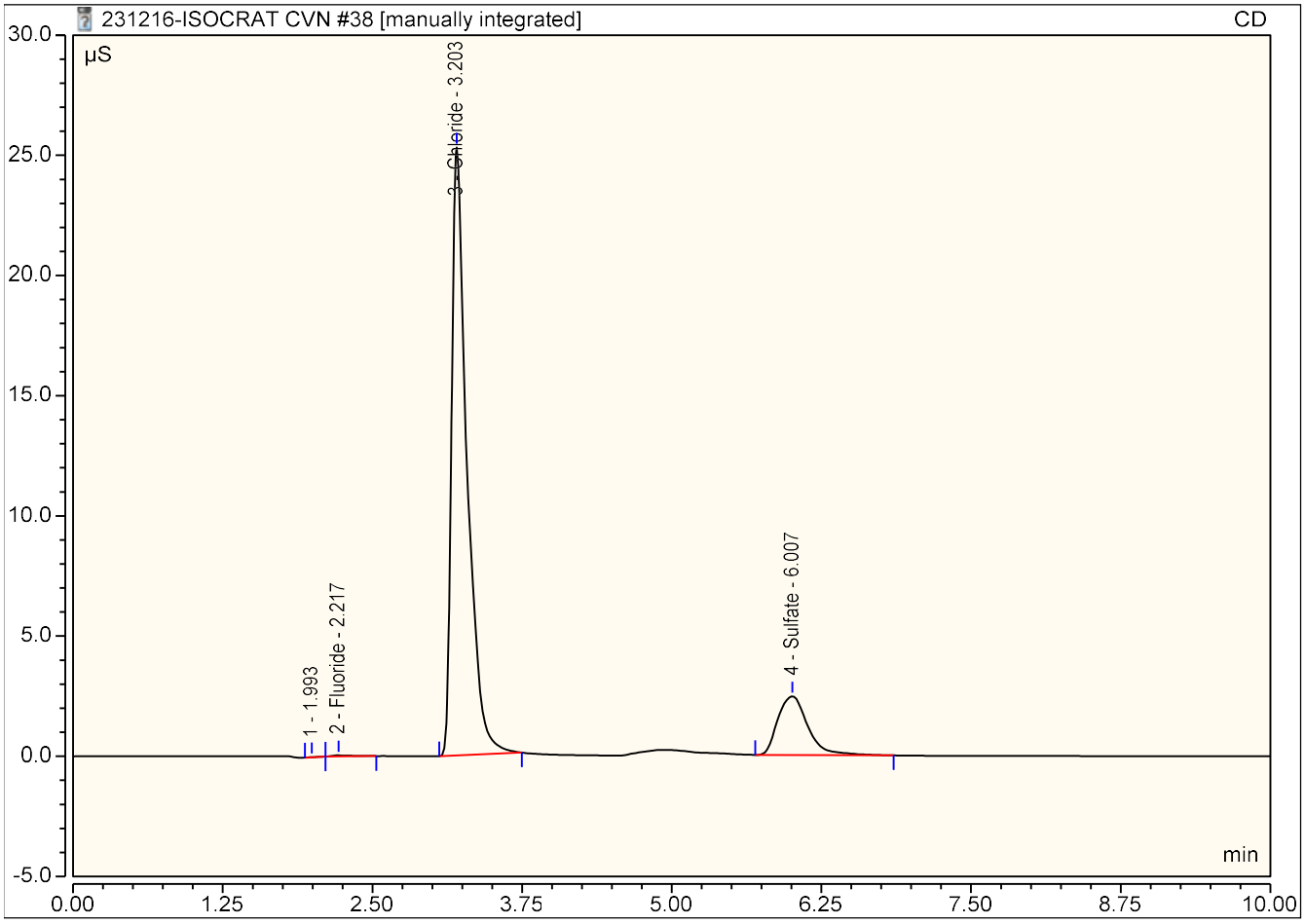
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	3.20	**Chloride**	BMB	4.463	29.531	99.8894
3	6.02	**Sulfate**	BM *	0.061	0.244	4.8361
4	6.39	**Nitrate**	MB*	0.306	1.139	2.9674
TOTAL:				4.83	30.91	107.69



Peak Integration Report

Sample Name:	**XL2373375-04; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 14:40**	*Run Time:*	**10.00**

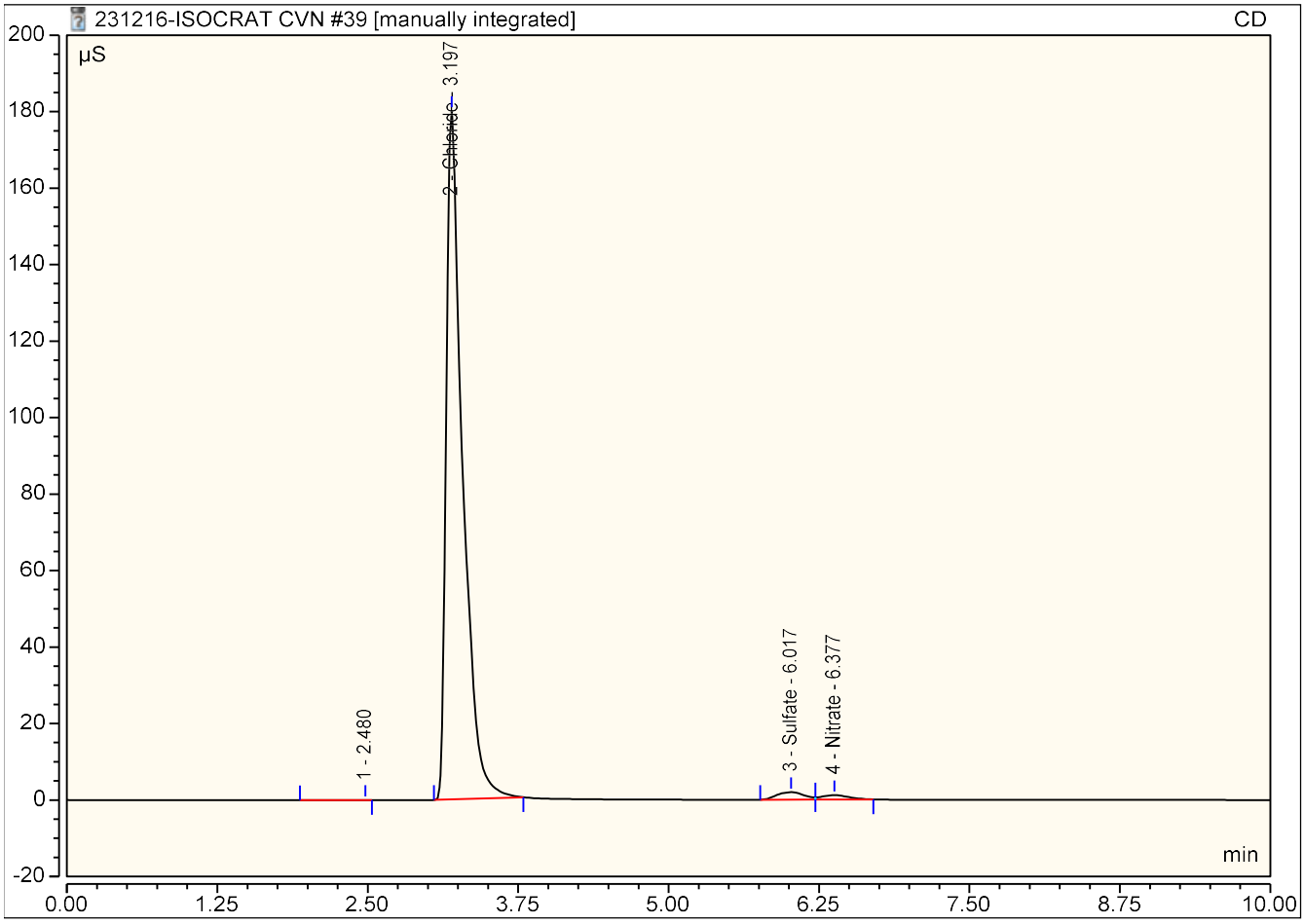
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.22	**Fluoride**	BMB	0.008	0.044	0.6075
3	3.20	**Chloride**	BMB	3.779	25.293	84.8558
4	6.01	**Sulfate**	BMB*	0.708	2.441	25.4115
TOTAL:				4.50	27.78	110.87



Peak Integration Report

Sample Name:	**XL2373375-05; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 14:52**	*Run Time:*	**10.00**

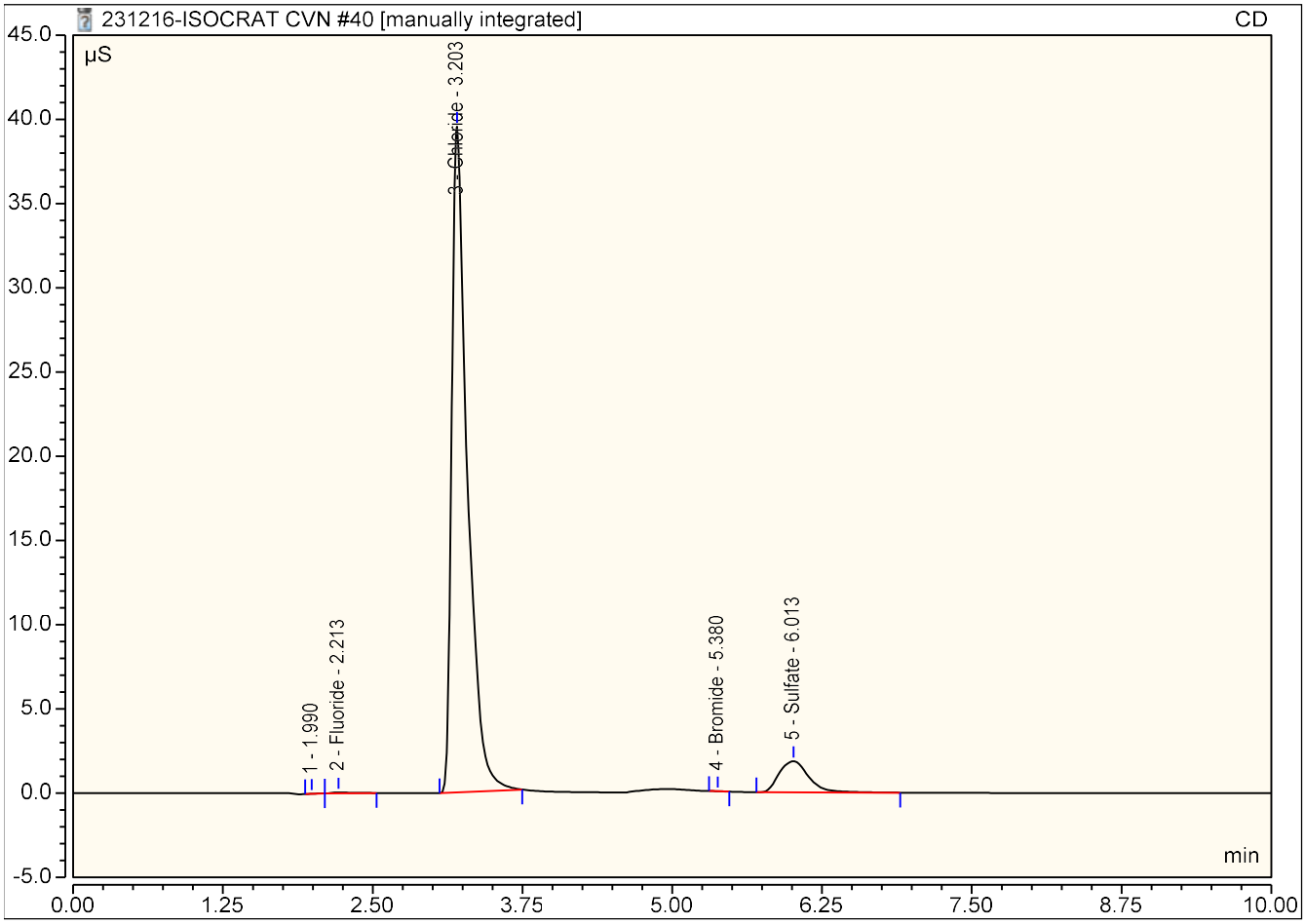
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	3.20	**Chloride**	BMB*	28.457	180.030	627.2914
3	6.02	**Sulfate**	BM *	0.514	1.957	19.2396
4	6.38	**Nitrate**	MB*	0.299	1.149	2.9206
TOTAL:				29.27	183.14	649.45



Peak Integration Report

Sample Name:	**XL2373375-06; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 15:04**	*Run Time:*	**10.00**

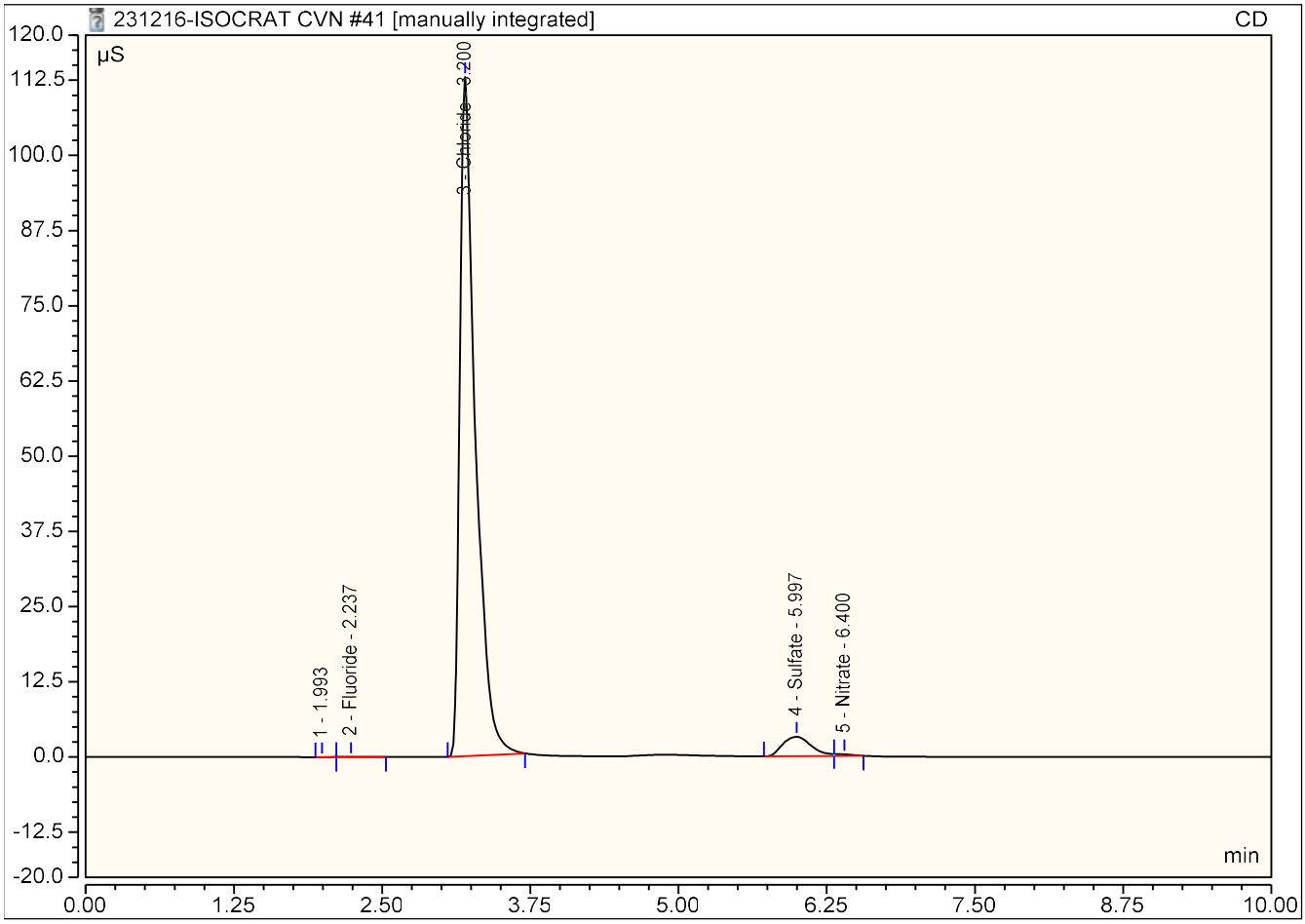
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.21	**Fluoride**	BMB	0.009	0.051	0.6219
3	3.20	**Chloride**	BMB	5.973	39.522	133.0703
4	5.38	**Bromide**	BMB*	0.001	0.007	0.5943
5	6.01	**Sulfate**	BMB*	0.533	1.854	19.8197
TOTAL:				6.52	41.43	154.11



Peak Integration Report

Sample Name:	**XL2373375-07; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 15:17**	*Run Time:*	**10.00**

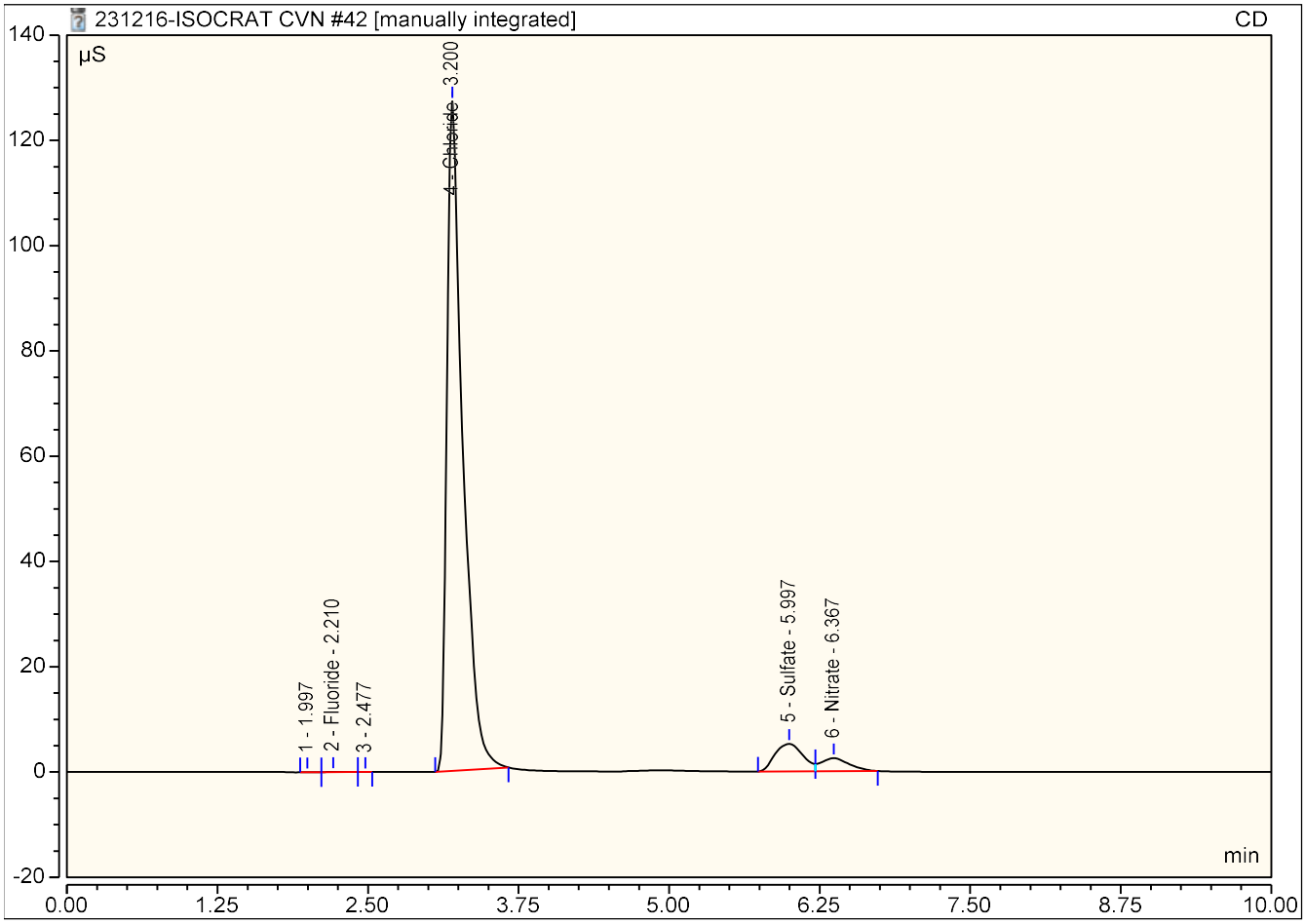
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.24	**Fluoride**	BMB	0.005	0.021	0.5476
3	3.20	**Chloride**	BMB*	17.144	112.910	378.6110
4	6.00	**Sulfate**	BM *	0.902	3.239	31.5763
5	6.40	**Nitrate**	MB*	0.047	0.269	1.1857
TOTAL:				18.10	116.44	411.92



Peak Integration Report

Sample Name:	**XL2373375-08; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 15:29**	*Run Time:*	**10.00**

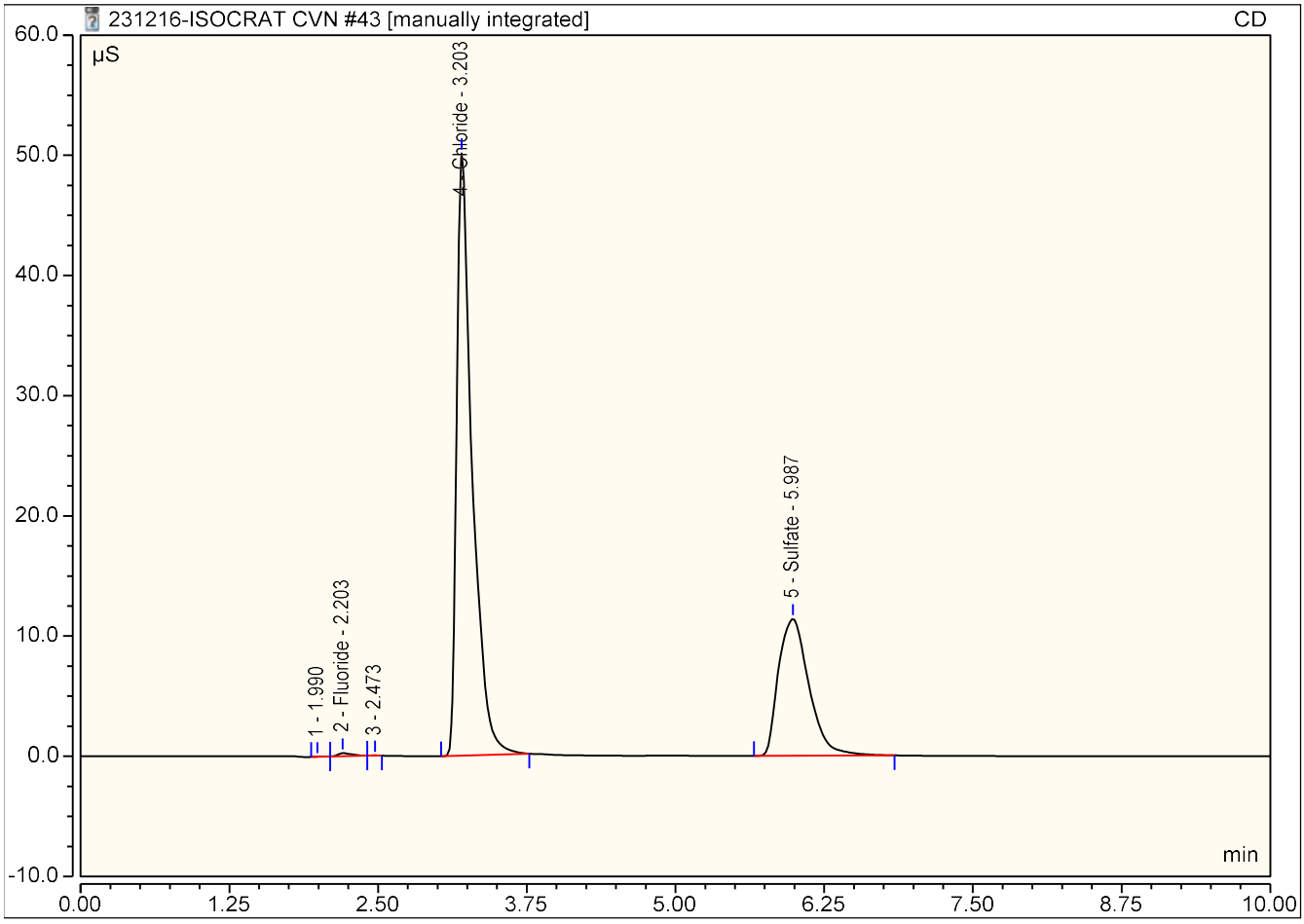
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.21	**Fluoride**	BMB	0.003	0.018	0.5202
4	3.20	**Chloride**	BMB*	19.508	127.176	430.5855
5	6.00	**Sulfate**	BM *	1.411	5.252	47.7341
6	6.37	**Nitrate**	MB*	0.671	2.474	5.4717
TOTAL:				21.59	134.92	484.31



Peak Integration Report

Sample Name:	**L2373148-01 CL SO4; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 15:41**	*Run Time:*	**10.00**

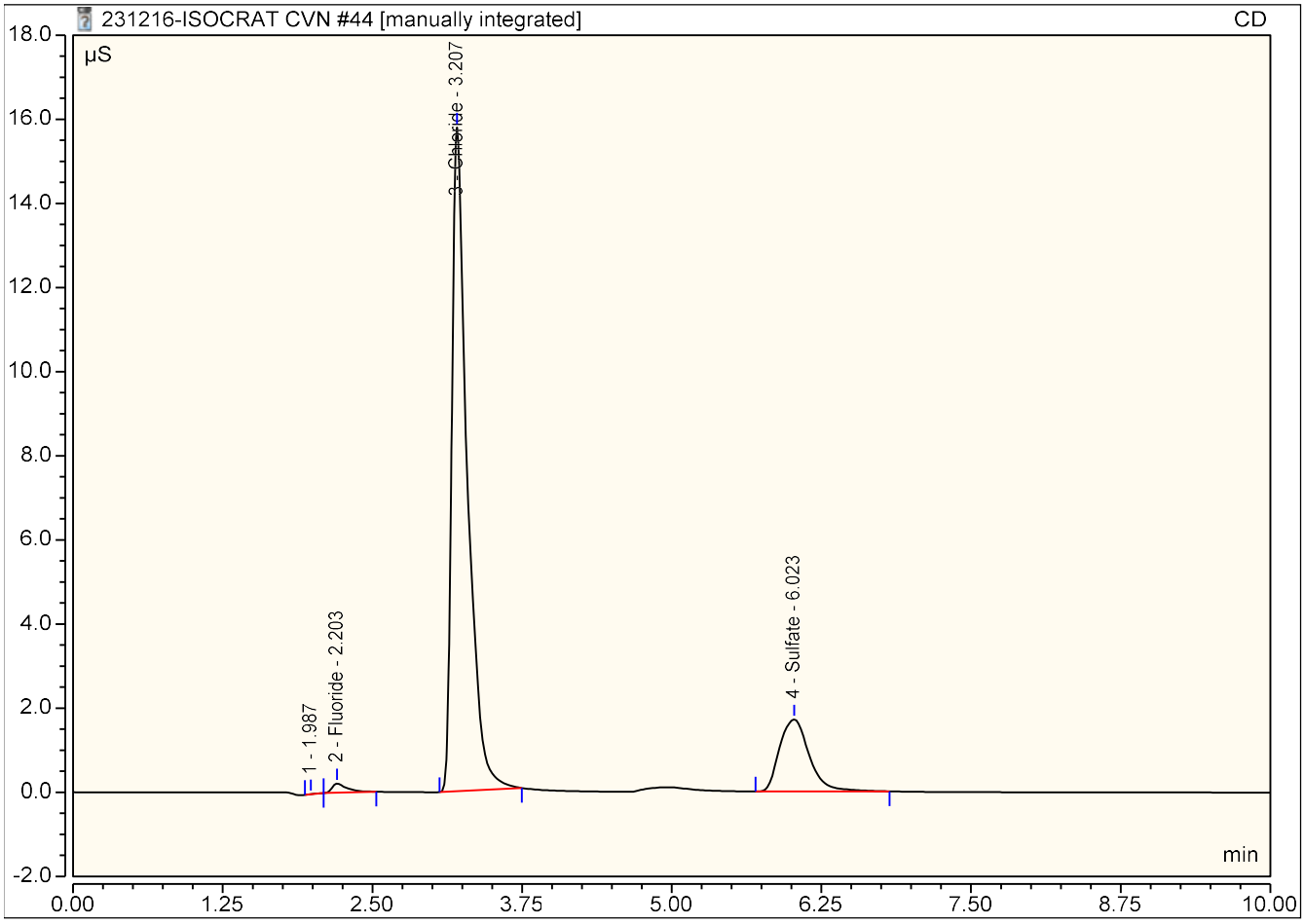
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.20	**Fluoride**	BMB	0.033	0.265	1.0018
4	3.20	**Chloride**	BMB*	7.598	50.122	168.7921
5	5.99	**Sulfate**	BMB*	3.381	11.409	110.3760
TOTAL:				11.01	61.80	280.17



Peak Integration Report

Sample Name:	**L2373148-02; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 15:53**	*Run Time:*	**10.00**

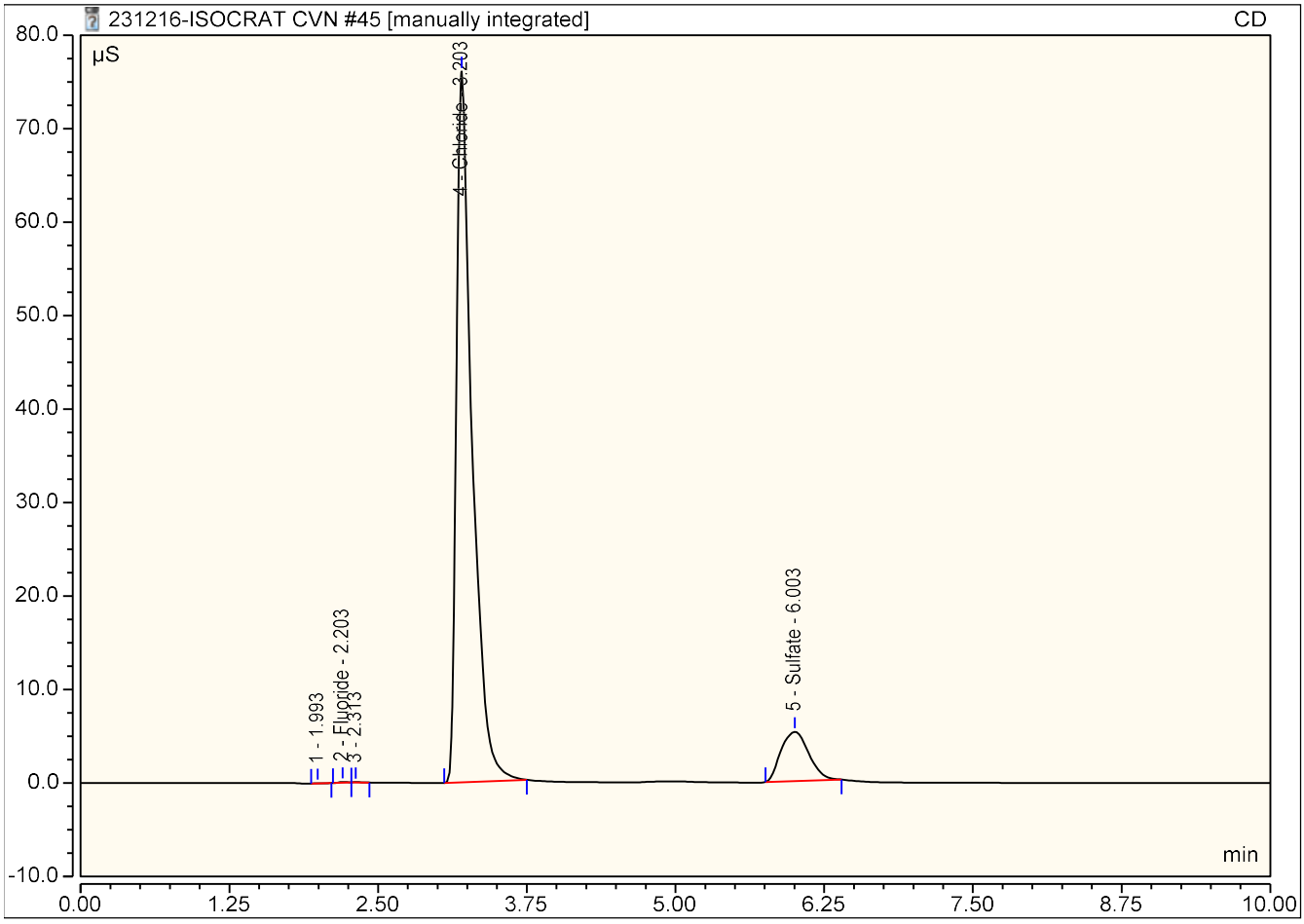
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.20	**Fluoride**	BMB	0.032	0.221	0.9804
3	3.21	**Chloride**	BMB	2.368	15.777	53.8296
4	6.02	**Sulfate**	BMB*	0.493	1.713	18.5616
TOTAL:				2.89	17.71	73.37



Peak Integration Report

Sample Name:	**XL2373384-01 CL; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 16:05**	*Run Time:*	**10.00**

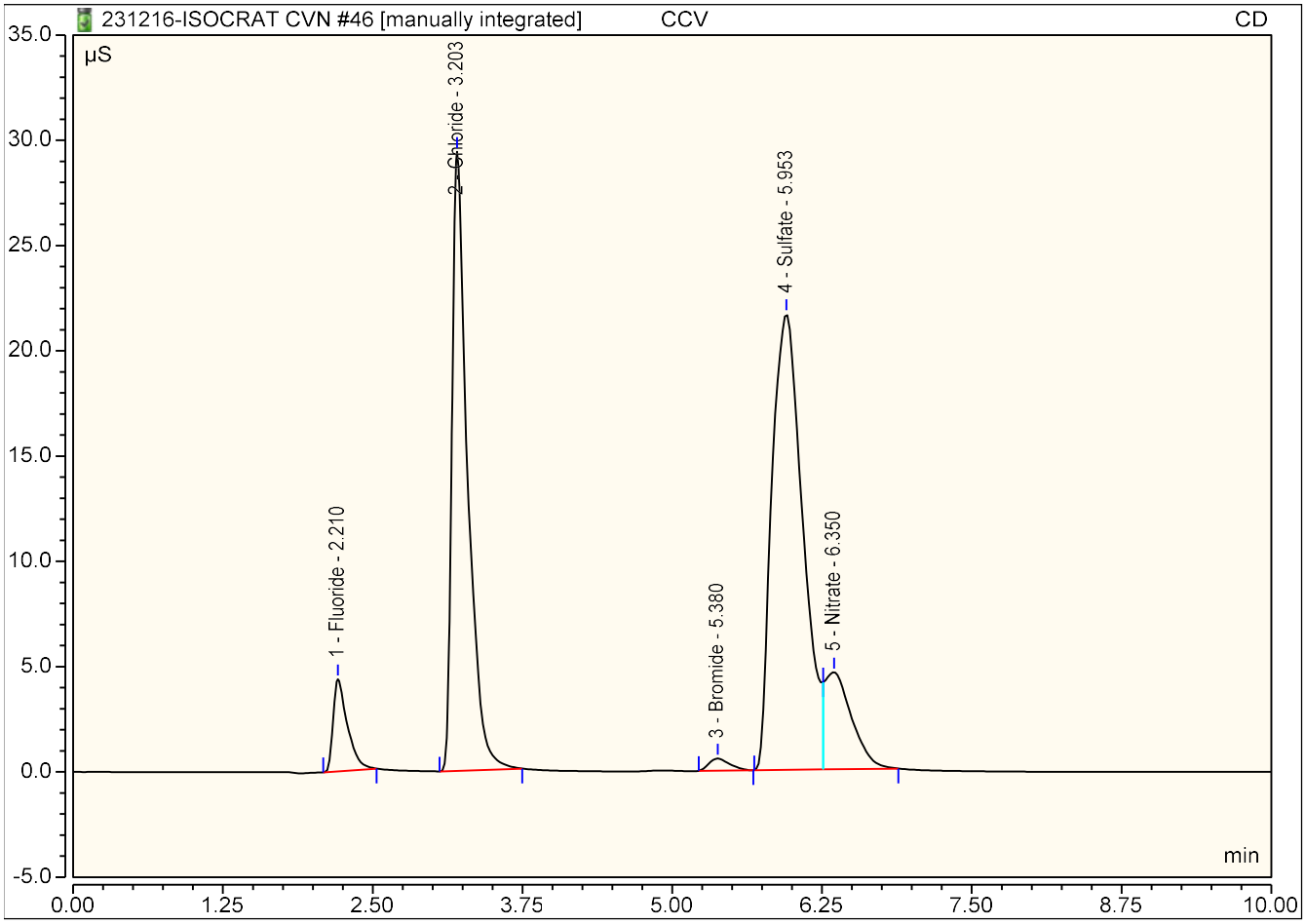
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.20	**Fluoride**	BMB	0.005	0.068	0.5591
4	3.20	**Chloride**	BMB*	11.665	76.030	258.1881
5	6.00	**Sulfate**	BMB*	1.429	5.270	48.3184
TOTAL:				13.10	81.37	307.07



Peak Integration Report

Sample Name:	**CCV**	*Inj. Vol.:*	**25.00**
Injection Type:	**Check Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 16:17**	*Run Time:*	**10.00**

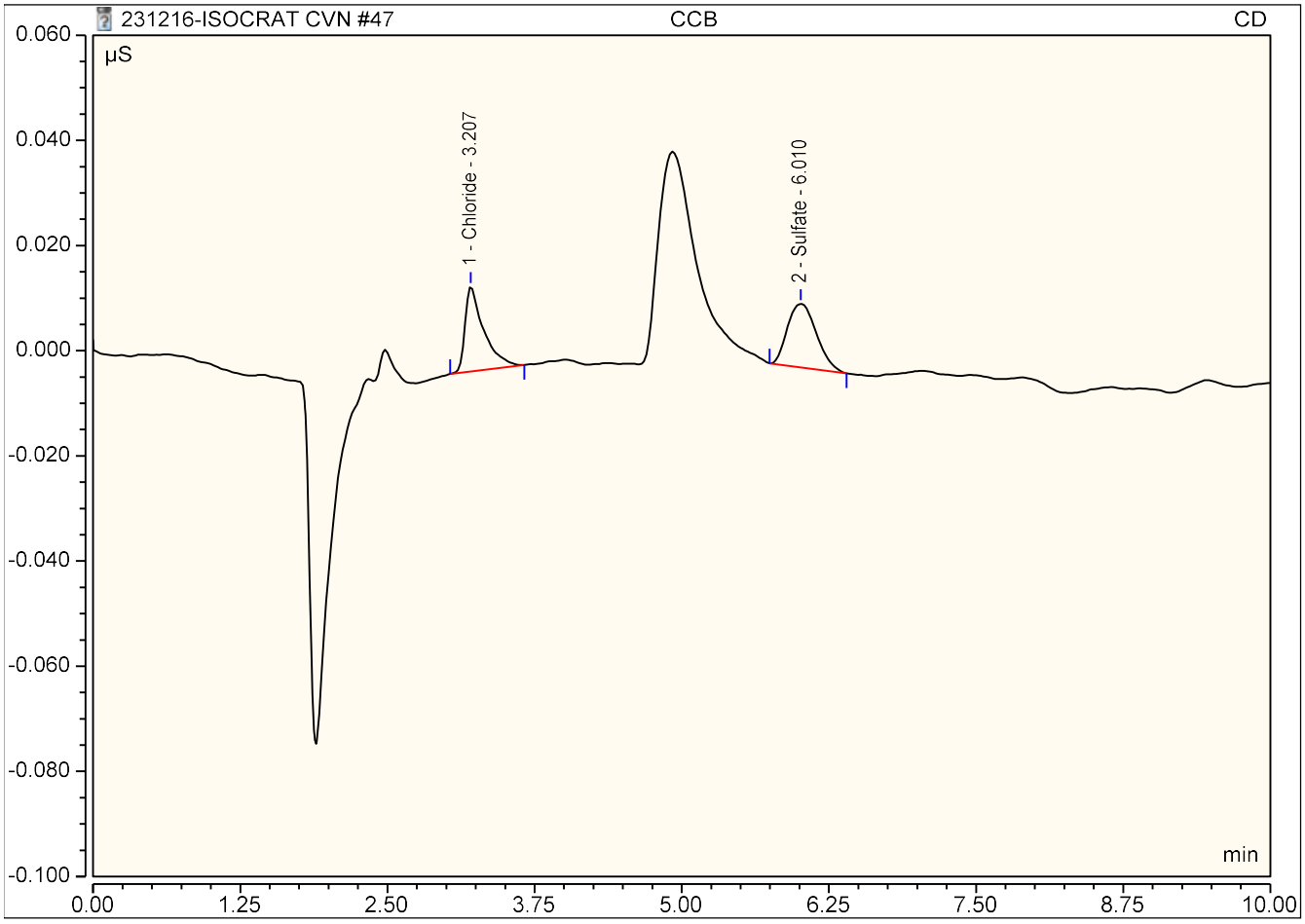
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.21	**Fluoride**	BMB	0.601	4.379	1.0004
2	3.20	**Chloride**	BMB	4.433	29.405	9.9219
3	5.38	**Bromide**	BMB*	0.116	0.578	0.9321
4	5.95	**Sulfate**	BM *	6.459	21.652	20.8260
5	6.35	**Nitrate**	MB*	1.197	4.609	0.9087
TOTAL:				12.81	60.62	33.59



Peak Integration Report

Sample Name:	**CCB**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 16:29**	*Run Time:*	**10.00**

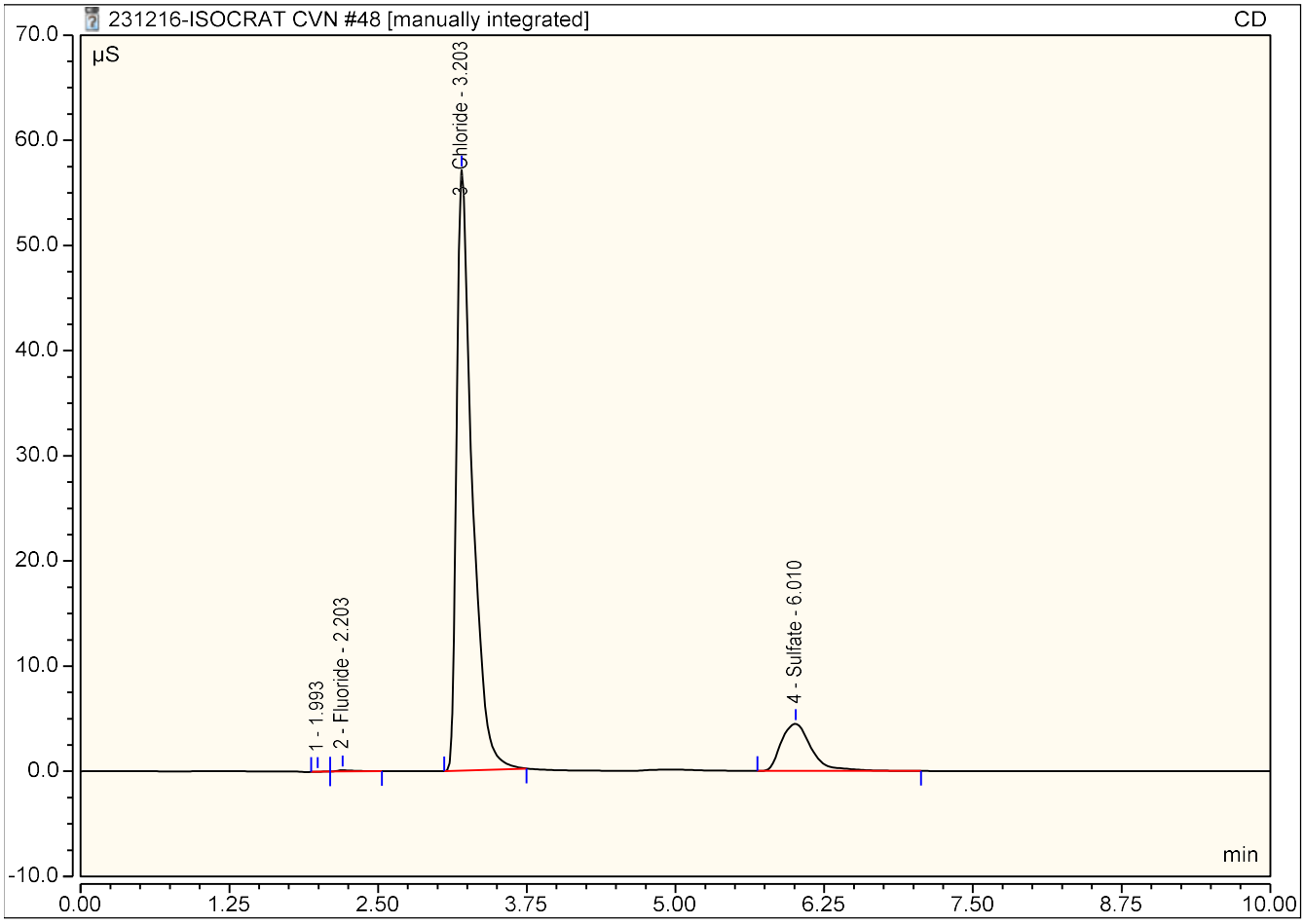
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	3.21	**Chloride**	BMB	0.003	0.016	0.1856
2	6.01	**Sulfate**	BMB	0.003	0.012	0.2996
TOTAL:				0.01	0.03	0.49



Peak Integration Report

Sample Name:	**XL2373384-02; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 16:41**	*Run Time:*	**10.00**

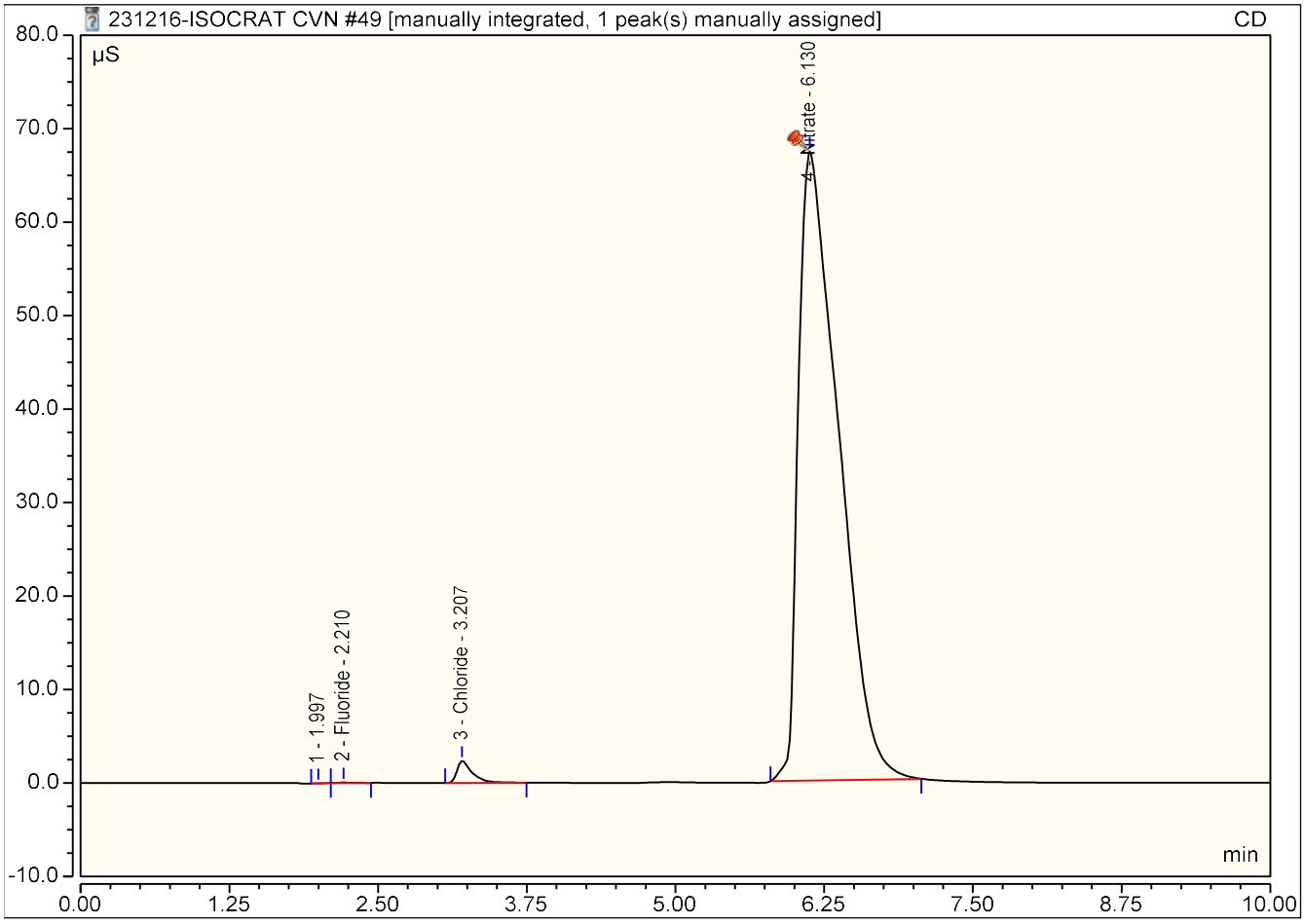
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.20	**Fluoride**	BMB	0.017	0.114	0.7521
3	3.20	**Chloride**	BMB	8.688	57.102	192.7634
4	6.01	**Sulfate**	BMB*	1.318	4.484	44.7857
TOTAL:				10.02	61.70	238.30



Peak Integration Report

Sample Name:	**L2371282-10 BR CL SO4**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 16:53**	*Run Time:*	**10.00**

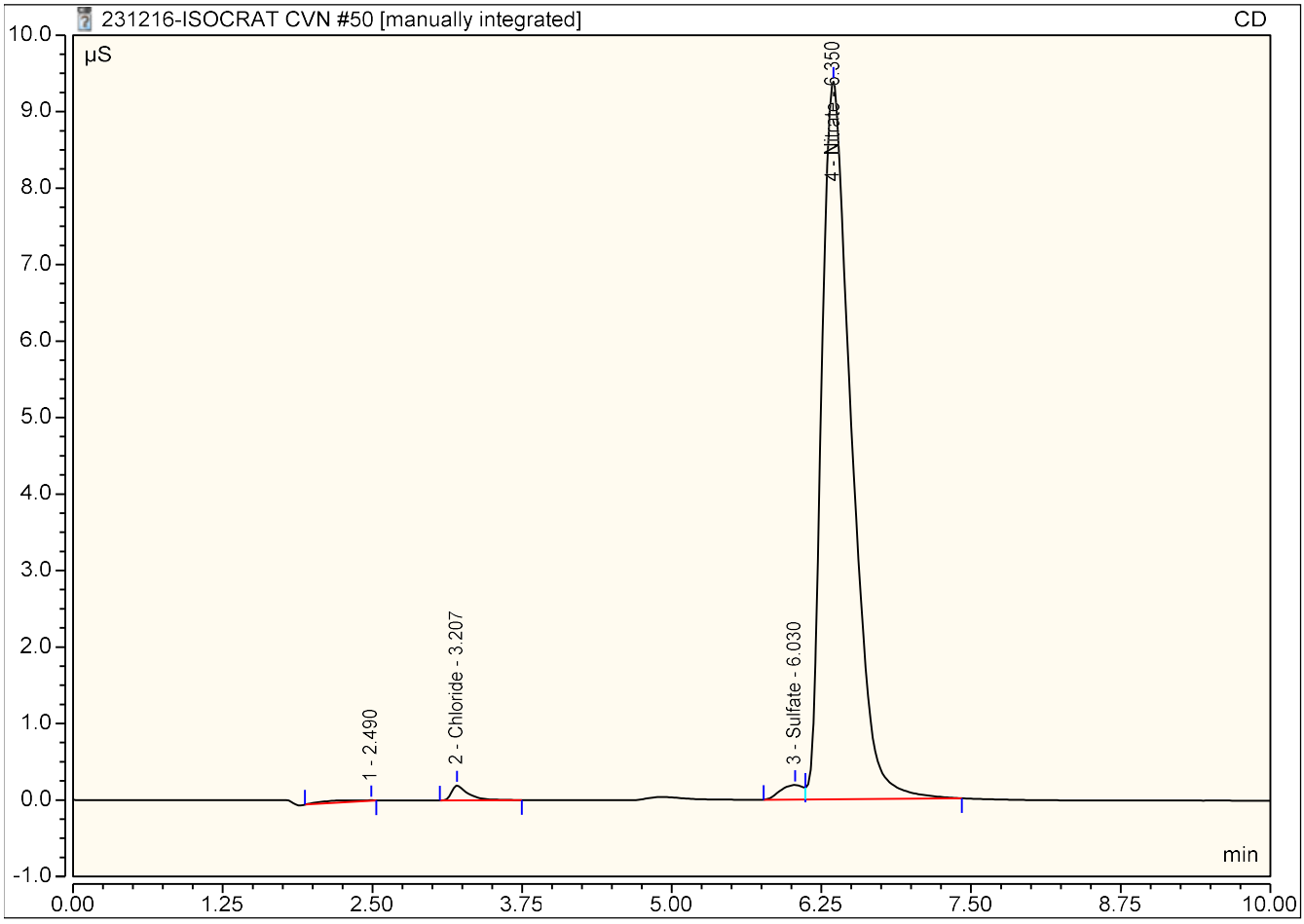
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.21	**Fluoride**	BMB	0.008	0.057	0.0604
3	3.21	**Chloride**	BMB	0.352	2.365	0.9523
4	6.13	**Nitrate**	BMB*^	26.226	67.309	18.1066
TOTAL:				26.59	69.73	19.12



Peak Integration Report

Sample Name:	**XL2371282-10; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 17:05**	*Run Time:*	**10.00**

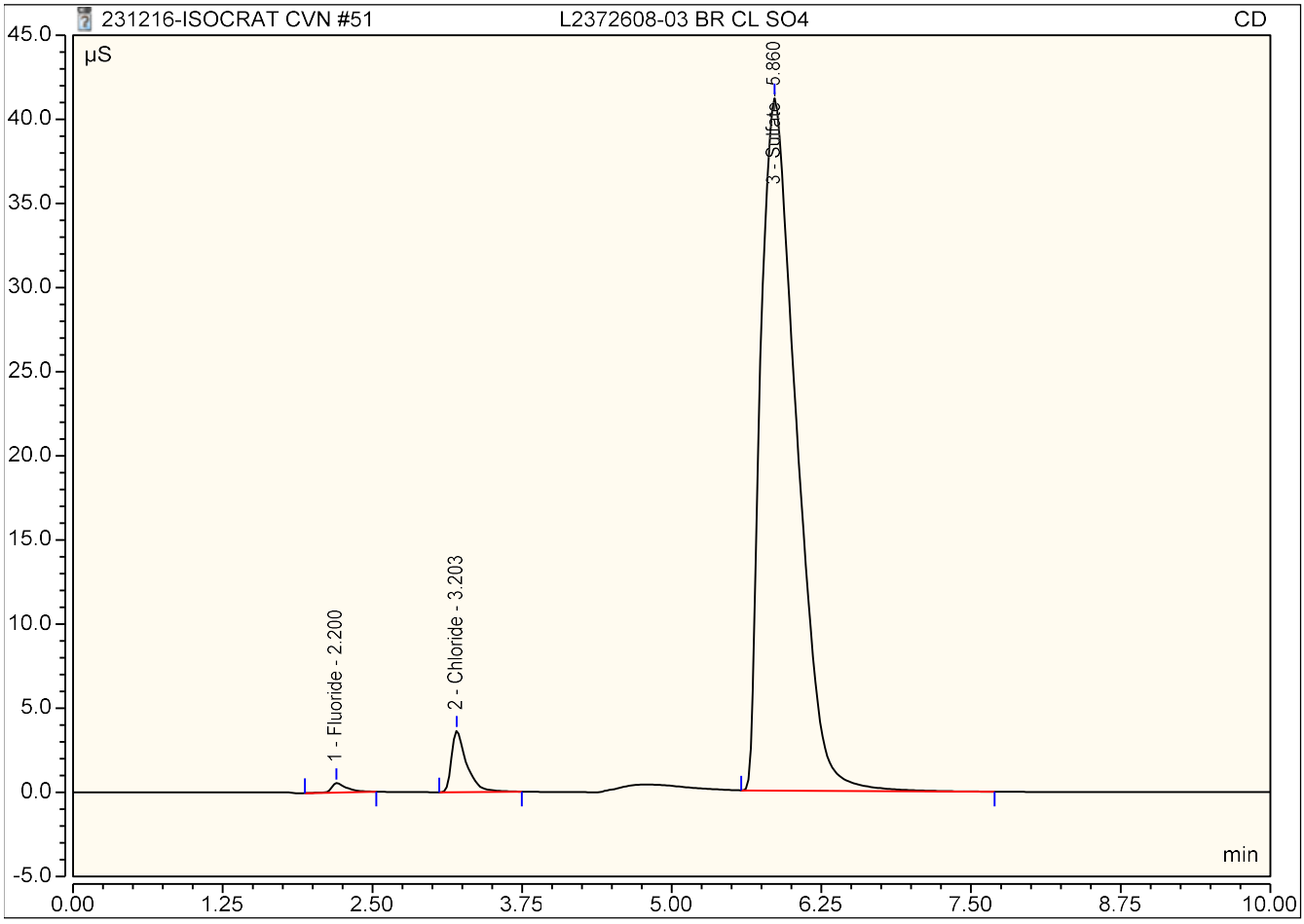
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	3.21	**Chloride**	BMB	0.031	0.194	2.4754
3	6.03	**Sulfate**	BM *	0.041	0.190	4.2027
4	6.35	**Nitrate**	MB*	2.679	9.382	19.2737
TOTAL:				2.75	9.77	25.95



Peak Integration Report

Sample Name:	**L2372608-03 BR CL SO4**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 17:17**	*Run Time:*	**10.00**

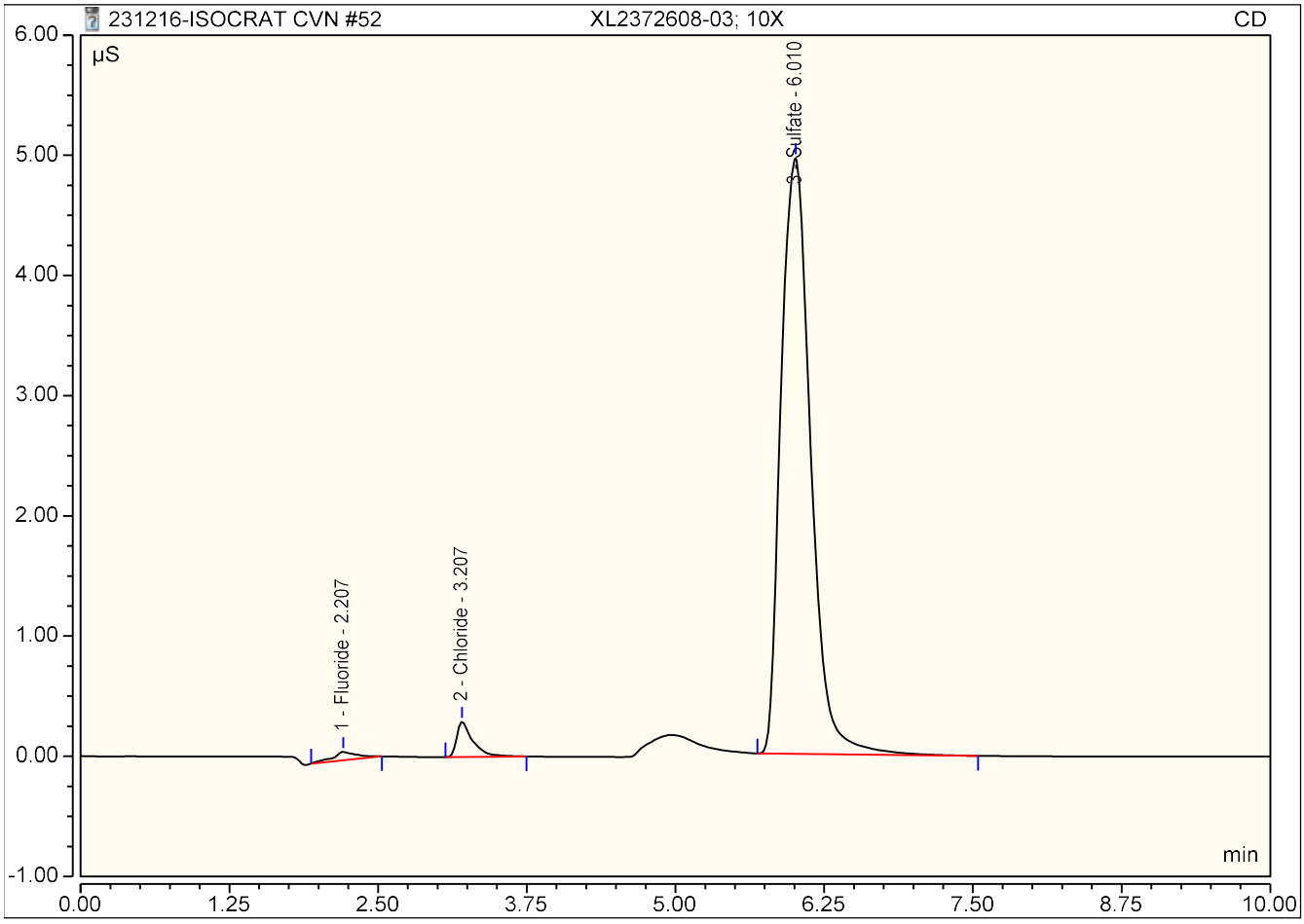
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.20	**Fluoride**	BMB	0.083	0.558	0.1788
2	3.20	**Chloride**	BMB	0.532	3.649	1.3485
3	5.86	**Sulfate**	BMB	14.146	41.142	45.2662
TOTAL:				14.76	45.35	46.79



Peak Integration Report

Sample Name:	**XL2372608-03; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 17:29**	*Run Time:*	**10.00**

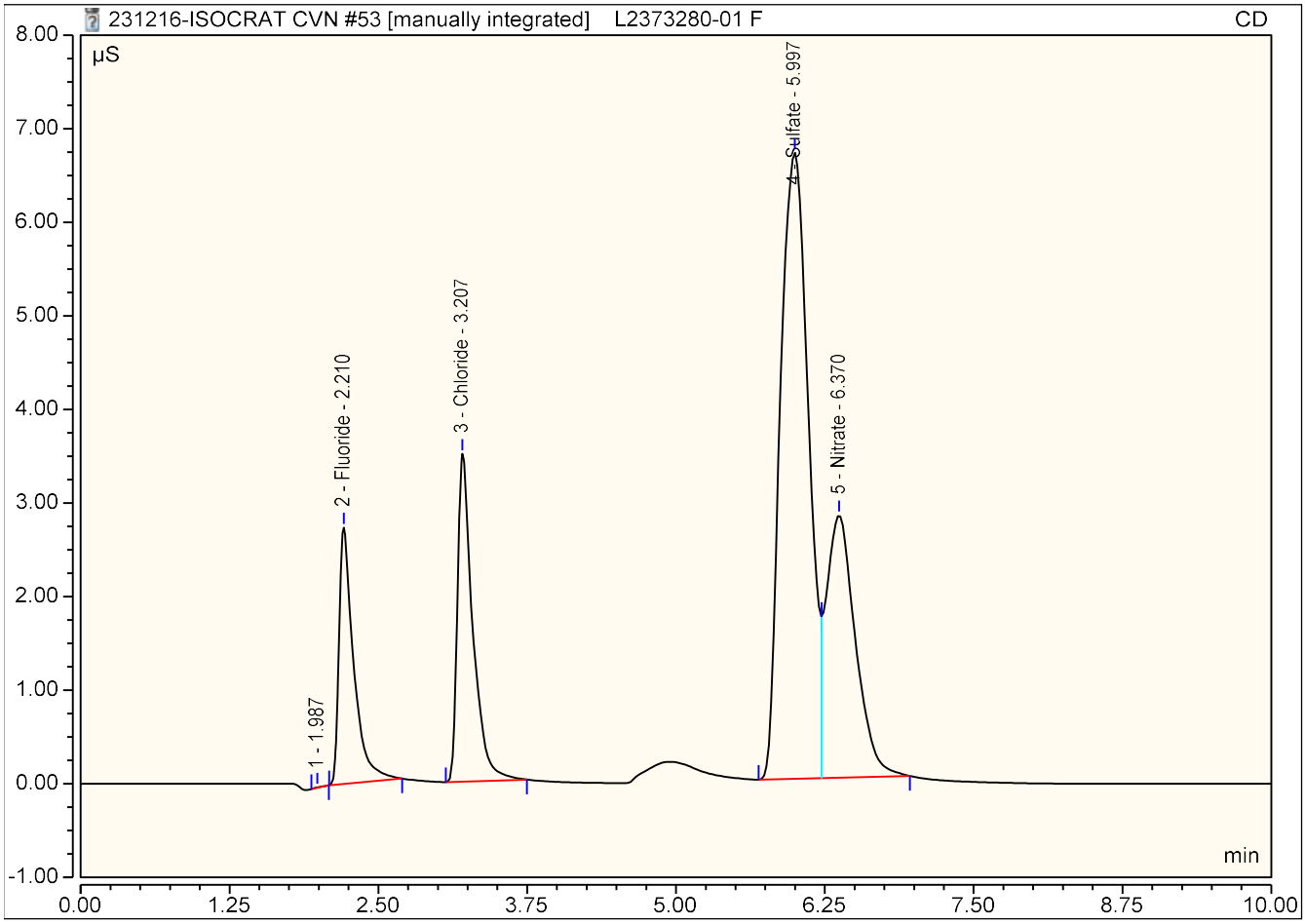
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.21	**Fluoride**	BMB	0.016	0.071	0.7348
2	3.21	**Chloride**	BMB	0.046	0.294	2.8105
3	6.01	**Sulfate**	BMB	1.435	4.958	48.5159
TOTAL:				1.50	5.32	52.06



Peak Integration Report

Sample Name:	**L2373280-01 F**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 17:42**	*Run Time:*	**10.00**

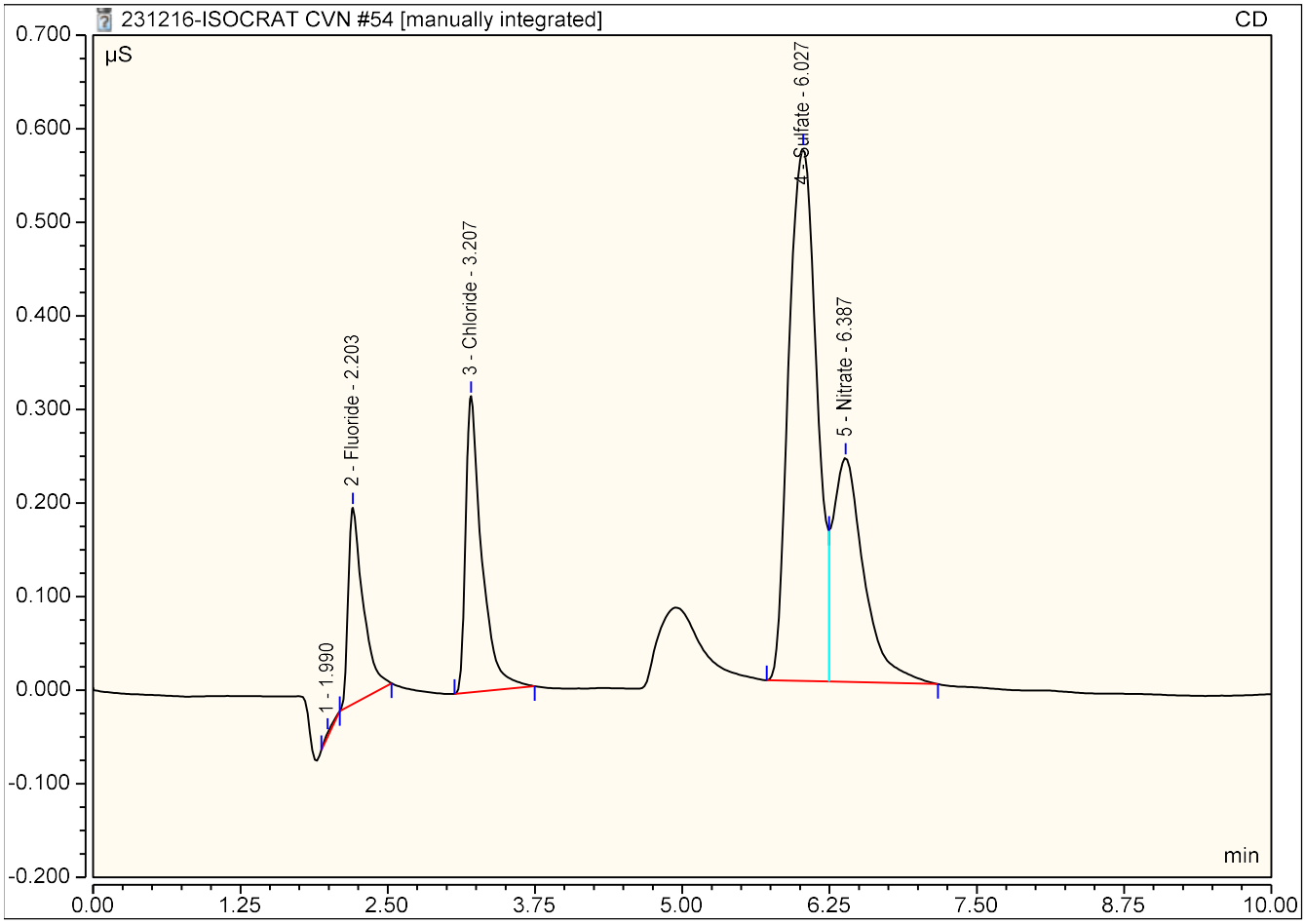
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.21	**Fluoride**	BMB*	0.392	2.740	0.6697
3	3.21	**Chloride**	BMB	0.521	3.503	1.3252
4	6.00	**Sulfate**	BM *	1.830	6.691	6.1082
5	6.37	**Nitrate**	MB*	0.794	2.806	0.6316
TOTAL:				3.54	15.74	8.73



Peak Integration Report

Sample Name:	**XL2373280-01; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 17:54**	*Run Time:*	**10.00**

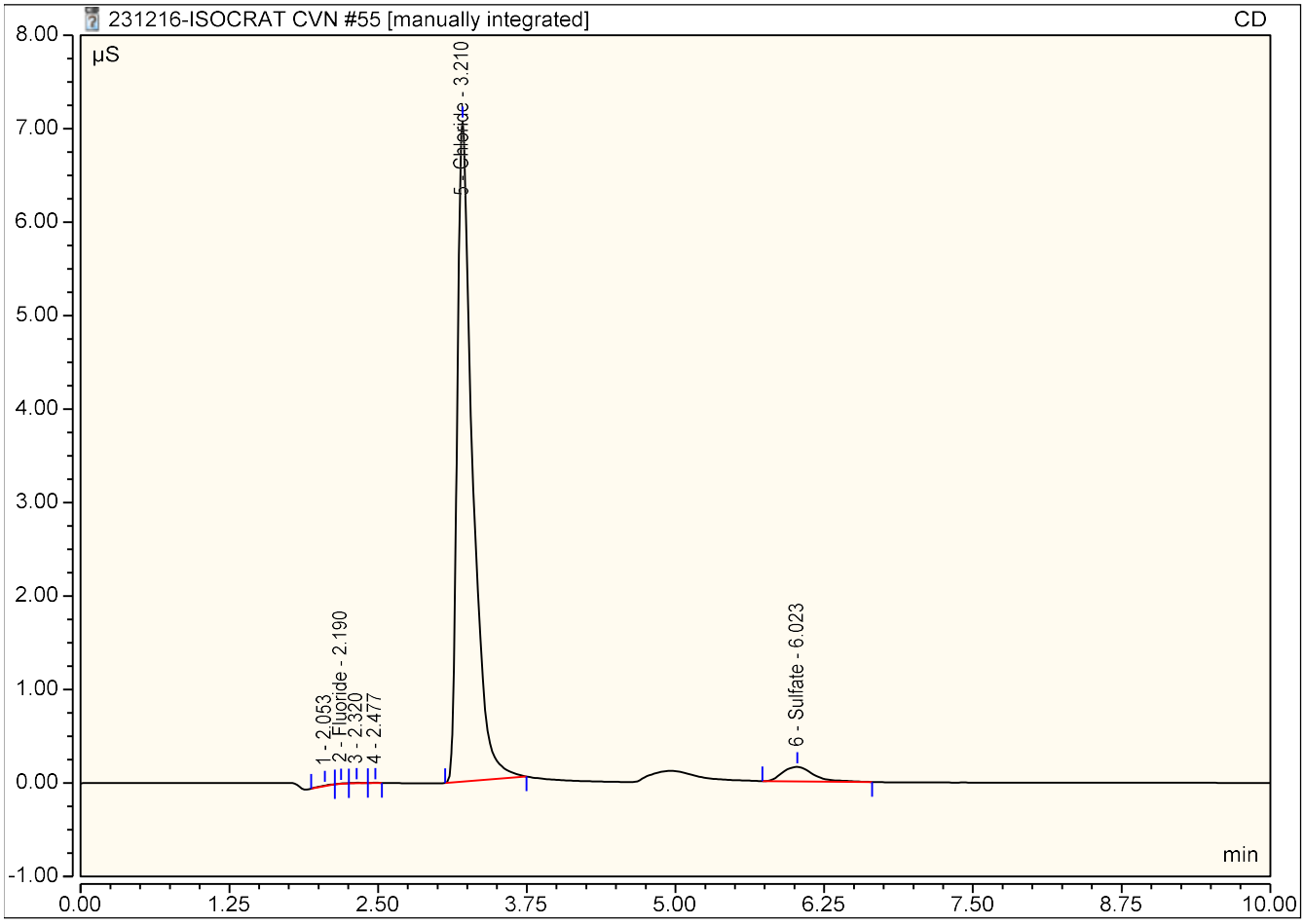
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.20	**Fluoride**	BMB	0.031	0.210	0.9639
3	3.21	**Chloride**	BMB	0.050	0.317	2.8927
4	6.03	**Sulfate**	BM *	0.156	0.569	7.8556
5	6.39	**Nitrate**	MB*	0.073	0.239	1.3644
TOTAL:				0.31	1.33	13.08



Peak Integration Report

Sample Name:	**L2371282-05 BR; 25X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**25.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 18:06**	*Run Time:*	**10.00**

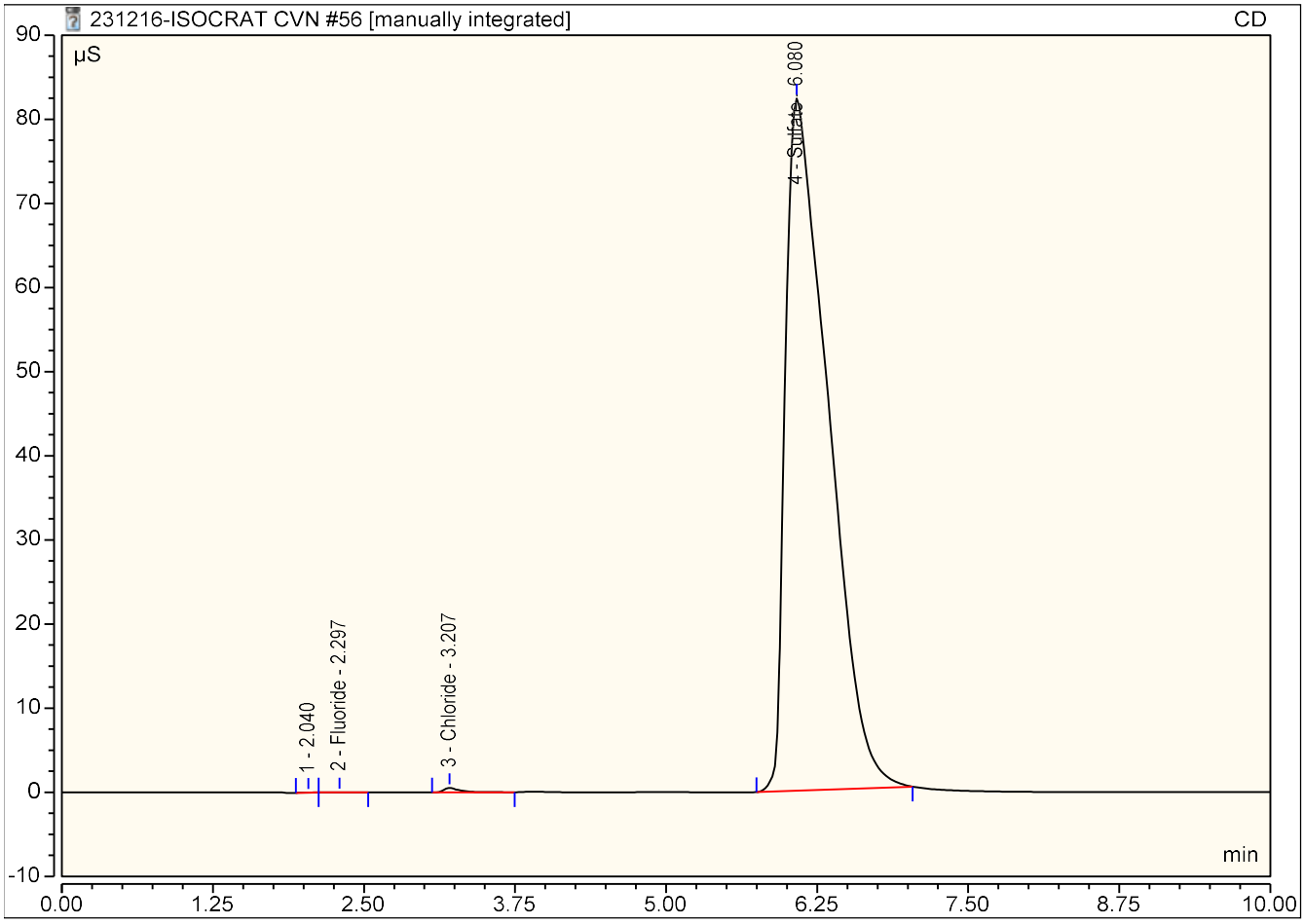
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.19	**Fluoride**	BMB	0.000	0.003	1.1952
5	3.21	**Chloride**	BMB	1.061	7.066	62.7672
6	6.02	**Sulfate**	BMB*	0.046	0.154	10.9059
TOTAL:				1.11	7.22	74.87



Peak Integration Report

Sample Name:	**L2371282-08; 25X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**25.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 18:18**	*Run Time:*	**10.00**

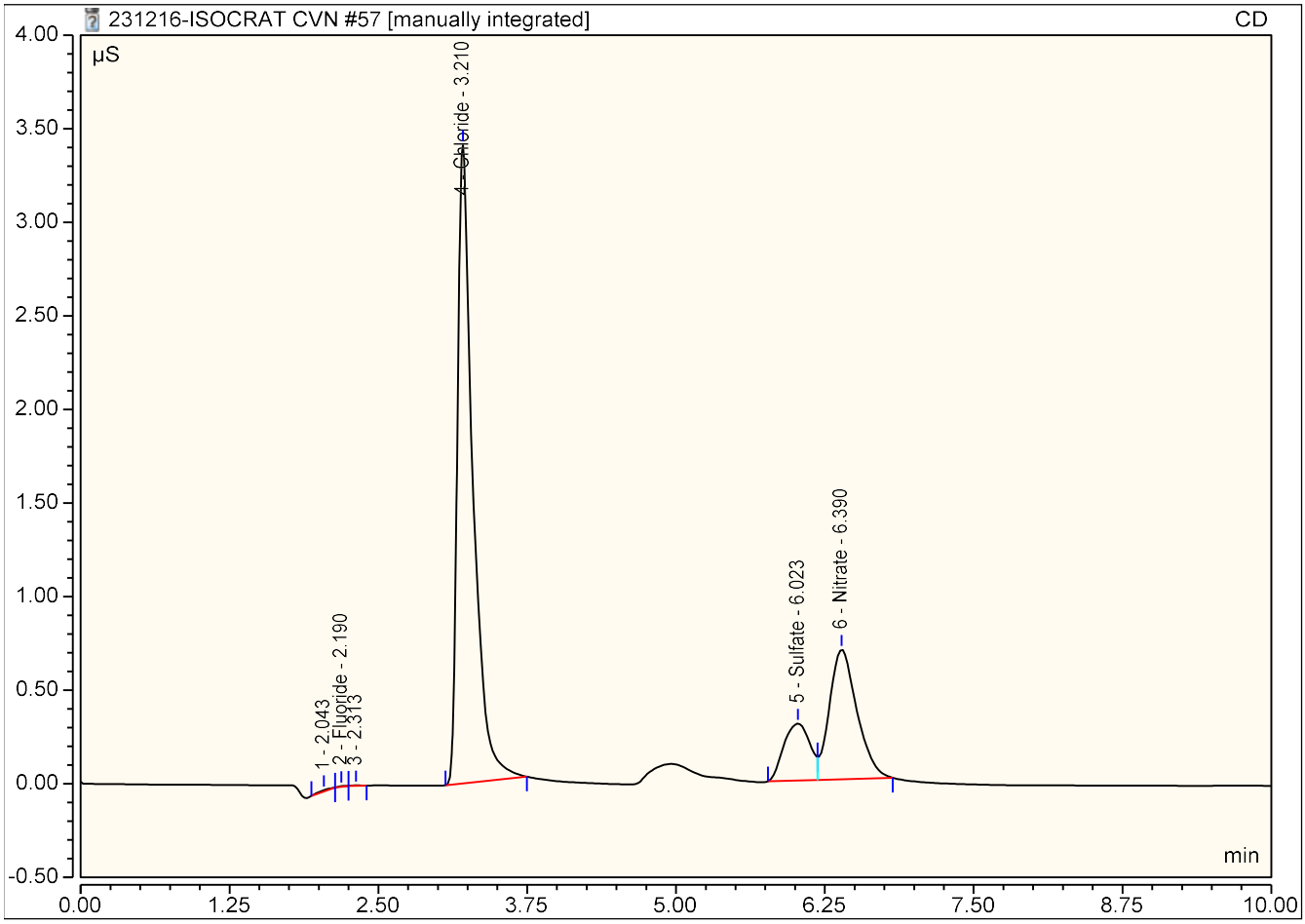
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.30	**Fluoride**	BMB	0.003	0.012	1.3106
3	3.21	**Chloride**	BMB	0.080	0.520	8.8484
4	6.08	**Sulfate**	BMB*	33.716	82.266	2687.3126
TOTAL:				33.80	82.80	2697.47



Peak Integration Report

Sample Name:	**L2371282-09; 50X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**50.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 18:30**	*Run Time:*	**10.00**

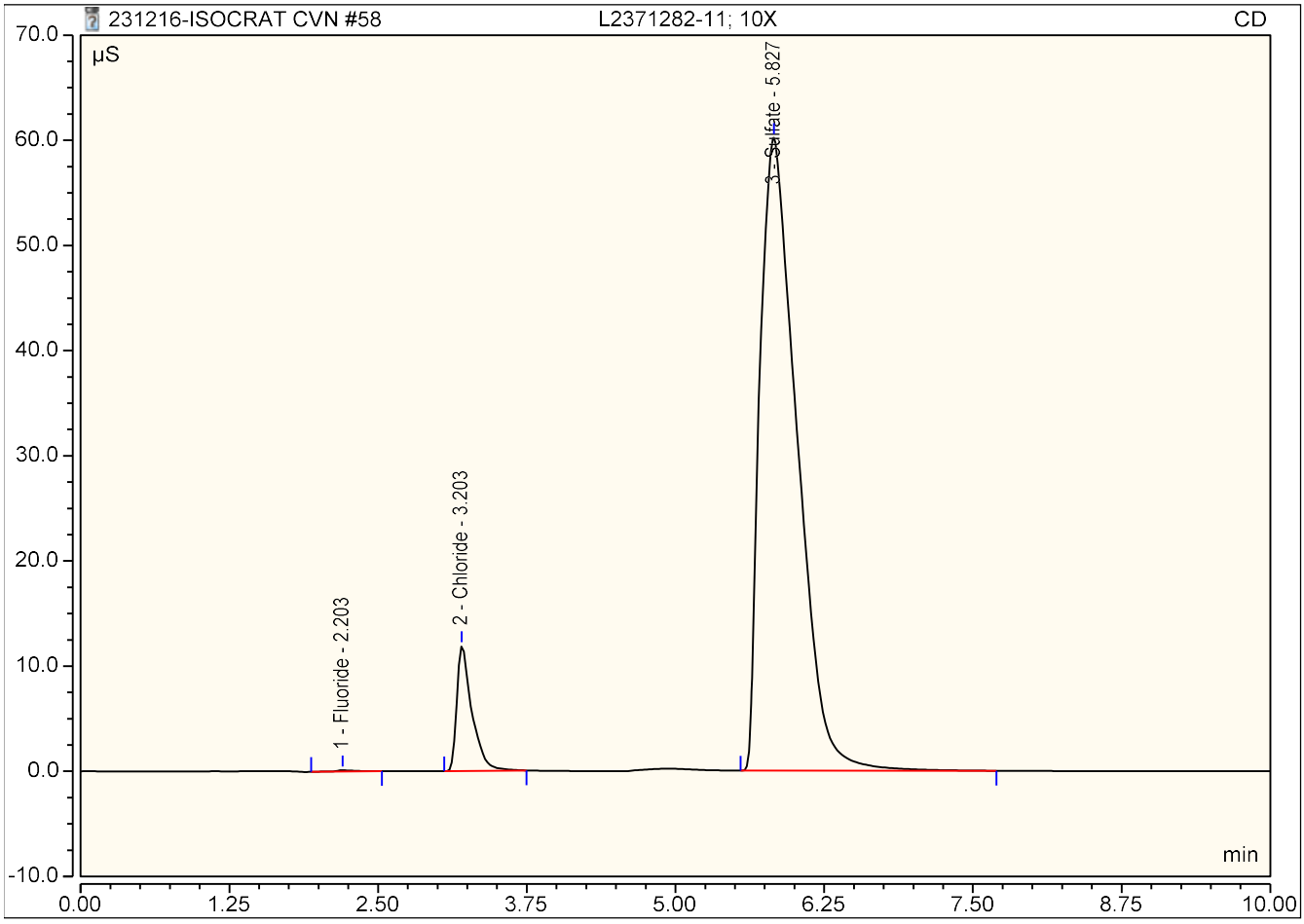
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.19	**Fluoride**	BMB	0.000	0.003	2.3906
4	3.21	**Chloride**	BMB	0.515	3.413	65.5107
5	6.02	**Sulfate**	BM *	0.078	0.304	26.7761
6	6.39	**Nitrate**	MB*	0.185	0.693	10.6859
TOTAL:				0.78	4.41	105.36



Peak Integration Report

Sample Name:	**L2371282-11; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 18:42**	*Run Time:*	**10.00**

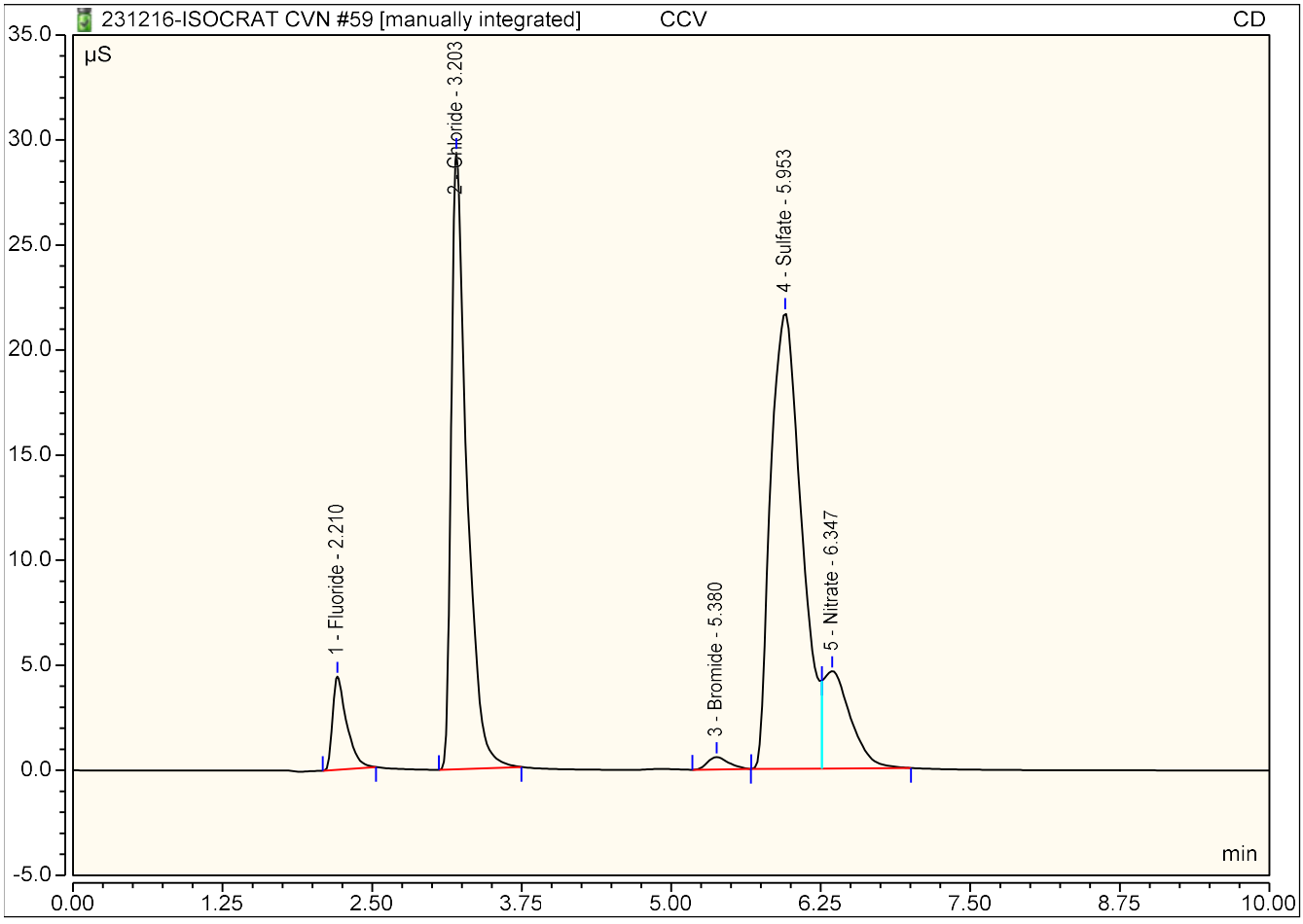
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.20	**Fluoride**	BMB	0.025	0.136	0.8759
2	3.20	**Chloride**	BMB	1.757	11.906	40.4171
3	5.83	**Sulfate**	BMB	21.683	60.197	692.3099
TOTAL:				23.47	72.24	733.60



Peak Integration Report

Sample Name:	**CCV**	*Inj. Vol.:*	**25.00**
Injection Type:	**Check Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 18:54**	*Run Time:*	**10.00**

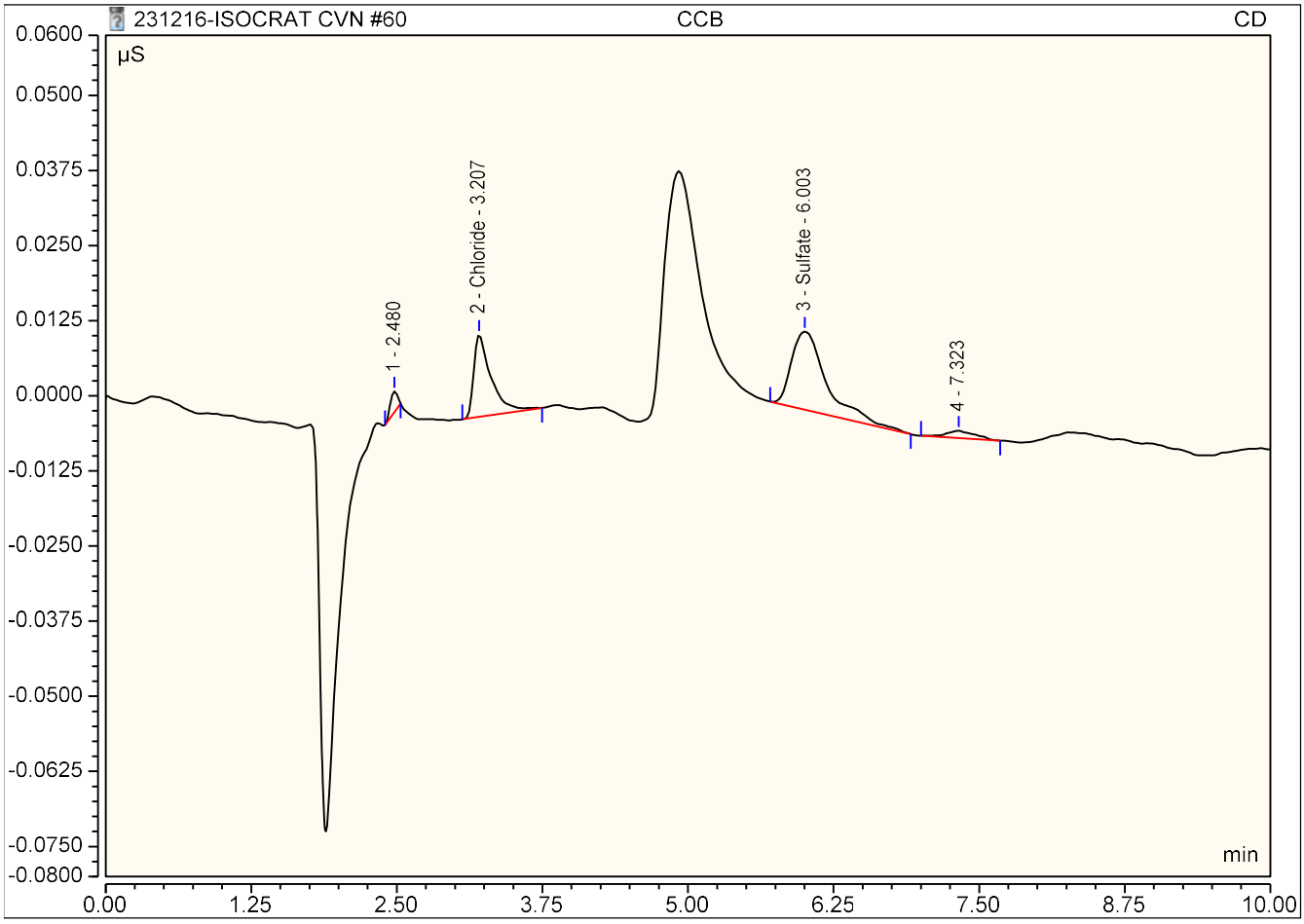
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.21	**Fluoride**	BMB	0.606	4.434	1.0091
2	3.20	**Chloride**	BMB	4.437	29.346	9.9314
3	5.38	**Bromide**	BMB*	0.121	0.591	0.9686
4	5.95	**Sulfate**	BM *	6.477	21.699	20.8838
5	6.35	**Nitrate**	MB*	1.219	4.633	0.9238
TOTAL:				12.86	60.70	33.72



Peak Integration Report

Sample Name:	**CCB**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 19:06**	*Run Time:*	**10.00**

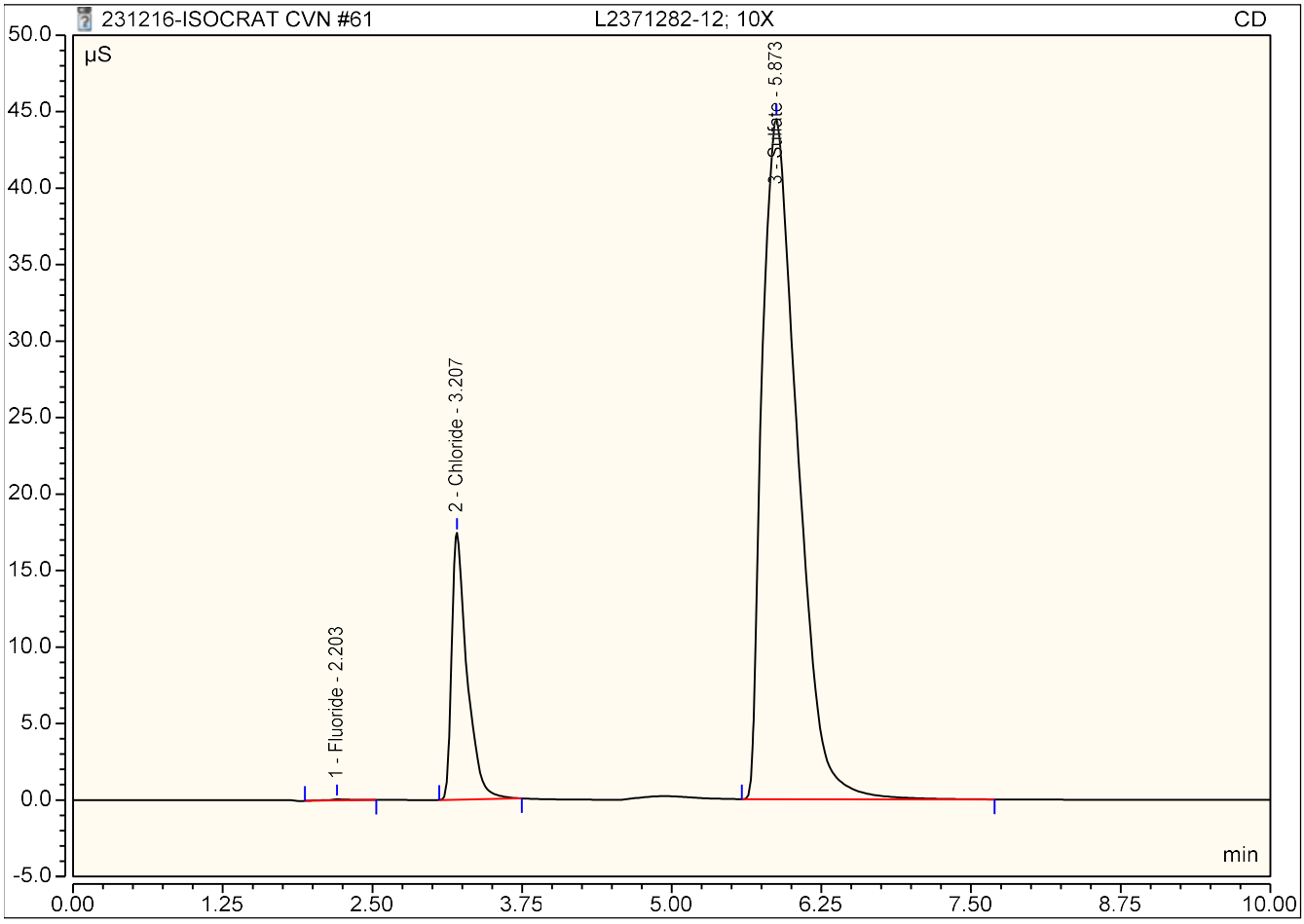
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	3.21	**Chloride**	BMB	0.002	0.014	0.1843
3	6.00	**Sulfate**	BMB	0.005	0.013	0.3029
TOTAL:				0.01	0.03	0.49



Peak Integration Report

Sample Name:	**L2371282-12; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 19:18**	*Run Time:*	**10.00**

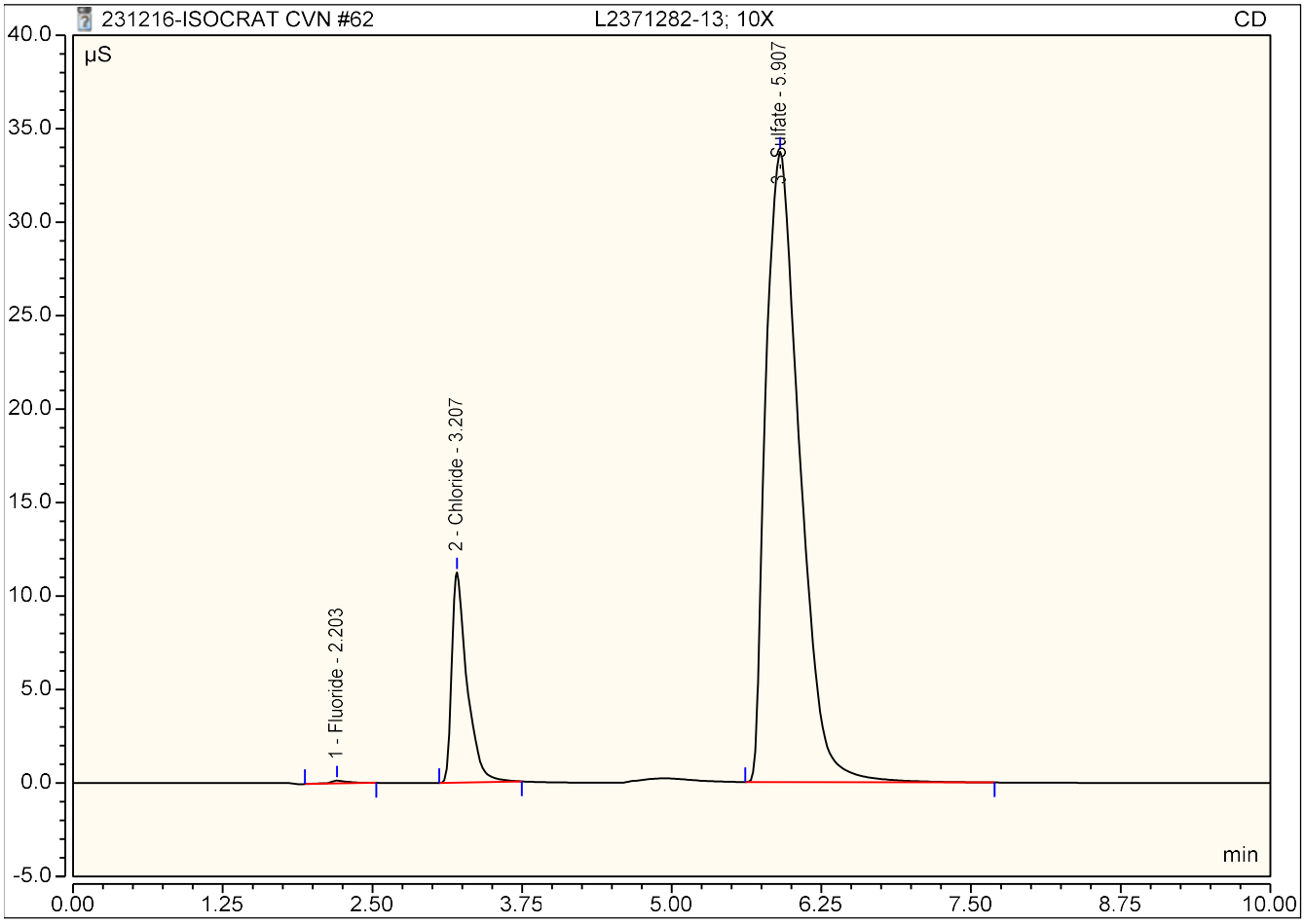
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.20	**Fluoride**	BMB	0.017	0.078	0.7419
2	3.21	**Chloride**	BMB	2.581	17.434	58.5285
3	5.87	**Sulfate**	BMB	15.144	44.478	484.4037
TOTAL:				17.74	61.99	543.67



Peak Integration Report

Sample Name:	**L2371282-13; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 19:30**	*Run Time:*	**10.00**

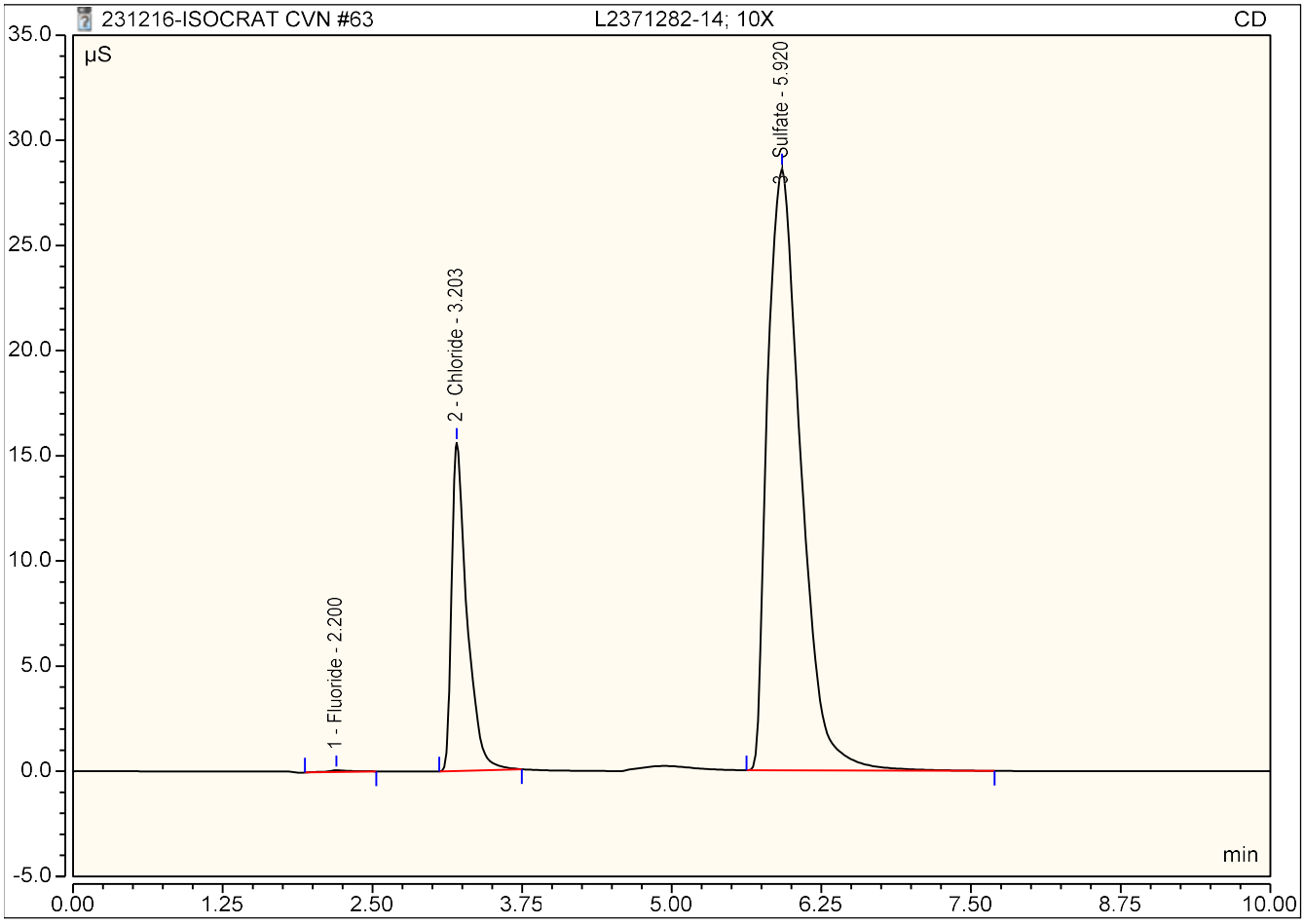
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.20	**Fluoride**	BMB	0.028	0.156	0.9205
2	3.21	**Chloride**	BMB	1.665	11.241	38.3902
3	5.91	**Sulfate**	BMB	11.027	33.717	353.4825
TOTAL:				12.72	45.11	392.79



Peak Integration Report

Sample Name:	**L2371282-14; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 19:42**	*Run Time:*	**10.00**

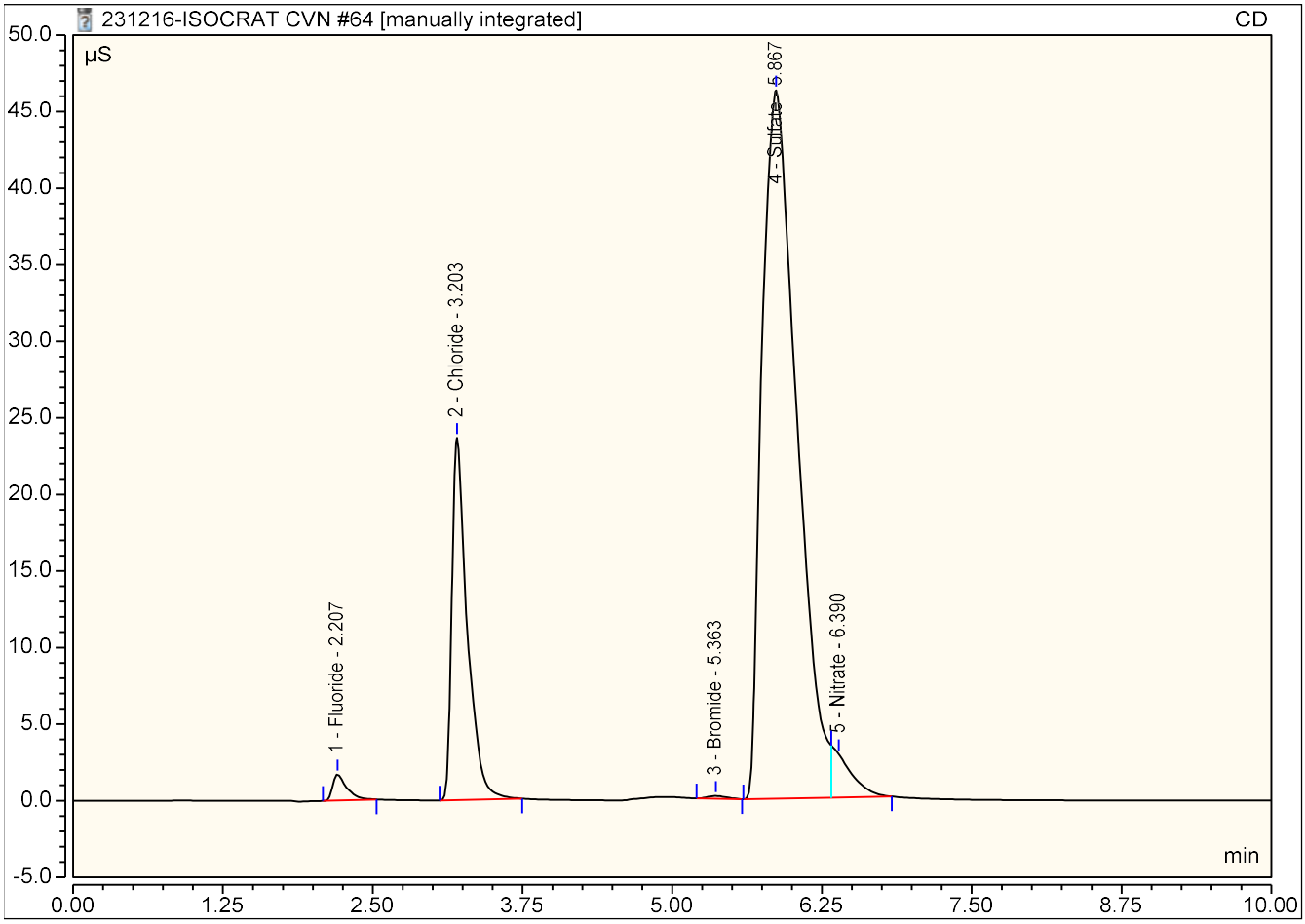
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.20	**Fluoride**	BMB	0.018	0.084	0.7551
2	3.20	**Chloride**	BMB	2.321	15.602	52.8015
3	5.92	**Sulfate**	BMB	9.204	28.627	295.5197
TOTAL:				11.54	44.31	349.08



Peak Integration Report

Sample Name:	**L2371282-15 MS; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 19:54**	*Run Time:*	**10.00**

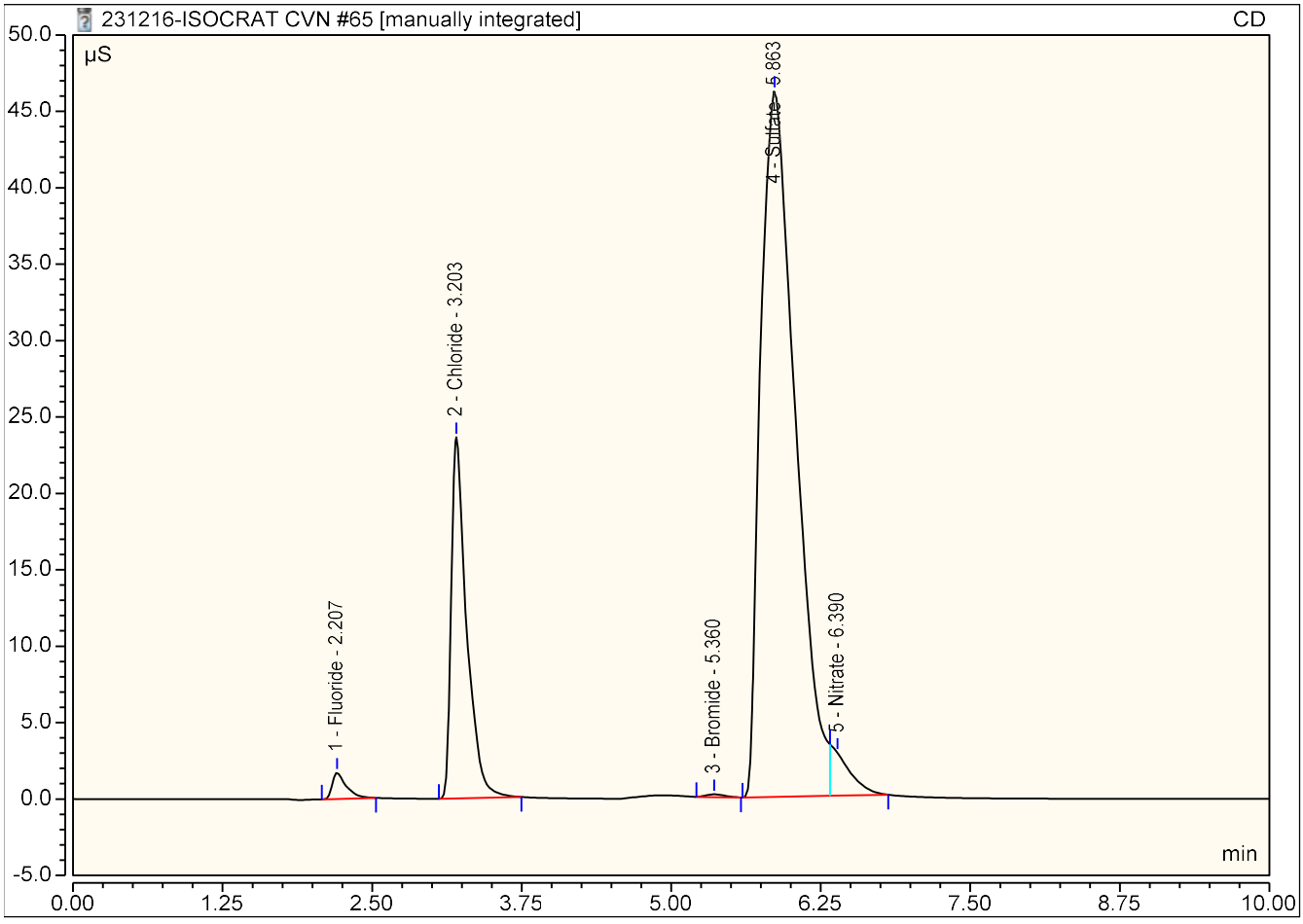
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.21	**Fluoride**	BMB	0.232	1.714	4.1600
2	3.20	**Chloride**	BMB	3.522	23.654	79.1965
3	5.36	**Bromide**	BMB*	0.034	0.186	3.1312
4	5.87	**Sulfate**	BM *	15.529	46.249	496.6343
5	6.39	**Nitrate**	MB*	0.593	2.826	4.9377
TOTAL:				19.91	74.63	588.06



Peak Integration Report

Sample Name:	**L2371282-15 MSD; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 20:07**	*Run Time:*	**10.00**

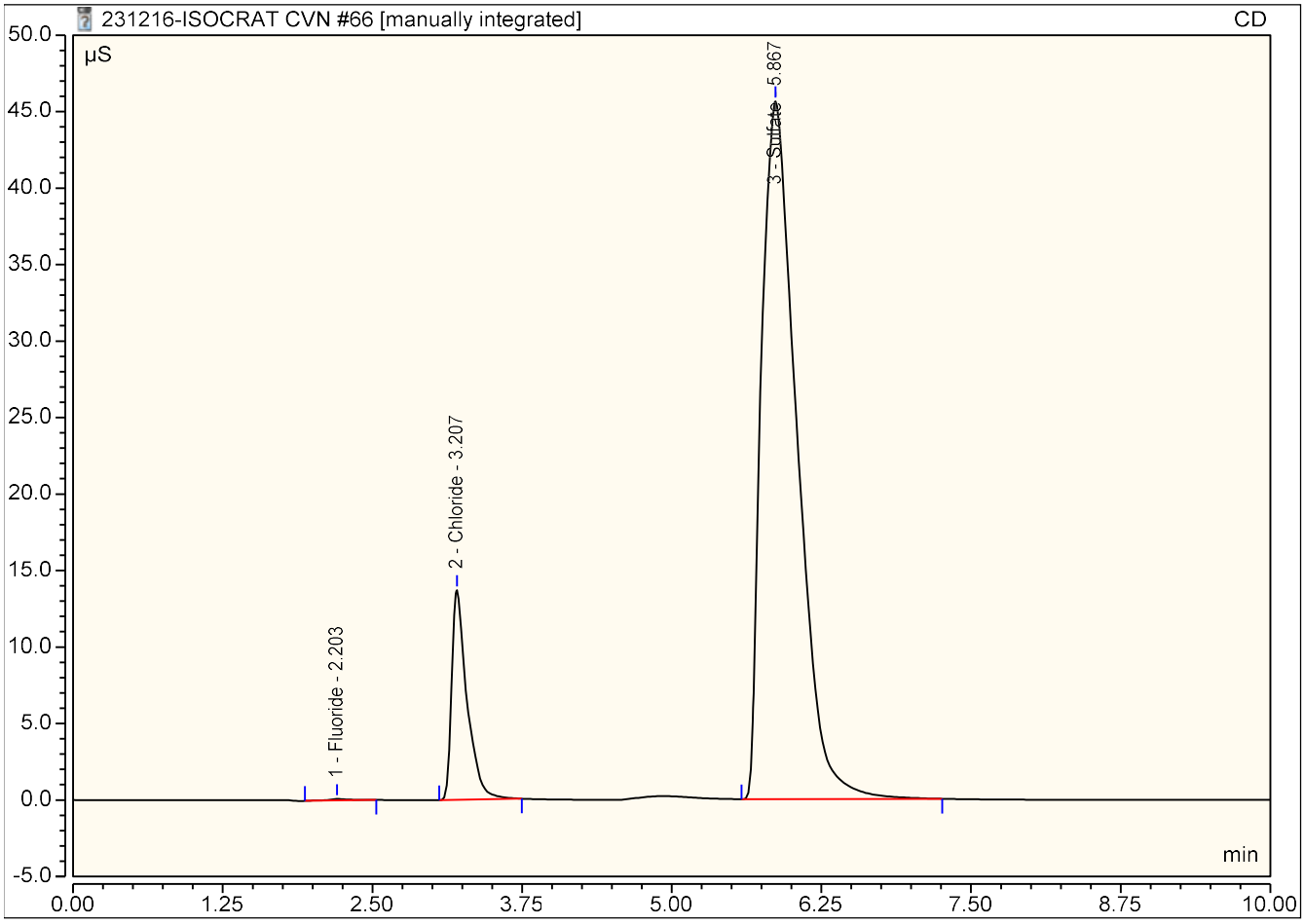
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.21	**Fluoride**	BMB	0.233	1.719	4.1767
2	3.20	**Chloride**	BMB	3.523	23.630	79.2244
3	5.36	**Bromide**	BMB*	0.034	0.186	3.1100
4	5.86	**Sulfate**	BM *	15.505	46.205	495.8707
5	6.39	**Nitrate**	MB*	0.584	2.807	4.8774
TOTAL:				19.88	74.55	587.26



Peak Integration Report

Sample Name:	**L2371282-15; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 20:19**	*Run Time:*	**10.00**

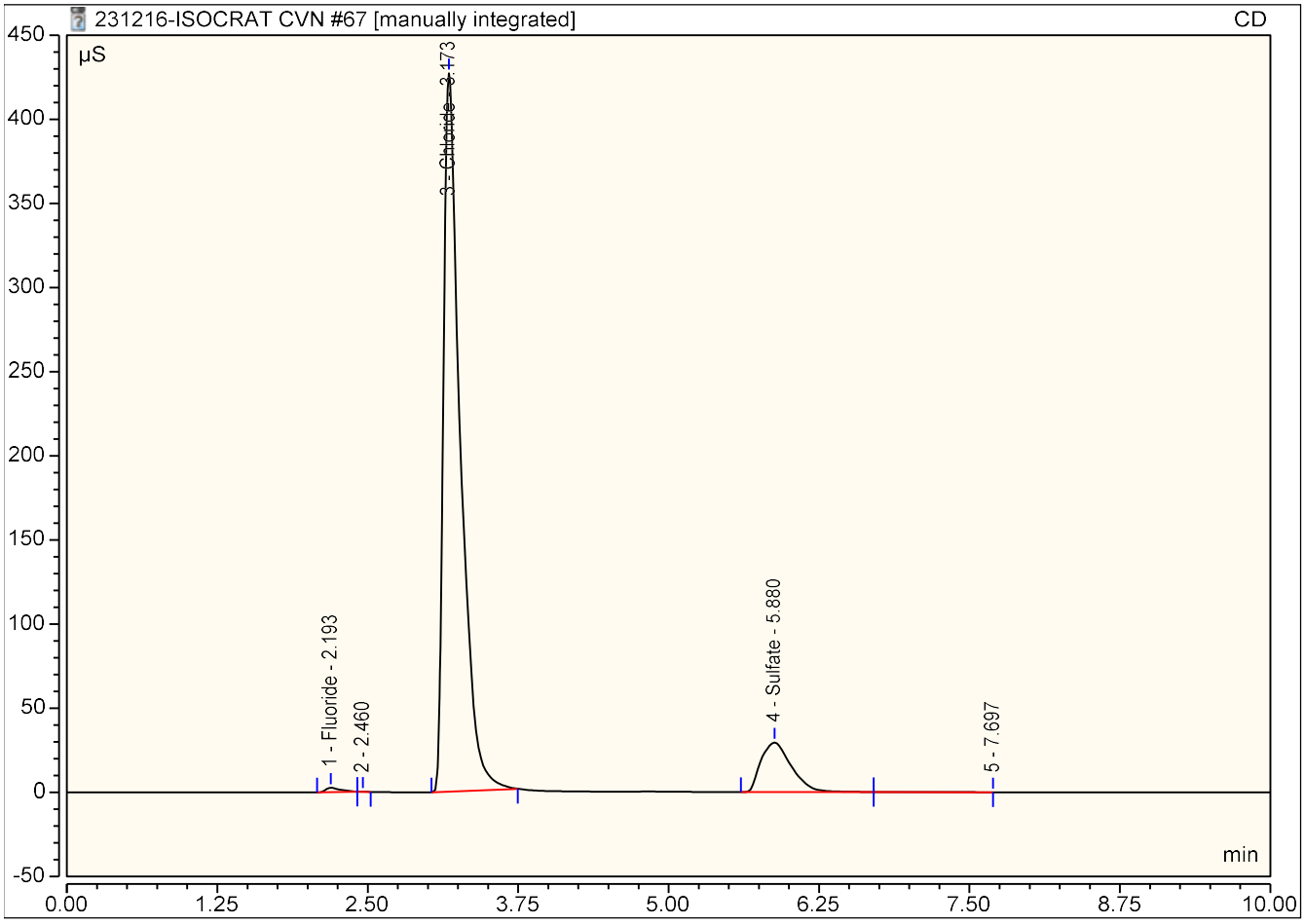
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.20	**Fluoride**	BMB	0.020	0.102	0.7948
2	3.21	**Chloride**	BMB	2.031	13.711	46.4308
3	5.87	**Sulfate**	BMB*	15.622	45.628	499.6131
TOTAL:				17.67	59.44	546.84



Peak Integration Report

Sample Name:	**XL2374268-01 DUP**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 20:31**	*Run Time:*	**10.00**

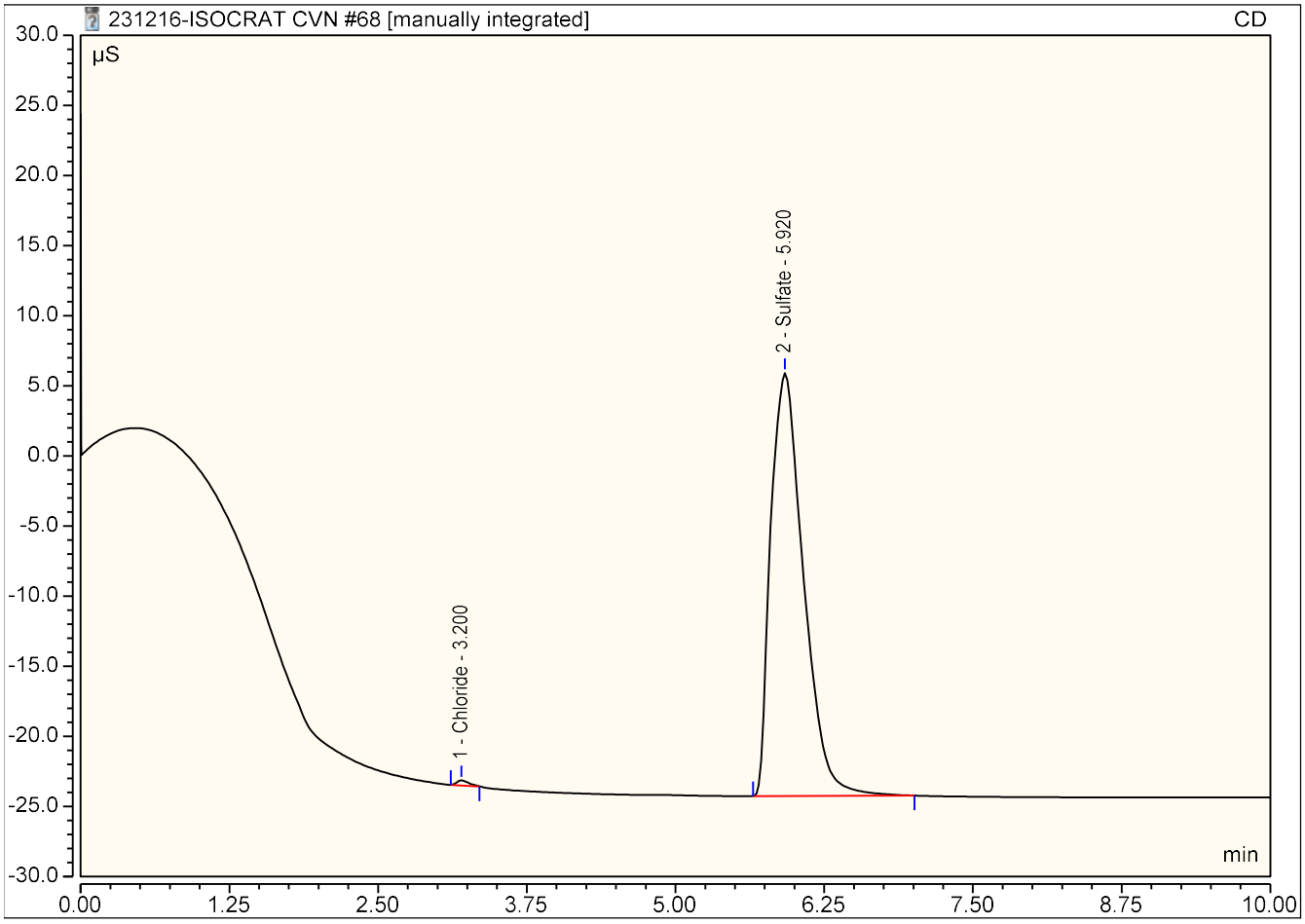
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.19	**Fluoride**	BMB	0.358	2.580	0.6144
3	3.17	**Chloride**	BMB	69.490	426.892	152.9191
4	5.88	**Sulfate**	BMb*	8.628	29.420	27.7235
TOTAL:				78.48	458.89	181.26



Peak Integration Report

Sample Name:	**L2373116-01 CL SO4; 50X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**50.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 20:43**	*Run Time:*	**10.00**

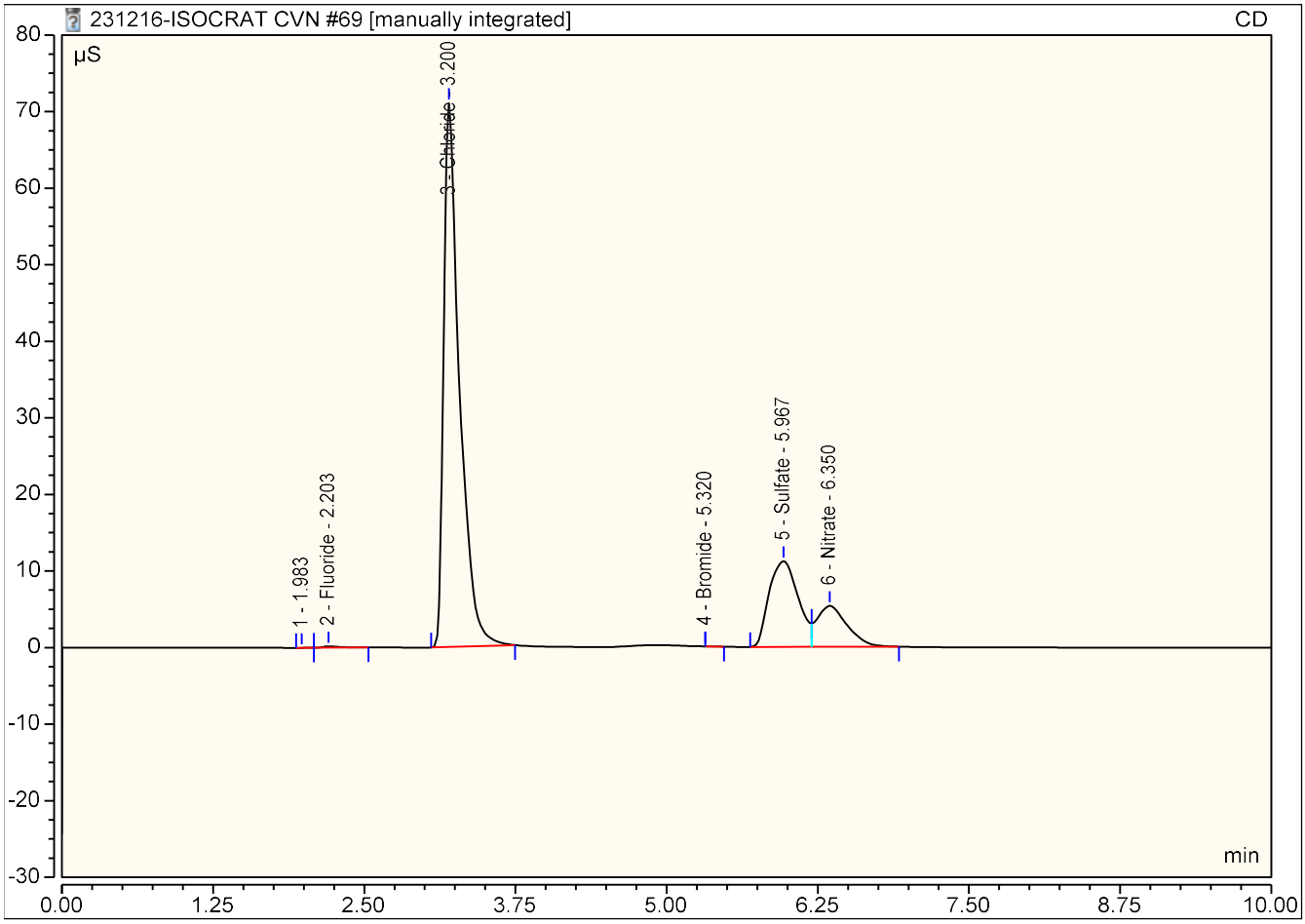
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	3.20	**Chloride**	BMB*	0.042	0.361	13.5955
2	5.92	**Sulfate**	BMB	9.619	30.156	1543.6884
TOTAL:				9.66	30.52	1557.28



Peak Integration Report

Sample Name:	**L2373201-01 CL SO4**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 20:55**	*Run Time:*	**10.00**

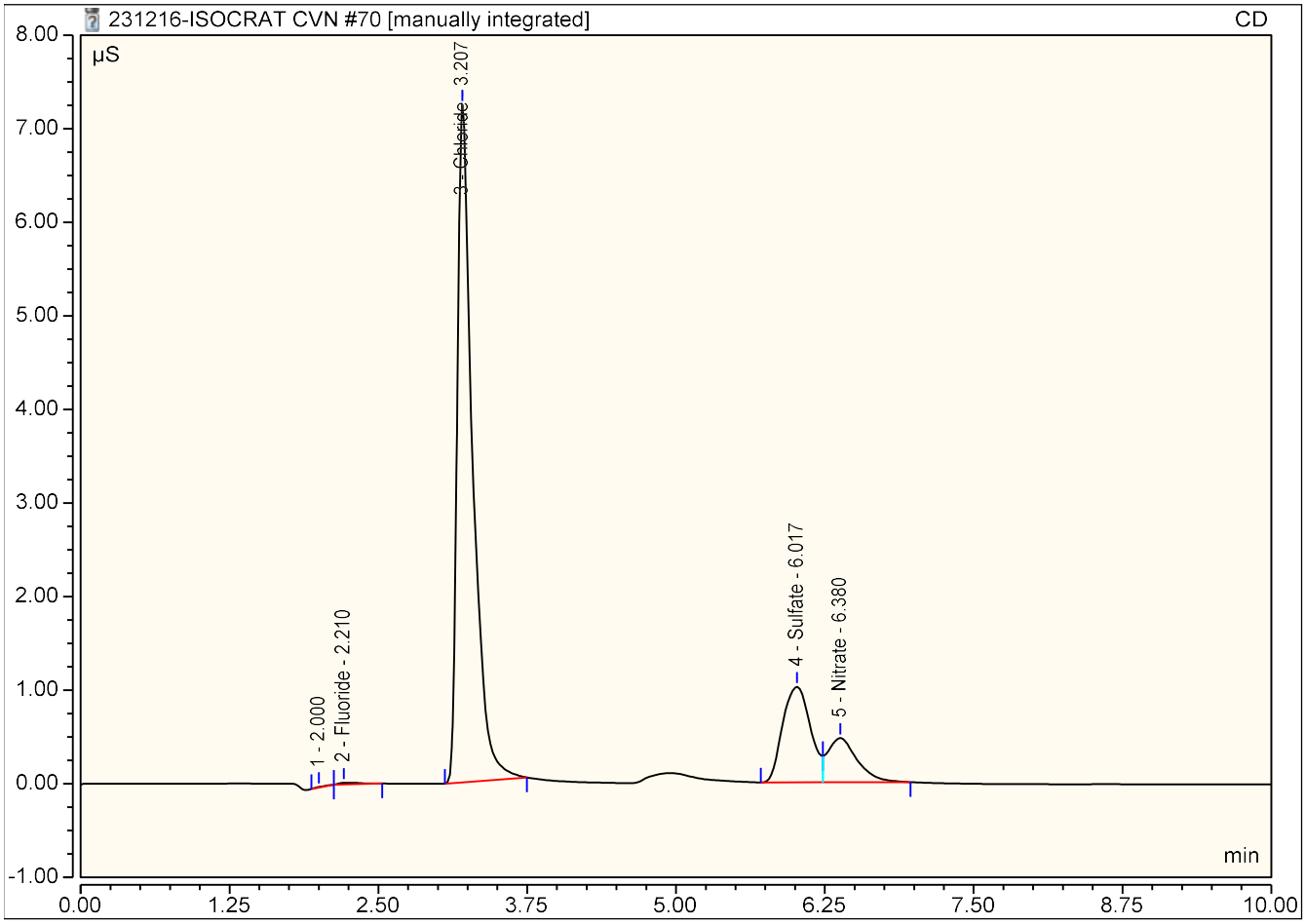
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.20	**Fluoride**	BMB	0.026	0.175	0.0888
3	3.20	**Chloride**	BMB	10.793	71.056	23.9025
4	5.32	**Bromide**	BMB*	0.000	0.000	0.0578
5	5.97	**Sulfate**	BM *	3.123	11.208	10.2180
6	6.35	**Nitrate**	MB*	1.542	5.347	1.1456
TOTAL:				15.48	87.79	35.41



Peak Integration Report

Sample Name:	**XL2373201-01; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 21:07**	*Run Time:*	**10.00**

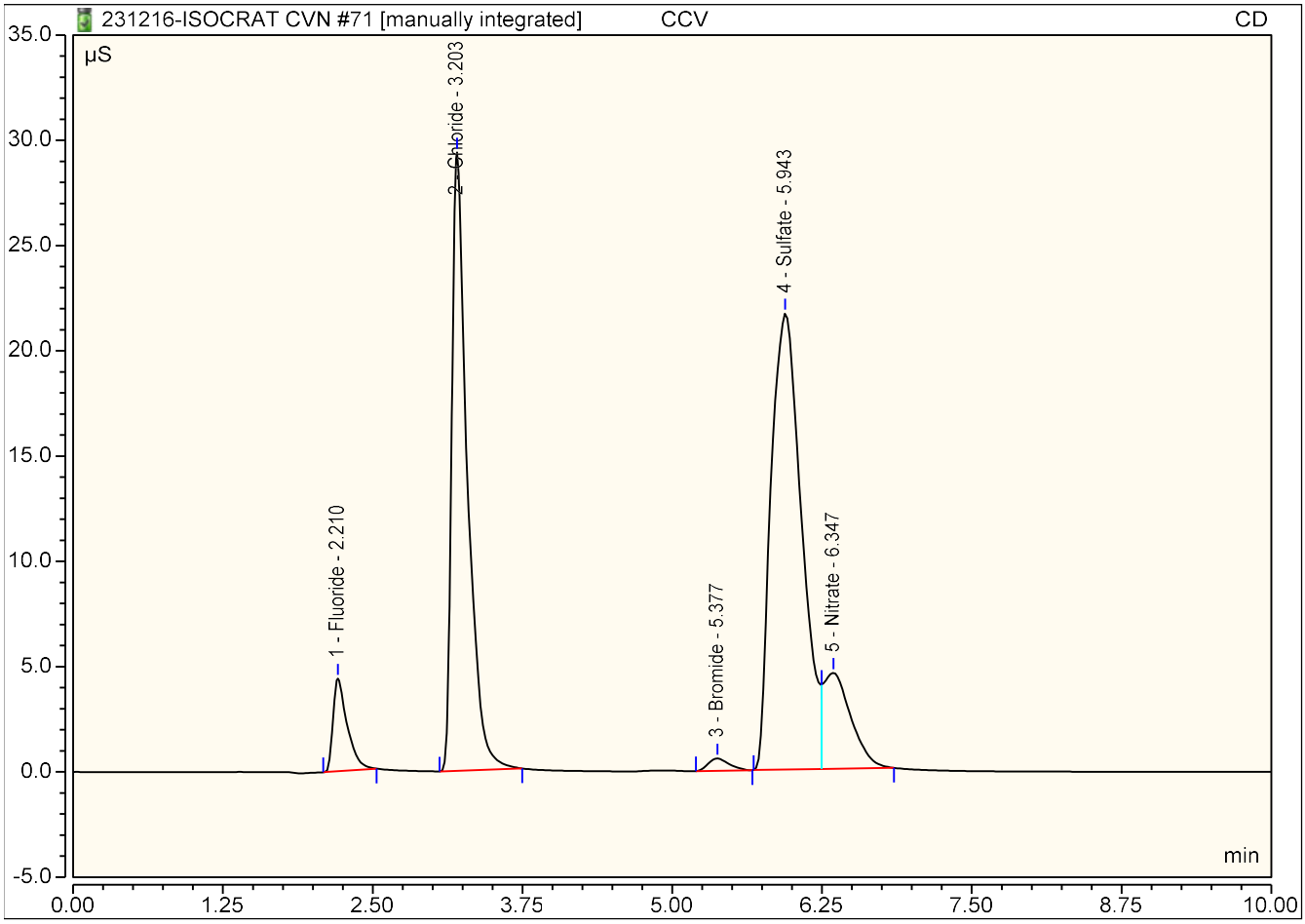
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.21	**Fluoride**	BMB	0.004	0.018	0.5339
3	3.21	**Chloride**	BMB	1.086	7.242	25.6715
4	6.02	**Sulfate**	BM *	0.276	1.021	11.6677
5	6.38	**Nitrate**	MB*	0.135	0.473	1.7928
TOTAL:				1.50	8.75	39.67



Peak Integration Report

Sample Name:	**CCV**	*Inj. Vol.:*	**25.00**
Injection Type:	**Check Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 21:19**	*Run Time:*	**10.00**

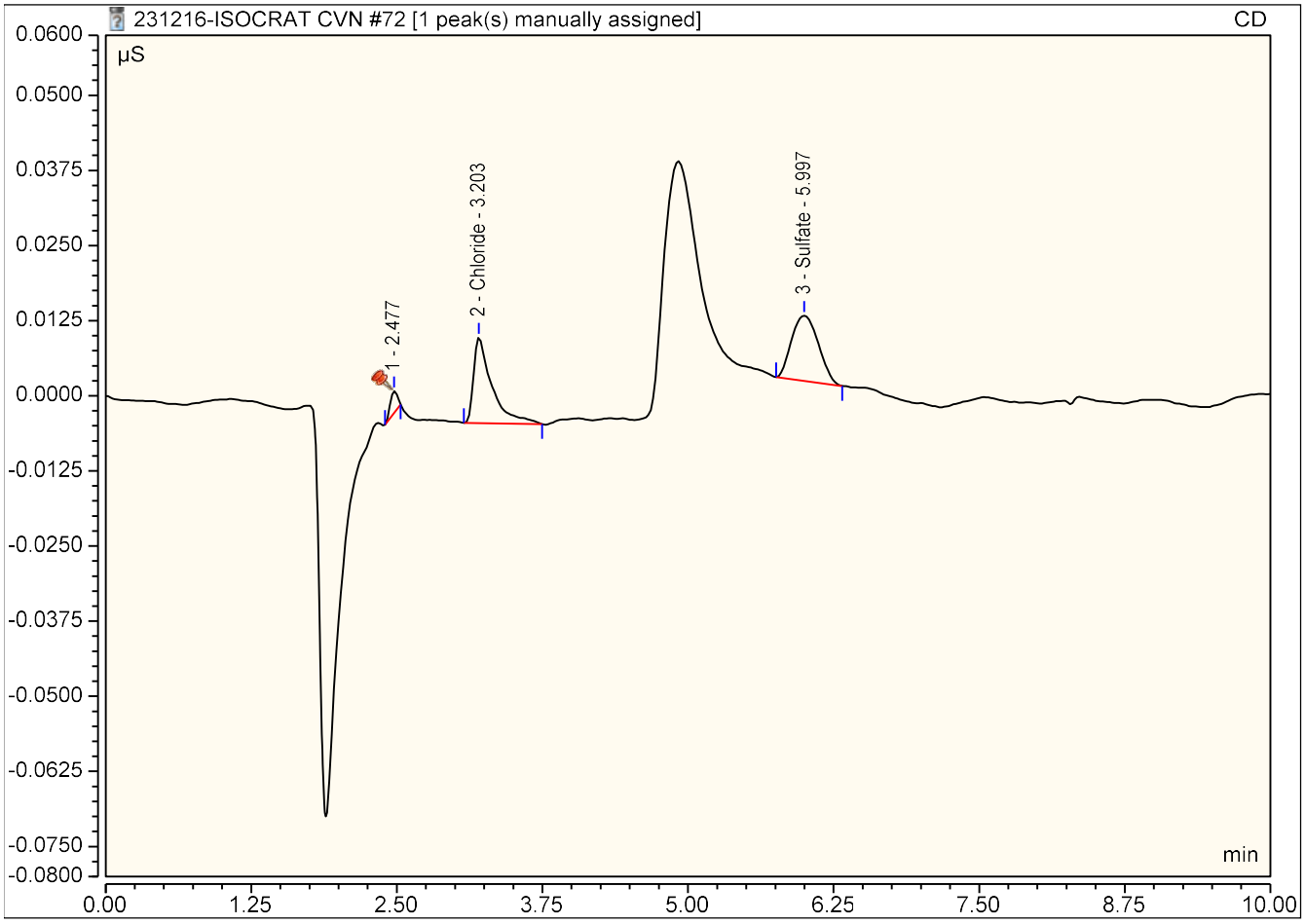
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.21	**Fluoride**	BMB	0.602	4.406	1.0027
2	3.20	**Chloride**	BMB	4.427	29.370	9.9097
3	5.38	**Bromide**	BMB*	0.119	0.587	0.9522
4	5.94	**Sulfate**	BM *	6.407	21.668	20.6597
5	6.35	**Nitrate**	MB*	1.210	4.559	0.9175
TOTAL:				12.76	60.59	33.44



Peak Integration Report

Sample Name:	**CCB**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 21:31**	*Run Time:*	**10.00**

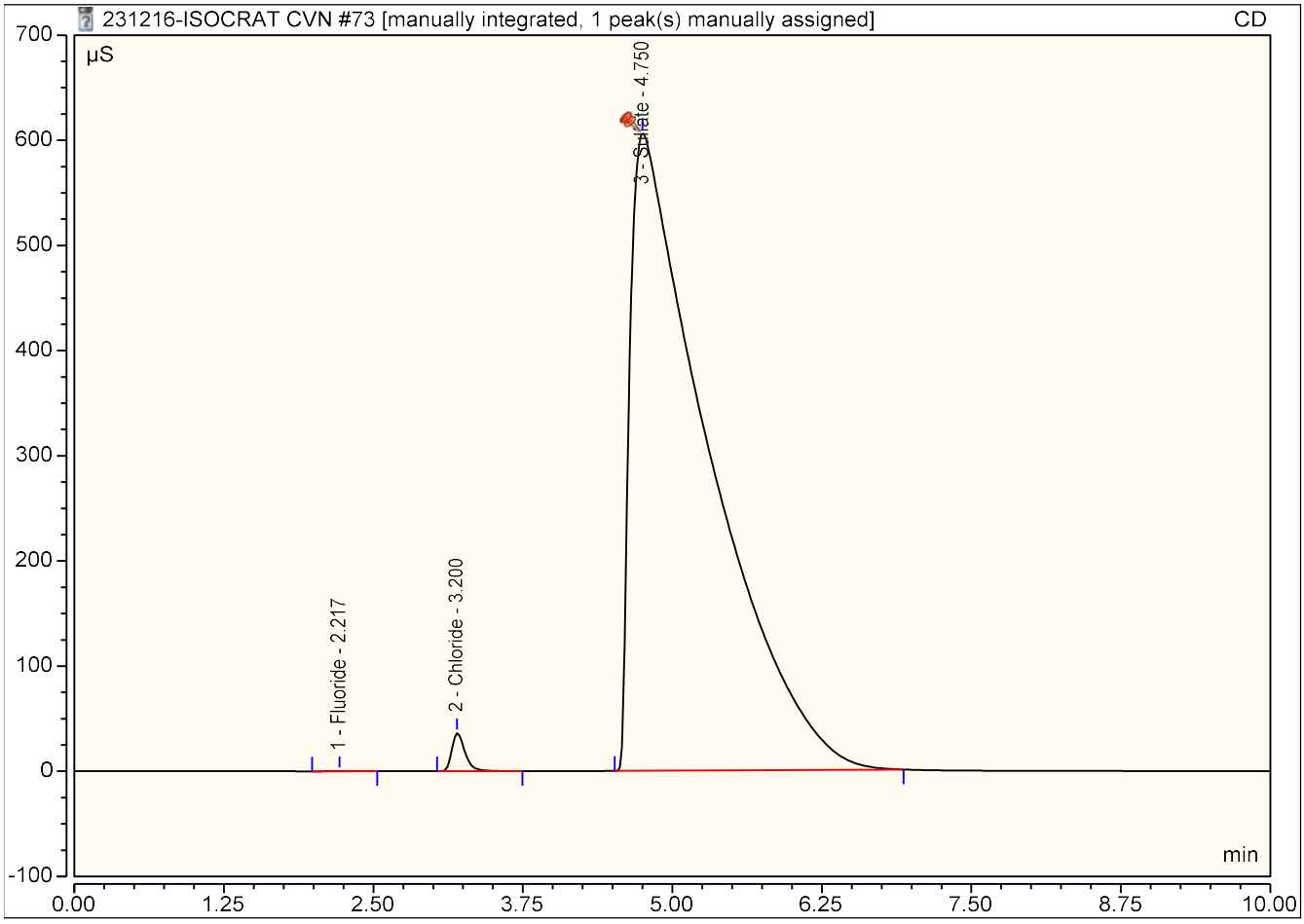
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	3.20	**Chloride**	BMB	0.003	0.014	0.1848
3	6.00	**Sulfate**	BMB	0.003	0.011	0.2978
TOTAL:				0.01	0.03	0.48



Peak Integration Report

Sample Name:	**L2373116-02;**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 21:43**	*Run Time:*	**10.00**

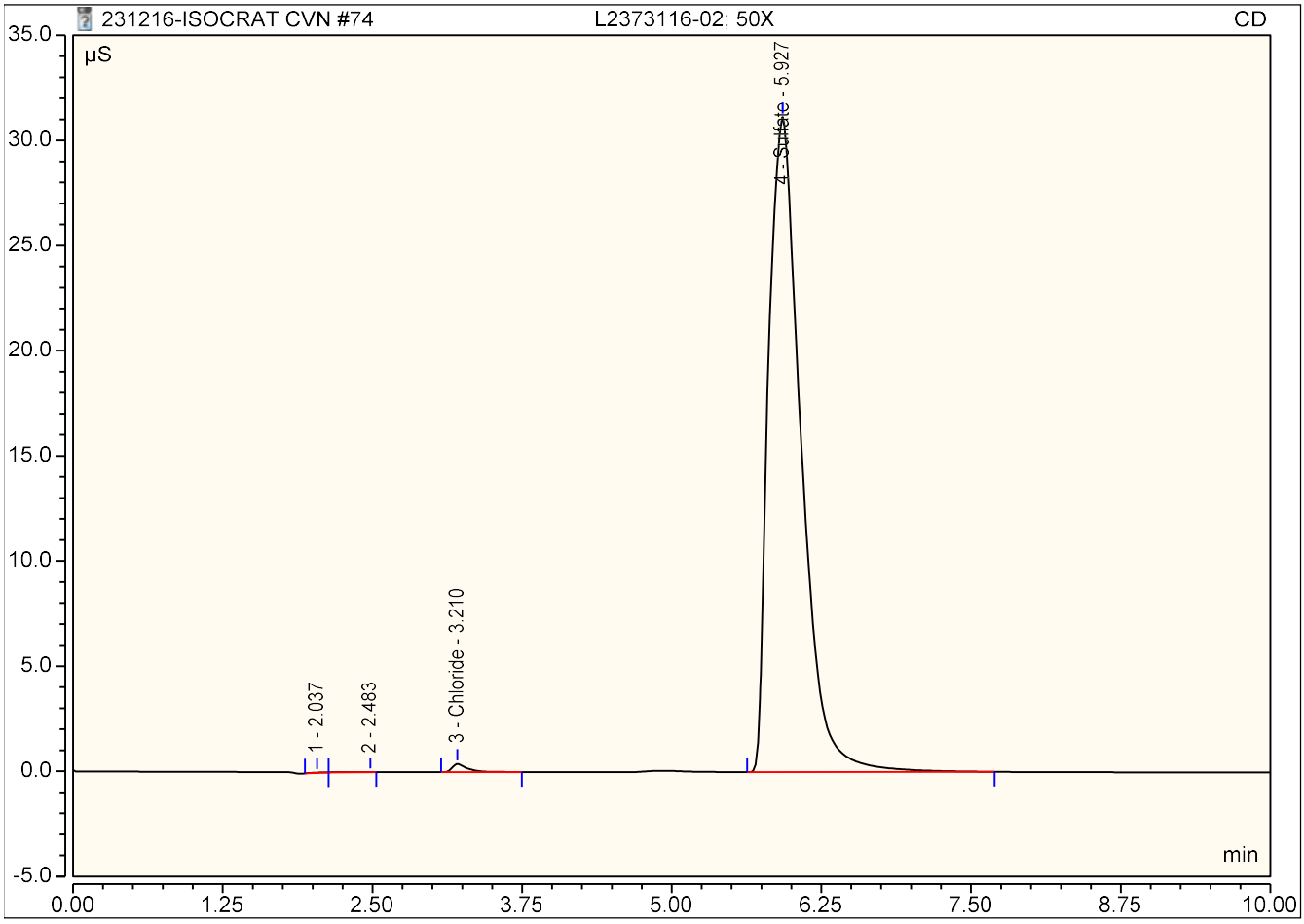
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.22	**Fluoride**	BMB	0.040	0.260	0.1116
2	3.20	**Chloride**	BMB	4.680	36.205	10.4653
3	4.75	**Sulfate**	BMB*^	461.140	606.483	1466.5226
TOTAL:				465.86	642.95	1477.10



Peak Integration Report

Sample Name:	**L2373116-02; 50X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**50.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 21:55**	*Run Time:*	**10.00**

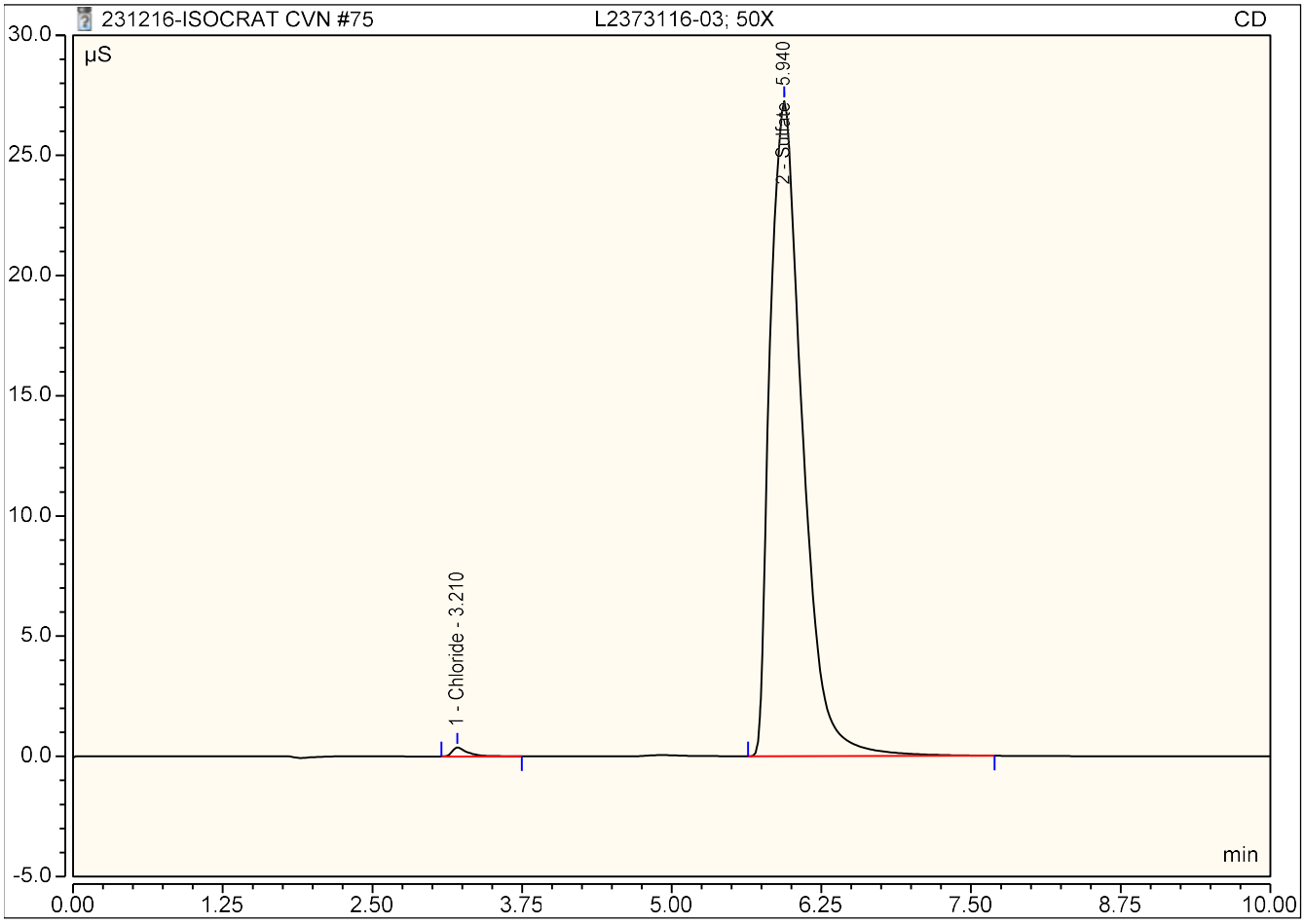
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
3	3.21	**Chloride**	BMB	0.059	0.394	15.3944
4	5.93	**Sulfate**	BMB	9.799	31.148	1572.2522
TOTAL:				9.86	31.54	1587.65



Peak Integration Report

Sample Name:	**L2373116-03; 50X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**50.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 22:08**	*Run Time:*	**10.00**

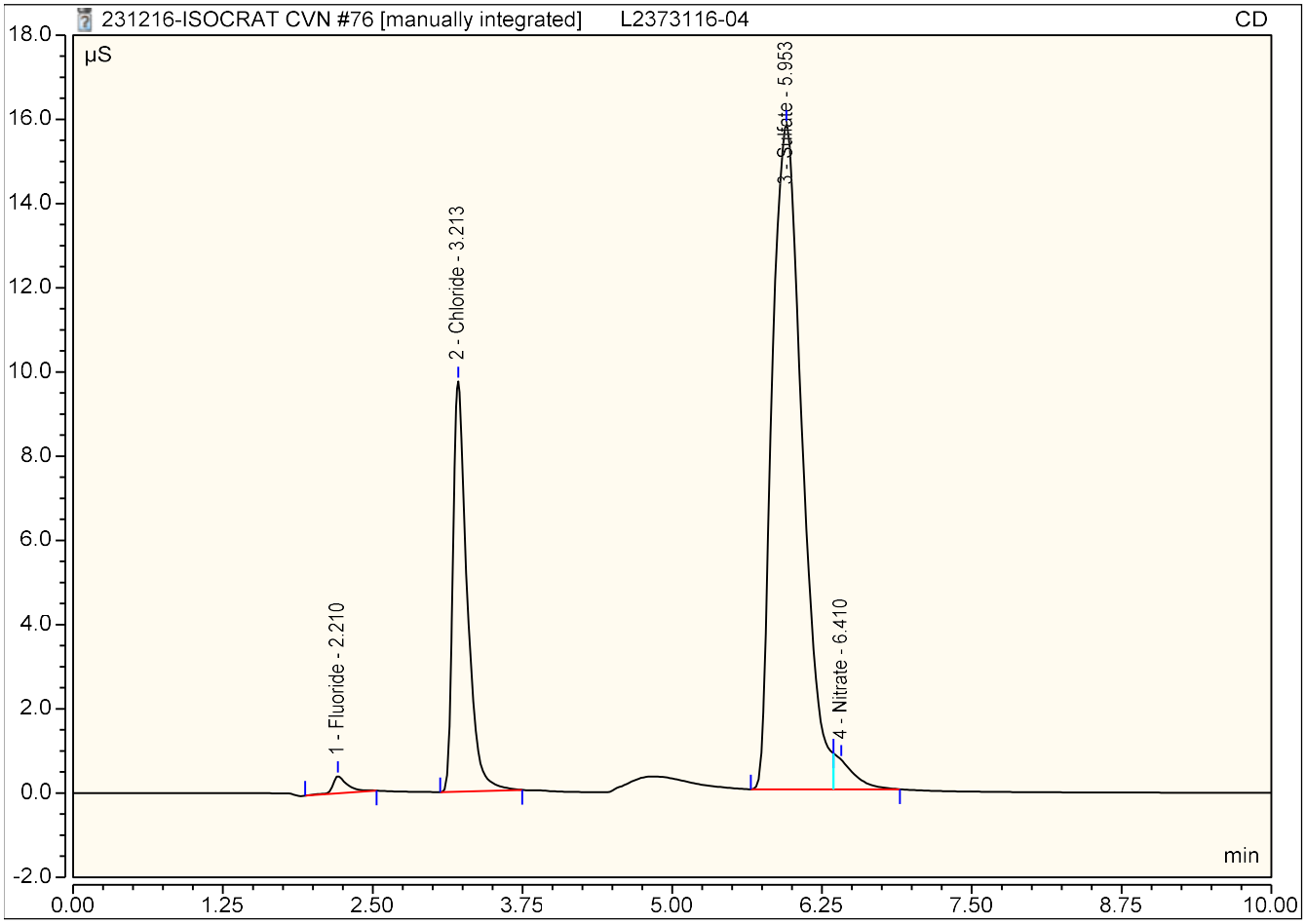
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	3.21	**Chloride**	BMB	0.056	0.373	15.1139
2	5.94	**Sulfate**	BMB	8.508	27.251	1367.0265
TOTAL:				8.56	27.62	1382.14



Peak Integration Report

Sample Name:	**L2373116-04**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 22:20**	*Run Time:*	**10.00**

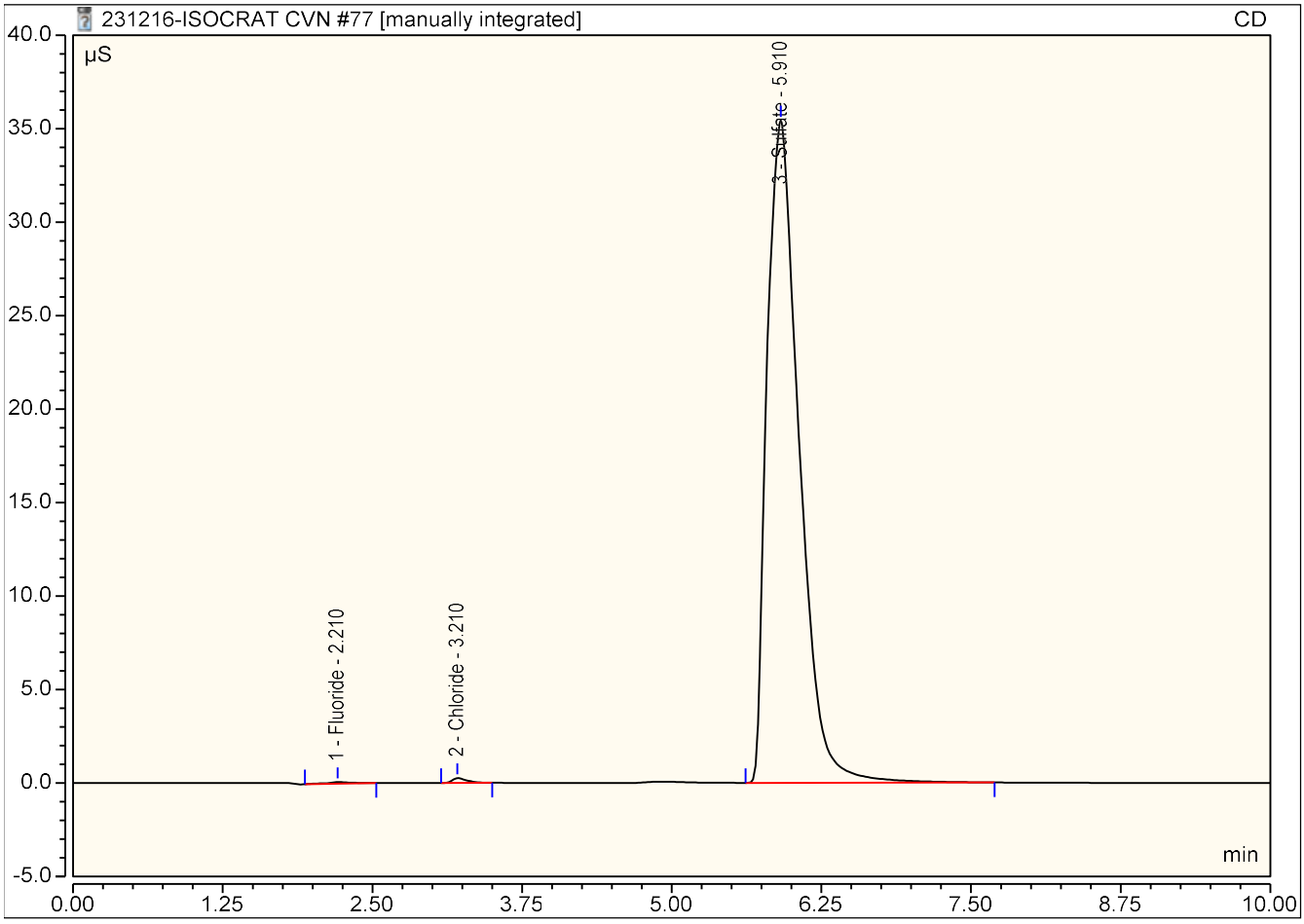
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.21	**Fluoride**	BMB	0.059	0.412	0.1412
2	3.21	**Chloride**	BMB	1.339	9.744	3.1224
3	5.95	**Sulfate**	BM *	4.559	15.782	14.7842
4	6.41	**Nitrate**	MB*	0.145	0.701	0.1860
TOTAL:				6.10	26.64	18.23



Peak Integration Report

Sample Name:	**L2373116-05; 50X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**50.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 22:32**	*Run Time:*	**10.00**

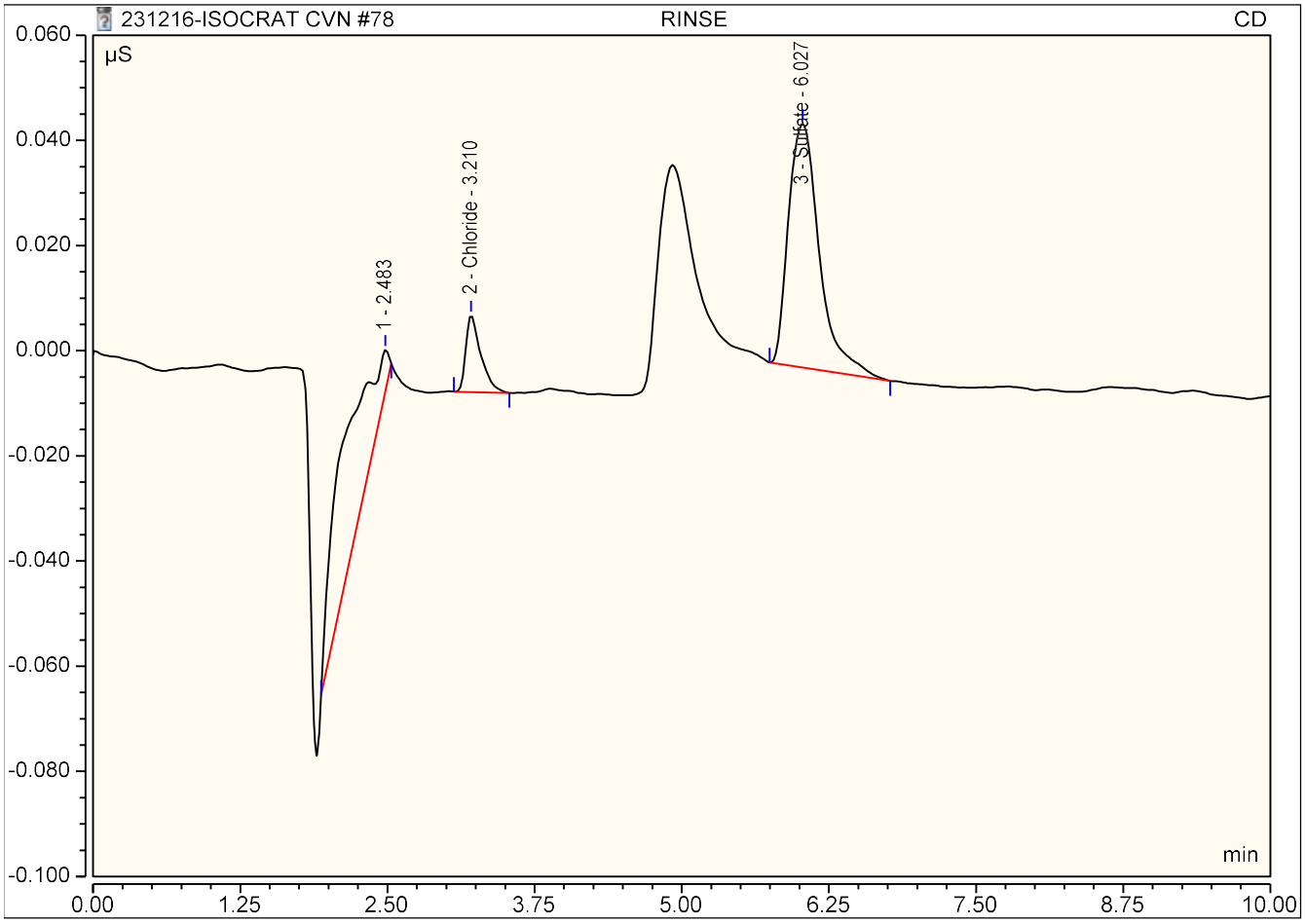
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.21	**Fluoride**	BMB	0.019	0.085	3.8696
2	3.21	**Chloride**	BMB*	0.036	0.262	12.9561
3	5.91	**Sulfate**	BMB	11.013	35.431	1765.1869
TOTAL:				11.07	35.78	1782.01



Peak Integration Report

Sample Name:	**RINSE**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 22:44**	*Run Time:*	**10.00**

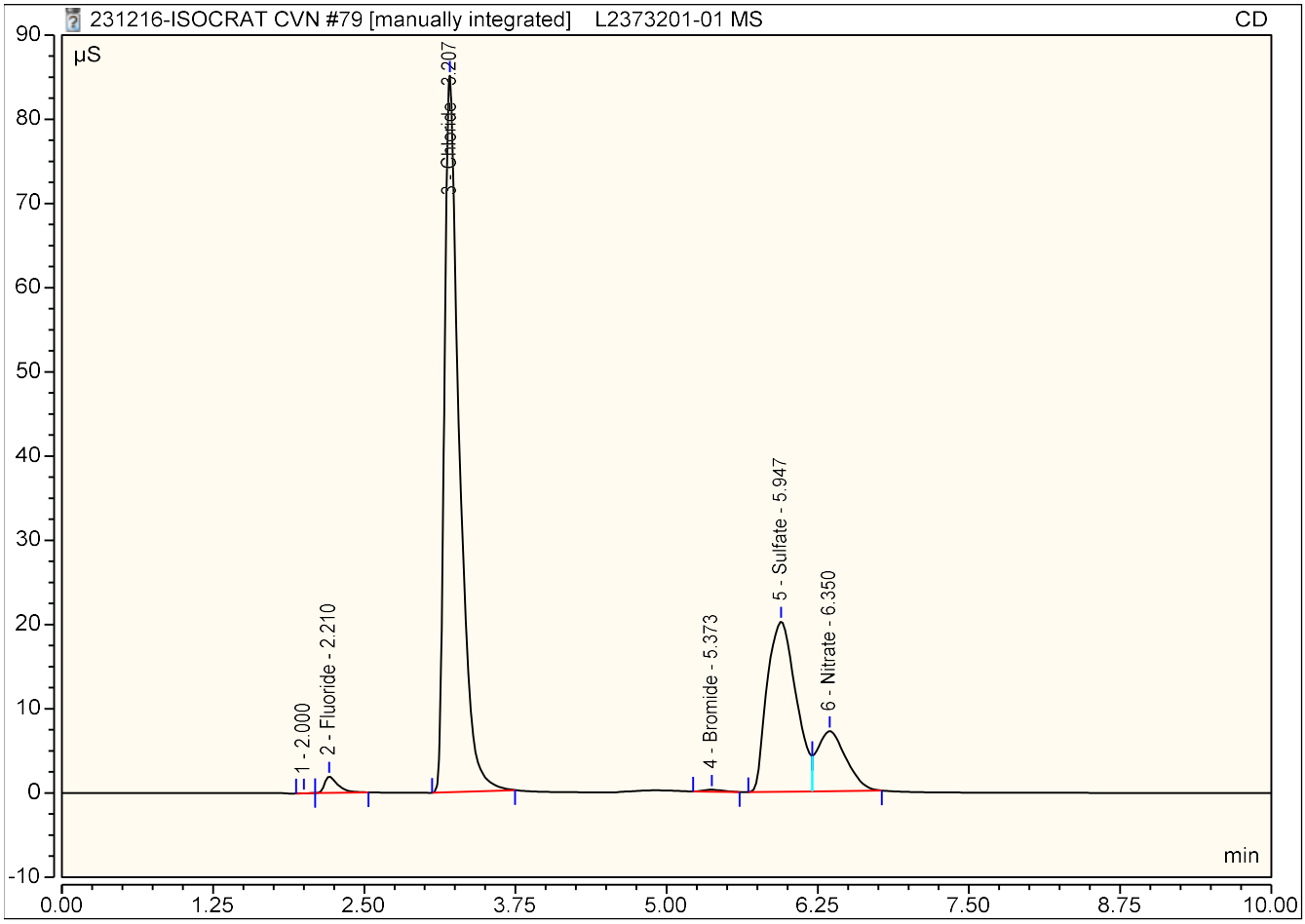
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	3.21	**Chloride**	BMB	0.002	0.015	0.1838
3	6.03	**Sulfate**	BMB	0.014	0.046	0.3334
TOTAL:				0.02	0.06	0.52



Peak Integration Report

Sample Name:	**L2373201-01 MS**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 22:56**	*Run Time:*	**10.00**

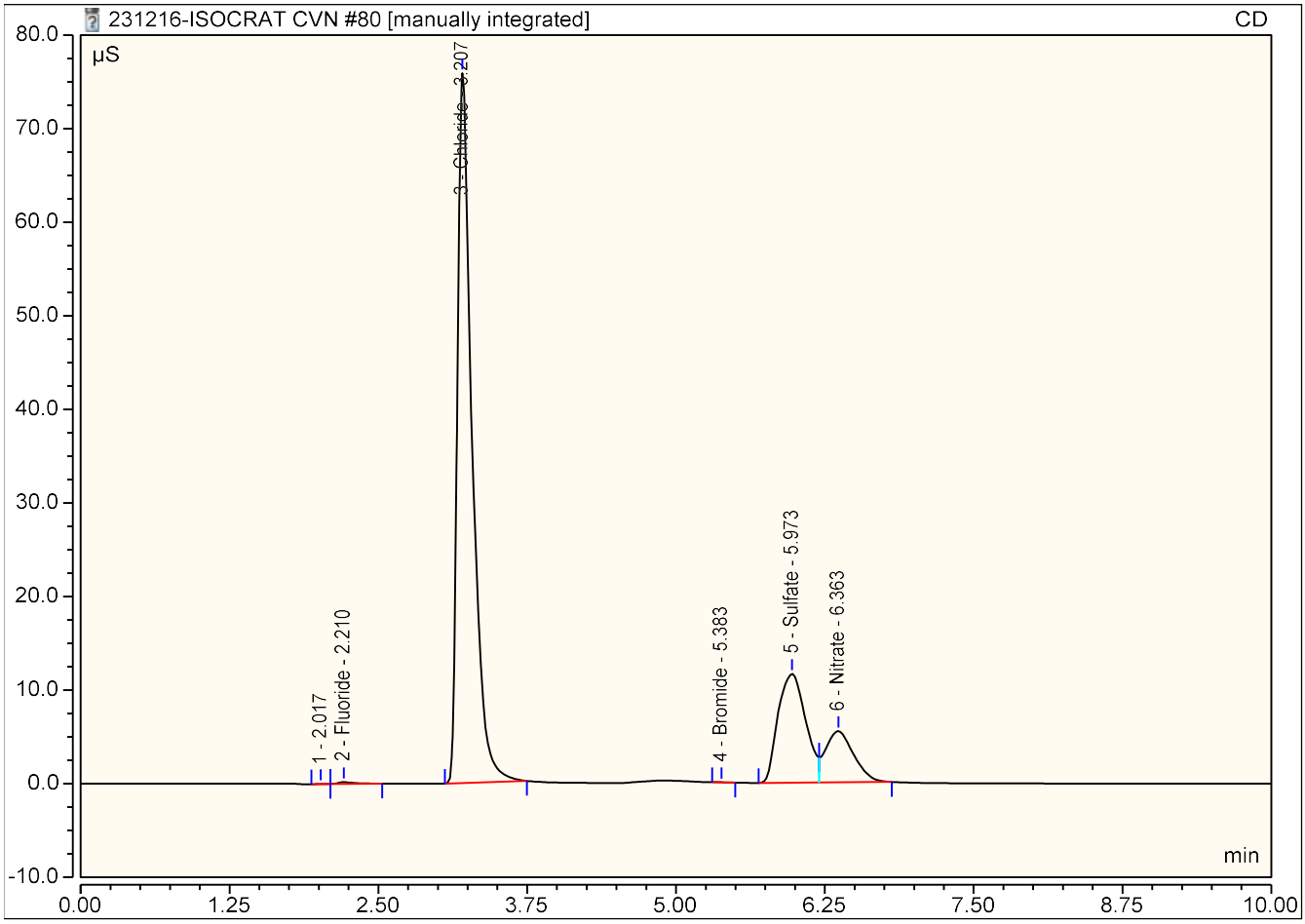
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.21	**Fluoride**	BMB	0.249	1.961	0.4428
3	3.21	**Chloride**	BMB	12.189	85.068	26.9698
4	5.37	**Bromide**	BMB*	0.043	0.232	0.3795
5	5.95	**Sulfate**	BM *	5.623	20.230	18.1660
6	6.35	**Nitrate**	MB*	1.974	7.139	1.4427
TOTAL:				20.08	114.63	47.40



Peak Integration Report

Sample Name:	**L2373201-01 DUP**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 23:08**	*Run Time:*	**10.00**

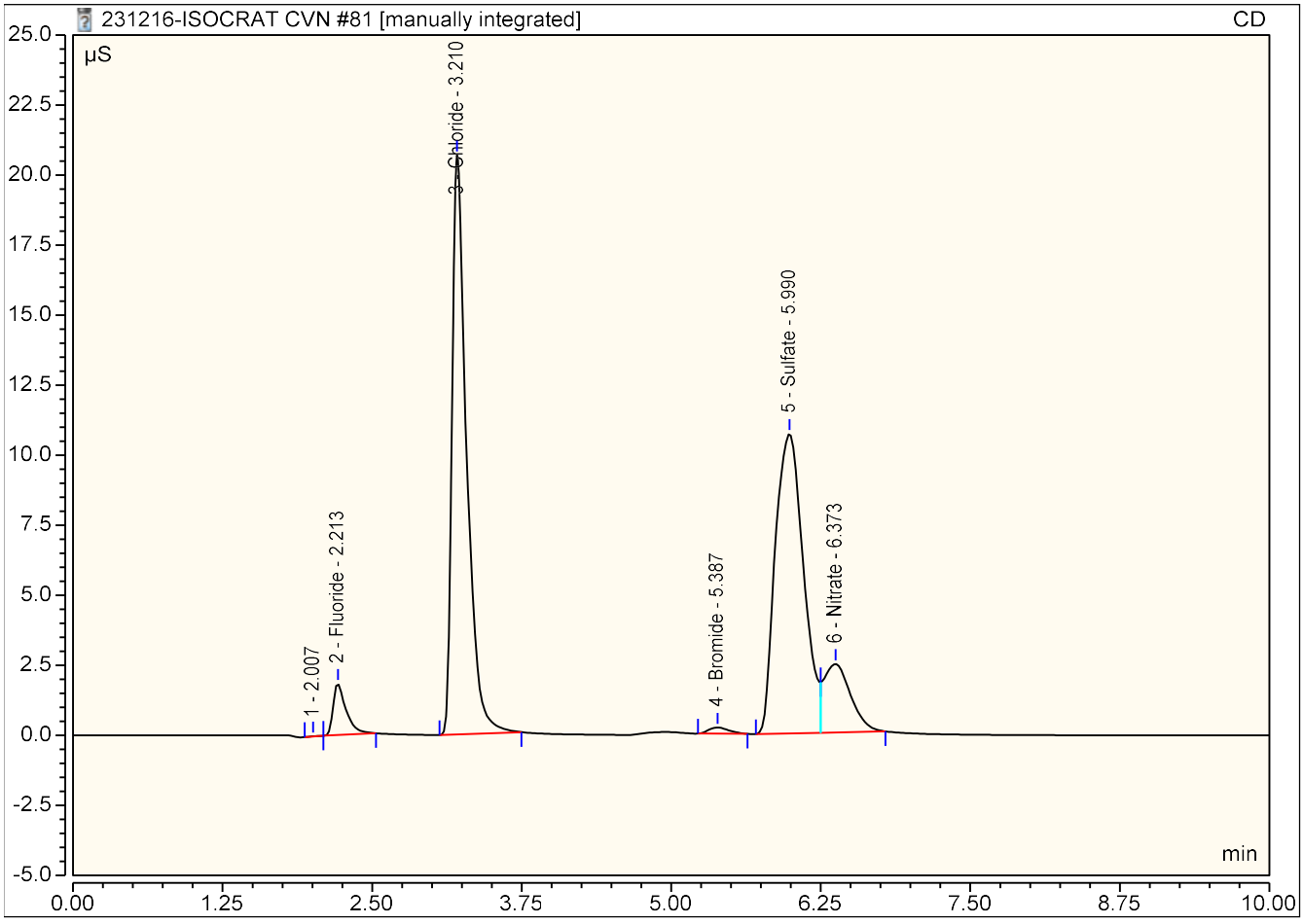
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.21	**Fluoride**	BMB	0.025	0.182	0.0873
3	3.21	**Chloride**	BMB	10.796	75.859	23.9089
4	5.38	**Bromide**	BMB*	0.001	0.009	0.0621
5	5.97	**Sulfate**	BM *	3.129	11.626	10.2359
6	6.36	**Nitrate**	MB*	1.497	5.478	1.1152
TOTAL:				15.45	93.15	35.41



Peak Integration Report

Sample Name:	**XL2373201-01 MS; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 23:20**	*Run Time:*	**10.00**

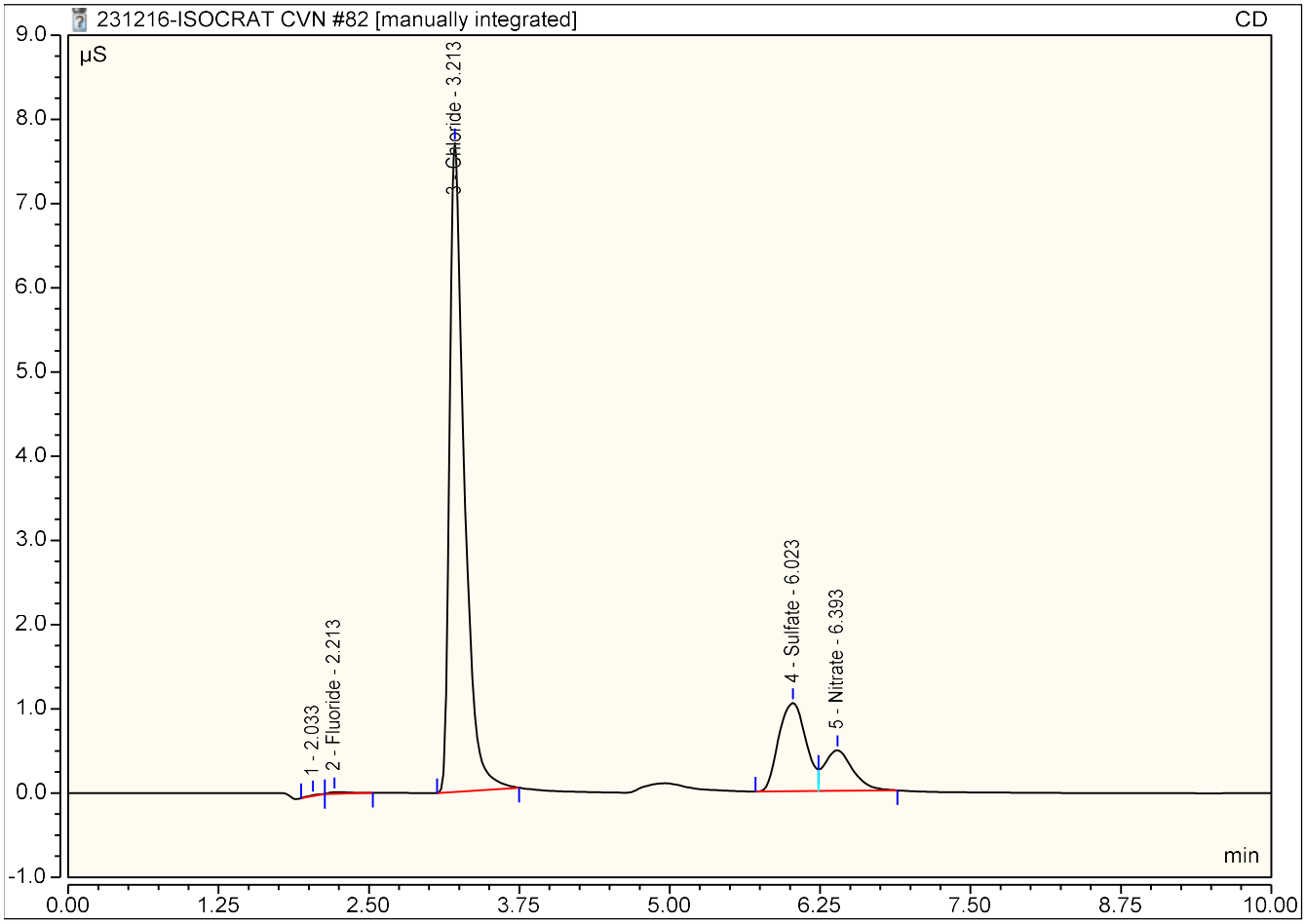
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.21	**Fluoride**	BMB	0.230	1.834	4.1288
3	3.21	**Chloride**	BMB	2.918	20.675	65.9332
4	5.39	**Bromide**	BMB*	0.044	0.224	3.8357
5	5.99	**Sulfate**	BM *	2.916	10.698	95.6093
6	6.37	**Nitrate**	MB*	0.631	2.447	5.1984
TOTAL:				6.74	35.88	174.71



Peak Integration Report

Sample Name:	**XL2373201-01 DUP; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 23:32**	*Run Time:*	**10.00**

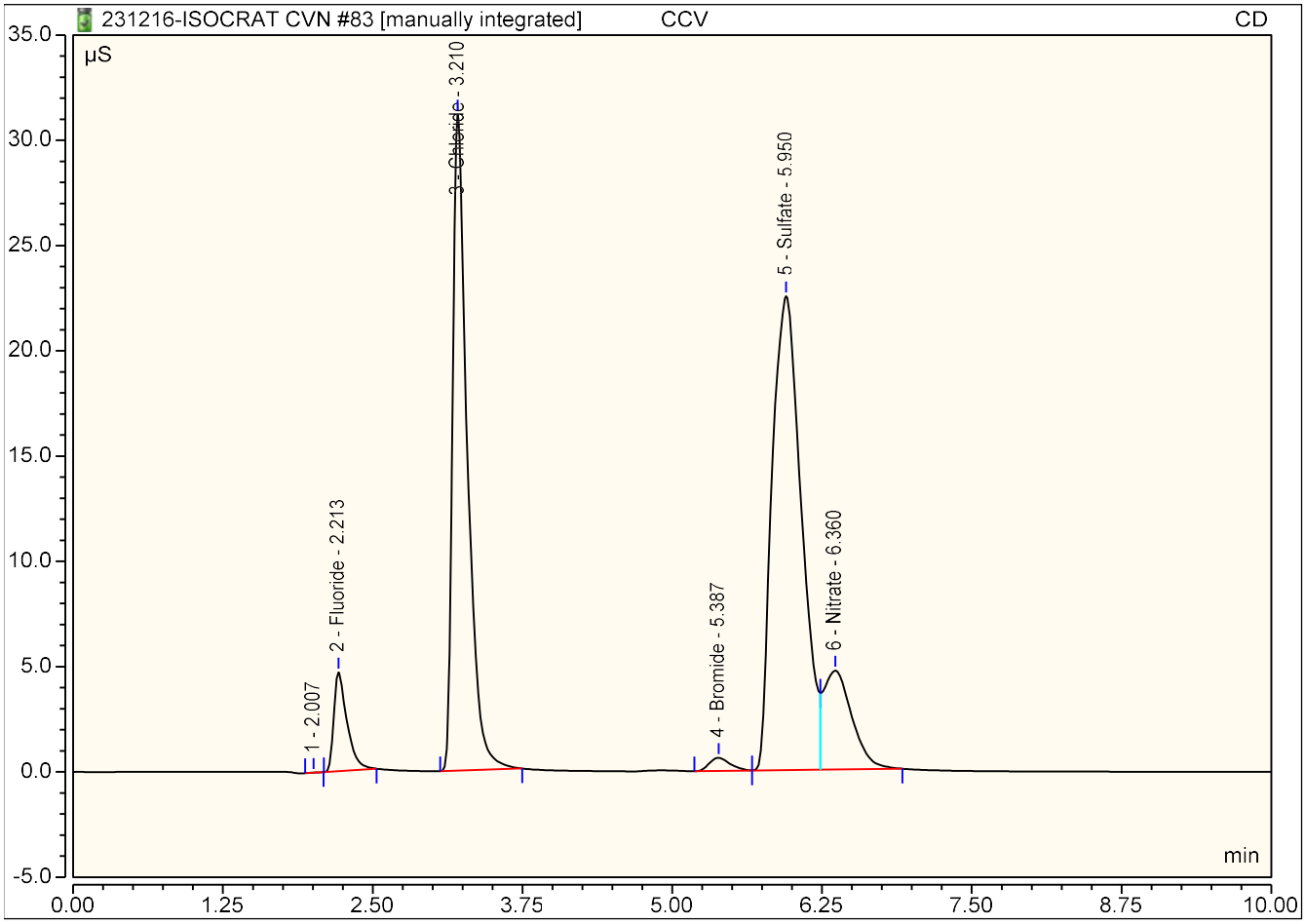
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.21	**Fluoride**	BMB	0.004	0.019	0.5312
3	3.21	**Chloride**	BMB	1.090	7.705	25.7389
4	6.02	**Sulfate**	BM *	0.275	1.048	11.6391
5	6.39	**Nitrate**	MB*	0.132	0.484	1.7735
TOTAL:				1.50	9.26	39.68



Peak Integration Report

Sample Name:	**CCV**	*Inj. Vol.:*	**25.00**
Injection Type:	**Check Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 23:44**	*Run Time:*	**10.00**

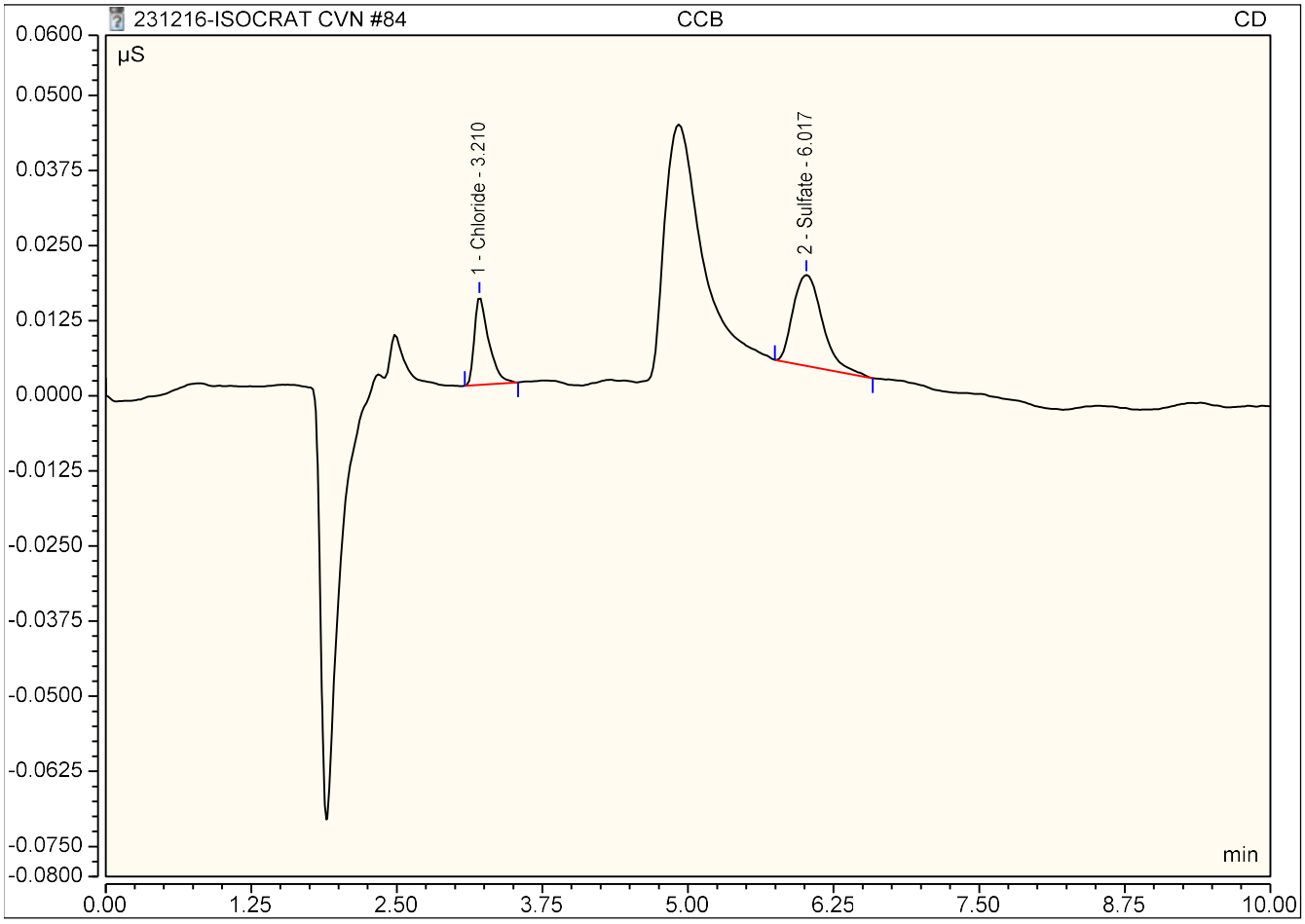
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.21	**Fluoride**	BMB	0.598	4.697	0.9963
3	3.21	**Chloride**	BMB	4.432	31.179	9.9204
4	5.39	**Bromide**	BMb*	0.124	0.624	0.9905
5	5.95	**Sulfate**	bM *	6.364	22.508	20.5242
6	6.36	**Nitrate**	MB*	1.291	4.701	0.9733
TOTAL:				12.81	63.71	33.40



Peak Integration Report

Sample Name:	**CCB**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**16-Dec-2023 / 23:56**	*Run Time:*	**10.00**

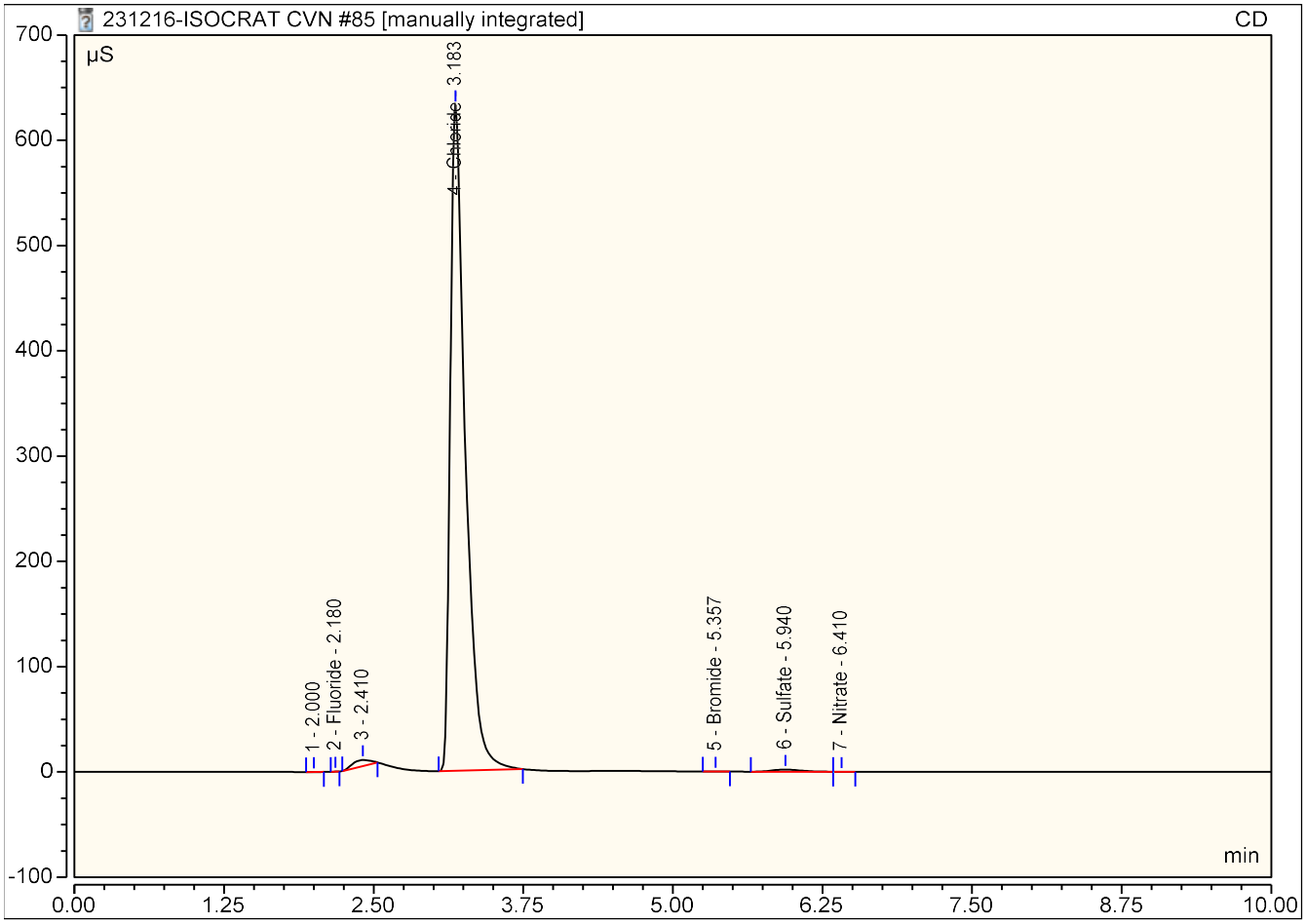
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	3.21	**Chloride**	BMB	0.002	0.015	0.1837
2	6.02	**Sulfate**	BMB	0.004	0.015	0.3026
TOTAL:				0.01	0.03	0.49



Peak Integration Report

Sample Name:	**L2373323-01 SO4**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**17-Dec-2023 / 00:08**	*Run Time:*	**10.00**

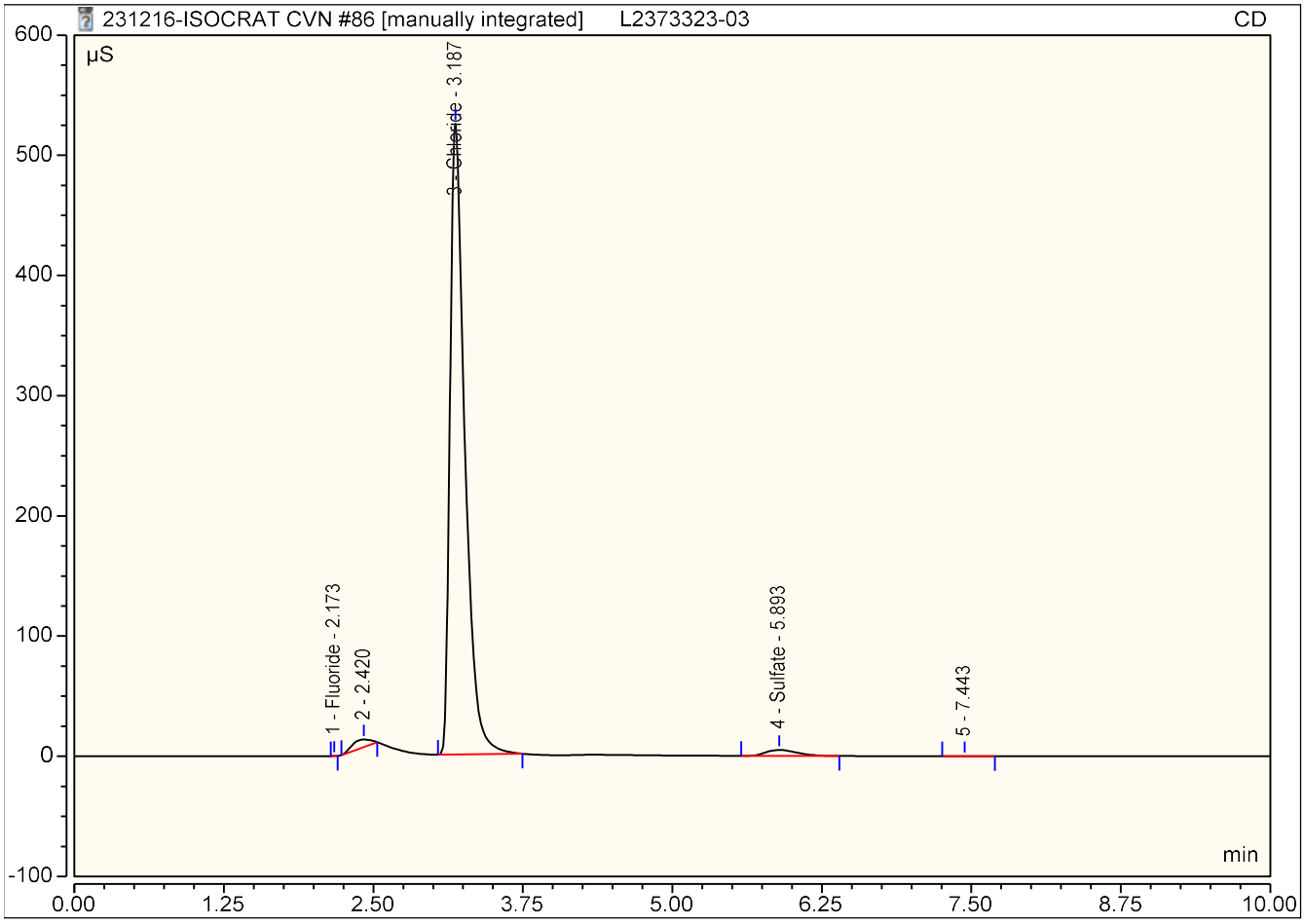
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.18	**Fluoride**	BMB	0.002	0.058	0.0510
4	3.18	**Chloride**	BMB	92.459	632.346	203.4072
5	5.36	**Bromide**	BMB*	0.007	0.053	0.1069
6	5.94	**Sulfate**	BM *	0.592	2.094	2.1713
7	6.41	**Nitrate**	MB*	0.008	0.059	0.0921
TOTAL:				93.07	634.61	205.83



Peak Integration Report

Sample Name:	**L2373323-03**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**17-Dec-2023 / 00:21**	*Run Time:*	**10.00**

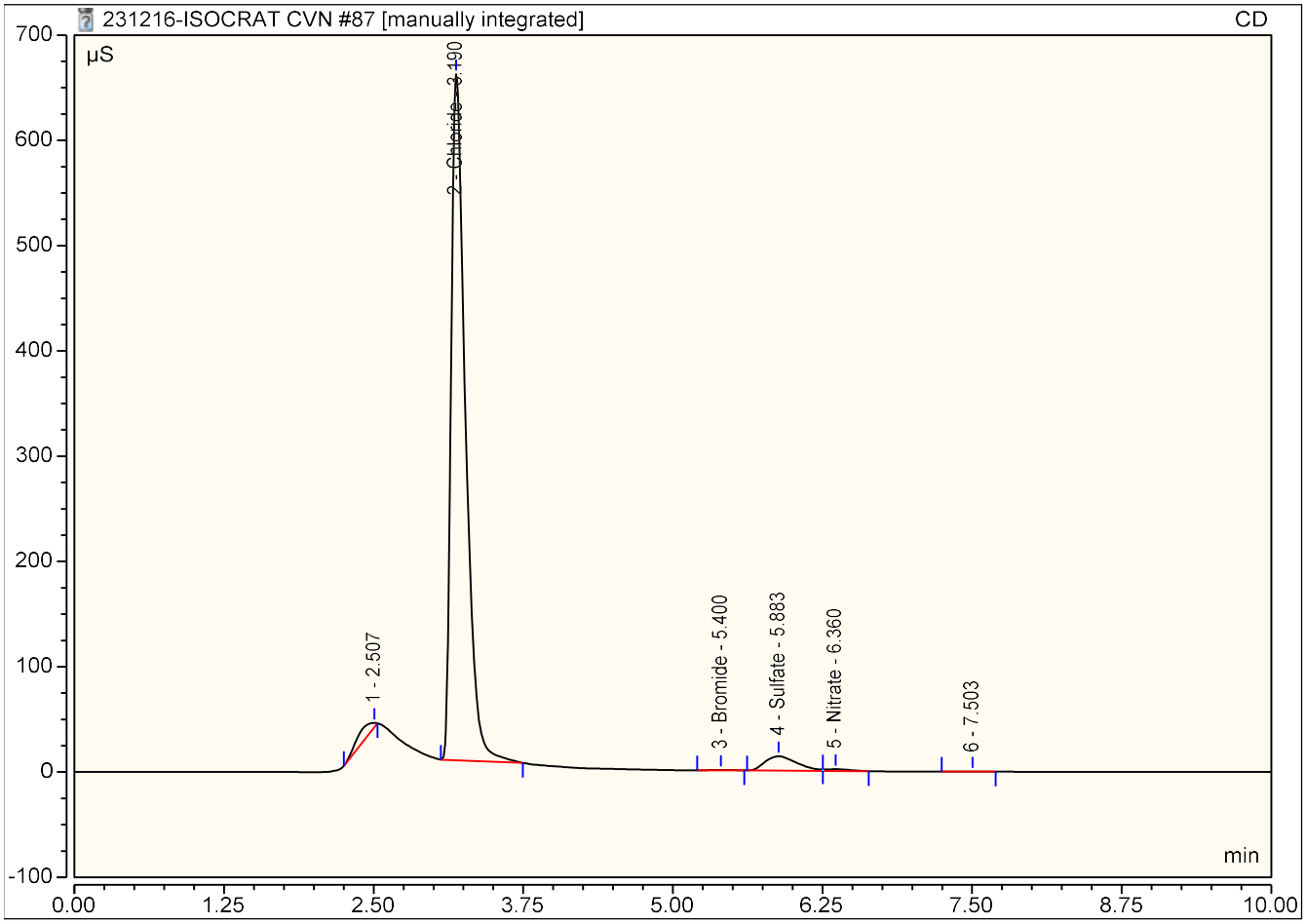
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.17	**Fluoride**	BMB	0.000	0.017	0.0483
3	3.19	**Chloride**	BMB	75.416	524.945	165.9453
4	5.89	**Sulfate**	BMB*	1.521	5.042	5.1232
TOTAL:				76.94	530.00	171.12



Peak Integration Report

Sample Name:	**L2373323-04 MS**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**17-Dec-2023 / 00:33**	*Run Time:*	**10.00**

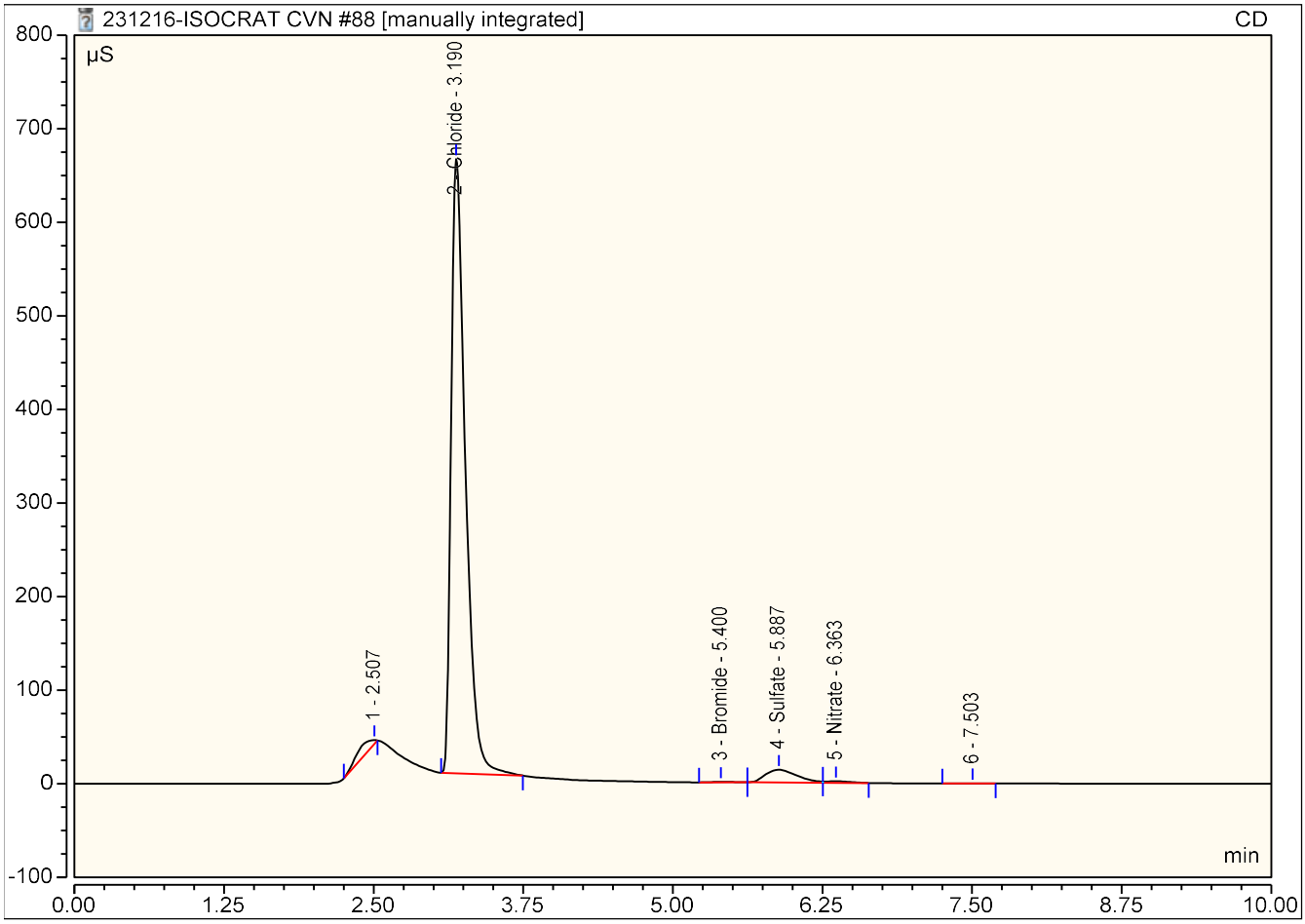
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	3.19	**Chloride**	BMB	90.384	651.758	198.8463
3	5.40	**Bromide**	BMB*	0.109	0.497	0.8793
4	5.88	**Sulfate**	BM *	4.143	13.575	13.4607
5	6.36	**Nitrate**	MB*	0.385	1.628	0.3511
TOTAL:				95.02	667.46	213.54



Peak Integration Report

Sample Name:	**L2373323-04 MSD**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**17-Dec-2023 / 00:45**	*Run Time:*	**10.00**

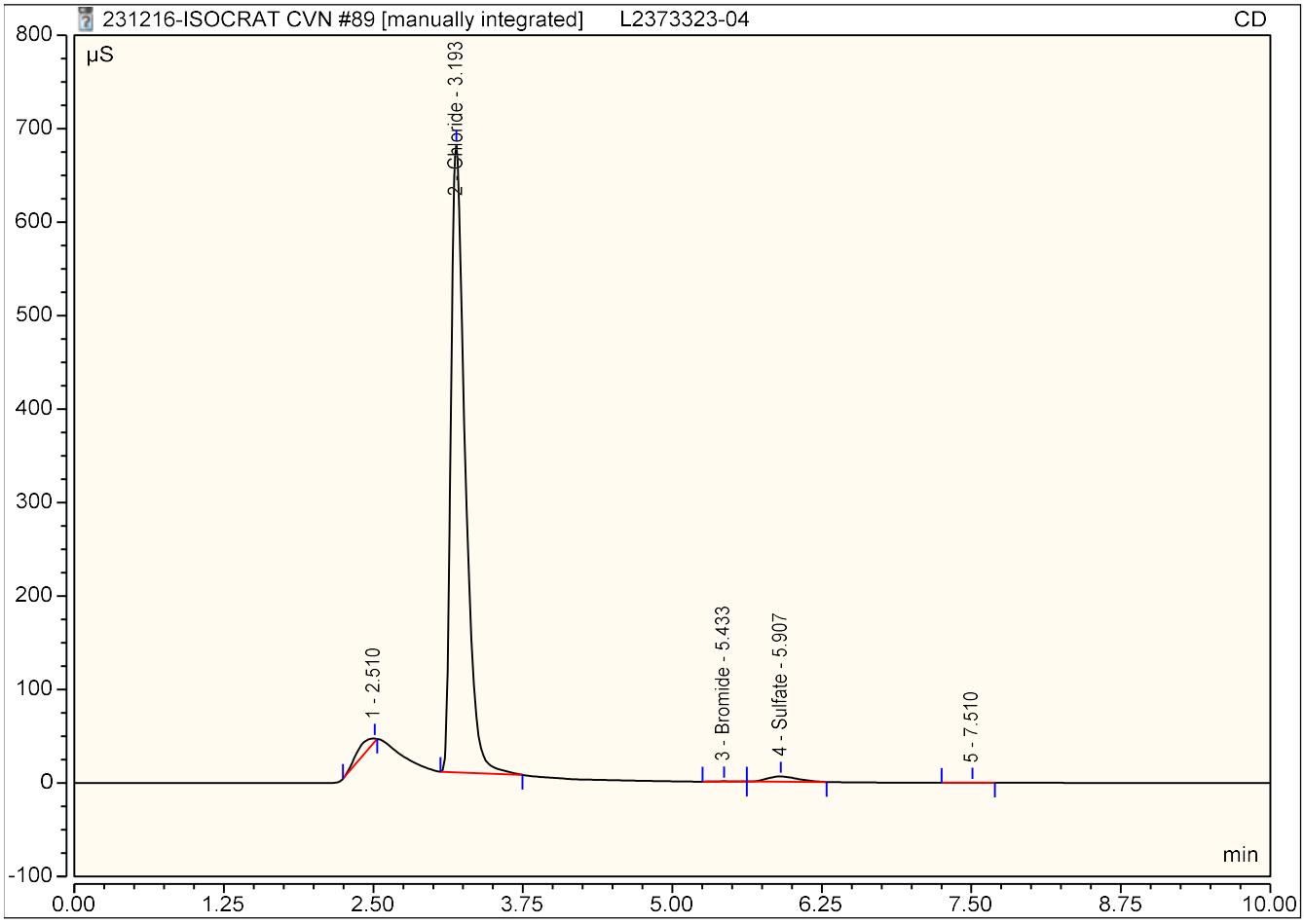
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	3.19	**Chloride**	BMB	90.576	656.543	199.2679
3	5.40	**Bromide**	BMB*	0.112	0.510	0.9014
4	5.89	**Sulfate**	BM *	4.139	13.652	13.4475
5	6.36	**Nitrate**	MB*	0.380	1.608	0.3473
TOTAL:				95.21	672.31	213.96



Peak Integration Report

Sample Name:	**L2373323-04**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**17-Dec-2023 / 00:57**	*Run Time:*	**10.00**

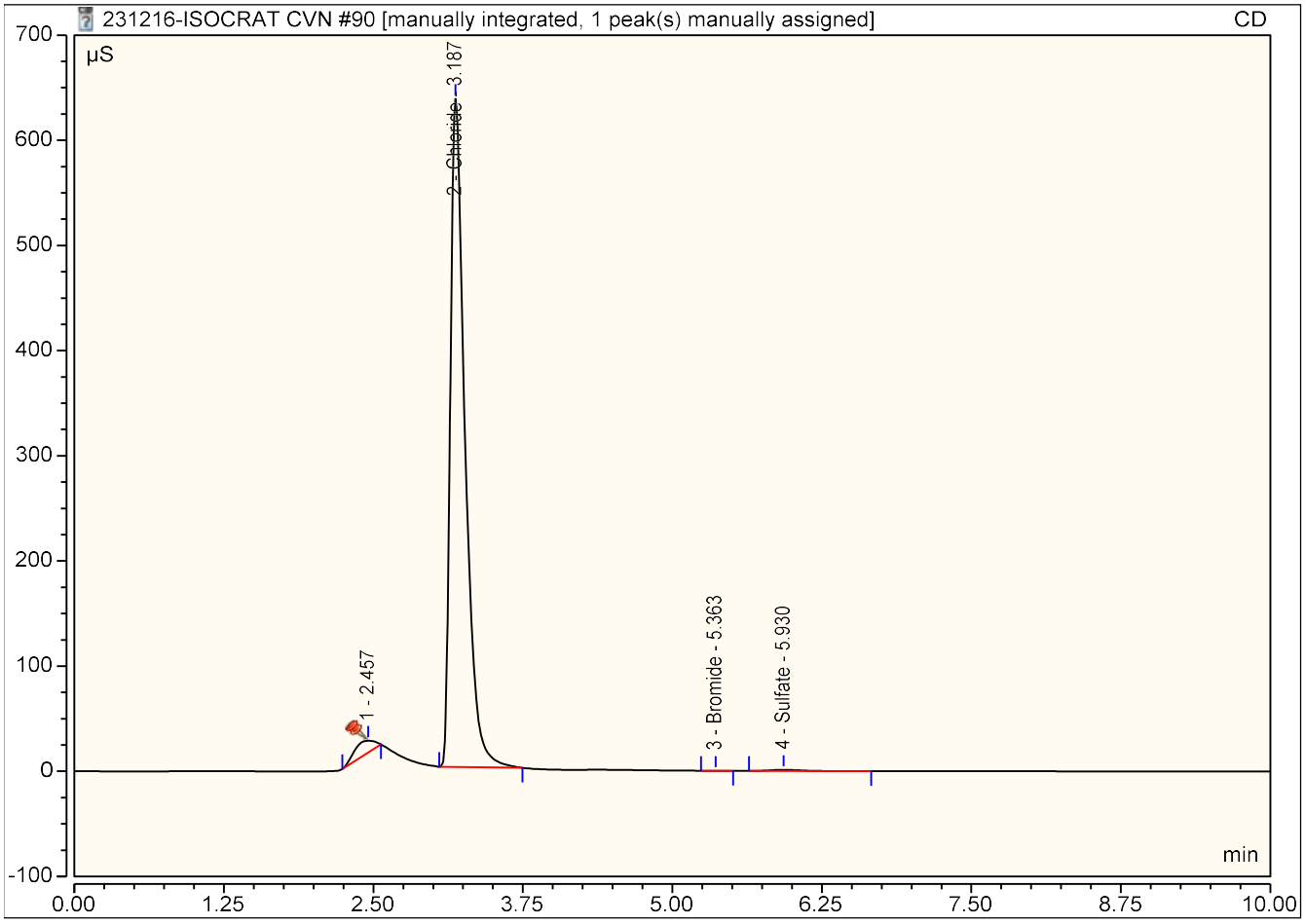
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	3.19	**Chloride**	BMB	92.592	671.191	203.6981
3	5.43	**Bromide**	BMb*	0.073	0.337	0.6073
4	5.91	**Sulfate**	bMB*	1.641	5.639	5.5059
TOTAL:				94.31	677.17	209.81



Peak Integration Report

Sample Name:	**L2373323-05**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**17-Dec-2023 / 01:09**	*Run Time:*	**10.00**

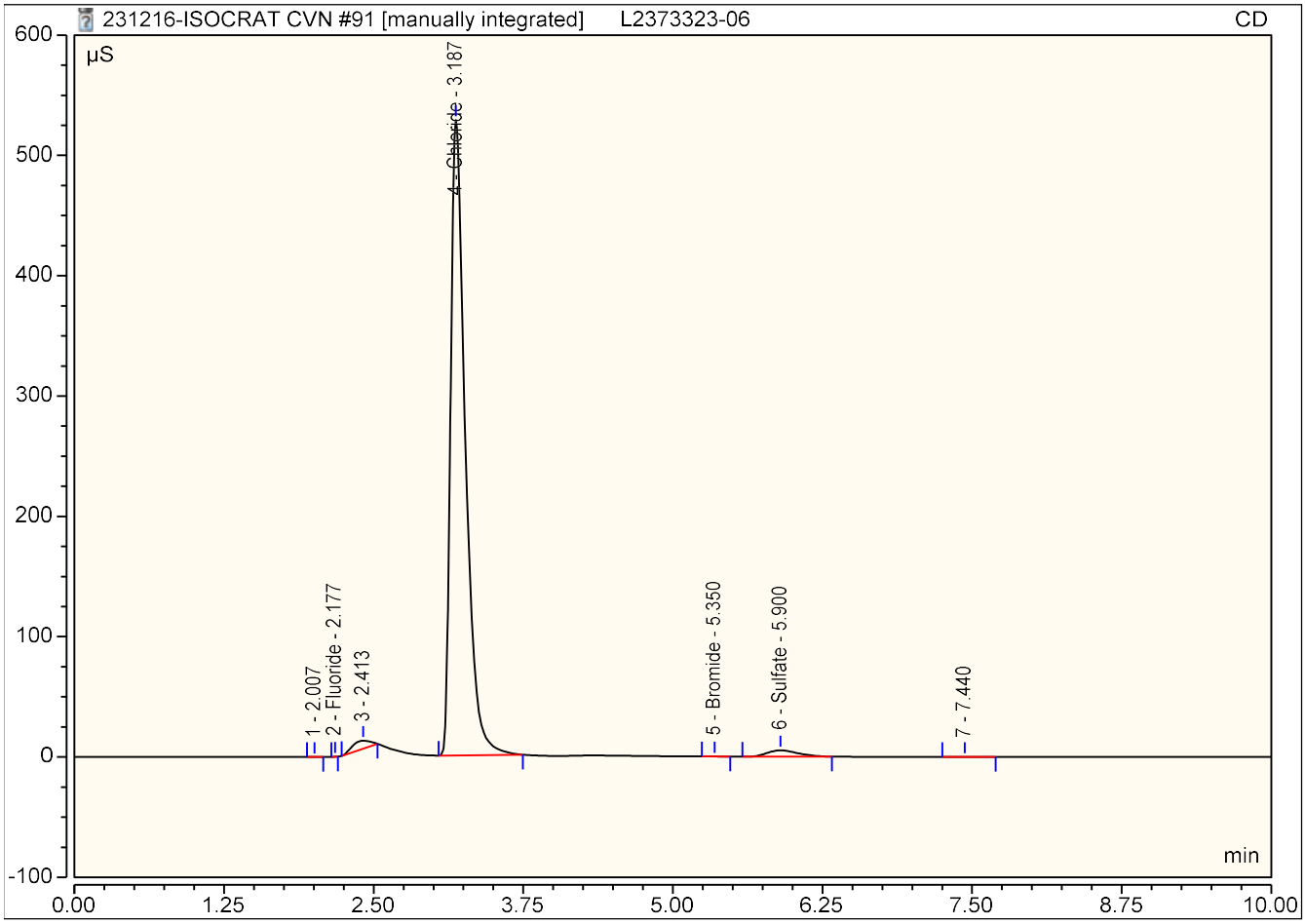
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	3.19	**Chloride**	BMB	90.278	635.223	198.6130
3	5.36	**Bromide**	BMB*	0.009	0.060	0.1232
4	5.93	**Sulfate**	BMB	0.344	1.164	1.3832
TOTAL:				90.63	636.45	200.12



Peak Integration Report

Sample Name:	**L2373323-06**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**17-Dec-2023 / 01:21**	*Run Time:*	**10.00**

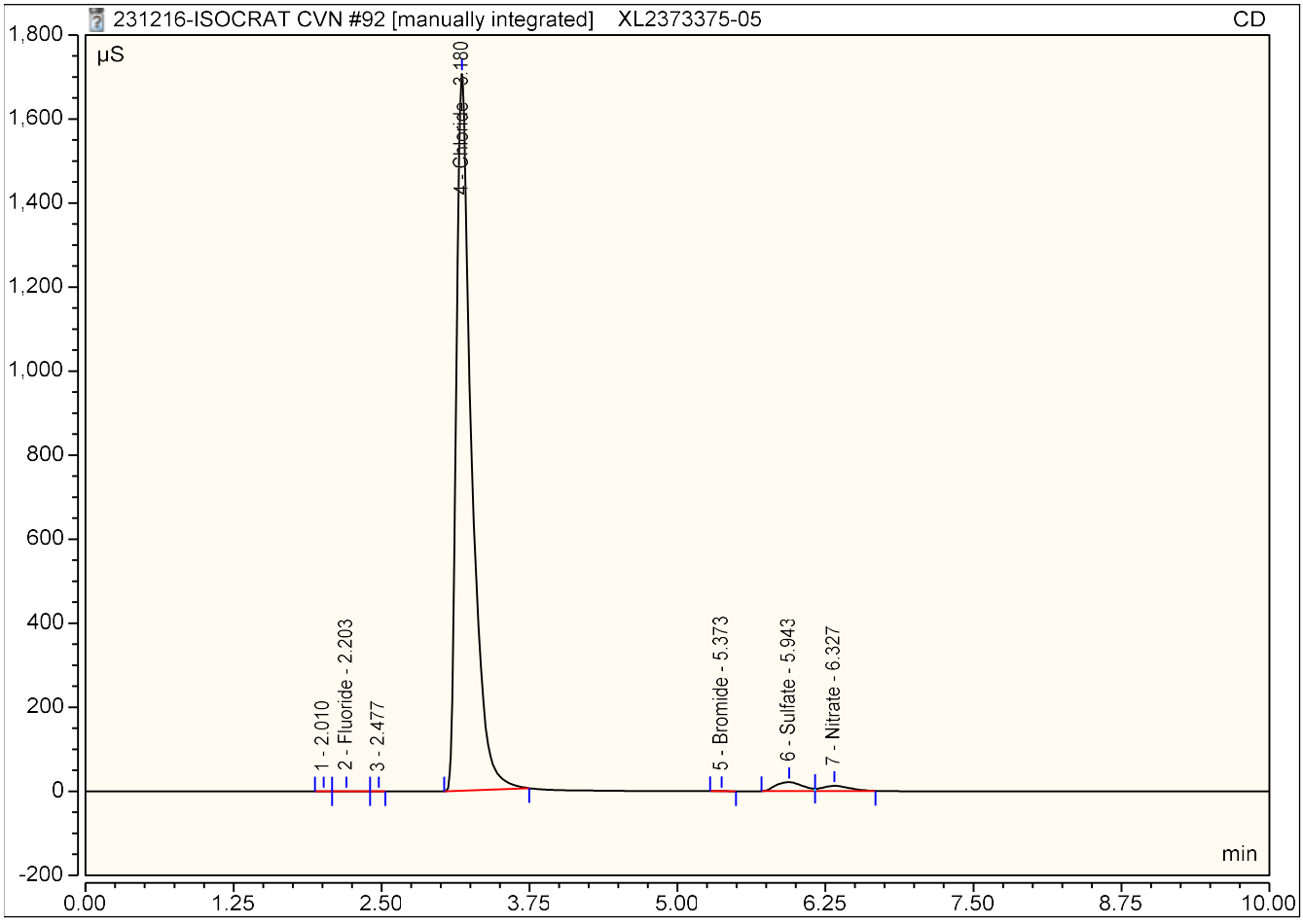
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.18	**Fluoride**	BMB	0.000	0.012	0.0480
4	3.19	**Chloride**	BMB	75.300	528.118	165.6896
5	5.35	**Bromide**	BMB*	0.008	0.055	0.1111
6	5.90	**Sulfate**	BMB*	1.558	5.215	5.2419
TOTAL:				76.87	533.40	171.09



Peak Integration Report

Sample Name:	**XL2373375-05**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**17-Dec-2023 / 01:33**	*Run Time:*	**10.00**

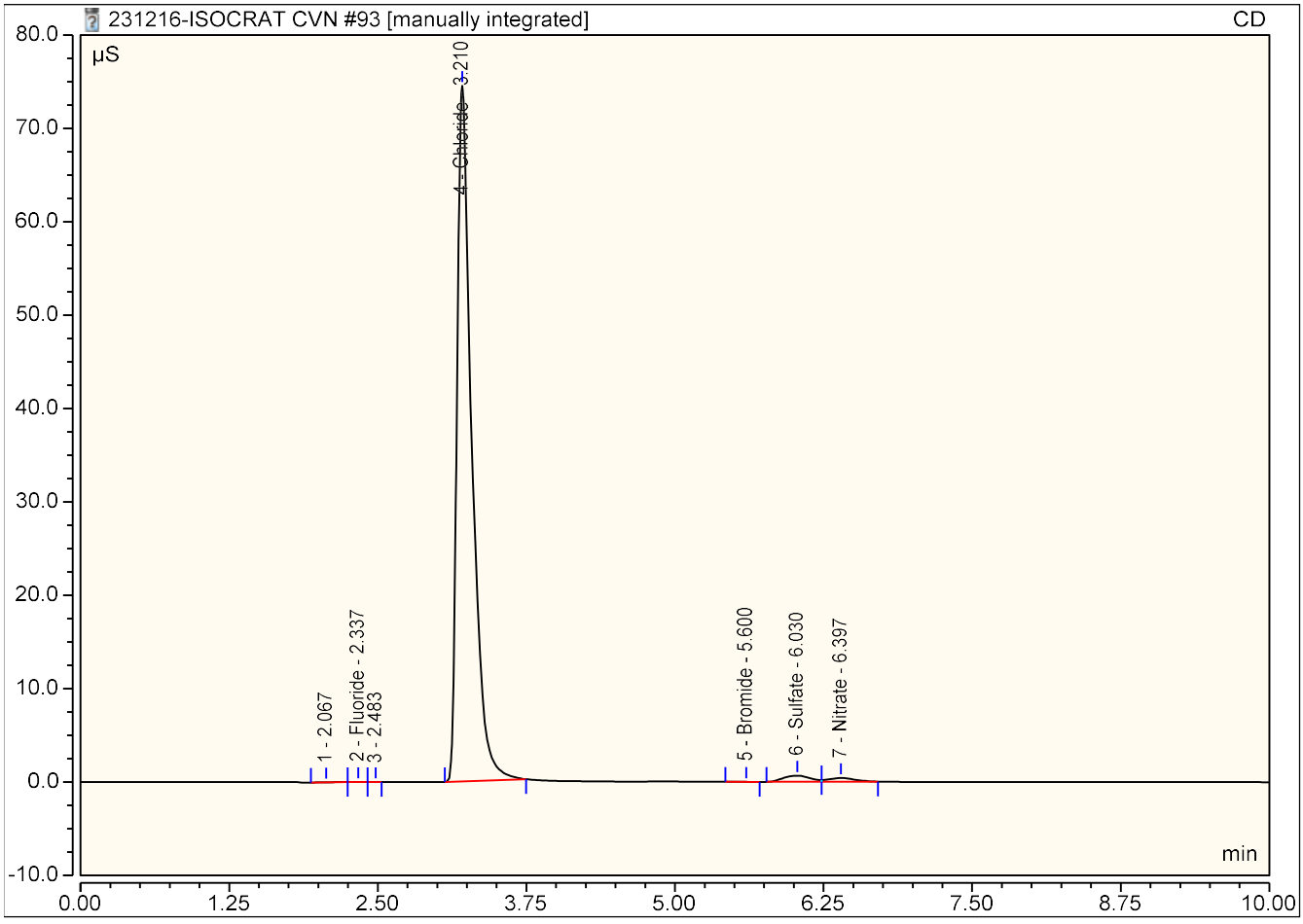
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.20	**Fluoride**	BMB	0.005	0.034	0.0554
4	3.18	**Chloride**	BMB	255.531	1705.441	561.8435
5	5.37	**Bromide**	BMB*	0.005	0.040	0.0931
6	5.94	**Sulfate**	BM *	5.595	21.379	18.0795
7	6.33	**Nitrate**	MB*	3.346	12.399	2.3857
TOTAL:				264.48	1739.29	582.46



Peak Integration Report

Sample Name:	**XL2373375-05; 25X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**25.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**17-Dec-2023 / 01:45**	*Run Time:*	**10.00**

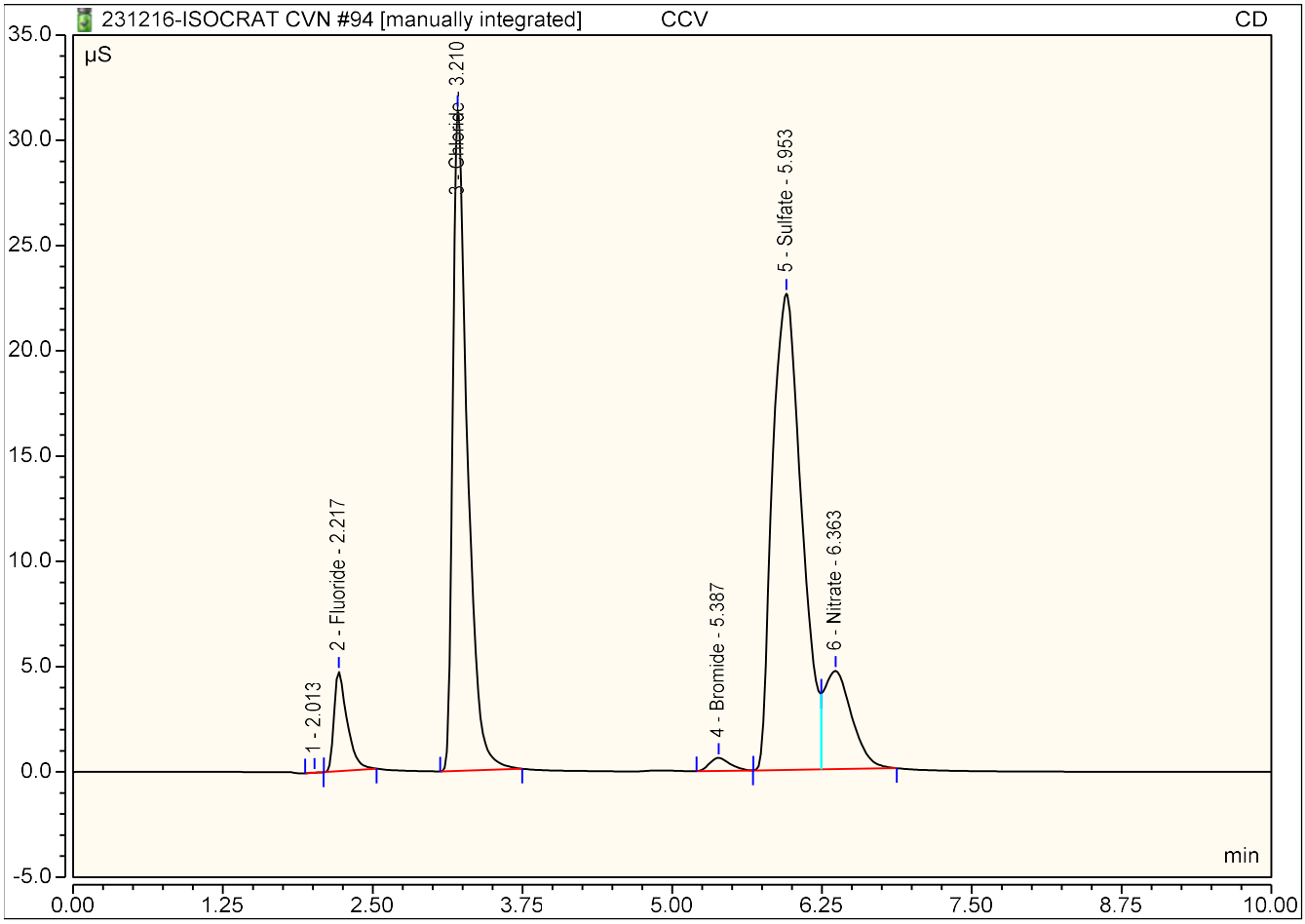
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.34	**Fluoride**	BMB	0.000	0.005	1.2047
4	3.21	**Chloride**	BMB	10.695	74.487	592.1756
5	5.60	**Bromide**	BMB*	0.000	0.001	1.3851
6	6.03	**Sulfate**	BM *	0.170	0.657	20.7352
7	6.40	**Nitrate**	MB*	0.099	0.391	3.8656
TOTAL:				10.97	75.54	619.37



Peak Integration Report

Sample Name:	**CCV**	*Inj. Vol.:*	**25.00**
Injection Type:	**Check Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**17-Dec-2023 / 01:57**	*Run Time:*	**10.00**

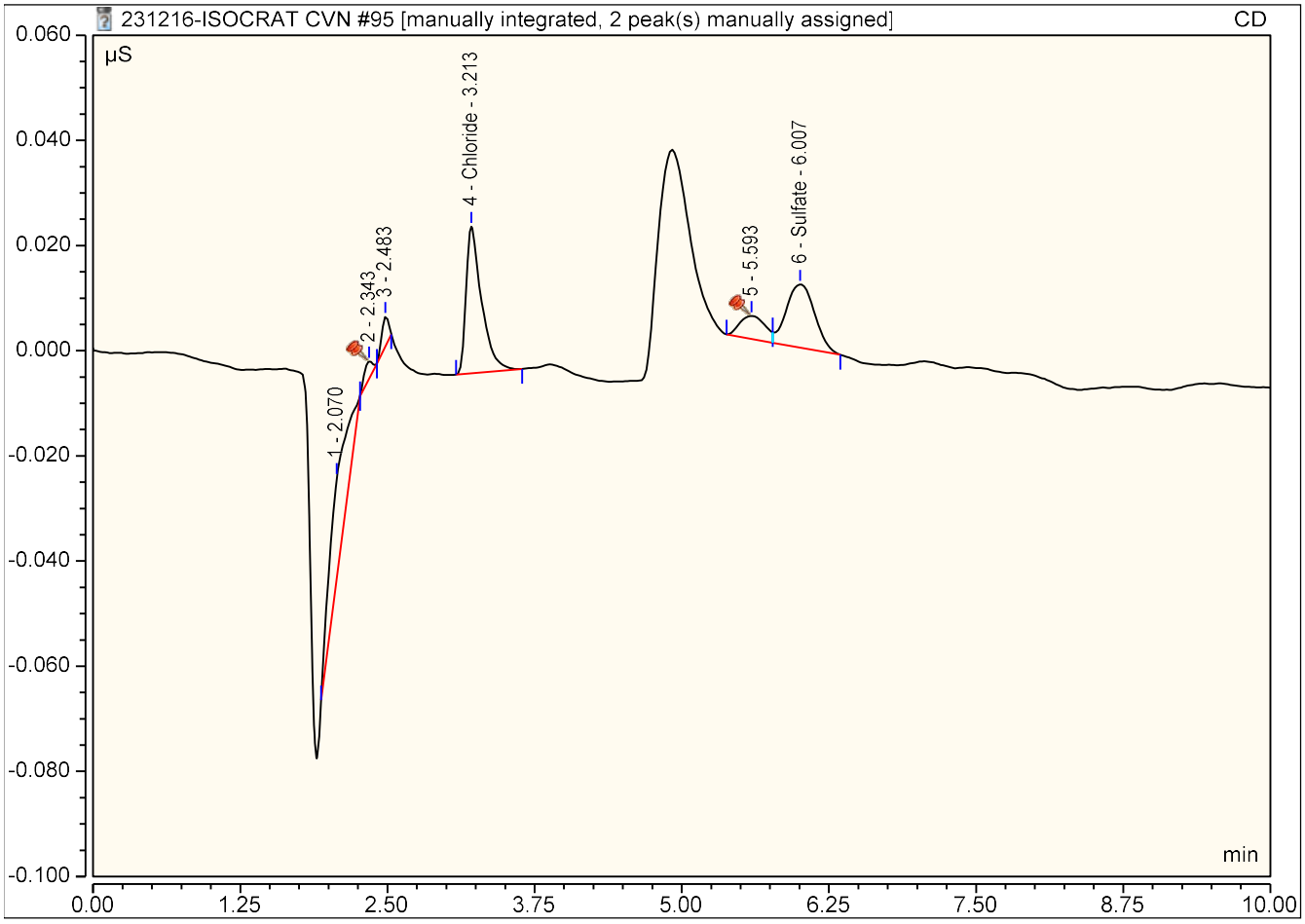
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.22	**Fluoride**	BMB	0.602	4.730	1.0015
3	3.21	**Chloride**	BMB	4.437	31.381	9.9322
4	5.39	**Bromide**	BMB*	0.123	0.619	0.9817
5	5.95	**Sulfate**	BM *	6.379	22.623	20.5706
6	6.36	**Nitrate**	MB*	1.251	4.672	0.9460
TOTAL:				12.79	64.03	33.43



Peak Integration Report

Sample Name:	**CCB**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**17-Dec-2023 / 02:09**	*Run Time:*	**10.00**

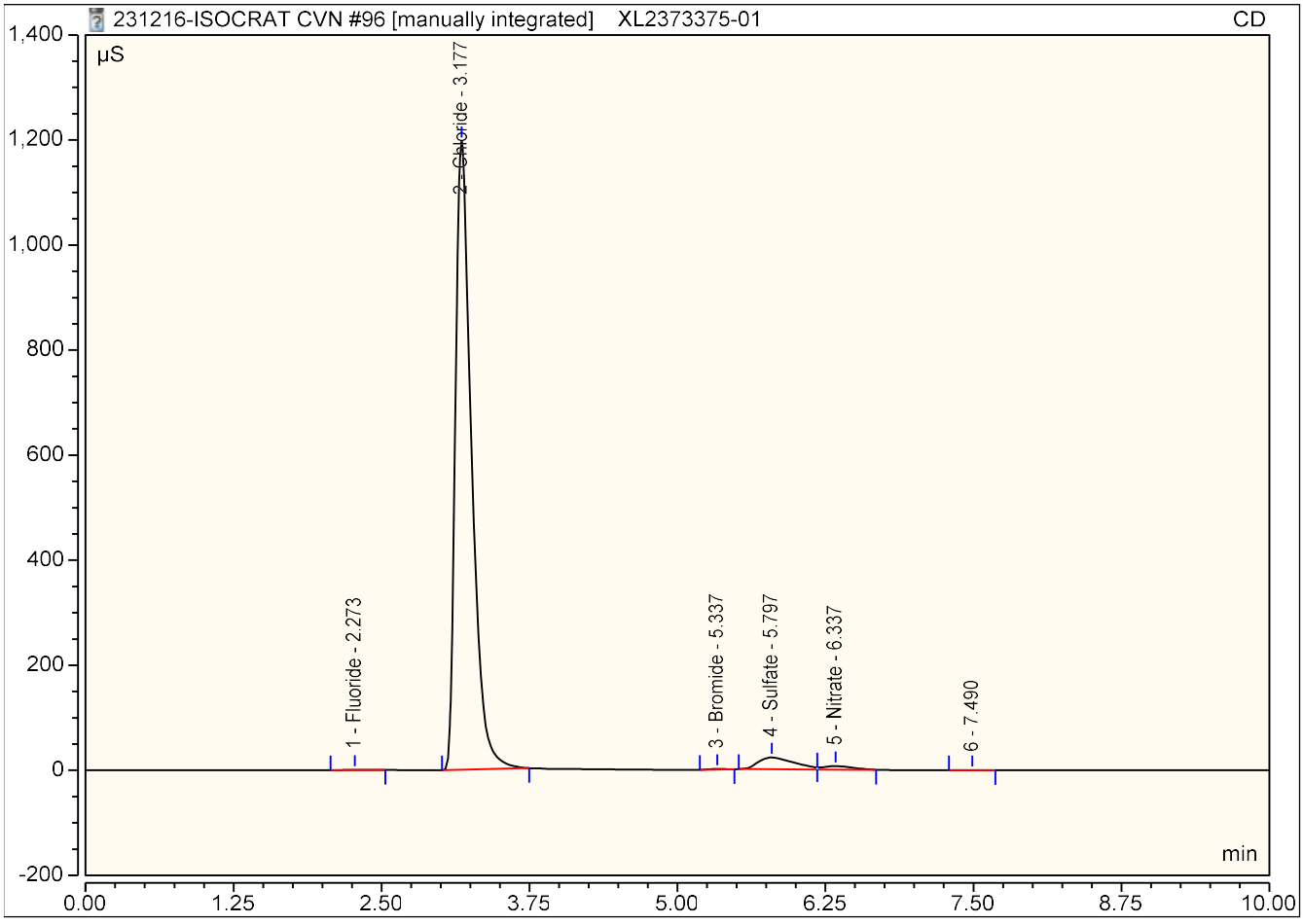
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
4	3.21	**Chloride**	BMB	0.004	0.028	0.1885
6	6.01	**Sulfate**	MB*	0.003	0.012	0.2992
TOTAL:				0.01	0.04	0.49



Peak Integration Report

Sample Name:	**XL2373375-01**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**17-Dec-2023 / 02:21**	*Run Time:*	**10.00**

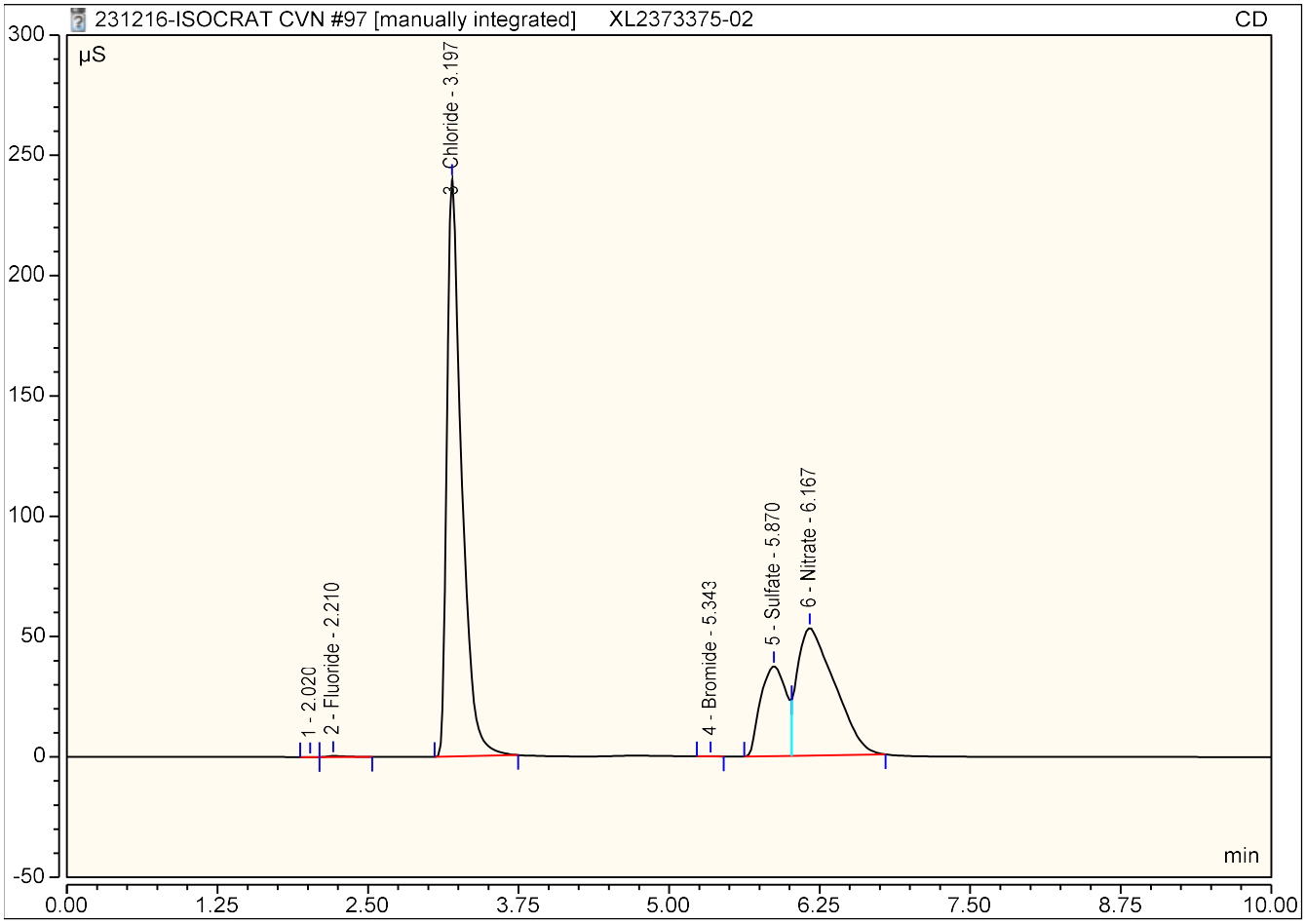
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.27	**Fluoride**	BMB	0.156	0.627	0.2954
2	3.18	**Chloride**	BMB	189.110	1196.769	415.8470
3	5.34	**Bromide**	BMB*	0.154	1.068	1.2220
4	5.80	**Sulfate**	BM *	7.866	22.561	25.2976
5	6.34	**Nitrate**	MB*	1.900	6.644	1.3917
TOTAL:				199.19	1227.67	444.05



Peak Integration Report

Sample Name:	**XL2373375-02**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**17-Dec-2023 / 02:33**	*Run Time:*	**10.00**

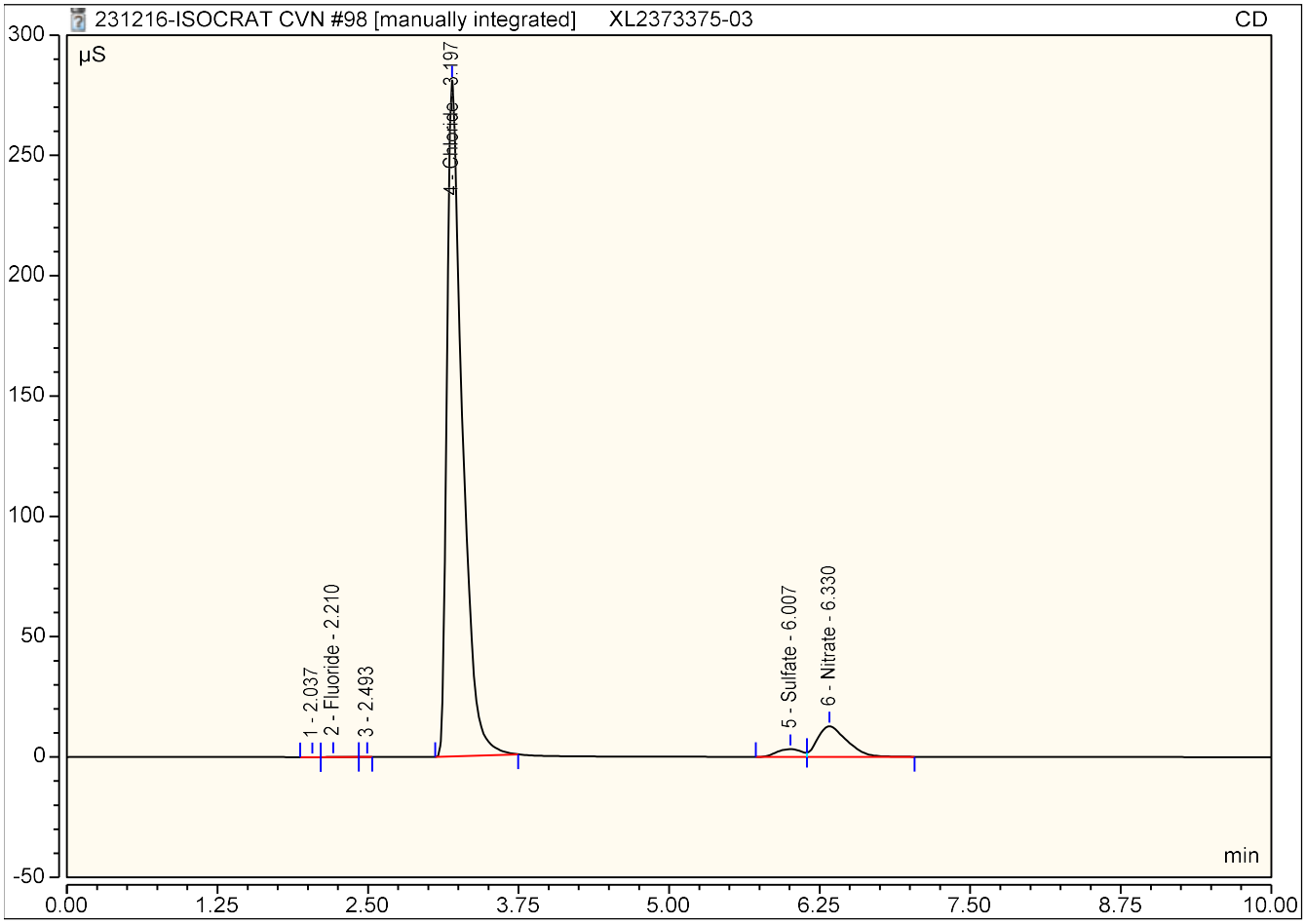
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.21	**Fluoride**	BMB	0.074	0.481	0.1645
3	3.20	**Chloride**	BMB	34.219	240.057	75.3928
4	5.34	**Bromide**	BMB*	0.009	0.070	0.1234
5	5.87	**Sulfate**	BM *	9.144	37.345	29.3638
6	6.17	**Nitrate**	MB*	19.015	52.958	13.1517
TOTAL:				62.46	330.91	118.20



Peak Integration Report

Sample Name:	**XL2373375-03**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**17-Dec-2023 / 02:45**	*Run Time:*	**10.00**

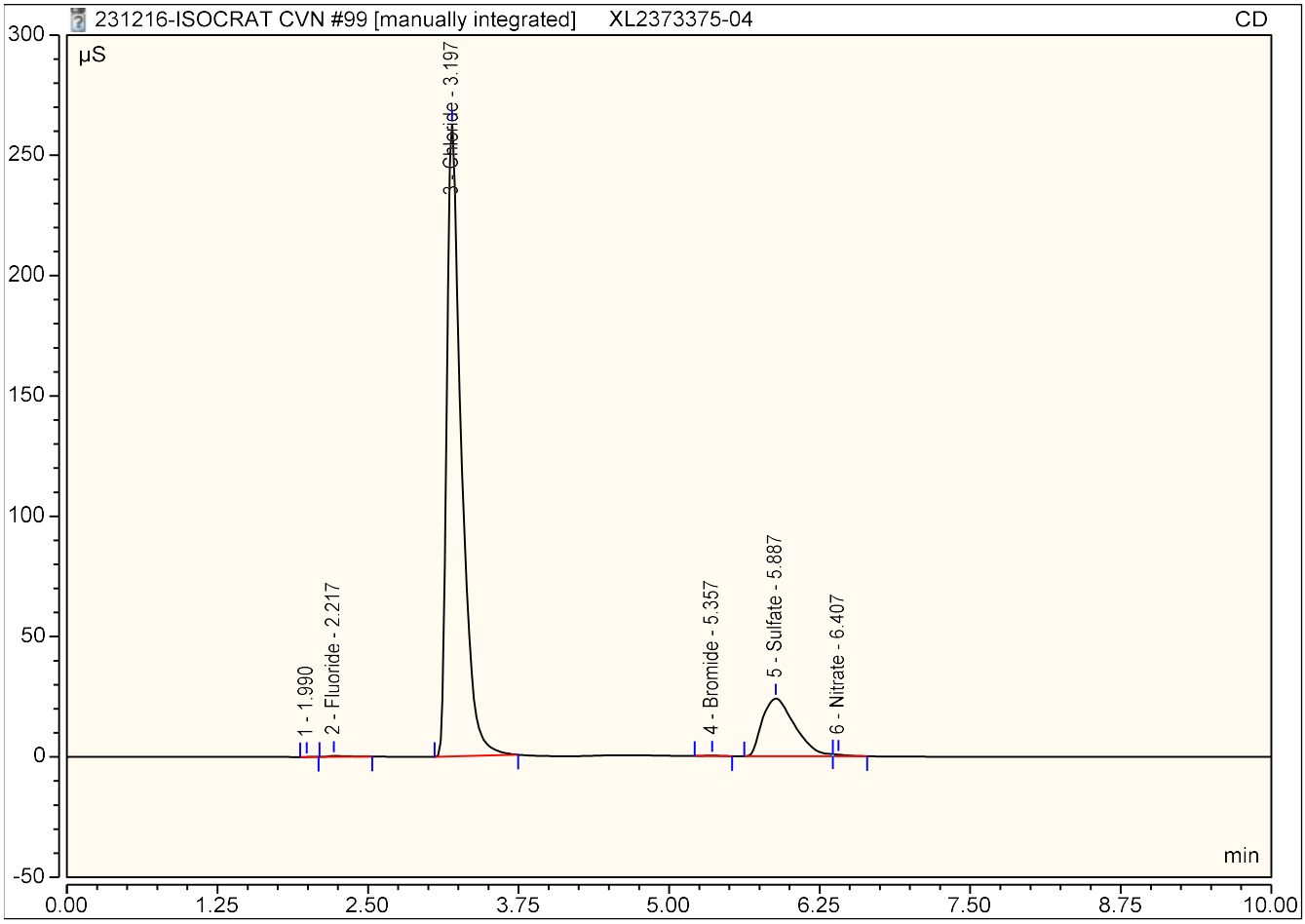
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.21	**Fluoride**	BMB	0.005	0.038	0.0560
4	3.20	**Chloride**	BMB	41.973	280.885	92.4376
5	6.01	**Sulfate**	BM *	0.766	3.234	2.7225
6	6.33	**Nitrate**	MB*	3.580	12.687	2.5460
TOTAL:				46.32	296.84	97.76



Peak Integration Report

Sample Name:	**XL2373375-04**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**17-Dec-2023 / 02:58**	*Run Time:*	**10.00**

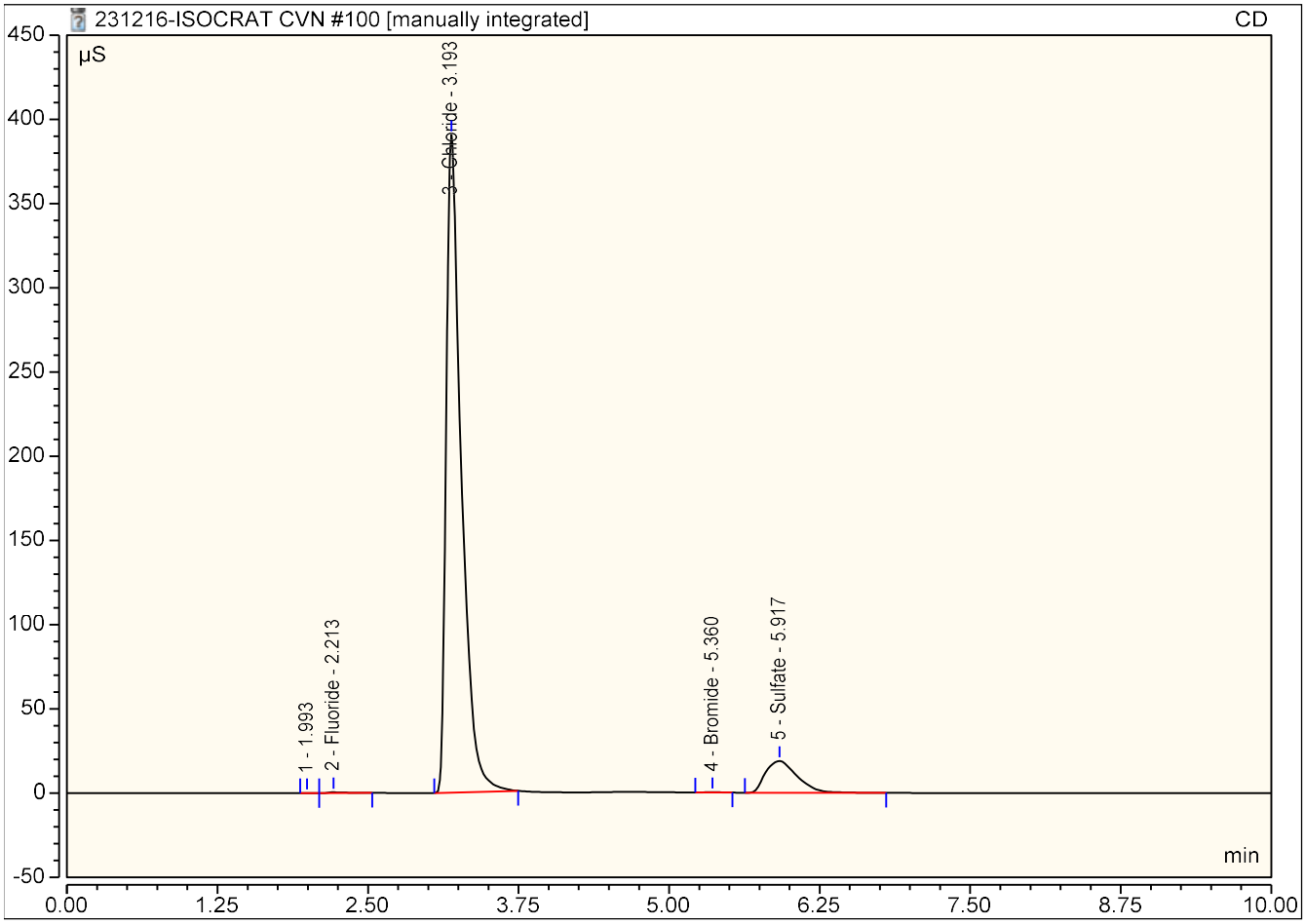
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.22	**Fluoride**	BMB	0.075	0.418	0.1670
3	3.20	**Chloride**	BMB	37.108	262.494	81.7433
4	5.36	**Bromide**	BMB*	0.035	0.213	0.3202
5	5.89	**Sulfate**	BM *	7.488	24.021	24.0973
6	6.41	**Nitrate**	MB*	0.099	0.662	0.1544
TOTAL:				44.81	287.81	106.48



Peak Integration Report

Sample Name:	**XL2373375-06**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**17-Dec-2023 / 03:10**	*Run Time:*	**10.00**

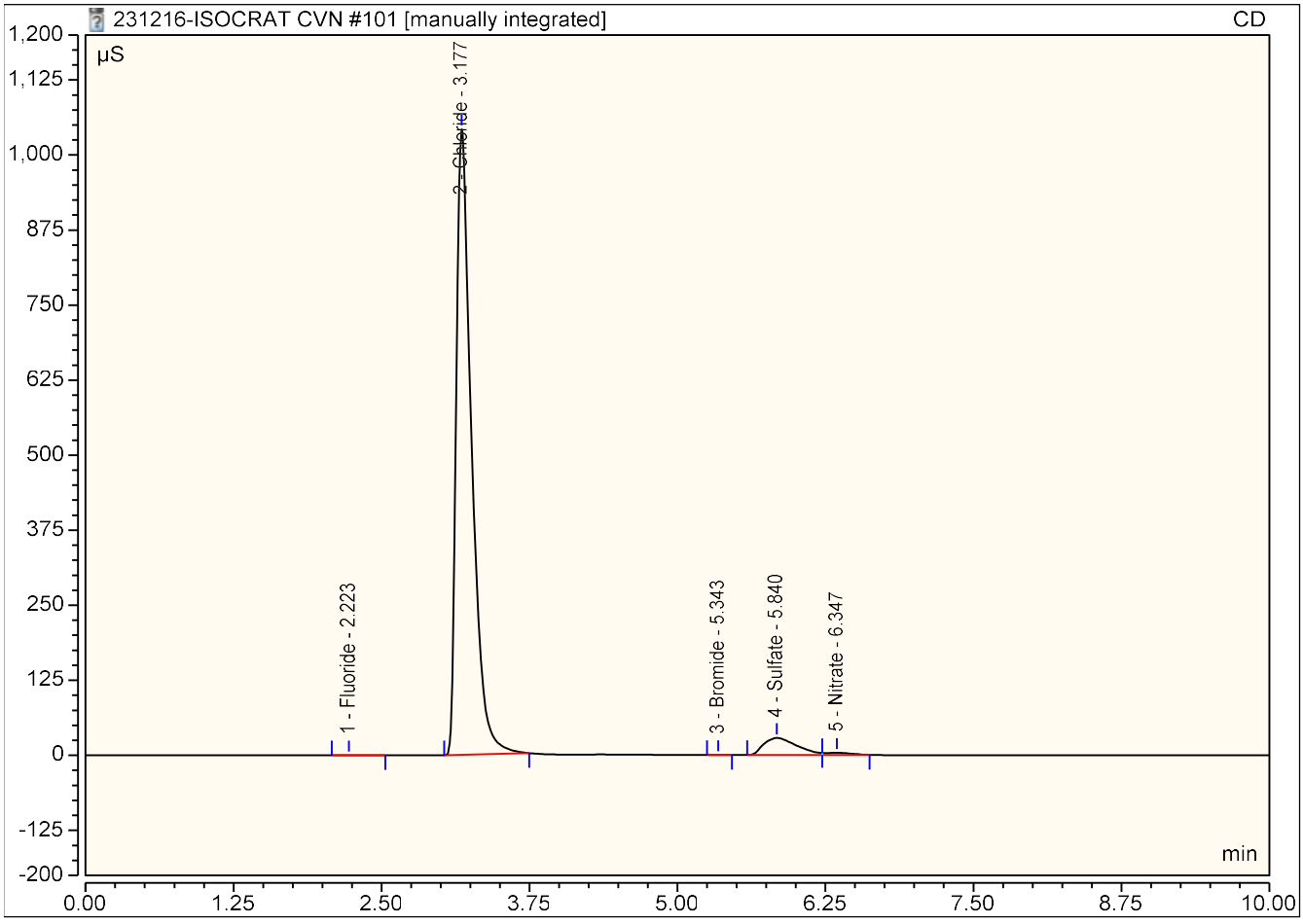
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.21	**Fluoride**	BMB	0.081	0.474	0.1756
3	3.19	**Chloride**	BMB	56.851	390.415	125.1395
4	5.36	**Bromide**	BMB*	0.032	0.193	0.2947
5	5.92	**Sulfate**	BMB*	5.748	18.906	18.5662
TOTAL:				62.71	409.99	144.18



Peak Integration Report

Sample Name:	**XL2373375-07**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**17-Dec-2023 / 03:22**	*Run Time:*	**10.00**

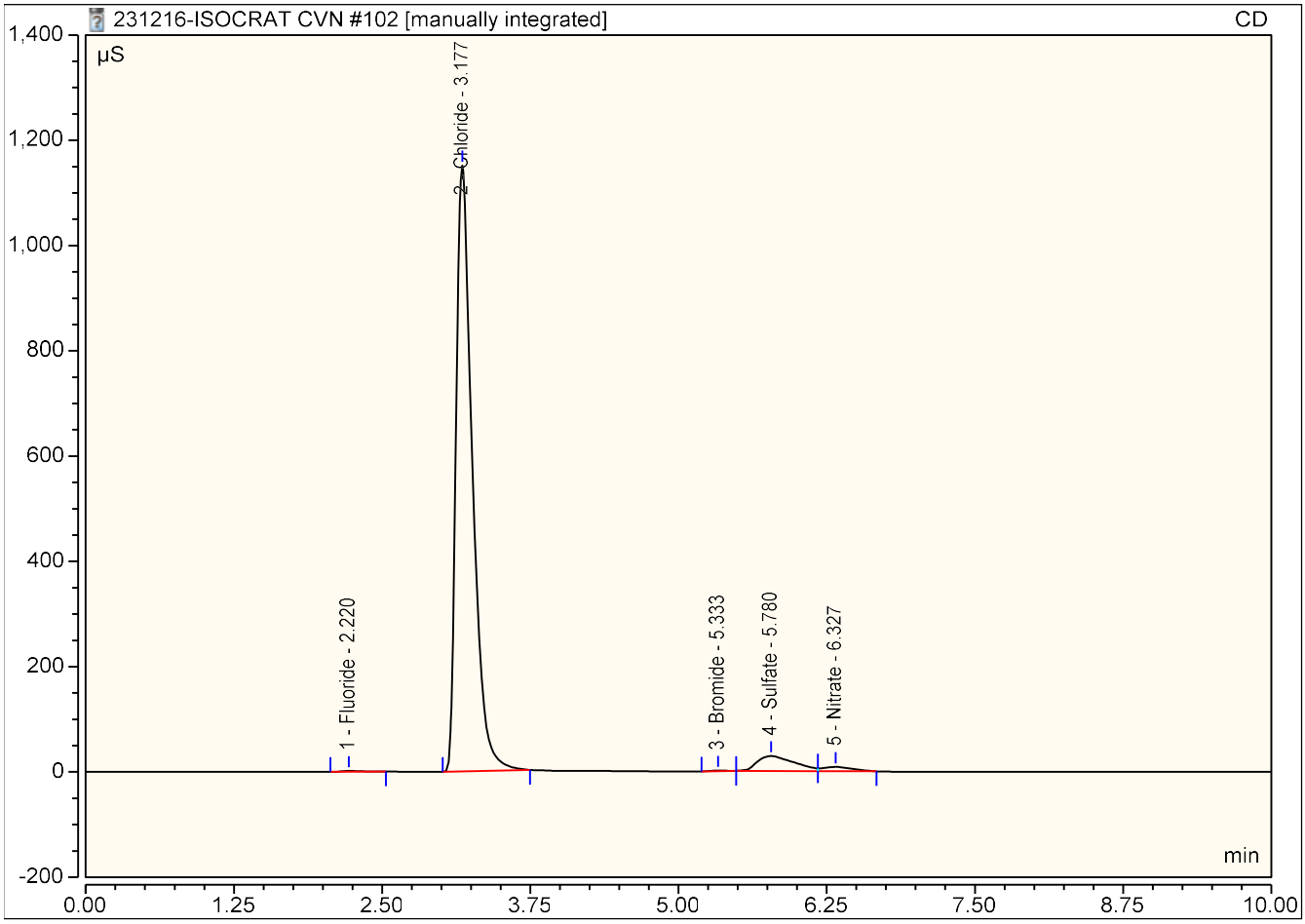
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.22	**Fluoride**	BMB	0.030	0.148	0.0954
2	3.18	**Chloride**	BMB	156.461	1042.532	344.0849
3	5.34	**Bromide**	BMB*	0.015	0.121	0.1693
4	5.84	**Sulfate**	BM *	9.163	28.419	29.4239
5	6.35	**Nitrate**	MB*	0.918	3.670	0.7168
TOTAL:				166.59	1074.89	374.49



Peak Integration Report

Sample Name:	**XL2373375-01 MS**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**17-Dec-2023 / 03:34**	*Run Time:*	**10.00**

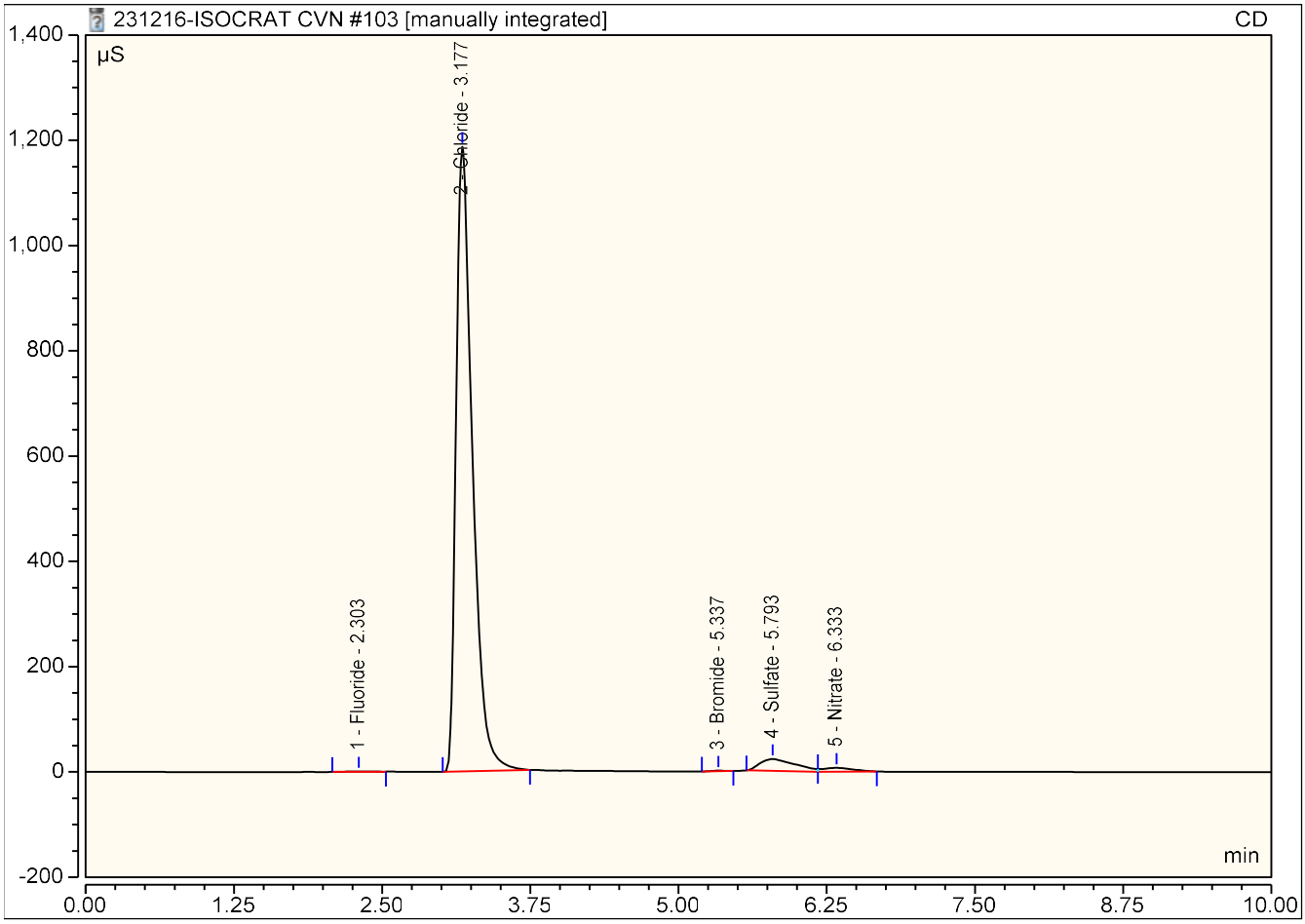
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.22	**Fluoride**	BMB	0.363	1.850	0.6225
2	3.18	**Chloride**	BMB	182.860	1151.366	402.1108
3	5.33	**Bromide**	BMB*	0.171	1.193	1.3439
4	5.78	**Sulfate**	BM *	10.156	28.523	32.5809
5	6.33	**Nitrate**	MB*	2.306	7.994	1.6707
TOTAL:				195.86	1190.93	438.33



Peak Integration Report

Sample Name:	**XL2373375-01 DUP**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**17-Dec-2023 / 03:46**	*Run Time:*	**10.00**

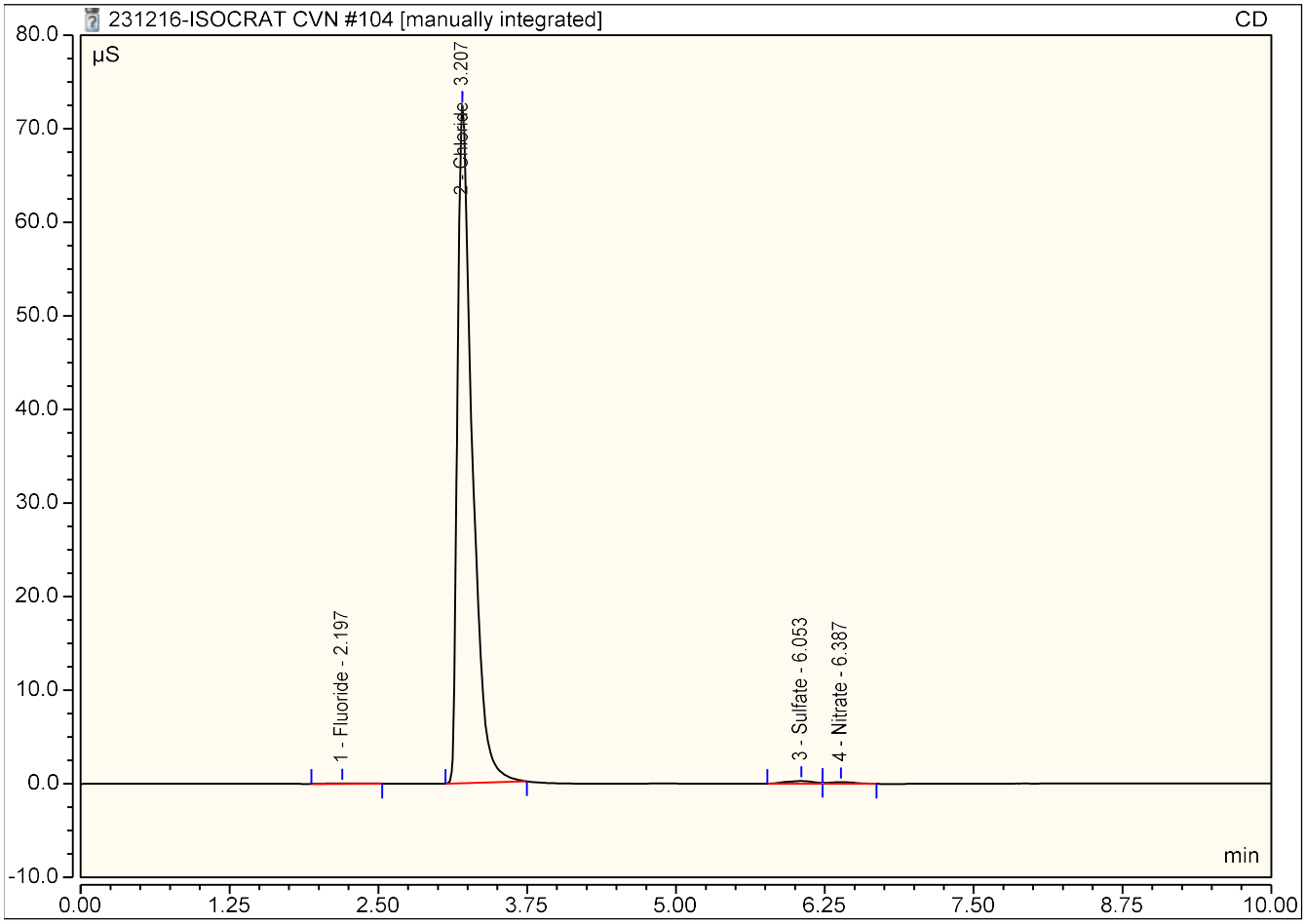
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.30	**Fluoride**	BMB	0.129	0.500	0.2518
2	3.18	**Chloride**	BMB	189.170	1186.536	415.9795
3	5.34	**Bromide**	BMB*	0.136	0.966	1.0846
4	5.79	**Sulfate**	BM *	7.792	22.293	25.0644
5	6.33	**Nitrate**	MB*	2.112	7.183	1.5374
TOTAL:				199.34	1217.48	443.92



Peak Integration Report

Sample Name:	**XL2373375-05; 25X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**25.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**17-Dec-2023 / 03:58**	*Run Time:*	**10.00**

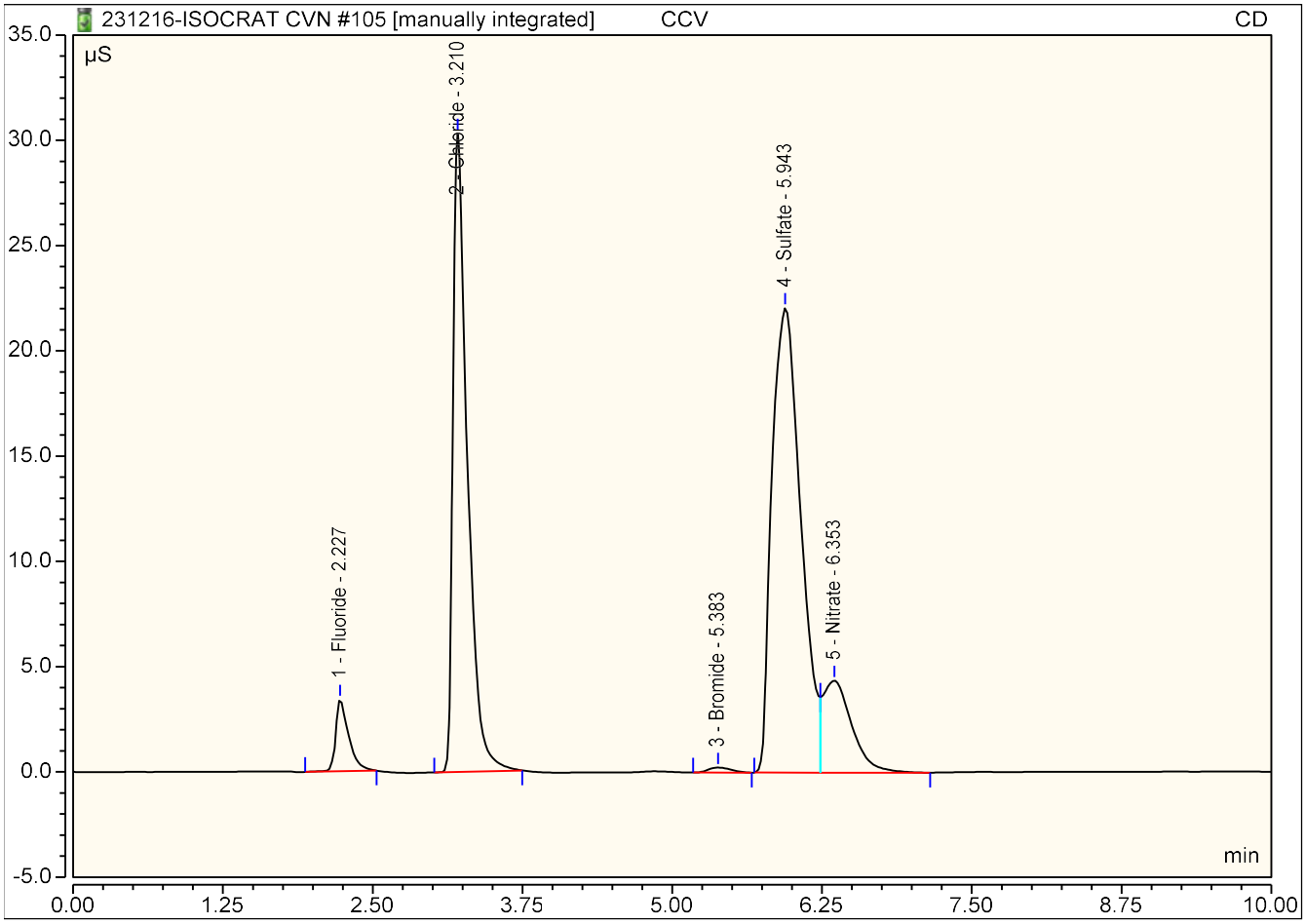
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.20	**Fluoride**	BMB	0.013	0.034	1.7037
2	3.21	**Chloride**	BMB	10.477	72.382	580.1884
3	6.05	**Sulfate**	BM *	0.077	0.292	13.3145
4	6.39	**Nitrate**	MB*	0.047	0.182	2.9681
TOTAL:				10.61	72.89	598.17



Peak Integration Report

Sample Name:	**CCV**	*Inj. Vol.:*	**25.00**
Injection Type:	**Check Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**17-Dec-2023 / 04:10**	*Run Time:*	**10.00**

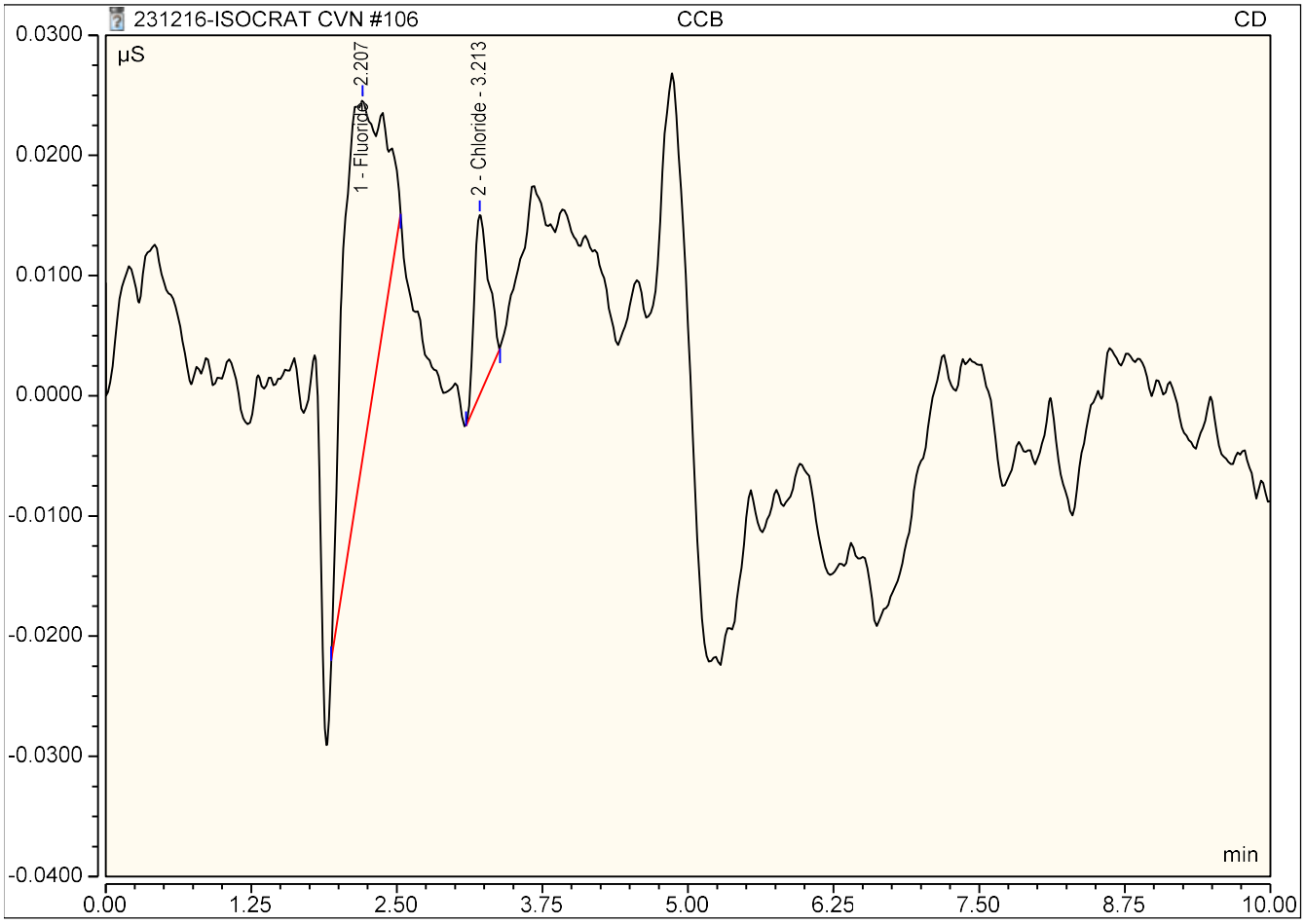
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.23	**Fluoride**	BMB	0.427	3.411	0.7248
2	3.21	**Chloride**	BMB	4.237	30.324	9.4929
3	5.38	**Bromide**	BMB*	0.053	0.242	0.4561
4	5.94	**Sulfate**	BM *	6.165	22.070	19.8909
5	6.35	**Nitrate**	MB*	1.220	4.371	0.9243
TOTAL:				12.10	60.42	31.49



Peak Integration Report

Sample Name:	**CCB**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**17-Dec-2023 / 04:22**	*Run Time:*	**10.00**

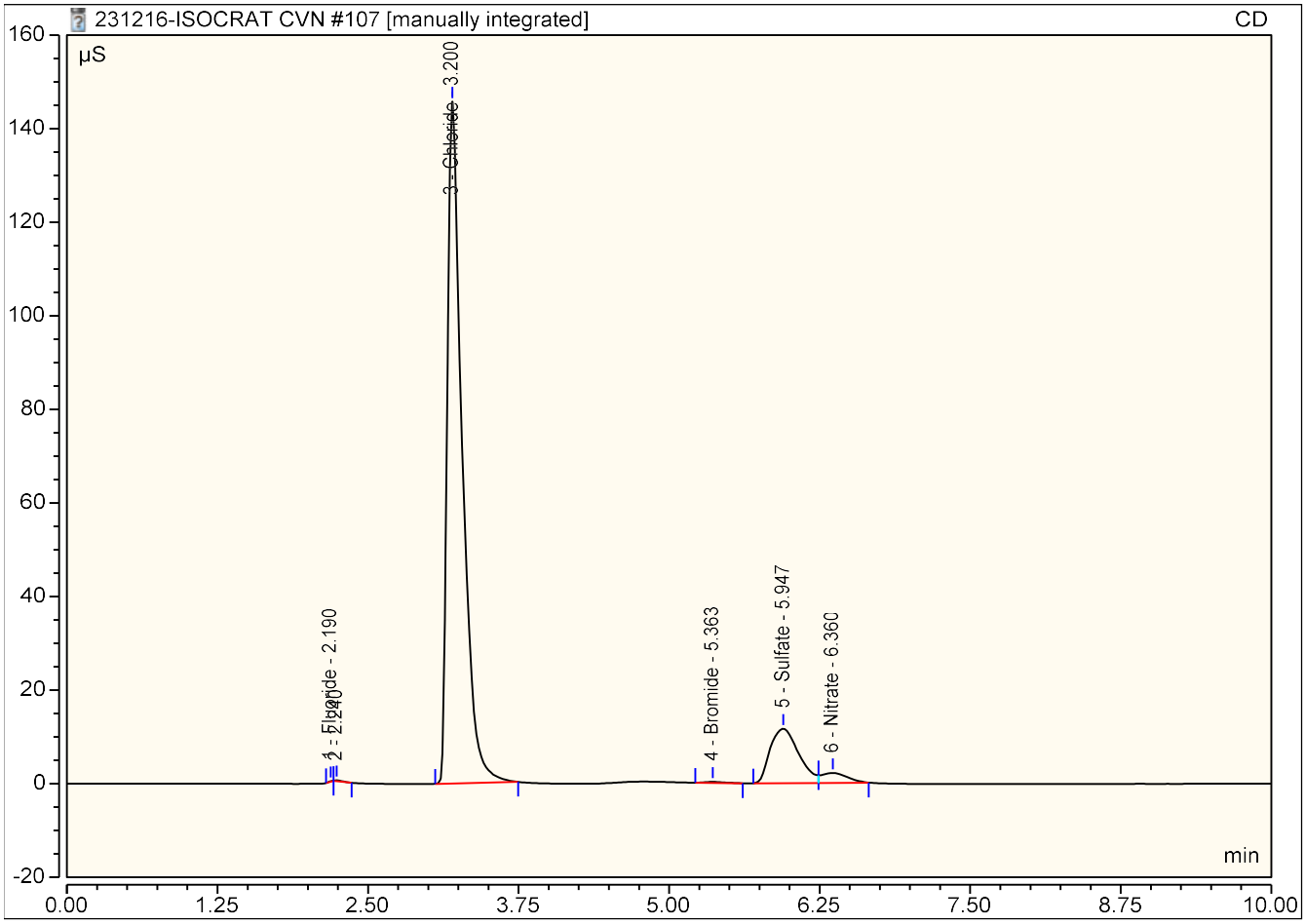
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.21	**Fluoride**	BMB	0.012	0.030	0.0666
2	3.21	**Chloride**	BMB	0.002	0.015	0.1838
TOTAL:				0.01	0.04	0.25



Peak Integration Report

Sample Name:	**XL2373375-01 MS; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**17-Dec-2023 / 04:34**	*Run Time:*	**10.00**

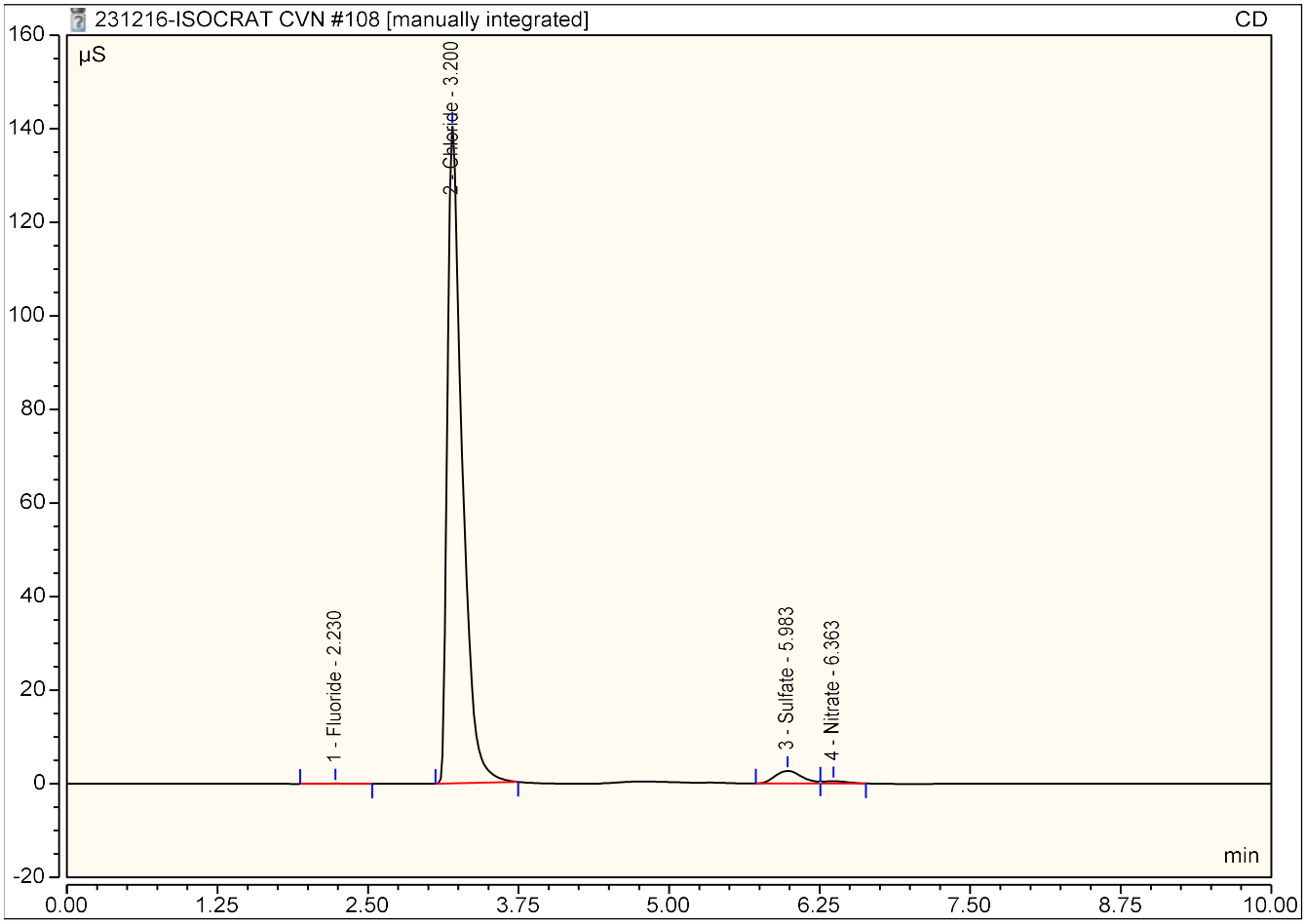
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.19	**Fluoride**	BMB	0.003	0.094	0.5260
3	3.20	**Chloride**	BMB	20.913	145.703	461.4712
4	5.36	**Bromide**	BMB*	0.044	0.227	3.8764
5	5.95	**Sulfate**	BM *	3.188	11.617	104.2417
6	6.36	**Nitrate**	MB*	0.518	2.104	4.4241
TOTAL:				24.67	159.74	574.54



Peak Integration Report

Sample Name:	**XL2373375-01 DUP; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**17-Dec-2023 / 04:46**	*Run Time:*	**10.00**

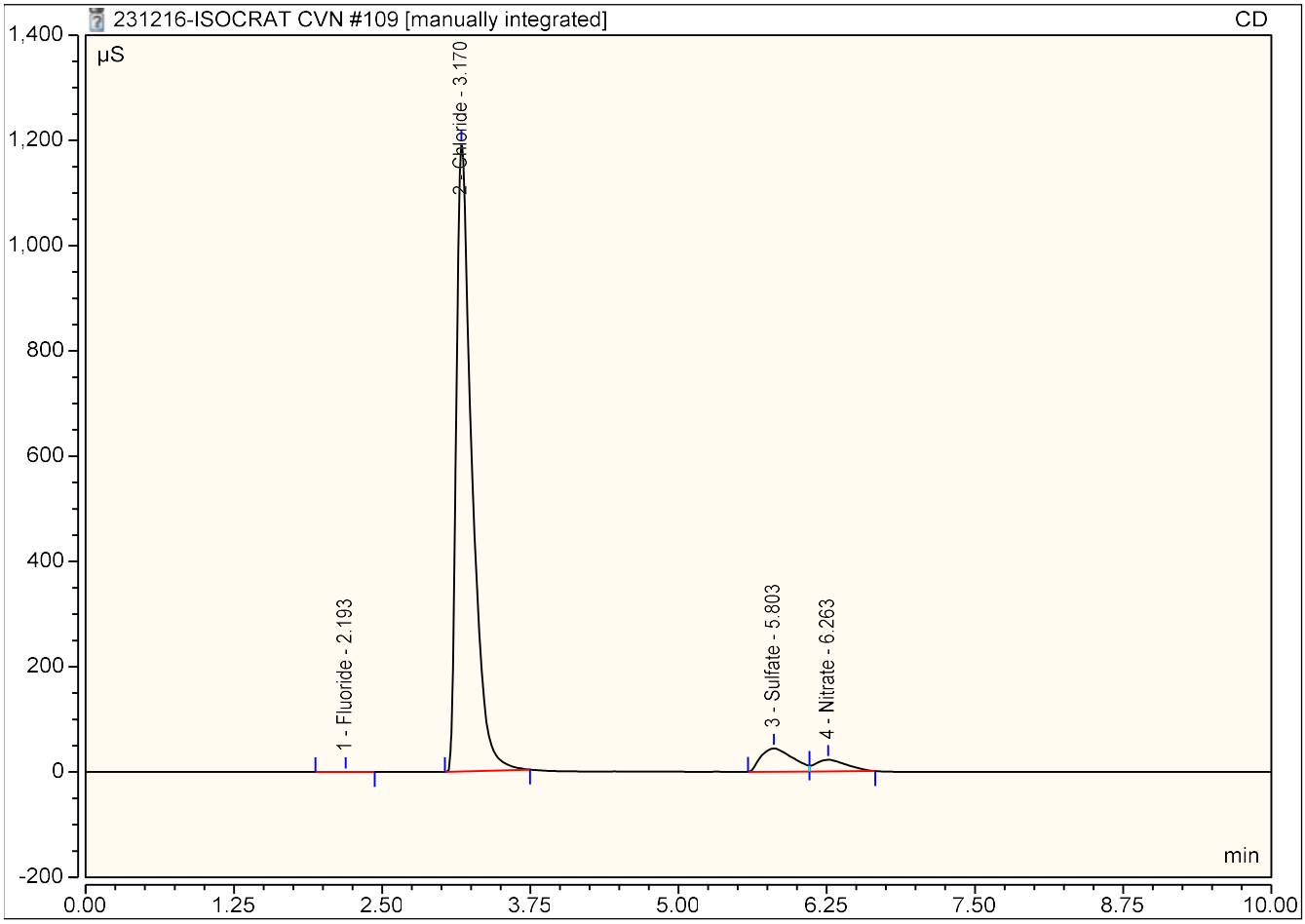
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.23	**Fluoride**	BMB	0.020	0.071	0.7879
2	3.20	**Chloride**	BMB	20.145	140.382	444.5843
3	5.98	**Sulfate**	BM *	0.696	2.712	25.0155
4	6.36	**Nitrate**	MB*	0.114	0.486	1.6442
TOTAL:				20.97	143.65	472.03



Peak Integration Report

Sample Name:	**XL2373375-08**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**17-Dec-2023 / 04:58**	*Run Time:*	**10.00**

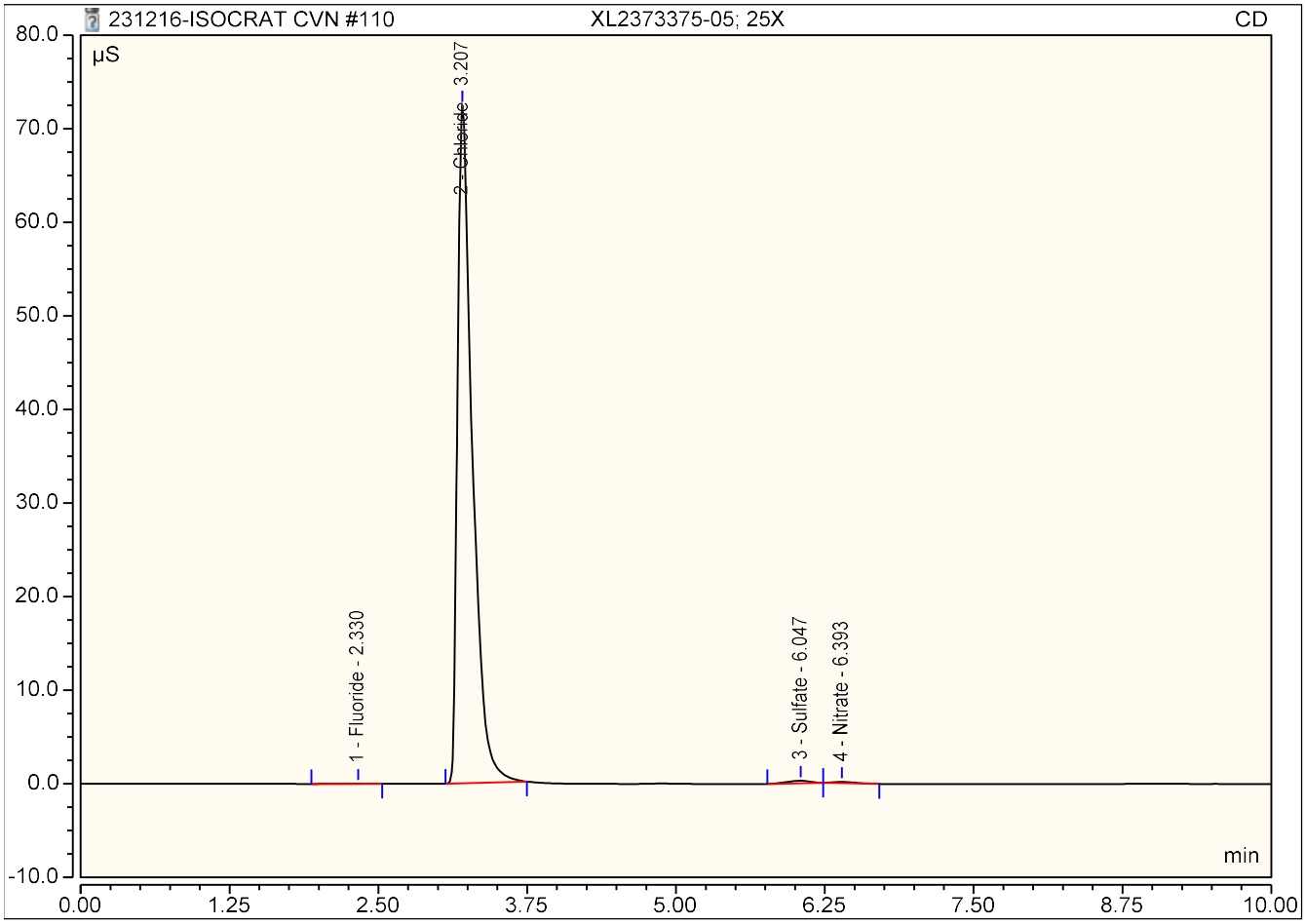
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.19	**Fluoride**	BMB	0.013	0.073	0.0677
2	3.17	**Chloride**	BMB	181.857	1191.162	399.9045
3	5.80	**Sulfate**	BM *	13.725	44.109	43.9289
4	6.26	**Nitrate**	MB*	6.769	22.164	4.7373
TOTAL:				202.36	1257.51	448.64



Peak Integration Report

Sample Name:	**XL2373375-05; 25X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**25.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**17-Dec-2023 / 05:10**	*Run Time:*	**10.00**

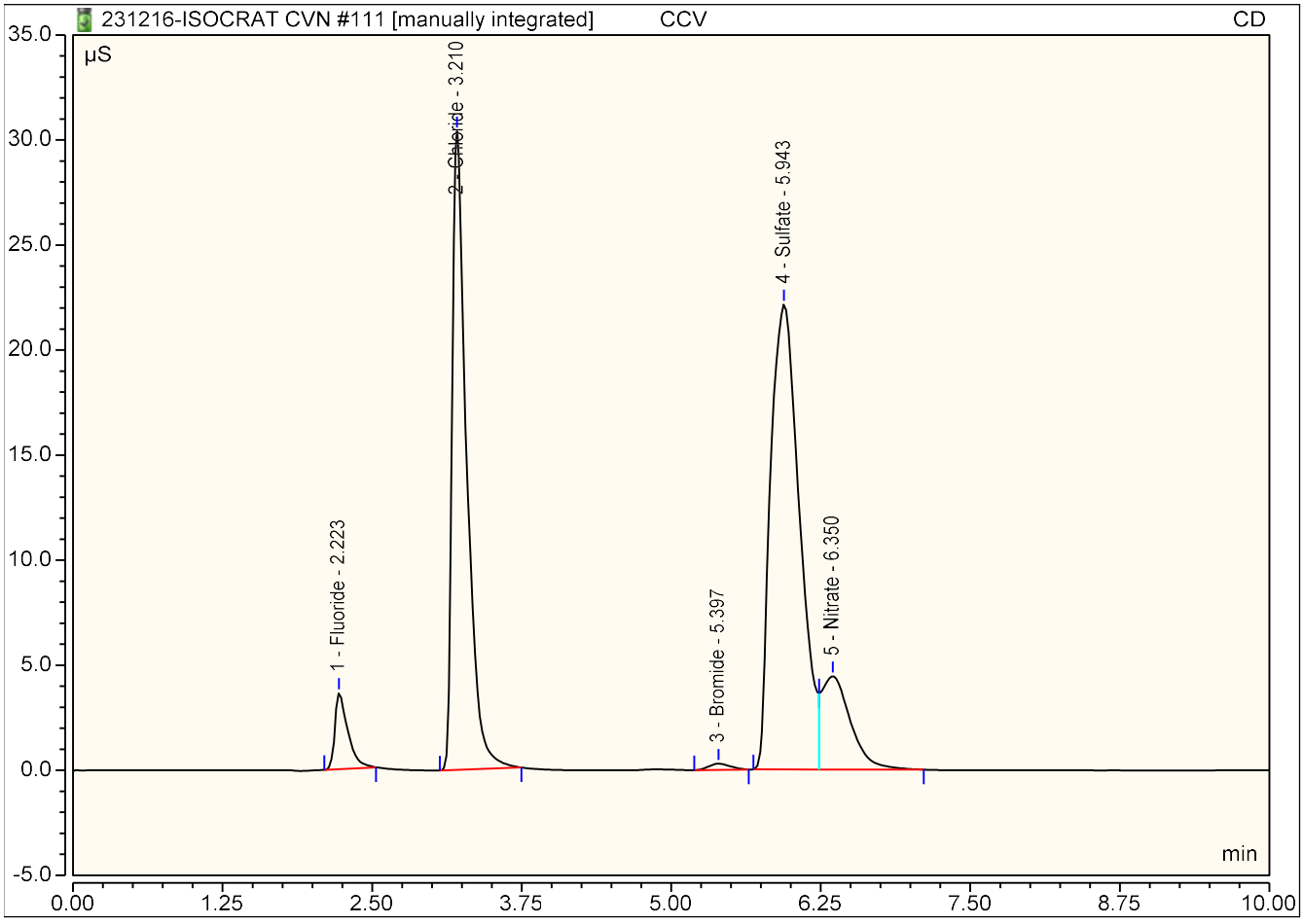
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.33	**Fluoride**	BMB	0.011	0.019	1.6322
2	3.21	**Chloride**	BMB	10.483	72.429	580.5427
3	6.05	**Sulfate**	BMB	0.062	0.275	12.1536
4	6.39	**Nitrate**	BMB	0.030	0.136	2.6668
TOTAL:				10.59	72.86	597.00



Peak Integration Report

Sample Name:	**CCV**	*Inj. Vol.:*	**25.00**
Injection Type:	**Check Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**17-Dec-2023 / 05:23**	*Run Time:*	**10.00**

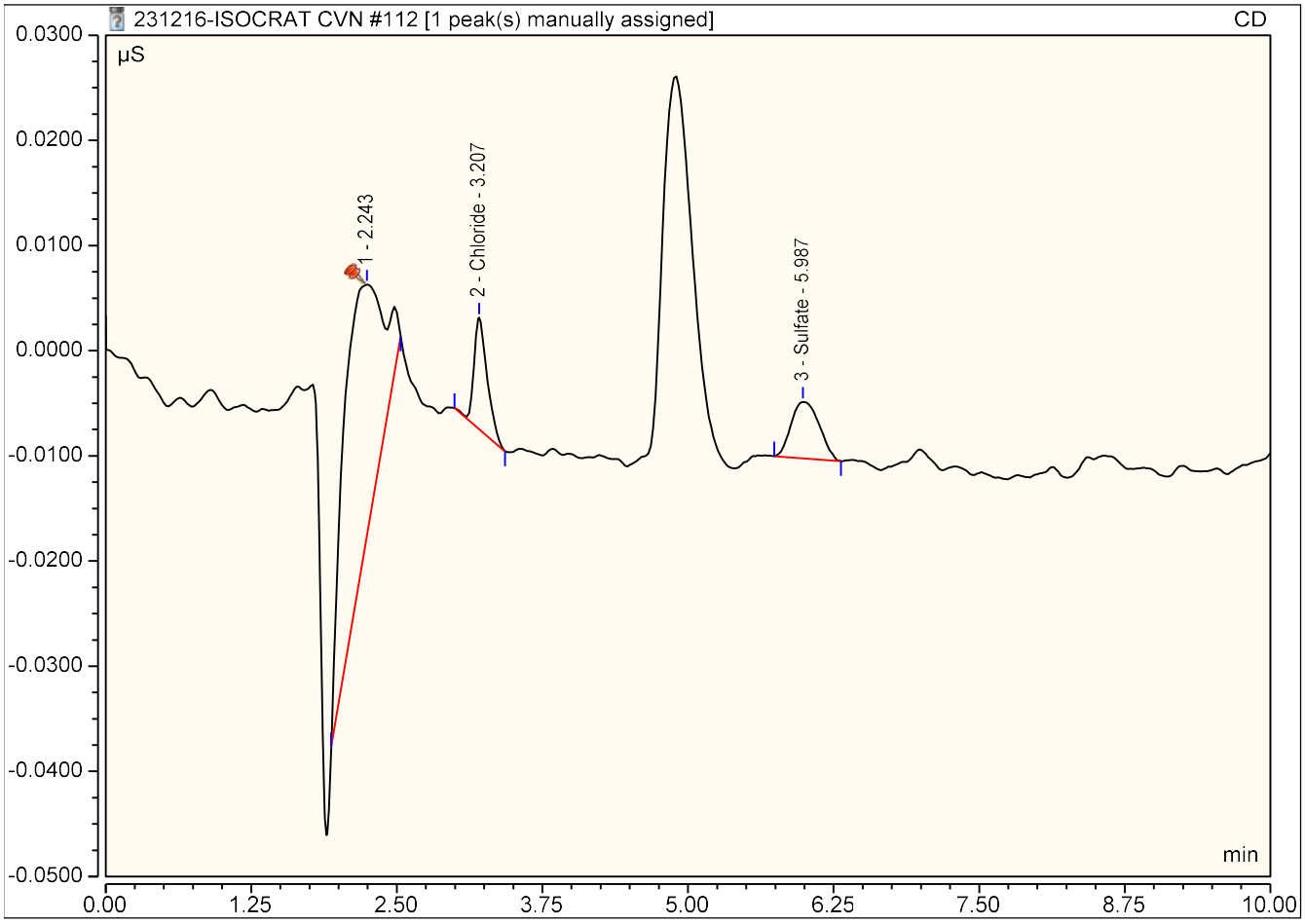
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.22	**Fluoride**	BMB	0.456	3.631	0.7703
2	3.21	**Chloride**	BMB	4.278	30.387	9.5831
3	5.40	**Bromide**	BMB*	0.062	0.298	0.5225
4	5.94	**Sulfate**	BM *	6.222	22.136	20.0718
5	6.35	**Nitrate**	MB*	1.247	4.440	0.9430
TOTAL:				12.26	60.89	31.89



Peak Integration Report

Sample Name:	**CCB**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**17-Dec-2023 / 05:35**	*Run Time:*	**10.00**

No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	3.21	**Chloride**	BMB	0.001	0.011	0.1822
3	5.99	**Sulfate**	BMB	0.002	0.005	0.2933
TOTAL:				0.00	0.02	0.48



Anion Summary Report

No.	Name	Dilution	Amount CD Fluoride	Amount CD Chloride	Amount CD Nitrate	Amount CD Sulfate	Amount CD Bromide
1	BLANK	1.0	0.0499	0.1978	n.a.	0.2930	n.a.
2	STD 0.5	1.0	0.0646	0.3853	0.1062	0.6290	0.0697
3	STD 1.0	1.0	0.0808	0.6248	0.1253	1.0529	0.0849
4	STD 2.0	1.0	0.1920	2.0081	0.1368	4.0400	0.1886
5	STD 3.0	1.0	0.4601	4.9912	0.4633	10.0526	0.4094
6	STD 4.0	1.0	1.9562	19.5699	1.8972	39.5560	2.0224
7	STD 5.0	1.0	5.0213	50.1707	5.0462	100.1696	5.8291
8	RINSE	1.0	0.0659	0.2372	n.a.	0.3404	n.a.
9	CCV	1.0	1.0101	9.9452	0.9454	20.7185	0.9381
10	CCB	1.0	n.a.	0.1821	n.a.	0.3016	n.a.
11	ICV	1.0	0.7904	8.1890	0.7182	8.1278	0.8493
12	ICB	1.0	n.a.	0.1817	n.a.	0.2994	n.a.
13	BLK	1.0	n.a.	0.1846	n.a.	0.3007	n.a.
14	LCS	1.0	0.7756	8.1538	0.7202	8.0966	0.8104
15	BLK-2	1.0	n.a.	0.1837	n.a.	0.3000	n.a.
16	LCS-2	1.0	0.7711	8.1375	0.7054	8.1203	0.8055
17	XL2374268-01 BR CL F SO4 NO3	1.0	0.6086	152.5406	n.a.	27.7478	n.a.
18	XL2374268-01; 10X	10.0	n.a.	162.4196	n.a.	29.6263	n.a.
19	XL2374268-03	1.0	0.7135	151.4212	0.9426	27.3531	n.a.
20	XL2374268-03; 10X	10.0	1.0596	165.2259	1.4082	29.6146	n.a.
21	CCV	1.0	0.9991	9.8905	0.9260	20.8003	0.9447
22	CCB	1.0	n.a.	0.1840	n.a.	0.2982	n.a.
23	XL2374268-02; 25X	25.0	39.7504	31.0111	2.3291	18.3535	n.a.
24	XL2374268-04; 25X	25.0	17.2064	52.8836	n.a.	26.8938	n.a.
25	RINSE	1.0	0.9838	n.a.	n.a.	0.2954	n.a.
26	XL2374268-05	1.0	0.6371	148.6920	0.3308	28.8767	n.a.
27	XL2374268-06	1.0	0.7273	153.8523	n.a.	27.7363	n.a.
28	XL2374268-07	1.0	0.9552	127.8152	n.a.	1.3784	n.a.
29	XL2374268-01 MS	1.0	n.a.	150.9578	0.4478	34.6941	n.a.
30	XL2374268-01 DUP	1.0	n.a.	0.2339	n.a.	0.3334	n.a.
31	XL2374268-01 MS; 10X	10.0	4.8481	196.1093	2.9248	110.4015	0.6686
32	XL2374268-01 DUP; 10X	10.0	1.0511	162.9969	n.a.	29.5545	n.a.
33	XL2373375-01 BR CL SO4; 10X	10.0	n.a.	448.2073	2.1578	29.8833	n.a.
34	CCV	1.0	1.0191	9.9080	0.9139	20.8832	0.9707
35	CCB	1.0	n.a.	0.1835	n.a.	0.3011	n.a.
36	XL2373375-02; 10X	10.0	0.6058	81.1582	14.2501	33.1297	n.a.
37	XL2373375-03; 10X	10.0	n.a.	99.8894	2.9674	4.8361	n.a.
38	XL2373375-04; 10X	10.0	0.6075	84.8558	n.a.	25.4115	n.a.
39	XL2373375-05; 10X	10.0	n.a.	627.2914	2.9206	19.2396	n.a.
40	XL2373375-06; 10X	10.0	0.6219	133.0703	n.a.	19.8197	0.5943
41	XL2373375-07; 10X	10.0	0.5476	378.6110	1.1857	31.5763	n.a.
42	XL2373375-08; 10X	10.0	0.5202	430.5855	5.4717	47.7341	n.a.
43	L2373148-01 CL SO4; 10X	10.0	1.0018	168.7921	n.a.	110.3760	n.a.
44	L2373148-02; 10X	10.0	0.9804	53.8296	n.a.	18.5616	n.a.
45	XL2373384-01 CL; 10X	10.0	0.5591	258.1881	n.a.	48.3184	n.a.

46	CCV	1.0	1.0004	9.9219	0.9087	20.8260	0.9321
47	CCB	1.0	n.a.	0.1856	n.a.	0.2996	n.a.
48	XL2373384-02; 10X	10.0	0.7521	192.7634	n.a.	44.7857	n.a.
49	L2371282-10 BR CL SO4	1.0	0.0604	0.9523	18.1066	n.a.	n.a.
50	XL2371282-10; 10X	10.0	n.a.	2.4754	19.2737	4.2027	n.a.
51	L2372608-03 BR CL SO4	1.0	0.1788	1.3485	n.a.	45.2662	n.a.
52	XL2372608-03; 10X	10.0	0.7348	2.8105	n.a.	48.5159	n.a.
53	L2373280-01 F	1.0	0.6697	1.3252	0.6316	6.1082	n.a.
54	XL2373280-01; 10X	10.0	0.9639	2.8927	1.3644	7.8556	n.a.
55	L2371282-05 BR; 25X	25.0	1.1952	62.7672	n.a.	10.9059	n.a.
56	L2371282-08; 25X	25.0	1.3106	8.8484	n.a.	2687.3126	n.a.
57	L2371282-09; 50X	50.0	2.3906	65.5107	10.6859	26.7761	n.a.
58	L2371282-11; 10X	10.0	0.8759	40.4171	n.a.	692.3099	n.a.
59	CCV	1.0	1.0091	9.9314	0.9238	20.8838	0.9686
60	CCB	1.0	n.a.	0.1843	n.a.	0.3029	n.a.
61	L2371282-12; 10X	10.0	0.7419	58.5285	n.a.	484.4037	n.a.
62	L2371282-13; 10X	10.0	0.9205	38.3902	n.a.	353.4825	n.a.
63	L2371282-14; 10X	10.0	0.7551	52.8015	n.a.	295.5197	n.a.
64	L2371282-15 MS; 10X	10.0	4.1600	79.1965	4.9377	496.6343	3.1312
65	L2371282-15 MSD; 10X	10.0	4.1767	79.2244	4.8774	495.8707	3.1100
66	L2371282-15; 10X	10.0	0.7948	46.4308	n.a.	499.6131	n.a.
67	XL2374268-01 DUP	1.0	0.6144	152.9191	n.a.	27.7235	n.a.
68	L2373116-01 CL SO4; 50X	50.0	n.a.	13.5955	n.a.	1543.6884	n.a.
69	L2373201-01 CL SO4	1.0	0.0888	23.9025	1.1456	10.2180	0.0578
70	XL2373201-01; 10X	10.0	0.5339	25.6715	1.7928	11.6677	n.a.
71	CCV	1.0	1.0027	9.9097	0.9175	20.6597	0.9522
72	CCB	1.0	n.a.	0.1848	n.a.	0.2978	n.a.
73	L2373116-02;	1.0	0.1116	10.4653	n.a.	1466.5226	n.a.
74	L2373116-02; 50X	50.0	n.a.	15.3944	n.a.	1572.2522	n.a.
75	L2373116-03; 50X	50.0	n.a.	15.1139	n.a.	1367.0265	n.a.
76	L2373116-04	1.0	0.1412	3.1224	0.1860	14.7842	n.a.
77	L2373116-05; 50X	50.0	3.8696	12.9561	n.a.	1765.1869	n.a.
78	RINSE	1.0	n.a.	0.1838	n.a.	0.3334	n.a.
79	L2373201-01 MS	1.0	0.4428	26.9698	1.4427	18.1660	0.3795
80	L2373201-01 DUP	1.0	0.0873	23.9089	1.1152	10.2359	0.0621
81	XL2373201-01 MS; 10X	10.0	4.1288	65.9332	5.1984	95.6093	3.8357
82	XL2373201-01 DUP; 10X	10.0	0.5312	25.7389	1.7735	11.6391	n.a.
83	CCV	1.0	0.9963	9.9204	0.9733	20.5242	0.9905
84	CCB	1.0	n.a.	0.1837	n.a.	0.3026	n.a.
85	L2373323-01 SO4	1.0	0.0510	203.4072	0.0921	2.1713	0.1069
86	L2373323-03	1.0	0.0483	165.9453	n.a.	5.1232	n.a.
87	L2373323-04 MS	1.0	n.a.	198.8463	0.3511	13.4607	0.8793
88	L2373323-04 MSD	1.0	n.a.	199.2679	0.3473	13.4475	0.9014
89	L2373323-04	1.0	n.a.	203.6981	n.a.	5.5059	0.6073
90	L2373323-05	1.0	n.a.	198.6130	n.a.	1.3832	0.1232
91	L2373323-06	1.0	0.0480	165.6896	n.a.	5.2419	0.1111
92	XL2373375-05	1.0	0.0554	561.8435	2.3857	18.0795	0.0931
93	XL2373375-05; 25X	25.0	1.2047	592.1756	3.8656	20.7352	1.3851

94	CCV	1.0	1.0015	9.9322	0.9460	20.5706	0.9817
95	CCB	1.0	n.a.	0.1885	n.a.	0.2992	n.a.
96	XL2373375-01	1.0	0.2954	415.8470	1.3917	25.2976	1.2220
97	XL2373375-02	1.0	0.1645	75.3928	13.1517	29.3638	0.1234
98	XL2373375-03	1.0	0.0560	92.4376	2.5460	2.7225	n.a.
99	XL2373375-04	1.0	0.1670	81.7433	0.1544	24.0973	0.3202
100	XL2373375-06	1.0	0.1756	125.1395	n.a.	18.5662	0.2947
101	XL2373375-07	1.0	0.0954	344.0849	0.7168	29.4239	0.1693
102	XL2373375-01 MS	1.0	0.6225	402.1108	1.6707	32.5809	1.3439
103	XL2373375-01 DUP	1.0	0.2518	415.9795	1.5374	25.0644	1.0846
104	XL2373375-05; 25X	25.0	1.7037	580.1884	2.9681	13.3145	n.a.
105	CCV	1.0	0.7248	9.4929	0.9243	19.8909	0.4561
106	CCB	1.0	0.0666	0.1838	n.a.	n.a.	n.a.
107	XL2373375-01 MS; 10X	10.0	0.5260	461.4712	4.4241	104.2417	3.8764
108	XL2373375-01 DUP; 10X	10.0	0.7879	444.5843	1.6442	25.0155	n.a.
109	XL2373375-08	1.0	0.0677	399.9045	4.7373	43.9289	n.a.
110	XL2373375-05; 25X	25.0	1.6322	580.5427	2.6668	12.1536	n.a.
111	CCV	1.0	0.7703	9.5831	0.9430	20.0718	0.5225
112	CCB	1.0	n.a.	0.1822	n.a.	0.2933	n.a.
	Sum:	804.000	132.9972		173.7596	15757.1846	44.2075
	Average:	7.179	1.5647		2.8026	143.2471	1.0281
	Rel.Std.Dev:	157.961 %	2.9856		1.4423	2.8930	1.1771

Inject Time	Comment
28/Nov/2023 17:33	AU
28/Nov/2023 17:45	LOT#230717-0.5
28/Nov/2023 17:57	LOT#230717-1.0
28/Nov/2023 18:09	LOT#230717-2.0
28/Nov/2023 18:21	LOT#230717-3.0
28/Nov/2023 18:33	LOT#230717-4.0
28/Nov/2023 18:45	LOT#230717-5.0
16/Dec/2023 08:33	864683-4825-4841-4842
16/Dec/2023 08:45	LOT#231211-C
16/Dec/2023 08:57	CVN
16/Dec/2023 09:09	LOT#231211-I
16/Dec/2023 09:21	CVN
16/Dec/2023 09:33	CVN
16/Dec/2023 09:45	LOT#231211-I
16/Dec/2023 09:57	CVN
16/Dec/2023 10:09	LOT#231211-I
16/Dec/2023 10:22	CVN
16/Dec/2023 10:34	CVN
16/Dec/2023 10:46	CVN
16/Dec/2023 10:58	CVN
16/Dec/2023 11:10	LOT#231211-C
16/Dec/2023 11:22	CVN
16/Dec/2023 11:34	CVN
16/Dec/2023 11:46	CVN
16/Dec/2023 11:58	CVN
16/Dec/2023 12:10	CVN
16/Dec/2023 12:23	CVN
16/Dec/2023 12:35	CVN
16/Dec/2023 12:47	CVN
16/Dec/2023 12:59	CVN
16/Dec/2023 13:11	CVN
16/Dec/2023 13:23	CVN
16/Dec/2023 13:35	CVN
16/Dec/2023 13:47	LOT#231211-C
16/Dec/2023 14:04	CVN
16/Dec/2023 14:16	CVN
16/Dec/2023 14:28	CVN
16/Dec/2023 14:40	CVN
16/Dec/2023 14:52	CVN
16/Dec/2023 15:04	CVN
16/Dec/2023 15:17	CVN
16/Dec/2023 15:29	CVN
16/Dec/2023 15:41	CVN
16/Dec/2023 15:53	CVN
16/Dec/2023 16:05	CVN

16/Dec/2023 16:17	LOT#231211-C
16/Dec/2023 16:29	CVN
16/Dec/2023 16:41	CVN
16/Dec/2023 16:53	CVN
16/Dec/2023 17:05	CVN
16/Dec/2023 17:17	CVN
16/Dec/2023 17:29	CVN
16/Dec/2023 17:42	CVN
16/Dec/2023 17:54	CVN
16/Dec/2023 18:06	CVN
16/Dec/2023 18:18	CVN
16/Dec/2023 18:30	CVN
16/Dec/2023 18:42	CVN
16/Dec/2023 18:54	LOT#231211-C
16/Dec/2023 19:06	CVN
16/Dec/2023 19:18	CVN
16/Dec/2023 19:30	CVN
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16/Dec/2023 20:43	CVN
16/Dec/2023 20:55	CVN
16/Dec/2023 21:07	CVN
16/Dec/2023 21:19	LOT#231211-C
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17/Dec/2023 00:08	CVN
17/Dec/2023 00:21	CVN
17/Dec/2023 00:33	CVN
17/Dec/2023 00:45	CVN
17/Dec/2023 00:57	CVN
17/Dec/2023 01:09	CVN
17/Dec/2023 01:21	CVN
17/Dec/2023 01:33	CVN
17/Dec/2023 01:45	CVN

17/Dec/2023 01:57	LOT#231211-C
17/Dec/2023 02:09	CVN
17/Dec/2023 02:21	CVN
17/Dec/2023 02:33	CVN
17/Dec/2023 02:45	CVN
17/Dec/2023 02:58	CVN
17/Dec/2023 03:10	CVN
17/Dec/2023 03:22	CVN
17/Dec/2023 03:34	CVN
17/Dec/2023 03:46	CVN
17/Dec/2023 03:58	CVN
17/Dec/2023 04:10	LOT#231211-C
17/Dec/2023 04:22	CVN
17/Dec/2023 04:34	CVN
17/Dec/2023 04:46	CVN
17/Dec/2023 04:58	CVN
17/Dec/2023 05:10	CVN
17/Dec/2023 05:23	LOT#231211-C
17/Dec/2023 05:35	CVN
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	#DIV/0!
	#DIV/0!

Quality Control

Form 5a
Matrix Spike

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Client Sample ID	: MW-6D	**Matrix**	: WATER
Lab Sample ID	: L2373323-04		
Matrix Spike	: WG1864842-3	**MS Analysis Date**	: 12/17/23 00:33
Matrix Spike Dup	: WG1864842-4	**MSD Analysis Date**	: 12/17/23 00:45

		Matrix Spike Sample			Matrix Spike Duplicate					
Parameter	Sample Conc. (mg/l)	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	RPD	Recovery Limits	RPD Limit
Sulfate	5.50	8	13.5	100	8	13.4	99	1	90-110	20

Form 7
Laboratory Control Sample

Client	: Sterling Environmental Engineering	**Lab Number**	: L2373323
Project Name	: TROY BELTING	**Project Number**	: 2011-31
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: WG1864842-2	**LCS Analysis Date**	: 12/16/23 10:09
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	**True (mg/l)**	**Found (mg/l)**	**%R**	**True (mg/l)**	**Found (mg/l)**	**%R**	**RPD**	**Recovery Limits**	**RPD Limit**
Sulfate	**8.00**	**8.12**	**102.**					**90-110**	**20**

Date Created: 11/11/21
Created By: Jason Hebert
File: PM11467-1
Page: 1

WETCHEM (WATER)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Method	Holding Time	Container/Sample Preservation
Bromide	24959-67-9	0.05	0.0132	mg/l	90-110		90-110	20	20	300.0	28 days	1 - Plastic 250ml unpreserved
Chloride	16887-00-6	0.5	0.0839	mg/l	90-110		64-148	18	18	9056	28 days	1 - Plastic 250ml unpreserved
Chloride	16887-00-6	0.5	0.0839	mg/l	90-110		90-110	18	18	300.0	28 days	1 - Plastic 250ml unpreserved
Fluoride	16984-48-8	0.05	0.037	mg/l	90-110		81-124	15	15	9056	28 days	1 - Plastic 500ml unpreserved
Fluoride	16984-48-8	0.05	0.037	mg/l	90-110		90-110	15	15	300.0	28 days	1 - Plastic 500ml unpreserved
Nitrogen, Nitrate	14797-55-8	0.05	0.0128	mg/l	90-110		90-110	15	15	300.0	48 hours	1 - Plastic 250ml unpreserved
Nitrogen, Nitrate	14797-55-8	0.05	0.0128	mg/l	90-110		80-120	15	15	9056	48 hours	1 - Plastic 250ml unpreserved
Sulfate	14808-79-8	1	0.454	mg/l	90-110		72-124	20	20	9056	28 days	1 - Plastic 500ml unpreserved
Sulfate	14808-79-8	1	0.454	mg/l	90-110		90-110	20	20	300.0	28 days	1 - Plastic 500ml unpreserved

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.

Calculations of Anions by Ion Chromatography

Aqueous samples:

The Dionex calculates the area of the peaks produced by the instrument, compares them to the peak area of the calibration standard stored in its memory, and calculates result in mg/L.

If the sample was manually diluted prior to analysis, the calculated mean must be manually multiplied by the dilution factor. The Reported Detection Limit is also multiplied by the same dilution factor.

$$\text{Result, mg/L} = \frac{\text{area - y-intercept}}{\text{slope}} \times \text{Dilution Factor}$$